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

April 17, 2009

Peter Brighton
Walden Environmental Engineering, PLLC
16 Spring Street
Oyster Bay, NY 11771

RE: Bayville Village Cleaners / BVC0106

Dear Peter:

Enclosed are the results of the samples submitted to our laboratory on March 24, 2009. For your reference, these analyses have been assigned our service request number P0901030.

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 217 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

NARRATIVE

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

Client:	Walden Environmental Engineering, PLLC	CAS Project No:	P0901030
Project:	Bayville Village Cleaners / BVC0106	New York Lab ID:	11221

CASE NARRATIVE

The samples were received intact under chain of custody on March 24, 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 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 spike recoveries of ethyl acetate and 4-methyl-2-pentanone for the Laboratory Control Sample (LCS) analyzed on April 6, 2009 were outside the Laboratory generated control criterion. The recovery error equates to a potential high bias. However, the spike recoveries of the analytes in question were within the method criteria; therefore, the data quality is not significantly affected. No corrective action was taken.

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.

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Walden Environmental Engineering, PLLC Work order: P0901030

Project: Bayville Village Cleaners / BVC0106

Sample(s) received on: 03/24/09 Date opened: 03/24/09 by: MZAMORA

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
P0901030-001.01	6.0 L Source Can					
P0901030-002.01	6.0 L Ambient Can					
P0901030-003.01	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)

NYSDEC DATA PACKAGE SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
SS-1	P0901030-001	EPA TO-15					
I-1	P0901030-002	EPA TO-15					
O-1	P0901030-003	EPA TO-15					

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
P0901030-001	Air	3/20/09	3/24/09	NA	4/6/09
P0901030-002	Air	3/20/09	3/24/09	NA	4/7/09
P0901030-003	Air	3/20/09	3/24/09	NA	4/7/09

CHAIN OF CUSTODY FORMS

Air - Chain of Custody Record & Analytical Service Request

Columbia Analytical Services™
2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P0901030

Company Name & Address (Reporting Information)
Walden Associates
16 Spring Street
Oyster Bay, NY 11771

Project Name: Bayville Village Cleaners

Project Number: BVC0106

Project Manager: Peter Brighton

P.O. # / Billing Information: BVC0106

Phone: (516)624 7200 Fax: (516)624 3219

Email Address for Result Reporting: pbrighton@walden-associates.com

Sampler (Print & Sign): Edyta Lagomarsini

CAS Contact

Analysis Method and/or Analytes

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Sample Type (Air/Tube/ Solid)	Canister ID (Bar Code # - AC, SC, etc.)	Flow Controller (Bar Code - FC #)	Sample Volume	TO-15				Comments e.g. Actual Preservative or specific instructions
SS-1	1	3/20/09	0910	Air	SC00948	0A00598	6L	✓				8 h
I-1	2	3/20/09	0914	Air	AC01573	FC00244	6L	✓				↓
O-1	3	3/20/09	0915	Air	AC01239	FC00690	6L	✓				

Report Tier Levels - please select
Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) ____
EDD required Yes / No
Type: ____ EDD Units: ____

Project Requirements (MRLs, QAPP): Cat. B

Relinquished by: (Signature)	Date: 3/23/09	Time: 1551	Received by: (Signature) Fedex Pick-up Tracking # 868228179200	Date: 3/23/09	Time: 1551	Cooler / Blank	
Relinquished by: (Signature) Fedex	Date:	Time:	Received by: (Signature) Ultaire	Date: 3/24/09	Time: 0935		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Temperature	°C

GC/MS VOLATILES DATA

QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Walden Environmental Engineering, PLLC**
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Project ID: P0901030

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 3/20/09
Analyst: Wida Ang Date(s) Received: 3/24/09
Sampling Media: 6.0 L Summa Canister(s) Date(s) Analyzed: 4/6 - 4/7/09
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P090406-MB	**110**	70-130	**101**	70-130	**94**	70-130	
Lab Control Sample	P090406-LCS	**110**	70-130	**100**	70-130	**99**	70-130	
SS-1	P0901030-001	**110**	70-130	**101**	70-130	**97**	70-130	
SS-1	P0901030-001DUP	**110**	70-130	**100**	70-130	**97**	70-130	
I-1	P0901030-002	**109**	70-130	**99**	70-130	**97**	70-130	
O-1	P0901030-003	**109**	70-130	**101**	70-130	**96**	70-130	

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/06/09
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	**25.6**	**97**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.3	**25.9**	**98**	61-118	
74-87-3	Chloromethane	25.3	**27.0**	**107**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.8	**26.5**	**99**	65-122	
75-01-4	Vinyl Chloride	25.5	**26.8**	**105**	57-132	
106-99-0	1,3-Butadiene	30.0	**34.2**	**114**	66-161	
74-83-9	Bromomethane	25.8	**28.0**	**109**	67-130	
75-00-3	Chloroethane	25.8	**25.9**	**100**	68-123	
64-17-5	Ethanol	133	**154**	**116**	50-155	
75-05-8	Acetonitrile	26.3	**27.4**	**104**	48-148	
107-02-8	Acrolein	27.3	**28.5**	**104**	67-138	
67-64-1	Acetone	137	**143**	**104**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**30.1**	**114**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**49.8**	**104**	54-126	
107-13-1	Acrylonitrile	26.8	**29.7**	**111**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**28.0**	**102**	70-123	
75-09-2	Methylene Chloride	26.5	**24.9**	**94**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**30.3**	**112**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**28.3**	**103**	69-126	
75-15-0	Carbon Disulfide	26.8	**27.3**	**102**	66-115	
156-60-5	trans-1,2-Dichloroethene	26.8	**31.0**	**116**	69-125	
75-34-3	1,1-Dichloroethane	26.8	**29.9**	**112**	72-130	
1634-04-4	Methyl tert-Butyl Ether	27.5	**28.5**	**104**	72-132	
108-05-4	Vinyl Acetate	126	**187**	**148**	73-158	
78-93-3	2-Butanone (MEK)	27.5	**32.0**	**116**	68-126	

Verified By: RL Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/06/09
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	27.5	**31.0**	**113**	69-124	
141-78-6	Ethyl Acetate	53.5	**69.7**	**130**	65-126	L
110-54-3	n-Hexane	27.3	**28.3**	**104**	63-125	
67-66-3	Chloroform	26.8	**30.0**	**112**	68-126	
109-99-9	Tetrahydrofuran (THF)	27.5	**31.3**	**114**	65-124	
107-06-2	1,2-Dichloroethane	26.8	**31.5**	**118**	61-129	
71-55-6	1,1,1-Trichloroethane	26.5	**28.2**	**106**	69-127	
71-43-2	Benzene	26.8	**26.6**	**99**	68-122	
56-23-5	Carbon Tetrachloride	27.0	**31.7**	**117**	68-137	
110-82-7	Cyclohexane	54.5	**56.8**	**104**	68-121	
78-87-5	1,2-Dichloropropane	26.5	**29.6**	**112**	69-128	
75-27-4	Bromodichloromethane	27.3	**31.2**	**114**	71-131	
79-01-6	Trichloroethene	26.5	**25.6**	**97**	72-122	
123-91-1	1,4-Dioxane	27.0	**29.6**	**110**	73-127	
80-62-6	Methyl Methacrylate	53.5	**60.2**	**113**	80-133	
142-82-5	n-Heptane	27.0	**27.8**	**103**	69-126	
10061-01-5	cis-1,3-Dichloropropene	25.0	**29.1**	**116**	73-122	
108-10-1	4-Methyl-2-pentanone	27.5	**33.7**	**123**	67-122	L
10061-02-6	trans-1,3-Dichloropropene	27.5	**34.3**	**125**	75-131	
79-00-5	1,1,2-Trichloroethane	26.3	**28.3**	**108**	76-125	
108-88-3	Toluene	27.0	**27.4**	**101**	74-119	
591-78-6	2-Hexanone	27.5	**30.0**	**109**	64-118	
124-48-1	Dibromochloromethane	28.8	**32.9**	**114**	79-129	
106-93-4	1,2-Dibromoethane	26.8	**28.8**	**107**	79-125	
123-86-4	n-Butyl Acetate	27.5	**32.0**	**116**	70-136	

L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/06/09
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	26.8	**28.3**	**106**	75-126	
127-18-4	Tetrachloroethene	25.8	**24.8**	**96**	72-125	
108-90-7	Chlorobenzene	26.8	**27.0**	**101**	74-121	
100-41-4	Ethylbenzene	26.5	**27.6**	**104**	76-120	
179601-23-1	m,p-Xylenes	52.5	**55.0**	**105**	75-120	
75-25-2	Bromoform	26.0	**32.3**	**124**	76-143	
100-42-5	Styrene	27.0	**28.1**	**104**	78-124	
95-47-6	o-Xylene	26.5	**27.3**	**103**	76-121	
111-84-2	n-Nonane	26.5	**28.1**	**106**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**32.9**	**122**	77-126	
98-82-8	Cumene	25.8	**26.5**	**103**	78-125	
80-56-8	alpha-Pinene	27.5	**29.6**	**108**	78-125	
103-65-1	n-Propylbenzene	25.8	**28.0**	**109**	80-127	
622-96-8	4-Ethyltoluene	27.5	**30.0**	**109**	75-123	
108-67-8	1,3,5-Trimethylbenzene	27.3	**27.8**	**102**	76-124	
95-63-6	1,2,4-Trimethylbenzene	26.8	**30.2**	**113**	76-123	
100-44-7	Benzyl Chloride	28.8	**35.8**	**124**	80-137	
541-73-1	1,3-Dichlorobenzene	27.5	**29.6**	**108**	74-125	
106-46-7	1,4-Dichlorobenzene	27.3	**28.3**	**104**	74-126	
95-50-1	1,2-Dichlorobenzene	27.3	**31.7**	**116**	75-124	
5989-27-5	d-Limonene	26.8	**32.6**	**122**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.5	**33.8**	**123**	79-144	
120-82-1	1,2,4-Trichlorobenzene	28.8	**35.5**	**123**	70-139	
91-20-3	Naphthalene	25.8	**32.9**	**128**	69-141	
87-68-3	Hexachlorobutadiene	28.8	**29.9**	**104**	68-138	

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1**
Client Project ID: **Bayville Village Cleaners / BVC0106**

CAS Project ID: P0901030
CAS Sample ID: P0901030-001DUP

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC00948

Date Collected: 3/20/09
Date Received: 3/24/09
Date Analyzed: 4/6/09
Volume(s) Analyzed: 0.060 Liter(s)

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average ppbV	% RPD	RPD Limit	Data Qualifier
Propene	ND	ND	ND	ND	-	-	25	
Dichlorodifluoromethane (CFC 12)	ND	ND	ND	ND	-	-	25	
Chloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	ND	ND	ND	-	-	25	
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Butadiene	ND	ND	ND	ND	-	-	25	
Bromomethane	ND	ND	ND	ND	-	-	25	
Chloroethane	ND	ND	ND	ND	-	-	25	
Ethanol	ND	ND	ND	ND	-	-	25	
Acetonitrile	ND	ND	ND	ND	-	-	25	
Acrolein	ND	ND	ND	ND	-	-	25	
Acetone	ND	ND	ND	ND	-	-	25	
Trichlorofluoromethane	ND	ND	ND	ND	-	-	25	
2-Propanol (Isopropyl Alcohol)	ND	ND	ND	ND	-	-	25	
Acrylonitrile	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
Methylene Chloride	ND	ND	ND	ND	-	-	25	
3-Chloro-1-propene (Allyl Chloride)	ND	ND	ND	ND	-	-	25	
Trichlorotrifluoroethane	ND	ND	ND	ND	-	-	25	
Carbon Disulfide	ND	ND	ND	ND	-	-	25	
trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethane	ND	ND	ND	ND	-	-	25	
Methyl tert-Butyl Ether	ND	ND	ND	ND	-	-	25	
Vinyl Acetate	ND	ND	ND	ND	-	-	25	
2-Butanone (MEK)	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1**
Client Project ID: **Bayville Village Cleaners / BVC0106**

CAS Project ID: P0901030
CAS Sample ID: P0901030-001DUP

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC00948

Date Collected: 3/20/09
Date Received: 3/24/09
Date Analyzed: 4/6/09
Volume(s) Analyzed: 0.060 Liter(s)

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average ppbV	% RPD	RPD Limit	Data Qualifier
cis-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
Ethyl Acetate	ND	ND	ND	ND	-	-	25	
n-Hexane	ND	ND	ND	ND	-	-	25	
Chloroform	23.2	4.75	22.9	4.70	4.725	**1**	25	
Tetrahydrofuran (THF)	ND	ND	ND	ND	-	-	25	
1,2-Dichloroethane	ND	ND	ND	ND	-	-	25	
1,1,1-Trichloroethane	ND	ND	ND	ND	-	-	25	
Benzene	ND	ND	ND	ND	-	-	25	
Carbon Tetrachloride	ND	ND	ND	ND	-	-	25	
Cyclohexane	ND	ND	ND	ND	-	-	25	
1,2-Dichloropropane	ND	ND	ND	ND	-	-	25	
Bromodichloromethane	ND	ND	ND	ND	-	-	25	
Trichloroethene	ND	ND	ND	ND	-	-	25	
1,4-Dioxane	ND	ND	ND	ND	-	-	25	
Methyl Methacrylate	ND	ND	ND	ND	-	-	25	
n-Heptane	ND	ND	ND	ND	-	-	25	
cis-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
4-Methyl-2-pentanone	ND	ND	ND	ND	-	-	25	
trans-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
1,1,2-Trichloroethane	ND	ND	ND	ND	-	-	25	
Toluene	39.6	10.5	39.1	10.4	10.45	**1**	25	
2-Hexanone	ND	ND	ND	ND	-	-	25	
Dibromochloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dibromoethane	ND	ND	ND	ND	-	-	25	
n-Butyl Acetate	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-001DUP

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.060 Liter(s)
Test Notes:
Container ID: SC00948

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average ppbV	% RPD	RPD Limit	Data Qualifier
n-Octane	41.5	8.88	41.9	8.98	8.93	**1**	25	
Tetrachloroethene	2,190	323	2,200	324	323.5	**0.3**	25	
Chlorobenzene	ND	ND	ND	ND	-	-	25	
Ethylbenzene	ND	ND	ND	ND	-	-	25	
m,p-Xylenes	44.4	10.2	44.2	10.2	10.2	**0**	25	
Bromoform	ND	ND	ND	ND	-	-	25	
Styrene	ND	ND	ND	ND	-	-	25	
o-Xylene	15.1	3.47	15.2	3.50	3.485	**0.9**	25	
n-Nonane	87.0	16.6	87.2	16.6	16.6	**0**	25	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	-	-	25	
Cumene	ND	ND	ND	ND	-	-	25	
alpha-Pinene	ND	ND	ND	ND	-	-	25	
n-Propylbenzene	ND	ND	ND	ND	-	-	25	
4-Ethyltoluene	ND	ND	ND	ND	-	-	25	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,4-Trimethylbenzene	40.3	8.21	40.1	8.15	8.18	**0.7**	25	
Benzyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,4-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,2-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
d-Limonene	ND	ND	ND	ND	-	-	25	
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	-	-	25	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	-	-	25	
Naphthalene	ND	ND	ND	ND	-	-	25	
Hexachlorobutadiene	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106**

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Lab File ID: 04060902.D
Analyst: Wida Ang Date Analyzed: 4/06/09
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 09:01
Test Notes:

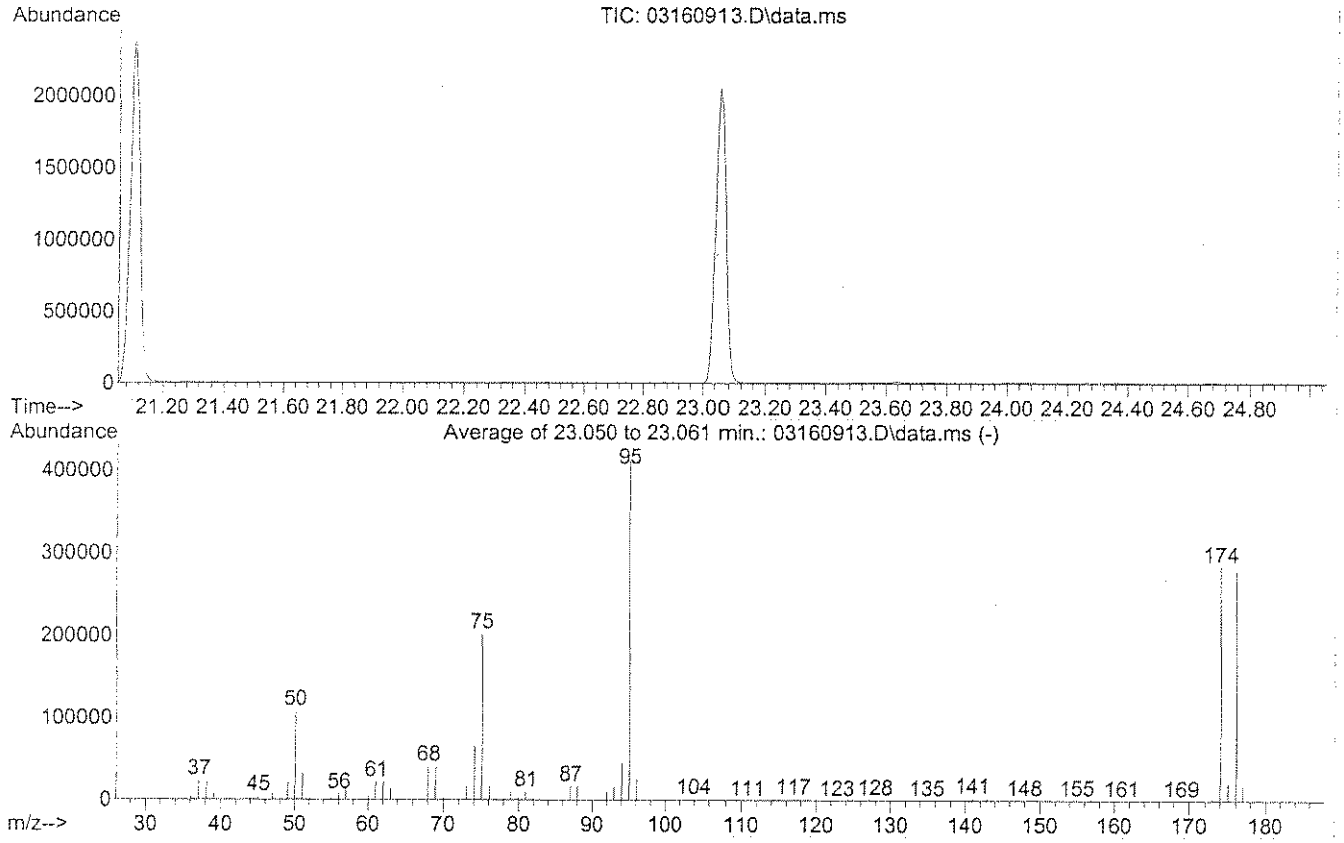
Client Sample ID	CAS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P090406-LCS	04060908.D	13:00
SS-1	P0901030-001	04060923.D	22:43
SS-1 (Lab Duplicate)	P0901030-001DUP	04060924.D	23:22
I-1	P0901030-002	04060925.D	00:01
O-1	P0901030-003	04060927.D	01:19

Verified By: Re Date: 4/9/09

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160913.D
Acq On : 16 Mar 2009 17:36
Operator : WA/LH
Sample : 25ng BFB STD
Misc : S20-02230901
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Jan 23 08:54:57 2009



AutoFind: Scans 3420, 3421, 3422; Background Corrected with Scan 3410

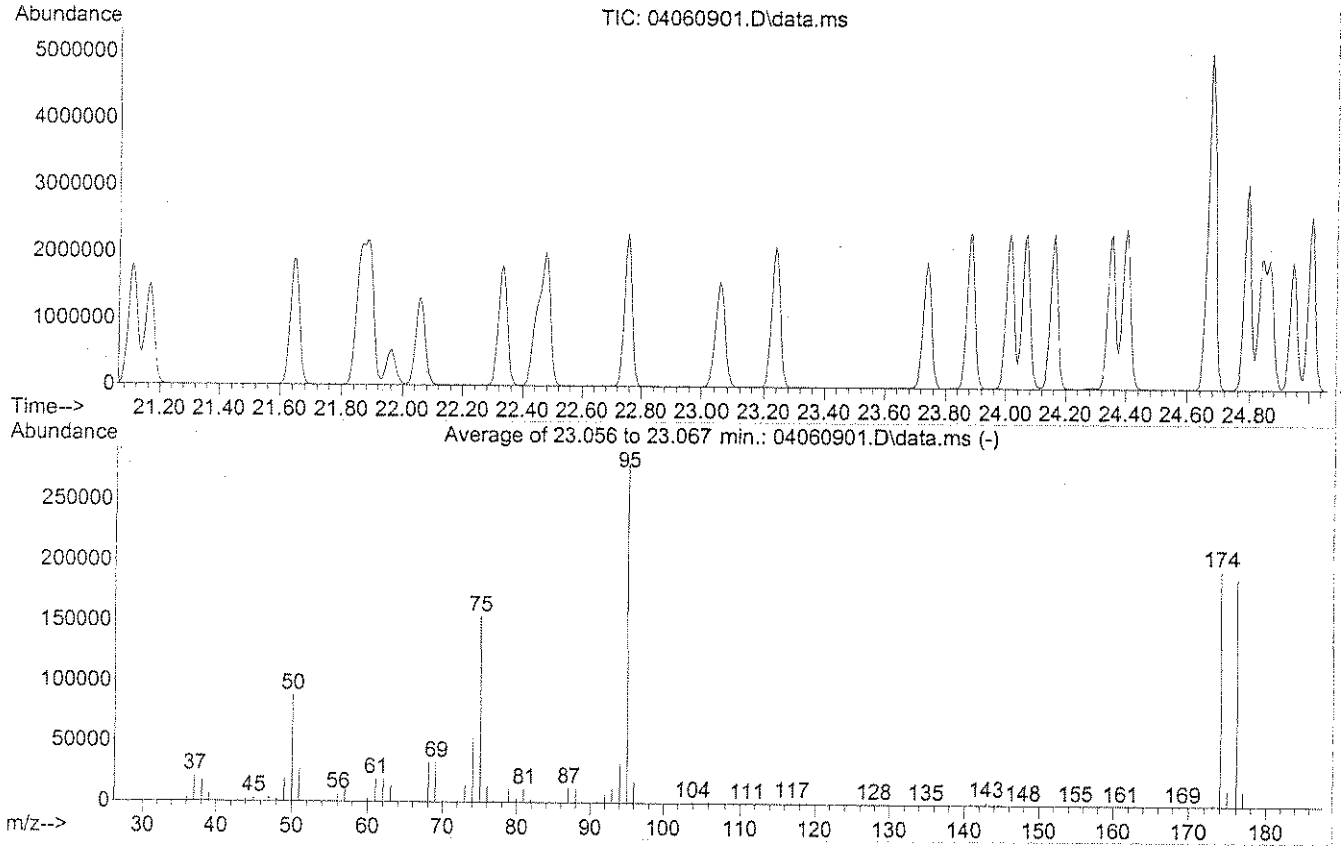
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	26.5	108896	PASS
75	95	30	66	49.2	202475	PASS
95	95	100	100	100.0	411349	PASS
96	95	5	9	6.6	26965	PASS
173	174	0.00	2	0.8	2340	PASS
174	95	50	120	69.2	284757	PASS
175	174	4	9	7.2	20507	PASS
176	174	93	101	97.6	278037	PASS
177	176	5	9	6.5	18029	PASS

20

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue Mar 17 08:49:32 2009



AutoFind: Scans 3421, 3422, 3423; Background Corrected with Scan 3410

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	31.7	88811	PASS
75	95	30	66	55.1	154293	PASS
95	95	100	100	100.0	280256	PASS
96	95	5	9	6.3	17681	PASS
173	174	0.00	2	1.0	1925	PASS
174	95	50	120	69.8	195627	PASS
175	174	4	9	7.1	13860	PASS
176	174	93	101	96.2	188160	PASS
177	176	5	9	6.4	12037	PASS

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106**

Internal Standard Area and RT Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Lab File ID: 04060901.D
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 08:07
Test Notes:

		IS1 (BCM)			IS2 (DFB)			IS3 (CBZ)		
		AREA	#	RT	#	AREA	#	RT	#	AREA	#	RT	#
	24 Hour Standard	249312		12.31		1157236		15.23		674781		21.11	
	Upper Limit	349037		12.64		1620130		15.56		944693		21.44	
	Lower Limit	149587		11.98		694342		14.90		404869		20.78	
	Client Sample ID												
01	Method Blank	238866		12.28		1127900		15.21		654418		21.10	
02	Lab Control Sample	188267		12.31		889883		15.23		519656		21.11	
03	SS-1	232305		12.28		1071398		15.21		639114		21.10	
04	SS-1 (Lab Duplicate)	231209		12.28		1071158		15.22		627984		21.10	
05	I-1	197293		12.28		919455		15.22		543763		21.10	
06	O-1	243003		12.28		1131005		15.22		656653		21.10	
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an I.
I = Internal standard not within the specified liimits.

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES
MDLs for TO-15 (SCAN)

	09/17/08	08/07/08	09/23/08	10/02/08	09/03/08	09/25/08					FINAL	
	MS2	MS3	MS8	MS9	MS13	MS16	MAX			MW	MDL_R	MDL_R
COMPOUND	MDL_R	MDL_R	MDL_R	MDL_R	MDL_R	MDL_R	MDL_R	µg/m³	ppbV		µg/m³	ppbV
Propene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.075566	42.08	0.13	0.076
Dichlorodifluoromethane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.026301	120.90	0.13	0.026
Chloromethane	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.062979	50.49	0.13	0.063
Freon 114	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.018606	170.90	0.13	0.019
Vinyl Chloride	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.050877	62.50	0.13	0.051
1,3-Butadiene	0.120	0.150	0.150	0.150	0.140	0.150	0.150	0.15	0.067831	54.09	0.15	0.068
Bromomethane	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.033493	94.94	0.13	0.033
Chloroethane	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.049284	64.52	0.13	0.049
Ethanol	0.530	0.670	0.670	0.670	0.640	0.670	0.670	0.67	0.355724	46.07	0.67	0.36
Acetonitrile	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.077462	41.05	0.13	0.077
Acrolein	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.061085	56.06	0.14	0.061
Acetone	0.550	0.690	0.690	0.690	0.660	0.690	0.690	0.69	0.290589	58.08	0.69	0.29
Trichlorofluoromethane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.023143	137.40	0.13	0.023
Isopropanol	0.190	0.240	0.240	0.240	0.230	0.240	0.240	0.24	0.097677	60.10	0.24	0.098
Acrylonitrile	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.059928	53.06	0.13	0.060
1,1-Dichloroethene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.035325	96.94	0.14	0.035
tert-Butanol	0.200	0.250	0.250	0.250	0.240	0.250	0.250	0.25	0.082501	74.12	0.25	0.083
Methylene Chloride	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.037436	84.94	0.13	0.037
Allyl Chloride	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.044746	76.53	0.14	0.045
Trichlorotrifluoroethane	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.018275	187.38	0.14	0.018
Carbon Disulfide	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.041763	76.14	0.13	0.042
trans-1,2-Dichloroethene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.032802	96.94	0.13	0.033
1,1-Dichloroethane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.032132	98.96	0.13	0.032
Methyl tert-Butyl Ether	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.038847	88.15	0.14	0.039
Vinyl Acetate	0.500	0.640	0.640	0.640	0.600	0.640	0.640	0.64	0.181838	86.09	0.64	0.18
2-Butanone	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.047489	72.11	0.14	0.047
cis-1,2-Dichloroethene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.035325	96.94	0.14	0.035
Diisopropyl Ether	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.033513	102.18	0.14	0.034
Ethyl Acetate	0.210	0.270	0.270	0.270	0.260	0.270	0.270	0.27	0.074957	88.11	0.27	0.075
n-Hexane	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.039740	86.17	0.14	0.040
Chloroform	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.026631	119.40	0.13	0.027
Tetrahydrofuran	0.110	0.140	0.140	0.140	0.150	0.140	0.150	0.15	0.050881	72.11	0.15	0.051
Ethyl tert-Butyl Ether	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.031121	102.18	0.13	0.031
1,2-Dichloroethane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.032132	98.96	0.13	0.032
1,1,1-Trichloroethane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.023837	133.40	0.13	0.024
Isopropyl Acetate	0.210	0.270	0.270	0.270	0.250	0.270	0.270	0.27	0.064665	102.13	0.27	0.065
1-Butanol	0.240	0.280	0.280	0.280	0.290	0.280	0.290	0.29	0.095698	74.12	0.29	0.096
Benzene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.040709	78.11	0.13	0.041
Carbon Tetrachloride	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.022265	153.80	0.14	0.022
Cyclohexane	0.220	0.270	0.270	0.270	0.260	0.270	0.270	0.27	0.078472	84.16	0.27	0.078
tert-Amyl Methyl Ether	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.031121	102.18	0.13	0.031
1,2-Dichloropropane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.028140	113.00	0.13	0.028
Bromodichloromethane	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.020906	163.80	0.14	0.021
Trichloroethene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.024199	131.40	0.13	0.024
1,4-Dioxane	0.110	0.140	0.140	0.140	0.160	0.140	0.160	0.16	0.044417	88.11	0.16	0.044
Isooctane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.027837	114.23	0.13	0.028
Methyl Methacrylate	0.210	0.270	0.270	0.270	0.260	0.270	0.270	0.27	0.065963	100.12	0.27	0.066
n-Heptane	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.034176	100.20	0.14	0.034
cis-1,3-Dichloropropene	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.028647	111.00	0.13	0.029
4-Methyl-2-pentanone	0.110	0.140	0.140	0.140	0.140	0.140	0.140	0.14	0.034176	100.20	0.14	0.034
trans-1,3-Dichloropropene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.030850	111.00	0.14	0.031
1,1,2-Trichloroethane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.023837	133.40	0.13	0.024
Toluene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.037165	92.14	0.14	0.037
2-Hexanone	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.034189	100.16	0.14	0.034
Dibromochloromethane	0.120	0.140	0.140	0.140	0.140	0.140	0.140	0.14	0.016440	208.30	0.14	0.016
1,2-Dibromoethane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.016923	187.90	0.13	0.017
Butyl Acetate	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.029480	116.16	0.14	0.029
n-Octane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.027837	114.23	0.13	0.028
Tetrachloroethene	0.100	0.130	0.130	0.130	0.140	0.220	0.220	0.22	0.032456	165.80	0.22	0.032
Chlorobenzene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.028240	112.60	0.13	0.028
Ethylbenzene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.029942	106.20	0.13	0.030
m- & p-Xylene	0.210	0.260	0.260	0.260	0.250	0.260	0.260	0.26	0.059883	106.20	0.26	0.060
Bromoform	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.012578	252.80	0.13	0.013
Styrene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.032895	104.10	0.14	0.033
o-Xylene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.029942	106.20	0.13	0.030
n-Nonane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.024792	128.26	0.13	0.025
1,1,2,2-Tetrachloroethane	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.020395	167.90	0.14	0.020
Cumene	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.026454	120.20	0.13	0.026
alpha-Pinene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.025135	136.24	0.14	0.025
n-Propylbenzene	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.026456	120.19	0.13	0.026
3-Ethyltoluene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.028489	120.20	0.14	0.028
4-Ethyltoluene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.028489	120.20	0.14	0.028
1,3,5-Trimethylbenzene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.028489	120.20	0.14	0.028
alpha-Methylstyrene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.026904	118.19	0.13	0.027
2-Ethyltoluene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.028489	120.20	0.14	0.028

COLUMBIA ANALYTICAL SERVICES
MDLs for TO-15 (SCAN)

	09/17/08	08/07/08	09/23/08	10/02/08	09/03/08	09/25/08					FINAL	
	MS2	MS3	MS8	MS9	MS13	MS16	MAX			MW	MDL_R	MDL_R
COMPOUND	MDL_R	MDL_R	MDL_R	MDL_R	MDL_R	MDL_R	MDL_R	µg/m³	ppbV		µg/m³	ppbV
1,2,4-Trimethylbenzene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.026454	120.20	**0.13**	**0.026**
n-Decane	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.024068	142.28	**0.14**	**0.024**
Benzyl Chloride	0.120	0.140	0.140	0.140	0.140	0.140	0.140	0.14	0.027051	126.59	**0.14**	**0.027**
1,3-Dichlorobenzene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.023295	147.00	**0.14**	**0.023**
1,4-Dichlorobenzene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.023295	147.00	**0.14**	**0.023**
sec-Butylbenzene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.023691	134.22	**0.13**	**0.024**
p-Isopropyltoluene	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.023691	134.22	**0.13**	**0.024**
1,2,3-Trimethylbenzene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.026456	120.19	**0.13**	**0.026**
1,2-Dichlorobenzene	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.023295	147.00	**0.14**	**0.023**
d-Limonene	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.023340	136.24	**0.13**	**0.023**
1,2-Dibromo-3-Chloropropane	0.110	0.140	0.140	0.140	0.140	0.140	0.140	0.14	0.014490	236.33	**0.14**	**0.014**
n-Undecane	0.110	0.140	0.140	0.140	0.130	0.140	0.140	0.14	0.021908	156.31	**0.14**	**0.022**
1,2,4-Trichlorobenzene	0.120	0.140	0.140	0.140	0.180	0.140	0.180	0.18	0.024258	181.50	**0.18**	**0.024**
Naphthalene	0.100	0.130	0.130	0.130	0.120	0.130	0.130	0.13	0.024809	128.17	**0.13**	**0.025**
n-Dodecane	0.110	0.130	0.130	0.130	0.130	0.130	0.130	0.13	0.018667	170.34	**0.13**	**0.019**
Hexachloro-1,3-butadiene	0.190	0.140	0.140	0.140	0.140	0.140	0.190	0.19	0.017820	260.80	**0.19**	**0.018**

Sample Data

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-001

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.060 Liter(s)
Test Notes:
Container ID: SC00948

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	11	ND	6.6	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	11	ND	2.3	
74-87-3	Chloromethane	ND	11	ND	5.5	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	11	ND	1.6	
75-01-4	Vinyl Chloride	ND	11	ND	4.4	
106-99-0	1,3-Butadiene	ND	11	ND	5.1	
74-83-9	Bromomethane	ND	11	ND	2.9	
75-00-3	Chloroethane	ND	11	ND	4.3	
64-17-5	Ethanol	ND	110	ND	60	
75-05-8	Acetonitrile	ND	11	ND	6.8	
107-02-8	Acrolein	ND	11	ND	4.9	
67-64-1	Acetone	ND	110	ND	48	
75-69-4	Trichlorofluoromethane	ND	11	ND	2.0	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	23	ND	9.2	
107-13-1	Acrylonitrile	ND	11	ND	5.2	
75-35-4	1,1-Dichloroethene	ND	11	ND	2.9	
75-09-2	Methylene Chloride	ND	11	ND	3.3	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	11	ND	3.6	
76-13-1	Trichlorotrifluoroethane	ND	11	ND	1.5	
75-15-0	Carbon Disulfide	ND	11	ND	3.6	
156-60-5	trans-1,2-Dichloroethene	ND	11	ND	2.9	
75-34-3	1,1-Dichloroethane	ND	11	ND	2.8	
1634-04-4	Methyl tert-Butyl Ether	ND	11	ND	3.1	
108-05-4	Vinyl Acetate	ND	110	ND	32	
78-93-3	2-Butanone (MEK)	ND	11	ND	3.8	

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: Ru Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1**
Client Project ID: **Bayville Village Cleaners / BVC0106**

CAS Project ID: P0901030
CAS Sample ID: P0901030-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC00948

Date Collected: 3/20/09
Date Received: 3/24/09
Date Analyzed: 4/6/09
Volume(s) Analyzed: 0.060 Liter(s)

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	11	ND	2.9	
141-78-6	Ethyl Acetate	ND	23	ND	6.3	
110-54-3	n-Hexane	ND	11	ND	3.2	
67-66-3	**Chloroform**	**23**	11	**4.8**	2.3	
109-99-9	Tetrahydrofuran (THF)	ND	11	ND	3.8	
107-06-2	1,2-Dichloroethane	ND	11	ND	2.8	
71-55-6	1,1,1-Trichloroethane	ND	11	ND	2.1	
71-43-2	Benzene	ND	11	ND	3.5	
56-23-5	Carbon Tetrachloride	ND	11	ND	1.8	
110-82-7	Cyclohexane	ND	23	ND	6.6	
78-87-5	1,2-Dichloropropane	ND	11	ND	2.5	
75-27-4	Bromodichloromethane	ND	11	ND	1.7	
79-01-6	Trichloroethene	ND	11	ND	2.1	
123-91-1	1,4-Dioxane	ND	11	ND	3.1	
80-62-6	Methyl Methacrylate	ND	23	ND	5.5	
142-82-5	n-Heptane	ND	11	ND	2.8	
10061-01-5	cis-1,3-Dichloropropene	ND	11	ND	2.5	
108-10-1	4-Methyl-2-pentanone	ND	11	ND	2.8	
10061-02-6	trans-1,3-Dichloropropene	ND	11	ND	2.5	
79-00-5	1,1,2-Trichloroethane	ND	11	ND	2.1	
108-88-3	**Toluene**	**40**	11	**11**	3.0	
591-78-6	2-Hexanone	ND	11	ND	2.8	
124-48-1	Dibromochloromethane	ND	11	ND	1.3	
106-93-4	1,2-Dibromoethane	ND	11	ND	1.5	
123-86-4	n-Butyl Acetate	ND	11	ND	2.4	

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

Verified By: Rv Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC** CAS Project ID: P0901030
Client Sample ID: **SS-1** CAS Sample ID: P0901030-001
Client Project ID: **Bayville Village Cleaners / BVC0106**

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.060 Liter(s)
Test Notes:
Container ID: SC00948

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**41**	11	**8.9**	2.4	
127-18-4	**Tetrachloroethene**	**2,200**	11	**320**	1.7	
108-90-7	Chlorobenzene	ND	11	ND	2.5	
100-41-4	Ethylbenzene	ND	11	ND	2.6	
179601-23-1	**m,p-Xylenes**	**44**	23	**10**	5.2	
75-25-2	Bromoform	ND	11	ND	1.1	
100-42-5	Styrene	ND	11	ND	2.7	
95-47-6	**o-Xylene**	**15**	11	**3.5**	2.6	
111-84-2	**n-Nonane**	**87**	11	**17**	2.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	11	ND	1.7	
98-82-8	Cumene	ND	11	ND	2.3	
80-56-8	alpha-Pinene	ND	11	ND	2.0	
103-65-1	n-Propylbenzene	ND	11	ND	2.3	
622-96-8	4-Ethyltoluene	ND	11	ND	2.3	
108-67-8	1,3,5-Trimethylbenzene	ND	11	ND	2.3	
95-63-6	**1,2,4-Trimethylbenzene**	**40**	11	**8.2**	2.3	
100-44-7	Benzyl Chloride	ND	11	ND	2.2	
541-73-1	1,3-Dichlorobenzene	ND	11	ND	1.9	
106-46-7	1,4-Dichlorobenzene	ND	11	ND	1.9	
95-50-1	1,2-Dichlorobenzene	ND	11	ND	1.9	
5989-27-5	d-Limonene	ND	11	ND	2.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	ND	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	11	ND	1.5	
91-20-3	Naphthalene	ND	11	ND	2.2	
87-68-3	Hexachlorobutadiene	ND	11	ND	1.1	

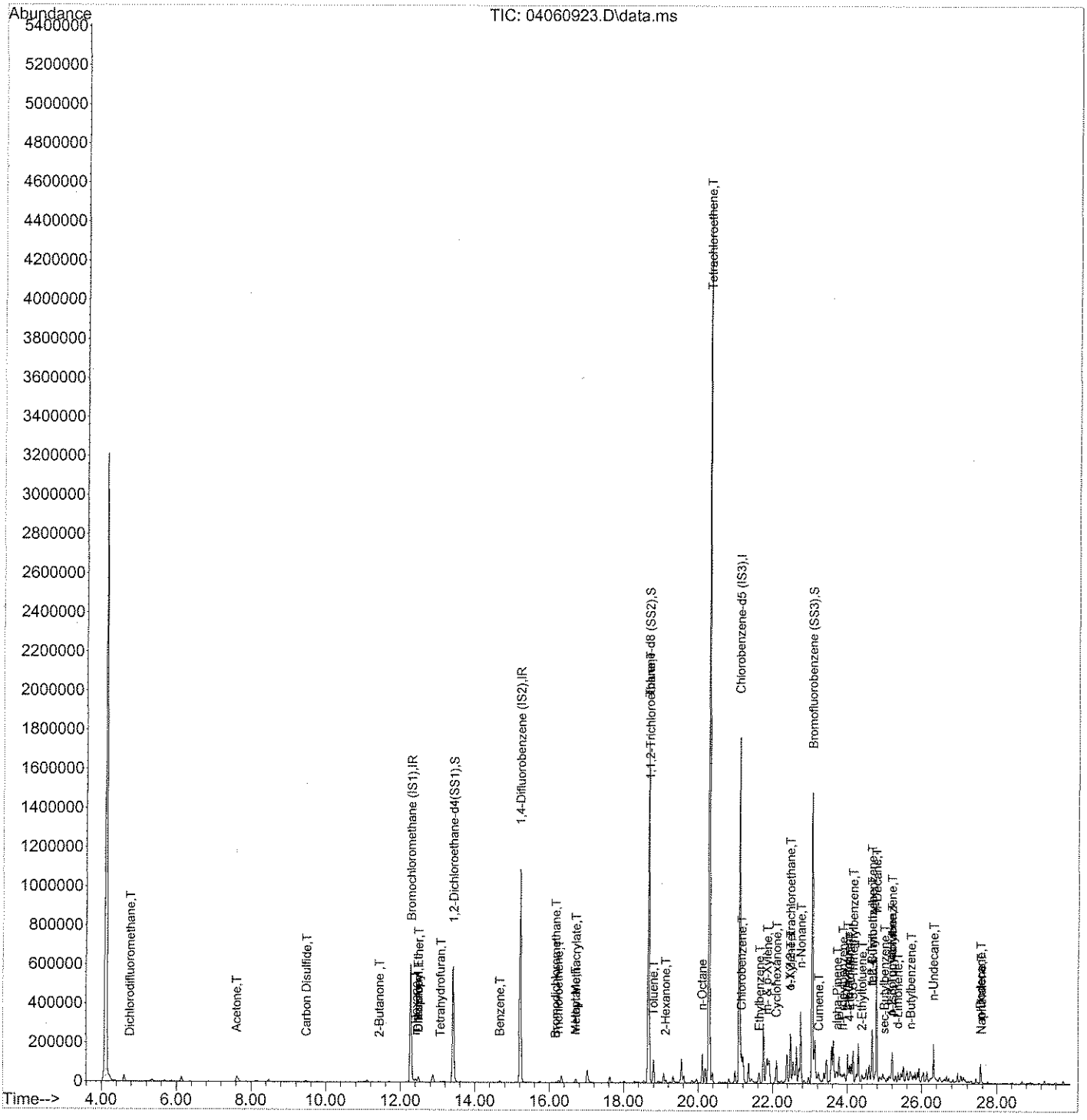
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 4/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 22:43
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 22:43
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS) LH 4/8/09
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration DA 4/8/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	232305	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.21	114	1071398	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	639114	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.42	65	606864	27.525	ng		-0.04
Spiked Amount 25.000			Recovery = 110.08%				
57) Toluene-d8 (SS2)	18.67	98	1310070	25.244	ng		-0.01
Spiked Amount 25.000			Recovery = 100.96%				
73) Bromofluorobenzene (SS3)	23.06	174	404163	24.134	ng		0.00
Spiked Amount 25.000			Recovery = 96.52%				
Target Compounds							Qvalue
2) Propene	4.61	42	625	N.D.			
3) Dichlorodifluoromethane	4.76	85	3221	0.109 ng		#	92
4) Chloromethane	5.08	50	254	N.D.			
5) Freon 114	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	6.97	45	646	N.D.			
11) Acetonitrile	7.24	41	69	N.D.			
12) Acrolein	7.40	56	56	N.D.			
13) Acetone	7.62	58	14960	1.029 ng		#	72
14) Trichlorofluoromethane	7.88	101	1192	N.D.			
15) Isopropanol	8.09	45	1887	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) tert-Butanol	9.07	59	1489	N.D.			
19) Methylene Chloride	9.07	84	610	N.D.			
20) Allyl Chloride	9.18	41	619	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.48	76	15242	0.300 ng			97
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	11.10	86	52	N.D.			
27) 2-Butanone	11.43	72	571	0.066 ng		#	38
28) cis-1,2-Dichloroethene	12.06	61	402	N.D.			
29) Diisopropyl Ether	12.48	87	2447	0.235 ng		#	1
30) Ethyl Acetate	12.43	61	113	N.D.			
31) n-Hexane	12.41	57	5341	0.173 ng			85

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 22:43
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.48	83	24154	1.023 ng		99
34) Tetrahydrofuran	13.08	72	565	0.067 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.42	62	272	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.60	56	190	N.D.		
41) Benzene	14.67	78	10676	0.195 ng		99
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.10	84	785	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.17	83	1258	0.070 ng		75
47) Trichloroethene	16.24	130	4332	0.331 ng		97
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) Isooctane	16.34	57	3241	N.D.		
50) Methyl Methacrylate	16.72	100	1188	0.248 ng	#	1
51) n-Heptane	16.71	71	4479	0.312 ng		93
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.68	97	113798	9.397 ng	#	8
58) Toluene	18.80	91	98308	1.746 ng		99
59) 2-Hexanone	19.13	43	11370	0.228 ng	#	37
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) Butyl Acetate	19.96	43	1642	N.D.		
63) n-Octane	20.11	57	33326	1.830 ng		95
64) Tetrachloroethene	20.30	166	1389330	96.711 ng		100
65) Chlorobenzene	21.16	112	4441	0.128 ng	#	43
66) Ethylbenzene	21.65	91	29644	0.452 ng		96
67) m- & p-Xylene	21.86	91	101973	1.961 ng		95
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.34	104	1120	N.D.		
70) o-Xylene	22.48	91	35740	0.664 ng		90
71) n-Nonane	22.75	43	167165	3.840 ng		93
72) 1,1,2,2-Tetrachloroethane	22.48	83	5407	0.253 ng	#	62
74) Cumene	23.24	105	5719	0.086 ng		94
75) alpha-Pinene	23.73	93	6019	0.200 ng	#	15
76) n-Propylbenzene	23.88	91	22890	0.273 ng		83
77) 3-Ethyltoluene	24.01	105	48038	0.790 ng		99
78) 4-Ethyltoluene	24.06	105	24746	0.415 ng		98
79) 1,3,5-Trimethylbenzene	24.16	105	25692	0.478 ng		96

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 22:43
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

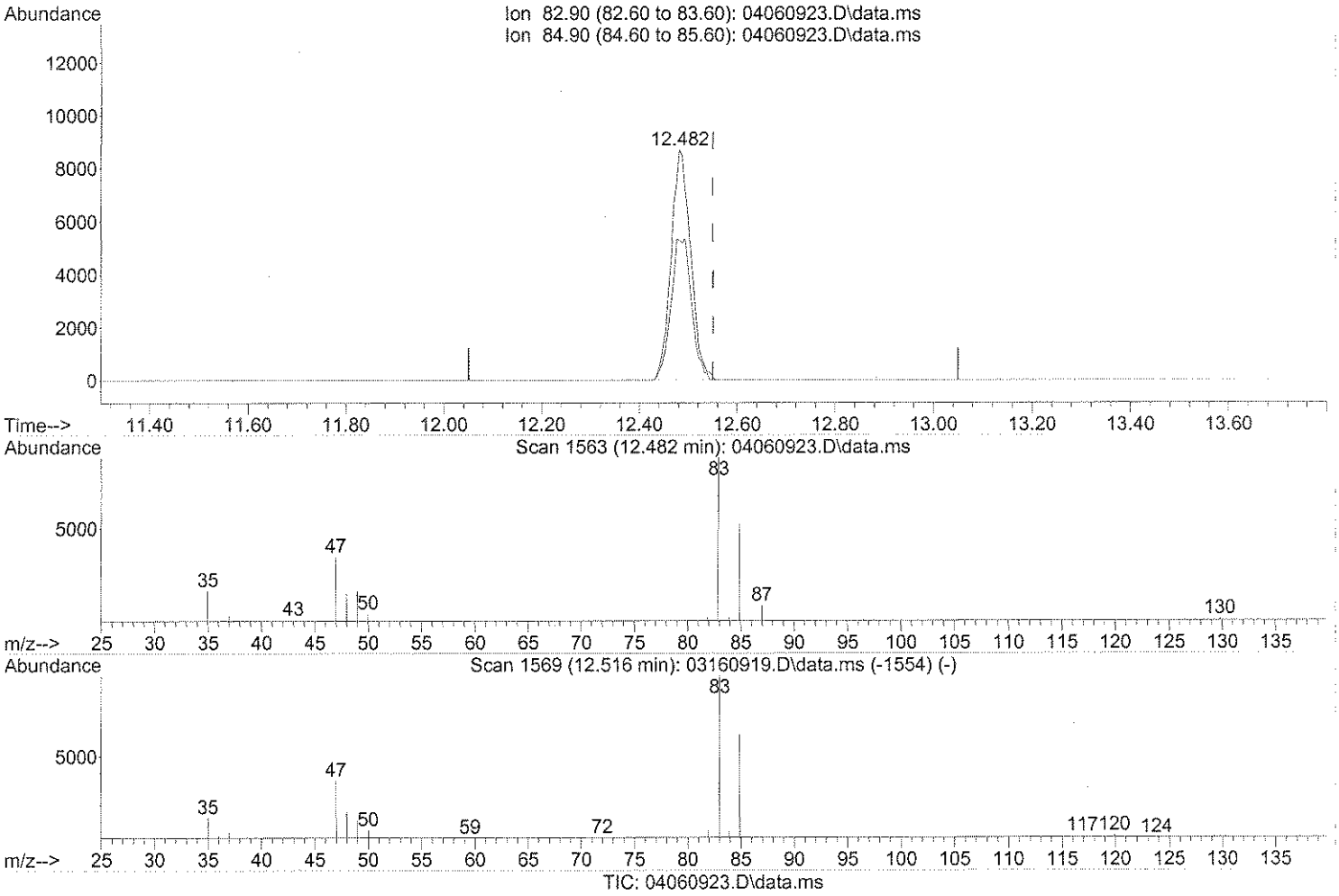
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.15	118	53	N.D.		
81) 2-Ethyltoluene	24.40	105	22485	0.361 ng		95
82) 1,2,4-Trimethylbenzene	24.67	105	97836	1.779 ng		89
83) n-Decane	24.79	57	238634	5.346 ng		94
84) Benzyl Chloride	24.87	91	56	N.D.		
85) 1,3-Dichlorobenzene	24.95	146	718	N.D.		
86) 1,4-Dichlorobenzene	24.95	146	718	N.D.		
87) sec-Butylbenzene	25.00	105	6866	0.097 ng		95
88) p-Isopropyltoluene	25.20	119	8178	0.131 ng	#	43
89) 1,2,3-Trimethylbenzene	25.20	105	35158	0.665 ng		90
90) 1,2-Dichlorobenzene	24.95	146	718	N.D.		
91) d-Limonene	25.37	68	9887	0.429 ng		91
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.32	57	71598	1.501 ng		92
94) 1,2,4-Trichlorobenzene	0.00	184	0	N.D.		
95) Naphthalene	27.57	128	13077	0.208 ng		95
96) n-Dodecane	27.55	57	33709	0.641 ng		89
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.11	55	12658	0.366 ng	#	72
99) tert-Butylbenzene	24.67	119	11023	0.229 ng	#	54
100) n-Butylbenzene	25.71	91	16306	0.280 ng	#	28

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060923.D\data.ms

(32) Chloroform (T)

12.482min (-0.068) 1.02ng

response 24154

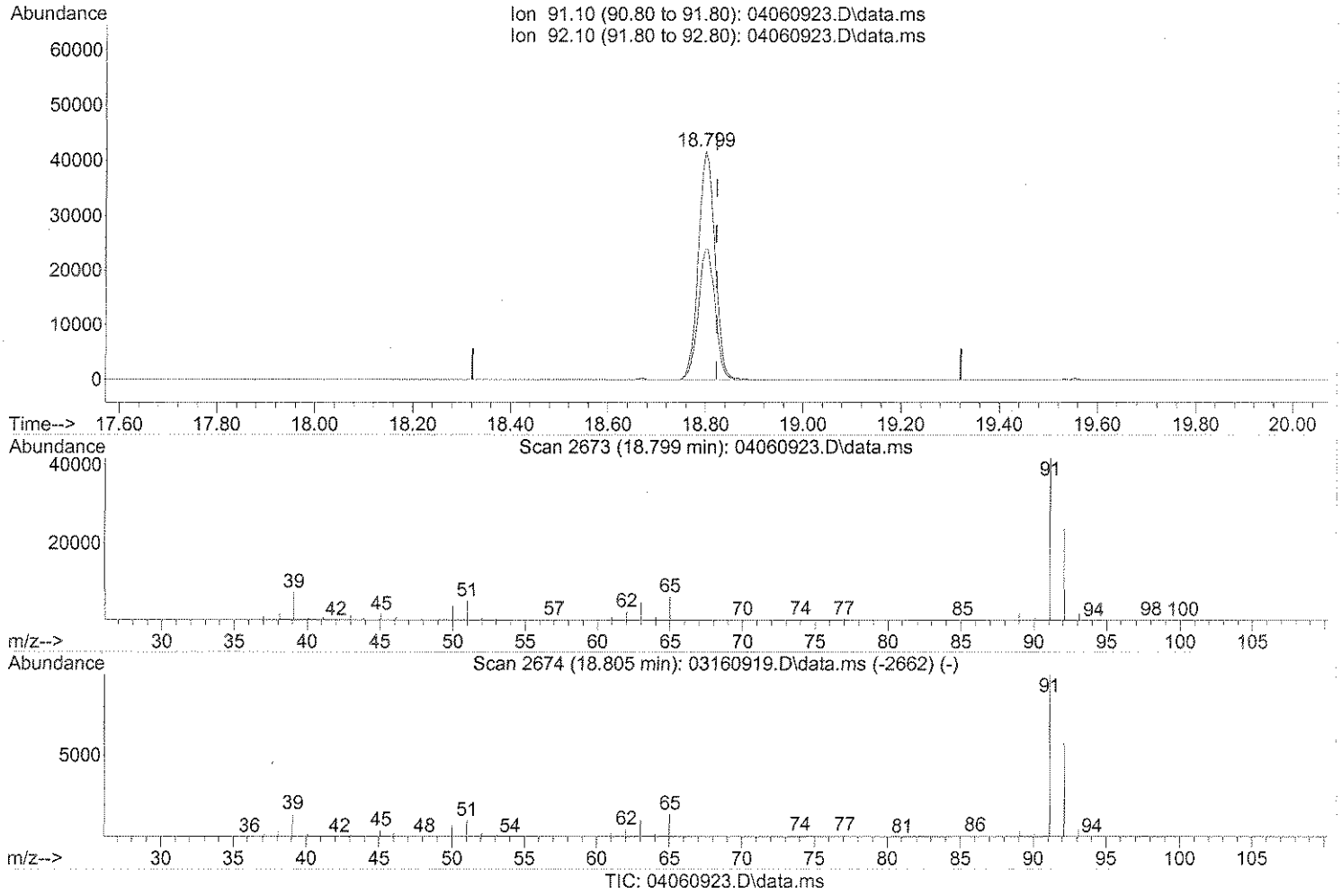
Ion	Exp%	Act%
82.90	100	100
84.90	65.20	64.51
0.00	0.00	0.00
0.00	0.00	0.00

33

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(58) Toluene (T)

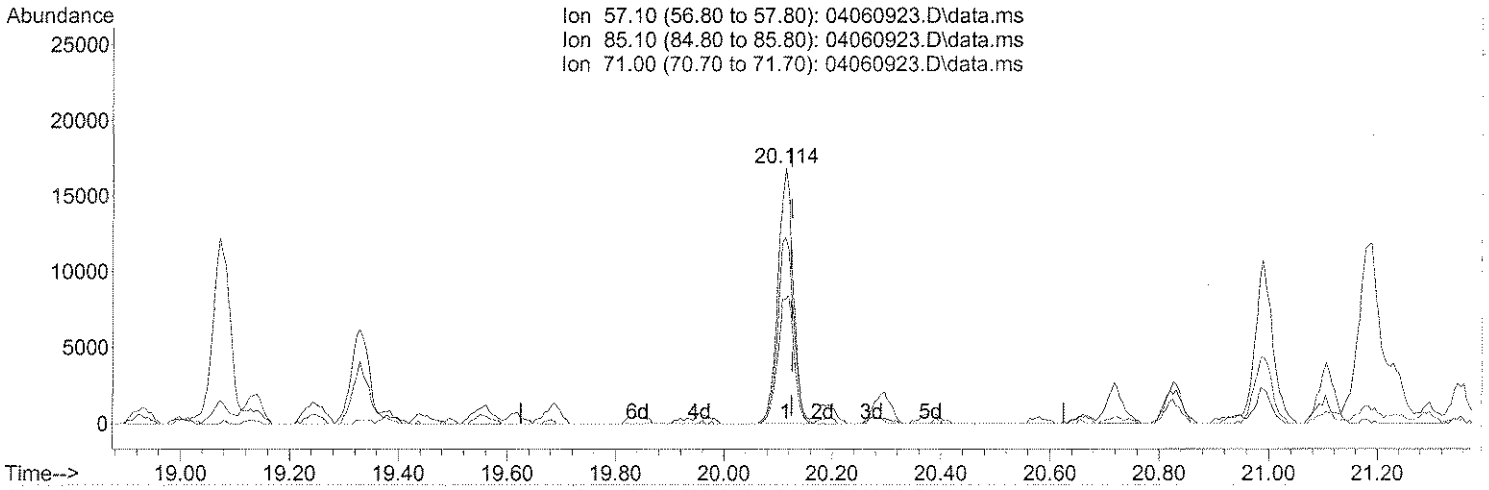
18.799min (-0.023) 1.75ng

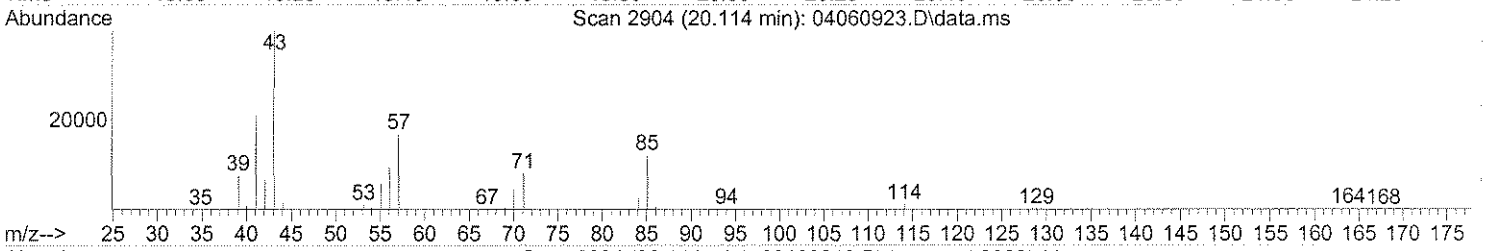
response 98308

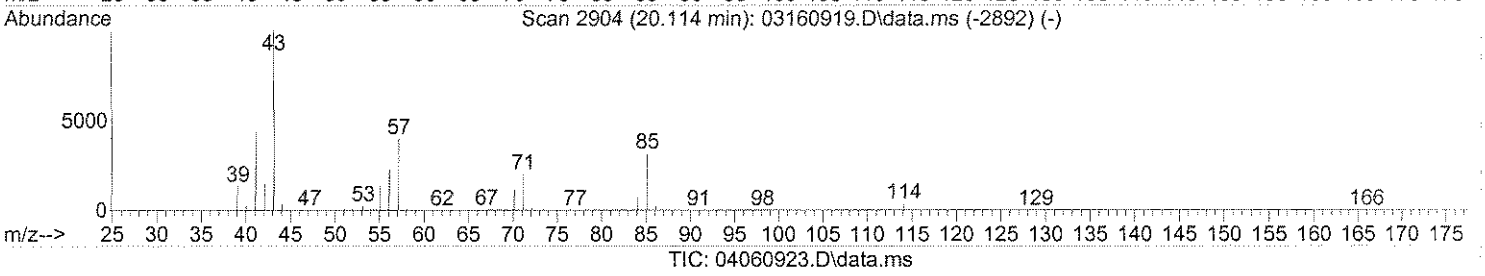
Ion	Exp%	Act%
91.10	100	100
92.10	58.40	57.94
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration







TIC: 04060923.D\data.ms

(63) n-Octane

20.114min (-0.011) 1.83ng

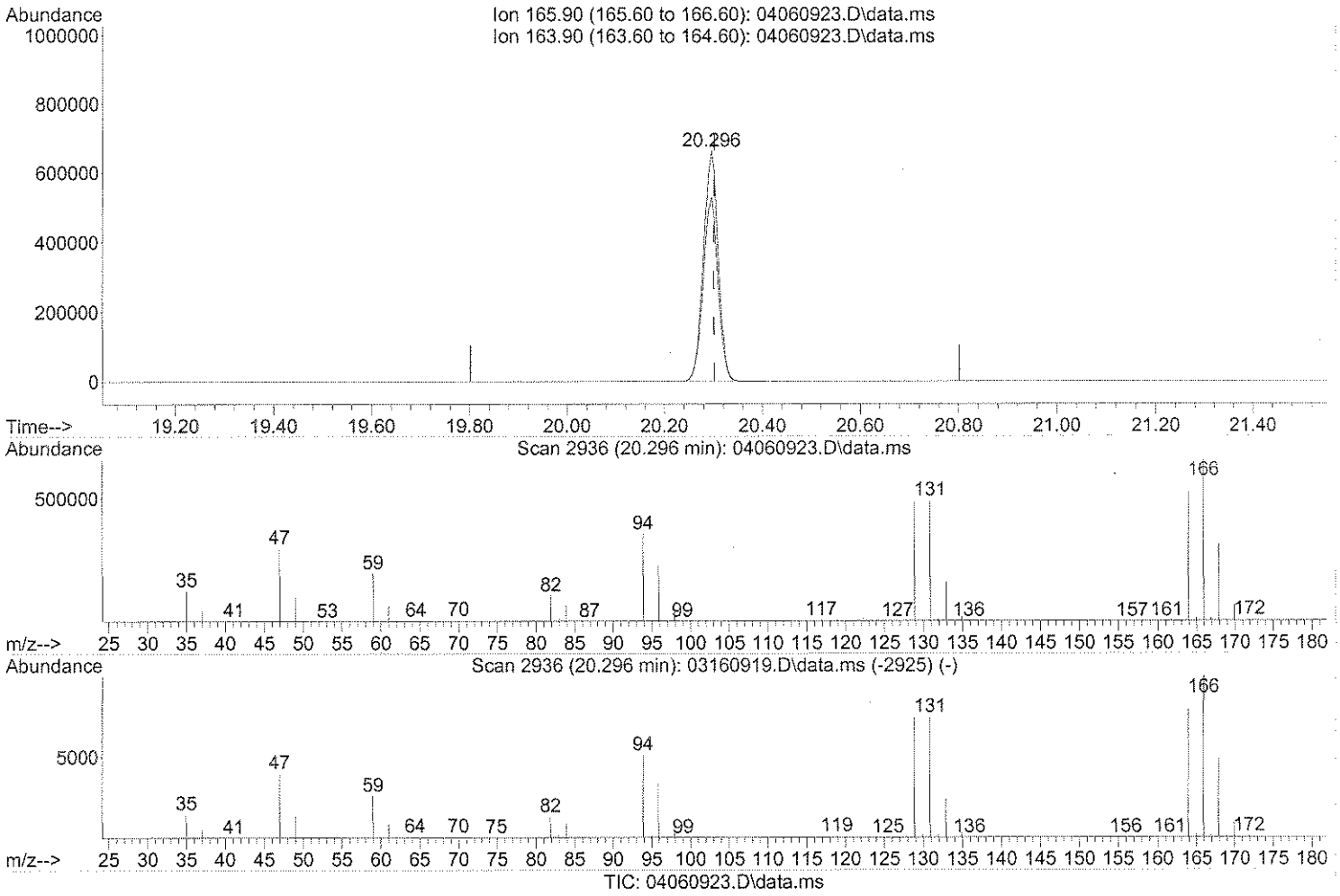
response 33326

Ion	Exp%	Act%
57.10	100	100
85.10	74.80	75.80
71.00	46.00	53.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060923.D\data.ms

(64) Tetrachloroethene (T)

20.296min (-0.006) 96.71ng

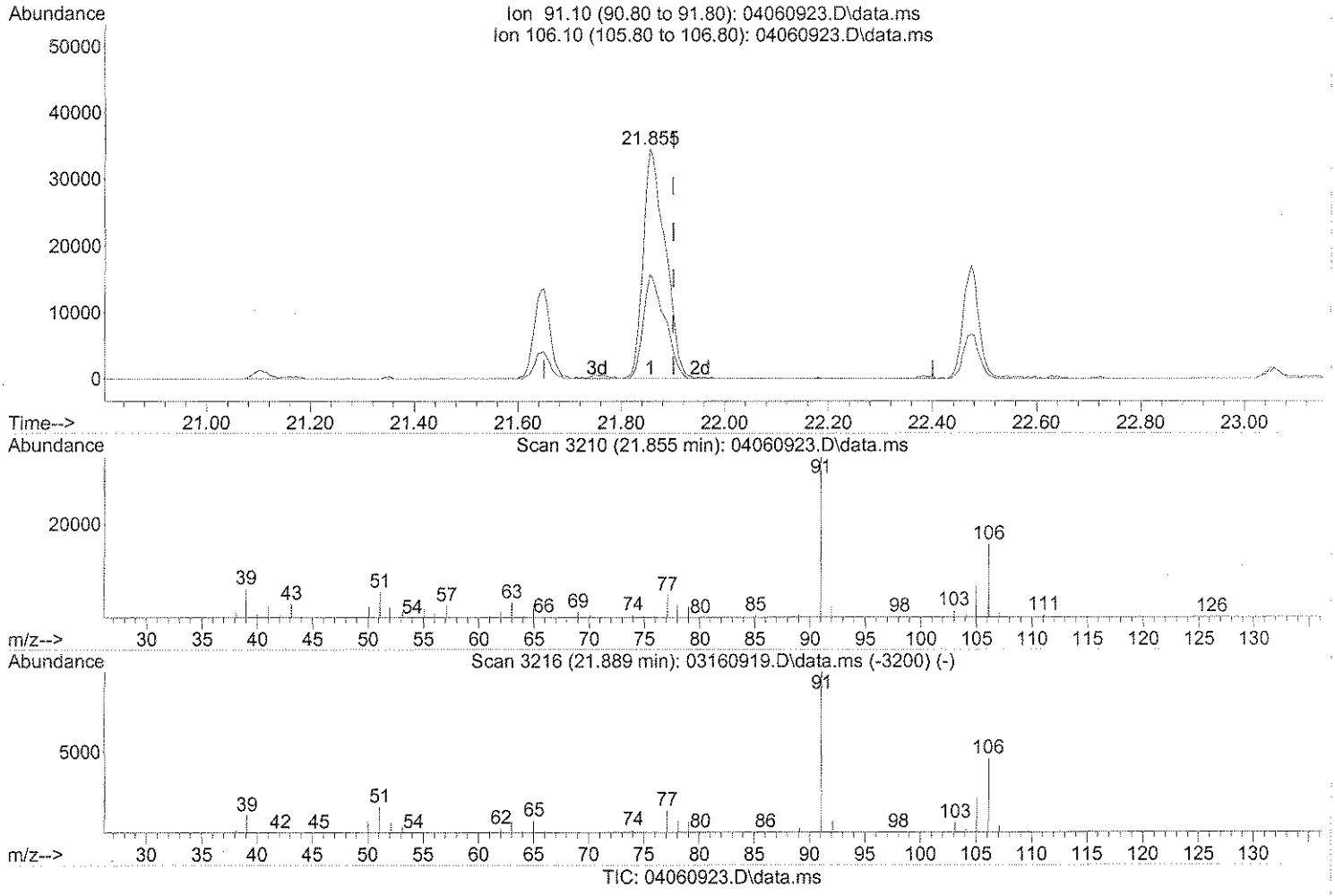
response 1389330

Ion	Exp%	Act%
165.90	100	100
163.90	79.90	79.95
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



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

21.855min (-0.046) 1.96ng

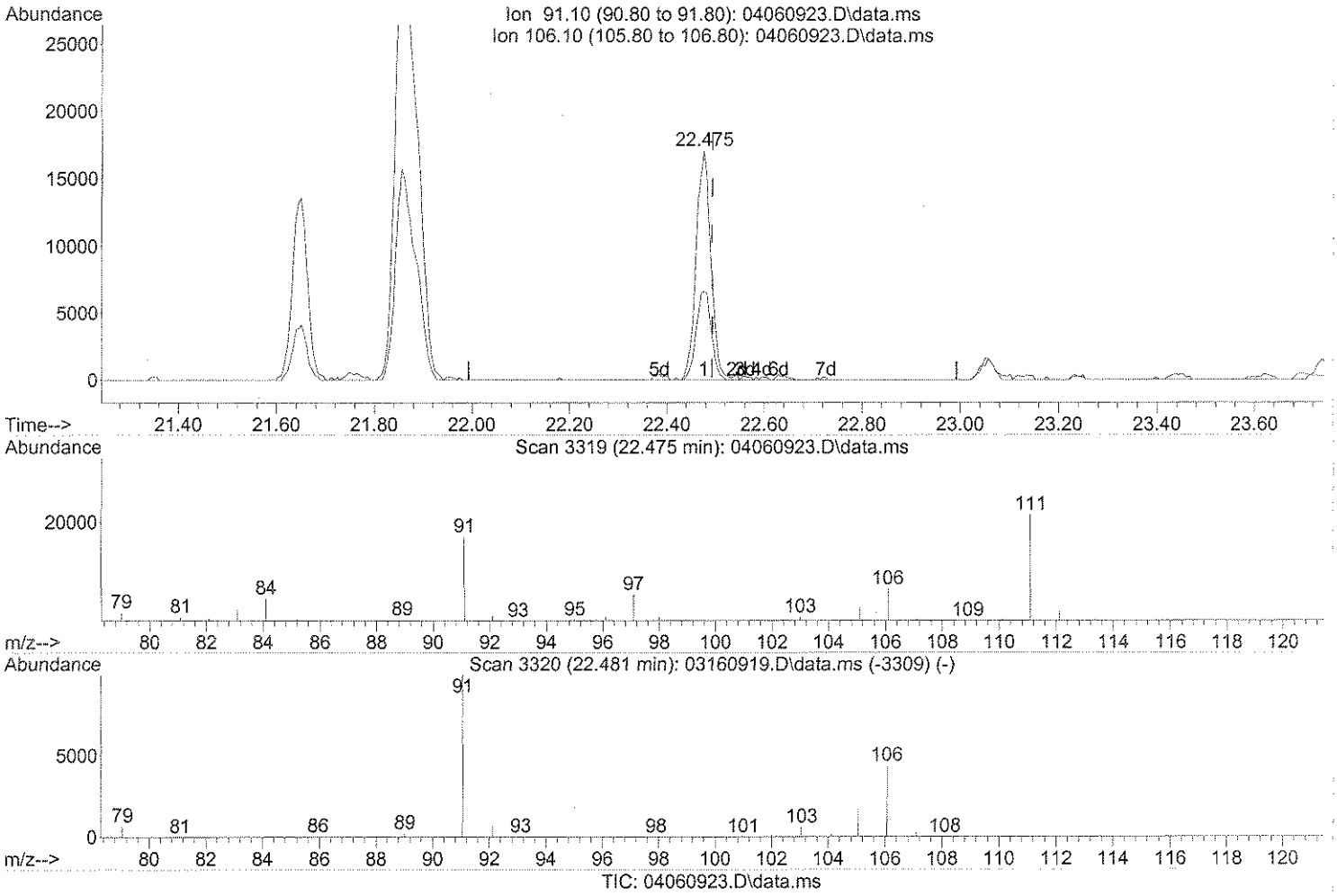
response 101973

Ion	Exp%	Act%
91.10	100	100
106.10	47.90	44.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060923.D\data.ms

(70) o-Xylene (T)

22.475min (-0.017) 0.66ng

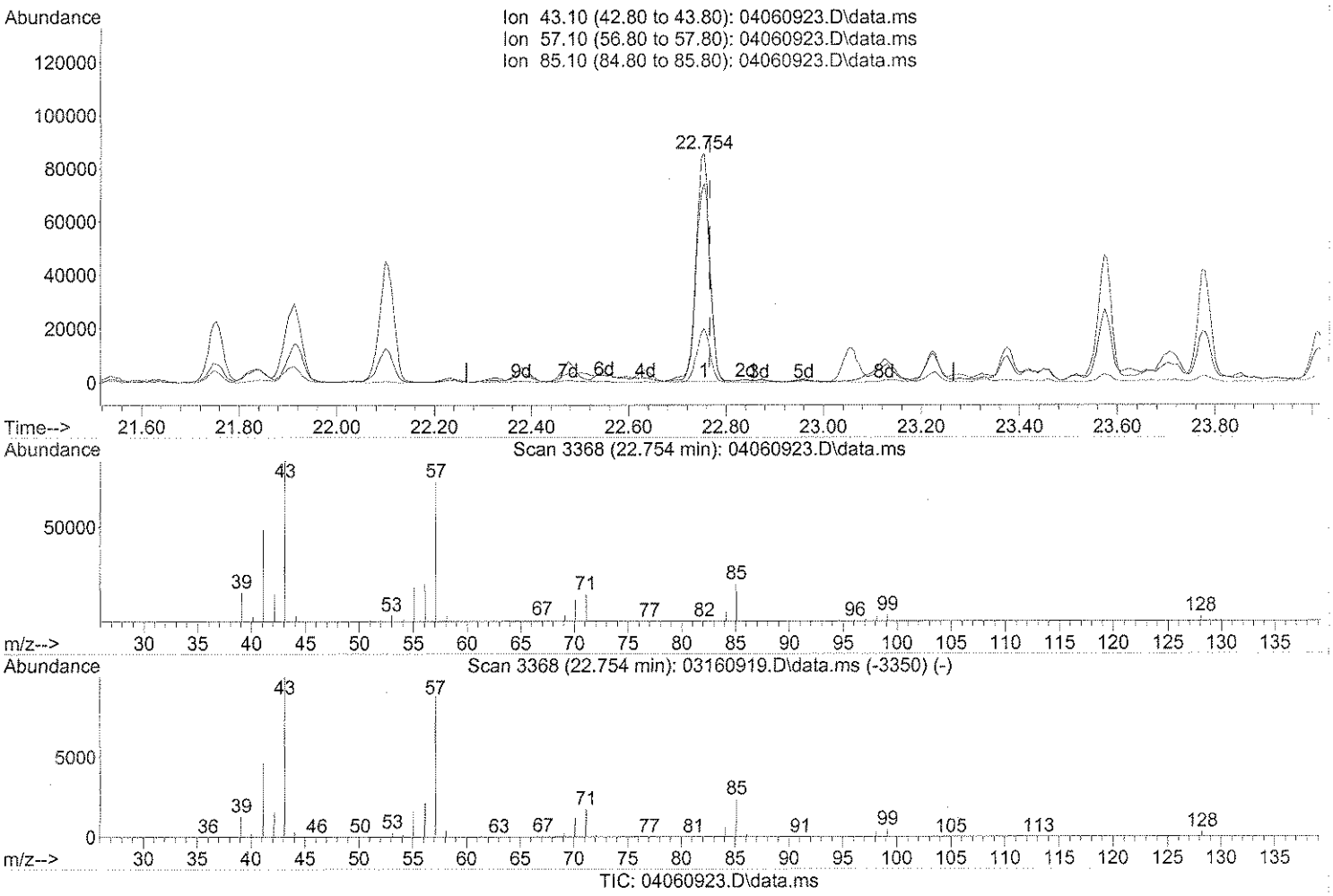
response 35740

Ion	Exp%	Act%
91.10	100	100
106.10	46.30	39.97
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060923.D\data.ms

(71) n-Nonane (T)

22.754min (-0.011) 3.84ng

response 167165

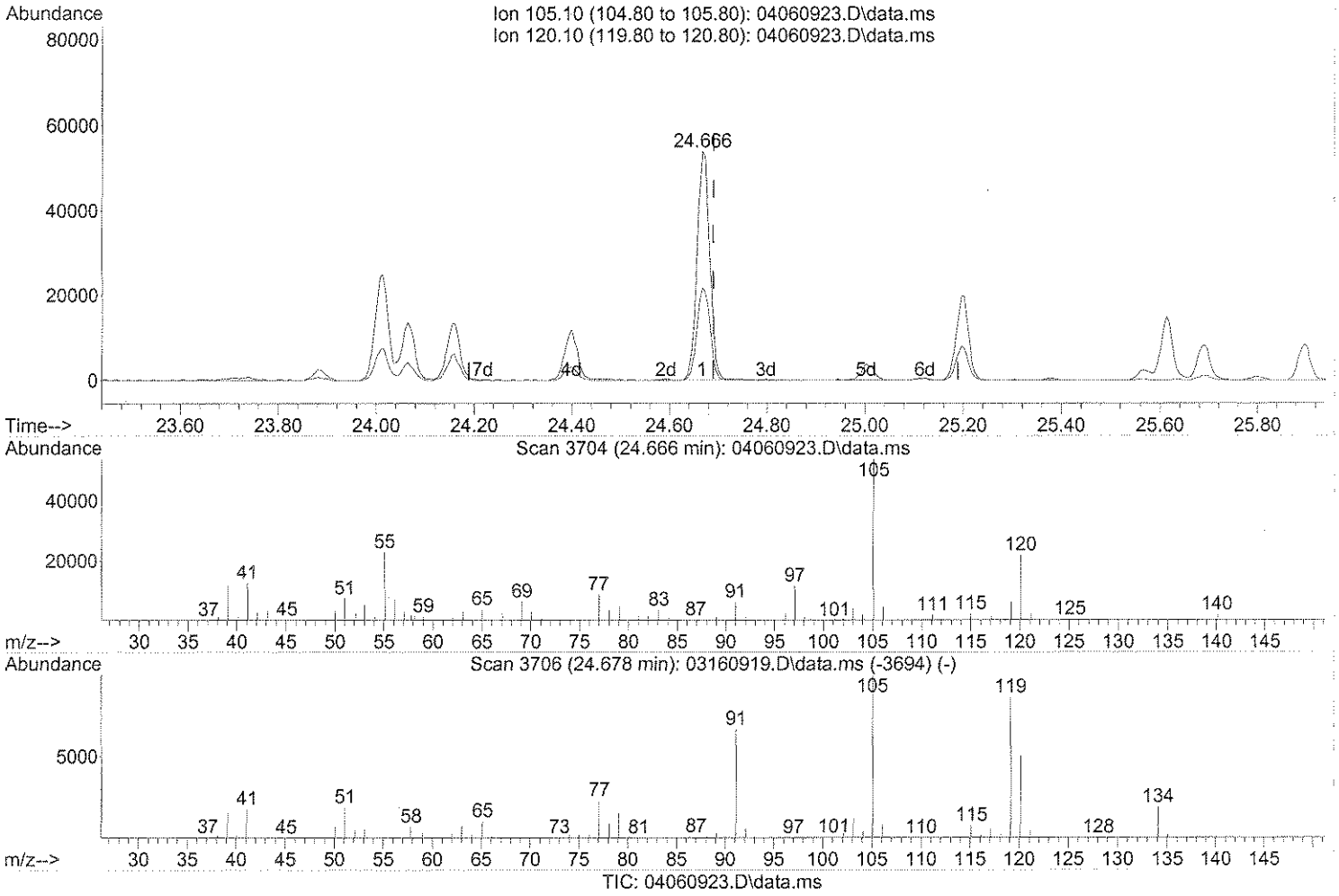
Ion	Exp%	Act%
43.10	100	100
57.10	80.50	86.91
85.10	19.50	22.74
0.00	0.00	0.00

39

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060923.D
Acq On : 6 Apr 2009 10:43 pm
Operator : WA/LH
Sample : P0901030-001 (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:32 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060923.D\data.ms

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

24.666min (-0.023) 1.78ng

response 97836

Ion	Exp%	Act%
105.10	100	100
120.10	49.00	41.74
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **I-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-002

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/7/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.25 Liter(s)
Test Notes:
Container ID: AC01573

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	2.4	ND	1.4	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.7**	2.4	**0.55**	0.49	
74-87-3	Chloromethane	ND	2.4	ND	1.2	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.4	ND	0.35	
75-01-4	Vinyl Chloride	ND	2.4	ND	0.95	
106-99-0	1,3-Butadiene	ND	2.4	ND	1.1	
74-83-9	Bromomethane	ND	2.4	ND	0.62	
75-00-3	Chloroethane	ND	2.4	ND	0.92	
64-17-5	Ethanol	ND	24	ND	13	
75-05-8	Acetonitrile	ND	2.4	ND	1.4	
107-02-8	**Acrolein**	**5.4**	2.4	**2.4**	1.1	
67-64-1	**Acetone**	**81**	24	**34**	10	
75-69-4	Trichlorofluoromethane	ND	2.4	ND	0.43	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	4.8	ND	2.0	
107-13-1	Acrylonitrile	ND	2.4	ND	1.1	
75-35-4	1,1-Dichloroethene	ND	2.4	ND	0.61	
75-09-2	Methylene Chloride	ND	2.4	ND	0.70	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.4	ND	0.77	
76-13-1	Trichlorotrifluoroethane	ND	2.4	ND	0.32	
75-15-0	Carbon Disulfide	ND	2.4	ND	0.78	
156-60-5	trans-1,2-Dichloroethene	ND	2.4	ND	0.61	
75-34-3	1,1-Dichloroethane	ND	2.4	ND	0.60	
1634-04-4	Methyl tert-Butyl Ether	ND	2.4	ND	0.67	
108-05-4	Vinyl Acetate	ND	24	ND	6.9	
78-93-3	**2-Butanone (MEK)**	**7.5**	2.4	**2.6**	0.82	

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: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **I-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-002

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/7/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.25 Liter(s)
Test Notes:
Container ID: AC01573

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	2.4	ND	0.61	
141-78-6	Ethyl Acetate	ND	4.8	ND	1.3	
110-54-3	n-Hexane	ND	2.4	ND	0.69	
67-66-3	Chloroform	ND	2.4	ND	0.50	
109-99-9	Tetrahydrofuran (THF)	ND	2.4	ND	0.82	
107-06-2	1,2-Dichloroethane	ND	2.4	ND	0.60	
71-55-6	1,1,1-Trichloroethane	ND	2.4	ND	0.44	
71-43-2	Benzene	ND	2.4	ND	0.76	
56-23-5	Carbon Tetrachloride	ND	2.4	ND	0.38	
110-82-7	Cyclohexane	ND	4.8	ND	1.4	
78-87-5	1,2-Dichloropropane	ND	2.4	ND	0.52	
75-27-4	Bromodichloromethane	ND	2.4	ND	0.36	
79-01-6	**Trichloroethene**	**51**	2.4	**9.4**	0.45	
123-91-1	1,4-Dioxane	ND	2.4	ND	0.67	
80-62-6	Methyl Methacrylate	ND	4.8	ND	1.2	
142-82-5	n-Heptane	ND	2.4	ND	0.59	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	ND	0.53	
108-10-1	**4-Methyl-2-pentanone**	**2.6**	2.4	**0.64**	0.59	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	ND	0.53	
79-00-5	1,1,2-Trichloroethane	ND	2.4	ND	0.44	
108-88-3	**Toluene**	**3.5**	2.4	**0.93**	0.64	
591-78-6	2-Hexanone	ND	2.4	ND	0.59	
124-48-1	Dibromochloromethane	ND	2.4	ND	0.28	
106-93-4	1,2-Dibromoethane	ND	2.4	ND	0.32	
123-86-4	n-Butyl Acetate	ND	2.4	ND	0.51	

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

Verified By: RC Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC** CAS Project ID: P0901030
Client Sample ID: **I-1** CAS Sample ID: P0901030-002
Client Project ID: **Bayville Village Cleaners / BVC0106**

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/7/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.25 Liter(s)
Test Notes:
Container ID: AC01573

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	2.4	ND	0.52	
127-18-4	**Tetrachloroethene**	**65**	2.4	**9.6**	0.36	
108-90-7	Chlorobenzene	ND	2.4	ND	0.53	
100-41-4	**Ethylbenzene**	**4.3**	2.4	**1.0**	0.56	
179601-23-1	**m,p-Xylenes**	**14**	4.8	**3.2**	1.1	
75-25-2	Bromoform	ND	2.4	ND	0.23	
100-42-5	Styrene	ND	2.4	ND	0.57	
95-47-6	**o-Xylene**	**4.2**	2.4	**0.96**	0.56	
111-84-2	n-Nonane	ND	2.4	ND	0.46	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	ND	0.35	
98-82-8	Cumene	ND	2.4	ND	0.49	
80-56-8	alpha-Pinene	ND	2.4	ND	0.43	
103-65-1	n-Propylbenzene	ND	2.4	ND	0.49	
622-96-8	4-Ethyltoluene	ND	2.4	ND	0.49	
108-67-8	1,3,5-Trimethylbenzene	ND	2.4	ND	0.49	
95-63-6	**1,2,4-Trimethylbenzene**	**5.0**	2.4	**1.0**	0.49	
100-44-7	Benzyl Chloride	ND	2.4	ND	0.47	
541-73-1	1,3-Dichlorobenzene	ND	2.4	ND	0.40	
106-46-7	1,4-Dichlorobenzene	ND	2.4	ND	0.40	
95-50-1	1,2-Dichlorobenzene	ND	2.4	ND	0.40	
5989-27-5	**d-Limonene**	**26**	2.4	**4.7**	0.43	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.4	ND	0.25	
120-82-1	1,2,4-Trichlorobenzene	ND	2.4	ND	0.33	
91-20-3	Naphthalene	ND	2.4	ND	0.46	
87-68-3	Hexachlorobutadiene	ND	2.4	ND	0.23	

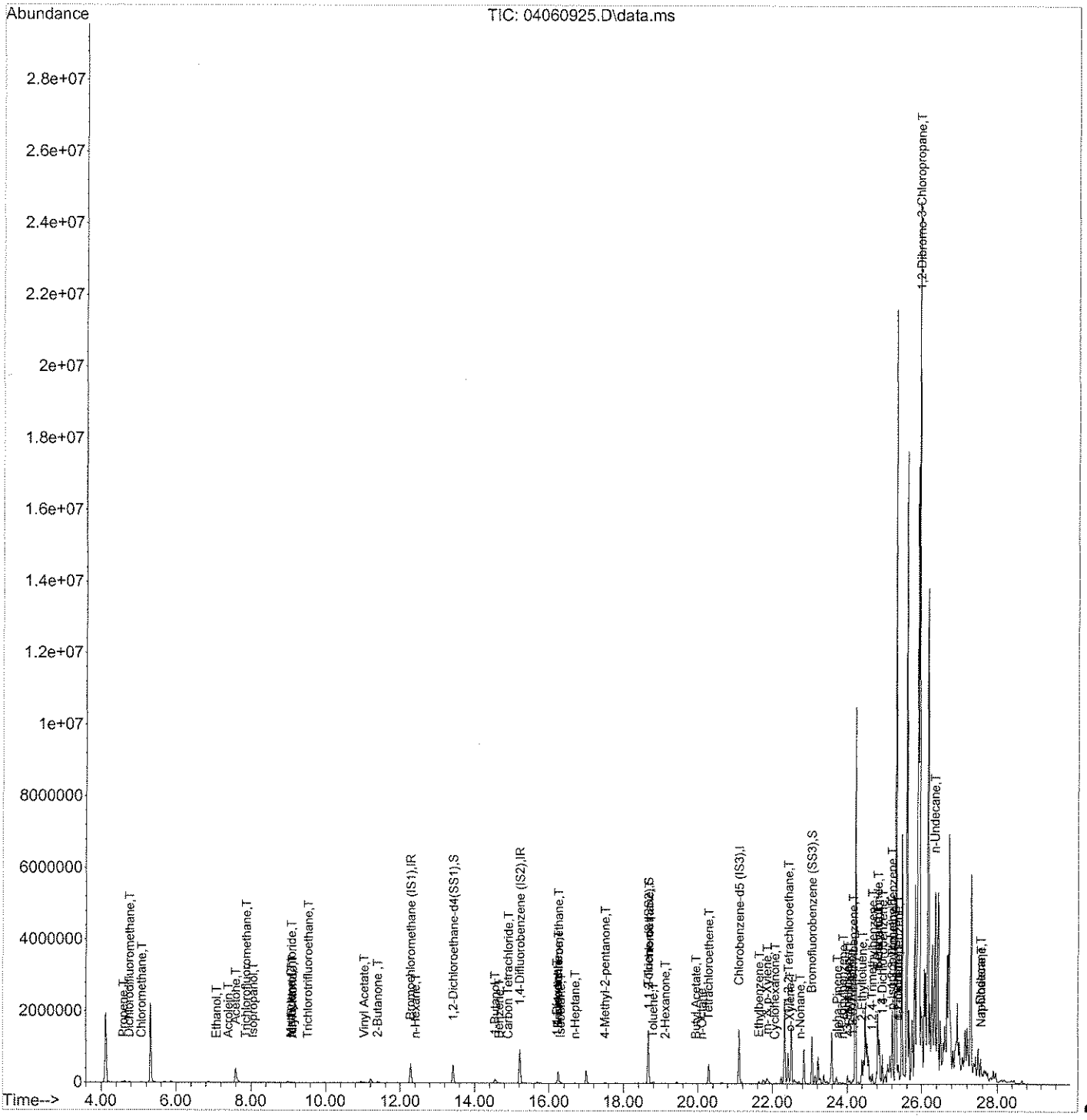
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 4/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 00:01
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 08 11:25:11 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
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Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 08 11:25:11 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

LH 4/8/09
DA 4/8/09

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	197293	25.000 ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.22	114	919455	25.000 ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	543763	25.000 ng		-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.43	65	511262	27.304 ng		-0.03
Spiked Amount 25.000			Recovery =	109.20%		
57) Toluene-d8 (SS2)	18.67	98	1097789	24.863 ng		-0.01
Spiked Amount 25.000			Recovery =	99.44%		
73) Bromofluorobenzene (SS3)	23.06	174	346153	24.295 ng		0.00
Spiked Amount 25.000			Recovery =	97.20%		
Target Compounds						Qvalue
2) Propene	4.59	42	8208	0.~~440 ng~~	#	15
3) Dichlorodifluoromethane	4.75	85	14010	0.560 ng		99
4) Chloromethane	5.08	50	10895	0.~~395 ng~~		97
5) Freon 114	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.78	54	151	N.D.		
8) Bromomethane	6.24	94	160	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.09	45	6192	0.~~559 ng~~		88
11) Acetonitrile	7.20	41	1685	N.D.		
12) Acrolein	7.40	56	10960	1.118 ng	#	76
13) Acetone	7.60	58	207577m	16.807 ng		
14) Trichlorofluoromethane	7.88	101	6320	0.~~302 ng~~		96
15) Isopropanol	8.07	45	29943m	0.679 ng	<mRL	
16) Acrylonitrile	8.40	53	53	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) tert-Butanol	9.10	59	32227	0.745 ng	#	60
19) Methylene Chloride	9.08	84	1914	0.~~152 ng~~		87
20) Allyl Chloride	9.12	41	4008	0.~~183 ng~~	#	55
21) Trichlorotrifluoroethane	9.53	151	987	0.~~127 ng~~		92
22) Carbon Disulfide	9.47	76	1181	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	11.03	86	3965	~~2.272 ng~~	#	1
27) 2-Butanone	11.39	72	11375	1.555 ng	#	64
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.43	61	277	N.D.		
31) n-Hexane	12.41	57	2874	0.~~110 ng~~	#	73

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 00:01
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 08 11:25:11 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.49	83	913	N.D.		
34) Tetrahydrofuran	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.59	62	133	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.55	56	122242	7.891 ng		84
41) Benzene	14.67	78	9360	~~0.199 ng~~		100
42) Carbon Tetrachloride	14.90	117	1041	~~0.075 ng~~		99
43) Cyclohexane	15.09	84	189	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.26	83	1806	~~0.117 ng~~		99
47) Trichloroethene	16.25	130	117262	10.440 ng		99
48) 1,4-Dioxane	16.22	88	1596	~~0.181 ng~~		92
49) Isooctane	16.32	57	31298	0.453 ng	#	20
50) Methyl Methacrylate	16.43	100	65	N.D.		
51) n-Heptane	16.70	71	985	~~0.080 ng~~	#	76
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.51	58	7419	0.543 ng		95
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.69	97	94992	~~9.140 ng~~ TP	#	8
58) Toluene	18.80	91	34617	0.723 ng		99
59) 2-Hexanone	19.13	43	9559	0~~.225 ng~~		97
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) Butyl Acetate	19.95	43	5269	~~0.116 ng~~		97
63) n-Octane	20.11	57	2184	~~0.141 ng~~	#	81
64) Tetrachloroethene	20.29	166	164396	13.450 ng		99
65) Chlorobenzene	21.11	112	146	N.D.		
66) Ethylbenzene	21.64	91	50094	0.898 ng		95
67) m- & p-Xylene	21.86	91	128857	2.912 ng		94
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.34	104	550	N.D.		
70) o-Xylene	22.48	91	39415	0.860 ng		93
71) n-Nonane	22.75	43	10644m	~~0.287 ng~~		
72) 1,1,2,2-Tetrachloroethane	22.42	83	5566	~~0.306 ng~~	#	1
74) Cumene	23.24	105	2977	N.D.		
75) alpha-Pinene	23.74	93	3007	~~0.118 ng~~	#	43
76) n-Propylbenzene	23.88	91	14544	~~0.204 ng~~		92
77) 3-Ethyltoluene	24.01	105	34248	0.662 ng		99
78) 4-Ethyltoluene	24.06	105	16033	0~~.316 ng~~		100
79) 1,3,5-Trimethylbenzene	24.16	105	18172	~~0.397 ng~~		92

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 00:01
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 08 11:25:11 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

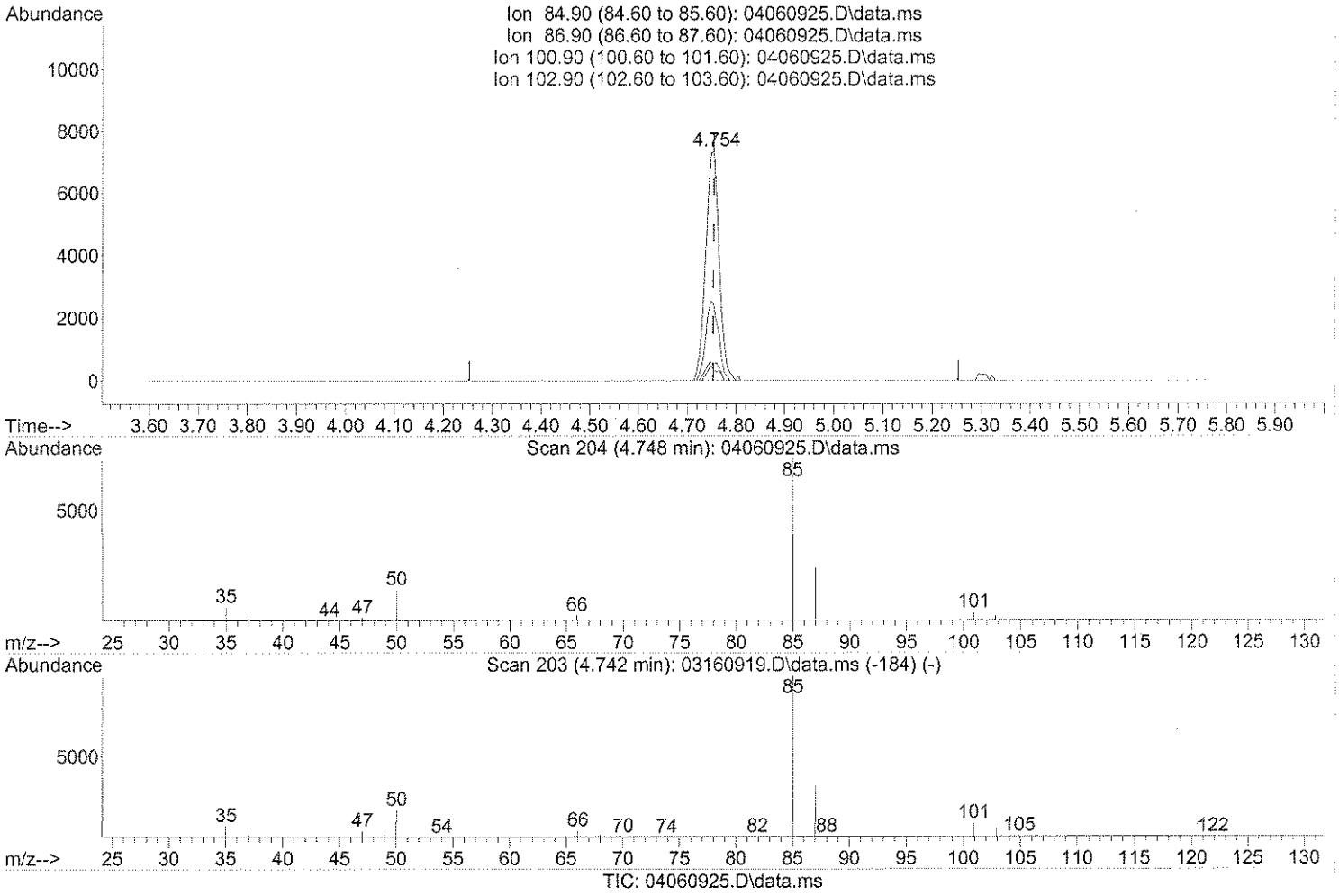
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.59	118	489	N.D.		
81) 2-Ethyltoluene	24.40	105	15980	0.302 ng		98
82) 1,2,4-Trimethylbenzene	24.67	105	47865	1.023 ng		88
83) n-Decane	24.83	57	897385	23.628 ng	#	42
84) Benzyl Chloride	24.82	91	2629	~~0.071~~ ng	#	1
85) 1,3-Dichlorobenzene	24.95	146	7166	~~0.316 ng~~		98
86) 1,4-Dichlorobenzene	24.95	146	7166	~~0.300 ng~~		99
87) sec-Butylbenzene	25.01	105	2201	N.D.		
88) p-Isopropyltoluene	25.20	119	3872	0.073 ng	#	28
89) 1,2,3-Trimethylbenzene	25.20	105	10761	0.239 ng		86
90) 1,2-Dichlorobenzene	25.37	146	3880	~~0.182 ng~~		95
91) d-Limonene	25.38	68	105050	5.353 ng		96
92) 1,2-Dibromo-3-Chloropr...	25.94	157	733	~~0.108 ng~~	#	1
93) n-Undecane	26.35	57	1219576	30.060 ng	#	1
94) 1,2,4-Trichlorobenzene	27.39	184	68	N.D.		
95) Naphthalene	27.57	128	12517	~~0.234 ng~~		97
96) n-Dodecane	27.55	57	189791	4.241 ng		95
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.07	55	4973	0.169 ng	#	60
99) tert-Butylbenzene	25.12	119	1945	N.D.		
100) n-Butylbenzene	25.71	91	2704	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(3) Dichlorodifluoromethane (T)

4.754min (0.000) 0.56ng

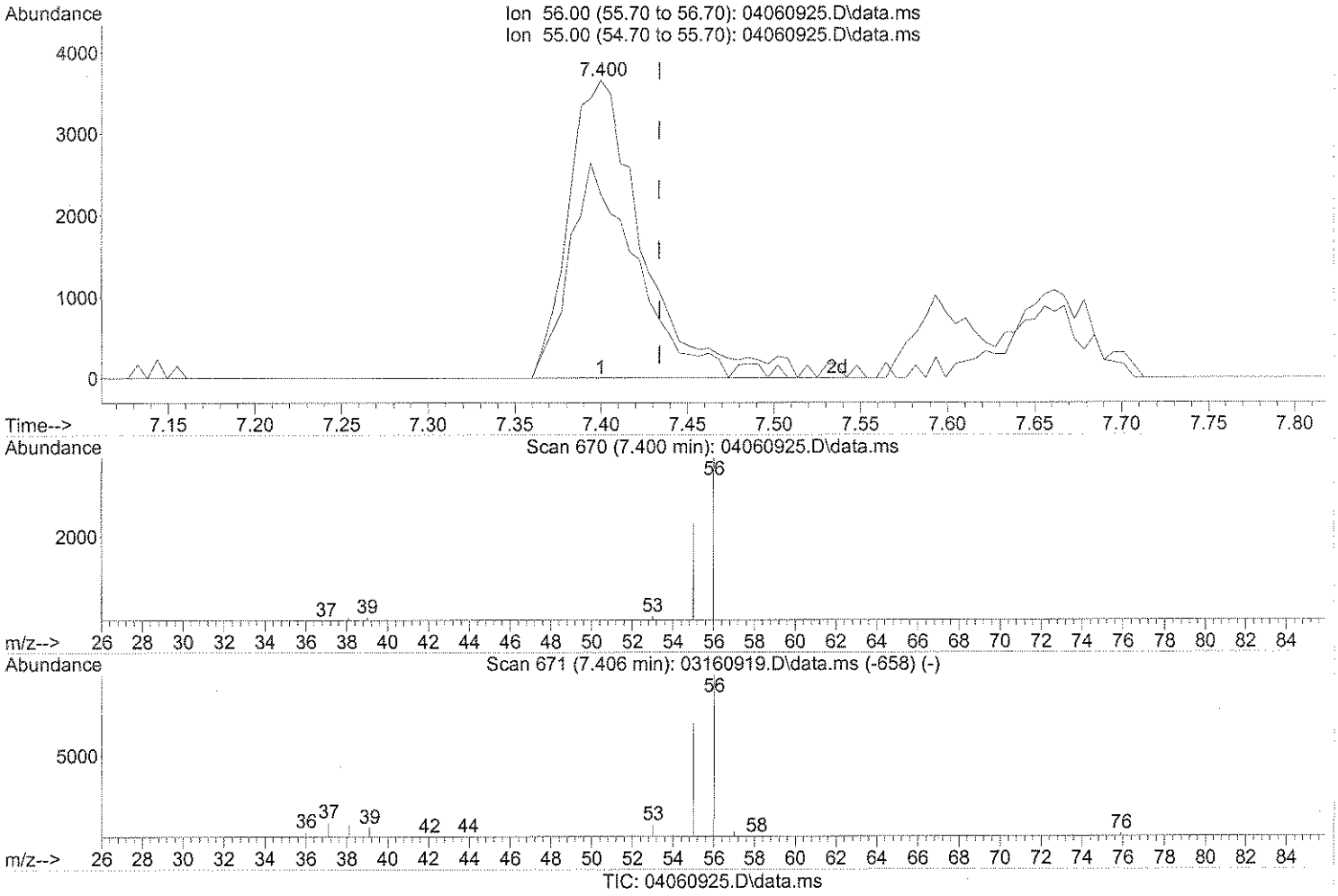
response 14010

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.86
100.90	8.80	8.16
102.90	5.90	5.14

48

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(12) Acrolein (T)

7.400min (-0.034) 1.12ng

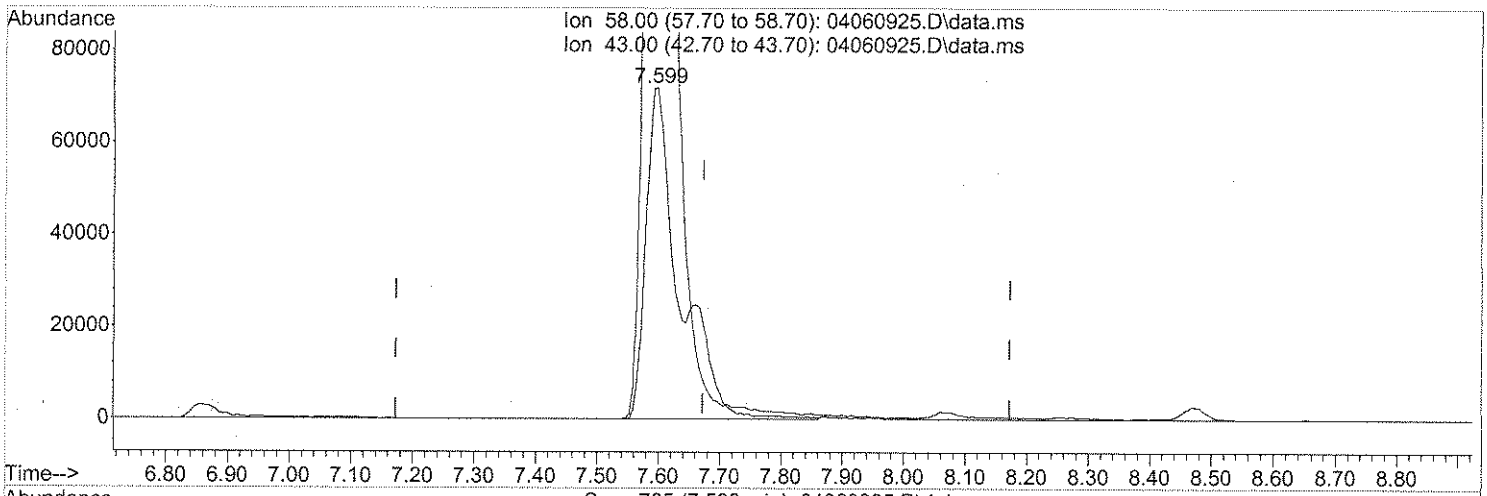
response 10960

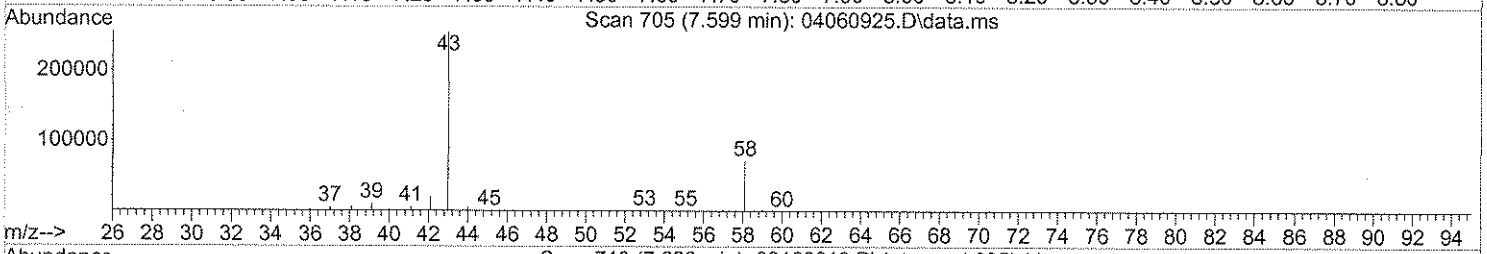
Ion	Exp%	Act%
56.00	100	100
55.00	87.40	65.20#
0.00	0.00	0.00
0.00	0.00	0.00

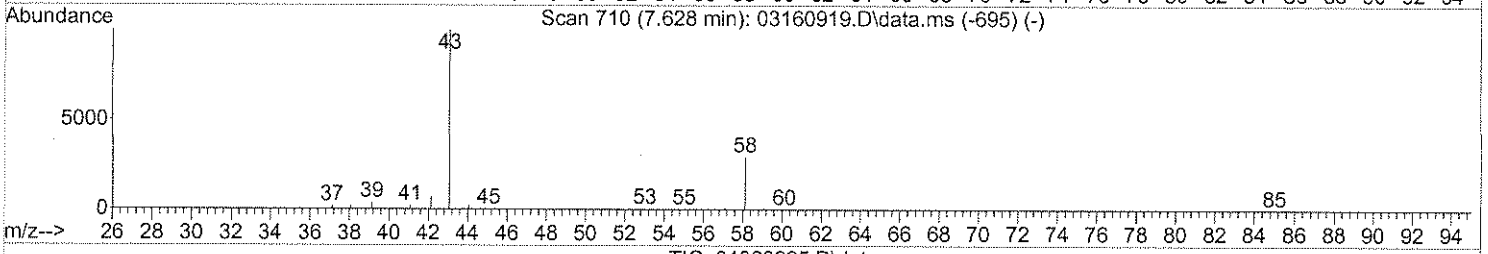
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 00:01
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:28:48 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration







TIC: 04060925.D\data.ms

(13) Acetone (T)

7.599min (-0.074) 22.17ng

response 273866

Ion	Exp%	Act%
58.00	100	100
43.00	322.50	287.05#
0.00	0.00	0.00
0.00	0.00	0.00

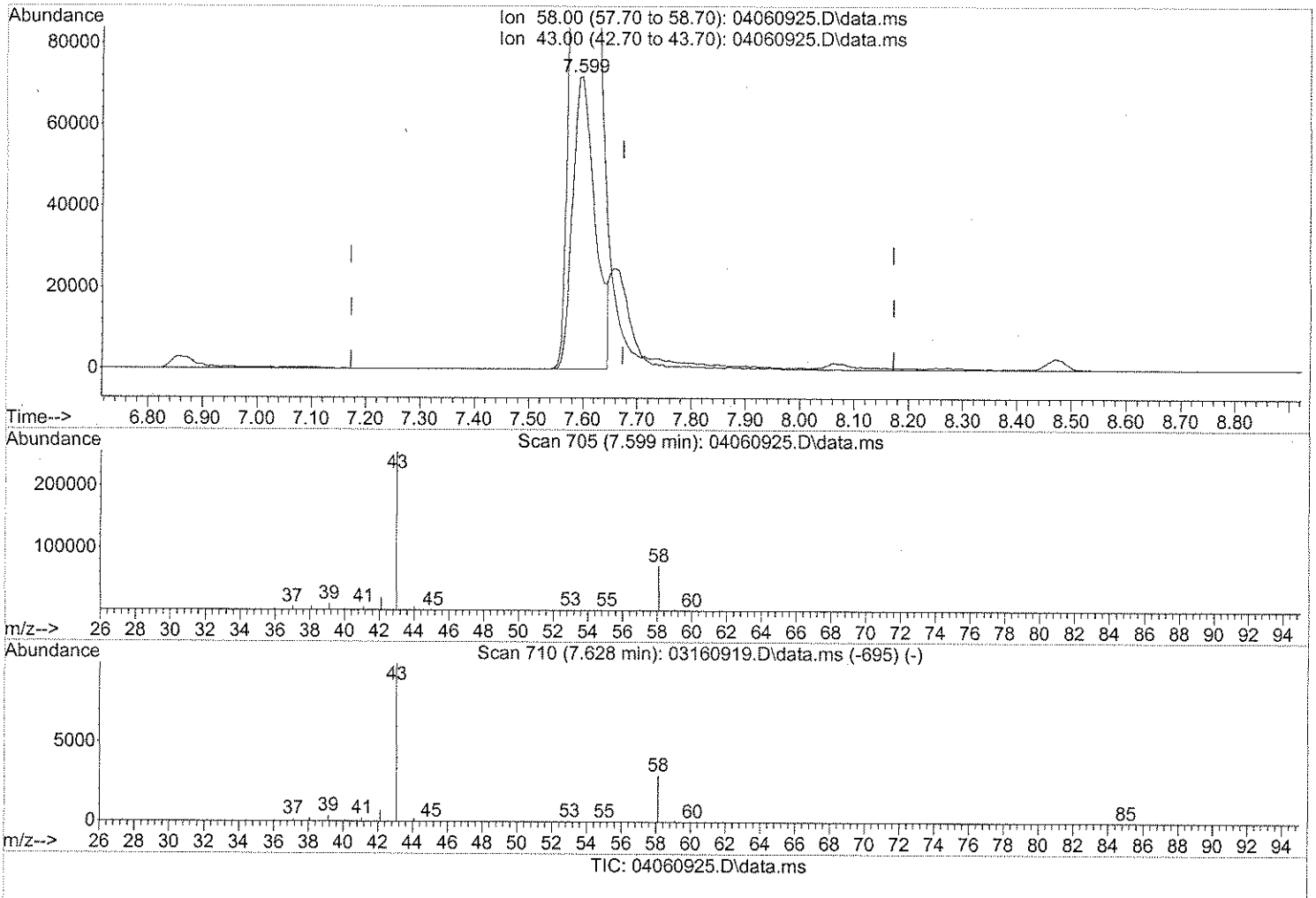
SH

50

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 00:01
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:28:48 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(13) Acetone (T)

7.599min (-0.074) 16.81ng m

response 207577

Ion	Exp%	Act%
58.00	100	100
43.00	322.50	378.72#
0.00	0.00	0.00
0.00	0.00	0.00

SH → IC

4/8/09

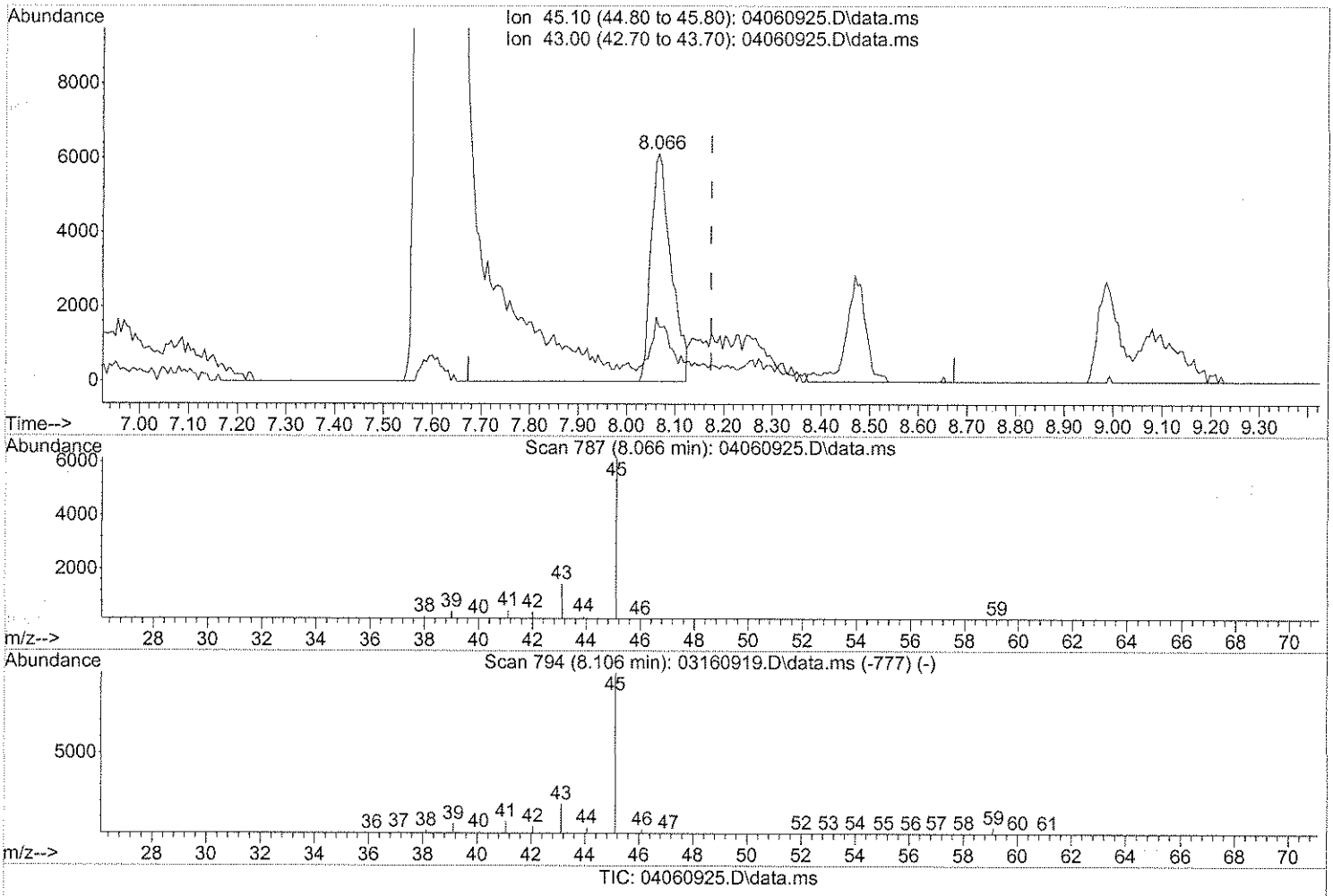
4/8/09

51

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 00:01
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:28:48 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(15) Isopropanol (T)

8.066min (-0.108) 0.40ng m

response 17687

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	30.85
0.00	0.00	0.00
0.00	0.00	0.00

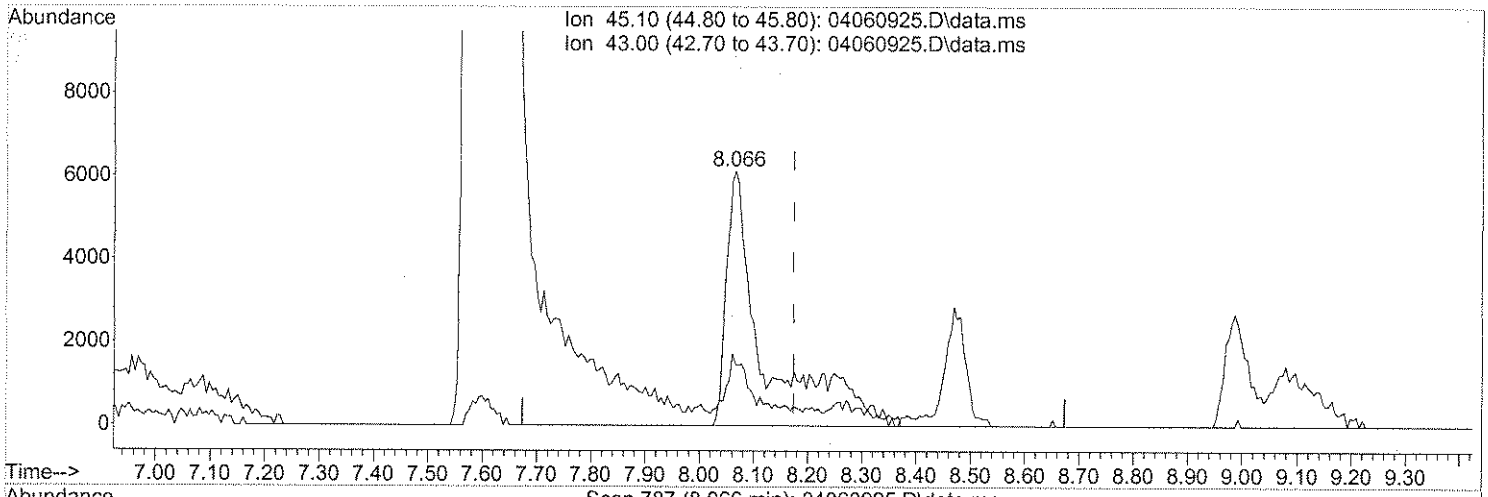
int. by mistake

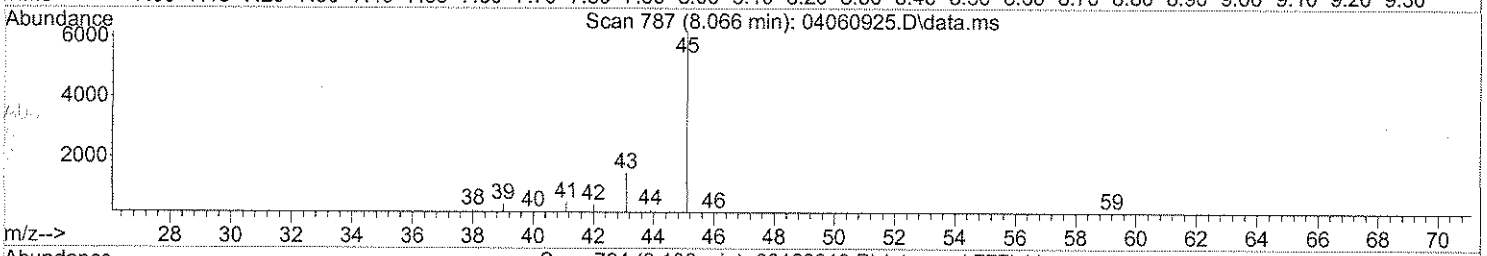
52

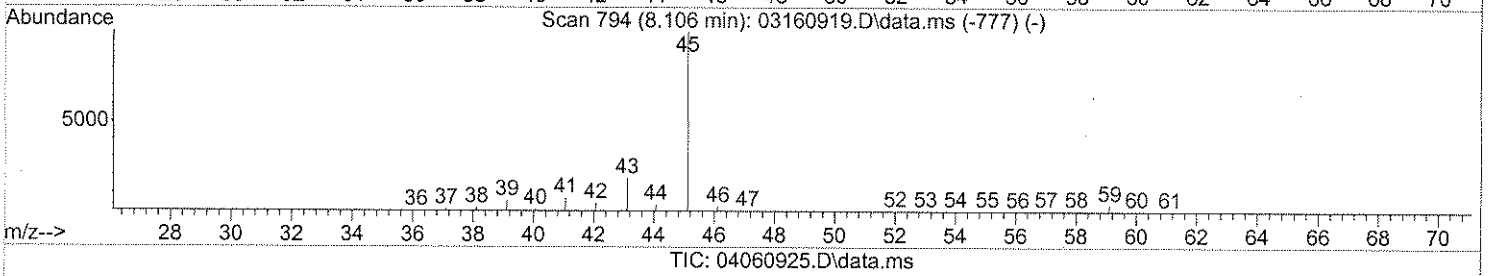
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 00:01
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:28:48 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration







TIC: 04060925.D\data.ms

(15) Isopropanol (T)

8.066min (-0.108) 0.68ng m

response 29943

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	18.22
0.00	0.00	0.00
0.00	0.00	0.00

IC

DA 4/8/09

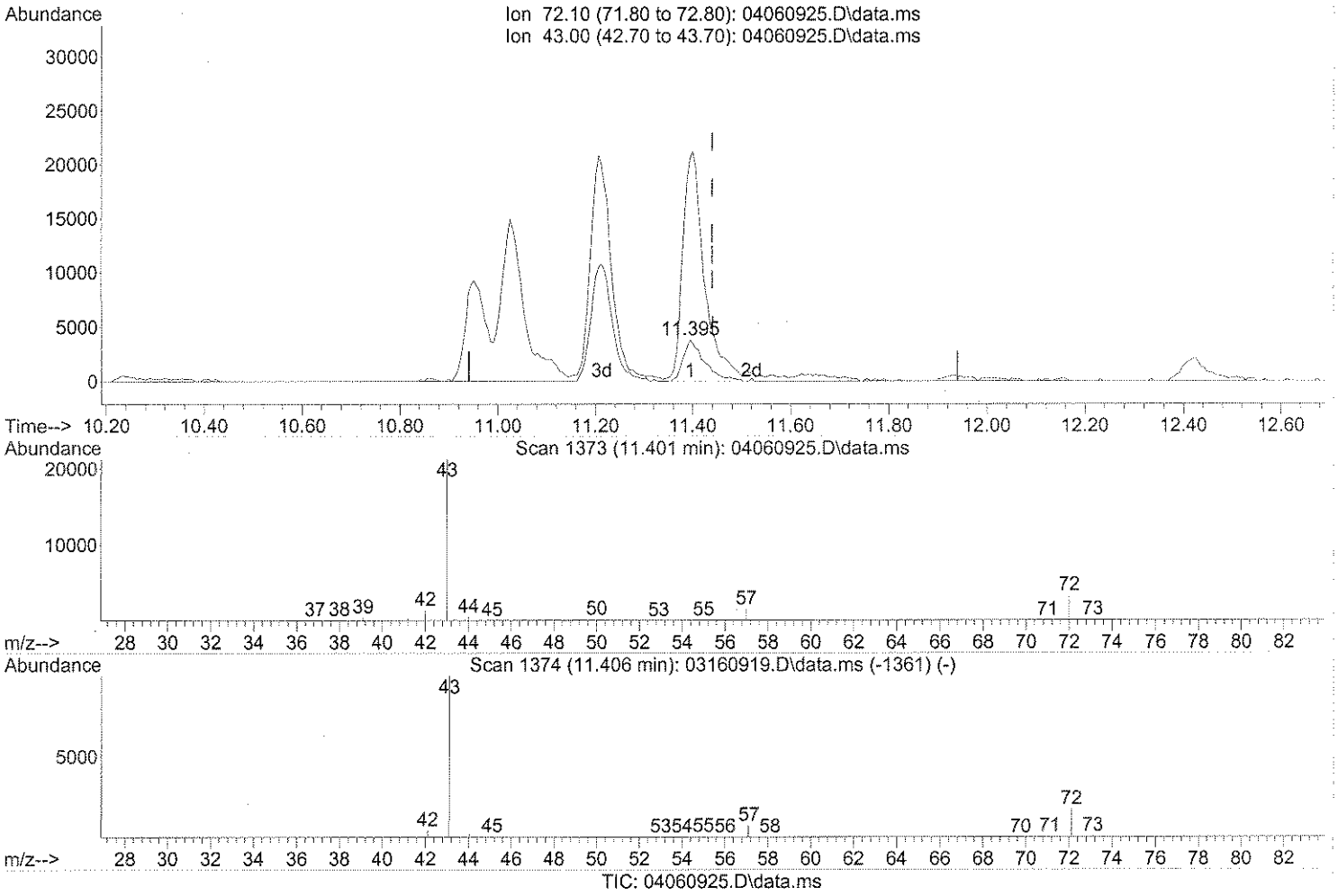
MK 4/8/09

53

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(27) 2-Butanone (T)

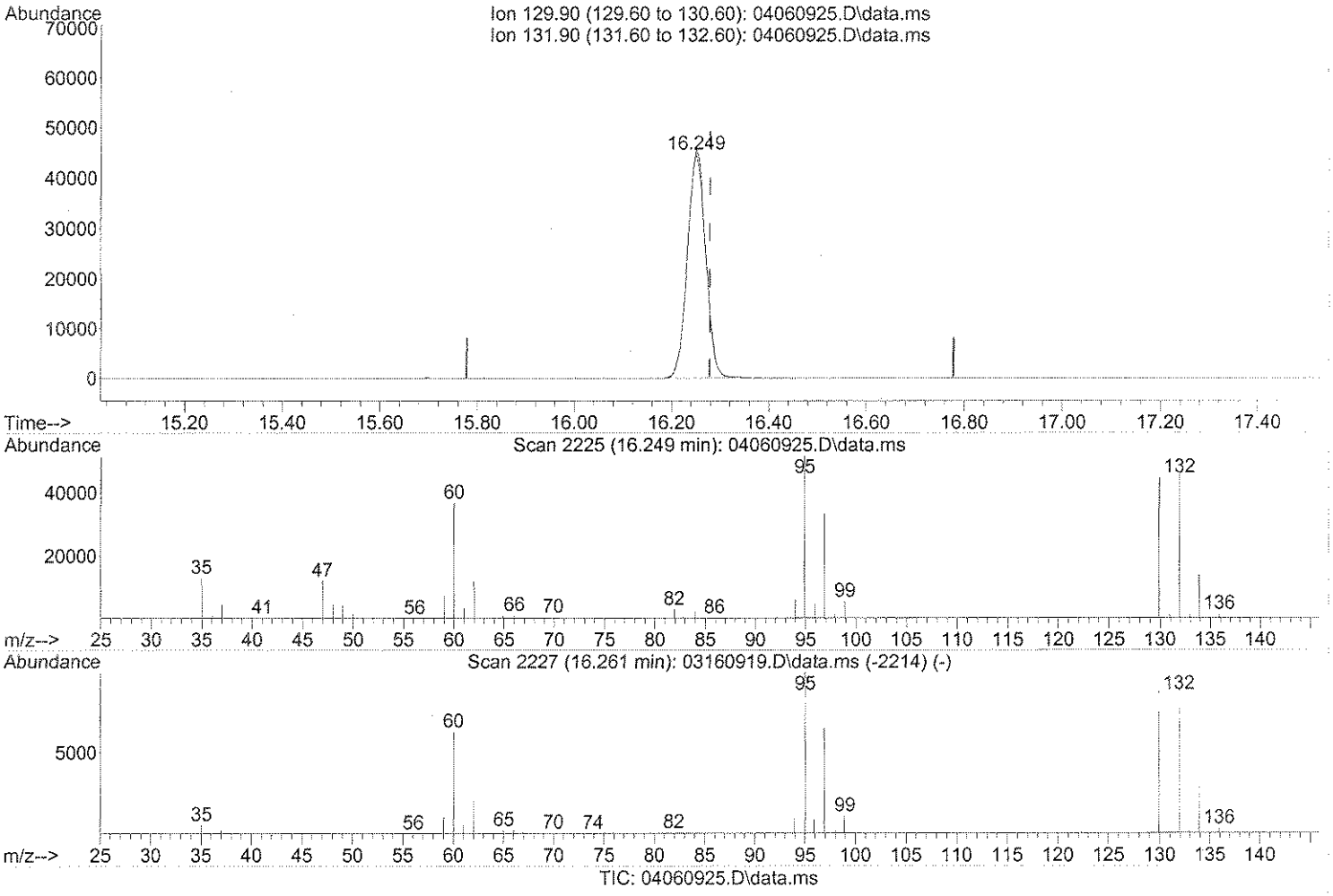
11.395min (-0.046) 1.55ng

response 11375

Ion	Exp%	Act%
72.10	100	100
43.00	696.90	571.29#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(47) Trichloroethene (T)

16.249min (-0.028) 10.44ng

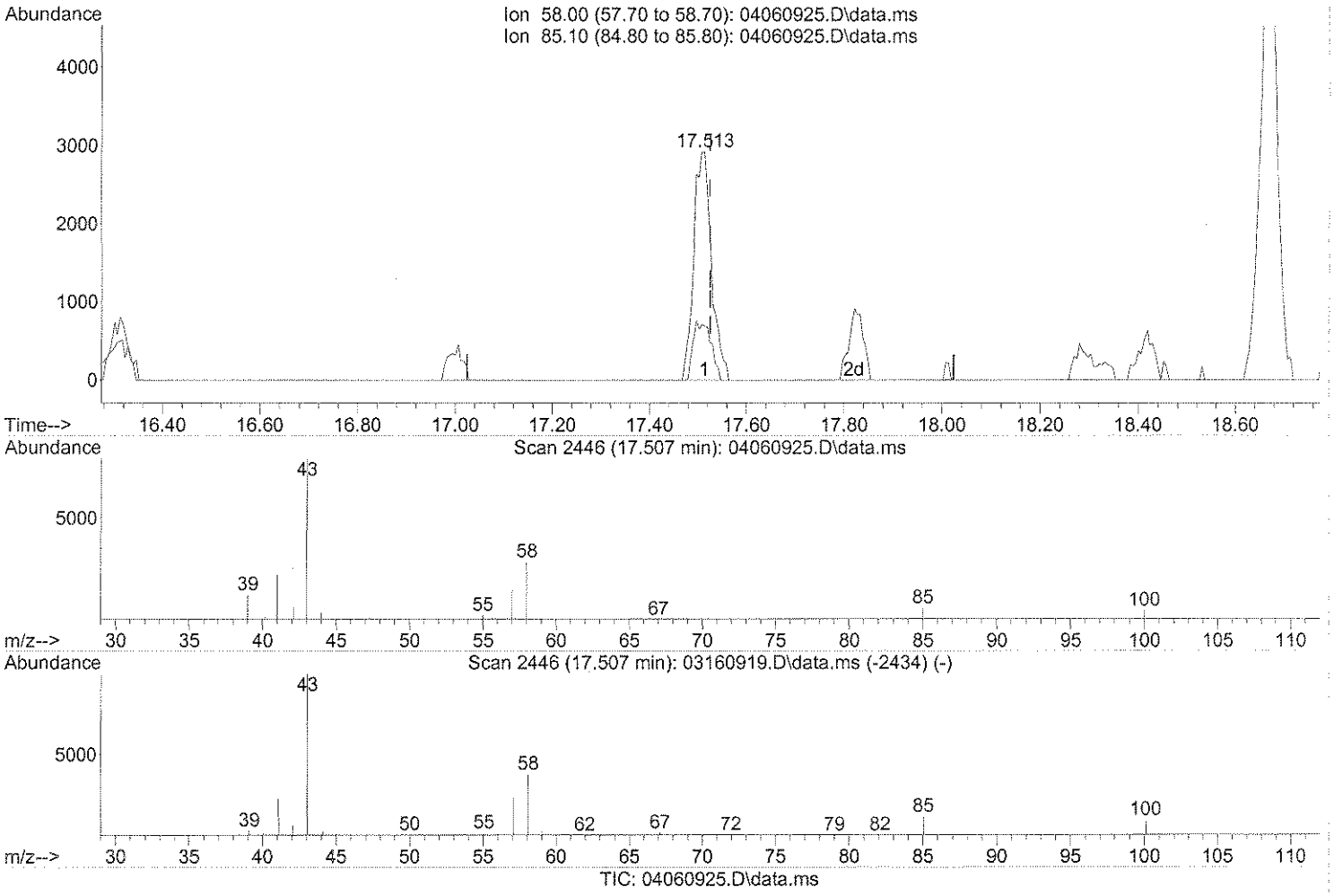
response 117262

Ion	Exp%	Act%
129.90	100	100
131.90	101.70	102.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

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

17.513min (-0.011) 0.54ng

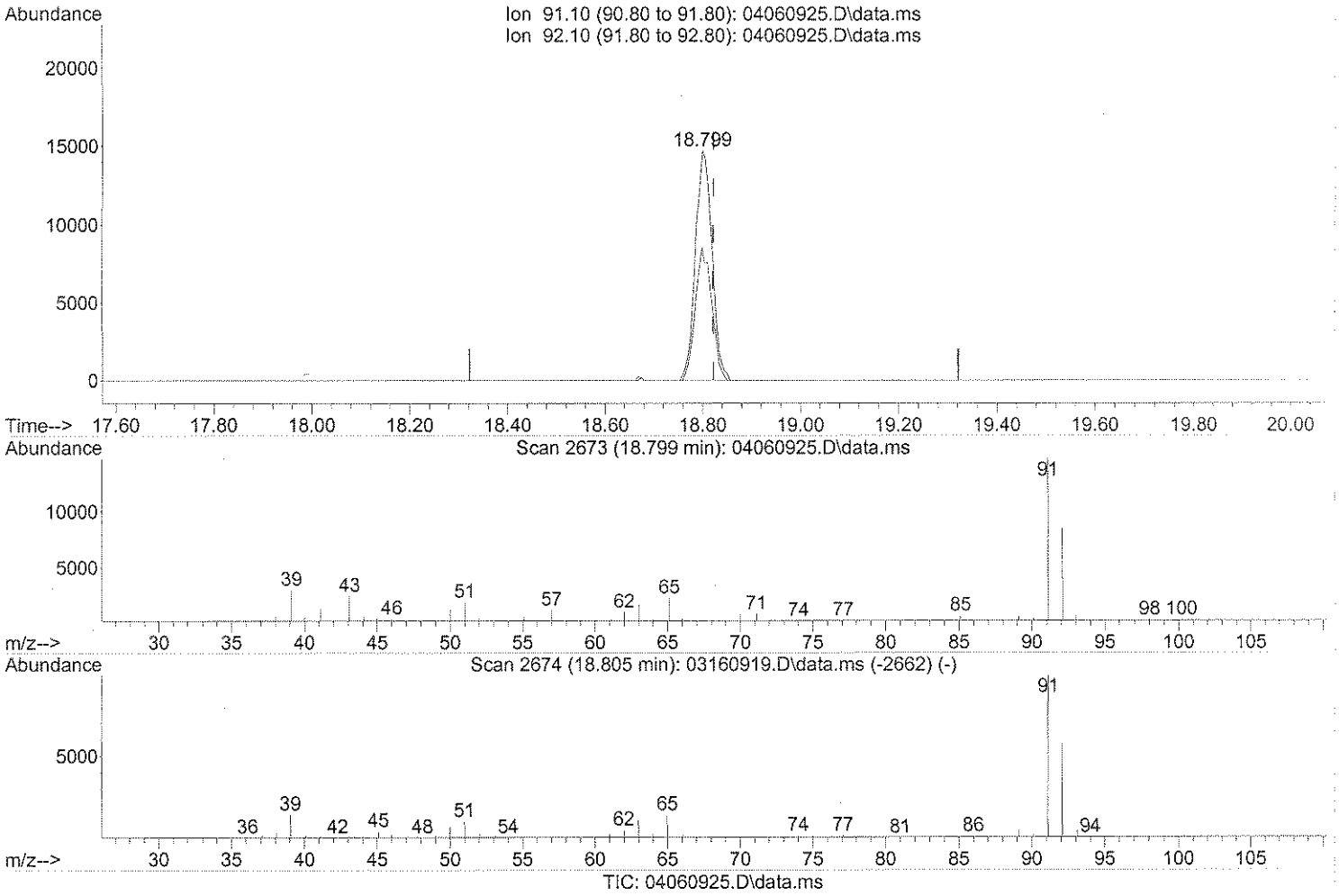
response 7419

Ion	Exp%	Act%
58.00	100	100
85.10	28.30	25.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(58) Toluene (T)

18.799min (-0.023) 0.72ng

response 34617

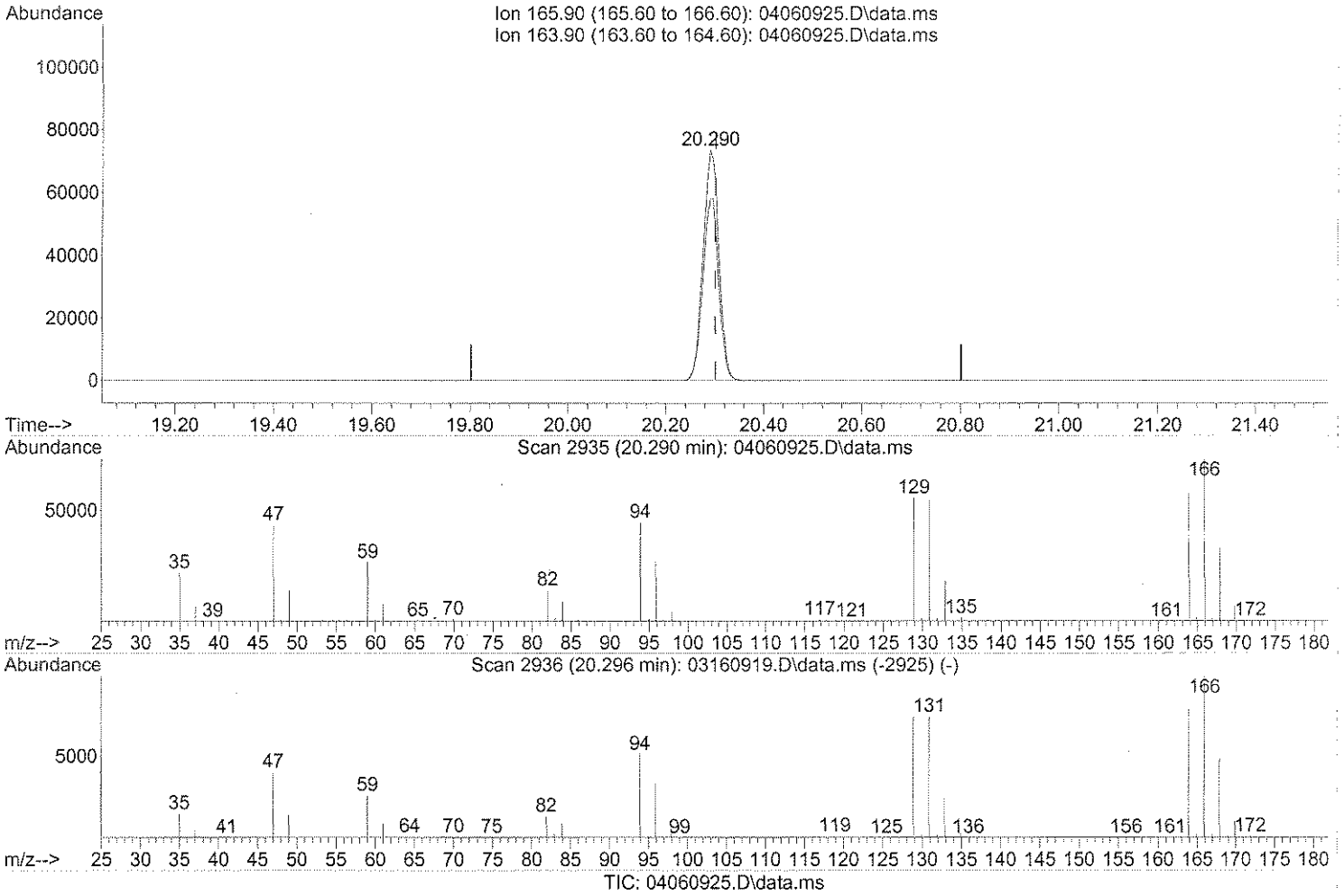
Ion	Exp%	Act%
91.10	100	100
92.10	58.40	57.54
0.00	0.00	0.00
0.00	0.00	0.00

57

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(64) Tetrachloroethene (T)

20.290min (-0.011) 13.45ng

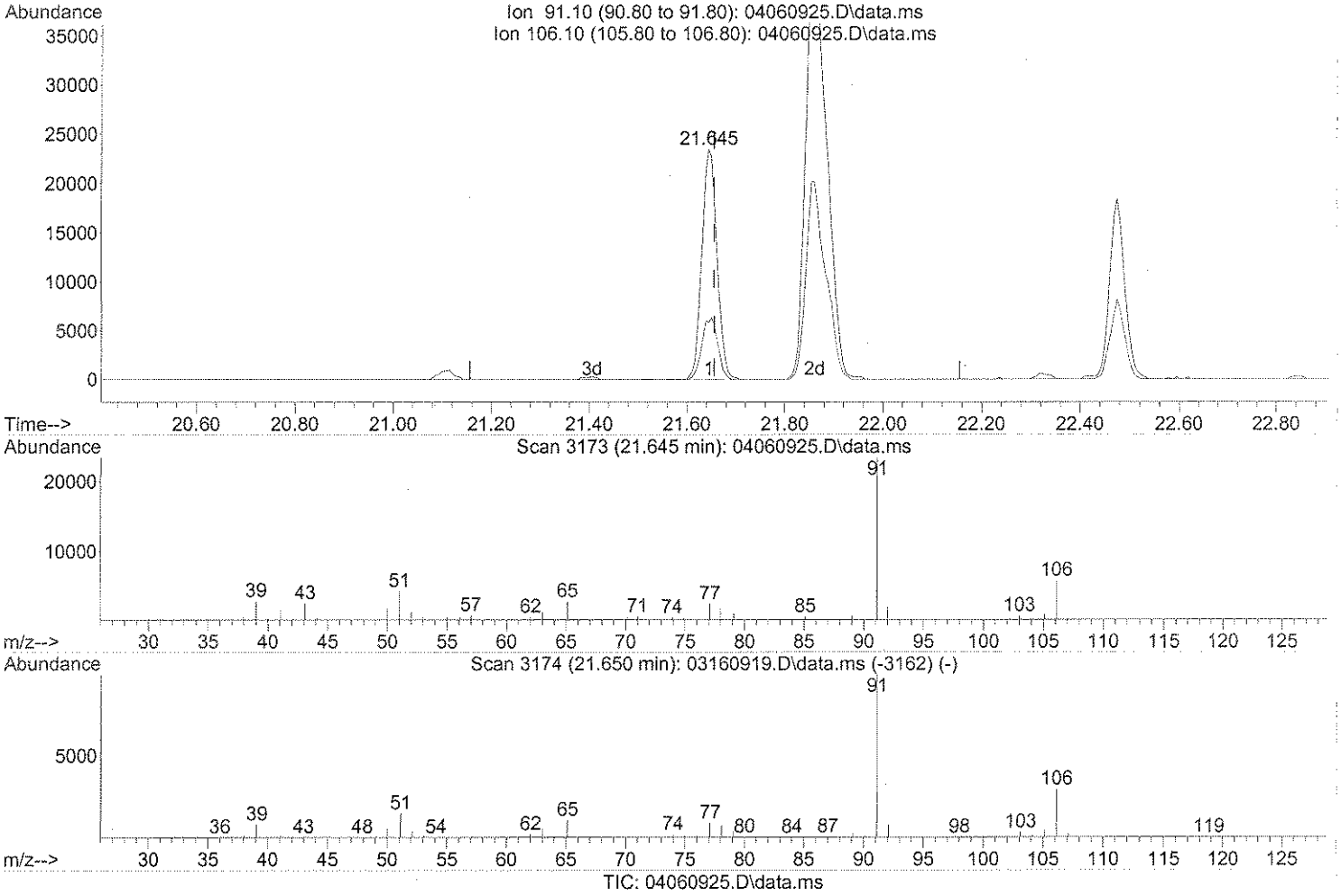
response 164396

Ion	Exp%	Act%
165.90	100	100
163.90	79.90	79.16
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(66) Ethylbenzene (T)

21.645min (-0.011) 0.90ng

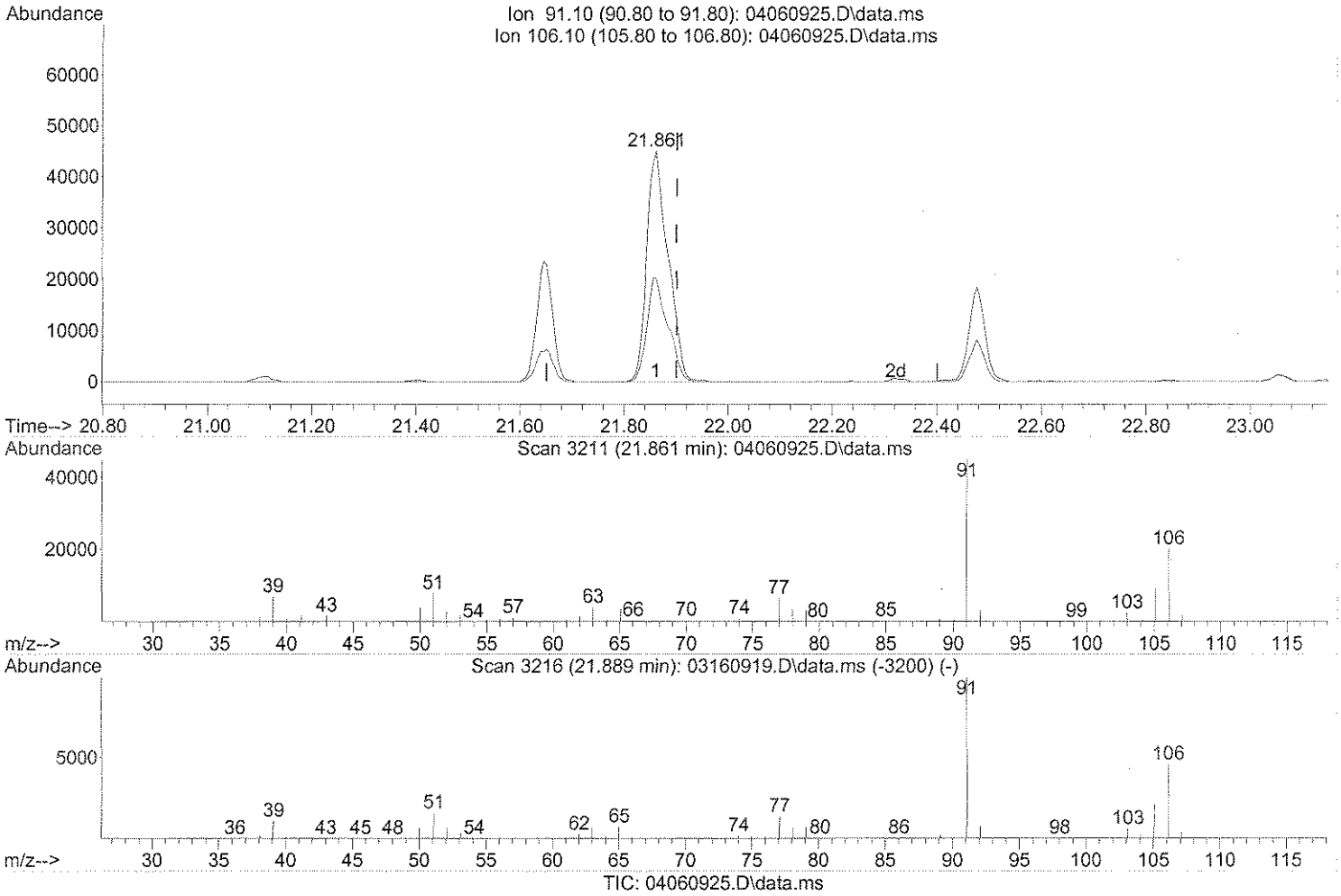
response 50094

Ion	Exp%	Act%
91.10	100	100
106.10	30.90	28.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



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

21.861min (-0.040) 2.91ng

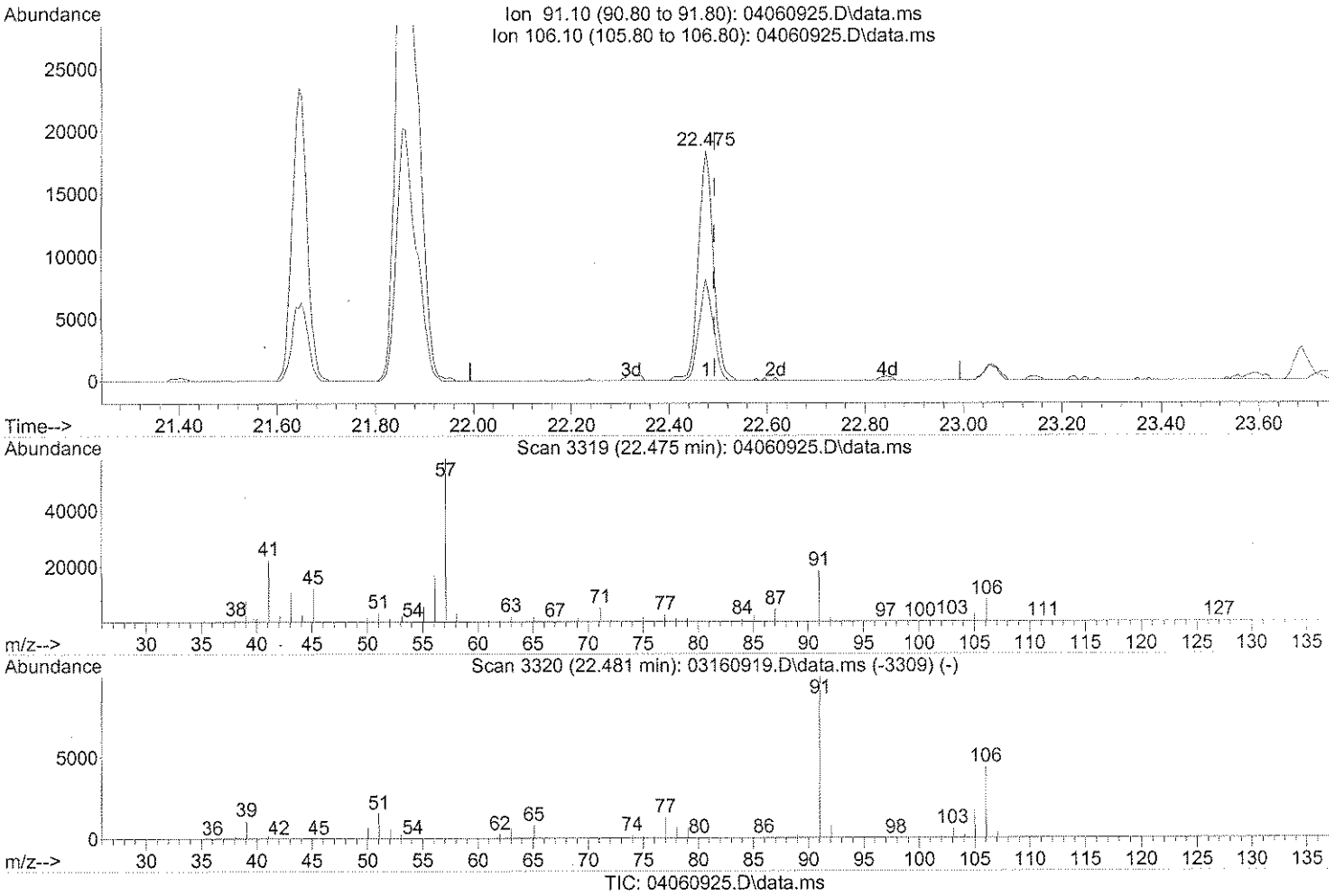
response 128857

Ion	Exp%	Act%
91.10	100	100
106.10	47.90	43.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(70) o-Xylene (T)

22.475min (-0.017) 0.86ng

response 39415

Ion	Exp%	Act%
91.10	100	100
106.10	46.30	41.58
0.00	0.00	0.00
0.00	0.00	0.00

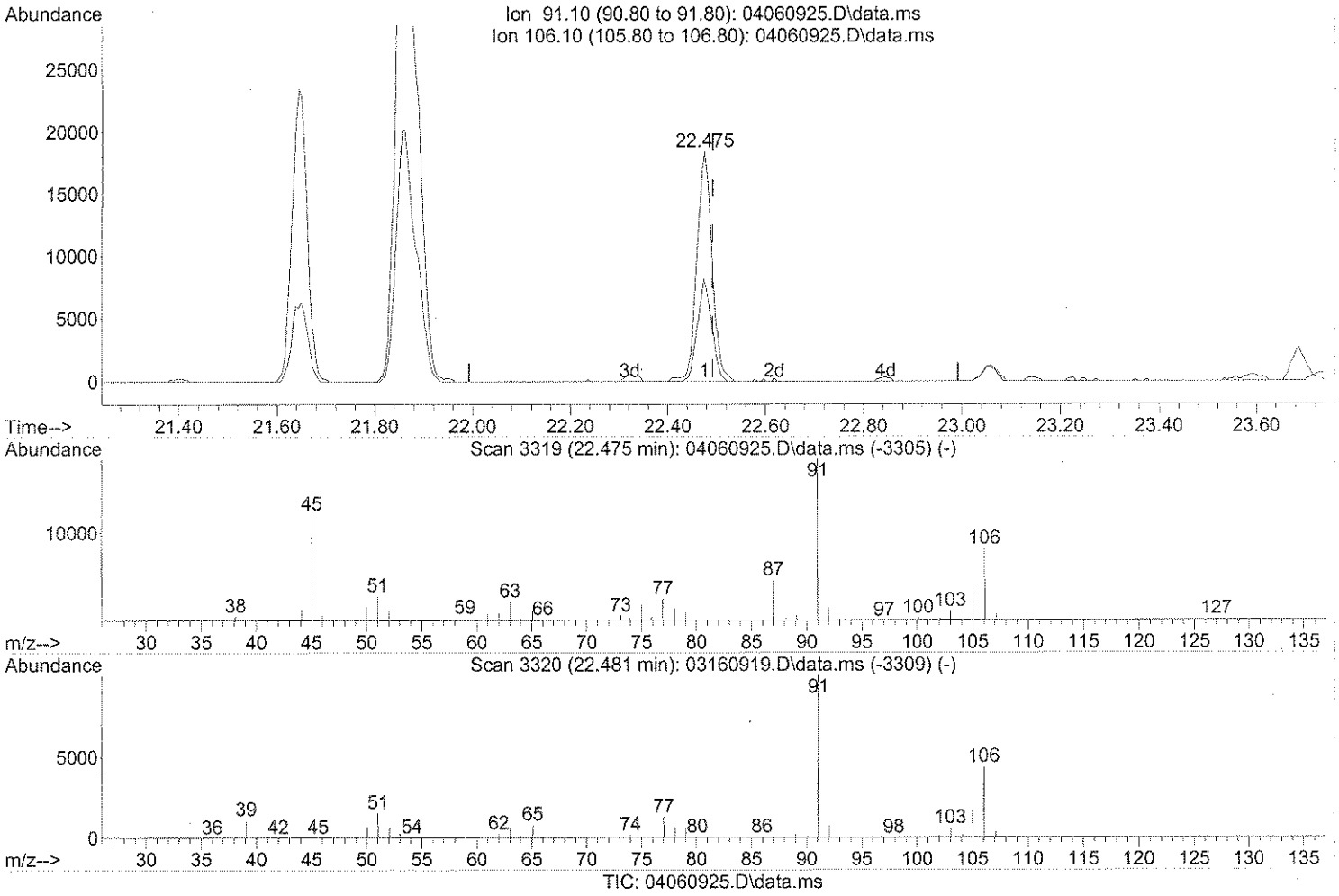
before

61

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 08:57:44 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(70) o-Xylene (T)

22.475min (-0.017) 0.86ng

response 39415

after subtraction

Ion	Exp%	Act%
91.10	100	100
106.10	46.30	41.58
0.00	0.00	0.00
0.00	0.00	0.00

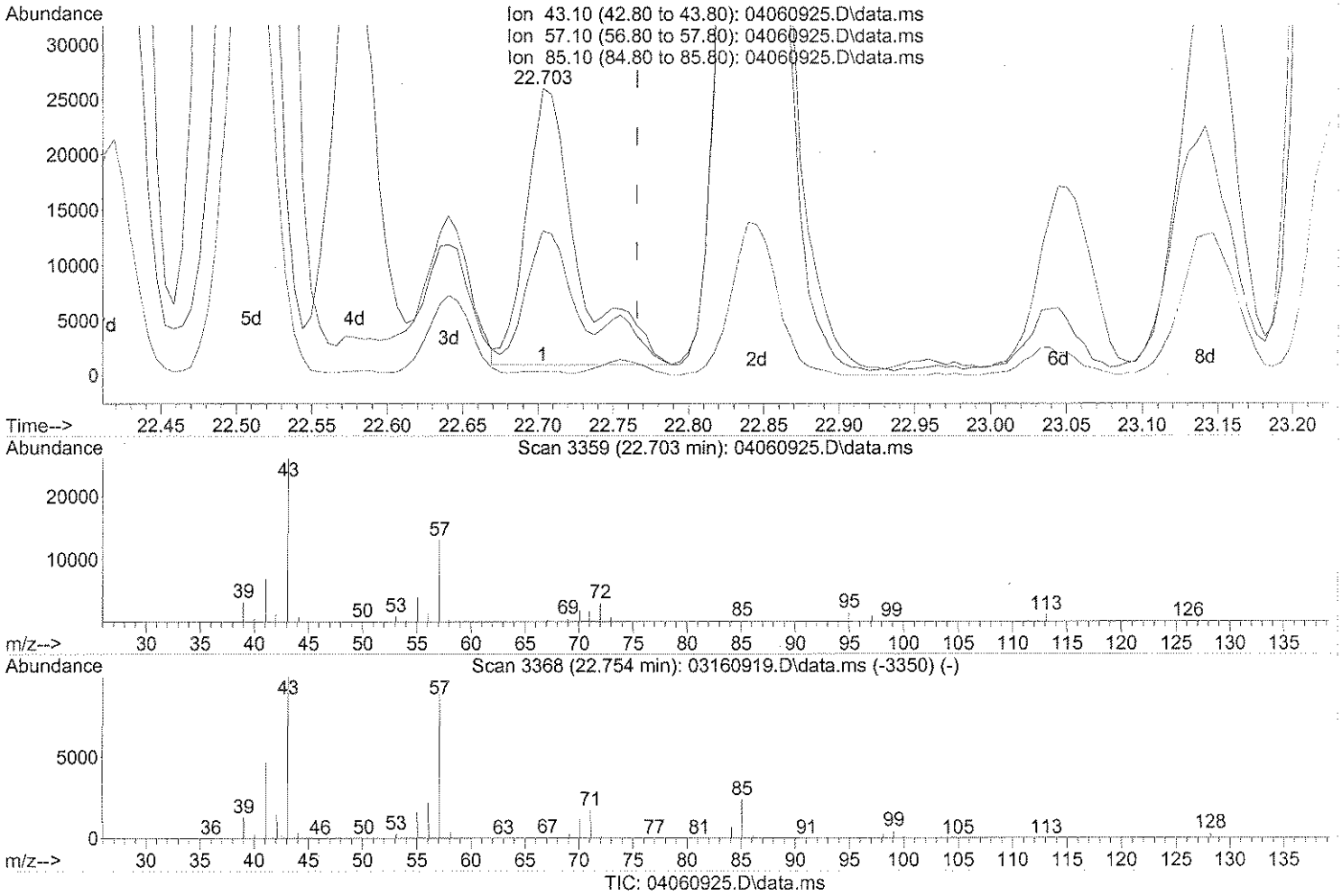
4/16/09

62

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:18:06 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(71) n-Nonane (T)

22.703min (-0.063) 1.62ng

response 59965

Ion	Exp%	Act%
43.10	100	100
57.10	80.50	36.32#
85.10	19.50	0.70
0.00	0.00	0.00

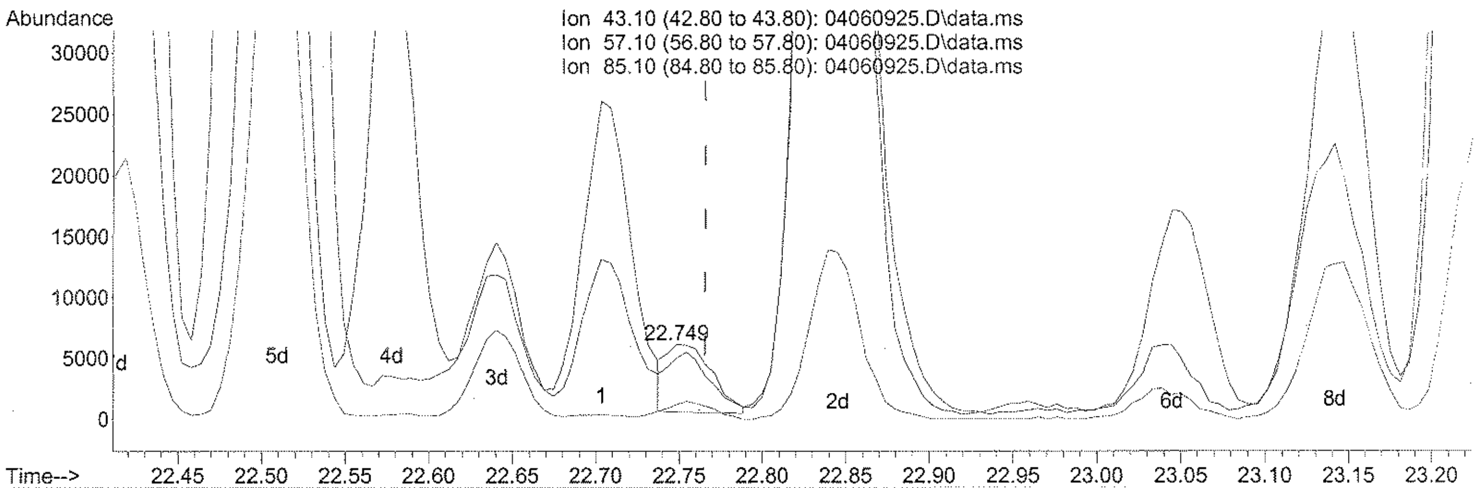
SH

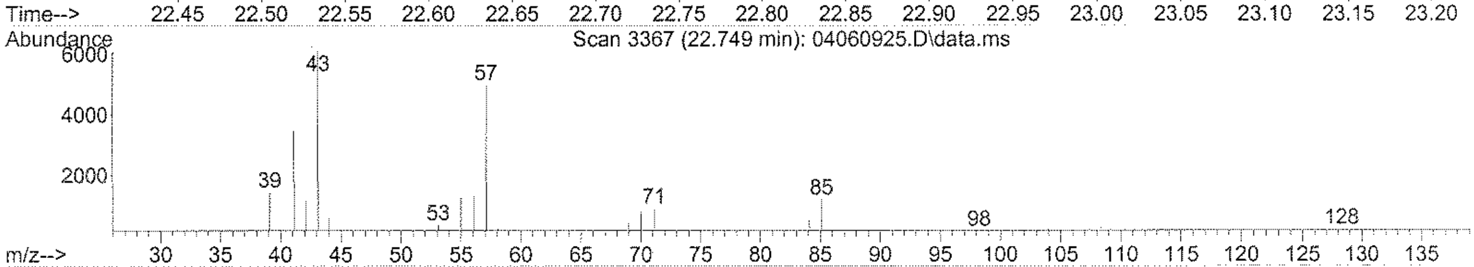
63

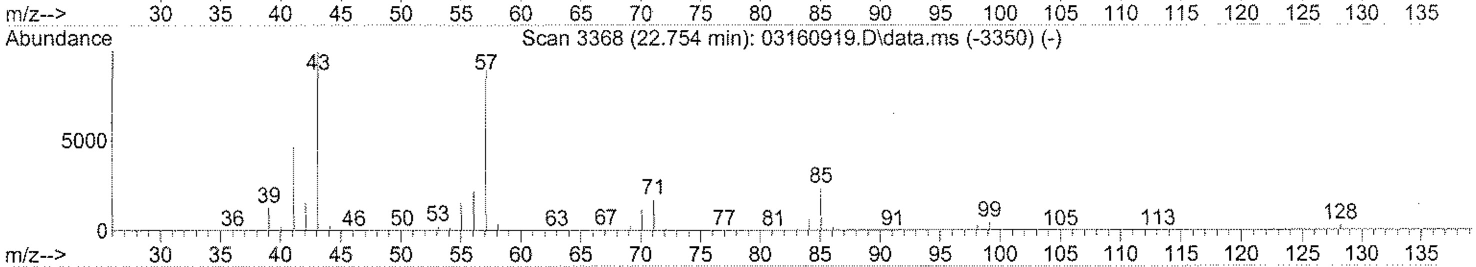
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:18:06 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration







TIC: 04060925.D\data.ms

(71) n-Nonane (T)

22.749min (-0.017) 0.29ng m

response 10644

Ion	Exp%	Act%
43.10	100	100
57.10	80.50	204.64#
85.10	19.50	3.95
0.00	0.00	0.00

Sh —TIC

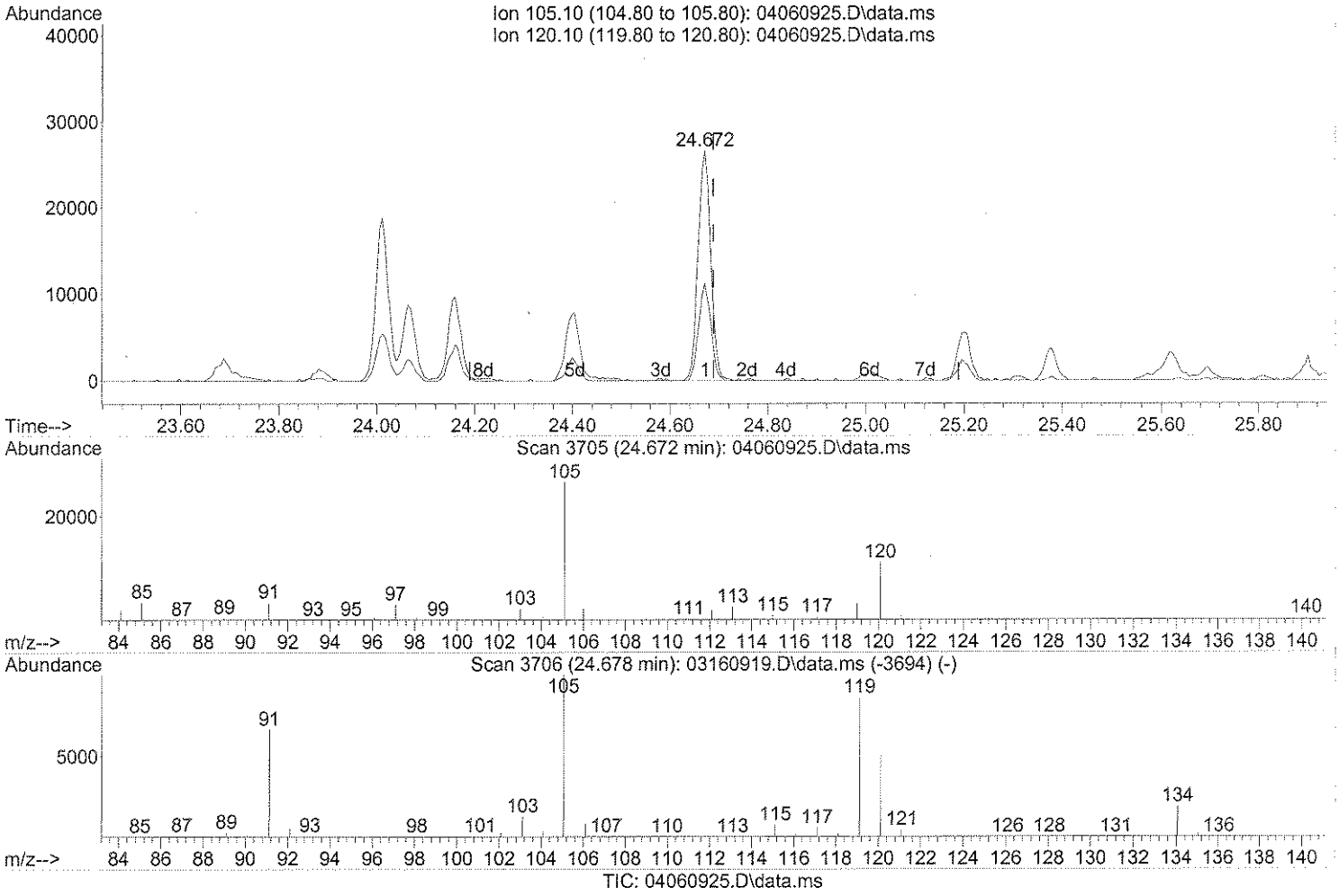
[initials] 4/7/09
[initials] 4/8/09

64

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:18:06 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

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

24.672min (-0.017) 1.02ng

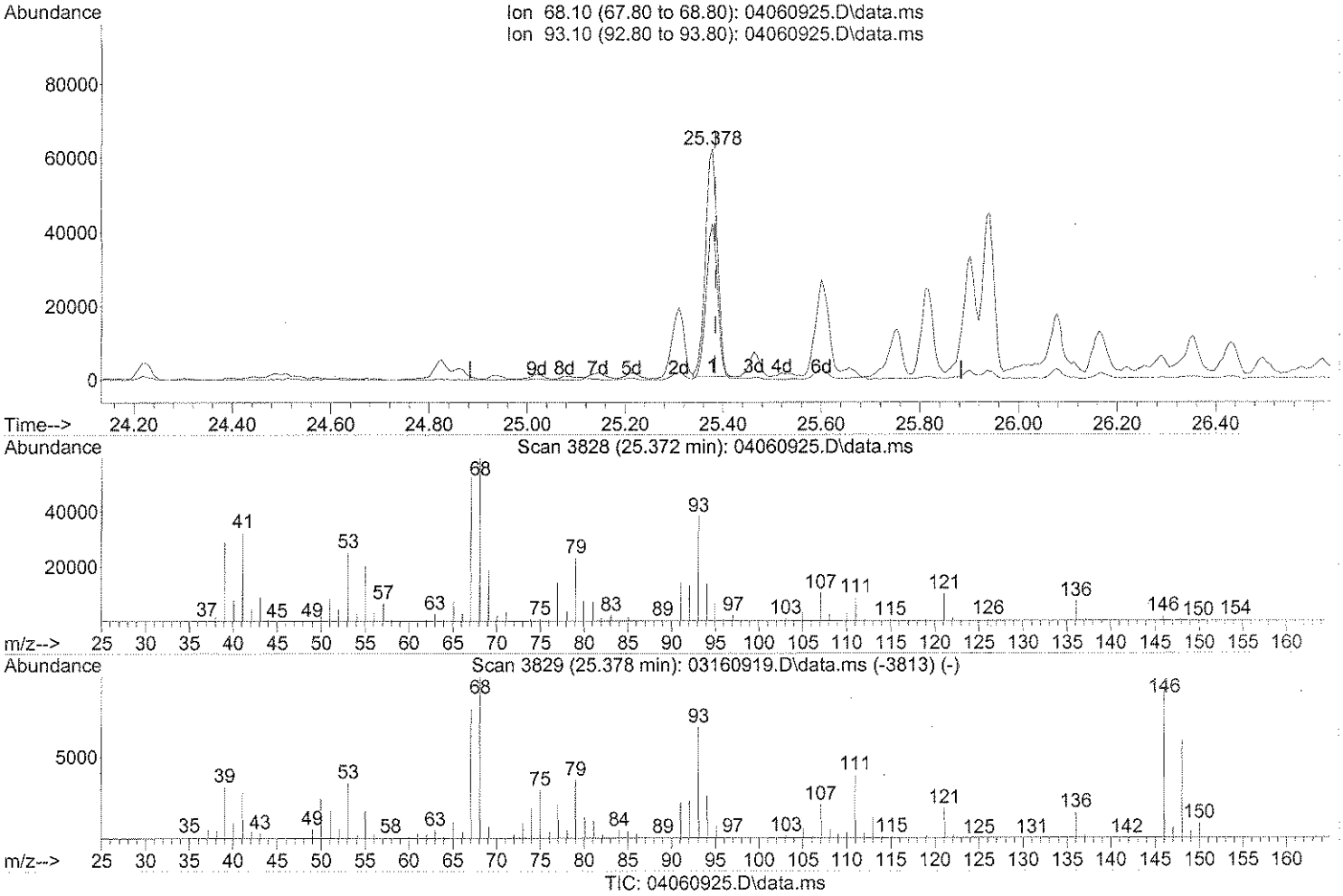
response 47865

Ion	Exp%	Act%
105.10	100	100
120.10	49.00	40.89
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:18:06 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(91) d-Limonene (T)

25.378min (-0.006) 5.35ng

response 105050

before

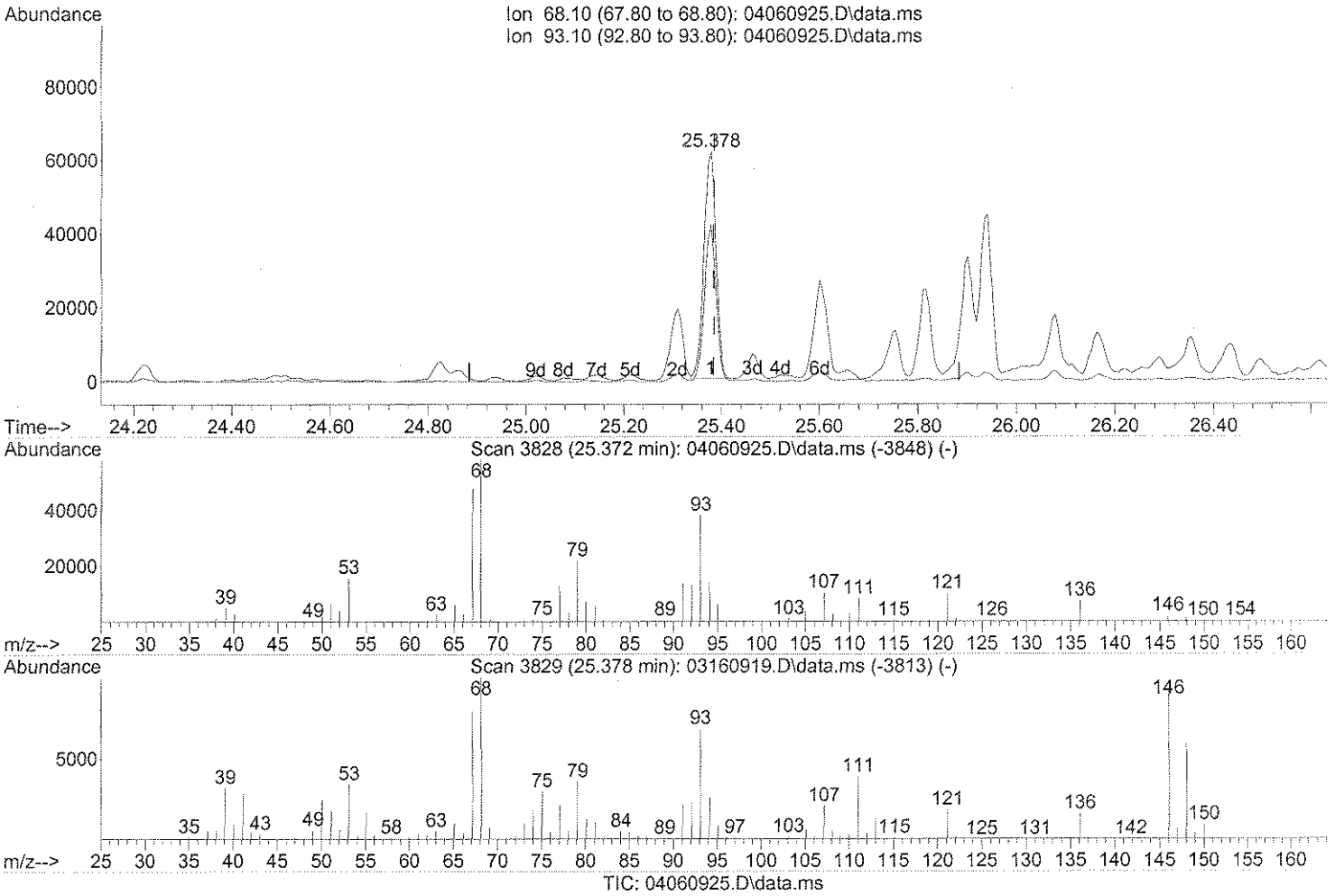
Ion	Exp%	Act%
68.10	100	100
93.10	69.50	66.62
0.00	0.00	0.00
0.00	0.00	0.00

66

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060925.D
Acq On : 7 Apr 2009 12:01 am
Operator : WA/LH
Sample : P0901030-002 (250mL)
Misc : Walden Environmental I-1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 07 12:18:06 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060925.D\data.ms

(91) d-Limonene (T)

25.378min (-0.006) 5.35ng

response 105050

Ion	Exp%	Act%
68.10	100	100
93.10	69.50	66.62
0.00	0.00	0.00
0.00	0.00	0.00

After subtraction

WA 4/8/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **O-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-003

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/7/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01239

Initial Pressure (psig): -2.1 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.44

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.72	ND	0.42	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.6**	0.72	**0.52**	0.15	
74-87-3	Chloromethane	ND	0.72	ND	0.35	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.72	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.72	ND	0.28	
106-99-0	1,3-Butadiene	ND	0.72	ND	0.33	
74-83-9	Bromomethane	ND	0.72	ND	0.19	
75-00-3	Chloroethane	ND	0.72	ND	0.27	
64-17-5	Ethanol	ND	7.2	ND	3.8	
75-05-8	Acetonitrile	ND	0.72	ND	0.43	
107-02-8	**Acrolein**	**1.3**	0.72	**0.56**	0.31	
67-64-1	**Acetone**	**8.8**	7.2	**3.7**	3.0	
75-69-4	**Trichlorofluoromethane**	**1.3**	0.72	**0.23**	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.4	ND	0.59	
107-13-1	Acrylonitrile	ND	0.72	ND	0.33	
75-35-4	1,1-Dichloroethene	ND	0.72	ND	0.18	
75-09-2	Methylene Chloride	ND	0.72	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.72	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.72	ND	0.094	
75-15-0	Carbon Disulfide	ND	0.72	ND	0.23	
156-60-5	trans-1,2-Dichloroethene	ND	0.72	ND	0.18	
75-34-3	1,1-Dichloroethane	ND	0.72	ND	0.18	
1634-04-4	Methyl tert-Butyl Ether	ND	0.72	ND	0.20	
108-05-4	Vinyl Acetate	ND	7.2	ND	2.0	
78-93-3	**2-Butanone (MEK)**	**1.4**	0.72	**0.46**	0.24	

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

Verified By: RC Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **O-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-003

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/7/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01239

Initial Pressure (psig): -2.1 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.44

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.72	ND	0.18	
141-78-6	Ethyl Acetate	ND	1.4	ND	0.40	
110-54-3	n-Hexane	ND	0.72	ND	0.20	
67-66-3	Chloroform	ND	0.72	ND	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.72	ND	0.24	
107-06-2	1,2-Dichloroethane	ND	0.72	ND	0.18	
71-55-6	1,1,1-Trichloroethane	ND	0.72	ND	0.13	
71-43-2	**Benzene**	**0.77**	0.72	**0.24**	0.23	
56-23-5	Carbon Tetrachloride	ND	0.72	ND	0.11	
110-82-7	Cyclohexane	ND	1.4	ND	0.42	
78-87-5	1,2-Dichloropropane	ND	0.72	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.72	ND	0.11	
79-01-6	Trichloroethene	ND	0.72	ND	0.13	
123-91-1	1,4-Dioxane	ND	0.72	ND	0.20	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.35	
142-82-5	n-Heptane	ND	0.72	ND	0.18	
10061-01-5	cis-1,3-Dichloropropene	ND	0.72	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.72	ND	0.18	
10061-02-6	trans-1,3-Dichloropropene	ND	0.72	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.72	ND	0.13	
108-88-3	**Toluene**	**2.4**	0.72	**0.64**	0.19	
591-78-6	2-Hexanone	ND	0.72	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.72	ND	0.085	
106-93-4	1,2-Dibromoethane	ND	0.72	ND	0.094	
123-86-4	n-Butyl Acetate	ND	0.72	ND	0.15	

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

Verified By: RC Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC** CAS Project ID: P0901030
Client Sample ID: **O-1** CAS Sample ID: P0901030-003
Client Project ID: **Bayville Village Cleaners / BVC0106**

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/7/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01239

Initial Pressure (psig): -2.1 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.44

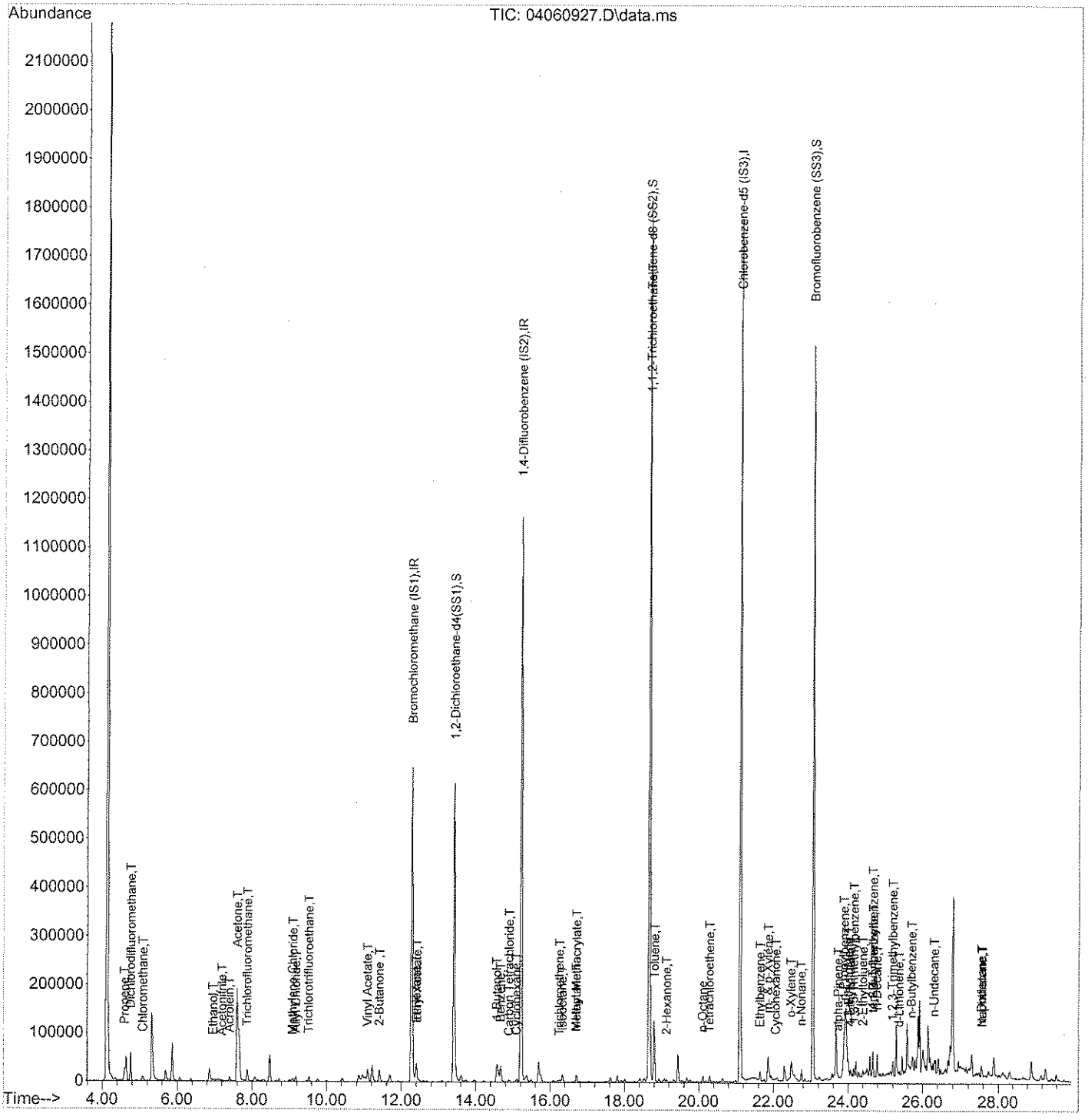
CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.72	ND	0.15	
127-18-4	Tetrachloroethene	ND	0.72	ND	0.11	
108-90-7	Chlorobenzene	ND	0.72	ND	0.16	
100-41-4	Ethylbenzene	ND	0.72	ND	0.17	
179601-23-1	m,p-Xylenes	ND	1.4	ND	0.33	
75-25-2	Bromoform	ND	0.72	ND	0.070	
100-42-5	Styrene	ND	0.72	ND	0.17	
95-47-6	o-Xylene	ND	0.72	ND	0.17	
111-84-2	n-Nonane	ND	0.72	ND	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.72	ND	0.10	
98-82-8	Cumene	ND	0.72	ND	0.15	
80-56-8	alpha-Pinene	ND	0.72	ND	0.13	
103-65-1	n-Propylbenzene	ND	0.72	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.72	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.72	ND	0.15	
95-63-6	1,2,4-Trimethylbenzene	ND	0.72	ND	0.15	
100-44-7	Benzyl Chloride	ND	0.72	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.72	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.72	ND	0.12	
95-50-1	1,2-Dichlorobenzene	ND	0.72	ND	0.12	
5989-27-5	d-Limonene	ND	0.72	ND	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.72	ND	0.075	
120-82-1	1,2,4-Trichlorobenzene	ND	0.72	ND	0.097	
91-20-3	Naphthalene	ND	0.72	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.72	ND	0.068	

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

Verified By: Re Date: 4/9/09

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 08 11:26:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 08 11:26:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

LH 4/8/09
DST 4/7/09

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	243003	25.000 ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.22	114	1131005	25.000 ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	656653	25.000 ng		-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.42	65	629811	27.308 ng		-0.04
Spiked Amount 25.000			Recovery =	109.24%		
57) Toluene-d8 (SS2)	18.67	98	1352499	25.365 ng		-0.01
Spiked Amount 25.000			Recovery =	101.48%		
73) Bromofluorobenzene (SS3)	23.06	174	411364	23.908 ng		0.00
Spiked Amount 25.000			Recovery =	95.64%		
Target Compounds						Qvalue
2) Propene	4.60	42	6939m	0.302 ng		<RL
3) Dichlorodifluoromethane	4.76	85	55558	1.801 ng		99
4) Chloromethane	5.08	50	11191	0.329 ng		95
5) Freon 114	5.32	135	699	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.78	54	1271	N.D.		
8) Bromomethane	6.25	94	230	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	6.96	45	9738	0.714 ng	#	40
11) Acetonitrile	7.21	41	4349	0.122 ng		92
12) Acrolein	7.40	56	10759	0.891 ng		83
13) Acetone	7.60	58	92630m	6.089 ng		
14) Trichlorofluoromethane	7.87	101	22759	0.882 ng		98
15) Isopropanol	8.16	45	1431	N.D.		
16) Acrylonitrile	8.46	53	1341	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) tert-Butanol	9.03	59	1499	N.D.		
19) Methylene Chloride	9.09	84	2547	0.164 ng		88
20) Allyl Chloride	9.18	41	2784	0.103 ng	#	55
21) Trichlorotrifluoroethane	9.52	151	3589	0.375 ng	#	81
22) Carbon Disulfide	9.47	76	2657	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	10.95	73	58	N.D.		
26) Vinyl Acetate	11.09	86	686	0.319 ng	#	1
27) 2-Butanone	11.41	72	8504	0.944 ng	#	57
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.42	61	2798	0.458 ng		96
31) n-Hexane	12.41	57	13492	0.419 ng		96

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 08 11:26:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.49	83	1027	N.D.		
34) Tetrahydrofuran	13.11	72	504	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.59	62	1261	N.D.		
38) 1,1,1-Trichloroethane	13.98	97	604	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.57	56	47047	2.469 ng		90
41) Benzene	14.67	78	30810	0.534 ng		98
42) Carbon Tetrachloride	14.89	117	2695	0.158 ng		96
43) Cyclohexane	15.09	84	2353	0.114 ng		94
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.07	83	59	N.D.		
47) Trichloroethene	16.26	130	1032	0.075 ng		98
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) Isooctane	16.34	57	18955	0.223 ng		74
50) Methyl Methacrylate	16.71	100	965	0.191 ng	#	1
51) n-Heptane	16.70	71	3485	0.230 ng		96
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.51	58	677	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.68	97	118250	9.250 ng	FP #	8
58) Toluene	18.80	91	96319	1.665 ng		98
59) 2-Hexanone	19.13	43	5818	0.114 ng		88
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) Butyl Acetate	19.97	43	2078	N.D.		
63) n-Octane	20.11	57	3081	0.165 ng		94
64) Tetrachloroethene	20.29	166	3798	0.257 ng		100
65) Chlorobenzene	21.18	112	60	N.D.		
66) Ethylbenzene	21.64	91	17586	0.261 ng		94
67) m- & p-Xylene	21.86	91	47395	0.887 ng		95
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.33	104	1199	N.D.		
70) o-Xylene	22.48	91	21932	0.396 ng		81
71) n-Nonane	22.75	43	12500	0.279 ng		96
72) 1,1,2,2-Tetrachloroethane	22.48	83	782	N.D.		
74) Cumene	23.24	105	2260	N.D.		
75) alpha-Pinene	23.74	93	2168	0.070 ng	#	43
76) n-Propylbenzene	23.89	91	8311	0.096 ng		88
77) 3-Ethyltoluene	24.01	105	17629	0.282 ng		99
78) 4-Ethyltoluene	24.06	105	8710	0.142 ng		97
79) 1,3,5-Trimethylbenzene	24.16	105	7882	0.143 ng		94

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 08 11:26:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

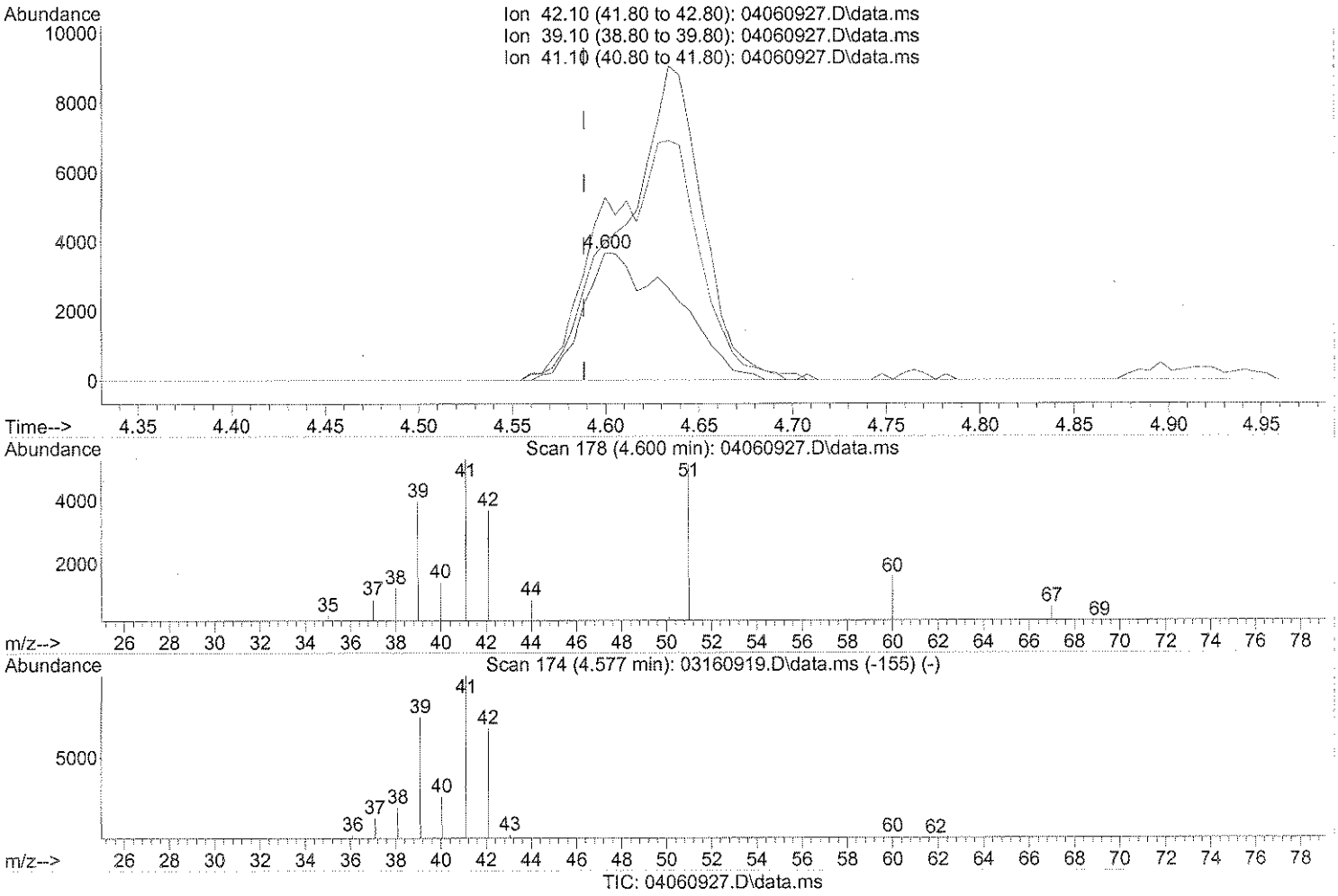
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.59	118	584	N.D.		
81) 2-Ethyltoluene	24.40	105	7866	0.123 ng		95
82) 1,2,4-Trimethylbenzene	24.67	105	27047	0.479 ng		85
83) n-Decane	24.79	57	21146	0.461 ng		74
84) Benzyl Chloride	24.84	91	925	N.D.		
85) 1,3-Dichlorobenzene	24.88	146	65	N.D.		
86) 1,4-Dichlorobenzene	24.95	146	967	N.D.		
87) sec-Butylbenzene	25.01	105	1877	N.D.		
88) p-Isopropyltoluene	25.20	119	2295	N.D.		
89) 1,2,3-Trimethylbenzene	25.20	105	8386	0.154 ng		91
90) 1,2-Dichlorobenzene	25.38	146	54	N.D.		
91) d-Limonene	25.38	68	2121	0.089 ng		100
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.32	57	15644	0.319 ng	#	56
94) 1,2,4-Trichlorobenzene	0.00	184	0	N.D.		
95) Naphthalene	27.57	128	6646	0.103 ng		98
96) n-Dodecane	27.56	57	9025	0.167 ng		93
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.07	55	4845	0.136 ng		94
99) tert-Butylbenzene	24.68	119	3143	0.063 ng	#	54
100) n-Butylbenzene	25.71	91	5324	0.089 ng	#	64

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060927.D\data.ms

(2) Propene (T)

4.600min (+0.011) 0.55ng

response 12530

Ion	Exp%	Act%
42.10	100	100
39.10	127.00	0.00#
41.10	166.70	85.75#
0.00	0.00	0.00

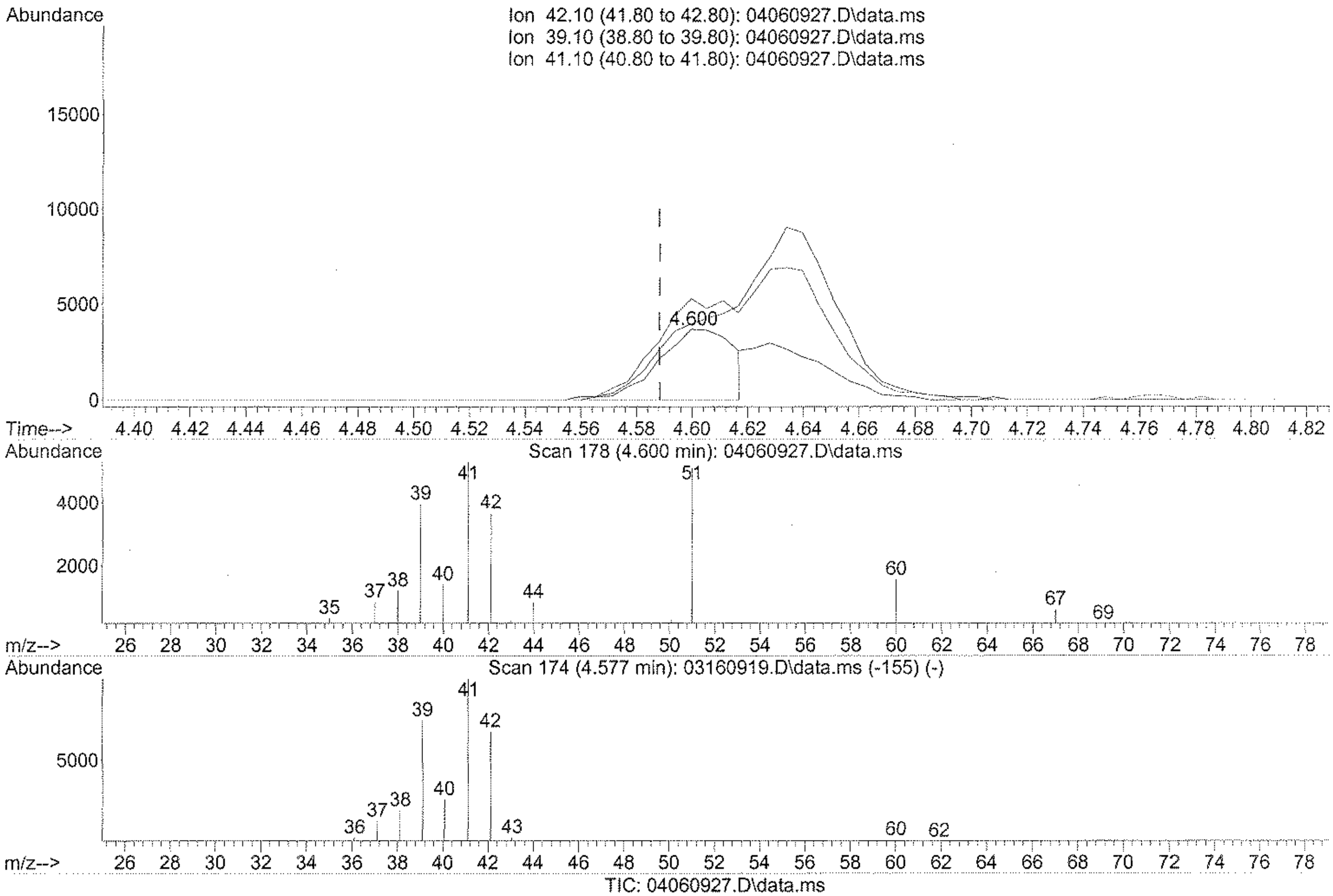
SH

75

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(2) Propene (T)

4.600min (+0.011) 0.30ng m

response 6939

Ion	Exp%	Act%
42.10	100	100
39.10	127.00	0.00#
41.10	166.70	154.83
0.00	0.00	0.00

Sh → IC

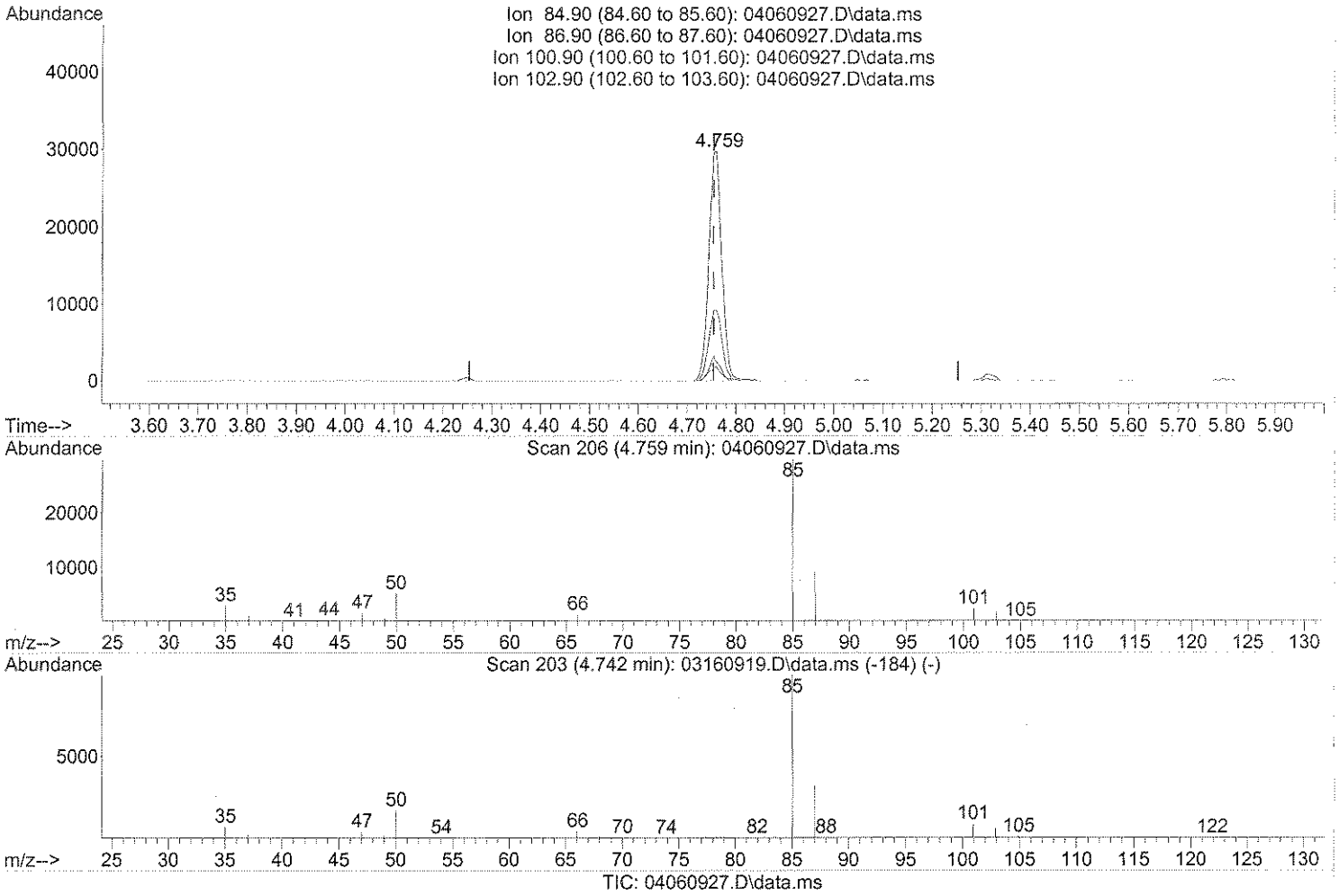
4/7/09

76

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(3) Dichlorodifluoromethane (T)

4.759min (+0.006) 1.80ng

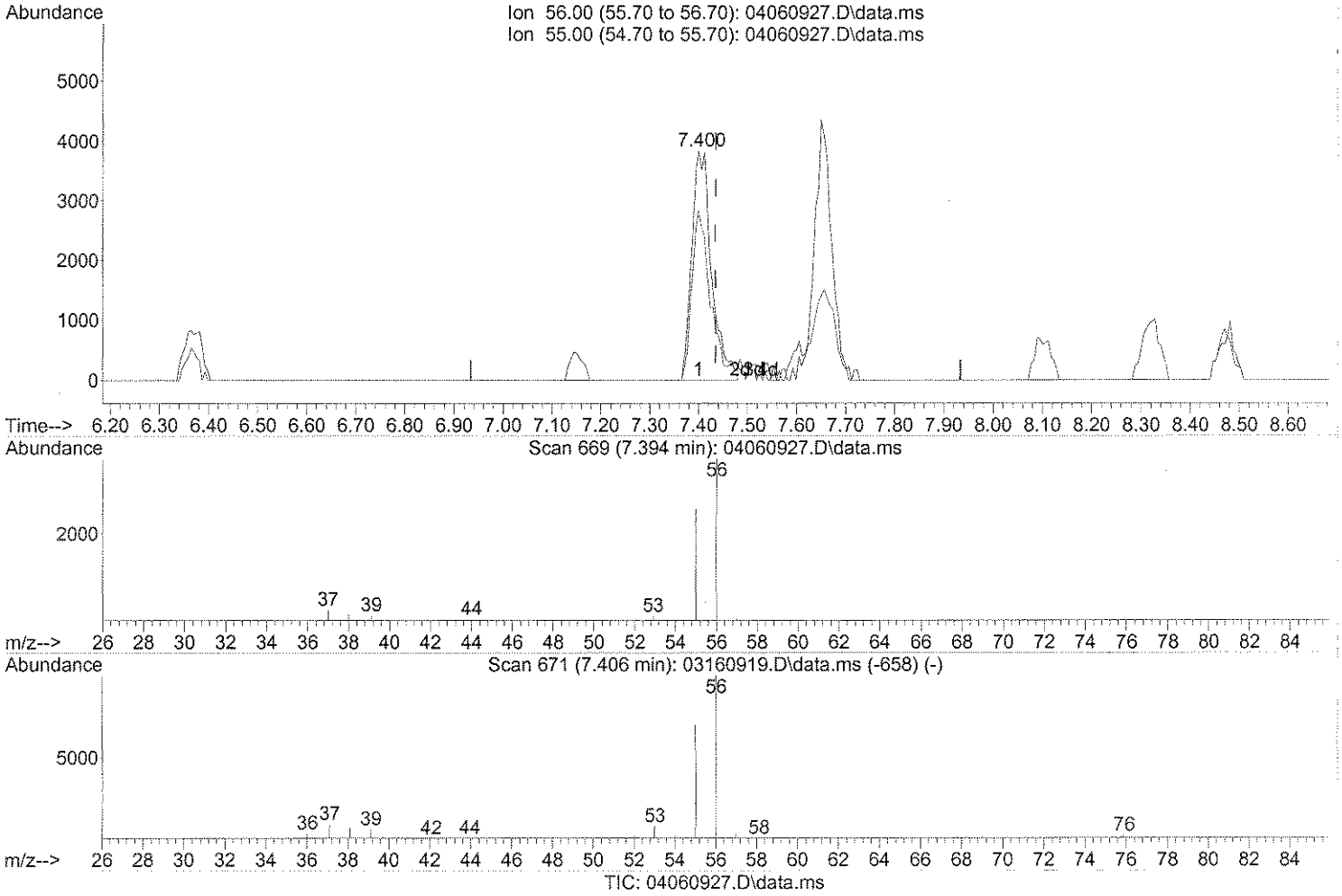
response 55558

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.49
100.90	8.80	9.15
102.90	5.90	5.83

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(12) Acrolein (T)

7.400min (-0.034) 0.89ng

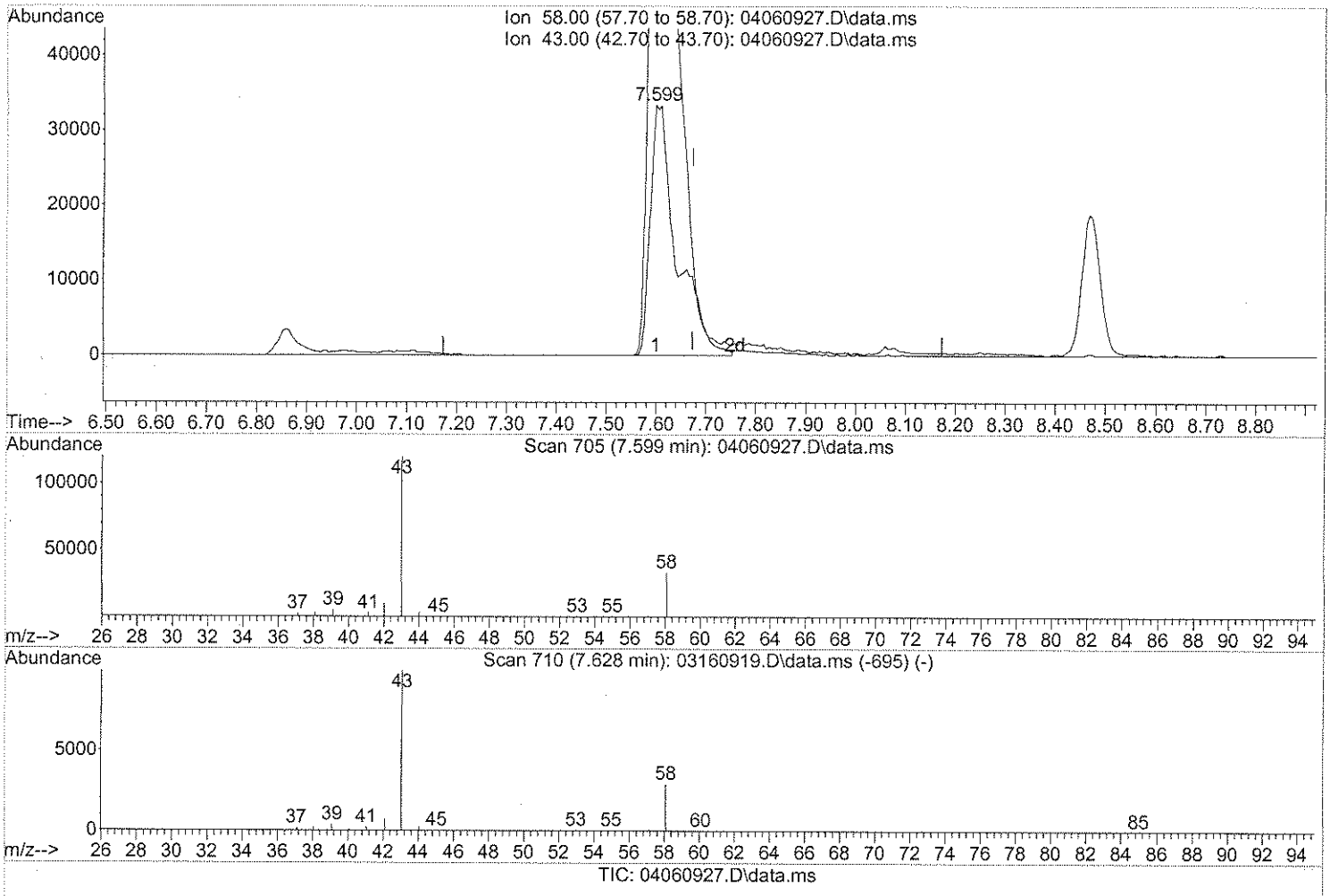
response 10759

Ion	Exp%	Act%
56.00	100	100
55.00	87.40	71.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 12:36:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(13) Acetone (T)

7.599min (-0.074) 8.15ng

response 124017

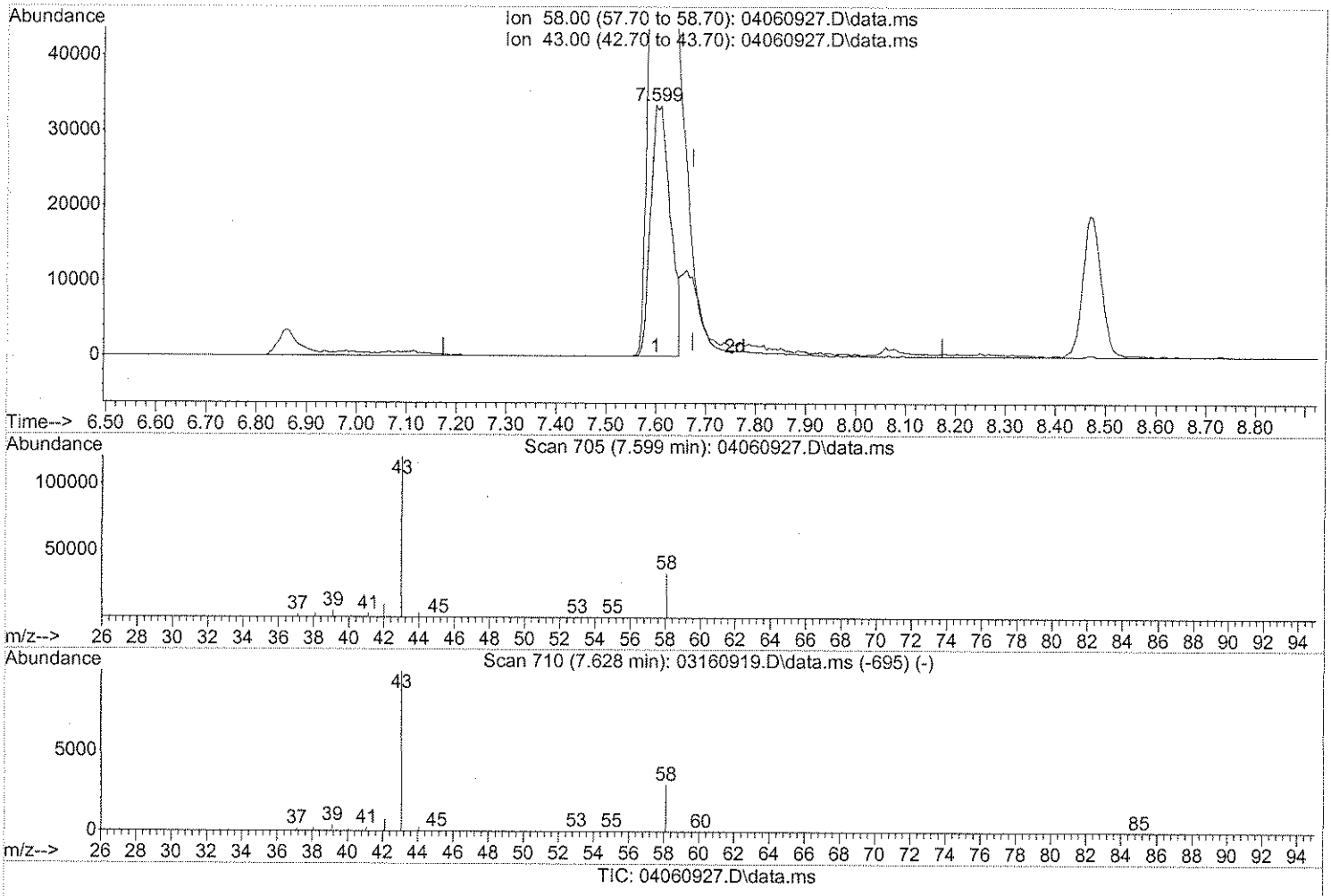
Ion	Exp%	Act%
58.00	100	100
43.00	322.50	335.21
0.00	0.00	0.00
0.00	0.00	0.00

SH

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 12:36:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(13) Acetone (T)

7.599min (-0.074) 6.09ng m

response 92630

Ion	Exp%	Act%
58.00	100	100
43.00	322.50	448.79#
0.00	0.00	0.00
0.00	0.00	0.00

SH-71C

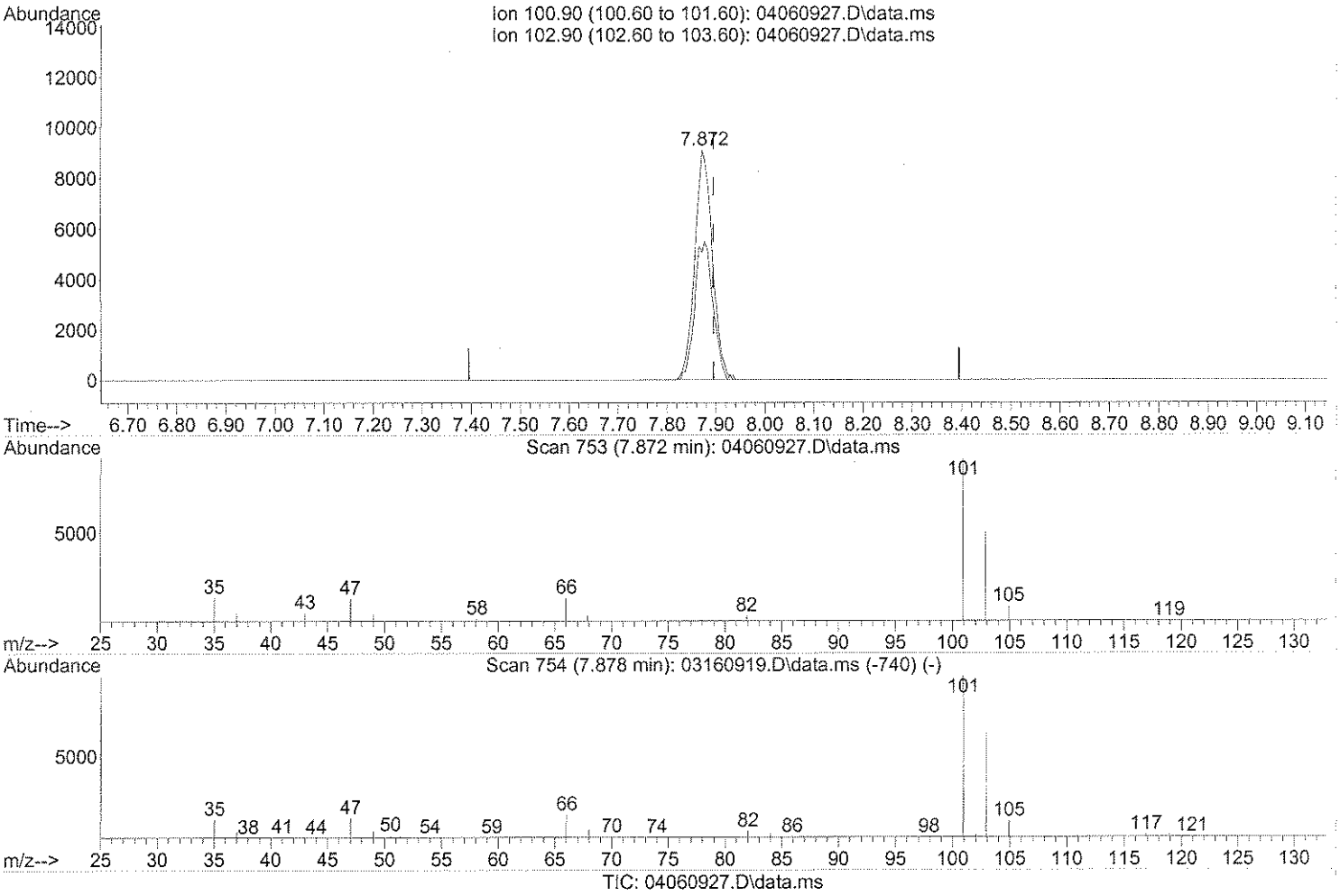
4/8/09

80

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060927.D\data.ms

(14) Trichlorofluoromethane (T)

7.872min (-0.023) 0.88ng

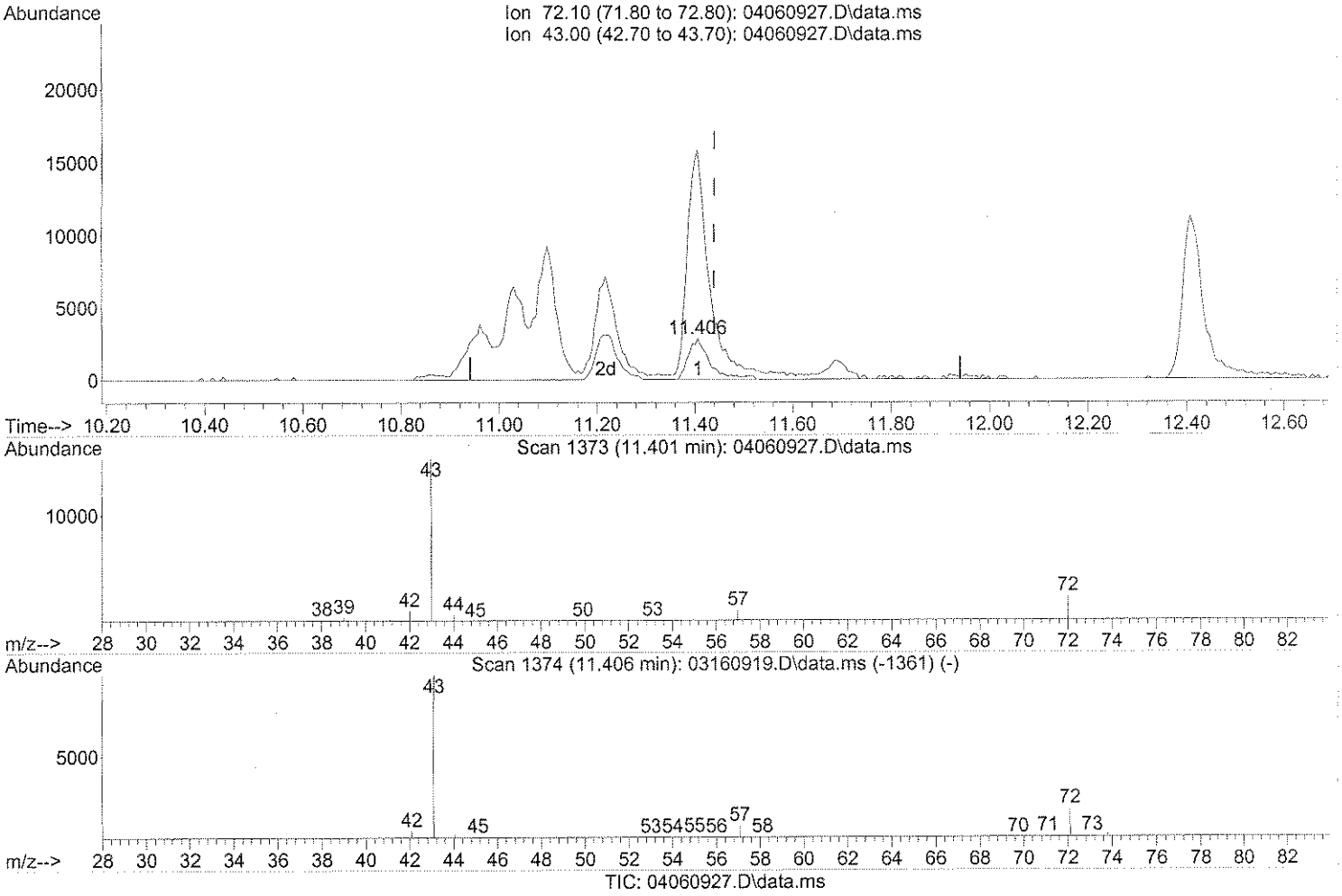
response 22759

Ion	Exp%	Act%
100.90	100	100
102.90	61.10	62.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(27) 2-Butanone (T)

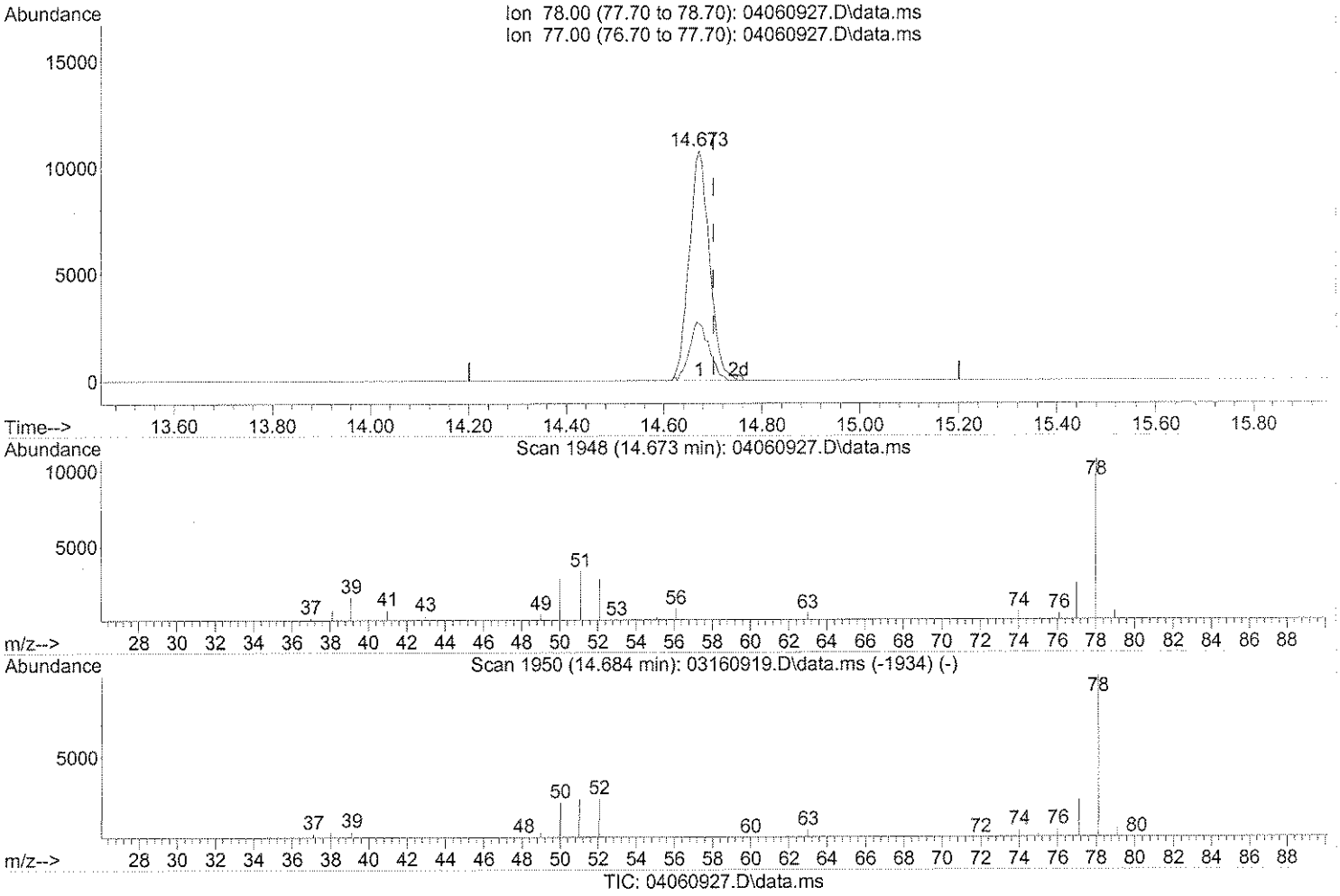
11.406min (-0.034) 0.94ng

response 8504

Ion	Exp%	Act%
72.10	100	100
43.00	696.90	549.54#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060927.D\data.ms

(41) Benzene (T)

14.673min (-0.029) 0.53ng

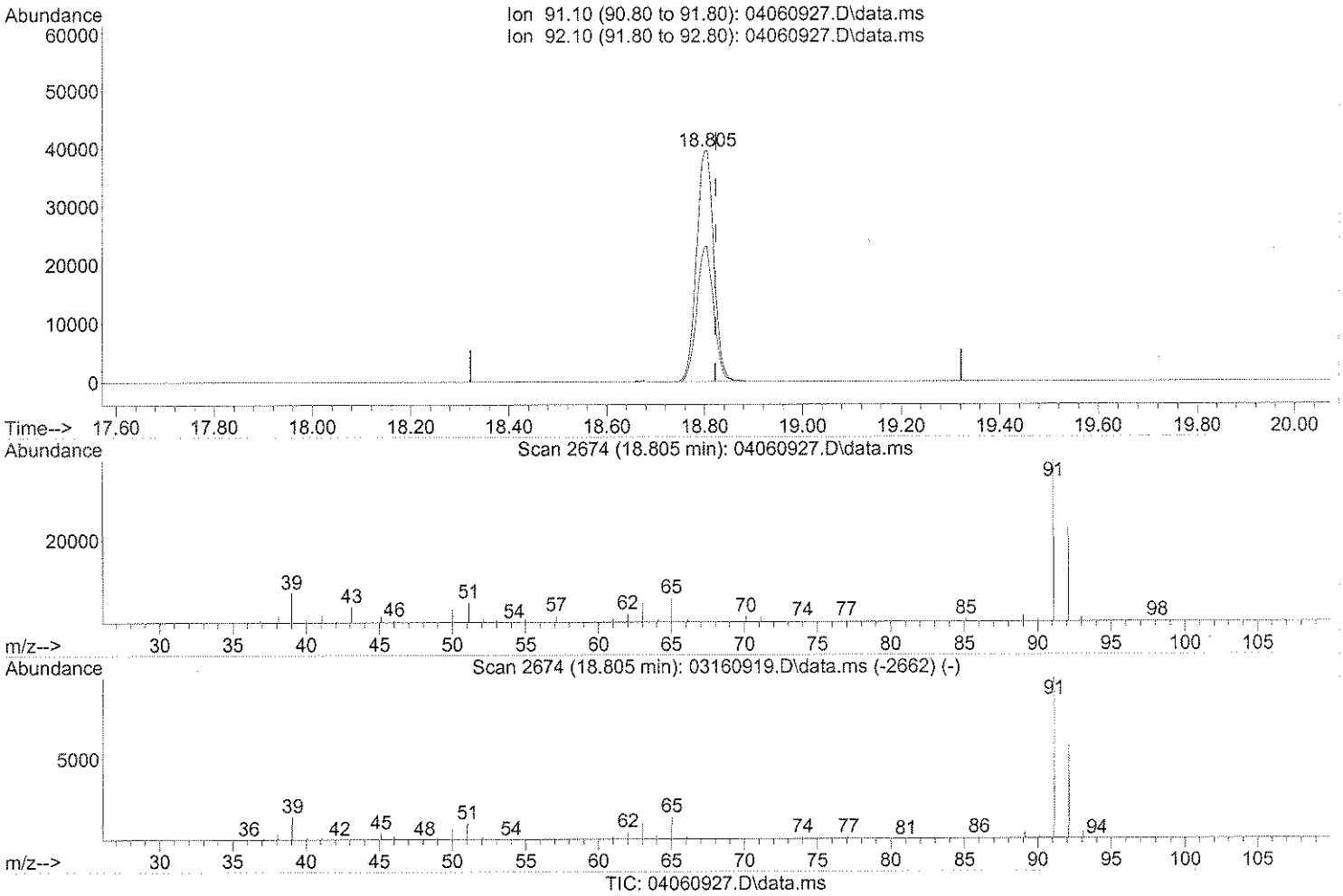
response 30810

Ion	Exp%	Act%
78.00	100	100
77.00	23.80	24.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060927.D
Acq On : 7 Apr 2009 1:19 am
Operator : WA/LH
Sample : P0901030-003 (1000mL)
Misc : Walden Environmental O-1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 07 08:57:54 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060927.D\data.ms

(58) Toluene (T)

18.805min (-0.017) 1.66ng

response 96319

Ion	Exp%	Act%
91.10	100	100
92.10	58.40	57.05
0.00	0.00	0.00
0.00	0.00	0.00

Standards Data

Method Path : J:\MS16\METHODS\
Method File : R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue Mar 17 08:55:14 2009
Response Via : Initial Calibration

Calibration Files
0.1 =03160914.D 0.2 =03160915.D 0.5 =03160916.D 1.0 =03160917.D 5.0 =03160918.D 25 =03160919.D
50 =03160920.D 100 =03160921.D

		Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
1)	IR	Bromochloromethane...	----------	----------	ISTD	----------	----------	----------	----------	----------		
2)	T	Propene	2.603	2.123	2.109	2.058	2.862	2.051	2.553	2.560	2.365	13.32
3)	T	Dichlorodifluo...	3.728	3.226	3.258	3.122	3.368	2.718	3.034	2.929	3.173	9.57
4)	T	Chloromethane	4.172	3.670	3.591	3.264	3.483	3.245	3.465	3.074	3.496	9.62
5)	T	Freon 114	1.444	1.327	1.278	1.248	1.283	1.100	1.220	1.216	1.265	7.81
6)	T	Vinyl Chloride	3.197	2.846	2.773	2.616	2.922	2.462	2.785	2.811	2.802	7.68
7)	T	1,3-Butadiene	2.632	2.202	2.252	2.191	2.362	2.117	2.399	2.463	2.327	7.29
8)	T	Bromomethane	1.391	1.297	1.260	1.128	1.202	1.104	1.231	1.200	1.227	7.49
9)	T	Chloroethane	1.462	1.372	1.290	1.220	1.326	1.128	1.240	1.241	1.285	7.98
10)	T	Ethanol	1.541	1.127	1.343	1.243	1.366	1.435	1.595	1.582	1.404	11.92
11)	T	Acetonitrile	4.284	3.437	3.627	3.218	3.603	3.462	3.854	3.823	3.664	8.89
12)	T	Acrolein	1.694	1.361	1.133	1.027	1.167	1.107	1.226	1.226	1.243	16.70
13)	T	Acetone	2.059	1.752	1.420	1.348	1.511	1.345	1.537	1.545	1.565	15.27
14)	T	Trichlorofluor...	2.820	2.718	2.591	2.468	2.788	2.478	2.731	2.630	2.653	5.05
15)	T	Isopropanol	7.276	5.859	5.950	5.740	4.686	5.357	5.145	4.700	5.589	15.01
16)	T	Acrylonitrile	3.022	2.633	2.686	2.626	2.977	2.781	3.121	3.086	2.866	7.24
17)	T	1,1-Dichloroet...	1.471	1.371	1.360	1.245	1.384	1.212	1.348	1.328	1.340	6.07
18)	T	tert-Butanol	6.771	5.636	5.597	5.223	5.655	5.197	5.766	3.980	5.478	14.16
19)	T	Methylene Chlo...	2.287	1.797	1.522	1.391	1.509	1.328	1.477	1.450	1.595	19.54
20)	T	Allyl Chloride	2.920	2.593	2.472	2.411	2.858	2.747	3.112	3.108	2.778	9.72
21)	T	Trichlorotrifl...	1.149	1.017	0.970	0.866	0.984	0.856	1.010	1.032	0.986	9.53
22)	T	Carbon Disulfide	7.075	5.545	5.046	5.026	5.454	4.873	5.423	5.322	5.470	12.63
23)	T	trans-1,2-Dich...	2.752	2.597	2.633	2.458	3.007	2.689	2.980	2.910	2.753	7.14
24)	T	1,1-Dichloroet...	3.465	3.166	3.124	2.994	3.334	2.985	3.303	3.226	3.200	5.22
25)	T	Methyl tert-Bu...	5.006	4.470	4.179	3.981	4.453	3.974	4.520	4.494	4.385	7.72
26)	T	Vinyl Acetate			0.118	0.149	0.231	0.256	0.289	0.284	0.221	32.39
27)	T	2-Butanone	0.858	0.834	0.829	0.879	1.007	0.941	1.056	1.012	0.927	9.65
28)	T	cis-1,2-Dichlo...	2.978	2.591	2.666	2.515	2.813	2.533	2.805	2.711	2.701	5.88
29)	T	Diisopropyl Ether	1.207	1.167	1.148	1.039	1.138	0.993	1.133	1.149	1.122	6.26
30)	T	Ethyl Acetate	0.488	0.520	0.578	0.592	0.681	0.658	0.757	0.752	0.628	16.01
31)	T	n-Hexane	4.031	3.503	3.284	2.921	3.191	2.809	3.330	3.453	3.316	11.37

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3/17/09 3/17/09

Method Path : J:\MS16\METHODS\
Method File : R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

32)	T	Chloroform	2.755	2.668	2.481	2.409	2.569	2.347	2.599	2.505	2.542	5.28
33)	S	1,2-Dichloroet...	2.391	2.390	2.395	2.398	2.370	2.367	2.348	2.322	2.373	1.13
34)	T	Tetrahydrofuran	0.858	0.881	0.832	0.811	0.989	0.903	0.996	0.941	0.901	7.69
35)	T	Ethyl tert-But...	1.929	1.818	1.710	1.617	1.776	1.597	1.812	1.824	1.760	6.38
36)	T	1,2-Dichloroet...	2.841	2.591	2.563	2.479	2.787	2.515	2.756	2.592	2.640	5.11
37)	IR	1,4-Difluorobenzen...	----------ISTD----------									
38)	T	1,1,1-Trichlor...	0.544	0.501	0.491	0.471	0.508	0.456	0.503	0.484	0.495	5.33
39)	T	Isopropyl Acetate	0.286	0.248	0.242	0.237	0.267	0.250	0.278	0.277	0.261	7.07
40)	T	1-Butanol	0.398	0.321	0.370	0.386	0.446	0.458	0.504	0.485	0.421	14.81
41)	T	Benzene	1.485	1.287	1.244	1.184	1.292	1.154	1.287	1.278	1.276	7.74
42)	T	Carbon Tetrach...	0.346	0.303	0.344	0.358	0.416	0.389	0.434	0.419	0.376	12.13
43)	T	Cyclohexane	0.505	0.484	0.448	0.421	0.464	0.408	0.455	0.457	0.455	6.85
44)	T	tert-Amyl Meth...	1.048	0.962	0.939	0.874	0.974	0.868	0.963	0.947	0.947	6.04
45)	T	1,2-Dichloropr...	0.400	0.363	0.383	0.359	0.402	0.361	0.396	0.384	0.381	4.72
46)	T	Bromodichlorom...	0.439	0.408	0.406	0.406	0.451	0.404	0.439	0.419	0.421	4.44
47)	T	Trichloroethene	0.348	0.321	0.316	0.295	0.309	0.268	0.297	0.290	0.305	7.84
48)	T	1,4-Dioxane	0.238	0.220	0.225	0.234	0.259	0.236	0.254	0.247	0.239	5.67
49)	T	Isooctane	2.155	1.946	1.865	1.790	1.875	1.683	1.870	1.848	1.879	7.20
50)	T	Methyl Methacr...	0.103	0.097	0.104	0.105	0.122	0.112	0.126	0.125	0.112	10.04
51)	T	n-Heptane	0.361	0.348	0.326	0.327	0.345	0.307	0.336	0.328	0.335	4.94
52)	T	cis-1,3-Dichlo...	0.471	0.434	0.459	0.460	0.542	0.493	0.539	0.517	0.489	8.15
53)	T	4-Methyl-2-pen...	0.355	0.313	0.347	0.345	0.406	0.376	0.417	0.412	0.371	10.09
54)	T	trans-1,3-Dich...	0.346	0.370	0.410	0.426	0.515	0.475	0.518	0.497	0.445	14.90
55)	T	1,1,2-Trichlor...	0.298	0.268	0.283	0.273	0.297	0.268	0.290	0.283	0.283	4.24
56)	I	Chlorobenzene-d5 (...	----------ISTD----------									
57)	S	Toluene-d8 (SS2)	2.039	2.064	2.036	2.011	2.009	2.016	2.029	2.036	2.030	0.90
58)	T	Toluene	2.420	2.304	2.166	2.047	2.212	2.013	2.234	2.225	2.202	5.96
59)	T	2-Hexanone	2.706	1.943	1.796	1.713	1.870	1.754	1.941	1.882	1.950	16.23
60)	T	Dibromochlorom...	0.468	0.447	0.458	0.457	0.528	0.494	0.551	0.542	0.493	8.45
61)	T	1,2-Dibromoethane	0.548	0.513	0.539	0.507	0.577	0.529	0.587	0.579	0.547	5.65
62)	T	Butyl Acetate	2.162	1.874	1.963	1.855	2.115	2.016	2.312	2.382	2.085	9.30
63)		n-Octane	0.768	0.726	0.713	0.653	0.720	0.648	0.734	0.737	0.712	5.83
64)	T	Tetrachloroethene	0.706	0.611	0.536	0.486	0.542	0.492	0.556	0.566	0.562	12.60
65)	T	Chlorobenzene	1.400	1.407	1.331	1.280	1.381	1.255	1.385	1.379	1.352	4.25
66)	T	Ethylbenzene	2.844	2.493	2.507	2.378	2.659	2.373	2.641	2.622	2.564	6.19
67)	T	m- & p-Xylene	2.268	2.007	1.968	1.866	2.076	1.880	2.109	2.101	2.034	6.53
68)	T	Bromoform	0.354	0.335	0.364	0.368	0.442	0.431	0.495	0.500	0.411	15.75
69)	T	Styrene	1.455	1.346	1.396	1.324	1.513	1.384	1.572	1.592	1.448	7.05
70)	T	o-Xylene	2.421	2.145	2.053	1.930	2.126	1.907	2.145	2.122	2.106	7.54

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LH 03/17/09

Method Path : J:\MS16\METHODS\
Method File : R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

71)	T	n-Nonane	1.970	1.776	1.686	1.589	1.733	1.546	1.708	1.614	1.703	7.79
72)	T	1,1,2,2-Tetrac...	0.770	0.741	0.762	0.756	0.910	0.847	0.948	0.959	0.837	10.92
73)	S	Bromofluoroben...	0.652	0.649	0.643	0.645	0.646	0.659	0.669	0.677	0.655	1.91
74)	T	Cumene	3.040	2.700	2.497	2.356	2.593	2.348	2.630	2.627	2.599	8.47
75)	T	alpha-Pinene	1.215	1.133	1.121	1.091	1.229	1.121	1.249	1.238	1.174	5.44
76)	T	n-Propylbenzene	3.544	3.236	3.179	3.030	3.382	3.050	3.431	3.401	3.282	5.70
77)	T	3-Ethyltoluene	2.612	2.298	2.295	2.202	2.361	2.206	2.528	2.532	2.380	6.65
78)	T	4-Ethyltoluene	2.684	2.308	2.218	2.047	2.383	2.159	2.422	2.418	2.330	8.38
79)	T	1,3,5-Trimethy...	2.583	2.130	2.047	1.850	2.051	1.882	2.149	2.132	2.103	10.68
80)	T	alpha-Methylst...	0.991	0.973	0.947	0.959	1.090	1.022	1.163	1.173	1.040	8.73
81)	T	2-Ethyltoluene	2.824	2.331	2.358	2.204	2.444	2.243	2.547	2.530	2.435	8.21
82)	T	1,2,4-Trimethy...	2.623	2.153	2.034	1.920	2.132	1.986	2.253	2.106	2.151	10.09
83)	T	n-Decane	1.860	1.675	1.664	1.594	1.793	1.664	1.892	1.828	1.746	6.31
84)	T	Benzyl Chloride	1.646	1.353	1.382	1.425	1.809	1.813	2.080	2.041	1.694	17.08
85)	T	1,3-Dichlorobe...	1.055	0.958	0.987	0.936	1.063	1.009	1.162	1.171	1.042	8.44
86)	T	1,4-Dichlorobe...	1.172	1.040	1.035	0.983	1.104	1.049	1.191	1.201	1.097	7.54
87)	T	sec-Butylbenzene	3.018	2.704	2.624	2.524	2.827	2.606	2.955	2.903	2.770	6.54
88)	T	p-Isopropyltol...	2.540	2.381	2.334	2.274	2.500	2.349	2.668	2.440	2.436	5.29
89)	T	1,2,3-Trimethy...	2.115	1.988	2.021	1.926	2.143	2.015	2.274	2.071	2.069	5.21
90)	T	1,2-Dichlorobe...	1.023	0.888	0.918	0.880	1.007	0.958	1.104	1.051	0.979	8.25
91)	T	d-Limonene	0.959	0.877	0.873	0.854	0.962	0.873	0.965	0.856	0.902	5.55
92)	T	1,2-Dibromo-3-...	0.258	0.229	0.289	0.272	0.335	0.337	0.382	0.387	0.311	18.61
93)	T	n-Undecane	2.132	1.806	1.715	1.673	1.908	1.775	1.989	1.924	1.865	8.17
94)	T	1,2,4-Trichlor...	0.109	0.122	0.149	0.169	0.201	0.201	0.226	0.233	0.176	26.39
95)	T	Naphthalene	2.280	1.943	2.130	2.122	2.510	2.637	3.031	3.033	2.461	16.91
96)	T	n-Dodecane	2.238	1.938	1.821	1.819	2.167	2.077	2.307	2.090	2.057	8.91
97)	T	Hexachloro-1,3...	0.377	0.358	0.366	0.376	0.413	0.397	0.458	0.480	0.403	11.10
98)	T	Cyclohexanone	1.942	1.408	1.267	1.181	1.230	1.171	1.317	1.299	1.352	18.55
99)	T	tert-Butylbenzene	2.145	1.856	1.812	1.721	1.900	1.758	2.007	1.885	1.886	7.28
100)	T	n-Butylbenzene	2.423	2.092	2.160	2.138	2.382	2.203	2.450	2.390	2.280	6.37

(#) = Out of Range

3/17/09 3/17/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-03120903
20ng/L Std. ID: S20-03120904
200ng/L Std. ID: S20-03050902

Dilution Factors:		5	50	250
	Source Std.	Primary Working Standards		
Compounds	mg/m³	200ng/L	20ng/L	4ng/L
Propene	1.03	206	20.6	4.12
Dichlorodifluoromethane	1.05	210	21.0	4.20
Chloromethane	1.01	202	20.2	4.04
Freon-114	1.06	212	21.2	4.24
Vinyl Chloride	1.02	204	20.4	4.08
1,3-Butadiene	1.08	216	21.6	4.32
Bromomethane	1.03	206	20.6	4.12
Chloroethane	1.04	208	20.8	4.16
Ethanol	5.29	1058	106	21.2
Acetonitrile	1.05	210	21.0	4.20
Acrolein	1.08	216	21.6	4.32
Acetone	5.31	1062	106	21.2
Trichlorofluoromethane	1.05	210	21.0	4.20
Isopropanol	1.94	388	38.8	7.76
Acrylonitrile	1.03	206	20.6	4.12
1,1-Dichloroethene	1.10	220	22.0	4.40
tert-Butanol	2.00	400	40.0	8.00
Methylene Chloride	1.06	212	21.2	4.24
Allyl Chloride	1.08	216	21.6	4.32
Trichlorotrifluoroethane	1.10	220	22.0	4.40
Carbon Disulfide	1.04	208	20.8	4.16
trans-1,2-Dichloroethene	1.03	206	20.6	4.12
1,1-Dichloroethane	1.07	214	21.4	4.28
Methyl tert-Butyl Ether	1.06	212	21.2	4.24
Vinyl Acetate	5.05	1010	101	20.2
2-Butanone	1.08	216	21.6	4.32
cis-1,2-Dichloroethene	1.09	218	21.8	4.36
Diisopropyl Ether	1.06	212	21.2	4.24
Ethyl Acetate	2.08	416	41.6	8.32
n-Hexane	1.04	208	20.8	4.16
Chloroform	1.10	220	22.0	4.40
Tetrahydrofuran	1.07	214	21.4	4.28
Ethyl tert-Butyl Ether	1.03	206	20.6	4.12
1,2-Dichloroethane	1.06	212	21.2	4.24
1,1,1-Trichloroethane	1.05	210	21.0	4.20
Isopropyl Acetate	2.09	418	41.8	8.36
1-Butanol	2.16	432	43.2	8.64
Benzene	1.03	206	20.6	4.12
Carbon Tetrachloride	1.05	210	21.0	4.20
Cyclohexane	2.12	424	42.4	8.48
tert-Amyl Methyl Ether	1.03	206	20.6	4.12
1,2-Dichloropropane	1.05	210	21.0	4.20
Bromodichloromethane	1.05	210	21.0	4.20
Trichloroethene	1.03	206	20.6	4.12
1,4-Dioxane	1.04	208	20.8	4.16
Isooctane	1.04	208	20.8	4.16
Methyl Methacrylate	2.13	426	42.6	8.52
n-Heptane	1.04	208	20.8	4.16
cis-1,3-Dichloropropene	1.00	200	20.0	4.00
4-Methyl-2-pentanone	1.09	218	21.8	4.36
trans-1,3-Dichloropropene	1.10	220	22.0	4.40
1,1,2-Trichloroethane	1.04	208	20.8	4.16
Toluene	1.08	216	21.6	4.32
2-Hexanone	1.10	220	22.0	4.40
Dibromochloromethane	1.15	230	23.0	4.60
1,2-Dibromoethane	1.06	212	21.2	4.24
n-Butyl Acetate	1.10	220	22.0	4.40
n-Octane	1.05	210	21.0	4.20
Tetrachloroethene	1.03	206	20.6	4.12
Chlorobenzene	1.06	212	21.2	4.24
Ethylbenzene	1.05	210	21.0	4.20
m-&p-Xylene	2.08	416	41.6	8.32

Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source)							
	[redacted]	[redacted]	20	20	20	200	200	200
Injection (L):	0.025	0.05	0.025	0.050	0.25	0.125	0.25	0.50
ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.529	1.058	2.65	5.29	26.5	132	265	529
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.531	1.062	2.66	5.31	26.6	133	266	531
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.194	0.388	0.970	1.94	9.70	48.5	97.0	194
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.200	0.400	1.00	2.00	10.0	50.0	100	200
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.505	1.010	2.53	5.05	25.3	126	253	505
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.208	0.416	1.04	2.08	10.4	52.0	104	208
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.209	0.418	1.05	2.09	10.5	52.3	105	209
	0.216	0.432	1.08	2.16	10.8	54.0	108	216
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.212	0.424	1.06	2.12	10.6	53.0	106	212
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.213	0.426	1.07	2.13	10.7	53.3	107	213
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.100	0.200	0.500	1.00	5.00	25.0	50.0	100
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.115	0.230	0.575	1.15	5.75	28.8	57.5	115
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.208	0.416	1.04	2.08	10.4	52.0	104	208

3/17/09

03/17/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-03120903
20ng/L Std. ID:
200ng/L Std. ID:
Dilution Factors: 5 50 250

Compounds	Source Std. mg/m³	Primary Working Standards 200ng/L	20ng/L	4ng/L	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source) 4	4	20	20	20	200	200	200
					Injection (L):	0.025	0.050	0.025	0.05	0.25	0.125	0.25	0.50
					ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Bromoform	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
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	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
n-Nonane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
1,1,2,2-Tetrachloroethane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Cumene	1.02	204	20.4	4.08		0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
alpha-Pinene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
n-Propylbenzene	1.02	204	20.4	4.08		0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
3-Ethyltoluene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
4-Ethyltoluene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
1,3,5-Trimethylbenzene	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
alpha-Methylstyrene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
2-Ethyltoluene	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
1,2,4-Trimethylbenzene	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
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	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
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	1.02	204	20.4	4.08		0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
1,2,3-Trimethylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,2-Dichlorobenzene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
d-Limonene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
chloropropane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
n-Undecane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
1,2,4-Trichlorobenzene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
Naphthalene	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
n-Dodecane	0.94	188	18.8	3.76		0.094	0.188	0.470	0.940	4.70	23.5	47.0	94.0
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	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
Cyclohexanone	0.99	198	19.8	3.96		0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0
tert-Butylbenzene	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
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.

3/17/09
03/17/09

Calibration Status Report GCMS-16

Method Path : J:\MS16\METHODS\
Method File : R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue Mar 17 08:55:14 2009
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS16\DATA\2009_03\16\03160914.D
2	0.2	0	25	J:\MS16\DATA\2009_03\16\03160915.D
3	0.5	1	25	J:\MS16\DATA\2009_03\16\03160916.D
4	1.0	1	25	J:\MS16\DATA\2009_03\16\03160917.D
5	5.0	5	25	J:\MS16\DATA\2009_03\16\03160918.D
6	25	26	25	J:\MS16\DATA\2009_03\16\03160919.D
7	50	52	25	J:\MS16\DATA\2009_03\16\03160920.D
8	100	103	25	J:\MS16\DATA\2009_03\16\03160921.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Mar 17 08:48 2009	Mar 17 08:34 2009	16 Mar 2009 18:17
2	0.2	Mar 17 08:48 2009	Mar 17 08:41 2009	16 Mar 2009 18:58
3	0.5	Mar 17 08:48 2009	Mar 17 08:42 2009	16 Mar 2009 19:38
4	1.0	Mar 17 08:48 2009	Mar 17 08:44 2009	16 Mar 2009 20:19
5	5.0	Mar 17 08:49 2009	Mar 17 08:45 2009	16 Mar 2009 21:00
6	25	Mar 17 08:49 2009	Mar 17 08:46 2009	16 Mar 2009 21:41
7	50	Mar 17 08:49 2009	Mar 17 08:47 2009	16 Mar 2009 22:22
8	100	Mar 17 08:49 2009	Mar 17 08:34 2009	16 Mar 2009 23:03

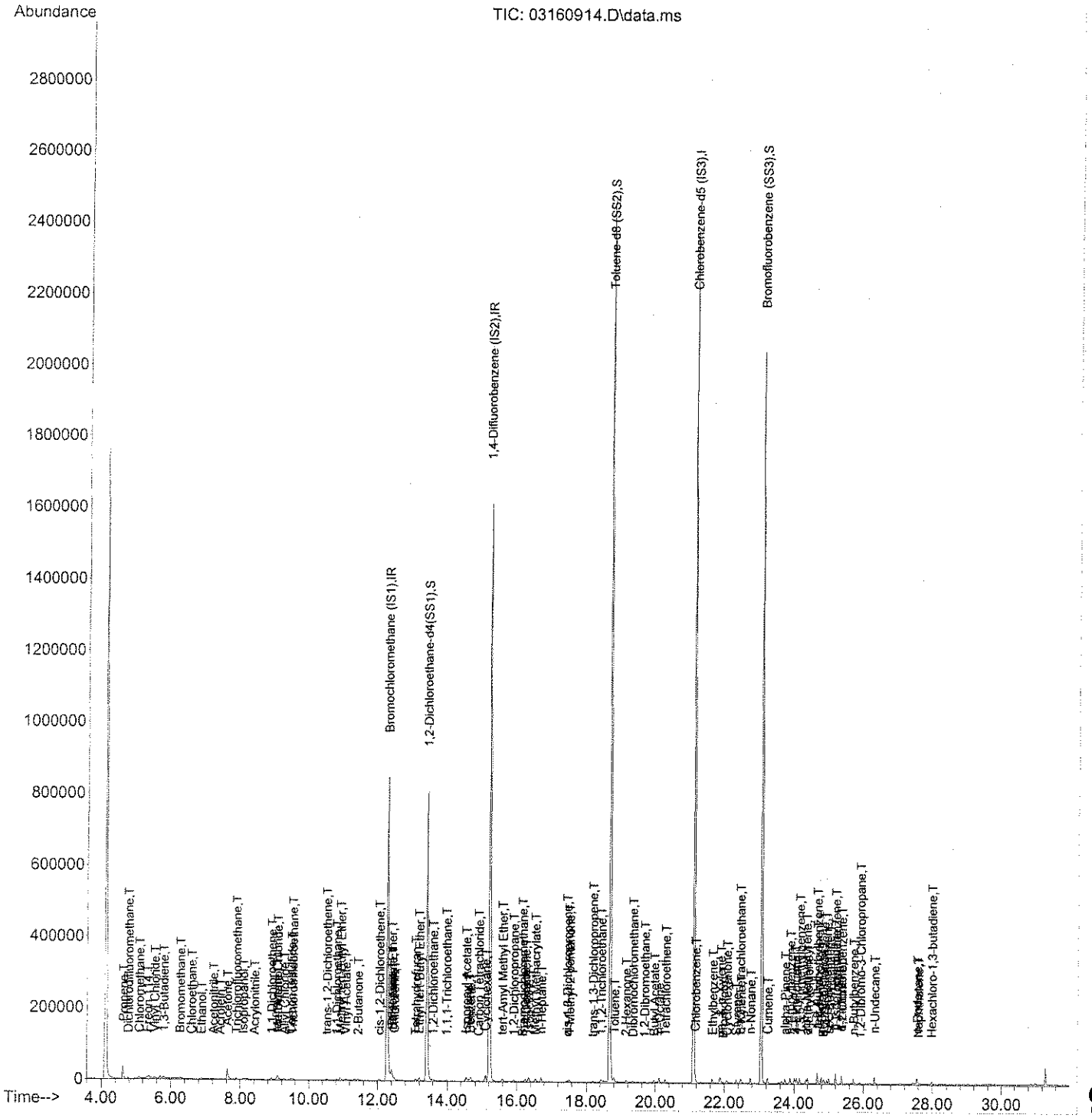
R16031609.M Tue Mar 17 09:06:09 2009

3/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:34:58 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:34:58 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	357941	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.21	114	1693316	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	964435	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.42	65	855963	37.394	ng		-0.04
Spiked Amount 25.000			Recovery = 149.56%				
57) Toluene-d8 (SS2)	18.67	98	1966454	21.657	ng		-0.01
Spiked Amount 25.000			Recovery = 86.64%				
73) Bromofluorobenzene (SS3)	23.06	174	628766	18.436	ng		0.00
Spiked Amount 25.000			Recovery = 73.76%				
Target Compounds							Qvalue
2) Propene	4.63	42	3838	0.192	ng		95
3) Dichlorodifluoromethane	4.78	85	5605	0.160	ng		95
4) Chloromethane	5.09	50	6033	0.211	ng		97
5) Freon 114	5.33	135	2191	0.132	ng		87
6) Vinyl Chloride	5.53	62	4669	0.182	ng		82
7) 1,3-Butadiene	5.79	54	4070	0.239	ng		99
8) Bromomethane	6.27	94	2051	0.155	ng		96
9) Chloroethane	6.59	64	2177	0.190	ng		86
10) Ethanol	6.87	45	11671m	0.939	ng		
11) Acetonitrile	7.21	41	6441	0.191	ng		74
12) Acrolein	7.41	56	2620	0.251	ng		89
13) Acetone	7.62	58	15657	1.105	ng		87
14) Trichlorofluoromethane	7.89	101	4240	0.139	ng		94
15) Isopropanol	8.09	45	20210	0.398	ng		61
16) Acrylonitrile	8.40	53	4456m	0.192	ng		
17) 1,1-Dichloroethene	8.90	96	2317	0.155	ng		96
18) tert-Butanol	9.07	59	19390	0.405	ng	#	72
19) Methylene Chloride	9.08	84	3471	0.193	ng	#	69
20) Allyl Chloride	9.28	41	4515	0.208	ng		87
21) Trichlorotrifluoroethane	9.53	151	1810	0.133	ng		90
22) Carbon Disulfide	9.48	76	10535	0.167	ng		99
23) trans-1,2-Dichloroethene	10.52	61	4059	0.165	ng		92
24) 1,1-Dichloroethane	10.81	63	5309	0.181	ng		99
25) Methyl tert-Butyl Ether	10.93	73	7597	0.172	ng		99
26) Vinyl Acetate	11.08	86	268	0.091	ng	#	1
27) 2-Butanone	11.43	72	1327	0.123	ng	#	1
28) cis-1,2-Dichloroethene	12.06	61	4648	0.194	ng		97
29) Diisopropyl Ether	12.41	87	1832	0.140	ng	#	80
30) Ethyl Acetate	12.43	61	1453	0.232	ng		95
31) n-Hexane	12.41	57	6003	0.203	ng		91

3/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:34:58 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.48	83	4339	0.160	ng		94
34) Tetrahydrofuran	13.09	72	1315	0.131	ng	#	83
35) Ethyl tert-Butyl Ether	13.19	87	2845	0.150	ng		94
36) 1,2-Dichloroethane	13.59	62	4312	0.188	ng		97
38) 1,1,1-Trichloroethane	13.98	97	3869	0.146	ng		98
39) Isopropyl Acetate	14.55	61	4042	0.336	ng		94
40) 1-Butanol	14.62	56	5822	0.313	ng		86
41) Benzene	14.67	78	10357	0.143	ng		98
42) Carbon Tetrachloride	14.89	117	2459	0.104	ng		94
43) Cyclohexane	15.10	84	7258	0.301	ng		90
44) tert-Amyl Methyl Ether	15.58	73	7309	0.148	ng		86
45) 1,2-Dichloropropane	15.90	63	2848	0.155	ng		99
46) Bromodichloromethane	16.16	83	3123	0.138	ng		97
47) Trichloroethene	16.25	130	2425	0.125	ng		94
48) 1,4-Dioxane	16.25	88	1675	0.120	ng	#	1
49) Isooctane	16.34	57	15178	0.185	ng		90
50) Methyl Methacrylate	16.53	100	1484	0.208	ng	#	74
51) n-Heptane	16.71	71	2544	0.142	ng		94
52) cis-1,3-Dichloropropene	17.47	75	3191	0.117	ng		89
53) 4-Methyl-2-pentanone	17.53	58	2620	0.153	ng		88
54) trans-1,3-Dichloropropene	18.18	75	2578	0.103	ng		93
55) 1,1,2-Trichloroethane	18.42	97	2099	0.123	ng		85
58) Toluene	18.80	91	10081	0.110	ng		97
59) 2-Hexanone	19.13	43	11483	0.207	ng		86
60) Dibromochloromethane	19.35	129	2077	0.092	ng		97
61) 1,2-Dibromoethane	19.68	107	2241	0.096	ng		96
62) Butyl Acetate	19.97	43	9176	0.144	ng		92
63) n-Octane	20.11	57	3110	0.148	ng		88
64) Tetrachloroethene	20.30	166	2806	0.110	ng		93
65) Chlorobenzene	21.16	112	5726	0.095	ng		91
66) Ethylbenzene	21.65	91	11519	0.113	ng		89
67) m- & p-Xylene	21.89	91	18198	0.228	ng		96
68) Bromoform	21.97	173	1463	0.070	ng		97
69) Styrene	22.34	104	6005	0.098	ng		95
70) o-Xylene	22.48	91	9807	0.120	ng		93
71) n-Nonane	22.75	43	7979	0.158	ng		97
72) 1,1,2,2-Tetrachloroethane	22.45	83	3208	0.088	ng		91
74) Cumene	23.24	105	11963	0.110	ng		100
75) alpha-Pinene	23.74	93	5155	0.110	ng		72
76) n-Propylbenzene	23.89	91	13947	0.106	ng		99
77) 3-Ethyltoluene	24.02	105	11086	0.112	ng		95
78) 4-Ethyltoluene	24.07	105	11391	0.117	ng		91
79) 1,3,5-Trimethylbenzene	24.16	105	10763	0.128	ng		92

MM 3/17/09 MM 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:34:58 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	4052	0.085	ng		89
81) 2-Ethyltoluene	24.40	105	11765	0.116	ng		97
82) 1,2,4-Trimethylbenzene	24.67	105	10624	0.118	ng		94
83) n-Decane	24.79	57	7751	0.147	ng		93
84) Benzyl Chloride	24.84	91	6986	0.095	ng		83
85) 1,3-Dichlorobenzene	24.87	146	4355	0.083	ng		96
86) 1,4-Dichlorobenzene	24.95	146	4793	0.089	ng		95
87) sec-Butylbenzene	25.01	105	12343	0.105	ng		92
88) p-Isopropyltoluene	25.20	119	9996	0.088	ng		90
89) 1,2,3-Trimethylbenzene	25.20	105	8648	0.096	ng		95
90) 1,2-Dichlorobenzene	25.37	146	4222	0.085	ng		97
91) d-Limonene	25.37	68	3923	0.112	ng		91
92) 1,2-Dibromo-3-Chloropr...	25.91	157	1076	0.062	ng	#	12
93) n-Undecane	26.32	57	8800	0.154	ng		93
94) 1,2,4-Trichlorobenzene	27.43	184	463	N.D.			
95) Naphthalene	27.59	128	8884	0.068	ng		89
96) n-Dodecane	27.56	57	8116	0.126	ng		92
97) Hexachloro-1,3-butadiene	27.98	225	1598	0.077	ng		99
98) Cyclohexanone	22.07	55	7418	0.193	ng	#	92
99) tert-Butylbenzene	24.67	119	8936	0.102	ng		96
100) n-Butylbenzene	25.71	91	10188	0.110	ng		94

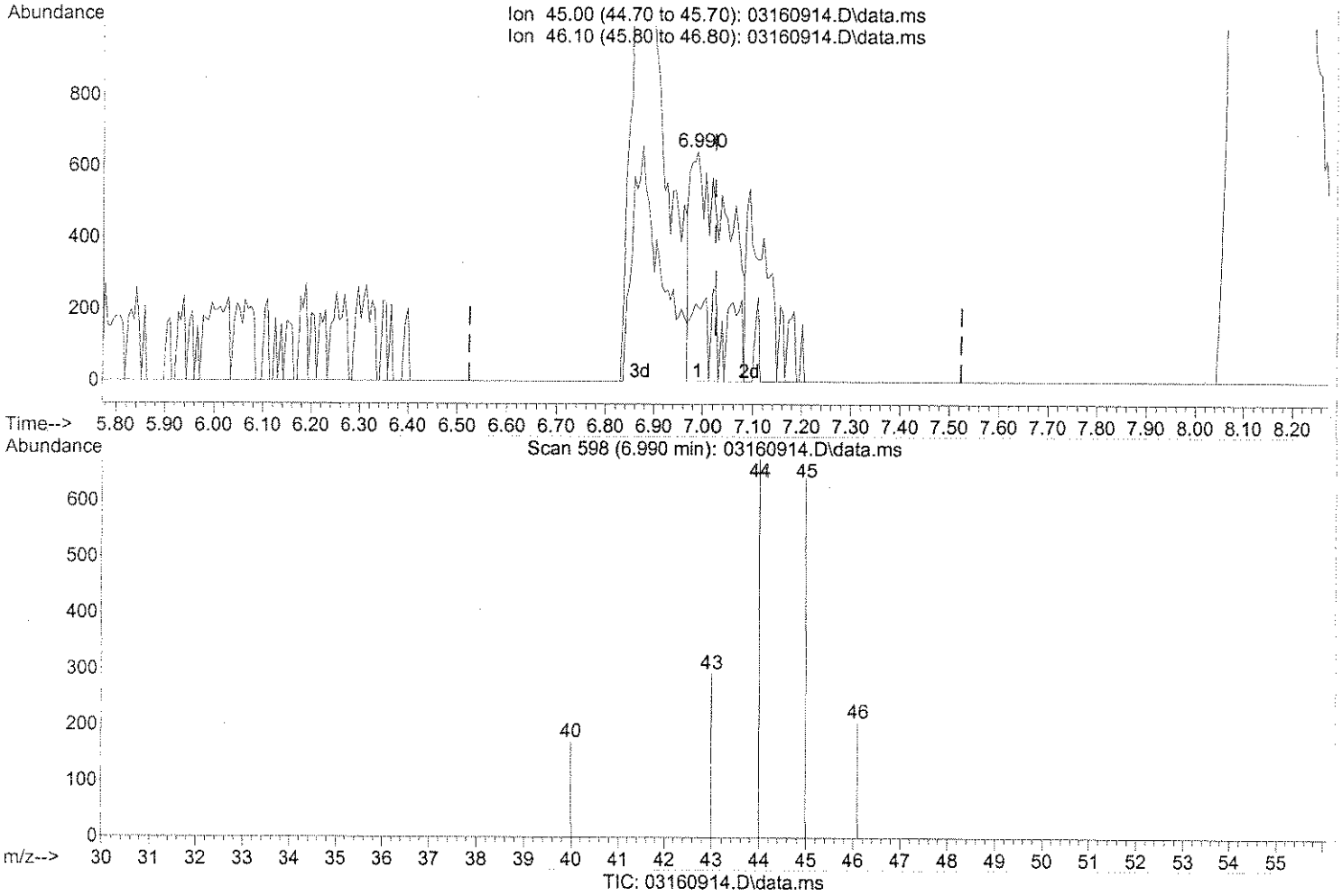
(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/17/09 03/17/09

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.990min (-0.034) 0.27ng

response 3307

SP

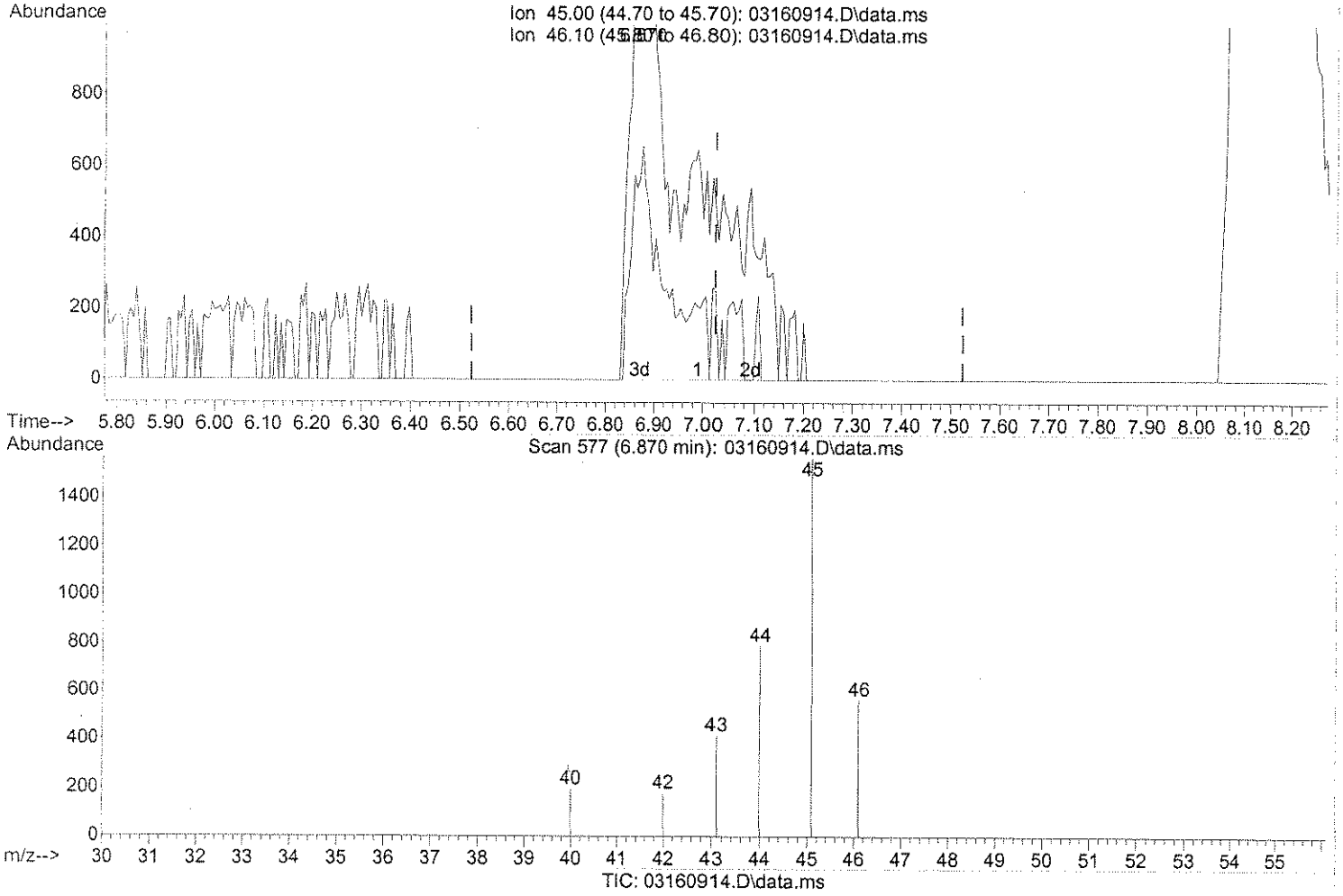
Ion	Exp%	Act%
45.00	100	100
46.10	35.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

96

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.870min (-0.154) 0.94ng m

response 11671

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SP ——→ IC
LH 03/17/09

EM 3/17/09

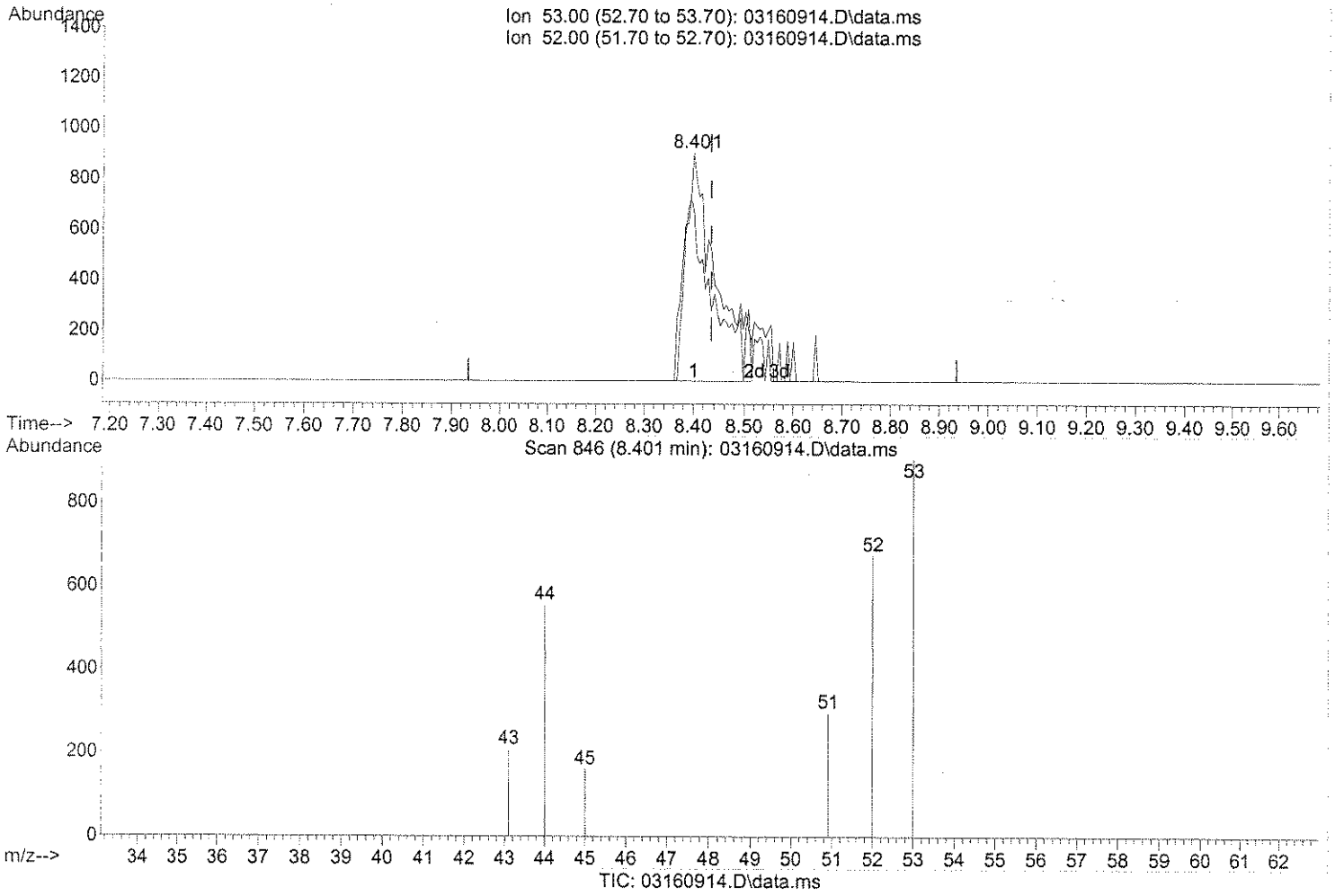
PM 3/17/09

97

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.401min (-0.034) 0.17ng

response 3950

Ion	Exp%	Act%
53.00	100	100
52.00	85.20	70.23
0.00	0.00	0.00
0.00	0.00	0.00

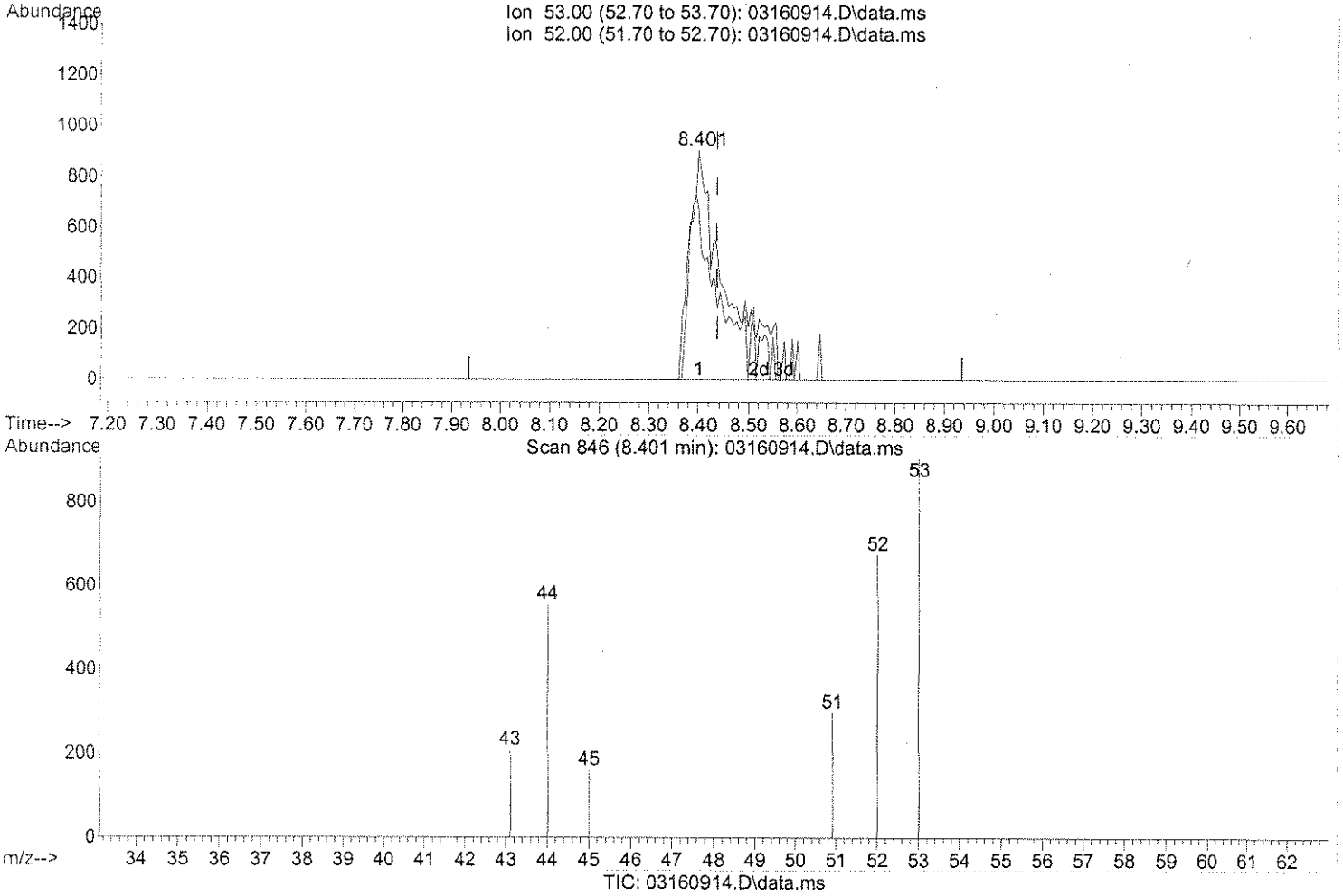
PT

98

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160914.D
Acq On : 16 Mar 2009 18:17
Operator : WA/LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.401min (-0.034) 0.19ng m

response 4456

Ion	Exp%	Act%
53.00	100	100
52.00	85.20	62.25#
0.00	0.00	0.00
0.00	0.00	0.00

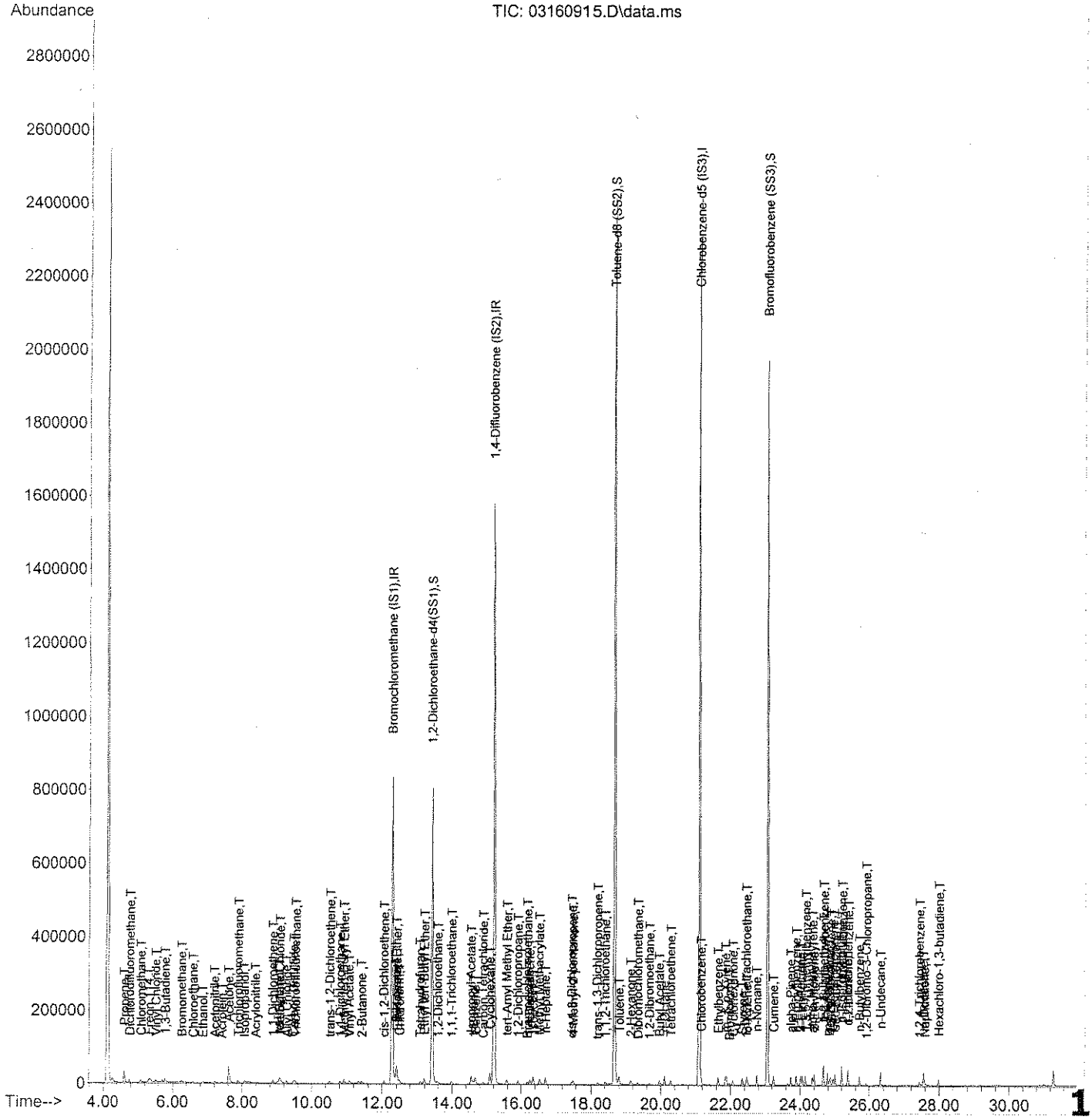
PT → LC
VM 03/17/09

Em 3/17/09

PCM 3/17/09

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:41:28 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



100

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:41:28 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	353555	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.21	114	1655482	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	934920	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.42	65	845107	37.378	ng		-0.04
Spiked Amount 25.000			Recovery = 149.52%				
57) Toluene-d8 (SS2)	18.67	98	1929926	21.926	ng		-0.01
Spiked Amount 25.000			Recovery = 87.72%				
73) Bromofluorobenzene (SS3)	23.06	174	606471	18.344	ng		0.00
Spiked Amount 25.000			Recovery = 73.36%				
Target Compounds							Qvalue
2) Propene	4.62	42	6184	0.312	ng		96
3) Dichlorodifluoromethane	4.78	85	9582	0.277	ng		98
4) Chloromethane	5.09	50	10485	0.371	ng		96
5) Freon 114	5.32	135	3979	0.242	ng		93
6) Vinyl Chloride	5.52	62	8211	0.325	ng		81
7) 1,3-Butadiene	5.79	54	6726m	0.401	ng		
8) Bromomethane	6.27	94	3778	0.288	ng		92
9) Chloroethane	6.59	64	4037	0.358	ng		95
10) Ethanol	6.86	45	16860m	1.374	ng		
11) Acetonitrile	7.21	41	10206	0.307	ng		95
12) Acrolein	7.41	56	4156	0.404	ng		99
13) Acetone	7.62	58	26320	1.881	ng	#	84
14) Trichlorofluoromethane	7.89	101	8073	0.269	ng		96
15) Isopropanol	8.07	45	32147m	0.640	ng		
16) Acrylonitrile	8.38	53	7671	0.334	ng		87
17) 1,1-Dichloroethene	8.88	96	4265	0.288	ng		93
18) tert-Butanol	9.07	59	31885	0.674	ng	#	83
19) Methylene Chloride	9.08	84	5387	0.303	ng	#	78
20) Allyl Chloride	9.28	41	7920	0.369	ng		99
21) Trichlorotrifluoroethane	9.53	151	3164	0.235	ng		91
22) Carbon Disulfide	9.48	76	16310	0.263	ng		96
23) trans-1,2-Dichloroethene	10.52	61	7566	0.312	ng		97
24) 1,1-Dichloroethane	10.81	63	9583	0.331	ng		97
25) Methyl tert-Butyl Ether	10.92	73	13402	0.308	ng		95
26) Vinyl Acetate	11.06	86	1116	0.384	ng	#	58
27) 2-Butanone	11.42	72	2547	0.238	ng	#	68
28) cis-1,2-Dichloroethene	12.06	61	7988	0.338	ng		96
29) Diisopropyl Ether	12.40	87	3498	0.271	ng	#	49
30) Ethyl Acetate	12.43	61	3060	0.495	ng	#	22
31) n-Hexane	12.41	57	10305	0.353	ng		96

3/17/09 03/17/09

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:41:28 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.49	83	8300	0.309	ng		99
34) Tetrahydrofuran	13.08	72	2665	0.269	ng		92
35) Ethyl tert-Butyl Ether	13.20	87	5295	0.282	ng		97
36) 1,2-Dichloroethane	13.59	62	7768	0.343	ng		96
38) 1,1,1-Trichloroethane	13.98	97	6972	0.269	ng		99
39) Isopropyl Acetate	14.55	61	6873	0.584	ng	#	92
40) 1-Butanol	14.62	56	9197m	0.506	ng		
41) Benzene	14.68	78	17554	0.247	ng		99
42) Carbon Tetrachloride	14.90	117	4215	0.183	ng		99
43) Cyclohexane	15.10	84	13582	0.576	ng	#	84
44) tert-Amyl Methyl Ether	15.58	73	13127	0.271	ng		96
45) 1,2-Dichloropropane	15.90	63	5052	0.281	ng		97
46) Bromodichloromethane	16.17	83	5675	0.257	ng		98
47) Trichloroethene	16.25	130	4381	0.232	ng		93
48) 1,4-Dioxane	16.24	88	3027	0.221	ng		97
49) Isooctane	16.34	57	26810	0.333	ng		93
50) Methyl Methacrylate	16.53	100	2726	0.391	ng	#	57
51) n-Heptane	16.71	71	4800	0.273	ng		87
52) cis-1,3-Dichloropropene	17.47	75	5747	0.216	ng		97
53) 4-Methyl-2-pentanone	17.52	58	4523	0.271	ng		93
54) trans-1,3-Dichloropropene	18.18	75	5392	0.220	ng		92
55) 1,1,2-Trichloroethane	18.41	97	3697	0.222	ng		94
58) Toluene	18.80	91	18608	0.210	ng		99
59) 2-Hexanone	19.14	43	15986	0.297	ng		98
60) Dibromochloromethane	19.35	129	3847	0.175	ng		98
61) 1,2-Dibromoethane	19.68	107	4070	0.180	ng		95
62) Butyl Acetate	19.97	43	15421	0.250	ng		95
63) n-Octane	20.11	57	5702	0.280	ng		89
64) Tetrachloroethene	20.30	166	4710	0.190	ng		98
65) Chlorobenzene	21.17	112	11152	0.190	ng		98
66) Ethylbenzene	21.65	91	19577	0.198	ng		99
67) m- & p-Xylene	21.87	91	31227	0.403	ng		96
68) Bromoform	21.97	173	2681	0.132	ng		94
69) Styrene	22.34	104	10773	0.181	ng		94
70) o-Xylene	22.48	91	16846	0.212	ng		92
71) n-Nonane	22.75	43	13949	0.284	ng		97
72) 1,1,2,2-Tetrachloroethane	22.45	83	5988	0.170	ng		100
74) Cumene	23.24	105	20595	0.196	ng		99
75) alpha-Pinene	23.74	93	9324	0.206	ng		89
76) n-Propylbenzene	23.89	91	24688	0.194	ng		99
77) 3-Ethyltoluene	24.01	105	18910	0.197	ng		99
78) 4-Ethyltoluene	24.07	105	18989	0.202	ng		97
79) 1,3,5-Trimethylbenzene	24.16	105	17209	0.212	ng		95

03/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:41:28 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

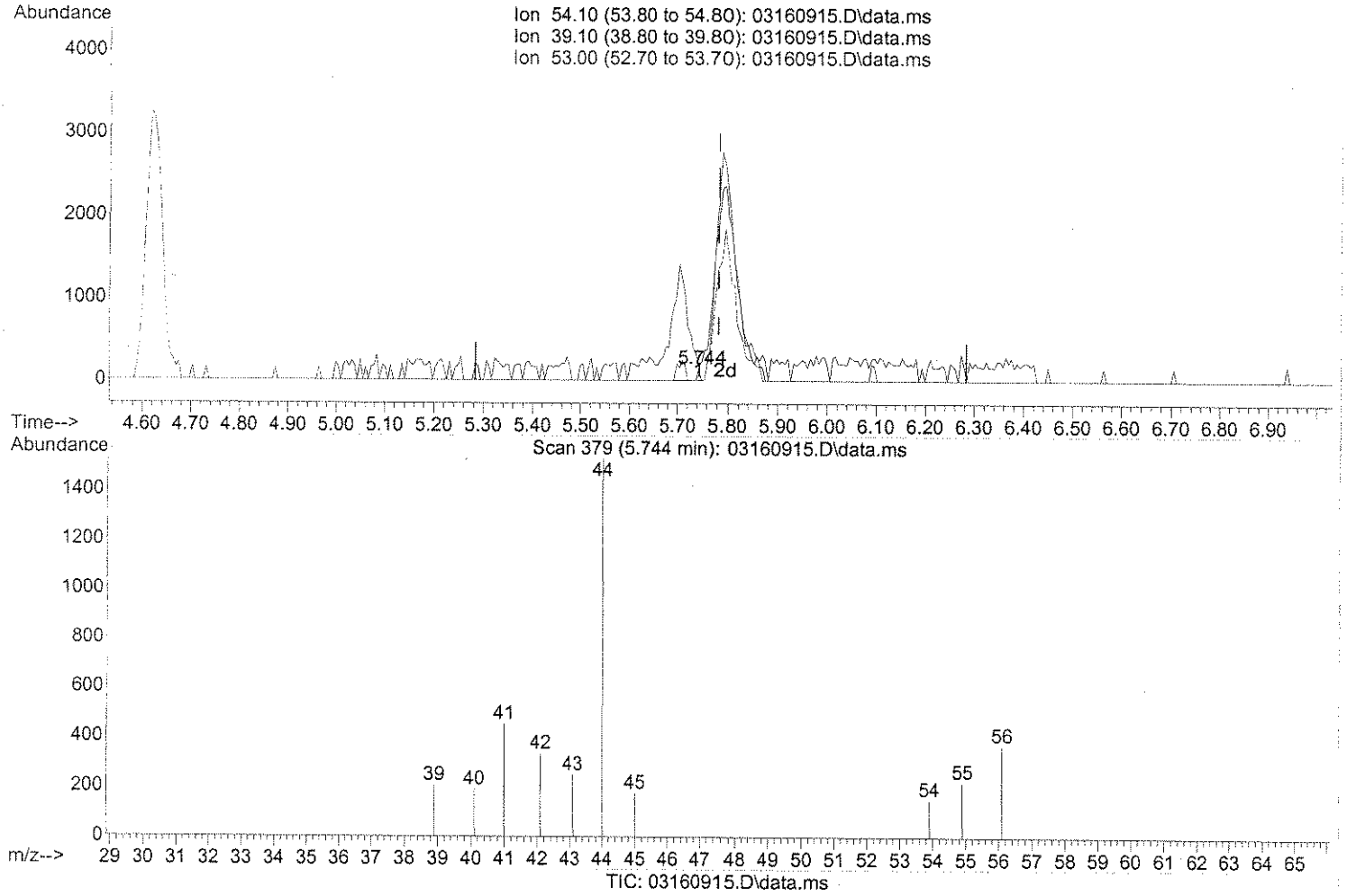
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	7716	0.166	ng		98
81) 2-Ethyltoluene	24.40	105	18828	0.191	ng		99
82) 1,2,4-Trimethylbenzene	24.67	105	16909	0.194	ng		97
83) n-Decane	24.79	57	13530	0.264	ng		91
84) Benzyl Chloride	24.84	91	11130	0.157	ng		91
85) 1,3-Dichlorobenzene	24.87	146	7663	0.150	ng		98
86) 1,4-Dichlorobenzene	24.95	146	8247	0.158	ng		99
87) sec-Butylbenzene	25.01	105	21437	0.188	ng		94
88) p-Isopropyltoluene	25.20	119	18166	0.164	ng		94
89) 1,2,3-Trimethylbenzene	25.20	105	15762	0.181	ng		99
90) 1,2-Dichlorobenzene	25.38	146	7109	0.147	ng		96
91) d-Limonene	25.38	68	6952	0.205	ng		96
92) 1,2-Dibromo-3-Chloropr...	25.91	157	1853	0.111	ng	#	38
93) n-Undecane	26.32	57	14452	0.261	ng		92
94) 1,2,4-Trichlorobenzene	27.43	184	1007	0.099	ng	#	78
95) Naphthalene	27.59	128	14678	0.117	ng		94
96) n-Dodecane	27.56	57	13625	0.218	ng		91
97) Hexachloro-1,3-butadiene	27.99	225	2944	0.146	ng		95
98) Cyclohexanone	22.08	55	10429	0.279	ng	#	93
99) tert-Butylbenzene	24.67	119	14996	0.177	ng		98
100) n-Butylbenzene	25.71	91	17057	0.189	ng		97

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:41 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(7) 1,3-Butadiene (T)

5.744min (-0.040) 0.00ng

response 52

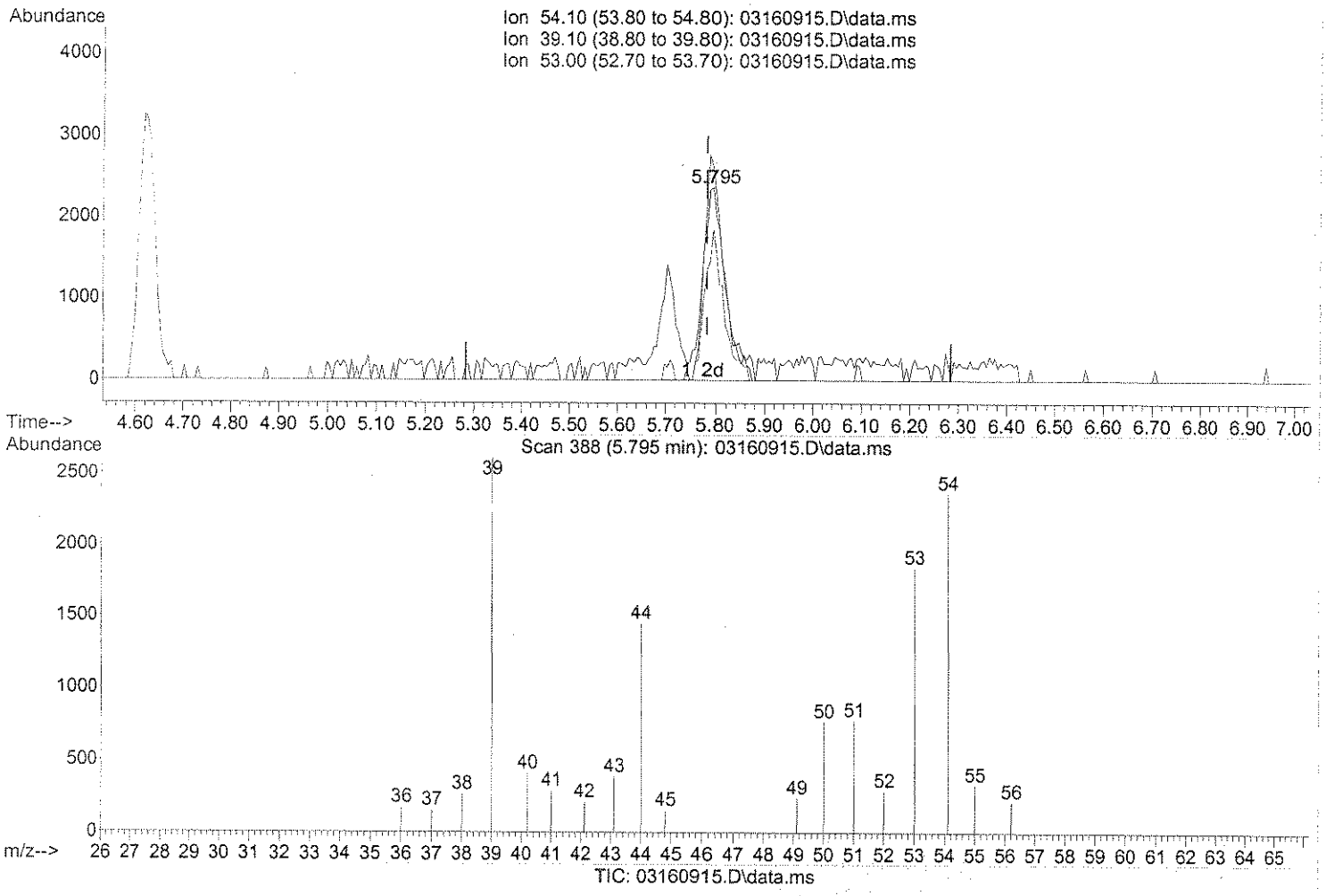
Ion	Exp%	Act%
54.10	100	100
39.10	100.70	0.00#
53.00	67.50	0.00#
0.00	0.00	0.00

RT

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:41 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(7) 1,3-Butadiene (T)

5.795min (+0.011) 0.40ng m

response 6726

Ion	Exp%	Act%
54.10	100	100
39.10	100.70	0.00#
53.00	67.50	0.00#
0.00	0.00	0.00

RT → IC
LH 03/17/09

Ben 3/17/09

RSH 3/17/09

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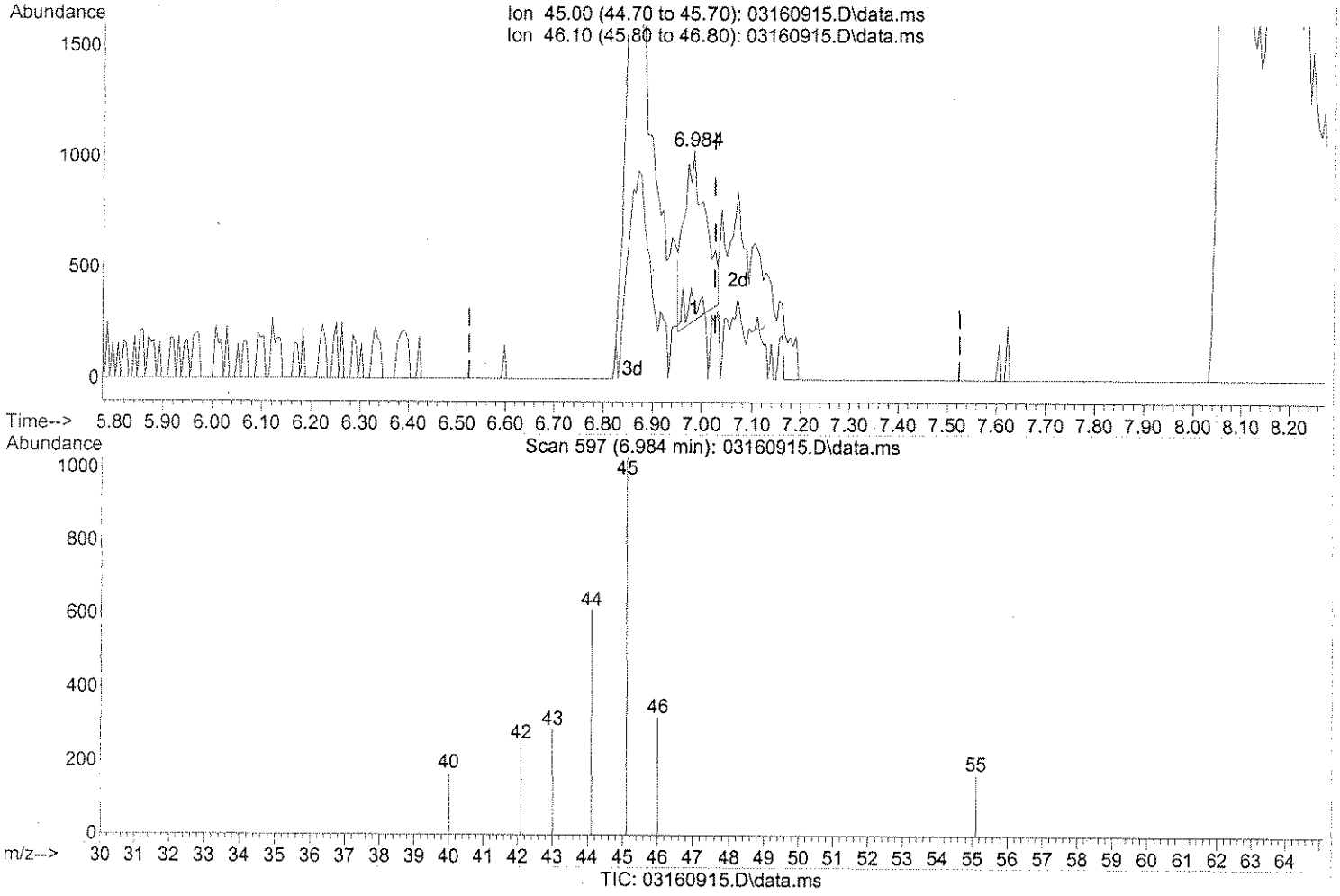
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:41 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.984min (-0.040) 0.18ng

response 2255

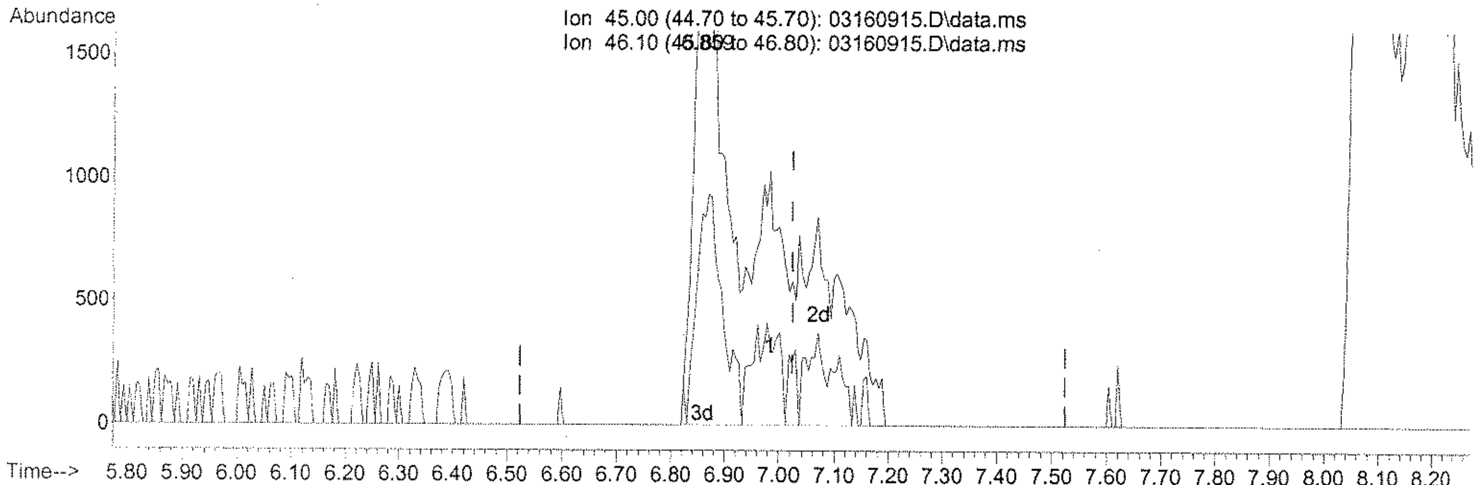
Ion	Exp%	Act%
45.00	100	100
46.10	35.10	60.00#
0.00	0.00	0.00
0.00	0.00	0.00

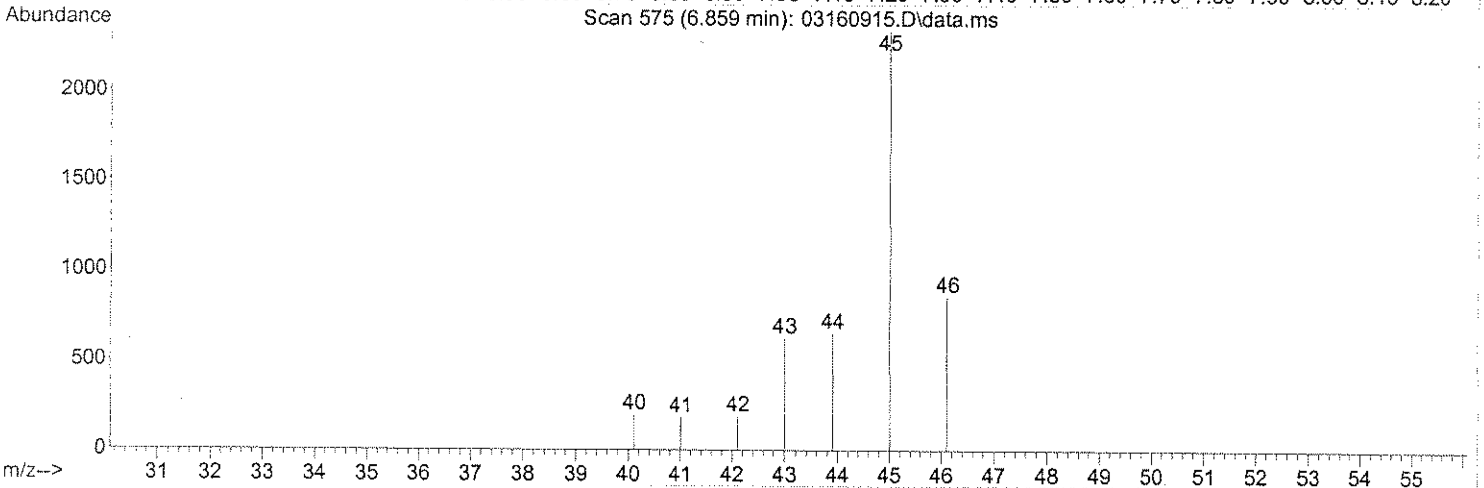
SP

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:39:33 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration





TIC: 03160915.D\data.ms

(10) Ethanol (T)

6.859min (-0.165) 1.37ng m

response 16860

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	8.02#
0.00	0.00	0.00
0.00	0.00	0.00

SP ⟶ IC

LH 03/17/09

Em 3/17/09

[initials] 3/17/09

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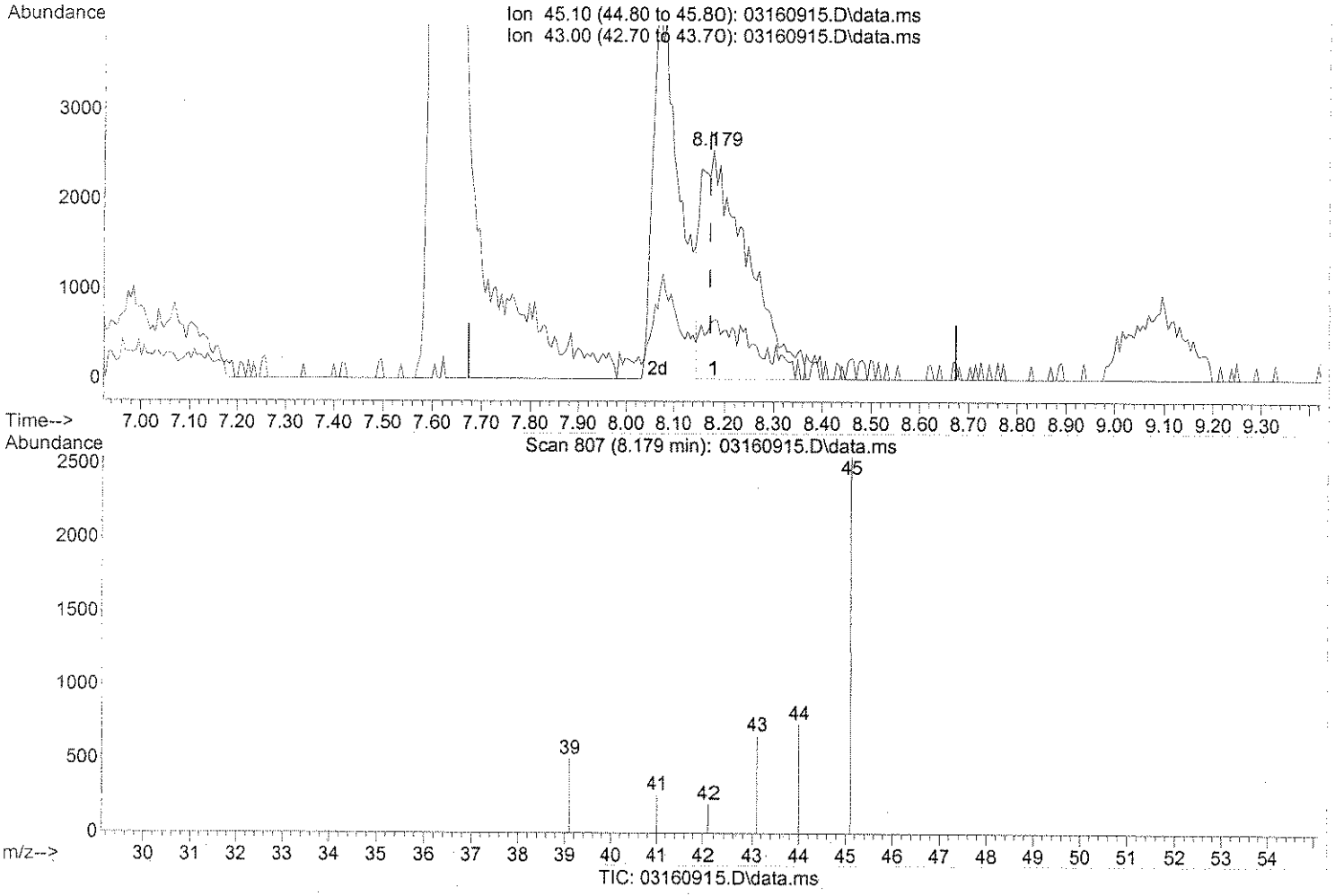
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:33:41 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.179min (+0.006) 0.32ng

response 16117

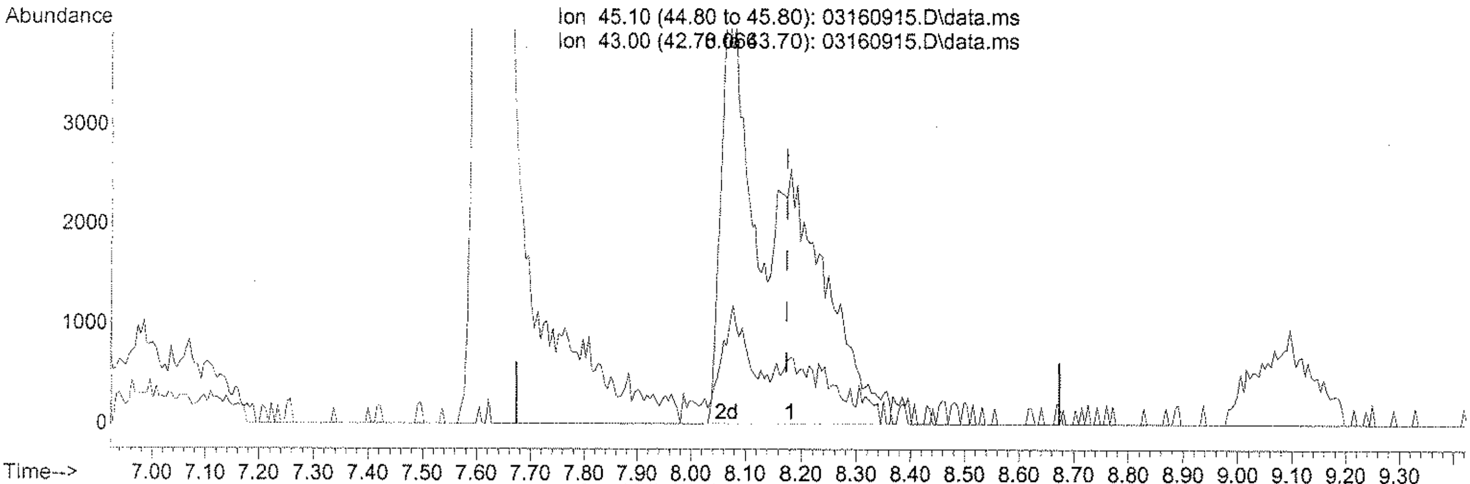
Ion	Exp%	Act%
45.10	100	100
43.00	17.10	9.64
0.00	0.00	0.00
0.00	0.00	0.00

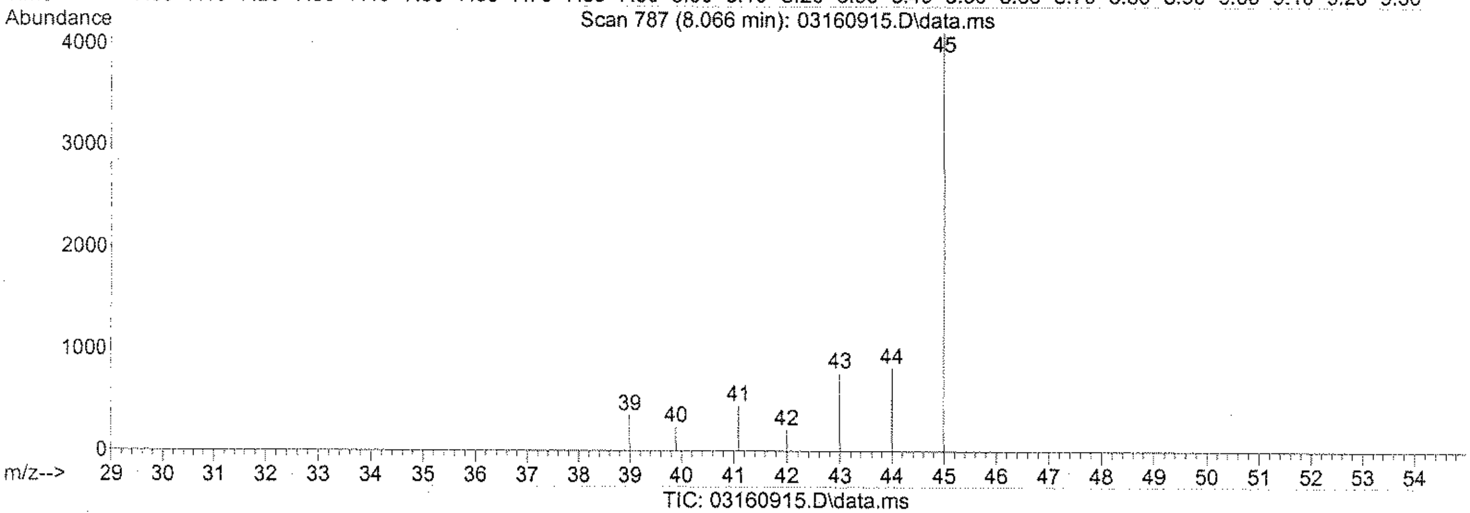
SP

Quantitation Report (Qedit)

```
Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On    : 16 Mar 2009  18:58
Operator  : WA/LH
Sample    : 0.2ng TO-15 ICAL STD
Misc      : S20-02230901/S20-03120903
ALS Vial  : 6   Sample Multiplier: 1

Quant Time: Mar 17 08:33:41 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title  : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration
```





(15) Isopropanol (T)

8.066min (-0.108) 0.64ng m

response 32147

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	4.83
0.00	0.00	0.00
0.00	0.00	0.00

SP ⟶ IC
LH 03/17/09

Em 3/17/09

pdt 3/17/09

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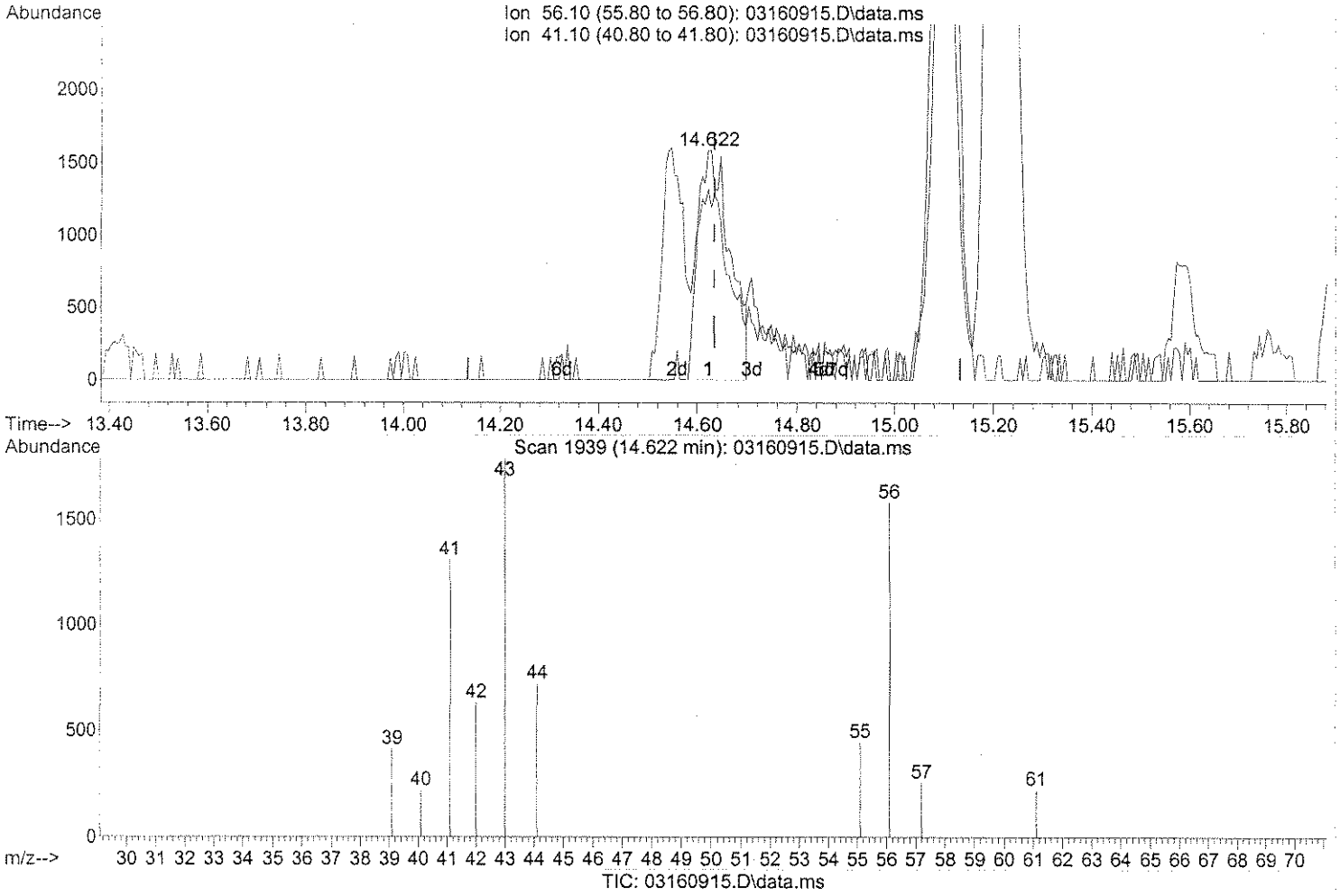
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:39:33 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(40) 1-Butanol (T)

14.622min (-0.011) 0.38ng

response 6821

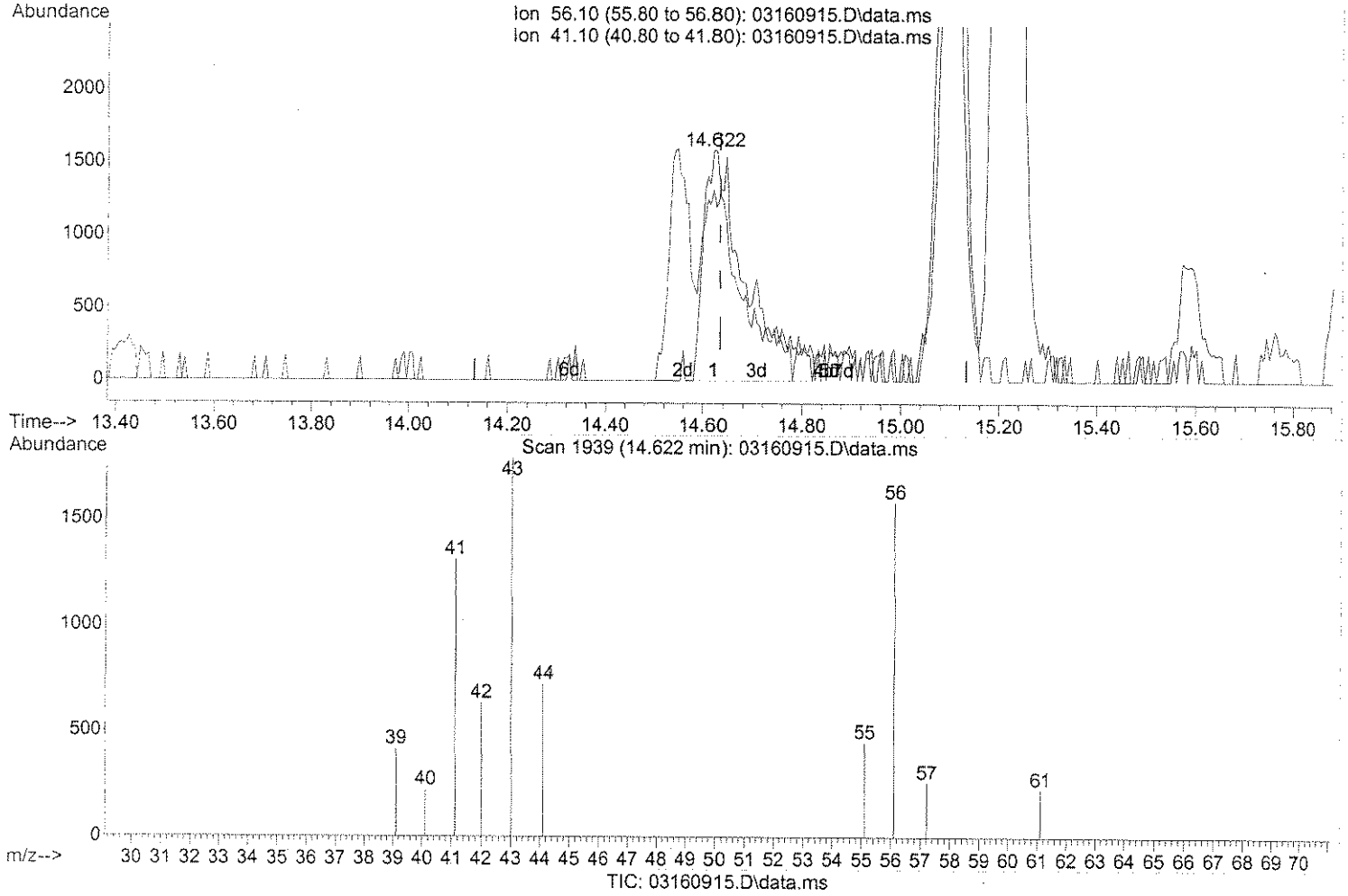
Ion	Exp%	Act%
56.10	100	100
41.10	85.80	105.89#
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160915.D
Acq On : 16 Mar 2009 18:58
Operator : WA/LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120903
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 17 08:39:33 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(40) 1-Butanol (T)

14.622min (-0.011) 0.51ng m

response 9197

Ion	Exp%	Act%
56.10	100	100
41.10	85.80	78.54
0.00	0.00	0.00
0.00	0.00	0.00

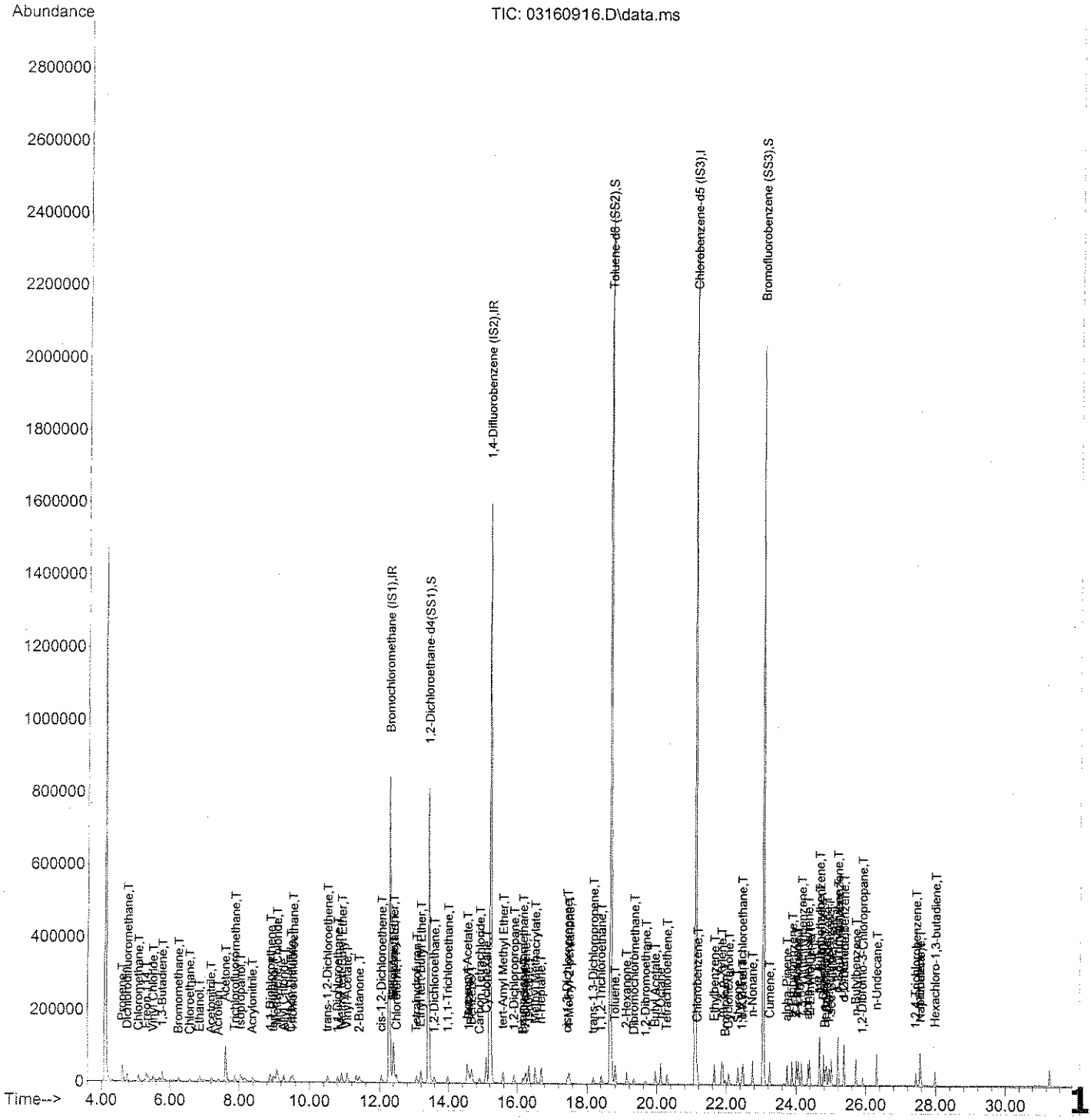
SR ⟶ IC
LH 03/17/09
3/17/09

3/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:42:57 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:42:57 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	355827	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.21	114	1667914	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	957563	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.42	65	852368	37.458	ng		-0.04
Spiked Amount 25.000			Recovery = 149.84%				
57) Toluene-d8 (SS2)	18.67	98	1949206	21.621	ng		-0.01
Spiked Amount 25.000			Recovery = 86.48%				
73) Bromofluorobenzene (SS3)	23.06	174	615423	18.174	ng		0.00
Spiked Amount 25.000			Recovery = 72.68%				
Target Compounds							Qvalue
2) Propene	4.61	42	15456	0.776	ng		89
3) Dichlorodifluoromethane	4.76	85	24342	0.700	ng		99
4) Chloromethane	5.08	50	25813	0.908	ng		100
5) Freon 114	5.32	135	9644	0.583	ng		86
6) Vinyl Chloride	5.52	62	20132	0.791	ng		85
7) 1,3-Butadiene	5.78	54	17312	1.025	ng		99
8) Bromomethane	6.26	94	9239	0.700	ng		99
9) Chloroethane	6.59	64	9545	0.840	ng		97
10) Ethanol	6.86	45	50643m	4.100	ng		
11) Acetonitrile	7.19	41	27099	0.810	ng		87
12) Acrolein	7.40	56	8705	0.840	ng		86
13) Acetone	7.60	58	53779	3.818	ng	#	82
14) Trichlorofluoromethane	7.88	101	19364	0.640	ng		94
15) Isopropanol	8.05	45	82153m	1.626	ng		
16) Acrylonitrile	8.38	53	19688m	0.852	ng		
17) 1,1-Dichloroethene	8.89	96	10649	0.715	ng		91
18) tert-Butanol	8.98	59	79664m	1.672	ng		
19) Methylene Chloride	9.08	84	11484	0.643	ng	#	77
20) Allyl Chloride	9.27	41	18997	0.879	ng		94
21) Trichlorotrifluoroethane	9.53	151	7594	0.560	ng		94
22) Carbon Disulfide	9.48	76	37348	0.597	ng		98
23) trans-1,2-Dichloroethene	10.51	61	19299	0.791	ng		99
24) 1,1-Dichloroethane	10.80	63	23786	0.817	ng		99
25) Methyl tert-Butyl Ether	10.92	73	31522	0.719	ng		94
26) Vinyl Acetate	11.07	86	4253	1.456	ng	#	84
27) 2-Butanone	11.41	72	6371	0.592	ng	#	68
28) cis-1,2-Dichloroethene	12.05	61	20679	0.869	ng		99
29) Diisopropyl Ether	12.40	87	8663	0.666	ng	#	54
30) Ethyl Acetate	12.40	61	8554	1.376	ng		85
31) n-Hexane	12.41	57	24306	0.827	ng		9

3/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:42:57 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.49	83	19421	0.719	ng		100
34) Tetrahydrofuran	13.07	72	6333	0.636	ng	#	81
35) Ethyl tert-Butyl Ether	13.19	87	12537	0.664	ng		95
36) 1,2-Dichloroethane	13.59	62	19332	0.849	ng		99
38) 1,1,1-Trichloroethane	13.98	97	17207	0.658	ng		97
39) Isopropyl Acetate	14.54	61	16927	1.429	ng		96
40) 1-Butanol	14.59	56	26693	1.457	ng	#	60
41) Benzene	14.67	78	42743	0.598	ng		99
42) Carbon Tetrachloride	14.91	117	12049	0.519	ng		98
43) Cyclohexane	15.10	84	31704	1.334	ng	#	85
44) tert-Amyl Methyl Ether	15.59	73	32263	0.662	ng		97
45) 1,2-Dichloropropane	15.91	63	13430	0.742	ng		99
46) Bromodichloromethane	16.17	83	14224	0.640	ng		100
47) Trichloroethene	16.25	130	10867	0.571	ng		99
48) 1,4-Dioxane	16.22	88	7802	0.565	ng		96
49) Isooctane	16.34	57	64704	0.799	ng		97
50) Methyl Methacrylate	16.53	100	7457	1.062	ng	#	75
51) n-Heptane	16.70	71	11318	0.640	ng		90
52) cis-1,3-Dichloropropene	17.46	75	15304	0.572	ng		99
53) 4-Methyl-2-pentanone	17.51	58	12635	0.751	ng		93
54) trans-1,3-Dichloropropene	18.18	75	15049	0.608	ng		93
55) 1,1,2-Trichloroethane	18.41	97	9811	0.586	ng		99
58) Toluene	18.80	91	44804	0.493	ng		99
59) 2-Hexanone	19.13	43	37825	0.686	ng		99
60) Dibromochloromethane	19.35	129	10094	0.449	ng		97
61) 1,2-Dibromoethane	19.68	107	10941	0.473	ng		97
62) Butyl Acetate	19.95	43	41355	0.654	ng		95
63) n-Octane	20.11	57	14335	0.686	ng		92
64) Tetrachloroethene	20.29	166	10571	0.417	ng		94
65) Chlorobenzene	21.17	112	27025	0.449	ng		97
66) Ethylbenzene	21.65	91	50404	0.498	ng		96
67) m- & p-Xylene	21.86	91	78375	0.987	ng		95
68) Bromoform	21.96	173	7465	0.360	ng		98
69) Styrene	22.33	104	28603	0.469	ng		95
70) o-Xylene	22.48	91	41293	0.508	ng		94
71) n-Nonane	22.75	43	33901	0.674	ng		95
72) 1,1,2,2-Tetrachloroethane	22.45	83	15768	0.437	ng		99
74) Cumene	23.24	105	48774	0.454	ng		98
75) alpha-Pinene	23.74	93	23612	0.510	ng		95
76) n-Propylbenzene	23.88	91	62109	0.476	ng		96
77) 3-Ethyltoluene	24.01	105	48347	0.491	ng		99
78) 4-Ethyltoluene	24.06	105	46733	0.484	ng		100
79) 1,3,5-Trimethylbenzene	24.16	105	42348	0.509	ng		9

3/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:42:57 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

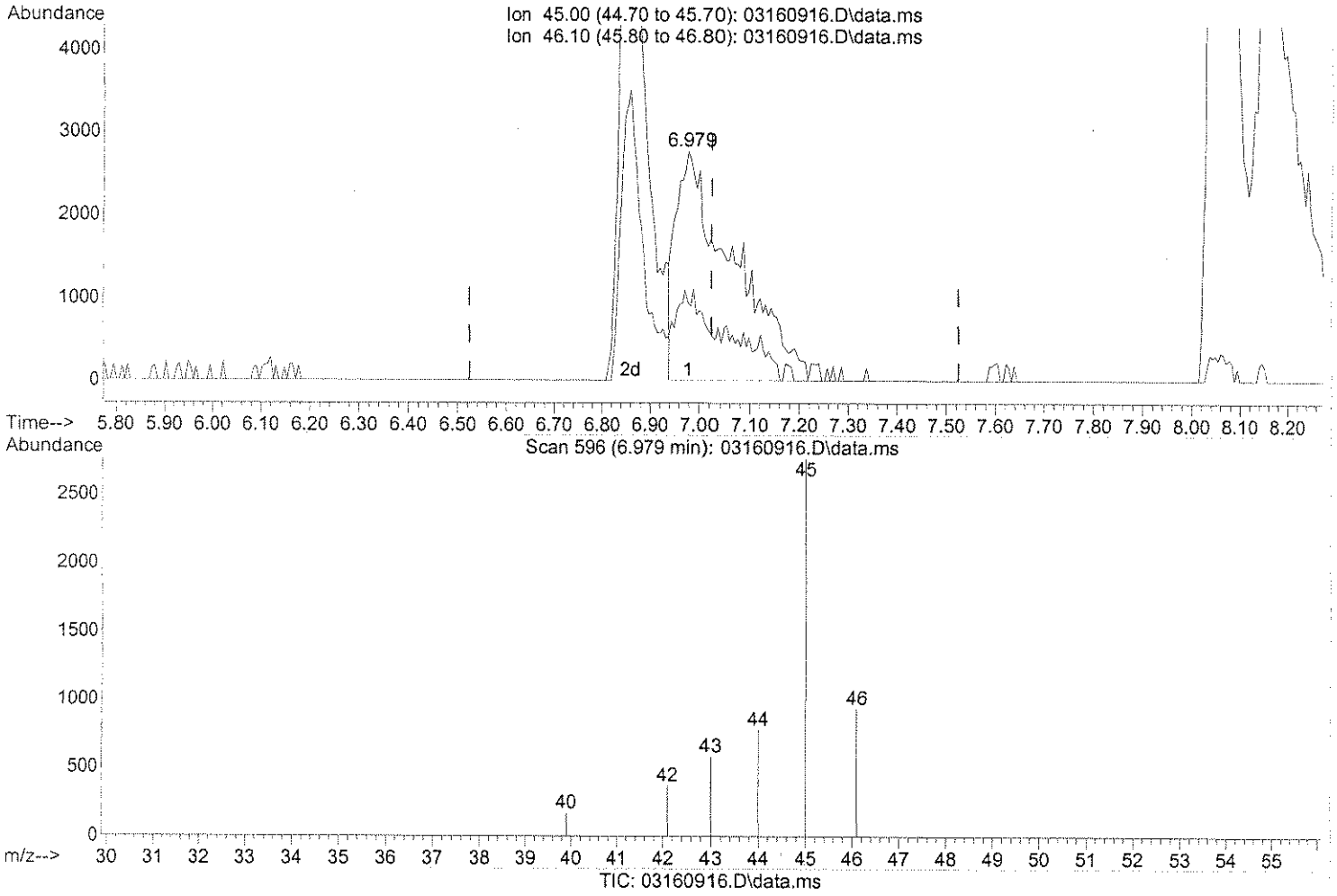
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	19222	0.405	ng		92
81) 2-Ethyltoluene	24.40	105	48773	0.483	ng		99
82) 1,2,4-Trimethylbenzene	24.67	105	40909	0.458	ng		100
83) n-Decane	24.79	57	34407	0.655	ng		94
84) Benzyl Chloride	24.84	91	29106	0.401	ng		94
85) 1,3-Dichlorobenzene	24.87	146	20221	0.388	ng		99
86) 1,4-Dichlorobenzene	24.95	146	21018	0.393	ng		100
87) sec-Butylbenzene	25.01	105	53266	0.457	ng		96
88) p-Isopropyltoluene	25.20	119	45590	0.403	ng		95
89) 1,2,3-Trimethylbenzene	25.20	105	41023	0.459	ng		97
90) 1,2-Dichlorobenzene	25.37	146	18812	0.381	ng		99
91) d-Limonene	25.38	68	17727	0.511	ng		97
92) 1,2-Dibromo-3-Chloropr...	25.90	157	5978	0.349	ng	#	72
93) n-Undecane	26.32	57	35142	0.620	ng		90
94) 1,2,4-Trichlorobenzene	27.43	184	3138	0.301	ng	#	90
95) Naphthalene	27.57	128	41192	0.320	ng		96
96) n-Dodecane	27.56	57	32784	0.513	ng		89
97) Hexachloro-1,3-butadiene	27.99	225	7704	0.372	ng		98
98) Cyclohexanone	22.07	55	24016	0.628	ng		95
99) tert-Butylbenzene	24.67	119	37484	0.433	ng		98
100) n-Butylbenzene	25.71	91	45098	0.489	ng		98

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.979min (-0.046) 1.77ng

response 21877

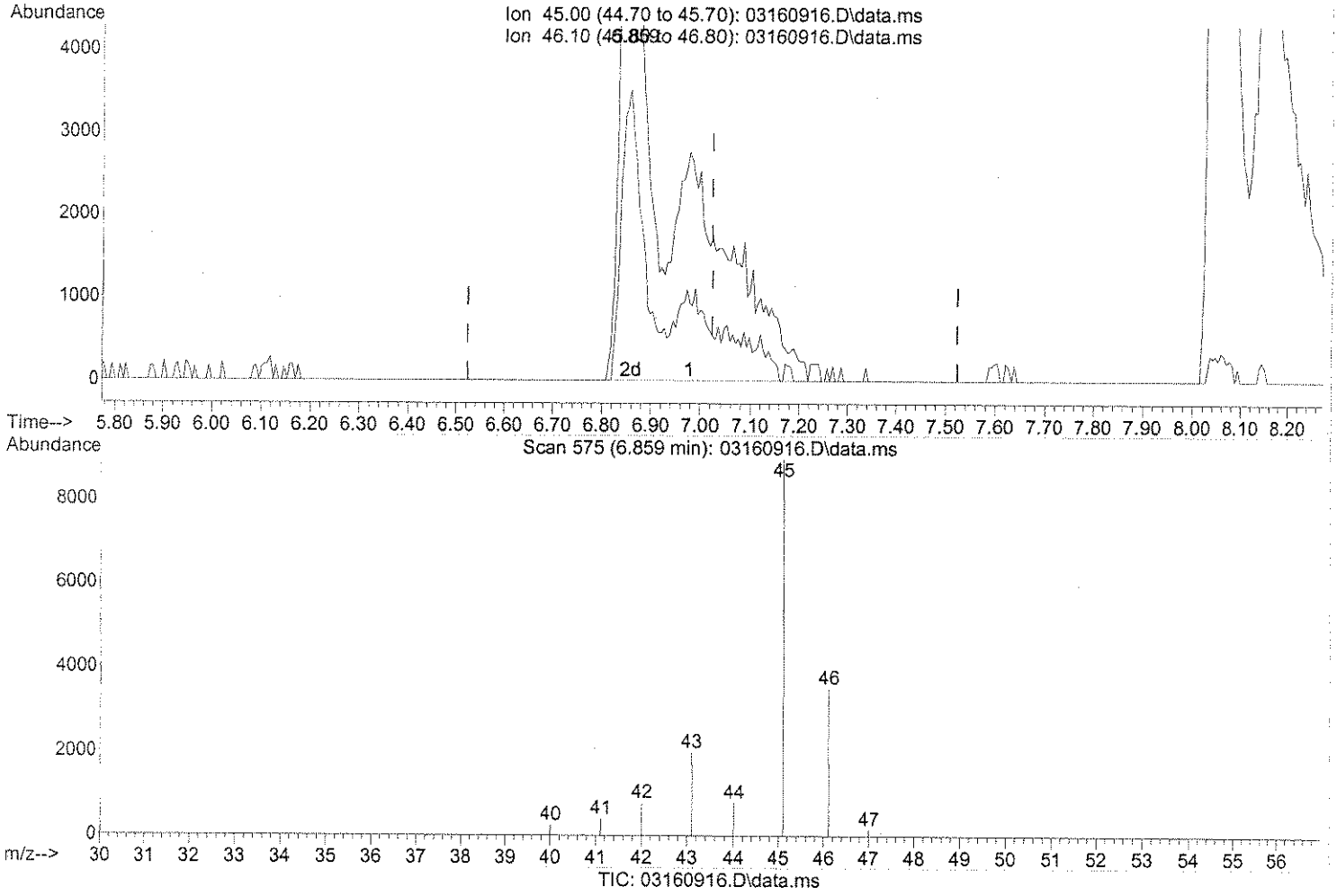
SP

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	30.97
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.859min (-0.165) 4.10ng m

response 50643

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	13.38#
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC
LH 03/17/09

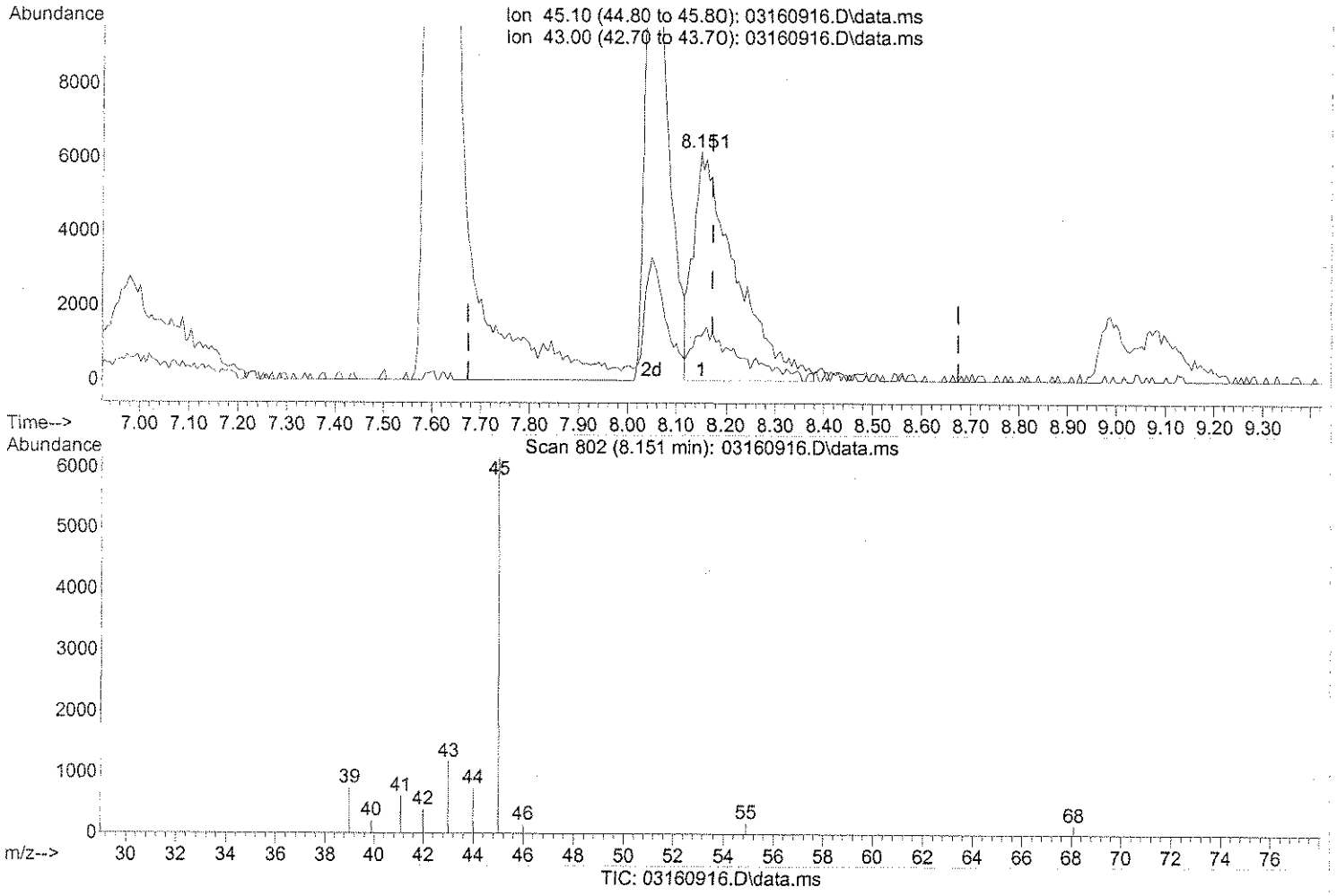
3/17/09

3/17/09

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.151min (-0.023) 0.72ng

response 36354

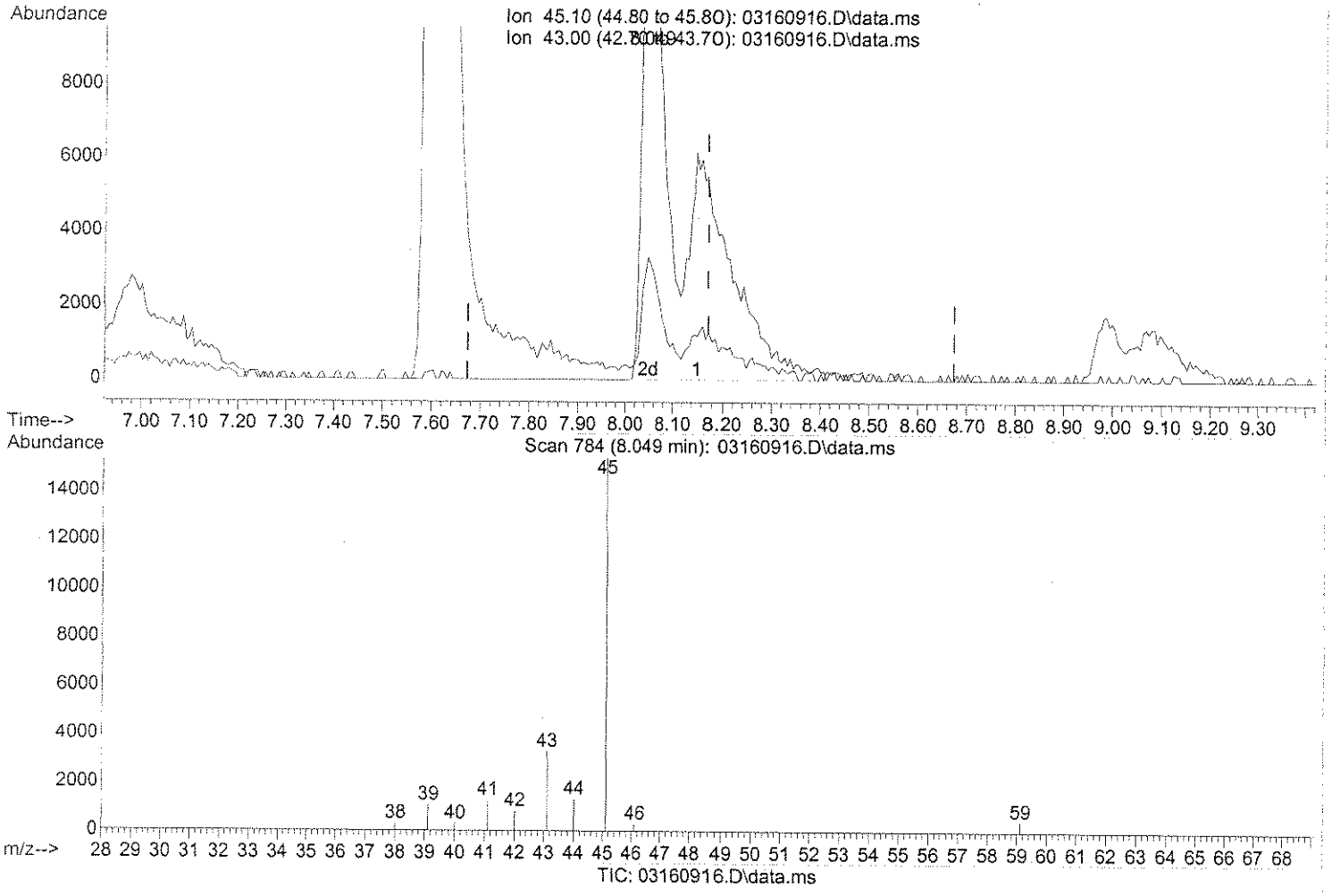
Ion	Exp%	Act%
45.10	100	100
43.00	17.10	16.73
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.049min (-0.125) 1.63ng m

response 82153

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	7.40
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC
LH 03/17/09

Em 3/17/09

3/17/09

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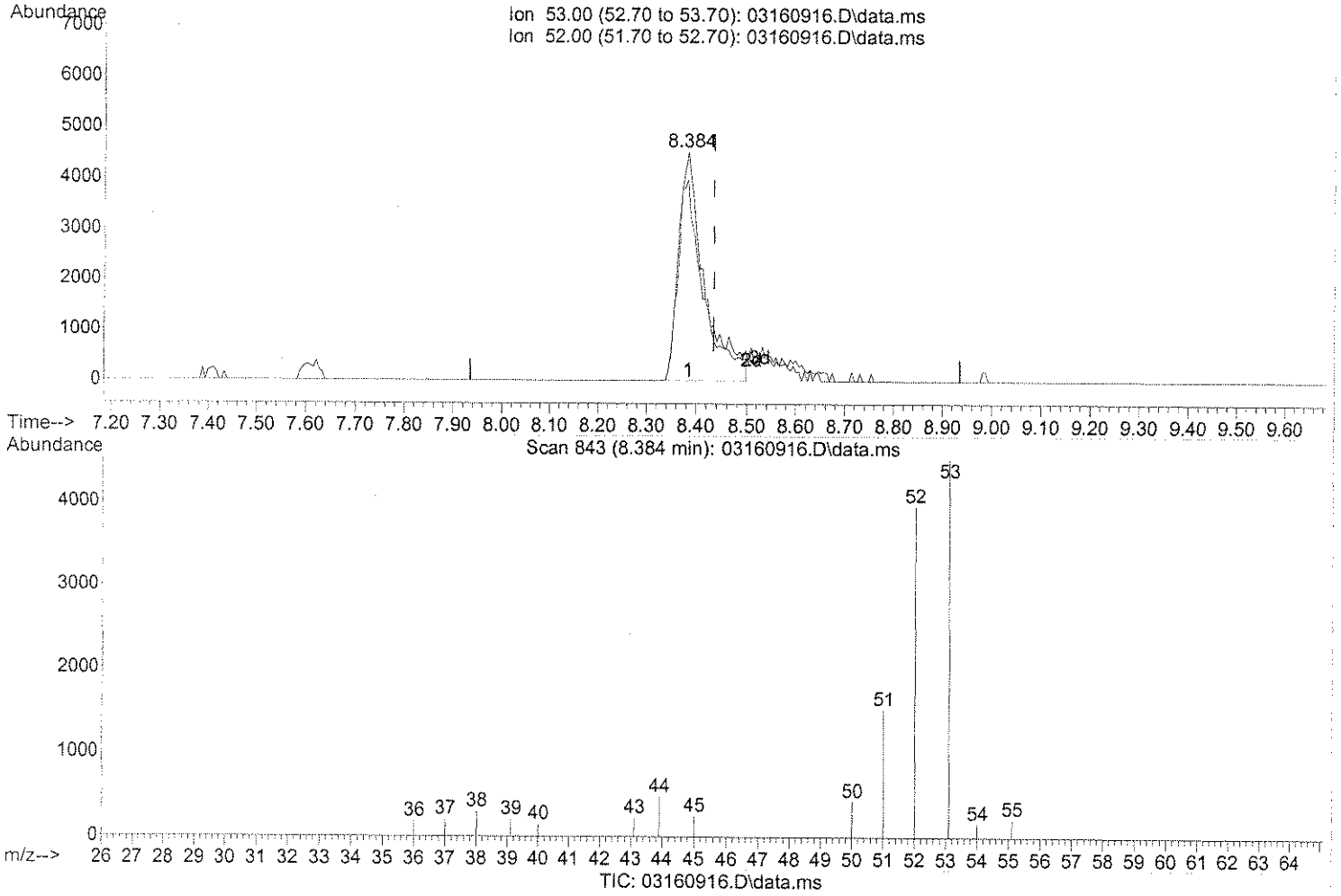
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.384min (-0.051) 0.70ng

response 16162

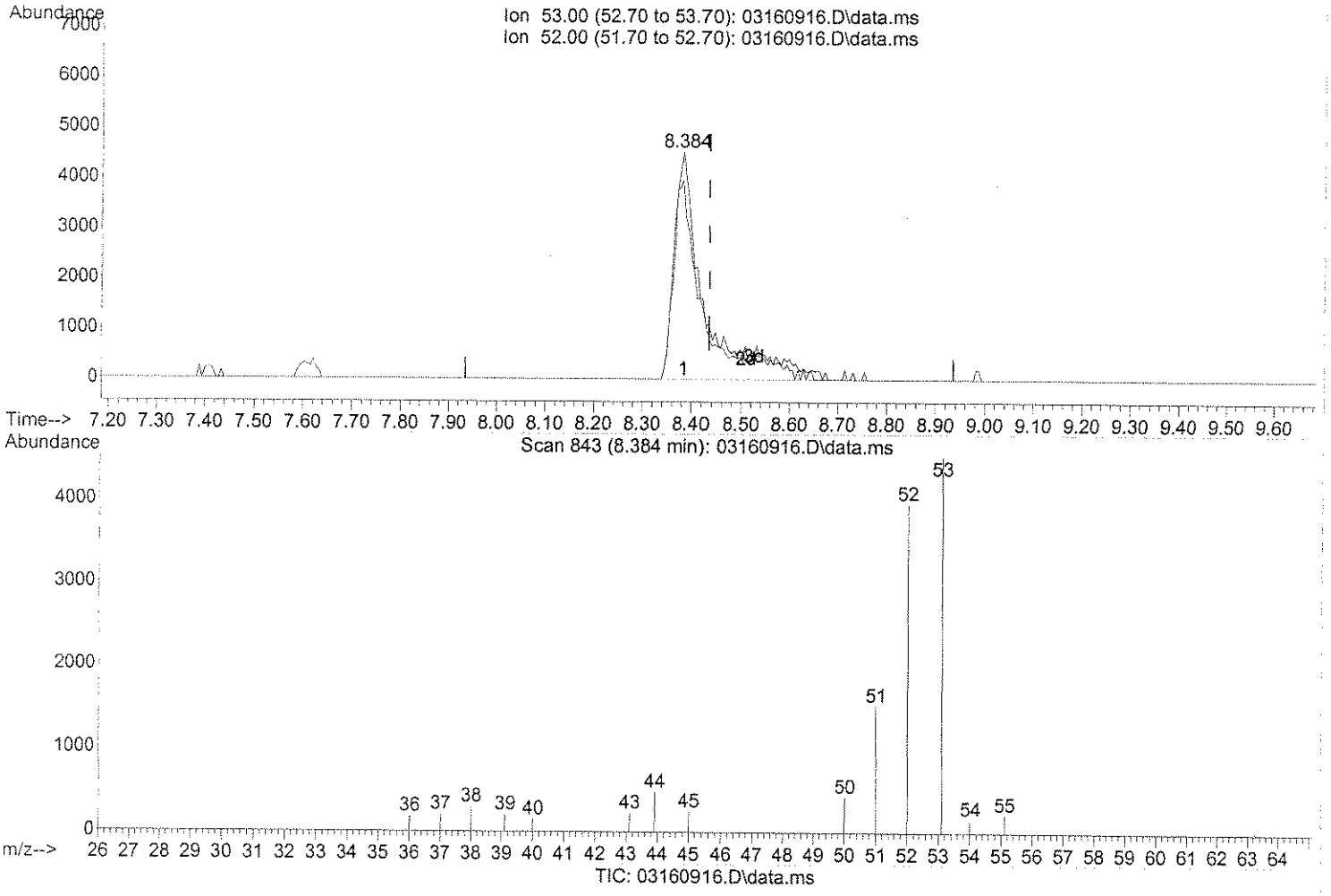
Ion	Exp%	Act%
53.00	100	100
52.00	85.20	91.35
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.384min (-0.051) 0.85ng m

response 19688

Ion	Exp%	Act%
53.00	100	100
52.00	85.20	74.99
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
LH 03/17/09

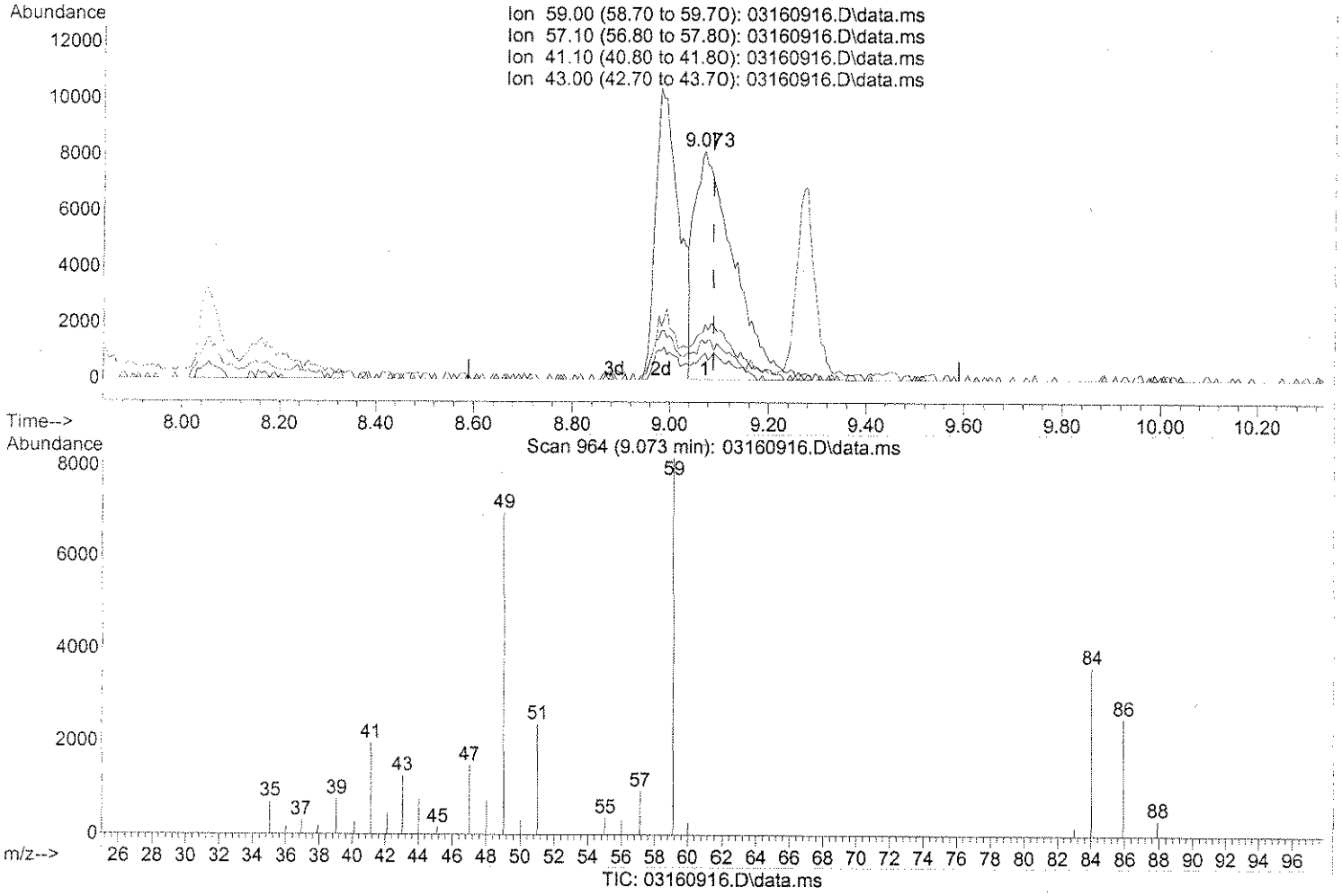
3/17/09

3/17/09

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(18) tert-Butanol (T)

9.073min (-0.017) 0.94ng

response 44656

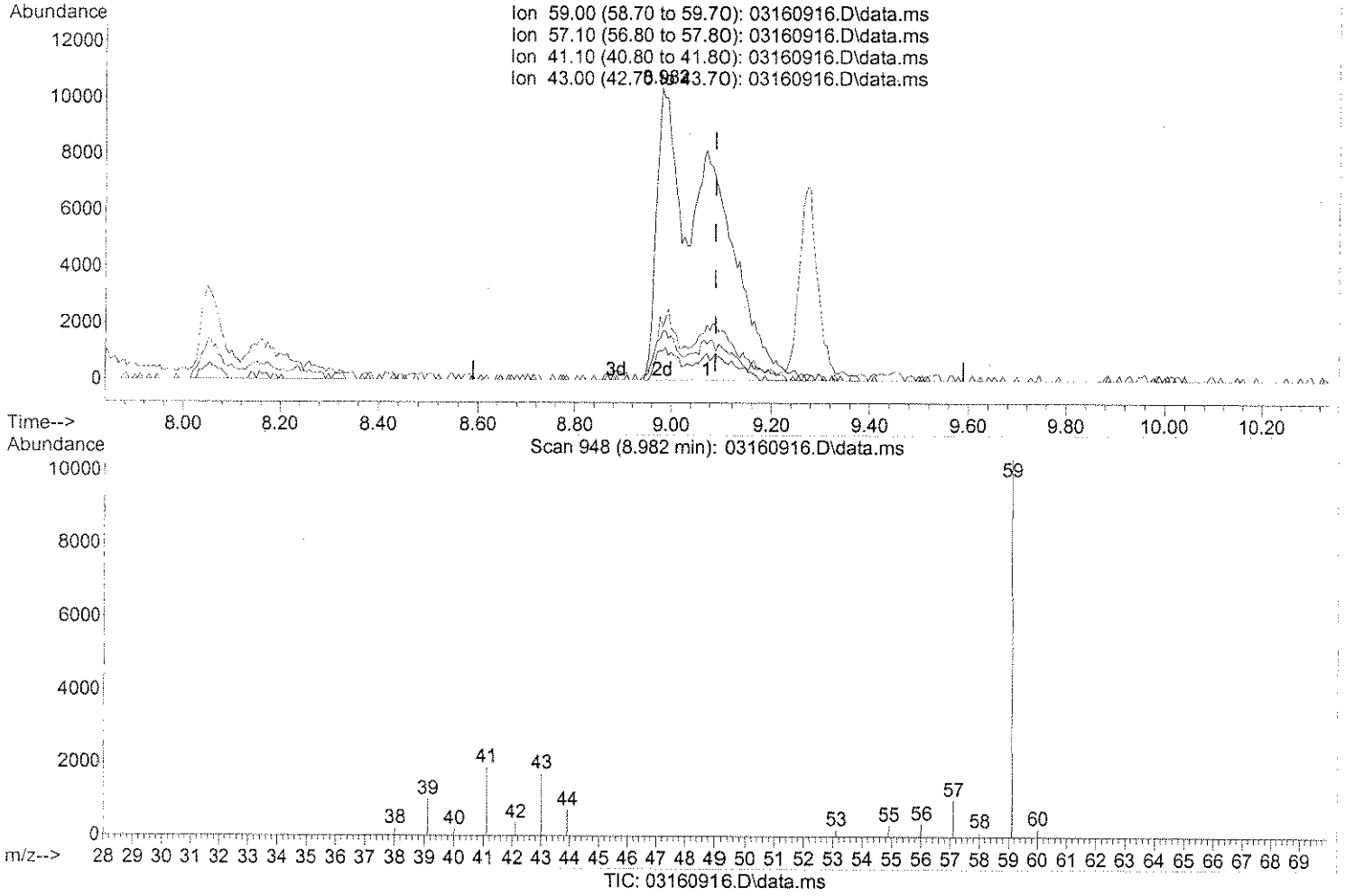
Ion	Exp%	Act%
59.00	100	100
57.10	10.50	0.00
41.10	23.00	0.00#
43.00	14.50	9.09

SP

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160916.D
Acq On : 16 Mar 2009 19:38
Operator : WA/LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(18) tert-Butanol (T)

8.982min (-0.108) 1.67ng m

response 79664

Ion	Exp%	Act%
59.00	100	100
57.10	10.50	0.00
41.10	23.00	0.00#
43.00	14.50	5.09

SP → IC
LH 02/17/09

Em 3/17/09

3/17/09

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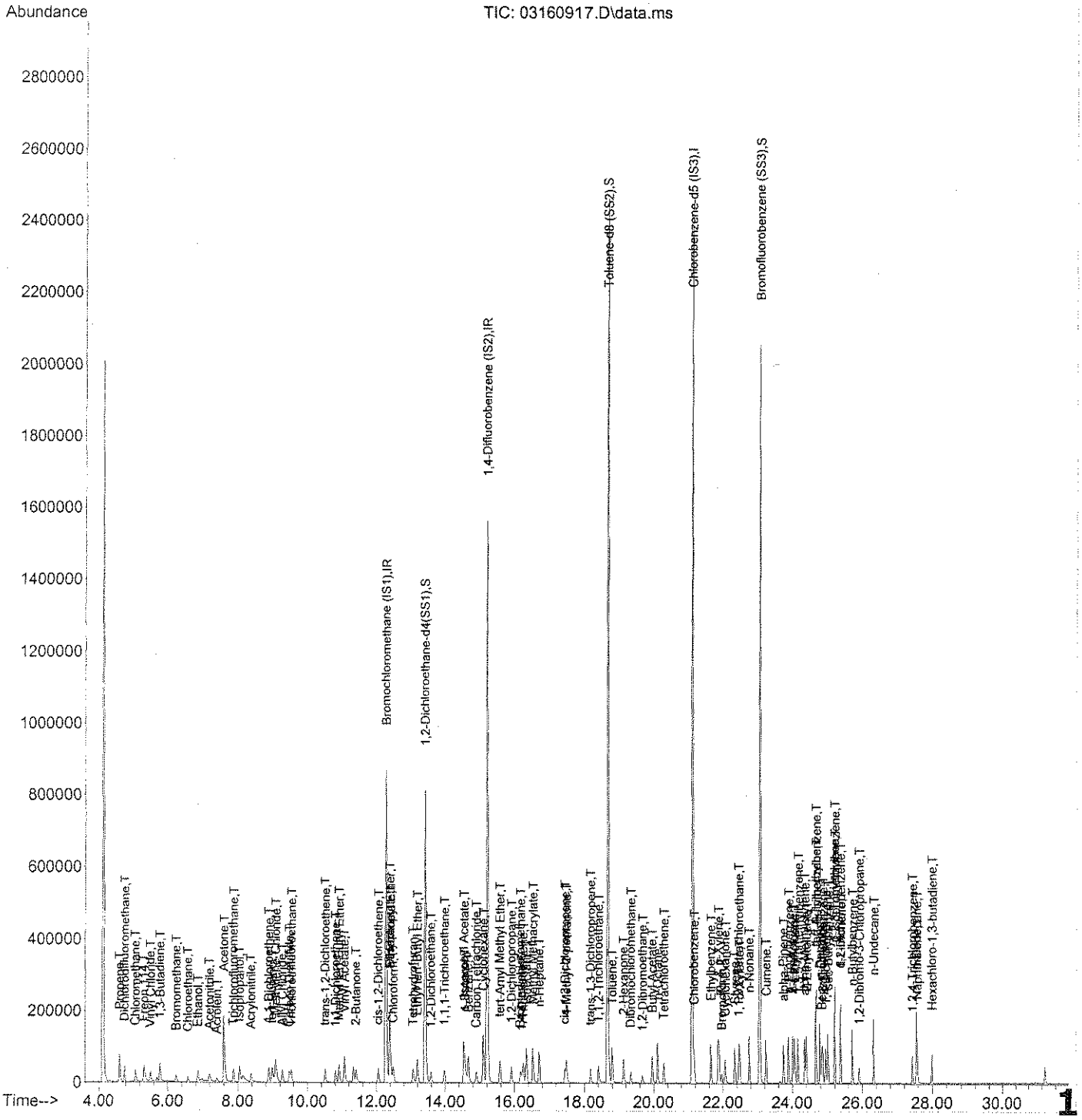
Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:44:39 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:44:39 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	356422	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.22	114	1653354	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	964538	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.42	65	854781	37.502	ng		-0.04
Spiked Amount 25.000			Recovery =	150.00%			
57) Toluene-d8 (SS2)	18.67	98	1940008	21.364	ng		-0.01
Spiked Amount 25.000			Recovery =	85.44%			
73) Bromofluorobenzene (SS3)	23.06	174	622005	18.236	ng		0.00
Spiked Amount 25.000			Recovery =	72.96%			
Target Compounds							Qvalue
2) Propene	4.61	42	30226	1.515	ng		87
3) Dichlorodifluoromethane	4.76	85	46738	1.341	ng		98
4) Chloromethane	5.08	50	47007	1.651	ng		99
5) Freon 114	5.32	135	18857	1.138	ng		90
6) Vinyl Chloride	5.51	62	38042	1.492	ng		84
7) 1,3-Butadiene	5.78	54	33740	1.994	ng		98
8) Bromomethane	6.25	94	16567	1.253	ng		93
9) Chloroethane	6.58	64	18085	1.589	ng		99
10) Ethanol	6.86	45	93748m	7.576	ng		
11) Acetonitrile	7.19	41	48179	1.438	ng		76
12) Acrolein	7.41	56	15814	1.524	ng	#	78
13) Acetone	7.60	58	102071	7.235	ng	#	84
14) Trichlorofluoromethane	7.88	101	36947	1.220	ng		92
15) Isopropanol	8.05	45	158758m	3.137	ng		
16) Acrylonitrile	8.38	53	38562	1.666	ng		88
17) 1,1-Dichloroethene	8.89	96	19522	1.309	ng		95
18) tert-Butanol	8.98	59	148935m	3.121	ng		
19) Methylene Chloride	9.08	84	21015	1.174	ng	#	79
20) Allyl Chloride	9.27	41	37129	1.714	ng		93
21) Trichlorotrifluoroethane	9.53	151	13583	1.000	ng		91
22) Carbon Disulfide	9.48	76	74528	1.190	ng		100
23) trans-1,2-Dichloroethene	10.51	61	36096	1.477	ng		97
24) 1,1-Dichloroethane	10.81	63	45670	1.566	ng		100
25) Methyl tert-Butyl Ether	10.91	73	60167	1.370	ng		94
26) Vinyl Acetate	11.06	86	10735	3.668	ng	#	69
27) 2-Butanone	11.40	72	13527	1.256	ng	#	61
28) cis-1,2-Dichloroethene	12.05	61	39081	1.640	ng		99
29) Diisopropyl Ether	12.40	87	15708	1.205	ng	#	61
30) Ethyl Acetate	12.41	61	17545	2.817	ng		89
31) n-Hexane	12.41	57	43316	1.471	ng		91

3/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:44:39 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.49	83	37775	1.396	ng		99
34) Tetrahydrofuran	13.07	72	12369	1.239	ng	#	74
35) Ethyl tert-Butyl Ether	13.19	87	23742	1.255	ng		98
36) 1,2-Dichloroethane	13.59	62	37461	1.643	ng		98
38) 1,1,1-Trichloroethane	13.98	97	32737	1.264	ng		98
39) Isopropyl Acetate	14.54	61	32825	2.795	ng	#	93
40) 1-Butanol	14.57	56	55209	3.040	ng	#	71
41) Benzene	14.67	78	80681	1.138	ng		99
42) Carbon Tetrachloride	14.90	117	24893	1.082	ng		96
43) Cyclohexane	15.10	84	59057	2.507	ng	#	83
44) tert-Amyl Methyl Ether	15.58	73	59568	1.233	ng		98
45) 1,2-Dichloropropane	15.91	63	24930	1.390	ng		97
46) Bromodichloromethane	16.18	83	28160	1.278	ng		99
47) Trichloroethene	16.25	130	20062	1.063	ng		97
48) 1,4-Dioxane	16.21	88	16093	1.177	ng		89
49) Isooctane	16.35	57	123115	1.533	ng		97
50) Methyl Methacrylate	16.53	100	14817	2.128	ng	#	69
51) n-Heptane	16.71	71	22523	1.285	ng	#	85
52) cis-1,3-Dichloropropene	17.46	75	30428	1.147	ng		100
53) 4-Methyl-2-pentanone	17.51	58	24836	1.489	ng		89
54) trans-1,3-Dichloropropene	18.18	75	31020	1.265	ng		96
55) 1,1,2-Trichloroethane	18.41	97	18811	1.133	ng		97
58) Toluene	18.80	91	85282	0.932	ng		100
59) 2-Hexanone	19.12	43	72686	1.308	ng		96
60) Dibromochloromethane	19.34	129	20285	0.895	ng		100
61) 1,2-Dibromoethane	19.68	107	20728	0.890	ng		99
62) Butyl Acetate	19.95	43	78729	1.236	ng		95
63) n-Octane	20.11	57	26449	1.257	ng		90
64) Tetrachloroethene	20.30	166	19296	0.756	ng		100
65) Chlorobenzene	21.16	112	52345	0.864	ng		100
66) Ethylbenzene	21.64	91	96327	0.944	ng		98
67) m- & p-Xylene	21.87	91	149726	1.872	ng		97
68) Bromoform	21.96	173	15211	0.727	ng		100
69) Styrene	22.33	104	54639	0.889	ng		95
70) o-Xylene	22.48	91	78167	0.955	ng		96
71) n-Nonane	22.75	43	64369	1.271	ng		94
72) 1,1,2,2-Tetrachloroethane	22.45	83	31493	0.867	ng		99
74) Cumene	23.24	105	92701	0.856	ng		98
75) alpha-Pinene	23.74	93	46290	0.992	ng		95
76) n-Propylbenzene	23.88	91	119256	0.908	ng		97
77) 3-Ethyltoluene	24.01	105	93472	0.942	ng		99
78) 4-Ethyltoluene	24.06	105	86872	0.894	ng		98
79) 1,3,5-Trimethylbenzene	24.16	105	77081	0.919	ng		10[illegible]

3/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:44:39 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

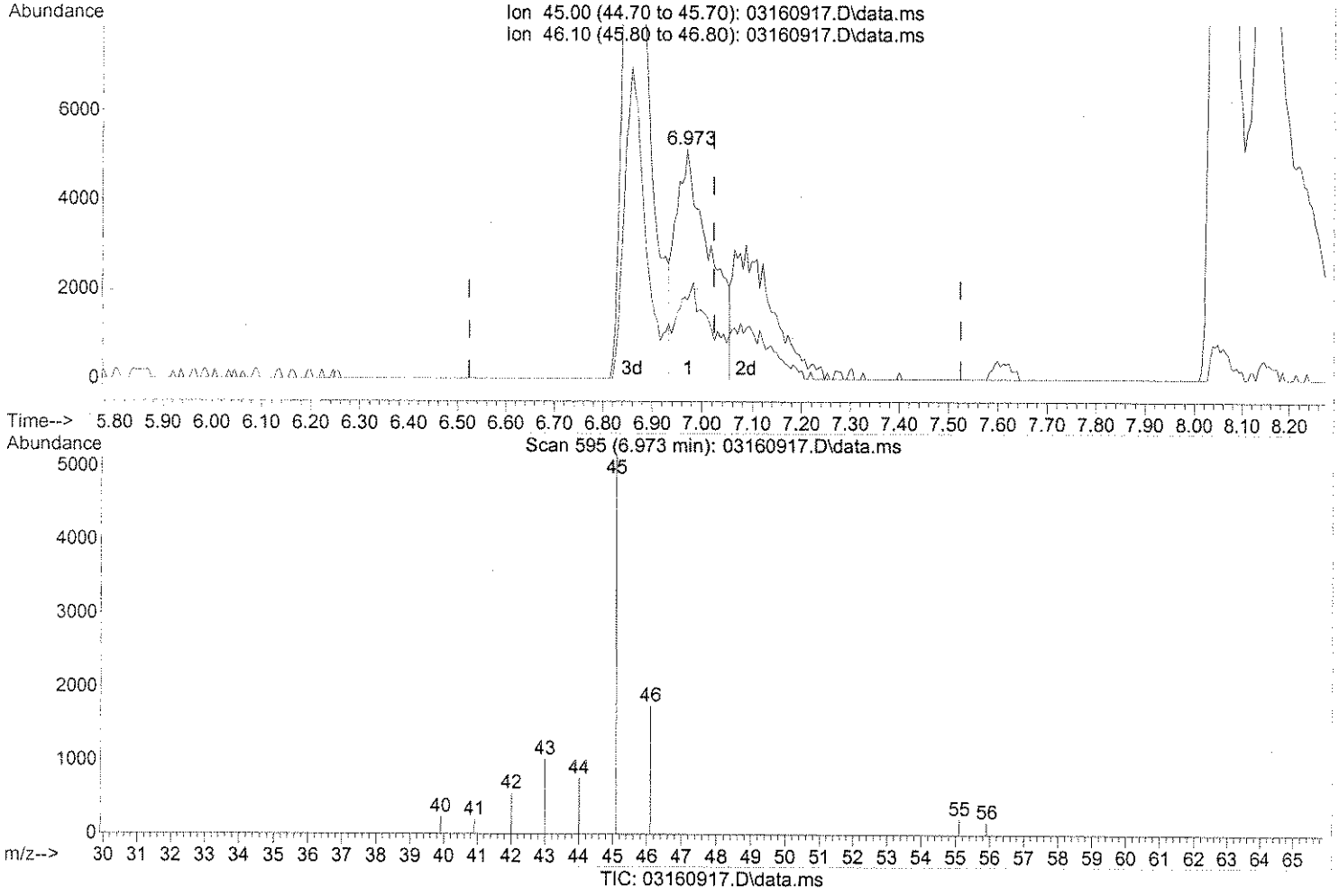
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	39236	0.821	ng		97
81) 2-Ethyltoluene	24.40	105	91844	0.902	ng		99
82) 1,2,4-Trimethylbenzene	24.67	105	77783	0.864	ng		97
83) n-Decane	24.79	57	66403	1.255	ng		93
84) Benzyl Chloride	24.84	91	60468	0.826	ng		96
85) 1,3-Dichlorobenzene	24.86	146	38630	0.735	ng		97
86) 1,4-Dichlorobenzene	24.95	146	40182	0.747	ng		100
87) sec-Butylbenzene	25.01	105	103230	0.879	ng		97
88) p-Isopropyltoluene	25.20	119	89474	0.785	ng		96
89) 1,2,3-Trimethylbenzene	25.20	105	78783	0.875	ng		95
90) 1,2-Dichlorobenzene	25.37	146	36341	0.731	ng		98
91) d-Limonene	25.38	68	34913	1.000	ng		96
92) 1,2-Dibromo-3-Chloropr...	25.91	157	11318	0.655	ng	#	62
93) n-Undecane	26.32	57	69080	1.210	ng		90
94) 1,2,4-Trichlorobenzene	27.43	184	7152	0.681	ng		97
95) Naphthalene	27.57	128	82690	0.637	ng		100
96) n-Dodecane	27.55	57	65979	1.025	ng		88
97) Hexachloro-1,3-butadiene	27.99	225	15971	0.765	ng		94
98) Cyclohexanone	22.07	55	45103	1.171	ng		95
99) tert-Butylbenzene	24.67	119	71692	0.822	ng		98
100) n-Butylbenzene	25.71	91	89897	0.967	ng		97

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.973min (-0.051) 1.95ng

response 24104

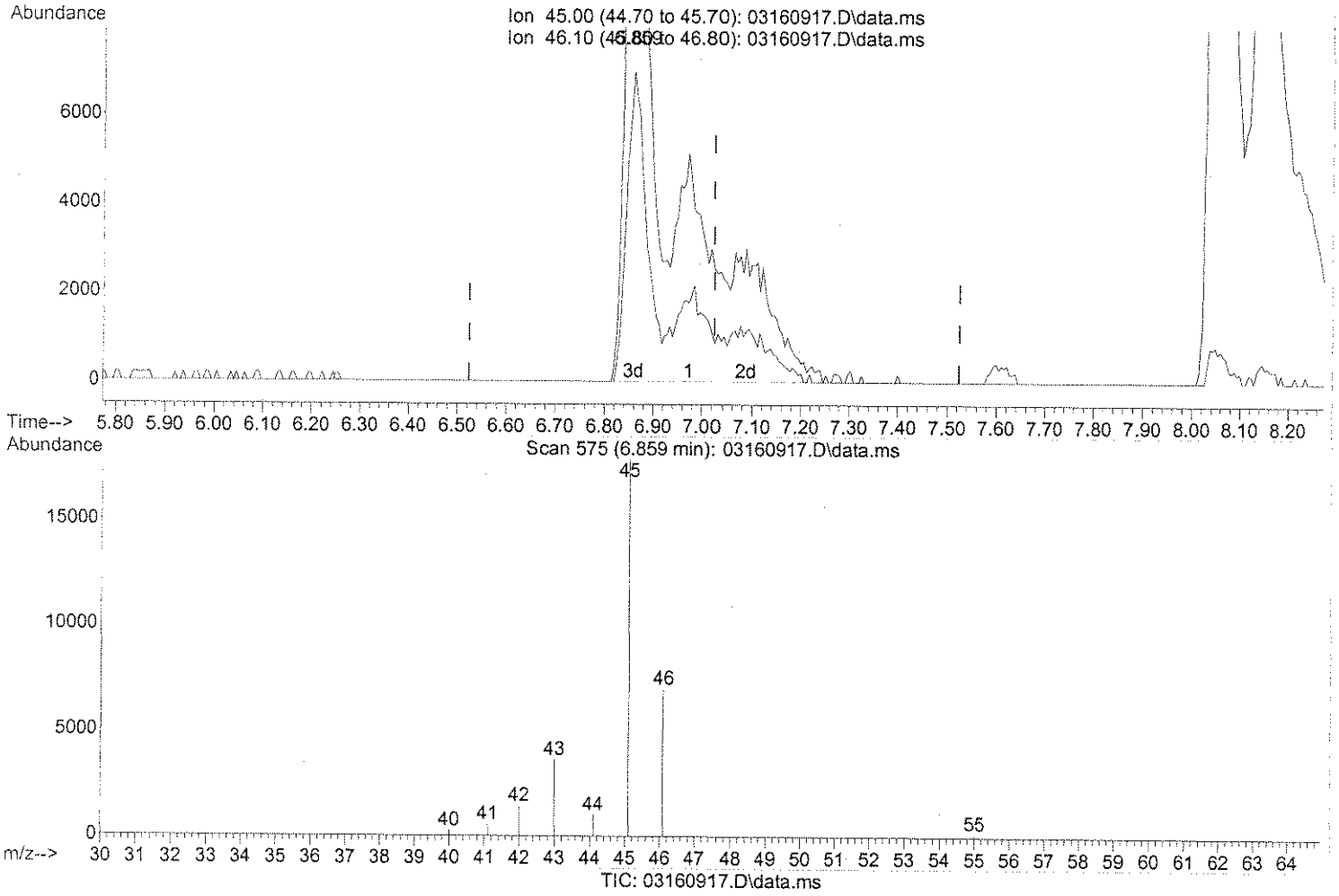
SP

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	38.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.859min (-0.165) 7.58ng m

response 93748

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	9.77#
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC
LH 03/17/09

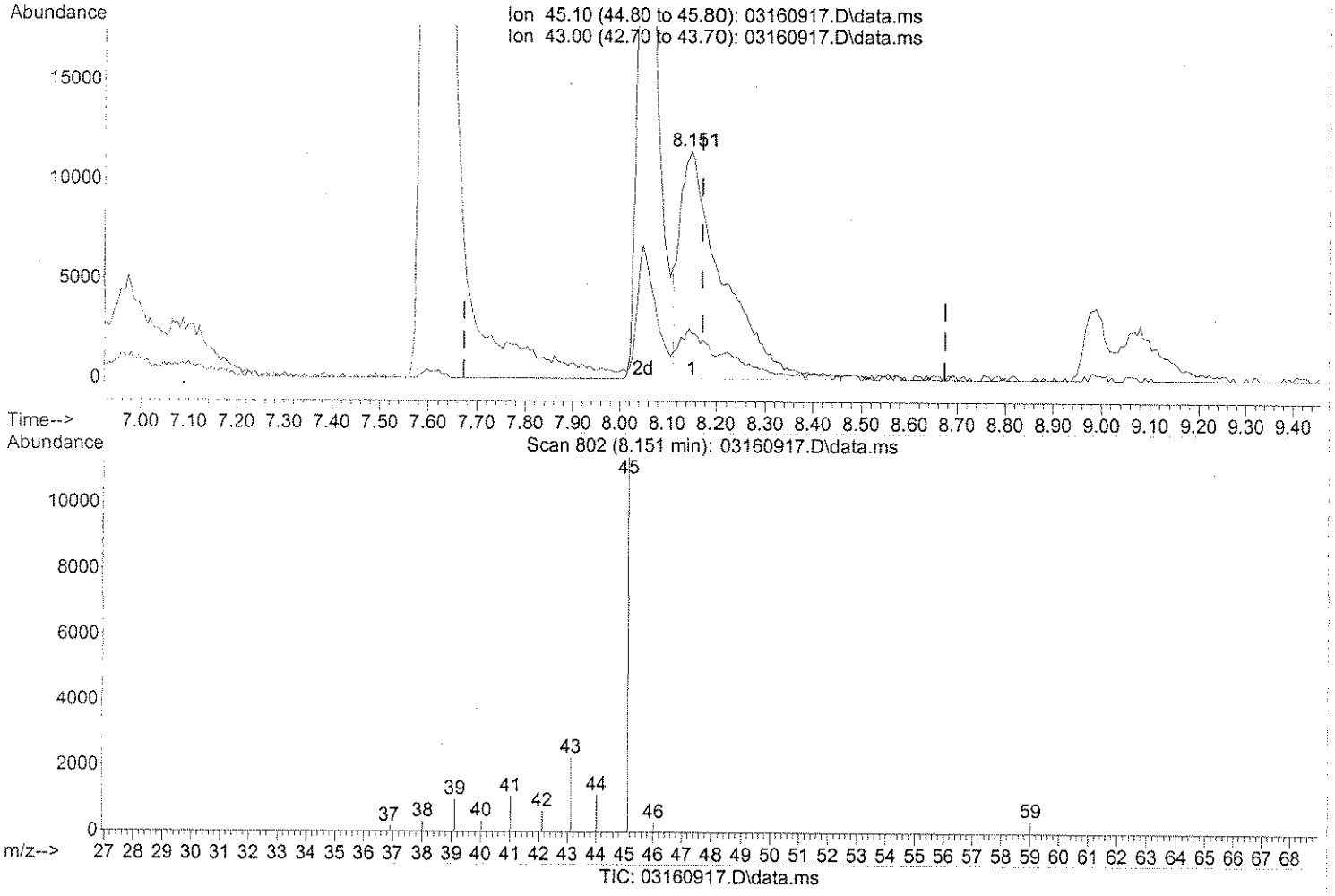
EM 3/17/09

MH 3/17/09

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.151min (-0.023) 1.40ng

response 70871

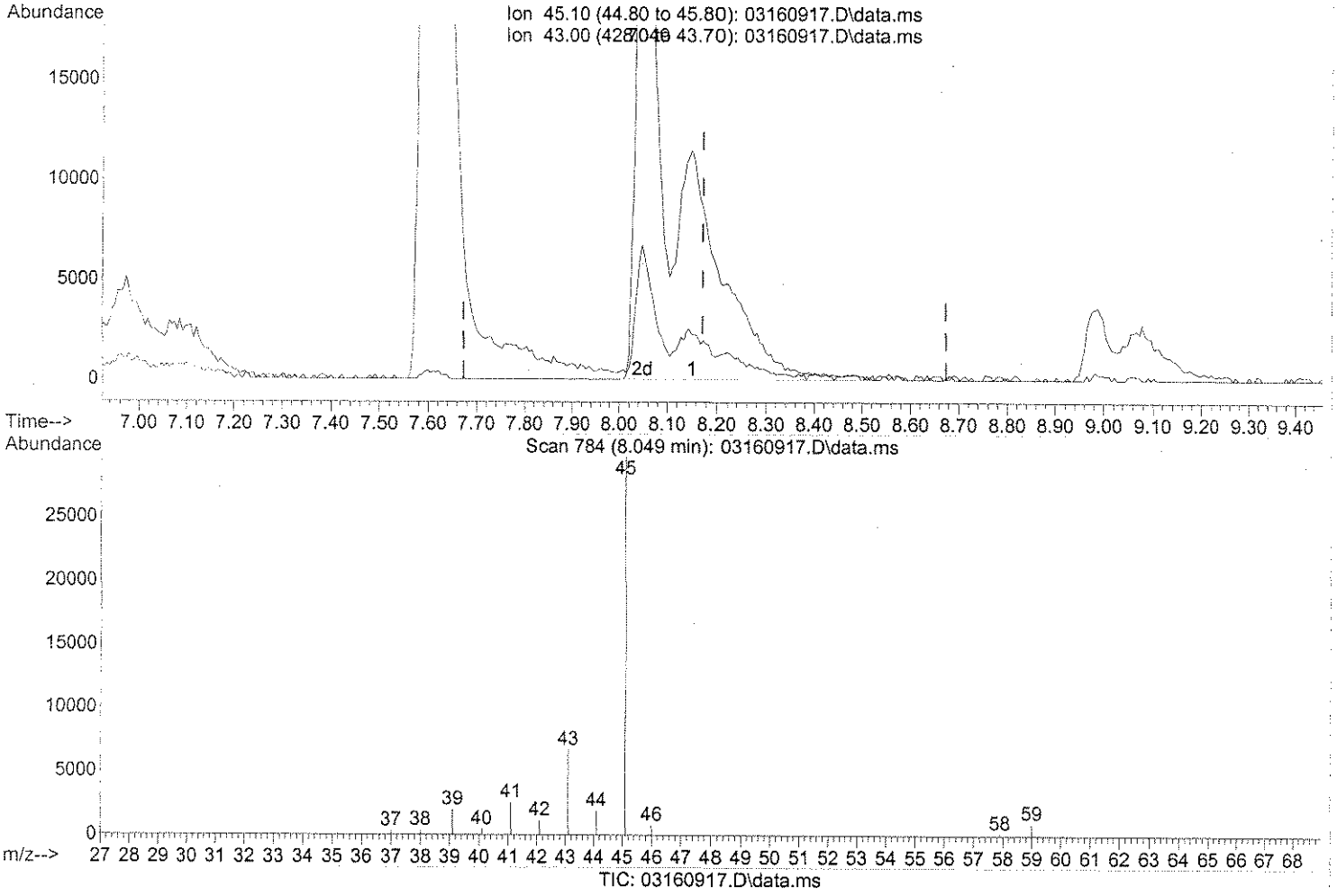
Ion	Exp%	Act%
45.10	100	100
43.00	17.10	19.40
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.049min (-0.125) 3.14ng m

response 158758

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	8.66
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC

LH 03/17/09

EM 3/17/09

AM 3/17/09

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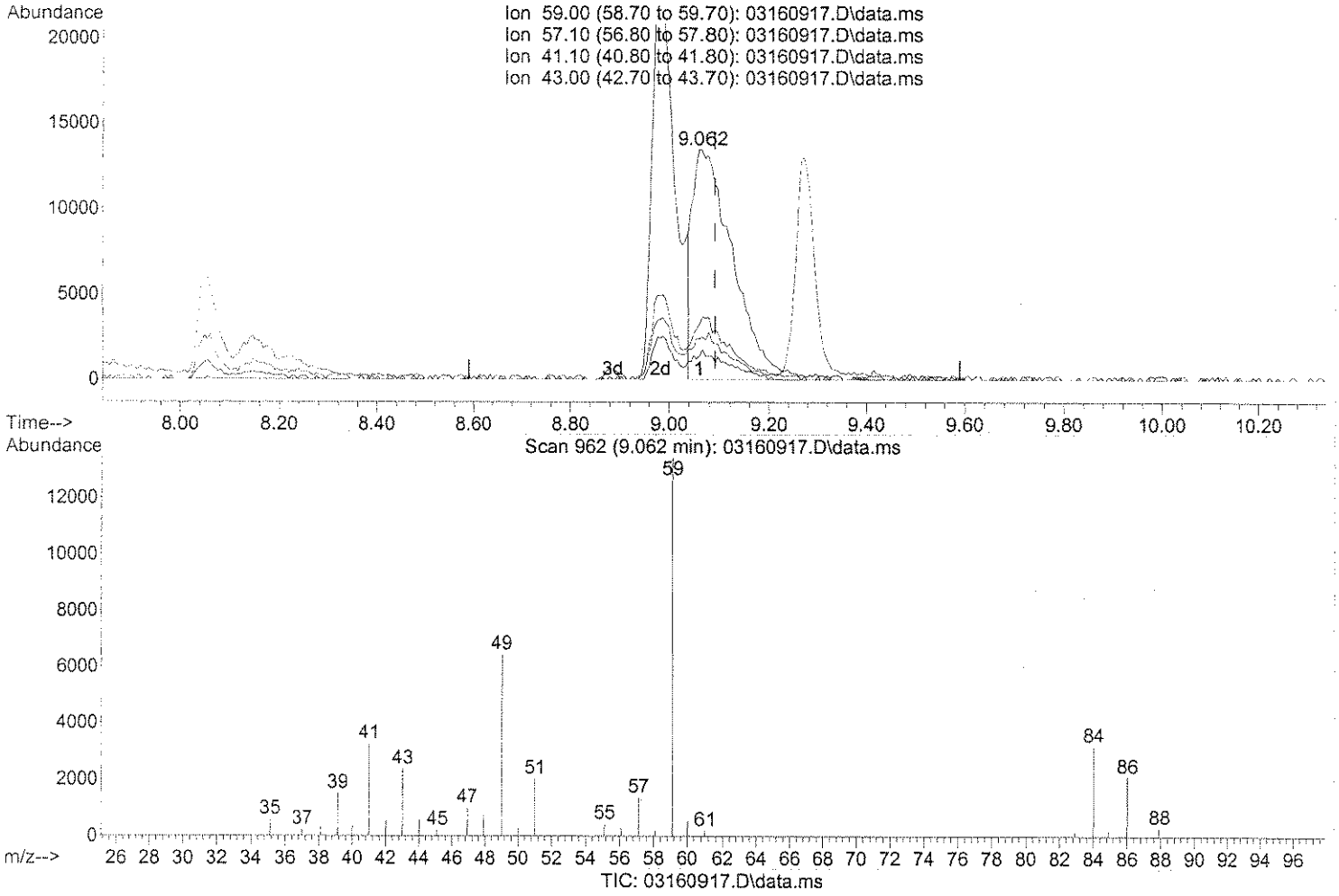
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On : 16 Mar 2009 20:19
Operator : WA/LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(18) tert-Butanol (T)

9.062min (-0.028) 1.54ng

response 73462

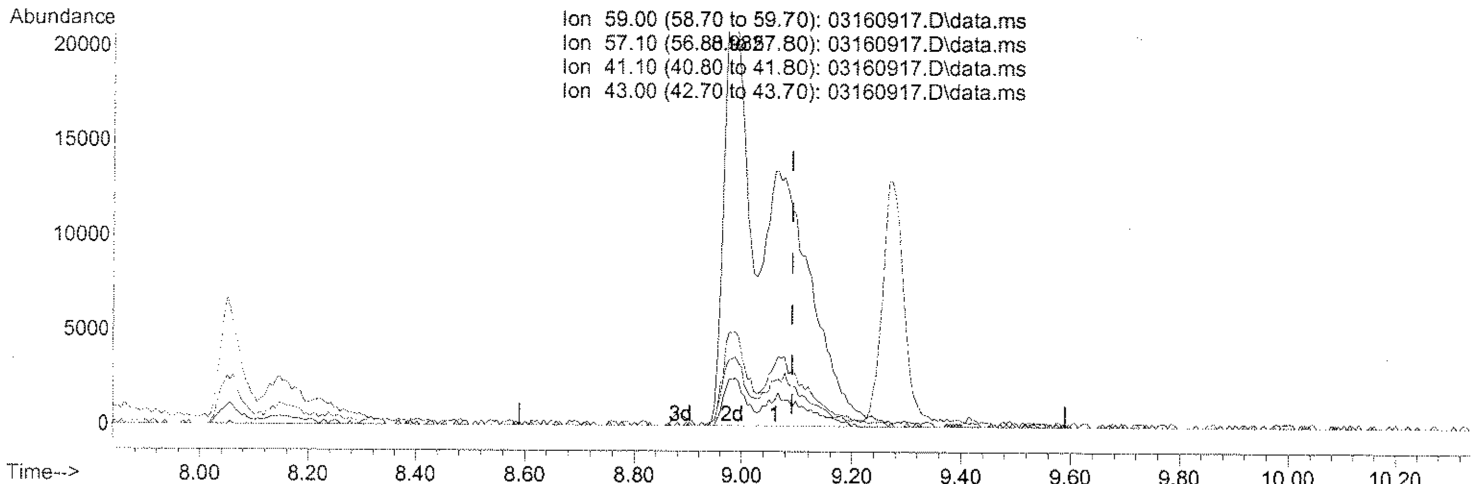
Ion	Exp%	Act%
59.00	100	100
57.10	10.50	11.71
41.10	23.00	25.56
43.00	14.50	19.88

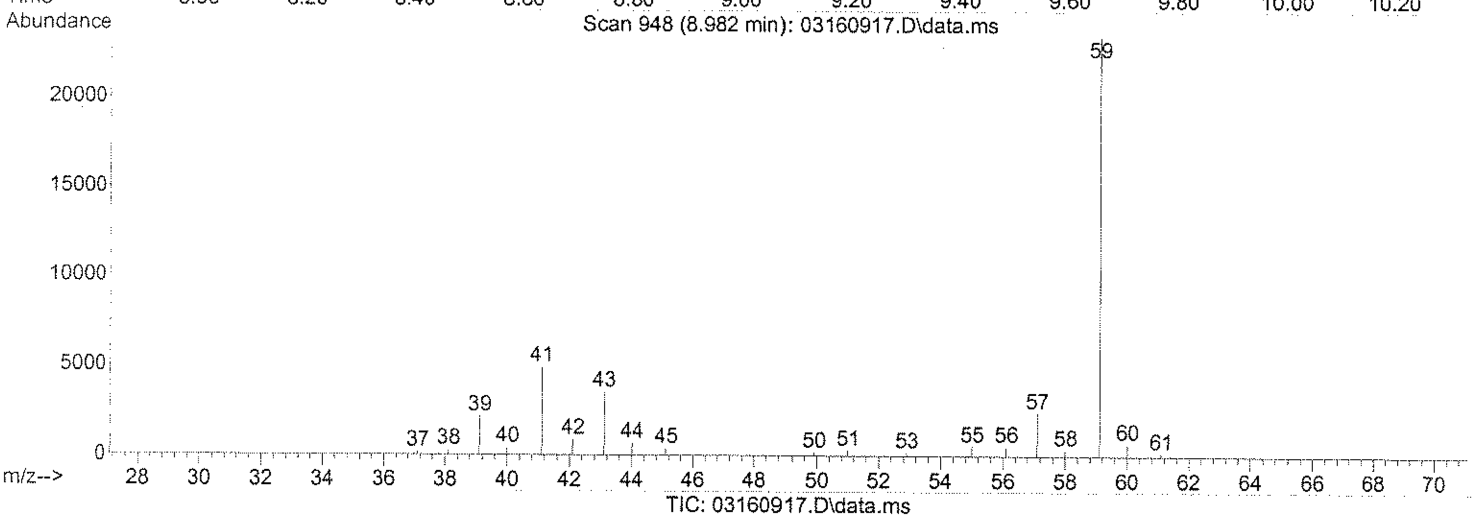
SP

Quantitation Report (Qedit)

```
Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160917.D
Acq On    : 16 Mar 2009  20:19
Operator  : WA/LH
Sample    : 1.0ng TO-15 ICAL STD
Misc      : S20-02230901/S20-03120904
ALS Vial  : 2   Sample Multiplier: 1

Quant Time: Mar 17 08:33:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title  : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration
```





(18) tert-Butanol (T)

8.982min (-0.108) 3.12ng m

response 148935

Ion	Exp%	Act%
59.00	100	100
57.10	10.50	5.78
41.10	23.00	12.61
43.00	14.50	9.80

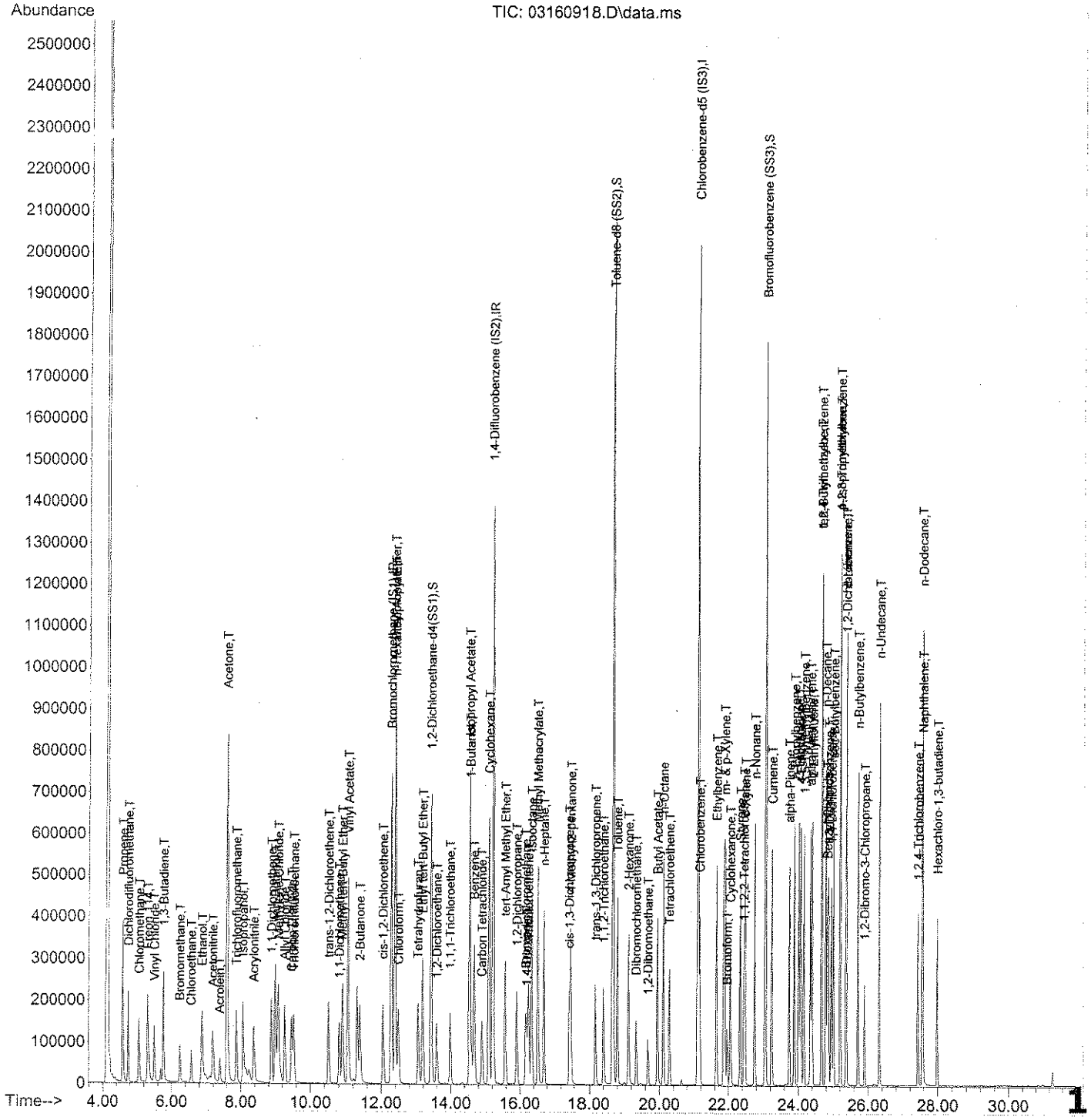
SP → IC
LH 03/17/09

Em 3/17/09

[initials] 3/17/09

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:45:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:45:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.29	130	309475	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.22	114	1444918	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	835553	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.43	65	733312	37.053	ng		-0.03
Spiked Amount 25.000			Recovery =	148.20%			
57) Toluene-d8 (SS2)	18.67	98	1678488	21.337	ng		-0.01
Spiked Amount 25.000			Recovery =	85.36%			
73) Bromofluorobenzene (SS3)	23.06	174	540093	18.279	ng		0.00
Spiked Amount 25.000			Recovery =	73.12%			
Target Compounds							Qvalue
2) Propene	4.59	42	182457	10.531	ng		86
3) Dichlorodifluoromethane	4.75	85	218881	7.235	ng		99
4) Chloromethane	5.06	50	217737	8.809	ng		99
5) Freon 114	5.31	135	84183	5.852	ng		87
6) Vinyl Chloride	5.49	62	184493	8.331	ng		85
7) 1,3-Butadiene	5.77	54	157883	10.746	ng		99
8) Bromomethane	6.24	94	76614	6.675	ng		98
9) Chloroethane	6.56	64	85368	8.639	ng		100
10) Ethanol	6.88	45	448139m	41.710	ng		
11) Acetonitrile	7.18	41	234170	8.050	ng		91
12) Acrolein	7.39	56	78010	8.659	ng		87
13) Acetone	7.60	58	497651	40.625	ng	#	83
14) Trichlorofluoromethane	7.87	101	181178	6.890	ng		96
15) Isopropanol	8.07	45	562632m	12.803	ng		
16) Acrylonitrile	8.38	53	189763	9.440	ng		98
17) 1,1-Dichloroethene	8.88	96	94210	7.275	ng		95
18) tert-Butanol	8.99	59	700055	16.895	ng		98
19) Methylene Chloride	9.08	84	98996	6.369	ng	#	77
20) Allyl Chloride	9.27	41	191056	10.160	ng		92
21) Trichlorotrifluoroethane	9.53	151	67011	5.683	ng		92
22) Carbon Disulfide	9.47	76	351089	6.456	ng		99
23) trans-1,2-Dichloroethene	10.51	61	191727	9.034	ng		99
24) 1,1-Dichloroethane	10.81	63	220798	8.718	ng		100
25) Methyl tert-Butyl Ether	10.90	73	292176	7.663	ng		94
26) Vinyl Acetate	11.06	86	72228	28.424	ng	#	53
27) 2-Butanone	11.39	72	67317	7.196	ng	#	69
28) cis-1,2-Dichloroethene	12.06	61	189770	9.174	ng		100
29) Diisopropyl Ether	12.40	87	74671	6.599	ng	#	65
30) Ethyl Acetate	12.40	61	87694	16.214	ng		91
31) n-Hexane	12.41	57	205432	8.035	ng		91

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:45:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.50	83	174890	7.445	ng		100
34) Tetrahydrofuran	13.05	72	65530	7.561	ng	#	68
35) Ethyl tert-Butyl Ether	13.19	87	113241	6.896	ng		99
36) 1,2-Dichloroethane	13.59	62	182819	9.235	ng		98
38) 1,1,1-Trichloroethane	13.98	97	154195	6.811	ng		97
39) Isopropyl Acetate	14.54	61	161955	15.777	ng	#	94
40) 1-Butanol	14.55	56	278321	17.535	ng	#	73
41) Benzene	14.67	78	384614	6.208	ng		99
42) Carbon Tetrachloride	14.90	117	126355	6.285	ng		100
43) Cyclohexane	15.10	84	284186	13.801	ng	#	85
44) tert-Amyl Methyl Ether	15.58	73	289934	6.868	ng		94
45) 1,2-Dichloropropane	15.91	63	122007	7.785	ng		100
46) Bromodichloromethane	16.18	83	136742	7.098	ng		100
47) Trichloroethene	16.25	130	92085	5.581	ng		99
48) 1,4-Dioxane	16.20	88	77710	6.502	ng		90
49) Isooctane	16.34	57	563508	8.031	ng		98
50) Methyl Methacrylate	16.52	100	75200	12.361	ng	#	70
51) n-Heptane	16.71	71	103673	6.766	ng		87
52) cis-1,3-Dichloropropene	17.46	75	156524	6.751	ng		100
53) 4-Methyl-2-pentanone	17.50	58	127904	8.772	ng		91
54) trans-1,3-Dichloropropene	18.17	75	163649	7.635	ng		98
55) 1,1,2-Trichloroethane	18.41	97	89256	6.149	ng		94
58) Toluene	18.80	91	399166	5.035	ng		99
59) 2-Hexanone	19.12	43	343758	7.140	ng		94
60) Dibromochloromethane	19.34	129	101553	5.173	ng		100
61) 1,2-Dibromoethane	19.68	107	102257	5.068	ng		99
62) Butyl Acetate	19.95	43	388779	7.043	ng		97
63) n-Octane	20.11	57	126334	6.932	ng		90
64) Tetrachloroethene	20.29	166	93271	4.220	ng		98
65) Chlorobenzene	21.16	112	244659	4.663	ng		98
66) Ethylbenzene	21.64	91	466492	5.279	ng		97
67) m- & p-Xylene	21.88	91	721701	10.415	ng		96
68) Bromoform	21.96	173	78977	4.359	ng		99
69) Styrene	22.33	104	270449	5.080	ng		95
70) o-Xylene	22.48	91	372978	5.259	ng		96
71) n-Nonane	22.75	43	304036	6.930	ng		92
72) 1,1,2,2-Tetrachloroethane	22.44	83	164211	5.217	ng		99
74) Cumene	23.24	105	442046	4.711	ng		100
75) alpha-Pinene	23.74	93	225846	5.586	ng		96
76) n-Propylbenzene	23.88	91	576418	5.066	ng		97
77) 3-Ethyltoluene	24.01	105	434069	5.049	ng		98
78) 4-Ethyltoluene	24.06	105	437996	5.203	ng		99
79) 1,3,5-Trimethylbenzene	24.16	105	370213	5.095	ng		101

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:45:45 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

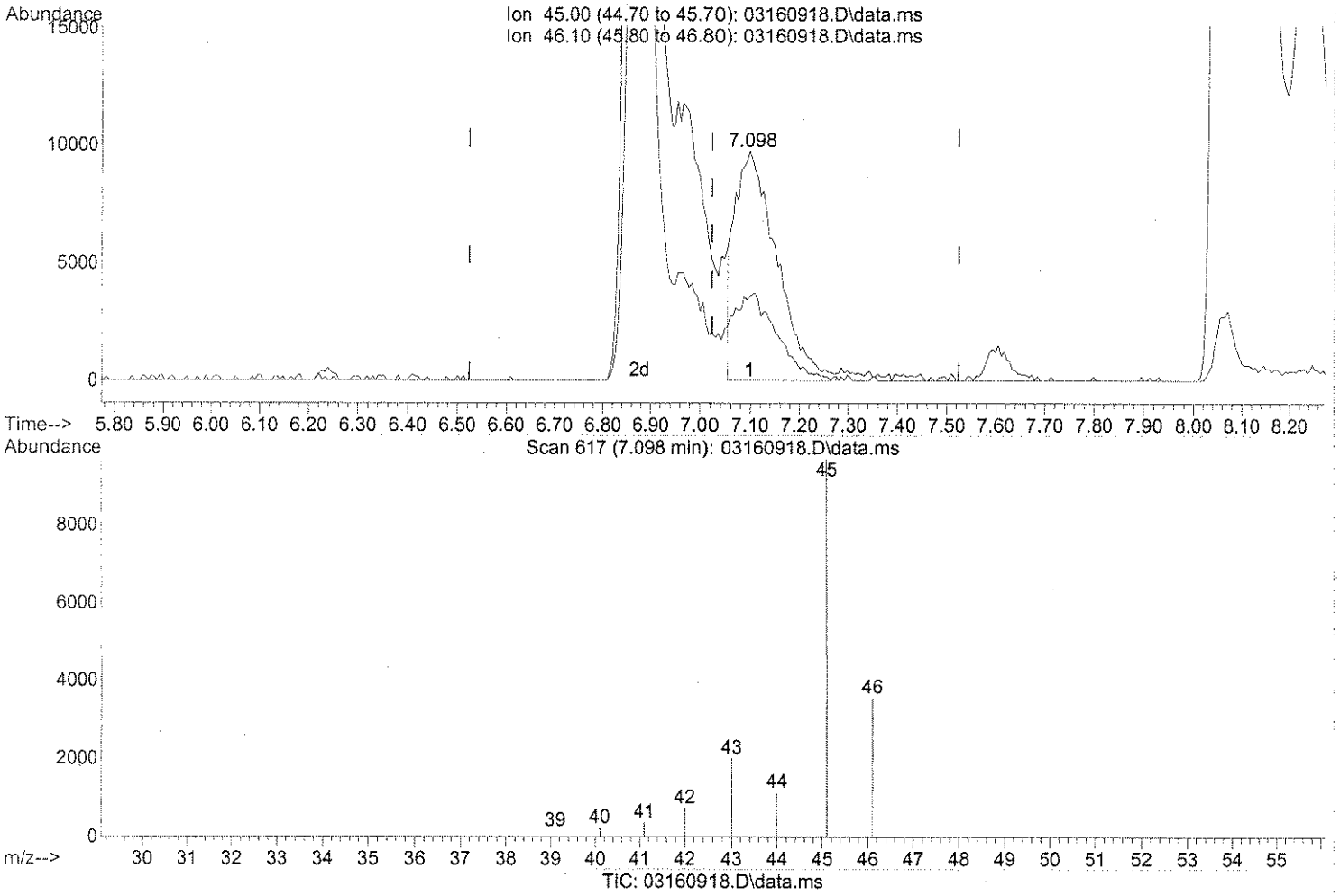
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	193009	4.660	ng		98
81) 2-Ethyltoluene	24.40	105	441013	5.000	ng		99
82) 1,2,4-Trimethylbenzene	24.67	105	374110	4.799	ng		98
83) n-Decane	24.79	57	323634	7.063	ng		93
84) Benzyl Chloride	24.83	91	332547	5.246	ng		96
85) 1,3-Dichlorobenzene	24.87	146	189993	4.175	ng		99
86) 1,4-Dichlorobenzene	24.95	146	195612	4.196	ng		100
87) sec-Butylbenzene	25.01	105	500791	4.923	ng		97
88) p-Isopropyltoluene	25.20	119	426165	4.316	ng		96
89) 1,2,3-Trimethylbenzene	25.20	105	379551	4.866	ng		97
90) 1,2-Dichlorobenzene	25.37	146	180068	4.178	ng		98
91) d-Limonene	25.37	68	170320	5.629	ng		98
92) 1,2-Dibromo-3-Chloropr...	25.90	157	60402	4.038	ng	#	71
93) n-Undecane	26.32	57	341249	6.902	ng		90
94) 1,2,4-Trichlorobenzene	27.43	184	36894	4.058	ng		96
95) Naphthalene	27.57	128	423568	3.769	ng		100
96) n-Dodecane	27.55	57	340471	6.107	ng		89
97) Hexachloro-1,3-butadiene	27.99	225	75929	4.199	ng		99
98) Cyclohexanone	22.05	55	203473	6.100	ng		96
99) tert-Butylbenzene	24.67	119	342830	4.537	ng		99
100) n-Butylbenzene	25.71	91	433850	5.389	ng		97

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:50 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.098min (+0.074) 5.40ng

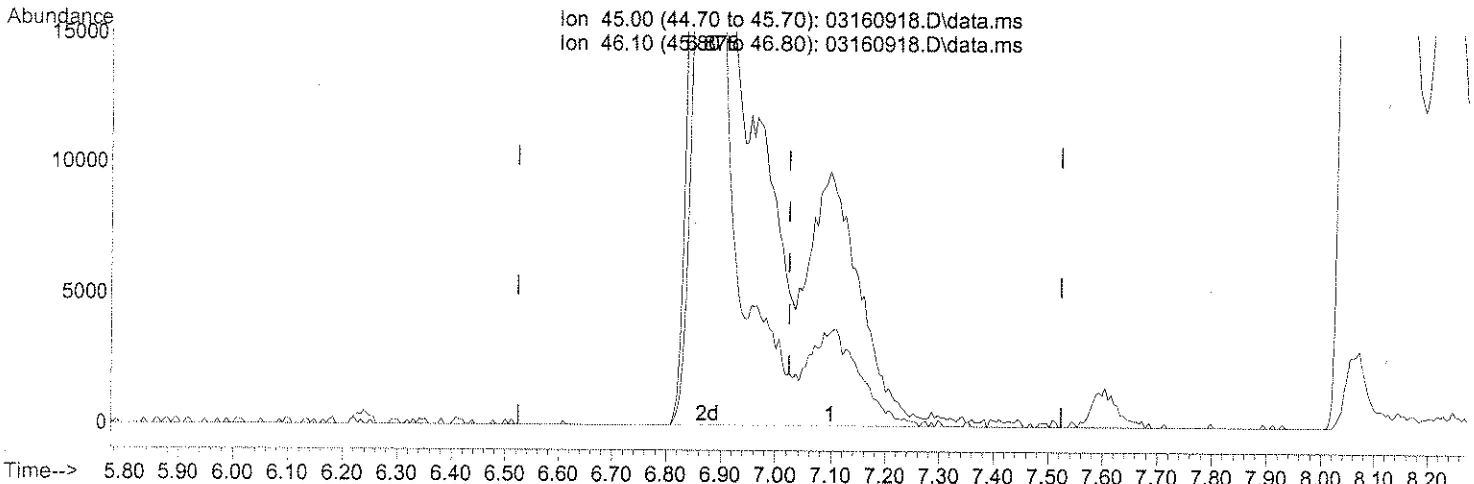
response 58014

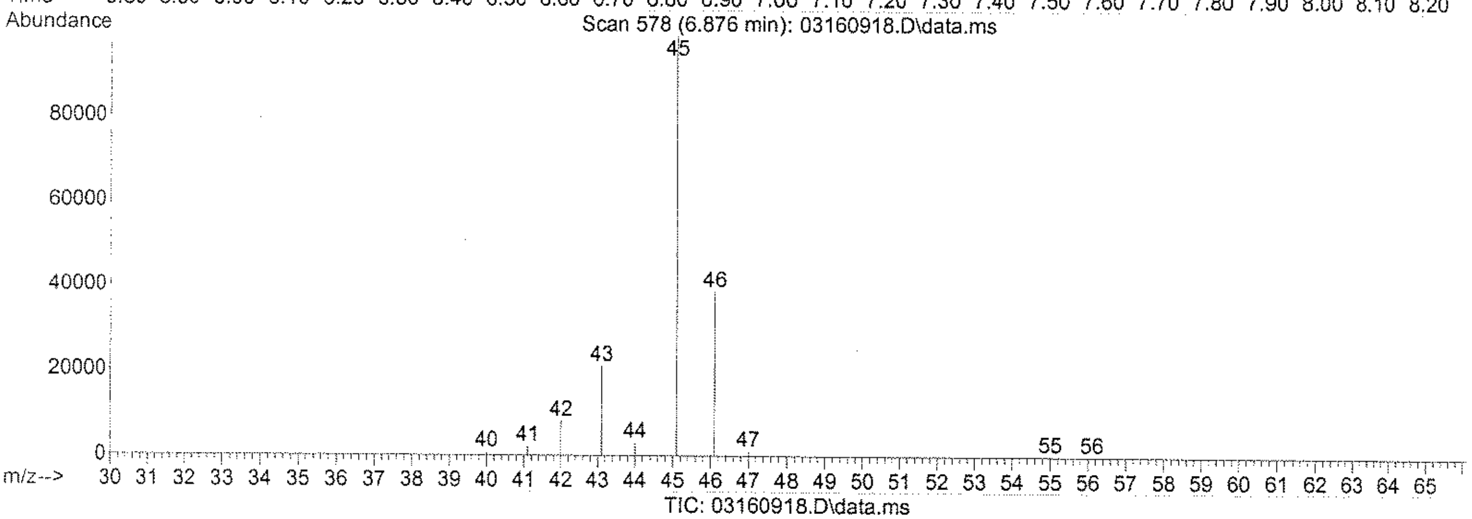
Ion	Exp%	Act%
45.00	100	100
46.10	35.10	41.09
0.00	0.00	0.00
0.00	0.00	0.00

SP

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:50 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration





(10) Ethanol (T)

6.876min (-0.148) 41.71ng m

response 448139

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	5.32#
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC
LH 03/17/09

Em 3/17/09

PH 3/17/09

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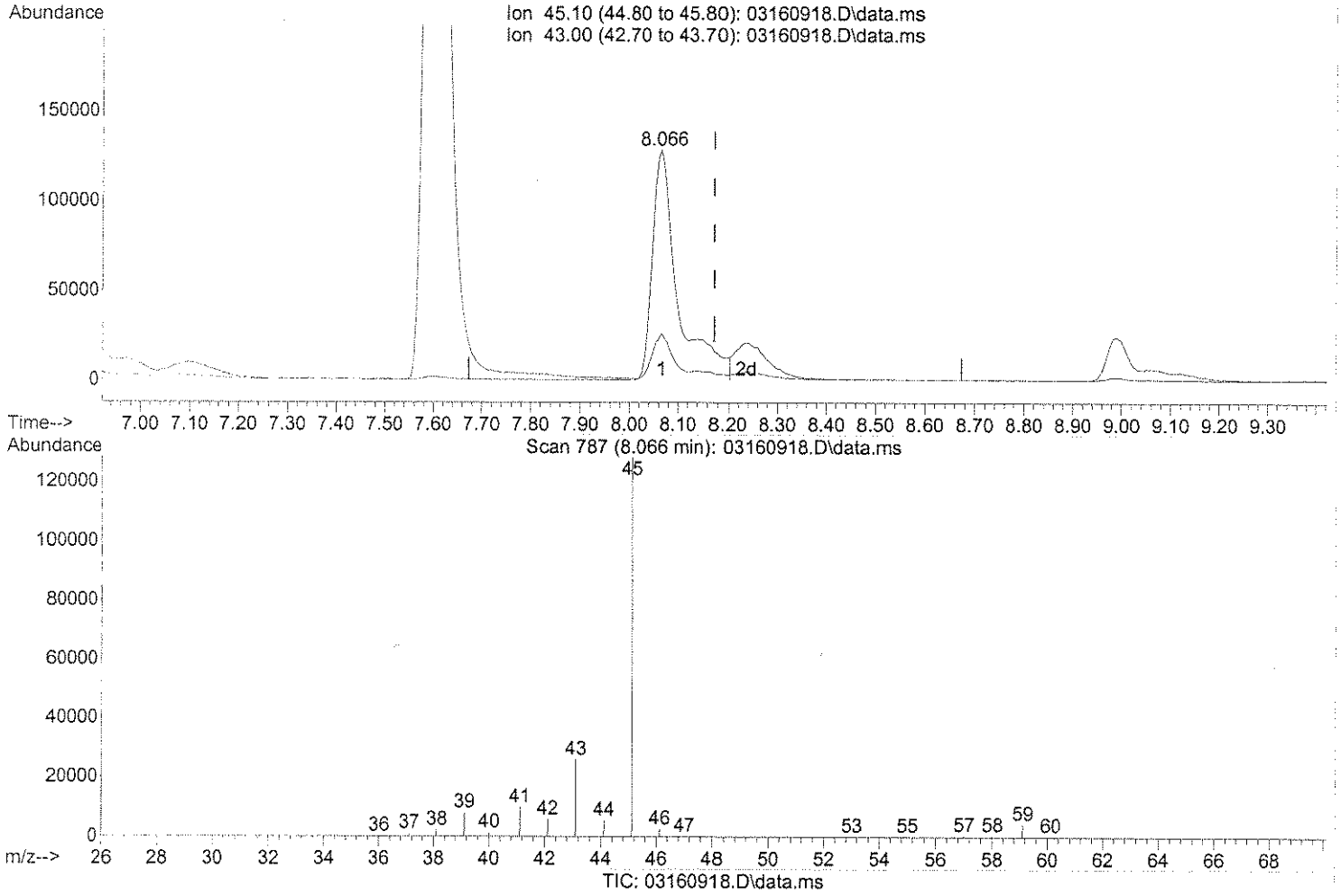
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:50 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.066min (-0.108) 10.53ng

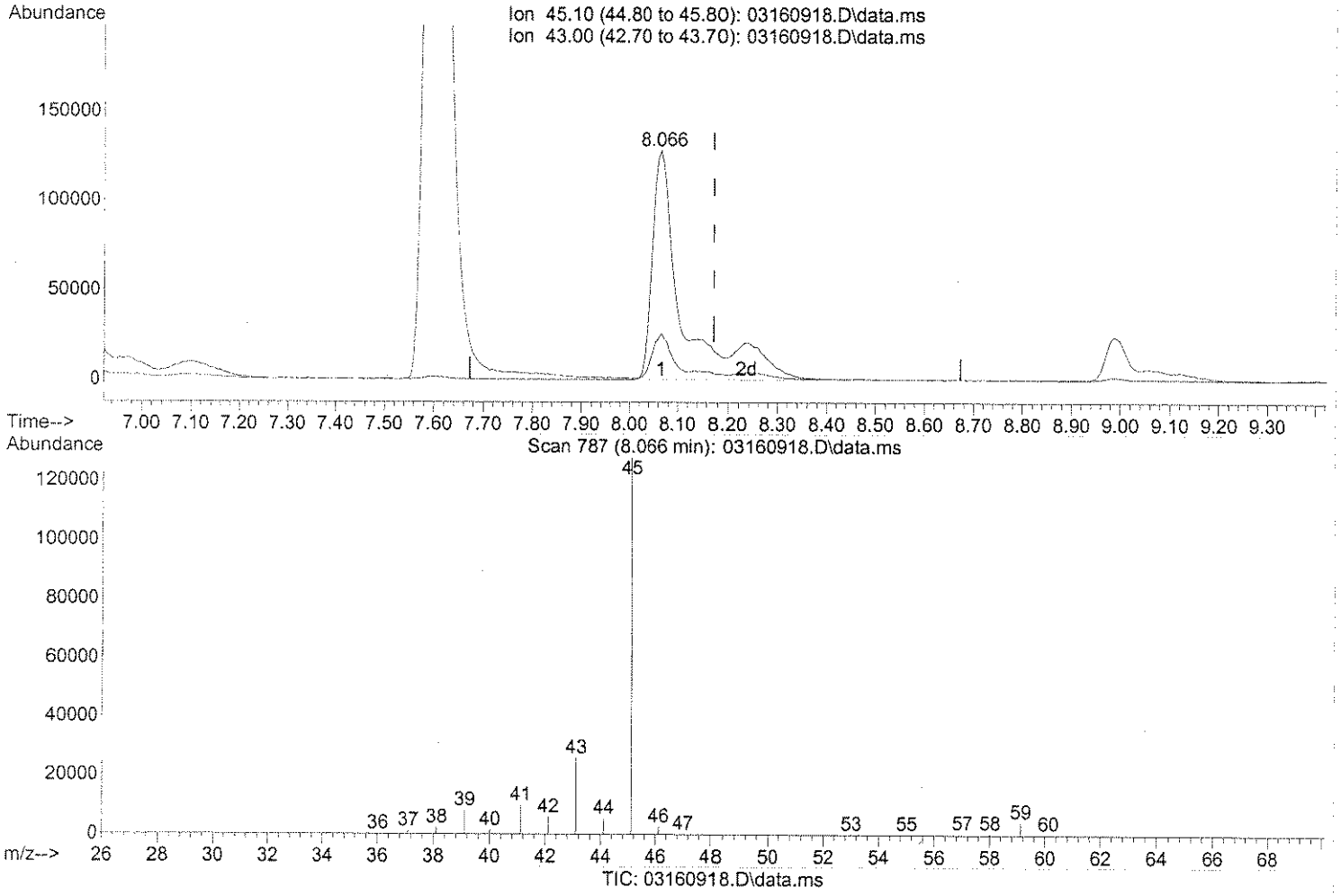
response 462932

SP

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	18.97
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160918.D
Acq On : 16 Mar 2009 21:00
Operator : WA/LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-02230901/S20-03120904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:50 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.066min (-0.108) 12.80ng m

response 562632

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	15.61
0.00	0.00	0.00
0.00	0.00	0.00

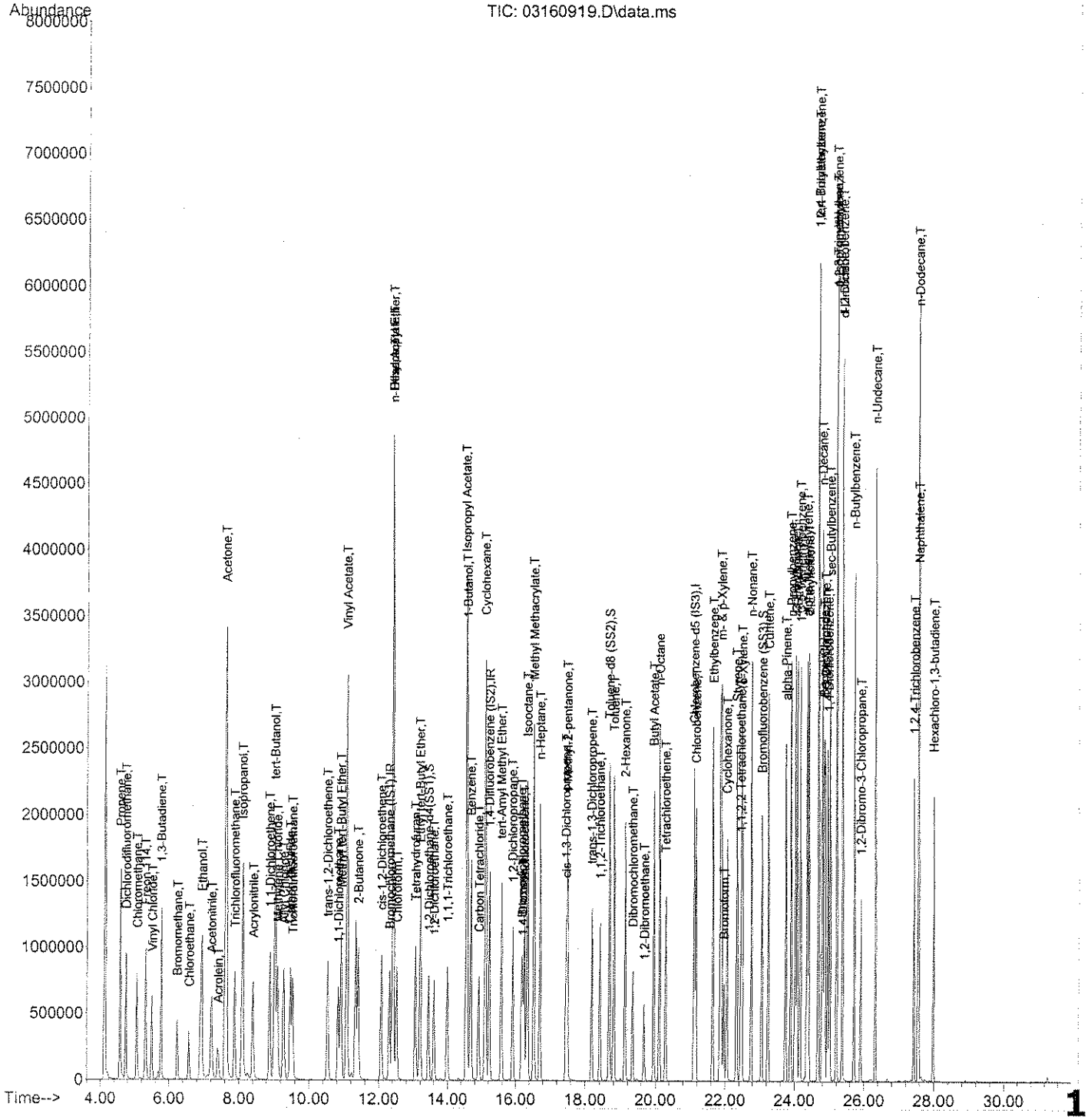
SP → IC
WA 03/17/09

CM 3/17/09

CM 3/17/09

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:46:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:46:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.31	130	352840	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.23	114	1662491	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.11	82	944054	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.44	65	835220	37.015	ng		-0.02
Spiked Amount 25.000			Recovery = 148.08%				
57) Toluene-d8 (SS2)	18.67	98	1903453	21.416	ng		0.00
Spiked Amount 25.000			Recovery = 85.68%				
73) Bromofluorobenzene (SS3)	23.06	174	622301	18.640	ng		0.00
Spiked Amount 25.000			Recovery = 74.56%				
Target Compounds							Qvalue
2) Propene	4.58	42	746687	37.802	ng		87
3) Dichlorodifluoromethane	4.74	85	1008925	29.252	ng		99
4) Chloromethane	5.06	50	1158796	41.120	ng		99
5) Freon 114	5.30	135	411437	25.086	ng		87
6) Vinyl Chloride	5.49	62	886165	35.097	ng		84
7) 1,3-Butadiene	5.77	54	806586	48.150	ng		97
8) Bromomethane	6.24	94	401922	30.715	ng		98
9) Chloroethane	6.57	64	413862	36.733	ng		99
10) Ethanol	6.94	45	2672701m	218.186	ng		
11) Acetonitrile	7.22	41	1284949	38.742	ng		90
12) Acrolein	7.41	56	421762	41.061	ng		81
13) Acetone	7.63	58	2525449	180.821	ng		90
14) Trichlorofluoromethane	7.88	101	919826	30.680	ng		96
15) Isopropanol	8.11	45	3666997m	73.191	ng		
16) Acrylonitrile	8.40	53	1012566	44.181	ng		98
17) 1,1-Dichloroethene	8.89	96	470253	31.850	ng		98
18) tert-Butanol	9.03	59	3667469	77.631	ng		98
19) Methylene Chloride	9.11	84	496688	28.029	ng	#	80
20) Allyl Chloride	9.28	41	1046961	48.834	ng		91
21) Trichlorotrifluoroethane	9.53	151	332343	24.722	ng		92
22) Carbon Disulfide	9.47	76	1788059	28.839	ng		99
23) trans-1,2-Dichloroethene	10.52	61	979030	40.463	ng		98
24) 1,1-Dichloroethane	10.83	63	1129063	39.102	ng		100
25) Methyl tert-Butyl Ether	10.91	73	1486201	34.190	ng		94
26) Vinyl Acetate	11.08	86	455172	157.111	ng	#	59
27) 2-Butanone	11.41	72	358491	33.611	ng	#	65
28) cis-1,2-Dichloroethene	12.07	61	975905	41.377	ng		99
29) Diisopropyl Ether	12.41	87	371379	28.786	ng	#	75
30) Ethyl Acetate	12.41	61	482832	78.302	ng		95
31) n-Hexane	12.41	57	1030895	35.367	ng		9

3/17/09 03/17/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:46:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.52	83	910948	34.014	ng		99
34) Tetrahydrofuran	13.06	72	341545	34.567	ng	#	69
35) Ethyl tert-Butyl Ether	13.20	87	581648	31.067	ng		98
36) 1,2-Dichloroethane	13.60	62	940821	41.685	ng		99
38) 1,1,1-Trichloroethane	14.00	97	797674	30.621	ng		97
39) Isopropyl Acetate	14.55	61	869324	73.604	ng	#	92
40) 1-Butanol	14.57	56	1644411	90.045	ng		81
41) Benzene	14.68	78	1979437	27.771	ng		99
42) Carbon Tetrachloride	14.92	117	681133	29.445	ng		100
43) Cyclohexane	15.11	84	1439451	60.758	ng	#	86
44) tert-Amyl Methyl Ether	15.58	73	1489882	30.675	ng		93
45) 1,2-Dichloropropane	15.91	63	630869	34.985	ng		99
46) Bromodichloromethane	16.18	83	706250	31.864	ng		100
47) Trichloroethene	16.26	130	459532	24.207	ng		100
48) 1,4-Dioxane	16.21	88	408647	29.715	ng		91
49) Isooctane	16.35	57	2910528	36.052	ng		100
50) Methyl Methacrylate	16.53	100	397080	56.726	ng	#	73
51) n-Heptane	16.72	71	531429	30.145	ng		87
52) cis-1,3-Dichloropropene	17.46	75	819825	30.732	ng		99
53) 4-Methyl-2-pentanone	17.51	58	681939	40.647	ng		92
54) trans-1,3-Dichloropropene	18.17	75	868328	35.211	ng		99
55) 1,1,2-Trichloroethane	18.41	97	463137	27.730	ng		95
58) Toluene	18.80	91	2051940	22.909	ng		99
59) 2-Hexanone	19.12	43	1821346	33.484	ng		94
60) Dibromochloromethane	19.35	129	537619	24.237	ng		99
61) 1,2-Dibromoethane	19.68	107	529515	23.227	ng		99
62) Butyl Acetate	19.95	43	2093802	33.572	ng		97
63) n-Octane	20.11	57	643652	31.260	ng		91
64) Tetrachloroethene	20.30	166	479367	19.197	ng		99
65) Chlorobenzene	21.17	112	1255584	21.179	ng		100
66) Ethylbenzene	21.65	91	2356550	23.604	ng		97
67) m- & p-Xylene	21.89	91	3692517	47.163	ng		97
68) Bromoform	21.96	173	436126	21.304	ng		99
69) Styrene	22.33	104	1400734	23.289	ng		96
70) o-Xylene	22.48	91	1893789	23.631	ng		96
71) n-Nonane	22.75	43	1535639	30.981	ng		90
72) 1,1,2,2-Tetrachloroethane	22.45	83	863838	24.292	ng		99
74) Cumene	23.24	105	2260665	21.322	ng		100
75) alpha-Pinene	23.74	93	1163759	25.477	ng		98
76) n-Propylbenzene	23.89	91	2936984	22.846	ng		97
77) 3-Ethyltoluene	24.01	105	2291127	23.586	ng		100
78) 4-Ethyltoluene	24.07	105	2242526	23.577	ng		99
79) 1,3,5-Trimethylbenzene	24.16	105	1919223	23.380	ng		101

3/17/09 3/17/09

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:46:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

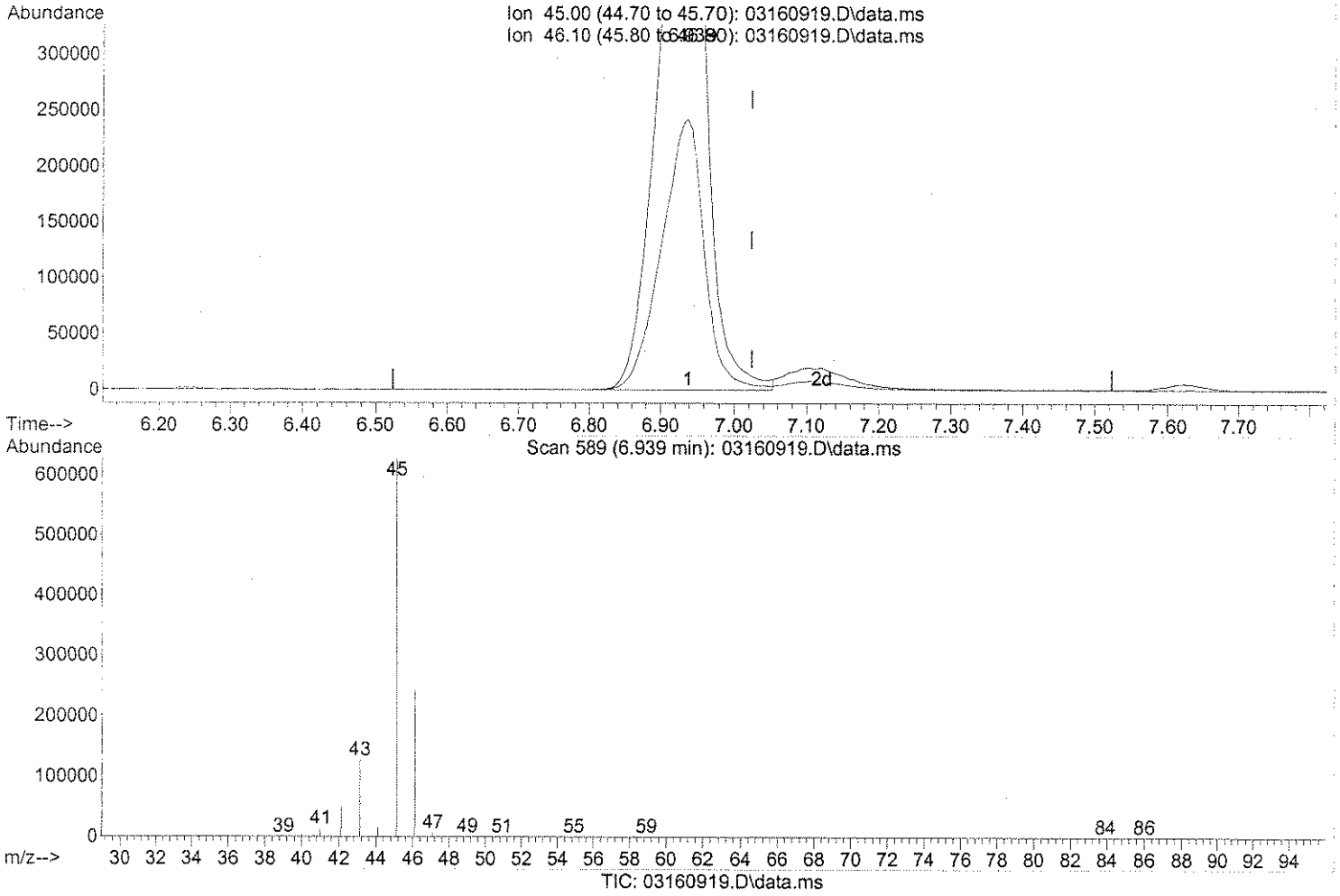
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	1022961	21.857	ng		98
81) 2-Ethyltoluene	24.40	105	2286441	22.946	ng		99
82) 1,2,4-Trimethylbenzene	24.68	105	1971977	22.390	ng		98
83) n-Decane	24.79	57	1696550	32.770	ng		95
84) Benzyl Chloride	24.84	91	1882984	26.292	ng		97
85) 1,3-Dichlorobenzene	24.87	146	1020803	19.853	ng		99
86) 1,4-Dichlorobenzene	24.95	146	1049510	19.924	ng		100
87) sec-Butylbenzene	25.01	105	2608239	22.695	ng		98
88) p-Isopropyltoluene	25.20	119	2261674	20.275	ng		97
89) 1,2,3-Trimethylbenzene	25.20	105	2016509	22.881	ng		96
90) 1,2-Dichlorobenzene	25.37	146	969245	19.906	ng		98
91) d-Limonene	25.38	68	873505	25.552	ng		99
92) 1,2-Dibromo-3-Chloropr...	25.90	157	343729	20.338	ng	#	76
93) n-Undecane	26.32	57	1796595	32.161	ng		93
94) 1,2,4-Trichlorobenzene	27.43	184	208430	20.289	ng		97
95) Naphthalene	27.57	128	2518994	19.836	ng		100
96) n-Dodecane	27.55	57	1843301	29.261	ng		92
97) Hexachloro-1,3-butadiene	27.99	225	412069	20.169	ng		100
98) Cyclohexanone	22.06	55	1096179	29.087	ng		95
99) tert-Butylbenzene	24.67	119	1792899	21.002	ng		99
100) n-Butylbenzene	25.71	91	2271532	24.972	ng		98

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.939min (-0.085) 208.44ng

response 2553295

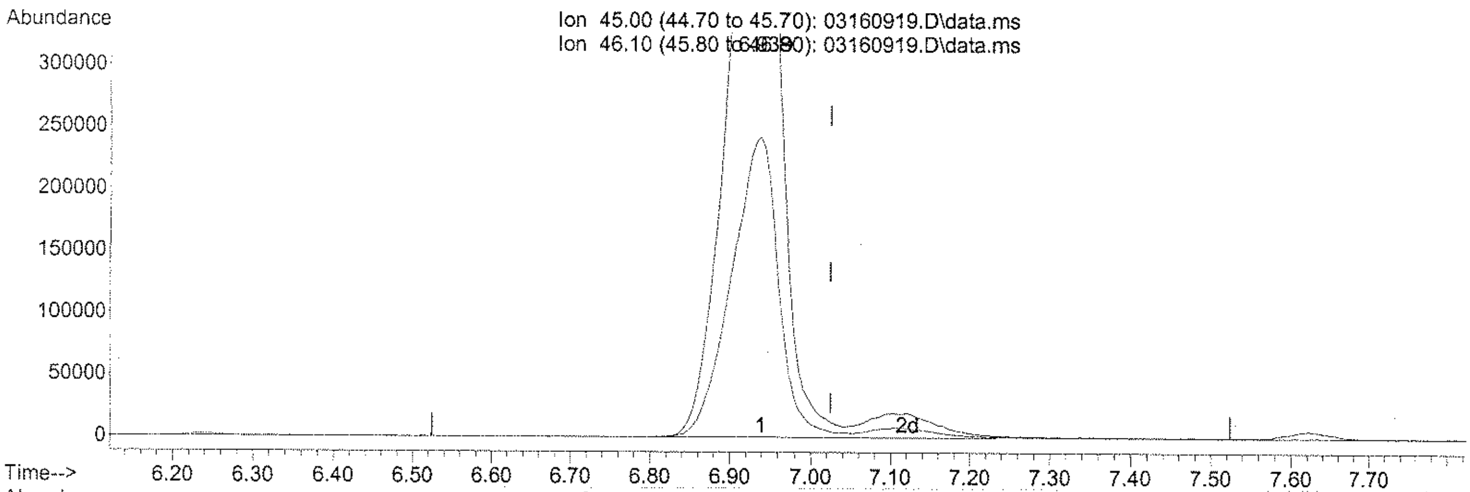
SP

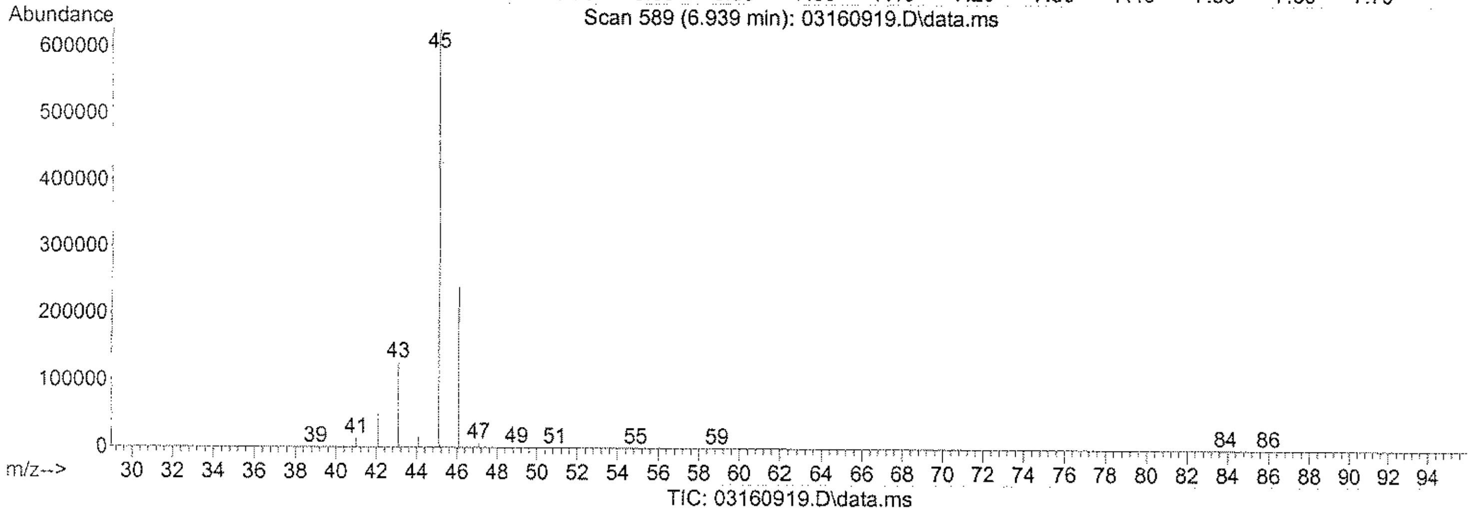
Ion	Exp%	Act%
45.00	100	100
46.10	35.10	38.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration





(10) Ethanol (T)

6.939min (-0.085) 218.19ng m

response 2672701

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	37.01
0.00	0.00	0.00
0.00	0.00	0.00

SP ⟶ IC
LH 03/17/09

Em 3/17/09

RH 3/17/09

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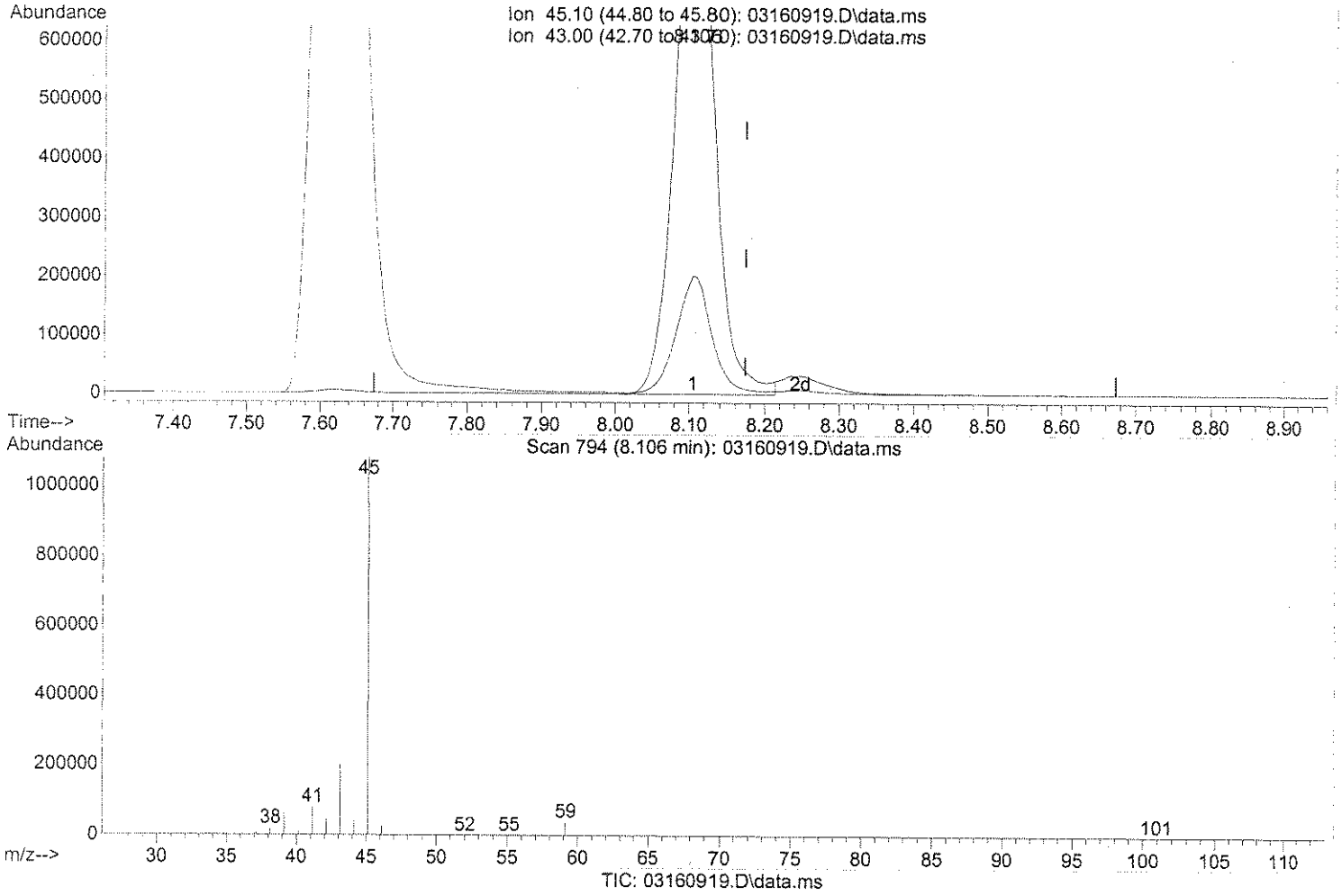
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.106min (-0.068) 70.51ng

response 3532636

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	19.60
0.00	0.00	0.00
0.00	0.00	0.00

SP

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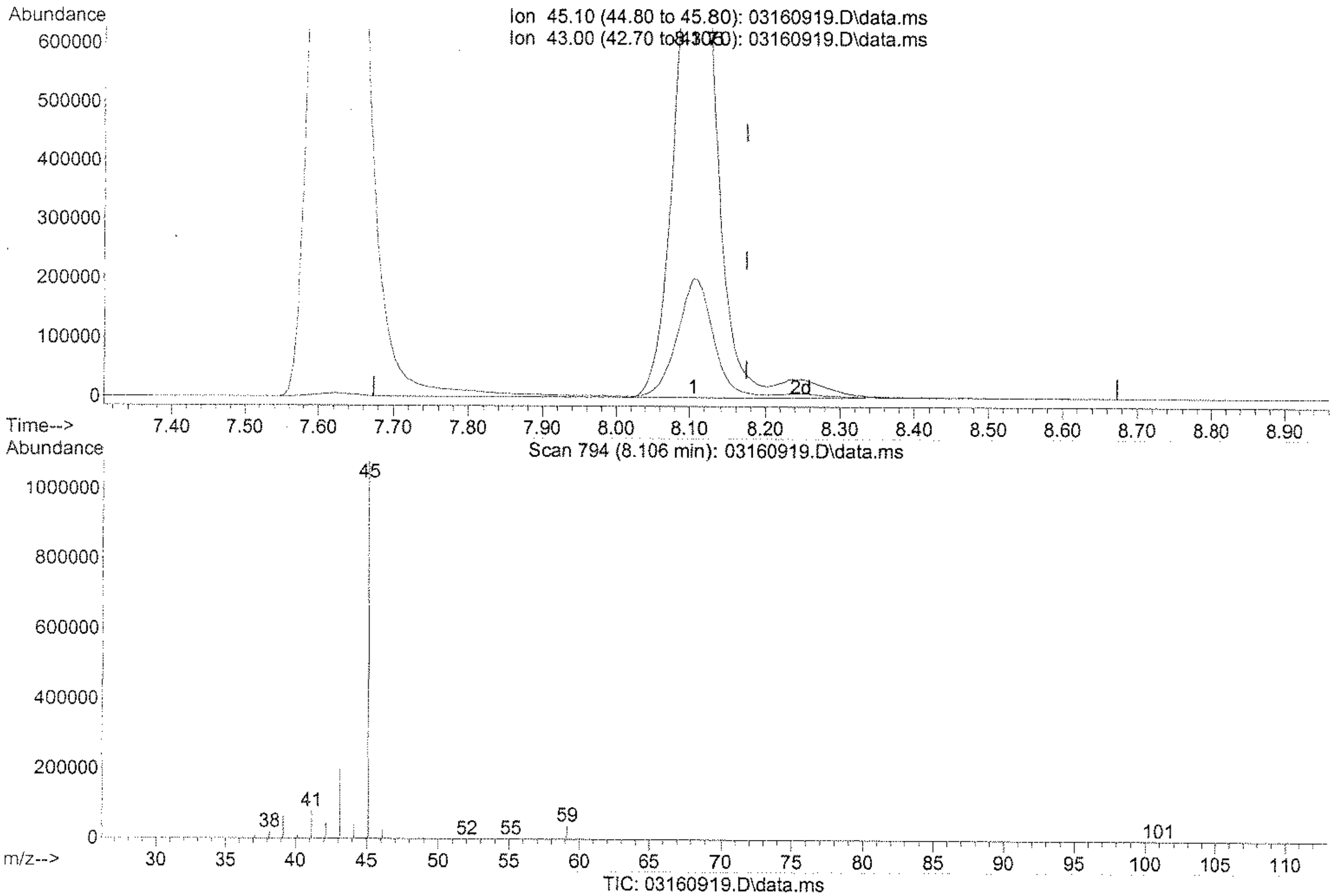
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160919.D
Acq On : 16 Mar 2009 21:41
Operator : WA/LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:53 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.106min (-0.068) 73.19ng m

response 3666997

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	18.88
0.00	0.00	0.00
0.00	0.00	0.00

SP → I/C
LH 03/17/09

Bm 3/17/09

[signature] 3/17/09

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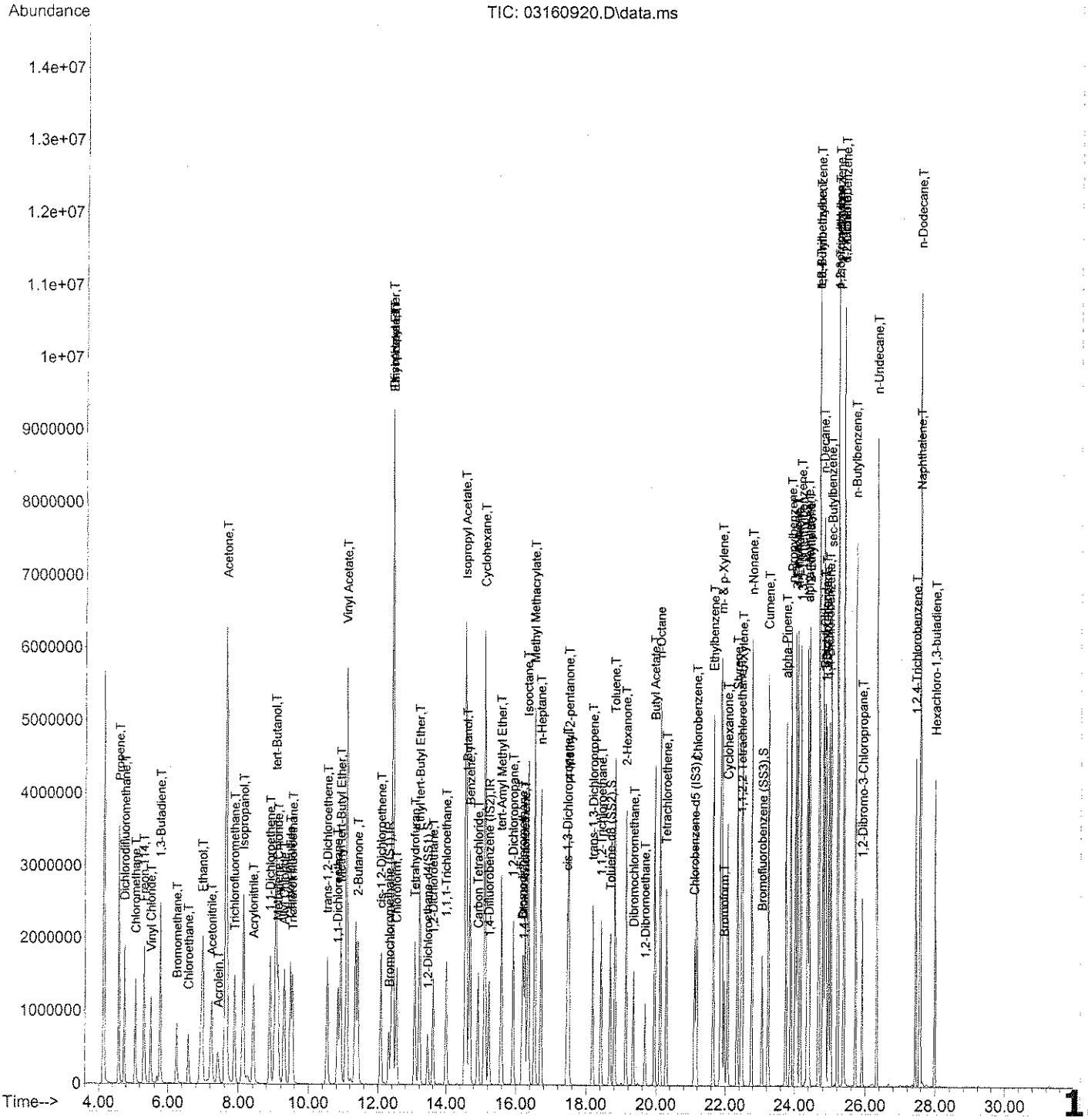
Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160920.D
Acq On : 16 Mar 2009 22:22
Operator : WA/LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:47:25 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160920.D
Acq On : 16 Mar 2009 22:22
Operator : WA/LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:47:25 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.32	130	313013	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.24	114	1494362	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.11	82	830036	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.45	65	734923	36.715	ng		-0.01
Spiked Amount 25.000			Recovery = 146.84%				
57) Toluene-d8 (SS2)	18.68	98	1683964	21.549	ng		0.00
Spiked Amount 25.000			Recovery = 86.20%				
73) Bromofluorobenzene (SS3)	23.06	174	555521	18.926	ng		0.00
Spiked Amount 25.000			Recovery = 75.72%				
Target Compounds							Qvalue
2) Propene	4.58	42	1646391	93.956	ng		87
3) Dichlorodifluoromethane	4.75	85	1994530	65.186	ng		99
4) Chloromethane	5.06	50	2190740	87.630	ng		99
5) Freon 114	5.31	135	809309	55.624	ng		87
6) Vinyl Chloride	5.50	62	1778530	79.401	ng		84
7) 1,3-Butadiene	5.77	54	1621872	109.137	ng		95
8) Bromomethane	6.25	94	793508	68.356	ng		97
9) Chloroethane	6.58	64	807251	80.765	ng		99
10) Ethanol	6.97	45	5292988m	487.072	ng		
11) Acetonitrile	7.23	41	2533379	86.101	ng		90
12) Acrolein	7.42	56	828988	90.976	ng		82
13) Acetone	7.64	58	5119967	413.232	ng		97
14) Trichlorofluoromethane	7.88	101	1795308	67.500	ng		96
15) Isopropanol	8.13	45	6248618	140.587	ng		97
16) Acrylonitrile	8.41	53	2012238	98.970	ng		98
17) 1,1-Dichloroethene	8.89	96	928027	70.852	ng		97
18) tert-Butanol	9.06	59	7219659	172.266	ng		98
19) Methylene Chloride	9.12	84	980196	62.352	ng	#	79
20) Allyl Chloride	9.29	41	2103990	110.625	ng		91
21) Trichlorotrifluoroethane	9.53	151	695557	58.324	ng		93
22) Carbon Disulfide	9.47	76	3530413	64.187	ng		99
23) trans-1,2-Dichloroethene	10.54	61	1921572	89.524	ng		98
24) 1,1-Dichloroethane	10.84	63	2212780	86.384	ng		100
25) Methyl tert-Butyl Ether	10.92	73	2999102	77.773	ng		95
26) Vinyl Acetate	11.09	86	915419	356.178	ng	#	57
27) 2-Butanone	11.42	72	714161	75.478	ng	#	64
28) cis-1,2-Dichloroethene	12.08	61	1913943	91.475	ng		99
29) Diisopropyl Ether	12.41	87	752100	65.712	ng	#	70
30) Ethyl Acetate	12.42	61	985304	180.121	ng		95
31) n-Hexane	12.42	57	2168079	83.845	ng		91

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160920.D
Acq On : 16 Mar 2009 22:22
Operator : WA/LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:47:25 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.53	83	1789717	75.329	ng		99
34) Tetrahydrofuran	13.06	72	667077	76.103	ng	#	70
35) Ethyl tert-Butyl Ether	13.20	87	1168430	70.349	ng		98
36) 1,2-Dichloroethane	13.61	62	1828555	91.326	ng		98
38) 1,1,1-Trichloroethane	14.00	97	1578067	67.395	ng		97
39) Isopropyl Acetate	14.56	61	1744277	164.300	ng	#	87
40) 1-Butanol	14.60	56	3256306	198.372	ng		84
41) Benzene	14.69	78	3960625	61.817	ng		99
42) Carbon Tetrachloride	14.92	117	1362855	65.544	ng		100
43) Cyclohexane	15.12	84	2881867	135.326	ng	#	87
44) tert-Amyl Methyl Ether	15.59	73	2965244	67.920	ng		93
45) 1,2-Dichloropropane	15.92	63	1241435	76.591	ng		99
46) Bromodichloromethane	16.19	83	1377147	69.124	ng		99
47) Trichloroethene	16.27	130	913551	53.538	ng		100
48) 1,4-Dioxane	16.22	88	790818	63.975	ng		93
49) Isooctane	16.35	57	5812245	80.096	ng		99
50) Methyl Methacrylate	16.54	100	803398	127.685	ng	#	77
51) n-Heptane	16.72	71	1043242	65.836	ng		88
52) cis-1,3-Dichloropropene	17.47	75	1610306	67.155	ng		99
53) 4-Methyl-2-pentanone	17.51	58	1357026	89.986	ng		93
54) trans-1,3-Dichloropropene	18.18	75	1703001	76.826	ng		99
55) 1,1,2-Trichloroethane	18.42	97	902260	60.100	ng		95
58) Toluene	18.81	91	4005887	50.868	ng		99
59) 2-Hexanone	19.13	43	3543807	74.100	ng		92
60) Dibromochloromethane	19.35	129	1051566	53.918	ng		99
61) 1,2-Dibromoethane	19.68	107	1033806	51.576	ng		99
62) Butyl Acetate	19.95	43	4221487	76.984	ng		96
63) n-Octane	20.12	57	1279945	70.702	ng		93
64) Tetrachloroethene	20.30	166	951147	43.323	ng		100
65) Chlorobenzene	21.17	112	2437368	46.761	ng		100
66) Ethylbenzene	21.65	91	4603732	52.447	ng		98
67) m- & p-Xylene	21.89	91	7280994	105.772	ng		98
68) Bromoform	21.97	173	879590	48.869	ng		99
69) Styrene	22.34	104	2792358	52.803	ng		97
70) o-Xylene	22.49	91	3739041	53.066	ng		97
71) n-Nonane	22.76	43	2977221	68.315	ng		88
72) 1,1,2,2-Tetrachloroethane	22.45	83	1699419	54.354	ng		99
74) Cumene	23.24	105	4453550	47.774	ng		100
75) alpha-Pinene	23.74	93	2280486	56.783	ng		99
76) n-Propylbenzene	23.89	91	5809329	51.397	ng		98
77) 3-Ethyltoluene	24.02	105	4615975	54.046	ng		100
78) 4-Ethyltoluene	24.07	105	4423456	52.895	ng		99
79) 1,3,5-Trimethylbenzene	24.17	105	3852569	53.378	ng		10[illegible]

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160920.D
Acq On : 16 Mar 2009 22:22
Operator : WA/LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:47:25 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

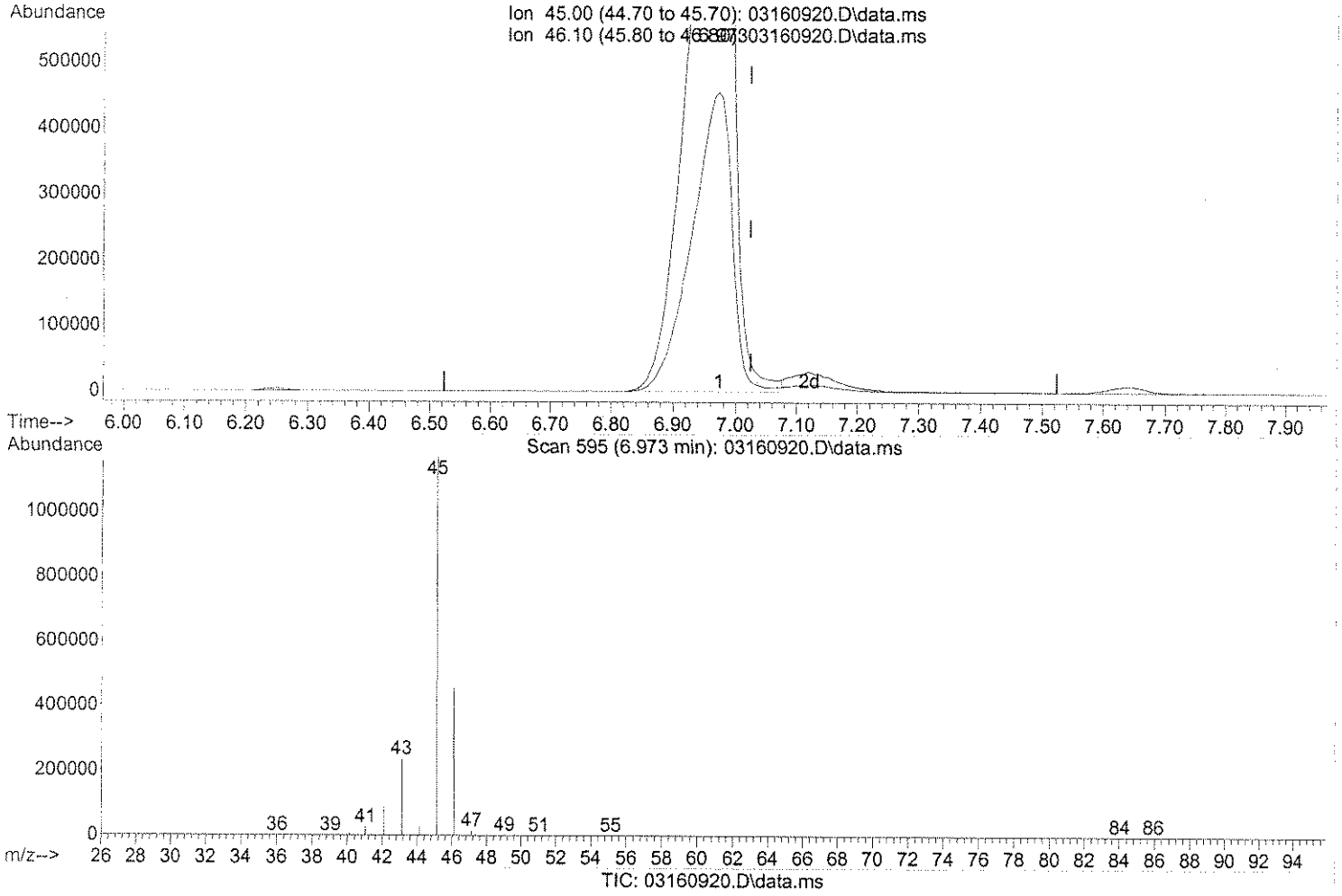
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.36	118	2046825	49.742	ng	99
81) 2-Ethyltoluene	24.40	105	4567078	52.129	ng	99
82) 1,2,4-Trimethylbenzene	24.68	105	3927160	50.715	ng	97
83) n-Decane	24.80	57	3392110	74.520	ng	95
84) Benzyl Chloride	24.84	91	3798308	60.320	ng	97
85) 1,3-Dichlorobenzene	24.87	146	2064065	45.657	ng	100
86) 1,4-Dichlorobenzene	24.95	146	2096061	45.257	ng	100
87) sec-Butylbenzene	25.01	105	5200289	51.466	ng	98
88) p-Isopropyltoluene	25.20	119	4518040	46.066	ng	99
89) 1,2,3-Trimethylbenzene	25.21	105	4000709	51.630	ng	95
90) 1,2-Dichlorobenzene	25.38	146	1960892	45.805	ng	99
91) d-Limonene	25.38	68	1697375	56.472	ng	100
92) 1,2-Dibromo-3-Chloropr...	25.91	157	684857	46.088	ng	81
93) n-Undecane	26.32	57	3532236	71.916	ng	93
94) 1,2,4-Trichlorobenzene	27.43	184	413562	45.787	ng	97
95) Naphthalene	27.57	128	5081864	45.515	ng	100
96) n-Dodecane	27.56	57	3600069	64.998	ng	93
97) Hexachloro-1,3-butadiene	27.99	225	836970	46.593	ng	100
98) Cyclohexanone	22.07	55	2164576	65.326	ng	94
99) tert-Butylbenzene	24.68	119	3598433	47.941	ng	99
100) n-Butylbenzene	25.71	91	4433855	55.438	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160920.D
Acq On : 16 Mar 2009 22:22
Operator : WA/LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:56 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.973min (-0.051) 472.63ng

response 5136084

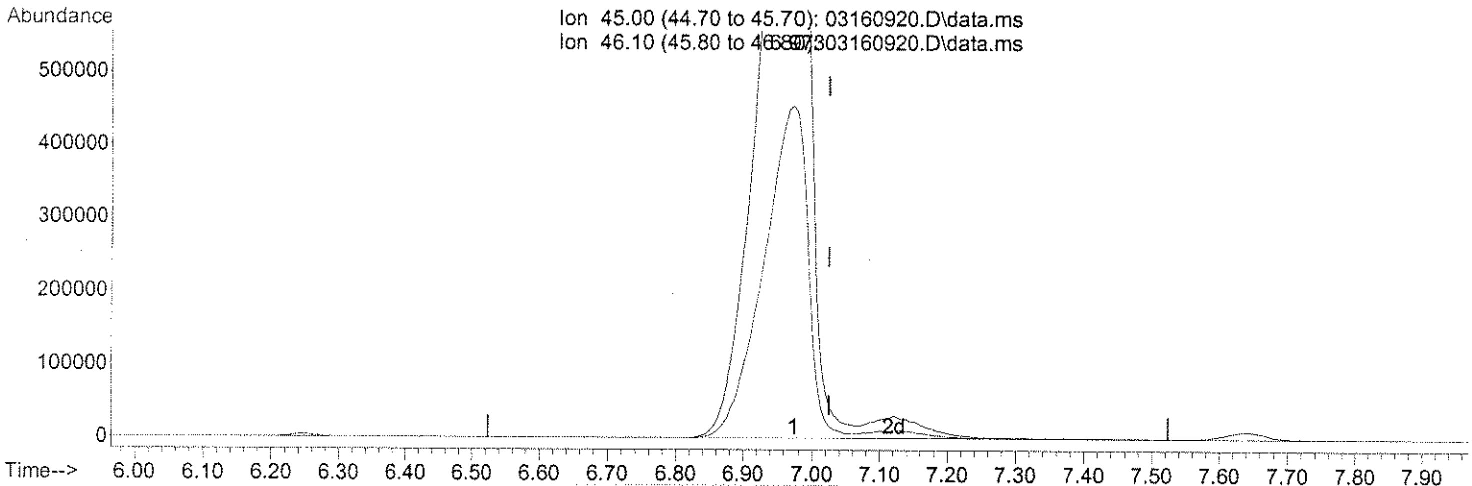
SP

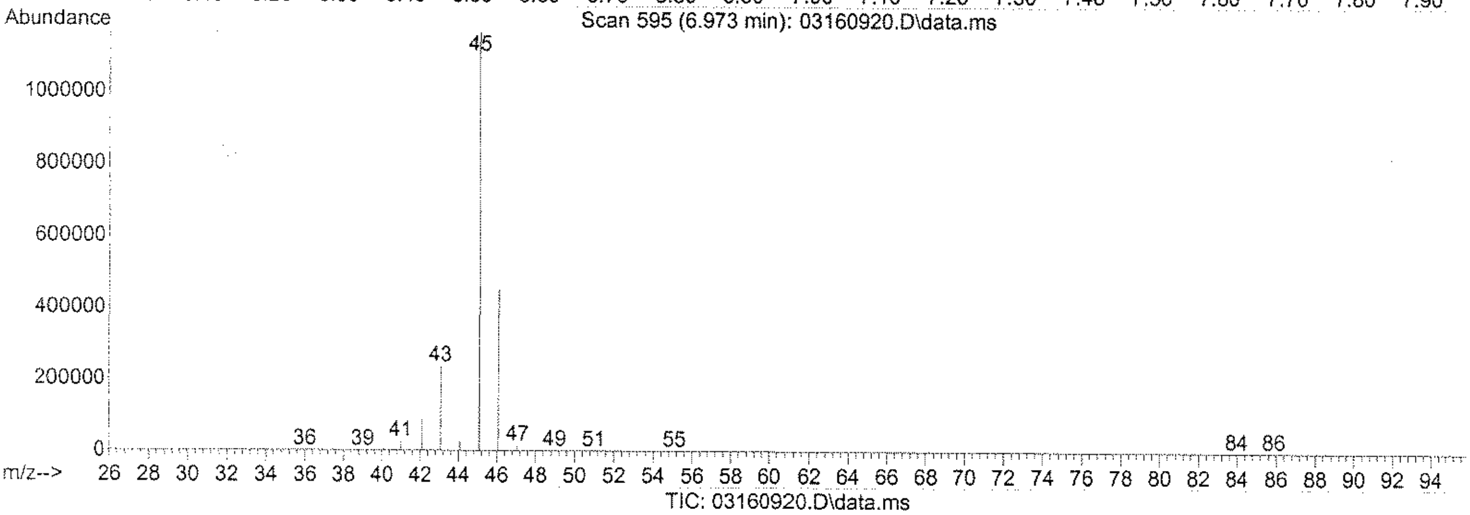
Ion	Exp%	Act%
45.00	100	100
46.10	35.10	40.20
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160920.D
Acq On : 16 Mar 2009 22:22
Operator : WA/LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:33:56 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration





(10) Ethanol (T)

6.973min (-0.051) 487.07ng m

response 5292988

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	39.00
0.00	0.00	0.00
0.00	0.00	0.00

SP ⟶ IC

LH 03/17/09

Em 3/17/09

PH 3/17/09

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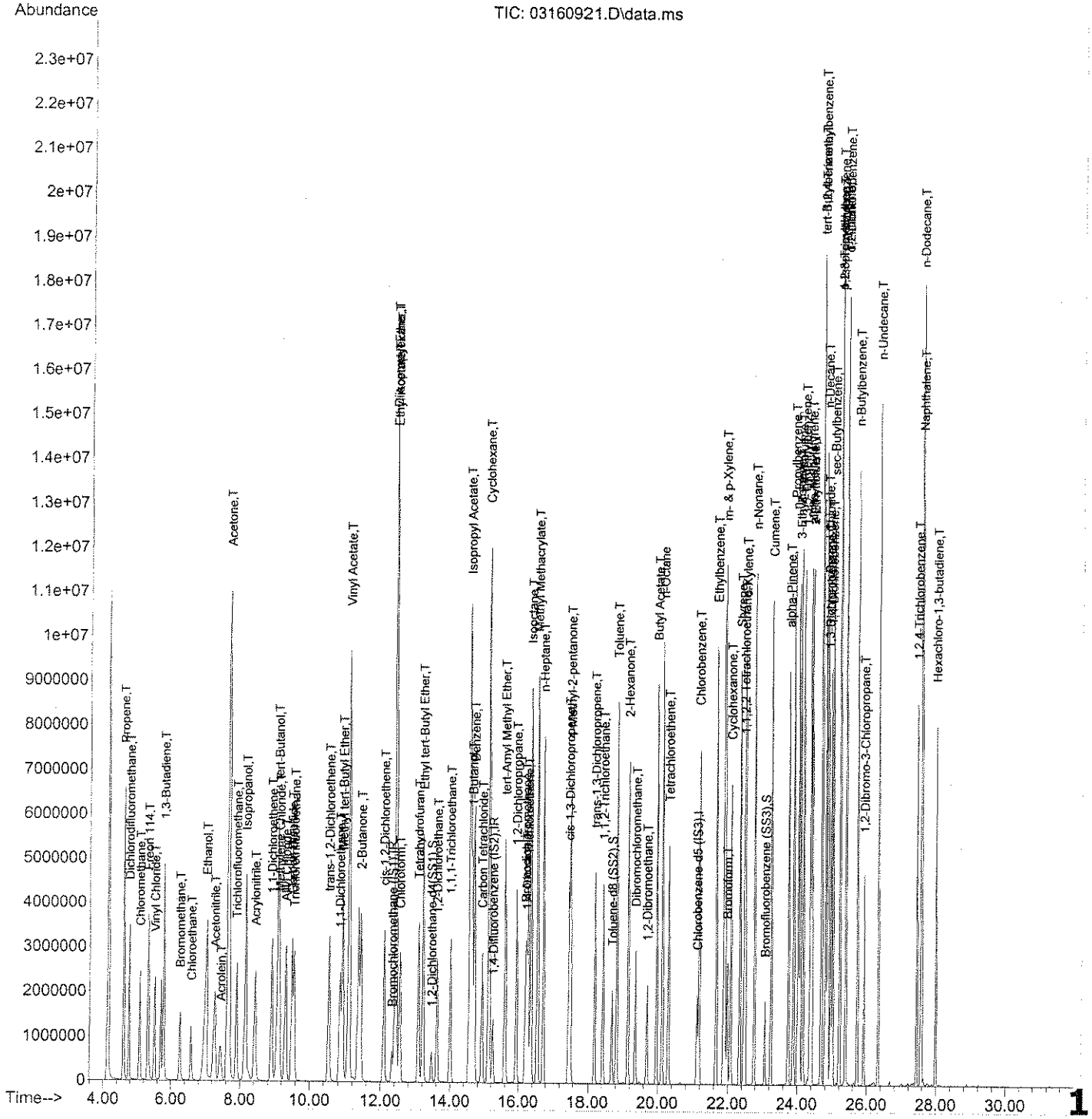
Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160921.D
Acq On : 16 Mar 2009 23:03
Operator : WA/LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:34:01 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160921.D
Acq On : 16 Mar 2009 23:03
Operator : WA/LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:34:01 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.33	130	319370	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.25	114	1531788	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.12	82	837799	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.46	65	741582	36.310	ng		0.00
Spiked Amount 25.000			Recovery = 145.24%				
57) Toluene-d8 (SS2)	18.68	98	1705944	21.628	ng		0.00
Spiked Amount 25.000			Recovery = 86.52%				
73) Bromofluorobenzene (SS3)	23.06	174	567547	19.156	ng		0.00
Spiked Amount 25.000			Recovery = 76.64%				
Target Compounds							Qvalue
2) Propene	4.59	42	3368656	188.415	ng		85
3) Dichlorodifluoromethane	4.75	85	3928481	125.836	ng		99
4) Chloromethane	5.07	50	3966805	155.515	ng		99
5) Freon 114	5.32	135	1647193	110.959	ng		87
6) Vinyl Chloride	5.51	62	3663148	160.283	ng		84
7) 1,3-Butadiene	5.78	54	3397479	224.069	ng		94
8) Bromomethane	6.26	94	1578594	133.279	ng		97
9) Chloroethane	6.59	64	1649172	161.713	ng		100
10) Ethanol	7.02	45	10691324	964.255	ng		93
11) Acetonitrile	7.26	41	5128509	170.831	ng		91
12) Acrolein	7.43	56	1691305	181.915	ng		82
13) Acetone	7.67	58	10481930	829.155	ng		93
14) Trichlorofluoromethane	7.89	101	3528378	130.019	ng		96
15) Isopropanol	8.17	45	11649135	256.876	ng		97
16) Acrylonitrile	8.44	53	4060174	195.720	ng		98
17) 1,1-Dichloroethene	8.90	96	1865804	139.612	ng		95
18) tert-Butanol	9.09	59	10169152	237.814	ng		97
19) Methylene Chloride	9.13	84	1963528	122.418	ng	#	78
20) Allyl Chloride	9.31	41	4287391	220.938	ng		91
21) Trichlorotrifluoroethane	9.55	151	1450859	119.236	ng		95
22) Carbon Disulfide	9.48	76	7070229	125.986	ng		99
23) trans-1,2-Dichloroethene	10.55	61	3829079	174.841	ng		98
24) 1,1-Dichloroethane	10.85	63	4409205	168.703	ng		100
25) Methyl tert-Butyl Ether	10.93	73	6085584	154.670	ng		96
26) Vinyl Acetate	11.12	86	1831109	698.279	ng	#	48
27) 2-Butanone	11.44	72	1396796	144.685	ng	#	63
28) cis-1,2-Dichloroethene	12.09	61	3775540	176.856	ng		98
29) Diisopropyl Ether	12.42	87	1555845	133.231	ng	#	1
30) Ethyl Acetate	12.44	61	1999038	358.165	ng		95
31) n-Hexane	12.43	57	4588043	173.899	ng		98

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160921.D
Acq On : 16 Mar 2009 23:03
Operator : WA/LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 17 08:34:01 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.55	83	3520097	145.212	ng		99
34) Tetrahydrofuran	13.08	72	1286886	143.891	ng	#	69
35) Ethyl tert-Butyl Ether	13.21	87	2399674	141.604	ng		98
36) 1,2-Dichloroethane	13.63	62	3510068	171.819	ng		99
38) 1,1,1-Trichloroethane	14.01	97	3115602	129.808	ng		98
39) Isopropyl Acetate	14.57	61	3541985	325.480	ng	#	79
40) 1-Butanol	14.63	56	6422539	381.697	ng		88
41) Benzene	14.70	78	8065514	122.811	ng		98
42) Carbon Tetrachloride	14.93	117	2693466	126.373	ng		100
43) Cyclohexane	15.13	84	5931448	271.722	ng	#	87
44) tert-Amyl Methyl Ether	15.60	73	5978366	133.590	ng		93
45) 1,2-Dichloropropane	15.93	63	2471001	148.724	ng		99
46) Bromodichloromethane	16.20	83	2698068	132.117	ng		99
47) Trichloroethene	16.28	130	1827635	104.490	ng		100
48) 1,4-Dioxane	16.23	88	1573817	124.206	ng		93
49) Isooctane	16.36	57	11777867	158.339	ng		96
50) Methyl Methacrylate	16.56	100	1637223	253.847	ng	#	80
51) n-Heptane	16.73	71	2087711	128.531	ng		90
52) cis-1,3-Dichloropropene	17.47	75	3166708	128.835	ng		99
53) 4-Methyl-2-pentanone	17.52	58	2750177	177.912	ng		94
54) trans-1,3-Dichloropropene	18.18	75	3347577	147.326	ng		99
55) 1,1,2-Trichloroethane	18.42	97	1802565	117.136	ng		97
58) Toluene	18.82	91	8053465	101.318	ng		99
59) 2-Hexanone	19.14	43	6937233	143.712	ng		89
60) Dibromochloromethane	19.36	129	2086980	106.016	ng		99
61) 1,2-Dibromoethane	19.69	107	2056365	101.641	ng		100
62) Butyl Acetate	19.97	43	8780180	158.634	ng		94
63) n-Octane	20.13	57	2593599	141.938	ng		94
64) Tetrachloroethene	20.30	166	1954769	88.212	ng		99
65) Chlorobenzene	21.17	112	4898843	93.114	ng		100
66) Ethylbenzene	21.66	91	9226357	104.135	ng		98
67) m- & p-Xylene	21.90	91	14643432	210.757	ng		99
68) Bromoform	21.97	173	1793918	98.745	ng		99
69) Styrene	22.34	104	5708109	106.939	ng		98
70) o-Xylene	22.49	91	7468158	105.010	ng		98
71) n-Nonane	22.77	43	5679996	129.125	ng		83
72) 1,1,2,2-Tetrachloroethane	22.46	83	3471058	109.989	ng		100
74) Cumene	23.25	105	8977982	95.415	ng		100
75) alpha-Pinene	23.75	93	4563722	112.581	ng		98
76) n-Propylbenzene	23.89	91	11626947	101.913	ng		97
77) 3-Ethyltoluene	24.02	105	9335087	108.286	ng		99
78) 4-Ethyltoluene	24.08	105	8912050	105.582	ng		99
79) 1,3,5-Trimethylbenzene	24.17	105	7715429	105.908	ng		99

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160921.D
Acq On : 16 Mar 2009 23:03
Operator : WA/LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-02230901/S20-03050902
ALS Vial : 2 Sample Multiplier: 1

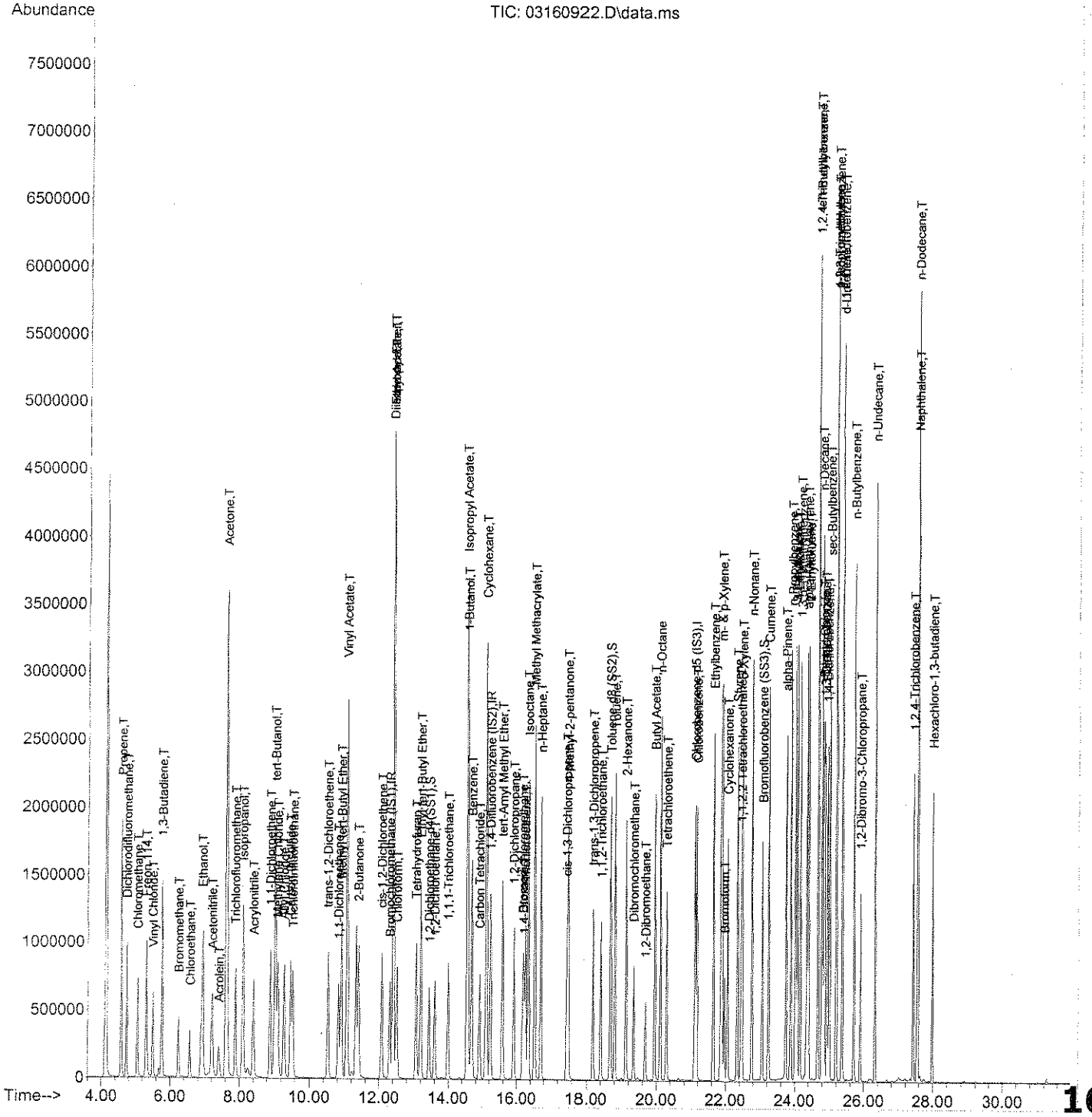
Quant Time: Mar 17 08:34:01 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Jan 23 08:54:57 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.36	118	4167195	100.332	ng	98
81) 2-Ethyltoluene	24.42	105	9155984	103.538	ng	99
82) 1,2,4-Trimethylbenzene	24.69	105	7409227	94.796	ng	96
83) n-Decane	24.80	57	6614562	143.967	ng	95
84) Benzyl Chloride	24.85	91	7523989	118.380	ng	98
85) 1,3-Dichlorobenzene	24.88	146	4199032	92.023	ng	100
86) 1,4-Dichlorobenzene	24.96	146	4266648	91.269	ng	100
87) sec-Butylbenzene	25.02	105	10310603	101.095	ng	99
88) p-Isopropyltoluene	25.21	119	8340078	84.248	ng	98
89) 1,2,3-Trimethylbenzene	25.21	105	7355972	94.051	ng	94
90) 1,2-Dichlorobenzene	25.38	146	3769573	87.238	ng	99
91) d-Limonene	25.38	68	3040015	100.204	ng	97
92) 1,2-Dibromo-3-Chloropr...	25.91	157	1398930	93.270	ng	91
93) n-Undecane	26.33	57	6898782	139.156	ng	93
94) 1,2,4-Trichlorobenzene	27.44	184	858421	94.159	ng	97
95) Naphthalene	27.58	128	10267134	91.104	ng	100
96) n-Dodecane	27.56	57	6584298	117.776	ng	90
97) Hexachloro-1,3-butadiene	28.00	225	1770175	97.630	ng	99
98) Cyclohexanone	22.08	55	4308895	128.836	ng	92
99) tert-Butylbenzene	24.68	119	6823217	90.062	ng	99
100) n-Butylbenzene	25.72	91	8728785	108.128	ng	100

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

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On : 16 Mar 2009 23:44
Operator : WA/LH
Sample : 25ng TO-15 ICV STD
Misc : S20-02230901/S20-03050910
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 17 08:55:56 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On : 16 Mar 2009 23:44
Operator : WA/LH
Sample : 25ng TO-15 ICV STD
Misc : S20-02230901/S20-03050910
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 17 08:55:56 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.31	130	315080	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.23	114	1471324	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.11	82	831076	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.44	65	715576	23.929	ng		-0.02
Spiked Amount 25.000			Recovery =	95.72%			
57) Toluene-d8 (SS2)	18.67	98	1682861	24.937	ng		0.00
Spiked Amount 25.000			Recovery =	99.76%			
73) Bromofluorobenzene (SS3)	23.06	174	553220	25.405	ng		0.00
Spiked Amount 25.000			Recovery =	101.60%			
Target Compounds							Qvalue
2) Propene	4.58	42	871481	29.241	ng		88
3) Dichlorodifluoromethane	4.74	85	1030743	25.775	ng		99
4) Chloromethane	5.06	50	1108817	25.168	ng		99
5) Freon 114	5.31	135	418865	26.282	ng		87
6) Vinyl Chloride	5.49	62	899382	25.471	ng		84
7) 1,3-Butadiene	5.77	54	928035	31.641	ng		95
8) Bromomethane	6.24	94	402018	26.007	ng		97
9) Chloroethane	6.57	64	405607	25.047	ng		99
10) Ethanol	6.93	45	2644565m	149.460	ng		
11) Acetonitrile	7.21	41	1286255	27.858	ng		91
12) Acrolein	7.41	56	387993	24.776	ng		82
13) Acetone	7.62	58	2628560	133.268	ng		95
14) Trichlorofluoromethane	7.88	101	929159	27.787	ng		95
15) Isopropanol	8.11	45	2932038m	41.624	ng		
16) Acrylonitrile	8.40	53	1002569	27.753	ng		98
17) 1,1-Dichloroethene	8.89	96	470758	27.880	ng		94
18) tert-Butanol	9.03	59	3570553	51.713	ng		98
19) Methylene Chloride	9.10	84	496965	24.720	ng	#	75
20) Allyl Chloride	9.28	41	1042823	29.789	ng		90
21) Trichlorotrifluoroethane	9.53	151	346541	27.896	ng		93
22) Carbon Disulfide	9.47	76	1809565	26.247	ng		99
23) trans-1,2-Dichloroethene	10.52	61	995428	28.686	ng		97
24) 1,1-Dichloroethane	10.83	63	1110011	27.526	ng		100
25) Methyl tert-Butyl Ether	10.91	73	1533007	27.742	ng		94
26) Vinyl Acetate	11.08	86	441996	158.615	ng	#	46
27) 2-Butanone	11.41	72	368977	31.582	ng	#	58
28) cis-1,2-Dichloroethene	12.07	61	951792	27.955	ng		98
29) Diisopropyl Ether	12.40	87	378573	26.774	ng	#	67
30) Ethyl Acetate	12.41	61	487609	61.587	ng		94
31) n-Hexane	12.41	57	1048750	25.098	ng		9[illegible]

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Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On : 16 Mar 2009 23:44
Operator : WA/LH
Sample : 25ng TO-15 ICV STD
Misc : S20-02230901/S20-03050910
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 17 08:55:56 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.52	83	888894	27.751	ng		99
34) Tetrahydrofuran	13.06	72	345559	30.417	ng	#	66
35) Ethyl tert-Butyl Ether	13.20	87	581731	26.220	ng		98
36) 1,2-Dichloroethane	13.60	62	909198	27.321	ng		98
38) 1,1,1-Trichloroethane	14.00	97	792852	27.219	ng		98
39) Isopropyl Acetate	14.55	61	850193	55.448	ng	#	89
40) 1-Butanol	14.57	56	1652947	66.675	ng		84
41) Benzene	14.68	78	1964231	26.150	ng		99
42) Carbon Tetrachloride	14.91	117	672545	30.371	ng		100
43) Cyclohexane	15.11	84	1488112	55.534	ng	#	85
44) tert-Amyl Methyl Ether	15.58	73	1493321	26.792	ng		92
45) 1,2-Dichloropropane	15.91	63	614188	27.385	ng		100
46) Bromodichloromethane	16.18	83	717255	28.918	ng		99
47) Trichloroethene	16.26	130	460617	25.628	ng		100
48) 1,4-Dioxane	16.21	88	414621	29.466	ng		90
49) Isooctane	16.35	57	2867700	25.931	ng		99
50) Methyl Methacrylate	16.53	100	398914	60.666	ng	#	75
51) n-Heptane	16.72	71	538174	27.308	ng		86
52) cis-1,3-Dichloropropene	17.46	75	807924	28.057	ng		99
53) 4-Methyl-2-pentanone	17.50	58	687432	31.460	ng		91
54) trans-1,3-Dichloropropene	18.17	75	860192	32.873	ng		99
55) 1,1,2-Trichloroethane	18.41	97	460099	27.665	ng		96
58) Toluene	18.80	91	2017648	27.557	ng		99
59) 2-Hexanone	19.12	43	1798096	27.731	ng		92
60) Dibromochloromethane	19.35	129	548781	33.468	ng		99
61) 1,2-Dibromoethane	19.68	107	526281	28.916	ng		99
62) Butyl Acetate	19.95	43	1997274	28.816	ng		96
63) n-Octane	20.11	57	639715	27.013	ng		90
64) Tetrachloroethene	20.30	166	479197	25.652	ng		99
65) Chlorobenzene	21.17	112	1242350	27.636	ng		100
66) Ethylbenzene	21.65	91	2325432	27.278	ng		97
67) m- & p-Xylene	21.88	91	3648920	53.956	ng		98
68) Bromoform	21.96	173	449680	32.890	ng		100
69) Styrene	22.33	104	1394298	28.974	ng		96
70) o-Xylene	22.48	91	1882263	26.884	ng		96
71) n-Nonane	22.75	43	1480023	26.147	ng		88
72) 1,1,2,2-Tetrachloroethane	22.45	83	857426	30.827	ng		99
74) Cumene	23.24	105	2267800	26.251	ng		100
75) alpha-Pinene	23.74	93	1157117	29.637	ng		97
76) n-Propylbenzene	23.88	91	2942150	26.968	ng		97
77) 3-Ethyltoluene	24.01	105	2302715	29.111	ng		100
78) 4-Ethyltoluene	24.07	105	2283268	29.478	ng		99
79) 1,3,5-Trimethylbenzene	24.16	105	1913568	27.370	ng		101

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On : 16 Mar 2009 23:44
Operator : WA/LH
Sample : 25ng TO-15 ICV STD
Misc : S20-02230901/S20-03050910
ALS Vial : 3 Sample Multiplier: 1

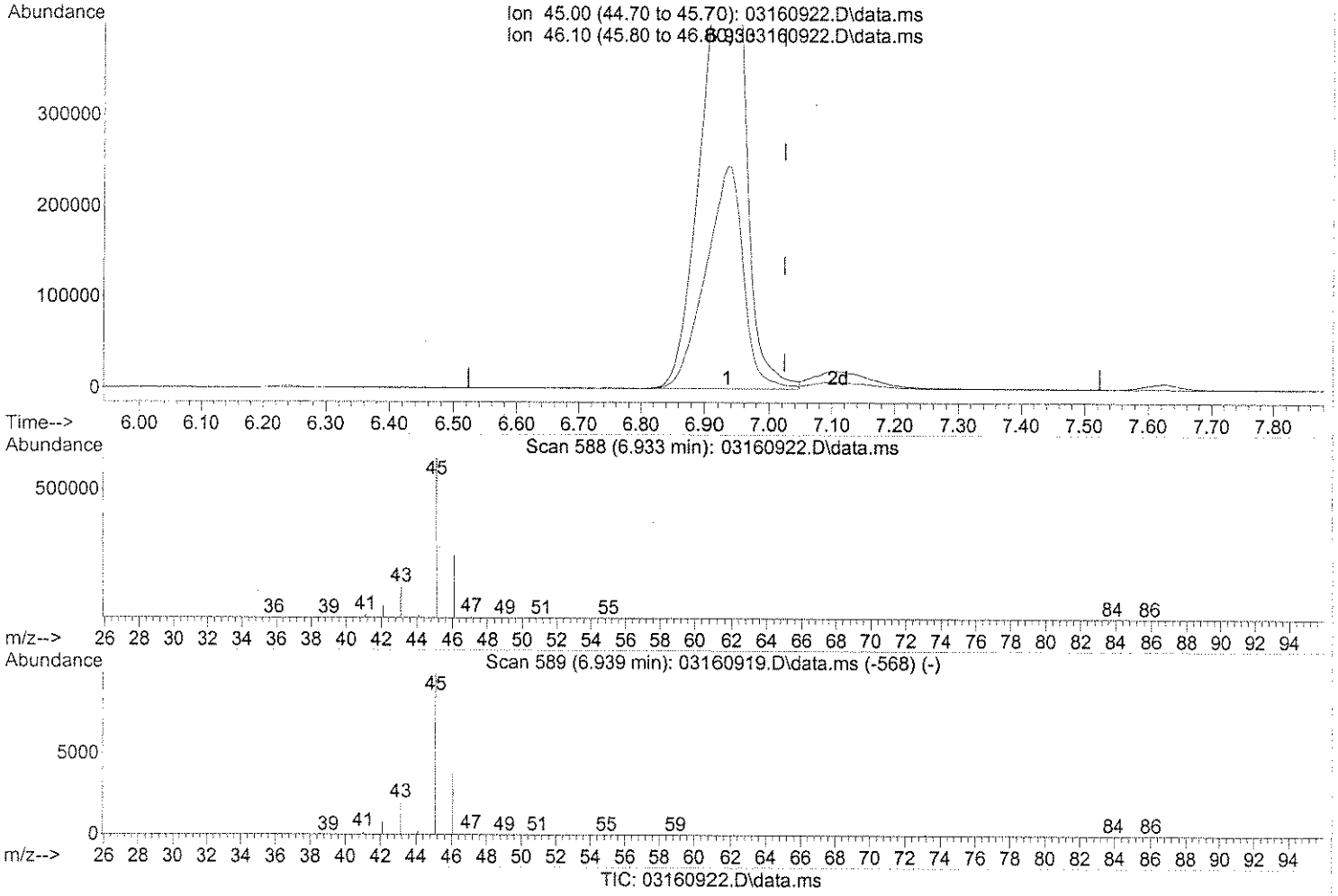
Quant Time: Mar 17 08:55:56 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.35	118	1030215	29.804	ng	98
81) 2-Ethyltoluene	24.40	105	2305147	28.477	ng	99
82) 1,2,4-Trimethylbenzene	24.68	105	1950148	27.275	ng	98
83) n-Decane	24.79	57	1672528	28.813	ng	94
84) Benzyl Chloride	24.84	91	1966539	34.929	ng	97
85) 1,3-Dichlorobenzene	24.87	146	1025587	29.596	ng	100
86) 1,4-Dichlorobenzene	24.95	146	1042828	28.597	ng	100
87) sec-Butylbenzene	25.01	105	2614833	28.394	ng	98
88) p-Isopropyltoluene	25.20	119	2267229	28.000	ng	98
89) 1,2,3-Trimethylbenzene	25.20	105	2008605	29.203	ng	96
90) 1,2-Dichlorobenzene	25.37	146	970646	29.835	ng	99
91) d-Limonene	25.38	68	866073	28.875	ng	100
92) 1,2-Dibromo-3-Chloropr...	25.90	157	354007	34.233	ng	79
93) n-Undecane	26.32	57	1764518	28.457	ng	92
94) 1,2,4-Trichlorobenzene	27.43	184	211404	36.088	ng	97
95) Naphthalene	27.57	128	2618356	32.009	ng	100
96) n-Dodecane	27.55	57	1822464	26.648	ng	91
97) Hexachloro-1,3-butadiene	27.99	225	420233	31.360	ng	100
98) Cyclohexanone	22.06	55	1061838	23.629	ng	95
99) tert-Butylbenzene	24.67	119	1796514	28.661	ng	100
100) n-Butylbenzene	25.71	91	2273609	30.000	ng	99

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

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On : 16 Mar 2009 23:44
Operator : WA/LH
Sample : 25ng TO-15 ICV STD
Misc : S20-02230901/S20-03050910
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 17 08:54:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.933min (-0.091) 142.38ng

response 2519199

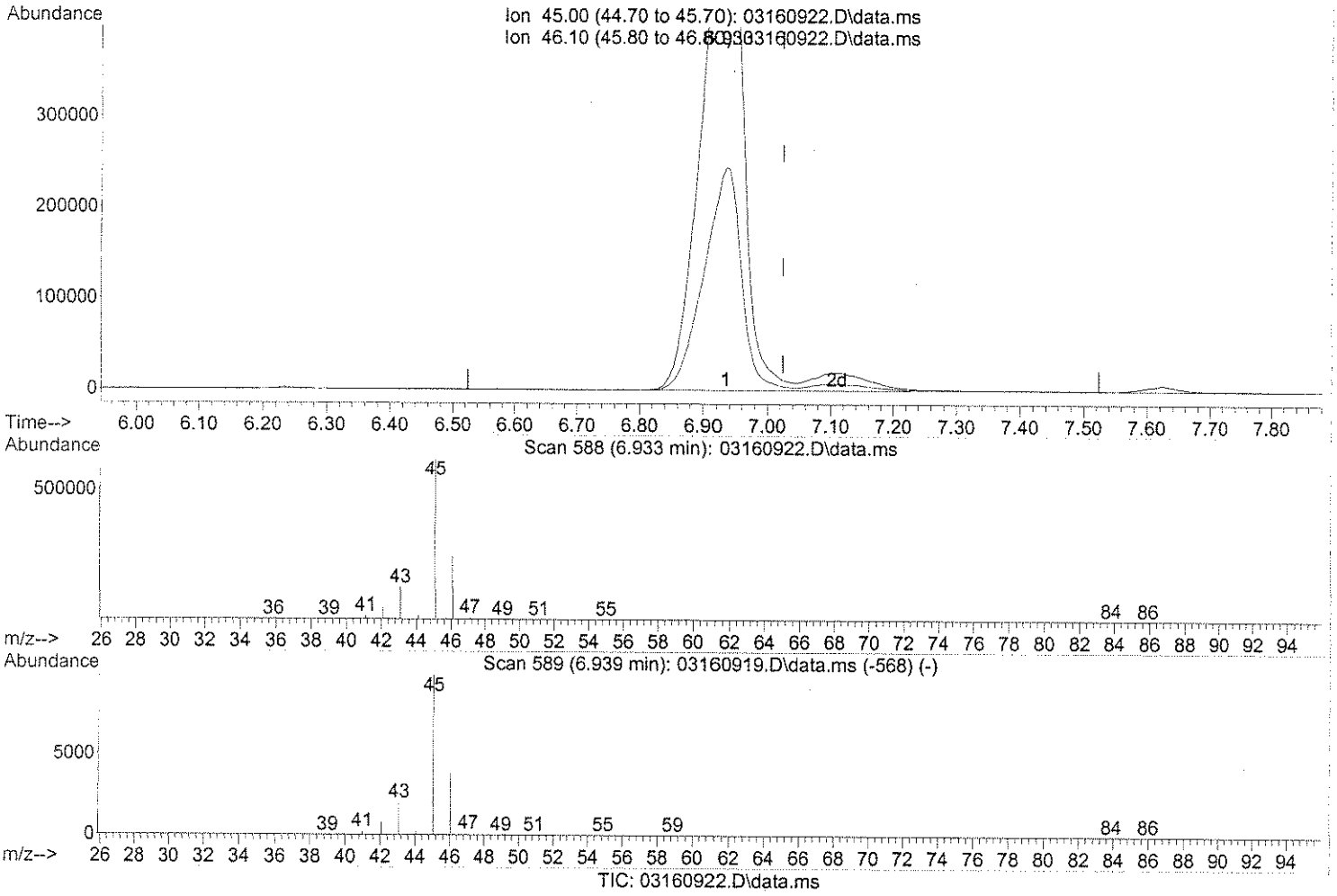
SP

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	38.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On : 16 Mar 2009 23:44
Operator : WA/LH
Sample : 25ng TO-15 ICV STD
Misc : S20-02230901/S20-03050910
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 17 08:54:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.933min (-0.091) 149.46ng m

response 2644565

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	36.71
0.00	0.00	0.00
0.00	0.00	0.00

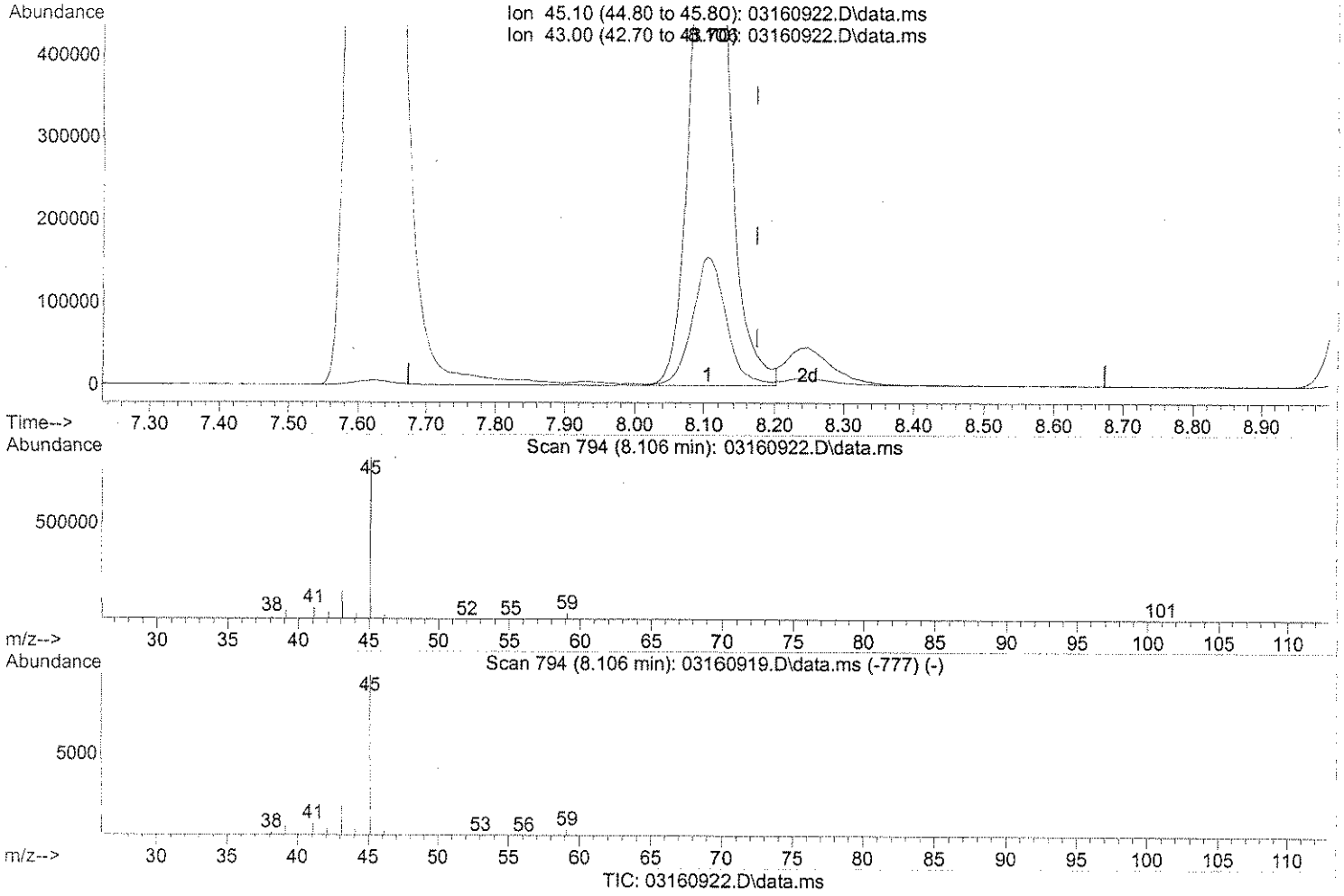
SP → IC
LH 03/17/09
Em 3/17/09

PSA 3/17/09

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On : 16 Mar 2009 23:44
Operator : WA/LH
Sample : 25ng TO-15 ICV STD
Misc : S20-02230901/S20-03050910
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 17 08:54:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.106min (-0.068) 38.49ng

response 2710948

SP

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	18.28
0.00	0.00	0.00
0.00	0.00	0.00

```
Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160922.D
Acq On    : 16 Mar 2009  23:44
Operator  : WA/LH
Sample    : 25ng TO-15 ICV STD
Misc      : S20-02230901/S20-03050910
ALS Vial  : 3   Sample Multiplier: 1

Quant Time: Mar 17 08:54:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title  : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration
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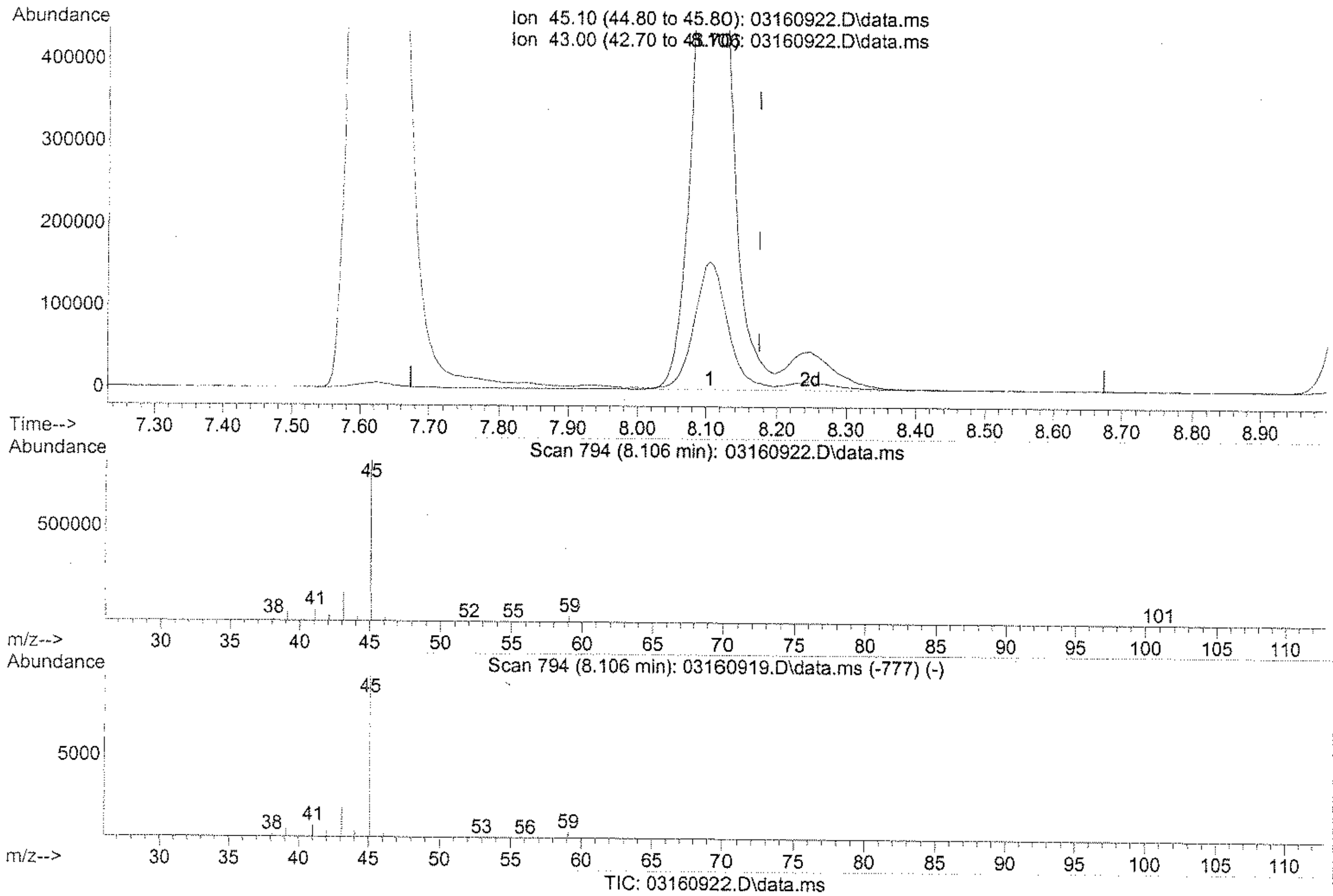

(15) Isopropanol (T)

8.106min (-0.068) 41.62ng m

response 2932038

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	16.90
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC

LH 03/17/09

Em 3/17/09

RM 3/17/09

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INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 03160922.D **Acq. Method File:** TO15LT.M
Data File Path: J:\MS16\DATA\2009_03\16\ **Name:** 25ng TO-15 ICV STD
Operator: WA/LH **Misc Info:** S20-02230901/S20-03050910
Date Acquired: 3/16/09 23:44 **Instrument Name:** GCMS-16

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.58	29.2	26.3	111.0	70	130	*
3)	Dichlorodifluoromethane	4.74	25.8	26.3	98.1	70	130	*
4)	Chloromethane	5.06	25.2	25.3	99.6	70	130	*
5)	Freon 114	5.31	26.3	26.8	98.1	70	130	*
6)	Vinyl Chloride	5.49	25.5	25.5	100.0	70	130	*
7)	1,3-Butadiene	5.77	31.6	30.0	105.3	70	130	*
8)	Bromomethane	6.24	26.0	25.8	100.8	70	130	*
9)	Chloroethane	6.57	25.0	25.8	96.9	70	130	*
10)	Ethanol	6.93	149.5	133.0	112.4	70	130	*
11)	Acetonitrile	7.21	27.9	26.3	106.1	70	130	*
12)	Acrolein	7.41	24.8	27.3	90.8	70	130	*
13)	Acetone	7.62	133.3	137.0	97.3	70	130	*
14)	Trichlorofluoromethane	7.88	27.8	26.3	105.7	70	130	*
15)	Isopropanol	8.11	41.6	48.0	86.7	70	130	*
16)	Acrylonitrile	8.40	27.8	26.8	103.7	70	130	*
17)	1,1-Dichloroethene	8.89	27.9	27.5	101.5	70	130	*
18)	tert-Butanol	9.03	51.7	50.5	102.4	70	130	*
19)	Methylene Chloride	9.10	24.7	26.5	93.2	70	130	*
20)	Allyl Chloride	9.28	29.8	27.0	110.4	70	130	*
21)	Trichlorotrifluoroethane	9.53	27.9	27.5	101.5	70	130	*
22)	Carbon Disulfide	9.47	26.2	26.8	97.8	70	130	*
23)	trans-1,2-Dichloroethene	10.52	28.7	26.8	107.1	70	130	*
24)	1,1-Dichloroethane	10.83	27.5	26.8	102.6	70	130	*
25)	Methyl tert-Butyl Ether	10.91	27.7	27.5	100.7	70	130	*
26)	Vinyl Acetate	11.08	158.6	126.0	125.9	70	130	*
27)	2-Butanone	11.41	31.6	27.5	114.9	70	130	*
28)	cis-1,2-Dichloroethene	12.07	28.0	27.5	101.8	70	130	*
29)	Diisopropyl Ether	12.40	26.8	27.0	99.3	70	130	*
30)	Ethyl Acetate	12.41	61.6	53.5	115.1	70	130	*
31)	n-Hexane	12.41	25.1	27.3	91.9	70	130	*
32)	Chloroform	12.52	27.8	26.8	103.7	70	130	*
34)	Tetrahydrofuran	13.06	30.4	27.5	110.5	70	130	*
35)	Ethyl tert-Butyl Ether	13.20	26.2	26.0	100.8	70	130	*
36)	1,2-Dichloroethane	13.60	27.3	26.8	101.9	70	130	*
38)	1,1,1-Trichloroethane	14.00	27.2	26.5	102.6	70	130	*
39)	Isopropyl Acetate	14.55	55.4	52.8	104.9	70	130	*
40)	1-Butanol	14.57	66.7	54.8	121.7	70	130	*
41)	Benzene	14.68	26.2	26.8	97.8	70	130	*
42)	Carbon Tetrachloride	14.91	30.4	27.0	112.6	70	130	*
43)	Cyclohexane	15.11	55.5	54.5	101.8	70	130	*
44)	tert-Amyl Methyl Ether	15.58	26.8	26.3	101.9	70	130	*
45)	1,2-Dichloropropane	15.91	27.4	26.5	103.4	70	130	*
46)	Bromodichloromethane	16.18	28.9	27.3	105.9	70	130	*
47)	Trichloroethene	16.26	25.6	26.5	96.6	70	130	*
48)	1,4-Dioxane	16.21	29.5	27.0	109.3	70	130	*
49)	Isooctane	16.35	25.9	26.5	97.7	70	130	*
50)	Methyl Methacrylate	16.53	60.7	53.5	113.5	70	130	*

3/17/09 3/17/09

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 03160922.D **Acq. Method File:** TO15LT.M
Data File Path: J:\MS16\DATA\2009_03\16\ **Name:** 25ng TO-15 ICV STD
Operator: WA/LH **Misc Info:** S20-02230901/S20-03050910
Date Acquired: 3/16/09 23:44 **Instrument Name:** GCMS-16

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
51)	n-Heptane	16.72	27.3	27.0	101.1	70	130	*
52)	cis-1,3-Dichloropropene	17.46	28.1	25.0	112.4	70	130	*
53)	4-Methyl-2-pentanone	17.50	31.5	27.5	114.5	70	130	*
54)	trans-1,3-Dichloropropene	18.17	32.9	27.5	119.6	70	130	*
55)	1,1,2-Trichloroethane	18.41	27.7	26.3	105.3	70	130	*
58)	Toluene	18.80	27.6	27.0	102.2	70	130	*
59)	2-Hexanone	19.12	27.7	27.5	100.7	70	130	*
60)	Dibromochloromethane	19.35	33.5	28.8	116.3	70	130	*
61)	1,2-Dibromoethane	19.68	28.9	26.8	107.8	70	130	*
62)	Butyl Acetate	19.95	28.8	27.5	104.7	70	130	*
63)	n-Octane	20.11	27.0	26.8	100.7	70	130	*
64)	Tetrachloroethene	20.30	25.7	25.8	99.6	70	130	*
65)	Chlorobenzene	21.17	27.6	26.8	103.0	70	130	*
66)	Ethylbenzene	21.65	27.3	26.5	103.0	70	130	*
67)	m- & p-Xylene	21.88	54.0	52.5	102.9	70	130	*
68)	Bromoform	21.96	32.9	26.0	126.5	70	130	*
69)	Styrene	22.33	29.0	27.0	107.4	70	130	*
70)	o-Xylene	22.48	26.9	26.5	101.5	70	130	*
71)	n-Nonane	22.75	26.1	26.5	98.5	70	130	*
72)	1,1,2,2-Tetrachloroethane	22.45	30.8	27.0	114.1	70	130	*
74)	Cumene	23.24	26.3	25.8	101.9	70	130	*
75)	alpha-Pinene	23.74	29.6	27.5	107.6	70	130	*
76)	n-Propylbenzene	23.88	27.0	25.8	104.7	70	130	*
77)	3-Ethyltoluene	24.01	29.1	27.5	105.8	70	130	*
78)	4-Ethyltoluene	24.07	29.5	27.5	107.3	70	130	*
79)	1,3,5-Trimethylbenzene	24.16	27.4	27.3	100.4	70	130	*
80)	alpha-Methylstyrene	24.35	29.8	26.8	111.2	70	130	*
81)	2-Ethyltoluene	24.40	28.5	27.3	104.4	70	130	*
82)	1,2,4-Trimethylbenzene	24.68	27.3	26.8	101.9	70	130	*
83)	n-Decane	24.79	28.8	27.3	105.5	70	130	*
84)	Benzyl Chloride	24.84	34.9	28.8	121.2	70	130	*
85)	1,3-Dichlorobenzene	24.87	29.6	27.5	107.6	70	130	*
86)	1,4-Dichlorobenzene	24.95	28.6	27.3	104.8	70	130	*
87)	sec-Butylbenzene	25.01	28.4	26.8	106.0	70	130	*
88)	p-Isopropyltoluene	25.20	28.0	26.0	107.7	70	130	*
89)	1,2,3-Trimethylbenzene	25.20	29.2	26.8	109.0	70	130	*
90)	1,2-Dichlorobenzene	25.37	29.8	27.3	109.2	70	130	*
91)	d-Limonene	25.38	28.9	26.8	107.8	70	130	*
92)	1,2-Dibromo-3-Chloropropane	25.90	34.2	27.5	124.4	70	130	*
93)	n-Undecane	26.32	28.5	27.3	104.4	70	130	*
94)	1,2,4-Trichlorobenzene	27.43	36.1	28.8	125.3	70	130	*
95)	Naphthalene	27.57	32.0	25.8	124.0	70	130	*
96)	n-Dodecane	27.55	26.6	26.8	99.3	70	130	*
97)	Hexachloro-1,3-butadiene	27.99	31.4	28.8	109.0	70	130	*
98)	Cyclohexanone	22.06	23.6	25.3	93.3	70	130	*
99)	tert-Butylbenzene	24.67	28.7	27.0	106.3	70	130	*
100)	n-Butylbenzene	25.71	30.0	27.5	109.1	70	130	*

* Denotes Passing Criterion

3/17/09 03/17/09

Evaluate Continuing Calibration Report

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:11:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 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	71	-0.02
2	T	Propene	2.365	1.901	19.6	65	-0.01
3	T	Dichlorodifluoromethane	3.173	2.656	16.3	69	-0.01
4	T	Chloromethane	3.496	3.243	7.2	71	-0.01
5	T	Freon 114	1.265	1.048	17.2	67	-0.02
6	T	Vinyl Chloride	2.802	2.488	11.2	71	-0.02
7	T	1,3-Butadiene	2.327	2.140	8.0	71	-0.02
8	T	Bromomethane	1.227	1.161	5.4	74	-0.02
9	T	Chloroethane	1.285	1.078	16.1	68	-0.02
10	T	Ethanol	1.404	1.438	-2.4	71	-0.09
11	T	Acetonitrile	3.664	3.224	12.0	66	-0.05
12	T	Acrolein	1.243	1.065	14.3	68	-0.03
13	T	Acetone	1.565	1.364	12.8	72	-0.05
14	T	Trichlorofluoromethane	2.653	2.465	7.1	70	-0.02
15	T	Isopropanol	5.589	5.324	4.7	70	-0.07
16	T	Acrylonitrile	2.866	2.689	6.2	68	-0.04
17	T	1,1-Dichloroethene	1.340	1.149	14.3	67	-0.02
18	T	tert-Butanol	5.478	5.182	5.4	70	-0.06
19	T	Methylene Chloride	1.595	1.255	21.3	67	-0.03
20	T	Allyl Chloride	2.778	2.575	7.3	66	-0.03
21	T	Trichlorotrifluoroethane	0.986	0.834	15.4	69	-0.02
22	T	Carbon Disulfide	5.470	4.606	15.8	67	-0.02
23	T	trans-1,2-Dichloroethene	2.753	2.674	2.9	70	-0.02
24	T	1,1-Dichloroethane	3.200	2.964	7.4	70	-0.02
25	T	Methyl tert-Butyl Ether	4.385	3.716	15.3	66	-0.02
26	T	Vinyl Acetate	0.221	0.281	-27.1	78	-0.04
27	T	2-Butanone	0.927	0.876	5.5	66	-0.04
28	T	cis-1,2-Dichloroethene	2.701	2.545	5.8	71	-0.03
29	T	Diisopropyl Ether	1.122	0.950	15.3	68	-0.02
30	T	Ethyl Acetate	0.628	0.673	-7.2	72	-0.03
31	T	n-Hexane	3.316	2.788	15.9	70	-0.02
32	T	Chloroform	2.542	2.296	9.7	69	-0.04
33	S	1,2-Dichloroethane-d4(SS1)	2.373	2.620	-10.4	78	-0.02
34	T	Tetrahydrofuran	0.901	0.845	6.2	66	-0.03
35	T	Ethyl tert-Butyl Ether	1.760	1.469	16.5	65	-0.02
36	T	1,2-Dichloroethane	2.640	2.634	0.2	74	-0.03
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	70	-0.02
38	T	1,1,1-Trichloroethane	0.495	0.446	9.9	68	-0.02

RT 4/7/09 LH 4/7/09

Evaluate Continuing Calibration Report

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:11:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 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	0.261	0.252	3.4	70	-0.03
40	T	1-Butanol	0.421	0.483	-14.7	73	-0.07
41	T	Benzene	1.276	1.105	13.4	67	-0.02
42	T	Carbon Tetrachloride	0.376	0.376	0.0	67	-0.02
43	T	Cyclohexane	0.455	0.394	13.4	67	-0.02
44	T	tert-Amyl Methyl Ether	0.947	0.829	12.5	66	-0.02
45	T	1,2-Dichloropropane	0.381	0.358	6.0	69	-0.02
46	T	Bromodichloromethane	0.421	0.406	3.6	70	-0.02
47	T	Trichloroethene	0.305	0.255	16.4	66	-0.02
48	T	1,4-Dioxane	0.239	0.225	5.9	66	-0.03
49	T	Isooctane	1.879	1.638	12.8	68	-0.02
50	T	Methyl Methacrylate	0.112	0.104	7.1	65	-0.03
51	T	n-Heptane	0.335	0.290	13.4	66	-0.01
52	T	cis-1,3-Dichloropropene	0.489	0.480	1.8	68	-0.01
53	T	4-Methyl-2-pentanone	0.371	0.372	-0.3	69	-0.02
54	T	trans-1,3-Dichloropropene	0.445	0.466	-4.7	68	-0.02
55	T	1,1,2-Trichloroethane	0.283	0.258	8.8	67	-0.01
56	I	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	71	0.00
57	S	Toluene-d8 (SS2)	2.030	2.039	-0.4	72	0.00
58	T	Toluene	2.202	1.886	14.4	67	-0.02
59	T	2-Hexanone	1.950	1.717	11.9	70	-0.02
60	T	Dibromochloromethane	0.493	0.467	5.3	68	-0.01
61	T	1,2-Dibromoethane	0.547	0.501	8.4	68	-0.01
62	T	Butyl Acetate	2.085	1.886	9.5	67	-0.02
63		n-Octane	0.712	0.629	11.7	69	-0.01
64	T	Tetrachloroethene	0.562	0.451	19.8	66	0.00
65	T	Chlorobenzene	1.352	1.163	14.0	66	0.00
66	T	Ethylbenzene	2.564	2.243	12.5	68	0.00
67	T	m- & p-Xylene	2.034	1.799	11.6	68	-0.01
68	T	Bromoform	0.411	0.400	2.7	66	-0.01
69	T	Styrene	1.448	1.272	12.2	66	-0.01
70	T	o-Xylene	2.106	1.819	13.6	68	-0.02
71	T	n-Nonane	1.703	1.464	14.0	68	-0.01
72	T	1,1,2,2-Tetrachloroethane	0.837	0.838	-0.1	71	-0.02
73	S	Bromofluorobenzene (SS3)	0.655	0.628	4.1	68	0.00
74	T	Cumene	2.599	2.212	14.9	67	-0.01
75	T	alpha-Pinene	1.174	1.032	12.1	66	-0.01
76	T	n-Propylbenzene	3.282	2.949	10.1	69	-0.01

AM 4/7/09 MI 4/7/09

Evaluate Continuing Calibration Report

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:11:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	2.380	2.078	12.7	67	-0.01
78	T	4-Ethyltoluene	2.330	2.039	12.5	67	-0.01
79	T	1,3,5-Trimethylbenzene	2.103	1.784	15.2	68	-0.01
80	T	alpha-Methylstyrene	1.040	0.951	8.6	67	-0.01
81	T	2-Ethyltoluene	2.435	2.143	12.0	68	-0.02
82	T	1,2,4-Trimethylbenzene	2.151	2.025	5.9	73	-0.02
83	T	n-Decane	1.746	1.643	5.9	71	-0.01
84	T	Benzyl Chloride	1.694	1.788	-5.5	70	-0.02
85	T	1,3-Dichlorobenzene	1.042	0.960	7.9	68	-0.02
86	T	1,4-Dichlorobenzene	1.097	0.985	10.2	67	-0.02
87	T	sec-Butylbenzene	2.770	2.514	9.2	69	-0.01
88	T	p-Isopropyltoluene	2.436	2.401	1.4	73	-0.01
89	T	1,2,3-Trimethylbenzene	2.069	2.068	0.0	73	-0.01
90	T	1,2-Dichlorobenzene	0.979	0.952	2.8	71	-0.01
91	T	d-Limonene	0.902	0.907	-0.6	74	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.311	0.320	-2.9	68	-0.01
93	T	n-Undecane	1.865	1.741	6.6	70	0.00
94	T	1,2,4-Trichlorobenzene	0.176	0.191	-8.5	68	0.00
95	T	Naphthalene	2.461	2.630	-6.9	71	0.00
96	T	n-Dodecane	2.057	2.040	0.8	70	0.00
97	T	Hexachloro-1,3-butadiene	0.403	0.366	9.2	66	0.00
98	T	Cyclohexanone	1.352	1.160	14.2	71	-0.02
99	T	tert-Butylbenzene	1.886	1.783	5.5	72	-0.01
100	T	n-Butylbenzene	2.280	2.179	4.4	71	0.00

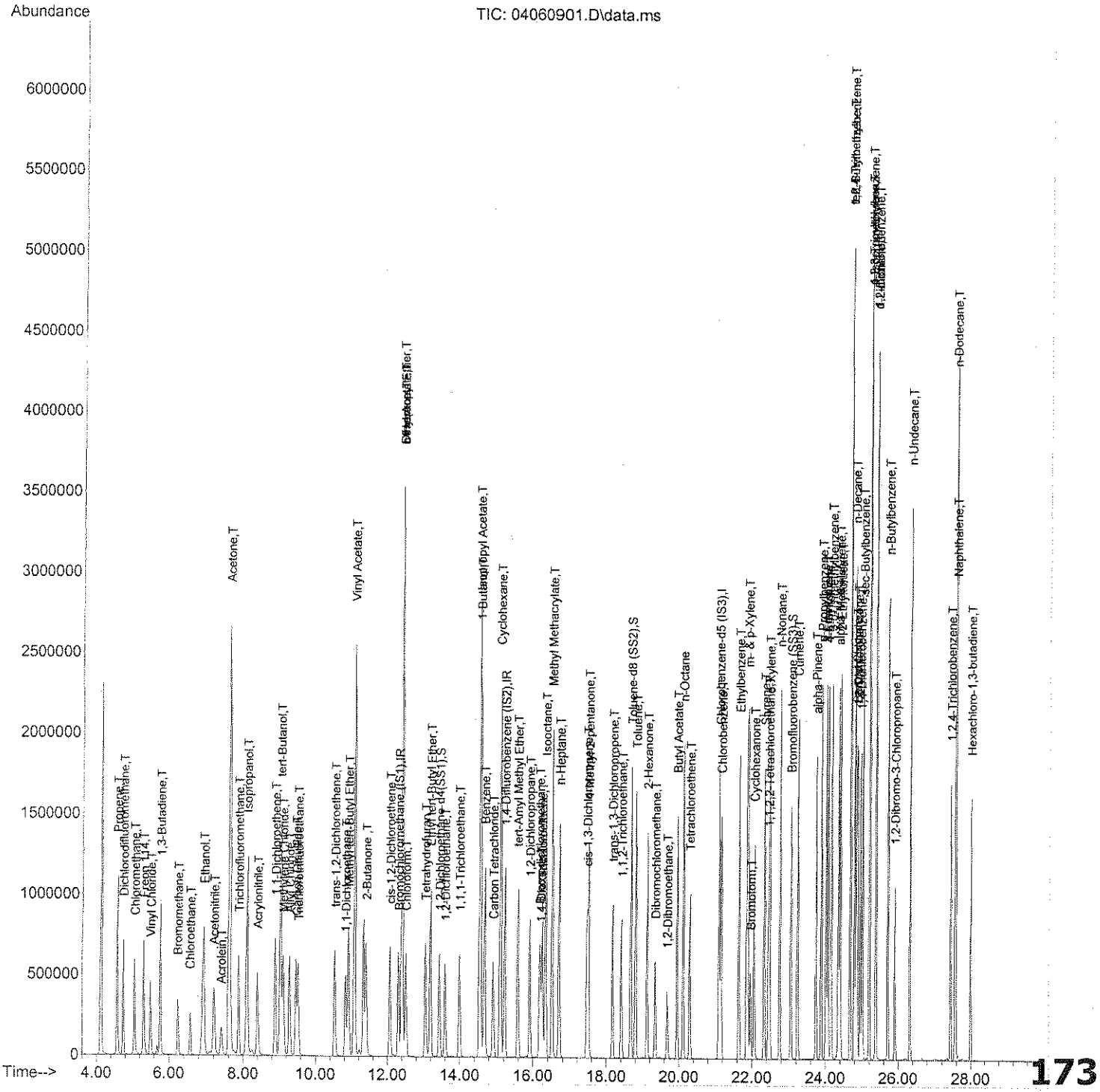
(#) = Out of Range SPCC's out = 0 CCC's out = 0

4/7/09 4/7/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:11:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:11:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.31	130	249312	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.23	114	1157236	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.11	82	674781	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.44	65	653102	27.601	ng		-0.02
Spiked Amount 25.000			Recovery = 110.40%				
57) Toluene-d8 (SS2)	18.67	98	1376178	25.116	ng		0.00
Spiked Amount 25.000			Recovery = 100.48%				
73) Bromofluorobenzene (SS3)	23.06	174	423548	23.955	ng		0.00
Spiked Amount 25.000			Recovery = 95.84%				
Target Compounds							Qvalue
2) Propene	4.58	42	488985	20.735	ng		91
3) Dichlorodifluoromethane	4.74	85	696521	22.012	ng		99
4) Chloromethane	5.06	50	818155	23.469	ng		100
5) Freon 114	5.30	135	277015	21.967	ng		88
6) Vinyl Chloride	5.49	62	632645	22.643	ng		84
7) 1,3-Butadiene	5.77	54	576238	24.829	ng		96
8) Bromomethane	6.24	94	298680	24.419	ng		97
9) Chloroethane	6.57	64	279611	21.822	ng		100
10) Ethanol	6.94	45	1893149m	135.218	ng		
11) Acetonitrile	7.21	41	845559	23.144	ng		88
12) Acrolein	7.41	56	286746	23.141	ng		82
13) Acetone	7.62	58	1809354	115.934	ng	#	80
14) Trichlorofluoromethane	7.88	101	646594	24.437	ng		95
15) Isopropanol	8.11	45	2575192m	46.202	ng		
16) Acrylonitrile	8.40	53	691955	24.208	ng		100
17) 1,1-Dichloroethene	8.88	96	315080	23.583	ng		90
18) tert-Butanol	9.03	59	2584032	47.298	ng		97
19) Methylene Chloride	9.10	84	331715	20.853	ng		88
20) Allyl Chloride	9.28	41	693461	25.035	ng		91
21) Trichlorotrifluoroethane	9.53	151	228805	23.277	ng		86
22) Carbon Disulfide	9.47	76	1194324	21.893	ng		98
23) trans-1,2-Dichloroethene	10.52	61	688036	25.058	ng		97
24) 1,1-Dichloroethane	10.83	63	792291	24.830	ng		100
25) Methyl tert-Butyl Ether	10.91	73	981968	22.458	ng		97
26) Vinyl Acetate	11.08	86	352986	160.089	ng	#	68
27) 2-Butanone	11.40	72	235780	25.505	ng	#	75
28) cis-1,2-Dichloroethene	12.07	61	692864	25.718	ng		96
29) Diisopropyl Ether	12.40	87	250941	22.429	ng	#	86
30) Ethyl Acetate	12.41	61	349156	55.734	ng		100
31) n-Hexane	12.41	57	722824	21.861	ng		91

4/7/09 4/7/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:11:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.51	83	629796	24.849	ng		99
34) Tetrahydrofuran	13.05	72	225936	25.134	ng	#	69
35) Ethyl tert-Butyl Ether	13.19	87	378058	21.535	ng	#	91
36) 1,2-Dichloroethane	13.60	62	696061	26.434	ng		99
38) 1,1,1-Trichloroethane	13.99	97	542548	23.681	ng		93
39) Isopropyl Acetate	14.54	61	609196	50.514	ng		97
40) 1-Butanol	14.56	56	1206628	61.882	ng		79
41) Benzene	14.68	78	1319894	22.341	ng		100
42) Carbon Tetrachloride	14.91	117	457857	26.287	ng		100
43) Cyclohexane	15.11	84	967333	45.897	ng		89
44) tert-Amyl Methyl Ether	15.58	73	990575	22.596	ng		97
45) 1,2-Dichloropropane	15.91	63	435249	24.674	ng		99
46) Bromodichloromethane	16.18	83	494814	25.364	ng		99
47) Trichloroethene	16.25	130	304054	21.509	ng		100
48) 1,4-Dioxane	16.20	88	271201	24.504	ng		94
49) Isooctane	16.35	57	1971304	22.663	ng		96
50) Methyl Methacrylate	16.53	100	257132	49.717	ng	#	62
51) n-Heptane	16.72	71	349160	22.525	ng		90
52) cis-1,3-Dichloropropene	17.46	75	555689	24.535	ng		100
53) 4-Methyl-2-pentanone	17.50	58	470363	27.368	ng		97
54) trans-1,3-Dichloropropene	18.17	75	592609	28.793	ng		98
55) 1,1,2-Trichloroethane	18.41	97	310164	23.712	ng		94
58) Toluene	18.80	91	1374222	23.116	ng		99
59) 2-Hexanone	19.12	43	1274533	24.210	ng		95
60) Dibromochloromethane	19.35	129	363104	27.273	ng		100
61) 1,2-Dibromoethane	19.68	107	358260	24.243	ng		100
62) Butyl Acetate	19.95	43	1399781	24.874	ng		97
63) n-Octane	20.11	57	446352	23.213	ng		97
64) Tetrachloroethene	20.30	166	314010	20.703	ng		99
65) Chlorobenzene	21.17	112	832172	22.799	ng		100
66) Ethylbenzene	21.65	91	1592283	23.004	ng		96
67) m- & p-Xylene	21.89	91	2525376	45.992	ng		95
68) Bromoform	21.96	173	289395	26.069	ng		99
69) Styrene	22.33	104	920071	23.548	ng		95
70) o-Xylene	22.48	91	1291305	22.715	ng		94
71) n-Nonane	22.75	43	1039155	22.610	ng		90
72) 1,1,2,2-Tetrachloroethane	22.45	83	610736	27.044	ng		99
74) Cumene	23.24	105	1522539	21.706	ng		99
75) alpha-Pinene	23.74	93	765915	24.161	ng		92
76) n-Propylbenzene	23.88	91	2029702	22.914	ng		95
77) 3-Ethyltoluene	24.01	105	1542321	24.014	ng		99
78) 4-Ethyltoluene	24.07	105	1513235	24.062	ng		100
79) 1,3,5-Trimethylbenzene	24.16	105	1300267	22.905	ng		97

4/7/09 4/7/09

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:11:36 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	680497	24.246	ng		99
81) 2-Ethyltoluene	24.40	105	1562007	23.766	ng		100
82) 1,2,4-Trimethylbenzene	24.67	105	1437642	24.764	ng		99
83) n-Decane	24.79	57	1197104	25.400	ng		97
84) Benzyl Chloride	24.84	91	1327226	29.034	ng		95
85) 1,3-Dichlorobenzene	24.87	146	694279	24.676	ng		100
86) 1,4-Dichlorobenzene	24.95	146	704592	23.797	ng		100
87) sec-Butylbenzene	25.01	105	1798201	24.049	ng		97
88) p-Isopropyltoluene	25.20	119	1652349	25.133	ng		95
89) 1,2,3-Trimethylbenzene	25.20	105	1478963	26.483	ng		97
90) 1,2-Dichlorobenzene	25.37	146	688868	26.078	ng		99
91) d-Limonene	25.38	68	648906	26.646	ng		96
92) 1,2-Dibromo-3-Chloropr...	25.90	157	233382	27.796	ng	#	58
93) n-Undecane	26.32	57	1259221	25.011	ng		95
94) 1,2,4-Trichlorobenzene	27.43	184	141448	29.739	ng		96
95) Naphthalene	27.57	128	1796285	27.046	ng		99
96) n-Dodecane	27.55	57	1294058	23.304	ng		94
97) Hexachloro-1,3-butadiene	27.99	225	271510	24.954	ng		100
98) Cyclohexanone	22.06	55	776402	21.279	ng	#	95
99) tert-Butylbenzene	24.67	119	1299382	25.531	ng		98
100) n-Butylbenzene	25.71	91	1605597	26.093	ng		95

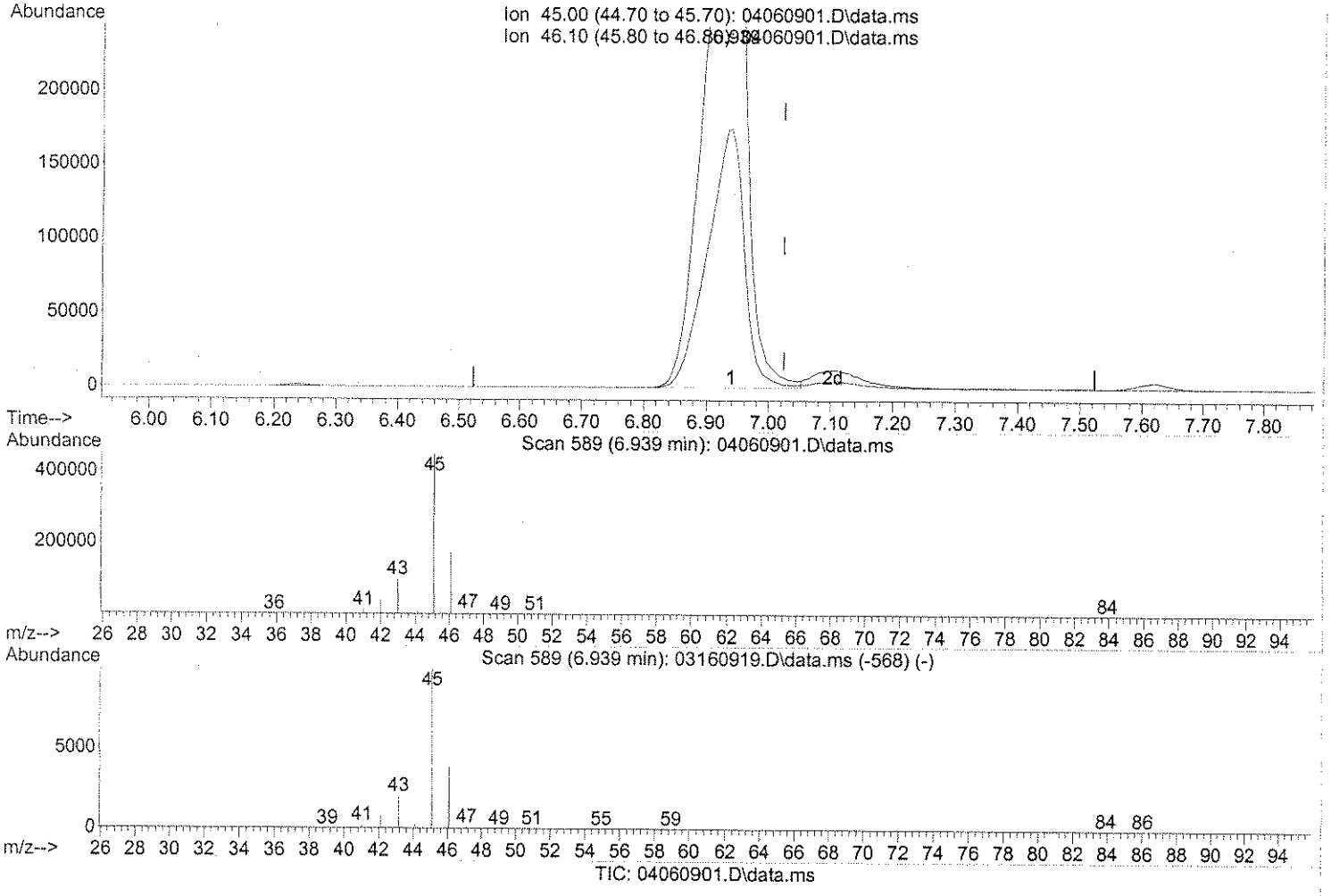
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/7/09 4/7/09

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:09:04 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.939min (-0.086) 130.17ng

response 1822515

PT

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	38.85
0.00	0.00	0.00
0.00	0.00	0.00

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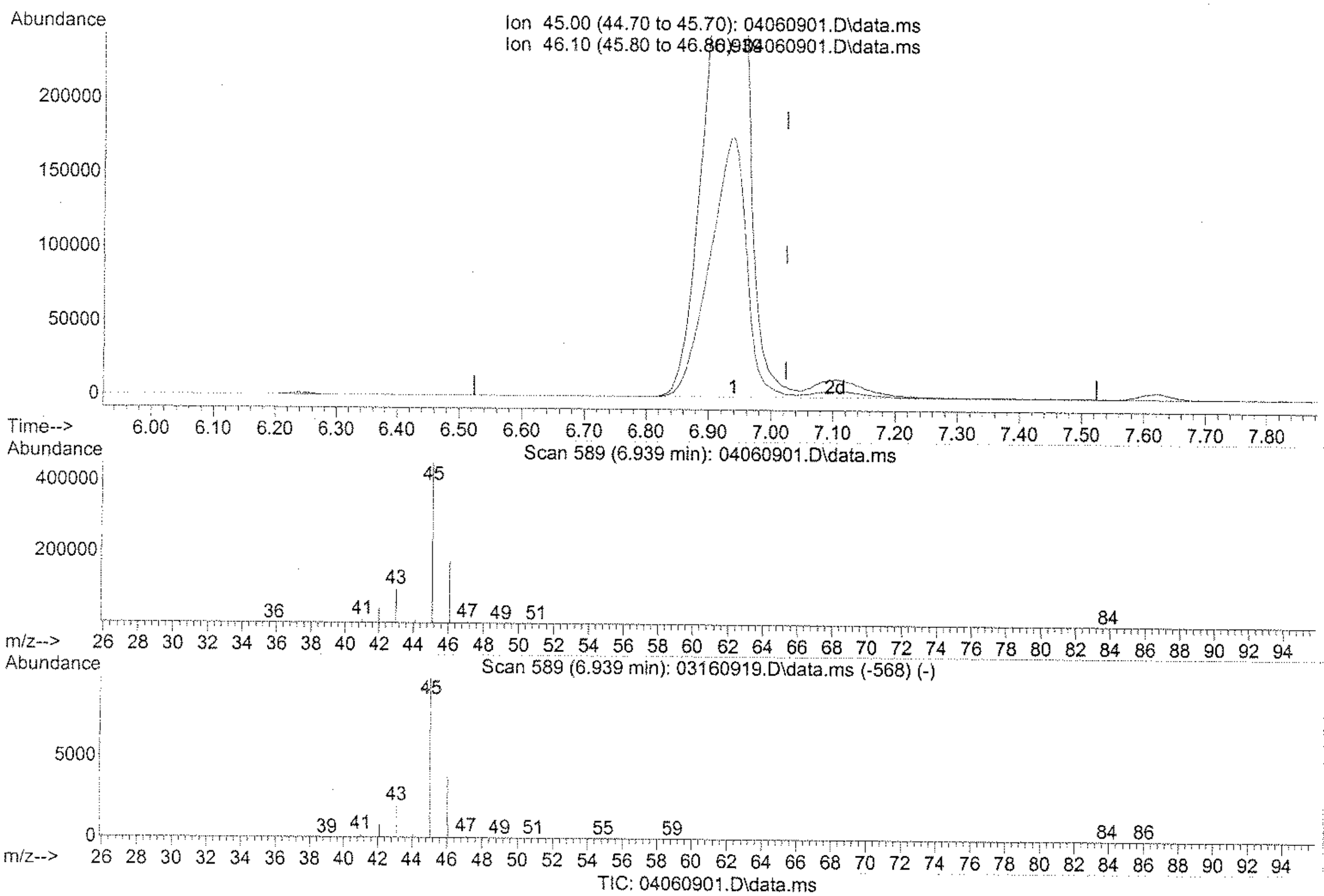
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:09:04 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.939min (-0.086) 135.22ng m

response 1893149

Ion	Exp%	Act%
45.00	100	100
46.10	35.10	37.40
0.00	0.00	0.00
0.00	0.00	0.00

PT ⟶ IC
m 4/7/09

Fo 04/07/09

4/7/09

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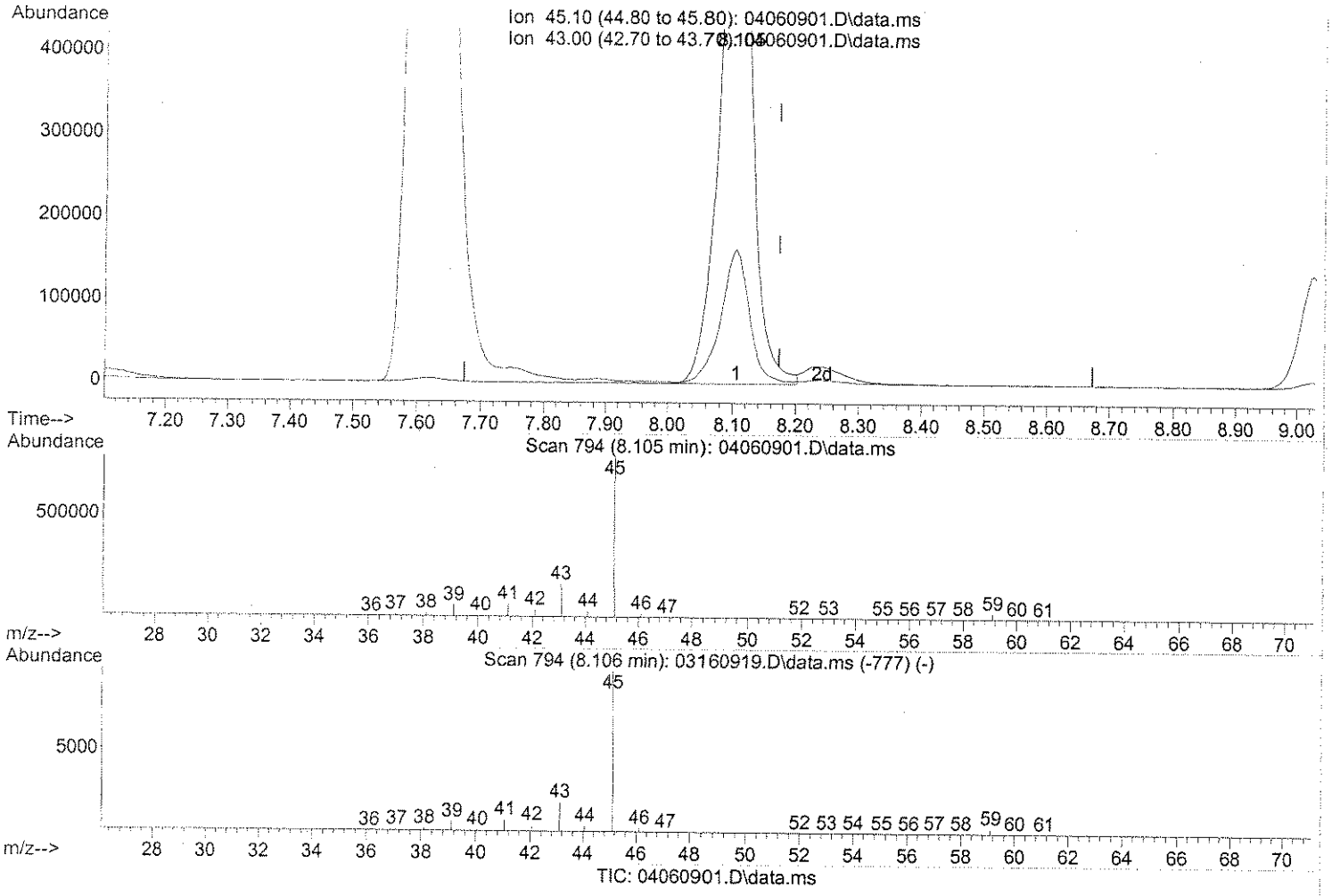
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:09:04 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.105min (-0.068) 44.48ng

response 2479435

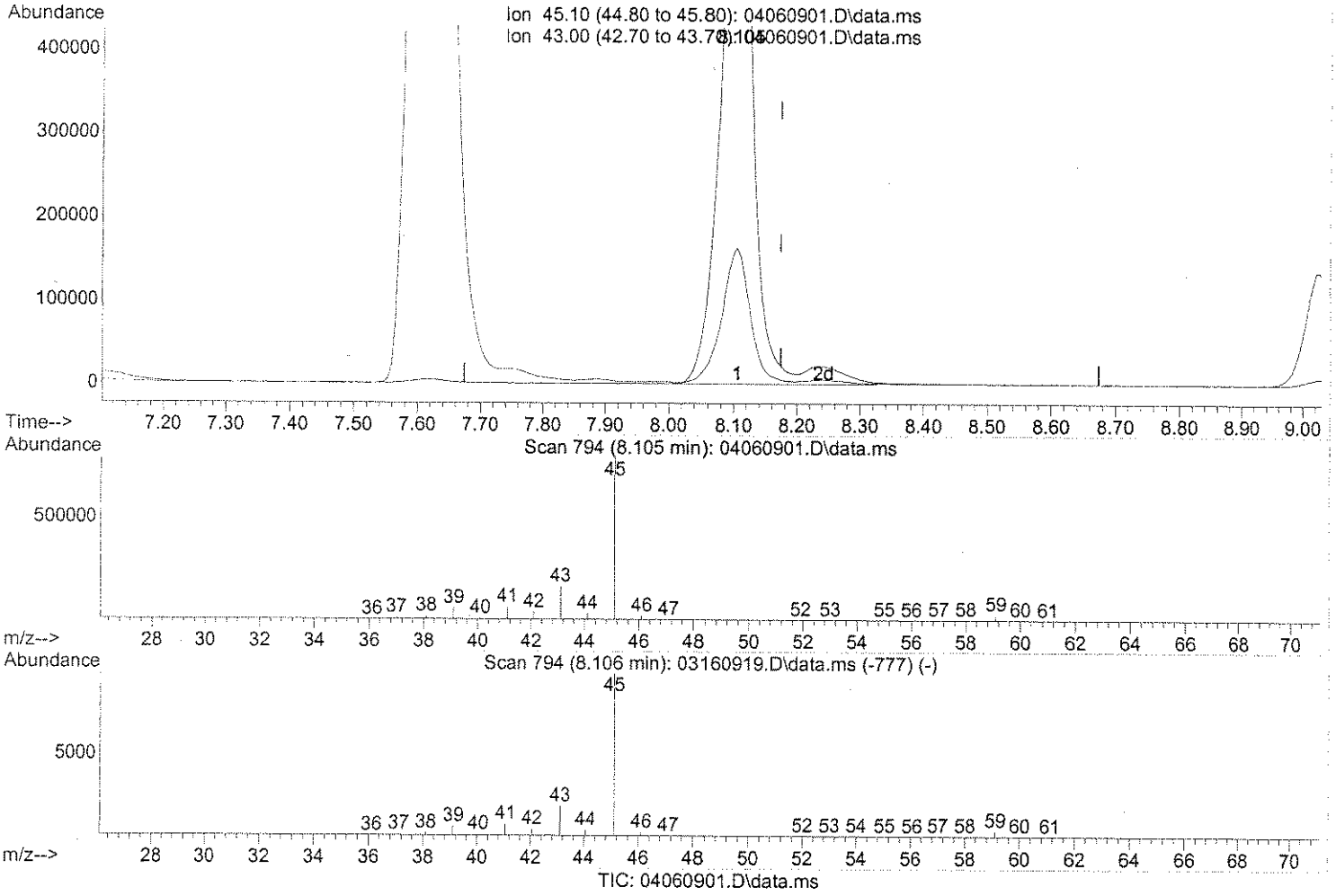
Ion	Exp%	Act%
45.10	100	100
43.00	17.10	20.23
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:09:04 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



(15) Isopropanol (T)

8.105min (-0.068) 46.20ng m

response 2575192

Ion	Exp%	Act%
45.10	100	100
43.00	17.10	19.48
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
LH 4/7/09

4/7/09

LH 4/7/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106**

Internal Standard Area and RT Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Lab File ID: 04060901.D
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 08:07
Test Notes:

		IS1 (BCM)			IS2 (DFB)			IS3 (CBZ)		
		AREA	#	RT	AREA	#	RT	#	AREA	#	RT	#
	24 Hour Standard	249312		12.31	1157236		15.23		674781		21.11	
	Upper Limit	349037		12.64	1620130		15.56		944693		21.44	
	Lower Limit	149587		11.98	694342		14.90		404869		20.78	
	Client Sample ID											
01	Method Blank	238866		12.28	1127900		15.21		654418		21.10	
02	Lab Control Sample	188267		12.31	889883		15.23		519656		21.11	
03	SS-1	232305		12.28	1071398		15.21		639114		21.10	
04	SS-1 (Lab Duplicate)	231209		12.28	1071158		15.22		627984		21.10	
05	I-1	197293		12.28	919455		15.22		543763		21.10	
06	O-1	243003		12.28	1131005		15.22		656653		21.10	
07												
08												
09												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an I.
I = Internal standard not within the specified liimits.

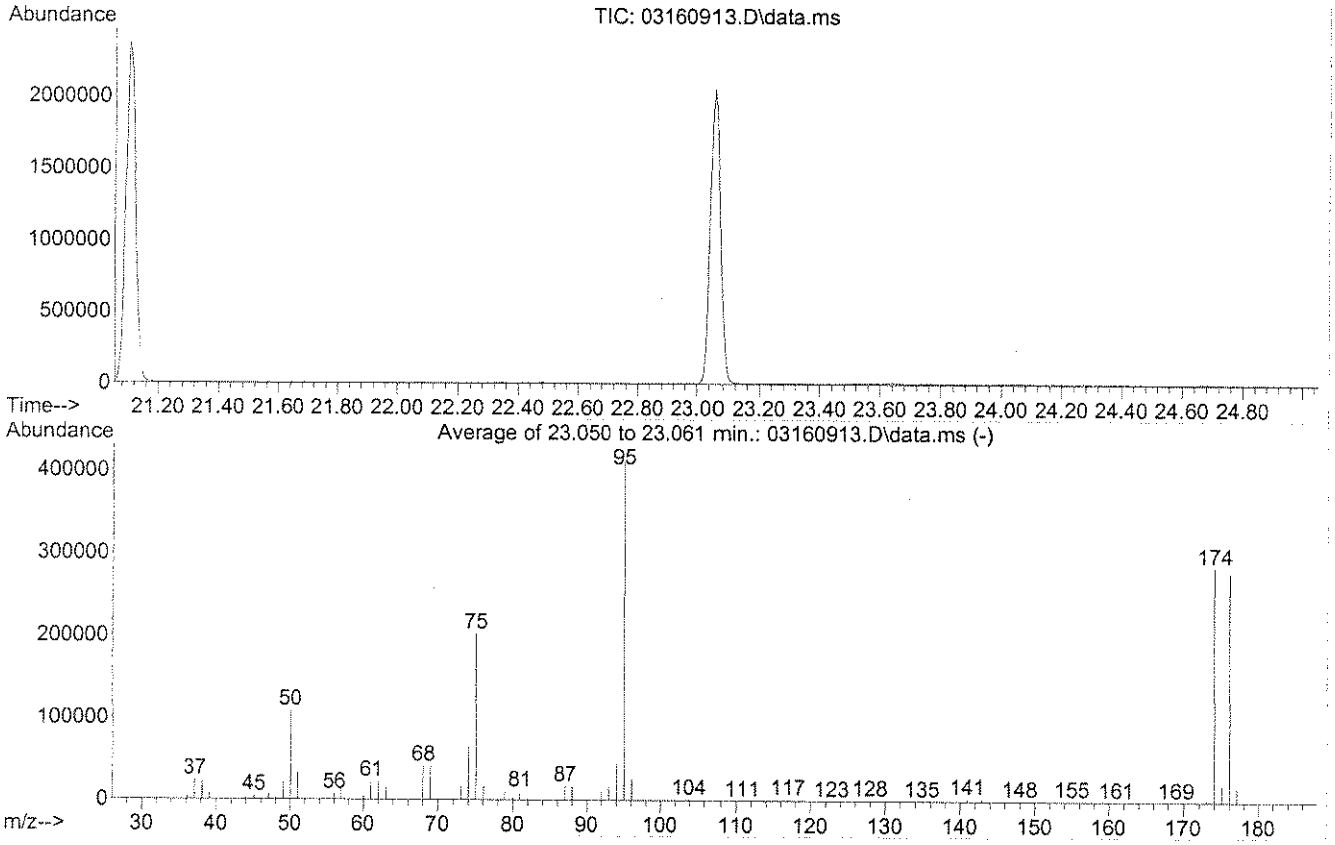
Verified By: _____ Date: 4/9/09

Raw QC Data

Data Path : J:\MS16\DATA\2009_03\16\
Data File : 03160913.D
Acq On : 16 Mar 2009 17:36
Operator : WA/LH
Sample : 25ng BFB STD
Misc : S20-02230901
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Jan 23 08:54:57 2009



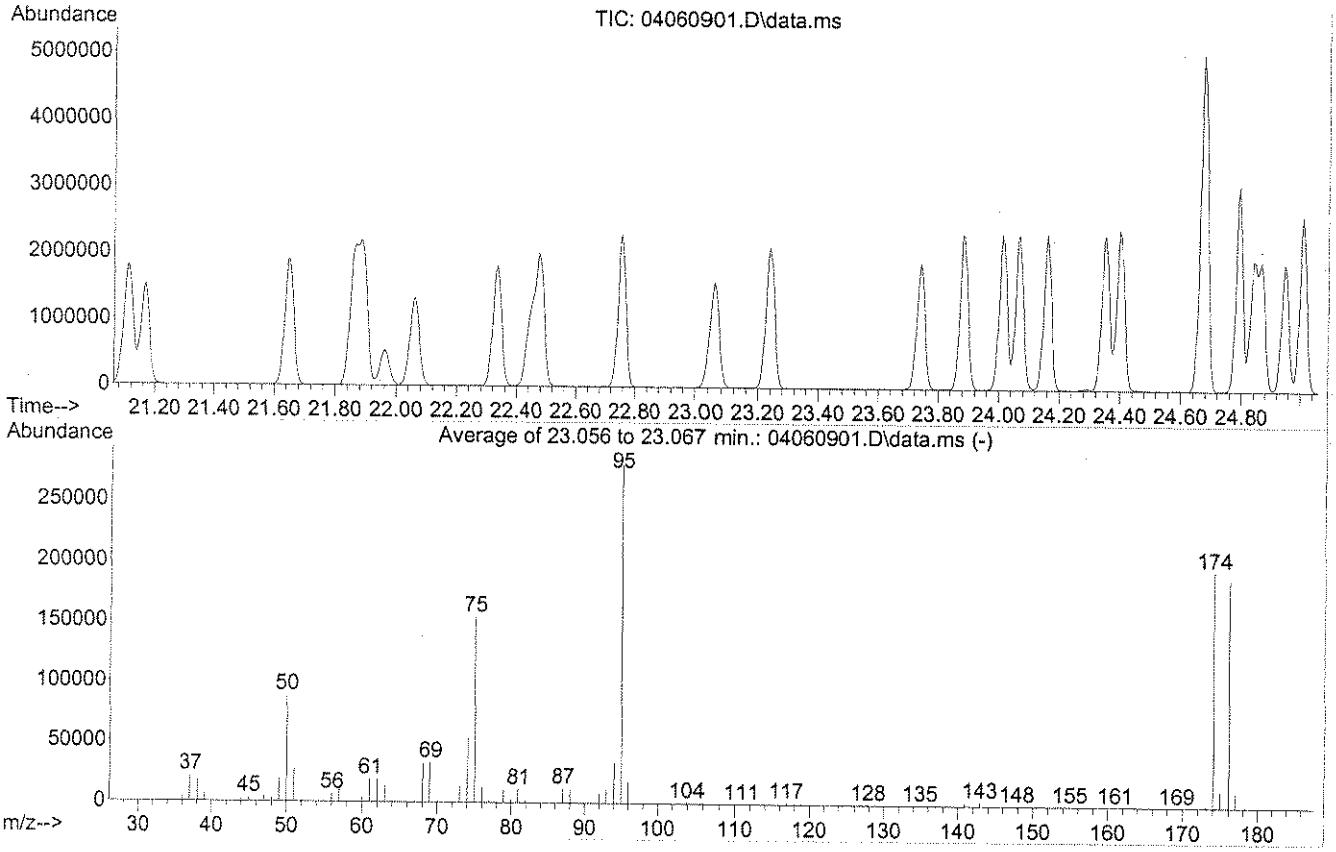
AutoFind: Scans 3420, 3421, 3422; Background Corrected with Scan 3410

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	26.5	108896	PASS
75	95	30	66	49.2	202475	PASS
95	95	100	100	100.0	411349	PASS
96	95	5	9	6.6	26965	PASS
173	174	0.00	2	0.8	2340	PASS
174	95	50	120	69.2	284757	PASS
175	174	4	9	7.2	20507	PASS
176	174	93	101	97.6	278037	PASS
177	176	5	9	6.5	18029	PASS

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060901.D
Acq On : 6 Apr 2009 8:07
Operator : WA/LH
Sample : 25ng TO-15 CCV STD
Misc : S20-03200903/S20-03250914
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16031609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue Mar 17 08:49:32 2009



AutoFind: Scans 3421, 3422, 3423; Background Corrected with Scan 3410

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	31.7	88811	PASS
75	95	30	66	55.1	154293	PASS
95	95	100	100	100.0	280256	PASS
96	95	5	9	6.3	17681	PASS
173	174	0.00	2	1.0	1925	PASS
174	95	50	120	69.8	195627	PASS
175	174	4	9	7.1	13860	PASS
176	174	93	101	96.2	188160	PASS
177	176	5	9	6.4	12037	PASS

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Method Blank** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
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	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
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	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
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: RL Date: 4/9/09

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Method Blank** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
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	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: Re Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Walden Environmental Engineering, PLLC** CAS Project ID: P0901030
Client Sample ID: **Method Blank** CAS Sample ID: P090406-MB
Client Project ID: **Bayville Village Cleaners / BVC0106**

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
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	0.50	ND	0.073	
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	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

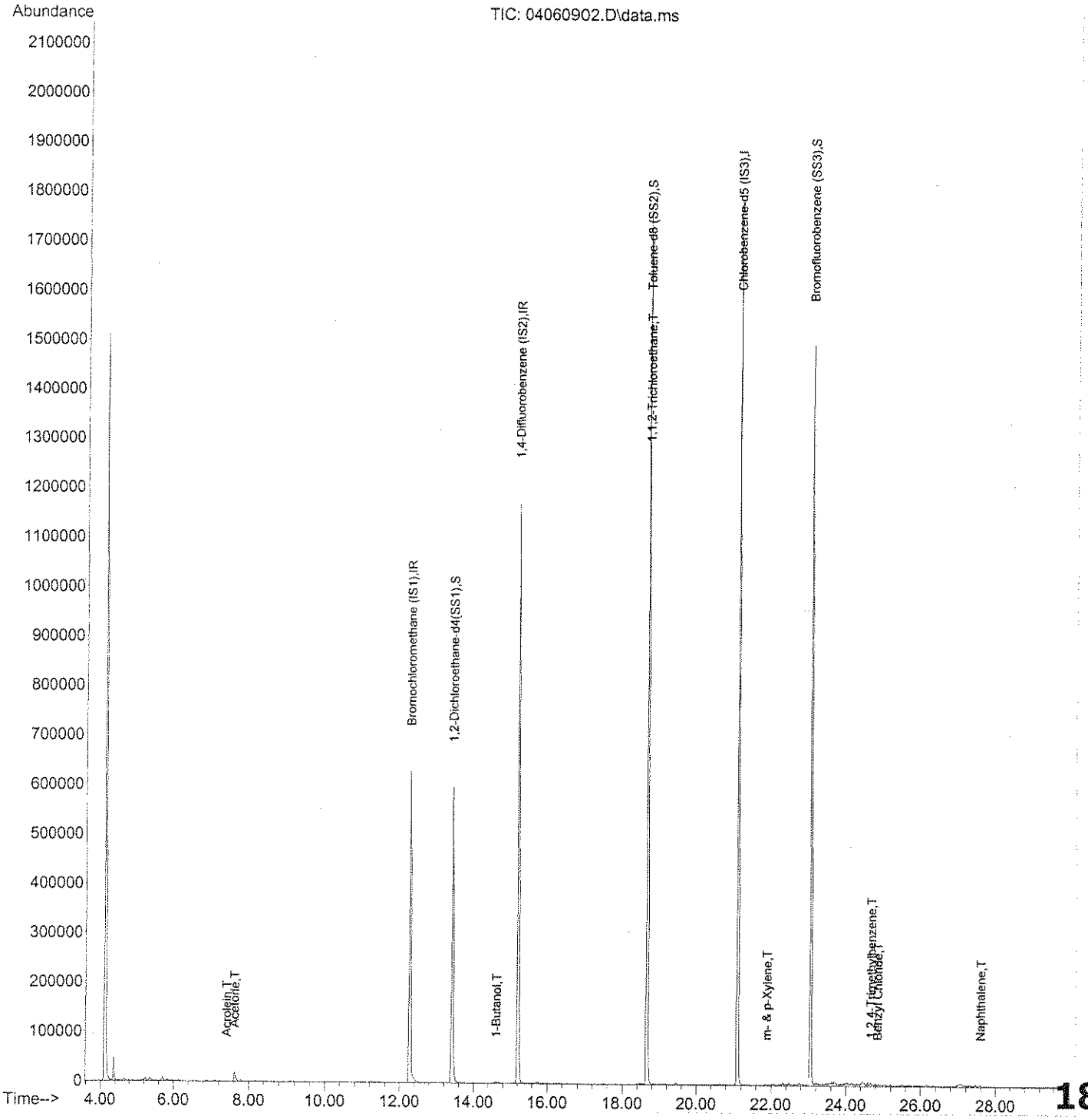
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 4/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060902.D
Acq On : 6 Apr 2009 9:01
Operator : WA/LH
Sample : TO-15 Method Blank (1000mL)
Misc : S20-03200903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:12:16 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060902.D
Acq On : 6 Apr 2009 9:01
Operator : WA/LH
Sample : TO-15 Method Blank (1000mL)
Misc : S20-03200903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:12:16 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	238866	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.21	114	1127900	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	654418	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.42	65	625457	27.589	ng		-0.04
Spiked Amount 25.000			Recovery = 110.36%				
57) Toluene-d8 (SS2)	18.67	98	1341105	25.237	ng		-0.01
Spiked Amount 25.000			Recovery = 100.96%				
73) Bromofluorobenzene (SS3)	23.06	174	401180	23.396	ng		0.00
Spiked Amount 25.000			Recovery = 93.60%				
Target Compounds							Qvalue
2) Propene	4.63	42	1226	N.D.			
3) Dichlorodifluoromethane	4.78	85	545	N.D.			
4) Chloromethane	5.11	50	508	N.D.			
5) Freon 114	5.32	135	136	N.D.			
6) Vinyl Chloride	5.53	62	177	N.D.			
7) 1,3-Butadiene	5.80	54	151	N.D.			
8) Bromomethane	6.27	94	76	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.00	45	777	N.D.			
11) Acetonitrile	7.21	41	1789	N.D.			
12) Acrolein	7.41	56	1355	~~0.114~~	ng	#	77
13) Acetone	7.62	58	12950	~~0.866~~	ng	#	84
14) Trichlorofluoromethane	7.88	101	150	N.D.			
15) Isopropanol	8.14	45	1342	N.D.			
16) Acrylonitrile	8.41	53	273	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) tert-Butanol	9.09	59	115	N.D.			
19) Methylene Chloride	9.08	84	832	N.D.			
20) Allyl Chloride	9.25	41	56	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.49	76	2534	N.D.			
23) trans-1,2-Dichloroethene	10.51	61	187	N.D.			
24) 1,1-Dichloroethane	10.82	63	427	N.D.			
25) Methyl tert-Butyl Ether	10.94	73	687	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone	11.43	72	493	N.D.			
28) cis-1,2-Dichloroethene	12.06	61	435	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	12.41	57	510	N.D.			

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060902.D
Acq On : 6 Apr 2009 9:01
Operator : WA/LH
Sample : TO-15 Method Blank (1000mL)
Misc : S20-03200903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:12:16 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.50	83	250	N.D.		
34) Tetrahydrofuran	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.59	62	224	N.D.		
38) 1,1,1-Trichloroethane	13.96	97	117	N.D.		
39) Isopropyl Acetate	14.55	61	56	N.D.		
40) 1-Butanol	14.63	56	3716	0.196 ng		96
41) Benzene	14.67	78	1583	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.10	84	399	N.D.		
44) tert-Amyl Methyl Ether	15.58	73	205	N.D.		
45) 1,2-Dichloropropane	15.90	63	57	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) Isooctane	16.33	57	1633	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	16.70	71	114	N.D.		
52) cis-1,3-Dichloropropene	17.48	75	256	N.D.		
53) 4-Methyl-2-pentanone	17.53	58	225	N.D.		
54) trans-1,3-Dichloropropene	18.19	75	308	N.D.		
55) 1,1,2-Trichloroethane	18.68	97	115759	9.080 ng	# FP	8
58) Toluene	18.79	91	2706	N.D.		
59) 2-Hexanone	19.14	43	2974	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	19.68	107	219	N.D.		
62) Butyl Acetate	19.99	43	882	N.D.		
63) n-Octane	20.10	57	415	N.D.		
64) Tetrachloroethene	20.29	166	120	N.D.		
65) Chlorobenzene	21.16	112	746	N.D.		
66) Ethylbenzene	21.65	91	1413	N.D.		
67) m- & p-Xylene	21.89	91	3466	0.065 ng	#	29
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.34	104	770	N.D.		
70) o-Xylene	22.48	91	1813	N.D.		
71) n-Nonane	22.75	43	1509	N.D.		
72) 1,1,2,2-Tetrachloroethane	22.45	83	118	N.D.		
74) Cumene	23.24	105	978	N.D.		
75) alpha-Pinene	23.74	93	61	N.D.		
76) n-Propylbenzene	23.89	91	2683	N.D.		
77) 3-Ethyltoluene	24.02	105	2040	N.D.		
78) 4-Ethyltoluene	24.07	105	2415	N.D.		
79) 1,3,5-Trimethylbenzene	24.15	105	1933	N.D.		

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060902.D
Acq On : 6 Apr 2009 9:01
Operator : WA/LH
Sample : TO-15 Method Blank (1000mL)
Misc : S20-03200903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 15:12:16 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	211	N.D.		
81) 2-Ethyltoluene	24.39	105	2039	N.D.		
82) 1,2,4-Trimethylbenzene	24.67	105	4005	~~0.071 ng~~	#	60
83) n-Decane	24.79	57	1597	N.D.		
84) Benzyl Chloride	24.85	91	3919	~~0.088 ng~~	#	57
85) 1,3-Dichlorobenzene	24.88	146	842	N.D.		
86) 1,4-Dichlorobenzene	24.95	146	1216	N.D.		
87) sec-Butylbenzene	25.01	105	1301	N.D.		
88) p-Isopropyltoluene	25.20	119	746	N.D.		
89) 1,2,3-Trimethylbenzene	25.20	105	1400	N.D.		
90) 1,2-Dichlorobenzene	25.37	146	645	N.D.		
91) d-Limonene	25.38	68	87	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.32	57	1200	N.D.		
94) 1,2,4-Trichlorobenzene	27.44	184	52	N.D.		
95) Naphthalene	27.59	128	4659	~~0.072 ng~~		76
96) n-Dodecane	27.56	57	980	N.D.		
97) Hexachloro-1,3-butadiene	27.98	225	62	N.D.		
98) Cyclohexanone	22.07	55	2062	N.D.		
99) tert-Butylbenzene	24.60	119	573	N.D.		
100) n-Butylbenzene	25.72	91	1455	N.D.		

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

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COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/06/09
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	**25.6**	**97**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.3	**25.9**	**98**	61-118	
74-87-3	Chloromethane	25.3	**27.0**	**107**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.8	**26.5**	**99**	65-122	
75-01-4	Vinyl Chloride	25.5	**26.8**	**105**	57-132	
106-99-0	1,3-Butadiene	30.0	**34.2**	**114**	66-161	
74-83-9	Bromomethane	25.8	**28.0**	**109**	67-130	
75-00-3	Chloroethane	25.8	**25.9**	**100**	68-123	
64-17-5	Ethanol	133	**154**	**116**	50-155	
75-05-8	Acetonitrile	26.3	**27.4**	**104**	48-148	
107-02-8	Acrolein	27.3	**28.5**	**104**	67-138	
67-64-1	Acetone	137	**143**	**104**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**30.1**	**114**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**49.8**	**104**	54-126	
107-13-1	Acrylonitrile	26.8	**29.7**	**111**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**28.0**	**102**	70-123	
75-09-2	Methylene Chloride	26.5	**24.9**	**94**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**30.3**	**112**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**28.3**	**103**	69-126	
75-15-0	Carbon Disulfide	26.8	**27.3**	**102**	66-115	
156-60-5	trans-1,2-Dichloroethene	26.8	**31.0**	**116**	69-125	
75-34-3	1,1-Dichloroethane	26.8	**29.9**	**112**	72-130	
1634-04-4	Methyl tert-Butyl Ether	27.5	**28.5**	**104**	72-132	
108-05-4	Vinyl Acetate	126	**187**	**148**	73-158	
78-93-3	2-Butanone (MEK)	27.5	**32.0**	**116**	68-126	

Verified By: Rev Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/06/09
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	27.5	**31.0**	**113**	69-124	
141-78-6	Ethyl Acetate	53.5	**69.7**	**130**	65-126	L
110-54-3	n-Hexane	27.3	**28.3**	**104**	63-125	
67-66-3	Chloroform	26.8	**30.0**	**112**	68-126	
109-99-9	Tetrahydrofuran (THF)	27.5	**31.3**	**114**	65-124	
107-06-2	1,2-Dichloroethane	26.8	**31.5**	**118**	61-129	
71-55-6	1,1,1-Trichloroethane	26.5	**28.2**	**106**	69-127	
71-43-2	Benzene	26.8	**26.6**	**99**	68-122	
56-23-5	Carbon Tetrachloride	27.0	**31.7**	**117**	68-137	
110-82-7	Cyclohexane	54.5	**56.8**	**104**	68-121	
78-87-5	1,2-Dichloropropane	26.5	**29.6**	**112**	69-128	
75-27-4	Bromodichloromethane	27.3	**31.2**	**114**	71-131	
79-01-6	Trichloroethene	26.5	**25.6**	**97**	72-122	
123-91-1	1,4-Dioxane	27.0	**29.6**	**110**	73-127	
80-62-6	Methyl Methacrylate	53.5	**60.2**	**113**	80-133	
142-82-5	n-Heptane	27.0	**27.8**	**103**	69-126	
10061-01-5	cis-1,3-Dichloropropene	25.0	**29.1**	**116**	73-122	
108-10-1	4-Methyl-2-pentanone	27.5	**33.7**	**123**	67-122	L
10061-02-6	trans-1,3-Dichloropropene	27.5	**34.3**	**125**	75-131	
79-00-5	1,1,2-Trichloroethane	26.3	**28.3**	**108**	76-125	
108-88-3	Toluene	27.0	**27.4**	**101**	74-119	
591-78-6	2-Hexanone	27.5	**30.0**	**109**	64-118	
124-48-1	Dibromochloromethane	28.8	**32.9**	**114**	79-129	
106-93-4	1,2-Dibromoethane	26.8	**28.8**	**107**	79-125	
123-86-4	n-Butyl Acetate	27.5	**32.0**	**116**	70-136	

L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P090406-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 4/06/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

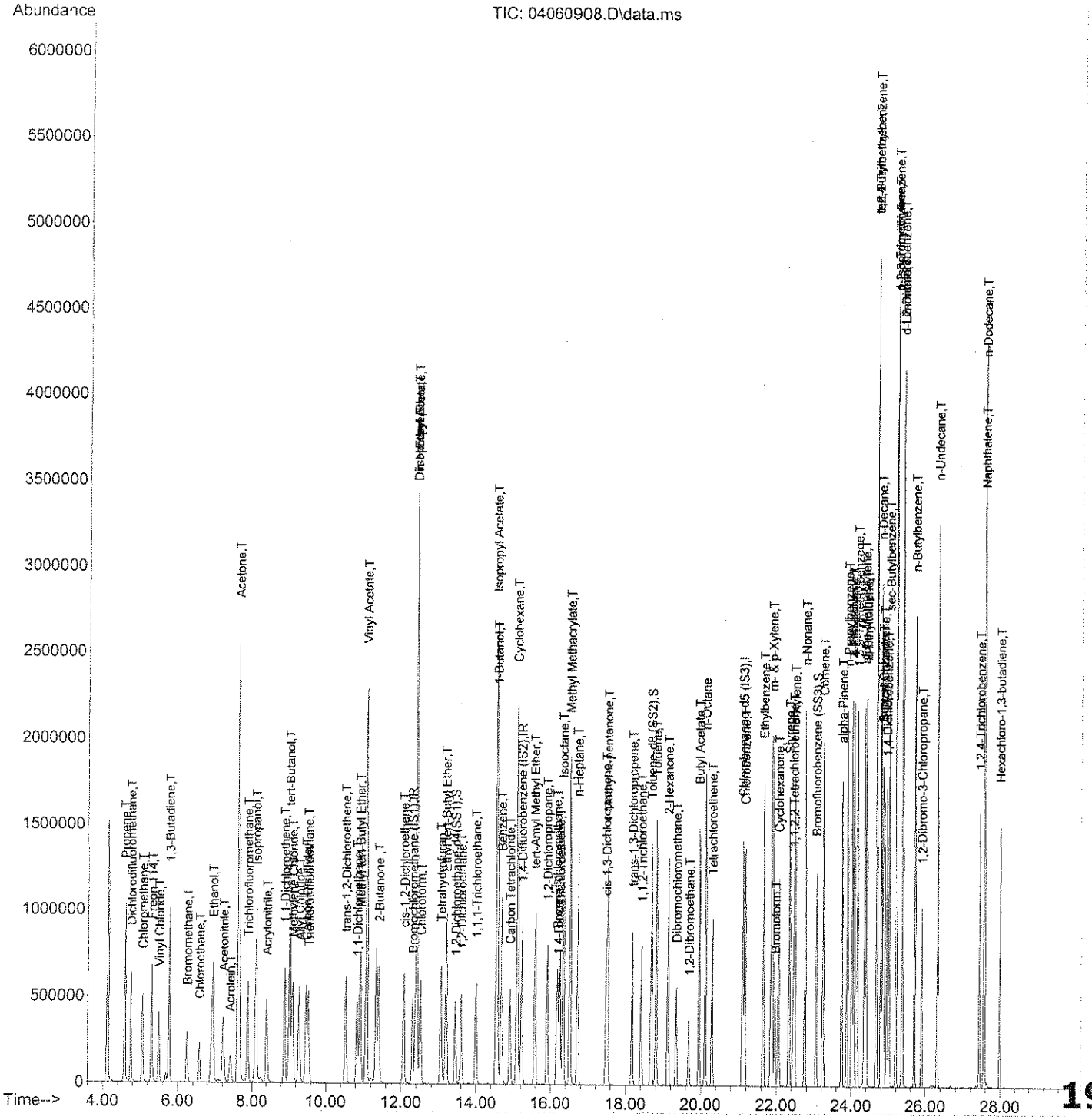
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.8	**28.3**	**106**	75-126	
127-18-4	Tetrachloroethene	25.8	**24.8**	**96**	72-125	
108-90-7	Chlorobenzene	26.8	**27.0**	**101**	74-121	
100-41-4	Ethylbenzene	26.5	**27.6**	**104**	76-120	
179601-23-1	m,p-Xylenes	52.5	**55.0**	**105**	75-120	
75-25-2	Bromoform	26.0	**32.3**	**124**	76-143	
100-42-5	Styrene	27.0	**28.1**	**104**	78-124	
95-47-6	o-Xylene	26.5	**27.3**	**103**	76-121	
111-84-2	n-Nonane	26.5	**28.1**	**106**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**32.9**	**122**	77-126	
98-82-8	Cumene	25.8	**26.5**	**103**	78-125	
80-56-8	alpha-Pinene	27.5	**29.6**	**108**	78-125	
103-65-1	n-Propylbenzene	25.8	**28.0**	**109**	80-127	
622-96-8	4-Ethyltoluene	27.5	**30.0**	**109**	75-123	
108-67-8	1,3,5-Trimethylbenzene	27.3	**27.8**	**102**	76-124	
95-63-6	1,2,4-Trimethylbenzene	26.8	**30.2**	**113**	76-123	
100-44-7	Benzyl Chloride	28.8	**35.8**	**124**	80-137	
541-73-1	1,3-Dichlorobenzene	27.5	**29.6**	**108**	74-125	
106-46-7	1,4-Dichlorobenzene	27.3	**28.3**	**104**	74-126	
95-50-1	1,2-Dichlorobenzene	27.3	**31.7**	**116**	75-124	
5989-27-5	d-Limonene	26.8	**32.6**	**122**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.5	**33.8**	**123**	79-144	
120-82-1	1,2,4-Trichlorobenzene	28.8	**35.5**	**123**	70-139	
91-20-3	Naphthalene	25.8	**32.9**	**128**	69-141	
87-68-3	Hexachlorobutadiene	28.8	**29.9**	**104**	68-138	

Verified By: _____ Date: 4/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060908.D
Acq On : 6 Apr 2009 13:00
Operator : WA/LH
Sample : 25ng TO-15 LCS STD
Misc : S20-03200903/S20-04030901
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 15:13:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060908.D
Acq On : 6 Apr 2009 13:00
Operator : WA/LH
Sample : 25ng TO-15 LCS STD
Misc : S20-03200903/S20-04030901
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 15:13:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.31	130	188267	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.23	114	889883	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.11	82	519656	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.44	65	490402	27.445	ng		-0.02
Spiked Amount 25.000			Recovery = 109.80%				
57) Toluene-d8 (SS2)	18.67	98	1052039	24.932	ng		0.00
Spiked Amount 25.000			Recovery = 99.72%				
73) Bromofluorobenzene (SS3)	23.06	174	335351	24.629	ng		0.00
Spiked Amount 25.000			Recovery = 98.52%				
Target Compounds							Qvalue
2) Propene	4.58	42	455455	25.575	ng		92
3) Dichlorodifluoromethane	4.75	85	619073	25.909	ng		99
4) Chloromethane	5.06	50	711156	27.015	ng		100
5) Freon 114	5.31	135	252770	26.544	ng		86
6) Vinyl Chloride	5.50	62	565079	26.783	ng		84
7) 1,3-Butadiene	5.77	54	599452	34.205	ng		96
8) Bromomethane	6.24	94	258718	28.011	ng		97
9) Chloroethane	6.58	64	250235	25.861	ng		99
10) Ethanol	6.93	45	1625769	153.772	ng		96
11) Acetonitrile	7.22	41	757175	27.445	ng		89
12) Acrolein	7.40	56	267091	28.544	ng		83
13) Acetone	7.62	58	1688962	143.310	ng	#	81
14) Trichlorofluoromethane	7.88	101	602059	30.132	ng		96
15) Isopropanol	8.11	45	2096202	49.803	ng		94
16) Acrylonitrile	8.40	53	640656	29.680	ng		100
17) 1,1-Dichloroethene	8.89	96	282776	28.028	ng		89
18) tert-Butanol	9.03	59	2312948	56.064	ng		97
19) Methylene Chloride	9.11	84	299049	24.895	ng		90
20) Allyl Chloride	9.28	41	634467	30.332	ng		90
21) Trichlorotrifluoroethane	9.53	151	209887	28.276	ng		87
22) Carbon Disulfide	9.47	76	1125207	27.313	ng		98
23) trans-1,2-Dichloroethene	10.53	61	641848	30.956	ng		98
24) 1,1-Dichloroethane	10.83	63	719971	29.880	ng		99
25) Methyl tert-Butyl Ether	10.91	73	941137	28.503	ng		97
26) Vinyl Acetate	11.08	86	310796	186.659	ng	#	70
27) 2-Butanone	11.40	72	223429	32.006	ng	#	72
28) cis-1,2-Dichloroethene	12.07	61	630799	31.007	ng		96
29) Diisopropyl Ether	12.40	87	234529	27.760	ng	#	90
30) Ethyl Acetate	12.41	61	329893	69.733	ng		98
31) n-Hexane	12.41	57	706558	28.298	ng		91

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060908.D
Acq On : 6 Apr 2009 13:00
Operator : WA/LH
Sample : 25ng TO-15 LCS STD
Misc : S20-03200903/S20-04030901
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 15:13:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.52	83	573779	29.979	ng		99
34) Tetrahydrofuran	13.06	72	212177	31.257	ng	#	69
35) Ethyl tert-Butyl Ether	13.19	87	349279	26.347	ng	#	89
36) 1,2-Dichloroethane	13.60	62	626836	31.524	ng		100
38) 1,1,1-Trichloroethane	14.00	97	496934	28.207	ng		92
39) Isopropyl Acetate	14.55	61	563965	60.812	ng		97
40) 1-Butanol	14.57	56	1073114	71.569	ng	#	76
41) Benzene	14.68	78	1210123	26.637	ng		100
42) Carbon Tetrachloride	14.91	117	425098	31.739	ng		99
43) Cyclohexane	15.11	84	920864	56.819	ng		90
44) tert-Amyl Methyl Ether	15.58	73	917491	27.217	ng		97
45) 1,2-Dichloropropane	15.91	63	400982	29.561	ng		98
46) Bromodichloromethane	16.18	83	467339	31.153	ng		98
47) Trichloroethene	16.26	130	278246	25.596	ng		100
48) 1,4-Dioxane	16.21	88	251562	29.559	ng		95
49) Isooctane	16.35	57	1863509	27.861	ng		96
50) Methyl Methacrylate	16.53	100	239289	60.168	ng	#	64
51) n-Heptane	16.72	71	331744	27.832	ng		92
52) cis-1,3-Dichloropropene	17.46	75	507406	29.134	ng		99
53) 4-Methyl-2-pentanone	17.50	58	445232	33.689	ng		97
54) trans-1,3-Dichloropropene	18.17	75	543413	34.336	ng		98
55) 1,1,2-Trichloroethane	18.41	97	284966	28.330	ng		92
58) Toluene	18.80	91	1256206	27.439	ng		99
59) 2-Hexanone	19.12	43	1214954	29.967	ng		95
60) Dibromochloromethane	19.35	129	337553	32.922	ng		98
61) 1,2-Dibromoethane	19.68	107	327898	28.812	ng		100
62) Butyl Acetate	19.95	43	1385364	31.966	ng		98
63) n-Octane	20.11	57	419740	28.346	ng		97
64) Tetrachloroethene	20.30	166	289848	24.814	ng		98
65) Chlorobenzene	21.17	112	759638	27.025	ng		99
66) Ethylbenzene	21.65	91	1470677	27.590	ng		95
67) m- & p-Xylene	21.88	91	2326639	55.022	ng		95
68) Bromoform	21.96	173	276461	32.338	ng		98
69) Styrene	22.33	104	847009	28.149	ng		95
70) o-Xylene	22.48	91	1194730	27.290	ng		94
71) n-Nonane	22.75	43	996052	28.142	ng		91
72) 1,1,2,2-Tetrachloroethane	22.45	83	572923	32.943	ng		100
74) Cumene	23.24	105	1434088	26.548	ng		98
75) alpha-Pinene	23.74	93	723140	29.621	ng		93
76) n-Propylbenzene	23.89	91	1912189	28.031	ng		95
77) 3-Ethyltoluene	24.01	105	1462292	29.564	ng		99
78) 4-Ethyltoluene	24.07	105	1453180	30.005	ng		100
79) 1,3,5-Trimethylbenzene	24.16	105	1215687	27.808	ng		97

DA 4/7/09 LH 4/7/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060908.D
Acq On : 6 Apr 2009 13:00
Operator : WA/LH
Sample : 25ng TO-15 LCS STD
Misc : S20-03200903/S20-04030901
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 15:13:47 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.35	118	640893	29.652	ng		96
81) 2-Ethyltoluene	24.40	105	1474612	29.134	ng		100
82) 1,2,4-Trimethylbenzene	24.67	105	1352287	30.247	ng		99
83) n-Decane	24.79	57	1137699	31.345	ng		97
84) Benzyl Chloride	24.84	91	1259549	35.779	ng		95
85) 1,3-Dichlorobenzene	24.87	146	642257	29.641	ng		100
86) 1,4-Dichlorobenzene	24.95	146	644728	28.276	ng		100
87) sec-Butylbenzene	25.01	105	1686490	29.288	ng		97
88) p-Isopropyltoluene	25.20	119	1576901	31.145	ng		95
89) 1,2,3-Trimethylbenzene	25.20	105	1409383	32.771	ng		97
90) 1,2-Dichlorobenzene	25.37	146	644560	31.685	ng		100
91) d-Limonene	25.38	68	612126	32.639	ng		97
92) 1,2-Dibromo-3-Chloropr...	25.90	157	218609	33.808	ng	#	55
93) n-Undecane	26.32	57	1202100	31.004	ng		96
94) 1,2,4-Trichlorobenzene	27.43	184	129956	35.479	ng		96
95) Naphthalene	27.57	128	1680601	32.858	ng		100
96) n-Dodecane	27.55	57	1250780	29.249	ng		95
97) Hexachloro-1,3-butadiene	27.99	225	250335	29.876	ng		100
98) Cyclohexanone	22.06	55	719420	25.603	ng	#	94
99) tert-Butylbenzene	24.67	119	1232810	31.454	ng		98
100) n-Butylbenzene	25.71	91	1529877	32.284	ng		95

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

RA 4/7/09 LH 4/7/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-001DUP

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.060 Liter(s)
Test Notes:
Container ID: SC00948

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average ppbV	% RPD	RPD Limit	Data Qualifier
Propene	ND	ND	ND	ND	-	-	25	
Dichlorodifluoromethane (CFC 12)	ND	ND	ND	ND	-	-	25	
Chloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	ND	ND	ND	-	-	25	
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Butadiene	ND	ND	ND	ND	-	-	25	
Bromomethane	ND	ND	ND	ND	-	-	25	
Chloroethane	ND	ND	ND	ND	-	-	25	
Ethanol	ND	ND	ND	ND	-	-	25	
Acetonitrile	ND	ND	ND	ND	-	-	25	
Acrolein	ND	ND	ND	ND	-	-	25	
Acetone	ND	ND	ND	ND	-	-	25	
Trichlorofluoromethane	ND	ND	ND	ND	-	-	25	
2-Propanol (Isopropyl Alcohol)	ND	ND	ND	ND	-	-	25	
Acrylonitrile	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
Methylene Chloride	ND	ND	ND	ND	-	-	25	
3-Chloro-1-propene (Allyl Chloride)	ND	ND	ND	ND	-	-	25	
Trichlorotrifluoroethane	ND	ND	ND	ND	-	-	25	
Carbon Disulfide	ND	ND	ND	ND	-	-	25	
trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethane	ND	ND	ND	ND	-	-	25	
Methyl tert-Butyl Ether	ND	ND	ND	ND	-	-	25	
Vinyl Acetate	ND	ND	ND	ND	-	-	25	
2-Butanone (MEK)	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By: _____ Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-001DUP

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.060 Liter(s)
Test Notes:
Container ID: SC00948

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average ppbV	% RPD	RPD Limit	Data Qualifier
cis-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
Ethyl Acetate	ND	ND	ND	ND	-	-	25	
n-Hexane	ND	ND	ND	ND	-	-	25	
Chloroform	23.2	4.75	22.9	4.70	4.725	1	25	
Tetrahydrofuran (THF)	ND	ND	ND	ND	-	-	25	
1,2-Dichloroethane	ND	ND	ND	ND	-	-	25	
1,1,1-Trichloroethane	ND	ND	ND	ND	-	-	25	
Benzene	ND	ND	ND	ND	-	-	25	
Carbon Tetrachloride	ND	ND	ND	ND	-	-	25	
Cyclohexane	ND	ND	ND	ND	-	-	25	
1,2-Dichloropropane	ND	ND	ND	ND	-	-	25	
Bromodichloromethane	ND	ND	ND	ND	-	-	25	
Trichloroethene	ND	ND	ND	ND	-	-	25	
1,4-Dioxane	ND	ND	ND	ND	-	-	25	
Methyl Methacrylate	ND	ND	ND	ND	-	-	25	
n-Heptane	ND	ND	ND	ND	-	-	25	
cis-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
4-Methyl-2-pentanone	ND	ND	ND	ND	-	-	25	
trans-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
1,1,2-Trichloroethane	ND	ND	ND	ND	-	-	25	
Toluene	39.6	10.5	39.1	10.4	10.45	1	25	
2-Hexanone	ND	ND	ND	ND	-	-	25	
Dibromochloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dibromoethane	ND	ND	ND	ND	-	-	25	
n-Butyl Acetate	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By: Ler Date: 4/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Walden Environmental Engineering, PLLC**
Client Sample ID: **SS-1** CAS Project ID: P0901030
Client Project ID: **Bayville Village Cleaners / BVC0106** CAS Sample ID: P0901030-001DUP

Test Code: EPA TO-15 Date Collected: 3/20/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/24/09
Analyst: Wida Ang Date Analyzed: 4/6/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.060 Liter(s)
Test Notes:
Container ID: SC00948

Initial Pressure (psig): -1.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.36

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average ppbV	% RPD	RPD Limit	Data Qualifier
n-Octane	41.5	8.88	41.9	8.98	8.93	**1**	25	
Tetrachloroethene	2,190	323	2,200	324	323.5	**0.3**	25	
Chlorobenzene	ND	ND	ND	ND	-	-	25	
Ethylbenzene	ND	ND	ND	ND	-	-	25	
m,p-Xylenes	44.4	10.2	44.2	10.2	10.2	**0**	25	
Bromoform	ND	ND	ND	ND	-	-	25	
Styrene	ND	ND	ND	ND	-	-	25	
o-Xylene	15.1	3.47	15.2	3.50	3.485	**0.9**	25	
n-Nonane	87.0	16.6	87.2	16.6	16.6	**0**	25	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	-	-	25	
Cumene	ND	ND	ND	ND	-	-	25	
alpha-Pinene	ND	ND	ND	ND	-	-	25	
n-Propylbenzene	ND	ND	ND	ND	-	-	25	
4-Ethyltoluene	ND	ND	ND	ND	-	-	25	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,4-Trimethylbenzene	40.3	8.21	40.1	8.15	8.18	**0.7**	25	
Benzyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,4-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,2-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
d-Limonene	ND	ND	ND	ND	-	-	25	
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	-	-	25	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	-	-	25	
Naphthalene	ND	ND	ND	ND	-	-	25	
Hexachlorobutadiene	ND	ND	ND	ND	-	-	25	

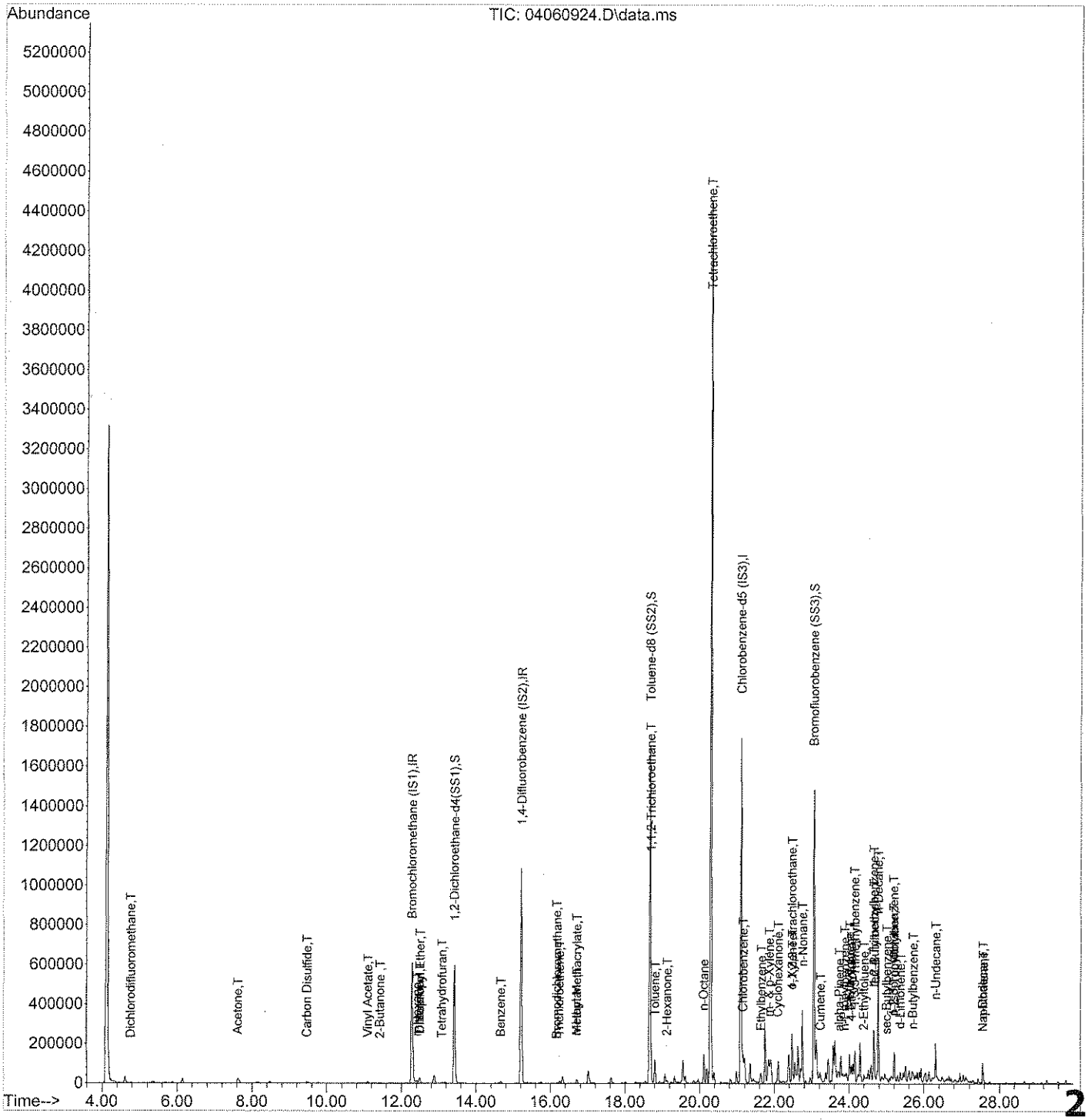
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By: _____ Date: 4/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 23:22
Operator : WA/LH
Sample : P0901030-001Dup (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 23:22
Operator : WA/LH
Sample : P0901030-001Dup (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

MH 4/8/09
MH 4/8/09

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	231209	25.000 ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.22	114	1071158	25.000 ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.10	82	627984	25.000 ng		-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.42	65	605389	27.588 ng		-0.04
Spiked Amount 25.000			Recovery =	110.36%		
57) Toluene-d8 (SS2)	18.67	98	1279402	25.090 ng		-0.01
Spiked Amount 25.000			Recovery =	100.36%		
73) Bromofluorobenzene (SS3)	23.06	174	399150	24.258 ng		0.00
Spiked Amount 25.000			Recovery =	97.04%		
Target Compounds						Qvalue
2) Propene	4.61	42	456	N.D.		
3) Dichlorodifluoromethane	4.76	85	3258	~~0.111 ng~~	#	93
4) Chloromethane	5.09	50	143	N.D.		
5) Freon 114	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	6.99	45	123	N.D.		
11) Acetonitrile	0.00	41	0	N.D.		
12) Acrolein	7.41	56	174	N.D.		
13) Acetone	7.62	58	12756	~~0.881 ng~~	#	80
14) Trichlorofluoromethane	7.88	101	1271	N.D.		
15) Isopropanol	8.17	45	326	N.D.		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) tert-Butanol	9.06	59	1114	N.D.		
19) Methylene Chloride	9.09	84	373	N.D.		
20) Allyl Chloride	9.18	41	500	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.48	76	15494	~~0.306 ng~~		95
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.10	86	175	~~0.086 ng~~	#	1
27) 2-Butanone	11.43	72	664	~~0.077 ng~~	#	84
28) cis-1,2-Dichloroethene	12.05	61	349	N.D.		
29) Diisopropyl Ether	12.49	87	2557	0.246 ng	#	1
30) Ethyl Acetate	12.42	61	53	N.D.		
31) n-Hexane	12.41	57	5681	~~0.185 ng~~		9

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 23:22
Operator : WA/LH
Sample : P0901030-001Dup (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.49	83	23782	1.012	ng		99
34) Tetrahydrofuran	13.09	72	1192	0.143	ng	#	83
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.42	62	440	N.D.			
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.			
39) Isopropyl Acetate	0.00	61	0	N.D.			
40) 1-Butanol	14.62	56	397	N.D.			
41) Benzene	14.67	78	10806	0.198	ng		97
42) Carbon Tetrachloride	14.91	117	53	N.D.			
43) Cyclohexane	15.11	84	847	N.D.			
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	16.18	83	1193	0.066	ng		92
47) Trichloroethene	16.25	130	4019	0.307	ng		99
48) 1,4-Dioxane	0.00	88	0	N.D.			
49) Isooctane	16.34	57	3063	N.D.			
50) Methyl Methacrylate	16.70	100	1140	0.238	ng	#	1
51) n-Heptane	16.70	71	4789	0.334	ng		89
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.			
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	18.69	97	110534	9.129	ng	TP#	7
58) Toluene	18.80	91	95364	1.724	ng		99
59) 2-Hexanone	19.13	43	10790	0.220	ng	#	35
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) Butyl Acetate	19.96	43	1709	N.D.			
63) n-Octane	20.11	57	33108	1.850	ng		96
64) Tetrachloroethene	20.30	166	1367622	96.887	ng		99
65) Chlorobenzene	21.17	112	3546	0.104	ng	#	43
66) Ethylbenzene	21.65	91	30379	0.472	ng		97
67) m- & p-Xylene	21.86	91	99575	1.949	ng		94
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.33	104	1006	N.D.			
70) o-Xylene	22.48	91	35434	0.670	ng		90
71) n-Nonane	22.75	43	164495	3.846	ng		91
72) 1,1,2,2-Tetrachloroethane	22.48	83	5587	0.266	ng	#	55
74) Cumene	23.24	105	5825	0.089	ng		97
75) alpha-Pinene	23.74	93	5590	0.189	ng	#	30
76) n-Propylbenzene	23.88	91	22903	0.278	ng		81
77) 3-Ethyltoluene	24.01	105	47102	0.788	ng		100
78) 4-Ethyltoluene	24.06	105	24108	0.412	ng		98
79) 1,3,5-Trimethylbenzene	24.15	105	25079	0.475	ng		10

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 23:22
Operator : WA/LH
Sample : P0901030-001Dup (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration

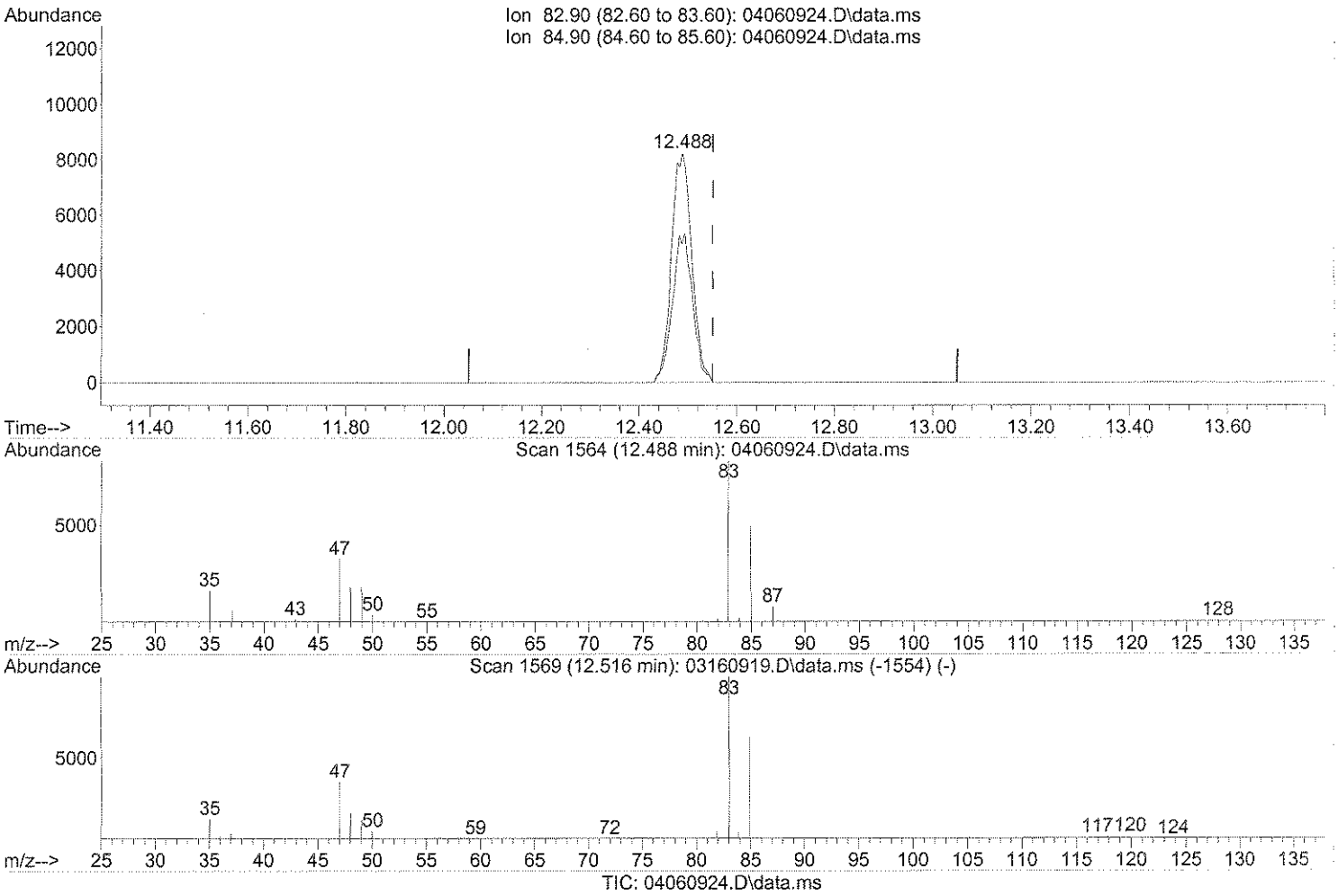
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.17	118	56	N.D.		
81) 2-Ethyltoluene	24.40	105	21961	0.359 ng		96
82) 1,2,4-Trimethylbenzene	24.67	105	95520	1.768 ng		89
83) n-Decane	24.79	57	235336	5.365 ng		94
84) Benzyl Chloride	24.83	91	58	N.D.		
85) 1,3-Dichlorobenzene	24.95	146	515	N.D.		
86) 1,4-Dichlorobenzene	24.95	146	515	N.D.		
87) sec-Butylbenzene	25.01	105	6456	0.093 ng		96
88) p-Isopropyltoluene	25.20	119	7903	0.129 ng	#	45
89) 1,2,3-Trimethylbenzene	25.20	105	35039	0.674 ng		93
90) 1,2-Dichlorobenzene	24.95	146	515	N.D.		
91) d-Limonene	25.38	68	9801	0.432 ng		90
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.32	57	68999	1.473 ng		86
94) 1,2,4-Trichlorobenzene	0.00	184	0	N.D.		
95) Naphthalene	27.57	128	12996	0.210 ng		96
96) n-Dodecane	27.55	57	33310	0.645 ng		91
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.10	55	12171	0.358 ng	#	72
99) tert-Butylbenzene	24.67	119	10808	0.228 ng	#	55
100) n-Butylbenzene	25.71	91	15962	0.279 ng	#	24

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 11:22 pm
Operator : WA/LH
Sample : P0901030-001Dup (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
Response via : Initial Calibration



TIC: 04060924.D\data.ms

(32) Chloroform (T)

12.488min (-0.063) 1.01ng

response 23782

Ion	Exp%	Act%
82.90	100	100
84.90	65.20	64.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 11:22 pm
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QLast Update : Tue Mar 17 08:49:32 2009
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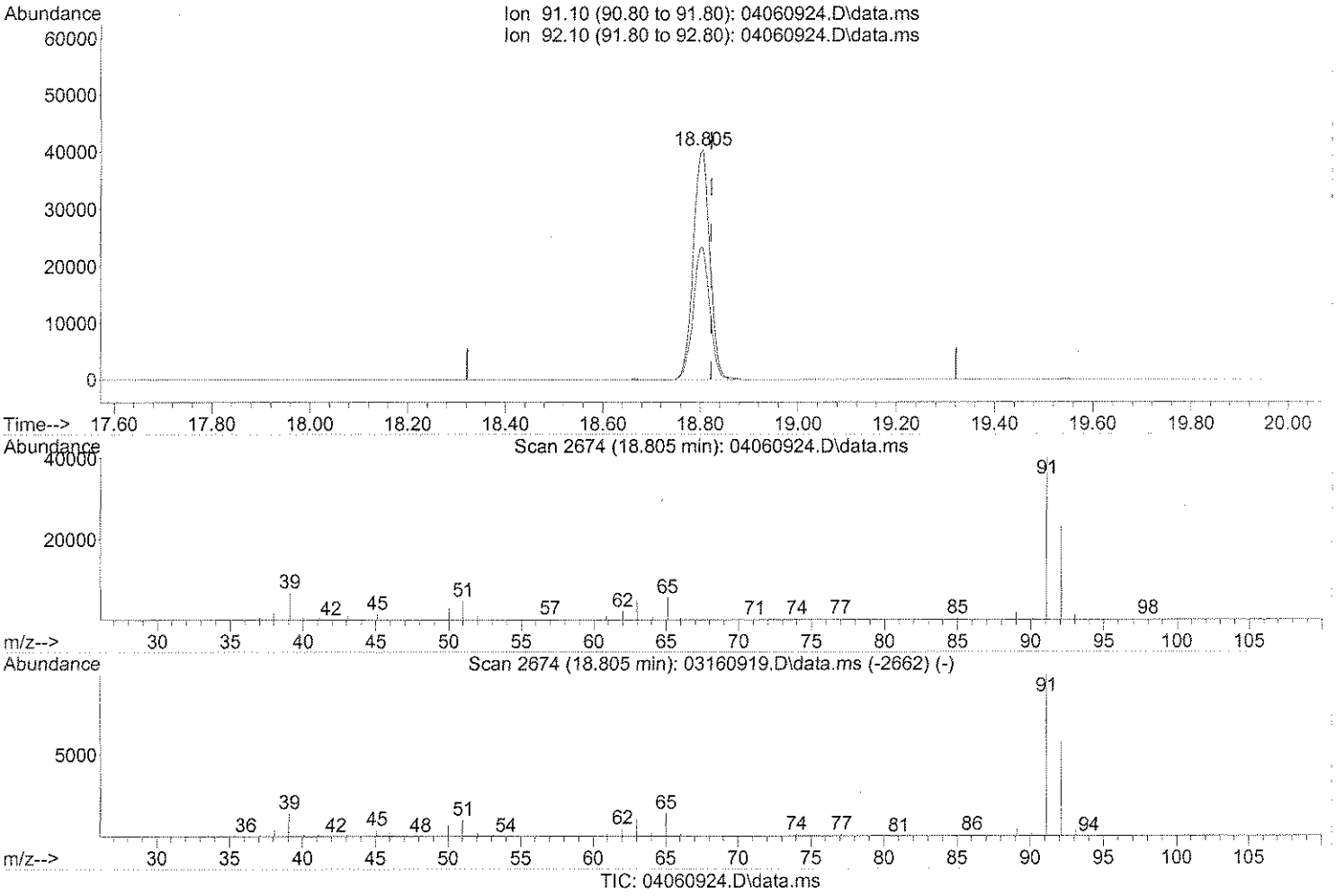

TIC: 04060924.D\data.ms

(58) Toluene (T)

18.805min (-0.017) 1.72ng

response 95364

Ion	Exp%	Act%
91.10	100	100
92.10	58.40	57.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 11:22 pm
Operator : WA/LH
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Quant Time: Apr 07 08:57:38 2009
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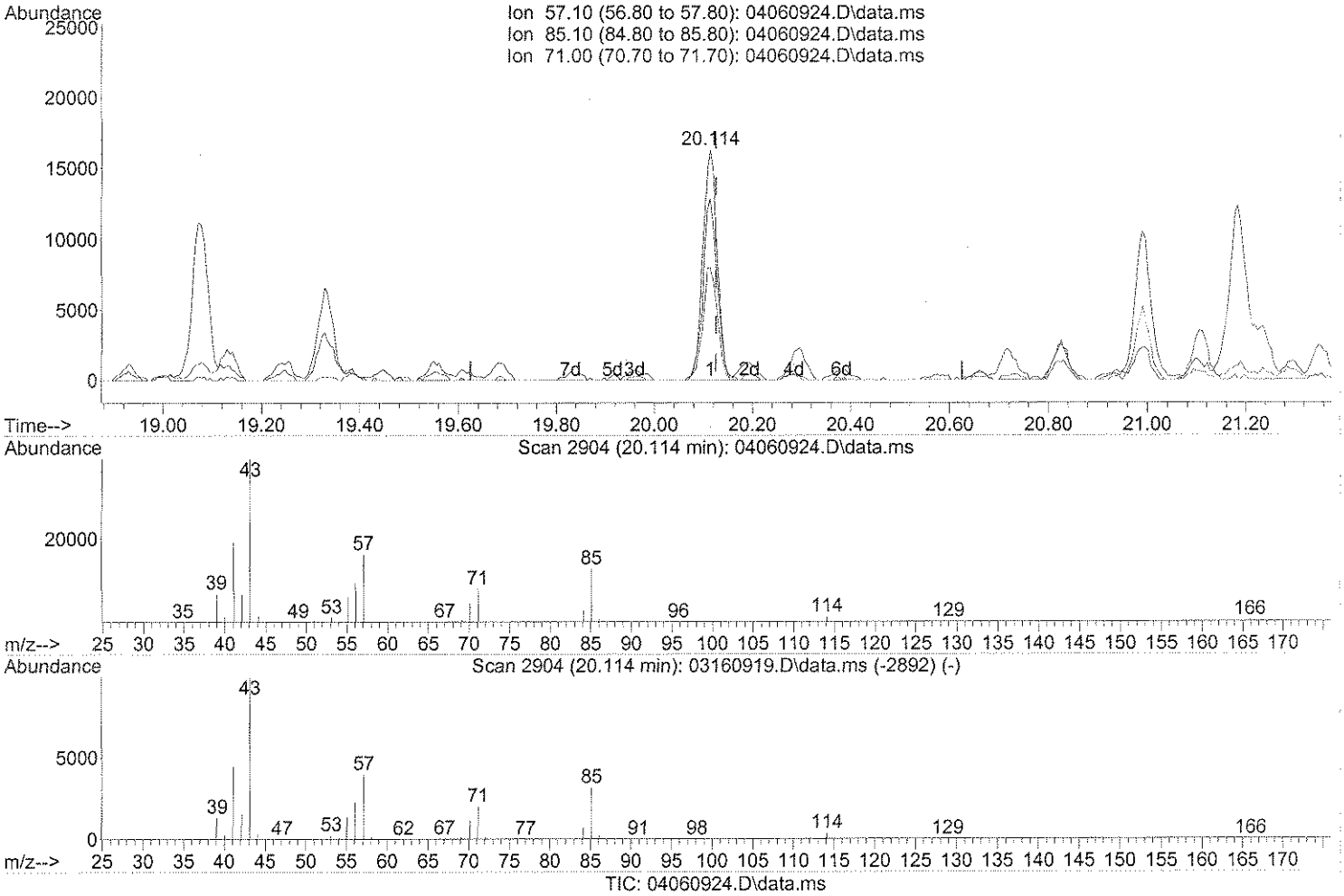

(63) n-Octane

20.114min (-0.011) 1.85ng

response 33108

Ion	Exp%	Act%
57.10	100	100
85.10	74.80	77.03
71.00	46.00	50.08
0.00	0.00	0.00

208

Quantitation Report (Qedit)

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Data File : 04060924.D
Acq On : 6 Apr 2009 11:22 pm
Operator : WA/LH
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Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue Mar 17 08:49:32 2009
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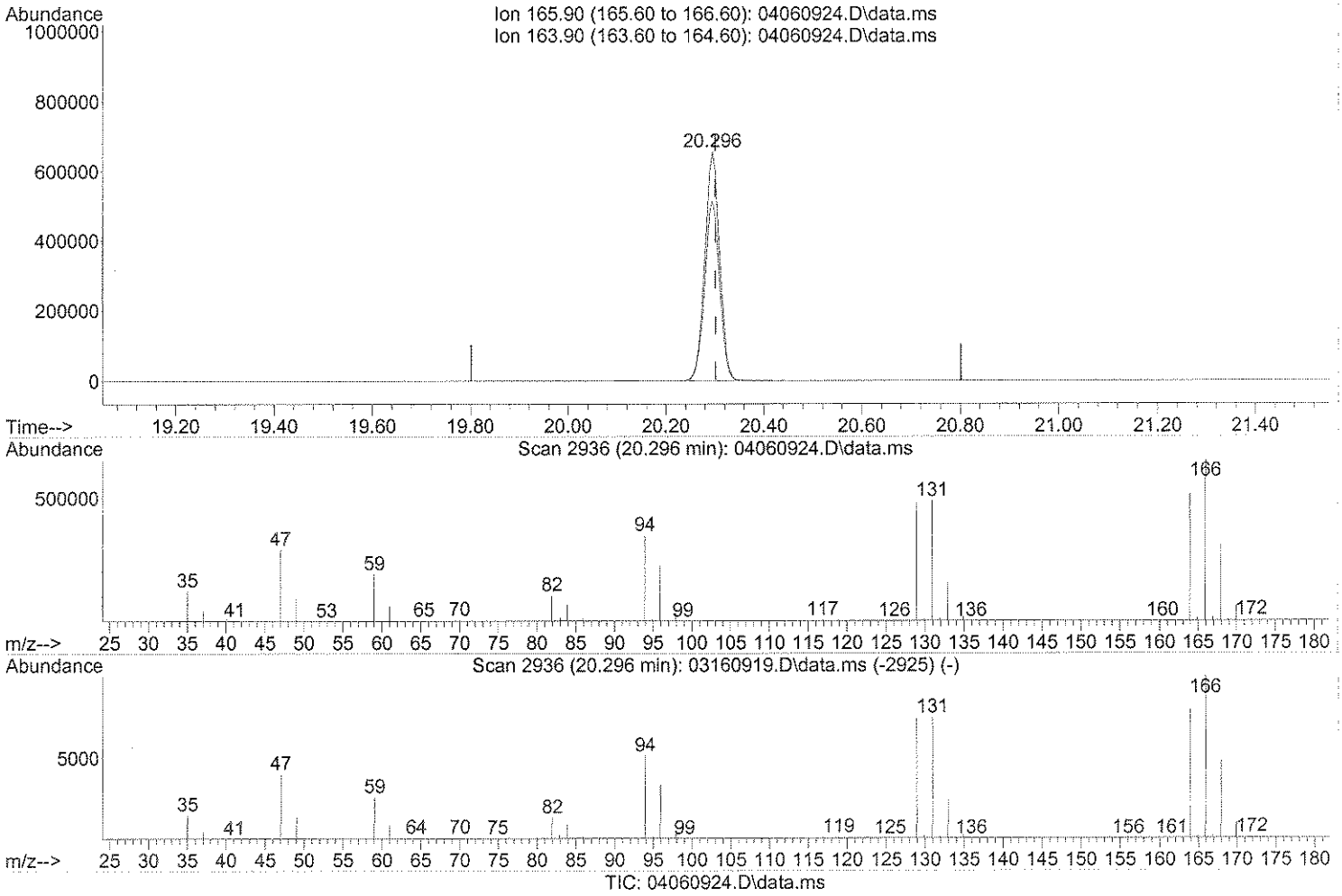

TIC: 04060924.D\data.ms

(64) Tetrachloroethene (T)

20.296min (-0.006) 96.89ng

response 1367622

Ion	Exp%	Act%
165.90	100	100
163.90	79.90	79.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
Acq On : 6 Apr 2009 11:22 pm
Operator : WA/LH
Sample : P0901030-001Dup (60mL)
Misc : Walden Environmental SS-1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 07 08:57:38 2009
Quant Method : J:\MS16\METHODS\R16031609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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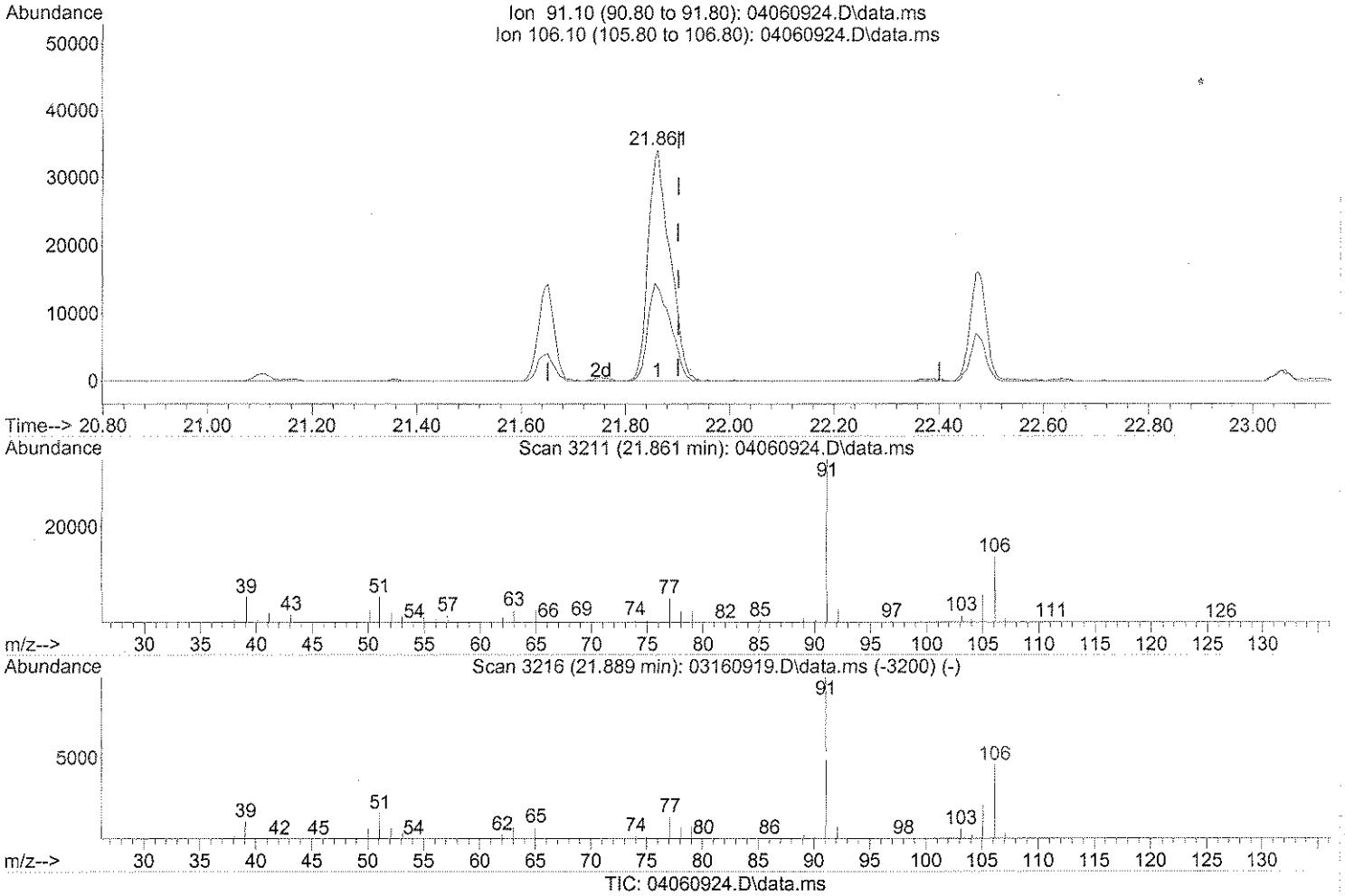

(67) m- & p-Xylene (T)

21.861min (-0.040) 1.95ng

response 99575

Ion	Exp%	Act%
91.10	100	100
106.10	47.90	43.97
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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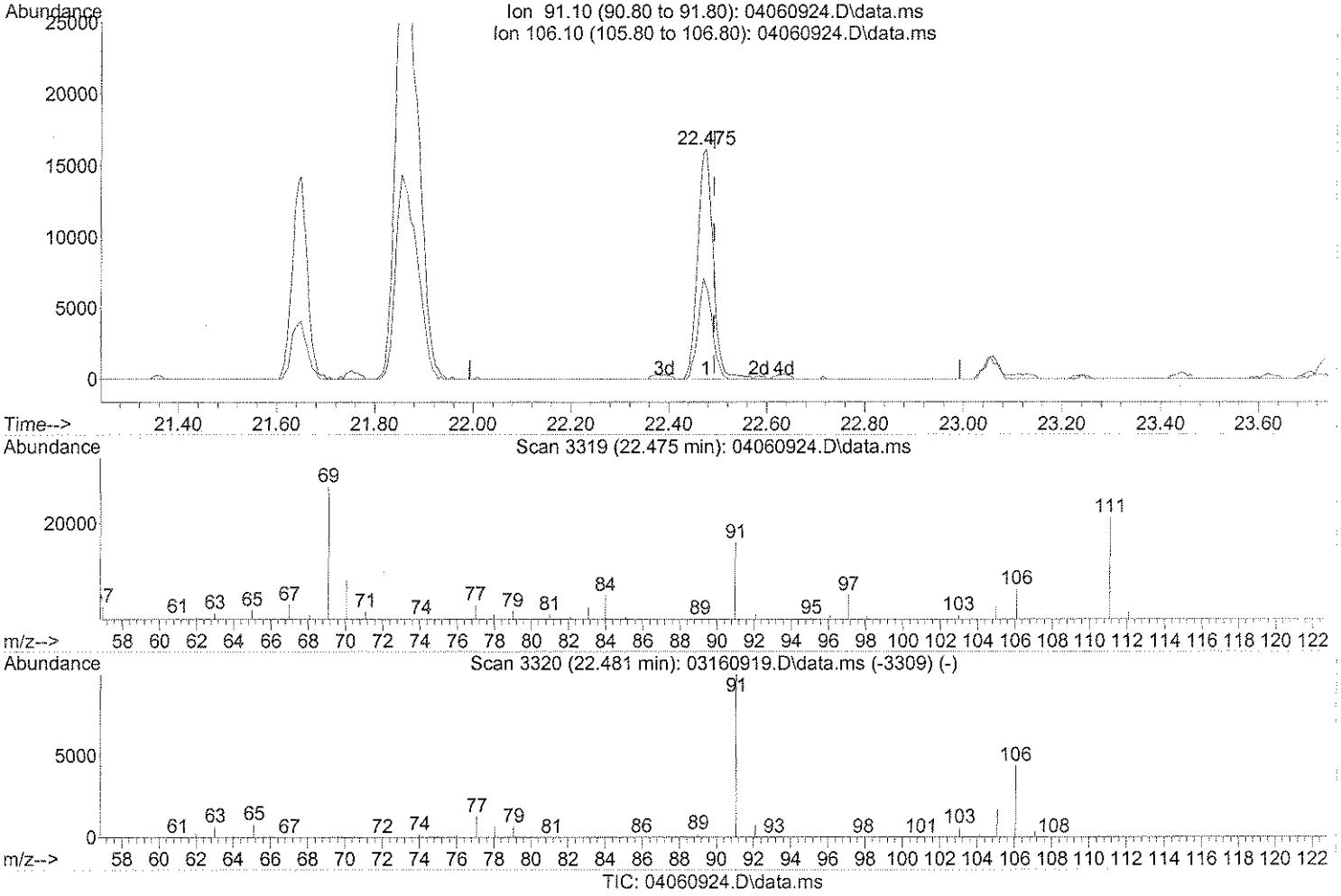

TIC: 04060924.D\data.ms

(70) o-Xylene (T)

22.475min (-0.017) 0.67ng

response 35434

Ion	Exp%	Act%
91.10	100	100
106.10	46.30	39.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_04\06\
Data File : 04060924.D
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Misc : Walden Environmental SS-1
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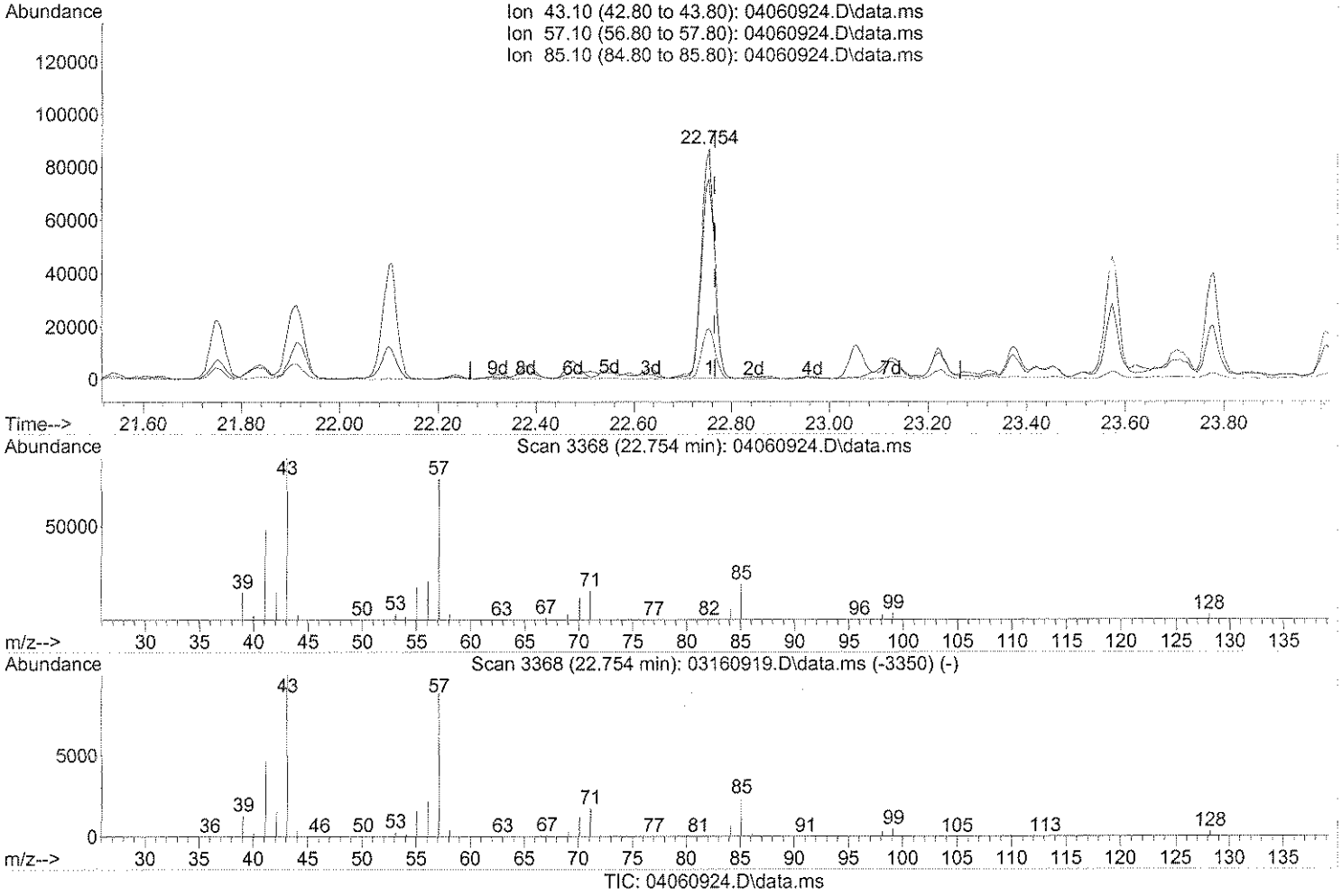

TIC: 04060924.D\data.ms

(71) n-Nonane (T)

22.754min (-0.011) 3.85ng

response 164495

Ion	Exp%	Act%
43.10	100	100
57.10	80.50	88.42
85.10	19.50	22.80
0.00	0.00	0.00

212

Quantitation Report (Qedit)

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Data File : 04060924.D
Acq On : 6 Apr 2009 11:22 pm
Operator : WA/LH
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Misc : Walden Environmental SS-1
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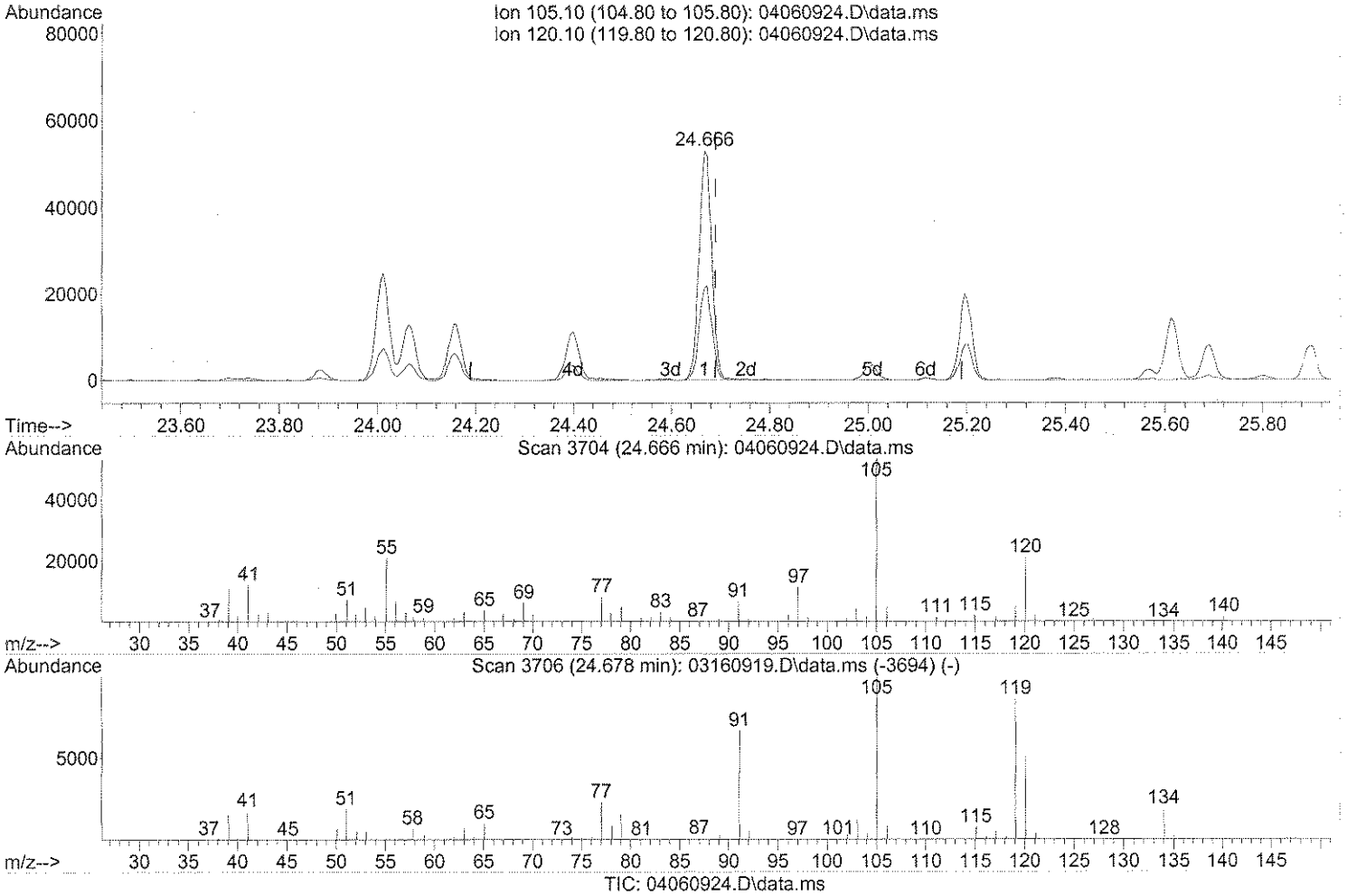

TIC: 04060924.D\data.ms

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

24.666min (-0.023) 1.77ng

response 95520

Ion	Exp%	Act%
105.10	100	100
120.10	49.00	41.75
0.00	0.00	0.00
0.00	0.00	0.00

Copy of Calculations

1. Determination of Pressure Dilution Factor

Upon receipt at the laboratory the pressure or vacuum of the sample canisters is measured using a digital pressure gauge. The canisters are then pressurized with humidified zero air to approximately +3.5 psig (pounds per square inch gauge).

Pressure Dilution factor is calculated as:

$$PDF = \frac{P_f + 14.7}{P_i + 14.7}$$

P_f final pressure in psig
P_i initial pressure in psig

2. Validating Initial and Continuing Calibration Results

GC/MS target compound analysis is performed using internal standard quantitation. Three internal standard compounds (Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5) are added to each aliquot of sample, blank, standard and duplicate at an amount of 25 nanograms(ng). Internal standard responses are used to calculate RRFs (relative response factors) as follows:

$$RRF = \frac{A_x C_{is}}{A_{is} C_x}$$

A_x area response of the analyte quantitation ion
A_{is} area response of the corresponding internal standard quantitation ion
C_{is} internal standard concentration, ng
C_x analyte concentration, ng

The percent relative standard deviation (%RSD) for the five or six initial calibration points should be less than 30% (with a maximum of two analytes $\leq$40%) for the calibration to be considered valid and linear.

$$\%RSD = \frac{SD}{\overline{RRF}}(100)$$

SD standard deviation
$\overline{RRF}$ average or mean RRF (ICAL)

The initial calibration is verified once per twenty-four hour analytical sequence with the analysis of a continuing calibration standard at one of the initial calibration levels (actual analyte concentrations of the CCV are the same as the corresponding concentrations in the initial calibration). The relative response factor of each target analyte from the daily continuing calibration standard is compared to the average relative response factor from the initial multipoint calibration. The percent difference (%D) of the initial and continuing calibration relative response factors is calculated as follows:

$$\%D = \left(\frac{\overline{RRF} - RRF\ cont}{\overline{RRF}} \right)(100)$$

$\overline{RRF}$	average relative response factor from the initial calibration
$RRF\ cont$	relative response factor from the daily continuing calibration standard

Note: the percent difference (%D) should be less than 30% for an acceptable continuing calibration standard.

3. Validating GC/MS Target Analyte Quantitation Results

Target analytes are measured in nanograms using internal standard quantitation as follows:

$$ng_x = \frac{A_x ng_{is}}{A_{is}\overline{RRF}}$$

ng_x	nanogram concentration of analyte x
A_x	area response of the analyte's quantitation ion
A_{is}	area response of the corresponding internal standard's quantitation ion
ng_{is}	internal standard amount, in nanograms
$\overline{RRF}$	average or mean RRFs (ICAL)

4. Calculation of µg/m^3 (microgram per cubic meter) Results

Target compound results reported on the "Results of Analysis" form in units of µg/m^3 are calculated as follows:

$$\mu g/m^3 = \frac{(ng)(PDF)}{L}$$

ng	nanograms of analyte (measured on the GC/MS quantitation report)
PDF	pressure dilution factor (see equation 1)
L	sample aliquot in Liters

5. **Conversion to ppb (parts per billion) Volume**

$$C_{ppbv} = C_x\left(\frac{24.46}{FW}\right)$$

FW	formula weight of the target analytes (i.e. formula weight of Dichloromethane is 84.94; 1,2-Dichloropropane is 113)
24.46	molar volume of ideal gas at 25°C and 1 atmosphere
C_x	final analyte concentration calculated in equation 4 ($\mu g/m^3$)