2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

August 25, 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 July 30, 2009. For your reference, these analyses have been assigned our service request number P0902599.

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 276 pages.

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

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

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Client: Environmental Health & Engineering, Inc. CAS Project No: P0902599
Project: 16512

CASE NARRATIVE

The samples were received intact under chain of custody on July 30, 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: P0902599

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 #
P0902599-001.01	99472	6.0 L-Summa Canister Ambient		0.4	3.5				AC00876	**14117**		
P0902599-002.01	99473	6.0 L-Summa Canister Ambient		0.4	3.5				AC01304	**14117**		
P0902599-003.01	99474	6.0 L-Summa Canister Ambient		0.4	3.5				AC00768	**14117**		
P0902599-004.01	99475	6.0 L-Summa Canister Ambient	0.0	0.0	3.5				AC00614	**14117**		
P0902599-005.01	99476	6.0 L-Summa Canister Ambient	-29.5	-14.5	4.0				AC01573	**14117**		
P0902599-006.01	99431	6.0 L-Summa Canister Ambient		0.3	3.7				AC01096	**14117**		
P0902599-007.01	99432	6.0 L-Summa Canister Ambient	0.0	0.0	3.5				AC01117	**14117**		
P0902599-008.01	99433	6.0 L-Summa Canister Ambient		0.2	3.5				AC00917	**14117**		
P0902599-009.01	99434	6.0 L-Summa Canister Ambient		0.2	3.8				AC00880	**14117**		
P0902599-010.01	99435	6.0 L-Summa Canister Ambient		0.4	3.5				AC00663	**14117**		

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

P0902599

DATE: 7/29/09

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.
99472	Summa	EPA-TO15 Low Level Analysis List of 75	120 min
99473	↓	↓	↓
99474			
99475			
99476			
99431			
99432			
99433			
99434			
99435			

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 mfraggia@eheinc.com

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

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 7/29/09

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

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

Received by: _____ of (company name) CAS Date: 7/30/09 0940

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

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

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

Page 1 of 1

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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: P0902599

Project: Project # 16512

Sample(s) received on: 7/30/09 Date opened: 7/30/09 by: ADAVID

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

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

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0902599-001.01	6.0 L Ambient Can					
P0902599-002.01	6.0 L Ambient Can					
P0902599-003.01	6.0 L Ambient Can					
P0902599-004.01	6.0 L Ambient Can					
P0902599-005.01	6.0 L Ambient Can					
P0902599-006.01	6.0 L Ambient Can					

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

Missing time and date collected on COC.

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

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Environmental Health & Engineering, Inc. Work order: P0902599

Project: Project # 16512

Sample(s) received on: 7/30/09 Date opened: 7/30/09 by: ADAVID

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0902599-007.01	6.0 L Ambient Can					
P0902599-008.01	6.0 L Ambient Can					
P0902599-009.01	6.0 L Ambient Can					
P0902599-010.01	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: **99472**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-001

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: AC00876

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.61	ND	0.12	
74-87-3	Chloromethane	ND	0.12	ND	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	ND	6.1	ND	3.2	
75-05-8	Acetonitrile	ND	0.61	ND	0.36	
107-02-8	Acrolein	ND	0.61	ND	0.26	
67-64-1	Acetone	ND	6.1	ND	2.5	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.61	ND	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	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.61	ND	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)	ND	0.61	ND	0.21	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99472**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-001

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: AC00876

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.61	ND	0.17	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	ND	0.12	ND	0.038	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.019	
110-82-7	Cyclohexane	ND	0.61	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.61	ND	0.15	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	ND	0.61	ND	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99472**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-001

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: AC00876

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.016	
91-20-3	Naphthalene	ND	0.24	ND	0.046	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.011	

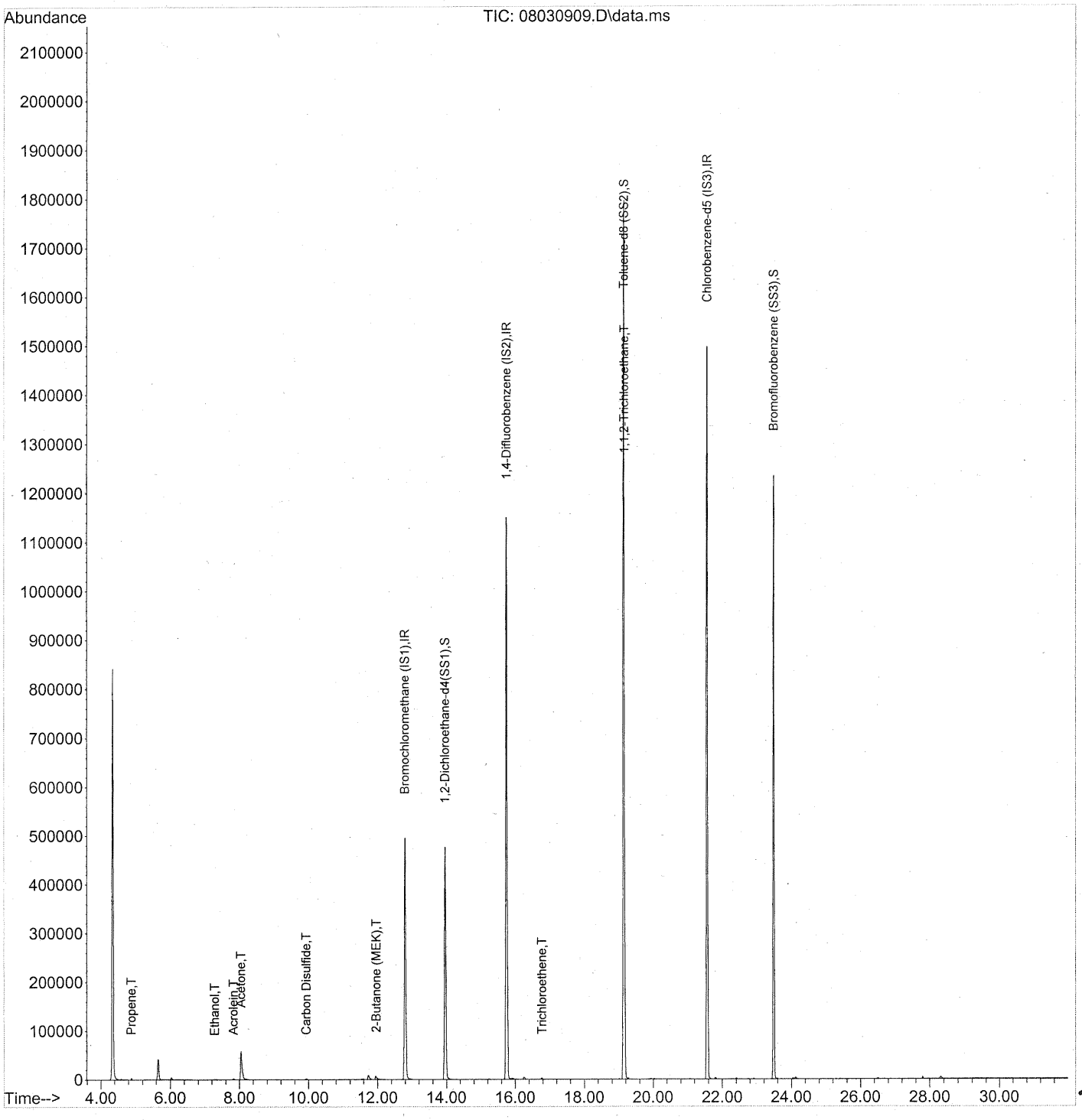
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: P Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030909.D
Acq On : 3 Aug 2009 12:50
Operator : EM
Sample : P0902599-001 (1000ml)
Misc : Environmental H & E 99472
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 03 13:28:01 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030909.D
Acq On : 3 Aug 2009 12:50
Operator : EM
Sample : P0902599-001 (1000ml)
Misc : Environmental H & E 99472
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 03 13:28:01 2009
Quant Method : J:\MS09\Methods\R9072409.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	272952	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.75	114	1377386	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	607307	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	476308	24.665	ng		-0.03
Spiked Amount 25.000			Recovery =	98.68%			
57) Toluene-d8 (SS2)	19.15	98	1561594	25.991	ng		-0.01
Spiked Amount 25.000			Recovery =	103.96%			
73) Bromofluorobenzene (SS3)	23.49	174	456826	25.290	ng		0.00
Spiked Amount 25.000			Recovery =	101.16%			
Target Compounds							Qvalue
2) Propene	4.88	42	1143	0.~~066~~	ng	#	84
3) Dichlorodifluoromethan...	5.04	85	226	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	7.28	45	2794	0.~~245~~	ng	#	42
11) Acetonitrile	7.62	41	640	N.D.			
12) Acrolein	7.83	56	2657	0.~~319~~	ng		99
13) Acetone	8.05	58	45526	~~3.503~~	ng	#	64
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.57	59	106	N.D.			
19) Methylene Chloride	9.53	84	354	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	3879	0.~~066~~	ng	#	75
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	11.96	72	4006	0.~~404~~	ng	#	41
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	0.00	57	0	N.D.			

12

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030909.D
Acq On : 3 Aug 2009 12:50
Operator : EM
Sample : P0902599-001 (1000ml)
Misc : Environmental H & E 99472
ALS Vial : 9 Sample Multiplier: 1

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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	12.99	83	632	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	1514	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	103	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	1745	0.~~093~~ ng		99
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	220	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D. FP		
55) 1,1,2-Trichloroethane	19.16	97	121878	~~7.898~~ ng	#	8
58) Toluene	19.28	91	1693	N.D.		
59) 2-Hexanone	19.69	43	110	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	22.09	91	104	N.D.		
67) m- & p-Xylenes	22.32	91	987	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	22.92	91	323	N.D.		
71) n-Nonane	23.18	43	219	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.49	105	470	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.41	105	107	N.D.		
78) 4-Ethyltoluene	24.47	105	119	N.D.		
79) 1,3,5-Trimethylbenzene	24.47	105	119	N.D.		

13

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030909.D
Acq On : 3 Aug 2009 12:50
Operator : EM
Sample : P0902599-001 (1000ml)
Misc : Environmental H & E 99472
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 03 13:28:01 2009
Quant Method : J:\MS09\Methods\R9072409.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

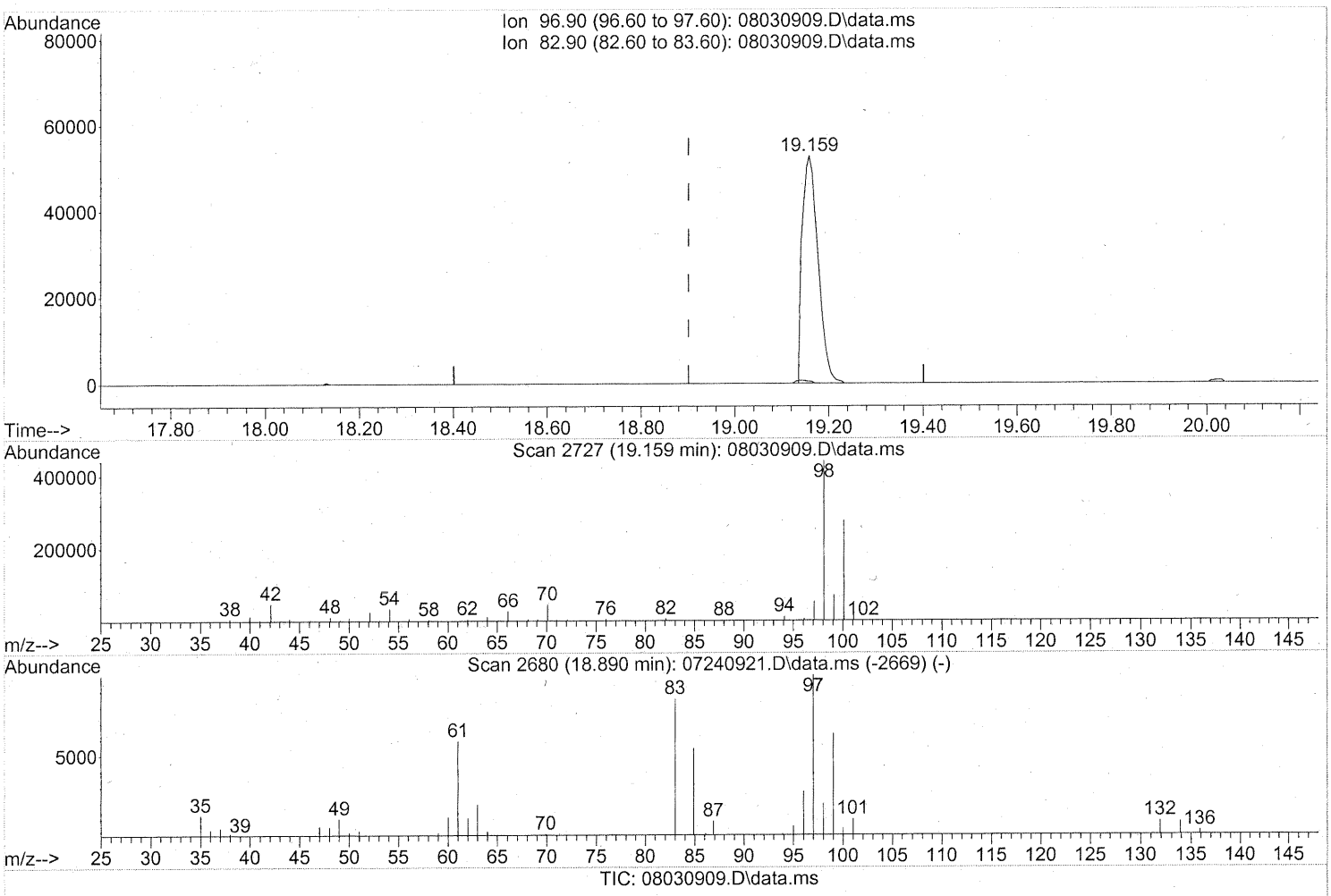
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	25.05	105	141	N.D.		
82) 1,2,4-Trimethylbenzene	25.05	105	141	N.D.		
83) n-Decane	25.14	57	110	N.D.		
84) Benzyl Chloride	0.00	91	0	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	25.05	105	141	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	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	26.51	57	683	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.95	128	843	N.D.		
96) n-Dodecane	27.80	57	940	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.54	55	234	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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030909.D
Acq On : 3 Aug 2009 12:50
Operator : EM
Sample : P0902599-001 (1000ml)
Misc : Environmental H & E 99472
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 03 13:28:01 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030909.D\data.ms

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

19.159min (+0.257) 7.90ng

response 121878

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.94#
0.00	0.00	0.00
0.00	0.00	0.00

FP
8m 8/5/09
LM 8/5/09

15

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99473**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-002

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: AC01304

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.61	ND	0.12	
74-87-3	Chloromethane	ND	0.12	ND	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	ND	6.1	ND	3.2	
75-05-8	Acetonitrile	ND	0.61	ND	0.36	
107-02-8	Acrolein	ND	0.61	ND	0.26	
67-64-1	Acetone	ND	6.1	ND	2.5	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.61	ND	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	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.61	ND	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)	ND	0.61	ND	0.21	

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

Verified By: P Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99473**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-002

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: AC01304

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.61	ND	0.17	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	ND	0.12	ND	0.038	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.019	
110-82-7	Cyclohexane	ND	0.61	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	**Trichloroethene**	**0.21**	0.12	**0.038**	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.61	ND	0.15	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	ND	0.61	ND	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

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

Verified By: P Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99473**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-002

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: AC01304

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.016	
91-20-3	Naphthalene	ND	0.24	ND	0.046	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.011	

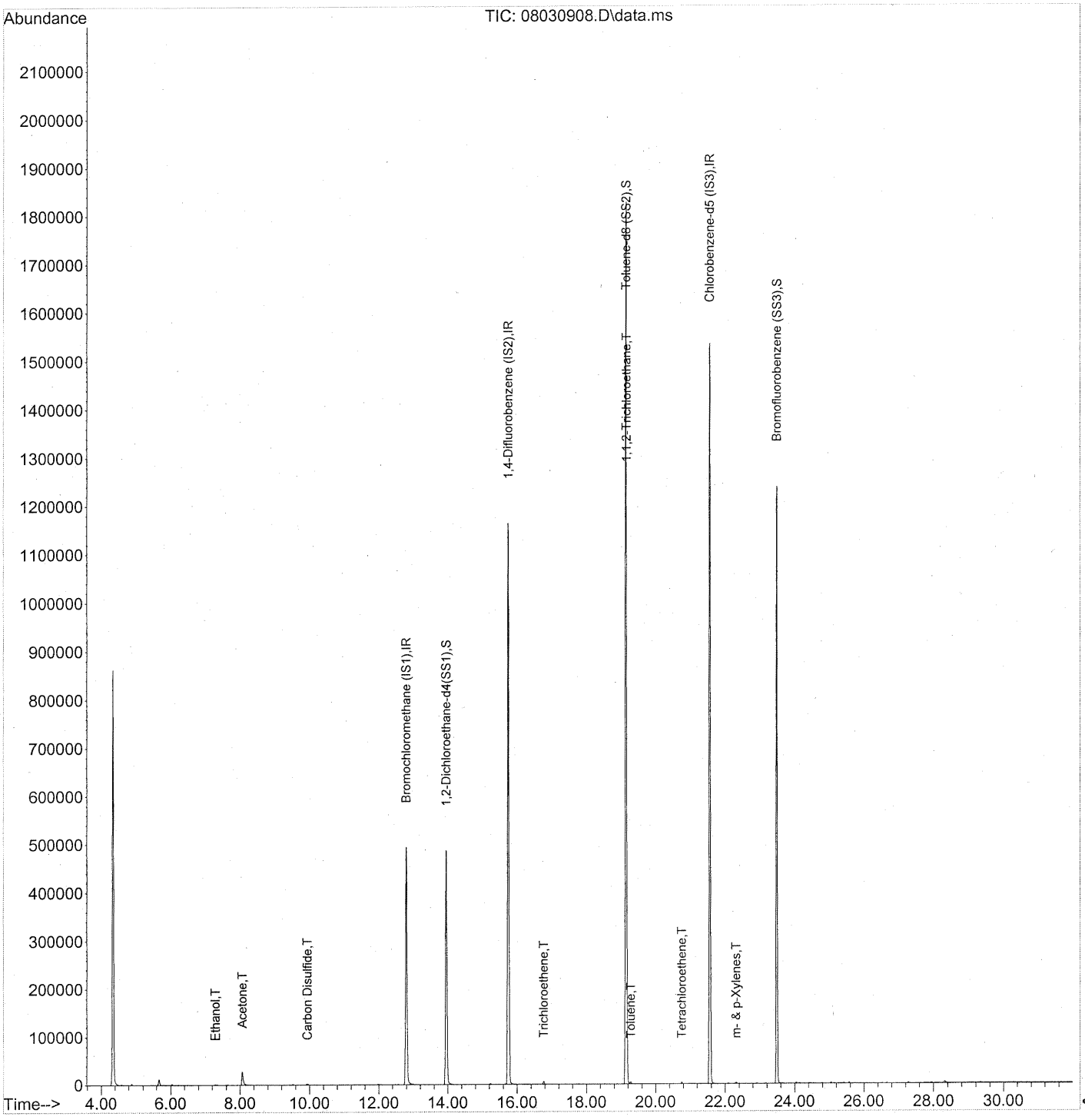
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/4/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030908.D
Acq On : 3 Aug 2009 12:08
Operator : EM
Sample : P0902599-002 (1000ml)
Misc : Environmental H & E 99473
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 03 13:27:57 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030908.D
Acq On : 3 Aug 2009 12:08
Operator : EM
Sample : P0902599-002 (1000ml)
Misc : Environmental H & E 99473
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 03 13:27:57 2009
Quant Method : J:\MS09\Methods\R9072409.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	277545	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1394607	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	614731	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	482321	24.563	ng		-0.03
Spiked Amount 25.000			Recovery =	98.24%			
57) Toluene-d8 (SS2)	19.15	98	1585972	26.078	ng		-0.01
Spiked Amount 25.000			Recovery =	104.32%			
73) Bromofluorobenzene (SS3)	23.49	174	456438	24.964	ng		0.00
Spiked Amount 25.000			Recovery =	99.84%			
Target Compounds							Qvalue
2) Propene	4.88	42	747	N.D.			
3) Dichlorodifluoromethan...	5.03	85	951	N.D.			
4) Chloromethane	0.00	50	0	N.D.			
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.29	45	3109	0.268	ng	#	42
11) Acetonitrile	7.63	41	1144	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.07	58	18819	1.424	ng		88
14) Trichlorofluoromethane	8.29	101	140	N.D.			
15) 2-Propanol (Isopropanol)	8.61	45	228	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	403	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	5366	0.090	ng	#	75
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	0.00	72	0	N.D.			
28) cis-1,2-Dichloroethene	12.56	61	222	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	121	N.D.			

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EM 8/5/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030908.D
Acq On : 3 Aug 2009 12:08
Operator : EM
Sample : P0902599-002 (1000ml)
Misc : Environmental H & E 99473
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 03 13:27:57 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	15.22	78	3073	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	217	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	3224	0.170 ng		99
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	970	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D. FP		
55) 1,1,2-Trichloroethane	19.16	97	133316	~~8.532~~ ng	#	8
58) Toluene	19.28	91	4683	0~~.063~~ ng		88
59) 2-Hexanone	0.00	43	0	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.56	43	128	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	20.75	166	1425	0.~~072~~ ng		90
65) Chlorobenzene	21.61	112	760	N.D.		
66) Ethylbenzene	22.10	91	1605	N.D.		
67) m- & p-Xylenes	22.31	91	3975	0.~~060~~ ng		95
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	22.92	91	1621	N.D.		
71) n-Nonane	23.17	43	380	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.66	105	1223	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.28	91	1443	N.D.		
77) 3-Ethyltoluene	24.40	105	2015	N.D.		
78) 4-Ethyltoluene	24.47	105	1543	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	1231	N.D.		

21

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030908.D
Acq On : 3 Aug 2009 12:08
Operator : EM
Sample : P0902599-002 (1000ml)
Misc : Environmental H & E 99473
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 03 13:27:57 2009
Quant Method : J:\MS09\Methods\R9072409.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

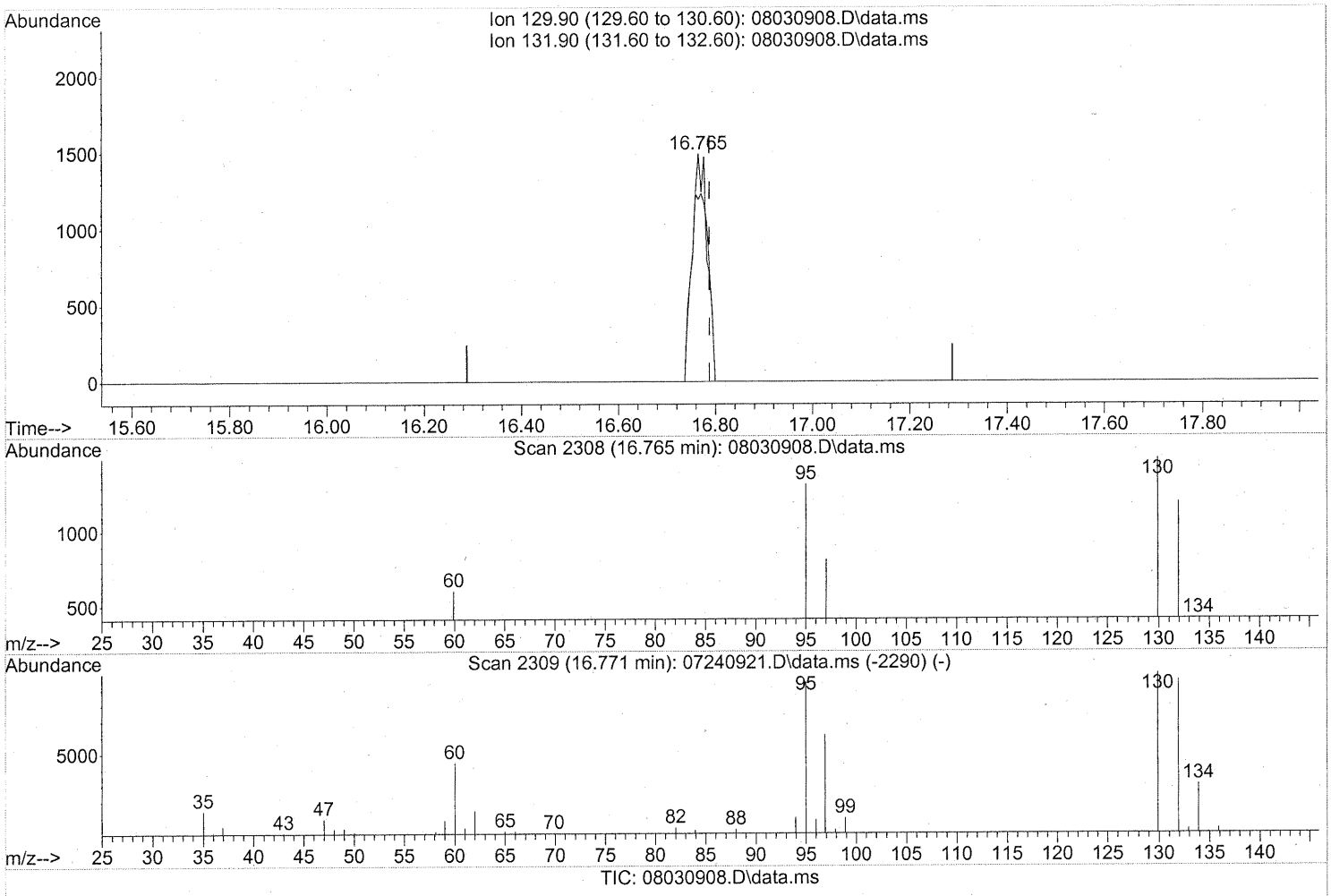
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.79	105	1296	N.D.		
82) 1,2,4-Trimethylbenzene	25.05	105	1511	N.D.		
83) n-Decane	25.15	57	609	N.D.		
84) Benzyl Chloride	25.56	91	118	N.D.		
85) 1,3-Dichlorobenzene	25.25	146	522	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	767	N.D.		
87) sec-Butylbenzene	25.39	105	769	N.D.		
88) 4-Isopropyltoluene (p-...	25.57	119	1110	N.D.		
89) 1,2,3-Trimethylbenzene	25.57	105	934	N.D.		
90) 1,2-Dichlorobenzene	25.75	146	567	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	535	N.D.		
94) 1,2,4-Trichlorobenzene	27.79	180	376	N.D.		
95) Naphthalene	27.94	128	2363	N.D.		
96) n-Dodecane	27.81	57	227	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	0.00	55	0	N.D.		
99) tert-Butylbenzene	25.05	119	569	N.D.		
100) n-Butylbenzene	26.08	91	646	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030908.D
Acq On : 3 Aug 2009 12:08
Operator : EM
Sample : P0902599-002 (1000ml)
Misc : Environmental H & E 99473
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:58:33 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030908.D\data.ms

(47) Trichloroethene (T)

16.765min (-0.023) 0.17ng

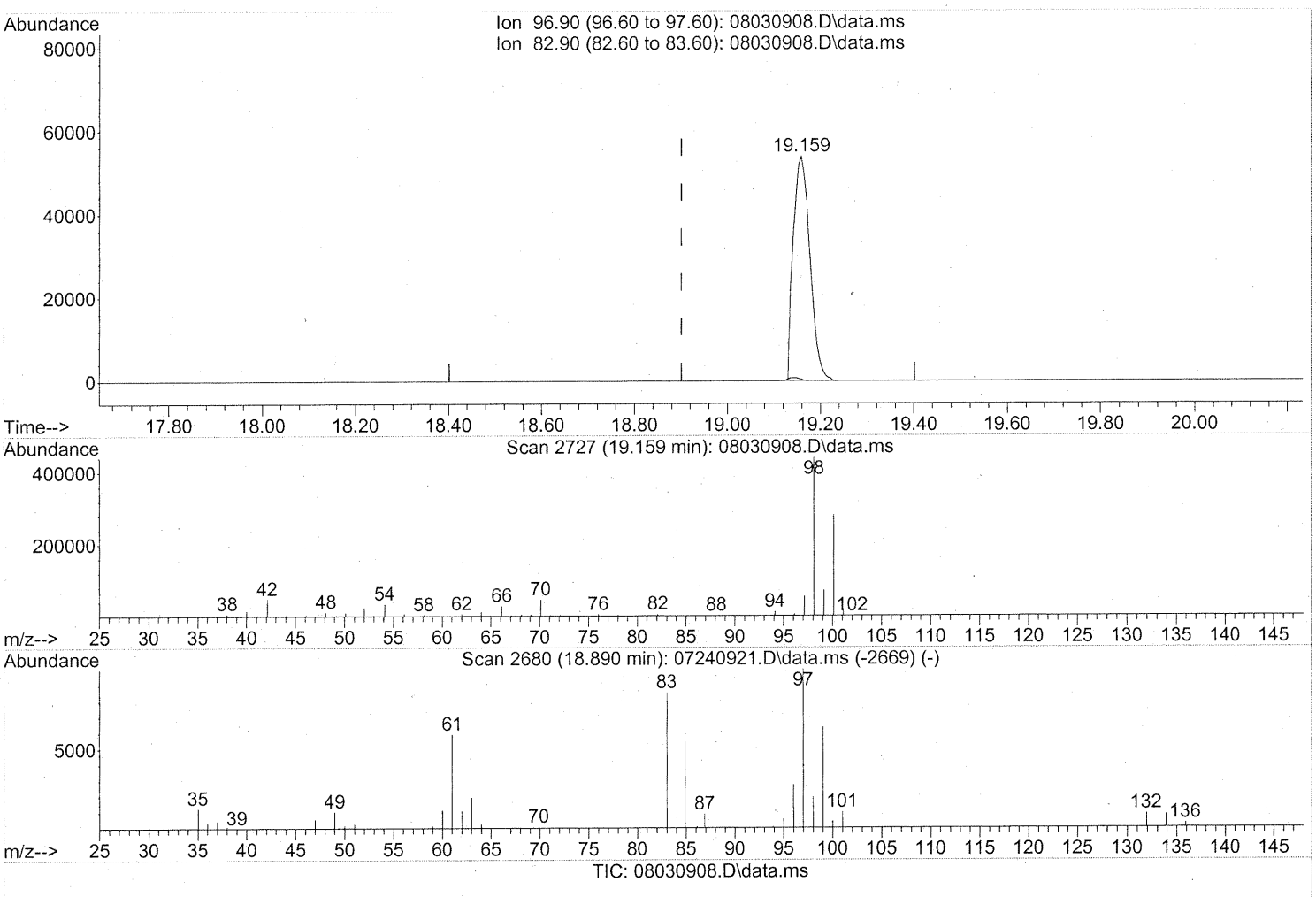
response 3224

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	94.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030908.D
Acq On : 3 Aug 2009 12:08
Operator : EM
Sample : P0902599-002 (1000ml)
Misc : Environmental H & E 99473
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 03 13:27:57 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030908.D\data.ms

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

19.159min (+0.257) 8.53ng

response 133316

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.79#
0.00	0.00	0.00
0.00	0.00	0.00

FP
tom 8/5/09
VM 8/5/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99474**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-003

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: AC00768

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.61	ND	0.12	
74-87-3	Chloromethane	ND	0.12	ND	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	ND	6.1	ND	3.2	
75-05-8	Acetonitrile	ND	0.61	ND	0.36	
107-02-8	Acrolein	ND	0.61	ND	0.26	
67-64-1	Acetone	ND	6.1	ND	2.5	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.61	ND	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	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.61	ND	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)	ND	0.61	ND	0.21	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99474**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-003

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: AC00768

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.61	ND	0.17	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	ND	0.12	ND	0.038	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.019	
110-82-7	Cyclohexane	ND	0.61	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.61	ND	0.15	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	ND	0.61	ND	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99474**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-003

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: AC00768

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.016	
91-20-3	Naphthalene	ND	0.24	ND	0.046	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.011	

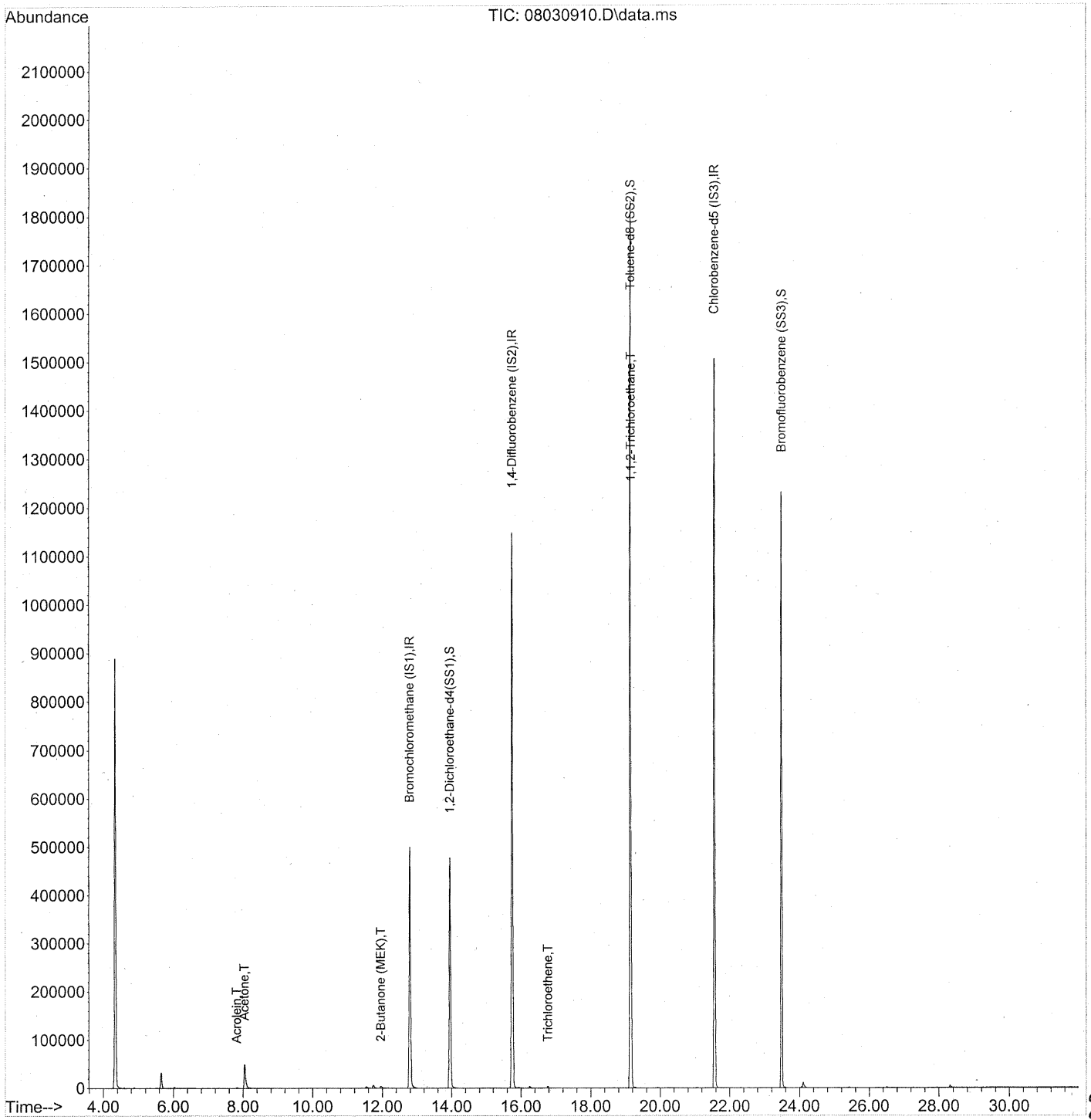
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030910.D
Acq On : 3 Aug 2009 13:31
Operator : EM
Sample : P0902599-003 (1000ml)
Misc : Environmental H & E 99474
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 14:16:26 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030910.D
Acq On : 3 Aug 2009 13:31
Operator : EM
Sample : P0902599-003 (1000ml)
Misc : Environmental H & E 99474
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 14:16:26 2009
Quant Method : J:\MS09\Methods\R9072409.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	272257	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1367742	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	609384	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	476465	24.736	ng		-0.03
Spiked Amount 25.000			Recovery =	98.96%			
57) Toluene-d8 (SS2)	19.15	98	1583507	26.266	ng		-0.01
Spiked Amount 25.000			Recovery =	105.08%			
73) Bromofluorobenzene (SS3)	23.49	174	451212	24.894	ng		0.00
Spiked Amount 25.000			Recovery =	99.56%			
Target Compounds							Qvalue
2) Propene	4.88	42	704	N.D.			
3) Dichlorodifluoromethan...	0.00	85	0	N.D.			
4) Chloromethane	0.00	50	0	N.D.			
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.33	45	106	N.D.			
11) Acetonitrile	7.60	41	217	N.D.			
12) Acrolein	7.82	56	2390	0.288	ng		98
13) Acetone	8.04	58	37586	2.900	ng	#	73
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.57	59	113	N.D.			
19) Methylene Chloride	9.52	84	105	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	1769	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	11.56	86	108	N.D.			
27) 2-Butanone (MEK)	11.96	72	2827	0.286	ng	#	47
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	0.00	57	0	N.D.			

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030910.D
Acq On : 3 Aug 2009 13:31
Operator : EM
Sample : P0902599-003 (1000ml)
Misc : Environmental H & E 99474
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 14:16:26 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	1244	N.D.			
42) Carbon Tetrachloride	0.00	117	0	N.D.			
43) Cyclohexane	15.75	84	484	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	1775	0.095	ng		89
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.	FP		
55) 1,1,2-Trichloroethane	19.16	97	131425	8.577	ng	#	8
58) Toluene	19.28	91	1543	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	20.75	166	439	N.D.			
65) Chlorobenzene	0.00	112	0	N.D.			
66) Ethylbenzene	22.31	91	258	N.D.			
67) m- & p-Xylenes	22.31	91	258	N.D.			
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	0.00	104	0	N.D.			
70) o-Xylene	0.00	91	0	N.D.			
71) n-Nonane	0.00	43	0	N.D.			
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.			
74) Cumene	23.49	105	120	N.D.			
75) alpha-Pinene	0.00	93	0	N.D.			
76) n-Propylbenzene	0.00	91	0	N.D.			
77) 3-Ethyltoluene	24.41	105	127	N.D.			
78) 4-Ethyltoluene	24.41	105	127	N.D.			
79) 1,3,5-Trimethylbenzene	24.41	105	127	N.D.			

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Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030910.D
Acq On : 3 Aug 2009 13:31
Operator : EM
Sample : P0902599-003 (1000ml)
Misc : Environmental H & E 99474
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 14:16:26 2009
Quant Method : J:\MS09\Methods\R9072409.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

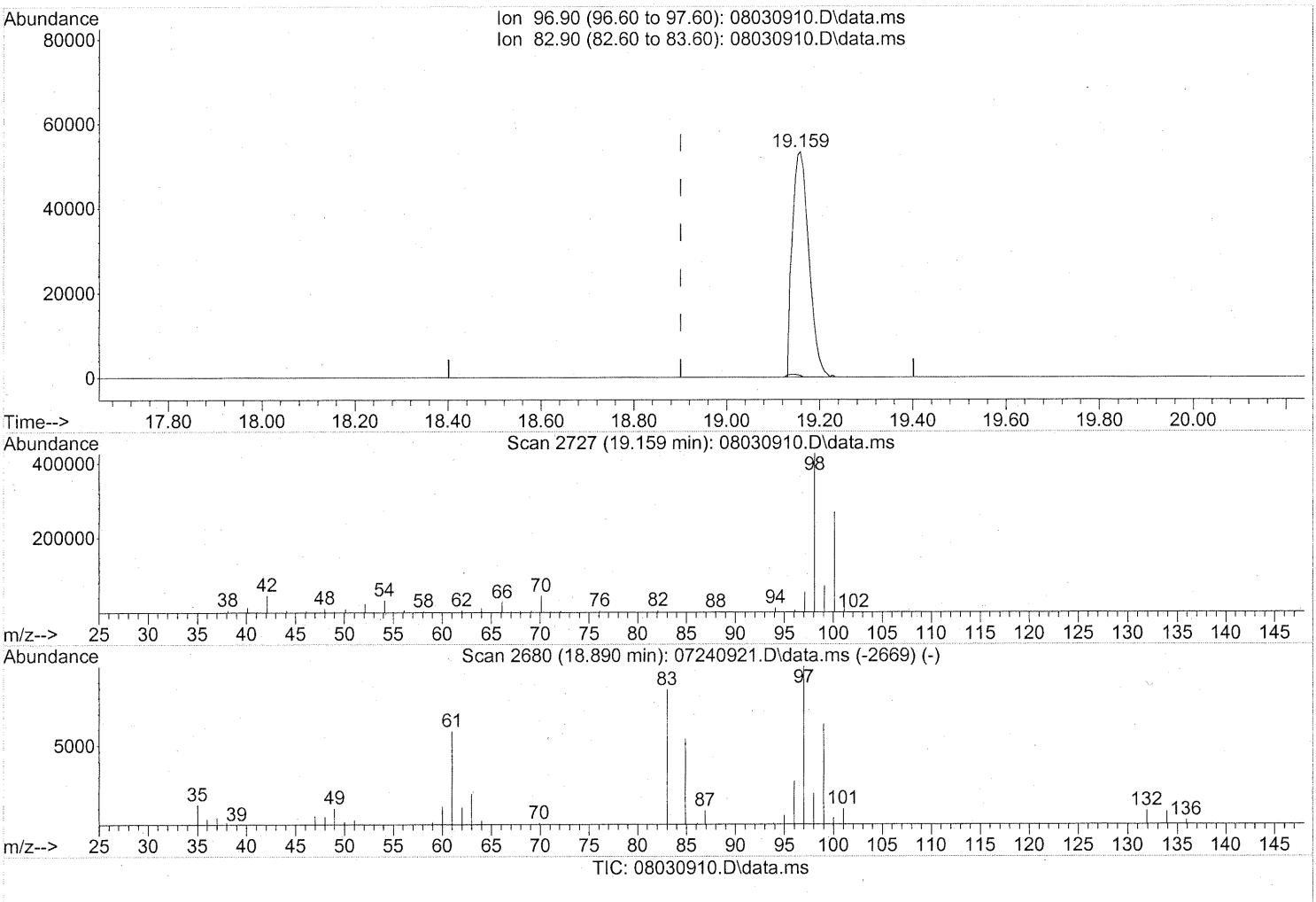
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.41	105	127	N.D.		
82) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
83) n-Decane	25.42	57	1338	N.D.		
84) Benzyl Chloride	0.00	91	0	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	386	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	386	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	0.00	105	0	N.D.		
90) 1,2-Dichlorobenzene	25.33	146	386	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	26.50	57	620	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.95	128	916	N.D.		
96) n-Dodecane	0.00	57	0	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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030910.D
Acq On : 3 Aug 2009 13:31
Operator : EM
Sample : P0902599-003 (1000ml)
Misc : Environmental H & E 99474
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 14:16:26 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030910.D\data.ms

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

19.159min (+0.257) 8.58ng

response 131425

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.76#
0.00	0.00	0.00
0.00	0.00	0.00

FP
Em 8/5/09
MM 8/5/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99475**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-004

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: AC00614

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.62	ND	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.62	ND	0.13	
74-87-3	Chloromethane	ND	0.12	ND	0.060	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.62	ND	0.089	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.049	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.056	
74-83-9	Bromomethane	ND	0.12	ND	0.032	
75-00-3	Chloroethane	ND	0.12	ND	0.047	
64-17-5	Ethanol	ND	6.2	ND	3.3	
75-05-8	Acetonitrile	ND	0.62	ND	0.37	
107-02-8	Acrolein	ND	0.62	ND	0.27	
67-64-1	Acetone	ND	6.2	ND	2.6	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.62	ND	0.25	
107-13-1	Acrylonitrile	ND	0.62	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.62	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.040	
76-13-1	Trichlorotrifluoroethane	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.62	ND	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.031	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.2	ND	1.8	
78-93-3	2-Butanone (MEK)	ND	0.62	ND	0.21	

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

Verified By: _____ Date: 8/12/09

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99475**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-004

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: AC00614

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.62	ND	0.17	
110-54-3	n-Hexane	ND	0.62	ND	0.18	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.62	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.023	
71-43-2	Benzene	ND	0.12	ND	0.039	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.020	
110-82-7	Cyclohexane	ND	0.62	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.019	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.62	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.62	ND	0.15	
142-82-5	n-Heptane	ND	0.62	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.62	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.023	
108-88-3	Toluene	ND	0.62	ND	0.16	
591-78-6	2-Hexanone	ND	0.62	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.62	ND	0.13	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99475**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-004

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: AC00614

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.62	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.027	
100-41-4	Ethylbenzene	ND	0.62	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.62	ND	0.14	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	Styrene	ND	0.62	ND	0.15	
95-47-6	o-Xylene	ND	0.62	ND	0.14	
111-84-2	n-Nonane	ND	0.62	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.62	ND	0.13	
80-56-8	alpha-Pinene	ND	0.62	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.62	ND	0.13	
622-96-8	4-Ethyltoluene	ND	0.62	ND	0.13	
108-67-8	1,3,5-Trimethylbenzene	ND	0.62	ND	0.13	
95-63-6	1,2,4-Trimethylbenzene	ND	0.62	ND	0.13	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.021	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.021	
5989-27-5	d-Limonene	ND	0.62	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.62	ND	0.064	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.017	
91-20-3	Naphthalene	ND	0.25	ND	0.047	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.012	

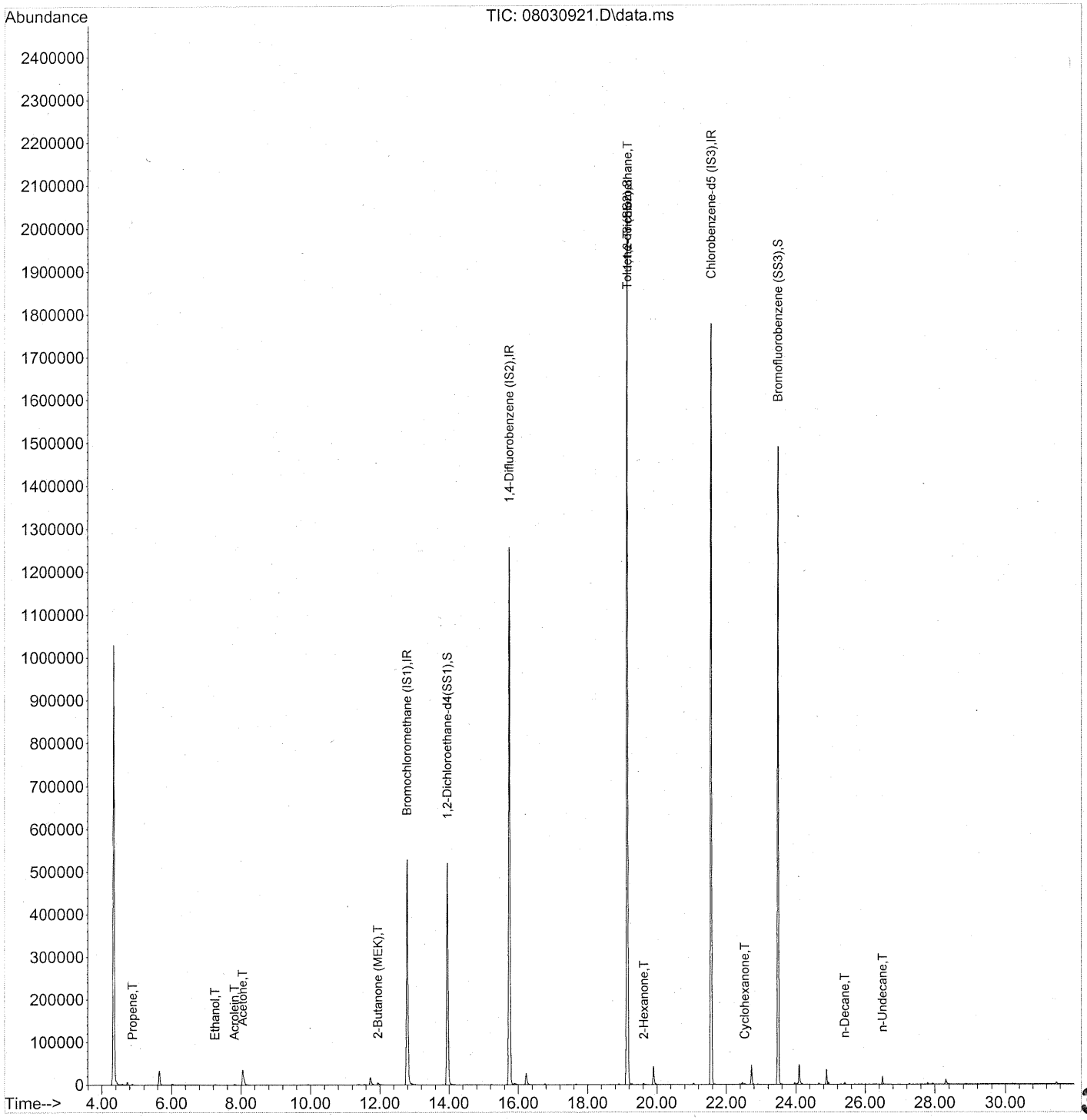
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030921.D
Acq On : 3 Aug 2009 21:37
Operator : EM
Sample : P0902599-004 (1000ml)
Misc : Environmental H & E 99475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 04 08:12:20 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030921.D
Acq On : 3 Aug 2009 21:37
Operator : EM
Sample : P0902599-004 (1000ml)
Misc : Environmental H & E 99475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 04 08:12:20 2009
Quant Method : J:\MS09\Methods\R9072409.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	292454	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1491374	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	711293	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	522136	25.235	ng		-0.03
Spiked Amount 25.000			Recovery = 100.96%				
57) Toluene-d8 (SS2)	19.15	98	1762823	25.051	ng		-0.01
Spiked Amount 25.000			Recovery = 100.20%				
73) Bromofluorobenzene (SS3)	23.49	174	536524	25.360	ng		0.00
Spiked Amount 25.000			Recovery = 101.44%				
Target Compounds							Qvalue
2) Propene	4.88	42	944	0.051	ng	#	86
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	7.25	45	3332	0.272	ng	#	49
11) Acetonitrile	7.60	41	994	N.D.			
12) Acrolein	7.81	56	2631	0.295	ng		91
13) Acetone	8.05	58	31777	2.282	ng	#	44
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.			
19) Methylene Chloride	9.52	84	113	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	2014	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	11.55	86	114	N.D.			
27) 2-Butanone (MEK)	11.95	72	2762	0.260	ng	#	32
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	0.00	57	0	N.D.			

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Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030921.D
Acq On : 3 Aug 2009 21:37
Operator : EM
Sample : P0902599-004 (1000ml)
Misc : Environmental H & E 99475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 04 08:12:20 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	15.21	56	222	N.D.		
41) Benzene	15.23	78	1182	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.75	84	531	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	956	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. FP		
55) 1,1,2-Trichloroethane	19.15	97	148186	~~8.869~~ ng	#	8
58) Toluene	19.28	91	2028	N.D.		
59) 2-Hexanone	19.63	43	3871	0.~~104~~ ng		86
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	21.61	112	639	N.D.		
66) Ethylbenzene	22.31	91	128	N.D.		
67) m- & p-Xylenes	22.33	91	123	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	22.91	43	258	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.48	105	637	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.41	105	242	N.D.		
78) 4-Ethyltoluene	24.41	105	242	N.D.		
79) 1,3,5-Trimethylbenzene	24.41	105	242	N.D.		

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Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030921.D
Acq On : 3 Aug 2009 21:37
Operator : EM
Sample : P0902599-004 (1000ml)
Misc : Environmental H & E 99475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 04 08:12:20 2009
Quant Method : J:\MS09\Methods\R9072409.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

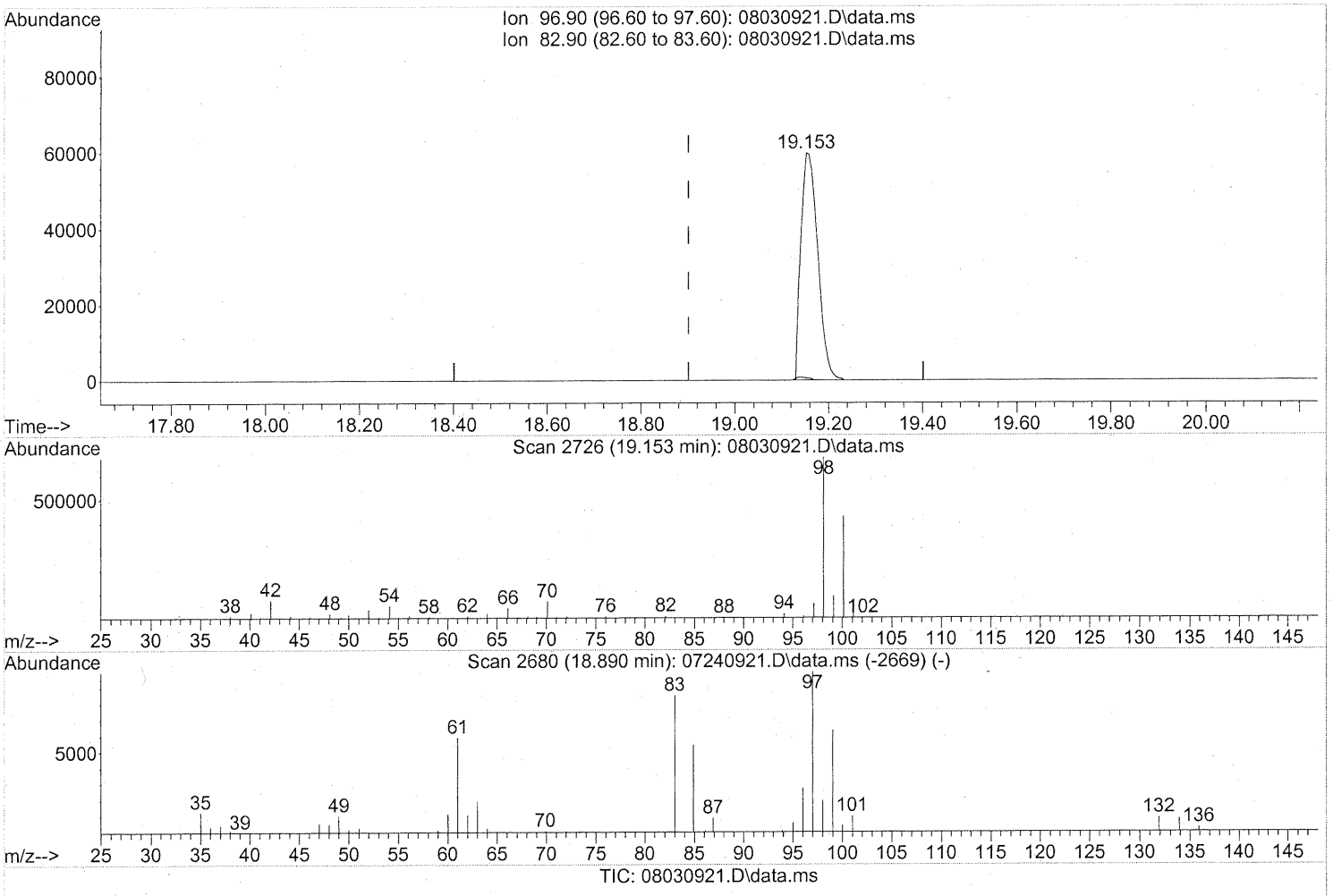
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	25.05	105	123	N.D.		
82) 1,2,4-Trimethylbenzene	25.05	105	123	N.D.		
83) n-Decane	25.41	57	2817	0.065 ng	#	38
84) Benzyl Chloride	0.00	91	0	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	240	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	240	N.D.		
87) sec-Butylbenzene	25.05	105	123	N.D.		
88) 4-Isopropyltoluene (p-...	0.00	119	0	N.D.		
89) 1,2,3-Trimethylbenzene	26.01	105	658	N.D.		
90) 1,2-Dichlorobenzene	25.33	146	240	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	26.50	57	3915	0.088 ng	#	46
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	3827	N.D.		
96) n-Dodecane	27.80	57	867	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.53	55	1342	0.052 ng	#	74
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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030921.D
Acq On : 3 Aug 2009 21:37
Operator : EM
Sample : P0902599-004 (1000ml)
Misc : Environmental H & E 99475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 04 08:12:20 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030921.D\data.ms

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

19.153min (+0.251) 8.87ng

response 148186

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.84#
0.00	0.00	0.00
0.00	0.00	0.00

FP
8m 8/5/09

UM 8/5/09

40

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99476**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-005

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: AC01573

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -14.5 Final Pressure (psig): 4.0

Canister Dilution Factor: 93.50

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	47	ND	27	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	47	ND	9.5	
74-87-3	Chloromethane	ND	9.4	ND	4.5	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	47	ND	6.7	
75-01-4	Vinyl Chloride	ND	9.4	ND	3.7	
106-99-0	1,3-Butadiene	ND	9.4	ND	4.2	
74-83-9	Bromomethane	ND	9.4	ND	2.4	
75-00-3	Chloroethane	ND	9.4	ND	3.5	
64-17-5	Ethanol	ND	470	ND	250	
75-05-8	Acetonitrile	ND	47	ND	28	
107-02-8	Acrolein	ND	47	ND	20	
67-64-1	Acetone	ND	470	ND	200	
75-69-4	Trichlorofluoromethane	ND	9.4	ND	1.7	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	47	ND	19	
107-13-1	Acrylonitrile	ND	47	ND	22	
75-35-4	1,1-Dichloroethene	ND	9.4	ND	2.4	
75-09-2	Methylene Chloride	ND	47	ND	13	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	9.4	ND	3.0	
76-13-1	Trichlorotrifluoroethane	ND	9.4	ND	1.2	
75-15-0	Carbon Disulfide	ND	47	ND	15	
156-60-5	trans-1,2-Dichloroethene	ND	9.4	ND	2.4	
75-34-3	1,1-Dichloroethane	ND	9.4	ND	2.3	
1634-04-4	Methyl tert-Butyl Ether	ND	9.4	ND	2.6	
108-05-4	Vinyl Acetate	ND	470	ND	130	
78-93-3	2-Butanone (MEK)	ND	47	ND	16	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99476**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-005

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: AC01573

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -14.5 Final Pressure (psig): 4.0

Canister Dilution Factor: 93.50

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	9.4	ND	2.4	
141-78-6	Ethyl Acetate	ND	47	ND	13	
110-54-3	n-Hexane	ND	47	ND	13	
67-66-3	Chloroform	ND	9.4	ND	1.9	
109-99-9	Tetrahydrofuran (THF)	ND	47	ND	16	
107-06-2	1,2-Dichloroethane	ND	9.4	ND	2.3	
71-55-6	1,1,1-Trichloroethane	ND	9.4	ND	1.7	
71-43-2	Benzene	ND	9.4	ND	2.9	
56-23-5	Carbon Tetrachloride	ND	9.4	ND	1.5	
110-82-7	Cyclohexane	ND	47	ND	14	
78-87-5	1,2-Dichloropropane	ND	9.4	ND	2.0	
75-27-4	Bromodichloromethane	ND	9.4	ND	1.4	
79-01-6	Trichloroethene	ND	9.4	ND	1.7	
123-91-1	1,4-Dioxane	ND	47	ND	13	
80-62-6	Methyl Methacrylate	ND	47	ND	11	
142-82-5	n-Heptane	ND	47	ND	11	
10061-01-5	cis-1,3-Dichloropropene	ND	47	ND	10	
108-10-1	4-Methyl-2-pentanone	ND	47	ND	11	
10061-02-6	trans-1,3-Dichloropropene	ND	47	ND	10	
79-00-5	1,1,2-Trichloroethane	ND	9.4	ND	1.7	
108-88-3	Toluene	ND	47	ND	12	
591-78-6	2-Hexanone	ND	47	ND	11	
124-48-1	Dibromochloromethane	ND	9.4	ND	1.1	
106-93-4	1,2-Dibromoethane	ND	9.4	ND	1.2	
123-86-4	n-Butyl Acetate	ND	47	ND	9.8	

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: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99476**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-005

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: AC01573

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -14.5 Final Pressure (psig): 4.0

Canister Dilution Factor: 93.50

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	47	ND	10	
127-18-4	Tetrachloroethene	ND	9.4	ND	1.4	
108-90-7	Chlorobenzene	ND	9.4	ND	2.0	
100-41-4	Ethylbenzene	ND	47	ND	11	
179601-23-1	m,p-Xylenes	ND	47	ND	11	
75-25-2	Bromoform	ND	47	ND	4.5	
100-42-5	Styrene	ND	47	ND	11	
95-47-6	o-Xylene	ND	47	ND	11	
111-84-2	n-Nonane	ND	47	ND	8.9	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.4	ND	1.4	
98-82-8	Cumene	ND	47	ND	9.5	
80-56-8	alpha-Pinene	ND	47	ND	8.4	
103-65-1	n-Propylbenzene	ND	47	ND	9.5	
622-96-8	4-Ethyltoluene	ND	47	ND	9.5	
108-67-8	1,3,5-Trimethylbenzene	ND	47	ND	9.5	
95-63-6	1,2,4-Trimethylbenzene	ND	47	ND	9.5	
100-44-7	Benzyl Chloride	ND	9.4	ND	1.8	
541-73-1	1,3-Dichlorobenzene	ND	9.4	ND	1.6	
106-46-7	1,4-Dichlorobenzene	ND	9.4	ND	1.6	
95-50-1	1,2-Dichlorobenzene	ND	9.4	ND	1.6	
5989-27-5	d-Limonene	ND	47	ND	8.4	
96-12-8	1,2-Dibromo-3-chloropropane	ND	47	ND	4.8	
120-82-1	1,2,4-Trichlorobenzene	ND	9.4	ND	1.3	
91-20-3	Naphthalene	ND	19	ND	3.6	
87-68-3	Hexachlorobutadiene	ND	9.4	ND	0.88	

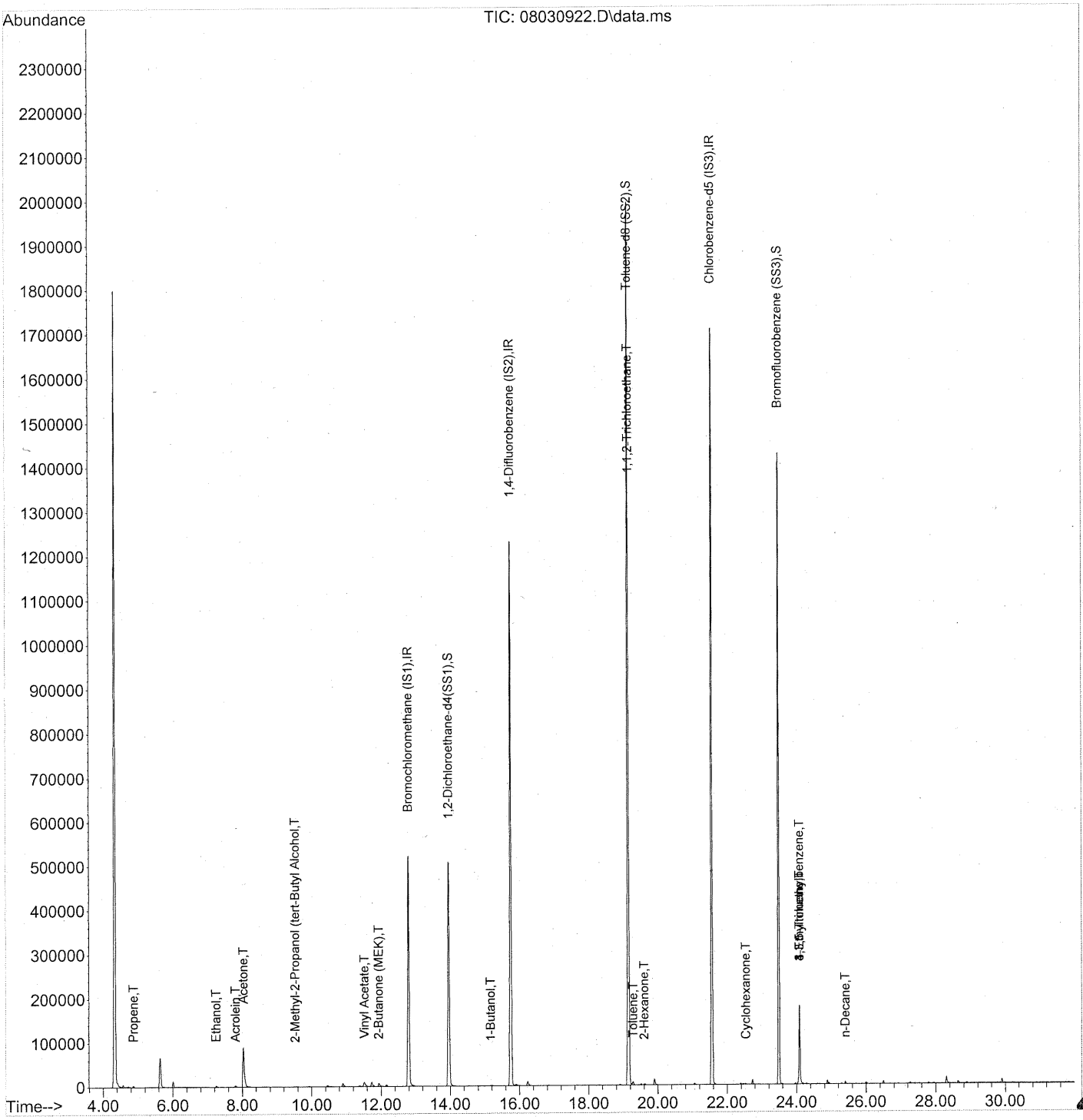
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030922.D
Acq On : 3 Aug 2009 22:19
Operator : EM
Sample : P0902599-005 (1000ml)
Misc : Environmental H & E 99476
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 04 08:12:24 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030922.D
Acq On : 3 Aug 2009 22:19
Operator : EM
Sample : P0902599-005 (1000ml)
Misc : Environmental H & E 99476
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 04 08:12:24 2009
Quant Method : J:\MS09\Methods\R9072409.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	287648	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1454873	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	687129	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	510743	25.097	ng		-0.03
Spiked Amount 25.000			Recovery =	100.40%			
57) Toluene-d8 (SS2)	19.15	98	1711319	25.174	ng		-0.01
Spiked Amount 25.000			Recovery =	100.68%			
73) Bromofluorobenzene (SS3)	23.49	174	515664	25.231	ng		0.00
Spiked Amount 25.000			Recovery =	100.92%			
Target Compounds							Qvalue
2) Propene	4.87	42	1167	0.064	ng		89
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	7.25	45	4205	0.349	ng		76
11) Acetonitrile	7.59	41	771	N.D.			
12) Acrolein	7.81	56	3606	0.411	ng		100
13) Acetone	8.03	58	62215	4.543	ng	#	78
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.53	59	3479	0.086	ng	#	63
19) Methylene Chloride	0.00	84	0	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	9.92	76	2305	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	11.52	86	2383	0.730	ng	#	79
27) 2-Butanone (MEK)	11.94	72	3851	0.369	ng	#	46
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.			

Cam 8/5/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030922.D
Acq On : 3 Aug 2009 22:19
Operator : EM
Sample : P0902599-005 (1000ml)
Misc : Environmental H & E 99476
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 04 08:12:24 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	15.17	56	1924	0.106 ng	#	57
41) Benzene	15.23	78	787	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.74	84	717	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	1133	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	135209	~~8.295~~ ng FP	#	8
58) Toluene	19.28	91	8846	~~0.106~~ ng		95
59) 2-Hexanone	19.61	43	3408	~~0.095~~ ng	#	73
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	0.00	43	0	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	0.00	91	0	N.D.		
67) m- & p-Xylenes	0.00	91	0	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	0.00	91	0	N.D.		
71) n-Nonane	23.16	43	813	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.48	105	530	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.09	105	83847	0.896 ng	#	42
78) 4-Ethyltoluene	24.09	105	83847	~~0.893 ng~~ FP	#	45
79) 1,3,5-Trimethylbenzene	24.09	105	76054	~~0.974 ng~~ FP	#	28

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Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030922.D
Acq On : 3 Aug 2009 22:19
Operator : EM
Sample : P0902599-005 (1000ml)
Misc : Environmental H & E 99476
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 04 08:12:24 2009
Quant Method : J:\MS09\Methods\R9072409.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	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.40	105	107	N.D.		
82) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
83) n-Decane	25.40	57	3123	0.074 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	26.00	105	3091	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	26.66	57	106	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	1564	N.D.		
96) n-Dodecane	27.80	57	657	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.54	55	1454	0.058 ng	#	66
99) tert-Butylbenzene	0.00	119	0	N.D.		
100) n-Butylbenzene	26.02	91	224	N.D.		

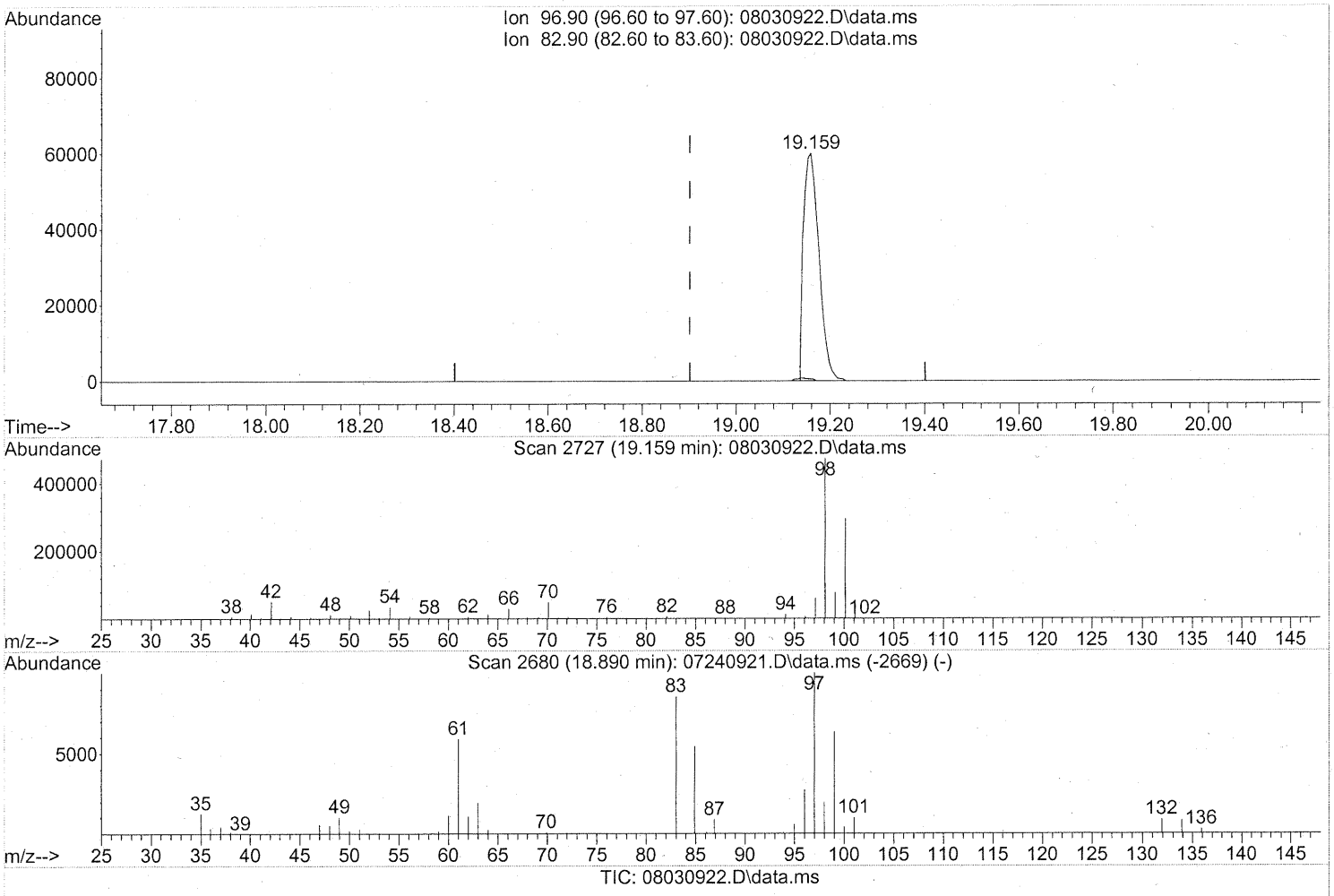
(#) = qualifier out of range (m) = manual integration (+) = signals summed

47

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030922.D
Acq On : 3 Aug 2009 22:19
Operator : EM
Sample : P0902599-005 (1000ml)
Misc : Environmental H & E 99476
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 04 08:12:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030922.D\data.ms

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

19.159min (+0.257) 8.30ng

response 135209

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.00#
0.00	0.00	0.00
0.00	0.00	0.00

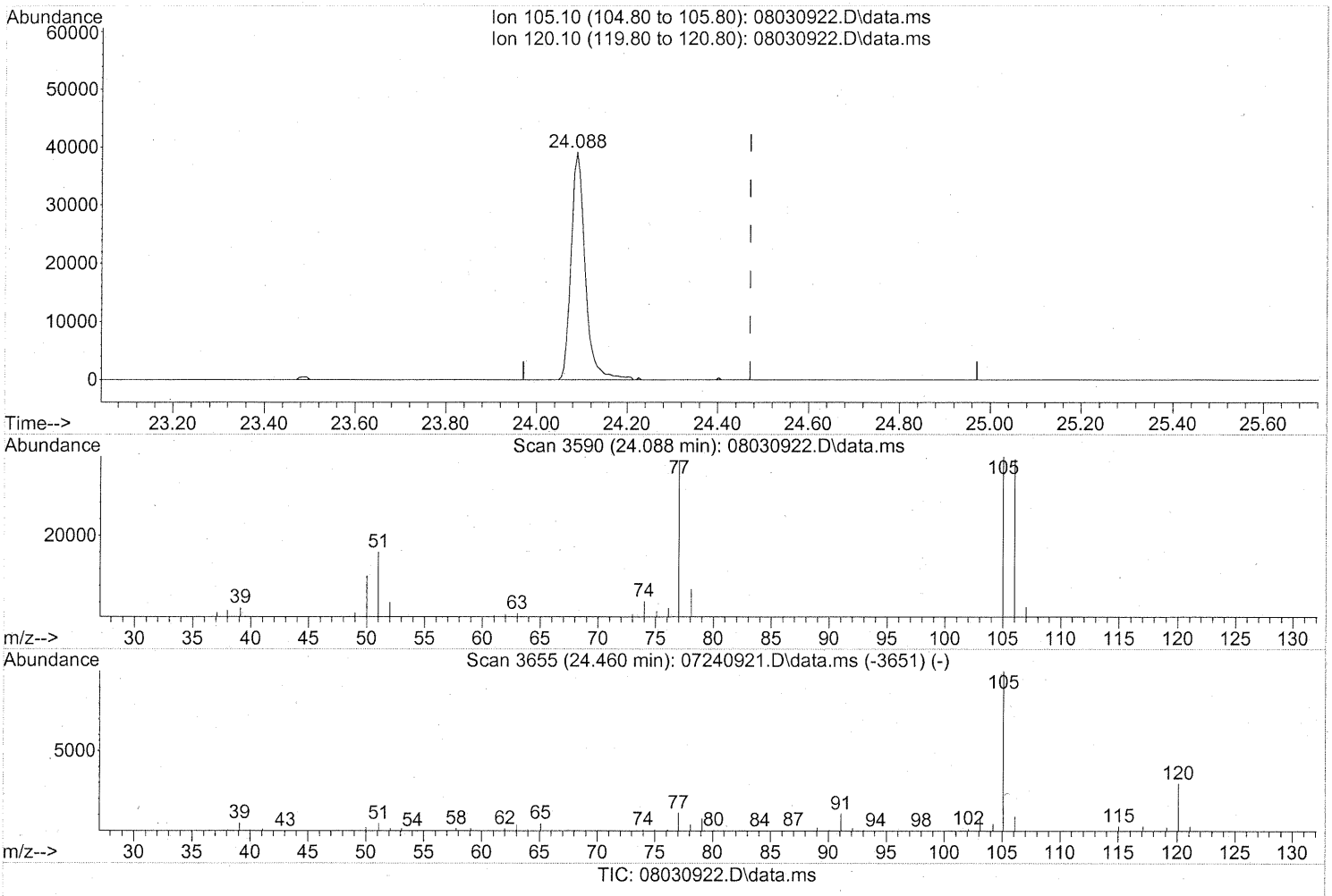
FP
8/5/09
8/5/09

48

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030922.D
Acq On : 3 Aug 2009 22:19
Operator : EM
Sample : P0902599-005 (1000ml)
Misc : Environmental H & E 99476
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 04 08:12:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030922.D\data.ms

(78) 4-Ethyltoluene (T)

24.088min (-0.383) 0.89ng

response 83847

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

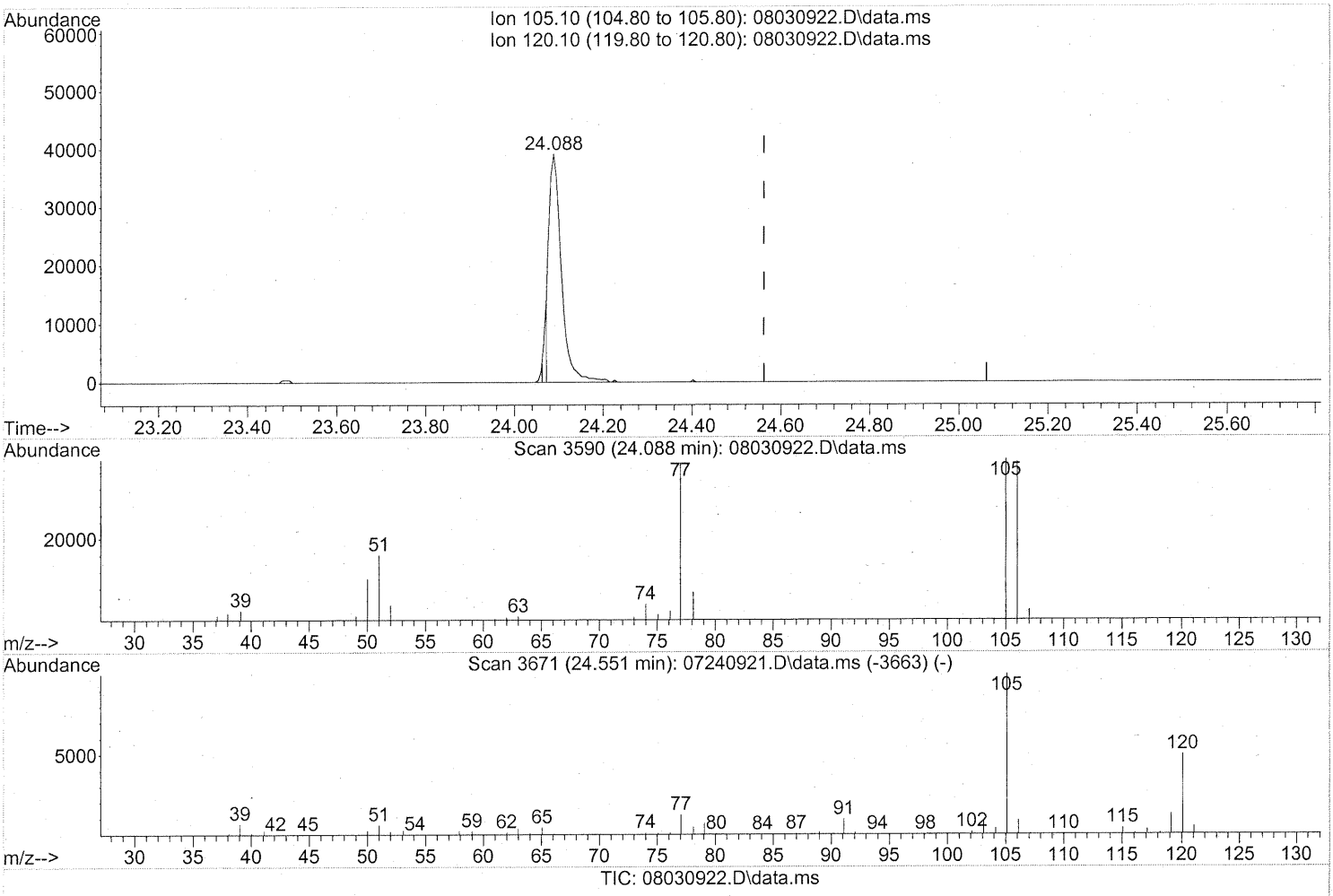
FP
8/5/09
8/5/09

49

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030922.D
Acq On : 3 Aug 2009 22:19
Operator : EM
Sample : P0902599-005 (1000ml)
Misc : Environmental H & E 99476
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 04 08:12:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030922.D\data.ms

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

24.088min (-0.474) 0.97ng

response 76054

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

FP
EM 8/5/09
LM 8/5/09

50

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99431**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01096

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.3 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.62	ND	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.62	ND	0.12	
74-87-3	Chloromethane	ND	0.12	ND	0.060	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.62	ND	0.088	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.048	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.056	
74-83-9	Bromomethane	ND	0.12	ND	0.032	
75-00-3	Chloroethane	ND	0.12	ND	0.047	
64-17-5	Ethanol	ND	6.2	ND	3.3	
75-05-8	Acetonitrile	ND	0.62	ND	0.37	
107-02-8	**Acrolein**	**0.63**	0.62	**0.27**	0.27	
67-64-1	Acetone	ND	6.2	ND	2.6	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.62	ND	0.25	
107-13-1	Acrylonitrile	ND	0.62	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.62	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	Trichlorotrifluoroethane	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.62	ND	0.20	
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	6.2	ND	1.7	
78-93-3	2-Butanone (MEK)	ND	0.62	ND	0.21	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99431**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01096

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.3 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.62	ND	0.17	
110-54-3	n-Hexane	ND	0.62	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.62	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.023	
71-43-2	Benzene	ND	0.12	ND	0.039	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.020	
110-82-7	Cyclohexane	ND	0.62	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.62	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.62	ND	0.15	
142-82-5	n-Heptane	ND	0.62	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.62	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.023	
108-88-3	Toluene	ND	0.62	ND	0.16	
591-78-6	2-Hexanone	ND	0.62	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.62	ND	0.13	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99431**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01096

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.3 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.62	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.027	
100-41-4	Ethylbenzene	ND	0.62	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.62	ND	0.14	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	Styrene	ND	0.62	ND	0.14	
95-47-6	o-Xylene	ND	0.62	ND	0.14	
111-84-2	n-Nonane	ND	0.62	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.62	ND	0.13	
80-56-8	alpha-Pinene	ND	0.62	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.62	ND	0.13	
622-96-8	4-Ethyltoluene	ND	0.62	ND	0.13	
108-67-8	1,3,5-Trimethylbenzene	ND	0.62	ND	0.13	
95-63-6	1,2,4-Trimethylbenzene	ND	0.62	ND	0.13	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.62	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.62	ND	0.064	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.017	
91-20-3	Naphthalene	ND	0.25	ND	0.047	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.012	

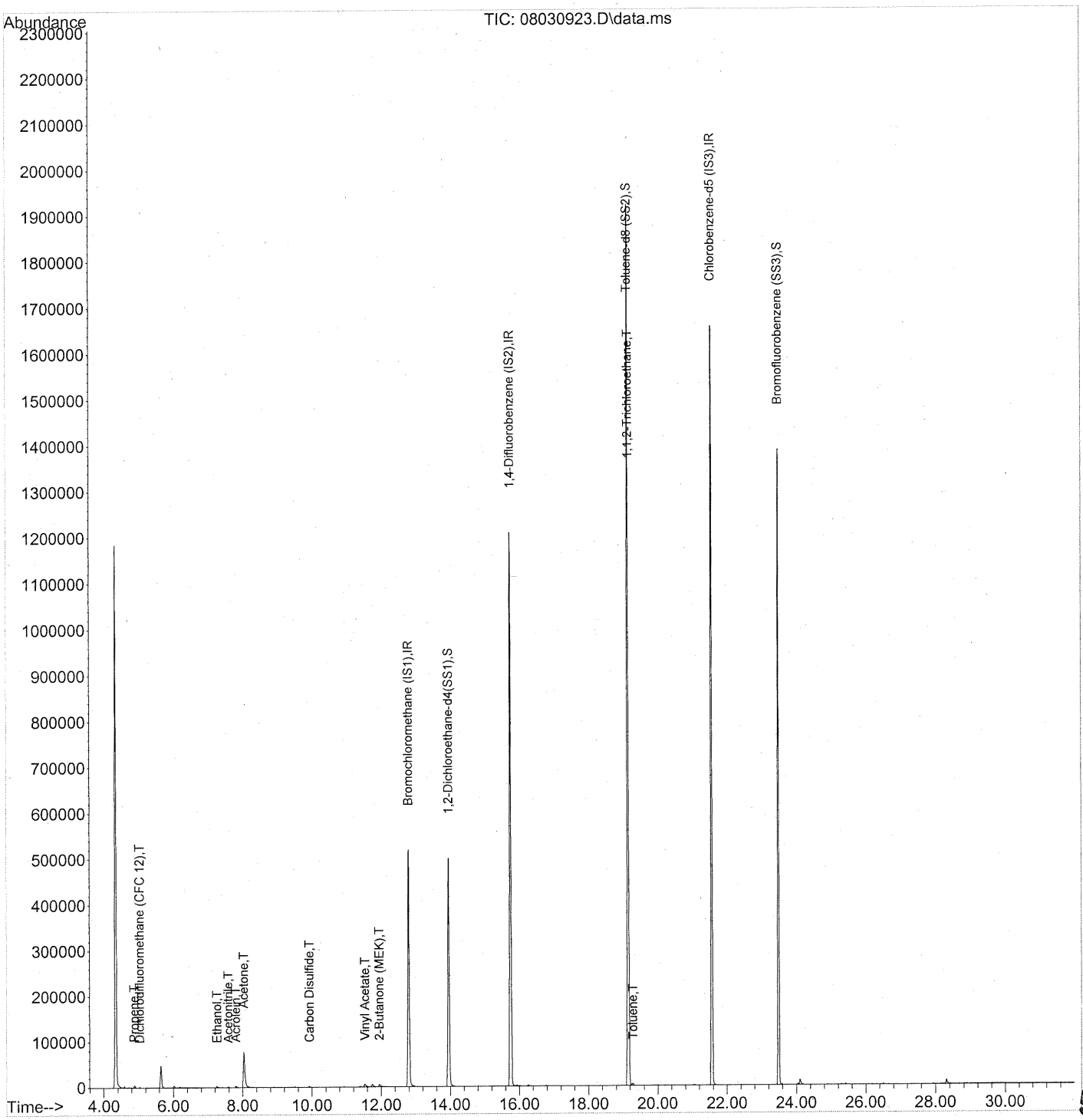
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030923.D
Acq On : 3 Aug 2009 23:01
Operator : EM
Sample : P0902599-006 (1000ml)
Misc : Environmental H & E 99431
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 04 08:12:27 2009
Quant Method : J:\MS09\Methods\R9072409.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



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Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030923.D
Acq On : 3 Aug 2009 23:01
Operator : EM
Sample : P0902599-006 (1000ml)
Misc : Environmental H & E 99431
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 04 08:12:27 2009
Quant Method : J:\MS09\Methods\R9072409.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	284797	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1429334	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	666597	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	502576	24.943	ng		-0.03
Spiked Amount 25.000			Recovery = 99.76%				
57) Toluene-d8 (SS2)	19.14	98	1680167	25.477	ng		-0.02
Spiked Amount 25.000			Recovery = 101.92%				
73) Bromofluorobenzene (SS3)	23.49	174	509447	25.695	ng		0.00
Spiked Amount 25.000			Recovery = 102.76%				
Target Compounds							Qvalue
2) Propene	4.87	42	1340	0.~~075~~	ng	#	72
3) Dichlorodifluoromethan...	5.03	85	1891	0.~~053~~	ng	#	77
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	7.26	45	5022	0.~~421~~	ng		71
11) Acetonitrile	7.59	41	2417	0.090	ng		85
12) Acrolein	7.81	56	4424	0.509	ng		99
13) Acetone	8.03	58	54443	~~4.015~~	ng	#	80
14) Trichlorofluoromethane	8.30	101	760	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.57	59	445	N.D.			
19) Methylene Chloride	9.52	84	636	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	3533	0.~~058~~	ng	#	75
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.53	86	1172	0.~~362~~	ng	#	14
27) 2-Butanone (MEK)	11.95	72	3006	0.~~291~~	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	0.00	61	0	N.D.			
31) n-Hexane	12.92	57	105	N.D.			

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030923.D
Acq On : 3 Aug 2009 23:01
Operator : EM
Sample : P0902599-006 (1000ml)
Misc : Environmental H & E 99431
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 04 08:12:27 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	1673	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.74	84	653	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	698	N.D.	
48) 1,4-Dioxane	0.00	88	0	N.D.	
49) 2,2,4-Trimethylpentane...	16.85	57	866	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	140543	~~8.776~~ ng FP #	8
58) Toluene	19.28	91	5221	~~0.065~~ ng	95
59) 2-Hexanone	19.54	43	466	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	514	N.D.	
67) m- & p-Xylenes	22.31	91	514	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Styrene	0.00	104	0	N.D.	
70) o-Xylene	0.00	91	0	N.D.	
71) n-Nonane	0.00	43	0	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	23.49	105	482	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	0.00	91	0	N.D.	
77) 3-Ethyltoluene	24.41	105	106	N.D.	
78) 4-Ethyltoluene	24.41	105	106	N.D.	
79) 1,3,5-Trimethylbenzene	24.41	105	106	N.D.	

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Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030923.D
Acq On : 3 Aug 2009 23:01
Operator : EM
Sample : P0902599-006 (1000ml)
Misc : Environmental H & E 99431
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 04 08:12:27 2009
Quant Method : J:\MS09\Methods\R9072409.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

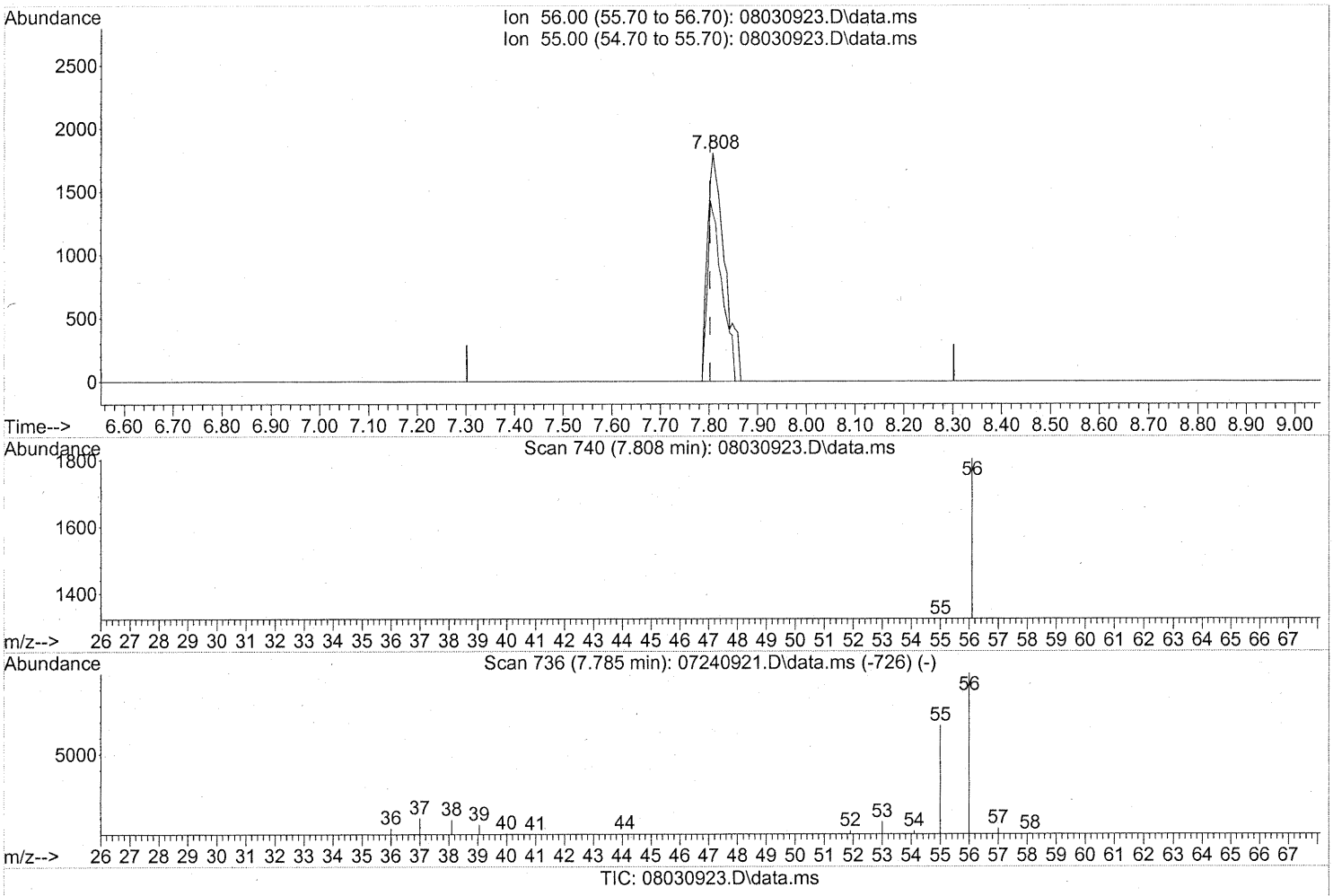
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.41	105	106	N.D.		
82) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
83) n-Decane	25.41	57	1706	N.D.		
84) Benzyl Chloride	0.00	91	0	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	0.00	105	0	N.D.		
88) 4-Isopropyltoluene (p-...	0.00	119	0	N.D.		
89) 1,2,3-Trimethylbenzene	26.04	105	233	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	257	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	790	N.D.		
96) n-Dodecane	0.00	57	0	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.54	55	260	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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030923.D
Acq On : 3 Aug 2009 23:01
Operator : EM
Sample : P0902599-006 (1000ml)
Misc : Environmental H & E 99431
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 05 16:04:59 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030923.D\data.ms

(12) Acrolein (T)

7.808min (+0.006) 0.51ng

response 4424

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	66.89
0.00	0.00	0.00
0.00	0.00	0.00

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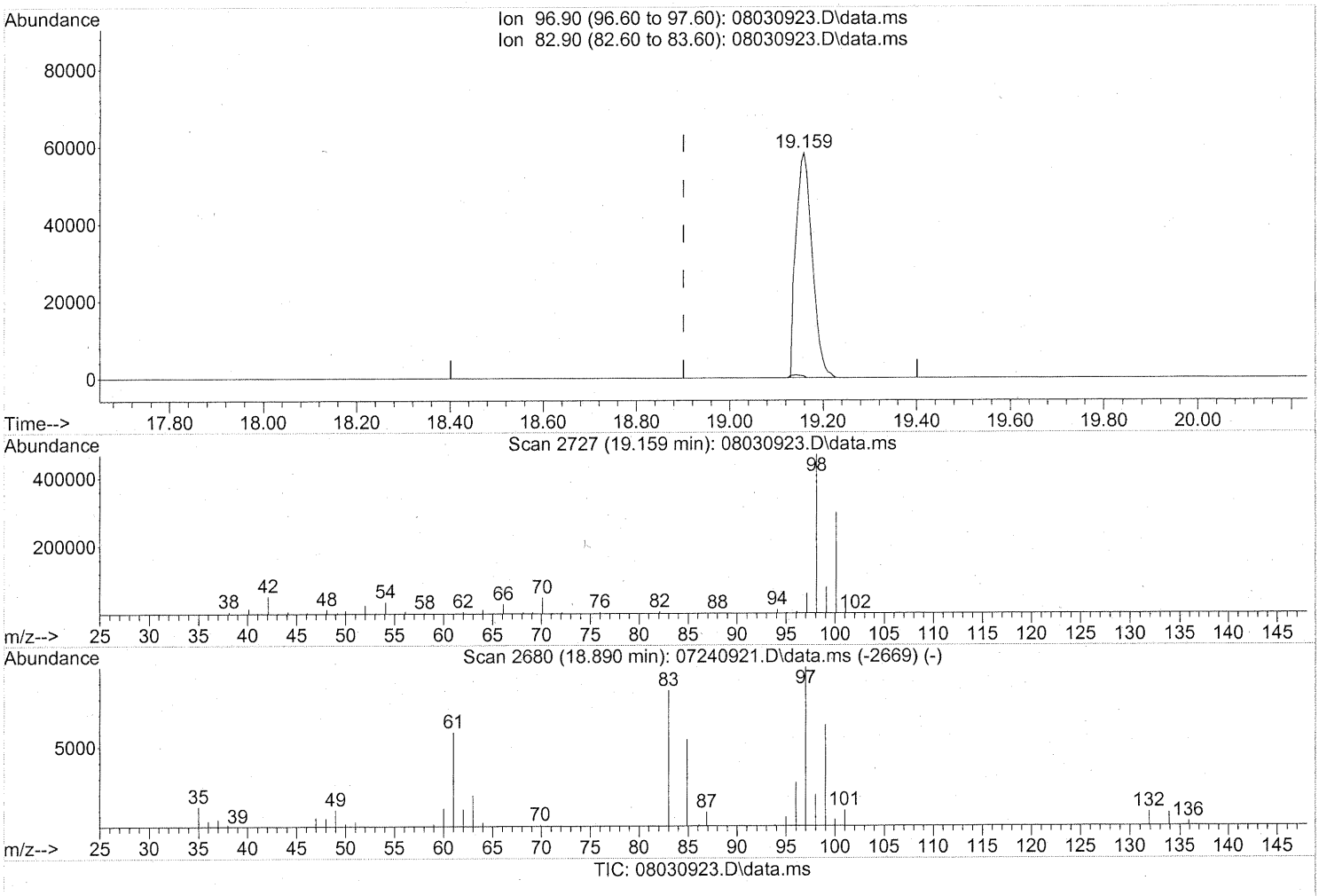
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030923.D
Acq On : 3 Aug 2009 23:01
Operator : EM
Sample : P0902599-006 (1000ml)
Misc : Environmental H & E 99431
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 04 08:12:27 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030923.D\data.ms

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

19.159min (+0.257) 8.78ng

response 140543

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.76#
0.00	0.00	0.00
0.00	0.00	0.00

FP
Em 8/5/09
VM 8/5/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99432**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-007

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: AC01117

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): 0.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**11**	0.62	**6.6**	0.36	**M1**
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.3**	0.62	**0.47**	0.13	
74-87-3	**Chloromethane**	**0.81**	0.12	**0.39**	0.060	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.62	ND	0.089	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.049	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.056	
74-83-9	**Bromomethane**	**2.5**	0.12	**0.63**	0.032	
75-00-3	Chloroethane	ND	0.12	ND	0.047	
64-17-5	**Ethanol**	**1,400**	6.2	**740**	3.3	**D**
75-05-8	**Acetonitrile**	**260**	0.62	**160**	0.37	**D**
107-02-8	**Acrolein**	**5.8**	0.62	**2.5**	0.27	
67-64-1	**Acetone**	**320**	6.2	**130**	2.6	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.12	**0.21**	0.022	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**36**	0.62	**15**	0.25	
107-13-1	Acrylonitrile	ND	0.62	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.62	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.040	
76-13-1	**Trichlorotrifluoroethane**	**0.55**	0.12	**0.072**	0.016	
75-15-0	**Carbon Disulfide**	**2.6**	0.62	**0.83**	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.031	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.2	ND	1.8	
78-93-3	**2-Butanone (MEK)**	**18**	0.62	**6.2**	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.
M1 = Matrix interference due to coelution with a non-target compound; results may be biased high.

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99432**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-007

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: AC01117

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): 0.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

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**	**11**	0.62	**3.1**	0.17	
110-54-3	**n-Hexane**	**1.3**	0.62	**0.38**	0.18	
67-66-3	**Chloroform**	**1.5**	0.12	**0.31**	0.025	
109-99-9	**Tetrahydrofuran (THF)**	**6.1**	0.62	**2.1**	0.21	
107-06-2	**1,2-Dichloroethane**	**0.16**	0.12	**0.039**	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.023	
71-43-2	**Benzene**	**1.3**	0.12	**0.40**	0.039	
56-23-5	**Carbon Tetrachloride**	**0.48**	0.12	**0.076**	0.020	
110-82-7	**Cyclohexane**	**1.8**	0.62	**0.54**	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.027	
75-27-4	**Bromodichloromethane**	**0.30**	0.12	**0.044**	0.019	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.62	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.62	ND	0.15	
142-82-5	**n-Heptane**	**2.1**	0.62	**0.52**	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	**4-Methyl-2-pentanone**	**3.4**	0.62	**0.83**	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.023	
108-88-3	**Toluene**	**8.2**	0.62	**2.2**	0.16	
591-78-6	2-Hexanone	ND	0.62	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	**n-Butyl Acetate**	**1.7**	0.62	**0.36**	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: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99432**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-007

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:
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Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): 0.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.0**	0.62	**0.22**	0.13	
127-18-4	**Tetrachloroethene**	**0.45**	0.12	**0.066**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.027	
100-41-4	**Ethylbenzene**	**5.0**	0.62	**1.2**	0.14	
179601-23-1	**m,p-Xylenes**	**16**	0.62	**3.6**	0.14	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	**Styrene**	**1.6**	0.62	**0.37**	0.15	
95-47-6	**o-Xylene**	**4.9**	0.62	**1.1**	0.14	
111-84-2	**n-Nonane**	**1.9**	0.62	**0.37**	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.62	ND	0.13	
80-56-8	**alpha-Pinene**	**46**	0.62	**8.3**	0.11	
103-65-1	n-Propylbenzene	ND	0.62	ND	0.13	
622-96-8	**4-Ethyltoluene**	**0.68**	0.62	**0.14**	0.13	
108-67-8	**1,3,5-Trimethylbenzene**	**0.73**	0.62	**0.15**	0.13	
95-63-6	**1,2,4-Trimethylbenzene**	**2.2**	0.62	**0.45**	0.13	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.021	
106-46-7	**1,4-Dichlorobenzene**	**0.30**	0.12	**0.051**	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.021	
5989-27-5	**d-Limonene**	**29**	0.62	**5.2**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.62	ND	0.064	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.017	
91-20-3	**Naphthalene**	**59**	0.25	**11**	0.047	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.012	

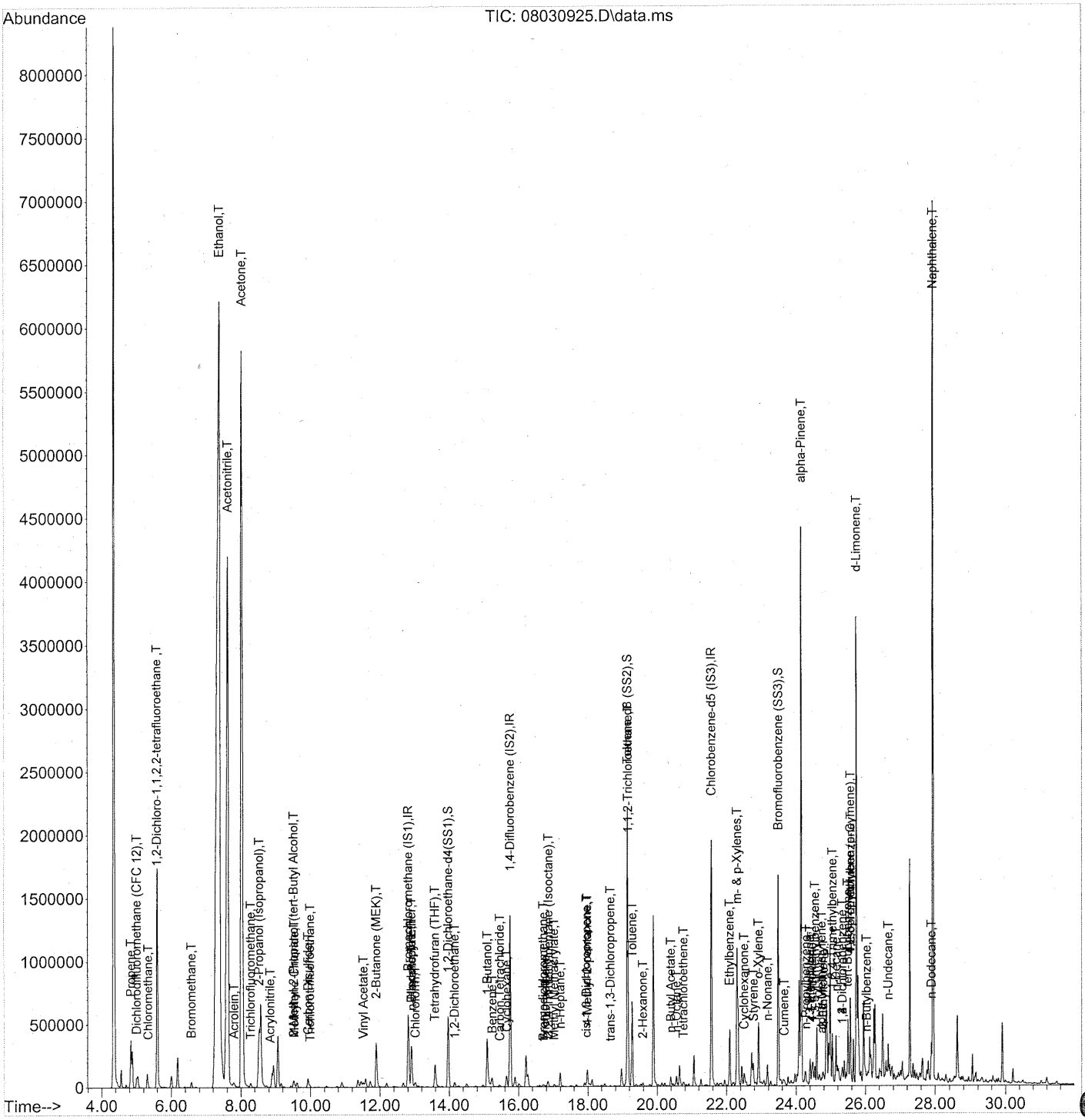
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 08:12:30 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
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ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 08:12:30 2009
Quant Method : J:\MS09\Methods\R9072409.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)	12.81	130	320997	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1614460	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	793804	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	558782	24.605	ng		-0.02
Spiked Amount 25.000			Recovery = 98.44%				
57) Toluene-d8 (SS2)	19.15	98	1900762	24.203	ng		-0.01
Spiked Amount 25.000			Recovery = 96.80%				
73) Bromofluorobenzene (SS3)	23.49	174	592225	25.083	ng		0.00
Spiked Amount 25.000			Recovery = 100.32%				
Target Compounds					M		Qvalue
2) Propene	4.84	42	184787	9.125	ng	#	86
3) Dichlorodifluoromethan...	5.00	85	75517	1.869	ng		100
4) Chloromethane	5.33	50	19783	0.654	ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	1598	0.070	ng	#	55
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.07	54	1034	N.D.			
8) Bromomethane	6.57	94	37631	1.977	ng		100
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.39	45	22689596	1688.621	ng	See Dil	99
11) Acetonitrile	7.63	41	8290976	272.885	ng	See Dil	100
12) Acrolein	7.80	56	45976	4.693	ng		99
13) Acetone	8.03	58	3929994	257.143	ng		95
14) Trichlorofluoromethane	8.28	101	33665	0.956	ng		98
15) 2-Propanol (Isopropanol)	8.52	45	1157956	28.794	ng		87
16) Acrylonitrile	8.84	53	1981	0.097	ng	#	68
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.51	59	21930	0.484	ng	#	1
19) Methylene Chloride	9.53	84	4966	0.245	ng		96
20) 3-Chloro-1-propene (Al...	9.71	41	104	N.D.			
21) Trichlorotrifluoroethane	9.98	151	7101	0.445	ng		95
22) Carbon Disulfide	9.93	76	144276	2.093	ng		99
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.37	73	108	N.D.			
26) Vinyl Acetate	11.53	86	16192	4.442	ng	#	1
27) 2-Butanone (MEK)	11.89	72	170483	14.624	ng		100
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.90	87	1465	0.081	ng	#	1
30) Ethyl Acetate	12.90	61	68790	9.009	ng		97
31) n-Hexane	12.92	57	37816	1.071	ng		99

EM 8/5/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 08:12:30 2009
Quant Method : J:\MS09\Methods\R9072409.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	13.02	83	38813	1.211 ng		98
34) Tetrahydrofuran (THF)	13.59	72	54171	4.932 ng	#	72
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.15	62	3284	0.128 ng		85
38) 1,1,1-Trichloroethane	14.53	97	511	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.09	56	345322	17.214 ng	#	78
41) Benzene	15.23	78	89302	1.037 ng		99
42) Carbon Tetrachloride	15.46	117	9792	0.387 ng		99
43) Cyclohexane	15.65	84	48012	1.491 ng		96
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.71	83	5955	0.239 ng	#	71
47) Trichloroethene	16.77	130	1714	0.078 ng		95
48) 1,4-Dioxane	16.74	88	338	N.D.		
49) 2,2,4-Trimethylpentane...	16.86	57	35498	0.425 ng		73
50) Methyl Methacrylate	17.02	100	3594	0.445 ng	#	68
51) n-Heptane	17.20	71	35993	1.727 ng		99
52) cis-1,3-Dichloropropene	17.96	75	7594	0.252 ng		98
53) 4-Methyl-2-pentanone	17.99	58	44542	2.733 ng		99
54) trans-1,3-Dichloropropene	18.65	75	6312	0.238 ng		99
55) 1,1,2-Trichloroethane	19.16	97	154410	8.537 ng	#	8
58) Toluene	19.28	91	634872	6.604 ng		100
59) 2-Hexanone	19.59	43	20426	0.494 ng		81
60) Dibromochloromethane	19.82	129	1040	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	63343	1.378 ng		96
63) n-Octane	20.56	57	15450	0.822 ng		98
64) Tetrachloroethene	20.75	166	9223	0.363 ng		97
65) Chlorobenzene	21.61	112	2479	N.D.		
66) Ethylbenzene	22.09	91	423283	4.049 ng		100
67) m- & p-Xylenes	22.30	91	1099275	12.752 ng		100
68) Bromoform	22.42	173	738	N.D.		
69) Styrene	22.77	104	81573	1.283 ng		99
70) o-Xylene	22.92	91	341981	3.982 ng		100
71) n-Nonane	23.17	43	65138	1.554 ng		97
72) 1,1,2,2-Tetrachloroethane	22.91	83	1511	N.D.		
74) Cumene	23.66	105	24076	0.211 ng		98
75) alpha-Pinene	24.15	93	2021450	37.088 ng		99
76) n-Propylbenzene	24.28	91	55222	0.402 ng		84
77) 3-Ethyltoluene	24.40	105	122592	1.134 ng		100
78) 4-Ethyltoluene	24.46	105	59538	0.549 ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	53345	0.591 ng		99

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 08:12:30 2009
Quant Method : J:\MS09\Methods\R9072409.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

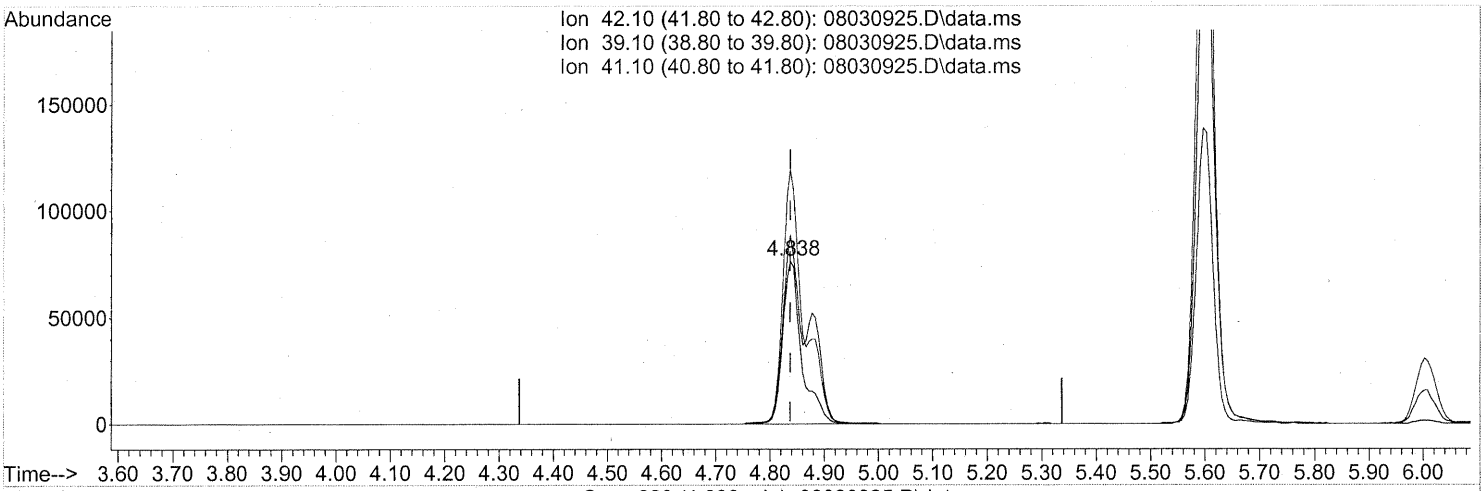
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	16788	0.333 ng		91
81) 2-Ethyltoluene	24.79	105	43039	0.380 ng		97
82) 1,2,4-Trimethylbenzene	25.05	105	181450	1.799 ng		91
83) n-Decane	25.15	57	142468	2.923 ng		98
84) Benzyl Chloride	25.22	91	1291	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	13524	~~0.255 ng~~ TP		99
86) 1,4-Dichlorobenzene	25.33	146	13524	0.245 ng		100
87) sec-Butylbenzene	25.39	105	5200	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	310072	2.439 ng		95
89) 1,2,3-Trimethylbenzene	25.57	105	52558	0.512 ng	#	45
90) 1,2-Dichlorobenzene	25.33	146	13524	~~0.246 ng~~ TP		99
91) d-Limonene	25.74	68	942844	23.524 ng		98
92) 1,2-Dibromo-3-Chloropr...	26.66	157	500	N.D.		
93) n-Undecane	26.65	57	128542	2.576 ng		91
94) 1,2,4-Trichlorobenzene	27.80	180	1149	N.D.		
95) Naphthalene	27.94	128	5909527	47.737 ng		100
96) n-Dodecane	27.89	57	99821	1.872 ng		98
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	54884	1.893 ng		98
99) tert-Butylbenzene	25.49	119	13279	0.130 ng		92
100) n-Butylbenzene	26.03	91	19303	0.192 ng	#	33

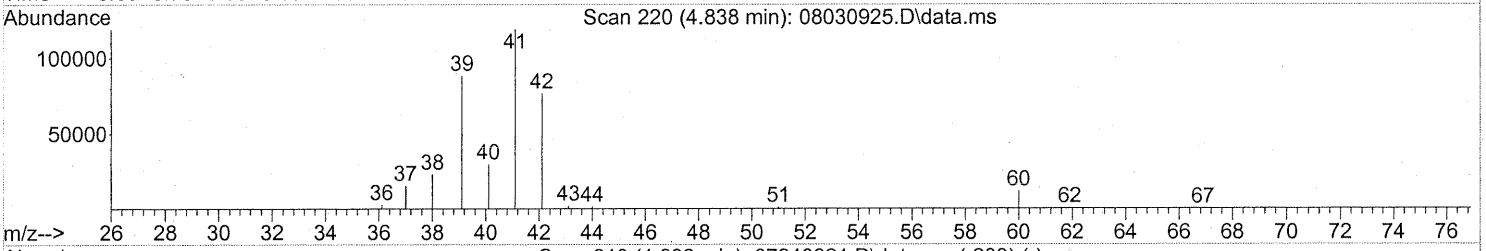
(#) = qualifier out of range (m) = manual integration (+) = signals summed

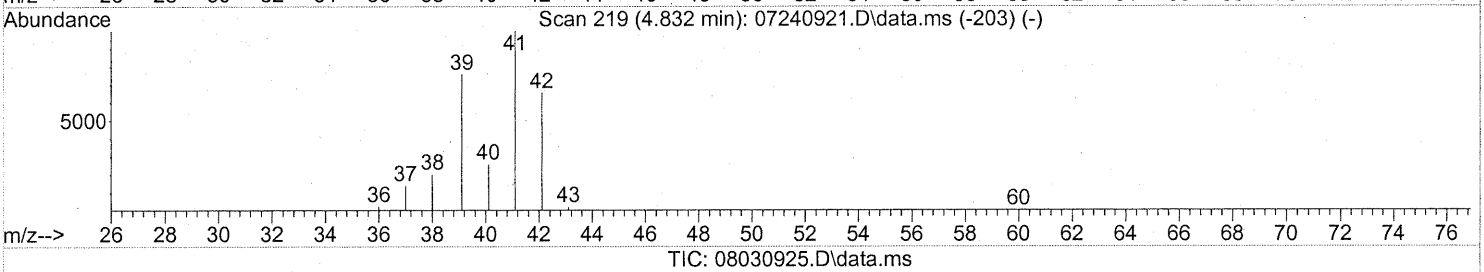
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030925.D\data.ms

(2) Propene (T)

4.838min (-0.000) 9.12ng

response 184787

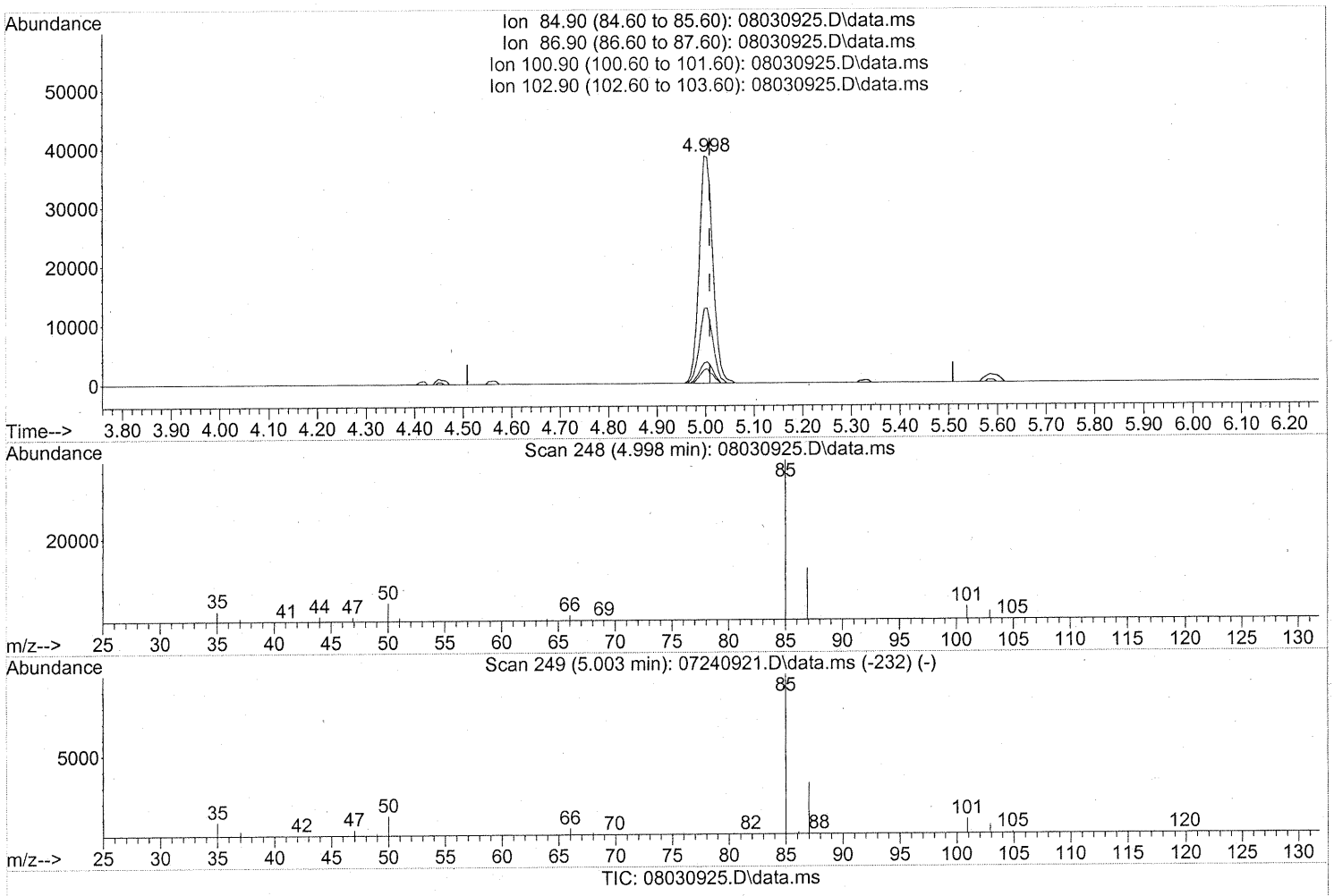
Ion	Exp%	Act%
42.10	100	100
39.10	115.80	103.90
41.10	152.70	173.48#
0.00	0.00	0.00

67

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.998min (-0.011) 1.87ng

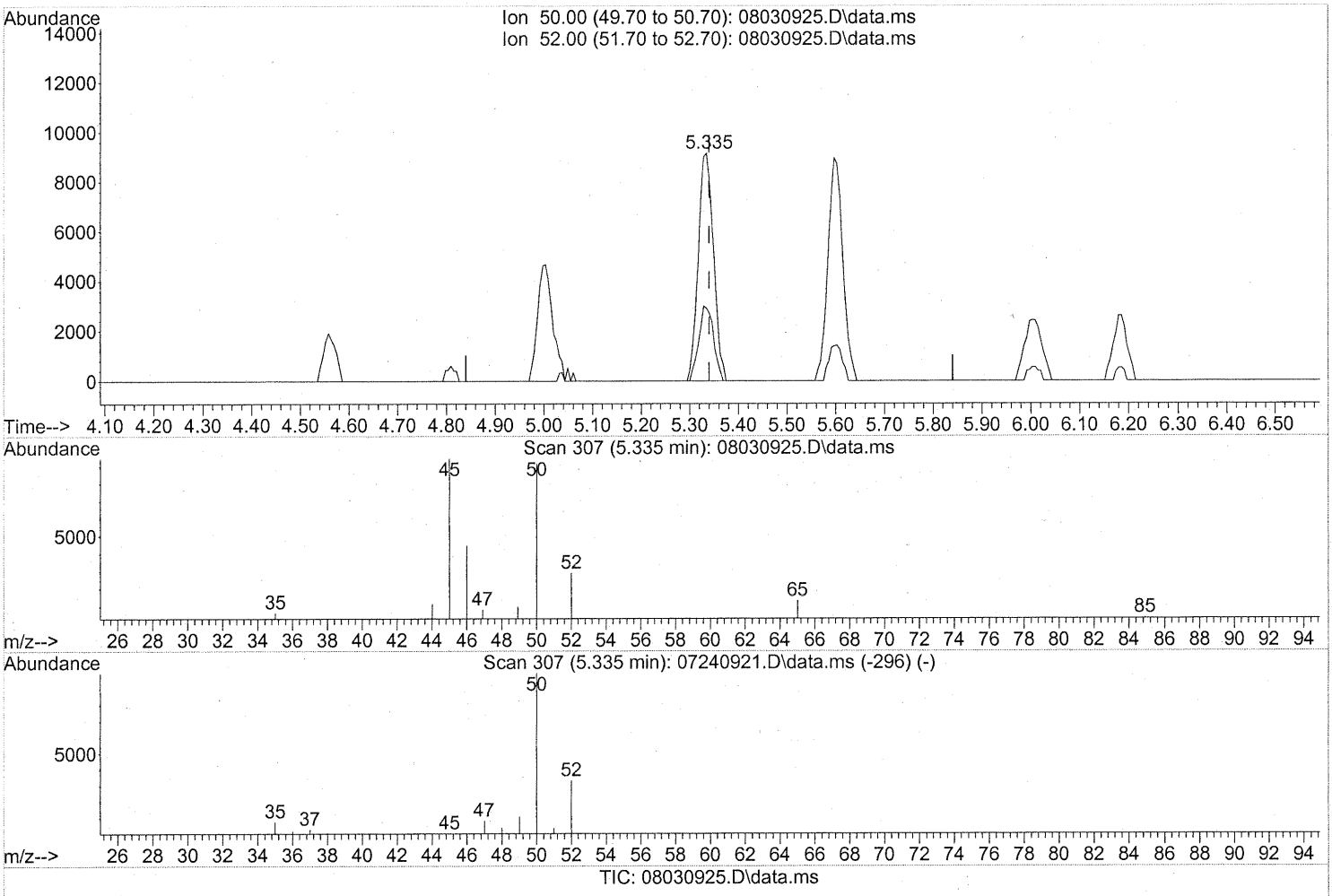
response 75517

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.31
100.90	9.10	8.93
102.90	5.50	5.51

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(4) Chloromethane (T)

5.335min (-0.006) 0.65ng

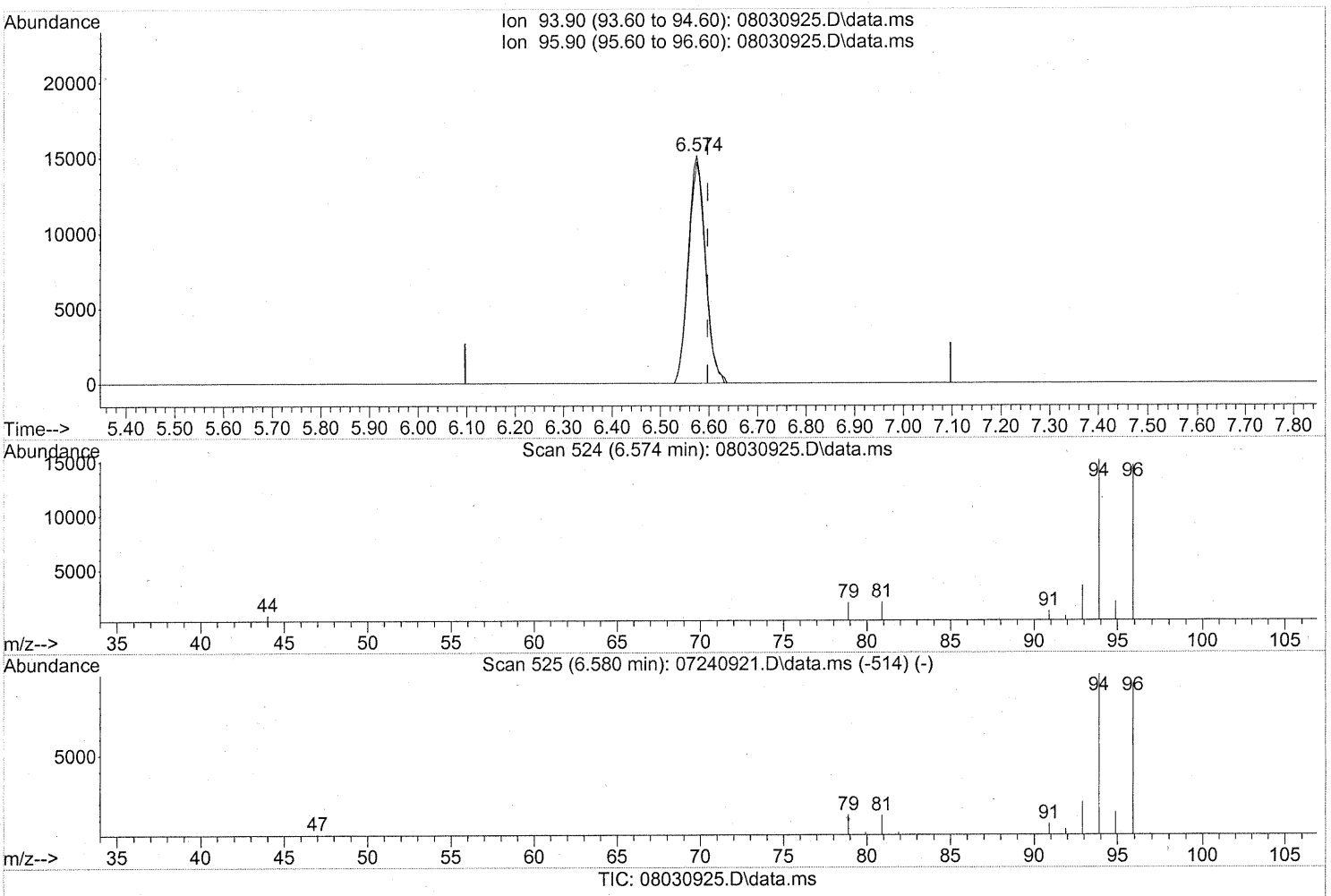
response 19783

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	31.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(8) Bromomethane (T)

6.574min (-0.023) 1.98ng

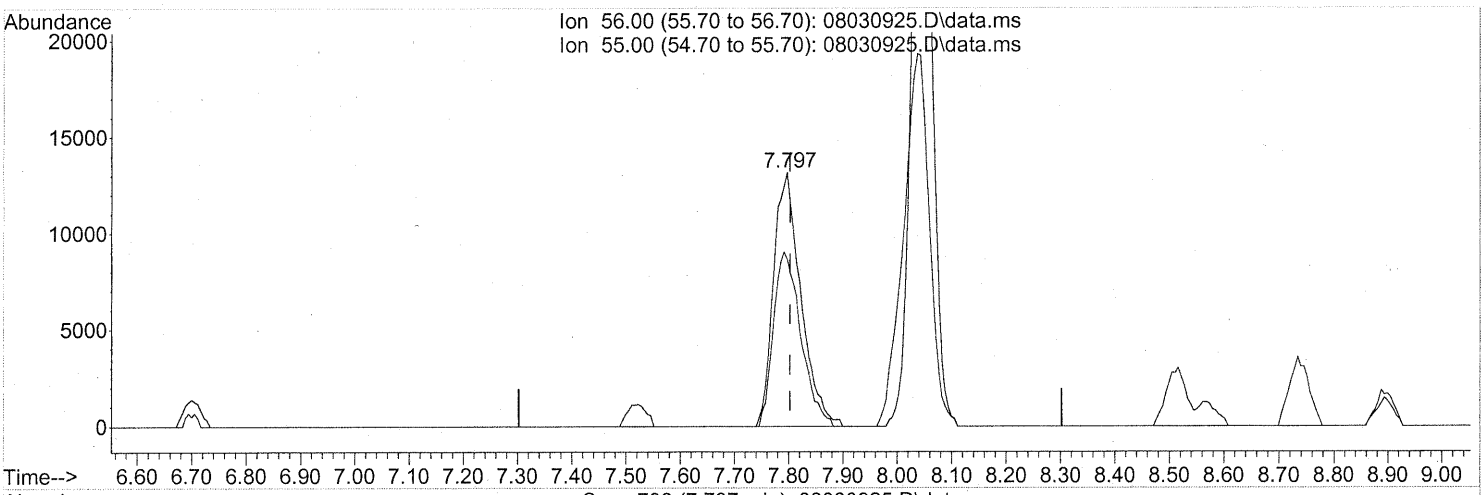
response 37631

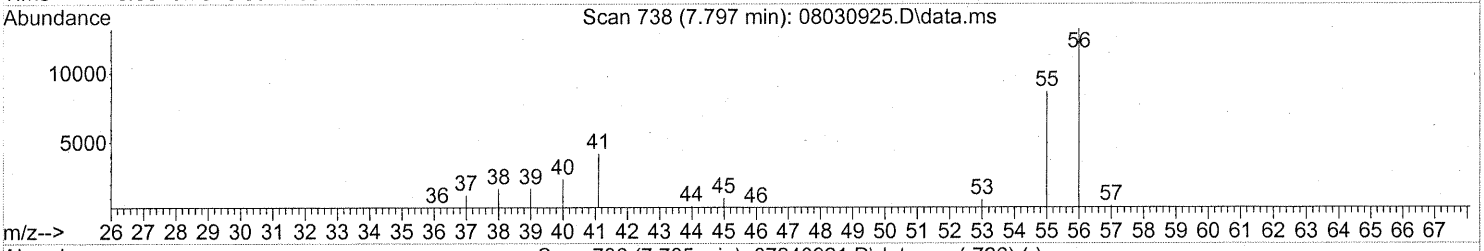
Ion	Exp%	Act%
93.90	100	100
95.90	94.20	94.18
0.00	0.00	0.00
0.00	0.00	0.00

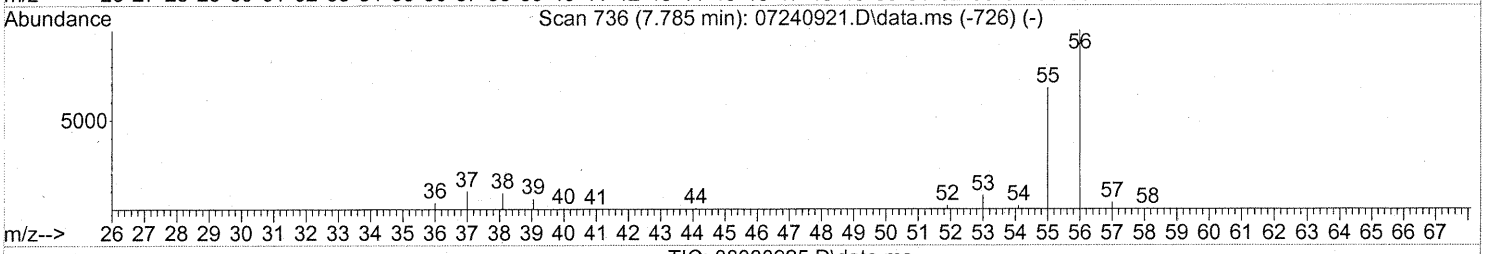
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030925.D\data.ms

(12) Acrolein (T)

7.797min (-0.006) 4.69ng

response 45976

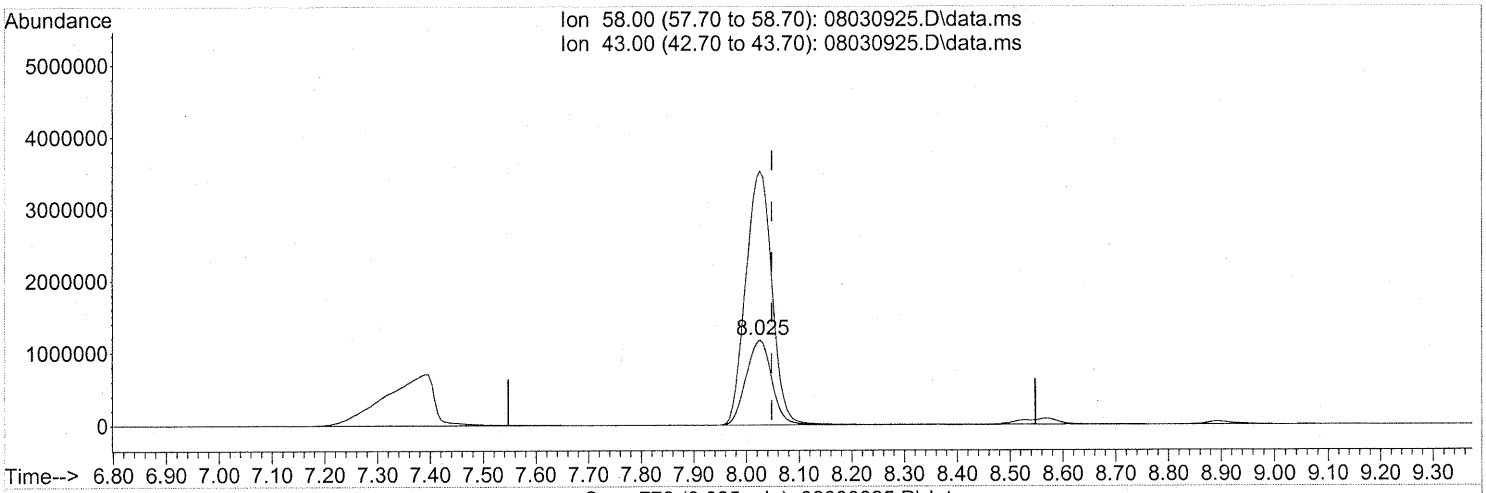
Ion	Exp%	Act%
56.00	100	100
55.00	67.70	68.76
0.00	0.00	0.00
0.00	0.00	0.00

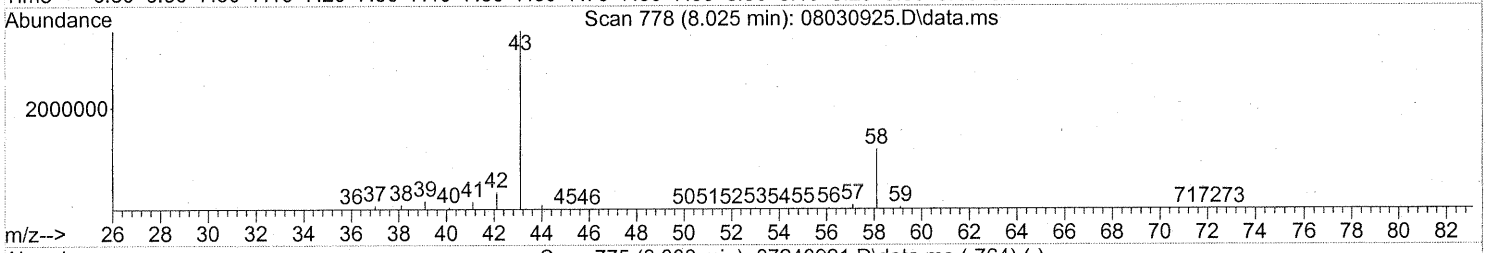
71

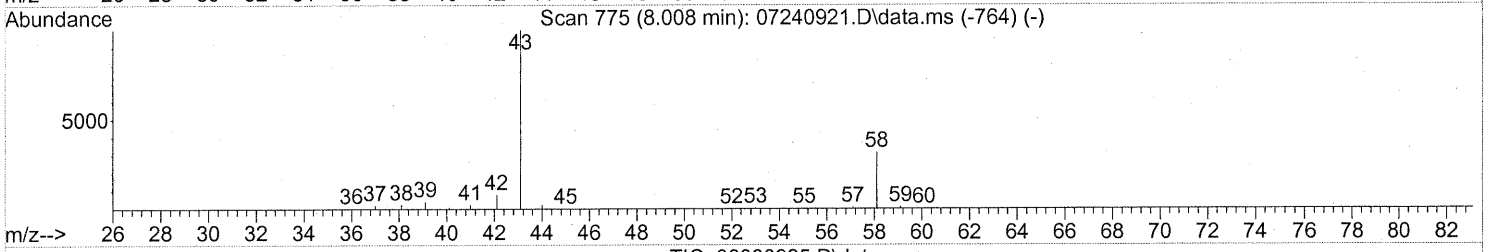
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030925.D\data.ms

(13) Acetone (T)

8.025min (-0.023) 257.14ng

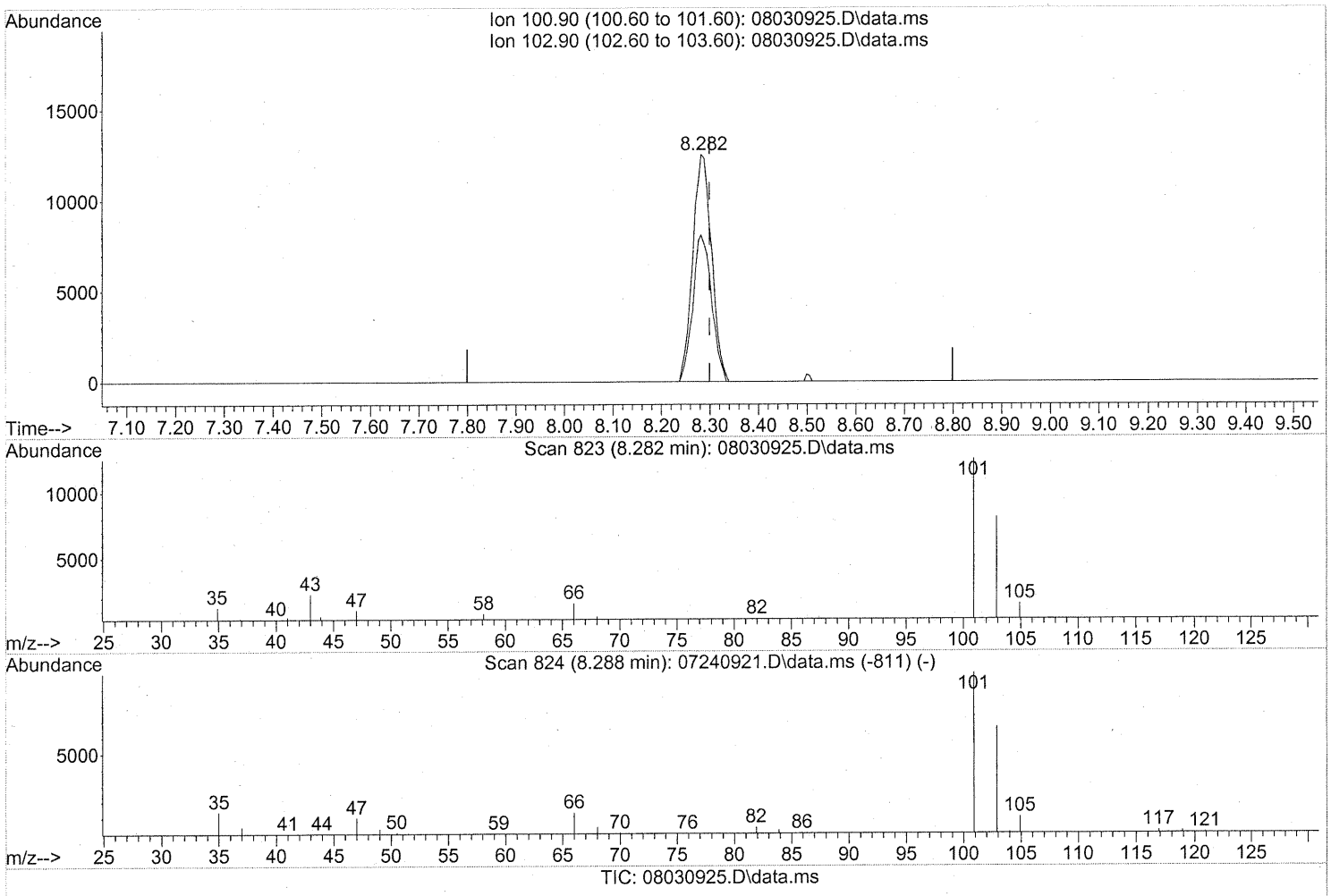
response 3929994

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	307.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(14) Trichlorofluoromethane (T)

8.282min (-0.017) 0.96ng

response 33665

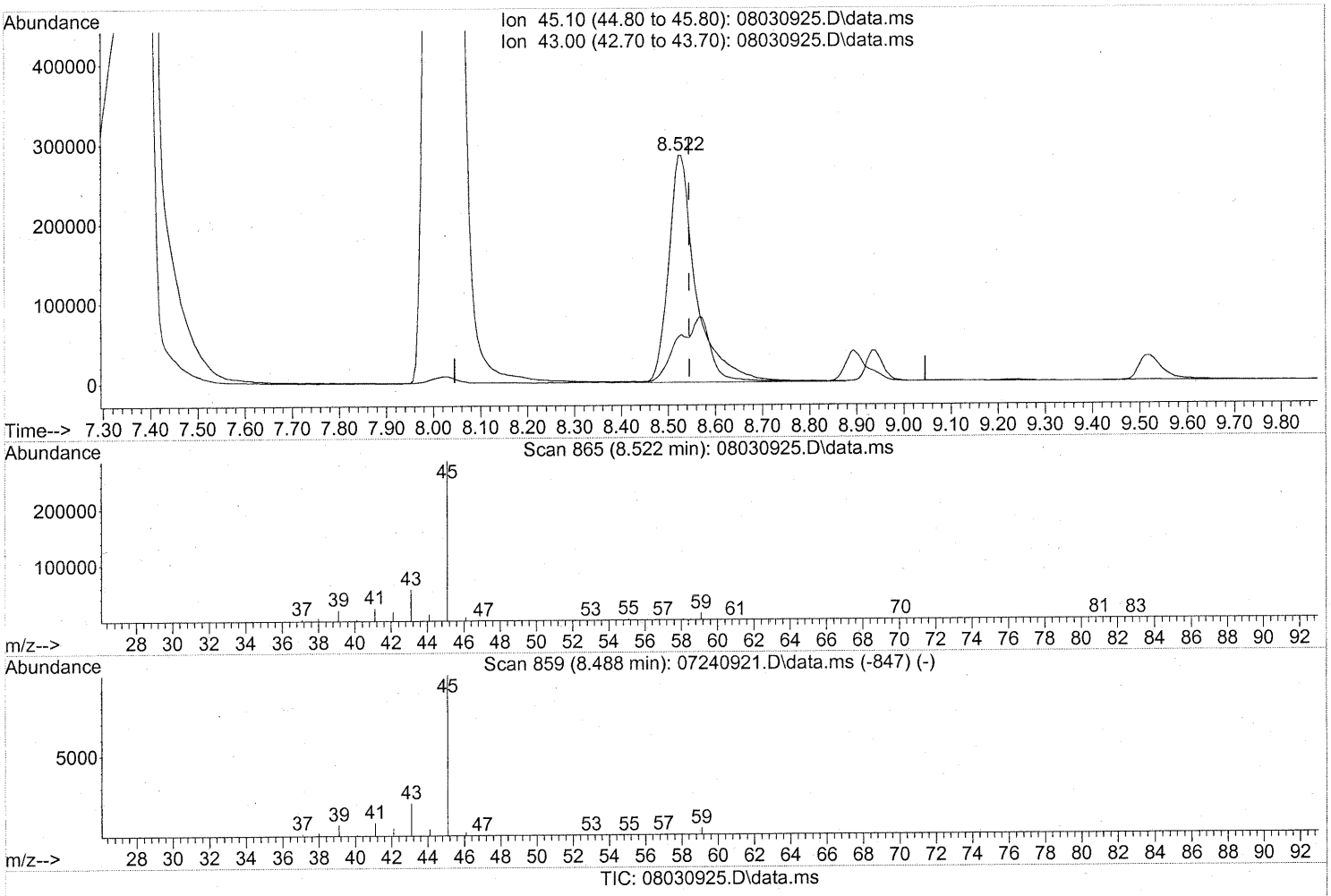
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.17
0.00	0.00	0.00
0.00	0.00	0.00

73

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.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)

8.522min (-0.023) 28.79ng

response 1157956

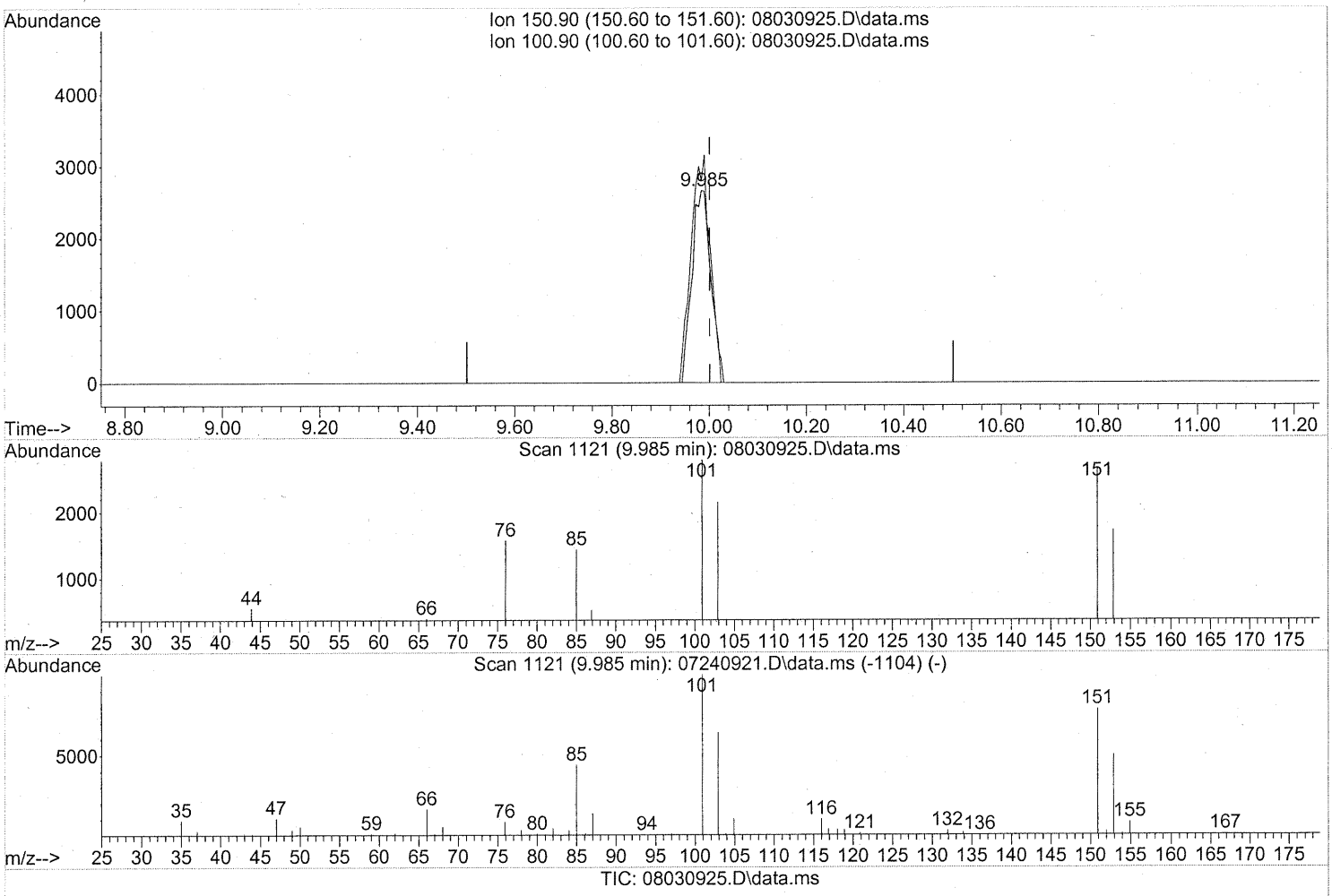
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	14.39
0.00	0.00	0.00
0.00	0.00	0.00

74

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.985min (-0.017) 0.44ng

response 7101

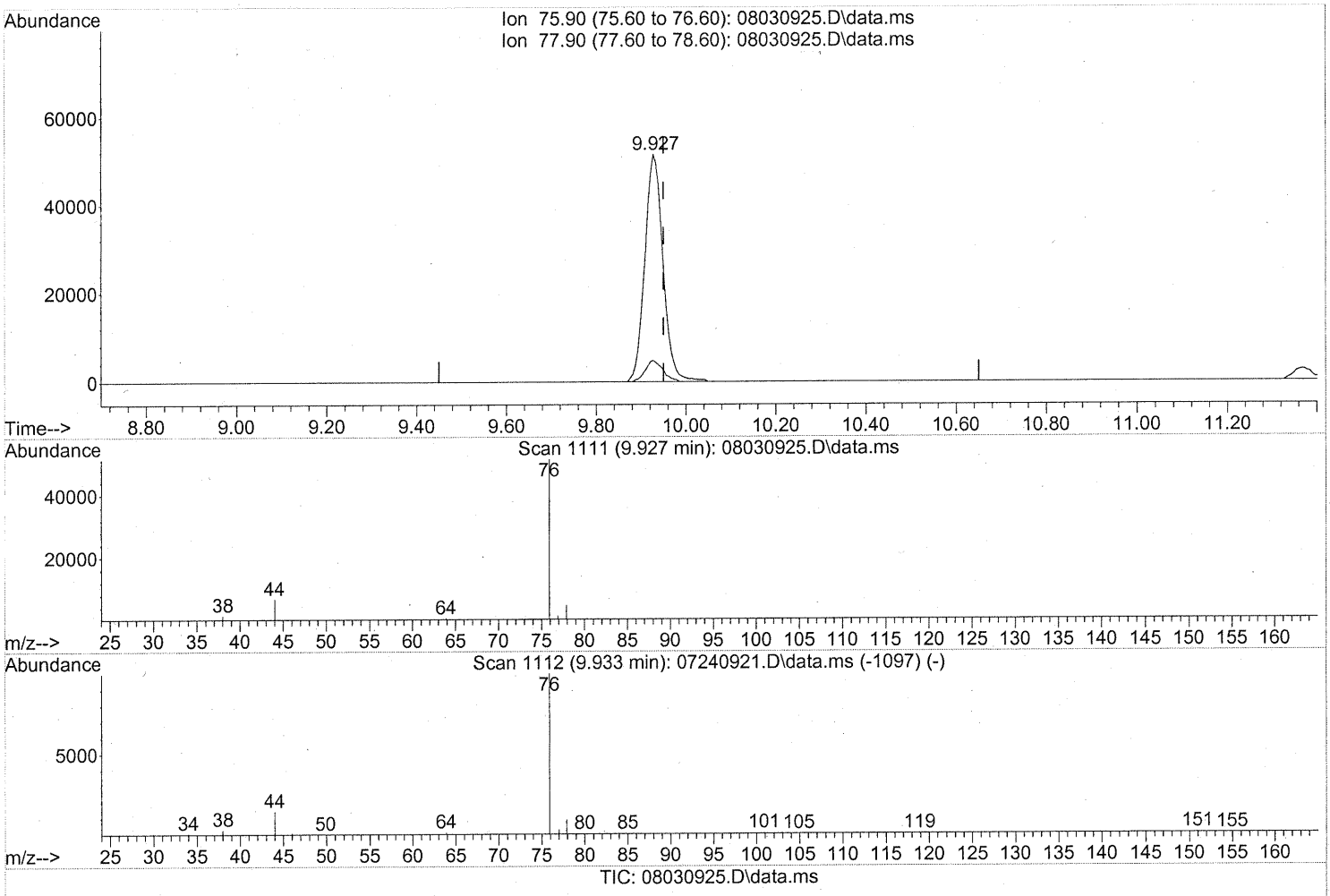
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	121.81
0.00	0.00	0.00
0.00	0.00	0.00

75

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(22) Carbon Disulfide (T)

9.927min (-0.023) 2.09ng

response 144276

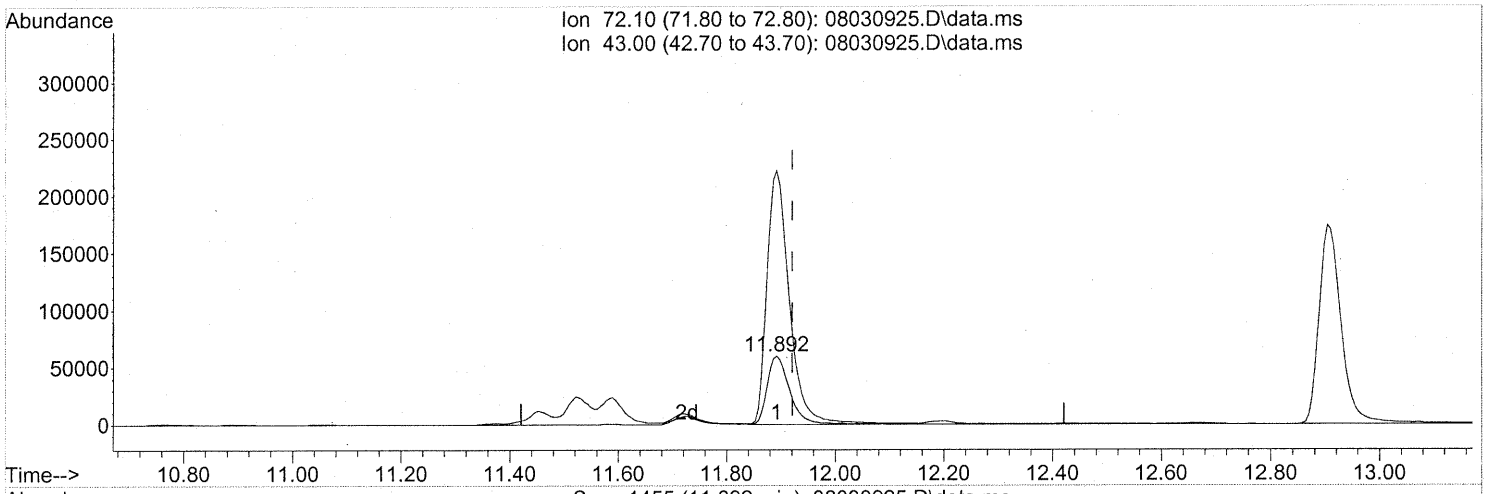
Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.82
0.00	0.00	0.00
0.00	0.00	0.00

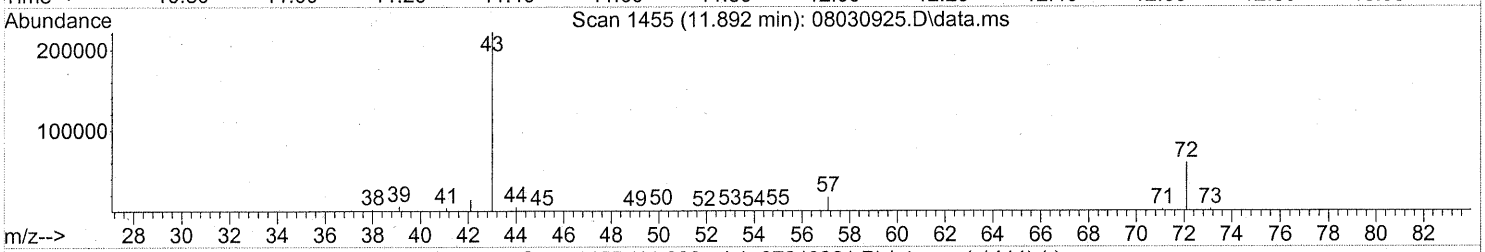
76

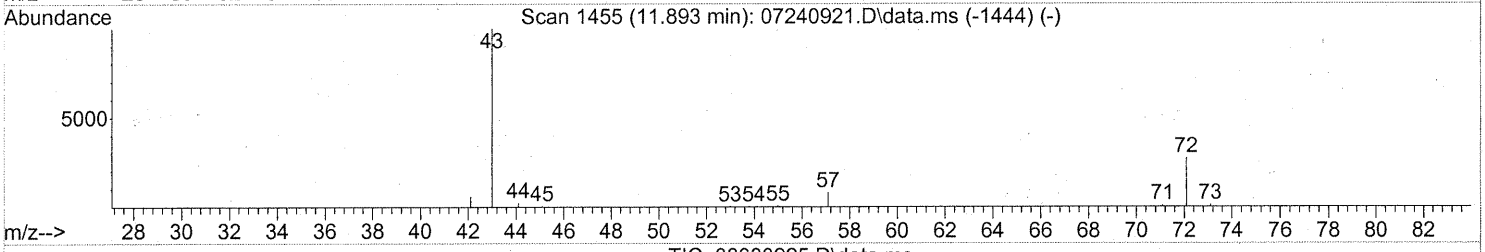
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030925.D\data.ms

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

11.892min (-0.029) 14.62ng

response 170483

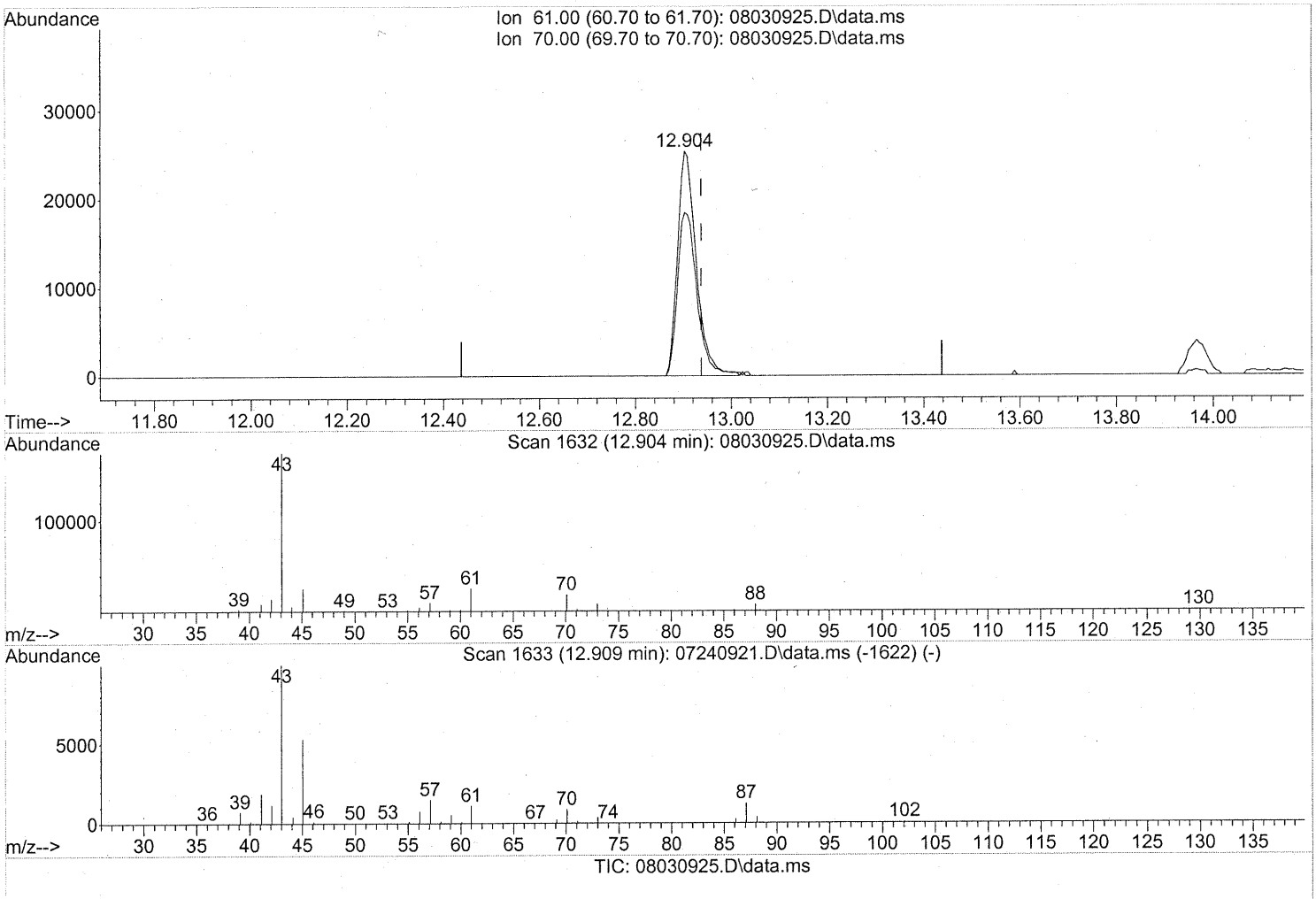
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	367.59
0.00	0.00	0.00
0.00	0.00	0.00

77

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(30) Ethyl Acetate (T)

12.904min (-0.034) 9.01ng

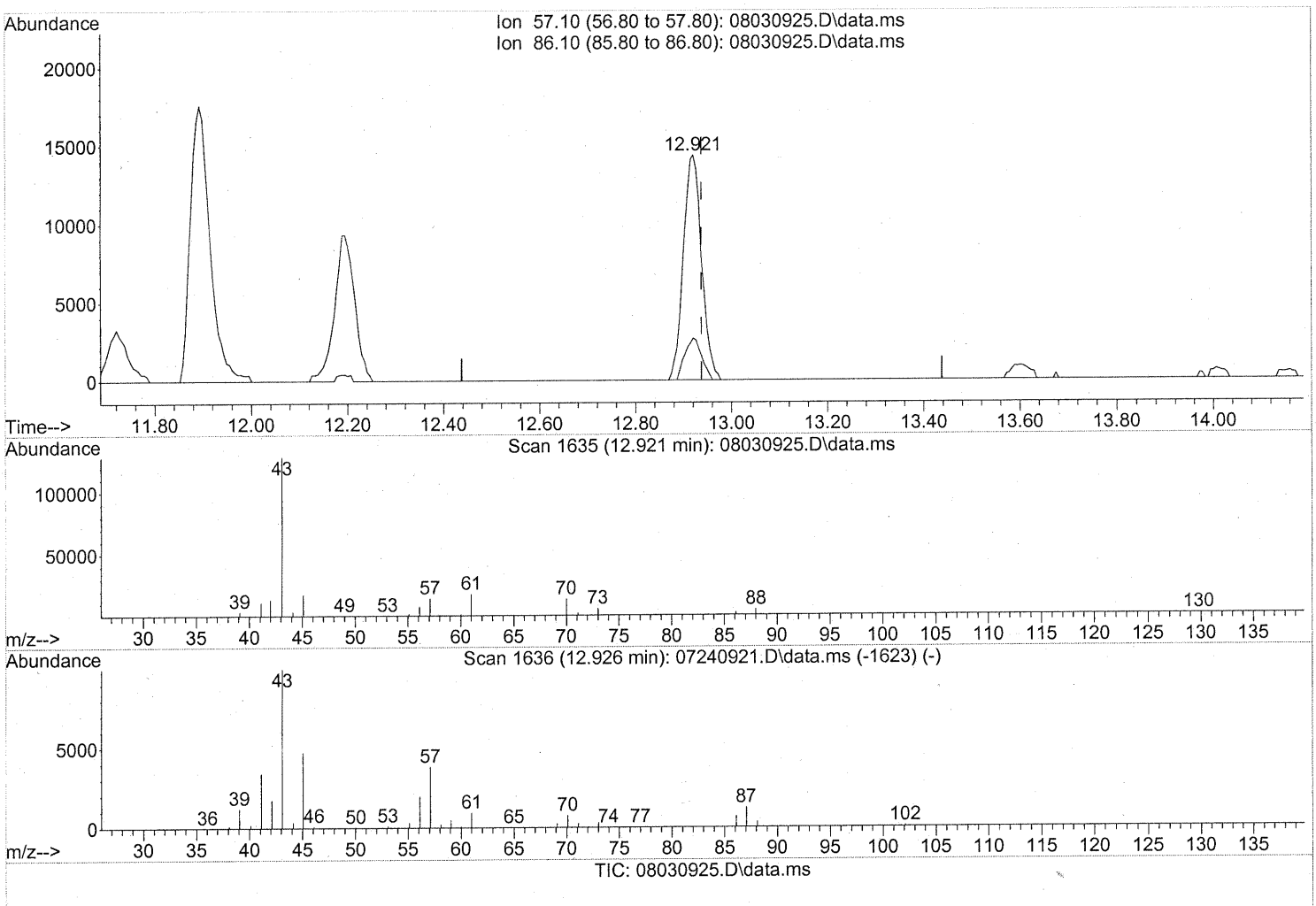
response 68790

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	76.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(31) n-Hexane (T)

12.921min (-0.017) 1.07ng

response 37816

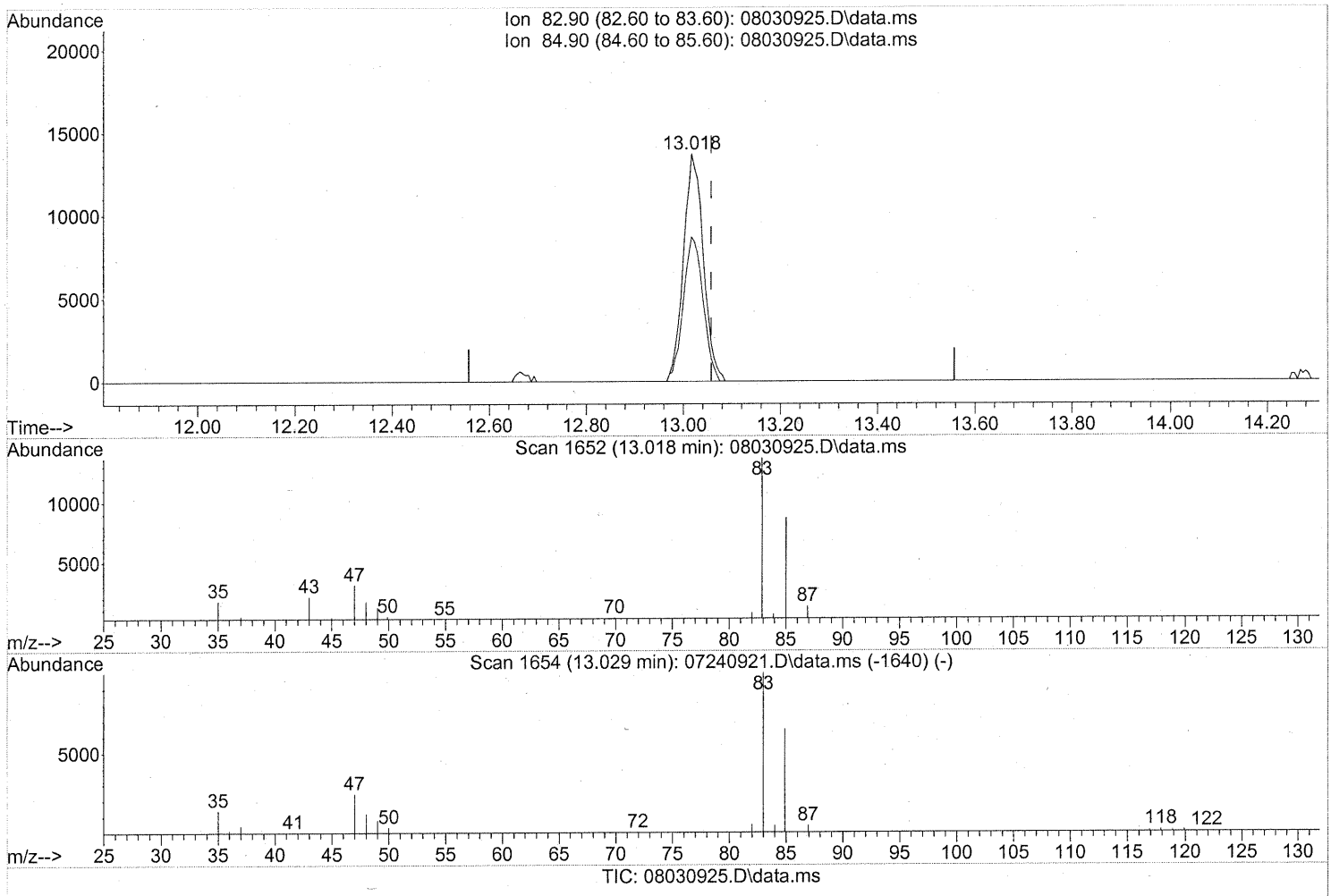
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	16.89
0.00	0.00	0.00
0.00	0.00	0.00

79

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(32) Chloroform (T)

13.018min (-0.040) 1.21ng

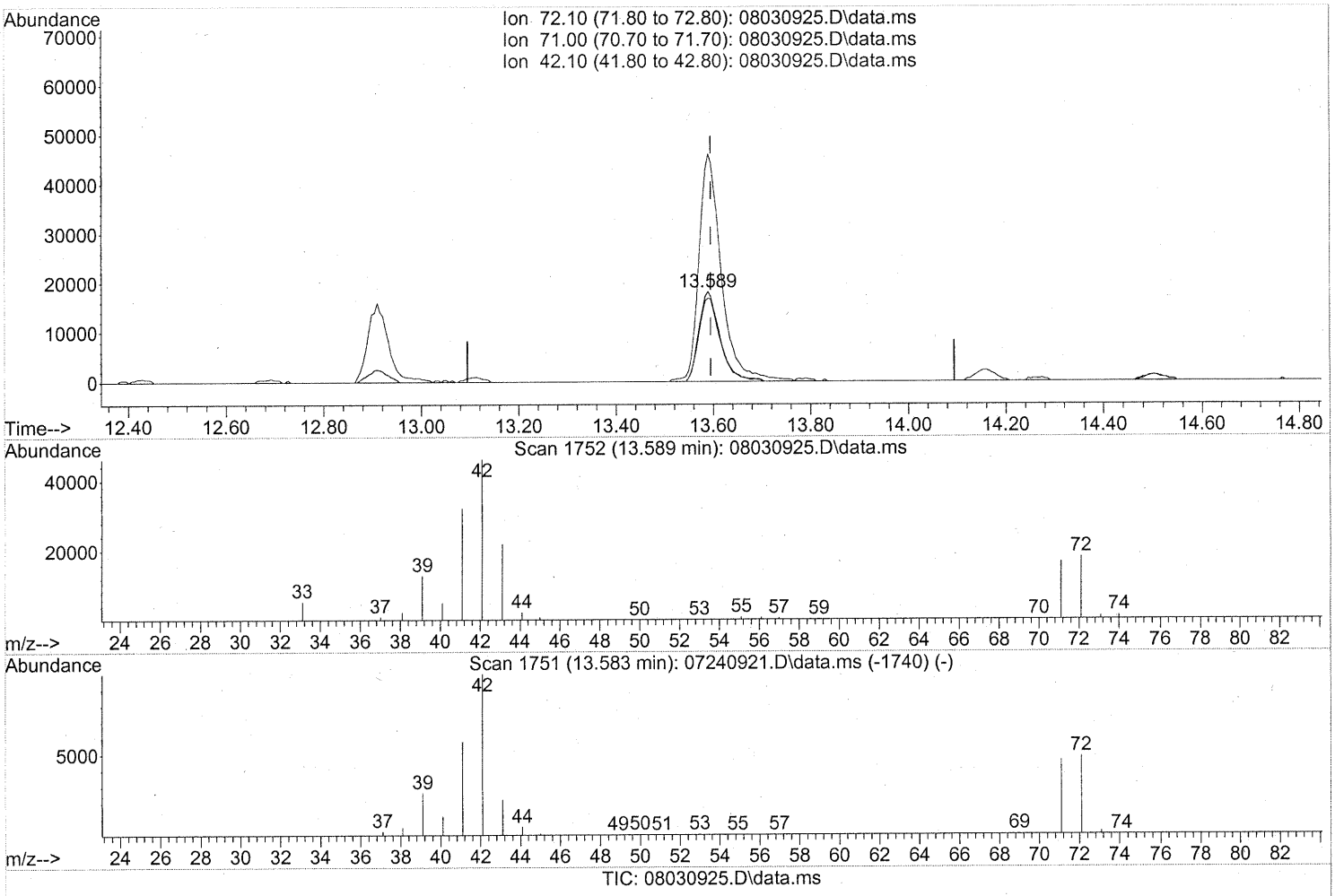
response 38813

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	63.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.589min (-0.006) 4.93ng

response 54171

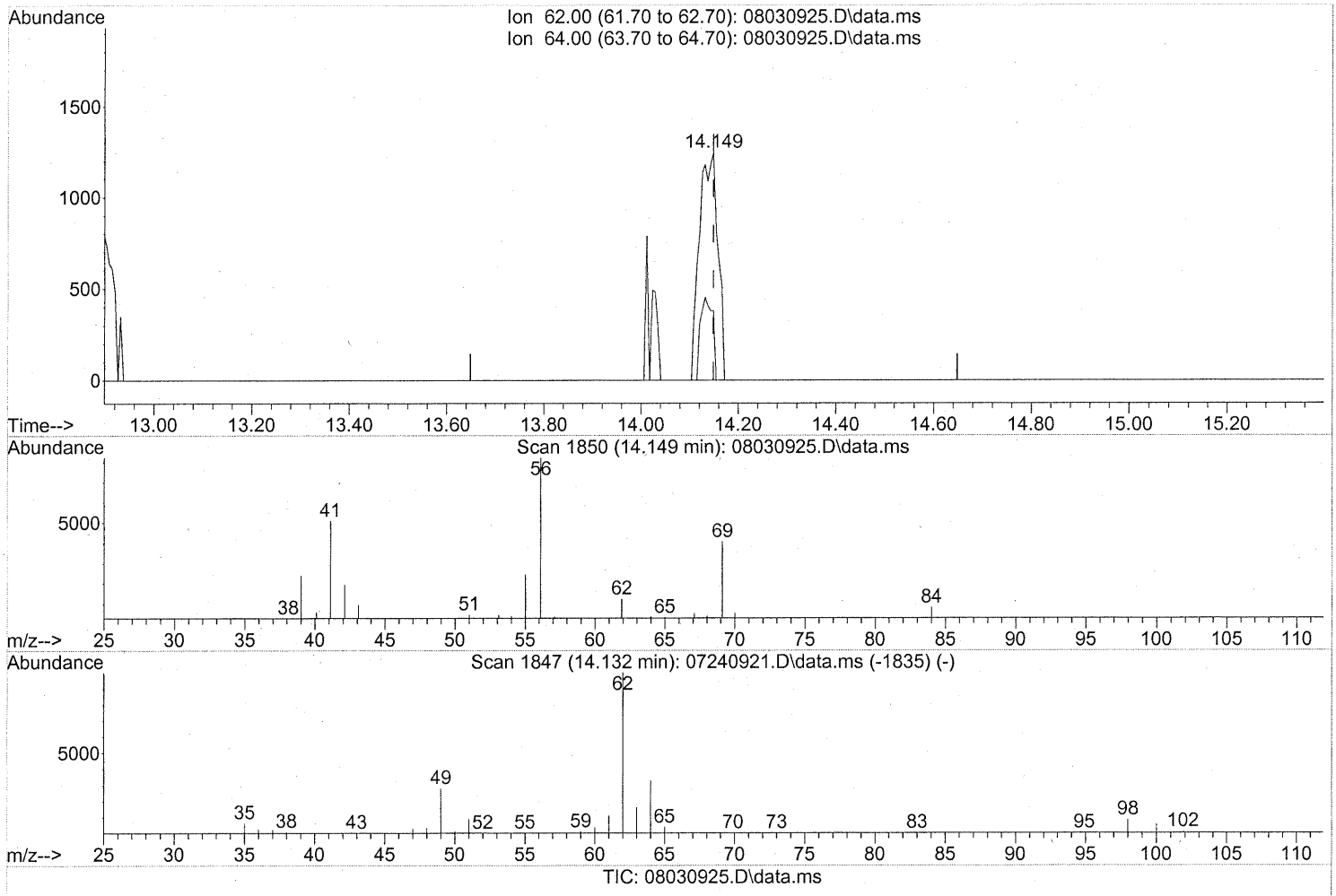
Ion	Exp%	Act%
72.10	100	100
71.00	95.20	95.15
42.10	206.50	270.52#
0.00	0.00	0.00

81

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(36) 1,2-Dichloroethane (T)

14.149min (-0.000) 0.13ng

response 3284

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	24.12
0.00	0.00	0.00
0.00	0.00	0.00

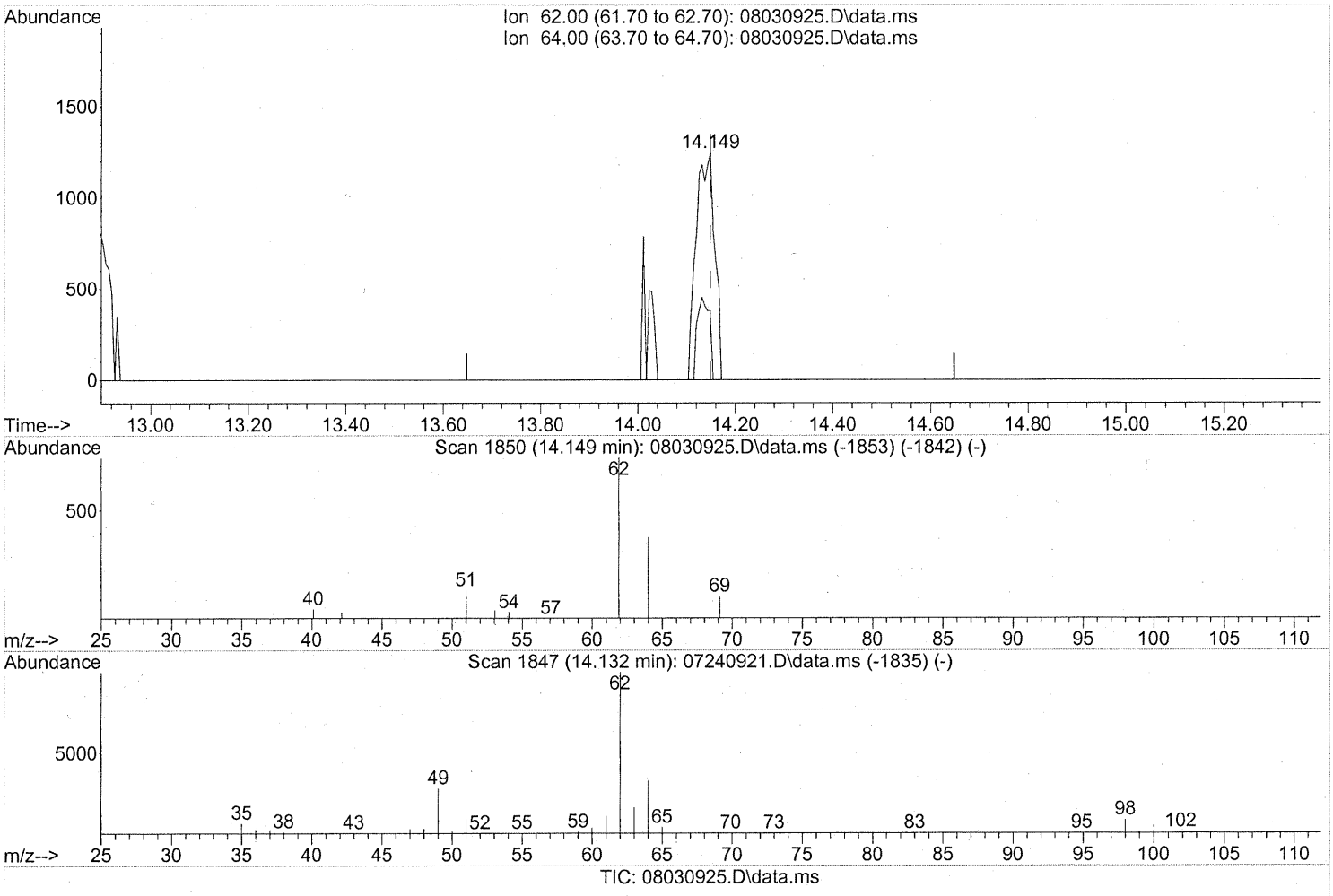
Before subtraction

82

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(36) 1,2-Dichloroethane (T)

14.149min (-0.000) 0.13ng

response 3284

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	24.12
0.00	0.00	0.00
0.00	0.00	0.00

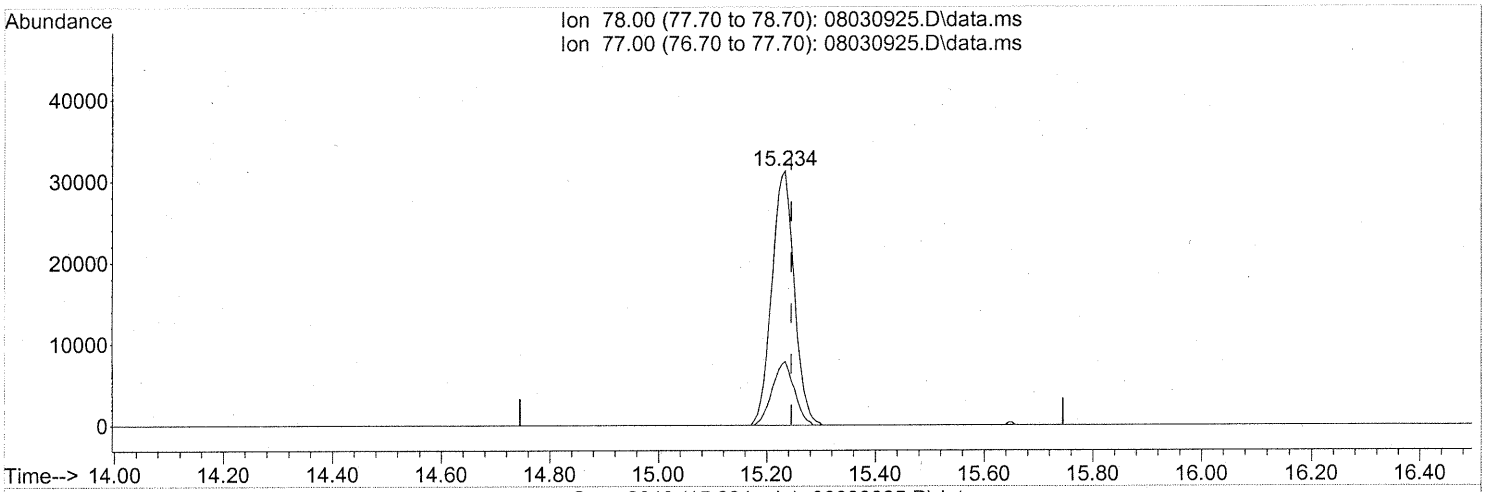
After subtraction
GM 8/10/09

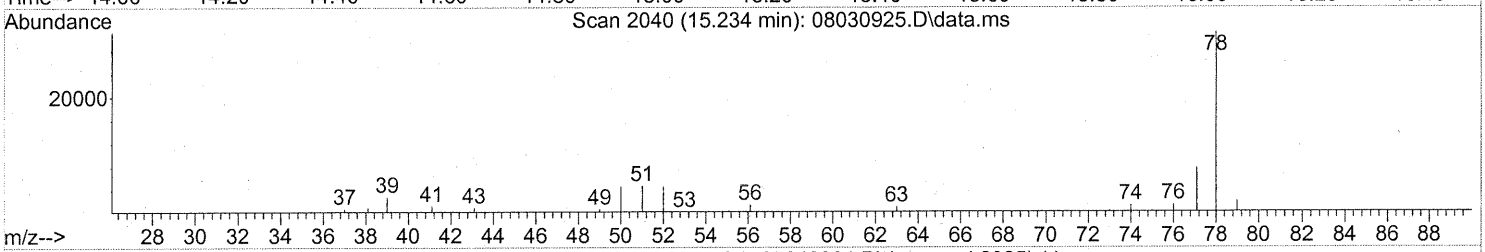
83

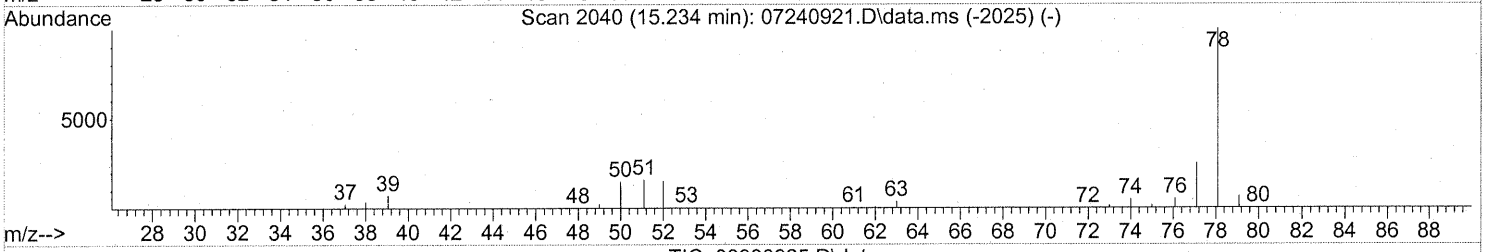
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030925.D\data.ms

(41) Benzene (T)

15.234min (-0.011) 1.04ng

response 89302

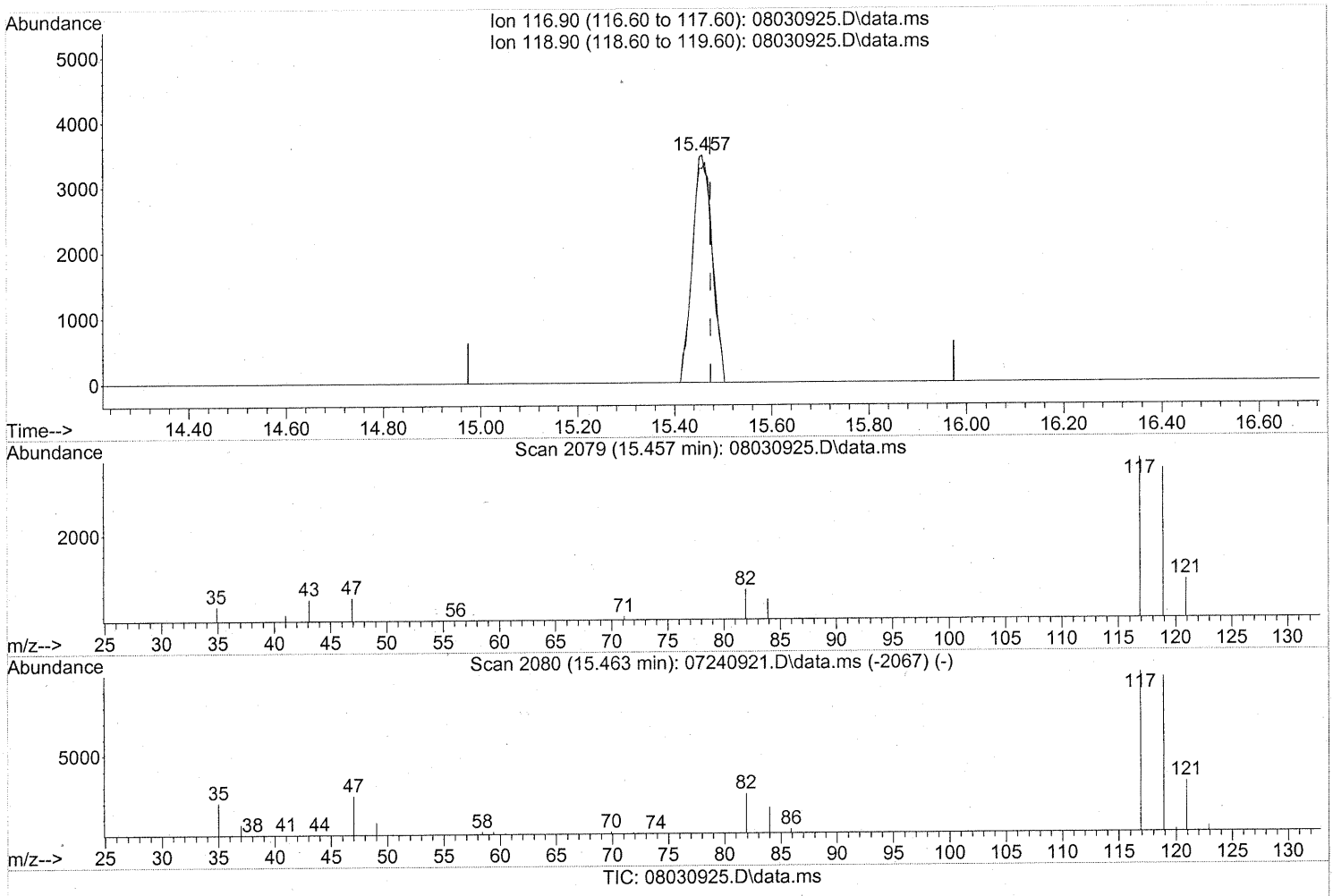
Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.49
0.00	0.00	0.00
0.00	0.00	0.00

84

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(42) Carbon Tetrachloride (T)

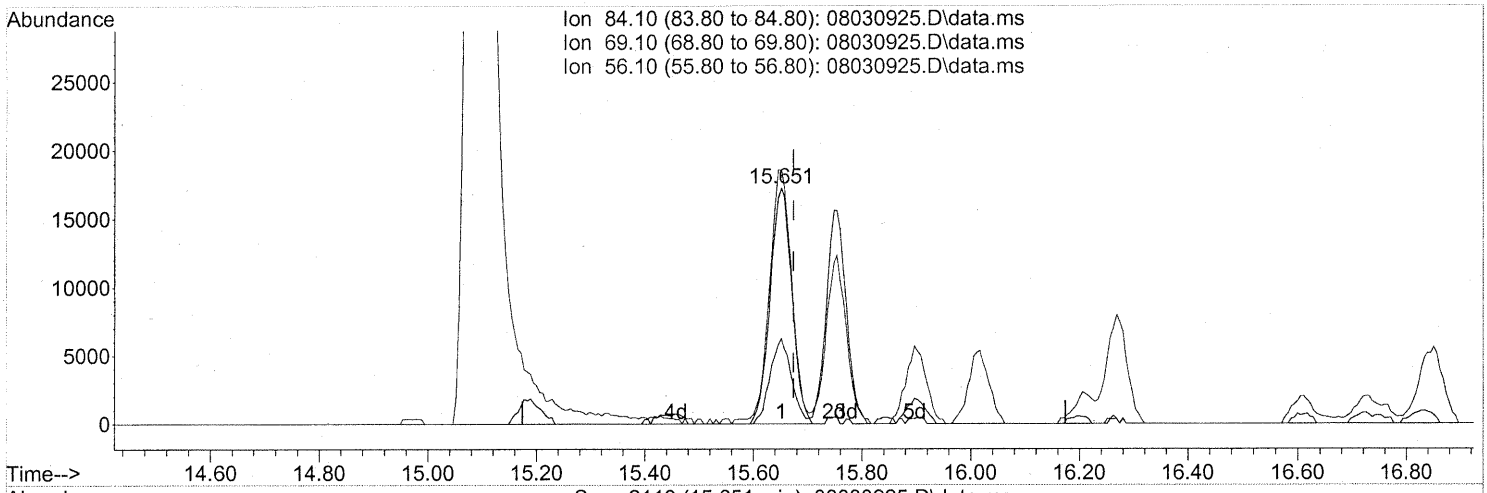
15.457min (-0.017) 0.39ng

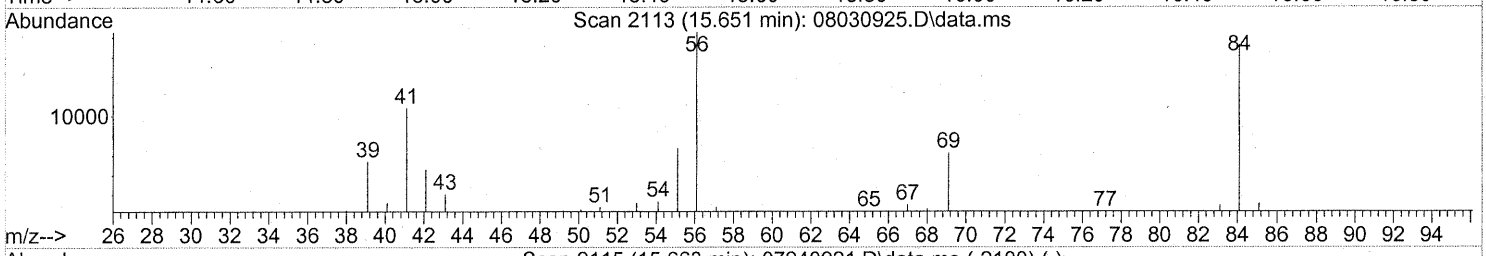
response 9792

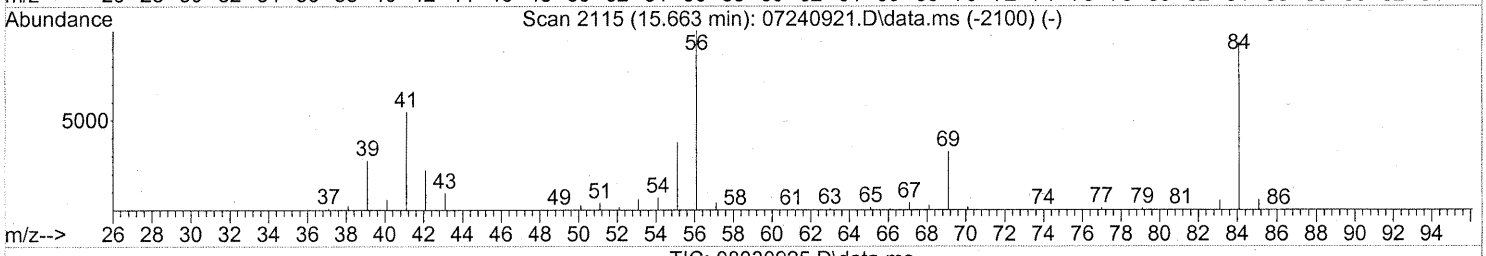
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	98.46
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030925.D\data.ms

(43) Cyclohexane (T)

15.651min (-0.023) 1.49ng

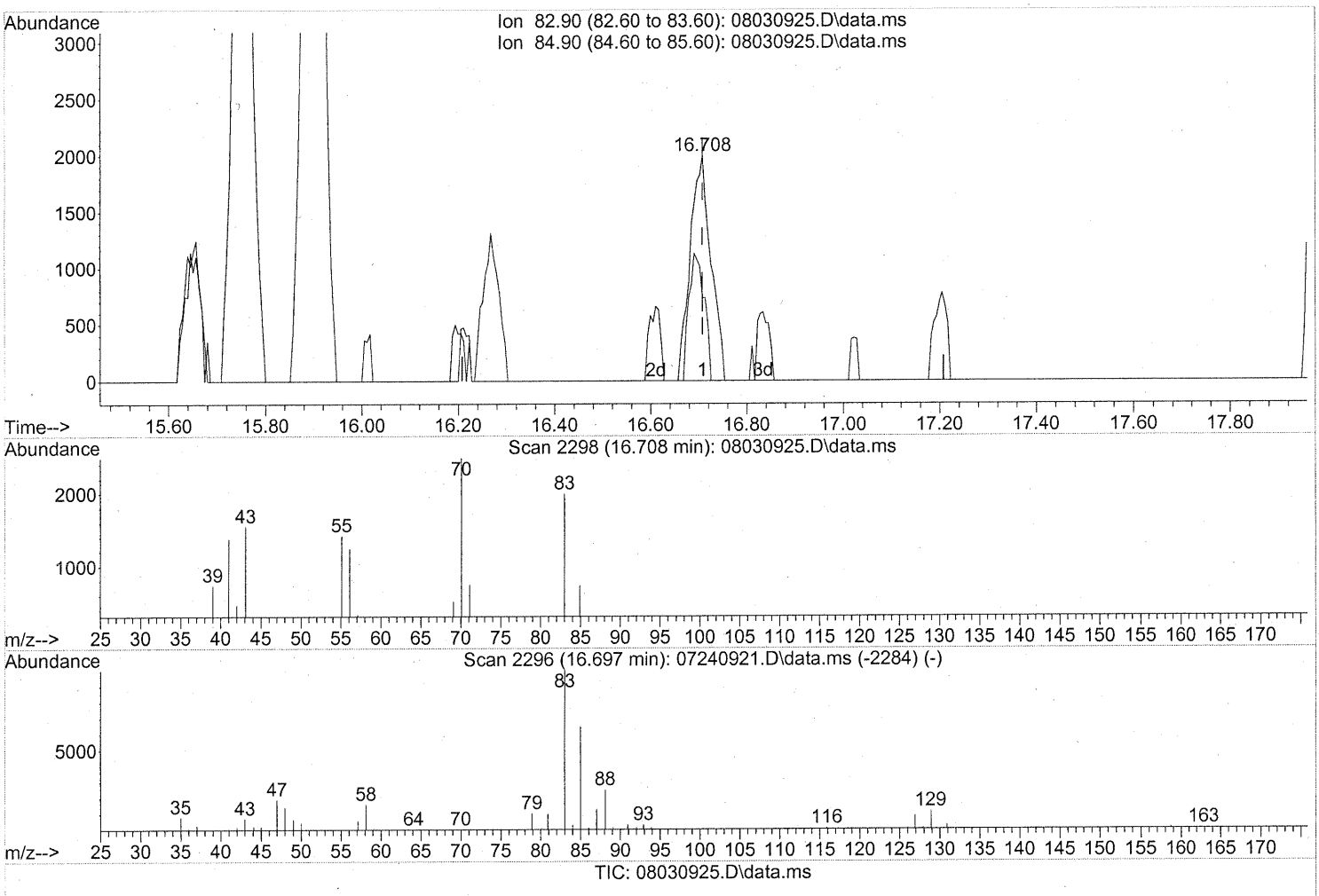
response 48012

Ion	Exp%	Act%
84.10	100	100
69.10	34.80	35.47
56.10	107.30	111.77
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(46) Bromodichloromethane (T)

16.708min (-0.000) 0.24ng

response 5955

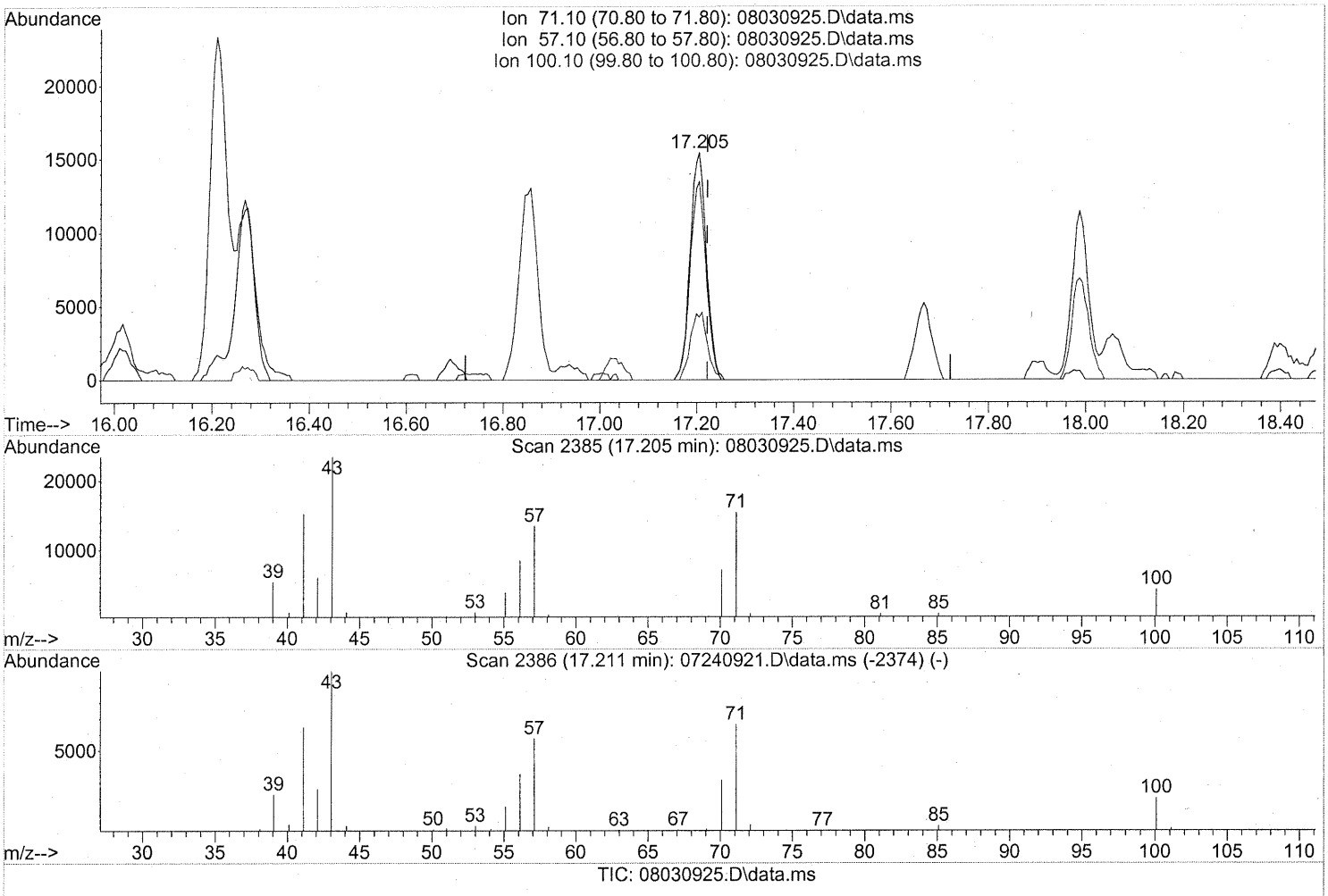
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	41.61#
0.00	0.00	0.00
0.00	0.00	0.00

87

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.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



(51) n-Heptane (T)

17.205min (-0.017) 1.73ng

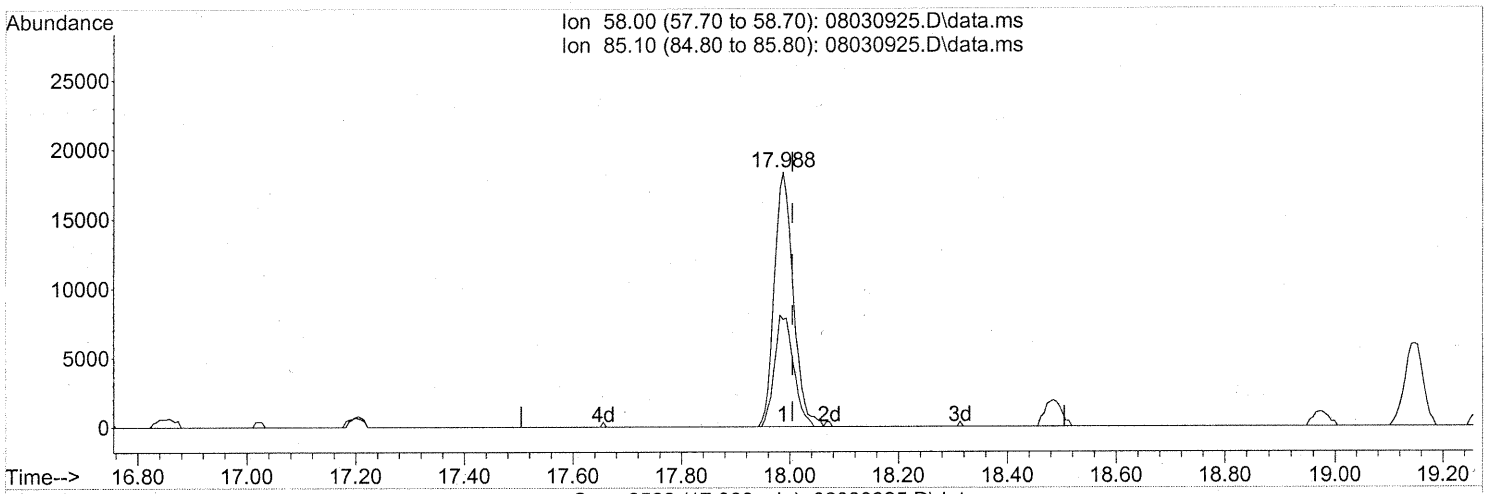
response 35993

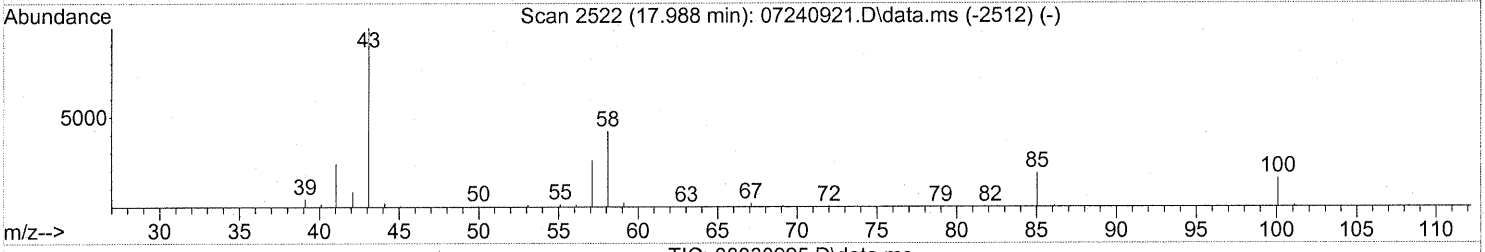
Ion	Exp%	Act%
71.10	100	100
57.10	86.80	85.82
100.10	30.70	30.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration





TIC: 08030925.D\data.ms

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

17.988min (-0.017) 2.73ng

response 44542

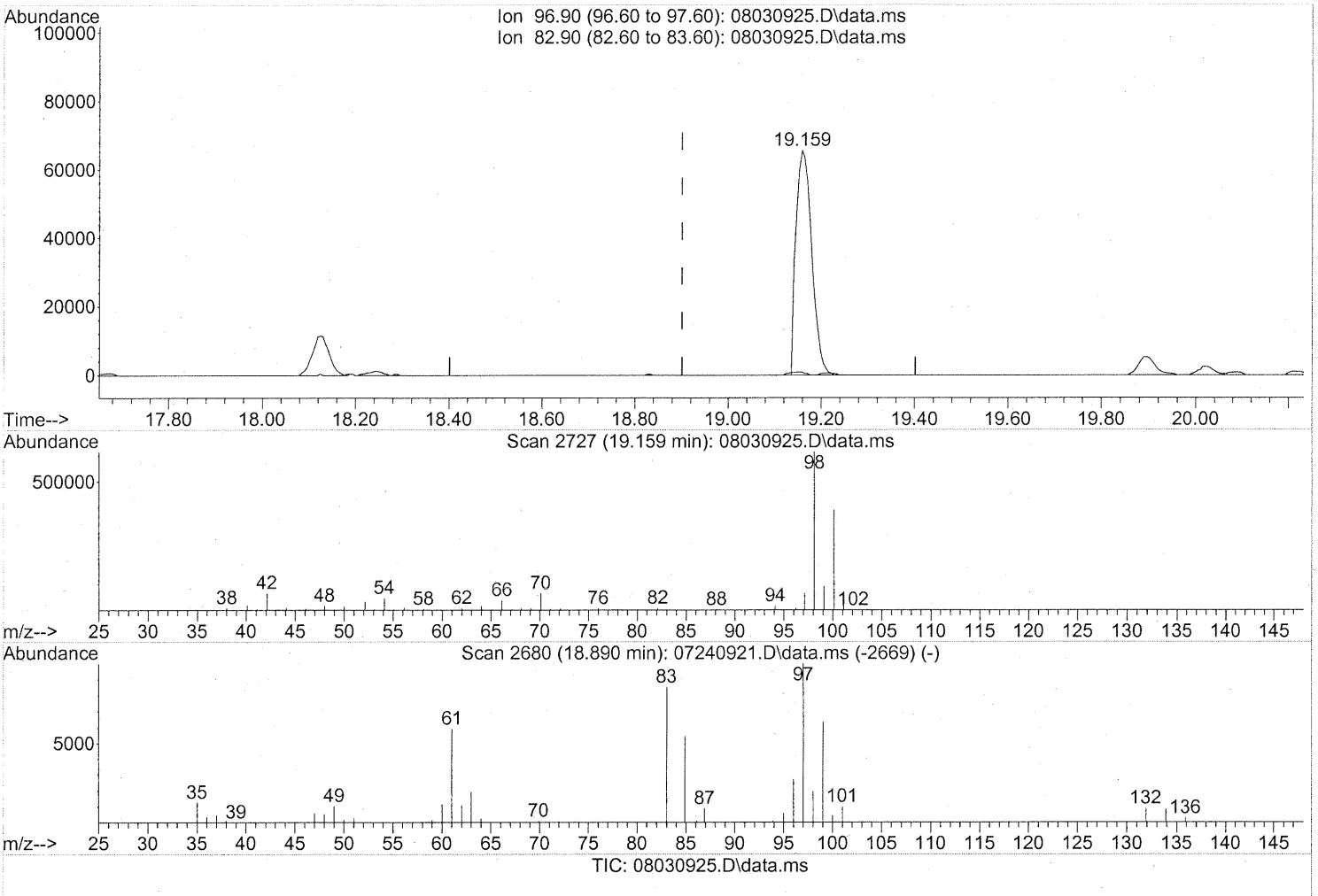
Ion	Exp%	Act%
58.00	100	100
85.10	45.40	44.46
0.00	0.00	0.00
0.00	0.00	0.00

89

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 08:12:30 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

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

19.159min (+0.257) 8.54ng

response 154410

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.29#
0.00	0.00	0.00
0.00	0.00	0.00

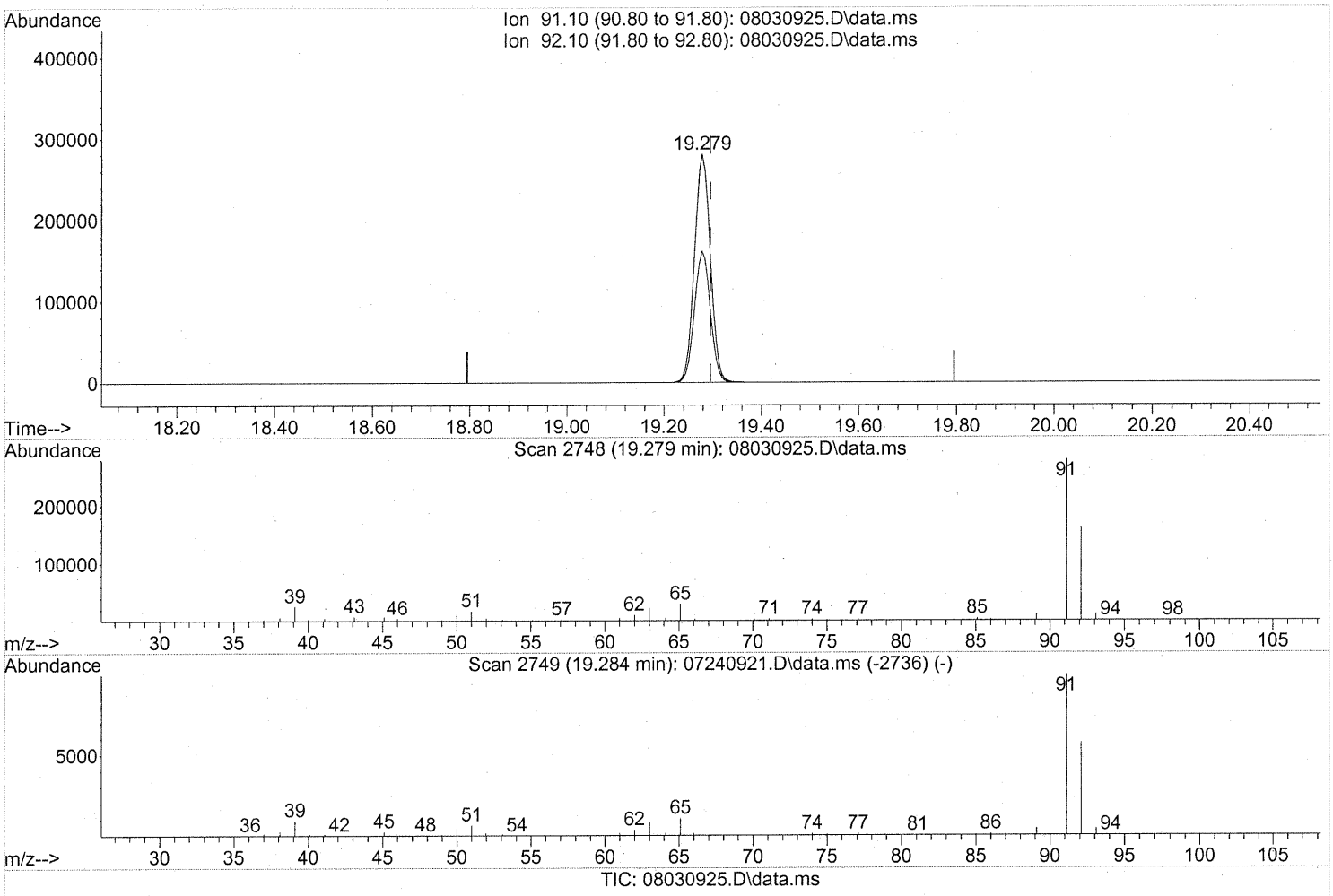
FP
8/5/09
VM 8/5/09

90

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(58) Toluene (T)

19.279min (-0.017) 6.60ng

response 634872

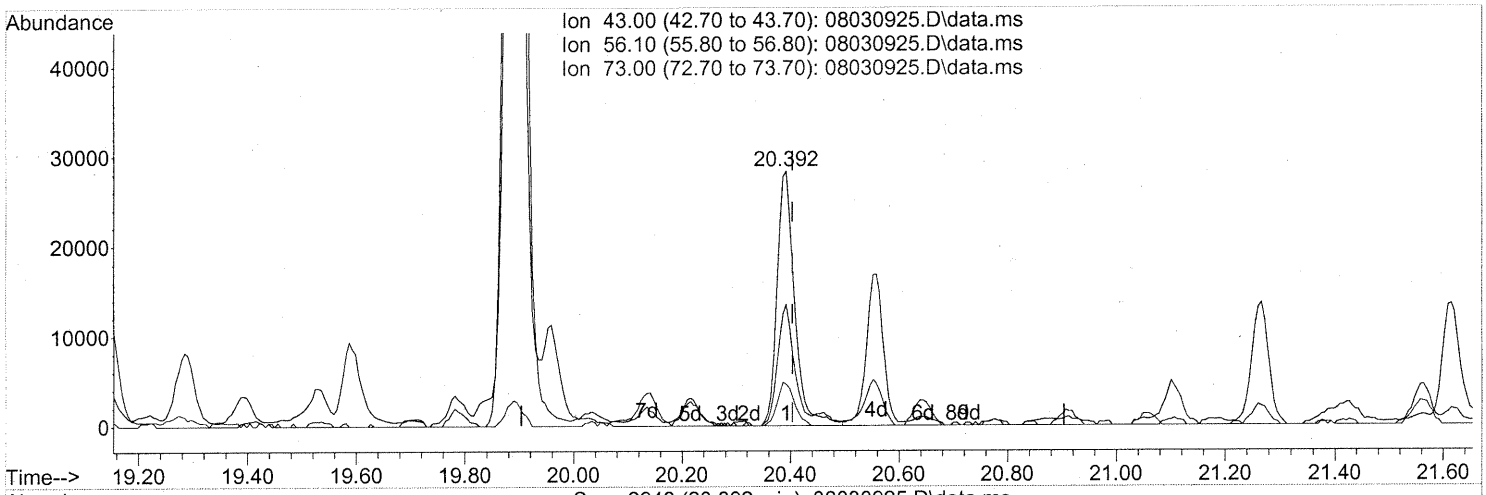
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.56
0.00	0.00	0.00
0.00	0.00	0.00

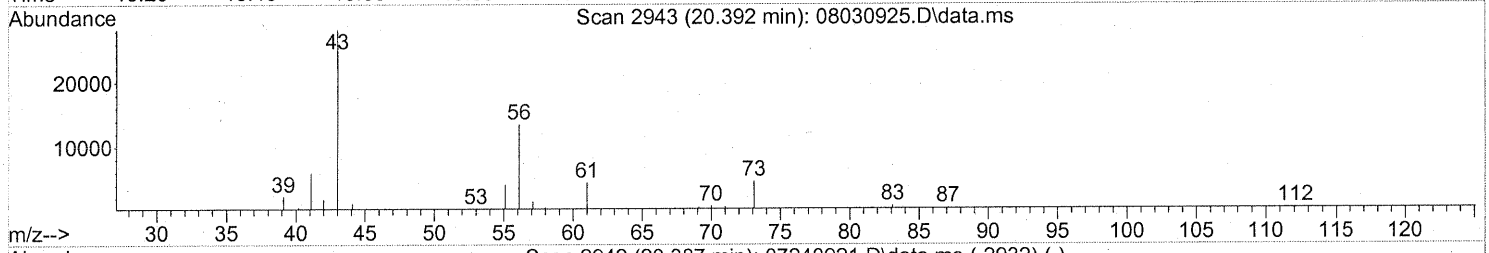
91

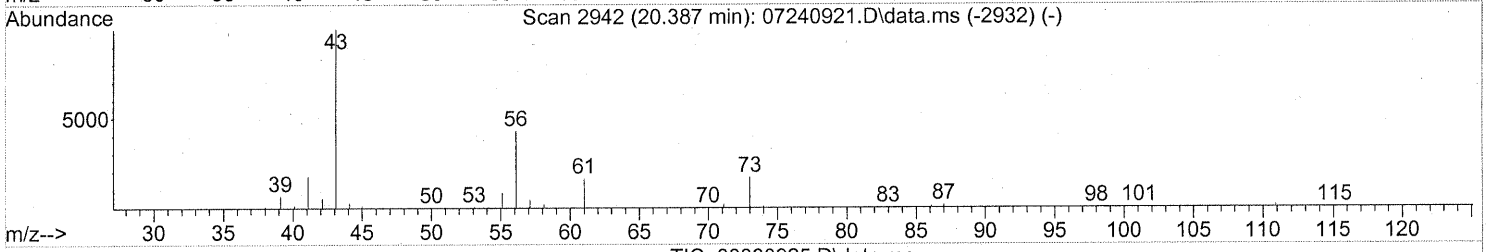
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030925.D\data.ms

(62) n-Butyl Acetate (T)

20.392min (-0.011) 1.38ng

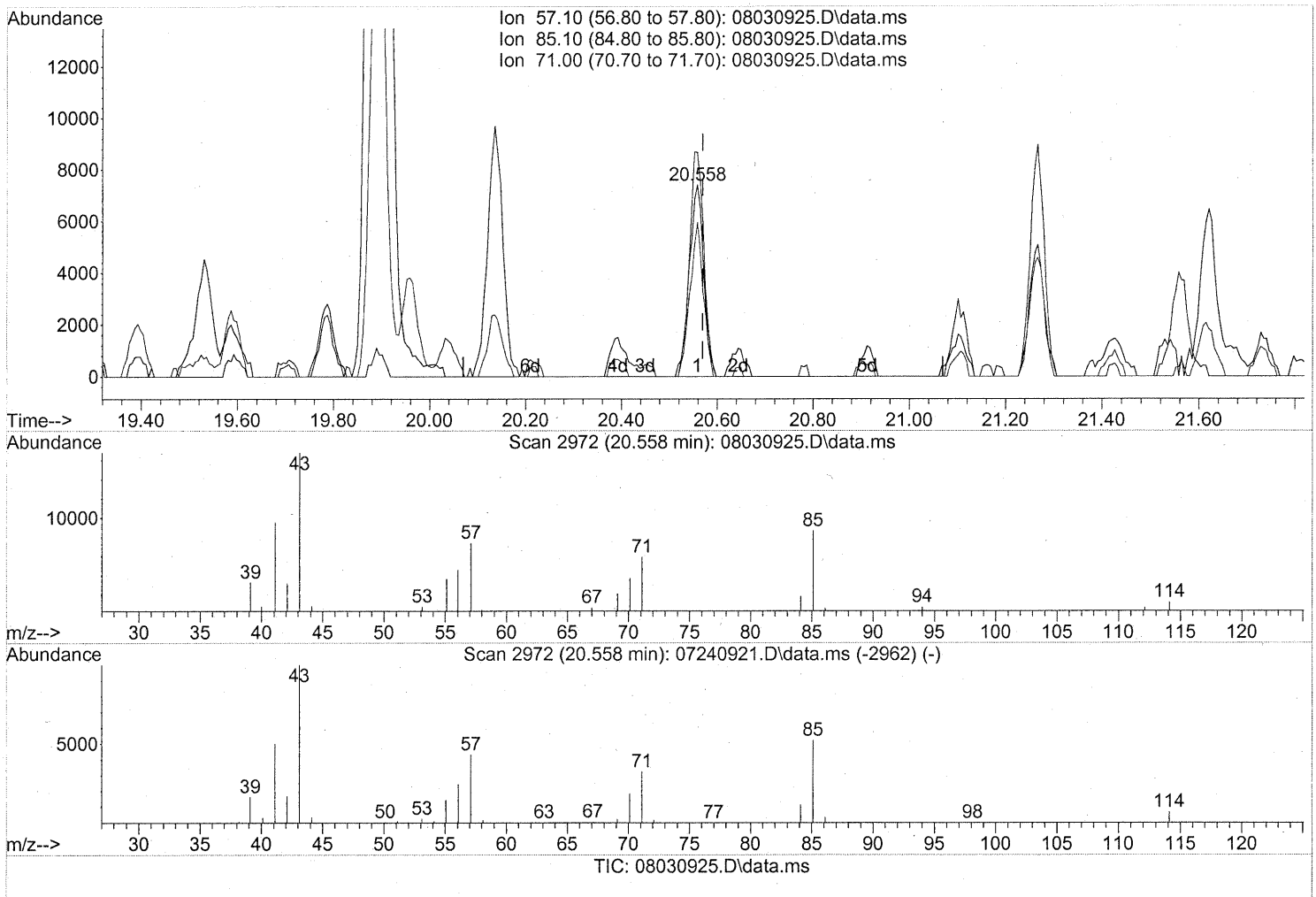
response 63343

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	45.87
73.00	16.90	16.35
0.00	0.00	0.00

92

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 0.82ng

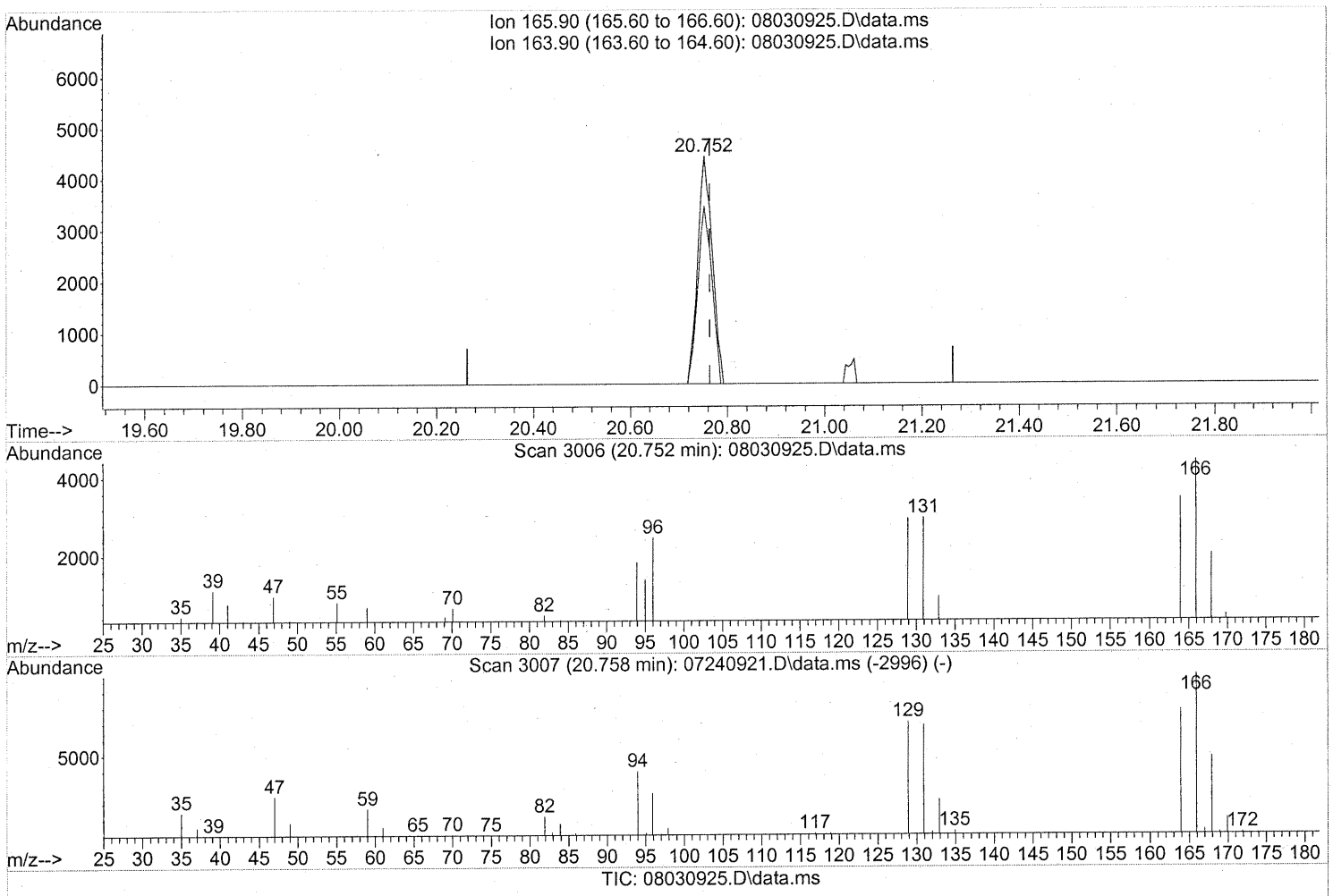
response 15450

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	117.55
71.00	75.10	74.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(64) Tetrachloroethene (T)

20.752min (-0.011) 0.36ng

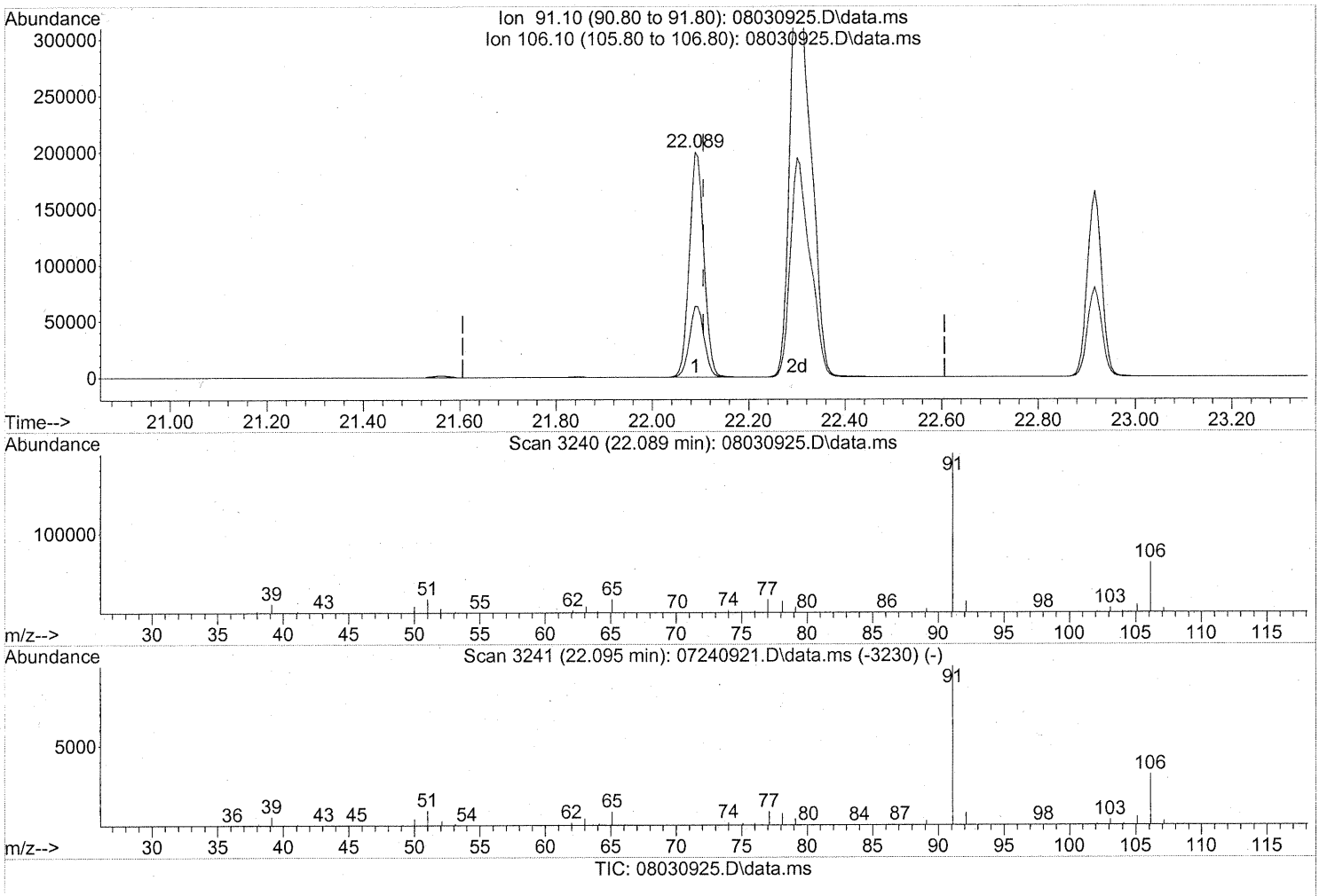
response 9223

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	75.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.017) 4.05ng

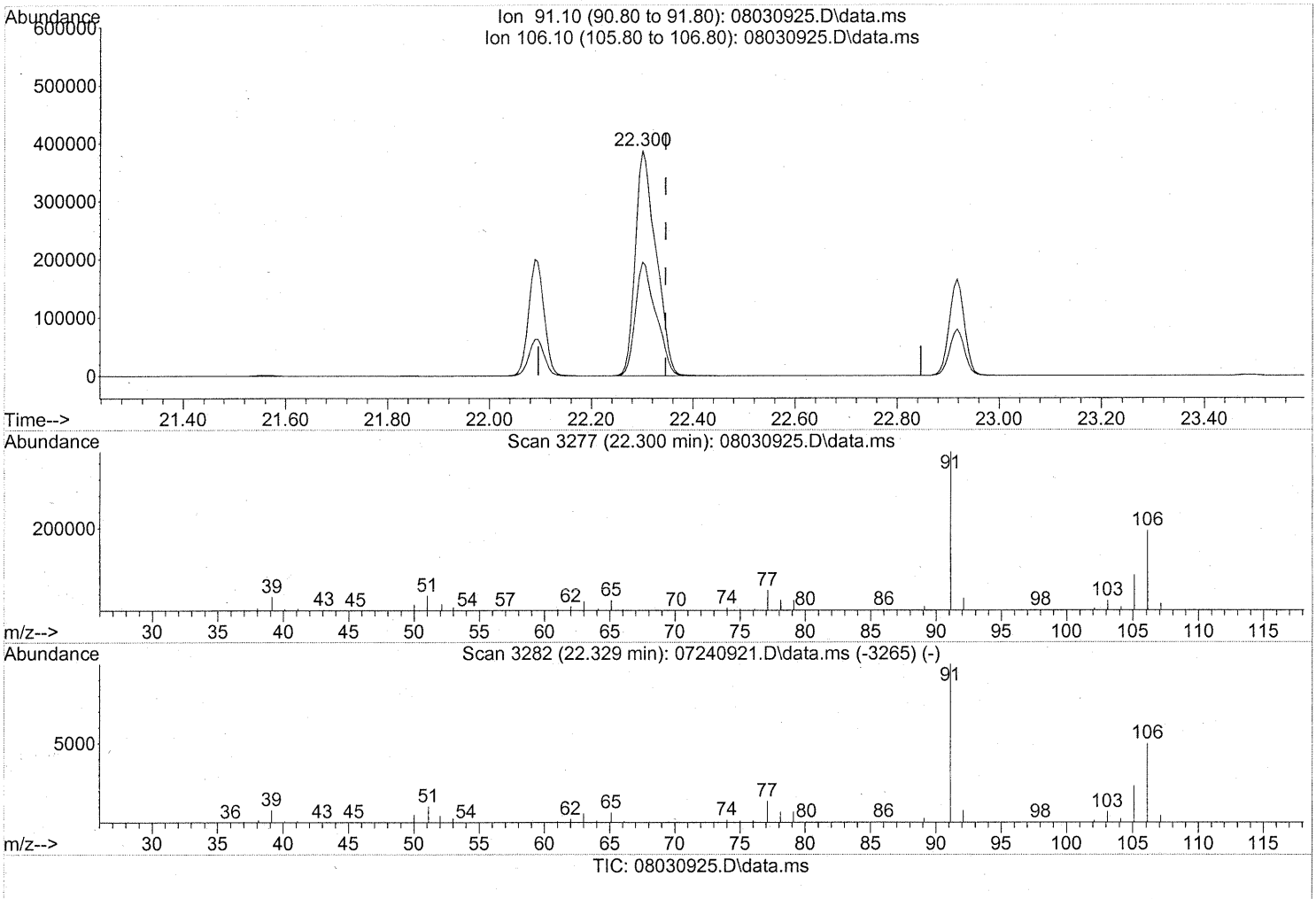
response 423283

Ion	Exp%	Act%
91.10	100	100
106.10	31.80	31.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

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

22.300min (-0.046) 12.75ng

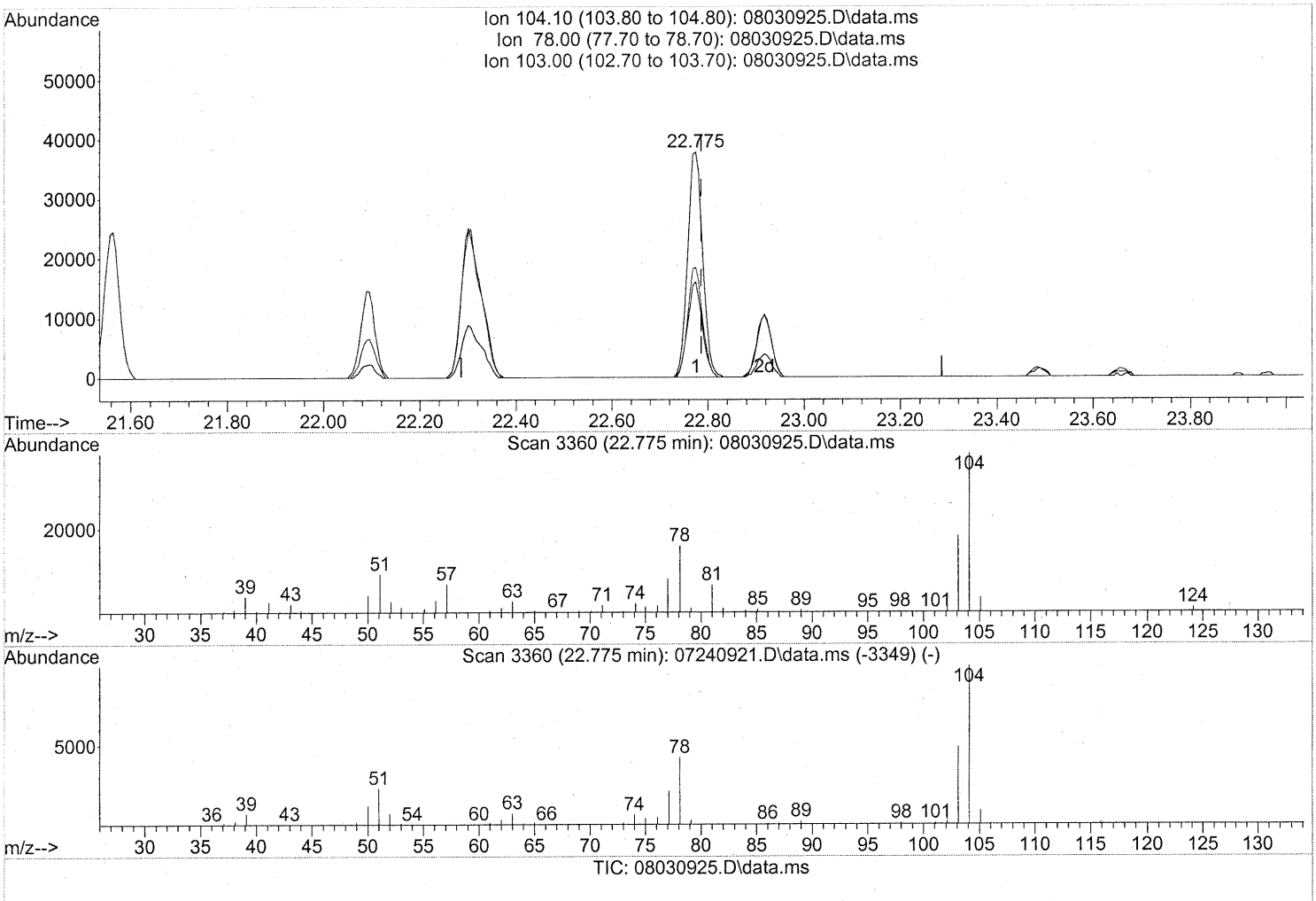
response 1099275

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	50.10
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(69) Styrene (T)

22.775min (-0.011) 1.28ng

response 81573

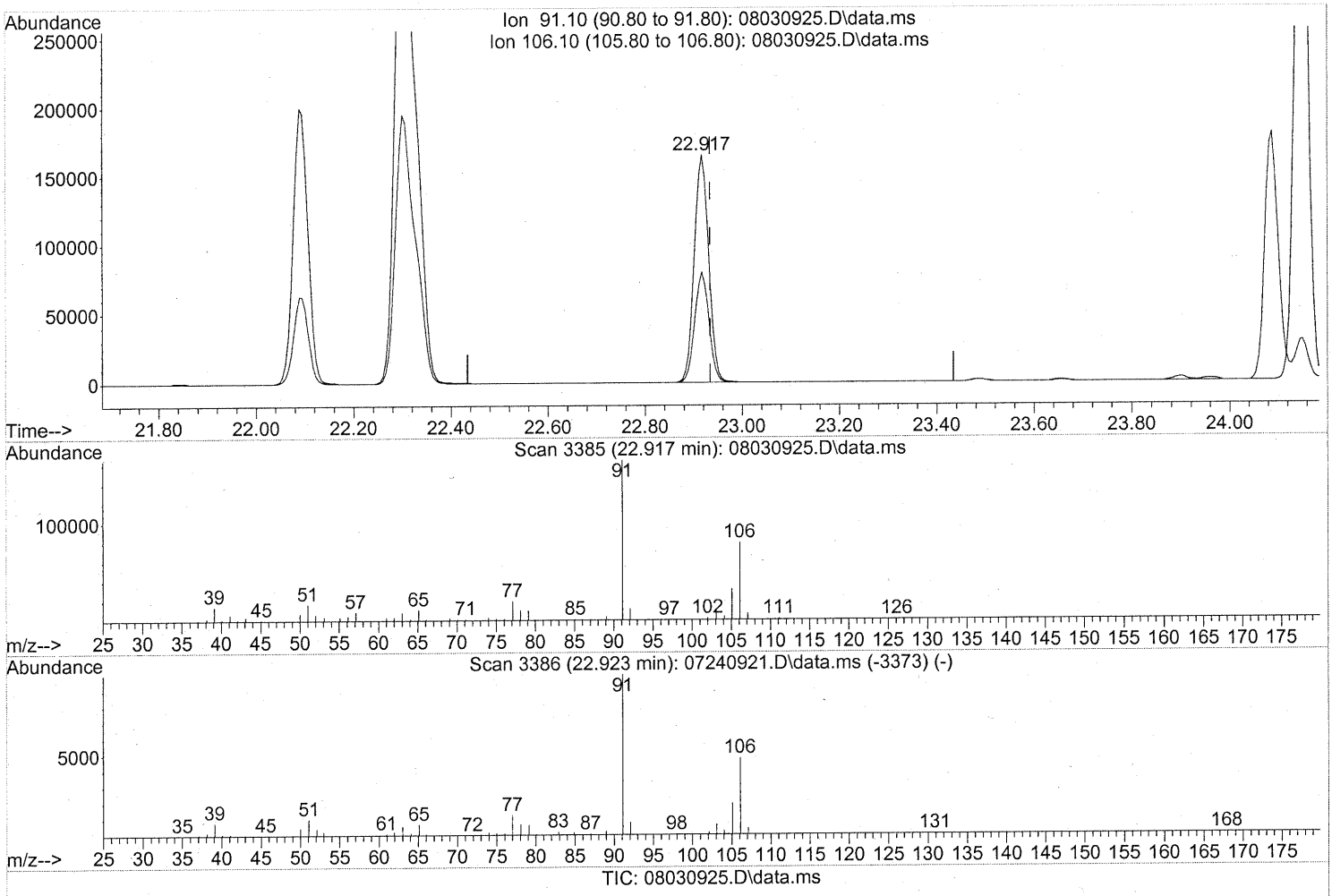
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.00
103.00	48.70	48.11
0.00	0.00	0.00

97

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 3.98ng

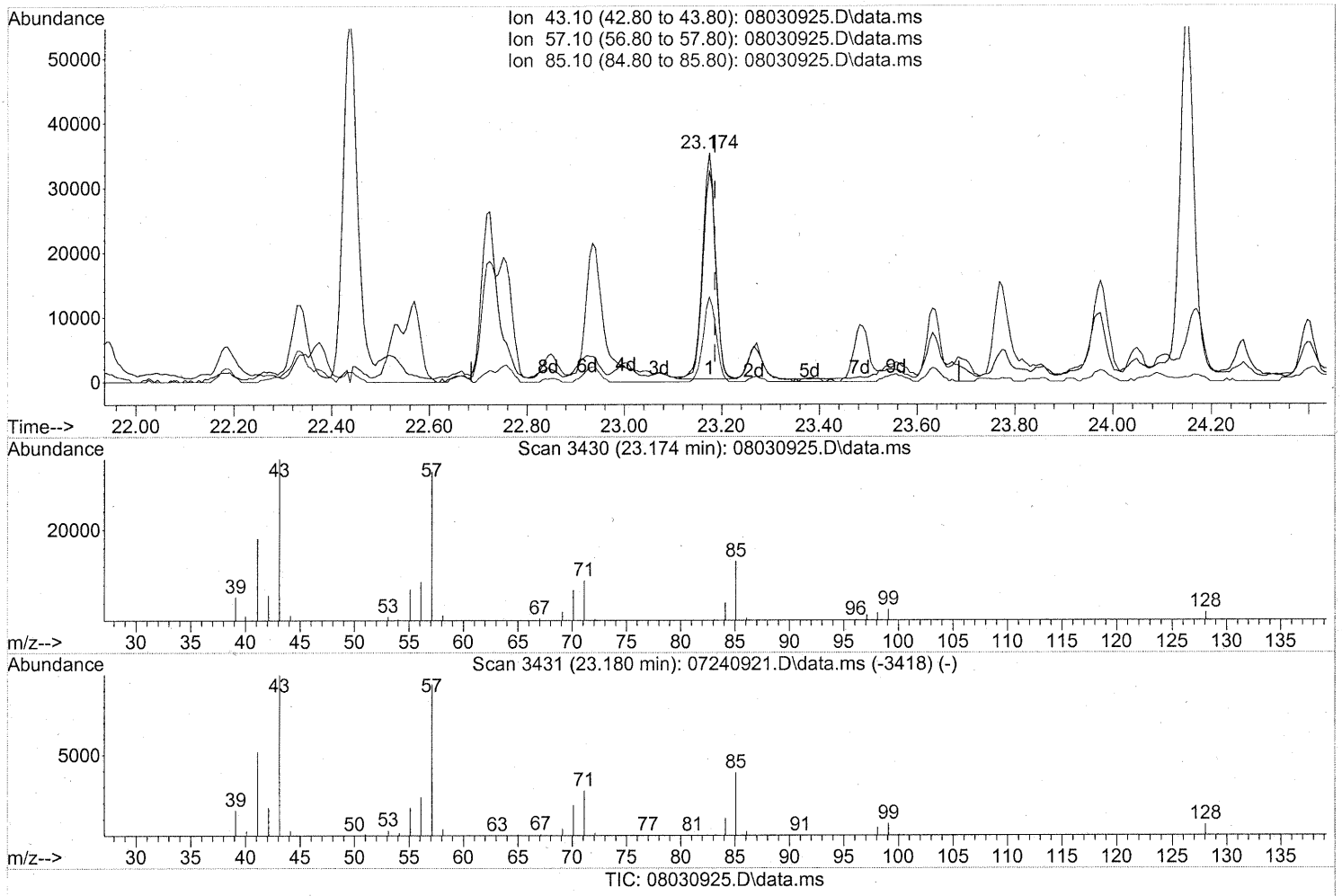
response 341981

Ion	Exp%	Act%
91.10	100	100
106.10	47.80	47.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 1.55ng

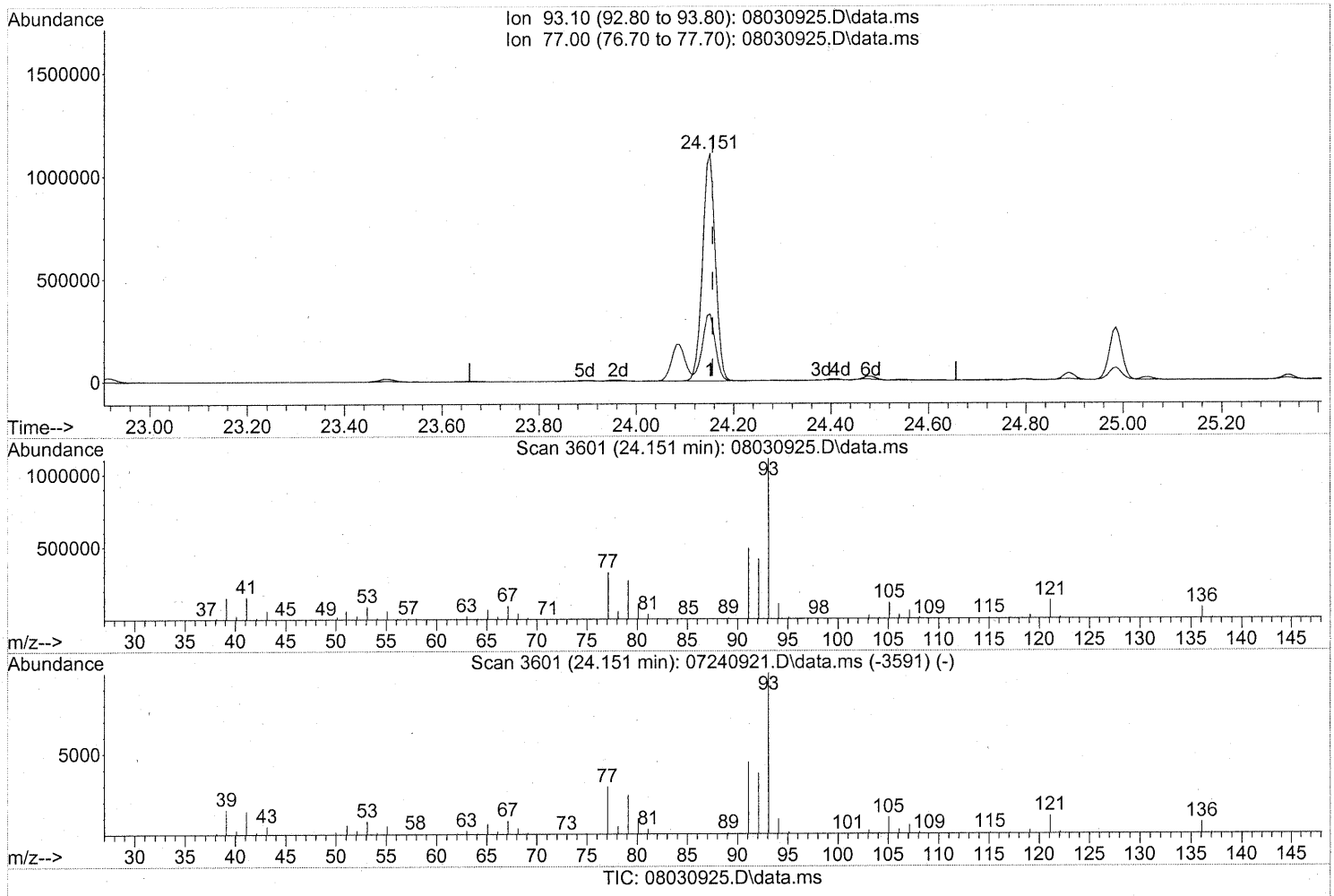
response 65138

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	90.80
85.10	38.80	37.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(75) alpha-Pinene (T)

24.151min (-0.006) 37.09ng

response 2021450

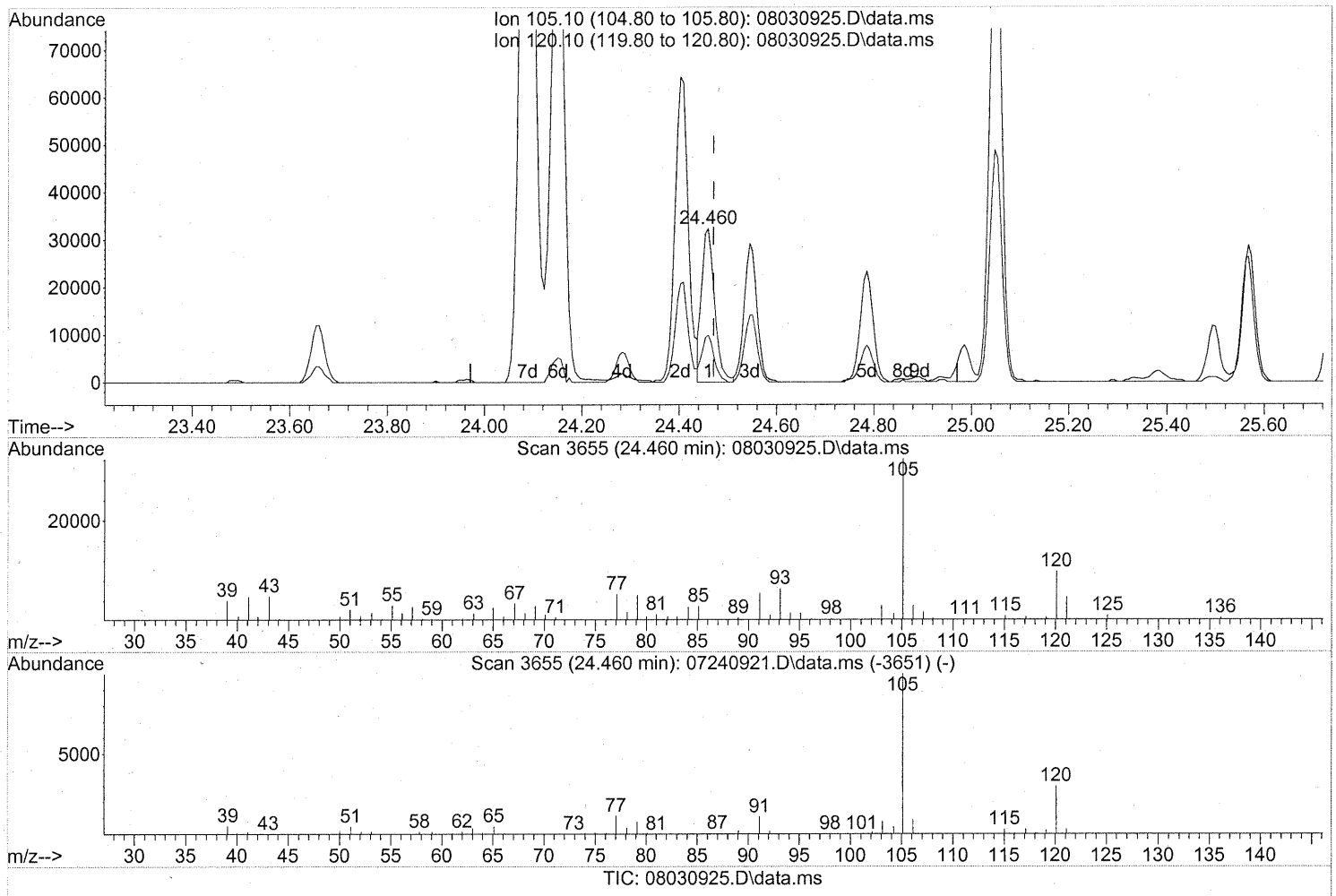
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	29.82
0.00	0.00	0.00
0.00	0.00	0.00

100

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 0.55ng

response 59538

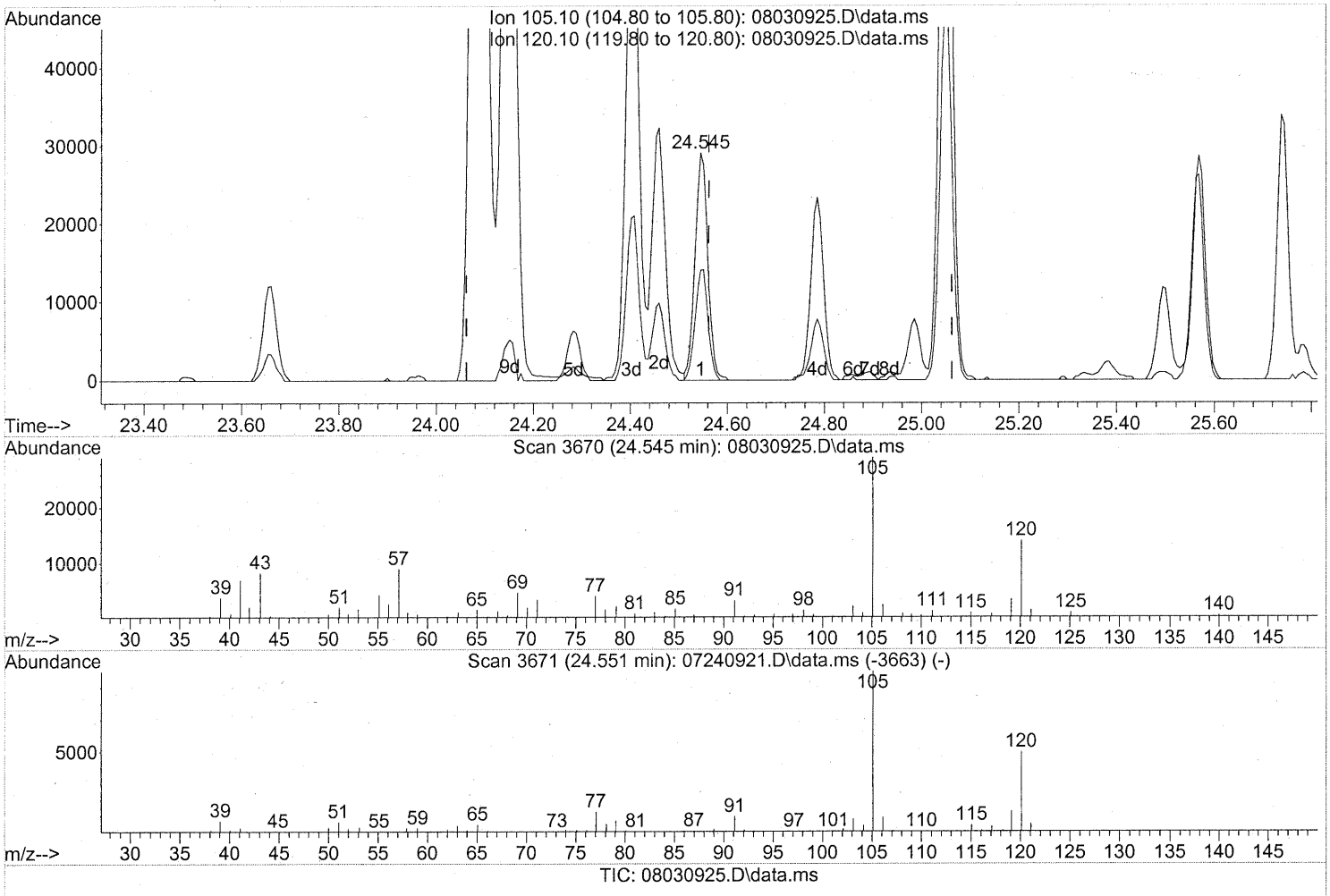
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	29.14
0.00	0.00	0.00
0.00	0.00	0.00

101

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

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

24.545min (-0.017) 0.59ng

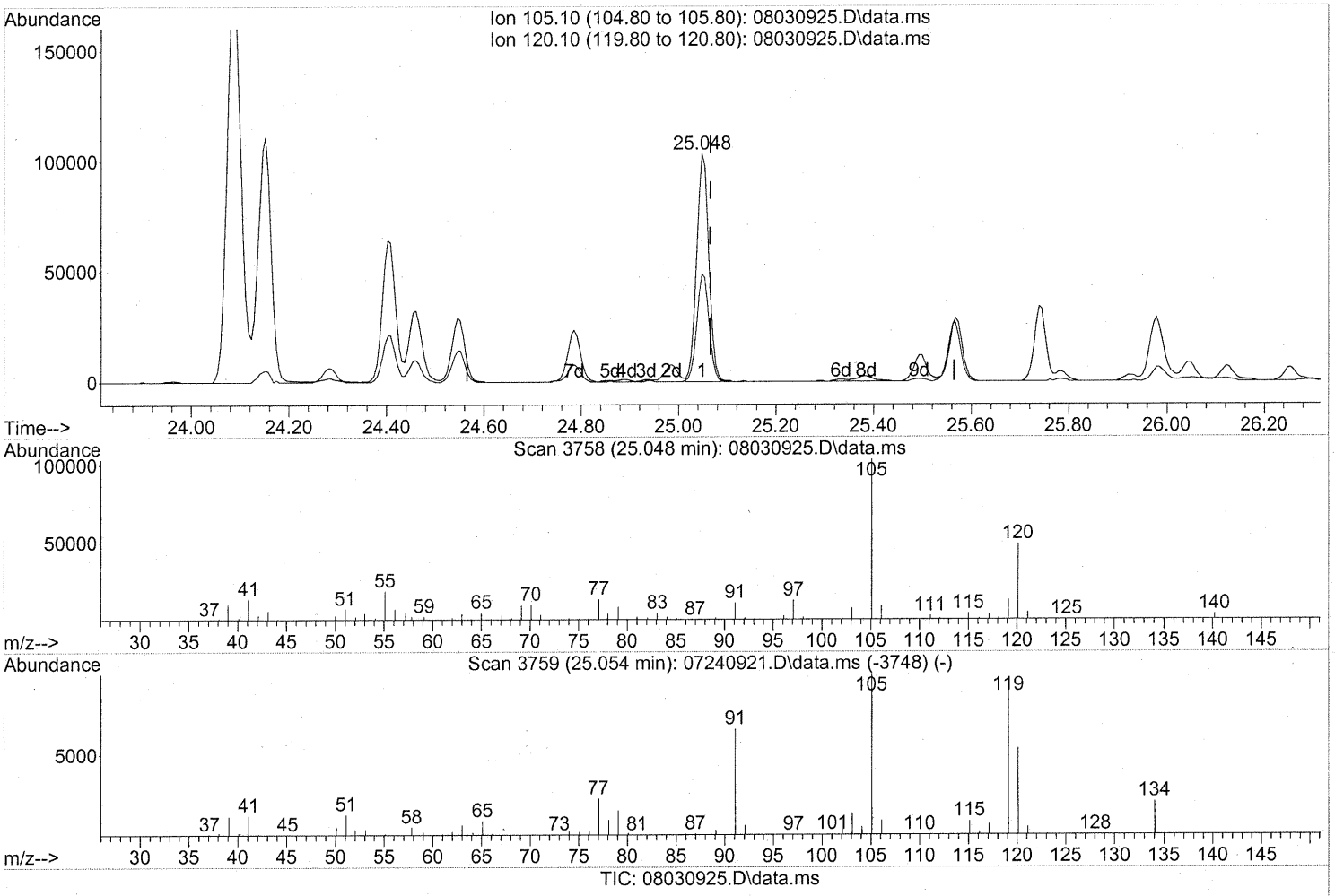
response 53345

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

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

25.048min (-0.017) 1.80ng

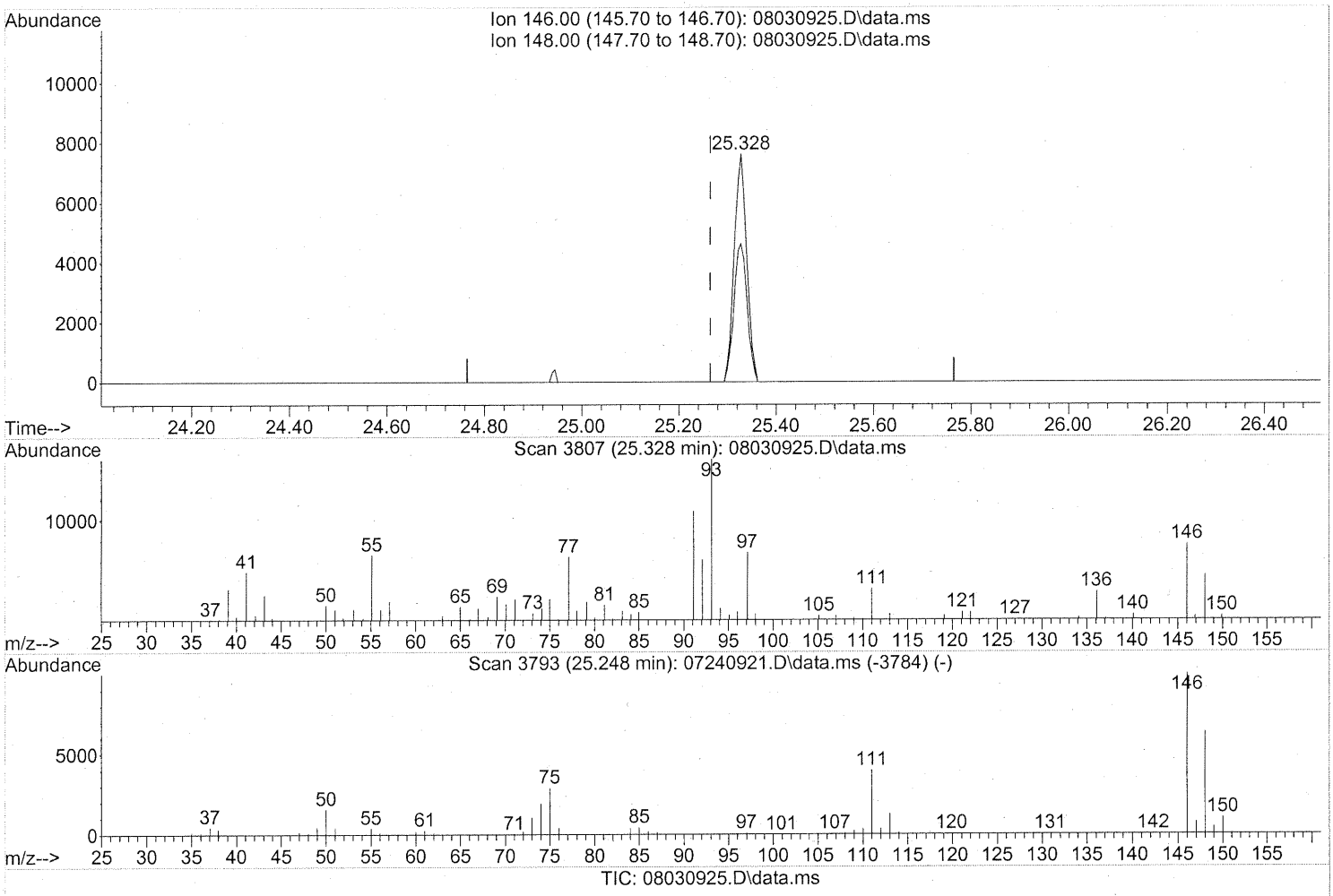
response 181450

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	47.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 08:12:30 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.26ng

response 13524

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.08
0.00	0.00	0.00
0.00	0.00	0.00

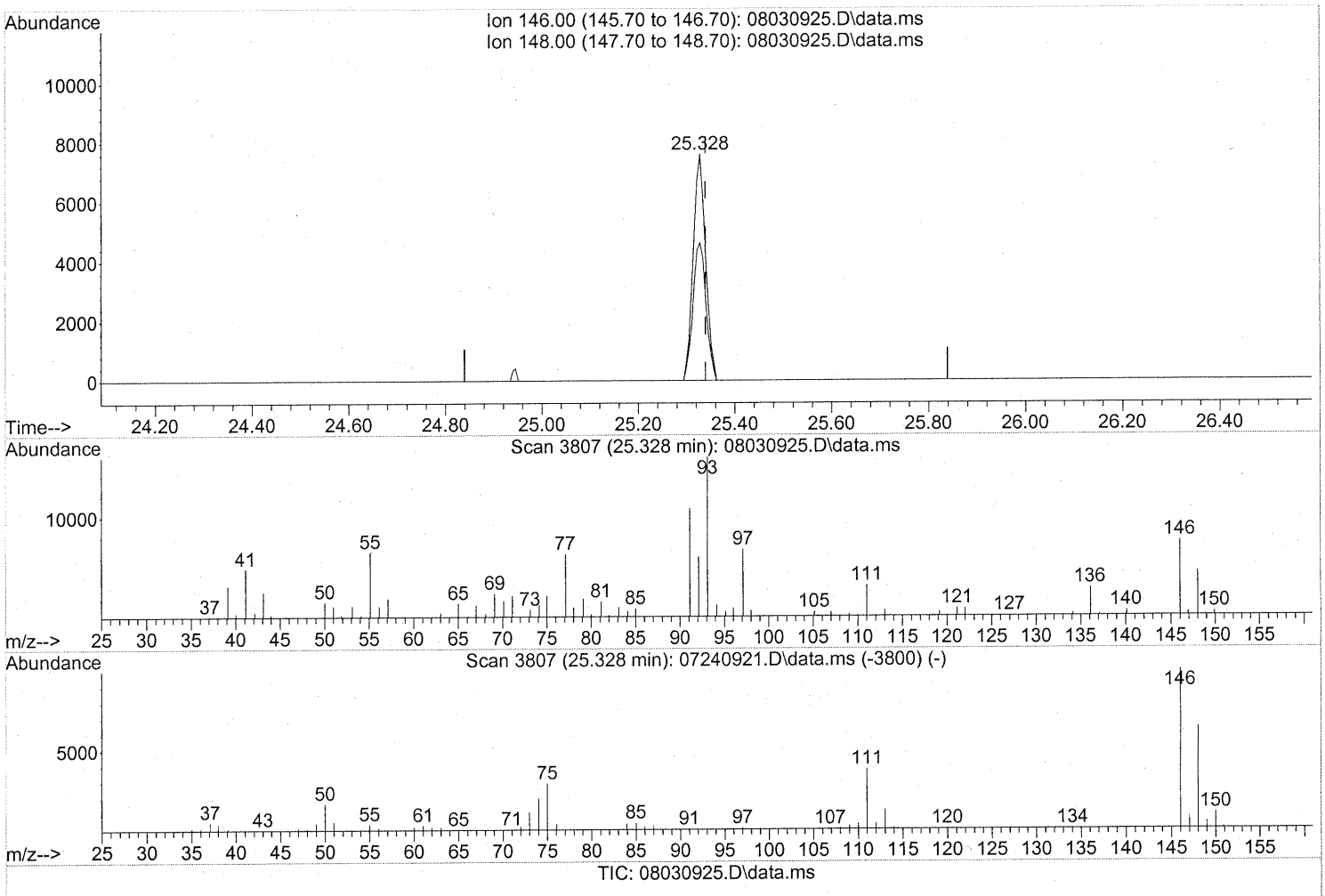
FP
EM 8/5/09
WM 8/5/09

104

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.328min (-0.011) 0.25ng

response 13524

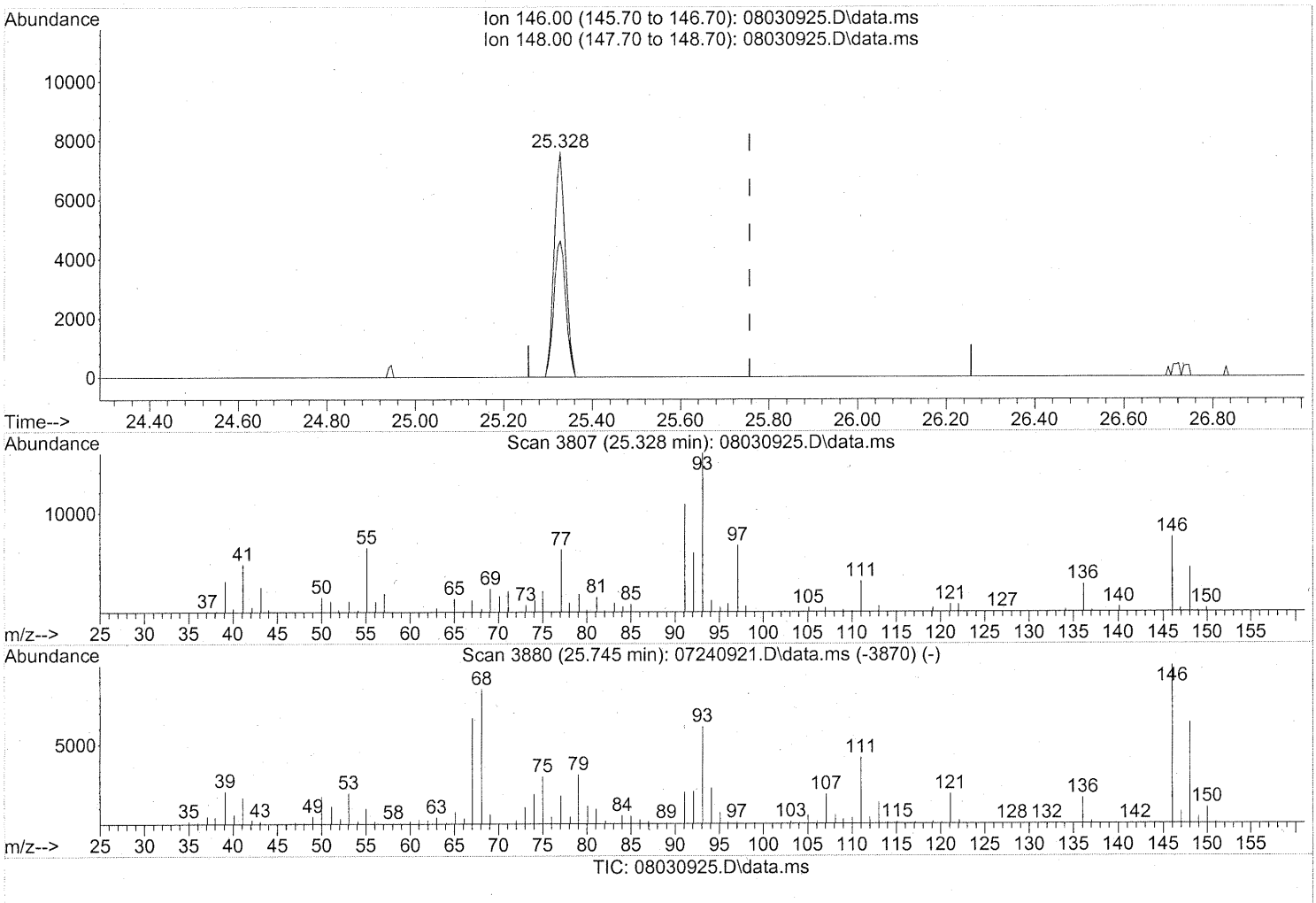
Ion	Exp%	Act%
146.00	100	100
148.00	64.00	64.08
0.00	0.00	0.00
0.00	0.00	0.00

105

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 08:12:30 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.25ng

response 13524

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.08
0.00	0.00	0.00
0.00	0.00	0.00

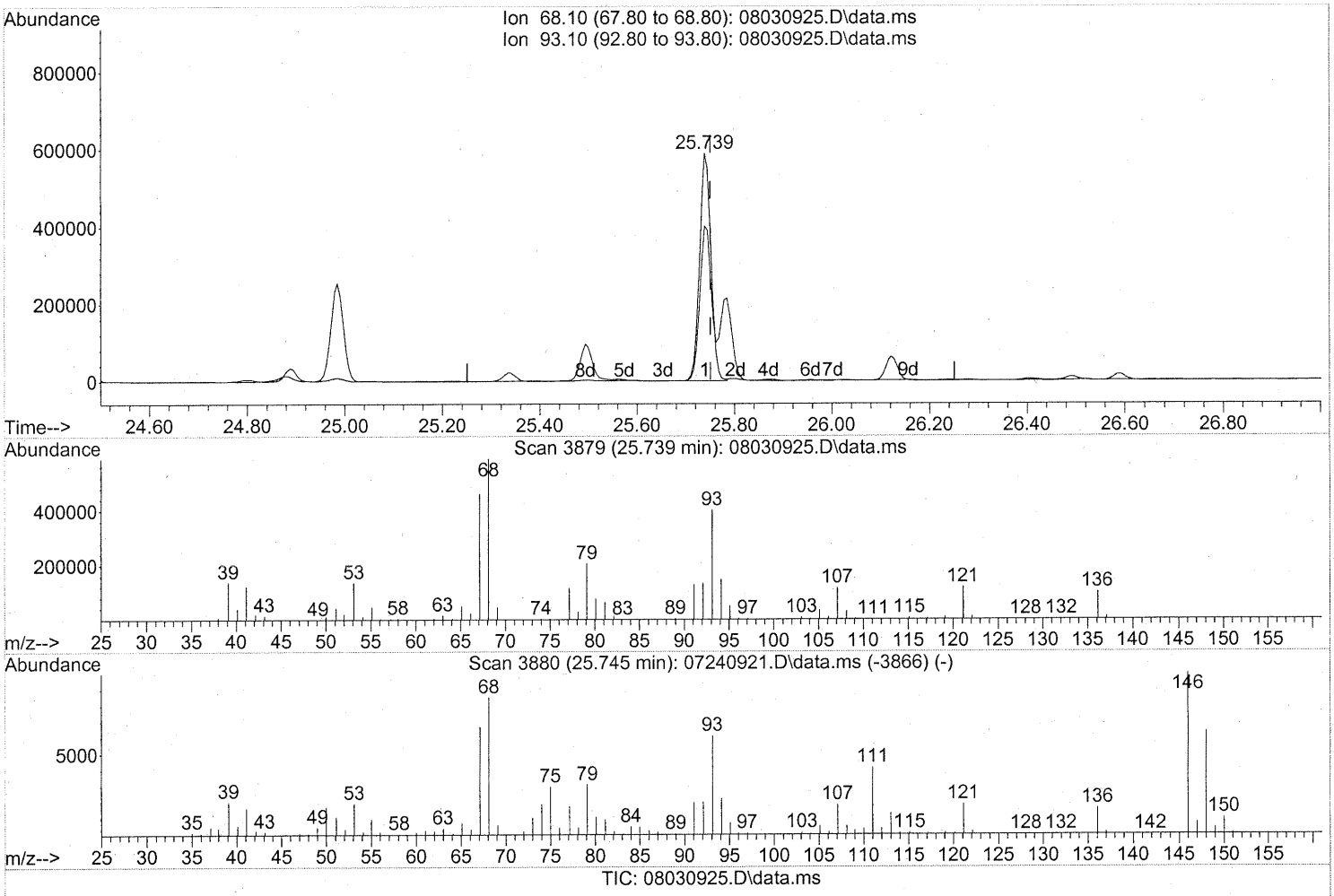
FP
em 8/5/09
LM 8/5/09

106

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(91) d-Limonene (T)

25.739min (-0.012) 23.52ng

response 942844

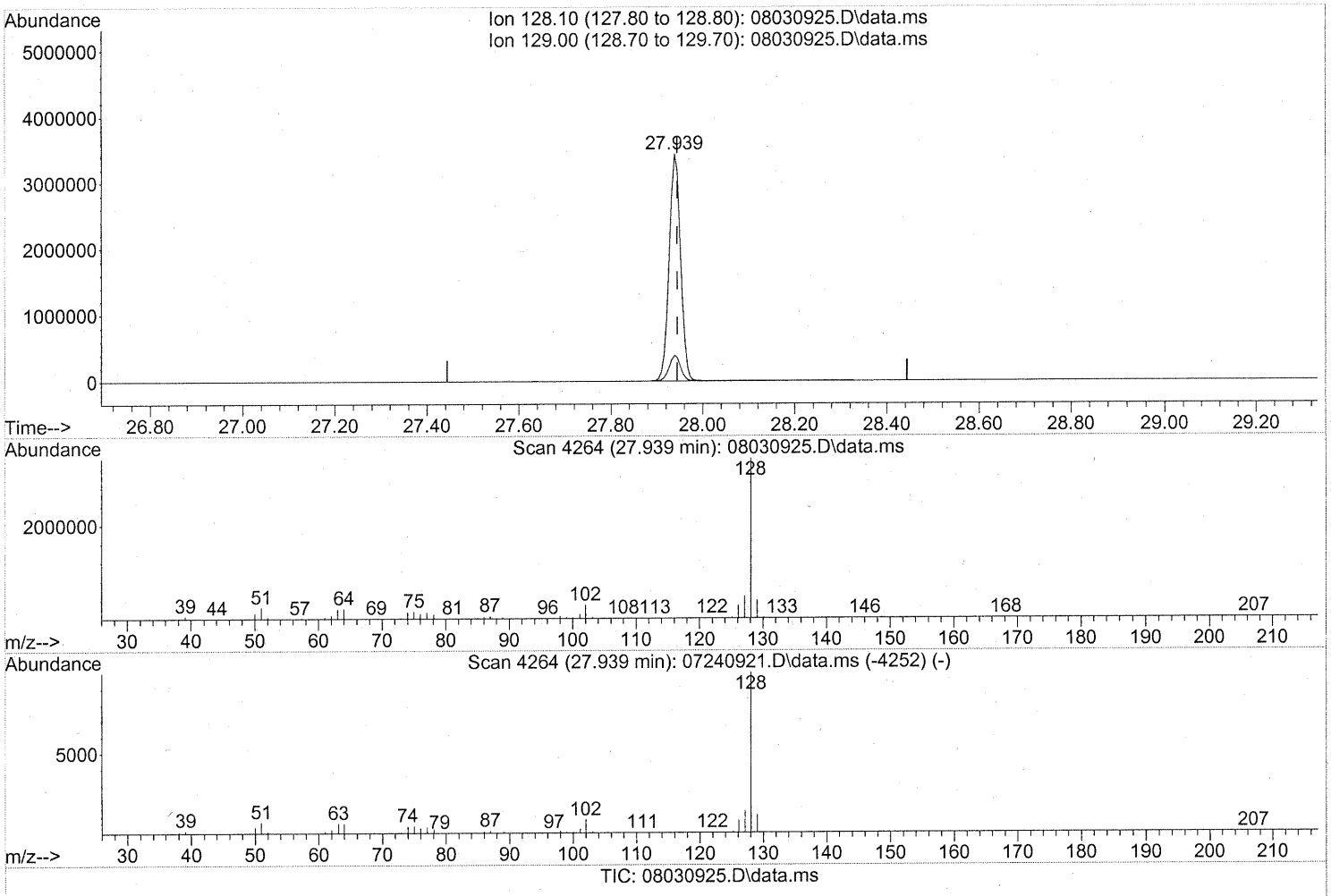
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	70.46
0.00	0.00	0.00
0.00	0.00	0.00

107

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030925.D
Acq On : 4 Aug 2009 00:24
Operator : EM
Sample : P0902599-007 (1000ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:11:24 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030925.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 47.74ng

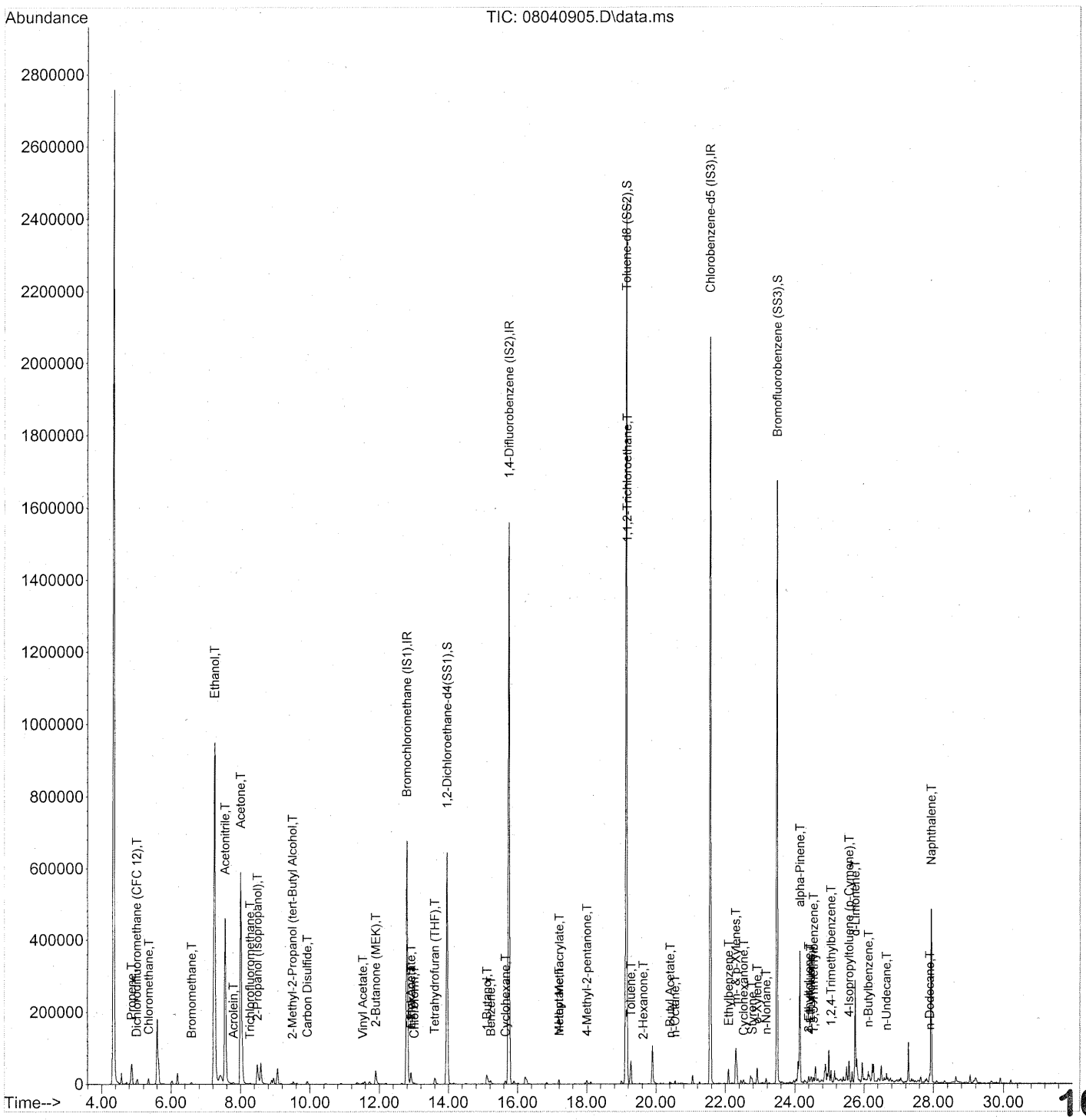
response 5909527

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	11.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040905.D
Acq On : 4 Aug 2009 9:38
Operator : EM
Sample : P0902599-007 dil (100ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:14:36 2009
Quant Method : J:\MS09\Methods\R9072409.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\04\
Data File : 08040905.D
Acq On : 4 Aug 2009 9:38
Operator : EM
Sample : P0902599-007 dil (100ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:14:36 2009
Quant Method : J:\MS09\Methods\R9072409.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	373703	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1844860	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	841607	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	642333	24.295	ng		-0.03
Spiked Amount 25.000			Recovery =	97.20%			
57) Toluene-d8 (SS2)	19.14	98	2101505	25.239	ng		-0.02
Spiked Amount 25.000			Recovery =	100.96%			
73) Bromofluorobenzene (SS3)	23.49	174	610913	24.405	ng		0.00
Spiked Amount 25.000			Recovery =	97.64%			
Target Compounds							Qvalue
2) Propene	4.87	42	16784	0.712	ng	#	74
3) Dichlorodifluoromethan...	5.01	85	8849	0.188	ng	#	95
4) Chloromethane	5.35	50	5663	0.161	ng		95
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	6.59	94	5066	0.229	ng		96
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.25	45	1769326m	113.106	ng		
11) Acetonitrile	7.55	41	744079	21.036	ng		100
12) Acrolein	7.79	56	4232	0.371	ng		96
13) Acetone	8.00	58	345440	19.415	ng		100
14) Trichlorofluoromethane	8.28	101	3386	0.083	ng		90
15) 2-Propanol (Isopropanol)	8.48	45	130723	2.792	ng		92
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.49	59	5943	0.113	ng	#	65
19) Methylene Chloride	9.52	84	913	N.D.			
20) 3-Chloro-1-propene (Al...	9.62	41	408	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.92	76	16686	0.208	ng		93
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.53	86	813	0.192	ng	#	1
27) 2-Butanone (MEK)	11.90	72	19507	1.437	ng		91
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.92	61	6339	0.713	ng		96
31) n-Hexane	12.92	57	3893	0.095	ng		97

EM 8/5/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040905.D
Acq On : 4 Aug 2009 9:38
Operator : EM
Sample : P0902599-007 dil (100ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:14:36 2009
Quant Method : J:\MS09\Methods\R9072409.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	3542	0.095	ng		96
34) Tetrahydrofuran (THF)	13.60	72	5378	0.421	ng	#	63
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	15.11	56	31539	1.376	ng		82
41) Benzene	15.22	78	10025	0.102	ng		90
42) Carbon Tetrachloride	15.45	117	391	N.D.			
43) Cyclohexane	15.65	84	4978	0.135	ng		89
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D.			
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	0.00	88	0	N.D.			
49) 2,2,4-Trimethylpentane...	16.84	57	3873	N.D.			
50) Methyl Methacrylate	17.21	100	870	0.094	ng	#	1
51) n-Heptane	17.20	71	3505	0.147	ng		92
52) cis-1,3-Dichloropropene	17.94	75	233	N.D.			
53) 4-Methyl-2-pentanone	18.00	58	4029	0.216	ng		86
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	19.16	97	172139	8.328	ng	#	8
58) Toluene	19.27	91	63032	0.618	ng		99
59) 2-Hexanone	19.63	43	2304	0.053	ng	#	22
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.41	43	6683	0.137	ng		88
63) n-Octane	20.55	57	1540	0.077	ng		96
64) Tetrachloroethene	20.75	166	604	N.D.			
65) Chlorobenzene	0.00	112	0	N.D.			
66) Ethylbenzene	22.09	91	40067	0.361	ng		99
67) m- & p-Xylenes	22.30	91	101224	1.108	ng		98
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.77	104	7440	0.110	ng		98
70) o-Xylene	22.92	91	32758	0.360	ng		99
71) n-Nonane	23.17	43	6961	0.157	ng		84
72) 1,1,2,2-Tetrachloroethane	22.52	83	117	N.D.			
74) Cumene	23.65	105	2704	N.D.			
75) alpha-Pinene	24.15	93	167631	2.901	ng		95
76) n-Propylbenzene	24.28	91	5656	N.D.			
77) 3-Ethyltoluene	24.40	105	12023	0.105	ng		95
78) 4-Ethyltoluene	24.46	105	5806	0.050	ng		96
79) 1,3,5-Trimethylbenzene	24.55	105	5480	0.057	ng		94

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Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040905.D
Acq On : 4 Aug 2009 9:38
Operator : EM
Sample : P0902599-007 dil (100ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:14:36 2009
Quant Method : J:\MS09\Methods\R9072409.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

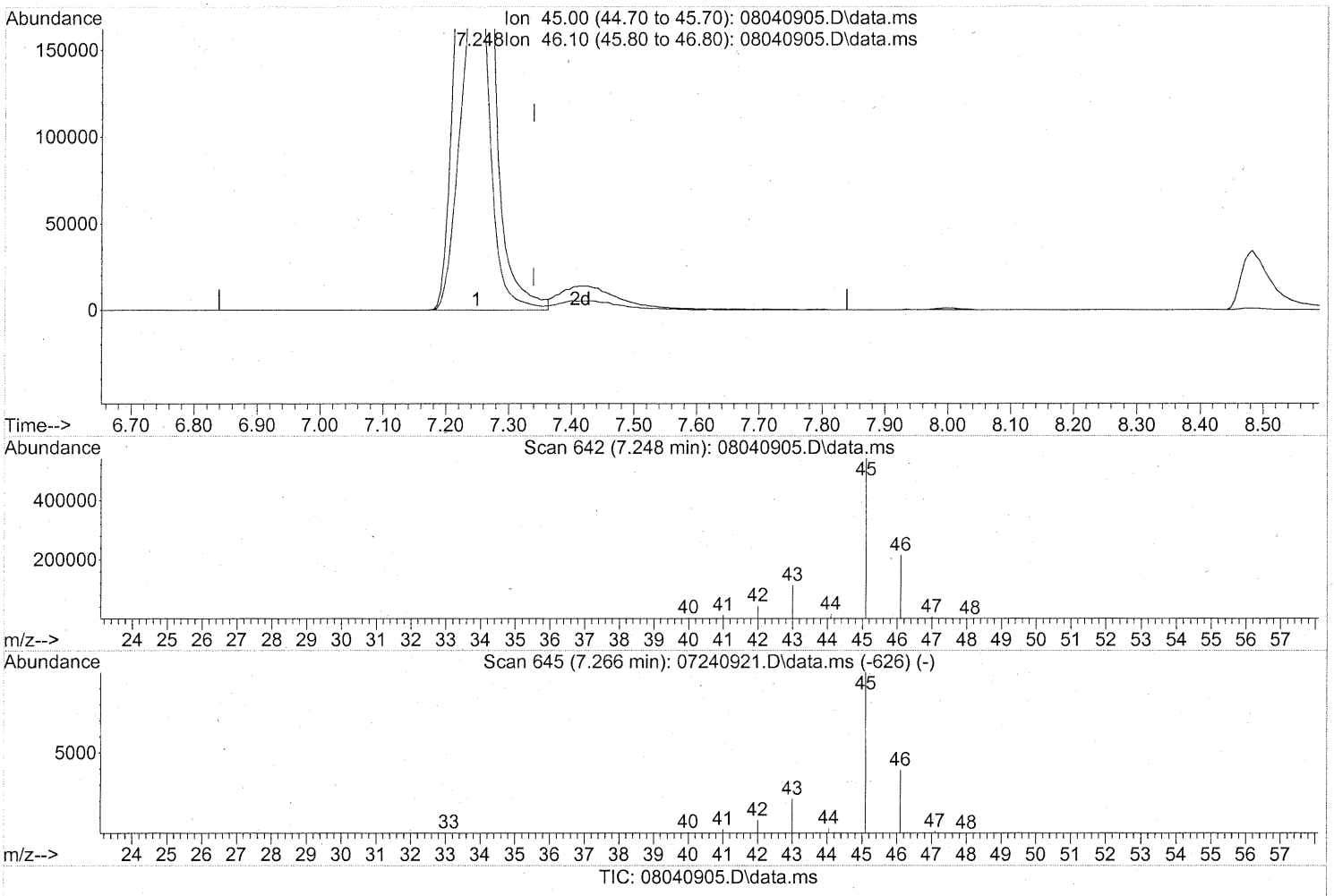
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	1360	N.D.		
81) 2-Ethyltoluene	24.79	105	4401	N.D.		
82) 1,2,4-Trimethylbenzene	25.05	105	16396	0.153 ng		90
83) n-Decane	25.19	57	2426	N.D.		
84) Benzyl Chloride	25.33	91	2677	N.D.		
85) 1,3-Dichlorobenzene	25.32	146	854	N.D.		
86) 1,4-Dichlorobenzene	25.32	146	854	N.D.		
87) sec-Butylbenzene	25.38	105	116	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	26973	0.200 ng		96
89) 1,2,3-Trimethylbenzene	25.57	105	5251	N.D.		
90) 1,2-Dichlorobenzene	25.32	146	854	N.D.		
91) d-Limonene	25.74	68	70919	1.669 ng		98
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	9428	0.178 ng	#	77
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	451756	3.442 ng		99
96) n-Dodecane	27.89	57	8379	0.148 ng		82
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.52	55	6304	0.205 ng		89
99) tert-Butylbenzene	25.05	119	2216	N.D.		
100) n-Butylbenzene	26.12	91	5718	0.054 ng	#	66

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040905.D
Acq On : 4 Aug 2009 9:38
Operator : EM
Sample : P0902599-007 dil (100ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 11:58:50 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08040905.D\data.ms

(10) Ethanol (T)

7.248min (-0.091) 107.27ng

response 1678082

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

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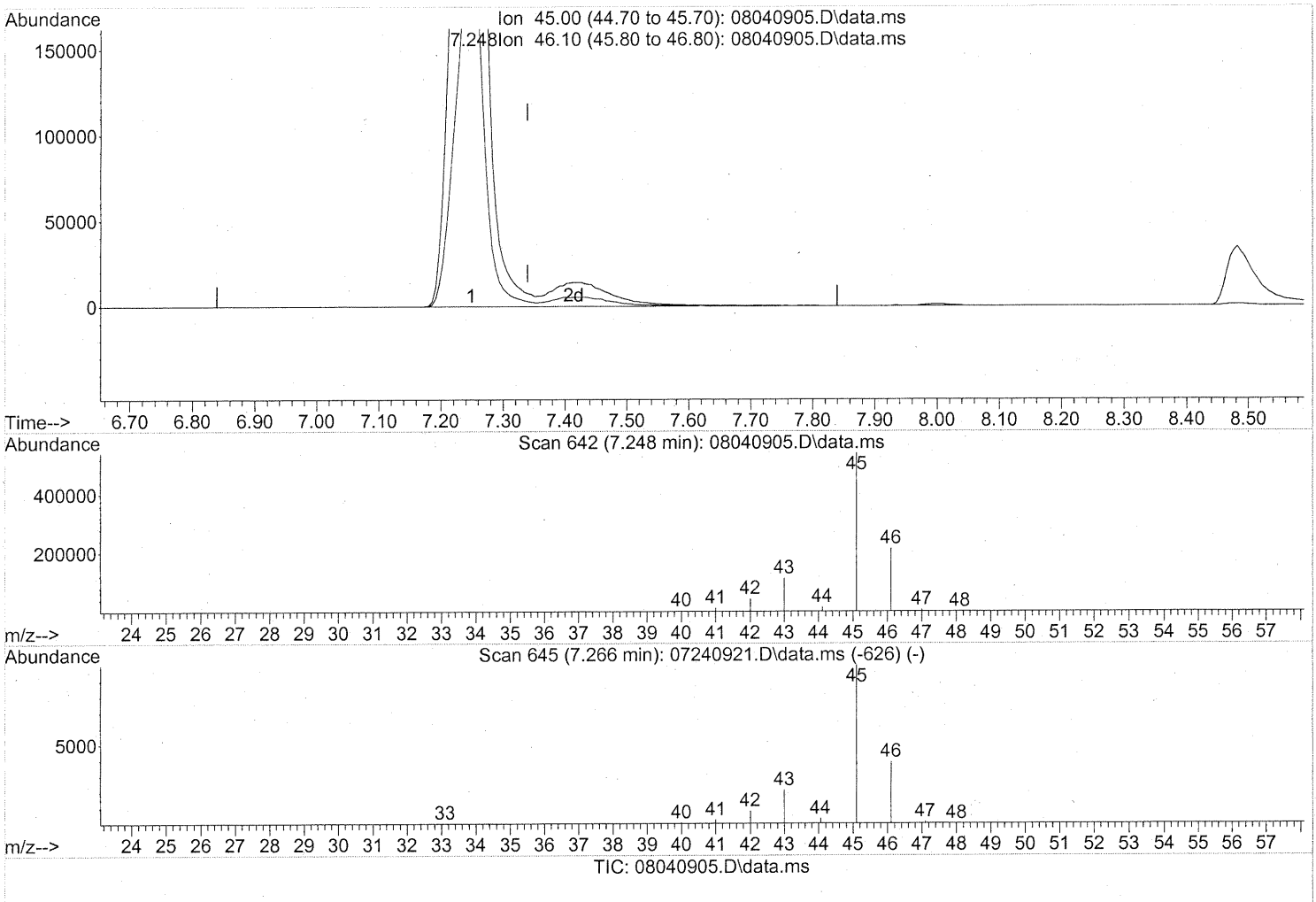
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040905.D
Acq On : 4 Aug 2009 9:38
Operator : EM
Sample : P0902599-007 dil (100ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 04 11:58:50 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08040905.D\data.ms

(10) Ethanol (T)

7.248min (-0.091) 113.11ng m

response 1769326

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 → IC
Em 8/5/09
VM 8/5/09

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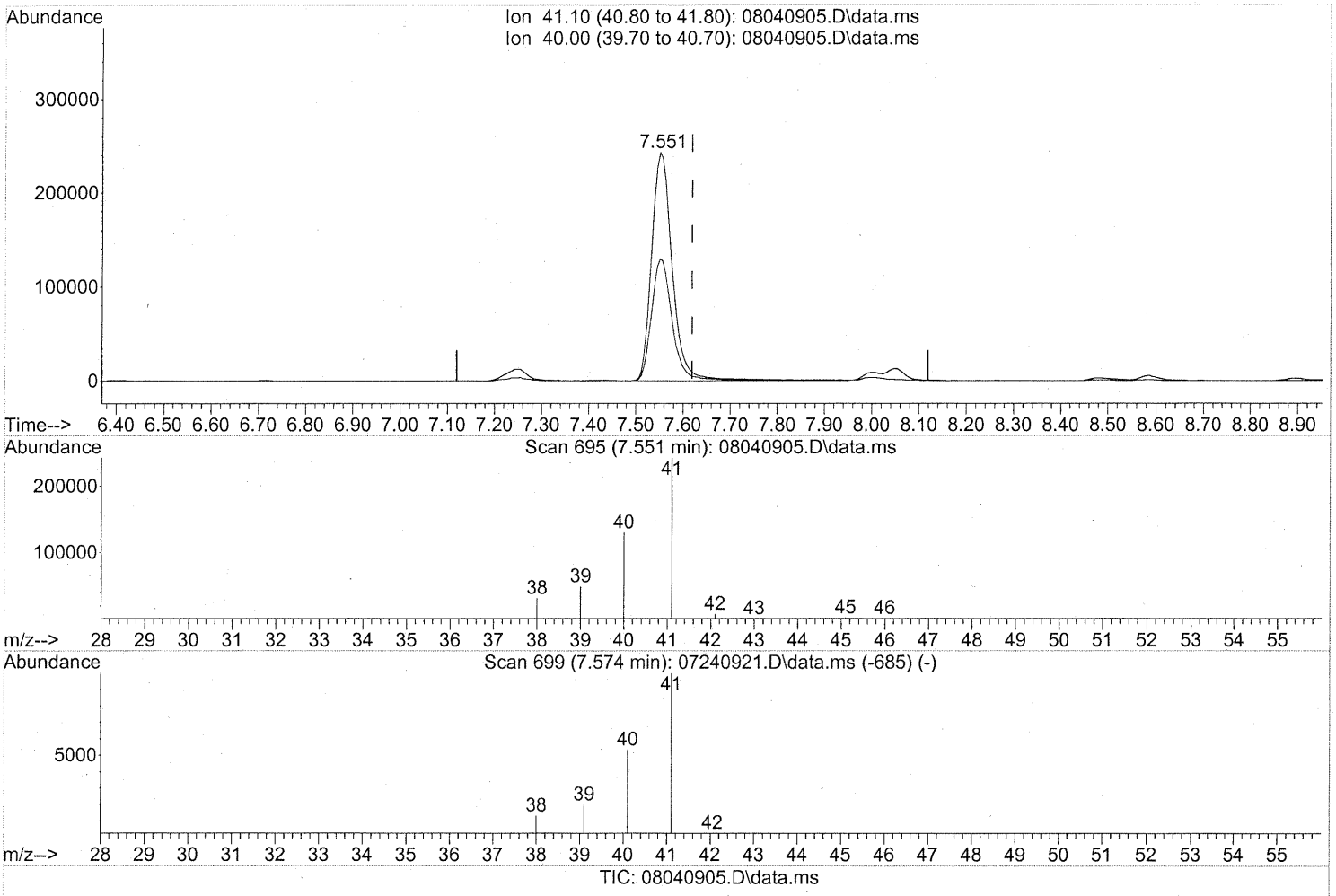
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040905.D
Acq On : 4 Aug 2009 9:38
Operator : EM
Sample : P0902599-007 dil (100ml)
Misc : Environmental H & E 99432
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 05 16:14:36 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08040905.D\data.ms

(11) Acetonitrile (T)

7.551min (-0.068) 21.04ng

response 744079

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	53.40
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: **99433**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-008

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: AC00917

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.22

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)	ND	0.61	ND	0.12	
74-87-3	Chloromethane	ND	0.12	ND	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	0.048	
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	ND	6.1	ND	3.2	
75-05-8	**Acetonitrile**	**0.91**	0.61	**0.54**	0.36	
107-02-8	Acrolein	ND	0.61	ND	0.27	
67-64-1	Acetone	ND	6.1	ND	2.6	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.61	ND	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	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	Trichlorotrifluoroethane	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.61	ND	0.20	
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)	ND	0.61	ND	0.21	

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

Verified By: _____ Date: 8/4/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99433**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-008

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: AC00917

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.61	ND	0.17	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	ND	0.12	ND	0.038	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.019	
110-82-7	Cyclohexane	ND	0.61	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.61	ND	0.15	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	ND	0.61	ND	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99433**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-008

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: AC00917

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.027	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.016	
91-20-3	Naphthalene	ND	0.24	ND	0.047	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.011	

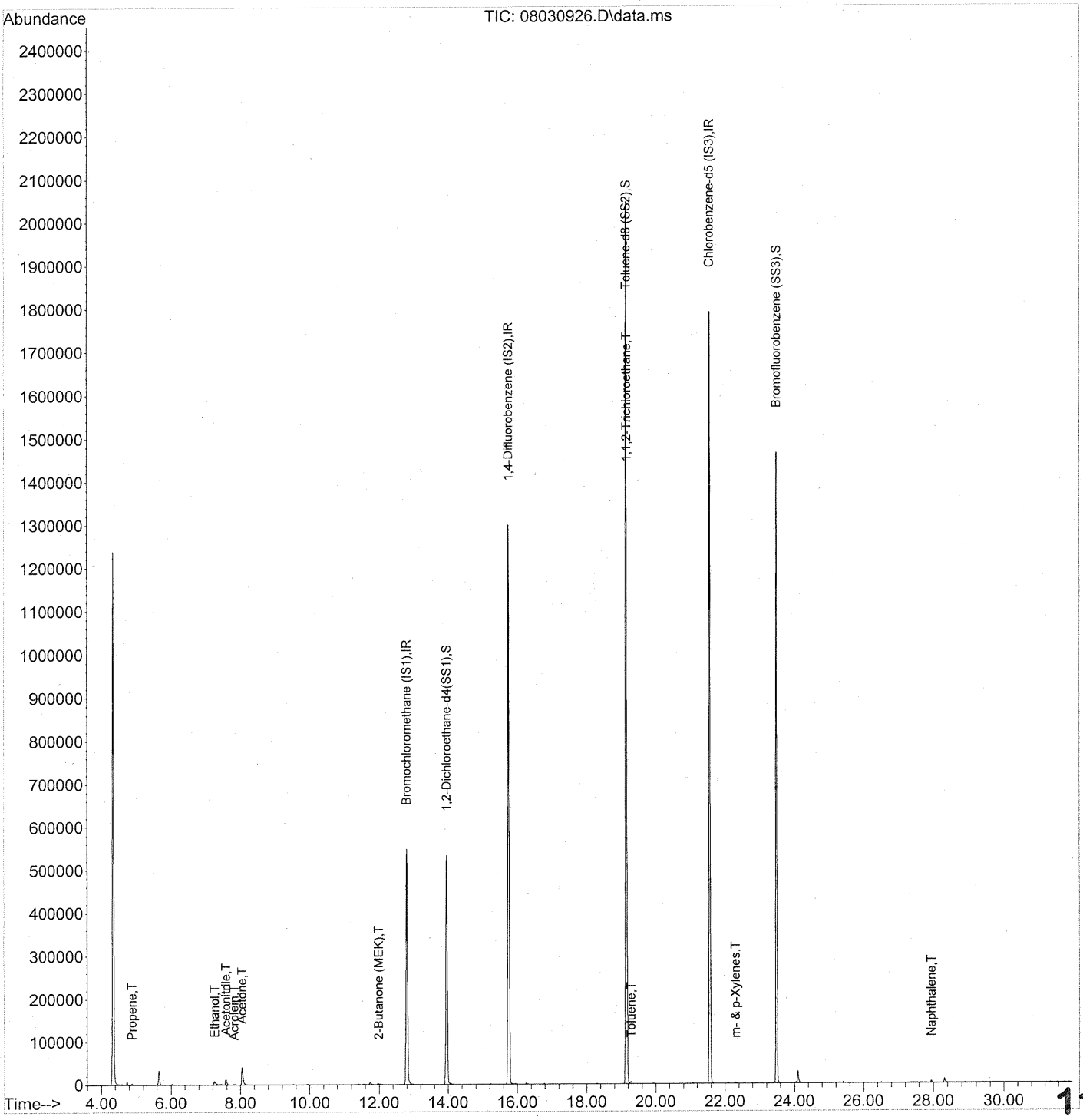
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030926.D
Acq On : 4 Aug 2009 1:06
Operator : EM
Sample : P0902599-008 (1000ml)
Misc : Environmental H & E 99433
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 08:12:34 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030926.D
Acq On : 4 Aug 2009 1:06
Operator : EM
Sample : P0902599-008 (1000ml)
Misc : Environmental H & E 99433
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 08:12:34 2009
Quant Method : J:\MS09\Methods\R9072409.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	306841	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1539528	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	717193	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	533541	24.578	ng		-0.03
Spiked Amount 25.000			Recovery =	98.32%			
57) Toluene-d8 (SS2)	19.15	98	1792993	25.270	ng		-0.01
Spiked Amount 25.000			Recovery =	101.08%			
73) Bromofluorobenzene (SS3)	23.49	174	534517	25.057	ng		0.00
Spiked Amount 25.000			Recovery =	100.24%			
Target Compounds							Qvalue
2) Propene	4.88	42	1128	0.~~058~~	ng	#	82
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	7.25	45	26433	~~2.058~~	ng		78
11) Acetonitrile	7.58	41	21594	0.744	ng		99
12) Acrolein	7.82	56	2938	~~0.314~~	ng		95
13) Acetone	8.05	58	29948	~~2.050~~	ng	#	66
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.			
19) Methylene Chloride	9.52	84	524	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	2937	N.D.			
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	11.98	72	1420	~~0.127~~	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.			

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030926.D
Acq On : 4 Aug 2009 1:06
Operator : EM
Sample : P0902599-008 (1000ml)
Misc : Environmental H & E 99433
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 08:12:34 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	2013	N.D.			
42) Carbon Tetrachloride	0.00	117	0	N.D.			
43) Cyclohexane	15.73	84	609	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	16.76	130	550	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. FP			
55) 1,1,2-Trichloroethane	19.16	97	148929	~~8.634~~	ng	#	8
58) Toluene	19.28	91	5496	0~~.063~~	ng		94
59) 2-Hexanone	19.98	43	351	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	20.75	166	754	N.D.			
65) Chlorobenzene	21.63	112	800	N.D.			
66) Ethylbenzene	22.10	91	1988	N.D.			
67) m- & p-Xylenes	22.31	91	4862	0~~.062~~	ng		92
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.78	104	119	N.D.			
70) o-Xylene	22.92	91	1473	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	23.49	105	534	N.D.			
75) alpha-Pinene	0.00	93	0	N.D.			
76) n-Propylbenzene	24.28	91	647	N.D.			
77) 3-Ethyltoluene	24.41	105	1134	N.D.			
78) 4-Ethyltoluene	24.47	105	401	N.D.			
79) 1,3,5-Trimethylbenzene	24.47	105	401	N.D.			

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030926.D
Acq On : 4 Aug 2009 1:06
Operator : EM
Sample : P0902599-008 (1000ml)
Misc : Environmental H & E 99433
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 08:12:34 2009
Quant Method : J:\MS09\Methods\R9072409.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	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.79	105	134	N.D.		
82) 1,2,4-Trimethylbenzene	25.05	105	676	N.D.		
83) n-Decane	25.15	57	118	N.D.		
84) Benzyl Chloride	25.23	91	370	N.D.		
85) 1,3-Dichlorobenzene	25.25	146	288	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	896	N.D.		
87) sec-Butylbenzene	25.05	105	676	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	25.75	146	111	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	106	N.D.		
94) 1,2,4-Trichlorobenzene	27.80	180	120	N.D.		
95) Naphthalene	27.94	128	7292	0.065	ng	92
96) n-Dodecane	0.00	57	0	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.55	55	139	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

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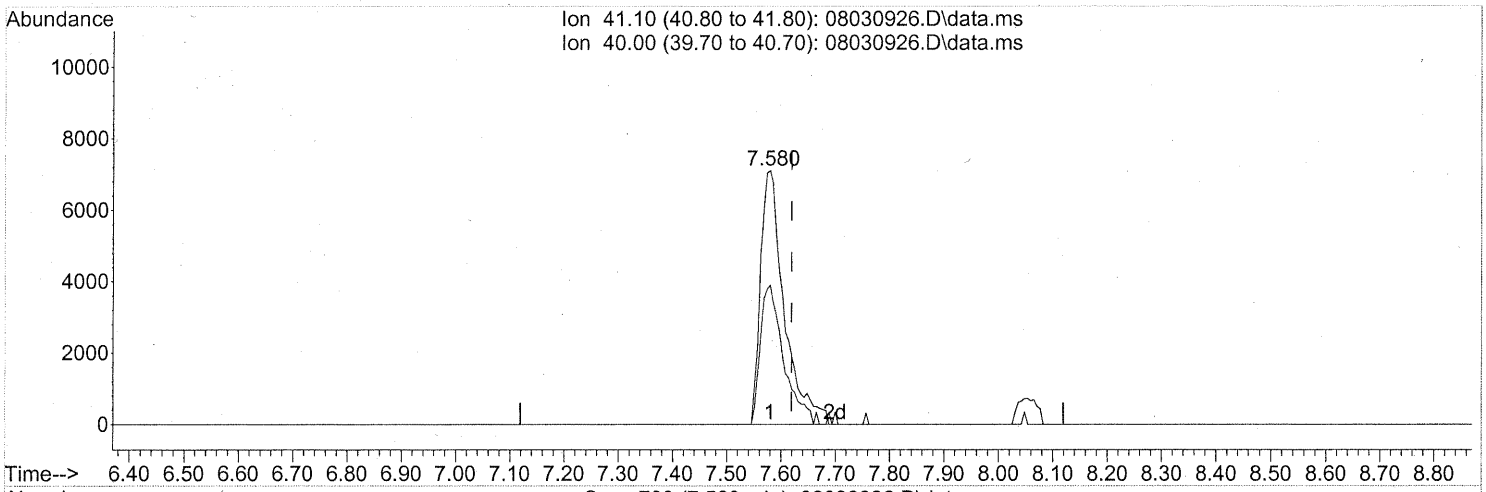
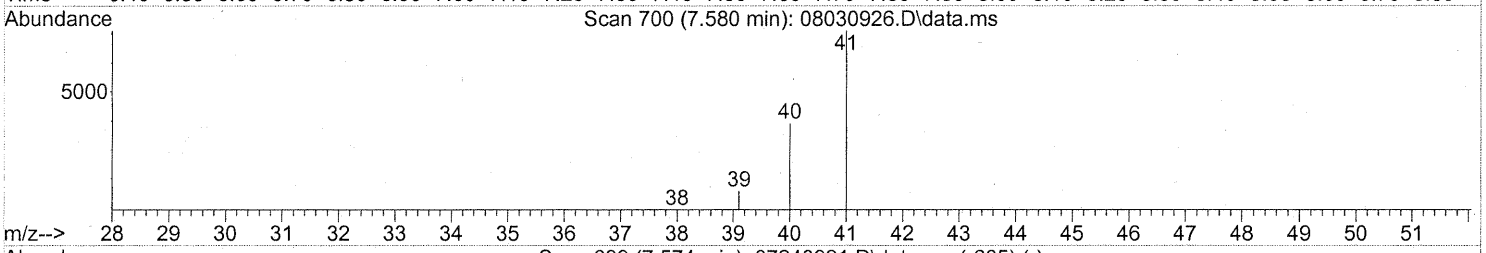
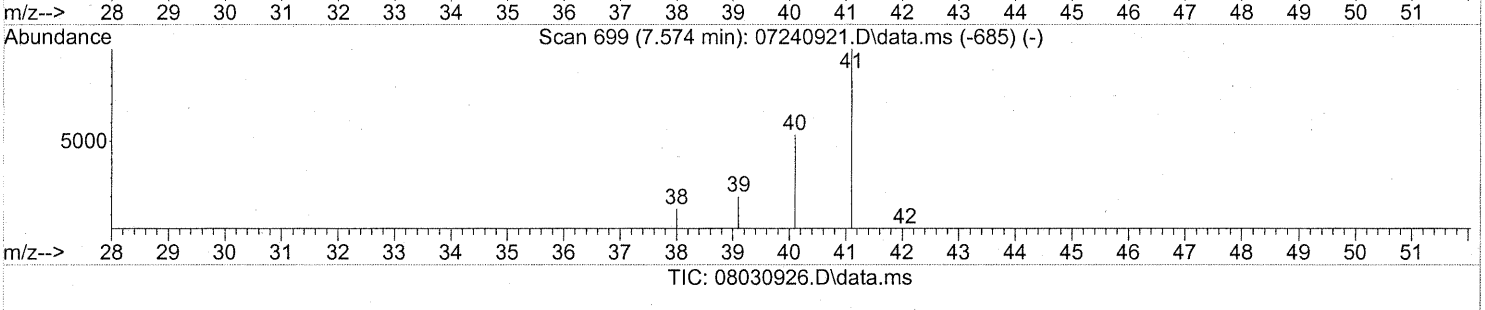
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030926.D
Acq On : 4 Aug 2009 1:06
Operator : EM
Sample : P0902599-008 (1000ml)
Misc : Environmental H & E 99433
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 16:17:18 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration







TIC: 08030926.D\data.ms

(11) Acetonitrile (T)

7.580min (-0.040) 0.74ng

response 21594

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	54.05
0.00	0.00	0.00
0.00	0.00	0.00

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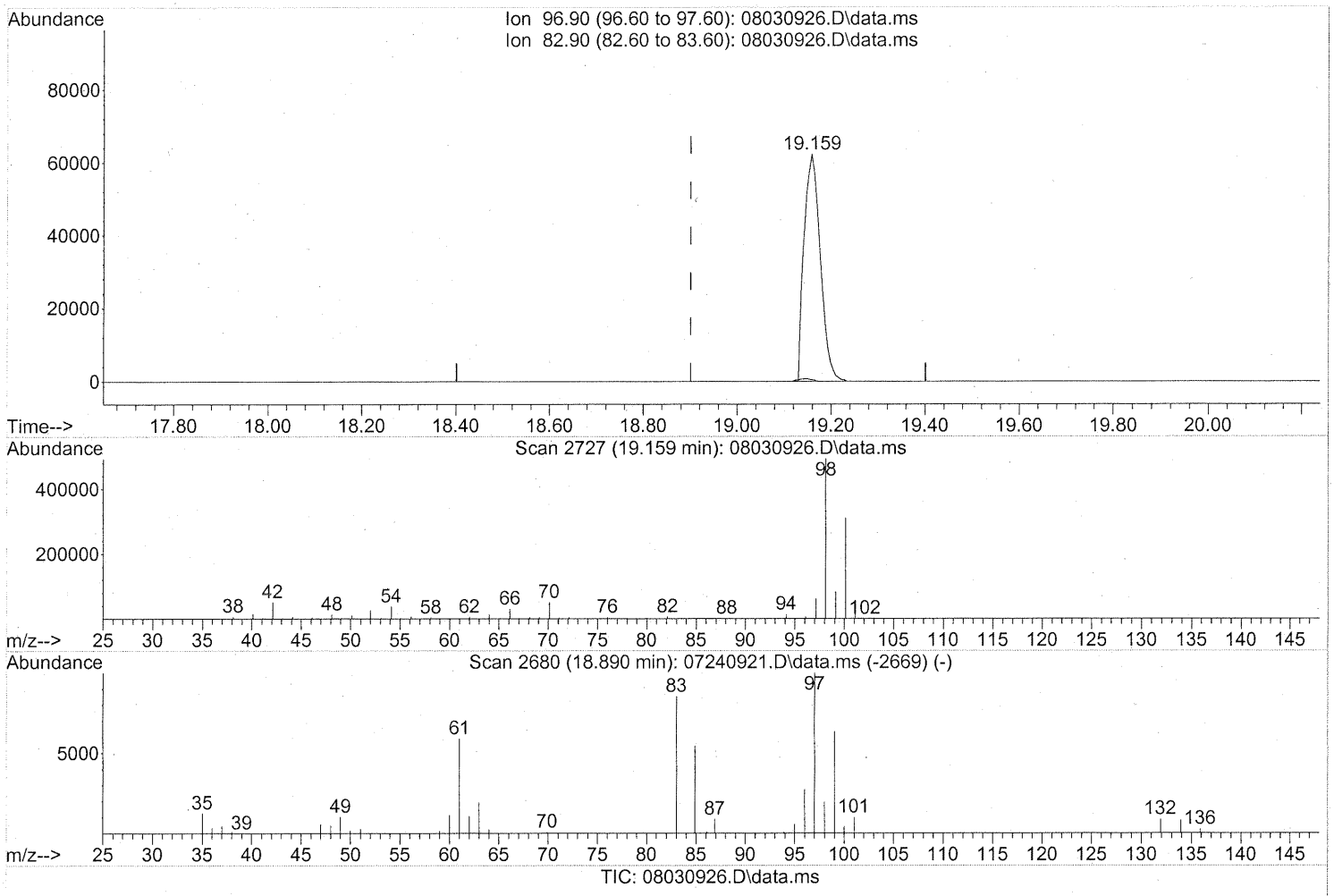
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030926.D
Acq On : 4 Aug 2009 1:06
Operator : EM
Sample : P0902599-008 (1000ml)
Misc : Environmental H & E 99433
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 08:12:34 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030926.D\data.ms

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

19.159min (+0.257) 8.63ng

response 148929

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.83#
0.00	0.00	0.00
0.00	0.00	0.00

FP
Em 8/5/09
LM 8/5/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99434**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-009

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: AC00880

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.2 Final Pressure (psig): 3.8

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.62	ND	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.62	ND	0.13	
74-87-3	Chloromethane	ND	0.12	ND	0.060	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.62	ND	0.089	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.049	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.056	
74-83-9	Bromomethane	ND	0.12	ND	0.032	
75-00-3	Chloroethane	ND	0.12	ND	0.047	
64-17-5	Ethanol	ND	6.2	ND	3.3	
75-05-8	Acetonitrile	ND	0.62	ND	0.37	
107-02-8	**Acrolein**	**1.0**	0.62	**0.45**	0.27	
67-64-1	Acetone	ND	6.2	ND	2.6	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.62	ND	0.25	
107-13-1	Acrylonitrile	ND	0.62	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.62	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.040	
76-13-1	Trichlorotrifluoroethane	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.62	ND	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.031	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.2	ND	1.8	
78-93-3	**2-Butanone (MEK)**	**0.78**	0.62	**0.26**	0.21	

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

Verified By: _____ Date: 8/14/9

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99434**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-009

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: AC00880

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.2 Final Pressure (psig): 3.8

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.62	ND	0.17	
110-54-3	n-Hexane	ND	0.62	ND	0.18	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.62	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.023	
71-43-2	Benzene	ND	0.12	ND	0.039	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.020	
110-82-7	Cyclohexane	ND	0.62	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.019	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.62	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.62	ND	0.15	
142-82-5	n-Heptane	ND	0.62	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.62	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.023	
108-88-3	Toluene	ND	0.62	ND	0.16	
591-78-6	2-Hexanone	ND	0.62	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.62	ND	0.13	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99434**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-009

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: AC00880

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.2 Final Pressure (psig): 3.8

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.62	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.027	
100-41-4	Ethylbenzene	ND	0.62	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.62	ND	0.14	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	Styrene	ND	0.62	ND	0.15	
95-47-6	o-Xylene	ND	0.62	ND	0.14	
111-84-2	n-Nonane	ND	0.62	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.62	ND	0.13	
80-56-8	alpha-Pinene	ND	0.62	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.62	ND	0.13	
622-96-8	4-Ethyltoluene	ND	0.62	ND	0.13	
108-67-8	1,3,5-Trimethylbenzene	ND	0.62	ND	0.13	
95-63-6	1,2,4-Trimethylbenzene	ND	0.62	ND	0.13	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.021	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.021	
5989-27-5	d-Limonene	ND	0.62	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.62	ND	0.064	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.017	
91-20-3	Naphthalene	ND	0.25	ND	0.047	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.012	

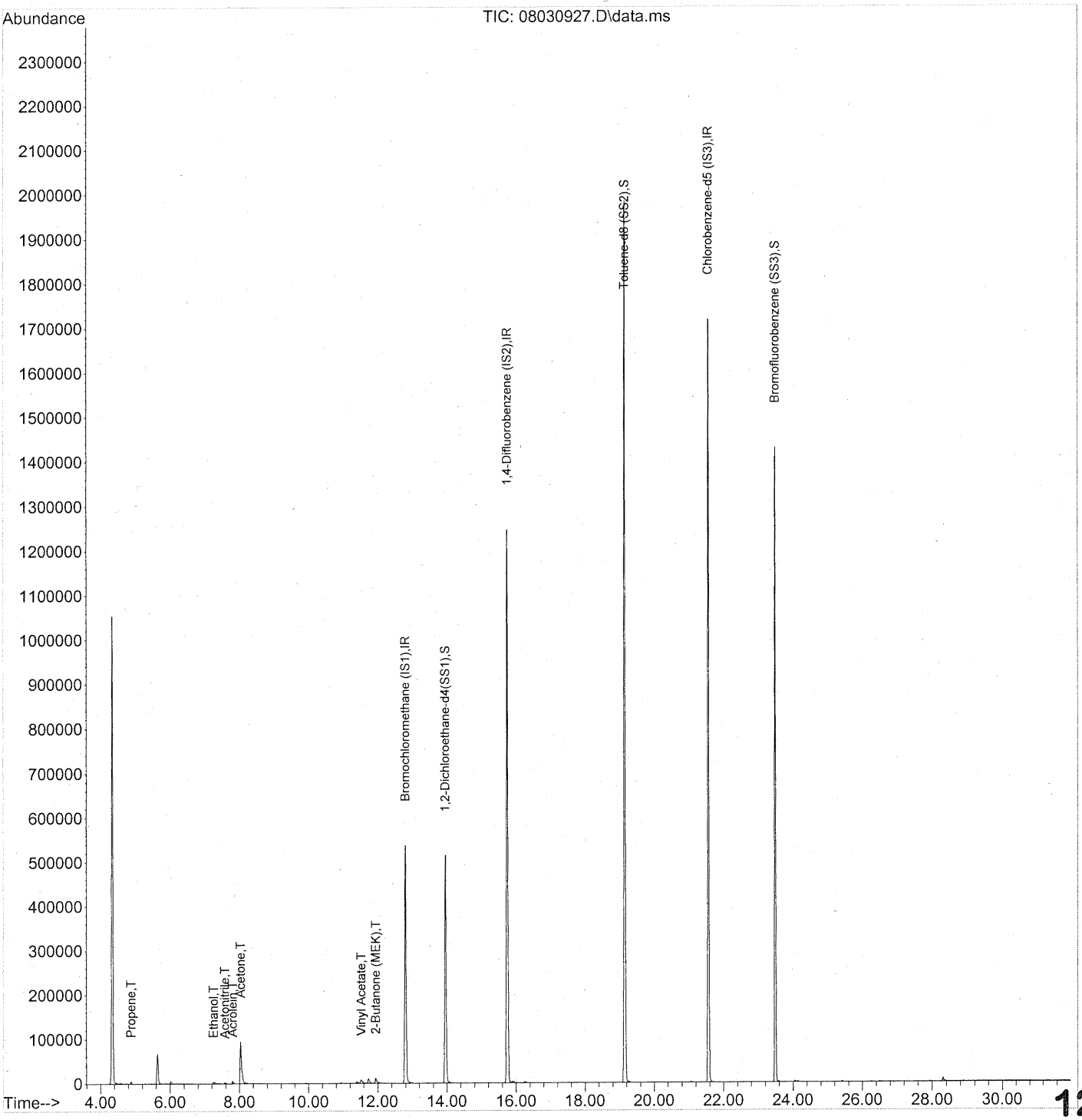
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 16:19:20 2009
Quant Method : J:\MS09\Methods\R9072409.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\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 16:19:20 2009
Quant Method : J:\MS09\Methods\R9072409.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	293374	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1479336	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	686042	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	518172	24.965	ng		-0.04
Spiked Amount 25.000			Recovery =	99.88%			
57) Toluene-d8 (SS2)	19.15	98	1732404	25.525	ng		-0.01
Spiked Amount 25.000			Recovery =	102.08%			
73) Bromofluorobenzene (SS3)	23.49	174	516031	25.289	ng		0.00
Spiked Amount 25.000			Recovery =	101.16%			
Target Compounds							Qvalue
2) Propene	4.88	42	1709	0.092	ng		91
3) Dichlorodifluoromethan...	0.00	85	0	N.D.			
4) Chloromethane	0.00	50	0	N.D.			
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.25	45	9677	0.788	ng		82
11) Acetonitrile	7.58	41	4284	0.154	ng		99
12) Acrolein	7.81	56	7425	0.829	ng		96
13) Acetone	8.03	58	51561m	3.691	ng		
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.57	59	1972	N.D.			
19) Methylene Chloride	9.52	84	329	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	2469	N.D.			
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.53	86	2143	0.643	ng	#	87
27) 2-Butanone (MEK)	11.94	72	6689	0.628	ng	#	66
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	0.00	57	0	N.D.			

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 16:19:20 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	1565	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.74	84	671	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	113	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	0.00	97	0	N.D.	d	
58) Toluene	19.28	91	1843	N.D.		
59) 2-Hexanone	19.54	43	235	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	218	N.D.		
67) m- & p-Xylenes	22.31	91	218	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	0.00	91	0	N.D.		
71) n-Nonane	0.00	43	0	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.48	105	365	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.12	105	1359	N.D.		
78) 4-Ethyltoluene	24.12	105	1359	N.D.		
79) 1,3,5-Trimethylbenzene	24.12	105	1359	N.D.		

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 16:19:20 2009
Quant Method : J:\MS09\Methods\R9072409.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

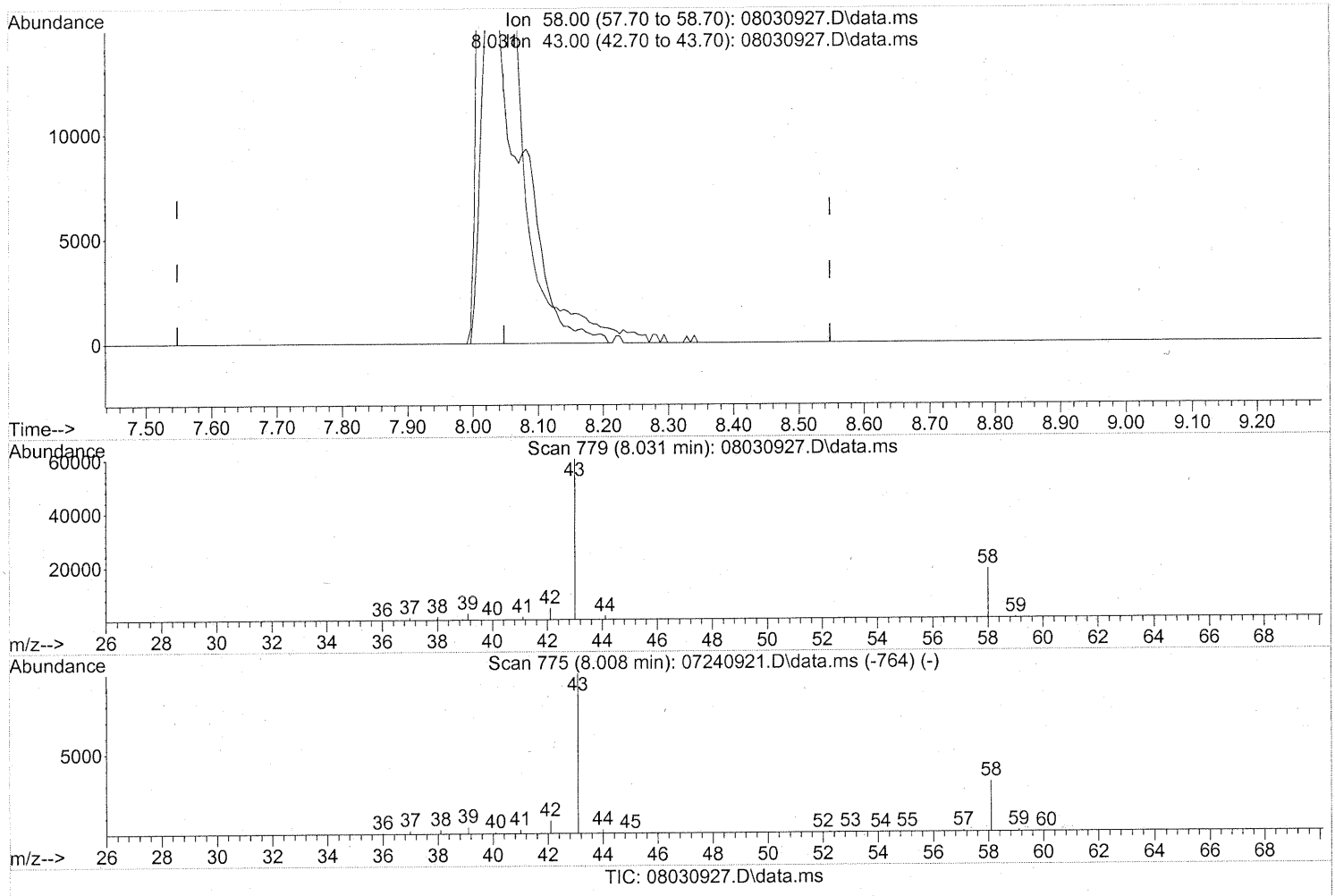
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	0.00	105	0	N.D.		
82) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
83) n-Decane	25.41	57	1565	N.D.		
84) Benzyl Chloride	0.00	91	0	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	0.00	105	0	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	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	26.51	57	380	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	2088	N.D.		
96) n-Dodecane	27.89	57	106	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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 04 08:12:37 2009
Quant Method : J:\MS09\Methods\R9072409.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



(13) Acetone (T)

8.031min (-0.017) 5.20ng

response 72678

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	244.99#
0.00	0.00	0.00
0.00	0.00	0.00

SH

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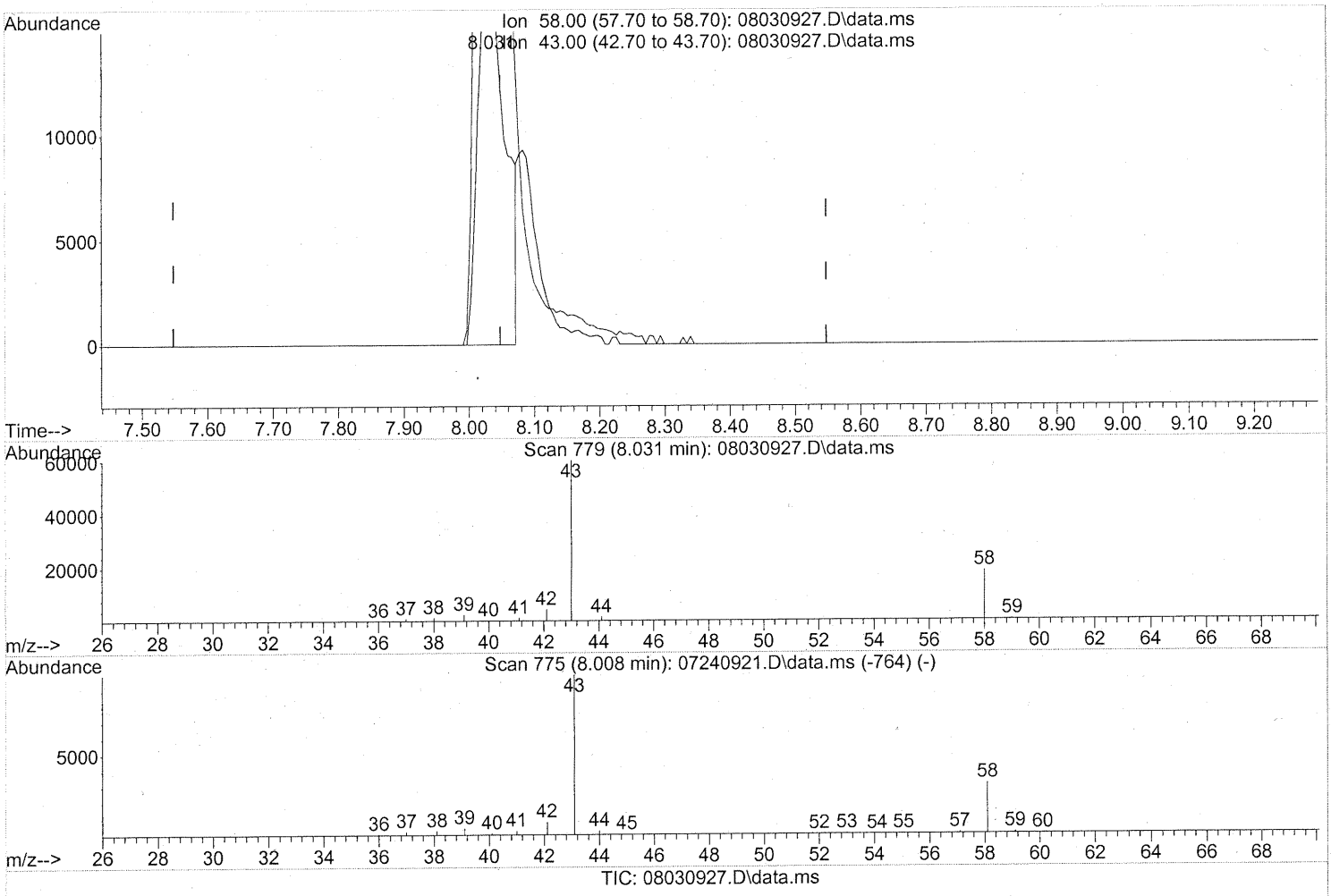
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 04 08:12:37 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030927.D\data.ms

(13) Acetone (T)

8.031min (-0.017) 3.69ng m

response 51561

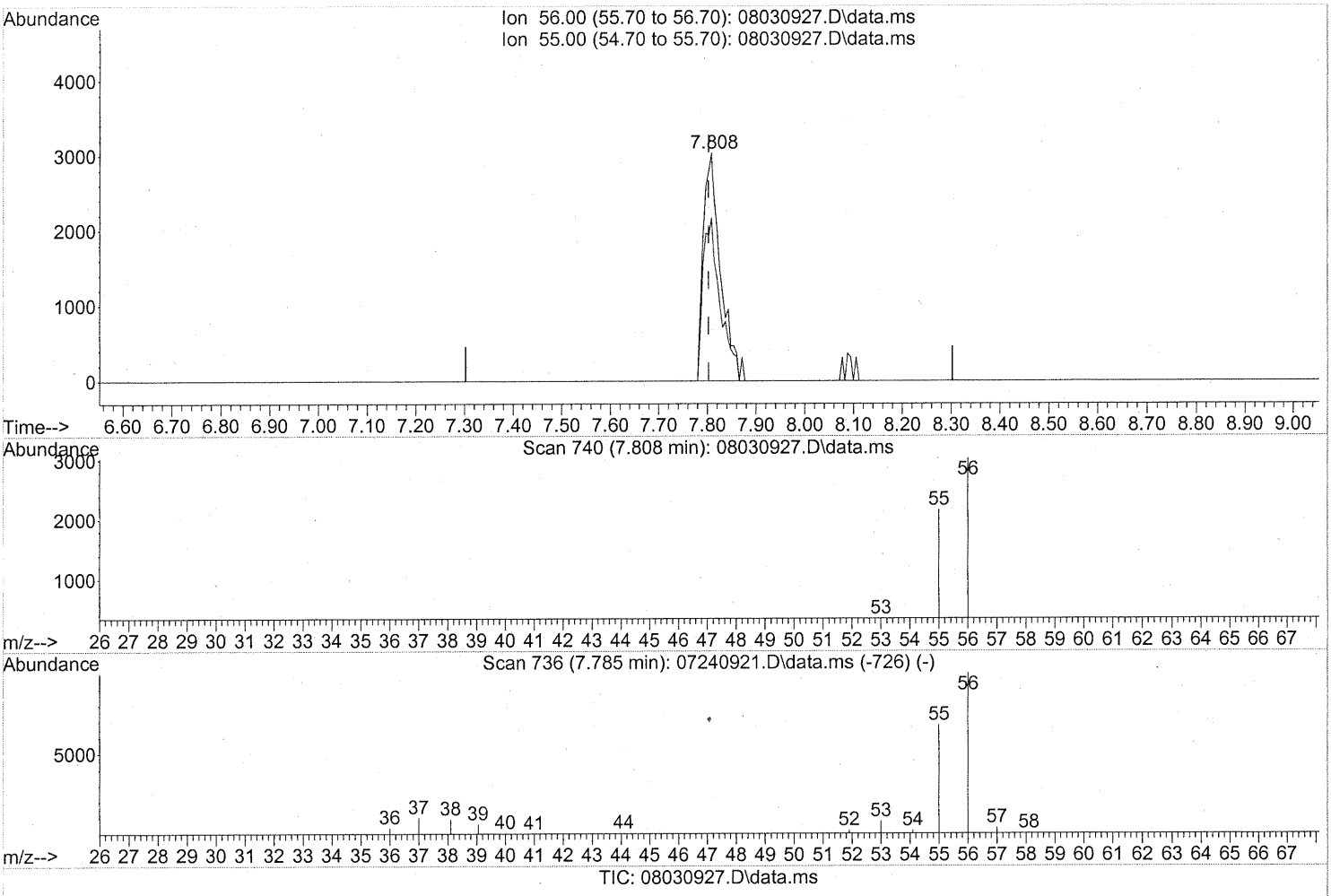
Ion	Exp%	Act%
58.00	100	100
43.00	317.70	345.33
0.00	0.00	0.00
0.00	0.00	0.00

SH →IC
tm 8/5/09
WM 8/5/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 16:19:20 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030927.D\data.ms

(12) Acrolein (T)

7.808min (+0.006) 0.83ng

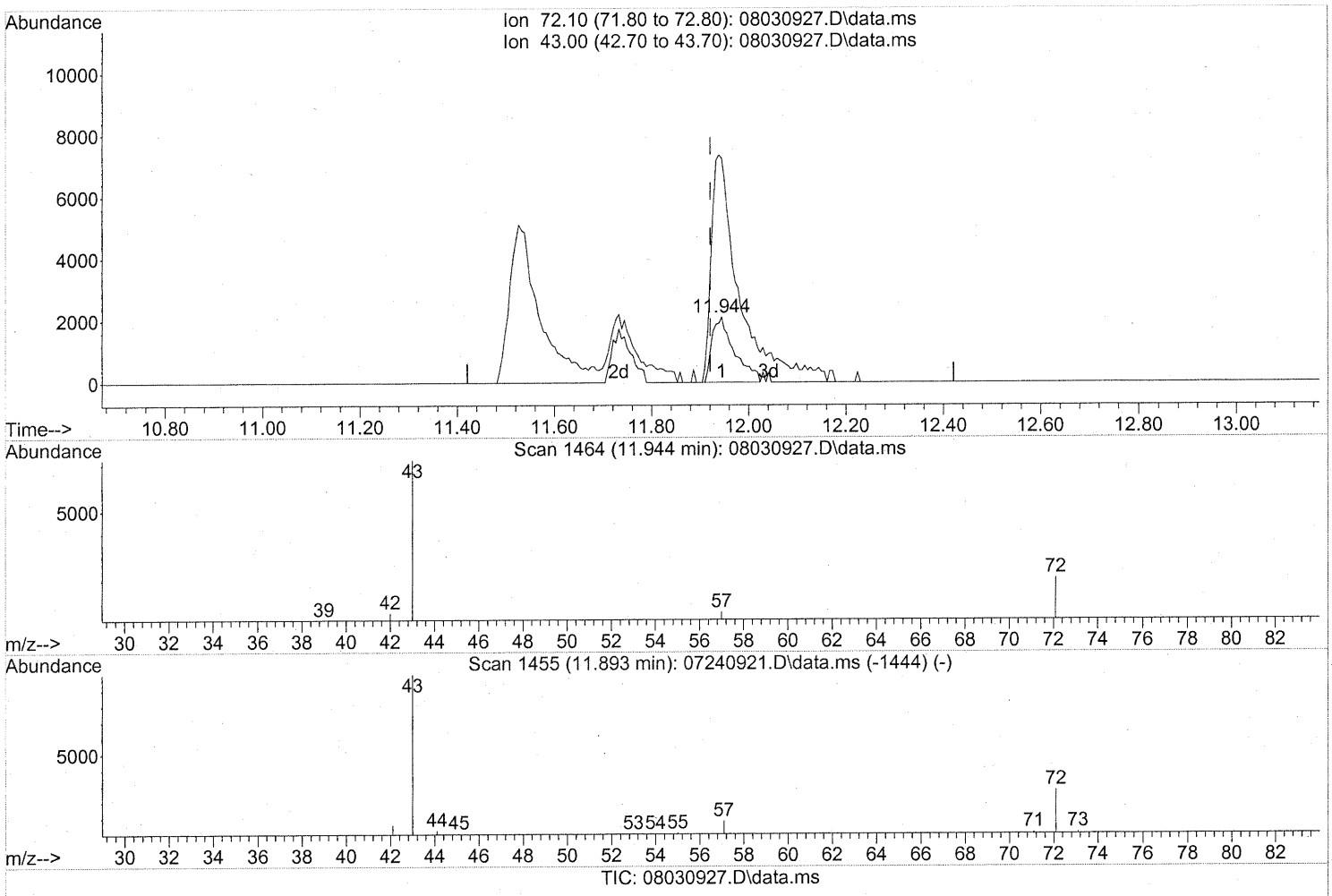
response 7425

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	70.56
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 16:19:20 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030927.D\data.ms

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

11.944min (+0.023) 0.63ng

response 6689

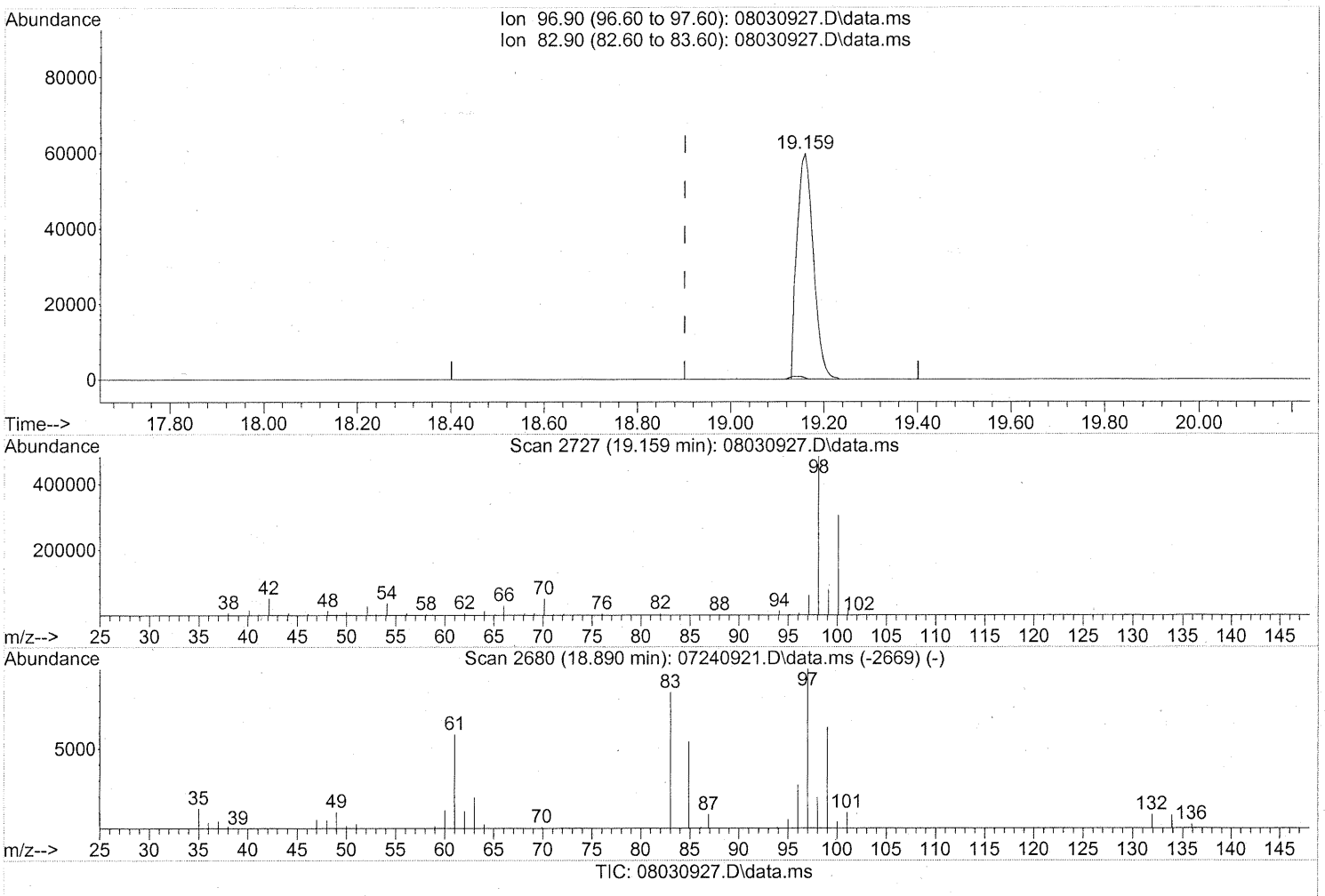
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	442.40#
0.00	0.00	0.00
0.00	0.00	0.00

135

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030927.D
Acq On : 4 Aug 2009 1:48
Operator : EM
Sample : P0902599-009 (1000ml)
Misc : Environmental H & E 99434
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 04 08:12:37 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030927.D\data.ms

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

19.159min (+0.257) 8.74ng

response 144833

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

FP
EM 8/5/09
LM 8/5/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99435**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-010

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: AC00663

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.61	ND	0.12	
74-87-3	Chloromethane	ND	0.12	ND	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	ND	6.1	ND	3.2	
75-05-8	Acetonitrile	ND	0.61	ND	0.36	
107-02-8	**Acrolein**	**0.63**	0.61	**0.28**	0.26	
67-64-1	Acetone	ND	6.1	ND	2.5	
75-69-4	Trichlorofluoromethane	ND	0.12	ND	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.61	ND	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	ND	0.12	ND	0.016	
75-15-0	Carbon Disulfide	ND	0.61	ND	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)**	**0.76**	0.61	**0.26**	0.21	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99435**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-010

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: AC00663

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.61	ND	0.17	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	ND	0.12	ND	0.038	
56-23-5	Carbon Tetrachloride	ND	0.12	ND	0.019	
110-82-7	Cyclohexane	ND	0.61	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	**Trichloroethene**	**0.18**	0.12	**0.033**	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.61	ND	0.15	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	ND	0.61	ND	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **99435**
Client Project ID: **16512**

CAS Project ID: P0902599
CAS Sample ID: P0902599-010

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: AC00663

Date Collected: 7/29/09
Date Received: 7/30/09
Date Analyzed: 8/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.12	ND	0.016	
91-20-3	Naphthalene	ND	0.24	ND	0.046	
87-68-3	Hexachlorobutadiene	ND	0.12	ND	0.011	

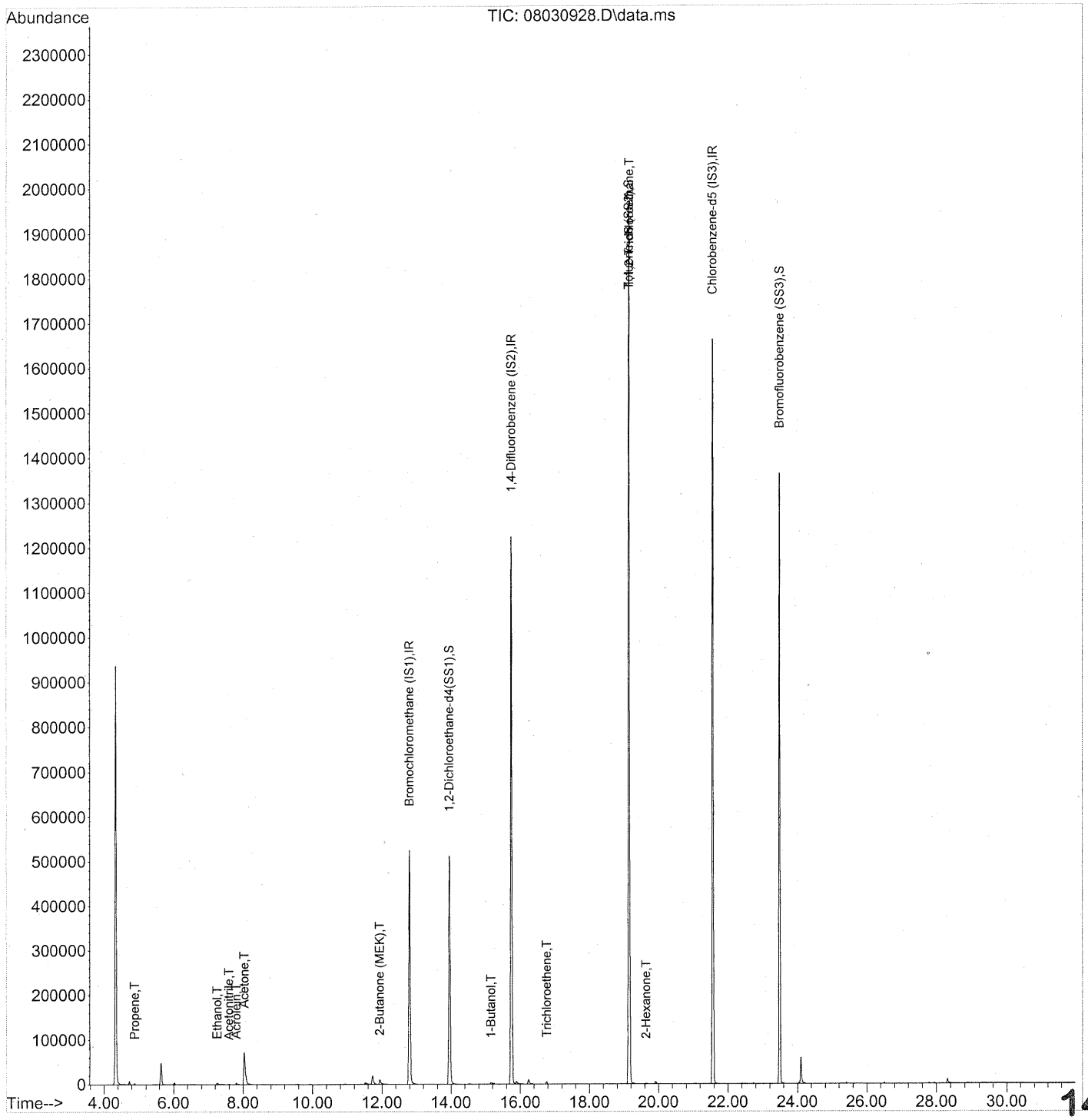
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 08:12:40 2009
Quant Method : J:\MS09\Methods\R9072409.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 (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 08:12:40 2009
Quant Method : J:\MS09\Methods\R9072409.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	287277	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1454358	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	676246	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	512068	25.195	ng		-0.04
Spiked Amount 25.000			Recovery =	100.76%			
57) Toluene-d8 (SS2)	19.14	98	1698824	25.392	ng		-0.02
Spiked Amount 25.000			Recovery =	101.56%			
73) Bromofluorobenzene (SS3)	23.49	174	496085	24.664	ng		0.00
Spiked Amount 25.000			Recovery =	98.64%			
Target Compounds							Qvalue
2) Propene	4.88	42	1178	0.065	ng		88
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	7.25	45	7721	0.642	ng		74
11) Acetonitrile	7.59	41	1664	0.061	ng		98
12) Acrolein	7.81	56	4574	0.522	ng		97
13) Acetone	8.03	58	57116	4.176	ng	#	63
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.58	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...	9.57	59	115	N.D.			
19) Methylene Chloride	9.52	84	235	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	9.92	76	1983	N.D.			
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	11.93	72	6596	0.632	ng	#	77
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	0.00	57	0	N.D.			

Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 08:12:40 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	15.15	56	6140	0.340	ng	#	67
41) Benzene	15.22	78	1354	N.D.			
42) Carbon Tetrachloride	0.00	117	0	N.D.			
43) Cyclohexane	15.74	84	588	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	2901	0.146	ng		98
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. FP			
55) 1,1,2-Trichloroethane	19.15	97	142531	~~8.747~~	ng	#	8
58) Toluene	19.28	91	1394	N.D.			
59) 2-Hexanone	19.63	43	2835	~~0.080~~	ng	#	60
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	472	N.D.			
67) m- & p-Xylenes	22.31	91	472	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	318	N.D.			
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.			
74) Cumene	23.49	105	340	N.D.			
75) alpha-Pinene	0.00	93	0	N.D.			
76) n-Propylbenzene	0.00	91	0	N.D.			
77) 3-Ethyltoluene	24.42	105	104	N.D.			
78) 4-Ethyltoluene	24.42	105	104	N.D.			
79) 1,3,5-Trimethylbenzene	24.42	105	104	N.D.			

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Quantitation Report (Not Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 08:12:40 2009
Quant Method : J:\MS09\Methods\R9072409.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

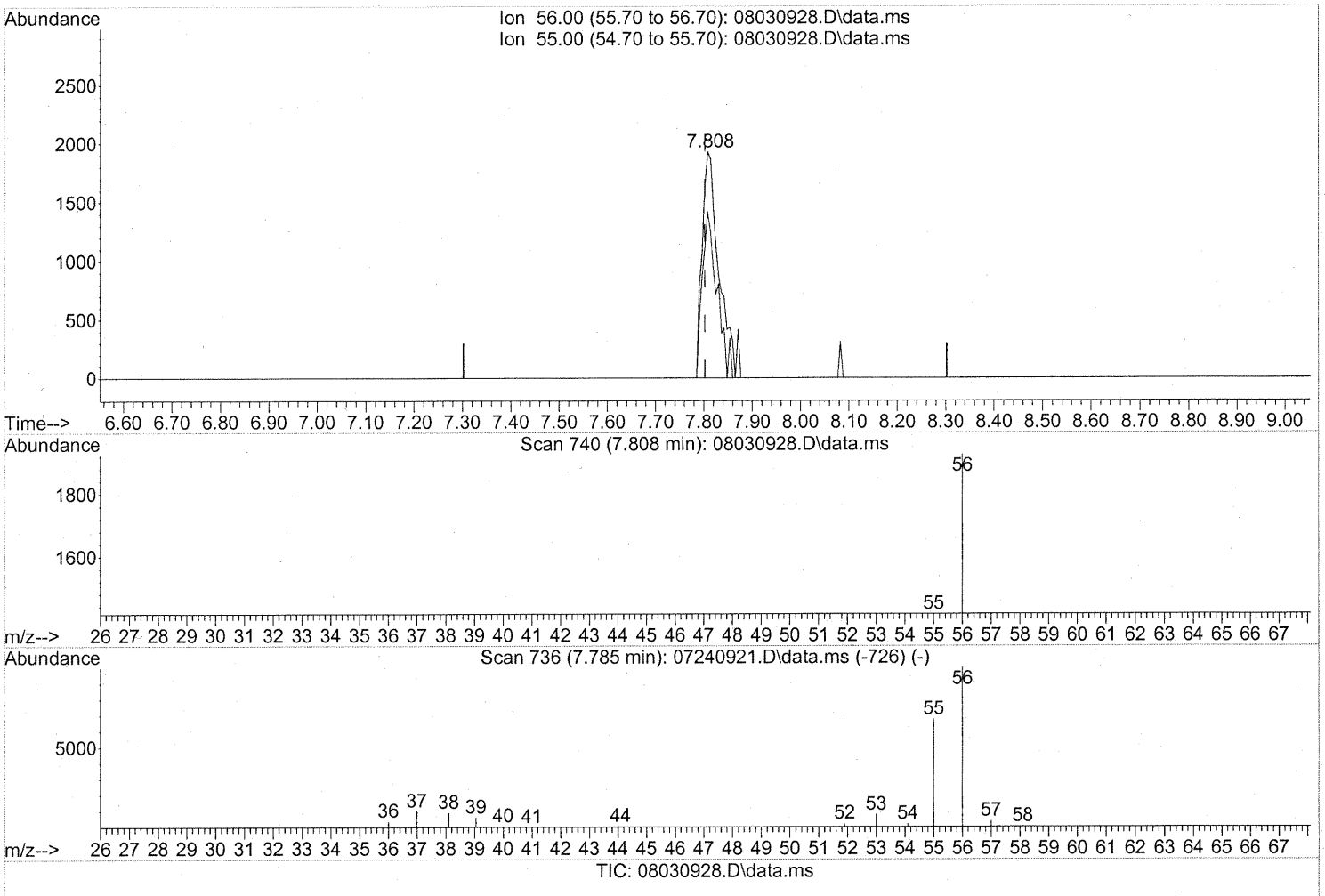
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.42	105	104	N.D.		
82) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
83) n-Decane	25.41	57	1776	N.D.		
84) Benzyl Chloride	0.00	91	0	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	0.00	105	0	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	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	26.50	57	411	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	1740	N.D.		
96) n-Dodecane	27.80	57	251	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.55	55	390	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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 16:20:22 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030928.D\data.ms

(12) Acrolein (T)

7.808min (+0.006) 0.52ng

response 4574

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	65.39
0.00	0.00	0.00
0.00	0.00	0.00

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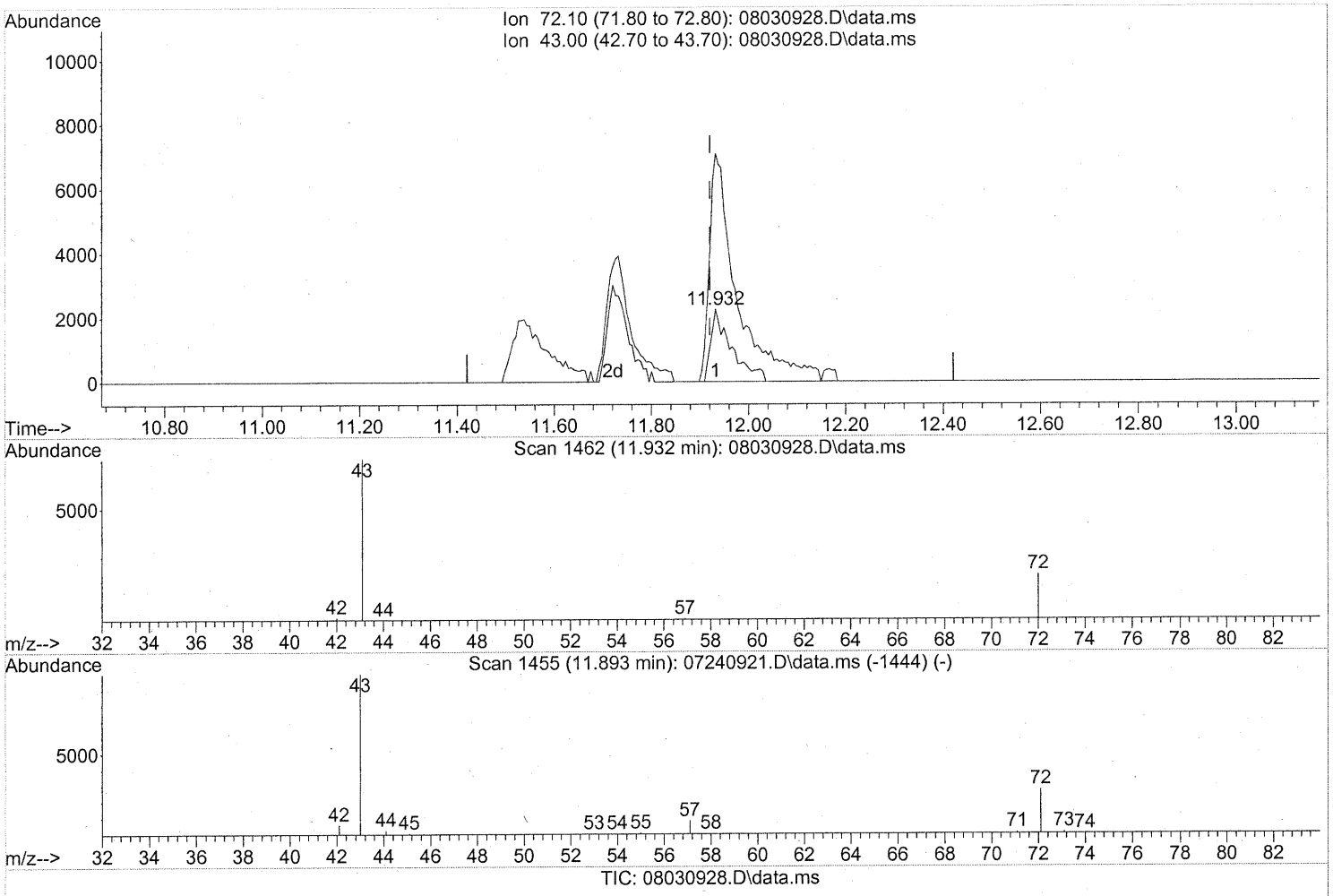
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 16:20:22 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030928.D\data.ms

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

11.932min (+0.011) 0.63ng

response 6596

Ion	Exp%	Act%
72.10	100	100
43.00	366.50	418.69#
0.00	0.00	0.00
0.00	0.00	0.00

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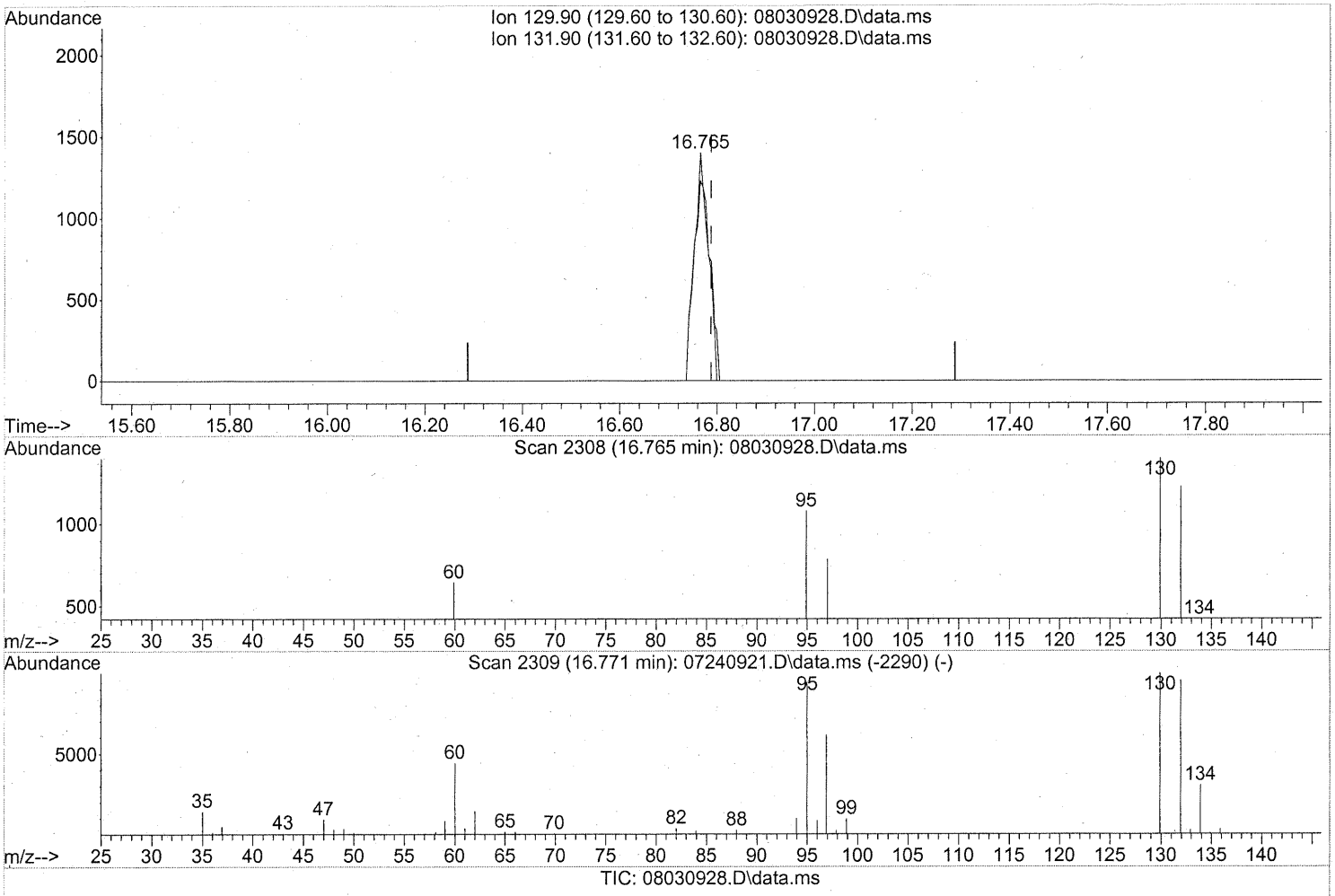
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 16:20:22 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030928.D\data.ms

(47) Trichloroethene (T)

16.765min (-0.023) 0.15ng

response 2901

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	97.59
0.00	0.00	0.00
0.00	0.00	0.00

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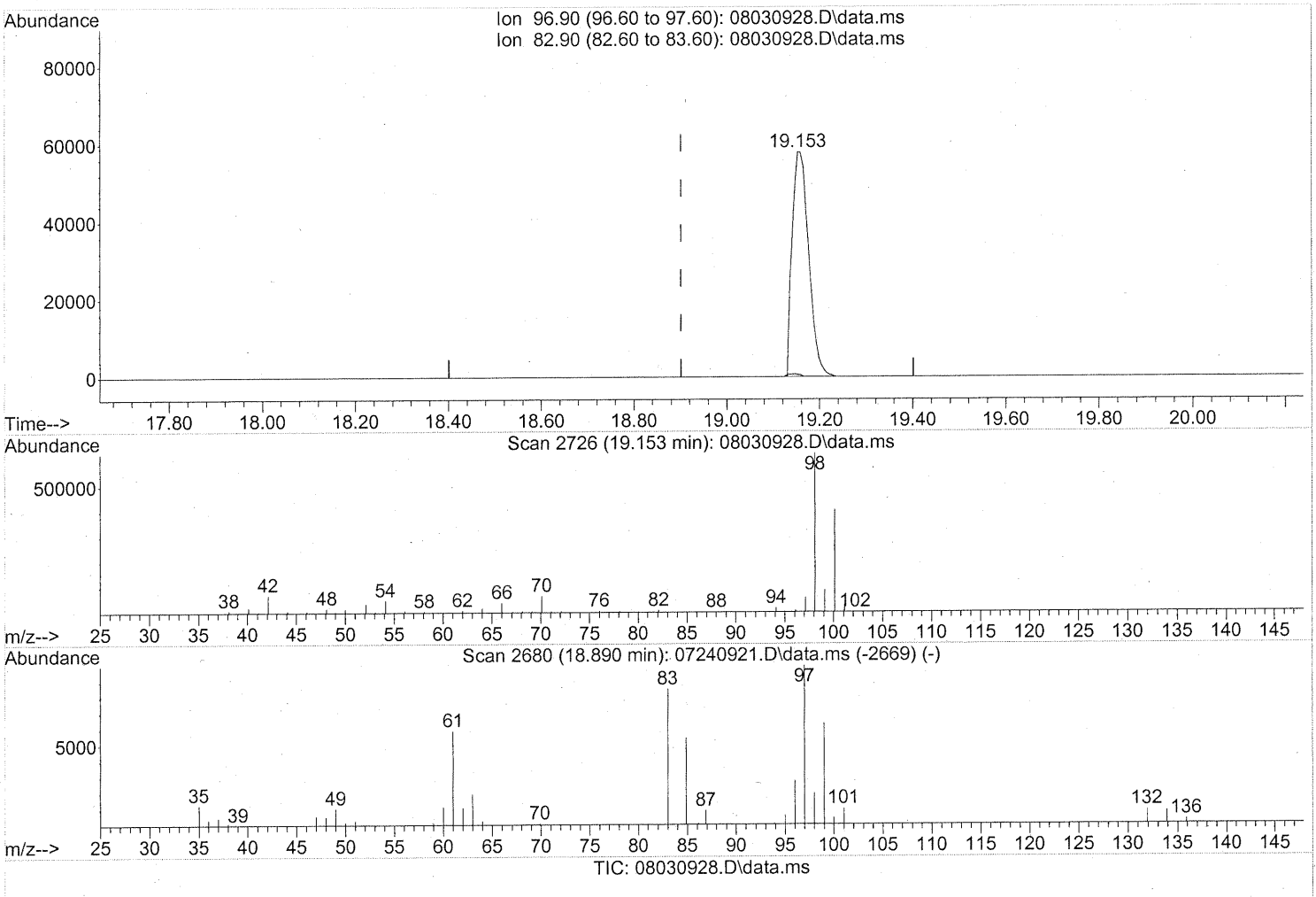
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030928.D
Acq On : 4 Aug 2009 2:29
Operator : EM
Sample : P0902599-010 (1000ml)
Misc : Environmental H & E 99435
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 08:12:40 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030928.D\data.ms

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

19.153min (+0.251) 8.75ng

response 142531

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.77#
0.00	0.00	0.00
0.00	0.00	0.00

FP
Em 8/5/09
M81509

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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: P0902599
CAS Sample ID: P090803-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/3/09
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: 8/12/09

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

CAS Project ID: P0902599
CAS Sample ID: P090803-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/3/09
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	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902599
CAS Sample ID: P090803-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/3/09
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	0.10	ND	0.013	
91-20-3	Naphthalene	ND	0.20	ND	0.038	
87-68-3	Hexachlorobutadiene	ND	0.10	ND	0.0094	

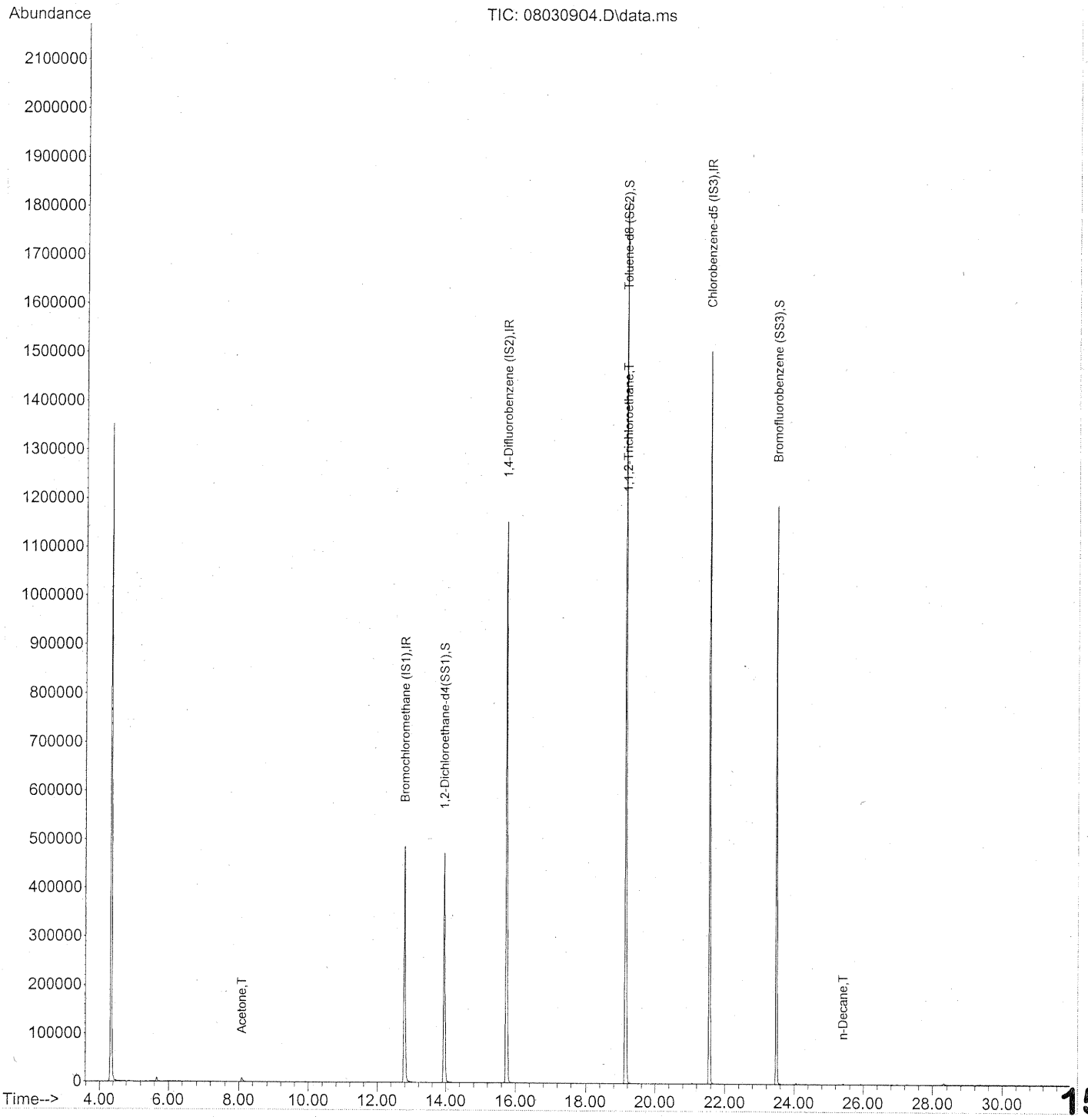
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030904.D
Acq On : 3 Aug 2009 9:00
Operator : EM
Sample : CAS CAN QC C3S 3533
Misc : AC01262
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 03 09:37:36 2009
Quant Method : J:\MS09\Methods\R9072409.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\03\
Data File : 08030904.D
Acq On : 3 Aug 2009 9:00
Operator : EM
Sample : CAS CAN QC C3S 3533
Misc : AC01262
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 03 09:37:36 2009
Quant Method : J:\MS09\Methods\R9072409.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	273186	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1370543	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	597889	25.000	ng	-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.95	65	475139	24.584	ng	-0.04
Spiked Amount 25.000			Recovery =	98.32%		
57) Toluene-d8 (SS2)	19.15	98	1572150	26.579	ng	-0.01
Spiked Amount 25.000			Recovery =	106.32%		
73) Bromofluorobenzene (SS3)	23.49	174	443875	24.960	ng	0.00
Spiked Amount 25.000			Recovery =	99.84%		

Target Compounds						Qvalue
2) Propene	4.88	42	114	N.D.		
3) Dichlorodifluoromethan...	0.00	85	0	N.D.		
4) Chloromethane	0.00	50	0	N.D.		
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	0.00	45	0	N.D.		
11) Acetonitrile	0.00	41	0	N.D.		
12) Acrolein	0.00	56	0	N.D.		
13) Acetone	8.08	58	6975	0.536	ng	# 73
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.		
19) Methylene Chloride	0.00	84	0	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	1221	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 8/3/09

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030904.D
Acq On : 3 Aug 2009 9:00
Operator : EM
Sample : CAS CAN QC C3S 3533
Misc : AC01262
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 03 09:37:36 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	991	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.74	84	607	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. FP	
55) 1,1,2-Trichloroethane	19.16	97	130333	~~8.488~~ ng	# 8
58) Toluene	0.00	91	0	N.D.	
59) 2-Hexanone	0.00	43	0	N.D.	
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) n-Butyl Acetate	0.00	43	0	N.D.	
63) n-Octane	0.00	57	0	N.D.	
64) Tetrachloroethene	0.00	166	0	N.D.	
65) Chlorobenzene	0.00	112	0	N.D.	
66) Ethylbenzene	0.00	91	0	N.D.	
67) m- & p-Xylenes	0.00	91	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Styrene	0.00	104	0	N.D.	
70) o-Xylene	22.92	91	105	N.D.	
71) n-Nonane	0.00	43	0	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	23.48	105	368	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	24.25	91	531	N.D.	
77) 3-Ethyltoluene	24.17	105	106	N.D.	
78) 4-Ethyltoluene	24.17	105	106	N.D.	
79) 1,3,5-Trimethylbenzene	24.17	105	106	N.D.	

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030904.D
Acq On : 3 Aug 2009 9:00
Operator : EM
Sample : CAS CAN QC C3S 3533
Misc : AC01262
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 03 09:37:36 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	2002	0.055 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	0.00	105	0	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	0.00	57	0	N.D.	
94) 1,2,4-Trichlorobenzene	28.26	180	616	N.D.	
95) Naphthalene	27.95	128	494	N.D.	
96) n-Dodecane	0.00	57	0	N.D.	
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	0.00	55	0	N.D.	
99) tert-Butylbenzene	0.00	119	0	N.D.	
100) n-Butylbenzene	0.00	91	0	N.D.	

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

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902599
CAS Sample ID: P090804-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/4/09
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: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902599
CAS Sample ID: P090804-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/4/09
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	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902599
CAS Sample ID: P090804-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/4/09
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	0.10	ND	0.013	
91-20-3	Naphthalene	ND	0.20	ND	0.038	
87-68-3	Hexachlorobutadiene	ND	0.10	ND	0.0094	

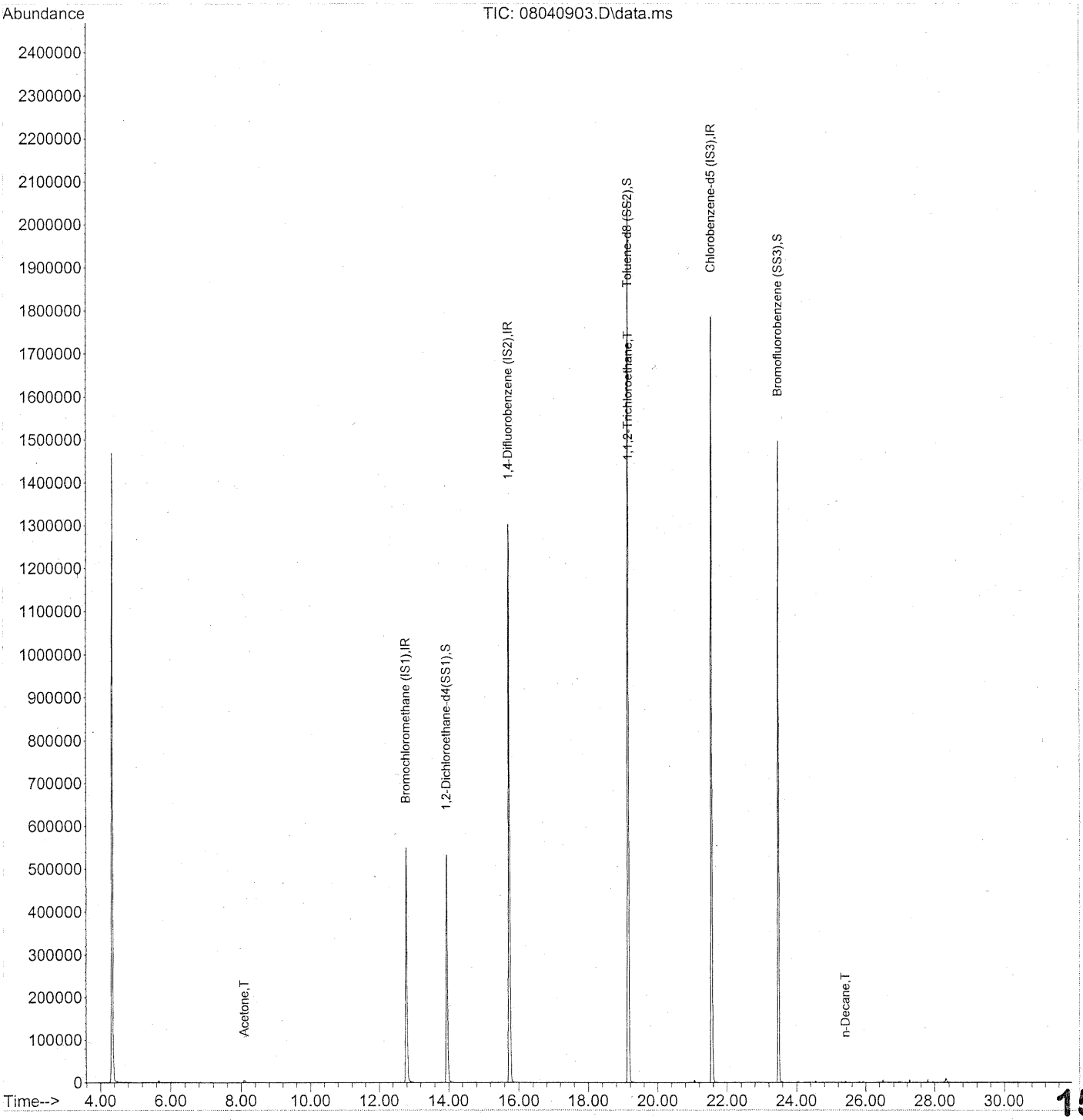
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 8/12/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040903.D
Acq On : 4 Aug 2009 5:17
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-07200901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 09:20:22 2009
Quant Method : J:\MS09\Methods\R9072409.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\04\
Data File : 08040903.D
Acq On : 4 Aug 2009 5:17
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-07200901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 09:20:22 2009
Quant Method : J:\MS09\Methods\R9072409.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	300632	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1528590	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	719079	25.000	ng	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.95	65	534447	25.128	ng	-0.03
Spiked Amount 25.000			Recovery =	100.52%		
57) Toluene-d8 (SS2)	19.15	98	1781648	25.044	ng	-0.01
Spiked Amount 25.000			Recovery =	100.16%		
73) Bromofluorobenzene (SS3)	23.49	174	533894	24.963	ng	0.00
Spiked Amount 25.000			Recovery =	99.84%		
Target Compounds						Qvalue
2) Propene	0.00	42	0	N.D.		
3) Dichlorodifluoromethan...	0.00	85	0	N.D.		
4) Chloromethane	0.00	50	0	N.D.		
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.28	45	220	N.D.		
11) Acetonitrile	7.60	41	217	N.D.		
12) Acrolein	0.00	56	0	N.D.		
13) Acetone	8.09	58	4333	0.303	ng	86
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.		
19) Methylene Chloride	9.52	84	109	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	1433	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.		

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040903.D
Acq On : 4 Aug 2009 5:17
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-07200901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 09:20:22 2009
Quant Method : J:\MS09\Methods\R9072409.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	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	955	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.74	84	739	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	149893	~~8.753 ng~~ FP	#	8
58) Toluene	19.28	91	1188	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	384	N.D.		
67) m- & p-Xylenes	22.31	91	384	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	22.92	91	474	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	23.49	105	746	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.25	91	1056	N.D.		
77) 3-Ethyltoluene	24.40	105	259	N.D.		
78) 4-Ethyltoluene	24.47	105	115	N.D.		
79) 1,3,5-Trimethylbenzene	24.54	105	446	N.D.		

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040903.D
Acq On : 4 Aug 2009 5:17
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-07200901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 09:20:22 2009
Quant Method : J:\MS09\Methods\R9072409.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	0.00	118	0	N.D.	
81) 2-Ethyltoluene	25.05	105	597	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	597	N.D.	
83) n-Decane	25.41	57	2340	0.053 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	25.05	105	597	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	0.00	146	0	N.D.	
91) d-Limonene	0.00	68	0	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.65	57	107	N.D.	
94) 1,2,4-Trichlorobenzene	27.80	180	103	N.D.	
95) Naphthalene	27.94	128	2179	N.D.	
96) n-Dodecane	27.89	57	351	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: P0902599

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: 7/29/09
Date(s) Received: 7/30/09
Date(s) Analyzed: 8/3 - 8/4/09

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	P090803-MB	**98**	70-130	**106**	70-130	**100**	70-130	
Method Blank	P090804-MB	**101**	70-130	**100**	70-130	**100**	70-130	
Lab Control Sample	P090803-LCS	**98**	70-130	**102**	70-130	**99**	70-130	
Lab Control Sample	P090804-LCS	**98**	70-130	**100**	70-130	**97**	70-130	
99472	P0902599-001	**99**	70-130	**104**	70-130	**101**	70-130	
99473	P0902599-002	**98**	70-130	**104**	70-130	**100**	70-130	
99474	P0902599-003	**99**	70-130	**105**	70-130	**100**	70-130	
99475	P0902599-004	**101**	70-130	**100**	70-130	**101**	70-130	
99476	P0902599-005	**100**	70-130	**101**	70-130	**101**	70-130	
99431	P0902599-006	**100**	70-130	**102**	70-130	**103**	70-130	
99432	P0902599-007	**98**	70-130	**97**	70-130	**100**	70-130	
99433	P0902599-008	**98**	70-130	**101**	70-130	**100**	70-130	
99434	P0902599-009	**100**	70-130	**102**	70-130	**101**	70-130	
99435	P0902599-010	**101**	70-130	**102**	70-130	**99**	70-130	

Verified By: _____ Date: 8/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902599
Client Project ID: **16512** CAS Sample ID: P090803-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 8/03/09
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	**25.0**	**95**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**22.2**	**85**	61-118	
74-87-3	Chloromethane	25.0	**20.9**	**84**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**22.1**	**85**	65-122	
75-01-4	Vinyl Chloride	25.3	**21.0**	**83**	57-132	
106-99-0	1,3-Butadiene	26.8	**23.5**	**88**	66-161	
74-83-9	Bromomethane	25.8	**23.2**	**90**	67-130	
75-00-3	Chloroethane	25.5	**21.2**	**83**	68-123	
64-17-5	Ethanol	130	**108**	**83**	50-155	
75-05-8	Acetonitrile	26.0	**22.0**	**85**	48-148	
107-02-8	Acrolein	26.3	**24.2**	**92**	67-138	
67-64-1	Acetone	132	**123**	**93**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**22.8**	**87**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**41.5**	**86**	54-126	
107-13-1	Acrylonitrile	25.8	**28.6**	**111**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**25.7**	**93**	70-123	
75-09-2	Methylene Chloride	26.8	**23.5**	**88**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**29.5**	**109**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**26.5**	**96**	69-126	
75-15-0	Carbon Disulfide	26.0	**24.4**	**94**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**24.5**	**96**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**25.0**	**94**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**24.8**	**94**	72-132	
108-05-4	Vinyl Acetate	126	**116**	**92**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**31.0**	**116**	68-126	

Verified By: RC Date: 8/17/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902599
Client Project ID: **16512** CAS Sample ID: P090803-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 8/03/09
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
156-59-2	cis-1,2-Dichloroethene	27.0	**26.7**	**99**	69-124	
141-78-6	Ethyl Acetate	52.0	**50.9**	**98**	65-126	
110-54-3	n-Hexane	26.0	**25.5**	**98**	63-125	
67-66-3	Chloroform	27.5	**25.6**	**93**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**28.5**	**108**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**25.3**	**96**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**25.0**	**96**	69-127	
71-43-2	Benzene	25.8	**24.6**	**95**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**26.4**	**100**	68-137	
110-82-7	Cyclohexane	51.8	**50.7**	**98**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**26.3**	**101**	69-128	
75-27-4	Bromodichloromethane	26.3	**26.6**	**101**	71-131	
79-01-6	Trichloroethene	25.8	**25.0**	**97**	72-122	
123-91-1	1,4-Dioxane	26.0	**27.5**	**106**	73-127	
80-62-6	Methyl Methacrylate	52.8	**58.4**	**111**	80-133	
142-82-5	n-Heptane	25.8	**26.4**	**102**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**26.4**	**108**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**29.5**	**110**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**31.0**	**115**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**26.9**	**103**	76-125	
108-88-3	Toluene	26.8	**26.6**	**99**	74-119	
591-78-6	2-Hexanone	27.0	**30.9**	**114**	64-118	
124-48-1	Dibromochloromethane	28.3	**29.7**	**105**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**27.9**	**106**	79-125	
123-86-4	n-Butyl Acetate	27.5	**30.2**	**110**	70-136	

Verified By: RC Date: 8/17/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902599
Client Project ID: **16512** CAS Sample ID: P090803-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 8/03/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

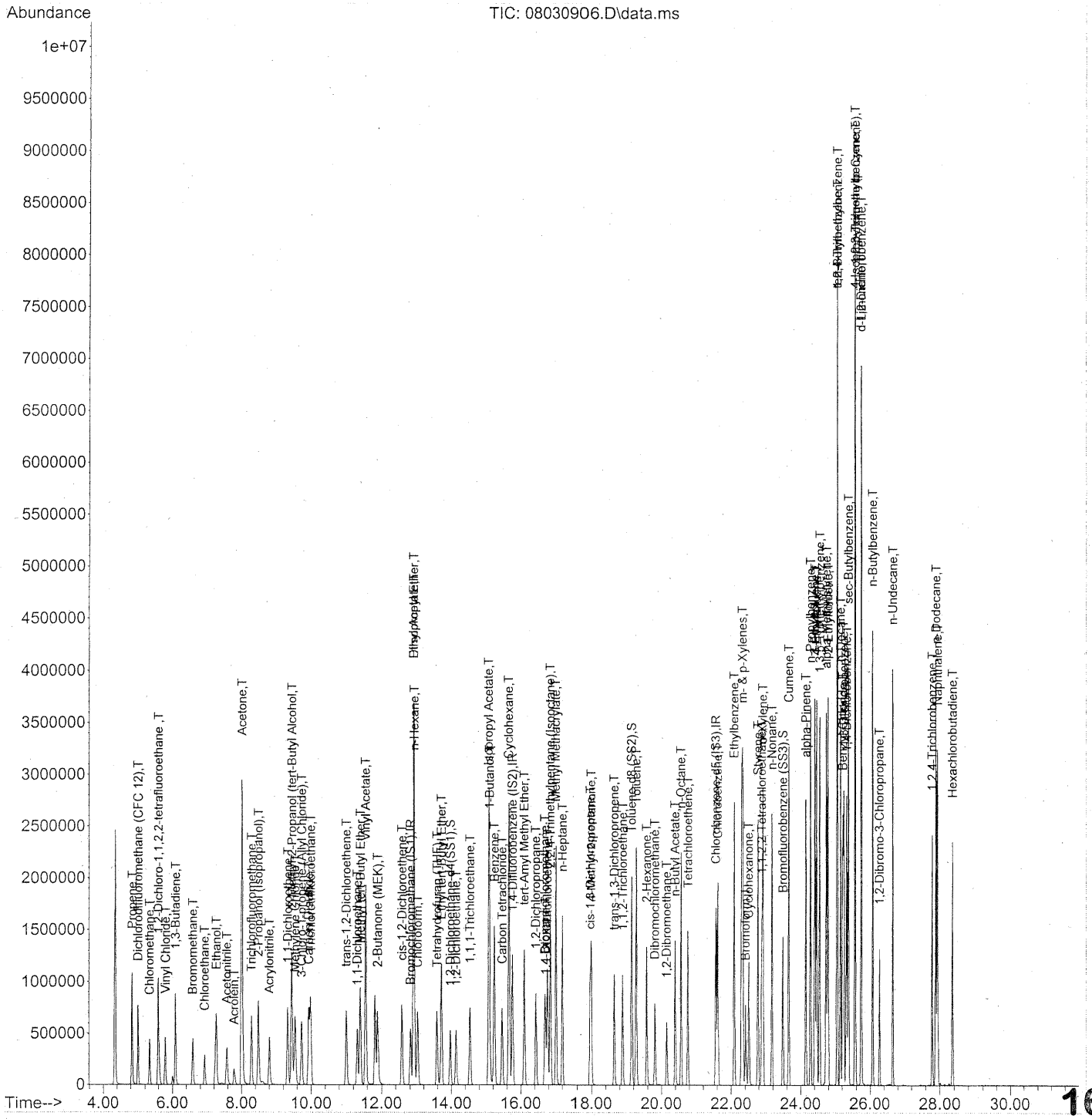
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**28.3**	**108**	75-126	
127-18-4	Tetrachloroethene	25.3	**25.5**	**101**	72-125	
108-90-7	Chlorobenzene	26.5	**26.6**	**100**	74-121	
100-41-4	Ethylbenzene	26.3	**27.5**	**105**	76-120	
179601-23-1	m,p-Xylenes	51.5	**54.5**	**106**	75-120	
75-25-2	Bromoform	26.5	**28.3**	**107**	76-143	
100-42-5	Styrene	26.3	**29.2**	**111**	78-124	
95-47-6	o-Xylene	26.0	**27.5**	**106**	76-121	
111-84-2	n-Nonane	25.8	**29.0**	**112**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**29.5**	**109**	77-126	
98-82-8	Cumene	25.3	**26.3**	**104**	78-125	
80-56-8	alpha-Pinene	24.8	**27.0**	**109**	78-125	
103-65-1	n-Propylbenzene	25.3	**27.7**	**109**	80-127	
622-96-8	4-Ethyltoluene	26.3	**28.8**	**110**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**28.9**	**109**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**29.3**	**115**	76-123	
100-44-7	Benzyl Chloride	26.8	**32.1**	**120**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**28.1**	**108**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**27.2**	**103**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**27.3**	**106**	75-124	
5989-27-5	d-Limonene	26.5	**30.3**	**114**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**30.8**	**114**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**26.9**	**99**	70-139	
91-20-3	Naphthalene	25.0	**26.3**	**105**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**27.8**	**104**	68-138	

Verified By: _____ Date: 8/7/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030906.D
Acq On : 3 Aug 2009 10:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:17:32 2009
Quant Method : J:\MS09\Methods\R9072409.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\03\
Data File : 08030906.D
Acq On : 3 Aug 2009 10:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:17:32 2009
Quant Method : J:\MS09\Methods\R9072409.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	303518	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1516329	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	691042	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	525071	24.452	ng		-0.02
Spiked Amount 25.000			Recovery =	97.80%			
57) Toluene-d8 (SS2)	19.15	98	1739837	25.449	ng		-0.01
Spiked Amount 25.000			Recovery =	101.80%			
73) Bromofluorobenzene (SS3)	23.49	174	509107	24.769	ng		0.00
Spiked Amount 25.000			Recovery =	99.08%			
Target Compounds							Qvalue
2) Propene	4.83	42	478826	25.007	ng		99
3) Dichlorodifluoromethan...	5.00	85	847888	22.188	ng		99
4) Chloromethane	5.33	50	596727	20.853	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	474864	22.064	ng		100
6) Vinyl Chloride	5.80	62	640864	21.007	ng		99
7) 1,3-Butadiene	6.08	54	514444	23.454	ng		100
8) Bromomethane	6.58	94	418146	23.237	ng		100
9) Chloroethane	6.93	64	322939	21.158	ng		100
10) Ethanol	7.27	45	1374730m	108.203	ng		
11) Acetonitrile	7.57	41	632928	22.032	ng		100
12) Acrolein	7.79	56	223954	24.179	ng		98
13) Acetone	8.01	58	1779812	123.161	ng		98
14) Trichlorofluoromethane	8.29	101	757782	22.766	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1579515	41.539	ng		99
16) Acrylonitrile	8.81	53	554522	28.604	ng		100
17) 1,1-Dichloroethene	9.33	96	435578	25.697	ng		98
18) 2-Methyl-2-Propanol (t...	9.45	59	2199113	51.352	ng		98
19) Methylene Chloride	9.54	84	450185	23.527	ng		98
20) 3-Chloro-1-propene (Al...	9.73	41	609308	29.507	ng		97
21) Trichlorotrifluoroethane	9.98	151	399412	26.452	ng		97
22) Carbon Disulfide	9.93	76	1592575	24.436	ng		98
23) trans-1,2-Dichloroethene	11.00	61	608769	24.488	ng		99
24) 1,1-Dichloroethane	11.31	63	758652	25.035	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1327212	24.834	ng		100
26) Vinyl Acetate	11.56	86	401093	116.368	ng	#	94
27) 2-Butanone (MEK)	11.89	72	341411	30.974	ng		98
28) cis-1,2-Dichloroethene	12.58	61	640632	26.705	ng		99
29) Diisopropyl Ether	12.91	87	439076	25.629	ng	#	95
30) Ethyl Acetate	12.91	61	367446	50.893	ng		99
31) n-Hexane	12.93	57	850522	25.477	ng		9

EM 8/3/09

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030906.D
Acq On : 3 Aug 2009 10:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:17:32 2009
Quant Method : J:\MS09\Methods\R9072409.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	777345	25.641	ng		100
34) Tetrahydrofuran (THF)	13.58	72	295898	28.489	ng		97
35) Ethyl tert-Butyl Ether	13.71	87	584340	25.445	ng		96
36) 1,2-Dichloroethane	14.13	62	615885	25.341	ng		100
38) 1,1,1-Trichloroethane	14.54	97	694513	24.972	ng		99
39) Isopropyl Acetate	15.07	61	646687	58.566	ng	#	84
40) 1-Butanol	15.09	56	1021661	54.225	ng		81
41) Benzene	15.23	78	1986588	24.567	ng		99
42) Carbon Tetrachloride	15.46	117	626669	26.384	ng		99
43) Cyclohexane	15.66	84	1533871	50.727	ng		98
44) tert-Amyl Methyl Ether	16.10	73	1389742	26.003	ng		100
45) 1,2-Dichloropropane	16.43	63	449071	26.344	ng		99
46) Bromodichloromethane	16.70	83	621088	26.574	ng		99
47) Trichloroethene	16.77	130	515892	24.964	ng		100
48) 1,4-Dioxane	16.72	88	374810	27.537	ng		98
49) 2,2,4-Trimethylpentane...	16.86	57	1925502	24.573	ng		99
50) Methyl Methacrylate	17.02	100	442886	58.403	ng		97
51) n-Heptane	17.21	71	517625	26.437	ng		99
52) cis-1,3-Dichloropropene	17.95	75	747712	26.368	ng		100
53) 4-Methyl-2-pentanone	17.99	58	452308	29.547	ng		99
54) trans-1,3-Dichloropropene	18.64	75	774082	31.012	ng		100
55) 1,1,2-Trichloroethane	18.89	97	456533	26.873	ng		98
58) Toluene	19.28	91	2228021	26.623	ng		100
59) 2-Hexanone	19.58	43	1112572	30.910	ng		100
60) Dibromochloromethane	19.82	129	559136	29.712	ng		100
61) 1,2-Dibromoethane	20.15	107	540478	27.881	ng		99
62) n-Butyl Acetate	20.39	43	1207239	30.170	ng		100
63) n-Octane	20.56	57	462984	28.311	ng		99
64) Tetrachloroethene	20.76	166	564781	25.524	ng		99
65) Chlorobenzene	21.62	112	1402943	26.649	ng		100
66) Ethylbenzene	22.09	91	2503389	27.508	ng		100
67) m- & p-Xylenes	22.33	91	4091655	54.522	ng		100
68) Bromoform	22.41	173	474742	28.309	ng		99
69) Styrene	22.77	104	1614186	29.168	ng		99
70) o-Xylene	22.92	91	2056771	27.511	ng		100
71) n-Nonane	23.17	43	1058268	28.994	ng		98
72) 1,1,2,2-Tetrachloroethane	22.89	83	918275	29.533	ng		99
74) Cumene	23.66	105	2612393	26.313	ng		99
75) alpha-Pinene	24.15	93	1283149	27.043	ng		99
76) n-Propylbenzene	24.28	91	3314001	27.712	ng		100
77) 3-Ethyltoluene	24.41	105	2676683	28.450	ng		99
78) 4-Ethyltoluene	24.46	105	2719285	28.800	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	2273039	28.948	ng		100

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030906.D
Acq On : 3 Aug 2009 10:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:17:32 2009
Quant Method : J:\MS09\Methods\R9072409.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

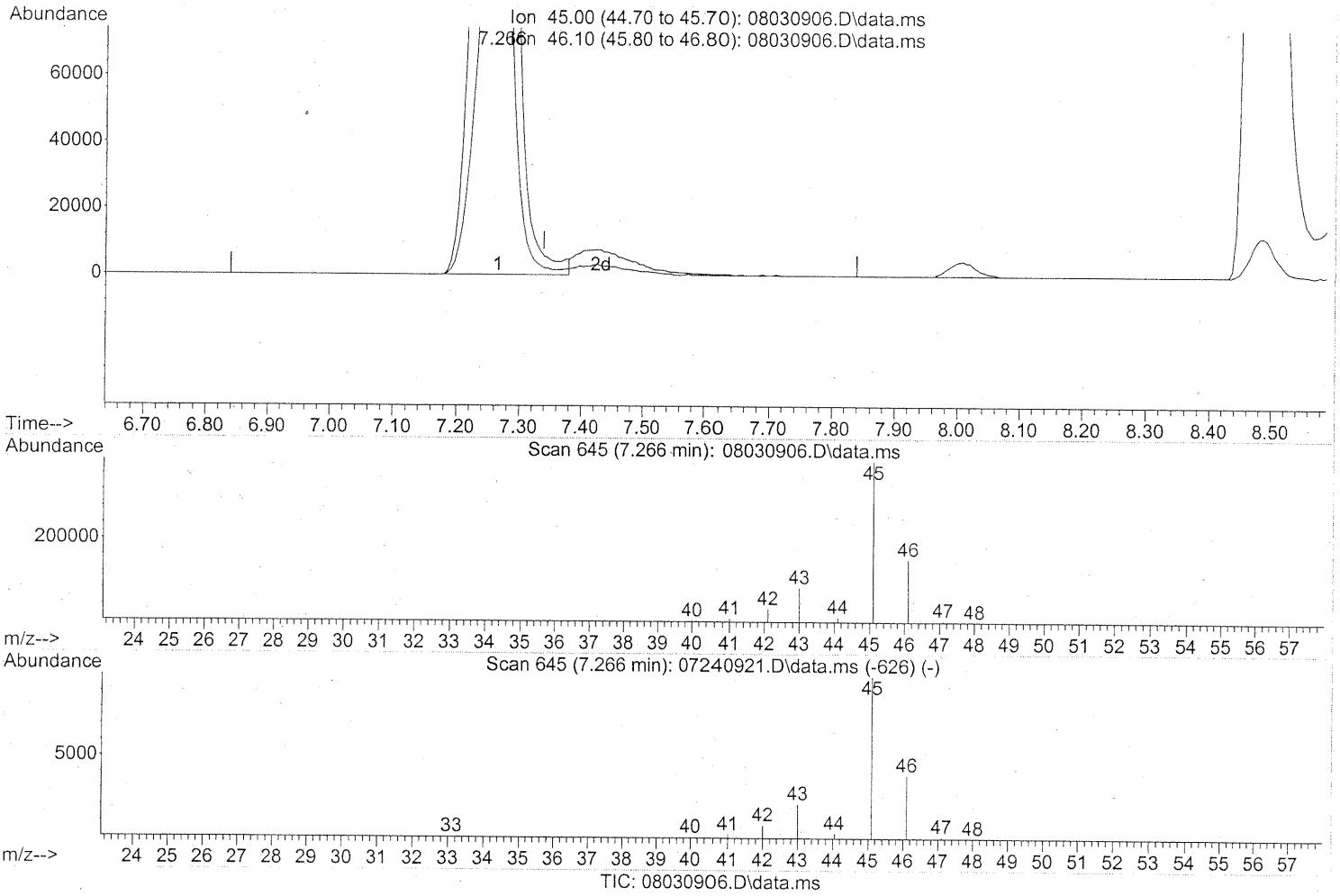
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1272309	28.966	ng	99
81) 2-Ethyltoluene	24.79	105	2767451	28.078	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2570599	29.270	ng	98
83) n-Decane	25.15	57	1285460	30.299	ng	98
84) Benzyl Chloride	25.22	91	2022173	32.124	ng	100
85) 1,3-Dichlorobenzene	25.25	146	1296397	28.122	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1304612	27.163	ng	99
87) sec-Butylbenzene	25.38	105	3141438	28.611	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	3148473	28.443	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2613807	29.228	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1306952	27.276	ng	100
91) d-Limonene	25.74	68	1055588	30.253	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.26	157	413858	30.756	ng	98
93) n-Undecane	26.65	57	1312777	30.220	ng	100
94) 1,2,4-Trichlorobenzene	27.79	180	831361	26.890	ng	99
95) Naphthalene	27.94	128	2829231	26.253	ng	100
96) n-Dodecane	27.89	57	1230238	26.502	ng	99
97) Hexachlorobutadiene	28.36	225	492022	27.817	ng	99
98) Cyclohexanone	22.51	55	637681	25.261	ng	99
99) tert-Butylbenzene	25.05	119	2515345	28.339	ng	100
100) n-Butylbenzene	26.07	91	2591652	29.641	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030906.D
Acq On : 3 Aug 2009 10:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:17:07 2009
Quant Method : J:\MS09\Methods\R9072409.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)

7.266min (-0.074) 104.29ng

response 1324987

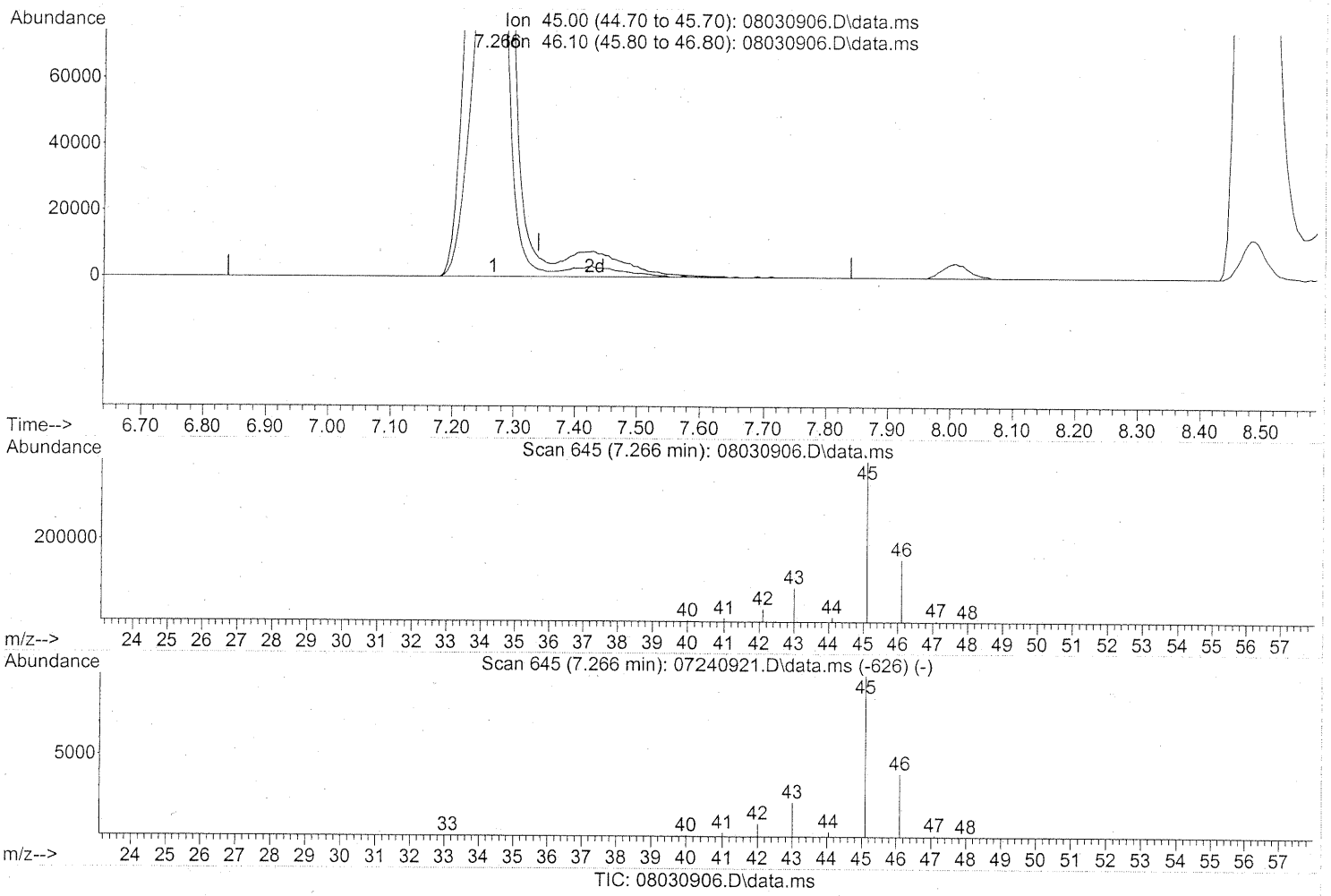
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.91
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030906.D
Acq On : 3 Aug 2009 10:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:17:07 2009
Quant Method : J:\MS09\Methods\R9072409.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)

7.266min (-0.074) 108.20ng m

response 1374730

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

PT → IC

8/3/09

8/4/09

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COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902599
Client Project ID: **16512** CAS Sample ID: P090804-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 8/04/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
115-07-1	Propene	26.3	**27.3**	**104**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**22.7**	**87**	61-118	
74-87-3	Chloromethane	25.0	**21.8**	**87**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**21.6**	**83**	65-122	
75-01-4	Vinyl Chloride	25.3	**21.0**	**83**	57-132	
106-99-0	1,3-Butadiene	26.8	**23.7**	**88**	66-161	
74-83-9	Bromomethane	25.8	**22.4**	**87**	67-130	
75-00-3	Chloroethane	25.5	**20.3**	**80**	68-123	
64-17-5	Ethanol	130	**109**	**84**	50-155	
75-05-8	Acetonitrile	26.0	**23.3**	**90**	48-148	
107-02-8	Acrolein	26.3	**24.4**	**93**	67-138	
67-64-1	Acetone	132	**118**	**89**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**22.1**	**84**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**41.3**	**86**	54-126	
107-13-1	Acrylonitrile	25.8	**28.1**	**109**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**25.4**	**92**	70-123	
75-09-2	Methylene Chloride	26.8	**23.0**	**86**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**28.7**	**106**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**25.1**	**91**	69-126	
75-15-0	Carbon Disulfide	26.0	**23.8**	**92**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**24.3**	**95**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**24.8**	**94**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**24.4**	**93**	72-132	
108-05-4	Vinyl Acetate	126	**106**	**84**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**28.9**	**108**	68-126	

Verified By: RC Date: 8/17/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902599
Client Project ID: **16512** CAS Sample ID: P090804-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 8/04/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	27.0	**25.6**	**95**	69-124	
141-78-6	Ethyl Acetate	52.0	**47.8**	**92**	65-126	
110-54-3	n-Hexane	26.0	**23.6**	**91**	63-125	
67-66-3	Chloroform	27.5	**24.1**	**88**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**27.1**	**102**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**23.9**	**91**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**23.8**	**92**	69-127	
71-43-2	Benzene	25.8	**22.7**	**88**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**24.6**	**94**	68-137	
110-82-7	Cyclohexane	51.8	**47.7**	**92**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**25.2**	**97**	69-128	
75-27-4	Bromodichloromethane	26.3	**25.1**	**95**	71-131	
79-01-6	Trichloroethene	25.8	**23.2**	**90**	72-122	
123-91-1	1,4-Dioxane	26.0	**26.2**	**101**	73-127	
80-62-6	Methyl Methacrylate	52.8	**54.5**	**103**	80-133	
142-82-5	n-Heptane	25.8	**24.6**	**95**	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	**27.7**	**103**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**29.1**	**108**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**25.1**	**97**	76-125	
108-88-3	Toluene	26.8	**23.9**	**89**	74-119	
591-78-6	2-Hexanone	27.0	**27.7**	**103**	64-118	
124-48-1	Dibromochloromethane	28.3	**26.6**	**94**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**25.1**	**95**	79-125	
123-86-4	n-Butyl Acetate	27.5	**26.9**	**98**	70-136	

Verified By: RG Date: 8/17/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902599
Client Project ID: **16512** CAS Sample ID: P090804-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 8/04/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

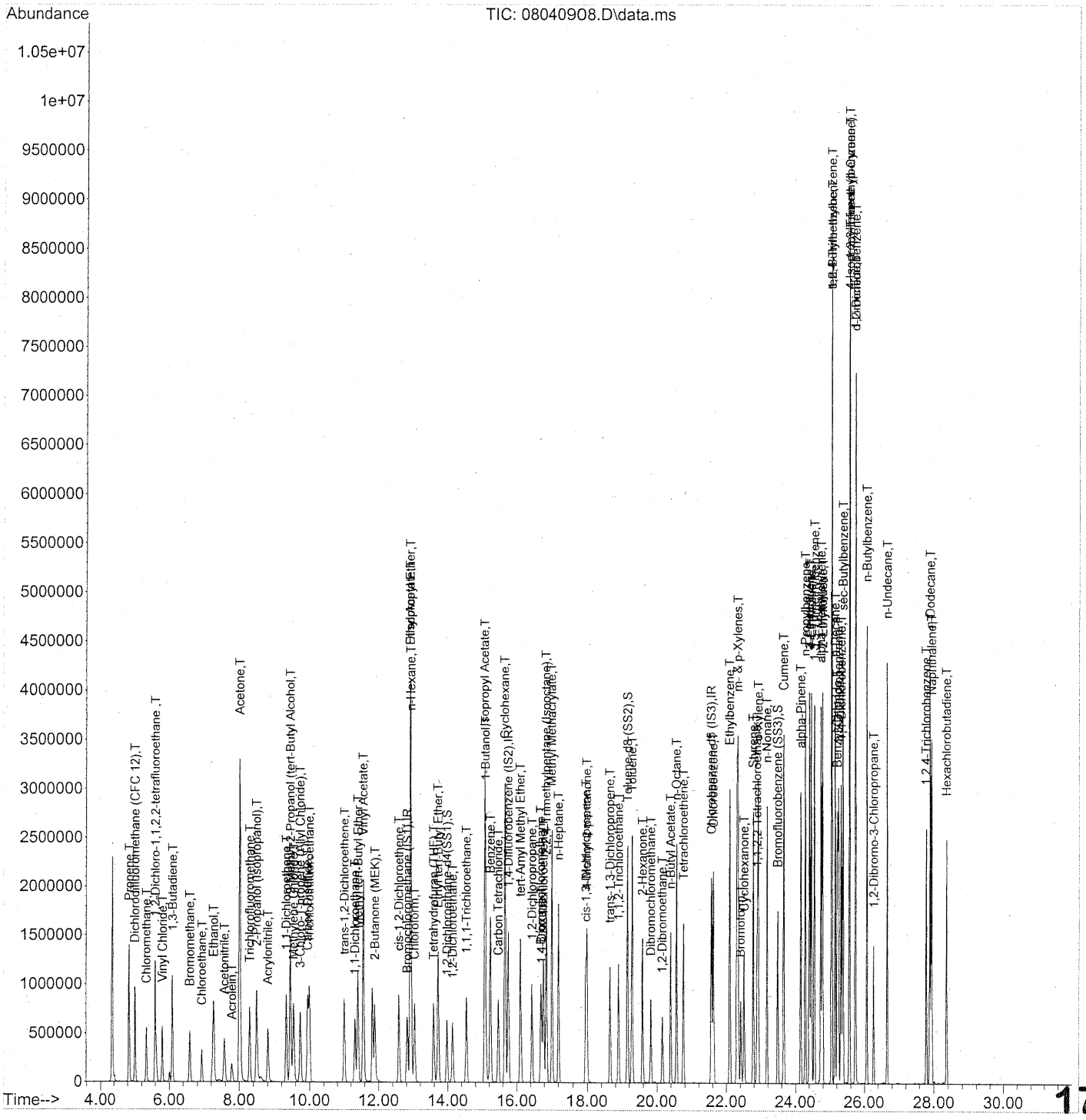
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**25.4**	**97**	75-126	
127-18-4	Tetrachloroethene	25.3	**22.6**	**89**	72-125	
108-90-7	Chlorobenzene	26.5	**23.8**	**90**	74-121	
100-41-4	Ethylbenzene	26.3	**24.5**	**93**	76-120	
179601-23-1	m,p-Xylenes	51.5	**47.9**	**93**	75-120	
75-25-2	Bromoform	26.5	**24.6**	**93**	76-143	
100-42-5	Styrene	26.3	**25.7**	**98**	78-124	
95-47-6	o-Xylene	26.0	**24.4**	**94**	76-121	
111-84-2	n-Nonane	25.8	**25.7**	**100**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**26.0**	**96**	77-126	
98-82-8	Cumene	25.3	**23.1**	**91**	78-125	
80-56-8	alpha-Pinene	24.8	**23.8**	**96**	78-125	
103-65-1	n-Propylbenzene	25.3	**24.2**	**96**	80-127	
622-96-8	4-Ethyltoluene	26.3	**25.0**	**95**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**25.2**	**95**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**25.1**	**98**	76-123	
100-44-7	Benzyl Chloride	26.8	**28.0**	**104**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**24.1**	**93**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**23.4**	**89**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**23.2**	**90**	75-124	
5989-27-5	d-Limonene	26.5	**26.4**	**100**	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	**23.4**	**86**	70-139	
91-20-3	Naphthalene	25.0	**22.8**	**91**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**24.1**	**90**	68-138	

Verified By: RC Date: 8/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:09:25 2009
Quant Method : J:\MS09\Methods\R9072409.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\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:09:25 2009
Quant Method : J:\MS09\Methods\R9072409.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	370320	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1841654	25.000	ng	-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	858141	25.000	ng	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.97	65	638885	24.385	ng	-0.02
Spiked Amount 25.000			Recovery =	97.56%		
57) Toluene-d8 (SS2)	19.15	98	2112109	24.878	ng	0.00
Spiked Amount 25.000			Recovery =	99.52%		
73) Bromofluorobenzene (SS3)	23.49	174	617470	24.192	ng	0.00
Spiked Amount 25.000			Recovery =	96.76%		
Target Compounds						Qvalue
2) Propene	4.84	42	637262	27.277	ng	99
3) Dichlorodifluoromethan...	5.00	85	1059440	22.723	ng	99
4) Chloromethane	5.33	50	762467	21.838	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	566942	21.590	ng	100
6) Vinyl Chloride	5.80	62	782257	21.016	ng	99
7) 1,3-Butadiene	6.09	54	634837	23.722	ng	99
8) Bromomethane	6.59	94	492506	22.432	ng	100
9) Chloroethane	6.93	64	378907	20.347	ng	100
10) Ethanol	7.27	45	1689127m	108.966	ng	
11) Acetonitrile	7.58	41	817905	23.335	ng	100
12) Acrolein	7.79	56	276224	24.443	ng	98
13) Acetone	8.01	58	2077766	117.843	ng	95
14) Trichlorofluoromethane	8.29	101	896683	22.079	ng	98
15) 2-Propanol (Isopropanol)	8.49	45	1916667m	41.313	ng	
16) Acrylonitrile	8.81	53	664211	28.081	ng	100
17) 1,1-Dichloroethene	9.33	96	526178	25.442	ng	98
18) 2-Methyl-2-Propanol (t...	9.45	59	2632761	50.388	ng	99
19) Methylene Chloride	9.54	84	536503	22.980	ng	99
20) 3-Chloro-1-propene (Al...	9.73	41	724253	28.747	ng	98
21) Trichlorotrifluoroethane	9.99	151	462565	25.108	ng	99
22) Carbon Disulfide	9.94	76	1894854	23.829	ng	98
23) trans-1,2-Dichloroethene	11.01	61	735608	24.253	ng	97
24) 1,1-Dichloroethane	11.32	63	916642	24.792	ng	100
25) Methyl tert-Butyl Ether	11.40	73	1592215	24.418	ng	99
26) Vinyl Acetate	11.56	86	445786	106.004	ng	97
27) 2-Butanone (MEK)	11.89	72	388666	28.900	ng	99
28) cis-1,2-Dichloroethene	12.58	61	748227	25.563	ng	98
29) Diisopropyl Ether	12.91	87	497769	23.814	ng	96
30) Ethyl Acetate	12.91	61	420647	47.752	ng	99
31) n-Hexane	12.93	57	959451	23.555	ng	99

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EM 8/4/09

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:09:25 2009
Quant Method : J:\MS09\Methods\R9072409.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	893178	24.147	ng		100
34) Tetrahydrofuran (THF)	13.58	72	342884	27.057	ng		99
35) Ethyl tert-Butyl Ether	13.71	87	672326	23.995	ng		96
36) 1,2-Dichloroethane	14.14	62	708414	23.890	ng		99
38) 1,1,1-Trichloroethane	14.54	97	804917	23.829	ng		100
39) Isopropyl Acetate	15.07	61	739888	55.170	ng	#	88
40) 1-Butanol	15.09	56	1155965	50.515	ng		83
41) Benzene	15.23	78	2225541	22.661	ng		99
42) Carbon Tetrachloride	15.46	117	708872	24.573	ng		99
43) Cyclohexane	15.66	84	1752444	47.718	ng		97
44) tert-Amyl Methyl Ether	16.11	73	1605186	24.729	ng		100
45) 1,2-Dichloropropane	16.44	63	521230	25.176	ng		98
46) Bromodichloromethane	16.70	83	711462	25.063	ng		99
47) Trichloroethene	16.77	130	583131	23.233	ng		100
48) 1,4-Dioxane	16.72	88	433124	26.201	ng		96
49) 2,2,4-Trimethylpentane...	16.86	57	2235283	23.487	ng		98
50) Methyl Methacrylate	17.02	100	501900	54.494	ng		98
51) n-Heptane	17.21	71	584148	24.565	ng		100
52) cis-1,3-Dichloropropene	17.95	75	858291	24.920	ng		100
53) 4-Methyl-2-pentanone	17.99	58	515715	27.738	ng		99
54) trans-1,3-Dichloropropene	18.64	75	882130	29.098	ng		100
55) 1,1,2-Trichloroethane	18.89	97	517799	25.095	ng		99
58) Toluene	19.28	91	2488733	23.947	ng		100
59) 2-Hexanone	19.58	43	1237913	27.696	ng		100
60) Dibromochloromethane	19.82	129	621933	26.614	ng		100
61) 1,2-Dibromoethane	20.15	107	604830	25.126	ng		99
62) n-Butyl Acetate	20.39	43	1334631	26.859	ng		99
63) n-Octane	20.56	57	516456	25.432	ng		99
64) Tetrachloroethene	20.76	166	621651	22.623	ng		99
65) Chlorobenzene	21.62	112	1558843	23.844	ng		100
66) Ethylbenzene	22.09	91	2767006	24.484	ng		100
67) m- & p-Xylenes	22.33	91	4465504	47.917	ng		100
68) Bromoform	22.41	173	513013	24.635	ng		100
69) Styrene	22.77	104	1765190	25.686	ng		99
70) o-Xylene	22.92	91	2265326	24.401	ng		99
71) n-Nonane	23.17	43	1166634	25.739	ng		98
72) 1,1,2,2-Tetrachloroethane	22.89	83	1004367	26.012	ng		99
74) Cumene	23.66	105	2852504	23.137	ng		100
75) alpha-Pinene	24.15	93	1404154	23.831	ng		100
76) n-Propylbenzene	24.28	91	3597883	24.227	ng		100
77) 3-Ethyltoluene	24.41	105	2892835	24.760	ng		99
78) 4-Ethyltoluene	24.46	105	2928639	24.978	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	2452542	25.152	ng		100

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:09:25 2009
Quant Method : J:\MS09\Methods\R9072409.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

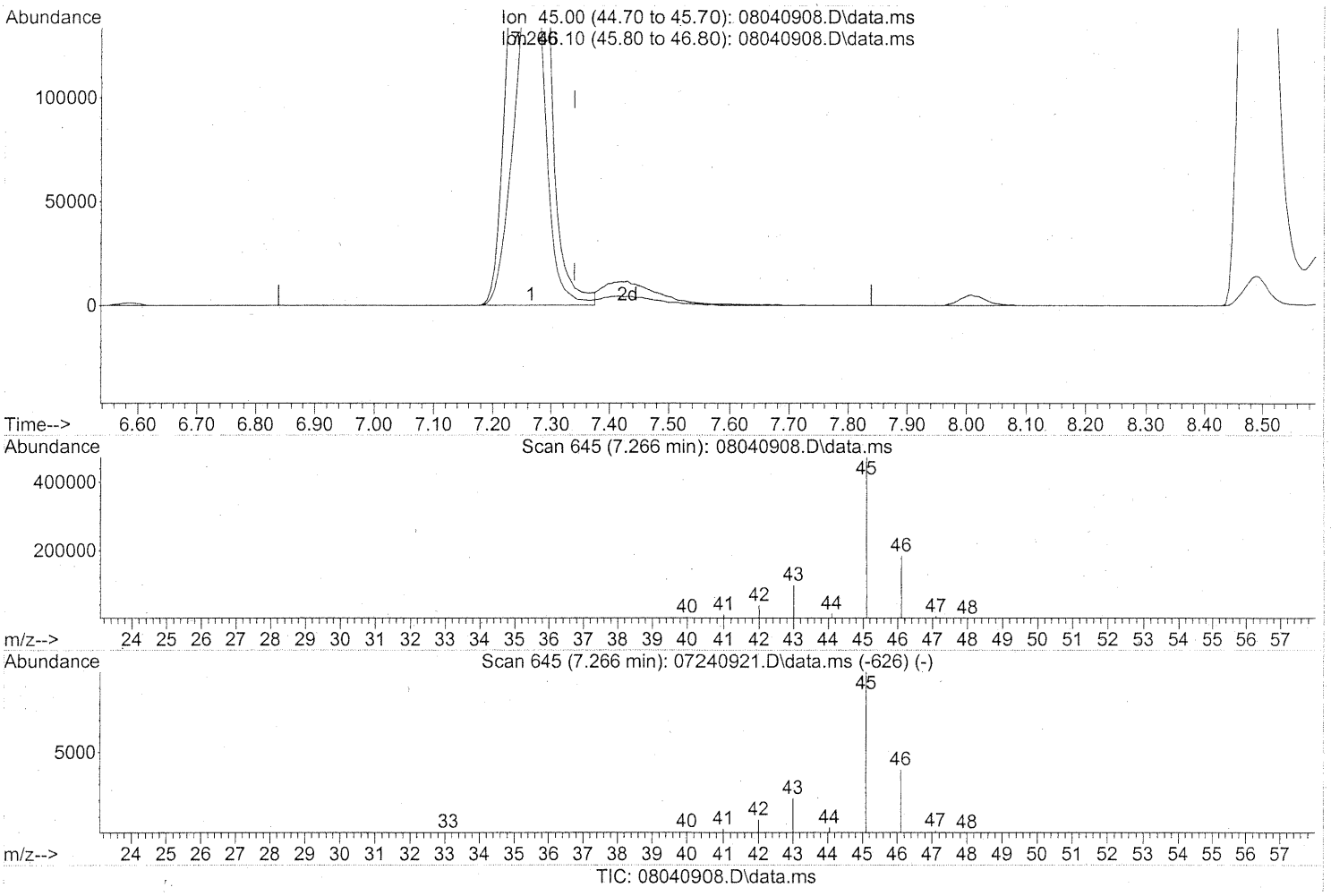
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1372230	25.158	ng	99
81) 2-Ethyltoluene	24.79	105	2973815	24.297	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2740871	25.132	ng	99
83) n-Decane	25.15	57	1403283	26.635	ng	98
84) Benzyl Chloride	25.22	91	2190887	28.027	ng	100
85) 1,3-Dichlorobenzene	25.25	146	1379636	24.100	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1393718	23.368	ng	99
87) sec-Butylbenzene	25.38	105	3380937	24.797	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	3341388	24.308	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2768213	24.927	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1382458	23.234	ng	100
91) d-Limonene	25.74	68	1141804	26.352	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.27	157	445586	26.666	ng	97
93) n-Undecane	26.65	57	1437027	26.639	ng	100
94) 1,2,4-Trichlorobenzene	27.79	180	897945	23.388	ng	99
95) Naphthalene	27.94	128	3047275	22.770	ng	100
96) n-Dodecane	27.89	57	1357365	23.547	ng	100
97) Hexachlorobutadiene	28.36	225	530307	24.143	ng	100
98) Cyclohexanone	22.51	55	704540	22.475	ng	98
99) tert-Butylbenzene	25.05	119	2674659	24.266	ng	100
100) n-Butylbenzene	26.07	91	2787828	25.676	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:08:39 2009
Quant Method : J:\MS09\Methods\R9072409.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)

7.266min (-0.074) 104.19ng

response 1615157

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.88
0.00	0.00	0.00
0.00	0.00	0.00

PT

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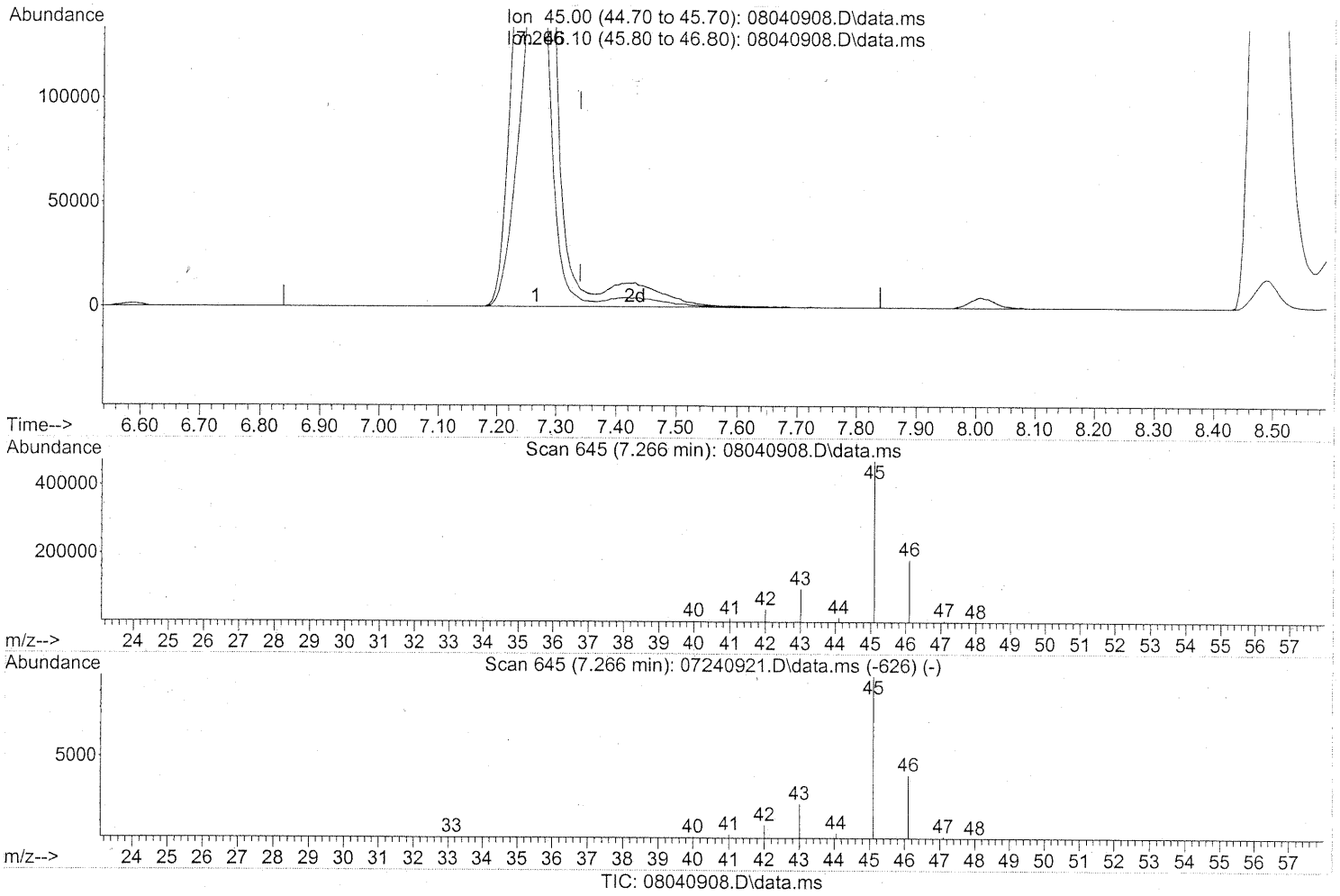
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:08:39 2009
Quant Method : J:\MS09\Methods\R9072409.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)

7.266min (-0.074) 108.97ng m

response 1689127

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.18
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

Em 8/4/09

E 8/4/09

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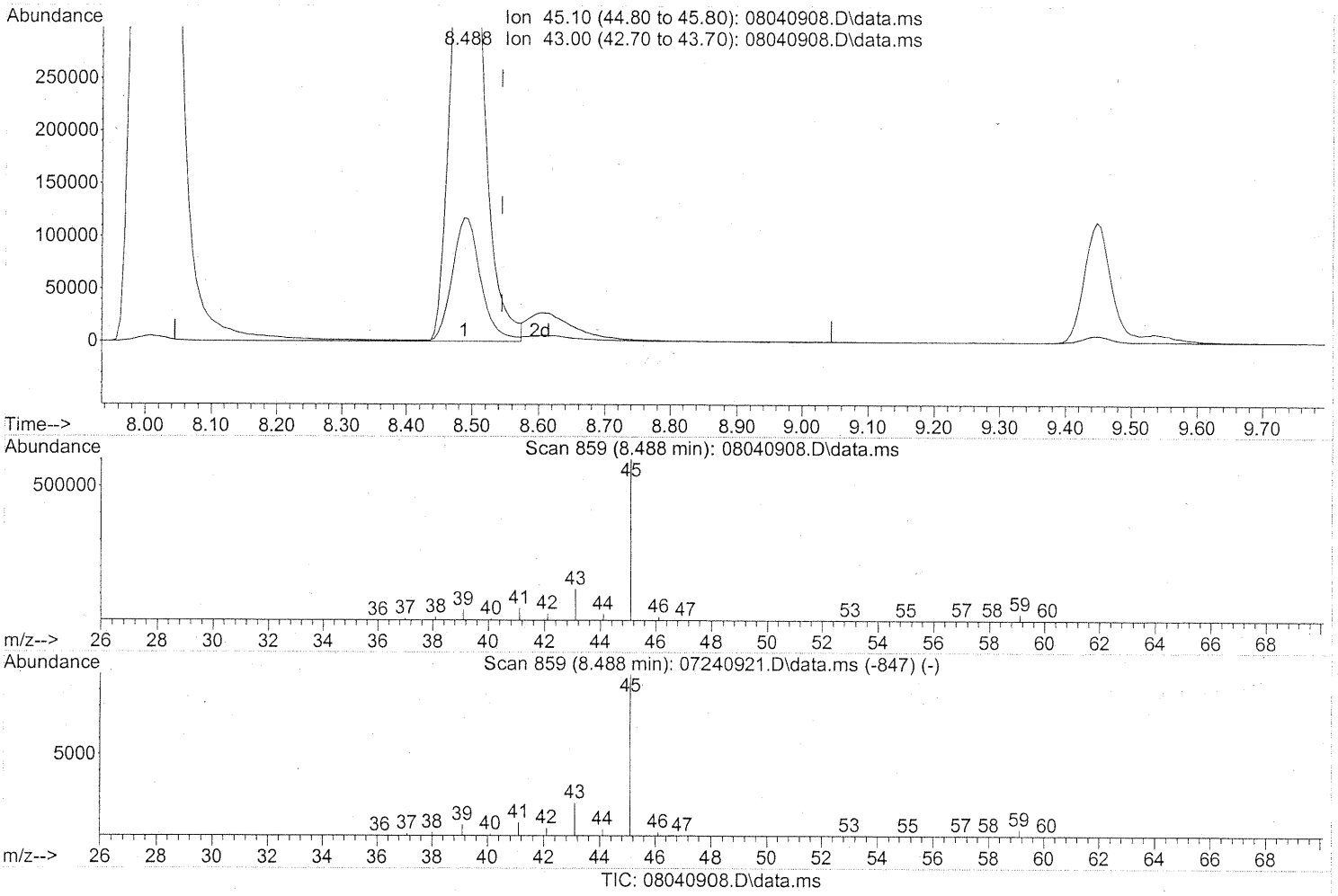
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:08:39 2009
Quant Method : J:\MS09\Methods\R9072409.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)

8.488min (-0.057) 38.35ng

response 1779169

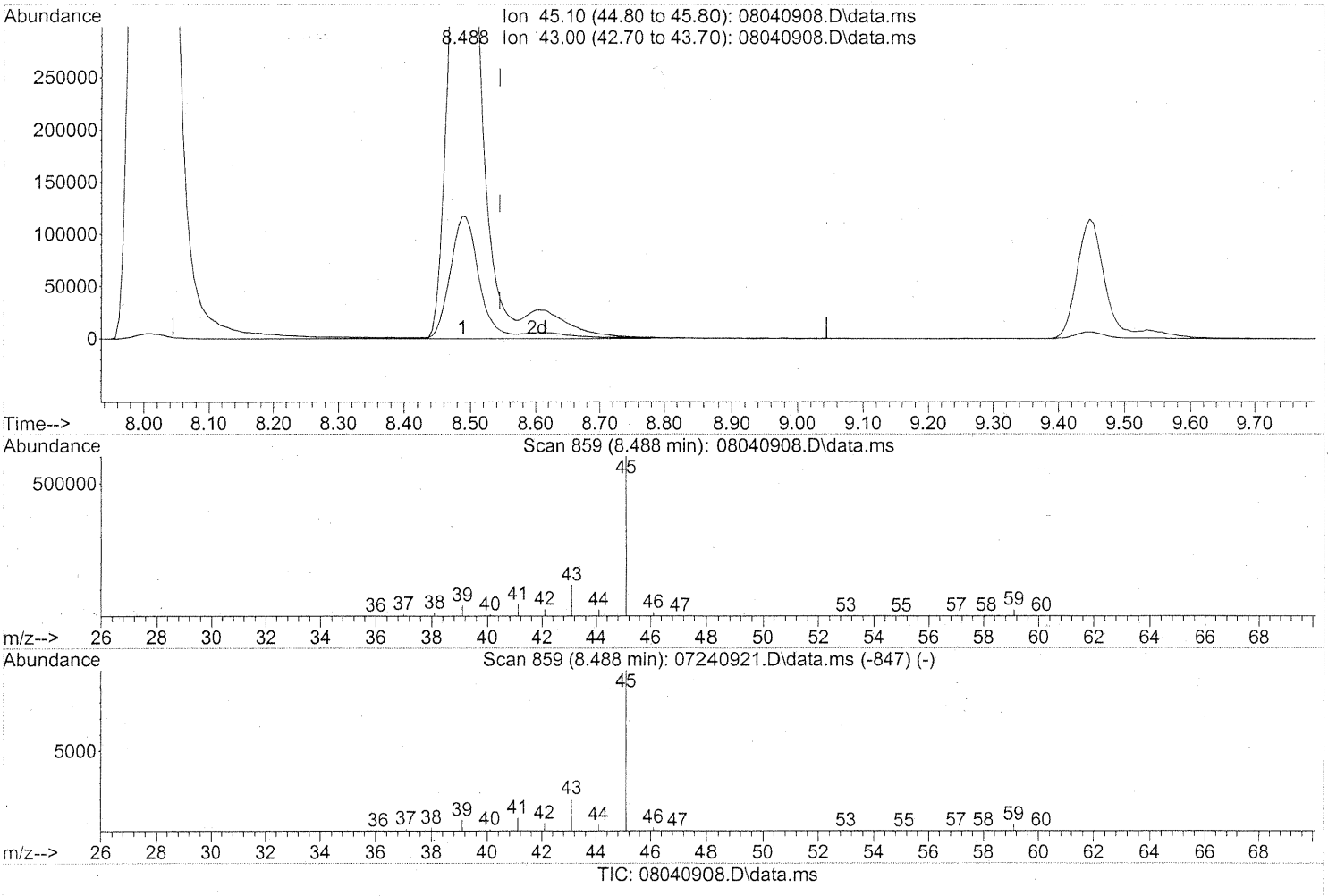
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.30
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040908.D
Acq On : 4 Aug 2009 11:42
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:08:39 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08040908.D\data.ms

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

8.488min (-0.057) 41.31ng m

response 1916667

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.91
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

8/4/09

8/14/09

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INITIAL CALIBRATION STANDARDS

Response Factor Report MS09

Method Path : J:\MS09\Methods\
Method File : R9072409.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Mon Jul 27 09:38:25 2009
Response Via : Initial Calibration

Calibration Files
0.1 =07240916.D 0.2 =07240917.D 0.5 =07240918.D 1.0 =07240919.D 5.0 =07240920.D 25 =07240921.D
50 =07240922.D 100 =07240923.D

		Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
1)	IR	Bromochloromethane...	----------	ISTD	----------							
2)	T	Propene	1.794	1.486	1.396	1.219	1.436	1.447	1.853	1.986	1.577	16.89
3)	T	Dichlorodifluo...	3.537	3.076	3.603	3.161	2.884	2.858	3.054	3.007	3.148	8.88
4)	T	Chloromethane	2.781	2.370	2.672	2.394	2.035	2.202	2.316	2.088	2.357	11.13
5)	T	1,2-Dichloro-1...	1.946	1.806	2.019	1.796	1.557	1.630	1.697	1.730	1.773	8.70
6)	T	Vinyl Chloride	2.708	2.470	2.879	2.522	2.266	2.342	2.427	2.488	2.513	7.85
7)	T	1,3-Butadiene	1.983	1.573	1.880	1.696	1.552	1.740	1.952	2.078	1.807	10.83
8)	T	Bromomethane	1.446	1.457	1.654	1.505	1.333	1.471	1.480	1.511	1.482	5.99
9)	T	Chloroethane	1.331	1.184	1.451	1.275	1.171	1.193	1.209	1.244	1.257	7.54
10)	T	Ethanol	1.013	0.956	1.027	0.945	1.005	0.984	1.177	1.266	1.046	10.88
11)	T	Acetonitrile	2.542	2.514	2.473	2.336	2.187	2.200	2.305	2.372	2.366	5.73
12)	T	Acrolein	0.685	0.765	0.791	0.739	0.716	0.770	0.813	0.824	0.763	6.27
13)	T	Acetone	1.372	1.147	1.220	1.058	0.962	1.098	1.269	1.397	1.190	12.82
14)	T	Trichlorofluor...	2.837	2.656	3.100	2.728	2.533	2.648	2.747	2.686	2.742	6.17
15)	T	2-Propanol (Is...	3.373	3.235	3.828	3.570	2.587	3.065	2.721	2.678	3.132	14.39
16)	T	Acrylonitrile	1.046	1.279	1.611	1.589	1.618	1.784	1.920	1.928	1.597	19.13
17)	T	1,1-Dichloroet...	1.330	1.294	1.585	1.415	1.274	1.389	1.440	1.442	1.396	7.14
18)	T	2-Methyl-2-Pro...	3.658	3.353	3.878	3.622	3.375	3.875	2.930		3.527	9.55
19)	T	Methylene Chlo...	2.023	1.652	1.688	1.519	1.334	1.444	1.489	1.458	1.576	13.55
20)	T	3-Chloro-1-pro...	1.454	1.441	1.759	1.617	1.578	1.836	1.945	1.978	1.701	12.35
21)	T	Trichlorotrifl...	1.242	1.176	1.421	1.248	1.152	1.254	1.264	1.192	1.244	6.62
22)	T	Carbon Disulfide	6.067	5.168	5.714	5.186	4.758	5.190	5.398	5.463	5.368	7.37
23)	T	trans-1,2-Dich...	1.929	1.908	2.243	2.080	1.893	2.062	2.125	2.141	2.048	6.16
24)	T	1,1-Dichloroet...	2.455	2.414	2.763	2.501	2.308	2.468	2.532	2.528	2.496	5.20
25)	T	Methyl tert-Bu...	4.401	4.228	4.705	4.237	4.051	4.387	4.570	4.636	4.402	5.12
26)	T	Vinyl Acetate			0.195	0.209	0.238	0.340	0.368	0.354	0.284	27.72
27)	T	2-Butanone (MEK)			0.822	0.799	0.877	1.044	1.094	0.812	0.908	14.14
28)	T	cis-1,2-Dichlo...	1.979	1.771	2.186	1.925	1.801	1.979	2.073	2.094	1.976	7.22
29)	T	Diisopropyl Ether	1.375	1.153	1.410	1.266	1.182	1.410	1.623	1.871	1.411	16.89
30)	T	Ethyl Acetate			0.460	0.422	0.464	0.605	0.730	0.887	0.595	30.87
31)	T	n-Hexane	2.629	2.323	2.621	2.357	2.220	2.683	3.232	3.931	2.750	20.75

cm 7/27/09

Method Path : J:\MS09\Methods\
Method File : R9072409.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

32)	T	Chloroform	2.548	2.329	2.754	2.496	2.277	2.475	2.555	2.543	2.497	5.89
33)	S	1,2-Dichloroet...	1.769	1.784	1.775	1.760	1.747	1.754	1.769	1.791	1.769	0.84
34)	T	Tetrahydrofura...	0.531	0.746	0.978	0.876	0.856	0.935	0.955	0.968	0.856	17.73
35)	T	Ethyl tert-But...	1.666	1.686	2.015	1.873	1.729	1.943	2.069	2.152	1.892	9.73
36)	T	1,2-Dichloroet...	1.979	1.908	2.184	1.983	1.852	2.010	2.059	2.039	2.002	4.99
37)	IR	1,4-Difluorobenzen...	----------ISTD----------									
38)	T	1,1,1-Trichlor...	0.471	0.432	0.508	0.458	0.426	0.458	0.470	0.445	0.459	5.67
39)	T	Isopropyl Acetate	0.140	0.141	0.172	0.162	0.163	0.206	0.227	0.245	0.182	21.55
40)	T	1-Butanol			0.228	0.240	0.264	0.353	0.387	0.393	0.311	24.23
41)	T	Benzene	1.757	1.358	1.373	1.212	1.096	1.226	1.313	1.330	1.333	14.59
42)	T	Carbon Tetrach...	0.393	0.345	0.421	0.392	0.365	0.401	0.414	0.402	0.392	6.42
43)	T	Cyclohexane	0.492	0.449	0.515	0.465	0.433	0.500	0.541	0.593	0.499	10.46
44)	T	tert-Amyl Meth...	0.858	0.765	0.908	0.831	0.796	0.912	0.977	1.002	0.881	9.52
45)	T	1,2-Dichloropr...	0.264	0.256	0.308	0.271	0.260	0.286	0.299	0.304	0.281	7.51
46)	T	Bromodichlorom...	0.353	0.343	0.404	0.376	0.361	0.407	0.424	0.415	0.385	7.99
47)	T	Trichloroethene	0.343	0.338	0.377	0.335	0.306	0.334	0.345	0.348	0.341	5.74
48)	T	1,4-Dioxane	0.153	0.170	0.240	0.231	0.220	0.253	0.264	0.265	0.224	18.71
49)	T	2,2,4-Trimethy...	1.444	1.212	1.359	1.217	1.139	1.254	1.323	1.387	1.292	7.99
50)	T	Methyl Methacr...		0.080	0.115	0.112	0.115	0.141	0.151	0.161	0.125	22.26
51)	T	n-Heptane	0.279	0.295	0.339	0.309	0.292	0.329	0.358	0.381	0.323	10.94
52)	T	cis-1,3-Dichlo...	0.424	0.377	0.474	0.433	0.434	0.508	0.539	0.551	0.468	13.10
53)	T	4-Methyl-2-pen...		0.157	0.232	0.224	0.239	0.285	0.306	0.324	0.252	22.62
54)	T	trans-1,3-Dich...	0.309	0.292	0.402	0.392	0.408	0.476	0.502	0.511	0.412	20.03
55)	T	1,1,2-Trichlor...	0.247	0.246	0.301	0.277	0.263	0.291	0.304	0.312	0.280	9.30
56)	IR	Chlorobenzene-d5 (...	----------ISTD----------									
57)	S	Toluene-d8 (SS2)	2.485	2.503	2.519	2.515	2.489	2.442	2.437	2.397	2.473	1.76
58)	T	Toluene	3.390	2.939	3.184	2.881	2.657	2.919	3.115	3.136	3.028	7.42
59)	T	2-Hexanone		0.758	1.131	1.201	1.265	1.509	1.628	1.624	1.302	24.07
60)	T	Dibromochlorom...	0.575	0.600	0.704	0.672	0.647	0.730	0.766	0.751	0.681	10.26
61)	T	1,2-Dibromoethane	0.643	0.614	0.739	0.703	0.670	0.735	0.759	0.748	0.701	7.62
62)	T	n-Butyl Acetate	0.933	1.002	1.357	1.368	1.422	1.692	1.841	1.966	1.448	25.60
63)	T	n-Octane	0.548	0.537	0.589	0.560	0.525	0.605	0.664	0.705	0.592	10.81
64)	T	Tetrachloroethene	0.811	0.746	0.864	0.779	0.722	0.796	0.837	0.850	0.801	6.27
65)	T	Chlorobenzene	2.024	1.828	2.002	1.841	1.708	1.868	1.973	1.993	1.905	5.83
66)	T	Ethylbenzene	3.293	3.006	3.313	3.079	2.952	3.375	3.657	3.663	3.292	8.28
67)	T	m- & p-Xylenes	2.686	2.400	2.661	2.447	2.372	2.816	3.126	3.213	2.715	11.82
68)	T	Bromoform	0.471	0.456	0.626	0.568	0.592	0.687	0.728	0.727	0.607	17.50
69)	T	Styrene	1.895	1.607	1.960	1.816	1.854	2.162	2.340	2.383	2.002	13.50
70)	T	o-Xylene	2.603	2.398	2.699	2.482	2.412	2.791	3.058	3.194	2.705	10.92

EM 7/27/09

Method Path : J:\MS09\Methods\
Method File : R9072409.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

71)	T	n-Nonane	1.277	1.111	1.298	1.175	1.173	1.398	1.544	1.587	1.320	13.32
72)	T	1,1,2,2-Tetrac...	1.018	0.883	1.063	1.033	1.038	1.214	1.335	1.414	1.125	15.96
73)	S	Bromofluoroben...	0.737	0.731	0.740	0.736	0.769	0.757	0.751	0.727	0.744	1.92
74)	T	Cumene	3.588	3.231	3.600	3.357	3.198	3.691	4.059	4.011	3.592	9.08
75)	T	alpha-Pinene	1.514	1.418	1.665	1.568	1.565	1.838	2.038	2.125	1.717	14.99
76)	T	n-Propylbenzene	4.211	3.812	4.310	4.002	3.947	4.651	5.109	4.570	4.326	9.98
77)	T	3-Ethyltoluene	3.178	2.858	3.302	3.122	3.078	3.673	3.985	4.034	3.404	12.92
78)	T	4-Ethyltoluene	3.346	2.973	3.357	3.108	3.079	3.602	4.104	3.757	3.416	11.27
79)	T	1,3,5-Trimethy...	2.741	2.413	2.743	2.568	2.536	2.987	3.354	3.384	2.841	12.97
80)	T	alpha-Methylst...	1.384	1.205	1.445	1.419	1.465	1.757	1.968	2.067	1.589	19.25
81)	T	2-Ethyltoluene	3.402	2.994	3.444	3.250	3.233	3.833	4.262	4.108	3.566	12.67
82)	T	1,2,4-Trimethy...	2.719	2.481	2.777	2.646	2.728	3.589	4.349	4.130	3.177	23.16
83)	T	n-Decane	1.333	1.204	1.401	1.302	1.353	1.706	1.959	2.021	1.535	20.63
84)	T	Benzyl Chloride	1.558	1.428	1.796	1.866	2.191	2.801	3.252	3.326	2.277	33.08 ✓
85)	T	1,3-Dichlorobe...	1.568	1.419	1.597	1.505	1.504	1.722	1.951	2.076	1.668	13.96
86)	T	1,4-Dichlorobe...	1.722	1.460	1.671	1.595	1.572	1.783	2.006	2.093	1.738	12.50
87)	T	sec-Butylbenzene	3.773	3.358	3.895	3.614	3.650	4.332	4.881	4.275	3.972	12.41
88)	T	4-Isopropyltol...	3.488	3.227	3.682	3.465	3.573	4.572	5.554	4.476	4.005	19.79
89)	T	1,2,3-Trimethy...	2.693	2.483	2.871	2.723	2.812	3.636	4.486	4.179	3.235	23.51
90)	T	1,2-Dichlorobe...	1.552	1.346	1.595	1.475	1.498	1.804	2.186	2.411	1.733	21.73
91)	T	d-Limonene		0.858	1.008	0.978	1.090	1.444	1.722	1.736	1.262	29.05
92)	T	1,2-Dibromo-3-...	0.337	0.342	0.455	0.463	0.499	0.546	0.619	0.633	0.487	22.96
93)	T	n-Undecane	1.381	1.214	1.361	1.300	1.387	1.738	2.062	2.129	1.572	22.75
94)	T	1,2,4-Trichlor...	1.048	0.959	1.074	1.018	1.042	1.054	1.289	1.463	1.118	15.12
95)	T	Naphthalene	3.861	3.316	3.739	3.606	3.775	3.807	4.683	4.402	3.899	11.24
96)	T	n-Dodecane	1.459	1.273	1.398	1.381	1.491	1.766	2.237	2.430	1.679	25.66
97)	T	Hexachlorobuta...	0.567	0.537	0.610	0.584	0.595	0.616	0.744	0.866	0.640	17.16
98)	T	Cyclohexanone	0.910	0.749	0.808	0.832	0.838	1.006	1.076	1.086	0.913	14.07
99)	T	tert-Butylbenzene	2.870	2.522	2.909	2.736	2.755	3.533	4.220	4.144	3.211	20.75
100)	T	n-Butylbenzene	2.788	2.549	3.005	2.841	2.938	3.508	3.992	3.683	3.163	15.92

(#) = Out of Range

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Cam 7/27/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-07240814
20ng/L Std. ID: S20-07240909
200ng/L Std. ID: S20-07240905
Dilution Factors: 5 50 250

Compounds	Source Std. mg/m³	Primary Working Standards 200ng/L	20ng/L	4ng/L	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source) 4	4	20	20	20	200	200	200
					Injection (L):	0.025	0.05	0.025	0.050	0.25	0.125	0.25	0.50
					ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Propene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Dichlorodifluoromethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
Chloromethane	1.00	200	20.0	4.00		0.100	0.200	0.500	1.00	5.00	25.0	50.0	100
Freon-114	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
Vinyl Chloride	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
1,3-Butadiene	1.20	240	24.0	4.80		0.120	0.240	0.600	1.20	6.00	30.0	60.0	120
Bromomethane	1.02	204	20.4	4.08		0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
Chloroethane	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
Ethanol	5.20	1040	104	20.8		0.520	1.040	2.60	5.20	26.0	130	260	520
Acetonitrile	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
Acrolein	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Acetone	5.50	1100	110	22.0		0.550	1.100	2.75	5.50	27.5	138	275	550
Trichlorofluoromethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
Isopropanol	1.89	378	37.8	7.56		0.189	0.378	0.945	1.89	9.45	47.3	94.5	189
Acrylonitrile	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,1-Dichloroethene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
tert-Butanol	2.02	404	40.4	8.08		0.202	0.404	1.01	2.02	10.1	50.5	101	202
Methylene Chloride	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Allyl Chloride	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Trichlorotrifluoroethane	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
Carbon Disulfide	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
trans-1,2-Dichloroethene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,1-Dichloroethane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
Methyl tert-Butyl Ether	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
Vinyl Acetate	5.02	1004	100	20.1		0.502	1.004	2.51	5.02	25.1	126	251	502
2-Butanone	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
cis-1,2-Dichloroethene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
Diisopropyl Ether	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Ethyl Acetate	2.13	426	42.6	8.52		0.213	0.426	1.07	2.13	10.7	53.3	107	213
n-Hexane	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
Chloroform	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Tetrahydrofuran	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
Ethyl tert-Butyl Ether	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
1,2-Dichloroethane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,1,1-Trichloroethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
Isopropyl Acetate	2.09	418	41.8	8.36		0.209	0.418	1.05	2.09	10.5	52.3	105	209
1-Butanol	2.07	414	41.4	8.28		0.207	0.414	1.04	2.07	10.4	51.8	104	207
Benzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
Carbon Tetrachloride	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Cyclohexane	2.15	430	43.0	8.60		0.215	0.430	1.08	2.15	10.8	53.8	108	215
tert-Amyl Methyl Ether	1.04	208	20.8	4.16		0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
1,2-Dichloropropane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
Bromodichloromethane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Trichloroethene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,4-Dioxane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Isooctane	1.04	208	20.8	4.16		0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
Methyl Methacrylate	2.13	426	42.6	8.52		0.213	0.426	1.07	2.13	10.7	53.3	107	213
n-Heptane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
cis-1,3-Dichloropropene	0.99	198	19.8	3.96		0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0
4-Methyl-2-pentanone	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
trans-1,3-Dichloropropene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
1,1,2-Trichloroethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
Toluene	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
2-Hexanone	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
Dibromochloromethane	1.15	230	23.0	4.60		0.115	0.230	0.575	1.15	5.75	28.8	57.5	115
1,2-Dibromoethane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Butyl Acetate	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
n-Octane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Tetrachloroethene	1.02	204	20.4	4.08		0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
Chlorobenzene	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Ethylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
m-&p-Xylene	2.08	416	41.6	8.32		0.208	0.416	1.04	2.08	10.4	52.0	104	208

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Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-07240914
20ng/L Std. ID: S20-07240909
200ng/L Std. ID: S20-07240905
Dilution Factors: 5 50 250

Compounds	Source Std. mg/m^3	Primary Working Standards 200ng/L	20ng/L	4ng/L	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source) 4	4	20	20	20	200	200	200
					Injection (L):	0.025	0.050	0.025	0.05	0.25	0.125	0.25	0.50
					ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Bromoform	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
Styrene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
o-Xylene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Nonane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,1,2,2-Tetrachloroethane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Cumene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
alpha-Pinene	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
n-Propylbenzene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
3-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
4-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,3,5-Trimethylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
alpha-Methylstyrene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
2-Ethyltoluene	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
1,2,4-Trimethylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Decane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Benzyl Chloride	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
1,3-Dichlorobenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,4-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
sec-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
p-Isopropyltoluene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
1,2,3-Trimethylbenzene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
1,2-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
d-Limonene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
chloropropane	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
n-Undecane	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,2,4-Trichlorobenzene	1.12	224	22.4	4.48		0.112	0.224	0.560	1.12	5.60	28.0	56.0	112
Naphthalene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Dodecane	0.99	198	19.8	3.96		0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0
Hexachloro-1,3-butadiene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
Methacrylonitrile	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
Cyclohexanone	0.98	196	19.6	3.92		0.098	0.196	0.490	0.980	4.90	24.5	49.0	98.0
tert-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Butylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109

*Enter Information in the Solid Shaded Areas ONLY.

tm 7/27/09

Calibration Status Report MS09

Method Path : J:\MS09\Methods\
Method File : R9072409.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Mon Jul 27 09:38:25 2009
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS09\Data\2009_07\24\07240916.D
2	0.2	0	25	J:\MS09\Data\2009_07\24\07240917.D
3	0.5	1	25	J:\MS09\Data\2009_07\24\07240918.D
4	1.0	1	25	J:\MS09\Data\2009_07\24\07240919.D
5	5.0	5	25	J:\MS09\Data\2009_07\24\07240920.D
6	25	27	25	J:\MS09\Data\2009_07\24\07240921.D
7	50	54	25	J:\MS09\Data\2009_07\24\07240922.D
8	100	107	25	J:\MS09\Data\2009_07\24\07240923.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Jul 27 09:18 2009	Jul 27 08:59 2009	24 Jul 2009 20:46
2	0.2	Jul 27 09:19 2009	Jul 27 09:03 2009	24 Jul 2009 21:28
3	0.5	Jul 27 09:20 2009	Jul 27 09:04 2009	24 Jul 2009 22:10
4	1.0	Jul 27 09:20 2009	Jul 27 09:06 2009	24 Jul 2009 22:51
5	5.0	Jul 27 09:20 2009	Jul 27 09:09 2009	24 Jul 2009 23:33
6	25	Jul 27 09:21 2009	Jul 27 09:12 2009	25 Jul 2009 00:14
7	50	Jul 27 09:21 2009	Jul 27 09:13 2009	25 Jul 2009 00:56
8	100	Jul 27 09:21 2009	Jul 27 09:14 2009	25 Jul 2009 1:38

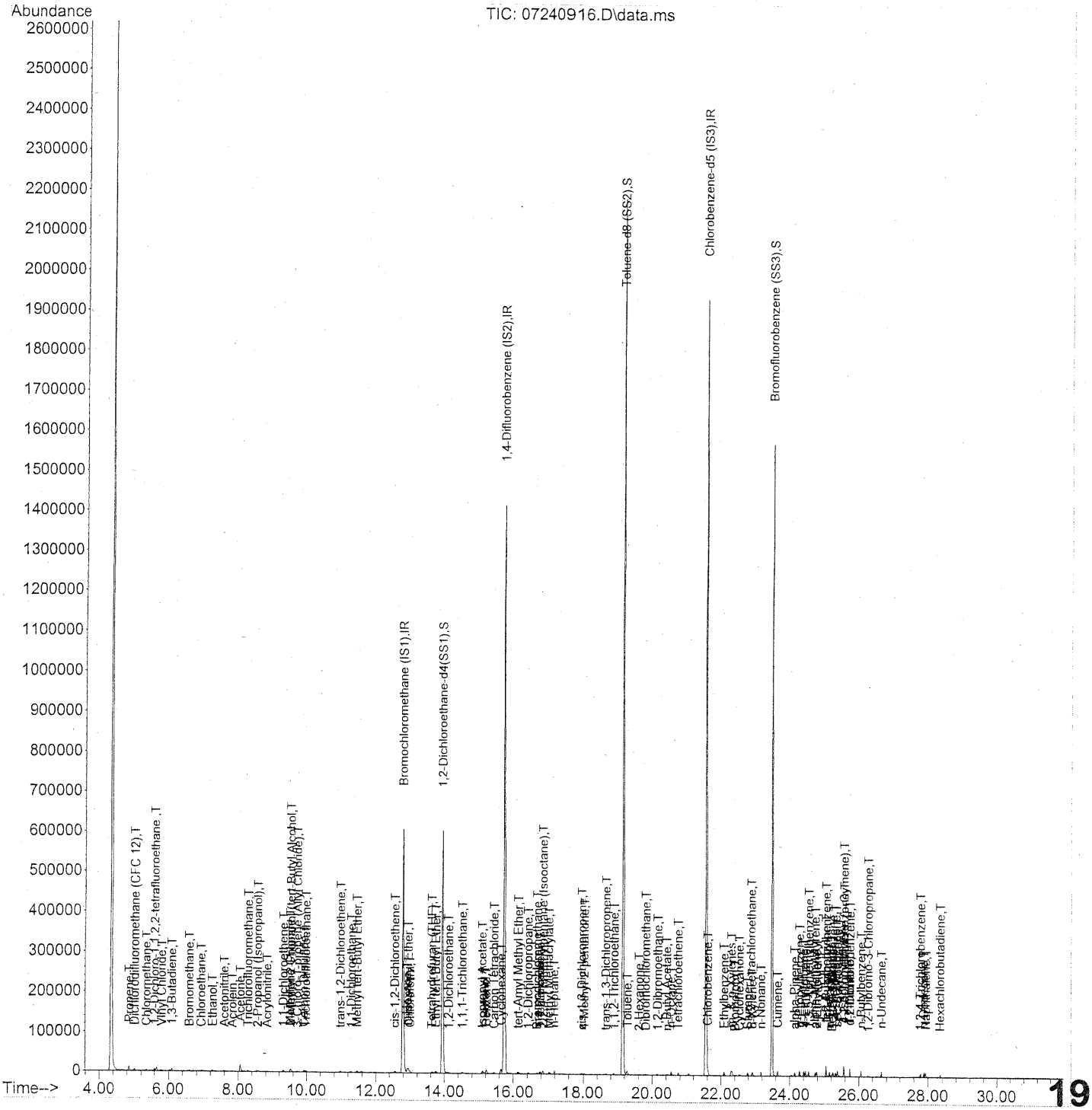
R9072409.M Mon Jul 27 09:49:58 2009

cm 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240916.D
Acq On : 24 Jul 2009 20:46
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 08:59:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240916.D
Acq On : 24 Jul 2009 20:46
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 08:59:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.79	130	337880	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.74	114	1691887	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	769516	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	597763	20.213	ng		-0.02
Spiked Amount 25.000			Recovery = 80.84%				
57) Toluene-d8 (SS2)	19.14	98	1912000	27.464	ng		0.00
Spiked Amount 25.000			Recovery = 109.84%				
73) Bromofluorobenzene (SS3)	23.49	174	567494	28.491	ng		0.00
Spiked Amount 25.000			Recovery = 113.96%				
Target Compounds							Qvalue
2) Propene	4.87	42	2594	0.137	ng		96
3) Dichlorodifluoromethan...	5.01	85	5020	0.131	ng	#	88
4) Chloromethane	5.36	50	3758	0.119	ng		88
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	2788	0.127	ng		87
6) Vinyl Chloride	5.81	62	3697	0.102	ng		93
7) 1,3-Butadiene	6.10	54	3216	0.112	ng		95
8) Bromomethane	6.59	94	1994	0.091	ng		91
9) Chloroethane	6.93	64	1817	0.115	ng	#	55
10) Ethanol	7.26	45	7120	0.538	ng		69
11) Acetonitrile	7.60	41	3608	0.114	ng		91
12) Acrolein	7.84	56	1000	0.086	ng	#	60
13) Acetone	8.07	58	10195	0.624	ng		99
14) Trichlorofluoromethane	8.29	101	4026	0.108	ng		95
15) 2-Propanol (Isopropanol)	8.56	45	8615	0.170	ng		81
16) Acrylonitrile	8.84	53	1499	0.061	ng		91
17) 1,1-Dichloroethene	9.32	96	1978	0.108	ng	#	81
18) 2-Methyl-2-Propanol (t...	9.53	59	9987	0.181	ng	#	84
19) Methylene Chloride	9.52	84	2926	0.141	ng		99
20) 3-Chloro-1-propene (Al...	9.73	41	2122	0.079	ng	#	58
21) Trichlorotrifluoroethane	9.98	151	1847	0.132	ng		98
22) Carbon Disulfide	9.92	76	8774	0.134	ng		79
23) trans-1,2-Dichloroethene	10.98	61	2763	0.101	ng		96
24) 1,1-Dichloroethane	11.30	63	3517	0.096	ng		84
25) Methyl tert-Butyl Ether	11.46	73	6484	0.104	ng		95
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	11.98	72	112	N.D.			
28) cis-1,2-Dichloroethene	12.56	61	2915	0.110	ng		97
29) Diisopropyl Ether	12.94	87	1988	0.111	ng	#	60
30) Ethyl Acetate	12.96	61	266	N.D.			
31) n-Hexane	12.92	57	3873	0.118	ng		80

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240916.D
Acq On : 24 Jul 2009 20:46
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 08:59:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.00	83	3685	0.106	ng		94
34) Tetrahydrofuran (THF)	13.63	72	790m	0.063	ng		
35) Ethyl tert-Butyl Ether	13.75	87	2319	0.088	ng	#	83
36) 1,2-Dichloroethane	14.13	62	2835	0.094	ng	#	49
38) 1,1,1-Trichloroethane	14.52	97	3347	0.103	ng		91
39) Isopropyl Acetate	15.10	61	1987	0.163	ng	#	55
40) 1-Butanol	15.18	56	1843	0.092	ng	#	78
41) Benzene	15.22	78	12606	0.144	ng		92
42) Carbon Tetrachloride	15.45	117	2870	0.112	ng		92
43) Cyclohexane	15.65	84	7158	0.210	ng		95
44) tert-Amyl Methyl Ether	16.14	73	6042	0.101	ng	#	74
45) 1,2-Dichloropropane	16.43	63	1875	0.101	ng		87
46) Bromodichloromethane	16.69	83	2582	0.099	ng		93
47) Trichloroethene	16.77	130	2460	0.127	ng		92
48) 1,4-Dioxane	16.77	88	1107	0.076	ng	#	63
49) 2,2,4-Trimethylpentane...	16.86	57	10166	0.119	ng		95
50) Methyl Methacrylate	17.04	100	907	0.123	ng	#	51
51) n-Heptane	17.20	71	2001	0.093	ng		93
52) cis-1,3-Dichloropropene	17.95	75	2842	0.089	ng		74
53) 4-Methyl-2-pentanone	18.03	58	1068	0.062	ng	#	31
54) trans-1,3-Dichloropropene	18.65	75	2298	0.077	ng		69
55) 1,1,2-Trichloroethane	18.89	97	1754	0.101	ng		97
58) Toluene	19.28	91	11269	0.150	ng		95
59) 2-Hexanone	19.62	43	2184	0.057	ng		82
60) Dibromochloromethane	19.82	129	2034	0.131	ng		87
61) 1,2-Dibromoethane	20.16	107	2097	0.125	ng		98
62) n-Butyl Acetate	20.42	43	3158	0.073	ng	#	70
63) n-Octane	20.55	57	1806	0.115	ng		90
64) Tetrachloroethene	20.75	166	2547	0.152	ng		100
65) Chlorobenzene	21.61	112	6728	0.153	ng		97
66) Ethylbenzene	22.09	91	10743	0.131	ng		100
67) m- & p-Xylenes	22.31	91	17195	0.252	ng		99
68) Bromoform	22.41	173	1493	0.114	ng	#	65
69) Styrene	22.78	104	6241	0.139	ng		94
70) o-Xylene	22.92	91	8494	0.126	ng		100
71) n-Nonane	23.17	43	4165	0.113	ng		89
72) 1,1,2,2-Tetrachloroethane	22.88	83	3354	0.121	ng		95
74) Cumene	23.65	105	11374	0.137	ng		96
75) alpha-Pinene	24.15	93	4706	0.115	ng		91
76) n-Propylbenzene	24.28	91	13350	0.127	ng		96
77) 3-Ethyltoluene	24.40	105	10663	0.136	ng		100
78) 4-Ethyltoluene	24.46	105	11227	0.147	ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	9196	0.141	ng		95

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240916.D
Acq On : 24 Jul 2009 20:46
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 08:59:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	4559	0.137	ng		94
81) 2-Ethyltoluene	24.79	105	10995	0.135	ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	8870	0.121	ng		99
83) n-Decane	25.15	57	4431	0.111	ng		94
84) Benzyl Chloride	25.22	91	5275	0.096	ng		92
85) 1,3-Dichlorobenzene	25.25	146	5262	0.158	ng		99
86) 1,4-Dichlorobenzene	25.33	146	5617	0.164	ng		89
87) sec-Butylbenzene	25.38	105	12310	0.137	ng		98
88) 4-Isopropyltoluene (p-...	25.56	119	11057	0.125	ng		98
89) 1,2,3-Trimethylbenzene	25.57	105	8869	0.123	ng		96
90) 1,2-Dichlorobenzene	25.74	146	5064	0.152	ng		95
91) d-Limonene	25.74	68	2751	0.103	ng		97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	1142	0.111	ng		85
93) n-Undecane	26.65	57	4632	0.122	ng		96
94) 1,2,4-Trichlorobenzene	27.79	180	3614	0.181	ng		96
95) Naphthalene	27.94	128	12598	0.168	ng		97
96) n-Dodecane	27.89	57	4445	0.106	ng		93
97) Hexachlorobutadiene	28.35	225	1920	0.153	ng		93
98) Cyclohexanone	22.54	55	2746	0.117	ng	#	87
99) tert-Butylbenzene	25.05	119	9363	0.131	ng		97
100) n-Butylbenzene	26.06	91	9355	0.124	ng		99

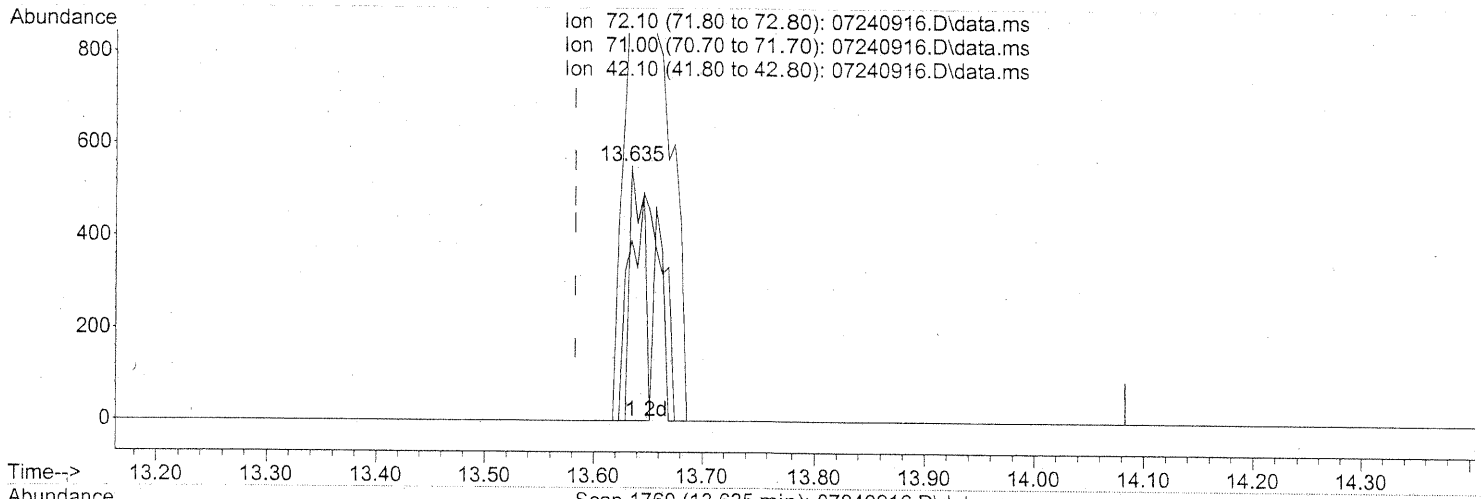
(#) = qualifier out of range (m) = manual integration (+) = signals summed

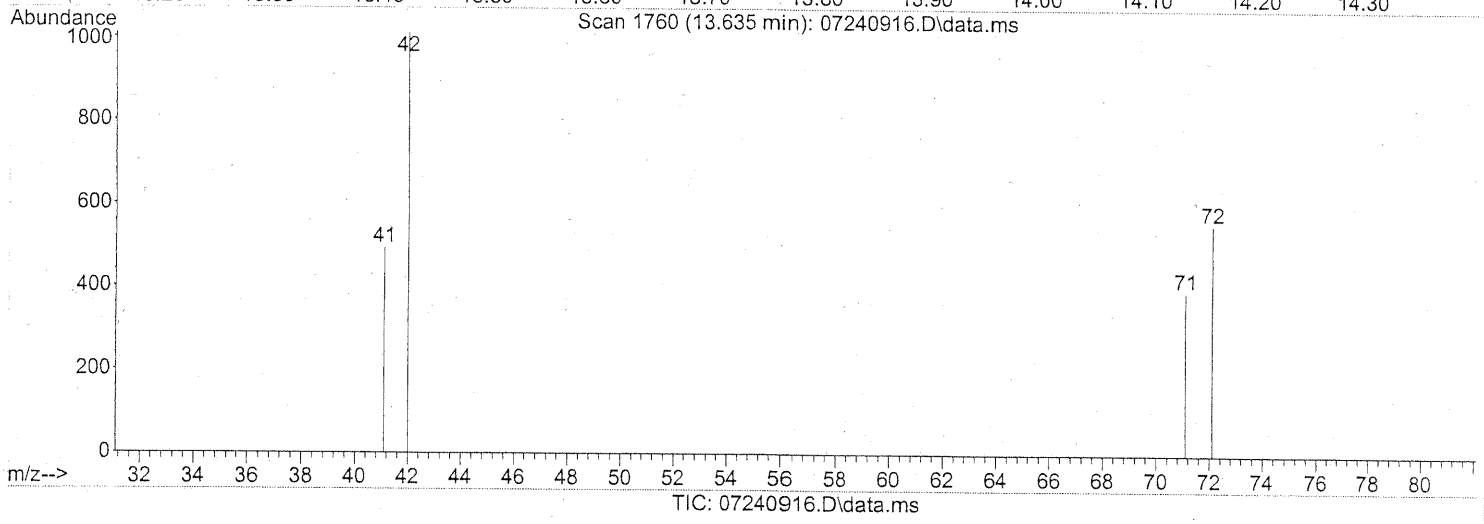
em 7/27/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240916.D
Acq On : 24 Jul 2009 20:46
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 08:54:12 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration





TIC: 07240916.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.635min (+0.051) 0.04ng

response 505

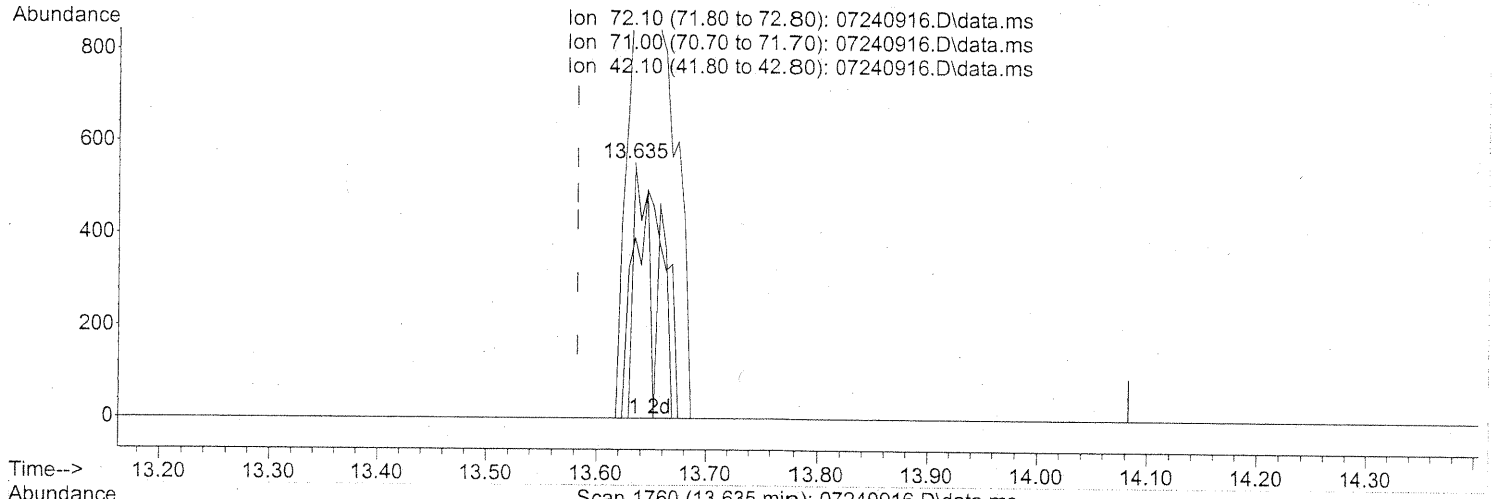
Ion	Exp%	Act%
72.10	100	100
71.00	95.20	0.00#
42.10	206.50	0.00#
0.00	0.00	0.00

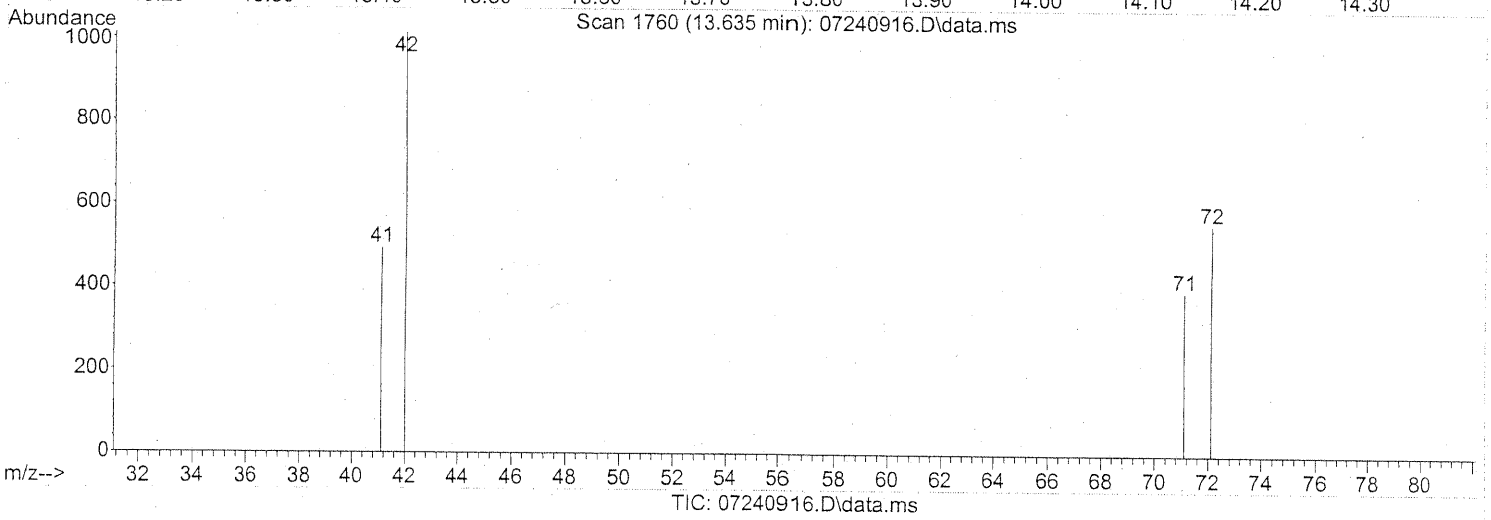
SP

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240916.D
Acq On : 24 Jul 2009 20:46
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 08:54:12 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration





TIC: 07240916.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.635min (+0.051) 0.06ng m

response 790

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

SP → IC
EM 7/27/09

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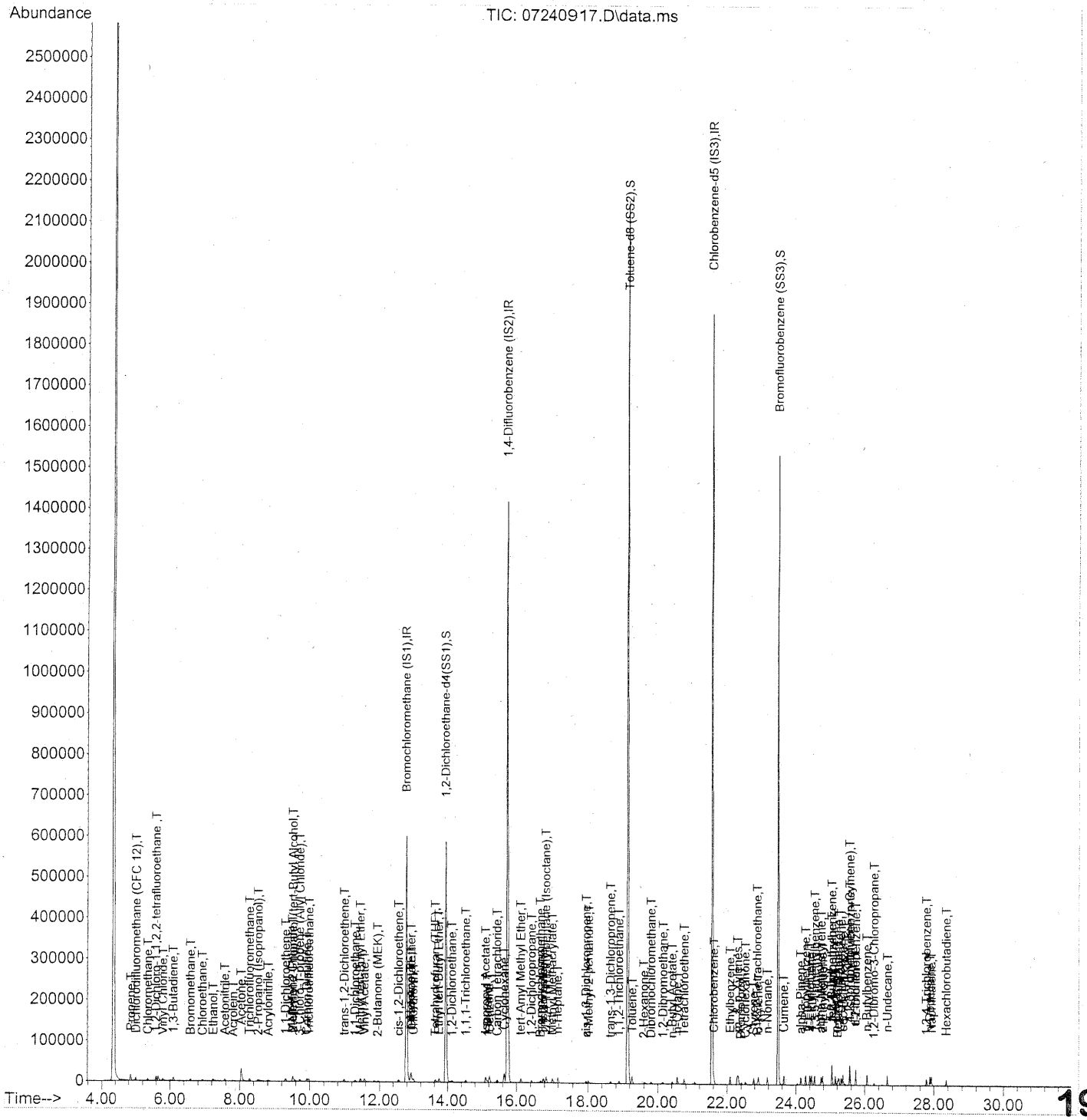
Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240917.D
Acq On : 24 Jul 2009 21:28
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:03:38 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ath : J:\MS09\Data\2009_07\24\
ile : 07240917.D
: 24 Jul 2009 21:28
or : EM
: 0.2ng TO-15 ICAL STD
: S20-07200901/S20-07240914
al : 5 Sample Multiplier: 1

Time: Jul 27 09:03:38 2009
Method : J:\MS09\Methods\R9072409.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Update : Mon Jul 27 08:47:52 2009
se via : Initial Calibration

nal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
Bromochloromethane (IS1)	12.80	130	328864	25.000	ng		-0.02
1,4-Difluorobenzene (IS2)	15.74	114	1673819	25.000	ng		-0.01
Chlorobenzene-d5 (IS3)	21.56	82	753097	25.000	ng		0.00
m Monitoring Compounds							
1,2-Dichloroethane-d4(...	13.95	65	586718	20.383	ng		-0.02
ked Amount 25.000			Recovery =	81.52%			
Toluene-d8 (SS2)	19.15	98	1885003	27.667	ng		0.00
ked Amount 25.000			Recovery =	110.68%			
Bromofluorobenzene (SS3)	23.49	174	550535	28.242	ng		0.00
ked Amount 25.000			Recovery =	112.96%			
t Compounds							Qvalue
Propene	4.87	42	4182	0.228	ng		95
Dichlorodifluoromethan...	5.01	85	8498	0.227	ng		95
Chloromethane	5.35	50	6234	0.203	ng		92
1,2-Dichloro-1,1,2,2-t...	5.60	135	5036	0.236	ng		93
Vinyl Chloride	5.80	62	6564	0.187	ng		98
1,3-Butadiene	6.09	54	4965	0.178	ng		95
Bromomethane	6.59	94	3910	0.184	ng		99
Chloroethane	6.93	64	3145	0.204	ng		89
Ethanol	7.24	45	13078m	1.014	ng		
Acetonitrile	7.58	41	6945	0.226	ng		96
Acrolein	7.82	56	2173	0.191	ng	#	75
Acetone	8.05	58	16593	1.043	ng		99
Trichlorofluoromethane	8.28	101	7336	0.203	ng		97
2-Propanol (Isopropanol)	8.53	45	16088	0.325	ng		75
Acrylonitrile	8.82	53	3568	0.150	ng		94
1,1-Dichloroethene	9.32	96	3745	0.210	ng		96
2-Methyl-2-Propanol (t...	9.53	59	17821	0.331	ng		90
Methylene Chloride	9.51	84	4650	0.230	ng		99
3-Chloro-1-propene (Al...	9.72	41	4094	0.157	ng		82
Trichlorotrifluoroethane	9.98	151	3404	0.249	ng		96
Carbon Disulfide	9.92	76	14549	0.229	ng		92
trans-1,2-Dichloroethene	10.99	61	5322	0.200	ng		99
1,1-Dichloroethane	11.30	63	6732	0.189	ng		97
Methyl tert-Butyl Ether	11.45	73	12124	0.199	ng		95
Vinyl Acetate	11.57	86	1167	0.226	ng	#	1
2-Butanone (MEK)	11.95	72	1408m	0.110	ng		
cis-1,2-Dichloroethene	12.57	61	5080	0.197	ng		98
Diisopropyl Ether	12.94	87	3245	0.186	ng	#	89
Ethyl Acetate	12.94	61	1369	0.203	ng		84
n-Hexane	12.92	57	6663	0.209	ng		90

.M Mon Jul 27 09:04:41 2009 tm 7/27/09 Page: 1

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240917.D
Acq On : 24 Jul 2009 21:28
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:03:38 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.00	83	6555	0.194	ng		100
34) Tetrahydrofuran (THF)	13.63	72	2160	0.177	ng	#	83
35) Ethyl tert-Butyl Ether	13.74	87	4569	0.179	ng		91
36) 1,2-Dichloroethane	14.13	62	5322	0.181	ng		92
38) 1,1,1-Trichloroethane	14.53	97	6067	0.188	ng		96
39) Isopropyl Acetate	15.11	61	3949	0.328	ng	#	72
40) 1-Butanol	15.17	56	4833	0.243	ng	#	76
41) Benzene	15.23	78	19281	0.222	ng		100
42) Carbon Tetrachloride	15.45	117	4987	0.196	ng		99
43) Cyclohexane	15.65	84	12914	0.384	ng		99
44) tert-Amyl Methyl Ether	16.13	73	10650	0.179	ng		100
45) 1,2-Dichloropropane	16.43	63	3593	0.196	ng		96
46) Bromodichloromethane	16.69	83	4966	0.193	ng		88
47) Trichloroethene	16.77	130	4800	0.250	ng		96
48) 1,4-Dioxane	16.77	88	2438	0.169	ng		94
49) 2,2,4-Trimethylpentane...	16.85	57	16874	0.200	ng		97
50) Methyl Methacrylate	17.03	100	2276	0.313	ng	#	83
51) n-Heptane	17.20	71	4194	0.197	ng		95
52) cis-1,3-Dichloropropene	17.95	75	4994	0.158	ng		86
53) 4-Methyl-2-pentanone	18.03	58	2313	0.136	ng		83
54) trans-1,3-Dichloropropene	18.65	75	4296	0.146	ng		84
55) 1,1,2-Trichloroethane	18.88	97	3458	0.201	ng		92
58) Toluene	19.28	91	19125	0.260	ng		99
59) 2-Hexanone	19.61	43	5022	0.133	ng		87
60) Dibromochloromethane	19.82	129	4160	0.274	ng		95
61) 1,2-Dibromoethane	20.15	107	3924	0.239	ng		100
62) n-Butyl Acetate	20.42	43	6641	0.156	ng		85
63) n-Octane	20.56	57	3461	0.226	ng		96
64) Tetrachloroethene	20.75	166	4582	0.280	ng		99
65) Chlorobenzene	21.62	112	11897	0.277	ng		97
66) Ethylbenzene	22.09	91	19198	0.239	ng		97
67) m- & p-Xylenes	22.31	91	30071	0.451	ng		98
68) Bromoform	22.41	173	2828	0.220	ng		86
69) Styrene	22.77	104	10358	0.236	ng		97
70) o-Xylene	22.92	91	15317	0.232	ng		97
71) n-Nonane	23.17	43	7095	0.197	ng		98
72) 1,1,2,2-Tetrachloroethane	22.88	83	5693	0.209	ng		94
74) Cumene	23.65	105	20048	0.246	ng		97
75) alpha-Pinene	24.15	93	8627	0.215	ng		91
76) n-Propylbenzene	24.28	91	23654	0.230	ng		98
77) 3-Ethyltoluene	24.40	105	18766	0.245	ng		100
78) 4-Ethyltoluene	24.46	105	19523	0.261	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	15845	0.248	ng		99

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Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240917.D
Acq On : 24 Jul 2009 21:28
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:03:38 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	7768	0.238	ng	94
81) 2-Ethyltoluene	24.79	105	18942	0.238	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	15843	0.220	ng	98
83) n-Decane	25.15	57	7832	0.200	ng	99
84) Benzyl Chloride	25.21	91	9467	0.175	ng	98
85) 1,3-Dichlorobenzene	25.25	146	9317	0.285	ng	98
86) 1,4-Dichlorobenzene	25.32	146	9326	0.278	ng	98
87) sec-Butylbenzene	25.38	105	21444	0.244	ng	99
88) 4-Isopropyltoluene (p-...	25.56	119	20027	0.231	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	16008	0.228	ng	96
90) 1,2-Dichlorobenzene	25.75	146	8598	0.263	ng	95
91) d-Limonene	25.74	68	5634	0.215	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.26	157	2268	0.225	ng	86
93) n-Undecane	26.65	57	7975	0.215	ng	98
94) 1,2,4-Trichlorobenzene	27.79	180	6470	0.332	ng	97
95) Naphthalene	27.94	128	21175	0.288	ng	97
96) n-Dodecane	27.89	57	7590	0.186	ng	99
97) Hexachlorobutadiene	28.36	225	3560	0.291	ng	98
98) Cyclohexanone	22.53	55	4421	0.193	ng	93
99) tert-Butylbenzene	25.05	119	16104	0.231	ng	100
100) n-Butylbenzene	26.06	91	16737	0.227	ng	99

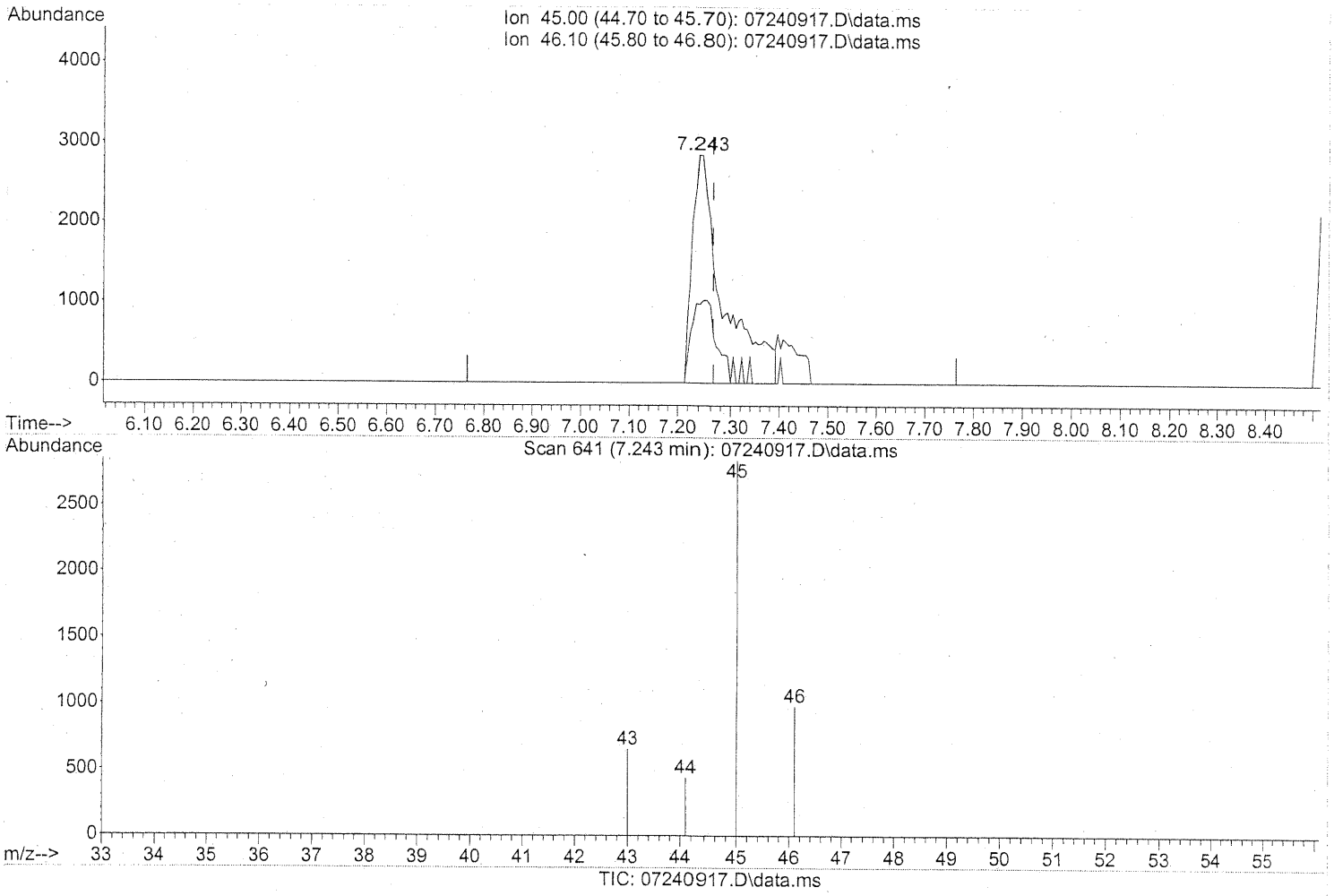
(#) = qualifier out of range (m) = manual integration (+) = signals summed

tom 7/27/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240917.D
Acq On : 24 Jul 2009 21:28
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:01:12 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.243min (-0.023) 0.88ng

response 11292

PT

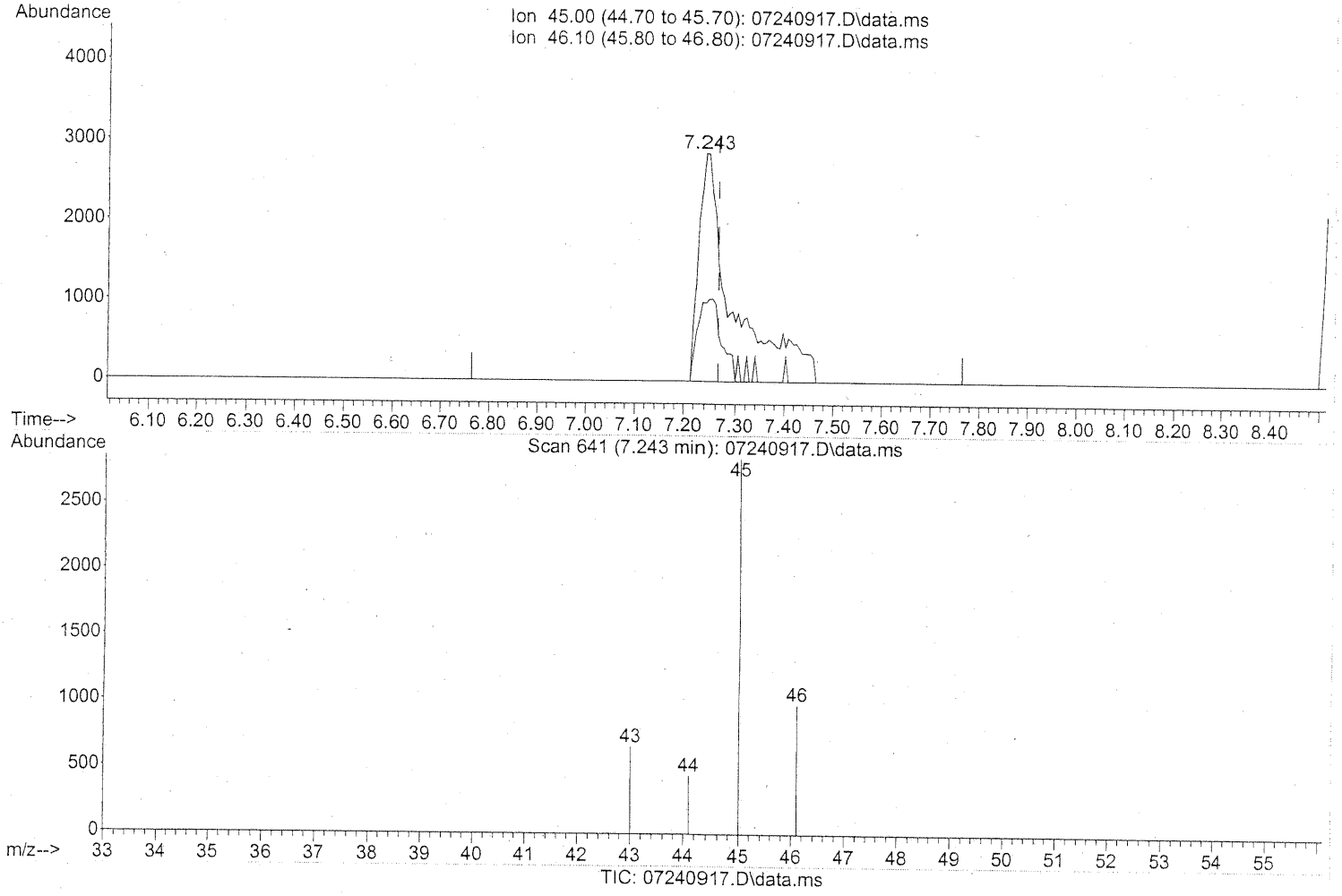
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	28.83
0.00	0.00	0.00
0.00	0.00	0.00

201

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240917.D
Acq On : 24 Jul 2009 21:28
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:01:12 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.243min (-0.023) 1.01ng m

response 13078

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	24.90
0.00	0.00	0.00
0.00	0.00	0.00

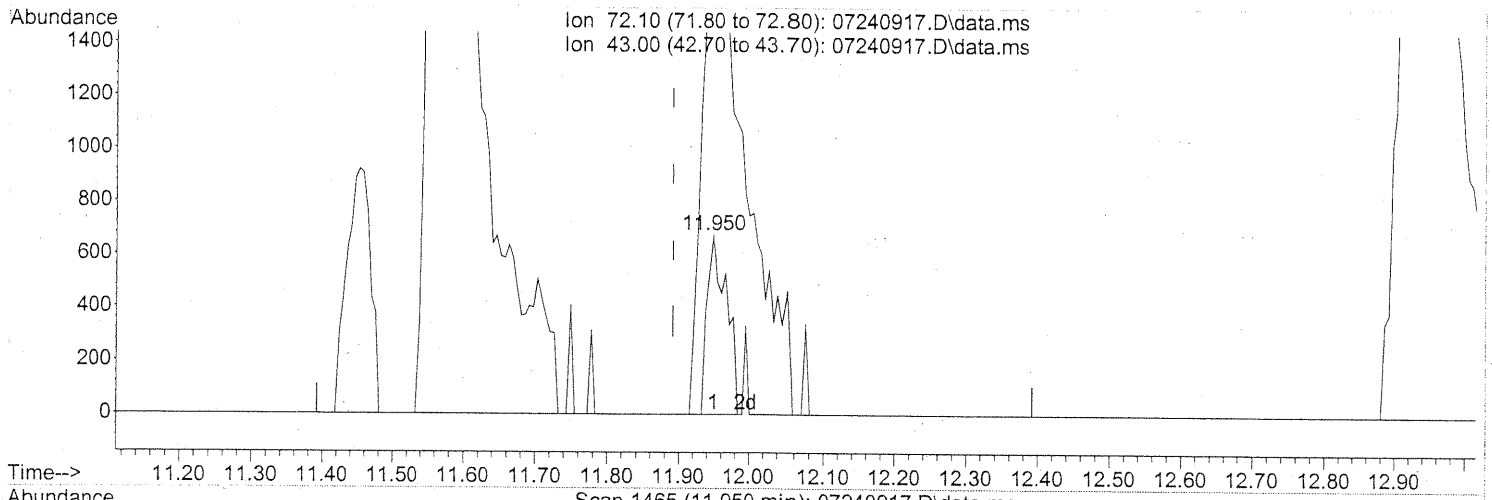
PT → IC
EM 7/27/09
7/27/09

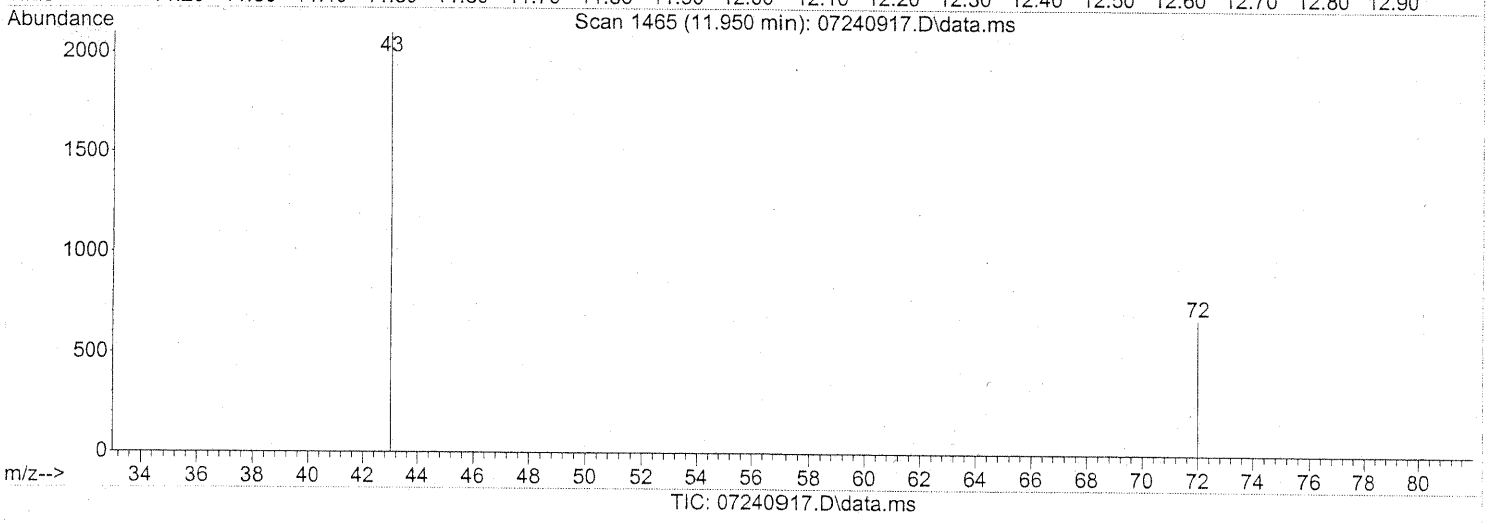
202

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240917.D
Acq On : 24 Jul 2009 21:28
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:01:48 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration





TIC: 07240917.D\data.ms

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

11.950min (+0.057) 0.10ng

response 1295

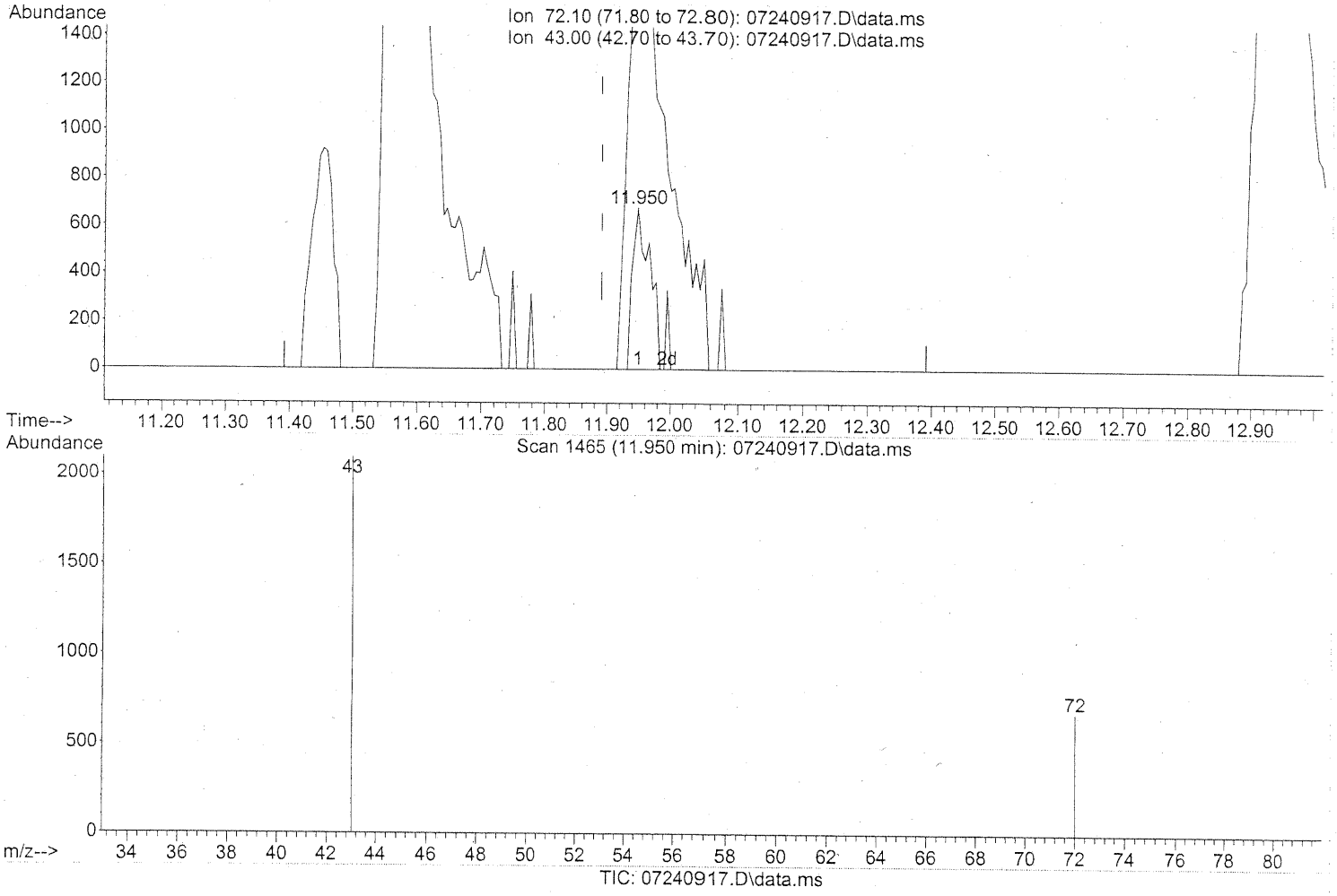
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	630.42#
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240917.D
Acq On : 24 Jul 2009 21:28
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240914
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:01:48 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



TIC: 07240917.D\data.ms

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

11.950min (+0.057) 0.11ng m

response 1408

Ion	Exp%	Act%
72.10	100	100
43.00	366.50	579.83#
0.00	0.00	0.00
0.00	0.00	0.00

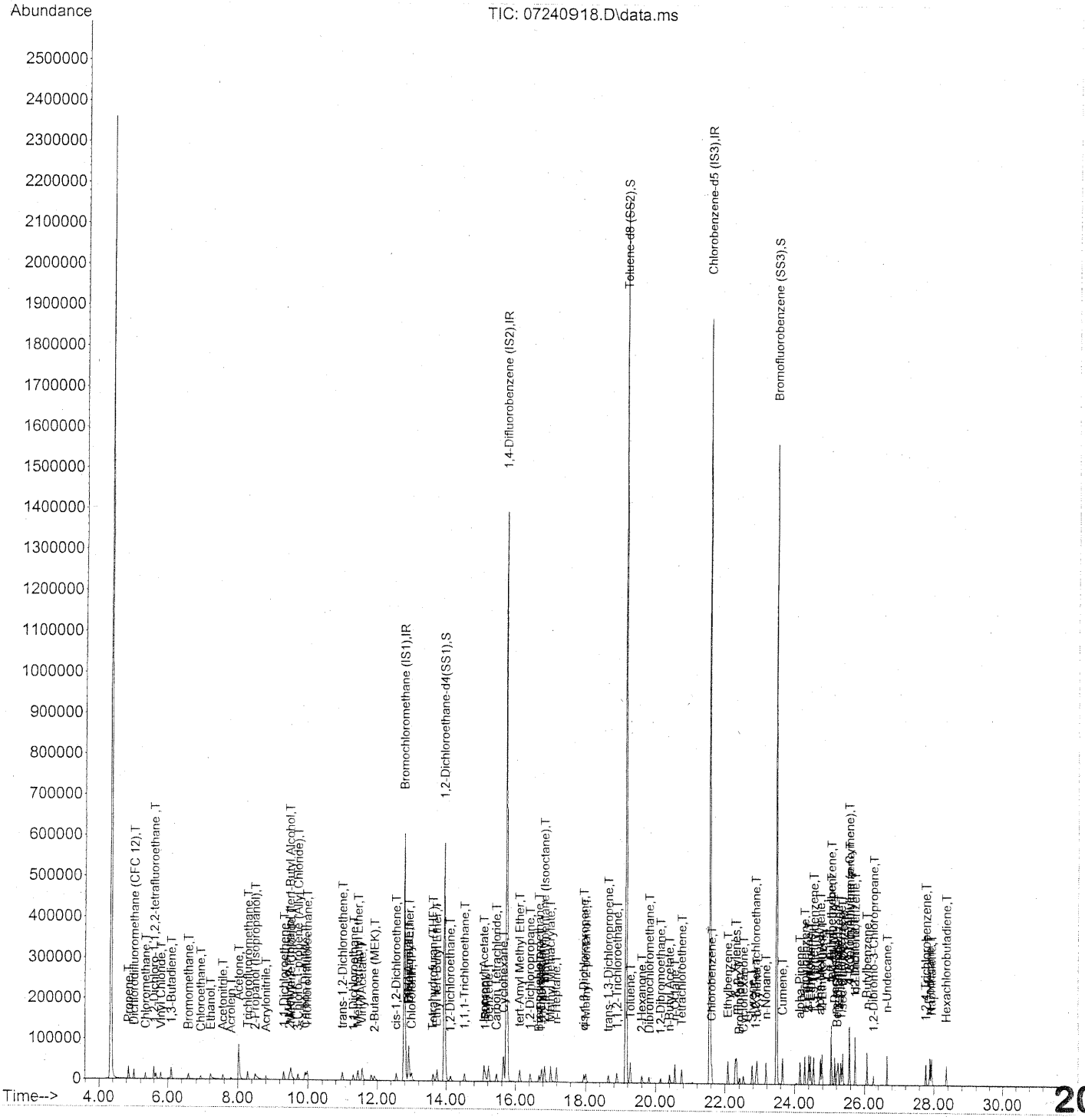
SP → IC
Em 7/27/09
7/27/09

204

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240918.D
Acq On : 24 Jul 2009 22:10
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:04:51 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240918.D
Acq On : 24 Jul 2009 22:10
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:04:51 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	329340	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.74	114	1665218	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	753779	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	584701	20.284	ng		-0.02
Spiked Amount 25.000			Recovery =	81.12%			
57) Toluene-d8 (SS2)	19.14	98	1899111	27.849	ng		0.00
Spiked Amount 25.000			Recovery =	111.40%			
73) Bromofluorobenzene (SS3)	23.49	174	557427	28.570	ng		0.00
Spiked Amount 25.000			Recovery =	114.28%			
Target Compounds							Qvalue
2) Propene	4.86	42	9837	0.535	ng		98
3) Dichlorodifluoromethan...	5.01	85	24918	0.666	ng		98
4) Chloromethane	5.35	50	17598	0.571	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	14097	0.661	ng		100
6) Vinyl Chloride	5.80	62	19155	0.544	ng		99
7) 1,3-Butadiene	6.09	54	14858	0.530	ng		98
8) Bromomethane	6.59	94	11112	0.523	ng		97
9) Chloroethane	6.93	64	9653	0.626	ng		97
10) Ethanol	7.23	45	35164	2.724	ng		89
11) Acetonitrile	7.57	41	17104	0.556	ng		95
12) Acrolein	7.81	56	5628	0.494	ng		99
13) Acetone	8.03	58	44204	2.776	ng		95
14) Trichlorofluoromethane	8.29	101	21437	0.592	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	47651	0.962	ng		93
16) Acrylonitrile	8.80	53	11247	0.472	ng		100
17) 1,1-Dichloroethene	9.32	96	11481	0.643	ng		93
18) 2-Methyl-2-Propanol (t...	9.48	59	51598	0.957	ng		97
19) Methylene Chloride	9.52	84	11900	0.589	ng		97
20) 3-Chloro-1-propene (Al...	9.72	41	12510	0.480	ng		95
21) Trichlorotrifluoroethane	9.98	151	10295	0.753	ng		96
22) Carbon Disulfide	9.92	76	40272	0.632	ng		99
23) trans-1,2-Dichloroethene	10.98	61	15661	0.587	ng		100
24) 1,1-Dichloroethane	11.30	63	19289	0.542	ng		97
25) Methyl tert-Butyl Ether	11.43	73	33783	0.554	ng		100
26) Vinyl Acetate	11.56	86	6442	1.246	ng	#	76
27) 2-Butanone (MEK)	11.92	72	5956	0.463	ng	#	71
28) cis-1,2-Dichloroethene	12.56	61	15696	0.608	ng		99
29) Diisopropyl Ether	12.93	87	9939	0.569	ng	#	86
30) Ethyl Acetate	12.92	61	6490	0.960	ng		91
31) n-Hexane	12.92	57	18821	0.589	ng		94

R9072409.M Mon Jul 27 09:06:21 2009 Em 7/27/09 Page: 1

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240918.D
Acq On : 24 Jul 2009 22:10
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:04:51 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.00	83	19411	0.573	ng		99
34) Tetrahydrofuran (THF)	13.61	72	7085	0.581	ng		98
35) Ethyl tert-Butyl Ether	13.73	87	13668	0.534	ng		99
36) 1,2-Dichloroethane	14.12	62	15246	0.519	ng		97
38) 1,1,1-Trichloroethane	14.53	97	17781	0.554	ng		99
39) Isopropyl Acetate	15.09	61	12034	1.005	ng	#	79
40) 1-Butanol	15.13	56	15808	0.800	ng	#	63
41) Benzene	15.23	78	48455	0.562	ng		98
42) Carbon Tetrachloride	15.45	117	15143	0.599	ng		97
43) Cyclohexane	15.65	84	37034	1.106	ng		99
44) tert-Amyl Methyl Ether	16.12	73	31446	0.533	ng		98
45) 1,2-Dichloropropane	16.43	63	10779	0.590	ng		100
46) Bromodichloromethane	16.69	83	14535	0.568	ng		99
47) Trichloroethene	16.77	130	13295	0.696	ng		100
48) 1,4-Dioxane	16.74	88	8546	0.597	ng		94
49) 2,2,4-Trimethylpentane...	16.86	57	47082	0.560	ng		100
50) Methyl Methacrylate	17.03	100	8230	1.137	ng		99
51) n-Heptane	17.20	71	11952	0.566	ng		97
52) cis-1,3-Dichloropropene	17.95	75	15640	0.498	ng		97
53) 4-Methyl-2-pentanone	18.00	58	8497	0.500	ng		99
54) trans-1,3-Dichloropropene	18.64	75	14742	0.503	ng		100
55) 1,1,2-Trichloroethane	18.89	97	10531	0.616	ng		97
58) Toluene	19.28	91	51839	0.703	ng		98
59) 2-Hexanone	19.60	43	18758	0.496	ng		98
60) Dibromochloromethane	19.82	129	12206	0.804	ng		99
61) 1,2-Dibromoethane	20.15	107	11805	0.719	ng		98
62) n-Butyl Acetate	20.40	43	22510	0.528	ng		94
63) n-Octane	20.56	57	9494	0.619	ng		97
64) Tetrachloroethene	20.75	166	13289	0.811	ng		97
65) Chlorobenzene	21.62	112	32601	0.759	ng		98
66) Ethylbenzene	22.09	91	52949	0.659	ng		99
67) m- & p-Xylenes	22.31	91	83457	1.250	ng		99
68) Bromoform	22.41	173	9717	0.755	ng		95
69) Styrene	22.77	104	31618	0.719	ng		99
70) o-Xylene	22.92	91	43131	0.651	ng		99
71) n-Nonane	23.17	43	20750	0.575	ng		98
72) 1,1,2,2-Tetrachloroethane	22.88	83	17150	0.630	ng		98
74) Cumene	23.66	105	55902	0.685	ng		99
75) alpha-Pinene	24.15	93	25355	0.631	ng		99
76) n-Propylbenzene	24.28	91	66921	0.651	ng		98
77) 3-Ethyltoluene	24.40	105	54264	0.707	ng		99
78) 4-Ethyltoluene	24.46	105	55165	0.735	ng		98
79) 1,3,5-Trimethylbenzene	24.55	105	45071	0.704	ng		99

EM 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240918.D
Acq On : 24 Jul 2009 22:10
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

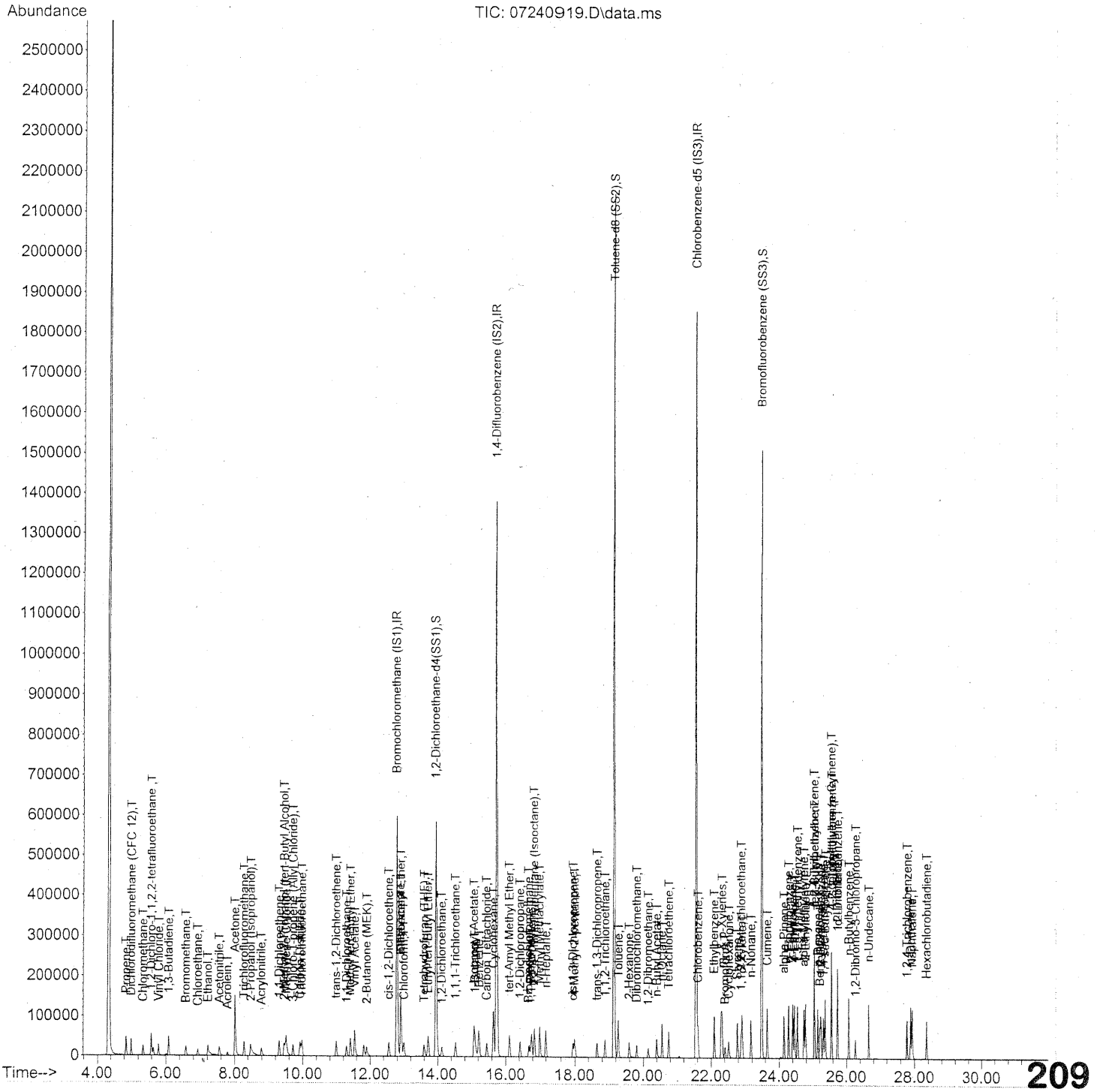
Quant Time: Jul 27 09:04:51 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	23316	0.714	ng	98
81) 2-Ethyltoluene	24.79	105	54511	0.685	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	44372	0.616	ng	95
83) n-Decane	25.15	57	22804	0.582	ng	97
84) Benzyl Chloride	25.21	91	29785	0.551	ng	98
85) 1,3-Dichlorobenzene	25.25	146	26250	0.803	ng	98
86) 1,4-Dichlorobenzene	25.33	146	26695	0.795	ng	99
87) sec-Butylbenzene	25.38	105	62236	0.707	ng	100
88) 4-Isopropyltoluene (p-...	25.56	119	57177	0.660	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	46307	0.658	ng	98
90) 1,2-Dichlorobenzene	25.75	146	25489	0.779	ng	98
91) d-Limonene	25.74	68	16560	0.633	ng	96
92) 1,2-Dibromo-3-Chloropr...	26.26	157	7550	0.748	ng	91
93) n-Undecane	26.65	57	22368	0.602	ng	98
94) 1,2,4-Trichlorobenzene	27.79	180	18140	0.930	ng	98
95) Naphthalene	27.94	128	59757	0.813	ng	98
96) n-Dodecane	27.89	57	20863	0.510	ng	98
97) Hexachlorobutadiene	28.36	225	10113	0.825	ng	99
98) Cyclohexanone	22.53	55	11931	0.519	ng	98
99) tert-Butylbenzene	25.05	119	46488	0.666	ng	99
100) n-Butylbenzene	26.07	91	49384	0.671	ng	98

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

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240919.D
Acq On : 24 Jul 2009 22:51
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:06:31 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240919.D
Acq On : 24 Jul 2009 22:51
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:06:31 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	327292	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1646564	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.56	82	743382	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	576070	20.109	ng		-0.02
Spiked Amount 25.000			Recovery = 80.44%				
57) Toluene-d8 (SS2)	19.15	98	1869459	27.797	ng		0.00
Spiked Amount 25.000			Recovery = 111.20%				
73) Bromofluorobenzene (SS3)	23.49	174	547389	28.448	ng		0.00
Spiked Amount 25.000			Recovery = 113.80%				
Target Compounds							Qvalue
2) Propene	4.85	42	17079	0.935	ng		99
3) Dichlorodifluoromethan...	5.00	85	43452	1.169	ng		100
4) Chloromethane	5.34	50	31336	1.023	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	24923	1.175	ng		99
6) Vinyl Chloride	5.80	62	33345	0.952	ng		99
7) 1,3-Butadiene	6.09	54	26645	0.957	ng		99
8) Bromomethane	6.58	94	20101	0.951	ng		99
9) Chloroethane	6.93	64	16861	1.100	ng		100
10) Ethanol	7.22	45	64309	5.012	ng		93
11) Acetonitrile	7.56	41	32117	1.051	ng		98
12) Acrolein	7.79	56	10444	0.923	ng		99
13) Acetone	8.01	58	76166	4.813	ng		96
14) Trichlorofluoromethane	8.28	101	37494	1.043	ng		99
15) 2-Propanol (Isopropanol)	8.48	45	88329	1.794	ng		95
16) Acrylonitrile	8.79	53	22051	0.931	ng		100
17) 1,1-Dichloroethene	9.32	96	20370	1.149	ng		96
18) 2-Methyl-2-Propanol (t...	9.46	59	95792	1.788	ng		96
19) Methylene Chloride	9.52	84	21280	1.059	ng		98
20) 3-Chloro-1-propene (Al...	9.72	41	22860	0.883	ng		99
21) Trichlorotrifluoroethane	9.98	151	17968	1.323	ng		98
22) Carbon Disulfide	9.92	76	72643	1.146	ng		99
23) trans-1,2-Dichloroethene	10.98	61	28868	1.089	ng		99
24) 1,1-Dichloroethane	11.30	63	34703	0.981	ng		99
25) Methyl tert-Butyl Ether	11.42	73	60467	0.999	ng		99
26) Vinyl Acetate	11.55	86	13708	2.668	ng	#	89
27) 2-Butanone (MEK)	11.90	72	11505	0.899	ng	#	81
28) cis-1,2-Dichloroethene	12.56	61	27471	1.071	ng		99
29) Diisopropyl Ether	12.91	87	17730	1.022	ng	#	90
30) Ethyl Acetate	12.91	61	11779	1.753	ng		98
31) n-Hexane	12.92	57	33637	1.059	ng		99

EM 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240919.D
Acq On : 24 Jul 2009 22:51
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:06:31 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	34967	1.039	ng		100
34) Tetrahydrofuran (THF)	13.61	72	12609	1.040	ng		97
35) Ethyl tert-Butyl Ether	13.72	87	25251	0.993	ng		98
36) 1,2-Dichloroethane	14.13	62	27525	0.942	ng		99
38) 1,1,1-Trichloroethane	14.53	97	31672	0.998	ng		99
39) Isopropyl Acetate	15.08	61	22324	1.885	ng	#	76
40) 1-Butanol	15.11	56	32693	1.674	ng	#	72
41) Benzene	15.23	78	84648	0.993	ng		99
42) Carbon Tetrachloride	15.45	117	27854	1.115	ng		97
43) Cyclohexane	15.65	84	65846	1.988	ng		100
44) tert-Amyl Methyl Ether	16.11	73	56898	0.975	ng		98
45) 1,2-Dichloropropane	16.43	63	18749	1.039	ng		96
46) Bromodichloromethane	16.69	83	26712	1.056	ng		98
47) Trichloroethene	16.77	130	23418	1.239	ng		96
48) 1,4-Dioxane	16.74	88	16266	1.148	ng		100
49) 2,2,4-Trimethylpentane...	16.85	57	83368	1.003	ng		100
50) Methyl Methacrylate	17.02	100	15665	2.189	ng		96
51) n-Heptane	17.20	71	21598	1.034	ng		99
52) cis-1,3-Dichloropropene	17.95	75	28213	0.908	ng		99
53) 4-Methyl-2-pentanone	17.99	58	16238	0.967	ng		95
54) trans-1,3-Dichloropropene	18.65	75	28425	0.982	ng		98
55) 1,1,2-Trichloroethane	18.88	97	19156	1.133	ng		99
58) Toluene	19.28	91	92525	1.273	ng		100
59) 2-Hexanone	19.59	43	39272	1.052	ng		94
60) Dibromochloromethane	19.82	129	22994	1.536	ng		98
61) 1,2-Dibromoethane	20.15	107	22165	1.369	ng		98
62) n-Butyl Acetate	20.40	43	44760	1.065	ng		98
63) n-Octane	20.56	57	17824	1.178	ng		98
64) Tetrachloroethene	20.75	166	23618	1.462	ng		99
65) Chlorobenzene	21.62	112	59115	1.395	ng		99
66) Ethylbenzene	22.09	91	97047	1.225	ng		99
67) m- & p-Xylenes	22.32	91	151316	2.298	ng		100
68) Bromoform	22.41	173	17388	1.371	ng		99
69) Styrene	22.77	104	57768	1.331	ng		98
70) o-Xylene	22.92	91	78242	1.198	ng		100
71) n-Nonane	23.17	43	37032	1.040	ng		99
72) 1,1,2,2-Tetrachloroethane	22.89	83	32853	1.224	ng		98
74) Cumene	23.65	105	102817	1.278	ng		98
75) alpha-Pinene	24.15	93	47090	1.188	ng		97
76) n-Propylbenzene	24.28	91	122584	1.210	ng		99
77) 3-Ethyltoluene	24.40	105	101183	1.337	ng		99
78) 4-Ethyltoluene	24.46	105	100742	1.362	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	83227	1.318	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240919.D
Acq On : 24 Jul 2009 22:51
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:06:31 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	45150	1.401	ng	99
81) 2-Ethyltoluene	24.79	105	101484	1.293	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	83397	1.173	ng	97
83) n-Decane	25.15	57	41807	1.083	ng	99
84) Benzyl Chloride	25.21	91	61025	1.144	ng	99
85) 1,3-Dichlorobenzene	25.25	146	48782	1.513	ng	99
86) 1,4-Dichlorobenzene	25.33	146	50266	1.519	ng	99
87) sec-Butylbenzene	25.38	105	113919	1.313	ng	100
88) 4-Isopropyltoluene (p-...	25.56	119	106113	1.242	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	86622	1.248	ng	98
90) 1,2-Dichlorobenzene	25.74	146	46477	1.440	ng	98
91) d-Limonene	25.74	68	31710	1.228	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.26	157	15129	1.520	ng	94
93) n-Undecane	26.65	57	42142	1.150	ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	33915	1.763	ng	98
95) Naphthalene	27.94	128	113653	1.568	ng	99
96) n-Dodecane	27.89	57	40667	1.008	ng	99
97) Hexachlorobutadiene	28.36	225	19096	1.580	ng	97
98) Cyclohexanone	22.52	55	24258	1.071	ng	99
99) tert-Butylbenzene	25.05	119	86238	1.253	ng	99
100) n-Butylbenzene	26.06	91	92071	1.268	ng	99

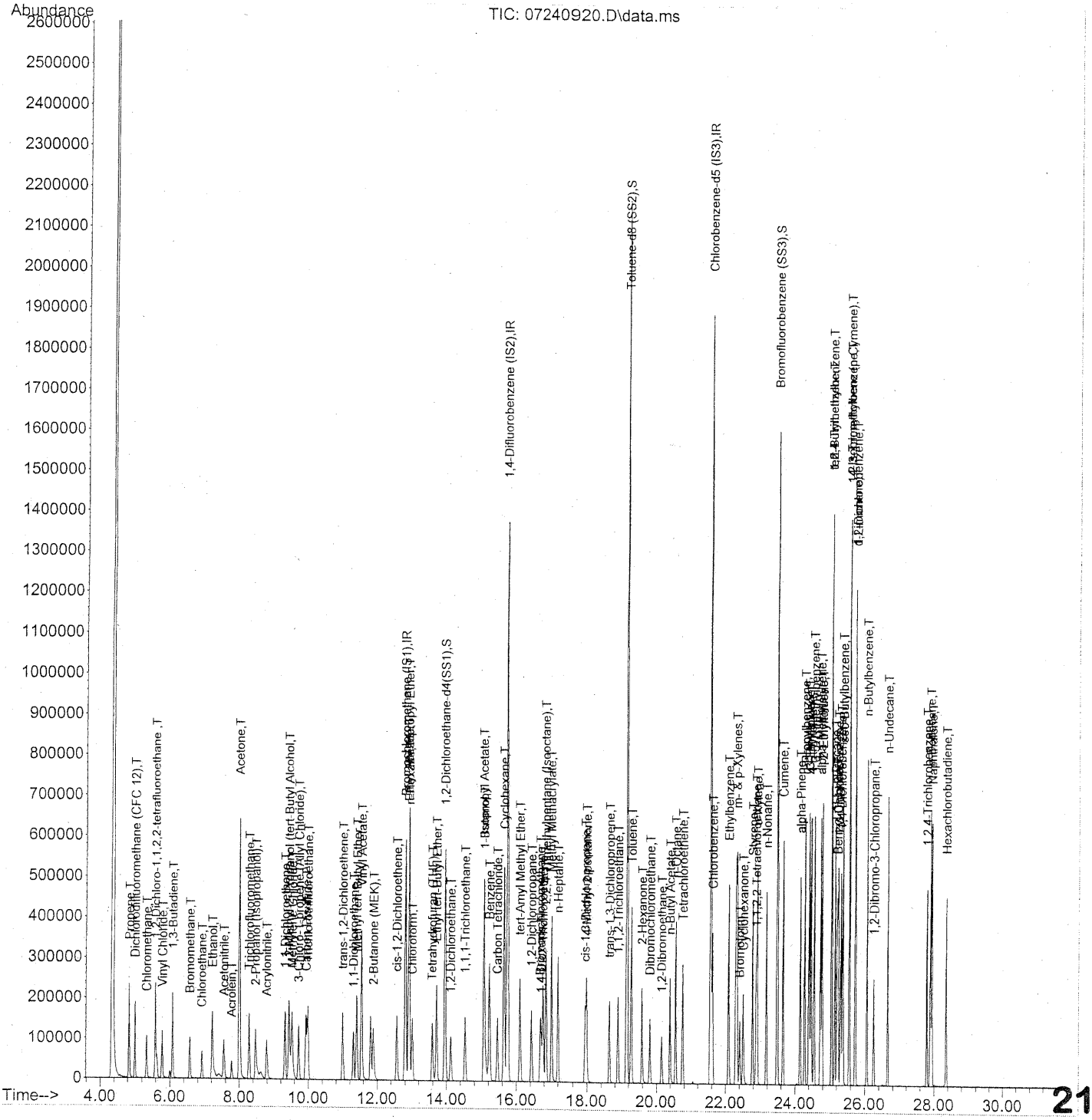
(#) = qualifier out of range (m) = manual integration (+) = signals summed

em 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:09:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:09:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.81	130	326195	25.000	ng	-0.01
37) 1,4-Difluorobenzene (IS2)	15.75	114	1643427	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.56	82	747557	25.000	ng	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.96	65	569881	19.960	ng	-0.01
Spiked Amount 25.000			Recovery =	79.84%		
57) Toluene-d8 (SS2)	19.15	98	1860715	27.513	ng	0.00
Spiked Amount 25.000			Recovery =	110.04%		
73) Bromofluorobenzene (SS3)	23.49	174	575147	29.724	ng	0.00
Spiked Amount 25.000			Recovery =	118.88%		
Target Compounds						Qvalue
2) Propene	4.84	42	100231	5.503	ng	99
3) Dichlorodifluoromethan...	5.00	85	197528	5.330	ng	99
4) Chloromethane	5.33	50	132785	4.350	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	107697	5.095	ng	100
6) Vinyl Chloride	5.79	62	149294	4.278	ng	98
7) 1,3-Butadiene	6.08	54	121474	4.378	ng	99
8) Bromomethane	6.57	94	88675	4.211	ng	99
9) Chloroethane	6.92	64	77153	5.051	ng	100
10) Ethanol	7.23	45	340925m	26.661	ng	
11) Acetonitrile	7.56	41	149821	4.918	ng	100
12) Acrolein	7.78	56	50422	4.473	ng	98
13) Acetone	8.00	58	345023	21.874	ng	98
14) Trichlorofluoromethane	8.28	101	173532	4.842	ng	97
15) 2-Propanol (Isopropanol)	8.47	45	318940m	6.500	ng	
16) Acrylonitrile	8.79	53	111871	4.740	ng	99
17) 1,1-Dichloroethene	9.32	96	91435	5.173	ng	99
18) 2-Methyl-2-Propanol (t...	9.43	59	444746	8.331	ng	98
19) Methylene Chloride	9.53	84	93118	4.650	ng	98
20) 3-Chloro-1-propene (Al...	9.72	41	111171	4.309	ng	100
21) Trichlorotrifluoroethane	9.98	151	82672	6.108	ng	96
22) Carbon Disulfide	9.93	76	332118	5.259	ng	98
23) trans-1,2-Dichloroethene	10.99	61	130924	4.955	ng	99
24) 1,1-Dichloroethane	11.30	63	159584	4.529	ng	100
25) Methyl tert-Butyl Ether	11.40	73	288071	4.774	ng	99
26) Vinyl Acetate	11.54	86	77801	15.196	ng	97
27) 2-Butanone (MEK)	11.89	72	62948	4.936	ng	95
28) cis-1,2-Dichloroethene	12.57	61	128052	5.011	ng	99
29) Diisopropyl Ether	12.91	87	82524	4.771	ng	97
30) Ethyl Acetate	12.90	61	64788	9.675	ng	100
31) n-Hexane	12.92	57	157886	4.989	ng	214

Em 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:09:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.01	83	158964	4.741 ng		100
34) Tetrahydrofuran (THF)	13.59	72	61404	5.081 ng		97
35) Ethyl tert-Butyl Ether	13.71	87	116176	4.585 ng		98
36) 1,2-Dichloroethane	14.13	62	128076	4.399 ng		99
38) 1,1,1-Trichloroethane	14.53	97	147142	4.645 ng		100
39) Isopropyl Acetate	15.07	61	112518	9.519 ng	#	79
40) 1-Butanol	15.08	56	180216	9.245 ng		79
41) Benzene	15.23	78	381716	4.485 ng		99
42) Carbon Tetrachloride	15.46	117	129732	5.203 ng		99
43) Cyclohexane	15.66	84	307544	9.305 ng		99
44) tert-Amyl Methyl Ether	16.10	73	272209	4.673 ng		99
45) 1,2-Dichloropropane	16.43	63	89817	4.986 ng		100
46) Bromodichloromethane	16.69	83	128175	5.076 ng		99
47) Trichloroethene	16.77	130	106445	5.643 ng		99
48) 1,4-Dioxane	16.72	88	77468	5.480 ng		100
49) 2,2,4-Trimethylpentane...	16.85	57	389436	4.693 ng		100
50) Methyl Methacrylate	17.02	100	81077	11.353 ng		100
51) n-Heptane	17.21	71	101728	4.878 ng		98
52) cis-1,3-Dichloropropene	17.95	75	141308	4.559 ng		100
53) 4-Methyl-2-pentanone	17.99	58	86254	5.146 ng		97
54) trans-1,3-Dichloropropene	18.64	75	147653	5.109 ng		99
55) 1,1,2-Trichloroethane	18.88	97	90610	5.369 ng		98
58) Toluene	19.28	91	429074	5.871 ng		99
59) 2-Hexanone	19.58	43	208001	5.543 ng		98
60) Dibromochloromethane	19.82	129	111297	7.395 ng		100
61) 1,2-Dibromoethane	20.15	107	106113	6.517 ng		99
62) n-Butyl Acetate	20.39	43	233900	5.535 ng		99
63) n-Octane	20.56	57	83987	5.522 ng		98
64) Tetrachloroethene	20.75	166	110068	6.776 ng		99
65) Chlorobenzene	21.62	112	275773	6.471 ng		100
66) Ethylbenzene	22.09	91	467911	5.873 ng		100
67) m- & p-Xylenes	22.32	91	737498	11.136 ng		100
68) Bromoform	22.41	173	91102	7.142 ng		100
69) Styrene	22.77	104	296596	6.797 ng		99
70) o-Xylene	22.92	91	382208	5.820 ng		100
71) n-Nonane	23.17	43	185939	5.195 ng		98
72) 1,1,2,2-Tetrachloroethane	22.88	83	166076	6.154 ng		99
74) Cumene	23.65	105	492420	6.086 ng		100
75) alpha-Pinene	24.15	93	236398	5.931 ng		99
76) n-Propylbenzene	24.28	91	607801	5.965 ng		99
77) 3-Ethyltoluene	24.40	105	501561	6.590 ng		100
78) 4-Ethyltoluene	24.46	105	501826	6.746 ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	413241	6.507 ng		100

EM 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:09:44 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	234444	7.236	ng	99
81) 2-Ethyltoluene	24.79	105	507526	6.429	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	432367	6.050	ng	97
83) n-Decane	25.15	57	218547	5.628	ng	100
84) Benzyl Chloride	25.21	91	360276	6.719	ng	100
85) 1,3-Dichlorobenzene	25.25	146	245121	7.562	ng	100
86) 1,4-Dichlorobenzene	25.32	146	249090	7.484	ng	99
87) sec-Butylbenzene	25.38	105	578534	6.629	ng	100
88) 4-Isopropyltoluene (p-...	25.56	119	550250	6.406	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	449883	6.447	ng	97
90) 1,2-Dichlorobenzene	25.74	146	237394	7.314	ng	100
91) d-Limonene	25.74	68	177692	6.845	ng	100
92) 1,2-Dibromo-3-Chloropr...	26.26	157	82030	8.196	ng	96
93) n-Undecane	26.65	57	226067	6.134	ng	98
94) 1,2,4-Trichlorobenzene	27.79	180	174516	9.021	ng	100
95) Naphthalene	27.94	128	598276	8.206	ng	99
96) n-Dodecane	27.89	57	220752	5.440	ng	99
97) Hexachlorobutadiene	28.36	225	97905	8.053	ng	99
98) Cyclohexanone	22.51	55	122823	5.390	ng	99
99) tert-Butylbenzene	25.05	119	436634	6.311	ng	100
100) n-Butylbenzene	26.06	91	478776	6.555	ng	99

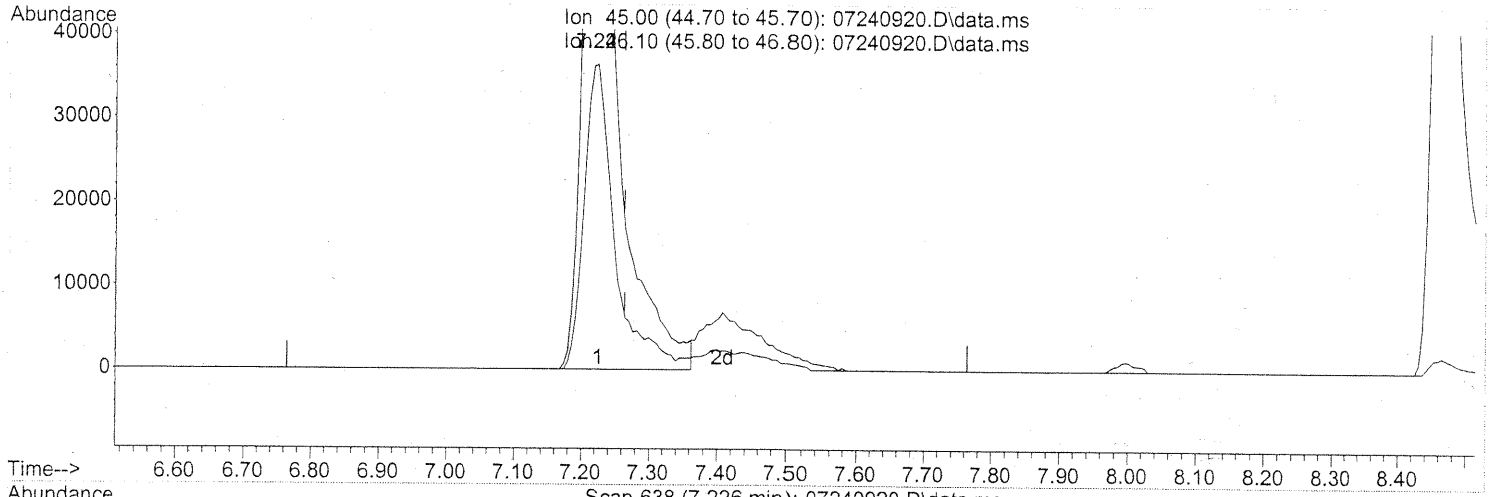
(#) = qualifier out of range (m) = manual integration (+) = signals summed

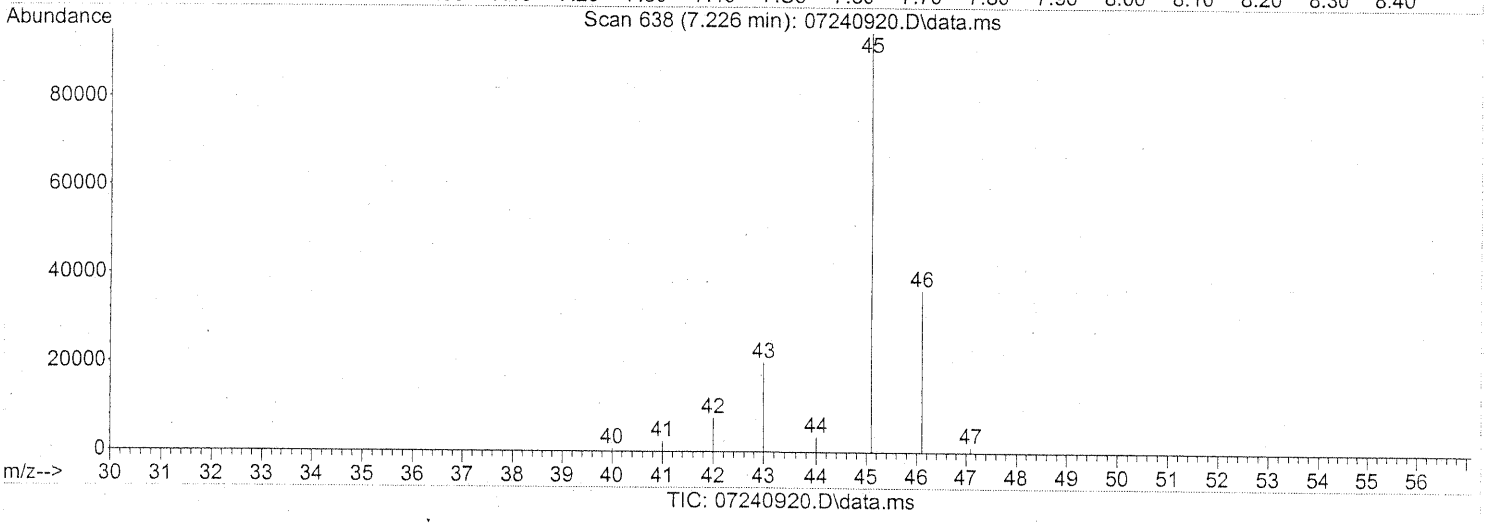
EM 7/27/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:08:23 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration





(10) Ethanol (T)

7.226min (-0.040) 23.47ng

response 300157

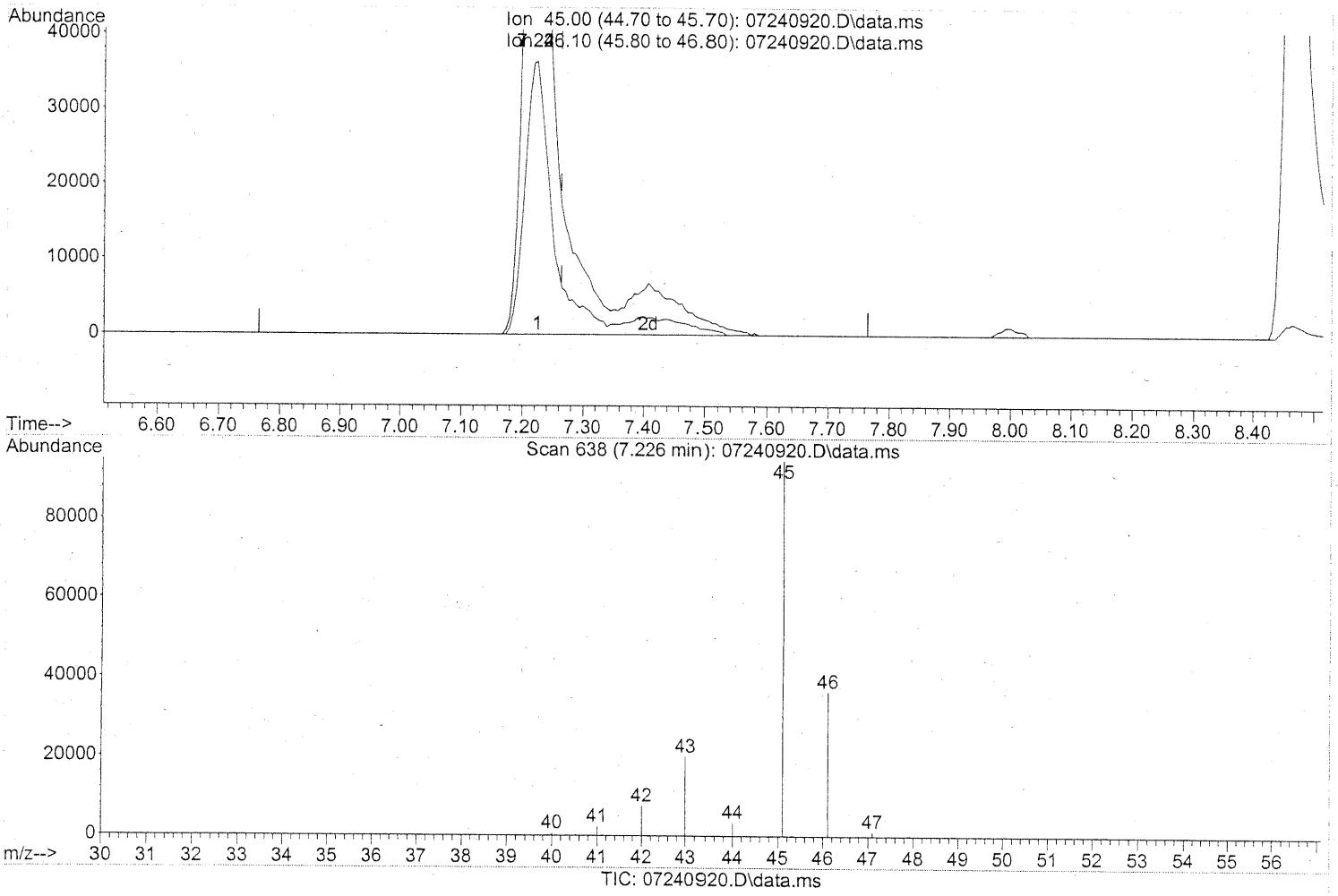
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.00
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:08:23 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.226min (-0.040) 26.66ng m

response 340925

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	34.34
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
em 7/27/09
7/27/09

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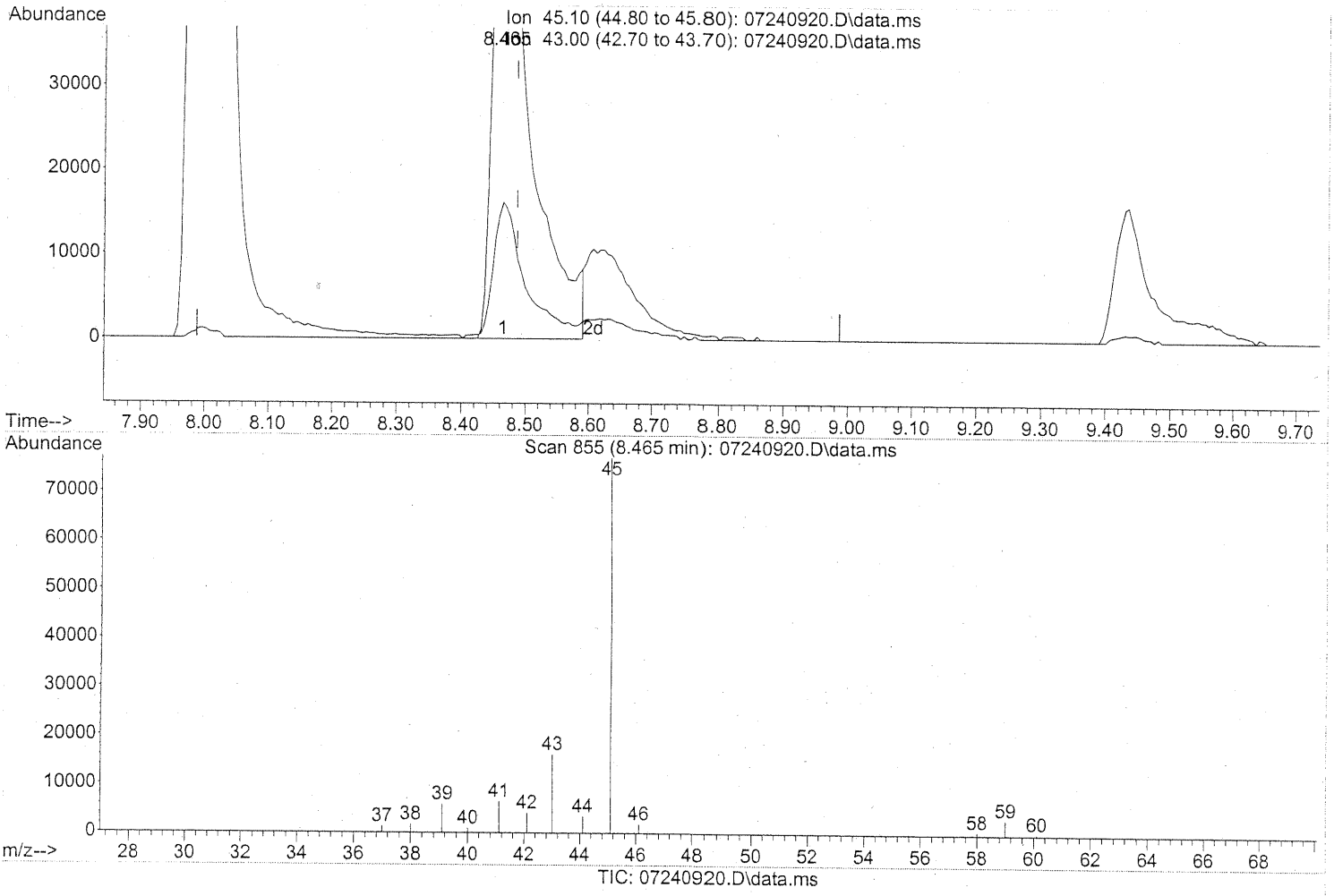
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:08:23 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



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

8.465min (-0.023) 5.39ng

response 264372

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	21.22
0.00	0.00	0.00
0.00	0.00	0.00

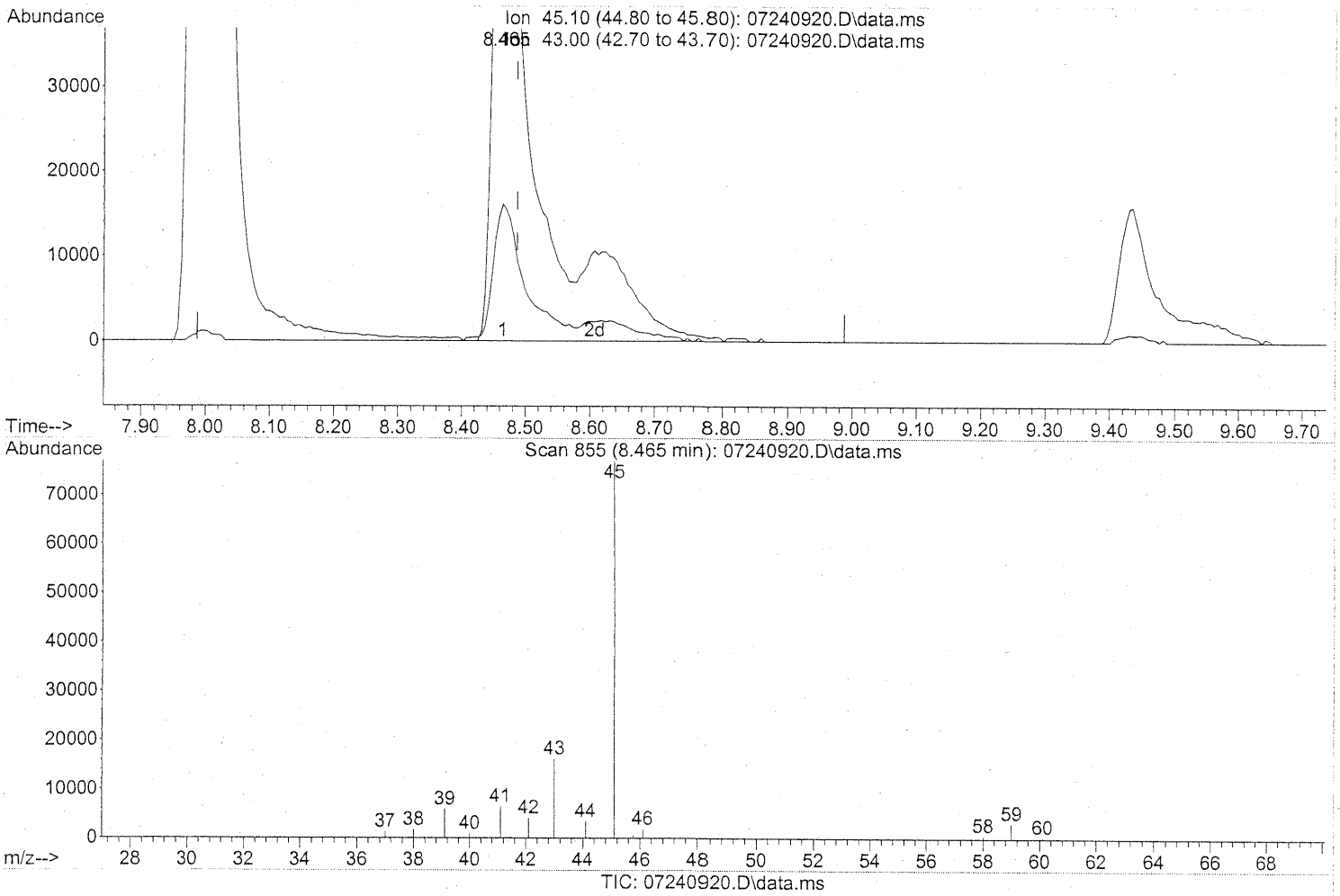
PT

219

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240920.D
Acq On : 24 Jul 2009 23:33
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240909
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:08:23 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



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

8.465min (-0.023) 6.50ng m

response 318940

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.59
0.00	0.00	0.00
0.00	0.00	0.00

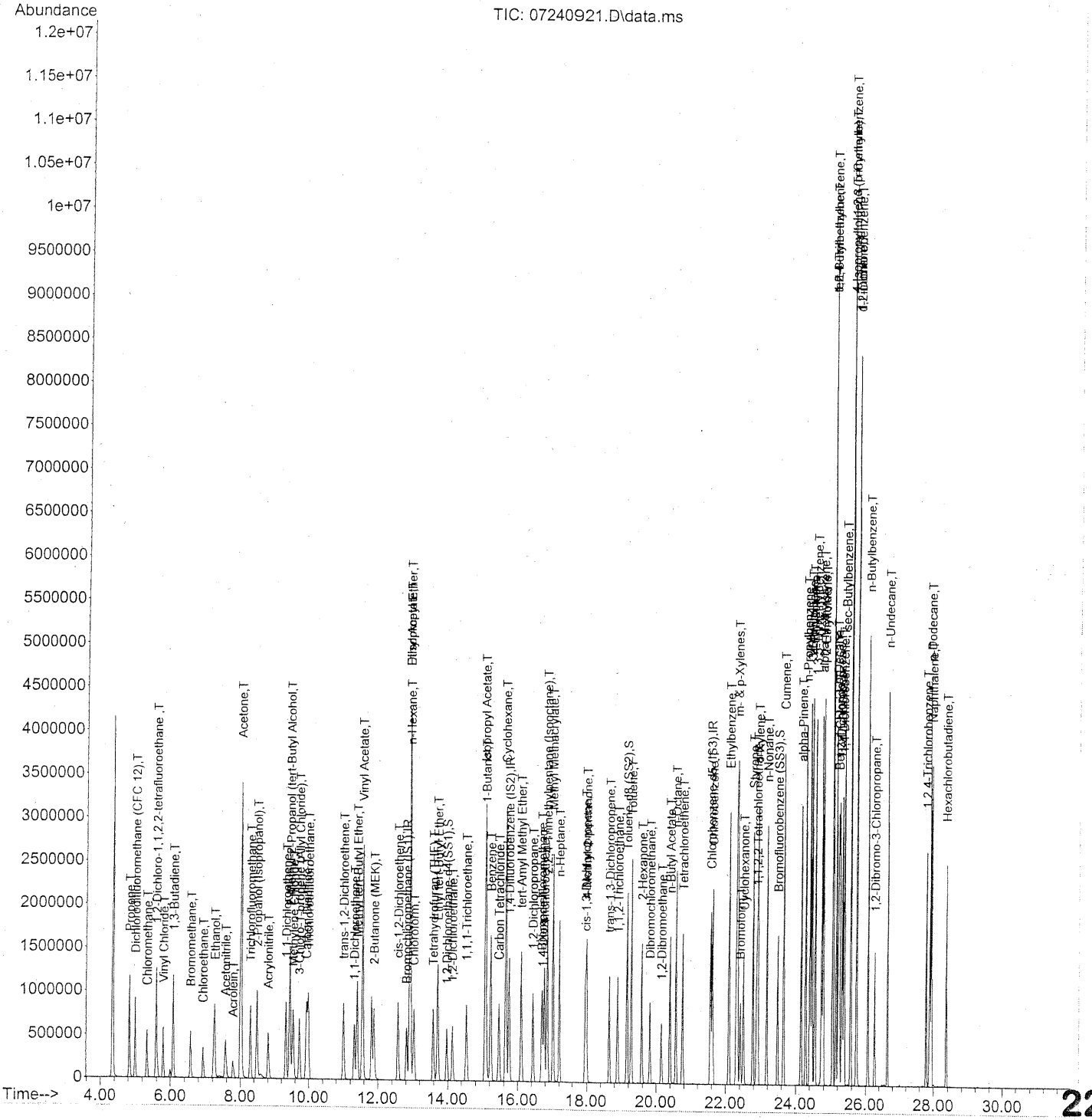
PT → LC
Eom 7/27/09
7/27/09

220

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:12:00 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:12:00 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	334561	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.75	114	1680638	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.56	82	784143	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	586734	20.037	ng		0.00
Spiked Amount 25.000			Recovery =	80.16%			
57) Toluene-d8 (SS2)	19.15	98	1914682	26.990	ng		0.00
Spiked Amount 25.000			Recovery =	107.96%			
73) Bromofluorobenzene (SS3)	23.49	174	593711	29.251	ng		0.00
Spiked Amount 25.000			Recovery =	117.00%			
Target Compounds							Qvalue
2) Propene	4.83	42	519112	27.788	ng		100
3) Dichlorodifluoromethan...	5.00	85	1005925	26.465	ng		99
4) Chloromethane	5.33	50	736618	23.529	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	578121	26.665	ng		100
6) Vinyl Chloride	5.80	62	792905	22.150	ng		100
7) 1,3-Butadiene	6.08	54	698573	24.550	ng		99
8) Bromomethane	6.58	94	502094	23.248	ng		100
9) Chloroethane	6.93	64	403814	25.777	ng		100
10) Ethanol	7.27	45	1711818m	130.522	ng		
11) Acetonitrile	7.57	41	774300	24.782	ng		99
12) Acrolein	7.79	56	278383	24.078	ng		98
13) Acetone	8.01	58	2028057	125.359	ng		99
14) Trichlorofluoromethane	8.29	101	931820	25.348	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1939885m	38.547	ng		
16) Acrylonitrile	8.80	53	632510	26.130	ng		100
17) 1,1-Dichloroethene	9.33	96	511346	28.207	ng		98
18) 2-Methyl-2-Propanol (t...	9.45	59	2618814	47.828	ng		98
19) Methylene Chloride	9.54	84	517928	25.215	ng		99
20) 3-Chloro-1-propene (Al...	9.73	41	663528	25.076	ng		100
21) Trichlorotrifluoroethane	9.98	151	461485	33.244	ng		97
22) Carbon Disulfide	9.93	76	1861523	28.741	ng		98
23) trans-1,2-Dichloroethene	11.00	61	731103	26.977	ng		100
24) 1,1-Dichloroethane	11.31	63	875381	24.220	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1602908	25.899	ng		100
26) Vinyl Acetate	11.56	86	573211	109.157	ng		100
27) 2-Butanone (MEK)	11.89	72	384094	29.365	ng		99
28) cis-1,2-Dichloroethene	12.58	61	722864	27.578	ng		99
29) Diisopropyl Ether	12.91	87	505532	28.499	ng	#	95
30) Ethyl Acetate	12.91	61	431258	62.792	ng		99
31) n-Hexane	12.93	57	980353	30.205	ng		10

EM 7/27/09

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:12:00 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	887504	25.809	ng		100
34) Tetrahydrofuran (THF)	13.58	72	343920	27.744	ng		98
35) Ethyl tert-Butyl Ether	13.71	87	670898	25.813	ng		99
36) 1,2-Dichloroethane	14.13	62	712858	23.874	ng		99
38) 1,1,1-Trichloroethane	14.54	97	809564	24.990	ng		100
39) Isopropyl Acetate	15.07	61	723678	59.868	ng	#	82
40) 1-Butanol	15.09	56	1228458	61.622	ng		84
41) Benzene	15.23	78	2184917	25.105	ng		99
42) Carbon Tetrachloride	15.46	117	728542	28.571	ng		99
43) Cyclohexane	15.66	84	1808808	53.515	ng		99
44) tert-Amyl Methyl Ether	16.10	73	1594609	26.766	ng		100
45) 1,2-Dichloropropane	16.43	63	504951	27.409	ng		98
46) Bromodichloromethane	16.70	83	737896	28.575	ng		99
47) Trichloroethene	16.77	130	595564	30.875	ng		100
48) 1,4-Dioxane	16.72	88	455319	31.496	ng		99
49) 2,2,4-Trimethylpentane...	16.86	57	2191491	25.825	ng		100
50) Methyl Methacrylate	17.02	100	503479	68.940	ng		100
51) n-Heptane	17.21	71	586458	27.501	ng		100
52) cis-1,3-Dichloropropene	17.95	75	846178	26.694	ng		100
53) 4-Methyl-2-pentanone	17.99	58	527336	30.768	ng		98
54) trans-1,3-Dichloropropene	18.64	75	880820	29.802	ng		100
55) 1,1,2-Trichloroethane	18.89	97	514478	29.808	ng		99
58) Toluene	19.28	91	2472020	32.245	ng		100
59) 2-Hexanone	19.58	43	1301868	33.072	ng		99
60) Dibromochloromethane	19.82	129	659565	41.781	ng		100
61) 1,2-Dibromoethane	20.15	107	610731	35.758	ng		99
62) n-Butyl Acetate	20.39	43	1459306	32.922	ng		100
63) n-Octane	20.56	57	508471	31.869	ng		100
64) Tetrachloroethene	20.76	166	636842	37.373	ng		99
65) Chlorobenzene	21.62	112	1581675	35.383	ng		100
66) Ethylbenzene	22.09	91	2805556	33.570	ng		100
67) m- & p-Xylenes	22.33	91	4592828	66.117	ng		100
68) Bromoform	22.42	173	556211	41.568	ng		100
69) Styrene	22.77	104	1817793	39.713	ng		99
70) o-Xylene	22.92	91	2319522	33.671	ng		99
71) n-Nonane	23.18	43	1161988	30.947	ng		99
72) 1,1,2,2-Tetrachloroethane	22.89	83	1020606	36.056	ng		99
74) Cumene	23.66	105	2986949	35.194	ng		100
75) alpha-Pinene	24.15	93	1458807	34.891	ng		99
76) n-Propylbenzene	24.28	91	3763610	35.216	ng		100
77) 3-Ethyltoluene	24.41	105	3145024	39.395	ng		99
78) 4-Ethyltoluene	24.46	105	3084378	39.528	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	2557975	38.400	ng		100

 EM 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:12:00 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

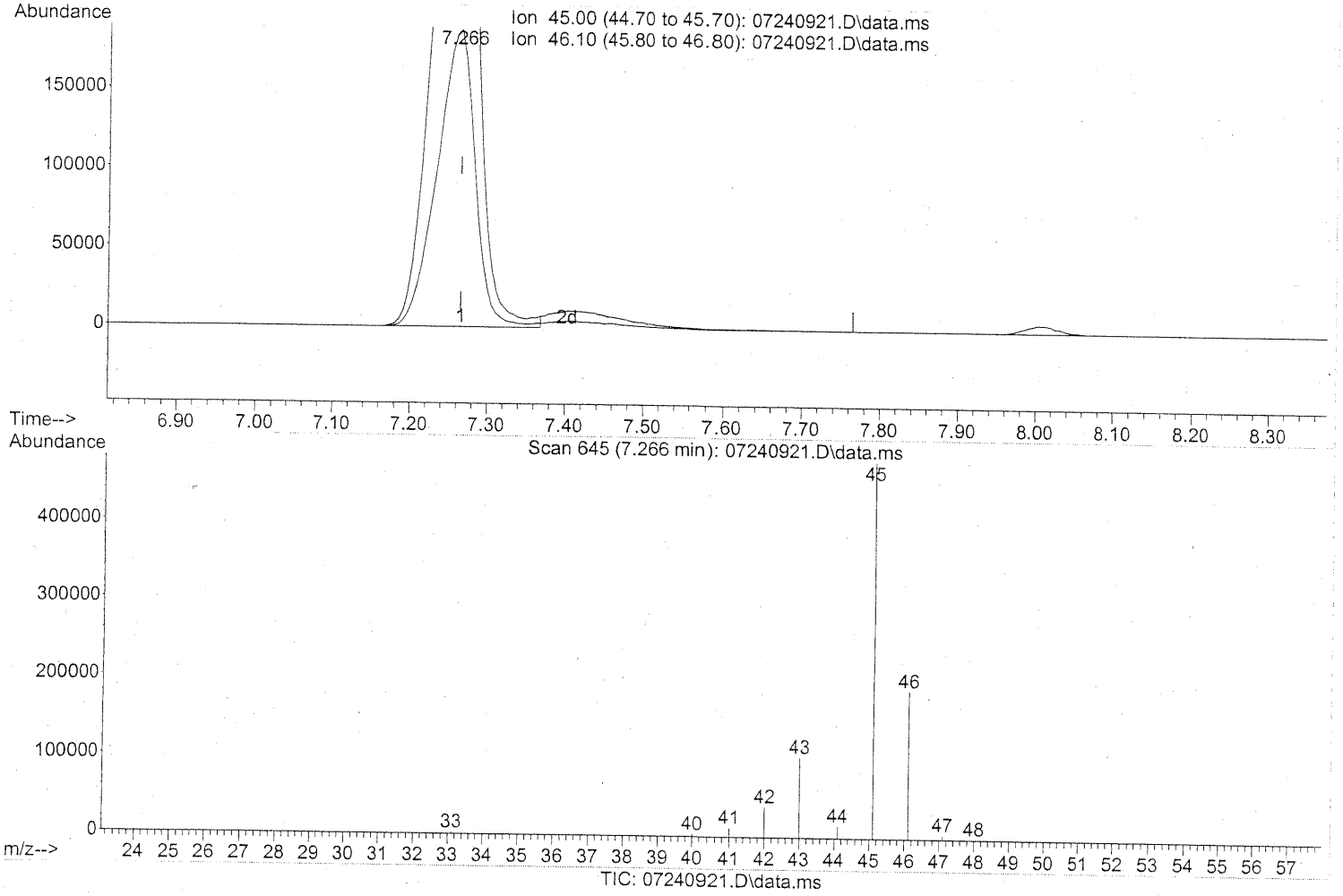
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1477310	43.467	ng	99
81) 2-Ethyltoluene	24.79	105	3161734	38.183	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2982927	39.790	ng	99
83) n-Decane	25.16	57	1444437	35.460	ng	99
84) Benzyl Chloride	25.22	91	2416210	42.959	ng	100
85) 1,3-Dichlorobenzene	25.25	146	1474214	43.357	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1481757	42.442	ng	100
87) sec-Butylbenzene	25.39	105	3600680	39.333	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	3699453	41.059	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	3056652	41.756	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1499793	44.049	ng	100
91) d-Limonene	25.75	68	1236612	45.411	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.27	157	470762	44.843	ng	95
93) n-Undecane	26.65	57	1487970	38.488	ng	99
94) 1,2,4-Trichlorobenzene	27.79	180	925411	45.606	ng	99
95) Naphthalene	27.94	128	3164635	41.379	ng	100
96) n-Dodecane	27.89	57	1373683	32.273	ng	99
97) Hexachlorobutadiene	28.36	225	531614	41.689	ng	100
98) Cyclohexanone	22.51	55	773115	32.345	ng	99
99) tert-Butylbenzene	25.05	119	2936568	40.463	ng	100
100) n-Butylbenzene	26.07	91	3004188	39.212	ng	100

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 08:48:03 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.266min (0.000) 125.06ng

response 1640232

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.83
0.00	0.00	0.00
0.00	0.00	0.00

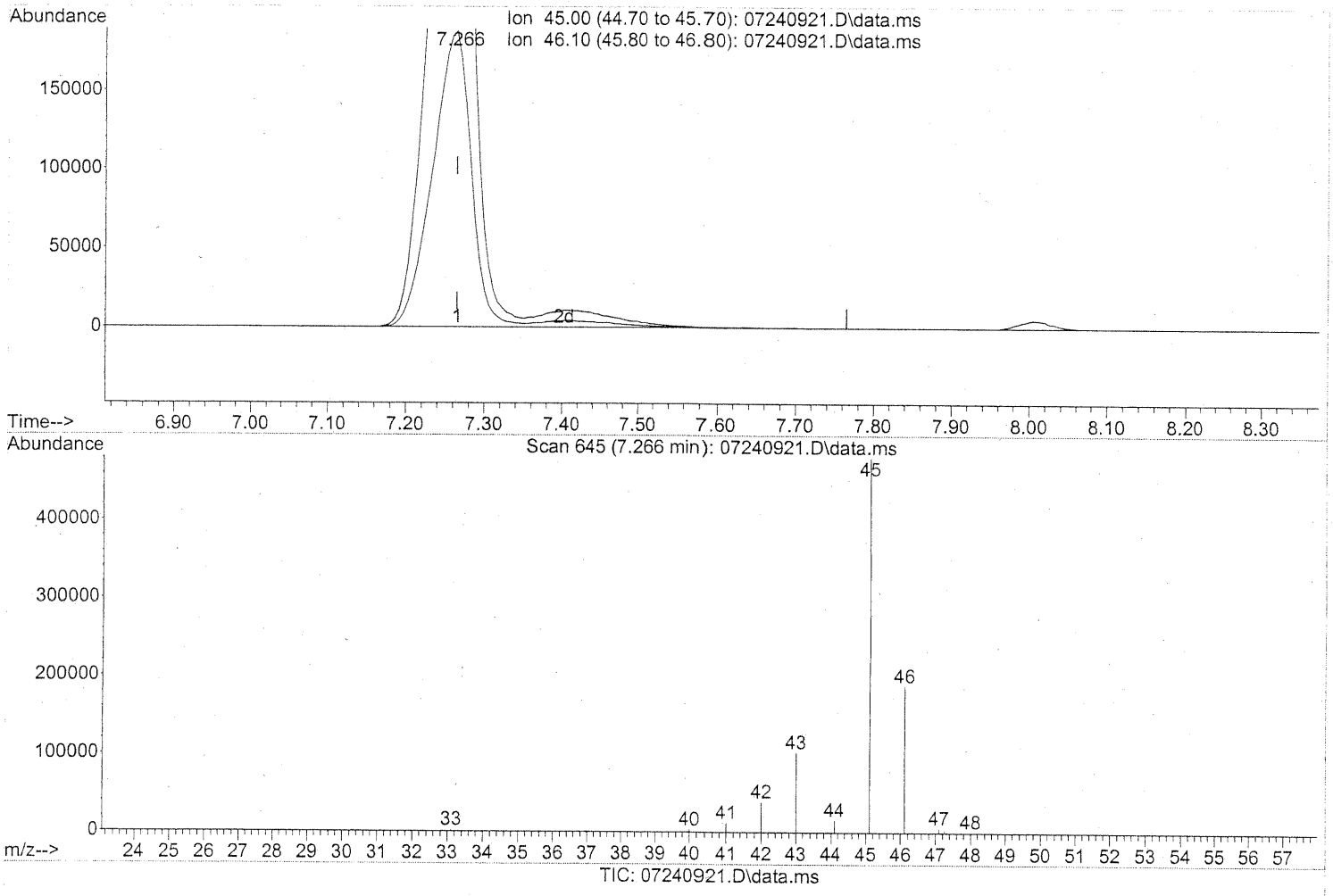
PT

225

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 08:48:03 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.266min (0.000) 130.52ng m

response 1711818

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.20
0.00	0.00	0.00
0.00	0.00	0.00

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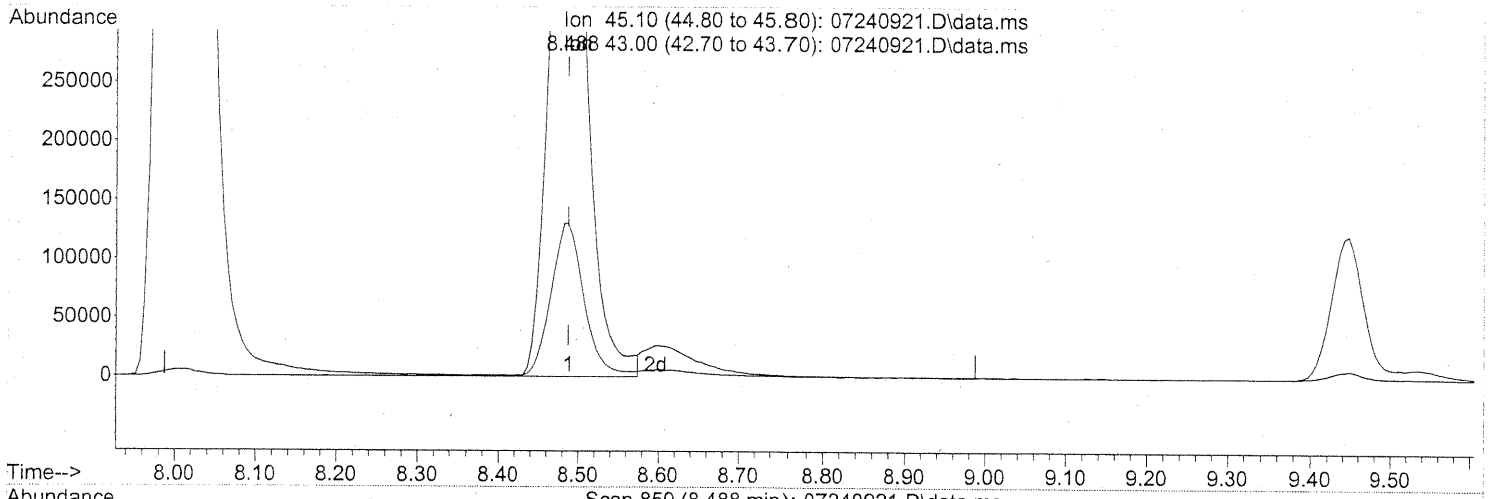
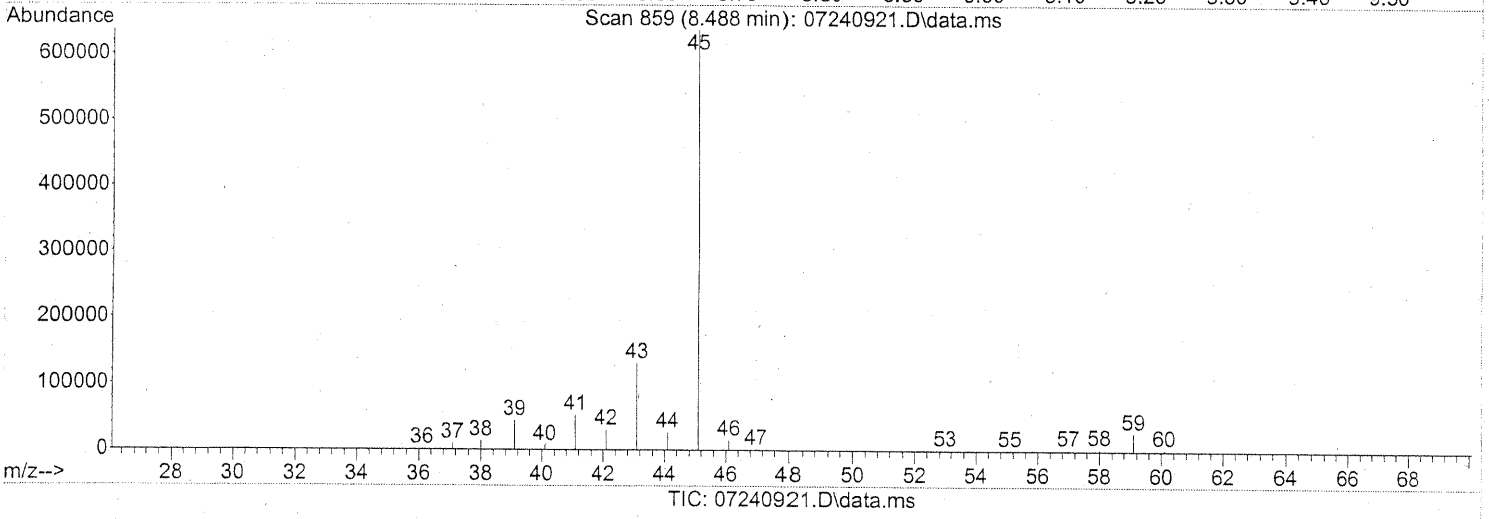
7/27/09

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 08:48:03 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration





TIC: 07240921.D\data.ms

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

8.488min (0.000) 35.95ng

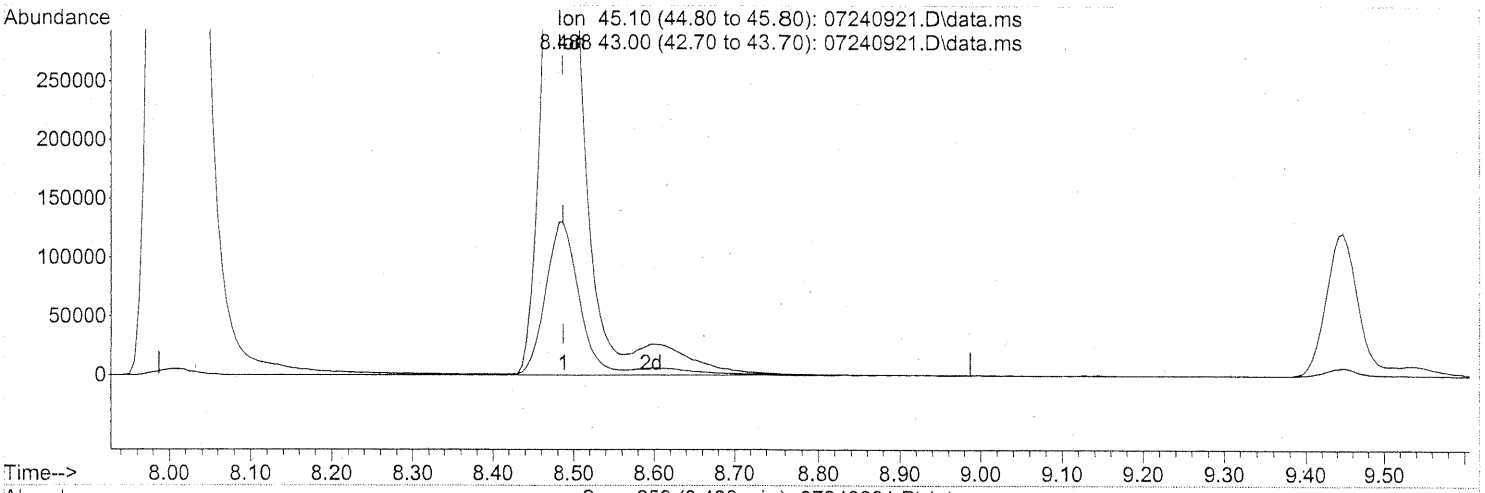
response 1809118

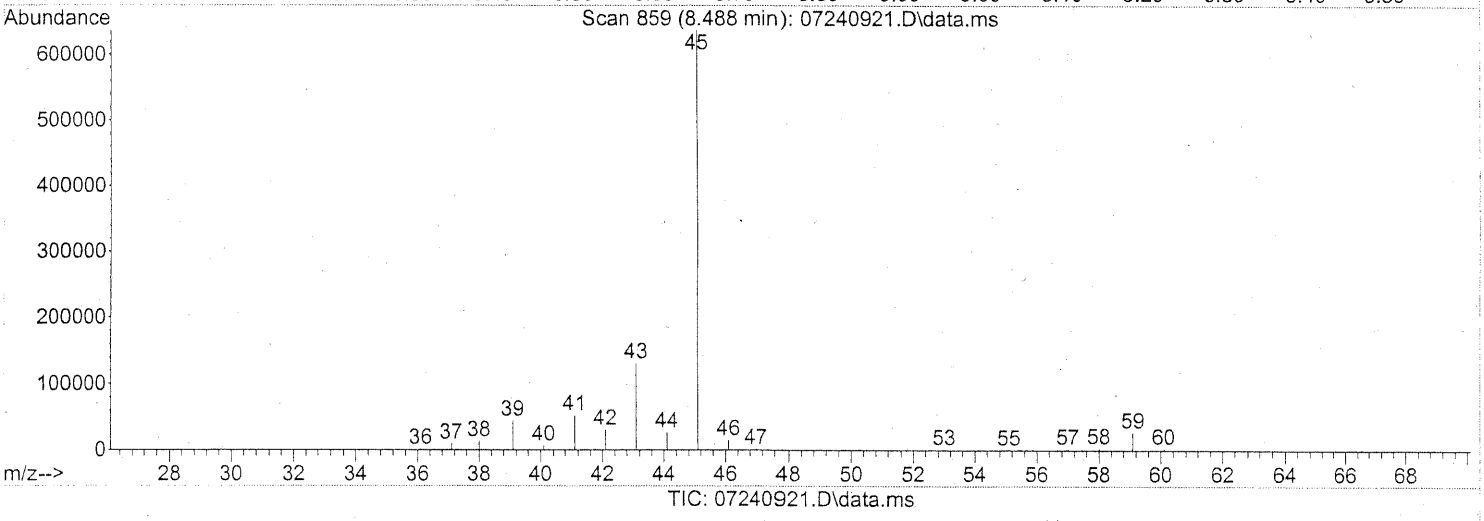
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	20.64
0.00	0.00	0.00
0.00	0.00	0.00

PT

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240921.D
Acq On : 25 Jul 2009 00:14
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 08:48:03 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration





TIC: 07240921.D\data.ms

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

8.488min (0.000) 38.55ng m

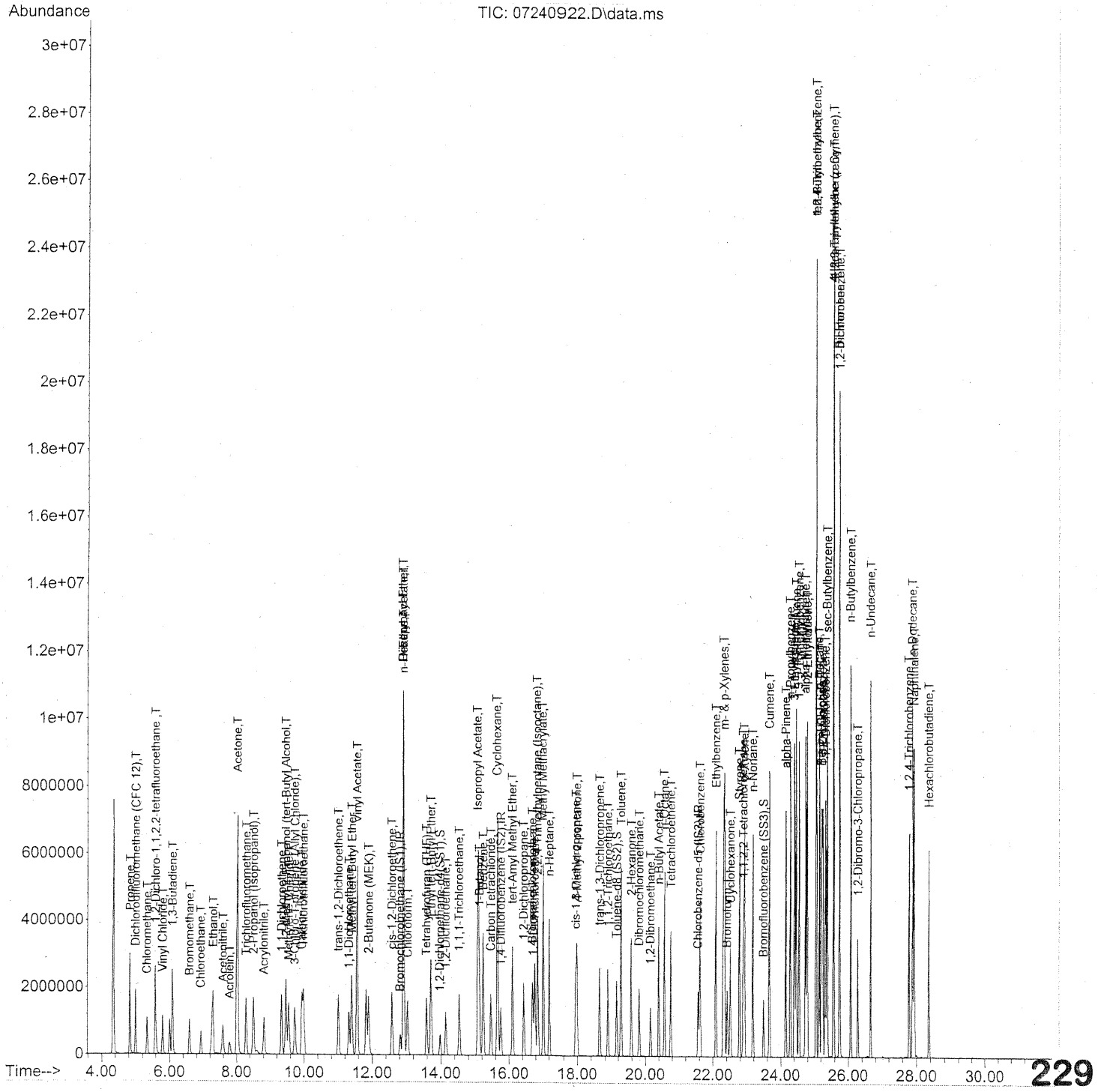
response 1939885

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.25
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Em 7/27/09
7/27/09

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240922.D
Acq On : 25 Jul 2009 00:56
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:13:11 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240922.D
Acq On : 25 Jul 2009 00:56
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:13:11 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	334431	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.77	114	1680503	25.000	ng		0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	783371	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.98	65	591614	20.211	ng		0.00
Spiked Amount 25.000			Recovery =	80.84%			
57) Toluene-d8 (SS2)	19.15	98	1908892	26.935	ng		0.00
Spiked Amount 25.000			Recovery =	107.72%			
73) Bromofluorobenzene (SS3)	23.49	174	588011	28.999	ng		0.00
Spiked Amount 25.000			Recovery =	116.00%			
Target Compounds							Qvalue
2) Propene	4.83	42	1326440	71.032	ng		100
3) Dichlorodifluoromethan...	5.00	85	2144836	56.450	ng		99
4) Chloromethane	5.33	50	1549190	49.502	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	1203456	55.529	ng		100
6) Vinyl Chloride	5.80	62	1639565	45.820	ng		100
7) 1,3-Butadiene	6.08	54	1566512	55.073	ng		100
8) Bromomethane	6.59	94	1009847	46.777	ng		100
9) Chloroethane	6.93	64	816493	52.139	ng		100
10) Ethanol	7.29	45	4093585	312.247	ng		100
11) Acetonitrile	7.59	41	1618889	51.833	ng		100
12) Acrolein	7.79	56	587634	50.845	ng		98
13) Acetone	8.03	58	4668898	288.707	ng		95
14) Trichlorofluoromethane	8.29	101	1928885	52.490	ng		98
15) 2-Propanol (Isopropanol)	8.50	45	3439733	68.376	ng		100
16) Acrylonitrile	8.81	53	1361029	56.247	ng		100
17) 1,1-Dichloroethene	9.33	96	1059462	58.465	ng		99
18) 2-Methyl-2-Propanol (t...	9.46	59	3958447	72.323	ng		99
19) Methylene Chloride	9.55	84	1066008	51.918	ng		97
20) 3-Chloro-1-propene (Al...	9.73	41	1404688	53.107	ng		100
21) Trichlorotrifluoroethane	9.99	151	930085	67.027	ng		98
22) Carbon Disulfide	9.94	76	3863592	59.674	ng		97
23) trans-1,2-Dichloroethene	11.01	61	1506569	55.612	ng		99
24) 1,1-Dichloroethane	11.32	63	1795347	49.692	ng		100
25) Methyl tert-Butyl Ether	11.40	73	3331566	53.850	ng		100
26) Vinyl Acetate	11.57	86	1236360	235.533	ng		99
27) 2-Butanone (MEK)	11.90	72	804680	61.544	ng		100
28) cis-1,2-Dichloroethene	12.58	61	1511007	57.668	ng		98
29) Diisopropyl Ether	12.91	87	1161454	65.501	ng	#	93
30) Ethyl Acetate	12.92	61	1044430	152.131	ng		99
31) n-Hexane	12.93	57	2356606	72.635	ng		9

R9072409.M Mon Jul 27 09:14:19 2009 em 7/27/09 Page: 1

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240922.D
Acq On : 25 Jul 2009 00:56
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:13:11 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.04	83	1828516	53.195	ng		100
34) Tetrahydrofuran (THF)	13.59	72	702576	56.699	ng		100
35) Ethyl tert-Butyl Ether	13.72	87	1425532	54.869	ng		97
36) 1,2-Dichloroethane	14.14	62	1459766	48.908	ng		99
38) 1,1,1-Trichloroethane	14.54	97	1658392	51.197	ng		100
39) Isopropyl Acetate	15.08	61	1602957	132.618	ng	#	86
40) 1-Butanol	15.12	56	2704177	135.657	ng	#	5
41) Benzene	15.24	78	4678498	53.761	ng		100
42) Carbon Tetrachloride	15.47	117	1501671	58.895	ng		99
43) Cyclohexane	15.66	84	3930317	116.291	ng		98
44) tert-Amyl Methyl Ether	16.11	73	3415816	57.340	ng		100
45) 1,2-Dichloropropane	16.44	63	1056847	57.370	ng		98
46) Bromodichloromethane	16.70	83	1538229	59.573	ng		99
47) Trichloroethene	16.78	130	1228428	63.688	ng		100
48) 1,4-Dioxane	16.73	88	947662	65.558	ng		98
49) 2,2,4-Trimethylpentane...	16.86	57	4625097	54.507	ng		100
50) Methyl Methacrylate	17.03	100	1088716	149.086	ng		97
51) n-Heptane	17.22	71	1274278	59.760	ng		100
52) cis-1,3-Dichloropropene	17.95	75	1794205	56.606	ng		100
53) 4-Methyl-2-pentanone	17.99	58	1130714	65.977	ng		98
54) trans-1,3-Dichloropropene	18.65	75	1854969	62.766	ng		99
55) 1,1,2-Trichloroethane	18.89	97	1073618	62.208	ng		99
58) Toluene	19.28	91	5270710	68.820	ng		100
59) 2-Hexanone	19.59	43	2804973	71.326	ng		100
60) Dibromochloromethane	19.82	129	1380879	87.560	ng		100
61) 1,2-Dibromoethane	20.15	107	1260494	73.874	ng		99
62) n-Butyl Acetate	20.39	43	3172033	71.633	ng		99
63) n-Octane	20.56	57	1112752	69.813	ng		100
64) Tetrachloroethene	20.76	166	1336901	78.534	ng		99
65) Chlorobenzene	21.63	112	3338487	74.757	ng		100
66) Ethylbenzene	22.10	91	6073712	72.746	ng		100
67) m- & p-Xylenes	22.33	91	10186130	146.782	ng		99
68) Bromoform	22.42	173	1174610	87.869	ng		100
69) Styrene	22.78	104	3923090	85.792	ng		100
70) o-Xylene	22.93	91	5077740	73.782	ng		100
71) n-Nonane	23.18	43	2564690	68.373	ng		100
72) 1,1,2,2-Tetrachloroethane	22.89	83	2238622	79.163	ng		99
74) Cumene	23.67	105	6550441	77.257	ng		100
75) alpha-Pinene	24.15	93	3225606	77.224	ng		99
76) n-Propylbenzene	24.29	91	8244845	77.223	ng		99
77) 3-Ethyltoluene	24.41	105	6805577	85.331	ng		100
78) 4-Ethyltoluene	24.47	105	7008657	89.908	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	5727339	86.062	ng		100

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240922.D
Acq On : 25 Jul 2009 00:56
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

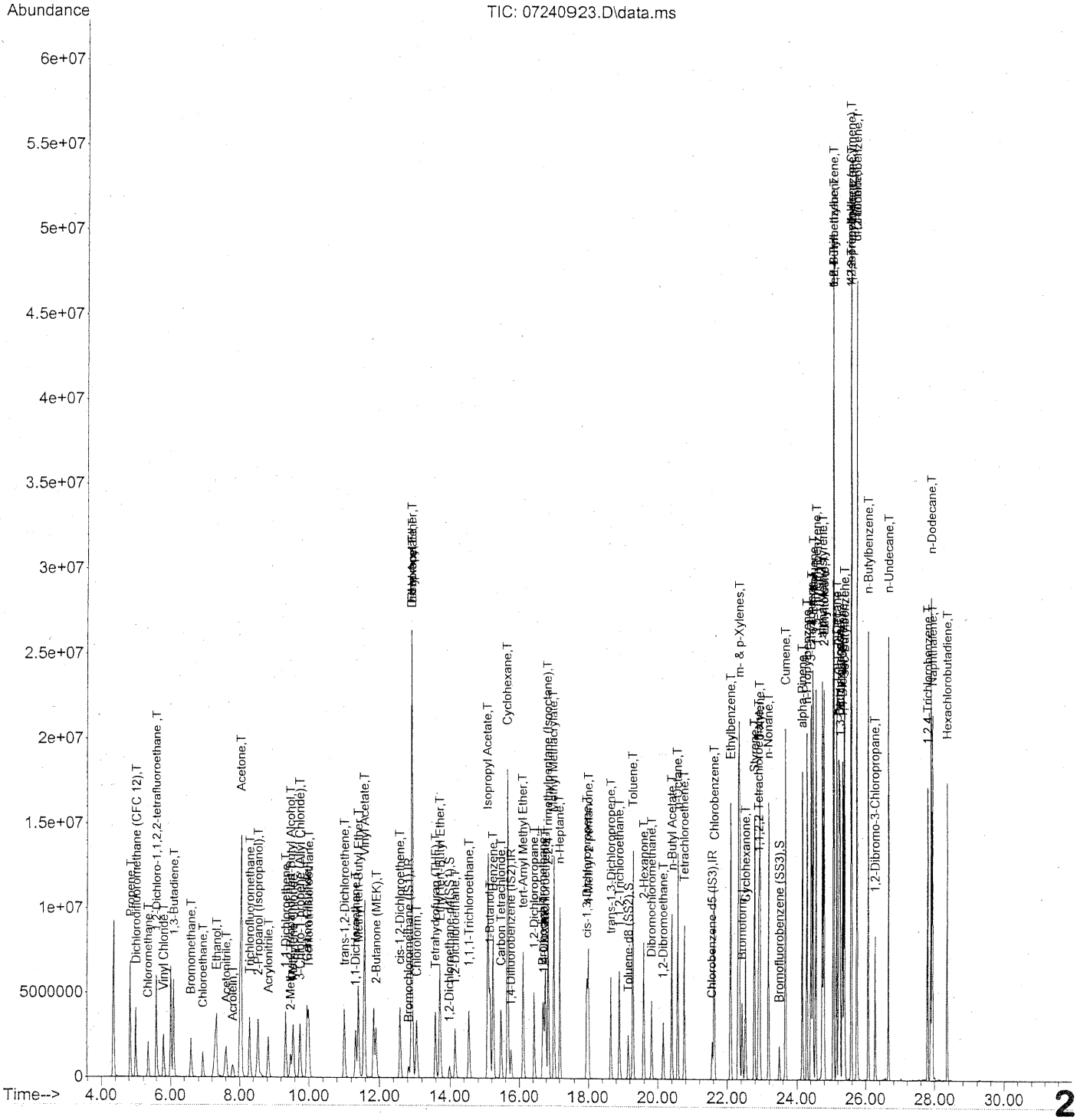
Quant Time: Jul 27 09:13:11 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	3299903	97.189	ng	99
81) 2-Ethyltoluene	24.80	105	7011399	84.758	ng	99
82) 1,2,4-Trimethylbenzene	25.06	105	7221883	96.429	ng	98
83) n-Decane	25.16	57	3315541	81.474	ng	99
84) Benzyl Chloride	25.23	91	5604883	99.750	ng	100
85) 1,3-Dichlorobenzene	25.25	146	3331443	98.074	ng	100
86) 1,4-Dichlorobenzene	25.33	146	3331403	95.515	ng	100
87) sec-Butylbenzene	25.39	105	8105485	88.630	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	8962908	99.575	ng	99
89) 1,2,3-Trimethylbenzene	25.58	105	7519581	102.824	ng	97
90) 1,2-Dichlorobenzene	25.75	146	3630441	106.732	ng	100
91) d-Limonene	25.74	68	2940523	108.090	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.27	157	1067250	101.762	ng	95
93) n-Undecane	26.66	57	3521127	91.168	ng	99
94) 1,2,4-Trichlorobenzene	27.80	180	2261665	111.568	ng	100
95) Naphthalene	27.94	128	7778061	101.802	ng	99
96) n-Dodecane	27.89	57	3470131	81.606	ng	99
97) Hexachlorobutadiene	28.36	225	1281371	100.583	ng	99
98) Cyclohexanone	22.52	55	1652816	69.217	ng	99
99) tert-Butylbenzene	25.06	119	7008929	96.671	ng	99
100) n-Butylbenzene	26.07	91	6818183	89.082	ng	99

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

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240923.D
Acq On : 25 Jul 2009 1:38
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:14:28 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240923.D
Acq On : 25 Jul 2009 1:38
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:14:28 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.84	130	378303	25.000	ng		0.02
37) 1,4-Difluorobenzene (IS2)	15.77	114	1946517	25.000	ng		0.02
56) Chlorobenzene-d5 (IS3)	21.57	82	925238	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.99	65	677568	20.463	ng		0.02
Spiked Amount 25.000			Recovery = 81.84%				
57) Toluene-d8 (SS2)	19.16	98	2217876	26.496	ng		0.01
Spiked Amount 25.000			Recovery = 106.00%				
73) Bromofluorobenzene (SS3)	23.49	174	672797	28.093	ng		0.00
Spiked Amount 25.000			Recovery = 112.36%				
Target Compounds							Qvalue
2) Propene	4.84	42	3216246	152.259	ng		98
3) Dichlorodifluoromethan...	5.01	85	4778383	111.178	ng		99
4) Chloromethane	5.34	50	3159280	89.244	ng		100
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	2774907	113.189	ng		100
6) Vinyl Chloride	5.80	62	3802360	93.939	ng		99
7) 1,3-Butadiene	6.09	54	3774226	117.299	ng		99
8) Bromomethane	6.60	94	2332004	95.493	ng		100
9) Chloroethane	6.94	64	1901870	107.364	ng		99
10) Ethanol	7.34	45	9959097	671.554	ng		100
11) Acetonitrile	7.62	41	3768702	106.672	ng		99
12) Acrolein	7.80	56	1346769	103.016	ng		98
13) Acetone	8.05	58	11629101	635.705	ng	#	78
14) Trichlorofluoromethane	8.30	101	4268461	102.686	ng		98
15) 2-Propanol (Isopropanol)	8.55	45	7659354	134.598	ng		99
16) Acrylonitrile	8.84	53	3092408	112.979	ng		100
17) 1,1-Dichloroethene	9.34	96	2400565	117.109	ng		99
18) 2-Methyl-2-Propanol (t...	9.48	59	2332801	37.678	ng		96
19) Methylene Chloride	9.56	84	2361243	101.663	ng		98
20) 3-Chloro-1-propene (Al...	9.74	41	3232471	108.037	ng		99
21) Trichlorotrifluoroethane	10.00	151	1984835	126.449	ng		99
22) Carbon Disulfide	9.95	76	8845950	120.783	ng		97
23) trans-1,2-Dichloroethene	11.02	61	3434156	112.065	ng		98
24) 1,1-Dichloroethane	11.33	63	4054931	99.218	ng		100
25) Methyl tert-Butyl Ether	11.41	73	7646702	109.264	ng		98
26) Vinyl Acetate	11.58	86	2691219	453.234	ng	#	86
27) 2-Butanone (MEK)	11.92	72	1351550	91.383	ng		99
28) cis-1,2-Dichloroethene	12.59	61	3454351	116.547	ng		98
29) Diisopropyl Ether	12.93	87	3029068	151.015	ng	#	92
30) Ethyl Acetate	12.94	61	2858748	368.112	ng		100
31) n-Hexane	12.94	57	6483491	176.659	ng		92

EM 7/27/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240923.D
Acq On : 25 Jul 2009 1:38
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:14:28 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.06	83	4117291	105.890	ng		100
34) Tetrahydrofuran (THF)	13.59	72	1610915	114.927	ng		99
35) Ethyl tert-Butyl Ether	13.73	87	3354324	114.136	ng		96
36) 1,2-Dichloroethane	14.15	62	3271061	96.885	ng		99
38) 1,1,1-Trichloroethane	14.55	97	3639334	96.997	ng		100
39) Isopropyl Acetate	15.10	61	3981137	284.361	ng		97
40) 1-Butanol	15.15	56	6328206	274.075	ng	#	5
41) Benzene	15.25	78	10974259	108.873	ng		100
42) Carbon Tetrachloride	15.47	117	3381490	114.496	ng		98
43) Cyclohexane	15.67	84	9931690	253.701	ng		97
44) tert-Amyl Methyl Ether	16.11	73	8111482	117.556	ng		100
45) 1,2-Dichloropropane	16.45	63	2487540	116.580	ng		99
46) Bromodichloromethane	16.71	83	3490444	116.705	ng		99
47) Trichloroethene	16.79	130	2871963	128.549	ng		100
48) 1,4-Dioxane	16.74	88	2208380	131.894	ng		97
49) 2,2,4-Trimethylpentane...	16.87	57	11228641	114.245	ng		98
50) Methyl Methacrylate	17.05	100	2671801	315.870	ng		97
51) n-Heptane	17.22	71	3146622	127.402	ng		99
52) cis-1,3-Dichloropropene	17.96	75	4249292	115.741	ng		99
53) 4-Methyl-2-pentanone	18.00	58	2774694	139.778	ng		100
54) trans-1,3-Dichloropropene	18.66	75	4372805	127.742	ng		100
55) 1,1,2-Trichloroethane	18.90	97	2551028	127.612	ng		100
58) Toluene	19.30	91	12533650	138.559	ng		98
59) 2-Hexanone	19.60	43	6610685	142.324	ng		98
60) Dibromochloromethane	19.83	129	3196490	171.608	ng		99
61) 1,2-Dibromoethane	20.16	107	2934085	145.592	ng		100
62) n-Butyl Acetate	20.40	43	8001912	152.996	ng		97
63) n-Octane	20.57	57	2792932	148.358	ng		99
64) Tetrachloroethene	20.76	166	3208291	159.568	ng		98
65) Chlorobenzene	21.63	112	7965268	151.014	ng		99
66) Ethylbenzene	22.11	91	14369974	145.722	ng		98
67) m- & p-Xylenes	22.35	91	24734885	301.778	ng		96
68) Bromoform	22.43	173	2769581	175.417	ng		100
69) Styrene	22.79	104	9435360	174.699	ng		99
70) o-Xylene	22.93	91	12530844	154.162	ng		99
71) n-Nonane	23.19	43	6227222	140.559	ng		97
72) 1,1,2,2-Tetrachloroethane	22.91	83	5599835	167.661	ng		99
74) Cumene	23.67	105	15288185	152.664	ng		96
75) alpha-Pinene	24.16	93	7944902	161.043	ng		99
76) n-Propylbenzene	24.29	91	17419734	138.139	ng		92
77) 3-Ethyltoluene	24.42	105	16274364	172.767	ng		96
78) 4-Ethyltoluene	24.47	105	15153930	164.589	ng		90
79) 1,3,5-Trimethylbenzene	24.56	105	13651938	173.687	ng		9[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240923.D
Acq On : 25 Jul 2009 1:38
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 27 09:14:28 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 08:47:52 2009
Response via : Initial Calibration

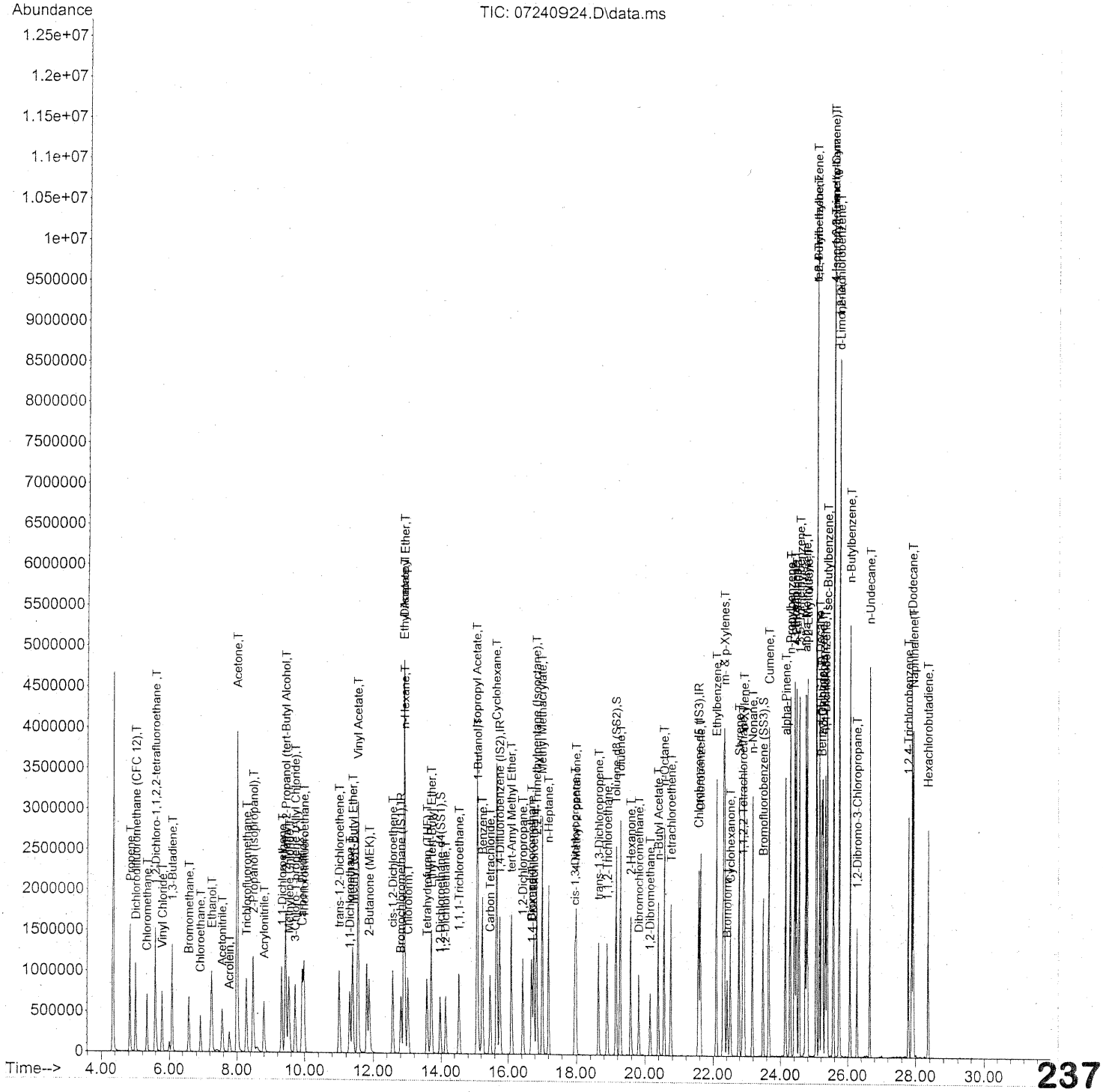
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	8186472	204.139	ng	98
81) 2-Ethyltoluene	24.80	105	15963469	163.388	ng	94
82) 1,2,4-Trimethylbenzene	25.07	105	16202949	183.174	ng	88
83) n-Decane	25.17	57	8079119	168.090	ng	99
84) Benzyl Chloride	25.24	91	13541552	204.045	ng	97
85) 1,3-Dichlorobenzene	25.27	146	8372671	208.689	ng	100
86) 1,4-Dichlorobenzene	25.34	146	8211130	199.326	ng	100
87) sec-Butylbenzene	25.39	105	16769219	155.249	ng	91
88) 4-Isopropyltoluene (p-...	25.57	119	17063893	160.507	ng	81
89) 1,2,3-Trimethylbenzene	25.58	105	16550081	191.609	ng	88
90) 1,2-Dichlorobenzene	25.76	146	9459037	235.449	ng	99
91) d-Limonene	25.75	68	7001097	217.891	ng	93
92) 1,2-Dibromo-3-Chloropr...	26.28	157	2578208	208.138	ng	95
93) n-Undecane	26.66	57	8589039	188.286	ng	95
94) 1,2,4-Trichlorobenzene	27.80	180	6065319	253.325	ng	99
95) Naphthalene	27.94	128	17267724	191.352	ng	92
96) n-Dodecane	27.90	57	8903255	177.272	ng	95
97) Hexachlorobutadiene	28.36	225	3526470	234.372	ng	99
98) Cyclohexanone	22.53	55	3939191	139.672	ng	97
99) tert-Butylbenzene	25.07	119	16255159	189.823	ng	93
100) n-Butylbenzene	26.08	91	14857787	164.357	ng	90

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:40:01 2009
Quant Method : J:\MS09\Methods\R9072409.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_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:40:01 2009
Quant Method : J:\MS09\Methods\R9072409.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)	12.81	130	390307	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1955770	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	925210	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	694801	25.162	ng		-0.02
Spiked Amount 25.000			Recovery =	100.64%			
57) Toluene-d8 (SS2)	19.15	98	2249364	24.574	ng		-0.01
Spiked Amount 25.000			Recovery =	98.28%			
73) Bromofluorobenzene (SS3)	23.49	174	664046	24.131	ng		0.00
Spiked Amount 25.000			Recovery =	96.52%			
Target Compounds							Qvalue
2) Propene	4.83	42	699671	28.415	ng		99
3) Dichlorodifluoromethan...	5.00	85	1196935	24.357	ng		99
4) Chloromethane	5.33	50	971167	26.391	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	685329	24.762	ng		99
6) Vinyl Chloride	5.79	62	1015739	25.892	ng		99
7) 1,3-Butadiene	6.08	54	798324	28.303	ng		100
8) Bromomethane	6.58	94	637263	27.539	ng		100
9) Chloroethane	6.92	64	519047	26.445	ng		100
10) Ethanol	7.25	45	2029943m	124.246	ng		
11) Acetonitrile	7.57	41	951679	25.761	ng		100
12) Acrolein	7.78	56	348393	29.250	ng		98
13) Acetone	8.00	58	2433272	130.939	ng		96
14) Trichlorofluoromethane	8.29	101	1053169	24.604	ng		98
15) 2-Propanol (Isopropanol)	8.48	45	2354451m	48.151	ng		
16) Acrylonitrile	8.80	53	773979	31.046	ng		100
17) 1,1-Dichloroethene	9.33	96	610358	28.001	ng		99
18) 2-Methyl-2-Propanol (t...	9.44	59	3094853	56.199	ng		99
19) Methylene Chloride	9.54	84	617467	25.094	ng		97
20) 3-Chloro-1-propene (Al...	9.73	41	821559	30.939	ng		98
21) Trichlorotrifluoroethane	9.98	151	525465	27.062	ng		99
22) Carbon Disulfide	9.93	76	2159012	25.761	ng		98
23) trans-1,2-Dichloroethene	11.00	61	857461	26.822	ng		97
24) 1,1-Dichloroethane	11.31	63	1051998	26.995	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1831119	26.644	ng		99
26) Vinyl Acetate	11.56	86	666906	150.463	ng		98
27) 2-Butanone (MEK)	11.89	72	434722	30.669	ng		99
28) cis-1,2-Dichloroethene	12.57	61	856547	27.766	ng		98
29) Diisopropyl Ether	12.91	87	570990	25.918	ng	#	94
30) Ethyl Acetate	12.90	61	489429	52.715	ng		99
31) n-Hexane	12.93	57	1123730	26.176	ng		9

R9072409.M Mon Jul 27 09:40:37 2009 EM 7/27/09 Page: 1

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:40:01 2009
Quant Method : J:\MS09\Methods\R9072409.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	13.02	83	1022970	26.240	ng		100
34) Tetrahydrofuran (THF)	13.58	72	392055	29.353	ng		100
35) Ethyl tert-Butyl Ether	13.71	87	766494	25.955	ng		96
36) 1,2-Dichloroethane	14.13	62	818178	26.179	ng		99
38) 1,1,1-Trichloroethane	14.54	97	918714	25.611	ng		99
39) Isopropyl Acetate	15.07	61	849495	59.646	ng	#	87
40) 1-Butanol	15.09	56	1330401	54.746	ng		82
41) Benzene	15.23	78	2507224	24.039	ng		99
42) Carbon Tetrachloride	15.46	117	812759	26.531	ng		99
43) Cyclohexane	15.66	84	2012920	51.612	ng		97
44) tert-Amyl Methyl Ether	16.10	73	1831189	26.564	ng		100
45) 1,2-Dichloropropane	16.43	63	594303	27.031	ng		99
46) Bromodichloromethane	16.70	83	819403	27.181	ng		99
47) Trichloroethene	16.77	130	658950	24.722	ng		99
48) 1,4-Dioxane	16.72	88	494612	28.174	ng		96
49) 2,2,4-Trimethylpentane...	16.86	57	2529927	25.032	ng		99
50) Methyl Methacrylate	17.02	100	566120	57.880	ng		97
51) n-Heptane	17.21	71	662286	26.226	ng		100
52) cis-1,3-Dichloropropene	17.95	75	979082	26.769	ng		100
53) 4-Methyl-2-pentanone	17.99	58	590637	29.914	ng		99
54) trans-1,3-Dichloropropene	18.64	75	1007021	31.279	ng		100
55) 1,1,2-Trichloroethane	18.89	97	586389	26.761	ng		99
58) Toluene	19.28	91	2800409	24.993	ng		100
59) 2-Hexanone	19.58	43	1412487	29.311	ng		100
60) Dibromochloromethane	19.82	129	707041	28.062	ng		100
61) 1,2-Dibromoethane	20.15	107	683634	26.341	ng		100
62) n-Butyl Acetate	20.39	43	1609900	30.050	ng		99
63) n-Octane	20.56	57	579035	26.446	ng		99
64) Tetrachloroethene	20.76	166	688471	23.239	ng		99
65) Chlorobenzene	21.62	112	1755751	24.909	ng		100
66) Ethylbenzene	22.09	91	3132202	25.706	ng		99
67) m- & p-Xylenes	22.33	91	5041070	50.172	ng		100
68) Bromoform	22.42	173	574106	25.570	ng		100
69) Styrene	22.77	104	1967625	26.556	ng		100
70) o-Xylene	22.92	91	2535736	25.333	ng		99
71) n-Nonane	23.18	43	1290344	26.404	ng		99
72) 1,1,2,2-Tetrachloroethane	22.89	83	1118302	26.863	ng		99
74) Cumene	23.66	105	3201636	24.086	ng		100
75) alpha-Pinene	24.15	93	1574755	24.789	ng		99
76) n-Propylbenzene	24.28	91	4005576	25.017	ng		100
77) 3-Ethyltoluene	24.41	105	3333668	26.465	ng		99
78) 4-Ethyltoluene	24.46	105	3166673	25.050	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	2741541	26.078	ng		1

 em 7/27/09

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:40:01 2009
Quant Method : J:\MS09\Methods\R9072409.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	1546311	26.294	ng	99
81) 2-Ethyltoluene	24.79	105	3302217	25.024	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	3126958	26.594	ng	99
83) n-Decane	25.15	57	1543368	27.171	ng	98
84) Benzyl Chloride	25.22	91	2480149	29.427	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1542524	24.993	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1559800	24.256	ng	99
87) sec-Butylbenzene	25.38	105	3764147	25.606	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	3812561	25.725	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	3157630	26.372	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1557074	24.272	ng	100
91) d-Limonene	25.74	68	1289645	27.607	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.27	157	492179	27.319	ng	95
93) n-Undecane	26.65	57	1591265	27.360	ng	100
94) 1,2,4-Trichlorobenzene	27.79	180	1000544	24.172	ng	99
95) Naphthalene	27.94	128	3439547	23.839	ng	100
96) n-Dodecane	27.89	57	1538465	24.754	ng	99
97) Hexachlorobutadiene	28.36	225	584325	24.674	ng	99
98) Cyclohexanone	22.51	55	838650	24.814	ng	99
99) tert-Butylbenzene	25.05	119	3051414	25.678	ng	100
100) n-Butylbenzene	26.07	91	3104805	26.523	ng	100

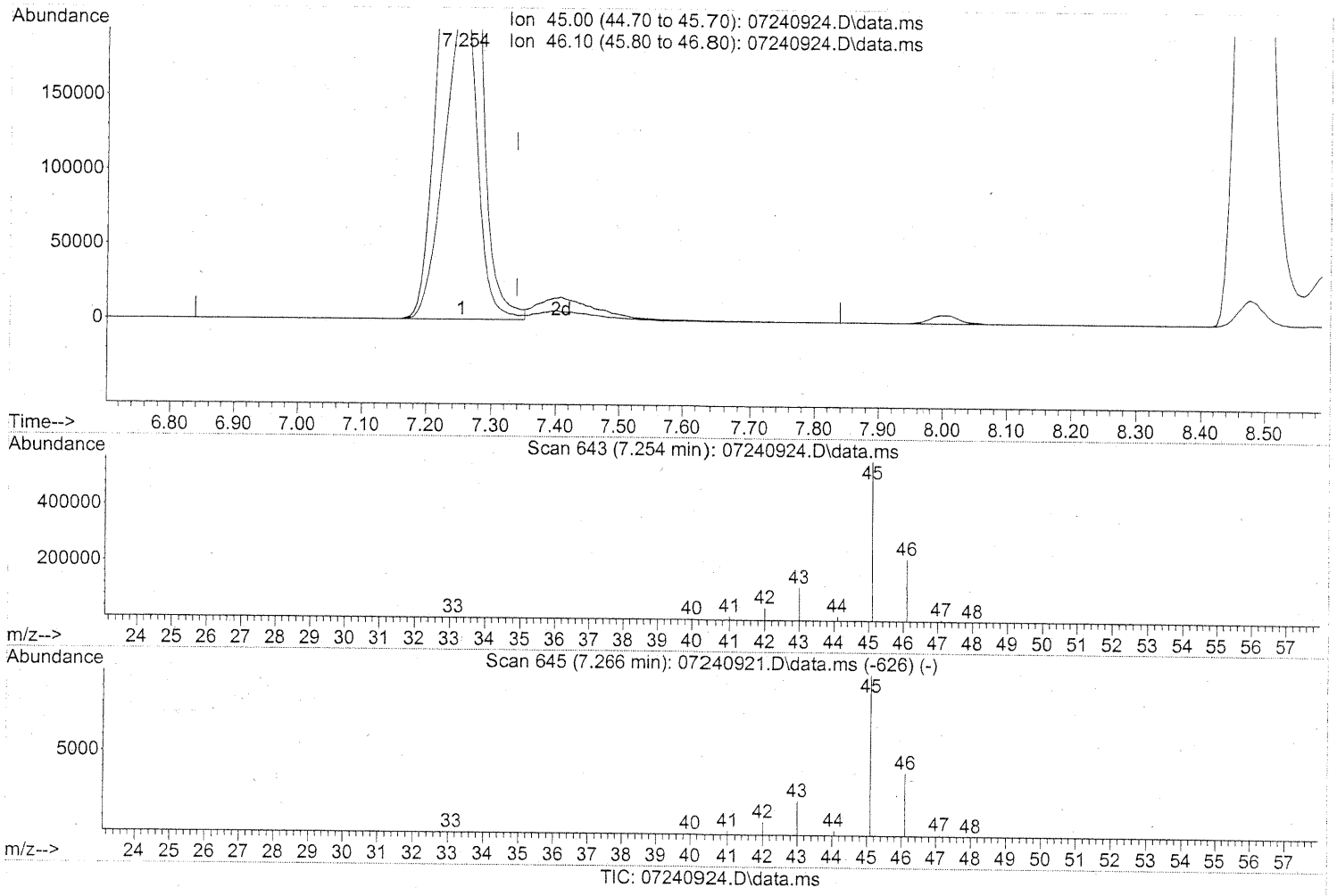
(#) = qualifier out of range (m) = manual integration (+) = signals summed

tom 7/27/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:38:39 2009
Quant Method : J:\MS09\Methods\R9072409.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) 118.25ng

response 1931965

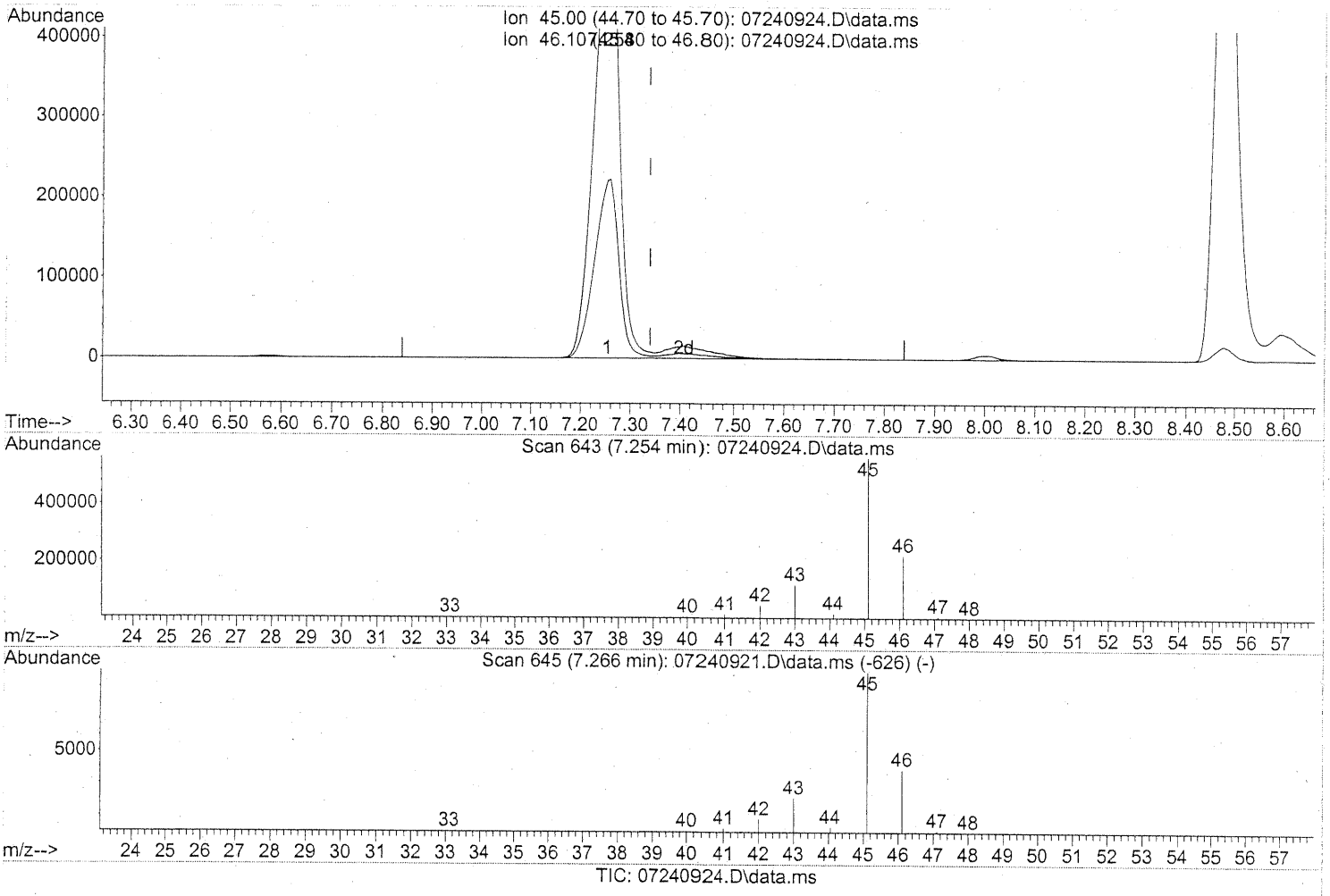
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.98
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:40:01 2009
Quant Method : J:\MS09\Methods\R9072409.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) 124.25ng m

response 2029943

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.10
0.00	0.00	0.00
0.00	0.00	0.00

PT - TIC

Em 7/27/09

7/27/09

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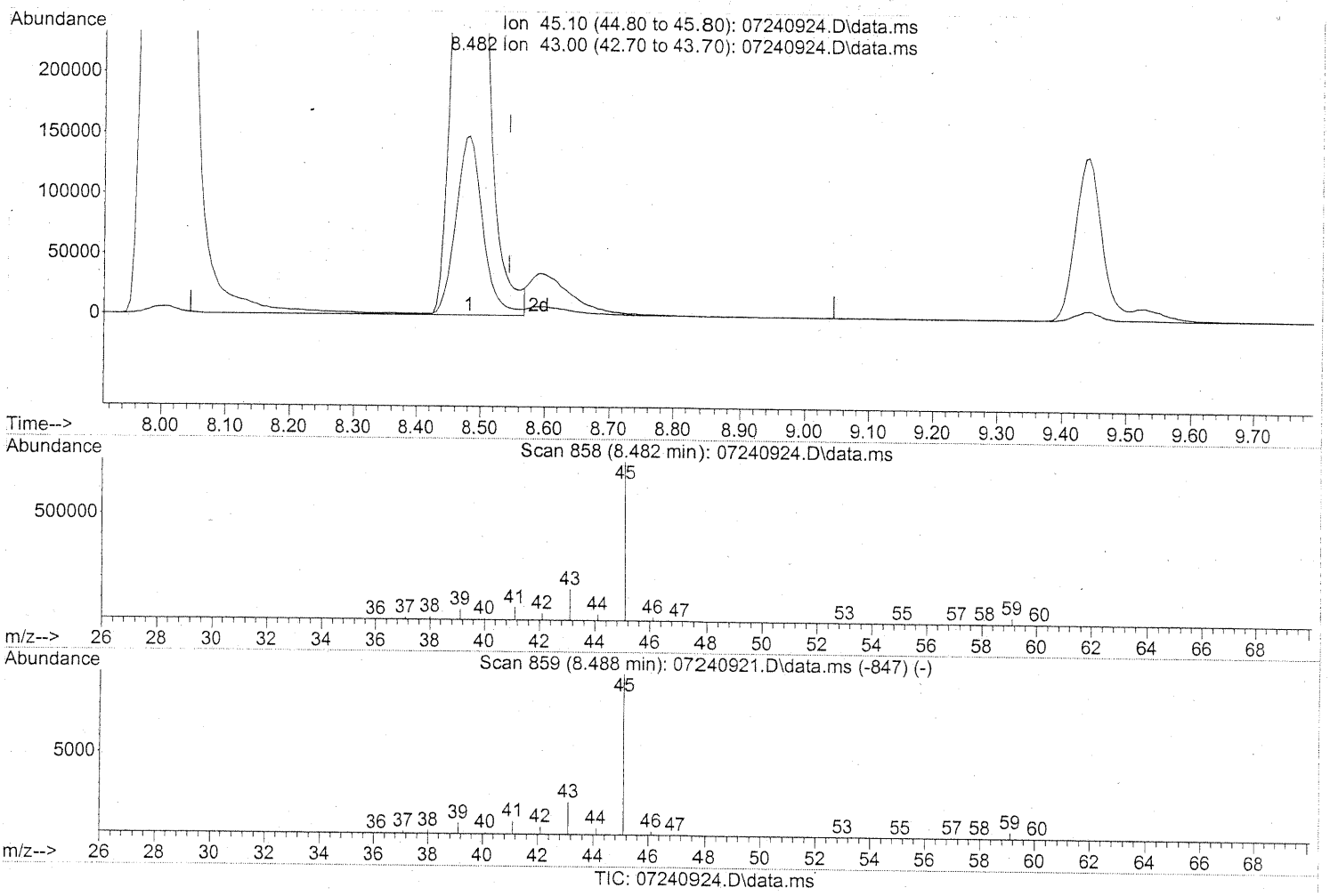
Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:38:39 2009
Quant Method : J:\MS09\Methods\R9072409.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) 44.79ng

response 2190235

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.68
0.00	0.00	0.00
0.00	0.00	0.00

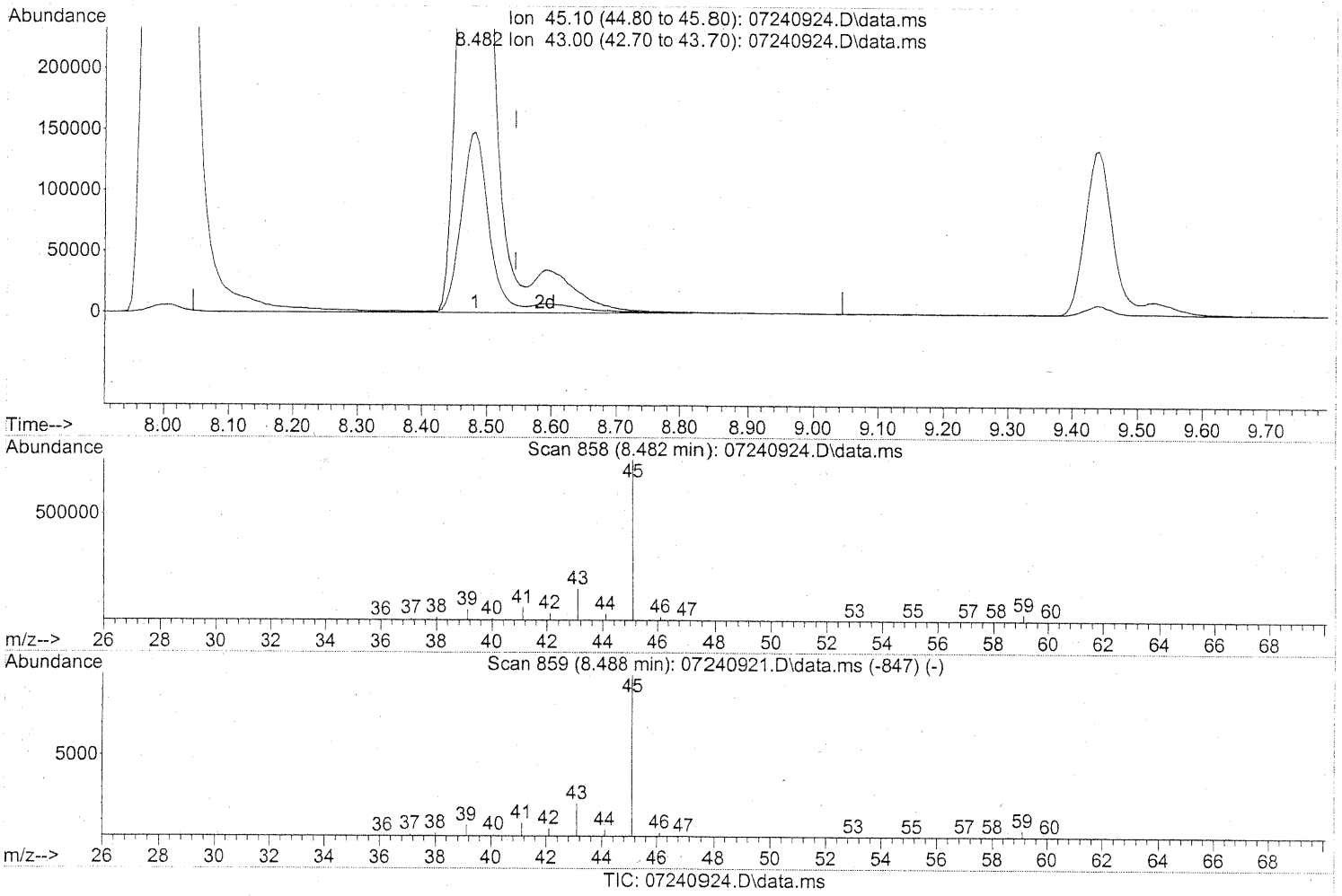
PT → HC

EM 7/27/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240924.D
Acq On : 25 Jul 2009 2:19
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-07200901/S20-07240915
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 09:38:39 2009
Quant Method : J:\MS09\Methods\R9072409.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) 48.15ng m

response 2354451

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	18.31
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Em 7/27/09
7/27/09

R9072409.M Mon Jul 27 09:40:06 2009

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 07240924.D
Data File Path: J:\MS09\Data\2009_07\24\
Operator: EM
Date Acquired: 7/25/09 2:19

Acq. Method File: TO15LOW.M
Name: 25ng TO-15 ICV STD
Misc Info: S20-07200901/S20-07240915
Instrument Name: MS09

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.83	28.4	26.3	108.0	70	130	*
3)	Dichlorodifluoromethane (CFC	5.00	24.4	26.0	93.8	70	130	*
4)	Chloromethane	5.33	26.4	25.0	105.6	70	130	*
5)	1,2-Dichloro-1,1,2,2-tetrafluoro(	5.59	24.8	26.0	95.4	70	130	*
6)	Vinyl Chloride	5.79	25.9	25.3	102.4	70	130	*
7)	1,3-Butadiene	6.08	28.3	26.8	105.6	70	130	*
8)	Bromomethane	6.58	27.5	25.8	106.6	70	130	*
9)	Chloroethane	6.92	26.4	25.5	103.5	70	130	*
10)	Ethanol	7.25	124.2	130.0	95.5	70	130	*
11)	Acetonitrile	7.57	25.8	26.0	99.2	70	130	*
12)	Acrolein	7.78	29.3	26.3	111.4	70	130	*
13)	Acetone	8.00	130.9	132.0	99.2	70	130	*
14)	Trichlorofluoromethane	8.29	24.6	26.3	93.5	70	130	*
15)	2-Propanol (Isopropanol)	8.48	48.2	48.0	100.4	70	130	*
16)	Acrylonitrile	8.80	31.0	25.8	120.2	70	130	*
17)	1,1-Dichloroethene	9.33	28.0	27.5	101.8	70	130	*
18)	2-Methyl-2-Propanol (tert-Butyl Al	9.44	56.2	50.0	112.4	70	130	*
19)	Methylene Chloride	9.54	25.1	26.8	93.7	70	130	*
20)	3-Chloro-1-propene (Allyl Chlor	9.73	30.9	27.0	114.4	70	130	*
21)	Trichlorotrifluoroethane	9.98	27.1	27.5	98.5	70	130	*
22)	Carbon Disulfide	9.93	25.8	26.0	99.2	70	130	*
23)	trans-1,2-Dichloroethene	11.00	26.8	25.5	105.1	70	130	*
24)	1,1-Dichloroethane	11.31	27.0	26.5	101.9	70	130	*
25)	Methyl tert-Butyl Ether	11.40	26.6	26.3	101.1	70	130	*
26)	Vinyl Acetate	11.56	150.5	126.0	119.4	70	130	*
27)	2-Butanone (MEK)	11.89	30.7	26.8	114.6	70	130	*
28)	cis-1,2-Dichloroethene	12.57	27.8	27.0	103.0	70	130	*
29)	Diisopropyl Ether	12.91	25.9	26.5	97.7	70	130	*
30)	Ethyl Acetate	12.90	52.7	52.0	101.3	70	130	*
31)	n-Hexane	12.93	26.2	26.0	100.8	70	130	*
32)	Chloroform	13.02	26.2	27.5	95.3	70	130	*
34)	Tetrahydrofuran (THF)	13.58	29.4	26.5	110.9	70	130	*
35)	Ethyl tert-Butyl Ether	13.71	26.0	25.5	102.0	70	130	*
36)	1,2-Dichloroethane	14.13	26.2	26.3	99.6	70	130	*
38)	1,1,1-Trichloroethane	14.54	25.6	26.0	98.5	70	130	*
39)	Isopropyl Acetate	15.07	59.6	52.3	114.0	70	130	*
40)	1-Butanol	15.09	54.7	52.8	103.6	70	130	*
41)	Benzene	15.23	24.0	25.8	93.0	70	130	*
42)	Carbon Tetrachloride	15.46	26.5	26.3	100.8	70	130	*
43)	Cyclohexane	15.66	51.6	51.8	99.6	70	130	*
44)	tert-Amyl Methyl Ether	16.10	26.6	25.5	104.3	70	130	*
45)	1,2-Dichloropropane	16.43	27.0	26.0	103.8	70	130	*
46)	Bromodichloromethane	16.70	27.2	26.3	103.4	70	130	*
47)	Trichloroethene	16.77	24.7	25.8	95.7	70	130	*
48)	1,4-Dioxane	16.72	28.2	26.0	108.5	70	130	*
49)	2,2,4-Trimethylpentane (Isooctan	16.86	25.0	25.8	96.9	70	130	*
50)	Methyl Methacrylate	17.02	57.9	52.8	109.7	70	130	*

EM 7/27/09

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 07240924.D
Data File Path: J:\MS09\Data\2009_07\24\
Operator: EM
Date Acquired: 7/25/09 2:19

Acq. Method File: TO15LOW.M
Name: 25ng TO-15 ICV STD
Misc Info: S20-07200901/S20-07240915
Instrument Name: MS09

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
51)	n-Heptane	17.21	26.2	25.8	101.6	70	130	*
52)	cis-1,3-Dichloropropene	17.95	26.8	24.5	109.4	70	130	*
53)	4-Methyl-2-pentanone	17.99	29.9	26.8	111.6	70	130	*
54)	trans-1,3-Dichloropropene	18.64	31.3	27.0	115.9	70	130	*
55)	1,1,2-Trichloroethane	18.89	26.8	26.0	103.1	70	130	*
58)	Toluene	19.28	25.0	26.8	93.3	70	130	*
59)	2-Hexanone	19.58	29.3	27.0	108.5	70	130	*
60)	Dibromochloromethane	19.82	28.1	28.3	99.3	70	130	*
61)	1,2-Dibromoethane	20.15	26.3	26.3	100.0	70	130	*
62)	n-Butyl Acetate	20.39	30.1	27.5	109.5	70	130	*
63)	n-Octane	20.56	26.4	26.3	100.4	70	130	*
64)	Tetrachloroethene	20.76	23.2	25.3	91.7	70	130	*
65)	Chlorobenzene	21.62	24.9	26.5	94.0	70	130	*
66)	Ethylbenzene	22.09	25.7	26.3	97.7	70	130	*
67)	m- & p-Xylenes	22.33	50.2	51.5	97.5	70	130	*
68)	Bromoform	22.42	25.6	26.5	96.6	70	130	*
69)	Styrene	22.77	26.6	26.3	101.1	70	130	*
70)	o-Xylene	22.92	25.3	26.0	97.3	70	130	*
71)	n-Nonane	23.18	26.4	25.8	102.3	70	130	*
72)	1,1,2,2-Tetrachloroethane	22.89	26.9	27.0	99.6	70	130	*
74)	Cumene	23.66	24.1	25.3	95.3	70	130	*
75)	alpha-Pinene	24.15	24.8	24.8	100.0	70	130	*
76)	n-Propylbenzene	24.28	25.0	25.3	98.8	70	130	*
77)	3-Ethyltoluene	24.41	26.5	26.3	100.8	70	130	*
78)	4-Ethyltoluene	24.46	25.1	26.3	95.4	70	130	*
79)	1,3,5-Trimethylbenzene	24.55	26.1	26.5	98.5	70	130	*
80)	alpha-Methylstyrene	24.74	26.3	26.0	101.2	70	130	*
81)	2-Ethyltoluene	24.79	25.0	26.0	96.2	70	130	*
82)	1,2,4-Trimethylbenzene	25.05	26.6	25.5	104.3	70	130	*
83)	n-Decane	25.15	27.2	26.3	103.4	70	130	*
84)	Benzyl Chloride	25.22	29.4	26.8	109.7	70	130	*
85)	1,3-Dichlorobenzene	25.25	25.0	26.0	96.2	70	130	*
86)	1,4-Dichlorobenzene	25.33	24.3	26.3	92.4	70	130	*
87)	sec-Butylbenzene	25.38	25.6	25.8	99.2	70	130	*
88)	4-Isopropyltoluene (p-Cymene)	25.57	25.7	25.0	102.8	70	130	*
89)	1,2,3-Trimethylbenzene	25.57	26.4	26.0	101.5	70	130	*
90)	1,2-Dichlorobenzene	25.75	24.3	25.8	94.2	70	130	*
91)	d-Limonene	25.74	27.6	26.5	104.2	70	130	*
92)	1,2-Dibromo-3-Chloropropane	26.27	27.3	27.0	101.1	70	130	*
93)	n-Undecane	26.65	27.4	26.3	104.2	70	130	*
94)	1,2,4-Trichlorobenzene	27.79	24.2	27.3	88.6	70	130	*
95)	Naphthalene	27.94	23.8	25.0	95.2	70	130	*
96)	n-Dodecane	27.89	24.8	24.3	102.1	70	130	*
97)	Hexachlorobutadiene	28.36	24.7	26.8	92.2	70	130	*
98)	Cyclohexanone	22.51	24.8	24.8	100.0	70	130	*
99)	tert-Butylbenzene	25.05	25.7	26.5	97.0	70	130	*
100)	n-Butylbenzene	26.07	26.5	26.5	100.0	70	130	*

* Denotes Passing Criterion

EM 7/27/09

CONTINUING CALIBRATION STANDARDS

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:35:44 2009
Quant Method : J:\MS09\Methods\R9072409.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

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	Bromochloromethane (IS1)	1.000	1.000	0.0	94	-0.02
2	T	Propene	1.577	1.826	-15.8	119	0.00
3	T	Dichlorodifluoromethane (CF	3.148	3.021	4.0	99	-0.01
4	T	Chloromethane	2.357	2.133	9.5	91	-0.01
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.773	1.547	12.7	89	-0.01
6	T	Vinyl Chloride	2.513	2.150	14.4	86	-0.01
7	T	1,3-Butadiene	1.807	1.779	1.5	96	-0.01
8	T	Bromomethane	1.482	1.365	7.9	87	-0.02
9	T	Chloroethane	1.257	1.082	13.9	85	-0.01
10	T	Ethanol	1.046	1.029	1.6	98	-0.08
11	T	Acetonitrile	2.366	2.300	2.8	98	-0.05
12	T	Acrolein	0.763	0.800	-4.8	98	-0.02
13	T	Acetone	1.190	1.182	0.7	101	-0.04
14	T	Trichlorofluoromethane	2.742	2.593	5.4	92	-0.01
15	T	2-Propanol (Isopropanol)	3.132	2.929	6.5	90	-0.06
16	T	Acrylonitrile	1.597	1.898	-18.8	100	-0.03
17	T	1,1-Dichloroethene	1.396	1.379	1.2	93	-0.01
18	T	2-Methyl-2-Propanol (tert-B	3.527	3.916	-11.0	95	-0.03
19	T	Methylene Chloride	1.576	1.461	7.3	95	-0.01
20	T	3-Chloro-1-propene (Allyl C	1.701	1.980	-16.4	101	-0.01
21	T	Trichlorotrifluoroethane	1.244	1.243	0.1	93	-0.02
22	T	Carbon Disulfide	5.368	5.271	1.8	95	-0.02
23	T	trans-1,2-Dichloroethene	2.048	2.051	-0.1	94	-0.02
24	T	1,1-Dichloroethane	2.496	2.473	0.9	94	-0.02
25	T	Methyl tert-Butyl Ether	4.402	4.332	1.6	93	-0.01
26	T	Vinyl Acetate	0.284	0.366	-28.9	101	-0.03
27	T	2-Butanone (MEK)	0.908	1.080	-18.9	97	-0.03
28	T	cis-1,2-Dichloroethene	1.976	2.006	-1.5	95	-0.01
29	T	Diisopropyl Ether	1.411	1.401	0.7	93	-0.02
30	T	Ethyl Acetate	0.595	0.615	-3.4	96	-0.03
31	T	n-Hexane	2.750	2.697	1.9	94	-0.01
32	T	Chloroform	2.497	2.444	2.1	93	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.769	1.720	2.8	92	-0.02
34	T	Tetrahydrofuran (THF)	0.856	0.951	-11.1	96	-0.01
35	T	Ethyl tert-Butyl Ether	1.892	1.928	-1.9	93	-0.01
36	T	1,2-Dichloroethane	2.002	1.960	2.1	92	-0.01
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	93	-0.01
38	T	1,1,1-Trichloroethane	0.459	0.448	2.4	91	-0.01

EM 8/3/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:35:44 2009
Quant Method : J:\MS09\Methods\R9072409.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

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	0.182	0.211	-15.9	96	-0.02
40	T	1-Butanol	0.311	0.360	-15.8	95	-0.06
41	T	Benzene	1.333	1.255	5.9	96	-0.01
42	T	Carbon Tetrachloride	0.392	0.392	0.0	91	-0.01
43	T	Cyclohexane	0.499	0.497	0.4	93	-0.01
44	T	tert-Amyl Methyl Ether	0.881	0.911	-3.4	93	-0.01
45	T	1,2-Dichloropropane	0.281	0.288	-2.5	94	-0.01
46	T	Bromodichloromethane	0.385	0.402	-4.4	92	-0.01
47	T	Trichloroethene	0.341	0.331	2.9	92	-0.02
48	T	1,4-Dioxane	0.224	0.251	-12.1	93	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.292	1.262	2.3	94	-0.02
50	T	Methyl Methacrylate	0.125	0.141	-12.8	94	-0.02
51	T	n-Heptane	0.323	0.337	-4.3	96	-0.01
52	T	cis-1,3-Dichloropropene	0.468	0.512	-9.4	94	0.00
53	T	4-Methyl-2-pentanone	0.252	0.289	-14.7	95	-0.02
54	T	trans-1,3-Dichloropropene	0.412	0.477	-15.8	93	-0.02
55	T	1,1,2-Trichloroethane	0.280	0.292	-4.3	93	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	95	0.00
57	S	Toluene-d8 (SS2)	2.473	2.423	2.0	95	-0.01
58	T	Toluene	3.028	2.907	4.0	95	-0.01
59	T	2-Hexanone	1.302	1.507	-15.7	95	-0.02
60	T	Dibromochloromethane	0.681	0.715	-5.0	93	0.00
61	T	1,2-Dibromoethane	0.701	0.726	-3.6	94	-0.01
62	T	n-Butyl Acetate	1.448	1.691	-16.8	95	-0.02
63	T	n-Octane	0.592	0.607	-2.5	96	-0.01
64	T	Tetrachloroethene	0.801	0.783	2.2	94	0.00
65	T	Chlorobenzene	1.905	1.842	3.3	94	-0.01
66	T	Ethylbenzene	3.292	3.326	-1.0	94	-0.01
67	T	m- & p-Xylenes	2.715	2.759	-1.6	93	-0.02
68	T	Bromoform	0.607	0.677	-11.5	94	-0.01
69	T	Styrene	2.002	2.131	-6.4	94	-0.01
70	T	o-Xylene	2.705	2.741	-1.3	94	-0.01
71	T	n-Nonane	1.320	1.416	-7.3	96	0.00
72	T	1,1,2,2-Tetrachloroethane	1.125	1.210	-7.6	95	-0.02
73	S	Bromofluorobenzene (SS3)	0.744	0.759	-2.0	96	0.00
74	T	Cumene	3.592	3.612	-0.6	93	-0.01
75	T	alpha-Pinene	1.717	1.797	-4.7	93	0.00
76	T	n-Propylbenzene	4.326	4.562	-5.5	93	0.00

Tom 8/3/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:35:44 2009
Quant Method : J:\MS09\Methods\R9072409.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

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

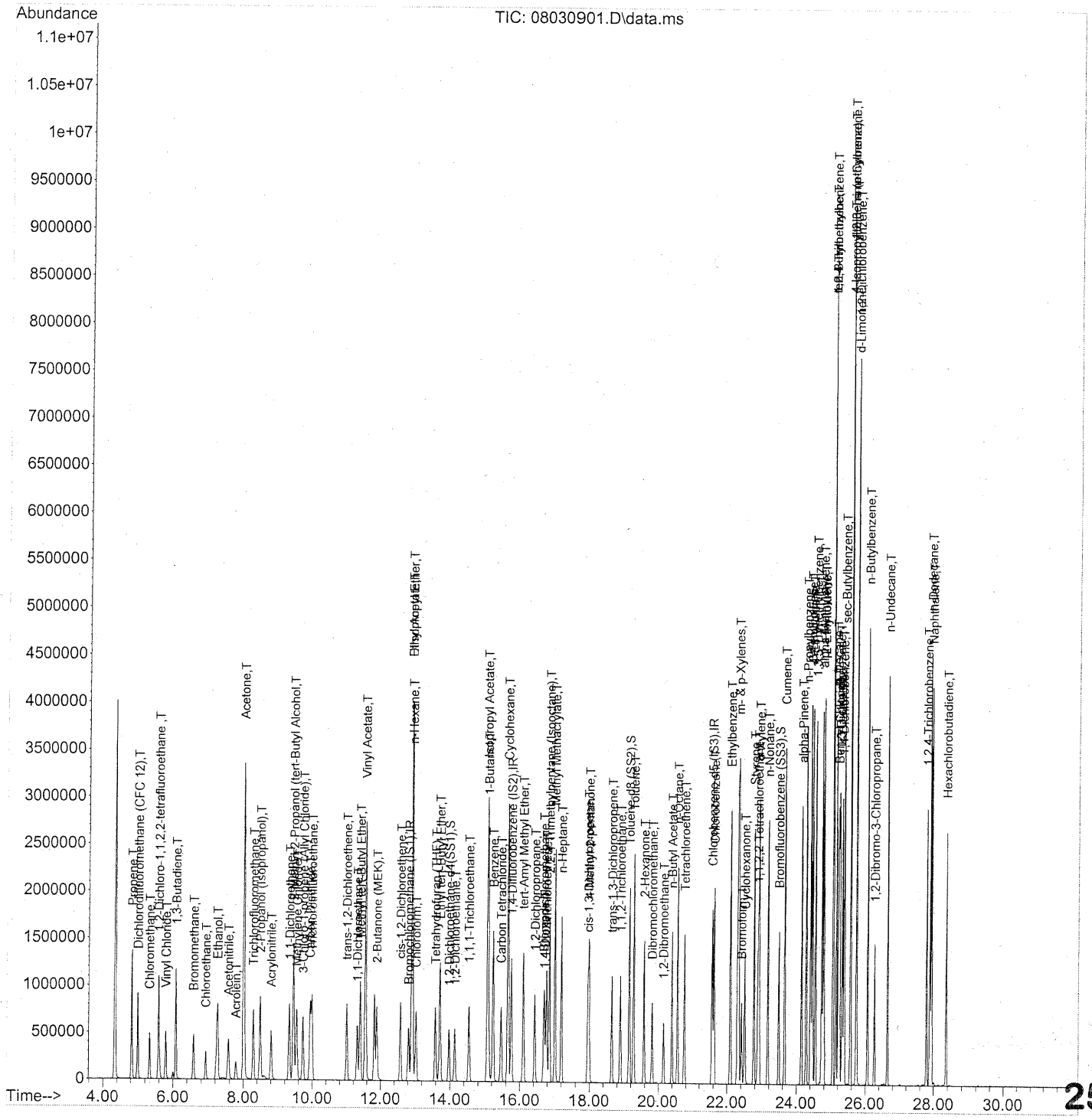
		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	3.404	3.607	-6.0	94	-0.01
78	T	4-Ethyltoluene	3.416	3.522	-3.1	93	-0.01
79	T	1,3,5-Trimethylbenzene	2.841	2.948	-3.8	94	-0.01
80	T	alpha-Methylstyrene	1.589	1.719	-8.2	93	-0.01
81	T	2-Ethyltoluene	3.566	3.766	-5.6	94	-0.01
82	T	1,2,4-Trimethylbenzene	3.177	3.473	-9.3	92	-0.01
83	T	n-Decane	1.535	1.697	-10.6	95	-0.01
84	T	Benzyl Chloride	2.277	2.828	-24.2	96	-0.02
85	T	1,3-Dichlorobenzene	1.668	1.721	-3.2	95	-0.02
86	T	1,4-Dichlorobenzene	1.738	1.788	-2.9	96	-0.01
87	T	sec-Butylbenzene	3.972	4.263	-7.3	94	0.00
88	T	4-Isopropyltoluene (p-Cymen	4.005	4.468	-11.6	93	0.00
89	T	1,2,3-Trimethylbenzene	3.235	3.562	-10.1	93	0.00
90	T	1,2-Dichlorobenzene	1.733	1.804	-4.1	95	-0.01
91	T	d-Limonene	1.262	1.407	-11.5	93	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.487	0.586	-20.3	102	0.00
93	T	n-Undecane	1.572	1.761	-12.0	97	-0.01
94	T	1,2,4-Trichlorobenzene	1.118	1.225	-9.6	111	-0.01
95	T	Naphthalene	3.899	4.560	-17.0	114	0.00
96	T	n-Dodecane	1.679	1.939	-15.5	105	0.00
97	T	Hexachlorobutadiene	0.640	0.698	-9.1	108	0.00
98	T	Cyclohexanone	0.913	0.999	-9.4	95	-0.02
99	T	tert-Butylbenzene	3.211	3.408	-6.1	92	-0.01
100	T	n-Butylbenzene	3.163	3.480	-10.0	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:35:44 2009
Quant Method : J:\MS09\Methods\R9072409.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\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:35:44 2009
Quant Method : J:\MS09\Methods\R9072409.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	314517	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1568072	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	746849	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	540844	24.306	ng		-0.02
Spiked Amount 25.000			Recovery =	97.24%			
57) Toluene-d8 (SS2)	19.15	98	1809568	24.491	ng		-0.01
Spiked Amount 25.000			Recovery =	97.96%			
73) Bromofluorobenzene (SS3)	23.49	174	567072	25.528	ng		0.00
Spiked Amount 25.000			Recovery =	102.12%			
Target Compounds							Qvalue
2) Propene	4.83	42	615663	31.029	ng		99
3) Dichlorodifluoromethan...	5.00	85	999429	25.239	ng		99
4) Chloromethane	5.33	50	670845	22.623	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	515774	23.127	ng		99
6) Vinyl Chloride	5.79	62	684476	21.652	ng		99
7) 1,3-Butadiene	6.08	54	671535	29.545	ng		100
8) Bromomethane	6.58	94	437912	23.484	ng		100
9) Chloroethane	6.93	64	344316	21.770	ng		100
10) Ethanol	7.26	45	1683188m	127.848	ng		
11) Acetonitrile	7.57	41	761157	25.569	ng		99
12) Acrolein	7.79	56	271747	28.313	ng		97
13) Acetone	8.01	58	2051512	136.998	ng		96
14) Trichlorofluoromethane	8.29	101	858090	24.878	ng		99
15) 2-Propanol (Isopropanol)	8.49	45	1742680m	44.227	ng		
16) Acrylonitrile	8.80	53	632723	31.496	ng		100
17) 1,1-Dichloroethene	9.33	96	477053	27.160	ng		98
18) 2-Methyl-2-Propanol (t...	9.45	59	2487906	56.064	ng		98
19) Methylene Chloride	9.54	84	492564	24.842	ng		97
20) 3-Chloro-1-propene (Al...	9.73	41	672408	31.424	ng		98
21) Trichlorotrifluoroethane	9.98	151	430189	27.494	ng		97
22) Carbon Disulfide	9.93	76	1777288	26.316	ng		98
23) trans-1,2-Dichloroethene	11.00	61	683655	26.539	ng		99
24) 1,1-Dichloroethane	11.31	63	824583	26.259	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1487986	26.868	ng		99
26) Vinyl Acetate	11.56	86	580088	162.414	ng		98
27) 2-Butanone (MEK)	11.89	72	373612	32.710	ng		98
28) cis-1,2-Dichloroethene	12.58	61	688807	27.709	ng		98
29) Diisopropyl Ether	12.91	87	472425	26.612	ng	#	93
30) Ethyl Acetate	12.91	61	412481	55.133	ng		98
31) n-Hexane	12.93	57	926388	26.779	ng		9[illegible]

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EM 8/3/09

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:35:44 2009
Quant Method : J:\MS09\Methods\R9072409.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	823931	26.227	ng		100
34) Tetrahydrofuran (THF)	13.58	72	329136	30.581	ng		99
35) Ethyl tert-Butyl Ether	13.71	87	625694	26.293	ng		96
36) 1,2-Dichloroethane	14.14	62	653397	25.944	ng		99
38) 1,1,1-Trichloroethane	14.54	97	739560	25.714	ng		100
39) Isopropyl Acetate	15.07	61	692393	60.636	ng	#	84
40) 1-Butanol	15.09	56	1170552	60.077	ng		84
41) Benzene	15.23	78	2086766	24.955	ng		99
42) Carbon Tetrachloride	15.46	117	664455	27.052	ng		99
43) Cyclohexane	15.66	84	1678051	53.664	ng		98
44) tert-Amyl Methyl Ether	16.10	73	1485338	26.875	ng		100
45) 1,2-Dichloropropane	16.44	63	474349	26.909	ng		98
46) Bromodichloromethane	16.70	83	680040	28.136	ng		99
47) Trichloroethene	16.77	130	550342	25.752	ng		100
48) 1,4-Dioxane	16.72	88	421251	29.928	ng		98
49) 2,2,4-Trimethylpentane...	16.86	57	2058765	25.406	ng		99
50) Methyl Methacrylate	17.02	100	472245	60.220	ng		97
51) n-Heptane	17.21	71	560761	27.696	ng		99
52) cis-1,3-Dichloropropene	17.95	75	795799	27.137	ng		100
53) 4-Methyl-2-pentanone	17.99	58	498364	31.481	ng		98
54) trans-1,3-Dichloropropene	18.64	75	823186	31.891	ng		100
55) 1,1,2-Trichloroethane	18.89	97	480934	27.375	ng		99
58) Toluene	19.28	91	2344622	25.922	ng		100
59) 2-Hexanone	19.58	43	1238279	31.832	ng		100
60) Dibromochloromethane	19.82	129	615251	30.251	ng		100
61) 1,2-Dibromoethane	20.15	107	574864	27.439	ng		99
62) n-Butyl Acetate	20.39	43	1389118	32.122	ng		100
63) n-Octane	20.56	57	486372	27.519	ng		99
64) Tetrachloroethene	20.76	166	596259	24.933	ng		99
65) Chlorobenzene	21.62	112	1485801	26.114	ng		100
66) Ethylbenzene	22.09	91	2633332	26.773	ng		100
67) m- & p-Xylenes	22.33	91	4286433	52.849	ng		100
68) Bromoform	22.42	173	521709	28.785	ng		100
69) Styrene	22.77	104	1705807	28.520	ng		99
70) o-Xylene	22.92	91	2170119	26.858	ng		100
71) n-Nonane	23.18	43	1121160	28.421	ng		99
72) 1,1,2,2-Tetrachloroethane	22.89	83	968389	28.817	ng		99
74) Cumene	23.66	105	2783975	25.946	ng		100
75) alpha-Pinene	24.15	93	1357912	26.480	ng		99
76) n-Propylbenzene	24.28	91	3516032	27.204	ng		99
77) 3-Ethyltoluene	24.41	105	2941319	28.926	ng		99
78) 4-Ethyltoluene	24.46	105	2872497	28.150	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	2404534	28.335	ng		10[illegible]

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:35:44 2009
Quant Method : J:\MS09\Methods\R9072409.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

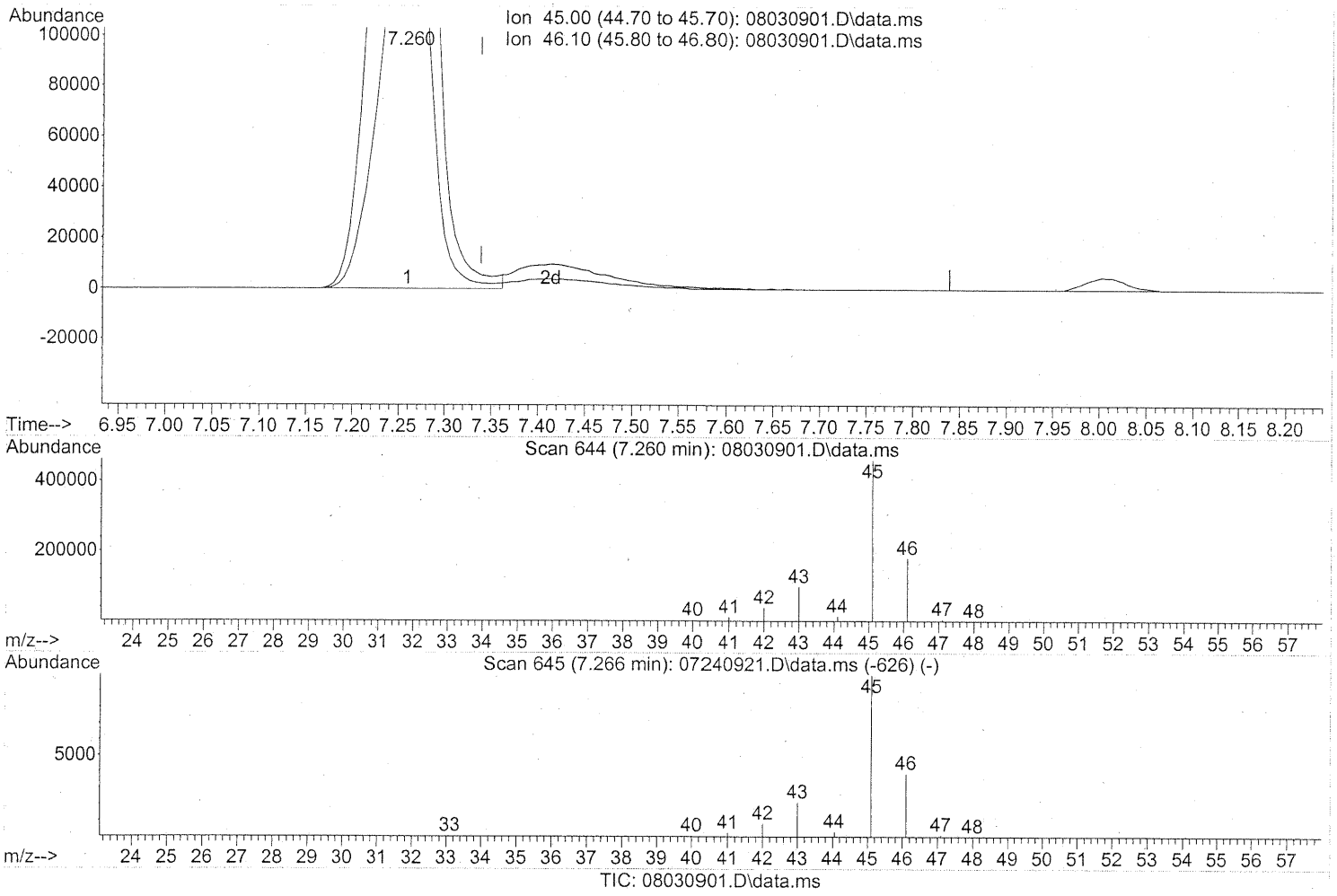
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1376001	28.986	ng	99
81) 2-Ethyltoluene	24.79	105	2959023	27.778	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2749543	28.968	ng	98
83) n-Decane	25.16	57	1368677	29.850	ng	98
84) Benzyl Chloride	25.22	91	2323590	34.154	ng	100
85) 1,3-Dichlorobenzene	25.25	146	1403930	28.179	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1415525	27.270	ng	99
87) sec-Butylbenzene	25.39	105	3374812	28.440	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	3443746	28.786	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2851424	29.502	ng	98
90) 1,2-Dichlorobenzene	25.74	146	1428313	27.582	ng	100
91) d-Limonene	25.74	68	1147809	30.438	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.27	157	481687	33.122	ng	98
93) n-Undecane	26.65	57	1436572	30.599	ng	99
94) 1,2,4-Trichlorobenzene	27.79	180	1024559	30.663	ng	99
95) Naphthalene	27.94	128	3610356	30.998	ng	100
96) n-Dodecane	27.89	57	1436798	28.639	ng	99
97) Hexachlorobutadiene	28.36	225	573104	29.979	ng	100
98) Cyclohexanone	22.51	55	731462	26.811	ng	98
99) tert-Butylbenzene	25.05	119	2697959	28.125	ng	100
100) n-Butylbenzene	26.07	91	2838483	30.039	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:07:52 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030901.D\data.ms

(10) Ethanol (T)

7.260min (-0.080) 122.90ng

response 1618101

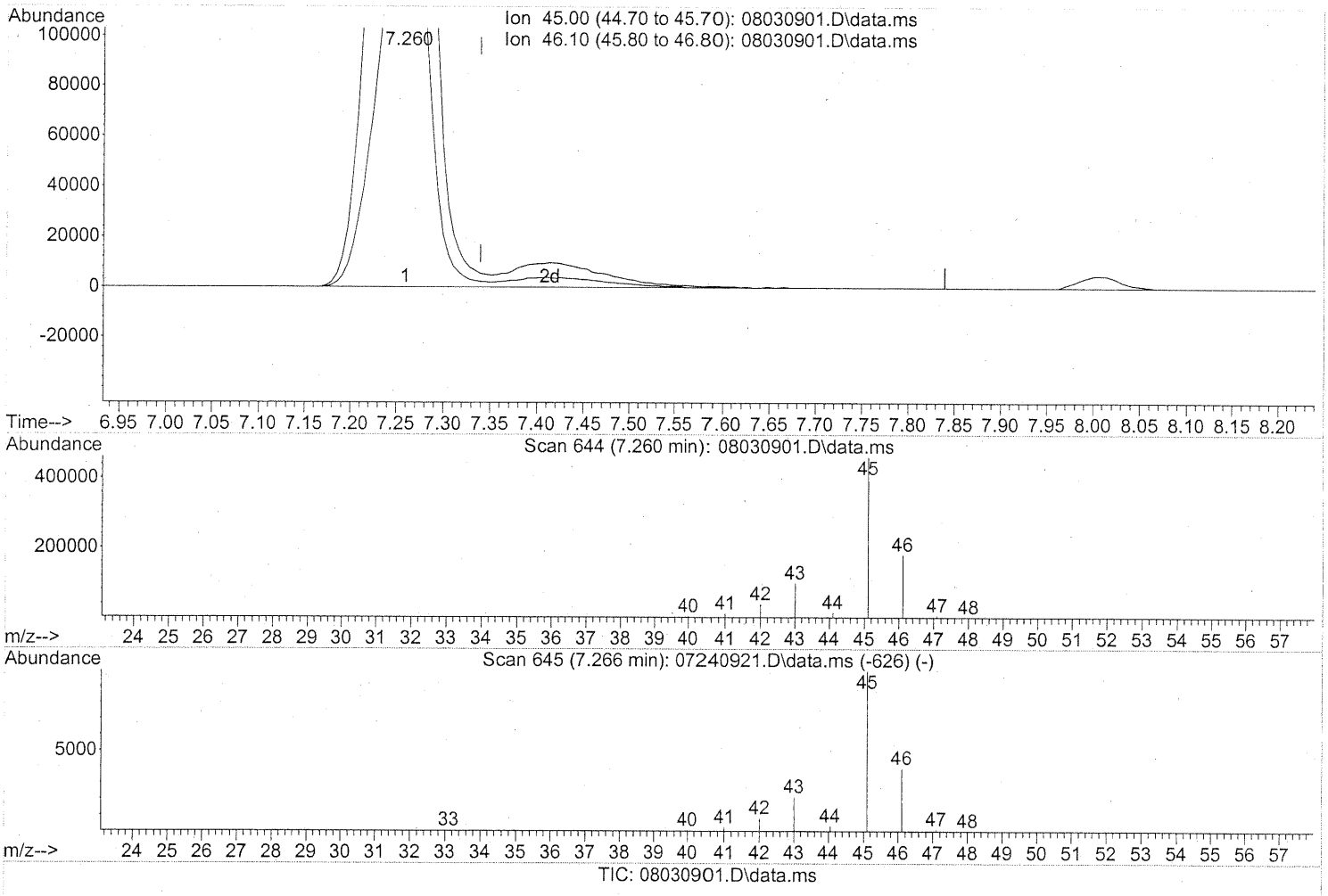
PT

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:07:52 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030901.D\data.ms

(10) Ethanol (T)

7.260min (-0.080) 127.85ng m

response 1683188

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.16
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Sam 8/3/09

VOA 8/4/09

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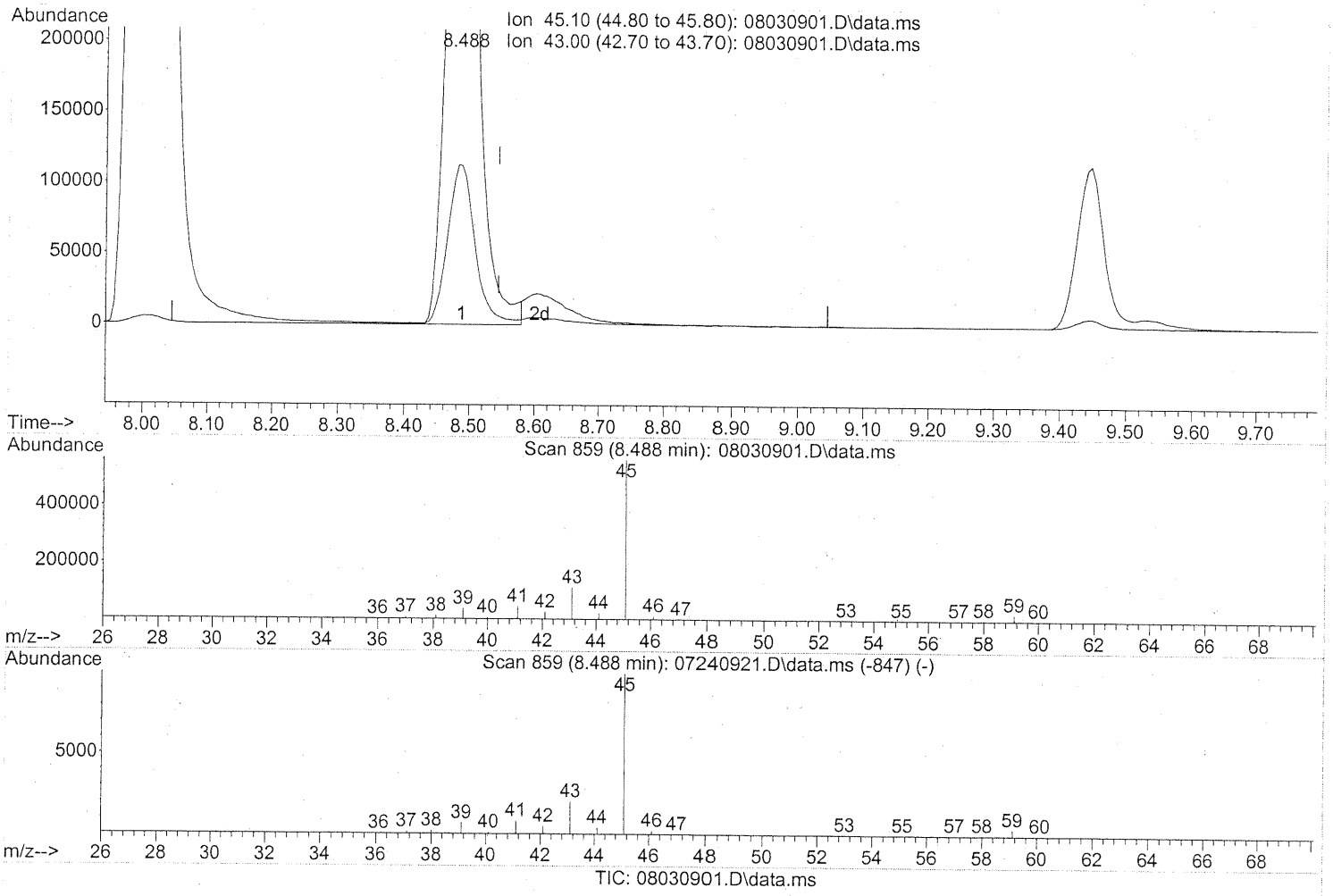
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:07:52 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08030901.D\data.ms

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

8.488min (-0.057) 41.52ng

response 1635806

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.93
0.00	0.00	0.00
0.00	0.00	0.00

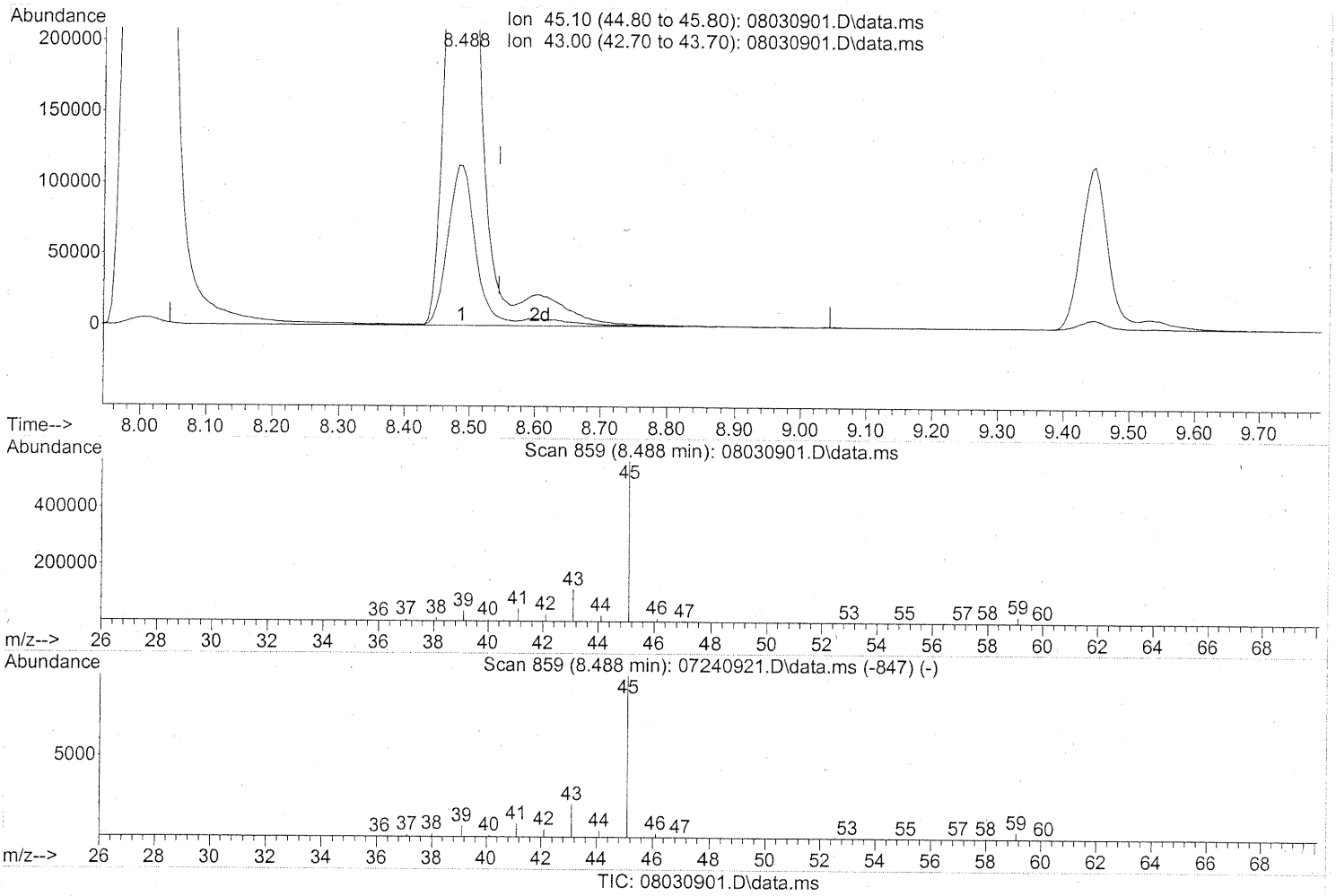
PT

257

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 08:07:52 2009
Quant Method : J:\MS09\Methods\R9072409.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)

8.488min (-0.057) 44.23ng m

response 1742680

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	18.71
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Lam 8/3/09

AM 8/4/09

258

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:49:37 2009
Quant Method : J:\MS09\Methods\R9072409.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

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	106	-0.02
2	T	Propene	1.577	1.719	-9.0	126	0.00
3	T	Dichlorodifluoromethane (CF	3.148	2.843	9.7	106	0.00
4	T	Chloromethane	2.357	2.185	7.3	106	0.00
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.773	1.499	15.5	98	0.00
6	T	Vinyl Chloride	2.513	2.211	12.0	101	-0.01
7	T	1,3-Butadiene	1.807	1.775	1.8	109	-0.01
8	T	Bromomethane	1.482	1.323	10.7	96	-0.02
9	T	Chloroethane	1.257	1.061	15.6	95	-0.01
10	T	Ethanol	1.046	1.029	1.6	111	-0.08
11	T	Acetonitrile	2.366	2.264	4.3	110	-0.05
12	T	Acrolein	0.763	0.778	-2.0	108	-0.02
13	T	Acetone	1.190	1.122	5.7	109	-0.04
14	T	Trichlorofluoromethane	2.742	2.460	10.3	99	-0.01
15	T	2-Propanol (Isopropanol)	3.132	2.901	7.4	101	-0.06
16	T	Acrylonitrile	1.597	1.836	-15.0	110	-0.03
17	T	1,1-Dichloroethene	1.396	1.321	5.4	101	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.527	3.715	-5.3	102	-0.04
19	T	Methylene Chloride	1.576	1.391	11.7	103	-0.02
20	T	3-Chloro-1-propene (Allyl C	1.701	1.928	-13.3	112	-0.02
21	T	Trichlorotrifluoroethane	1.244	1.171	5.9	99	-0.02
22	T	Carbon Disulfide	5.368	5.079	5.4	104	-0.02
23	T	trans-1,2-Dichloroethene	2.048	1.990	2.8	103	-0.02
24	T	1,1-Dichloroethane	2.496	2.400	3.8	104	-0.01
25	T	Methyl tert-Butyl Ether	4.402	4.140	6.0	100	-0.01
26	T	Vinyl Acetate	0.284	0.347	-22.2	109	-0.03
27	T	2-Butanone (MEK)	0.908	1.045	-15.1	107	-0.03
28	T	cis-1,2-Dichloroethene	1.976	1.907	3.5	103	-0.01
29	T	Diisopropyl Ether	1.411	1.328	5.9	100	-0.02
30	T	Ethyl Acetate	0.595	0.594	0.2	105	-0.03
31	T	n-Hexane	2.750	2.620	4.7	104	-0.01
32	T	Chloroform	2.497	2.322	7.0	100	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.769	1.741	1.6	106	-0.02
34	T	Tetrahydrofuran (THF)	0.856	0.926	-8.2	106	-0.01
35	T	Ethyl tert-Butyl Ether	1.892	1.831	3.2	100	-0.01
36	T	1,2-Dichloroethane	2.002	1.874	6.4	99	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	106	-0.01
38	T	1,1,1-Trichloroethane	0.459	0.424	7.6	98	-0.01

EM 8/4/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:49:37 2009
Quant Method : J:\MS09\Methods\R9072409.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

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	0.182	0.204	-12.1	105	-0.03
40	T	1-Butanol	0.311	0.344	-10.6	103	-0.06
41	T	Benzene	1.333	1.189	10.8	102	-0.01
42	T	Carbon Tetrachloride	0.392	0.367	6.4	97	-0.01
43	T	Cyclohexane	0.499	0.477	4.4	101	-0.02
44	T	tert-Amyl Methyl Ether	0.881	0.874	0.8	101	-0.01
45	T	1,2-Dichloropropane	0.281	0.280	0.4	103	-0.02
46	T	Bromodichloromethane	0.385	0.382	0.8	99	-0.01
47	T	Trichloroethene	0.341	0.310	9.1	98	-0.02
48	T	1,4-Dioxane	0.224	0.240	-7.1	100	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.292	1.232	4.6	104	-0.02
50	T	Methyl Methacrylate	0.125	0.134	-7.2	101	-0.02
51	T	n-Heptane	0.323	0.322	0.3	103	-0.01
52	T	cis-1,3-Dichloropropene	0.468	0.489	-4.5	102	0.00
53	T	4-Methyl-2-pentanone	0.252	0.279	-10.7	103	-0.02
54	T	trans-1,3-Dichloropropene	0.412	0.455	-10.4	101	-0.02
55	T	1,1,2-Trichloroethane	0.280	0.278	0.7	101	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	109	0.00
57	S	Toluene-d8 (SS2)	2.473	2.414	2.4	108	-0.01
58	T	Toluene	3.028	2.714	10.4	102	-0.01
59	T	2-Hexanone	1.302	1.423	-9.3	103	-0.02
60	T	Dibromochloromethane	0.681	0.655	3.8	98	-0.01
61	T	1,2-Dibromoethane	0.701	0.672	4.1	100	-0.01
62	T	n-Butyl Acetate	1.448	1.598	-10.4	103	-0.02
63	T	n-Octane	0.592	0.574	3.0	104	-0.01
64	T	Tetrachloroethene	0.801	0.711	11.2	98	0.00
65	T	Chlorobenzene	1.905	1.705	10.5	100	-0.01
66	T	Ethylbenzene	3.292	3.080	6.4	100	-0.01
67	T	m- & p-Xylenes	2.715	2.542	6.4	99	-0.02
68	T	Bromoform	0.607	0.610	-0.5	97	-0.01
69	T	Styrene	2.002	1.955	2.3	99	-0.01
70	T	o-Xylene	2.705	2.525	6.7	99	-0.01
71	T	n-Nonane	1.320	1.341	-1.6	105	0.00
72	T	1,1,2,2-Tetrachloroethane	1.125	1.139	-1.2	103	-0.02
73	S	Bromofluorobenzene (SS3)	0.744	0.734	1.3	106	0.00
74	T	Cumene	3.592	3.327	7.4	99	-0.01
75	T	alpha-Pinene	1.717	1.657	3.5	99	0.00
76	T	n-Propylbenzene	4.326	4.223	2.4	99	0.00

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:49:37 2009
Quant Method : J:\MS09\Methods\R9072409.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

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	3.404	3.313	2.7	99	-0.01
78	T	4-Ethyltoluene	3.416	3.230	5.4	98	-0.01
79	T	1,3,5-Trimethylbenzene	2.841	2.705	4.8	99	-0.01
80	T	alpha-Methylstyrene	1.589	1.583	0.4	98	-0.01
81	T	2-Ethyltoluene	3.566	3.454	3.1	99	-0.01
82	T	1,2,4-Trimethylbenzene	3.177	3.172	0.2	97	-0.01
83	T	n-Decane	1.535	1.606	-4.6	103	-0.01
84	T	Benzyl Chloride	2.277	2.619	-15.0	102	-0.02
85	T	1,3-Dichlorobenzene	1.668	1.552	7.0	99	-0.02
86	T	1,4-Dichlorobenzene	1.738	1.617	7.0	99	-0.01
87	T	sec-Butylbenzene	3.972	3.904	1.7	99	0.00
88	T	4-Isopropyltoluene (p-Cymen	4.005	4.034	-0.7	96	0.00
89	T	1,2,3-Trimethylbenzene	3.235	3.238	-0.1	97	0.00
90	T	1,2-Dichlorobenzene	1.733	1.627	6.1	99	-0.01
91	T	d-Limonene	1.262	1.304	-3.3	99	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.487	0.530	-8.8	106	0.00
93	T	n-Undecane	1.572	1.663	-5.8	105	-0.01
94	T	1,2,4-Trichlorobenzene	1.118	1.105	1.2	115	-0.01
95	T	Naphthalene	3.899	4.160	-6.7	119	0.00
96	T	n-Dodecane	1.679	1.862	-10.9	115	0.00
97	T	Hexachlorobutadiene	0.640	0.624	2.5	111	0.00
98	T	Cyclohexanone	0.913	0.953	-4.4	104	-0.02
99	T	tert-Butylbenzene	3.211	3.101	3.4	96	-0.01
100	T	n-Butylbenzene	3.163	3.200	-1.2	100	0.00

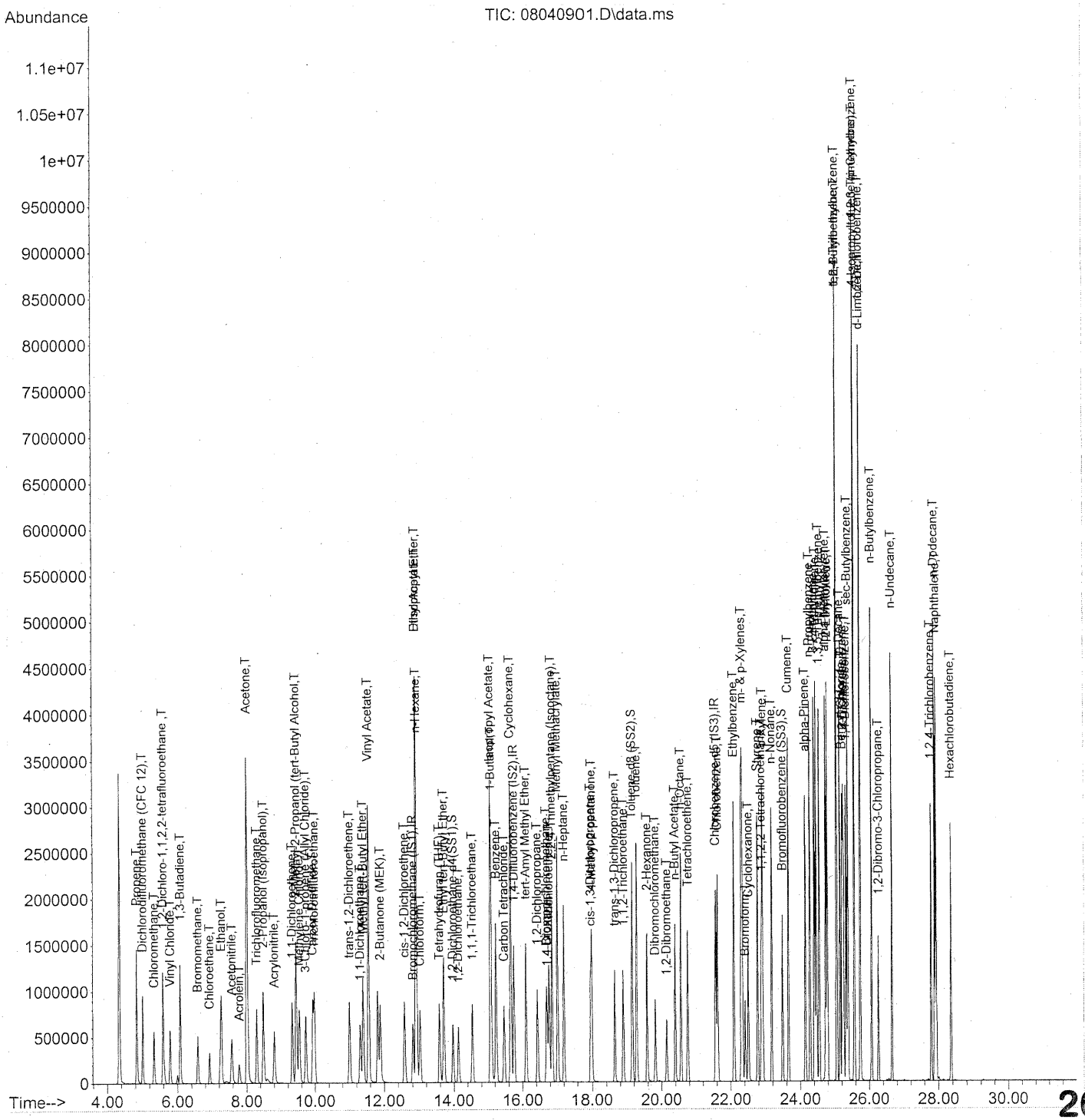
(#) = Out of Range SPCC's out = 0 CCC's out = 0

tem 8/4/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:49:37 2009
Quant Method : J:\MS09\Methods\R9072409.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\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:49:37 2009
Quant Method : J:\MS09\Methods\R9072409.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	356266	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1773398	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	857244	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	620305	24.610	ng		-0.02
Spiked Amount 25.000			Recovery =	98.44%			
57) Toluene-d8 (SS2)	19.15	98	2069430	24.401	ng		-0.01
Spiked Amount 25.000			Recovery =	97.60%			
73) Bromofluorobenzene (SS3)	23.49	174	629135	24.675	ng		0.00
Spiked Amount 25.000			Recovery =	98.68%			
Target Compounds							Qvalue
2) Propene	4.83	42	656326	29.202	ng		98
3) Dichlorodifluoromethan...	5.00	85	1065635	23.757	ng		100
4) Chloromethane	5.33	50	778422	23.175	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	566018	22.405	ng		100
6) Vinyl Chloride	5.79	62	797144	22.261	ng		99
7) 1,3-Butadiene	6.08	54	758829	29.474	ng		99
8) Bromomethane	6.58	94	480815	22.763	ng		100
9) Chloroethane	6.93	64	382560	21.353	ng		100
10) Ethanol	7.26	45	1906673m	127.852	ng		
11) Acetonitrile	7.57	41	848528	25.163	ng		100
12) Acrolein	7.79	56	299314	27.531	ng		97
13) Acetone	8.01	58	2207082	130.115	ng		96
14) Trichlorofluoromethane	8.29	101	921976	23.598	ng		98
15) 2-Propanol (Isopropanol)	8.48	45	1955473m	43.812	ng		
16) Acrylonitrile	8.81	53	693340	30.469	ng		99
17) 1,1-Dichloroethene	9.32	96	517863	26.028	ng		100
18) 2-Methyl-2-Propanol (t...	9.44	59	2673567	53.187	ng		99
19) Methylene Chloride	9.54	84	531421	23.661	ng		96
20) 3-Chloro-1-propene (Al...	9.73	41	741882	30.608	ng		97
21) Trichlorotrifluoroethane	9.98	151	458938	25.894	ng		99
22) Carbon Disulfide	9.93	76	1939754	25.356	ng		98
23) trans-1,2-Dichloroethene	11.00	61	751337	25.748	ng		98
24) 1,1-Dichloroethane	11.32	63	906158	25.475	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1610685	25.676	ng		99
26) Vinyl Acetate	11.56	86	623878	154.205	ng	#	94
27) 2-Butanone (MEK)	11.89	72	409659	31.663	ng		98
28) cis-1,2-Dichloroethene	12.58	61	742078	26.353	ng		98
29) Diisopropyl Ether	12.91	87	507367	25.231	ng	#	88
30) Ethyl Acetate	12.91	61	451122	53.232	ng		98
31) n-Hexane	12.93	57	1019317	26.012	ng		98

EM 8/4/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:49:37 2009
Quant Method : J:\MS09\Methods\R9072409.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	886638	24.916	ng		100
34) Tetrahydrofuran (THF)	13.58	72	363006	29.775	ng		99
35) Ethyl tert-Butyl Ether	13.71	87	673096	24.970	ng		95
36) 1,2-Dichloroethane	14.13	62	707760	24.810	ng		99
38) 1,1,1-Trichloroethane	14.54	97	790533	24.304	ng		100
39) Isopropyl Acetate	15.07	61	756640	58.590	ng	#	85
40) 1-Butanol	15.09	56	1265424	57.427	ng		85
41) Benzene	15.23	78	2235991	23.643	ng		99
42) Carbon Tetrachloride	15.46	117	703488	25.325	ng		99
43) Cyclohexane	15.66	84	1819366	51.447	ng		96
44) tert-Amyl Methyl Ether	16.10	73	1611797	25.786	ng		99
45) 1,2-Dichloropropane	16.43	63	521483	26.158	ng		98
46) Bromodichloromethane	16.70	83	731594	26.764	ng		99
47) Trichloroethene	16.77	130	583279	24.133	ng		100
48) 1,4-Dioxane	16.72	88	456147	28.655	ng		96
49) 2,2,4-Trimethylpentane...	16.86	57	2273101	24.804	ng		98
50) Methyl Methacrylate	17.02	100	507425	57.214	ng		95
51) n-Heptane	17.21	71	606026	26.466	ng		99
52) cis-1,3-Dichloropropene	17.95	75	860153	25.936	ng		100
53) 4-Methyl-2-pentanone	17.99	58	545136	30.449	ng		100
54) trans-1,3-Dichloropropene	18.64	75	887051	30.387	ng		100
55) 1,1,2-Trichloroethane	18.89	97	518193	26.081	ng		100
58) Toluene	19.28	91	2512438	24.201	ng		100
59) 2-Hexanone	19.58	43	1342050	30.057	ng		100
60) Dibromochloromethane	19.82	129	646639	27.700	ng		100
61) 1,2-Dibromoethane	20.15	107	610966	25.407	ng		99
62) n-Butyl Acetate	20.39	43	1506838	30.357	ng		100
63) n-Octane	20.56	57	527351	25.995	ng		98
64) Tetrachloroethene	20.76	166	621819	22.653	ng		99
65) Chlorobenzene	21.62	112	1578852	24.176	ng		100
66) Ethylbenzene	22.09	91	2798534	24.789	ng		99
67) m- & p-Xylenes	22.33	91	4531967	48.681	ng		100
68) Bromoform	22.42	173	540021	25.959	ng		100
69) Styrene	22.77	104	1796450	26.168	ng		100
70) o-Xylene	22.92	91	2294729	24.743	ng		99
71) n-Nonane	23.18	43	1218865	26.919	ng		98
72) 1,1,2,2-Tetrachloroethane	22.89	83	1046922	27.142	ng		99
74) Cumene	23.66	105	2943673	23.901	ng		99
75) alpha-Pinene	24.15	93	1437634	24.425	ng		99
76) n-Propylbenzene	24.28	91	3736090	25.184	ng		100
77) 3-Ethyltoluene	24.41	105	3101118	26.570	ng		99
78) 4-Ethyltoluene	24.46	105	3024072	25.819	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	2531763	25.992	ng		10

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:49:37 2009
Quant Method : J:\MS09\Methods\R9072409.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

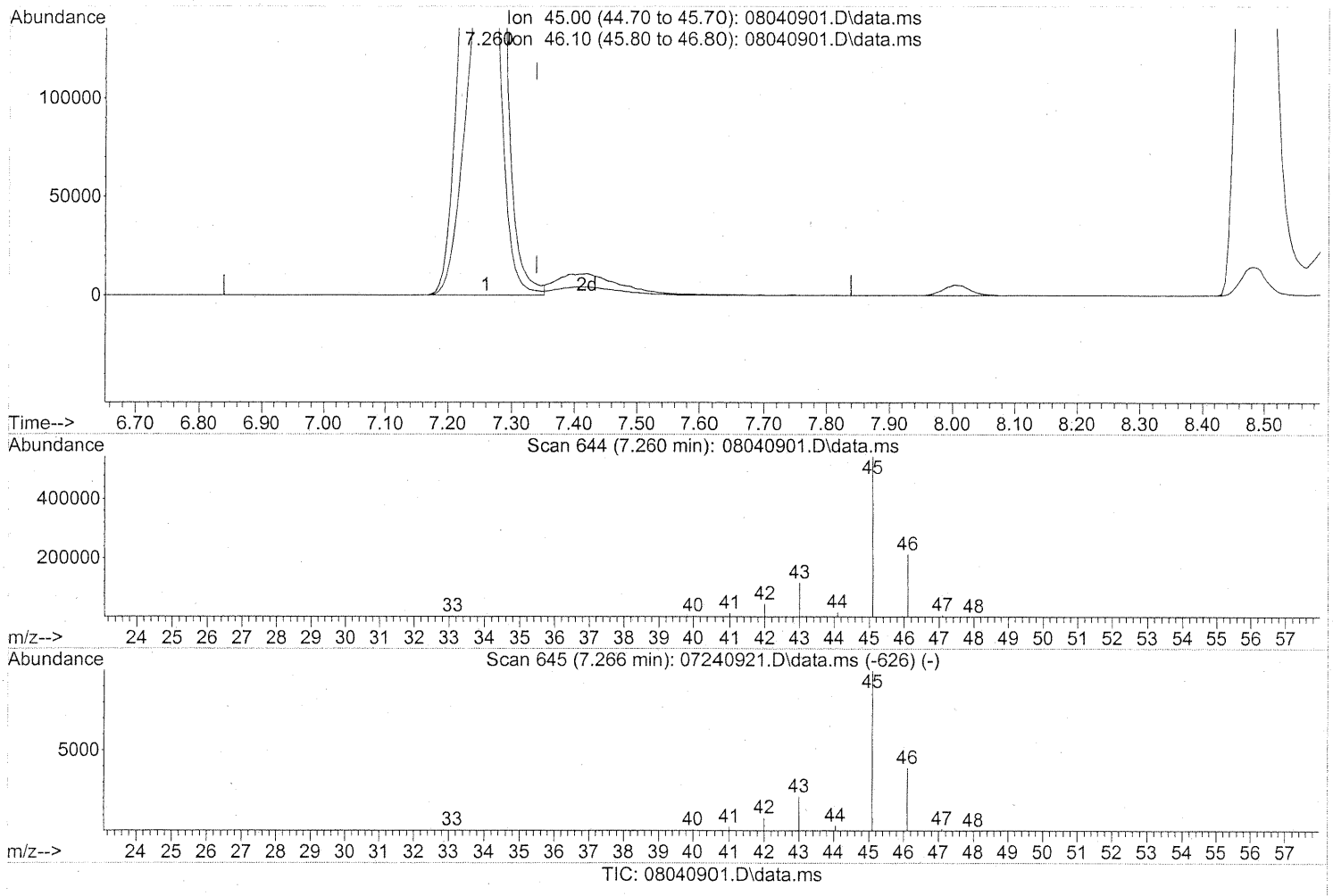
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1454380	26.692	ng	99
81) 2-Ethyltoluene	24.79	105	3114758	25.475	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2882767	26.461	ng	99
83) n-Decane	25.16	57	1486603	28.246	ng	98
84) Benzyl Chloride	25.22	91	2469765	31.628	ng	100
85) 1,3-Dichlorobenzene	25.25	146	1453130	25.411	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1469692	24.667	ng	99
87) sec-Butylbenzene	25.38	105	3547791	26.048	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	3568575	25.988	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2975291	26.819	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1478232	24.870	ng	100
91) d-Limonene	25.74	68	1220784	28.205	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	499849	29.945	ng	97
93) n-Undecane	26.65	57	1557139	28.896	ng	99
94) 1,2,4-Trichlorobenzene	27.79	180	1061208	27.670	ng	99
95) Naphthalene	27.94	128	3779741	28.273	ng	100
96) n-Dodecane	27.89	57	1583494	27.498	ng	99
97) Hexachlorobutadiene	28.36	225	588507	26.821	ng	99
98) Cyclohexanone	22.51	55	800883	25.575	ng	98
99) tert-Butylbenzene	25.05	119	2817383	25.588	ng	100
100) n-Butylbenzene	26.07	91	2995845	27.621	ng	100

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:14:23 2009
Quant Method : J:\MS09\Methods\R9072409.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) 122.63ng

response 1828758

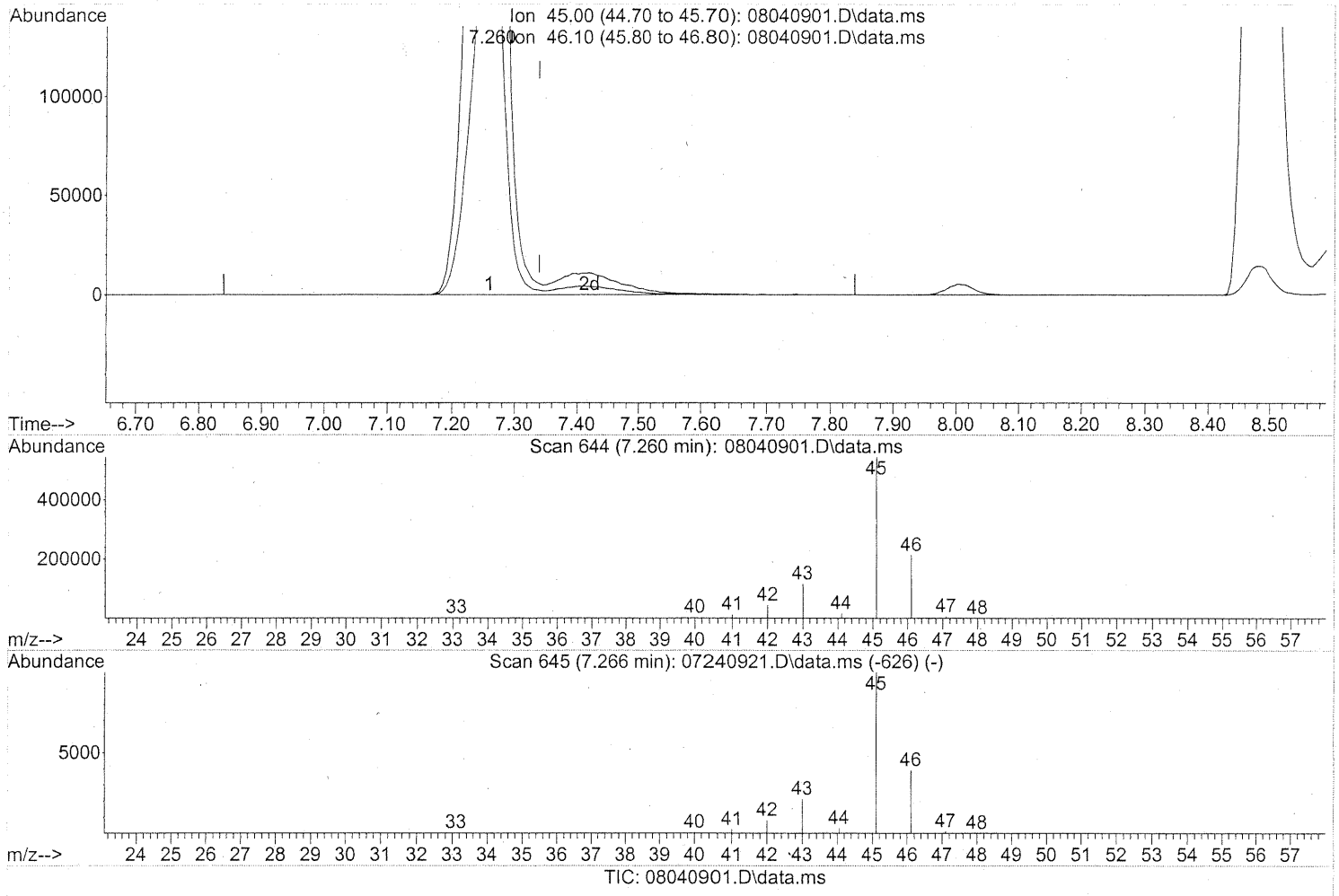
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.78
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:14:23 2009
Quant Method : J:\MS09\Methods\R9072409.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



TIC: 08040901.D\data.ms

(10) Ethanol (T)

7.260min (-0.080) 127.85ng m

response 1906673

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.20
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Em 8/4/09

E. 8/4/09

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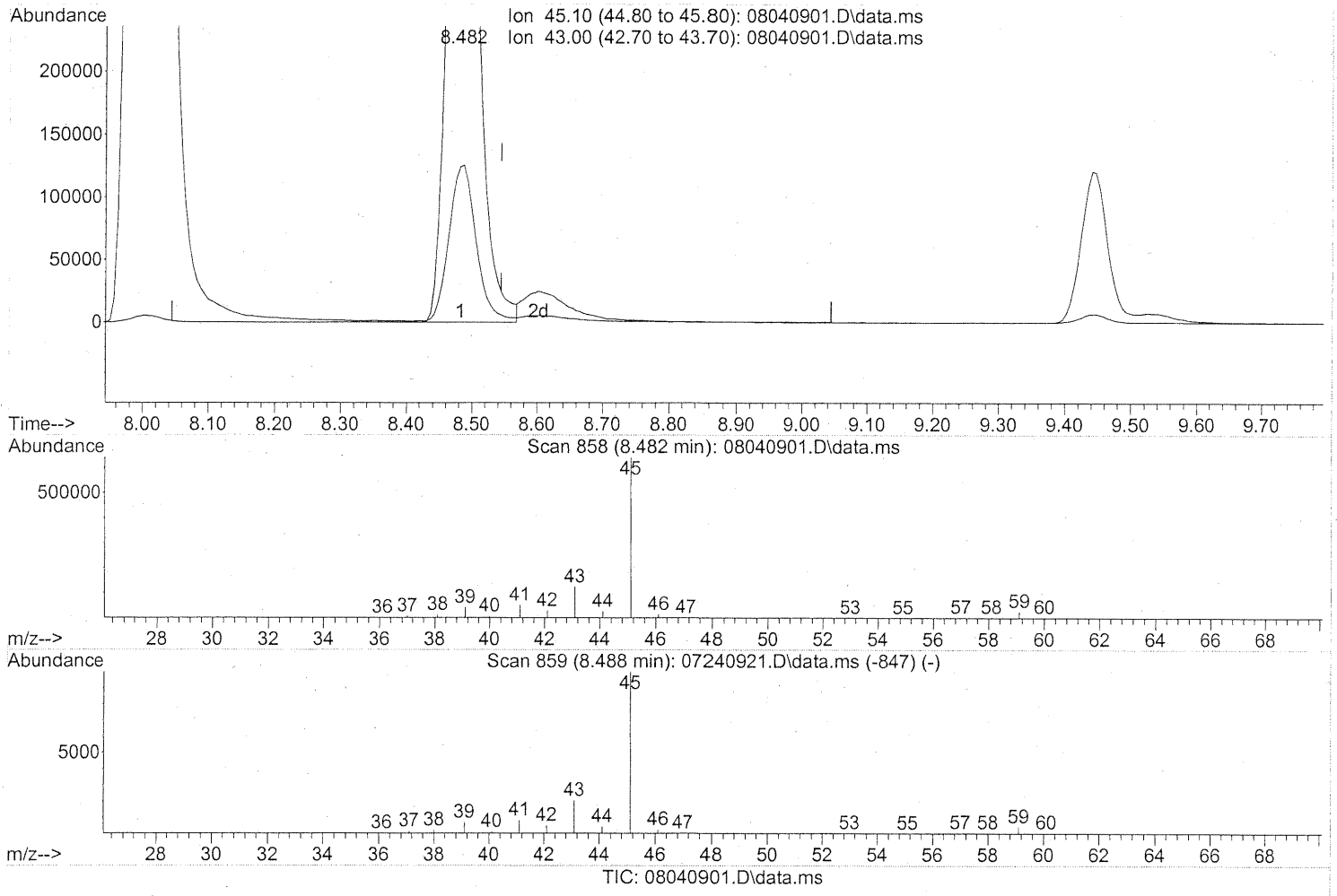
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:14:23 2009
Quant Method : J:\MS09\Methods\R9072409.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) 41.00ng

response 1829799

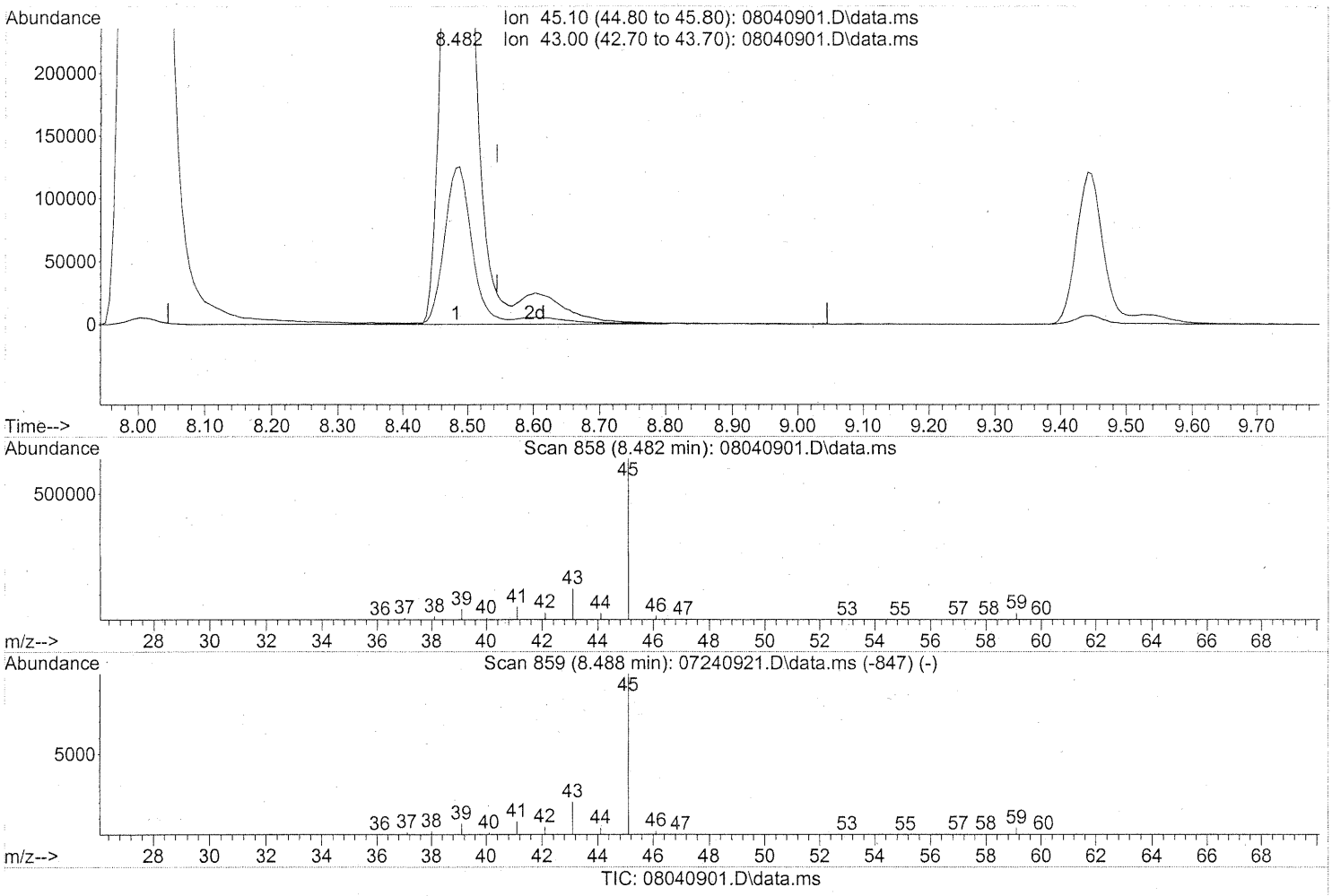
PT

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 04 08:14:23 2009
Quant Method : J:\MS09\Methods\R9072409.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) 43.81ng m

response 1955473

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	18.29
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Com 8/4/09
C. 8/4/09

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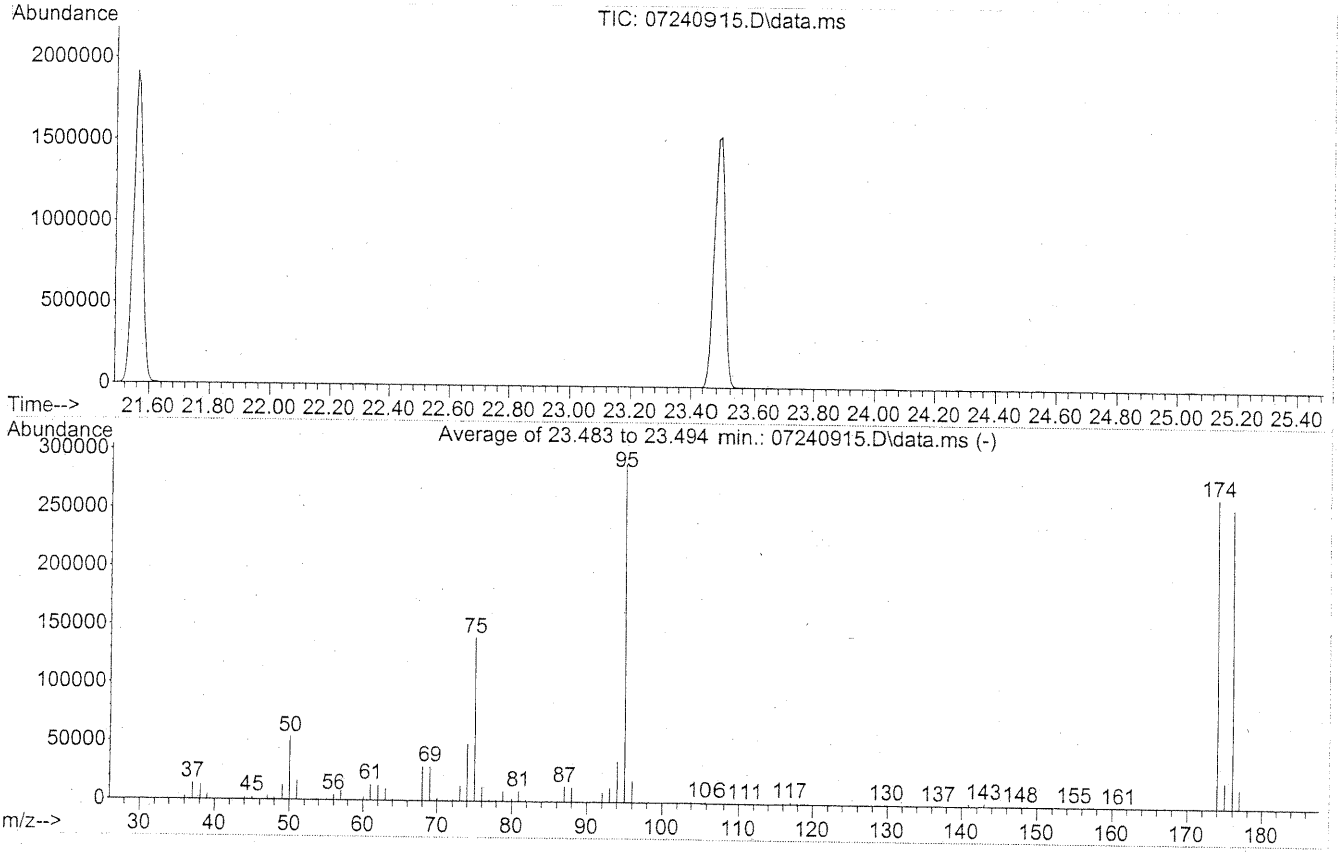
BFB TUNING & MASS CALIBRATIONS

Data Path : J:\MS09\Data\2009_07\24\
Data File : 07240915.D
Acq On : 24 Jul 2009 20:05
Operator : EM
Sample : TO-15 BFB Standard (200ml)
Misc : S20-07200901
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9072409.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Mon Jul 27 08:47:52 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	18.5	53541	PASS
75	95	30	66	48.3	139757	PASS
95	95	100	100	100.0	289173	PASS
96	95	5	9	6.2	18017	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.4	264213	PASS
175	174	4	9	8.2	21669	PASS
176	174	93	101	96.8	255723	PASS
177	176	5	9	6.4	16452	PASS

Sm 7/27/09

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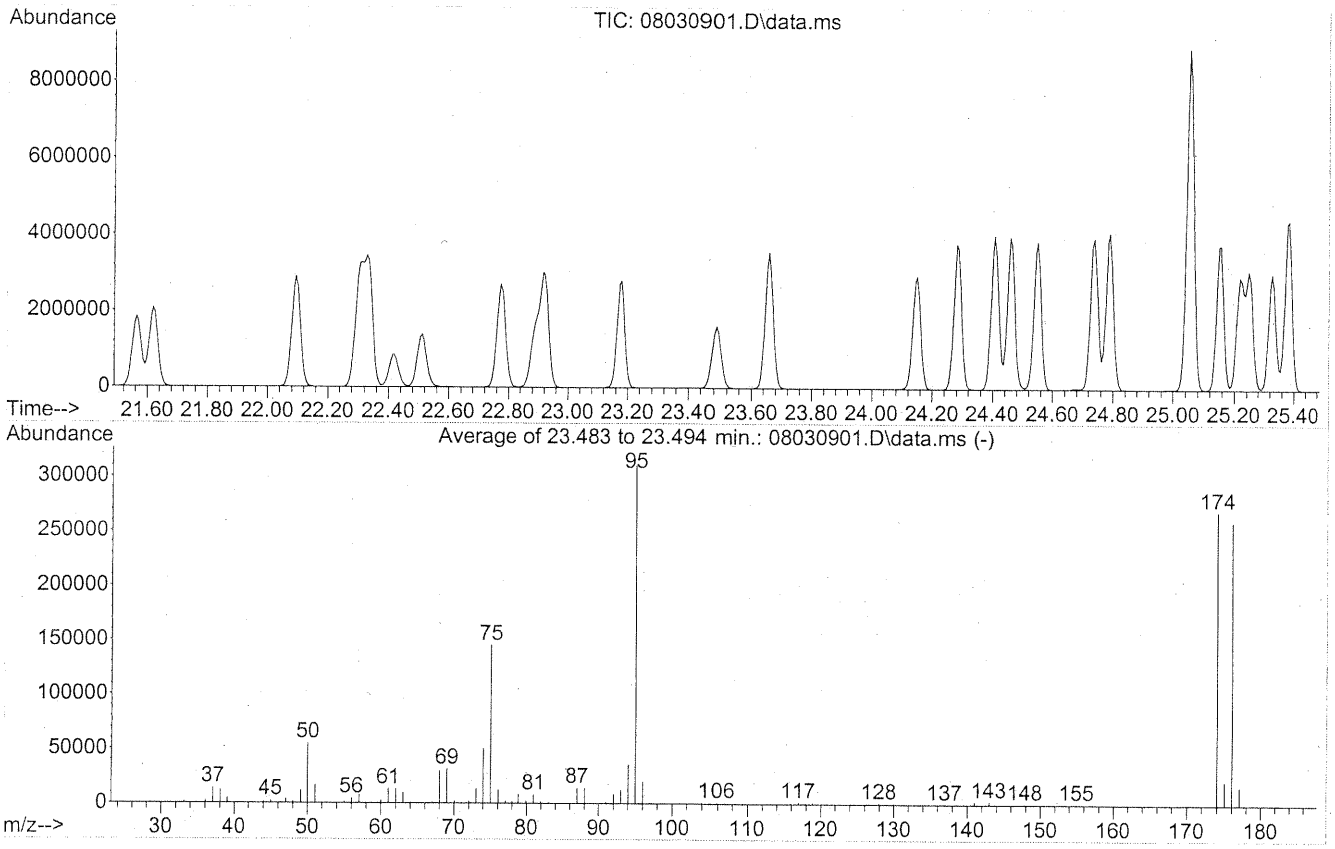
Data Path : J:\MS09\Data\2009_08\03\
Data File : 08030901.D
Acq On : 3 Aug 2009 6:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9072409.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

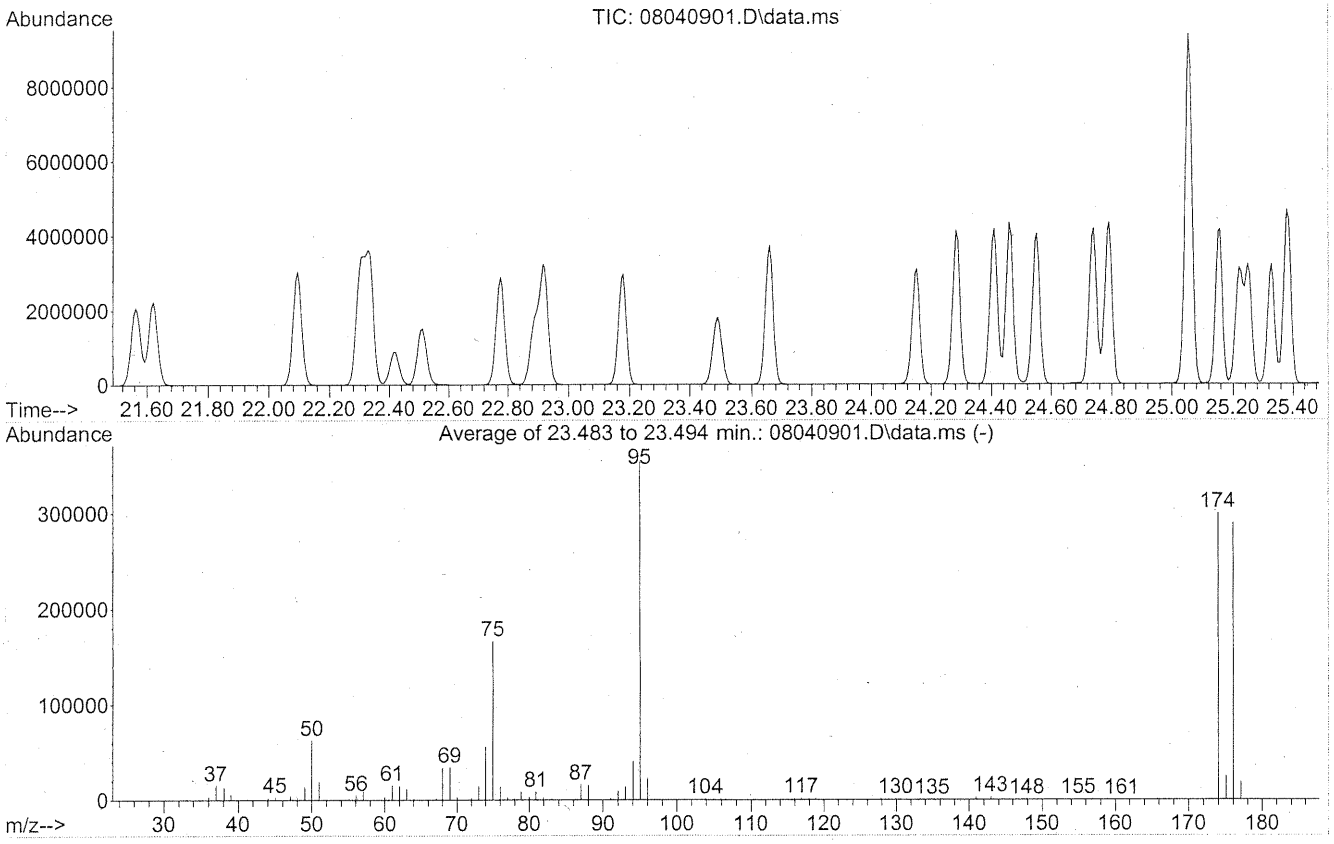
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.6	54725	PASS
75	95	30	66	46.8	145173	PASS
95	95	100	100	100.0	310315	PASS
96	95	5	9	6.5	20152	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.7	269163	PASS
175	174	4	9	8.0	21571	PASS
176	174	93	101	96.5	259797	PASS
177	176	5	9	6.5	16819	PASS

Em 8/3/09

Data Path : J:\MS09\Data\2009_08\04\
Data File : 08040901.D
Acq On : 4 Aug 2009 3:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-07200901/S20-07240905
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9072409.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	17.7	62619	PASS
75	95	30	66	47.0	166293	PASS
95	95	100	100	100.0	353515	PASS
96	95	5	9	6.4	22760	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	84.7	299307	PASS
175	174	4	9	8.2	24616	PASS
176	174	93	101	96.5	288939	PASS
177	176	5	9	6.4	18491	PASS

Em 8/4/09

RUN LOGS

EM 7/27/09

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	07/24/09 3:44	07240901.D	5ng TO-15 CCV STD	S20-07200901/S20-06290902	EM	1	Pass
2	07/24/09 4:26	07240902.D	TO-15 Method Blank (1000ml)	S20-07200901	EM	16	Pass as MB
3	07/24/09 8:06	07240903.D	P0902494-003 (0.6ml)	[redacted]	EM	1	
4	07/24/09 8:47	07240904.D	P0902494-009 (0.030ml)	[redacted]	EM	1	
5	07/24/09 9:32	07240905.D	Blank (200ml)	S20-07200901	EM	1	
6	07/24/09 10:14	07240906.D	P0902494-007 (0.0125ml)	[redacted]	EM	1	
7	07/24/09 10:56	07240907.D	P0902494-007 dup (0.0125ml)	[redacted]	EM	1	Pass as lab Dup.
8	07/24/09 11:37	07240908.D	25ng TO-15 LCS STD	S20-07200901/S20-06260906	EM	2	Pass
9	07/24/09 12:18	07240909.D	25ng TO-15 LCSD STD	S20-07200901/S20-06260906	EM	2	Case, File Extra
10	07/24/09 16:37	07240910.D	25ng std check	S20-07200901/S20-07240905	EM	1	
11	07/24/09 17:19	07240911.D	8ng std check	S20-07200901/S20-07240914	EM	5	
12	07/24/09 18:00	07240912.D	2.5ng std check	S20-07200901/S20-07240909	EM	1	
13	07/24/09 18:42	07240913.D	25ng std check	S20-07200901/S20-07240915	EM	2	
14	07/24/09 19:24	07240914.D	System Check		EM	4	
15	07/24/09 20:05	07240915.D	TO-15 BFB Standard (200ml)	S20-07200901	EM	1	Pass
16	07/24/09 20:46	07240916.D	0.1ng TO-15 ICAL STD	S20-07200901/S20-07240914	EM	5	
17	07/24/09 21:28	07240917.D	0.2ng TO-15 ICAL STD	S20-07200901/S20-07240914	EM	5	ICAL
18	07/24/09 22:10	07240918.D	0.5ng TO-15 ICAL STD	S20-07200901/S20-07240909	EM	1	R9072409.M
19	07/24/09 22:51	07240919.D	1.0ng TO-15 ICAL STD	S20-07200901/S20-07240909	EM	1	
20	07/24/09 23:33	07240920.D	5ng TO-15 ICAL STD	S20-07200901/S20-07240909	EM	1	
21	07/25/09 0:14	07240921.D	25ng TO-15 ICAL STD	S20-07200901/S20-07240905	EM	1	
22	07/25/09 0:56	07240922.D	50ng TO-15 ICAL STD	S20-07200901/S20-07240905	EM	1	
23	07/25/09 1:38	07240923.D	100ng TO-15 ICAL STD	S20-07200901/S20-07240905	EM	1	
24	07/25/09 2:19	07240924.D	25ng TO-15 ICV STD	S20-07200901/S20-07240915	EM	2	Pass
25	07/25/09 3:01	07240925.D	25ng TO-15 ICV STD	S20-07200901/S20-07240915	EM	2	Case, File
26	07/25/09 3:43	07240926.D	System Check		EM	4	
27	07/25/09 4:25	07240927.D	Blank (200ml)	S20-06220903	EM	1	
28	07/25/09 9:03	07240928.D	Blank (200ml)	S20-06220903	EM	1	
29	07/25/09 9:41	07240929.D	System Check		EM	4	

ICAL R9072409.M : 02ng-100ng : Methyl Methacrylate, 4-Methyl-2-pentanone, 2-Hexanone
d-Limonene
0.5ng-100ng : VA, 2-Butanone, EA, 1-Butanol
0.1ng-50ng : TBA
Rest 0.1-100ng.

EM 7/27/09

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EM 8/4/09

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/03/09 6:23	08030901.D	25ng TO-15 CCV STD	S20-07200901/S20-07240905	EM	1	Pass
2	08/03/09 7:05	08030902.D	TO-15 Method Blank (1000ml)	S20-07200901	EM	1	Case File
3	08/03/09 8:19	08030903.D	25ng TO-15 AC&F STD	S20-07200901/S20-07220901	EM	7	Pass
4	08/03/09 9:00	08030904.D	CAS CAN QC C3S 3533	AC01262	EM	8	Pass as MB/75 @ 0.1ug/m3
5	08/03/09 10:01	08030905.D	P0902574-001 dil (0.5ml)	[redacted]	EM	1	
6	08/03/09 10:42	08030906.D	25ng TO-15 LCS STD	S20-07200901/S20-07240915	EM	2	Pass
7	08/03/09 11:26	08030907.D	P0902594-002 dil (100ml)	[redacted]	EM	6	
8	08/03/09 12:08	08030908.D	P0902599-002 (1000ml)	Environmental H & E 99473	EM	10	
9	08/03/09 12:50	08030909.D	P0902599-001 (1000ml)	Environmental H & E 99472	EM	9	
10	08/03/09 13:31	08030910.D	P0902599-003 (1000ml)	Environmental H & E 99474	EM	11	
11	08/03/09 14:13	08030911.D	P0902599-003 dup (1000ml)	Environmental H & E 99474	EM	11	Case File
12	08/03/09 14:54	08030912.D	System Check		EM	4	
13	08/03/09 15:35	08030913.D	P0902632-001 (100ml)	[redacted]	EM	9	
14	08/03/09 16:46	08030914.D	P0902632-001 dil (25ml)	[redacted]	EM	9	
15	08/03/09 17:27	08030915.D	P0902632-002 (100ml)	[redacted]	EM	10	
16	08/03/09 18:09	08030916.D	P0902632-002 dup (100ml)	[redacted]	EM	10	Pass as Lab Dup.
17	08/03/09 18:50	08030917.D	P0902632-002 dil (25ml)	[redacted]	EM	10	Case File
18	08/03/09 19:32	08030918.D	25ng TO-15 LCSD STD	S20-07200901/S20-07240915	EM	2	Pass
19	08/03/09 20:14	08030919.D	P0902589-001 (1000ml)	[redacted]	EM	5	
20	08/03/09 20:56	08030920.D	P0902589-001 dil (100ml)	[redacted]	EM	5	
21	08/03/09 21:37	08030921.D	P0902599-004 (1000ml)	Environmental H & E 99475	EM	12	
22	08/03/09 22:19	08030922.D	P0902599-005 (1000ml)	Environmental H & E 99476	EM	14	
23	08/03/09 23:01	08030923.D	P0902599-006 (1000ml)	Environmental H & E 99431	EM	15	
24	08/03/09 23:43	08030924.D	System Check		EM	4	
25	08/04/09 0:24	08030925.D	P0902599-007 (1000ml)	Environmental H & E 99432	EM	16	
26	08/04/09 1:06	08030926.D	P0902599-008 (1000ml)	Environmental H & E 99433	EM	6	
27	08/04/09 1:48	08030927.D	P0902599-009 (1000ml)	Environmental H & E 99434	EM	7	
28	08/04/09 2:29	08030928.D	P0902599-010 (1000ml)	Environmental H & E 99435	EM	8	
29	08/04/09 3:11	08030929.D	System Check		EM	4	

EM 8/5/09

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/04/09 3:53	08040901.D	25ng TO-15 CCV STD	S20-07200901/S20-07240905	EM	1	Pass
2	08/04/09 4:35	08040902.D	25ng TO-15 AC&F STD	S20-07200901/S20-07220901	EM	3	
3	08/04/09 5:17	08040903.D	TO-15 Method Blank (1000ml)	S20-07200901	EM	1	Pass as MB
4	08/04/09 8:38	08040904.D	P0902632-002 (1000ml)	[redacted]	EM	10	
5	08/04/09 9:38	08040905.D	P0902599-007 dil (100ml)	Environmental H & E 99432	EM	16	
6	08/04/09 10:19	08040906.D	P0902624-001 (1000ml)	[redacted]	EM	5	
7	08/04/09 11:01	08040907.D	P0902624-004 (1000ml)	[redacted]	EM	6	
8	08/04/09 11:42	08040908.D	25ng TO-15 LCS STD	S20-07200901/S20-07240915	EM	2	Pass
9	08/04/09 12:29	08040909.D	P0902624-001 dil (100ml)	[redacted]	EM	5	
10	08/04/09 13:10	08040910.D	P0902624-002 (1000ml)	[redacted]	EM	7	
11	08/04/09 13:52	08040911.D	P0902624-002 dup (1000ml)	[redacted]	EM	7	Pass as Lab Dup.