STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001;AIHA 101160; NVLAP LabCode 101202-

August 07, 2013

Natural Resource Technology, Inc.
23713 W. Paul Road
Suite D
Pewaukee, WI 53072
Telephone: (262) 523-9000
Fax: (262) 523-9001

RE: 69420, Peoples Gas - Willow Street / Hawthorne Ave STAT Project No: 13060776

Dear Sarah Meyer:

STAT Analysis received 6 samples for the referenced project on 6/21/2013 6:20:00 PM. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Eileen M. LaPierre

Eileen LaPierre
Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This analytical report shall become property of the Customer upon payment in full. Otherwise, STAT will be under no obligation to support, defend or discuss the analytical report.

STAT Analysis Corporation

Date: August 07, 2013

Client: Natural Resource Technology, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13060776-001A	062113091		6/21/2013 11:20:00 AM	6/21/2013
13060776-001B	062113091		6/21/2013 11:20:00 AM	6/21/2013
13060776-001C	062113091		6/21/2013 11:20:00 AM	6/21/2013
13060776-002A	062113092		6/21/2013 12:45:00 PM	6/21/2013
13060776-002B	062113092		6/21/2013 12:45:00 PM	6/21/2013
13060776-002C	062113092		6/21/2013 12:45:00 PM	6/21/2013
13060776-003A	062113093		6/21/2013 2:20:00 PM	6/21/2013
13060776-003B	062113093		6/21/2013 2:20:00 PM	6/21/2013
13060776-003C	062113093		6/21/2013 2:20:00 PM	6/21/2013
13060776-004A	062113094		6/21/2013 3:35:00 PM	6/21/2013
13060776-004B	062113094		6/21/2013 3:35:00 PM	6/21/2013
13060776-004C	062113094		6/21/2013 3:35:00 PM	6/21/2013
13060776-005A	062113096		6/21/2013 5:00:00 PM	6/21/2013
13060776-005B	062113096		6/21/2013 5:00:00 PM	6/21/2013
13060776-005C	062113096		6/21/2013 5:00:00 PM	6/21/2013
13060776-006A	062113095			6/21/2013

Analytical Results

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

STAT Analysis Corporation

Date: *August 07, 2013*

CLIENT: Natural Resource Technology, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne
Lab Order: 13060776

CASE NARRATIVE

Please refer to Analytical QC Summary Report for QC outliers.

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Date Reported: August 07, 2013
Date Printed: August 07, 2013

Client: Natural Resource Technology, Inc.
Lab Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne A
Lab ID: 13060776-001

Client Sample ID: 062113091
Collection Date 6/21/2013 11:20:00 AM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020 (SW3005A)**			Prep Date: **6/25/2013**		Analyst: **JG**
Antimony	ND	0.006		mg/L	2	6/26/2013
Arsenic	ND	0.004		mg/L	2	6/26/2013
Beryllium	ND	0.002		mg/L	2	6/26/2013
Copper	ND	0.01		mg/L	2	6/26/2013
Lead	ND	0.002		mg/L	2	6/26/2013
Semivolatile Organic Compounds by GC/MS	**SW8270C-SIM (SW3510C)**			Prep Date: **6/24/2013**		Analyst: **DM**
Acenaphthene	0.024	0.01		mg/L	10	6/27/2013
Acenaphthylene	ND	0.001		mg/L	1	6/26/2013
Anthracene	0.0015	0.001		mg/L	1	6/26/2013
Benz(a)anthracene	0.00012	0.0001		mg/L	1	6/26/2013
Benzo(a)pyrene	ND	0.0001		mg/L	1	6/26/2013
Benzo(b)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Benzo(g,h,i)perylene	ND	0.001		mg/L	1	6/26/2013
Benzo(k)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Chrysene	0.00013	0.0001		mg/L	1	6/26/2013
Dibenz(a,h)anthracene	ND	0.0001		mg/L	1	6/26/2013
Fluoranthene	0.0017	0.001		mg/L	1	6/26/2013
Fluorene	0.0055	0.001		mg/L	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	0.0001		mg/L	1	6/26/2013
Naphthalene	0.034	0.01		mg/L	10	6/27/2013
Phenanthrene	0.0071	0.001		mg/L	1	6/26/2013
Pyrene	0.002	0.001		mg/L	1	6/26/2013
2-Methylnaphthalene	0.005	0.001		mg/L	1	6/26/2013
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
1,2,4-Trimethylbenzene	0.0084	0.005		mg/L	1	6/27/2013
1,3,5-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
Benzene	0.0013	0.001		mg/L	1	6/27/2013
Ethylbenzene	0.0068	0.001		mg/L	1	6/27/2013
Toluene	ND	0.005		mg/L	1	6/27/2013
Xylenes, Total	ND	0.015		mg/L	1	6/27/2013

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: August 07, 2013
Date Printed: August 07, 2013

Client: Natural Resource Technology, Inc.
Lab Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne A
Lab ID: 13060776-002

Client Sample ID: 062113092
Collection Date 6/21/2013 12:45:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020 (SW3005A)**			Prep Date: **6/25/2013**		Analyst: **JG**
Antimony	ND	0.006		mg/L	2	6/26/2013
Arsenic	ND	0.004		mg/L	2	6/26/2013
Beryllium	ND	0.002		mg/L	2	6/26/2013
Copper	ND	0.01		mg/L	2	6/26/2013
Lead	0.004	0.002		mg/L	2	6/26/2013
Semivolatile Organic Compounds by GC/MS	**SW8270C-SIM (SW3510C)**			Prep Date: **6/24/2013**		Analyst: **DM**
Acenaphthene	ND	0.001		mg/L	1	6/26/2013
Acenaphthylene	ND	0.001		mg/L	1	6/26/2013
Anthracene	ND	0.001		mg/L	1	6/26/2013
Benz(a)anthracene	ND	0.0001		mg/L	1	6/26/2013
Benzo(a)pyrene	ND	0.0001		mg/L	1	6/26/2013
Benzo(b)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Benzo(g,h,i)perylene	ND	0.001		mg/L	1	6/26/2013
Benzo(k)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Chrysene	ND	0.0001		mg/L	1	6/26/2013
Dibenz(a,h)anthracene	ND	0.0001		mg/L	1	6/26/2013
Fluoranthene	ND	0.001		mg/L	1	6/26/2013
Fluorene	ND	0.001		mg/L	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	0.0001		mg/L	1	6/26/2013
Naphthalene	ND	0.001		mg/L	1	6/26/2013
Phenanthrene	ND	0.001		mg/L	1	6/26/2013
Pyrene	ND	0.001		mg/L	1	6/26/2013
2-Methylnaphthalene	ND	0.001		mg/L	1	6/26/2013
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
1,2,4-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
1,3,5-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
Benzene	ND	0.001		mg/L	1	6/27/2013
Ethylbenzene	ND	0.001		mg/L	1	6/27/2013
Toluene	ND	0.005		mg/L	1	6/27/2013
Xylenes, Total	ND	0.015		mg/L	1	6/27/2013

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
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E - Value above quantitation range
H - Holding time exceeded

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Date Reported: August 07, 2013
Date Printed: August 07, 2013

Client: Natural Resource Technology, Inc.
Lab Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne A
Lab ID: 13060776-003

Client Sample ID: 062113093
Collection Date 6/21/2013 2:20:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020 (SW3005A)**			Prep Date: **6/25/2013**		Analyst: **JG**
Antimony	ND	0.006		mg/L	2	6/26/2013
Arsenic	ND	0.004		mg/L	2	6/26/2013
Beryllium	ND	0.002		mg/L	2	6/26/2013
Copper	ND	0.01		mg/L	2	6/26/2013
Lead	0.0021	0.002		mg/L	2	6/26/2013
Semivolatile Organic Compounds by GC/MS	**SW8270C-SIM (SW3510C)**			Prep Date: **6/24/2013**		Analyst: **DM**
Acenaphthene	ND	0.001		mg/L	1	6/26/2013
Acenaphthylene	ND	0.001		mg/L	1	6/26/2013
Anthracene	ND	0.001		mg/L	1	6/26/2013
Benz(a)anthracene	ND	0.0001		mg/L	1	6/26/2013
Benzo(a)pyrene	ND	0.0001		mg/L	1	6/26/2013
Benzo(b)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Benzo(g,h,i)perylene	ND	0.001		mg/L	1	6/26/2013
Benzo(k)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Chrysene	ND	0.0001		mg/L	1	6/26/2013
Dibenz(a,h)anthracene	ND	0.0001		mg/L	1	6/26/2013
Fluoranthene	ND	0.001		mg/L	1	6/26/2013
Fluorene	ND	0.001		mg/L	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	0.0001		mg/L	1	6/26/2013
Naphthalene	ND	0.001		mg/L	1	6/26/2013
Phenanthrene	ND	0.001		mg/L	1	6/26/2013
Pyrene	ND	0.001		mg/L	1	6/26/2013
2-Methylnaphthalene	ND	0.001		mg/L	1	6/26/2013
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
1,2,4-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
1,3,5-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
Benzene	ND	0.001		mg/L	1	6/27/2013
Ethylbenzene	ND	0.001		mg/L	1	6/27/2013
Toluene	ND	0.005		mg/L	1	6/27/2013
Xylenes, Total	ND	0.015		mg/L	1	6/27/2013

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
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R - RPD outside accepted recovery limits
E - Value above quantitation range
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Date Reported: August 07, 2013
Date Printed: August 07, 2013

Client: Natural Resource Technology, Inc.
Lab Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne A
Lab ID: 13060776-004

Client Sample ID: 062113094
Collection Date 6/21/2013 3:35:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020 (SW3005A)**			Prep Date: **6/25/2013**		Analyst: **JG**
Antimony	ND	0.006		mg/L	2	6/26/2013
Arsenic	ND	0.004		mg/L	2	6/26/2013
Beryllium	ND	0.002		mg/L	2	6/26/2013
Copper	ND	0.01		mg/L	2	6/26/2013
Lead	ND	0.002		mg/L	2	6/26/2013
Semivolatile Organic Compounds by GC/MS	**SW8270C-SIM (SW3510C)**			Prep Date: **6/24/2013**		Analyst: **DM**
Acenaphthene	ND	0.001		mg/L	1	6/26/2013
Acenaphthylene	ND	0.001		mg/L	1	6/26/2013
Anthracene	ND	0.001		mg/L	1	6/26/2013
Benz(a)anthracene	ND	0.0001		mg/L	1	6/26/2013
Benzo(a)pyrene	ND	0.0001		mg/L	1	6/26/2013
Benzo(b)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Benzo(g,h,i)perylene	ND	0.001		mg/L	1	6/26/2013
Benzo(k)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Chrysene	ND	0.0001		mg/L	1	6/26/2013
Dibenz(a,h)anthracene	ND	0.0001		mg/L	1	6/26/2013
Fluoranthene	ND	0.001		mg/L	1	6/26/2013
Fluorene	ND	0.001		mg/L	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	0.0001		mg/L	1	6/26/2013
Naphthalene	ND	0.001		mg/L	1	6/26/2013
Phenanthrene	ND	0.001		mg/L	1	6/26/2013
Pyrene	ND	0.001		mg/L	1	6/26/2013
2-Methylnaphthalene	ND	0.001		mg/L	1	6/26/2013
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
1,2,4-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
1,3,5-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
Benzene	ND	0.001		mg/L	1	6/27/2013
Ethylbenzene	ND	0.001		mg/L	1	6/27/2013
Toluene	ND	0.005		mg/L	1	6/27/2013
Xylenes, Total	ND	0.015		mg/L	1	6/27/2013

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J - Analyte detected below quantitation limits
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HT - Sample received past holding time
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Date Reported: August 07, 2013
Date Printed: August 07, 2013

Client: Natural Resource Technology, Inc.
Lab Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne A
Lab ID: 13060776-005

Client Sample ID: 062113096
Collection Date 6/21/2013 5:00:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020 (SW3005A)**			Prep Date: **6/25/2013**		Analyst: **JG**
Antimony	ND	0.006		mg/L	2	6/26/2013
Arsenic	ND	0.004		mg/L	2	6/26/2013
Beryllium	ND	0.002		mg/L	2	6/26/2013
Copper	ND	0.01		mg/L	2	6/26/2013
Lead	0.0055	0.002		mg/L	2	6/26/2013
Semivolatile Organic Compounds by GC/MS	**SW8270C-SIM (SW3510C)**			Prep Date: **6/25/2013**		Analyst: **DM**
Acenaphthene	ND	0.001		mg/L	1	6/26/2013
Acenaphthylene	ND	0.001		mg/L	1	6/26/2013
Anthracene	ND	0.001		mg/L	1	6/26/2013
Benz(a)anthracene	ND	0.0001		mg/L	1	6/26/2013
Benzo(a)pyrene	ND	0.0001		mg/L	1	6/26/2013
Benzo(b)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Benzo(g,h,i)perylene	ND	0.001		mg/L	1	6/26/2013
Benzo(k)fluoranthene	ND	0.0001		mg/L	1	6/26/2013
Chrysene	ND	0.0001		mg/L	1	6/26/2013
Dibenz(a,h)anthracene	ND	0.0001		mg/L	1	6/26/2013
Fluoranthene	ND	0.001		mg/L	1	6/26/2013
Fluorene	ND	0.001		mg/L	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	0.0001		mg/L	1	6/26/2013
Naphthalene	ND	0.001		mg/L	1	6/26/2013
Phenanthrene	ND	0.001		mg/L	1	6/26/2013
Pyrene	ND	0.001		mg/L	1	6/26/2013
2-Methylnaphthalene	ND	0.001		mg/L	1	6/26/2013
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
1,2,4-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
1,3,5-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
Benzene	ND	0.001		mg/L	1	6/27/2013
Ethylbenzene	ND	0.001		mg/L	1	6/27/2013
Toluene	ND	0.005		mg/L	1	6/27/2013
Xylenes, Total	ND	0.015		mg/L	1	6/27/2013

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
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Date Reported: August 07, 2013
Date Printed: August 07, 2013

Client: Natural Resource Technology, Inc.
Lab Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne A
Lab ID: 13060776-006

Client Sample ID: 062113095
Collection Date
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
1,2,4-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
1,3,5-Trimethylbenzene	ND	0.005		mg/L	1	6/27/2013
Benzene	ND	0.001		mg/L	1	6/27/2013
Ethylbenzene	ND	0.001		mg/L	1	6/27/2013
Toluene	ND	0.005		mg/L	1	6/27/2013
Xylenes, Total	ND	0.015		mg/L	1	6/27/2013

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

Burns & McDonnell
SINCE 1898

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
1431 Opus Place
Downers Grove, Illinois 60515
Phone: (630) 724-3200 Fax: (630) 724-3201

Attention: SARAH MEYER
REPORT TO: SMEYER@NATURALRT.COM

Laboratory: STAT ANALYSIS
Address: 2242 WEST HARRISON SUITE 200
City/State/ZIP: CHICAGO IL 60612
Telephone: 312-733-0551

Document Control No.: 69420-094-2013
Lab. Reference No. or Episode No.: 13060776

Project Number: 69420 (INVOICE INTERYS PO 3400002395)
Site Name: PEOPLES GAS - WILLOW STREET/HAWTHORNE AVE OU

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type: Matrix: Liquid	Sample Type: Matrix: Solid	Sample Type: Matrix: Gas	Number of Containers	Parameter/Method Code: PVOCs*	PAHs*	Metals*				Remarks	
062113	091	—	—	—	—	—	6/21/13	1120	X			5	X	X	X					001
062113	092	—	—	—	—	—		1245	X			5	X	X	X					002
062113	093	—	—	—	—	—		1420	X			5	X	X	X					003
062113	094	—	—	—	—	—		1535	X			5	X	X	X					004
062113	096	—	—	—	—	—		1700	X			5	X	X	X					005
062113	095	—	—	—	—	—	Laboratory Prep		X			2	X							006

6/21/13

Sampler (signature):

Sampler (signature):

Custody Seal Number: 69420-136456 to 69420-136457

Special Instructions: *SEE SITE SPECIFIC ANALYTE LIST AND SPECIAL REPORTING LIMITS 10 DAY TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
1.	6/21/13 1745		6/21/13 1745
2.	6/21/13 1820		6/21/13 1820

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 3.3

Laboratory Comments:

061301 Form WCD-KC1-CHI

STAT Analysis Corporation

Sample Receipt Checklist

Client Name NRT

Date and Time Received: 6/21/2013 6:20:00 PM

Work Order Number 13060776

Received by: MAM

Checklist completed by: Signature 6/21/13 Date

Reviewed by: Initials 6/25/13 Date

Matrix: Carrier name STAT Analysis

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature 3.3 °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - Samples pH checked?	Yes ☑	No ☐	Checked by:
Water - Samples properly preserved?	Yes ☑	No ☐	pH Adjusted? NO

Any No response must be detailed in the comments section below.

Comments:

Client / Person contacted: Date contacted: Contacted by:

Response:

Volatile Organic Compounds

SW846 8260B

Quality Control Data

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

STAT **Analysis Corporation**

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Test No: SW8260B **Matrix:** W

QC SUMMARY REPORT SURROGATE RECOVERIES

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4				
VBLK062713-7	98.5	100	95.9	106				
VLCS062713-7	97.9	98.6	97.6	97.6				
VLCSD062713-7	102	97.9	99.2	108				
13060776-001A	98.8	98.7	96.7	106				
13060776-002A	98.6	99.2	106	106				
13060776-003A	98.7	101	101	112				
13060776-004A	98.1	99.4	98.6	107				
13060776-005A	96.3	99.0	102	110				
13060776-006A	100	102	102	103				

Acronym		Surrogate	QC Limits
BR4FBZ	=	4-Bromofluorobenzene	86-115
BZMED8	=	Toluene-d8	88-110
DBFM	=	Dibromofluoromethane	86-118
DCA12D4	=	1,2-Dichloroethane-d4	80-120

*** Surrogate recovery outside acceptance limit**

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STAT Analysis SDG No.: 13060776

Lab Code: _____

Lab File ID (Standard): 06271302.D Date Analyzed: 6/27/2013

Instrument ID: VOA-7 Time Analyzed: 9:39

GC Column: ID: (mm) Heated Purge: (Y/N) N

		IS1 (PFB) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CLB) AREA #	RT #	IS4 (DCB) AREA #	RT #
	12 HOUR STD	1695992	5.381	2704100	6.397	1383581	10.491	1324304	13.853
	UPPER LIMIT	3391984	5.881	5408200	6.897	2767162	10.991	2648608	14.353
	LOWER LIMIT	847996	4.881	1352050	5.897	691791	9.991	662152	13.353
	SAMPLE NO.								
01	VBLK062713-7	1604706	5.38	2499598	6.41	1302032	10.49	1184170	13.86
02	VLCS062713-7	1574136	5.39	2494456	6.41	1289802	10.49	1227139	13.86
03	VLCSD062713-7	1595562	5.39	2549103	6.41	1272635	10.49	1229559	13.86
04	062113091	1725740	5.38	2600430	6.41	1402903	10.49	1259014	13.86
05	062113092	1651076	5.38	2606088	6.40	1354204	10.49	1233705	13.86
06	062113093	1586306	5.39	2548671	6.40	1342781	10.49	1196353	13.86
07	062113094	1639814	5.39	2478016	6.40	1286703	10.49	1188710	13.86
08	062113096	1568973	5.39	2486861	6.41	1297046	10.49	1167510	13.85
09	062113095	1575285	5.39	2437523	6.40	1261898	10.49	1167626	13.86

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CLB) = Chlorobenzene-d5
IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Volatile Organic Compounds

SW846 8260B

Initial Calibration

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

ATTACHMENT 1: DATA REVIEW CHECKLIST - ICAL

GC/MS Volatiles SOP 4000, EPA 8260B

First Level Reviewer: Petra Svacha Review Date: 06/10/2013

Second Level Reviewer: Alfred Tadalan Review Date: 07/01/2013

Analysis date: 06/09/2013 Batch Start Time: 1:08 pm Instrument: VOA-7
ICAL Data File #s: 06091303.D to 06091307.D, 06091310.D, 06091311.D 06091313.D

Page 1 of 1 Initial Calibration (ICAL)

Item	Aspect	1st Yes	Level No	2nd Yes	Level No	Comments: record routine corrective actions here	CAR # /QER #
1	Tune meets criteria	✔		✔			
2	# of Stds 7 (minimum = 5)	✔		✔			
3	All Stds in tune period: 12hr All Stds. Sequenced w/in 36 hrs.	✔		✔			
4	Acceptance criteria met for: SPCCs: =0.1, =0.3 CCCs: = 30% RSD %RSD = 15% avg RF used r = 0.99 linear regression used RRT ± 0.06 RT units	✔ ✔ ✔ ✔ ✔ ✔		✔ ✔ ✔ ✔ ✔ ✔			
5	Calibration updated: RF RT Mid-level used for int stds Correct data files used	✔		✔			
6	RL = low std = 1 µg/L RL = _____ µg/L for (list)	✔		✔		*See following sheet	
7	High std = 300 µg/L High std = _____µg/L for	✔		✔		*See following sheet	
8	ICV acceptable for: CCCs: = 20%D SPCC's: =0.1, =0.3 RT: ± 30 seconds Int stds: -50% to +100% Other compounds	✔		✔			
9	Manual Integration acceptable: List files	✔		✔			
10	Tune & QC Solns ID recorded	✔		✔			
11	All other information recorded	✔		✔			

Additional Comments:

Standards:

1,4-Dioxane	67-9-200
VOC-BFB	67-9-211
VOC-EH	67-9-208
VOC-F-LIST	67-9-206
VOC-GAS	67-9-213
VOC-MOR	67-9-207
VOC-VCX	67-9-212
LCS1	67-9-214
LCS2	67-9-215
IS/SUR	67-9-199

COMPOUND	LOW STANDARD	HIGH STANDARD
Isobutyl Alcohol	20	6000
Isopropyl Alcohol	20	6000
n-Butanol	20	6000
1,4-Dioxane	10	3000
Xylenes-Total	3	900
Acetone	2	600
Carbon Disulfide	2	600
Vinyl Acetate	2	600
2-Butanone	2	600
2-Hexanone	2	600
4-methyl-2-pentanone	2	600
4-chloroethyl vinyl ether	2	600

ATTACHMENT 2: DATA REVIEW CHECKLIST – BATCH DATA

GC/MS Volatiles SOP 4000, EPA 8260B

First Level Reviewer: Petra Svacha Review Date: 06/11/2013

Second Level Reviewer: Alfred Tadalan Review Date: 07/01/2013

Analysis date: 06/10/2013 Batch Start Time: 7:41 am Instrument: VOA-7

Page 1 of 1 Continuing Calibration Verification (CCV) and Batch Data

Item	Aspect	1st Yes	Level No	2nd Yes	Level No	Comments: record routine corrective actions here	CAR # QER#
1	Tune meets criteria	✔		✔			
2	All Analyses in tune period 12hr	✔		✔			
3	CCV Acceptance criteria met: SPCCs: =0.1, =0.3 CCCs: = 20%D RT: ± 30 seconds Int stds: -50% to +100% Correct ICAL RFs used	✔ ✔ ✔ ✔ ✔ ✔		✔ ✔ ✔ ✔ ✔ ✔			
4	Method Blank < RL False pos/neg checked Surrogates acceptable	✔ ✔ ✔		✔ ✔ ✔			
5	LCS/LCSD recovery acceptable Surrogates acceptable	✔ ✔	✔	✔ ✔	✔	1,1,2,2-Tetrachloroethane: 65% (ILCS)	
6	MS/MSD recov/RPD acceptable Surrogates acceptable					N/A	
7	Test Samples: Correct IDs Surrogates acceptable False pos/neg checked RL, Units Results within curve Dilutions performed	✔ ✔ ✔ ✔ ✔ ✔		✔ ✔ ✔ ✔ ✔ ✔			
8	MB, LCS/LCSD, MS/MSD per batch of 20 samples	✔		✔			
9	Manual Integration acceptable: List files	✔		✔		See folder	
10	Int Stds Check (optional)	✔		✔			
11	Tune & QC Solns ID recorded	✔		✔			
12	All other information recorded	✔		✔			
13	LIMS transcription correct	✔		✔			
14	Analysis within holding time	✔		✔			
15	All samples preserved pH =2	✔		✔			
16	All samples stored properly	✔		✔			
17	Corrections properly recorded	✔		✔			

Additional Comments:

Standards:

1,4-Dioxane	67-9-200
VOC-BFB	67-9-211
VOC-EH	67-9-208
VOC-F-LIST	67-9-206
VOC-GAS	67-9-213
VOC-MOR	67-9-207
VOC-VCX	67-9-212
LCS1	67-9-214
LCS2	67-9-215
IS/SUR	67-9-199

Injection Log

Directory: C:\msdchem\1\DATA\VOA7\060913

Line	Vial	FileName	Multiplier	SampleName		Misc Info		Injected
1	100	06091301.D	1.	TUNE BFB060913-7		BFB_624		9 Jun 2013 13:08
2	2	06091303.D	1.	ICAL VSTD001		VOC_W+		9 Jun 2013 14:01
3	3	06091304.D	1.	ICAL VSTD005		VOC_W+		9 Jun 2013 14:36
4	4	06091305.D	1.	ICAL VSTD010		VOC_W+		9 Jun 2013 15:11
5	5	06091306.D	1.	ICAL VSTD020		VOC_W+		9 Jun 2013 15:46
6	6	06091307.D	1.	ICAL VSTD050		VOC_W+		9 Jun 2013 16:21
7	7	06101308.D	1.	TUNE BFB061013-7		BFB_624		10 Jun 2013 07:41
8	8	06101309.D	1.	ICAL VSTD100		VOC_W+		10 Jun 2013 08:00
9	9	06101310.D	1.	ICAL VSTD200		VOC_W+		10 Jun 2013 08:35
10	10	06101311.D	1.	ICAL VSTD300		VOC_W+		10 Jun 2013 09:10
11	12	06101313.D	1.	ICAL VSTD100r		VOC_W+		10 Jun 2013 10:20
12	14	06101315.D	1.	LCS VLCS061013-7		VOC_W+		10 Jun 2013 11:31
13	15	06101316.D	1.	LCSD VLCSD061013-7		VOC_W+		10 Jun 2013 12:14
14	17	06101318.D	1.	MBLK VBLK061013-7		VOC_W+		10 Jun 2013 13:24
15	18	06101319.D	1.	SAMP 13060079-027A		VOC_W	5mL	10 Jun 2013 13:59
16	19	06101320.D	1.	MBLK ZBLK060613-7	1:10	VOC_TCLP+	5mL	10 Jun 2013 14:34
17	20	06101321.D	1.	SAMP 13060095-001B	1:10	VOC_TCLP	5mL	10 Jun 2013 15:09
18		06101322.D	1.					
19	1	BLANK1.D	1.			VOC_W+		9 Jun 2013 13:26
20	11	BLANK2.D	1.			VOC_W+		10 Jun 2013 09:45
21	13	BLANK3.D	1.			VOC_W+		10 Jun 2013 10:55
22	16	BLANK4.D	1.			VOC_W+		10 Jun 2013 12:49

Response Factor Report VOA7

Method Path : C:\msdchem\1\DATA\VOA7\060913\
Method File : W7060913.M
Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
Last Update : Mon Jun 10 14:33:33 2013
Response Via : Initial Calibration

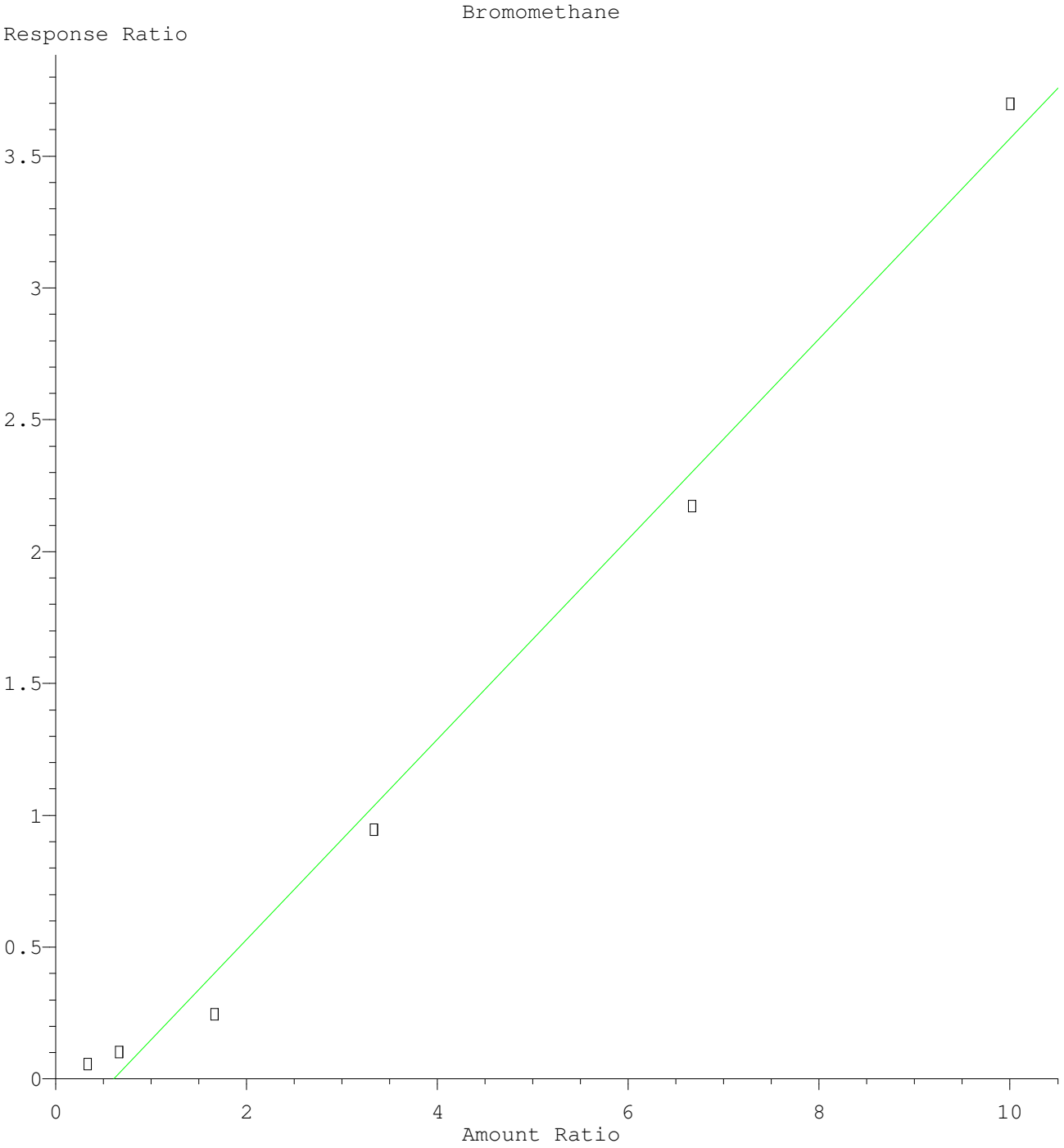
Calibration Files
1 =06091303.D 5 =06091304.D 10 =06091305.D 20 =06091306.D 50 =06091307.D 100 =061013
300 =06101311.D

		Compound	1	5	10	20	50	100	200	300	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------									
2)	M	Dichlorodifluo...	0.601	0.577	0.524	0.521	0.515	0.555	0.523	0.524	0.542	5.83
3)	TPM	Chloromethane	0.376	0.487	0.412	0.405	0.407	0.432	0.412	0.421	0.419	7.57
4)	TCM	Vinyl chloride	0.479	0.540	0.476	0.523	0.523	0.552	0.529	0.543	0.521	5.45
5)	M	1,3-Butadiene		0.340	0.358	0.357	0.358	0.367	0.358	0.359	0.357	2.30
6)	TM	Bromomethane			0.169	0.152	0.147	0.283	0.326	0.370	0.241	40.47*
7)	TM	Chloroethane	0.304	0.264	0.249	0.254	0.256	0.258	0.252	0.309	0.268	8.89
8)	M	Trichlorofluor...	0.522	0.642	0.565	0.563	0.579	0.598	0.594	0.608	0.584	6.12
9)	M	Isopropyl Alcohol	0.031	0.032	0.029	0.030	0.031	0.033	0.035	0.036	0.032	7.85
10)	M	Ethyl Ether		0.348	0.334	0.323	0.321	0.337	0.332	0.347	0.335	3.16
11)	M	Acrolein		0.072	0.062	0.067	0.066	0.074			0.068	6.74
12)	TM	Acetone		0.159	0.163	0.157	0.142	0.151	0.159	0.165	0.156	4.87
13)	M	Freon-TF		0.216	0.256	0.241	0.259	0.282	0.252	0.267	0.253	8.28
14)	TCM	1,1-Dichloroet...	0.345	0.323	0.333	0.310	0.319	0.328	0.323	0.345	0.328	3.74
15)	TM	Methylene Chlo...	0.493	0.436	0.406	0.396	0.401	0.407	0.398	0.413	0.419	7.76
16)	TM	Carbon disulfide	1.071	1.142	1.235	1.266	1.270	1.322	1.254	1.270	1.229	6.65
17)	M	Acrylonitrile		0.163	0.182	0.188	0.183	0.191	0.193	0.202	0.186	6.47
18)	TM	MTBE	1.177	1.183	1.181	1.181	1.198	1.246	1.222	1.286	1.209	3.25
19)	M	Hexane		0.329	0.365	0.322	0.351	0.378	0.292	0.301	0.334	9.65
20)	TM	trans-1,2-Dich...	0.429	0.427	0.380	0.366	0.385	0.402	0.381	0.404	0.397	5.76
21)	M	Vinyl acetate	0.896	0.783	0.838	0.887	0.811	1.004			0.870	9.05
22)	TPM	1,1-Dichloroet...		0.714	0.629	0.632	0.654	0.670	0.658	0.682	0.663	4.45
23)	TM	2-Butanone		0.061	0.068	0.061	0.060	0.065	0.062	0.063	0.063	4.63
24)	M	2,2-Dichloropr...	0.665	0.638	0.561	0.527	0.550	0.613			0.592	9.23
25)	TM	cis-1,2-Dichlo...	0.473	0.452	0.417	0.416	0.416	0.432	0.420	0.436	0.433	4.74
26)	M	Ethyl Acetate		0.091	0.075	0.072	0.063	0.065	0.065	0.063	0.071	14.27
27)	TCM	Chloroform	0.755	0.624	0.608	0.630	0.613	0.639	0.626	0.645	0.642	7.31
28)	M	Bromochloromet...		0.187	0.178	0.188	0.169	0.161	0.163	0.163	0.173	6.65
29)	S	Dibromofluorom...	0.433	0.430	0.436	0.432	0.429	0.441	0.442	0.453	0.437	1.87
30)	M	Isobutyl alcohol		0.017	0.019	0.018	0.019	0.022	0.022	0.024	0.020	11.77
31)	I	1,4-Difluorobenzene	----------ISTD----------									
32)	S	1,2-Dichloroet...	0.066	0.067	0.072	0.071	0.066	0.069	0.071	0.070	0.069	3.45
33)	TM	Carbon Tetrach...	0.292	0.268	0.236	0.235	0.244	0.274	0.260	0.278	0.261	8.00
34)	TM	1,2-Dichloroet...	0.346	0.334	0.301	0.325	0.326	0.331	0.339	0.340	0.330	4.18
35)	TM	1,1,1-Trichlor...	0.380	0.333	0.309	0.308	0.326	0.340	0.337	0.342	0.334	6.83
36)	M	1,1-Dichloropr...	0.100	0.119	0.102	0.108	0.109	0.116	0.114	0.117	0.110	6.34
37)	M	1-Butanol		0.006	0.007	0.007	0.007	0.008	0.009	0.009	0.008	14.18
38)	TM	Benzene	1.028	1.001	0.912	0.952	0.958	0.991	0.990	0.975	0.976	3.60
39)	TM	Trichloroethene	0.256	0.244	0.217	0.222	0.232	0.237	0.277	0.287	0.246	10.23
40)	TCM	1,2-Dichloropr...	0.253	0.227	0.229	0.226	0.237	0.238	0.245	0.246	0.238	4.13
41)	M	1,4-Dioxane		0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.004	4.50
42)	TM	Bromodichlorom...	0.329	0.306	0.265	0.289	0.291	0.305	0.315	0.317	0.302	6.62
43)	M	Dibromomethane	0.171	0.150	0.135	0.138	0.141	0.145	0.147	0.150	0.147	7.41
44)	M	2-Nitropropane		0.073	0.059	0.054	0.057	0.065	0.067	0.068	0.063	10.82
45)	M	2-Chloroethylv...		0.124	0.120	0.126	0.131	0.137	0.146	0.144	0.133	7.64
46)	T	4-Methyl-2-pen...	0.263	0.274	0.259	0.276	0.275	0.288	0.301	0.294	0.279	5.25
47)	TM	cis-1,3-Dichlo...	0.446	0.385	0.362	0.390	0.400	0.419	0.386	0.386	0.397	6.41
48)	S	Toluene-d8	1.214	1.208	1.233	1.215	1.212	1.233	1.270	1.226	1.226	1.65
49)	TCM	Toluene	0.645	0.634	0.566	0.596	0.612	0.632	0.631	0.632	0.619	4.25
50)	I	Chlorobenzene-d5	----------ISTD----------									
51)	TM	trans-1,3-Dich...	0.640	0.641	0.548	0.589	0.595	0.638	0.577	0.616	0.606	5.62
52)	TM	2-Hexanone	0.372	0.410	0.329	0.341	0.345	0.354	0.369	0.377	0.362	7.04
53)	TM	1,1,2-Trichlor...	0.323	0.353	0.333	0.315	0.306	0.322	0.328	0.351	0.329	5.01

54)	M	1,3-Dichloropr...	0.700	0.734	0.655	0.667	0.688	0.693	0.698	0.732	0.696	3.95
55)	TM	Tetrachloroethene	0.336	0.327	0.285	0.285	0.295	0.317	0.303	0.315	0.308	6.08
56)	TM	Dibromochlorom...	0.325	0.406	0.322	0.345	0.365	0.406	0.416	0.450	0.379	12.37
57)	M	1,2-Dibromoethane	0.365	0.408	0.362	0.386	0.400	0.412	0.409	0.436	0.397	6.32
58)	TPM	Chlorobenzene	1.149	1.165	1.010	1.052	1.053	1.081	1.087	1.140	1.092	4.98
59)	TCM	Ethylbenzene	2.201	2.098	1.844	1.947	1.935	1.997	1.987	2.078	2.011	5.54
60)	M	1,1,1,2-Tetrac...	0.379	0.364	0.310	0.337	0.354	0.376	0.391	0.419	0.366	9.19
61)	TM,	L1Xylene	0.794	0.770	0.675	0.700	0.724	0.749	0.746	0.786	0.743	5.60
62)	TM,	L1Xylene (2)	0.802	0.782	0.659	0.677	0.673	0.705	0.710	0.753	0.720	7.38
63)	TM,	L1Xylenes, Total	0.797	0.774	0.670	0.692	0.707	0.734	0.734	0.775	0.735	6.05
64)	TM	Styrene	1.286	1.372	1.189	1.305	1.294	1.347	1.367	1.440	1.325	5.65
65)	M	Isopropylbenzene	1.718	1.734	1.527	1.568	1.565	1.630	1.617	1.682	1.630	4.65
66)	TPM	Bromoform		0.250	0.240	0.235	0.255	0.296	0.321		0.266	12.94
67)	TPM	1,1,2,2-Tetrac...	0.612	0.551	0.554	0.522	0.523	0.571	0.475	0.481	0.536	8.53
68)	S	Bromofluoroben...	0.724	0.760	0.752	0.747	0.718	0.734	0.758	0.783	0.747	2.84
69)	I	1,4-Dichlorobenzen...	----------ISTD----------									
70)	M	1,2,3-Trichlor...	0.422	0.455	0.469	0.460	0.451	0.465	0.479	0.470	0.459	3.81
71)	M	n-Propylbenzene	1.989	1.955	1.821	1.819	1.860	1.904	1.830	1.779	1.870	3.92
72)	M	Bromobenzene	0.531	0.525	0.483	0.496	0.493	0.512	0.500	0.503	0.505	3.20
73)	M	1,3,5-Trimethy...	1.667	1.558	1.430	1.472	1.468	1.503	1.476	1.448	1.503	5.10
74)	M	2-Chlorotoluene	1.359	1.360	1.240	1.308	1.280	1.309	1.282	1.249	1.298	3.45
75)	M	4-Chlorotoluene	1.470	1.472	1.399	1.416	1.468	1.477	1.443	1.427	1.447	2.05
76)	M	tert-Butylbenzene	1.079	1.055	0.971	0.917	1.035	1.058	1.027	1.002	1.018	5.21
77)	M	1-Ethyl-2-meth...	1.868	1.673	1.777	1.772	1.847	1.875	1.834	1.794	1.805	3.68
78)	M	1,2,4-Trimethy...	1.583	1.478	1.449	1.459	1.442	1.494	1.452	1.450	1.476	3.16
79)	M	sec-Butylbenzene	1.679	1.558	1.434	1.422	1.475	1.499	1.430	1.398	1.487	6.23
80)	M	p-Isopropyltol...	1.285	1.232	1.210	1.212	1.210	1.234	1.199	1.192	1.222	2.40
81)	M	1,3-Dichlorobe...	0.892	0.878	0.785	0.806	0.806	0.820	0.812	0.792	0.824	4.77
82)	M	1,4-Dichlorobe...	0.910	0.916	0.904	0.897	0.902	0.931	0.920	0.911	0.912	1.19
83)	M	n-Butylbenzene	1.126	1.072	1.011	1.033	1.061	1.112	1.049	1.038	1.063	3.70
84)	M	1,2-Dichlorobe...	0.770	0.799	0.756	0.783	0.789	0.809	0.807	0.797	0.789	2.34
85)	M	1,2-Dibromo-3-...		0.087	0.091	0.085	0.089	0.098	0.099	0.100	0.093	6.82
86)	M	1,2,4-Trichlor...	0.404	0.339	0.370	0.353	0.356	0.390	0.391	0.398	0.375	6.37
87)	M	Hexachlorbutad...		0.207	0.171	0.166	0.170	0.184	0.168	0.165	0.176	8.53
88)	M	Naphthalene	0.737	0.896	0.925	0.898	0.881	1.001	1.015	1.056	0.926	10.79
89)	M	1,2,3-Trichlor...	0.320	0.299	0.294	0.310	0.303	0.351	0.341	0.346	0.320	7.06

(#) = Out of Range (*) = Linear Regression Used SPCC's & CCC's out = 0

W7060913.M Mon Jun 10 14:34:55 2013



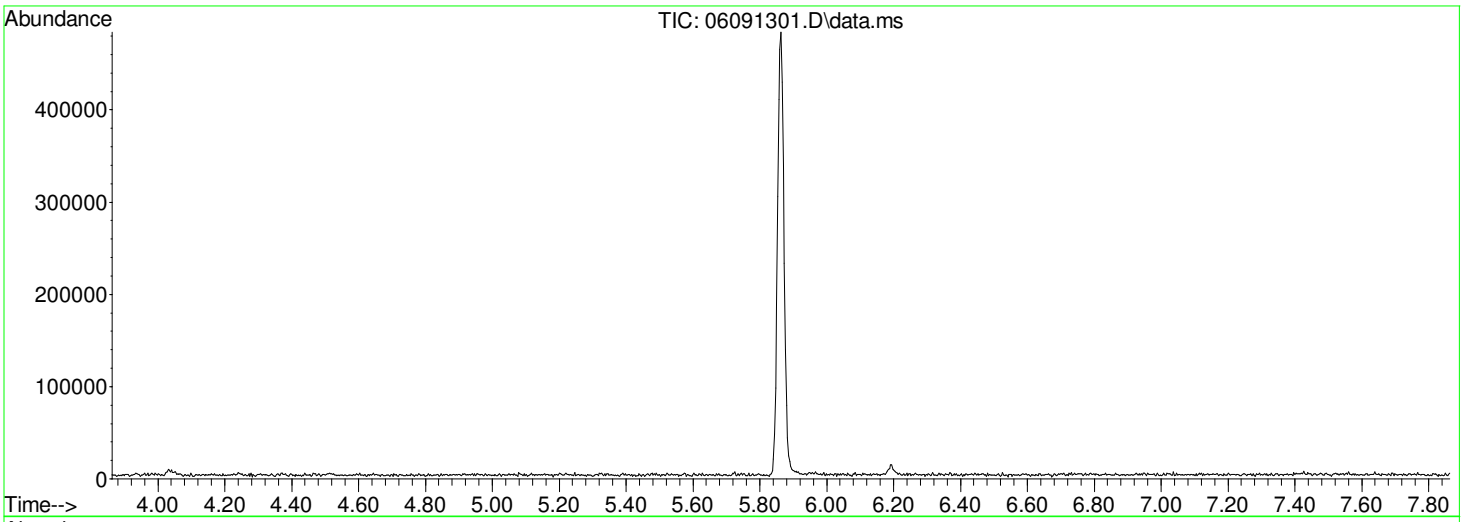
Resp Ratio = 3.80e-001 * Amt - 2.33e-001
Coef of Det (r^2) = 0.991 Curve Fit: Linear

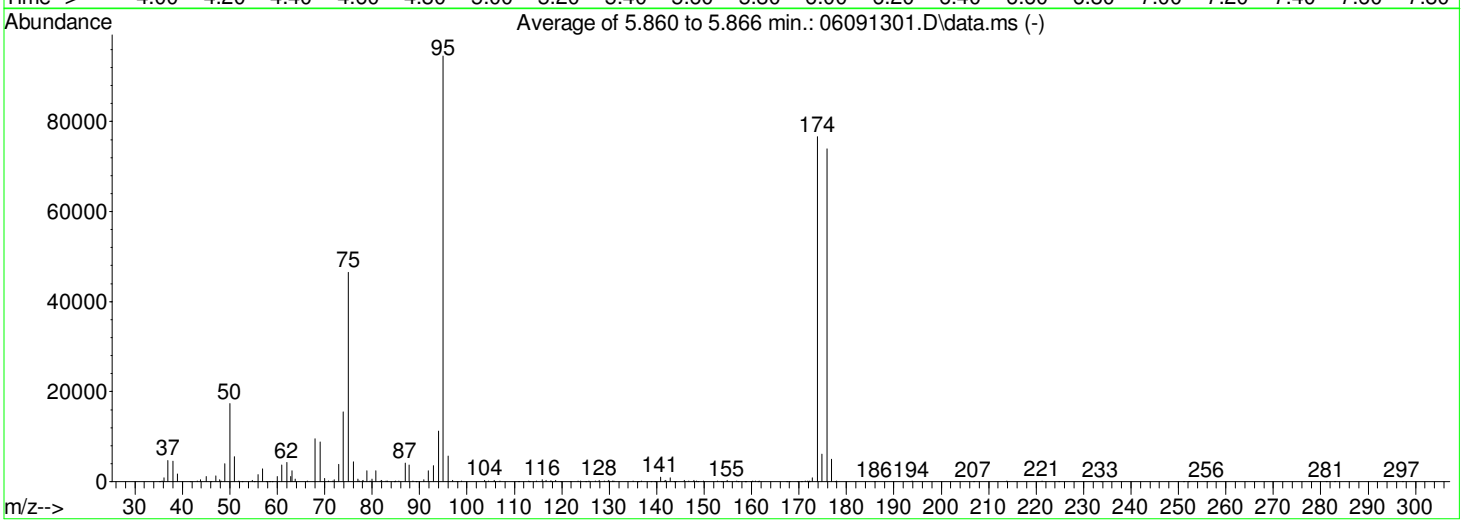
Method Name: C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Calibration Table Last Updated: Mon Jun 10 14:34:29 2013

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091301.D
Acq On : 9 Jun 2013 1:08 pm
Operator : PS
Sample : TUNE BFB060913-7
Misc : BFB_624
ALS Vial : 100 Sample Multiplier: 1
InstName : VOA7

Integration File: events.e

Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
Last Update : Mon Jun 10 14:33:33 2013





AutoFind: Scans 1019, 1020, 1021; Background Corrected with Scan 1009

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	17320	PASS
75	95	30	60	49.2	46509	PASS
95	95	100	100	100.0	94525	PASS
96	95	5	9	6.0	5628	PASS
173	174	0.00	2	1.1	820	PASS
174	95	50	100	81.0	76608	PASS
175	174	5	9	7.9	6067	PASS
176	174	95	101	96.5	73923	PASS
177	176	5	9	6.8	5034	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:33:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1905937	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	3160494	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1791676	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1621926	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.264	113	824702	29.71	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 99.03%			
32) 1,2-Dichloroethane-d4	5.729	102	208240	28.64	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 95.47%			
48) Toluene-d8	8.468	98	3838319	29.71	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.03%			
68) Bromofluorobenzene	12.195	174	1297767	29.07	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 96.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.214	85	38162m	1.12	ug/L	
3) Chloromethane	1.347	50	23913	0.87	ug/L #	41
4) Vinyl chloride	1.426	62	30428	0.92	ug/L #	44
7) Chloroethane	1.749	64	19295	1.15	ug/L #	44
8) Trichlorofluoromethane	1.954	101	33158	0.89	ug/L #	19
14) 1,1-Dichloroethene	2.392	96	21927	1.05	ug/L #	46
15) Methylene Chloride	2.863	84	31323	1.17	ug/L #	62
16) Carbon disulfide	2.585	76	136087	1.74	ug/L #	76
18) MTBE	3.190	73	74770	0.97	ug/L #	53
21) Vinyl acetate	3.812	43	113815	2.07	ug/L #	75
24) 2,2-Dichloropropane	4.526	77	42254	1.13	ug/L #	57
25) cis-1,2-Dichloroethene	4.549	96	30025	1.11	ug/L #	11
27) Chloroform	5.039	83	47936	1.17	ug/L #	79
28) Bromochloromethane	4.882	128	16518m	1.50	ug/L	
33) Carbon Tetrachloride	5.503	117	30765m	1.14	ug/L	
34) 1,2-Dichloroethane	5.851	62	36483	1.05	ug/L #	46
35) 1,1,1-Trichloroethane	5.262	97	40038	1.15	ug/L #	24
36) 1,1-Dichloropropene	5.506	110	10537m	0.89	ug/L	
38) Benzene	5.800	78	108249	1.05	ug/L #	1
39) Trichloroethene	6.731	95	26927m	0.79	ug/L	
40) 1,2-Dichloropropane	7.040	63	26653m	1.08	ug/L	
42) Bromodichloromethane	7.472	83	34637	1.09	ug/L #	25
43) Dibromomethane	7.207	93	17975m	1.19	ug/L	
46) 4-Methyl-2-pentanone	8.369	43	55393	1.86	ug/L #	88
47) cis-1,3-Dichloropropene	8.108	75	46947	1.12	ug/L #	69
49) Toluene	8.563	92	67974	1.04	ug/L	90
51) trans-1,3-Dichloropropene	8.910	75	38211	1.06	ug/L #	73
52) 2-Hexanone	9.570	43	44436	2.07	ug/L #	26
53) 1,1,2-Trichloroethane	9.152	83	19318m	0.97	ug/L	
54) 1,3-Dichloropropane	9.375	76	41800	1.01	ug/L	86
55) Tetrachloroethene	9.313	164	20047m	1.10	ug/L	
56) Dibromochloromethane	9.686	129	19400m	0.84	ug/L	
57) 1,2-Dibromoethane	9.811	107	21807m	0.92	ug/L	
58) Chlorobenzene	10.536	112	68613	1.05	ug/L #	80
59) Ethylbenzene	10.722	91	131460	1.10	ug/L #	44
60) 1,1,1,2-Tetrachloroethane	10.663	131	22661m	1.04	ug/L	
61) Xylene	10.905	106	94858	2.14	ug/L	96
62) Xylene (2)	11.461	106	47921m	1.15	ug/L	
63) Xylenes, Total	10.905	106	142780m	3.28	ug/L #	
64) Styrene	11.489	104	76825	1.00	ug/L	83
65) Isopropylbenzene	12.008	105	102603	1.05	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:33:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration

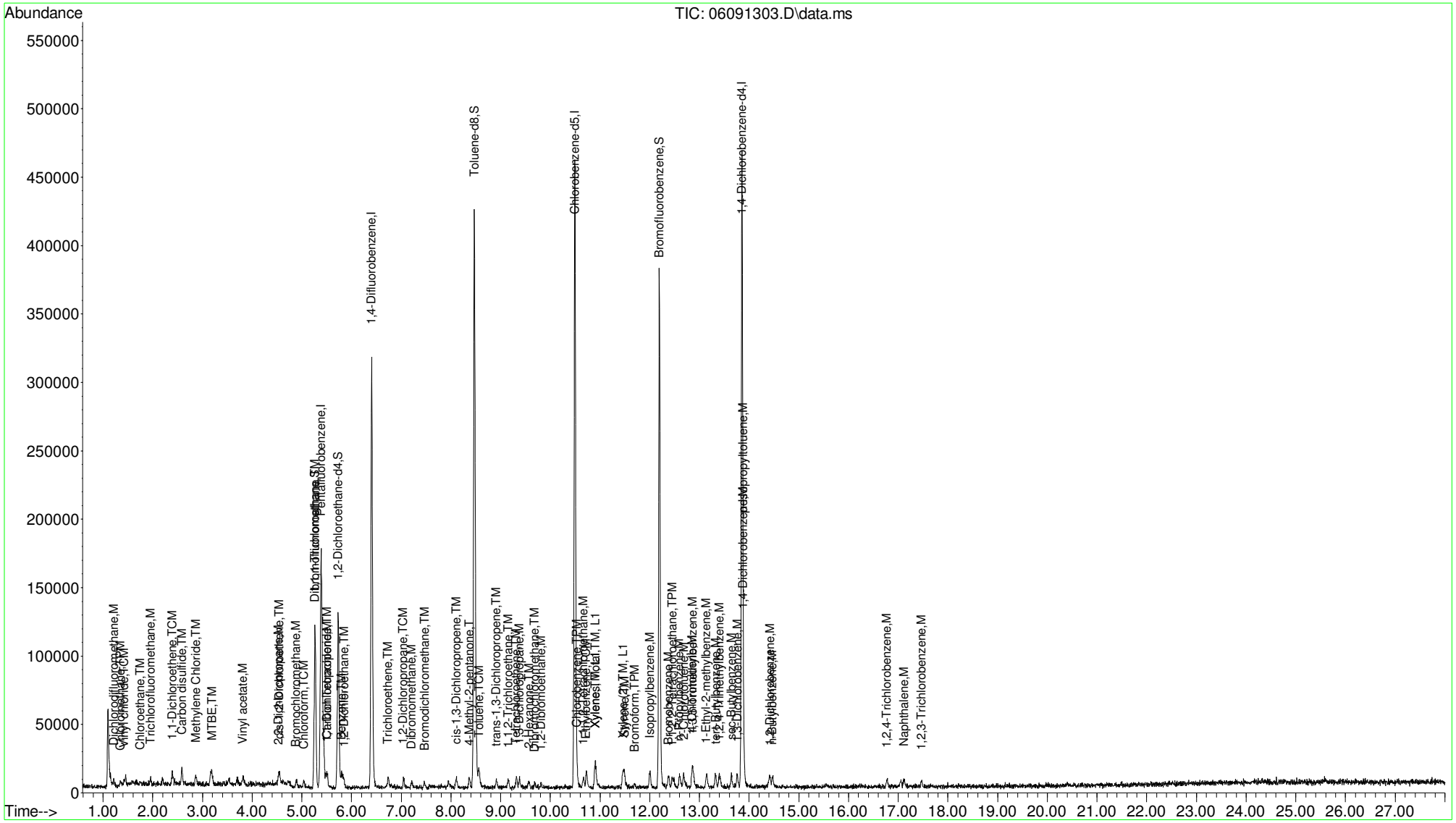
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
66)	Bromoform	11.699	173	15131	0.91 ug/L #	36
67)	1,1,2,2-Tetrachloroethane	12.453	83	36528	1.13 ug/L #	87
71)	n-Propylbenzene	12.597	91	107521	1.06 ug/L	99
72)	Bromobenzene	12.378	156	28696	1.05 ug/L #	88
73)	1,3,5-Trimethylbenzene	12.865	105	90138	1.18 ug/L	98
74)	2-Chlorotoluene	12.684	91	73470	1.04 ug/L	89
75)	4-Chlorotoluene	12.856	91	79463m	1.03 ug/L	
76)	tert-Butylbenzene	13.330	119	58349	1.07 ug/L #	25
77)	1-Ethyl-2-methylbenzene	13.136	105	100992m	1.05 ug/L	
78)	1,2,4-Trimethylbenzene	13.399	105	85573	1.09 ug/L #	85
79)	sec-Butylbenzene	13.644	105	90750	1.13 ug/L #	56
80)	p-Isopropyltoluene	13.876	119	69465	1.05 ug/L #	50
81)	1,3-Dichlorobenzene	13.763	146	48209m	1.13 ug/L	
82)	1,4-Dichlorobenzene	13.884	146	49211	0.99 ug/L #	24
83)	n-Butylbenzene	14.468	91	60882	1.05 ug/L #	82
84)	1,2-Dichlorobenzene	14.422	146	41618	0.98 ug/L #	48
86)	1,2,4-Trichlorobenzene	16.773	180	21843m	1.08 ug/L	
88)	Naphthalene	17.116	128	39821	0.77 ug/L #	76
89)	1,2,3-Trichlorobenzene	17.469	180	17274	1.00 ug/L #	21

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:33:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:15:26 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 11:55:54 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1905886	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	3161234	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1787079	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1621822	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.264	113	824702	0.00	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 0.00%#			
32) 1,2-Dichloroethane-d4	5.729	102	208130	0.00	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 0.00%#			
48) Toluene-d8	8.468	98	3837298	0.00	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 0.00%#			
68) Bromofluorobenzene	12.195	174	1301095	0.00	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 0.00%#			

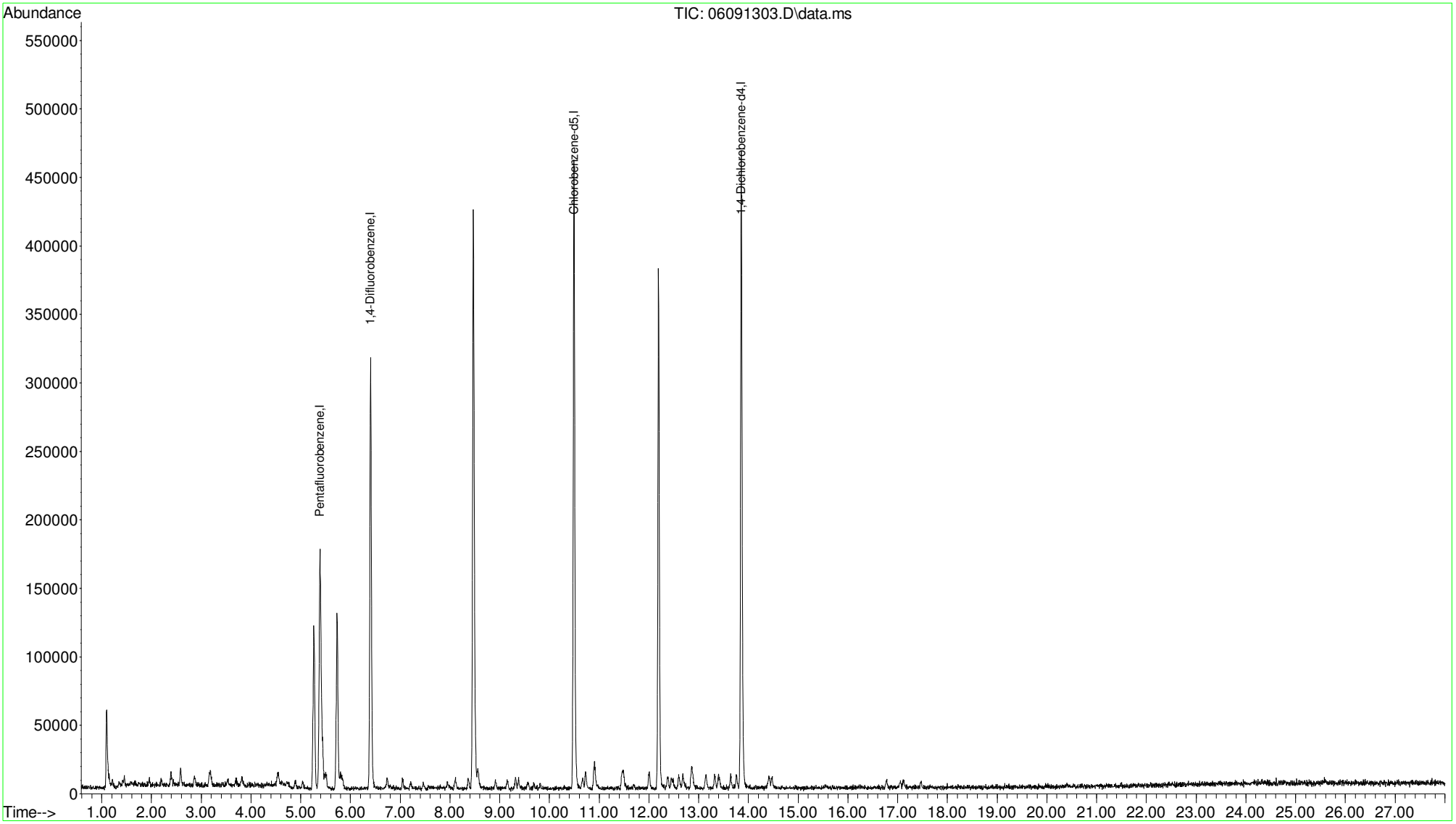
Target Compounds Qvalue

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:15:26 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 11:55:54 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1905937	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	3160494	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1791676	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1621926	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.264	113	824702	29.71	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 99.03%			
32) 1,2-Dichloroethane-d4	5.729	102	208240	28.64	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 95.47%			
48) Toluene-d8	8.468	98	3838319	29.71	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.03%			
68) Bromofluorobenzene	12.195	174	1297767	29.07	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 96.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	15689	0.46	ug/L #	27
3) Chloromethane	1.347	50	23913	0.87	ug/L #	41
4) Vinyl chloride	1.426	62	30428	0.92	ug/L #	44
7) Chloroethane	1.749	64	19295	1.15	ug/L #	44
8) Trichlorofluoromethane	1.954	101	33158	0.89	ug/L #	19
9) Isopropyl Alcohol	2.596	45	31461	15.53	ug/L #	61
14) 1,1-Dichloroethene	2.392	96	21927	1.05	ug/L #	46
15) Methylene Chloride	2.863	84	31323	1.17	ug/L #	62
16) Carbon disulfide	2.585	76	136087	1.74	ug/L #	76
18) MTBE	3.190	73	74770	0.97	ug/L #	53
21) Vinyl acetate	3.812	43	113815	2.07	ug/L #	75
24) 2,2-Dichloropropane	4.526	77	42254	1.13	ug/L #	57
25) cis-1,2-Dichloroethene	4.549	96	30025	1.11	ug/L #	11
27) Chloroform	5.039	83	47936	1.17	ug/L #	79
33) Carbon Tetrachloride	5.390	117	167786	6.21	ug/L #	12
34) 1,2-Dichloroethane	5.851	62	36483	1.05	ug/L #	46
35) 1,1,1-Trichloroethane	5.262	97	40038	1.15	ug/L #	24
36) 1,1-Dichloropropene	5.269	110	17446	1.48	ug/L #	1
37) 1-Butanol	6.397	56	48913	60.63	ug/L #	17
38) Benzene	5.800	78	108249	1.05	ug/L #	1
39) Trichloroethene	6.407	95	93591	2.73	ug/L #	7
40) 1,2-Dichloropropane	7.052	63	24104	0.98	ug/L #	88
42) Bromodichloromethane	7.472	83	34637	1.09	ug/L #	25
46) 4-Methyl-2-pentanone	8.369	43	55393	1.86	ug/L #	88
47) cis-1,3-Dichloropropene	8.108	75	46947	1.12	ug/L #	69
49) Toluene	8.563	92	67974	1.04	ug/L	90
51) trans-1,3-Dichloropropene	8.910	75	38211	1.06	ug/L #	73
52) 2-Hexanone	9.570	43	44436	2.07	ug/L #	26
54) 1,3-Dichloropropane	9.375	76	41800	1.01	ug/L	86
58) Chlorobenzene	10.536	112	68613	1.05	ug/L #	80
59) Ethylbenzene	10.722	91	131460	1.10	ug/L #	44
61) Xylene	10.905	106	94858	2.14	ug/L	96
62) Xylene (2)	11.461	106	38871	0.93	ug/L	85
63) Xylenes, Total	10.905	106	133730m	3.07	ug/L #	
64) Styrene	11.489	104	76825	1.00	ug/L	83
65) Isopropylbenzene	12.008	105	102603	1.05	ug/L	94
66) Bromoform	11.699	173	15131	0.91	ug/L #	36
67) 1,1,2,2-Tetrachloroethane	12.453	83	36528	1.13	ug/L #	87
70) 1,2,3-Trichloropropane	12.194	75	816564	6.58	ug/L #	42
71) n-Propylbenzene	12.597	91	107521	1.06	ug/L	99
72) Bromobenzene	12.378	156	28696	1.05	ug/L #	88

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration

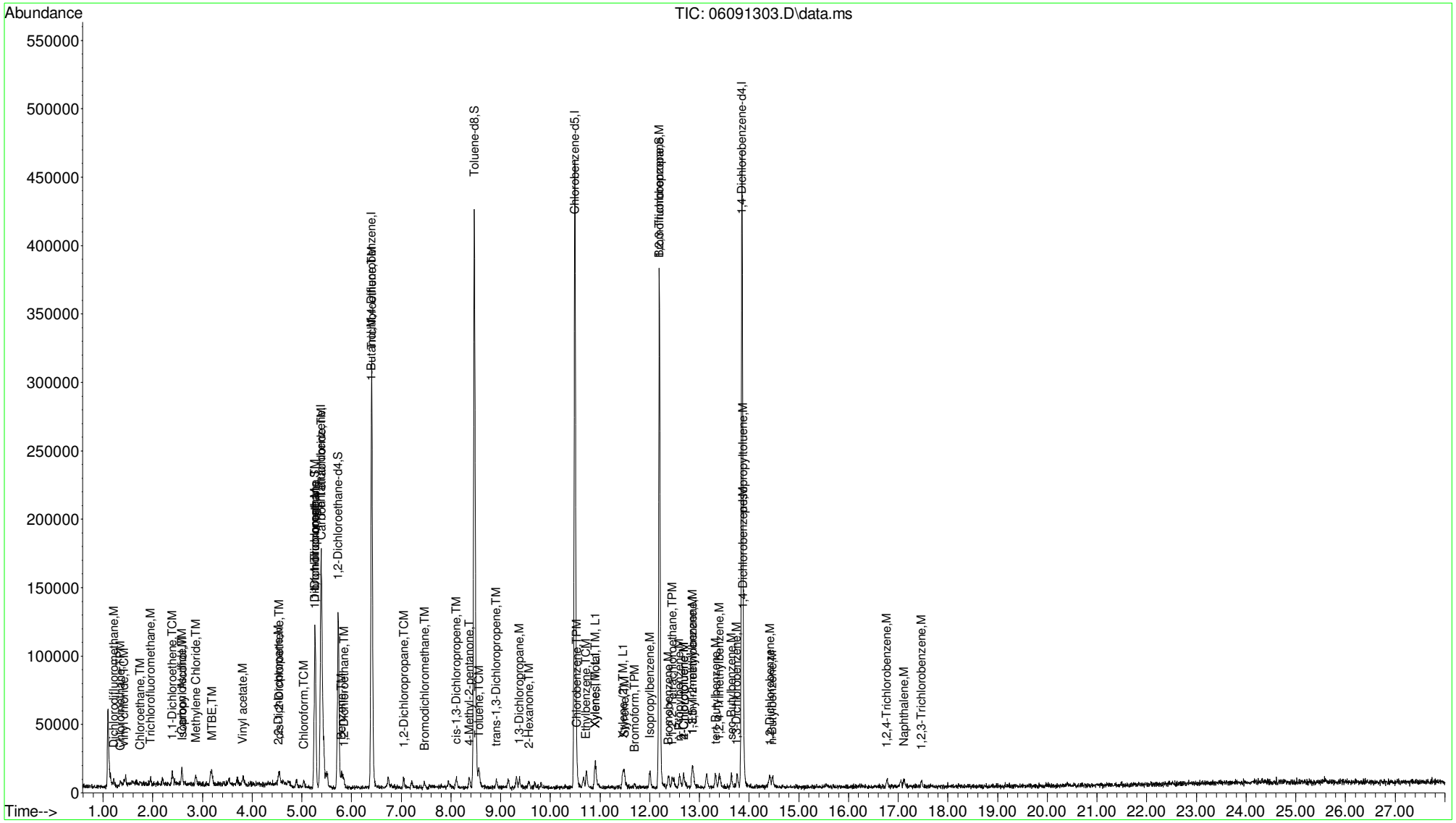
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
73) 1,3,5-Trimethylbenzene	12.865	105	90138	1.18 ug/L	98
74) 2-Chlorotoluene	12.684	91	73470	1.04 ug/L	89
75) 4-Chlorotoluene	12.684	91	73106	0.94 ug/L	88
76) tert-Butylbenzene	13.330	119	58349	1.07 ug/L #	25
77) 1-Ethyl-2-methylbenzene	12.865	105	88756	0.92 ug/L	71
78) 1,2,4-Trimethylbenzene	13.399	105	85573	1.09 ug/L #	85
79) sec-Butylbenzene	13.644	105	90750	1.13 ug/L #	56
80) p-Isopropyltoluene	13.876	119	69465	1.05 ug/L #	50
81) 1,3-Dichlorobenzene	13.749	146	16403	0.39 ug/L #	25
82) 1,4-Dichlorobenzene	13.884	146	49211	0.99 ug/L #	24
83) n-Butylbenzene	14.468	91	60882	1.05 ug/L #	82
84) 1,2-Dichlorobenzene	14.422	146	41618	0.98 ug/L #	48
86) 1,2,4-Trichlorobenzene	16.774	180	20237	1.00 ug/L #	12
88) Naphthalene	17.116	128	39821	0.77 ug/L #	76
89) 1,2,3-Trichlorobenzene	17.469	180	17274	1.00 ug/L #	21

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

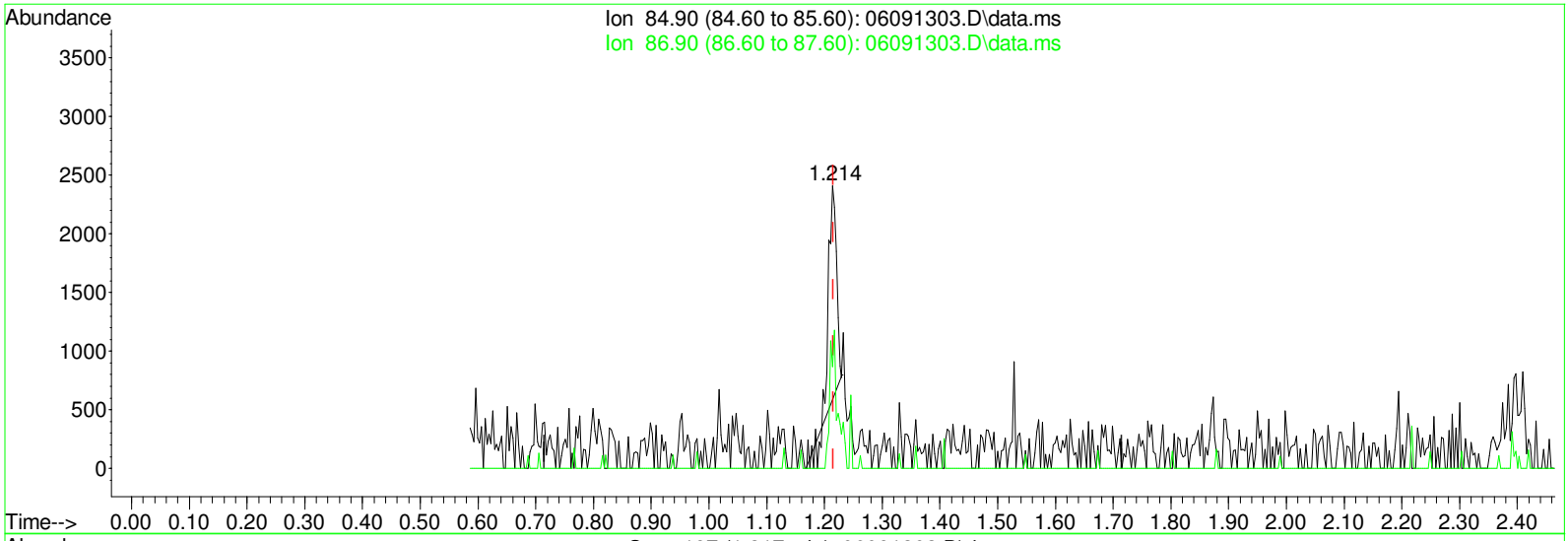
Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration

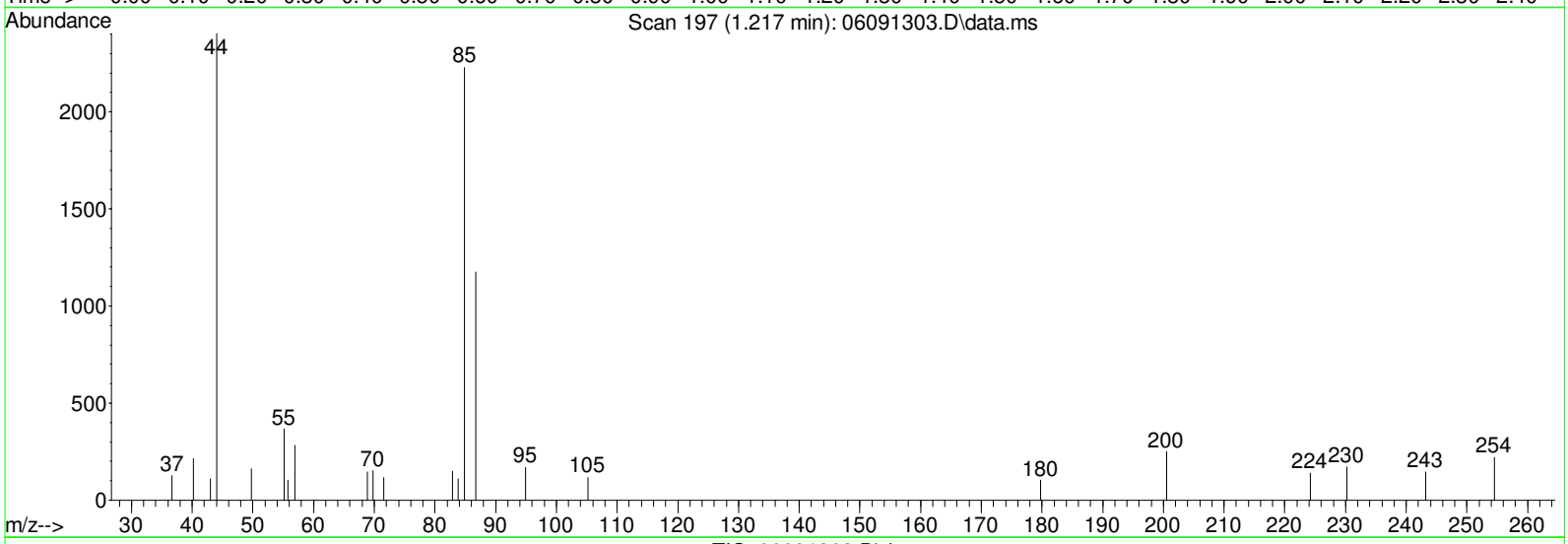


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(2) Dichlorodifluoromethane (M)

1.216min (+0.001) 0.46 ug/L

response 15689

Ion	Exp%	Act%
84.90	100	100
86.90	31.20	71.37#
0.00	0.00	0.00
0.00	0.00	0.00

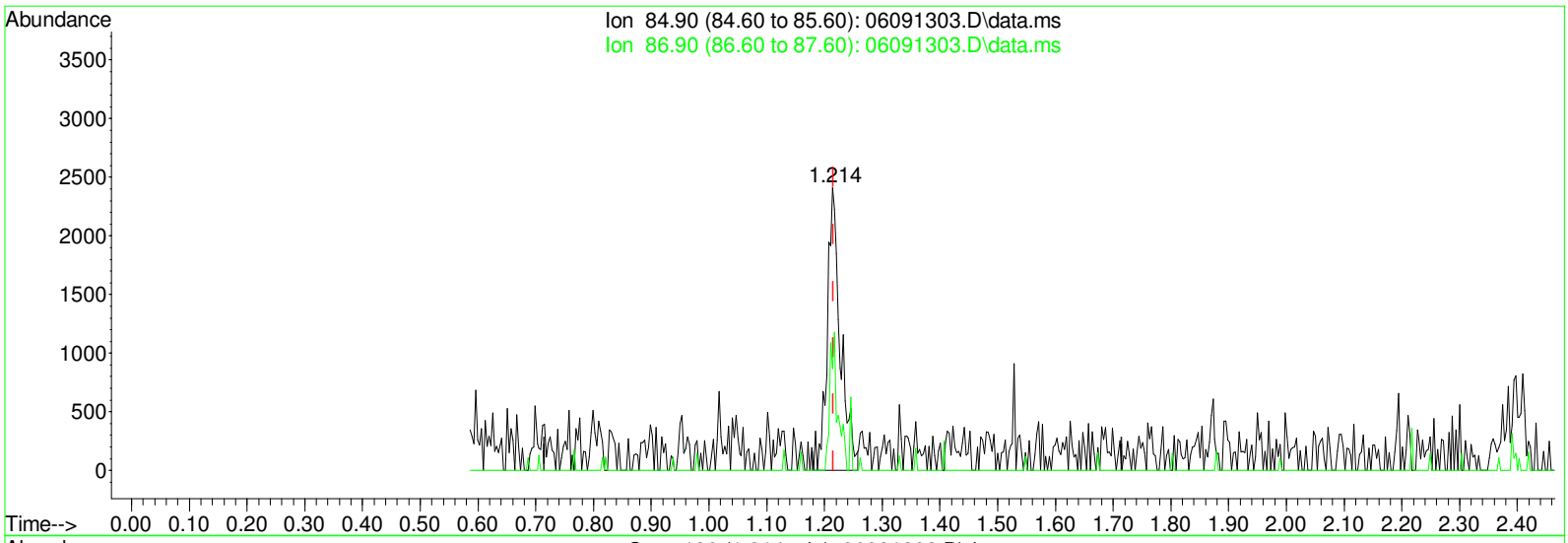
BEFORE

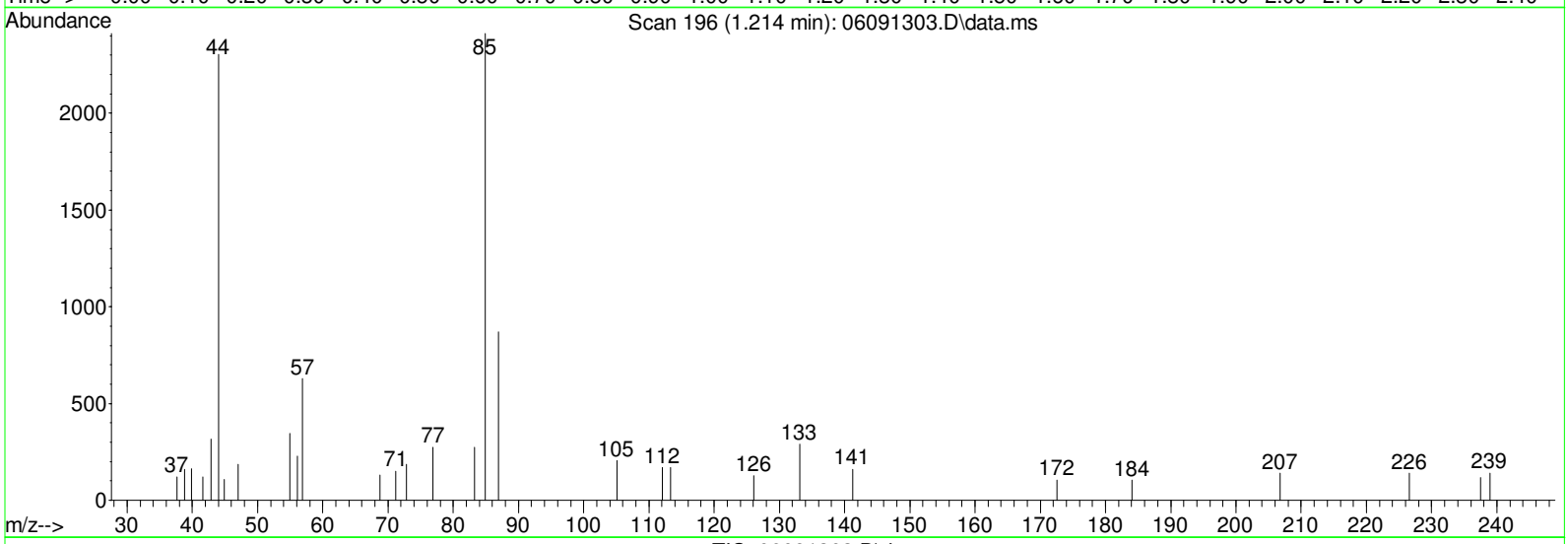
By Alfred at 3:25:08 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(2) Dichlorodifluoromethane (M)

1.214min (-0.001) 1.12 ug/L m

response 38162

Ion	Exp%	Act%
84.90	100	100
86.90	31.20	29.34
0.00	0.00	0.00
0.00	0.00	0.00

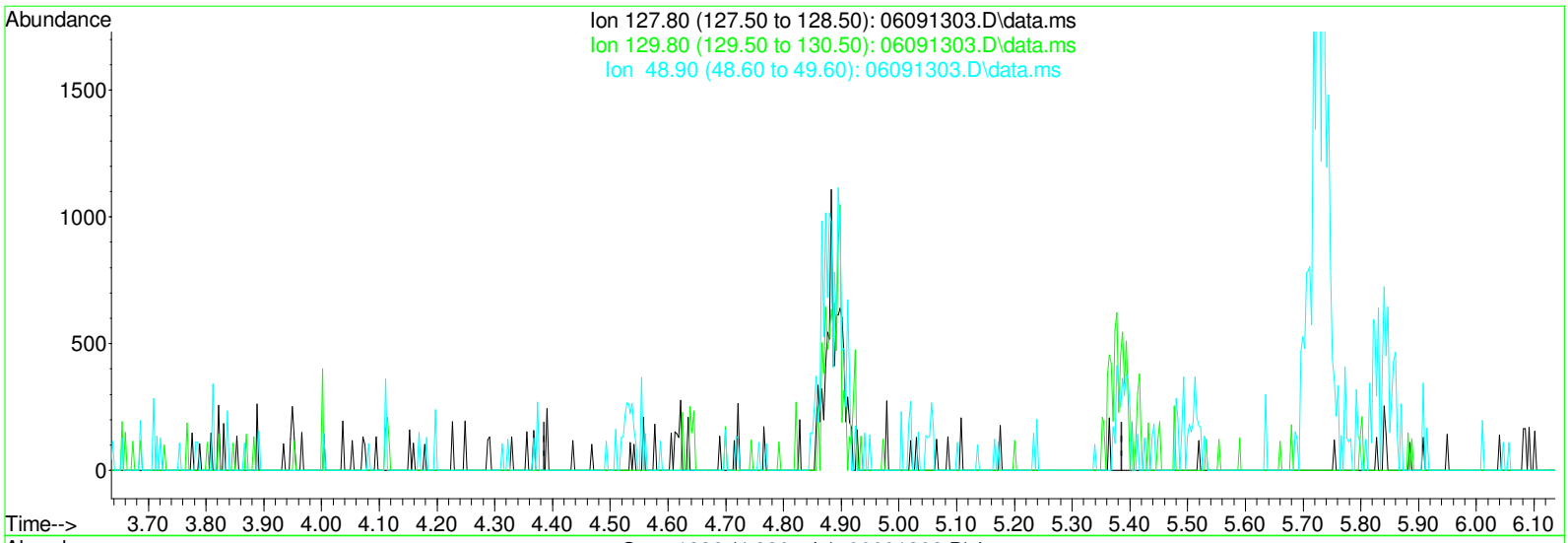
AFTER M3

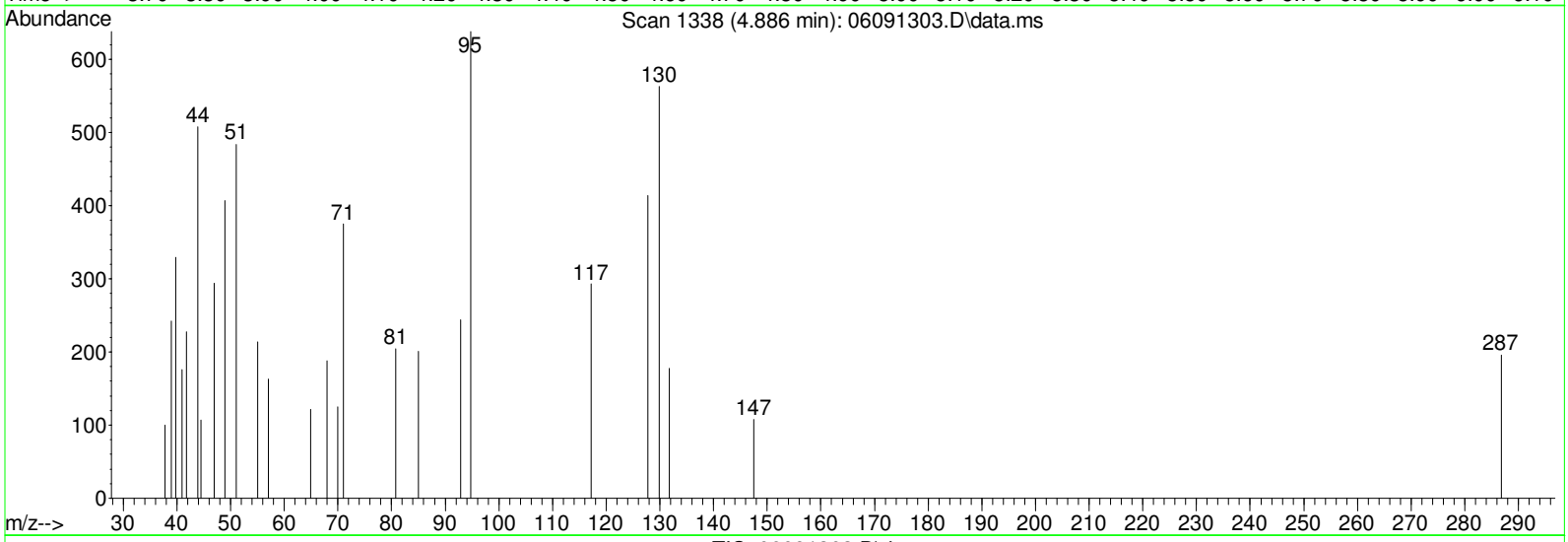
By Alfred at 3:25:15 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(28) Bromochloromethane (M)

4.886min (-4.886) 0.00 ug/L

response 0

Ion	Exp%	Act%
127.80	100	0.00
129.80	129.70	0.00#
48.90	199.30	0.00#
0.00	0.00	0.00

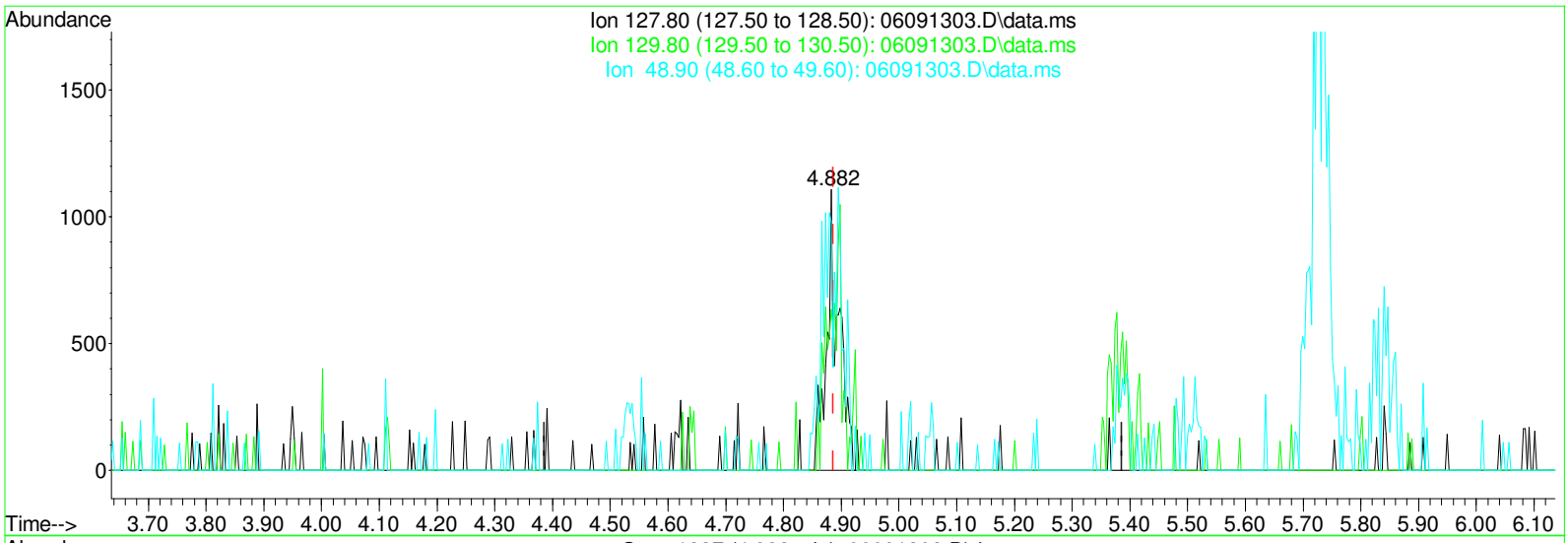
BEFORE

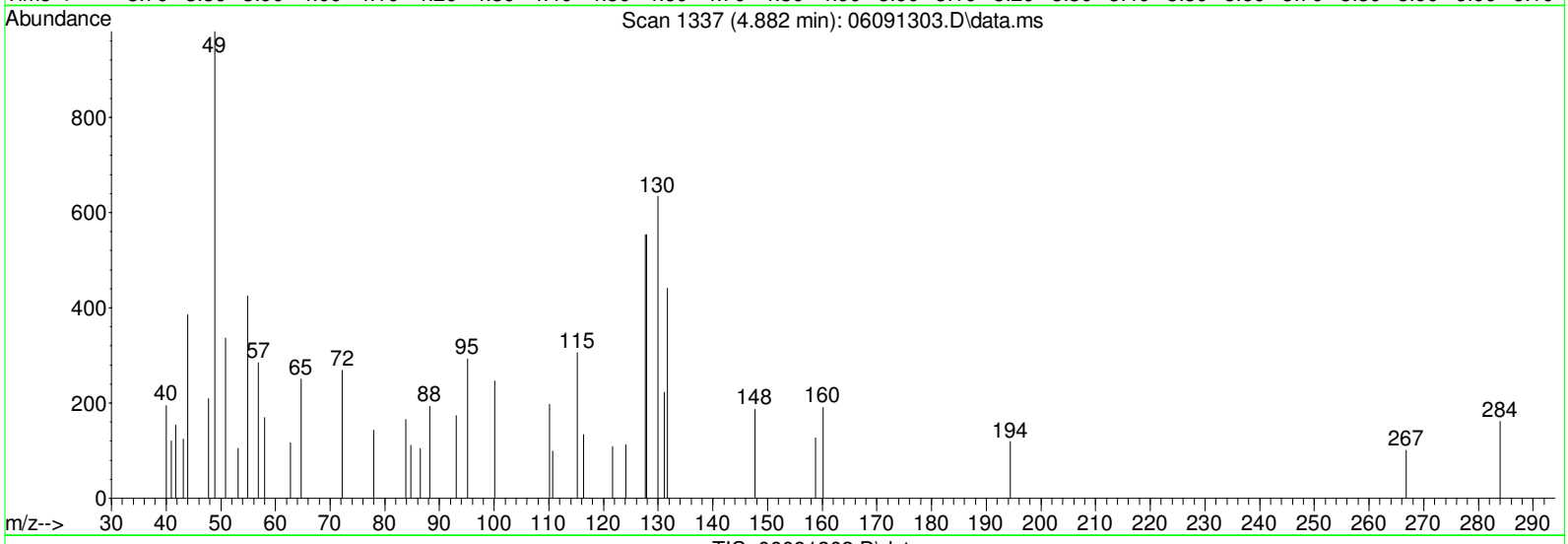
By Alfred at 3:25:20 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

AFTER M1
By Alfred at 3:25:26 PM, 7/3/2013

(28) Bromochloromethane (M)

4.882min (-0.004) 1.50 ug/L m

response 16518

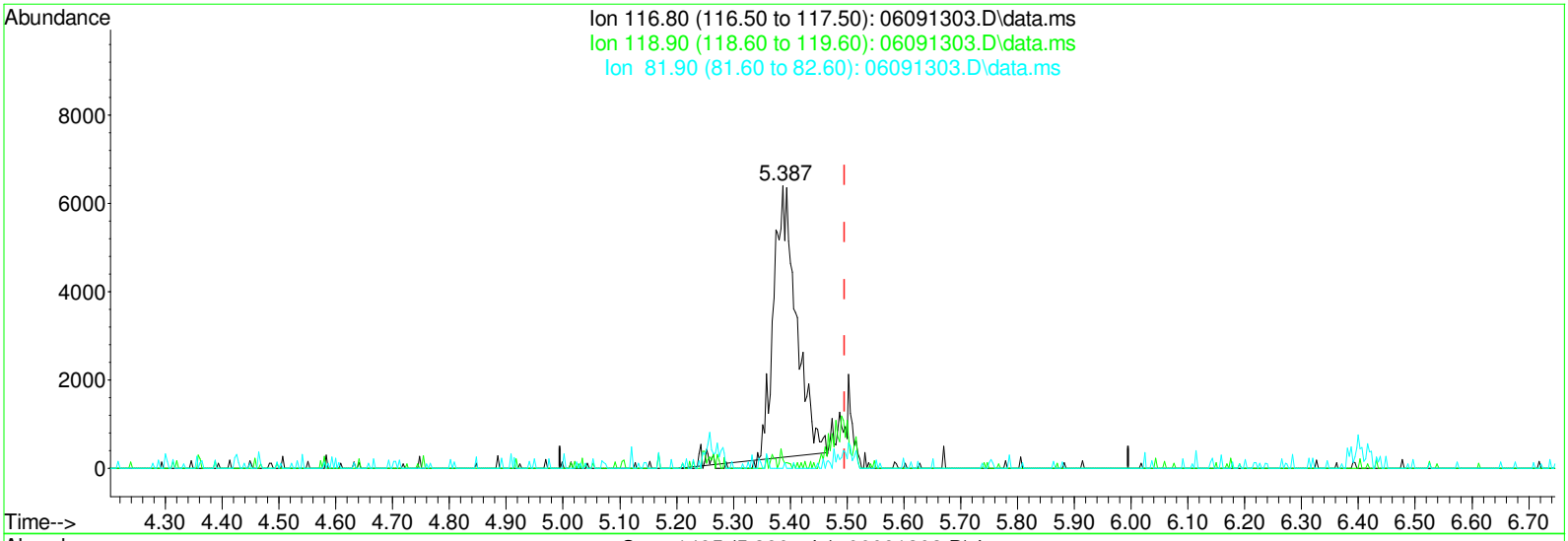
Ion	Exp%	Act%
127.80	100	100
129.80	129.70	104.71
48.90	199.30	149.85#
0.00	0.00	0.00

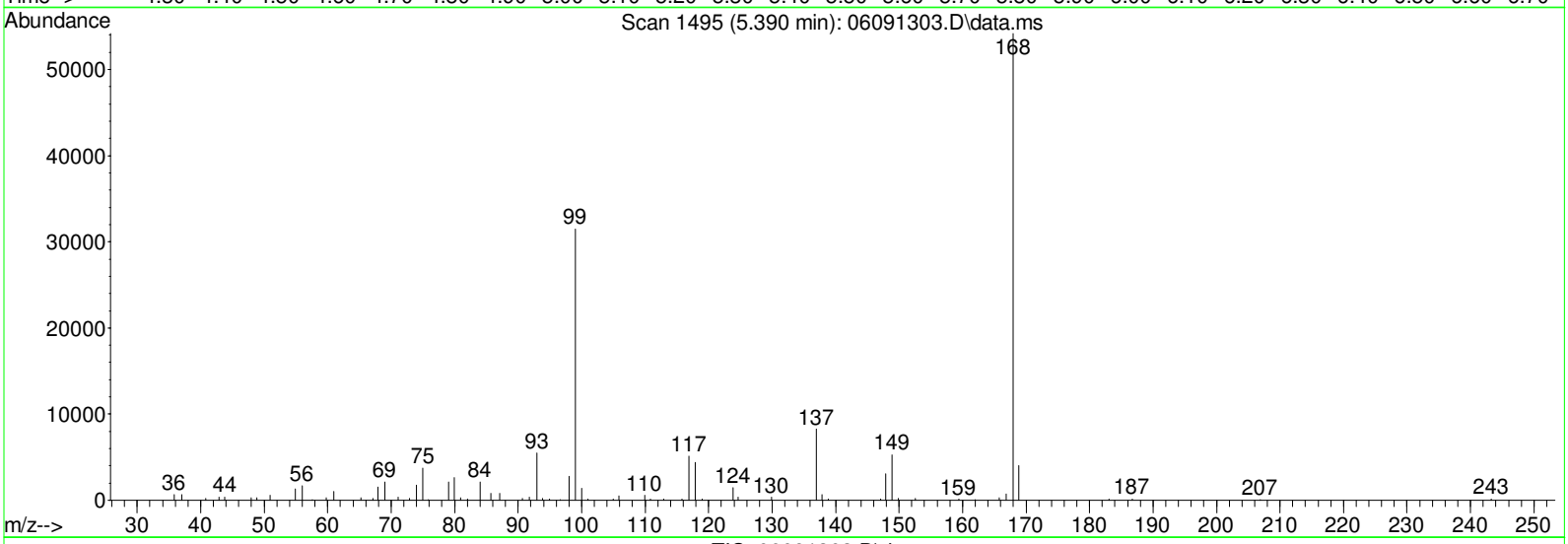
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(33) Carbon Tetrachloride (TM)

5.390min (-0.106) 6.21 ug/L

response 167786

Ion	Exp%	Act%
116.80	100	100
118.90	96.60	0.00#
81.90	27.90	0.00#
0.00	0.00	0.00

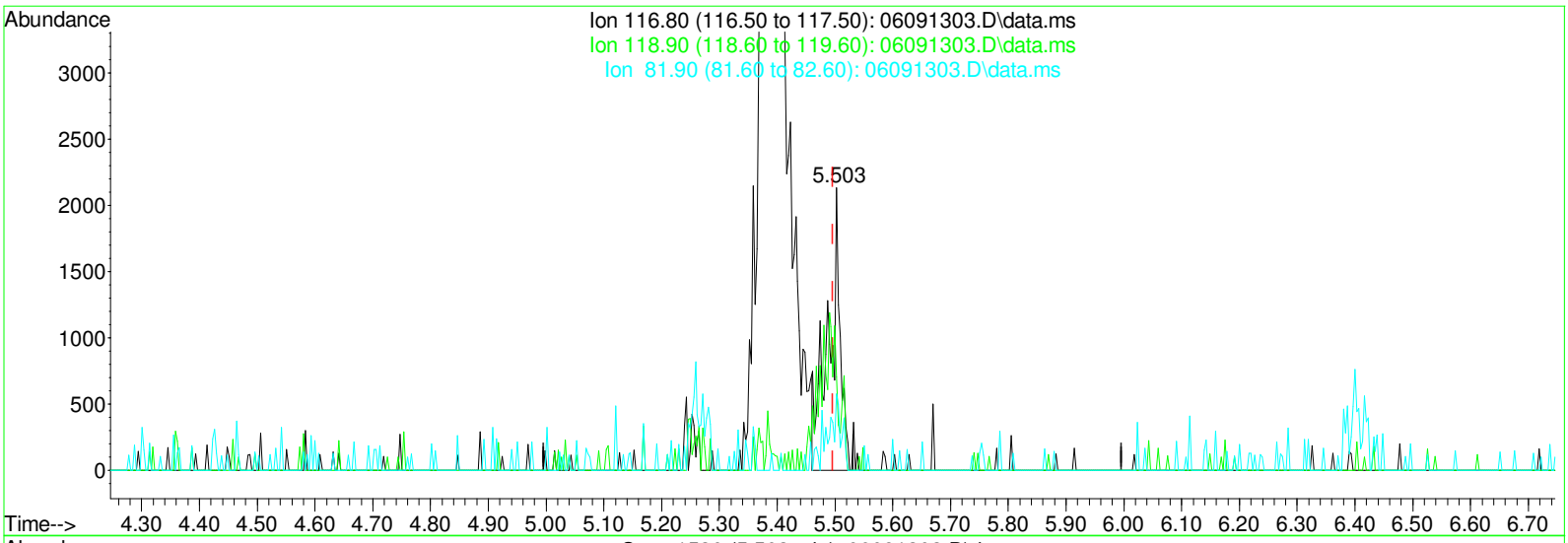
BEFORE

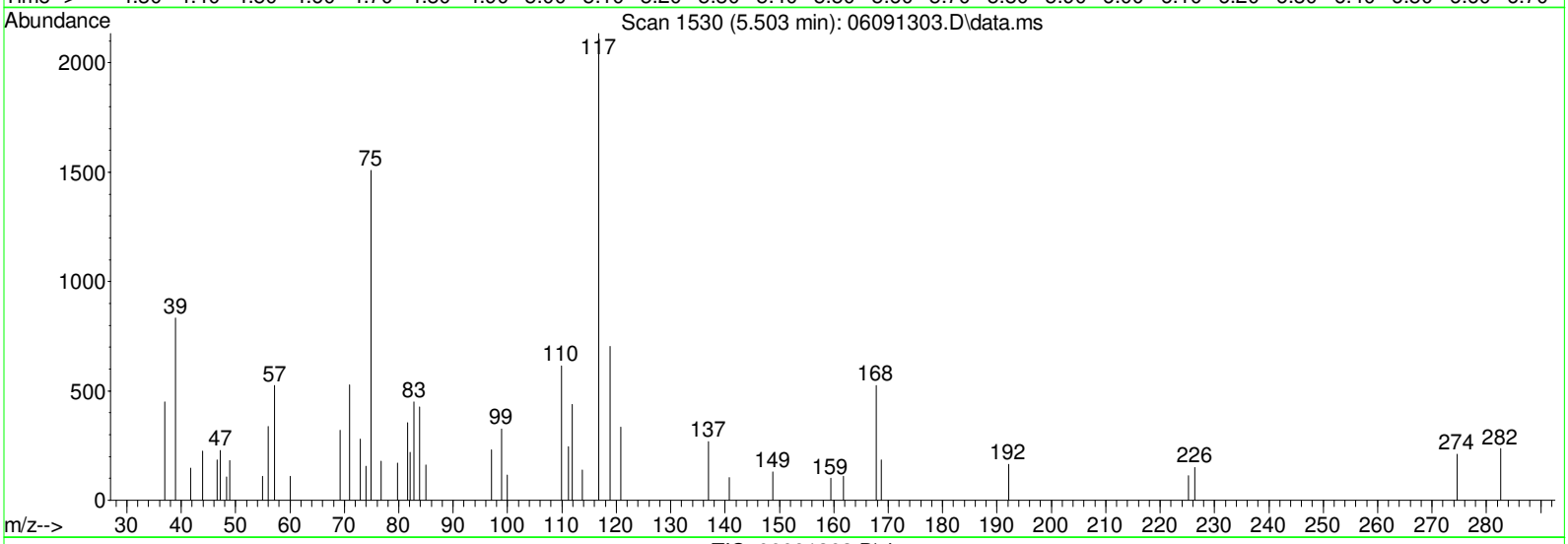
By Alfred at 3:25:32 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(33) Carbon Tetrachloride (TM)

5.503min (+0.007) 1.14 ug/L m

response 30765

Ion	Exp%	Act%
116.80	100	100
118.90	96.60	82.69
81.90	27.90	27.56
0.00	0.00	0.00

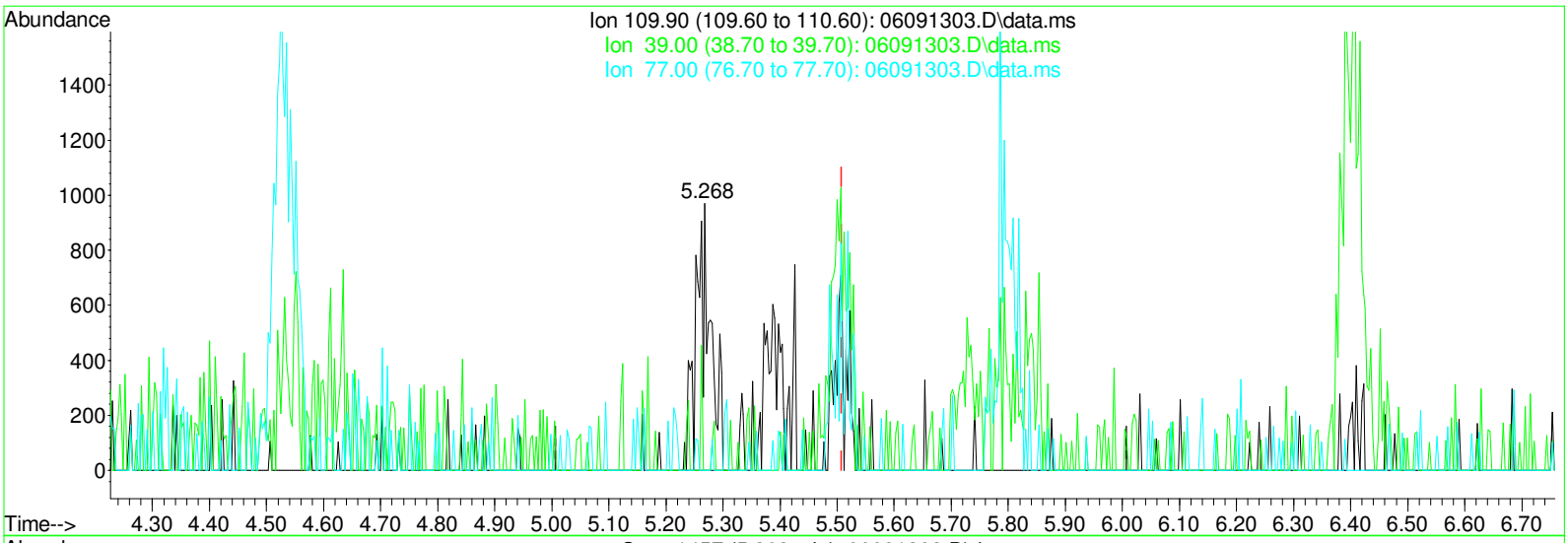
AFTER M2

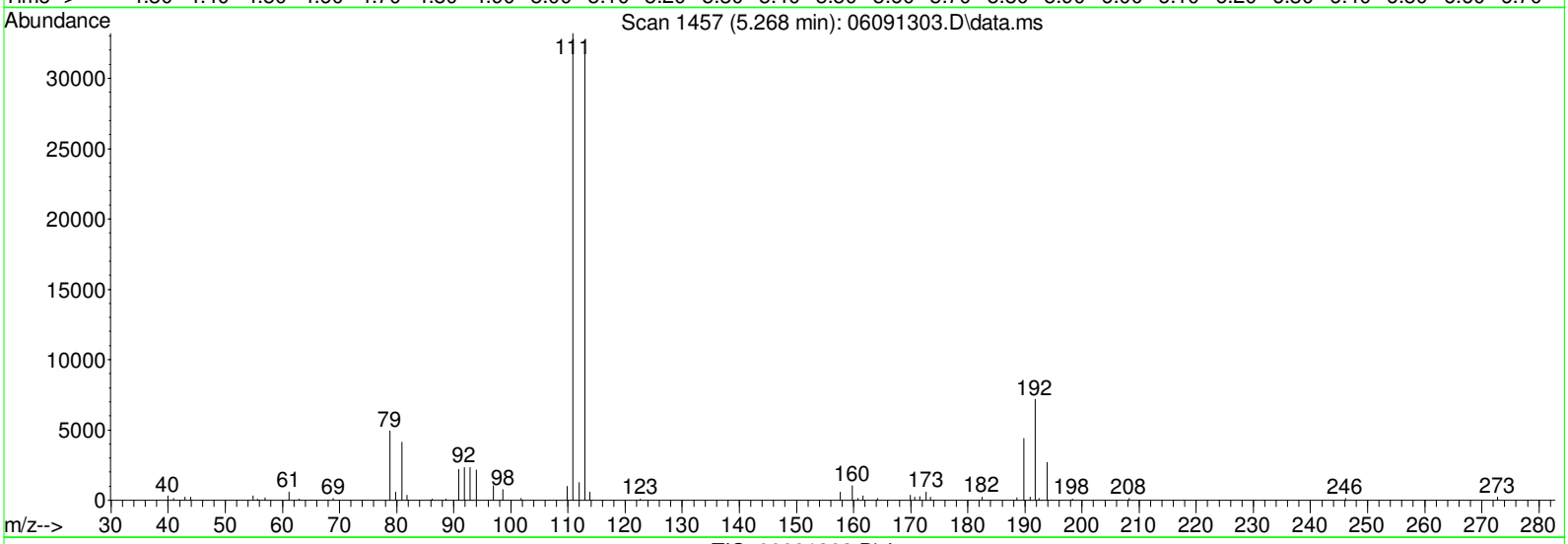
By Alfred at 3:25:40 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(36) 1,1-Dichloropropene (M)

5.269min (-0.239) 1.48 ug/L

response 17446

Ion	Exp%	Act%
109.90	100	100
39.00	167.20	0.00#
77.00	86.00	0.00#
0.00	0.00	0.00

BEFORE

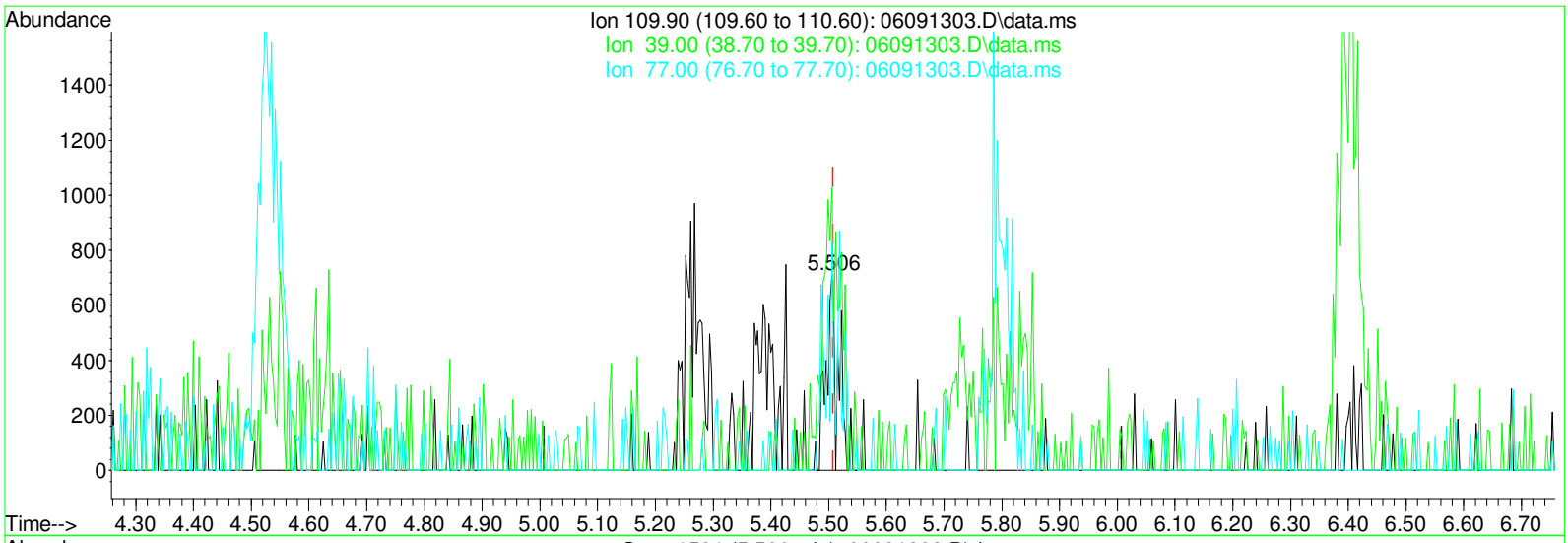
By Alfred at 3:25:47 PM, 7/3/2013

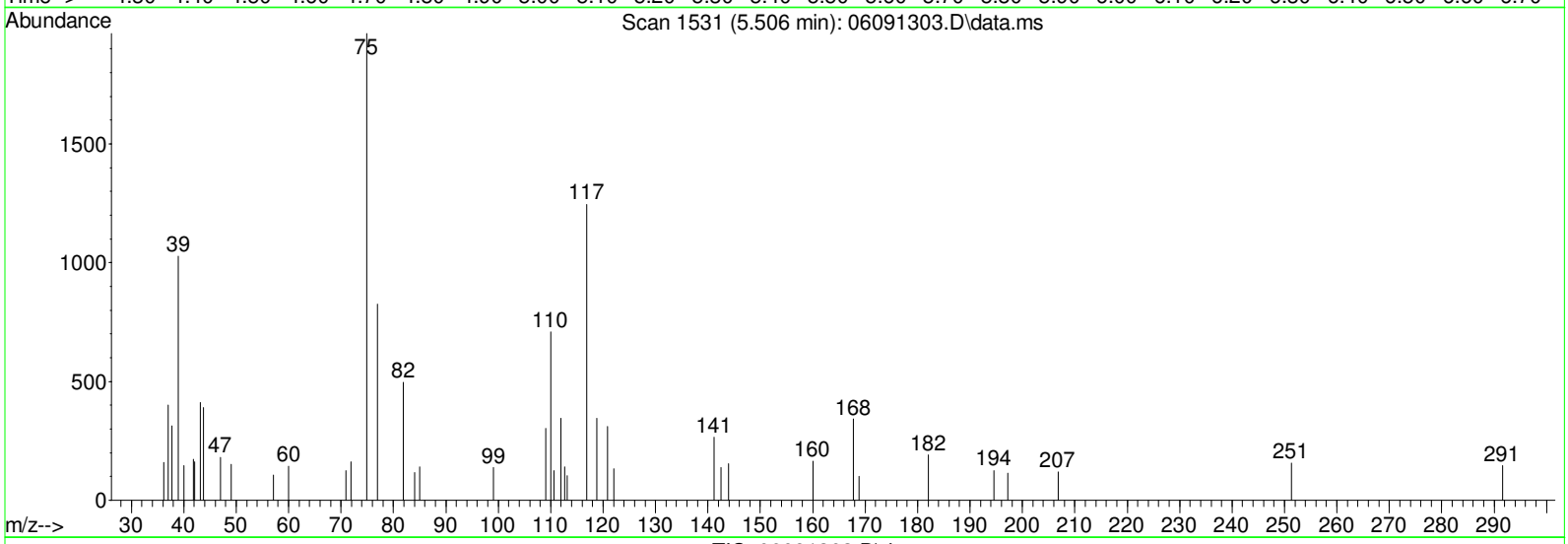
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(36) 1,1-Dichloropropene (M)

5.506min (-0.002) 0.89 ug/L m

response 10537

Ion	Exp%	Act%
109.90	100	100
39.00	167.20	207.10
77.00	86.00	122.12#
0.00	0.00	0.00

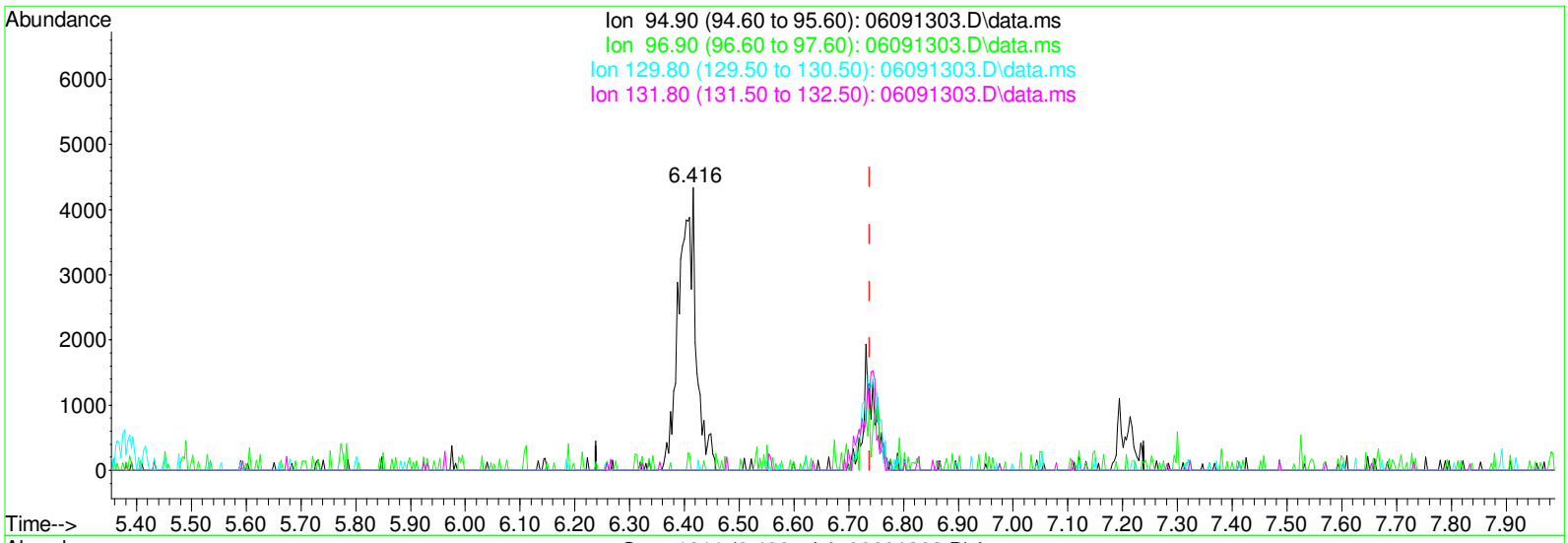
AFTER M2

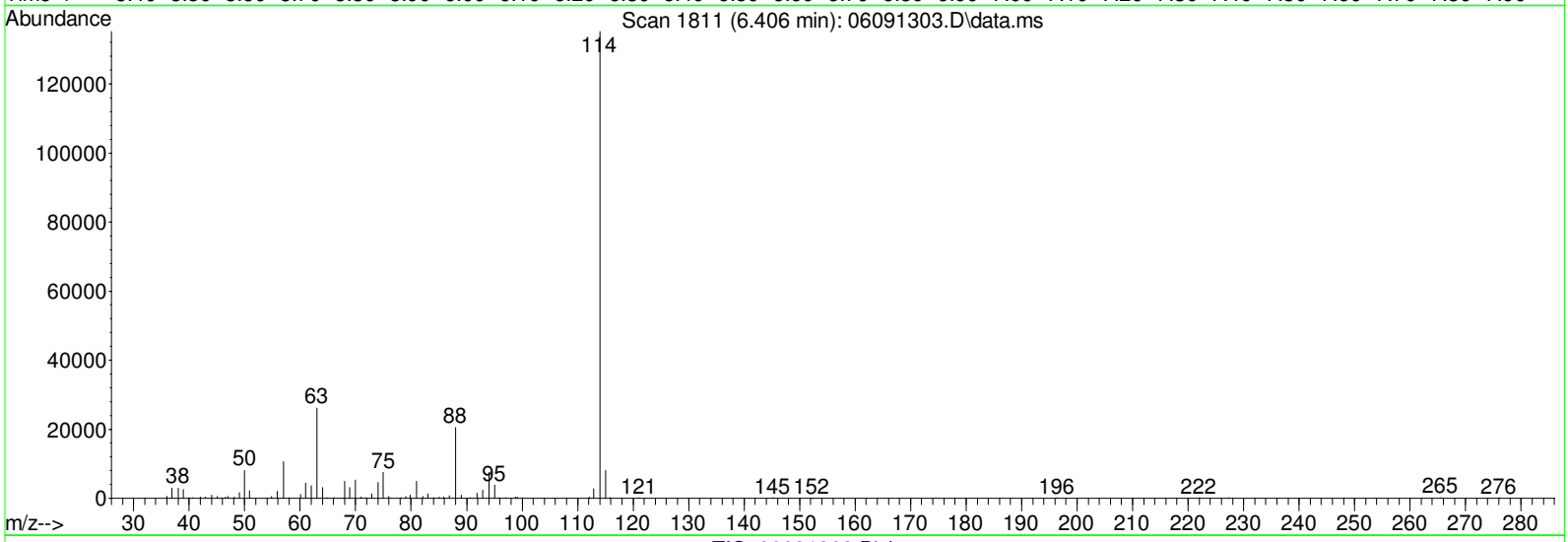
By Alfred at 3:25:54 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

BEFORE

By Alfred at 3:26:00 PM, 7/3/2013

(39) Trichloroethene (TM)

6.407min (-0.332) 2.73 ug/L

response 93591

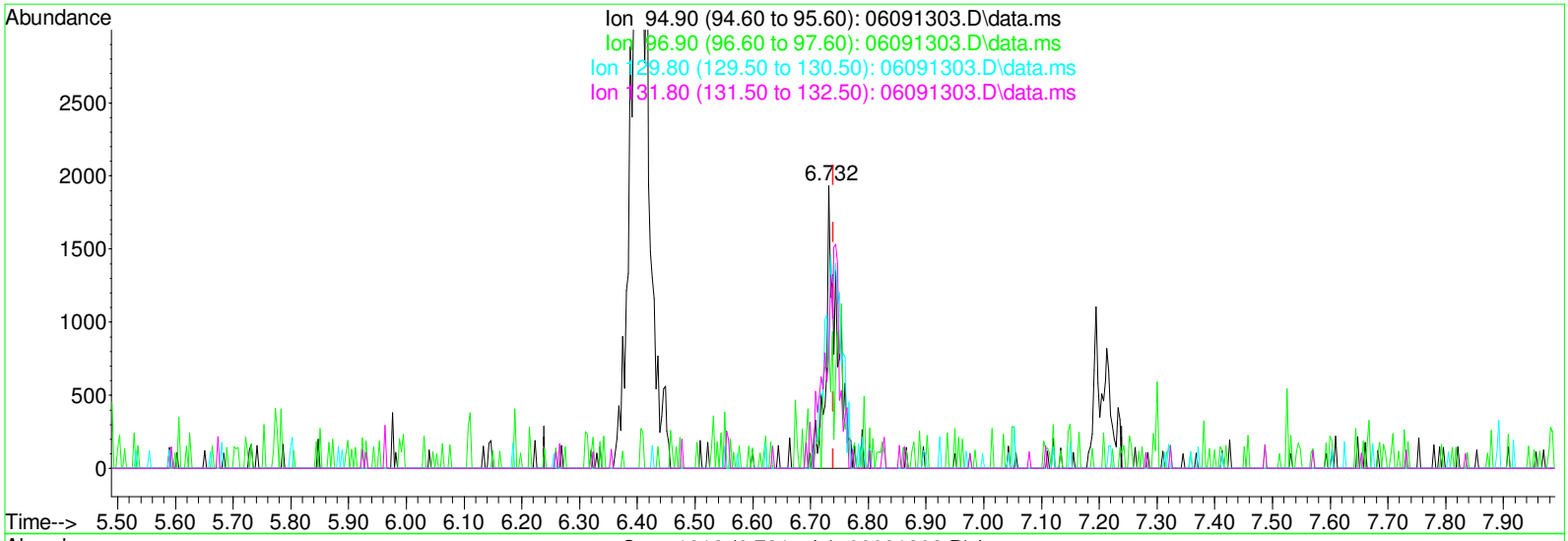
Ion	Exp%	Act%
94.90	100	100
96.90	61.80	0.00#
129.80	96.40	0.00#
131.80	93.10	0.00#

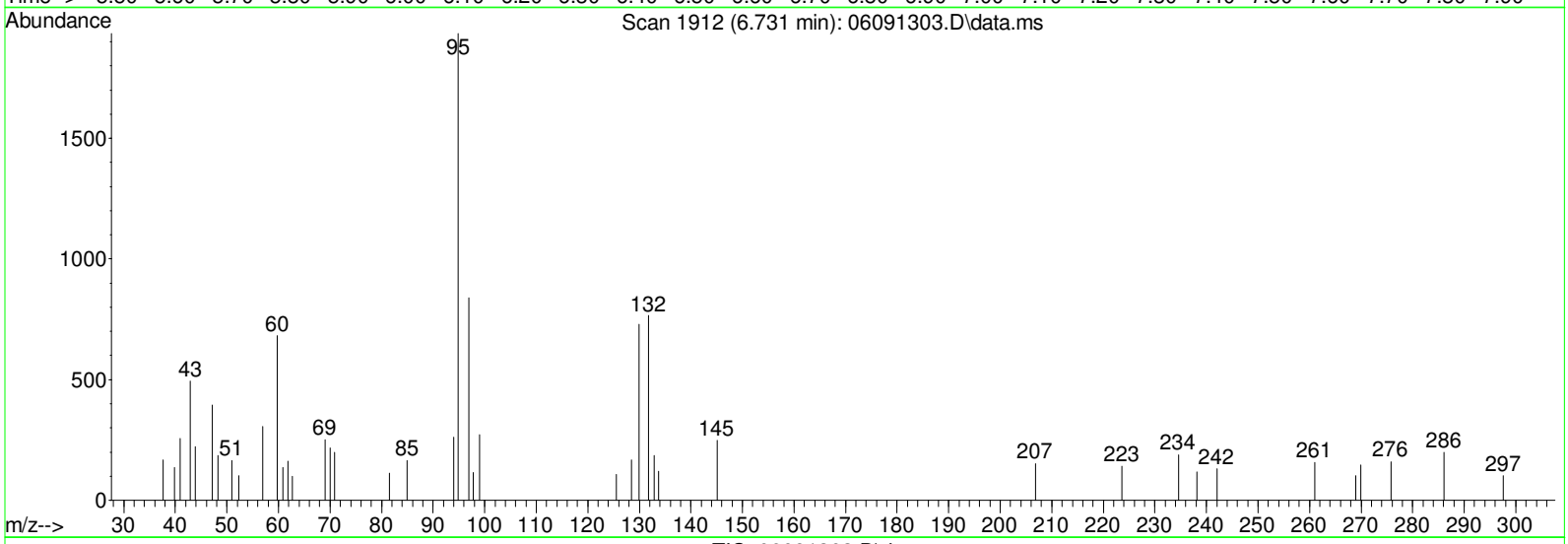
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(39) Trichloroethene (TM)

6.731min (-0.008) 0.79 ug/L m

response 26927

Ion	Exp%	Act%
94.90	100	100
96.90	61.80	75.89
129.80	96.40	110.04
131.80	93.10	102.58

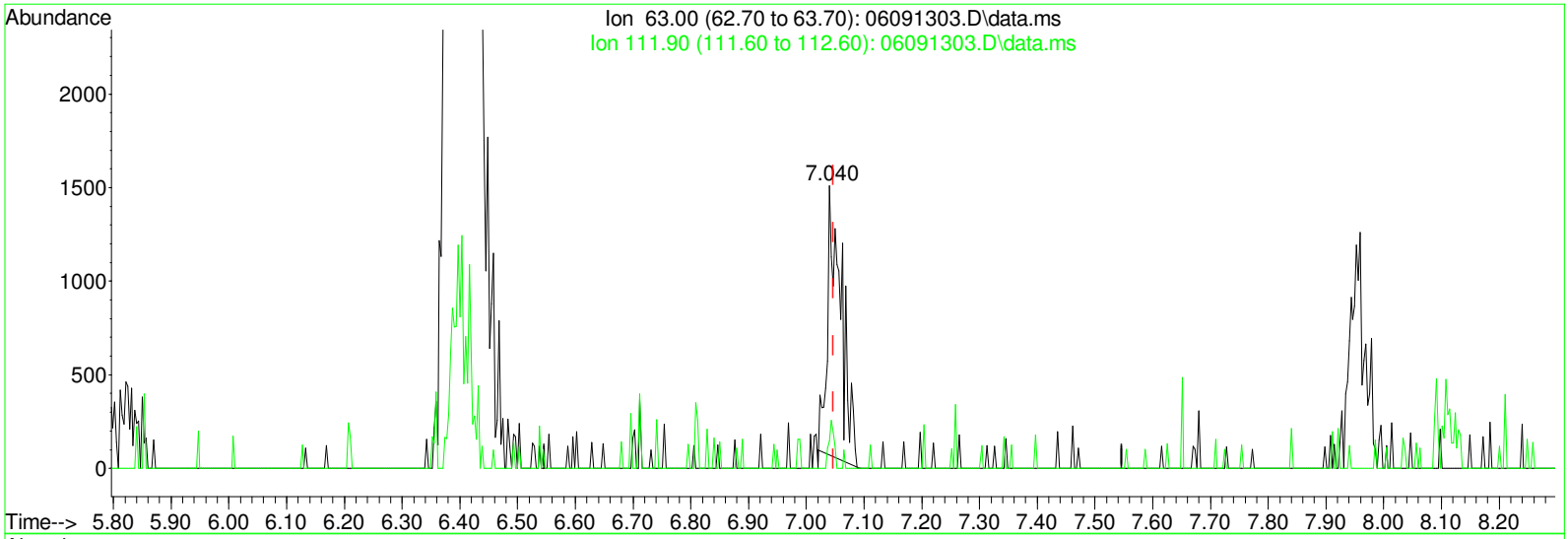
AFTER M2

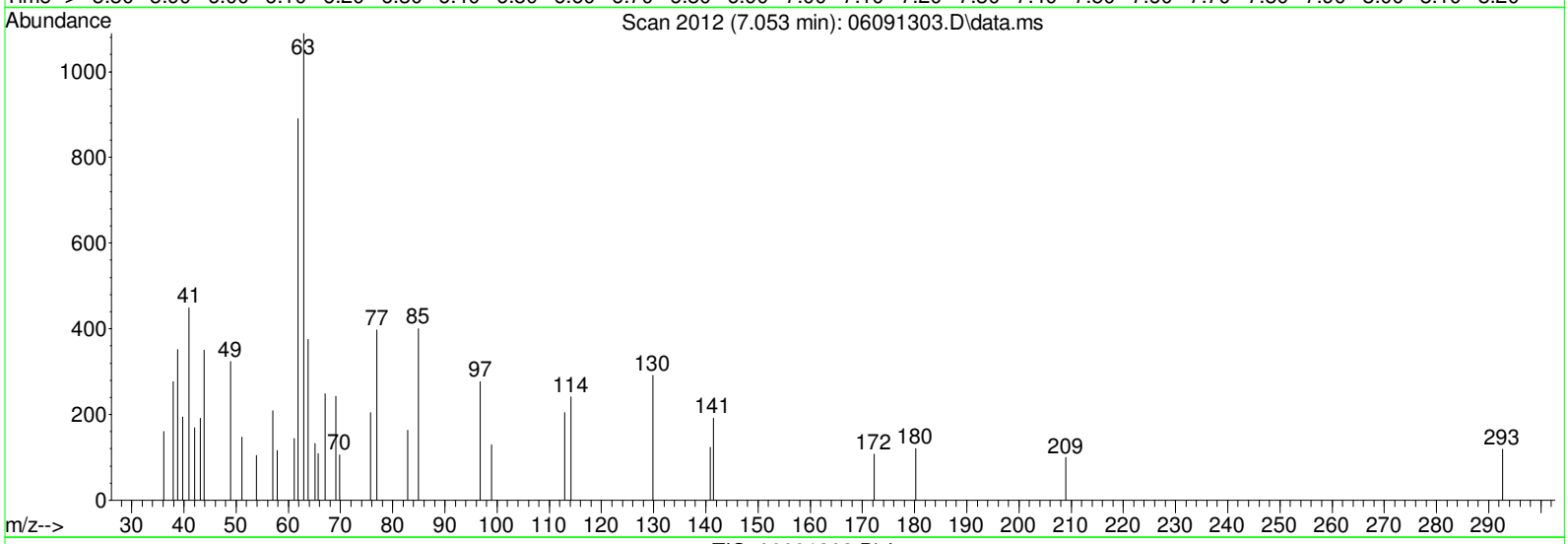
By Alfred at 3:26:07 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(40) 1,2-Dichloropropane (TCM)

7.052min (+0.005) 0.98 ug/L

response 24104

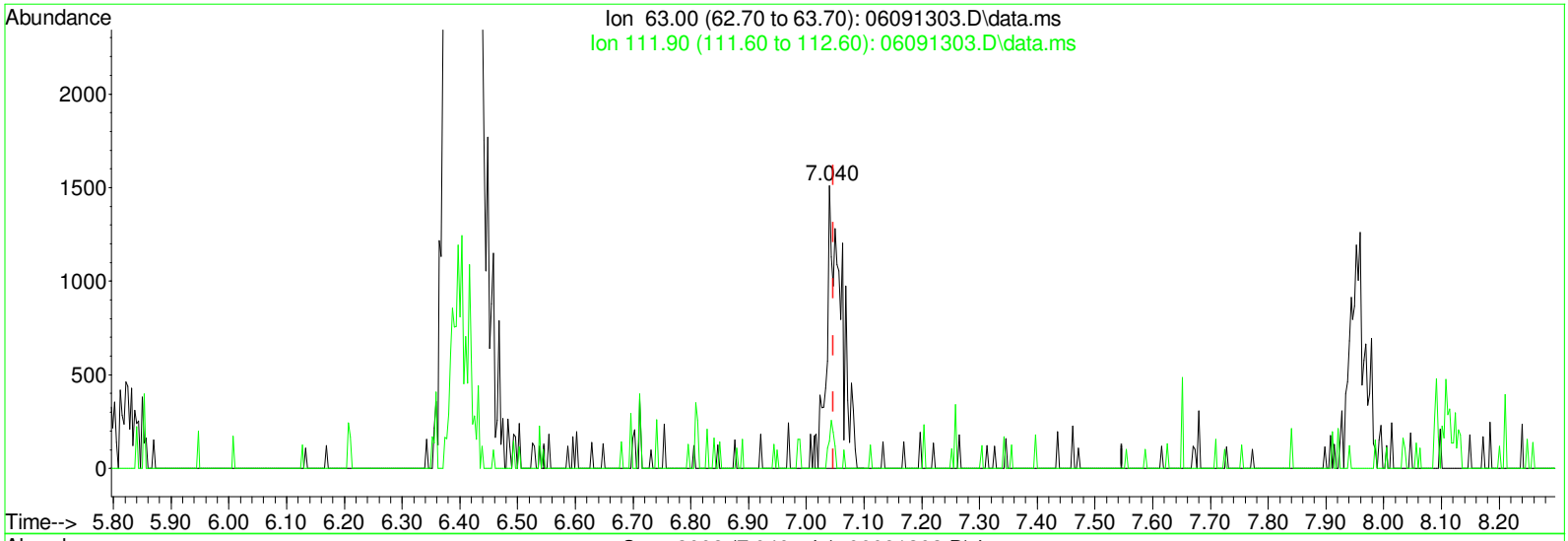
Ion	Exp%	Act%
63.00	100	100
111.90	4.10	0.00
0.00	0.00	0.00
0.00	0.00	0.00

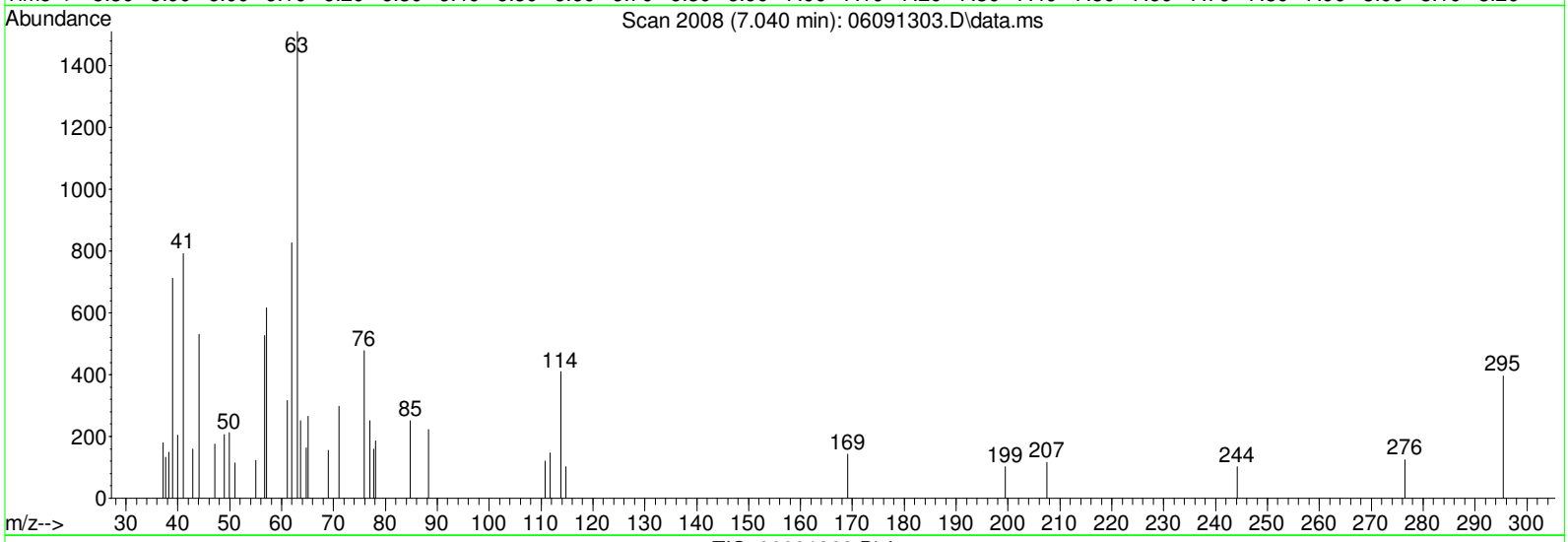
BEFORE
By Alfred at 3:27:09 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(40) 1,2-Dichloropropane (TCM)

7.040min (-0.007) 1.08 ug/L m

response 26653

Ion	Exp%	Act%
63.00	100	100
111.90	4.10	5.98
0.00	0.00	0.00
0.00	0.00	0.00

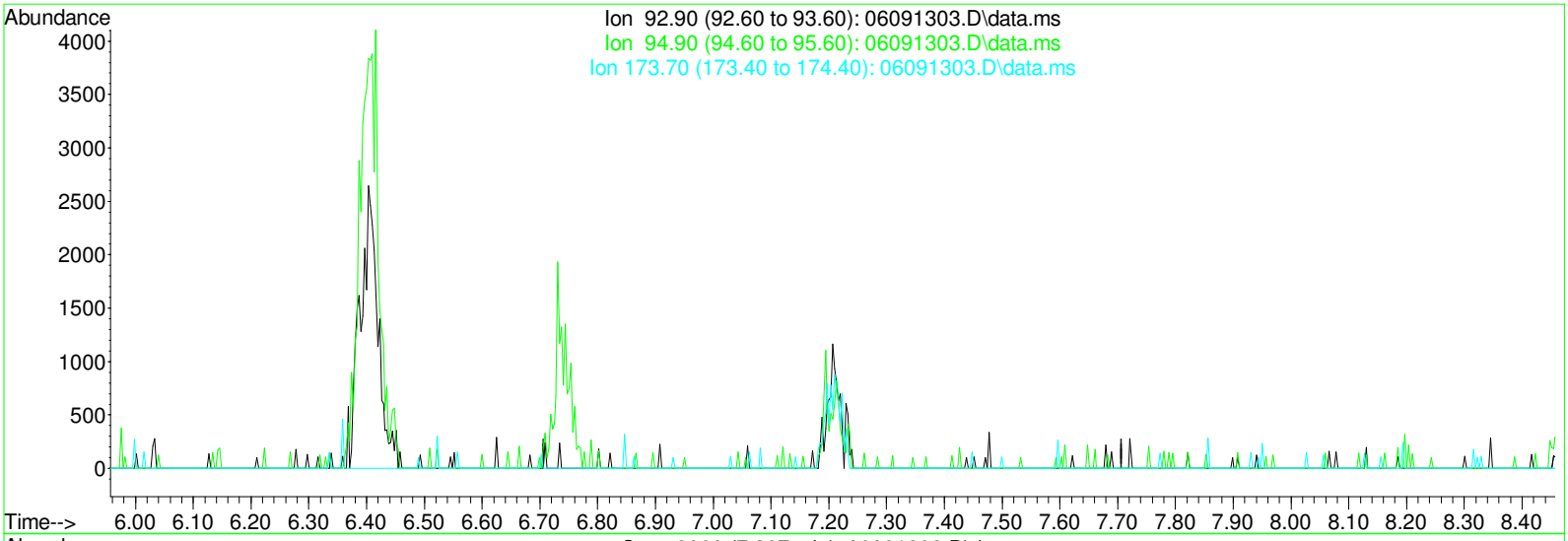
AFTER M3

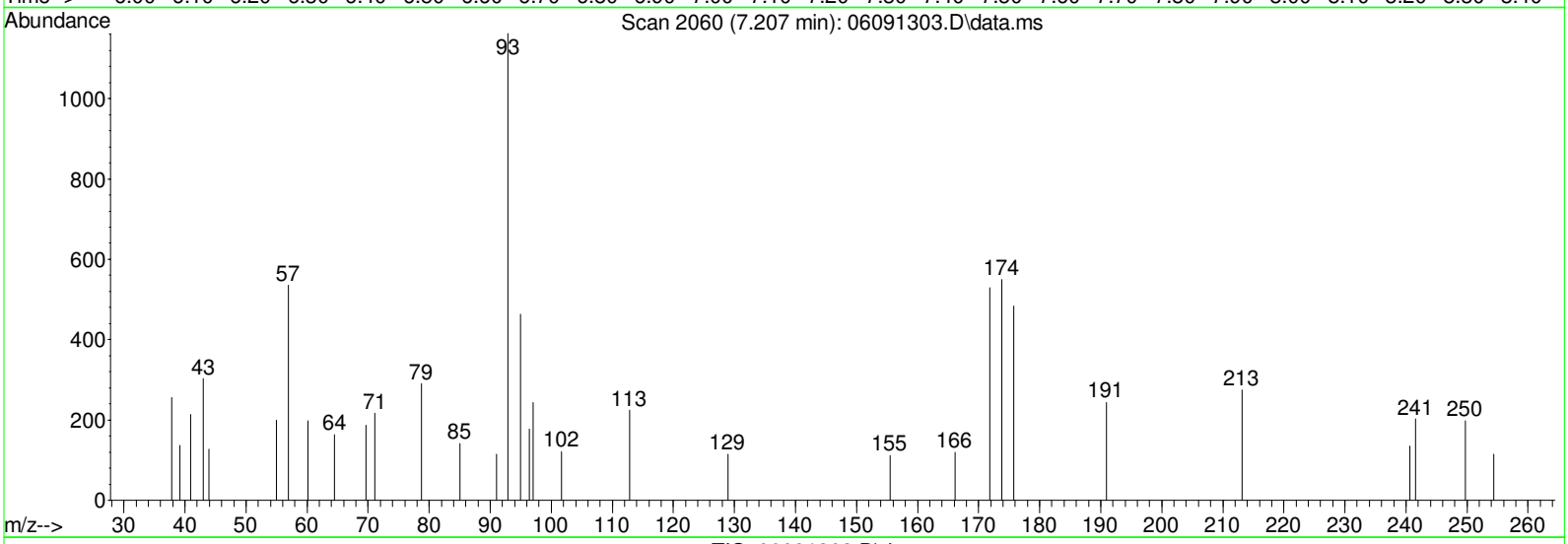
By Alfred at 3:27:15 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

BEFORE
By Alfred at 3:27:21 PM, 7/3/2013

(43) Dibromomethane (M)

7.207min (-7.207) 0.00 ug/L

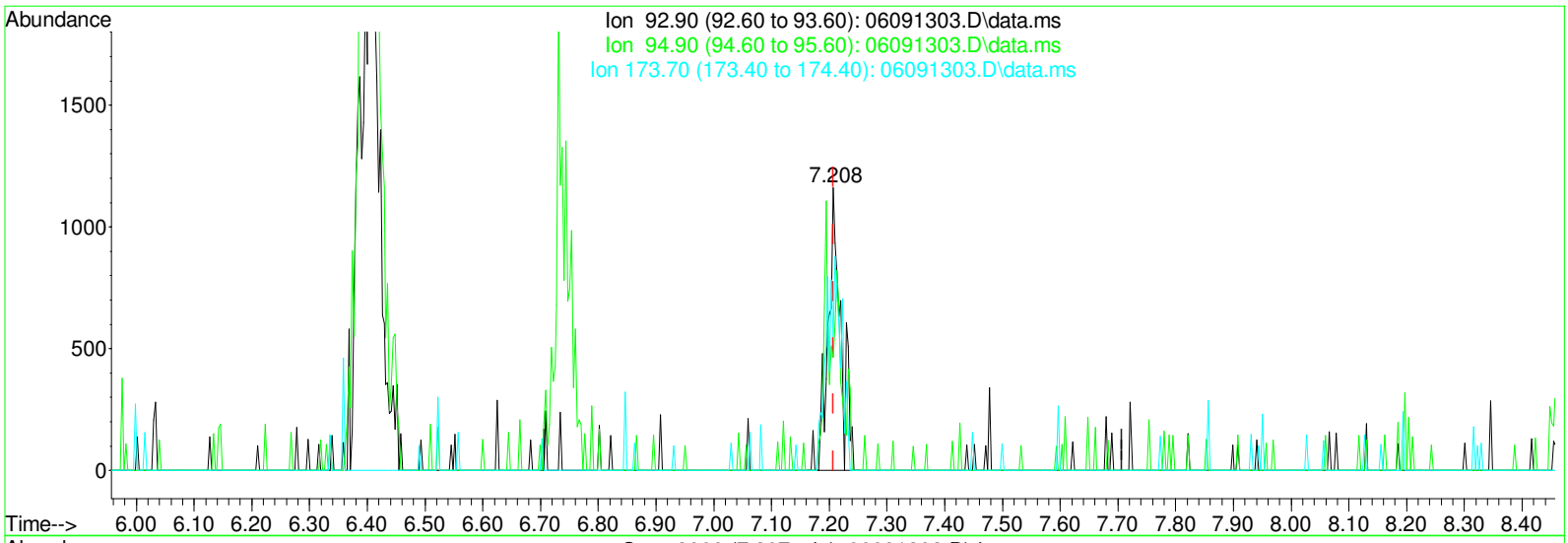
response 0

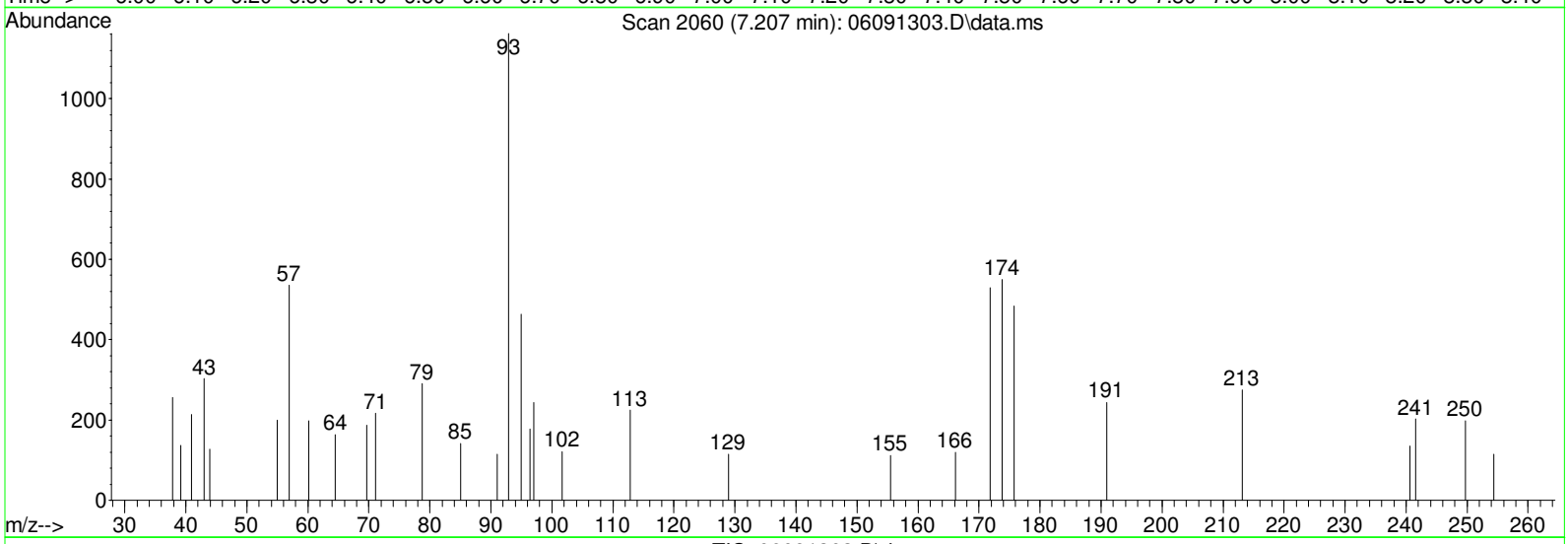
Ion	Exp%	Act%
92.90	100	0.00
94.90	87.00	0.00#
173.70	99.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

AFTER M1
By Alfred at 3:27:27 PM, 7/3/2013

(43) Dibromomethane (M)

7.207min (+0.000) 1.19 ug/L m

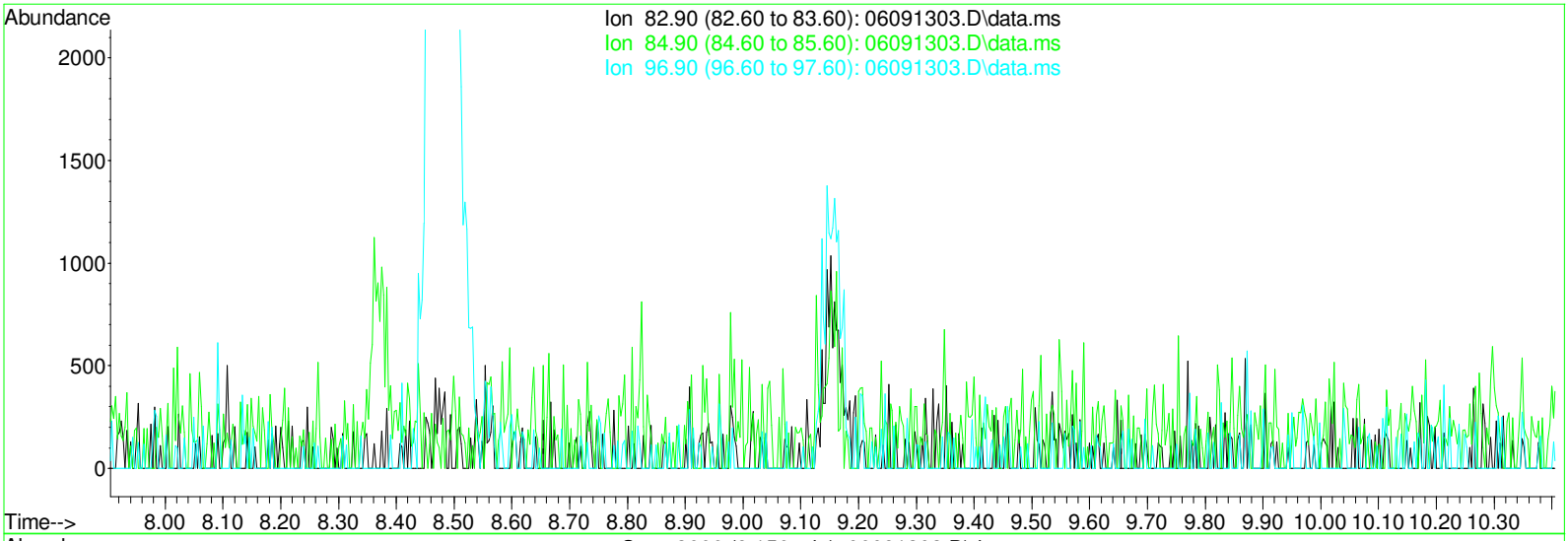
response 17975

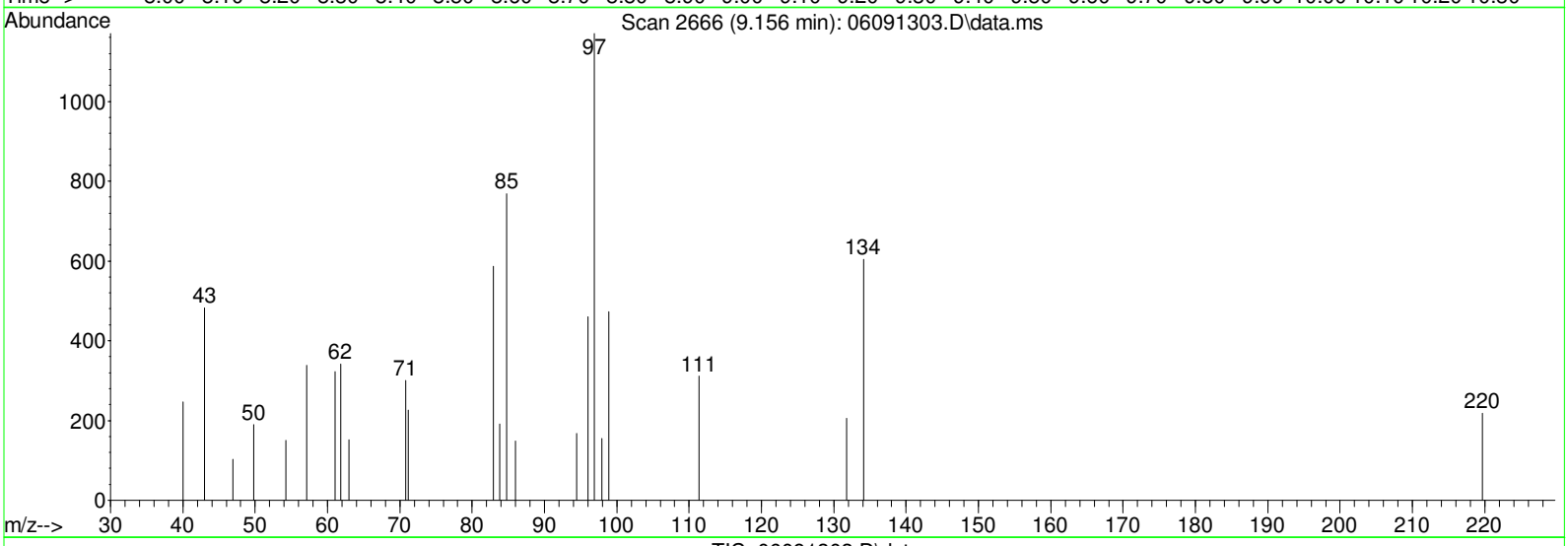
Ion	Exp%	Act%
92.90	100	100
94.90	87.00	86.21
173.70	99.50	87.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(53) 1,1,2-Trichloroethane (TM)

9.155min (-9.155) 0.00 ug/L

response 0

Ion	Exp%	Act%
82.90	100	0.00
84.90	62.70	0.00#
96.90	117.90	0.00#
0.00	0.00	0.00

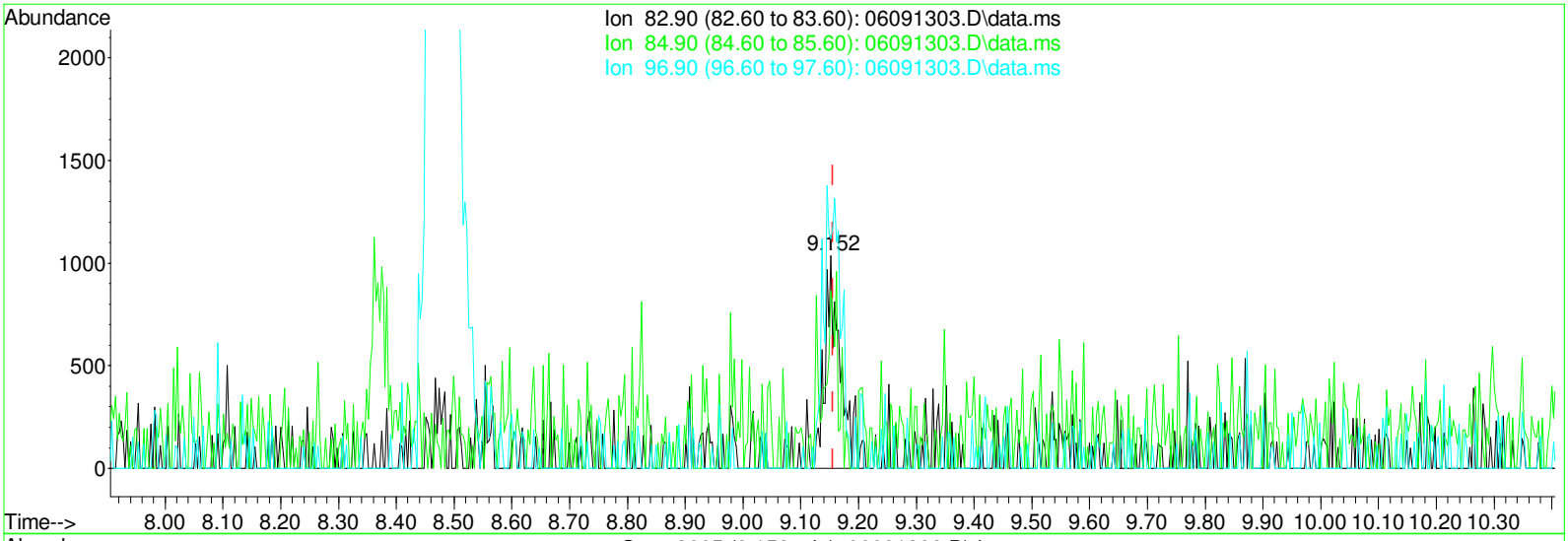
BEFORE
By Alfred at 3:41:14 PM, 7/3/2013

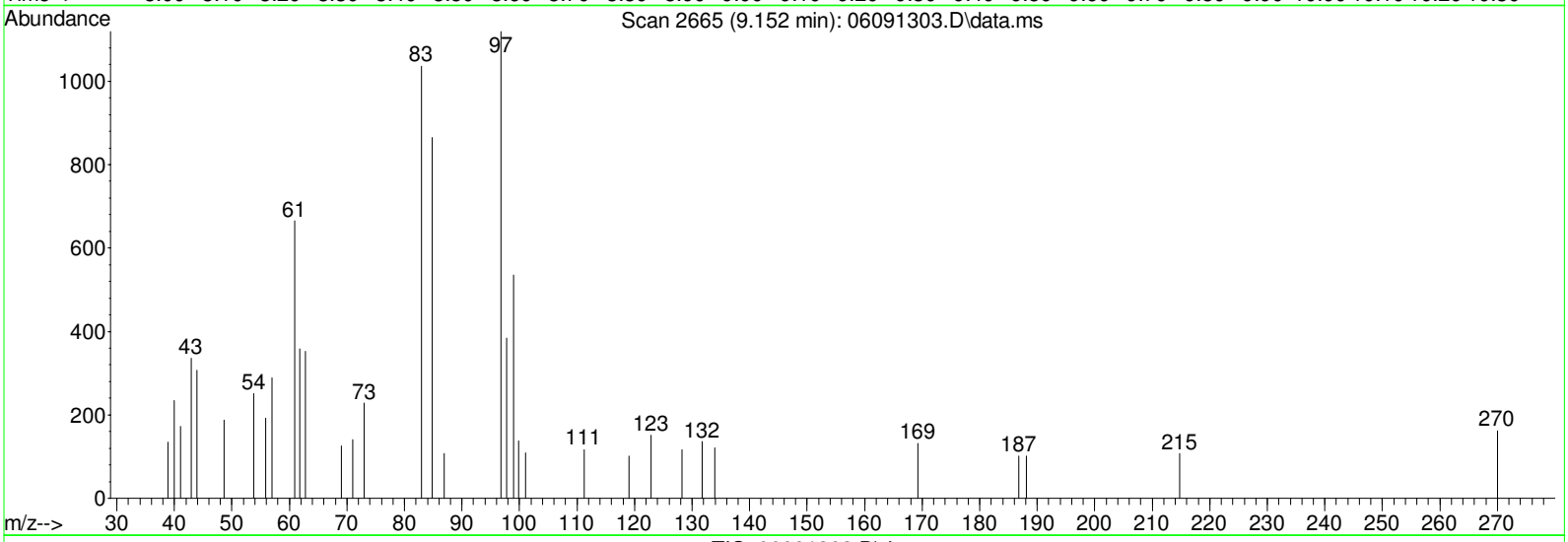
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(53) 1,1,2-Trichloroethane (TM)

9.152min (-0.003) 0.97 ug/L m

response 19318

Ion	Exp%	Act%
82.90	100	100
84.90	62.70	85.06#
96.90	117.90	144.52
0.00	0.00	0.00

AFTER M1

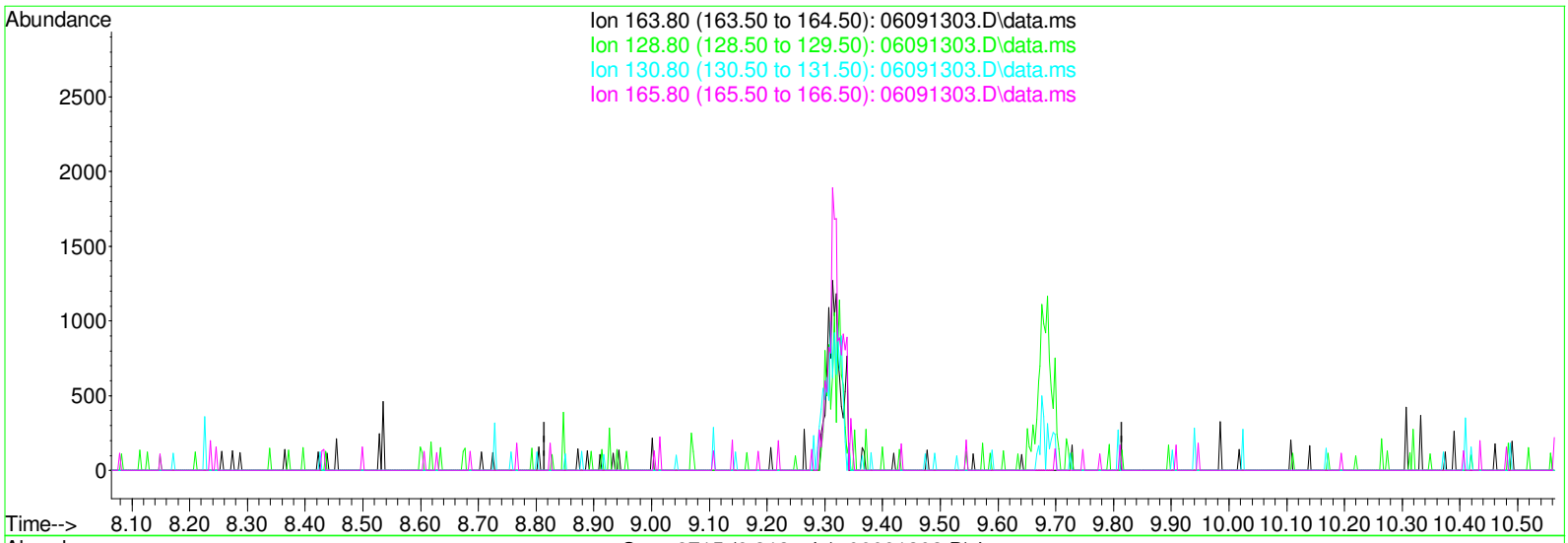
By Alfred at 3:41:20 PM, 7/3/2013

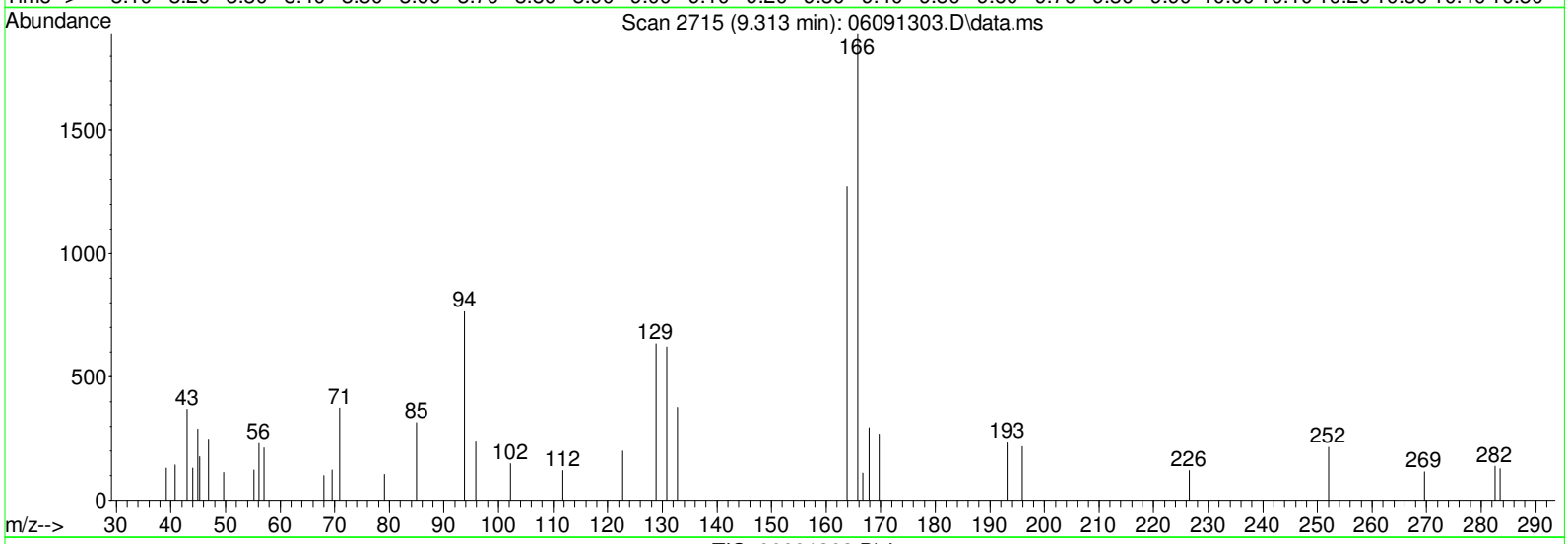
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(55) Tetrachloroethene (TM)

9.315min (-9.315) 0.00 ug/L

response 0

Ion	Exp%	Act%
163.80	100	0.00
128.80	96.00	0.00#
130.80	90.00	0.00#
165.80	125.20	0.00#

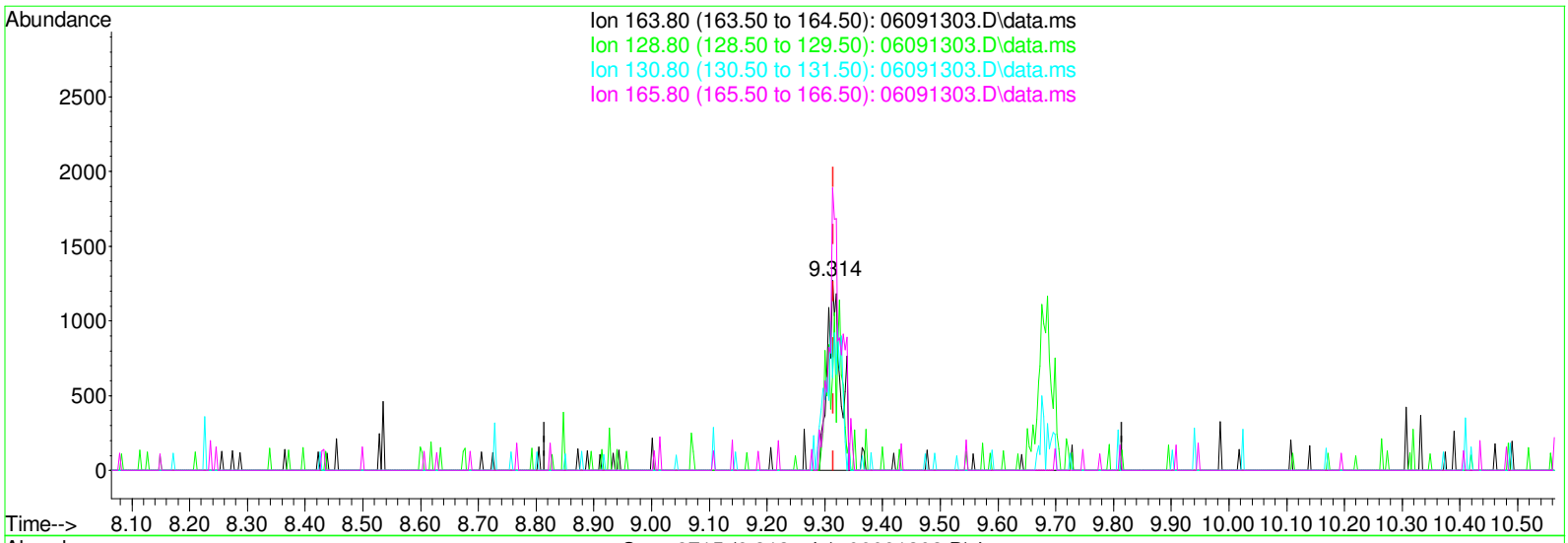
BEFORE

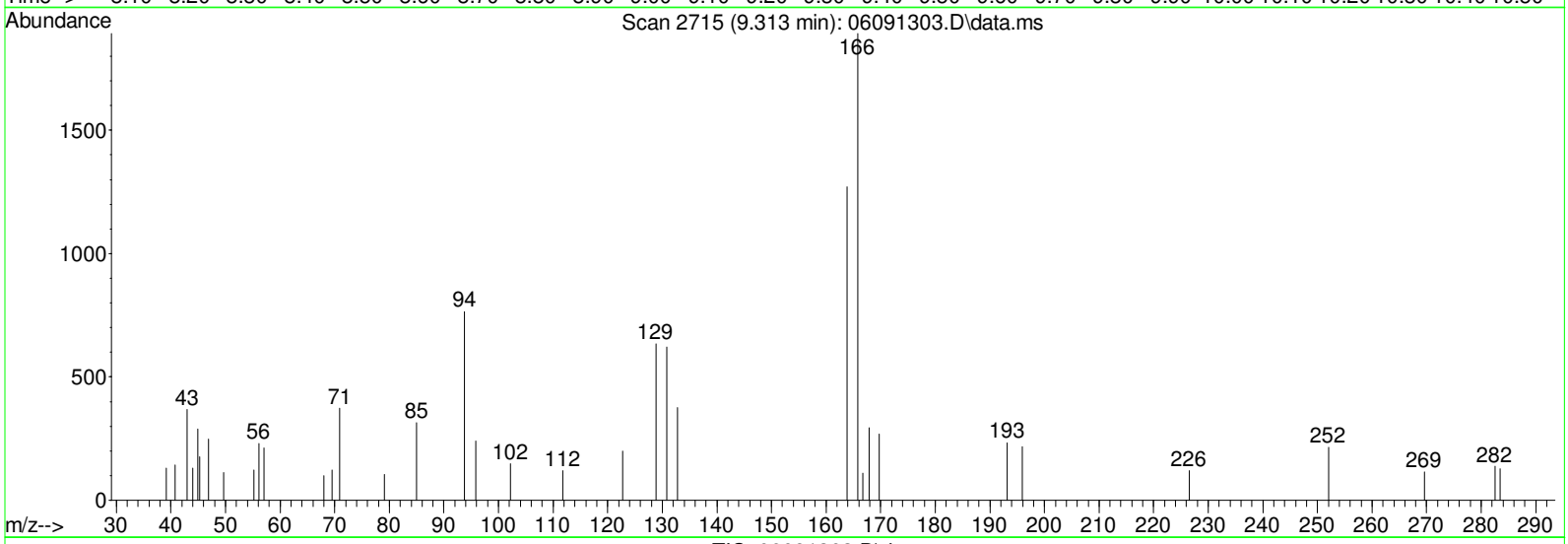
By Alfred at 3:41:27 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Operator: PS
Sample : ICAL VSTD001
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(55) Tetrachloroethene (TM)

9.313min (-0.001) 1.10 ug/L m

response 20047

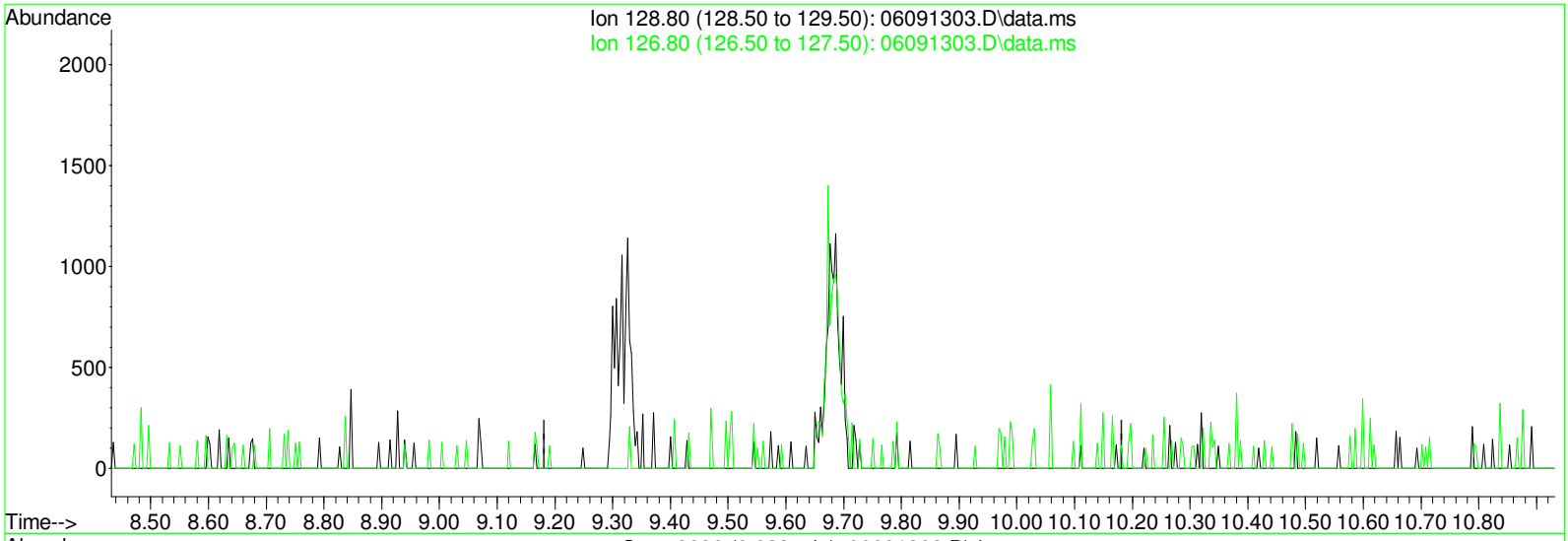
Ion	Exp%	Act%
163.80	100	100
128.80	96.00	85.74
130.80	90.00	92.52
165.80	125.20	138.93

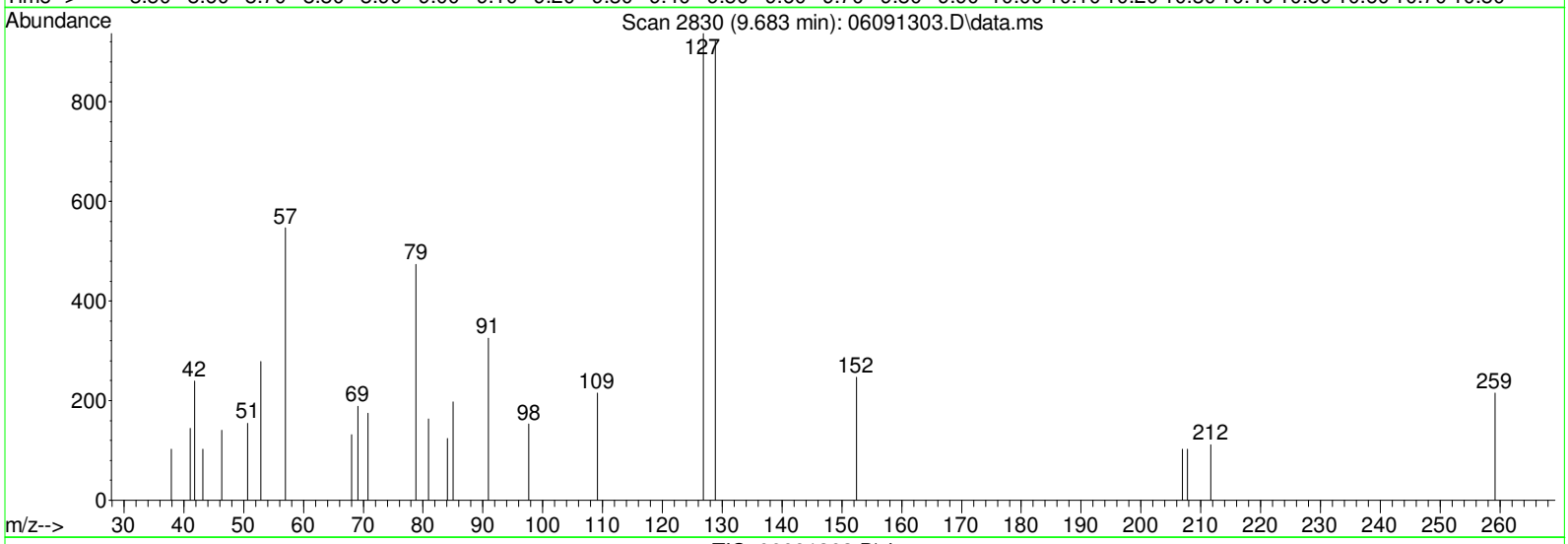
AFTER M1
By Alfred at 3:41:32 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(56) Dibromochloromethane (TM)

9.682min (-9.682) 0.00 ug/L

response 0

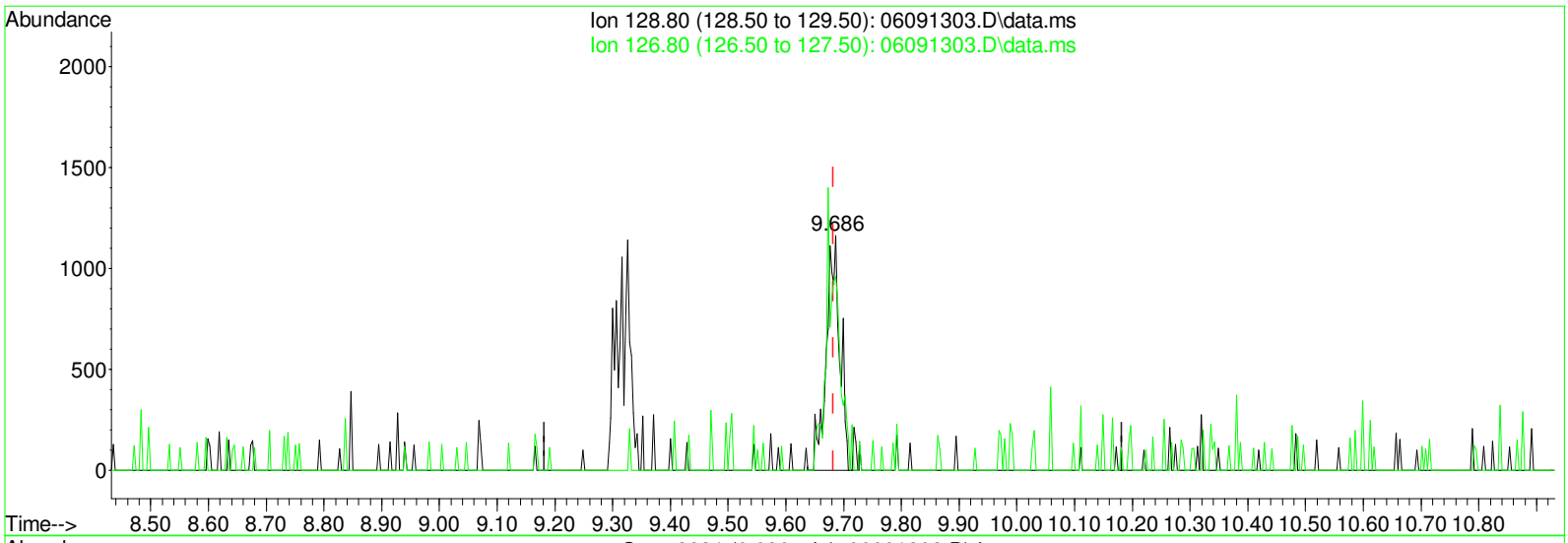
Ion	Exp%	Act%
128.80	100	0.00
126.80	76.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

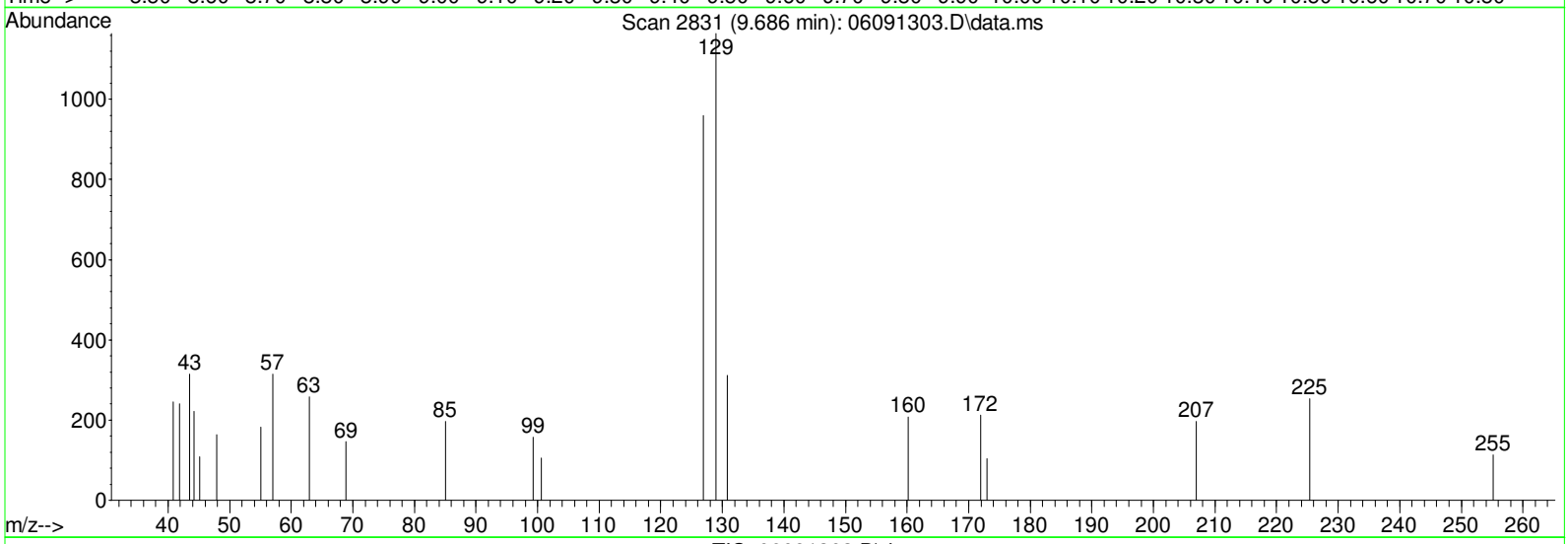
BEFORE
By Alfred at 3:41:42 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(56) Dibromochloromethane (TM)

9.686min (+0.004) 0.84 ug/L m

response 19400

Ion	Exp%	Act%
128.80	100	100
126.80	76.30	99.86#
0.00	0.00	0.00
0.00	0.00	0.00

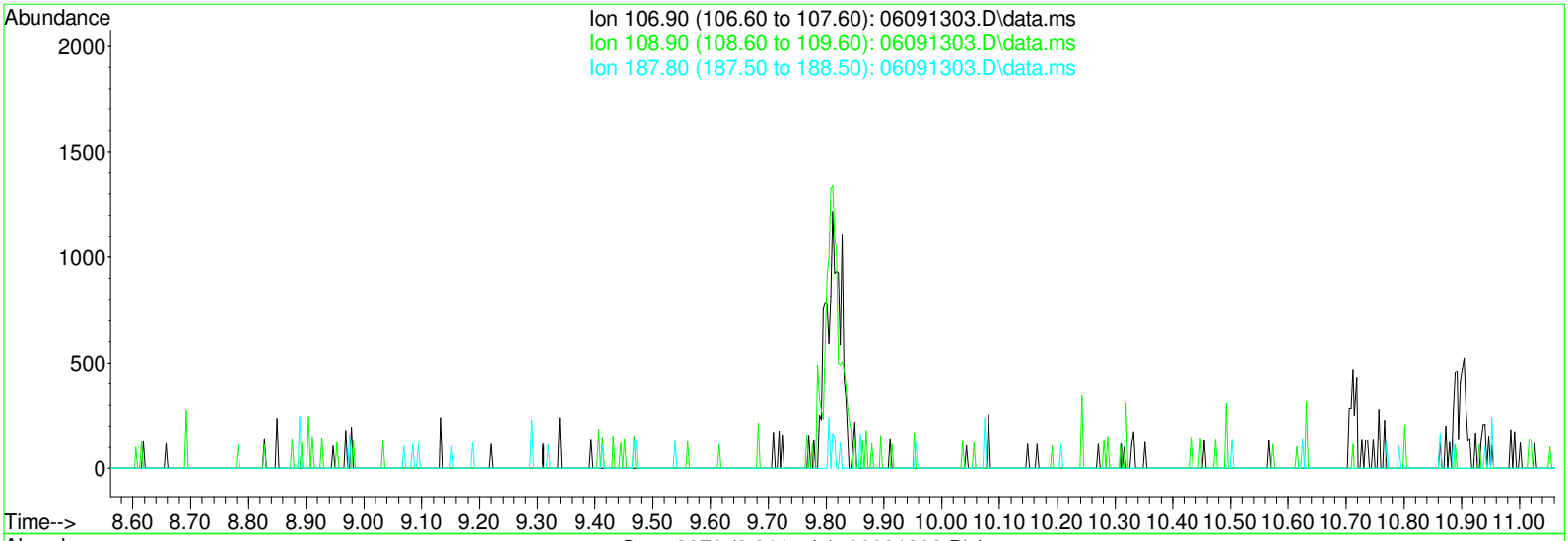
AFTER M1

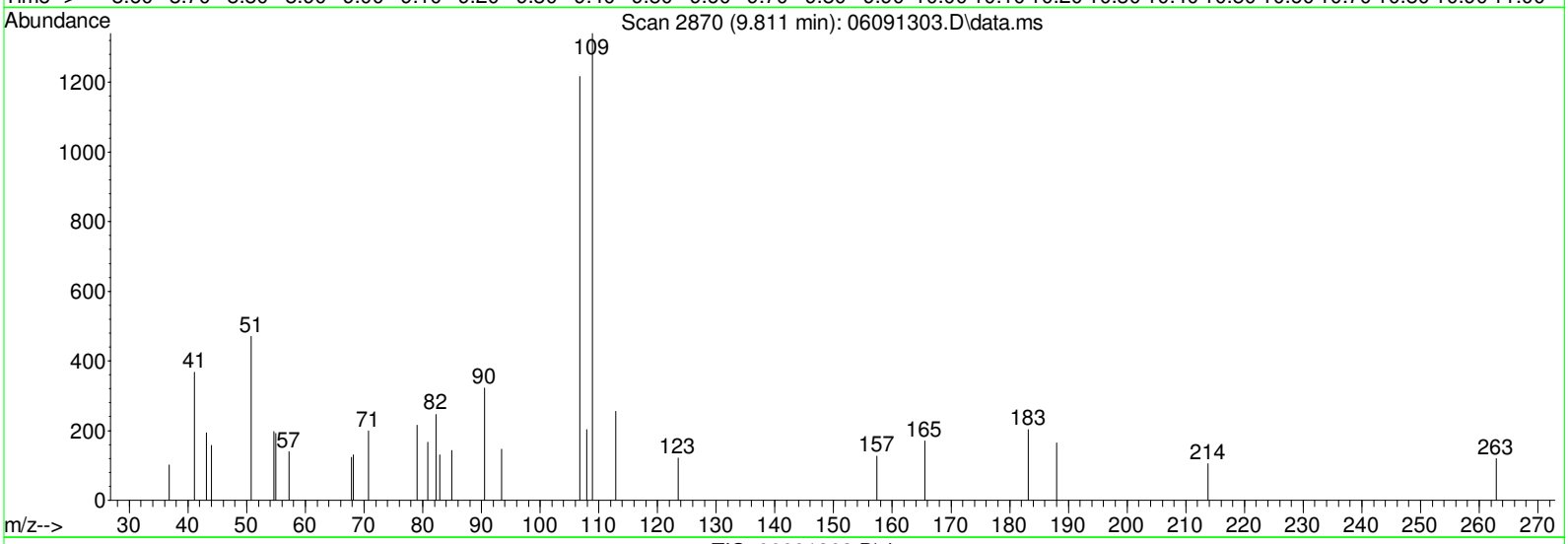
By Alfred at 3:41:48 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(57) 1,2-Dibromoethane (M)

9.811min (-9.811) 0.00 ug/L

response 0

Ion	Exp%	Act%
106.90	100	0.00
108.90	93.00	0.00#
187.80	3.40	0.00
0.00	0.00	0.00

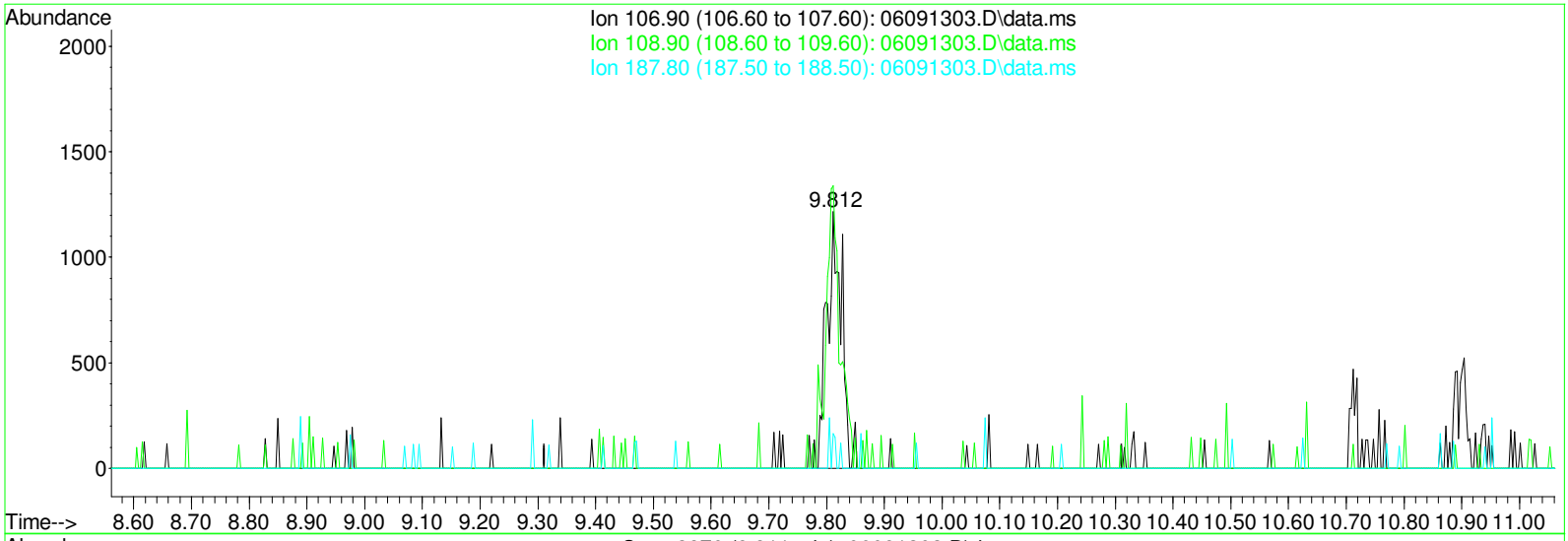
BEFORE

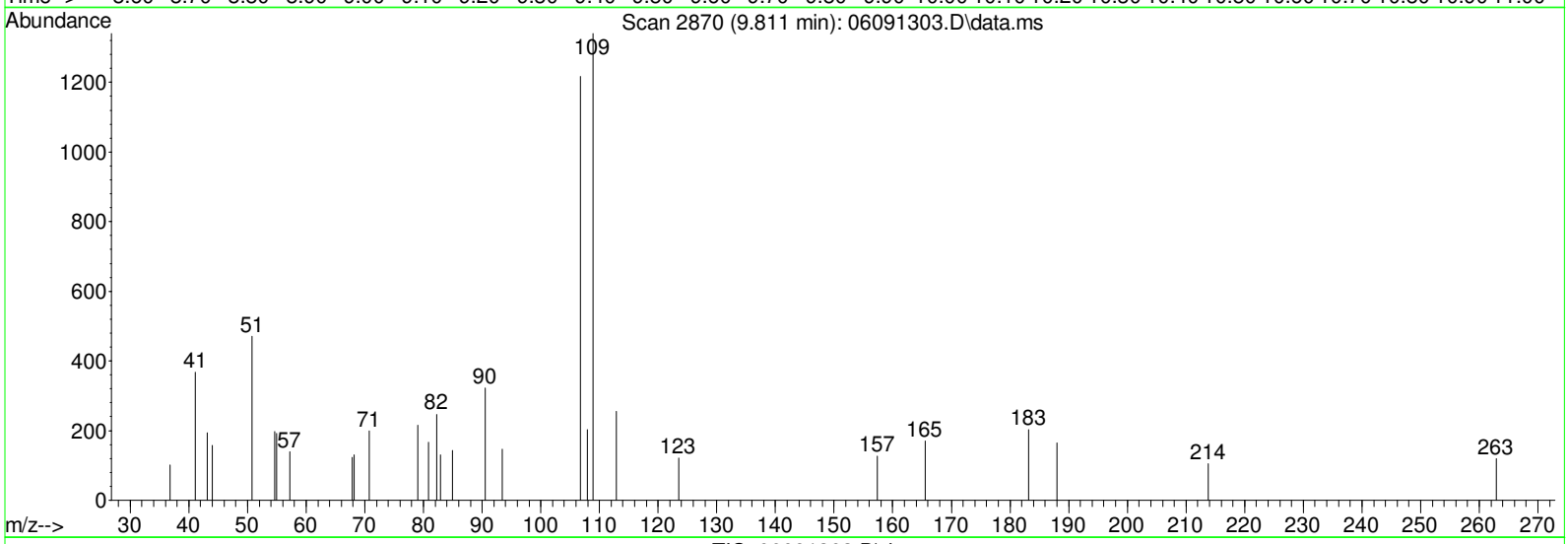
By Alfred at 3:41:54 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(57) 1,2-Dibromoethane (M)

9.811min (-0.000) 0.92 ug/L m

response 21807

Ion	Exp%	Act%
106.90	100	100
108.90	93.00	0.00#
187.80	3.40	0.00
0.00	0.00	0.00

AFTER M1

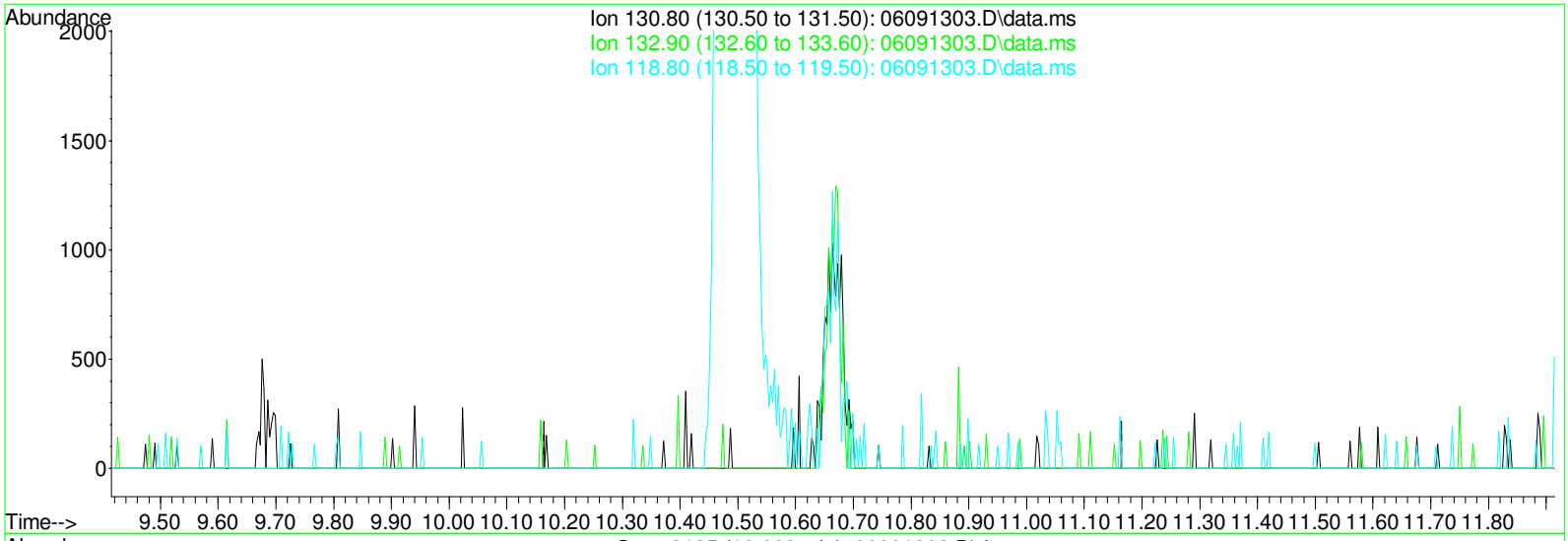
By Alfred at 3:42:00 PM, 7/3/2013

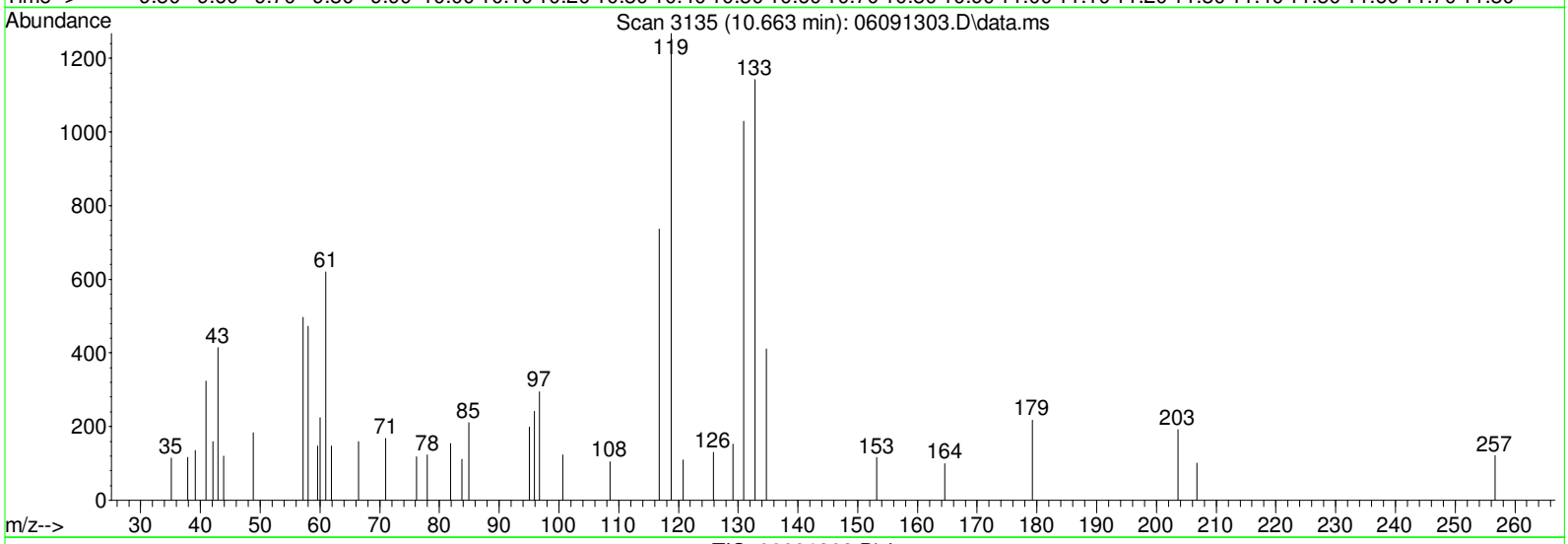
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(60) 1,1,1,2-Tetrachloroethane (M)

10.665min (-10.665) 0.00 ug/L

response 0

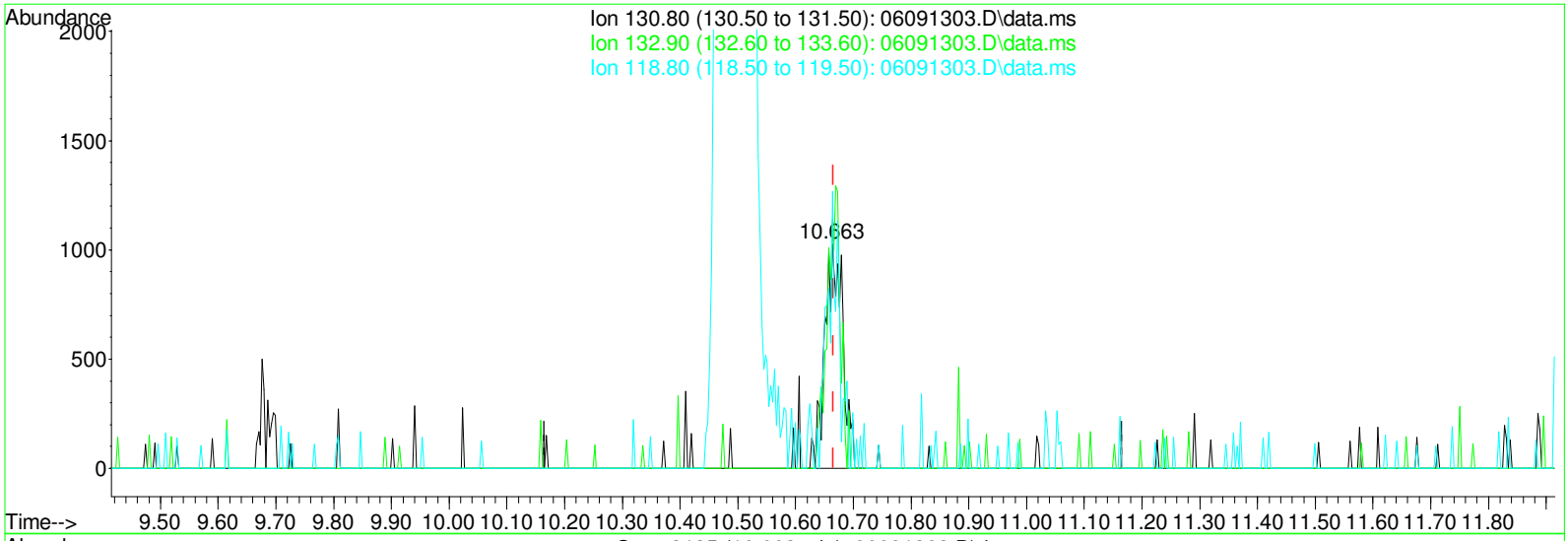
Ion	Exp%	Act%
130.80	100	0.00
132.90	93.10	0.00#
118.80	61.00	0.00#
0.00	0.00	0.00

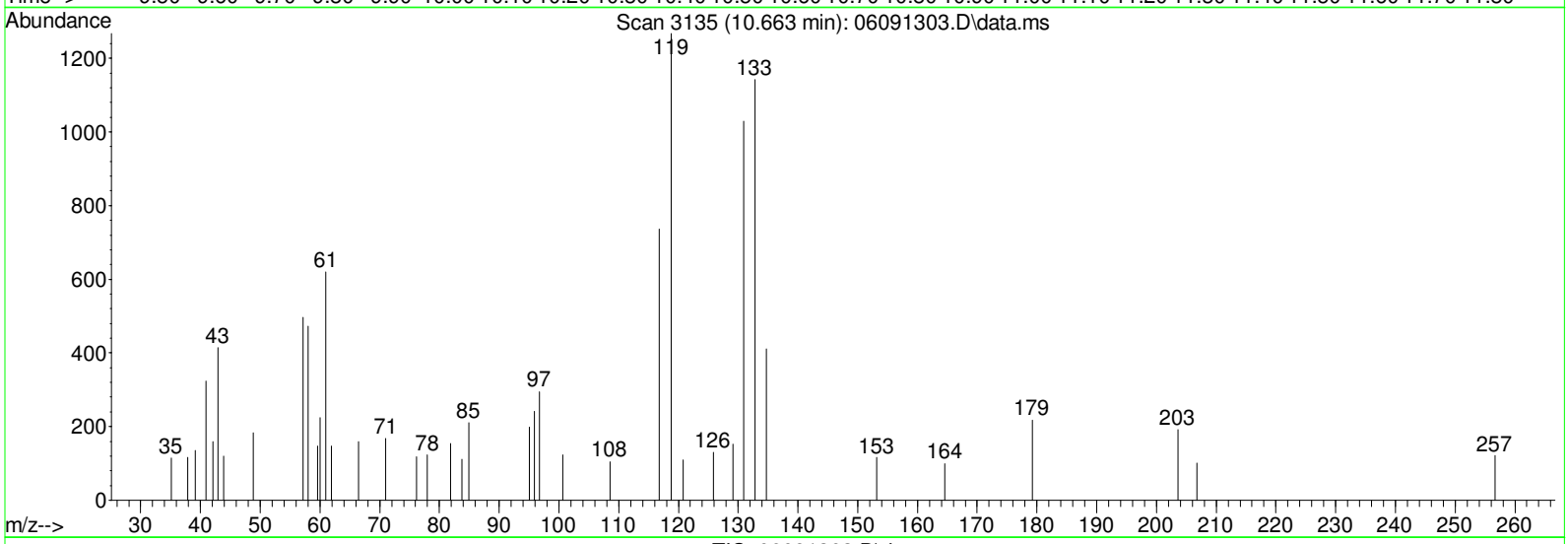
BEFORE
By Alfred at 3:42:05 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(60) 1,1,1,2-Tetrachloroethane (M)

10.663min (-0.002) 1.04 ug/L m

response 22661

Ion	Exp%	Act%
130.80	100	100
132.90	93.10	93.17
118.80	61.00	84.86#
0.00	0.00	0.00

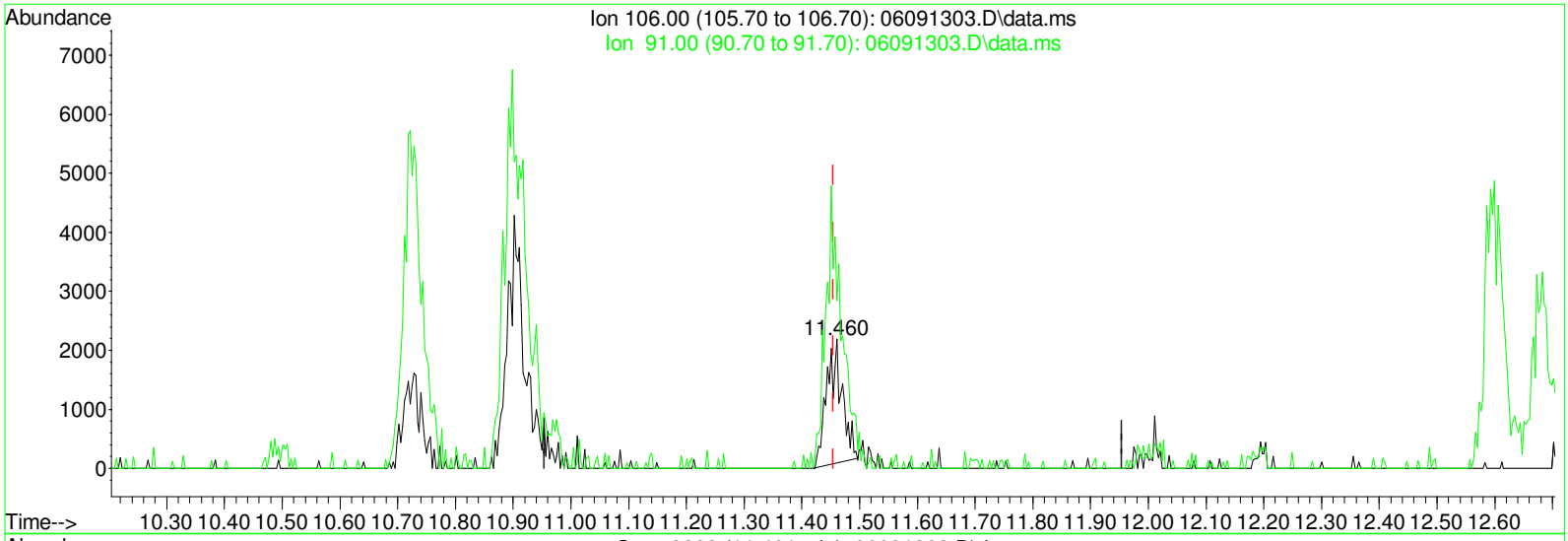
AFTER M1
By Alfred at 3:42:11 PM, 7/3/2013

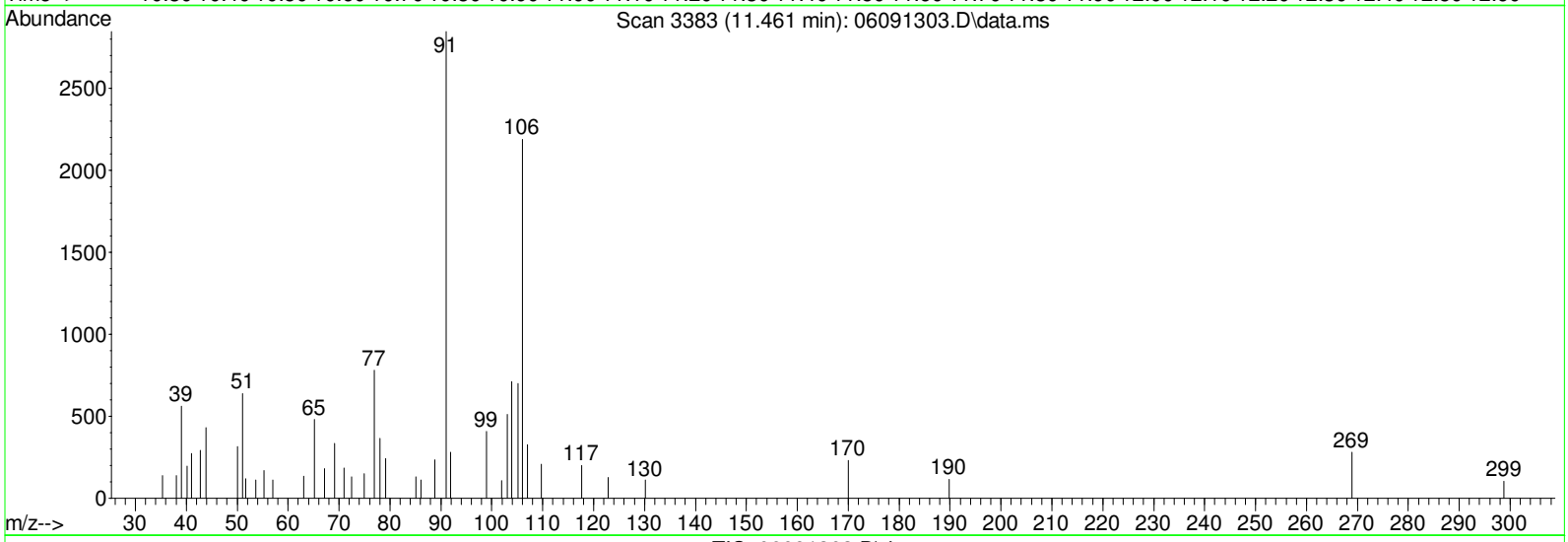
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(62) Xylene (2) (TM, L1)

11.461min (+0.007) 0.93 ug/L

response 38871

Ion	Exp%	Act%
106.00	100	100
91.00	221.60	245.38
0.00	0.00	0.00
0.00	0.00	0.00

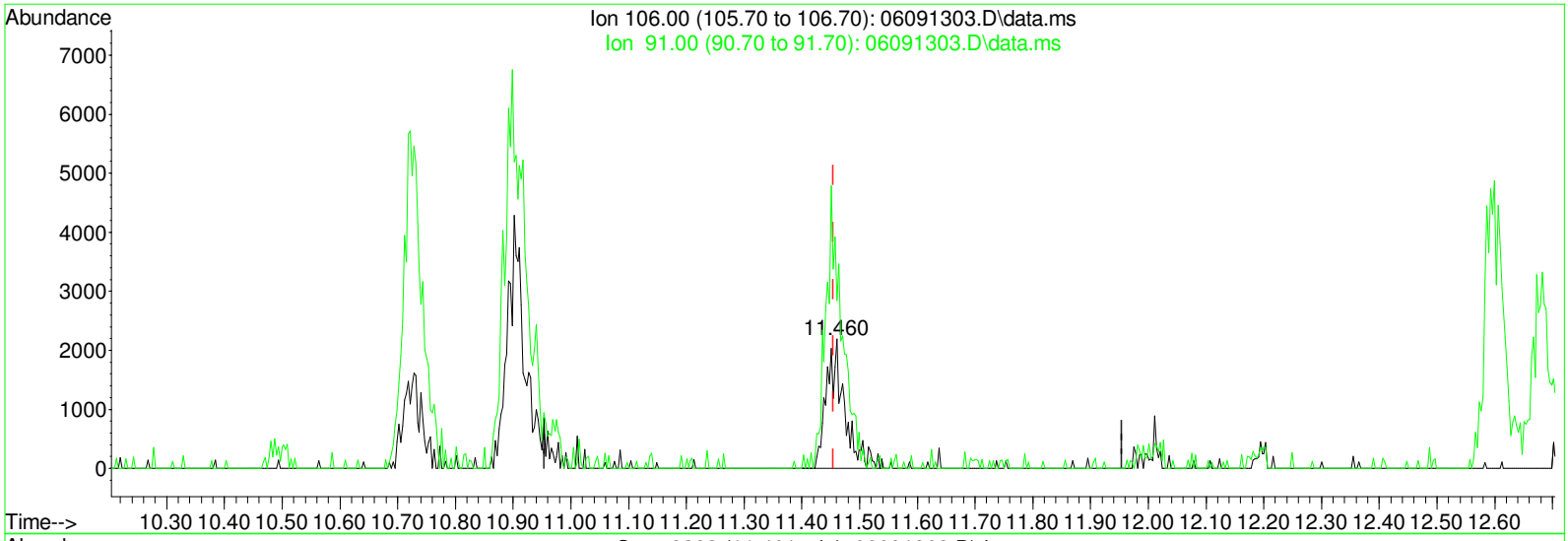
BEFORE

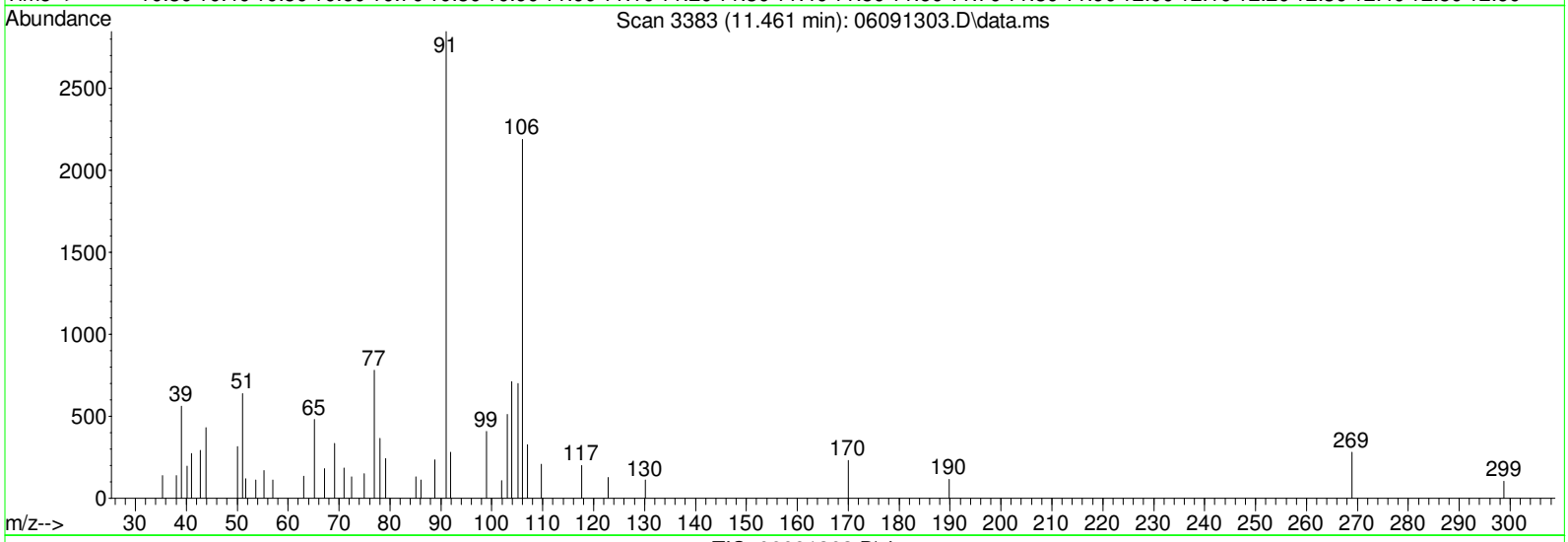
By Alfred at 3:42:18 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Operator: PS
Sample : ICAL VSTD001
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

AFTER M3
By Alfred at 3:42:26 PM, 7/3/2013

(62) Xylene (2) (TM, L1)

11.461min (+0.007) 1.15 ug/L m

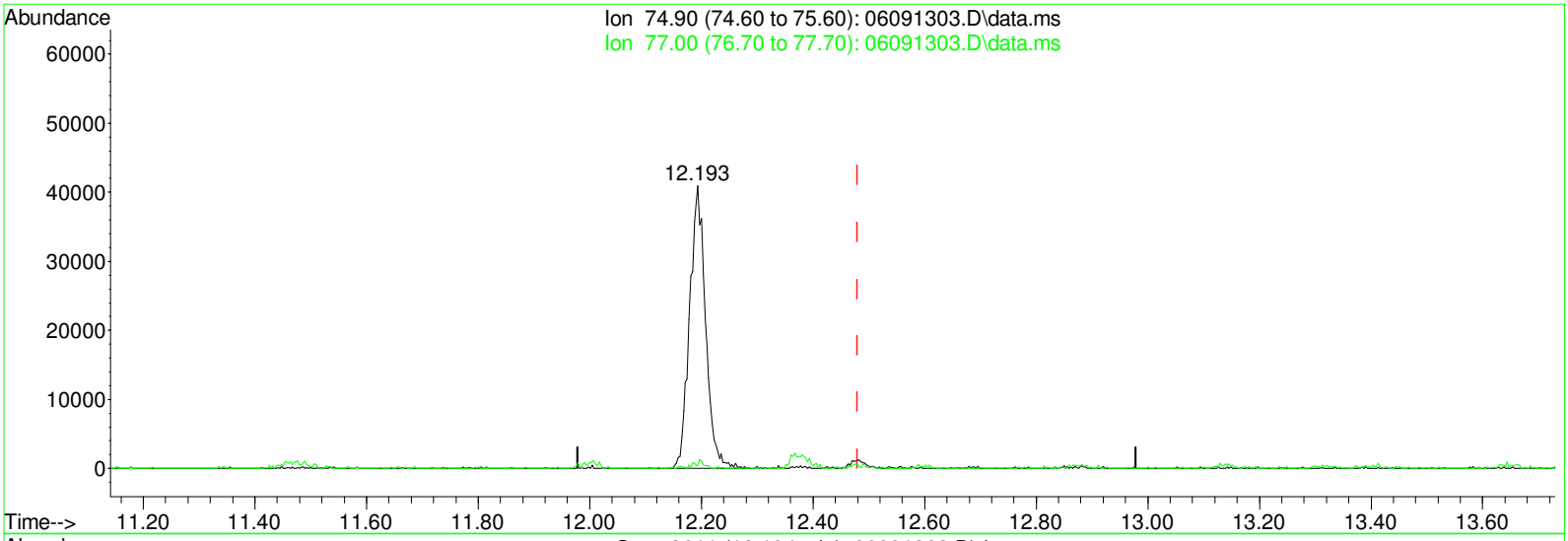
response 47921

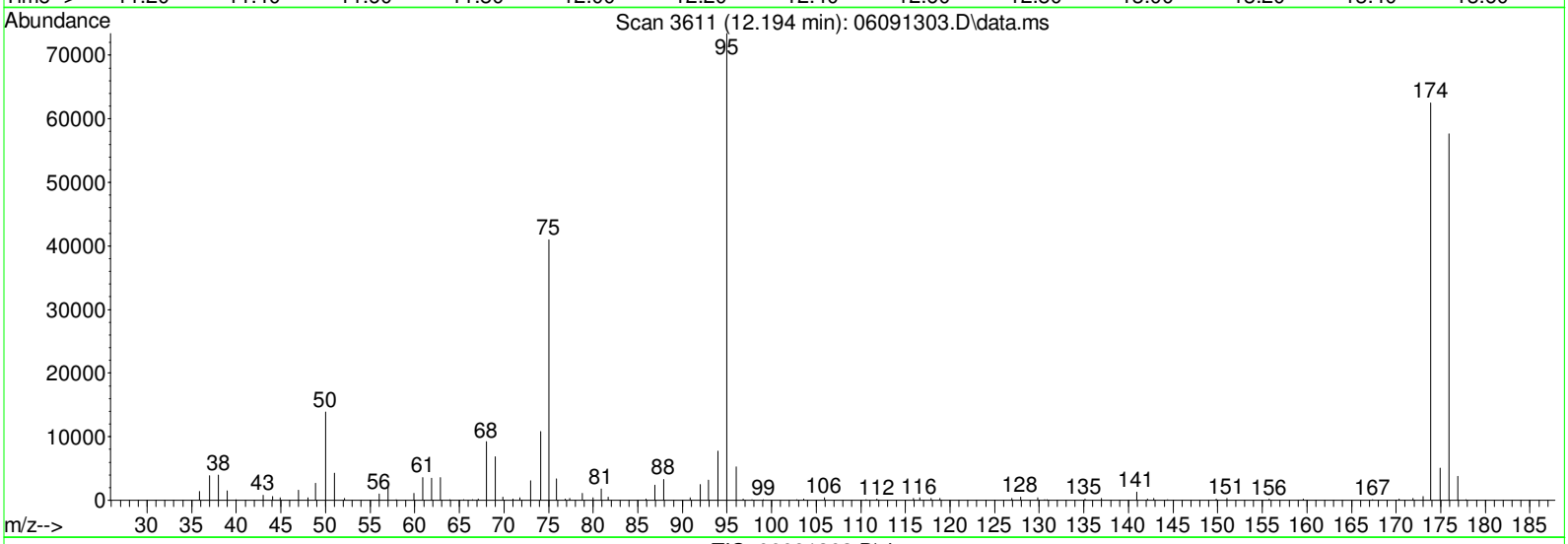
Ion	Exp%	Act%
106.00	100	100
91.00	221.60	199.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(70) 1,2,3-Trichloropropane (M)

12.194min (-0.285) 6.58 ug/L

response 816564

Ion	Exp%	Act%
74.90	100	100
77.00	32.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

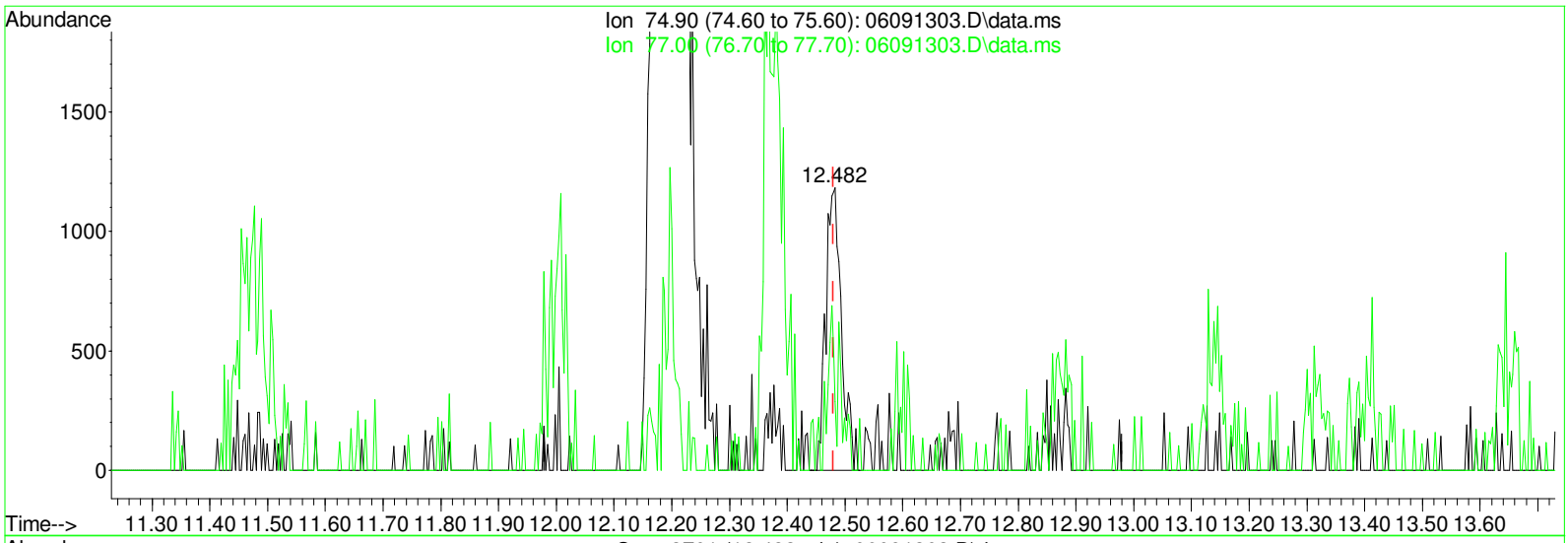
BEFORE
By Alfred at 3:42:35 PM, 7/3/2013

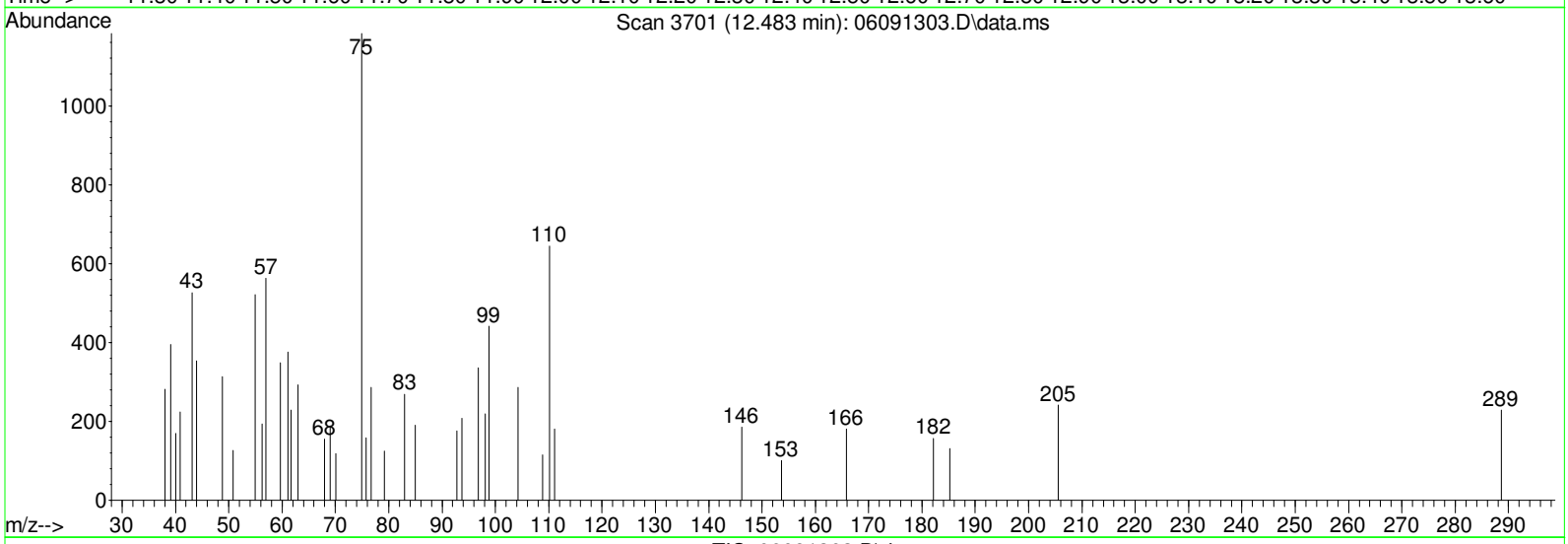
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(70) 1,2,3-Trichloropropane (M)

12.483min (+0.004) 0.18 ug/L m

response 22788

Ion	Exp%	Act%
74.90	100	100
77.00	32.60	44.54
0.00	0.00	0.00
0.00	0.00	0.00

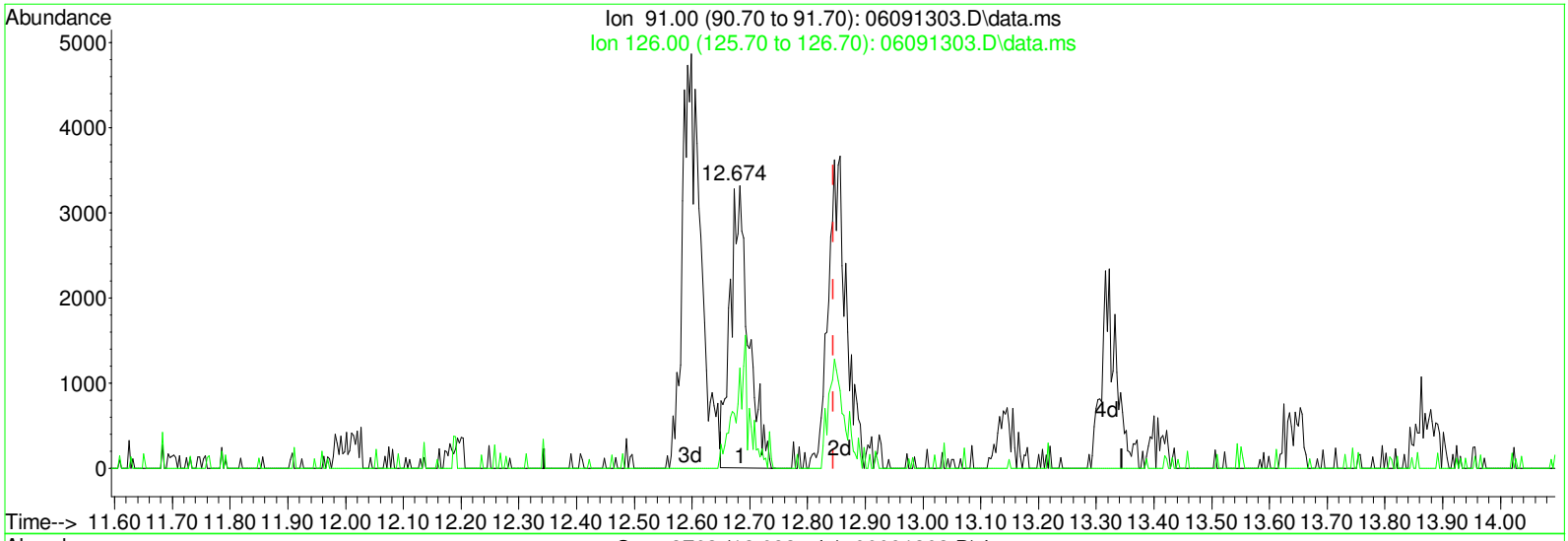
AFTER M2

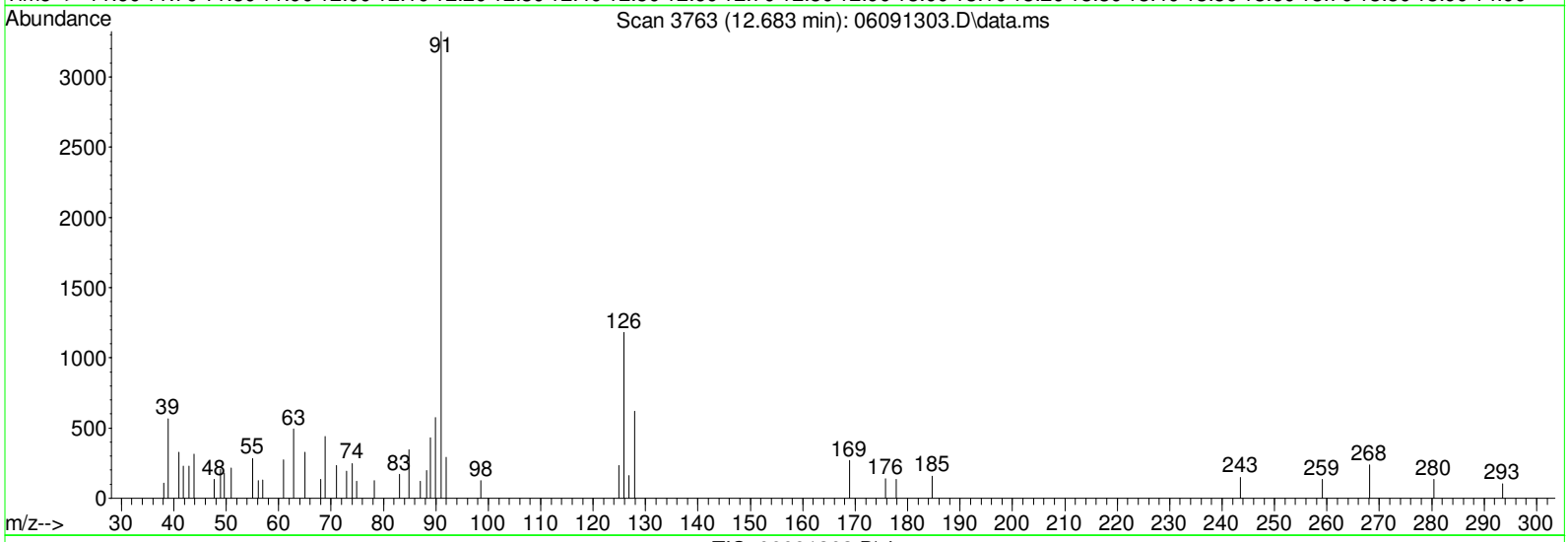
By Alfred at 3:42:43 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Operator: PS
Sample : ICAL VSTD001
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(75) 4-Chlorotoluene (M)

12.684min (-0.160) 0.94 ug/L

response 73106

Ion	Exp%	Act%
91.00	100	100
126.00	28.60	35.11
0.00	0.00	0.00
0.00	0.00	0.00

BEFORE

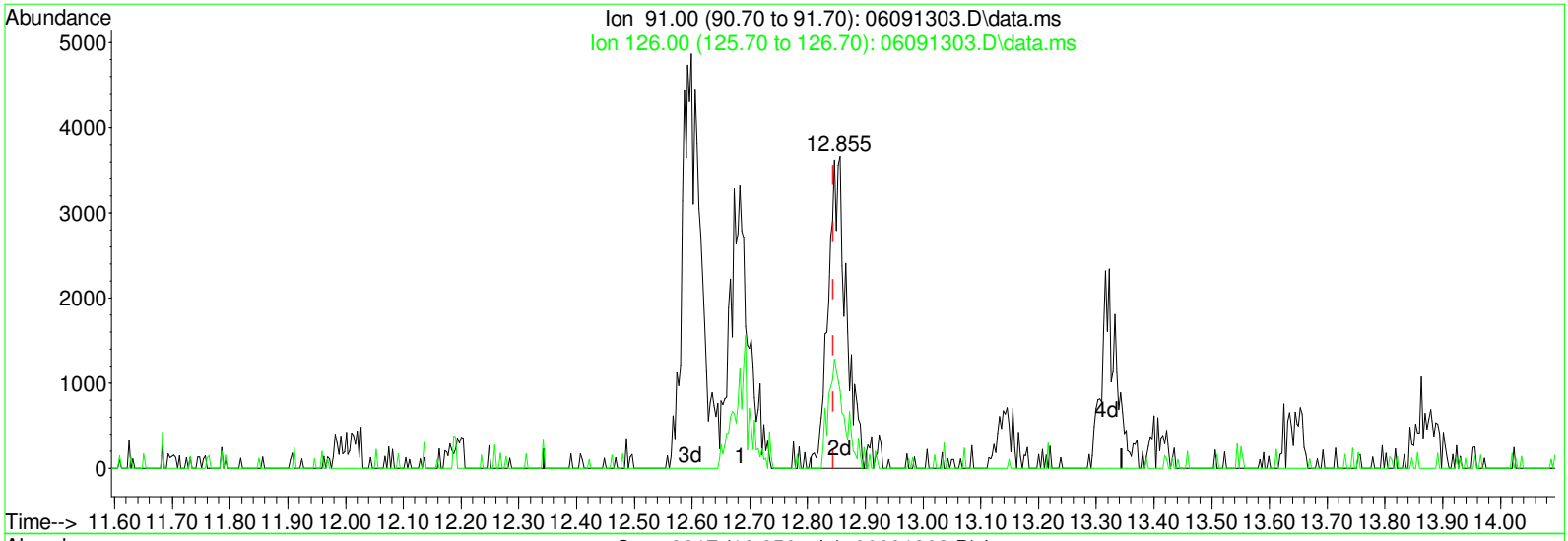
By Alfred at 3:43:17 PM, 7/3/2013

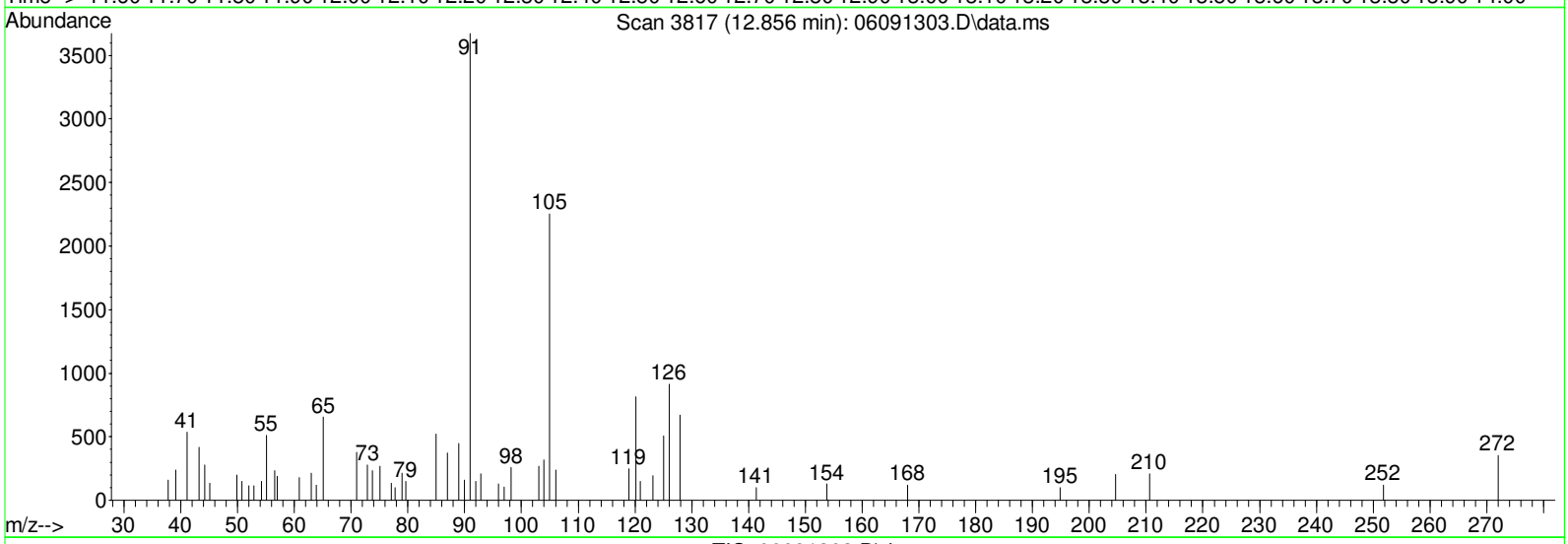
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(75) 4-Chlorotoluene (M)

12.856min (+0.012) 1.03 ug/L m

response 79463

Ion	Exp%	Act%
91.00	100	100
126.00	28.60	32.30
0.00	0.00	0.00
0.00	0.00	0.00

AFTER M2

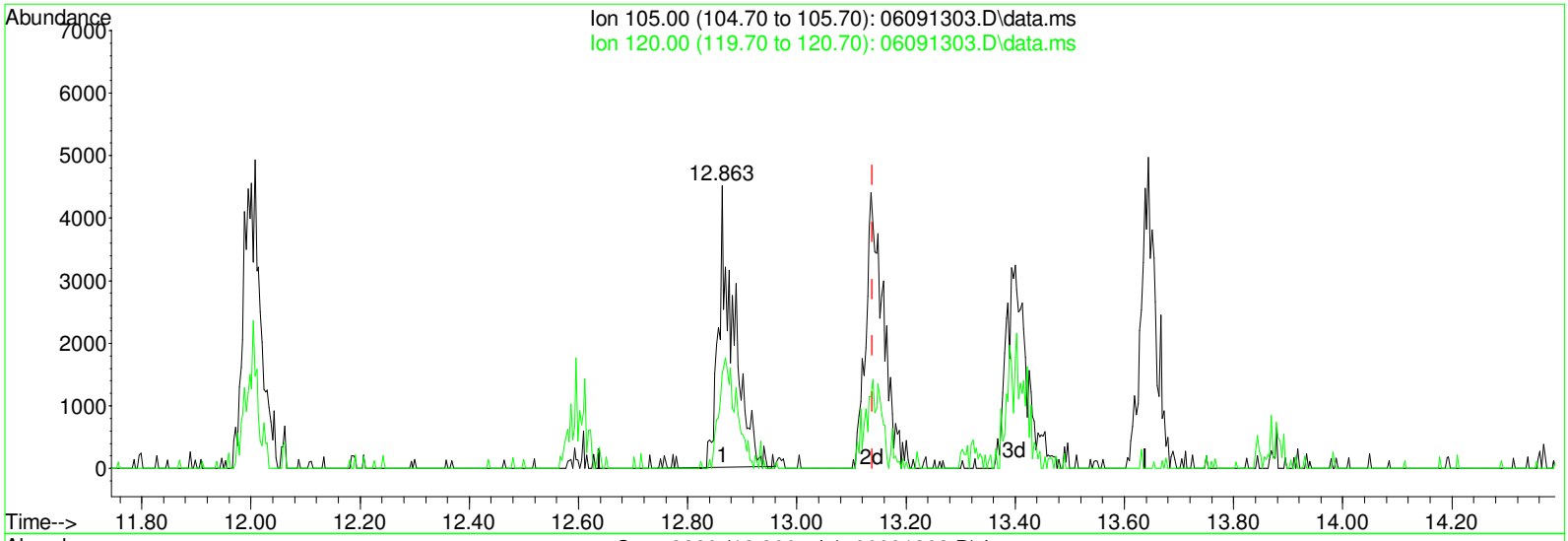
By Alfred at 3:43:25 PM, 7/3/2013

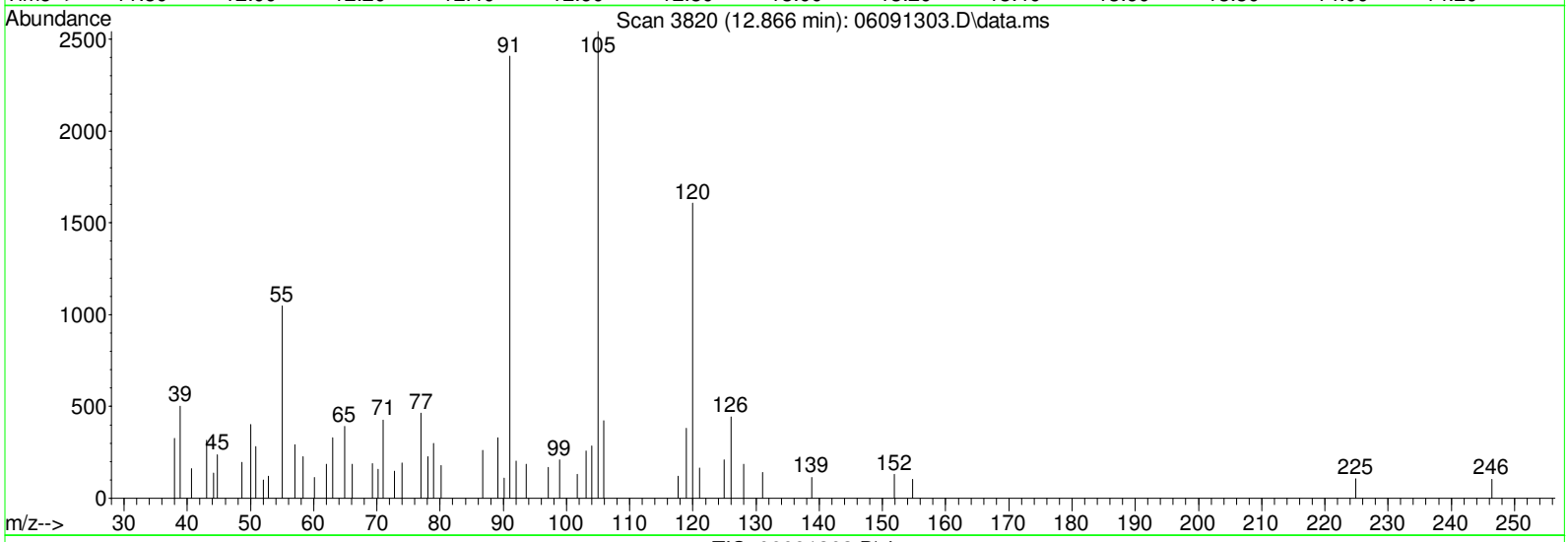
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(77) 1-Ethyl-2-methylbenzene (M)

12.865min (-0.274) 0.92 ug/L

response 88756

Ion	Exp%	Act%
105.00	100	100
120.00	30.30	46.10
0.00	0.00	0.00
0.00	0.00	0.00

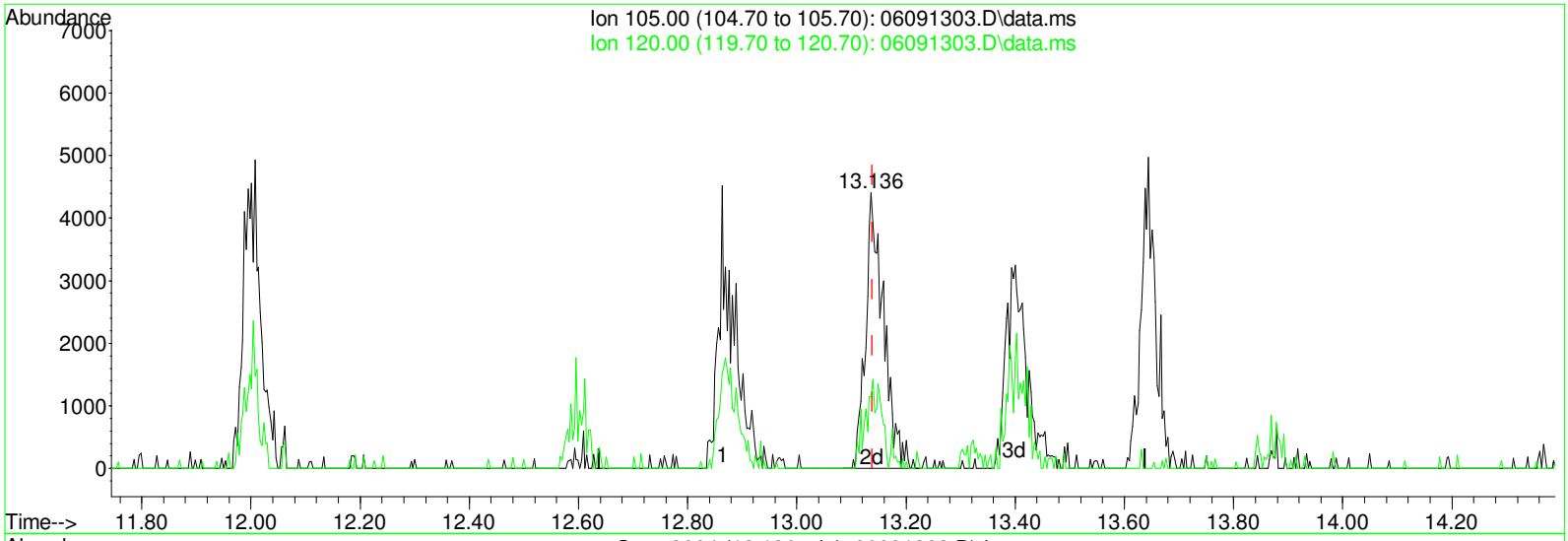
BEFORE

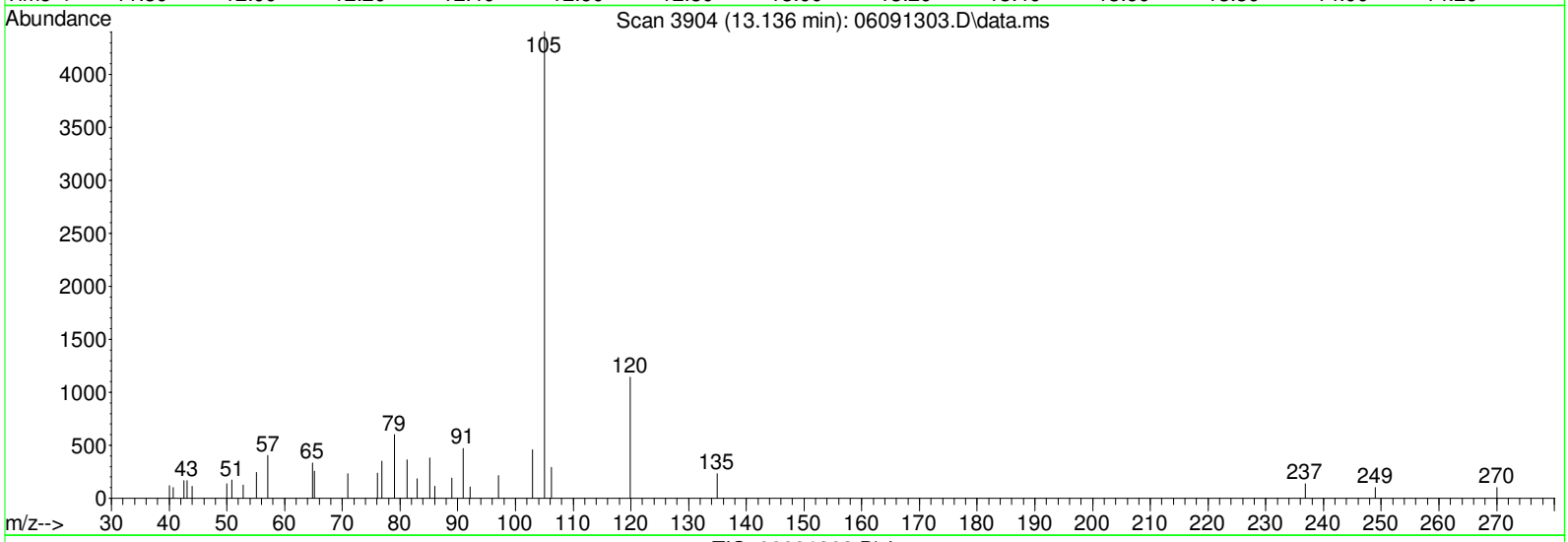
By Alfred at 3:43:30 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm Operator: PS
Sample : ICAL VSTD001 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

AFTER M2
By Alfred at 3:43:46 PM, 7/3/2013

(77) 1-Ethyl-2-methylbenzene (M)

13.136min (-0.003) 1.05 ug/L m

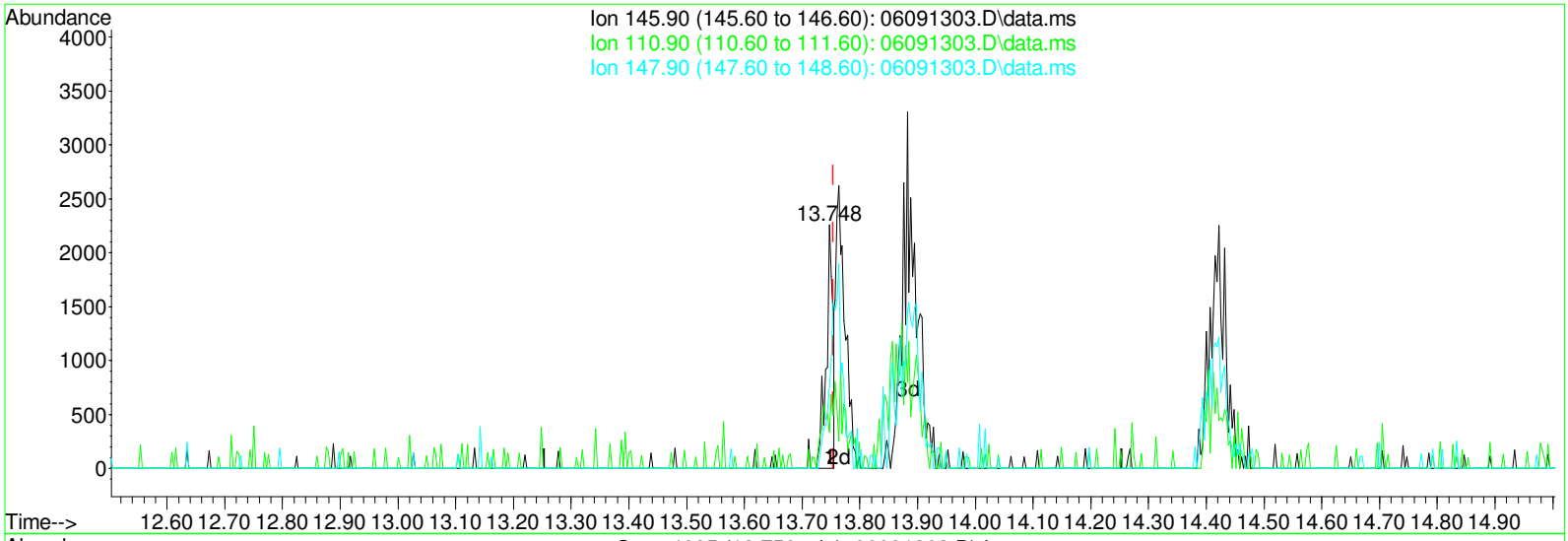
response 100992

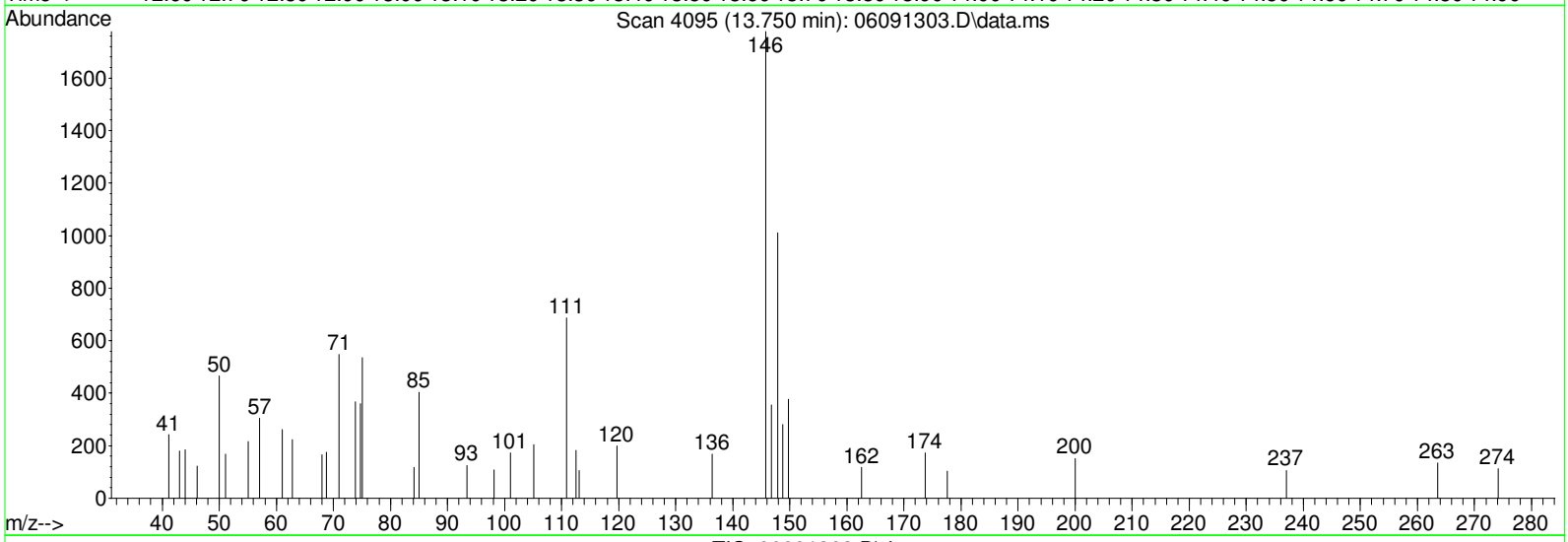
Ion	Exp%	Act%
105.00	100	100
120.00	30.30	40.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Operator: PS
Sample : ICAL VSTD001
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 2

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

BEFORE
By Alfred at 3:43:54 PM, 7/3/2013

(81) 1,3-Dichlorobenzene (M)

13.749min (-0.005) 0.39 ug/L

response 16403

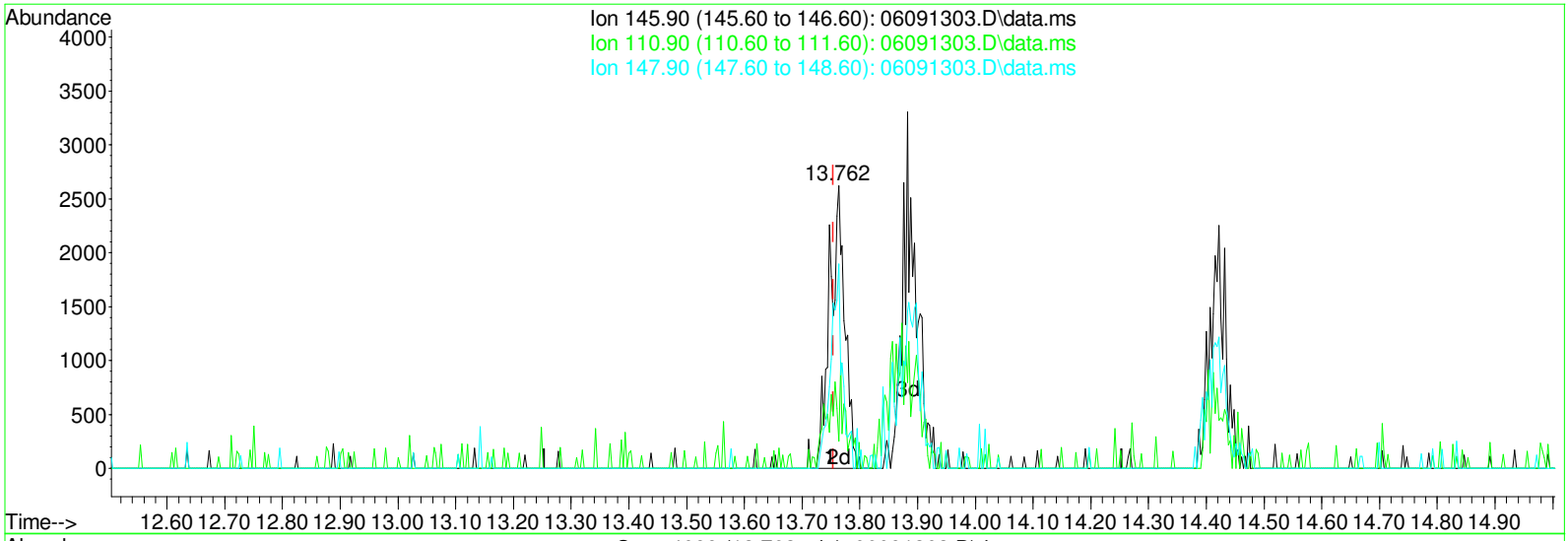
Ion	Exp%	Act%
145.90	100	100
110.90	41.30	0.00#
147.90	62.60	0.00#
0.00	0.00	0.00

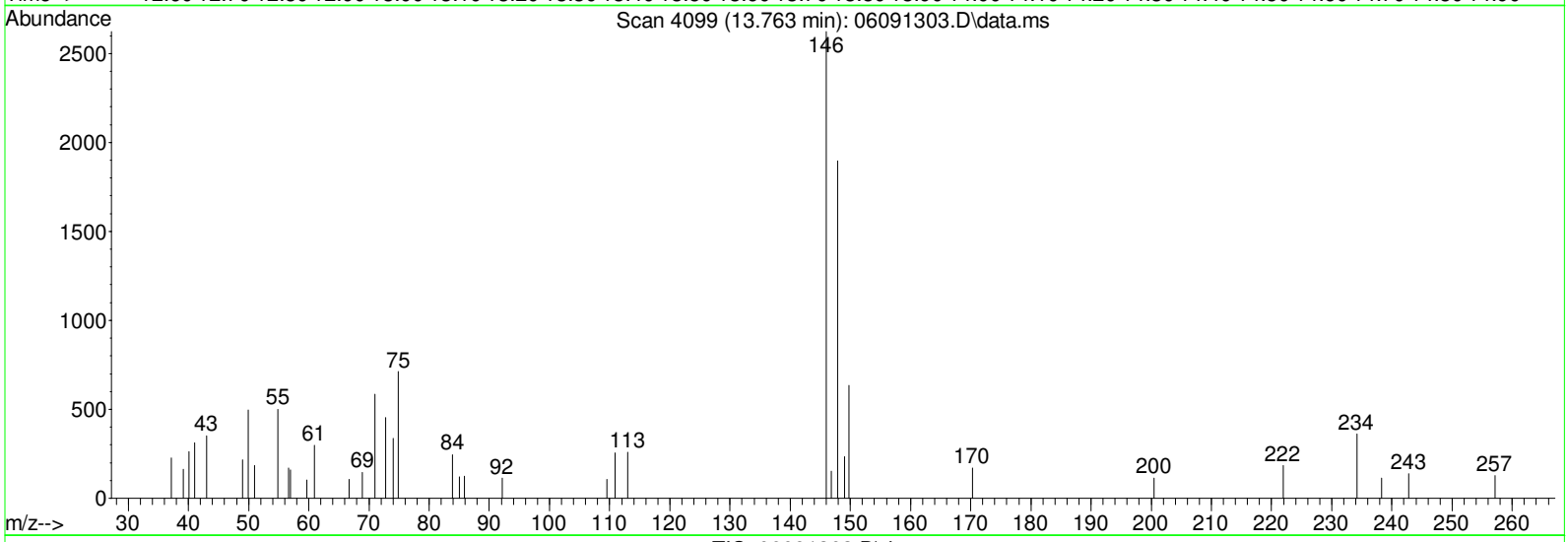
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(81) 1,3-Dichlorobenzene (M)

13.763min (+0.009) 1.13 ug/L m

response 48209

Ion	Exp%	Act%
145.90	100	100
110.90	41.30	0.00#
147.90	62.60	0.00#
0.00	0.00	0.00

AFTER M3

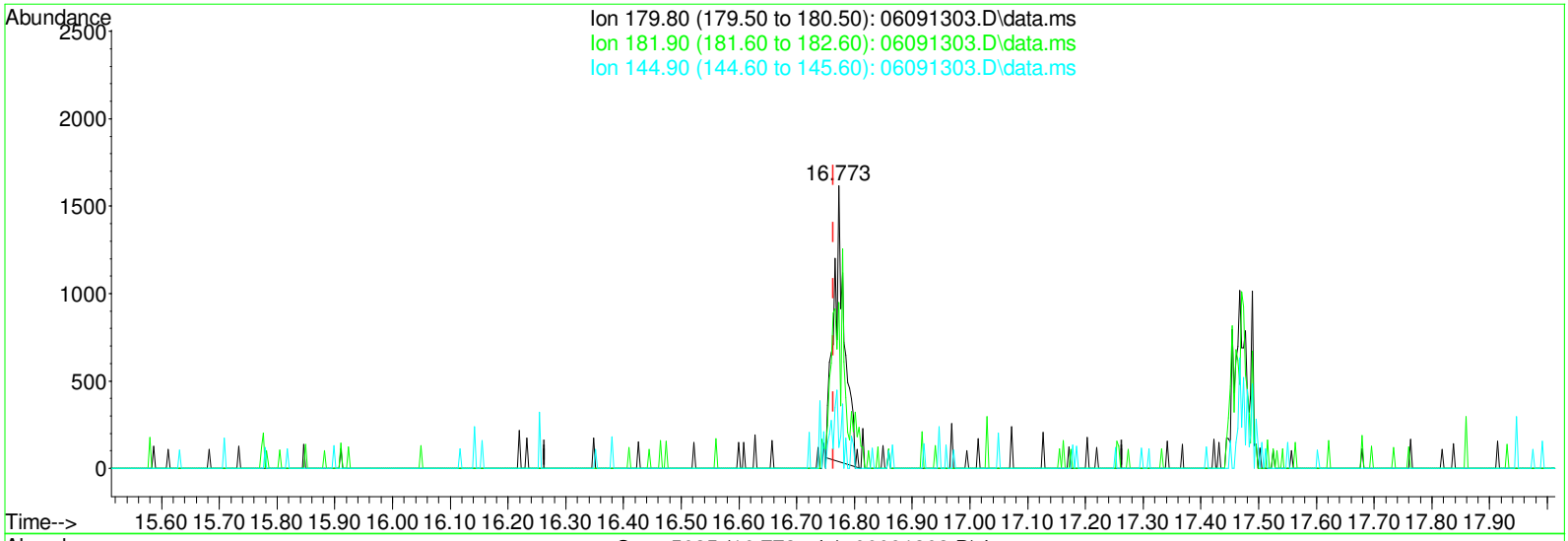
By Alfred at 3:43:58 PM, 7/3/2013

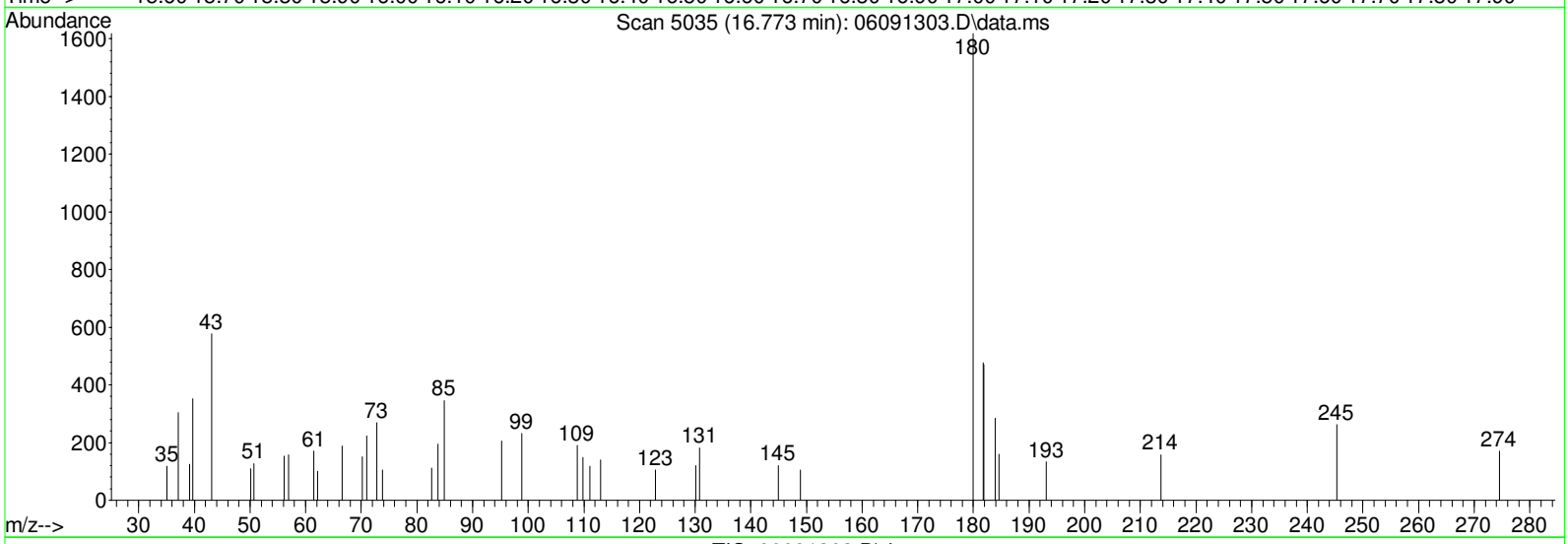
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(86) 1,2,4-Trichlorobenzene (M)

16.774min (+0.011) 1.00 ug/L

response 20237

Ion	Exp%	Act%
179.80	100	100
181.90	95.80	0.00#
144.90	30.20	0.00#
0.00	0.00	0.00

BEFORE

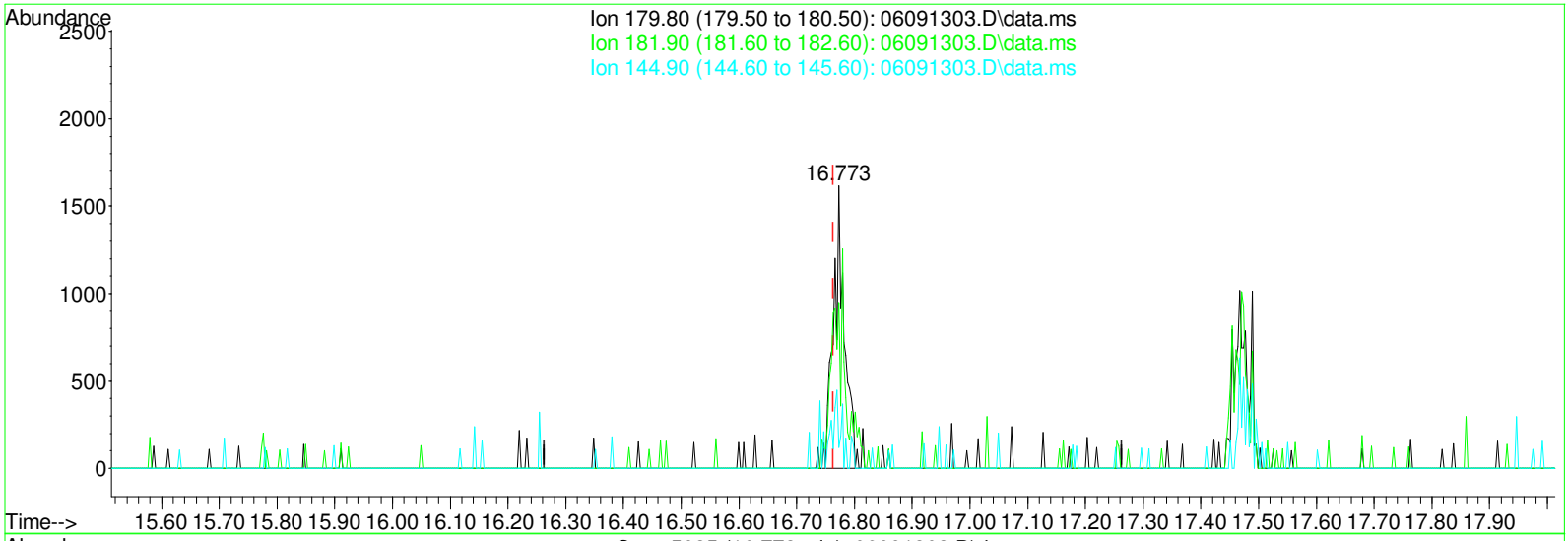
By Alfred at 3:44:04 PM, 7/3/2013

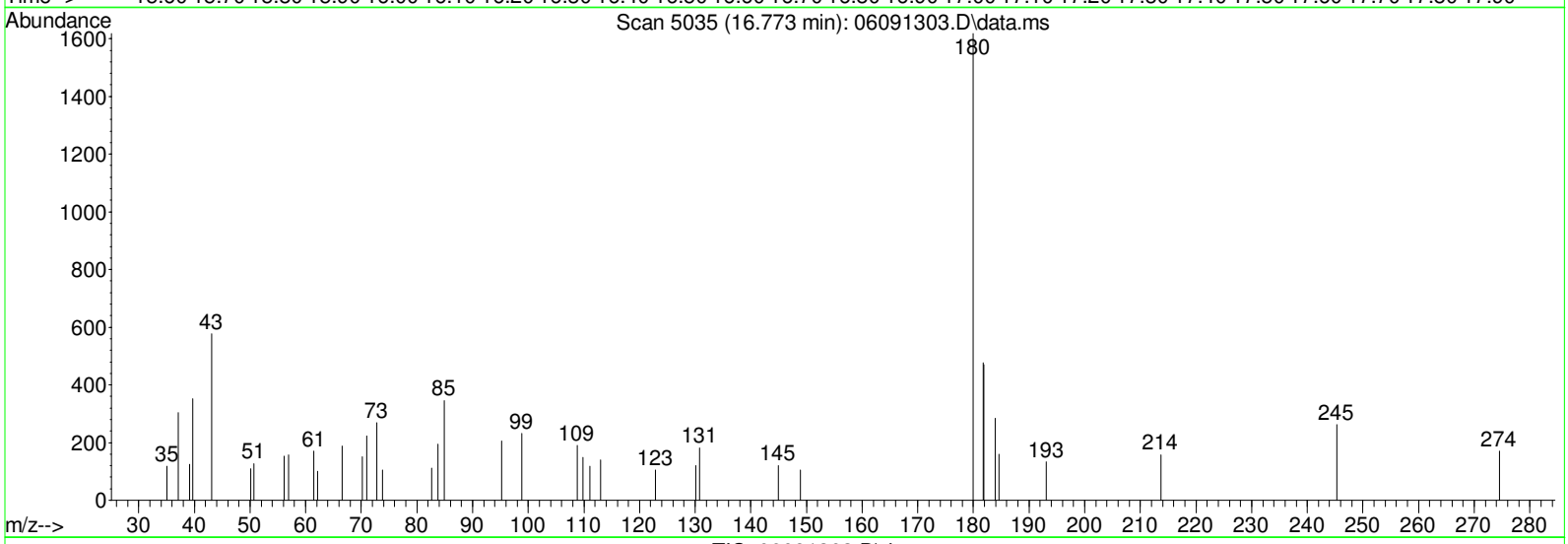
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091303.D
Acq On : 9 Jun 2013 2:01 pm
Sample : ICAL VSTD001
Misc : VOC_W+
ALS Vial : 2

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:28:23 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Mon Jun 10 14:20:54 2013
Response via : Initial Calibration





TIC: 06091303.D\data.ms

(86) 1,2,4-Trichlorobenzene (M)

16.773min (+0.009) 1.08 ug/L m

response 21843

Ion	Exp%	Act%
179.80	100	100
181.90	95.80	0.00#
144.90	30.20	0.00#
0.00	0.00	0.00

AFTER M3

By Alfred at 3:44:09 PM, 7/3/2013

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:09:02 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1866040	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.401	114	3107741	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1695922	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1637236	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	803040	26.87	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 89.57%			
32) 1,2-Dichloroethane-d4	5.729	102	209681	27.17	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 90.57%			
48) Toluene-d8	8.467	98	3753706	29.61	ug/L	-0.01
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.70%			
68) Bromofluorobenzene	12.193	174	1288189	33.62	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 112.07%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.214	85	179406m	6.76	ug/L	
3) Chloromethane	1.349	50	151451	5.93	ug/L	97
4) Vinyl chloride	1.423	62	167850	5.51	ug/L	96
5) 1,3-Butadiene	1.450	39	105659	4.43	ug/L	90
6) Bromomethane	1.669	96	47246	13.46	ug/L	97
7) Chloroethane	1.747	64	82086m	5.67	ug/L	
8) Trichlorofluoromethane	1.947	101	199738	4.99	ug/L	97
9) Isopropyl Alcohol	2.585	45	198852	86.09	ug/L #	61
10) Ethyl Ether	2.190	59	108143	5.04	ug/L	97
11) Acrolein	2.288	56	22377m	5.20	ug/L	
12) Acetone	2.438	43	98654	8.57	ug/L	96
13) Freon-TF	2.400	151	67026	4.67	ug/L #	19
14) 1,1-Dichloroethene	2.389	96	100364	5.64	ug/L	85
15) Methylene Chloride	2.867	84	135529	5.58	ug/L	83
16) Carbon disulfide	2.584	76	710038	9.49	ug/L	96
17) Acrylonitrile	3.141	53	50820	4.06	ug/L #	65
18) MTBE	3.188	73	367988	4.79	ug/L	96
19) Hexane	3.528	57	102299	4.98	ug/L	96
20) trans-1,2-Dichloroethene	3.175	96	132757	5.88	ug/L	87
21) Vinyl acetate	3.812	43	486793	9.69	ug/L	97
22) 1,1-Dichloroethane	3.701	63	221908	5.14	ug/L	92
23) 2-Butanone	4.593	72	37657m	9.56	ug/L	
24) 2,2-Dichloropropane	4.537	77	198505	5.62	ug/L	79
25) cis-1,2-Dichloroethene	4.547	96	140584	5.38	ug/L	91
26) Ethyl Acetate	4.731	45	28163m	6.07	ug/L	
27) Chloroform	5.032	83	194012	4.48	ug/L	88
28) Bromochloromethane	4.881	128	58240	5.59	ug/L #	84
30) Isobutyl alcohol	5.836	43	106917	66.54	ug/L #	86
33) Carbon Tetrachloride	5.493	117	138897	4.62	ug/L	90
34) 1,2-Dichloroethane	5.842	62	173057	4.88	ug/L #	90
35) 1,1,1-Trichloroethane	5.264	97	172481	4.81	ug/L #	47
36) 1,1-Dichloropropene	5.509	110	61497	5.50	ug/L	92
37) 1-Butanol	6.802	56	64686	72.16	ug/L #	47
38) Benzene	5.794	78	518622	5.05	ug/L #	10
39) Trichloroethene	6.731	95	126465m	4.96	ug/L	
40) 1,2-Dichloropropane	7.047	63	117527	4.50	ug/L	90
41) 1,4-Dioxane	7.284	88	20025	54.08	ug/L #	23
42) Bromodichloromethane	7.467	83	158638	4.92	ug/L #	91
43) Dibromomethane	7.204	93	77547	5.27	ug/L #	50
44) 2-Nitropropane	7.802	41	37627	4.98	ug/L #	2
45) 2-Chloroethylvinyl ether	7.949	63	128514	7.70	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:09:02 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

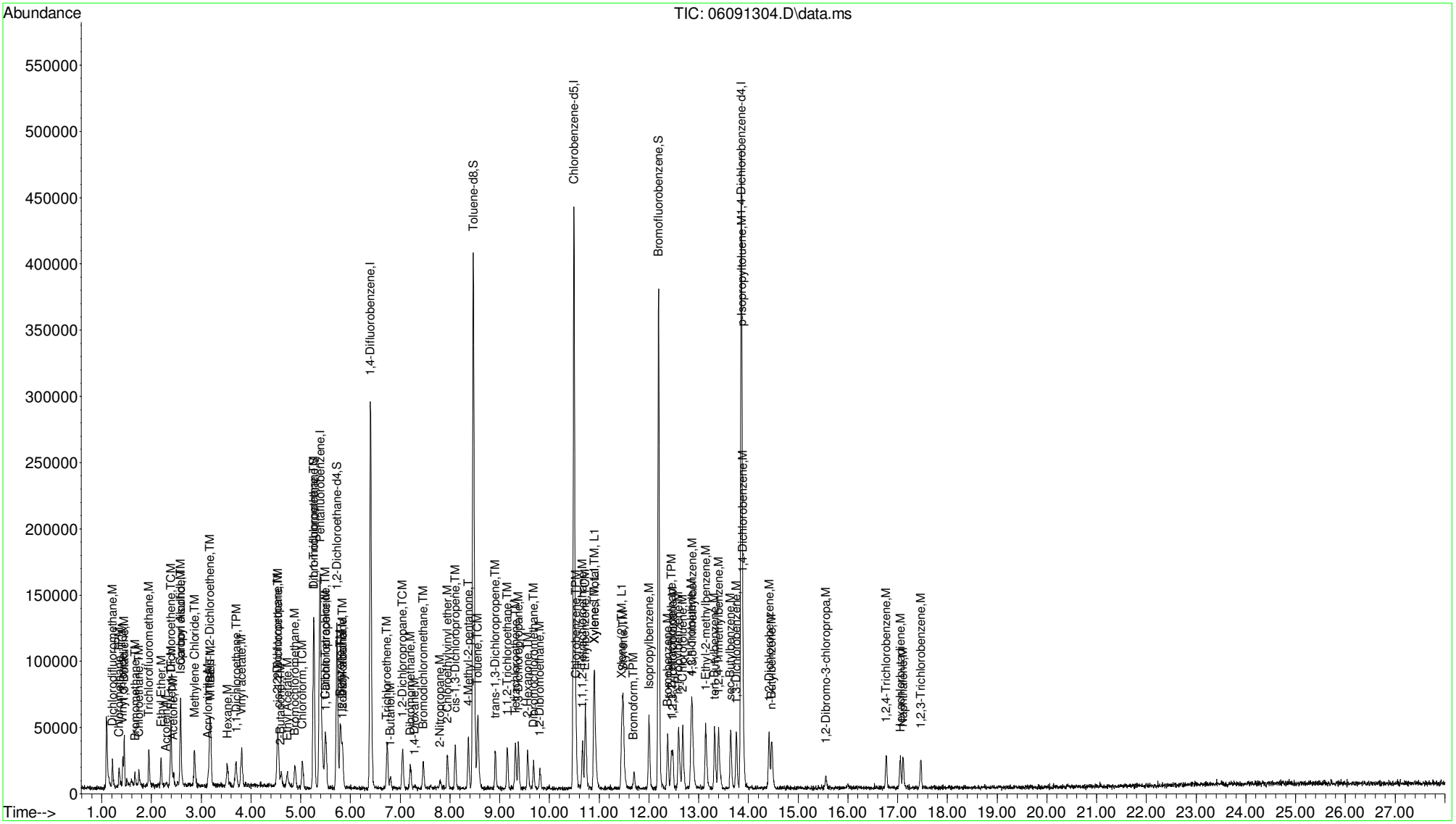
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.368	43	284223	8.71 ug/L	87
47) cis-1,3-Dichloropropene	8.105	75	199401	4.72 ug/L	94
49) Toluene	8.554	92	328574m	5.03 ug/L	
51) trans-1,3-Dichloropropene	8.912	75	181250	4.95 ug/L	97
52) 2-Hexanone	9.561	43	231848m	10.60 ug/L	
53) 1,1,2-Trichloroethane	9.149	83	99834m	5.28 ug/L	
54) 1,3-Dichloropropane	9.374	76	207422	5.07 ug/L	95
55) Tetrachloroethene	9.315	164	92375	5.85 ug/L	95
56) Dibromochloromethane	9.680	129	114856	4.82 ug/L #	60
57) 1,2-Dibromoethane	9.807	107	115455	5.12 ug/L #	60
58) Chlorobenzene	10.534	112	329158	5.49 ug/L	97
59) Ethylbenzene	10.722	91	592909	5.19 ug/L	94
60) 1,1,1,2-Tetrachloroethane	10.664	131	103009m	4.64 ug/L	
61) Xylene	10.903	106	435511	10.43 ug/L	99
62) Xylene (2)	11.458	106	220954	5.51 ug/L	89
63) Xylenes, Total	10.903	106	656465m	15.93 ug/L #	
64) Styrene	11.485	104	387790	5.20 ug/L	100
65) Isopropylbenzene	12.000	105	489982	5.47 ug/L	98
66) Bromoform	11.693	173	70762	4.57 ug/L #	91
67) 1,1,2,2-Tetrachloroethane	12.452	83	155702	5.01 ug/L #	91
70) 1,2,3-Trichloropropane	12.480	75	124206m	4.22 ug/L	
71) n-Propylbenzene	12.595	91	533531	4.88 ug/L	92
72) Bromobenzene	12.376	156	143160	5.05 ug/L #	93
73) 1,3,5-Trimethylbenzene	12.869	105	425010	4.81 ug/L	99
74) 2-Chlorotoluene	12.678	91	370991	4.77 ug/L	97
75) 4-Chlorotoluene	12.849	91	401699	4.47 ug/L	92
76) tert-Butylbenzene	13.320	119	287826	4.75 ug/L	90
77) 1-Ethyl-2-methylbenzene	13.140	105	456480	4.30 ug/L	98
78) 1,2,4-Trimethylbenzene	13.399	105	403366	4.38 ug/L	97
79) sec-Butylbenzene	13.639	105	425092	4.99 ug/L	99
80) p-Isopropyltoluene	13.870	119	336285	4.69 ug/L	89
81) 1,3-Dichlorobenzene	13.759	146	239583	5.26 ug/L	97
82) 1,4-Dichlorobenzene	13.886	146	249924	4.77 ug/L	94
83) n-Butylbenzene	14.467	91	292475	4.50 ug/L	97
84) 1,2-Dichlorobenzene	14.417	146	217956	4.82 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.560	75	23875m	3.76 ug/L	
86) 1,2,4-Trichlorobenzene	16.767	180	92439	4.38 ug/L	95
87) Hexachlorbutadiene	17.058	225	56389	6.31 ug/L #	78
88) Naphthalene	17.105	128	244612	4.09 ug/L #	76
89) 1,2,3-Trichlorobenzene	17.471	180	81571	4.55 ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:09:02 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1866040	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.401	114	3107741	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1695922	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1637236	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	803040	26.87	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 89.57%			
32) 1,2-Dichloroethane-d4	5.729	102	209681	27.17	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 90.57%			
48) Toluene-d8	8.467	98	3753706	29.61	ug/L	-0.01
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.70%			
68) Bromofluorobenzene	12.193	174	1288189	33.62	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 112.07%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.215	85	149827	5.65	ug/L	94
3) Chloromethane	1.349	50	151451	5.93	ug/L	97
4) Vinyl chloride	1.423	62	167850	5.51	ug/L	96
5) 1,3-Butadiene	1.450	39	105659	4.43	ug/L	90
6) Bromomethane	1.669	96	47246	13.46	ug/L	97
7) Chloroethane	1.748	64	78017	5.39	ug/L	90
8) Trichlorofluoromethane	1.947	101	199738	4.99	ug/L	97
9) Isopropyl Alcohol	2.585	45	198852	86.09	ug/L #	61
10) Ethyl Ether	2.190	59	108143	5.04	ug/L	97
11) Acrolein	2.290	56	20218	4.70	ug/L #	10
12) Acetone	2.438	43	98654	8.57	ug/L	96
13) Freon-TF	2.400	151	67026	4.67	ug/L #	19
14) 1,1-Dichloroethene	2.389	96	100364	5.64	ug/L	85
15) Methylene Chloride	2.867	84	135529	5.58	ug/L	83
16) Carbon disulfide	2.584	76	710038	9.49	ug/L	96
17) Acrylonitrile	3.141	53	50820	4.06	ug/L #	65
18) MTBE	3.188	73	367988	4.79	ug/L	96
19) Hexane	3.528	57	102299	4.98	ug/L	96
20) trans-1,2-Dichloroethene	3.175	96	132757	5.88	ug/L	87
21) Vinyl acetate	3.812	43	486793	9.69	ug/L	97
22) 1,1-Dichloroethane	3.701	63	221908	5.14	ug/L	92
24) 2,2-Dichloropropane	4.537	77	198505	5.62	ug/L	79
25) cis-1,2-Dichloroethene	4.547	96	140584	5.38	ug/L	91
27) Chloroform	5.032	83	194012	4.48	ug/L	88
28) Bromochloromethane	4.881	128	58240	5.59	ug/L #	84
30) Isobutyl alcohol	5.836	43	106917	66.54	ug/L #	86
33) Carbon Tetrachloride	5.493	117	138897	4.62	ug/L	90
34) 1,2-Dichloroethane	5.842	62	173057	4.88	ug/L #	90
35) 1,1,1-Trichloroethane	5.264	97	172481	4.81	ug/L #	47
36) 1,1-Dichloropropene	5.509	110	61497	5.50	ug/L	92
37) 1-Butanol	6.802	56	64686	72.16	ug/L #	47
38) Benzene	5.794	78	518622	5.05	ug/L #	10
39) Trichloroethene	6.733	95	121299	4.75	ug/L	89
40) 1,2-Dichloropropane	7.047	63	117527	4.50	ug/L	90
41) 1,4-Dioxane	7.284	88	20025	54.08	ug/L #	23
42) Bromodichloromethane	7.467	83	158638	4.92	ug/L #	91
43) Dibromomethane	7.204	93	77547	5.27	ug/L #	50
44) 2-Nitropropane	7.802	41	37627	4.98	ug/L #	2
45) 2-Chloroethylvinyl ether	7.949	63	128514	7.70	ug/L	96
46) 4-Methyl-2-pentanone	8.368	43	284223	8.71	ug/L	87
47) cis-1,3-Dichloropropene	8.105	75	199401	4.72	ug/L	94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

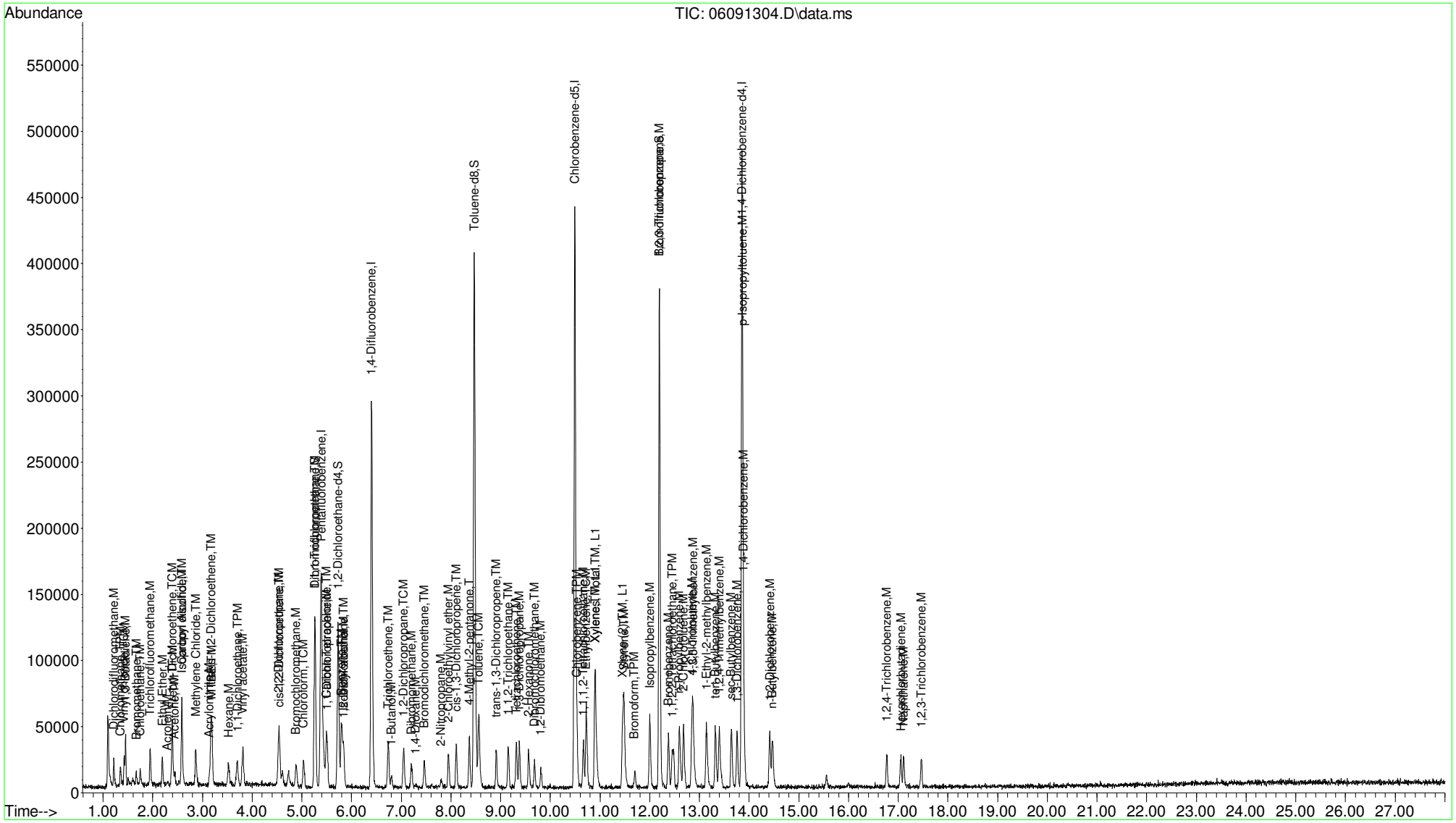
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Toluene	8.555	92	149313	2.29 ug/L #	1
51) trans-1,3-Dichloropropene	8.912	75	181250	4.95 ug/L	97
52) 2-Hexanone	9.562	43	214133	9.79 ug/L	94
53) 1,1,2-Trichloroethane	9.152	83	93669	4.95 ug/L	92
54) 1,3-Dichloropropane	9.374	76	207422	5.07 ug/L	95
55) Tetrachloroethene	9.315	164	92375	5.85 ug/L	95
56) Dibromochloromethane	9.680	129	114856	4.82 ug/L #	60
57) 1,2-Dibromoethane	9.807	107	115455	5.12 ug/L #	60
58) Chlorobenzene	10.534	112	329158	5.49 ug/L	97
59) Ethylbenzene	10.722	91	592909	5.19 ug/L	94
60) 1,1,1,2-Tetrachloroethane	10.666	131	99983	4.50 ug/L #	66
61) Xylene	10.903	106	435511	10.43 ug/L	99
62) Xylene (2)	11.458	106	220954	5.51 ug/L	89
63) Xylenes, Total	10.903	106	656465m	15.93 ug/L #	
64) Styrene	11.485	104	387790	5.20 ug/L	100
65) Isopropylbenzene	12.000	105	489982	5.47 ug/L	98
66) Bromoform	11.693	173	70762	4.57 ug/L #	91
67) 1,1,2,2-Tetrachloroethane	12.452	83	155702	5.01 ug/L #	91
70) 1,2,3-Trichloropropane	12.193	75	825680	28.08 ug/L #	42
71) n-Propylbenzene	12.595	91	533531	4.88 ug/L	92
72) Bromobenzene	12.376	156	143160	5.05 ug/L #	93
73) 1,3,5-Trimethylbenzene	12.869	105	425010	4.81 ug/L	99
74) 2-Chlorotoluene	12.678	91	370991	4.77 ug/L	97
75) 4-Chlorotoluene	12.849	91	401699	4.47 ug/L	92
76) tert-Butylbenzene	13.320	119	287826	4.75 ug/L	90
77) 1-Ethyl-2-methylbenzene	13.140	105	456480	4.30 ug/L	98
78) 1,2,4-Trimethylbenzene	13.399	105	403366	4.38 ug/L	97
79) sec-Butylbenzene	13.639	105	425092	4.99 ug/L	99
80) p-Isopropyltoluene	13.870	119	336285	4.69 ug/L	89
81) 1,3-Dichlorobenzene	13.759	146	239583	5.26 ug/L	97
82) 1,4-Dichlorobenzene	13.886	146	249924	4.77 ug/L	94
83) n-Butylbenzene	14.467	91	292475	4.50 ug/L	97
84) 1,2-Dichlorobenzene	14.417	146	217956	4.82 ug/L	97
86) 1,2,4-Trichlorobenzene	16.767	180	92439	4.38 ug/L	95
87) Hexachlorbutadiene	17.058	225	56389	6.31 ug/L #	78
88) Naphthalene	17.105	128	244612	4.09 ug/L #	76
89) 1,2,3-Trichlorobenzene	17.471	180	81571	4.55 ug/L	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

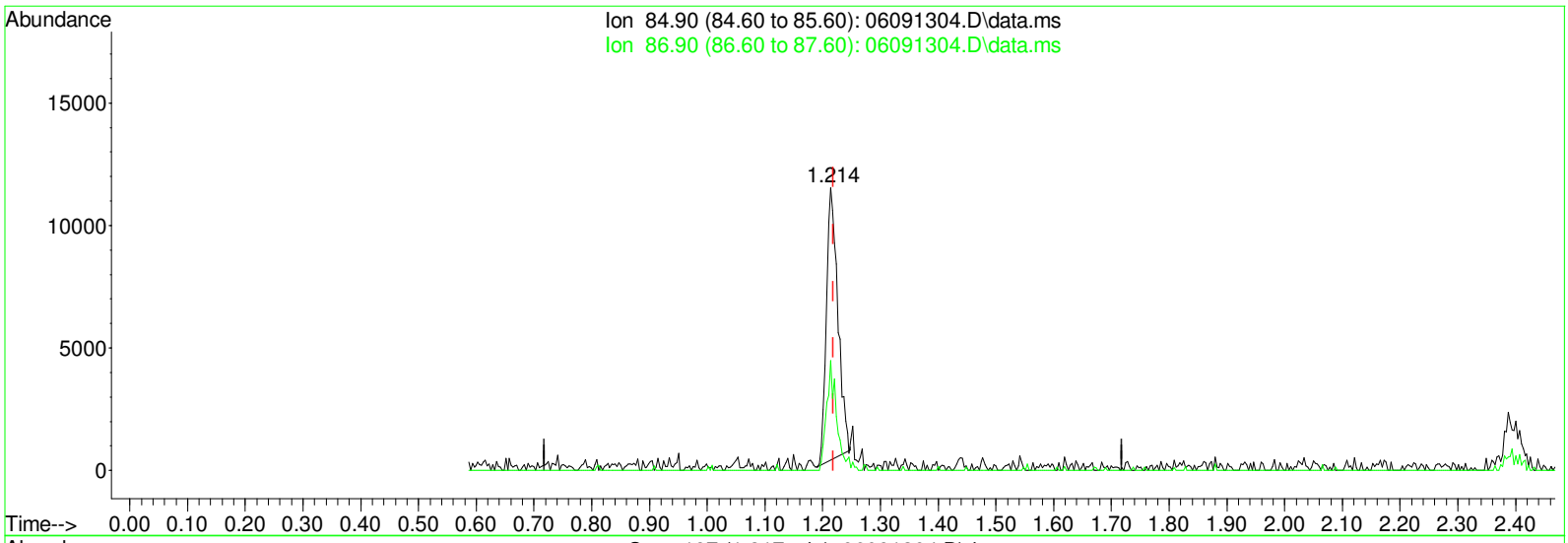
Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

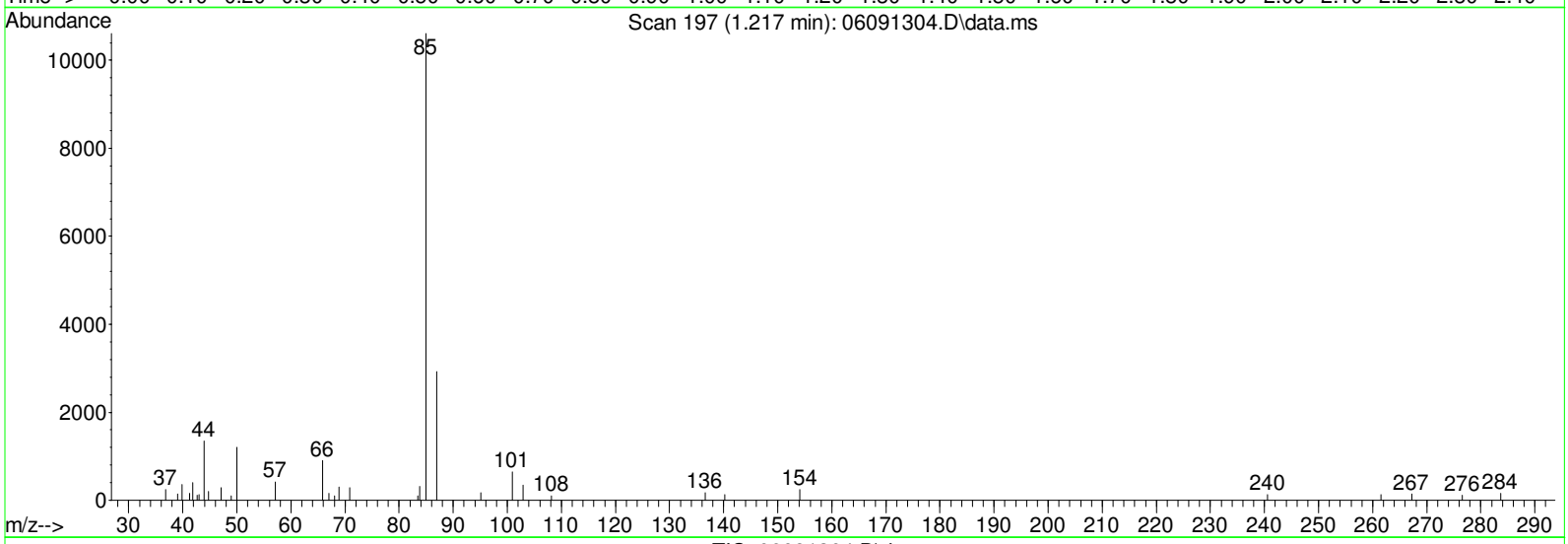


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Operator: PS
Sample : ICAL VSTD005
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

BEFORE
By Alfred at 3:44:20 PM, 7/3/2013

(2) Dichlorodifluoromethane (M)

1.215min (-0.003) 5.65 ug/L

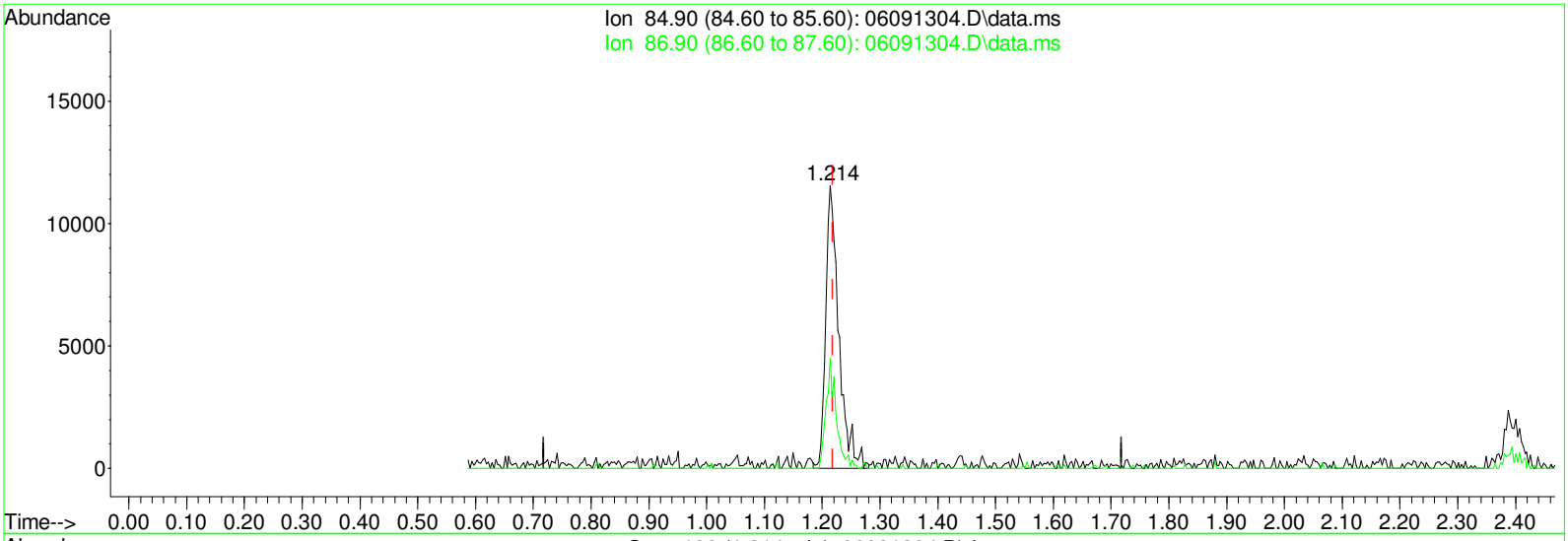
response 149827

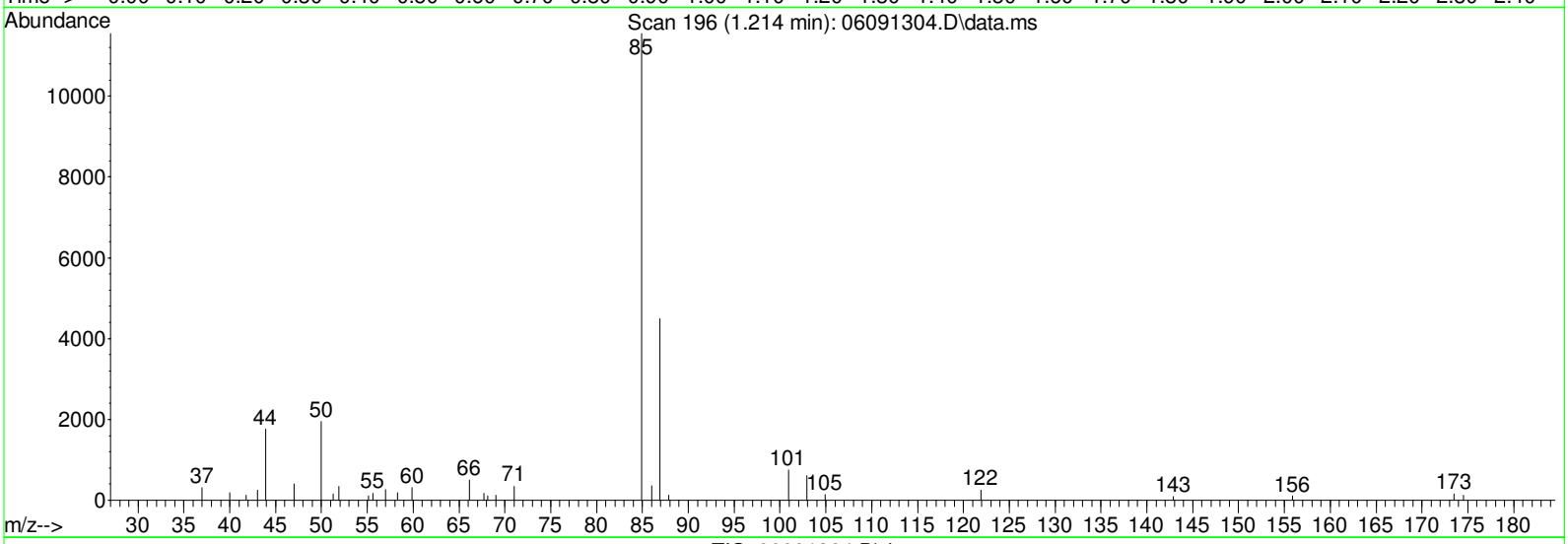
Ion	Exp%	Act%
84.90	100	100
86.90	31.20	34.46
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

AFTER M3
By Alfred at 3:44:25 PM, 7/3/2013

(2) Dichlorodifluoromethane (M)

1.214min (-0.004) 6.76 ug/L m

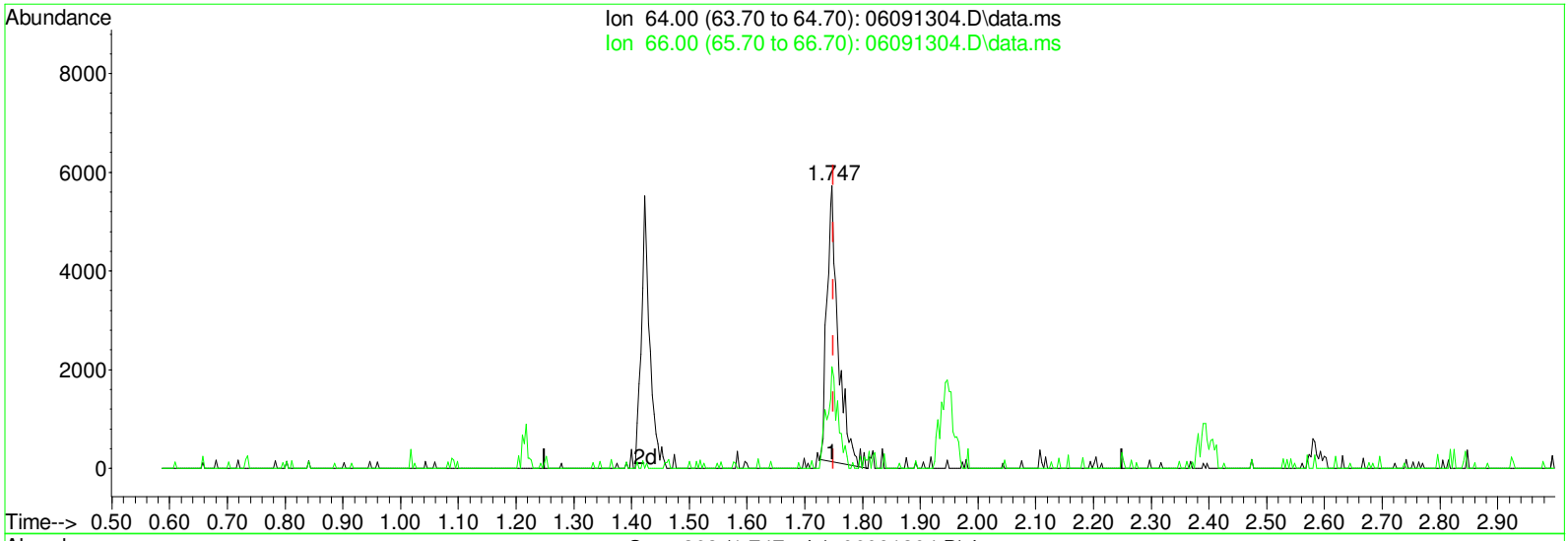
response 179406

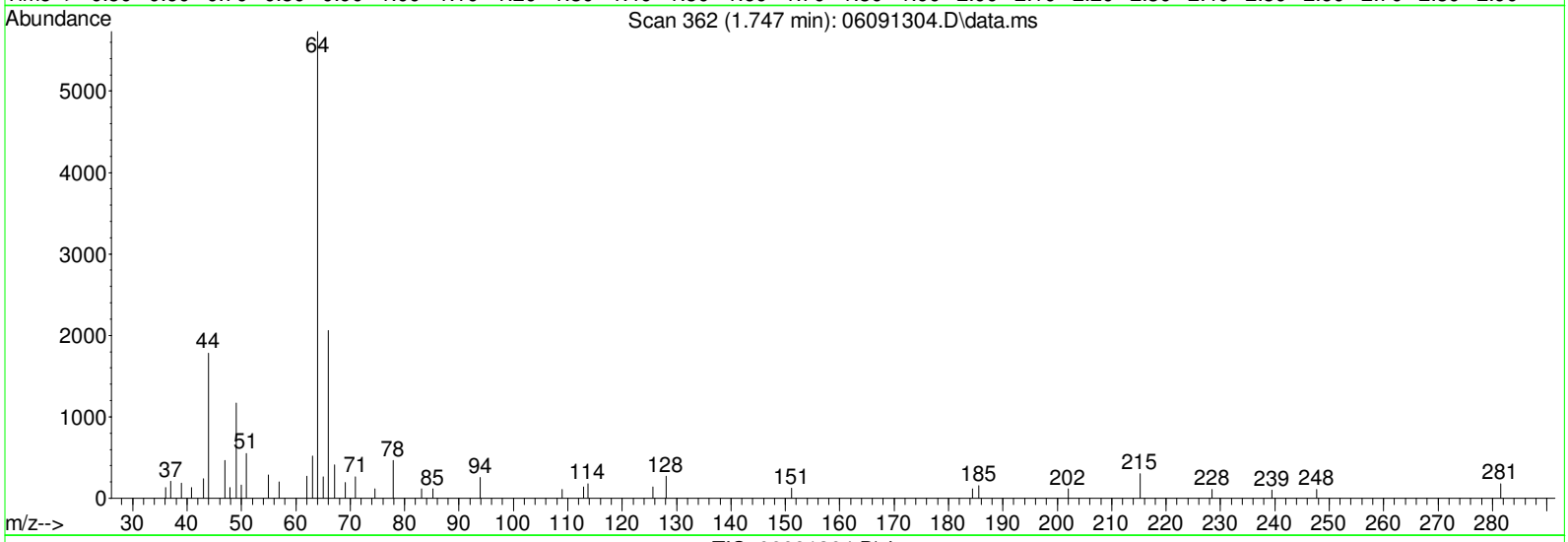
Ion	Exp%	Act%
84.90	100	100
86.90	31.20	28.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Operator: PS
Sample : ICAL VSTD005
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(7) Chloroethane (TM)

1.748min (-0.001) 5.39 ug/L

response 78017

Ion	Exp%	Act%
64.00	100	100
66.00	30.60	35.84
0.00	0.00	0.00
0.00	0.00	0.00

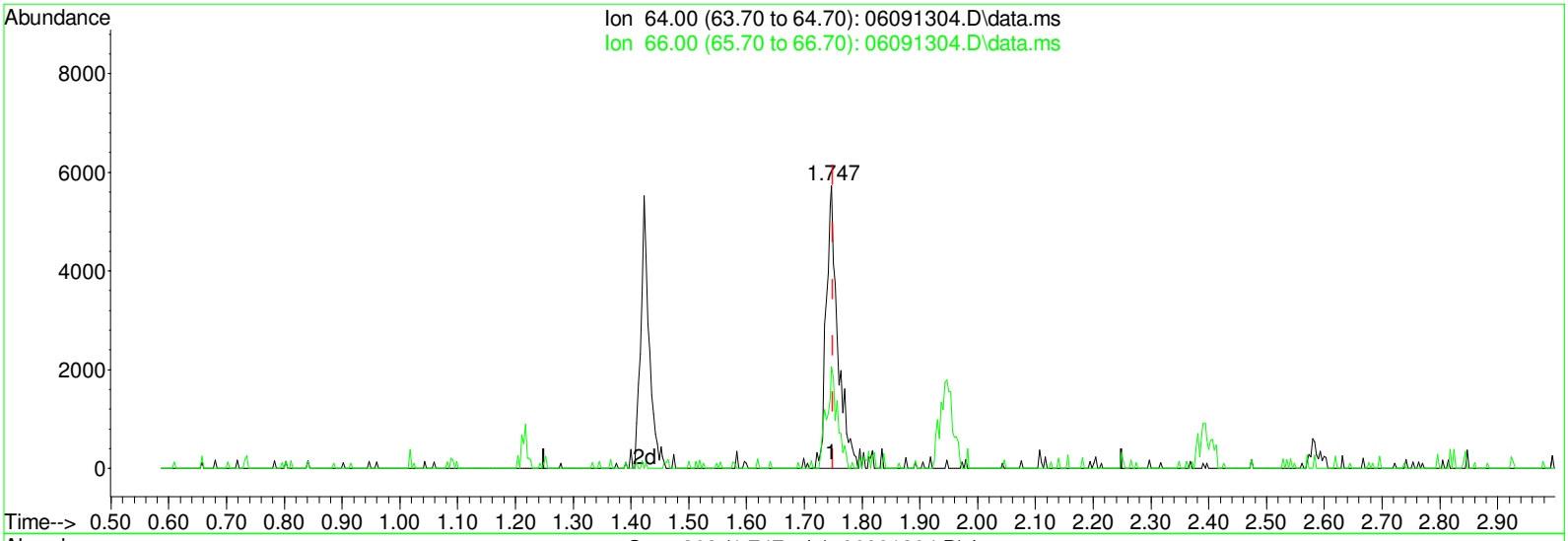
BEFORE

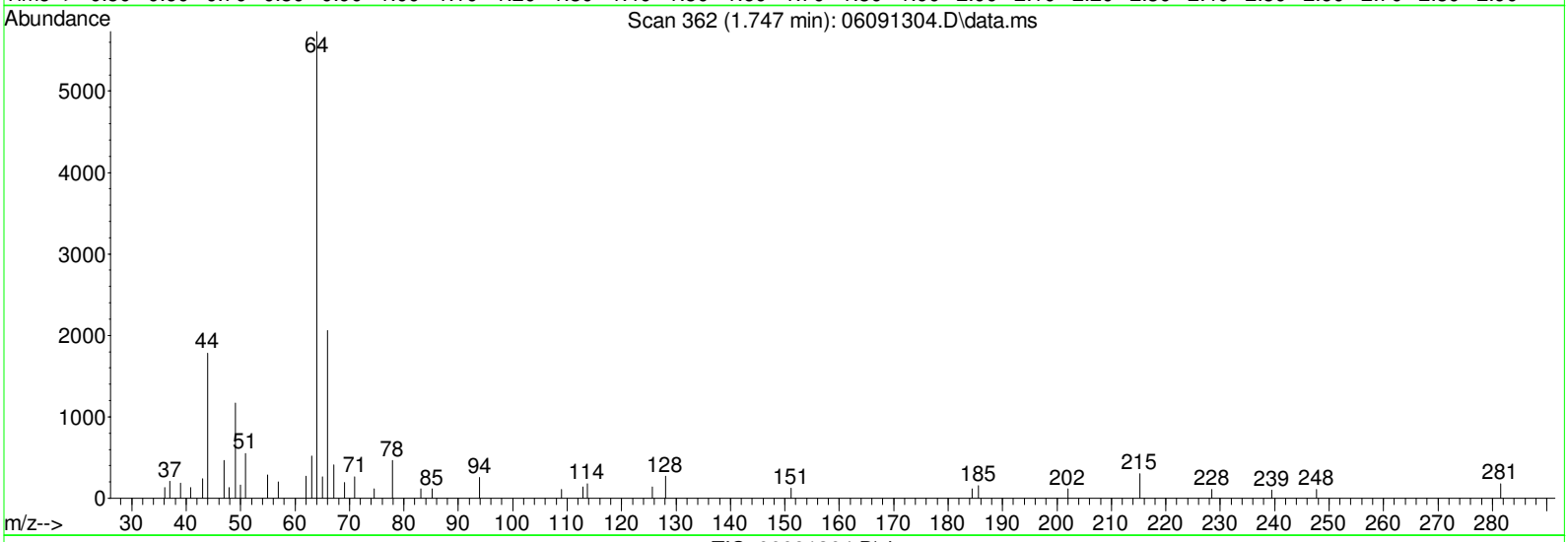
By Alfred at 3:44:31 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(7) Chloroethane (TM)

1.747min (-0.002) 5.67 ug/L m

response 82086

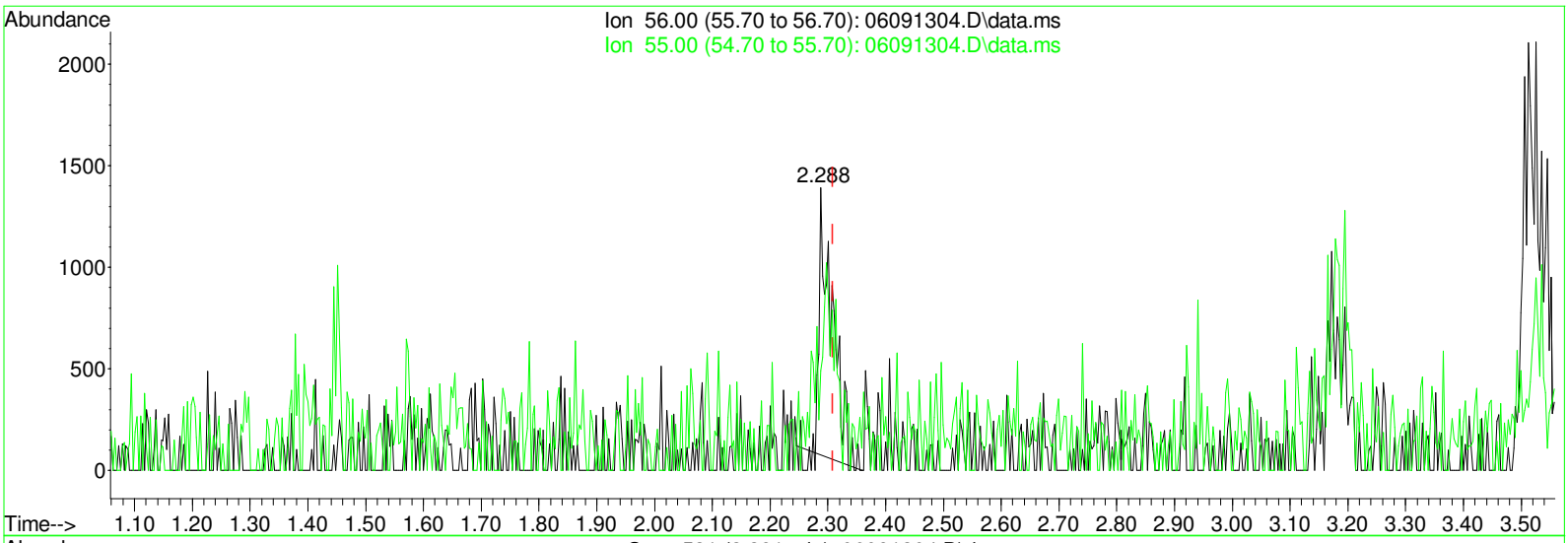
Ion	Exp%	Act%
64.00	100	100
66.00	30.60	34.06
0.00	0.00	0.00
0.00	0.00	0.00

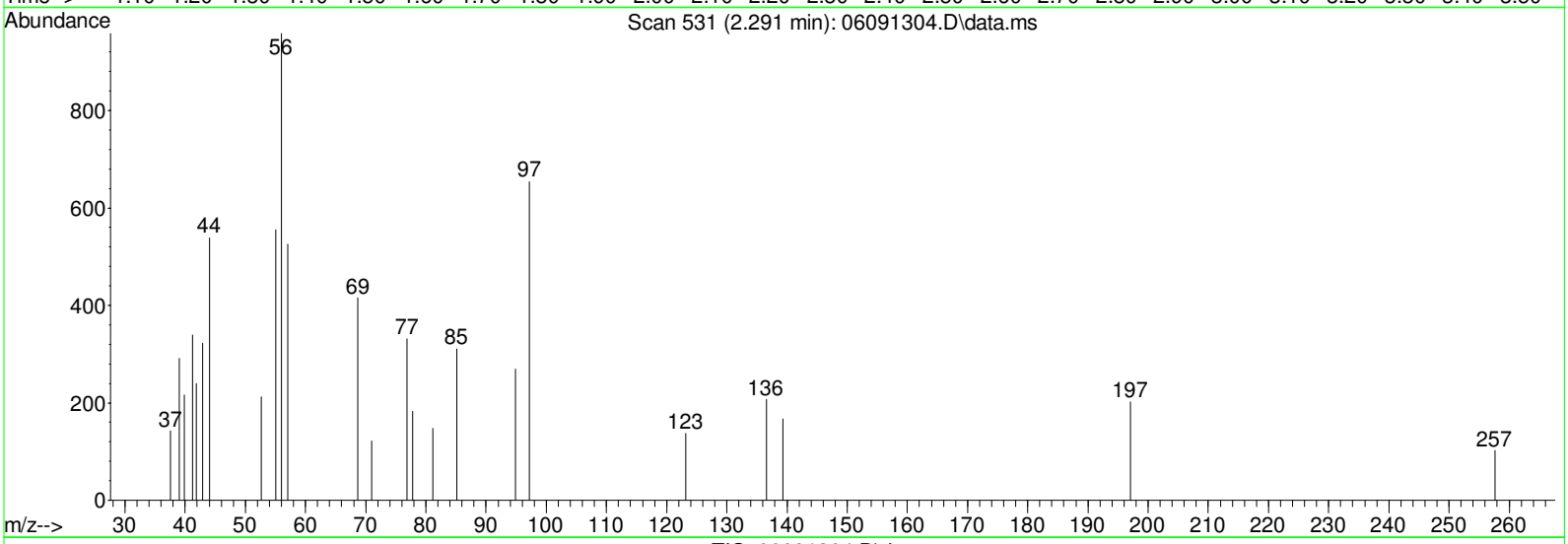
AFTER M3
By Alfred at 3:44:37 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Operator: PS
Sample : ICAL VSTD005
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(11) Acrolein (M)

2.290min (-0.018) 4.70 ug/L

response 20218

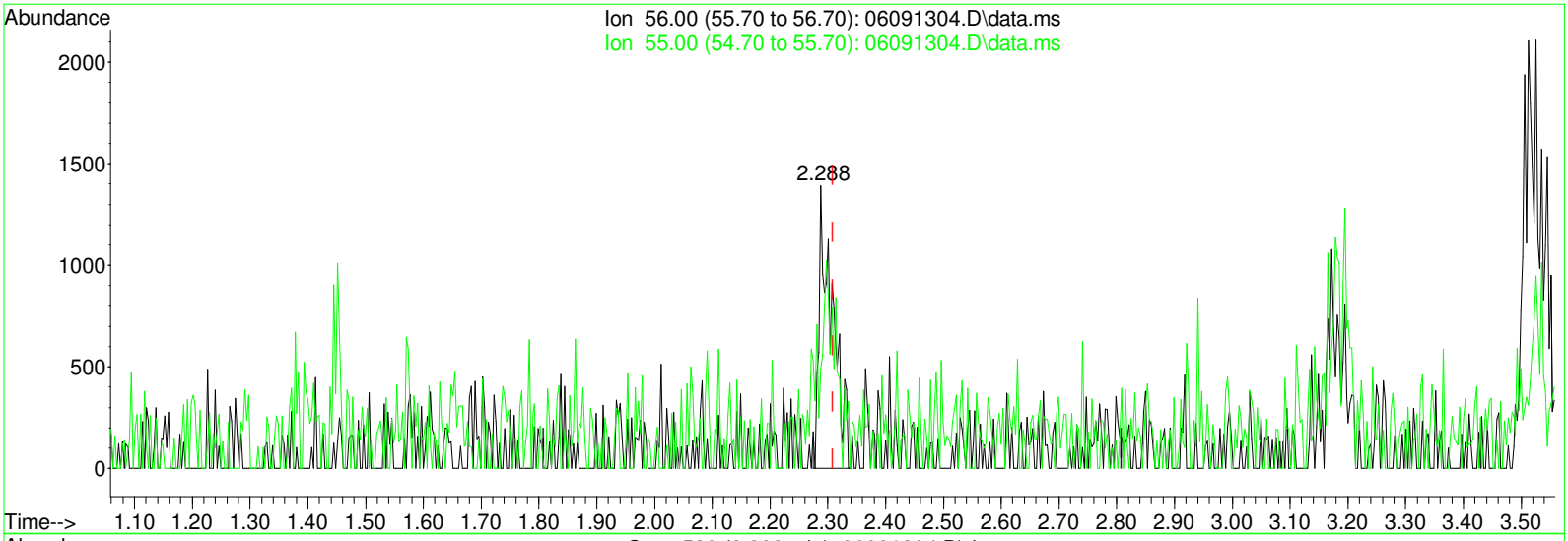
Ion	Exp%	Act%
56.00	100	100
55.00	79.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

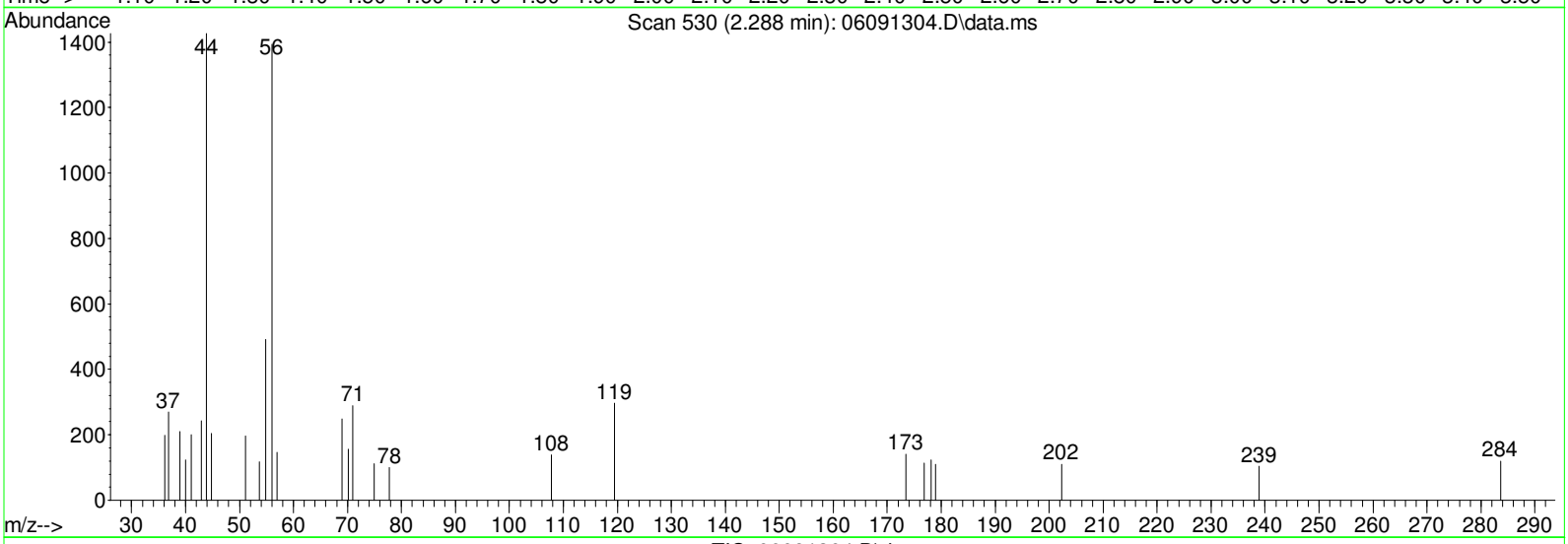
BEFORE
By Alfred at 3:44:41 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Operator: PS
Sample : ICAL VSTD005
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(11) Acrolein (M)

2.288min (-0.021) 5.20 ug/L m

response 22377

Ion	Exp%	Act%
56.00	100	100
55.00	79.20	89.84
0.00	0.00	0.00
0.00	0.00	0.00

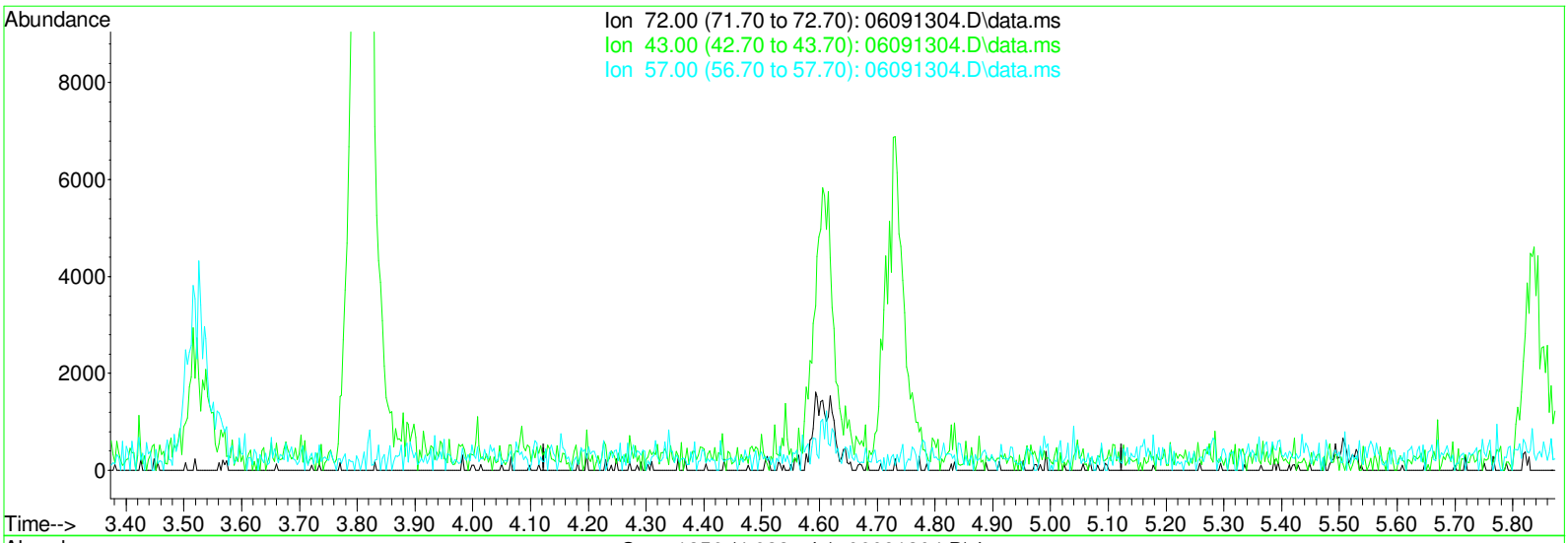
AFTER M3

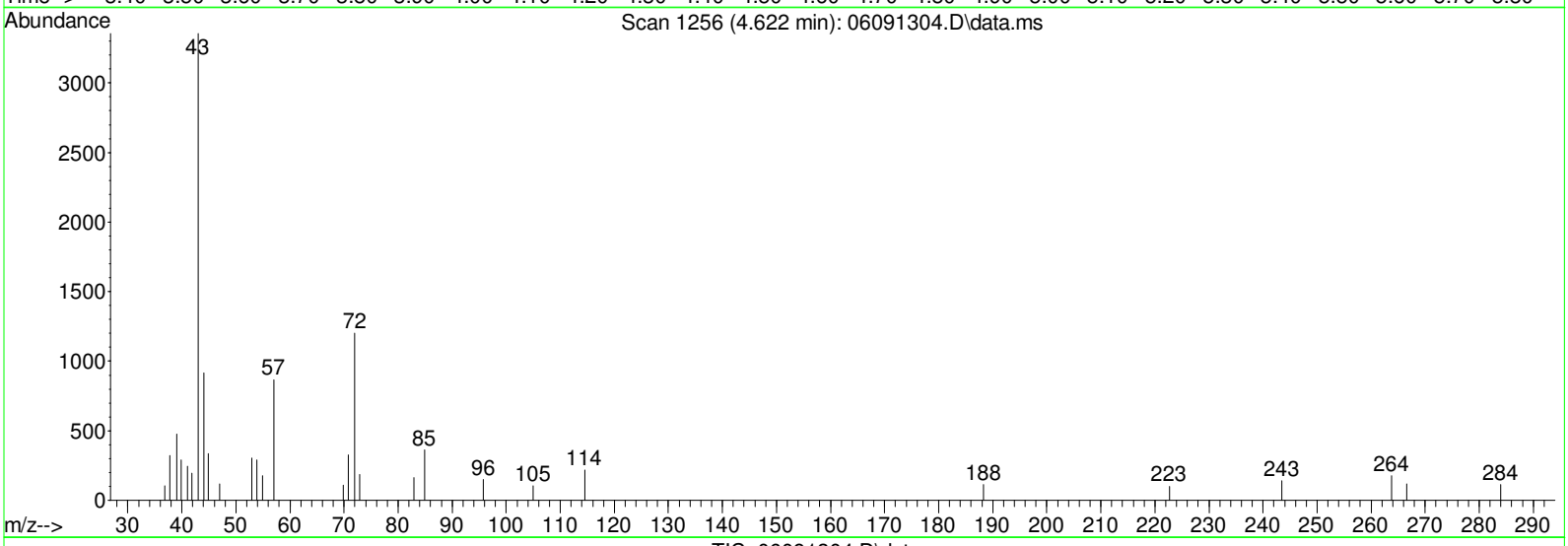
By Alfred at 3:44:46 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Operator: PS
Sample : ICAL VSTD005
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(23) 2-Butanone (TM)

4.623min (-4.623) 0.00 ug/L

response 0

Ion	Exp%	Act%
72.00	100	0.00
43.00	437.50	0.00#
57.00	37.10	0.00#
0.00	0.00	0.00

BEFORE

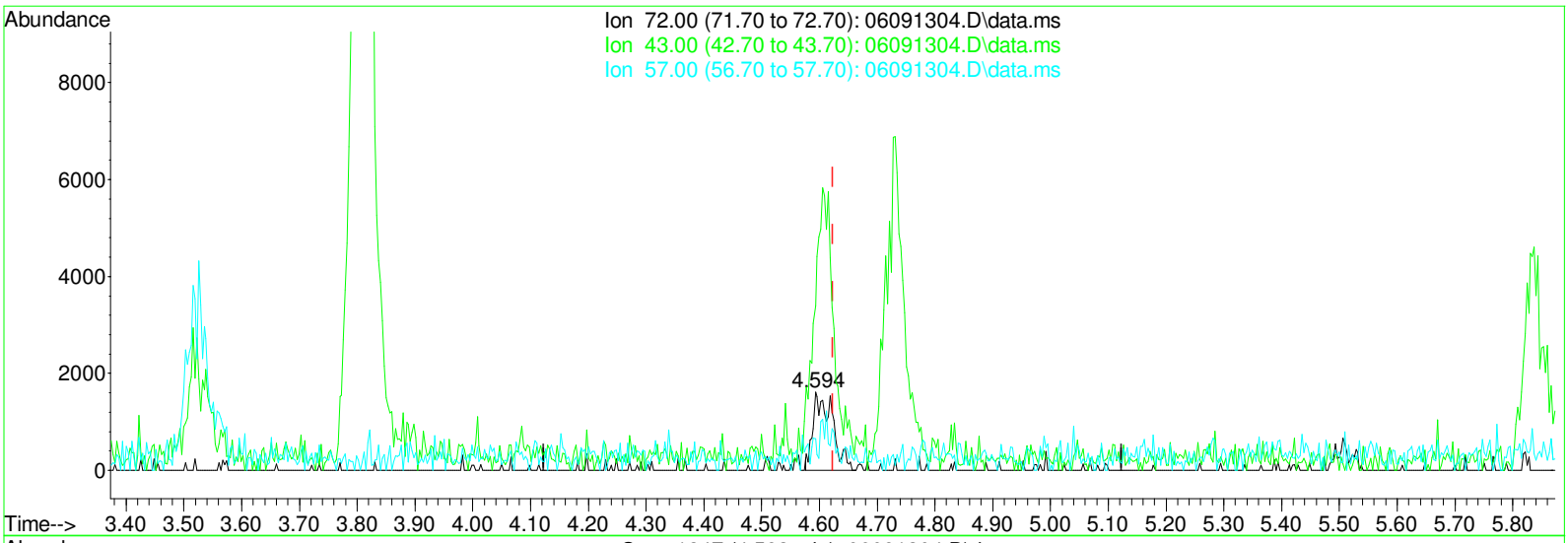
By Alfred at 3:44:55 PM, 7/3/2013

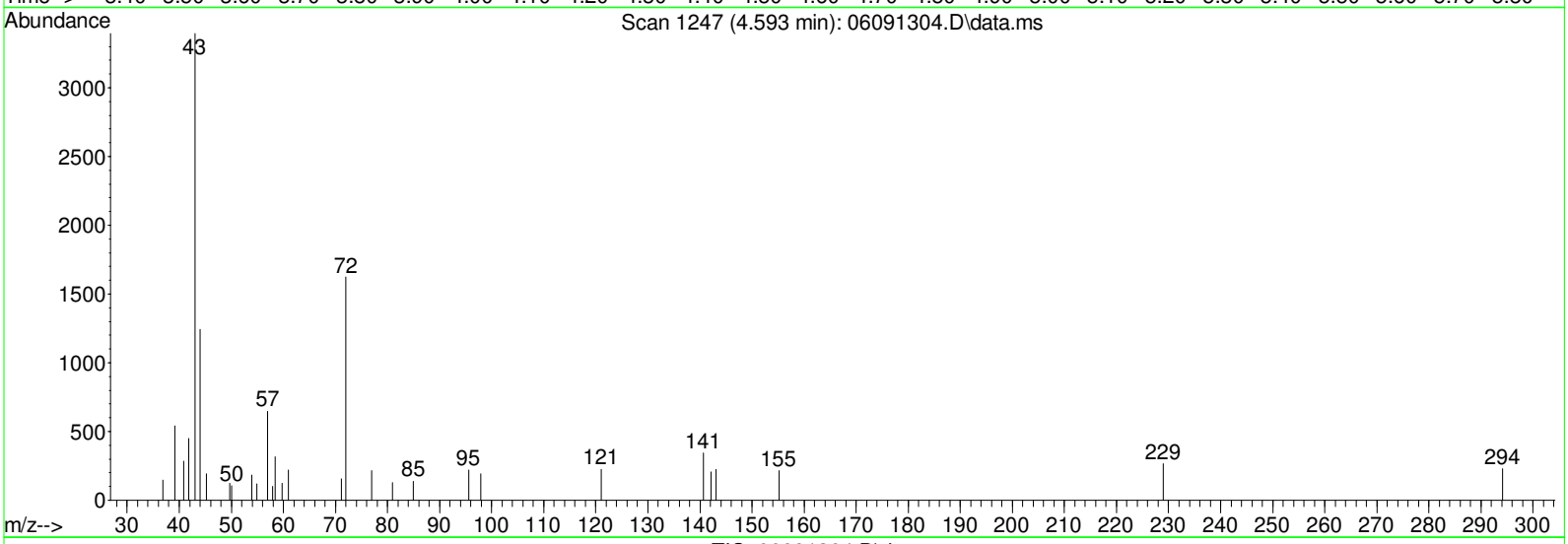
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Sample : ICAL VSTD005
Misc : VOC_W+
ALS Vial : 3

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(23) 2-Butanone (TM)

4.593min (-0.030) 9.56 ug/L m

response 37657

Ion	Exp%	Act%
72.00	100	100
43.00	437.50	393.37
57.00	37.10	74.49#
0.00	0.00	0.00

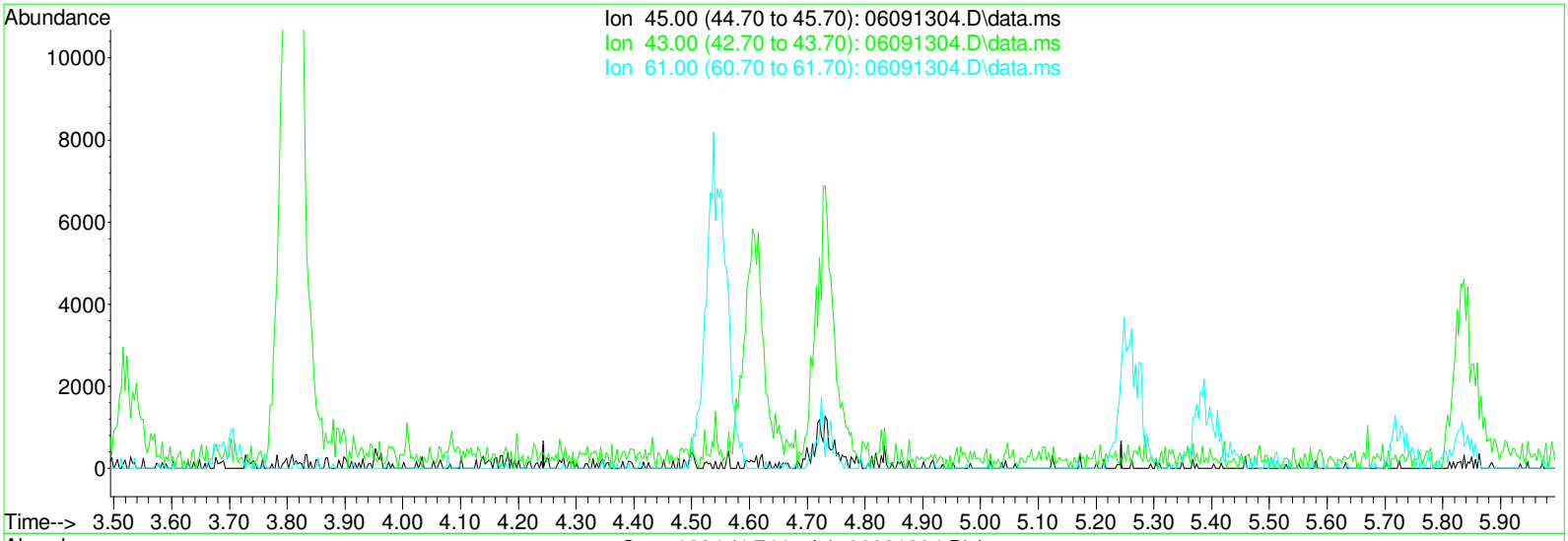
AFTER M1

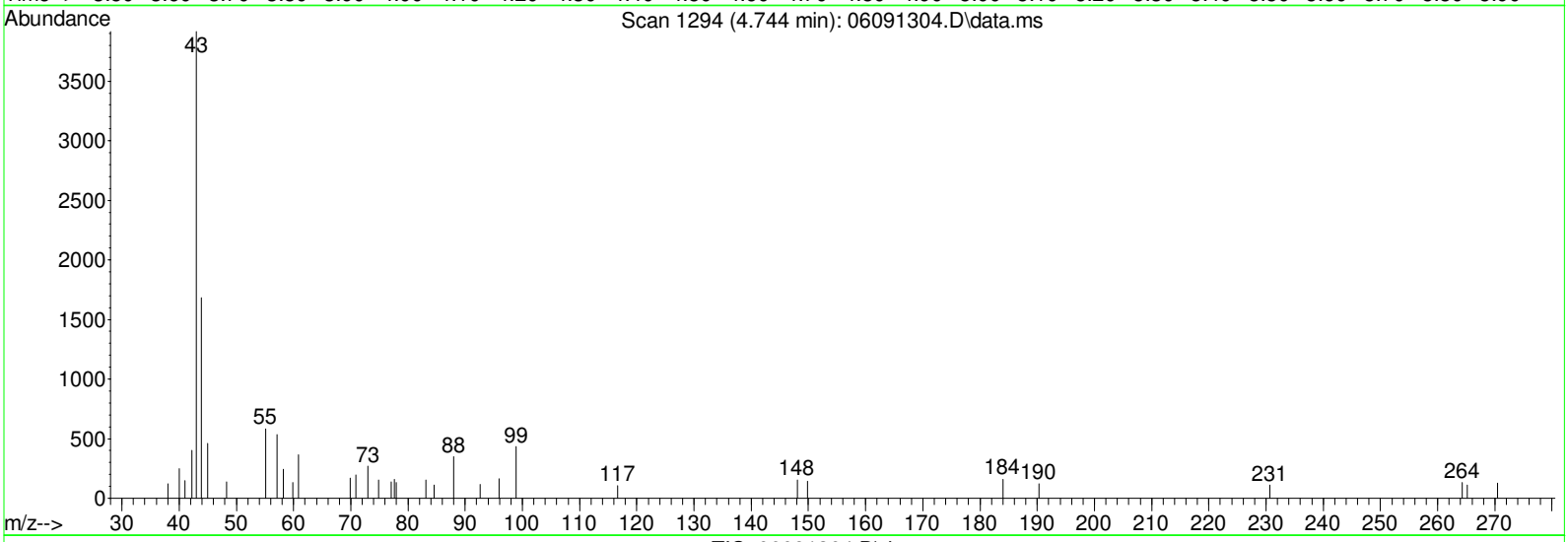
By Alfred at 3:45:00 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

BEFORE

By Alfred at 3:45:05 PM, 7/3/2013

(26) Ethyl Acetate (M)

4.744min (-4.744) 0.00 ug/L

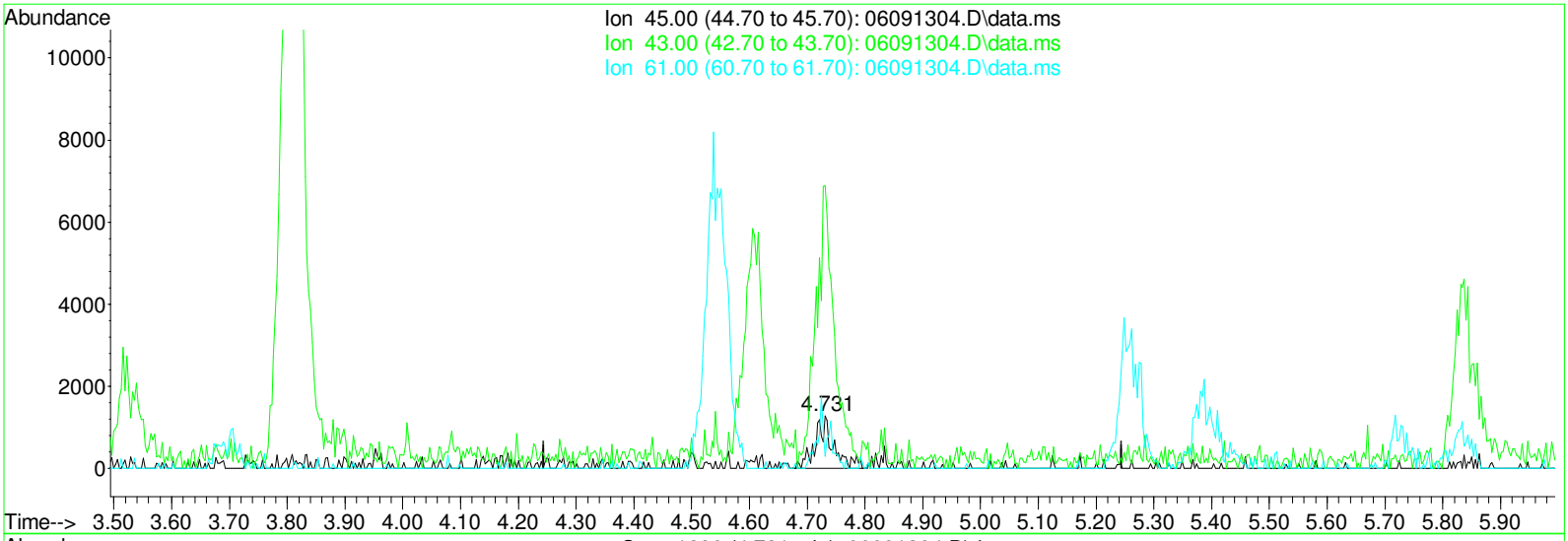
response 0

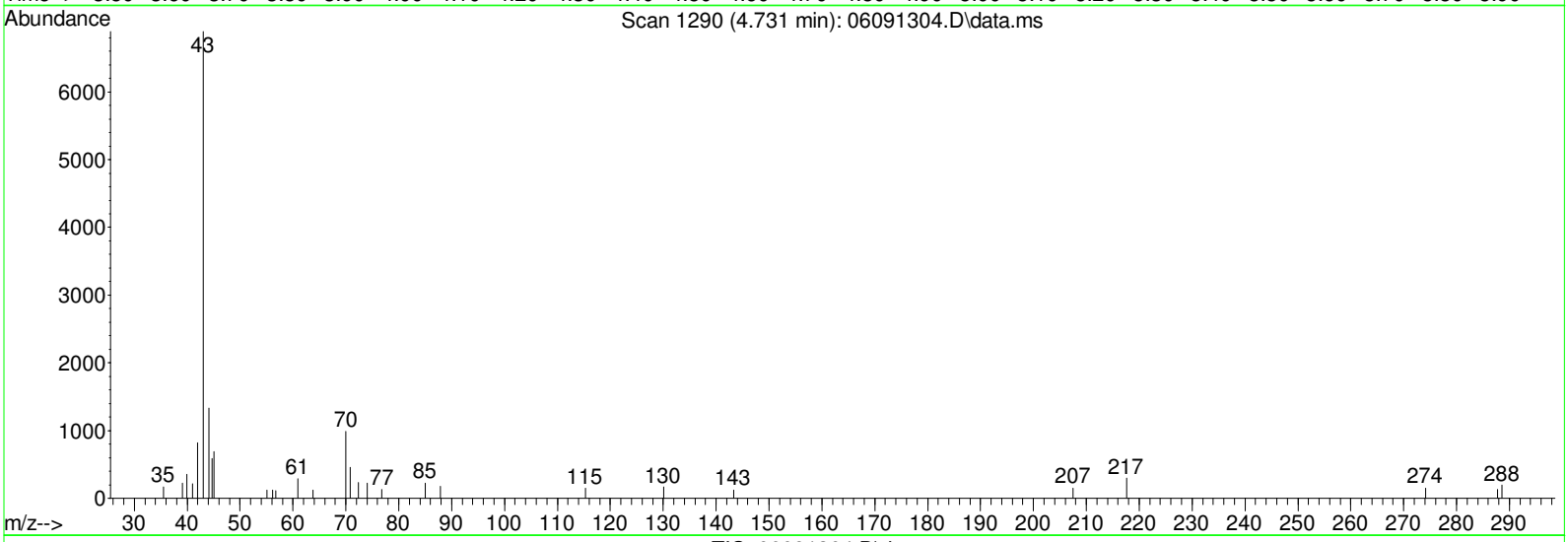
Ion	Exp%	Act%
45.00	100	0.00
43.00	714.10	0.00#
61.00	99.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Operator: PS
Sample : ICAL VSTD005
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(26) Ethyl Acetate (M)

4.731min (-0.013) 6.07 ug/L m

response 28163

Ion	Exp%	Act%
45.00	100	100
43.00	714.10	0.00#
61.00	99.90	0.00#
0.00	0.00	0.00

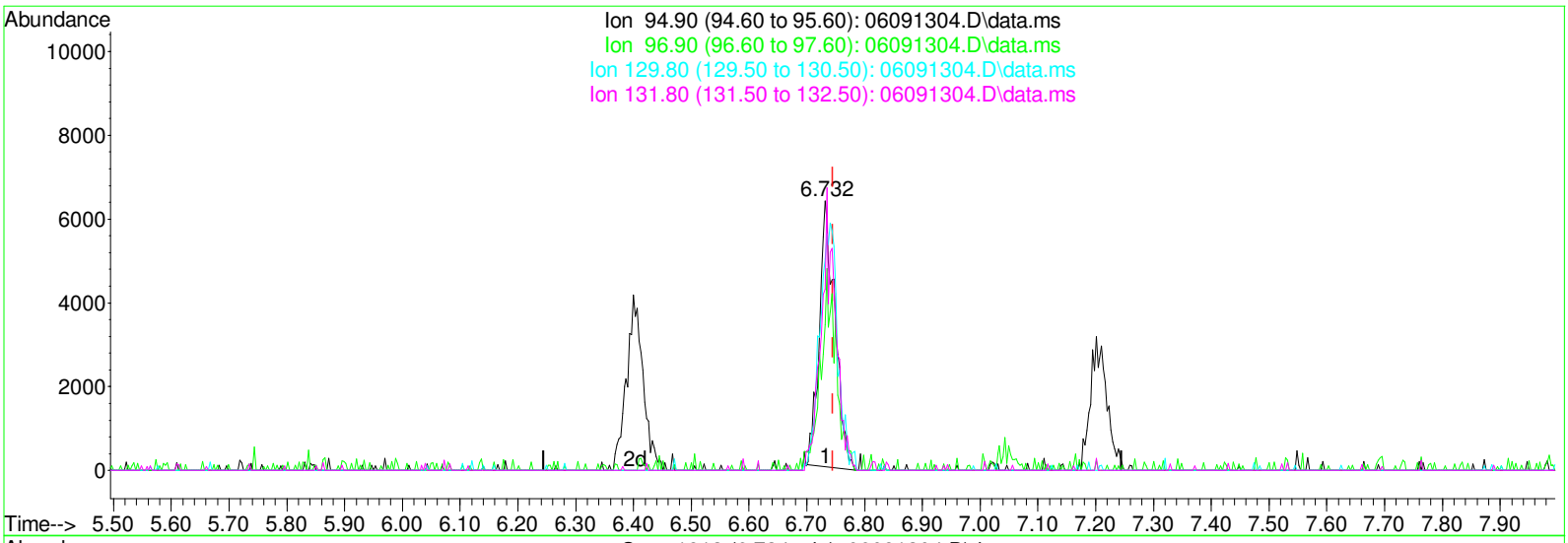
AFTER M1

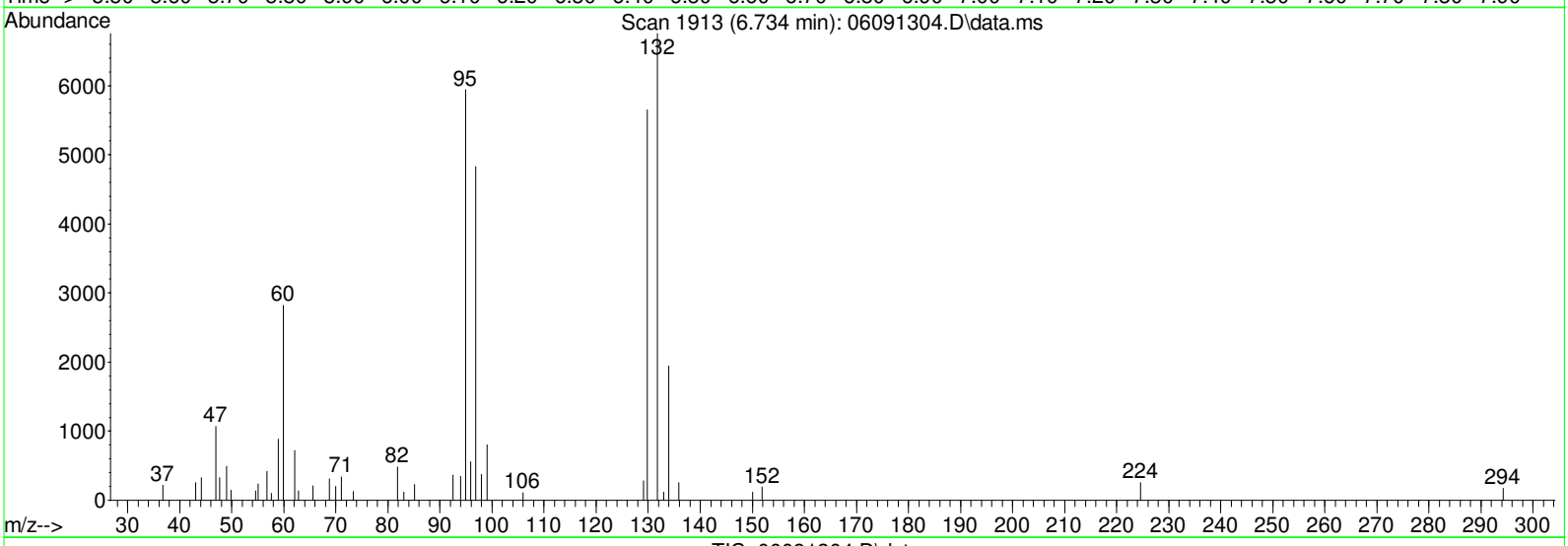
By Alfred at 3:45:12 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(39) Trichloroethene (TM)

6.733min (-0.012) 4.75 ug/L

response 121299

Ion	Exp%	Act%
94.90	100	100
96.90	61.80	77.16
129.80	96.40	107.28
131.80	93.10	97.38

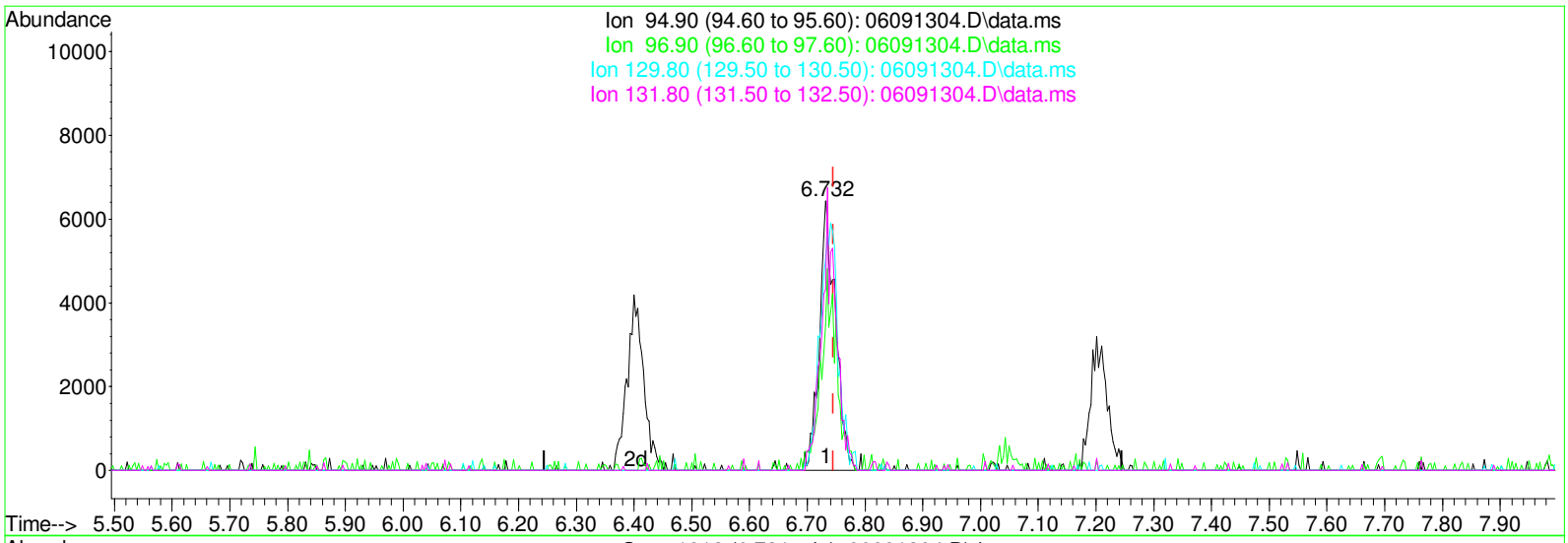
BEFORE

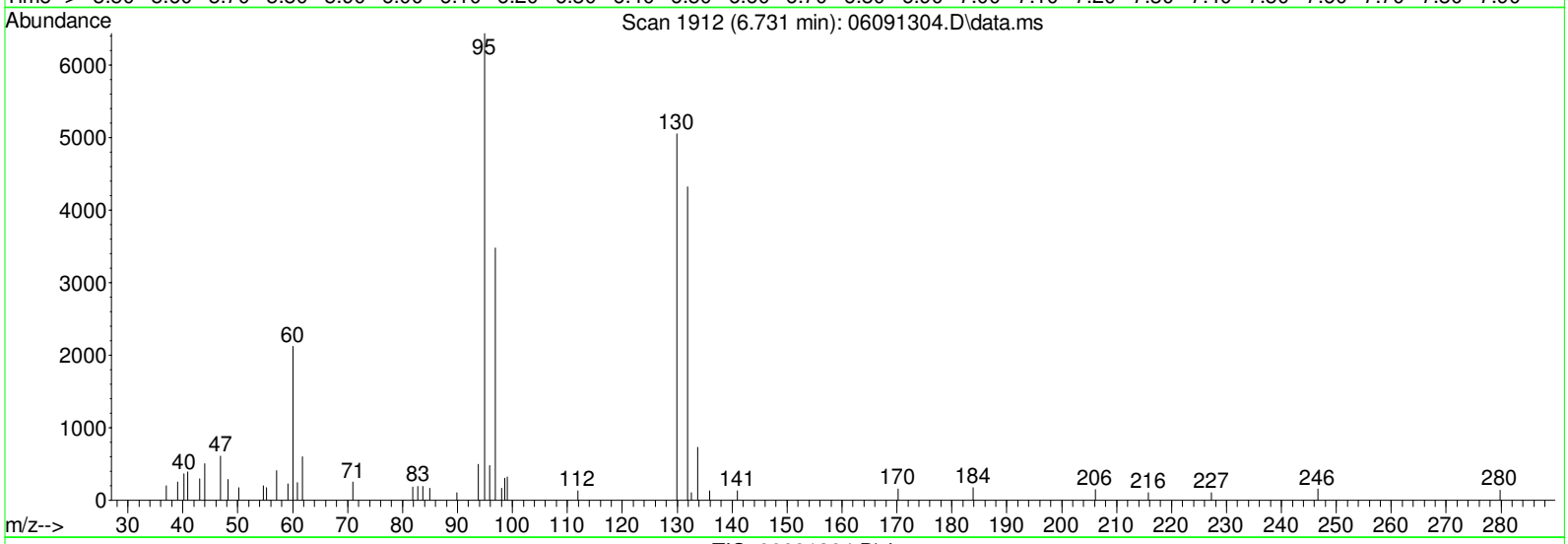
By Alfred at 3:45:17 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(39) Trichloroethene (TM)

6.731min (-0.014) 4.96 ug/L m

response 126465

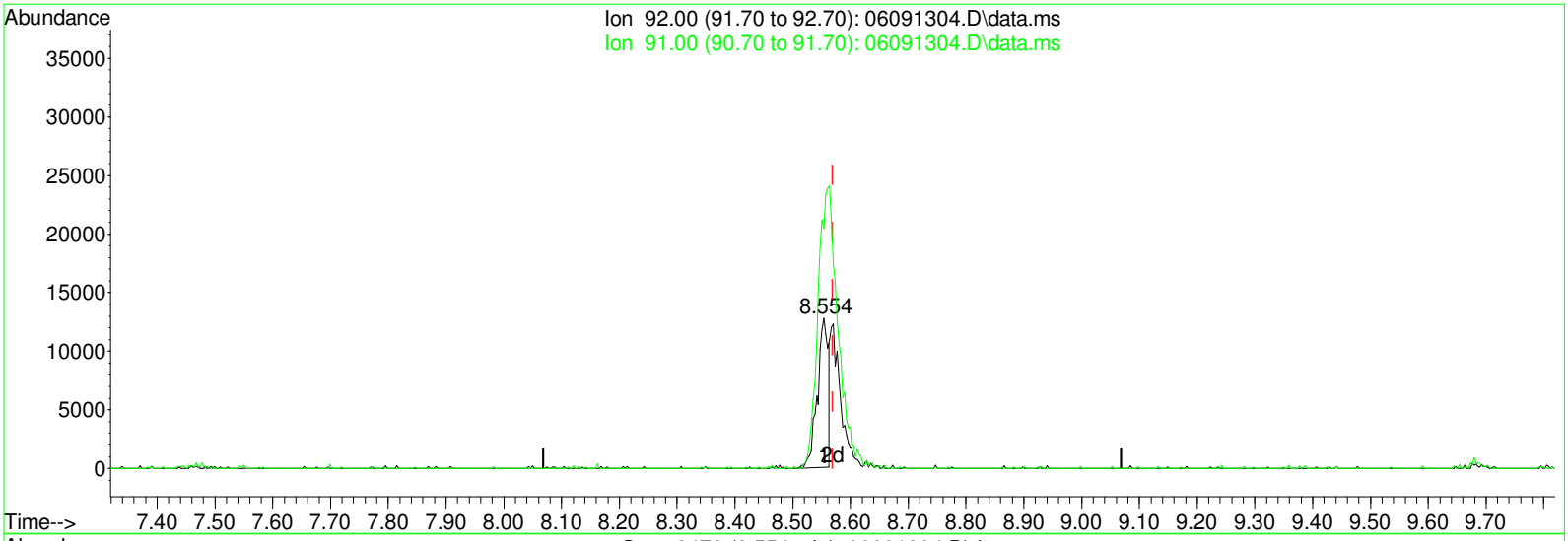
Ion	Exp%	Act%
94.90	100	100
96.90	61.80	74.01
129.80	96.40	102.90
131.80	93.10	93.40

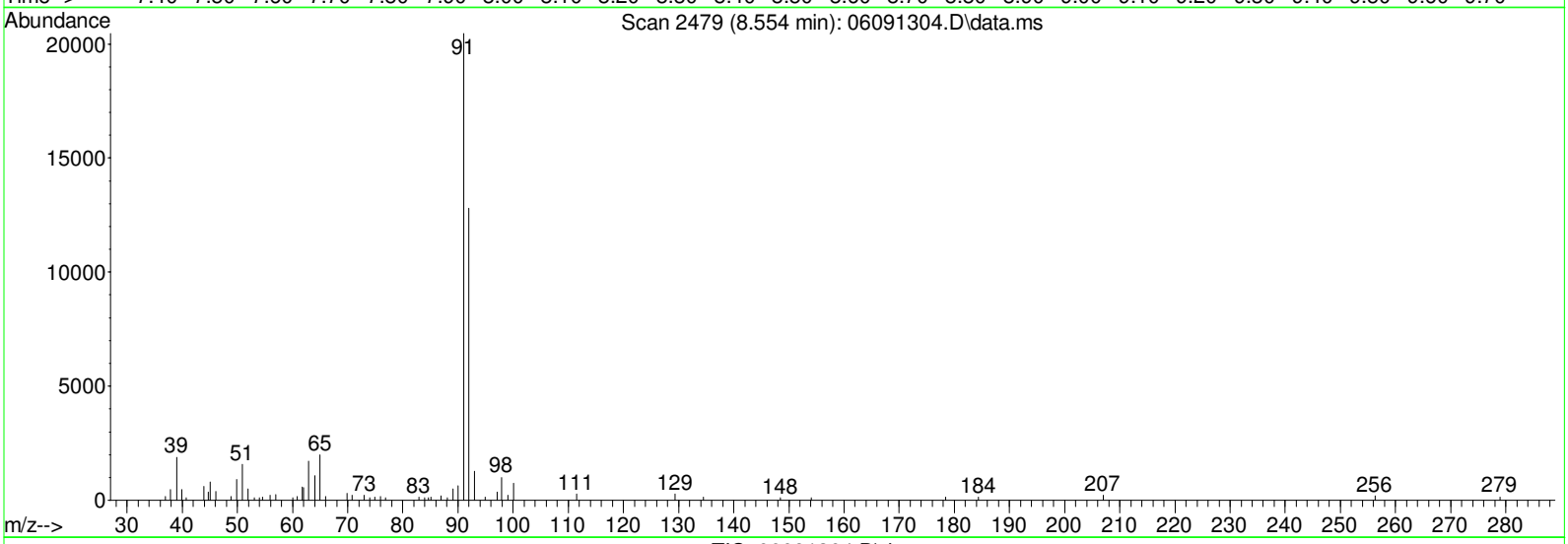
AFTER M3
By Alfred at 3:45:23 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

BEFORE
By Alfred at 3:45:26 PM, 7/3/2013

(49) Toluene (TCM)

8.555min (-0.014) 2.29 ug/L

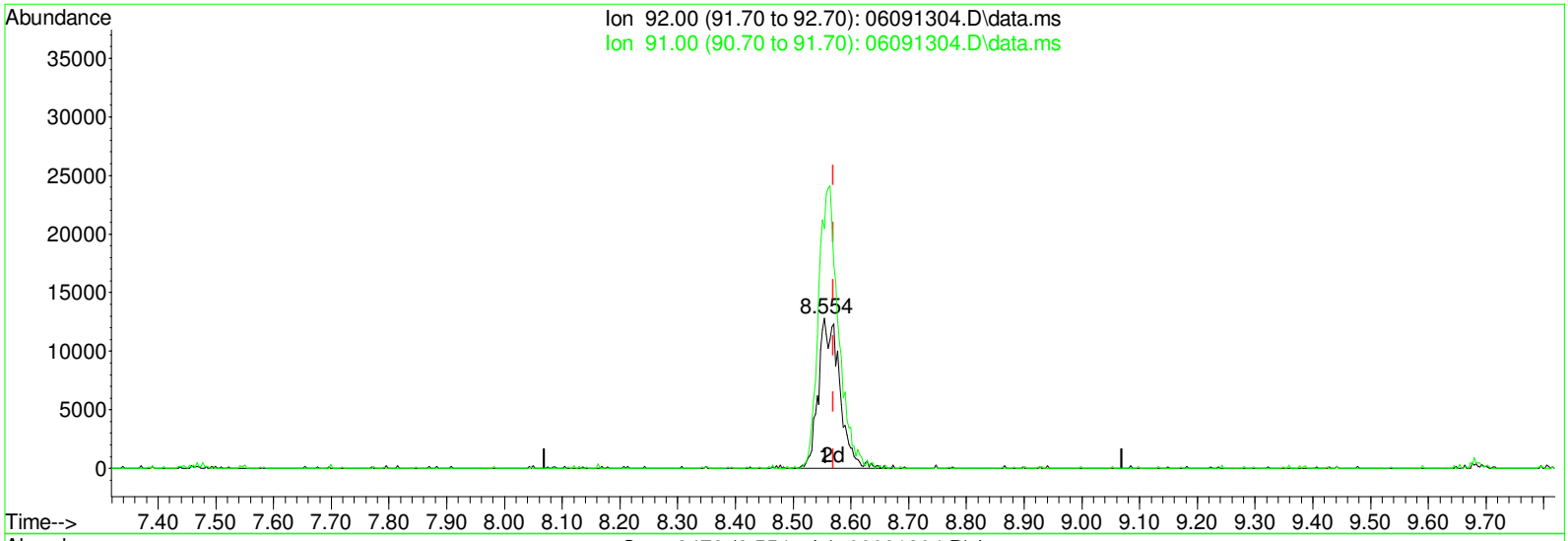
response 149313

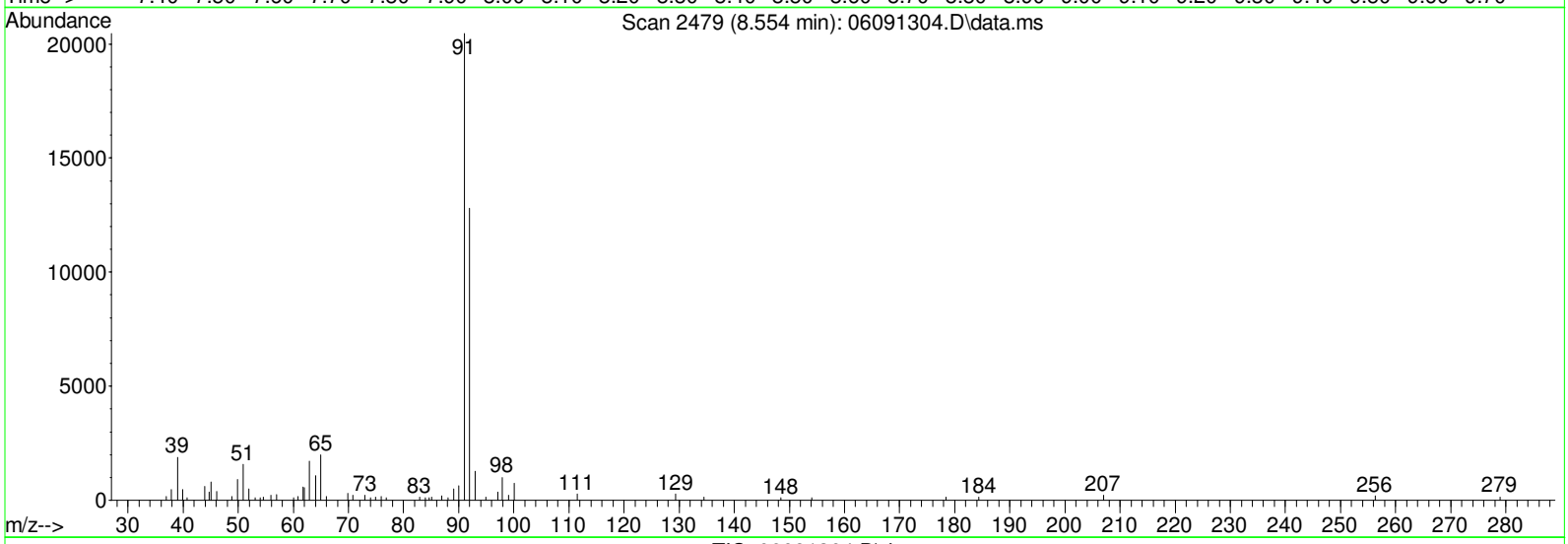
Ion	Exp%	Act%
92.00	100	100
91.00	175.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

AFTER M3
By Alfred at 3:45:32 PM, 7/3/2013

(49) Toluene (TCM)

8.554min (-0.015) 5.03 ug/L m

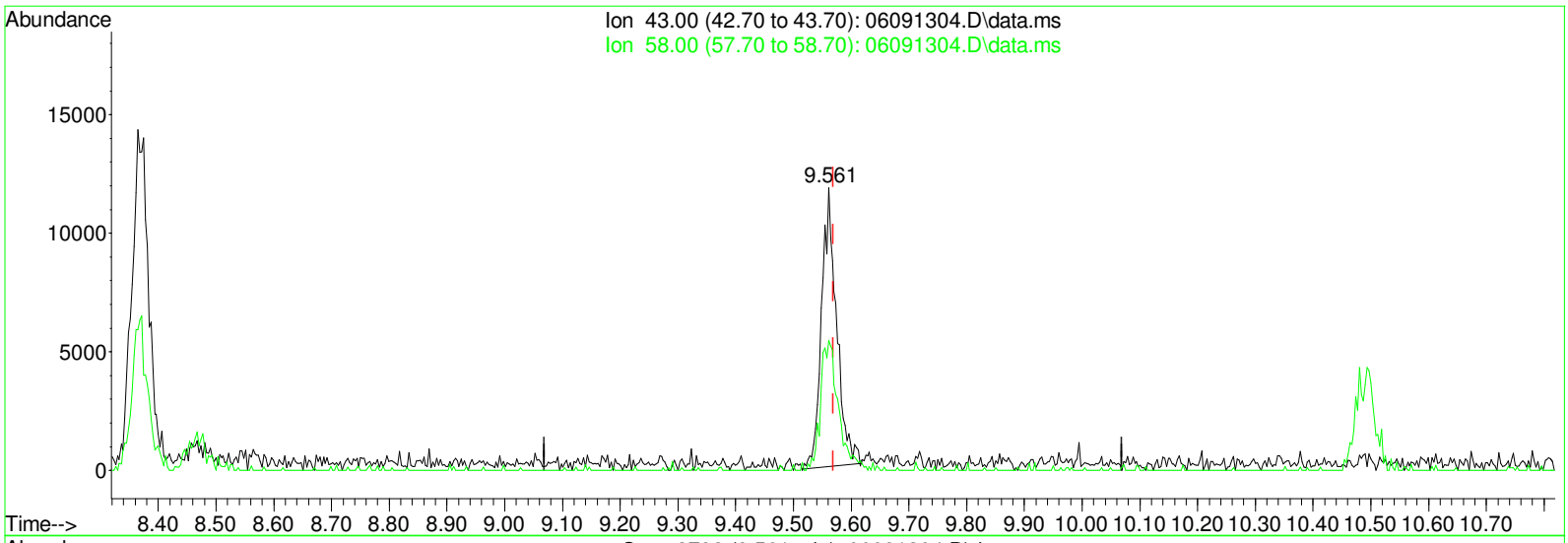
response 328574

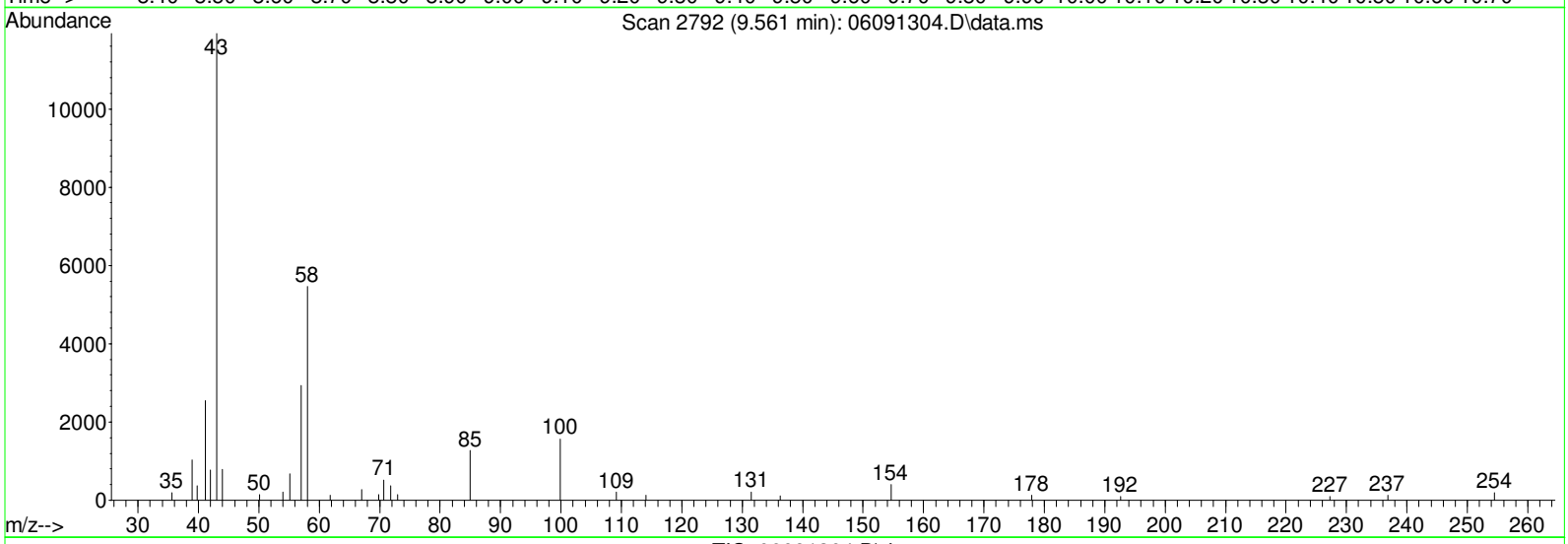
Ion	Exp%	Act%
92.00	100	100
91.00	175.10	177.22
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(52) 2-Hexanone (TM)

9.562min (-0.007) 9.79 ug/L

response 214133

Ion	Exp%	Act%
43.00	100	100
58.00	52.00	56.24
0.00	0.00	0.00
0.00	0.00	0.00

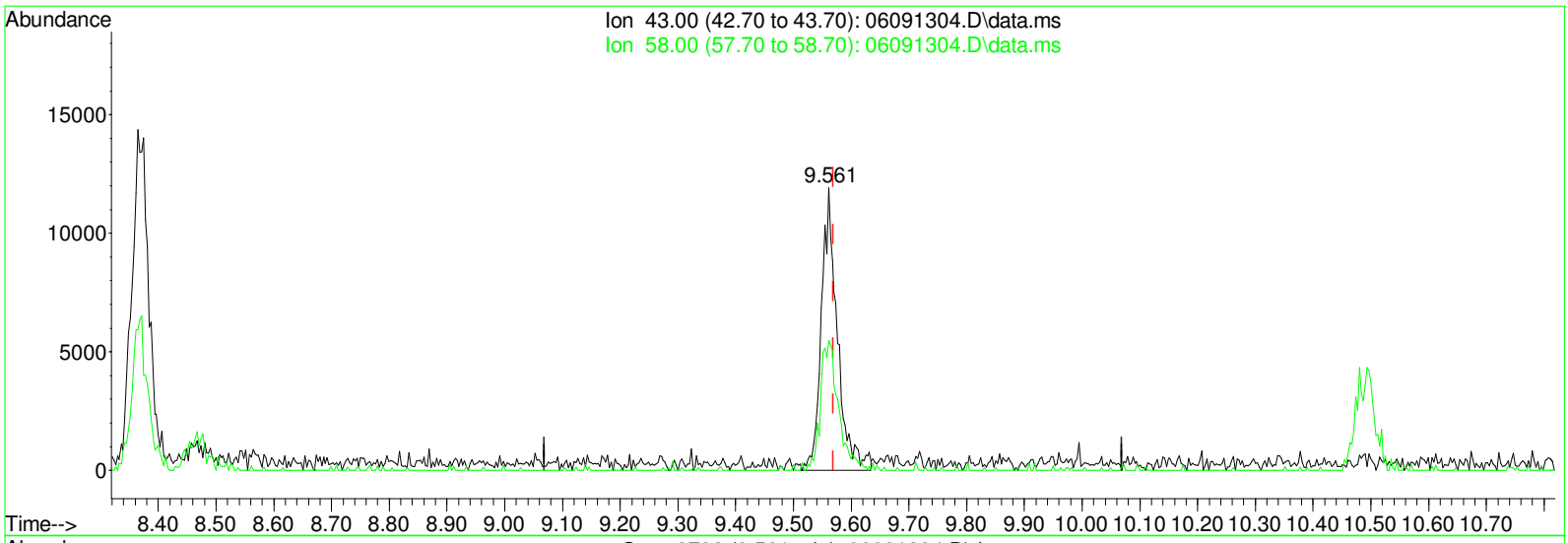
BEFORE

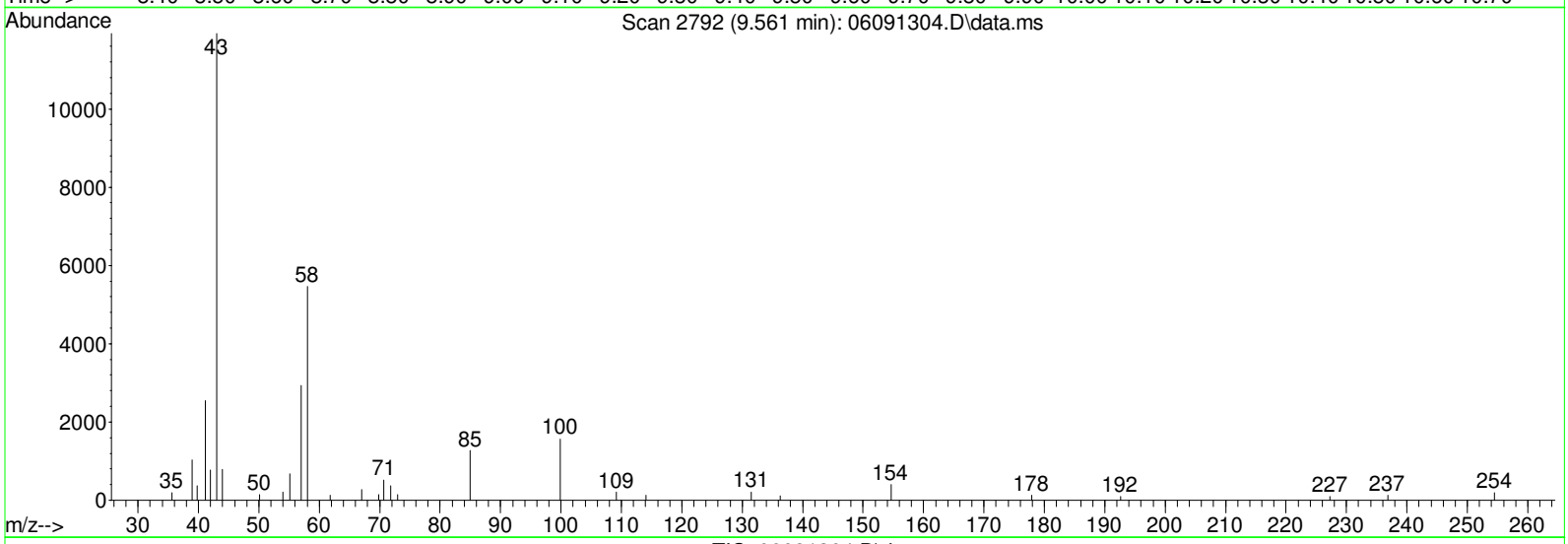
By Alfred at 3:45:40 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(52) 2-Hexanone (TM)

9.561min (-0.008) 10.60 ug/L m

response 231848

Ion	Exp%	Act%
43.00	100	100
58.00	52.00	51.94
0.00	0.00	0.00
0.00	0.00	0.00

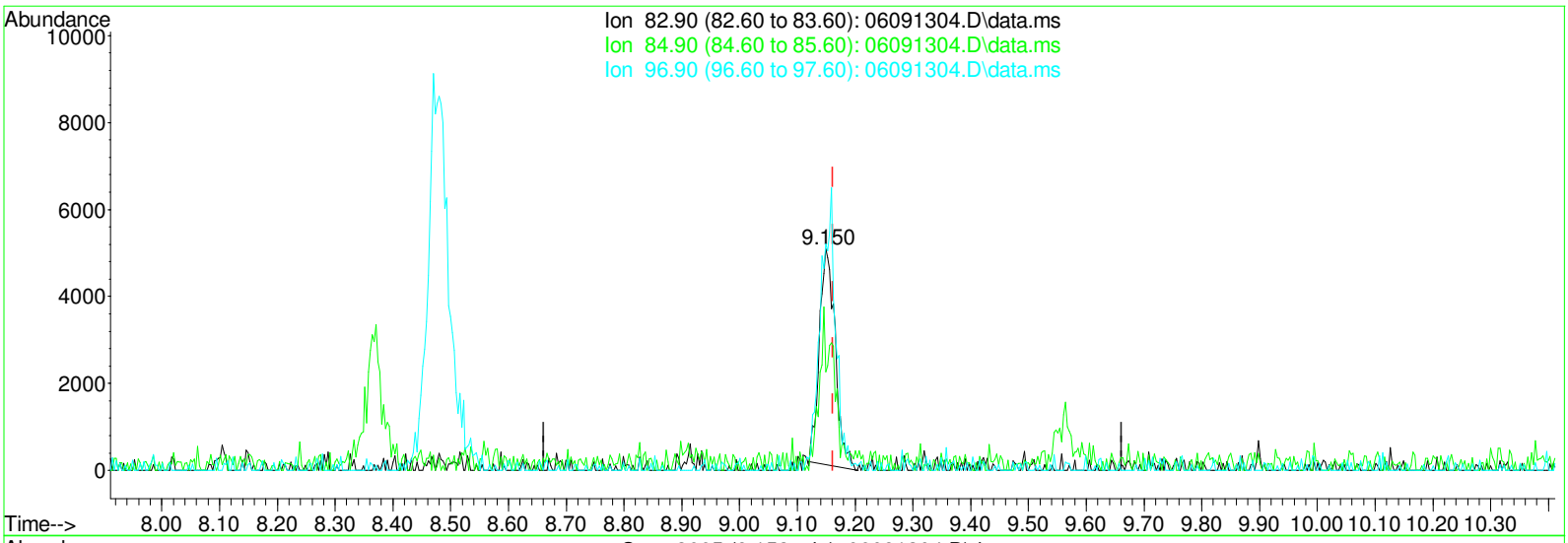
AFTER M3

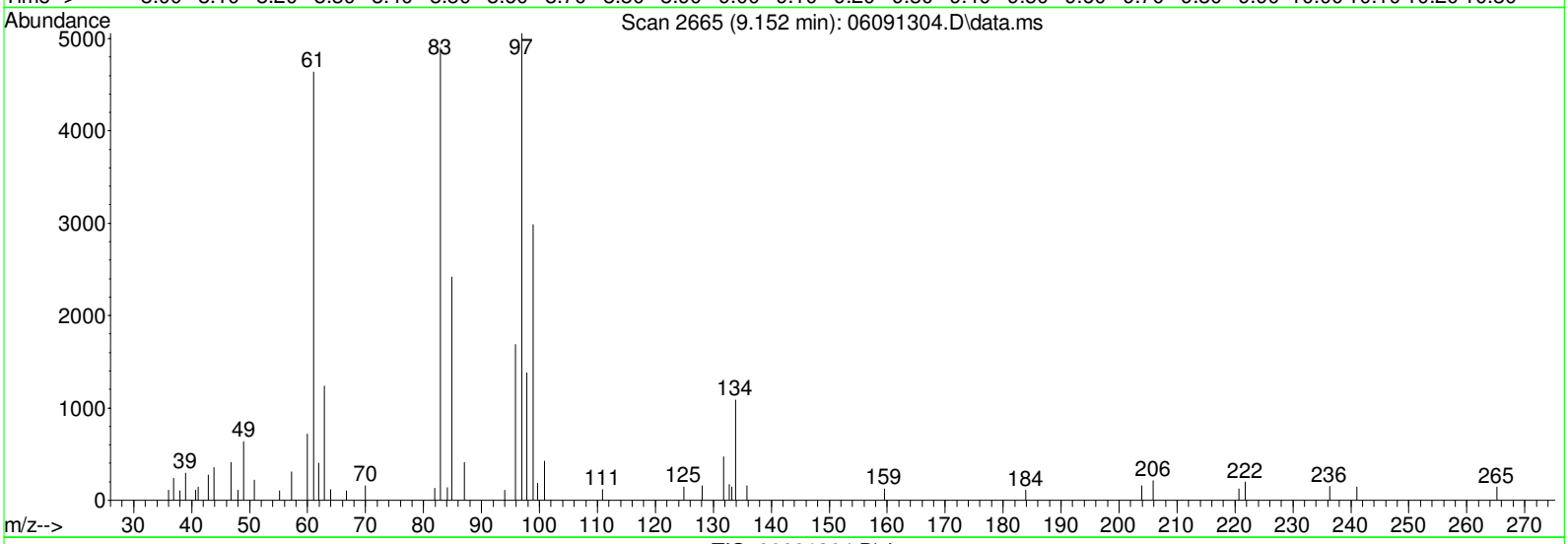
By Alfred at 3:45:45 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Operator: PS
Sample : ICAL VSTD005
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

BEFORE
By Alfred at 3:45:49 PM, 7/3/2013

(53) 1,1,2-Trichloroethane (TM)

9.152min (-0.009) 4.95 ug/L

response 93669

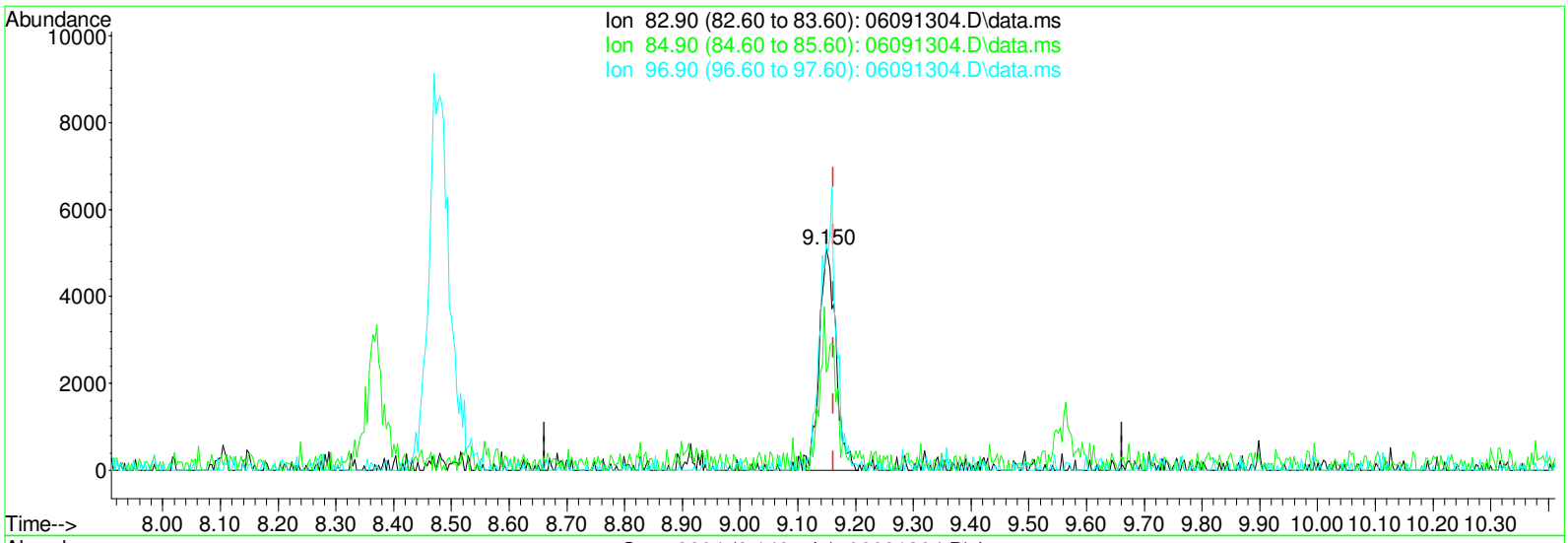
Ion	Exp%	Act%
82.90	100	100
84.90	62.70	68.96
96.90	117.90	127.21
0.00	0.00	0.00

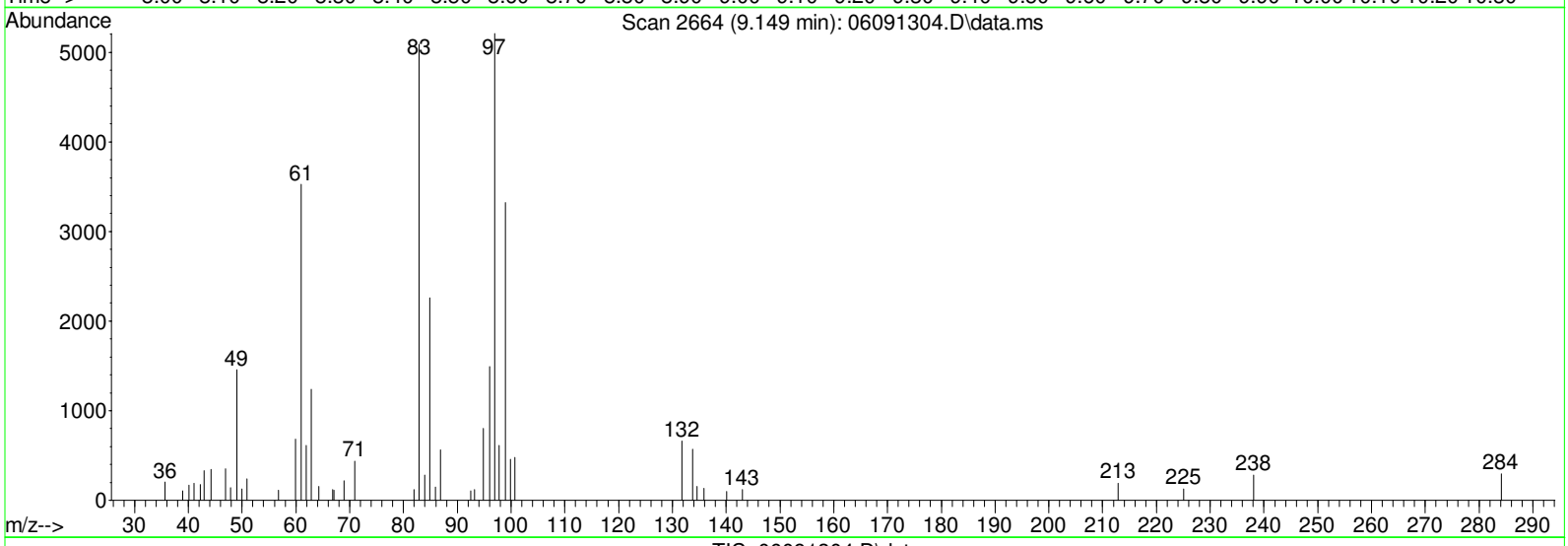
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Sample : ICAL VSTD005
Misc : VOC_W+
ALS Vial : 3

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

AFTER M3
By Alfred at 3:45:53 PM, 7/3/2013

(53) 1,1,2-Trichloroethane (TM)

9.149min (-0.012) 5.28 ug/L m

response 99834

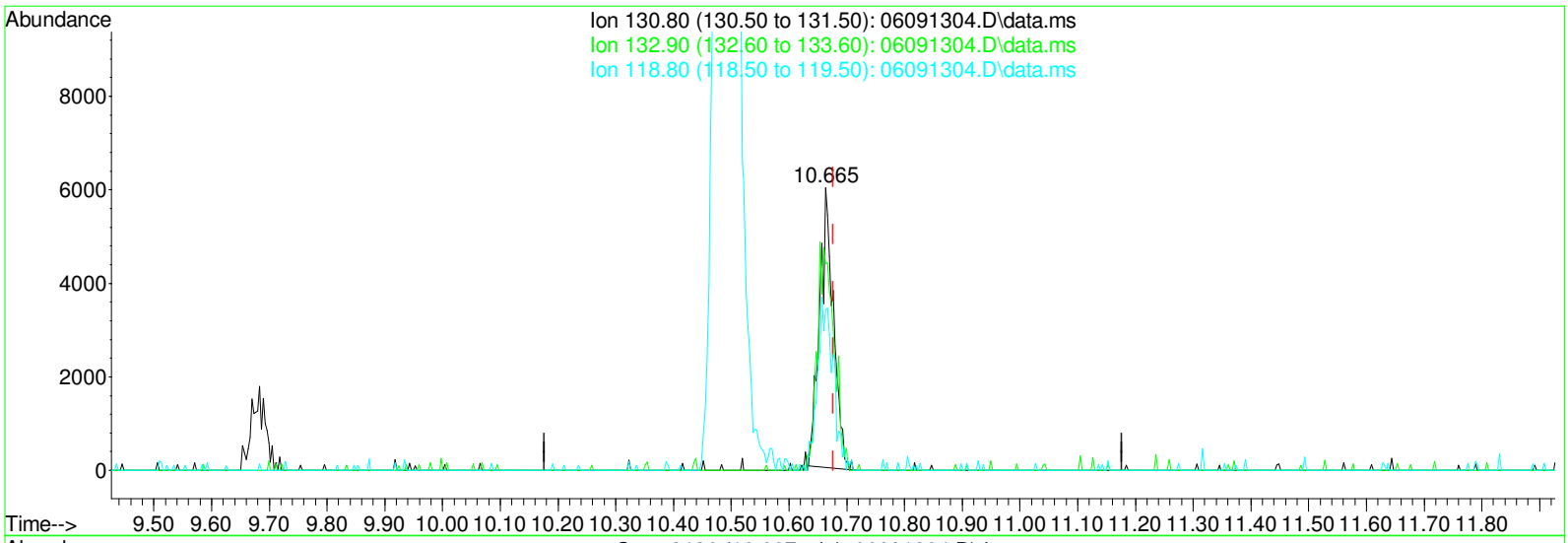
Ion	Exp%	Act%
82.90	100	100
84.90	62.70	64.70
96.90	117.90	119.36
0.00	0.00	0.00

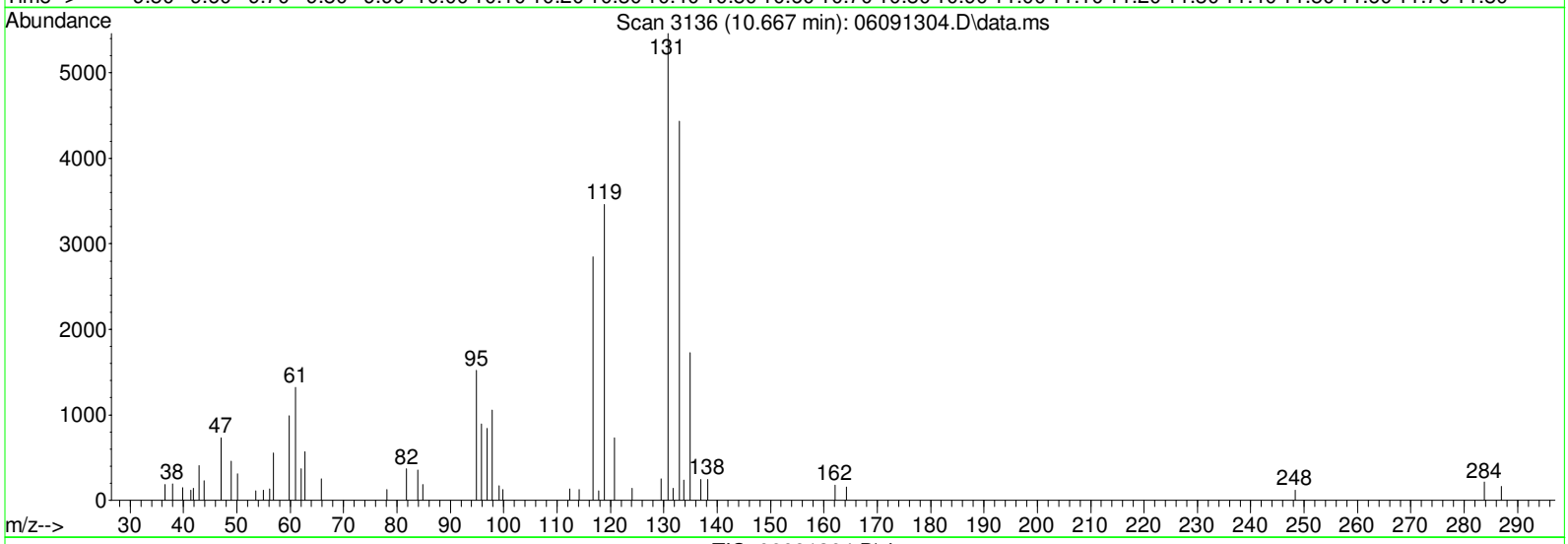
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Sample : ICAL VSTD005
Misc : VOC_W+
ALS Vial : 3

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(60) 1,1,1,2-Tetrachloroethane (M)

10.666min (-0.010) 4.50 ug/L

response 99983

Ion	Exp%	Act%
130.80	100	100
132.90	93.10	96.44
118.80	61.00	0.00#
0.00	0.00	0.00

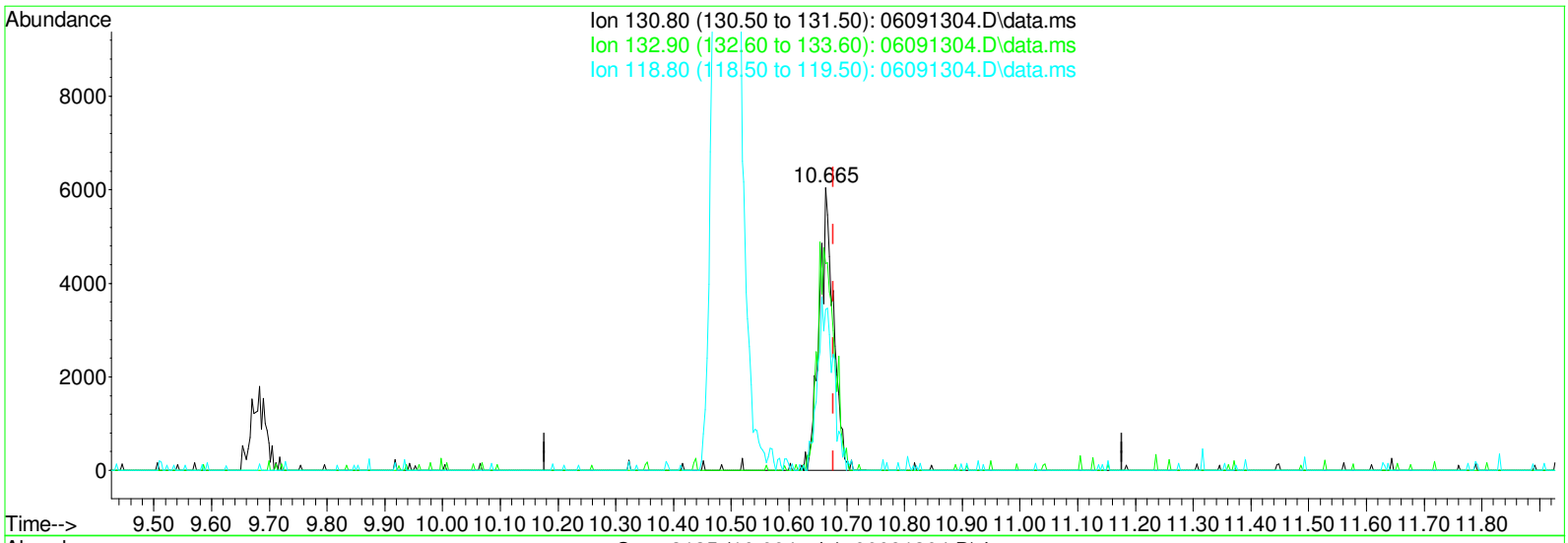
BEFORE
By Alfred at 3:45:58 PM, 7/3/2013

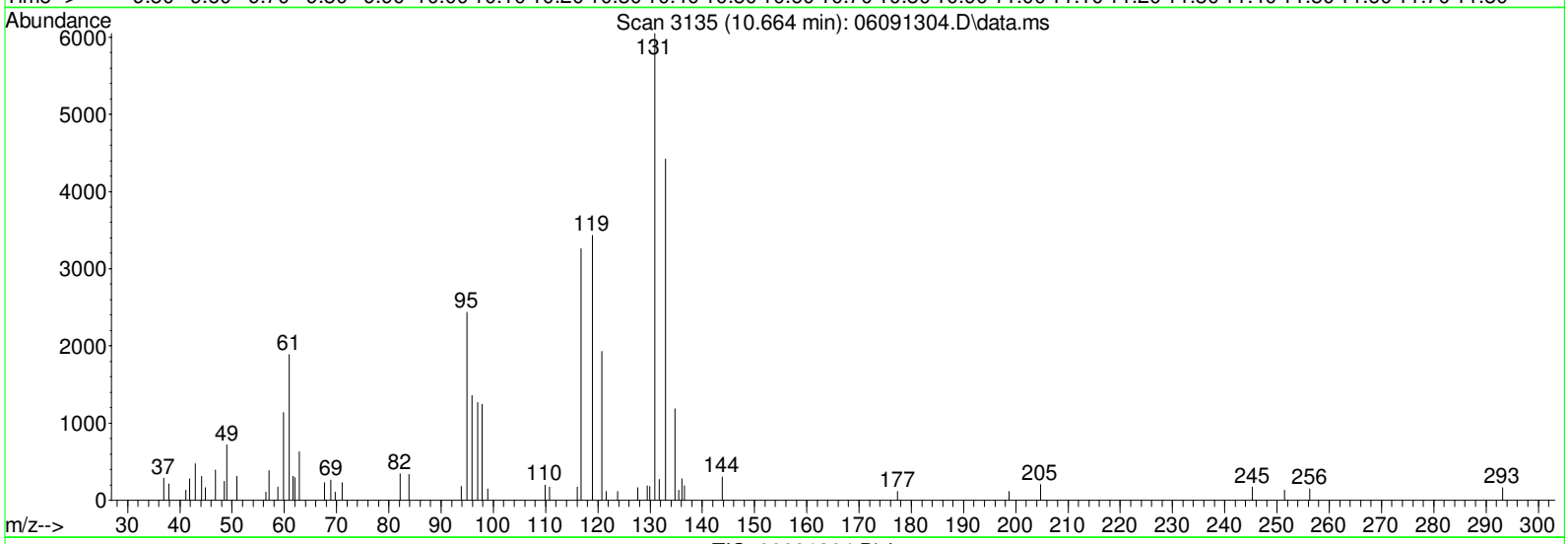
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Sample : ICAL VSTD005
Misc : VOC_W+
ALS Vial : 3

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(60) 1,1,1,2-Tetrachloroethane (M)

10.664min (-0.013) 4.64 ug/L m

response 103009

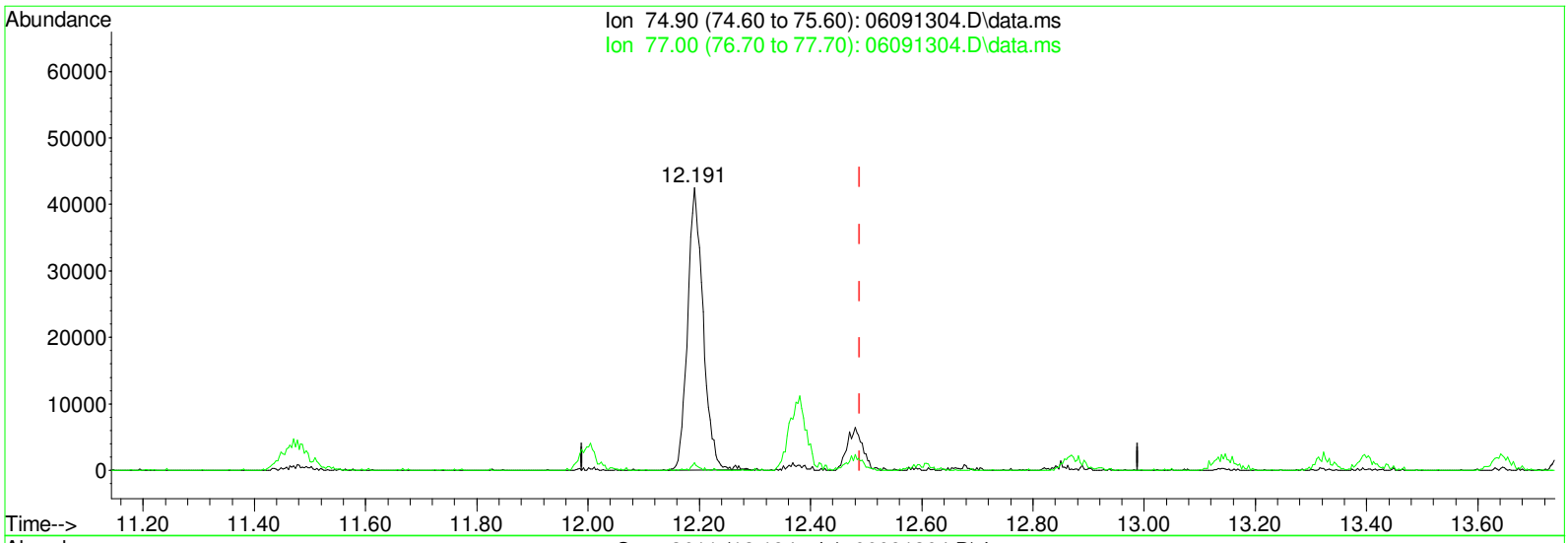
Ion	Exp%	Act%
130.80	100	100
132.90	93.10	93.61
118.80	61.00	0.00#
0.00	0.00	0.00

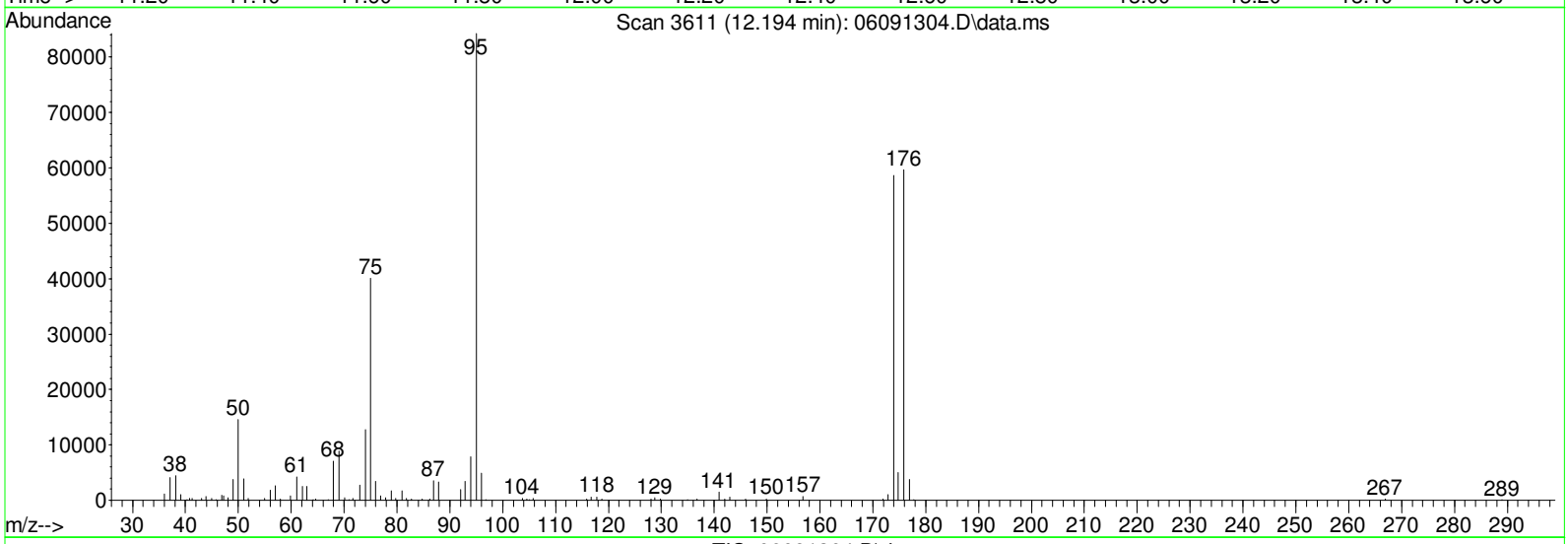
AFTER M3
By Alfred at 3:46:03 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(70) 1,2,3-Trichloropropane (M)

12.193min (-0.296) 28.08 ug/L

response 825680

Ion	Exp%	Act%
74.90	100	100
77.00	32.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

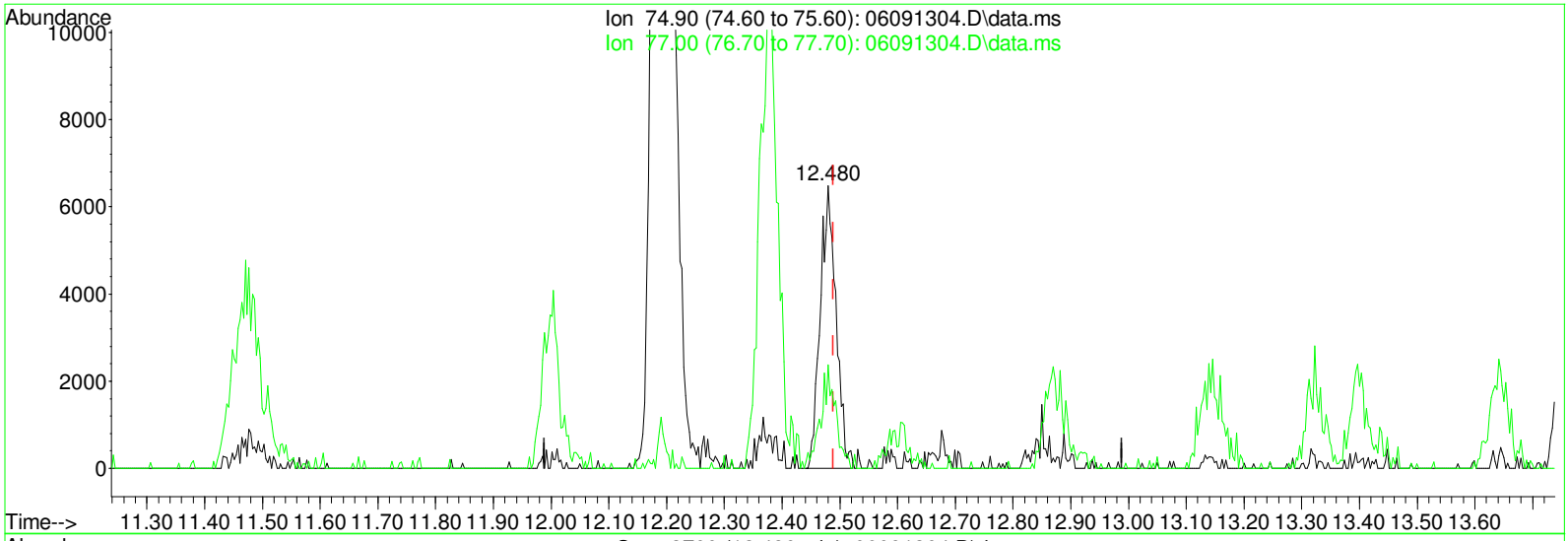
BEFORE
By Alfred at 3:46:07 PM, 7/3/2013

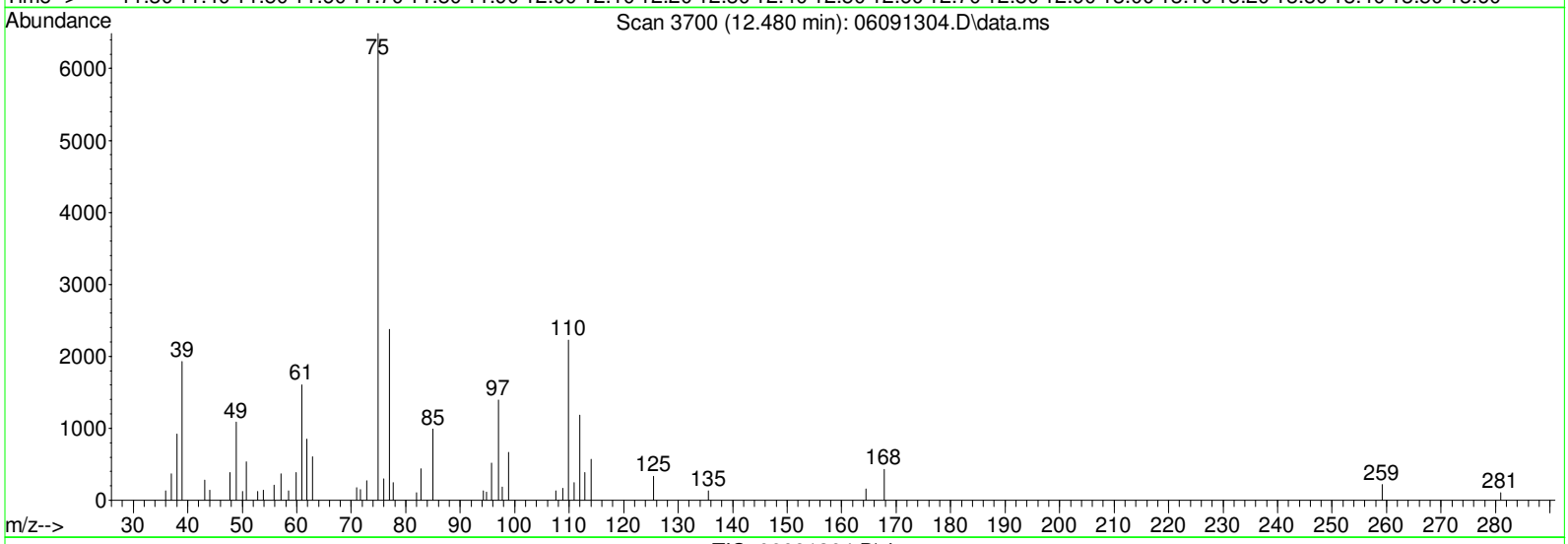
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Sample : ICAL VSTD005
Misc : VOC_W+
ALS Vial : 3

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(70) 1,2,3-Trichloropropane (M)

12.480min (-0.008) 4.22 ug/L m

response 124206

Ion	Exp%	Act%
74.90	100	100
77.00	32.60	33.13
0.00	0.00	0.00
0.00	0.00	0.00

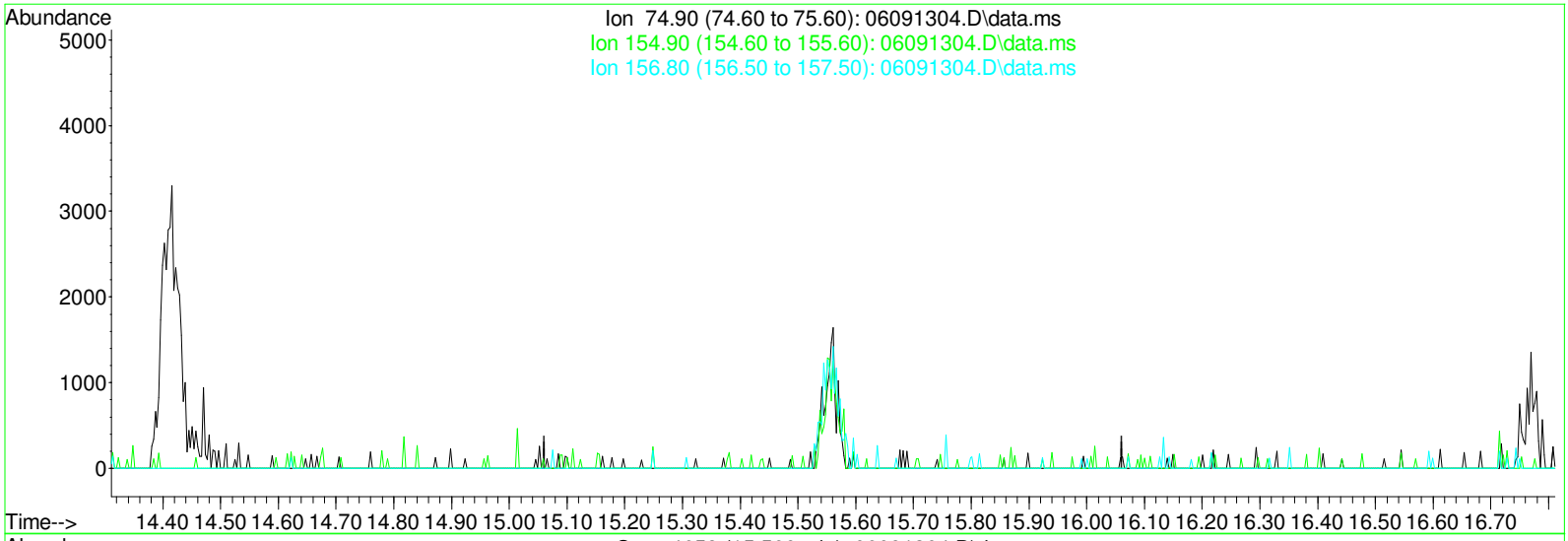
AFTER M2

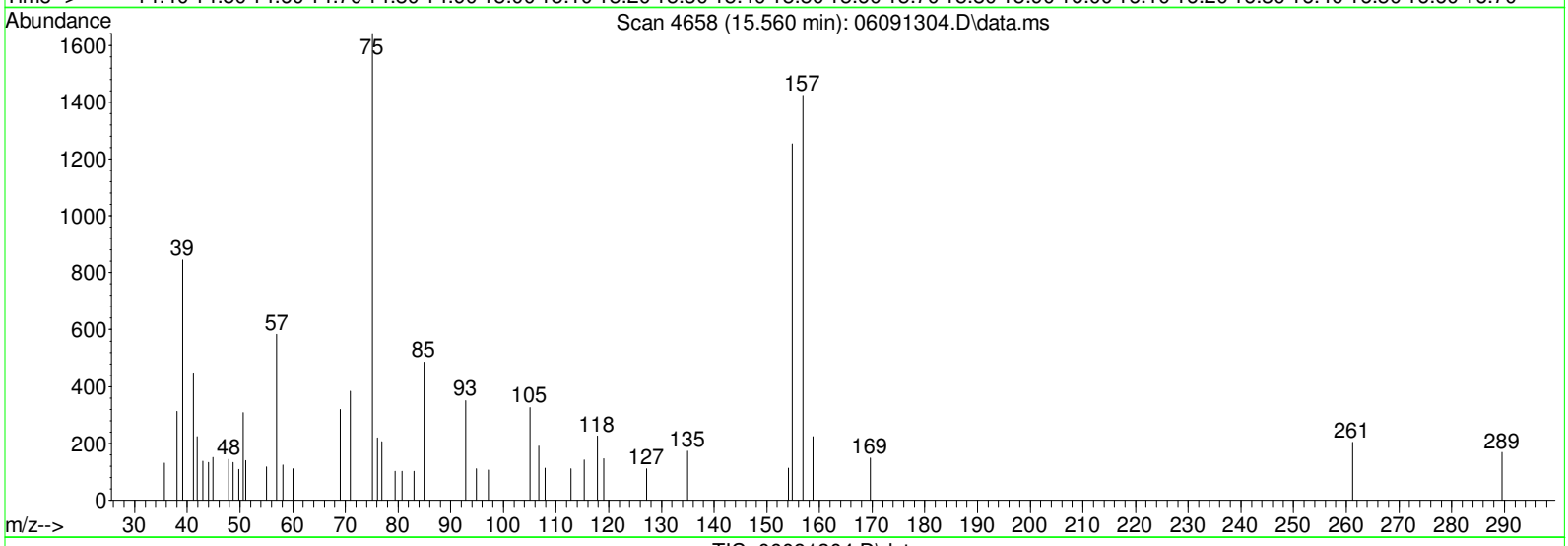
By Alfred at 3:46:12 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm Operator: PS
Sample : ICAL VSTD005 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(85) 1,2-Dibromo-3-chloropropa (M)

15.561min (-15.561) 0.00 ug/L

response 0

Ion	Exp%	Act%
74.90	100	0.00
154.90	74.30	0.00#
156.80	95.90	0.00#
0.00	0.00	0.00

BEFORE

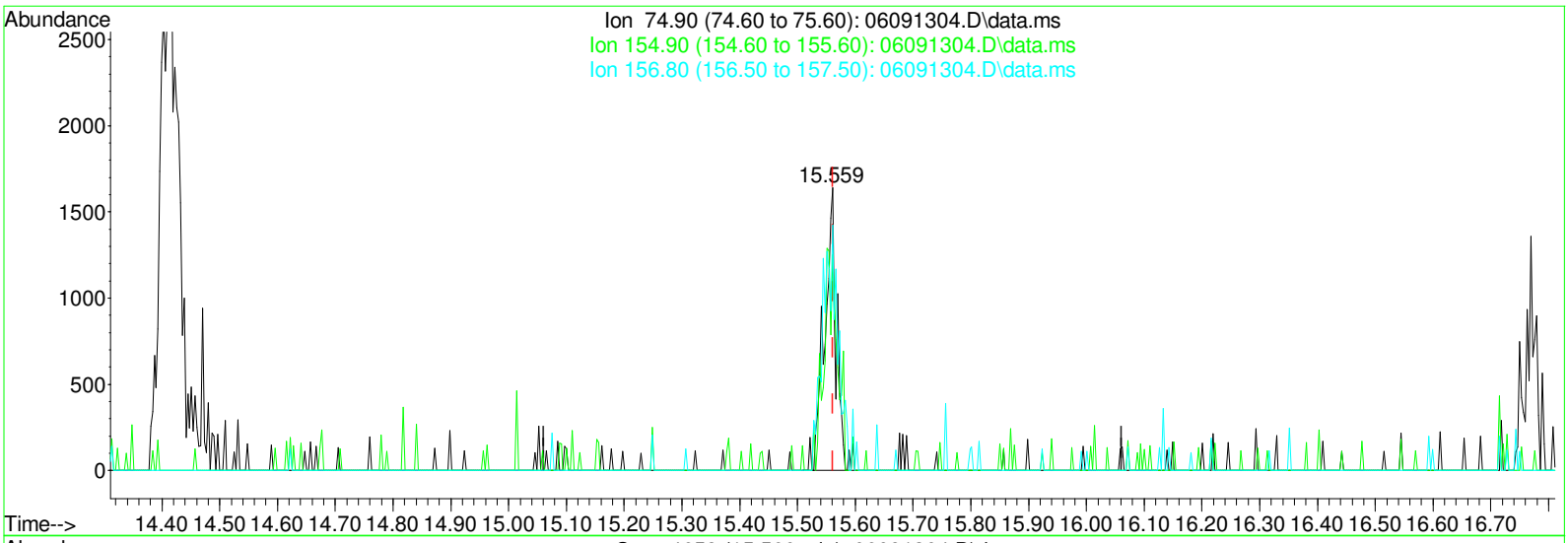
By Alfred at 3:46:17 PM, 7/3/2013

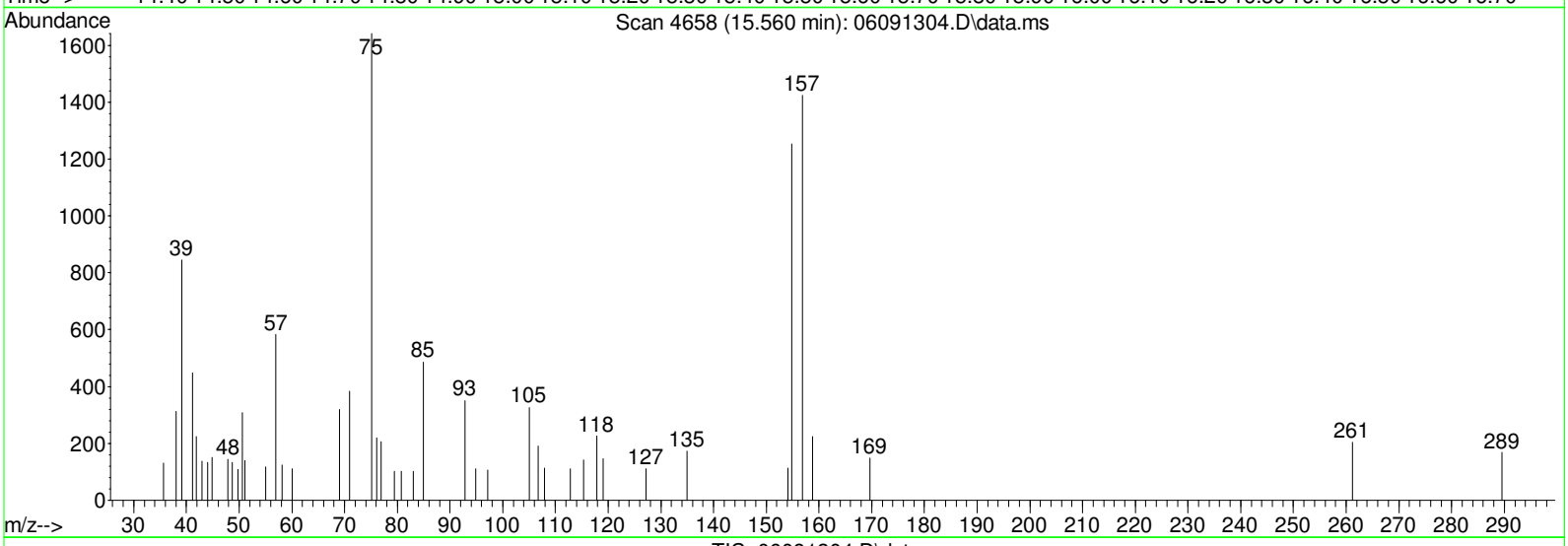
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091304.D
Acq On : 9 Jun 2013 2:36 pm
Sample : ICAL VSTD005
Misc : VOC_W+
ALS Vial : 3

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:05:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091304.D\data.ms

(85) 1,2-Dibromo-3-chloropropa (M)

15.560min (-0.000) 3.76 ug/L m

response 23875

Ion	Exp%	Act%
74.90	100	100
154.90	74.30	91.89
156.80	95.90	115.77
0.00	0.00	0.00

AFTER M1

By Alfred at 3:46:23 PM, 7/3/2013

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:11:05 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1875814	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.403	114	3146934	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1783482	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1668218	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	817213	27.21	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 90.70%			
32) 1,2-Dichloroethane-d4	5.726	102	226695	29.01	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 96.70%			
48) Toluene-d8	8.469	98	3880675	30.23	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.77%			
68) Bromofluorobenzene	12.194	174	1341834	33.30	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 111.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	327619m	12.29	ug/L	
3) Chloromethane	1.352	50	257911m	10.04	ug/L	
4) Vinyl chloride	1.424	62	297782	9.73	ug/L	94
5) 1,3-Butadiene	1.453	39	223707	9.34	ug/L	91
6) Bromomethane	1.670	96	105430m	18.61	ug/L	
7) Chloroethane	1.748	64	155990	10.72	ug/L	90
8) Trichlorofluoromethane	1.947	101	353198	8.78	ug/L	100
9) Isopropyl Alcohol	2.589	45	357874	154.13	ug/L #	94
10) Ethyl Ether	2.192	59	208745	9.67	ug/L	95
11) Acrolein	2.300	56	38889	8.99	ug/L #	10
12) Acetone	2.439	43	203320	17.58	ug/L	99
13) Freon-TF	2.394	151	159797	11.07	ug/L #	37
14) 1,1-Dichloroethene	2.390	96	207946	11.62	ug/L	81
15) Methylene Chloride	2.867	84	253937	10.40	ug/L	87
16) Carbon disulfide	2.584	76	1544844	20.54	ug/L	96
17) Acrylonitrile	3.149	53	113790m	9.05	ug/L	
18) MTBE	3.188	73	738466	9.56	ug/L	100
19) Hexane	3.519	57	228452	11.06	ug/L	96
20) trans-1,2-Dichloroethene	3.170	96	237679	10.47	ug/L	92
21) Vinyl acetate	3.810	43	1047980	20.76	ug/L	94
22) 1,1-Dichloroethane	3.701	63	393292	9.06	ug/L	96
23) 2-Butanone	4.608	72	85587	21.63	ug/L #	83
24) 2,2-Dichloropropane	4.535	77	350745	9.88	ug/L	96
25) cis-1,2-Dichloroethene	4.546	96	260727	9.92	ug/L	92
26) Ethyl Acetate	4.729	45	47000	10.08	ug/L #	73
27) Chloroform	5.034	83	379926	8.73	ug/L	96
28) Bromochloromethane	4.889	128	111018	10.59	ug/L #	89
30) Isobutyl alcohol	5.835	43	241062	149.25	ug/L	98
33) Carbon Tetrachloride	5.496	117	247326	8.13	ug/L	95
34) 1,2-Dichloroethane	5.837	62	316127m	8.80	ug/L	
35) 1,1,1-Trichloroethane	5.258	97	323677	8.91	ug/L	97
36) 1,1-Dichloropropene	5.509	110	106853	9.44	ug/L	91
37) 1-Butanol	6.799	56	151287	166.66	ug/L	92
38) Benzene	5.795	78	957101	9.21	ug/L	99
39) Trichloroethene	6.739	95	227432	8.80	ug/L	94
40) 1,2-Dichloropropane	7.043	63	240497m	9.09	ug/L	
41) 1,4-Dioxane	7.290	88	38421	102.47	ug/L #	72
42) Bromodichloromethane	7.460	83	277946	8.51	ug/L	98
43) Dibromomethane	7.206	93	142030	9.53	ug/L	94
44) 2-Nitropropane	7.807	41	61434	8.02	ug/L #	2
45) 2-Chloroethylvinyl ether	7.953	63	252313m	14.92	ug/L	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:11:05 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

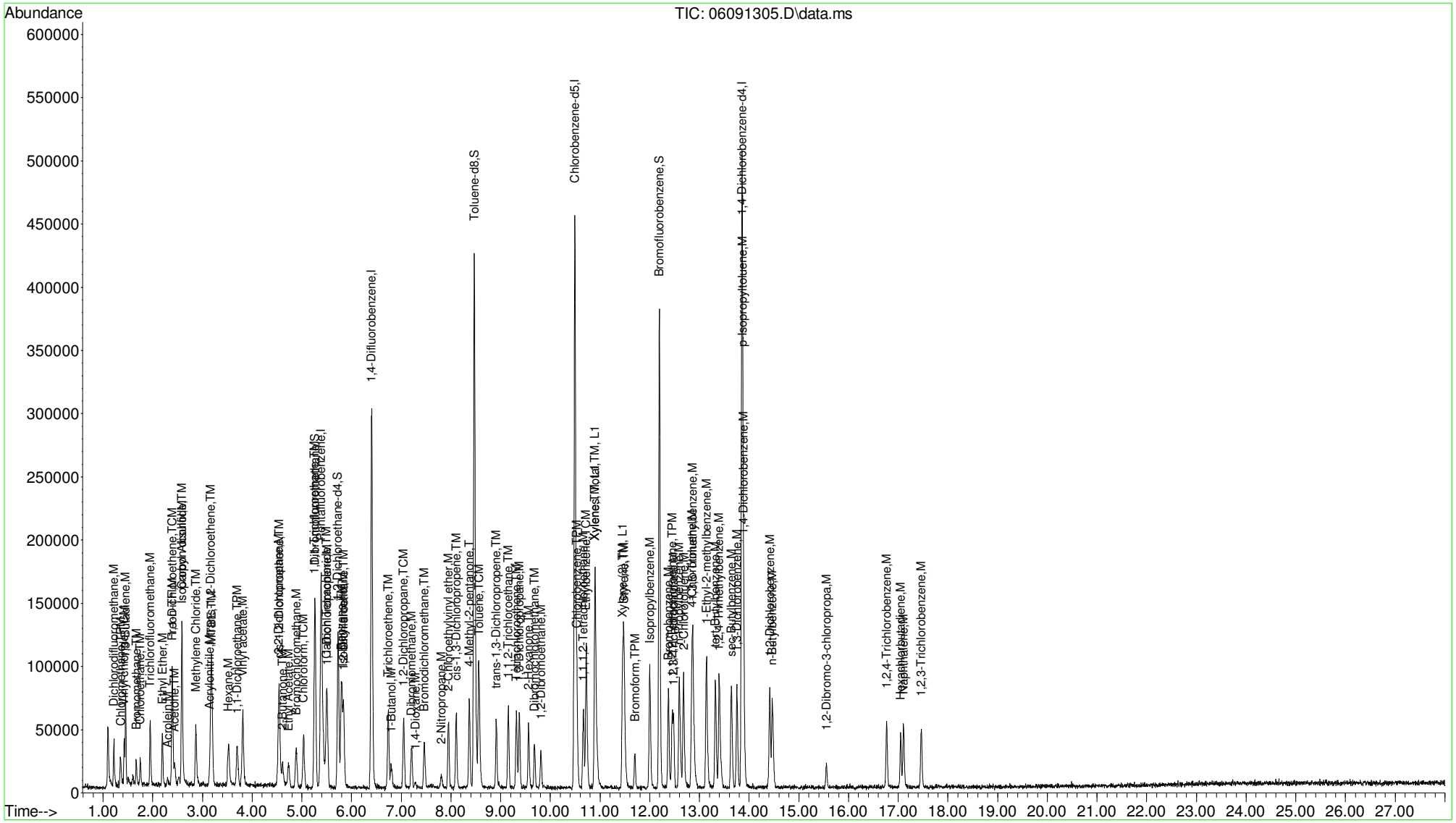
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.367	43	544263	16.47 ug/L	92
47) cis-1,3-Dichloropropene	8.109	75	379963	8.89 ug/L	93
49) Toluene	8.564	92	593663	8.97 ug/L	98
51) trans-1,3-Dichloropropene	8.911	75	325928	8.46 ug/L	97
52) 2-Hexanone	9.559	43	391416	17.02 ug/L	96
53) 1,1,2-Trichloroethane	9.151	83	197726	9.95 ug/L	94
54) 1,3-Dichloropropane	9.374	76	389570	9.05 ug/L	96
55) Tetrachloroethene	9.318	164	169659	10.22 ug/L	98
56) Dibromochloromethane	9.679	129	191166	7.63 ug/L	86
57) 1,2-Dibromoethane	9.810	107	215268	9.07 ug/L #	99
58) Chlorobenzene	10.533	112	600676	9.52 ug/L	100
59) Ethylbenzene	10.723	91	1096057	9.13 ug/L	96
60) 1,1,1,2-Tetrachloroethane	10.666	131	184073	7.88 ug/L #	62
61) Xylene	10.900	106	802438	18.27 ug/L	94
62) Xylene (2)	11.454	106	391932	9.29 ug/L	93
63) Xylenes, Total	10.900	106	1194370m	27.55 ug/L #	
64) Styrene	11.481	104	706588	9.02 ug/L	96
65) Isopropylbenzene	12.004	105	907503	9.64 ug/L	98
66) Bromoform	11.702	173	142924	8.79 ug/L #	94
67) 1,1,2,2-Tetrachloroethane	12.455	83	329300	10.07 ug/L	99
70) 1,2,3-Trichloropropane	12.482	75	260785	8.70 ug/L #	42
71) n-Propylbenzene	12.596	91	1012335	9.08 ug/L	99
72) Bromobenzene	12.375	156	268622	9.30 ug/L #	91
73) 1,3,5-Trimethylbenzene	12.867	105	795357	8.84 ug/L	98
74) 2-Chlorotoluene	12.682	91	689610	8.71 ug/L	95
75) 4-Chlorotoluene	12.850	91	778026	8.49 ug/L	94
76) tert-Butylbenzene	13.319	119	539799	8.73 ug/L	95
77) 1-Ethyl-2-methylbenzene	13.143	105	988031	9.14 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	805505	8.59 ug/L	99
79) sec-Butylbenzene	13.643	105	797200	9.19 ug/L	99
80) p-Isopropyltoluene	13.873	119	672597	9.20 ug/L	99
81) 1,3-Dichlorobenzene	13.754	146	436630	9.40 ug/L	99
82) 1,4-Dichlorobenzene	13.888	146	502950	9.43 ug/L	98
83) n-Butylbenzene	14.465	91	562456	8.50 ug/L	96
84) 1,2-Dichlorobenzene	14.416	146	420317	9.13 ug/L	98
85) 1,2-Dibromo-3-chloropropa	15.554	75	50769m	7.84 ug/L	
86) 1,2,4-Trichlorobenzene	16.767	180	205818	9.57 ug/L	94
87) Hexachlorbutadiene	17.051	225	94843	10.42 ug/L	95
88) Naphthalene	17.106	128	514402	8.44 ug/L	97
89) 1,2,3-Trichlorobenzene	17.465	180	163262	8.93 ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:11:05 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1875814	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.403	114	3146934	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1783482	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1668218	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	817213	27.21	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 90.70%			
32) 1,2-Dichloroethane-d4	5.726	102	226695	29.01	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 96.70%			
48) Toluene-d8	8.469	98	3880675	30.23	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.77%			
68) Bromofluorobenzene	12.194	174	1341834	33.30	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 111.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	293749	11.02	ug/L	91
3) Chloromethane	1.347	50	250364	9.74	ug/L	70
4) Vinyl chloride	1.424	62	297782	9.73	ug/L	94
5) 1,3-Butadiene	1.453	39	223707	9.34	ug/L	91
6) Bromomethane	1.671	96	96061	17.78	ug/L	96
7) Chloroethane	1.748	64	155990	10.72	ug/L	90
8) Trichlorofluoromethane	1.947	101	353198	8.78	ug/L	100
9) Isopropyl Alcohol	2.589	45	357874	154.13	ug/L #	94
10) Ethyl Ether	2.192	59	208745	9.67	ug/L	95
11) Acrolein	2.300	56	38889	8.99	ug/L #	10
12) Acetone	2.439	43	203320	17.58	ug/L	99
13) Freon-TF	2.394	151	159797	11.07	ug/L #	37
14) 1,1-Dichloroethene	2.390	96	207946	11.62	ug/L	81
15) Methylene Chloride	2.867	84	253937	10.40	ug/L	87
16) Carbon disulfide	2.584	76	1544844	20.54	ug/L	96
17) Acrylonitrile	3.144	53	98811	7.86	ug/L	86
18) MTBE	3.188	73	738466	9.56	ug/L	100
19) Hexane	3.519	57	228452	11.06	ug/L	96
20) trans-1,2-Dichloroethene	3.170	96	237679	10.47	ug/L	92
21) Vinyl acetate	3.810	43	1047980	20.76	ug/L	94
22) 1,1-Dichloroethane	3.701	63	393292	9.06	ug/L	96
23) 2-Butanone	4.608	72	85587	21.63	ug/L #	83
24) 2,2-Dichloropropane	4.535	77	350745	9.88	ug/L	96
25) cis-1,2-Dichloroethene	4.546	96	260727	9.92	ug/L	92
26) Ethyl Acetate	4.729	45	47000	10.08	ug/L #	73
27) Chloroform	5.034	83	379926	8.73	ug/L	96
28) Bromochloromethane	4.889	128	111018	10.59	ug/L #	89
30) Isobutyl alcohol	5.835	43	241062	149.25	ug/L	98
33) Carbon Tetrachloride	5.496	117	247326	8.13	ug/L	95
34) 1,2-Dichloroethane	5.839	62	299717	8.35	ug/L #	95
35) 1,1,1-Trichloroethane	5.258	97	323677	8.91	ug/L	97
36) 1,1-Dichloropropene	5.509	110	106853	9.44	ug/L	91
37) 1-Butanol	6.799	56	151287	166.66	ug/L	92
38) Benzene	5.795	78	957101	9.21	ug/L	99
39) Trichloroethene	6.739	95	227432	8.80	ug/L	94
40) 1,2-Dichloropropane	7.047	63	239117	9.04	ug/L #	88
41) 1,4-Dioxane	7.290	88	38421	102.47	ug/L #	72
42) Bromodichloromethane	7.460	83	277946	8.51	ug/L	98
43) Dibromomethane	7.206	93	142030	9.53	ug/L	94
44) 2-Nitropropane	7.807	41	61434	8.02	ug/L #	2
45) 2-Chloroethylvinyl ether	7.953	63	148374	8.77	ug/L #	42

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

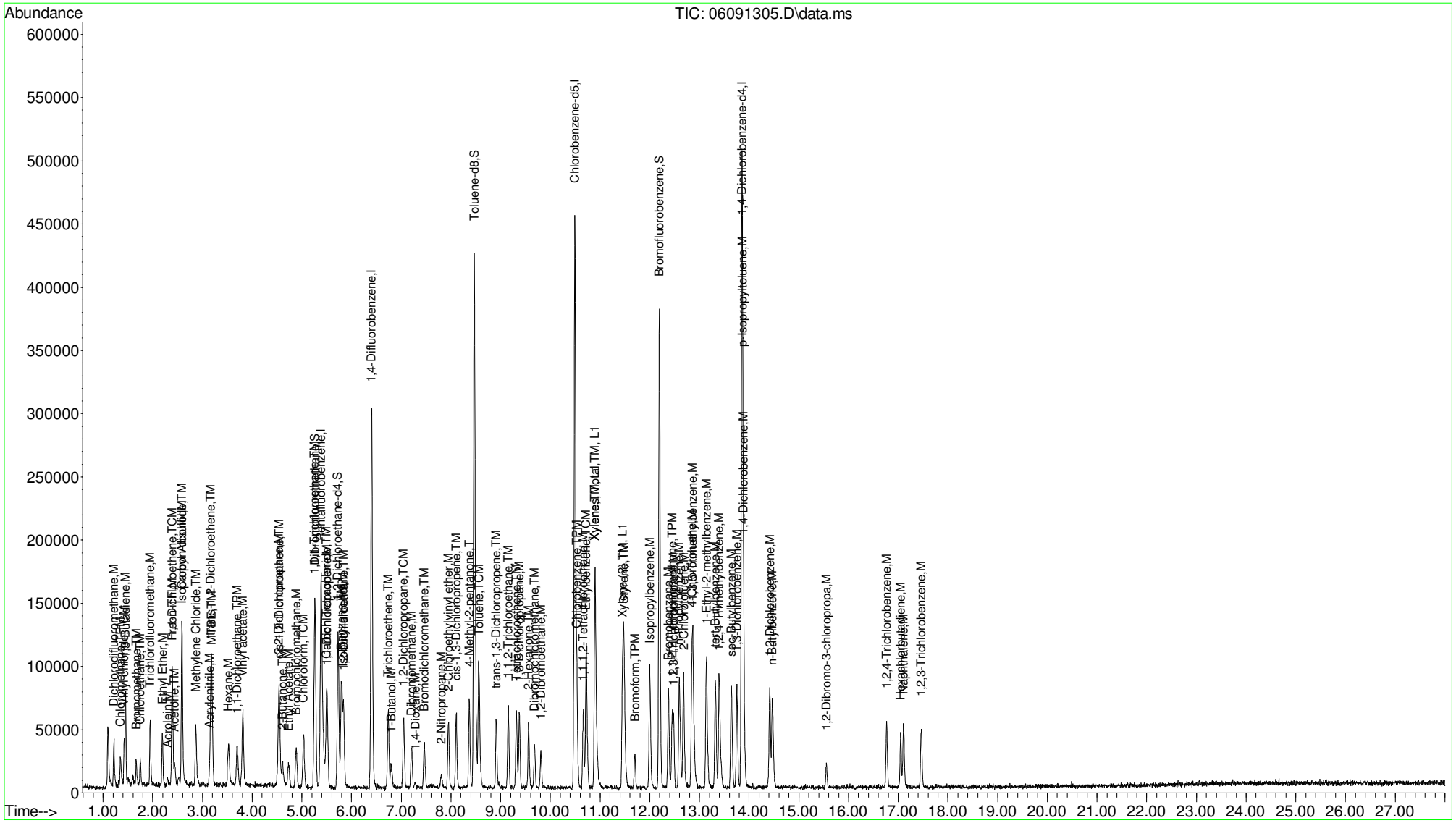
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.367	43	544263	16.47 ug/L	92
47) cis-1,3-Dichloropropene	8.109	75	379963	8.89 ug/L	93
49) Toluene	8.564	92	593663	8.97 ug/L	98
51) trans-1,3-Dichloropropene	8.911	75	325928	8.46 ug/L	97
52) 2-Hexanone	9.559	43	391416	17.02 ug/L	96
53) 1,1,2-Trichloroethane	9.151	83	197726	9.95 ug/L	94
54) 1,3-Dichloropropane	9.374	76	389570	9.05 ug/L	96
55) Tetrachloroethene	9.318	164	169659	10.22 ug/L	98
56) Dibromochloromethane	9.679	129	191166	7.63 ug/L	86
57) 1,2-Dibromoethane	9.810	107	215268	9.07 ug/L #	99
58) Chlorobenzene	10.533	112	600676	9.52 ug/L	100
59) Ethylbenzene	10.723	91	1096057	9.13 ug/L	96
60) 1,1,1,2-Tetrachloroethane	10.666	131	184073	7.88 ug/L #	62
61) Xylene	10.900	106	802438	18.27 ug/L	94
62) Xylene (2)	11.454	106	391932	9.29 ug/L	93
63) Xylenes, Total	10.900	106	1194370m	27.55 ug/L #	
64) Styrene	11.481	104	706588	9.02 ug/L	96
65) Isopropylbenzene	12.004	105	907503	9.64 ug/L	98
66) Bromoform	11.702	173	142924	8.79 ug/L #	94
67) 1,1,2,2-Tetrachloroethane	12.455	83	329300	10.07 ug/L	99
70) 1,2,3-Trichloropropane	12.482	75	260785	8.70 ug/L #	42
71) n-Propylbenzene	12.596	91	1012335	9.08 ug/L	99
72) Bromobenzene	12.375	156	268622	9.30 ug/L #	91
73) 1,3,5-Trimethylbenzene	12.867	105	795357	8.84 ug/L	98
74) 2-Chlorotoluene	12.682	91	689610	8.71 ug/L	95
75) 4-Chlorotoluene	12.850	91	778026	8.49 ug/L	94
76) tert-Butylbenzene	13.319	119	539799	8.73 ug/L	95
77) 1-Ethyl-2-methylbenzene	13.143	105	988031	9.14 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	805505	8.59 ug/L	99
79) sec-Butylbenzene	13.643	105	797200	9.19 ug/L	99
80) p-Isopropyltoluene	13.873	119	672597	9.20 ug/L	99
81) 1,3-Dichlorobenzene	13.754	146	436630	9.40 ug/L	99
82) 1,4-Dichlorobenzene	13.888	146	502950	9.43 ug/L	98
83) n-Butylbenzene	14.465	91	562456	8.50 ug/L	96
84) 1,2-Dichlorobenzene	14.416	146	420317	9.13 ug/L	98
85) 1,2-Dibromo-3-chloropropa	15.556	75	34310	5.30 ug/L #	38
86) 1,2,4-Trichlorobenzene	16.767	180	205818	9.57 ug/L	94
87) Hexachlorbutadiene	17.051	225	94843	10.42 ug/L	95
88) Naphthalene	17.106	128	514402	8.44 ug/L	97
89) 1,2,3-Trichlorobenzene	17.465	180	163262	8.93 ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

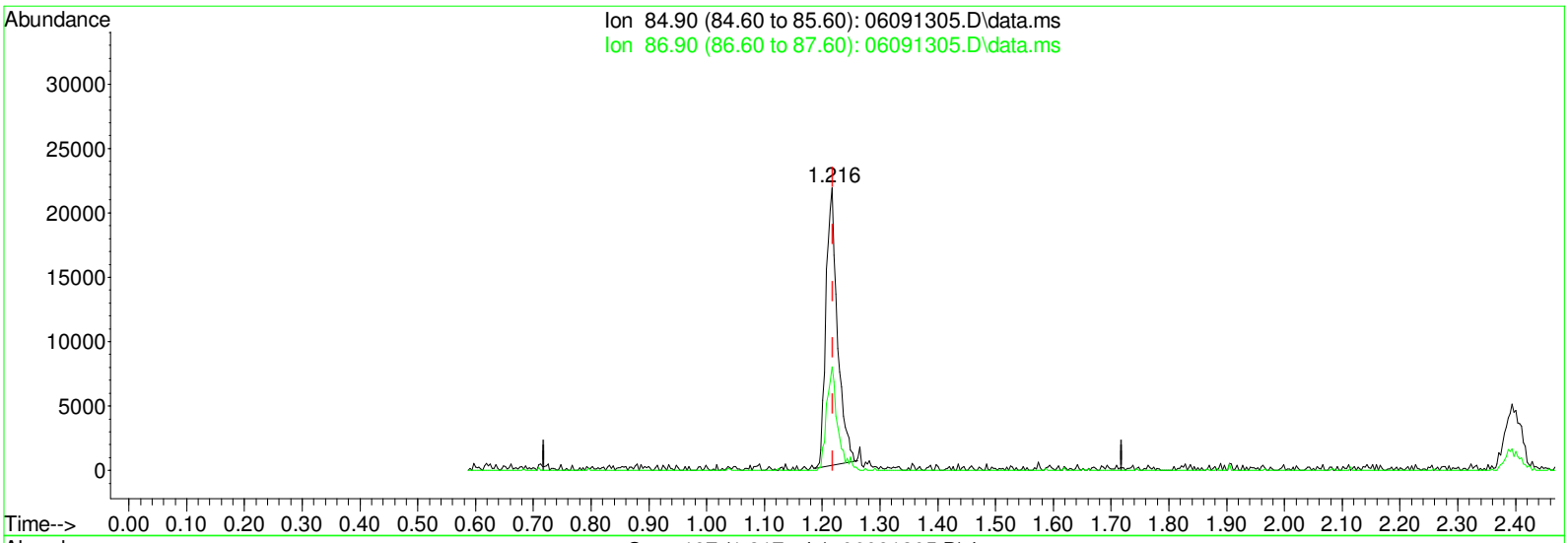
Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

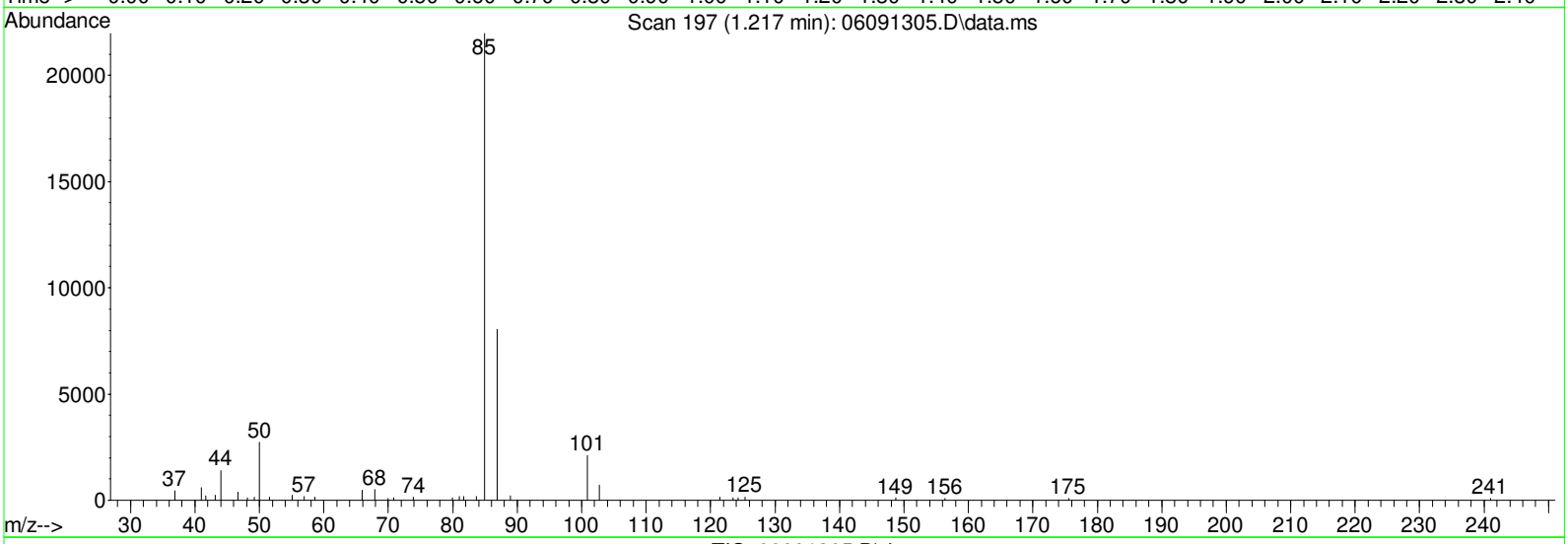


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(2) Dichlorodifluoromethane (M)

1.217min (-0.001) 11.02 ug/L

response 293749

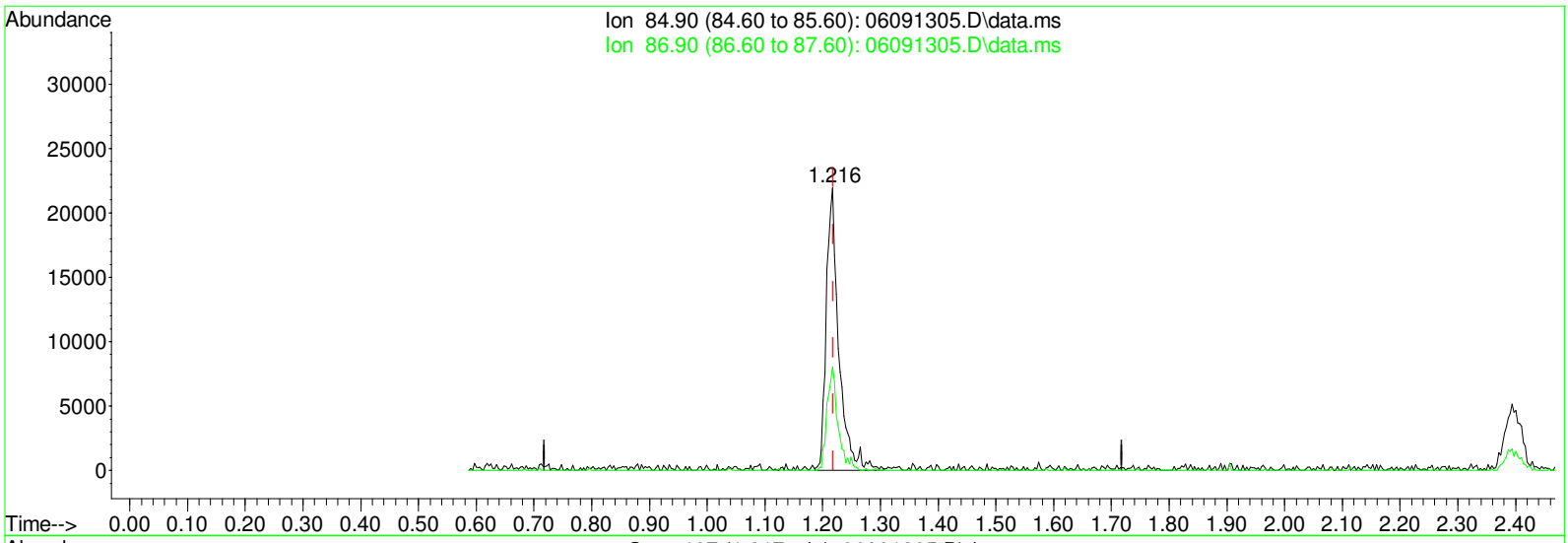
Ion	Exp%	Act%
84.90	100	100
86.90	31.20	36.04
0.00	0.00	0.00
0.00	0.00	0.00

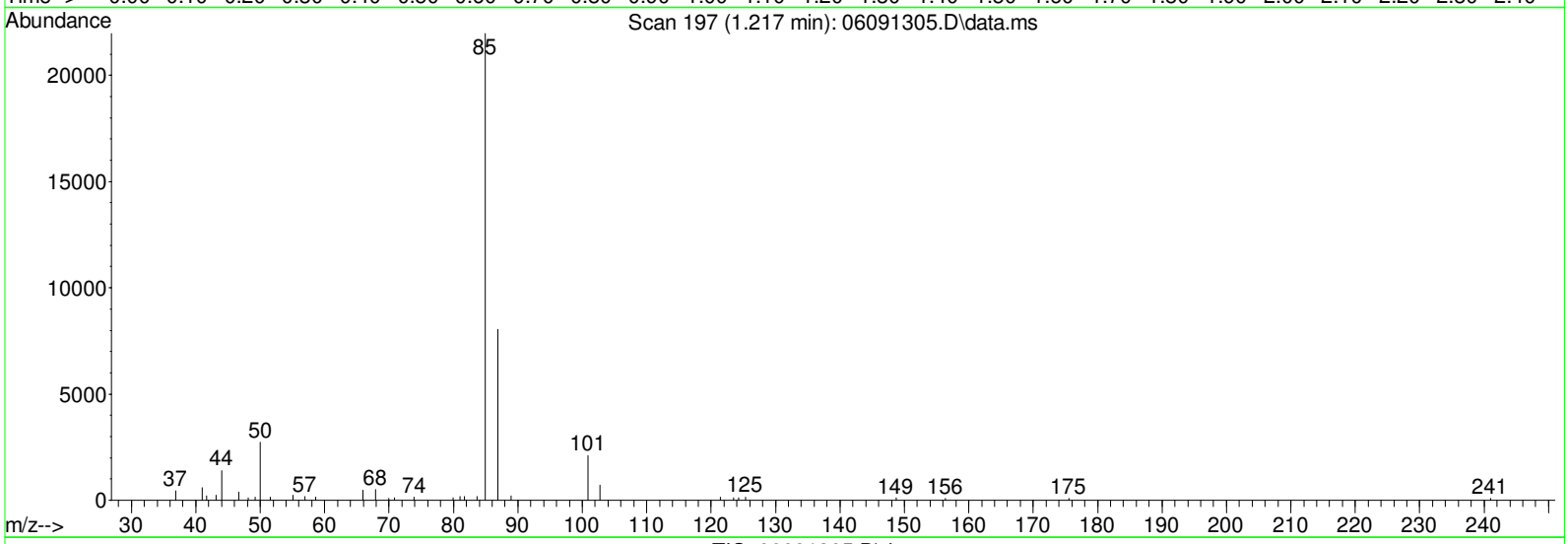
BEFORE
By Alfred at 3:46:36 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(2) Dichlorodifluoromethane (M)

1.217min (-0.001) 12.29 ug/L m

response 327619

Ion	Exp%	Act%
84.90	100	100
86.90	31.20	32.32
0.00	0.00	0.00
0.00	0.00	0.00

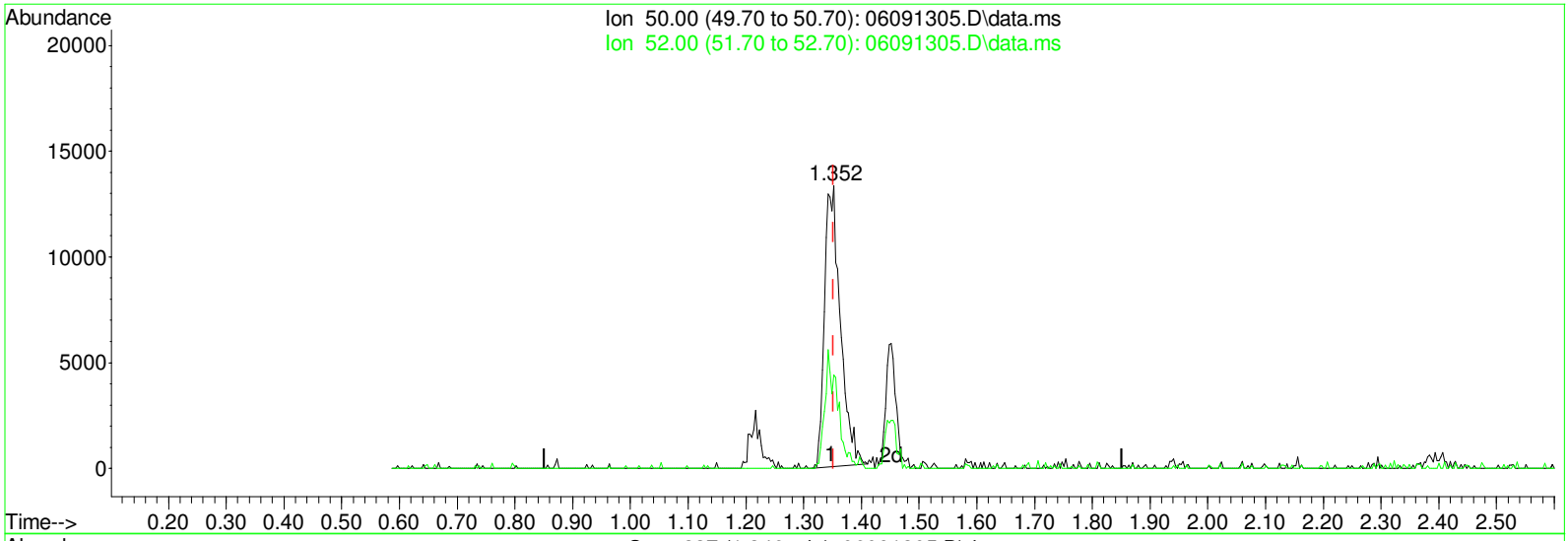
AFTER M3

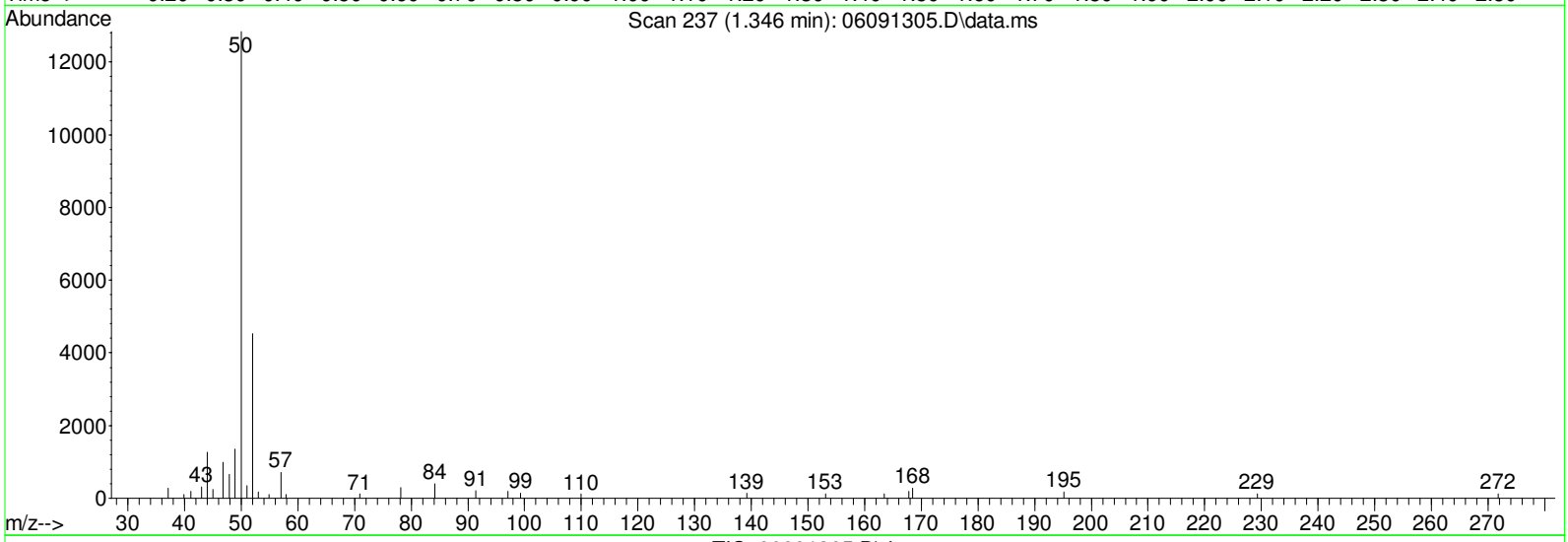
By Alfred at 3:46:40 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(3) Chloromethane (TPM)

1.347min (-0.004) 9.74 ug/L

response 250364

Ion	Exp%	Act%
50.00	100	100
52.00	33.90	16.54
0.00	0.00	0.00
0.00	0.00	0.00

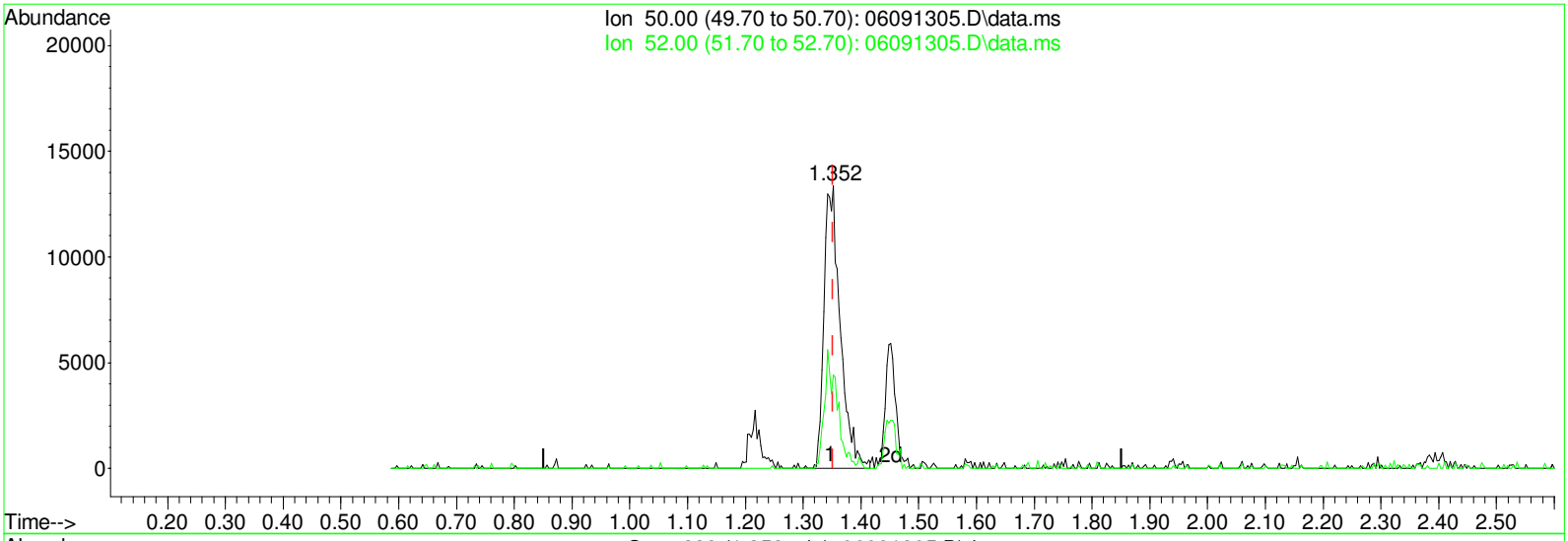
BEFORE

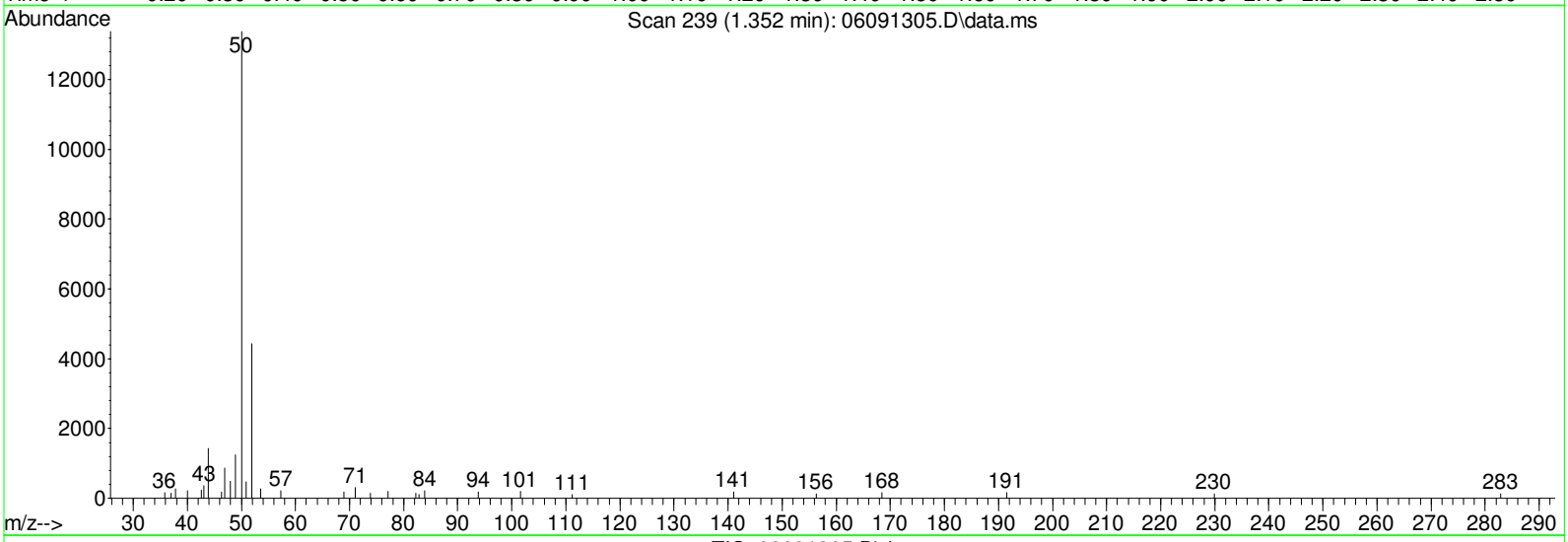
By Alfred at 3:46:45 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(3) Chloromethane (TPM)

1.352min (+0.001) 10.04 ug/L m

response 257911

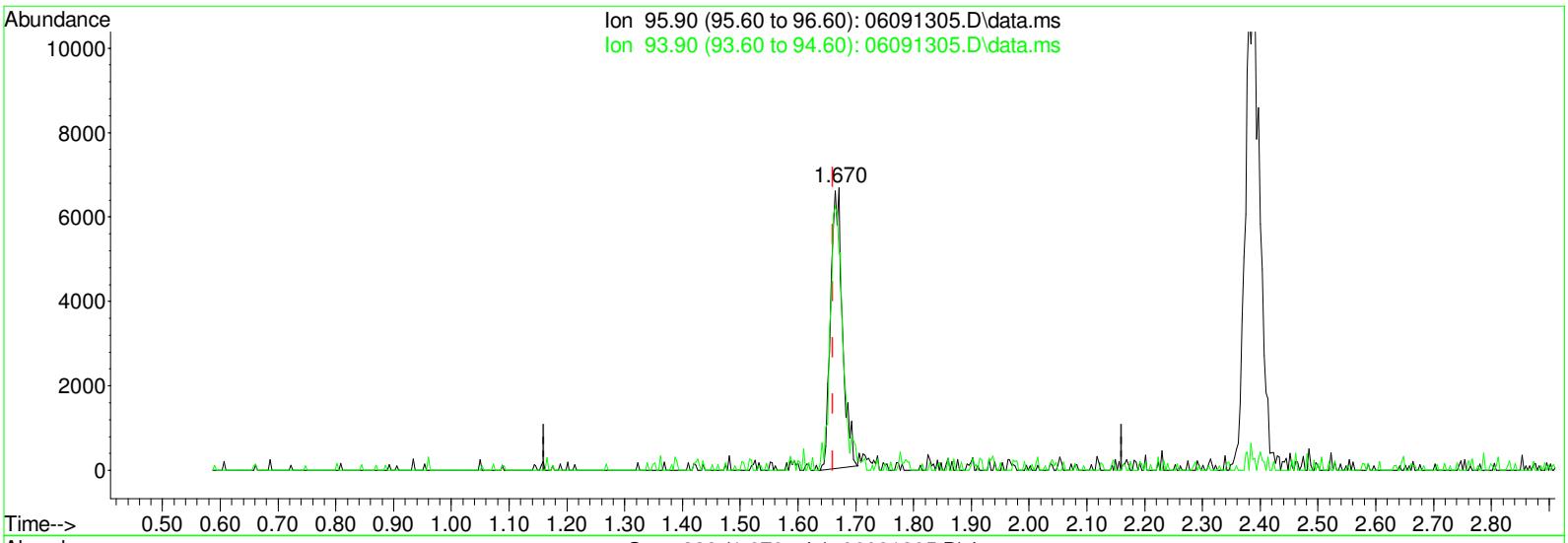
Ion	Exp%	Act%
50.00	100	100
52.00	33.90	16.06
0.00	0.00	0.00
0.00	0.00	0.00

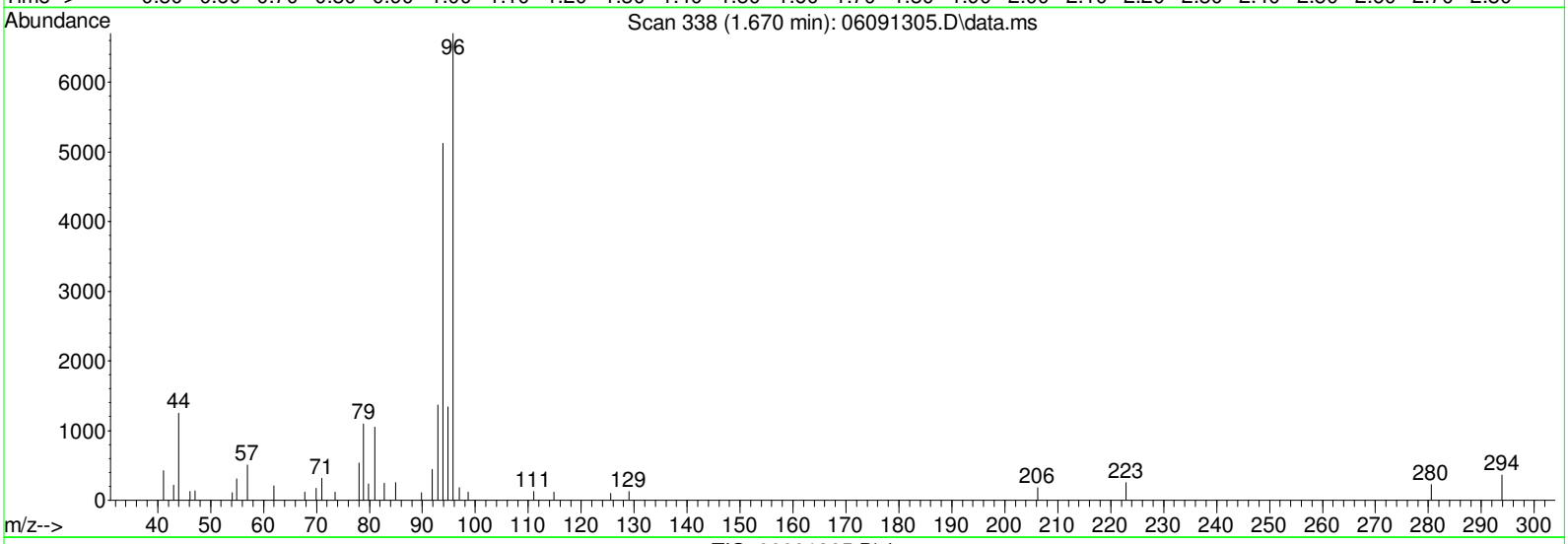
AFTER M3
By Alfred at 3:46:50 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(6) Bromomethane (TM)

1.671min (+0.011) 17.78 ug/L

response 96061

Ion	Exp%	Act%
95.90	100	100
93.90	98.20	102.13
0.00	0.00	0.00
0.00	0.00	0.00

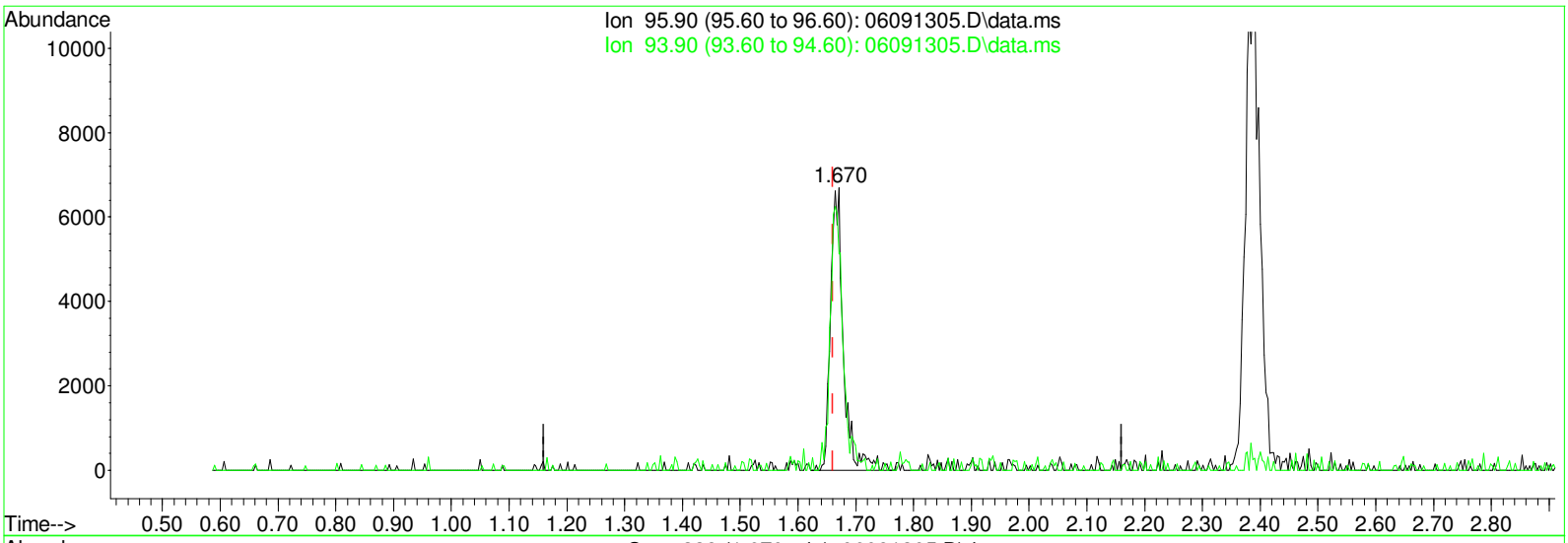
BEFORE

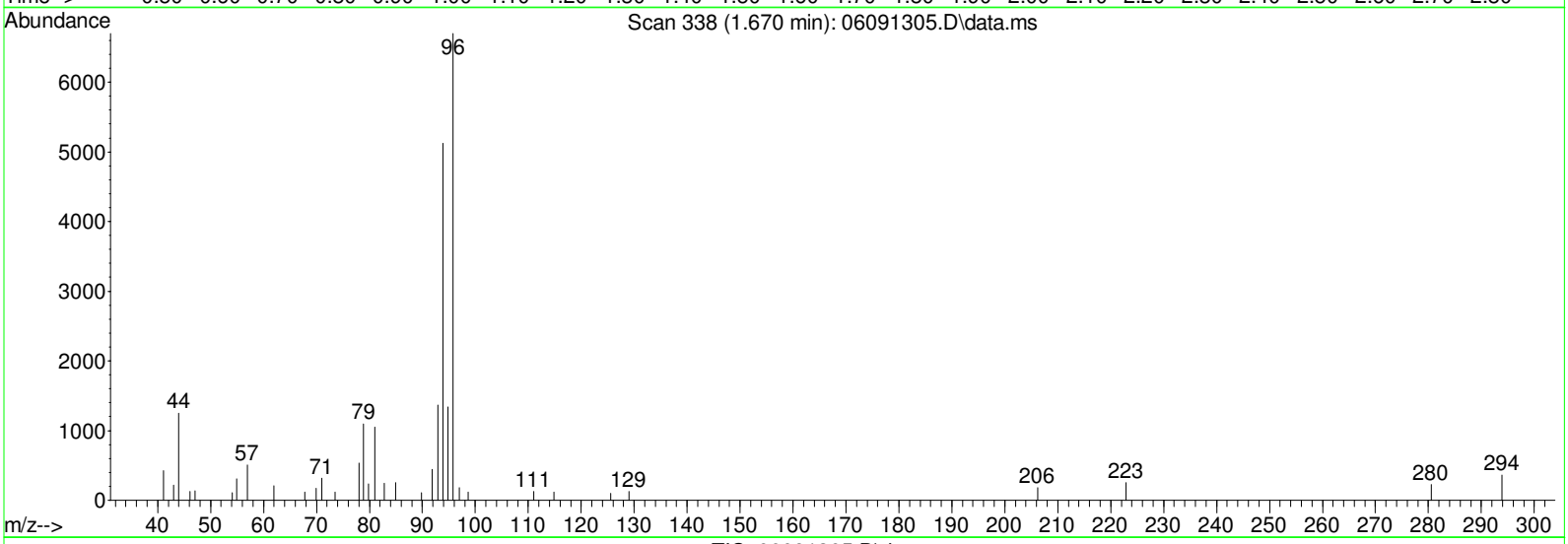
By Alfred at 3:46:55 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm
Operator: PS
Sample : ICAL VSTD010
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(6) Bromomethane (TM)

1.670min (+0.010) 18.61 ug/L m

response 105430

Ion	Exp%	Act%
95.90	100	100
93.90	98.20	93.05
0.00	0.00	0.00
0.00	0.00	0.00

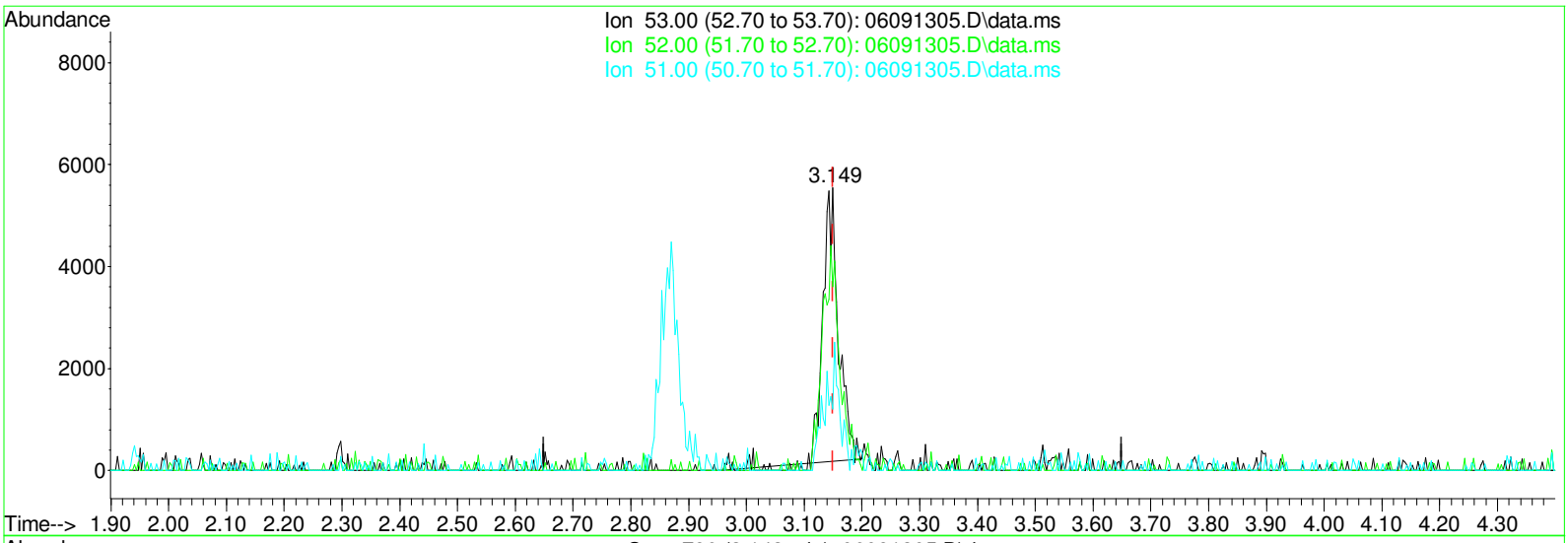
AFTER M3

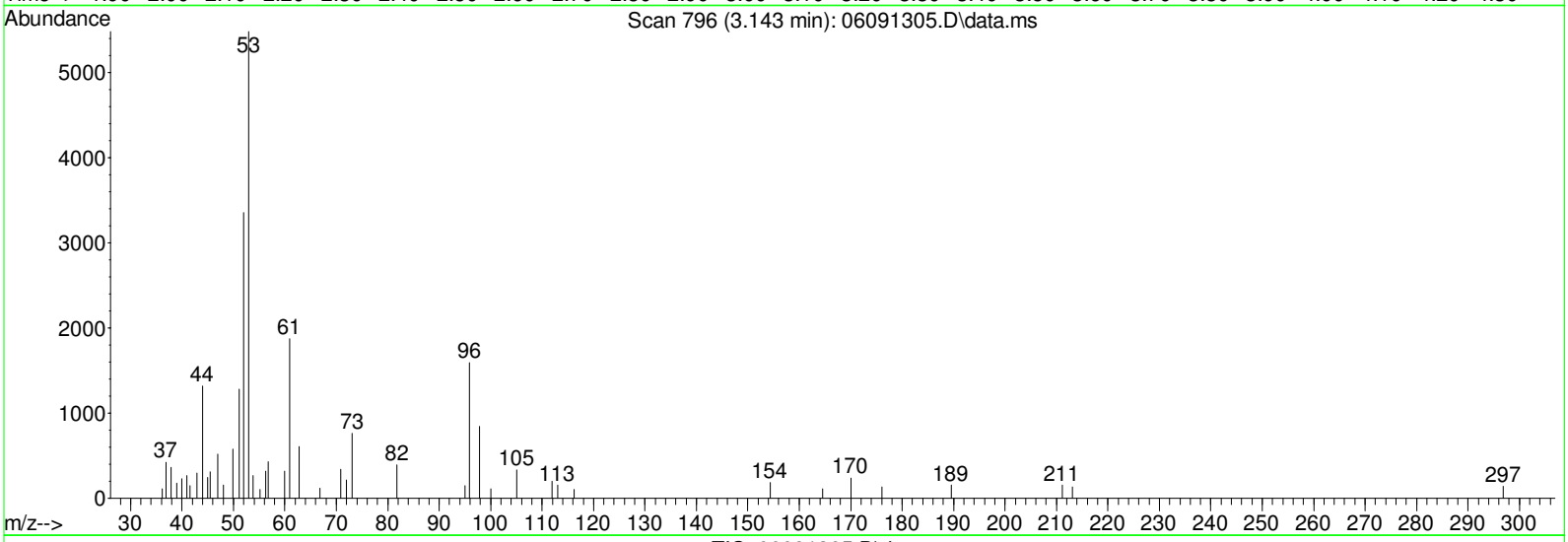
By Alfred at 3:47:01 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

BEFORE
By Alfred at 3:47:06 PM, 7/3/2013

(17) Acrylonitrile (M)

3.144min (-0.005) 7.86 ug/L

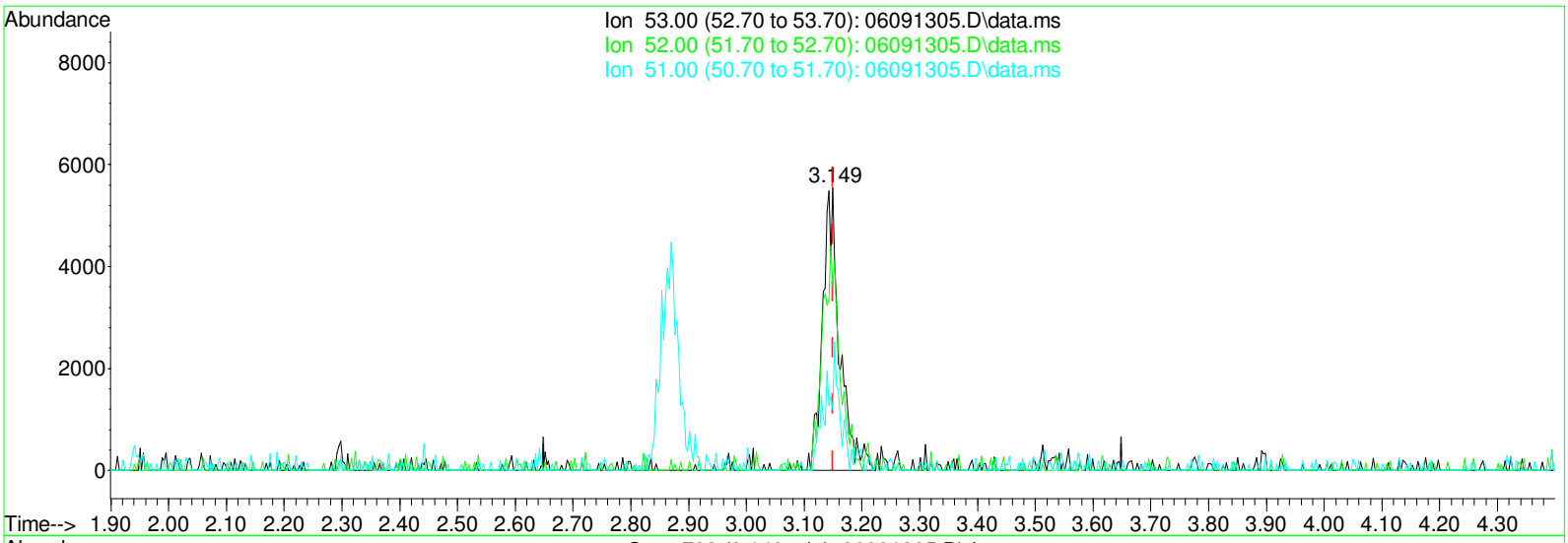
response 98811

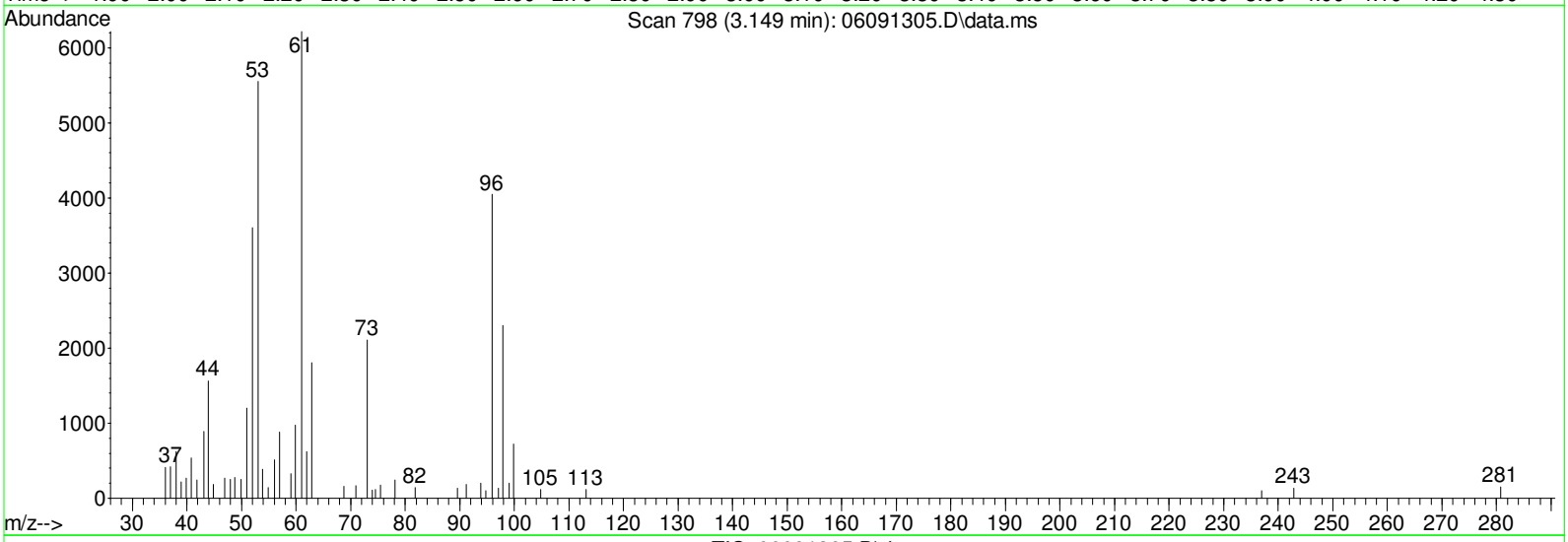
Ion	Exp%	Act%
53.00	100	100
52.00	78.60	92.68
51.00	36.80	42.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(17) Acrylonitrile (M)

3.149min (+0.000) 9.05 ug/L m

response 113790

Ion	Exp%	Act%
53.00	100	100
52.00	78.60	80.48
51.00	36.80	36.73
0.00	0.00	0.00

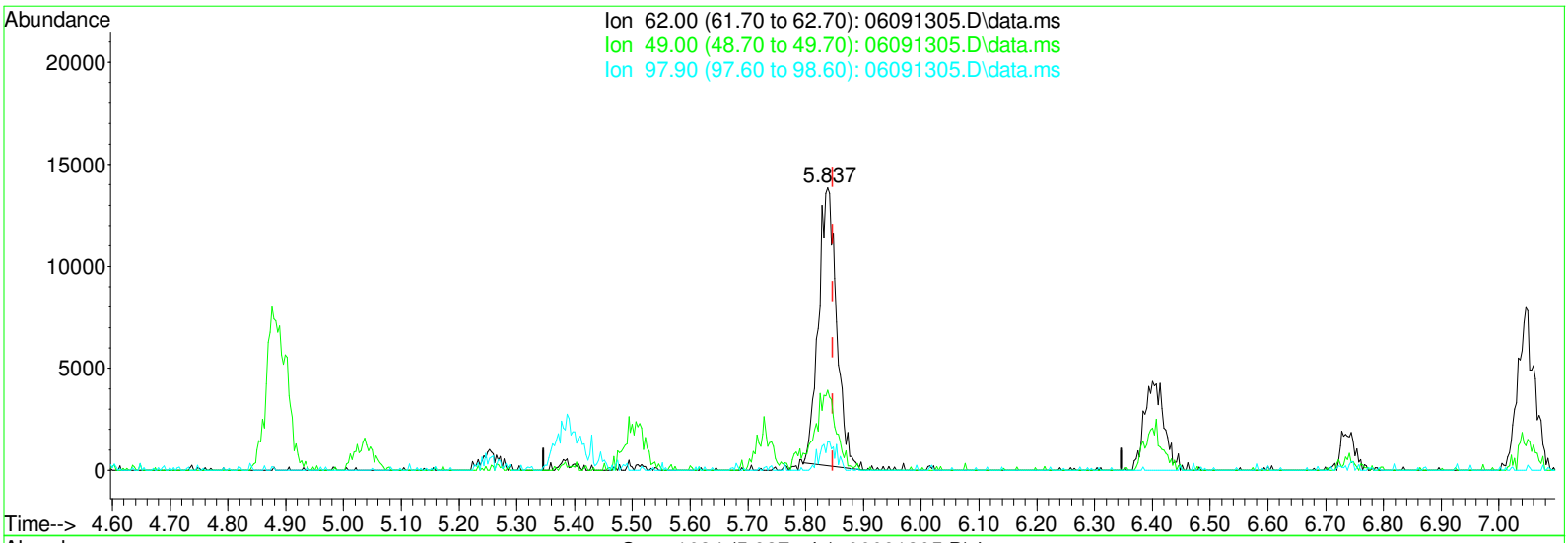
AFTER M3
By Alfred at 3:47:10 PM, 7/3/2013

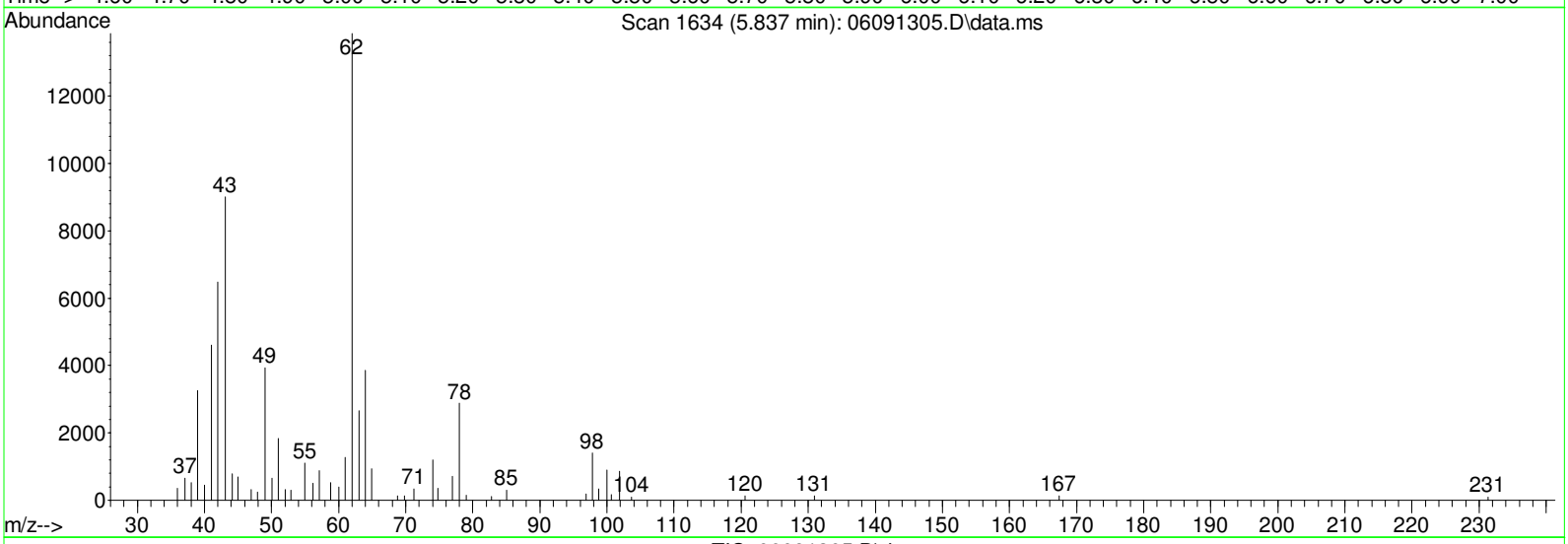
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm
Sample : ICAL VSTD010
Misc : VOC_W+
ALS Vial : 4

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(34) 1,2-Dichloroethane (TM)

5.839min (-0.008) 8.35 ug/L

response 299717

Ion	Exp%	Act%
62.00	100	100
49.00	36.10	35.99
97.90	8.50	0.00
0.00	0.00	0.00

BEFORE

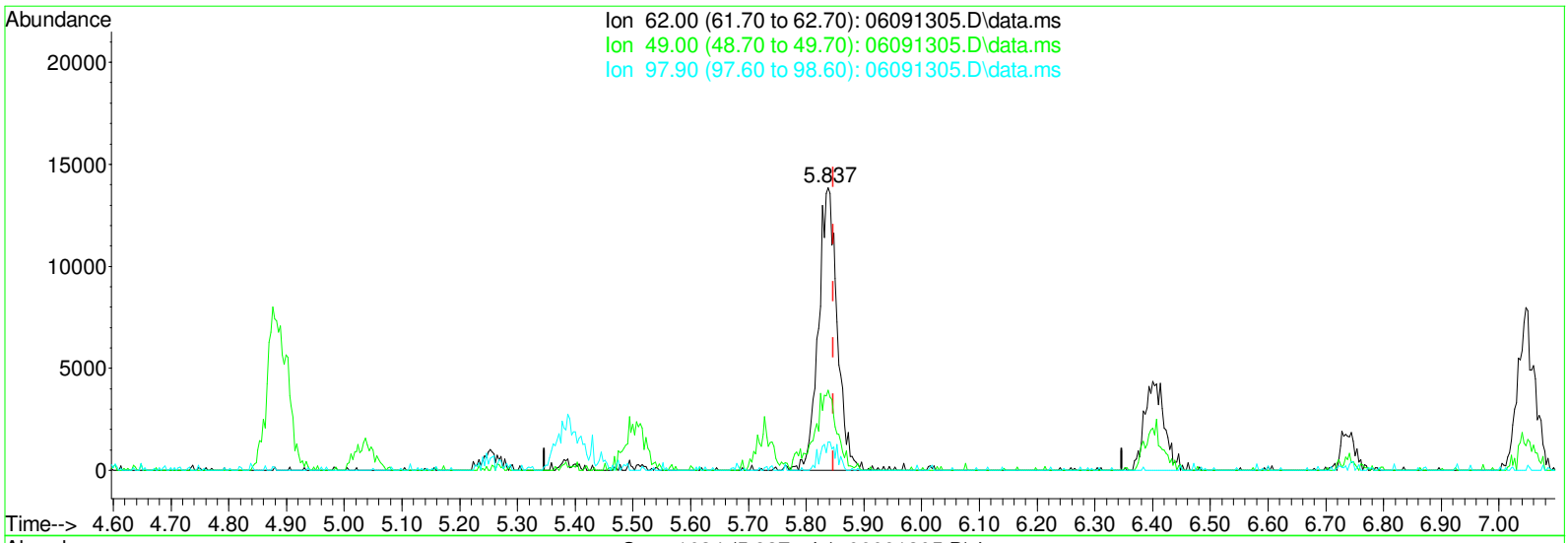
By Alfred at 3:47:17 PM, 7/3/2013

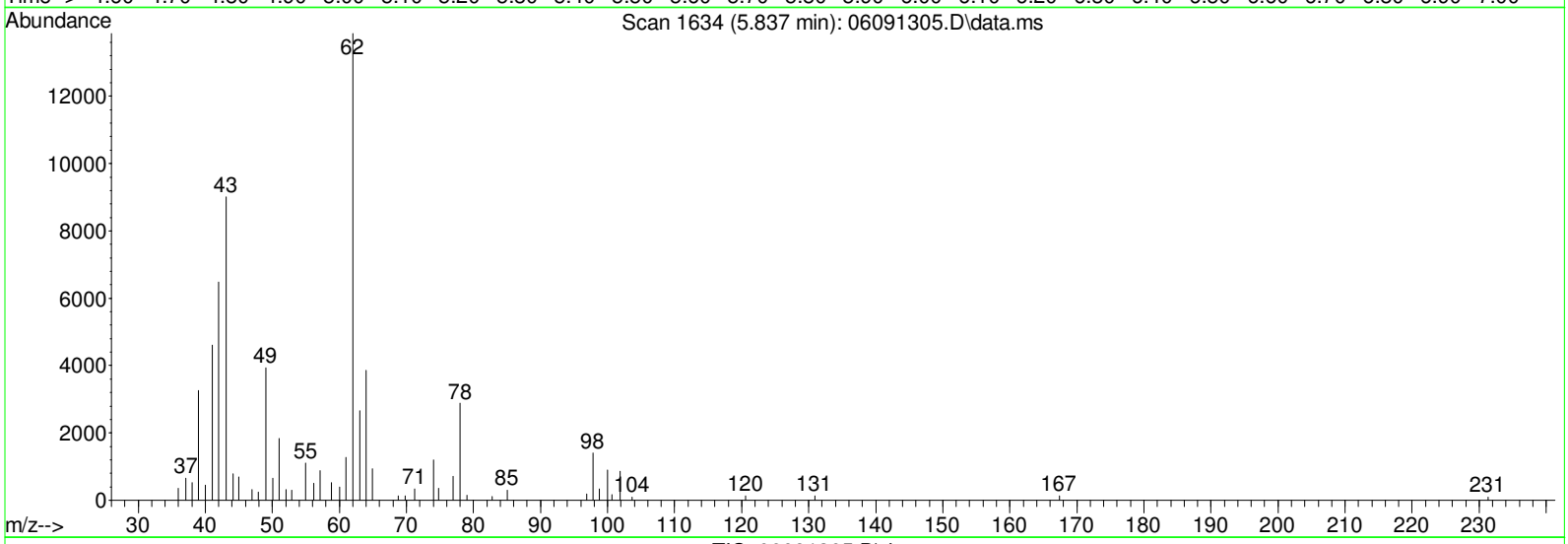
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm
Sample : ICAL VSTD010
Misc : VOC_W+
ALS Vial : 4

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(34) 1,2-Dichloroethane (TM)

5.837min (-0.009) 8.80 ug/L m

response 316127

Ion	Exp%	Act%
62.00	100	100
49.00	36.10	34.13
97.90	8.50	0.00
0.00	0.00	0.00

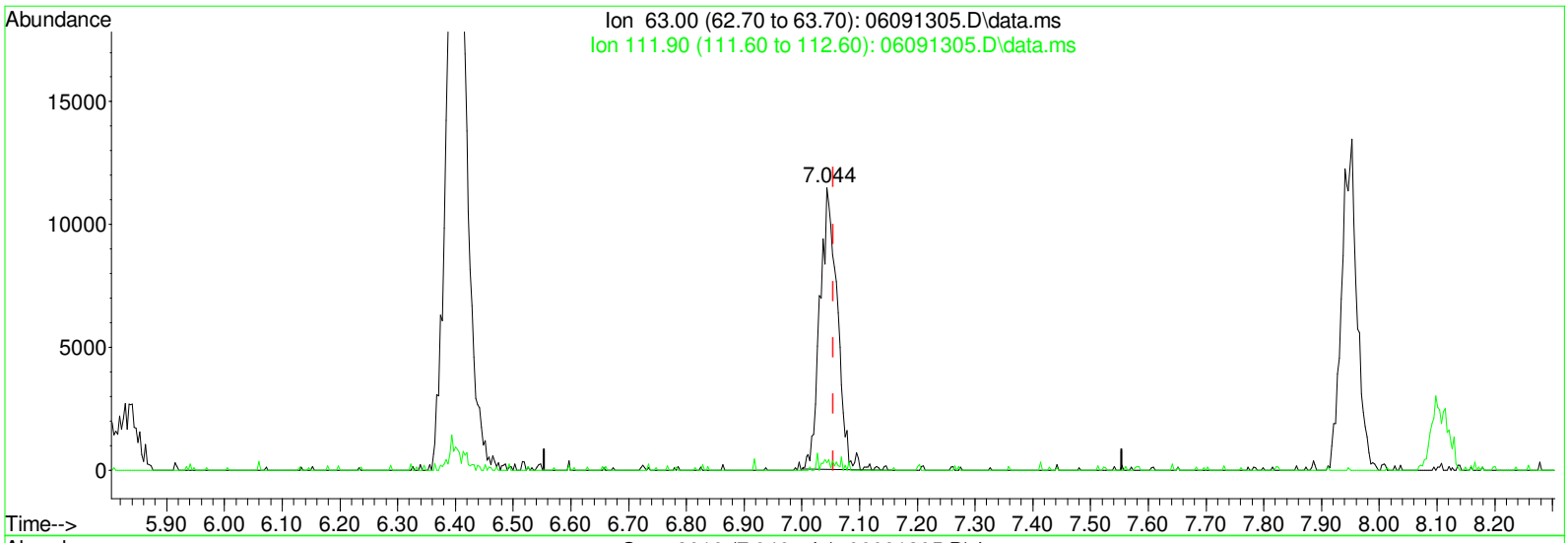
AFTER M3

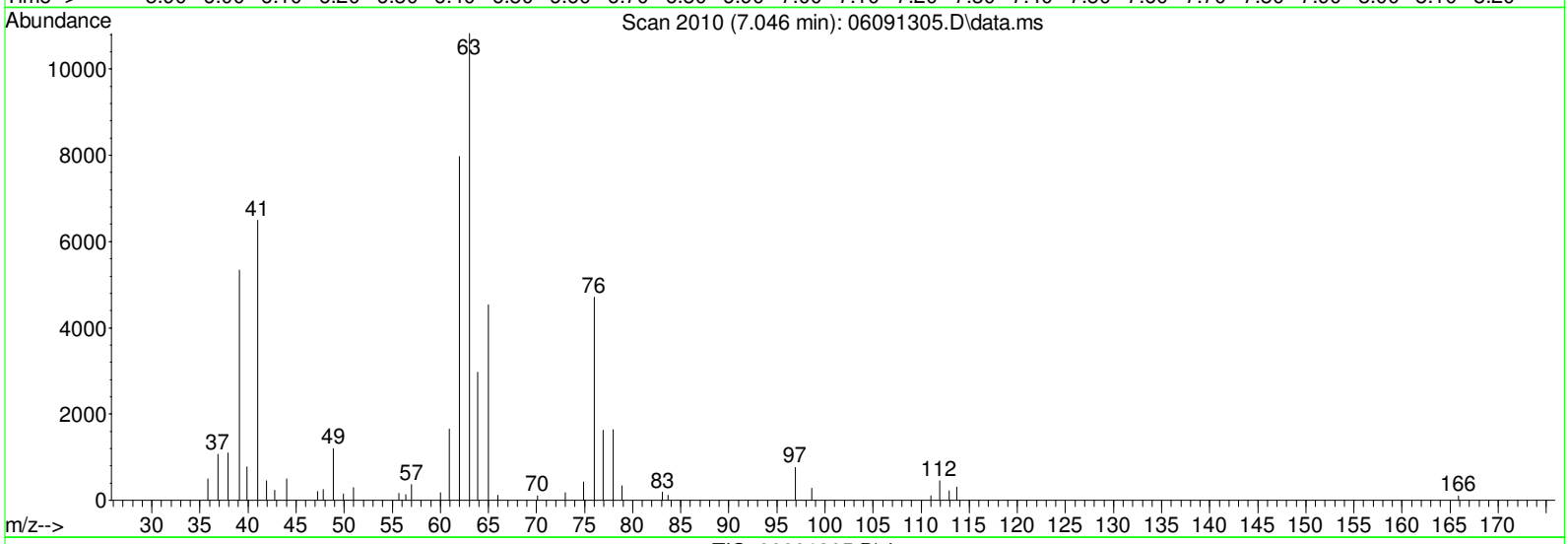
By Alfred at 3:47:21 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(40) 1,2-Dichloropropane (TCM)

7.047min (-0.008) 9.04 ug/L

response 239117

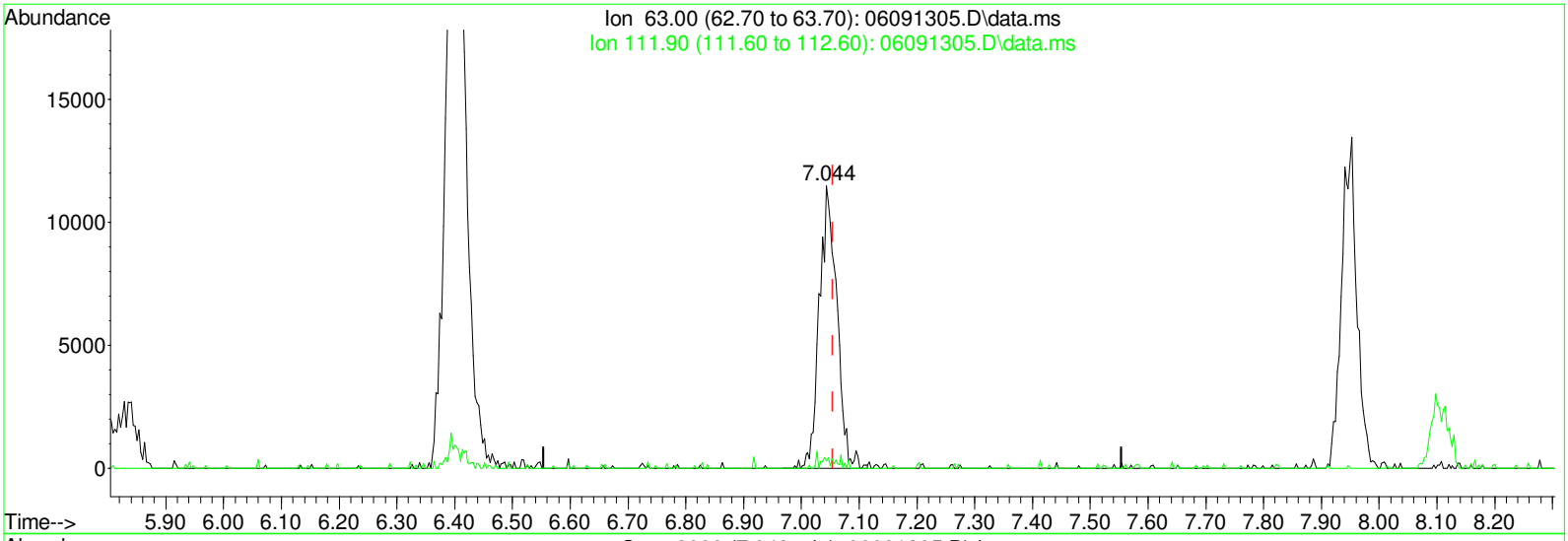
Ion	Exp%	Act%
63.00	100	100
111.90	4.10	0.00
0.00	0.00	0.00
0.00	0.00	0.00

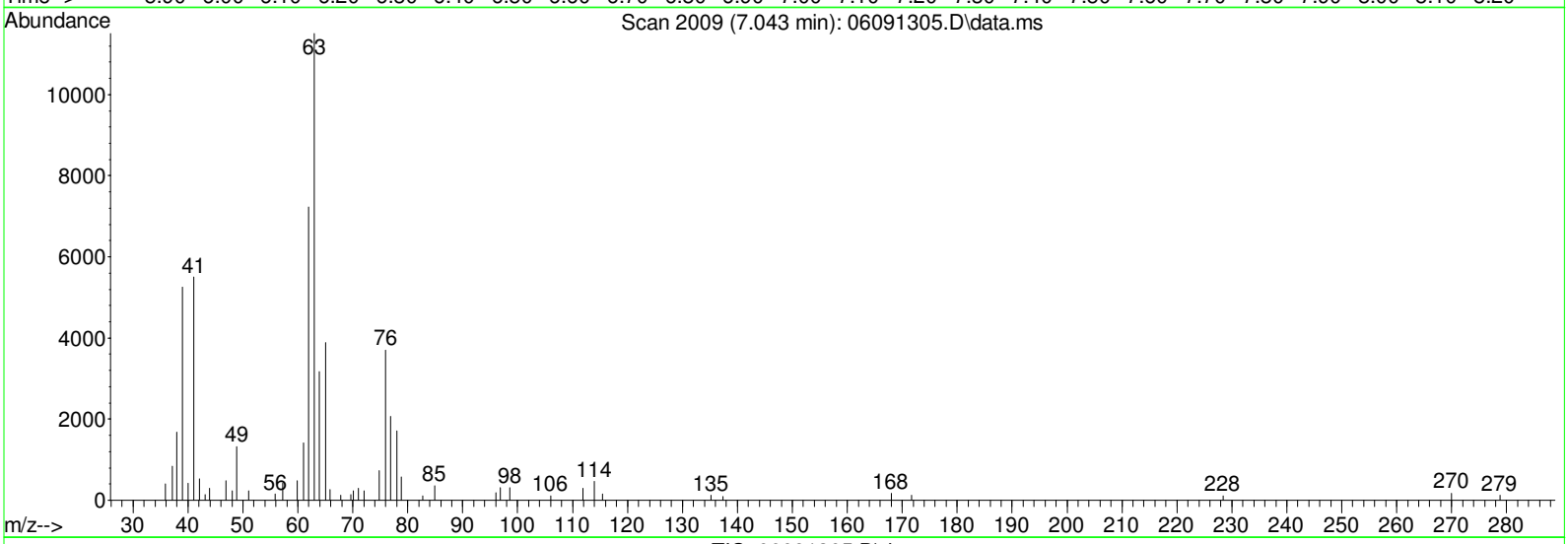
BEFORE
By Alfred at 3:47:39 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

AFTER M3
By Alfred at 3:47:43 PM, 7/3/2013

(40) 1,2-Dichloropropane (TCM)

7.043min (-0.011) 9.09 ug/L m

response 240497

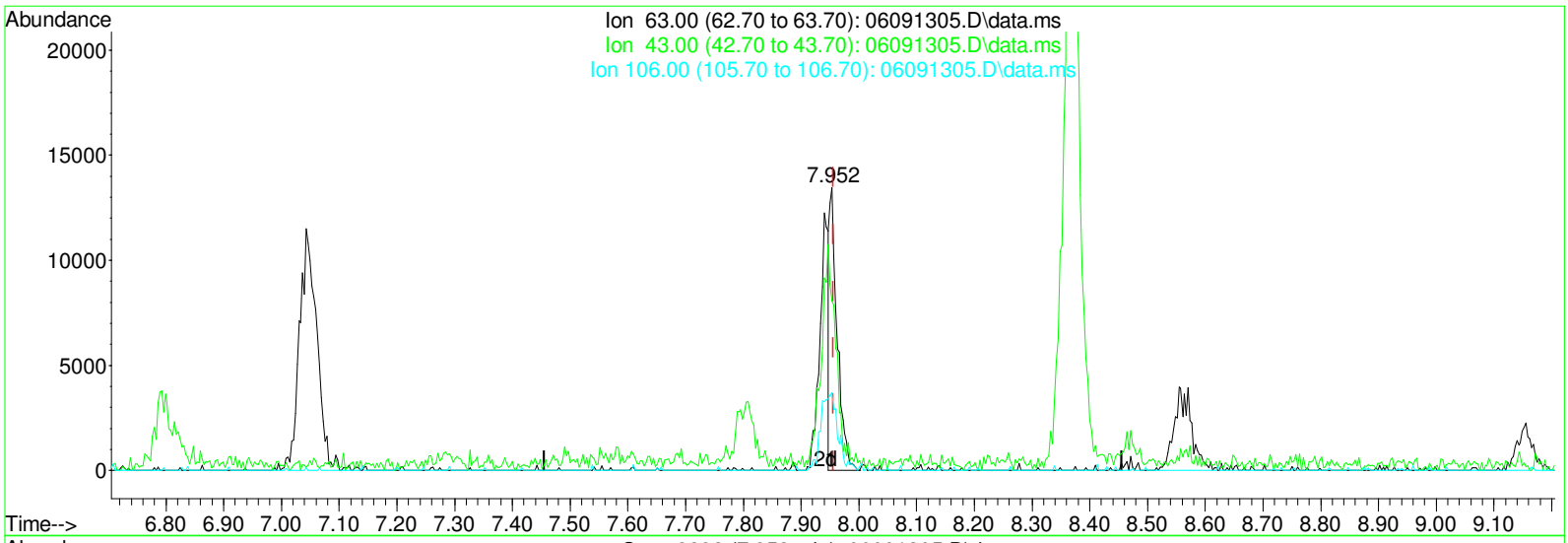
Ion	Exp%	Act%
63.00	100	100
111.90	4.10	0.00
0.00	0.00	0.00
0.00	0.00	0.00

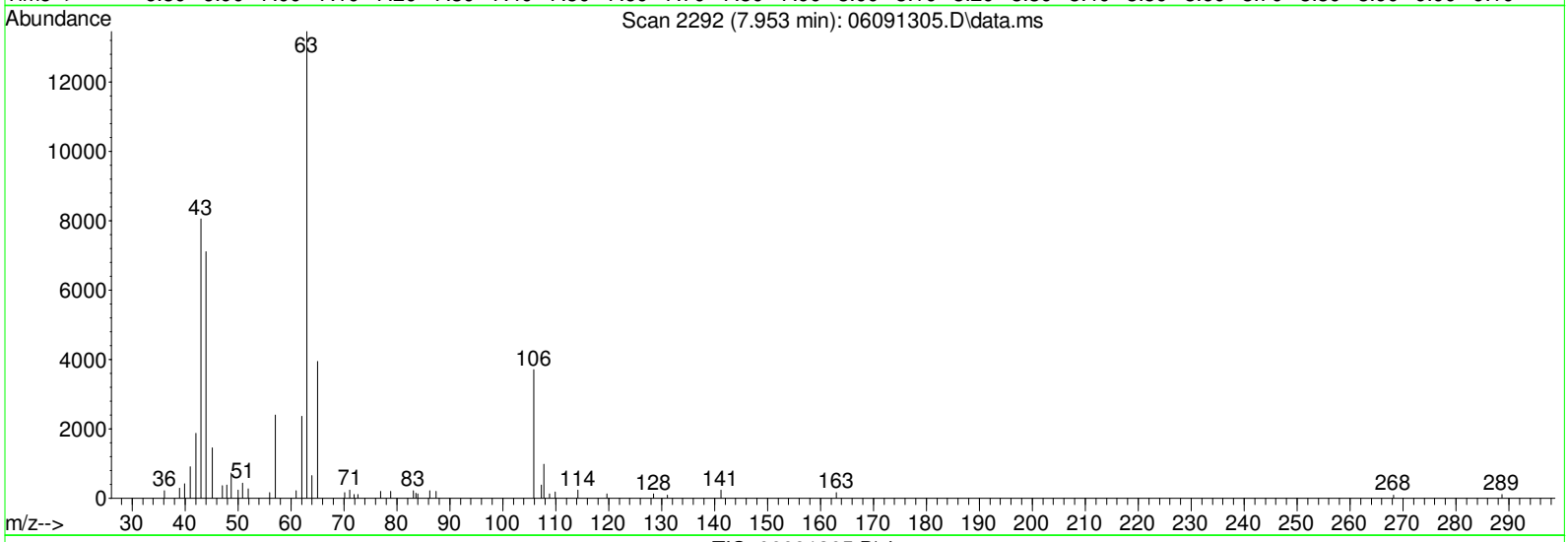
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm
Sample : ICAL VSTD010
Misc : VOC_W+
ALS Vial : 4

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(45) 2-Chloroethylvinyl ether (M)

7.953min (-0.002) 8.77 ug/L

response 148374

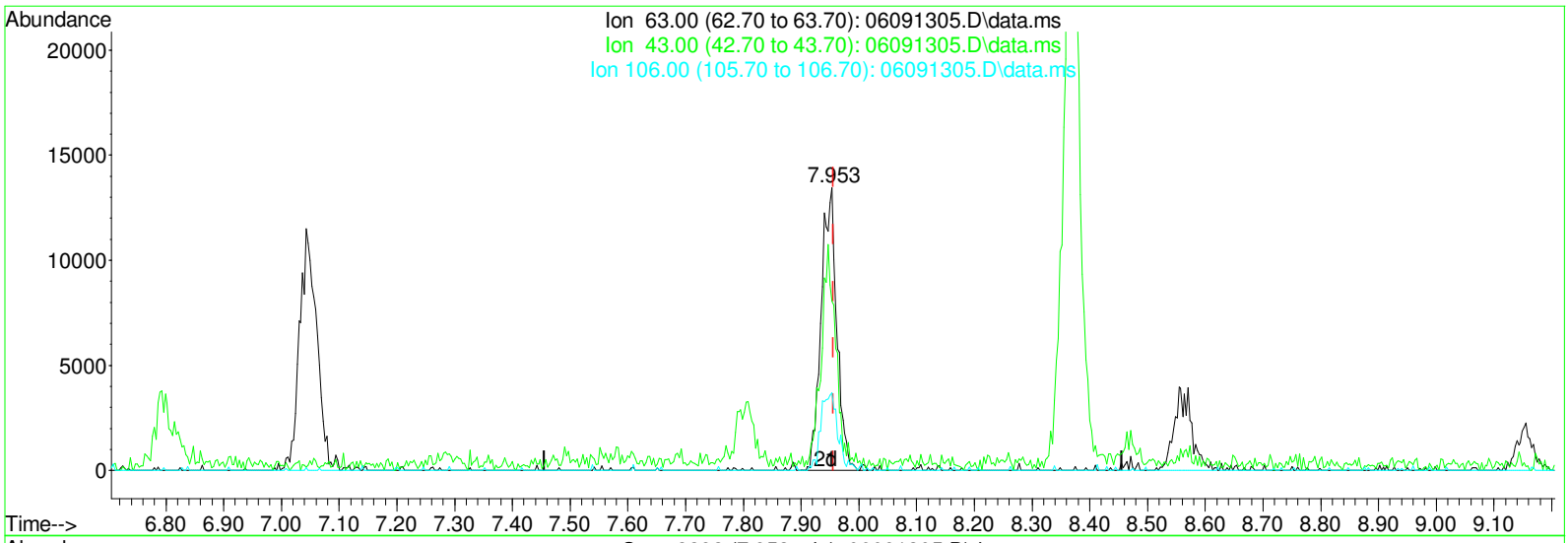
Ion	Exp%	Act%
63.00	100	100
43.00	72.70	124.64#
106.00	26.70	51.36#
0.00	0.00	0.00

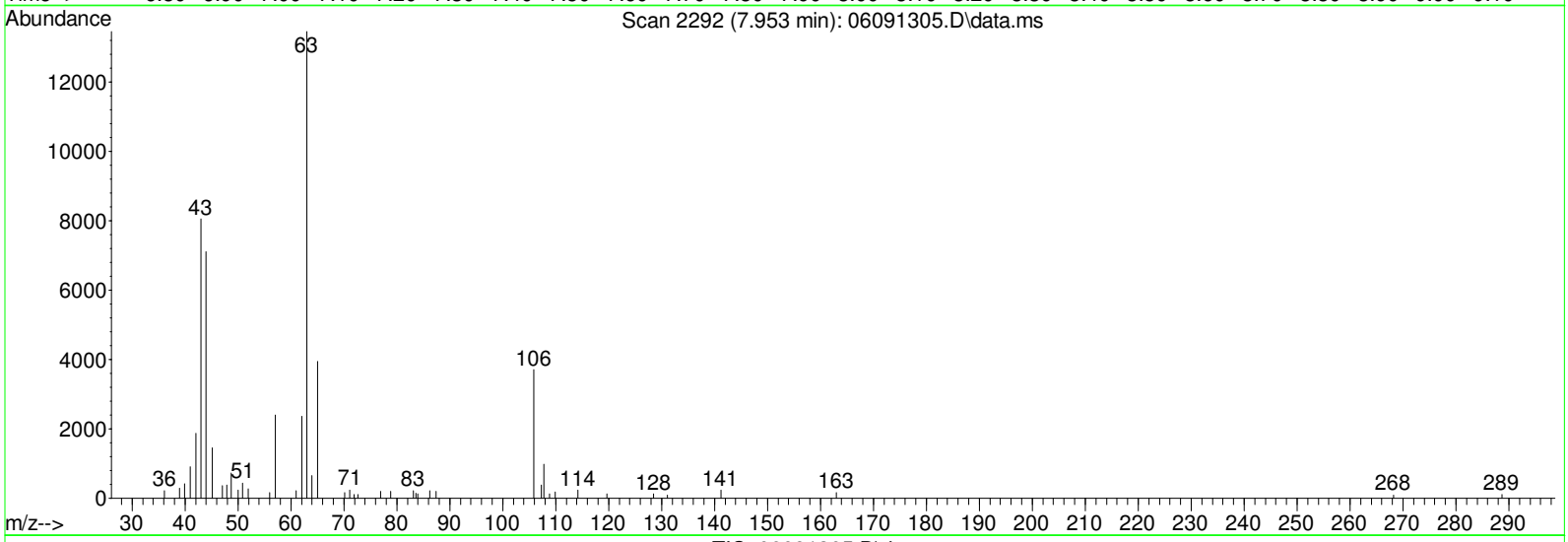
BEFORE
By Alfred at 3:47:47 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm Operator: PS
Sample : ICAL VSTD010 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

AFTER M3
By Alfred at 3:47:53 PM, 7/3/2013

(45) 2-Chloroethylvinyl ether (M)

7.953min (-0.002) 14.92 ug/L m

response 252313

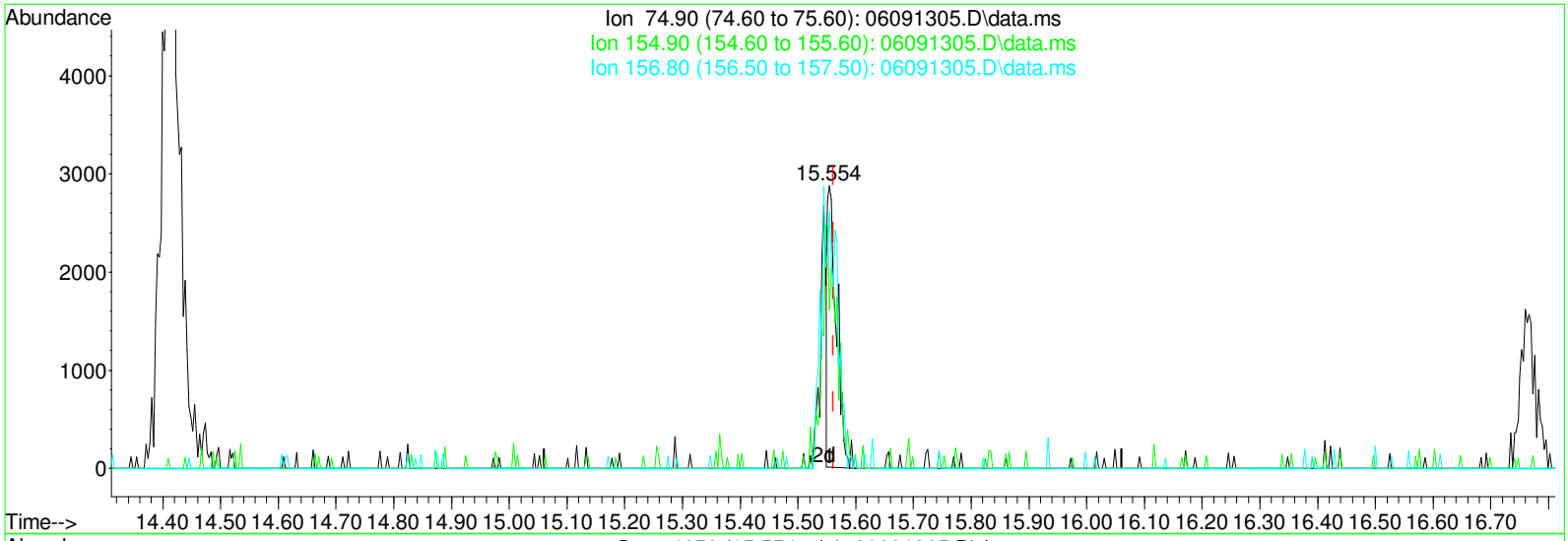
Ion	Exp%	Act%
63.00	100	100
43.00	72.70	73.30
106.00	26.70	30.20
0.00	0.00	0.00

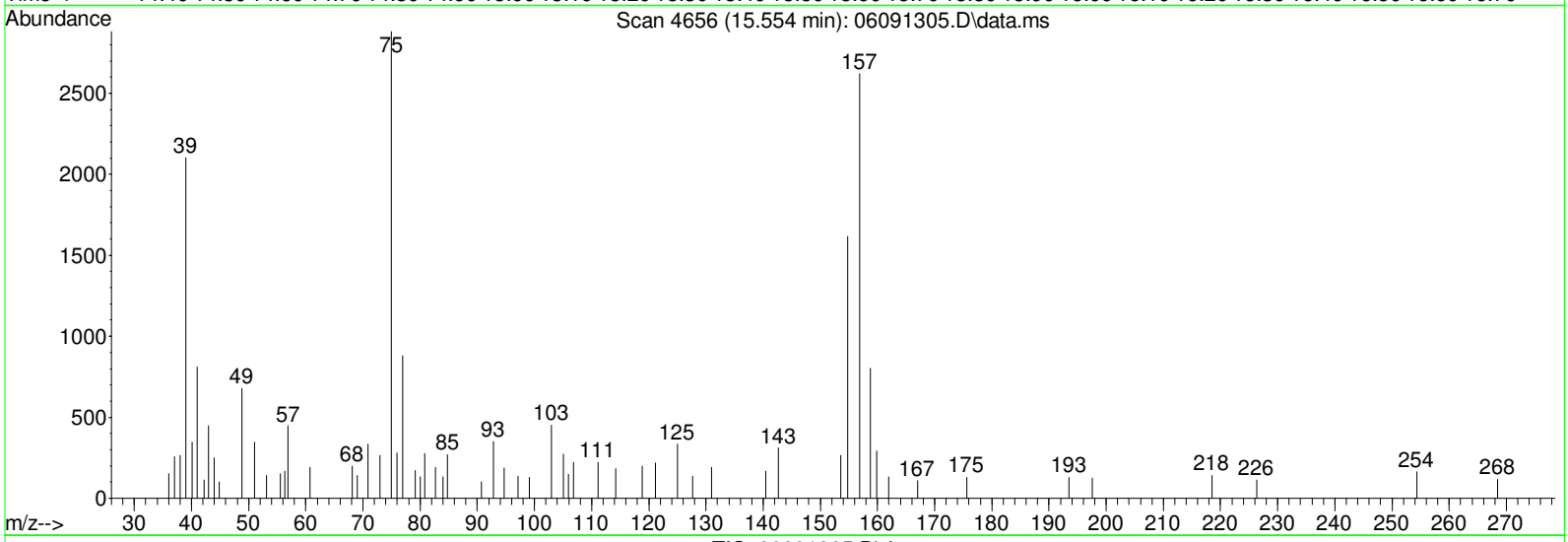
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm
Sample : ICAL VSTD010
Misc : VOC_W+
ALS Vial : 4

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(85) 1,2-Dibromo-3-chloropropa (M)

15.556min (-0.005) 5.30 ug/L

response 34310

Ion	Exp%	Act%
74.90	100	100
154.90	74.30	127.70#
156.80	95.90	155.35#
0.00	0.00	0.00

BEFORE

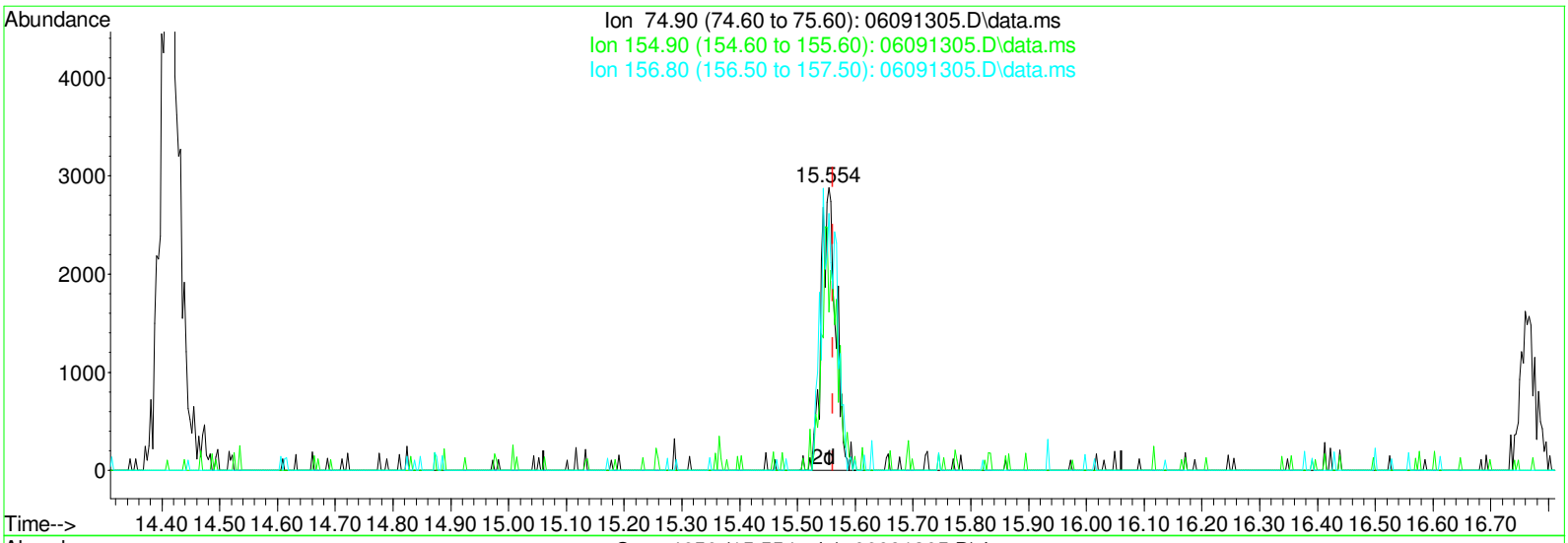
By Alfred at 3:47:57 PM, 7/3/2013

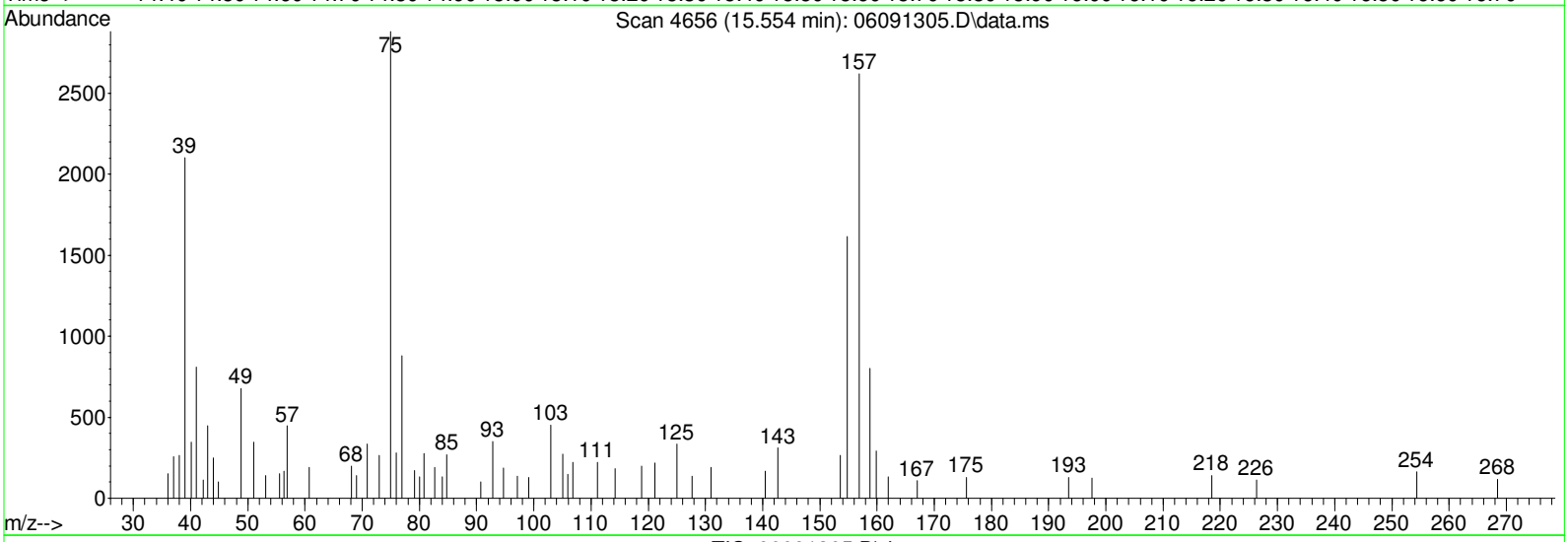
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091305.D
Acq On : 9 Jun 2013 3:11 pm
Sample : ICAL VSTD010
Misc : VOC_W+
ALS Vial : 4

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:09:11 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091305.D\data.ms

(85) 1,2-Dibromo-3-chloropropa (M)

15.554min (-0.007) 7.84 ug/L m

response 50769

Ion	Exp%	Act%
74.90	100	100
154.90	74.30	86.30
156.80	95.90	104.99
0.00	0.00	0.00

AFTER M3
By Alfred at 3:48:01 PM, 7/3/2013

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm Operator: PS
Sample : ICAL VSTD020 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 10 14:12:19 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1863786	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.403	114	3094962	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1758893	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1638326	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	804278	26.95	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 89.83%			
32) 1,2-Dichloroethane-d4	5.729	102	218914	28.48	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 94.93%			
48) Toluene-d8	8.469	98	3760022	29.78	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.27%			
68) Bromofluorobenzene	12.192	174	1313495	33.05	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 110.17%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	646883	24.42	ug/L	99
3) Chloromethane	1.346	50	502893	19.70	ug/L	98
4) Vinyl chloride	1.425	62	649733	21.37	ug/L	93
5) 1,3-Butadiene	1.452	39	443169	18.61	ug/L	87
6) Bromomethane	1.667	96	188926m	26.15	ug/L	
7) Chloroethane	1.747	64	315640	21.82	ug/L	97
8) Trichlorofluoromethane	1.949	101	700125	17.52	ug/L	97
9) Isopropyl Alcohol	2.589	45	733724	318.04	ug/L #	97
10) Ethyl Ether	2.194	59	401349	18.71	ug/L	96
11) Acrolein	2.300	56	82860	19.27	ug/L	92
12) Acetone	2.442	43	389520	33.90	ug/L	93
13) Freon-TF	2.395	151	299038	20.84	ug/L	92
14) 1,1-Dichloroethene	2.385	96	385262	21.67	ug/L	92
15) Methylene Chloride	2.868	84	492149	20.29	ug/L	89
16) Carbon disulfide	2.585	76	3147165	42.11	ug/L	99
17) Acrylonitrile	3.145	53	234005	18.73	ug/L	97
18) MTBE	3.185	73	1467929	19.12	ug/L	99
19) Hexane	3.524	57	400473	19.51	ug/L	99
20) trans-1,2-Dichloroethene	3.170	96	454350	20.14	ug/L	95
21) Vinyl acetate	3.808	43	2203933	43.94	ug/L	94
22) 1,1-Dichloroethane	3.701	63	784936	18.20	ug/L	95
23) 2-Butanone	4.613	72	151142	38.44	ug/L	79
24) 2,2-Dichloropropane	4.527	77	654239	18.56	ug/L	91
25) cis-1,2-Dichloroethene	4.545	96	516861	19.79	ug/L	94
26) Ethyl Acetate	4.730	45	89977	19.41	ug/L #	68
27) Chloroform	5.037	83	783150	18.11	ug/L	96
28) Bromochloromethane	4.886	128	233786	22.45	ug/L #	83
30) Isobutyl alcohol	5.839	43	453965	282.88	ug/L	96
33) Carbon Tetrachloride	5.493	117	485563	16.22	ug/L	98
34) 1,2-Dichloroethane	5.836	62	669588	18.96	ug/L	95
35) 1,1,1-Trichloroethane	5.260	97	634493	17.76	ug/L	97
36) 1,1-Dichloropropene	5.505	110	222186	19.95	ug/L	99
37) 1-Butanol	6.794	56	282649	316.59	ug/L	94
38) Benzene	5.798	78	1964058	19.21	ug/L	98
39) Trichloroethene	6.738	95	458290	18.04	ug/L	96
40) 1,2-Dichloropropane	7.049	63	466974	17.95	ug/L #	88
41) 1,4-Dioxane	7.279	88	73312	198.81	ug/L #	23
42) Bromodichloromethane	7.467	83	595966	18.56	ug/L	99
43) Dibromomethane	7.208	93	285062	19.45	ug/L	96
44) 2-Nitropropane	7.804	41	110732	14.71	ug/L #	80
45) 2-Chloroethylvinyl ether	7.947	63	518330	31.17	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm Operator: PS
Sample : ICAL VSTD020 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 10 14:12:19 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

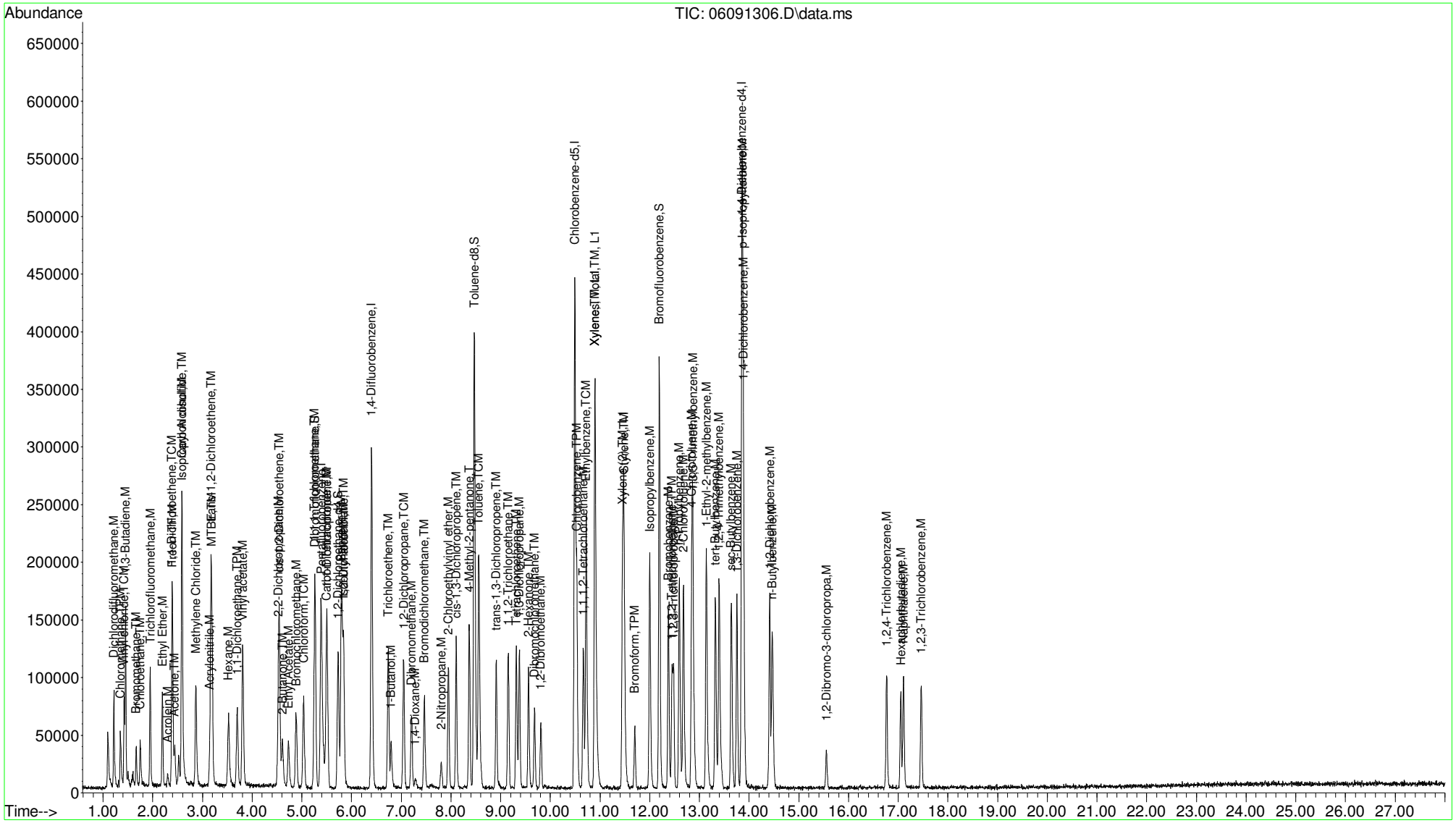
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.369	43	1140318	35.09 ug/L	98
47) cis-1,3-Dichloropropene	8.106	75	804285	19.14 ug/L	98
49) Toluene	8.559	92	1229242	18.89 ug/L	100
51) trans-1,3-Dichloropropene	8.909	75	690301	18.18 ug/L	97
52) 2-Hexanone	9.560	43	799779	35.26 ug/L	97
53) 1,1,2-Trichloroethane	9.148	83	369311	18.84 ug/L	99
54) 1,3-Dichloropropane	9.378	76	782379	18.43 ug/L	99
55) Tetrachloroethene	9.315	164	334705	20.45 ug/L	97
56) Dibromochloromethane	9.682	129	404275	16.36 ug/L	95
57) 1,2-Dibromoethane	9.810	107	452570	19.34 ug/L #	99
58) Chlorobenzene	10.532	112	1233335	19.82 ug/L	99
59) Ethylbenzene	10.723	91	2282744	19.28 ug/L	100
60) 1,1,1,2-Tetrachloroethane	10.661	131	394980	17.15 ug/L	96
61) Xylene	10.899	106	1641144	37.89 ug/L	98
62) Xylene (2)	11.452	106	793763	19.07 ug/L	93
63) Xylenes, Total	10.899	106	2434906m	56.95 ug/L #	
64) Styrene	11.479	104	1530388	19.80 ug/L	96
65) Isopropylbenzene	12.000	105	1838809	19.80 ug/L	100
66) Bromoform	11.699	173	275153	17.15 ug/L	95
67) 1,1,2,2-Tetrachloroethane	12.448	83	611699	18.97 ug/L	100
70) 1,2,3-Trichloropropane	12.483	75	502037	17.06 ug/L	100
71) n-Propylbenzene	12.596	91	1986888	18.15 ug/L	98
72) Bromobenzene	12.376	156	541834	19.10 ug/L	95
73) 1,3,5-Trimethylbenzene	12.868	105	1608083	18.20 ug/L	100
74) 2-Chlorotoluene	12.679	91	1428835	18.37 ug/L	100
75) 4-Chlorotoluene	12.843	91	1546946	17.20 ug/L	94
76) tert-Butylbenzene	13.319	119	1002041	16.51 ug/L	95
77) 1-Ethyl-2-methylbenzene	13.138	105	1935774	18.24 ug/L	98
78) 1,2,4-Trimethylbenzene	13.394	105	1593939	17.31 ug/L	99
79) sec-Butylbenzene	13.640	105	1553089	18.23 ug/L	99
80) p-Isopropyltoluene	13.873	119	1324115	18.44 ug/L	100
81) 1,3-Dichlorobenzene	13.755	146	880403	19.30 ug/L	98
82) 1,4-Dichlorobenzene	13.885	146	979992	18.70 ug/L	97
83) n-Butylbenzene	14.465	91	1127895	17.35 ug/L	97
84) 1,2-Dichlorobenzene	14.415	146	854999	18.91 ug/L	95
85) 1,2-Dibromo-3-chloropropa	15.553	75	92425	14.54 ug/L	85
86) 1,2,4-Trichlorobenzene	16.768	180	385920	18.26 ug/L	98
87) Hexachlorbutadiene	17.056	225	181301	20.29 ug/L #	85
88) Naphthalene	17.106	128	980746	16.38 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	338632	18.86 ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm Operator: PS
Sample : ICAL VSTD020 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 10 14:12:19 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm Operator: PS
Sample : ICAL VSTD020 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 10 14:11:14 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1863786	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.403	114	3094962	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1758893	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1638326	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	804278	26.95	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 89.83%			
32) 1,2-Dichloroethane-d4	5.729	102	218914	28.48	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 94.93%			
48) Toluene-d8	8.469	98	3760022	29.78	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.27%			
68) Bromofluorobenzene	12.192	174	1313495	33.05	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 110.17%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	646883	24.42	ug/L	99
3) Chloromethane	1.346	50	502893	19.70	ug/L	98
4) Vinyl chloride	1.425	62	649733	21.37	ug/L	93
5) 1,3-Butadiene	1.452	39	443169	18.61	ug/L	87
6) Bromomethane	1.668	96	175664	24.96	ug/L	99
7) Chloroethane	1.747	64	315640	21.82	ug/L	97
8) Trichlorofluoromethane	1.949	101	700125	17.52	ug/L	97
9) Isopropyl Alcohol	2.589	45	733724	318.04	ug/L #	97
10) Ethyl Ether	2.194	59	401349	18.71	ug/L	96
11) Acrolein	2.300	56	82860	19.27	ug/L	92
12) Acetone	2.442	43	389520	33.90	ug/L	93
13) Freon-TF	2.395	151	299038	20.84	ug/L	92
14) 1,1-Dichloroethene	2.385	96	385262	21.67	ug/L	92
15) Methylene Chloride	2.868	84	492149	20.29	ug/L	89
16) Carbon disulfide	2.585	76	3147165	42.11	ug/L	99
17) Acrylonitrile	3.145	53	234005	18.73	ug/L	97
18) MTBE	3.185	73	1467929	19.12	ug/L	99
19) Hexane	3.524	57	400473	19.51	ug/L	99
20) trans-1,2-Dichloroethene	3.170	96	454350	20.14	ug/L	95
21) Vinyl acetate	3.808	43	2203933	43.94	ug/L	94
22) 1,1-Dichloroethane	3.701	63	784936	18.20	ug/L	95
23) 2-Butanone	4.613	72	151142	38.44	ug/L	79
24) 2,2-Dichloropropane	4.527	77	654239	18.56	ug/L	91
25) cis-1,2-Dichloroethene	4.545	96	516861	19.79	ug/L	94
26) Ethyl Acetate	4.730	45	89977	19.41	ug/L #	68
27) Chloroform	5.037	83	783150	18.11	ug/L	96
28) Bromochloromethane	4.886	128	233786	22.45	ug/L #	83
30) Isobutyl alcohol	5.839	43	453965	282.88	ug/L	96
33) Carbon Tetrachloride	5.493	117	485563	16.22	ug/L	98
34) 1,2-Dichloroethane	5.836	62	669588	18.96	ug/L	95
35) 1,1,1-Trichloroethane	5.260	97	634493	17.76	ug/L	97
36) 1,1-Dichloropropene	5.505	110	222186	19.95	ug/L	99
37) 1-Butanol	6.794	56	282649	316.59	ug/L	94
38) Benzene	5.798	78	1964058	19.21	ug/L	98
39) Trichloroethene	6.738	95	458290	18.04	ug/L	96
40) 1,2-Dichloropropane	7.049	63	466974	17.95	ug/L #	88
41) 1,4-Dioxane	7.279	88	73312	198.81	ug/L #	23
42) Bromodichloromethane	7.467	83	595966	18.56	ug/L	99
43) Dibromomethane	7.208	93	285062	19.45	ug/L	96
44) 2-Nitropropane	7.804	41	110732	14.71	ug/L #	80
45) 2-Chloroethylvinyl ether	7.947	63	518330	31.17	ug/L	93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm Operator: PS
Sample : ICAL VSTD020 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 10 14:11:14 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

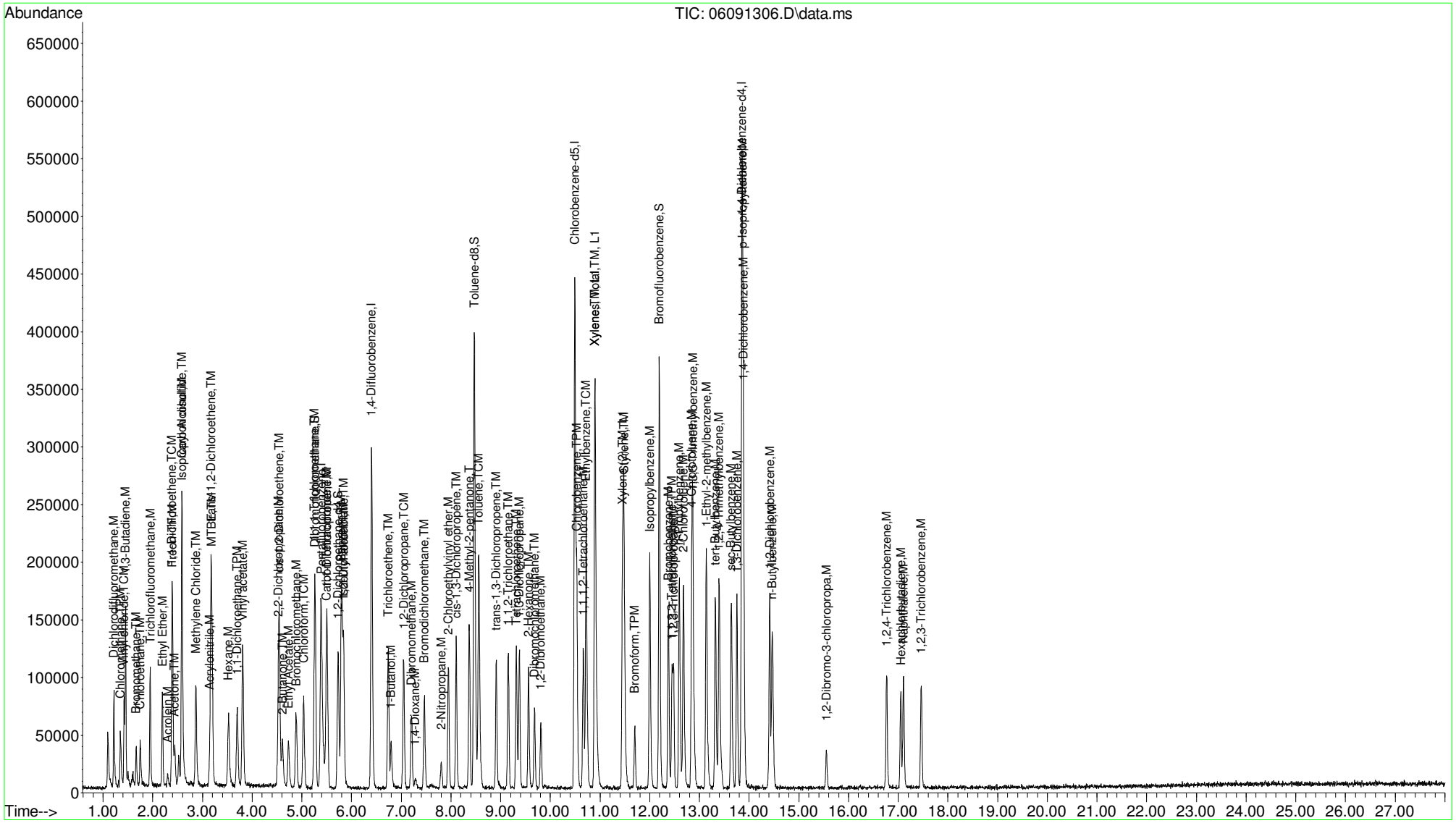
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.369	43	1140318	35.09 ug/L	98
47) cis-1,3-Dichloropropene	8.106	75	804285	19.14 ug/L	98
49) Toluene	8.559	92	1229242	18.89 ug/L	100
51) trans-1,3-Dichloropropene	8.909	75	690301	18.18 ug/L	97
52) 2-Hexanone	9.560	43	799779	35.26 ug/L	97
53) 1,1,2-Trichloroethane	9.148	83	369311	18.84 ug/L	99
54) 1,3-Dichloropropane	9.378	76	782379	18.43 ug/L	99
55) Tetrachloroethene	9.315	164	334705	20.45 ug/L	97
56) Dibromochloromethane	9.682	129	404275	16.36 ug/L	95
57) 1,2-Dibromoethane	9.810	107	452570	19.34 ug/L #	99
58) Chlorobenzene	10.532	112	1233335	19.82 ug/L	99
59) Ethylbenzene	10.723	91	2282744	19.28 ug/L	100
60) 1,1,1,2-Tetrachloroethane	10.661	131	394980	17.15 ug/L	96
61) Xylene	10.899	106	1641144	37.89 ug/L	98
62) Xylene (2)	11.452	106	793763	19.07 ug/L	93
63) Xylenes, Total	10.899	106	2434906m	56.95 ug/L #	
64) Styrene	11.479	104	1530388	19.80 ug/L	96
65) Isopropylbenzene	12.000	105	1838809	19.80 ug/L	100
66) Bromoform	11.699	173	275153	17.15 ug/L	95
67) 1,1,2,2-Tetrachloroethane	12.448	83	611699	18.97 ug/L	100
70) 1,2,3-Trichloropropane	12.483	75	502037	17.06 ug/L	100
71) n-Propylbenzene	12.596	91	1986888	18.15 ug/L	98
72) Bromobenzene	12.376	156	541834	19.10 ug/L	95
73) 1,3,5-Trimethylbenzene	12.868	105	1608083	18.20 ug/L	100
74) 2-Chlorotoluene	12.679	91	1428835	18.37 ug/L	100
75) 4-Chlorotoluene	12.843	91	1546946	17.20 ug/L	94
76) tert-Butylbenzene	13.319	119	1002041	16.51 ug/L	95
77) 1-Ethyl-2-methylbenzene	13.138	105	1935774	18.24 ug/L	98
78) 1,2,4-Trimethylbenzene	13.394	105	1593939	17.31 ug/L	99
79) sec-Butylbenzene	13.640	105	1553089	18.23 ug/L	99
80) p-Isopropyltoluene	13.873	119	1324115	18.44 ug/L	100
81) 1,3-Dichlorobenzene	13.755	146	880403	19.30 ug/L	98
82) 1,4-Dichlorobenzene	13.885	146	979992	18.70 ug/L	97
83) n-Butylbenzene	14.465	91	1127895	17.35 ug/L	97
84) 1,2-Dichlorobenzene	14.415	146	854999	18.91 ug/L	95
85) 1,2-Dibromo-3-chloropropa	15.553	75	92425	14.54 ug/L	85
86) 1,2,4-Trichlorobenzene	16.768	180	385920	18.26 ug/L	98
87) Hexachlorbutadiene	17.056	225	181301	20.29 ug/L #	85
88) Naphthalene	17.106	128	980746	16.38 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	338632	18.86 ug/L	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm Operator: PS
Sample : ICAL VSTD020 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 10 14:11:14 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

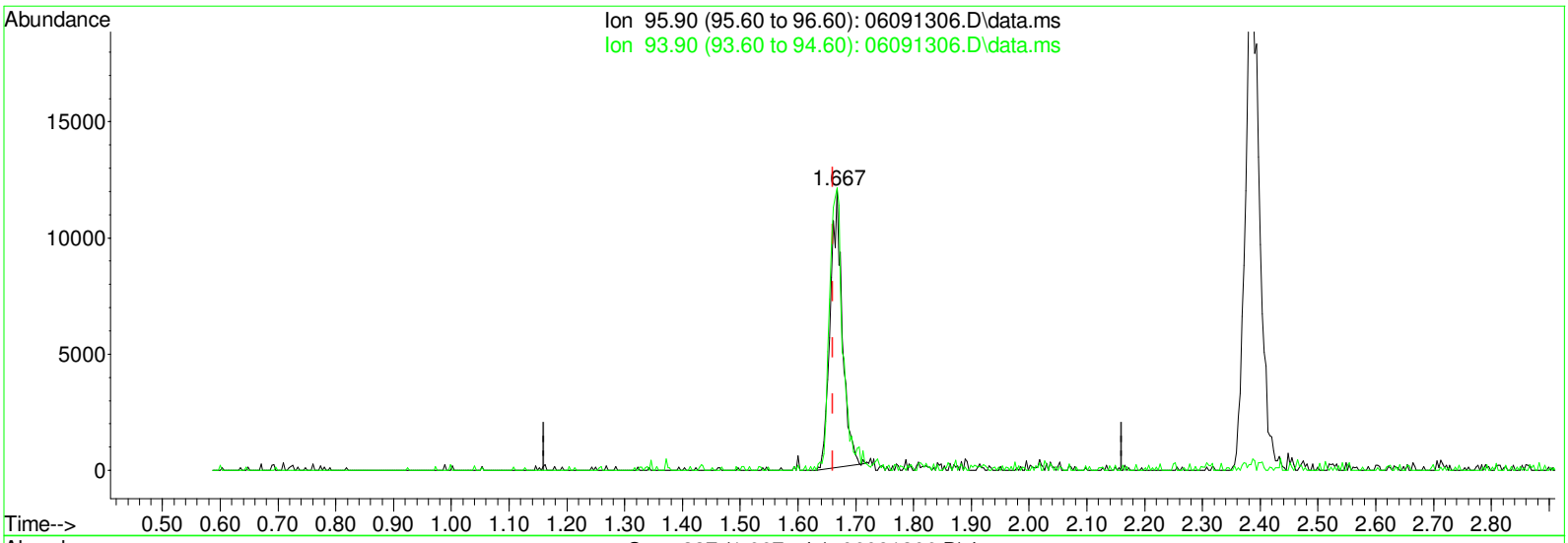


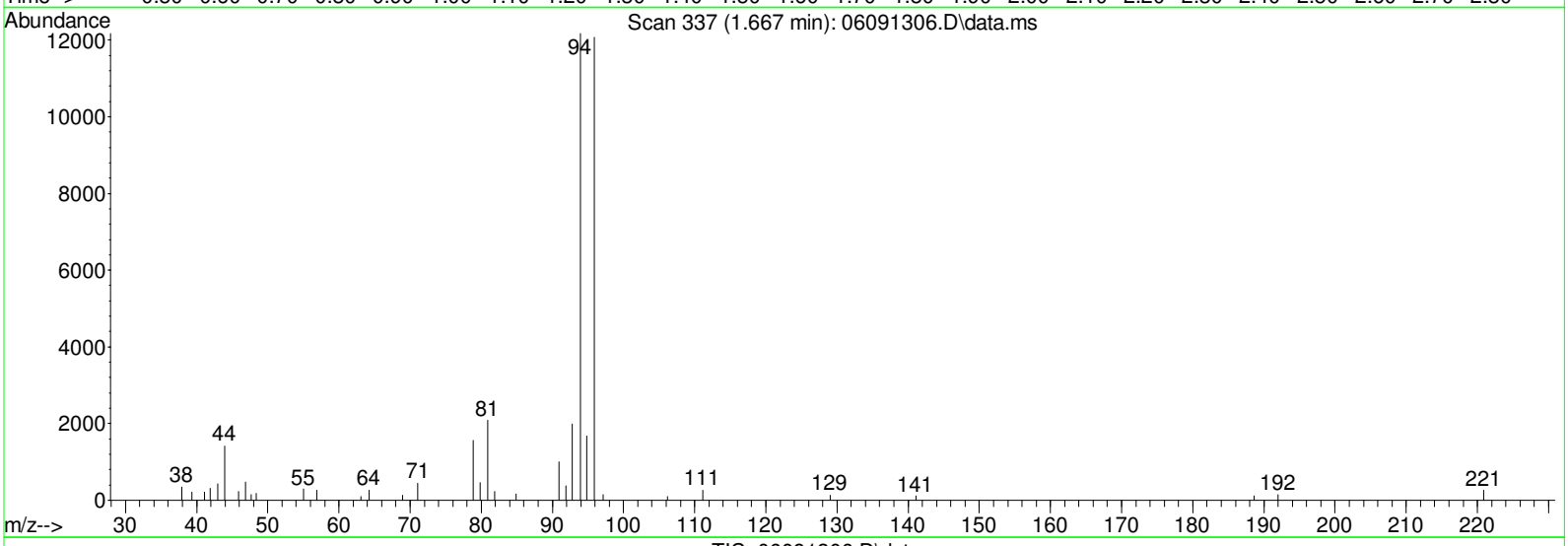
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm
Sample : ICAL VSTD020
Misc : VOC_W+
ALS Vial : 5

Operator: PS
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 10 14:11:14 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091306.D\data.ms

(6) Bromomethane (TM)

1.668min (+0.008) 24.96 ug/L

response 175664

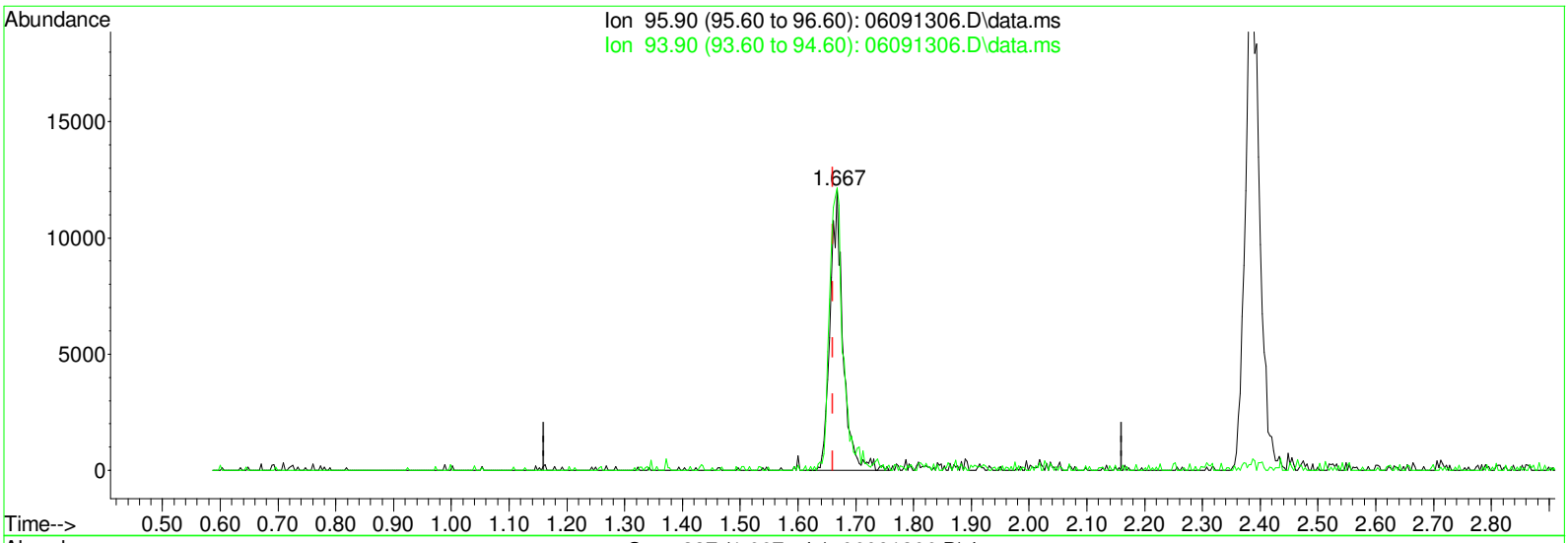
Ion	Exp%	Act%
95.90	100	100
93.90	98.20	99.23
0.00	0.00	0.00
0.00	0.00	0.00

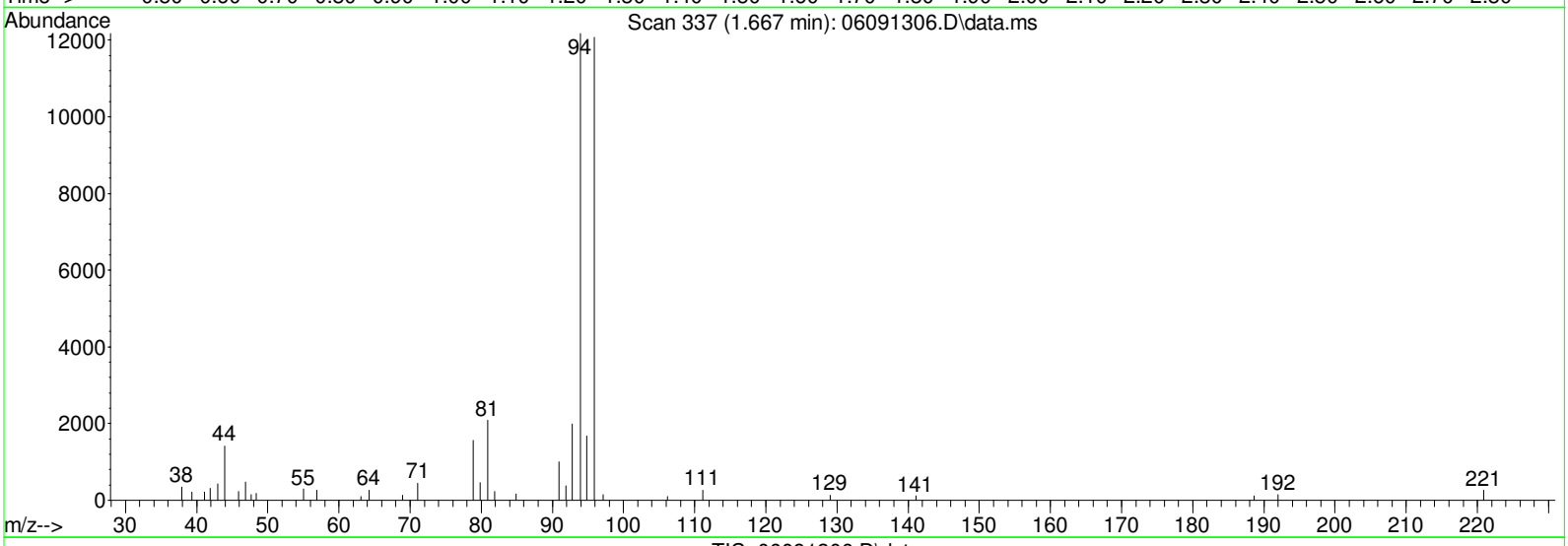
BEFORE
By Alfred at 3:48:13 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091306.D
Acq On : 9 Jun 2013 3:46 pm Operator: PS
Sample : ICAL VSTD020 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 10 14:11:14 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration





TIC: 06091306.D\data.ms

(6) Bromomethane (TM)

1.667min (+0.007) 26.15 ug/L m

response 188926

Ion	Exp%	Act%
95.90	100	100
93.90	98.20	92.27
0.00	0.00	0.00
0.00	0.00	0.00

AFTER M3

By Alfred at 3:48:18 PM, 7/3/2013

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091307.D
Acq On : 9 Jun 2013 4:21 pm Operator: PS
Sample : ICAL VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 6

Quant Time: Jun 10 14:12:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.390	168	1920231	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.402	114	3148649	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1816949	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1676446	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.266	113	823910	26.79	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 89.30%			
32) 1,2-Dichloroethane-d4	5.727	102	207500	26.54	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 88.47%			
48) Toluene-d8	8.469	98	3814666	29.70	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.00%			
68) Bromofluorobenzene	12.195	174	1304790	31.78	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 105.93%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	1648206	60.39	ug/L	100
3) Chloromethane	1.348	50	1301333	49.48	ug/L	95
4) Vinyl chloride	1.426	62	1674064	53.44	ug/L	98
5) 1,3-Butadiene	1.451	39	1146721	46.75	ug/L	88
6) Bromomethane	1.662	96	469891	50.05	ug/L	88
7) Chloroethane	1.743	64	818554	54.93	ug/L	97
8) Trichlorofluoromethane	1.946	101	1851838	44.99	ug/L	98
9) Isopropyl Alcohol	2.594	45	1952730	821.55	ug/L #	95
10) Ethyl Ether	2.192	59	1026556	46.45	ug/L	92
11) Acrolein	2.299	56	212790	48.04	ug/L	84
12) Acetone	2.444	43	910325	76.89	ug/L	96
13) Freon-TF	2.397	151	829666	56.13	ug/L	93
14) 1,1-Dichloroethene	2.388	96	1022446	55.83	ug/L	90
15) Methylene Chloride	2.865	84	1282262	51.31	ug/L	87
16) Carbon disulfide	2.585	76	8128957	105.56	ug/L	100
17) Acrylonitrile	3.145	53	586356	45.56	ug/L	97
18) MTBE	3.189	73	3834022	48.48	ug/L	99
19) Hexane	3.525	57	1124235	53.16	ug/L	93
20) trans-1,2-Dichloroethene	3.167	96	1231494	52.99	ug/L	91
21) Vinyl acetate	3.810	43	5192184	100.47	ug/L	95
22) 1,1-Dichloroethane	3.696	63	2092381	47.09	ug/L	98
23) 2-Butanone	4.609	72	387230	95.58	ug/L #	71
24) 2,2-Dichloropropane	4.532	77	1759614	48.44	ug/L	98
25) cis-1,2-Dichloroethene	4.544	96	1331864	49.51	ug/L	94
26) Ethyl Acetate	4.734	45	200357	41.96	ug/L #	81
27) Chloroform	5.034	83	1961996	44.04	ug/L	98
28) Bromochloromethane	4.886	128	542287	50.55	ug/L #	88
30) Isobutyl alcohol	5.841	43	1211330	732.62	ug/L	98
33) Carbon Tetrachloride	5.496	117	1282657	42.12	ug/L	98
34) 1,2-Dichloroethane	5.838	62	1712684	47.67	ug/L	96
35) 1,1,1-Trichloroethane	5.263	97	1709898	47.05	ug/L	96
36) 1,1-Dichloropropene	5.509	110	569849	50.30	ug/L	91
37) 1-Butanol	6.795	56	741686	816.59	ug/L	95
38) Benzene	5.798	78	5027654	48.35	ug/L	99
39) Trichloroethene	6.739	95	1215838	47.04	ug/L	96
40) 1,2-Dichloropropane	7.046	63	1242886	46.96	ug/L	99
41) 1,4-Dioxane	7.285	88	181976	485.06	ug/L	89
42) Bromodichloromethane	7.463	83	1525512	46.70	ug/L	98
43) Dibromomethane	7.207	93	737491	49.45	ug/L	96
44) 2-Nitropropane	7.799	41	298462	38.96	ug/L #	76
45) 2-Chloroethylvinyl ether	7.949	63	1376986	81.39	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091307.D
Acq On : 9 Jun 2013 4:21 pm Operator: PS
Sample : ICAL VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 6

Quant Time: Jun 10 14:12:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

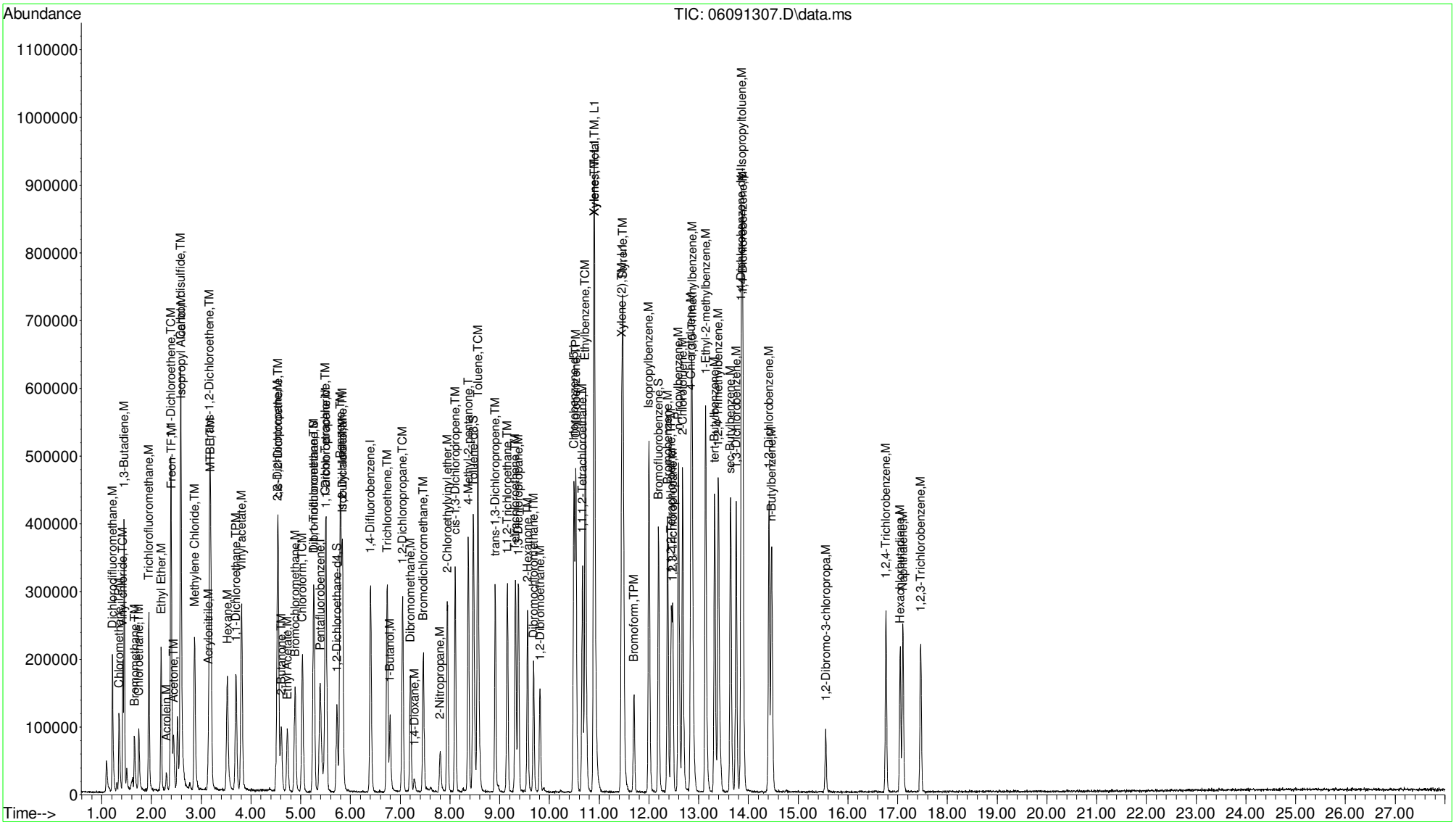
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.369	43	2890198	87.42 ug/L	97
47) cis-1,3-Dichloropropene	8.105	75	2096970	49.04 ug/L	96
49) Toluene	8.561	92	3209075	48.49 ug/L	98
51) trans-1,3-Dichloropropene	8.911	75	1802355	45.94 ug/L	96
52) 2-Hexanone	9.560	43	2088755	89.15 ug/L	98
53) 1,1,2-Trichloroethane	9.155	83	925490	45.69 ug/L	95
54) 1,3-Dichloropropane	9.376	76	2082076	47.47 ug/L	99
55) Tetrachloroethene	9.315	164	894172	52.89 ug/L	97
56) Dibromochloromethane	9.682	129	1106630	43.36 ug/L	96
57) 1,2-Dibromoethane	9.811	107	1209808	50.05 ug/L	99
58) Chlorobenzene	10.531	112	3189768	49.62 ug/L	97
59) Ethylbenzene	10.722	91	5859174	47.89 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.665	131	1071564	45.04 ug/L	97
61) Xylene	10.900	106	4383698	97.97 ug/L	99
62) Xylene (2)	11.454	106	2038765	47.41 ug/L	95
63) Xylenes, Total	10.900	106	6422463m	145.43 ug/L #	
64) Styrene	11.478	104	3918355	49.09 ug/L	96
65) Isopropylbenzene	11.999	105	4738854	49.39 ug/L	98
66) Bromoform	11.699	173	771311	46.54 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.449	83	1582427	47.50 ug/L	99
70) 1,2,3-Trichloropropane	12.480	75	1260416	41.86 ug/L	100
71) n-Propylbenzene	12.594	91	5197736	46.39 ug/L	98
72) Bromobenzene	12.373	156	1377157	47.45 ug/L	94
73) 1,3,5-Trimethylbenzene	12.869	105	4103041	45.38 ug/L	97
74) 2-Chlorotoluene	12.678	91	3577659	44.94 ug/L	97
75) 4-Chlorotoluene	12.844	91	4101609	44.56 ug/L	97
76) tert-Butylbenzene	13.322	119	2890945	46.55 ug/L	97
77) 1-Ethyl-2-methylbenzene	13.139	105	5160955	47.51 ug/L	100
78) 1,2,4-Trimethylbenzene	13.396	105	4027667	42.74 ug/L	98
79) sec-Butylbenzene	13.641	105	4122041	47.29 ug/L	98
80) p-Isopropyltoluene	13.871	119	3380499	46.00 ug/L	99
81) 1,3-Dichlorobenzene	13.754	146	2253103	48.27 ug/L	97
82) 1,4-Dichlorobenzene	13.889	146	2521080	47.02 ug/L	97
83) n-Butylbenzene	14.465	91	2965112	44.59 ug/L	99
84) 1,2-Dichlorobenzene	14.413	146	2204046	47.64 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.553	75	247314	38.02 ug/L	85
86) 1,2,4-Trichlorobenzene	16.763	180	994351	45.99 ug/L	99
87) Hexachlorbutadiene	17.052	225	474813	51.92 ug/L	96
88) Naphthalene	17.104	128	2462946	40.21 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	847480	46.12 ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091307.D
Acq On : 9 Jun 2013 4:21 pm Operator: PS
Sample : ICAL VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 6

Quant Time: Jun 10 14:12:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091307.D
Acq On : 9 Jun 2013 4:21 pm Operator: PS
Sample : ICAL VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 6

Quant Time: Jun 10 14:12:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.390	168	1920231	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.402	114	3148649	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1816949	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1676446	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.266	113	823910	26.79	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 89.30%			
32) 1,2-Dichloroethane-d4	5.727	102	207500	26.54	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 88.47%			
48) Toluene-d8	8.469	98	3814666	29.70	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.00%			
68) Bromofluorobenzene	12.195	174	1304790	31.78	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 105.93%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	1648206	60.39	ug/L	100
3) Chloromethane	1.348	50	1301333	49.48	ug/L	95
4) Vinyl chloride	1.426	62	1674064	53.44	ug/L	98
5) 1,3-Butadiene	1.451	39	1146721	46.75	ug/L	88
6) Bromomethane	1.662	96	469891	50.05	ug/L	88
7) Chloroethane	1.743	64	818554	54.93	ug/L	97
8) Trichlorofluoromethane	1.946	101	1851838	44.99	ug/L	98
9) Isopropyl Alcohol	2.594	45	1952730	821.55	ug/L #	95
10) Ethyl Ether	2.192	59	1026556	46.45	ug/L	92
11) Acrolein	2.299	56	212790	48.04	ug/L	84
12) Acetone	2.444	43	910325	76.89	ug/L	96
13) Freon-TF	2.397	151	829666	56.13	ug/L	93
14) 1,1-Dichloroethene	2.388	96	1022446	55.83	ug/L	90
15) Methylene Chloride	2.865	84	1282262	51.31	ug/L	87
16) Carbon disulfide	2.585	76	8128957	105.56	ug/L	100
17) Acrylonitrile	3.145	53	586356	45.56	ug/L	97
18) MTBE	3.189	73	3834022	48.48	ug/L	99
19) Hexane	3.525	57	1124235	53.16	ug/L	93
20) trans-1,2-Dichloroethene	3.167	96	1231494	52.99	ug/L	91
21) Vinyl acetate	3.810	43	5192184	100.47	ug/L	95
22) 1,1-Dichloroethane	3.696	63	2092381	47.09	ug/L	98
23) 2-Butanone	4.609	72	387230	95.58	ug/L #	71
24) 2,2-Dichloropropane	4.532	77	1759614	48.44	ug/L	98
25) cis-1,2-Dichloroethene	4.544	96	1331864	49.51	ug/L	94
26) Ethyl Acetate	4.734	45	200357	41.96	ug/L #	81
27) Chloroform	5.034	83	1961996	44.04	ug/L	98
28) Bromochloromethane	4.886	128	542287	50.55	ug/L #	88
30) Isobutyl alcohol	5.841	43	1211330	732.62	ug/L	98
33) Carbon Tetrachloride	5.496	117	1282657	42.12	ug/L	98
34) 1,2-Dichloroethane	5.838	62	1712684	47.67	ug/L	96
35) 1,1,1-Trichloroethane	5.263	97	1709898	47.05	ug/L	96
36) 1,1-Dichloropropene	5.509	110	569849	50.30	ug/L	91
37) 1-Butanol	6.795	56	741686	816.59	ug/L	95
38) Benzene	5.798	78	5027654	48.35	ug/L	99
39) Trichloroethene	6.739	95	1215838	47.04	ug/L	96
40) 1,2-Dichloropropane	7.046	63	1242886	46.96	ug/L	99
41) 1,4-Dioxane	7.285	88	181976	485.06	ug/L	89
42) Bromodichloromethane	7.463	83	1525512	46.70	ug/L	98
43) Dibromomethane	7.207	93	737491	49.45	ug/L	96
44) 2-Nitropropane	7.799	41	298462	38.96	ug/L #	76
45) 2-Chloroethylvinyl ether	7.949	63	1376986	81.39	ug/L	94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091307.D
Acq On : 9 Jun 2013 4:21 pm Operator: PS
Sample : ICAL VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 6

Quant Time: Jun 10 14:12:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

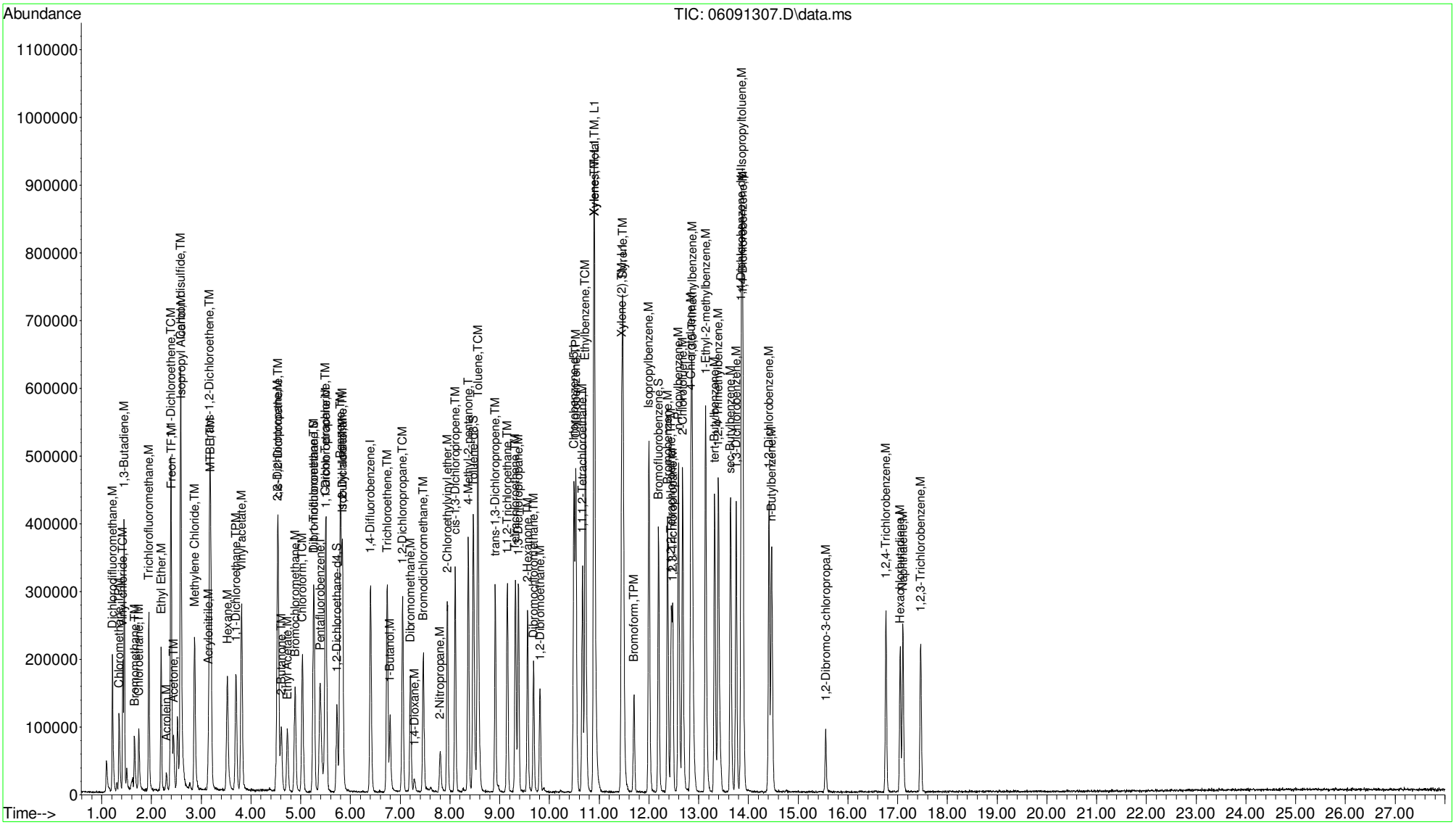
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.369	43	2890198	87.42 ug/L	97
47) cis-1,3-Dichloropropene	8.105	75	2096970	49.04 ug/L	96
49) Toluene	8.561	92	3209075	48.49 ug/L	98
51) trans-1,3-Dichloropropene	8.911	75	1802355	45.94 ug/L	96
52) 2-Hexanone	9.560	43	2088755	89.15 ug/L	98
53) 1,1,2-Trichloroethane	9.155	83	925490	45.69 ug/L	95
54) 1,3-Dichloropropane	9.376	76	2082076	47.47 ug/L	99
55) Tetrachloroethene	9.315	164	894172	52.89 ug/L	97
56) Dibromochloromethane	9.682	129	1106630	43.36 ug/L	96
57) 1,2-Dibromoethane	9.811	107	1209808	50.05 ug/L	99
58) Chlorobenzene	10.531	112	3189768	49.62 ug/L	97
59) Ethylbenzene	10.722	91	5859174	47.89 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.665	131	1071564	45.04 ug/L	97
61) Xylene	10.900	106	4383698	97.97 ug/L	99
62) Xylene (2)	11.454	106	2038765	47.41 ug/L	95
63) Xylenes, Total	10.900	106	6422463m	145.43 ug/L #	
64) Styrene	11.478	104	3918355	49.09 ug/L	96
65) Isopropylbenzene	11.999	105	4738854	49.39 ug/L	98
66) Bromoform	11.699	173	771311	46.54 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.449	83	1582427	47.50 ug/L	99
70) 1,2,3-Trichloropropane	12.480	75	1260416	41.86 ug/L	100
71) n-Propylbenzene	12.594	91	5197736	46.39 ug/L	98
72) Bromobenzene	12.373	156	1377157	47.45 ug/L	94
73) 1,3,5-Trimethylbenzene	12.869	105	4103041	45.38 ug/L	97
74) 2-Chlorotoluene	12.678	91	3577659	44.94 ug/L	97
75) 4-Chlorotoluene	12.844	91	4101609	44.56 ug/L	97
76) tert-Butylbenzene	13.322	119	2890945	46.55 ug/L	97
77) 1-Ethyl-2-methylbenzene	13.139	105	5160955	47.51 ug/L	100
78) 1,2,4-Trimethylbenzene	13.396	105	4027667	42.74 ug/L	98
79) sec-Butylbenzene	13.641	105	4122041	47.29 ug/L	98
80) p-Isopropyltoluene	13.871	119	3380499	46.00 ug/L	99
81) 1,3-Dichlorobenzene	13.754	146	2253103	48.27 ug/L	97
82) 1,4-Dichlorobenzene	13.889	146	2521080	47.02 ug/L	97
83) n-Butylbenzene	14.465	91	2965112	44.59 ug/L	99
84) 1,2-Dichlorobenzene	14.413	146	2204046	47.64 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.553	75	247314	38.02 ug/L	85
86) 1,2,4-Trichlorobenzene	16.763	180	994351	45.99 ug/L	99
87) Hexachlorbutadiene	17.052	225	474813	51.92 ug/L	96
88) Naphthalene	17.104	128	2462946	40.21 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	847480	46.12 ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06091307.D
Acq On : 9 Jun 2013 4:21 pm Operator: PS
Sample : ICAL VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 6

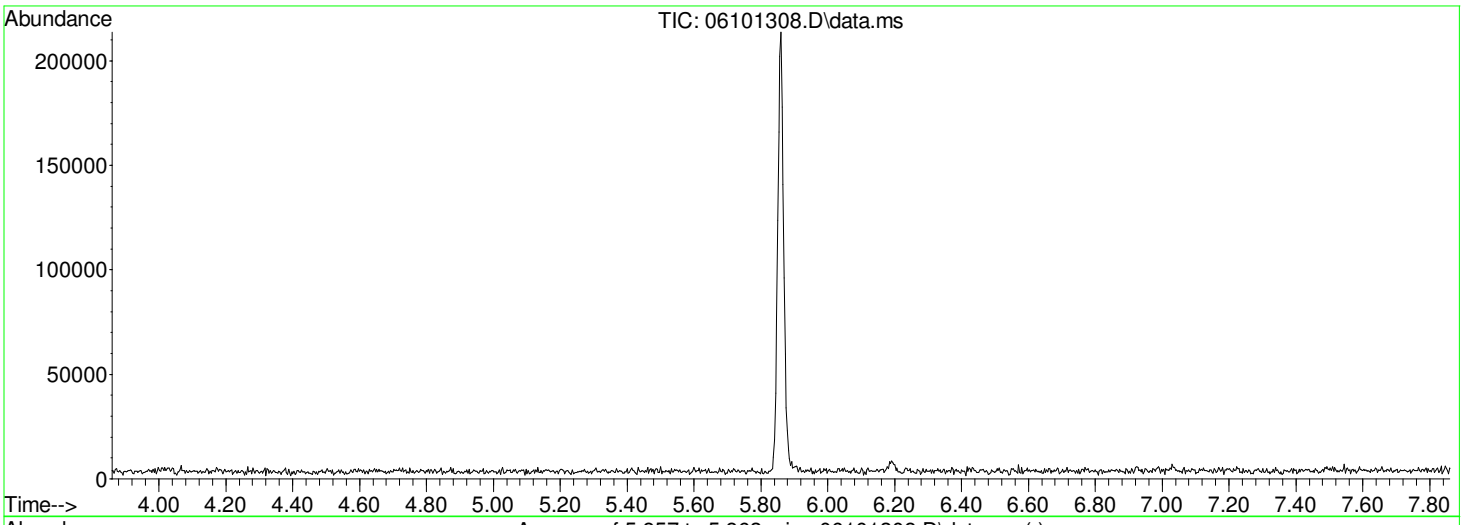
Quant Time: Jun 10 14:12:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

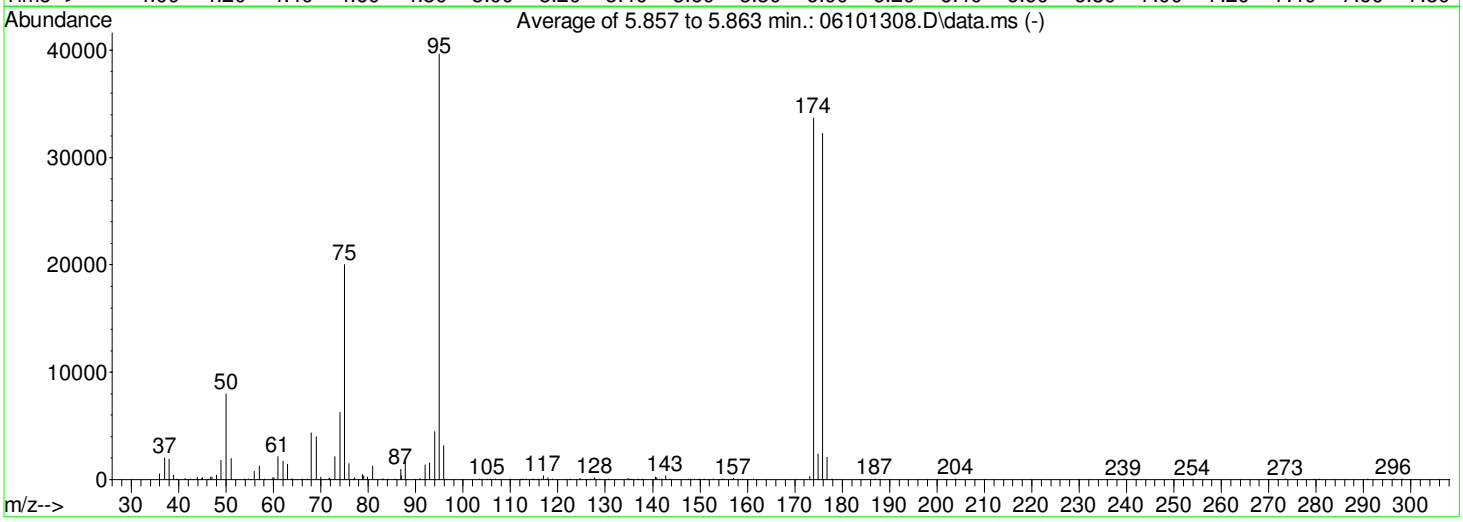


Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101308.D
Acq On : 10 Jun 2013 7:41 am
Operator : PS
Sample : TUNE BFB061013-7
Misc : BFB_624
ALS Vial : 7 Sample Multiplier: 1
InstName : VOA7

Integration File: events.e

Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
Last Update : Mon Jun 10 11:55:54 2013





AutoFind: Scans 1018, 1019, 1020; Background Corrected with Scan 1009

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	7980	PASS
75	95	30	60	50.5	20003	PASS
95	95	100	100	100.0	39624	PASS
96	95	5	9	7.9	3150	PASS
173	174	0.00	2	0.9	288	PASS
174	95	50	100	85.0	33688	PASS
175	174	5	9	7.0	2370	PASS
176	174	95	101	95.8	32259	PASS
177	176	5	9	6.5	2107	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101309.D
Acq On : 10 Jun 2013 8:00 am Operator: PS
Sample : ICAL VSTD100 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 8

Quant Time: Jun 10 14:13:17 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.441	168	1972849	30.00	ug/L	0.05
31) 1,4-Difluorobenzene	6.416	114	3211083	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.503	82	1861648	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.864	152	1625856	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.265	113	766776	24.27	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 80.90%#			
32) 1,2-Dichloroethane-d4	5.726	102	202975	25.45	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 84.83%			
48) Toluene-d8	8.491	98	3991170	30.46	ug/L	0.01
Spiked Amount 30.000	Range 88 - 110		Recovery = 101.53%			
68) Bromofluorobenzene	12.206	174	1344590	31.96	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 106.53%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.219	85	3313428	118.16	ug/L	99
3) Chloromethane	1.346	50	2468232	91.35	ug/L	96
4) Vinyl chloride	1.429	62	3221798	100.11	ug/L	99
5) 1,3-Butadiene	1.459	39	1752712	69.54	ug/L	100
6) Bromomethane	1.655	96	1344836	122.91	ug/L	97
7) Chloroethane	1.744	64	1579544	103.18	ug/L	97
8) Trichlorofluoromethane	1.951	101	3681330	87.05	ug/L	99
9) Isopropyl Alcohol	2.604	45	3731145	1527.90	ug/L #	96
10) Ethyl Ether	2.194	59	1914485	84.32	ug/L	94
11) Acrolein	2.308	56	447346	98.30	ug/L	82
12) Acetone	2.448	43	1872245	153.92	ug/L	99
13) Freon-TF	2.397	151	1580173	104.05	ug/L	93
14) 1,1-Dichloroethene	2.389	96	1907198	101.37	ug/L	93
15) Methylene Chloride	2.868	84	2533313	98.66	ug/L	88
16) Carbon disulfide	2.591	76	16671918	210.73	ug/L	99
17) Acrylonitrile	3.153	53	1193162	90.23	ug/L	98
18) MTBE	3.188	73	7291922	89.74	ug/L	99
19) Hexane	3.539	57	2358912	108.56	ug/L	95
20) trans-1,2-Dichloroethene	3.170	96	2252472	94.34	ug/L	92
21) Vinyl acetate	3.811	43	8669492	163.29	ug/L	93
22) 1,1-Dichloroethane	3.698	63	3870550	84.79	ug/L	98
23) 2-Butanone	4.609	72	697813	167.64	ug/L #	75
24) 2,2-Dichloropropane	4.534	77	3202417	85.81	ug/L	97
25) cis-1,2-Dichloroethene	4.546	96	2517708	91.09	ug/L	93
26) Ethyl Acetate	4.734	45	368461	75.10	ug/L	96
27) Chloroform	5.034	83	3593776	78.52	ug/L	97
28) Bromochloromethane	4.891	128	872376	79.14	ug/L #	84
30) Isobutyl alcohol	5.841	43	2247054	1322.79	ug/L	98
33) Carbon Tetrachloride	5.494	117	2666478	85.87	ug/L	95
34) 1,2-Dichloroethane	5.838	62	3199223	87.32	ug/L	98
35) 1,1,1-Trichloroethane	5.260	97	3222316	86.95	ug/L	96
36) 1,1-Dichloropropene	5.510	110	1155097	99.99	ug/L	95
37) 1-Butanol	6.798	56	1454712	1570.48	ug/L	95
38) Benzene	5.806	78	10244962	96.60	ug/L	100
39) Trichloroethene	6.740	95	2421106	91.85	ug/L	94
40) 1,2-Dichloropropane	7.048	63	2408374	89.23	ug/L	99
41) 1,4-Dioxane	7.280	88	394524	1031.17	ug/L	90
42) Bromodichloromethane	7.463	83	2941867	88.32	ug/L	98
43) Dibromomethane	7.204	93	1377969	90.60	ug/L	96
44) 2-Nitropropane	7.804	41	617831	79.09	ug/L #	83
45) 2-Chloroethylvinyl ether	7.951	63	1879092	108.91	ug/L	95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101309.D
Acq On : 10 Jun 2013 8:00 am Operator: PS
Sample : ICAL VSTD100 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 8

Quant Time: Jun 10 14:13:17 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

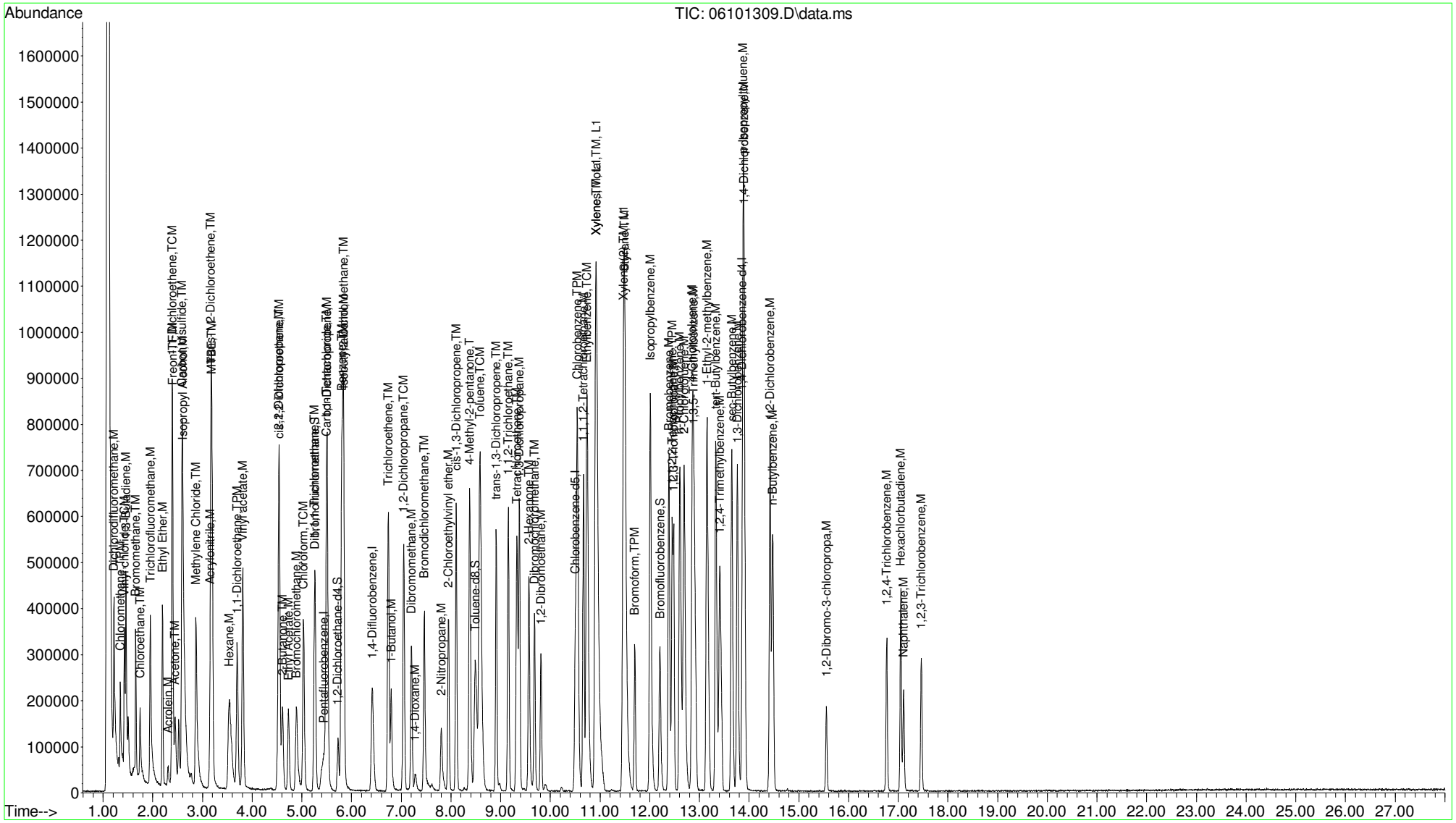
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46)	4-Methyl-2-pentanone	8.375	43	6032839	178.92 ug/L	98
47)	cis-1,3-Dichloropropene	8.105	75	3964464	90.91 ug/L	97
49)	Toluene	8.585	92	6785274	100.53 ug/L	99
51)	trans-1,3-Dichloropropene	8.911	75	3490476	86.84 ug/L	95
52)	2-Hexanone	9.567	43	4231374	176.26 ug/L	95
53)	1,1,2-Trichloroethane	9.154	83	1872891	90.25 ug/L	97
54)	1,3-Dichloropropane	9.377	76	4059808	90.34 ug/L	98
55)	Tetrachloroethene	9.325	164	1947719	112.43 ug/L	97
56)	Dibromochloromethane	9.682	129	2308628	88.29 ug/L	99
57)	1,2-Dibromoethane	9.812	107	2336739	94.35 ug/L	97
58)	Chlorobenzene	10.543	112	6704091	101.78 ug/L	97
59)	Ethylbenzene	10.738	91	12354022	98.56 ug/L	98
60)	1,1,1,2-Tetrachloroethane	10.666	131	2298237	94.27 ug/L	97
61)	Xylene	10.920	106	9055096	197.52 ug/L	99
62)	Xylene (2)	11.472	106	4264442	96.79 ug/L	95
63)	Xylenes, Total	10.920	106	13319538m	294.36 ug/L #	
64)	Styrene	11.497	104	8109846	99.16 ug/L	97
65)	Isopropylbenzene	12.012	105	9944964	101.16 ug/L	99
66)	Bromoform	11.699	173	1735456	102.21 ug/L	99
67)	1,1,2,2-Tetrachloroethane	12.451	83	3301577	96.72 ug/L	99
70)	1,2,3-Trichloropropane	12.482	75	2703423	92.57 ug/L	100
71)	n-Propylbenzene	12.607	91	10197311	93.84 ug/L	95
72)	Bromobenzene	12.384	156	2953747	104.94 ug/L	92
73)	1,3,5-Trimethylbenzene	12.885	105	6531885	74.50 ug/L	96
74)	2-Chlorotoluene	12.691	91	7895798	102.28 ug/L	100
75)	4-Chlorotoluene	12.855	91	8076975	90.47 ug/L	96
76)	tert-Butylbenzene	13.330	119	5399265	89.64 ug/L	95
77)	1-Ethyl-2-methylbenzene	13.153	105	9984313	94.78 ug/L	99
78)	1,2,4-Trimethylbenzene	13.411	105	5831124	63.80 ug/L	99
79)	sec-Butylbenzene	13.650	105	8253616	97.63 ug/L	100
80)	p-Isopropyltoluene	13.880	119	6258306	87.81 ug/L	99
81)	1,3-Dichlorobenzene	13.762	146	4623915	102.14 ug/L	98
82)	1,4-Dichlorobenzene	13.898	146	5028736	96.70 ug/L	98
83)	n-Butylbenzene	14.473	91	4906780	76.08 ug/L	99
84)	1,2-Dichlorobenzene	14.422	146	4556668	101.56 ug/L	97
85)	1,2-Dibromo-3-chloropropa	15.556	75	503909	79.87 ug/L	77
86)	1,2,4-Trichlorobenzene	16.769	180	1262614	60.21 ug/L	99
87)	Hexachlorbutadiene	17.051	225	1017249	114.69 ug/L	96
88)	Naphthalene	17.108	128	2248054	37.84 ug/L	98
89)	1,2,3-Trichlorobenzene	17.464	180	1098051	61.62 ug/L	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101309.D
Acq On : 10 Jun 2013 8:00 am Operator: PS
Sample : ICAL VSTD100 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 8

Quant Time: Jun 10 14:13:17 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101310.D
Acq On : 10 Jun 2013 8:35 am Operator: PS
Sample : ICAL VSTD200 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 9

Quant Time: Jun 10 14:13:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1875536	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.402	114	2992296	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.490	82	1770662	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1708070	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.261	113	828357	27.58	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 91.93%			
32) 1,2-Dichloroethane-d4	5.726	102	212966	28.66	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 95.53%			
48) Toluene-d8	8.470	98	3800922	31.13	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 103.77%			
68) Bromofluorobenzene	12.194	174	1341764	33.54	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 111.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	6542417	245.42	ug/L	97
3) Chloromethane	1.345	50	5154485	200.66	ug/L	96
4) Vinyl chloride	1.425	62	6612806	216.14	ug/L	98
5) 1,3-Butadiene	1.452	39	4472387	186.66	ug/L	92
6) Bromomethane	1.650	96	4074859	371.52	ug/L	91
7) Chloroethane	1.723	64	3150837	216.49	ug/L	94
8) Trichlorofluoromethane	1.937	101	7430703	184.82	ug/L	99
9) Isopropyl Alcohol	2.634	45	8717405	3754.98	ug/L #	95
10) Ethyl Ether	2.191	59	4155724	192.53	ug/L	93
11) Acrolein	2.300	56	548064	126.68	ug/L	87
12) Acetone	2.448	43	3988214	344.89	ug/L	97
13) Freon-TF	2.389	151	3147325	218.01	ug/L	94
14) 1,1-Dichloroethene	2.381	96	4032433	225.44	ug/L	89
15) Methylene Chloride	2.862	84	4981927	204.10	ug/L	88
16) Carbon disulfide	2.579	76	31354202	416.87	ug/L	99
17) Acrylonitrile	3.147	53	2414585	192.08	ug/L	99
18) MTBE	3.188	73	15276346	197.76	ug/L	99
19) Hexane	3.518	57	3648444	176.62	ug/L	94
20) trans-1,2-Dichloroethene	3.165	96	4767354	210.02	ug/L	91
21) Vinyl acetate	3.809	43	5526548	109.49	ug/L	96
22) 1,1-Dichloroethane	3.694	63	8228684	189.62	ug/L	99
23) 2-Butanone	4.615	72	1541442	389.53	ug/L #	70
24) 2,2-Dichloropropane	4.529	77	3987100	112.37	ug/L	97
25) cis-1,2-Dichloroethene	4.544	96	5252454	199.89	ug/L	90
26) Ethyl Acetate	4.735	45	809219	173.50	ug/L	92
27) Chloroform	5.032	83	7822680	179.77	ug/L	99
28) Bromochloromethane	4.889	128	2041598	194.83	ug/L #	85
30) Isobutyl alcohol	5.872	43	5594748	3464.38	ug/L	97
33) Carbon Tetrachloride	5.490	117	5189716	179.34	ug/L	98
34) 1,2-Dichloroethane	5.839	62	6767316	198.21	ug/L	97
35) 1,1,1-Trichloroethane	5.257	97	6724599	194.72	ug/L	97
36) 1,1-Dichloropropene	5.505	110	2275777	211.40	ug/L	96
37) 1-Butanol	6.821	56	3558646	4122.75	ug/L	96
38) Benzene	5.798	78	19753691	199.89	ug/L	100
39) Trichloroethene	6.737	95	5532737	225.24	ug/L	95
40) 1,2-Dichloropropane	7.047	63	4885098	194.24	ug/L	100
41) 1,4-Dioxane	7.291	88	764770	2145.03	ug/L	83
42) Bromodichloromethane	7.464	83	6277714	202.24	ug/L	99
43) Dibromomethane	7.205	93	2937175	207.23	ug/L	95
44) 2-Nitropropane	7.806	41	1331131	182.85	ug/L	93
45) 2-Chloroethylvinyl ether	7.950	63	5832067	362.73	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101310.D
Acq On : 10 Jun 2013 8:35 am Operator: PS
Sample : ICAL VSTD200 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 9

Quant Time: Jun 10 14:13:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

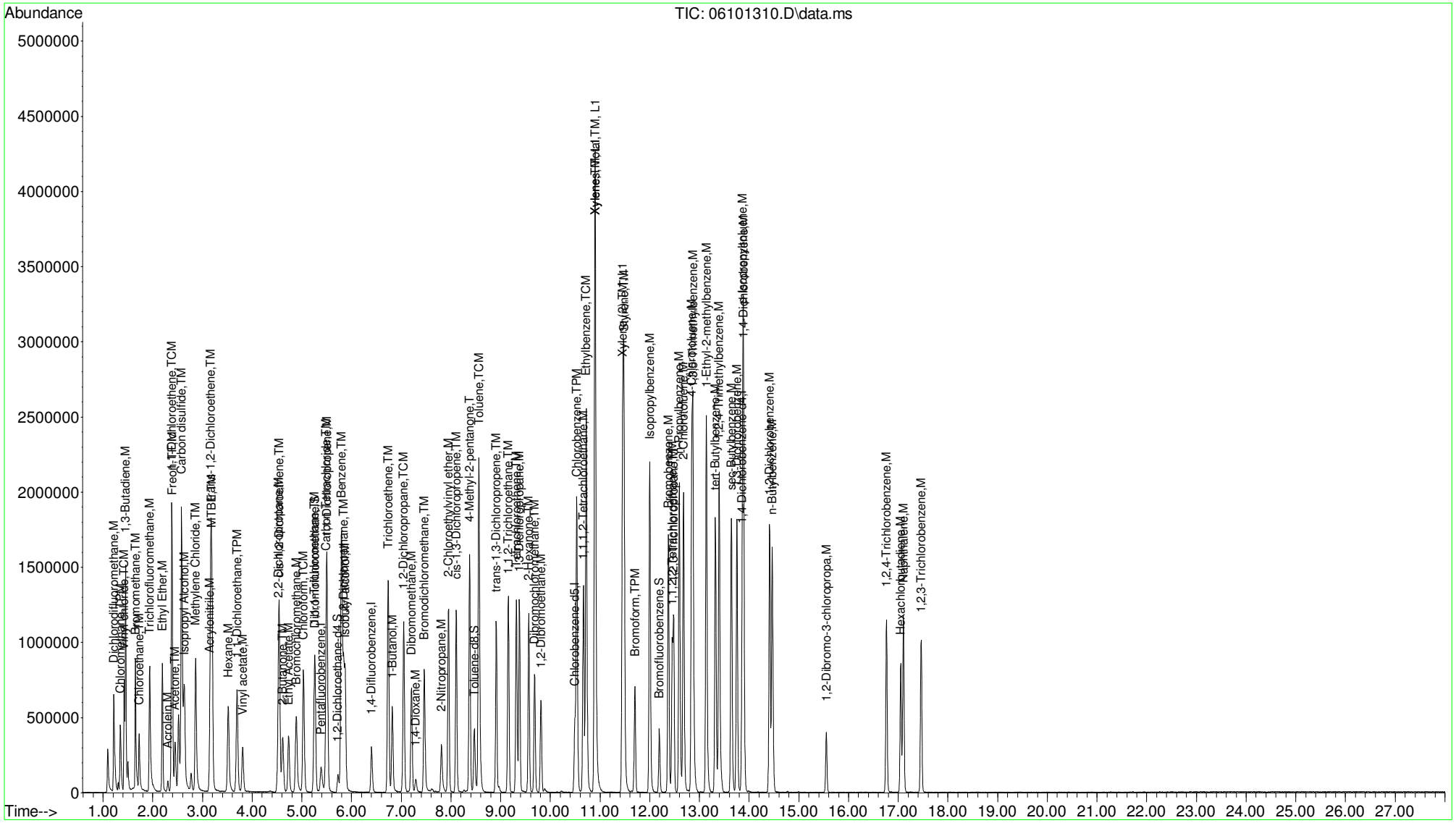
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46)	4-Methyl-2-pentanone	8.375	43	12027053	382.78 ug/L	96
47)	cis-1,3-Dichloropropene	8.107	75	7696208	189.40 ug/L	96
49)	Toluene	8.561	92	12596360	200.26 ug/L	100
51)	trans-1,3-Dichloropropene	8.911	75	6811385	178.16 ug/L	96
52)	2-Hexanone	9.565	43	8704286	381.22 ug/L	96
53)	1,1,2-Trichloroethane	9.154	83	3868947	196.02 ug/L	99
54)	1,3-Dichloropropane	9.378	76	8237444	192.73 ug/L	98
55)	Tetrachloroethene	9.316	164	3577683	217.13 ug/L	97
56)	Dibromochloromethane	9.683	129	4911269	197.47 ug/L	99
57)	1,2-Dibromoethane	9.811	107	4832501	205.15 ug/L	98
58)	Chlorobenzene	10.531	112	12836686	204.90 ug/L	97
59)	Ethylbenzene	10.723	91	23450772	196.70 ug/L	97
60)	1,1,1,2-Tetrachloroethane	10.665	131	4610854	198.86 ug/L	97
61)	Xylene	10.900	106	17612481	403.92 ug/L	99
62)	Xylene (2)	11.454	106	8385527	200.11 ug/L	94
63)	Xylenes, Total	10.900	106	25998008m	604.08 ug/L #	
64)	Styrene	11.480	104	16136715	207.43 ug/L	97
65)	Isopropylbenzene	12.000	105	19089082	204.15 ug/L	99
66)	Bromoform	11.701	173	3786418	234.45 ug/L	98
67)	1,1,2,2-Tetrachloroethane	12.452	83	5611434	172.84 ug/L	100
70)	1,2,3-Trichloropropane	12.481	75	5452412	177.72 ug/L	100
71)	n-Propylbenzene	12.595	91	20837532	182.53 ug/L	98
72)	Bromobenzene	12.376	156	5695354	192.60 ug/L	95
73)	1,3,5-Trimethylbenzene	12.869	105	16812061	182.51 ug/L	97
74)	2-Chlorotoluene	12.680	91	14594978	179.95 ug/L	97
75)	4-Chlorotoluene	12.844	91	16433602	175.22 ug/L	97
76)	tert-Butylbenzene	13.322	119	11689221	184.72 ug/L	97
77)	1-Ethyl-2-methylbenzene	13.140	105	20889343	188.76 ug/L	98
78)	1,2,4-Trimethylbenzene	13.397	105	16537310	172.24 ug/L	98
79)	sec-Butylbenzene	13.643	105	16289104	183.41 ug/L	99
80)	p-Isopropyltoluene	13.872	119	13648134	182.28 ug/L	100
81)	1,3-Dichlorobenzene	13.753	146	9248865	194.48 ug/L	97
82)	1,4-Dichlorobenzene	13.888	146	10478373	191.79 ug/L	97
83)	n-Butylbenzene	14.465	91	11949459	176.36 ug/L	99
84)	1,2-Dichlorobenzene	14.413	146	9193483	195.04 ug/L	97
85)	1,2-Dibromo-3-chloropropa	15.553	75	1125206	169.76 ug/L	83
86)	1,2,4-Trichlorobenzene	16.763	180	4452100	202.09 ug/L	99
87)	Hexachlorbutadiene	17.051	225	1915440	205.57 ug/L	98
88)	Naphthalene	17.104	128	11560278	185.24 ug/L	98
89)	1,2,3-Trichlorobenzene	17.463	180	3881032	207.31 ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101310.D
Acq On : 10 Jun 2013 8:35 am Operator: PS
Sample : ICAL VSTD200 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 9

Quant Time: Jun 10 14:13:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101310.D
Acq On : 10 Jun 2013 8:35 am Operator: PS
Sample : ICAL VSTD200 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 9

Quant Time: Jun 10 14:13:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.387	168	1875536	30.00	ug/L		0.00
31) 1,4-Difluorobenzene	6.402	114	2992296	30.00	ug/L		0.00
50) Chlorobenzene-d5	10.490	82	1770662	30.00	ug/L		0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1708070	30.00	ug/L	#	0.00
System Monitoring Compounds							
29) Dibromofluoromethane	5.261	113	828357	27.58	ug/L		0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 91.93%				
32) 1,2-Dichloroethane-d4	5.726	102	212966	28.66	ug/L		0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 95.53%				
48) Toluene-d8	8.470	98	3800922	31.13	ug/L		0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 103.77%				
68) Bromofluorobenzene	12.194	174	1341764	33.54	ug/L		0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 111.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.216	85	6542417	245.42	ug/L		97
3) Chloromethane	1.345	50	5154485	200.66	ug/L		96
4) Vinyl chloride	1.425	62	6612806	216.14	ug/L		98
5) 1,3-Butadiene	1.452	39	4472387	186.66	ug/L		92
6) Bromomethane	1.650	96	4074859	371.52	ug/L		91
7) Chloroethane	1.723	64	3150837	216.49	ug/L		94
8) Trichlorofluoromethane	1.937	101	7430703	184.82	ug/L		99
9) Isopropyl Alcohol	2.634	45	8717405	3754.98	ug/L	#	95
10) Ethyl Ether	2.191	59	4155724	192.53	ug/L		93
11) Acrolein	2.300	56	548064	126.68	ug/L		87
12) Acetone	2.448	43	3988214	344.89	ug/L		97
13) Freon-TF	2.389	151	3147325	218.01	ug/L		94
14) 1,1-Dichloroethene	2.381	96	4032433	225.44	ug/L		89
15) Methylene Chloride	2.862	84	4981927	204.10	ug/L		88
16) Carbon disulfide	2.579	76	31354202	416.87	ug/L		99
17) Acrylonitrile	3.147	53	2414585	192.08	ug/L		99
18) MTBE	3.188	73	15276346	197.76	ug/L		99
19) Hexane	3.518	57	3648444	176.62	ug/L		94
20) trans-1,2-Dichloroethene	3.165	96	4767354	210.02	ug/L		91
21) Vinyl acetate	3.809	43	5526548	109.49	ug/L		96
22) 1,1-Dichloroethane	3.694	63	8228684	189.62	ug/L		99
23) 2-Butanone	4.615	72	1541442	389.53	ug/L	#	70
24) 2,2-Dichloropropane	4.529	77	3987100	112.37	ug/L		97
25) cis-1,2-Dichloroethene	4.544	96	5252454	199.89	ug/L		90
26) Ethyl Acetate	4.735	45	809219	173.50	ug/L		92
27) Chloroform	5.032	83	7822680	179.77	ug/L		99
28) Bromochloromethane	4.889	128	2041598	194.83	ug/L	#	85
30) Isobutyl alcohol	5.872	43	5594748	3464.38	ug/L		97
33) Carbon Tetrachloride	5.490	117	5189716	179.34	ug/L		98
34) 1,2-Dichloroethane	5.839	62	6767316	198.21	ug/L		97
35) 1,1,1-Trichloroethane	5.257	97	6724599	194.72	ug/L		97
36) 1,1-Dichloropropene	5.505	110	2275777	211.40	ug/L		96
37) 1-Butanol	6.821	56	3558646	4122.75	ug/L		96
38) Benzene	5.798	78	19753691	199.89	ug/L		100
39) Trichloroethene	6.737	95	5532737	225.24	ug/L		95
40) 1,2-Dichloropropane	7.047	63	4885098	194.24	ug/L		100
41) 1,4-Dioxane	7.291	88	764770	2145.03	ug/L		83
42) Bromodichloromethane	7.464	83	6277714	202.24	ug/L		99
43) Dibromomethane	7.205	93	2937175	207.23	ug/L		95
44) 2-Nitropropane	7.806	41	1331131	182.85	ug/L		93
45) 2-Chloroethylvinyl ether	7.950	63	5832067	362.73	ug/L		94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101310.D
Acq On : 10 Jun 2013 8:35 am Operator: PS
Sample : ICAL VSTD200 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 9

Quant Time: Jun 10 14:13:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

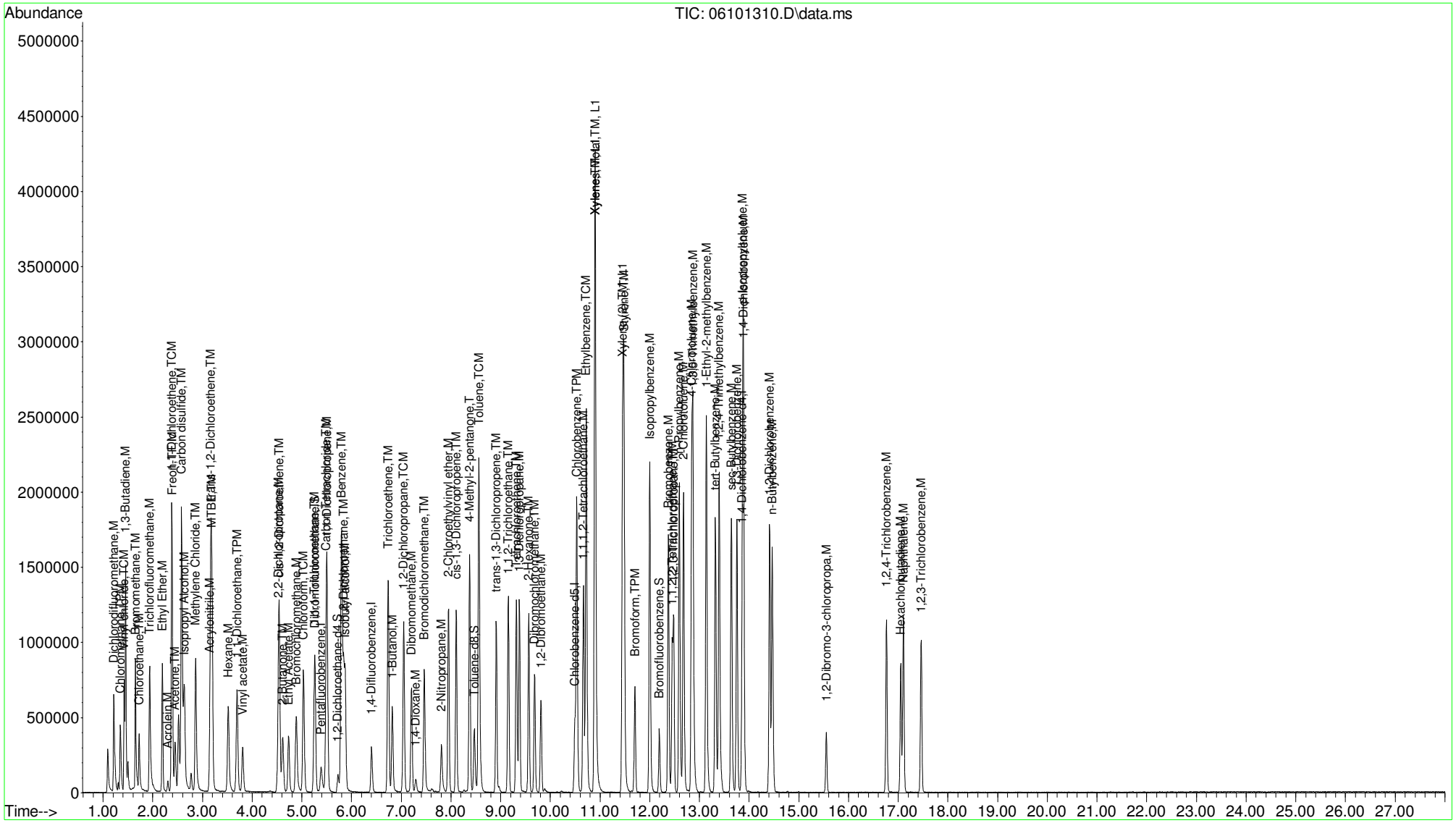
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46)	4-Methyl-2-pentanone	8.375	43	12027053	382.78 ug/L	96
47)	cis-1,3-Dichloropropene	8.107	75	7696208	189.40 ug/L	96
49)	Toluene	8.561	92	12596360	200.26 ug/L	100
51)	trans-1,3-Dichloropropene	8.911	75	6811385	178.16 ug/L	96
52)	2-Hexanone	9.565	43	8704286	381.22 ug/L	96
53)	1,1,2-Trichloroethane	9.154	83	3868947	196.02 ug/L	99
54)	1,3-Dichloropropane	9.378	76	8237444	192.73 ug/L	98
55)	Tetrachloroethene	9.316	164	3577683	217.13 ug/L	97
56)	Dibromochloromethane	9.683	129	4911269	197.47 ug/L	99
57)	1,2-Dibromoethane	9.811	107	4832501	205.15 ug/L	98
58)	Chlorobenzene	10.531	112	12836686	204.90 ug/L	97
59)	Ethylbenzene	10.723	91	23450772	196.70 ug/L	97
60)	1,1,1,2-Tetrachloroethane	10.665	131	4610854	198.86 ug/L	97
61)	Xylene	10.900	106	17612481	403.92 ug/L	99
62)	Xylene (2)	11.454	106	8385527	200.11 ug/L	94
63)	Xylenes, Total	10.900	106	25998008m	604.08 ug/L #	
64)	Styrene	11.480	104	16136715	207.43 ug/L	97
65)	Isopropylbenzene	12.000	105	19089082	204.15 ug/L	99
66)	Bromoform	11.701	173	3786418	234.45 ug/L	98
67)	1,1,2,2-Tetrachloroethane	12.452	83	5611434	172.84 ug/L	100
70)	1,2,3-Trichloropropane	12.481	75	5452412	177.72 ug/L	100
71)	n-Propylbenzene	12.595	91	20837532	182.53 ug/L	98
72)	Bromobenzene	12.376	156	5695354	192.60 ug/L	95
73)	1,3,5-Trimethylbenzene	12.869	105	16812061	182.51 ug/L	97
74)	2-Chlorotoluene	12.680	91	14594978	179.95 ug/L	97
75)	4-Chlorotoluene	12.844	91	16433602	175.22 ug/L	97
76)	tert-Butylbenzene	13.322	119	11689221	184.72 ug/L	97
77)	1-Ethyl-2-methylbenzene	13.140	105	20889343	188.76 ug/L	98
78)	1,2,4-Trimethylbenzene	13.397	105	16537310	172.24 ug/L	98
79)	sec-Butylbenzene	13.643	105	16289104	183.41 ug/L	99
80)	p-Isopropyltoluene	13.872	119	13648134	182.28 ug/L	100
81)	1,3-Dichlorobenzene	13.753	146	9248865	194.48 ug/L	97
82)	1,4-Dichlorobenzene	13.888	146	10478373	191.79 ug/L	97
83)	n-Butylbenzene	14.465	91	11949459	176.36 ug/L	99
84)	1,2-Dichlorobenzene	14.413	146	9193483	195.04 ug/L	97
85)	1,2-Dibromo-3-chloropropa	15.553	75	1125206	169.76 ug/L	83
86)	1,2,4-Trichlorobenzene	16.763	180	4452100	202.09 ug/L	99
87)	Hexachlorbutadiene	17.051	225	1915440	205.57 ug/L	98
88)	Naphthalene	17.104	128	11560278	185.24 ug/L	98
89)	1,2,3-Trichlorobenzene	17.463	180	3881032	207.31 ug/L	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101310.D
Acq On : 10 Jun 2013 8:35 am Operator: PS
Sample : ICAL VSTD200 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 9

Quant Time: Jun 10 14:13:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101311.D
Acq On : 10 Jun 2013 9:10 am Operator: PS
Sample : ICAL VSTD300 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 10

Quant Time: Jun 10 14:14:10 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1848786	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.401	114	3064874	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.494	82	1730648	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1790983	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.260	113	838398	28.32	ug/L	-0.01
Spiked Amount 30.000	Range 86 - 118		Recovery = 94.40%			
32) 1,2-Dichloroethane-d4	5.727	102	214662	28.20	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 94.00%			
48) Toluene-d8	8.471	98	3757766	30.05	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.17%			
68) Bromofluorobenzene	12.195	174	1355626	34.67	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 115.57%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	9696388	368.99	ug/L	98
3) Chloromethane	1.344	50	7790360	307.65	ug/L	98
4) Vinyl chloride	1.426	62	10029916	332.58	ug/L	98
5) 1,3-Butadiene	1.452	39	6642849	281.26	ug/L	89
6) Bromomethane	1.647	96	6835761	625.77	ug/L	95
7) Chloroethane	1.717	64	5705112	397.67	ug/L	97
8) Trichlorofluoromethane	1.928	101	11243955	283.71	ug/L	98
9) Isopropyl Alcohol	2.657	45	13254918	5792.10	ug/L #	95
10) Ethyl Ether	2.192	59	6419802	301.73	ug/L	94
11) Acrolein	2.301	56	855033	200.50	ug/L	89
12) Acetone	2.452	43	6086500	533.96	ug/L	96
13) Freon-TF	2.383	151	4943183	347.35	ug/L	92
14) 1,1-Dichloroethene	2.377	96	6379220	361.81	ug/L	91
15) Methylene Chloride	2.859	84	7642532	317.63	ug/L	88
16) Carbon disulfide	2.573	76	46961075	633.40	ug/L	98
17) Acrylonitrile	3.150	53	3735649	301.47	ug/L	99
18) MTBE	3.188	73	23776677	312.25	ug/L	99
19) Hexane	3.514	57	5572765	273.68	ug/L	93
20) trans-1,2-Dichloroethene	3.162	96	7475138	334.08	ug/L	91
21) Vinyl acetate	3.808	43	5441124	109.36	ug/L	94
22) 1,1-Dichloroethane	3.692	63	12616194	294.94	ug/L	98
23) 2-Butanone	4.618	72	2338323	599.46	ug/L #	73
24) 2,2-Dichloropropane	4.528	77	6158651	176.09	ug/L	97
25) cis-1,2-Dichloroethene	4.540	96	8065200	311.38	ug/L	91
26) Ethyl Acetate	4.737	45	1167100	253.85	ug/L	99
27) Chloroform	5.032	83	11930034	278.13	ug/L	99
28) Bromochloromethane	4.886	128	3014298	291.82	ug/L #	87
30) Isobutyl alcohol	5.886	43	8735712	5487.60	ug/L	99
33) Carbon Tetrachloride	5.491	117	8519030	287.42	ug/L	99
34) 1,2-Dichloroethane	5.837	62	10432122	298.32	ug/L	97
35) 1,1,1-Trichloroethane	5.258	97	10484671	296.41	ug/L	98
36) 1,1-Dichloropropene	5.504	110	3584589	325.09	ug/L	97
37) 1-Butanol	6.832	56	5536275	6261.99	ug/L	96
38) Benzene	5.796	78	29887028	295.26	ug/L	99
39) Trichloroethene	6.735	95	8792990	349.48	ug/L	95
40) 1,2-Dichloropropane	7.049	63	7543761	292.84	ug/L	99
41) 1,4-Dioxane	7.299	88	1197550	3279.36	ug/L	87
42) Bromodichloromethane	7.464	83	9713804	305.53	ug/L	99
43) Dibromomethane	7.205	93	4593278	316.40	ug/L	95
44) 2-Nitropropane	7.810	41	2082105	279.24	ug/L	93
45) 2-Chloroethylvinyl ether	7.952	63	8837803	536.66	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101311.D
Acq On : 10 Jun 2013 9:10 am Operator: PS
Sample : ICAL VSTD300 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 10

Quant Time: Jun 10 14:14:10 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

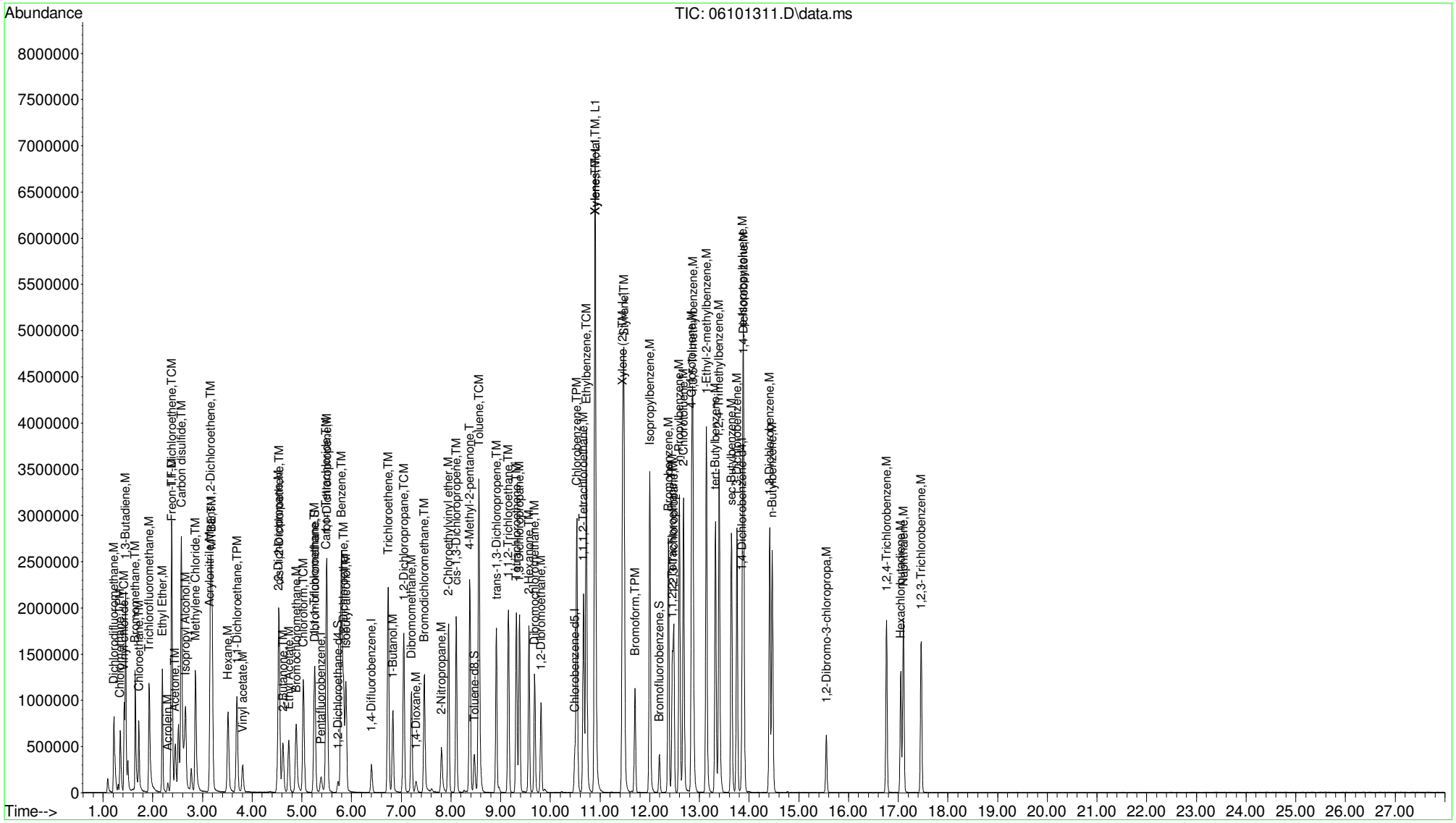
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.380	43	18040871	560.58 ug/L	96
47) cis-1,3-Dichloropropene	8.107	75	11821957	284.04 ug/L	97
49) Toluene	8.561	92	19379858	300.82 ug/L	98
51) trans-1,3-Dichloropropene	8.913	75	10654587	285.13 ug/L	97
52) 2-Hexanone	9.569	43	13042830	584.44 ug/L	94
53) 1,1,2-Trichloroethane	9.155	83	6071106	314.70 ug/L	99
54) 1,3-Dichloropropane	9.379	76	12661412	303.08 ug/L	98
55) Tetrachloroethene	9.316	164	5449369	338.38 ug/L	97
56) Dibromochloromethane	9.686	129	7782370	320.14 ug/L	99
57) 1,2-Dibromoethane	9.812	107	7548270	327.85 ug/L	100
58) Chlorobenzene	10.533	112	19737618	322.34 ug/L	97
59) Ethylbenzene	10.723	91	35956481	308.57 ug/L	97
60) 1,1,1,2-Tetrachloroethane	10.668	131	7260038	320.35 ug/L	96
61) Xylene	10.901	106	27203262	638.30 ug/L	98
62) Xylene (2)	11.454	106	13036853	318.30 ug/L	93
63) Xylenes, Total	10.901	106	40240115m	956.62 ug/L #	
64) Styrene	11.481	104	24927193	327.84 ug/L	96
65) Isopropylbenzene	12.001	105	29116164	318.59 ug/L	98
66) Bromoform	11.703	173	6057169	383.73 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.453	83	8317073	262.10 ug/L	100
70) 1,2,3-Trichloropropane	12.484	75	8424881	261.89 ug/L	99
71) n-Propylbenzene	12.597	91	31864590	266.21 ug/L	98
72) Bromobenzene	12.376	156	9002010	290.33 ug/L	92
73) 1,3,5-Trimethylbenzene	12.869	105	25928922	268.46 ug/L	97
74) 2-Chlorotoluene	12.680	91	22371548	263.07 ug/L	97
75) 4-Chlorotoluene	12.845	91	25552896	259.83 ug/L	97
76) tert-Butylbenzene	13.323	119	17941682	270.40 ug/L	98
77) 1-Ethyl-2-methylbenzene	13.139	105	32131167	276.90 ug/L	98
78) 1,2,4-Trimethylbenzene	13.397	105	25963370	257.89 ug/L	99
79) sec-Butylbenzene	13.643	105	25041933	268.91 ug/L	99
80) p-Isopropyltoluene	13.873	119	21351564	271.97 ug/L	98
81) 1,3-Dichlorobenzene	13.754	146	14182902	284.42 ug/L	97
82) 1,4-Dichlorobenzene	13.889	146	16310210	284.71 ug/L	97
83) n-Butylbenzene	14.466	91	18592011	261.69 ug/L	98
84) 1,2-Dichlorobenzene	14.414	146	14279988	288.93 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.553	75	1796610	258.51 ug/L	81
86) 1,2,4-Trichlorobenzene	16.765	180	7123848	308.40 ug/L	99
87) Hexachlorbutadiene	17.052	225	2959936	302.96 ug/L	97
88) Naphthalene	17.103	128	18906459	288.93 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	6202352	315.96 ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101311.D
Acq On : 10 Jun 2013 9:10 am Operator: PS
Sample : ICAL VSTD300 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 10

Quant Time: Jun 10 14:14:10 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101311.D
Acq On : 10 Jun 2013 9:10 am Operator: PS
Sample : ICAL VSTD300 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 10

Quant Time: Jun 10 14:14:10 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1848786	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.401	114	3064874	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.494	82	1730648	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1790983	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.260	113	838398	28.32	ug/L	-0.01
Spiked Amount 30.000	Range 86 - 118		Recovery = 94.40%			
32) 1,2-Dichloroethane-d4	5.727	102	214662	28.20	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 94.00%			
48) Toluene-d8	8.471	98	3757766	30.05	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.17%			
68) Bromofluorobenzene	12.195	174	1355626	34.67	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 115.57%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	9696388	368.99	ug/L	98
3) Chloromethane	1.344	50	7790360	307.65	ug/L	98
4) Vinyl chloride	1.426	62	10029916	332.58	ug/L	98
5) 1,3-Butadiene	1.452	39	6642849	281.26	ug/L	89
6) Bromomethane	1.647	96	6835761	625.77	ug/L	95
7) Chloroethane	1.717	64	5705112	397.67	ug/L	97
8) Trichlorofluoromethane	1.928	101	11243955	283.71	ug/L	98
9) Isopropyl Alcohol	2.657	45	13254918	5792.10	ug/L #	95
10) Ethyl Ether	2.192	59	6419802	301.73	ug/L	94
11) Acrolein	2.301	56	855033	200.50	ug/L	89
12) Acetone	2.452	43	6086500	533.96	ug/L	96
13) Freon-TF	2.383	151	4943183	347.35	ug/L	92
14) 1,1-Dichloroethene	2.377	96	6379220	361.81	ug/L	91
15) Methylene Chloride	2.859	84	7642532	317.63	ug/L	88
16) Carbon disulfide	2.573	76	46961075	633.40	ug/L	98
17) Acrylonitrile	3.150	53	3735649	301.47	ug/L	99
18) MTBE	3.188	73	23776677	312.25	ug/L	99
19) Hexane	3.514	57	5572765	273.68	ug/L	93
20) trans-1,2-Dichloroethene	3.162	96	7475138	334.08	ug/L	91
21) Vinyl acetate	3.808	43	5441124	109.36	ug/L	94
22) 1,1-Dichloroethane	3.692	63	12616194	294.94	ug/L	98
23) 2-Butanone	4.618	72	2338323	599.46	ug/L #	73
24) 2,2-Dichloropropane	4.528	77	6158651	176.09	ug/L	97
25) cis-1,2-Dichloroethene	4.540	96	8065200	311.38	ug/L	91
26) Ethyl Acetate	4.737	45	1167100	253.85	ug/L	99
27) Chloroform	5.032	83	11930034	278.13	ug/L	99
28) Bromochloromethane	4.886	128	3014298	291.82	ug/L #	87
30) Isobutyl alcohol	5.886	43	8735712	5487.60	ug/L	99
33) Carbon Tetrachloride	5.491	117	8519030	287.42	ug/L	99
34) 1,2-Dichloroethane	5.837	62	10432122	298.32	ug/L	97
35) 1,1,1-Trichloroethane	5.258	97	10484671	296.41	ug/L	98
36) 1,1-Dichloropropene	5.504	110	3584589	325.09	ug/L	97
37) 1-Butanol	6.832	56	5536275	6261.99	ug/L	96
38) Benzene	5.796	78	29887028	295.26	ug/L	99
39) Trichloroethene	6.735	95	8792990	349.48	ug/L	95
40) 1,2-Dichloropropane	7.049	63	7543761	292.84	ug/L	99
41) 1,4-Dioxane	7.299	88	1197550	3279.36	ug/L	87
42) Bromodichloromethane	7.464	83	9713804	305.53	ug/L	99
43) Dibromomethane	7.205	93	4593278	316.40	ug/L	95
44) 2-Nitropropane	7.810	41	2082105	279.24	ug/L	93
45) 2-Chloroethylvinyl ether	7.952	63	8837803	536.66	ug/L	94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101311.D
Acq On : 10 Jun 2013 9:10 am Operator: PS
Sample : ICAL VSTD300 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 10

Quant Time: Jun 10 14:14:10 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

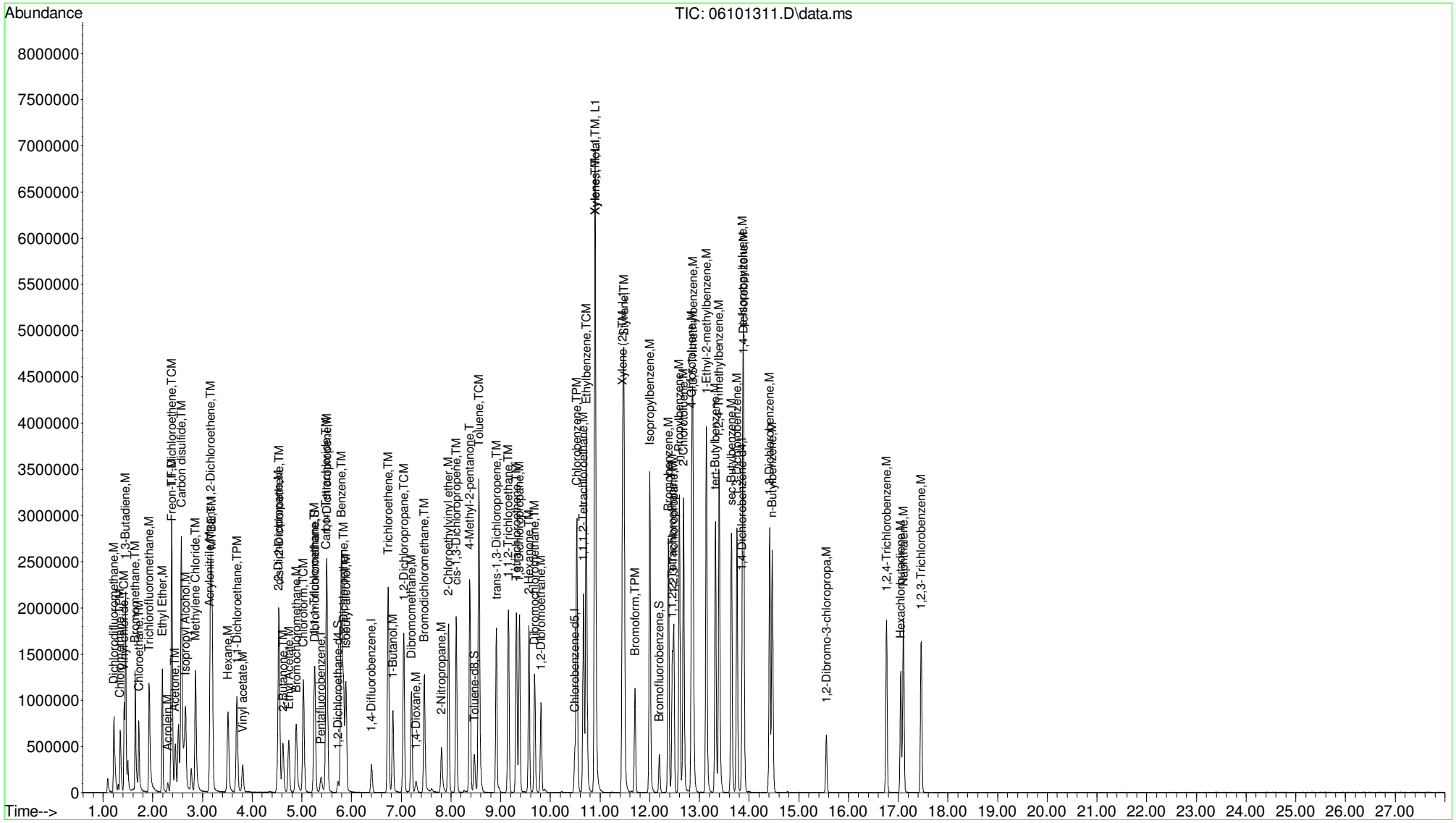
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.380	43	18040871	560.58 ug/L	96
47) cis-1,3-Dichloropropene	8.107	75	11821957	284.04 ug/L	97
49) Toluene	8.561	92	19379858	300.82 ug/L	98
51) trans-1,3-Dichloropropene	8.913	75	10654587	285.13 ug/L	97
52) 2-Hexanone	9.569	43	13042830	584.44 ug/L	94
53) 1,1,2-Trichloroethane	9.155	83	6071106	314.70 ug/L	99
54) 1,3-Dichloropropane	9.379	76	12661412	303.08 ug/L	98
55) Tetrachloroethene	9.316	164	5449369	338.38 ug/L	97
56) Dibromochloromethane	9.686	129	7782370	320.14 ug/L	99
57) 1,2-Dibromoethane	9.812	107	7548270	327.85 ug/L	100
58) Chlorobenzene	10.533	112	19737618	322.34 ug/L	97
59) Ethylbenzene	10.723	91	35956481	308.57 ug/L	97
60) 1,1,1,2-Tetrachloroethane	10.668	131	7260038	320.35 ug/L	96
61) Xylene	10.901	106	27203262	638.30 ug/L	98
62) Xylene (2)	11.454	106	13036853	318.30 ug/L	93
63) Xylenes, Total	10.901	106	40240115m	956.62 ug/L #	
64) Styrene	11.481	104	24927193	327.84 ug/L	96
65) Isopropylbenzene	12.001	105	29116164	318.59 ug/L	98
66) Bromoform	11.703	173	6057169	383.73 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.453	83	8317073	262.10 ug/L	100
70) 1,2,3-Trichloropropane	12.484	75	8424881	261.89 ug/L	99
71) n-Propylbenzene	12.597	91	31864590	266.21 ug/L	98
72) Bromobenzene	12.376	156	9002010	290.33 ug/L	92
73) 1,3,5-Trimethylbenzene	12.869	105	25928922	268.46 ug/L	97
74) 2-Chlorotoluene	12.680	91	22371548	263.07 ug/L	97
75) 4-Chlorotoluene	12.845	91	25552896	259.83 ug/L	97
76) tert-Butylbenzene	13.323	119	17941682	270.40 ug/L	98
77) 1-Ethyl-2-methylbenzene	13.139	105	32131167	276.90 ug/L	98
78) 1,2,4-Trimethylbenzene	13.397	105	25963370	257.89 ug/L	99
79) sec-Butylbenzene	13.643	105	25041933	268.91 ug/L	99
80) p-Isopropyltoluene	13.873	119	21351564	271.97 ug/L	98
81) 1,3-Dichlorobenzene	13.754	146	14182902	284.42 ug/L	97
82) 1,4-Dichlorobenzene	13.889	146	16310210	284.71 ug/L	97
83) n-Butylbenzene	14.466	91	18592011	261.69 ug/L	98
84) 1,2-Dichlorobenzene	14.414	146	14279988	288.93 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.553	75	1796610	258.51 ug/L	81
86) 1,2,4-Trichlorobenzene	16.765	180	7123848	308.40 ug/L	99
87) Hexachlorbutadiene	17.052	225	2959936	302.96 ug/L	97
88) Naphthalene	17.103	128	18906459	288.93 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	6202352	315.96 ug/L	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101311.D
Acq On : 10 Jun 2013 9:10 am Operator: PS
Sample : ICAL VSTD300 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 10

Quant Time: Jun 10 14:14:10 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101313.D
Acq On : 10 Jun 2013 10:20 am Operator: PS
Sample : ICAL VSTD100r Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 10 14:14:46 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.385	168	1863990	30.00	ug/L	-0.01
31) 1,4-Difluorobenzene	6.401	114	3064181	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1796570	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1688750	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.261	113	821633	27.53	ug/L	-0.01
Spiked Amount 30.000	Range 86 - 118		Recovery = 91.77%			
32) 1,2-Dichloroethane-d4	5.727	102	211238	27.76	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 92.53%			
48) Toluene-d8	8.469	98	3777900	30.22	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.73%			
68) Bromofluorobenzene	12.194	174	1318053	32.47	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 108.23%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.215	85	3449268	130.19	ug/L	98
3) Chloromethane	1.346	50	2682150	105.06	ug/L	98
4) Vinyl chloride	1.424	62	3431208	112.85	ug/L	99
5) 1,3-Butadiene	1.452	39	2279909	95.74	ug/L	89
6) Bromomethane	1.650	96	1759485	166.64	ug/L	93
7) Chloroethane	1.738	64	1604911	110.96	ug/L	100
8) Trichlorofluoromethane	1.944	101	3713289	92.93	ug/L	96
9) Isopropyl Alcohol	2.602	45	4062652	1760.81	ug/L #	98
10) Ethyl Ether	2.190	59	2094630	97.64	ug/L	95
11) Acrolein	2.300	56	457301	106.36	ug/L #	75
12) Acetone	2.443	43	1878351	163.44	ug/L	96
13) Freon-TF	2.393	151	1750564	122.01	ug/L	91
14) 1,1-Dichloroethene	2.384	96	2039593	114.73	ug/L	90
15) Methylene Chloride	2.863	84	2527655	104.19	ug/L	88
16) Carbon disulfide	2.582	76	16430043	219.80	ug/L	99
17) Acrylonitrile	3.143	53	1184641	94.82	ug/L	99
18) MTBE	3.185	73	7740907	100.83	ug/L	99
19) Hexane	3.521	57	2349687	114.45	ug/L	92
20) trans-1,2-Dichloroethene	3.166	96	2496396	110.66	ug/L	90
21) Vinyl acetate	3.808	43	12473137	248.65	ug/L	93
22) 1,1-Dichloroethane	3.695	63	4164637	96.57	ug/L	98
23) 2-Butanone	4.609	72	802230	203.98	ug/L #	67
24) 2,2-Dichloropropane	4.530	77	3806434	107.95	ug/L	97
25) cis-1,2-Dichloroethene	4.544	96	2682011	102.70	ug/L	95
26) Ethyl Acetate	4.730	45	403907	87.14	ug/L	99
27) Chloroform	5.032	83	3971436	91.83	ug/L	97
28) Bromochloromethane	4.886	128	1003114	96.32	ug/L #	88
30) Isobutyl alcohol	5.851	43	2691757	1677.12	ug/L	98
33) Carbon Tetrachloride	5.492	117	2803683	94.61	ug/L	99
34) 1,2-Dichloroethane	5.836	62	3378016	96.62	ug/L	98
35) 1,1,1-Trichloroethane	5.259	97	3473642	98.22	ug/L	97
36) 1,1-Dichloropropene	5.504	110	1180120	107.05	ug/L	94
37) 1-Butanol	6.804	56	1692506	1914.80	ug/L	94
38) Benzene	5.797	78	10117950	99.98	ug/L	99
39) Trichloroethene	6.737	95	2424049	96.37	ug/L	95
40) 1,2-Dichloropropane	7.048	63	2430036	94.35	ug/L	99
41) 1,4-Dioxane	7.288	88	386765	1059.35	ug/L	86
42) Bromodichloromethane	7.463	83	3113584	97.95	ug/L	99
43) Dibromomethane	7.206	93	1482818	102.17	ug/L	96
44) 2-Nitropropane	7.803	41	662865	88.92	ug/L #	80
45) 2-Chloroethylvinyl ether	7.947	63	2804463	170.34	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101313.D
Acq On : 10 Jun 2013 10:20 am Operator: PS
Sample : ICAL VSTD100r Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 10 14:14:46 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

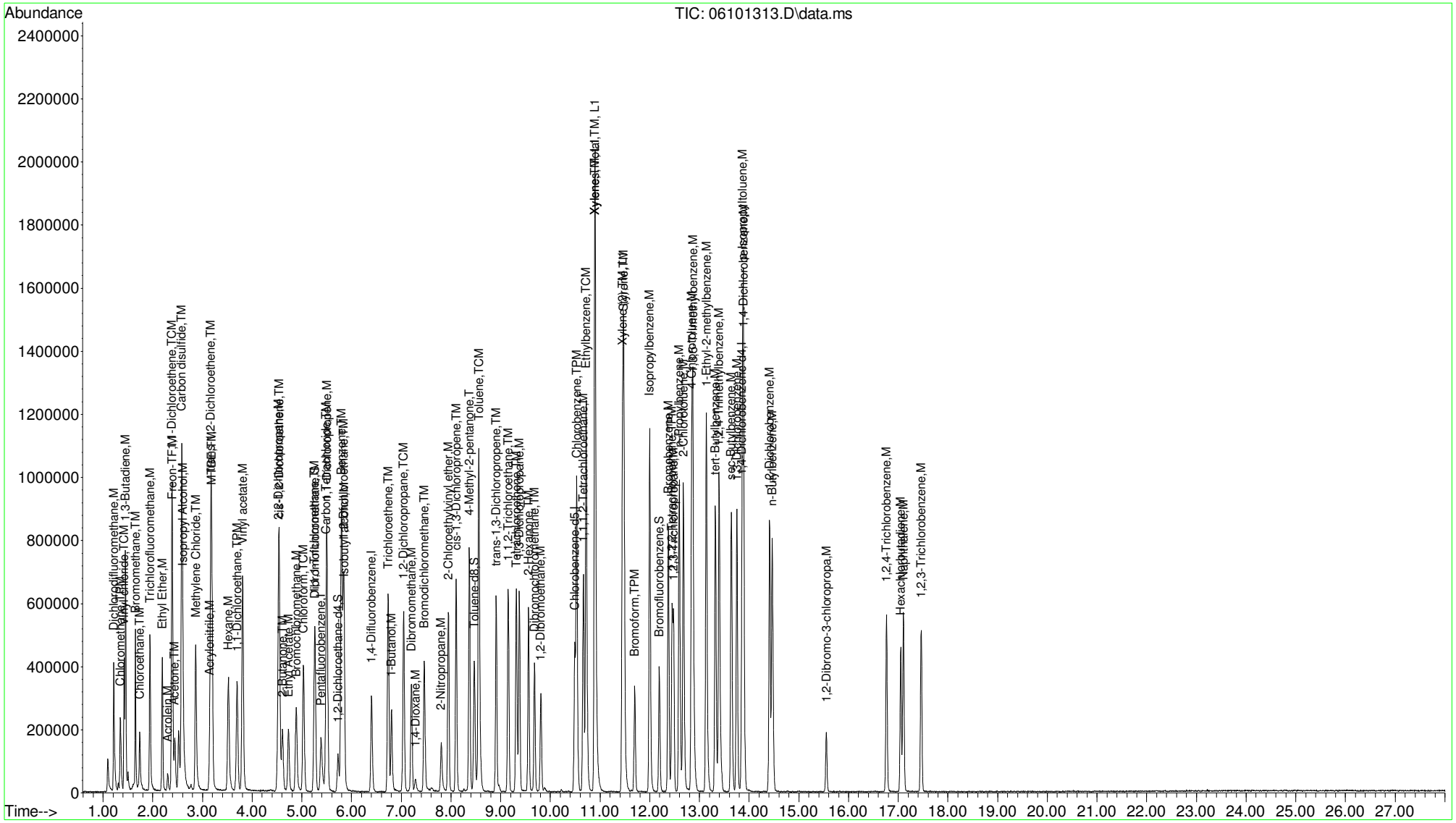
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.371	43	5878201	182.69 ug/L	97
47) cis-1,3-Dichloropropene	8.105	75	4283848	102.95 ug/L	97
49) Toluene	8.560	92	6453828	100.20 ug/L	100
51) trans-1,3-Dichloropropene	8.910	75	3822051	98.53 ug/L	96
52) 2-Hexanone	9.560	43	4241730	183.10 ug/L	95
53) 1,1,2-Trichloroethane	9.152	83	1928149	96.28 ug/L	99
54) 1,3-Dichloropropane	9.376	76	4149949	95.70 ug/L	99
55) Tetrachloroethene	9.318	164	1899146	113.60 ug/L	96
56) Dibromochloromethane	9.682	129	2429210	96.26 ug/L	99
57) 1,2-Dibromoethane	9.810	107	2469232	103.31 ug/L	100
58) Chlorobenzene	10.531	112	6475698	101.88 ug/L	97
59) Ethylbenzene	10.720	91	11959695	98.87 ug/L	97
60) 1,1,1,2-Tetrachloroethane	10.664	131	2254190	95.82 ug/L	96
61) Xylene	10.898	106	8970795	202.77 ug/L	99
62) Xylene (2)	11.453	106	4219278	99.23 ug/L	94
63) Xylenes, Total	10.898	106	13190073m	302.06 ug/L #	
64) Styrene	11.478	104	8068640	102.23 ug/L	96
65) Isopropylbenzene	11.999	105	9761365	102.89 ug/L	98
66) Bromoform	11.698	173	1775552	108.36 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.449	83	3420690	103.84 ug/L	98
70) 1,2,3-Trichloropropane	12.479	75	2618375	86.32 ug/L	100
71) n-Propylbenzene	12.594	91	10718016	94.96 ug/L	98
72) Bromobenzene	12.374	156	2881798	98.57 ug/L	93
73) 1,3,5-Trimethylbenzene	12.868	105	8459863	92.89 ug/L	96
74) 2-Chlorotoluene	12.678	91	7369944	91.91 ug/L	97
75) 4-Chlorotoluene	12.844	91	8315635	89.68 ug/L	96
76) tert-Butylbenzene	13.322	119	5954757	95.18 ug/L	93
77) 1-Ethyl-2-methylbenzene	13.139	105	10553477	96.45 ug/L	100
78) 1,2,4-Trimethylbenzene	13.396	105	8409025	88.58 ug/L	99
79) sec-Butylbenzene	13.642	105	8435870	96.07 ug/L	100
80) p-Isopropyltoluene	13.872	119	6947311	93.85 ug/L	99
81) 1,3-Dichlorobenzene	13.753	146	4618661	98.23 ug/L	98
82) 1,4-Dichlorobenzene	13.887	146	5242547	97.05 ug/L	97
83) n-Butylbenzene	14.466	91	6257311	93.41 ug/L	99
84) 1,2-Dichlorobenzene	14.413	146	4551809	97.67 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.554	75	554107	84.55 ug/L	86
86) 1,2,4-Trichlorobenzene	16.764	180	2192703	100.67 ug/L	98
87) Hexachlorbutadiene	17.053	225	1036658	112.53 ug/L	96
88) Naphthalene	17.104	128	5636129	91.35 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	1974078	106.65 ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101313.D
Acq On : 10 Jun 2013 10:20 am Operator: PS
Sample : ICAL VSTD100r Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 10 14:14:46 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101313.D
Acq On : 10 Jun 2013 10:20 am Operator: PS
Sample : ICAL VSTD100r Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 10 14:14:46 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.385	168	1863990	30.00	ug/L	-0.01
31) 1,4-Difluorobenzene	6.401	114	3064181	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1796570	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1688750	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.261	113	821633	27.53	ug/L	-0.01
Spiked Amount 30.000	Range 86 - 118		Recovery = 91.77%			
32) 1,2-Dichloroethane-d4	5.727	102	211238	27.76	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 92.53%			
48) Toluene-d8	8.469	98	3777900	30.22	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.73%			
68) Bromofluorobenzene	12.194	174	1318053	32.47	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 108.23%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.215	85	3449268	130.19	ug/L	98
3) Chloromethane	1.346	50	2682150	105.06	ug/L	98
4) Vinyl chloride	1.424	62	3431208	112.85	ug/L	99
5) 1,3-Butadiene	1.452	39	2279909	95.74	ug/L	89
6) Bromomethane	1.650	96	1759485	166.64	ug/L	93
7) Chloroethane	1.738	64	1604911	110.96	ug/L	100
8) Trichlorofluoromethane	1.944	101	3713289	92.93	ug/L	96
9) Isopropyl Alcohol	2.602	45	4062652	1760.81	ug/L #	98
10) Ethyl Ether	2.190	59	2094630	97.64	ug/L	95
11) Acrolein	2.300	56	457301	106.36	ug/L #	75
12) Acetone	2.443	43	1878351	163.44	ug/L	96
13) Freon-TF	2.393	151	1750564	122.01	ug/L	91
14) 1,1-Dichloroethene	2.384	96	2039593	114.73	ug/L	90
15) Methylene Chloride	2.863	84	2527655	104.19	ug/L	88
16) Carbon disulfide	2.582	76	16430043	219.80	ug/L	99
17) Acrylonitrile	3.143	53	1184641	94.82	ug/L	99
18) MTBE	3.185	73	7740907	100.83	ug/L	99
19) Hexane	3.521	57	2349687	114.45	ug/L	92
20) trans-1,2-Dichloroethene	3.166	96	2496396	110.66	ug/L	90
21) Vinyl acetate	3.808	43	12473137	248.65	ug/L	93
22) 1,1-Dichloroethane	3.695	63	4164637	96.57	ug/L	98
23) 2-Butanone	4.609	72	802230	203.98	ug/L #	67
24) 2,2-Dichloropropane	4.530	77	3806434	107.95	ug/L	97
25) cis-1,2-Dichloroethene	4.544	96	2682011	102.70	ug/L	95
26) Ethyl Acetate	4.730	45	403907	87.14	ug/L	99
27) Chloroform	5.032	83	3971436	91.83	ug/L	97
28) Bromochloromethane	4.886	128	1003114	96.32	ug/L #	88
30) Isobutyl alcohol	5.851	43	2691757	1677.12	ug/L	98
33) Carbon Tetrachloride	5.492	117	2803683	94.61	ug/L	99
34) 1,2-Dichloroethane	5.836	62	3378016	96.62	ug/L	98
35) 1,1,1-Trichloroethane	5.259	97	3473642	98.22	ug/L	97
36) 1,1-Dichloropropene	5.504	110	1180120	107.05	ug/L	94
37) 1-Butanol	6.804	56	1692506	1914.80	ug/L	94
38) Benzene	5.797	78	10117950	99.98	ug/L	99
39) Trichloroethene	6.737	95	2424049	96.37	ug/L	95
40) 1,2-Dichloropropane	7.048	63	2430036	94.35	ug/L	99
41) 1,4-Dioxane	7.288	88	386765	1059.35	ug/L	86
42) Bromodichloromethane	7.463	83	3113584	97.95	ug/L	99
43) Dibromomethane	7.206	93	1482818	102.17	ug/L	96
44) 2-Nitropropane	7.803	41	662865	88.92	ug/L #	80
45) 2-Chloroethylvinyl ether	7.947	63	2804463	170.34	ug/L	93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101313.D
Acq On : 10 Jun 2013 10:20 am Operator: PS
Sample : ICAL VSTD100r Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 10 14:14:46 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration

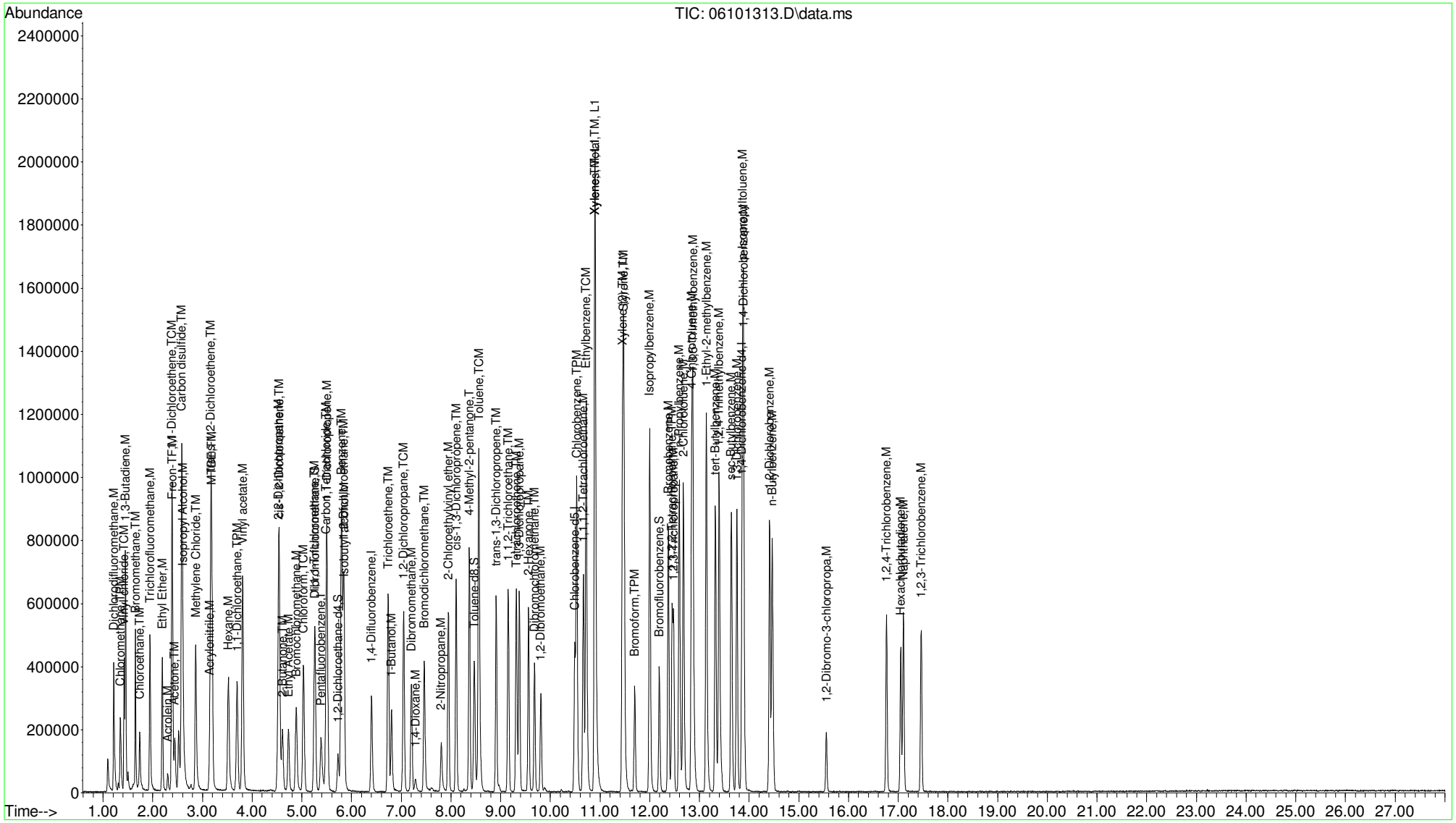
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.371	43	5878201	182.69 ug/L	97
47) cis-1,3-Dichloropropene	8.105	75	4283848	102.95 ug/L	97
49) Toluene	8.560	92	6453828	100.20 ug/L	100
51) trans-1,3-Dichloropropene	8.910	75	3822051	98.53 ug/L	96
52) 2-Hexanone	9.560	43	4241730	183.10 ug/L	95
53) 1,1,2-Trichloroethane	9.152	83	1928149	96.28 ug/L	99
54) 1,3-Dichloropropane	9.376	76	4149949	95.70 ug/L	99
55) Tetrachloroethene	9.318	164	1899146	113.60 ug/L	96
56) Dibromochloromethane	9.682	129	2429210	96.26 ug/L	99
57) 1,2-Dibromoethane	9.810	107	2469232	103.31 ug/L	100
58) Chlorobenzene	10.531	112	6475698	101.88 ug/L	97
59) Ethylbenzene	10.720	91	11959695	98.87 ug/L	97
60) 1,1,1,2-Tetrachloroethane	10.664	131	2254190	95.82 ug/L	96
61) Xylene	10.898	106	8970795	202.77 ug/L	99
62) Xylene (2)	11.453	106	4219278	99.23 ug/L	94
63) Xylenes, Total	10.898	106	13190073m	302.06 ug/L #	
64) Styrene	11.478	104	8068640	102.23 ug/L	96
65) Isopropylbenzene	11.999	105	9761365	102.89 ug/L	98
66) Bromoform	11.698	173	1775552	108.36 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.449	83	3420690	103.84 ug/L	98
70) 1,2,3-Trichloropropane	12.479	75	2618375	86.32 ug/L	100
71) n-Propylbenzene	12.594	91	10718016	94.96 ug/L	98
72) Bromobenzene	12.374	156	2881798	98.57 ug/L	93
73) 1,3,5-Trimethylbenzene	12.868	105	8459863	92.89 ug/L	96
74) 2-Chlorotoluene	12.678	91	7369944	91.91 ug/L	97
75) 4-Chlorotoluene	12.844	91	8315635	89.68 ug/L	96
76) tert-Butylbenzene	13.322	119	5954757	95.18 ug/L	93
77) 1-Ethyl-2-methylbenzene	13.139	105	10553477	96.45 ug/L	100
78) 1,2,4-Trimethylbenzene	13.396	105	8409025	88.58 ug/L	99
79) sec-Butylbenzene	13.642	105	8435870	96.07 ug/L	100
80) p-Isopropyltoluene	13.872	119	6947311	93.85 ug/L	99
81) 1,3-Dichlorobenzene	13.753	146	4618661	98.23 ug/L	98
82) 1,4-Dichlorobenzene	13.887	146	5242547	97.05 ug/L	97
83) n-Butylbenzene	14.466	91	6257311	93.41 ug/L	99
84) 1,2-Dichlorobenzene	14.413	146	4551809	97.67 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.554	75	554107	84.55 ug/L	86
86) 1,2,4-Trichlorobenzene	16.764	180	2192703	100.67 ug/L	98
87) Hexachlorbutadiene	17.053	225	1036658	112.53 ug/L	96
88) Naphthalene	17.104	128	5636129	91.35 ug/L	98
89) 1,2,3-Trichlorobenzene	17.462	180	1974078	106.65 ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101313.D
Acq On : 10 Jun 2013 10:20 am Operator: PS
Sample : ICAL VSTD100r Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 10 14:14:46 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7051613.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominFri May 17 13:21:38 2013
QLast Update : Fri May 17 13:21:38 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am Operator: PS
Sample : LCS VLCS061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 10 14:36:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1823933	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	3020692	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1723677	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1653935	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	791703	29.80	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 99.33%			
32) 1,2-Dichloroethane-d4	5.732	102	206240	29.68	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 98.93%			
48) Toluene-d8	8.469	98	3746282	30.34	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 101.13%			
68) Bromofluorobenzene	12.193	174	1328879	30.96	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 103.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	695642	21.09	ug/L	98
3) Chloromethane	1.349	50	642217	25.21	ug/L	96
4) Vinyl chloride	1.422	62	637369	20.14	ug/L	99
5) 1,3-Butadiene	1.452	39	310787	14.33	ug/L	86
6) Bromomethane	1.664	96	135726	24.25	ug/L	99
7) Chloroethane	1.746	64	361073	22.14	ug/L	95
8) Trichlorofluoromethane	1.949	101	710221	20.01	ug/L	99
9) Isopropyl Alcohol	2.593	45	768874	396.52	ug/L #	97
10) Ethyl Ether	2.193	59	410712	20.19	ug/L	94
11) Acrolein	2.304	56	59046m	14.24	ug/L	
12) Acetone	2.440	43	401378	42.19	ug/L	92
13) Freon-TF	2.395	151	310088	20.15	ug/L	95
14) 1,1-Dichloroethene	2.388	96	395394	19.81	ug/L	91
15) Methylene Chloride	2.867	84	484379	19.02	ug/L	87
16) Carbon disulfide	2.584	76	2719906	36.41	ug/L	97
17) Acrylonitrile	3.145	53	448740	39.66	ug/L	97
18) MTBE	3.183	73	1552062	21.11	ug/L	99
19) Hexane	3.522	57	381269	18.77	ug/L	99
20) trans-1,2-Dichloroethene	3.173	96	480542	19.92	ug/L	93
21) Vinyl acetate	3.529	43	227415	4.30	ug/L	49
22) 1,1-Dichloroethane	3.700	63	835147	20.73	ug/L	98
23) 2-Butanone	4.613	72	142689	37.36	ug/L	79
24) 2,2-Dichloropropane	4.533	77	371983	10.33	ug/L	96
25) cis-1,2-Dichloroethene	4.547	96	521264	19.81	ug/L	89
26) Ethyl Acetate	4.734	45	69546	16.22	ug/L #	84
27) Chloroform	5.033	83	797577	20.42	ug/L	97
28) Bromochloromethane	4.886	128	235302	22.39	ug/L #	84
30) Isobutyl alcohol	5.839	43	564981	460.31	ug/L	98
33) Carbon Tetrachloride	5.494	117	531877	20.24	ug/L	97
34) 1,2-Dichloroethane	5.836	62	676966	20.35	ug/L	96
35) 1,1,1-Trichloroethane	5.261	97	700655	20.82	ug/L	97
36) 1,1-Dichloropropene	5.505	110	258309	23.23	ug/L	96
37) 1-Butanol	6.800	56	297982	386.43	ug/L	98
38) Benzene	5.797	78	2017871	20.54	ug/L	99
39) Trichloroethene	6.738	95	644489	25.97	ug/L	97
40) 1,2-Dichloropropane	7.046	63	488027	20.39	ug/L #	88
41) 1,4-Dioxane	7.285	88	79202	211.15	ug/L	92
42) Bromodichloromethane	7.464	83	618068	20.33	ug/L	99
43) Dibromomethane	7.205	93	293443	19.81	ug/L	95
44) 2-Nitropropane	7.805	41	108070	17.02	ug/L #	70
45) 2-Chloroethylvinyl ether	7.948	63	527108	39.46	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am Operator: PS
Sample : LCS VLCS061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 10 14:36:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

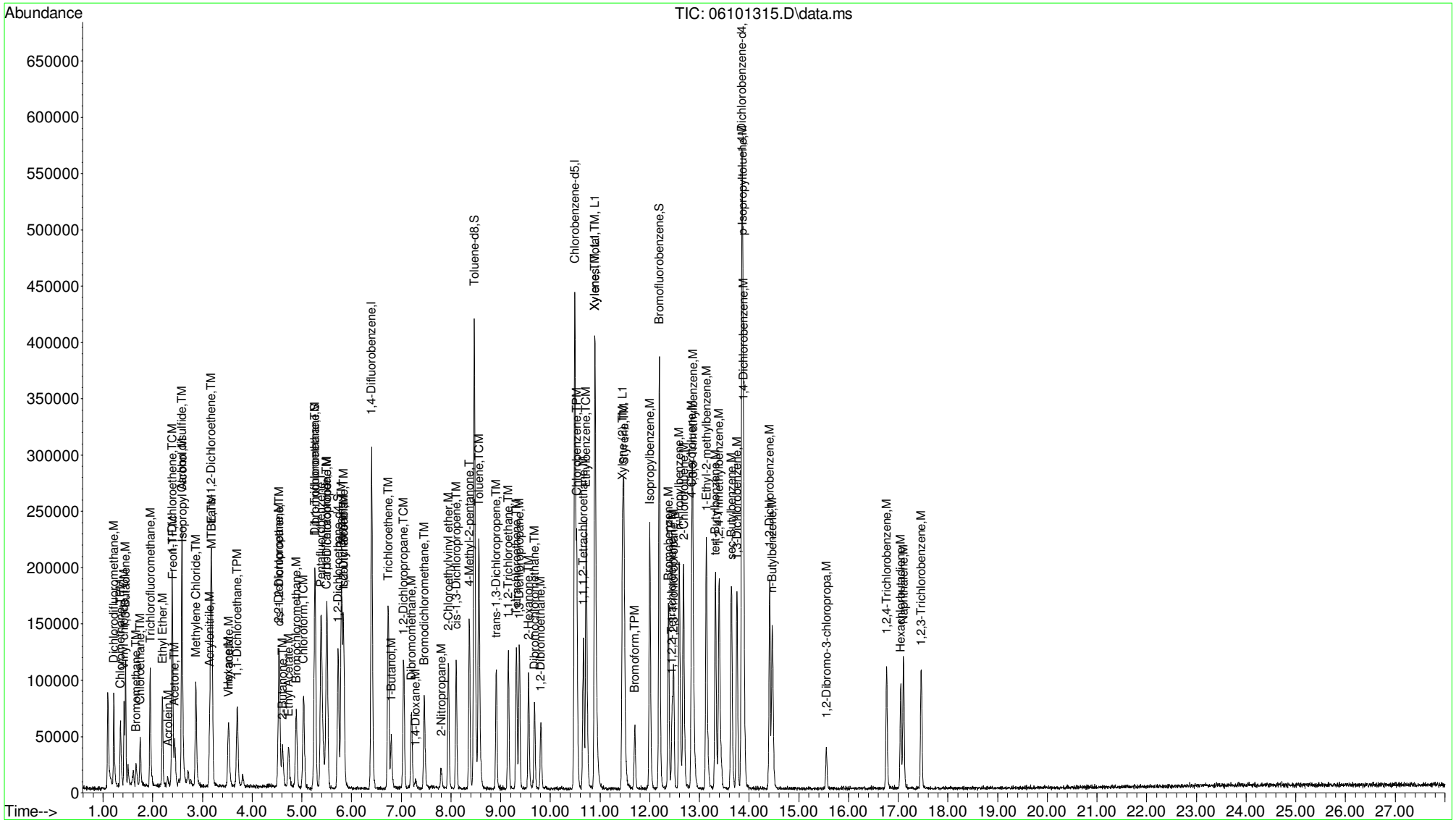
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.369	43	1160190	41.30 ug/L	97
47) cis-1,3-Dichloropropene	8.106	75	695125	17.41 ug/L	95
49) Toluene	8.560	92	1328930	21.34 ug/L	99
51) trans-1,3-Dichloropropene	8.911	75	637380	18.32 ug/L	94
52) 2-Hexanone	9.562	43	771613	37.09 ug/L	93
53) 1,1,2-Trichloroethane	9.152	83	381516	20.20 ug/L	98
54) 1,3-Dichloropropane	9.379	76	801682	20.05 ug/L	99
55) Tetrachloroethene	9.317	164	348949	19.72 ug/L	95
56) Dibromochloromethane	9.682	129	457601	21.00 ug/L	96
57) 1,2-Dibromoethane	9.809	107	469908	20.58 ug/L	98
58) Chlorobenzene	10.530	112	1394749	22.22 ug/L	99
59) Ethylbenzene	10.721	91	2456882	21.27 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.664	131	427627	20.32 ug/L	94
61) Xylene	10.897	106	1845798	43.24 ug/L	98
62) Xylene (2)	11.450	106	903258	21.83 ug/L	95
63) Xylenes, Total	10.897	106	2749056m	65.06 ug/L #	
64) Styrene	11.480	104	1498084	19.68 ug/L	98
65) Isopropylbenzene	12.000	105	2093722	22.36 ug/L	100
66) Bromoform	11.700	173	300985	19.68 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.449	83	397908	12.92 ug/L	97
70) 1,2,3-Trichloropropane	12.480	75	494686	19.56 ug/L #	42
71) n-Propylbenzene	12.596	91	2316981	22.48 ug/L	98
72) Bromobenzene	12.376	156	576595	20.70 ug/L	88
73) 1,3,5-Trimethylbenzene	12.868	105	1653147	19.95 ug/L	97
74) 2-Chlorotoluene	12.681	91	1594743	22.28 ug/L	97
75) 4-Chlorotoluene	12.845	91	1768002	22.17 ug/L	97
76) tert-Butylbenzene	13.321	119	1164812	20.76 ug/L	95
77) 1-Ethyl-2-methylbenzene	13.139	105	2049761	20.60 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	1649524	20.27 ug/L	98
79) sec-Butylbenzene	13.643	105	1797888	21.93 ug/L	100
80) p-Isopropyltoluene	13.873	119	1431772	21.26 ug/L	98
81) 1,3-Dichlorobenzene	13.753	146	971189	21.38 ug/L	98
82) 1,4-Dichlorobenzene	13.889	146	1031450	20.52 ug/L	96
83) n-Butylbenzene	14.465	91	1173827	20.03 ug/L	98
84) 1,2-Dichlorobenzene	14.413	146	951682	21.89 ug/L	98
85) 1,2-Dibromo-3-chloropropa	15.555	75	99584	19.47 ug/L	81
86) 1,2,4-Trichlorobenzene	16.767	180	413145	19.98 ug/L	99
87) Hexachlorbutadiene	17.052	225	207177	21.37 ug/L	97
88) Naphthalene	17.105	128	1152084	22.56 ug/L	94
89) 1,2,3-Trichlorobenzene	17.463	180	390667	22.12 ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am Operator: PS
Sample : LCS VLCS061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 10 14:36:22 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am Operator: PS
Sample : LCS VLCS061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 10 14:35:58 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.387	168	1823933	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	3020692	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1723677	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1653935	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	791703	29.80	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 99.33%			
32) 1,2-Dichloroethane-d4	5.732	102	206240	29.68	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 98.93%			
48) Toluene-d8	8.469	98	3746282	30.34	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 101.13%			
68) Bromofluorobenzene	12.193	174	1328879	30.96	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 103.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	695642	21.09	ug/L	98
3) Chloromethane	1.349	50	642217	25.21	ug/L	96
4) Vinyl chloride	1.422	62	637369	20.14	ug/L	99
5) 1,3-Butadiene	1.452	39	310787	14.33	ug/L	86
6) Bromomethane	1.664	96	135726	24.25	ug/L	99
7) Chloroethane	1.746	64	361073	22.14	ug/L	95
8) Trichlorofluoromethane	1.949	101	710221	20.01	ug/L	99
9) Isopropyl Alcohol	2.593	45	768874	396.52	ug/L #	97
10) Ethyl Ether	2.193	59	410712	20.19	ug/L	94
11) Acrolein	2.303	56	53579	12.92	ug/L #	76
12) Acetone	2.440	43	401378	42.19	ug/L	92
13) Freon-TF	2.395	151	310088	20.15	ug/L	95
14) 1,1-Dichloroethene	2.388	96	395394	19.81	ug/L	91
15) Methylene Chloride	2.867	84	484379	19.02	ug/L	87
16) Carbon disulfide	2.584	76	2719906	36.41	ug/L	97
17) Acrylonitrile	3.145	53	448740	39.66	ug/L	97
18) MTBE	3.183	73	1552062	21.11	ug/L	99
19) Hexane	3.522	57	381269	18.77	ug/L	99
20) trans-1,2-Dichloroethene	3.173	96	480542	19.92	ug/L	93
21) Vinyl acetate	3.529	43	227415	4.30	ug/L	49
22) 1,1-Dichloroethane	3.700	63	835147	20.73	ug/L	98
23) 2-Butanone	4.613	72	142689	37.36	ug/L	79
24) 2,2-Dichloropropane	4.533	77	371983	10.33	ug/L	96
25) cis-1,2-Dichloroethene	4.547	96	521264	19.81	ug/L	89
26) Ethyl Acetate	4.734	45	69546	16.22	ug/L #	84
27) Chloroform	5.033	83	797577	20.42	ug/L	97
28) Bromochloromethane	4.886	128	235302	22.39	ug/L #	84
30) Isobutyl alcohol	5.839	43	564981	460.31	ug/L	98
33) Carbon Tetrachloride	5.494	117	531877	20.24	ug/L	97
34) 1,2-Dichloroethane	5.836	62	676966	20.35	ug/L	96
35) 1,1,1-Trichloroethane	5.261	97	700655	20.82	ug/L	97
36) 1,1-Dichloropropene	5.505	110	258309	23.23	ug/L	96
37) 1-Butanol	6.800	56	297982	386.43	ug/L	98
38) Benzene	5.797	78	2017871	20.54	ug/L	99
39) Trichloroethene	6.738	95	644489	25.97	ug/L	97
40) 1,2-Dichloropropane	7.046	63	488027	20.39	ug/L #	88
41) 1,4-Dioxane	7.285	88	79202	211.15	ug/L	92
42) Bromodichloromethane	7.464	83	618068	20.33	ug/L	99
43) Dibromomethane	7.205	93	293443	19.81	ug/L	95
44) 2-Nitropropane	7.805	41	108070	17.02	ug/L #	70
45) 2-Chloroethylvinyl ether	7.948	63	527108	39.46	ug/L	93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am Operator: PS
Sample : LCS VLCS061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 10 14:35:58 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

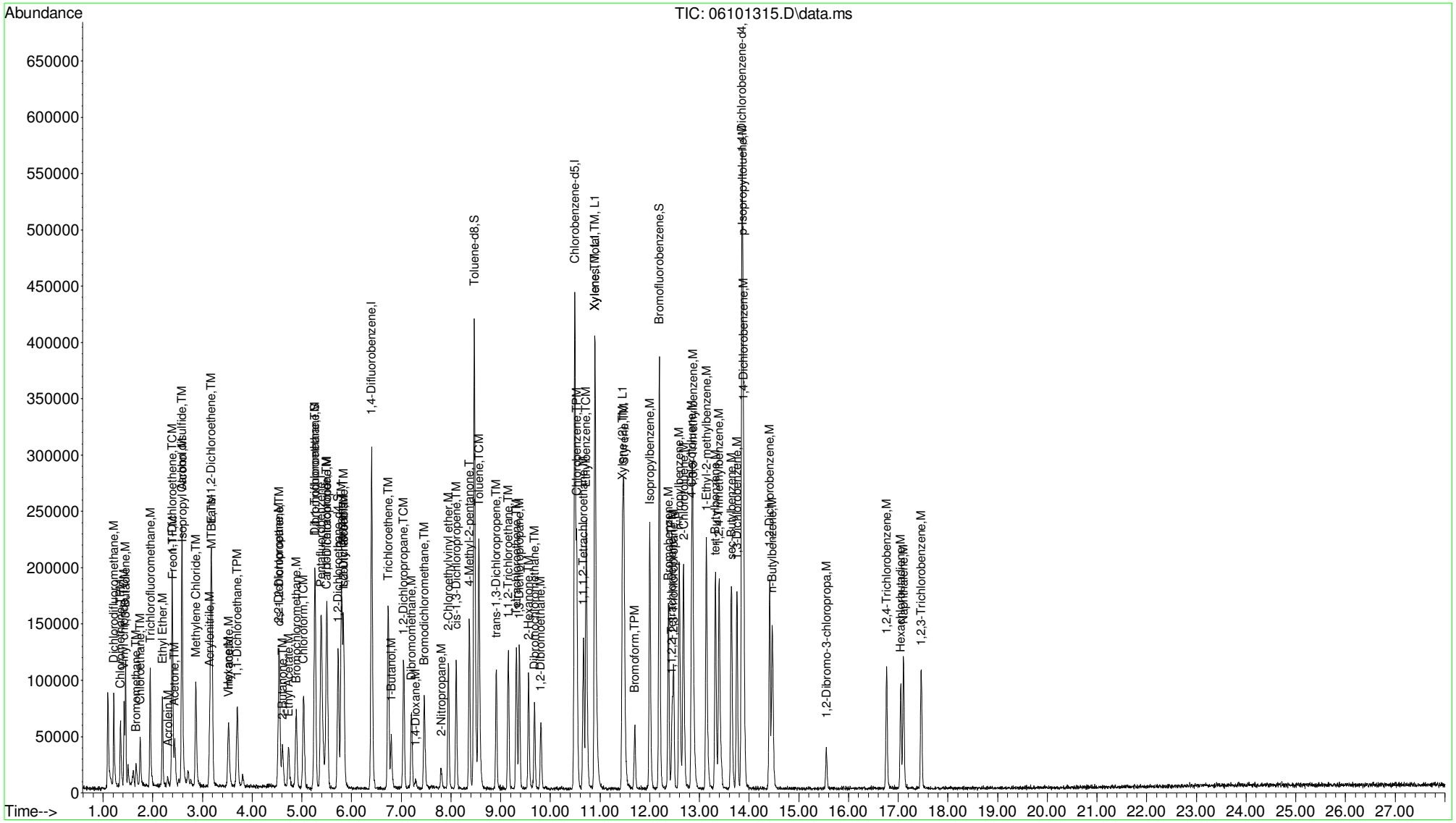
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.369	43	1160190	41.30 ug/L	97
47) cis-1,3-Dichloropropene	8.106	75	695125	17.41 ug/L	95
49) Toluene	8.560	92	1328930	21.34 ug/L	99
51) trans-1,3-Dichloropropene	8.911	75	637380	18.32 ug/L	94
52) 2-Hexanone	9.562	43	771613	37.09 ug/L	93
53) 1,1,2-Trichloroethane	9.152	83	381516	20.20 ug/L	98
54) 1,3-Dichloropropane	9.379	76	801682	20.05 ug/L	99
55) Tetrachloroethene	9.317	164	348949	19.72 ug/L	95
56) Dibromochloromethane	9.682	129	457601	21.00 ug/L	96
57) 1,2-Dibromoethane	9.809	107	469908	20.58 ug/L	98
58) Chlorobenzene	10.530	112	1394749	22.22 ug/L	99
59) Ethylbenzene	10.721	91	2456882	21.27 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.664	131	427627	20.32 ug/L	94
61) Xylene	10.897	106	1845798	43.24 ug/L	98
62) Xylene (2)	11.450	106	903258	21.83 ug/L	95
63) Xylenes, Total	10.897	106	2749056m	65.06 ug/L #	
64) Styrene	11.480	104	1498084	19.68 ug/L	98
65) Isopropylbenzene	12.000	105	2093722	22.36 ug/L	100
66) Bromoform	11.700	173	300985	19.68 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.449	83	397908	12.92 ug/L	97
70) 1,2,3-Trichloropropane	12.480	75	494686	19.56 ug/L #	42
71) n-Propylbenzene	12.596	91	2316981	22.48 ug/L	98
72) Bromobenzene	12.376	156	576595	20.70 ug/L	88
73) 1,3,5-Trimethylbenzene	12.868	105	1653147	19.95 ug/L	97
74) 2-Chlorotoluene	12.681	91	1594743	22.28 ug/L	97
75) 4-Chlorotoluene	12.845	91	1768002	22.17 ug/L	97
76) tert-Butylbenzene	13.321	119	1164812	20.76 ug/L	95
77) 1-Ethyl-2-methylbenzene	13.139	105	2049761	20.60 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	1649524	20.27 ug/L	98
79) sec-Butylbenzene	13.643	105	1797888	21.93 ug/L	100
80) p-Isopropyltoluene	13.873	119	1431772	21.26 ug/L	98
81) 1,3-Dichlorobenzene	13.753	146	971189	21.38 ug/L	98
82) 1,4-Dichlorobenzene	13.889	146	1031450	20.52 ug/L	96
83) n-Butylbenzene	14.465	91	1173827	20.03 ug/L	98
84) 1,2-Dichlorobenzene	14.413	146	951682	21.89 ug/L	98
85) 1,2-Dibromo-3-chloropropa	15.555	75	99584	19.47 ug/L	81
86) 1,2,4-Trichlorobenzene	16.767	180	413145	19.98 ug/L	99
87) Hexachlorbutadiene	17.052	225	207177	21.37 ug/L	97
88) Naphthalene	17.105	128	1152084	22.56 ug/L	94
89) 1,2,3-Trichlorobenzene	17.463	180	390667	22.12 ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am Operator: PS
Sample : LCS VLCS061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 14

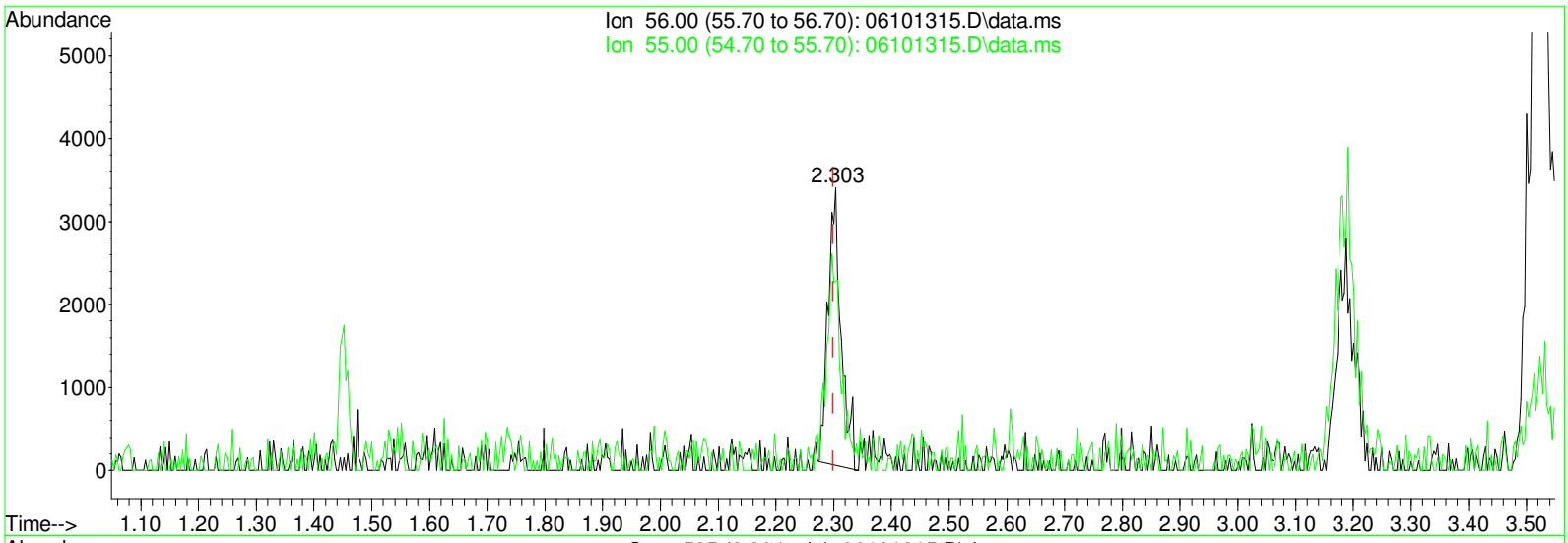
Quant Time: Jun 10 14:35:58 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

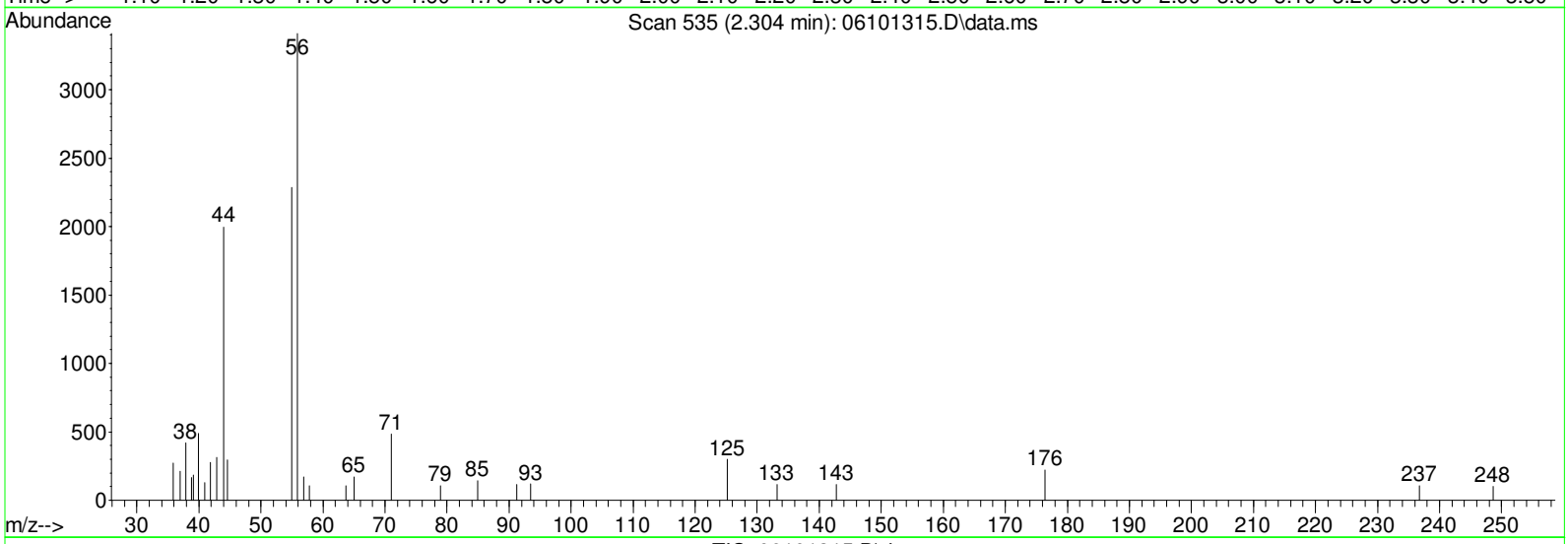


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am
Operator: PS
Sample : LCS VLCS061013-7
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 10 14:35:58 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration





TIC: 06101315.D\data.ms

(11) Acrolein (M)

2.303min (+0.004) 12.92 ug/L

response 53579

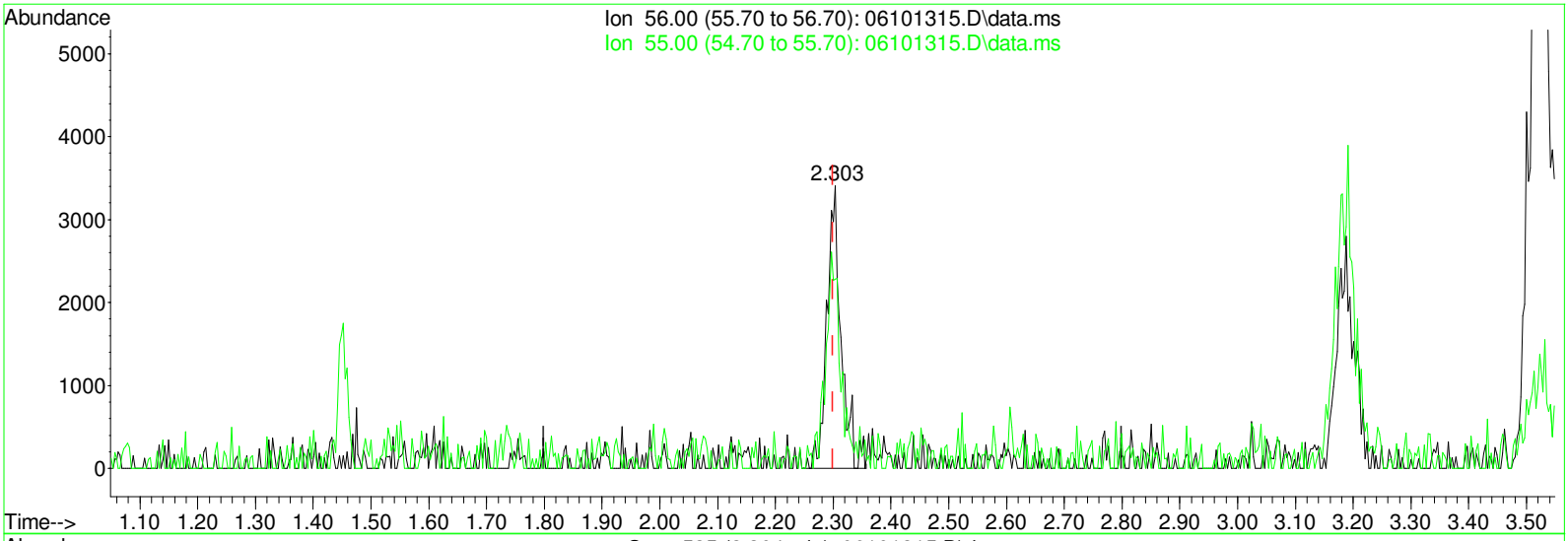
Ion	Exp%	Act%
56.00	100	100
55.00	79.20	100.14#
0.00	0.00	0.00
0.00	0.00	0.00

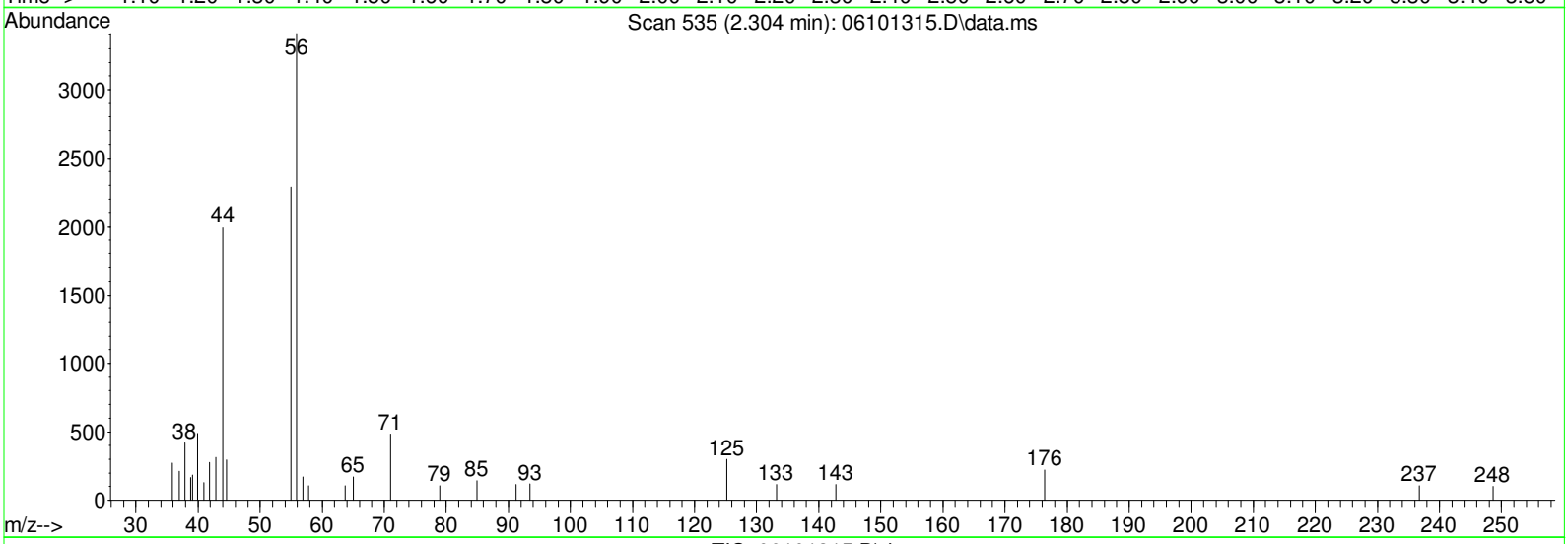
BEFORE
By Alfred at 3:48:53 PM, 7/3/2013

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101315.D
Acq On : 10 Jun 2013 11:31 am
Operator: PS
Sample : LCS VLCS061013-7
Inst : VOA7
Misc : VOC_W+
Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 10 14:35:58 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration





TIC: 06101315.D\data.ms

(11) Acrolein (M)

2.304min (+0.005) 14.24 ug/L m

response 59046

Ion	Exp%	Act%
56.00	100	100
55.00	79.20	90.87
0.00	0.00	0.00
0.00	0.00	0.00

AFTER M3

By Alfred at 3:48:57 PM, 7/3/2013

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101316.D
Acq On : 10 Jun 2013 12:14 pm Operator: PS
Sample : LCSD VLCSD061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 10 14:36:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.388	168	1908114	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.402	114	3073509	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.490	82	1802080	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1674982	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.257	113	823838	29.65	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 98.83%			
32) 1,2-Dichloroethane-d4	5.723	102	224482	31.75	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 105.83%			
48) Toluene-d8	8.469	98	3846802	30.62	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 102.07%			
68) Bromofluorobenzene	12.195	174	1348471	30.05	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 100.17%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.215	85	727663	21.09	ug/L	98
3) Chloromethane	1.348	50	680004	25.51	ug/L	98
4) Vinyl chloride	1.421	62	671485	20.28	ug/L	100
5) 1,3-Butadiene	1.451	39	354718	15.64	ug/L	91
6) Bromomethane	1.666	96	147344	24.48	ug/L	93
7) Chloroethane	1.744	64	378317	22.18	ug/L	98
8) Trichlorofluoromethane	1.946	101	778214	20.95	ug/L	99
9) Isopropyl Alcohol	2.587	45	725911	357.85	ug/L #	98
10) Ethyl Ether	2.189	59	392938	18.46	ug/L	95
11) Acrolein	2.301	56	60012	13.84	ug/L	96
12) Acetone	2.439	43	396188	39.81	ug/L	99
13) Freon-TF	2.395	151	326167	20.26	ug/L	95
14) 1,1-Dichloroethene	2.382	96	421846	20.21	ug/L	90
15) Methylene Chloride	2.859	84	504176	18.93	ug/L	85
16) Carbon disulfide	2.582	76	2936121	37.57	ug/L	99
17) Acrylonitrile	3.139	53	447819	37.83	ug/L	95
18) MTBE	3.184	73	1538029	20.00	ug/L	99
19) Hexane	3.521	57	424260	19.96	ug/L	87
20) trans-1,2-Dichloroethene	3.163	96	513491	20.35	ug/L	90
21) Vinyl acetate	3.812	43	396925	7.18	ug/L	87
22) 1,1-Dichloroethane	3.692	63	877876	20.83	ug/L	97
23) 2-Butanone	4.601	72	142722	35.72	ug/L #	1
24) 2,2-Dichloropropane	4.530	77	371473	9.86	ug/L	93
25) cis-1,2-Dichloroethene	4.541	96	554463	20.15	ug/L	91
26) Ethyl Acetate	4.719	45	80606	17.97	ug/L #	75
27) Chloroform	5.029	83	836770	20.48	ug/L	99
28) Bromochloromethane	4.887	128	238317	21.67	ug/L #	90
30) Isobutyl alcohol	5.837	43	541977	422.08	ug/L #	93
33) Carbon Tetrachloride	5.496	117	570800	21.34	ug/L	97
34) 1,2-Dichloroethane	5.834	62	710472	20.99	ug/L	96
35) 1,1,1-Trichloroethane	5.256	97	756206	22.08	ug/L	95
36) 1,1-Dichloropropene	5.504	110	248968	22.01	ug/L	93
37) 1-Butanol	6.794	56	296231	377.56	ug/L	93
38) Benzene	5.794	78	2096705	20.97	ug/L	99
39) Trichloroethene	6.733	95	616239	24.40	ug/L	96
40) 1,2-Dichloropropane	7.048	63	509591	20.93	ug/L	98
41) 1,4-Dioxane	7.280	88	83791	219.54	ug/L	91
42) Bromodichloromethane	7.461	83	633223	20.47	ug/L	98
43) Dibromomethane	7.206	93	289222	19.19	ug/L	92
44) 2-Nitropropane	7.806	41	112552	17.43	ug/L #	2
45) 2-Chloroethylvinyl ether	7.946	63	536142	39.44	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101316.D
Acq On : 10 Jun 2013 12:14 pm Operator: PS
Sample : LCSD VLCSD061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 10 14:36:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

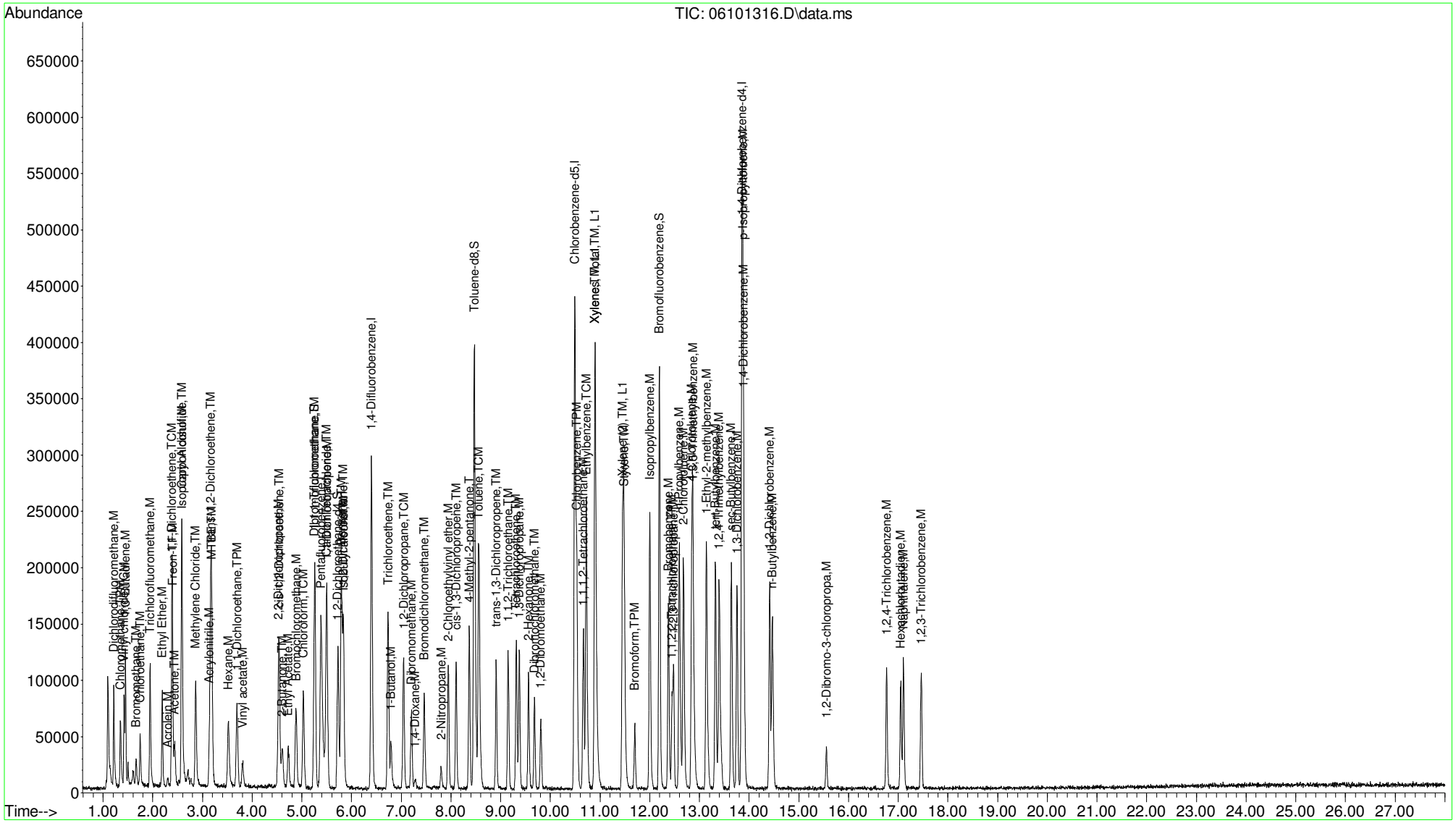
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.366	43	1108408	38.78 ug/L	97
47) cis-1,3-Dichloropropene	8.104	75	716966	17.64 ug/L	93
49) Toluene	8.558	92	1377259	21.73 ug/L	100
51) trans-1,3-Dichloropropene	8.909	75	680386	18.71 ug/L	98
52) 2-Hexanone	9.560	43	785884	36.13 ug/L	100
53) 1,1,2-Trichloroethane	9.150	83	379000	19.19 ug/L	100
54) 1,3-Dichloropropane	9.375	76	795314	19.03 ug/L	98
55) Tetrachloroethene	9.313	164	368504	19.92 ug/L	97
56) Dibromochloromethane	9.683	129	461722	20.27 ug/L	98
57) 1,2-Dibromoethane	9.807	107	485068	20.32 ug/L #	99
58) Chlorobenzene	10.532	112	1440637	21.96 ug/L	98
59) Ethylbenzene	10.723	91	2563082	21.22 ug/L	99
60) 1,1,1,2-Tetrachloroethane	10.666	131	447717	20.35 ug/L	97
61) Xylene	10.898	106	1961191	43.94 ug/L	99
62) Xylene (2)	11.453	106	945207	21.85 ug/L	95
63) Xylenes, Total	10.898	106	2906398m	65.79 ug/L #	
64) Styrene	11.483	104	1523252	19.14 ug/L	98
65) Isopropylbenzene	12.000	105	2217245	22.64 ug/L	100
66) Bromoform	11.699	173	297494	18.60 ug/L	97
67) 1,1,2,2-Tetrachloroethane	12.449	83	461491	14.33 ug/L	98
70) 1,2,3-Trichloropropane	12.480	75	509763	19.90 ug/L #	42
71) n-Propylbenzene	12.595	91	2425590	23.24 ug/L	97
72) Bromobenzene	12.376	156	588876	20.87 ug/L	94
73) 1,3,5-Trimethylbenzene	12.870	105	1720442	20.50 ug/L	98
74) 2-Chlorotoluene	12.678	91	1648384	22.74 ug/L	98
75) 4-Chlorotoluene	12.848	91	1793940	22.21 ug/L	97
76) tert-Butylbenzene	13.320	119	1346446	23.69 ug/L	92
77) 1-Ethyl-2-methylbenzene	13.142	105	2115446	20.99 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	1665121	20.21 ug/L	94
79) sec-Butylbenzene	13.642	105	1872341	22.55 ug/L	99
80) p-Isopropyltoluene	13.874	119	1522352	22.32 ug/L	99
81) 1,3-Dichlorobenzene	13.756	146	1001025	21.76 ug/L	98
82) 1,4-Dichlorobenzene	13.890	146	1042774	20.49 ug/L	99
83) n-Butylbenzene	14.465	91	1201314	20.25 ug/L	99
84) 1,2-Dichlorobenzene	14.413	146	967746	21.98 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.556	75	105706	20.40 ug/L	81
86) 1,2,4-Trichlorobenzene	16.766	180	433887	20.72 ug/L	98
87) Hexachlorbutadiene	17.051	225	212474	21.64 ug/L	97
88) Naphthalene	17.106	128	1166016	22.55 ug/L	98
89) 1,2,3-Trichlorobenzene	17.465	180	396213	22.15 ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101316.D
Acq On : 10 Jun 2013 12:14 pm Operator: PS
Sample : LCSD VLCSD061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 10 14:36:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101316.D
Acq On : 10 Jun 2013 12:14 pm Operator: PS
Sample : LCSD VLCSD061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 10 14:36:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.388	168	1908114	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.402	114	3073509	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.490	82	1802080	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1674982	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.257	113	823838	29.65	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 98.83%			
32) 1,2-Dichloroethane-d4	5.723	102	224482	31.75	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 105.83%			
48) Toluene-d8	8.469	98	3846802	30.62	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 102.07%			
68) Bromofluorobenzene	12.195	174	1348471	30.05	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 100.17%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.215	85	727663	21.09	ug/L	98
3) Chloromethane	1.348	50	680004	25.51	ug/L	98
4) Vinyl chloride	1.421	62	671485	20.28	ug/L	100
5) 1,3-Butadiene	1.451	39	354718	15.64	ug/L	91
6) Bromomethane	1.666	96	147344	24.48	ug/L	93
7) Chloroethane	1.744	64	378317	22.18	ug/L	98
8) Trichlorofluoromethane	1.946	101	778214	20.95	ug/L	99
9) Isopropyl Alcohol	2.587	45	725911	357.85	ug/L #	98
10) Ethyl Ether	2.189	59	392938	18.46	ug/L	95
11) Acrolein	2.301	56	60012	13.84	ug/L	96
12) Acetone	2.439	43	396188	39.81	ug/L	99
13) Freon-TF	2.395	151	326167	20.26	ug/L	95
14) 1,1-Dichloroethene	2.382	96	421846	20.21	ug/L	90
15) Methylene Chloride	2.859	84	504176	18.93	ug/L	85
16) Carbon disulfide	2.582	76	2936121	37.57	ug/L	99
17) Acrylonitrile	3.139	53	447819	37.83	ug/L	95
18) MTBE	3.184	73	1538029	20.00	ug/L	99
19) Hexane	3.521	57	424260	19.96	ug/L	87
20) trans-1,2-Dichloroethene	3.163	96	513491	20.35	ug/L	90
21) Vinyl acetate	3.812	43	396925	7.18	ug/L	87
22) 1,1-Dichloroethane	3.692	63	877876	20.83	ug/L	97
23) 2-Butanone	4.601	72	142722	35.72	ug/L #	1
24) 2,2-Dichloropropane	4.530	77	371473	9.86	ug/L	93
25) cis-1,2-Dichloroethene	4.541	96	554463	20.15	ug/L	91
26) Ethyl Acetate	4.719	45	80606	17.97	ug/L #	75
27) Chloroform	5.029	83	836770	20.48	ug/L	99
28) Bromochloromethane	4.887	128	238317	21.67	ug/L #	90
30) Isobutyl alcohol	5.837	43	541977	422.08	ug/L #	93
33) Carbon Tetrachloride	5.496	117	570800	21.34	ug/L	97
34) 1,2-Dichloroethane	5.834	62	710472	20.99	ug/L	96
35) 1,1,1-Trichloroethane	5.256	97	756206	22.08	ug/L	95
36) 1,1-Dichloropropene	5.504	110	248968	22.01	ug/L	93
37) 1-Butanol	6.794	56	296231	377.56	ug/L	93
38) Benzene	5.794	78	2096705	20.97	ug/L	99
39) Trichloroethene	6.733	95	616239	24.40	ug/L	96
40) 1,2-Dichloropropane	7.048	63	509591	20.93	ug/L	98
41) 1,4-Dioxane	7.280	88	83791	219.54	ug/L	91
42) Bromodichloromethane	7.461	83	633223	20.47	ug/L	98
43) Dibromomethane	7.206	93	289222	19.19	ug/L	92
44) 2-Nitropropane	7.806	41	112552	17.43	ug/L #	2
45) 2-Chloroethylvinyl ether	7.946	63	536142	39.44	ug/L	91

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101316.D
Acq On : 10 Jun 2013 12:14 pm Operator: PS
Sample : LCSD VLCSD061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 10 14:36:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.366	43	1108408	38.78 ug/L	97
47) cis-1,3-Dichloropropene	8.104	75	716966	17.64 ug/L	93
49) Toluene	8.558	92	1377259	21.73 ug/L	100
51) trans-1,3-Dichloropropene	8.909	75	680386	18.71 ug/L	98
52) 2-Hexanone	9.560	43	785884	36.13 ug/L	100
53) 1,1,2-Trichloroethane	9.150	83	379000	19.19 ug/L	100
54) 1,3-Dichloropropane	9.375	76	795314	19.03 ug/L	98
55) Tetrachloroethene	9.313	164	368504	19.92 ug/L	97
56) Dibromochloromethane	9.683	129	461722	20.27 ug/L	98
57) 1,2-Dibromoethane	9.807	107	485068	20.32 ug/L #	99
58) Chlorobenzene	10.532	112	1440637	21.96 ug/L	98
59) Ethylbenzene	10.723	91	2563082	21.22 ug/L	99
60) 1,1,1,2-Tetrachloroethane	10.666	131	447717	20.35 ug/L	97
61) Xylene	10.898	106	1961191	43.94 ug/L	99
62) Xylene (2)	11.453	106	945207	21.85 ug/L	95
63) Xylenes, Total	10.898	106	2906398m	65.79 ug/L #	
64) Styrene	11.483	104	1523252	19.14 ug/L	98
65) Isopropylbenzene	12.000	105	2217245	22.64 ug/L	100
66) Bromoform	11.699	173	297494	18.60 ug/L	97
67) 1,1,2,2-Tetrachloroethane	12.449	83	461491	14.33 ug/L	98
70) 1,2,3-Trichloropropane	12.480	75	509763	19.90 ug/L #	42
71) n-Propylbenzene	12.595	91	2425590	23.24 ug/L	97
72) Bromobenzene	12.376	156	588876	20.87 ug/L	94
73) 1,3,5-Trimethylbenzene	12.870	105	1720442	20.50 ug/L	98
74) 2-Chlorotoluene	12.678	91	1648384	22.74 ug/L	98
75) 4-Chlorotoluene	12.848	91	1793940	22.21 ug/L	97
76) tert-Butylbenzene	13.320	119	1346446	23.69 ug/L	92
77) 1-Ethyl-2-methylbenzene	13.142	105	2115446	20.99 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	1665121	20.21 ug/L	94
79) sec-Butylbenzene	13.642	105	1872341	22.55 ug/L	99
80) p-Isopropyltoluene	13.874	119	1522352	22.32 ug/L	99
81) 1,3-Dichlorobenzene	13.756	146	1001025	21.76 ug/L	98
82) 1,4-Dichlorobenzene	13.890	146	1042774	20.49 ug/L	99
83) n-Butylbenzene	14.465	91	1201314	20.25 ug/L	99
84) 1,2-Dichlorobenzene	14.413	146	967746	21.98 ug/L	97
85) 1,2-Dibromo-3-chloropropa	15.556	75	105706	20.40 ug/L	81
86) 1,2,4-Trichlorobenzene	16.766	180	433887	20.72 ug/L	98
87) Hexachlorbutadiene	17.051	225	212474	21.64 ug/L	97
88) Naphthalene	17.106	128	1166016	22.55 ug/L	98
89) 1,2,3-Trichlorobenzene	17.465	180	396213	22.15 ug/L	97

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

Quantitation Report (Not Reviewed)

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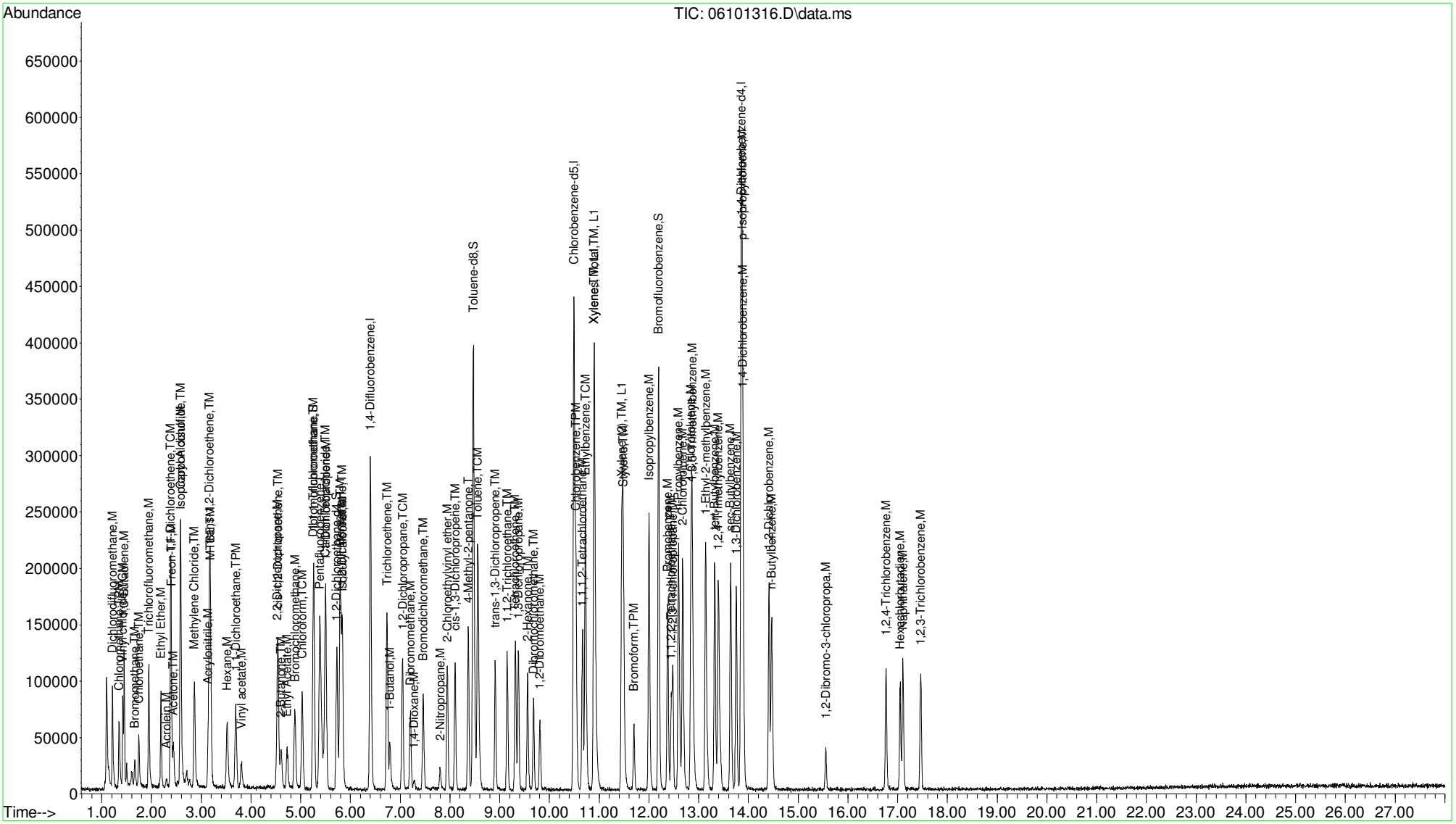
Data File : 06101316.D
Acq On : 10 Jun 2013 12:14 pm Operator: PS
Sample : LCSD VLCSD061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 10 14:36:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101318.D
Acq On : 10 Jun 2013 1:24 pm Operator: PS
Sample : MBLK VBLK061013-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 17

Quant Time: Jun 10 14:37:35 2013
Quant Method : C:\msdchem\1\DATA\VOA7\060913\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.388	168	1833235	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	3066023	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.493	82	1735292	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1599754	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.261	113	829290	31.06	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 103.53%			
32) 1,2-Dichloroethane-d4	5.727	102	216057	30.63	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 102.10%			
48) Toluene-d8	8.471	98	3711771	29.61	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.70%			
68) Bromofluorobenzene	12.195	174	1284652	29.73	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 99.10%			
Target Compounds						Qvalue
71) n-Propylbenzene	12.605	91	26008	0.26	ug/L #	53
86) 1,2,4-Trichlorobenzene	16.779	180	14652	0.73	ug/L #	12
88) Naphthalene	17.104	128	112502	2.28	ug/L #	76
89) 1,2,3-Trichlorobenzene	17.474	180	37726	2.21	ug/L #	83

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\060913\
Data File : 06101318.D
Acq On : 10 Jun 2013 1:24 pm Operator: PS
Sample : MBLK VBLK061013-7 Inst : VOA7
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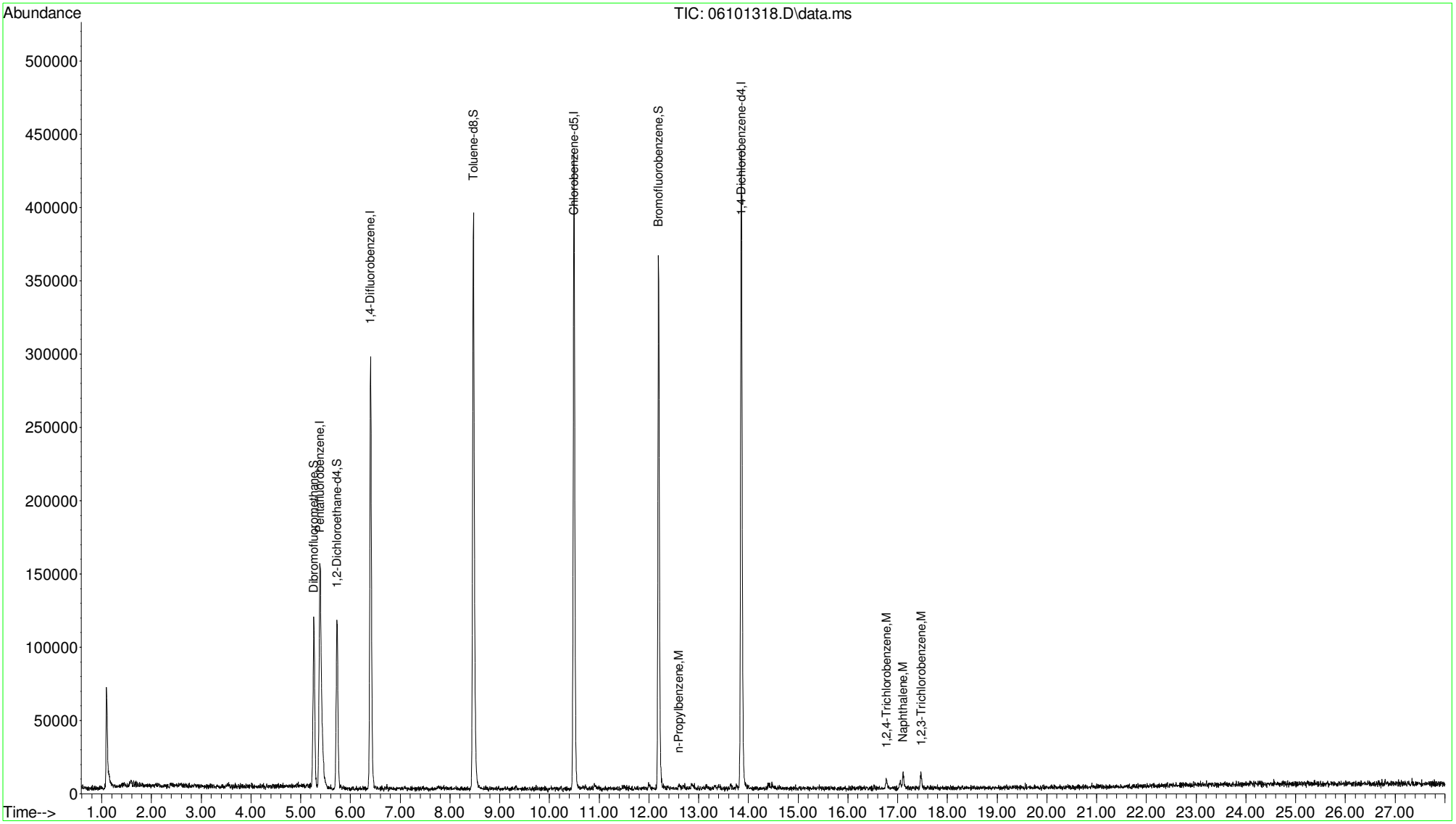

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System Monitoring Compounds						
29) Dibromofluoromethane	5.261	113	829290	31.06	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 103.53%			
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Spiked Amount 30.000	Range 80 - 120		Recovery = 102.10%			
48) Toluene-d8	8.471	98	3711771	29.61	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.70%			
68) Bromofluorobenzene	12.195	174	1284652	29.73	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 99.10%			
Target Compounds						Qvalue
33) Carbon Tetrachloride	5.388	117	173460	6.50	ug/L #	12
37) 1-Butanol	6.402	56	63428	81.04	ug/L #	17
39) Trichloroethene	6.401	95	87944	3.49	ug/L #	7
46) 4-Methyl-2-pentanone	8.466	43	22227	0.78	ug/L #	1
70) 1,2,3-Trichloropropane	12.193	75	798662	32.64	ug/L #	42
71) n-Propylbenzene	12.605	91	26008	0.26	ug/L #	53
86) 1,2,4-Trichlorobenzene	16.779	180	14652	0.73	ug/L #	12
88) Naphthalene	17.104	128	112502	2.28	ug/L #	76
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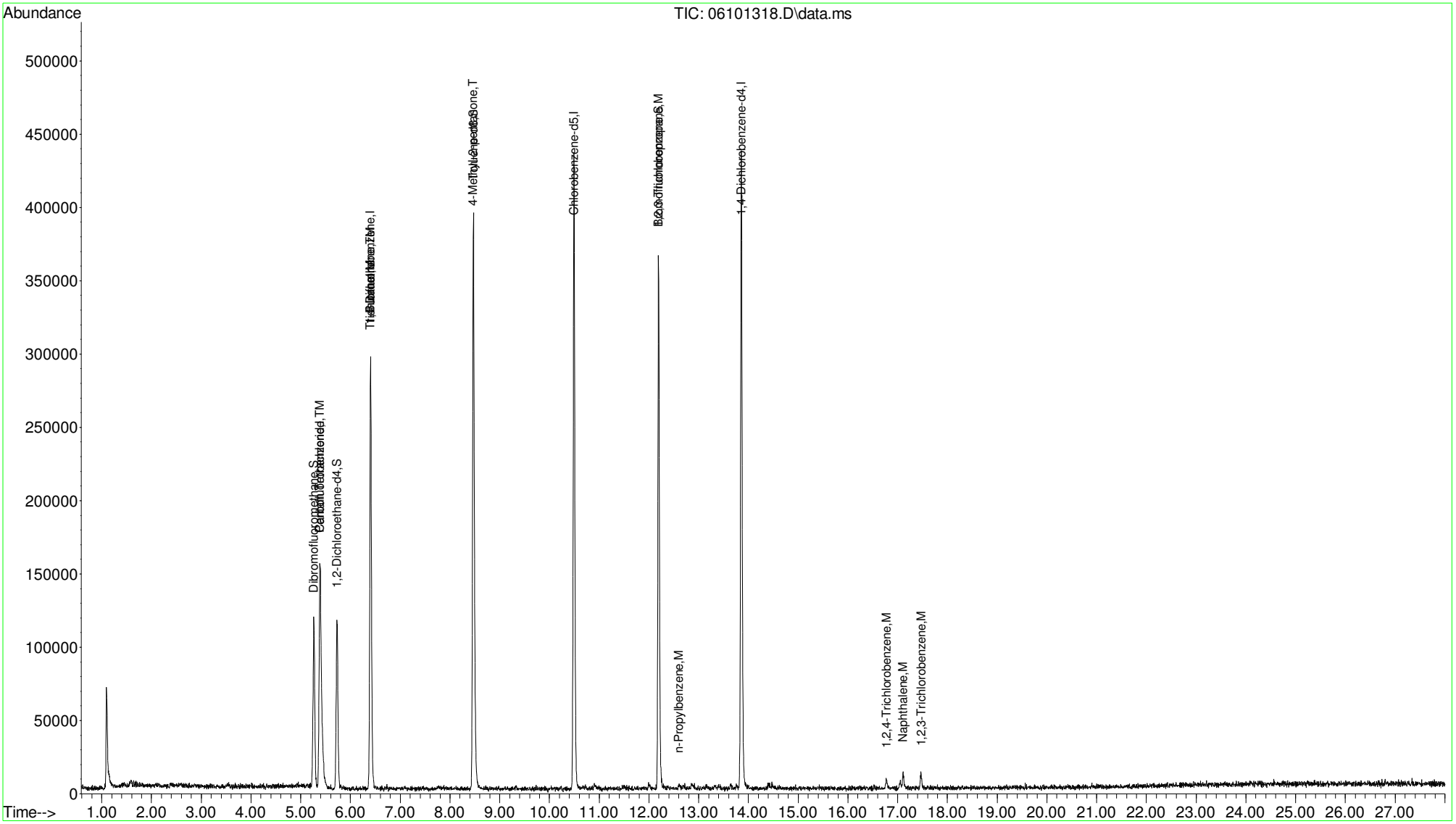


STAT Analysis Corporation

Volatile Organic Compounds

SW846 8260B

Run 1

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **VOA-7_130627B**

Sample ID: **BFB062713-7** SampType: **TUNE** TestCode: **BFB_624** Units: Prep Date: Run ID: **VOA-7_130627B**
Client ID: **ZZZZZ** Batch ID: **R90552** TestNo: **BFB_Tune** Analysis Date: **06/27/13 9:12** SeqNo: **2442975**

Mass	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
50	22.3	0	100	0	22.3	15	40	0	0		
75	50.1	0	100	0	50.1	30	60	0	0		
95	100	0	100	0	100	100	100	0	0		
96	6.1	0	100	0	6.1	5	9	0	0		
173	0	0	100	0	0	0	2	0	0		
174	83.4	0	100	0	83.4	50	100	0	0		
175	7.3	0	100	0	7.3	5	9	0	0		
176	95.6	0	100	0	95.6	95	101	0	0		
177	6.5	0	100	0	6.5	5	9	0	0		

Sample ID: **VSTD050** SampType: **CCV** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_130627B**
Client ID: **ZZZZZ** Batch ID: **R90552** TestNo: **SW8260B** Analysis Date: **06/27/13 9:39** SeqNo: **2442976**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.04571	0.0050	0.05	0	91.4	80	120	0	0		
1,2,4-Trimethylbenzene	0.05695	0.0050	0.05	0	114			0	0		
1,2-Dichloropropane	0.04721	0.0050	0.05	0	94.4	80	120	0	0		
1,3,5-Trimethylbenzene	0.05635	0.0050	0.05	0	113			0	0		
Benzene	0.04625	0.0010	0.05	0	92.5			0	0		
Chloroform	0.04186	0.0050	0.05	0	83.7	80	120	0	0		
Ethylbenzene	0.05504	0.0010	0.05	0	110	80	120	0	0		
Toluene	0.04758	0.0050	0.05	0	95.2	80	120	0	0		
Vinyl chloride	0.04339	0.0020	0.05	0	86.8	80	120	0	0		
Xylenes, Total	0.1764	0.015	0.15	0	118			0	0		

Sample ID: **VBLK062713-7** SampType: **MBLK** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_130627B**
Client ID: **ZZZZZ** Batch ID: **R90552** TestNo: **SW8260B** Analysis Date: **06/27/13 10:52** SeqNo: **2442977**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: VOA-7_130627B

Sample ID: **VBLK062713-7** SampType: **MBLK** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_130627B**
Client ID: **ZZZZZ** Batch ID: **R90552** TestNo: **SW8260B** Analysis Date: **06/27/13 10:52** SeqNo: **2442977**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.0050									
1,3,5-Trimethylbenzene	ND	0.0050									
Benzene	ND	0.0010									
Ethylbenzene	ND	0.0010									
Toluene	ND	0.0050									
Xylenes, Total	ND	0.015									

Sample ID: **VLCS062713-7** SampType: **LCS** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_130627B**
Client ID: **ZZZZZ** Batch ID: **R90552** TestNo: **SW8260B** Analysis Date: **06/27/13 11:28** SeqNo: **2442978**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	0.02276	0.0050	0.02	0	114	70	130	0	0		
1,3,5-Trimethylbenzene	0.02257	0.0050	0.02	0	113	70	130	0	0		
Benzene	0.01974	0.0010	0.02	0	98.7	70	130	0	0		
Ethylbenzene	0.02291	0.0010	0.02	0	115	70	130	0	0		
Toluene	0.02036	0.0050	0.02	0	102	70	130	0	0		
Xylenes, Total	0.073	0.015	0.06	0	122	70	130	0	0		

Sample ID: **VLCSD062713-7** SampType: **LCSD** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_130627B**
Client ID: **ZZZZZ** Batch ID: **R90552** TestNo: **SW8260B** Analysis Date: **06/27/13 12:04** SeqNo: **2442979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	0.02271	0.0050	0.02	0	114	70	130	0.02276	0.220	20	
1,3,5-Trimethylbenzene	0.02174	0.0050	0.02	0	109	70	130	0.02257	3.75	20	
Benzene	0.01868	0.0010	0.02	0	93.4	70	130	0.01974	5.52	20	
Ethylbenzene	0.02253	0.0010	0.02	0	113	70	130	0.02291	1.67	20	
Toluene	0.0195	0.0050	0.02	0	97.5	70	130	0.02036	4.32	20	
Xylenes, Total	0.07194	0.015	0.06	0	120	70	130	0.073	1.46	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

STAT Analysis Corporation

ATTACHMENT 2: DATA REVIEW CHECKLIST – BATCH DATA

GC/MS Volatiles SOP 4000, EPA 8260B

First Level Reviewer: Edward Panahon Review Date: 06/28/2013

Second Level Reviewer: Petra Svacha Review Date: 07/25/2013

Analysis date: 06/26/2013 06/27/2013 Batch Start Time: 9:12 am Instrument: VOA-7

Page 1 of 1 Continuing Calibration Verification (CCV) and Batch Data

Item	Aspect	1st Yes	Level No	2nd Yes	Level No	Comments: record routine corrective actions here	CAR # QER#
1	Tune meets criteria	✓					
2	All Analyses in tune period 12hr	✓					
3	CCV Acceptance criteria met: SPCCs: =0.1, =0.3 CCCs: = 20%D RT: ± 30 seconds Int stds: -50% to +100% Correct ICAL RFs used	✓ ✓ ✓ ✓ ✓ ✓					
4	Method Blank < RL False pos/neg checked Surrogates acceptable	✓ ✓ ✓					
5	LCS/LCSD recovery acceptable Surrogates acceptable	✓ ✓					
6	MS/MSD recov/RPD acceptable Surrogates acceptable					N/A	
7	Test Samples: Correct IDs Surrogates acceptable False pos/neg checked RL, Units Results within curve Dilutions performed	✓ ✓ ✓ ✓ ✓ ✓				13060809-001A will be reanalyzed at medium level	
8	MB, LCS/LCSD, MS/MSD per batch of 20 samples	✓					
9	Manual Integration acceptable: List files	✓				06271312.D	
10	Int Stds Check (optional)	✓					
11	Tune & QC Solns ID recorded	✓					
12	All other information recorded	✓					
13	LIMS transcription correct	✓					
14	Analysis within holding time	✓					
15	All samples preserved pH =2	✓					
16	All samples stored properly	✓					
17	Corrections properly recorded	✓					

Additional Comments:

Standards:

1,4-Dioxane	67-9-220
VOC-BFB	67-9-221
VOC-EH	67-9-225
VOC-F-LIST	67-9-223
VOC-GAS	67-9-230
VOC-MOR	67-9-224
VOC-VCX	67-9-229
LCS1	67-9-228
LCS2	67-9-227
IS/SUR	67-9-222

Injection Log

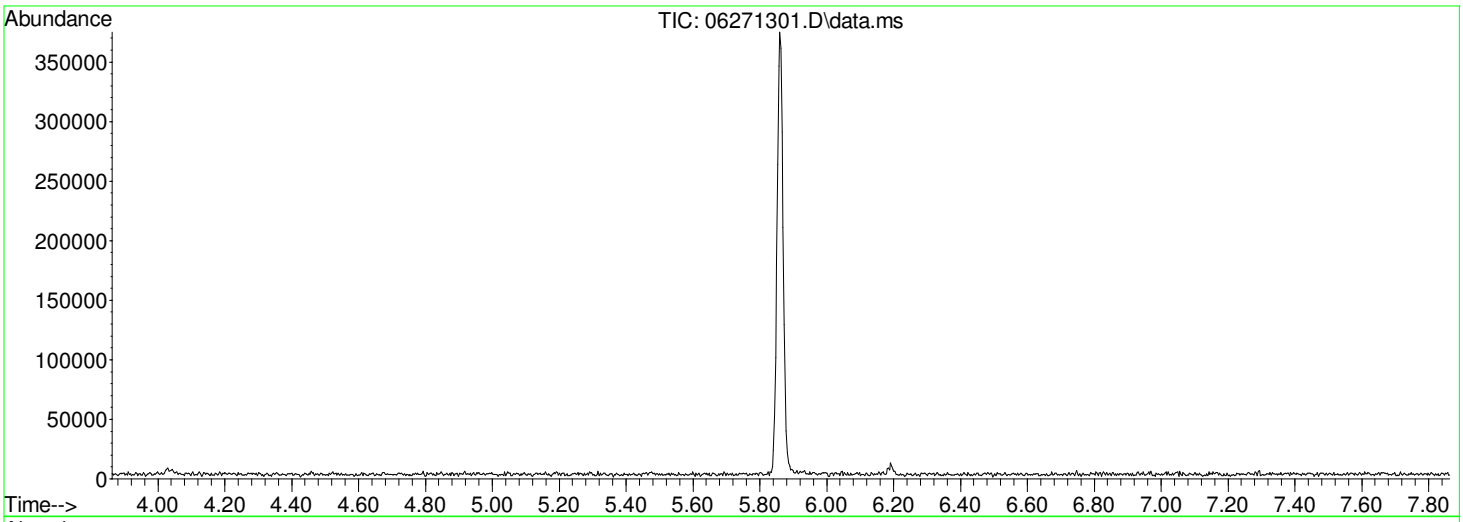
Directory: C:\msdchem\1\DATA\VOA7\062713

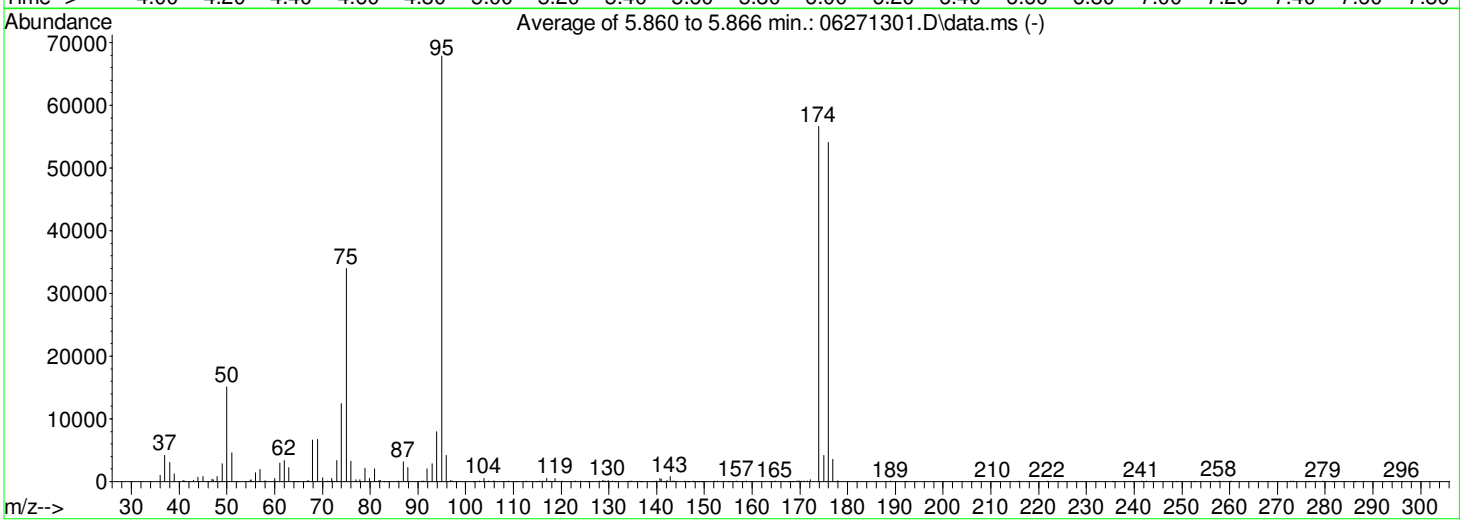
Line	Vial	FileName	Multiplier	SampleName		Misc Info		Injected
1	100	06271301.D	1.	TUNE BFB062713-7		BFB_624		27 Jun 2013 09:12
2	1	06271302.D	1.	CCV VSTD050		VOC_W+		27 Jun 2013 09:39
3	3	06271304.D	1.	MBLK VBLK062713-7		VOC_W+		27 Jun 2013 10:52
4	4	06271305.D	1.	LCS VLCS062713-7		VOC_W+		27 Jun 2013 11:28
5	5	06271306.D	1.	LCSD VLCSD062713-7		VOC_W+		27 Jun 2013 12:04
6	6	06271307.D	1.	SAMP 13060810-001A		VOC_W	5mL	27 Jun 2013 12:41
7	7	06271308.D	1.	SAMP 13060809-001A		VOC_W	0.5mL	27 Jun 2013 13:17
8	9	06271310.D	1.	SAMP 13060684-001B	1:10	VOC_TCLP		27 Jun 2013 14:30
9	10	06271311.D	1.	SAMP 13060809-001A	1:20	VOC_W		27 Jun 2013 15:06
10	11	06271312.D	1.	SAMP 13060776-001A		VOC_W+	5mL	27 Jun 2013 15:42
11	12	06271313.D	1.	SAMP 13060776-002A		VOC_W+	5mL	27 Jun 2013 16:44
12	13	06271314.D	1.	SAMP 13060776-003A		VOC_W+	5mL	27 Jun 2013 17:20
13	14	06271315.D	1.	SAMP 13060776-004A		VOC_W+	5mL	27 Jun 2013 18:07
14	15	06271316.D	1.	SAMP 13060776-005A		VOC_W+	5mL	27 Jun 2013 18:43
15	16	06271317.D	1.	SAMP 13060776-006A		VOC_W+	5mL	27 Jun 2013 19:19
16	2	BLANK1.D	1.			VOC_W+		27 Jun 2013 10:15
17	8	BLANK2.D	1.					27 Jun 2013 13:54

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271301.D
Acq On : 27 Jun 2013 9:12 am
Operator : erp
Sample : TUNE BFB062713-7
Misc : BFB_624
ALS Vial : 100 Sample Multiplier: 1
InstName : VOA7

Integration File: events.e

Method : C:\msdchem\1\DATA\VOA7\062213\W7060913.M
Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
Last Update : Mon Jun 10 14:33:33 2013





AutoFind: Scans 1019, 1020, 1021; Background Corrected with Scan 1007

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	15129	PASS
75	95	30	60	50.1	33973	PASS
95	95	100	100	100.0	67843	PASS
96	95	5	9	6.1	4155	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.4	56600	PASS
175	174	5	9	7.3	4159	PASS
176	174	95	101	95.6	54131	PASS
177	176	5	9	6.5	3543	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	88	0.00
2	M	Dichlorodifluoromethane	0.542	0.570	-5.2	98	0.00
3	TPM	Chloromethane	0.419	0.422	-0.7	92	0.00
4	TCM	Vinyl chloride	0.521	0.452	13.2	76	0.00
5	M	1,3-Butadiene	0.357	0.332	7.0	82	0.00
6	TM	Bromomethane	0.241	0.192	20.3	116	0.00
7	TM	Chloroethane	0.268	0.235	12.3	81	0.00
8	M	Trichlorofluoromethane	0.584	0.574	1.7	88	0.00
9	M	Isopropyl Alcohol	0.032	0.030	6.3	88	0.00
10	M	Ethyl Ether	0.335	0.301	10.1	83	0.00
11	M	Acrolein	0.068	0.062	8.8	82	0.00
12	TM	Acetone	0.156	0.181	-16.0	112	0.00
13	M	Freon-TF	0.253	0.263	-4.0	90	0.00
14	TCM	1,1-Dichloroethene	0.328	0.300	8.5	83	0.00
15	TM	Methylene Chloride	0.419	0.354	15.5	78	0.00
16	TM	Carbon disulfide	1.229	1.142	7.1	79	0.00
17	M	Acrylonitrile	0.186	0.177	4.8	85	0.00
18	TM	MTBE	1.209	1.133	6.3	83	0.00
19	M	Hexane	0.334	0.331	0.9	83	0.00
20	TM	trans-1,2-Dichloroethene	0.397	0.353	11.1	81	0.00
21	M	Vinyl acetate	0.870	0.901	-3.6	98	0.00
22	TPM	1,1-Dichloroethane	0.663	0.550	17.0	74	0.00
23	TM	2-Butanone	0.063	0.062	1.6	90	0.00
24	M	2,2-Dichloropropane	0.592	0.499	15.7	80	0.00
25	TM	cis-1,2-Dichloroethene	0.433	0.386	10.9	82	0.00
26	M	Ethyl Acetate	0.071	0.061	14.1	86	0.00
27	TCM	Chloroform	0.642	0.538	16.2	77	0.00
28	M	Bromochloromethane	0.173	0.148	14.5	77	0.00
29	S	Dibromofluoromethane	0.437	0.437	0.0	90	0.00
30	M	Isobutyl alcohol	0.020	0.020	0.0	91	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	86	0.00
32	S	1,2-Dichloroethane-d4	0.069	0.070	-1.4	92	0.00
33	TM	Carbon Tetrachloride	0.261	0.249	4.6	88	0.00
34	TM	1,2-Dichloroethane	0.330	0.340	-3.0	89	0.00
35	TM	1,1,1-Trichloroethane	0.334	0.312	6.6	82	-0.01
36	M	1,1-Dichloropropene	0.110	0.109	0.9	86	0.00
37	M	1-Butanol	0.008	0.007	12.5	91	0.00
38	TM	Benzene	0.976	0.903	7.5	81	0.00
39	TM	Trichloroethene	0.246	0.224	8.9	83	0.00
40	TCM	1,2-Dichloropropane	0.238	0.224	5.9	81	0.00
41	M	1,4-Dioxane	0.004	0.004	0.0	90	0.00
42	TM	Bromodichloromethane	0.302	0.297	1.7	88	0.00
43	M	Dibromomethane	0.147	0.130	11.6	79	0.00
44	M	2-Nitropropane	0.063	0.086	-36.5	130	0.00
45	M	2-Chloroethylvinyl ether	0.133	0.082	38.3	53	0.00
46	T	4-Methyl-2-pentanone	0.279	0.278	0.4	87	0.00
47	TM	cis-1,3-Dichloropropene	0.397	0.392	1.3	84	0.00
48	S	Toluene-d8	1.226	1.213	1.1	86	0.00
49	TCM	Toluene	0.619	0.589	4.8	83	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	76	0.00
51	TM	trans-1,3-Dichloropropene	0.606	0.690	-13.9	88	0.00
52	TM	2-Hexanone	0.362	0.383	-5.8	85	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53 TM	1,1,2-Trichloroethane	0.329	0.359	-9.1	89	0.00
54 M	1,3-Dichloropropane	0.696	0.759	-9.1	84	0.00
55 TM	Tetrachloroethene	0.308	0.308	0.0	79	0.00
56 TM	Dibromochloromethane	0.379	0.450	-18.7	94	0.00
57 M	1,2-Dibromoethane	0.397	0.449	-13.1	86	0.00
58 TPM	Chlorobenzene	1.092	1.308	-19.8	95	0.00
59 TCM	Ethylbenzene	2.011	2.213	-10.0	87	0.00
60 M	1,1,1,2-Tetrachloroethane	0.366	0.414	-13.1	89	0.00
61 TM,	L1 Xylene	0.743	0.871	-17.2	92	0.00
62 TM,	L1 Xylene (2)	0.720	0.852	-18.3	96	0.00
63 TM,	L1 Xylenes, Total	0.735	0.865	-17.7	93	0.00
64 TM	Styrene	1.325	1.453	-9.7	85	0.00
65 M	Isopropylbenzene	1.630	1.994	-22.3	97	0.00
66 TPM	Bromoform	0.266	0.293	-10.2	88	0.00
67 TPM	1,1,2,2-Tetrachloroethane	0.536	0.638	-19.0	93	0.00
68 S	Bromofluorobenzene	0.747	0.757	-1.3	80	0.00
69 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	79	0.00
70 M	1,2,3-Trichloropropane	0.459	0.503	-9.6	88	0.00
71 M	n-Propylbenzene	1.870	2.365	-26.5	100	0.00
72 M	Bromobenzene	0.505	0.548	-8.5	88	0.00
73 M	1,3,5-Trimethylbenzene	1.503	1.694	-12.7	91	0.00
74 M	2-Chlorotoluene	1.298	1.592	-22.7	98	0.00
75 M	4-Chlorotoluene	1.447	1.778	-22.9	96	0.00
76 M	tert-Butylbenzene	1.018	1.218	-19.6	93	0.00
77 M	1-Ethyl-2-methylbenzene	1.805	1.998	-10.7	85	0.00
78 M	1,2,4-Trimethylbenzene	1.476	1.681	-13.9	92	0.00
79 M	sec-Butylbenzene	1.487	1.853	-24.6	99	0.00
80 M	p-Isopropyltoluene	1.222	1.381	-13.0	90	0.00
81 M	1,3-Dichlorobenzene	0.824	1.024	-24.3	100	0.00
82 M	1,4-Dichlorobenzene	0.912	1.031	-13.0	90	0.00
83 M	n-Butylbenzene	1.063	1.258	-18.3	94	0.00
84 M	1,2-Dichlorobenzene	0.789	0.986	-25.0	99	0.00
85 M	1,2-Dibromo-3-chloropropa	0.093	0.115	-23.7	103	0.00
86 M	1,2,4-Trichlorobenzene	0.375	0.425	-13.3	94	0.00
87 M	Hexachlorbutadiene	0.176	0.198	-12.5	92	0.00
88 M	Naphthalene	0.926	1.081	-16.7	97	0.00
89 M	1,2,3-Trichlorobenzene	0.320	0.366	-14.4	95	0.00

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.381	168	1695992	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.397	114	2704100	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1383581	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.853	152	1324304	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.258	113	741657	30.03	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 100.10%			
32) 1,2-Dichloroethane-d4	5.726	102	190457	30.61	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 102.03%			
48) Toluene-d8	8.467	98	3278904	29.66	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.87%			
68) Bromofluorobenzene	12.194	174	1047949	30.42	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 101.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	1610534	52.51	ug/L	98
3) Chloromethane	1.351	50	1193304	50.37	ug/L	96
4) Vinyl chloride	1.425	62	1276903	43.39	ug/L	100
5) 1,3-Butadiene	1.450	39	939808	46.61	ug/L	91
6) Bromomethane	1.655	96	543281	43.67	ug/L	99
7) Chloroethane	1.741	64	665287	43.87	ug/L	97
8) Trichlorofluoromethane	1.945	101	1622508	49.15	ug/L	99
9) Isopropyl Alcohol	2.589	45	1710613	948.74	ug/L #	96
10) Ethyl Ether	2.187	59	851311	45.01	ug/L	94
11) Acrolein	2.296	56	173888	45.11	ug/L	91
12) Acetone	2.438	43	1021216	115.44	ug/L	97
13) Freon-TF	2.392	151	743900	51.99	ug/L	95
14) 1,1-Dichloroethene	2.383	96	848148	45.71	ug/L	91
15) Methylene Chloride	2.862	84	1002022	42.32	ug/L	89
16) Carbon disulfide	2.581	76	6456232	92.94	ug/L	99
17) Acrylonitrile	3.140	53	499546	47.48	ug/L	95
18) MTBE	3.181	73	3201193	46.83	ug/L	99
19) Hexane	3.516	57	936568	49.57	ug/L	96
20) trans-1,2-Dichloroethene	3.161	96	997166	44.46	ug/L	89
21) Vinyl acetate	3.803	43	5095003	103.63	ug/L	93
22) 1,1-Dichloroethane	3.692	63	1555134	41.51	ug/L	97
23) 2-Butanone	4.599	72	349188	98.33	ug/L #	62
24) 2,2-Dichloropropane	4.529	77	1410651	42.13	ug/L	90
25) cis-1,2-Dichloroethene	4.539	96	1091344	44.61	ug/L	96
26) Ethyl Acetate	4.729	45	172983	43.39	ug/L #	81
27) Chloroform	5.030	83	1520323	41.86	ug/L	97
28) Bromochloromethane	4.879	128	418494	42.82	ug/L #	85
30) Isobutyl alcohol	5.839	43	1103196	966.61	ug/L	99
33) Carbon Tetrachloride	5.487	117	1124379	47.79	ug/L	97
34) 1,2-Dichloroethane	5.833	62	1531030	51.41	ug/L	96
35) 1,1,1-Trichloroethane	5.251	97	1407026	46.70	ug/L	96
36) 1,1-Dichloropropene	5.503	110	489050	49.13	ug/L	86
37) 1-Butanol	6.798	56	672179	973.76	ug/L	99
38) Benzene	5.791	78	4067967	46.25	ug/L	97
39) Trichloroethene	6.733	95	1011312	45.52	ug/L	95
40) 1,2-Dichloropropane	7.044	63	1011311	47.21	ug/L	100
41) 1,4-Dioxane	7.285	88	163466	486.81	ug/L	83
42) Bromodichloromethane	7.463	83	1339889	49.22	ug/L	100
43) Dibromomethane	7.200	93	584277	44.07	ug/L	97
44) 2-Nitropropane	7.801	41	387031	68.11	ug/L #	76
45) 2-Chloroethylvinyl ether	7.943	63	735618	61.51	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

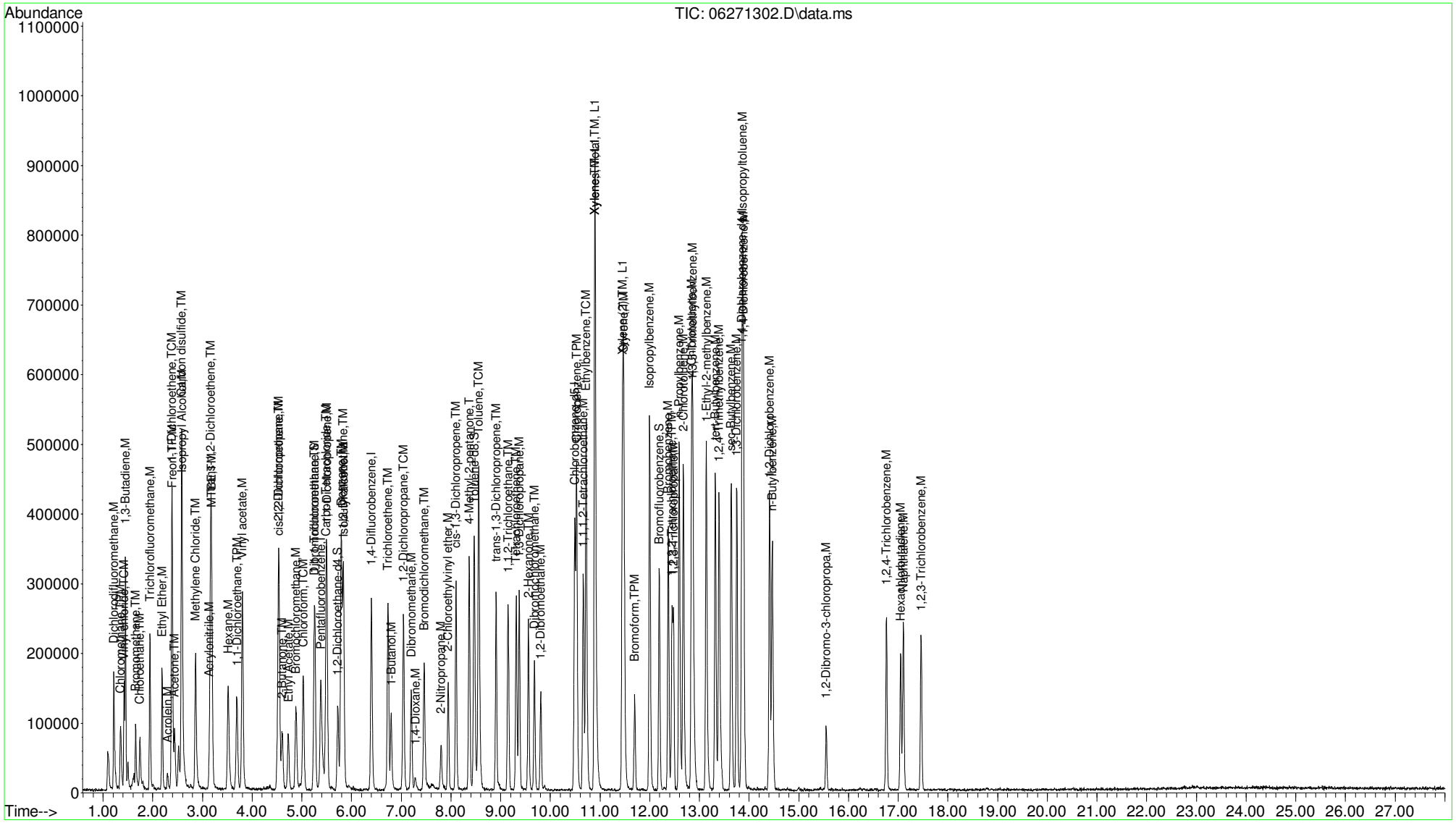
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.367	43	2506974	99.69 ug/L	99
47) cis-1,3-Dichloropropene	8.102	75	1766154	49.40 ug/L	91
49) Toluene	8.559	92	2652930	47.58 ug/L	99
51) trans-1,3-Dichloropropene	8.909	75	1590491	56.95 ug/L	91
52) 2-Hexanone	9.557	43	1767238	105.82 ug/L	97
53) 1,1,2-Trichloroethane	9.152	83	827202	54.55 ug/L	98
54) 1,3-Dichloropropane	9.374	76	1749657	54.53 ug/L	97
55) Tetrachloroethene	9.314	164	710706	50.04 ug/L	98
56) Dibromochloromethane	9.679	129	1037610	59.32 ug/L	99
57) 1,2-Dibromoethane	9.808	107	1034631	56.45 ug/L	98
58) Chlorobenzene	10.529	112	3016670	59.88 ug/L	97
59) Ethylbenzene	10.721	91	5104214	55.04 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.662	131	953549	56.44 ug/L	94
61) Xylene	10.897	106	4019195	117.29 ug/L	98
62) Xylene (2)	11.450	106	1965216	59.16 ug/L	93
63) Xylenes, Total	10.897	106	5984411m	176.45 ug/L #	
64) Styrene	11.478	104	3350118	54.82 ug/L	98
65) Isopropylbenzene	11.997	105	4598902	61.17 ug/L	98
66) Bromoform	11.697	173	675551	55.02 ug/L	99
67) 1,1,2,2-Tetrachloroethane	12.449	83	1472239	59.56 ug/L	97
70) 1,2,3-Trichloropropane	12.478	75	1110635	54.83 ug/L	99
71) n-Propylbenzene	12.594	91	5219274	63.24 ug/L	98
72) Bromobenzene	12.371	156	1209127	54.21 ug/L	91
73) 1,3,5-Trimethylbenzene	12.866	105	3738571	56.35 ug/L	99
74) 2-Chlorotoluene	12.677	91	3513597	61.30 ug/L	96
75) 4-Chlorotoluene	12.842	91	3924272	61.45 ug/L	97
76) tert-Butylbenzene	13.320	119	2688114	59.83 ug/L	96
77) 1-Ethyl-2-methylbenzene	13.138	105	4409115	55.33 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	3710211	56.95 ug/L	99
79) sec-Butylbenzene	13.641	105	4090698	62.33 ug/L	100
80) p-Isopropyltoluene	13.870	119	3047882	56.51 ug/L	99
81) 1,3-Dichlorobenzene	13.751	146	2260667	62.15 ug/L	97
82) 1,4-Dichlorobenzene	13.888	146	2275785	56.56 ug/L	96
83) n-Butylbenzene	14.465	91	2776367	59.18 ug/L	99
84) 1,2-Dichlorobenzene	14.412	146	2175739	62.50 ug/L	95
85) 1,2-Dibromo-3-chloropropa	15.550	75	254306	62.09 ug/L	86
86) 1,2,4-Trichlorobenzene	16.762	180	939142	56.73 ug/L	99
87) Hexachlorbutadiene	17.045	225	437560	56.38 ug/L	95
88) Naphthalene	17.103	128	2385361	58.34 ug/L	99
89) 1,2,3-Trichlorobenzene	17.461	180	808883	57.19 ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.381	168	1695992	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.397	114	2704100	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1383581	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.853	152	1324304	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.258	113	741657	30.03	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 100.10%			
32) 1,2-Dichloroethane-d4	5.726	102	190457	30.61	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 102.03%			
48) Toluene-d8	8.467	98	3278904	29.66	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.87%			
68) Bromofluorobenzene	12.194	174	1047949	30.42	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 101.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.216	85	1610534	52.51	ug/L	98
3) Chloromethane	1.351	50	1193304	50.37	ug/L	96
4) Vinyl chloride	1.425	62	1276903	43.39	ug/L	100
5) 1,3-Butadiene	1.450	39	939808	46.61	ug/L	91
6) Bromomethane	1.655	96	543281	43.67	ug/L	99
7) Chloroethane	1.741	64	665287	43.87	ug/L	97
8) Trichlorofluoromethane	1.945	101	1622508	49.15	ug/L	99
9) Isopropyl Alcohol	2.589	45	1710613	948.74	ug/L #	96
10) Ethyl Ether	2.187	59	851311	45.01	ug/L	94
11) Acrolein	2.296	56	173888	45.11	ug/L	91
12) Acetone	2.438	43	1021216	115.44	ug/L	97
13) Freon-TF	2.392	151	743900	51.99	ug/L	95
14) 1,1-Dichloroethene	2.383	96	848148	45.71	ug/L	91
15) Methylene Chloride	2.862	84	1002022	42.32	ug/L	89
16) Carbon disulfide	2.581	76	6456232	92.94	ug/L	99
17) Acrylonitrile	3.140	53	499546	47.48	ug/L	95
18) MTBE	3.181	73	3201193	46.83	ug/L	99
19) Hexane	3.516	57	936568	49.57	ug/L	96
20) trans-1,2-Dichloroethene	3.161	96	997166	44.46	ug/L	89
21) Vinyl acetate	3.803	43	5095003	103.63	ug/L	93
22) 1,1-Dichloroethane	3.692	63	1555134	41.51	ug/L	97
23) 2-Butanone	4.599	72	349188	98.33	ug/L #	62
24) 2,2-Dichloropropane	4.529	77	1410651	42.13	ug/L	90
25) cis-1,2-Dichloroethene	4.539	96	1091344	44.61	ug/L	96
26) Ethyl Acetate	4.729	45	172983	43.39	ug/L #	81
27) Chloroform	5.030	83	1520323	41.86	ug/L	97
28) Bromochloromethane	4.879	128	418494	42.82	ug/L #	85
30) Isobutyl alcohol	5.839	43	1103196	966.61	ug/L	99
33) Carbon Tetrachloride	5.487	117	1124379	47.79	ug/L	97
34) 1,2-Dichloroethane	5.833	62	1531030	51.41	ug/L	96
35) 1,1,1-Trichloroethane	5.251	97	1407026	46.70	ug/L	96
36) 1,1-Dichloropropene	5.503	110	489050	49.13	ug/L	86
37) 1-Butanol	6.798	56	672179	973.76	ug/L	99
38) Benzene	5.791	78	4067967	46.25	ug/L	97
39) Trichloroethene	6.733	95	1011312	45.52	ug/L	95
40) 1,2-Dichloropropane	7.044	63	1011311	47.21	ug/L	100
41) 1,4-Dioxane	7.285	88	163466	486.81	ug/L	83
42) Bromodichloromethane	7.463	83	1339889	49.22	ug/L	100
43) Dibromomethane	7.200	93	584277	44.07	ug/L	97
44) 2-Nitropropane	7.801	41	387031	68.11	ug/L #	76
45) 2-Chloroethylvinyl ether	7.943	63	735618	61.51	ug/L	93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

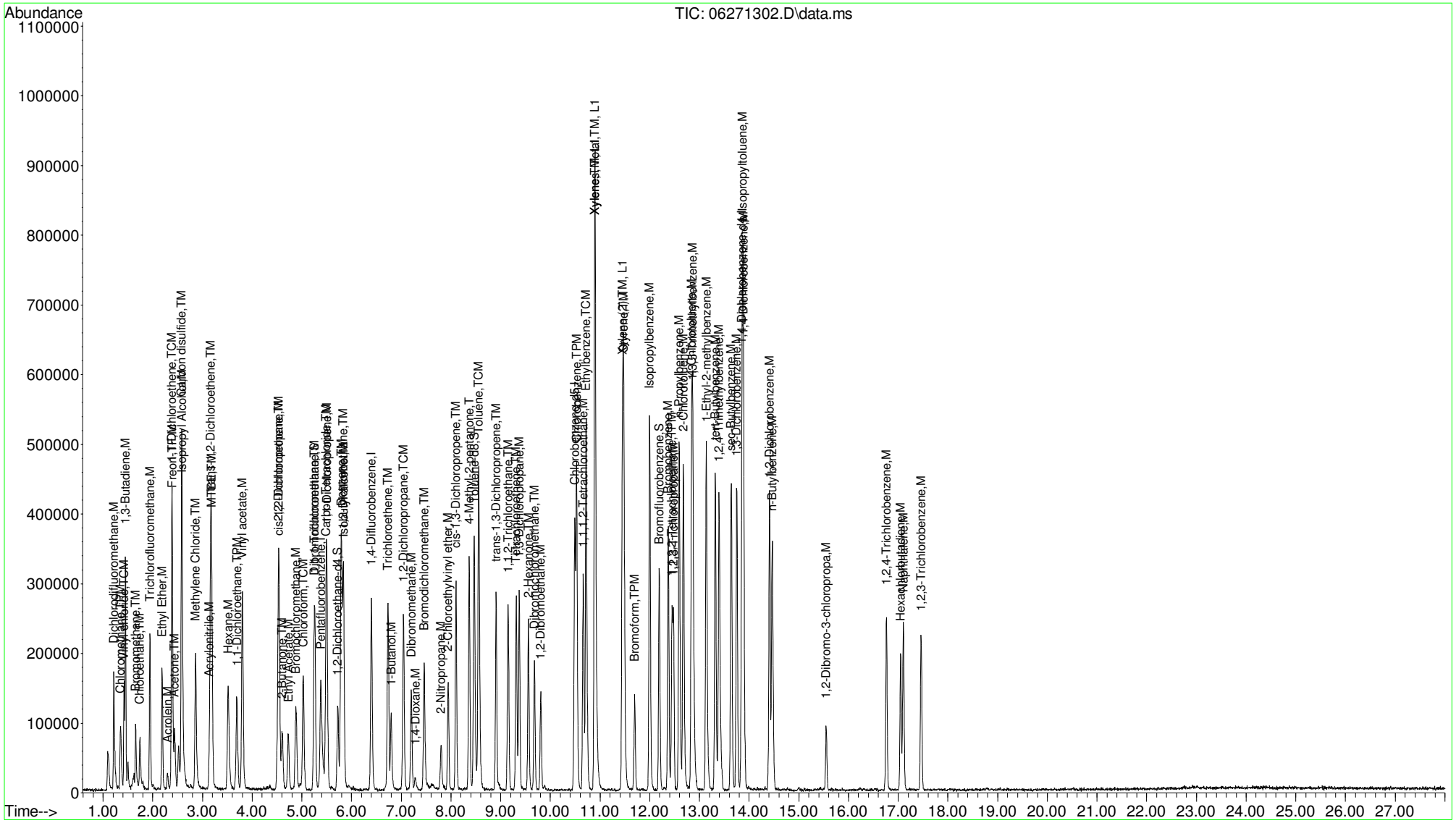
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.367	43	2506974	99.69 ug/L	99
47) cis-1,3-Dichloropropene	8.102	75	1766154	49.40 ug/L	91
49) Toluene	8.559	92	2652930	47.58 ug/L	99
51) trans-1,3-Dichloropropene	8.909	75	1590491	56.95 ug/L	91
52) 2-Hexanone	9.557	43	1767238	105.82 ug/L	97
53) 1,1,2-Trichloroethane	9.152	83	827202	54.55 ug/L	98
54) 1,3-Dichloropropane	9.374	76	1749657	54.53 ug/L	97
55) Tetrachloroethene	9.314	164	710706	50.04 ug/L	98
56) Dibromochloromethane	9.679	129	1037610	59.32 ug/L	99
57) 1,2-Dibromoethane	9.808	107	1034631	56.45 ug/L	98
58) Chlorobenzene	10.529	112	3016670	59.88 ug/L	97
59) Ethylbenzene	10.721	91	5104214	55.04 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.662	131	953549	56.44 ug/L	94
61) Xylene	10.897	106	4019195	117.29 ug/L	98
62) Xylene (2)	11.450	106	1965216	59.16 ug/L	93
63) Xylenes, Total	10.897	106	5984411m	176.45 ug/L #	
64) Styrene	11.478	104	3350118	54.82 ug/L	98
65) Isopropylbenzene	11.997	105	4598902	61.17 ug/L	98
66) Bromoform	11.697	173	675551	55.02 ug/L	99
67) 1,1,2,2-Tetrachloroethane	12.449	83	1472239	59.56 ug/L	97
70) 1,2,3-Trichloropropane	12.478	75	1110635	54.83 ug/L	99
71) n-Propylbenzene	12.594	91	5219274	63.24 ug/L	98
72) Bromobenzene	12.371	156	1209127	54.21 ug/L	91
73) 1,3,5-Trimethylbenzene	12.866	105	3738571	56.35 ug/L	99
74) 2-Chlorotoluene	12.677	91	3513597	61.30 ug/L	96
75) 4-Chlorotoluene	12.842	91	3924272	61.45 ug/L	97
76) tert-Butylbenzene	13.320	119	2688114	59.83 ug/L	96
77) 1-Ethyl-2-methylbenzene	13.138	105	4409115	55.33 ug/L	99
78) 1,2,4-Trimethylbenzene	13.396	105	3710211	56.95 ug/L	99
79) sec-Butylbenzene	13.641	105	4090698	62.33 ug/L	100
80) p-Isopropyltoluene	13.870	119	3047882	56.51 ug/L	99
81) 1,3-Dichlorobenzene	13.751	146	2260667	62.15 ug/L	97
82) 1,4-Dichlorobenzene	13.888	146	2275785	56.56 ug/L	96
83) n-Butylbenzene	14.465	91	2776367	59.18 ug/L	99
84) 1,2-Dichlorobenzene	14.412	146	2175739	62.50 ug/L	95
85) 1,2-Dibromo-3-chloropropa	15.550	75	254306	62.09 ug/L	86
86) 1,2,4-Trichlorobenzene	16.762	180	939142	56.73 ug/L	99
87) Hexachlorbutadiene	17.045	225	437560	56.38 ug/L	95
88) Naphthalene	17.103	128	2385361	58.34 ug/L	99
89) 1,2,3-Trichlorobenzene	17.461	180	808883	57.19 ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 9:39 am Operator: erp
Sample : CCV VSTD050 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 1

Quant Time: Jun 27 10:07:26 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271304.D
Acq On : 27 Jun 2013 10:52 am Operator: erp
Sample : MBLK VBLK062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 27 14:21:55 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

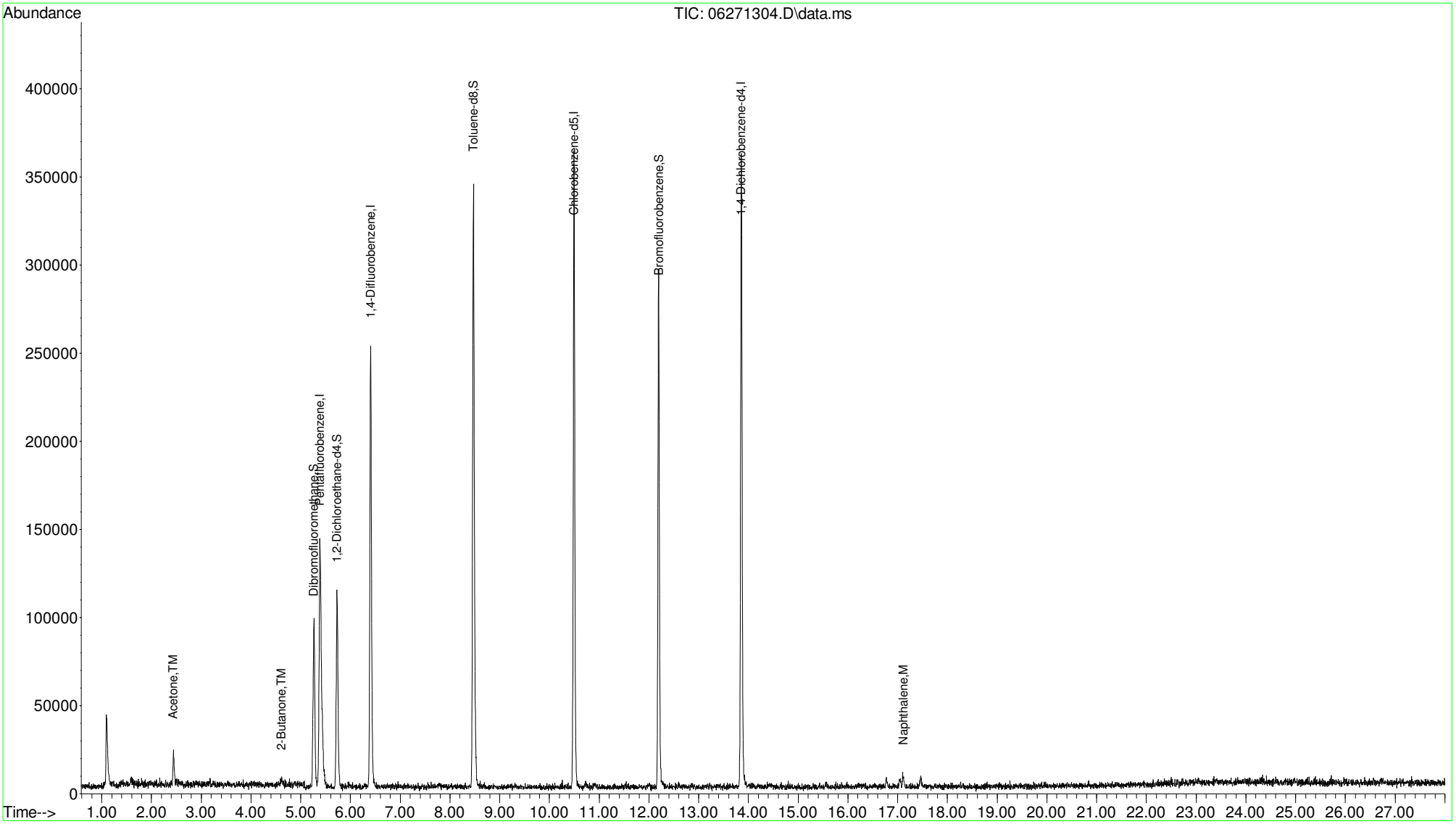
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.384	168	1604706	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.406	114	2499598	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.494	82	1302032	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1184170	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.269	113	672590	28.78	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 95.93%			
32) 1,2-Dichloroethane-d4	5.731	102	182438	31.72	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 105.73%			
48) Toluene-d8	8.470	98	3071672	30.06	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.20%			
68) Bromofluorobenzene	12.197	174	958250	29.56	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.53%			
Target Compounds						Qvalue
12) Acetone	2.442	43	222354	26.56	ug/L	95
23) 2-Butanone	4.617	72	11183	3.33	ug/L #	81
88) Naphthalene	17.111	128	59769	1.63	ug/L #	76

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271304.D
Acq On : 27 Jun 2013 10:52 am Operator: erp
Sample : MBLK VBLK062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 27 14:21:55 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271304.D
Acq On : 27 Jun 2013 10:52 am Operator: erp
Sample : MBLK VBLK062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 27 11:19:33 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

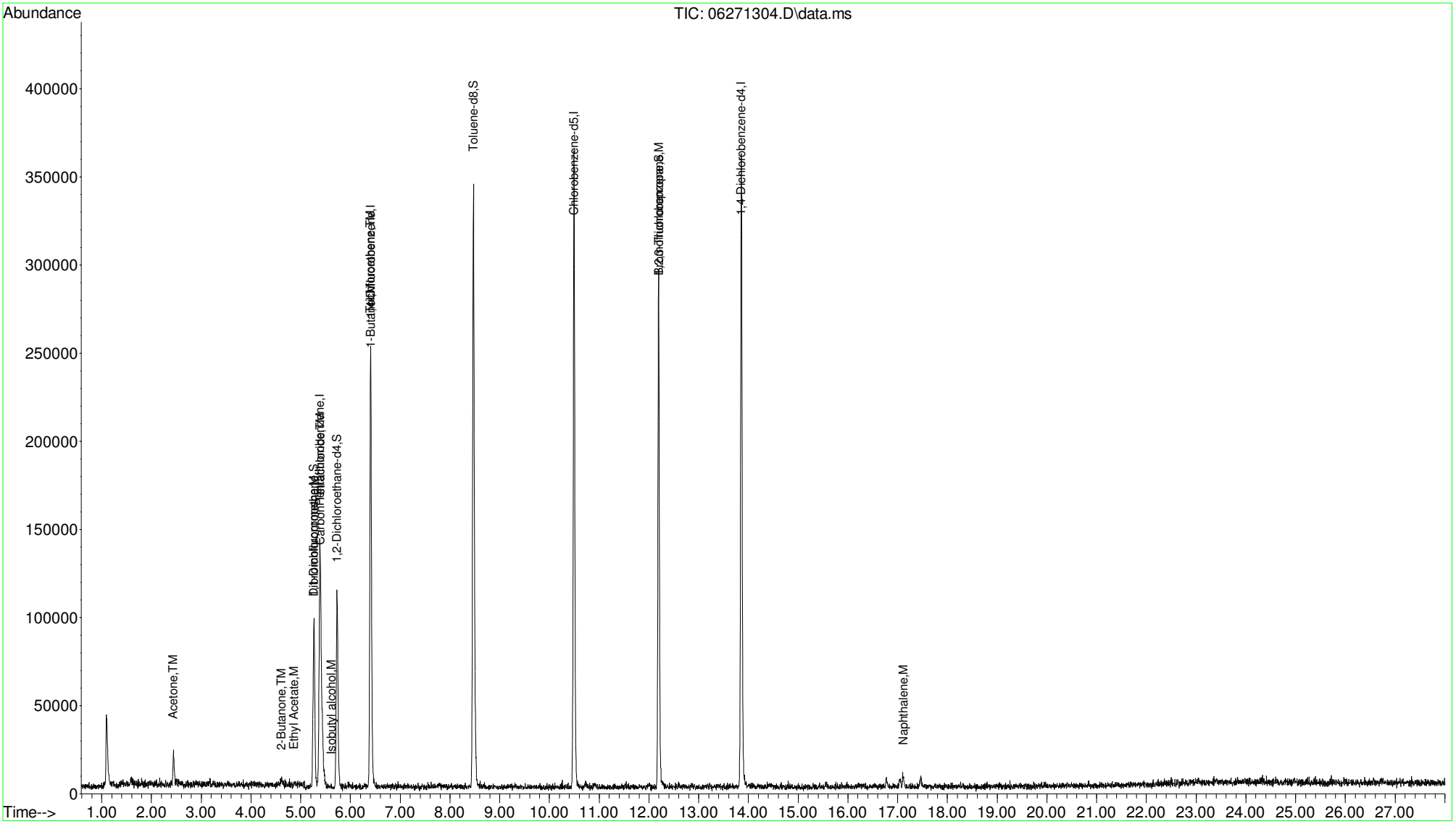
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.384	168	1604706	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.406	114	2499598	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.494	82	1302032	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1184170	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.269	113	672590	28.78	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 95.93%			
32) 1,2-Dichloroethane-d4	5.731	102	182438	31.72	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 105.73%			
48) Toluene-d8	8.470	98	3071672	30.06	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.20%			
68) Bromofluorobenzene	12.197	174	958250	29.56	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.53%			
Target Compounds						Qvalue
12) Acetone	2.442	43	222354	26.56	ug/L	95
23) 2-Butanone	4.617	72	11183	3.33	ug/L #	81
26) Ethyl Acetate	4.864	45	2324	0.62	ug/L #	1
30) Isobutyl alcohol	5.623	43	5849	5.42	ug/L #	21
33) Carbon Tetrachloride	5.398	117	151946	6.99	ug/L #	12
36) 1,1-Dichloropropene	5.269	110	15230	1.66	ug/L #	1
37) 1-Butanol	6.408	56	64740	101.46	ug/L #	17
39) Trichloroethene	6.404	95	72142	3.51	ug/L #	7
70) 1,2,3-Trichloropropane	12.197	75	639689	35.32	ug/L #	43
88) Naphthalene	17.111	128	59769	1.63	ug/L #	76

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271304.D
Acq On : 27 Jun 2013 10:52 am Operator: erp
Sample : MBLK VBLK062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 3

Quant Time: Jun 27 11:19:33 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271305.D
Acq On : 27 Jun 2013 11:28 am Operator: erp
Sample : LCS VLCS062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 27 11:55:58 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	5.390	168	1574136	30.00 ug/L	0.00
31) 1,4-Difluorobenzene	6.406	114	2494456	30.00 ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1289802	30.00 ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1227139	30.00 ug/L	0.00
System Monitoring Compounds					
29) Dibromofluoromethane	5.263	113	670983	29.27 ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 97.57%		
32) 1,2-Dichloroethane-d4	5.735	102	168126	29.29 ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 97.63%		
48) Toluene-d8	8.469	98	3016056	29.58 ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.60%		
68) Bromofluorobenzene	12.195	174	942791	29.36 ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 97.87%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.218	85	465813	16.36 ug/L	93
3) Chloromethane	1.356	50	454688	20.68 ug/L	96
4) Vinyl chloride	1.423	62	457437	16.75 ug/L	97
5) 1,3-Butadiene	1.450	39	305977	16.35 ug/L	94
6) Bromomethane	1.662	96	77826	22.28 ug/L	95
7) Chloroethane	1.745	64	261308	18.57 ug/L	93
8) Trichlorofluoromethane	1.946	101	595044	19.42 ug/L	99
9) Isopropyl Alcohol	2.597	45	797952	476.82 ug/L #	91
10) Ethyl Ether	2.194	59	329590	18.77 ug/L	93
11) Acrolein	2.302	56	77009	21.52 ug/L	84
12) Acetone	2.445	43	527129	64.20 ug/L	96
13) Freon-TF	2.394	151	277393	20.89 ug/L	96
14) 1,1-Dichloroethene	2.387	96	299114	17.37 ug/L	95
15) Methylene Chloride	2.864	84	406299	18.49 ug/L	86
16) Carbon disulfide	2.584	76	2440701	37.85 ug/L	100
17) Acrylonitrile	3.144	53	383581	39.28 ug/L	95
18) MTBE	3.193	73	1287802	20.30 ug/L	95
19) Hexane	3.526	57	369875	21.09 ug/L	98
20) trans-1,2-Dichloroethene	3.171	96	384914	18.49 ug/L	88
21) Vinyl acetate	3.812	43	1707530	37.42 ug/L	91
22) 1,1-Dichloroethane	3.701	63	675645	19.43 ug/L	97
23) 2-Butanone	4.615	72	145577	44.16 ug/L #	72
24) 2,2-Dichloropropane	4.531	77	568243	18.29 ug/L #	85
25) cis-1,2-Dichloroethene	4.545	96	405106	17.84 ug/L	96
26) Ethyl Acetate	4.734	45	67979	18.37 ug/L #	78
27) Chloroform	5.037	83	672610	19.95 ug/L	97
28) Bromochloromethane	4.884	128	199497	21.99 ug/L #	84
30) Isobutyl alcohol	5.850	43	542650	512.27 ug/L	97
33) Carbon Tetrachloride	5.495	117	452858	20.86 ug/L	95
34) 1,2-Dichloroethane	5.840	62	598513	21.79 ug/L	96
35) 1,1,1-Trichloroethane	5.263	97	567071	20.40 ug/L	94
36) 1,1-Dichloropropene	5.511	110	191498	20.86 ug/L	90
37) 1-Butanol	6.802	56	316090	496.39 ug/L	98
38) Benzene	5.800	78	1601519	19.74 ug/L	99
39) Trichloroethene	6.734	95	381744	18.63 ug/L	90
40) 1,2-Dichloropropane	7.055	63	392777	19.88 ug/L #	88
41) 1,4-Dioxane	7.284	88	81956	264.58 ug/L	95
42) Bromodichloromethane	7.464	83	527554	21.01 ug/L	99
43) Dibromomethane	7.207	93	250534	20.48 ug/L	97
44) 2-Nitropropane	7.806	41	151159	28.84 ug/L #	46
45) 2-Chloroethylvinyl ether	7.948	63	323546	29.33 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271305.D
Acq On : 27 Jun 2013 11:28 am Operator: erp
Sample : LCS VLCS062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 27 11:55:58 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

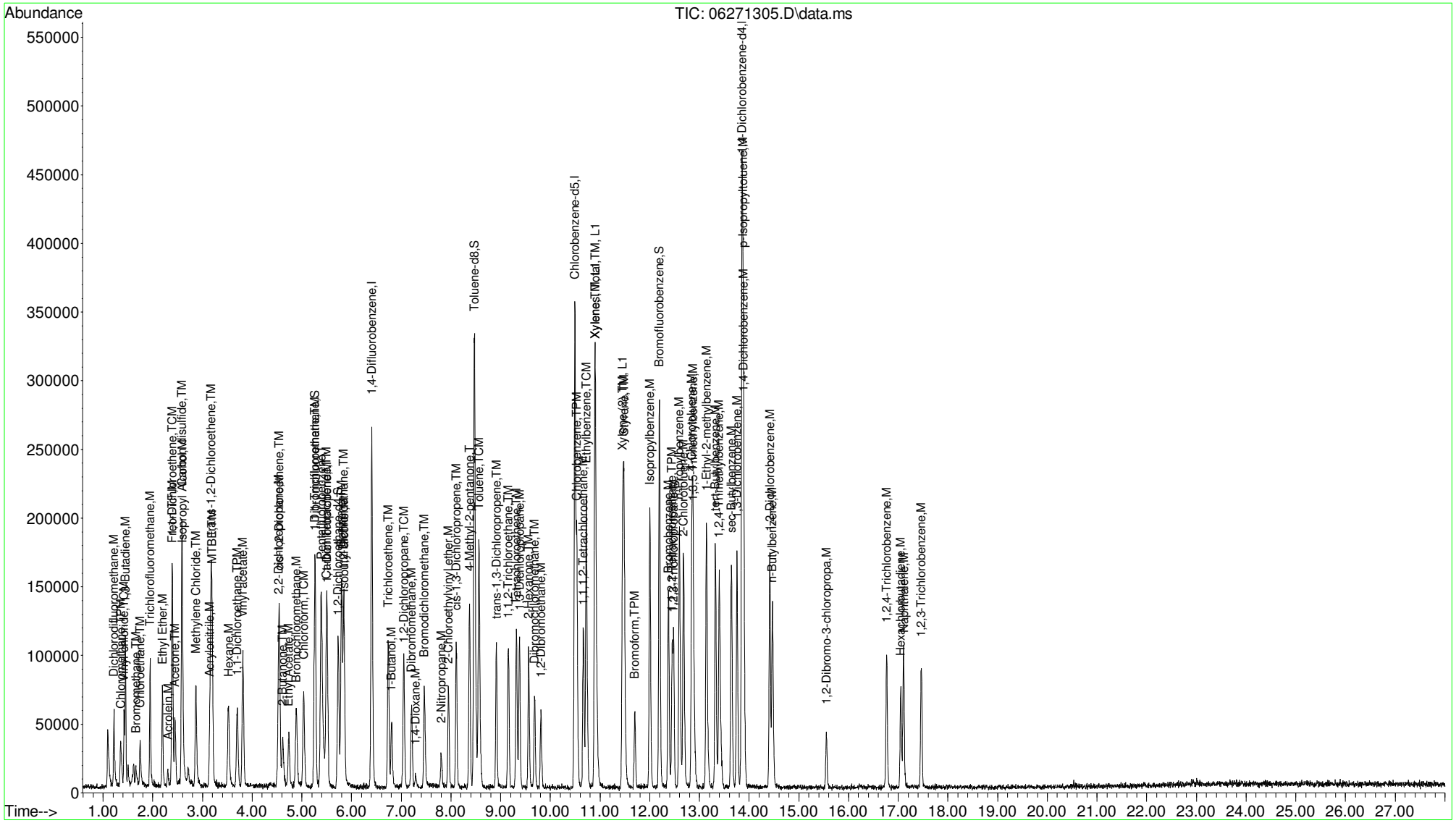
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.373	43	1017089	43.84 ug/L	98
47) cis-1,3-Dichloropropene	8.107	75	622446	18.87 ug/L	88
49) Toluene	8.563	92	1047084	20.36 ug/L	97
51) trans-1,3-Dichloropropene	8.913	75	619004	23.78 ug/L	94
52) 2-Hexanone	9.563	43	731832	47.01 ug/L	98
53) 1,1,2-Trichloroethane	9.156	83	313046	22.15 ug/L	94
54) 1,3-Dichloropropane	9.379	76	691046	23.10 ug/L	99
55) Tetrachloroethene	9.318	164	294926	22.28 ug/L	96
56) Dibromochloromethane	9.684	129	384367	23.57 ug/L	99
57) 1,2-Dibromoethane	9.812	107	403015	23.59 ug/L #	98
58) Chlorobenzene	10.532	112	1158610	24.67 ug/L	98
59) Ethylbenzene	10.724	91	1980752	22.91 ug/L	100
60) 1,1,1,2-Tetrachloroethane	10.664	131	367539	23.34 ug/L	94
61) Xylene	10.903	106	1542642	48.29 ug/L	98
62) Xylene (2)	11.454	106	765568	24.72 ug/L	93
63) Xylenes, Total	10.903	106	2308210m	73.00 ug/L #	
64) Styrene	11.481	104	1218831	21.39 ug/L	97
65) Isopropylbenzene	12.003	105	1763503	25.16 ug/L	96
66) Bromoform	11.699	173	291574	25.47 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.450	83	563855	24.47 ug/L	100
70) 1,2,3-Trichloropropane	12.480	75	459455	24.48 ug/L	99
71) n-Propylbenzene	12.596	91	2015442	26.35 ug/L	98
72) Bromobenzene	12.379	156	468051	22.65 ug/L	95
73) 1,3,5-Trimethylbenzene	12.875	105	1387246	22.57 ug/L	99
74) 2-Chlorotoluene	12.680	91	1278307	24.07 ug/L	98
75) 4-Chlorotoluene	12.847	91	1501339	25.37 ug/L	98
76) tert-Butylbenzene	13.321	119	1104039	26.52 ug/L	93
77) 1-Ethyl-2-methylbenzene	13.140	105	1706558	23.11 ug/L	99
78) 1,2,4-Trimethylbenzene	13.398	105	1373981	22.76 ug/L	98
79) sec-Butylbenzene	13.643	105	1509177	24.81 ug/L	99
80) p-Isopropyltoluene	13.878	119	1237753	24.77 ug/L	98
81) 1,3-Dichlorobenzene	13.754	146	854198	25.34 ug/L	95
82) 1,4-Dichlorobenzene	13.891	146	893967	23.98 ug/L	100
83) n-Butylbenzene	14.470	91	976871	22.47 ug/L	98
84) 1,2-Dichlorobenzene	14.416	146	824870	25.57 ug/L	95
85) 1,2-Dibromo-3-chloropropa	15.553	75	110177	29.03 ug/L	91
86) 1,2,4-Trichlorobenzene	16.765	180	371196	24.20 ug/L	98
87) Hexachlorbutadiene	17.053	225	144056	20.03 ug/L	99
88) Naphthalene	17.109	128	992007	26.18 ug/L	100
89) 1,2,3-Trichlorobenzene	17.459	180	318688	24.32 ug/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271305.D
Acq On : 27 Jun 2013 11:28 am Operator: erp
Sample : LCS VLCS062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 27 11:55:58 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271305.D
Acq On : 27 Jun 2013 11:28 am Operator: erp
Sample : LCS VLCS062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 27 11:55:58 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	5.390	168	1574136	30.00 ug/L	0.00
31) 1,4-Difluorobenzene	6.406	114	2494456	30.00 ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1289802	30.00 ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.855	152	1227139	30.00 ug/L	0.00
System Monitoring Compounds					
29) Dibromofluoromethane	5.263	113	670983	29.27 ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 97.57%		
32) 1,2-Dichloroethane-d4	5.735	102	168126	29.29 ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 97.63%		
48) Toluene-d8	8.469	98	3016056	29.58 ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.60%		
68) Bromofluorobenzene	12.195	174	942791	29.36 ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 97.87%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.218	85	465813	16.36 ug/L	93
3) Chloromethane	1.356	50	454688	20.68 ug/L	96
4) Vinyl chloride	1.423	62	457437	16.75 ug/L	97
5) 1,3-Butadiene	1.450	39	305977	16.35 ug/L	94
6) Bromomethane	1.662	96	77826	22.28 ug/L	95
7) Chloroethane	1.745	64	261308	18.57 ug/L	93
8) Trichlorofluoromethane	1.946	101	595044	19.42 ug/L	99
9) Isopropyl Alcohol	2.597	45	797952	476.82 ug/L #	91
10) Ethyl Ether	2.194	59	329590	18.77 ug/L	93
11) Acrolein	2.302	56	77009	21.52 ug/L	84
12) Acetone	2.445	43	527129	64.20 ug/L	96
13) Freon-TF	2.394	151	277393	20.89 ug/L	96
14) 1,1-Dichloroethene	2.387	96	299114	17.37 ug/L	95
15) Methylene Chloride	2.864	84	406299	18.49 ug/L	86
16) Carbon disulfide	2.584	76	2440701	37.85 ug/L	100
17) Acrylonitrile	3.144	53	383581	39.28 ug/L	95
18) MTBE	3.193	73	1287802	20.30 ug/L	95
19) Hexane	3.526	57	369875	21.09 ug/L	98
20) trans-1,2-Dichloroethene	3.171	96	384914	18.49 ug/L	88
21) Vinyl acetate	3.812	43	1707530	37.42 ug/L	91
22) 1,1-Dichloroethane	3.701	63	675645	19.43 ug/L	97
23) 2-Butanone	4.615	72	145577	44.16 ug/L #	72
24) 2,2-Dichloropropane	4.531	77	568243	18.29 ug/L #	85
25) cis-1,2-Dichloroethene	4.545	96	405106	17.84 ug/L	96
26) Ethyl Acetate	4.734	45	67979	18.37 ug/L #	78
27) Chloroform	5.037	83	672610	19.95 ug/L	97
28) Bromochloromethane	4.884	128	199497	21.99 ug/L #	84
30) Isobutyl alcohol	5.850	43	542650	512.27 ug/L	97
33) Carbon Tetrachloride	5.495	117	452858	20.86 ug/L	95
34) 1,2-Dichloroethane	5.840	62	598513	21.79 ug/L	96
35) 1,1,1-Trichloroethane	5.263	97	567071	20.40 ug/L	94
36) 1,1-Dichloropropene	5.511	110	191498	20.86 ug/L	90
37) 1-Butanol	6.802	56	316090	496.39 ug/L	98
38) Benzene	5.800	78	1601519	19.74 ug/L	99
39) Trichloroethene	6.734	95	381744	18.63 ug/L	90
40) 1,2-Dichloropropane	7.055	63	392777	19.88 ug/L #	88
41) 1,4-Dioxane	7.284	88	81956	264.58 ug/L	95
42) Bromodichloromethane	7.464	83	527554	21.01 ug/L	99
43) Dibromomethane	7.207	93	250534	20.48 ug/L	97
44) 2-Nitropropane	7.806	41	151159	28.84 ug/L #	46
45) 2-Chloroethylvinyl ether	7.948	63	323546	29.33 ug/L	96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271305.D
Acq On : 27 Jun 2013 11:28 am Operator: erp
Sample : LCS VLCS062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 27 11:55:58 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

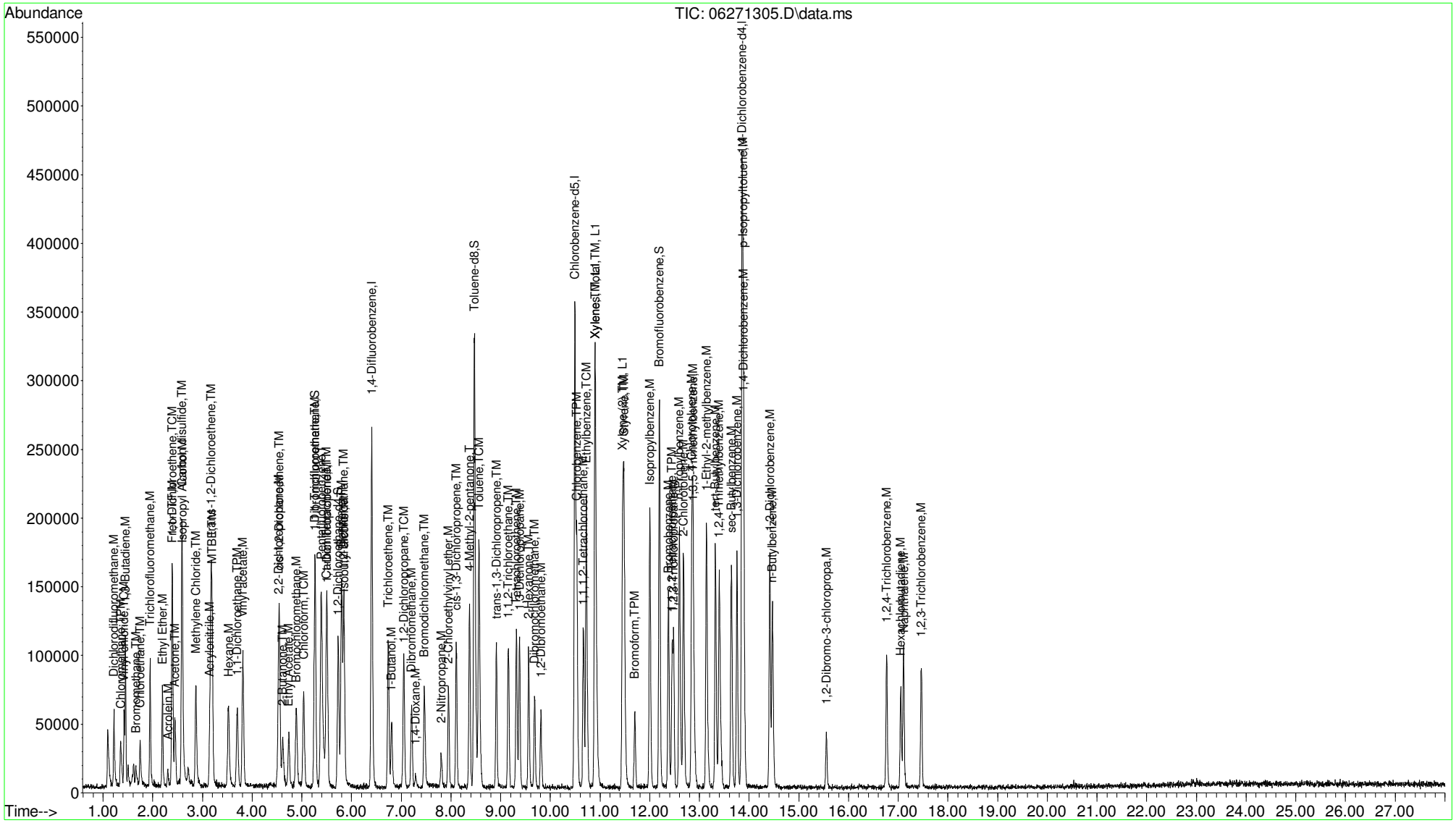
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.373	43	1017089	43.84 ug/L	98
47) cis-1,3-Dichloropropene	8.107	75	622446	18.87 ug/L	88
49) Toluene	8.563	92	1047084	20.36 ug/L	97
51) trans-1,3-Dichloropropene	8.913	75	619004	23.78 ug/L	94
52) 2-Hexanone	9.563	43	731832	47.01 ug/L	98
53) 1,1,2-Trichloroethane	9.156	83	313046	22.15 ug/L	94
54) 1,3-Dichloropropane	9.379	76	691046	23.10 ug/L	99
55) Tetrachloroethene	9.318	164	294926	22.28 ug/L	96
56) Dibromochloromethane	9.684	129	384367	23.57 ug/L	99
57) 1,2-Dibromoethane	9.812	107	403015	23.59 ug/L #	98
58) Chlorobenzene	10.532	112	1158610	24.67 ug/L	98
59) Ethylbenzene	10.724	91	1980752	22.91 ug/L	100
60) 1,1,1,2-Tetrachloroethane	10.664	131	367539	23.34 ug/L	94
61) Xylene	10.903	106	1542642	48.29 ug/L	98
62) Xylene (2)	11.454	106	765568	24.72 ug/L	93
63) Xylenes, Total	10.903	106	2308210m	73.00 ug/L #	
64) Styrene	11.481	104	1218831	21.39 ug/L	97
65) Isopropylbenzene	12.003	105	1763503	25.16 ug/L	96
66) Bromoform	11.699	173	291574	25.47 ug/L	98
67) 1,1,2,2-Tetrachloroethane	12.450	83	563855	24.47 ug/L	100
70) 1,2,3-Trichloropropane	12.480	75	459455	24.48 ug/L	99
71) n-Propylbenzene	12.596	91	2015442	26.35 ug/L	98
72) Bromobenzene	12.379	156	468051	22.65 ug/L	95
73) 1,3,5-Trimethylbenzene	12.875	105	1387246	22.57 ug/L	99
74) 2-Chlorotoluene	12.680	91	1278307	24.07 ug/L	98
75) 4-Chlorotoluene	12.847	91	1501339	25.37 ug/L	98
76) tert-Butylbenzene	13.321	119	1104039	26.52 ug/L	93
77) 1-Ethyl-2-methylbenzene	13.140	105	1706558	23.11 ug/L	99
78) 1,2,4-Trimethylbenzene	13.398	105	1373981	22.76 ug/L	98
79) sec-Butylbenzene	13.643	105	1509177	24.81 ug/L	99
80) p-Isopropyltoluene	13.878	119	1237753	24.77 ug/L	98
81) 1,3-Dichlorobenzene	13.754	146	854198	25.34 ug/L	95
82) 1,4-Dichlorobenzene	13.891	146	893967	23.98 ug/L	100
83) n-Butylbenzene	14.470	91	976871	22.47 ug/L	98
84) 1,2-Dichlorobenzene	14.416	146	824870	25.57 ug/L	95
85) 1,2-Dibromo-3-chloropropa	15.553	75	110177	29.03 ug/L	91
86) 1,2,4-Trichlorobenzene	16.765	180	371196	24.20 ug/L	98
87) Hexachlorbutadiene	17.053	225	144056	20.03 ug/L	99
88) Naphthalene	17.109	128	992007	26.18 ug/L	100
89) 1,2,3-Trichlorobenzene	17.459	180	318688	24.32 ug/L	93

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271305.D
Acq On : 27 Jun 2013 11:28 am Operator: erp
Sample : LCS VLCS062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 4

Quant Time: Jun 27 11:55:58 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271306.D
Acq On : 27 Jun 2013 12:04 pm Operator: erp
Sample : LCSD VLCSD062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 27 12:32:14 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.391	168	1595562	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.406	114	2549103	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.495	82	1272635	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1229559	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.265	113	691359	29.75	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 99.17%			
32) 1,2-Dichloroethane-d4	5.733	102	190858	32.54	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 108.47%			
48) Toluene-d8	8.471	98	3060160	29.37	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 97.90%			
68) Bromofluorobenzene	12.195	174	967645	30.54	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 101.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	473513	16.41	ug/L	95
3) Chloromethane	1.354	50	433360	19.44	ug/L	100
4) Vinyl chloride	1.425	62	440714	15.92	ug/L	92
5) 1,3-Butadiene	1.450	39	298679	15.75	ug/L	98
6) Bromomethane	1.659	96	102067	23.43	ug/L	94
7) Chloroethane	1.746	64	265763	18.63	ug/L	96
8) Trichlorofluoromethane	1.949	101	569897	18.35	ug/L	100
9) Isopropyl Alcohol	2.597	45	776360	457.69	ug/L #	97
10) Ethyl Ether	2.196	59	323550	18.18	ug/L	92
11) Acrolein	2.298	56	84103	23.19	ug/L #	71
12) Acetone	2.448	43	543679	65.32	ug/L	99
13) Freon-TF	2.397	151	262481	19.50	ug/L	94
14) 1,1-Dichloroethene	2.388	96	262779	15.05	ug/L	92
15) Methylene Chloride	2.868	84	379268	17.03	ug/L	86
16) Carbon disulfide	2.584	76	2318140	35.47	ug/L	98
17) Acrylonitrile	3.148	53	392049	39.61	ug/L	97
18) MTBE	3.186	73	1294602	20.13	ug/L	100
19) Hexane	3.522	57	374839	21.09	ug/L	95
20) trans-1,2-Dichloroethene	3.169	96	367366	17.41	ug/L	89
21) Vinyl acetate	3.810	43	1579009	34.14	ug/L	95
22) 1,1-Dichloroethane	3.700	63	629887	17.87	ug/L	96
23) 2-Butanone	4.614	72	145553	43.56	ug/L #	70
24) 2,2-Dichloropropane	4.532	77	545661	17.32	ug/L	97
25) cis-1,2-Dichloroethene	4.545	96	417781	18.15	ug/L	91
26) Ethyl Acetate	4.737	45	67265	17.94	ug/L #	82
27) Chloroform	5.036	83	633879	18.55	ug/L	97
28) Bromochloromethane	4.891	128	198698	21.61	ug/L #	86
30) Isobutyl alcohol	5.846	43	548838	511.16	ug/L	98
33) Carbon Tetrachloride	5.498	117	434595	19.59	ug/L	94
34) 1,2-Dichloroethane	5.840	62	578951	20.62	ug/L	97
35) 1,1,1-Trichloroethane	5.263	97	553382	19.48	ug/L	94
36) 1,1-Dichloropropene	5.506	110	191239	20.38	ug/L	88
37) 1-Butanol	6.803	56	316157	485.85	ug/L	93
38) Benzene	5.800	78	1548717	18.68	ug/L	96
39) Trichloroethene	6.740	95	389247	18.58	ug/L	95
40) 1,2-Dichloropropane	7.050	63	363630	18.01	ug/L #	88
41) 1,4-Dioxane	7.288	88	71905	227.16	ug/L	83
42) Bromodichloromethane	7.467	83	507358	19.77	ug/L	99
43) Dibromomethane	7.205	93	247429	19.80	ug/L	96
44) 2-Nitropropane	7.806	41	142396	26.58	ug/L #	83
45) 2-Chloroethylvinyl ether	7.955	63	319018	28.30	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271306.D
Acq On : 27 Jun 2013 12:04 pm Operator: erp
Sample : LCSD VLCSD062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 27 12:32:14 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

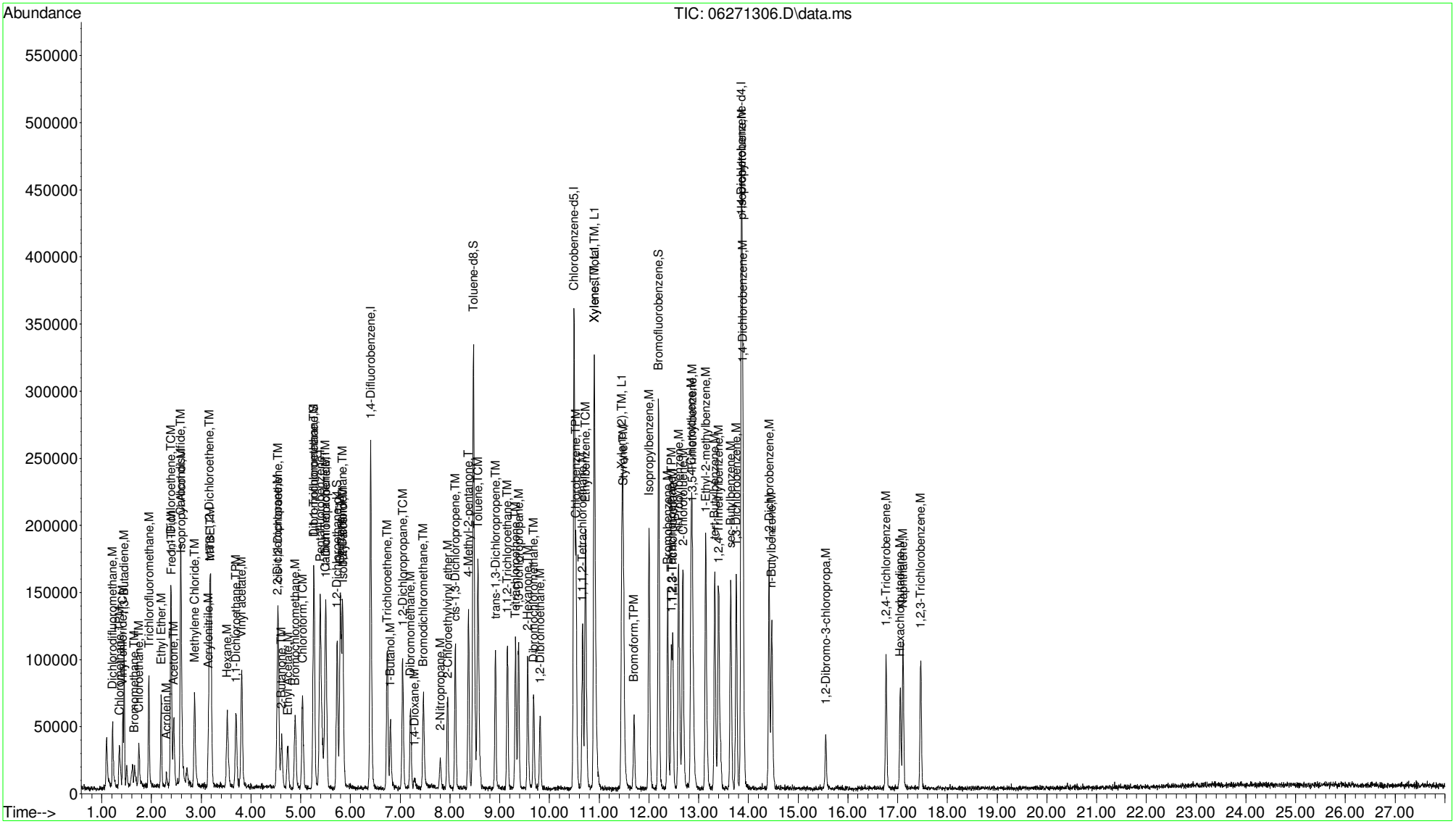
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.372	43	1008819	42.56 ug/L	99
47) cis-1,3-Dichloropropene	8.103	75	657899	19.52 ug/L	93
49) Toluene	8.564	92	1024687	19.50 ug/L	100
51) trans-1,3-Dichloropropene	8.913	75	598536	23.30 ug/L	94
52) 2-Hexanone	9.564	43	736857	47.97 ug/L	97
53) 1,1,2-Trichloroethane	9.152	83	337520	24.20 ug/L	95
54) 1,3-Dichloropropane	9.381	76	662475	22.44 ug/L	100
55) Tetrachloroethene	9.321	164	289023	22.12 ug/L	97
56) Dibromochloromethane	9.683	129	398956	24.80 ug/L	94
57) 1,2-Dibromoethane	9.810	107	404568	24.00 ug/L #	94
58) Chlorobenzene	10.534	112	1116227	24.09 ug/L	98
59) Ethylbenzene	10.723	91	1921568	22.53 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.661	131	352894	22.71 ug/L	90
61) Xylene	10.903	106	1490971	47.30 ug/L	99
62) Xylene (2)	11.457	106	753242	24.65 ug/L	89
63) Xylenes, Total	10.903	106	2244213m	71.94 ug/L #	
64) Styrene	11.484	104	1209344	21.51 ug/L	100
65) Isopropylbenzene	12.003	105	1727786	24.99 ug/L	100
66) Bromoform	11.700	173	281035	24.88 ug/L	96
67) 1,1,2,2-Tetrachloroethane	12.450	83	578903	25.46 ug/L	98
70) 1,2,3-Trichloropropane	12.481	75	492189	26.17 ug/L	98
71) n-Propylbenzene	12.599	91	1934754	25.25 ug/L	99
72) Bromobenzene	12.379	156	483631	23.35 ug/L	93
73) 1,3,5-Trimethylbenzene	12.873	105	1339097	21.74 ug/L	95
74) 2-Chlorotoluene	12.681	91	1298467	24.40 ug/L	100
75) 4-Chlorotoluene	12.850	91	1468194	24.76 ug/L	96
76) tert-Butylbenzene	13.323	119	972698	23.32 ug/L	97
77) 1-Ethyl-2-methylbenzene	13.142	105	1692966	22.88 ug/L	99
78) 1,2,4-Trimethylbenzene	13.403	105	1373820	22.71 ug/L	99
79) sec-Butylbenzene	13.645	105	1423641	23.36 ug/L	99
80) p-Isopropyltoluene	13.872	119	1217076	24.31 ug/L	98
81) 1,3-Dichlorobenzene	13.755	146	844276	25.00 ug/L	97
82) 1,4-Dichlorobenzene	13.888	146	877047	23.48 ug/L	99
83) n-Butylbenzene	14.469	91	960744	22.06 ug/L	97
84) 1,2-Dichlorobenzene	14.415	146	844818	26.14 ug/L	96
85) 1,2-Dibromo-3-chloropropa	15.559	75	111530	29.33 ug/L	88
86) 1,2,4-Trichlorobenzene	16.770	180	358965	23.35 ug/L	99
87) Hexachlorbutadiene	17.050	225	148713	20.64 ug/L	96
88) Naphthalene	17.106	128	1089852	28.71 ug/L	96
89) 1,2,3-Trichlorobenzene	17.464	180	352004	26.81 ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271306.D
Acq On : 27 Jun 2013 12:04 pm Operator: erp
Sample : LCSD VLCSD062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 27 12:32:14 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271306.D
Acq On : 27 Jun 2013 12:04 pm Operator: erp
Sample : LCSD VLCSD062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 27 12:32:14 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.391	168	1595562	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.406	114	2549103	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.495	82	1272635	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1229559	30.00	ug/L	0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.265	113	691359	29.75	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 99.17%			
32) 1,2-Dichloroethane-d4	5.733	102	190858	32.54	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 108.47%			
48) Toluene-d8	8.471	98	3060160	29.37	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 97.90%			
68) Bromofluorobenzene	12.195	174	967645	30.54	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 101.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.217	85	473513	16.41	ug/L	95
3) Chloromethane	1.354	50	433360	19.44	ug/L	100
4) Vinyl chloride	1.425	62	440714	15.92	ug/L	92
5) 1,3-Butadiene	1.450	39	298679	15.75	ug/L	98
6) Bromomethane	1.659	96	102067	23.43	ug/L	94
7) Chloroethane	1.746	64	265763	18.63	ug/L	96
8) Trichlorofluoromethane	1.949	101	569897	18.35	ug/L	100
9) Isopropyl Alcohol	2.597	45	776360	457.69	ug/L #	97
10) Ethyl Ether	2.196	59	323550	18.18	ug/L	92
11) Acrolein	2.298	56	84103	23.19	ug/L #	71
12) Acetone	2.448	43	543679	65.32	ug/L	99
13) Freon-TF	2.397	151	262481	19.50	ug/L	94
14) 1,1-Dichloroethene	2.388	96	262779	15.05	ug/L	92
15) Methylene Chloride	2.868	84	379268	17.03	ug/L	86
16) Carbon disulfide	2.584	76	2318140	35.47	ug/L	98
17) Acrylonitrile	3.148	53	392049	39.61	ug/L	97
18) MTBE	3.186	73	1294602	20.13	ug/L	100
19) Hexane	3.522	57	374839	21.09	ug/L	95
20) trans-1,2-Dichloroethene	3.169	96	367366	17.41	ug/L	89
21) Vinyl acetate	3.810	43	1579009	34.14	ug/L	95
22) 1,1-Dichloroethane	3.700	63	629887	17.87	ug/L	96
23) 2-Butanone	4.614	72	145553	43.56	ug/L #	70
24) 2,2-Dichloropropane	4.532	77	545661	17.32	ug/L	97
25) cis-1,2-Dichloroethene	4.545	96	417781	18.15	ug/L	91
26) Ethyl Acetate	4.737	45	67265	17.94	ug/L #	82
27) Chloroform	5.036	83	633879	18.55	ug/L	97
28) Bromochloromethane	4.891	128	198698	21.61	ug/L #	86
30) Isobutyl alcohol	5.846	43	548838	511.16	ug/L	98
33) Carbon Tetrachloride	5.498	117	434595	19.59	ug/L	94
34) 1,2-Dichloroethane	5.840	62	578951	20.62	ug/L	97
35) 1,1,1-Trichloroethane	5.263	97	553382	19.48	ug/L	94
36) 1,1-Dichloropropene	5.506	110	191239	20.38	ug/L	88
37) 1-Butanol	6.803	56	316157	485.85	ug/L	93
38) Benzene	5.800	78	1548717	18.68	ug/L	96
39) Trichloroethene	6.740	95	389247	18.58	ug/L	95
40) 1,2-Dichloropropane	7.050	63	363630	18.01	ug/L #	88
41) 1,4-Dioxane	7.288	88	71905	227.16	ug/L	83
42) Bromodichloromethane	7.467	83	507358	19.77	ug/L	99
43) Dibromomethane	7.205	93	247429	19.80	ug/L	96
44) 2-Nitropropane	7.806	41	142396	26.58	ug/L #	83
45) 2-Chloroethylvinyl ether	7.955	63	319018	28.30	ug/L	92

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271306.D
Acq On : 27 Jun 2013 12:04 pm Operator: erp
Sample : LCSD VLCSD062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 27 12:32:14 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

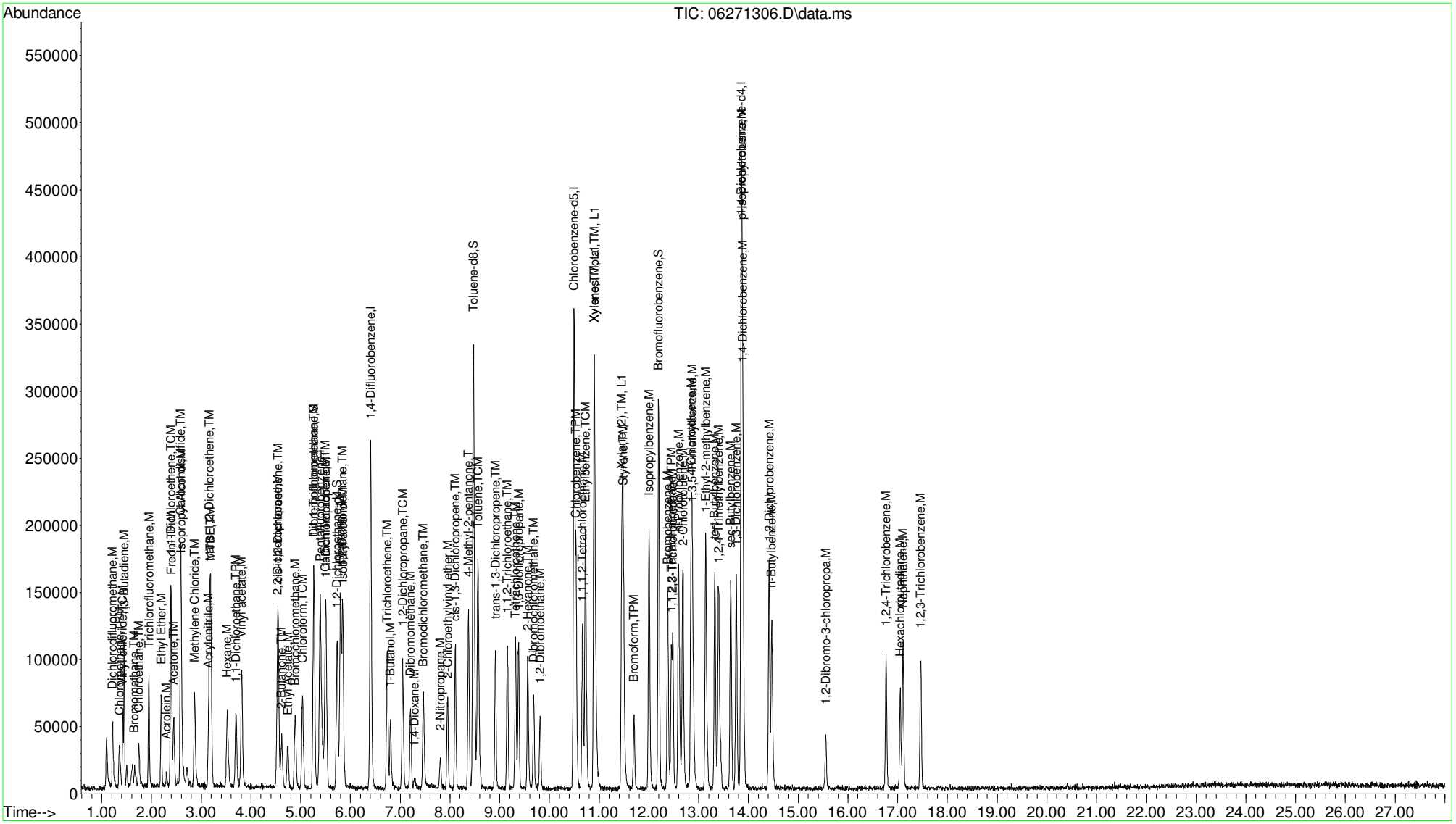
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) 4-Methyl-2-pentanone	8.372	43	1008819	42.56 ug/L	99
47) cis-1,3-Dichloropropene	8.103	75	657899	19.52 ug/L	93
49) Toluene	8.564	92	1024687	19.50 ug/L	100
51) trans-1,3-Dichloropropene	8.913	75	598536	23.30 ug/L	94
52) 2-Hexanone	9.564	43	736857	47.97 ug/L	97
53) 1,1,2-Trichloroethane	9.152	83	337520	24.20 ug/L	95
54) 1,3-Dichloropropane	9.381	76	662475	22.44 ug/L	100
55) Tetrachloroethene	9.321	164	289023	22.12 ug/L	97
56) Dibromochloromethane	9.683	129	398956	24.80 ug/L	94
57) 1,2-Dibromoethane	9.810	107	404568	24.00 ug/L #	94
58) Chlorobenzene	10.534	112	1116227	24.09 ug/L	98
59) Ethylbenzene	10.723	91	1921568	22.53 ug/L	98
60) 1,1,1,2-Tetrachloroethane	10.661	131	352894	22.71 ug/L	90
61) Xylene	10.903	106	1490971	47.30 ug/L	99
62) Xylene (2)	11.457	106	753242	24.65 ug/L	89
63) Xylenes, Total	10.903	106	2244213m	71.94 ug/L #	
64) Styrene	11.484	104	1209344	21.51 ug/L	100
65) Isopropylbenzene	12.003	105	1727786	24.99 ug/L	100
66) Bromoform	11.700	173	281035	24.88 ug/L	96
67) 1,1,2,2-Tetrachloroethane	12.450	83	578903	25.46 ug/L	98
70) 1,2,3-Trichloropropane	12.481	75	492189	26.17 ug/L	98
71) n-Propylbenzene	12.599	91	1934754	25.25 ug/L	99
72) Bromobenzene	12.379	156	483631	23.35 ug/L	93
73) 1,3,5-Trimethylbenzene	12.873	105	1339097	21.74 ug/L	95
74) 2-Chlorotoluene	12.681	91	1298467	24.40 ug/L	100
75) 4-Chlorotoluene	12.850	91	1468194	24.76 ug/L	96
76) tert-Butylbenzene	13.323	119	972698	23.32 ug/L	97
77) 1-Ethyl-2-methylbenzene	13.142	105	1692966	22.88 ug/L	99
78) 1,2,4-Trimethylbenzene	13.403	105	1373820	22.71 ug/L	99
79) sec-Butylbenzene	13.645	105	1423641	23.36 ug/L	99
80) p-Isopropyltoluene	13.872	119	1217076	24.31 ug/L	98
81) 1,3-Dichlorobenzene	13.755	146	844276	25.00 ug/L	97
82) 1,4-Dichlorobenzene	13.888	146	877047	23.48 ug/L	99
83) n-Butylbenzene	14.469	91	960744	22.06 ug/L	97
84) 1,2-Dichlorobenzene	14.415	146	844818	26.14 ug/L	96
85) 1,2-Dibromo-3-chloropropa	15.559	75	111530	29.33 ug/L	88
86) 1,2,4-Trichlorobenzene	16.770	180	358965	23.35 ug/L	99
87) Hexachlorbutadiene	17.050	225	148713	20.64 ug/L	96
88) Naphthalene	17.106	128	1089852	28.71 ug/L	96
89) 1,2,3-Trichlorobenzene	17.464	180	352004	26.81 ug/L	95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271306.D
Acq On : 27 Jun 2013 12:04 pm Operator: erp
Sample : LCSD VLCSD062713-7 Inst : VOA7
Misc : VOC_W+ Multiplr: 1.00
ALS Vial : 5

Quant Time: Jun 27 12:32:14 2013
Quant Method : C:\MSDCHEM\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm Operator: erp
Sample : SAMP 13060776-001A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 11

Quant Time: Jun 28 10:08:35 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

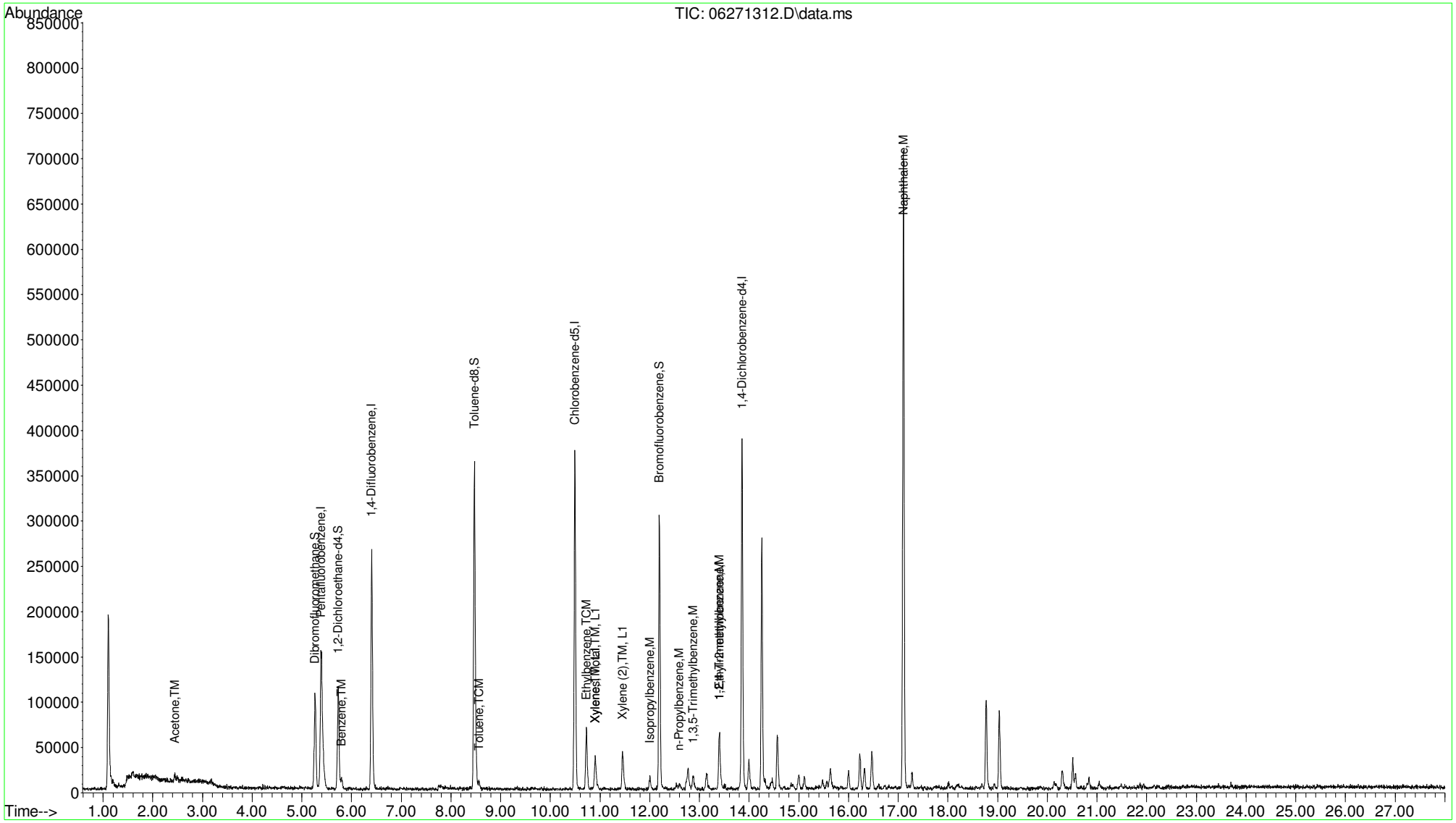
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.383	168	1725740	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.405	114	2600430	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.493	82	1402903	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1259014	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.265	113	728899	29.00	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 96.67%			
32) 1,2-Dichloroethane-d4	5.731	102	190872	31.90	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 106.33%			
48) Toluene-d8	8.471	98	3146406	29.60	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.67%			
68) Bromofluorobenzene	12.192	174	1035736	29.65	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.83%			
Target Compounds						Qvalue
12) Acetone	2.449	43	77612	8.62	ug/L	86
38) Benzene	5.792	78	112396	1.33	ug/L #	1
49) Toluene	8.564	92	39215m	0.73	ug/L	
59) Ethylbenzene	10.724	91	642287	6.83	ug/L	95
61) Xylene	10.902	106	145618	4.19	ug/L	95
62) Xylene (2)	11.455	106	148693	4.41	ug/L	98
63) Xylenes, Total	10.902	106	294310m	8.56	ug/L #	
65) Isopropylbenzene	12.002	105	107386	1.41	ug/L #	49
71) n-Propylbenzene	12.597	91	65974	0.84	ug/L #	53
73) 1,3,5-Trimethylbenzene	12.876	105	123291m	1.95	ug/L	
77) 1-Ethyl-2-methylbenzene	13.403	105	521082	6.88	ug/L	74
78) 1,2,4-Trimethylbenzene	13.403	105	520608	8.41	ug/L	97
88) Naphthalene	17.104	128	6939824	178.54	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm Operator: erp
Sample : SAMP 13060776-001A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 11

Quant Time: Jun 28 10:08:35 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm Operator: erp
Sample : SAMP 13060776-001A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 11

Quant Time: Jun 28 10:06:01 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

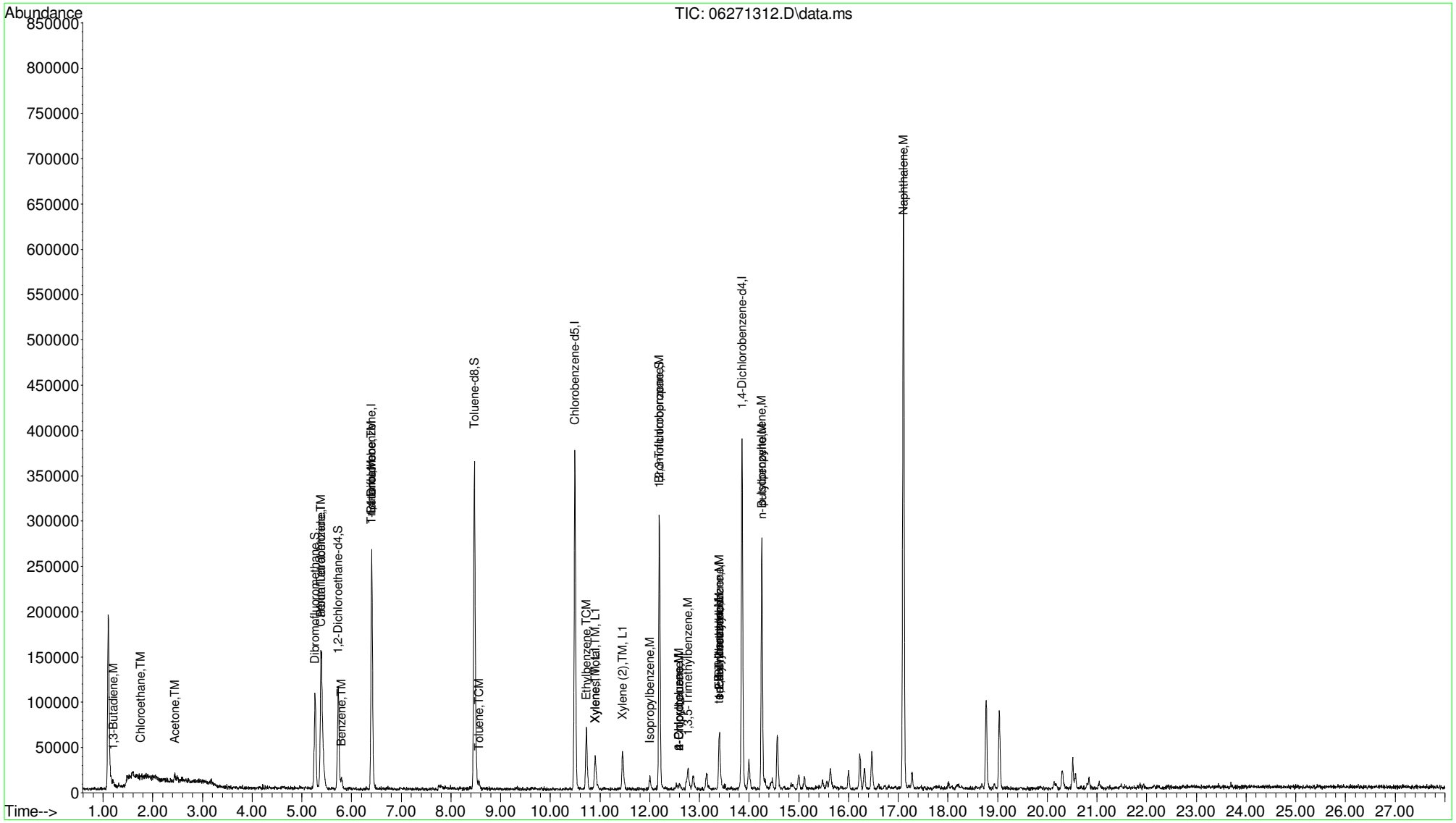
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.383	168	1725740	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.405	114	2600430	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.493	82	1402903	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1259014	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.265	113	728899	29.00	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 96.67%			
32) 1,2-Dichloroethane-d4	5.731	102	190872	31.90	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 106.33%			
48) Toluene-d8	8.471	98	3146406	29.60	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 98.67%			
68) Bromofluorobenzene	12.192	174	1035736	29.65	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.83%			
Target Compounds						Qvalue
5) 1,3-Butadiene	1.203	39	10313	0.50	ug/L #	4
7) Chloroethane	1.753	64	189029	12.25	ug/L #	44
12) Acetone	2.449	43	77612	8.62	ug/L	86
33) Carbon Tetrachloride	5.386	117	166828	7.37	ug/L #	12
37) 1-Butanol	6.402	56	35545	53.55	ug/L #	17
38) Benzene	5.792	78	112396	1.33	ug/L #	1
39) Trichloroethene	6.401	95	75144	3.52	ug/L #	7
49) Toluene	8.566	92	27269	0.51	ug/L #	52
59) Ethylbenzene	10.724	91	642287	6.83	ug/L	95
61) Xylene	10.902	106	145618	4.19	ug/L	95
62) Xylene (2)	11.455	106	148693	4.41	ug/L	98
63) Xylenes, Total	10.902	106	294310m	8.56	ug/L #	
65) Isopropylbenzene	12.002	105	107386	1.41	ug/L #	49
70) 1,2,3-Trichloropropane	12.194	75	650856	33.80	ug/L #	42
71) n-Propylbenzene	12.597	91	65974	0.84	ug/L #	53
73) 1,3,5-Trimethylbenzene	12.769	105	249857	3.96	ug/L	81
74) 2-Chlorotoluene	12.597	91	65967	1.21	ug/L #	43
75) 4-Chlorotoluene	12.597	91	65218	1.07	ug/L #	46
76) tert-Butylbenzene	13.396	119	65966	1.54	ug/L #	69
77) 1-Ethyl-2-methylbenzene	13.403	105	521082	6.88	ug/L	74
78) 1,2,4-Trimethylbenzene	13.403	105	520608	8.41	ug/L	97
79) sec-Butylbenzene	13.403	105	520136	8.34	ug/L #	56
80) p-Isopropyltoluene	14.257	119	89739	1.75	ug/L #	1
83) n-Butylbenzene	14.259	91	276226	6.19	ug/L #	43
88) Naphthalene	17.104	128	6939824	178.54	ug/L	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm Operator: erp
Sample : SAMP 13060776-001A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 11

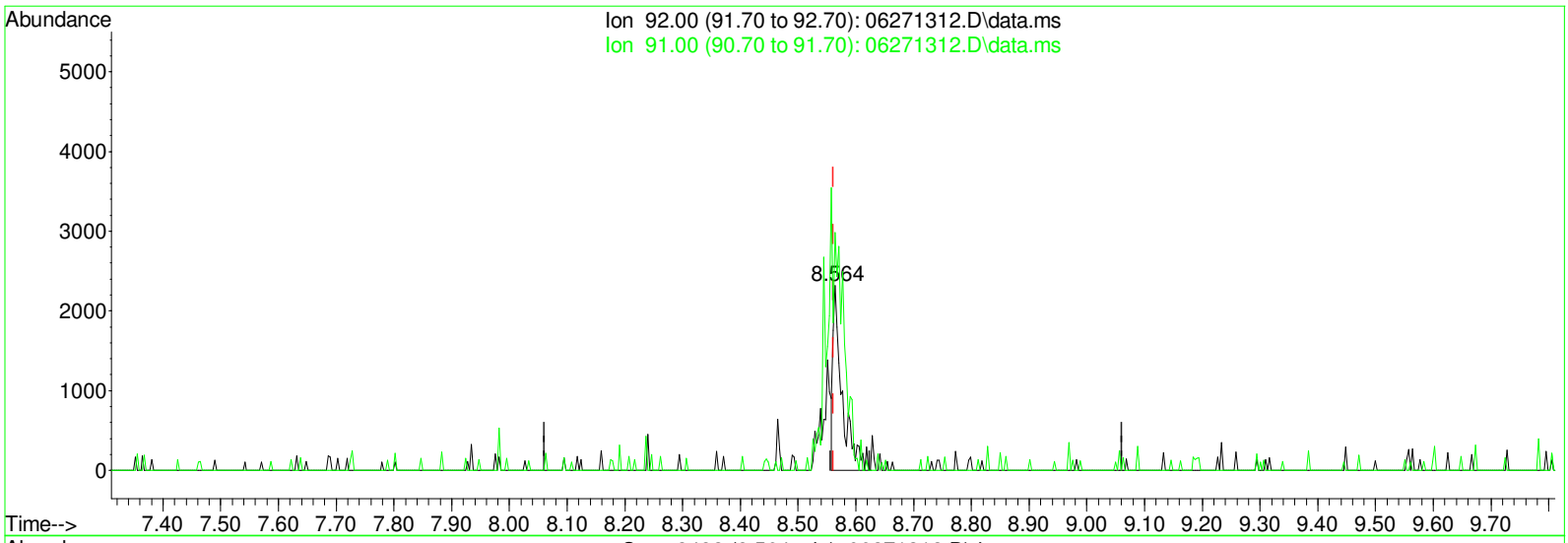
Quant Time: Jun 28 10:06:01 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

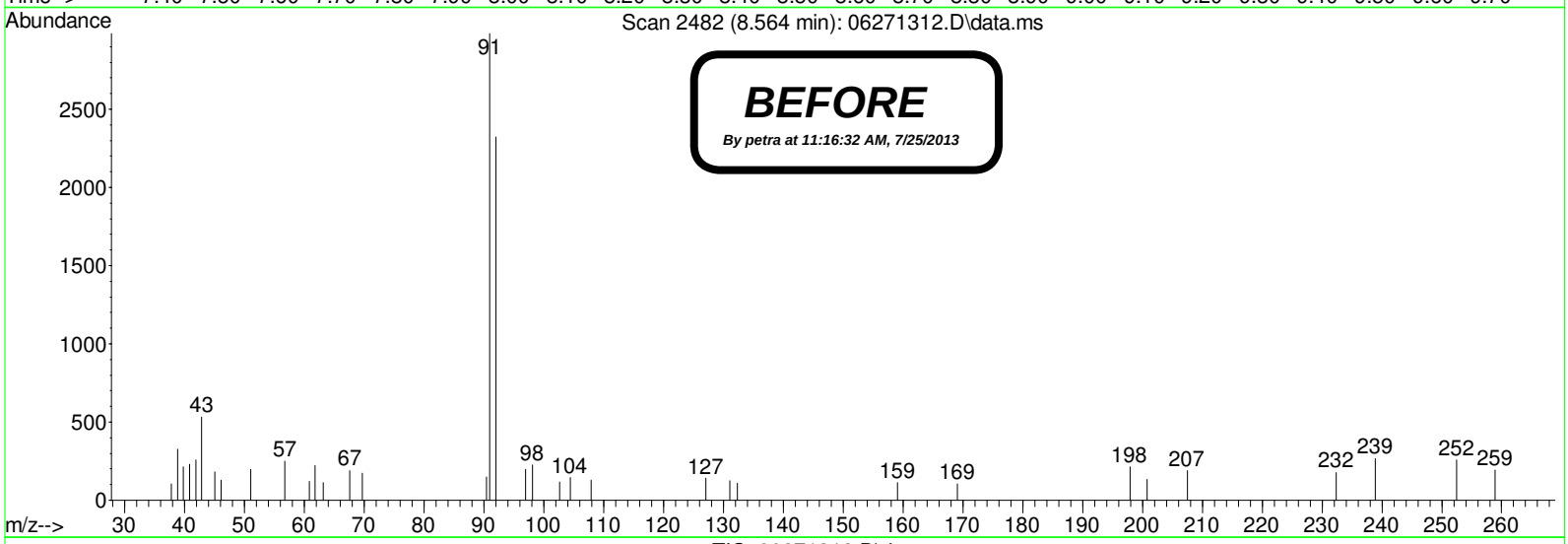


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm Operator: erp
Sample : SAMP 13060776-001A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 11

Quant Time: Jun 28 10:06:01 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration





TIC: 06271312.D\data.ms

(49) Toluene (TCM)

8.566min (+0.005) 0.51 ug/L

response 27269

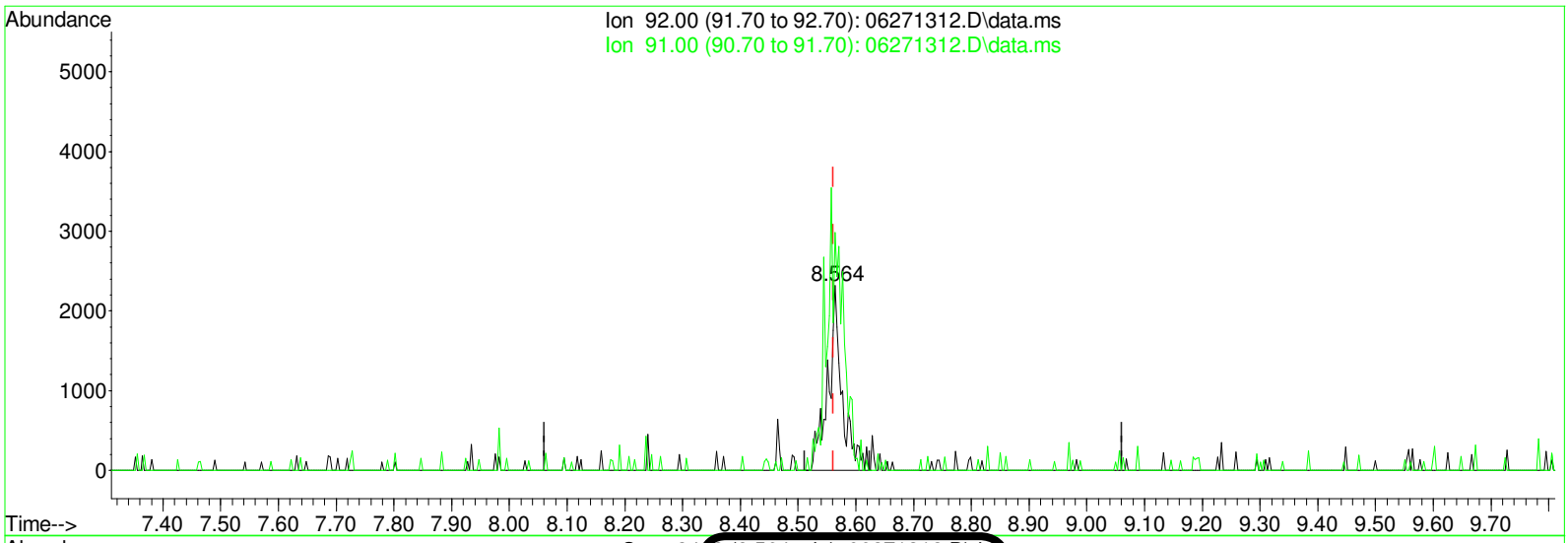
Ion	Exp%	Act%
92.00	100	100
91.00	175.10	241.78#
0.00	0.00	0.00
0.00	0.00	0.00

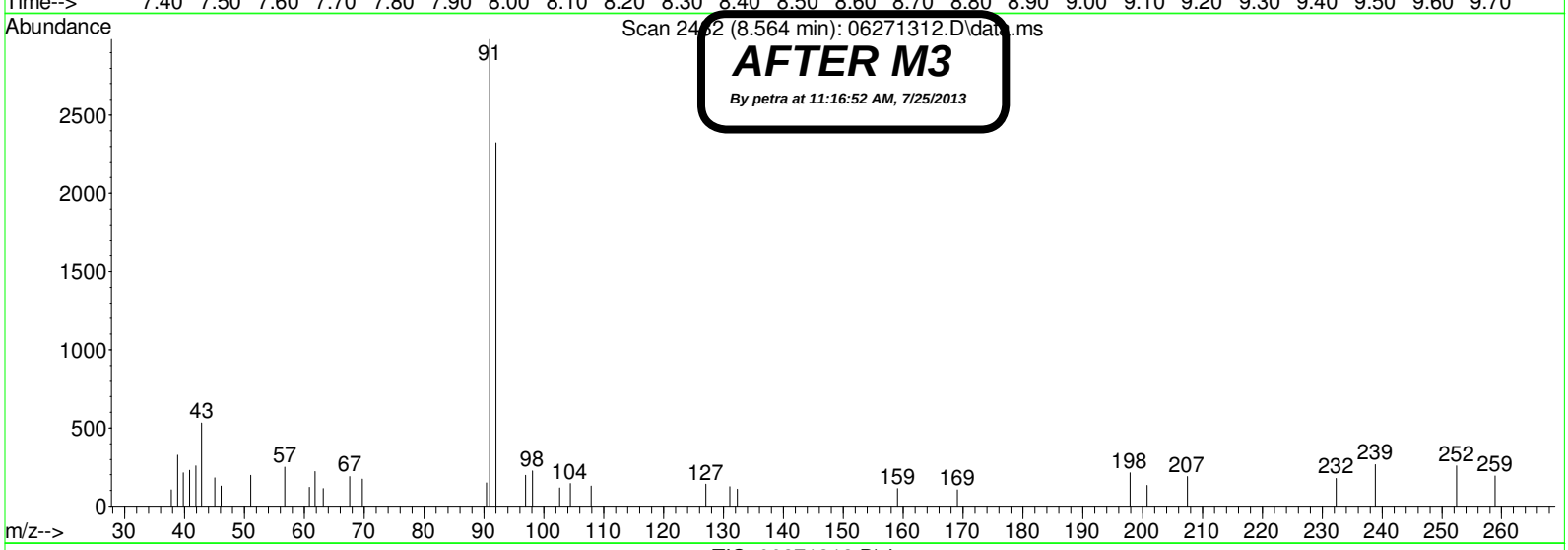
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm
Sample : SAMP 13060776-001A
Misc : VOC_W+ 5mL
ALS Vial : 11

Operator: erp
Inst : VOA7
Multiplr: 1.00

Quant Time: Jun 28 10:06:01 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration





TIC: 06271312.D\data.ms

(49) Toluene (TCM)

8.564min (+0.003) 0.73 ug/L m

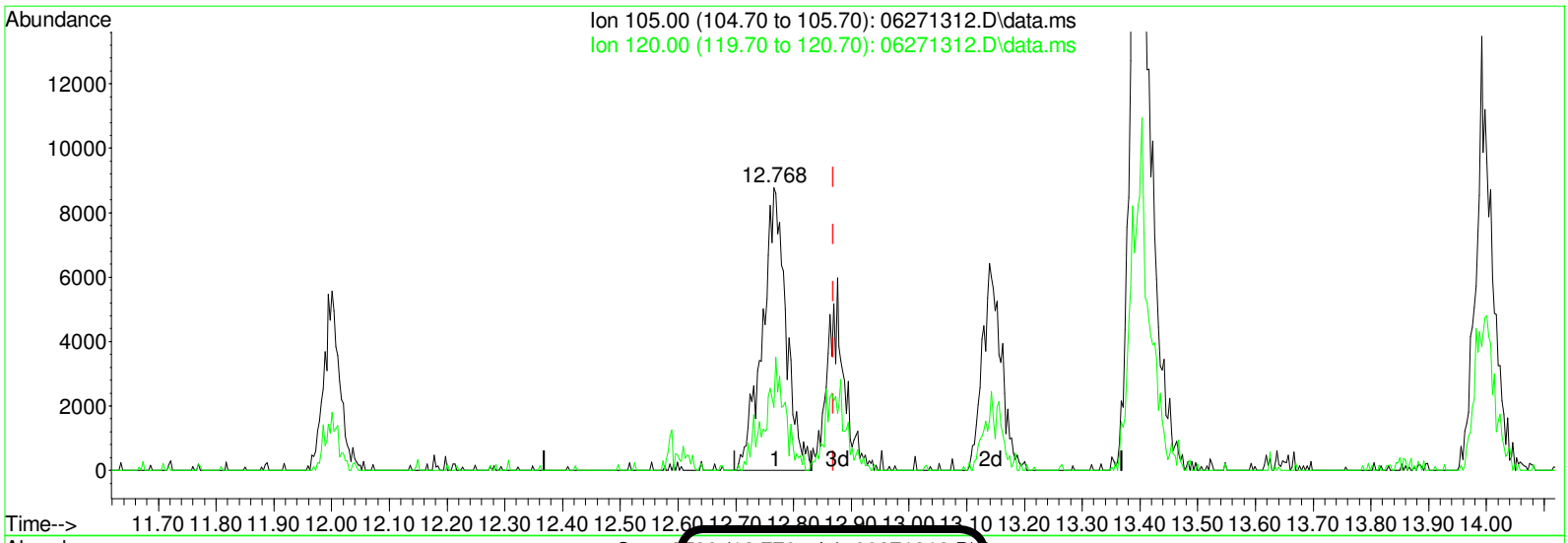
response 39215

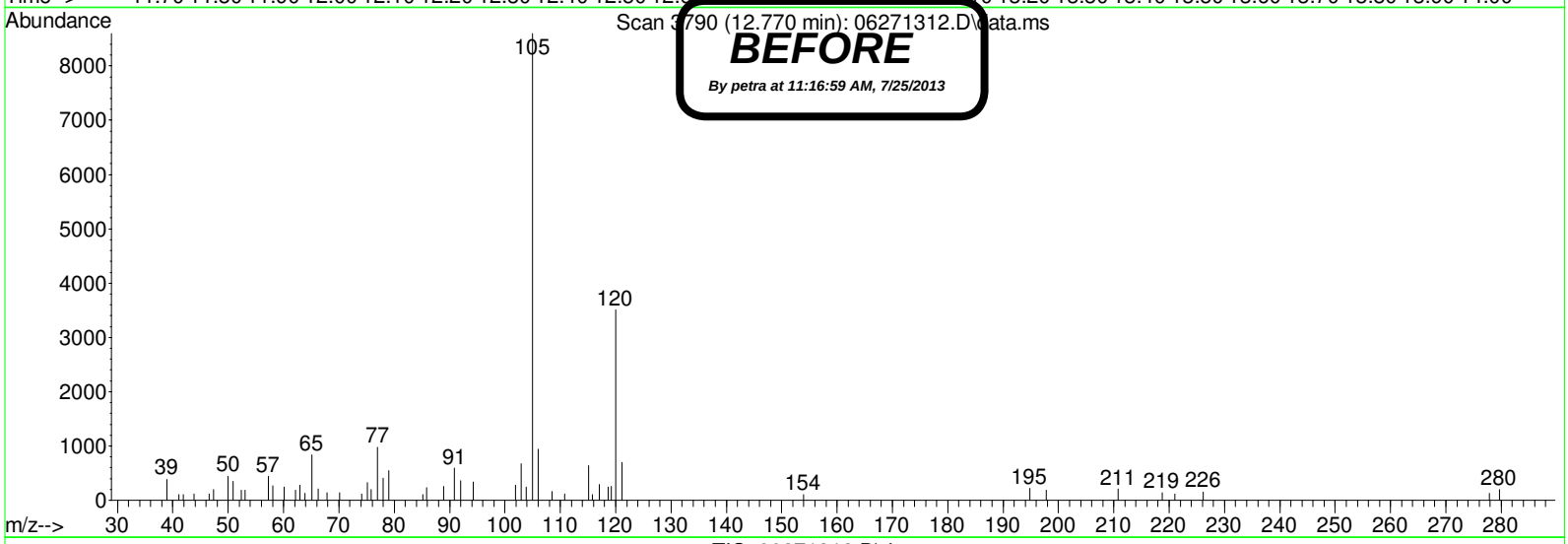
Ion	Exp%	Act%
92.00	100	100
91.00	175.10	168.13
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm Operator: erp
Sample : SAMP 13060776-001A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 11

Quant Time: Jun 28 10:06:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration





(73) 1,3,5-Trimethylbenzene (M)

12.769min (-0.099) 3.96 ug/L

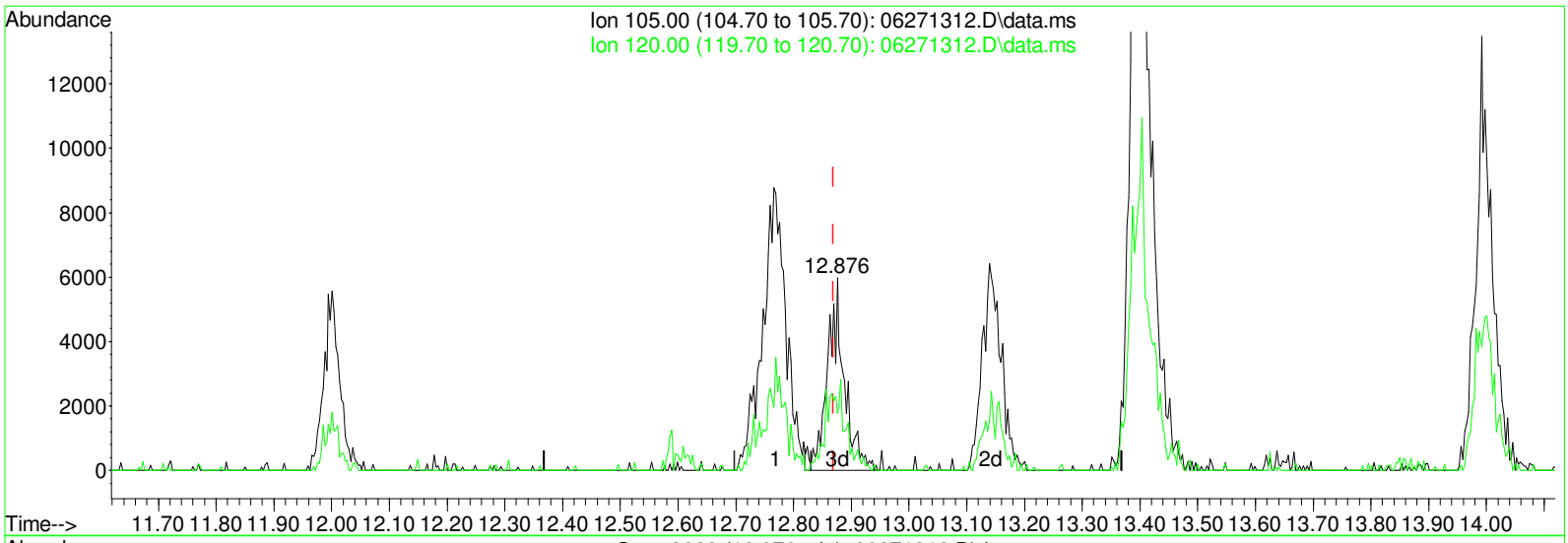
response 249857

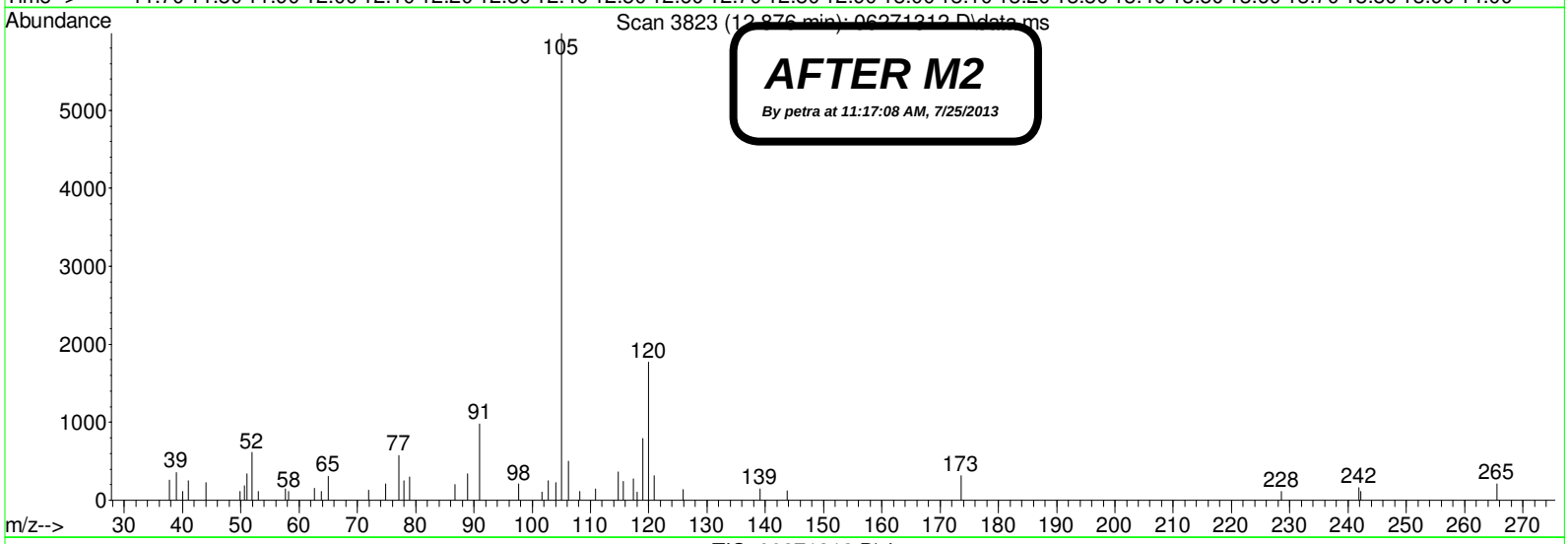
Ion	Exp%	Act%
105.00	100	100
120.00	46.90	33.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271312.D
Acq On : 27 Jun 2013 3:42 pm Operator: erp
Sample : SAMP 13060776-001A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 11

Quant Time: Jun 28 10:06:55 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration





TIC: 06271312.D\data.ms

(73) 1,3,5-Trimethylbenzene (M)

12.876min (+0.007) 1.95 ug/L m

response 123291

Ion	Exp%	Act%
105.00	100	100
120.00	46.90	68.87#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271313.D
Acq On : 27 Jun 2013 4:44 pm Operator: erp
Sample : SAMP 13060776-002A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 28 10:09:08 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

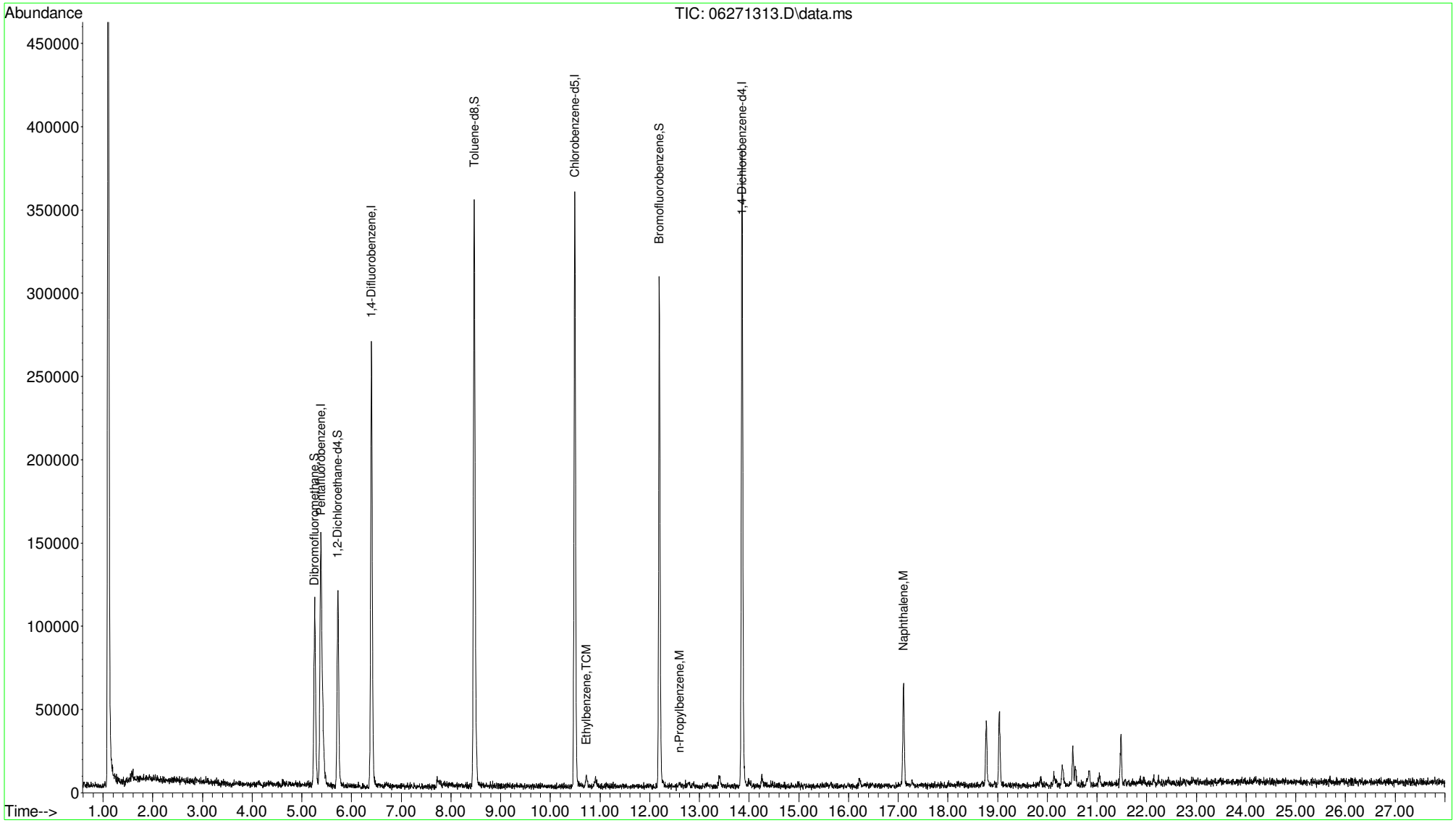
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.384	168	1651076	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.400	114	2606088	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1354204	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.858	152	1233705	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.258	113	762776	31.72	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 105.73%			
32) 1,2-Dichloroethane-d4	5.723	102	189762	31.65	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 105.50%			
48) Toluene-d8	8.467	98	3171251	29.77	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.23%			
68) Bromofluorobenzene	12.192	174	996988	29.57	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.57%			
Target Compounds						Qvalue
59) Ethylbenzene	10.732	91	62172	0.68	ug/L #	44
71) n-Propylbenzene	12.604	91	15768	0.21	ug/L #	53
88) Naphthalene	17.107	128	613093	16.10	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271313.D
Acq On : 27 Jun 2013 4:44 pm Operator: erp
Sample : SAMP 13060776-002A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 28 10:09:08 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271313.D
Acq On : 27 Jun 2013 4:44 pm Operator: erp
Sample : SAMP 13060776-002A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 28 10:08:45 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

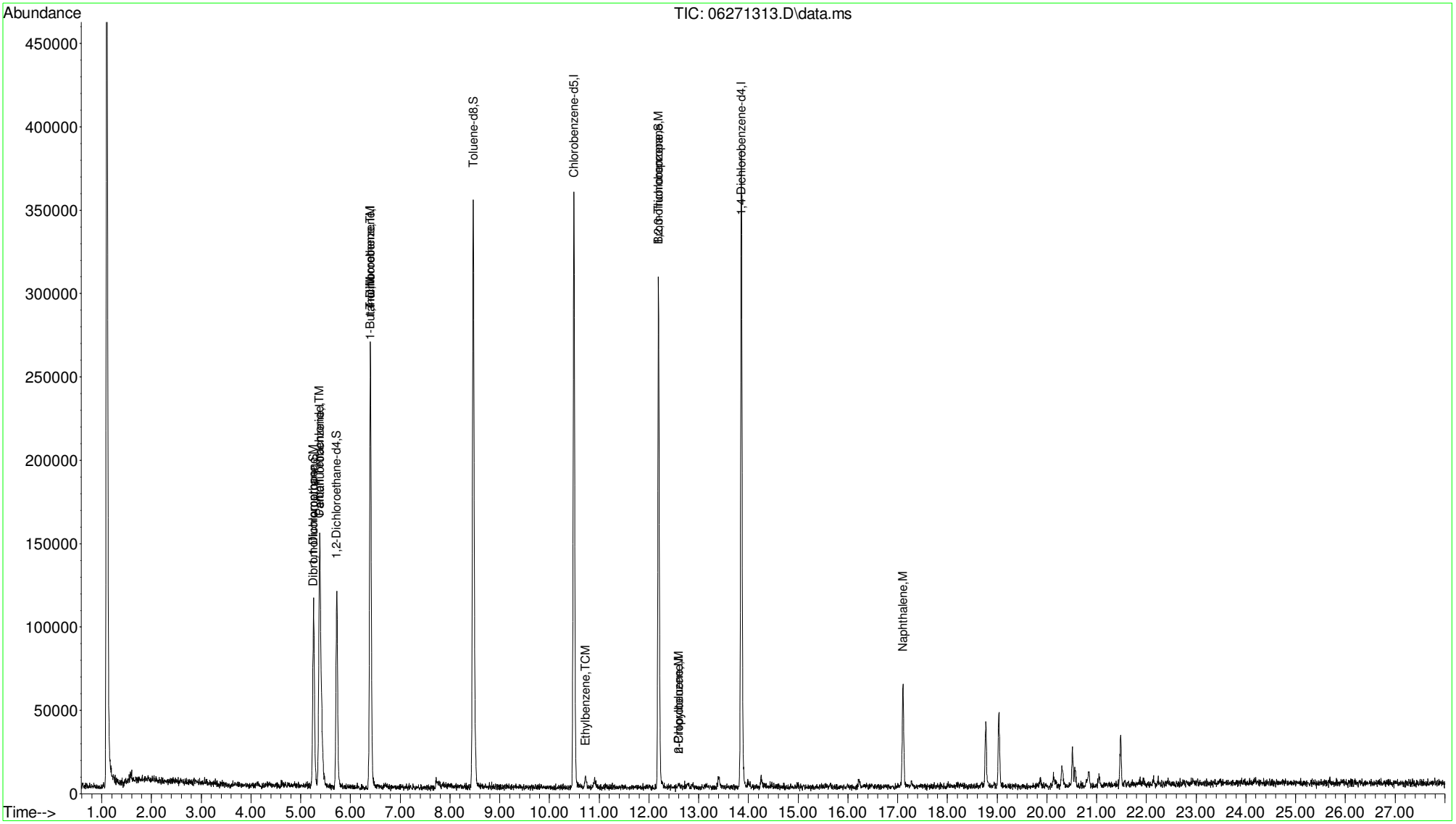
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.384	168	1651076	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.400	114	2606088	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1354204	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.858	152	1233705	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.258	113	762776	31.72	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 105.73%			
32) 1,2-Dichloroethane-d4	5.723	102	189762	31.65	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 105.50%			
48) Toluene-d8	8.467	98	3171251	29.77	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.23%			
68) Bromofluorobenzene	12.192	174	996988	29.57	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.57%			
Target Compounds						Qvalue
33) Carbon Tetrachloride	5.377	117	161927	7.14	ug/L #	12
36) 1,1-Dichloropropene	5.257	110	21514	2.24	ug/L #	1
37) 1-Butanol	6.402	56	62671	94.20	ug/L #	17
39) Trichloroethene	6.398	95	74928	3.50	ug/L #	7
59) Ethylbenzene	10.732	91	62172	0.68	ug/L #	44
70) 1,2,3-Trichloropropane	12.190	75	626578	33.21	ug/L #	42
71) n-Propylbenzene	12.604	91	15768	0.21	ug/L #	53
74) 2-Chlorotoluene	12.604	91	22992	0.43	ug/L #	43
88) Naphthalene	17.107	128	613093	16.10	ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271313.D
Acq On : 27 Jun 2013 4:44 pm Operator: erp
Sample : SAMP 13060776-002A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 12

Quant Time: Jun 28 10:08:45 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271314.D
Acq On : 27 Jun 2013 5:20 pm Operator: erp
Sample : SAMP 13060776-003A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 13

Quant Time: Jun 28 10:09:43 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

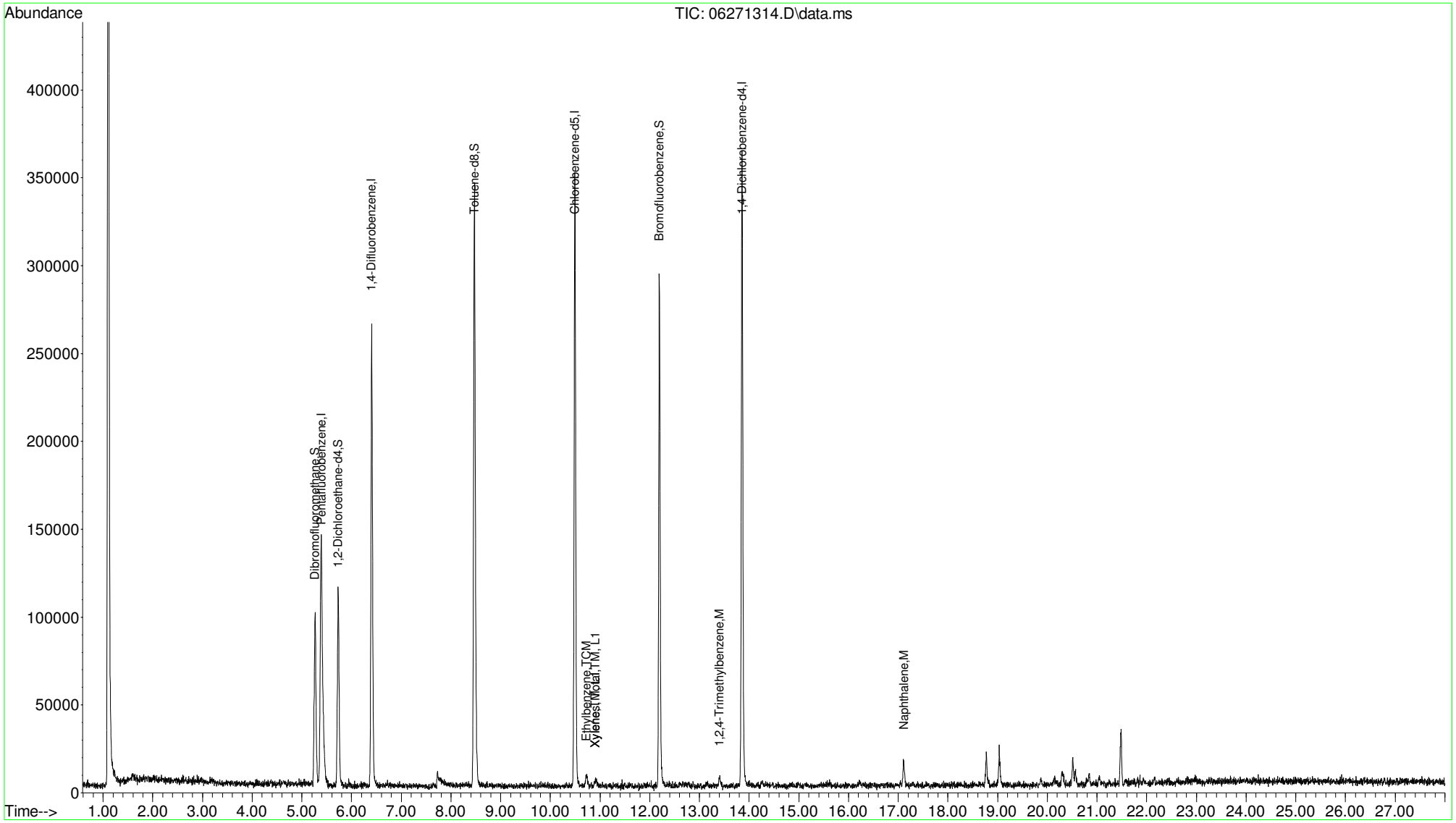
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.393	168	1586306	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	2548671	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1342781	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1196353	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.264	113	698378	30.23	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 100.77%			
32) 1,2-Dichloroethane-d4	5.733	102	196430	33.50	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 111.67%			
48) Toluene-d8	8.471	98	3149116	30.23	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.77%			
68) Bromofluorobenzene	12.192	174	990237	29.62	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.73%			
Target Compounds						Qvalue
59) Ethylbenzene	10.733	91	56255	0.63	ug/L #	44
61) Xylene	10.903	106	14613	0.44	ug/L #	1
63) Xylenes, Total	10.903	106	14613m	0.44	ug/L #	
78) 1,2,4-Trimethylbenzene	13.403	105	37906	0.64	ug/L #	77
88) Naphthalene	17.112	128	143156	3.88	ug/L #	76

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271314.D
Acq On : 27 Jun 2013 5:20 pm Operator: erp
Sample : SAMP 13060776-003A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 13

Quant Time: Jun 28 10:09:43 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271314.D
Acq On : 27 Jun 2013 5:20 pm Operator: erp
Sample : SAMP 13060776-003A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 13

Quant Time: Jun 28 10:09:16 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

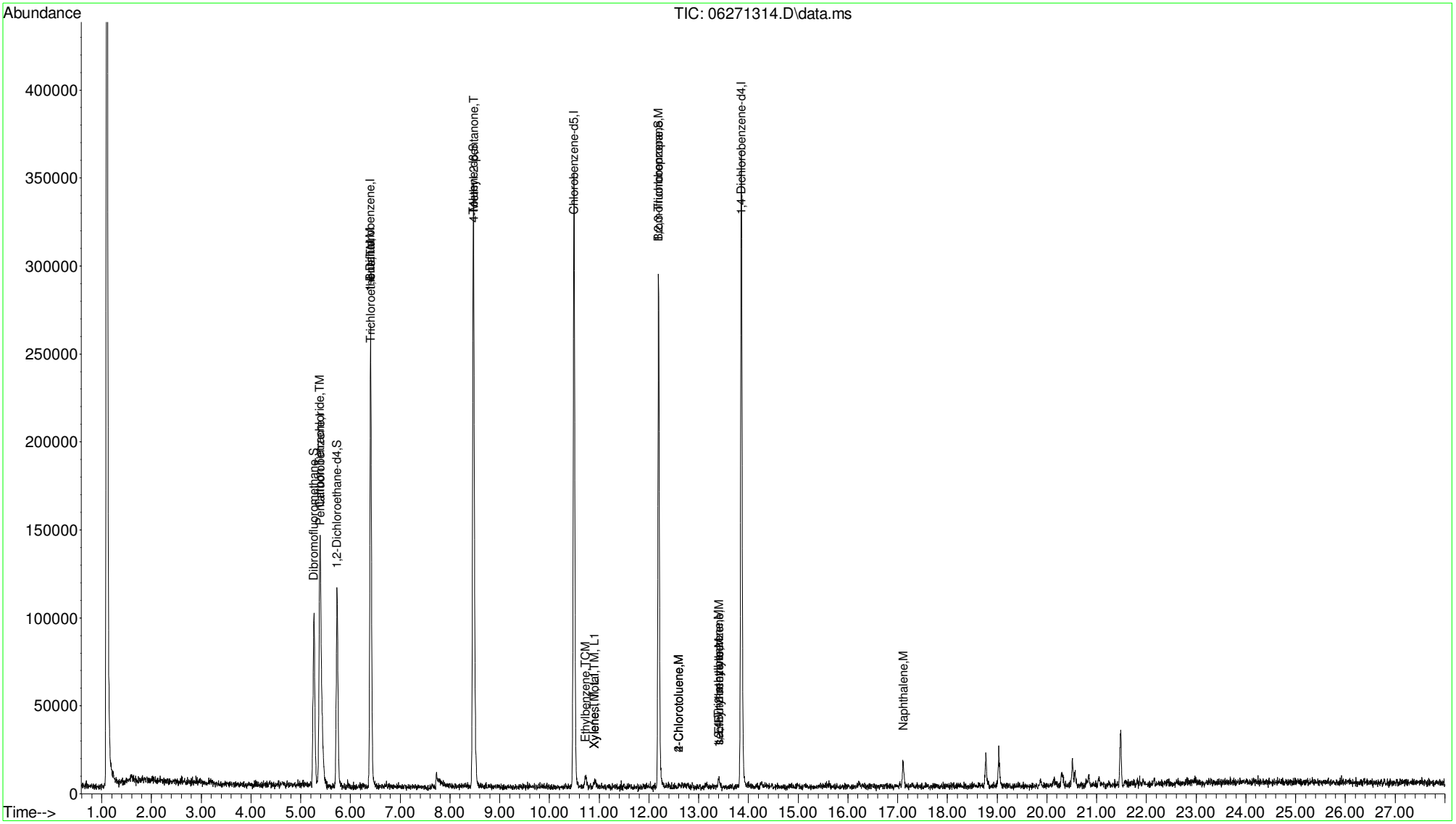
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.393	168	1586306	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	2548671	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.491	82	1342781	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1196353	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.264	113	698378	30.23	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 100.77%			
32) 1,2-Dichloroethane-d4	5.733	102	196430	33.50	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 111.67%			
48) Toluene-d8	8.471	98	3149116	30.23	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 100.77%			
68) Bromofluorobenzene	12.192	174	990237	29.62	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.73%			
Target Compounds						Qvalue
33) Carbon Tetrachloride	5.388	117	147335	6.64	ug/L #	12
37) 1-Butanol	6.402	56	59211	91.01	ug/L #	17
39) Trichloroethene	6.410	95	72842	3.48	ug/L #	7
46) 4-Methyl-2-pentanone	8.476	43	36603	1.54	ug/L #	44
59) Ethylbenzene	10.733	91	56255	0.63	ug/L #	44
61) Xylene	10.903	106	14613	0.44	ug/L #	1
63) Xylenes, Total	10.903	106	14613m	0.44	ug/L #	
70) 1,2,3-Trichloropropane	12.192	75	627758	34.31	ug/L #	42
74) 2-Chlorotoluene	12.600	91	18220	0.35	ug/L #	43
75) 4-Chlorotoluene	12.601	91	18694	0.32	ug/L #	46
77) 1-Ethyl-2-methylbenzene	13.410	105	37899	0.53	ug/L #	49
78) 1,2,4-Trimethylbenzene	13.403	105	37906	0.64	ug/L #	77
79) sec-Butylbenzene	13.410	105	39598	0.67	ug/L #	56
88) Naphthalene	17.112	128	143156	3.88	ug/L #	76

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271314.D
Acq On : 27 Jun 2013 5:20 pm Operator: erp
Sample : SAMP 13060776-003A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 13

Quant Time: Jun 28 10:09:16 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271315.D
Acq On : 27 Jun 2013 6:07 pm Operator: erp
Sample : SAMP 13060776-004A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 28 10:10:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

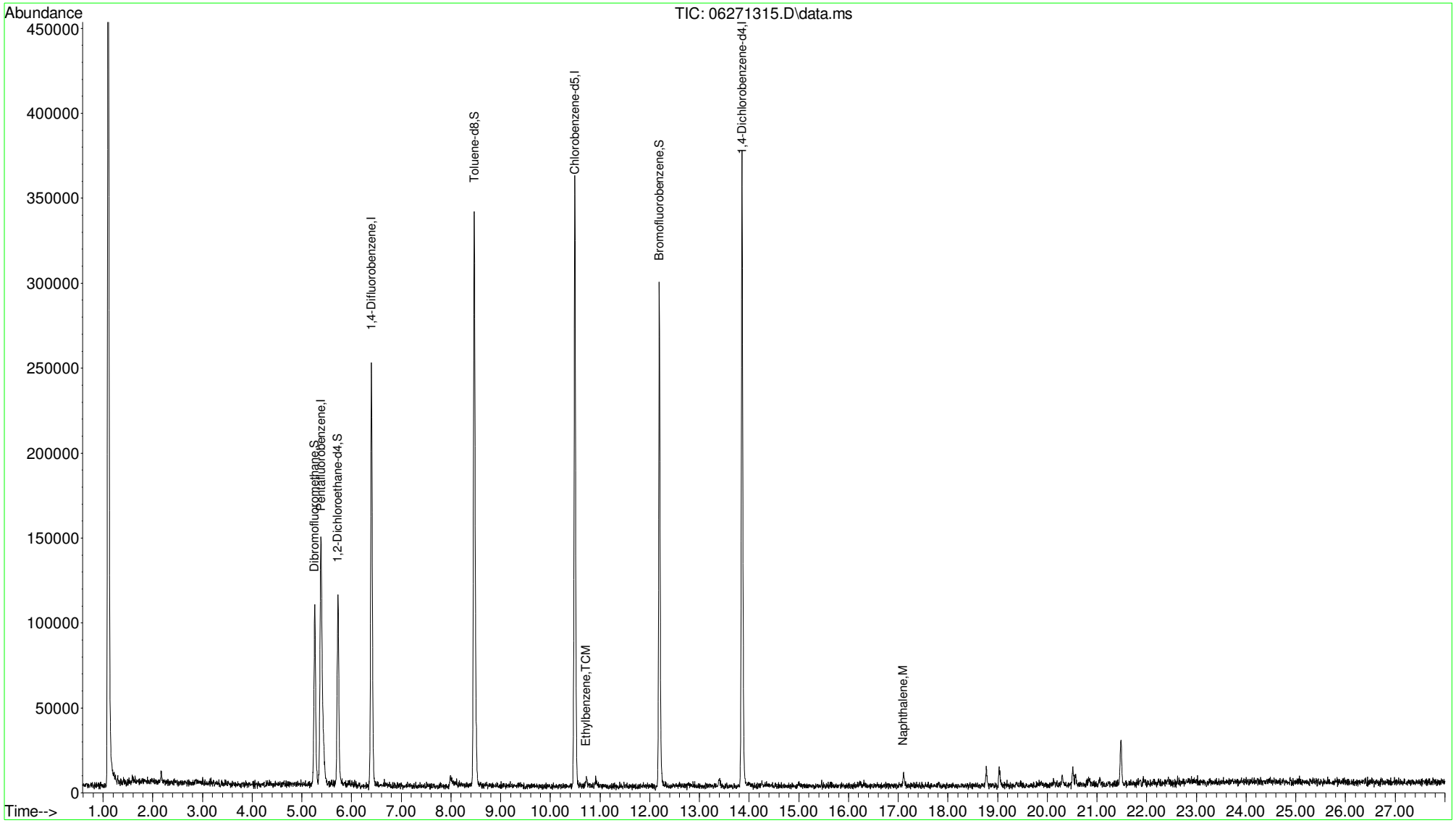
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	5.386	168	1639814	30.00 ug/L	0.00
31) 1,4-Difluorobenzene	6.400	114	2478016	30.00 ug/L	0.00
50) Chlorobenzene-d5	10.493	82	1286703	30.00 ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1188710	30.00 ug/L	# 0.00
System Monitoring Compounds					
29) Dibromofluoromethane	5.259	113	706268	29.57 ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 98.57%		
32) 1,2-Dichloroethane-d4	5.722	102	183538	32.19 ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 107.30%		
48) Toluene-d8	8.469	98	3021539	29.83 ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.43%		
68) Bromofluorobenzene	12.195	174	943001	29.43 ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.10%		
Target Compounds					Qvalue
59) Ethylbenzene	10.716	91	21192	0.25 ug/L #	44
88) Naphthalene	17.099	128	76240	2.08 ug/L	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271315.D
Acq On : 27 Jun 2013 6:07 pm Operator: erp
Sample : SAMP 13060776-004A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 28 10:10:28 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271315.D
Acq On : 27 Jun 2013 6:07 pm Operator: erp
Sample : SAMP 13060776-004A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 28 10:09:54 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

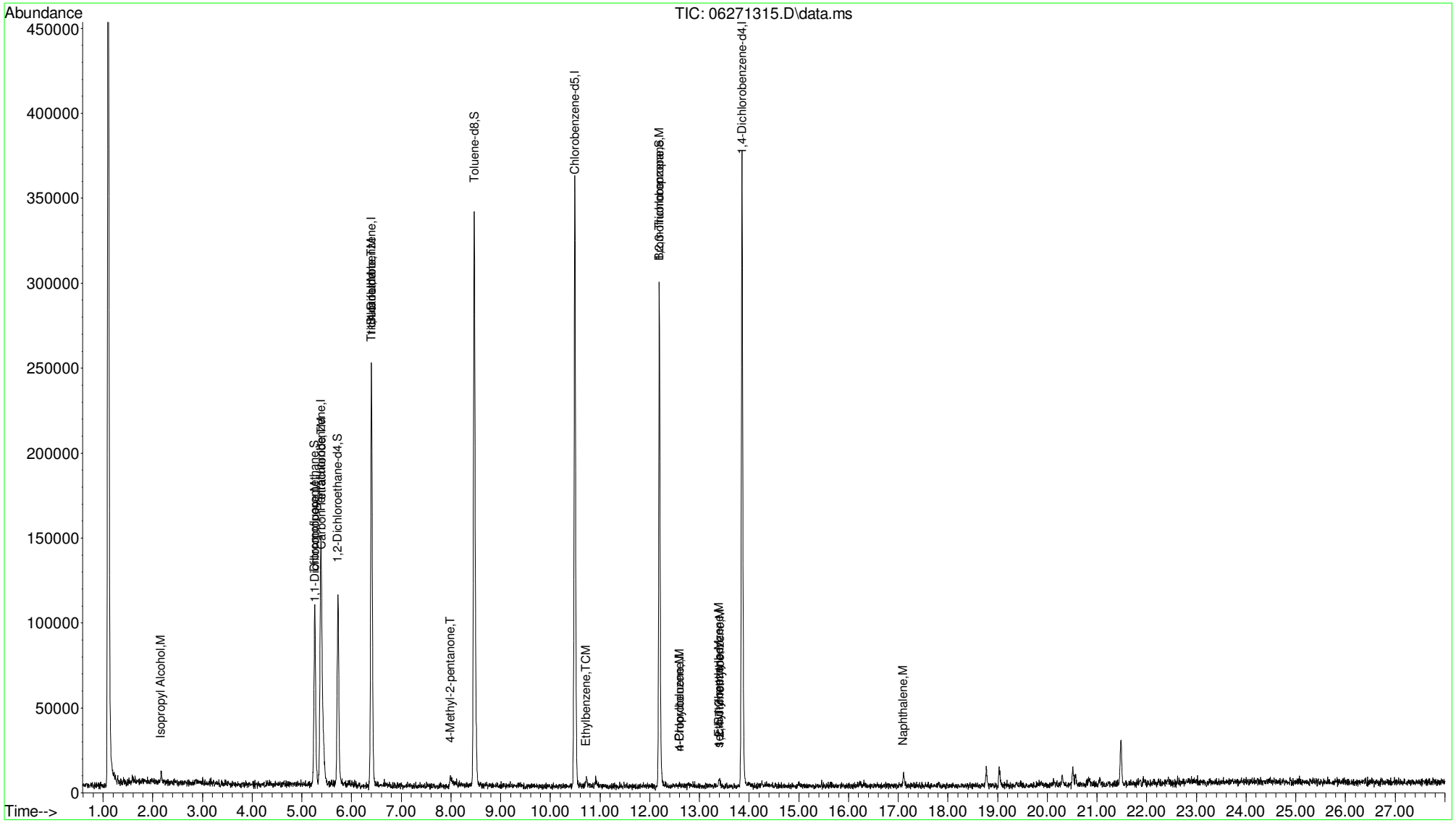
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.386	168	1639814	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.400	114	2478016	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.493	82	1286703	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1188710	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.259	113	706268	29.57	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 98.57%			
32) 1,2-Dichloroethane-d4	5.722	102	183538	32.19	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 107.30%			
48) Toluene-d8	8.469	98	3021539	29.83	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.43%			
68) Bromofluorobenzene	12.195	174	943001	29.43	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 98.10%			
Target Compounds						Qvalue
9) Isopropyl Alcohol	2.164	45	3565	2.05	ug/L #	61
33) Carbon Tetrachloride	5.394	117	56086	2.60	ug/L #	12
36) 1,1-Dichloropropene	5.262	110	11095	1.22	ug/L #	1
37) 1-Butanol	6.405	56	27605	43.64	ug/L #	17
39) Trichloroethene	6.396	95	70162	3.45	ug/L #	7
46) 4-Methyl-2-pentanone	7.989	43	57785	2.51	ug/L #	44
59) Ethylbenzene	10.716	91	21192	0.25	ug/L #	44
70) 1,2,3-Trichloropropane	12.195	75	606566	33.36	ug/L #	42
71) n-Propylbenzene	12.602	91	16134	0.22	ug/L #	53
75) 4-Chlorotoluene	12.602	91	16131	0.28	ug/L #	46
77) 1-Ethyl-2-methylbenzene	13.397	105	37214	0.52	ug/L #	44
78) 1,2,4-Trimethylbenzene	13.408	105	41160	0.70	ug/L #	39
79) sec-Butylbenzene	13.397	105	37218	0.63	ug/L #	56
88) Naphthalene	17.099	128	76240	2.08	ug/L	87

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271315.D
Acq On : 27 Jun 2013 6:07 pm Operator: erp
Sample : SAMP 13060776-004A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 14

Quant Time: Jun 28 10:09:54 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271316.D
Acq On : 27 Jun 2013 6:43 pm Operator: erp
Sample : SAMP 13060776-005A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 28 10:10:59 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

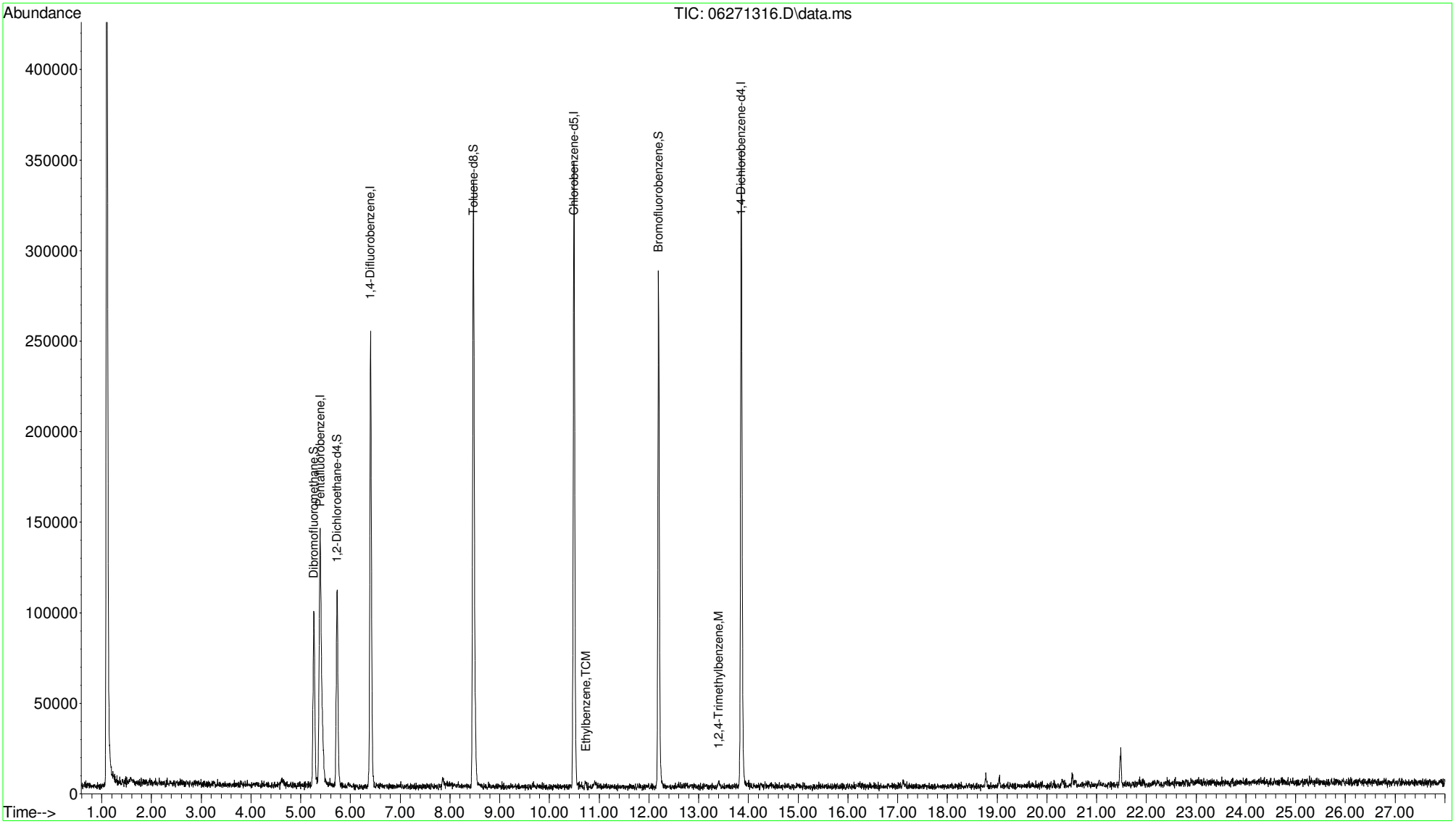
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1568973	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.405	114	2486861	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.493	82	1297046	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1167510	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	696687	30.49	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 101.63%			
32) 1,2-Dichloroethane-d4	5.734	102	188579	32.96	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 109.87%			
48) Toluene-d8	8.469	98	3019105	29.70	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.00%			
68) Bromofluorobenzene	12.195	174	933094	28.89	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 96.30%			
Target Compounds						Qvalue
59) Ethylbenzene	10.733	91	28711	0.33	ug/L #	44
78) 1,2,4-Trimethylbenzene	13.407	105	22403	0.39	ug/L #	39

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271316.D
Acq On : 27 Jun 2013 6:43 pm Operator: erp
Sample : SAMP 13060776-005A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 28 10:10:59 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271316.D
Acq On : 27 Jun 2013 6:43 pm Operator: erp
Sample : SAMP 13060776-005A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 15

Quant Time: Jun 28 10:10:36 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1568973	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.405	114	2486861	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.493	82	1297046	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.854	152	1167510	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	696687	30.49	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 101.63%			
32) 1,2-Dichloroethane-d4	5.734	102	188579	32.96	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 109.87%			
48) Toluene-d8	8.469	98	3019105	29.70	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 99.00%			
68) Bromofluorobenzene	12.195	174	933094	28.89	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 96.30%			
Target Compounds						Qvalue
12) Acetone	2.132	43	2584	0.32	ug/L #	45
33) Carbon Tetrachloride	5.388	117	155830	7.20	ug/L #	12
39) Trichloroethene	6.408	95	74337	3.64	ug/L #	7
59) Ethylbenzene	10.733	91	28711	0.33	ug/L #	44
70) 1,2,3-Trichloropropane	12.193	75	621714	34.82	ug/L #	42
75) 4-Chlorotoluene	12.591	91	13003	0.23	ug/L #	46
78) 1,2,4-Trimethylbenzene	13.407	105	22403	0.39	ug/L #	39

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271316.D
Acq On : 27 Jun 2013 6:43 pm Operator: erp
Sample : SAMP 13060776-005A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
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Quant Time: Jun 28 10:10:36 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
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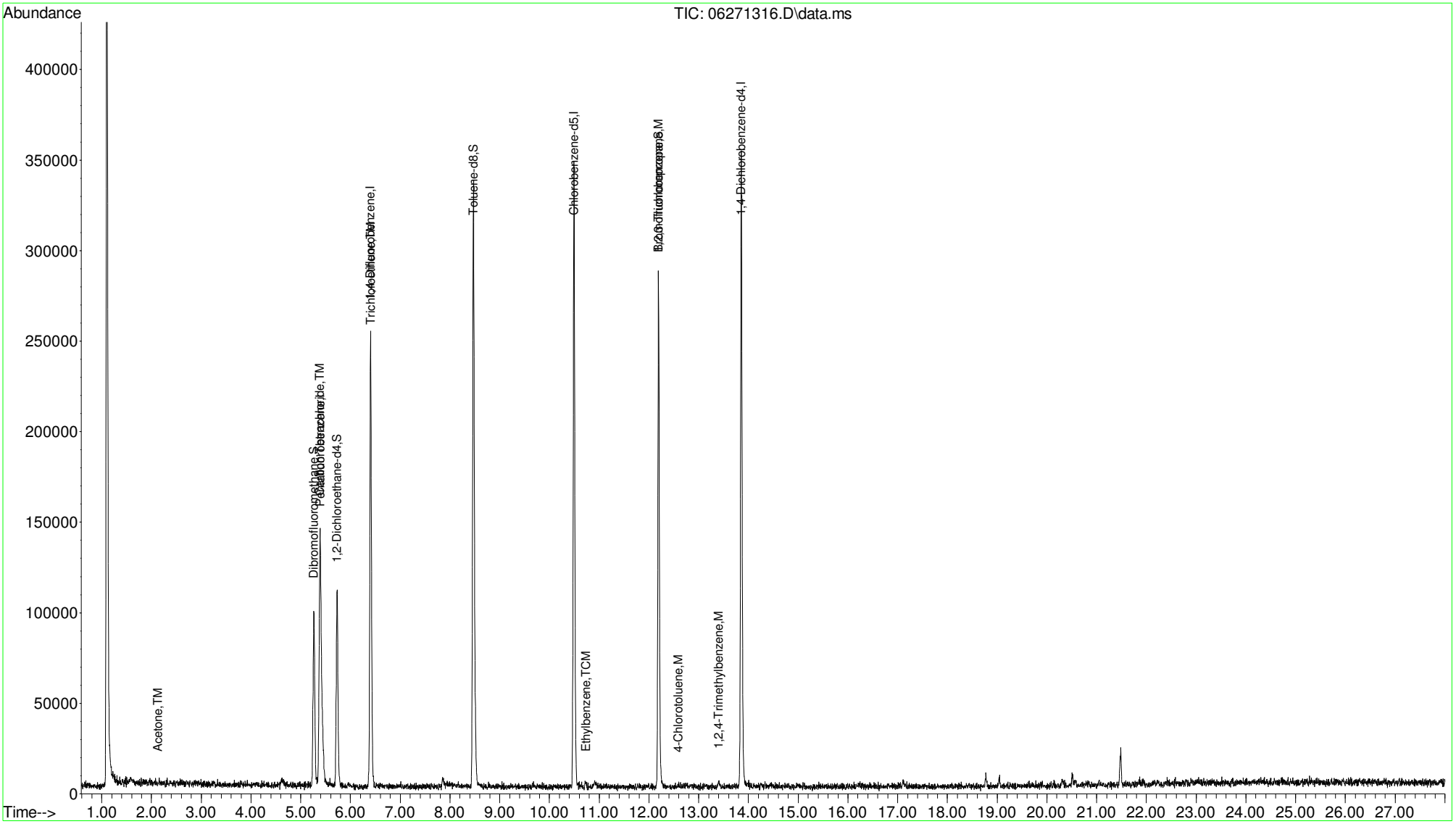
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271317.D
Acq On : 27 Jun 2013 7:19 pm Operator: erp
Sample : SAMP 13060776-006A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 16

Quant Time: Jun 28 10:11:45 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

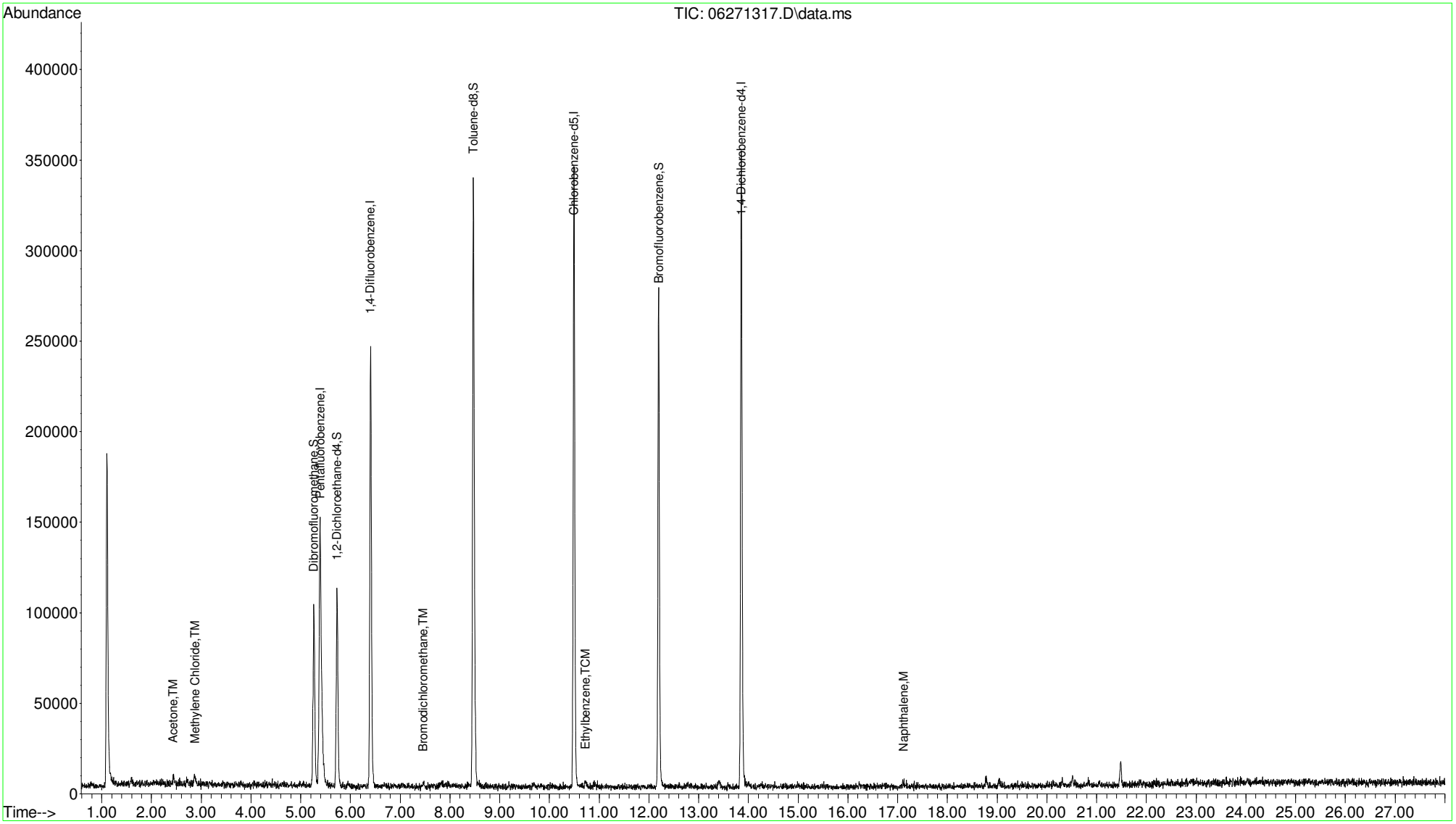
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1575285	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	2437523	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1261898	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1167626	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	703028	30.64	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 102.13%			
32) 1,2-Dichloroethane-d4	5.733	102	173086	30.86	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 102.87%			
48) Toluene-d8	8.469	98	3039092	30.50	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 101.67%			
68) Bromofluorobenzene	12.197	174	944541	30.06	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 100.20%			
Target Compounds						Qvalue
12) Acetone	2.440	43	66448	8.09	ug/L #	45
15) Methylene Chloride	2.877	84	22230	1.01	ug/L #	13
42) Bromodichloromethane	7.460	83	18494	0.75	ug/L #	73
59) Ethylbenzene	10.732	91	31010	0.37	ug/L #	44
88) Naphthalene	17.120	128	24563	0.68	ug/L #	76

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271317.D
Acq On : 27 Jun 2013 7:19 pm Operator: erp
Sample : SAMP 13060776-006A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 16

Quant Time: Jun 28 10:11:45 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : \\Harrison\RAWDATA\VOC-7\2013-7\0613-7\062713\
Data File : 06271317.D
Acq On : 27 Jun 2013 7:19 pm Operator: erp
Sample : SAMP 13060776-006A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 16

Quant Time: Jun 28 10:11:45 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

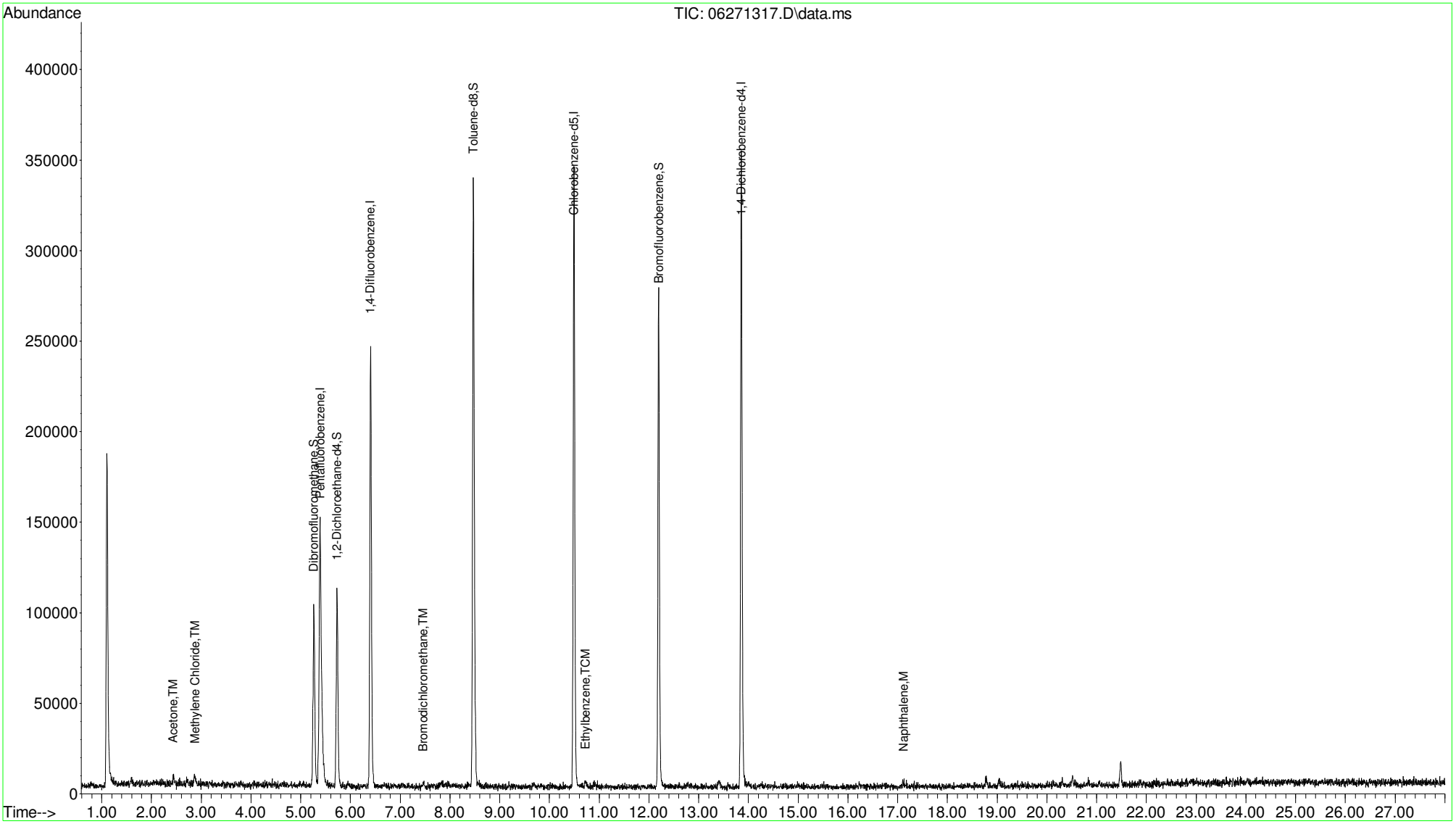
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1575285	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	2437523	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1261898	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1167626	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	703028	30.64	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 102.13%			
32) 1,2-Dichloroethane-d4	5.733	102	173086	30.86	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 102.87%			
48) Toluene-d8	8.469	98	3039092	30.50	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 101.67%			
68) Bromofluorobenzene	12.197	174	944541	30.06	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 100.20%			
Target Compounds						Qvalue
12) Acetone	2.440	43	66448	8.09	ug/L #	45
15) Methylene Chloride	2.877	84	22230	1.01	ug/L #	13
42) Bromodichloromethane	7.460	83	18494	0.75	ug/L #	73
59) Ethylbenzene	10.732	91	31010	0.37	ug/L #	44
88) Naphthalene	17.120	128	24563	0.68	ug/L #	76

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

Quantitation Report (QT Reviewed)

Data Path : \\Harrison\RAWDATA\VOC-7\2013-7\0613-7\062713\
Data File : 06271317.D
Acq On : 27 Jun 2013 7:19 pm Operator: erp
Sample : SAMP 13060776-006A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 16

Quant Time: Jun 28 10:11:45 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271317.D
Acq On : 27 Jun 2013 7:19 pm Operator: erp
Sample : SAMP 13060776-006A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 16

Quant Time: Jun 28 10:11:09 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration

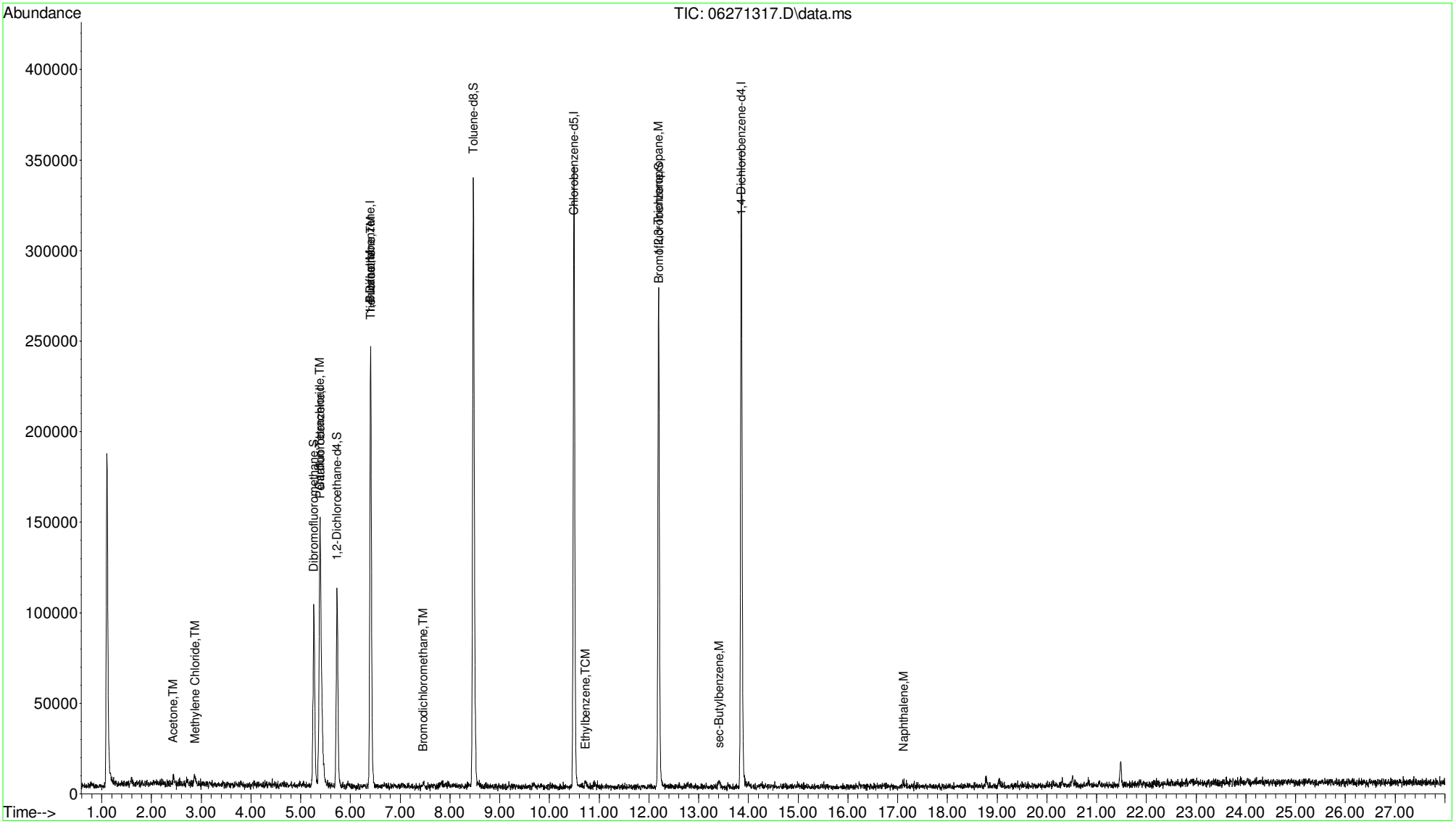
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.389	168	1575285	30.00	ug/L	0.00
31) 1,4-Difluorobenzene	6.404	114	2437523	30.00	ug/L	0.00
50) Chlorobenzene-d5	10.492	82	1261898	30.00	ug/L	0.00
69) 1,4-Dichlorobenzene-d4	13.856	152	1167626	30.00	ug/L	# 0.00
System Monitoring Compounds						
29) Dibromofluoromethane	5.263	113	703028	30.64	ug/L	0.00
Spiked Amount 30.000	Range 86 - 118		Recovery = 102.13%			
32) 1,2-Dichloroethane-d4	5.733	102	173086	30.86	ug/L	0.00
Spiked Amount 30.000	Range 80 - 120		Recovery = 102.87%			
48) Toluene-d8	8.469	98	3039092	30.50	ug/L	0.00
Spiked Amount 30.000	Range 88 - 110		Recovery = 101.67%			
68) Bromofluorobenzene	12.197	174	944541	30.06	ug/L	0.00
Spiked Amount 30.000	Range 86 - 115		Recovery = 100.20%			
Target Compounds						Qvalue
12) Acetone	2.440	43	66448	8.09	ug/L #	45
15) Methylene Chloride	2.877	84	22230	1.01	ug/L #	13
33) Carbon Tetrachloride	5.385	117	132990	6.27	ug/L #	12
37) 1-Butanol	6.404	56	59478	95.59	ug/L #	17
39) Trichloroethene	6.406	95	70114	3.50	ug/L #	7
42) Bromodichloromethane	7.460	83	18494	0.75	ug/L #	73
59) Ethylbenzene	10.732	91	31010	0.37	ug/L #	44
70) 1,2,3-Trichloropropane	12.193	75	599530	33.57	ug/L #	42
79) sec-Butylbenzene	13.416	105	23505	0.41	ug/L #	56
88) Naphthalene	17.120	128	24563	0.68	ug/L #	76

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\VOA7\062713\
Data File : 06271317.D
Acq On : 27 Jun 2013 7:19 pm Operator: erp
Sample : SAMP 13060776-006A Inst : VOA7
Misc : VOC_W+ 5mL Multiplr: 1.00
ALS Vial : 16

Quant Time: Jun 28 10:11:09 2013
Quant Method : C:\msdchem\1\DATA\VOA7\062713\W7060913.M
Quant Title : VOC-7 Water-8260B/624 J&W 20m x 180um x 1um nominMon Jun 10 14:34:29 2013
QLast Update : Mon Jun 10 14:34:29 2013
Response via : Initial Calibration



STAT Analysis Corporation

Semi-Volatile Organic Compounds (SVOCs)

SW846 8270C

Quality Control Data

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

STAT **Analysis Corporation**

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Test No: SW8270C-SIM **Matrix:** W

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	DCBZ12D4	NO2BZD5	PHEN2F	PHEND14				
MB-70059-PNA	80.2	84.4	90.6	93.6				
LCS-70059-PNA	77.8	86.2	93.4	92.4				
13060776-001B	73.8	86.8	84.4	87.8				
13060776-002B	83.2	89.2	94.2	97.0				
13060776-003B	76.8	83.0	87.8	92.8				
13060776-004B	71.8	86.8	82.2	85.8				
13060776-005B	74.4	85.4	91.6	94.2				
13060778-001BMS	82.2	95.8	90.2	89.4				
13060778-001BMSD	72.0	83.2	87.0	89.8				

Acronym		Surrogate	QC Limits
DCBZ12D4	=	1,2-Dichlorobenzene-d4	16-110
NO2BZD5	=	Nitrobenzene-d5	35-114
PHEN2F	=	2-Fluorobiphenyl	43-116
PHEND14	=	4-Terphenyl-d14	33-141

*** Surrogate recovery outside acceptance limit**

STAT **Analysis Corporation**

PREP BATCH REPORT

Prep Start Date: **6/24/2013 11:37:05**
Prep End Date:

Prep Factor Units: **mL / L**

Prep Batch **70059** Prep Code: **3510_PNA** Technician: **VCC**

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
MB-70059-PNA			1	0	0	1	1.000	6/24/2013	6/25/2013
LCS-70059-PNA			1	0	0	1	1.000	6/24/2013	6/25/2013
13060748-001B	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060776-001B	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060776-002B	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060776-003B	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060776-004B	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060778-001B	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060778-001BMS	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060778-001BMSD	Water		1	0	0	1	1.000	6/24/2013	6/25/2013
13060776-005B	Water		1	0	0	1	1.000	6/25/2013	6/25/2013
13060777-001B	Water		1	0	0	1	1.000	6/25/2013	6/25/2013
13060809-001B	Water		1	0	0	1	1.000	6/25/2013	6/25/2013
13060810-001B	Water		1	0	0	1	1.000	6/25/2013	6/25/2013
13060829-001B	Water		1	0	0	1	1.000	6/25/2013	6/25/2013
13060829-002A	Water		1	0	0	1	1.000	6/25/2013	6/25/2013
13060829-003A	Water		0.1	0	0	1	10.000	6/25/2013	6/25/2013

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STAT Analysis SDG No.: 13060776

Lab Code: _____

Lab File ID (Standard): 06261303.D Date Analyzed: 6/26/2013

Instrument ID: SVOC-7 Time Analyzed: 10:51

GC Column: ID: (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	34191	4.381	108149	5.440	78430	6.900	154495	8.115
UPPER LIMIT	68382	4.881	216298	5.940	156860	7.400	308990	8.615
LOWER LIMIT	17096	3.881	54075	4.940	39215	6.400	77248	7.615
SAMPLE NO.								
01 MB-70059-PNA	32243	4.38	98552	5.44	68898	6.90	143421	8.12
02 LCS-70059-PNA	29982	4.38	90032	5.44	64189	6.90	134931	8.12
03 062113091	33892	4.38	110459	5.44	73989	6.90	159221	8.12
04 062113092	36832	4.38	113918	5.44	80569	6.90	161039	8.12
05 062113093	32086	4.38	99027	5.44	70594	6.90	143886	8.12
06 062113094	32543	4.38	107125	5.44	74781	6.90	156509	8.11
07 062113096	35515	4.38	103959	5.44	79916	6.90	151929	8.12
08 MS	34711	4.38	113307	5.45	83261	6.90	171701	8.11
09 MSD	38848	4.38	119086	5.44	88131	6.90	173272	8.12

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STAT Analysis SDG No.: 13060776

Lab Code: _____

Lab File ID (Standard): 06261303.D Date Analyzed: 6/26/2013

Instrument ID: SVOC-7 Time Analyzed: 10:51

GC Column: ID: (mm)

		IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
	12 HOUR STD	194300	10.340	168947	11.570				
	UPPER LIMIT	388600	10.840	337894	12.070				
	LOWER LIMIT	97150	9.840	84474	11.070				
	SAMPLE NO.								
01	MB-70059-PNA	174511	10.35	129158	11.59				
02	LCS-70059-PNA	172441	10.35	123987	11.59				
03	062113091	193443	10.35	139519	11.60				
04	062113092	202640	10.35	153260	11.58				
05	062113093	175194	10.35	137773	11.59				
06	062113094	185514	10.35	134717	11.58				
07	062113096	192887	10.35	144278	11.59				
08	MS	207770	10.35	156106	11.59				
09	MSD	216503	10.35	162228	11.58				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STAT Analysis SDG No.: 13060776

Lab Code: _____

Lab File ID (Standard): 06271303.D Date Analyzed: 6/27/2013

Instrument ID: SVOC-7 Time Analyzed: 10:52

GC Column: ID: (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	32901	4.360	101140	5.424	71460	6.884	150684	8.093
UPPER LIMIT	65802	4.860	202280	5.924	142920	7.384	301368	8.593
LOWER LIMIT	16451	3.860	50570	4.924	35730	6.384	75342	7.593
SAMPLE NO.								
01 062113091	28978	4.37	97868	5.42	67579	6.88	136605	8.10

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STAT Analysis SDG No.: 13060776

Lab Code: _____

Lab File ID (Standard): 06271303.D Date Analyzed: 6/27/2013

Instrument ID: SVOC-7 Time Analyzed: 10:52

GC Column: ID: (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	194273	10.323	166865	11.554				
UPPER LIMIT	388546	10.823	333730	12.054				
LOWER LIMIT	97137	9.823	83433	11.054				
SAMPLE NO.								
01 062113091	169415	10.33	115123	11.56				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Semi-Volatile Organic Compounds (SVOCs)

SW846 8270C

Initial Calibration

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

STAT Analysis Corporation

ATTACHMENT 4: DATA REVIEW CHECKLIST – BATCH DATA

SemiVolatiles SOP 4020, EPA 8270C

First Level Reviewer: DMarisca Review Date: 6/27/13

Second Level Reviewer: M Pendleton Review Date: 6/27/13

Analysis date: 6/5/13 Batch Start Time: 1311 Instrument: 5000-7

Page 1 of 1 Continuing Calibration Verification (CCV) and Batch Data

Item	Aspect	1st Yes	Level No	2nd Yes	Level No	Comments: record routine corrective actions here	CAR # QER#
1	Tune meets criteria	✓		✓			
2	All Analyses in tune period 12hr	✓		✓			
3	CCV Acceptance criteria met: SPCCs: =0.05 CCCs: = 20%D RT: ± 30 seconds Int stds: -50% to +100% Correct ICAL RFs used	✓ ✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓ ✓			
4	Method Blank < RL False pos/neg checked Surrogates acceptable	✓ ✓ ✓		✓ ✓ ✓			
5	LCS/LCSD recovery acceptable Surrogates acceptable	✓ ✓		✓ ✓			
6	MS/MSD recov/RPD acceptable Surrogates acceptable	✓ ✓		✓ ✓			
7	Test Samples: Correct IDs Surrogates acceptable False pos/neg checked RL, Units Results within curve Dilutions performed	✓ ✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓ ✓			
8	MB, LCS/LCSD, MS/MSD per batch of 20 samples	✓		✓			
9	Manual Integration acceptable: List files	✓		✓		see attachment	
10	Int Stds Check (optional)	✓		✓			
11	Tune & QC Solns ID recorded	✓		✓		58-39-516, 5-41	
12	All other information recorded	✓		✓			
13	LIMS transcription correct	✓		✓			
14	Analysis within holding time	✓		✓			
15	All samples correct pH	NA		NA			
16	Autosampler tray checked	✓		✓			
17	Corrections properly recorded	✓		✓			

Additional Comments:

ATTACHMENT 3: DATA REVIEW CHECKLIST - ICAL

SemiVolatiles SOP 4020, EPA 8270C

First Level Reviewer: J Marisceal Review Date: 6/27/13

Second Level Reviewer: M Pendleton Review Date: 6/27/13

Analysis date: 6/5/13 Batch Start Time: 1011 Instrument: SVOC-7

ICAL Data File #s: 06051303 - 06051308

Page 1 of 1 Initial Calibration (ICAL)

Item	Aspect	1st Yes	Level No	2nd Yes	Level No	Comments: record routine corrective actions here	CAR # / QER #
1	Tune meets criteria	✓		✓			
2	# of Stds 8 (minimum = 5)	✓		✓			
3	All Stds in tune period: 12hr All Stds. Sequenced w/in 36 hrs.	✓ ✓		✓ ✓			
4	Acceptance criteria met for: SPCCs: =0.05 CCCs: = 30 % RSD %RSD = 15% avg RF used r = 0.99 linear regression used RRT ± 0.06 RT units	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓ ✓			
5	Calibration updated: RF RT Mid-level used for int stds Correct data files used	✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓			
6	RL = low std = 1 µg/mL RL = 1 µg/mL for (list)	✓		✓			
7	High std = 120 µg/mL High std = 120 µg/mL for (list)	✓		✓			
8	ICV acceptable for: CCCs: = 20%D RT: ± 30 seconds Int stds: -50% to +100% Other compounds	✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓			
9	Manual Integration acceptable: List files	✓		✓		see attachments	
10	Tune & QC Solns ID recorded	✓		✓		58-385, 516, 544-559	
11	All other information recorded	✓		✓			

Additional Comments:

Injection Log

Instrument Name: SVOC-7
Data Directory: C:\msdchem\1\data\060513\

Line	Vial	FileName	Mult	SampleName	Misc Info	Injected
1	20	06041320.D	1.	SAMP 13051144-008A	TO_13A	4 Jun 2013 6:19 pm
2	1	06051301.D	1.	SOLVENT BLANK	SOLVENT BLANK	5 Jun 2013 9:49 am
3	2	06051302.D	1.	TUNE DFTPP-1	DFTPP_D	5 Jun 2013 10:11 am
4	3	06051303.D	1.	ICAL 0.1 SSTD	PNA_QC	5 Jun 2013 10:34 am
5	4	06051304.D	1.	ICAL 0.5 SSTD	PNA_QC	5 Jun 2013 10:56 am
6	5	06051305.D	1.	ICAL 1.0 SSTD	PNA_QC	5 Jun 2013 11:18 am
7	6	06051306.D	1.	ICAL 5.0 SSTD	PNA_QC	5 Jun 2013 11:41 am
8	7	06051307.D	1.	ICAL 7.5.0 SSTD	PNA_QC	5 Jun 2013 12:03 pm
9	8	06051308.D	1.	ICAL 10.0 SSTD	PNA_QC	5 Jun 2013 12:26 pm
10	9	06051309.D	1.	ICV 5.0 SSTD	PNA_QC	5 Jun 2013 12:48 pm
11	2	06051310.D	1.	TUNE DFTPP-1	DFTPP_D	5 Jun 2013 1:11 pm
12	6	06051311.D	1.	CCV 5.0 SSTD	PNA_QC	5 Jun 2013 1:33 pm
13	10	06051312.D	1.	SAMP 13051132-004B	PNA_WATER+	5 Jun 2013 1:56 pm
14	11	06051313.D	1.	SAMP 13051132-005B	PNA_WATER+	5 Jun 2013 2:18 pm
15	12	06051314.D	1.	SAMP 13051094-006B	PNA_WATER+	5 Jun 2013 2:40 pm
16	13	06051315.D	1.	SAMP 13051094-007B	PNA_WATER+	5 Jun 2013 3:03 pm
17	14	06051316.D	1.	SAMP 13051179-002B	PNA_WATER+	5 Jun 2013 3:25 pm
18	15	06051317.D	1.	SAMP 13051179-003B	PNA_WATER+	5 Jun 2013 3:48 pm
19	16	06051318.D	1.	MBLK MB-69597-PNA	PNA_WATER+	5 Jun 2013 4:10 pm
20	17	06051319.D	1.	SAMP 13051132-004B	PNA_WATER+	5 Jun 2013 4:33 pm
21	18	06051320.D	1.	SAMP 13051132-004B	PNA_WATER+	5 Jun 2013 4:55 pm
22	19	06051321.D	1.	LCS LCS-69597-PNA	PNA_WATER+	5 Jun 2013 5:17 pm
23	20	06051322.D	1.	MS 13051179-003BMS	PNA_WATER+	5 Jun 2013 5:40 pm
24	21	06051323.D	1.	MSD 13051179-003BMSD	PNA_WATER+	5 Jun 2013 6:02 pm
25	22	06051324.D	1.	SAMP 13051179-001B	PNA_WATER+	5 Jun 2013 6:24 pm
26	23	06051325.D	1.	SAMP 13051179-004B	PNA_WATER+	5 Jun 2013 6:47 pm
27	24	06051326.D	1.	MS 13051179-004BMS	PNA_WATER+	5 Jun 2013 7:09 pm
28	25	06051327.D	1.	MSD 13051179-004BMSD	PNA_WATER+	5 Jun 2013 7:31 pm
29	26	06051328.D	1.	SAMP 13051179-005B	PNA_WATER+	5 Jun 2013 7:54 pm
30	27	06051329.D	1.	SAMP 13051179-006B	PNA_WATER+	5 Jun 2013 8:16 pm
31	28	06051330.D	1.	SAMP 13051179-007B	PNA_WATER+	5 Jun 2013 8:38 pm
32	29	06051331.D	1.	SAMP 13051179-008B	PNA_WATER+	5 Jun 2013 9:01 pm
33	30	06051332.D	1.	SAMP 13051132-004B	PNA_WATER+	5 Jun 2013 9:23 pm

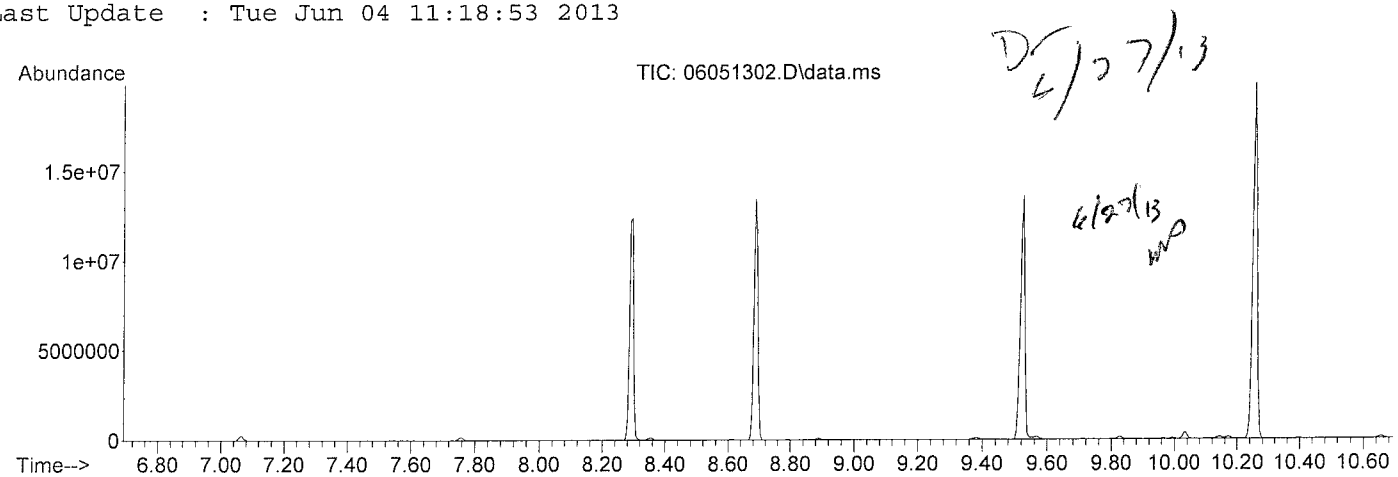
D 6/27/13

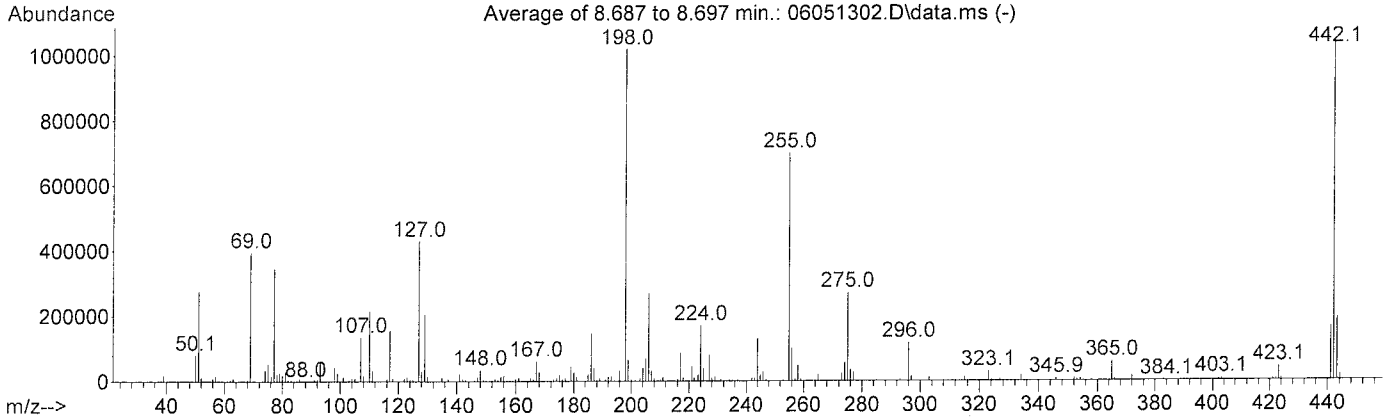
6/27/13 WP

Data Path : C:\msdchem\1\data\060513\
Data File : 06051302.D
Acq On : 5 Jun 2013 10:11 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-39-516
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Integration File: events.e

Method : C:\msdchem\1\data\060513\dftpp.M
Title : DFTPP Tune
Last Update : Tue Jun 04 11:18:53 2013





Spectrum Information: Average of 8.687 to 8.697 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	26.6	277168	PASS
68	69	0.00	2	1.6	6387	PASS
69	198	0.00	100	38.8	396696	PASS
70	69	0.00	2	0.5	1896	PASS
127	442	10	80	41.4	431579	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	98.0	1021611	PASS
199	198	5	9	6.8	69160	PASS
275	442	10	60	26.1	271848	PASS
365	198	1	100	5.9	60232	PASS
441	442	0.01	24	15.9	165941	PASS
442	442	50	100	100.0	1041963	PASS
443	442	15	24	18.6	193701	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051302.D
Acq On : 5 Jun 2013 10:11 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-39-516
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:48:21 2013
Quant Method : C:\msdchem\1\data\060513\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 05 15:47:55 2013
Response via : Initial Calibration

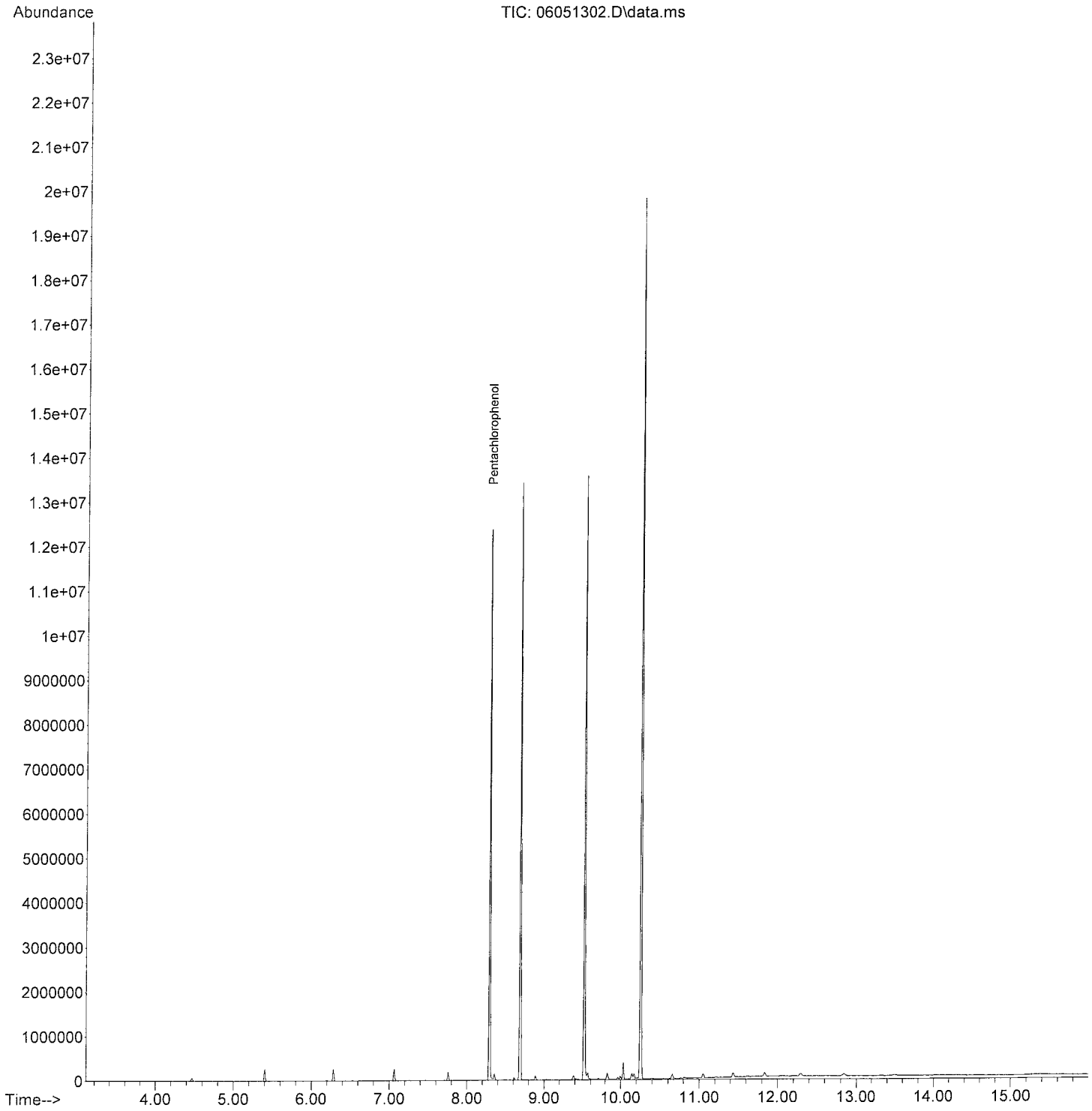
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
2) DFTPP	8.691	198	12865210	0.00	area	# 0.00
6) DDT	10.258	235	35163375	0.00	area	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	8.297	266	14608271	424.82	area	99
3) Benzidine	9.527	184	52943152	N.D.		
4) DDE	0.000		0	N.D. d		
5) DDD	10.035	235	635788	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051302.D
Acq On : 5 Jun 2013 10:11 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-39-516
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:48:21 2013
Quant Method : C:\msdchem\1\data\060513\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 05 15:47:55 2013
Response via : Initial Calibration



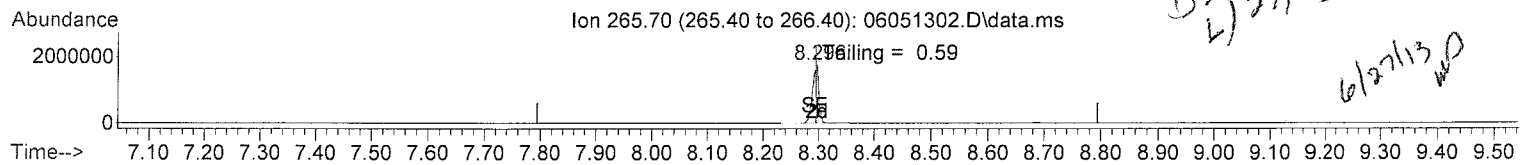
Quantitation Report (Qedit)

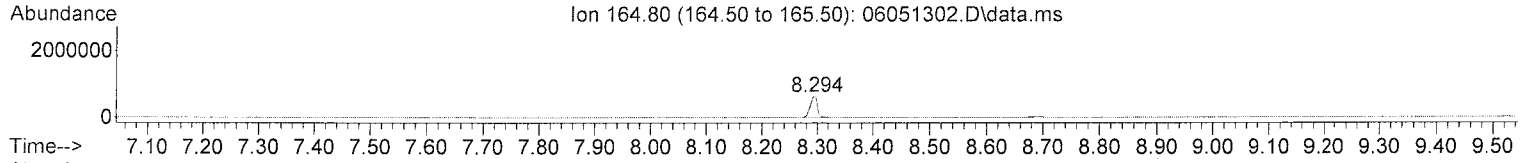
Data Path : C:\msdchem\1\data\060513\
Data File : 06051302.D
Acq On : 5 Jun 2013 10:11 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-39-516
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

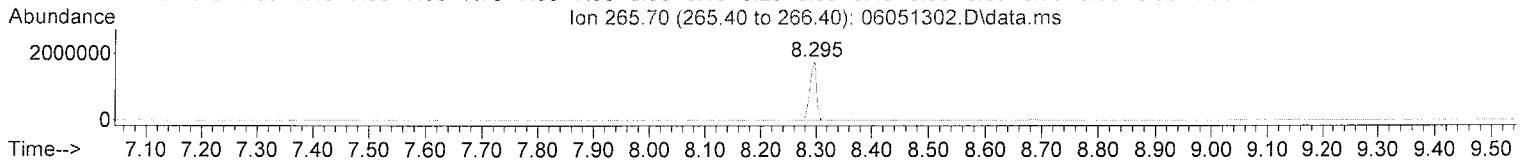
Quant Time: Jun 05 15:48:07 2013
Quant Method : C:\msdchem\1\data\060513\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 05 15:47:55 2013
Response via : Initial Calibration

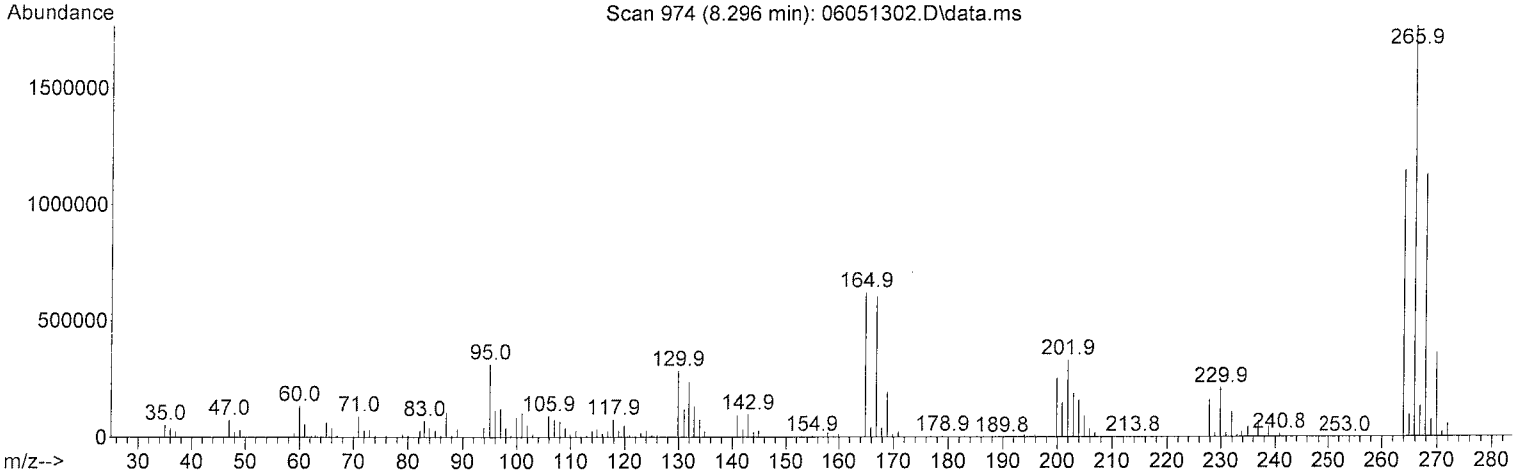
D 6/27/13

6/27/13 WD









TIC: 06051302.D\data.ms

(1) Pentachlorophenol

8.297min (+ 0.002) 424.82 area

response 14608271

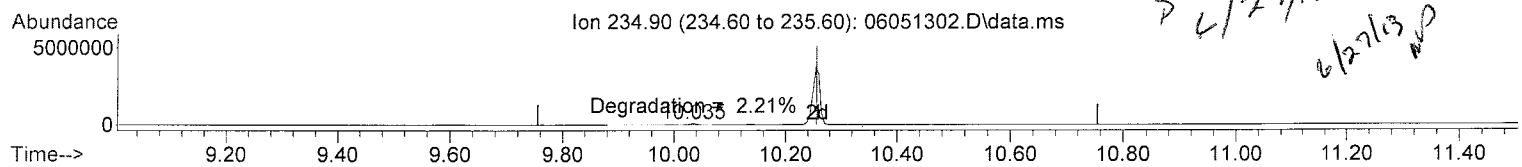
Ion	Exp%	Act%
265.70	100.00	100.00
164.80	35.20	38.41
265.70	100.00	100.00
0.00	0.00	0.00

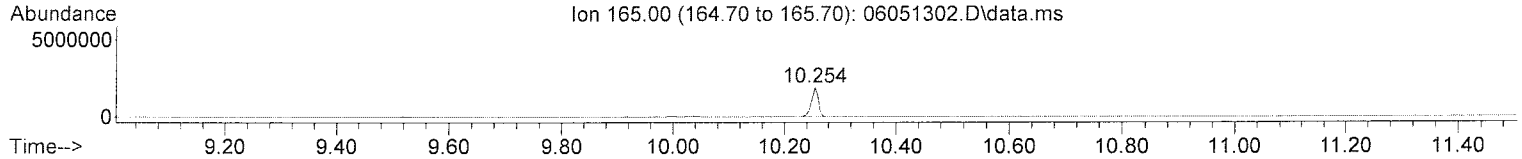
Quantitation Report (Qedit)

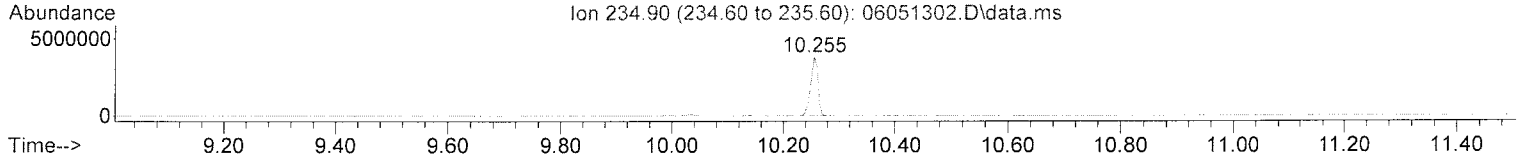
Data Path : C:\msdchem\1\data\060513\
Data File : 06051302.D
Acq On : 5 Jun 2013 10:11 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-39-516
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

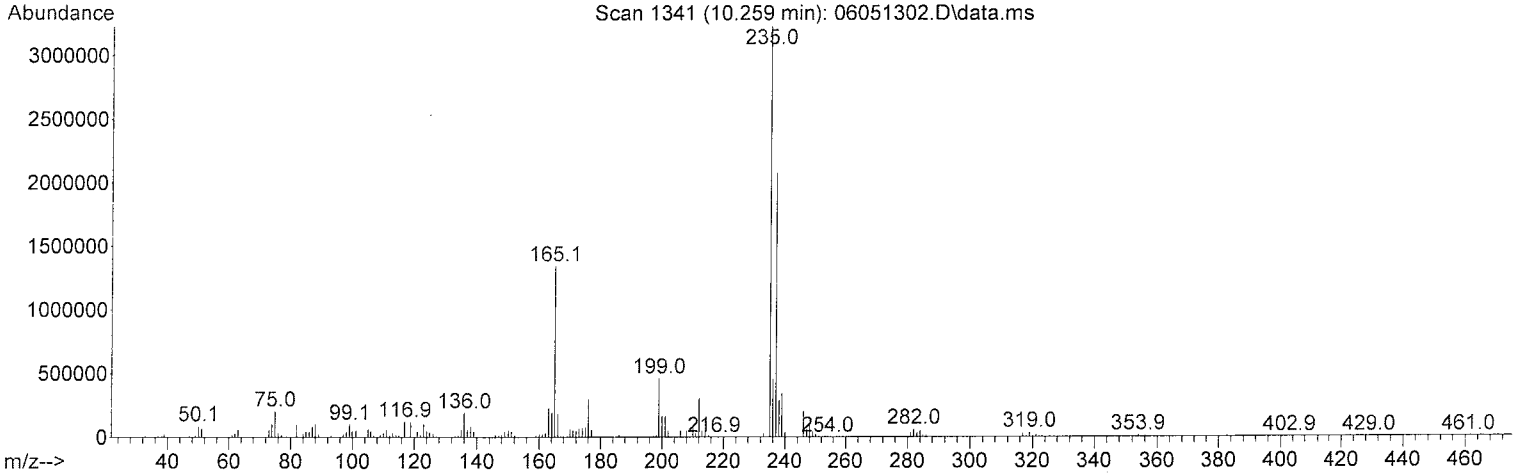
Quant Time: Jun 05 15:48:07 2013
Quant Method : C:\msdchem\1\data\060513\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 05 15:47:55 2013
Response via : Initial Calibration

D 6/27/13
6/27/13 MP









TIC: 06051302.D\data.ms

(6) DDT

10.258min (+ 0.002) 0.00 area

response 35163375

Ion	Exp%	Act%
234.90	100.00	100.00
165.00	49.40	46.90
234.90	100.00	100.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051302.D
Acq On : 5 Jun 2013 10:11 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-39-516
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:48:07 2013
Quant Method : C:\msdchem\1\data\060513\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 05 15:47:55 2013
Response via : Initial Calibration

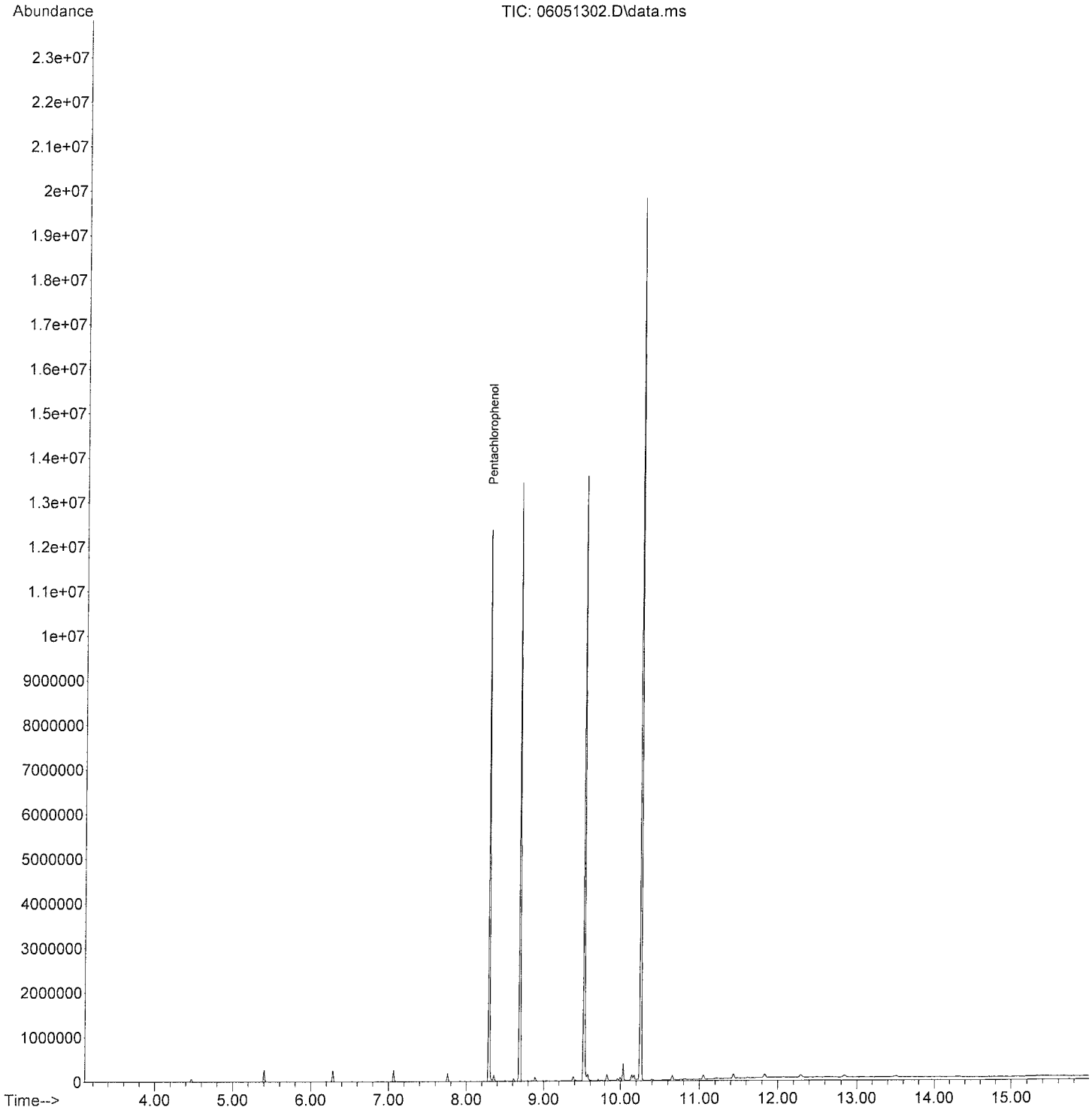
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
2) DFTPP	8.691	198	12865210	0.00	area	# 0.00
6) DDT	10.258	235	35163375	0.00	area	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	8.297	266	14608271	424.82	area	99
3) Benzidine	9.527	184	52943152	N.D.		
4) DDE	10.036	235	638184	N.D.		
5) DDD	10.035	235	635788	N.D.		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051302.D
Acq On : 5 Jun 2013 10:11 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-39-516
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:48:07 2013
Quant Method : C:\msdchem\1\data\060513\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 05 15:47:55 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:50:50 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration

D 6/27/13 6/27/13

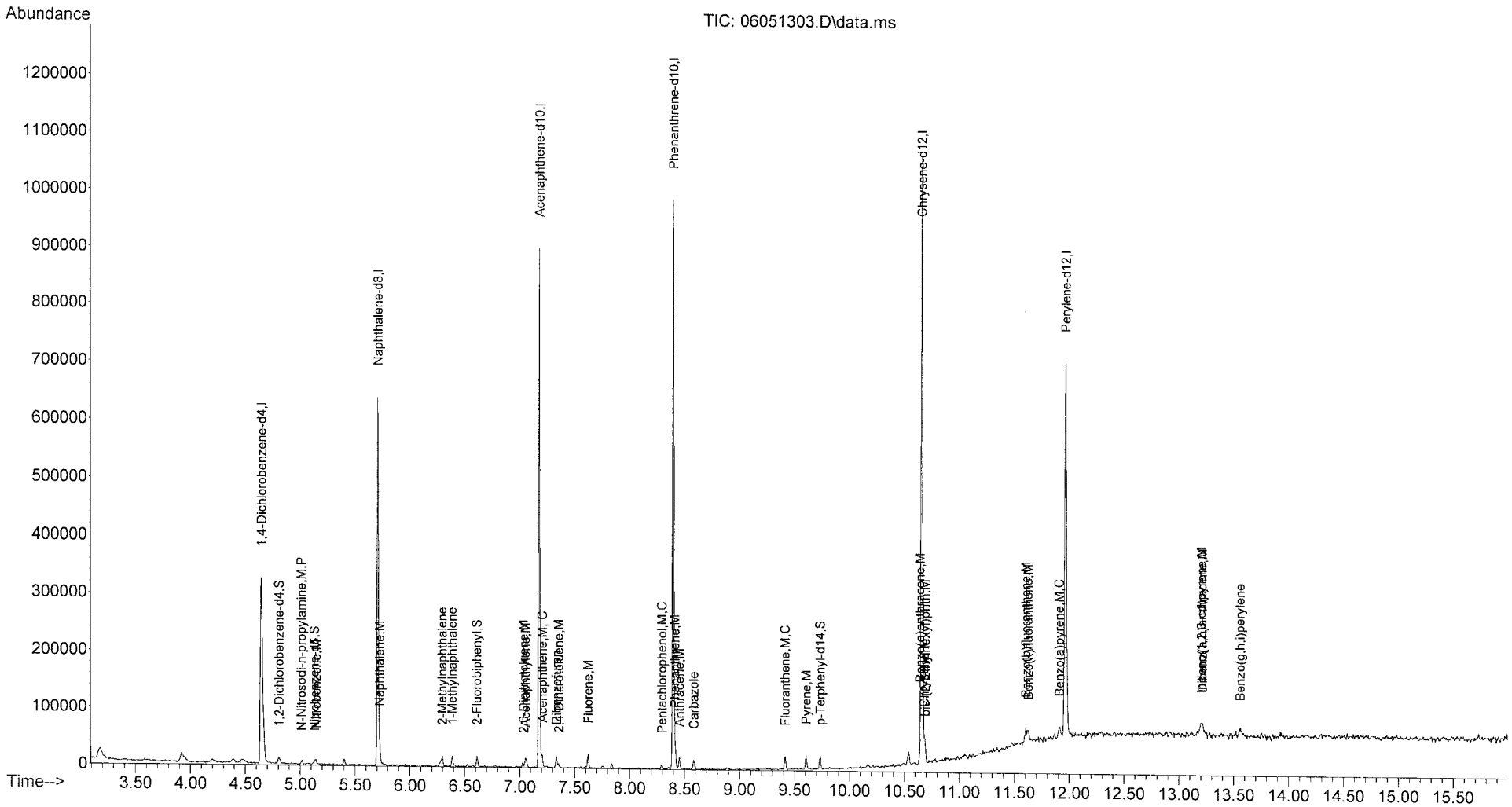
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	73304	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	237633	4.00	ngs	0.00
13) Acenaphthene-d10	7.179	164	162254	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	322107	4.00	ngs	0.00
26) Chrysene-d12	10.661	240	370673	4.00	ngs	0.00
33) Perylene-d12	11.971	264	292970	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.809	152	2296	0.10	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	0.20%#	
4) Nitrobenzene-d5	5.130	82	1967m	0.07	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	0.14%#	
10) 2-Fluorobiphenyl	6.612	172	5974	0.08	ngs	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	0.16%#	
25) p-Terphenyl-d14	9.735	244	8126	0.09	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	0.18%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.012	70	1054m	0.07	ngs	
5) Nitrobenzene	5.146	77	2196	0.07	ngs #	30
7) Naphthalene	5.724	128	6903	0.09	ngs #	69
8) 2-Methylnaphthalene	6.296	142	4059	0.08	ngs #	74
9) 1-Methylnaphthalene	6.387	142	4025	0.09	ngs #	88
11) Acenaphthylene	7.050	152	6544	0.08	ngs #	63
12) 2,6-Dinitrotoluene	7.034	165	1274m	0.09	ngs	
14) Acenaphthene	7.205	153	4639	0.09	ngs	88
15) Dibenzofuran	7.334	168	7676	0.08	ngs	99
16) 2,4-Dinitrotoluene	7.355	165	979m	0.05	ngs	
17) Fluorene	7.623	166	5772	0.09	ngs #	93
18) Pentachlorophenol	8.297	266	1157m	0.11	ngs	
20) Phenanthrene	8.414	178	9827	0.10	ngs #	64
21) Anthracene	8.457	178	7979	0.08	ngs #	61
22) Carbazole	8.585	167	6365	0.06	ngs #	59
23) Fluoranthene	9.414	202	9708	0.08	ngs #	79
24) Pyrene	9.607	202	11115	0.09	ngs #	80
27) Benzo(a)anthracene	10.645	228	10282m	0.09	ngs	
28) Chrysene	10.682	228	10387	0.09	ngs	97
29) bis-(2-Ethylhexyl)phth	10.693	149	7264	0.08	ngs #	56
30) Benzo(b)fluoranthene	11.607	252	10151	0.08	ngs #	89
31) Benzo(k)fluoranthene	11.629	252	9183m	0.09	ngs	
32) Benzo(a)pyrene	11.912	252	8508	0.08	ngs #	74
34) Indeno(1,2,3-cd)pyrene	13.207	276	9637	0.09	ngs #	74
35) Dibenz(a,h)anthracene	13.212	278	8985	0.11	ngs #	82
36) Benzo(g,h,i)perylene	13.560	276	8826	0.10	ngs #	54

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

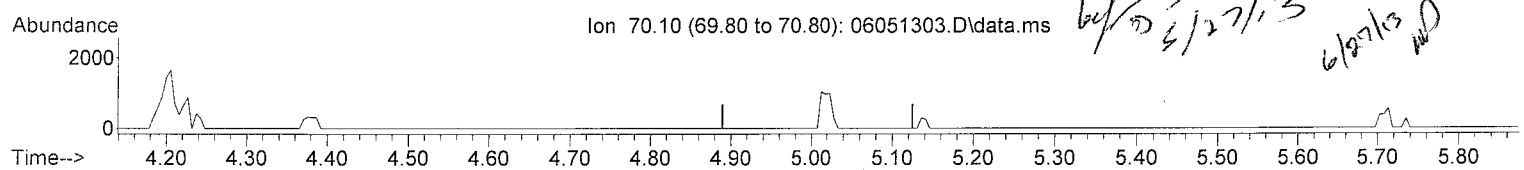
Quant Time: Jun 05 15:50:50 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration

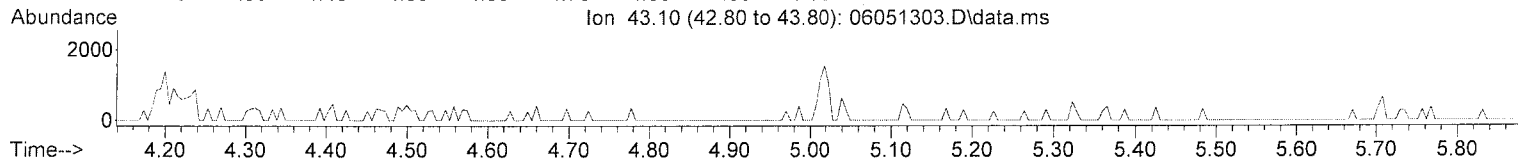


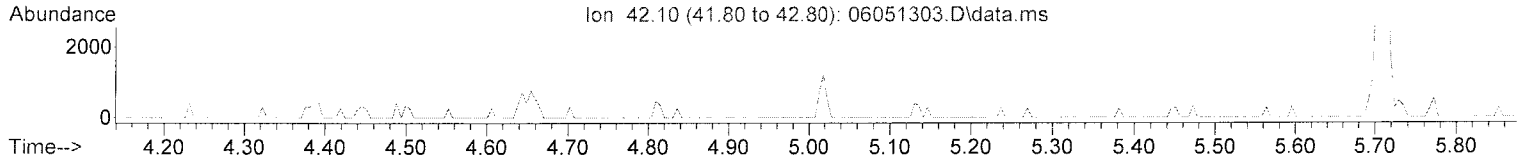
Quantitation Report (Qedit)

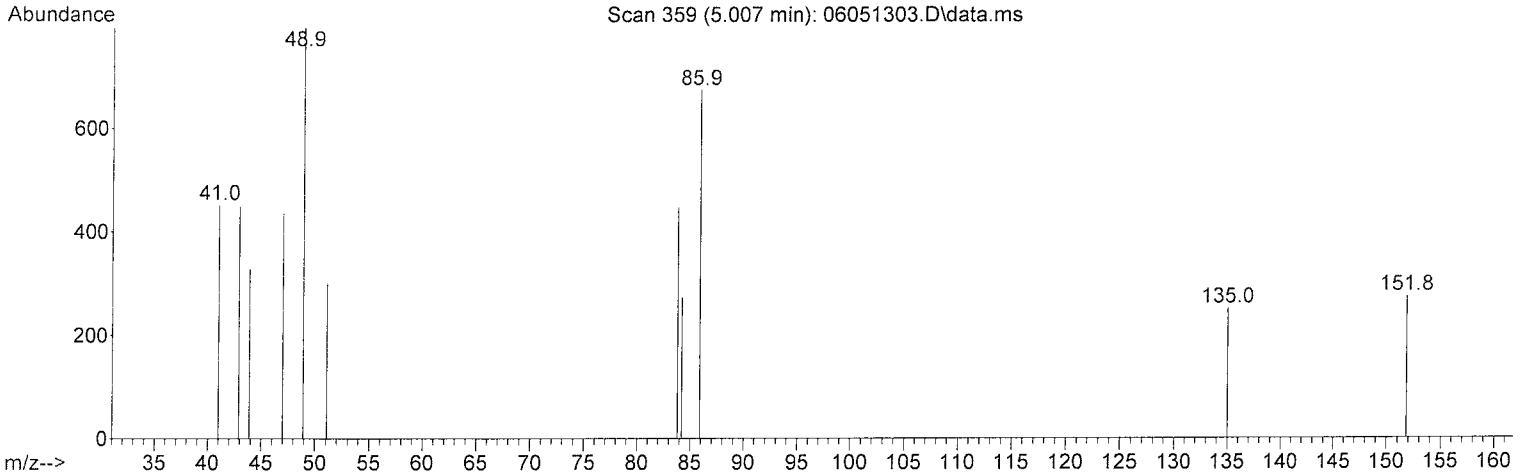
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(3) N-Nitrosodi-n-propylamine (M,P)

5.007min (-5.007) 0.00 ngs

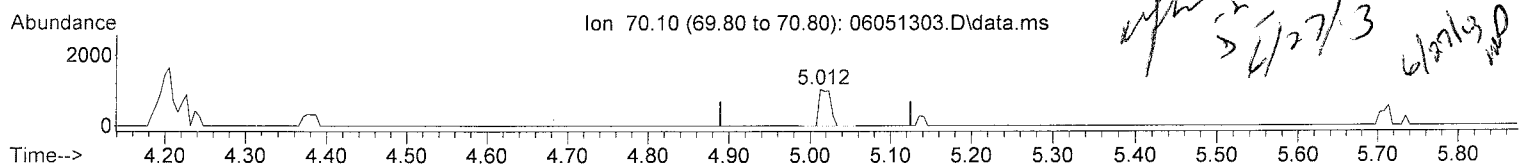
response 0

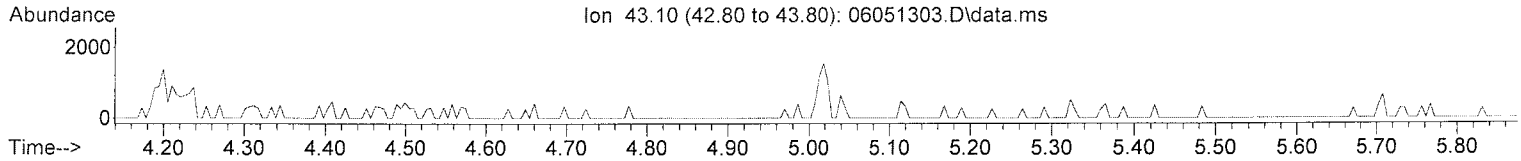
Ion	Exp%	Act%
70.10	100.00	0.00
43.10	84.50	0.00#
42.10	58.90	0.00#
0.00	0.00	0.00

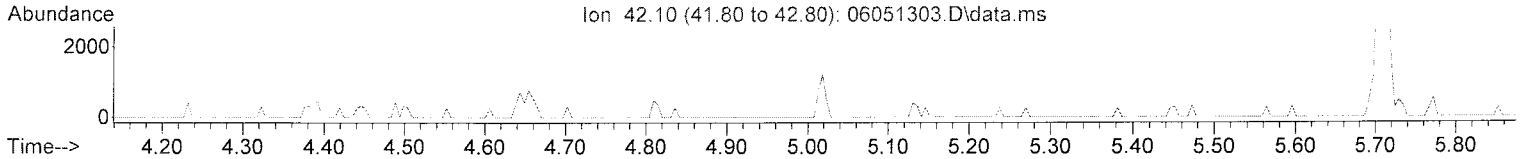
Quantitation Report (Qedit)

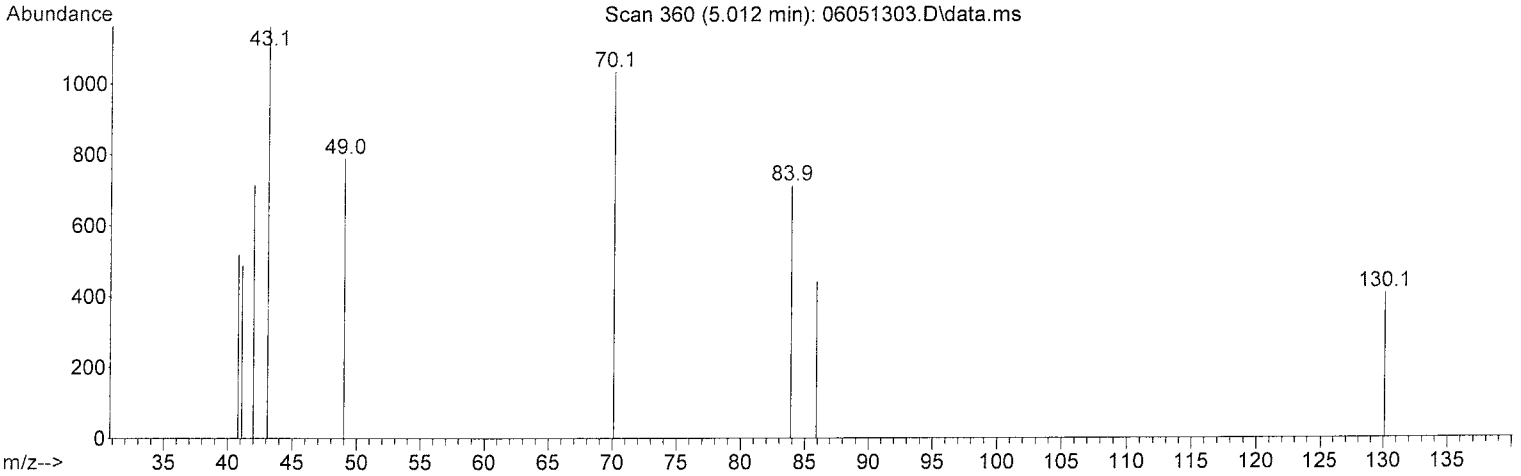
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(3) N-Nitrosodi-n-propylamine (M,P)

5.012min (+ 0.005) 0.07 ngs m

response 1054

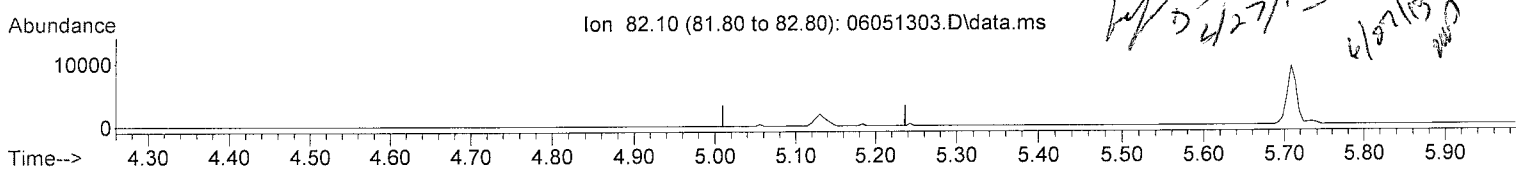
Ion	Exp%	Act%
70.10	100.00	100.00
43.10	84.50	0.00#
42.10	58.90	0.00#
0.00	0.00	0.00

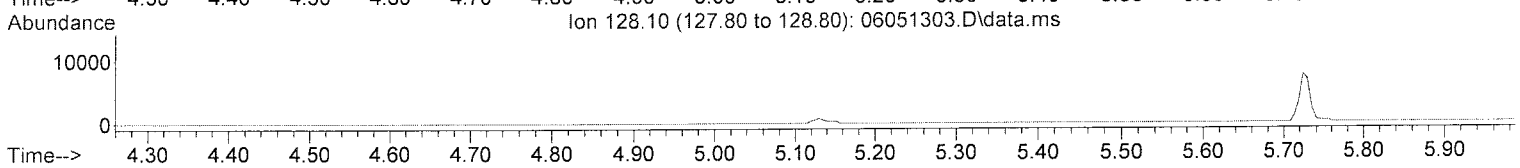
Quantitation Report (Qedit)

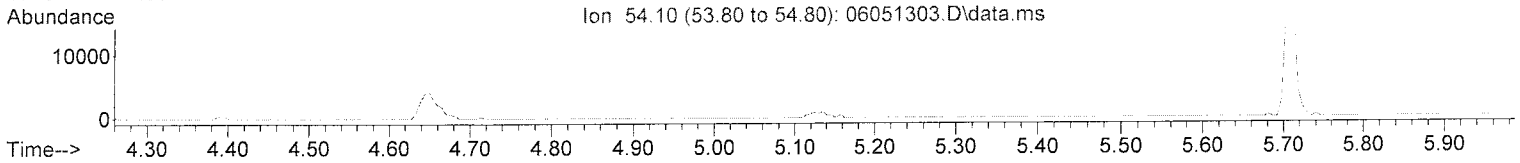
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

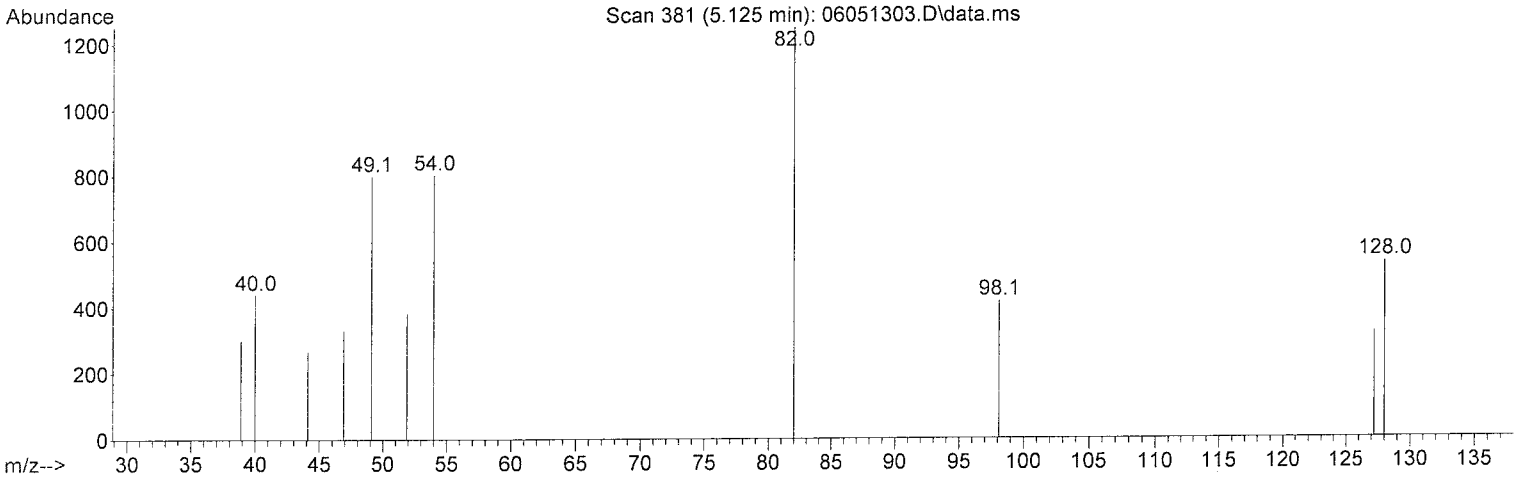
Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration

6/27/13 6/27/13









TIC: 06051303.D\data.ms

(4) Nitrobenzene-d5 (S)

5.123min (-5.123) 0.00 ngs

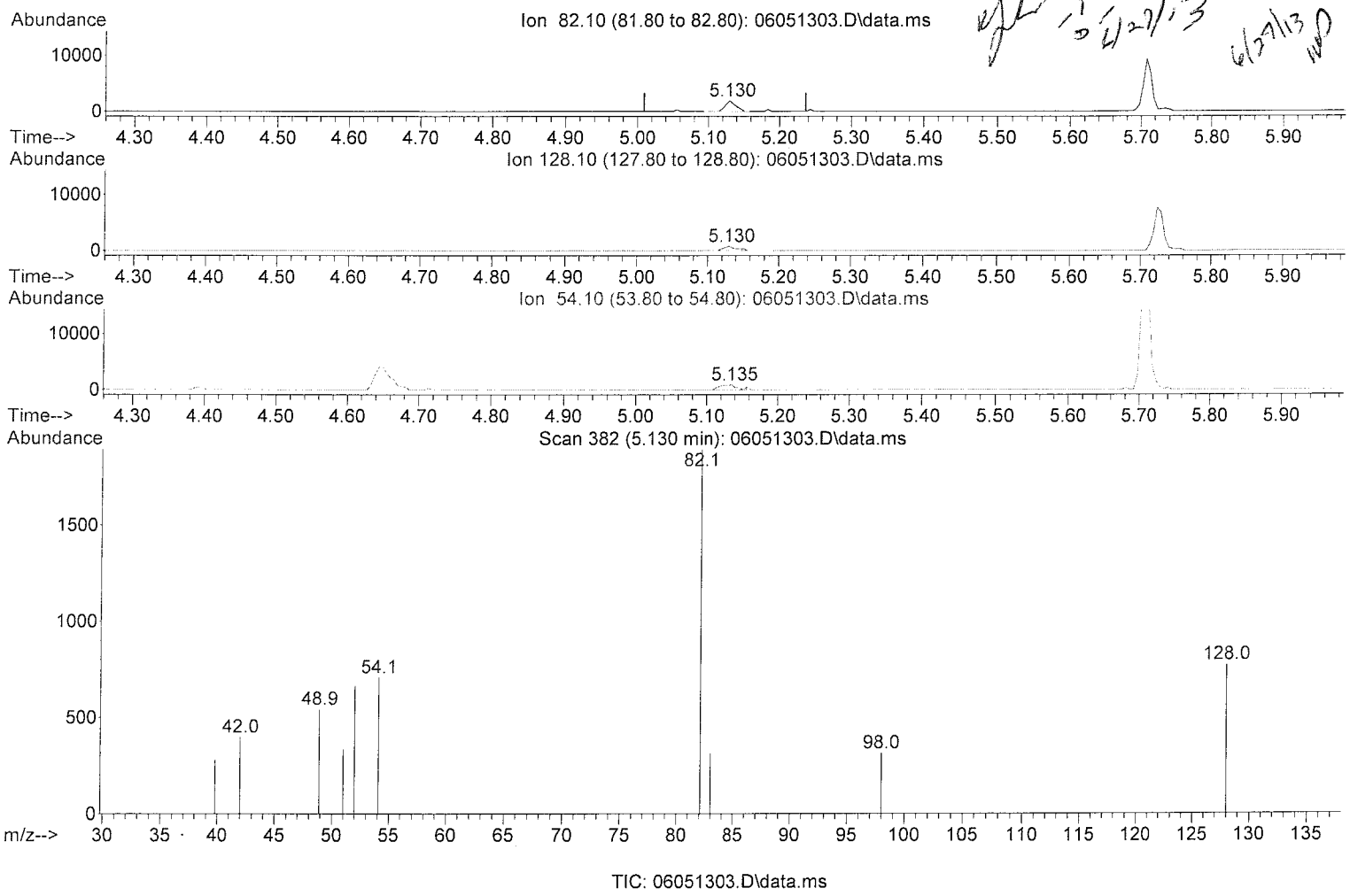
response 0

Ion	Exp%	Act%
82.10	100.00	0.00
128.10	42.60	0.00#
54.10	49.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration



TIC: 06051303.D\data.ms

(4) Nitrobenzene-d5 (S)

5.130min (+ 0.007) 0.07 ngs m

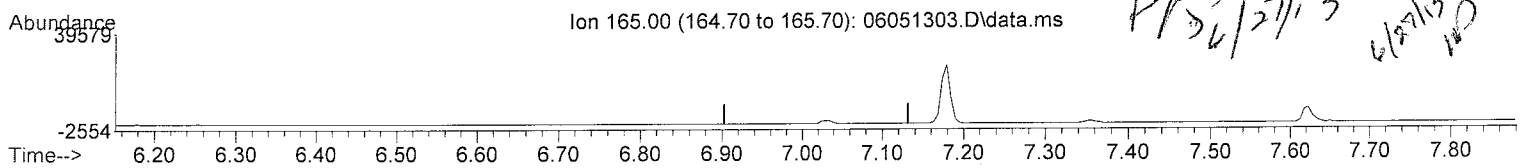
response 1967

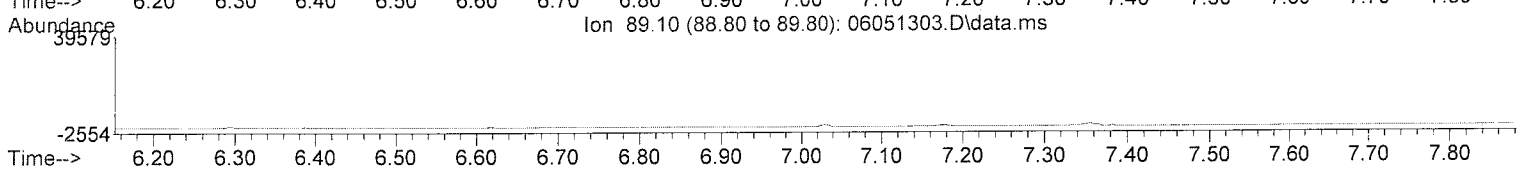
Ion	Exp%	Act%
82.10	100.00	100.00
128.10	42.60	50.43
54.10	49.70	73.21#
0.00	0.00	0.00

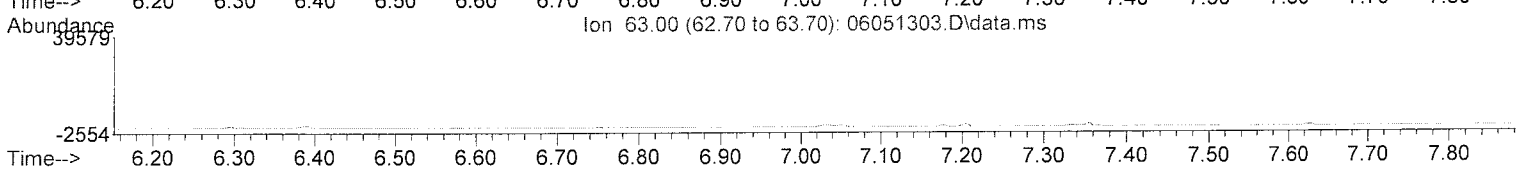
Quantitation Report (Qedit)

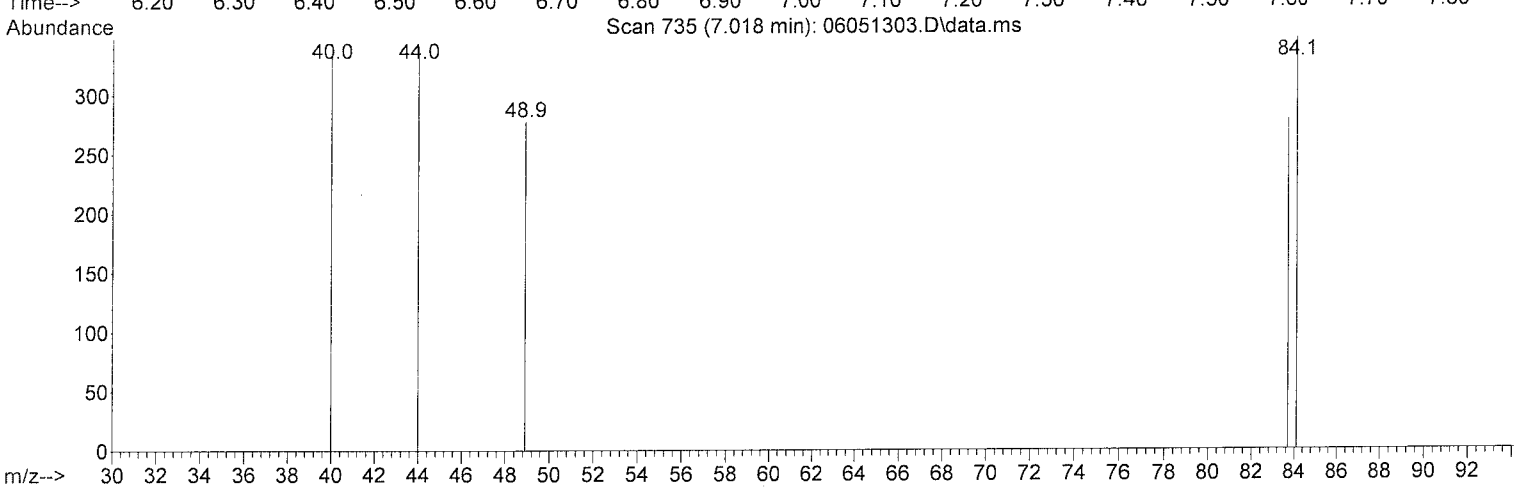
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(12) 2,6-Dinitrotoluene (M)

7.017min (-7.017) 0.00 ngs

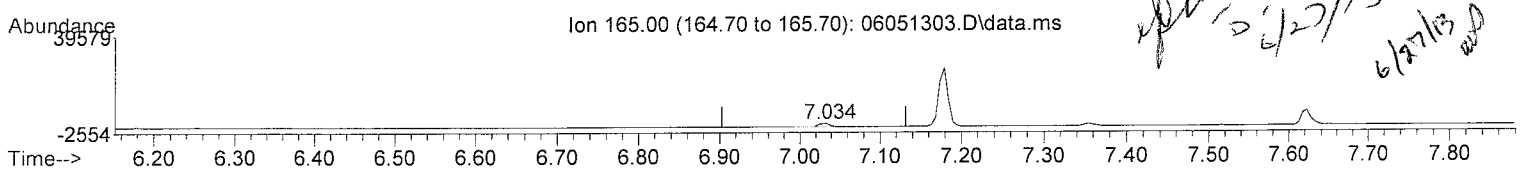
response 0

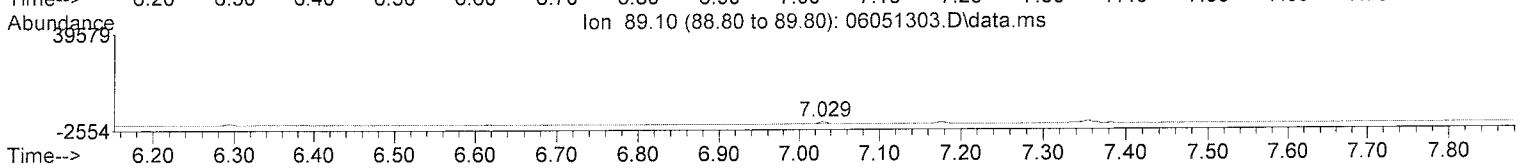
Ion	Exp%	Act%
165.00	100.00	0.00
89.10	57.50	0.00#
63.00	56.50	0.00#
0.00	0.00	0.00

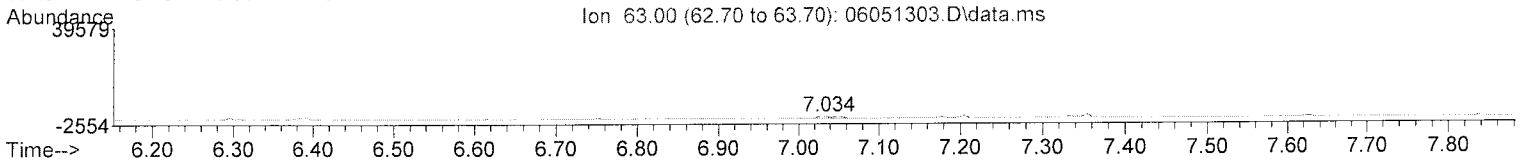
Quantitation Report (Qedit)

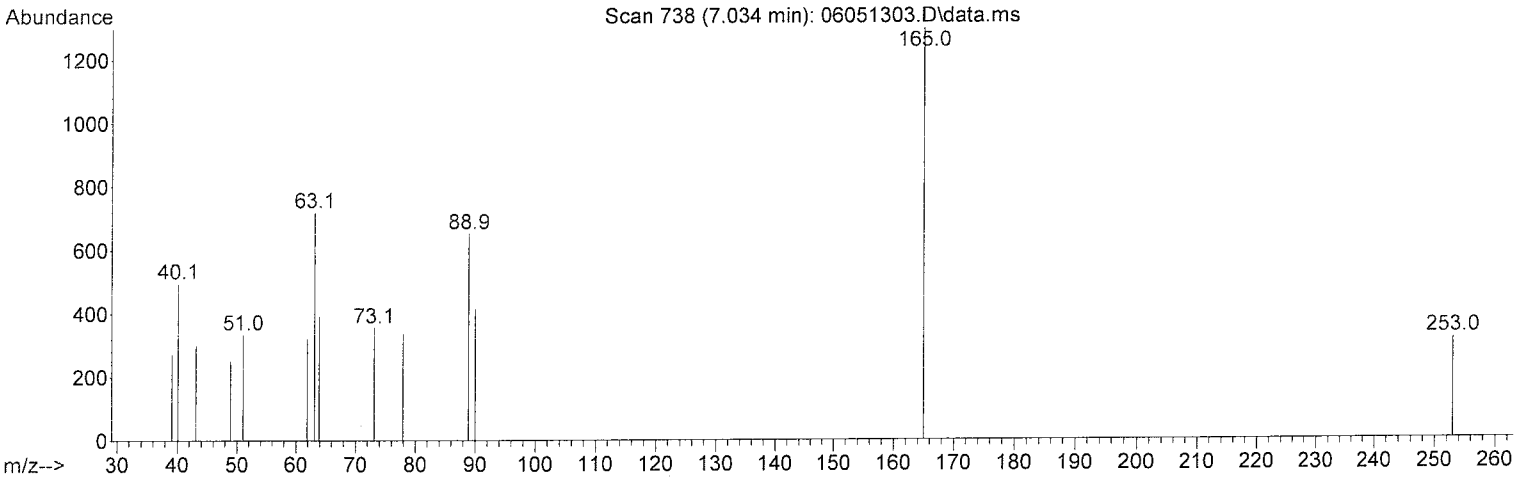
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(12) 2,6-Dinitrotoluene (M)

7.034min (+ 0.017) 0.09 ngs m

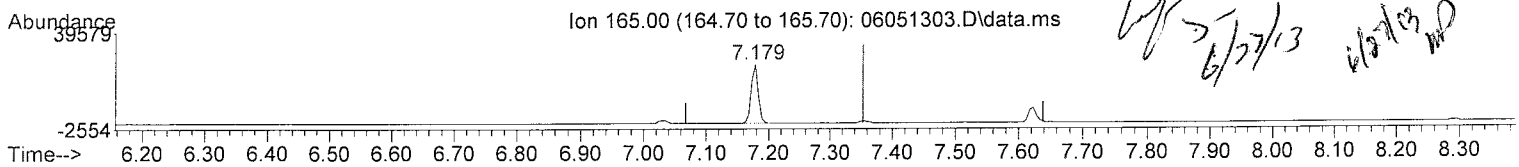
response 1274

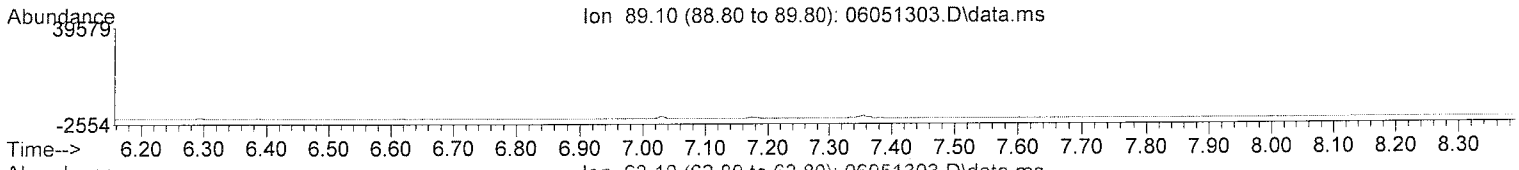
Ion	Exp%	Act%
165.00	100.00	100.00
89.10	57.50	49.53
63.00	56.50	95.13#
0.00	0.00	0.00

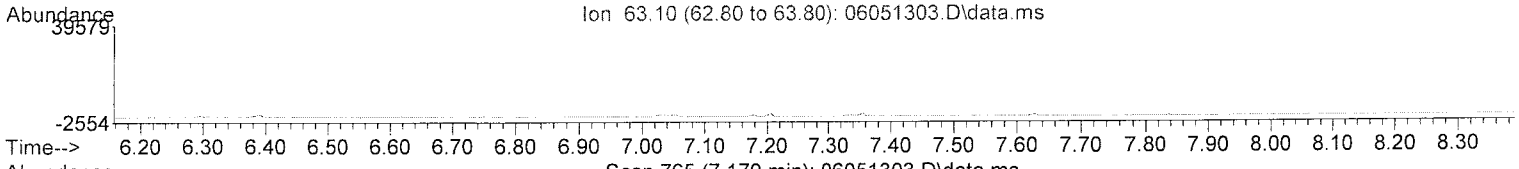
Quantitation Report (Qedit)

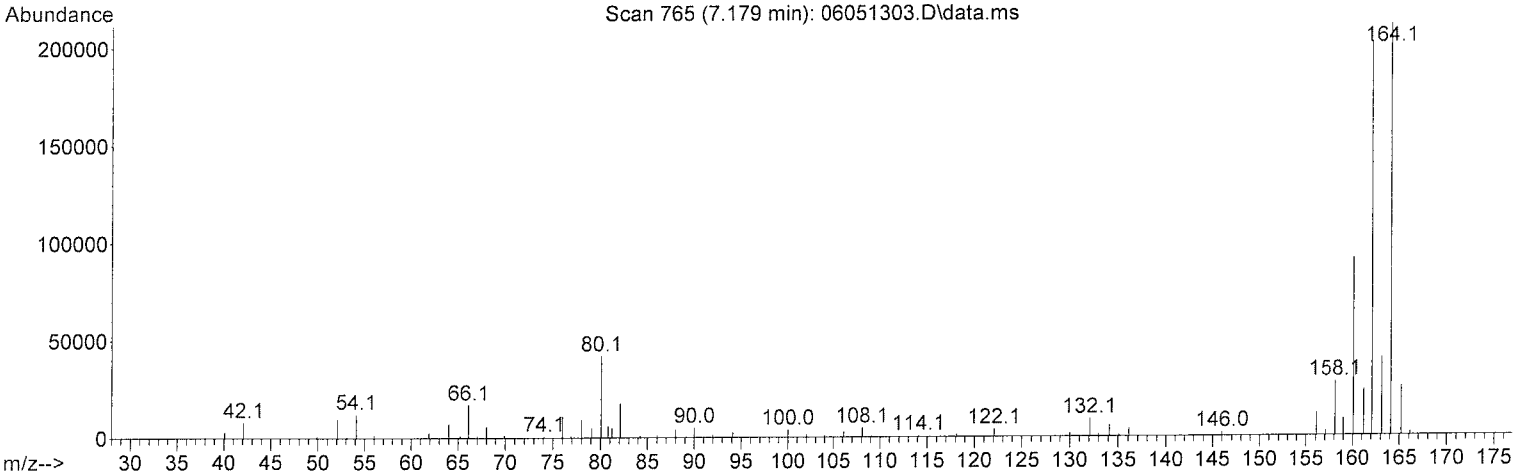
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(16) 2,4-Dinitrotoluene (M)

7.179min (-0.175) 1.13 ngs

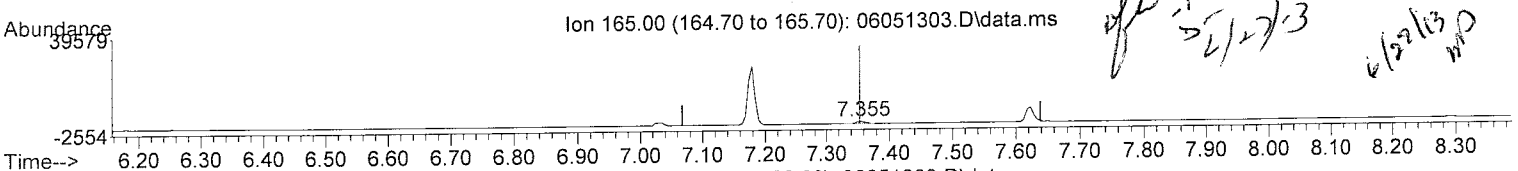
response 20309

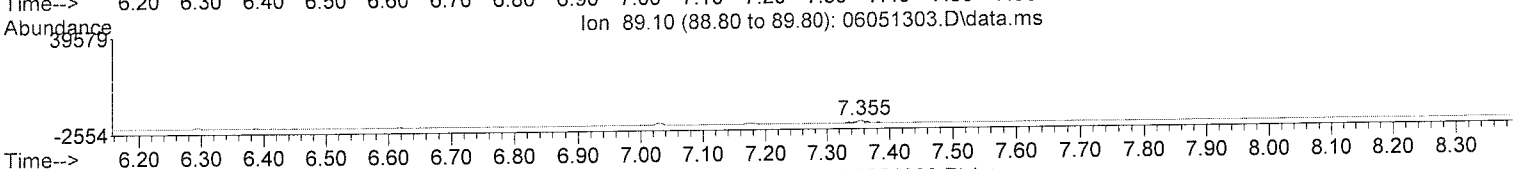
Ion	Exp%	Act%
165.00	100.00	100.00
89.10	86.00	0.00#
63.10	40.80	0.00#
0.00	0.00	0.00

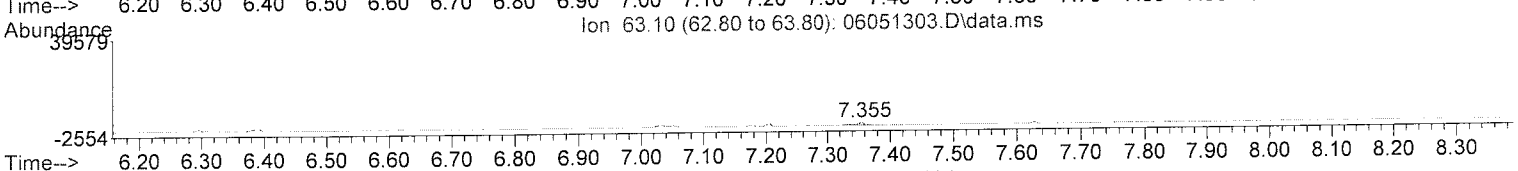
Quantitation Report (Qedit)

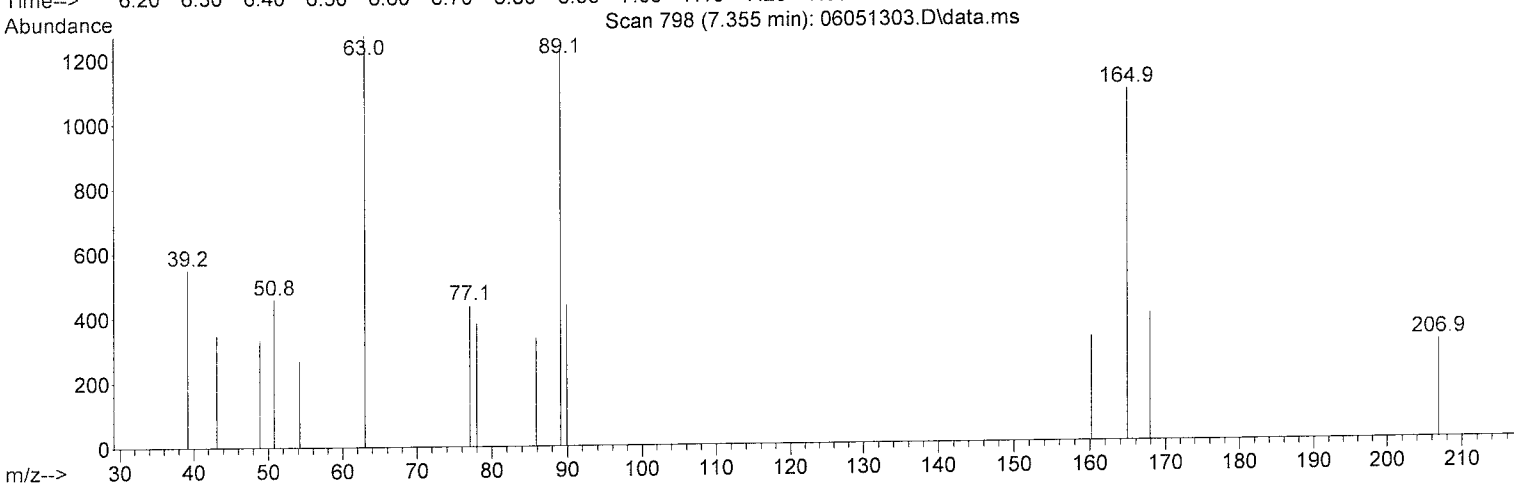
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(16) 2,4-Dinitrotoluene (M)

7.355min (+ 0.002) 0.05 ngs m

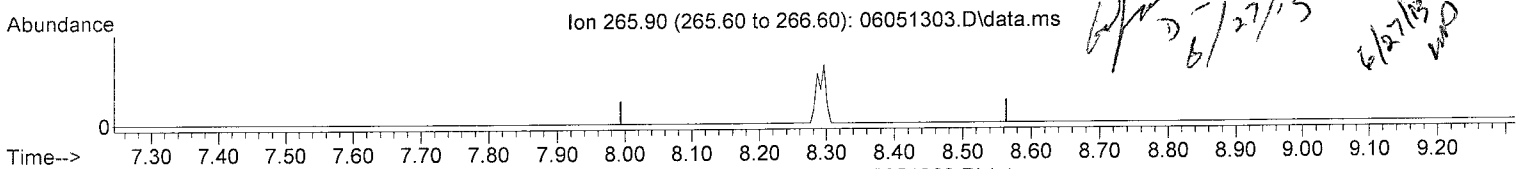
response 979

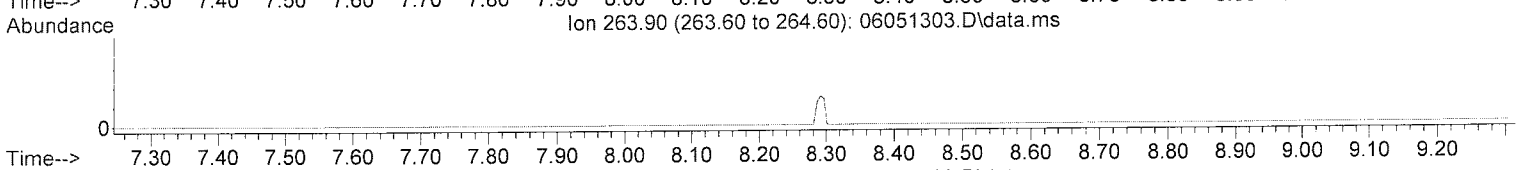
Ion	Exp%	Act%
165.00	100.00	100.00
89.10	86.00	145.76#
63.10	40.80	120.02#
0.00	0.00	0.00

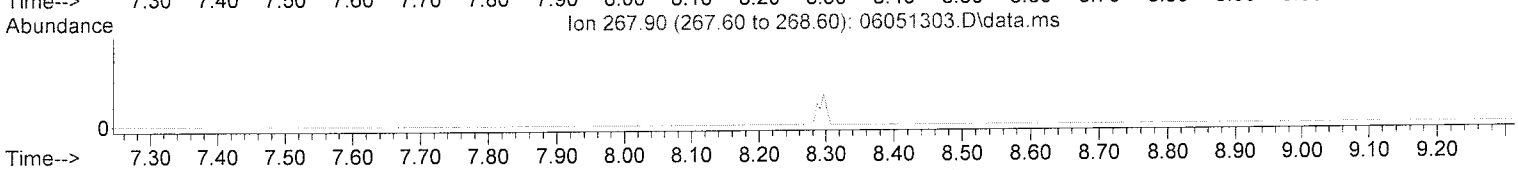
Quantitation Report (Qedit)

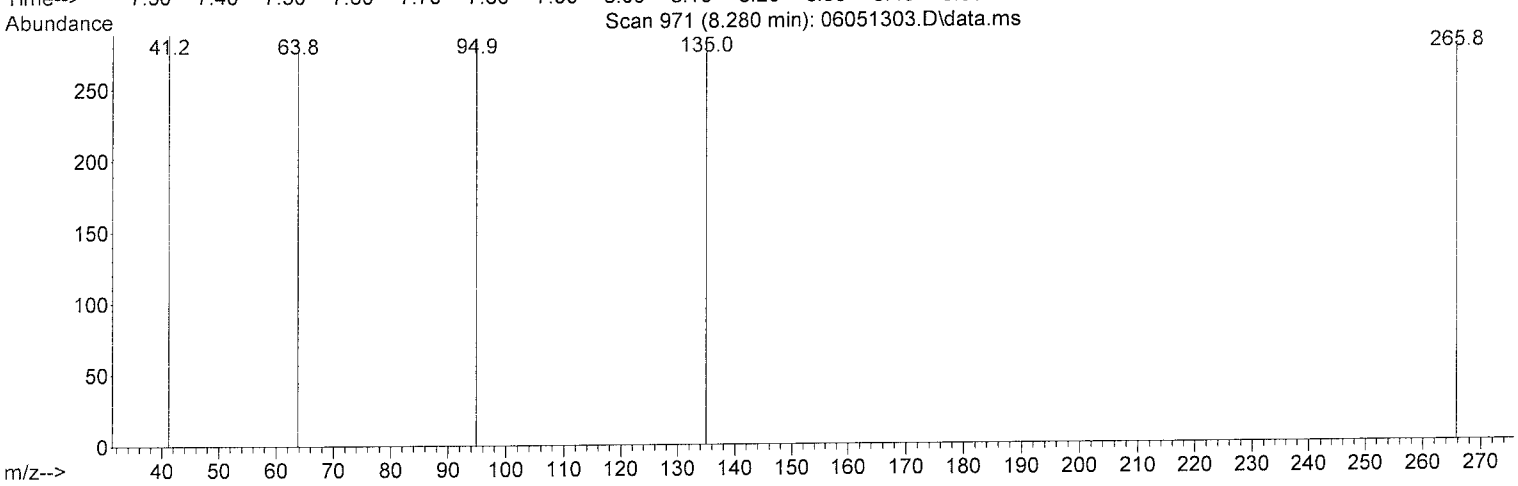
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(18) Pentachlorophenol (M,C)

8.279min (-8.279) 0.00 ngs

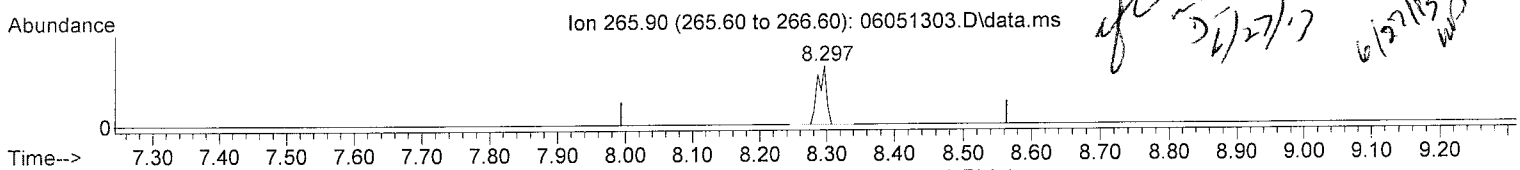
response 0

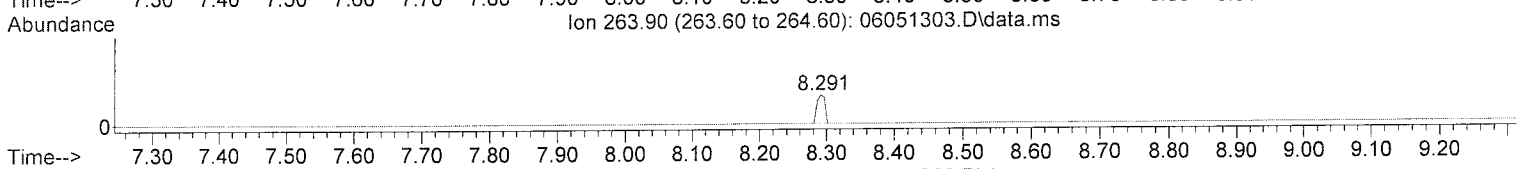
Ion	Exp%	Act%
265.90	100.00	0.00
263.90	61.40	0.00#
267.90	58.60	0.00#
0.00	0.00	0.00

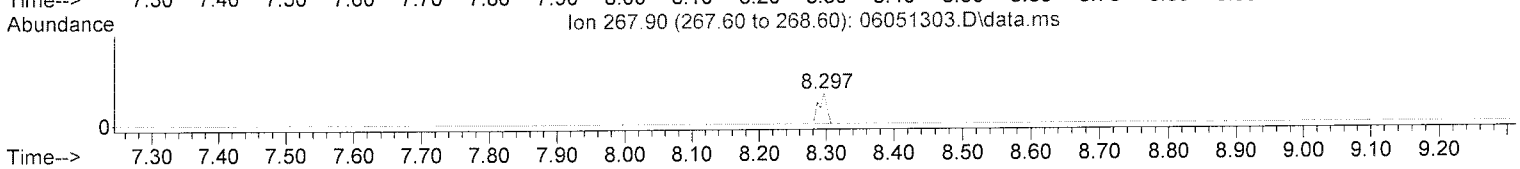
Quantitation Report (Qedit)

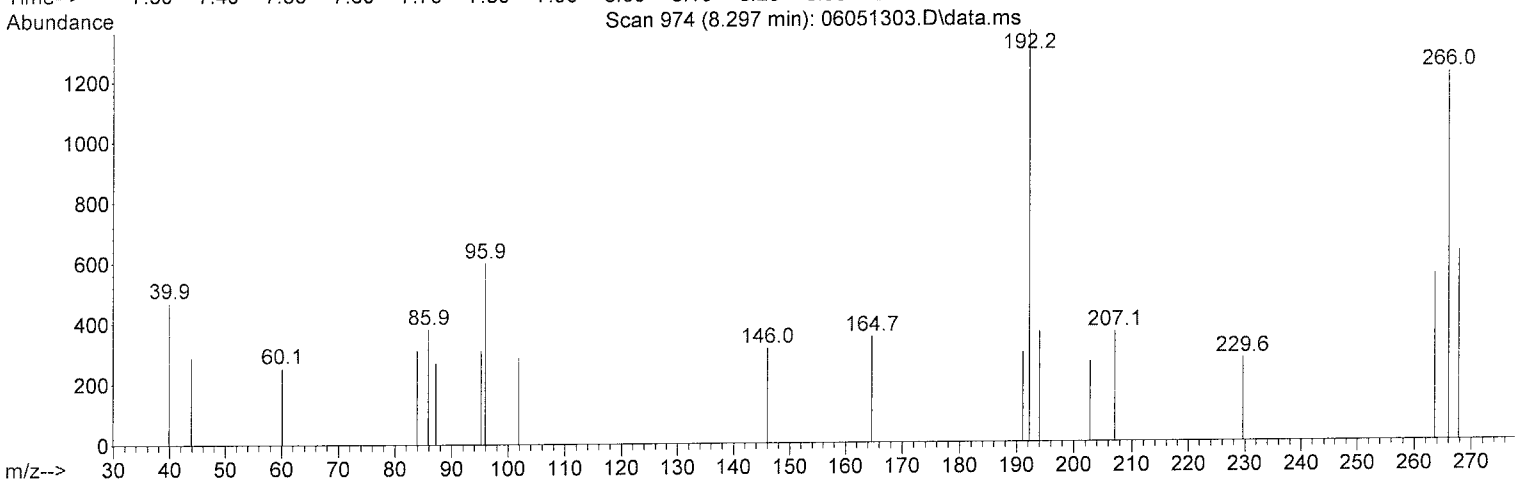
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(18) Pentachlorophenol (M,C)

8.297min (+ 0.018) 0.11 ngs m

response 1157

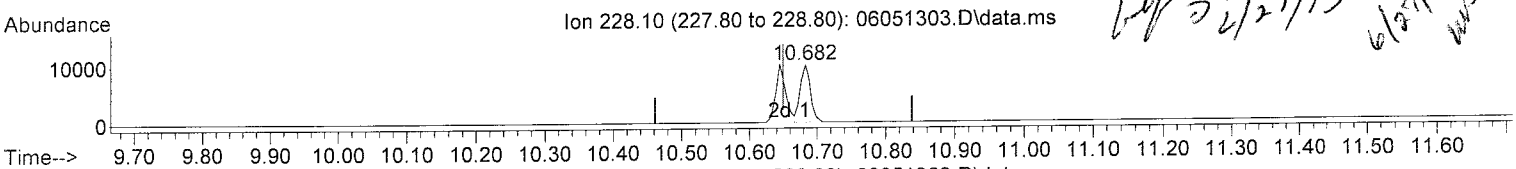
Ion	Exp%	Act%
265.90	100.00	100.00
263.90	61.40	44.77
267.90	58.60	46.67
0.00	0.00	0.00

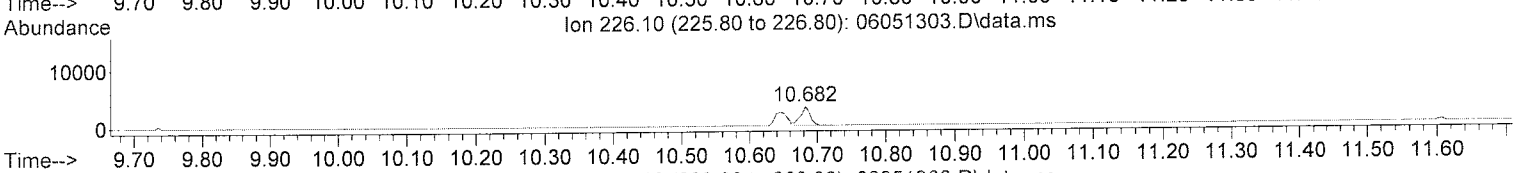
Quantitation Report (Qedit)

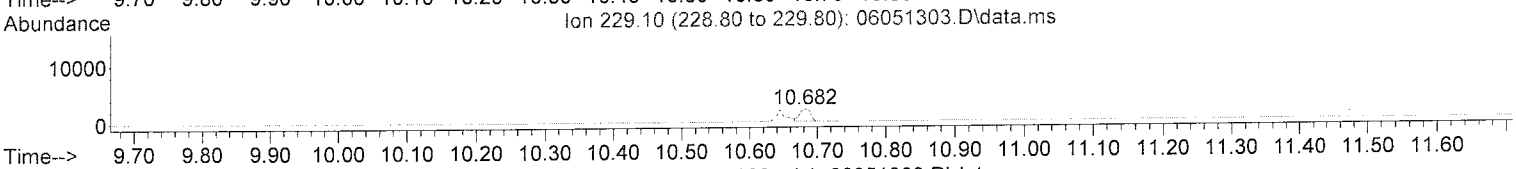
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

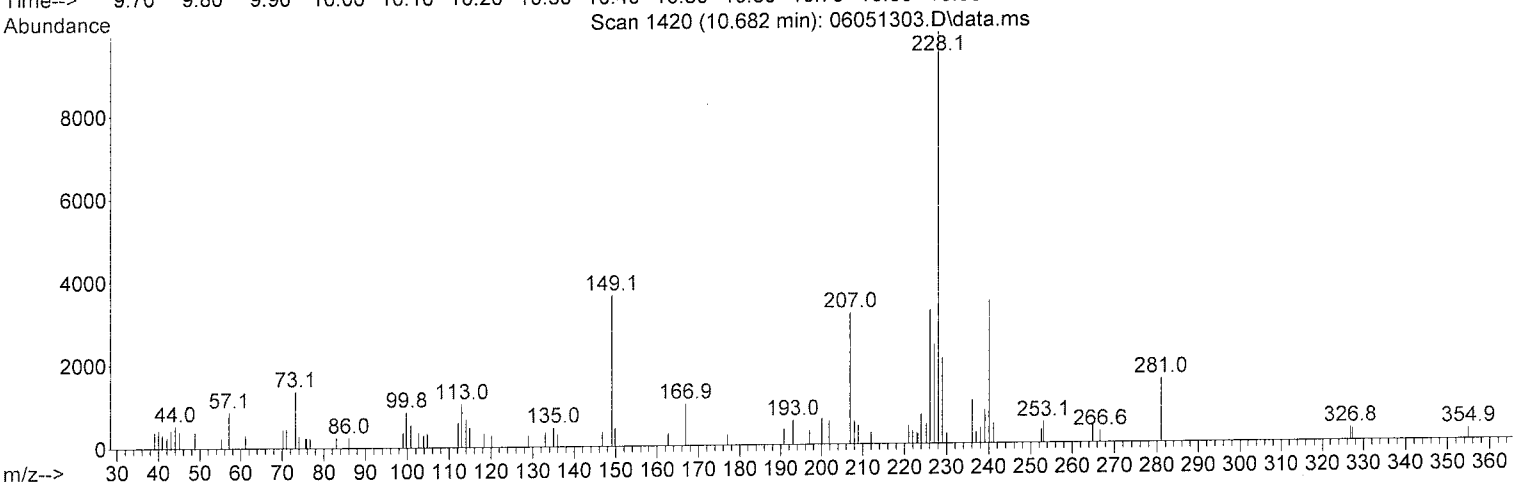
Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration

6/27/13 6/27/13 WD









TIC: 06051303.D\data.ms

(27) Benzo(a)anthracene (M)

10.682min (+ 0.032) 0.09 ngs

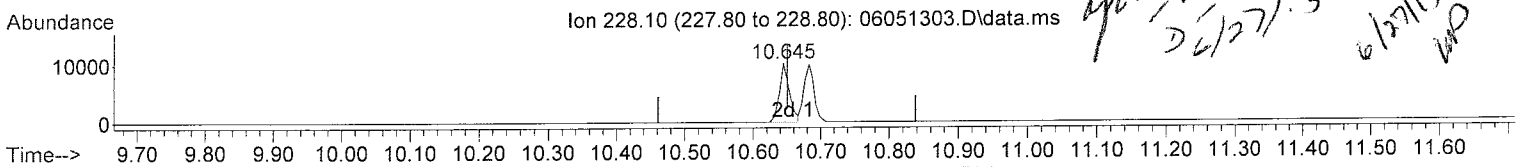
response 10387

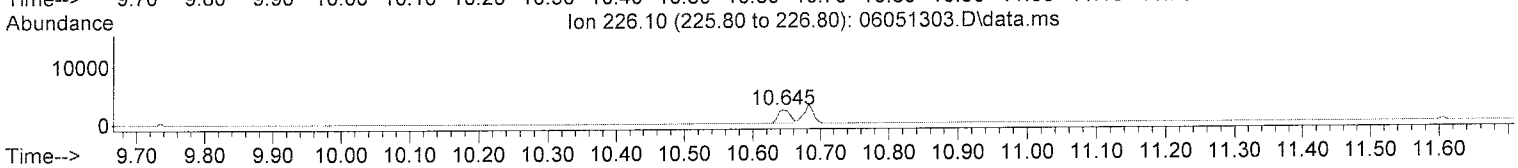
Ion	Exp%	Act%
228.10	100.00	100.00
226.10	27.10	30.37
229.10	19.70	21.80
0.00	0.00	0.00

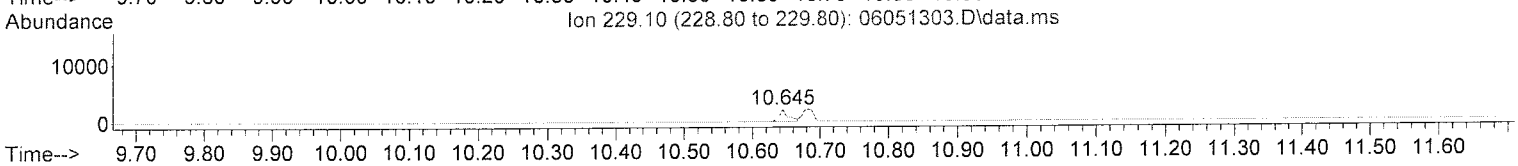
Quantitation Report (Qedit)

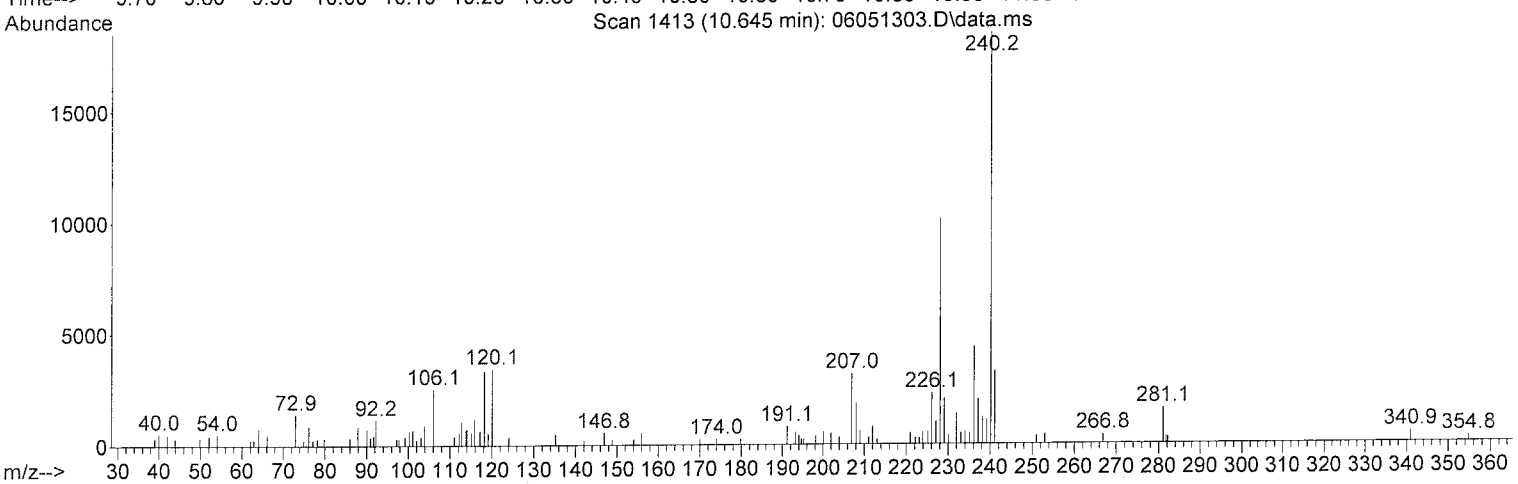
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(27) Benzo(a)anthracene (M)

10.645min (-0.005) 0.09 ngs m

response 10282

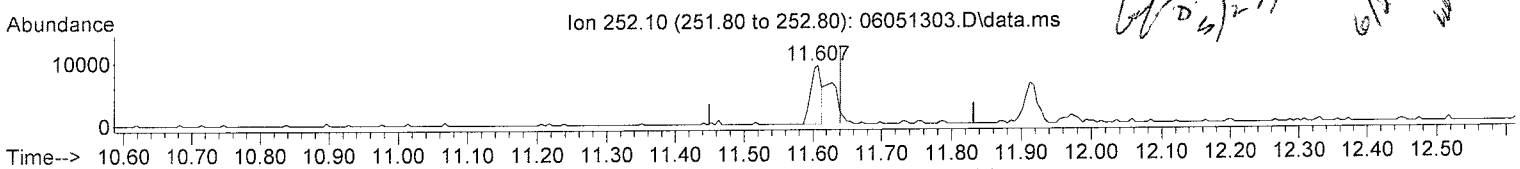
Ion	Exp%	Act%
228.10	100.00	100.00
226.10	27.10	27.56
229.10	19.70	17.54
0.00	0.00	0.00

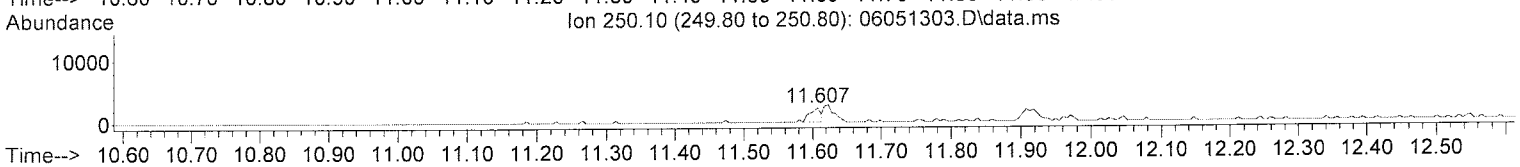
Quantitation Report (Qedit)

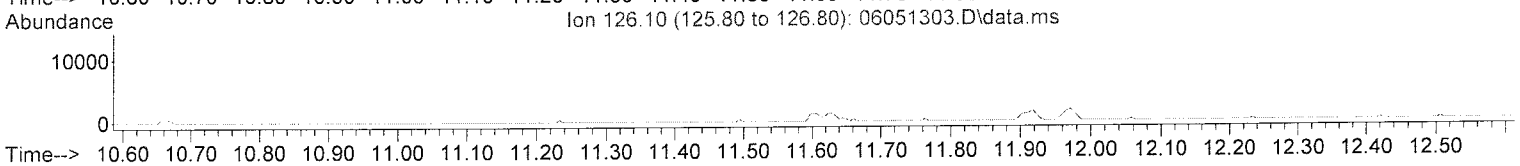
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

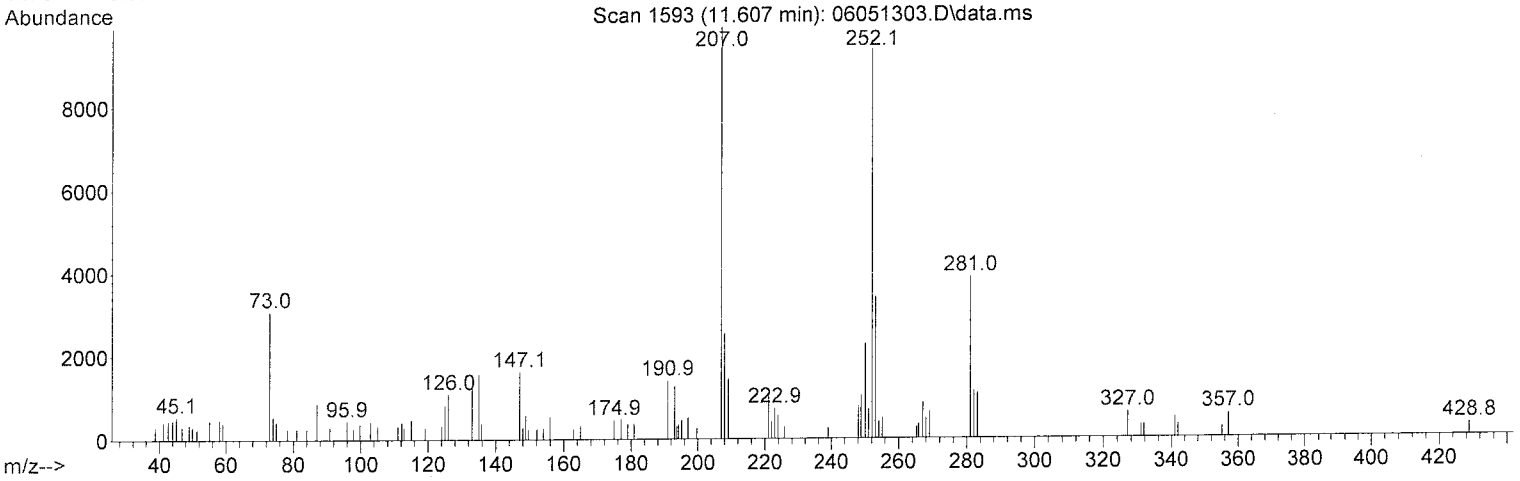
Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration

6/27/13 WD









TIC: 06051303.D\data.ms

(31) Benzo(k)fluoranthene (M)

11.607min (-0.033) 0.10 ngs

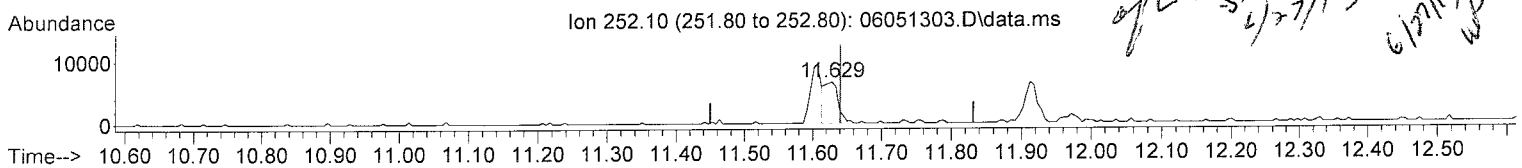
response 10151

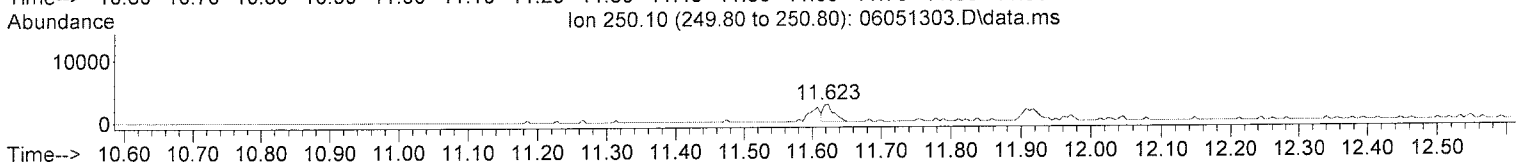
Ion	Exp%	Act%
252.10	100.00	100.00
250.10	23.30	24.99
126.10	15.60	0.00#
0.00	0.00	0.00

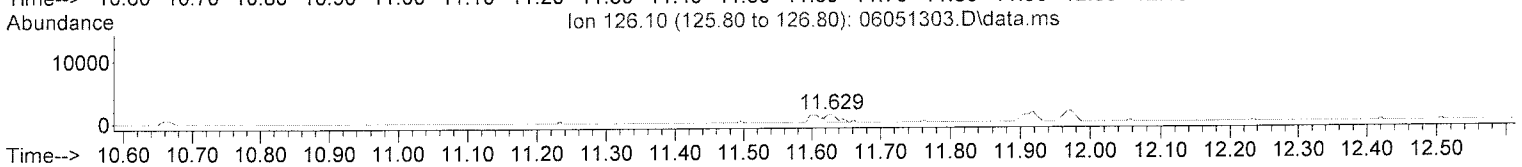
Quantitation Report (Qedit)

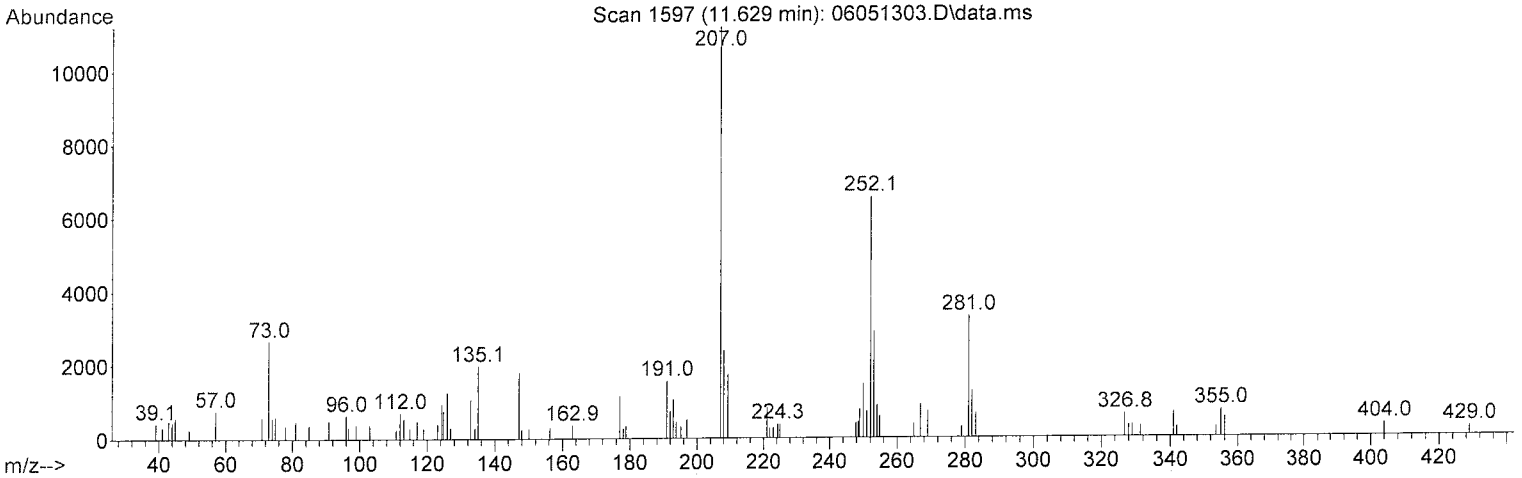
Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration









TIC: 06051303.D\data.ms

(31) Benzo(k)fluoranthene (M)

11.629min (-0.012) 0.09 ngs m

response 9183

Ion	Exp%	Act%
252.10	100.00	100.00
250.10	23.30	32.04#
126.10	15.60	15.20
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration

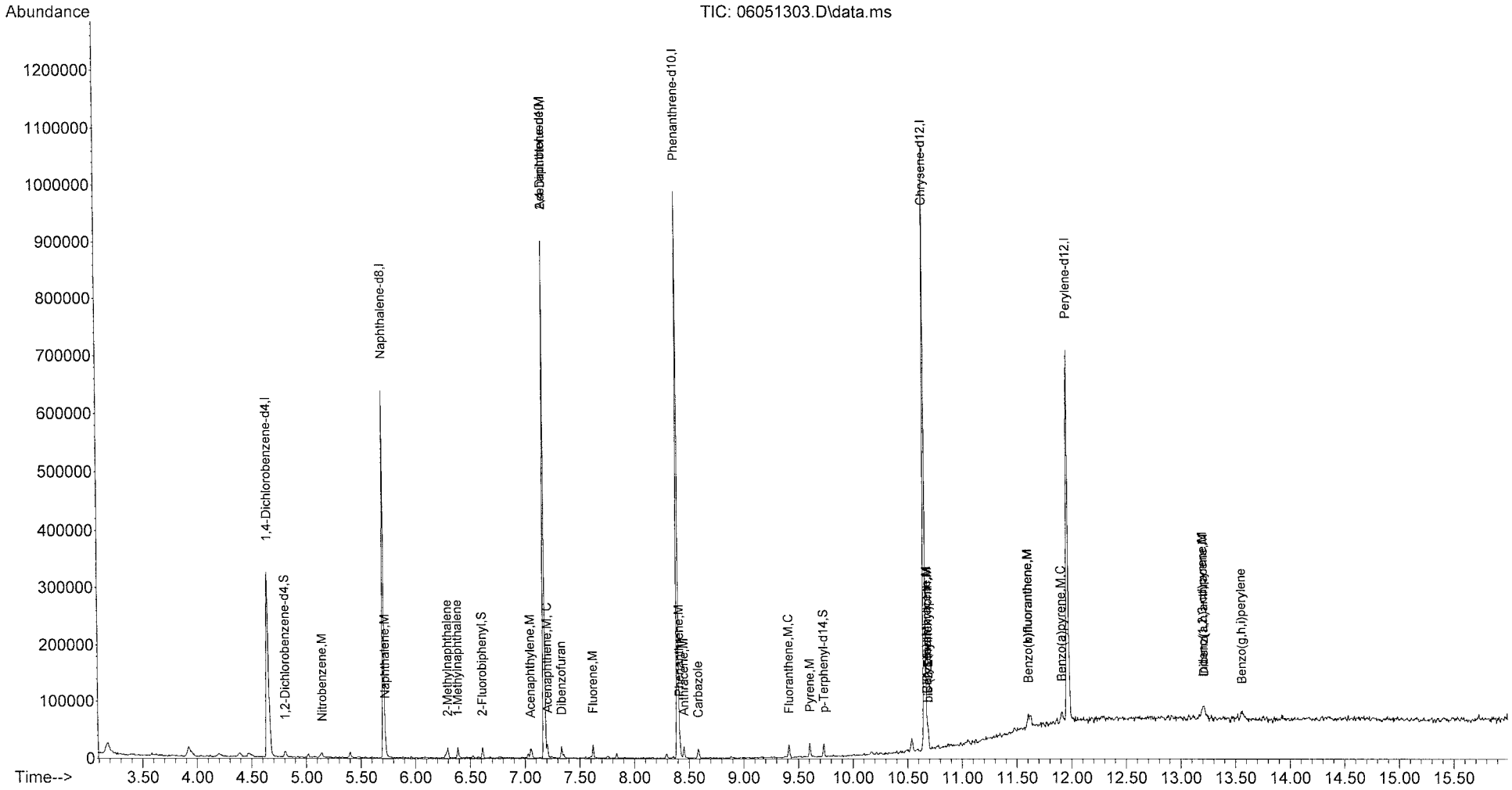
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.649	152	73304	4.00	ngs		0.00
6) Naphthalene-d8	5.708	136	237633	4.00	ngs		0.00
13) Acenaphthene-d10	7.179	164	162254	4.00	ngs		0.00
19) Phenanthrene-d10	8.398	188	322107	4.00	ngs		0.00
26) Chrysene-d12	10.661	240	370673	4.00	ngs		0.00
33) Perylene-d12	11.971	264	292970	4.00	ngs		0.00
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.809	152	2296	0.10	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	0.20%#		
4) Nitrobenzene-d5	0.000	82	0	0.00	ngs		
Spiked Amount 50.000	Range 35 - 114		Recovery	=	0.00%#		
10) 2-Fluorobiphenyl	6.612	172	5974	0.08	ngs		0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	0.16%#		
25) p-Terphenyl-d14	9.735	244	8126	0.09	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	0.18%#		
Target Compounds							Qvalue
5) Nitrobenzene	5.146	77	2196	0.07	ngs	#	30
7) Naphthalene	5.724	128	6903	0.09	ngs	#	69
8) 2-Methylnaphthalene	6.296	142	4059	0.08	ngs	#	74
9) 1-Methylnaphthalene	6.387	142	4025	0.09	ngs	#	88
11) Acenaphthylene	7.050	152	6544	0.08	ngs	#	63
14) Acenaphthene	7.205	153	4639	0.09	ngs		88
15) Dibenzofuran	7.334	168	7676	0.08	ngs		99
16) 2,4-Dinitrotoluene	7.179	165	20309	1.13	ngs	#	15
17) Fluorene	7.623	166	5772	0.09	ngs	#	93
20) Phenanthrene	8.414	178	9827	0.10	ngs	#	64
21) Anthracene	8.457	178	7979	0.08	ngs	#	61
22) Carbazole	8.585	167	6365	0.06	ngs	#	59
23) Fluoranthene	9.414	202	9708	0.08	ngs	#	79
24) Pyrene	9.607	202	11115	0.09	ngs	#	80
27) Benzo(a)anthracene	10.682	228	10387	0.09	ngs		94
28) Chrysene	10.682	228	10387	0.09	ngs		97
29) bis-(2-Ethylhexyl)phth	10.693	149	7264	0.08	ngs	#	56
30) Benzo(b)fluoranthene	11.607	252	10151	0.08	ngs	#	89
31) Benzo(k)fluoranthene	11.607	252	10151	0.10	ngs	#	83
32) Benzo(a)pyrene	11.912	252	8508	0.08	ngs	#	74
34) Indeno(1,2,3-cd)pyrene	13.207	276	9637	0.09	ngs	#	74
35) Dibenz(a,h)anthracene	13.212	278	8985	0.11	ngs	#	82
36) Benzo(g,h,i)perylene	13.560	276	8826	0.10	ngs	#	54

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051303.D
Acq On : 5 Jun 2013 10:34 am
Operator : DM
Sample : ICAL 0.1 SSTD
Misc : PNA_QC 58-39-544
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:49:24 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:49:07 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051304.D
Acq On : 5 Jun 2013 10:56 am
Operator : DM
Sample : ICAL 0.5 SSTD
Misc : PNA_QC 58-39-543
ALS Vial : 4 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:51:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:51:11 2013
Response via : Initial Calibration

D 6/27/13 6/27/13

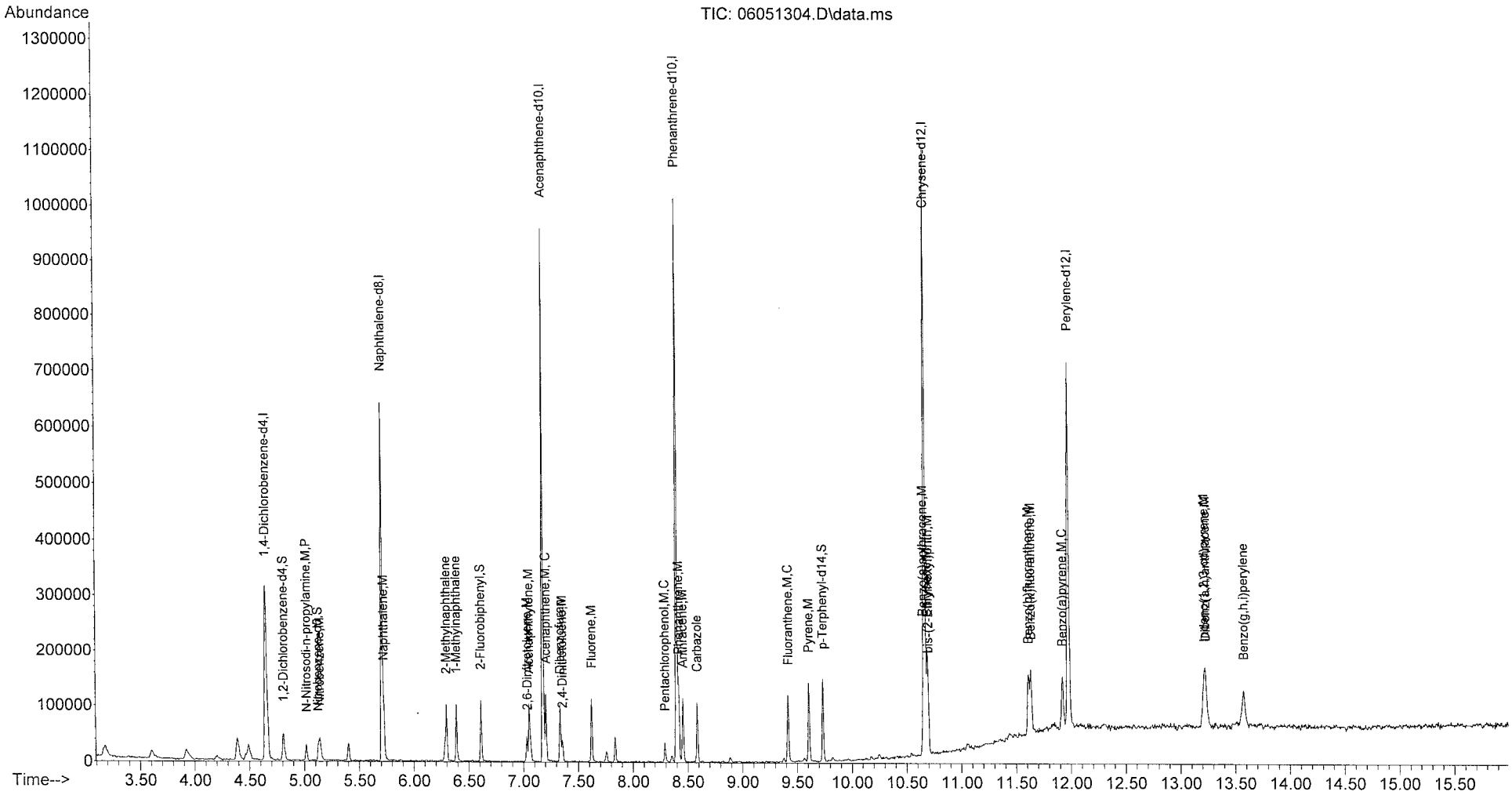
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.643	152	75596	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	244818	4.00	ngs	0.00
13) Acenaphthene-d10	7.179	164	169959	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	326520	4.00	ngs	0.00
26) Chrysene-d12	10.666	240	376038	4.00	ngs	0.00
33) Perylene-d12	11.976	264	304668	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.809	152	11174	0.49	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	0.98%#	
4) Nitrobenzene-d5	5.125	82	11316	0.41	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	0.82%#	
10) 2-Fluorobiphenyl	6.612	172	30411	0.44	ngs	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	0.88%#	
25) p-Terphenyl-d14	9.735	244	41404	0.47	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	0.94%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	6201	0.42	ngs	95
5) Nitrobenzene	5.141	77	11931	0.41	ngs	86
7) Naphthalene	5.724	128	33578	0.46	ngs	99
8) 2-Methylnaphthalene	6.296	142	22777	0.48	ngs	93
9) 1-Methylnaphthalene	6.387	142	21177	0.48	ngs	99
11) Acenaphthylene	7.050	152	36688	0.47	ngs	98
12) 2,6-Dinitrotoluene	7.034	165	4855	0.35	ngs	86
14) Acenaphthene	7.205	153	25200	0.47	ngs	99
15) Dibenzofuran	7.334	168	35859	0.39	ngs	98
16) 2,4-Dinitrotoluene	7.355	165	6237	0.36	ngs	91
17) Fluorene	7.623	166	27666	0.43	ngs	92
18) Pentachlorophenol	8.291	266	4045	0.37	ngs	95
20) Phenanthrene	8.420	178	46340	0.47	ngs	97
21) Anthracene	8.457	178	42181	0.45	ngs	99
22) Carbazole	8.585	167	35914	0.38	ngs	97
23) Fluoranthene	9.420	202	52354	0.45	ngs	98
24) Pyrene	9.607	202	56087	0.46	ngs	100
27) Benzo(a)anthracene	10.650	228	50407	0.45	ngs	97
28) Chrysene	10.687	228	50675	0.46	ngs	98
29) bis-(2-Ethylhexyl)phth	10.698	149	32683	0.37	ngs #	98
30) Benzo(b)fluoranthene	11.613	252	53737	0.44	ngs	98
31) Benzo(k)fluoranthene	11.634	252	43335	0.44	ngs	99
32) Benzo(a)pyrene	11.923	252	45477	0.46	ngs	99
34) Indeno(1,2,3-cd)pyrene	13.217	276	54492	0.51	ngs	96
35) Dibenz(a,h)anthracene	13.228	278	43668	0.51	ngs	99
36) Benzo(g,h,i)perylene	13.576	276	48276	0.52	ngs #	71

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051304.D
Acq On : 5 Jun 2013 10:56 am
Operator : DM
Sample : ICAL 0.5 SSTD
Misc : PNA_QC 58-39-543
ALS Vial : 4 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:51:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:51:11 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051304.D
Acq On : 5 Jun 2013 10:56 am
Operator : DM
Sample : ICAL 0.5 SSTD
Misc : PNA_QC 58-39-543
ALS Vial : 4 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:51:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:51:11 2013
Response via : Initial Calibration

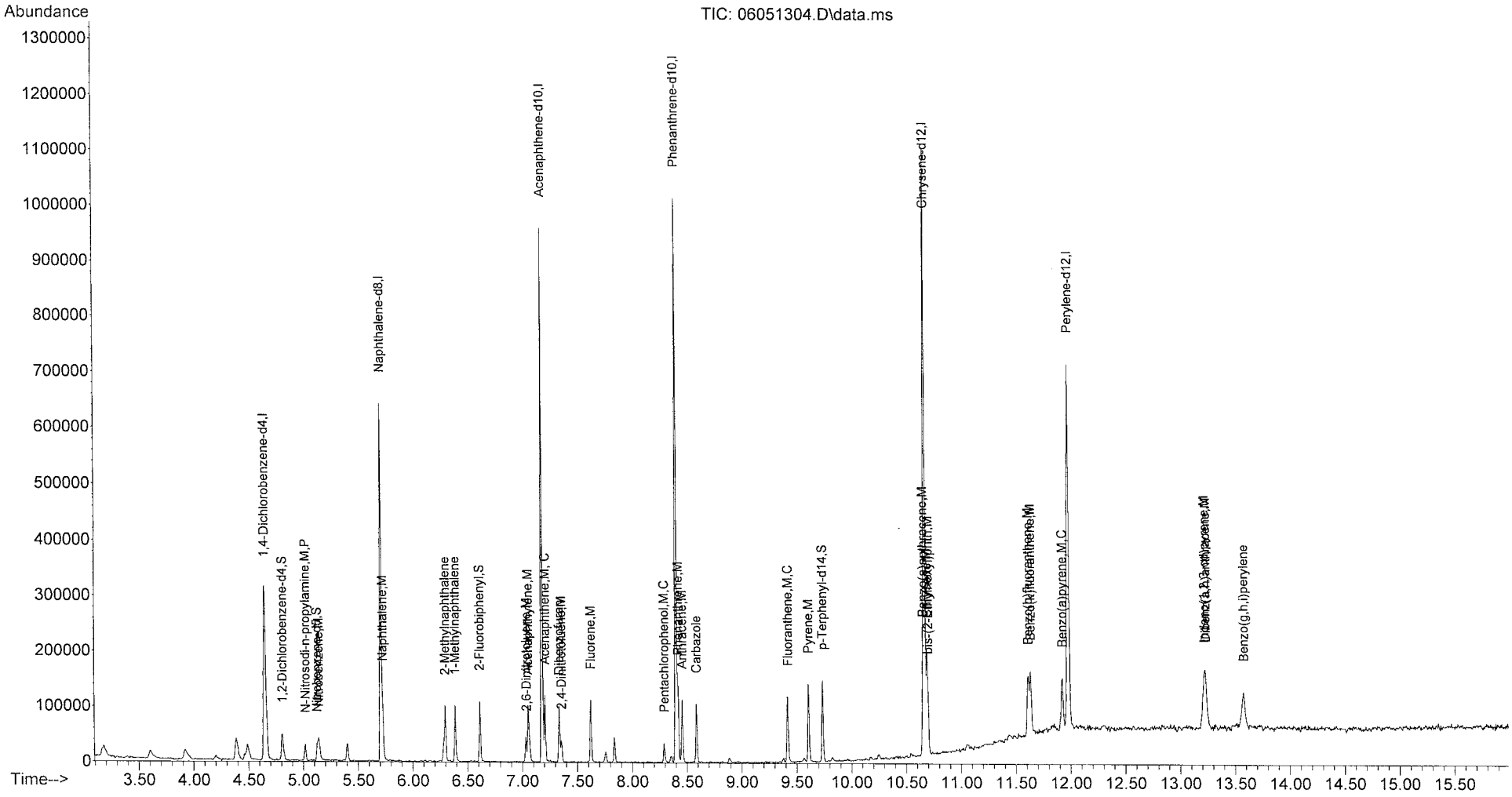
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.643	152	75596	4.00	ngs		0.00
6) Naphthalene-d8	5.708	136	244818	4.00	ngs		0.00
13) Acenaphthene-d10	7.179	164	169959	4.00	ngs		0.00
19) Phenanthrene-d10	8.398	188	326520	4.00	ngs		0.00
26) Chrysene-d12	10.666	240	376038	4.00	ngs		0.00
33) Perylene-d12	11.976	264	304668	4.00	ngs		0.00
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.809	152	11174	0.49	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	0.98%#		
4) Nitrobenzene-d5	5.125	82	11316	0.41	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	0.82%#		
10) 2-Fluorobiphenyl	6.612	172	30411	0.44	ngs		0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	0.88%#		
25) p-Terphenyl-d14	9.735	244	41404	0.47	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	0.94%#		
Target Compounds							Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	6201	0.42	ngs		95
5) Nitrobenzene	5.141	77	11931	0.41	ngs		86
7) Naphthalene	5.724	128	33578	0.46	ngs		99
8) 2-Methylnaphthalene	6.296	142	22777	0.48	ngs		93
9) 1-Methylnaphthalene	6.387	142	21177	0.48	ngs		99
11) Acenaphthylene	7.050	152	36688	0.47	ngs		98
12) 2,6-Dinitrotoluene	7.034	165	4855	0.35	ngs		86
14) Acenaphthene	7.205	153	25200	0.47	ngs		99
15) Dibenzofuran	7.334	168	35859	0.39	ngs		98
16) 2,4-Dinitrotoluene	7.355	165	6237	0.36	ngs		91
17) Fluorene	7.623	166	27666	0.43	ngs		92
18) Pentachlorophenol	8.291	266	4045	0.37	ngs		95
20) Phenanthrene	8.420	178	46340	0.47	ngs		97
21) Anthracene	8.457	178	42181	0.45	ngs		99
22) Carbazole	8.585	167	35914	0.38	ngs		97
23) Fluoranthene	9.420	202	52354	0.45	ngs		98
24) Pyrene	9.607	202	56087	0.46	ngs		100
27) Benzo(a)anthracene	10.650	228	50407	0.45	ngs		97
28) Chrysene	10.687	228	50675	0.46	ngs		98
29) bis-(2-Ethylhexyl)phth	10.698	149	32683	0.37	ngs	#	98
30) Benzo(b)fluoranthene	11.613	252	53737	0.44	ngs		98
31) Benzo(k)fluoranthene	11.634	252	43335	0.44	ngs		99
32) Benzo(a)pyrene	11.923	252	45477	0.46	ngs		99
34) Indeno(1,2,3-cd)pyrene	13.217	276	54492	0.51	ngs		96
35) Dibenz(a,h)anthracene	13.228	278	43668	0.51	ngs		99
36) Benzo(g,h,i)perylene	13.576	276	48276	0.52	ngs	#	71

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051304.D
Acq On : 5 Jun 2013 10:56 am
Operator : DM
Sample : ICAL 0.5 SSTD
Misc : PNA_QC 58-39-543
ALS Vial : 4 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:51:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:51:11 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:52:50 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration

D 6/27/13 6/27/13 WP

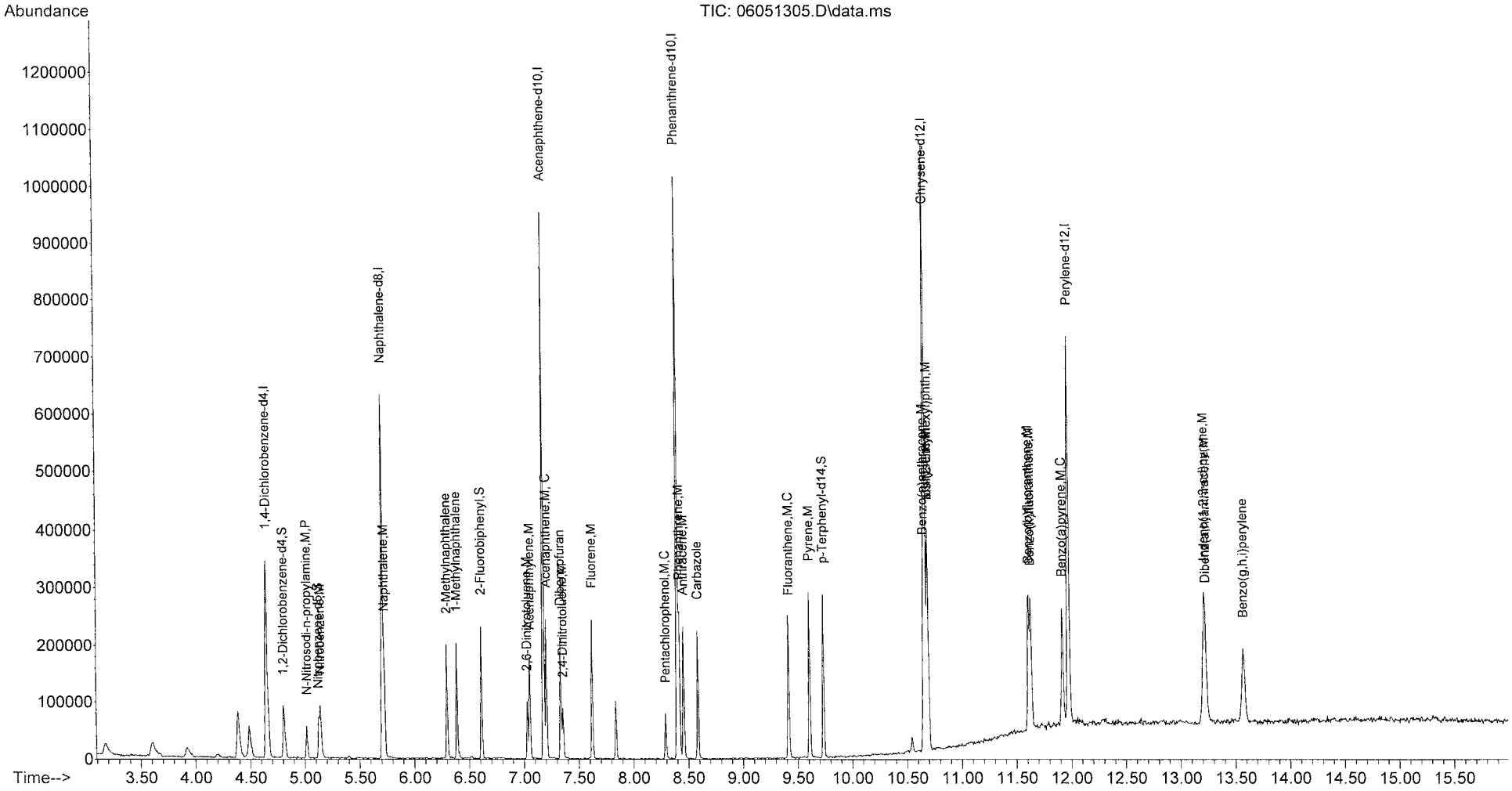
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	76130	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	247467	4.00	ngs	0.00
13) Acenaphthene-d10	7.178	164	170948	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	339884	4.00	ngs	0.00
26) Chrysene-d12	10.666	240	388476	4.00	ngs	0.00
33) Perylene-d12	11.976	264	313179	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.804	152	20002	0.89	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	1.78%#	
4) Nitrobenzene-d5	5.125	82	22188	0.85	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	1.70%#	
10) 2-Fluorobiphenyl	6.611	172	61158	0.91	ngs	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	1.82%#	
25) p-Terphenyl-d14	9.735	244	79649	0.89	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	1.78%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	12384	0.87	ngs	98
5) Nitrobenzene	5.141	77	23609	0.86	ngs	87
7) Naphthalene	5.724	128	67027	0.94	ngs	98
8) 2-Methylnaphthalene	6.296	142	43548	0.93	ngs	96
9) 1-Methylnaphthalene	6.387	142	42100	0.96	ngs	97
11) Acenaphthylene	7.055	152	70342	0.90	ngs	96
12) 2,6-Dinitrotoluene	7.029	165	11356	0.87	ngs	92
14) Acenaphthene	7.205	153	49342	0.94	ngs	96
15) Dibenzofuran	7.334	168	71486	0.81	ngs	93
16) 2,4-Dinitrotoluene	7.355	165	13879	0.84	ngs	80
17) Fluorene	7.622	166	58324	0.93	ngs	98
18) Pentachlorophenol	8.291	266	8495	0.78	ngs	91
20) Phenanthrene	8.419	178	91265	0.90	ngs	99
21) Anthracene	8.457	178	86020	0.91	ngs	98
22) Carbazole	8.585	167	80618	0.86	ngs	99
23) Fluoranthene	9.419	202	102620	0.87	ngs	99
24) Pyrene	9.607	202	115842	0.92	ngs	99
27) Benzo(a)anthracene	10.650	228	101490	0.89	ngs	99
28) Chrysene	10.687	228	103852	0.94	ngs	100
29) bis-(2-Ethylhexyl)phth	10.692	149	65128	0.75	ngs	98
30) Benzo(b)fluoranthene	11.612	252	123428m	1.01	ngs	
31) Benzo(k)fluoranthene	11.628	252	84276	0.85	ngs	97
32) Benzo(a)pyrene	11.917	252	95553	0.95	ngs	100
34) Indeno(1,2,3-cd)pyrene	13.217	276	111815m	1.03	ngs	
35) Dibenz(a,h)anthracene	13.228	278	88757	1.01	ngs	94
36) Benzo(g,h,i)perylene	13.570	276	100010	1.05	ngs	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

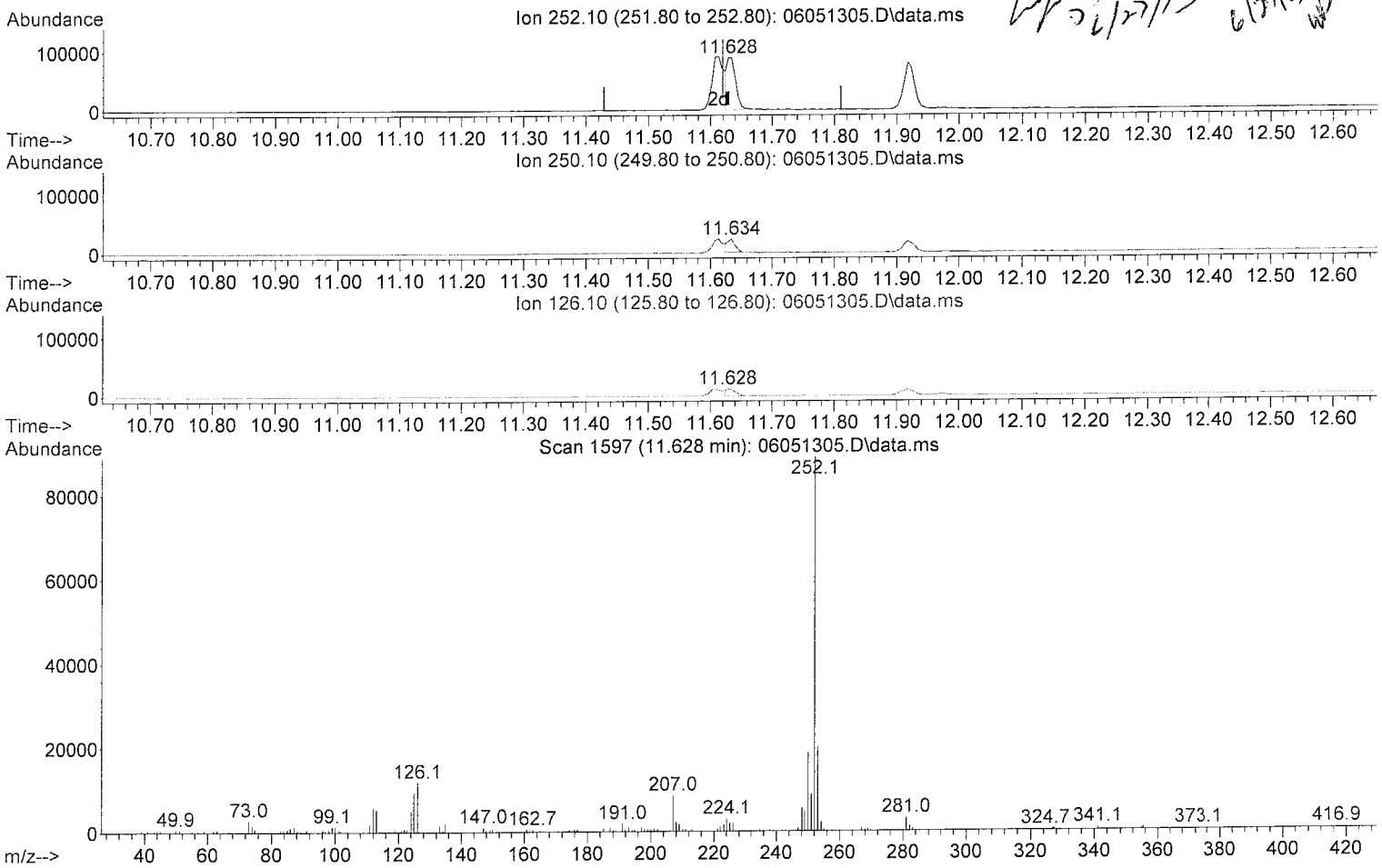
Quant Time: Jun 05 15:52:50 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:52:14 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration



(30) Benzo(b)fluoranthene (M)

11.628min (+ 0.009) 0.69 ngs

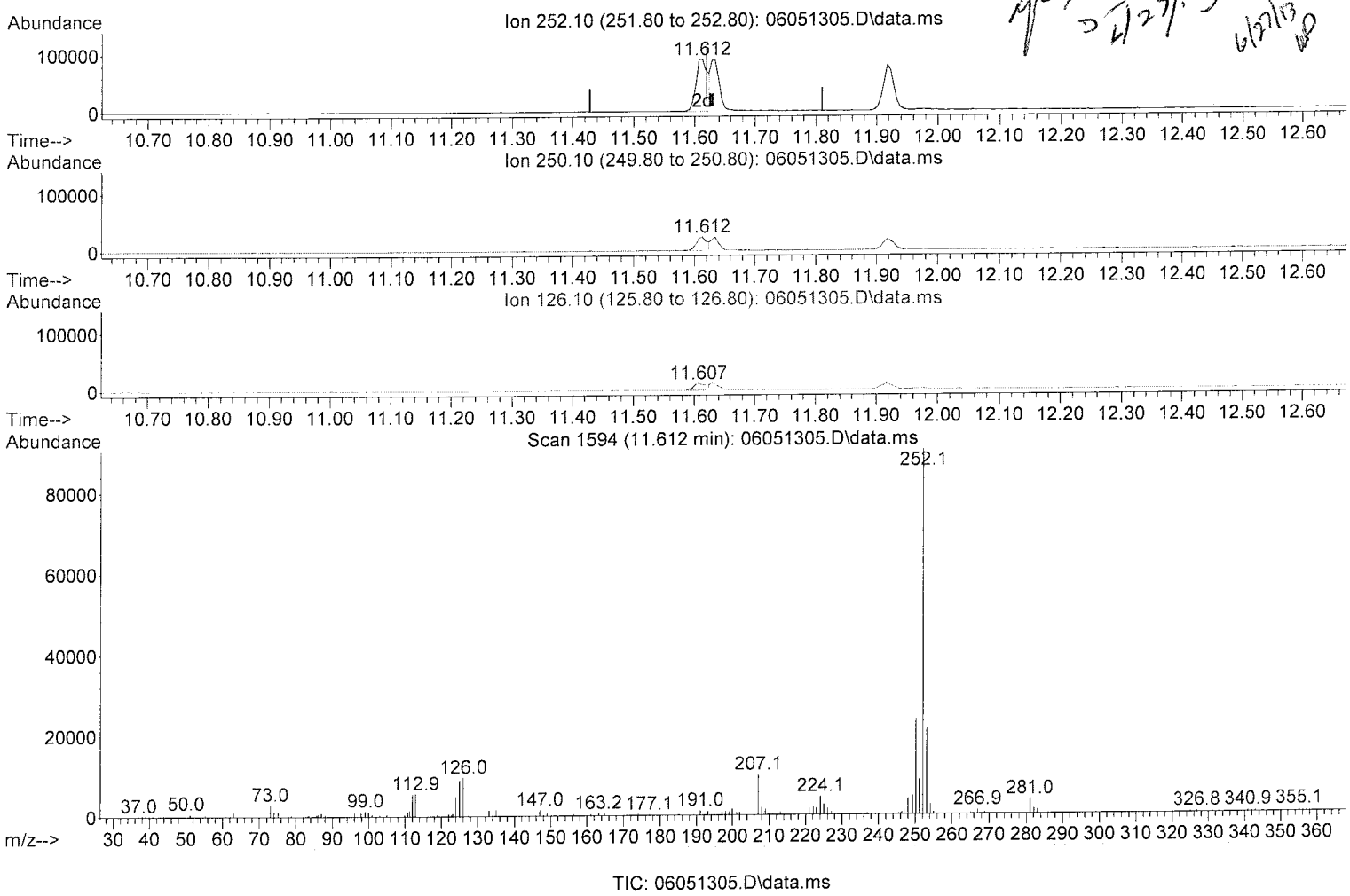
response 84276

Ion	Exp%	Act%
252.10	100.00	100.00
250.10	23.60	22.70
126.10	11.10	13.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:52:14 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration



(30) Benzo(b)fluoranthene (M)

11.612min (-0.007) 1.01 ngs m

response 123428

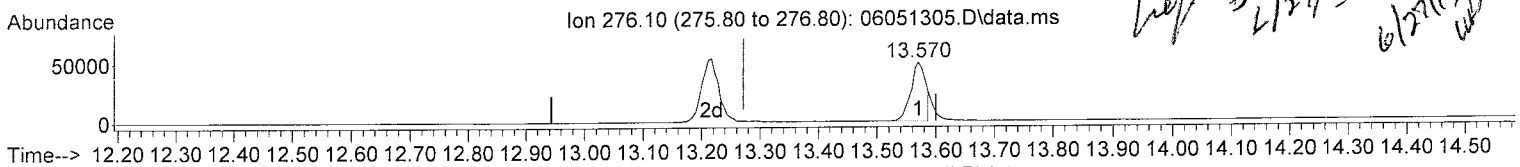
Ion	Exp%	Act%
252.10	100.00	100.00
250.10	23.60	23.35
126.10	11.10	13.85
0.00	0.00	0.00

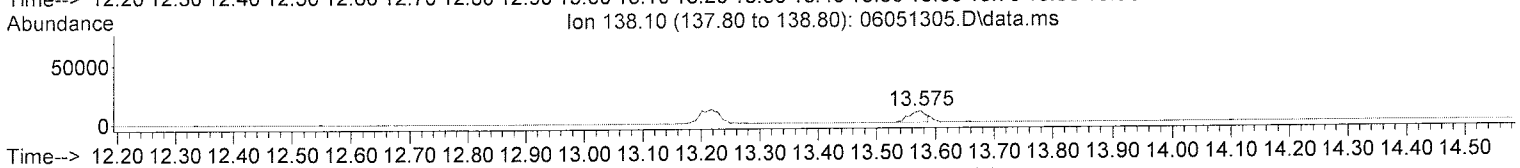
Quantitation Report (Qedit)

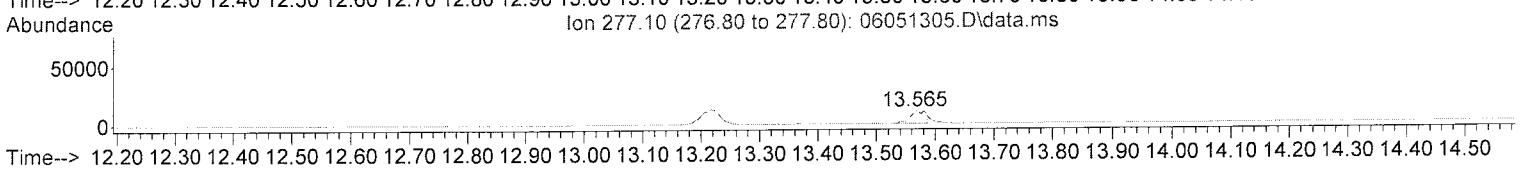
Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

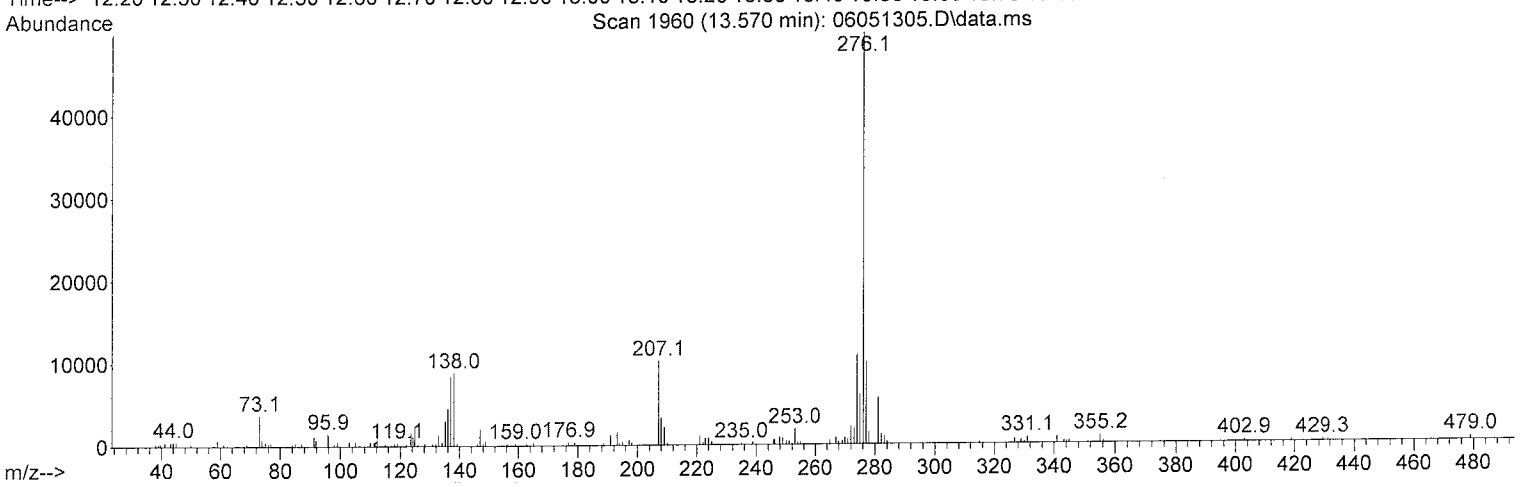
Quant Time: Jun 05 15:52:14 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration

6/27/13 6/27/13









TIC: 06051305.D\data.ms

(34) Indeno(1,2,3-cd)pyrene (M)

13.570min (+ 0.298) 0.80 ngs

response 86774

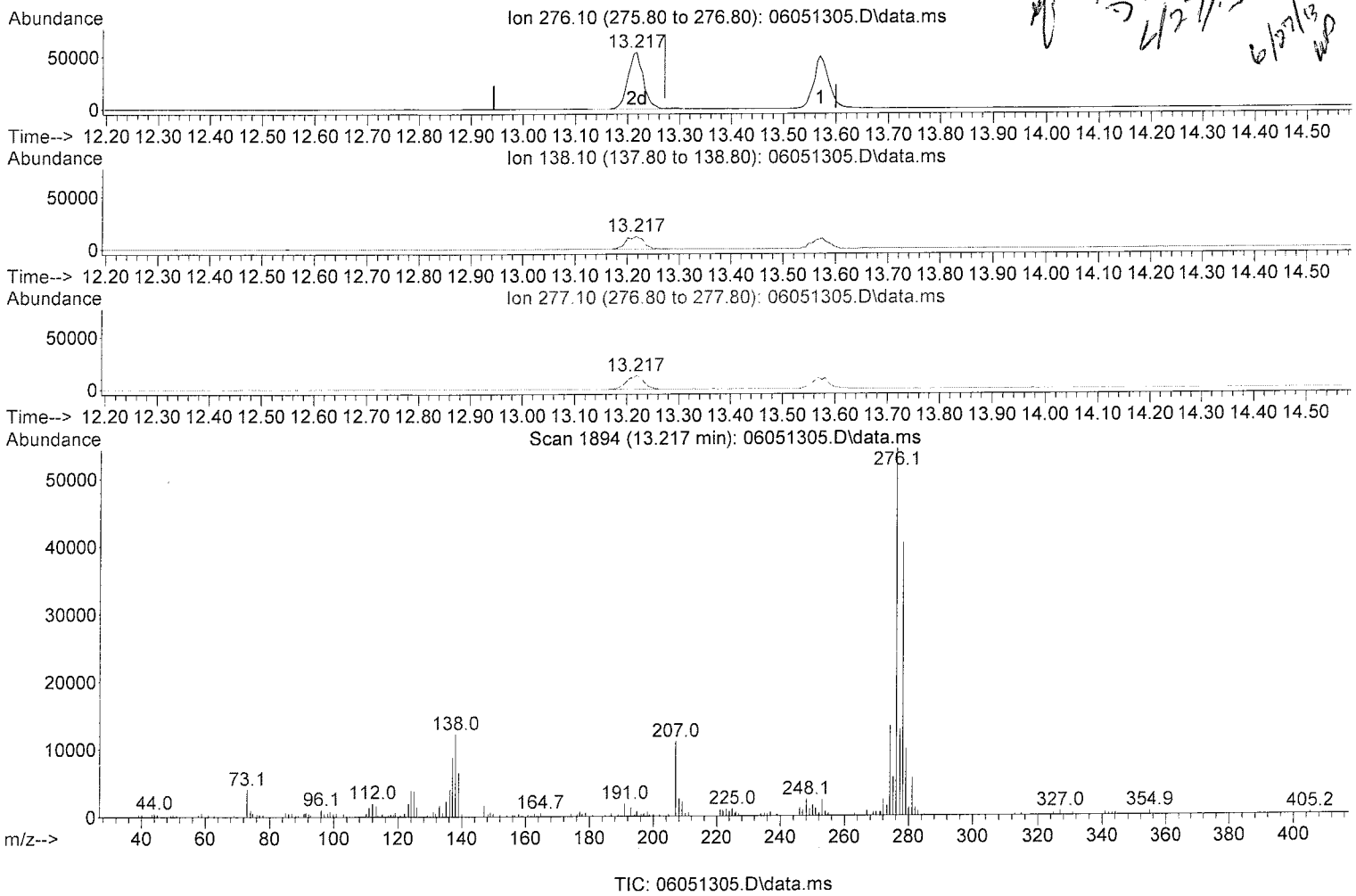
Ion	Exp%	Act%
276.10	100.00	100.00
138.10	25.10	21.30
277.10	25.70	22.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:52:14 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration

6/27/13 6/27/13



TIC: 06051305.D\data.ms

(34) Indeno(1,2,3-cd)pyrene (M)

13.217min (-0.055) 1.03 ngs m

response 111815

Ion	Exp%	Act%
276.10	100.00	100.00
138.10	25.10	25.33
277.10	25.70	26.15
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:52:14 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration

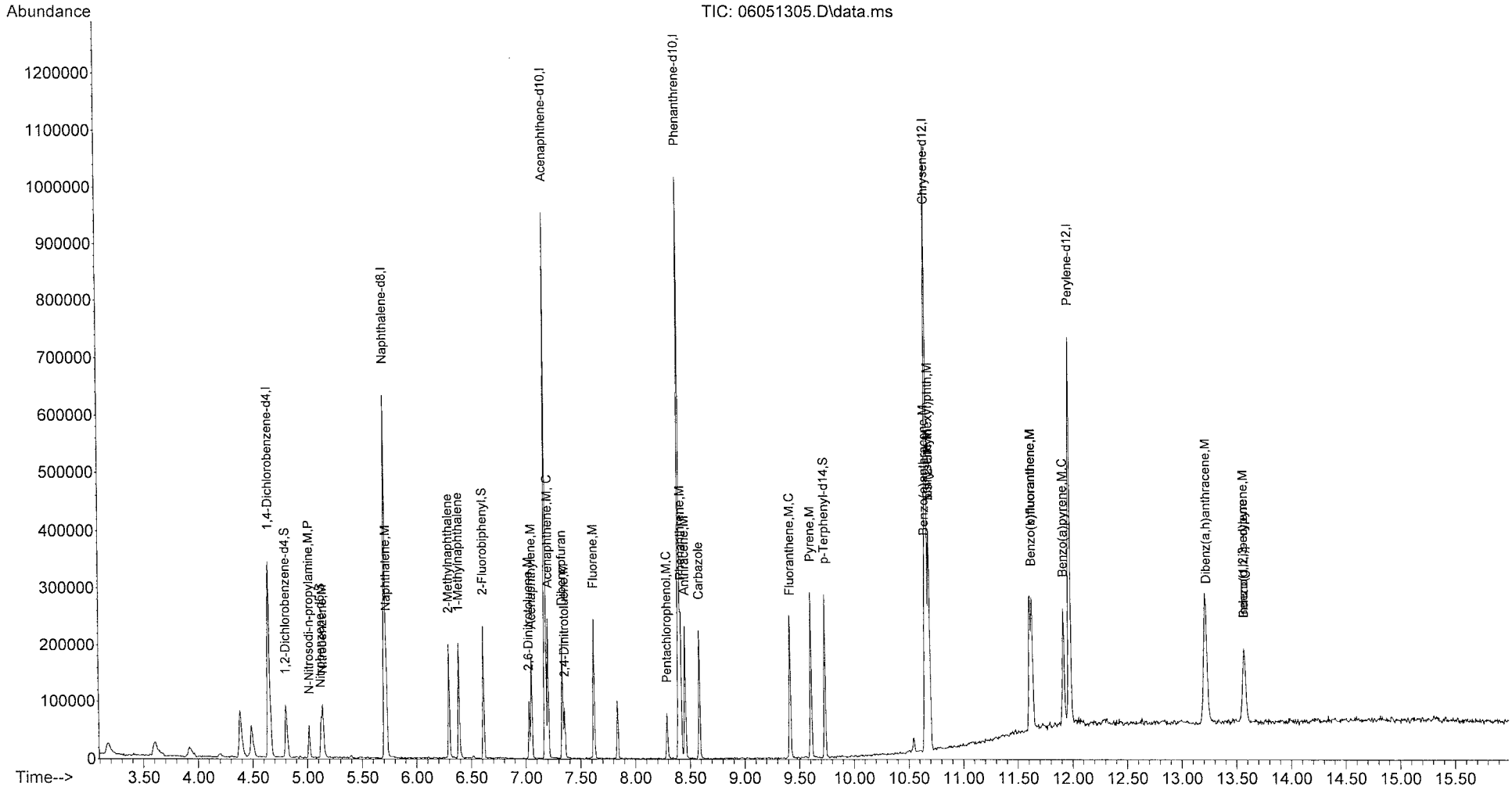
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	76130	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	247467	4.00	ngs	0.00
13) Acenaphthene-d10	7.178	164	170948	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	339884	4.00	ngs	0.00
26) Chrysene-d12	10.666	240	388476	4.00	ngs	0.00
33) Perylene-d12	11.976	264	313179	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.804	152	20002	0.89	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	1.78%#	
4) Nitrobenzene-d5	5.125	82	22188	0.85	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	1.70%#	
10) 2-Fluorobiphenyl	6.611	172	61158	0.91	ngs	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	1.82%#	
25) p-Terphenyl-d14	9.735	244	79649	0.89	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	1.78%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	12384	0.87	ngs	98
5) Nitrobenzene	5.141	77	23609	0.86	ngs	87
7) Naphthalene	5.724	128	67027	0.94	ngs	98
8) 2-Methylnaphthalene	6.296	142	43548	0.93	ngs	96
9) 1-Methylnaphthalene	6.387	142	42100	0.96	ngs	97
11) Acenaphthylene	7.055	152	70342	0.90	ngs	96
12) 2,6-Dinitrotoluene	7.029	165	11356	0.87	ngs	92
14) Acenaphthene	7.205	153	49342	0.94	ngs	96
15) Dibenzofuran	7.334	168	71486	0.81	ngs	93
16) 2,4-Dinitrotoluene	7.355	165	13879	0.84	ngs	80
17) Fluorene	7.622	166	58324	0.93	ngs	98
18) Pentachlorophenol	8.291	266	8495	0.78	ngs	91
20) Phenanthrene	8.419	178	91265	0.90	ngs	99
21) Anthracene	8.457	178	86020	0.91	ngs	98
22) Carbazole	8.585	167	80618	0.86	ngs	99
23) Fluoranthene	9.419	202	102620	0.87	ngs	99
24) Pyrene	9.607	202	115842	0.92	ngs	99
27) Benzo(a)anthracene	10.650	228	101490	0.89	ngs	99
28) Chrysene	10.687	228	103852	0.94	ngs	100
29) bis-(2-Ethylhexyl)phth	10.692	149	65128	0.75	ngs	98
30) Benzo(b)fluoranthene	11.628	252	84276	0.69	ngs	97
31) Benzo(k)fluoranthene	11.628	252	84276	0.85	ngs	97
32) Benzo(a)pyrene	11.917	252	95553	0.95	ngs	100
34) Indeno(1,2,3-cd)pyrene	13.570	276	86774	0.80	ngs	93
35) Dibenz(a,h)anthracene	13.228	278	88757	1.01	ngs	94
36) Benzo(g,h,i)perylene	13.570	276	100010	1.05	ngs	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051305.D
Acq On : 5 Jun 2013 11:18 am
Operator : DM
Sample : ICAL 1.0 SSTD
Misc : PNA_QC 58-39-542
ALS Vial : 5 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:52:14 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:52:03 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051306.D
Acq On : 5 Jun 2013 11:41 am
Operator : DM
Sample : ICAL 5.0 SSTD
Misc : PNA_QC 58-39-541
ALS Vial : 6 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:54:01 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:53:21 2013
Response via : Initial Calibration

D 6/27/13 6/27/13

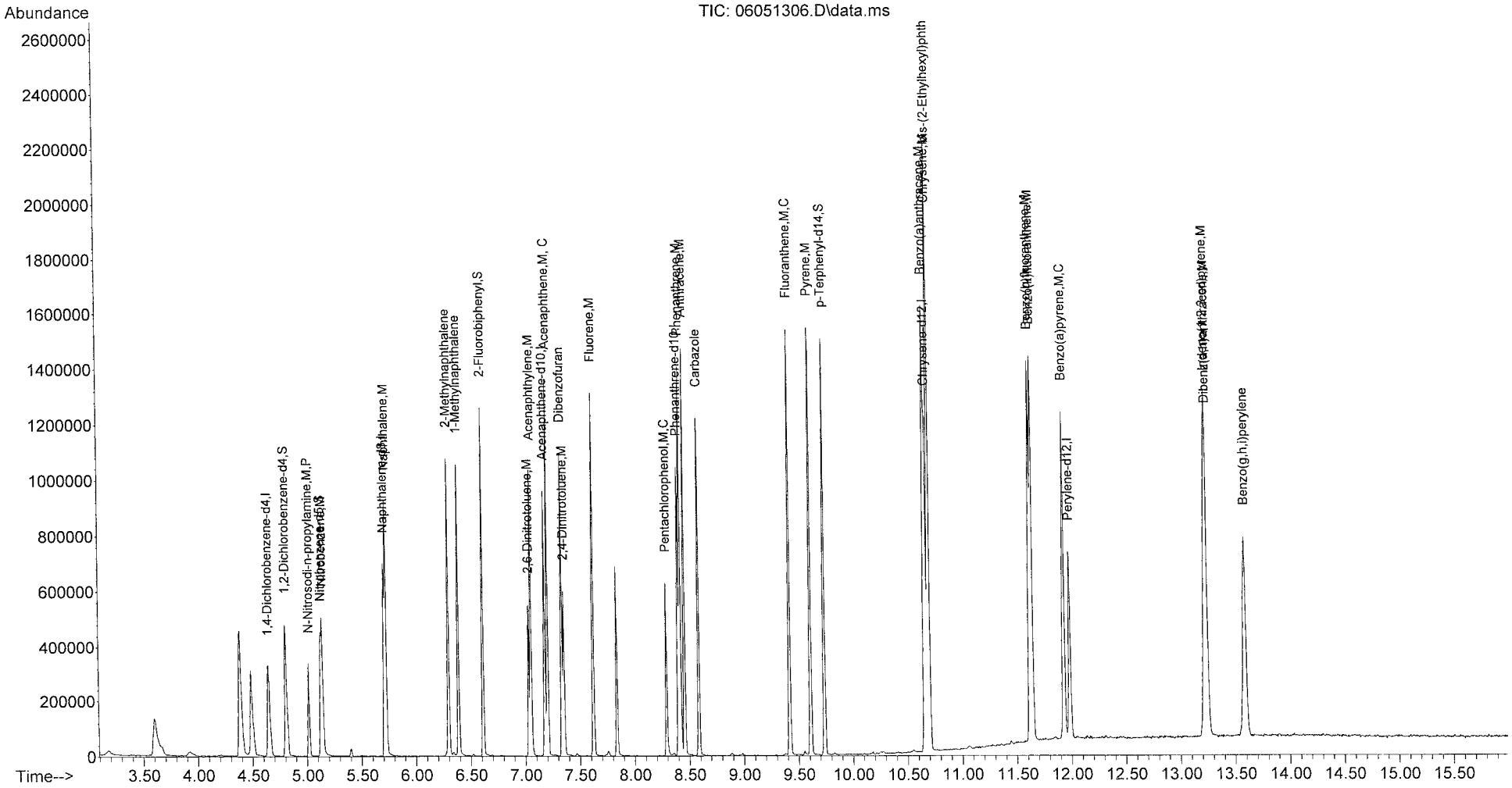
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.643	152	78367	4.00 ngs	0.00
6) Naphthalene-d8	5.708	136	258909	4.00 ngs	0.00
13) Acenaphthene-d10	7.179	164	175043	4.00 ngs	0.00
19) Phenanthrene-d10	8.398	188	345499	4.00 ngs	0.00
26) Chrysene-d12	10.671	240	406900	4.00 ngs	0.01
33) Perylene-d12	11.982	264	324472	4.00 ngs	0.01
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.804	152	102909	4.68 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	= 9.36%#	
4) Nitrobenzene-d5	5.130	82	139681	5.55 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	= 11.10%#	
10) 2-Fluorobiphenyl	6.612	172	326410	4.86 ngs	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	= 9.72%#	
25) p-Terphenyl-d14	9.735	244	446472	5.16 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	= 10.32%#	
Target Compounds					Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	68333	4.94 ngs	92
5) Nitrobenzene	5.141	77	132282	4.98 ngs	96
7) Naphthalene	5.724	128	354410	4.97 ngs	99
8) 2-Methylnaphthalene	6.296	142	247691	5.28 ngs	99
9) 1-Methylnaphthalene	6.387	142	218657	4.93 ngs	96
11) Acenaphthylene	7.056	152	417960	5.36 ngs	99
12) 2,6-Dinitrotoluene	7.034	165	65870	5.02 ngs	94
14) Acenaphthene	7.205	153	273506	5.26 ngs	97
15) Dibenzofuran	7.334	168	404156	4.79 ngs	99
16) 2,4-Dinitrotoluene	7.355	165	86486	5.45 ngs	88
17) Fluorene	7.622	166	314332	5.08 ngs	98
18) Pentachlorophenol	8.291	266	63608	5.76 ngs	94
20) Phenanthrene	8.419	178	501472	5.08 ngs	99
21) Anthracene	8.457	178	485006	5.27 ngs	99
22) Carbazole	8.585	167	435978	4.90 ngs	99
23) Fluoranthene	9.420	202	606029	5.35 ngs	100
24) Pyrene	9.607	202	640336	5.22 ngs	99
27) Benzo(a)anthracene	10.655	228	591621	5.20 ngs	99
28) Chrysene	10.693	228	580224	5.23 ngs	99
29) bis-(2-Ethylhexyl)phth	10.698	149	406205	4.80 ngs	97
30) Benzo(b)fluoranthene	11.618	252	619834m	5.03 ngs	
31) Benzo(k)fluoranthene	11.639	252	584332	5.93 ngs	96
32) Benzo(a)pyrene	11.928	252	558623	5.50 ngs	99
34) Indeno(1,2,3-cd)pyrene	13.228	276	651116	5.86 ngs	99
35) Dibenz(a,h)anthracene	13.239	278	522698	5.77 ngs	97
36) Benzo(g,h,i)perylene	13.586	276	556008	5.71 ngs	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051306.D
Acq On : 5 Jun 2013 11:41 am
Operator : DM
Sample : ICAL 5.0 SSTD
Misc : PNA_QC 58-39-541
ALS Vial : 6 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:54:01 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:53:21 2013
Response via : Initial Calibration

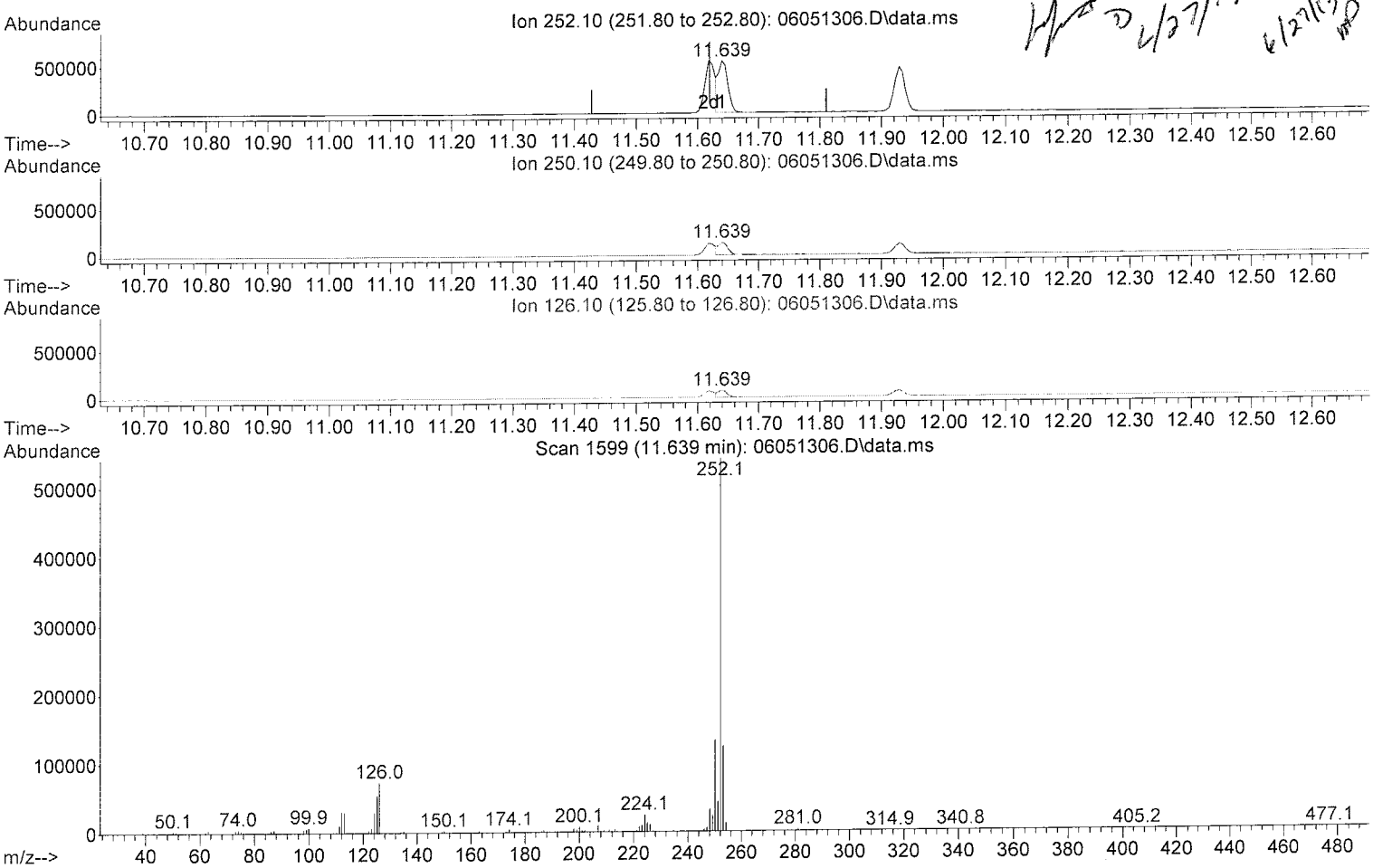


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051306.D
Acq On : 5 Jun 2013 11:41 am
Operator : DM
Sample : ICAL 5.0 SSTD
Misc : PNA_QC 58-39-541
ALS Vial : 6 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:53:35 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:53:21 2013
Response via : Initial Calibration

6/27/13 6/27/13



TIC: 06051306.D\data.ms

(30) Benzo(b)fluoranthene (M)

11.639min (+ 0.020) 4.74 ngs

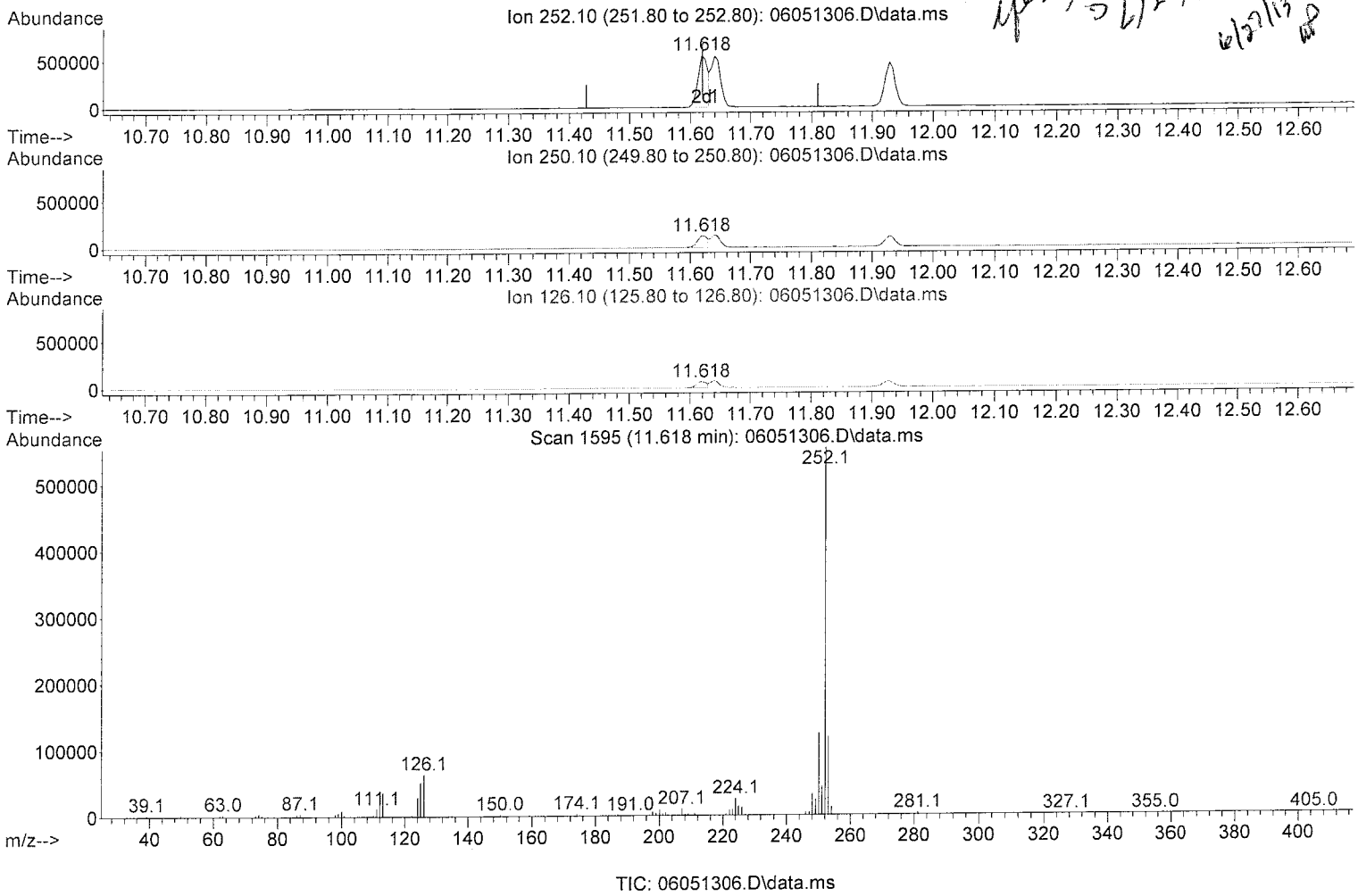
response 584332

Ion	Exp%	Act%
252.10	100.00	100.00
250.10	23.60	23.50
126.10	11.10	12.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051306.D
Acq On : 5 Jun 2013 11:41 am
Operator : DM
Sample : ICAL 5.0 SSTD
Misc : PNA_QC 58-39-541
ALS Vial : 6 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:53:35 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:53:21 2013
Response via : Initial Calibration



(30) Benzo(b)fluoranthene (M)

11.618min (-0.002) 5.03 ngs m

response 619834

Ion	Exp%	Act%
252.10	100.00	100.00
250.10	23.60	22.89
126.10	11.10	12.37
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051306.D
Acq On : 5 Jun 2013 11:41 am
Operator : DM
Sample : ICAL 5.0 SSTD
Misc : PNA_QC 58-39-541
ALS Vial : 6 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:53:35 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:53:21 2013
Response via : Initial Calibration

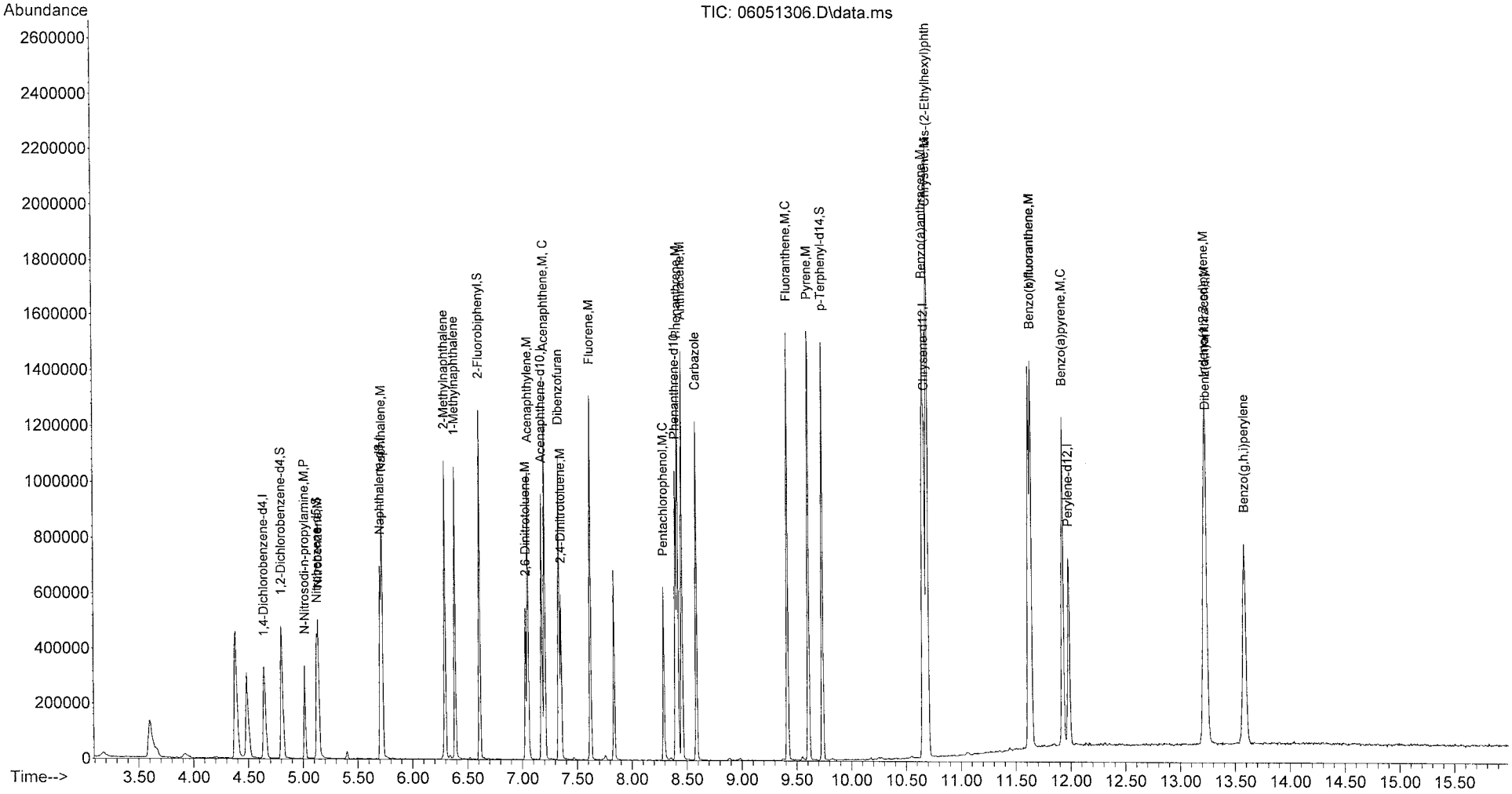
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.643	152	78367	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	258909	4.00	ngs	0.00
13) Acenaphthene-d10	7.179	164	175043	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	345499	4.00	ngs	0.00
26) Chrysene-d12	10.671	240	406900	4.00	ngs	0.01
33) Perylene-d12	11.982	264	324472	4.00	ngs	0.01
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.804	152	102909	4.68	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	9.36%#	
4) Nitrobenzene-d5	5.130	82	139681	5.55	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	11.10%#	
10) 2-Fluorobiphenyl	6.612	172	326410	4.86	ngs	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.72%#	
25) p-Terphenyl-d14	9.735	244	446472	5.16	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	10.32%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	68333	4.94	ngs	92
5) Nitrobenzene	5.141	77	132282	4.98	ngs	96
7) Naphthalene	5.724	128	354410	4.97	ngs	99
8) 2-Methylnaphthalene	6.296	142	247691	5.28	ngs	99
9) 1-Methylnaphthalene	6.387	142	218657	4.93	ngs	96
11) Acenaphthylene	7.056	152	417960	5.36	ngs	99
12) 2,6-Dinitrotoluene	7.034	165	65870	5.02	ngs	94
14) Acenaphthene	7.205	153	273506	5.26	ngs	97
15) Dibenzofuran	7.334	168	404156	4.79	ngs	99
16) 2,4-Dinitrotoluene	7.355	165	86486	5.45	ngs	88
17) Fluorene	7.622	166	314332	5.08	ngs	98
18) Pentachlorophenol	8.291	266	63608	5.76	ngs	94
20) Phenanthrene	8.419	178	501472	5.08	ngs	99
21) Anthracene	8.457	178	485006	5.27	ngs	99
22) Carbazole	8.585	167	435978	4.90	ngs	99
23) Fluoranthene	9.420	202	606029	5.35	ngs	100
24) Pyrene	9.607	202	640336	5.22	ngs	99
27) Benzo(a)anthracene	10.655	228	591621	5.20	ngs	99
28) Chrysene	10.693	228	580224	5.23	ngs	99
29) bis-(2-Ethylhexyl)phth	10.698	149	406205	4.80	ngs	97
30) Benzo(b)fluoranthene	11.639	252	584332	4.74	ngs	99
31) Benzo(k)fluoranthene	11.639	252	584332	5.93	ngs	96
32) Benzo(a)pyrene	11.928	252	558623	5.50	ngs	99
34) Indeno(1,2,3-cd)pyrene	13.228	276	651116	5.86	ngs	99
35) Dibenz(a,h)anthracene	13.239	278	522698	5.77	ngs	97
36) Benzo(g,h,i)perylene	13.586	276	556008	5.71	ngs	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051306.D
Acq On : 5 Jun 2013 11:41 am
Operator : DM
Sample : ICAL 5.0 SSTD
Misc : PNA_QC 58-39-541
ALS Vial : 6 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:53:35 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:53:21 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051307.D
Acq On : 5 Jun 2013 12:03 pm
Operator : DM
Sample : ICAL 7.5.0 SSTD
Misc : PNA_QC 58-39-540
ALS Vial : 7 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:54:32 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:54:21 2013
Response via : Initial Calibration

D 6/27/13 6/27/13 MP

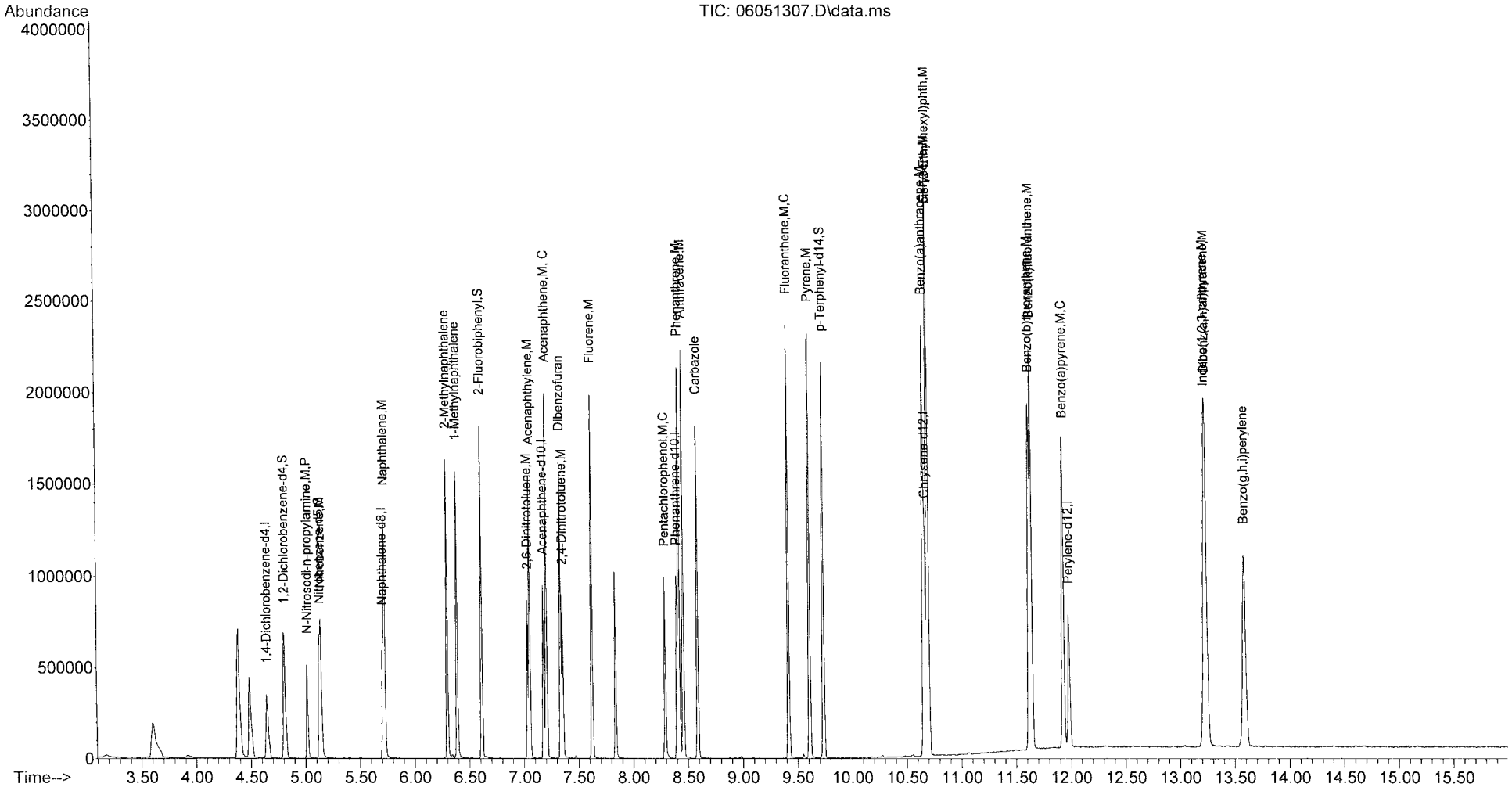
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.643	152	79249	4.00 ngs	0.00
6) Naphthalene-d8	5.708	136	260731	4.00 ngs	0.00
13) Acenaphthene-d10	7.179	164	171898	4.00 ngs	0.00
19) Phenanthrene-d10	8.398	188	346807	4.00 ngs	0.00
26) Chrysene-d12	10.671	240	399597	4.00 ngs	0.00
33) Perylene-d12	11.982	264	329130	4.00 ngs	0.00
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.809	152	152505	6.90 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	= 13.80%#	
4) Nitrobenzene-d5	5.130	82	214176	8.45 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	= 16.90%#	
10) 2-Fluorobiphenyl	6.612	172	492366	7.36 ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	= 14.72%#	
25) p-Terphenyl-d14	9.735	244	679282	7.79 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	= 15.58%#	
Target Compounds					Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	102698	7.52 ngs	98
5) Nitrobenzene	5.141	77	199715	7.61 ngs	98
7) Naphthalene	5.724	128	539900	7.51 ngs	99
8) 2-Methylnaphthalene	6.296	142	367628	7.72 ngs	99
9) 1-Methylnaphthalene	6.387	142	339970	7.64 ngs	99
11) Acenaphthylene	7.056	152	620781	7.88 ngs	99
12) 2,6-Dinitrotoluene	7.034	165	98900	7.59 ngs	97
14) Acenaphthene	7.205	153	409470	7.97 ngs	98
15) Dibenzofuran	7.334	168	578992	7.17 ngs	96
16) 2,4-Dinitrotoluene	7.355	165	129434	8.50 ngs	95
17) Fluorene	7.622	166	475320	7.85 ngs	99
18) Pentachlorophenol	8.291	266	101651	9.26 ngs	97
20) Phenanthrene	8.419	178	740330	7.44 ngs	99
21) Anthracene	8.457	178	741717	8.01 ngs	98
22) Carbazole	8.585	167	670145	7.74 ngs	99
23) Fluoranthene	9.420	202	919435	8.07 ngs	99
24) Pyrene	9.612	202	970244	7.86 ngs	99
27) Benzo(a)anthracene	10.655	228	896560	8.03 ngs	100
28) Chrysene	10.693	228	848805	7.73 ngs	98
29) bis-(2-Ethylhexyl)phth	10.698	149	626090	7.74 ngs	98
30) Benzo(b)fluoranthene	11.623	252	896245	7.46 ngs	99
31) Benzo(k)fluoranthene	11.639	252	920221	9.27 ngs	100
32) Benzo(a)pyrene	11.934	252	846797	8.41 ngs	99
34) Indeno(1,2,3-cd)pyrene	13.228	276	976150	8.40 ngs	100
35) Dibenz(a,h)anthracene	13.239	278	789295	8.31 ngs	99
36) Benzo(g,h,i)perylene	13.586	276	841490	8.28 ngs	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051307.D
Acq On : 5 Jun 2013 12:03 pm
Operator : DM
Sample : ICAL 7.5.0 SSTD
Misc : PNA_QC 58-39-540
ALS Vial : 7 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:54:32 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:54:21 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051307.D
Acq On : 5 Jun 2013 12:03 pm
Operator : DM
Sample : ICAL 7.5.0 SSTD
Misc : PNA_QC 58-39-540
ALS Vial : 7 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:54:32 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:54:21 2013
Response via : Initial Calibration

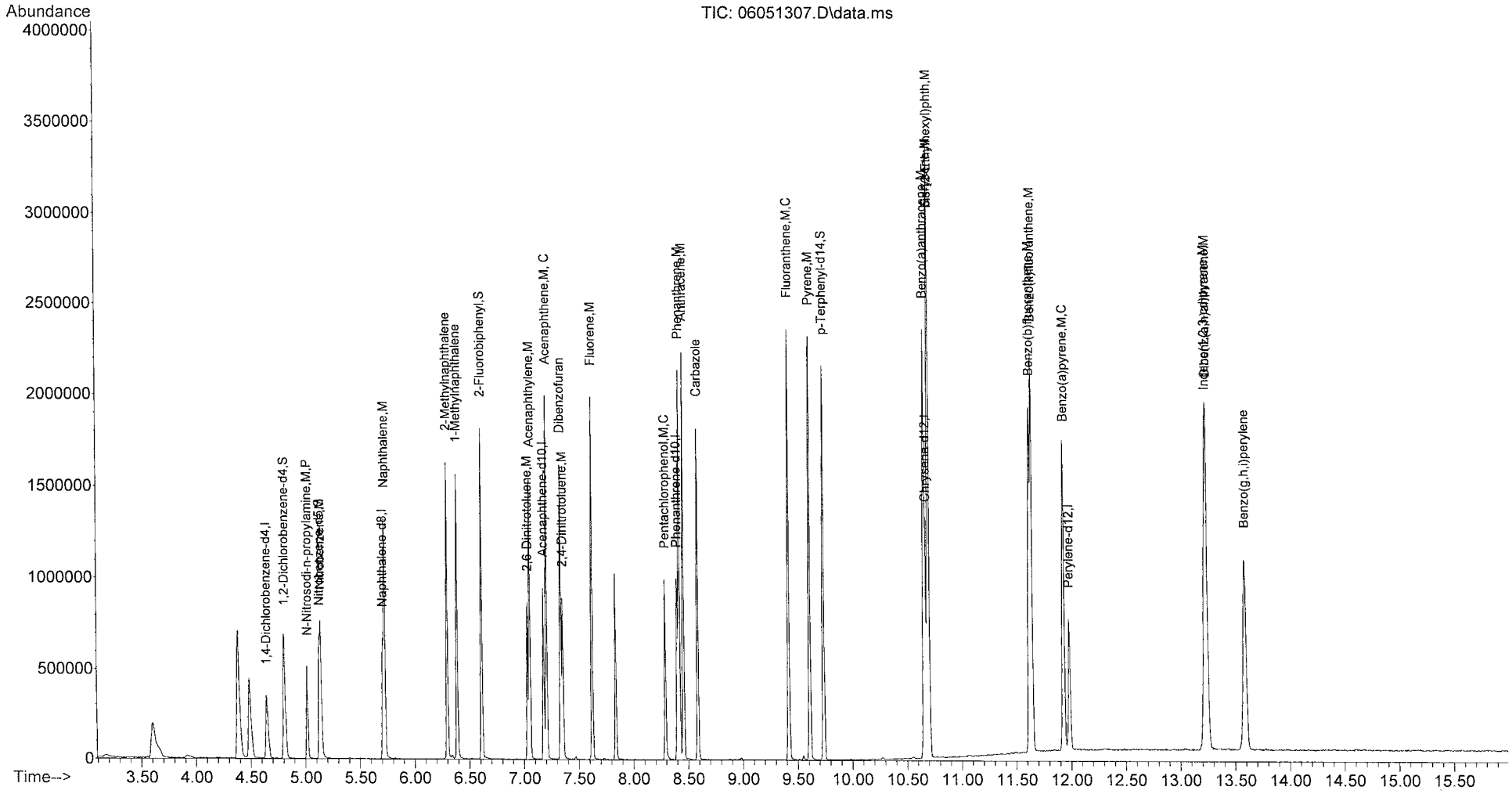
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.643	152	79249	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	260731	4.00	ngs	0.00
13) Acenaphthene-d10	7.179	164	171898	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	346807	4.00	ngs	0.00
26) Chrysene-d12	10.671	240	399597	4.00	ngs	0.00
33) Perylene-d12	11.982	264	329130	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.809	152	152505	6.90	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	13.80%#	
4) Nitrobenzene-d5	5.130	82	214176	8.45	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	16.90%#	
10) 2-Fluorobiphenyl	6.612	172	492366	7.36	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	14.72%#	
25) p-Terphenyl-d14	9.735	244	679282	7.79	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	15.58%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	102698	7.52	ngs	98
5) Nitrobenzene	5.141	77	199715	7.61	ngs	98
7) Naphthalene	5.724	128	539900	7.51	ngs	99
8) 2-Methylnaphthalene	6.296	142	367628	7.72	ngs	99
9) 1-Methylnaphthalene	6.387	142	339970	7.64	ngs	99
11) Acenaphthylene	7.056	152	620781	7.88	ngs	99
12) 2,6-Dinitrotoluene	7.034	165	98900	7.59	ngs	97
14) Acenaphthene	7.205	153	409470	7.97	ngs	98
15) Dibenzofuran	7.334	168	578992	7.17	ngs	96
16) 2,4-Dinitrotoluene	7.355	165	129434	8.50	ngs	95
17) Fluorene	7.622	166	475320	7.85	ngs	99
18) Pentachlorophenol	8.291	266	101651	9.26	ngs	97
20) Phenanthrene	8.419	178	740330	7.44	ngs	99
21) Anthracene	8.457	178	741717	8.01	ngs	98
22) Carbazole	8.585	167	670145	7.74	ngs	99
23) Fluoranthene	9.420	202	919435	8.07	ngs	99
24) Pyrene	9.612	202	970244	7.86	ngs	99
27) Benzo(a)anthracene	10.655	228	896560	8.03	ngs	100
28) Chrysene	10.693	228	848805	7.73	ngs	98
29) bis-(2-Ethylhexyl)phth	10.698	149	626090	7.74	ngs	98
30) Benzo(b)fluoranthene	11.623	252	896245	7.46	ngs	99
31) Benzo(k)fluoranthene	11.639	252	920221	9.27	ngs	100
32) Benzo(a)pyrene	11.934	252	846797	8.41	ngs	99
34) Indeno(1,2,3-cd)pyrene	13.228	276	976150	8.40	ngs	100
35) Dibenz(a,h)anthracene	13.239	278	789295	8.31	ngs	99
36) Benzo(g,h,i)perylene	13.586	276	841490	8.28	ngs	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051307.D
Acq On : 5 Jun 2013 12:03 pm
Operator : DM
Sample : ICAL 7.5.0 SSTD
Misc : PNA_QC 58-39-540
ALS Vial : 7 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:54:32 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:54:21 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051308.D
Acq On : 5 Jun 2013 12:26 pm
Operator : DM
Sample : ICAL 10.0 SSTD
Misc : PNA_QC 58-39-539
ALS Vial : 8 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:55:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:55:06 2013
Response via : Initial Calibration

6/27/13 6/28/13

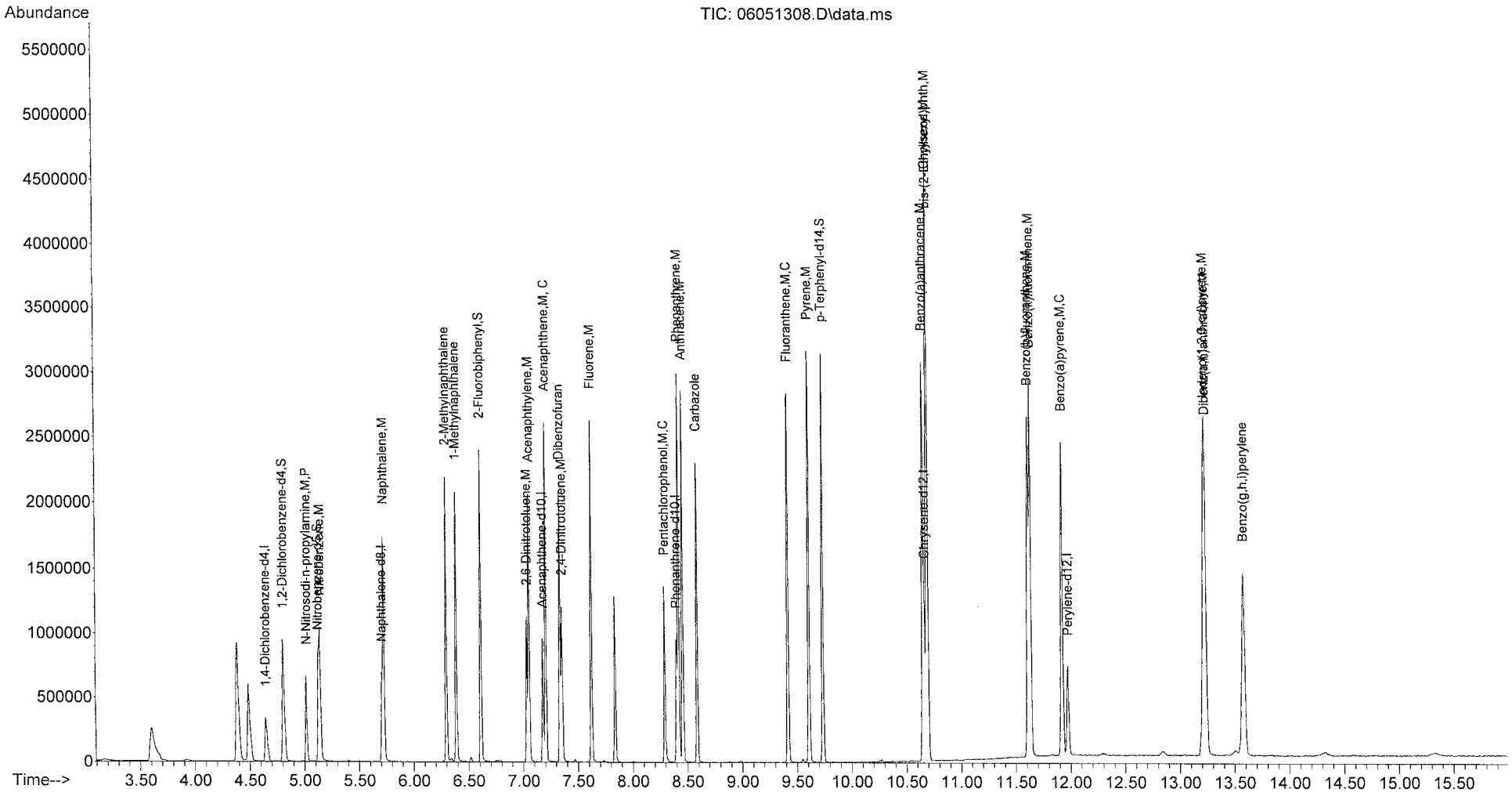
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.643	152	80717	4.00 ngs	0.00
6) Naphthalene-d8	5.708	136	256892	4.00 ngs	0.00
13) Acenaphthene-d10	7.179	164	174576	4.00 ngs	0.00
19) Phenanthrene-d10	8.398	188	343854	4.00 ngs	0.00
26) Chrysene-d12	10.666	240	394943	4.00 ngs	0.00
33) Perylene-d12	11.976	264	315431	4.00 ngs	0.00
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.804	152	203990	9.10 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 18.20%		
4) Nitrobenzene-d5	5.125	82	282285	10.88 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 21.76%#		
10) 2-Fluorobiphenyl	6.612	172	666632	10.17 ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 20.34%#		
25) p-Terphenyl-d14	9.735	244	898136	10.27 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 20.54%#		
Target Compounds					Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	138378	10.16 ngs	98
5) Nitrobenzene	5.141	77	270263	10.22 ngs	99
7) Naphthalene	5.724	128	698735	9.79 ngs	98
8) 2-Methylnaphthalene	6.296	142	490511	10.39 ngs	99
9) 1-Methylnaphthalene	6.387	142	440895	9.98 ngs	99
11) Acenaphthylene	7.056	152	843207	10.78 ngs	100
12) 2,6-Dinitrotoluene	7.034	165	133584	10.49 ngs	95
14) Acenaphthene	7.205	153	540785	10.23 ngs	98
15) Dibenzofuran	7.334	168	779247	9.68 ngs	98
16) 2,4-Dinitrotoluene	7.355	165	173959	11.35 ngs	99
17) Fluorene	7.622	166	638028	10.28 ngs	99
18) Pentachlorophenol	8.291	266	138605	12.04 ngs	98
20) Phenanthrene	8.419	178	991581	10.01 ngs	99
21) Anthracene	8.457	178	987727	10.65 ngs	99
22) Carbazole	8.585	167	877258	10.38 ngs	98
23) Fluoranthene	9.420	202	1203133	10.54 ngs	100
24) Pyrene	9.607	202	1277522	10.34 ngs	99
27) Benzo(a)anthracene	10.650	228	1190932	10.68 ngs	99
28) Chrysene	10.687	228	1131910	10.31 ngs	99
29) bis-(2-Ethylhexyl)phth	10.693	149	834589	10.62 ngs	100
30) Benzo(b)fluoranthene	11.613	252	1251364	10.54 ngs	99
31) Benzo(k)fluoranthene	11.634	252	1156158	11.39 ngs	99
32) Benzo(a)pyrene	11.923	252	1124849	11.10 ngs	99
34) Indeno(1,2,3-cd)pyrene	13.222	276	1308315	11.40 ngs	99
35) Dibenz(a,h)anthracene	13.233	278	1055635	11.22 ngs	98
36) Benzo(g,h,i)perylene	13.581	276	1104462	10.99 ngs	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051308.D
Acq On : 5 Jun 2013 12:26 pm
Operator : DM
Sample : ICAL 10.0 SSTD
Misc : PNA_QC 58-39-539
ALS Vial : 8 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:55:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:55:06 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051308.D
Acq On : 5 Jun 2013 12:26 pm
Operator : DM
Sample : ICAL 10.0 SSTD
Misc : PNA_QC 58-39-539
ALS Vial : 8 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:55:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:55:06 2013
Response via : Initial Calibration

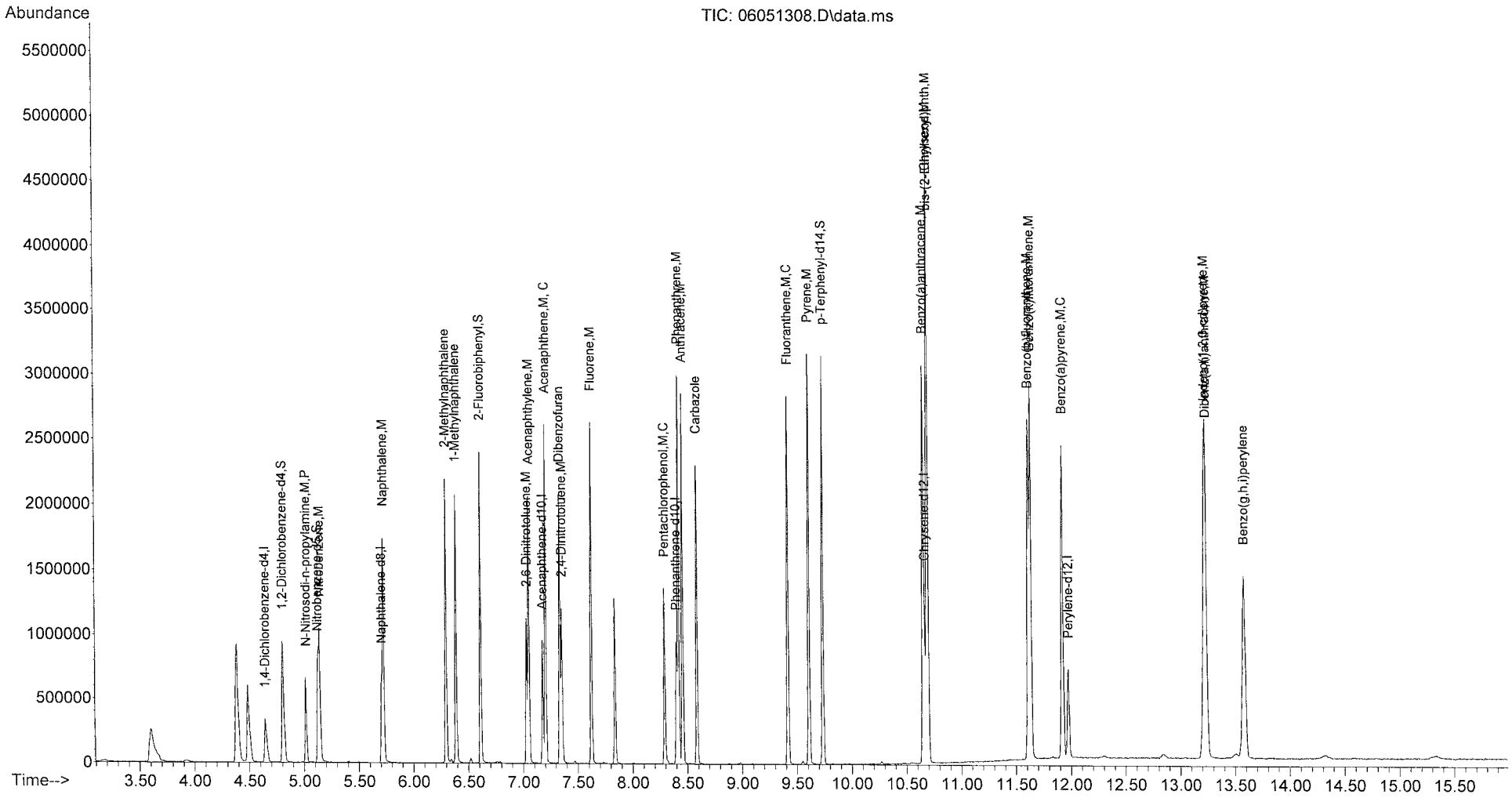
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.643	152	80717	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	256892	4.00	ngs	0.00
13) Acenaphthene-d10	7.179	164	174576	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	343854	4.00	ngs	0.00
26) Chrysene-d12	10.666	240	394943	4.00	ngs	0.00
33) Perylene-d12	11.976	264	315431	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.804	152	203990	9.10	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 18.20%			
4) Nitrobenzene-d5	5.125	82	282285	10.88	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 21.76%#			
10) 2-Fluorobiphenyl	6.612	172	666632	10.17	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 20.34%#			
25) p-Terphenyl-d14	9.735	244	898136	10.27	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 20.54%#			
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	138378	10.16	ngs	98
5) Nitrobenzene	5.141	77	270263	10.22	ngs	99
7) Naphthalene	5.724	128	698735	9.79	ngs	98
8) 2-Methylnaphthalene	6.296	142	490511	10.39	ngs	99
9) 1-Methylnaphthalene	6.387	142	440895	9.98	ngs	99
11) Acenaphthylene	7.056	152	843207	10.78	ngs	100
12) 2,6-Dinitrotoluene	7.034	165	133584	10.49	ngs	95
14) Acenaphthene	7.205	153	540785	10.23	ngs	98
15) Dibenzofuran	7.334	168	779247	9.68	ngs	98
16) 2,4-Dinitrotoluene	7.355	165	173959	11.35	ngs	99
17) Fluorene	7.622	166	638028	10.28	ngs	99
18) Pentachlorophenol	8.291	266	138605	12.04	ngs	98
20) Phenanthrene	8.419	178	991581	10.01	ngs	99
21) Anthracene	8.457	178	987727	10.65	ngs	99
22) Carbazole	8.585	167	877258	10.38	ngs	98
23) Fluoranthene	9.420	202	1203133	10.54	ngs	100
24) Pyrene	9.607	202	1277522	10.34	ngs	99
27) Benzo(a)anthracene	10.650	228	1190932	10.68	ngs	99
28) Chrysene	10.687	228	1131910	10.31	ngs	99
29) bis-(2-Ethylhexyl)phth	10.693	149	834589	10.62	ngs	100
30) Benzo(b)fluoranthene	11.613	252	1251364	10.54	ngs	99
31) Benzo(k)fluoranthene	11.634	252	1156158	11.39	ngs	99
32) Benzo(a)pyrene	11.923	252	1124849	11.10	ngs	99
34) Indeno(1,2,3-cd)pyrene	13.222	276	1308315	11.40	ngs	99
35) Dibenz(a,h)anthracene	13.233	278	1055635	11.22	ngs	98
36) Benzo(g,h,i)perylene	13.581	276	1104462	10.99	ngs	98

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

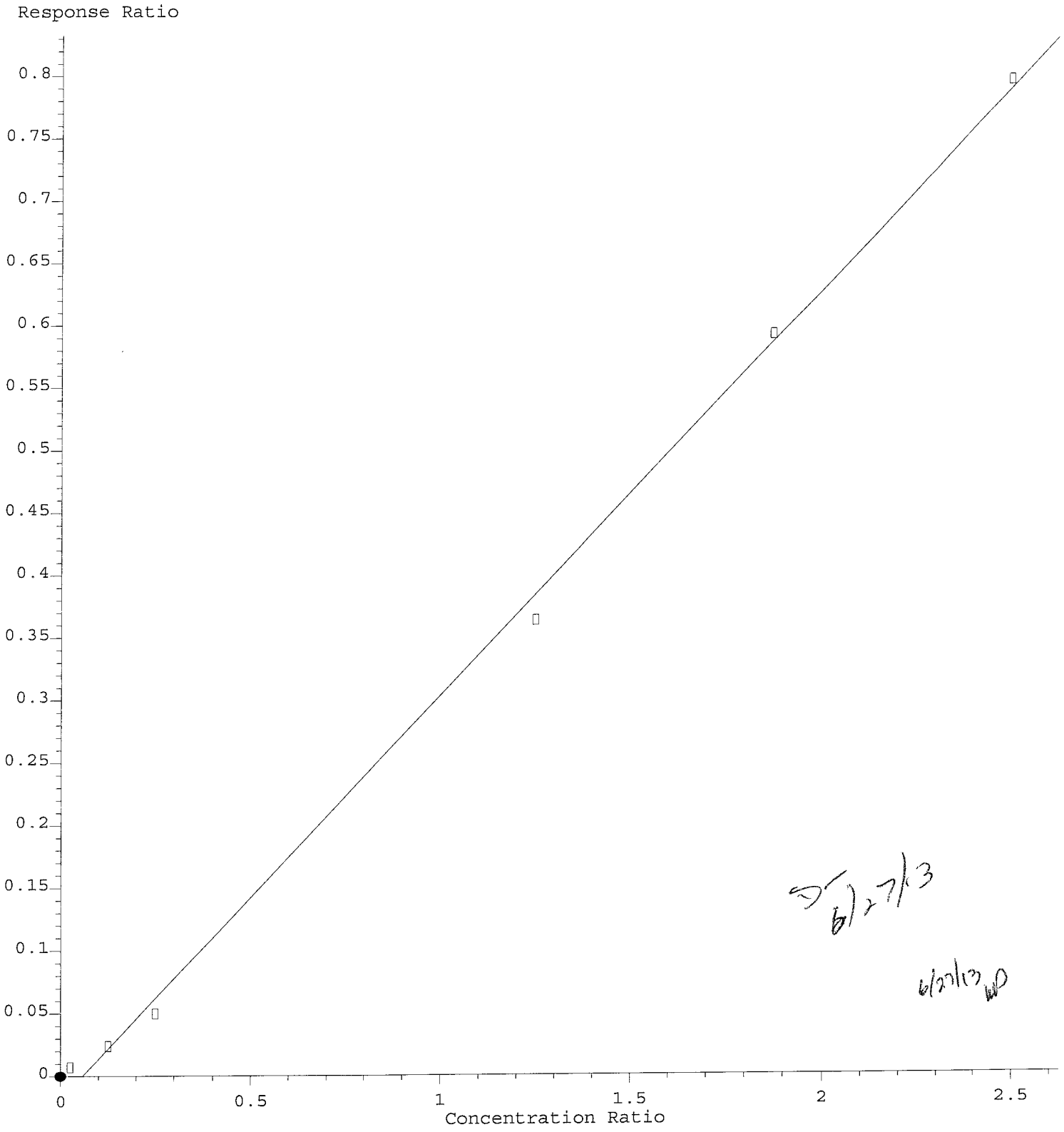
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051308.D
Acq On : 5 Jun 2013 12:26 pm
Operator : DM
Sample : ICAL 10.0 SSTD
Misc : PNA_QC 58-39-539
ALS Vial : 8 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:55:22 2013
Quant Method : C:\msdchem\1\data\060513\PNA0523.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:55:06 2013
Response via : Initial Calibration



Pentachlorophenol



6/27/13

6/27/13 WD

Response = 3.22e-001 * Amt - 1.88e-002
Coef of Det (r^2) = 0.998 Curve Fit: Linear
Method Name: C:\msdchem\1\data\060513\PNA0605.M
Calibration Table Last Updated: Wed Jun 05 15:56:30 2013

Method Path : C:\msdchem\1\data\060513\
Method File : PNA0605.M
Title : SOP 4020 EPA 8270C
Last Update : Wed Jun 05 15:57:59 2013
Response Via : Initial Calibration

Calibration Files
0.1 =06051303.D 0.5 =06051304.D 1.0 =06051305.D 5.0 =06051306.D 7.5 =06051307.D
10 =06051308.D

		Compound	0.1	0.5	1.0	5.0	7.5	10	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------							
2)	S	1,2-Dichlorobe...	1.253	1.182	1.051	1.051	1.026	1.011	1.096	8.97
3)	M,P	N-Nitrosodi-n-...	0.575	0.656	0.651	0.698	0.691	0.686	0.659	6.90
4)	S	Nitrobenzene-d5	1.073	1.198	1.166	1.426	1.441	1.399	1.284	12.26
5)	M	Nitrobenzene	1.198	1.263	1.240	1.350	1.344	1.339	1.289	4.98
6)	I	Naphthalene-d8	----------ISTD----------							
7)	M	Naphthalene	1.162	1.097	1.083	1.095	1.104	1.088	1.105	2.61
8)		2-Methylnaphth...	0.683	0.744	0.704	0.765	0.752	0.764	0.735	4.62
9)		1-Methylnaphth...	0.678	0.692	0.680	0.676	0.695	0.687	0.685	1.17
10)	S	2-Fluorobiphenyl	1.006	0.994	0.989	1.009	1.007	1.038	1.007	1.71
11)	M	Acenaphthylene	1.102	1.199	1.137	1.291	1.270	1.313	1.219	7.11
12)	M	2,6-Dinitrotol...	0.214	0.159	0.184	0.204	0.202	0.208	0.195	10.57
13)	I	Acenaphthene-d10	----------ISTD----------							
14)	M, C	Acenaphthene	1.144	1.186	1.155	1.250	1.270	1.239	1.207	4.40
15)		Dibenzofuran	1.892	1.688	1.673	1.847	1.796	1.785	1.780	4.86
16)	M	2,4-Dinitrotol...	0.241	0.294	0.325	0.395	0.402	0.399	0.343	19.52
17)	M	Fluorene	1.423	1.302	1.365	1.437	1.475	1.462	1.411	4.64
18)	M,C	Pentachlorophenol	0.285	0.190	0.199	0.291	0.315	0.318	0.266	21.45
19)	I	Phenanthrene-d10	----------ISTD----------							
20)	M	Phenanthrene	1.220	1.135	1.074	1.161	1.139	1.153	1.147	4.12
21)	M	Anthracene	0.991	1.033	1.012	1.123	1.141	1.149	1.075	6.56
22)		Carbazole	0.790	0.880	0.949	1.010	1.031	1.021	0.947	10.06
23)	M,C	Fluoranthene	1.206	1.283	1.208	1.403	1.414	1.400	1.319	7.52
24)	M	Pyrene	1.380	1.374	1.363	1.483	1.492	1.486	1.430	4.40
25)	S	p-Terphenyl-d14	1.009	1.014	0.937	1.034	1.045	1.045	1.014	3.99
26)	I	Chrysene-d12	----------ISTD----------							
27)	M	Benzo(a)anthra...	1.110	1.072	1.045	1.163	1.197	1.206	1.132	5.90
28)	M	Chrysene	1.121	1.078	1.069	1.141	1.133	1.146	1.115	2.96
29)	M	bis-(2-Ethylhe...	0.784	0.695	0.671	0.799	0.836	0.845	0.772	9.42
30)	M	Benzo(b)fluora...	1.095	1.143	1.271	1.219	1.196	1.267	1.199	5.79
31)	M	Benzo(k)fluora...	0.991	0.922	0.868	1.149	1.228	1.171	1.055	14.01
32)	M,C	Benzo(a)pyrene	0.918	0.967	0.984	1.098	1.130	1.139	1.040	9.09
33)	I	Perylene-d12	----------ISTD----------							
34)	M	Indeno(1,2,3-c...	1.316	1.431	1.428	1.605	1.582	1.659	1.503	8.77
35)	M	Dibenz(a,h)ant...	1.227	1.147	1.134	1.289	1.279	1.339	1.236	6.65
36)		Benzo(g,h,i)pe...	1.205	1.268	1.277	1.371	1.364	1.401	1.314	5.75

(#) = Out of Range

D 6/27/13

6/27/13 MD

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051309.D
Acq On : 5 Jun 2013 12:48 pm
Operator : DM
Sample : ICV 5.0 SSTD
Misc : PNA_QC 58-39-545
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:59:03 2013
Quant Method : C:\msdchem\1\data\060513\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:57:59 2013
Response via : Initial Calibration

D 6/27/13 6/27/13 P

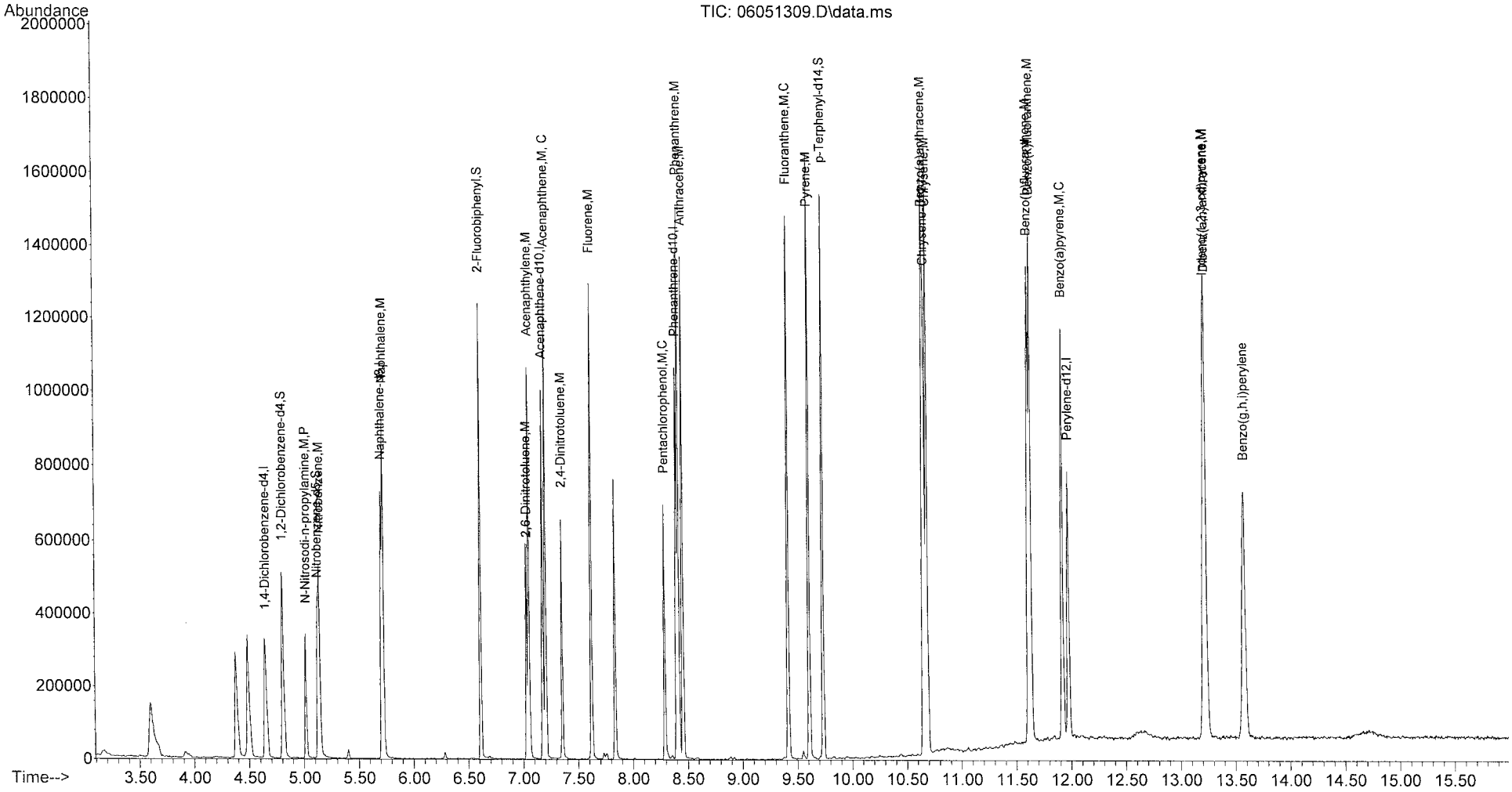
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	81308	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	267075	4.00	ngs	0.00
13) Acenaphthene-d10	7.179	164	180565	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	355263	4.00	ngs	0.00
26) Chrysene-d12	10.666	240	410838	4.00	ngs	0.00
33) Perylene-d12	11.976	264	325034	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.804	152	111012	4.98	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	9.96%#	
4) Nitrobenzene-d5	5.125	82	141276	5.41	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	10.82%#	
10) 2-Fluorobiphenyl	6.612	172	331257	4.93	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.86%#	
25) p-Terphenyl-d14	9.735	244	434507	4.82	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.64%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	72261	5.39	ngs	97
5) Nitrobenzene	5.141	77	135587	5.17	ngs	98
7) Naphthalene	5.724	128	366413	4.97	ngs	99
11) Acenaphthylene	7.050	152	420634	5.17	ngs	98
12) 2,6-Dinitrotoluene	7.034	165	70729	5.43	ngs	95
14) Acenaphthene	7.205	153	269747	4.95	ngs	98
16) 2,4-Dinitrotoluene	7.355	165	90244	5.84	ngs	95
17) Fluorene	7.623	166	323857	5.09	ngs	97
18) Pentachlorophenol	8.291	266	73572	5.29	ngs	99
20) Phenanthrene	8.420	178	512596	5.03	ngs	100
21) Anthracene	8.457	178	506119	5.30	ngs	98
23) Fluoranthene	9.420	202	612020	5.23	ngs	99
24) Pyrene	9.607	202	637614	5.02	ngs	99
27) Benzo(a)anthracene	10.650	228	604344	5.20	ngs	99
28) Chrysene	10.687	228	582908	5.09	ngs	99
30) Benzo(b)fluoranthene	11.613	252	626870	5.09	ngs	99
31) Benzo(k)fluoranthene	11.634	252	533070	4.92	ngs	100
32) Benzo(a)pyrene	11.923	252	500681	4.69	ngs	99
34) Indeno(1,2,3-cd)pyrene	13.217	276	618922	5.07	ngs	99
35) Dibenz(a,h)anthracene	13.228	278	523155	5.21	ngs	97
36) Benzo(g,h,i)perylene	13.581	276	557220	5.22	ngs	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051309.D
Acq On : 5 Jun 2013 12:48 pm
Operator : DM
Sample : ICV 5.0 SSTD
Misc : PNA_QC 58-39-545
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:59:03 2013
Quant Method : C:\msdchem\1\data\060513\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:57:59 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051309.D
Acq On : 5 Jun 2013 12:48 pm
Operator : DM
Sample : ICV 5.0 SSTD
Misc : PNA_QC 58-39-545
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:58:33 2013
Quant Method : C:\msdchem\1\data\060513\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:57:59 2013
Response via : Initial Calibration

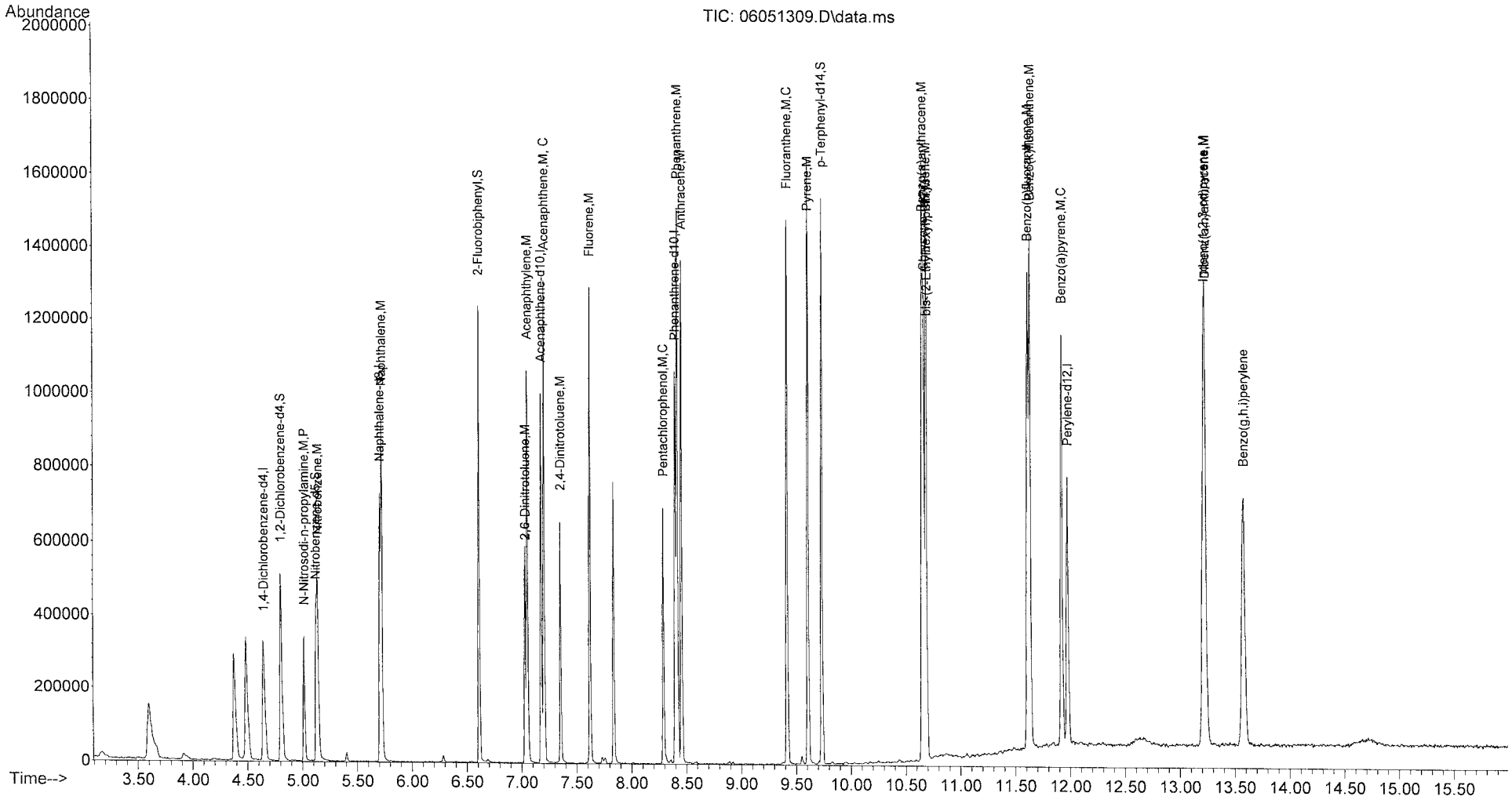
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	81308	4.00	ngs	0.00
6) Naphthalene-d8	5.708	136	267075	4.00	ngs	0.00
13) Acenaphthene-d10	7.179	164	180565	4.00	ngs	0.00
19) Phenanthrene-d10	8.398	188	355263	4.00	ngs	0.00
26) Chrysene-d12	10.666	240	410838	4.00	ngs	0.00
33) Perylene-d12	11.976	264	325034	4.00	ngs	0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.804	152	111012	4.98	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	9.96%#	
4) Nitrobenzene-d5	5.125	82	141276	5.41	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	10.82%#	
10) 2-Fluorobiphenyl	6.612	172	331257	4.93	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.86%#	
25) p-Terphenyl-d14	9.735	244	434507	4.82	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.64%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	5.018	70	72261	5.39	ngs	97
5) Nitrobenzene	5.141	77	135587	5.17	ngs	98
7) Naphthalene	5.724	128	366413	4.97	ngs	99
11) Acenaphthylene	7.050	152	420634	5.17	ngs	98
12) 2,6-Dinitrotoluene	7.034	165	70729	5.43	ngs	95
14) Acenaphthene	7.205	153	269747	4.95	ngs	98
16) 2,4-Dinitrotoluene	7.355	165	90244	5.84	ngs	95
17) Fluorene	7.623	166	323857	5.09	ngs	97
18) Pentachlorophenol	8.291	266	73572	5.29	ngs	99
20) Phenanthrene	8.420	178	512596	5.03	ngs	100
21) Anthracene	8.457	178	506119	5.30	ngs	98
23) Fluoranthene	9.420	202	612020	5.23	ngs	99
24) Pyrene	9.607	202	637614	5.02	ngs	99
27) Benzo(a)anthracene	10.650	228	604344	5.20	ngs	99
28) Chrysene	10.687	228	582908	5.09	ngs	99
29) bis-(2-Ethylhexyl)phth	10.693	149	4303	0.05	ngs #	58
30) Benzo(b)fluoranthene	11.613	252	626870	5.09	ngs	99
31) Benzo(k)fluoranthene	11.634	252	533070	4.92	ngs	100
32) Benzo(a)pyrene	11.923	252	500681	4.69	ngs	99
34) Indeno(1,2,3-cd)pyrene	13.217	276	618922	5.07	ngs	99
35) Dibenz(a,h)anthracene	13.228	278	523155	5.21	ngs	97
36) Benzo(g,h,i)perylene	13.581	276	557220	5.22	ngs	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\060513\
Data File : 06051309.D
Acq On : 5 Jun 2013 12:48 pm
Operator : DM
Sample : ICV 5.0 SSTD
Misc : PNA_QC 58-39-545
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:58:33 2013
Quant Method : C:\msdchem\1\data\060513\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:57:59 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\060513\
Data File : 06051309.D
Acq On : 5 Jun 2013 12:48 pm
Operator : DM
Sample : ICV 5.0 SSTD
Misc : PNA_QC 58-39-545
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 05 15:59:03 2013
Quant Method : C:\msdchem\1\data\060513\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 05 15:57:59 2013
Response via : Initial Calibration

D 6/27/13 6/27/13

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	4.000	4.000	0.0	104	0.00
2	S	1,2-Dichlorobenzene-d4	5.000	4.984	0.3	108	0.00
3	M,P	N-Nitrosodi-n-propylamine	5.000	5.391	-7.8	106	0.00
4	S	Nitrobenzene-d5	5.000	5.414	-8.3	101	0.00
5	M	Nitrobenzene	5.000	5.174	-3.5	102	0.00
6	I	Naphthalene-d8	4.000	4.000	0.0	103	0.00
7	M	Naphthalene	5.000	4.966	0.7	103	0.00
8		2-Methylnaphthalene	5.000	0.000	100.0#	0	-6.30#
9		1-Methylnaphthalene	5.000	0.000	100.0#	0	-6.39#
10	S	2-Fluorobiphenyl	5.000	4.927	1.5	101	0.00
11	M	Acenaphthylene	5.000	5.170	-3.4	101	0.00
12	M	2,6-Dinitrotoluene	5.000	5.430	-8.6	107	0.00
13	I	Acenaphthene-d10	4.000	4.000	0.0	103	0.00
14	M, C	Acenaphthene	5.000	4.950	1.0	99	0.00
15		Dibenzofuran	5.000	0.000	100.0#	0	-7.33#
16	M	2,4-Dinitrotoluene	5.000	5.837	-16.7	104	0.00
17	M	Fluorene	5.000	5.086	-1.7	103	0.00
18	M,C	Pentachlorophenol	5.000	5.290	-5.8	116	0.00
19	I	Phenanthrene-d10	4.000	4.000	0.0	103	0.00
20	M	Phenanthrene	5.000	5.031	-0.6	102	0.00
21	M	Anthracene	5.000	5.301	-6.0	104	0.00
22		Carbazole	5.000	0.000	100.0#	0	-8.59#
23	M,C	Fluoranthene	5.000	5.225	-4.5	101	0.00
24	M	Pyrene	5.000	5.021	-0.4	100	0.00
25	S	p-Terphenyl-d14	5.000	4.825	3.5	97	0.00
26	I	Chrysene-d12	4.000	4.000	0.0	101	0.00
27	M	Benzo(a)anthracene	5.000	5.197	-3.9	102	0.00
28	M	Chrysene	5.000	5.091	-1.8	100	0.00
29	M	bis-(2-Ethylhexyl)phth	5.000	0.000	100.0#	0	-10.70#
30	M	Benzo(b)fluoranthene	5.000	5.092	-1.8	101	0.00
31	M	Benzo(k)fluoranthene	5.000	4.921	1.6	91	0.00
32	M,C	Benzo(a)pyrene	5.000	4.689	6.2	90	0.00
33	I	Perylene-d12	4.000	4.000	0.0	100	0.00
34	M	Indeno(1,2,3-cd)pyrene	5.000	5.066	-1.3	95	-0.01
35	M	Dibenz(a,h)anthracene	5.000	5.211	-4.2	100	-0.01
36		Benzo(g,h,i)perylene	5.000	5.218	-4.4	100	0.00

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

STAT Analysis Corporation

Semi-Volatile Organic Compounds (SVOCs)

SW846 8270C

Run 1

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **SVOC-7_130626A**

Sample ID: **DFTPP-1** SampType: **TUNE** TestCode: **DFTPP_D** Units: Prep Date: Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **R90499** TestNo: **DFTPP_Tune** Analysis Date: **06/26/13 10:29** SeqNo: **2441664**

Mass	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
51	27	0	100	0	27	10	80	0	0		
68	1.4	0	100	0	1.4	0	2	0	0		
69	42.4	0	100	0	42.4	0	100	0	0		
70	0.5	0	100	0	0.5	0	2	0	0		
127	32	0	100	0	32	10	80	0	0		
197	0	0	100	0	0	0	2	0	0		
198	75	0	100	0	75	50	100	0	0		
199	7	0	100	0	7	5	9	0	0		
275	21.9	0	100	0	21.9	10	60	0	0		
365	7.3	0	100	0	7.3	1	100	0	0		
441	16.3	0	100	0	16.3	0.01	24	0	0		
442	100	0	100	0	100	50	100	0	0		
443	18.5	0	100	0	18.5	15	24	0	0		

Sample ID: **5.0 SSTD** SampType: **CCV** TestCode: **PNA_QC** Units: **µg/mL** Prep Date: Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **R90499** TestNo: **SW8270C-SI** Analysis Date: **06/26/13 10:51** SeqNo: **2441665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	5.16	0.10	5	0	103	80	120	0	0		
Acenaphthene	4.95	0.10	5	0	99	80	120	0	0		
Acenaphthylene	5.51	0.10	5	0	110	80	120	0	0		
Anthracene	5.27	0.10	5	0	105	80	120	0	0		
Benz(a)anthracene	5.29	0.10	5	0	106	80	120	0	0		
Benzo(a)pyrene	5.75	0.10	5	0	115	80	120	0	0		
Benzo(b)fluoranthene	5.39	0.10	5	0	108	80	120	0	0		
Benzo(g,h,i)perylene	5.25	0.10	5	0	105	80	120	0	0		
Benzo(k)fluoranthene	5.55	0.10	5	0	111	80	120	0	0		
Chrysene	4.84	0.10	5	0	96.8	80	120	0	0		
Dibenz(a,h)anthracene	5.4	0.10	5	0	108	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **SVOC-7_130626A**

Sample ID: **5.0 SSTD** SampType: **CCV** TestCode: **PNA_QC** Units: **µg/mL** Prep Date: Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **R90499** TestNo: **SW8270C-SI** Analysis Date: **06/26/13 10:51** SeqNo: **2441665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene	5.45	0.10	5	0	109	80	120	0	0		
Fluorene	4.99	0.10	5	0	99.8	80	120	0	0		
Indeno(1,2,3-cd)pyrene	5.42	0.10	5	0	108	80	120	0	0		
Naphthalene	4.86	0.10	5	0	97.2	80	120	0	0		
Phenanthrene	4.92	0.10	5	0	98.4	80	120	0	0		
Pyrene	5.35	0.10	5	0	107	80	120	0	0		

Sample ID: **MB-70059-PNA** SampType: **MBLK** TestCode: **PNA_WATER** Units: **mg/L** Prep Date: **6/24/2013** Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **70059** TestNo: **SW8270C-SI** Analysis Date: **06/26/13 15:42** SeqNo: **2442045**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.0010									
Acenaphthylene	ND	0.0010									
Anthracene	ND	0.0010									
Benz(a)anthracene	ND	0.00010									
Benzo(a)pyrene	ND	0.00010									
Benzo(b)fluoranthene	ND	0.00010									
Benzo(g,h,i)perylene	ND	0.0010									
Benzo(k)fluoranthene	ND	0.00010									
Chrysene	ND	0.00010									
Dibenz(a,h)anthracene	ND	0.00010									
Fluoranthene	ND	0.0010									
Fluorene	ND	0.0010									
Indeno(1,2,3-cd)pyrene	ND	0.00010									
2-Methylnaphthalene	ND	0.0010									
Naphthalene	ND	0.0010									
Phenanthrene	ND	0.0010									
Pyrene	ND	0.0010									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **SVOC-7_130626A**

Sample ID: **LCS-70059-PNA** SampType: **LCS** TestCode: **PNA_WATER** Units: **mg/L** Prep Date: **6/24/2013** Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **70059** TestNo: **SW8270C-SI** Analysis Date: **06/26/13 16:04** SeqNo: **2442046**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.00493	0.0010	0.005	0	98.6	50	125	0	0		
Acenaphthylene	0.00513	0.0010	0.005	0	103	50	125	0	0		
Anthracene	0.00488	0.0010	0.005	0	97.6	50	125	0	0		
Benz(a)anthracene	0.00494	0.00010	0.005	0	98.8	50	125	0	0		
Benzo(a)pyrene	0.00501	0.00010	0.005	0	100	50	125	0	0		
Benzo(b)fluoranthene	0.00494	0.00010	0.005	0	98.8	50	125	0	0		
Benzo(g,h,i)perylene	0.00597	0.0010	0.005	0	119	50	125	0	0		
Benzo(k)fluoranthene	0.00549	0.00010	0.005	0	110	50	125	0	0		
Chrysene	0.0048	0.00010	0.005	0	96	50	125	0	0		
Dibenz(a,h)anthracene	0.00617	0.00010	0.005	0	123	50	125	0	0		
Fluoranthene	0.00516	0.0010	0.005	0	103	50	125	0	0		
Fluorene	0.00514	0.0010	0.005	0	103	50	125	0	0		
Indeno(1,2,3-cd)pyrene	0.00605	0.00010	0.005	0	121	50	125	0	0		
2-Methylnaphthalene	0.0061	0.0010	0.005	0	122	50	125	0	0		
Naphthalene	0.00492	0.0010	0.005	0	98.4	50	125	0	0		
Phenanthrene	0.00486	0.0010	0.005	0	97.2	50	125	0	0		
Pyrene	0.00516	0.0010	0.005	0	103	50	125	0	0		

Sample ID: **13060778-001BMS** SampType: **MS** TestCode: **PNA_WATER** Units: **mg/L** Prep Date: **6/24/2013** Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **70059** TestNo: **SW8270C-SI** Analysis Date: **06/26/13 19:26** SeqNo: **2442397**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.00524	0.0010	0.005	0	105	50	125	0	0		
Acenaphthylene	0.00553	0.0010	0.005	0	111	50	125	0	0		
Anthracene	0.00533	0.0010	0.005	0	107	50	125	0	0		
Benz(a)anthracene	0.00548	0.00010	0.005	0	110	50	125	0	0		
Benzo(a)pyrene	0.0057	0.00010	0.005	0	114	50	125	0	0		
Benzo(b)fluoranthene	0.00599	0.00010	0.005	0	120	50	125	0	0		
Benzo(g,h,i)perylene	0.00658	0.0010	0.005	0	132	50	125	0	0		S
Benzo(k)fluoranthene	0.00559	0.00010	0.005	0	112	50	125	0	0		
Chrysene	0.00544	0.00010	0.005	0	109	50	125	0	0		

Qualifiers:
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **SVOC-7_130626A**

Sample ID: **13060778-001BMS** SampType: **MS** TestCode: **PNA_WATER** Units: **mg/L** Prep Date: **6/24/2013** Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **70059** TestNo: **SW8270C-SI** Analysis Date: **06/26/13 19:26** SeqNo: **2442397**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenz(a,h)anthracene	0.00682	0.00010	0.005	0	136	50	125	0	0		S
Fluoranthene	0.00564	0.0010	0.005	0	113	50	125	0	0		
Fluorene	0.00541	0.0010	0.005	0	108	50	125	0	0		
Indeno(1,2,3-cd)pyrene	0.00695	0.00010	0.005	0	139	50	125	0	0		S
2-Methylnaphthalene	0.00619	0.0010	0.005	0	124	50	125	0	0		
Naphthalene	0.00525	0.0010	0.005	0	105	50	125	0	0		
Phenanthrene	0.00516	0.0010	0.005	0	103	50	125	0	0		
Pyrene	0.00557	0.0010	0.005	0	111	50	125	0	0		

Sample ID: **13060778-001BMSD** SampType: **MSD** TestCode: **PNA_WATER** Units: **mg/L** Prep Date: **6/24/2013** Run ID: **SVOC-7_130626A**
Client ID: **ZZZZZ** Batch ID: **70059** TestNo: **SW8270C-SI** Analysis Date: **06/26/13 19:48** SeqNo: **2442399**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.00495	0.0010	0.005	0	99	50	125	0.00524	5.69	25	
Acenaphthylene	0.0052	0.0010	0.005	0	104	50	125	0.00553	6.15	25	
Anthracene	0.00525	0.0010	0.005	0	105	50	125	0.00533	1.51	25	
Benz(a)anthracene	0.0052	0.00010	0.005	0	104	50	125	0.00548	5.24	25	
Benzo(a)pyrene	0.00547	0.00010	0.005	0	109	50	125	0.0057	4.12	25	
Benzo(b)fluoranthene	0.00545	0.00010	0.005	0	109	50	125	0.00599	9.44	25	
Benzo(g,h,i)perylene	0.00631	0.0010	0.005	0	126	50	125	0.00658	4.19	25	S
Benzo(k)fluoranthene	0.00594	0.00010	0.005	0	119	50	125	0.00559	6.07	25	
Chrysene	0.00537	0.00010	0.005	0	107	50	125	0.00544	1.30	25	
Dibenz(a,h)anthracene	0.00662	0.00010	0.005	0	132	50	125	0.00682	2.98	25	S
Fluoranthene	0.00559	0.0010	0.005	0	112	50	125	0.00564	0.890	25	
Fluorene	0.00507	0.0010	0.005	0	101	50	125	0.00541	6.49	25	
Indeno(1,2,3-cd)pyrene	0.00667	0.00010	0.005	0	133	50	125	0.00695	4.11	25	S
2-Methylnaphthalene	0.00605	0.0010	0.005	0	121	50	125	0.00619	2.29	25	
Naphthalene	0.005	0.0010	0.005	0	100	50	125	0.00525	4.88	25	
Phenanthrene	0.00517	0.0010	0.005	0	103	50	125	0.00516	0.194	25	
Pyrene	0.00551	0.0010	0.005	0	110	50	125	0.00557	1.08	25	

Qualifiers:
ND - Not Detected at the Reporting Limit
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* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

ATTACHMENT 4: DATA REVIEW CHECKLIST – BATCH DATA

SemiVolatiles SOP 4020, EPA 8270C

First Level Reviewer: D Mariscal Review Date: 7/15/13

Second Level Reviewer: M Pendleton Review Date: 7/15/13

Analysis date: 6/26/13 Batch Start Time: 1029 Instrument: SVGC-7

Page 1 of 1 Continuing Calibration Verification (CCV) and Batch Data

Item	Aspect	1st Yes	Level No	2nd Yes	Level No	Comments: record routine corrective actions here	CAR # QER#
1	Tune meets criteria	✓		✓			
2	All Analyses in tune period 12hr	✓		✓			
3	CCV Acceptance criteria met:			✓			
	SPCCs: =0.05	✓		✓			
	CCCs: = 20%D	✓		✓			
	RT: ± 30 seconds	✓		✓			
	Int stds: -50% to +100%	✓		✓			
	Correct ICAL RFs used	✓		✓			
4	Method Blank < RL	✓		✓			
	False pos/neg checked	✓		✓			
	Surrogates acceptable	✓		✓			
5	LCS/LCSD recovery acceptable	✓		✓			
	Surrogates acceptable	✓		✓			
6	MS/MSD recov/RPD acceptable	✓		✓			
	Surrogates acceptable	✓		✓			
7	Test Samples: Correct IDs			✓			
	Surrogates acceptable	✓		✓			
	False pos/neg checked	✓		✓			
	RL, Units	✓		✓			
	Results within curve	✓		✓			
	Dilutions performed	✓		✓			
8	MB, LCS/LCSD, MS/MSD per batch of 20 samples	✓		✓			
9	Manual Integration acceptable: List files	✓		✓		see attachments	
10	Int Stds Check (optional)	✓		✓			
11	Tune & QC Solns ID recorded	✓		✓		S8-40-002, S8-34-596	
12	All other information recorded	✓		✓			
13	LIMS transcription correct	✓		✓			
14	Analysis within holding time	✓		✓			
15	All samples correct pH	NA		NA			
16	Autosampler tray checked	–		✓			
17	Corrections properly recorded	✓		✓			

Additional Comments:

Injection Log

Instrument Name: SVOC-7
Data Directory: C:\msdchem\1\data\062613\

Line	Vial	FileName	Mult	SampleName	Misc Info	Injected
1	33	06251333.D	1.	LCS LCS-70000-TRIS	TRIS	25 Jun 2013 10:47 pm
2	1	06261301.D	1.	SOLVENT BLANK	SOLVENT BLANK	26 Jun 2013 10:03 am
3	2	06261302.D	1.	TUNE DFTPP-1	DFTPP_D	26 Jun 2013 10:29 am
4	3	06261303.D	1.	CCV 5.0 SSTD	PNA_QC	26 Jun 2013 10:51 am
5	4	06261304.D	1.	MBLK MB-70020-PNA	PNA_WATER+	26 Jun 2013 11:14 am
6	5	06261305.D	1.	LCS LCS-70020-PNA	PNA_WATER+	26 Jun 2013 11:36 am
7	6	06261306.D	1.	LCSD LCSD-70020-PNA	PNA_WATER+	26 Jun 2013 11:58 am
8	7	06261307.D	1.	SAMP 13060663-001B	PNA_WATER+	26 Jun 2013 12:20 pm
9	8	06261308.D	1.	SAMP 13060663-002B	PNA_WATER+	26 Jun 2013 12:43 pm
10	9	06261309.D	1.	SAMP 13060663-003B	PNA_WATER+	26 Jun 2013 1:05 pm
11	10	06261310.D	1.	SAMP 13060663-004B	PNA_WATER+	26 Jun 2013 1:28 pm
12	11	06261311.D	1.	SAMP 13060715-001B	PNA_WATER+	26 Jun 2013 1:50 pm
13	12	06261312.D	1.	SAMP 13060715-002B	PNA_WATER+	26 Jun 2013 2:12 pm
14	13	06261313.D	1.	SAMP 13060715-003B	PNA_WATER+	26 Jun 2013 2:35 pm
15	14	06261314.D	1.	SAMP 13060715-004B	PNA_WATER+	26 Jun 2013 2:57 pm
16	15	06261315.D	1.	SAMP 13060715-005B	PNA_WATER+	26 Jun 2013 3:20 pm
17	16	06261316.D	1.	MBLK MB-70059-PNA	PNA_WATER+	26 Jun 2013 3:42 pm
18	17	06261317.D	1.	LCS LCS-70059-PNA	PNA_WATER+	26 Jun 2013 4:04 pm
19	18	06261318.D	1.	SAMP 13060748-001B	PNA_WATER	26 Jun 2013 4:27 pm
20	19	06261319.D	1.	SAMP 13060776-001B	PNA_WATER+	26 Jun 2013 4:49 pm
21	20	06261320.D	1.	SAMP 13060776-002B	PNA_WATER+	26 Jun 2013 5:12 pm
22	21	06261321.D	1.	SAMP 13060776-003B	PNA_WATER+	26 Jun 2013 5:34 pm
23	22	06261322.D	1.	SAMP 13060776-004B	PNA_WATER+	26 Jun 2013 5:57 pm
24	23	06261323.D	1.	SAMP 13060776-005B	PNA_WATER+	26 Jun 2013 6:19 pm
25	24	06261324.D	1.	SAMP 13060777-001B	PNA_WATER+	26 Jun 2013 6:41 pm
26	25	06261325.D	1.	SAMP 13060778-001B	PNA_WATER+	26 Jun 2013 7:04 pm
27	26	06261326.D	1.	MS 13060778-001BMS	PNA_WATER+	26 Jun 2013 7:26 pm
28	27	06261327.D	1.	MSD 13060778-001BMSD	PNA_WATER+	26 Jun 2013 7:48 pm
29	28	06261328.D	1.	SAMP 13060809-001B	PNA_WATER	26 Jun 2013 8:11 pm
30	29	06261329.D	1.	SAMP 13060810-001B	PNA_WATER	26 Jun 2013 8:33 pm
31	30	06261330.D	1.	SAMP 13060829-001B	PNA_WATER+	26 Jun 2013 8:55 pm
32	31	06261331.D	1.	SAMP 13060829-002B	PNA_WATER	26 Jun 2013 9:17 pm
33	32	06261332.D	1.	SAMP 13060829-003B	PNA_WATER	26 Jun 2013 9:39 pm

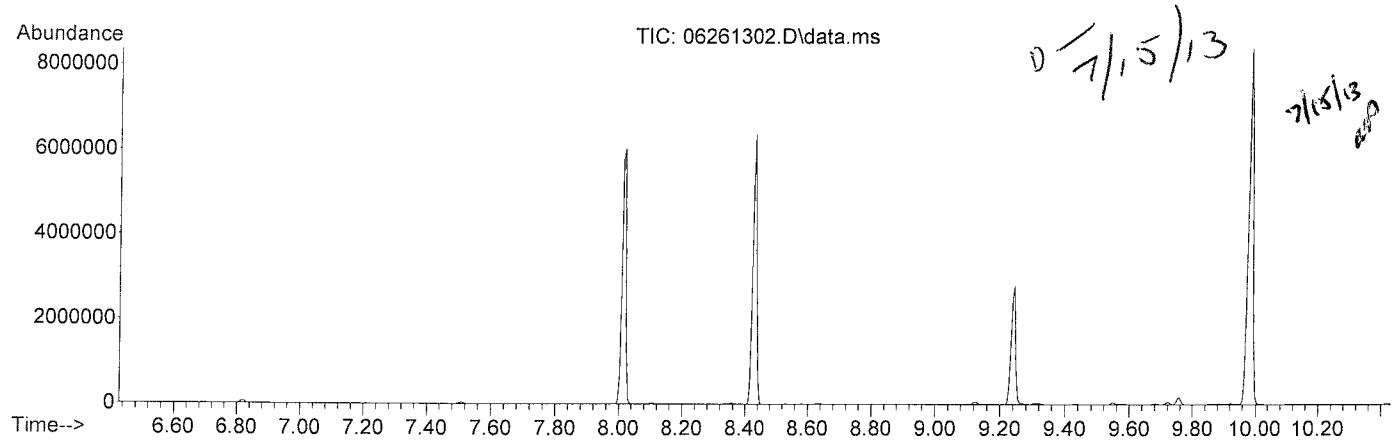
D 7/15/13

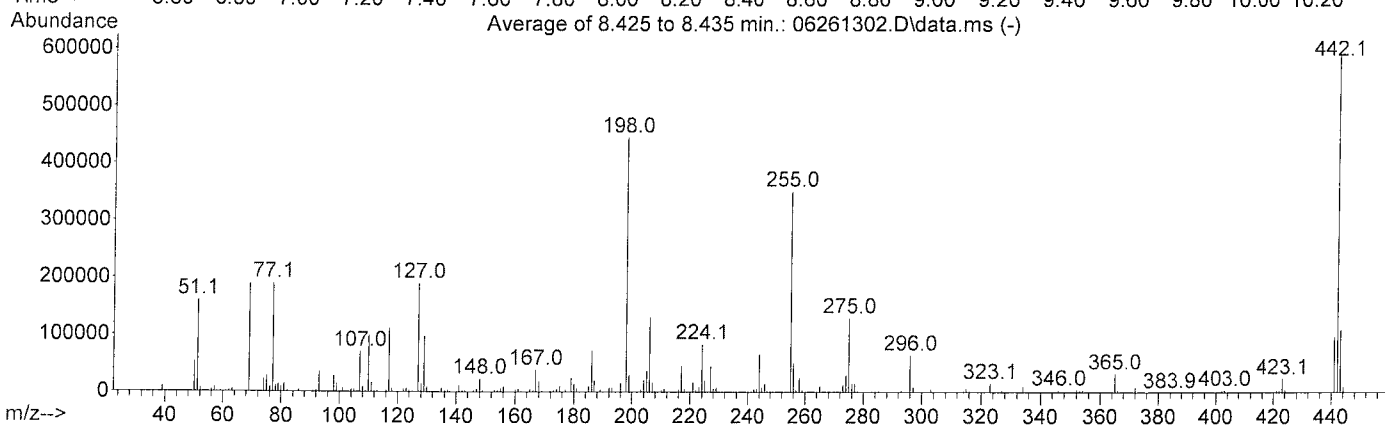
7/15/13

Data Path : C:\msdchem\1\data\062613\
Data File : 06261302.D
Acq On : 26 Jun 2013 10:29 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-002
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Integration File: events.e

Method : C:\msdchem\1\data\062613\dftpp.M
Title : DFTPP Tune
Last Update : Tue Jun 25 15:51:20 2013





AutoFind: Scans 998, 999, 1000; Background Corrected with Scan 993

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	27.0	160421	PASS
68	69	0.00	2	1.4	2579	PASS
69	198	0.00	100	42.4	189104	PASS
70	69	0.00	2	0.5	871	PASS
127	442	10	80	32.0	190357	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	75.0	445547	PASS
199	198	5	9	7.0	31021	PASS
275	442	10	60	21.9	129941	PASS
365	198	1	100	7.3	32624	PASS
441	442	0.01	24	16.3	96907	PASS
442	442	50	100	100.0	594261	PASS
443	442	15	24	18.5	109971	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261302.D
Acq On : 26 Jun 2013 10:29 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-002
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:01:45 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 26 14:01:13 2013
Response via : Initial Calibration

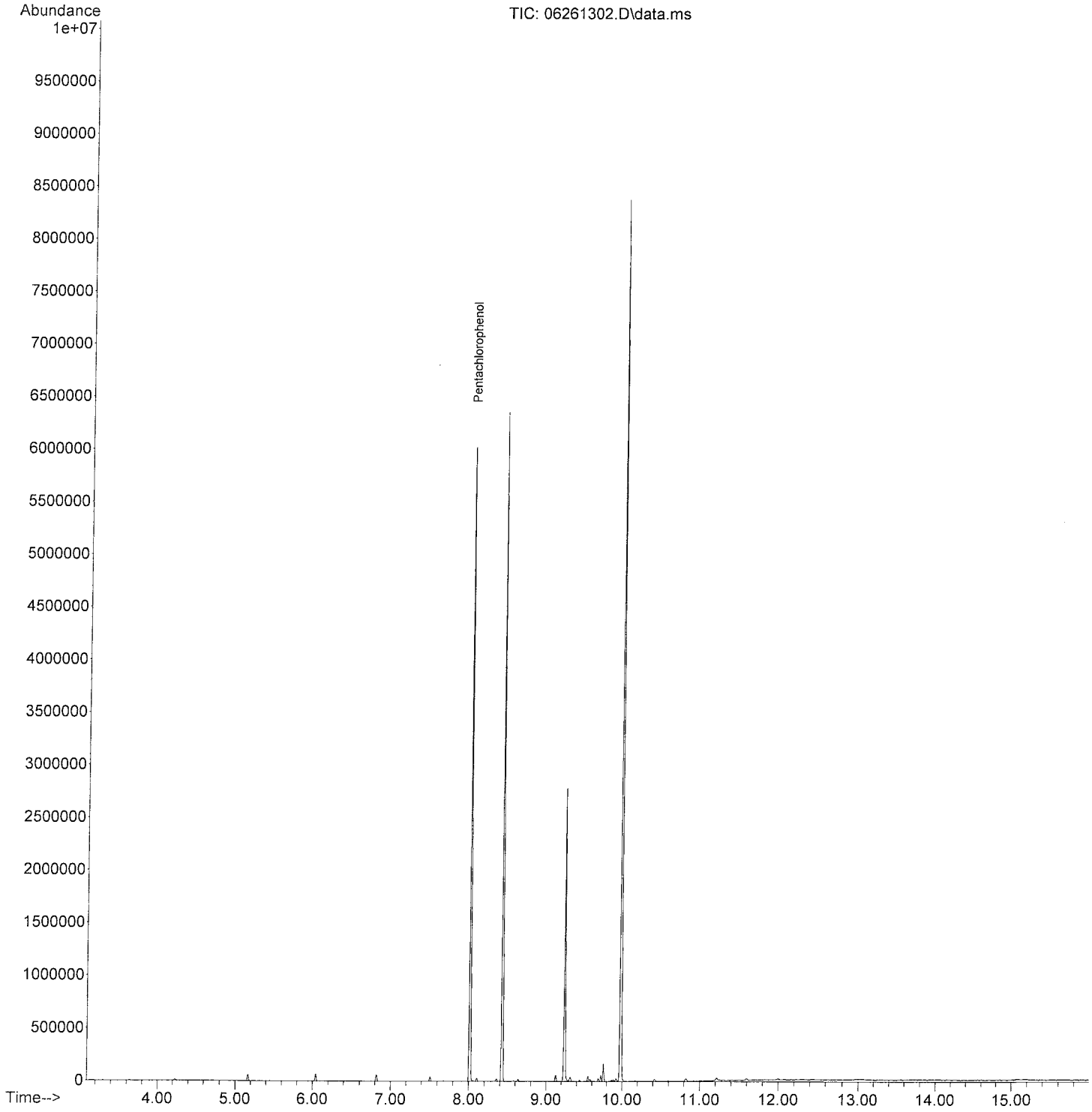
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
2) DFTPP	8.431	198	5134897	0.00	area	0.00
6) DDT	9.985	235	15101186	0.00	area	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	8.019	266	6942954	201.90	area	98
3) Benzidine	9.243	184	10372398	N.D.		
4) DDE	0.000		0	N.D. d		
5) DDD	9.758	235	275754	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261302.D
Acq On : 26 Jun 2013 10:29 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-002
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

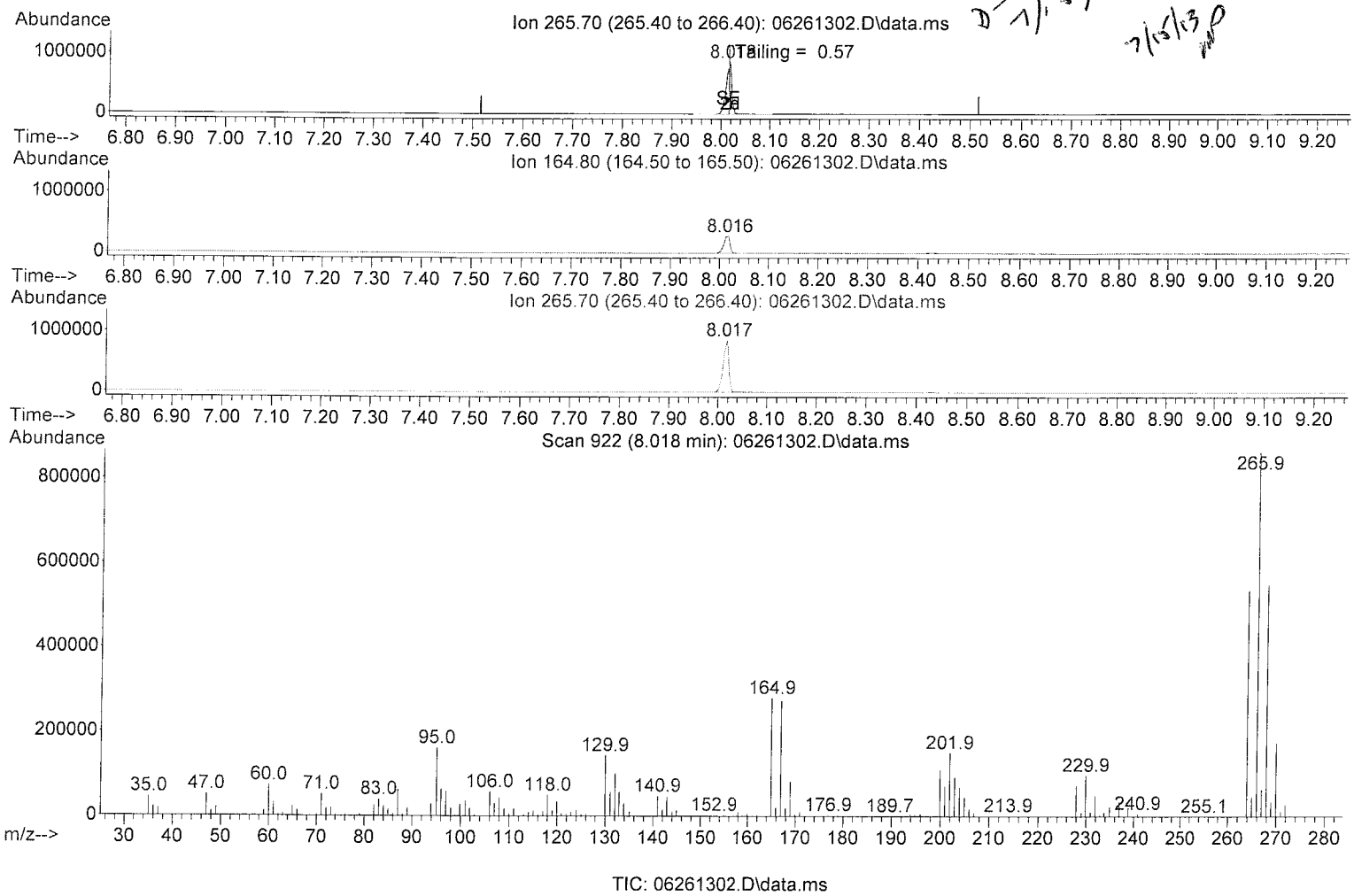
Quant Time: Jun 26 14:01:45 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 26 14:01:13 2013
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261302.D
Acq On : 26 Jun 2013 10:29 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-002
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:01:22 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 26 14:01:13 2013
Response via : Initial Calibration



(1) Pentachlorophenol

8.019min (+ 0.002) 201.90 area

response 6942954

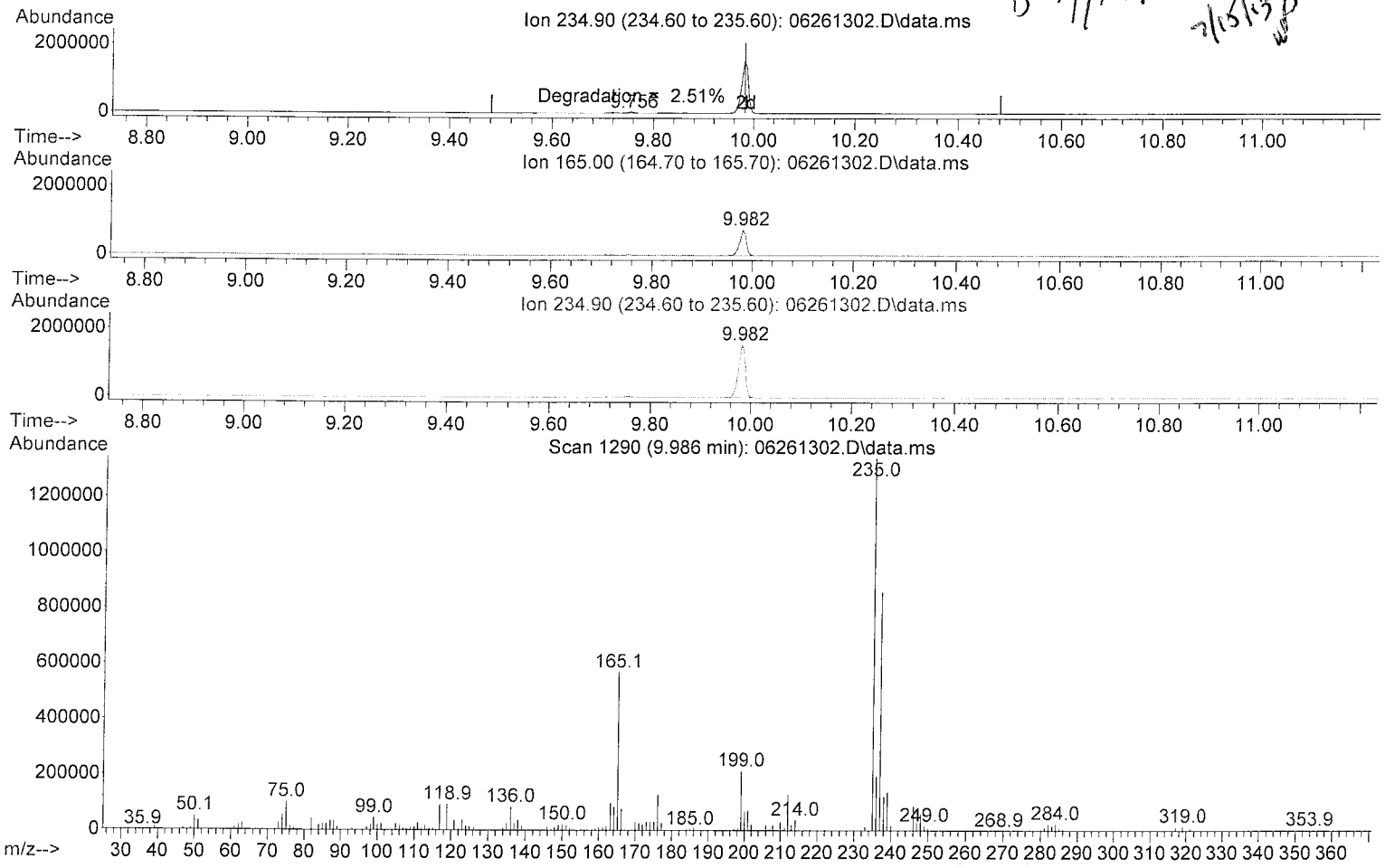
Ion	Exp%	Act%
265.70	100.00	100.00
164.80	32.40	36.02
265.70	100.00	100.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261302.D
Acq On : 26 Jun 2013 10:29 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-002
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:01:22 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 26 14:01:13 2013
Response via : Initial Calibration

D 7/15/13 7/15/13



TIC: 06261302.D\data.ms

(6) DDT

9.985min (+ 0.002) 0.00 area

response 15101186

Ion	Exp%	Act%
234.90	100.00	100.00
165.00	48.40	46.71
234.90	100.00	100.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261302.D
Acq On : 26 Jun 2013 10:29 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-002
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:01:22 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 26 14:01:13 2013
Response via : Initial Calibration

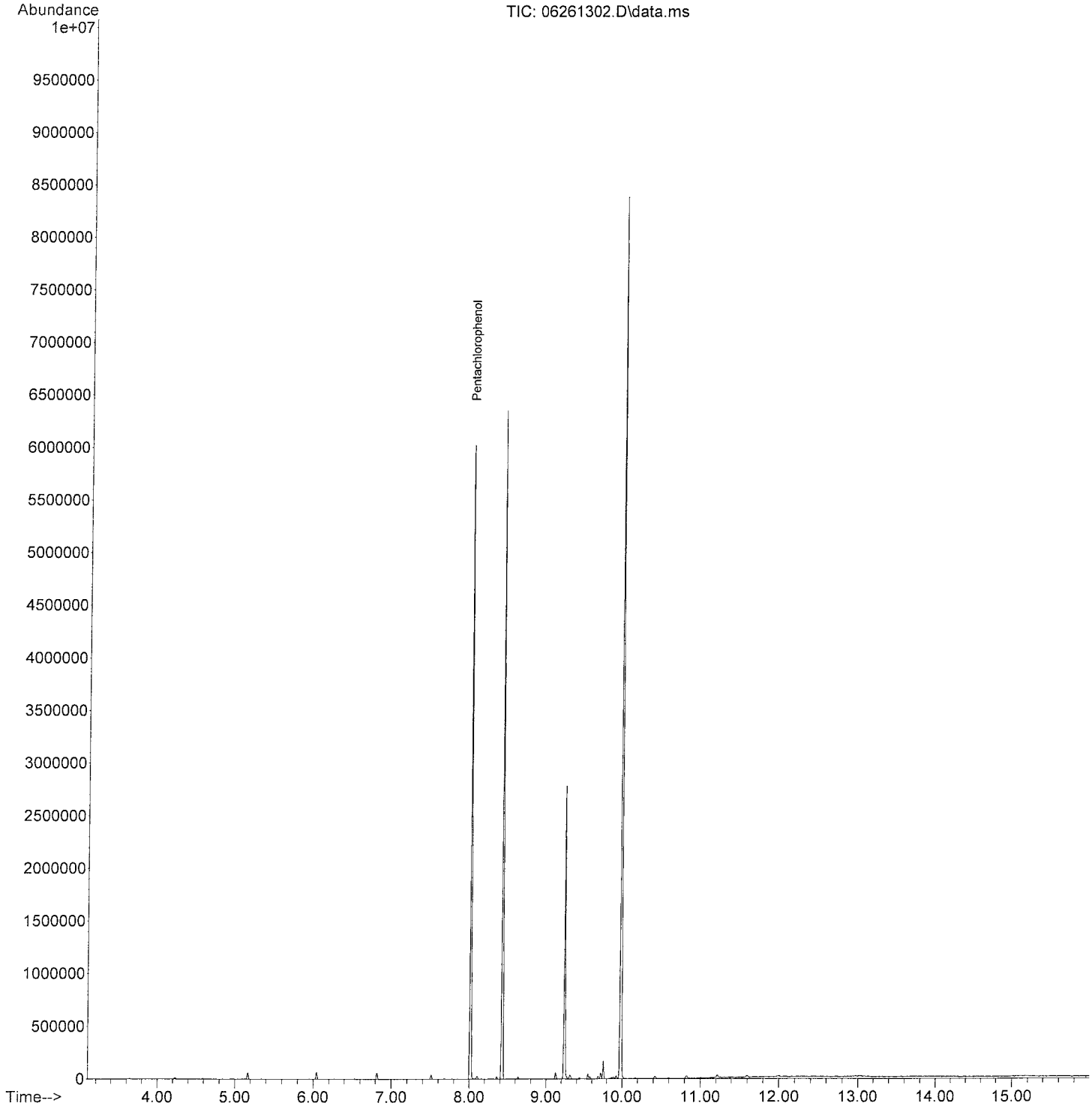
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
2) DFTPP	8.431	198	5134897	0.00	area	0.00
6) DDT	9.985	235	15101186	0.00	area	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	8.019	266	6942954	201.90	area	98
3) Benzidine	9.243	184	10372398	N.D.		
4) DDE	9.758	235	276146	N.D.		
5) DDD	9.758	235	275754	N.D.		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261302.D
Acq On : 26 Jun 2013 10:29 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-002
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:01:22 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Wed Jun 26 14:01:13 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261303.D
Acq On : 26 Jun 2013 10:51 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:02:34 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:02:28 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

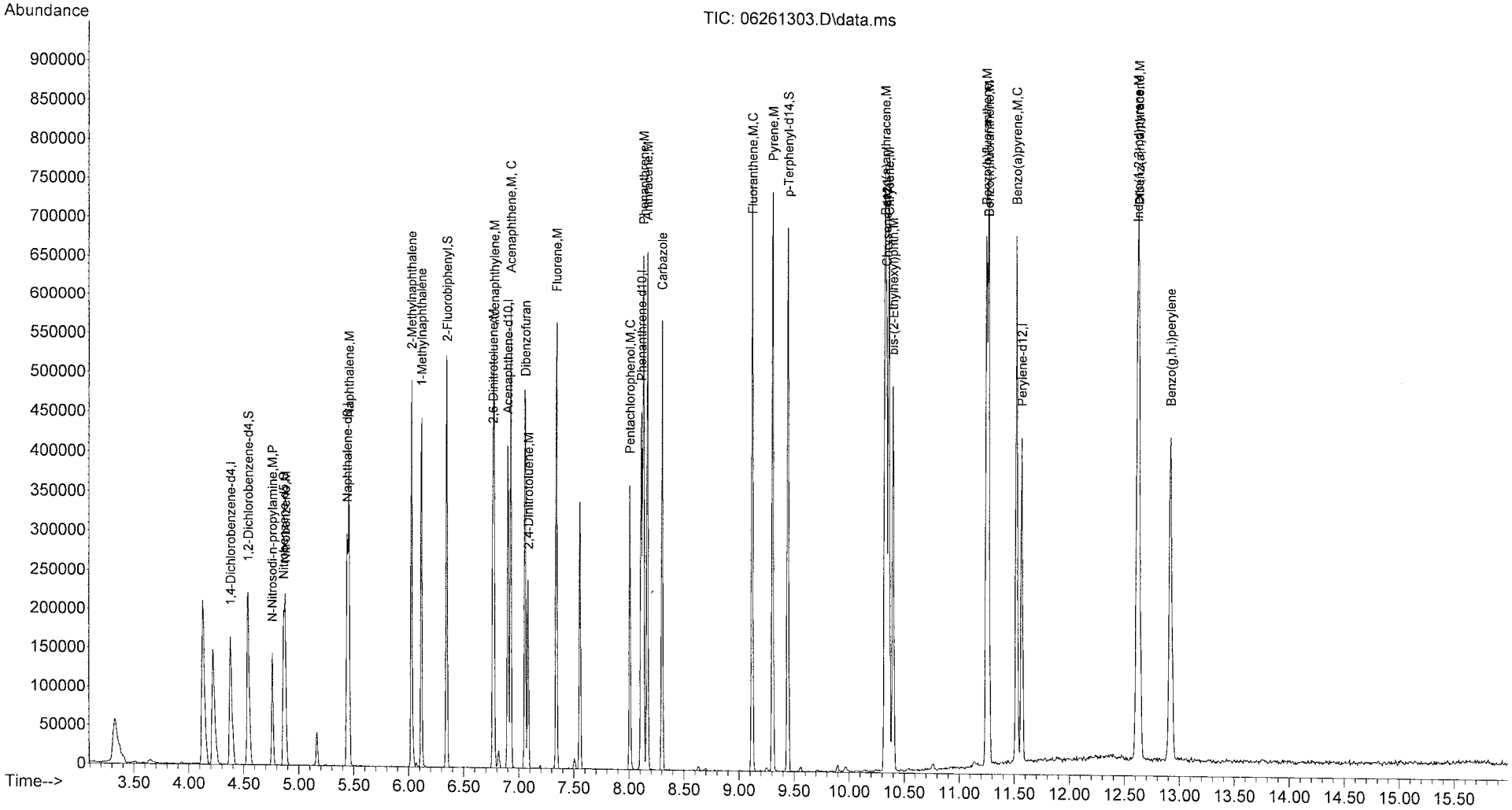
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.381	152	34191	4.00	ngs		0.00
6) Naphthalene-d8	5.440	136	108149	4.00	ngs		0.00
13) Acenaphthene-d10	6.900	164	78430	4.00	ngs		0.00
19) Phenanthrene-d10	8.115	188	154495	4.00	ngs		0.00
26) Chrysene-d12	10.340	240	194300	4.00	ngs		0.00
33) Perylene-d12	11.570	264	168947	4.00	ngs		0.00
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.542	152	46293	4.94	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 9.88%#				
4) Nitrobenzene-d5	4.863	82	55777	5.08	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 10.16%#				
10) 2-Fluorobiphenyl	6.350	172	146753	5.39	ngs		0.01
Spiked Amount 50.000	Range 43 - 116		Recovery = 10.78%#				
25) p-Terphenyl-d14	9.446	244	220114	5.62	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 11.24%#				
Target Compounds							Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	26904	4.77	ngs		93
5) Nitrobenzene	4.879	77	52700	4.78	ngs		90
7) Naphthalene	5.456	128	145275	4.86	ngs		98
8) 2-Methylnaphthalene	6.029	142	102530	5.16	ngs		96
9) 1-Methylnaphthalene	6.120	142	92995	5.02	ngs		96
11) Acenaphthylene	6.777	152	181555	5.51	ngs		98
12) 2,6-Dinitrotoluene	6.767	165	30380	5.76	ngs	#	72
14) Acenaphthene	6.927	153	117106	4.95	ngs		98
15) Dibenzofuran	7.061	168	172844	4.95	ngs		96
16) 2,4-Dinitrotoluene	7.088	165	38388	5.72	ngs		93
17) Fluorene	7.344	166	138048	4.99	ngs		99
18) Pentachlorophenol	8.008	266	35904	5.91	ngs		98
20) Phenanthrene	8.131	178	217923	4.92	ngs		98
21) Anthracene	8.168	178	218759	5.27	ngs		99
22) Carbazole	8.302	167	191924	5.25	ngs		99
23) Fluoranthene	9.120	202	277630	5.45	ngs		99
24) Pyrene	9.307	202	295247	5.35	ngs		99
27) Benzo(a)anthracene	10.329	228	290968	5.29	ngs		98
28) Chrysene	10.361	228	261971	4.84	ngs		98
29) bis-(2-Ethylhexyl)phth	10.398	149	188621	5.03	ngs		98
30) Benzo(b)fluoranthene	11.249	252	313785	5.39	ngs		97
31) Benzo(k)fluoranthene	11.270	252	284394	5.55	ngs		97
32) Benzo(a)pyrene	11.522	252	290424	5.75	ngs		93
34) Indeno(1,2,3-cd)pyrene	12.623	276	344195	5.42	ngs		94
35) Dibenz(a,h)anthracene	12.634	278	281841	5.40	ngs		98
36) Benzo(g,h,i)perylene	12.923	276	291343	5.25	ngs	#	89

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261303.D
Acq On : 26 Jun 2013 10:51 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:02:34 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:02:28 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261303.D
Acq On : 26 Jun 2013 10:51 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:02:34 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:02:28 2013
Response via : Initial Calibration

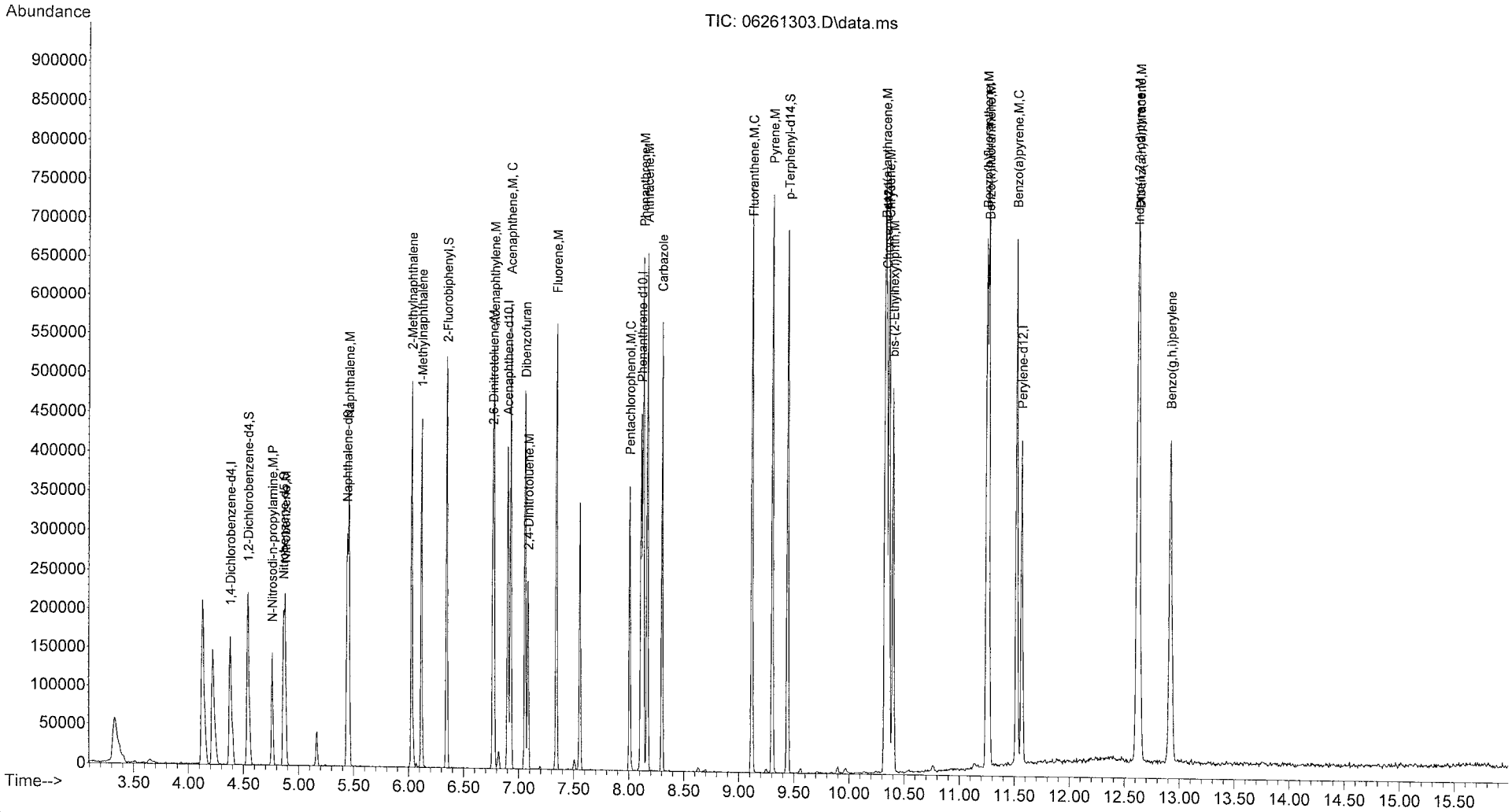
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.381	152	34191	4.00	ngs		0.00
6) Naphthalene-d8	5.440	136	108149	4.00	ngs		0.00
13) Acenaphthene-d10	6.900	164	78430	4.00	ngs		0.00
19) Phenanthrene-d10	8.115	188	154495	4.00	ngs		0.00
26) Chrysene-d12	10.340	240	194300	4.00	ngs		0.00
33) Perylene-d12	11.570	264	168947	4.00	ngs		0.00
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.542	152	46293	4.94	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	9.88%#		
4) Nitrobenzene-d5	4.863	82	55777	5.08	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	10.16%#		
10) 2-Fluorobiphenyl	6.350	172	146753	5.39	ngs		0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	10.78%#		
25) p-Terphenyl-d14	9.446	244	220114	5.62	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	11.24%#		
Target Compounds							Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	26904	4.77	ngs		93
5) Nitrobenzene	4.879	77	52700	4.78	ngs		90
7) Naphthalene	5.456	128	145275	4.86	ngs		98
8) 2-Methylnaphthalene	6.029	142	102530	5.16	ngs		96
9) 1-Methylnaphthalene	6.120	142	92995	5.02	ngs		96
11) Acenaphthylene	6.777	152	181555	5.51	ngs		98
12) 2,6-Dinitrotoluene	6.767	165	30380	5.76	ngs	#	72
14) Acenaphthene	6.927	153	117106	4.95	ngs		98
15) Dibenzofuran	7.061	168	172844	4.95	ngs		96
16) 2,4-Dinitrotoluene	7.088	165	38388	5.72	ngs		93
17) Fluorene	7.344	166	138048	4.99	ngs		99
18) Pentachlorophenol	8.008	266	35904	5.91	ngs		98
20) Phenanthrene	8.131	178	217923	4.92	ngs		98
21) Anthracene	8.168	178	218759	5.27	ngs		99
22) Carbazole	8.302	167	191924	5.25	ngs		99
23) Fluoranthene	9.120	202	277630	5.45	ngs		99
24) Pyrene	9.307	202	295247	5.35	ngs		99
27) Benzo(a)anthracene	10.329	228	290968	5.29	ngs		98
28) Chrysene	10.361	228	261971	4.84	ngs		98
29) bis-(2-Ethylhexyl)phth	10.398	149	188621	5.03	ngs		98
30) Benzo(b)fluoranthene	11.249	252	313785	5.39	ngs		97
31) Benzo(k)fluoranthene	11.270	252	284394	5.55	ngs		97
32) Benzo(a)pyrene	11.522	252	290424	5.75	ngs		93
34) Indeno(1,2,3-cd)pyrene	12.623	276	344195	5.42	ngs		94
35) Dibenz(a,h)anthracene	12.634	278	281841	5.40	ngs		98
36) Benzo(g,h,i)perylene	12.923	276	291343	5.25	ngs	#	89

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261303.D
Acq On : 26 Jun 2013 10:51 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:02:34 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:02:28 2013
Response via : Initial Calibration



PNA0605.M Wed Jun 26 14:02:35 2013

Page: 2

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\062613\
Data File : 06261303.D
Acq On : 26 Jun 2013 10:51 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 14:02:34 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:02:28 2013
Response via : Initial Calibration

7/15/13

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

7/15/13

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	4.000	4.000	0.0	44	0.00
2	S	1,2-Dichlorobenzene-d4	5.000	4.943	1.1	45	0.00
3	M,P	N-Nitrosodi-n-propylamine	5.000	4.773	4.5	39	0.00
4	S	Nitrobenzene-d5	5.000	5.083	-1.7	40	0.00
5	M	Nitrobenzene	5.000	4.782	4.4	40	0.00
6	I	Naphthalene-d8	4.000	4.000	0.0	42	0.00
7	M	Naphthalene	5.000	4.863	2.7	41	0.00
8		2-Methylnaphthalene	5.000	5.156	-3.1	41	0.00
9		1-Methylnaphthalene	5.000	5.024	-0.5	43	0.00
10	S	2-Fluorobiphenyl	5.000	5.390	-7.8	45	0.01
11	M	Acenaphthylene	5.000	5.510	-10.2	43	0.01
12	M	2,6-Dinitrotoluene	5.000	5.760	-15.2	46	0.01
13	I	Acenaphthene-d10	4.000	4.000	0.0	45	0.00
14	M, C	Acenaphthene	5.000	4.947	1.1	43	0.00
15		Dibenzofuran	5.000	4.951	1.0	43	0.00
16	M	2,4-Dinitrotoluene	5.000	5.716	-14.3	44	0.00
17	M	Fluorene	5.000	4.991	0.2	44	0.00
18	M,C	Pentachlorophenol	5.000	5.914	-18.3	56	0.00
19	I	Phenanthrene-d10	4.000	4.000	0.0	45	0.00
20	M	Phenanthrene	5.000	4.918	1.6	43	0.00
21	M	Anthracene	5.000	5.269	-5.4	45	0.00
22		Carbazole	5.000	5.249	-5.0	44	0.00
23	M,C	Fluoranthene	5.000	5.450	-9.0	46	0.00
24	M	Pyrene	5.000	5.346	-6.9	46	0.00
25	S	p-Terphenyl-d14	5.000	5.620	-12.4	49	0.00
26	I	Chrysene-d12	4.000	4.000	0.0	48	0.00
27	M	Benzo(a)anthracene	5.000	5.291	-5.8	49	0.00
28	M	Chrysene	5.000	4.838	3.2	45	0.00
29	M	bis-(2-Ethylhexyl)phth	5.000	5.033	-0.7	46	0.00
30	M	Benzo(b)fluoranthene	5.000	5.389	-7.8	51	0.00
31	M	Benzo(k)fluoranthene	5.000	5.551	-11.0	49	0.00
32	M,C	Benzo(a)pyrene	5.000	5.751	-15.0	52	0.00
33	I	Perylene-d12	4.000	4.000	0.0	52	0.00
34	M	Indeno(1,2,3-cd)pyrene	5.000	5.420	-8.4	53	-0.04
35	M	Dibenz(a,h)anthracene	5.000	5.401	-8.0	54	-0.04
36		Benzo(g,h,i)perylene	5.000	5.249	-5.0	52	-0.04

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261316.D
Acq On : 26 Jun 2013 3:42 pm
Operator : DM
Sample : MBLK MB-70059-PNA
Misc : PNA_WATER+
ALS Vial : 16 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:32 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13

7/15/13

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	32243	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	98552	4.00	ngs	0.00
13) Acenaphthene-d10	6.900	164	68898	4.00	ngs	0.00
19) Phenanthrene-d10	8.115	188	143421	4.00	ngs	# 0.00
26) Chrysene-d12	10.345	240	174511	4.00	ngs	0.00
33) Perylene-d12	11.586	264	129158	4.00	ngs	0.02
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	35397	4.01	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 8.02%#			
4) Nitrobenzene-d5	4.863	82	43649	4.22	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 8.44%#			
10) 2-Fluorobiphenyl	6.349	172	112326	4.53	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 9.06%#			
25) p-Terphenyl-d14	9.446	244	170240	4.68	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 9.36%#			

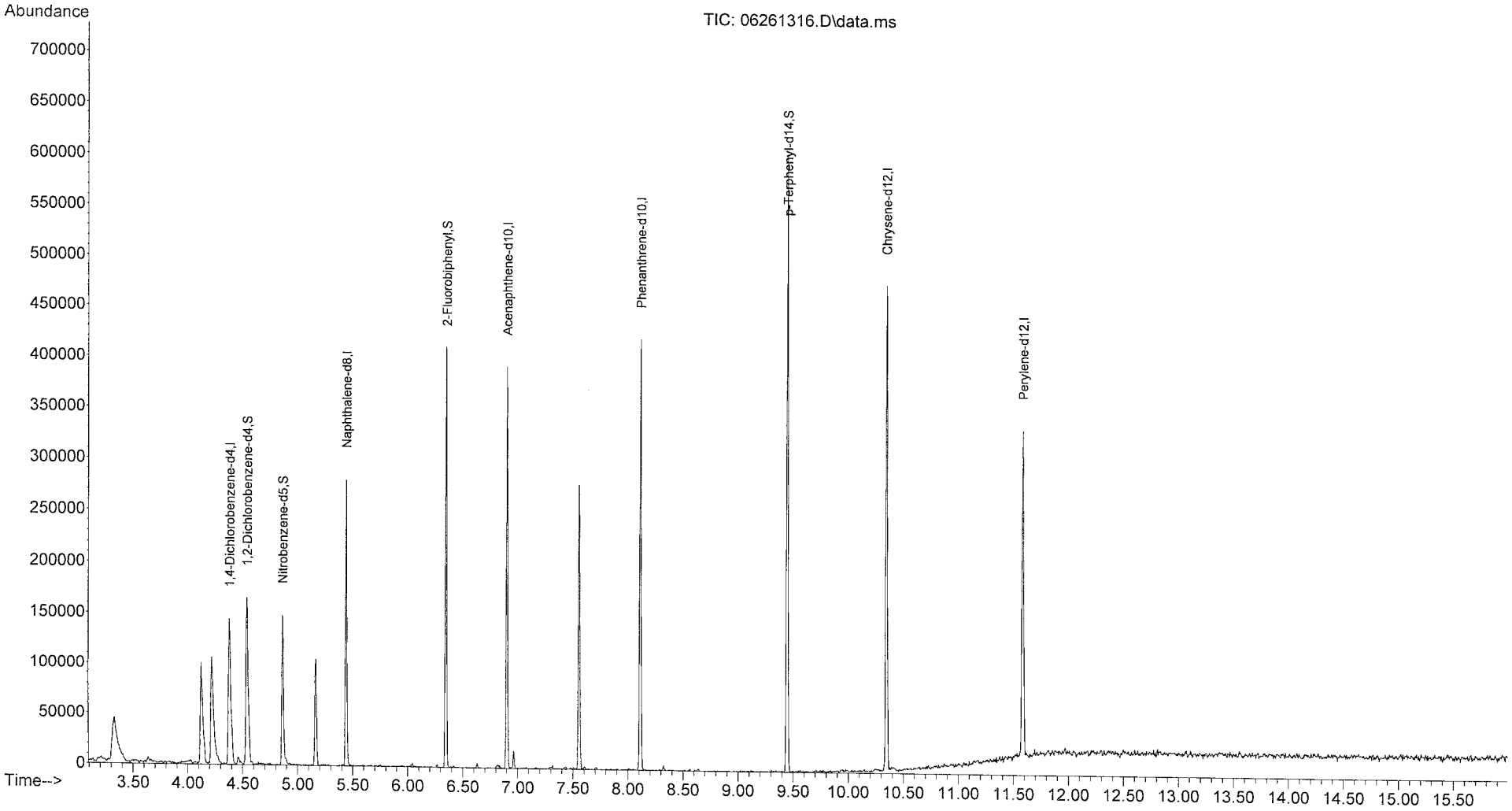
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261316.D
Acq On : 26 Jun 2013 3:42 pm
Operator : DM
Sample : MBLK MB-70059-PNA
Misc : PNA_WATER+
ALS Vial : 16 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:32 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261316.D
Acq On : 26 Jun 2013 3:42 pm
Operator : DM
Sample : MBLK MB-70059-PNA
Misc : PNA_WATER+
ALS Vial : 16 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:19 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

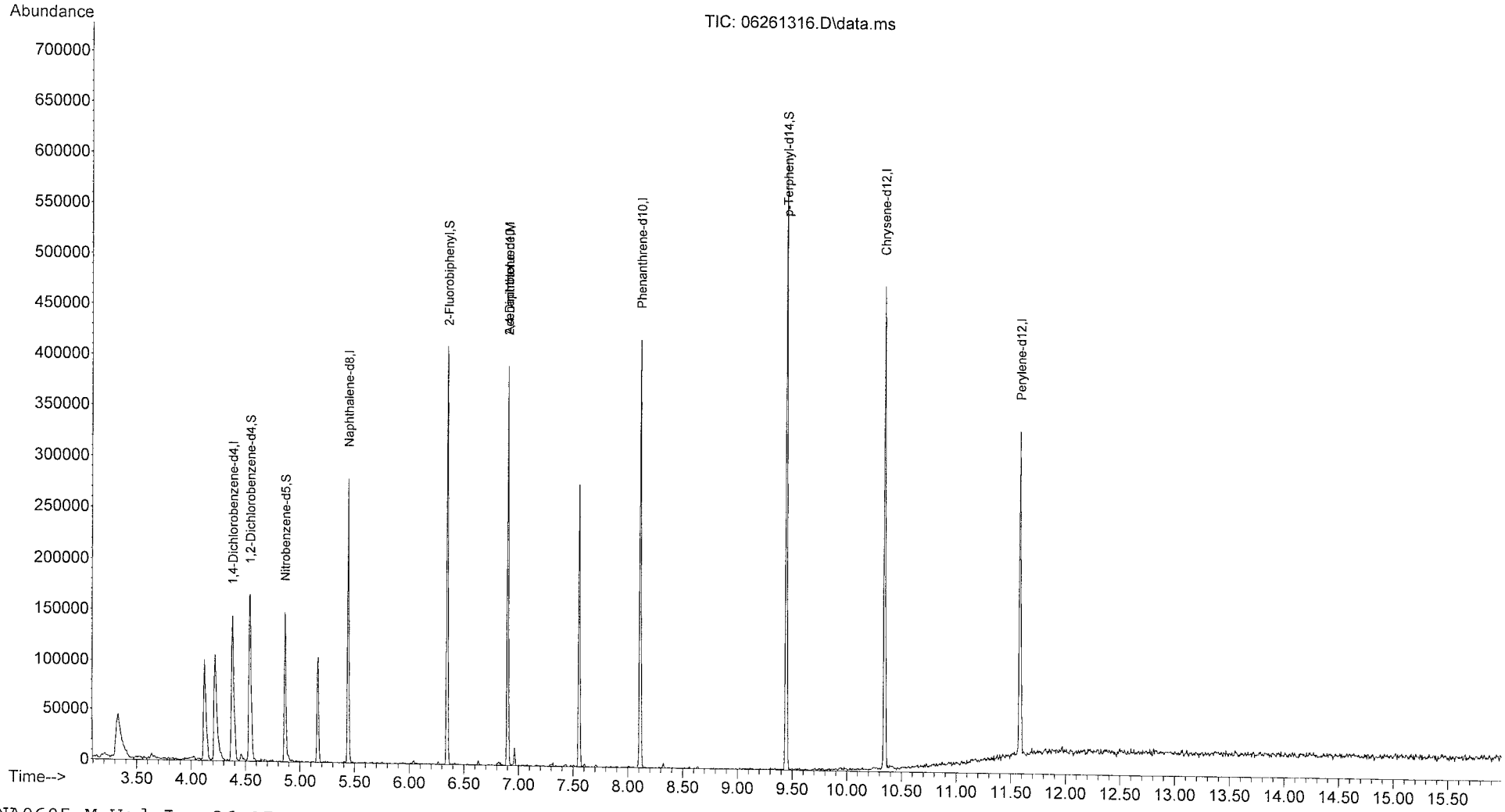
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	32243	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	98552	4.00	ngs	0.00
13) Acenaphthene-d10	6.900	164	68898	4.00	ngs	0.00
19) Phenanthrene-d10	8.115	188	143421	4.00	ngs	# 0.00
26) Chrysene-d12	10.345	240	174511	4.00	ngs	0.00
33) Perylene-d12	11.586	264	129158	4.00	ngs	0.02
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	35397	4.01	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	8.02%#	
4) Nitrobenzene-d5	4.863	82	43649	4.22	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.44%#	
10) 2-Fluorobiphenyl	6.349	172	112326	4.53	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.06%#	
25) p-Terphenyl-d14	9.446	244	170240	4.68	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.36%#	
Target Compounds						Qvalue
16) 2,4-Dinitrotoluene	6.900	165	8635	1.46	ngs	# 20

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261316.D
Acq On : 26 Jun 2013 3:42 pm
Operator : DM
Sample : MBLK MB-70059-PNA
Misc : PNA_WATER+
ALS Vial : 16 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:19 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261317.D
Acq On : 26 Jun 2013 4:04 pm
Operator : DM
Sample : LCS LCS-70059-PNA
Misc : PNA_WATER+
ALS Vial : 17 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:42:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

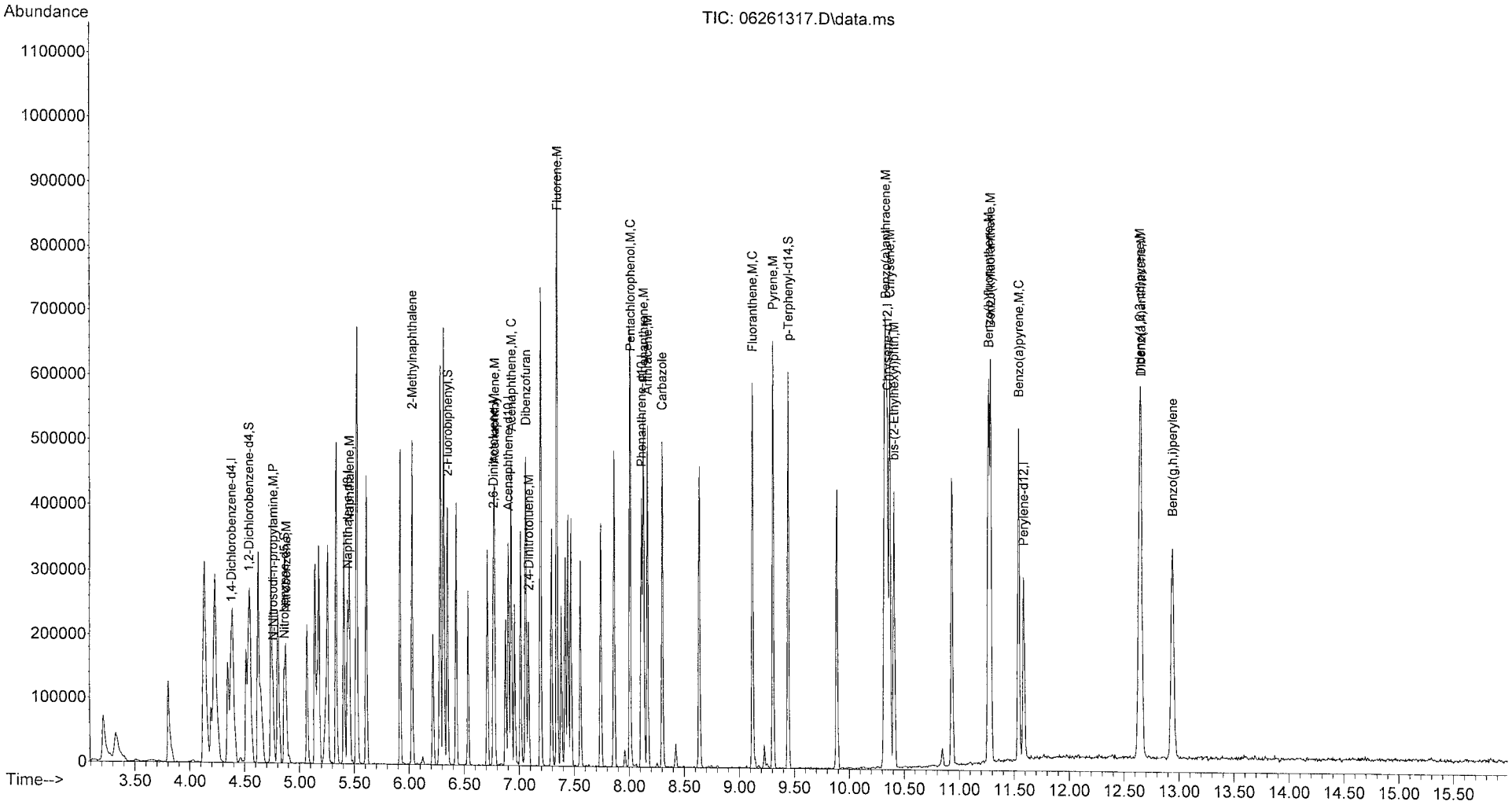
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.381	152	29982	4.00	ngs		0.00
6) Naphthalene-d8	5.440	136	90032	4.00	ngs		0.00
13) Acenaphthene-d10	6.900	164	64189	4.00	ngs		0.00
19) Phenanthrene-d10	8.115	188	134931	4.00	ngs		0.00
26) Chrysene-d12	10.350	240	172441	4.00	ngs		0.01
33) Perylene-d12	11.586	264	123987	4.00	ngs		0.02
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.542	152	31952	3.89	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	7.78%#		
4) Nitrobenzene-d5	4.863	82	41494	4.31	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.62%#		
10) 2-Fluorobiphenyl	6.350	172	105768	4.67	ngs		0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.34%#		
25) p-Terphenyl-d14	9.446	244	157966	4.62	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.24%#		
Target Compounds							Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	20822	4.21	ngs		85
5) Nitrobenzene	4.879	77	43207	4.47	ngs		87
7) Naphthalene	5.456	128	122267	4.92	ngs		98
8) 2-Methylnaphthalene	6.029	142	101008	6.10	ngs		96
11) Acenaphthylene	6.777	152	140706	5.13	ngs		96
12) 2,6-Dinitrotoluene	6.767	165	25719	5.86	ngs	#	70
14) Acenaphthene	6.927	153	95487	4.93	ngs		97
15) Dibenzofuran	7.061	168	168812	5.91	ngs		96
16) 2,4-Dinitrotoluene	7.088	165	33539	6.10	ngs		91
17) Fluorene	7.344	166	116407	5.14	ngs		99
18) Pentachlorophenol	8.013	266	74740	14.68	ngs		96
20) Phenanthrene	8.131	178	188041	4.86	ngs		100
21) Anthracene	8.168	178	176922	4.88	ngs		99
22) Carbazole	8.302	167	169437	5.31	ngs		99
23) Fluoranthene	9.120	202	229371	5.16	ngs		100
24) Pyrene	9.307	202	248775	5.16	ngs		98
27) Benzo(a)anthracene	10.334	228	241334	4.94	ngs		98
28) Chrysene	10.372	228	230633	4.80	ngs		97
29) bis-(2-Ethylhexyl)phth	10.409	149	165476	4.97	ngs		98
30) Benzo(b)fluoranthene	11.270	252	255195	4.94	ngs		98
31) Benzo(k)fluoranthene	11.286	252	249573	5.49	ngs		98
32) Benzo(a)pyrene	11.543	252	224443	5.01	ngs		95
34) Indeno(1,2,3-cd)pyrene	12.645	276	281997	6.05	ngs		96
35) Dibenz(a,h)anthracene	12.656	278	236349	6.17	ngs		97
36) Benzo(g,h,i)perylene	12.944	276	243232m	5.97	ngs		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261317.D
Acq On : 26 Jun 2013 4:04 pm
Operator : DM
Sample : LCS LCS-70059-PNA
Misc : PNA_WATER+
ALS Vial : 17 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:42:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

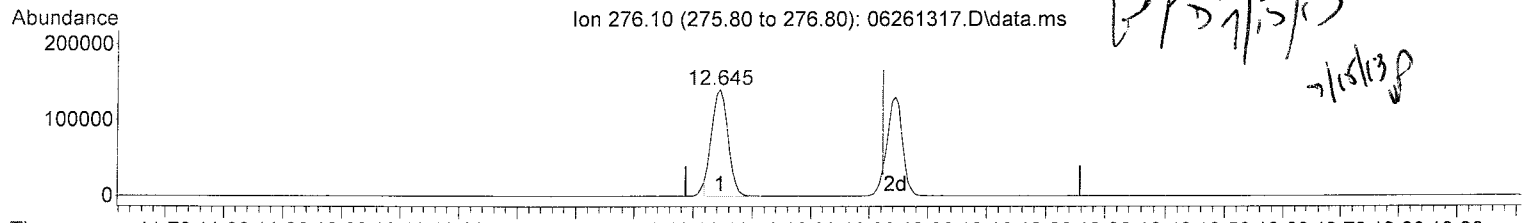


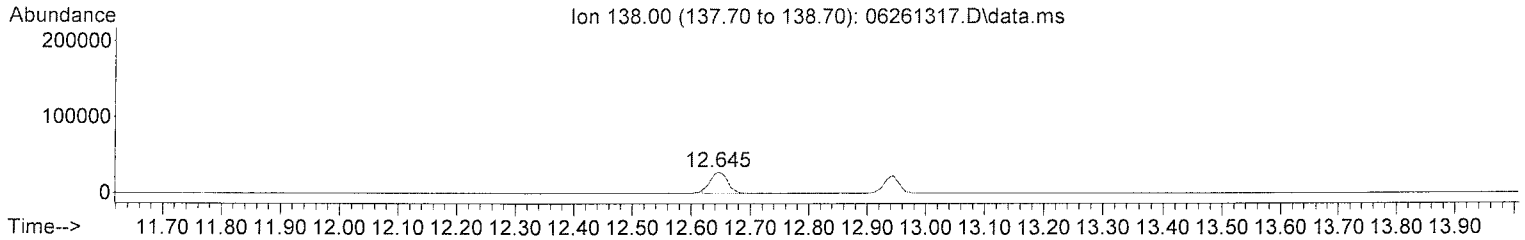
Quantitation Report (Qedit)

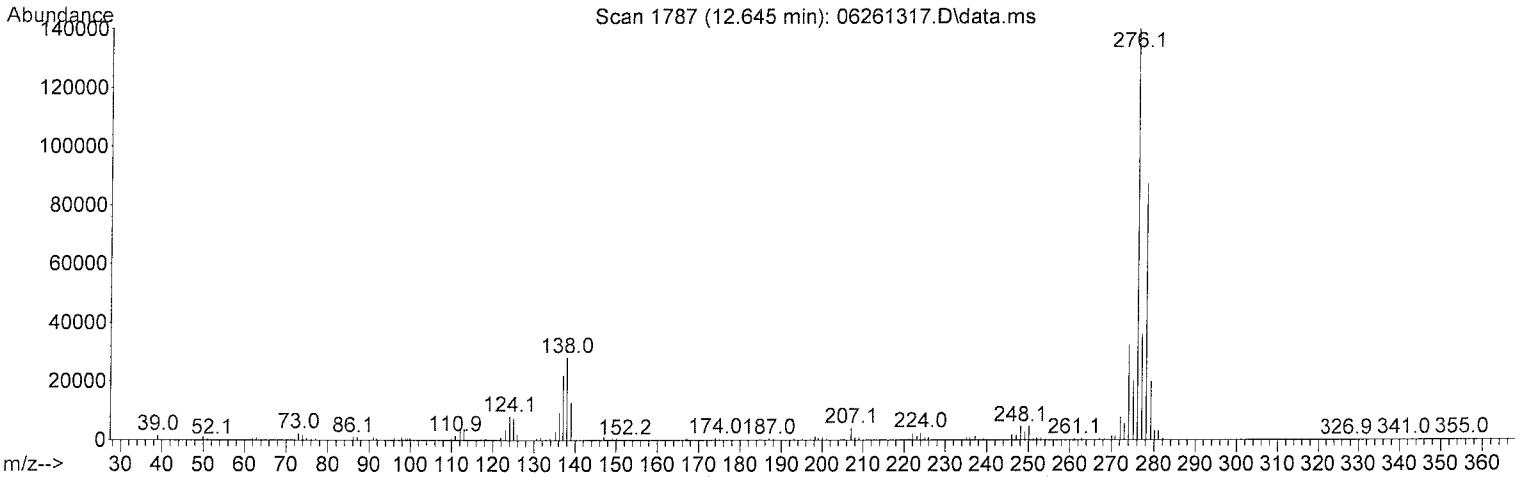
Data Path : C:\msdchem\1\data\062613\
Data File : 06261317.D
Acq On : 26 Jun 2013 4:04 pm
Operator : DM
Sample : LCS LCS-70059-PNA
Misc : PNA_WATER+
ALS Vial : 17 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:48 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

7/15/13
7/15/13







TIC: 06261317.D\data.ms

(36) Benzo(g,h,i)perylene

12.645min (-0.278) 6.66 ngs

response 271438

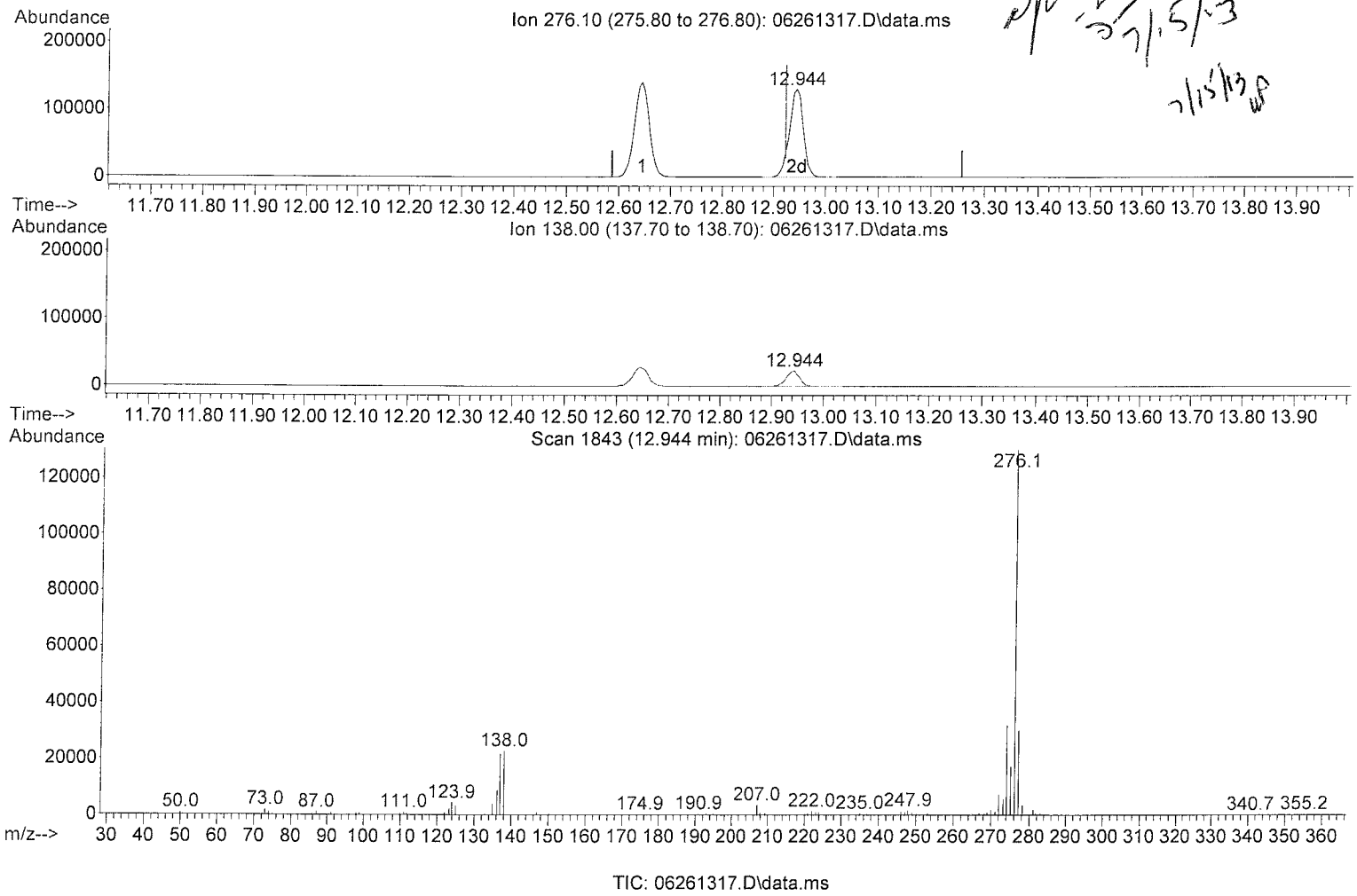
Ion	Exp%	Act%
276.10	100.00	100.00
138.00	21.40	20.96
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261317.D
Acq On : 26 Jun 2013 4:04 pm
Operator : DM
Sample : LCS LCS-70059-PNA
Misc : PNA_WATER+
ALS Vial : 17 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:48 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

7/15/13
7/15/13



TIC: 06261317.D\data.ms

(36) Benzo(g,h,i)perylene

12.944min (+ 0.021) 5.97 ngs m

response 243232

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	21.40	16.72#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261317.D
Acq On : 26 Jun 2013 4:04 pm
Operator : DM
Sample : LCS LCS-70059-PNA
Misc : PNA_WATER+
ALS Vial : 17 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:48 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

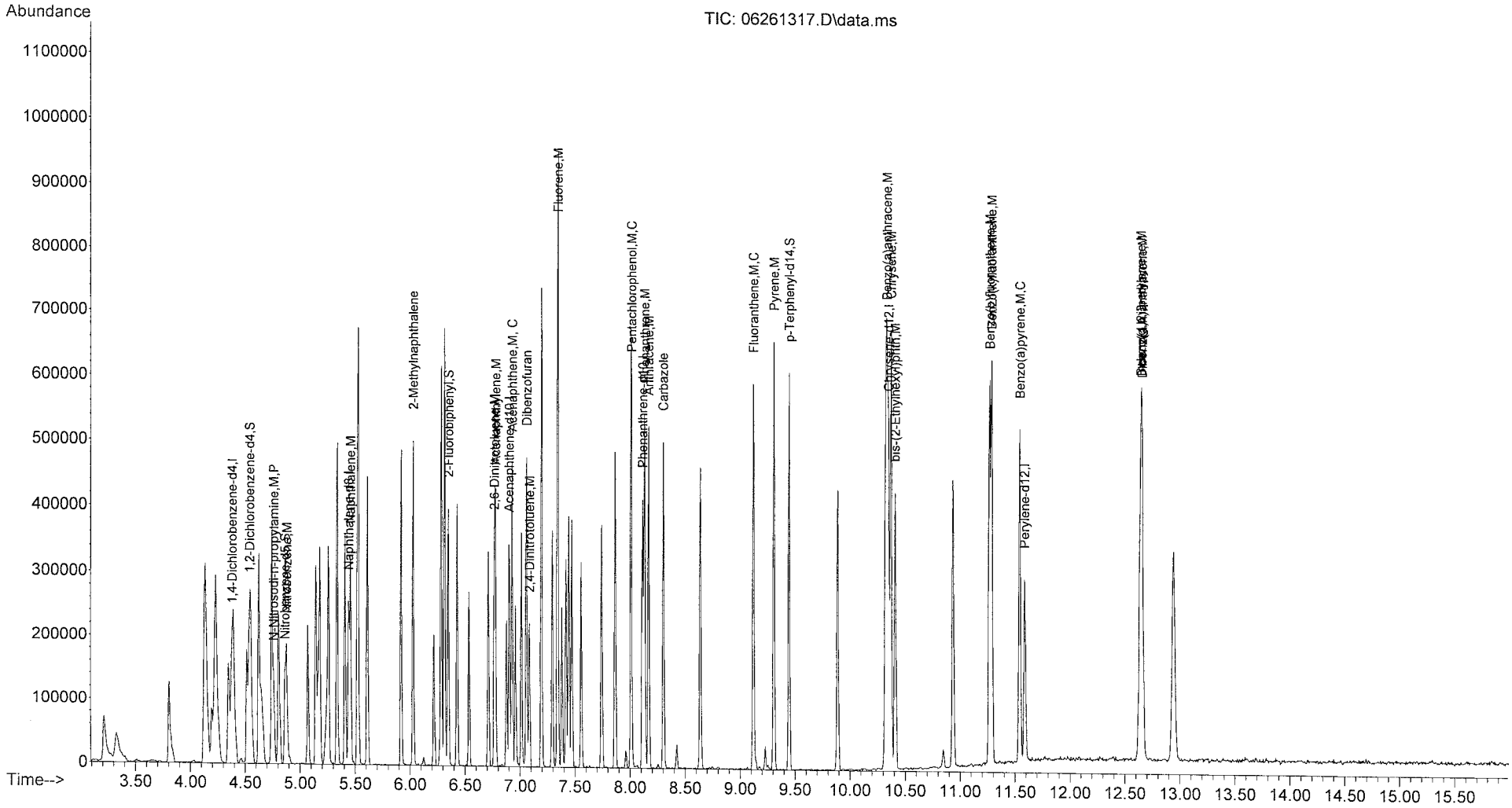
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.381	152	29982	4.00	ngs		0.00
6) Naphthalene-d8	5.440	136	90032	4.00	ngs		0.00
13) Acenaphthene-d10	6.900	164	64189	4.00	ngs		0.00
19) Phenanthrene-d10	8.115	188	134931	4.00	ngs		0.00
26) Chrysene-d12	10.350	240	172441	4.00	ngs		0.01
33) Perylene-d12	11.586	264	123987	4.00	ngs		0.02
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.542	152	31952	3.89	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	7.78%#		
4) Nitrobenzene-d5	4.863	82	41494	4.31	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.62%#		
10) 2-Fluorobiphenyl	6.350	172	105768	4.67	ngs		0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.34%#		
25) p-Terphenyl-d14	9.446	244	157966	4.62	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.24%#		
Target Compounds							Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	20822	4.21	ngs		85
5) Nitrobenzene	4.879	77	43207	4.47	ngs		87
7) Naphthalene	5.456	128	122267	4.92	ngs		98
8) 2-Methylnaphthalene	6.029	142	101008	6.10	ngs		96
11) Acenaphthylene	6.777	152	140706	5.13	ngs		96
12) 2,6-Dinitrotoluene	6.767	165	25719	5.86	ngs	#	70
14) Acenaphthene	6.927	153	95487	4.93	ngs		97
15) Dibenzofuran	7.061	168	168812	5.91	ngs		96
16) 2,4-Dinitrotoluene	7.088	165	33539	6.10	ngs		91
17) Fluorene	7.344	166	116407	5.14	ngs		99
18) Pentachlorophenol	8.013	266	74740	14.68	ngs		96
20) Phenanthrene	8.131	178	188041	4.86	ngs		100
21) Anthracene	8.168	178	176922	4.88	ngs		99
22) Carbazole	8.302	167	169437	5.31	ngs		99
23) Fluoranthene	9.120	202	229371	5.16	ngs		100
24) Pyrene	9.307	202	248775	5.16	ngs		98
27) Benzo(a)anthracene	10.334	228	241334	4.94	ngs		98
28) Chrysene	10.372	228	230633	4.80	ngs		97
29) bis-(2-Ethylhexyl)phth	10.409	149	165476	4.97	ngs		98
30) Benzo(b)fluoranthene	11.270	252	255195	4.94	ngs		98
31) Benzo(k)fluoranthene	11.286	252	249573	5.49	ngs		98
32) Benzo(a)pyrene	11.543	252	224443	5.01	ngs		95
34) Indeno(1,2,3-cd)pyrene	12.645	276	281997	6.05	ngs		96
35) Dibenz(a,h)anthracene	12.656	278	236349	6.17	ngs		97
36) Benzo(g,h,i)perylene	12.645	276	271438	6.66	ngs		99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261317.D
Acq On : 26 Jun 2013 4:04 pm
Operator : DM
Sample : LCS LCS-70059-PNA
Misc : PNA_WATER+
ALS Vial : 17 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:41:48 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



PNA0605.M Wed Jun 26 17:41:49 2013

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261319.D
Acq On : 26 Jun 2013 4:49 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+
ALS Vial : 19 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:45:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

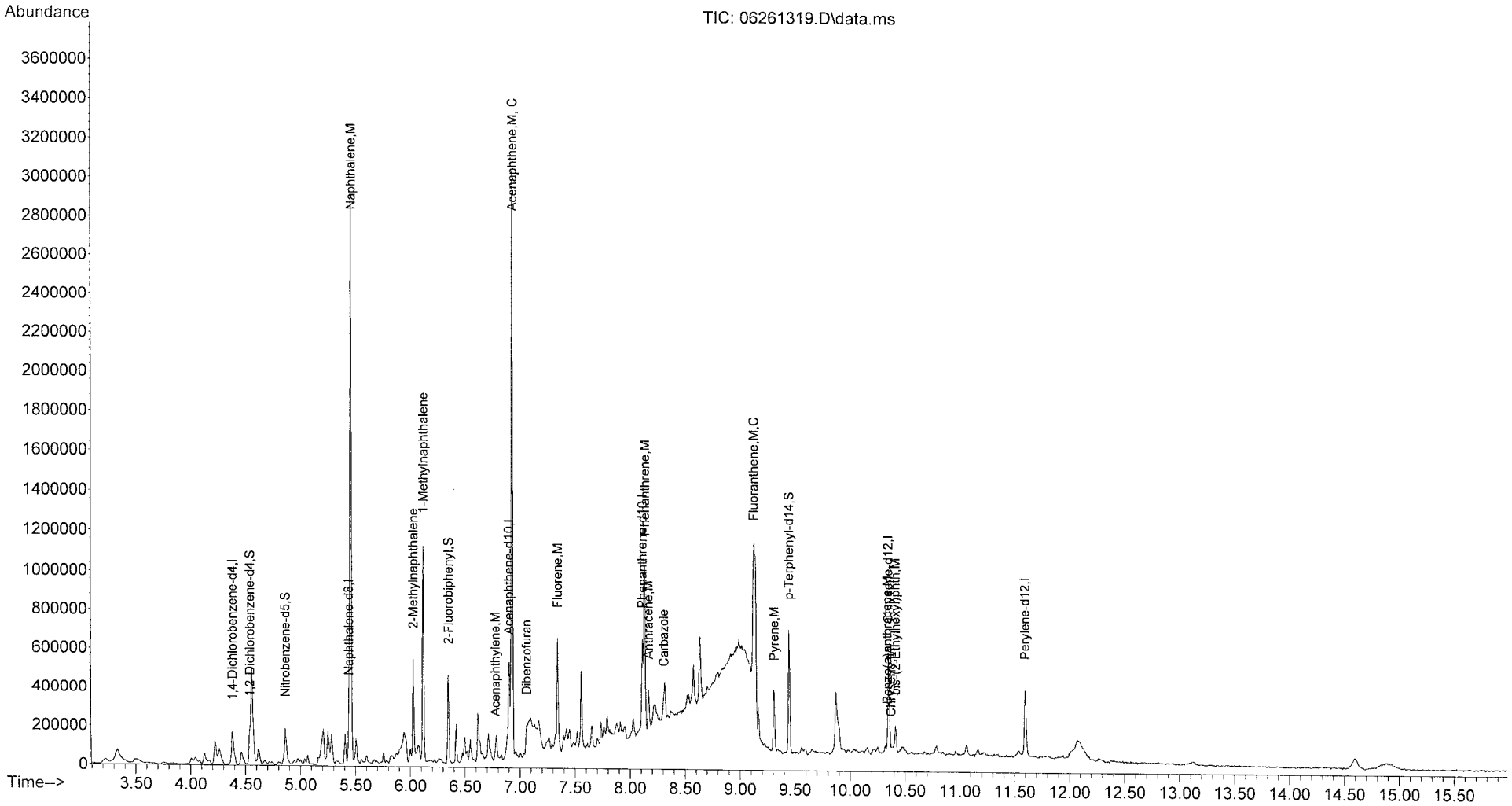
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.381	152	33892	4.00	ngs		0.00
6) Naphthalene-d8	5.440	136	110459	4.00	ngs		0.00
13) Acenaphthene-d10	6.900	164	73989	4.00	ngs		0.00
19) Phenanthrene-d10	8.115	188	159221	4.00	ngs		0.00
26) Chrysene-d12	10.350	240	193443	4.00	ngs		0.01
33) Perylene-d12	11.597	264	139519	4.00	ngs		0.03
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.542	152	34262	3.69	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	7.38%#		
4) Nitrobenzene-d5	4.863	82	47257	4.34	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.68%#		
10) 2-Fluorobiphenyl	6.350	172	117253	4.22	ngs		0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	8.44%#		
25) p-Terphenyl-d14	9.446	244	177138	4.39	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	8.78%#		
Target Compounds							Qvalue
7) Naphthalene	5.462	128	1085911	35.59	ngs		99
8) 2-Methylnaphthalene	6.029	142	100816	4.96	ngs		93
9) 1-Methylnaphthalene	6.120	142	211822	11.20	ngs		98
11) Acenaphthylene	6.777	152	13084	0.39	ngs	#	76
14) Acenaphthene	6.933	153	602704	26.99	ngs		98
15) Dibenzofuran	7.061	168	24469	0.74	ngs		99
17) Fluorene	7.344	166	143094	5.48	ngs		94
20) Phenanthrene	8.136	178	322521	7.06	ngs		99
21) Anthracene	8.168	178	62047	1.45	ngs		97
22) Carbazole	8.307	167	21322	0.57	ngs		95
23) Fluoranthene	9.125	202	91262	1.74	ngs		98
24) Pyrene	9.313	202	114951	2.02	ngs		97
27) Benzo(a)anthracene	10.340	228	6542	0.12	ngs	#	63
28) Chrysene	10.372	228	6771	0.13	ngs	#	72
29) bis-(2-Ethylhexyl)phth	10.415	149	53056	1.42	ngs	#	90

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261319.D
Acq On : 26 Jun 2013 4:49 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+
ALS Vial : 19 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:45:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



PNA0605.M Wed Jun 26 17:45:38 2013

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261319.D
Acq On : 26 Jun 2013 4:49 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+
ALS Vial : 19 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:44:51 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

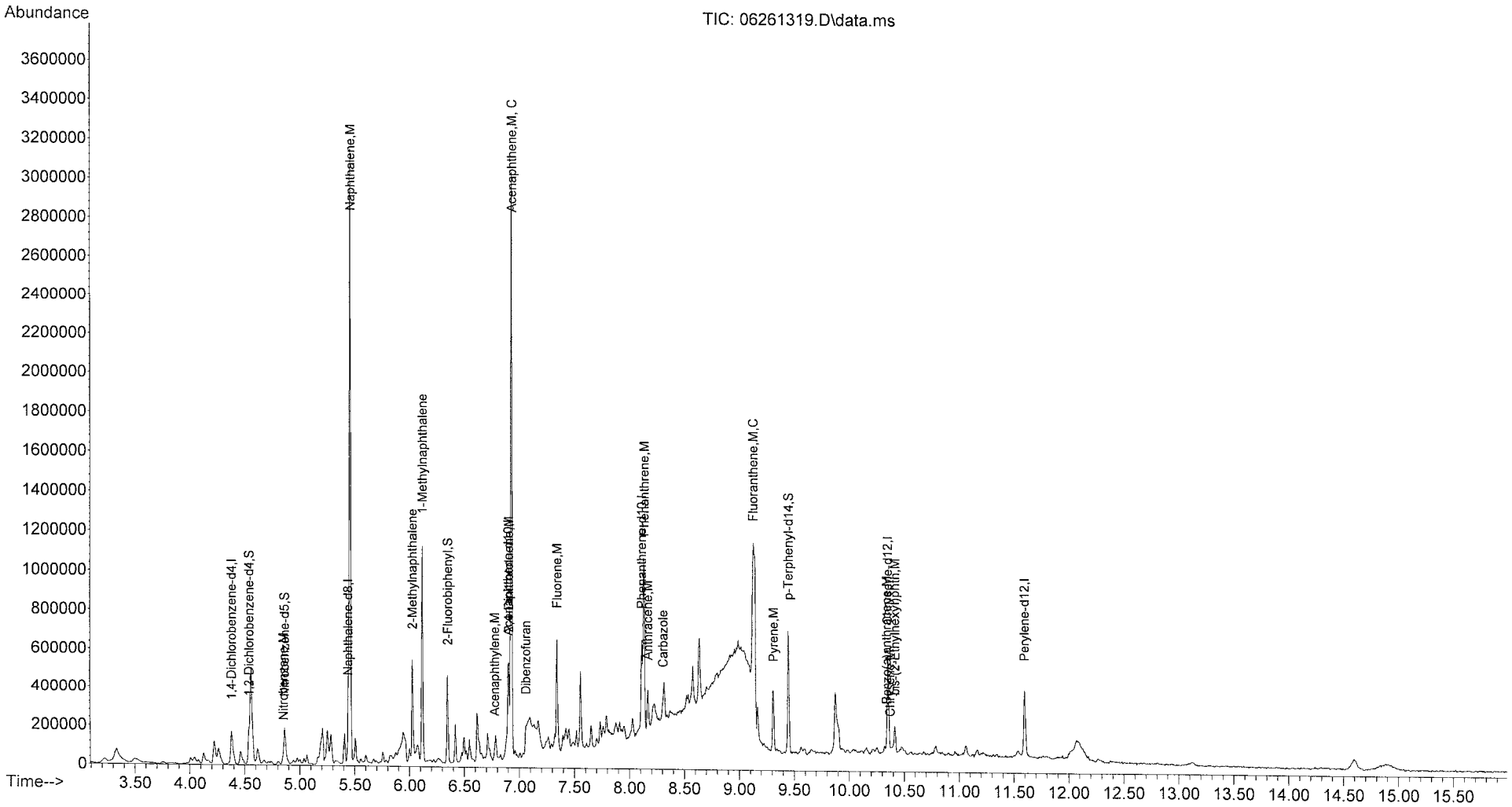
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	33892	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	110459	4.00	ngs	0.00
13) Acenaphthene-d10	6.900	164	73989	4.00	ngs	0.00
19) Phenanthrene-d10	8.115	188	159221	4.00	ngs	0.00
26) Chrysene-d12	10.350	240	193443	4.00	ngs	0.01
33) Perylene-d12	11.597	264	139519	4.00	ngs	0.03
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	34262	3.69	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	7.38%#	
4) Nitrobenzene-d5	4.863	82	47257	4.34	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.68%#	
10) 2-Fluorobiphenyl	6.350	172	117253	4.22	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	8.44%#	
25) p-Terphenyl-d14	9.446	244	177138	4.39	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	8.78%#	
Target Compounds						Qvalue
5) Nitrobenzene	4.852	77	3428	0.31	ngs	# 28
7) Naphthalene	5.462	128	1085911	35.59	ngs	99
8) 2-Methylnaphthalene	6.029	142	100816	4.96	ngs	93
9) 1-Methylnaphthalene	6.120	142	211822	11.20	ngs	98
11) Acenaphthylene	6.777	152	13084	0.39	ngs	# 76
14) Acenaphthene	6.933	153	602704	26.99	ngs	98
15) Dibenzofuran	7.061	168	24469	0.74	ngs	99
16) 2,4-Dinitrotoluene	6.906	165	9473	1.50	ngs	# 60
17) Fluorene	7.344	166	143094	5.48	ngs	94
20) Phenanthrene	8.136	178	322521	7.06	ngs	99
21) Anthracene	8.168	178	62047	1.45	ngs	97
22) Carbazole	8.307	167	21322	0.57	ngs	95
23) Fluoranthene	9.125	202	91262	1.74	ngs	98
24) Pyrene	9.313	202	114951	2.02	ngs	97
27) Benzo(a)anthracene	10.340	228	6542	0.12	ngs	# 63
28) Chrysene	10.372	228	6771	0.13	ngs	# 72
29) bis-(2-Ethylhexyl)phth	10.415	149	53056	1.42	ngs	# 90

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261319.D
Acq On : 26 Jun 2013 4:49 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+
ALS Vial : 19 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:44:51 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261320.D
Acq On : 26 Jun 2013 5:12 pm
Operator : DM
Sample : SAMP 13060776-002B
Misc : PNA_WATER+
ALS Vial : 20 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:45:57 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

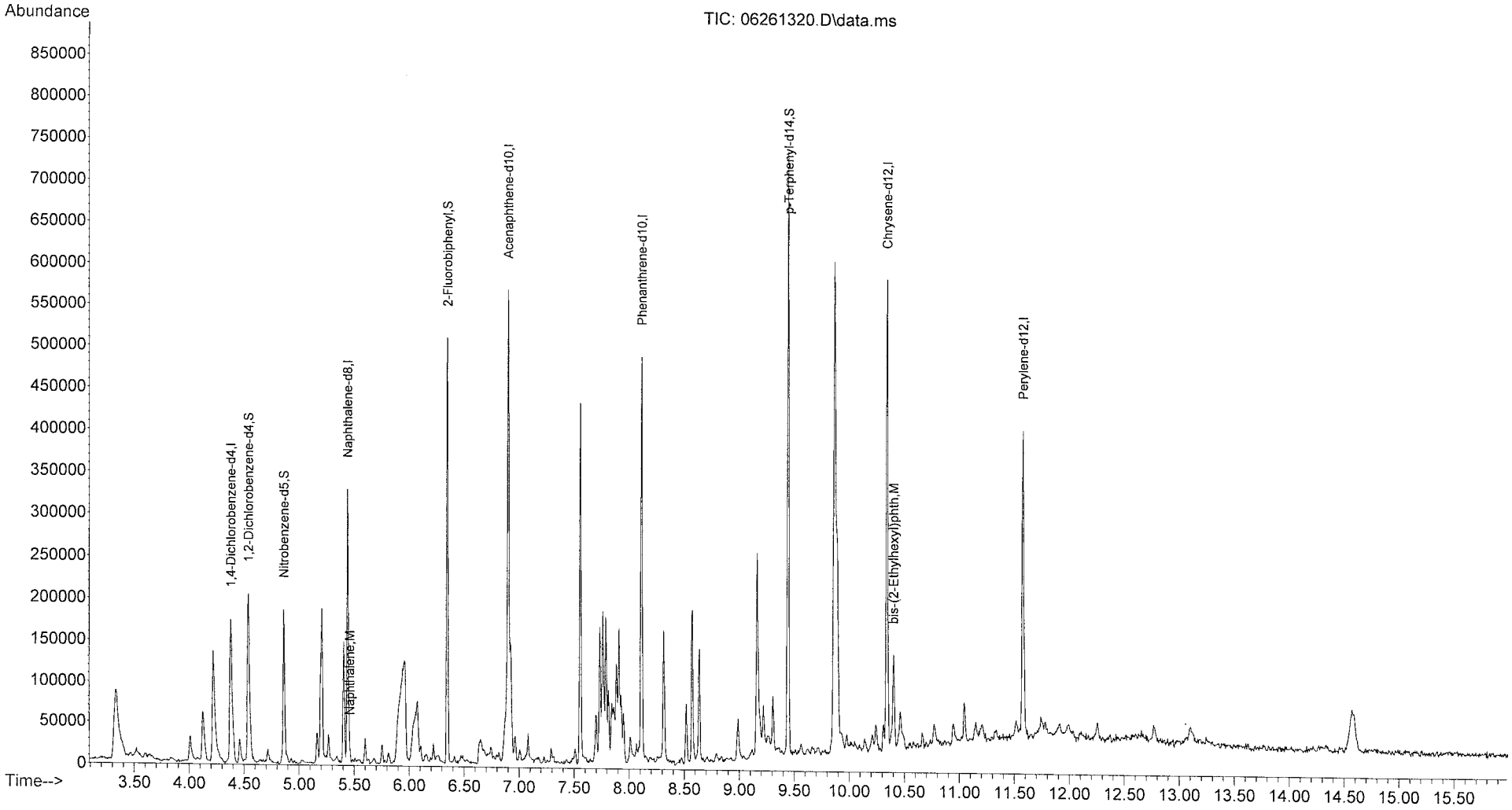
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	36832	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	113918	4.00	ngs	0.00
13) Acenaphthene-d10	6.901	164	80569	4.00	ngs	0.00
19) Phenanthrene-d10	8.115	188	161039	4.00	ngs	0.00
26) Chrysene-d12	10.345	240	202640	4.00	ngs	0.00
33) Perylene-d12	11.581	264	153260	4.00	ngs	0.01
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	42005	4.16	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	8.32%#	
4) Nitrobenzene-d5	4.863	82	52681	4.46	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.92%#	
10) 2-Fluorobiphenyl	6.350	172	135046	4.71	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.42%#	
25) p-Terphenyl-d14	9.447	244	198116	4.85	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.70%#	
Target Compounds						Qvalue
7) Naphthalene	5.462	128	2633	0.08	ngs	# 69
29) bis-(2-Ethylhexyl)phth	10.404	149	43325	1.11	ngs	# 97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261320.D
Acq On : 26 Jun 2013 5:12 pm
Operator : DM
Sample : SAMP 13060776-002B
Misc : PNA_WATER+
ALS Vial : 20 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:45:57 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261320.D
Acq On : 26 Jun 2013 5:12 pm
Operator : DM
Sample : SAMP 13060776-002B
Misc : PNA_WATER+
ALS Vial : 20 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:45:42 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

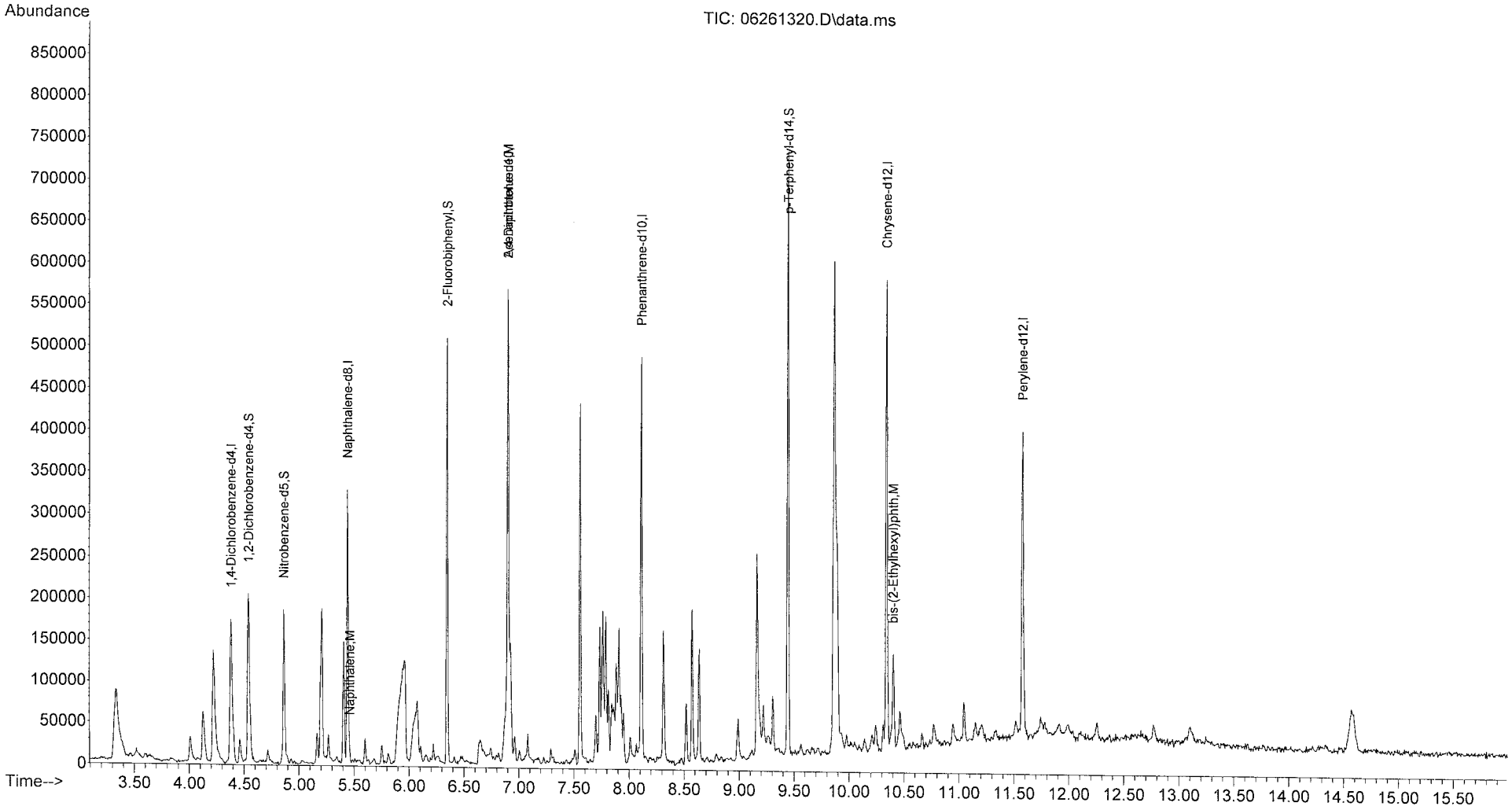
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	36832	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	113918	4.00	ngs	0.00
13) Acenaphthene-d10	6.901	164	80569	4.00	ngs	0.00
19) Phenanthrene-d10	8.115	188	161039	4.00	ngs	0.00
26) Chrysene-d12	10.345	240	202640	4.00	ngs	0.00
33) Perylene-d12	11.581	264	153260	4.00	ngs	0.01
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	42005	4.16	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	8.32%#	
4) Nitrobenzene-d5	4.863	82	52681	4.46	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.92%#	
10) 2-Fluorobiphenyl	6.350	172	135046	4.71	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.42%#	
25) p-Terphenyl-d14	9.447	244	198116	4.85	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.70%#	
Target Compounds						Qvalue
7) Naphthalene	5.462	128	2633	0.08	ngs	# 69
16) 2,4-Dinitrotoluene	6.901	165	10899	1.58	ngs	# 72
29) bis-(2-Ethylhexyl)phth	10.404	149	43325	1.11	ngs	# 97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261320.D
Acq On : 26 Jun 2013 5:12 pm
Operator : DM
Sample : SAMP 13060776-002B
Misc : PNA_WATER+
ALS Vial : 20 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 26 17:45:42 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261321.D
Acq On : 26 Jun 2013 5:34 pm
Operator : DM
Sample : SAMP 13060776-003B
Misc : PNA_WATER+
ALS Vial : 21 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:17:31 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

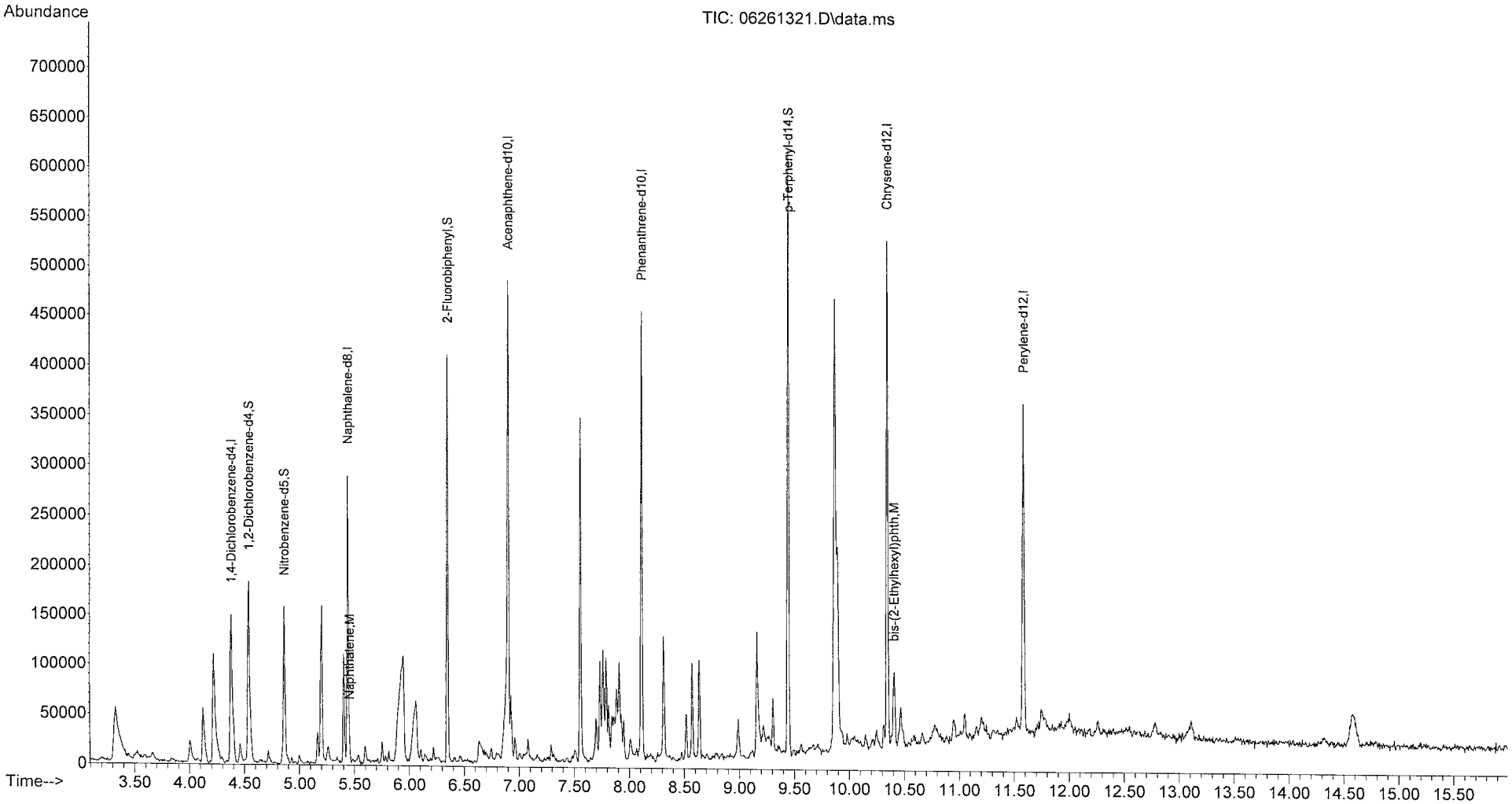
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.381	152	32086	4.00 ngs	0.00
6) Naphthalene-d8	5.440	136	99027	4.00 ngs	0.00
13) Acenaphthene-d10	6.900	164	70594	4.00 ngs	0.00
19) Phenanthrene-d10	8.115	188	143886	4.00 ngs	0.00
26) Chrysene-d12	10.345	240	175194	4.00 ngs	0.00
33) Perylene-d12	11.586	264	137773	4.00 ngs	0.02
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.542	152	33746	3.84 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 7.68%#		
4) Nitrobenzene-d5	4.863	82	42689	4.15 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 8.30%#		
10) 2-Fluorobiphenyl	6.349	172	109429	4.39 ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 8.78%#		
25) p-Terphenyl-d14	9.446	244	169232	4.64 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 9.28%#		
Target Compounds					Qvalue
7) Naphthalene	5.456	128	2349	0.09 ngs #	69
29) bis-(2-Ethylhexyl)phth	10.409	149	32755	0.97 ngs #	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261321.D
Acq On : 26 Jun 2013 5:34 pm
Operator : DM
Sample : SAMP 13060776-003B
Misc : PNA_WATER+
ALS Vial : 21 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:17:31 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261321.D
Acq On : 26 Jun 2013 5:34 pm
Operator : DM
Sample : SAMP 13060776-003B
Misc : PNA_WATER+
ALS Vial : 21 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:17:16 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

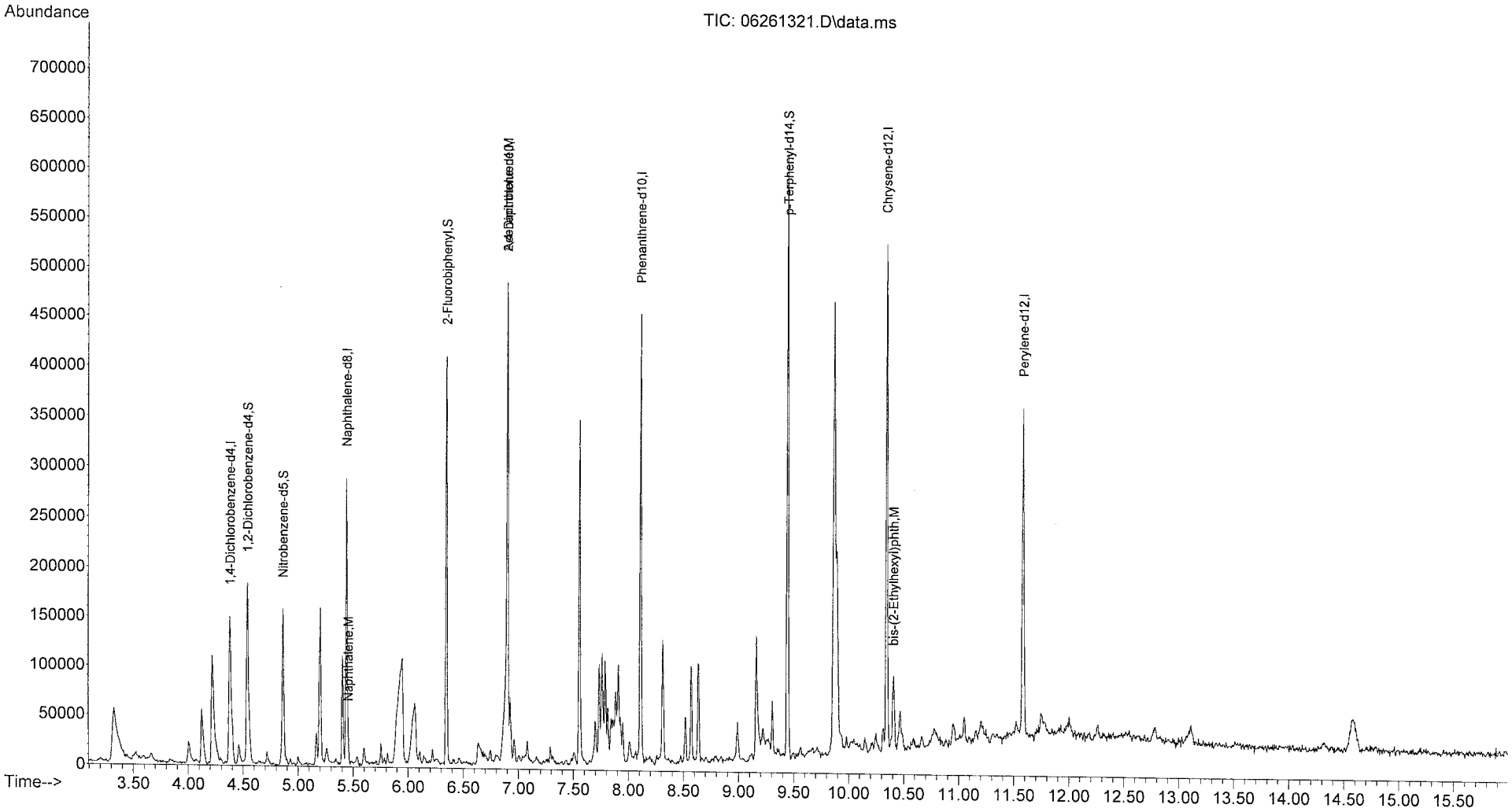
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	32086	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	99027	4.00	ngs	0.00
13) Acenaphthene-d10	6.900	164	70594	4.00	ngs	0.00
19) Phenanthrene-d10	8.115	188	143886	4.00	ngs	0.00
26) Chrysene-d12	10.345	240	175194	4.00	ngs	0.00
33) Perylene-d12	11.586	264	137773	4.00	ngs	0.02
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	33746	3.84	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	7.68%#	
4) Nitrobenzene-d5	4.863	82	42689	4.15	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.30%#	
10) 2-Fluorobiphenyl	6.349	172	109429	4.39	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	8.78%#	
25) p-Terphenyl-d14	9.446	244	169232	4.64	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.28%#	
Target Compounds						Qvalue
7) Naphthalene	5.456	128	2349	0.09	ngs	# 69
16) 2,4-Dinitrotoluene	6.900	165	9376	1.55	ngs	# 63
29) bis-(2-Ethylhexyl)phth	10.409	149	32755	0.97	ngs	# 97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261321.D
Acq On : 26 Jun 2013 5:34 pm
Operator : DM
Sample : SAMP 13060776-003B
Misc : PNA_WATER+
ALS Vial : 21 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:17:16 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261322.D
Acq On : 26 Jun 2013 5:57 pm
Operator : DM
Sample : SAMP 13060776-004B
Misc : PNA_WATER+
ALS Vial : 22 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:18:33 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

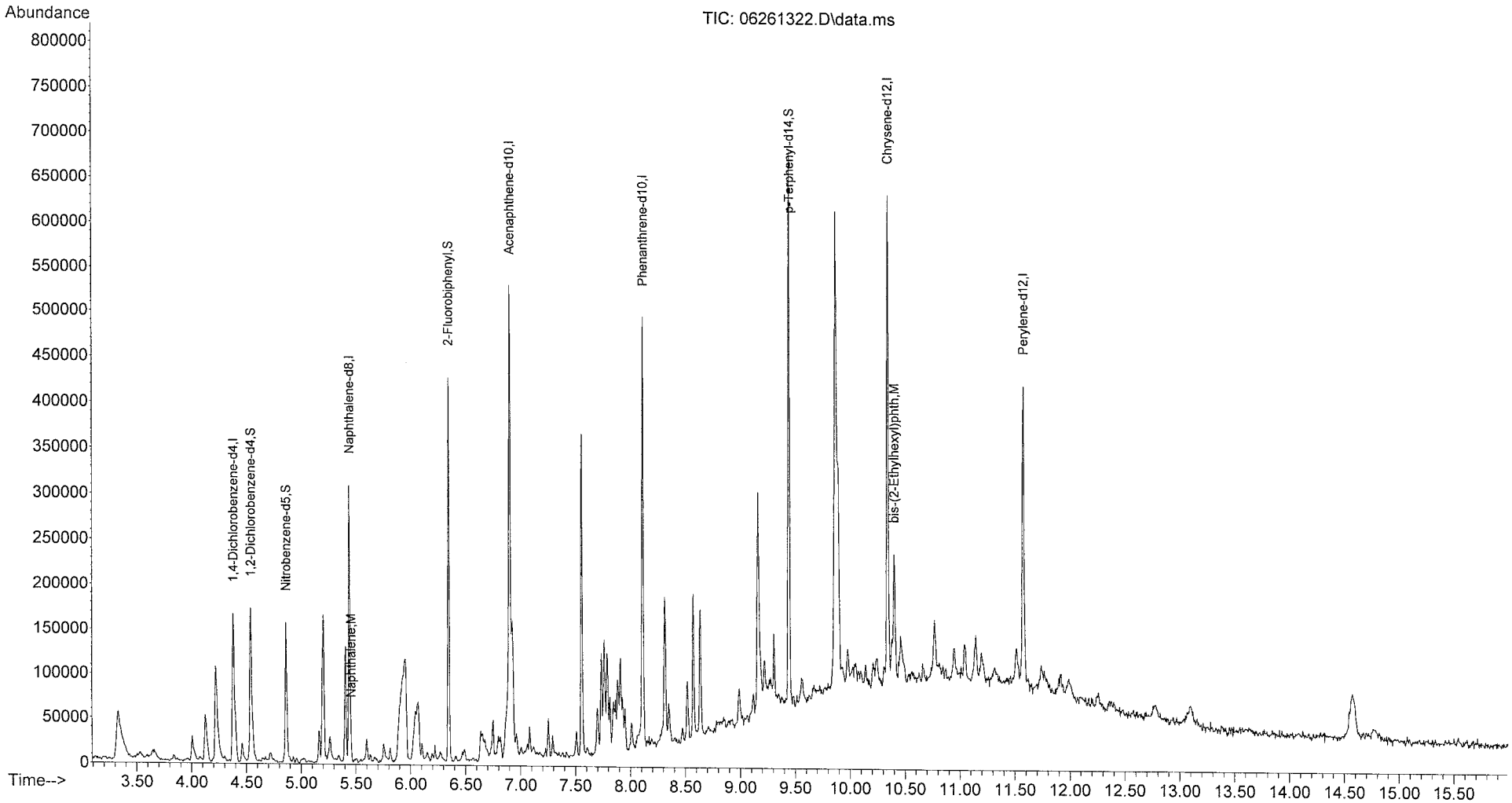
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.381	152	32543	4.00 ngs	0.00
6) Naphthalene-d8	5.440	136	107125	4.00 ngs	0.00
13) Acenaphthene-d10	6.900	164	74781	4.00 ngs	0.00
19) Phenanthrene-d10	8.114	188	156509	4.00 ngs	0.00
26) Chrysene-d12	10.345	240	185514	4.00 ngs	0.00
33) Perylene-d12	11.580	264	134717	4.00 ngs	0.01
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.542	152	31995	3.59 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	= 7.18%#	
4) Nitrobenzene-d5	4.863	82	45369	4.34 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	= 8.68%#	
10) 2-Fluorobiphenyl	6.344	172	110814	4.11 ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	= 8.22%#	
25) p-Terphenyl-d14	9.446	244	170404	4.29 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	= 8.58%#	
Target Compounds					Qvalue
7) Naphthalene	5.456	128	2218	0.07 ngs	# 69
29) bis-(2-Ethylhexyl)phth	10.404	149	58930	1.65 ngs	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261322.D
Acq On : 26 Jun 2013 5:57 pm
Operator : DM
Sample : SAMP 13060776-004B
Misc : PNA_WATER+
ALS Vial : 22 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:18:33 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261322.D
Acq On : 26 Jun 2013 5:57 pm
Operator : DM
Sample : SAMP 13060776-004B
Misc : PNA_WATER+
ALS Vial : 22 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:17:52 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

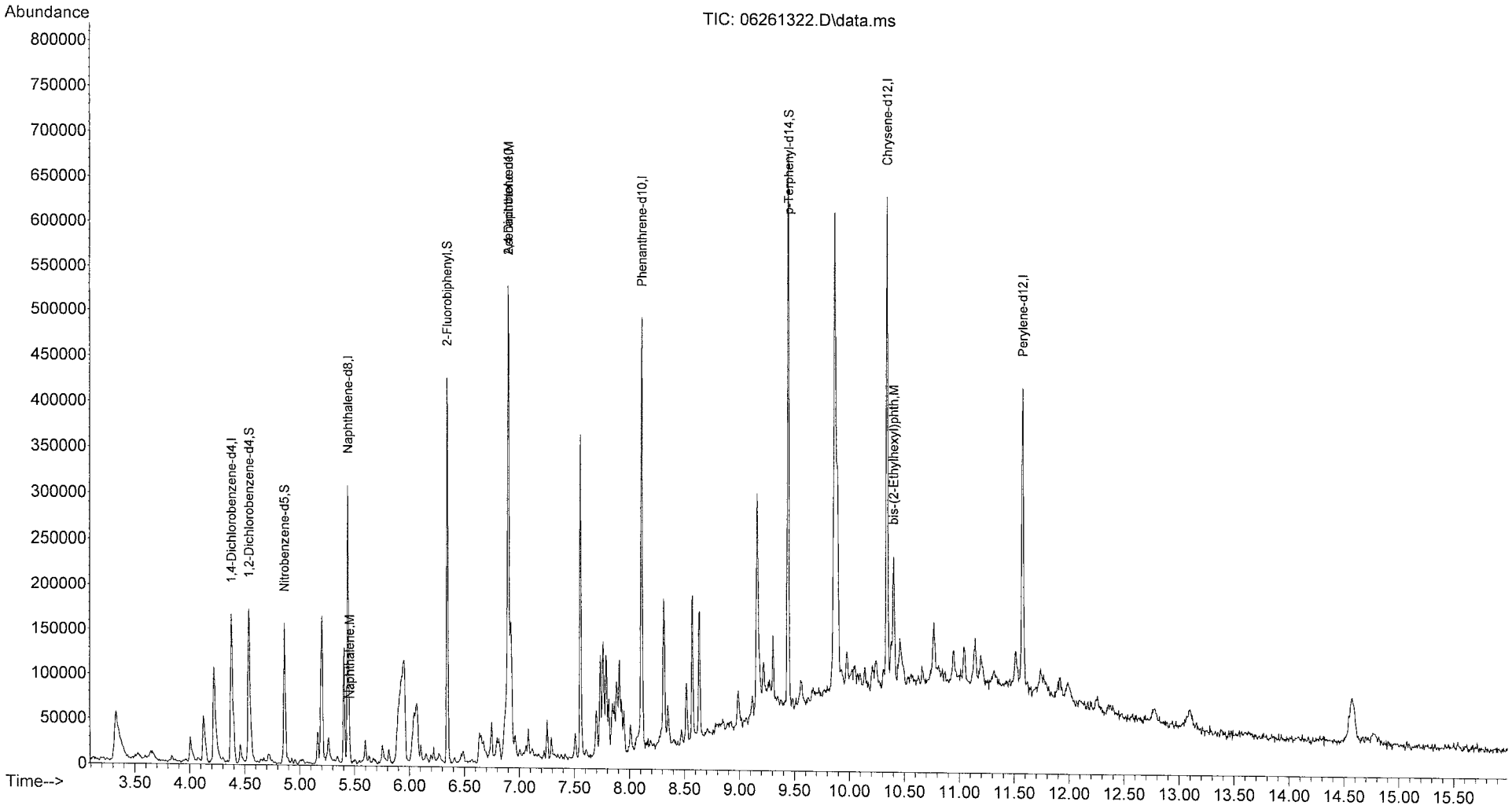
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	32543	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	107125	4.00	ngs	0.00
13) Acenaphthene-d10	6.900	164	74781	4.00	ngs	0.00
19) Phenanthrene-d10	8.114	188	156509	4.00	ngs	0.00
26) Chrysene-d12	10.345	240	185514	4.00	ngs	0.00
33) Perylene-d12	11.580	264	134717	4.00	ngs	0.01
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	31995	3.59	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	7.18%#	
4) Nitrobenzene-d5	4.863	82	45369	4.34	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.68%#	
10) 2-Fluorobiphenyl	6.344	172	110814	4.11	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	8.22%#	
25) p-Terphenyl-d14	9.446	244	170404	4.29	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	8.58%#	
Target Compounds						Qvalue
7) Naphthalene	5.456	128	2218	0.07	ngs	# 69
16) 2,4-Dinitrotoluene	6.900	165	10035	1.57	ngs	# 58
29) bis-(2-Ethylhexyl)phth	10.404	149	58930	1.65	ngs	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261322.D
Acq On : 26 Jun 2013 5:57 pm
Operator : DM
Sample : SAMP 13060776-004B
Misc : PNA_WATER+
ALS Vial : 22 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:17:52 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261323.D
Acq On : 26 Jun 2013 6:19 pm
Operator : DM
Sample : SAMP 13060776-005B
Misc : PNA_WATER+
ALS Vial : 23 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:19:05 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

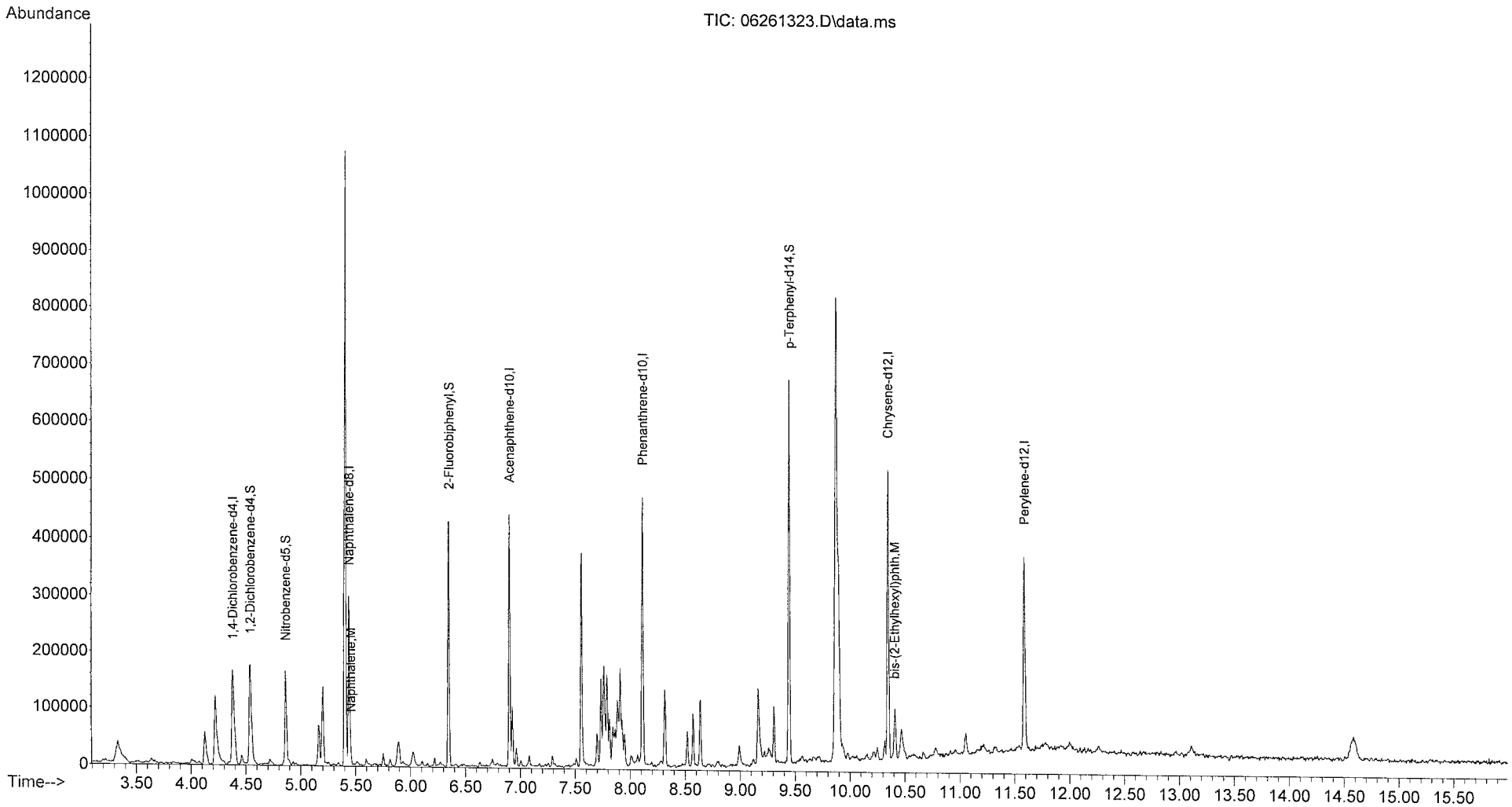
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.381	152	35515	4.00 ngs	0.00
6) Naphthalene-d8	5.440	136	103959	4.00 ngs	0.00
13) Acenaphthene-d10	6.900	164	79916	4.00 ngs	0.00
19) Phenanthrene-d10	8.115	188	151929	4.00 ngs	0.00
26) Chrysene-d12	10.345	240	192887	4.00 ngs	0.00
33) Perylene-d12	11.586	264	144278	4.00 ngs	0.02
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.542	152	36231	3.72 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 7.44%#		
4) Nitrobenzene-d5	4.863	82	48695	4.27 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 8.54%#		
10) 2-Fluorobiphenyl	6.349	172	119784	4.58 ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 9.16%#		
25) p-Terphenyl-d14	9.446	244	181541	4.71 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 9.42%#		
Target Compounds					Qvalue
7) Naphthalene	5.456	128	2067	0.07 ngs	# 69
29) bis-(2-Ethylhexyl)phth	10.409	149	34884	0.94 ngs	# 95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261323.D
Acq On : 26 Jun 2013 6:19 pm
Operator : DM
Sample : SAMP 13060776-005B
Misc : PNA_WATER+
ALS Vial : 23 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:19:05 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261323.D
Acq On : 26 Jun 2013 6:19 pm
Operator : DM
Sample : SAMP 13060776-005B
Misc : PNA_WATER+
ALS Vial : 23 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:18:51 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

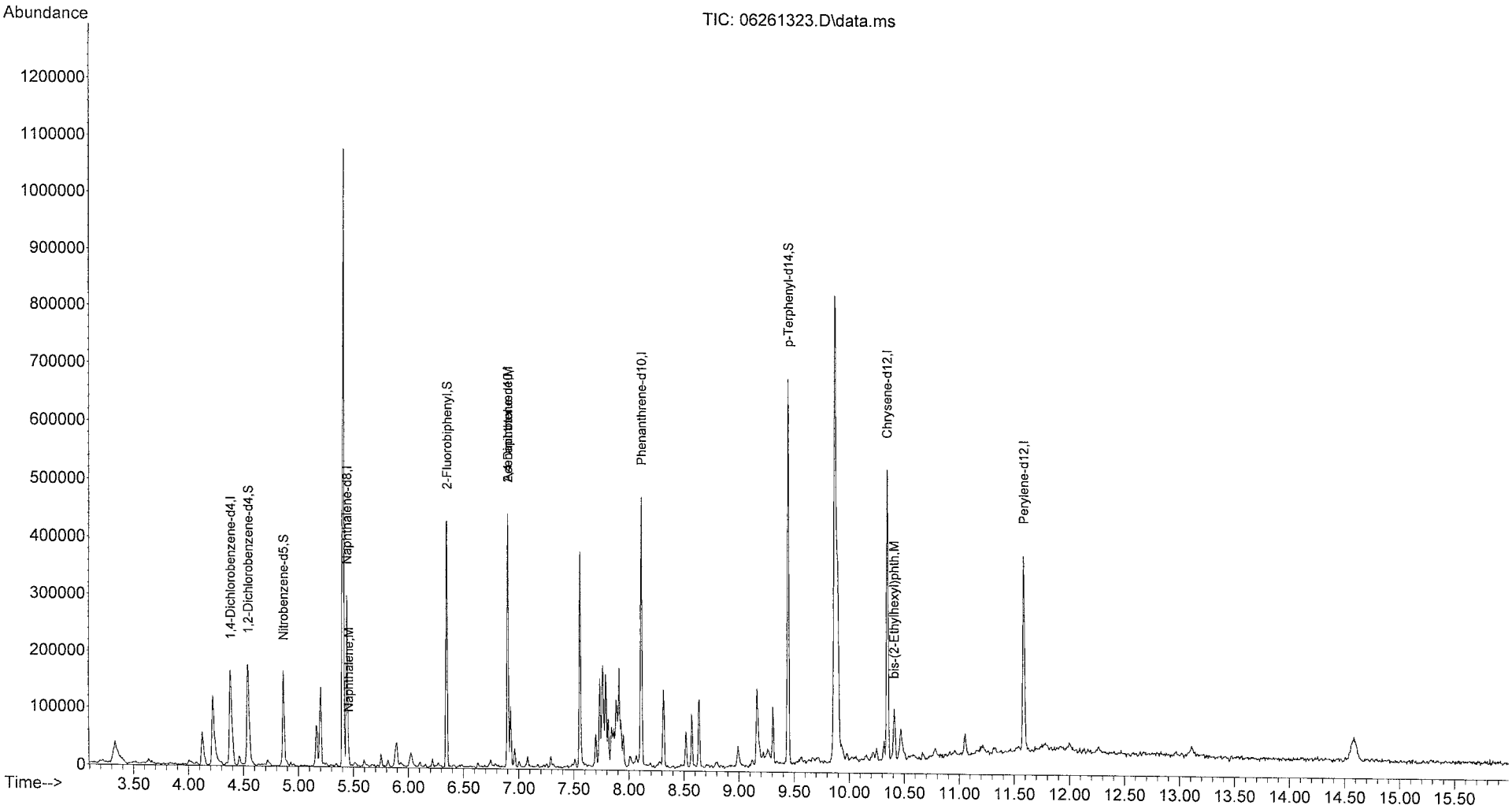
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	35515	4.00	ngs	0.00
6) Naphthalene-d8	5.440	136	103959	4.00	ngs	0.00
13) Acenaphthene-d10	6.900	164	79916	4.00	ngs	0.00
19) Phenanthrene-d10	8.115	188	151929	4.00	ngs	0.00
26) Chrysene-d12	10.345	240	192887	4.00	ngs	0.00
33) Perylene-d12	11.586	264	144278	4.00	ngs	0.02
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	36231	3.72	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	7.44%#	
4) Nitrobenzene-d5	4.863	82	48695	4.27	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	8.54%#	
10) 2-Fluorobiphenyl	6.349	172	119784	4.58	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.16%#	
25) p-Terphenyl-d14	9.446	244	181541	4.71	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	9.42%#	
Target Compounds						Qvalue
7) Naphthalene	5.456	128	2067	0.07	ngs	# 69
16) 2,4-Dinitrotoluene	6.900	165	10068	1.47	ngs	# 20
29) bis-(2-Ethylhexyl)phth	10.409	149	34884	0.94	ngs	# 95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261323.D
Acq On : 26 Jun 2013 6:19 pm
Operator : DM
Sample : SAMP 13060776-005B
Misc : PNA_WATER+
ALS Vial : 23 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:18:51 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261326.D
Acq On : 26 Jun 2013 7:26 pm
Operator : DM
Sample : MS 13060778-001BMS
Misc : PNA_WATER+
ALS Vial : 26 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:21:08 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

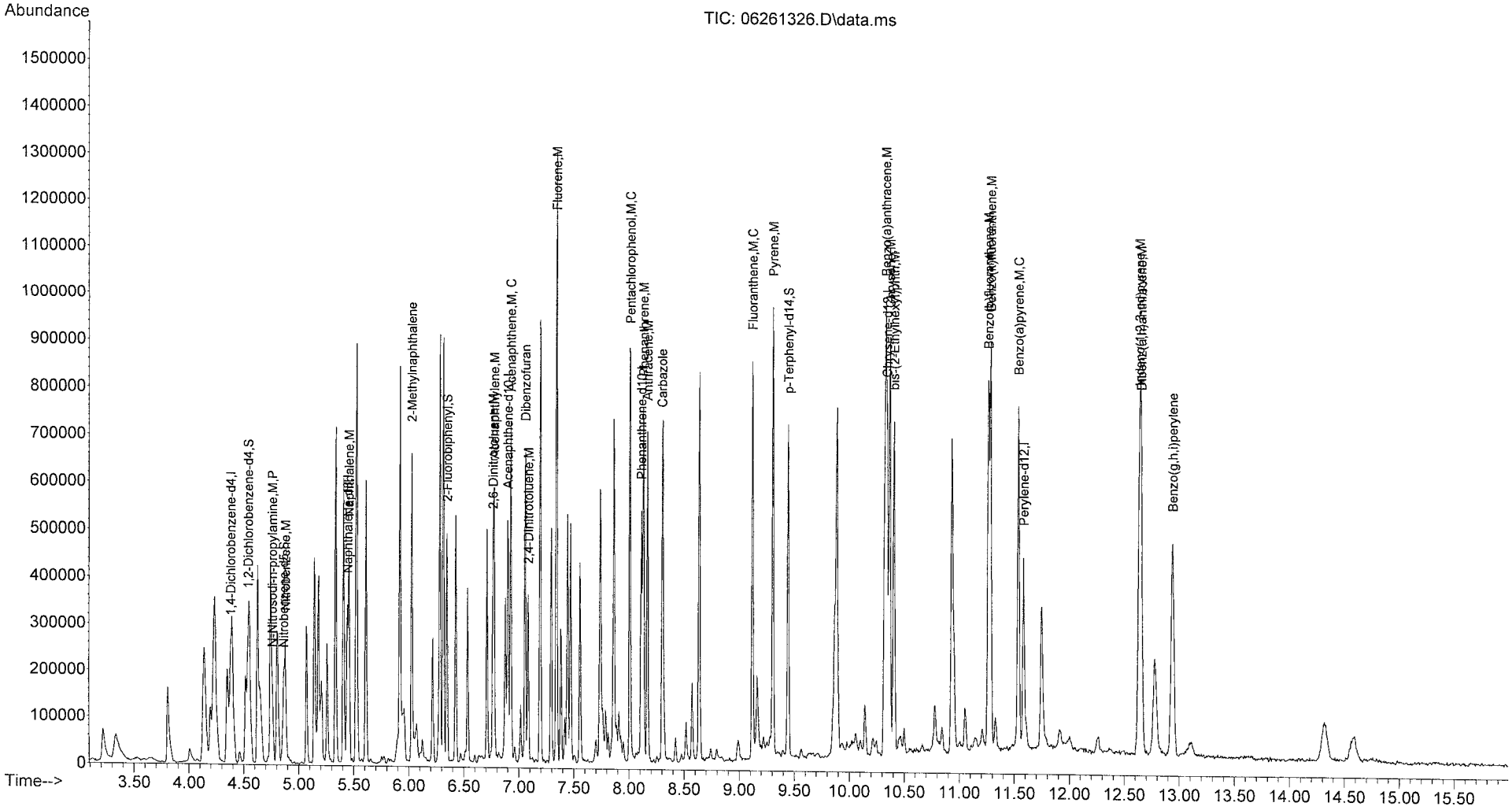
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.381	152	34711	4.00	ngs	0.00
6) Naphthalene-d8	5.445	136	113307	4.00	ngs	0.00
13) Acenaphthene-d10	6.900	164	83261	4.00	ngs	0.00
19) Phenanthrene-d10	8.114	188	171701	4.00	ngs	0.00
26) Chrysene-d12	10.345	240	207770	4.00	ngs	0.00
33) Perylene-d12	11.586	264	156106	4.00	ngs	0.02
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.542	152	39118	4.11	ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	8.22%#	
4) Nitrobenzene-d5	4.862	82	53354	4.79	ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	9.58%#	
10) 2-Fluorobiphenyl	6.349	172	128666	4.51	ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	9.02%#	
25) p-Terphenyl-d14	9.446	244	194599	4.47	ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	8.94%#	
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	25848	4.52	ngs	80
5) Nitrobenzene	4.879	77	57240	5.12	ngs	96
7) Naphthalene	5.456	128	164386	5.25	ngs	99
8) 2-Methylnaphthalene	6.028	142	128955	6.19	ngs	97
11) Acenaphthylene	6.777	152	191061	5.53	ngs	97
12) 2,6-Dinitrotoluene	6.767	165	37337	6.76	ngs #	70
14) Acenaphthene	6.927	153	131683	5.24	ngs	98
15) Dibenzofuran	7.061	168	223937	6.04	ngs	99
16) 2,4-Dinitrotoluene	7.088	165	45626	6.40	ngs	92
17) Fluorene	7.344	166	158868	5.41	ngs	97
18) Pentachlorophenol	8.013	266	97364	14.75	ngs	97
20) Phenanthrene	8.130	178	254277	5.16	ngs	99
21) Anthracene	8.168	178	245896	5.33	ngs	98
22) Carbazole	8.302	167	249608	6.14	ngs	98
23) Fluoranthene	9.120	202	319237	5.64	ngs	98
24) Pyrene	9.307	202	341886	5.57	ngs	99
27) Benzo(a)anthracene	10.334	228	322057	5.48	ngs	99
28) Chrysene	10.372	228	314713	5.44	ngs	97
29) bis-(2-Ethylhexyl)phth	10.409	149	277102	6.91	ngs	98
30) Benzo(b)fluoranthene	11.265	252	373223	5.99	ngs	96
31) Benzo(k)fluoranthene	11.286	252	306516	5.59	ngs	98
32) Benzo(a)pyrene	11.538	252	308005	5.70	ngs	94
34) Indeno(1,2,3-cd)pyrene	12.639	276	407551	6.95	ngs	95
35) Dibenz(a,h)anthracene	12.655	278	329098	6.82	ngs	98
36) Benzo(g,h,i)perylene	12.944	276	337642m	6.58	ngs	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261326.D
Acq On : 26 Jun 2013 7:26 pm
Operator : DM
Sample : MS 13060778-001BMS
Misc : PNA_WATER+
ALS Vial : 26 Sample Multiplier: 1
InstName : SVOC-7

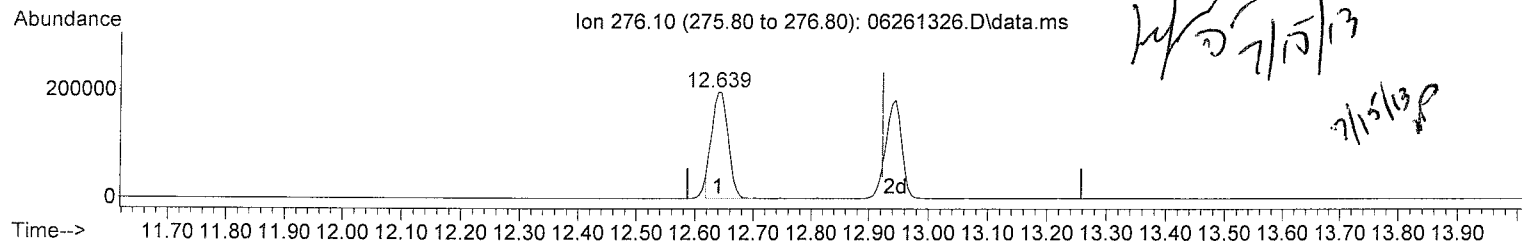
Quant Time: Jun 27 10:21:08 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

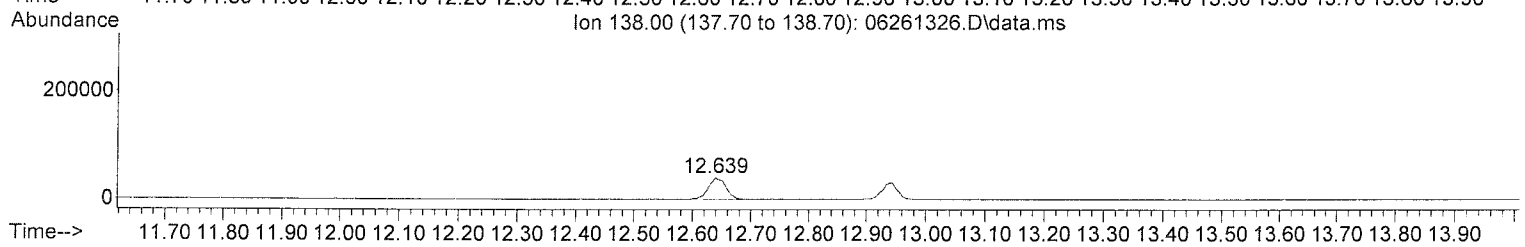


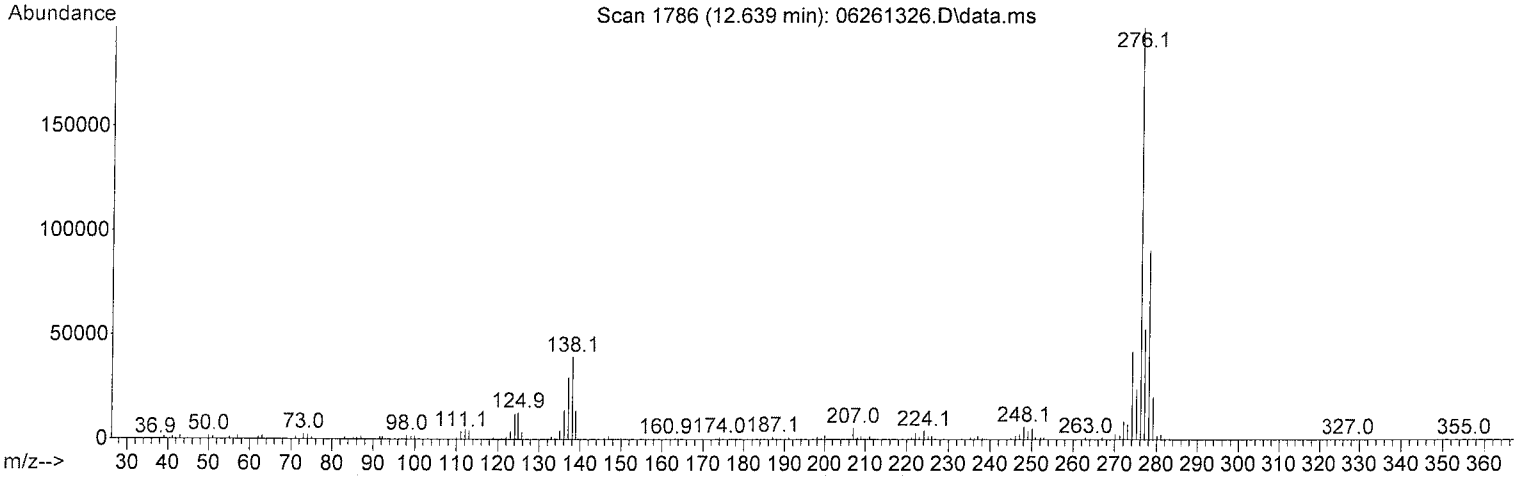
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261326.D
Acq On : 26 Jun 2013 7:26 pm
Operator : DM
Sample : MS 13060778-001BMS
Misc : PNA_WATER+
ALS Vial : 26 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:20:40 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration







TIC: 06261326.D\data.ms

(36) Benzo(g,h,i)perylene

12.639min (-0.284) 7.49 ngs

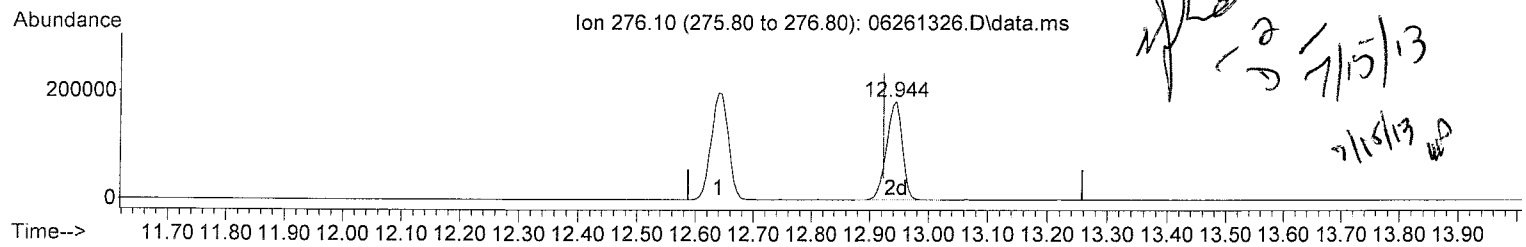
response 383992

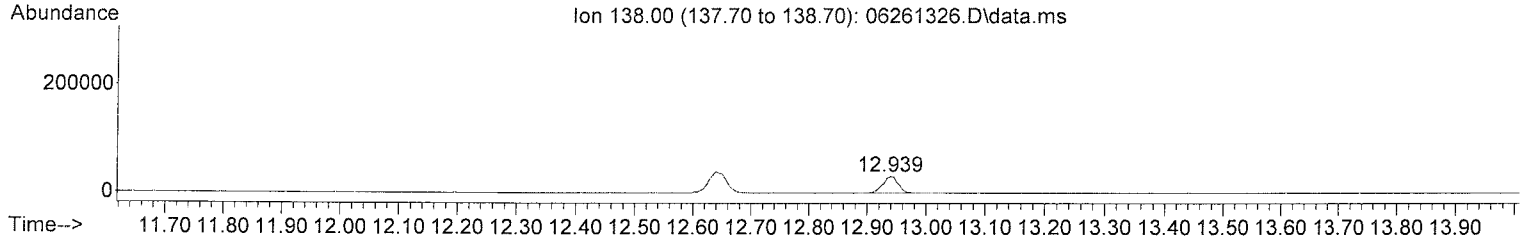
Ion	Exp%	Act%
276.10	100.00	100.00
138.00	21.40	20.40
0.00	0.00	0.00
0.00	0.00	0.00

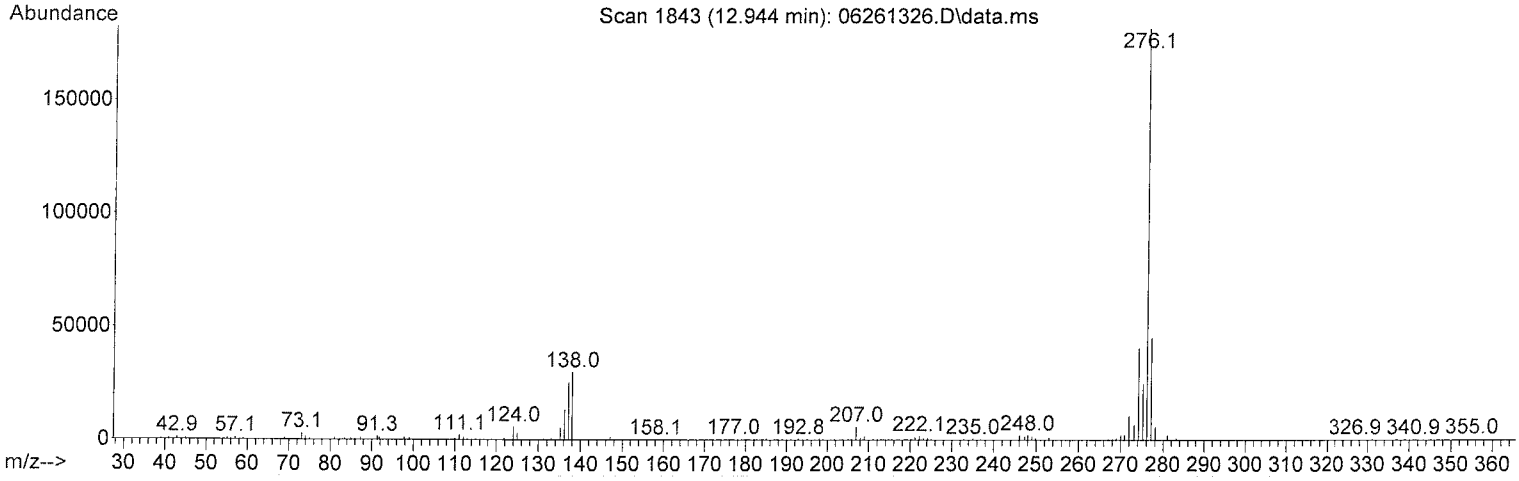
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261326.D
Acq On : 26 Jun 2013 7:26 pm
Operator : DM
Sample : MS 13060778-001BMS
Misc : PNA_WATER+
ALS Vial : 26 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:20:40 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration







TIC: 06261326.D\data.ms

(36) Benzo(g,h,i)perylene

12.944min (+ 0.021) 6.58 ngs m

response 337642

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	21.40	16.35#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261326.D
Acq On : 26 Jun 2013 7:26 pm
Operator : DM
Sample : MS 13060778-001BMS
Misc : PNA_WATER+
ALS Vial : 26 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:20:40 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

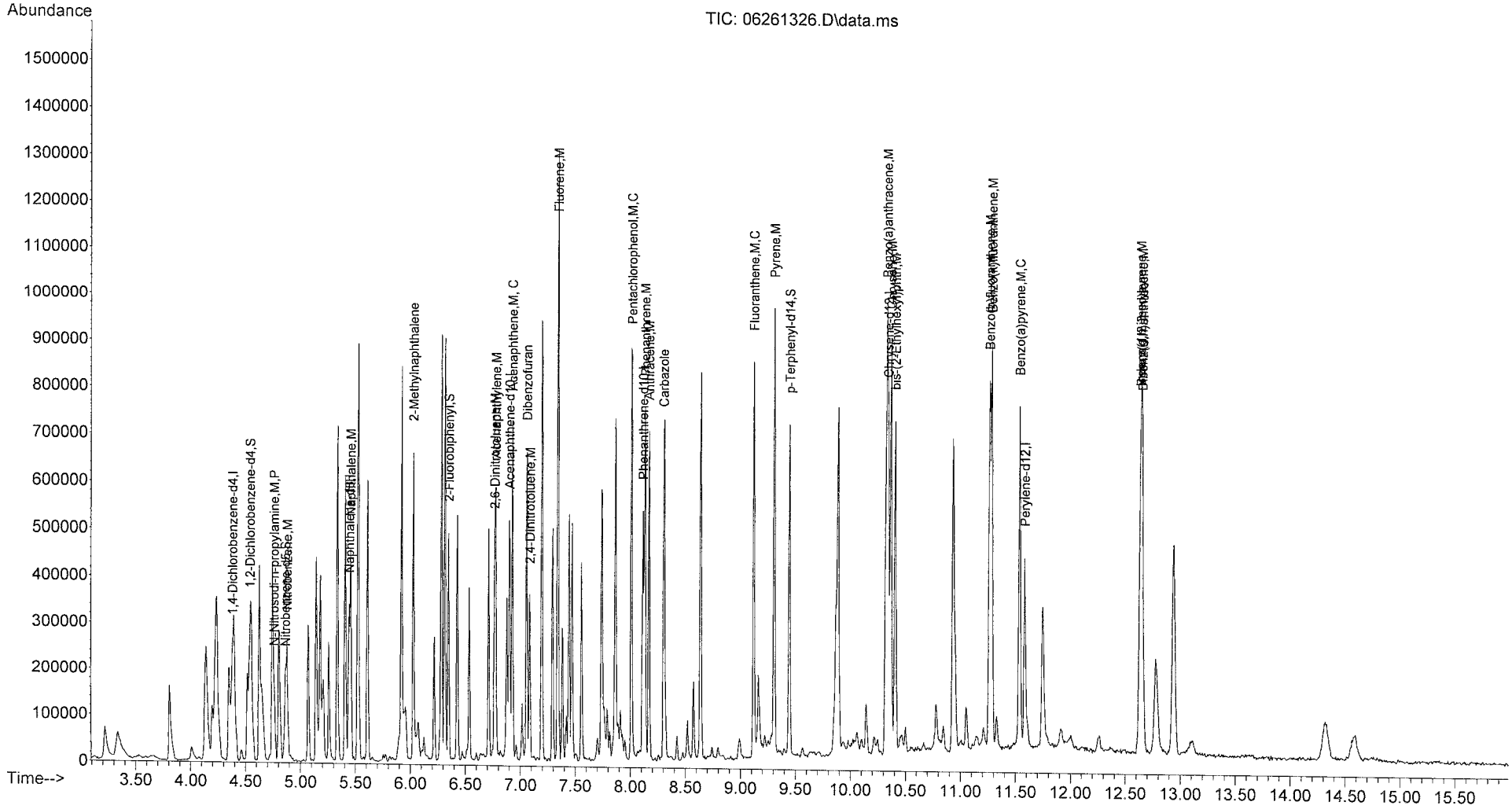
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.381	152	34711	4.00	ngs		0.00
6) Naphthalene-d8	5.445	136	113307	4.00	ngs		0.00
13) Acenaphthene-d10	6.900	164	83261	4.00	ngs		0.00
19) Phenanthrene-d10	8.114	188	171701	4.00	ngs		0.00
26) Chrysene-d12	10.345	240	207770	4.00	ngs		0.00
33) Perylene-d12	11.586	264	156106	4.00	ngs		0.02
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.542	152	39118	4.11	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 8.22%#				
4) Nitrobenzene-d5	4.862	82	53354	4.79	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 9.58%#				
10) 2-Fluorobiphenyl	6.349	172	128666	4.51	ngs		0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 9.02%#				
25) p-Terphenyl-d14	9.446	244	194599	4.47	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 8.94%#				
Target Compounds							Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	25848	4.52	ngs		80
5) Nitrobenzene	4.879	77	57240	5.12	ngs		96
7) Naphthalene	5.456	128	164386	5.25	ngs		99
8) 2-Methylnaphthalene	6.028	142	128955	6.19	ngs		97
11) Acenaphthylene	6.777	152	191061	5.53	ngs		97
12) 2,6-Dinitrotoluene	6.767	165	37337	6.76	ngs	#	70
14) Acenaphthene	6.927	153	131683	5.24	ngs		98
15) Dibenzofuran	7.061	168	223937	6.04	ngs		99
16) 2,4-Dinitrotoluene	7.088	165	45626	6.40	ngs		92
17) Fluorene	7.344	166	158868	5.41	ngs		97
18) Pentachlorophenol	8.013	266	97364	14.75	ngs		97
20) Phenanthrene	8.130	178	254277	5.16	ngs		99
21) Anthracene	8.168	178	245896	5.33	ngs		98
22) Carbazole	8.302	167	249608	6.14	ngs		98
23) Fluoranthene	9.120	202	319237	5.64	ngs		98
24) Pyrene	9.307	202	341886	5.57	ngs		99
27) Benzo(a)anthracene	10.334	228	322057	5.48	ngs		99
28) Chrysene	10.372	228	314713	5.44	ngs		97
29) bis-(2-Ethylhexyl)phth	10.409	149	277102	6.91	ngs		98
30) Benzo(b)fluoranthene	11.265	252	373223	5.99	ngs		96
31) Benzo(k)fluoranthene	11.286	252	306516	5.59	ngs		98
32) Benzo(a)pyrene	11.538	252	308005	5.70	ngs		94
34) Indeno(1,2,3-cd)pyrene	12.639	276	407551	6.95	ngs		95
35) Dibenz(a,h)anthracene	12.655	278	329098	6.82	ngs		98
36) Benzo(g,h,i)perylene	12.639	276	383992	7.49	ngs		98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261326.D
Acq On : 26 Jun 2013 7:26 pm
Operator : DM
Sample : MS 13060778-001BMS
Misc : PNA_WATER+
ALS Vial : 26 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:20:40 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



PNA0605.M Thu Jun 27 10:20:41 2013

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261327.D
Acq On : 26 Jun 2013 7:48 pm
Operator : DM
Sample : MSD 13060778-001BMSD
Misc : PNA_WATER+
ALS Vial : 27 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:21:50 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

D 7/15/13 7/15/13

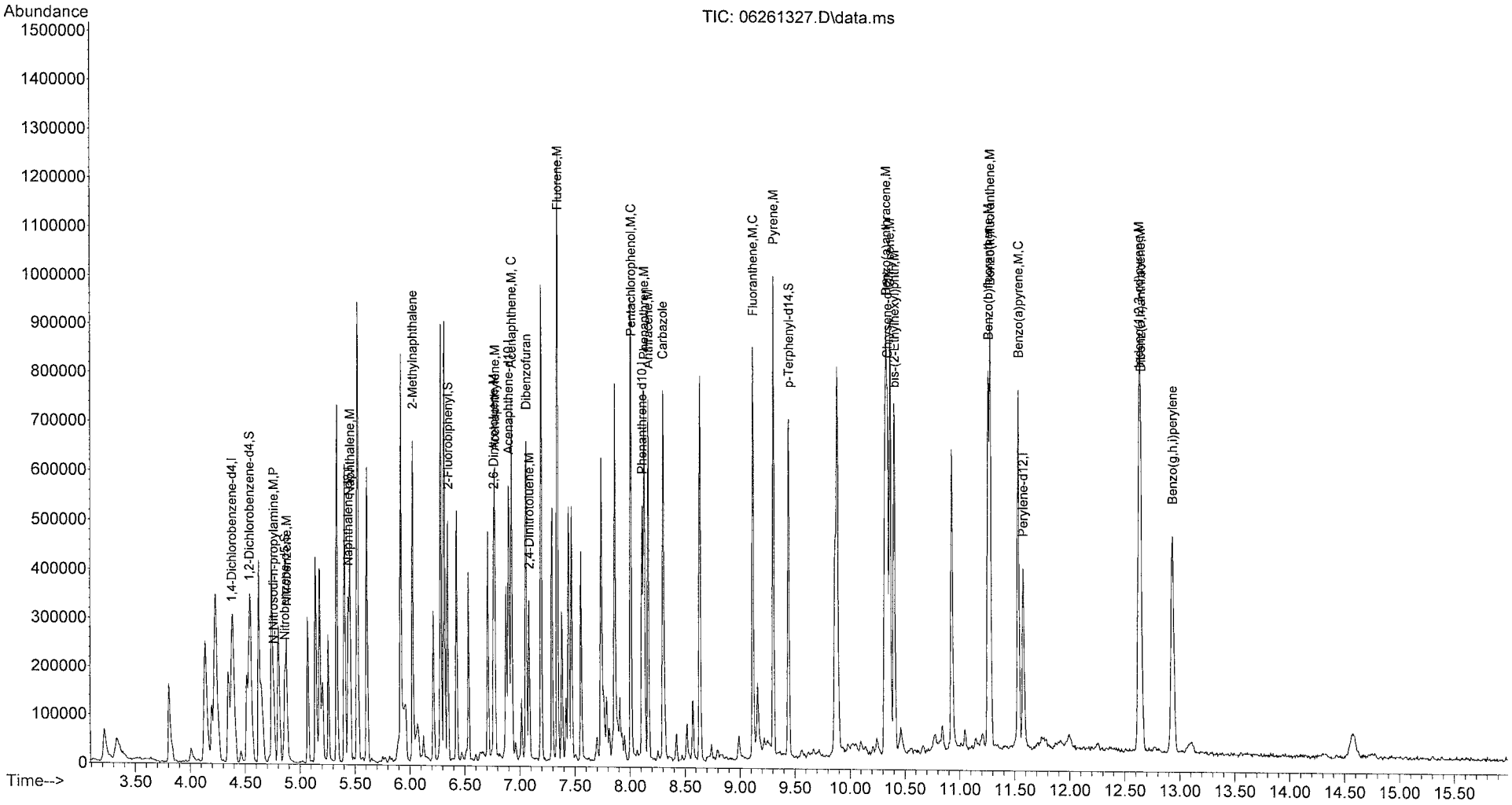
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.381	152	38848	4.00 ngs	# 0.00
6) Naphthalene-d8	5.440	136	119086	4.00 ngs	0.00
13) Acenaphthene-d10	6.901	164	88131	4.00 ngs	0.00
19) Phenanthrene-d10	8.115	188	173272	4.00 ngs	# 0.00
26) Chrysene-d12	10.345	240	216503	4.00 ngs	0.00
33) Perylene-d12	11.581	264	162228	4.00 ngs	0.01
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.542	152	38296	3.60 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	= 7.20%#	
4) Nitrobenzene-d5	4.863	82	51891	4.16 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	= 8.32%#	
10) 2-Fluorobiphenyl	6.350	172	130510	4.35 ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	= 8.70%#	
25) p-Terphenyl-d14	9.446	244	197316	4.49 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	= 8.98%#	
Target Compounds					Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	28059	4.38 ngs	83
5) Nitrobenzene	4.879	77	54759	4.37 ngs	# 87
7) Naphthalene	5.456	128	164639	5.00 ngs	99
8) 2-Methylnaphthalene	6.029	142	132459	6.05 ngs	97
11) Acenaphthylene	6.778	152	188701	5.20 ngs	95
12) 2,6-Dinitrotoluene	6.767	165	36429	6.27 ngs	# 69
14) Acenaphthene	6.927	153	131571	4.95 ngs	98
15) Dibenzofuran	7.061	168	229867	5.86 ngs	97
16) 2,4-Dinitrotoluene	7.088	165	46118	6.11 ngs	94
17) Fluorene	7.344	166	157490	5.07 ngs	96
18) Pentachlorophenol	8.013	266	96929	13.88 ngs	98
20) Phenanthrene	8.131	178	256691	5.17 ngs	99
21) Anthracene	8.168	178	244300	5.25 ngs	100
22) Carbazole	8.302	167	256189	6.25 ngs	100
23) Fluoranthene	9.120	202	319379	5.59 ngs	99
24) Pyrene	9.307	202	341163	5.51 ngs	98
27) Benzo(a)anthracene	10.334	228	318416	5.20 ngs	99
28) Chrysene	10.366	228	323754	5.37 ngs	98
29) bis-(2-Ethylhexyl)phth	10.409	149	295466	7.08 ngs	98
30) Benzo(b)fluoranthene	11.265	252	353375	5.45 ngs	98
31) Benzo(k)fluoranthene	11.281	252	339003	5.94 ngs	98
32) Benzo(a)pyrene	11.538	252	307917	5.47 ngs	95
34) Indeno(1,2,3-cd)pyrene	12.634	276	406608	6.67 ngs	95
35) Dibenz(a,h)anthracene	12.650	278	331522	6.62 ngs	97
36) Benzo(g,h,i)perylene	12.939	276	336530m	6.31 ngs	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261327.D
Acq On : 26 Jun 2013 7:48 pm
Operator : DM
Sample : MSD 13060778-001BMSD
Misc : PNA_WATER+
ALS Vial : 27 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:21:50 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

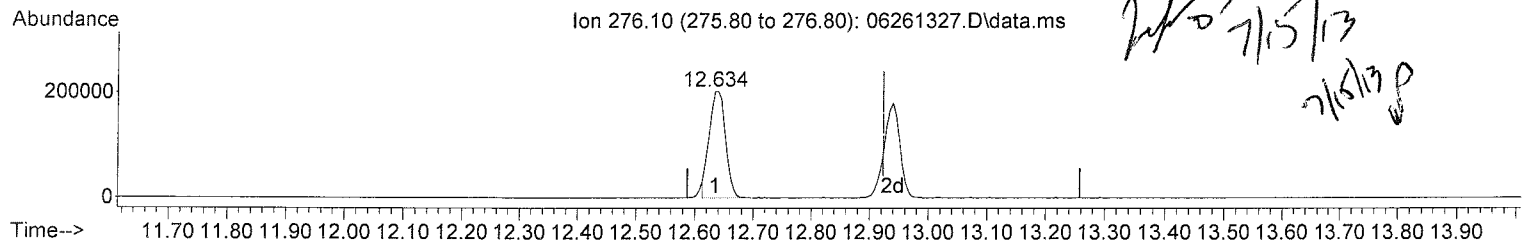


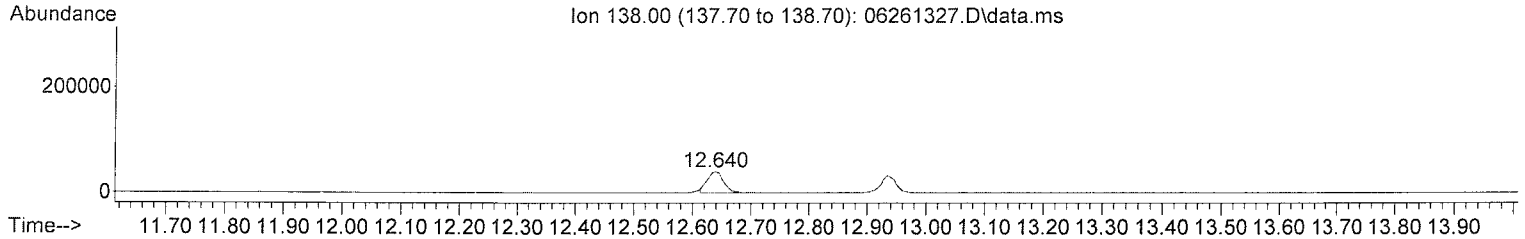
Quantitation Report (Qedit)

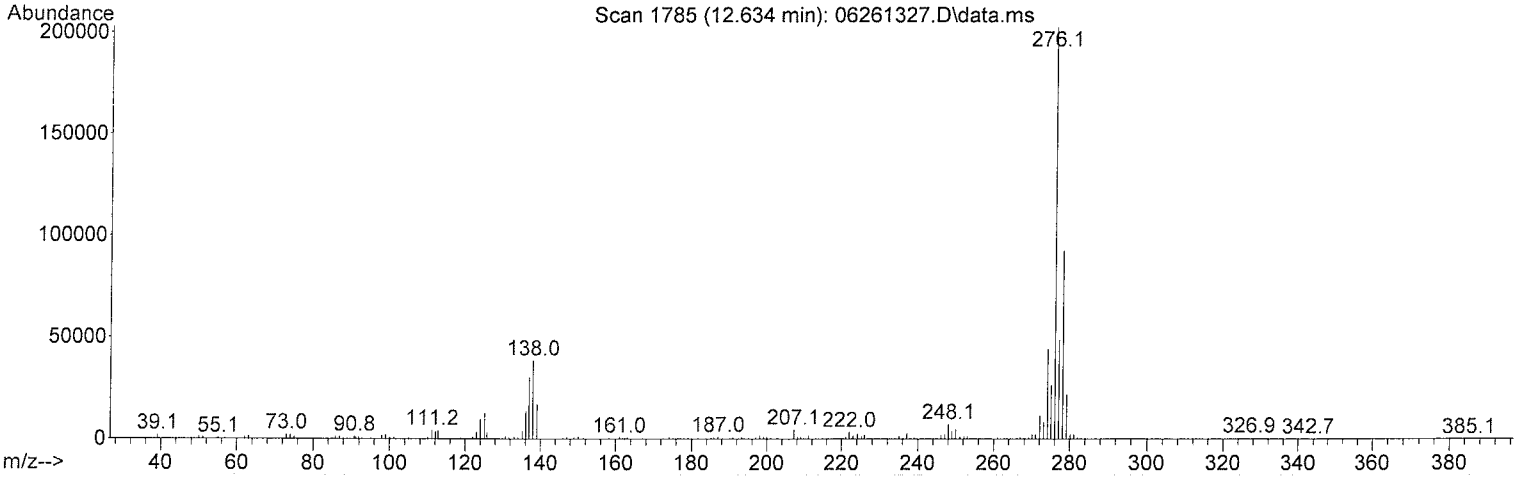
Data Path : C:\msdchem\1\data\062613\
Data File : 06261327.D
Acq On : 26 Jun 2013 7:48 pm
Operator : DM
Sample : MSD 13060778-001BMSD
Misc : PNA_WATER+
ALS Vial : 27 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:21:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

7/15/13
7/15/13







TIC: 06261327.D\data.ms

(36) Benzo(g,h,i)perylene

12.634min (-0.289) 7.32 ngs

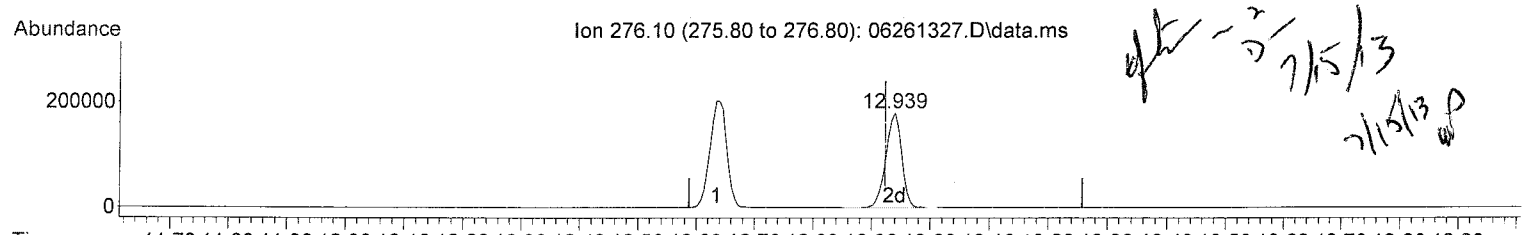
response 390069

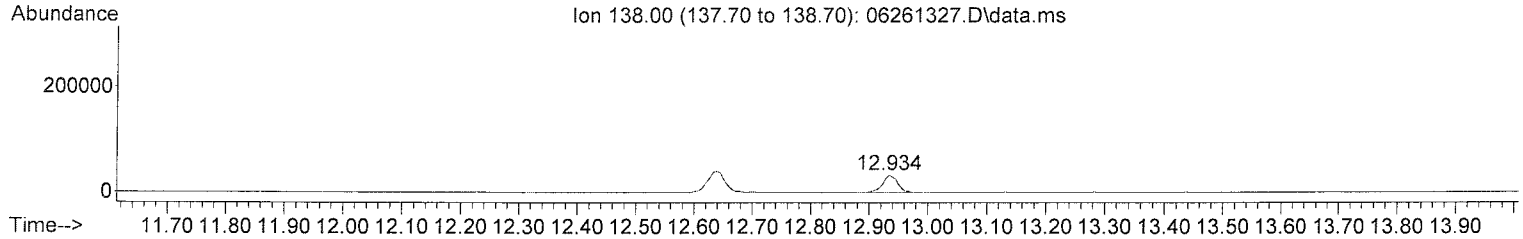
Ion	Exp%	Act%
276.10	100.00	100.00
138.00	21.40	19.96
0.00	0.00	0.00
0.00	0.00	0.00

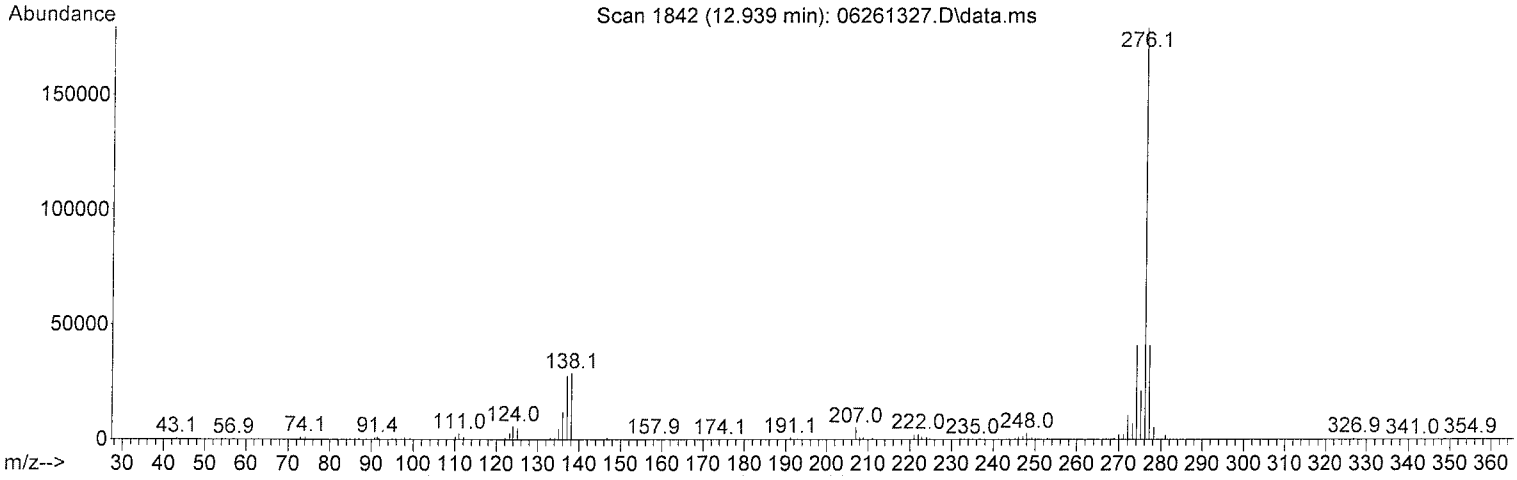
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261327.D
Acq On : 26 Jun 2013 7:48 pm
Operator : DM
Sample : MSD 13060778-001BMSD
Misc : PNA_WATER+
ALS Vial : 27 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:21:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration







TIC: 06261327.D\data.ms

(36) Benzo(g,h,i)perylene

12.939min (+ 0.016) 6.31 ngs m

response 336530

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	21.40	16.73#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261327.D
Acq On : 26 Jun 2013 7:48 pm
Operator : DM
Sample : MSD 13060778-001BMSD
Misc : PNA_WATER+
ALS Vial : 27 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:21:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration

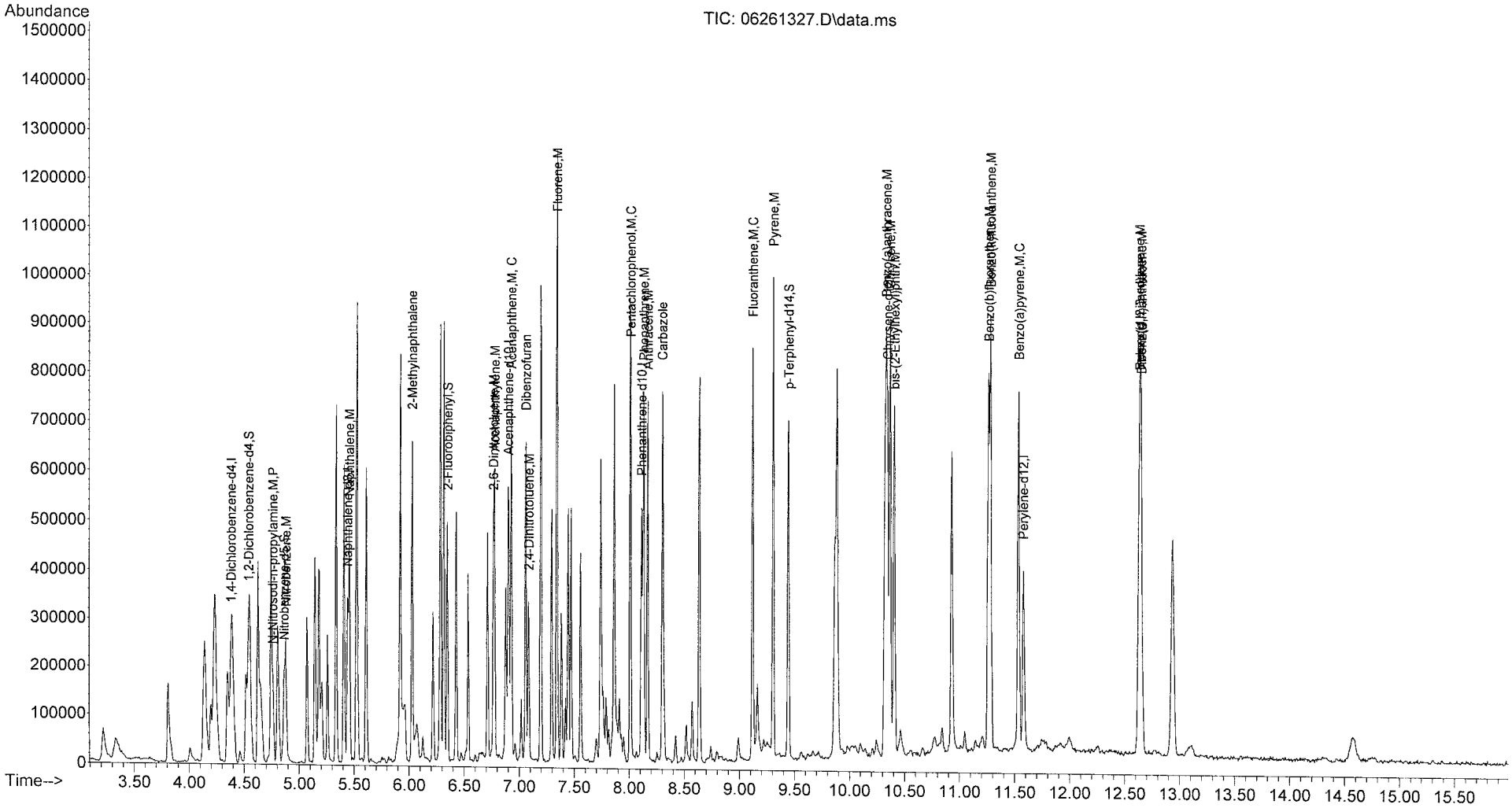
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.381	152	38848	4.00 ngs	# 0.00
6) Naphthalene-d8	5.440	136	119086	4.00 ngs	0.00
13) Acenaphthene-d10	6.901	164	88131	4.00 ngs	0.00
19) Phenanthrene-d10	8.115	188	173272	4.00 ngs	# 0.00
26) Chrysene-d12	10.345	240	216503	4.00 ngs	0.00
33) Perylene-d12	11.581	264	162228	4.00 ngs	0.01
System Monitoring Compounds					
2) 1,2-Dichlorobenzene-d4	4.542	152	38296	3.60 ngs	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	= 7.20%#	
4) Nitrobenzene-d5	4.863	82	51891	4.16 ngs	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	= 8.32%#	
10) 2-Fluorobiphenyl	6.350	172	130510	4.35 ngs	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	= 8.70%#	
25) p-Terphenyl-d14	9.446	244	197316	4.49 ngs	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	= 8.98%#	
Target Compounds					Qvalue
3) N-Nitrosodi-n-propylamine	4.761	70	28059	4.38 ngs	83
5) Nitrobenzene	4.879	77	54759	4.37 ngs	# 87
7) Naphthalene	5.456	128	164639	5.00 ngs	99
8) 2-Methylnaphthalene	6.029	142	132459	6.05 ngs	97
11) Acenaphthylene	6.778	152	188701	5.20 ngs	95
12) 2,6-Dinitrotoluene	6.767	165	36429	6.27 ngs	# 69
14) Acenaphthene	6.927	153	131571	4.95 ngs	98
15) Dibenzofuran	7.061	168	229867	5.86 ngs	97
16) 2,4-Dinitrotoluene	7.088	165	46118	6.11 ngs	94
17) Fluorene	7.344	166	157490	5.07 ngs	96
18) Pentachlorophenol	8.013	266	96929	13.88 ngs	98
20) Phenanthrene	8.131	178	256691	5.17 ngs	99
21) Anthracene	8.168	178	244300	5.25 ngs	100
22) Carbazole	8.302	167	256189	6.25 ngs	100
23) Fluoranthene	9.120	202	319379	5.59 ngs	99
24) Pyrene	9.307	202	341163	5.51 ngs	98
27) Benzo(a)anthracene	10.334	228	318416	5.20 ngs	99
28) Chrysene	10.366	228	323754	5.37 ngs	98
29) bis-(2-Ethylhexyl)phth	10.409	149	295466	7.08 ngs	98
30) Benzo(b)fluoranthene	11.265	252	353375	5.45 ngs	98
31) Benzo(k)fluoranthene	11.281	252	339003	5.94 ngs	98
32) Benzo(a)pyrene	11.538	252	307917	5.47 ngs	95
34) Indeno(1,2,3-cd)pyrene	12.634	276	406608	6.67 ngs	95
35) Dibenz(a,h)anthracene	12.650	278	331522	6.62 ngs	97
36) Benzo(g,h,i)perylene	12.634	276	390069	7.32 ngs	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062613\
Data File : 06261327.D
Acq On : 26 Jun 2013 7:48 pm
Operator : DM
Sample : MSD 13060778-001BMSD
Misc : PNA_WATER+
ALS Vial : 27 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 10:21:21 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Wed Jun 26 14:03:05 2013
Response via : Initial Calibration



Semi-Volatile Organic Compounds (SVOCs)

SW846 8270C

Run 2

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **SVOC-7_130627A**

Sample ID: **DFTPP-1** SampType: **TUNE** TestCode: **DFTPP_D** Units: Prep Date: Run ID: **SVOC-7_130627A**
Client ID: **ZZZZZ** Batch ID: **R90548** TestNo: **DFTPP_Tune** Analysis Date: **06/27/13 10:30** SeqNo: **2442867**

Mass	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
51	24.1	0	100	0	24.1	10	80	0	0		
68	1.6	0	100	0	1.6	0	2	0	0		
69	40	0	100	0	40	0	100	0	0		
70	0.5	0	100	0	0.5	0	2	0	0		
127	29	0	100	0	29	10	80	0	0		
197	0	0	100	0	0	0	2	0	0		
198	72.3	0	100	0	72.3	50	100	0	0		
199	6.5	0	100	0	6.5	5	9	0	0		
275	20.8	0	100	0	20.8	10	60	0	0		
365	7.7	0	100	0	7.7	1	100	0	0		
441	15.7	0	100	0	15.7	0.01	24	0	0		
442	100	0	100	0	100	50	100	0	0		
443	19.2	0	100	0	19.2	15	24	0	0		

Sample ID: **5.0 SSTD** SampType: **CCV** TestCode: **PNA_QC** Units: **µg/mL** Prep Date: Run ID: **SVOC-7_130627A**
Client ID: **ZZZZZ** Batch ID: **R90548** TestNo: **SW8270C-SI** Analysis Date: **06/27/13 10:52** SeqNo: **2442868**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	5.15	0.10	5	0	103	80	120	0	0		
Naphthalene	4.92	0.10	5	0	98.4	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

STAT Analysis Corporation

ATTACHMENT 4: DATA REVIEW CHECKLIST – BATCH DATA

SemiVolatiles SOP 4020, EPA 8270C

First Level Reviewer: D Marisca Review Date: 7/15/13

Second Level Reviewer: M Pendleton Review Date: 7/15/13

Analysis date: 6/27/13 Batch Start Time: 1007 Instrument: SVOC-7

Page 1 of 1 Continuing Calibration Verification (CCV) and Batch Data

Item	Aspect	1st Yes	Level No	2nd Yes	Level No	Comments: record routine corrective actions here	CAR # QER#
1	Tune meets criteria	✓		✓			
2	All Analyses in tune period 12hr	✓		✓			
3	CCV Acceptance criteria met: SPCCs: =0.05 CCCs: = 20%D RT: ± 30 seconds Int stds: -50% to +100% Correct ICAL RFs used	 ✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓ ✓			
4	Method Blank < RL False pos/neg checked Surrogates acceptable	✓ ✓ ✓		✓ ✓ ✓			
5	LCS/LCSD recovery acceptable Surrogates acceptable	✓ ✓		✓ ✓			
6	MS/MSD recov/RPD acceptable Surrogates acceptable	✓ ✓		✓ ✓			
7	Test Samples: Correct IDs Surrogates acceptable False pos/neg checked RL, Units Results within curve Dilutions performed	✓ ✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓ ✓			
8	MB, LCS/LCSD, MS/MSD per batch of 20 samples	✓		✓			
9	Manual Integration acceptable: List files	✓		✓		see attachment	
10	Int Stds Check (optional)	✓		✓			
11	Tune & QC Solns ID recorded	✓		✓		58-40-035, 58-39-046	
12	All other information recorded	✓		✓			
13	LIMS transcription correct	✓		✓			
14	Analysis within holding time	✓		✓			
15	All samples correct pH	NA		NA			
16	Autosampler tray checked	✓		✓			
17	Corrections properly recorded	✓		✓			

Additional Comments:

Injection Log

Instrument Name: SVOC-7
Data Directory: C:\msdchem\1\data\062713\

Line	Vial	FileName	Mult	SampleName	Misc Info	Injected
1	32	06261332.D	1.	SAMP 13060829-003B	PNA_WATER	26 Jun 2013 9:39 pm
2	1	06271301.D	1.	SOLVENT BLANK	SOLVENT BLANK	27 Jun 2013 10:07 am
3	2	06271302.D	1.	TUNE DFTPP-1	DFTPP_D	27 Jun 2013 10:30 am
4	3	06271303.D	1.	CCV 5.0 SSTD	PNA_QC	27 Jun 2013 10:52 am
5	4	06271304.D	1.	LCS LCS-70020-PNA	PNA_WATER+	27 Jun 2013 11:14 am
6	5	06271305.D	1.	LCSD LCSD-70020-PNA	PNA_WATER+	27 Jun 2013 11:37 am
7	6	06271306.D	1.	SAMP 13060879-011B	PNA_WATER	27 Jun 2013 11:59 am
8	7	06271307.D	1.	SAMP 13060879-012B	PNA_WATER	27 Jun 2013 12:22 pm
9	8	06271308.D	1.	SAMP 13060879-013B	PNA_WATER	27 Jun 2013 12:44 pm
10	9	06271309.D	1.	SAMP 13060776-001B	PNA_WATER+	27 Jun 2013 1:07 pm
11	10	06271310.D	1.	SAMP 13060809-001B	PNA_WATER	27 Jun 2013 1:30 pm
12	11	06271311.D	1.	MBLK MB-70107-PNA	PNA_WATER	27 Jun 2013 1:52 pm
13	4	06271312.D	1.	LCS LCS-70020-PNA	PNA_WATER+	27 Jun 2013 2:15 pm
14	12	06271313.D	1.	SAMP 13060879-012B	PNA_WATER	27 Jun 2013 2:37 pm
15	13	06271314.D	1.	LCS LCS-70107-PNA	PNA_WATER	27 Jun 2013 3:00 pm
16	14	06271315.D	1.	LCSD LCSD-70107-PNA	PNA_WATER	27 Jun 2013 3:22 pm

D 7/15/13

7/15/13

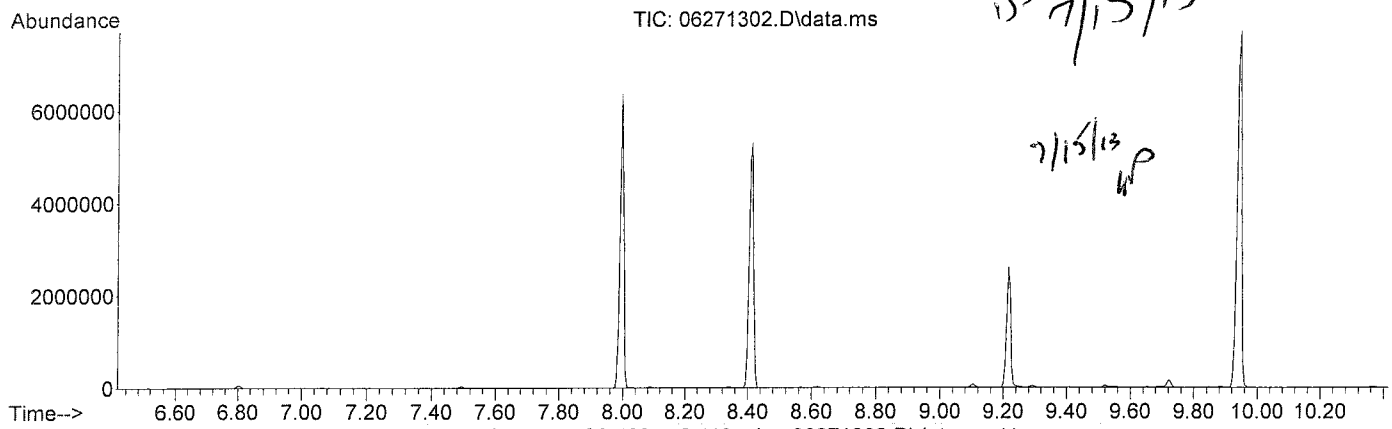
Data Path : C:\msdchem\1\data\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 10:30 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-035
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

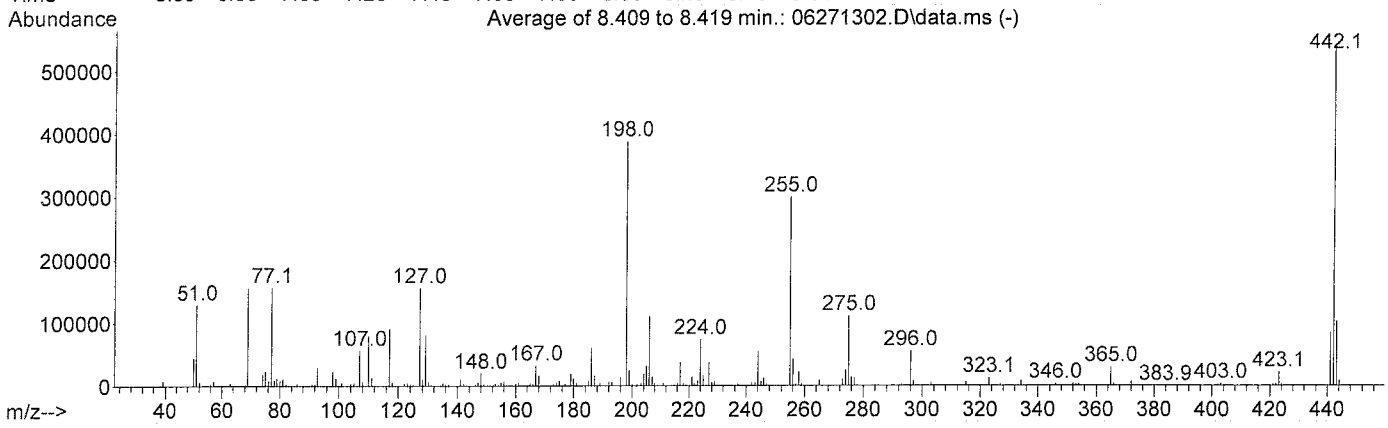
Integration File: events.e

Method : C:\msdchem\1\data\062613\dftpp.M
Title : DFTPP Tune
Last Update : Wed Jun 26 14:01:13 2013

D 7/15/13

7/15/13 MP





Spectrum Information: Average of 8.409 to 8.419 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	24.1	129664	PASS
68	69	0.00	2	1.6	2461	PASS
69	198	0.00	100	40.0	155699	PASS
70	69	0.00	2	0.5	810	PASS
127	442	10	80	29.0	156373	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	72.3	389141	PASS
199	198	5	9	6.5	25406	PASS
275	442	10	60	20.8	112043	PASS
365	198	1	100	7.7	29984	PASS
441	442	0.01	24	15.7	84496	PASS
442	442	50	100	100.0	538475	PASS
443	442	15	24	19.2	103288	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 10:30 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-035
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:32:48 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Thu Jun 27 13:32:36 2013
Response via : Initial Calibration

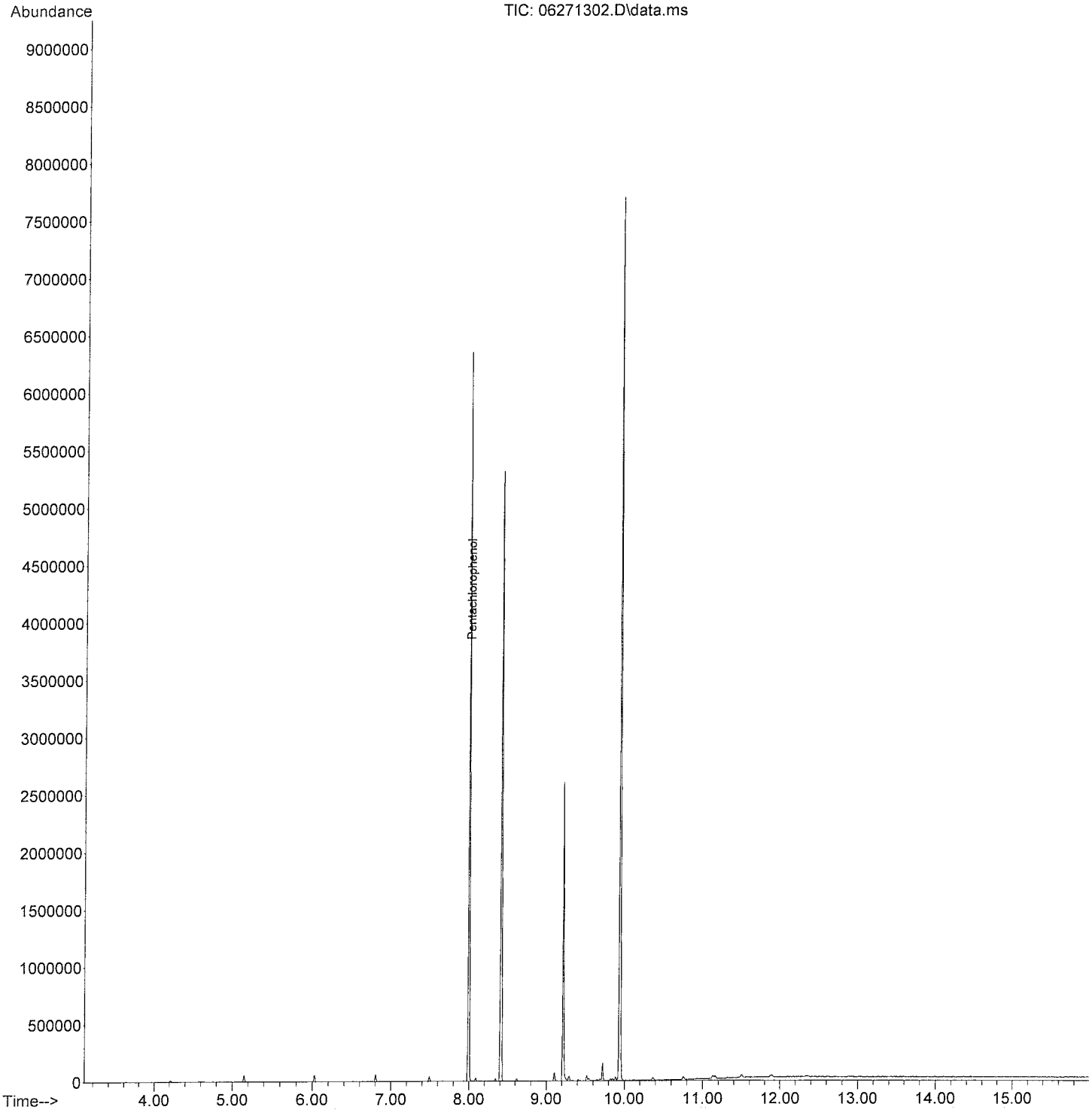
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
2) DFTPP	8.414	198	4776381	0.00	area	0.00
6) DDT	9.944	235	13817799	0.00	area	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	8.000	266	6641785	193.15	area	99
3) Benzidine	9.220	184	9490870	N.D.		
4) DDE	0.000		0	N.D.		
5) DDD	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 10:30 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-035
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:32:48 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Thu Jun 27 13:32:36 2013
Response via : Initial Calibration

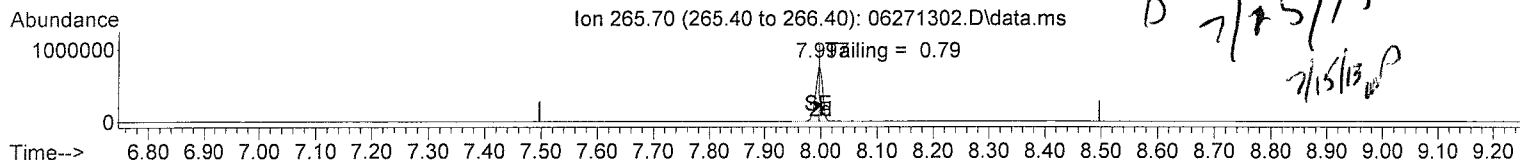


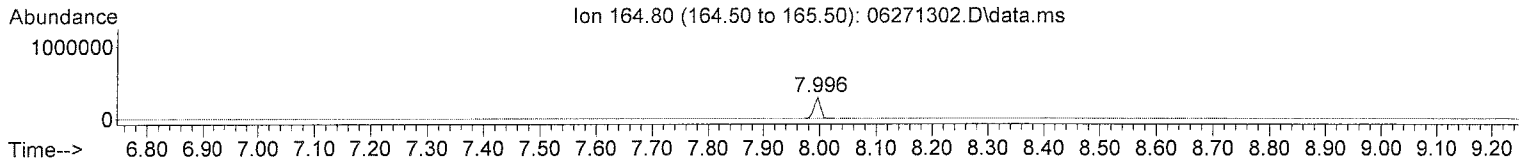
Quantitation Report (Qedit)

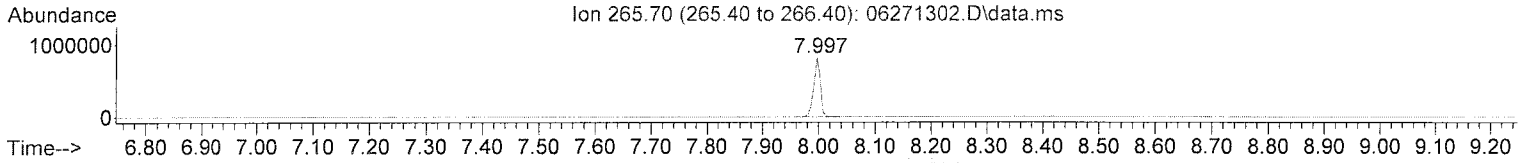
Data Path : C:\msdchem\1\data\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 10:30 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-035
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

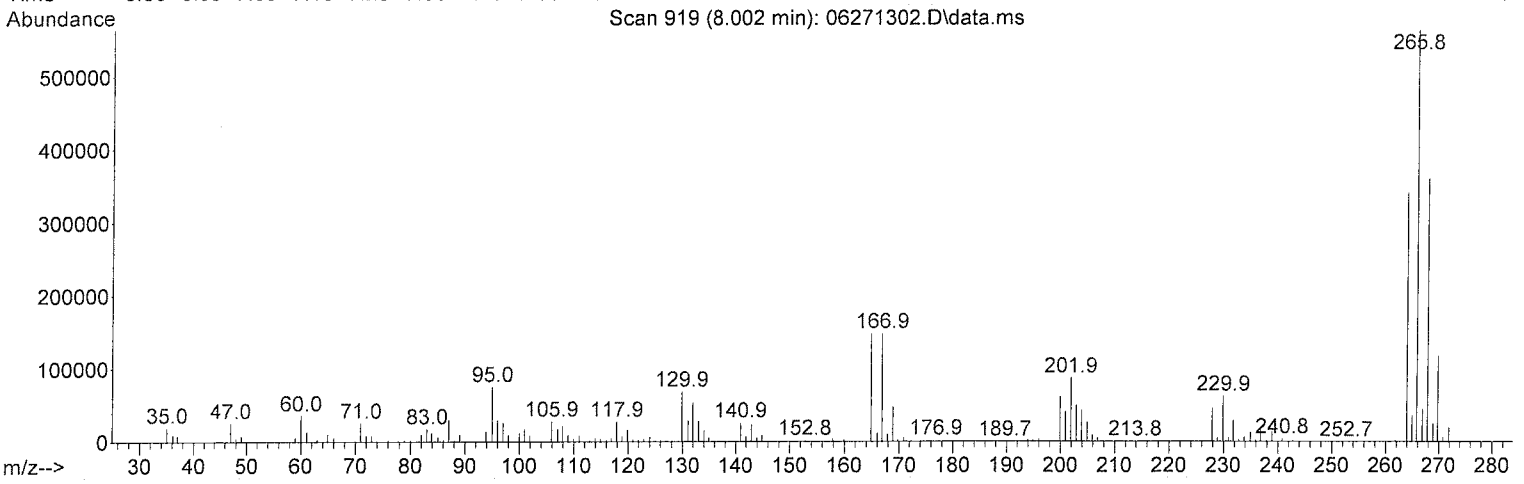
Quant Time: Jun 27 13:32:48 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Thu Jun 27 13:32:36 2013
Response via : Initial Calibration

D 7/15/13
7/15/13









TIC: 06271302.D\data.ms

(1) Pentachlorophenol

8.000min (+ 0.002) 193.15 area

response 6641785

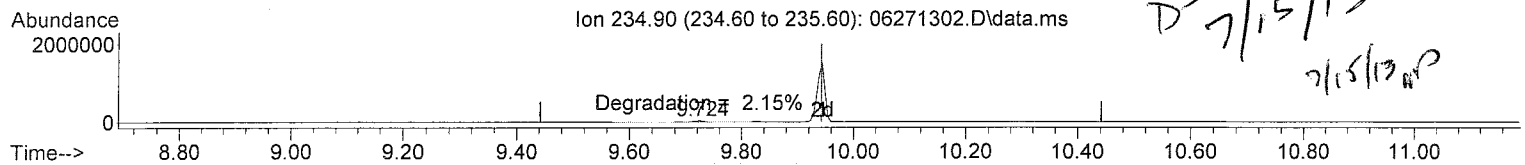
Ion	Exp%	Act%
265.70	100.00	100.00
164.80	36.50	35.15
265.70	100.00	100.00
0.00	0.00	0.00

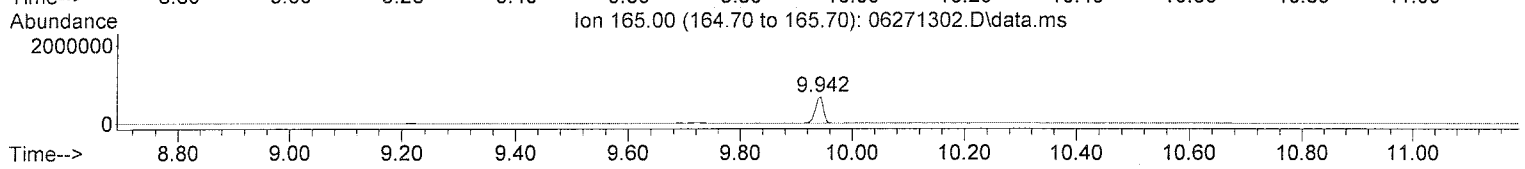
Quantitation Report (Qedit)

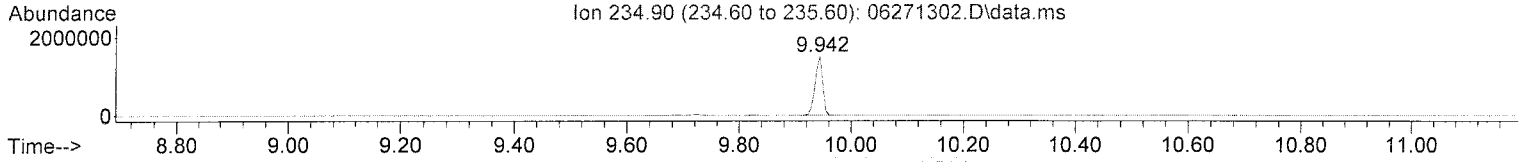
Data Path : C:\msdchem\1\data\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 10:30 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-035
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

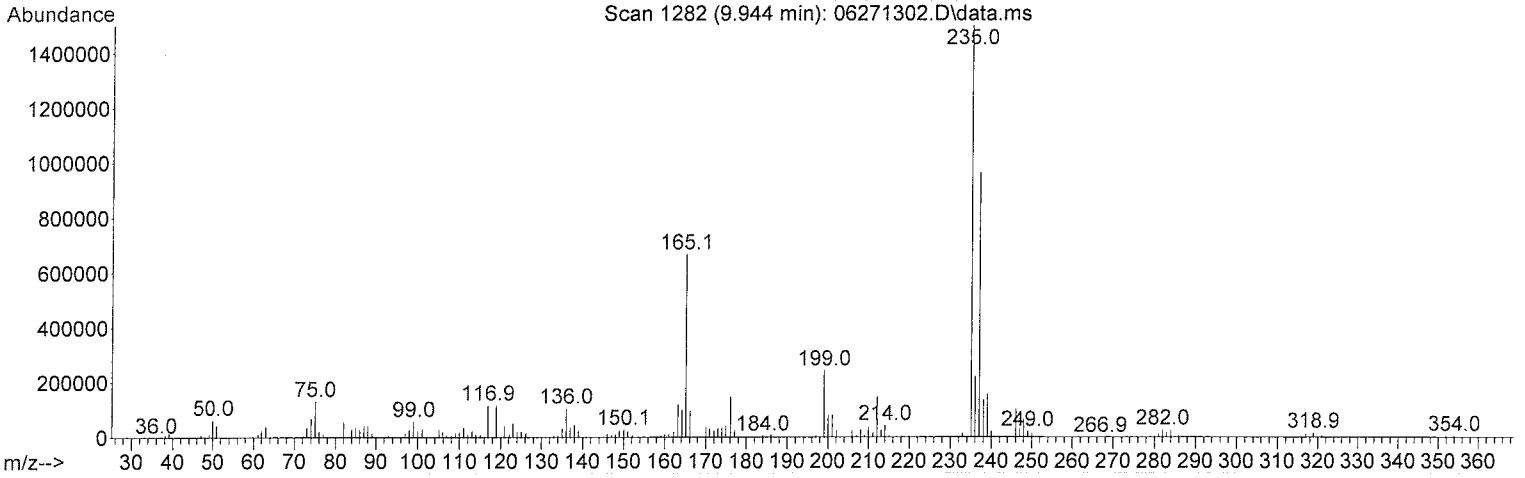
Quant Time: Jun 27 13:32:48 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Thu Jun 27 13:32:36 2013
Response via : Initial Calibration

D 7/15/13
7/15/13 NP









TIC: 06271302.D\data.ms

(6) DDT

9.944min (+ 0.002) 0.00 area

response 13817799

Ion	Exp%	Act%
234.90	100.00	100.00
165.00	44.50	47.15
234.90	100.00	100.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 10:30 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-035
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:32:48 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Thu Jun 27 13:32:36 2013
Response via : Initial Calibration

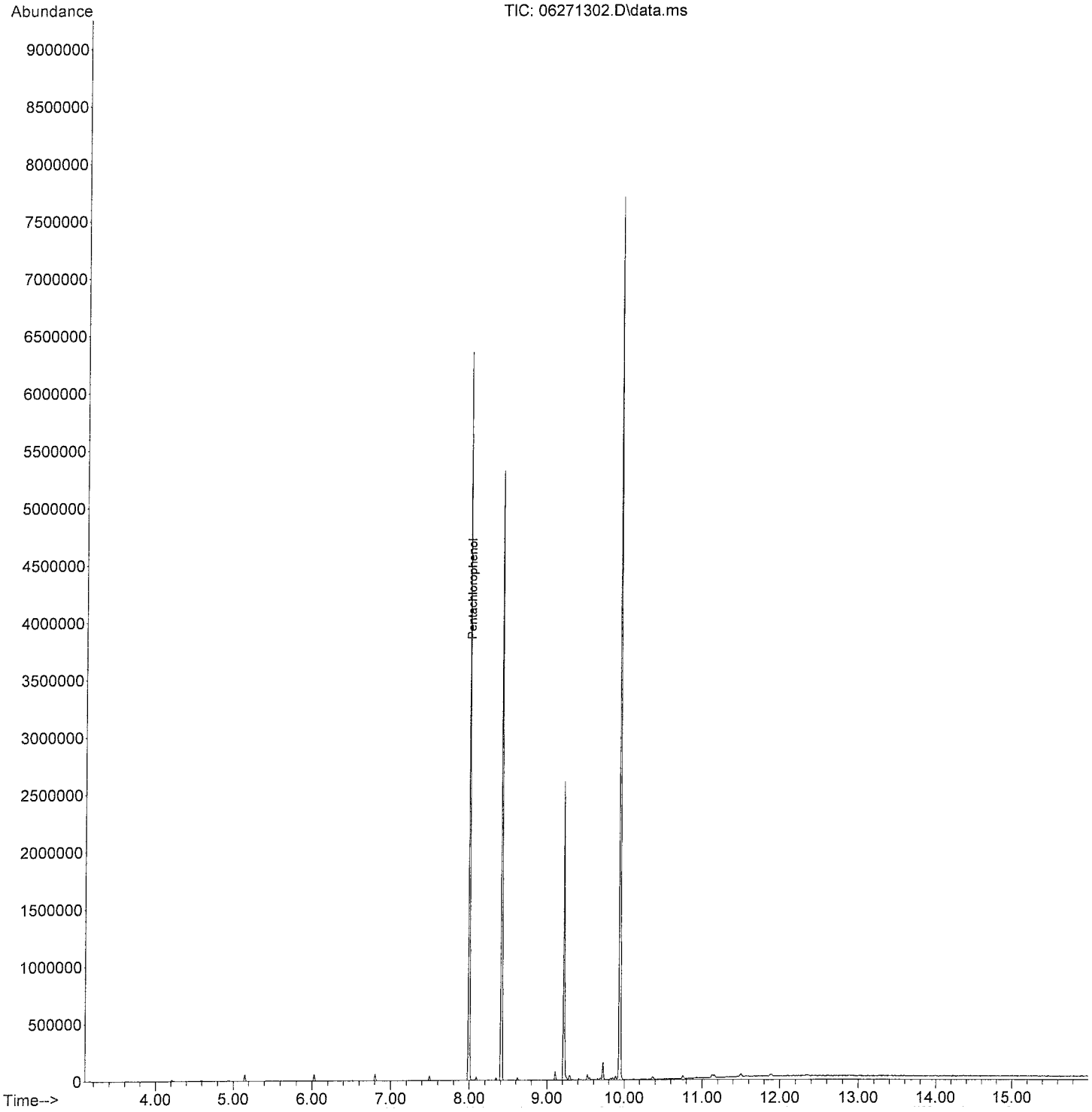
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
2) DFTPP	8.414	198	4776381	0.00	area	0.00
6) DDT	9.944	235	13817799	0.00	area	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	8.000	266	6641785	193.15	area	99
3) Benzidine	9.220	184	9490870	N.D.		
4) DDE	0.000		0	N.D.		
5) DDD	0.000		0	N.D.		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271302.D
Acq On : 27 Jun 2013 10:30 am
Operator : DM
Sample : TUNE DFTPP-1
Misc : DFTPP_D 58-40-035
ALS Vial : 2 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:32:48 2013
Quant Method : C:\msdchem\1\data\062613\dftpp.M
Quant Title : DFTPP Tune
QLast Update : Thu Jun 27 13:32:36 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271303.D
Acq On : 27 Jun 2013 10:52 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:34:35 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:01 2013
Response via : Initial Calibration

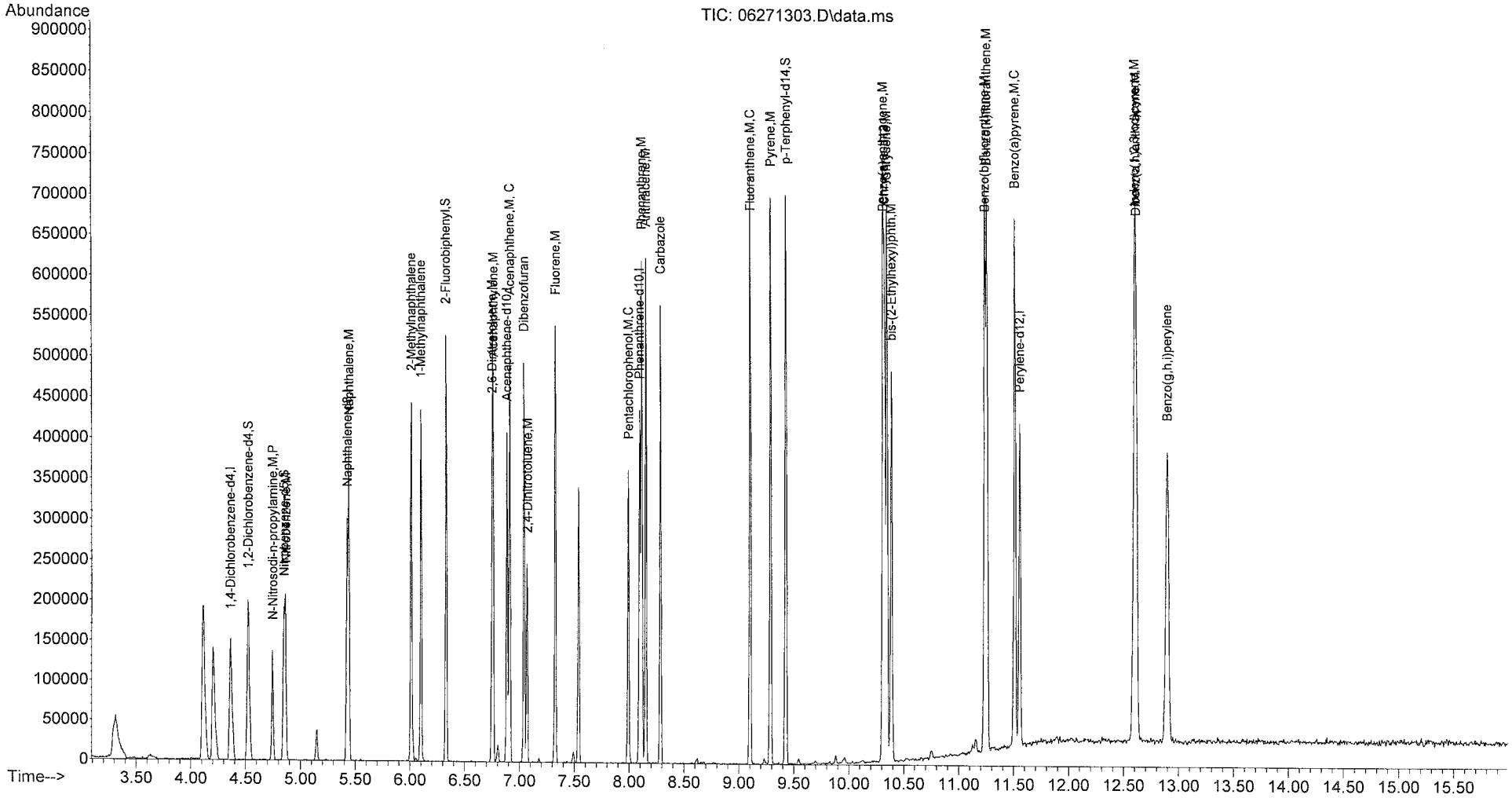
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.360	152	32901	4.00 ngs		0.00
6) Naphthalene-d8	5.424	136	101140	4.00 ngs		0.00
13) Acenaphthene-d10	6.884	164	71460	4.00 ngs		0.00
19) Phenanthrene-d10	8.093	188	150684	4.00 ngs		0.00
26) Chrysene-d12	10.323	240	194273	4.00 ngs		0.00
33) Perylene-d12	11.554	264	166865	4.00 ngs		0.00
System Monitoring Compounds						
2) 1,2-Dichlorobenzene-d4	4.520	152	41568	4.61 ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 9.22%#			
4) Nitrobenzene-d5	4.846	82	52153	4.94 ngs		0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 9.88%#			
10) 2-Fluorobiphenyl	6.328	172	139705	5.49 ngs		0.01
Spiked Amount 50.000	Range 43 - 116		Recovery = 10.98%#			
25) p-Terphenyl-d14	9.430	244	218228	5.71 ngs		0.01
Spiked Amount 50.000	Range 33 - 141		Recovery = 11.42%#			
Target Compounds						Qvalue
3) N-Nitrosodi-n-propylamine	4.745	70	23953	4.42 ngs		84
5) Nitrobenzene	4.862	77	48750	4.60 ngs		88
7) Naphthalene	5.440	128	137355	4.92 ngs		99
8) 2-Methylnaphthalene	6.012	142	98502	5.30 ngs		96
9) 1-Methylnaphthalene	6.098	142	88740	5.13 ngs		98
11) Acenaphthylene	6.761	152	169633	5.51 ngs		98
12) 2,6-Dinitrotoluene	6.751	165	28033	5.68 ngs	#	68
14) Acenaphthene	6.911	153	110986	5.15 ngs		97
15) Dibenzofuran	7.039	168	161083	5.06 ngs		97
16) 2,4-Dinitrotoluene	7.071	165	36420	5.95 ngs		92
17) Fluorene	7.328	166	131565	5.22 ngs		97
18) Pentachlorophenol	7.991	266	37930	6.82 ngs		98
20) Phenanthrene	8.114	178	203196	4.70 ngs		98
21) Anthracene	8.152	178	211445	5.22 ngs		99
22) Carbazole	8.286	167	189419	5.31 ngs		100
23) Fluoranthene	9.104	202	273427	5.50 ngs		100
24) Pyrene	9.291	202	285759	5.31 ngs		98
27) Benzo(a)anthracene	10.313	228	283448	5.15 ngs		100
28) Chrysene	10.345	228	261206	4.82 ngs		99
29) bis-(2-Ethylhexyl)phth	10.388	149	184193	4.92 ngs		97
30) Benzo(b)fluoranthene	11.238	252	342366m	5.88 ngs		
31) Benzo(k)fluoranthene	11.254	252	246950	4.82 ngs		100
32) Benzo(a)pyrene	11.511	252	284733	5.64 ngs		94
34) Indeno(1,2,3-cd)pyrene	12.602	276	328787	5.24 ngs		94
35) Dibenz(a,h)anthracene	12.613	278	268432	5.21 ngs		96
36) Benzo(g,h,i)perylene	12.896	276	277765	5.07 ngs	#	89

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271303.D
Acq On : 27 Jun 2013 10:52 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

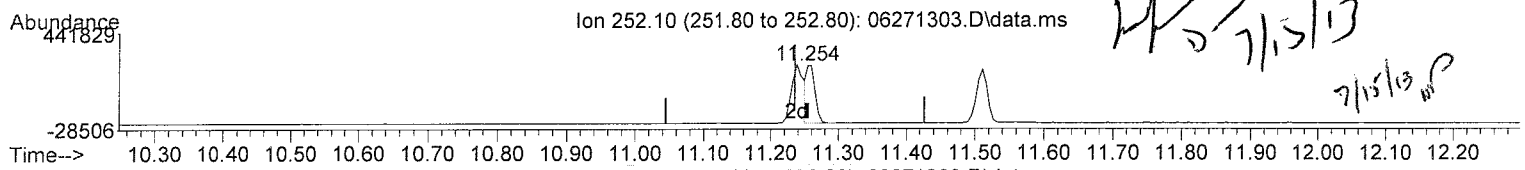
Quant Time: Jun 27 13:34:35 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:01 2013
Response via : Initial Calibration

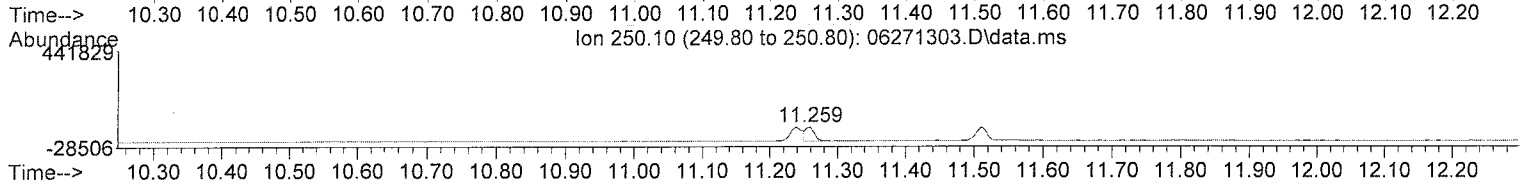


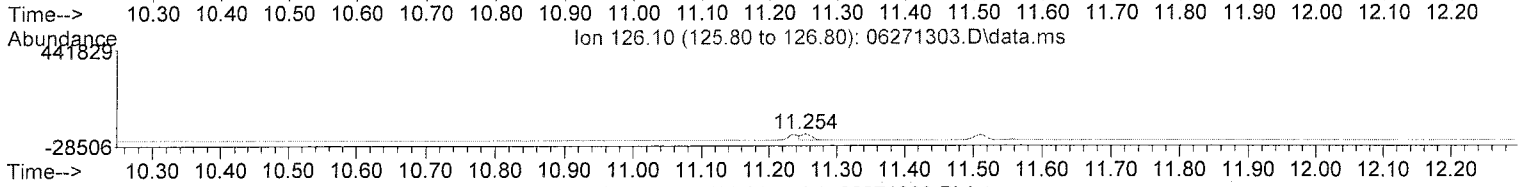
Quantitation Report (Qedit)

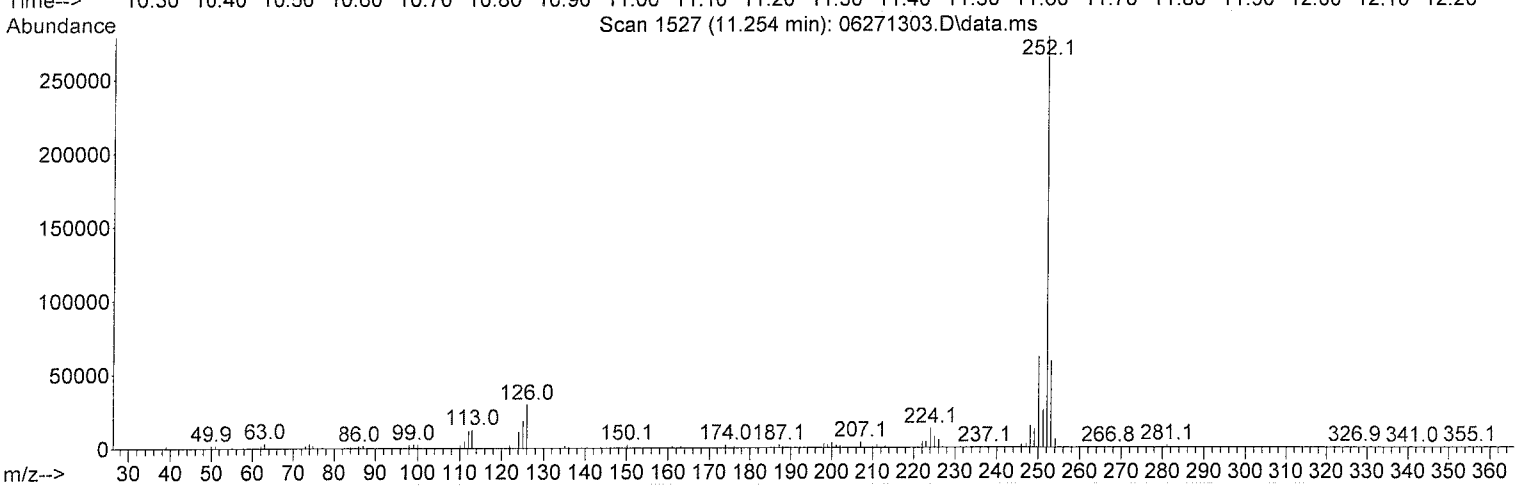
Data Path : C:\msdchem\1\data\062713\
Data File : 06271303.D
Acq On : 27 Jun 2013 10:52 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:34:09 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:01 2013
Response via : Initial Calibration









TIC: 06271303.D\data.ms

(30) Benzo(b)fluoranthene (M)

11.254min (+ 0.018) 4.24 ngs

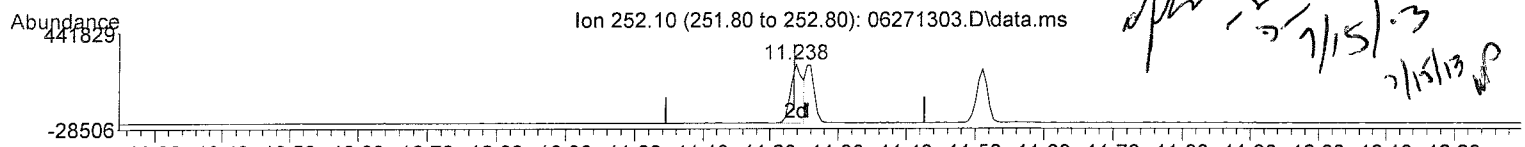
response 246950

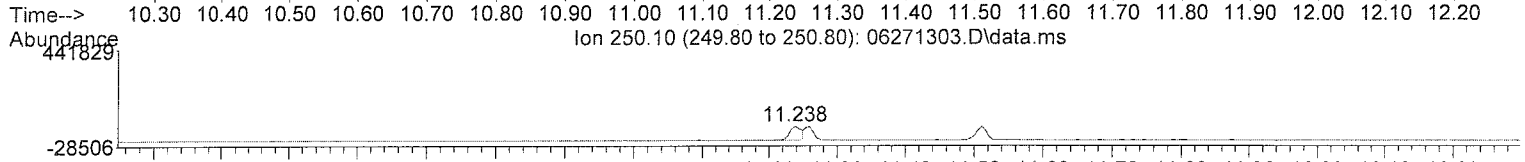
Ion	Exp%	Act%
252.10	100.00	100.00
250.10	22.90	23.30
126.10	12.40	12.23
0.00	0.00	0.00

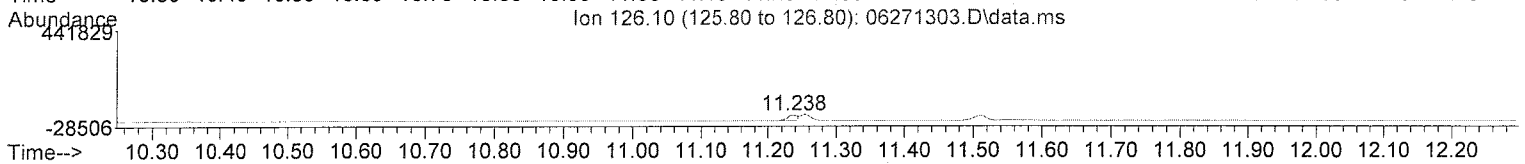
Quantitation Report (Qedit)

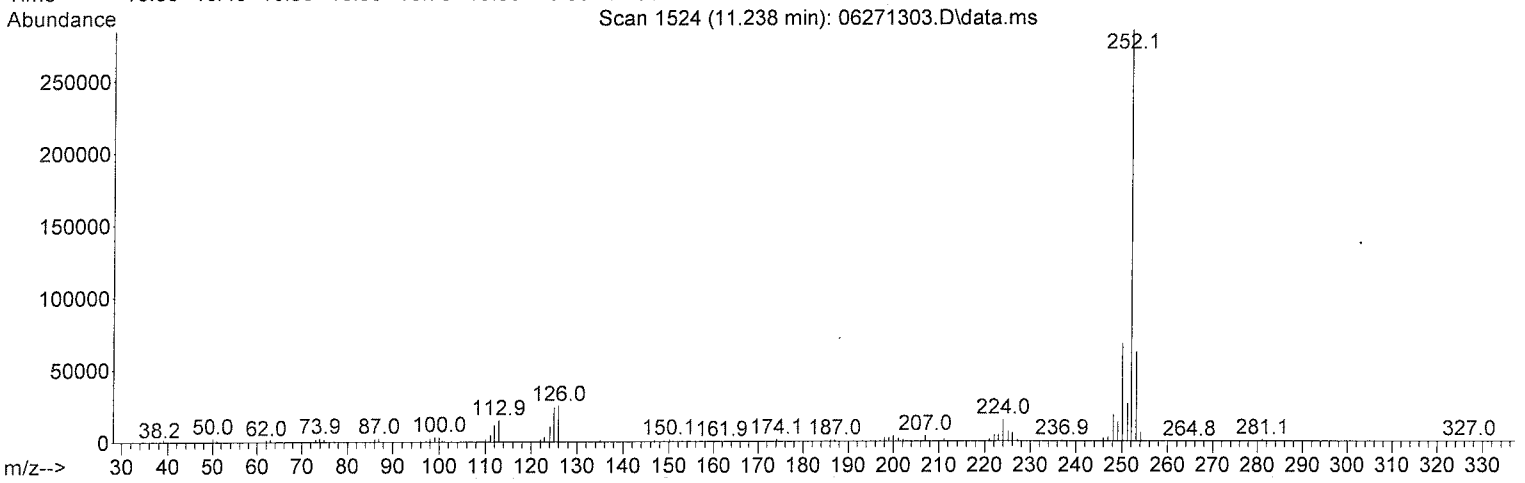
Data Path : C:\msdchem\1\data\062713\
Data File : 06271303.D
Acq On : 27 Jun 2013 10:52 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:34:09 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:01 2013
Response via : Initial Calibration









TIC: 06271303.D\data.ms

(30) Benzo(b)fluoranthene (M)

11.238min (+ 0.002) 5.88 ngs m

response 342366

Ion	Exp%	Act%
252.10	100.00	100.00
250.10	22.90	23.25
126.10	12.40	7.77#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271303.D
Acq On : 27 Jun 2013 10:52 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:34:09 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:01 2013
Response via : Initial Calibration

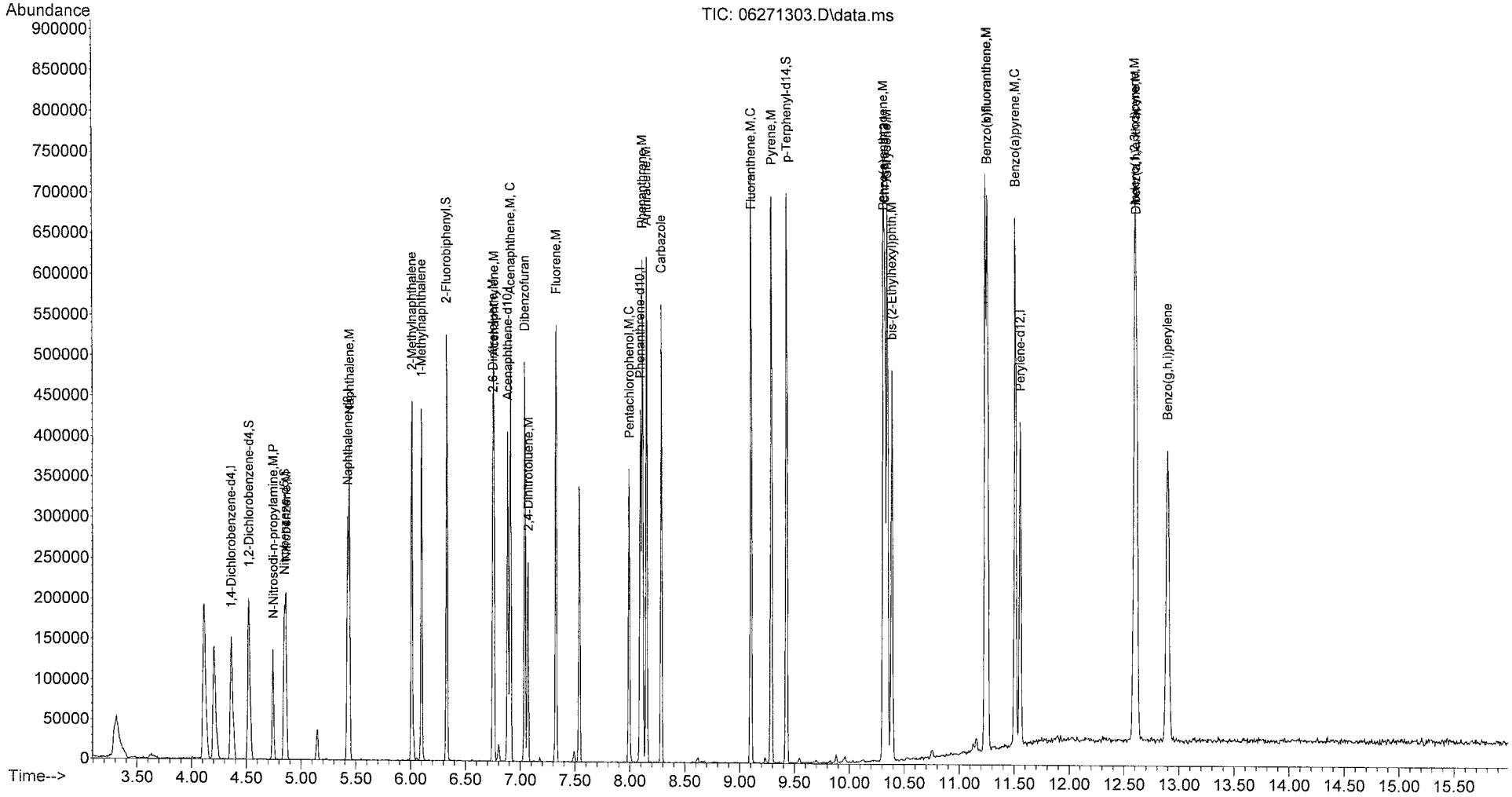
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.360	152	32901	4.00	ngs		0.00
6) Naphthalene-d8	5.424	136	101140	4.00	ngs		0.00
13) Acenaphthene-d10	6.884	164	71460	4.00	ngs		0.00
19) Phenanthrene-d10	8.093	188	150684	4.00	ngs		0.00
26) Chrysene-d12	10.323	240	194273	4.00	ngs		0.00
33) Perylene-d12	11.554	264	166865	4.00	ngs		0.00
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.520	152	41568	4.61	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery	=	9.22%#		
4) Nitrobenzene-d5	4.846	82	52153	4.94	ngs		0.01
Spiked Amount 50.000	Range 35 - 114		Recovery	=	9.88%#		
10) 2-Fluorobiphenyl	6.328	172	139705	5.49	ngs		0.01
Spiked Amount 50.000	Range 43 - 116		Recovery	=	10.98%#		
25) p-Terphenyl-d14	9.430	244	218228	5.71	ngs		0.01
Spiked Amount 50.000	Range 33 - 141		Recovery	=	11.42%#		
Target Compounds							Qvalue
3) N-Nitrosodi-n-propylamine	4.745	70	23953	4.42	ngs		84
5) Nitrobenzene	4.862	77	48750	4.60	ngs		88
7) Naphthalene	5.440	128	137355	4.92	ngs		99
8) 2-Methylnaphthalene	6.012	142	98502	5.30	ngs		96
9) 1-Methylnaphthalene	6.098	142	88740	5.13	ngs		98
11) Acenaphthylene	6.761	152	169633	5.51	ngs		98
12) 2,6-Dinitrotoluene	6.751	165	28033	5.68	ngs	#	68
14) Acenaphthene	6.911	153	110986	5.15	ngs		97
15) Dibenzofuran	7.039	168	161083	5.06	ngs		97
16) 2,4-Dinitrotoluene	7.071	165	36420	5.95	ngs		92
17) Fluorene	7.328	166	131565	5.22	ngs		97
18) Pentachlorophenol	7.991	266	37930	6.82	ngs		98
20) Phenanthrene	8.114	178	203196	4.70	ngs		98
21) Anthracene	8.152	178	211445	5.22	ngs		99
22) Carbazole	8.286	167	189419	5.31	ngs		100
23) Fluoranthene	9.104	202	273427	5.50	ngs		100
24) Pyrene	9.291	202	285759	5.31	ngs		98
27) Benzo(a)anthracene	10.313	228	283448	5.15	ngs		100
28) Chrysene	10.345	228	261206	4.82	ngs		99
29) bis-(2-Ethylhexyl)phth	10.388	149	184193	4.92	ngs		97
30) Benzo(b)fluoranthene	11.254	252	246950	4.24	ngs		99
31) Benzo(k)fluoranthene	11.254	252	246950	4.82	ngs		100
32) Benzo(a)pyrene	11.511	252	284733	5.64	ngs		94
34) Indeno(1,2,3-cd)pyrene	12.602	276	328787	5.24	ngs		94
35) Dibenz(a,h)anthracene	12.613	278	268432	5.21	ngs		96
36) Benzo(g,h,i)perylene	12.896	276	277765	5.07	ngs	#	89

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271303.D
Acq On : 27 Jun 2013 10:52 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:34:09 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:01 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\062713\
Data File : 06271303.D
Acq On : 27 Jun 2013 10:52 am
Operator : DM
Sample : CCV 5.0 SSTD
Misc : PNA_QC 58-39-546
ALS Vial : 3 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:34:35 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:01 2013
Response via : Initial Calibration

7/15/13
7/15/13

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	4.000	4.000	0.0	42	0.00
2	S	1,2-Dichlorobenzene-d4	5.000	4.612	7.8	40	0.00
3	M,P	N-Nitrosodi-n-propylamine	5.000	4.416	11.7	35	0.02
4	S	Nitrobenzene-d5	5.000	4.939	1.2	37	0.01
5	M	Nitrobenzene	5.000	4.597	8.1	37	0.01
6	I	Naphthalene-d8	4.000	4.000	0.0	39	0.00
7	M	Naphthalene	5.000	4.916	1.7	39	0.00
8		2-Methylnaphthalene	5.000	5.297	-5.9	40	0.00
9		1-Methylnaphthalene	5.000	5.127	-2.5	41	0.00
10	S	2-Fluorobiphenyl	5.000	5.487	-9.7	43	0.01
11	M	Acenaphthylene	5.000	5.505	-10.1	41	0.02
12	M	2,6-Dinitrotoluene	5.000	5.683	-13.7	43	0.02
13	I	Acenaphthene-d10	4.000	4.000	0.0	41	0.00
14	M, C	Acenaphthene	5.000	5.146	-2.9	41	0.00
15		Dibenzofuran	5.000	5.065	-1.3	40	0.00
16	M	2,4-Dinitrotoluene	5.000	5.952	-19.0	42	0.00
17	M	Fluorene	5.000	5.221	-4.4	42	0.01
18	M,C	Pentachlorophenol	5.000	6.820	-36.4#	60	0.01
19	I	Phenanthrene-d10	4.000	4.000	0.0	44	0.00
20	M	Phenanthrene	5.000	4.702	6.0	41	0.00
21	M	Anthracene	5.000	5.222	-4.4	44	0.00
22		Carbazole	5.000	5.312	-6.2	43	0.00
23	M,C	Fluoranthene	5.000	5.504	-10.1	45	0.00
24	M	Pyrene	5.000	5.305	-6.1	45	0.00
25	S	p-Terphenyl-d14	5.000	5.713	-14.3	49	0.01
26	I	Chrysene-d12	4.000	4.000	0.0	48	0.00
27	M	Benzo(a)anthracene	5.000	5.155	-3.1	48	0.00
28	M	Chrysene	5.000	4.825	3.5	45	0.00
29	M	bis-(2-Ethylhexyl)phth	5.000	4.915	1.7	45	0.01
30	M	Benzo(b)fluoranthene	5.000	5.881	-17.6	55	0.00
31	M	Benzo(k)fluoranthene	5.000	4.821	3.6	42	0.00
32	M,C	Benzo(a)pyrene	5.000	5.640	-12.8	51	0.00
33	I	Perylene-d12	4.000	4.000	0.0	51	0.00
34	M	Indeno(1,2,3-cd)pyrene	5.000	5.242	-4.8	50	-0.04
35	M	Dibenz(a,h)anthracene	5.000	5.208	-4.2	51	-0.04
36		Benzo(g,h,i)perylene	5.000	5.067	-1.3	50	-0.05

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271309.D
Acq On : 27 Jun 2013 1:07 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+ 1:10
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:42:47 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:56 2013
Response via : Initial Calibration

7/15/13

7/15/13

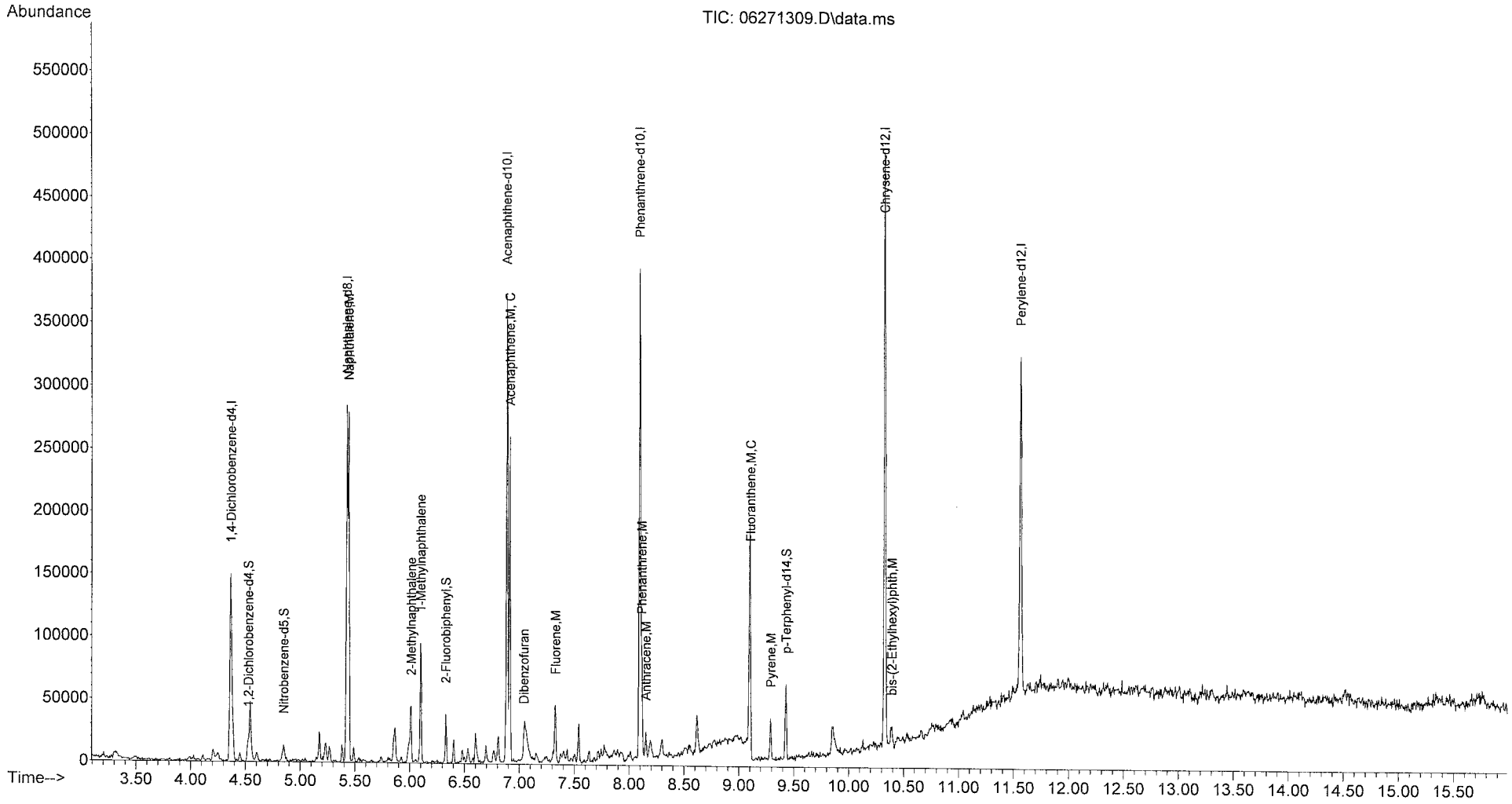
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.365	152	28978	4.00	ngs	#	0.00
6) Naphthalene-d8	5.424	136	97868	4.00	ngs		0.00
13) Acenaphthene-d10	6.884	164	67579	4.00	ngs		0.00
19) Phenanthrene-d10	8.099	188	136605	4.00	ngs		0.00
26) Chrysene-d12	10.329	240	169415	4.00	ngs		0.00
33) Perylene-d12	11.564	264	115123	4.00	ngs		0.01
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.526	152	2544	0.32	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 0.64%#				
4) Nitrobenzene-d5	4.847	82	4225	0.45	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 0.90%#				
10) 2-Fluorobiphenyl	6.328	172	10986	0.45	ngs		0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 0.90%#				
25) p-Terphenyl-d14	9.430	244	15716	0.45	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 0.90%#				
Target Compounds							Qvalue
7) Naphthalene	5.440	128	92415	3.42	ngs		99
8) 2-Methylnaphthalene	6.013	142	9478	0.53	ngs		98
9) 1-Methylnaphthalene	6.098	142	19242	1.15	ngs		95
14) Acenaphthene	6.911	153	48809	2.39	ngs		97
15) Dibenzofuran	7.039	168	3238	0.11	ngs	#	40
17) Fluorene	7.328	166	13077	0.55	ngs	#	93
20) Phenanthrene	8.115	178	29260	0.75	ngs		98
21) Anthracene	8.152	178	5860m	0.16	ngs		
23) Fluoranthene	9.104	202	8567	0.19	ngs	#	58
24) Pyrene	9.291	202	10622	0.22	ngs		95
29) bis-(2-Ethylhexyl)phth	10.393	149	5765	0.18	ngs	#	58

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271309.D
Acq On : 27 Jun 2013 1:07 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+ 1:10
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:42:47 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:56 2013
Response via : Initial Calibration



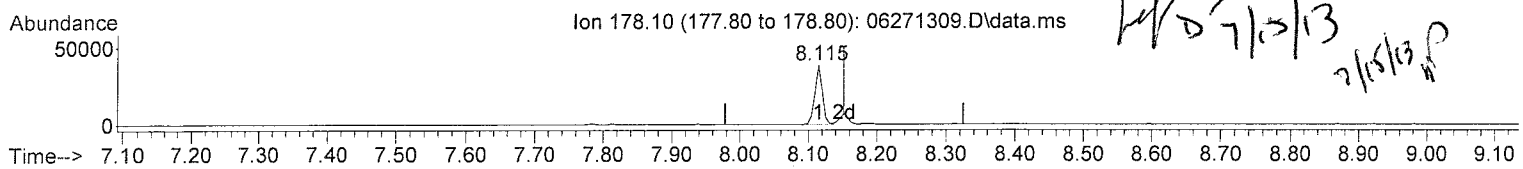
PNA0605.M Thu Jun 27 13:43:02 2013

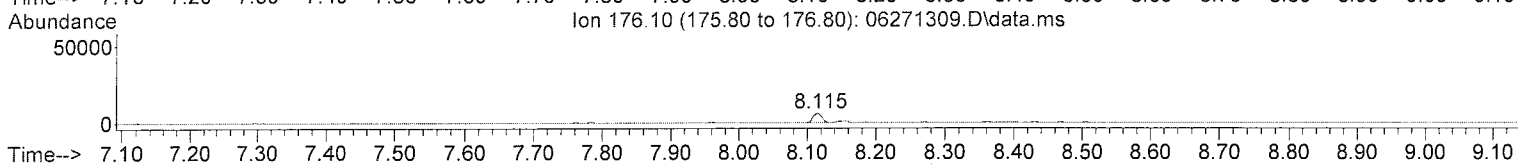
Page: 2

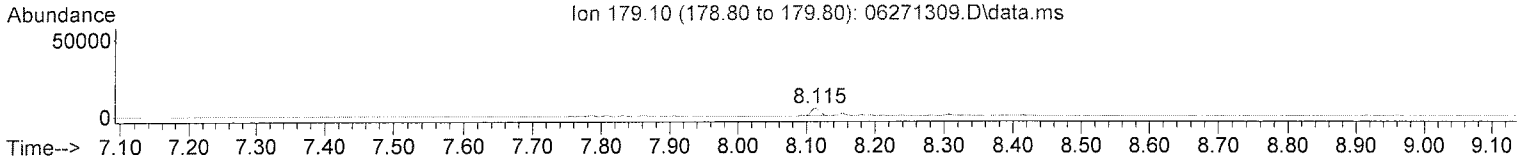
Quantitation Report (Qedit)

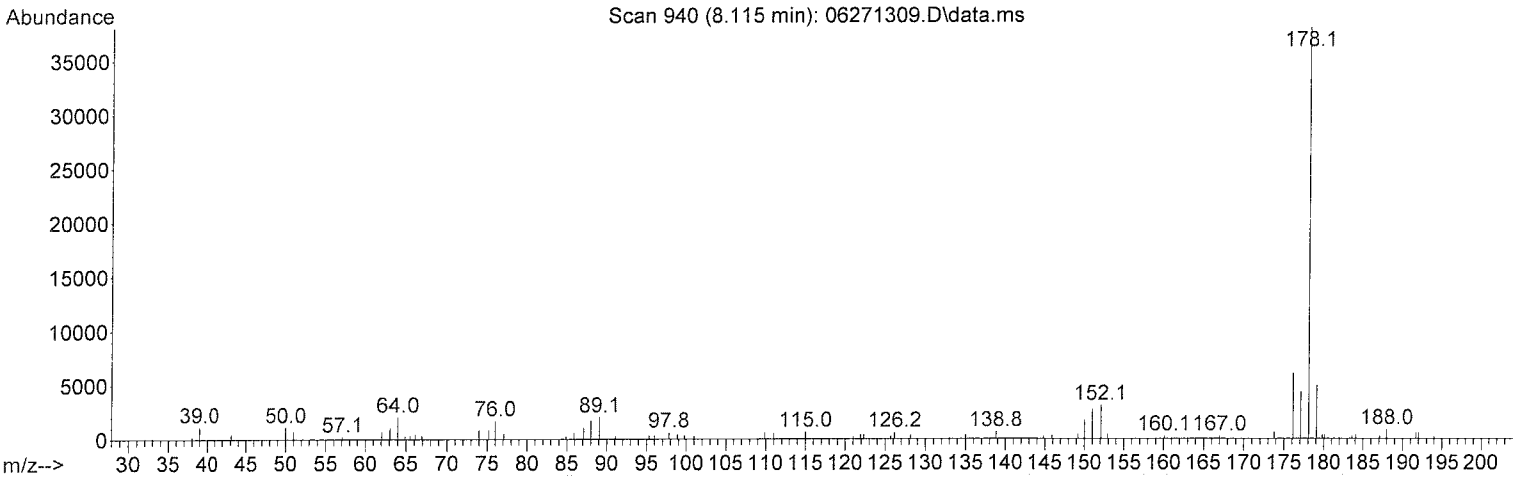
Data Path : C:\msdchem\1\data\062713\
Data File : 06271309.D
Acq On : 27 Jun 2013 1:07 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+ 1:10
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:42:24 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:56 2013
Response via : Initial Calibration









TIC: 06271309.D\data.ms

(21) Anthracene (M)

8.115min (-0.037) 0.80 ngs

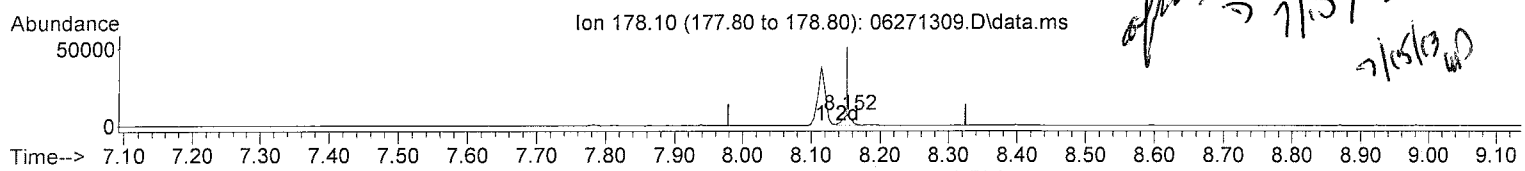
response 29260

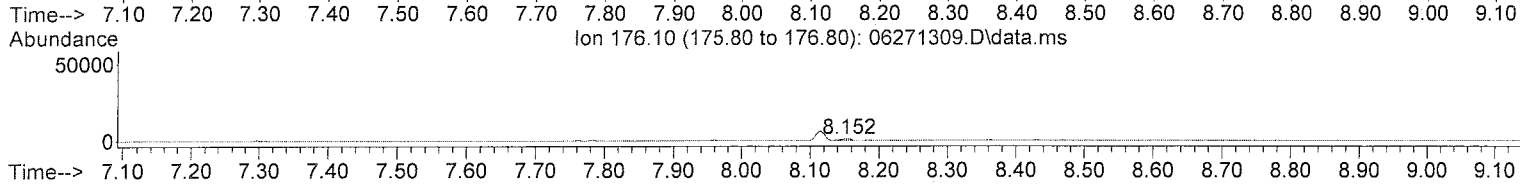
Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.00	18.20
179.10	15.40	14.56
0.00	0.00	0.00

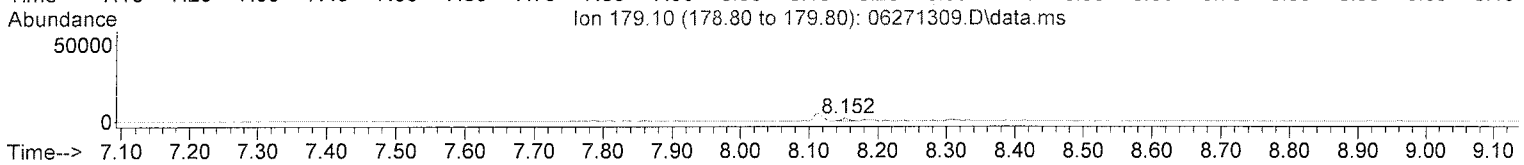
Quantitation Report (Qedit)

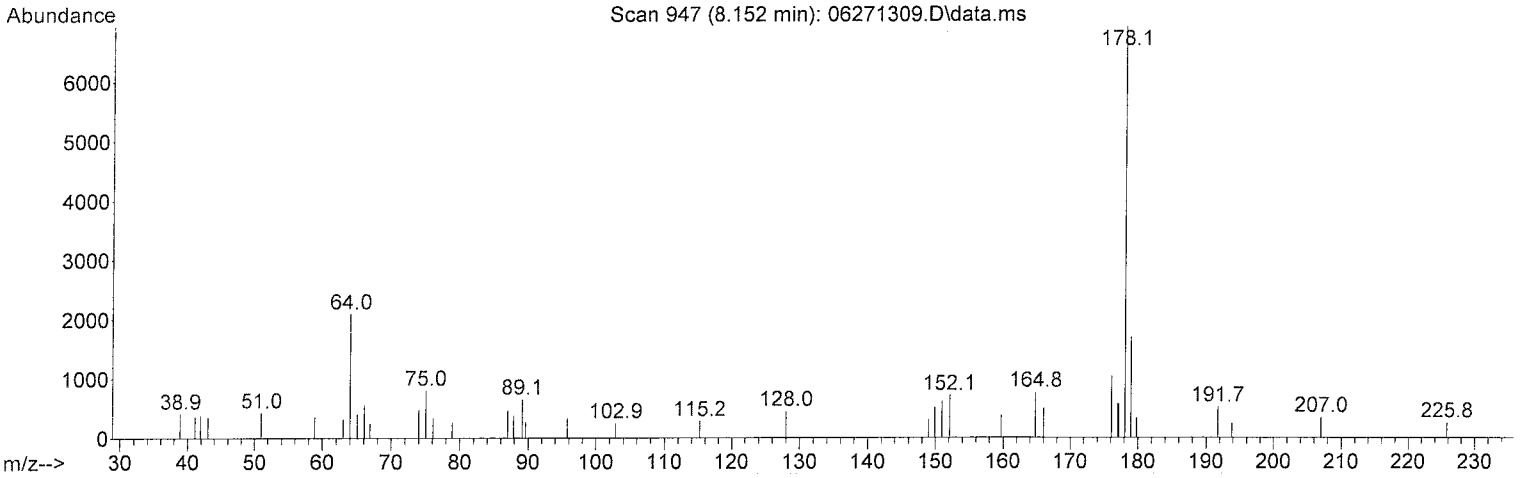
Data Path : C:\msdchem\1\data\062713\
Data File : 06271309.D
Acq On : 27 Jun 2013 1:07 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+ 1:10
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:42:24 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:56 2013
Response via : Initial Calibration









TIC: 06271309.D\data.ms

(21) Anthracene (M)

8.152min (+ 0.000) 0.16 ngs m

response 5860

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.00	15.17
179.10	15.40	18.62
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271309.D
Acq On : 27 Jun 2013 1:07 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+ 1:10
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:42:24 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:56 2013
Response via : Initial Calibration

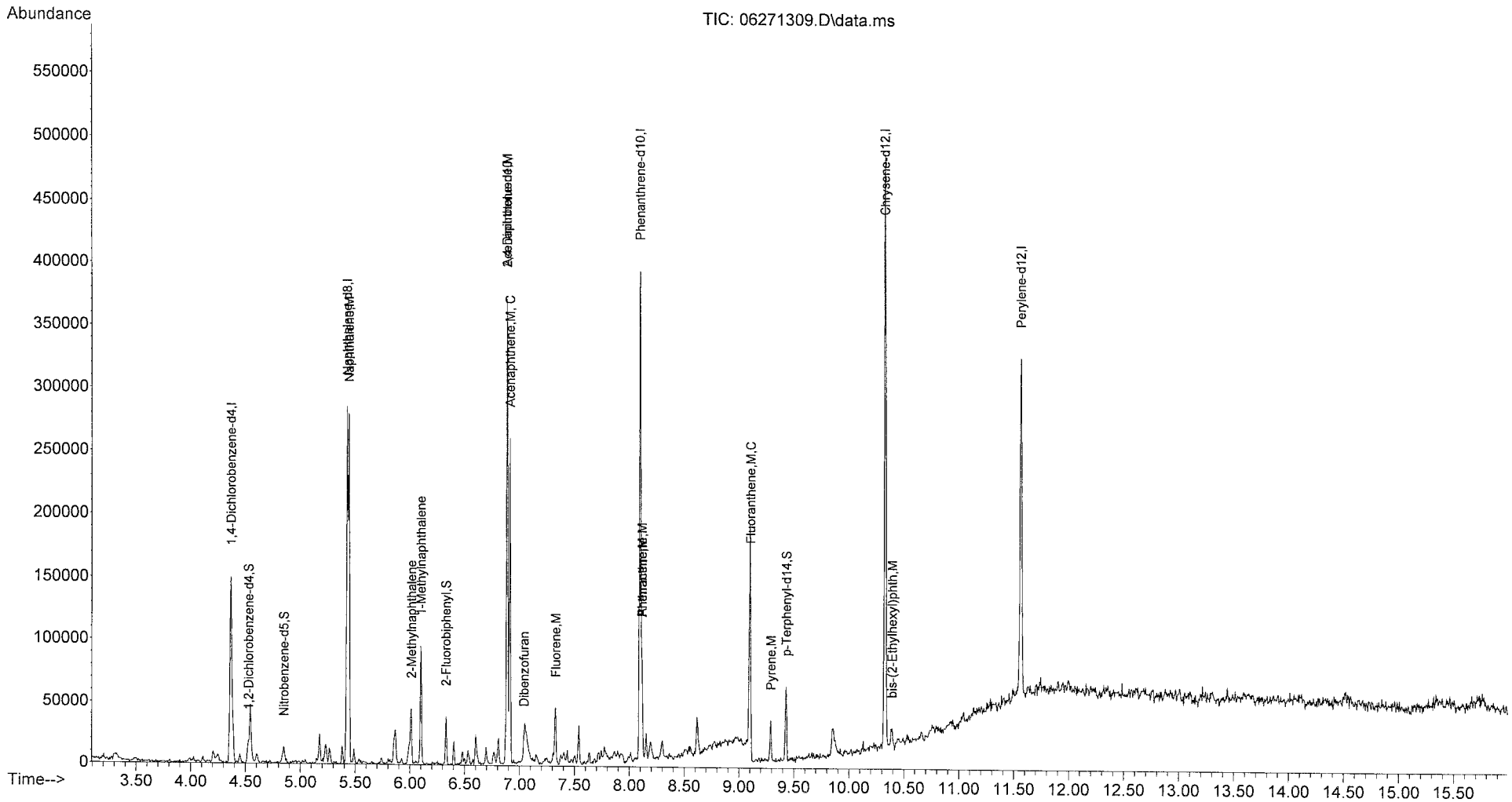
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.365	152	28978	4.00	ngs	#	0.00
6) Naphthalene-d8	5.424	136	97868	4.00	ngs		0.00
13) Acenaphthene-d10	6.884	164	67579	4.00	ngs		0.00
19) Phenanthrene-d10	8.099	188	136605	4.00	ngs		0.00
26) Chrysene-d12	10.329	240	169415	4.00	ngs		0.00
33) Perylene-d12	11.564	264	115123	4.00	ngs		0.01
System Monitoring Compounds							
2) 1,2-Dichlorobenzene-d4	4.526	152	2544	0.32	ngs		0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 0.64%#				
4) Nitrobenzene-d5	4.847	82	4225	0.45	ngs		0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 0.90%#				
10) 2-Fluorobiphenyl	6.328	172	10986	0.45	ngs		0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 0.90%#				
25) p-Terphenyl-d14	9.430	244	15716	0.45	ngs		0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 0.90%#				
Target Compounds							Qvalue
7) Naphthalene	5.440	128	92415	3.42	ngs		99
8) 2-Methylnaphthalene	6.013	142	9478	0.53	ngs		98
9) 1-Methylnaphthalene	6.098	142	19242	1.15	ngs		95
14) Acenaphthene	6.911	153	48809	2.39	ngs		97
15) Dibenzofuran	7.039	168	3238	0.11	ngs	#	40
16) 2,4-Dinitrotoluene	6.884	165	8355	1.44	ngs	#	42
17) Fluorene	7.328	166	13077	0.55	ngs	#	93
20) Phenanthrene	8.115	178	29260	0.75	ngs		98
21) Anthracene	8.115	178	29260	0.80	ngs		98
23) Fluoranthene	9.104	202	8567	0.19	ngs	#	58
24) Pyrene	9.291	202	10622	0.22	ngs		95
29) bis-(2-Ethylhexyl)phth	10.393	149	5765	0.18	ngs	#	58

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\062713\
Data File : 06271309.D
Acq On : 27 Jun 2013 1:07 pm
Operator : DM
Sample : SAMP 13060776-001B
Misc : PNA_WATER+ 1:10
ALS Vial : 9 Sample Multiplier: 1
InstName : SVOC-7

Quant Time: Jun 27 13:42:24 2013
Quant Method : C:\msdchem\1\data\062613\PNA0605.M
Quant Title : SOP 4020 EPA 8270C
QLast Update : Thu Jun 27 13:34:56 2013
Response via : Initial Calibration



Metals

SW846 6020

Quality Control Data

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

STAT **Analysis Corporation**

PREP BATCH REPORT

Prep Start Date: **6/25/2013 10:30:47**
Prep End Date: **6/25/2013 1:40:00 P**

Prep Batch **70095** Prep Code: **M_W_PREP** Technician: **VA**

Prep Factor Units: **mL / mL**

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
IMBW1 6/25/13			50	0	0	50	1.000	6/25/2013	6/25/2013
ILCSW1 6/25/13			50	0	0	50	1.000	6/25/2013	6/25/2013
13060777-001C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060778-001C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060778-001CMS	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060778-001CMSD	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060663-001C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060663-002C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060663-003C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060663-004C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060776-001C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060776-002C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060776-003C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060776-004C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060776-005C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060715-001C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060715-002C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060715-003C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060715-004C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013
13060715-005C	Water		50	0	0	50	1.000	6/25/2013	6/25/2013

STAT Analysis Corporation

Metals

SW846 6020

Run 1

Client: NRT, Inc.
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave
Lab Order: 13060776
Date Received: June 21, 2013

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **ICV** SampType: **ICV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 18:08** SeqNo: **2441103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.02518	0.0030	0.025	0	101	90	110	0	0		
Arsenic	0.05006	0.0020	0.05	0	100	90	110	0	0		
Beryllium	0.05068	0.0010	0.05	0	101	90	110	0	0		
Copper	0.05088	0.0050	0.05	0	102	90	110	0	0		
Lead	0.05021	0.0010	0.05	0	100	90	110	0	0		

Sample ID: **ICB** SampType: **ICB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 18:12** SeqNo: **2441104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00071	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00002	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00065	0.0010	0	0	0	0	0	0	0		
Copper	-0.00031	0.0050	0	0	0	0	0	0	0		
Lead	-0.00004	0.0010	0	0	0	0	0	0	0		

Sample ID: **ICS A** SampType: **ICSA** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 18:16** SeqNo: **2441105**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0008	0.0030	0	0	0	0	0	0	0		
Arsenic	0.00026	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00067	0.0010	0	0	0	0	0	0	0		
Copper	0.00232	0.0050	0	0	0	0	0	0	0		
Lead	0.00027	0.0010	0	0	0	0	0	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **ICS AB** SampType: **ICSAB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 18:20** SeqNo: **2441106**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00131	0.0030	0	0	0	0	0	0	0		
Arsenic	0.01872	0.0020	0.02	0	93.6	80	120	0	0		
Beryllium	-0.00067	0.0010	0	0	0	0	0	0	0		
Copper	0.02076	0.0050	0.02	0	104	80	120	0	0		
Lead	0.00042	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 18:42** SeqNo: **2441107**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.05237	0.0030	0.05	0	105	90	110	0	0		
Arsenic	0.09978	0.0020	0.1	0	99.8	90	110	0	0		
Beryllium	0.1024	0.0010	0.1	0	102	90	110	0	0		
Copper	0.1036	0.0050	0.1	0	104	90	110	0	0		
Lead	0.09979	0.0010	0.1	0	99.8	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 18:46** SeqNo: **2441108**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00102	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00005	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00066	0.0010	0	0	0	0	0	0	0		
Copper	-0.00031	0.0050	0	0	0	0	0	0	0		
Lead	-0.00007	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 19:29** SeqNo: **2441118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04965	0.0030	0.05	0	99.3	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 19:29** SeqNo: **2441118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.09889	0.0020	0.1	0	98.9	90	110	0	0		
Beryllium	0.09882	0.0010	0.1	0	98.8	90	110	0	0		
Copper	0.09991	0.0050	0.1	0	99.9	90	110	0	0		
Lead	0.09814	0.0010	0.1	0	98.1	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 19:32** SeqNo: **2441119**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00125	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00011	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00066	0.0010	0	0	0	0	0	0	0		
Copper	-0.00032	0.0050	0	0	0	0	0	0	0		
Lead	0.00016	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 20:18** SeqNo: **2441130**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04775	0.0030	0.05	0	95.5	90	110	0	0		
Arsenic	0.09758	0.0020	0.1	0	97.6	90	110	0	0		
Beryllium	0.09757	0.0010	0.1	0	97.6	90	110	0	0		
Copper	0.1003	0.0050	0.1	0	100	90	110	0	0		
Lead	0.09922	0.0010	0.1	0	99.2	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 20:21** SeqNo: **2441131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00117	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00008	0.0020	0	0	0	0	0	0	0		

Qualifiers:
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* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 20:21** SeqNo: **2441131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	-0.00068	0.0010	0	0	0	0	0	0	0		
Copper	-0.00033	0.0050	0	0	0	0	0	0	0		
Lead	-0.00008	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 21:07** SeqNo: **2441194**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04711	0.0030	0.05	0	94.2	90	110	0	0		
Arsenic	0.09967	0.0020	0.1	0	99.7	90	110	0	0		
Beryllium	0.1016	0.0010	0.1	0	102	90	110	0	0		
Copper	0.09963	0.0050	0.1	0	99.6	90	110	0	0		
Lead	0.09756	0.0010	0.1	0	97.6	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 21:11** SeqNo: **2441195**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00112	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00008	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00065	0.0010	0	0	0	0	0	0	0		
Copper	-0.00018	0.0050	0	0	0	0	0	0	0		
Lead	-0.00002	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 21:53** SeqNo: **2441201**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04705	0.0030	0.05	0	94.1	90	110	0	0		
Arsenic	0.09807	0.0020	0.1	0	98.1	90	110	0	0		
Beryllium	0.09848	0.0010	0.1	0	98.5	90	110	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 21:53** SeqNo: **2441201**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.09953	0.0050	0.1	0	99.5	90	110	0	0		
Lead	0.09636	0.0010	0.1	0	96.4	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 21:56** SeqNo: **2441202**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00114	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00009	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00067	0.0010	0	0	0	0	0	0	0		
Copper	0.00005	0.0050	0	0	0	0	0	0	0		
Lead	-0.00003	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 22:38** SeqNo: **2441213**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04651	0.0030	0.05	0	93	90	110	0	0		
Arsenic	0.09765	0.0020	0.1	0	97.6	90	110	0	0		
Beryllium	0.0971	0.0010	0.1	0	97.1	90	110	0	0		
Copper	0.0996	0.0050	0.1	0	99.6	90	110	0	0		
Lead	0.09454	0.0010	0.1	0	94.5	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 22:42** SeqNo: **2441214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00114	0.0030	0	0	0	0	0	0	0		
Arsenic	0.0007	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00065	0.0010	0	0	0	0	0	0	0		
Copper	0.00178	0.0050	0	0	0	0	0	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: ICPMS_130625C

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 22:42** SeqNo: **2441214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	-0.00002	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 23:24** SeqNo: **2441221**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04661	0.0030	0.05	0	93.2	90	110	0	0		
Arsenic	0.09964	0.0020	0.1	0	99.6	90	110	0	0		
Beryllium	0.0957	0.0010	0.1	0	95.7	90	110	0	0		
Copper	0.09907	0.0050	0.1	0	99.1	90	110	0	0		
Lead	0.0971	0.0010	0.1	0	97.1	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/25/13 23:28** SeqNo: **2441222**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00124	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00007	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00066	0.0010	0	0	0	0	0	0	0		
Copper	-0.00017	0.0050	0	0	0	0	0	0	0		
Lead	-0.00002	0.0010	0	0	0	0	0	0	0		

Sample ID: **IMBW1 6/25/13** SampType: **MBLK** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: **6/25/2013** Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **70095** TestNo: **SW6020** Analysis Date: **06/26/13 0:05** SeqNo: **2441227**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0060									
Arsenic	ND	0.0040									
Beryllium	ND	0.0020									
Copper	ND	0.010									
Lead	0.00102	0.0020									J

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: ICPMS_130625C

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 0:09** SeqNo: **2441228**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04522	0.0030	0.05	0	90.4	90	110	0	0		
Arsenic	0.09712	0.0020	0.1	0	97.1	90	110	0	0		
Beryllium	0.09278	0.0010	0.1	0	92.8	90	110	0	0		
Copper	0.09702	0.0050	0.1	0	97	90	110	0	0		
Lead	0.09393	0.0010	0.1	0	93.9	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 0:13** SeqNo: **2441229**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00128	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00008	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00063	0.0010	0	0	0	0	0	0	0		
Copper	-0.00025	0.0050	0	0	0	0	0	0	0		
Lead	0.00001	0.0010	0	0	0	0	0	0	0		

Sample ID: **ILCSW1 6/25/13** SampType: **LCS** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: **6/25/2013** Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **70095** TestNo: **SW6020** Analysis Date: **06/26/13 0:17** SeqNo: **2441230**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.2686	0.0060	0.25	0	107	80	120	0	0		
Arsenic	0.4848	0.0040	0.5	0	97	80	120	0	0		
Beryllium	0.4526	0.0020	0.5	0	90.5	80	120	0	0		
Copper	0.492	0.010	0.5	0	98.4	80	120	0	0		
Lead	0.5092	0.0020	0.5	0.00102	102	80	120	0	0		

Sample ID: **13060778-001CMS** SampType: **MS** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: **6/25/2013** Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **70095** TestNo: **SW6020** Analysis Date: **06/26/13 0:32** SeqNo: **2441233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.265	0.0060	0.25	0	106	75	125	0	0		

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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: ICPMS_130625C

Sample ID: **13060778-001CMS** SampType: **MS** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: **6/25/2013** Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **70095** TestNo: **SW6020** Analysis Date: **06/26/13 0:32** SeqNo: **2441233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4903	0.0040	0.5	0.00481	97.1	75	125	0	0		
Beryllium	0.4378	0.0020	0.5	0	87.6	75	125	0	0		
Copper	0.433	0.010	0.5	0.00426	85.7	75	125	0	0		
Lead	0.5259	0.0020	0.5	0.00146	105	75	125	0	0		

Sample ID: **13060778-001CMSD** SampType: **MSD** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: **6/25/2013** Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **70095** TestNo: **SW6020** Analysis Date: **06/26/13 0:39** SeqNo: **2441234**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.2698	0.0060	0.25	0	108	75	125	0.265	1.80	20	
Arsenic	0.507	0.0040	0.5	0.00481	100	75	125	0.4903	3.35	20	
Beryllium	0.4389	0.0020	0.5	0	87.8	75	125	0.4378	0.251	20	
Copper	0.4289	0.010	0.5	0.00426	84.9	75	125	0.433	0.951	20	
Lead	0.5282	0.0020	0.5	0.00146	105	75	125	0.5259	0.436	20	

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 0:54** SeqNo: **2441236**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04822	0.0030	0.05	0	96.4	90	110	0	0		
Arsenic	0.09515	0.0020	0.1	0	95.2	90	110	0	0		
Beryllium	0.102	0.0010	0.1	0	102	90	110	0	0		
Copper	0.09653	0.0050	0.1	0	96.5	90	110	0	0		
Lead	0.09516	0.0010	0.1	0	95.2	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 0:58** SeqNo: **2441237**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00125	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00001	0.0020	0	0	0	0	0	0	0		

Qualifiers:
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E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 0:58** SeqNo: **2441237**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	-0.00062	0.0010	0	0	0	0	0	0	0		
Copper	-0.00029	0.0050	0	0	0	0	0	0	0		
Lead	0	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 1:40** SeqNo: **2441243**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04782	0.0030	0.05	0	95.6	90	110	0	0		
Arsenic	0.09724	0.0020	0.1	0	97.2	90	110	0	0		
Beryllium	0.09622	0.0010	0.1	0	96.2	90	110	0	0		
Copper	0.1006	0.0050	0.1	0	101	90	110	0	0		
Lead	0.09659	0.0010	0.1	0	96.6	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 1:43** SeqNo: **2441244**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00122	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00007	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00067	0.0010	0	0	0	0	0	0	0		
Copper	-0.00034	0.0050	0	0	0	0	0	0	0		
Lead	-0.00005	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 2:25** SeqNo: **2441250**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04842	0.0030	0.05	0	96.8	90	110	0	0		
Arsenic	0.09775	0.0020	0.1	0	97.8	90	110	0	0		
Beryllium	0.09919	0.0010	0.1	0	99.2	90	110	0	0		

Qualifiers:
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 2:25** SeqNo: **2441250**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.09881	0.0050	0.1	0	98.8	90	110	0	0		
Lead	0.09766	0.0010	0.1	0	97.7	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 2:29** SeqNo: **2441251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00114	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00014	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00068	0.0010	0	0	0	0	0	0	0		
Copper	-0.00035	0.0050	0	0	0	0	0	0	0		
Lead	-0.00006	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 3:10** SeqNo: **2441256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.04767	0.0030	0.05	0	95.3	90	110	0	0		
Arsenic	0.09841	0.0020	0.1	0	98.4	90	110	0	0		
Beryllium	0.09846	0.0010	0.1	0	98.5	90	110	0	0		
Copper	0.09886	0.0050	0.1	0	98.9	90	110	0	0		
Lead	0.09748	0.0010	0.1	0	97.5	90	110	0	0		

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 3:14** SeqNo: **2441257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00123	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.0001	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00067	0.0010	0	0	0	0	0	0	0		
Copper	-0.00036	0.0050	0	0	0	0	0	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: ICPMS_130625C

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 3:14** SeqNo: **2441257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	-0.00003	0.0010	0	0	0	0	0	0	0		

Sample ID: **ICS A** SampType: **ICSA** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 3:44** SeqNo: **2441258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00062	0.0030	0	0	0	0	0	0	0		
Arsenic	0.00024	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00071	0.0010	0	0	0	0	0	0	0		
Copper	0.00231	0.0050	0	0	0	0	0	0	0		
Lead	0.00019	0.0010	0	0	0	0	0	0	0		

Sample ID: **ICS AB** SampType: **ICSAB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 3:48** SeqNo: **2441259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00113	0.0030	0	0	0	0	0	0	0		
Arsenic	0.01839	0.0020	0.02	0	92	80	120	0	0		
Beryllium	-0.00071	0.0010	0	0	0	0	0	0	0		
Copper	0.01973	0.0050	0.02	0	98.6	80	120	0	0		
Lead	0.0003	0.0010	0	0	0	0	0	0	0		

Sample ID: **CCV1** SampType: **CCV** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 3:52** SeqNo: **2441260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0493	0.0030	0.05	0	98.6	90	110	0	0		
Arsenic	0.09653	0.0020	0.1	0	96.5	90	110	0	0		
Beryllium	0.0979	0.0010	0.1	0	97.9	90	110	0	0		
Copper	0.09965	0.0050	0.1	0	99.7	90	110	0	0		
Lead	0.09752	0.0010	0.1	0	97.5	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Natural Resource Technology, Inc.
Work Order: 13060776
Project: 69420, Peoples Gas - Willow Street / Hawthorne Ave

ANALYTICAL QC SUMMARY REPORT

Run ID: **ICPMS_130625C**

Sample ID: **CCB** SampType: **CCB** TestCode: **M_ICPMS_W** Units: **mg/L** Prep Date: Run ID: **ICPMS_130625C**
Client ID: **ZZZZZ** Batch ID: **R90481** TestNo: **SW6020** Analysis Date: **06/26/13 3:56** SeqNo: **2441261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00121	0.0030	0	0	0	0	0	0	0		
Arsenic	-0.00013	0.0020	0	0	0	0	0	0	0		
Beryllium	-0.00068	0.0010	0	0	0	0	0	0	0		
Copper	-0.00023	0.0050	0	0	0	0	0	0	0		
Lead	-0.00005	0.0010	0	0	0	0	0	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

RUN SEQUENCE ICPMS 1

Sequence	Dilution	Internal Std	SAMPLE	ELEMENTS	TEST CODES	Date/Time
003CALB.	1		CAL Blank	#VALUE!		6/25/13 17:42
004CALS.	1		CAL STD 1	#VALUE!	60-23-05	6/25/13 17:46
005CALS.	1		CAL STD 2		60-23-04	6/25/13 17:49
006CALS.	1		CAL STD 3		60-23-03	6/25/13 17:53
007CALS.	1		CAL STD 4		60-23-02	6/25/13 17:57
008BLNK.	1		Blank		Blank	6/25/13 18:01
009BLNK.	1		Blank		Blank	6/25/13 18:04
010ICV1.	1		ICV		60-23-06	6/25/13 18:08
011_ICB.	1		ICB		60-22-493	6/25/13 18:12
012ICSA.	1		ICS A		60-23-08	6/25/13 18:16
013ICSAB.	1		ICS AB		60-23-09	6/25/13 18:20
014BLNK.	1		Blank		Blank	6/25/13 18:23
015SMPL.	1		blk		M_ICPMS_W	6/25/13 18:27
016SMPL.	1		blk		M_ICPMS_W	6/25/13 18:31
017SMPL.	1		blk		M_ICPMS_W	6/25/13 18:35
018SMPL.	1		blk		M_ICPMS_W	6/25/13 18:38
019CCV1.	1		CCV1	Al	60-23-07	6/25/13 18:42
020_CCB.	1		CCB		60-22-493	6/25/13 18:46
021SMPL.	1		blk		M_ICPMS_W	6/25/13 18:50
022SMPL.	10		IRBA1 6/25/13		M_AIR	6/25/13 18:54
023SMPL.	10		IMBA1 6/25/13		M_AIR	6/25/13 18:58
024SMPL.	10		ILCSA1 6/25/13	Pb As Cd Cr Ba Se Ag Cu Ni Zn Sb Be Tl Fe Co Mn V Al Mo Na Mg K Ca Sn	M_AIR	6/25/13 19:02
025SMPL.	10		ILCSDA1 6/25/13	Pb As Cd Cr Ba Se Ag Cu Ni Zn Sb Be Tl Fe Co Mn V Al Mo Na Mg K Ca Sn	M_AIR	6/25/13 19:06
026SMPL.	10		13060804-001A		M_AIR	6/25/13 19:10
027SMPL.	10		13060804-002A		M_AIR	6/25/13 19:13
028SMPL.	10		13060804-003A		M_AIR	6/25/13 19:17
029SMPL.	10		13060804-004A		M_AIR	6/25/13 19:21
030SMPL.	10		13060804-005A		M_AIR	6/25/13 19:25
031CCV1.	1		CCV1		60-23-07	6/25/13 19:29
032_CCB.	1		CCB		60-22-493	6/25/13 19:32
033SMPL.	10		13060804-006A		M_AIR	6/25/13 19:36
034SMPL.	10		13060847-001A		M_AIR	6/25/13 19:40
035SMPL.	10		13060847-002A		M_AIR	6/25/13 19:44
036SMPL.	10		13060847-003A		M_AIR	6/25/13 19:48
037SMPL.	10		13060847-004A		M_AIR	6/25/13 19:52
038SMPL.	10		13060795-001A		M_AIR	6/25/13 19:58
039SMPL.	10		13060795-002A		M_AIR	6/25/13 20:02
040SMPL.	10		13060795-003A		M_AIR	6/25/13 20:06
041SMPL.	10		13060795-004A		M_AIR	6/25/13 20:10
042SMPL.	10		13060795-005A		M_AIR	6/25/13 20:14
043CCV1.	1		CCV1		60-23-07	6/25/13 20:18
044_CCB.	1		CCB		60-22-493	6/25/13 20:21
045SMPL.	10		13060796-001A		M_AIR	6/25/13 20:25
046SMPL.	10		13060796-002A		M_AIR	6/25/13 20:29
047SMPL.	10		13060796-003A		M_AIR	6/25/13 20:33
048SMPL.	10		13060796-004A		M_AIR	6/25/13 20:37
049SMPL.	10		13060796-005A		M_AIR	6/25/13 20:41

File Path C:\ICPCHEM\1\DATA\ **13f25r00.B**
Method: 6020G.M

RUN SEQUENCE ICPMS 1

Sequence	Dilution	Internal Std	SAMPLE	ELEMENTS	TEST CODES	Date/Time
050SMPL.	2		IMBW2 6/25/13		M_ICPMS_W	6/25/13 20:44
051SMPL.	2		ILCSW2 6/25/13	Pb As Cd Cr Ba Se Ag Cu Ni Zn Sb Be Tl Fe Co Mn V Al Mo Na Mg K Ca Sn B	M_ICPMS_W	6/25/13 20:48
052SMPL.	5		IMBTA1 6/24/13	Na	M_ICPMS_T+	6/25/13 20:52
053BLNK.	1		blk			6/25/13 20:56
054SMPL.	5		13060376-002A	Na	M_ICPMS_T+	6/25/13 21:00
055BLNK.	1		blk			6/25/13 21:03
056CCV1.	1		CCV1	Na	60-23-07	6/25/13 21:07
057_CCB.	1		CCB		60-22-493	6/25/13 21:11
058SMPL.	5		13060377-001A	Na	M_ICPMS_T+	6/25/13 21:15
059BLNK.	1		blk			6/25/13 21:19
060SMPL.	5		13060377-002A	Na	M_ICPMS_T+	6/25/13 21:22
061BLNK.	1		blk			6/25/13 21:26
062SMPL.	5		13060377-010A	Na	M_ICPMS_T+	6/25/13 21:30
063BLNK.	1		blk			6/25/13 21:34
064SMPL.	5		13060377-011A	Na	M_ICPMS_T+	6/25/13 21:38
065BLNK.	1		blk			6/25/13 21:41
066SMPL.	5		13060377-015A	Na	M_ICPMS_T+	6/25/13 21:45
067BLNK.	1		blk			6/25/13 21:49
068CCV1.	1		CCV1	Na	60-23-07	6/25/13 21:53
069_CCB.	1		CCB	Na	60-22-493	6/25/13 21:56
070SMPL.	5		13060749-001A	Na	M_ICPMS_T+	6/25/13 22:00
071BLNK.	1		blk			6/25/13 22:04
072SMPL.	5		13060749-002A	Na	M_ICPMS_T+	6/25/13 22:08
073BLNK.	1		blk			6/25/13 22:12
074SMPL.	5		13060749-003A	Na	M_ICPMS_T+	6/25/13 22:16
075BLNK.	1		blk			6/25/13 22:19
076SMPL.	5		13060812-001A	Na	M_ICPMS_T+	6/25/13 22:23
077BLNK.	1		blk			6/25/13 22:27
078SMPL.	5		13060812-001AMS	Na	M_ICPMS_T+	6/25/13 22:31
079BLNK.	1		blk			6/25/13 22:34
080CCV1.	1		CCV1	Na	60-23-07	6/25/13 22:38
081_CCB.	1		CCB	Na	60-22-493	6/25/13 22:42
082SMPL.	5		IMBTB 6/24/13		M_ICPMS_T+	6/25/13 22:46
083SMPL.	5		13060376-001A		M_ICPMS_T+	6/25/13 22:50
084BLNK.	1		blk			6/25/13 22:53
085SMPL.	2		IMBSPLP 6/24/13	Na Ca	M_ICPMS_SPLP	6/25/13 22:57
086SMPL.	2		13060132-013B		M_ICPMS_SPLP	6/25/13 23:01
087BLNK.	1		blk			6/25/13 23:05
088SMPL.	2		13060764-020A		M_ICPMS_SPLP	6/25/13 23:09
089BLNK.	1		blk			6/25/13 23:12
090SMPL.	2		13060764-026A		M_ICPMS_SPLP	6/25/13 23:16
091BLNK.	1		blk			6/25/13 23:20
092CCV1.	1		CCV1		60-23-07	6/25/13 23:24
093_CCB.	1		CCB		60-22-493	6/25/13 23:28
094SMPL.	2		13060764-030A		M_ICPMS_SPLP	6/25/13 23:31
095BLNK.	1		blk			6/25/13 23:35
096SMPL.	2		13060764-030A		M_ICPMS_SPLP	6/25/13 23:39
097BLNK.	1		blk			6/25/13 23:43
098SMPL.	2		13060764-030AMS		M_ICPMS_SPLP	6/25/13 23:47

File Path C:\ICPCHEM\1\DATA\ **13f25r00.B**
Method: 6020G.M

RUN SEQUENCE ICPMS 1

Sequence	Dilution	Internal Std	SAMPLE	ELEMENTS	TEST CODES	Date/Time
099BLNK.	1		blk			6/25/13 23:50
100SMPL.	2		13060764-030AMSD		M_ICPMS_SPLP	6/25/13 23:54
101BLNK.	1		blk			6/25/13 23:58
102SMPL.	1		blk		M_ICPMS_W	6/26/13 0:02
103SMPL.	2		IMBW1 6/25/13		M_ICPMS_W	6/26/13 0:05
104CCV1.	1		CCV1		60-23-07	6/26/13 0:09
105_CCB.	1		CCB		60-22-493	6/26/13 0:13
106SMPL.	2		ILCSW1 6/25/13	Pb As Cd Cr Ba Se Ag Cu Ni Zn Sb Be Tl Fe Co Mn V Al Mo Na Mg K Ca Sn B	M_ICPMS_W	6/26/13 0:17
107SMPL.	10		13060778-001C		M_ICPMS_W	6/26/13 0:21
108SMPL.	2		13060778-001C		M_ICPMS_W	6/26/13 0:24
109BLNK.	1		blk			6/26/13 0:28
110SMPL.	2		13060778-001CMS		M_ICPMS_W	6/26/13 0:32
111BLNK.	1		blk			6/26/13 0:36
112SMPL.	2		13060778-001CMSD		M_ICPMS_W	6/26/13 0:39
113BLNK.	1		blk			6/26/13 0:43
114SMPL.	2		13060777-001C		M_ICPMS_W	6/26/13 0:47
115BLNK.	1		blk			6/26/13 0:51
116CCV1.	1		CCV1		60-23-07	6/26/13 0:54
117_CCB.	1		CCB		60-22-493	6/26/13 0:58
118SMPL.	2		13060663-001C	Na	M_ICPMS_W	6/26/13 1:02
119BLNK.	1		blk			6/26/13 1:06
120SMPL.	2		13060663-002C		M_ICPMS_W	6/26/13 1:09
121BLNK.	1		blk			6/26/13 1:13
122SMPL.	2		13060663-003C		M_ICPMS_W	6/26/13 1:17
123BLNK.	1		blk			6/26/13 1:21
124SMPL.	2		13060663-004C		M_ICPMS_W	6/26/13 1:25
125BLNK.	1		blk			6/26/13 1:28
126SMPL.	2		13060776-001C		M_ICPMS_W	6/26/13 1:32
127BLNK.	1		blk			6/26/13 1:36
128CCV1.	1		CCV1		60-23-07	6/26/13 1:40
129_CCB.	1		CCB		60-22-493	6/26/13 1:43
130SMPL.	2		13060776-002C		M_ICPMS_W	6/26/13 1:47
131BLNK.	1		blk			6/26/13 1:51
132SMPL.	2		13060776-003C		M_ICPMS_W	6/26/13 1:55
133BLNK.	1		blk			6/26/13 1:59
134SMPL.	2		13060776-004C		M_ICPMS_W	6/26/13 2:02
135BLNK.	1		blk			6/26/13 2:06
136SMPL.	2		13060776-005C		M_ICPMS_W	6/26/13 2:10
137BLNK.	1		blk			6/26/13 2:14
138SMPL.	2		13060715-001C	Na	M_ICPMS_W	6/26/13 2:17
139BLNK.	1		blk			6/26/13 2:21
140CCV1.	1		CCV1	Mg Ca	60-23-07	6/26/13 2:25
141_CCB.	1		CCB	Ca	60-22-493	6/26/13 2:29
142SMPL.	2		13060715-002C		M_ICPMS_W	6/26/13 2:33
143BLNK.	1		blk			6/26/13 2:36
144SMPL.	2	Li	13060715-003C		M_ICPMS_W	6/26/13 2:40
145BLNK.	1	Li Sc	blk			6/26/13 2:44
146BLNK.	1		blk			6/26/13 2:48
147SMPL.	2		13060715-004C		M_ICPMS_W	6/26/13 2:51

File Path C:\ICPCHEM\1\DATA\ **13f25r00.B**
Method: 6020G.M

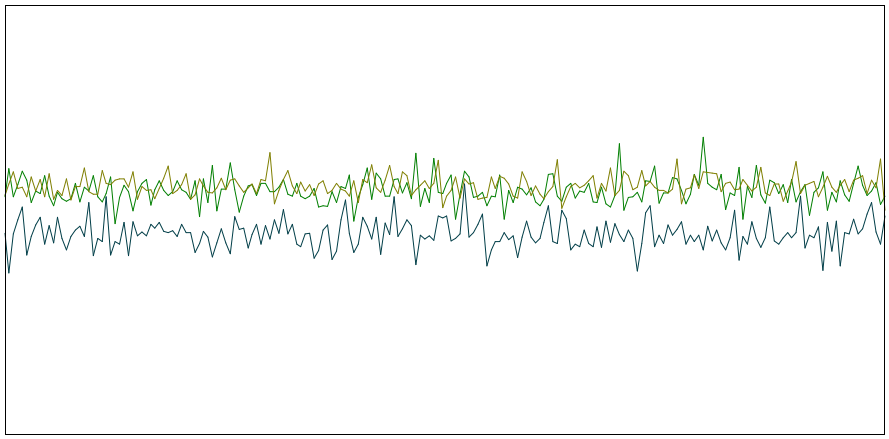
RUN SEQUENCE ICPMS 1

Sequence	Dilution	Internal Std	SAMPLE	ELEMENTS	TEST CODES	Date/Time
148BLNK.	1	Li	blk			6/26/13 2:55
149BLNK.	1		blk			6/26/13 2:59
150SMPL.	2		13060715-005C	Na	M_ICPMS_W	6/26/13 3:03
151BLNK.	1		blk			6/26/13 3:07
152CCV1.	1		CCV1	Na Mg Ca	60-23-07	6/26/13 3:10
153_CCB.	1		CCB	Ca	60-22-493	6/26/13 3:14
154SMPL.	1		blk		M_ICPMS_W	6/26/13 3:18
155SMPL.	1		blk		M_ICPMS_W	6/26/13 3:22
156SMPL.	1		blk		M_ICPMS_W	6/26/13 3:25
157SMPL.	1		blk		M_ICPMS_W	6/26/13 3:29
158SMPL.	1	Li	blk		M_ICPMS_W	6/26/13 3:33
159BLNK.	1		blk			6/26/13 3:37
160SMPL.	1		blk		M_ICPMS_W	6/26/13 3:41
161ICSA.	1		ICS A		60-23-08	6/26/13 3:44
162ICSAB.	1		ICS AB		60-23-09	6/26/13 3:48
163CCV1.	1		CCV1	Al Na Mg K	60-23-07	6/26/13 3:52
164_CCB.	1		CCB	Al K	60-22-493	6/26/13 3:56

File Path C:\ICPCHEM\1\DATA\ **13f25r00.B**
Method: 6020G.M

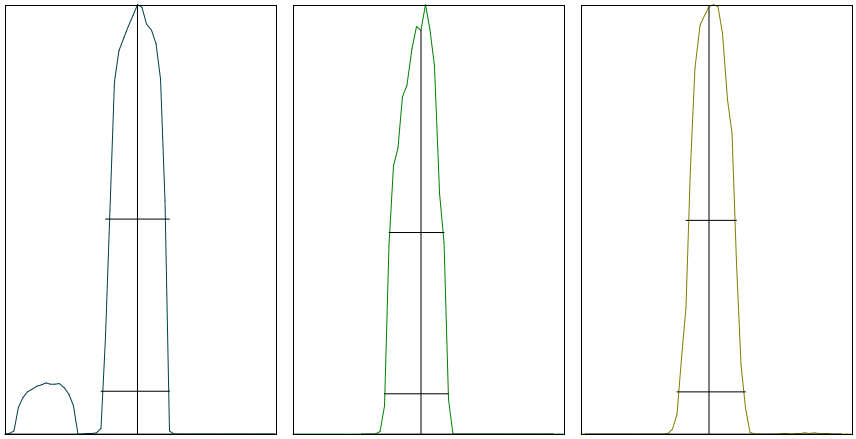
Tune Report

Tune File : Autotune.u
Comment : icp ms1



Integration Time: 0.1000 sec
Sampling Period: 0.6200 sec
n: 200
Oxide: 156/140 0.589%
Doubly Charged: 70/140 2.967%

m/z	Range	Count	Mean	RSD%	Background
7	50,000	25424.0	23310.3	7.33	1.60
89	20,000	11097.0	11341.9	5.40	3.80
205	10,000	5209.0	5789.7	3.98	6.80
156/140	2	0.525%	0.573%	17.13	
70/140	5	3.210%	2.904%	13.10	



m/z:	7	89	205
Height:	23,283	10,795	5,702
Axis:	7.00	88.95	204.95
W-50%:	0.70	0.60	0.55
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Jun 25, 2013 10:23:09
Printed : Jun 25, 2013 10:23:11

Tune File : Autotune.u
Comment : icp ms1

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1400 W	Extract 1	:	-180 V	AMU Gain	:	129
RF Matching	:	1.7 V	Extract 2	:	-100 V	AMU Offset	:	126
Smpl Depth	:	3.5 mm	Einzel 1,3	:	-102 V	Axis Gain	:	1
Torch-H	:	-0.2 mm	Einzel 2	:	0 V	Axis Offset	:	-0.01
Torch-V	:	-1.9 mm	Omega Bias	:	-36 V	QP Bias	:	3 V
Carrier Gas	:	1.25 L/min	Omega (+)	:	6.9 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-6 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	9.7 V	Discriminator	:	8 mV
Nebulizer Pump	:	0.12 rps	Plate Bias	:	-10.9 V	Analog HV	:	1740 V
Sample Pump	:	--- rps				Pulse HV	:	1620 V
S/C Temp	:	2 degC						

Generated : Jun 25, 2013 10:23:09
Printed : Jun 25, 2013 10:23:14

P/A Factor Tuning Report

Acquired:Jun 25 2013 10:44 am

Mass[amu]	Element	P/A Factor
6	Li	0.076642
9	Be	0.084496
11	B	0.082772
23	Na	0.092731
24	Mg	0.095839
27	Al	0.099607
39	K	0.100121
44	Ca	0.102214
45	Sc	0.098312
47	Ti	0.098669
50	V	0.100207
51	V	0.101325
52	Cr	0.102851
53	Cr	0.102933
55	Mn	0.103945
57	Fe	0.104854
59	Co	0.105804
60	Ni	0.106861
63	Cu	0.107239
66	Zn	0.107714
74	Ge	Sensitivity too low
75	As	0.106070
77	(As)	Sensitivity too low
78	Se	Sensitivity too low
82	Se	Sensitivity too low
83	(Se)	Sensitivity too low
88	Sr	Sensitivity too low
89	Y	0.105459
98	Mo	0.106644
99	(Mo)	0.107633
101	Ru	0.107777
102	Ru	0.108411
104	Ru	0.108394
106	(Cd)	Sensitivity too low
107	Ag	0.108997
108	(Cd)	Sensitivity too low
111	Cd	0.109627
114	Cd	0.109673
115	In	0.109690
118	(In)	0.109665
120	Sn	0.110184
121	Sb	0.109937
137	Ba	0.110429
140	Ce	Sensitivity too low
142	Ce	Sensitivity too low
182	W	Sensitivity too low
184	W	Sensitivity too low
186	W	Sensitivity too low
203	Tl	0.112622
206	Pb	0.112908
207	Pb	0.113046
208	Pb	0.114070
209	Bi	0.113891

- 1 -

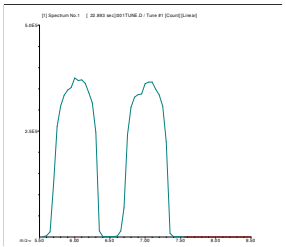
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1740 V
Pulse HV: 1620 V

6020 QC Tune Report

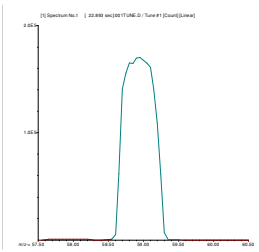
Data File: C:\ICPCHEM\1\DATA\13F25r00.B\001TUNE.D
Date Acquired: Jun 25 2013 05:32 pm
Acq. Method: TN_6020.M
Operator: ICPMS 1 - JG
Sample Name: Tune Check
Misc Info: 60-22-495
Vial Number: 1306
Current Method: C:\ICPCHEM\1\METHODS\TN_6020.M

RSD (%)

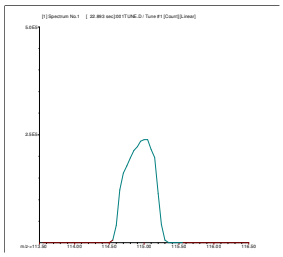
Element	Actual	Required	Flag
7 Li	3.11	5.00	
59 Co	3.56	5.00	
115 In	2.19	5.00	
205 Tl	1.92	5.00	



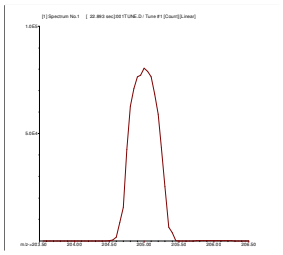
7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.90
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

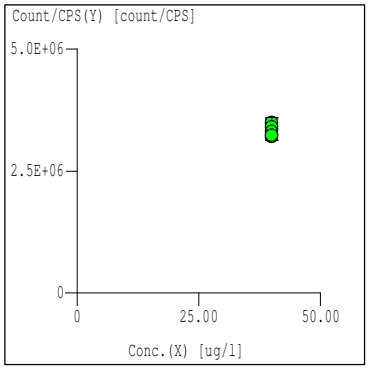
Last Calib: Jun 25, 2013 05:59 pm
Calibration Type: External Calibration Method
Calibration Title: ICPMS - 1
Weighting Method: 1/(SD*SD)
Mass Interpolation Fit for VIS: Point to Point
Method: C:\ICPCHEM\1\METHODS\6020G2W.M

=== Standard Files ===
<Data Correction>
Bkg File: ---
Rejected Masses: ---
Interference Correction: ON

	Data File	Sample Name	Date Acquired
1	c:\icpchem\1\data\13f25r00.b\003calb.d\003calb.d#	CAL Blank	Jun 25 2013 05:42 pm
2	c:\icpchem\1\data\13f25r00.b\004cals.d\004cals.d#	CAL STD 1	Jun 25 2013 05:46 pm
3	c:\icpchem\1\data\13f25r00.b\005cals.d\005cals.d#	CAL STD 2	Jun 25 2013 05:49 pm
4	c:\icpchem\1\data\13f25r00.b\006cals.d\006cals.d#	CAL STD 3	Jun 25 2013 05:53 pm
5	c:\icpchem\1\data\13f25r00.b\007cals.d\007cals.d#	CAL STD 4	Jun 25 2013 05:57 pm
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

=== Graph Detail ===

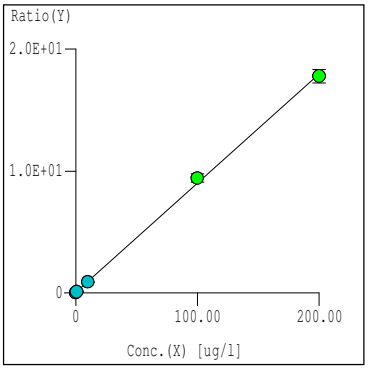
Step	Mass	Element	ISTD	Unit
(1)	6	Li	---	ug/l



Curve Fit: Excluded
r = 0.0000

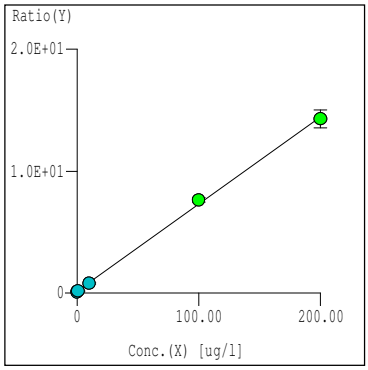
DL = --- ug/l
BEC = --- ug/l

Step	Mass	Element	ISTD	Unit
(1)	9	Be	6	ug/l



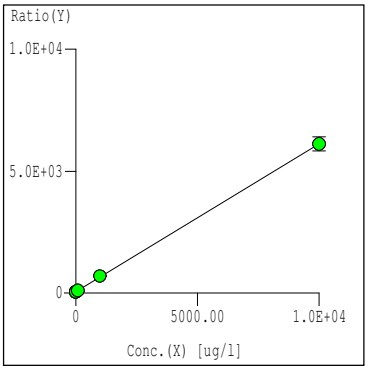
Curve Fit: Y=aX+b
r = 0.9996
Y = 8.961E-002*X +6.445E-002
X = 1.116E+001*Y -7.192E-001
DL = 8.959E-03 ug/l
BEC = 7.192E-01 ug/l

Step	Mass	Element	ISTD	Unit
(1)	11	B	6	ug/l



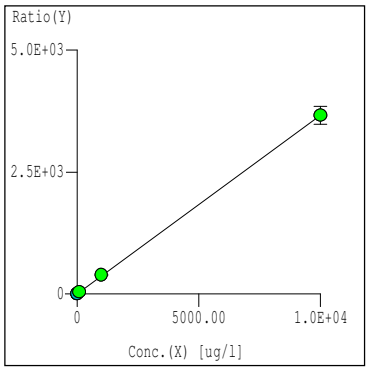
Curve Fit: Y=aX+b
r = 0.9995
Y = 7.158E-002*X +1.393E-001
X = 1.397E+001*Y -1.946E+000
DL = 1.610E-01 ug/l
BEC = 1.946 ug/l

Step	Mass	Element	ISTD	Unit
(1)	23	Na	45	ug/l



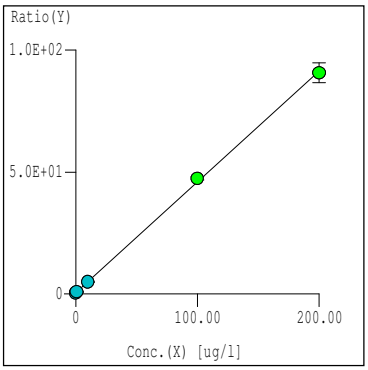
Curve Fit: Y=aX+b
r = 1.0000
Y = 6.067E-001*X +5.045E+001
X = 1.648E+000*Y -8.315E+001
DL = 7.641 ug/l
BEC = 83.15 ug/l

Step	Mass	Element	ISTD	Unit
(1)	24	Mg	45	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 3.657E-001*X +6.642E+000
X = 2.734E+000*Y -1.816E+001
DL = 3.370E-01 ug/l
BEC = 18.16 ug/l

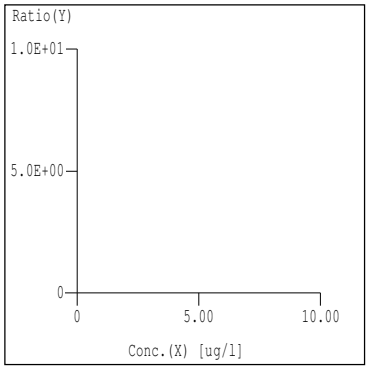
Step	Mass	Element	ISTD	Unit
(1)	27	Al	45	ug/l



Curve Fit: Y=aX+b
r = 0.9998
Y = 4.539E-001*X +6.085E-001
X = 2.203E+000*Y -1.341E+000
DL = 1.362E-01 ug/l
BEC = 1.341 ug/l

=== Graph Detail ===

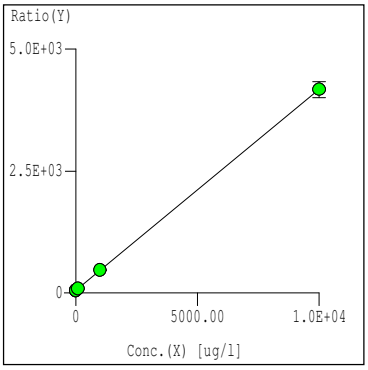
Step	Mass	Element	ISTD	Unit
(1)	28	Si	45	ug/l



Curve Fit: Y=aX+b
r = 0.0000

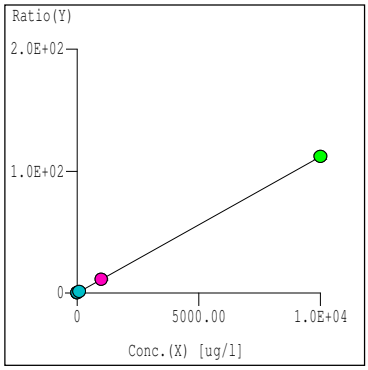
DL = --- ug/l
BEC = --- ug/l

Step	Mass	Element	ISTD	Unit
(1)	39	K	45	ug/l



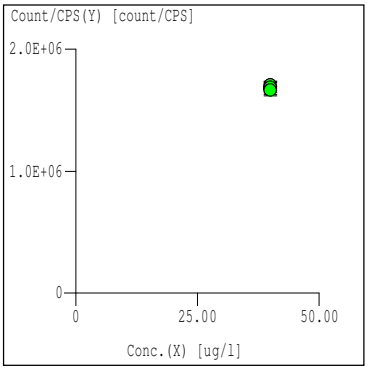
Curve Fit: Y=aX+b
r = 1.0000
Y = 4.126E-001*X +4.830E+001
X = 2.423E+000*Y -1.171E+002
DL = 5.395 ug/l
BEC = 117.1 ug/l

Step	Mass	Element	ISTD	Unit
(1)	44	Ca	45	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 1.120E-002*X +9.113E-002
X = 8.927E+001*Y -8.135E+000
DL = 1.195 ug/l
BEC = 8.135 ug/l

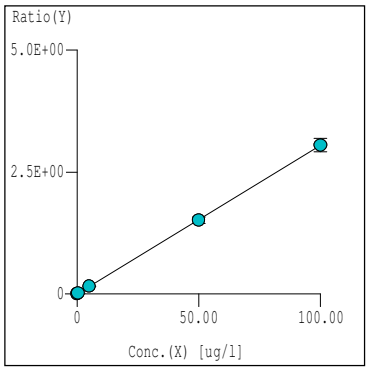
Step	Mass	Element	ISTD	Unit
(1)	45	Sc	---	ug/l



Curve Fit: Excluded
r = 0.0000

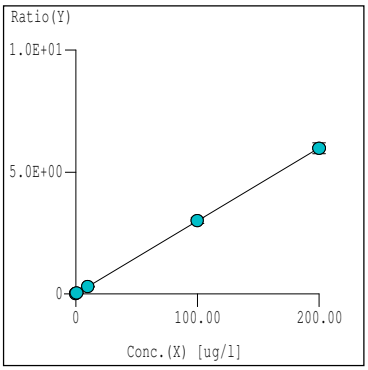
DL = --- ug/l
BEC = --- ug/l

Step	Mass	Element	ISTD	Unit
(1)	47	Ti	45	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 3.046E-002*X +1.452E-003
X = 3.283E+001*Y -4.768E-002
DL = 3.967E-02 ug/l
BEC = 4.768E-02 ug/l

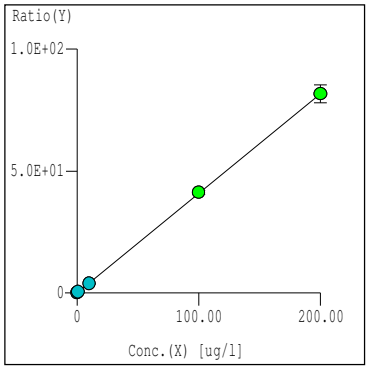
Step	Mass	Element	ISTD	Unit
(1)	50	V	45	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 2.986E-002*X +5.387E-003
X = 3.349E+001*Y -1.804E-001
DL = 1.692E-02 ug/l
BEC = 1.804E-01 ug/l

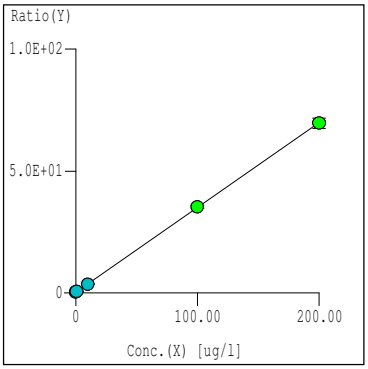
=== Graph Detail ===

Step	Mass	Element	ISTD	Unit
(1)	51	V	45	ug/l



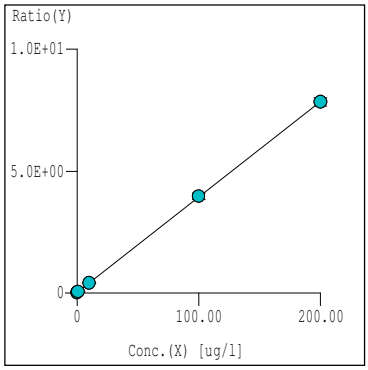
Curve Fit: Y=aX+b
r = 1.0000
Y = 4.090E-001*X +1.665E-002
X = 2.445E+000*Y -4.072E-002
DL = 4.157E-02 ug/l
BEC = 4.072E-02 ug/l

Step	Mass	Element	ISTD	Unit
(1)	52	Cr	45	ug/l



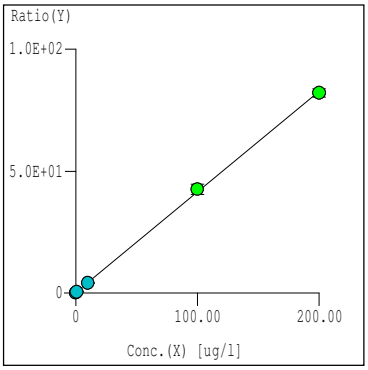
Curve Fit: Y=aX+b
r = 1.0000
Y = 3.478E-001*X +2.268E-001
X = 2.876E+000*Y -6.522E-001
DL = 9.539E-02 ug/l
BEC = 6.522E-01 ug/l

Step	Mass	Element	ISTD	Unit
(1)	53	Cr	45	ug/l



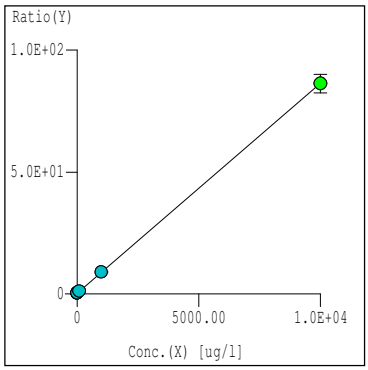
Curve Fit: Y=aX+b
r = 1.0000
Y = 3.918E-002*X +2.178E-002
X = 2.552E+001*Y -5.558E-001
DL = 3.330E-02 ug/l
BEC = 5.558E-01 ug/l

Step	Mass	Element	ISTD	Unit
(1)	55	Mn	45	ug/l



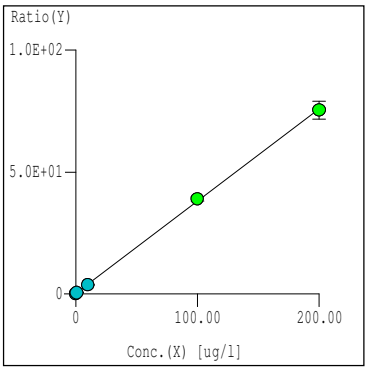
Curve Fit: Y=aX+b
r = 0.9998
Y = 4.122E-001*X +2.133E-001
X = 2.426E+000*Y -5.175E-001
DL = 2.138E-02 ug/l
BEC = 5.175E-01 ug/l

Step	Mass	Element	ISTD	Unit
(1)	57	Fe	45	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 8.597E-003*X +3.532E-001
X = 1.163E+002*Y -4.108E+001
DL = 3.086 ug/l
BEC = 41.08 ug/l

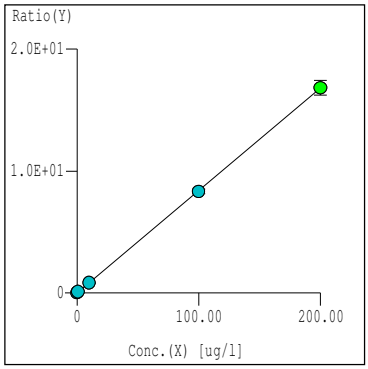
Step	Mass	Element	ISTD	Unit
(1)	59	Co	45	ug/l



Curve Fit: Y=aX+b
r = 0.9999
Y = 3.786E-001*X +2.001E-001
X = 2.641E+000*Y -5.286E-001
DL = 8.176E-02 ug/l
BEC = 5.286E-01 ug/l

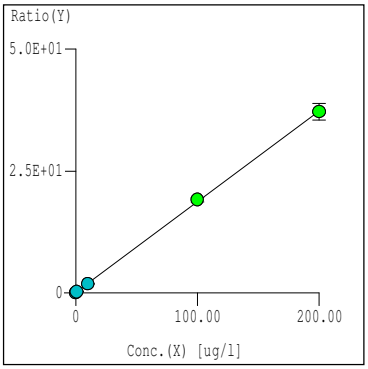
=== Graph Detail ===

Step	Mass	Element	ISTD	Unit
(1)	60	Ni	45	ug/l



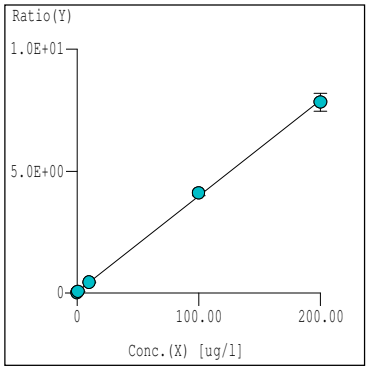
Curve Fit: Y=aX+b
r = 1.0000
Y = 8.402E-002*X -1.496E-002
X = 1.190E+001*Y +1.781E-001
DL = 3.617E-03 ug/l
BEC = -1.781E-01 ug/l

Step	Mass	Element	ISTD	Unit
(1)	63	Cu	45	ug/l



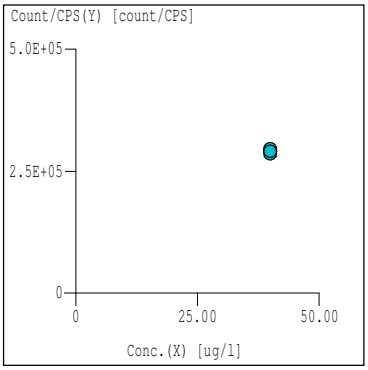
Curve Fit: Y=aX+b
r = 0.9999
Y = 1.863E-001*X +8.987E-002
X = 5.367E+000*Y -4.823E-001
DL = 3.148E-02 ug/l
BEC = 4.823E-01 ug/l

Step	Mass	Element	ISTD	Unit
(1)	66	Zn	45	ug/l



Curve Fit: Y=aX+b
r = 0.9998
Y = 3.922E-002*X +5.241E-002
X = 2.550E+001*Y -1.336E+000
DL = 4.266E-02 ug/l
BEC = 1.336 ug/l

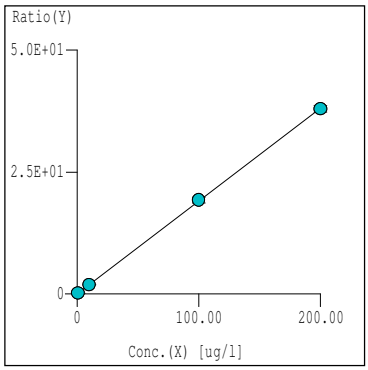
Step	Mass	Element	ISTD	Unit
(1)	74	Ge	---	ug/l



Curve Fit: Excluded
r = 0.0000

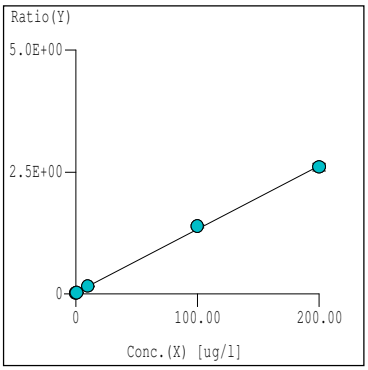
DL = --- ug/l
BEC = --- ug/l

Step	Mass	Element	ISTD	Unit
(1)	75	As	74	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 1.903E-001*X +1.420E-002
X = 5.256E+000*Y -7.462E-002
DL = 2.360E-01 ug/l
BEC = 7.462E-02 ug/l

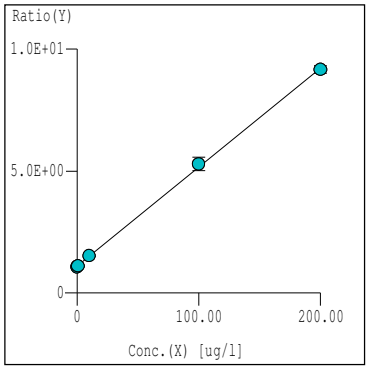
Step	Mass	Element	ISTD	Unit
(1)	77	(As)	74	ug/l



Curve Fit: Y=aX+b
r = 0.9996
Y = 1.303E-002*X +2.609E-002
X = 7.675E+001*Y -2.003E+000
DL = 1.831E-01 ug/l
BEC = 2.003 ug/l

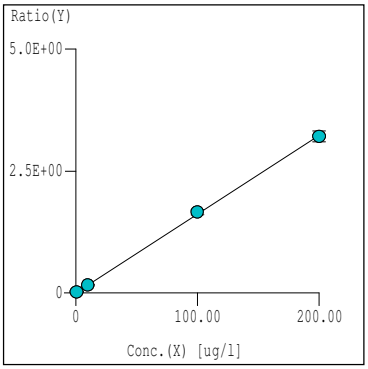
=== Graph Detail ===

Step	Mass	Element	ISTD	Unit
(1)	78	Se	74	ug/l



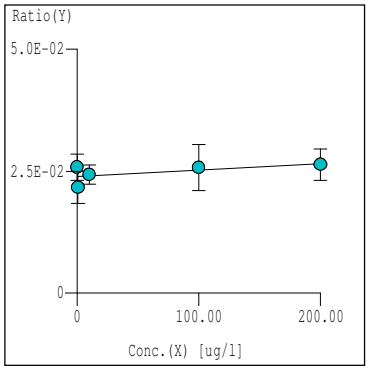
Curve Fit: Y=aX+b
r = 0.9998
Y = 4.061E-002*X +1.101E+000
X = 2.462E+001*Y -2.712E+001
DL = 2.494 ug/l
BEC = 27.12 ug/l

Step	Mass	Element	ISTD	Unit
(1)	82	Se	74	ug/l



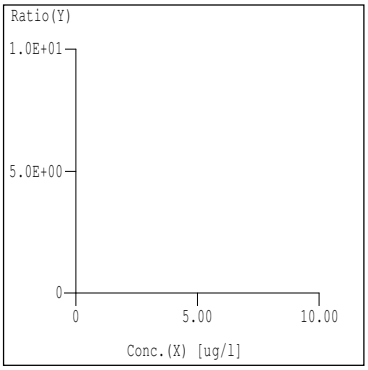
Curve Fit: Y=aX+b
r = 0.9999
Y = 1.612E-002*X +6.625E-003
X = 6.205E+001*Y -4.110E-001
DL = 9.338E-01 ug/l
BEC = 4.110E-01 ug/l

Step	Mass	Element	ISTD	Unit
(1)	83	(Se)	74	ug/l



Curve Fit: Y=aX+b
r = 0.6071
Y = 1.319E-005*X +2.396E-002
X = 7.581E+004*Y -1.816E+003
DL = 620.6 ug/l
BEC = 1816 ug/l

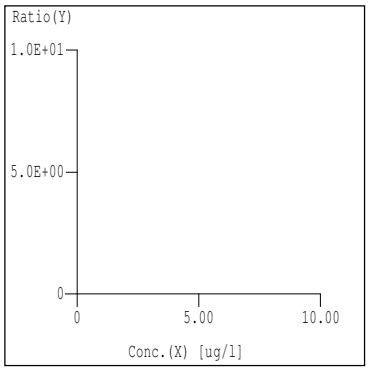
Step	Mass	Element	ISTD	Unit
(1)	86	Sr	74	ug/l



Curve Fit: Y=aX+b
r = 0.0000

DL = --- ug/l
BEC = --- ug/l

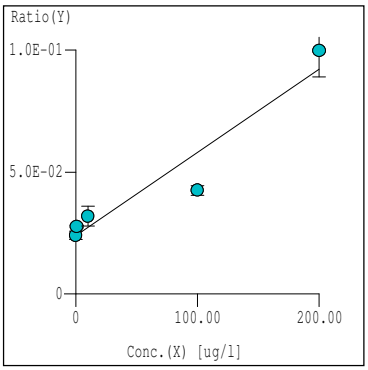
Step	Mass	Element	ISTD	Unit
(1)	87	Sr	74	ug/l



Curve Fit: Y=aX+b
r = 0.0000

DL = --- ug/l
BEC = --- ug/l

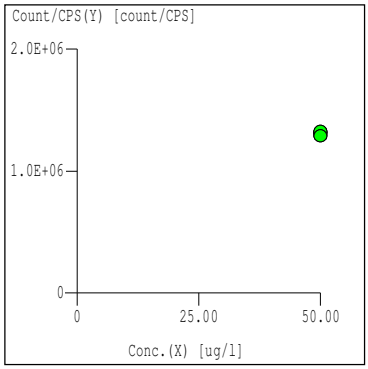
Step	Mass	Element	ISTD	Unit
(1)	88	Sr	74	ug/l



Curve Fit: Y=aX+b
r = 0.9566
Y = 3.416E-004*X +2.393E-002
X = 2.927E+003*Y -7.005E+001
DL = 15.17 ug/l
BEC = 70.05 ug/l

=== Graph Detail ===

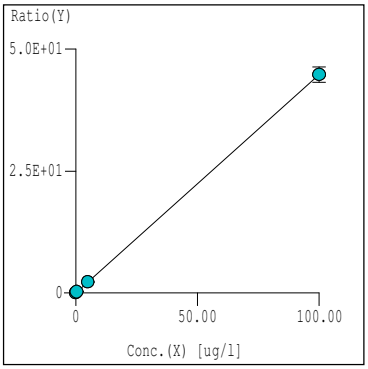
Step	Mass	Element	ISTD	Unit
(1)	89	Y	---	ug/l



Curve Fit: Y=aX+b
r = 0.0000

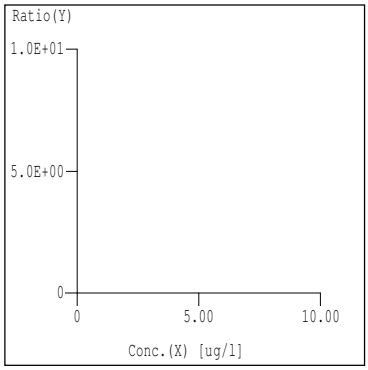
DL = --- ug/l
BEC = --- ug/l

Step	Mass	Element	ISTD	Unit
(1)	98	Mo	74	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 4.479E-001*X +9.464E-003
X = 2.233E+000*Y -2.113E-002
DL = 2.654E-02 ug/l
BEC = 2.113E-02 ug/l

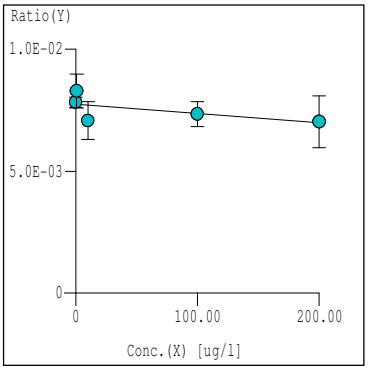
Step	Mass	Element	ISTD	Unit
(1)	99	(Mo)	74	ug/l



Curve Fit: Y=aX+b
r = 0.0000

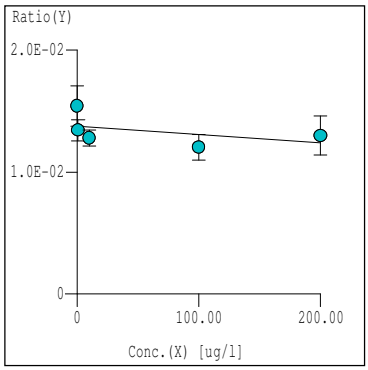
DL = --- ug/l
BEC = --- ug/l

Step	Mass	Element	ISTD	Unit
(1)	101	Ru	115	ug/l



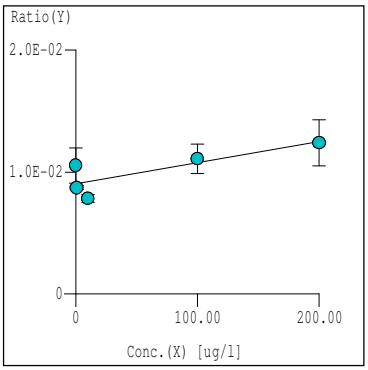
Curve Fit: Y=aX+b
r = -0.6202
Y = -3.811E-006*X +7.749E-003
X = -2.624E+005*Y +2.033E+003
DL = -1.677E+02 ug/l
BEC = -2.033E+03 ug/l

Step	Mass	Element	ISTD	Unit
(1)	102	Ru	115	ug/l



Curve Fit: Y=aX+b
r = -0.4596
Y = -6.665E-006*X +1.375E-002
X = -1.500E+005*Y +2.064E+003
DL = -7.502E+02 ug/l
BEC = -2.064E+03 ug/l

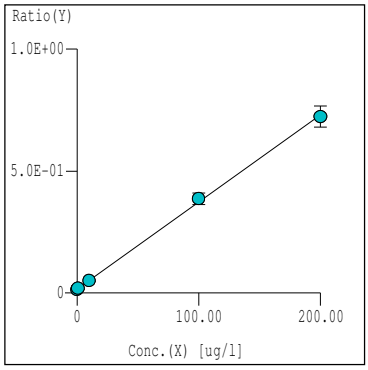
Step	Mass	Element	ISTD	Unit
(1)	104	Ru	115	ug/l



Curve Fit: Y=aX+b
r = 0.8209
Y = 1.720E-005*X +9.041E-003
X = 5.815E+004*Y -5.257E+002
DL = 251.0 ug/l
BEC = 525.7 ug/l

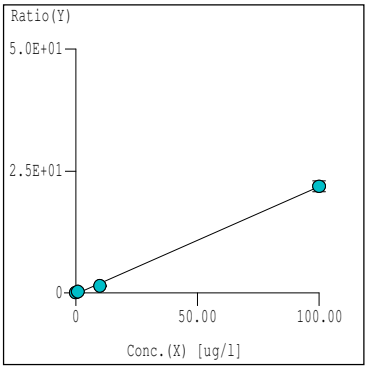
=== Graph Detail ===

Step Mass Element	ISTD	Unit
(1) 106 (Cd)	115	ug/l



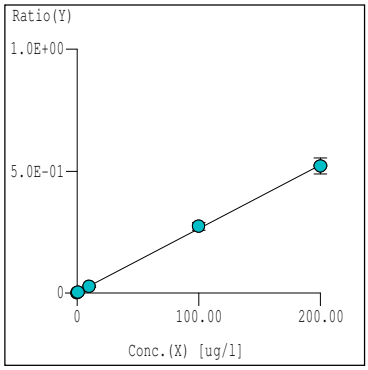
Curve Fit: Y=aX+b
r = 0.9997
Y = 3.566E-003*X +1.646E-002
X = 2.804E+002*Y -4.617E+000
DL = 4.449E-01 ug/l
BEC = 4.617 ug/l

Step Mass Element	ISTD	Unit
(1) 107 Ag	115	ug/l



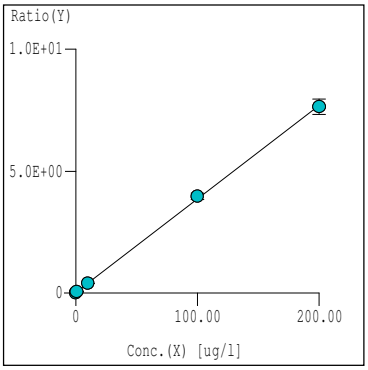
Curve Fit: Y=aX+b
r = 0.9994
Y = 2.205E-001*X -2.510E-001
X = 4.535E+000*Y +1.138E+000
DL = 1.077E-02 ug/l
BEC = -1.138E+00 ug/l

Step Mass Element	ISTD	Unit
(1) 108 (Cd)	115	ug/l



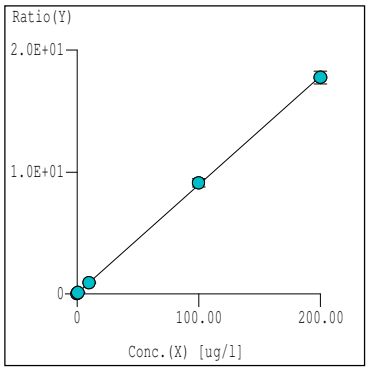
Curve Fit: Y=aX+b
r = 0.9997
Y = 2.620E-003*X +2.045E-003
X = 3.816E+002*Y -7.803E-001
DL = 8.160E-02 ug/l
BEC = 7.803E-01 ug/l

Step Mass Element	ISTD	Unit
(1) 111 Cd	115	ug/l



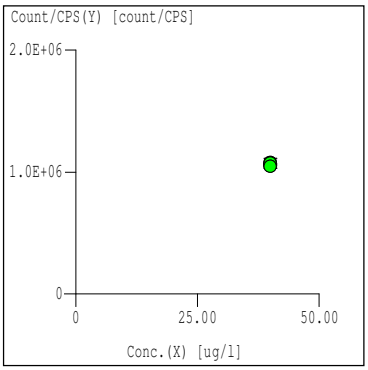
Curve Fit: Y=aX+b
r = 0.9998
Y = 3.833E-002*X +3.032E-002
X = 2.609E+001*Y -7.910E-001
DL = 1.425E-02 ug/l
BEC = 7.910E-01 ug/l

Step Mass Element	ISTD	Unit
(1) 114 Cd	115	ug/l



Curve Fit: Y=aX+b
r = 0.9999
Y = 8.903E-002*X +3.577E-002
X = 1.123E+001*Y -4.018E-001
DL = 2.576E-02 ug/l
BEC = 4.018E-01 ug/l

Step Mass Element	ISTD	Unit
(1) 115 In	---	ug/l

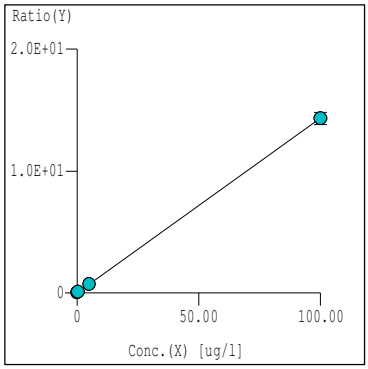


Curve Fit: Excluded
r = 0.0000

DL = --- ug/l
BEC = --- ug/l

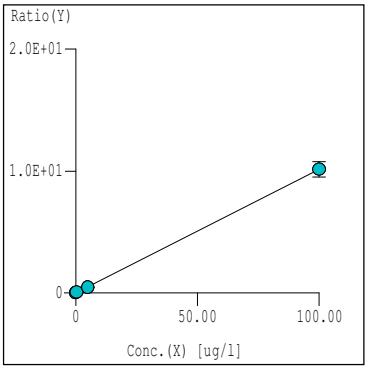
=== Graph Detail ===

Step Mass Element	ISTD	Unit
(1) 120 Sn	115	ug/l



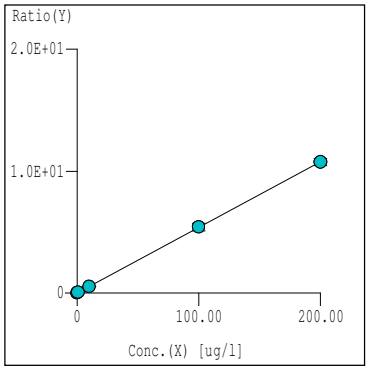
Curve Fit: Y=aX+b
r = 1.0000
Y = 1.431E-001*X +1.840E-002
X = 6.989E+000*Y -1.286E-001
DL = 2.936E-02 ug/l
BEC = 1.286E-01 ug/l

Step Mass Element	ISTD	Unit
(1) 121 Sb	115	ug/l



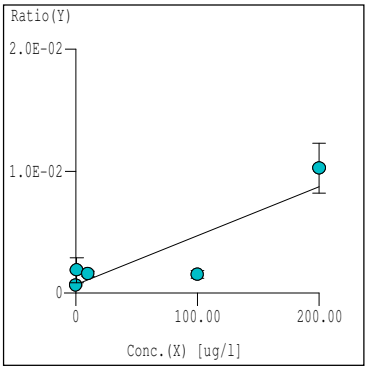
Curve Fit: Y=aX+b
r = 1.0000
Y = 1.015E-001*X -1.025E-002
X = 9.849E+000*Y +1.010E-001
DL = 1.976E-02 ug/l
BEC = -1.010E-01 ug/l

Step Mass Element	ISTD	Unit
(1) 137 Ba	115	ug/l



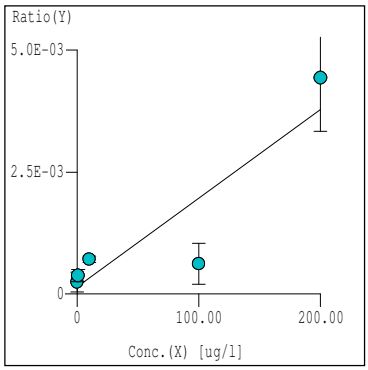
Curve Fit: Y=aX+b
r = 1.0000
Y = 5.384E-002*X +5.239E-003
X = 1.857E+001*Y -9.731E-002
DL = 2.336E-02 ug/l
BEC = 9.731E-02 ug/l

Step Mass Element	ISTD	Unit
(1) 140 Ce	115	ug/l



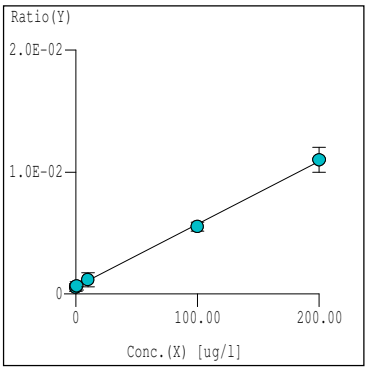
Curve Fit: Y=aX+b
r = 0.8821
Y = 4.003E-005*X +6.949E-004
X = 2.498E+004*Y -1.736E+001
DL = 4.295 ug/l
BEC = 17.36 ug/l

Step Mass Element	ISTD	Unit
(1) 142 Ce	115	ug/l



Curve Fit: Y=aX+b
r = 0.8976
Y = 1.816E-005*X +1.473E-004
X = 5.506E+004*Y -8.112E+000
DL = 34.08 ug/l
BEC = 8.112 ug/l

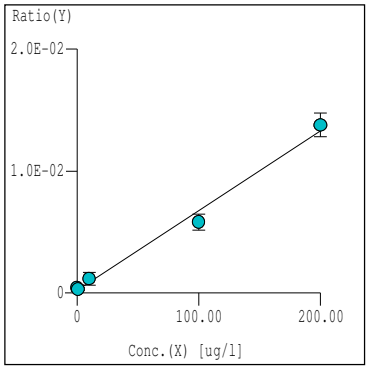
Step Mass Element	ISTD	Unit
(1) 182 W	209	ug/l



Curve Fit: Y=aX+b
r = 0.9996
Y = 5.170E-005*X +5.587E-004
X = 1.934E+004*Y -1.081E+001
DL = 18.17 ug/l
BEC = 10.81 ug/l

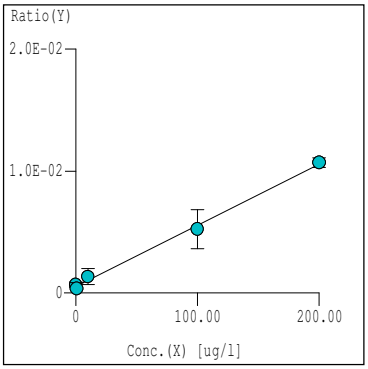
=== Graph Detail ===

Step Mass Element	ISTD	Unit
(1) 184 W	209	ug/l



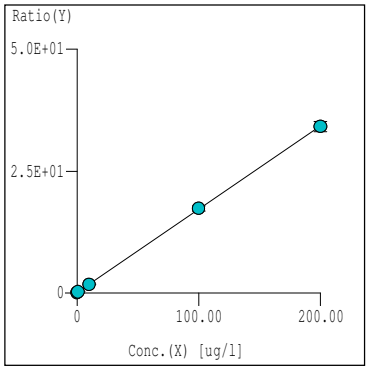
Curve Fit: Y=aX+b
r = 0.9953
Y = 6.540E-005*X +2.242E-004
X = 1.529E+004*Y -3.428E+000
DL = 12.55 ug/l
BEC = 3.428 ug/l

Step Mass Element	ISTD	Unit
(1) 186 W	209	ug/l



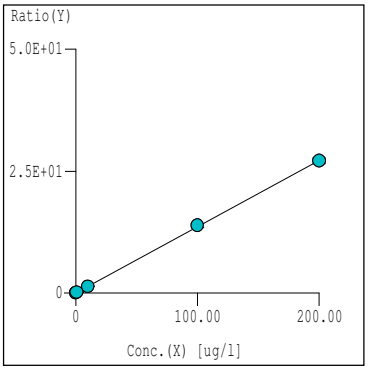
Curve Fit: Y=aX+b
r = 0.9982
Y = 5.001E-005*X +5.483E-004
X = 1.999E+004*Y -1.096E+001
DL = 12.77 ug/l
BEC = 10.96 ug/l

Step Mass Element	ISTD	Unit
(1) 203 Tl	209	ug/l



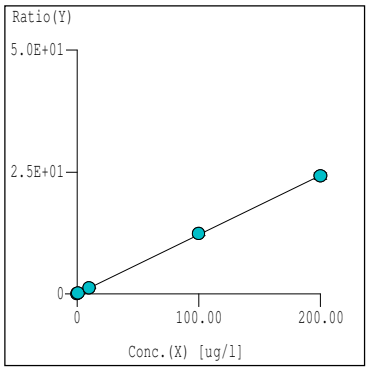
Curve Fit: Y=aX+b
r = 1.0000
Y = 1.707E-001*X +9.103E-002
X = 5.857E+000*Y -5.331E-001
DL = 4.168E-02 ug/l
BEC = 5.331E-01 ug/l

Step Mass Element	ISTD	Unit
(1) 206 Pb	209	ug/l



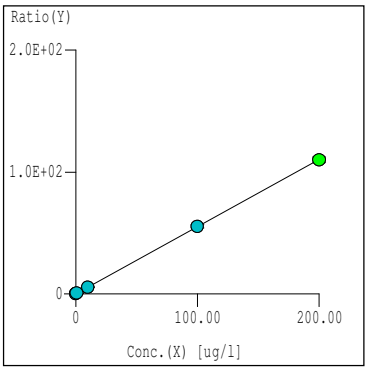
Curve Fit: Y=aX+b
r = 0.9999
Y = 1.359E-001*X +6.234E-002
X = 7.358E+000*Y -4.587E-001
DL = 7.869E-02 ug/l
BEC = 4.587E-01 ug/l

Step Mass Element	ISTD	Unit
(1) 207 Pb	209	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 1.212E-001*X +4.424E-002
X = 8.249E+000*Y -3.650E-001
DL = 4.457E-02 ug/l
BEC = 3.650E-01 ug/l

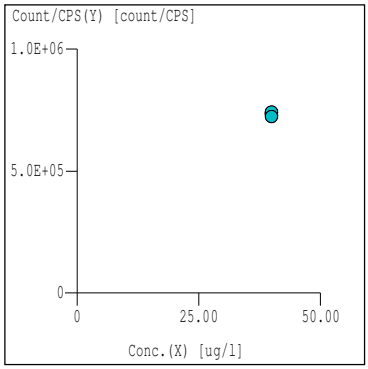
Step Mass Element	ISTD	Unit
(1) 208 Pb	209	ug/l



Curve Fit: Y=aX+b
r = 1.0000
Y = 5.500E-001*X +1.224E-001
X = 1.818E+000*Y -2.225E-001
DL = 5.428E-02 ug/l
BEC = 2.225E-01 ug/l

=== Graph Detail ===

Step	Mass	Element	ISTD	Unit
(1)	209	Bi	---	ug/l



Curve Fit: Excluded
r = 0.0000

DL = --- ug/l
BEC = --- ug/l

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\003CAL
Date Acquired: Jun 25 2013 05:42 pm
Operator: ICPMS 1 - JG
Sample Name: CAL Blank
Misc Info: 60-22-493
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:44 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	3491440.00	A	75710.00	2.17
9	Be	134.44	P	25.46	18.94
11	B	7540.00	P	177.80	2.36
23	Na	1583636.00	A	86730.00	5.48
24	Mg	19283.33	P	2333.00	12.10
27	Al	15774.44	P	1261.00	7.99
39	K	1992042.00	A	80430.00	4.04
44	Ca	4793.05	P	289.60	6.04
45	Sc	1679677.00	A	60620.00	3.61
47	Ti	122.22	P	15.75	12.89
50	V	253.33	P	14.53	5.74
51	V	3324.71	P	137.50	4.14
52	Cr	9778.89	P	110.30	1.13
53	Cr	704.44	P	22.69	3.22
55	Mn	2410.00	P	207.50	8.61
57	Fe	15367.78	P	291.10	1.89
59	Co	3814.45	P	294.10	7.71
60	Ni	162.22	P	1.93	1.19
63	Cu	1196.67	P	125.00	10.45
66	Zn	841.11	P	47.41	5.64
74	Ge	290446.69	P	4248.00	1.46
75	As	-219.81	P	112.30	51.09
77	(As)	91.11	P	5.09	5.59
78	Se	7772.22	P	133.20	1.71
82	Se	-12.80	P	36.91	288.33
83	(Se)	187.78	P	22.69	12.08
88	Sr	174.44	P	15.03	8.62
89	Y	1310755.00	A	4214.00	0.32
98	Mo	86.59	P	30.09	34.75
99	(Mo)	175.56	P	6.94	3.95
101	Ru	211.11	P	5.09	2.41
102	Ru	416.67	P	50.33	12.08
104	Ru	284.44	P	39.77	13.98
106	(Cd)	363.33	P	5.77	1.59
107	Ag	115.56	P	24.11	20.86
108	(Cd)	11.11	P	1.93	17.33
111	Cd	287.89	P	3.36	1.17
114	Cd	81.11	P	22.69	27.97
115	In	1079285.00	A	27080.00	2.51
118	(In)		P		
120	Sn	692.22	P	40.73	5.88
121	Sb	173.33	P	15.28	8.82
137	Ba	72.22	P	10.71	14.83
140	Ce	17.78	P	1.93	10.83
142	Ce	6.67	P	5.77	86.61
182	W	10.00	P	5.77	57.74
184	W	7.78	P	5.09	65.47
186	W	12.22	P	3.85	31.49
203	Tl	1262.22	P	34.69	2.75
206	Pb	586.67	P	68.07	11.60
207	Pb	456.67	P	35.28	7.73
208	Pb	2254.44	P	199.30	8.84
209	Bi	734170.00	P	5439.00	0.74

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\004CALS.D\004CALS.D#
Date Acquired: Jun 25 2013 05:46 pm
Operator: ICPMS 1 - JG
Sample Name: CAL STD 1
Misc Info: 60-23-05
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:44 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	3406624.00	A	193500.00	5.68
9 Be	7364.44	P	295.80	4.02
11 B	12910.00	P	706.60	5.47
23 Na	1951533.00	A	128800.00	6.60
24 Mg	181648.91	P	5428.00	2.99
27 Al	35706.67	P	1119.00	3.13
39 K	2101884.00	A	95170.00	4.53
44 Ca	10325.60	P	5.12	0.05
45 Sc	1705753.00	A	25720.00	1.51
47 Ti	808.89	P	32.72	4.05
50 V	1518.89	P	115.30	7.59
51 V	20091.91	P	537.00	2.67
52 Cr	23911.11	P	1187.00	4.96
53 Cr	2203.33	P	138.90	6.30
55 Mn	18703.33	P	408.10	2.18
57 Fe	19126.67	P	611.10	3.20
59 Co	19678.89	P	554.90	2.82
60 Ni	3752.22	P	129.30	3.45
63 Cu	9156.67	P	150.10	1.64
66 Zn	2828.89	P	73.21	2.59
74 Ge	293703.31	P	3428.00	1.17
75 As	1290.56	P	94.83	7.35
77 (As)	175.56	P	20.09	11.44
78 Se	8068.89	P	197.40	2.45
82 Se	137.46	P	38.84	28.26
83 (Se)	158.89	P	22.69	14.28
88 Sr	203.33	P	3.33	1.64
89 Y	1317636.00	A	11640.00	0.88
98 Mo	1703.44	P	38.84	2.28
99 (Mo)	166.67	P	40.55	24.33
101 Ru	220.00	P	17.64	8.02
102 Ru	356.67	P	24.04	6.74
104 Ru	231.11	P	5.09	2.20
106 (Cd)	487.78	P	79.18	16.23
107 Ag	5808.89	P	234.00	4.03
108 (Cd)	66.67	P	8.82	13.23
111 Cd	1308.91	P	85.48	6.53
114 Cd	2493.33	P	85.05	3.41
115 In	1061741.00	A	3984.00	0.38
118 (In)		P		
120 Sn	2478.89	P	78.20	3.15
121 Sb	1538.89	P	141.70	9.21
137 Ba	1471.11	P	123.30	8.38
140 Ce	50.00	P	27.28	54.56
142 Ce	10.00	P	3.33	33.33
182 W	12.22	P	6.94	56.77
184 W	5.56	P	1.93	34.65
186 W	6.67	P	8.82	132.29
203 Tl	4368.89	P	225.60	5.16
206 Pb	3082.22	P	36.87	1.20
207 Pb	2765.56	P	97.66	3.53
208 Pb	12008.89	P	94.30	0.79
209 Bi	735984.38	P	10930.00	1.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3406624.30	5.68	3491440.00	97.6	80 - 120	
45 Sc	1705752.80	1.51	1679677.50	101.6	80 - 120	
74 Ge	293703.34	1.17	290446.66	101.1	80 - 120	
115 In	1061740.60	0.38	1079284.80	98.4	80 - 120	
209 Bi	735984.44	1.49	734170.00	100.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 25 2013 05:49 pm
Operator: ICPMS 1 - JG
Sample Name: CAL STD 2
Misc Info: 60-23-04
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:48 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	3308825.00	A	64890.00	1.96
9 Be	73414.44	P	2081.00	2.83
11 B	65496.66	P	4613.00	7.04
23 Na	4151683.00	A	200600.00	4.83
24 Mg	1634742.00	A	54340.00	3.32
27 Al	205240.00	P	6401.00	3.12
39 K	3638958.00	A	31700.00	0.87
44 Ca	50782.72	P	1385.00	2.73
45 Sc	1677814.00	A	13370.00	0.80
47 Ti	6534.44	P	112.20	1.72
50 V	12452.22	P	111.10	0.89
51 V	161015.41	P	1933.00	1.20
52 Cr	149101.09	P	511.80	0.34
53 Cr	17301.11	P	215.40	1.25
55 Mn	172440.00	P	5745.00	3.33
57 Fe	49418.89	P	1245.00	2.52
59 Co	156304.41	P	959.10	0.61
60 Ni	34425.56	P	380.10	1.10
63 Cu	78197.78	P	1268.00	1.62
66 Zn	18288.89	P	761.00	4.16
74 Ge	285173.31	P	5165.00	1.81
75 As	13404.88	P	569.10	4.25
77 (As)	1111.11	P	67.03	6.03
78 Se	10834.44	P	345.50	3.19
82 Se	1138.44	P	76.23	6.70
83 (Se)	173.33	P	15.28	8.82
88 Sr	227.78	P	33.55	14.73
89 Y	1293122.00	A	25310.00	1.96
98 Mo	16026.25	P	585.20	3.65
99 (Mo)	132.22	P	10.18	7.70
101 Ru	186.67	P	20.27	10.86
102 Ru	337.78	P	11.71	3.47
104 Ru	206.67	P	5.77	2.79
106 (Cd)	1324.44	P	87.58	6.61
107 Ag	36852.22	P	627.40	1.70
108 (Cd)	715.56	P	60.49	8.45
111 Cd	10572.97	P	289.40	2.74
114 Cd	23906.67	P	627.40	2.62
115 In	1056203.00	A	15770.00	1.49
118 (In)		P		
120 Sn	19071.11	P	689.30	3.61
121 Sb	12186.67	P	912.70	7.49
137 Ba	14058.89	P	134.30	0.96
140 Ce	42.22	P	5.09	12.06
142 Ce	18.89	P	1.93	10.19
182 W	21.11	P	10.71	50.73
184 W	21.11	P	9.62	45.58
186 W	24.44	P	11.71	47.91
203 Tl	32011.11	P	820.00	2.56
206 Pb	25071.11	P	537.30	2.14
207 Pb	22090.00	P	745.40	3.37
208 Pb	100478.90	P	2772.00	2.76
209 Bi	730998.88	P	9231.00	1.26

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3308824.50	1.96	3491440.00	94.8	80 - 120	
45 Sc	1677813.80	0.80	1679677.50	99.9	80 - 120	
74 Ge	285173.34	1.81	290446.66	98.2	80 - 120	
115 In	1056202.80	1.49	1079284.80	97.9	80 - 120	
209 Bi	730998.88	1.26	734170.00	99.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 25 2013 05:53 pm
Operator: ICPMS 1 - JG
Sample Name: CAL STD 3
Misc Info: 60-23-03
Vial Number: 2104
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	3201897.00	A	56740.00	1.77
9 Be	754048.19	A	15810.00	2.10
11 B	611560.13	A	20010.00	3.27
23 Na	29403310.00	A	678700.00	2.31
24 Mg	16480320.00	A	154400.00	0.94
27 Al	2000010.00	A	47940.00	2.40
39 K	19775070.00	A	630700.00	3.19
44 Ca	473660.59	M	16600.00	3.50
45 Sc	1688333.00	A	42490.00	2.52
47 Ti	63826.67	P	1058.00	1.66
50 V	126676.70	P	3862.00	3.05
51 V	1739085.00	A	37750.00	2.17
52 Cr	1489590.00	A	12460.00	0.84
53 Cr	167517.80	P	1647.00	0.98
55 Mn	1794036.00	A	47300.00	2.64
57 Fe	378043.31	P	7230.00	1.91
59 Co	1645639.00	A	561.30	0.03
60 Ni	351054.41	P	1414.00	0.40
63 Cu	807434.50	A	8189.00	1.01
66 Zn	173216.70	P	712.40	0.41
74 Ge	295880.00	P	4837.00	1.63
75 As	142400.20	P	1878.00	1.32
77 (As)	10261.11	P	138.00	1.34
78 Se	39087.78	P	1818.00	4.65
82 Se	12266.07	P	273.50	2.23
83 (Se)	190.00	P	33.33	17.54
88 Sr	314.44	P	19.53	6.21
89 Y	1323704.00	A	20230.00	1.53
98 Mo	166878.50	P	1977.00	1.18
99 (Mo)	170.00	P	0.00	0.00
101 Ru	196.67	P	10.00	5.08
102 Ru	322.22	P	18.36	5.70
104 Ru	297.78	P	41.68	14.00
106 (Cd)	10333.33	P	257.70	2.49
107 Ag	584983.31	P	8324.00	1.42
108 (Cd)	7330.00	P	185.50	2.53
111 Cd	106217.40	P	1160.00	1.09
114 Cd	243826.70	P	1083.00	0.44
115 In	1072268.00	A	42860.00	4.00
118 (In)		P		
120 Sn	193374.41	P	5108.00	2.64
121 Sb	574.44	P	44.39	7.73
137 Ba	145144.41	P	2466.00	1.70
140 Ce	41.11	P	10.71	26.05
142 Ce	16.67	P	11.55	69.30
182 W	102.22	P	8.39	8.21
184 W	107.78	P	13.47	12.50
186 W	96.67	P	28.48	29.46
203 Tl	321386.69	P	6754.00	2.10
206 Pb	256951.09	P	3812.00	1.48
207 Pb	228361.09	P	3460.00	1.52
208 Pb	1026449.00	P	13890.00	1.35
209 Bi	741327.69	P	10590.00	1.43

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3201896.50	1.77	3491440.00	91.7	80 - 120	
45 Sc	1688333.50	2.52	1679677.50	100.5	80 - 120	
74 Ge	295880.00	1.63	290446.66	101.9	80 - 120	
115 In	1072268.30	4.00	1079284.80	99.3	80 - 120	
209 Bi	741327.75	1.43	734170.00	101.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 25 2013 05:57 pm
Operator: ICPMS 1 - JG
Sample Name: CAL STD 4
Misc Info: 60-23-02
Vial Number: 2105
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:55 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	3236031.00	A	103800.00	3.21
9 Be	1438819.00	A	48830.00	3.39
11 B	1155187.00	A	45530.00	3.94
23 Na	############	A	7769000.00	3.06
24 Mg	############	A	5212000.00	3.42
27 Al	3771306.00	A	115200.00	3.05
39 K	############	A	4758000.00	2.74
44 Ca	4663450.00	A	35200.00	0.75
45 Sc	1664143.00	A	33000.00	1.98
47 Ti	126948.90	P	3349.00	2.64
50 V	248314.41	P	4915.00	1.98
51 V	3396411.00	A	97590.00	2.87
52 Cr	2896037.00	A	44540.00	1.54
53 Cr	326230.00	P	437.80	0.13
55 Mn	3415174.00	A	47390.00	1.39
57 Fe	3589119.00	A	91250.00	2.54
59 Co	3137523.00	A	91230.00	2.91
60 Ni	699556.63	A	13020.00	1.86
63 Cu	1544766.00	A	40550.00	2.63
66 Zn	325600.00	P	9120.00	2.80
74 Ge	290064.41	P	2976.00	1.03
75 As	275266.91	P	1672.00	0.61
77 (As)	18870.00	P	358.30	1.90
78 Se	66424.44	P	507.10	0.76
82 Se	23276.06	P	685.60	2.95
83 (Se)	191.11	P	21.43	11.21
88 Sr	723.33	P	71.26	9.85
89 Y	1286234.00	A	21090.00	1.64
98 Mo	324770.81	P	8238.00	2.54
99 (Mo)	192.22	P	26.74	13.91
101 Ru	183.33	P	26.03	14.20
102 Ru	338.89	P	38.63	11.40
104 Ru	323.33	P	47.02	14.54
106 (Cd)	18876.67	P	876.20	4.64
107 Ag	1104007.00	A	28470.00	2.58
108 (Cd)	13608.89	P	713.90	5.25
111 Cd	199579.41	P	5082.00	2.55
114 Cd	463688.91	P	6748.00	1.46
115 In	1044656.00	A	15790.00	1.51
118 (In)		P		
120 Sn	374040.00	P	7618.00	2.04
121 Sb	264788.91	P	13690.00	5.17
137 Ba	280855.50	P	4171.00	1.49
140 Ce	267.78	P	53.16	19.85
142 Ce	115.56	P	27.15	23.50
182 W	198.89	P	18.95	9.53
184 W	248.89	P	18.36	7.38
186 W	193.33	P	6.67	3.45
203 Tl	617224.38	P	12620.00	2.04
206 Pb	490485.59	P	6892.00	1.41
207 Pb	437590.00	P	8804.00	2.01
208 Pb	1988095.00	A	35770.00	1.80
209 Bi	723043.31	P	7031.00	0.97

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3236031.30	3.21	3491440.00	92.7	80 - 120	
45 Sc	1664143.10	1.98	1679677.50	99.1	80 - 120	
74 Ge	290064.44	1.03	290446.66	99.9	80 - 120	
115 In	1044656.30	1.51	1079284.80	96.8	80 - 120	
209 Bi	723043.31	0.97	734170.00	98.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\008BLNK.D\008BLNK.D#
Date Acquired: Jun 25 2013 06:01 pm
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: Blank
Misc Info: Blank
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.6068	ug/l	4.19	-0.6068	4.00	
11 B	3.339	ug/l	19.36	3.339	15.00	
23 Na	-33.27	ug/l	9.76	-33.27	40.00	
24 Mg	-10.17	ug/l	9.23	-10.17	50.00	
27 Al	2.365	ug/l	5.00	2.365	15.00	
39 K	-6.548	ug/l	43.77	-6.548	40.00	
44 Ca	8.963	ug/l	3.17	8.963	50.00	
47 Ti	0.1497	ug/l	13.32	0.1497	20.00	
50 V	0.1734	ug/l	11.67	0.1734	5.00	
51 V	0.2502	ug/l	4.96	0.2502	5.00	
52 Cr	0.09013	ug/l	28.94	0.09013	5.00	
53 Cr	-0.2189	ug/l	5.08	-0.2189	5.00	
55 Mn	-0.207	ug/l	5.26	-0.207	5.00	
57 Fe	8.931	ug/l	23.31	8.931	50.00	
59 Co	-0.1791	ug/l	5.31	-0.1791	5.00	
60 Ni	0.3206	ug/l	9.78	0.3206	5.00	
63 Cu	-0.2051	ug/l	7.85	-0.2051	10.00	
66 Zn	-0.5038	ug/l	7.94	-0.5038	20.00	
75 As	-0.006344	ug/l	1908.90	-0.006344	5.00	
77 (As)	-0.8509	ug/l	28.12	-0.8509	10.00	
78 Se	-1.168	ug/l	54.78	-1.168	10.00	
82 Se	-0.1132	ug/l	179.86	-0.1132	5.00	
83 (Se)	-366.2	ug/l	85.20	-366.2	10.00	
88 Sr	15.45	ug/l	24.82	15.45	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.3179	ug/l	9.37	0.3179	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	76.23	ug/l	548.60	76.23	5.00	
102 Ru	-411.6	ug/l	62.61	-411.6	5.00	
104 Ru	71.56	ug/l	58.62	71.56	5.00	
106 (Cd)	-0.3272	ug/l	61.46	-0.3272	5.00	
107 Ag	1.258	ug/l	2.13	1.258	5.00	
108 (Cd)	-0.5416	ug/l	14.10	-0.5416	10.00	
111 Cd	-0.4105	ug/l	4.25	-0.4105	5.00	
114 Cd	-0.283	ug/l	10.51	-0.283	5.00	
120 Sn	0.4711	ug/l	7.10	0.4711	10.00	
121 Sb	1.408	ug/l	12.73	1.408	10.00	
137 Ba	0.05795	ug/l	54.19	0.05795	10.00	
140 Ce	7.685	ug/l	63.98	7.685	10.00	
142 Ce	24.01	ug/l	40.65	24.01	10.00	
182 W	0.7743	ug/l	687.33	0.7743	10.00	
184 W	10.37	ug/l	47.68	10.37	10.00	
186 W	4.591	ug/l	39.23	4.591	10.00	
203 Tl	-0.02107	ug/l	107.74	-0.02107	5.00	
206 Pb	-0.0846	ug/l	39.53	-0.0846	5.00	
207 Pb	-0.001035	ug/l	3691.80	-0.001035	5.00	
208 Pb	0.1409	ug/l	22.55	0.1409	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3248417.30	3.43	3491440.00	93.0	80 - 120	
45 Sc	1635527.00	2.01	1679677.50	97.4	80 - 120	
74 Ge	289254.44	2.94	290446.66	99.6	80 - 120	
115 In	1060799.90	2.78	1079284.80	98.3	80 - 120	
209 Bi	741813.31	1.76	734170.00	101.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\009BLNK.D\009BLNK.D#
Date Acquired: Jun 25 2013 06:04 pm
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: Blank
Misc Info: Blank
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.6281	ug/l	5.31	-0.6281	4.00	
11 B	0.705	ug/l	10.23	0.705	15.00	
23 Na	-39.99	ug/l	3.53	-39.99	40.00	
24 Mg	-11.19	ug/l	8.80	-11.19	50.00	
27 Al	2.251	ug/l	4.92	2.251	15.00	
39 K	-10.84	ug/l	8.83	-10.84	40.00	
44 Ca	8.079	ug/l	9.00	8.079	50.00	
47 Ti	0.1277	ug/l	19.34	0.1277	20.00	
50 V	0.1546	ug/l	26.33	0.1546	5.00	
51 V	0.2194	ug/l	12.57	0.2194	5.00	
52 Cr	0.05834	ug/l	12.15	0.05834	5.00	
53 Cr	-0.2069	ug/l	5.34	-0.2069	5.00	
55 Mn	-0.2247	ug/l	7.42	-0.2247	5.00	
57 Fe	7.072	ug/l	23.80	7.072	50.00	
59 Co	-0.1773	ug/l	2.80	-0.1773	5.00	
60 Ni	0.2995	ug/l	7.26	0.2995	5.00	
63 Cu	-0.2379	ug/l	11.78	-0.2379	10.00	
66 Zn	-0.5207	ug/l	9.74	-0.5207	20.00	
75 As	0.004447	ug/l	128.22	0.004447	5.00	
77 (As)	-1.369	ug/l	9.26	-1.369	10.00	
78 Se	-0.5662	ug/l	168.40	-0.5662	10.00	
82 Se	-0.2213	ug/l	105.83	-0.2213	5.00	
83 (Se)	-232.2	ug/l	71.10	-232.2	10.00	
88 Sr	17.48	ug/l	36.03	17.48	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.1357	ug/l	10.20	0.1357	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	-277.9	ug/l	36.20	-277.9	5.00	
102 Ru	-261.7	ug/l	96.06	-261.7	5.00	
104 Ru	-37.91	ug/l	98.29	-37.91	5.00	
106 (Cd)	-0.4117	ug/l	102.65	-0.4117	5.00	
107 Ag	1.225	ug/l	2.14	1.225	5.00	
108 (Cd)	-0.4559	ug/l	17.42	-0.4559	10.00	
111 Cd	-0.419	ug/l	10.37	-0.419	5.00	
114 Cd	-0.2919	ug/l	15.63	-0.2919	5.00	
120 Sn	0.1861	ug/l	7.41	0.1861	10.00	
121 Sb	0.4559	ug/l	4.29	0.4559	10.00	
137 Ba	0.03655	ug/l	151.68	0.03655	10.00	
140 Ce	16.64	ug/l	64.54	16.64	10.00	
142 Ce	26.72	ug/l	49.96	26.72	10.00	
182 W	-1.315	ug/l	299.77	-1.315	10.00	
184 W	5.018	ug/l	53.33	5.018	10.00	
186 W	1.398	ug/l	417.60	1.398	10.00	
203 Tl	-0.04145	ug/l	47.53	-0.04145	5.00	
206 Pb	-0.0998	ug/l	12.78	-0.0998	5.00	
207 Pb	-0.03594	ug/l	99.08	-0.03594	5.00	
208 Pb	0.1183	ug/l	24.03	0.1183	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3209640.30	2.90	3491440.00	91.9	80 - 120	
45 Sc	1623552.50	3.19	1679677.50	96.7	80 - 120	
74 Ge	285291.13	1.69	290446.66	98.2	80 - 120	
115 In	1049127.30	1.87	1079284.80	97.2	80 - 120	
209 Bi	721454.44	1.76	734170.00	98.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\010ICV1.D\010ICV1.D#
Date Acquired: Jun 25 2013 06:08 pm
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: ICV
Misc Info: 60-23-06
Vial Number: 2106
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	Expected	QC Range(%)	Flag
9 Be	50.68	ug/l	4.45	50.00	90 - 110	
11 B	49.91	ug/l	6.16	50.00	90 - 110	
23 Na	485.10	ug/l	2.31	500.00	90 - 110	
24 Mg	509.80	ug/l	4.53	500.00	90 - 110	
27 Al	50.17	ug/l	5.04	50.00	90 - 110	
39 K	480.20	ug/l	6.29	500.00	90 - 110	
44 Ca	473.80	ug/l	4.81	500.00	90 - 110	
47 Ti	25.19	ug/l	2.61	25.00	90 - 110	
50 V	50.63	ug/l	5.57	50.00	90 - 110	
51 V	50.97	ug/l	2.40	50.00	90 - 110	
52 Cr	50.88	ug/l	2.43	50.00	90 - 110	
53 Cr	50.74	ug/l	4.61	50.00	90 - 110	
55 Mn	51.16	ug/l	4.13	50.00	90 - 110	
57 Fe	486.00	ug/l	5.11	500.00	90 - 110	
59 Co	49.70	ug/l	3.06	50.00	90 - 110	
60 Ni	50.95	ug/l	4.15	50.00	90 - 110	
63 Cu	50.88	ug/l	5.16	50.00	90 - 110	
66 Zn	50.74	ug/l	4.04	50.00	90 - 110	
75 As	50.06	ug/l	2.47	50.00	90 - 110	
77 (As)	52.61	ug/l	5.60	50.00	90 - 110	
78 Se	51.44	ug/l	6.87	50.00	90 - 110	
82 Se	51.54	ug/l	1.78	50.00	90 - 110	
83 (Se)	-98.26	ug/l	297.88	50.00	90 - 110	
88 Sr	115.00	ug/l	12.31	50.00	90 - 110	Fail
89 Y	--------	ug/l	--------	50.00	90 - 110	
98 Mo	24.79	ug/l	5.64	25.00	90 - 110	
99 (Mo)	--------	ug/l	--------	---	##### - #####	
101 Ru	213.80	ug/l	181.95	50.00	90 - 110	Fail
102 Ru	480.70	ug/l	49.74	50.00	90 - 110	Fail
104 Ru	-61.88	ug/l	55.50	50.00	90 - 110	Fail
106 (Cd)	48.87	ug/l	5.10	50.00	90 - 110	
107 Ag	48.20	ug/l	1.14	50.00	90 - 110	
108 (Cd)	49.15	ug/l	2.40	50.00	90 - 110	
111 Cd	49.39	ug/l	2.35	50.00	90 - 110	
114 Cd	50.44	ug/l	2.33	50.00	90 - 110	
120 Sn	25.70	ug/l	3.22	25.00	90 - 110	
121 Sb	25.18	ug/l	7.26	25.00	90 - 110	
137 Ba	48.01	ug/l	2.96	50.00	90 - 110	
140 Ce	6.67	ug/l	134.08	50.00	90 - 110	Fail
142 Ce	20.65	ug/l	75.25	50.00	90 - 110	Fail
182 W	14.15	ug/l	38.13	50.00	90 - 110	Fail
184 W	8.31	ug/l	115.44	50.00	90 - 110	Fail
186 W	5.40	ug/l	96.11	50.00	90 - 110	Fail
203 Tl	50.09	ug/l	3.66	50.00	90 - 110	
206 Pb	50.67	ug/l	2.82	50.00	90 - 110	
207 Pb	50.15	ug/l	3.95	50.00	90 - 110	
208 Pb	50.21	ug/l	3.69	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3404109.00	2.47	3491440.00	97.5	80 - 120	
45 Sc	1721779.50	4.31	1679677.50	102.5	80 - 120	
74 Ge	296883.34	2.25	290446.66	102.2	80 - 120	
115 In	1108659.50	0.68	1079284.80	102.7	80 - 120	
209 Bi	758655.56	1.61	734170.00	103.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 10 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

ICB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\011_ICB.D\011_ICB.D#
Date Acquired: Jun 25 2013 06:12 pm
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: ICB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: ICB
Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.65 ug/l	1.26	1.00	
11 B	0.56 ug/l	15.40	5.00	
23 Na	-32.98 ug/l	10.25	40.00	
24 Mg	-15.62 ug/l	1.39	40.00	
27 Al	-0.64 ug/l	5.94	5.00	
39 K	-8.63 ug/l	27.96	40.00	
44 Ca	0.71 ug/l	32.16	40.00	
47 Ti	0.05 ug/l	61.35	5.00	
50 V	0.08 ug/l	25.87	2.00	
51 V	0.20 ug/l	3.62	2.00	
52 Cr	0.06 ug/l	57.44	2.00	
53 Cr	-0.20 ug/l	16.21	2.00	
55 Mn	-0.36 ug/l	1.30	2.00	
57 Fe	-0.26 ug/l	253.88	40.00	
59 Co	-0.24 ug/l	13.03	2.00	
60 Ni	0.28 ug/l	1.62	2.00	
63 Cu	-0.31 ug/l	3.12	5.00	
66 Zn	-0.94 ug/l	4.60	5.00	
75 As	-0.02 ug/l	303.58	2.00	
77 (As)	-1.18 ug/l	15.00	3.00	
78 Se	-1.91 ug/l	58.52	3.00	
82 Se	-0.08 ug/l	227.91	2.00	
83 (Se)	-140.40 ug/l	27.29	3.00	
88 Sr	-39.51 ug/l	11.41	2.00	
89 Y	-------- ug/l	--------	3.00	
98 Mo	0.11 ug/l	8.97	3.00	
99 (Mo)	-------- ug/l	--------	---	
101 Ru	448.50 ug/l	20.45	3.00	Fail
102 Ru	250.20 ug/l	47.64	3.00	Fail
104 Ru	-99.97 ug/l	53.60	3.00	
106 (Cd)	-0.37 ug/l	91.90	3.00	
107 Ag	1.22 ug/l	0.68	2.00	
108 (Cd)	-0.59 ug/l	7.71	3.00	
111 Cd	-0.42 ug/l	1.24	1.00	
114 Cd	-0.32 ug/l	4.25	1.00	
120 Sn	0.20 ug/l	10.40	5.00	
121 Sb	0.71 ug/l	8.65	3.00	
137 Ba	-0.02 ug/l	41.95	2.00	
140 Ce	-4.95 ug/l	220.16	2.00	
142 Ce	9.94 ug/l	76.60	2.00	Fail
182 W	-5.01 ug/l	145.19	3.00	
184 W	3.87 ug/l	40.46	3.00	Fail
186 W	5.74 ug/l	34.36	3.00	Fail
203 Tl	-0.08 ug/l	35.45	2.00	
206 Pb	-0.28 ug/l	3.63	3.00	
207 Pb	-0.18 ug/l	9.65	3.00	
208 Pb	-0.04 ug/l	12.01	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3428262.30	4.40	3491440.00	98.2	80 - 120	
45 Sc	1704640.80	4.68	1679677.50	101.5	80 - 120	
74 Ge	289495.53	2.40	290446.66	99.7	80 - 120	
115 In	1081706.40	1.33	1079284.80	100.2	80 - 120	
209 Bi	744421.06	0.92	734170.00	101.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

5 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes: Fail
ISTD: Pass

ICS-A QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\012ICSA.D\012ICSA.D#
Date Acquired: Jun 25 2013 06:16 pm
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: ICS A
Misc Info: 60-23-08
Vial Number: 1207
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: ICS-A
Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.67 ug/l	1.51	10.00	
11 B	1.75 ug/l	7.62	10.00	
23 Na	92250.00 ug/l	4.24	1.20	
24 Mg	91220.00 ug/l	6.19	1.20	
27 Al	91970.00 ug/l	4.25	1.20	
39 K	90840.00 ug/l	2.83	1.20	
44 Ca	97240.00 ug/l	2.84	1.20	
47 Ti	2162.00 ug/l	3.56	1.20	
50 V	1687.00 ug/l	1.66	10.00	
51 V	0.38 ug/l	3.69	10.00	
52 Cr	1.38 ug/l	4.76	10.00	
53 Cr	2.27 ug/l	3.58	10.00	
55 Mn	1.25 ug/l	4.15	10.00	
57 Fe	90310.00 ug/l	4.08	10.00	Fail
59 Co	1.06 ug/l	4.51	10.00	
60 Ni	2.94 ug/l	1.68	10.00	
63 Cu	2.32 ug/l	6.69	10.00	
66 Zn	2.21 ug/l	5.48	10.00	
75 As	0.26 ug/l	115.47	10.00	
77 (As)	3.10 ug/l	35.86	10.00	
78 Se	0.09 ug/l	1384.30	10.00	
82 Se	-0.10 ug/l	391.51	10.00	
83 (Se)	215.40 ug/l	198.65	10.00	
88 Sr	3192.00 ug/l	2.32	10.00	
89 Y	-------- ug/l	--------	10.00	
98 Mo	2200.00 ug/l	2.53	1.20	
99 (Mo)	-------- ug/l	--------	---	
101 Ru	1621.00 ug/l	3.85	10.00	
102 Ru	1843.00 ug/l	2.04	10.00	
104 Ru	-423.20 ug/l	9.09	10.00	
106 (Cd)	0.27 ug/l	78.34	10.00	
107 Ag	1.33 ug/l	5.05	10.00	
108 (Cd)	21.97 ug/l	7.68	10.00	
111 Cd	0.18 ug/l	138.05	10.00	
114 Cd	1.32 ug/l	3.68	10.00	
120 Sn	0.19 ug/l	18.26	10.00	
121 Sb	0.80 ug/l	4.84	10.00	
137 Ba	7.39 ug/l	4.46	10.00	
140 Ce	968.80 ug/l	6.12	10.00	
142 Ce	329.10 ug/l	18.79	10.00	
182 W	5054.00 ug/l	3.70	10.00	
184 W	4756.00 ug/l	2.07	10.00	
186 W	5787.00 ug/l	4.55	10.00	
203 Tl	-0.31 ug/l	11.14	10.00	
206 Pb	0.06 ug/l	41.70	10.00	
207 Pb	0.11 ug/l	21.84	10.00	
208 Pb	0.27 ug/l	10.10	10.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2938489.80	1.35	3491440.00	84.2	60 - 120	
45 Sc	1556764.30	3.29	1679677.50	92.7	60 - 120	
74 Ge	246985.55	0.90	290446.66	85.0	60 - 120	
115 In	905950.31	1.83	1079284.80	83.9	60 - 120	
209 Bi	587878.88	0.56	734170.00	80.1	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes: Fail
ISTD: Pass

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\013ICSAB.D\013ICSAB.D#
Date Acquired: Jun 25 2013 06:20 pm
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: ICS AB
Misc Info: 60-23-09
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: ICS-AB
Dilution Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	Expected	QC Range(%)	Flag
9 Be	-0.67	ug/l	2.26	0.00	0 - 0	
11 B	1.29	ug/l	16.35	0.00	0 - 0	
23 Na	98640.00	ug/l	7.04	100000.00	80 - 120	
24 Mg	100700.00	ug/l	7.59	100000.00	80 - 120	
27 Al	97450.00	ug/l	6.14	100000.00	80 - 120	
39 K	95660.00	ug/l	3.74	100000.00	80 - 120	
44 Ca	99130.00	ug/l	2.57	100000.00	80 - 120	
47 Ti	2202.00	ug/l	3.02	2000.00	80 - 120	
50 V	1752.00	ug/l	2.74	40.00	80 - 120	Fail
51 V	42.39	ug/l	3.00	40.00	80 - 120	
52 Cr	21.57	ug/l	1.64	20.00	80 - 120	
53 Cr	23.39	ug/l	2.99	20.00	80 - 120	
55 Mn	21.23	ug/l	2.78	20.00	80 - 120	
57 Fe	94340.00	ug/l	1.78	100000.00	80 - 120	
59 Co	40.08	ug/l	3.67	40.00	80 - 120	
60 Ni	40.01	ug/l	3.25	40.00	80 - 120	
63 Cu	20.76	ug/l	3.68	20.00	80 - 120	
66 Zn	18.08	ug/l	2.28	20.00	80 - 120	
75 As	18.72	ug/l	3.10	20.00	80 - 120	
77 (As)	20.92	ug/l	4.40	0.00	0 - 0	
78 Se	18.41	ug/l	6.23	0.00	0 - 0	
82 Se	16.94	ug/l	2.82	20.00	80 - 120	
83 (Se)	270.10	ug/l	82.67	0.00	0 - 0	
88 Sr	3286.00	ug/l	6.55	0.00	0 - 0	Fail
89 Y	--------	ug/l	--------	0.00	0 - 0	
98 Mo	2176.00	ug/l	1.95	2000.00	80 - 120	
99 (Mo)	--------	ug/l	--------	---	##### - #####	
101 Ru	1429.00	ug/l	3.31	0.00	0 - 0	Fail
102 Ru	1315.00	ug/l	11.70	0.00	0 - 0	Fail
104 Ru	569.50	ug/l	15.90	0.00	0 - 0	Fail
106 (Cd)	22.36	ug/l	4.07	0.00	0 - 0	
107 Ag	19.71	ug/l	1.66	20.00	80 - 120	
108 (Cd)	51.08	ug/l	0.76	10.00	80 - 120	
111 Cd	8.86	ug/l	4.78	10.00	80 - 120	
114 Cd	10.60	ug/l	2.90	10.00	80 - 120	
120 Sn	0.17	ug/l	9.97	0.00	0 - 0	
121 Sb	1.31	ug/l	2.60	0.00	0 - 0	
137 Ba	7.37	ug/l	1.44	0.00	0 - 0	
140 Ce	2152.00	ug/l	5.93	0.00	0 - 0	Fail
142 Ce	673.60	ug/l	2.84	0.00	0 - 0	Fail
182 W	3626.00	ug/l	4.25	---	##### - 0	
184 W	3325.00	ug/l	3.66	---	##### - 0	
186 W	3961.00	ug/l	11.32	---	##### - 0	
203 Tl	-0.20	ug/l	9.51	0.00	80 - 120	
206 Pb	0.21	ug/l	2.09	0.00	80 - 120	
207 Pb	0.27	ug/l	21.51	0.00	80 - 120	
208 Pb	0.42	ug/l	5.38	0.00	80 - 120	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2934441.00	0.44	3491440.00	84.0	60 - 120	
45 Sc	1501534.90	2.44	1679677.50	89.4	60 - 120	
74 Ge	245590.00	1.11	290446.66	84.6	60 - 120	
115 In	908115.19	1.21	1079284.80	84.1	60 - 120	
209 Bi	587020.00	0.91	734170.00	80.0	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

7 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Fail
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\019CCV1.D\019CCV1.D#
Date Acquired: Jun 25 2013 06:42 pm
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	102.40 ug/l	3.26	100.00	90 - 110	
11 B	99.11 ug/l	6.14	100.00	90 - 110	
23 Na	983.30 ug/l	6.68	1000.00	90 - 110	
24 Mg	1021.00 ug/l	5.09	1000.00	90 - 110	
27 Al	122.20 ug/l	4.30	100.00	90 - 110	Fail
39 K	1002.00 ug/l	2.38	1000.00	90 - 110	
44 Ca	979.90 ug/l	2.76	1000.00	90 - 110	
47 Ti	51.22 ug/l	4.59	50.00	90 - 110	
50 V	102.80 ug/l	4.80	100.00	90 - 110	
51 V	103.50 ug/l	4.27	100.00	90 - 110	
52 Cr	104.20 ug/l	4.77	100.00	90 - 110	
53 Cr	103.30 ug/l	3.30	100.00	90 - 110	
55 Mn	102.30 ug/l	2.77	100.00	90 - 110	
57 Fe	994.60 ug/l	4.38	1000.00	90 - 110	
59 Co	99.45 ug/l	5.24	100.00	90 - 110	
60 Ni	101.30 ug/l	5.30	100.00	90 - 110	
63 Cu	103.60 ug/l	6.21	100.00	90 - 110	
66 Zn	108.40 ug/l	6.24	100.00	90 - 110	
75 As	99.78 ug/l	1.53	100.00	90 - 110	
77 (As)	101.20 ug/l	3.04	100.00	90 - 110	
78 Se	104.80 ug/l	3.85	100.00	90 - 110	
82 Se	103.30 ug/l	4.28	100.00	90 - 110	
83 (Se)	-101.10 ug/l	121.36	100.00	90 - 110	
88 Sr	290.40 ug/l	7.67	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	49.59 ug/l	4.33	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	492.30 ug/l	57.67	100.00	90 - 110	Fail
102 Ru	372.00 ug/l	49.14	100.00	90 - 110	Fail
104 Ru	-35.14 ug/l	40.84	100.00	90 - 110	Fail
106 (Cd)	101.60 ug/l	4.31	100.00	90 - 110	
107 Ag	100.30 ug/l	3.39	100.00	90 - 110	
108 (Cd)	105.30 ug/l	2.12	100.00	90 - 110	
111 Cd	103.30 ug/l	5.38	100.00	90 - 110	
114 Cd	103.30 ug/l	4.32	100.00	90 - 110	
120 Sn	52.44 ug/l	4.93	50.00	90 - 110	
121 Sb	52.37 ug/l	8.86	50.00	90 - 110	
137 Ba	98.81 ug/l	3.15	100.00	90 - 110	
140 Ce	25.28 ug/l	38.05	100.00	90 - 110	Fail
142 Ce	30.69 ug/l	32.38	100.00	90 - 110	Fail
182 W	22.12 ug/l	45.57	100.00	90 - 110	Fail
184 W	14.57 ug/l	22.32	100.00	90 - 110	Fail
186 W	17.21 ug/l	88.73	100.00	90 - 110	Fail
203 Tl	99.08 ug/l	2.74	100.00	90 - 110	
206 Pb	101.20 ug/l	3.48	100.00	90 - 110	
207 Pb	98.61 ug/l	4.37	100.00	90 - 110	
208 Pb	99.79 ug/l	3.81	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3261717.30	2.41	3491440.00	93.4	80 - 120	
45 Sc	1628544.60	3.72	1679677.50	97.0	80 - 120	
74 Ge	296484.44	1.27	290446.66	102.1	80 - 120	
115 In	1069874.50	2.11	1079284.80	99.1	80 - 120	
209 Bi	755780.00	1.03	734170.00	102.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

10 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\020_CCB.D\020_CCB.D#
Date Acquired: Jun 25 2013 06:46 pm
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.66 ug/l	2.56	1.00	
11 B	0.86 ug/l	22.36	5.00	
23 Na	-32.08 ug/l	10.48	10.00	
24 Mg	-4.53 ug/l	60.28	10.00	
27 Al	11.75 ug/l	29.78	3.00	Fail
39 K	-9.67 ug/l	39.50	5.00	
44 Ca	12.71 ug/l	23.63	10.00	Fail
47 Ti	0.33 ug/l	16.08	5.00	
50 V	0.25 ug/l	42.26	2.00	
51 V	0.18 ug/l	7.72	2.00	
52 Cr	0.02 ug/l	7.31	2.00	
53 Cr	-0.20 ug/l	12.51	2.00	
55 Mn	-0.38 ug/l	1.71	2.00	
57 Fe	10.57 ug/l	16.09	10.00	Fail
59 Co	-0.30 ug/l	7.02	2.00	
60 Ni	0.25 ug/l	3.66	2.00	
63 Cu	-0.31 ug/l	6.62	5.00	
66 Zn	-0.94 ug/l	2.44	5.00	
75 As	-0.05 ug/l	242.85	2.00	
77 (As)	-1.21 ug/l	3.31	3.00	
78 Se	0.26 ug/l	410.63	3.00	
82 Se	-0.12 ug/l	428.97	2.00	
83 (Se)	-118.10 ug/l	156.99	3.00	
88 Sr	-35.69 ug/l	17.96	2.00	
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.44 ug/l	14.59	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	183.70 ug/l	178.66	5.00	Fail
102 Ru	353.10 ug/l	81.20	5.00	Fail
104 Ru	-79.57 ug/l	141.89	5.00	
106 (Cd)	-0.16 ug/l	316.03	3.00	
107 Ag	1.20 ug/l	1.33	2.00	
108 (Cd)	-0.58 ug/l	15.17	3.00	
111 Cd	-0.44 ug/l	10.79	1.00	
114 Cd	-0.33 ug/l	9.09	1.00	
120 Sn	0.27 ug/l	6.94	5.00	
121 Sb	1.02 ug/l	10.68	3.00	
137 Ba	-0.02 ug/l	45.60	2.00	
140 Ce	2.07 ug/l	462.31	2.00	Fail
142 Ce	10.99 ug/l	39.16	2.00	Fail
182 W	-0.32 ug/l	64.49	2.00	
184 W	6.73 ug/l	95.42	2.00	Fail
186 W	7.04 ug/l	131.64	2.00	Fail
203 Tl	-0.10 ug/l	32.11	2.00	
206 Pb	-0.31 ug/l	6.45	3.00	
207 Pb	-0.22 ug/l	10.11	3.00	
208 Pb	-0.07 ug/l	24.27	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3176170.80	1.28	3491440.00	91.0	80 - 120	
45 Sc	1620258.60	2.04	1679677.50	96.5	80 - 120	
74 Ge	287780.00	0.54	290446.66	99.1	80 - 120	
115 In	1026628.50	1.15	1079284.80	95.1	80 - 120	
209 Bi	737730.00	1.93	734170.00	100.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\031CCV1.D\031CCV1.D#
Date Acquired: Jun 25 2013 07:29 pm
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	98.82 ug/l	2.07	100.00	90 - 110	
11 B	105.70 ug/l	3.63	100.00	90 - 110	
23 Na	980.90 ug/l	2.16	1000.00	90 - 110	
24 Mg	1004.00 ug/l	0.81	1000.00	90 - 110	
27 Al	105.90 ug/l	2.23	100.00	90 - 110	
39 K	987.50 ug/l	2.30	1000.00	90 - 110	
44 Ca	948.30 ug/l	1.72	1000.00	90 - 110	
47 Ti	48.98 ug/l	1.33	50.00	90 - 110	
50 V	100.20 ug/l	2.56	100.00	90 - 110	
51 V	101.90 ug/l	3.19	100.00	90 - 110	
52 Cr	102.70 ug/l	3.87	100.00	90 - 110	
53 Cr	101.20 ug/l	3.36	100.00	90 - 110	
55 Mn	101.20 ug/l	3.48	100.00	90 - 110	
57 Fe	954.90 ug/l	1.89	1000.00	90 - 110	
59 Co	96.95 ug/l	2.96	100.00	90 - 110	
60 Ni	98.48 ug/l	1.45	100.00	90 - 110	
63 Cu	99.91 ug/l	1.28	100.00	90 - 110	
66 Zn	103.40 ug/l	0.84	100.00	90 - 110	
75 As	98.89 ug/l	1.90	100.00	90 - 110	
77 (As)	99.02 ug/l	2.40	100.00	90 - 110	
78 Se	98.65 ug/l	3.38	100.00	90 - 110	
82 Se	100.50 ug/l	1.79	100.00	90 - 110	
83 (Se)	-284.70 ug/l	12.83	100.00	90 - 110	
88 Sr	274.80 ug/l	5.58	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	47.58 ug/l	2.39	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1368.00 ug/l	18.66	100.00	90 - 110	Fail
102 Ru	1345.00 ug/l	11.18	100.00	90 - 110	Fail
104 Ru	-125.60 ug/l	47.70	100.00	90 - 110	Fail
106 (Cd)	100.70 ug/l	3.09	100.00	90 - 110	
107 Ag	100.10 ug/l	3.35	100.00	90 - 110	
108 (Cd)	100.10 ug/l	2.73	100.00	90 - 110	
111 Cd	101.10 ug/l	3.08	100.00	90 - 110	
114 Cd	101.80 ug/l	2.20	100.00	90 - 110	
120 Sn	50.63 ug/l	2.33	50.00	90 - 110	
121 Sb	49.65 ug/l	8.22	50.00	90 - 110	
137 Ba	96.71 ug/l	3.40	100.00	90 - 110	
140 Ce	18.49 ug/l	95.78	100.00	90 - 110	Fail
142 Ce	34.72 ug/l	12.08	100.00	90 - 110	Fail
182 W	2.76 ug/l	440.13	100.00	90 - 110	Fail
184 W	16.26 ug/l	41.10	100.00	90 - 110	Fail
186 W	12.48 ug/l	17.52	100.00	90 - 110	Fail
203 Tl	98.37 ug/l	2.72	100.00	90 - 110	
206 Pb	100.20 ug/l	2.37	100.00	90 - 110	
207 Pb	96.99 ug/l	3.78	100.00	90 - 110	
208 Pb	98.14 ug/l	3.11	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3498562.80	3.62	3491440.00	100.2	80 - 120	
45 Sc	1734890.90	2.74	1679677.50	103.3	80 - 120	
74 Ge	305782.22	1.87	290446.66	105.3	80 - 120	
115 In	1086047.80	0.70	1079284.80	100.6	80 - 120	
209 Bi	758427.75	0.92	734170.00	103.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\032_CCB.D\032_CCB.D#
Date Acquired: Jun 25 2013 07:32 pm
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.66 ug/l	1.40	1.00	
11 B	7.76 ug/l	8.40	5.00	Fail
23 Na	-33.00 ug/l	16.35	10.00	
24 Mg	-16.51 ug/l	2.10	10.00	
27 Al	0.53 ug/l	10.24	3.00	
39 K	-8.76 ug/l	63.52	5.00	
44 Ca	1.32 ug/l	30.31	10.00	
47 Ti	0.08 ug/l	29.15	5.00	
50 V	0.26 ug/l	118.16	2.00	
51 V	0.18 ug/l	5.43	2.00	
52 Cr	0.05 ug/l	51.14	2.00	
53 Cr	-0.21 ug/l	17.24	2.00	
55 Mn	-0.37 ug/l	4.17	2.00	
57 Fe	-1.05 ug/l	34.71	10.00	
59 Co	-0.40 ug/l	1.63	2.00	
60 Ni	0.25 ug/l	4.79	2.00	
63 Cu	-0.32 ug/l	4.38	5.00	
66 Zn	-0.90 ug/l	1.78	5.00	
75 As	-0.11 ug/l	14.41	2.00	
77 (As)	-1.17 ug/l	14.21	3.00	
78 Se	-1.20 ug/l	27.67	3.00	
82 Se	-0.33 ug/l	62.01	2.00	
83 (Se)	-40.17 ug/l	697.78	3.00	
88 Sr	-34.78 ug/l	16.20	2.00	
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.15 ug/l	21.08	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	824.50 ug/l	28.37	5.00	Fail
102 Ru	726.60 ug/l	17.81	5.00	Fail
104 Ru	-171.40 ug/l	18.10	5.00	
106 (Cd)	-0.72 ug/l	69.69	3.00	
107 Ag	1.21 ug/l	1.32	2.00	
108 (Cd)	-0.54 ug/l	14.58	3.00	
111 Cd	-0.49 ug/l	6.24	1.00	
114 Cd	-0.34 ug/l	2.32	1.00	
120 Sn	0.28 ug/l	15.02	5.00	
121 Sb	1.25 ug/l	8.34	3.00	
137 Ba	-0.01 ug/l	497.26	2.00	
140 Ce	-8.07 ug/l	37.59	2.00	
142 Ce	7.94 ug/l	135.30	2.00	Fail
182 W	-1.45 ug/l	289.07	2.00	
184 W	5.85 ug/l	75.12	2.00	Fail
186 W	1.20 ug/l	489.11	2.00	
203 Tl	-0.21 ug/l	11.33	2.00	
206 Pb	-0.07 ug/l	122.24	3.00	
207 Pb	0.02 ug/l	99.10	3.00	
208 Pb	0.16 ug/l	42.18	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3456488.50	2.23	3491440.00	99.0	80 - 120	
45 Sc	1658641.50	3.18	1679677.50	98.7	80 - 120	
74 Ge	295601.13	1.87	290446.66	101.8	80 - 120	
115 In	1073222.90	1.59	1079284.80	99.4	80 - 120	
209 Bi	737596.63	3.45	734170.00	100.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

5 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\043CCV1.D\043CCV1.D#
Date Acquired: Jun 25 2013 08:18 pm
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	97.57 ug/l	3.58	100.00	90 - 110	
11 B	107.40 ug/l	1.04	100.00	90 - 110	
23 Na	1044.00 ug/l	4.73	1000.00	90 - 110	
24 Mg	1031.00 ug/l	4.82	1000.00	90 - 110	
27 Al	106.30 ug/l	6.17	100.00	90 - 110	
39 K	986.80 ug/l	4.28	1000.00	90 - 110	
44 Ca	952.10 ug/l	3.29	1000.00	90 - 110	
47 Ti	49.06 ug/l	3.89	50.00	90 - 110	
50 V	99.81 ug/l	4.00	100.00	90 - 110	
51 V	101.00 ug/l	5.49	100.00	90 - 110	
52 Cr	100.10 ug/l	5.31	100.00	90 - 110	
53 Cr	99.00 ug/l	5.89	100.00	90 - 110	
55 Mn	97.69 ug/l	5.52	100.00	90 - 110	
57 Fe	958.20 ug/l	3.94	1000.00	90 - 110	
59 Co	97.55 ug/l	3.49	100.00	90 - 110	
60 Ni	98.88 ug/l	4.18	100.00	90 - 110	
63 Cu	100.30 ug/l	3.37	100.00	90 - 110	
66 Zn	101.00 ug/l	5.79	100.00	90 - 110	
75 As	97.58 ug/l	2.63	100.00	90 - 110	
77 (As)	97.89 ug/l	2.28	100.00	90 - 110	
78 Se	99.23 ug/l	3.15	100.00	90 - 110	
82 Se	97.61 ug/l	3.18	100.00	90 - 110	
83 (Se)	-73.48 ug/l	259.53	100.00	90 - 110	
88 Sr	268.30 ug/l	5.05	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	48.54 ug/l	3.97	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1483.00 ug/l	5.03	100.00	90 - 110	Fail
102 Ru	1138.00 ug/l	12.56	100.00	90 - 110	Fail
104 Ru	-183.70 ug/l	17.78	100.00	90 - 110	Fail
106 (Cd)	100.00 ug/l	2.33	100.00	90 - 110	
107 Ag	98.83 ug/l	2.37	100.00	90 - 110	
108 (Cd)	100.20 ug/l	4.29	100.00	90 - 110	
111 Cd	98.70 ug/l	2.20	100.00	90 - 110	
114 Cd	99.66 ug/l	2.89	100.00	90 - 110	
120 Sn	49.45 ug/l	4.18	50.00	90 - 110	
121 Sb	47.75 ug/l	8.05	50.00	90 - 110	
137 Ba	94.75 ug/l	2.40	100.00	90 - 110	
140 Ce	10.39 ug/l	77.40	100.00	90 - 110	Fail
142 Ce	7.22 ug/l	142.80	100.00	90 - 110	Fail
182 W	8.28 ug/l	102.86	100.00	90 - 110	Fail
184 W	18.68 ug/l	20.02	100.00	90 - 110	Fail
186 W	18.10 ug/l	60.83	100.00	90 - 110	Fail
203 Tl	99.08 ug/l	4.55	100.00	90 - 110	
206 Pb	101.70 ug/l	3.82	100.00	90 - 110	
207 Pb	98.26 ug/l	3.56	100.00	90 - 110	
208 Pb	99.22 ug/l	3.39	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3705660.30	0.99	3491440.00	106.1	80 - 120	
45 Sc	1792583.80	4.61	1679677.50	106.7	80 - 120	
74 Ge	311041.13	1.28	290446.66	107.1	80 - 120	
115 In	1124755.10	2.00	1079284.80	104.2	80 - 120	
209 Bi	767176.63	1.51	734170.00	104.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\044_CCB.D\044_CCB.D#
Date Acquired: Jun 25 2013 08:21 pm
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.68 ug/l	1.50	1.00	
11 B	7.28 ug/l	5.14	5.00	Fail
23 Na	-27.23 ug/l	12.47	10.00	
24 Mg	-16.78 ug/l	1.18	10.00	
27 Al	-0.15 ug/l	88.09	3.00	
39 K	-9.32 ug/l	18.24	5.00	
44 Ca	1.10 ug/l	21.81	10.00	
47 Ti	0.05 ug/l	39.86	5.00	
50 V	0.08 ug/l	44.90	2.00	
51 V	0.18 ug/l	0.67	2.00	
52 Cr	0.01 ug/l	202.86	2.00	
53 Cr	-0.29 ug/l	1.22	2.00	
55 Mn	-0.39 ug/l	3.83	2.00	
57 Fe	-1.53 ug/l	54.48	10.00	
59 Co	-0.41 ug/l	2.24	2.00	
60 Ni	0.24 ug/l	4.93	2.00	
63 Cu	-0.33 ug/l	4.56	5.00	
66 Zn	-0.94 ug/l	2.15	5.00	
75 As	-0.08 ug/l	96.94	2.00	
77 (As)	-1.17 ug/l	20.37	3.00	
78 Se	-0.17 ug/l	572.31	3.00	
82 Se	-0.18 ug/l	354.82	2.00	
83 (Se)	-241.60 ug/l	119.91	3.00	
88 Sr	-33.36 ug/l	15.88	2.00	
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.15 ug/l	6.80	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	860.30 ug/l	18.70	5.00	Fail
102 Ru	537.50 ug/l	23.81	5.00	Fail
104 Ru	-143.10 ug/l	34.26	5.00	
106 (Cd)	-0.23 ug/l	88.81	3.00	
107 Ag	1.20 ug/l	0.97	2.00	
108 (Cd)	-0.69 ug/l	11.89	3.00	
111 Cd	-0.45 ug/l	4.86	1.00	
114 Cd	-0.36 ug/l	4.51	1.00	
120 Sn	0.26 ug/l	6.47	5.00	
121 Sb	1.17 ug/l	7.43	3.00	
137 Ba	-0.04 ug/l	18.99	2.00	
140 Ce	-2.85 ug/l	173.17	2.00	
142 Ce	19.26 ug/l	62.93	2.00	Fail
182 W	3.29 ug/l	219.15	2.00	Fail
184 W	8.54 ug/l	66.09	2.00	Fail
186 W	-0.01 ug/l	52746.00	2.00	
203 Tl	-0.22 ug/l	10.22	2.00	
206 Pb	-0.31 ug/l	2.93	3.00	
207 Pb	-0.24 ug/l	3.80	3.00	
208 Pb	-0.08 ug/l	15.96	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3598230.00	4.51	3491440.00	103.1	80 - 120	
45 Sc	1683871.40	4.97	1679677.50	100.2	80 - 120	
74 Ge	293823.34	2.35	290446.66	101.2	80 - 120	
115 In	1075567.10	1.78	1079284.80	99.7	80 - 120	
209 Bi	735851.06	1.75	734170.00	100.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

6 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\056CCV1.D\056CCV1.D#
Date Acquired: Jun 25 2013 09:07 pm
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	101.60 ug/l	4.13	100.00	90 - 110	
11 B	105.50 ug/l	7.50	100.00	90 - 110	
23 Na	1144.00 ug/l	4.71	1000.00	90 - 110	Fail
24 Mg	1038.00 ug/l	6.61	1000.00	90 - 110	
27 Al	105.60 ug/l	5.58	100.00	90 - 110	
39 K	950.80 ug/l	6.84	1000.00	90 - 110	
44 Ca	970.30 ug/l	4.04	1000.00	90 - 110	
47 Ti	49.26 ug/l	6.37	50.00	90 - 110	
50 V	98.70 ug/l	2.81	100.00	90 - 110	
51 V	99.40 ug/l	1.39	100.00	90 - 110	
52 Cr	99.68 ug/l	3.33	100.00	90 - 110	
53 Cr	100.50 ug/l	4.58	100.00	90 - 110	
55 Mn	100.60 ug/l	4.40	100.00	90 - 110	
57 Fe	950.90 ug/l	4.80	1000.00	90 - 110	
59 Co	96.21 ug/l	4.61	100.00	90 - 110	
60 Ni	96.84 ug/l	6.59	100.00	90 - 110	
63 Cu	99.63 ug/l	6.10	100.00	90 - 110	
66 Zn	100.50 ug/l	6.48	100.00	90 - 110	
75 As	99.67 ug/l	3.99	100.00	90 - 110	
77 (As)	99.04 ug/l	3.43	100.00	90 - 110	
78 Se	100.20 ug/l	3.04	100.00	90 - 110	
82 Se	100.80 ug/l	4.27	100.00	90 - 110	
83 (Se)	6.82 ug/l	2908.30	100.00	90 - 110	
88 Sr	515.70 ug/l	7.69	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	47.31 ug/l	3.61	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1075.00 ug/l	15.31	100.00	90 - 110	Fail
102 Ru	778.80 ug/l	41.56	100.00	90 - 110	Fail
104 Ru	-122.80 ug/l	34.50	100.00	90 - 110	Fail
106 (Cd)	99.30 ug/l	6.65	100.00	90 - 110	
107 Ag	96.42 ug/l	4.03	100.00	90 - 110	
108 (Cd)	96.60 ug/l	5.60	100.00	90 - 110	
111 Cd	96.98 ug/l	3.94	100.00	90 - 110	
114 Cd	98.32 ug/l	3.36	100.00	90 - 110	
120 Sn	48.74 ug/l	6.55	50.00	90 - 110	
121 Sb	47.11 ug/l	11.01	50.00	90 - 110	
137 Ba	93.29 ug/l	3.59	100.00	90 - 110	
140 Ce	10.30 ug/l	54.07	100.00	90 - 110	Fail
142 Ce	46.54 ug/l	103.67	100.00	90 - 110	Fail
182 W	18.42 ug/l	42.10	100.00	90 - 110	Fail
184 W	15.99 ug/l	47.77	100.00	90 - 110	Fail
186 W	10.66 ug/l	88.82	100.00	90 - 110	Fail
203 Tl	97.60 ug/l	4.24	100.00	90 - 110	
206 Pb	99.31 ug/l	3.87	100.00	90 - 110	
207 Pb	97.11 ug/l	4.78	100.00	90 - 110	
208 Pb	97.56 ug/l	4.26	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3410497.80	1.04	3491440.00	97.7	80 - 120	
45 Sc	1720349.90	4.68	1679677.50	102.4	80 - 120	
74 Ge	299132.22	1.78	290446.66	103.0	80 - 120	
115 In	1085506.50	2.50	1079284.80	100.6	80 - 120	
209 Bi	737824.44	2.08	734170.00	100.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

10 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\057_CCB.D\057_CCB.D#
Date Acquired: Jun 25 2013 09:11 pm
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.65 ug/l	6.24	1.00	
11 B	3.62 ug/l	6.82	5.00	
23 Na	75.47 ug/l	55.93	10.00	Fail
24 Mg	-14.47 ug/l	9.47	10.00	
27 Al	-0.38 ug/l	16.82	3.00	
39 K	-19.99 ug/l	29.76	5.00	
44 Ca	29.90 ug/l	53.55	10.00	Fail
47 Ti	0.04 ug/l	38.99	5.00	
50 V	0.09 ug/l	19.68	2.00	
51 V	0.20 ug/l	12.63	2.00	
52 Cr	0.01 ug/l	65.06	2.00	
53 Cr	0.08 ug/l	42.48	2.00	
55 Mn	-0.32 ug/l	11.49	2.00	
57 Fe	-3.71 ug/l	93.90	10.00	
59 Co	-0.41 ug/l	5.19	2.00	
60 Ni	0.28 ug/l	2.26	2.00	
63 Cu	-0.18 ug/l	12.20	5.00	
66 Zn	-0.92 ug/l	4.86	5.00	
75 As	-0.08 ug/l	98.09	2.00	
77 (As)	-1.06 ug/l	12.10	3.00	
78 Se	-2.80 ug/l	9.88	3.00	
82 Se	-0.44 ug/l	85.56	2.00	
83 (Se)	53.82 ug/l	590.12	3.00	
88 Sr	160.40 ug/l	67.02	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.16 ug/l	17.20	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	628.20 ug/l	21.62	5.00	Fail
102 Ru	833.00 ug/l	26.74	5.00	Fail
104 Ru	-230.90 ug/l	8.54	5.00	
106 (Cd)	-0.93 ug/l	38.14	3.00	
107 Ag	1.21 ug/l	2.73	2.00	
108 (Cd)	-0.64 ug/l	12.41	3.00	
111 Cd	-0.48 ug/l	8.86	1.00	
114 Cd	-0.32 ug/l	10.38	1.00	
120 Sn	0.26 ug/l	23.50	5.00	
121 Sb	1.12 ug/l	9.74	3.00	
137 Ba	-0.01 ug/l	295.80	2.00	
140 Ce	1.02 ug/l	1103.20	2.00	
142 Ce	0.83 ug/l	1246.70	2.00	
182 W	-2.77 ug/l	78.73	2.00	
184 W	6.52 ug/l	64.65	2.00	Fail
186 W	2.02 ug/l	267.67	2.00	Fail
203 Tl	-0.25 ug/l	10.79	2.00	
206 Pb	-0.25 ug/l	11.21	3.00	
207 Pb	-0.15 ug/l	31.00	3.00	
208 Pb	-0.02 ug/l	193.47	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3482984.00	2.68	3491440.00	99.8	80 - 120	
45 Sc	1735327.30	8.08	1679677.50	103.3	80 - 120	
74 Ge	296020.00	1.66	290446.66	101.9	80 - 120	
115 In	1096771.60	2.11	1079284.80	101.6	80 - 120	
209 Bi	751417.13	3.34	734170.00	102.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

7 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\068CCV1.D\068CCV1.D#
Date Acquired: Jun 25 2013 09:53 pm
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	98.48 ug/l	2.40	100.00	90 - 110	
11 B	96.67 ug/l	7.79	100.00	90 - 110	
23 Na	1286.00 ug/l	0.80	1000.00	90 - 110	Fail
24 Mg	1050.00 ug/l	4.15	1000.00	90 - 110	
27 Al	109.30 ug/l	3.09	100.00	90 - 110	
39 K	978.80 ug/l	3.64	1000.00	90 - 110	
44 Ca	949.20 ug/l	3.31	1000.00	90 - 110	
47 Ti	48.09 ug/l	2.55	50.00	90 - 110	
50 V	96.72 ug/l	1.14	100.00	90 - 110	
51 V	100.10 ug/l	3.89	100.00	90 - 110	
52 Cr	100.00 ug/l	4.53	100.00	90 - 110	
53 Cr	98.75 ug/l	4.85	100.00	90 - 110	
55 Mn	97.65 ug/l	3.54	100.00	90 - 110	
57 Fe	929.40 ug/l	4.28	1000.00	90 - 110	
59 Co	96.82 ug/l	4.16	100.00	90 - 110	
60 Ni	96.70 ug/l	3.80	100.00	90 - 110	
63 Cu	99.53 ug/l	4.48	100.00	90 - 110	
66 Zn	109.50 ug/l	2.26	100.00	90 - 110	
75 As	98.07 ug/l	2.22	100.00	90 - 110	
77 (As)	100.00 ug/l	3.65	100.00	90 - 110	
78 Se	101.50 ug/l	2.90	100.00	90 - 110	
82 Se	101.70 ug/l	4.07	100.00	90 - 110	
83 (Se)	-196.00 ug/l	174.90	100.00	90 - 110	
88 Sr	534.40 ug/l	10.68	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	48.59 ug/l	2.88	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	744.70 ug/l	21.30	100.00	90 - 110	Fail
102 Ru	619.00 ug/l	24.15	100.00	90 - 110	Fail
104 Ru	-102.70 ug/l	53.19	100.00	90 - 110	Fail
106 (Cd)	98.27 ug/l	2.31	100.00	90 - 110	
107 Ag	96.57 ug/l	2.85	100.00	90 - 110	
108 (Cd)	97.27 ug/l	3.99	100.00	90 - 110	
111 Cd	96.91 ug/l	4.12	100.00	90 - 110	
114 Cd	98.04 ug/l	3.47	100.00	90 - 110	
120 Sn	49.13 ug/l	3.01	50.00	90 - 110	
121 Sb	47.05 ug/l	9.33	50.00	90 - 110	
137 Ba	92.19 ug/l	4.94	100.00	90 - 110	
140 Ce	63.49 ug/l	35.72	100.00	90 - 110	Fail
142 Ce	46.55 ug/l	62.11	100.00	90 - 110	Fail
182 W	8.76 ug/l	61.37	100.00	90 - 110	Fail
184 W	20.84 ug/l	45.78	100.00	90 - 110	Fail
186 W	13.17 ug/l	74.09	100.00	90 - 110	Fail
203 Tl	95.76 ug/l	2.48	100.00	90 - 110	
206 Pb	97.59 ug/l	1.33	100.00	90 - 110	
207 Pb	95.25 ug/l	2.62	100.00	90 - 110	
208 Pb	96.36 ug/l	2.17	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3592348.30	4.60	3491440.00	102.9	80 - 120	
45 Sc	1638272.00	1.96	1679677.50	97.5	80 - 120	
74 Ge	281054.44	0.79	290446.66	96.8	80 - 120	
115 In	1030640.40	2.22	1079284.80	95.5	80 - 120	
209 Bi	701485.56	1.14	734170.00	95.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

10 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\069_CCB.D\069_CCB.D#
Date Acquired: Jun 25 2013 09:56 pm
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.67 ug/l	4.05	1.00	
11 B	1.89 ug/l	10.16	5.00	
23 Na	179.80 ug/l	47.11	10.00	Fail
24 Mg	-15.07 ug/l	7.67	10.00	
27 Al	1.86 ug/l	60.82	3.00	
39 K	6.50 ug/l	50.14	5.00	Fail
44 Ca	25.73 ug/l	43.02	10.00	Fail
47 Ti	0.05 ug/l	57.65	5.00	
50 V	0.08 ug/l	22.73	2.00	
51 V	0.20 ug/l	8.65	2.00	
52 Cr	0.02 ug/l	100.25	2.00	
53 Cr	0.14 ug/l	4.82	2.00	
55 Mn	-0.21 ug/l	44.41	2.00	
57 Fe	-0.35 ug/l	212.92	10.00	
59 Co	-0.42 ug/l	2.97	2.00	
60 Ni	0.27 ug/l	15.59	2.00	
63 Cu	0.05 ug/l	70.88	5.00	
66 Zn	6.27 ug/l	55.48	5.00	Fail
75 As	-0.09 ug/l	145.24	2.00	
77 (As)	-1.00 ug/l	9.86	3.00	
78 Se	-1.93 ug/l	9.74	3.00	
82 Se	-0.36 ug/l	148.24	2.00	
83 (Se)	-0.30 ug/l	48508.00	3.00	
88 Sr	193.40 ug/l	56.00	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.15 ug/l	9.76	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	504.30 ug/l	43.17	5.00	Fail
102 Ru	605.20 ug/l	41.24	5.00	Fail
104 Ru	-111.40 ug/l	55.00	5.00	
106 (Cd)	-0.76 ug/l	47.21	3.00	
107 Ag	1.20 ug/l	1.63	2.00	
108 (Cd)	-0.65 ug/l	4.31	3.00	
111 Cd	-0.49 ug/l	6.34	1.00	
114 Cd	-0.34 ug/l	5.58	1.00	
120 Sn	0.21 ug/l	6.74	5.00	
121 Sb	1.14 ug/l	8.23	3.00	
137 Ba	-0.01 ug/l	384.29	2.00	
140 Ce	40.19 ug/l	78.93	2.00	Fail
142 Ce	29.58 ug/l	34.96	2.00	Fail
182 W	-1.01 ug/l	210.50	2.00	
184 W	5.29 ug/l	55.32	2.00	Fail
186 W	-3.36 ug/l	113.50	2.00	
203 Tl	-0.27 ug/l	14.06	2.00	
206 Pb	-0.27 ug/l	6.64	3.00	
207 Pb	-0.17 ug/l	16.49	3.00	
208 Pb	-0.03 ug/l	79.84	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3720080.30	0.81	3491440.00	106.5	80 - 120	
45 Sc	1622854.30	2.51	1679677.50	96.6	80 - 120	
74 Ge	280038.88	1.13	290446.66	96.4	80 - 120	
115 In	1036870.10	1.32	1079284.80	96.1	80 - 120	
209 Bi	702120.00	0.23	734170.00	95.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

10 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\080CCV1.D\080CCV1.D#
Date Acquired: Jun 25 2013 10:38 pm
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	97.10 ug/l	1.48	100.00	90 - 110	
11 B	94.81 ug/l	4.27	100.00	90 - 110	
23 Na	1210.00 ug/l	6.45	1000.00	90 - 110	Fail
24 Mg	1023.00 ug/l	6.67	1000.00	90 - 110	
27 Al	103.90 ug/l	4.33	100.00	90 - 110	
39 K	926.40 ug/l	2.26	1000.00	90 - 110	
44 Ca	936.50 ug/l	4.73	1000.00	90 - 110	
47 Ti	47.11 ug/l	3.38	50.00	90 - 110	
50 V	96.54 ug/l	1.60	100.00	90 - 110	
51 V	98.37 ug/l	2.69	100.00	90 - 110	
52 Cr	98.89 ug/l	3.94	100.00	90 - 110	
53 Cr	97.54 ug/l	4.58	100.00	90 - 110	
55 Mn	96.52 ug/l	5.35	100.00	90 - 110	
57 Fe	909.20 ug/l	4.18	1000.00	90 - 110	
59 Co	93.17 ug/l	4.61	100.00	90 - 110	
60 Ni	94.56 ug/l	5.07	100.00	90 - 110	
63 Cu	99.60 ug/l	6.66	100.00	90 - 110	
66 Zn	98.12 ug/l	6.02	100.00	90 - 110	
75 As	97.65 ug/l	2.02	100.00	90 - 110	
77 (As)	99.46 ug/l	7.08	100.00	90 - 110	
78 Se	97.33 ug/l	6.89	100.00	90 - 110	
82 Se	98.51 ug/l	4.28	100.00	90 - 110	
83 (Se)	28.38 ug/l	1118.40	100.00	90 - 110	
88 Sr	467.50 ug/l	12.82	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	46.84 ug/l	4.66	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	803.40 ug/l	21.53	100.00	90 - 110	Fail
102 Ru	890.50 ug/l	16.07	100.00	90 - 110	Fail
104 Ru	-68.74 ug/l	43.08	100.00	90 - 110	Fail
106 (Cd)	95.63 ug/l	4.59	100.00	90 - 110	
107 Ag	93.04 ug/l	3.58	100.00	90 - 110	
108 (Cd)	92.86 ug/l	6.08	100.00	90 - 110	
111 Cd	95.07 ug/l	3.57	100.00	90 - 110	
114 Cd	96.35 ug/l	4.18	100.00	90 - 110	
120 Sn	47.81 ug/l	3.26	50.00	90 - 110	
121 Sb	46.51 ug/l	9.48	50.00	90 - 110	
137 Ba	90.48 ug/l	4.07	100.00	90 - 110	
140 Ce	18.17 ug/l	49.91	100.00	90 - 110	Fail
142 Ce	29.74 ug/l	27.40	100.00	90 - 110	Fail
182 W	14.79 ug/l	3.96	100.00	90 - 110	Fail
184 W	11.96 ug/l	26.76	100.00	90 - 110	Fail
186 W	7.89 ug/l	81.02	100.00	90 - 110	Fail
203 Tl	95.01 ug/l	5.95	100.00	90 - 110	
206 Pb	96.10 ug/l	6.20	100.00	90 - 110	
207 Pb	93.23 ug/l	5.45	100.00	90 - 110	
208 Pb	94.54 ug/l	4.68	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3712419.50	1.21	3491440.00	106.3	80 - 120	
45 Sc	1655052.10	3.05	1679677.50	98.5	80 - 120	
74 Ge	283013.34	0.68	290446.66	97.4	80 - 120	
115 In	1034192.80	1.74	1079284.80	95.8	80 - 120	
209 Bi	705393.31	2.32	734170.00	96.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

10 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\081_CCB.D\081_CCB.D#
Date Acquired: Jun 25 2013 10:42 pm
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.65 ug/l	2.30	1.00	
11 B	1.23 ug/l	15.97	5.00	
23 Na	152.00 ug/l	23.99	10.00	Fail
24 Mg	-9.05 ug/l	24.11	10.00	
27 Al	0.62 ug/l	44.81	3.00	
39 K	-12.89 ug/l	71.68	5.00	
44 Ca	32.04 ug/l	27.40	10.00	Fail
47 Ti	0.09 ug/l	11.41	5.00	
50 V	0.11 ug/l	24.70	2.00	
51 V	0.18 ug/l	2.00	2.00	
52 Cr	0.00 ug/l	1276.50	2.00	
53 Cr	0.09 ug/l	39.33	2.00	
55 Mn	-0.13 ug/l	73.81	2.00	
57 Fe	-2.41 ug/l	38.57	10.00	
59 Co	-0.40 ug/l	3.48	2.00	
60 Ni	0.31 ug/l	15.31	2.00	
63 Cu	1.78 ug/l	26.75	5.00	
66 Zn	-0.54 ug/l	22.84	5.00	
75 As	0.70 ug/l	39.84	2.00	
77 (As)	-0.91 ug/l	18.03	3.00	
78 Se	-2.66 ug/l	36.85	3.00	
82 Se	0.03 ug/l	299.72	2.00	
83 (Se)	-288.60 ug/l	45.70	3.00	
88 Sr	127.10 ug/l	22.47	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.17 ug/l	4.01	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	673.00 ug/l	44.99	5.00	Fail
102 Ru	449.40 ug/l	46.44	5.00	Fail
104 Ru	-168.60 ug/l	36.65	5.00	
106 (Cd)	-0.48 ug/l	93.63	3.00	
107 Ag	1.21 ug/l	0.36	2.00	
108 (Cd)	-0.60 ug/l	20.67	3.00	
111 Cd	-0.45 ug/l	15.24	1.00	
114 Cd	-0.32 ug/l	1.53	1.00	
120 Sn	0.26 ug/l	10.01	5.00	
121 Sb	1.14 ug/l	8.93	3.00	
137 Ba	0.01 ug/l	370.21	2.00	
140 Ce	8.59 ug/l	115.57	2.00	Fail
142 Ce	1.39 ug/l	291.79	2.00	
182 W	-7.15 ug/l	50.48	2.00	
184 W	4.33 ug/l	78.02	2.00	Fail
186 W	-3.34 ug/l	116.66	2.00	
203 Tl	-0.25 ug/l	8.75	2.00	
206 Pb	-0.25 ug/l	8.42	3.00	
207 Pb	-0.16 ug/l	11.40	3.00	
208 Pb	-0.02 ug/l	168.59	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3686075.80	1.41	3491440.00	105.6	80 - 120	
45 Sc	1651976.00	3.05	1679677.50	98.4	80 - 120	
74 Ge	275488.88	1.45	290446.66	94.9	80 - 120	
115 In	1028645.90	0.90	1079284.80	95.3	80 - 120	
209 Bi	701131.94	1.77	734170.00	95.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

7 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\092CCV1.D\092CCV1.D#
Date Acquired: Jun 25 2013 11:24 pm
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	95.70 ug/l	3.82	100.00	90 - 110	
11 B	94.21 ug/l	6.52	100.00	90 - 110	
23 Na	1066.00 ug/l	8.85	1000.00	90 - 110	
24 Mg	1021.00 ug/l	8.41	1000.00	90 - 110	
27 Al	106.60 ug/l	10.19	100.00	90 - 110	
39 K	941.90 ug/l	9.33	1000.00	90 - 110	
44 Ca	923.70 ug/l	6.66	1000.00	90 - 110	
47 Ti	48.60 ug/l	4.62	50.00	90 - 110	
50 V	97.29 ug/l	6.56	100.00	90 - 110	
51 V	98.94 ug/l	6.06	100.00	90 - 110	
52 Cr	98.80 ug/l	6.90	100.00	90 - 110	
53 Cr	96.34 ug/l	6.82	100.00	90 - 110	
55 Mn	95.24 ug/l	7.52	100.00	90 - 110	
57 Fe	903.20 ug/l	7.24	1000.00	90 - 110	
59 Co	92.64 ug/l	4.78	100.00	90 - 110	
60 Ni	94.59 ug/l	5.22	100.00	90 - 110	
63 Cu	99.07 ug/l	5.38	100.00	90 - 110	
66 Zn	100.10 ug/l	6.20	100.00	90 - 110	
75 As	99.64 ug/l	3.96	100.00	90 - 110	
77 (As)	100.40 ug/l	2.66	100.00	90 - 110	
78 Se	98.81 ug/l	5.02	100.00	90 - 110	
82 Se	101.50 ug/l	4.14	100.00	90 - 110	
83 (Se)	-59.84 ug/l	386.03	100.00	90 - 110	
88 Sr	413.90 ug/l	6.61	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	47.64 ug/l	3.30	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1129.00 ug/l	1.80	100.00	90 - 110	Fail
102 Ru	1156.00 ug/l	8.12	100.00	90 - 110	Fail
104 Ru	-159.60 ug/l	7.26	100.00	90 - 110	Fail
106 (Cd)	98.93 ug/l	3.83	100.00	90 - 110	
107 Ag	95.67 ug/l	4.47	100.00	90 - 110	
108 (Cd)	96.84 ug/l	6.25	100.00	90 - 110	
111 Cd	95.82 ug/l	4.21	100.00	90 - 110	
114 Cd	97.27 ug/l	4.34	100.00	90 - 110	
120 Sn	49.28 ug/l	5.11	50.00	90 - 110	
121 Sb	46.61 ug/l	10.05	50.00	90 - 110	
137 Ba	93.02 ug/l	4.62	100.00	90 - 110	
140 Ce	30.59 ug/l	49.66	100.00	90 - 110	Fail
142 Ce	5.96 ug/l	120.63	100.00	90 - 110	Fail
182 W	19.74 ug/l	41.26	100.00	90 - 110	Fail
184 W	15.85 ug/l	22.75	100.00	90 - 110	Fail
186 W	15.47 ug/l	25.27	100.00	90 - 110	Fail
203 Tl	97.82 ug/l	6.02	100.00	90 - 110	
206 Pb	99.35 ug/l	4.63	100.00	90 - 110	
207 Pb	96.73 ug/l	4.84	100.00	90 - 110	
208 Pb	97.10 ug/l	4.58	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3742165.00	2.26	3491440.00	107.2	80 - 120	
45 Sc	1670026.50	5.39	1679677.50	99.4	80 - 120	
74 Ge	285574.44	1.07	290446.66	98.3	80 - 120	
115 In	1045236.90	2.27	1079284.80	96.8	80 - 120	
209 Bi	706254.44	2.20	734170.00	96.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\093_CCB.D\093_CCB.D#
Date Acquired: Jun 25 2013 11:28 pm
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.66 ug/l	3.61	1.00	
11 B	1.21 ug/l	7.34	5.00	
23 Na	-0.61 ug/l	958.59	10.00	
24 Mg	-15.13 ug/l	5.59	10.00	
27 Al	0.34 ug/l	67.25	3.00	
39 K	-19.36 ug/l	29.78	5.00	
44 Ca	12.17 ug/l	38.38	10.00	Fail
47 Ti	0.05 ug/l	30.77	5.00	
50 V	0.07 ug/l	77.27	2.00	
51 V	0.18 ug/l	21.68	2.00	
52 Cr	0.02 ug/l	39.45	2.00	
53 Cr	0.95 ug/l	12.75	2.00	
55 Mn	-0.34 ug/l	6.17	2.00	
57 Fe	-3.05 ug/l	37.43	10.00	
59 Co	-0.44 ug/l	2.41	2.00	
60 Ni	0.26 ug/l	6.97	2.00	
63 Cu	-0.17 ug/l	25.68	5.00	
66 Zn	-0.88 ug/l	8.19	5.00	
75 As	-0.07 ug/l	151.49	2.00	
77 (As)	-0.37 ug/l	69.63	3.00	
78 Se	-1.93 ug/l	80.28	3.00	
82 Se	-0.25 ug/l	123.92	2.00	
83 (Se)	-123.60 ug/l	33.45	3.00	
88 Sr	69.13 ug/l	58.41	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.14 ug/l	19.20	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	1040.00 ug/l	9.74	5.00	Fail
102 Ru	903.40 ug/l	13.16	5.00	Fail
104 Ru	-228.90 ug/l	25.98	5.00	
106 (Cd)	-0.89 ug/l	85.96	3.00	
107 Ag	1.20 ug/l	1.88	2.00	
108 (Cd)	-0.60 ug/l	4.58	3.00	
111 Cd	-0.47 ug/l	14.95	1.00	
114 Cd	-0.34 ug/l	6.99	1.00	
120 Sn	0.21 ug/l	6.41	5.00	
121 Sb	1.24 ug/l	7.10	3.00	
137 Ba	-0.02 ug/l	89.67	2.00	
140 Ce	8.42 ug/l	143.09	2.00	Fail
142 Ce	11.35 ug/l	137.71	2.00	Fail
182 W	-0.97 ug/l	202.98	2.00	
184 W	3.43 ug/l	55.42	2.00	Fail
186 W	0.73 ug/l	1448.80	2.00	
203 Tl	-0.33 ug/l	3.17	2.00	
206 Pb	-0.25 ug/l	14.72	3.00	
207 Pb	-0.16 ug/l	19.71	3.00	
208 Pb	-0.02 ug/l	77.28	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3504962.80	6.68	3491440.00	100.4	80 - 120	
45 Sc	1556079.60	7.49	1679677.50	92.6	80 - 120	
74 Ge	272935.53	5.40	290446.66	94.0	80 - 120	
115 In	1024021.30	4.12	1079284.80	94.9	80 - 120	
209 Bi	698112.25	5.02	734170.00	95.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

7 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\103SMPL.D\103SMPL.D#
Date Acquired: Jun 26 2013 12:05 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: IMBW1 6/25/13
Misc Info: M_ICPMS_W
Vial Number: 2401
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-1.29	-0.64	ug/l	5.64	10000.00	
11 B	10.61	5.30	ug/l	10.27	5000.00	
23 Na	114.58	57.29	ug/l	2.30	100000.00	
24 Mg	-27.36	-13.68	ug/l	5.15	100000.00	
27 Al	6.07	3.04	ug/l	3.93	100000.00	
39 K	27.06	13.53	ug/l	26.51	100000.00	
44 Ca	42.04	21.02	ug/l	4.51	100000.00	
47 Ti	0.32	0.16	ug/l	10.67	10000.00	
50 V	0.88	0.44	ug/l	7.90	10000.00	
51 V	0.22	0.11	ug/l	104.57	10000.00	
52 Cr	1.04	0.52	ug/l	13.51	10000.00	
53 Cr	42.16	21.08	ug/l	1.12	10000.00	
55 Mn	-0.17	-0.08	ug/l	25.11	10000.00	
57 Fe	54.46	27.23	ug/l	8.67	100000.00	
59 Co	-0.90	-0.45	ug/l	6.02	10000.00	
60 Ni	0.74	0.37	ug/l	4.19	10000.00	
63 Cu	0.84	0.42	ug/l	4.45	10000.00	
66 Zn	1.20	0.60	ug/l	5.88	10000.00	
75 As	-0.81	-0.40	ug/l	25.74	10000.00	
77 (As)	47.48	23.74	ug/l	2.56	10000.00	
78 Se	-1.95	-0.97	ug/l	93.06	10000.00	
82 Se	-1.12	-0.56	ug/l	105.29	10000.00	
83 (Se)	261.80	130.90	ug/l	348.13	10000.00	
88 Sr	342.40	171.20	ug/l	26.12	10000.00	
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	0.14	0.07	ug/l	20.40	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	3,700.00	1850.00	ug/l	4.90	10000.00	
102 Ru	3,918.00	1959.00	ug/l	3.52	10000.00	
104 Ru	-985.40	-492.70	ug/l	1.07	10000.00	
106 (Cd)	-1.70	-0.85	ug/l	52.33	10000.00	
107 Ag	2.37	1.19	ug/l	1.77	10000.00	
108 (Cd)	-1.30	-0.65	ug/l	17.76	10000.00	
111 Cd	-0.90	-0.45	ug/l	14.06	10000.00	
114 Cd	-0.63	-0.31	ug/l	13.90	#VALUE!	
120 Sn	0.67	0.33	ug/l	12.73	10000.00	
121 Sb	0.44	0.22	ug/l	6.84	10000.00	
137 Ba	0.11	0.06	ug/l	83.29	10000.00	
140 Ce	19.56	9.78	ug/l	154.31	10000.00	
142 Ce	31.34	15.67	ug/l	49.97	10000.00	
182 W	-3.63	-1.82	ug/l	334.73	10000.00	
184 W	15.15	7.58	ug/l	20.13	10000.00	
186 W	1.74	0.87	ug/l	476.66	10000.00	
203 Tl	-0.34	-0.17	ug/l	16.58	10000.00	
206 Pb	0.59	0.29	ug/l	27.48	10000.00	
207 Pb	0.70	0.35	ug/l	23.09	10000.00	
208 Pb	1.02	0.51	ug/l	17.08	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3672196.30	9.24	3491440.00	105.2	60 - 120	
45 Sc	1640299.40	8.30	1679677.50	97.7	60 - 120	
74 Ge	273931.13	3.24	290446.66	94.3	60 - 120	
115 In	1023653.10	2.75	1079284.80	94.8	60 - 120	
209 Bi	678010.00	3.01	734170.00	92.4	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\104CCV1.D\104CCV1.D#
Date Acquired: Jun 26 2013 12:09 am
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	92.78 ug/l	5.86	100.00	90 - 110	
11 B	90.07 ug/l	10.82	100.00	90 - 110	
23 Na	1018.00 ug/l	6.38	1000.00	90 - 110	
24 Mg	1009.00 ug/l	6.78	1000.00	90 - 110	
27 Al	107.00 ug/l	4.95	100.00	90 - 110	
39 K	976.80 ug/l	5.24	1000.00	90 - 110	
44 Ca	914.30 ug/l	4.11	1000.00	90 - 110	
47 Ti	48.30 ug/l	7.06	50.00	90 - 110	
50 V	97.78 ug/l	7.52	100.00	90 - 110	
51 V	101.50 ug/l	6.61	100.00	90 - 110	
52 Cr	100.70 ug/l	6.47	100.00	90 - 110	
53 Cr	98.35 ug/l	6.27	100.00	90 - 110	
55 Mn	95.66 ug/l	4.73	100.00	90 - 110	
57 Fe	906.30 ug/l	3.49	1000.00	90 - 110	
59 Co	93.59 ug/l	4.97	100.00	90 - 110	
60 Ni	94.20 ug/l	5.96	100.00	90 - 110	
63 Cu	97.02 ug/l	8.02	100.00	90 - 110	
66 Zn	98.60 ug/l	6.01	100.00	90 - 110	
75 As	97.12 ug/l	3.60	100.00	90 - 110	
77 (As)	99.25 ug/l	1.50	100.00	90 - 110	
78 Se	98.19 ug/l	4.13	100.00	90 - 110	
82 Se	102.40 ug/l	4.17	100.00	90 - 110	
83 (Se)	-316.20 ug/l	104.33	100.00	90 - 110	
88 Sr	285.20 ug/l	8.38	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	47.40 ug/l	4.00	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1578.00 ug/l	1.80	100.00	90 - 110	Fail
102 Ru	1603.00 ug/l	1.19	100.00	90 - 110	Fail
104 Ru	-246.50 ug/l	10.55	100.00	90 - 110	Fail
106 (Cd)	93.46 ug/l	4.33	100.00	90 - 110	
107 Ag	93.54 ug/l	3.61	100.00	90 - 110	
108 (Cd)	94.46 ug/l	5.44	100.00	90 - 110	
111 Cd	94.52 ug/l	4.11	100.00	90 - 110	
114 Cd	95.92 ug/l	5.34	100.00	90 - 110	
120 Sn	47.87 ug/l	4.73	50.00	90 - 110	
121 Sb	45.22 ug/l	10.83	50.00	90 - 110	
137 Ba	91.38 ug/l	4.79	100.00	90 - 110	
140 Ce	12.92 ug/l	27.01	100.00	90 - 110	Fail
142 Ce	18.35 ug/l	92.97	100.00	90 - 110	Fail
182 W	14.27 ug/l	14.93	100.00	90 - 110	Fail
184 W	11.89 ug/l	57.81	100.00	90 - 110	Fail
186 W	5.43 ug/l	181.82	100.00	90 - 110	Fail
203 Tl	93.73 ug/l	4.97	100.00	90 - 110	
206 Pb	95.07 ug/l	6.12	100.00	90 - 110	
207 Pb	92.93 ug/l	6.09	100.00	90 - 110	
208 Pb	93.93 ug/l	5.27	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3903335.30	7.95	3491440.00	111.8	80 - 120	
45 Sc	1740274.00	3.30	1679677.50	103.6	80 - 120	
74 Ge	298445.53	0.74	290446.66	102.8	80 - 120	
115 In	1101329.60	2.04	1079284.80	102.0	80 - 120	
209 Bi	754364.44	1.48	734170.00	102.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\105_CCB.D\105_CCB.D#
Date Acquired: Jun 26 2013 12:13 am
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.63 ug/l	1.62	1.00	
11 B	1.31 ug/l	20.98	5.00	
23 Na	-6.34 ug/l	82.46	10.00	
24 Mg	-15.80 ug/l	1.45	10.00	
27 Al	0.33 ug/l	21.28	3.00	
39 K	-14.22 ug/l	21.74	5.00	
44 Ca	2.21 ug/l	15.14	10.00	
47 Ti	0.10 ug/l	13.78	5.00	
50 V	0.13 ug/l	29.54	2.00	
51 V	0.19 ug/l	1.24	2.00	
52 Cr	0.07 ug/l	67.89	2.00	
53 Cr	0.76 ug/l	9.69	2.00	
55 Mn	-0.32 ug/l	0.93	2.00	
57 Fe	-2.70 ug/l	57.33	10.00	
59 Co	-0.41 ug/l	3.50	2.00	
60 Ni	0.30 ug/l	7.46	2.00	
63 Cu	-0.25 ug/l	7.81	5.00	
66 Zn	-0.82 ug/l	3.12	5.00	
75 As	-0.08 ug/l	67.28	2.00	
77 (As)	-0.49 ug/l	15.50	3.00	
78 Se	-3.55 ug/l	8.53	3.00	
82 Se	-0.30 ug/l	82.24	2.00	
83 (Se)	-24.34 ug/l	517.26	3.00	
88 Sr	0.87 ug/l	1590.20	2.00	
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.18 ug/l	8.20	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	1255.00 ug/l	3.78	5.00	Fail
102 Ru	1101.00 ug/l	11.39	5.00	Fail
104 Ru	-336.20 ug/l	12.80	5.00	
106 (Cd)	-0.42 ug/l	70.62	3.00	
107 Ag	1.22 ug/l	1.25	2.00	
108 (Cd)	-0.67 ug/l	15.82	3.00	
111 Cd	-0.42 ug/l	8.90	1.00	
114 Cd	-0.31 ug/l	6.14	1.00	
120 Sn	0.26 ug/l	2.79	5.00	
121 Sb	1.28 ug/l	9.52	3.00	
137 Ba	0.00 ug/l	1105.20	2.00	
140 Ce	-2.08 ug/l	302.84	2.00	
142 Ce	9.91 ug/l	144.34	2.00	Fail
182 W	3.20 ug/l	8.73	2.00	Fail
184 W	7.67 ug/l	38.75	2.00	Fail
186 W	0.01 ug/l	80159.00	2.00	
203 Tl	-0.26 ug/l	8.73	2.00	
206 Pb	-0.22 ug/l	7.87	3.00	
207 Pb	-0.13 ug/l	7.21	3.00	
208 Pb	0.01 ug/l	121.79	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3877684.50	6.53	3491440.00	111.1	80 - 120	
45 Sc	1755503.10	3.97	1679677.50	104.5	80 - 120	
74 Ge	297221.13	1.07	290446.66	102.3	80 - 120	
115 In	1093474.90	1.33	1079284.80	101.3	80 - 120	
209 Bi	736891.06	1.97	734170.00	100.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

5 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\106SMPL.D\106SMPL.D#
Date Acquired: Jun 26 2013 12:17 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: ILCSW1 6/25/13
Misc Info: M_ICPMS_W
Vial Number: 2402
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	452.60	226.30	ug/l	4.01	10000.00	
11 B	476.00	238.00	ug/l	3.48	5000.00	
23 Na	2,306.00	1153.00	ug/l	5.77	100000.00	
24 Mg	2,148.00	1074.00	ug/l	4.88	100000.00	
27 Al	549.20	274.60	ug/l	2.30	100000.00	
39 K	2,090.00	1045.00	ug/l	2.55	100000.00	
44 Ca	1,917.40	958.70	ug/l	4.22	100000.00	
47 Ti	244.60	122.30	ug/l	5.80	10000.00	
50 V	483.40	241.70	ug/l	5.59	10000.00	
51 V	471.60	235.80	ug/l	4.60	10000.00	
52 Cr	481.80	240.90	ug/l	4.22	10000.00	
53 Cr	530.00	265.00	ug/l	5.66	10000.00	
55 Mn	492.20	246.10	ug/l	4.58	10000.00	
57 Fe	1,918.80	959.40	ug/l	4.31	100000.00	
59 Co	482.60	241.30	ug/l	5.15	10000.00	
60 Ni	487.20	243.60	ug/l	5.18	10000.00	
63 Cu	492.00	246.00	ug/l	4.63	10000.00	
66 Zn	476.20	238.10	ug/l	5.31	10000.00	
75 As	484.80	242.40	ug/l	3.85	10000.00	
77 (As)	535.00	267.50	ug/l	2.06	10000.00	
78 Se	493.00	246.50	ug/l	2.13	10000.00	
82 Se	495.40	247.70	ug/l	2.89	10000.00	
83 (Se)	-57.66	-28.83	ug/l	1385.40	10000.00	
88 Sr	286.40	143.20	ug/l	18.43	10000.00	
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	250.20	125.10	ug/l	3.20	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	3,672.00	1836.00	ug/l	3.53	10000.00	
102 Ru	3,818.00	1909.00	ug/l	3.18	10000.00	
104 Ru	-162.84	-81.42	ug/l	82.83	10000.00	
106 (Cd)	489.20	244.60	ug/l	4.48	10000.00	
107 Ag	193.08	96.54	ug/l	5.82	10000.00	
108 (Cd)	483.80	241.90	ug/l	6.40	10000.00	
111 Cd	488.80	244.40	ug/l	6.35	10000.00	
114 Cd	494.60	247.30	ug/l	4.81	#VALUE!	
120 Sn	251.40	125.70	ug/l	6.59	10000.00	
121 Sb	268.60	134.30	ug/l	6.35	10000.00	
137 Ba	488.20	244.10	ug/l	5.47	10000.00	
140 Ce	124.08	62.04	ug/l	26.37	10000.00	
142 Ce	91.86	45.93	ug/l	11.59	10000.00	
182 W	427.40	213.70	ug/l	11.00	10000.00	
184 W	411.20	205.60	ug/l	9.89	10000.00	
186 W	526.80	263.40	ug/l	17.42	10000.00	
203 Tl	488.80	244.40	ug/l	5.10	10000.00	
206 Pb	507.20	253.60	ug/l	3.99	10000.00	
207 Pb	506.00	253.00	ug/l	3.16	10000.00	
208 Pb	509.20	254.60	ug/l	3.33	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3753498.80	0.89	3491440.00	107.5	60 - 120	
45 Sc	1564371.40	4.59	1679677.50	93.1	60 - 120	
74 Ge	271713.34	1.73	290446.66	93.6	60 - 120	
115 In	997840.69	3.74	1079284.80	92.5	60 - 120	
209 Bi	670023.31	1.01	734170.00	91.3	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\110SMPL.D\110SMPL.D#
Date Acquired: Jun 26 2013 12:32 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: 13060778-001CMS
Misc Info: M_ICPMS_W
Vial Number: 2405
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	437.80	218.90	ug/l	2.04	10000.00	
11 B	1,151.20	575.60	ug/l	2.85	5000.00	
23 Na	97,740.00	48870.00	ug/l	2.55	100000.00	
24 Mg	237,000.00	118500.00	ug/l	2.35	100000.00	>LRS
27 Al	536.60	268.30	ug/l	3.36	100000.00	
39 K	12,748.00	6374.00	ug/l	3.19	100000.00	
44 Ca	606,000.00	303000.00	ug/l	3.46	100000.00	>LRS
47 Ti	249.40	124.70	ug/l	5.09	10000.00	
50 V	504.80	252.40	ug/l	3.32	10000.00	
51 V	496.60	248.30	ug/l	2.72	10000.00	
52 Cr	478.80	239.40	ug/l	3.34	10000.00	
53 Cr	509.20	254.60	ug/l	4.00	10000.00	
55 Mn	1,810.60	905.30	ug/l	3.99	10000.00	
57 Fe	8,700.00	4350.00	ug/l	4.47	100000.00	
59 Co	461.60	230.80	ug/l	3.60	10000.00	
60 Ni	448.60	224.30	ug/l	3.51	10000.00	
63 Cu	433.00	216.50	ug/l	2.85	10000.00	
66 Zn	365.40	182.70	ug/l	3.02	10000.00	
75 As	490.40	245.20	ug/l	1.97	10000.00	
77 (As)	574.80	287.40	ug/l	2.95	10000.00	
78 Se	480.00	240.00	ug/l	4.26	10000.00	
82 Se	470.00	235.00	ug/l	2.22	10000.00	
83 (Se)	1,526.00	763.00	ug/l	65.09	10000.00	
88 Sr	35,000,000.00	17500000.00	ug/l	4.68	10000.00	>LRS
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	285.20	142.60	ug/l	4.59	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	2,872.00	1436.00	ug/l	16.68	10000.00	
102 Ru	-5,850.00	-2925.00	ug/l	26.84	10000.00	
104 Ru	30,900.00	15450.00	ug/l	5.33	10000.00	>LRS
106 (Cd)	447.00	223.50	ug/l	4.39	10000.00	
107 Ag	178.48	89.24	ug/l	5.79	10000.00	
108 (Cd)	443.40	221.70	ug/l	4.05	10000.00	
111 Cd	442.00	221.00	ug/l	4.40	10000.00	
114 Cd	447.20	223.60	ug/l	4.39	#VALUE!	
120 Sn	277.00	138.50	ug/l	5.02	10000.00	
121 Sb	265.00	132.50	ug/l	5.07	10000.00	
137 Ba	534.40	267.20	ug/l	4.02	10000.00	
140 Ce	4,350.00	2175.00	ug/l	3.48	10000.00	
142 Ce	2,354.00	1177.00	ug/l	7.80	10000.00	
182 W	527.80	263.90	ug/l	4.87	10000.00	
184 W	454.40	227.20	ug/l	2.86	10000.00	
186 W	553.20	276.60	ug/l	21.05	10000.00	
203 Tl	519.40	259.70	ug/l	4.72	10000.00	
206 Pb	525.80	262.90	ug/l	3.03	10000.00	
207 Pb	524.00	262.00	ug/l	2.88	10000.00	
208 Pb	526.00	263.00	ug/l	2.58	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3293298.00	1.91	3491440.00	94.3	60 - 120	
45 Sc	1460624.60	2.95	1679677.50	87.0	60 - 120	
74 Ge	232593.33	1.54	290446.66	80.1	60 - 120	
115 In	876880.81	2.69	1079284.80	81.2	60 - 120	
209 Bi	560028.88	1.64	734170.00	76.3	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\111BLNK.D\111BLNK.D#
Date Acquired: Jun 26 2013 12:36 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: blk
Misc Info:
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.4783	ug/l	27.08	-0.4783	4.00	
11 B	7.88	ug/l	7.48	7.88	15.00	
23 Na	36.43	ug/l	99.20	36.43	40.00	
24 Mg	121.6	ug/l	74.56	121.6	50.00	
27 Al	2.115	ug/l	20.51	2.115	15.00	
39 K	-31.02	ug/l	10.64	-31.02	40.00	
44 Ca	318	ug/l	68.02	318	50.00	
47 Ti	0.2065	ug/l	24.44	0.2065	20.00	
50 V	0.3829	ug/l	43.85	0.3829	5.00	
51 V	0.3667	ug/l	39.54	0.3667	5.00	
52 Cr	0.2263	ug/l	75.17	0.2263	5.00	
53 Cr	2.812	ug/l	15.03	2.812	5.00	
55 Mn	0.6612	ug/l	108.00	0.6612	5.00	
57 Fe	3.977	ug/l	87.73	3.977	50.00	
59 Co	-0.2617	ug/l	62.74	-0.2617	5.00	
60 Ni	0.4823	ug/l	39.40	0.4823	5.00	
63 Cu	0.3062	ug/l	58.69	0.3062	10.00	
66 Zn	-0.05953	ug/l	304.05	-0.05953	20.00	
75 As	0.2106	ug/l	128.73	0.2106	5.00	
77 (As)	0.6604	ug/l	23.38	0.6604	10.00	
78 Se	-2.209	ug/l	3.92	-2.209	10.00	
82 Se	-0.139	ug/l	383.67	-0.139	5.00	
83 (Se)	-264.1	ug/l	54.79	-264.1	10.00	
88 Sr	17540	ug/l	70.35	17540	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.3659	ug/l	26.67	0.3659	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	1465	ug/l	8.92	1465	5.00	
102 Ru	1398	ug/l	5.17	1398	5.00	
104 Ru	-359.8	ug/l	3.54	-359.8	5.00	
106 (Cd)	-0.5434	ug/l	83.07	-0.5434	5.00	
107 Ag	1.242	ug/l	5.48	1.242	5.00	
108 (Cd)	-0.4014	ug/l	75.44	-0.4014	10.00	
111 Cd	-0.2771	ug/l	85.78	-0.2771	5.00	
114 Cd	-0.1482	ug/l	97.98	-0.1482	5.00	
120 Sn	0.2092	ug/l	42.94	0.2092	10.00	
121 Sb	0.3285	ug/l	25.18	0.3285	10.00	
137 Ba	0.1809	ug/l	88.78	0.1809	10.00	
140 Ce	10.49	ug/l	64.40	10.49	10.00	
142 Ce	6.615	ug/l	199.24	6.615	10.00	
182 W	2.231	ug/l	131.91	2.231	10.00	
184 W	9.557	ug/l	72.76	9.557	10.00	
186 W	3.775	ug/l	149.67	3.775	10.00	
203 Tl	0.3316	ug/l	14.10	0.3316	5.00	
206 Pb	-0.06319	ug/l	179.30	-0.06319	5.00	
207 Pb	0.0151	ug/l	877.48	0.0151	5.00	
208 Pb	0.1635	ug/l	74.56	0.1635	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3719217.80	5.44	3491440.00	106.5	80 - 120	
45 Sc	1765151.90	3.76	1679677.50	105.1	80 - 120	
74 Ge	306107.78	1.73	290446.66	105.4	80 - 120	
115 In	1152345.40	1.97	1079284.80	106.8	80 - 120	
209 Bi	789017.25	4.06	734170.00	107.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\112SMPL.D\112SMPL.D#
Date Acquired: Jun 26 2013 12:39 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: 13060778-001CMSD
Misc Info: M_ICPMS_W
Vial Number: 2406
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	438.80	219.40	ug/l	2.87	10000.00	
11 B	1,179.60	589.80	ug/l	5.32	5000.00	
23 Na	94,300.00	47150.00	ug/l	6.52	100000.00	
24 Mg	225,600.00	112800.00	ug/l	5.71	100000.00	>LRS
27 Al	511.60	255.80	ug/l	6.61	100000.00	
39 K	12,366.00	6183.00	ug/l	5.30	100000.00	
44 Ca	595,000.00	297500.00	ug/l	5.04	100000.00	>LRS
47 Ti	253.20	126.60	ug/l	6.12	10000.00	
50 V	495.40	247.70	ug/l	7.64	10000.00	
51 V	484.20	242.10	ug/l	7.91	10000.00	
52 Cr	465.60	232.80	ug/l	7.70	10000.00	
53 Cr	501.60	250.80	ug/l	8.26	10000.00	
55 Mn	1,769.20	884.60	ug/l	7.06	10000.00	
57 Fe	8,626.00	4313.00	ug/l	3.82	100000.00	
59 Co	459.00	229.50	ug/l	5.83	10000.00	
60 Ni	452.80	226.40	ug/l	6.42	10000.00	
63 Cu	428.80	214.40	ug/l	6.40	10000.00	
66 Zn	355.80	177.90	ug/l	5.49	10000.00	
75 As	507.00	253.50	ug/l	4.38	10000.00	
77 (As)	585.40	292.70	ug/l	2.29	10000.00	
78 Se	480.20	240.10	ug/l	2.65	10000.00	
82 Se	474.40	237.20	ug/l	4.54	10000.00	
83 (Se)	762.00	381.00	ug/l	64.09	10000.00	
88 Sr	35,480,000.00	17740000.00	ug/l	4.32	10000.00	>LRS
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	291.80	145.90	ug/l	4.53	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	3,112.00	1556.00	ug/l	8.99	10000.00	
102 Ru	-6,742.00	-3371.00	ug/l	23.34	10000.00	
104 Ru	32,780.00	16390.00	ug/l	4.81	10000.00	>LRS
106 (Cd)	448.80	224.40	ug/l	3.66	10000.00	
107 Ag	180.96	90.48	ug/l	5.40	10000.00	
108 (Cd)	451.60	225.80	ug/l	5.00	10000.00	
111 Cd	446.60	223.30	ug/l	5.88	10000.00	
114 Cd	448.40	224.20	ug/l	5.20	#VALUE!	
120 Sn	258.80	129.40	ug/l	6.47	10000.00	
121 Sb	269.80	134.90	ug/l	6.36	10000.00	
137 Ba	540.80	270.40	ug/l	5.60	10000.00	
140 Ce	4,212.00	2106.00	ug/l	1.74	10000.00	
142 Ce	2,464.00	1232.00	ug/l	11.89	10000.00	
182 W	621.00	310.50	ug/l	12.83	10000.00	
184 W	512.60	256.30	ug/l	8.43	10000.00	
186 W	540.40	270.20	ug/l	12.73	10000.00	
203 Tl	525.60	262.80	ug/l	4.18	10000.00	
206 Pb	531.00	265.50	ug/l	3.72	10000.00	
207 Pb	529.20	264.60	ug/l	3.51	10000.00	
208 Pb	528.20	264.10	ug/l	3.31	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3468752.50	2.19	3491440.00	99.4	60 - 120	
45 Sc	1568847.10	4.80	1679677.50	93.4	60 - 120	
74 Ge	237903.33	1.34	290446.66	81.9	60 - 120	
115 In	901008.44	3.38	1079284.80	83.5	60 - 120	
209 Bi	575464.44	0.62	734170.00	78.4	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\116CCV1.D\116CCV1.D#
Date Acquired: Jun 26 2013 12:54 am
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	102.00 ug/l	4.20	100.00	90 - 110	
11 B	99.45 ug/l	9.84	100.00	90 - 110	
23 Na	991.60 ug/l	5.55	1000.00	90 - 110	
24 Mg	1073.00 ug/l	5.24	1000.00	90 - 110	
27 Al	106.70 ug/l	3.31	100.00	90 - 110	
39 K	938.70 ug/l	2.95	1000.00	90 - 110	
44 Ca	1027.00 ug/l	3.47	1000.00	90 - 110	
47 Ti	48.34 ug/l	3.14	50.00	90 - 110	
50 V	97.34 ug/l	5.09	100.00	90 - 110	
51 V	97.50 ug/l	5.32	100.00	90 - 110	
52 Cr	98.04 ug/l	6.29	100.00	90 - 110	
53 Cr	99.85 ug/l	5.25	100.00	90 - 110	
55 Mn	97.04 ug/l	5.32	100.00	90 - 110	
57 Fe	923.10 ug/l	4.59	1000.00	90 - 110	
59 Co	93.22 ug/l	3.66	100.00	90 - 110	
60 Ni	96.30 ug/l	3.86	100.00	90 - 110	
63 Cu	96.53 ug/l	4.34	100.00	90 - 110	
66 Zn	102.10 ug/l	4.25	100.00	90 - 110	
75 As	95.15 ug/l	2.96	100.00	90 - 110	
77 (As)	101.20 ug/l	2.48	100.00	90 - 110	
78 Se	99.54 ug/l	5.41	100.00	90 - 110	
82 Se	100.90 ug/l	3.63	100.00	90 - 110	
83 (Se)	55.60 ug/l	719.06	100.00	90 - 110	
88 Sr	4963.00 ug/l	22.02	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	48.04 ug/l	2.22	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1177.00 ug/l	11.68	100.00	90 - 110	Fail
102 Ru	1142.00 ug/l	11.42	100.00	90 - 110	Fail
104 Ru	-113.10 ug/l	38.16	100.00	90 - 110	Fail
106 (Cd)	98.79 ug/l	4.95	100.00	90 - 110	
107 Ag	95.53 ug/l	5.20	100.00	90 - 110	
108 (Cd)	97.27 ug/l	4.68	100.00	90 - 110	
111 Cd	98.10 ug/l	6.43	100.00	90 - 110	
114 Cd	98.68 ug/l	5.81	100.00	90 - 110	
120 Sn	49.89 ug/l	5.70	50.00	90 - 110	
121 Sb	48.22 ug/l	12.38	50.00	90 - 110	
137 Ba	94.60 ug/l	4.25	100.00	90 - 110	
140 Ce	125.60 ug/l	133.04	100.00	90 - 110	Fail
142 Ce	18.00 ug/l	83.72	100.00	90 - 110	Fail
182 W	0.96 ug/l	582.10	100.00	90 - 110	Fail
184 W	15.16 ug/l	60.11	100.00	90 - 110	Fail
186 W	12.07 ug/l	36.45	100.00	90 - 110	Fail
203 Tl	94.34 ug/l	4.72	100.00	90 - 110	
206 Pb	95.78 ug/l	4.36	100.00	90 - 110	
207 Pb	93.62 ug/l	3.18	100.00	90 - 110	
208 Pb	95.16 ug/l	3.90	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3321069.30	3.26	3491440.00	95.1	80 - 120	
45 Sc	1602068.50	0.88	1679677.50	95.4	80 - 120	
74 Ge	284638.88	1.43	290446.66	98.0	80 - 120	
115 In	1033113.20	1.92	1079284.80	95.7	80 - 120	
209 Bi	733866.63	1.47	734170.00	100.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\117_CCB.D\117_CCB.D#
Date Acquired: Jun 26 2013 12:58 am
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.62 ug/l	4.05	1.00	
11 B	4.25 ug/l	7.72	5.00	
23 Na	-34.50 ug/l	8.18	10.00	
24 Mg	22.59 ug/l	40.29	10.00	Fail
27 Al	-0.13 ug/l	28.50	3.00	
39 K	-33.07 ug/l	5.72	5.00	
44 Ca	81.59 ug/l	26.82	10.00	Fail
47 Ti	0.08 ug/l	27.87	5.00	
50 V	0.11 ug/l	37.44	2.00	
51 V	0.21 ug/l	15.04	2.00	
52 Cr	0.03 ug/l	78.24	2.00	
53 Cr	1.19 ug/l	8.11	2.00	
55 Mn	-0.17 ug/l	37.87	2.00	
57 Fe	-2.24 ug/l	81.22	10.00	
59 Co	-0.38 ug/l	5.22	2.00	
60 Ni	0.30 ug/l	7.94	2.00	
63 Cu	-0.29 ug/l	9.22	5.00	
66 Zn	-0.87 ug/l	5.69	5.00	
75 As	-0.01 ug/l	684.76	2.00	
77 (As)	-0.69 ug/l	26.60	3.00	
78 Se	-3.21 ug/l	15.95	3.00	
82 Se	-0.38 ug/l	85.33	2.00	
83 (Se)	187.90 ug/l	198.83	3.00	
88 Sr	3804.00 ug/l	32.83	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.17 ug/l	6.44	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	692.30 ug/l	53.06	5.00	Fail
102 Ru	744.40 ug/l	13.54	5.00	Fail
104 Ru	-221.30 ug/l	17.57	5.00	
106 (Cd)	-0.43 ug/l	115.13	3.00	
107 Ag	1.21 ug/l	1.06	2.00	
108 (Cd)	-0.64 ug/l	6.95	3.00	
111 Cd	-0.42 ug/l	3.92	1.00	
114 Cd	-0.31 ug/l	8.23	1.00	
120 Sn	0.26 ug/l	9.03	5.00	
121 Sb	1.25 ug/l	10.43	3.00	
137 Ba	0.01 ug/l	236.38	2.00	
140 Ce	-2.96 ug/l	238.72	2.00	
142 Ce	5.53 ug/l	125.33	2.00	Fail
182 W	-1.43 ug/l	935.62	2.00	
184 W	4.90 ug/l	99.06	2.00	Fail
186 W	-1.32 ug/l	166.31	2.00	
203 Tl	-0.23 ug/l	7.99	2.00	
206 Pb	-0.23 ug/l	18.33	3.00	
207 Pb	-0.14 ug/l	23.79	3.00	
208 Pb	0.00 ug/l	1870.30	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3444058.30	1.57	3491440.00	98.6	80 - 120	
45 Sc	1692490.30	5.47	1679677.50	100.8	80 - 120	
74 Ge	287342.22	0.40	290446.66	98.9	80 - 120	
115 In	1077133.50	2.05	1079284.80	99.8	80 - 120	
209 Bi	738257.75	1.24	734170.00	100.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

7 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\126SMPL.D\126SMPL.D#
Date Acquired: Jun 26 2013 01:32 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: 13060776-001C
Misc Info: M_ICPMS_W
Vial Number: 2412
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-1.41	-0.71	ug/l	0.39	10000.00	
11 B	1,130.40	565.20	ug/l	2.99	5000.00	
23 Na	96,340.00	48170.00	ug/l	6.61	100000.00	
24 Mg	102,980.00	51490.00	ug/l	7.29	100000.00	
27 Al	30.46	15.23	ug/l	30.51	100000.00	
39 K	32,300.00	16150.00	ug/l	5.48	100000.00	
44 Ca	215,600.00	107800.00	ug/l	3.93	100000.00	>LRS
47 Ti	2.95	1.48	ug/l	63.72	10000.00	
50 V	12.80	6.40	ug/l	4.41	10000.00	
51 V	0.55	0.28	ug/l	76.46	10000.00	
52 Cr	1.30	0.65	ug/l	9.12	10000.00	
53 Cr	58.30	29.15	ug/l	7.55	10000.00	
55 Mn	70.04	35.02	ug/l	3.07	10000.00	
57 Fe	1,756.00	878.00	ug/l	5.09	100000.00	
59 Co	0.98	0.49	ug/l	15.49	10000.00	
60 Ni	17.91	8.96	ug/l	7.02	10000.00	
63 Cu	1.78	0.89	ug/l	9.36	10000.00	
66 Zn	3.72	1.86	ug/l	8.17	10000.00	
75 As	1.42	0.71	ug/l	104.65	10000.00	
77 (As)	111.76	55.88	ug/l	7.37	10000.00	
78 Se	-6.01	-3.01	ug/l	13.15	10000.00	
82 Se	3.01	1.51	ug/l	10.60	10000.00	
83 (Se)	188.48	94.24	ug/l	208.30	10000.00	
88 Sr	5,492,000.00	2746000.00	ug/l	2.56	10000.00	>LRS
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	9.31	4.66	ug/l	2.29	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	3,480.00	1740.00	ug/l	3.15	10000.00	
102 Ru	1,901.40	950.70	ug/l	16.86	10000.00	
104 Ru	5,478.00	2739.00	ug/l	2.86	10000.00	
106 (Cd)	-1.02	-0.51	ug/l	159.37	10000.00	
107 Ag	2.30	1.15	ug/l	0.25	10000.00	
108 (Cd)	-1.15	-0.58	ug/l	8.74	10000.00	
111 Cd	-0.97	-0.49	ug/l	10.48	10000.00	
114 Cd	-0.74	-0.37	ug/l	1.65	#VALUE!	
120 Sn	0.39	0.19	ug/l	9.11	10000.00	
121 Sb	0.41	0.20	ug/l	8.50	10000.00	
137 Ba	45.94	22.97	ug/l	2.49	10000.00	
140 Ce	541.20	270.60	ug/l	4.52	10000.00	
142 Ce	367.20	183.60	ug/l	14.09	10000.00	
182 W	8,600.00	4300.00	ug/l	4.87	10000.00	
184 W	7,860.00	3930.00	ug/l	3.68	10000.00	
186 W	9,678.00	4839.00	ug/l	1.74	10000.00	
203 Tl	-0.83	-0.42	ug/l	1.62	10000.00	
206 Pb	0.79	0.39	ug/l	13.33	10000.00	
207 Pb	0.86	0.43	ug/l	11.81	10000.00	
208 Pb	1.18	0.59	ug/l	6.57	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4142712.00	1.41	3491440.00	118.7	60 - 120	
45 Sc	1766613.30	3.81	1679677.50	105.2	60 - 120	
74 Ge	276833.34	0.26	290446.66	95.3	60 - 120	
115 In	995023.19	0.41	1079284.80	92.2	60 - 120	
209 Bi	648412.25	0.48	734170.00	88.3	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\127BLNK.D\127BLNK.D#
Date Acquired: Jun 26 2013 01:36 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: blk
Misc Info:
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.6836	ug/l	0.88	-0.6836	4.00	
11 B	11.51	ug/l	14.98	11.51	15.00	
23 Na	49.38	ug/l	33.76	49.38	40.00	
24 Mg	91.48	ug/l	27.30	91.48	50.00	
27 Al	1.016	ug/l	8.38	1.016	15.00	
39 K	-16.26	ug/l	28.63	-16.26	40.00	
44 Ca	255.1	ug/l	20.86	255.1	50.00	
47 Ti	0.1387	ug/l	116.01	0.1387	20.00	
50 V	0.1083	ug/l	32.79	0.1083	5.00	
51 V	0.1222	ug/l	15.14	0.1222	5.00	
52 Cr	0.007044	ug/l	50.47	0.007044	5.00	
53 Cr	3.413	ug/l	7.66	3.413	5.00	
55 Mn	0.09068	ug/l	110.20	0.09068	5.00	
57 Fe	-0.0214	ug/l	6443.90	-0.0214	50.00	
59 Co	-0.4739	ug/l	0.68	-0.4739	5.00	
60 Ni	0.2621	ug/l	6.04	0.2621	5.00	
63 Cu	0.03906	ug/l	50.31	0.03906	10.00	
66 Zn	-0.3168	ug/l	9.00	-0.3168	20.00	
75 As	-0.01967	ug/l	485.00	-0.01967	5.00	
77 (As)	0.5742	ug/l	45.35	0.5742	10.00	
78 Se	-4.671	ug/l	17.02	-4.671	10.00	
82 Se	-0.3522	ug/l	72.32	-0.3522	5.00	
83 (Se)	-105.4	ug/l	207.12	-105.4	10.00	
88 Sr	10660	ug/l	21.10	10660	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.03492	ug/l	25.30	0.03492	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	1532	ug/l	5.10	1532	5.00	
102 Ru	1667	ug/l	9.12	1667	5.00	
104 Ru	-407.5	ug/l	1.13	-407.5	5.00	
106 (Cd)	-0.3895	ug/l	95.82	-0.3895	5.00	
107 Ag	1.161	ug/l	0.59	1.161	5.00	
108 (Cd)	-0.703	ug/l	13.71	-0.703	10.00	
111 Cd	-0.4548	ug/l	2.41	-0.4548	5.00	
114 Cd	-0.3525	ug/l	0.65	-0.3525	5.00	
120 Sn	0.03327	ug/l	38.47	0.03327	10.00	
121 Sb	0.149	ug/l	4.92	0.149	10.00	
137 Ba	-0.002964	ug/l	191.30	-0.002964	10.00	
140 Ce	-1.101	ug/l	581.56	-1.101	10.00	
142 Ce	14.27	ug/l	54.60	14.27	10.00	
182 W	12.97	ug/l	45.90	12.97	10.00	
184 W	19.87	ug/l	29.44	19.87	10.00	
186 W	10.08	ug/l	59.54	10.08	10.00	
203 Tl	-0.4329	ug/l	3.08	-0.4329	5.00	
206 Pb	-0.237	ug/l	6.01	-0.237	5.00	
207 Pb	-0.1713	ug/l	7.12	-0.1713	5.00	
208 Pb	-0.016	ug/l	7.81	-0.016	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3791338.30	2.97	3491440.00	108.6	80 - 120	
45 Sc	1842328.80	2.18	1679677.50	109.7	80 - 120	
74 Ge	307076.66	0.81	290446.66	105.7	80 - 120	
115 In	1093713.60	0.65	1079284.80	101.3	80 - 120	
209 Bi	759582.25	1.01	734170.00	103.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\128CCV1.D\128CCV1.D#
Date Acquired: Jun 26 2013 01:40 am
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	96.22 ug/l	3.14	100.00	90 - 110	
11 B	102.00 ug/l	6.02	100.00	90 - 110	
23 Na	1062.00 ug/l	5.22	1000.00	90 - 110	
24 Mg	1096.00 ug/l	4.72	1000.00	90 - 110	
27 Al	105.80 ug/l	6.41	100.00	90 - 110	
39 K	950.20 ug/l	7.25	1000.00	90 - 110	
44 Ca	1096.00 ug/l	4.40	1000.00	90 - 110	
47 Ti	49.03 ug/l	5.88	50.00	90 - 110	
50 V	101.70 ug/l	2.77	100.00	90 - 110	
51 V	101.90 ug/l	0.68	100.00	90 - 110	
52 Cr	101.80 ug/l	1.80	100.00	90 - 110	
53 Cr	103.70 ug/l	3.43	100.00	90 - 110	
55 Mn	97.37 ug/l	5.84	100.00	90 - 110	
57 Fe	949.50 ug/l	6.31	1000.00	90 - 110	
59 Co	95.06 ug/l	4.37	100.00	90 - 110	
60 Ni	98.41 ug/l	5.16	100.00	90 - 110	
63 Cu	100.60 ug/l	4.42	100.00	90 - 110	
66 Zn	103.00 ug/l	3.88	100.00	90 - 110	
75 As	97.24 ug/l	1.65	100.00	90 - 110	
77 (As)	98.16 ug/l	5.57	100.00	90 - 110	
78 Se	98.81 ug/l	5.03	100.00	90 - 110	
82 Se	101.50 ug/l	2.92	100.00	90 - 110	
83 (Se)	-305.20 ug/l	50.72	100.00	90 - 110	
88 Sr	5104.00 ug/l	16.67	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	47.62 ug/l	3.85	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1417.00 ug/l	3.12	100.00	90 - 110	Fail
102 Ru	1303.00 ug/l	6.45	100.00	90 - 110	Fail
104 Ru	-196.40 ug/l	38.28	100.00	90 - 110	Fail
106 (Cd)	98.96 ug/l	5.15	100.00	90 - 110	
107 Ag	97.81 ug/l	2.83	100.00	90 - 110	
108 (Cd)	100.10 ug/l	6.38	100.00	90 - 110	
111 Cd	100.30 ug/l	5.06	100.00	90 - 110	
114 Cd	100.50 ug/l	4.88	100.00	90 - 110	
120 Sn	50.37 ug/l	4.33	50.00	90 - 110	
121 Sb	47.82 ug/l	11.73	50.00	90 - 110	
137 Ba	94.79 ug/l	4.42	100.00	90 - 110	
140 Ce	13.46 ug/l	41.43	100.00	90 - 110	Fail
142 Ce	19.19 ug/l	37.11	100.00	90 - 110	Fail
182 W	22.20 ug/l	36.47	100.00	90 - 110	Fail
184 W	19.91 ug/l	49.01	100.00	90 - 110	Fail
186 W	17.50 ug/l	75.20	100.00	90 - 110	Fail
203 Tl	97.46 ug/l	4.83	100.00	90 - 110	
206 Pb	97.99 ug/l	5.02	100.00	90 - 110	
207 Pb	96.26 ug/l	4.40	100.00	90 - 110	
208 Pb	96.59 ug/l	4.19	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3861239.00	1.51	3491440.00	110.6	80 - 120	
45 Sc	1749499.50	1.62	1679677.50	104.2	80 - 120	
74 Ge	305484.44	1.12	290446.66	105.2	80 - 120	
115 In	1078379.60	1.98	1079284.80	99.9	80 - 120	
209 Bi	753380.00	1.73	734170.00	102.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\129_CCB.D\129_CCB.D#
Date Acquired: Jun 26 2013 01:43 am
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.67 ug/l	1.99	1.00	
11 B	5.23 ug/l	9.47	5.00	Fail
23 Na	-22.42 ug/l	4.58	10.00	
24 Mg	19.63 ug/l	19.30	10.00	Fail
27 Al	-0.45 ug/l	14.60	3.00	
39 K	-27.30 ug/l	14.07	5.00	
44 Ca	85.37 ug/l	18.46	10.00	Fail
47 Ti	0.07 ug/l	26.92	5.00	
50 V	0.08 ug/l	12.55	2.00	
51 V	0.16 ug/l	20.50	2.00	
52 Cr	-0.02 ug/l	168.42	2.00	
53 Cr	1.39 ug/l	9.86	2.00	
55 Mn	-0.22 ug/l	14.68	2.00	
57 Fe	-4.23 ug/l	43.58	10.00	
59 Co	-0.43 ug/l	1.68	2.00	
60 Ni	0.26 ug/l	1.89	2.00	
63 Cu	-0.34 ug/l	3.74	5.00	
66 Zn	-0.90 ug/l	3.49	5.00	
75 As	-0.07 ug/l	64.69	2.00	
77 (As)	-0.43 ug/l	27.06	3.00	
78 Se	-4.78 ug/l	6.69	3.00	
82 Se	-0.18 ug/l	78.07	2.00	
83 (Se)	-173.00 ug/l	74.62	3.00	
88 Sr	3839.00 ug/l	21.95	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.14 ug/l	2.80	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	788.00 ug/l	22.96	5.00	Fail
102 Ru	740.50 ug/l	27.78	5.00	Fail
104 Ru	-218.60 ug/l	5.75	5.00	
106 (Cd)	-0.67 ug/l	35.11	3.00	
107 Ag	1.20 ug/l	1.36	2.00	
108 (Cd)	-0.61 ug/l	8.89	3.00	
111 Cd	-0.45 ug/l	7.63	1.00	
114 Cd	-0.34 ug/l	4.31	1.00	
120 Sn	0.25 ug/l	10.28	5.00	
121 Sb	1.22 ug/l	9.67	3.00	
137 Ba	-0.02 ug/l	26.73	2.00	
140 Ce	3.96 ug/l	390.91	2.00	Fail
142 Ce	5.58 ug/l	246.95	2.00	Fail
182 W	6.37 ug/l	99.01	2.00	Fail
184 W	9.23 ug/l	36.75	2.00	Fail
186 W	2.09 ug/l	367.39	2.00	Fail
203 Tl	-0.34 ug/l	2.67	2.00	
206 Pb	-0.29 ug/l	4.99	3.00	
207 Pb	-0.19 ug/l	4.86	3.00	
208 Pb	-0.05 ug/l	13.53	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3744758.80	3.15	3491440.00	107.3	80 - 120	
45 Sc	1822167.50	6.72	1679677.50	108.5	80 - 120	
74 Ge	301532.22	0.94	290446.66	103.8	80 - 120	
115 In	1085544.80	1.82	1079284.80	100.6	80 - 120	
209 Bi	754026.63	2.00	734170.00	102.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

11 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\130SMPL.D\130SMPL.D#
Date Acquired: Jun 26 2013 01:47 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: 13060776-002C
Misc Info: M_ICPMS_W
Vial Number: 2501
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-1.38	-0.69	ug/l	0.25	10000.00	
11 B	1,358.80	679.40	ug/l	6.08	5000.00	
23 Na	90,560.00	45280.00	ug/l	6.22	100000.00	
24 Mg	284,600.00	142300.00	ug/l	5.92	100000.00	>LRS
27 Al	33.96	16.98	ug/l	5.99	100000.00	
39 K	12,144.00	6072.00	ug/l	3.79	100000.00	
44 Ca	620,800.00	310400.00	ug/l	3.86	100000.00	>LRS
47 Ti	2.07	1.03	ug/l	4.60	10000.00	
50 V	31.34	15.67	ug/l	6.23	10000.00	
51 V	0.84	0.42	ug/l	83.10	10000.00	
52 Cr	1.26	0.63	ug/l	9.24	10000.00	
53 Cr	44.88	22.44	ug/l	4.31	10000.00	
55 Mn	953.20	476.60	ug/l	3.40	10000.00	
57 Fe	4,620.00	2310.00	ug/l	3.30	100000.00	
59 Co	12.86	6.43	ug/l	4.33	10000.00	
60 Ni	33.10	16.55	ug/l	3.94	10000.00	
63 Cu	3.21	1.61	ug/l	8.21	10000.00	
66 Zn	17.29	8.65	ug/l	5.07	10000.00	
75 As	0.73	0.36	ug/l	105.31	10000.00	
77 (As)	146.98	73.49	ug/l	7.49	10000.00	
78 Se	0.08	0.04	ug/l	1961.70	10000.00	
82 Se	0.86	0.43	ug/l	103.76	10000.00	
83 (Se)	1,585.60	792.80	ug/l	38.23	10000.00	
88 Sr	64,100,000.00	32050000.00	ug/l	2.14	10000.00	>LRS
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	34.20	17.10	ug/l	2.81	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	2,308.00	1154.00	ug/l	7.46	10000.00	
102 Ru	-15,244.00	-7622.00	ug/l	17.50	10000.00	
104 Ru	64,300.00	32150.00	ug/l	4.96	10000.00	>LRS
106 (Cd)	0.26	0.13	ug/l	331.15	10000.00	
107 Ag	2.42	1.21	ug/l	1.57	10000.00	
108 (Cd)	-0.76	-0.38	ug/l	67.03	10000.00	
111 Cd	-0.75	-0.38	ug/l	20.31	10000.00	
114 Cd	0.87	0.43	ug/l	14.59	#VALUE!	
120 Sn	45.50	22.75	ug/l	4.99	10000.00	
121 Sb	1.49	0.75	ug/l	5.48	10000.00	
137 Ba	31.96	15.98	ug/l	2.87	10000.00	
140 Ce	5,428.00	2714.00	ug/l	0.93	10000.00	
142 Ce	4,278.00	2139.00	ug/l	1.41	10000.00	
182 W	151.72	75.86	ug/l	9.65	10000.00	
184 W	205.00	102.50	ug/l	12.48	10000.00	
186 W	147.68	73.84	ug/l	22.01	10000.00	
203 Tl	-0.50	-0.25	ug/l	3.85	10000.00	
206 Pb	3.59	1.80	ug/l	6.52	10000.00	
207 Pb	3.64	1.82	ug/l	1.16	10000.00	
208 Pb	3.99	2.00	ug/l	1.82	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3660267.80	0.41	3491440.00	104.8	60 - 120	
45 Sc	1593341.80	3.12	1679677.50	94.9	60 - 120	
74 Ge	237448.88	0.89	290446.66	81.8	60 - 120	
115 In	887884.06	1.46	1079284.80	82.3	60 - 120	
209 Bi	565155.56	1.10	734170.00	77.0	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\131BLNK.D\131BLNK.D#
Date Acquired: Jun 26 2013 01:51 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: blk
Misc Info:
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.6664	ug/l	0.49	-0.6664	4.00	
11 B	11.84	ug/l	11.02	11.84	15.00	
23 Na	15.97	ug/l	39.91	15.97	40.00	
24 Mg	77.85	ug/l	12.66	77.85	50.00	
27 Al	0.9576	ug/l	11.08	0.9576	15.00	
39 K	-27.39	ug/l	13.91	-27.39	40.00	
44 Ca	192.8	ug/l	9.23	192.8	50.00	
47 Ti	0.06755	ug/l	20.04	0.06755	20.00	
50 V	0.1313	ug/l	10.48	0.1313	5.00	
51 V	0.162	ug/l	10.22	0.162	5.00	
52 Cr	0.0271	ug/l	73.99	0.0271	5.00	
53 Cr	2.309	ug/l	4.41	2.309	5.00	
55 Mn	-0.002723	ug/l	2242.00	-0.002723	5.00	
57 Fe	1.348	ug/l	27.86	1.348	50.00	
59 Co	-0.4497	ug/l	1.07	-0.4497	5.00	
60 Ni	0.2847	ug/l	2.00	0.2847	5.00	
63 Cu	0.03357	ug/l	41.38	0.03357	10.00	
66 Zn	-0.2754	ug/l	31.67	-0.2754	20.00	
75 As	0.01275	ug/l	741.73	0.01275	5.00	
77 (As)	-0.03241	ug/l	457.57	-0.03241	10.00	
78 Se	-4.29	ug/l	19.77	-4.29	10.00	
82 Se	-0.4307	ug/l	98.07	-0.4307	5.00	
83 (Se)	-81.86	ug/l	466.53	-81.86	10.00	
88 Sr	14740	ug/l	13.35	14740	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.07765	ug/l	20.21	0.07765	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	1623	ug/l	1.28	1623	5.00	
102 Ru	1510	ug/l	2.67	1510	5.00	
104 Ru	-404.9	ug/l	6.35	-404.9	5.00	
106 (Cd)	-0.1778	ug/l	77.28	-0.1778	5.00	
107 Ag	1.181	ug/l	1.06	1.181	5.00	
108 (Cd)	-0.7194	ug/l	3.43	-0.7194	10.00	
111 Cd	-0.4149	ug/l	1.12	-0.4149	5.00	
114 Cd	-0.3422	ug/l	2.45	-0.3422	5.00	
120 Sn	0.07343	ug/l	11.77	0.07343	10.00	
121 Sb	0.2316	ug/l	6.33	0.2316	10.00	
137 Ba	-0.01845	ug/l	68.94	-0.01845	10.00	
140 Ce	4.743	ug/l	83.53	4.743	10.00	
142 Ce	3.109	ug/l	332.90	3.109	10.00	
182 W	4.959	ug/l	85.54	4.959	10.00	
184 W	2.696	ug/l	243.95	2.696	10.00	
186 W	-2.86	ug/l	65.42	-2.86	10.00	
203 Tl	-0.4088	ug/l	1.55	-0.4088	5.00	
206 Pb	-0.2299	ug/l	3.13	-0.2299	5.00	
207 Pb	-0.1402	ug/l	17.21	-0.1402	5.00	
208 Pb	-0.004536	ug/l	235.45	-0.004536	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3848895.30	4.00	3491440.00	110.2	80 - 120	
45 Sc	1815293.10	3.89	1679677.50	108.1	80 - 120	
74 Ge	306593.34	0.82	290446.66	105.6	80 - 120	
115 In	1108490.90	2.66	1079284.80	102.7	80 - 120	
209 Bi	766055.06	2.05	734170.00	104.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\132SMPL.D\132SMPL.D#
Date Acquired: Jun 26 2013 01:55 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: 13060776-003C
Misc Info: M_ICPMS_W
Vial Number: 2502
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-1.39	-0.69	ug/l	0.84	10000.00	
11 B	2,262.00	1131.00	ug/l	2.87	5000.00	
23 Na	227,000.00	113500.00	ug/l	1.99	100000.00	>LRS
24 Mg	165,740.00	82870.00	ug/l	2.52	100000.00	
27 Al	17.66	8.83	ug/l	6.38	100000.00	
39 K	8,924.00	4462.00	ug/l	2.82	100000.00	
44 Ca	441,800.00	220900.00	ug/l	3.06	100000.00	>LRS
47 Ti	1.72	0.86	ug/l	5.83	10000.00	
50 V	16.69	8.35	ug/l	3.60	10000.00	
51 V	0.68	0.34	ug/l	36.96	10000.00	
52 Cr	1.10	0.55	ug/l	6.17	10000.00	
53 Cr	41.12	20.56	ug/l	4.87	10000.00	
55 Mn	1,035.60	517.80	ug/l	1.66	10000.00	
57 Fe	5,376.00	2688.00	ug/l	5.71	100000.00	
59 Co	5.50	2.75	ug/l	5.14	10000.00	
60 Ni	16.78	8.39	ug/l	3.67	10000.00	
63 Cu	4.82	2.41	ug/l	3.46	10000.00	
66 Zn	33.62	16.81	ug/l	3.36	10000.00	
75 As	0.94	0.47	ug/l	17.35	10000.00	
77 (As)	126.10	63.05	ug/l	5.12	10000.00	
78 Se	1.77	0.88	ug/l	77.10	10000.00	
82 Se	3.62	1.81	ug/l	28.04	10000.00	
83 (Se)	725.20	362.60	ug/l	140.15	10000.00	
88 Sr	15,376,000.00	7688000.00	ug/l	0.95	10000.00	>LRS
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	7.82	3.91	ug/l	2.35	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	3,690.00	1845.00	ug/l	6.72	10000.00	
102 Ru	-1,392.20	-696.10	ug/l	20.33	10000.00	
104 Ru	14,156.00	7078.00	ug/l	5.07	10000.00	
106 (Cd)	-0.92	-0.46	ug/l	58.76	10000.00	
107 Ag	2.34	1.17	ug/l	0.71	10000.00	
108 (Cd)	-0.90	-0.45	ug/l	57.85	10000.00	
111 Cd	-0.90	-0.45	ug/l	12.96	10000.00	
114 Cd	-0.65	-0.32	ug/l	3.23	#VALUE!	
120 Sn	0.82	0.41	ug/l	4.59	10000.00	
121 Sb	1.12	0.56	ug/l	2.45	10000.00	
137 Ba	32.96	16.48	ug/l	3.99	10000.00	
140 Ce	1,818.80	909.40	ug/l	4.27	10000.00	
142 Ce	1,092.40	546.20	ug/l	16.41	10000.00	
182 W	348.60	174.30	ug/l	35.39	10000.00	
184 W	325.80	162.90	ug/l	21.78	10000.00	
186 W	350.00	175.00	ug/l	22.01	10000.00	
203 Tl	-0.68	-0.34	ug/l	5.15	10000.00	
206 Pb	1.76	0.88	ug/l	11.75	10000.00	
207 Pb	1.84	0.92	ug/l	5.68	10000.00	
208 Pb	2.10	1.05	ug/l	5.86	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3504631.30	0.92	3491440.00	100.4	60 - 120	
45 Sc	1550699.40	0.98	1679677.50	92.3	60 - 120	
74 Ge	235201.11	1.20	290446.66	81.0	60 - 120	
115 In	869864.38	0.99	1079284.80	80.6	60 - 120	
209 Bi	560362.25	1.48	734170.00	76.3	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\133BLNK.D\133BLNK.D#
Date Acquired: Jun 26 2013 01:59 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: blk
Misc Info:
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.6738	ug/l	0.61	-0.6738	4.00	
11 B	17.84	ug/l	12.23	17.84	15.00	
23 Na	47.79	ug/l	44.01	47.79	40.00	
24 Mg	65.57	ug/l	35.41	65.57	50.00	
27 Al	0.8848	ug/l	17.80	0.8848	15.00	
39 K	-27.48	ug/l	17.90	-27.48	40.00	
44 Ca	189.8	ug/l	24.95	189.8	50.00	
47 Ti	0.05605	ug/l	48.21	0.05605	20.00	
50 V	0.1137	ug/l	18.40	0.1137	5.00	
51 V	0.1547	ug/l	16.61	0.1547	5.00	
52 Cr	0.00645	ug/l	256.59	0.00645	5.00	
53 Cr	2.825	ug/l	6.16	2.825	5.00	
55 Mn	0.05746	ug/l	207.45	0.05746	5.00	
57 Fe	-0.3231	ug/l	754.26	-0.3231	50.00	
59 Co	-0.4692	ug/l	1.50	-0.4692	5.00	
60 Ni	0.2675	ug/l	2.19	0.2675	5.00	
63 Cu	0.04316	ug/l	70.20	0.04316	10.00	
66 Zn	-0.3253	ug/l	19.63	-0.3253	20.00	
75 As	-0.04889	ug/l	260.58	-0.04889	5.00	
77 (As)	0.236	ug/l	93.56	0.236	10.00	
78 Se	-5.998	ug/l	6.75	-5.998	10.00	
82 Se	-0.5115	ug/l	60.16	-0.5115	5.00	
83 (Se)	125.3	ug/l	225.62	125.3	10.00	
88 Sr	10330	ug/l	26.34	10330	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.04088	ug/l	37.33	0.04088	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	1677	ug/l	4.87	1677	5.00	
102 Ru	1599	ug/l	1.67	1599	5.00	
104 Ru	-392.8	ug/l	3.80	-392.8	5.00	
106 (Cd)	-0.3636	ug/l	115.24	-0.3636	5.00	
107 Ag	1.165	ug/l	0.41	1.165	5.00	
108 (Cd)	-0.6635	ug/l	6.90	-0.6635	10.00	
111 Cd	-0.4407	ug/l	9.22	-0.4407	5.00	
114 Cd	-0.3529	ug/l	4.31	-0.3529	5.00	
120 Sn	0.03965	ug/l	31.45	0.03965	10.00	
121 Sb	0.1785	ug/l	9.85	0.1785	10.00	
137 Ba	-0.02695	ug/l	46.79	-0.02695	10.00	
140 Ce	5.872	ug/l	62.45	5.872	10.00	
142 Ce	11.44	ug/l	151.05	11.44	10.00	
182 W	-3.101	ug/l	122.96	-3.101	10.00	
184 W	10.5	ug/l	57.51	10.5	10.00	
186 W	-0.7559	ug/l	774.18	-0.7559	10.00	
203 Tl	-0.4227	ug/l	2.53	-0.4227	5.00	
206 Pb	-0.248	ug/l	4.97	-0.248	5.00	
207 Pb	-0.1716	ug/l	9.94	-0.1716	5.00	
208 Pb	-0.02232	ug/l	51.88	-0.02232	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4115433.30	2.75	3491440.00	117.9	80 - 120	
45 Sc	1961725.60	4.57	1679677.50	116.8	80 - 120	
74 Ge	323048.88	1.10	290446.66	111.2	80 - 120	
115 In	1151342.60	3.71	1079284.80	106.7	80 - 120	
209 Bi	780928.88	1.06	734170.00	106.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\134SMPL.D\134SMPL.D#
Date Acquired: Jun 26 2013 02:02 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: 13060776-004C
Misc Info: M_ICPMS_W
Vial Number: 2503
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-1.41	-0.70	ug/l	0.60	10000.00	
11 B	1,344.60	672.30	ug/l	3.39	5000.00	
23 Na	70,320.00	35160.00	ug/l	5.45	100000.00	
24 Mg	99,620.00	49810.00	ug/l	6.25	100000.00	
27 Al	61.90	30.95	ug/l	7.16	100000.00	
39 K	14,782.00	7391.00	ug/l	5.03	100000.00	
44 Ca	177,360.00	88680.00	ug/l	4.72	100000.00	
47 Ti	1.85	0.93	ug/l	8.13	10000.00	
50 V	13.10	6.55	ug/l	75.70	10000.00	
51 V	0.89	0.45	ug/l	76.25	10000.00	
52 Cr	1.45	0.72	ug/l	8.54	10000.00	
53 Cr	54.78	27.39	ug/l	6.02	10000.00	
55 Mn	39.82	19.91	ug/l	5.16	10000.00	
57 Fe	1,504.00	752.00	ug/l	3.45	100000.00	
59 Co	0.23	0.11	ug/l	28.63	10000.00	
60 Ni	18.60	9.30	ug/l	5.79	10000.00	
63 Cu	5.78	2.89	ug/l	4.48	10000.00	
66 Zn	22.38	11.19	ug/l	6.42	10000.00	
75 As	0.10	0.05	ug/l	678.76	10000.00	
77 (As)	102.18	51.09	ug/l	6.37	10000.00	
78 Se	-4.95	-2.48	ug/l	33.30	10000.00	
82 Se	0.52	0.26	ug/l	260.55	10000.00	
83 (Se)	385.00	192.50	ug/l	67.79	10000.00	
88 Sr	3,852,000.00	1926000.00	ug/l	2.46	10000.00	>LRS
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	12.99	6.49	ug/l	3.73	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	3,808.00	1904.00	ug/l	2.17	10000.00	
102 Ru	2,636.00	1318.00	ug/l	2.39	10000.00	
104 Ru	3,726.00	1863.00	ug/l	12.05	10000.00	
106 (Cd)	0.37	0.19	ug/l	124.80	10000.00	
107 Ag	2.31	1.16	ug/l	0.24	10000.00	
108 (Cd)	-1.12	-0.56	ug/l	11.23	10000.00	
111 Cd	-0.83	-0.42	ug/l	7.36	10000.00	
114 Cd	-0.69	-0.35	ug/l	1.70	#VALUE!	
120 Sn	1.08	0.54	ug/l	8.02	10000.00	
121 Sb	1.59	0.79	ug/l	0.96	10000.00	
137 Ba	31.42	15.71	ug/l	3.46	10000.00	
140 Ce	2,036.00	1018.00	ug/l	1.79	10000.00	
142 Ce	1,412.00	706.00	ug/l	6.03	10000.00	
182 W	277.80	138.90	ug/l	10.32	10000.00	
184 W	311.40	155.70	ug/l	3.04	10000.00	
186 W	399.80	199.90	ug/l	13.17	10000.00	
203 Tl	-0.72	-0.36	ug/l	2.80	10000.00	
206 Pb	0.80	0.40	ug/l	9.95	10000.00	
207 Pb	0.92	0.46	ug/l	4.99	10000.00	
208 Pb	1.26	0.63	ug/l	1.49	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4105451.30	2.63	3491440.00	117.6	60 - 120	
45 Sc	1790698.30	4.96	1679677.50	106.6	60 - 120	
74 Ge	279906.66	1.97	290446.66	96.4	60 - 120	
115 In	993901.75	1.97	1079284.80	92.1	60 - 120	
209 Bi	653688.88	1.83	734170.00	89.0	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\135BLNK.D\135BLNK.D#
Date Acquired: Jun 26 2013 02:06 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: blk
Misc Info:
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.6835	ug/l	0.52	-0.6835	4.00	
11 B	14.19	ug/l	7.48	14.19	15.00	
23 Na	30.36	ug/l	5.14	30.36	40.00	
24 Mg	54.5	ug/l	8.35	54.5	50.00	
27 Al	0.9402	ug/l	3.26	0.9402	15.00	
39 K	-26.3	ug/l	3.01	-26.3	40.00	
44 Ca	149.1	ug/l	7.98	149.1	50.00	
47 Ti	0.06202	ug/l	5.08	0.06202	20.00	
50 V	0.108	ug/l	13.92	0.108	5.00	
51 V	0.1592	ug/l	19.72	0.1592	5.00	
52 Cr	0.03023	ug/l	80.12	0.03023	5.00	
53 Cr	2.766	ug/l	6.61	2.766	5.00	
55 Mn	-0.1002	ug/l	17.62	-0.1002	5.00	
57 Fe	0.2956	ug/l	480.04	0.2956	50.00	
59 Co	-0.471	ug/l	0.72	-0.471	5.00	
60 Ni	0.266	ug/l	2.14	0.266	5.00	
63 Cu	0.04301	ug/l	49.69	0.04301	10.00	
66 Zn	-0.271	ug/l	21.04	-0.271	20.00	
75 As	0.09345	ug/l	54.31	0.09345	5.00	
77 (As)	0.0743	ug/l	661.64	0.0743	10.00	
78 Se	-5.282	ug/l	5.70	-5.282	10.00	
82 Se	-0.06661	ug/l	939.35	-0.06661	5.00	
83 (Se)	-378.5	ug/l	128.56	-378.5	10.00	
88 Sr	6763	ug/l	7.67	6763	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.04649	ug/l	16.26	0.04649	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	1414	ug/l	15.01	1414	5.00	
102 Ru	1644	ug/l	3.06	1644	5.00	
104 Ru	-404.4	ug/l	6.22	-404.4	5.00	
106 (Cd)	-0.3837	ug/l	105.71	-0.3837	5.00	
107 Ag	1.161	ug/l	0.27	1.161	5.00	
108 (Cd)	-0.5694	ug/l	20.21	-0.5694	10.00	
111 Cd	-0.4727	ug/l	3.25	-0.4727	5.00	
114 Cd	-0.3589	ug/l	1.47	-0.3589	5.00	
120 Sn	0.04345	ug/l	6.53	0.04345	10.00	
121 Sb	0.1595	ug/l	5.59	0.1595	10.00	
137 Ba	-0.03074	ug/l	16.12	-0.03074	10.00	
140 Ce	5.261	ug/l	160.90	5.261	10.00	
142 Ce	37.39	ug/l	16.29	37.39	10.00	
182 W	2.355	ug/l	238.09	2.355	10.00	
184 W	6.133	ug/l	65.35	6.133	10.00	
186 W	2.739	ug/l	134.25	2.739	10.00	
203 Tl	-0.4308	ug/l	5.80	-0.4308	5.00	
206 Pb	-0.2595	ug/l	6.67	-0.2595	5.00	
207 Pb	-0.1662	ug/l	13.39	-0.1662	5.00	
208 Pb	-0.02669	ug/l	36.52	-0.02669	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3882208.80	3.66	3491440.00	111.2	80 - 120	
45 Sc	1848540.80	3.02	1679677.50	110.1	80 - 120	
74 Ge	318680.00	0.06	290446.66	109.7	80 - 120	
115 In	1128383.50	0.96	1079284.80	104.5	80 - 120	
209 Bi	781276.63	2.39	734170.00	106.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\136SMPL.D\136SMPL.D#
Date Acquired: Jun 26 2013 02:10 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: 13060776-005C
Misc Info: M_ICPMS_W
Vial Number: 2504
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Sample
Dilution Factor: 2.00
Autodil Factor: Undiluted
Final Dil Factor: 2.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-1.42	-0.71	ug/l	0.30	10000.00	
11 B	789.40	394.70	ug/l	1.64	5000.00	
23 Na	75,820.00	37910.00	ug/l	1.66	100000.00	
24 Mg	258,200.00	129100.00	ug/l	1.43	100000.00	>LRS
27 Al	13.10	6.55	ug/l	0.80	100000.00	
39 K	11,000.00	5500.00	ug/l	2.03	100000.00	
44 Ca	687,400.00	343700.00	ug/l	2.64	100000.00	>LRS
47 Ti	1.47	0.74	ug/l	11.85	10000.00	
50 V	25.54	12.77	ug/l	4.36	10000.00	
51 V	0.83	0.41	ug/l	65.61	10000.00	
52 Cr	0.91	0.45	ug/l	4.59	10000.00	
53 Cr	35.30	17.65	ug/l	1.01	10000.00	
55 Mn	2,530.00	1265.00	ug/l	4.34	10000.00	
57 Fe	31,320.00	15660.00	ug/l	4.71	100000.00	
59 Co	33.24	16.62	ug/l	4.89	10000.00	
60 Ni	41.08	20.54	ug/l	5.30	10000.00	
63 Cu	2.61	1.30	ug/l	7.90	10000.00	
66 Zn	12.35	6.17	ug/l	2.75	10000.00	
75 As	1.59	0.80	ug/l	73.27	10000.00	
77 (As)	135.96	67.98	ug/l	2.51	10000.00	
78 Se	-1.43	-0.71	ug/l	124.73	10000.00	
82 Se	3.42	1.71	ug/l	31.49	10000.00	
83 (Se)	1,934.60	967.30	ug/l	64.56	10000.00	
88 Sr	39,420,000.00	19710000.00	ug/l	1.56	10000.00	>LRS
89 Y	----	--------	ug/l	--------	#VALUE!	
98 Mo	13.55	6.78	ug/l	3.99	10000.00	
99 (Mo)	----	--------	ug/l	--------	#VALUE!	
101 Ru	2,758.00	1379.00	ug/l	18.12	10000.00	
102 Ru	-7,196.00	-3598.00	ug/l	0.69	10000.00	
104 Ru	37,340.00	18670.00	ug/l	4.37	10000.00	>LRS
106 (Cd)	-0.45	-0.22	ug/l	153.94	10000.00	
107 Ag	2.30	1.15	ug/l	0.51	10000.00	
108 (Cd)	-0.69	-0.34	ug/l	72.92	10000.00	
111 Cd	-0.78	-0.39	ug/l	4.87	10000.00	
114 Cd	-0.57	-0.28	ug/l	3.78	#VALUE!	
120 Sn	0.74	0.37	ug/l	1.81	10000.00	
121 Sb	0.45	0.23	ug/l	5.14	10000.00	
137 Ba	35.70	17.85	ug/l	3.42	10000.00	
140 Ce	4,056.00	2028.00	ug/l	3.04	10000.00	
142 Ce	2,362.00	1181.00	ug/l	0.70	10000.00	
182 W	12.52	6.26	ug/l	217.70	10000.00	
184 W	22.50	11.25	ug/l	58.12	10000.00	
186 W	57.78	28.89	ug/l	7.95	10000.00	
203 Tl	-0.61	-0.30	ug/l	4.56	10000.00	
206 Pb	5.14	2.57	ug/l	4.87	10000.00	
207 Pb	5.14	2.57	ug/l	3.18	10000.00	
208 Pb	5.51	2.76	ug/l	2.85	10000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3583075.80	1.25	3491440.00	102.6	60 - 120	
45 Sc	1546882.90	3.57	1679677.50	92.1	60 - 120	
74 Ge	230201.11	0.84	290446.66	79.3	60 - 120	
115 In	856160.25	2.93	1079284.80	79.3	60 - 120	
209 Bi	557284.44	1.30	734170.00	75.9	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\137BLNK.D\137BLNK.D#
Date Acquired: Jun 26 2013 02:14 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: blk
Misc Info:
Vial Number: 1
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: Blank
Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.		RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.6887	ug/l	0.14	-0.6887	4.00	
11 B	11.6	ug/l	2.65	11.6	15.00	
23 Na	29.12	ug/l	29.88	29.12	40.00	
24 Mg	86.5	ug/l	29.35	86.5	50.00	
27 Al	0.9494	ug/l	5.57	0.9494	15.00	
39 K	-22.13	ug/l	6.15	-22.13	40.00	
44 Ca	236.1	ug/l	25.07	236.1	50.00	
47 Ti	0.03187	ug/l	45.81	0.03187	20.00	
50 V	0.07803	ug/l	57.04	0.07803	5.00	
51 V	0.1501	ug/l	25.93	0.1501	5.00	
52 Cr	0.01132	ug/l	216.96	0.01132	5.00	
53 Cr	1.955	ug/l	9.64	1.955	5.00	
55 Mn	0.3675	ug/l	47.89	0.3675	5.00	
57 Fe	7.502	ug/l	13.77	7.502	50.00	
59 Co	-0.4635	ug/l	0.65	-0.4635	5.00	
60 Ni	0.2609	ug/l	3.74	0.2609	5.00	
63 Cu	0.04325	ug/l	44.88	0.04325	10.00	
66 Zn	-0.2943	ug/l	10.17	-0.2943	20.00	
75 As	-9.515E-005	ug/l	81324.00	-9.5E-005	5.00	
77 (As)	0.1208	ug/l	94.79	0.1208	10.00	
78 Se	-4.517	ug/l	15.99	-4.517	10.00	
82 Se	-0.2743	ug/l	124.02	-0.2743	5.00	
83 (Se)	83.51	ug/l	280.45	83.51	10.00	
88 Sr	11640	ug/l	22.45	11640	5.00	
89 Y	----	ug/l	--------	----	---	
98 Mo	0.05014	ug/l	14.13	0.05014	5.00	
99 (Mo)	----	ug/l	--------	----	---	
101 Ru	1599	ug/l	10.02	1599	5.00	
102 Ru	1545	ug/l	3.84	1545	5.00	
104 Ru	-396.8	ug/l	4.06	-396.8	5.00	
106 (Cd)	-0.4167	ug/l	124.57	-0.4167	5.00	
107 Ag	1.164	ug/l	0.27	1.164	5.00	
108 (Cd)	-0.6555	ug/l	10.65	-0.6555	10.00	
111 Cd	-0.464	ug/l	8.94	-0.464	5.00	
114 Cd	-0.3644	ug/l	0.89	-0.3644	5.00	
120 Sn	0.02197	ug/l	38.05	0.02197	10.00	
121 Sb	0.1524	ug/l	2.16	0.1524	10.00	
137 Ba	-0.03398	ug/l	13.92	-0.03398	10.00	
140 Ce	2.134	ug/l	159.51	2.134	10.00	
142 Ce	10.05	ug/l	80.38	10.05	10.00	
182 W	3.088	ug/l	286.37	3.088	10.00	
184 W	6.78	ug/l	50.03	6.78	10.00	
186 W	-3.704	ug/l	4.69	-3.704	10.00	
203 Tl	-0.4306	ug/l	4.88	-0.4306	5.00	
206 Pb	-0.2506	ug/l	6.05	-0.2506	5.00	
207 Pb	-0.1707	ug/l	7.43	-0.1707	5.00	
208 Pb	-0.02101	ug/l	54.36	-0.02101	5.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3668636.30	2.85	3491440.00	105.1	80 - 120	
45 Sc	1789190.40	4.66	1679677.50	106.5	80 - 120	
74 Ge	300416.66	2.84	290446.66	103.4	80 - 120	
115 In	1081202.80	2.14	1079284.80	100.2	80 - 120	
209 Bi	734904.88	2.42	734170.00	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

0 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

QC Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\140CCV1.D\140CCV1.D#
Date Acquired: Jun 26 2013 02:25 am
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	99.19 ug/l	4.02	100.00	90 - 110	
11 B	105.50 ug/l	6.17	100.00	90 - 110	
23 Na	1072.00 ug/l	4.10	1000.00	90 - 110	
24 Mg	1124.00 ug/l	6.05	1000.00	90 - 110	Fail
27 Al	106.30 ug/l	3.09	100.00	90 - 110	
39 K	984.10 ug/l	2.88	1000.00	90 - 110	
44 Ca	1167.00 ug/l	9.20	1000.00	90 - 110	Fail
47 Ti	49.20 ug/l	3.72	50.00	90 - 110	
50 V	99.69 ug/l	4.42	100.00	90 - 110	
51 V	102.00 ug/l	4.52	100.00	90 - 110	
52 Cr	102.10 ug/l	2.94	100.00	90 - 110	
53 Cr	103.40 ug/l	4.23	100.00	90 - 110	
55 Mn	97.89 ug/l	2.74	100.00	90 - 110	
57 Fe	959.50 ug/l	0.64	1000.00	90 - 110	
59 Co	95.04 ug/l	0.34	100.00	90 - 110	
60 Ni	98.57 ug/l	3.31	100.00	90 - 110	
63 Cu	98.81 ug/l	4.33	100.00	90 - 110	
66 Zn	101.30 ug/l	4.53	100.00	90 - 110	
75 As	97.75 ug/l	2.92	100.00	90 - 110	
77 (As)	99.72 ug/l	1.02	100.00	90 - 110	
78 Se	96.46 ug/l	2.43	100.00	90 - 110	
82 Se	98.68 ug/l	3.60	100.00	90 - 110	
83 (Se)	-162.80 ug/l	174.20	100.00	90 - 110	
88 Sr	10010.00 ug/l	25.67	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	46.33 ug/l	1.97	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1459.00 ug/l	8.78	100.00	90 - 110	Fail
102 Ru	1238.00 ug/l	7.41	100.00	90 - 110	Fail
104 Ru	-201.30 ug/l	6.52	100.00	90 - 110	Fail
106 (Cd)	104.10 ug/l	3.16	100.00	90 - 110	
107 Ag	98.84 ug/l	4.52	100.00	90 - 110	
108 (Cd)	102.50 ug/l	5.58	100.00	90 - 110	
111 Cd	101.70 ug/l	4.33	100.00	90 - 110	
114 Cd	101.20 ug/l	4.10	100.00	90 - 110	
120 Sn	50.31 ug/l	3.77	50.00	90 - 110	
121 Sb	48.42 ug/l	7.36	50.00	90 - 110	
137 Ba	95.42 ug/l	3.62	100.00	90 - 110	
140 Ce	25.00 ug/l	55.28	100.00	90 - 110	Fail
142 Ce	18.91 ug/l	32.88	100.00	90 - 110	Fail
182 W	8.47 ug/l	60.93	100.00	90 - 110	Fail
184 W	17.15 ug/l	15.78	100.00	90 - 110	Fail
186 W	19.63 ug/l	48.72	100.00	90 - 110	Fail
203 Tl	96.90 ug/l	2.92	100.00	90 - 110	
206 Pb	98.12 ug/l	2.99	100.00	90 - 110	
207 Pb	97.13 ug/l	3.98	100.00	90 - 110	
208 Pb	97.66 ug/l	3.66	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3766158.30	5.61	3491440.00	107.9	80 - 120	
45 Sc	1820881.30	4.16	1679677.50	108.4	80 - 120	
74 Ge	313022.22	3.88	290446.66	107.8	80 - 120	
115 In	1084931.00	4.93	1079284.80	100.5	80 - 120	
209 Bi	758625.56	2.91	734170.00	103.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

11 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\141_CCB.D\141_CCB.D#
Date Acquired: Jun 26 2013 02:29 am
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.68 ug/l	0.64	1.00	
11 B	6.97 ug/l	3.71	5.00	Fail
23 Na	2.02 ug/l	339.55	10.00	
24 Mg	35.54 ug/l	25.43	10.00	Fail
27 Al	-0.46 ug/l	7.14	3.00	
39 K	-23.77 ug/l	22.04	5.00	
44 Ca	105.40 ug/l	21.53	10.00	Fail
47 Ti	0.03 ug/l	36.81	5.00	
50 V	0.05 ug/l	30.31	2.00	
51 V	0.17 ug/l	22.95	2.00	
52 Cr	-0.01 ug/l	129.10	2.00	
53 Cr	1.32 ug/l	3.52	2.00	
55 Mn	-0.06 ug/l	132.66	2.00	
57 Fe	-0.20 ug/l	747.72	10.00	
59 Co	-0.44 ug/l	1.17	2.00	
60 Ni	0.24 ug/l	4.43	2.00	
63 Cu	-0.35 ug/l	2.89	5.00	
66 Zn	-0.92 ug/l	3.38	5.00	
75 As	-0.14 ug/l	53.52	2.00	
77 (As)	-0.60 ug/l	24.58	3.00	
78 Se	-5.29 ug/l	15.64	3.00	
82 Se	-0.54 ug/l	41.01	2.00	
83 (Se)	-139.40 ug/l	141.54	3.00	
88 Sr	5515.00 ug/l	19.66	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.14 ug/l	17.96	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	836.50 ug/l	32.29	5.00	Fail
102 Ru	960.20 ug/l	28.62	5.00	Fail
104 Ru	-264.00 ug/l	13.63	5.00	
106 (Cd)	-0.21 ug/l	98.39	3.00	
107 Ag	1.19 ug/l	0.54	2.00	
108 (Cd)	-0.63 ug/l	14.48	3.00	
111 Cd	-0.45 ug/l	2.27	1.00	
114 Cd	-0.36 ug/l	3.26	1.00	
120 Sn	0.22 ug/l	4.61	5.00	
121 Sb	1.14 ug/l	6.13	3.00	
137 Ba	-0.04 ug/l	11.58	2.00	
140 Ce	-8.43 ug/l	37.45	2.00	
142 Ce	9.45 ug/l	108.62	2.00	Fail
182 W	-0.74 ug/l	455.02	2.00	
184 W	8.04 ug/l	36.59	2.00	Fail
186 W	2.96 ug/l	126.39	2.00	Fail
203 Tl	-0.34 ug/l	7.73	2.00	
206 Pb	-0.29 ug/l	6.73	3.00	
207 Pb	-0.20 ug/l	3.41	3.00	
208 Pb	-0.06 ug/l	22.43	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4160261.50	1.98	3491440.00	119.2	80 - 120	
45 Sc	1915031.00	1.41	1679677.50	114.0	80 - 120	
74 Ge	319564.44	0.87	290446.66	110.0	80 - 120	
115 In	1125822.10	2.71	1079284.80	104.3	80 - 120	
209 Bi	768719.38	2.35	734170.00	104.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

9 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\152CCV1.D\152CCV1.D#
Date Acquired: Jun 26 2013 03:10 am
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	98.46 ug/l	2.22	100.00	90 - 110	
11 B	101.50 ug/l	2.57	100.00	90 - 110	
23 Na	1106.00 ug/l	7.04	1000.00	90 - 110	Fail
24 Mg	1114.00 ug/l	4.76	1000.00	90 - 110	Fail
27 Al	107.70 ug/l	4.98	100.00	90 - 110	
39 K	965.70 ug/l	4.00	1000.00	90 - 110	
44 Ca	1151.00 ug/l	1.55	1000.00	90 - 110	Fail
47 Ti	50.88 ug/l	6.08	50.00	90 - 110	
50 V	102.00 ug/l	7.59	100.00	90 - 110	
51 V	100.50 ug/l	8.75	100.00	90 - 110	
52 Cr	100.70 ug/l	9.10	100.00	90 - 110	
53 Cr	102.50 ug/l	7.93	100.00	90 - 110	
55 Mn	99.27 ug/l	6.80	100.00	90 - 110	
57 Fe	967.30 ug/l	6.13	1000.00	90 - 110	
59 Co	96.29 ug/l	3.44	100.00	90 - 110	
60 Ni	100.70 ug/l	4.10	100.00	90 - 110	
63 Cu	98.86 ug/l	4.54	100.00	90 - 110	
66 Zn	100.10 ug/l	8.27	100.00	90 - 110	
75 As	98.41 ug/l	3.65	100.00	90 - 110	
77 (As)	101.10 ug/l	3.50	100.00	90 - 110	
78 Se	94.92 ug/l	4.02	100.00	90 - 110	
82 Se	99.08 ug/l	4.05	100.00	90 - 110	
83 (Se)	-65.31 ug/l	602.82	100.00	90 - 110	
88 Sr	9755.00 ug/l	11.95	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	46.79 ug/l	1.59	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1310.00 ug/l	17.21	100.00	90 - 110	Fail
102 Ru	1291.00 ug/l	13.04	100.00	90 - 110	Fail
104 Ru	-151.70 ug/l	34.13	100.00	90 - 110	Fail
106 (Cd)	100.90 ug/l	2.81	100.00	90 - 110	
107 Ag	97.06 ug/l	2.98	100.00	90 - 110	
108 (Cd)	98.68 ug/l	1.96	100.00	90 - 110	
111 Cd	99.25 ug/l	4.29	100.00	90 - 110	
114 Cd	99.92 ug/l	2.99	100.00	90 - 110	
120 Sn	50.19 ug/l	3.02	50.00	90 - 110	
121 Sb	47.67 ug/l	9.10	50.00	90 - 110	
137 Ba	94.12 ug/l	4.70	100.00	90 - 110	
140 Ce	13.45 ug/l	86.91	100.00	90 - 110	Fail
142 Ce	21.42 ug/l	71.57	100.00	90 - 110	Fail
182 W	17.36 ug/l	59.79	100.00	90 - 110	Fail
184 W	11.27 ug/l	16.10	100.00	90 - 110	Fail
186 W	13.18 ug/l	47.57	100.00	90 - 110	Fail
203 Tl	96.41 ug/l	3.39	100.00	90 - 110	
206 Pb	98.23 ug/l	4.51	100.00	90 - 110	
207 Pb	96.94 ug/l	5.65	100.00	90 - 110	
208 Pb	97.48 ug/l	5.21	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3763608.30	5.87	3491440.00	107.8	80 - 120	
45 Sc	1783737.90	9.17	1679677.50	106.2	80 - 120	
74 Ge	302100.00	2.32	290446.66	104.0	80 - 120	
115 In	1073358.60	4.00	1079284.80	99.5	80 - 120	
209 Bi	741316.63	4.95	734170.00	101.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

12 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\153_CCB.D\153_CCB.D#
Date Acquired: Jun 26 2013 03:14 am
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.67 ug/l	2.08	1.00	
11 B	5.90 ug/l	1.27	5.00	Fail
23 Na	8.48 ug/l	251.65	10.00	
24 Mg	39.86 ug/l	50.05	10.00	Fail
27 Al	-0.47 ug/l	5.68	3.00	
39 K	-26.43 ug/l	5.03	5.00	
44 Ca	118.00 ug/l	35.67	10.00	Fail
47 Ti	0.09 ug/l	71.80	5.00	
50 V	0.08 ug/l	41.47	2.00	
51 V	0.16 ug/l	17.54	2.00	
52 Cr	0.00 ug/l	1644.10	2.00	
53 Cr	1.21 ug/l	5.67	2.00	
55 Mn	-0.08 ug/l	140.68	2.00	
57 Fe	0.73 ug/l	95.92	10.00	
59 Co	-0.43 ug/l	1.66	2.00	
60 Ni	0.26 ug/l	10.11	2.00	
63 Cu	-0.36 ug/l	7.38	5.00	
66 Zn	-0.91 ug/l	3.69	5.00	
75 As	-0.10 ug/l	72.41	2.00	
77 (As)	-0.65 ug/l	22.45	3.00	
78 Se	-3.87 ug/l	17.40	3.00	
82 Se	-0.35 ug/l	131.50	2.00	
83 (Se)	-211.50 ug/l	188.09	3.00	
88 Sr	6494.00 ug/l	35.17	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	0.14 ug/l	6.70	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	948.70 ug/l	25.61	5.00	Fail
102 Ru	961.00 ug/l	13.21	5.00	Fail
104 Ru	-216.00 ug/l	19.26	5.00	
106 (Cd)	-0.41 ug/l	54.50	3.00	
107 Ag	1.20 ug/l	1.74	2.00	
108 (Cd)	-0.60 ug/l	13.53	3.00	
111 Cd	-0.45 ug/l	5.08	1.00	
114 Cd	-0.34 ug/l	4.56	1.00	
120 Sn	0.24 ug/l	18.95	5.00	
121 Sb	1.23 ug/l	10.89	3.00	
137 Ba	-0.03 ug/l	101.29	2.00	
140 Ce	-7.66 ug/l	84.03	2.00	
142 Ce	-1.21 ug/l	566.53	2.00	
182 W	1.10 ug/l	672.65	2.00	
184 W	1.37 ug/l	130.78	2.00	
186 W	-3.45 ug/l	114.66	2.00	
203 Tl	-0.34 ug/l	3.09	2.00	
206 Pb	-0.27 ug/l	13.07	3.00	
207 Pb	-0.18 ug/l	12.92	3.00	
208 Pb	-0.03 ug/l	61.23	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3613866.50	5.69	3491440.00	103.5	80 - 120	
45 Sc	1756044.10	3.55	1679677.50	104.5	80 - 120	
74 Ge	292864.44	2.53	290446.66	100.8	80 - 120	
115 In	1038083.20	3.69	1079284.80	96.2	80 - 120	
209 Bi	714822.25	4.13	734170.00	97.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

6 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

ICS-A QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\161ICSA.D\161ICSA.D#
Date Acquired: Jun 26 2013 03:44 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: ICS A
Misc Info: 60-23-08
Vial Number: 1207
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: ICS-A
Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.71 ug/l	0.38	10.00	
11 B	2.75 ug/l	9.20	10.00	
23 Na	93690.00 ug/l	5.13	1.20	
24 Mg	91690.00 ug/l	6.32	1.20	
27 Al	94190.00 ug/l	5.91	1.20	
39 K	92430.00 ug/l	4.17	1.20	
44 Ca	95230.00 ug/l	3.68	1.20	
47 Ti	2138.00 ug/l	6.03	1.20	
50 V	1657.00 ug/l	6.30	10.00	
51 V	0.35 ug/l	25.85	10.00	
52 Cr	1.30 ug/l	7.51	10.00	
53 Cr	4.05 ug/l	4.82	10.00	
55 Mn	1.21 ug/l	8.55	10.00	
57 Fe	86510.00 ug/l	4.19	10.00	Fail
59 Co	0.99 ug/l	5.07	10.00	
60 Ni	3.09 ug/l	4.92	10.00	
63 Cu	2.31 ug/l	9.17	10.00	
66 Zn	2.15 ug/l	9.42	10.00	
75 As	0.24 ug/l	64.64	10.00	
77 (As)	5.44 ug/l	4.74	10.00	
78 Se	-3.29 ug/l	70.67	10.00	
82 Se	-0.48 ug/l	89.85	10.00	
83 (Se)	406.40 ug/l	108.93	10.00	
88 Sr	3629.00 ug/l	1.92	10.00	
89 Y	-------- ug/l	--------	10.00	
98 Mo	2037.00 ug/l	2.62	1.20	
99 (Mo)	-------- ug/l	--------	---	
101 Ru	1562.00 ug/l	0.97	10.00	
102 Ru	1764.00 ug/l	1.19	10.00	
104 Ru	-433.10 ug/l	1.62	10.00	
106 (Cd)	0.65 ug/l	71.49	10.00	
107 Ag	1.21 ug/l	0.67	10.00	
108 (Cd)	25.09 ug/l	4.93	10.00	
111 Cd	0.10 ug/l	230.59	10.00	
114 Cd	1.30 ug/l	1.21	10.00	
120 Sn	0.10 ug/l	10.51	10.00	
121 Sb	0.62 ug/l	7.44	10.00	
137 Ba	6.97 ug/l	7.64	10.00	
140 Ce	923.10 ug/l	0.52	10.00	
142 Ce	324.20 ug/l	14.04	10.00	
182 W	4880.00 ug/l	5.53	10.00	
184 W	4395.00 ug/l	4.67	10.00	
186 W	5410.00 ug/l	4.20	10.00	
203 Tl	-0.44 ug/l	1.16	10.00	
206 Pb	-0.03 ug/l	127.55	10.00	
207 Pb	0.03 ug/l	73.95	10.00	
208 Pb	0.19 ug/l	5.17	10.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3526913.80	5.14	3491440.00	101.0	60 - 120	
45 Sc	1673263.40	5.62	1679677.50	99.6	60 - 120	
74 Ge	251238.88	2.30	290446.66	86.5	60 - 120	
115 In	892518.00	3.26	1079284.80	82.7	60 - 120	
209 Bi	573000.00	1.32	734170.00	78.0	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes: Fail
ISTD: Pass

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\162ICSAB.D\162ICSAB.D#
Date Acquired: Jun 26 2013 03:48 am
Acq. Method: 6020G2W.M
Operator: ICPMS 1 - JG
Sample Name: ICS AB
Misc Info: 60-23-09
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal. Update: Jun 25 2013 05:59 pm
Sample Type: ICS-AB
Dilution Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	Expected	QC Range(%)	Flag
9 Be	-0.71	ug/l	0.25	0.00	0 - 0	
11 B	1.97	ug/l	14.55	0.00	0 - 0	
23 Na	96610.00	ug/l	4.77	100000.00	80 - 120	
24 Mg	100600.00	ug/l	5.25	100000.00	80 - 120	
27 Al	99320.00	ug/l	4.60	100000.00	80 - 120	
39 K	97560.00	ug/l	4.81	100000.00	80 - 120	
44 Ca	97890.00	ug/l	4.58	100000.00	80 - 120	
47 Ti	2162.00	ug/l	2.51	2000.00	80 - 120	
50 V	1676.00	ug/l	2.74	40.00	80 - 120	Fail
51 V	41.25	ug/l	3.66	40.00	80 - 120	
52 Cr	20.90	ug/l	2.89	20.00	80 - 120	
53 Cr	23.76	ug/l	2.44	20.00	80 - 120	
55 Mn	20.19	ug/l	3.83	20.00	80 - 120	
57 Fe	87800.00	ug/l	2.22	100000.00	80 - 120	
59 Co	37.21	ug/l	2.53	40.00	80 - 120	
60 Ni	38.39	ug/l	4.01	40.00	80 - 120	
63 Cu	19.73	ug/l	4.91	20.00	80 - 120	
66 Zn	16.39	ug/l	3.94	20.00	80 - 120	
75 As	18.39	ug/l	3.37	20.00	80 - 120	
77 (As)	22.34	ug/l	2.76	0.00	0 - 0	
78 Se	13.81	ug/l	13.09	0.00	0 - 0	
82 Se	16.04	ug/l	2.46	20.00	80 - 120	
83 (Se)	583.30	ug/l	46.56	0.00	0 - 0	
88 Sr	3573.00	ug/l	2.02	0.00	0 - 0	Fail
89 Y	--------	ug/l	--------	0.00	0 - 0	
98 Mo	2071.00	ug/l	2.32	2000.00	80 - 120	
99 (Mo)	--------	ug/l	--------	---	##### - #####	
101 Ru	1570.00	ug/l	5.29	0.00	0 - 0	Fail
102 Ru	1425.00	ug/l	3.06	0.00	0 - 0	Fail
104 Ru	590.50	ug/l	5.94	0.00	0 - 0	Fail
106 (Cd)	22.26	ug/l	1.60	0.00	0 - 0	
107 Ag	19.54	ug/l	4.86	20.00	80 - 120	
108 (Cd)	52.83	ug/l	4.47	10.00	80 - 120	
111 Cd	8.83	ug/l	9.29	10.00	80 - 120	
114 Cd	10.37	ug/l	3.92	10.00	80 - 120	
120 Sn	0.11	ug/l	18.37	0.00	0 - 0	
121 Sb	1.13	ug/l	1.45	0.00	0 - 0	
137 Ba	7.10	ug/l	7.56	0.00	0 - 0	
140 Ce	2090.00	ug/l	5.89	0.00	0 - 0	Fail
142 Ce	591.50	ug/l	6.85	0.00	0 - 0	Fail
182 W	3272.00	ug/l	2.21	---	##### - 0	
184 W	3015.00	ug/l	5.52	---	##### - 0	
186 W	3711.00	ug/l	3.97	---	##### - 0	
203 Tl	-0.31	ug/l	3.26	0.00	80 - 120	
206 Pb	0.09	ug/l	13.44	0.00	80 - 120	
207 Pb	0.13	ug/l	16.55	0.00	80 - 120	
208 Pb	0.30	ug/l	4.93	0.00	80 - 120	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3930444.50	5.26	3491440.00	112.6	60 - 120	
45 Sc	1732541.40	3.93	1679677.50	103.1	60 - 120	
74 Ge	257097.78	1.63	290446.66	88.5	60 - 120	
115 In	907502.38	4.16	1079284.80	84.1	60 - 120	
209 Bi	589498.88	3.15	734170.00	80.3	60 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

7 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Fail
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\163CCV1.D\163CCV1.D#
Date Acquired: Jun 26 2013 03:52 am
Operator: ICPMS 1 - JG
Sample Name: CCV1
Misc Info: 60-23-07
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	97.90 ug/l	2.41	100.00	90 - 110	
11 B	95.34 ug/l	2.89	100.00	90 - 110	
23 Na	1154.00 ug/l	2.97	1000.00	90 - 110	Fail
24 Mg	1127.00 ug/l	1.93	1000.00	90 - 110	Fail
27 Al	176.40 ug/l	9.63	100.00	90 - 110	Fail
39 K	1125.00 ug/l	1.89	1000.00	90 - 110	Fail
44 Ca	1040.00 ug/l	0.77	1000.00	90 - 110	
47 Ti	51.24 ug/l	4.61	50.00	90 - 110	
50 V	102.60 ug/l	4.70	100.00	90 - 110	
51 V	99.41 ug/l	5.30	100.00	90 - 110	
52 Cr	99.51 ug/l	4.68	100.00	90 - 110	
53 Cr	102.90 ug/l	3.32	100.00	90 - 110	
55 Mn	97.65 ug/l	2.59	100.00	90 - 110	
57 Fe	1022.00 ug/l	1.70	1000.00	90 - 110	
59 Co	95.06 ug/l	6.11	100.00	90 - 110	
60 Ni	99.95 ug/l	5.23	100.00	90 - 110	
63 Cu	99.65 ug/l	4.54	100.00	90 - 110	
66 Zn	103.50 ug/l	5.00	100.00	90 - 110	
75 As	96.53 ug/l	2.72	100.00	90 - 110	
77 (As)	98.18 ug/l	5.84	100.00	90 - 110	
78 Se	95.78 ug/l	4.99	100.00	90 - 110	
82 Se	96.34 ug/l	5.91	100.00	90 - 110	
83 (Se)	-92.86 ug/l	367.11	100.00	90 - 110	
88 Sr	999.40 ug/l	7.10	100.00	90 - 110	Fail
89 Y	-------- ug/l	--------	100.00	90 - 110	
98 Mo	50.99 ug/l	2.75	50.00	90 - 110	
99 (Mo)	-------- ug/l	--------	---	##### - #####	
101 Ru	1219.00 ug/l	11.56	100.00	90 - 110	Fail
102 Ru	1050.00 ug/l	26.96	100.00	90 - 110	Fail
104 Ru	-134.00 ug/l	48.64	100.00	90 - 110	Fail
106 (Cd)	101.80 ug/l	6.94	100.00	90 - 110	
107 Ag	101.60 ug/l	3.17	100.00	90 - 110	
108 (Cd)	102.90 ug/l	4.76	100.00	90 - 110	
111 Cd	99.69 ug/l	2.82	100.00	90 - 110	
114 Cd	101.20 ug/l	2.98	100.00	90 - 110	
120 Sn	51.67 ug/l	2.73	50.00	90 - 110	
121 Sb	49.30 ug/l	8.65	50.00	90 - 110	
137 Ba	96.32 ug/l	4.19	100.00	90 - 110	
140 Ce	9.82 ug/l	65.88	100.00	90 - 110	Fail
142 Ce	37.85 ug/l	26.26	100.00	90 - 110	Fail
182 W	27.24 ug/l	12.99	100.00	90 - 110	Fail
184 W	20.24 ug/l	19.35	100.00	90 - 110	Fail
186 W	28.49 ug/l	51.77	100.00	90 - 110	Fail
203 Tl	96.89 ug/l	4.09	100.00	90 - 110	
206 Pb	98.64 ug/l	2.72	100.00	90 - 110	
207 Pb	96.57 ug/l	2.91	100.00	90 - 110	
208 Pb	97.52 ug/l	2.73	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3929790.30	1.30	3491440.00	112.6	80 - 120	
45 Sc	1779298.80	3.21	1679677.50	105.9	80 - 120	
74 Ge	311468.88	1.54	290446.66	107.2	80 - 120	
115 In	1062430.10	1.84	1079284.80	98.4	80 - 120	
209 Bi	745621.06	1.50	734170.00	101.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

13 :Element Failures 40 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\13F25r00.B\164_CCB.D\164_CCB.D#
Date Acquired: Jun 26 2013 03:56 am
Operator: ICPMS 1 - JG
Sample Name: CCB
Misc Info: 60-22-493
Vial Number: 5
Current Method: C:\ICPCHEM\1\METHODS\6020G2W.M
Calibration File: C:\ICPCHEM\1\CALIB\6020G2W.C
Last Cal Update: Jun 25 2013 05:59 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	-0.68 ug/l	1.53	1.00	
11 B	1.79 ug/l	7.23	5.00	
23 Na	34.91 ug/l	29.48	10.00	Fail
24 Mg	33.49 ug/l	27.44	10.00	Fail
27 Al	47.31 ug/l	16.89	3.00	Fail
39 K	75.89 ug/l	13.53	5.00	Fail
44 Ca	47.70 ug/l	16.30	10.00	Fail
47 Ti	1.14 ug/l	19.79	5.00	
50 V	0.86 ug/l	13.18	2.00	
51 V	0.18 ug/l	8.59	2.00	
52 Cr	0.03 ug/l	12.09	2.00	
53 Cr	0.86 ug/l	1.83	2.00	
55 Mn	-0.35 ug/l	5.29	2.00	
57 Fe	41.63 ug/l	22.77	10.00	Fail
59 Co	-0.37 ug/l	4.01	2.00	
60 Ni	0.26 ug/l	2.40	2.00	
63 Cu	-0.23 ug/l	2.39	5.00	
66 Zn	-0.89 ug/l	1.64	5.00	
75 As	-0.13 ug/l	70.11	2.00	
77 (As)	-0.56 ug/l	61.74	3.00	
78 Se	-3.96 ug/l	33.38	3.00	
82 Se	-0.23 ug/l	119.33	2.00	
83 (Se)	-19.56 ug/l	892.64	3.00	
88 Sr	234.10 ug/l	19.80	2.00	Fail
89 Y	-------- ug/l	--------	#VALUE!	
98 Mo	1.70 ug/l	9.85	3.00	
99 (Mo)	-------- ug/l	--------	#VALUE!	
101 Ru	389.50 ug/l	94.81	5.00	Fail
102 Ru	469.60 ug/l	24.85	5.00	Fail
104 Ru	-143.50 ug/l	45.46	5.00	
106 (Cd)	-0.79 ug/l	69.11	3.00	
107 Ag	1.20 ug/l	0.57	2.00	
108 (Cd)	-0.61 ug/l	16.96	3.00	
111 Cd	-0.47 ug/l	7.68	1.00	
114 Cd	-0.33 ug/l	5.64	1.00	
120 Sn	0.16 ug/l	13.73	5.00	
121 Sb	1.21 ug/l	10.90	3.00	
137 Ba	-0.04 ug/l	41.56	2.00	
140 Ce	-8.59 ug/l	79.01	2.00	
142 Ce	-3.26 ug/l	129.22	2.00	
182 W	8.53 ug/l	153.05	2.00	Fail
184 W	9.77 ug/l	70.59	2.00	Fail
186 W	13.99 ug/l	68.86	2.00	Fail
203 Tl	-0.28 ug/l	9.40	2.00	
206 Pb	-0.27 ug/l	4.17	3.00	
207 Pb	-0.20 ug/l	4.93	3.00	
208 Pb	-0.05 ug/l	24.31	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3802297.00	4.44	3491440.00	108.9	80 - 120	
45 Sc	1706482.10	2.60	1679677.50	101.6	80 - 120	
74 Ge	294174.44	2.22	290446.66	101.3	80 - 120	
115 In	1008669.80	0.91	1079284.80	93.5	80 - 120	
209 Bi	715193.31	2.27	734170.00	97.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\13F25r00.B\003CALB.D\003CALB.D#

12 :Element Failures 15 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass