



CB&  
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August 11, 2015

Mr. Stanley Radon  
Senior Engineering Geologist  
New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, NY 14203-2915

**Subject:** *Zone 3 Bedrock Analytical Review*  
**Textron Inc.**  
**Wheatfield, New York**  
**New York State Site No. 932052**

Dear Mr. Radon:

On behalf of Textron Inc. (Textron), CB&I Environmental & Infrastructure, Inc. (CB&I) has prepared the following assessment of the laboratory analytical data collected as part the ongoing evaluation of groundwater quality in the Zone 3 monitoring wells. The groundwater analytical data from the October 2014 event (as presented in the *2014 Annual Summary and Site Maintenance and Monitoring Report*) demonstrated an increase in total volatile organic compounds (VOCs). Due to this increase in total VOC concentrations, Textron offered to collect groundwater samples from the two regularly sampled Zone 3 monitoring wells (87-02(3) and 87-13(3)) in the spring of 2015.

Representative groundwater quality samples were collected from the two Zone 3 monitoring wells (87-02(3) and 87-13(3)) on May 18, 2015 as part of the routine hydraulic monitoring event. The analytical results of this sampling event showed a further increase of VOCs, primarily trichloroethene (TCE) and cis-1,2-Dichloroethene (cis-DCE) in Monitoring Well 87-13(3), while 87-02(3) remained consistent with historical trends.

Due to this continued escalation in concentrations in Monitoring Well 87-13(3), groundwater samples were collected from all of the viable Zone 3 monitoring wells.

All of the Zone 3 monitoring wells (87-02(3), 87-04(3), 87-05(3), 87-13(3), 87-14(3), 87-15(3) and 87-16(3)(B)) were sampled on June 25, 2015. Additionally, the paired Zone 1 monitoring wells (87-02(1), 87-04(1), 87-05(1), 87-13(1), 87-14(1), and 87-15(1)) and Monitoring Well 87-13(0) were gauged for depth to water, depth to dense nonaqueous phase liquids (if detected), and depth to bottom. None of the wells reported the presence of separate phase product. Monitoring Well 87-13(1) did record a photoionization detector (PID) headspace of 53.5 parts per million by volume (ppmv); all of the other monitoring wells recorded PID headspace readings of 0.0 ppmv. The analytical results for both sampling events are summarized on Table 1. Due to sample breakage in the laboratory, no sample could be

analyzed from Monitoring Well 87-05(3). The data packages from both events are included as Attachment A.

Groundwater contour maps were constructed from the data obtained during the May and June sampling events and are included as Figures 1 and 2. Groundwater flow in the Zone 3 bedrock remains consistent toward the southeast. Elevated concentrations of TCE and cis-DCE are observed in Monitoring Wells 87-13(3) and 87-15(3); the analytical results are displayed graphically on Figure 3. Monitoring Well 87-15(3) is the most upgradient location on the property within the Zone 3 bedrock and is upgradient of the former Neutralization Pond. Monitoring Well 87-13(3) is located directly downgradient of the former Neutralization Pond. Monitoring Wells 87-02(3), 87-04(3), and 87-14(3) reported VOC concentrations that were below the laboratory method detection limits and within New York State Groundwater Quality Standards. Monitoring Well 87-16(3)(B) reported low level concentrations of VOCs; this location is within 25 feet cross-gradient from the former Neutralization Pond.

As you are aware, the former Neutralization Pond was excavated, filled, and capped in 1987 and all impacted materials were removed for off-site disposal as part of the approved closure plan of this Resource Conservation and Recovery Act unit. Additionally, the On-Site Treatment System is maintaining a positive vertical gradient upwards from Zone 3 to Zone 1 as shown in Tables 2 and 3.

The next groundwater sampling event is scheduled for October 2015. While Monitoring Wells 87-02(3) and 87-13(3) are not scheduled for sampling this year, Textron proposes to add these locations to the October 2015 sampling event to confirm the apparent off-site impacts that have been observed in these monitoring wells. Results of this sampling event will be reported to the New York State Department of Environmental Conservation (NYSDEC) in the *2015 Annual Summary and Site Maintenance and Monitoring Report*.

CB&I and Textron appreciate the NYSDEC's consideration of these matters. If there are any further questions or concerns, please feel free to contact Greg Simpson at (401) 457-2635 or me at (412) 858-3977.

Sincerely,



Cecelia Byers  
Project Manager 1

CB:lmk

Attachments: Tables  
Figures  
Appendix A – Analytical Report

cc: Mr. Greg Simpson – Textron  
Mr. Brian Sadowski – NYSDEC  
Mr. Dennis Weiss – NYSDEC  
File

*Tables*

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**TABLE 1**  
**Summary of Groundwater Analytical Data**  
**Former Textron Inc.**  
**Wheatfield, NY**  
**May and June 2015**

SAMPLE LOCATION	87-02(3)	87-02(3)	87-02(3)	87-02(3)		
SAMPLE I.D.	BAT-87-02(3)-150518	BAT-87-02(3))-150518MS	BAT-87-02(3))-150518MS	BAT-87-02(3)-150625		
SAMPLE DATE	5/18/2015	5/18/2015	5/18/2015	6/25/2015		
<b>VOCs by USEPA Method 8260</b>			Matrix Spike	Matrix Spike Duplicate		
	% Rec.	QC Lim	% Rec.	QC Lim		
Chloromethane	1.0 U	91	55 - 160	96	55 - 160	5.0 U
Vinyl chloride	1.0 U	90	60 - 157	94	60 - 157	5.0 U
Chloroethane	1.0 U	91	70 - 140	95	70 - 140	5.0 U
Bromomethane	1.0 U	52	10 - 162	53	10 - 162	5.0 U
1,1-Dichloroethene	1.0 U	94	72 - 125	96	72 - 125	5.0 U
Acetone	5.0 U	85	29 - 151	100	29 - 151	25 U
Carbon Disulfide	<b>0.97 J</b>	94	34 - 162	97	34 - 162	<b>1.2 J</b>
Methylene chloride	1.0 U	93	75 - 121	97	75 - 121	5.0 U
trans-1,2-Dichloroethene	1.0 U	99	77 - 125	102	77 - 125	5.0 U
1,1-Dichloroethane	1.0 U	100	74 - 132	103	74 - 132	5.0 U
cis-1,2-Dichloroethene	1.0 U	95	72 - 133	99	72 - 133	5.0 U
2-Butanone	5.0 U	87	46 - 141	94	46 - 141	25 U
Chloroform	1.0 U	97	75 - 130	101	75 - 130	5.0 U
1,1,1-Trichloroethane	1.0 U	102	74 - 127	106	74 - 127	5.0 U
Carbon Tetrachloride	1.0 U	106	71 - 135	109	71 - 135	5.0 U
Benzene	1.0 U	97	76 - 129	99	76 - 129	5.0 U
1,2-Dichloroethane	1.0 U	97	73 - 132	101	73 - 132	5.0 U
Trichloroethene	1.0 U	98	62 - 142	102	62 - 142	5.0 U
1,2-Dichloropropane	1.0 U	95	79 - 124	101	79 - 124	5.0 U
Bromodichloromethane	1.0 U	98	76 - 127	104	76 - 127	5.0 U
cis-1,3-Dichloropropene	1.0 U	91	52 - 134	93	52 - 134	5.0 U
4-Methyl-2-pentanone	5.0 U	96	60 - 141	106	60 - 141	25 U
Toluene	1.0 U	96	79 - 125	99	79 - 125	5.0 U
trans-1,3-Dichloropropene	1.0 U	81	64 - 123	85	64 - 123	5.0 U
1,1,2-Trichloroethane	1.0 U	93	82 - 115	98	82 - 115	5.0 U
Tetrachloroethene	1.0 U	100	67 - 137	104	67 - 137	5.0 U
2-Hexanone	5.0 U	108	56 - 132	117	56 - 132	25 U
Dibromochloromethane	1.0 U	110	72 - 128	114	72 - 128	5.0 U
Chlorobenzene	1.0 U	102	76 - 125	105	76 - 125	5.0 U
Ethylbenzene	1.0 U	94	72 - 134	97	72 - 134	5.0 U
m/p-Xylenes	2.0 U	105	68 - 138	108	68 - 138	10 U
o-Xylene	1.0 U	99	68 - 134	103	68 - 134	5.0 U
Styrene	1.0 U	40	34 - 156	41	34 - 156	5.0 U
Bromoform	1.0 U	105	58 - 133	112	58 - 133	5.0 U
1,1,2,2-Tetrachloroethane	1.0 U	108	72 - 122	113	72 - 122	5.0 U

Notes:

U = Compound not detected at detection limit.

**Bold** = Compound detected at concentration.

J = Indicates an estimated value below detection limit.

D - Compound analyzed at secondary dilution.

**TABLE 1**  
**Summary of Groundwater Analytical Data**  
**Former Textron Inc.**  
**Wheatfield, NY**  
**May and June 2015**

SAMPLE LOCATION	87-02(3)		87-02(3)		87-04(3)	87-13(3)
SAMPLE I.D.	BAT-87-02(3))-150625MS		BAT-87-02(3)-150625MS		BAT-87-04(3)-150625	BAT-87-13(3)-150518
SAMPLE DATE	6/25/2015		6/25/2015		6/25/2015	5/18/2015
VOCs by USEPA Method 8260	Matrix Spike		Matrix Spike Duplicate			
	% Rec.	QC Lim	% Rec.	QC Lim		
Chloromethane	118	55 - 160	119	55 - 160	5.0 U	200 U
Vinyl chloride	107	60 - 157	110	60 - 157	5.0 U	750
Chloroethane	100	70 - 140	87	70 - 140	5.0 U	200 U
Bromomethane	56	10 - 162	55	10 - 162	5.0 U	200 U
1,1-Dichloroethene	102	72 - 125	104	72 - 125	5.0 U	200 U
Acetone	90	29 - 151	89	29 - 151	25 U	1000 U
Carbon Disulfide	89	34 - 162	90	34 - 162	5.0 U	440
Methylene chloride	100	75 - 121	104	75 - 121	5.0 U	200 U
trans-1,2-Dichloroethene	106	77 - 125	106	77 - 125	5.0 U	320
1,1-Dichloroethane	99	74 - 132	104	74 - 132	5.0 U	200 U
cis-1,2-Dichloroethene	104	72 - 133	108	72 - 133	5.0 U	46000 D
2-Butanone	113	46 - 141	109	46 - 141	25 U	1000 U
Chloroform	102	75 - 130	104	75 - 130	2.6 J	490
1,1,1-Trichloroethane	99	74 - 127	98	74 - 127	5.0 U	200 U
Carbon Tetrachloride	89	71 - 135	93	71 - 135	5.0 U	200 U
Benzene	104	76 - 129	105	76 - 129	5.0 U	200 U
1,2-Dichloroethane	94	73 - 132	98	73 - 132	5.0 U	200 U
Trichloroethene	104	62 - 142	106	62 - 142	1.8 J	79000 D
1,2-Dichloropropane	100	79 - 124	104	79 - 124	5.0 U	200 U
Bromodichloromethane	96	76 - 127	98	76 - 127	5.0 U	86 J
cis-1,3-Dichloropropene	71	52 - 134	71	52 - 134	5.0 U	200 U
4-Methyl-2-pentanone	105	60 - 141	105	60 - 141	25 U	1000 U
Toluene	103	79 - 125	105	79 - 125	5.0 U	48 J
trans-1,3-Dichloropropene	68	64 - 123	69	64 - 123	5.0 U	200 U
1,1,2-Trichloroethane	103	82 - 115	108	82 - 115	5.0 U	200 U
Tetrachloroethene	95	67 - 137	99	67 - 137	5.0 U	200 U
2-Hexanone	99	56 - 132	96	56 - 132	25 U	1000 U
Dibromochloromethane	90	72 - 128	94	72 - 128	5.0 U	200 U
Chlorobenzene	98	76 - 125	98	76 - 125	5.0 U	200 U
Ethylbenzene	90	72 - 134	92	72 - 134	5.0 U	200 U
m/p-Xylenes	101	68 - 138	100	68 - 138	10 U	400 U
o-Xylene	98	68 - 134	102	68 - 134	5.0 U	200 U
Styrene	60	34 - 156	62	34 - 156	5.0 U	200 U
Bromoform	78	58 - 133	81	58 - 133	5.0 U	200 U
1,1,2,2-Tetrachloroethane	96	72 - 122	100	72 - 122	5.0 U	200 U

Notes:

U = Compound not detected at detection limit.

**Bold** = Compound detected at concentration.

J = Indicates an estimated value below detection lim

D - Compound analyzed at secondary dilution.

**TABLE 1**  
**Summary of Groundwater Analytical Data**  
**Former Textron Inc.**  
**Wheatfield, NY**  
**May and June 2015**

SAMPLE LOCATION	87-13(3)	87-13(3)	87-14(3)	87-15(3)
SAMPLE I.D.	BAT-DUP 1-150518	BAT-87-13(3)-150625	BAT-87-14(3)-150625	BAT-87-15(3)-150625
SAMPLE DATE	5/18/2015	6/25/2015	6/25/2015	6/25/2015
<b>VOCs by USEPA Method 8260</b>				
Chloromethane	250 U	200 U	1.0 U	1.0 U
Vinyl chloride	<b>830</b>	<b>990</b>	1.0 U	<b>390 D</b>
Chloroethane	250 U	200 U	1.0 U	<b>0.32 J</b>
Bromomethane	250 U	200 U	1.0 U	1.0 U
1,1-Dichloroethene	250 U	200 U	1.0 U	<b>4.7</b>
Acetone	1300 U	1000 U	5.0 U	5.0 U
Carbon Disulfide	<b>460</b>	<b>470</b>	1.0 U	1.0 U
Methylene chloride	250 U	200 U	1.0 U	<b>0.61 J</b>
trans-1,2-Dichloroethene	<b>320</b>	<b>310</b>	1.0 U	<b>5.4</b>
1,1-Dichloroethane	250 U	200 U	1.0 U	<b>6.8</b>
cis-1,2-Dichloroethene	<b>48000</b>	<b>50000 D</b>	<b>0.31 J</b>	<b>840 D</b>
2-Butanone	1300 U	1000 U	5.0 U	5.0 U
Chloroform	<b>680</b>	<b>520</b>	1.0 U	1.0 U
1,1,1-Trichloroethane	250 U	200 U	1.0 U	<b>0.66 J</b>
Carbon Tetrachloride	250 U	200 U	1.0 U	1.0 U
Benzene	250 U	200 U	1.0 U	1.0 U
1,2-Dichloroethane	250 U	200 U	1.0 U	1.0 U
Trichloroethene	<b>69000 D</b>	<b>71000 D</b>	1.0 U	<b>1.6</b>
1,2-Dichloropropane	250 U	200 U	1.0 U	1.0 U
Bromodichloromethane	<b>120 J</b>	<b>94 J</b>	1.0 U	1.0 U
cis-1,3-Dichloropropene	250 U	200 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1300 U	1000 U	5.0 U	5.0 U
Toluene	<b>50 J</b>	<b>54 J</b>	1.0 U	1.0 U
trans-1,3-Dichloropropene	250 U	200 U	1.0 U	1.0 U
1,1,2-Trichloroethane	250 U	200 U	1.0 U	1.0 U
Tetrachloroethene	250 U	200 U	1.0 U	1.0 U
2-Hexanone	1300 U	1000 U	5.0 U	5.0 U
Dibromochloromethane	250 U	200 U	1.0 U	1.0 U
Chlorobenzene	250 U	200 U	1.0 U	1.0 U
Ethylbenzene	250 U	200 U	1.0 U	1.0 U
m/p-Xylenes	500 U	400 U	2.0 U	2.0 U
o-Xylene	250 U	200 U	1.0 U	1.0 U
Styrene	250 U	200 U	1.0 U	1.0 U
Bromoform	250 U	200 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	250 U	200 U	1.0 U	1.0 U

Notes:

U = Compound not detected at detection limit.

**Bold** = Compound detected at concentration.

J = Indicates an estimated value below detection limit

D - Compound analyzed at secondary dilution.

**TABLE 1**  
**Summary of Groundwater Analytical Data**  
**Former Textron Inc.**  
**Wheatfield, NY**  
**May and June 2015**

SAMPLE LOCATION	87-15(3)	87-16(3)	TRIP BLANK	TRIP BLANK
SAMPLE I.D.	BAT-DUP-150625	BAT-87-16(3)-150518	Trip Blank	Trip Blank
SAMPLE DATE	6/25/2015	6/25/2015	5/18/2015	6/25/2015
<b>VOCs by USEPA Method 8260</b>				
Chloromethane	10 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	<b>420</b>	3.4	1.0 U	1.0 U
Chloroethane	10 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	10 U	1.0 U	1.0 U	1.0 U
Acetone	50 U	<b>2.2 J</b>	5.0 U	5.0 U
Carbon Disulfide	10 U	1.0 U	1.0 U	1.0 U
Methylene chloride	<b>41</b>	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	<b>4.4 J</b>	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	<b>5.9 J</b>	<b>1.9</b>	1.0 U	1.0 U
cis-1,2-Dichloroethene	<b>910</b>	<b>4.0</b>	1.0 U	1.0 U
2-Butanone	50 U	5.0 U	5.0 U	5.0 U
Chloroform	<b>4.5 J</b>	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	10 U	<b>4.2</b>	1.0 U	1.0 U
Carbon Tetrachloride	10 U	1.0 U	1.0 U	1.0 U
Benzene	10 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	10 U	1.0 U	1.0 U	1.0 U
Trichloroethene	<b>2.2 J</b>	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	10 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	10 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	10 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	50 U	5.0 U	5.0 U	5.0 U
Toluene	10 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	10 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	10 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	10 U	1.0 U	1.0 U	1.0 U
2-Hexanone	50 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	10 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	10 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	10 U	1.0 U	1.0 U	1.0 U
m/p-Xylenes	20 U	2.0 U	2.0 U	2.0 U
o-Xylene	10 U	1.0 U	1.0 U	1.0 U
Styrene	10 U	1.0 U	1.0 U	1.0 U
Bromoform	10 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	10 U	1.0 U	1.0 U	1.0 U

Notes:

U = Compound not detected at detection limit.

**Bold** = Compound detected at concentration.

J = Indicates an estimated value below detection limit

D - Compound analyzed at secondary dilution.

**TABLE 2**  
**Summary of Vertical Hydraulic Gradients**  
**May 2015 Hydraulic Monitoring Event**  
**Former Textron Inc.**  
**Wheatfield, New York**

Well Name	Top of Riser Elevation (ft MSL)	Water Level (ft BTOR)	Date Measured	Water Level Elevation (ft MSL)	Head Difference Zone 3 - Zone 1 (dH) (ft)	Thickness Zone 2 (dL) (ft)	Verticle Gradient (dH/dL)
87-02(1)	589.21	18.69	May 18, 2015	570.52	4.6	7.00	0.66
87-02(3)	588.63	13.51		575.12			
87-04(1)	589.08	15.25	May 18, 2015	573.83	2.4	7.00	0.34
87-04(3)	589.49	13.26		576.23			
87-05(1)	589.37	15.17	May 18, 2015	574.20	2.17	7.00	0.31
87-05(3)	589.46	13.09		576.37			
87-13(1)	590.06	16.00	May 18, 2015	574.06	2.58	7.00	0.37
87-13(3)	589.91	13.27		576.64			
87-14(1)	589.06	14.85	May 18, 2015	574.21	2.8	7.00	0.40
87-14(3)	590.35	13.34		577.01			
87-15(1)	590.27	13.82	May 18, 2015	576.45	0.8	7.00	0.11
87-15(3)	589.87	12.62		577.25			

Note: Positive vertical gradients are upwards from Zone 3 to Zone 1.

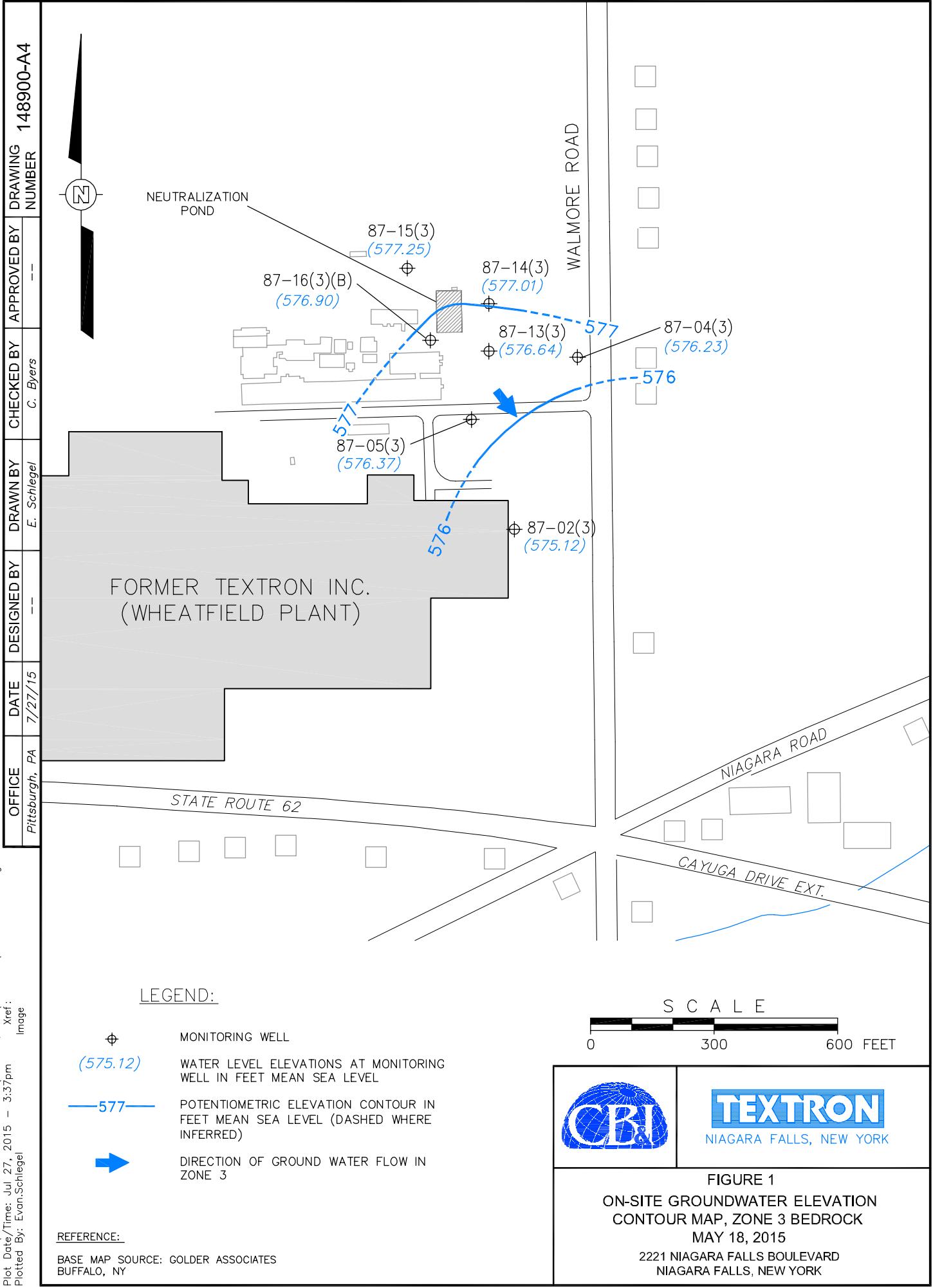
**TABLE 3**  
**Summary of Vertical Hydraulic Gradients**  
**June 2015 Hydraulic Monitoring Event**  
**Former Textron Inc.**  
**Wheatfield, New York**

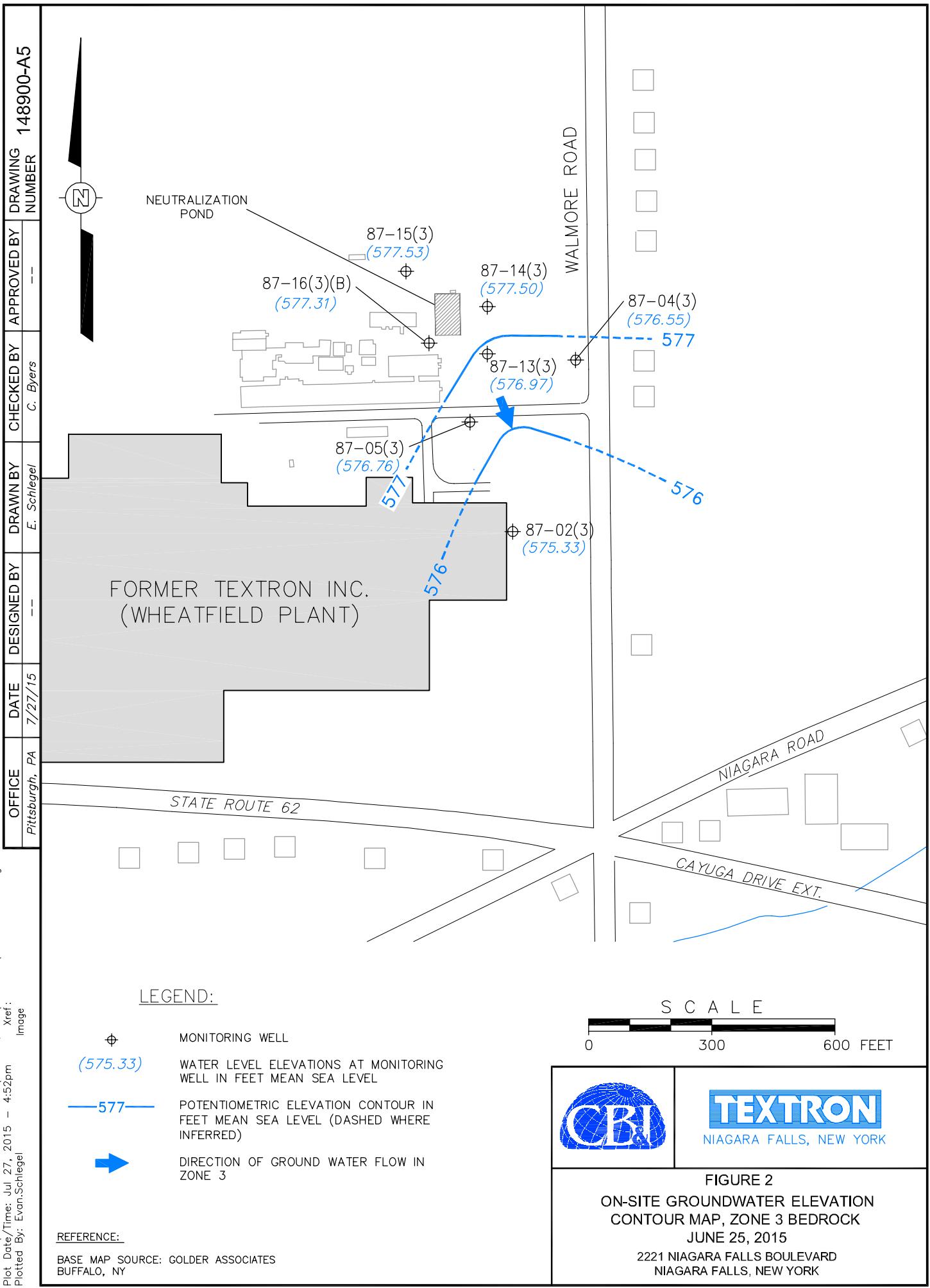
Well Name	Top of Riser Elevation (ft MSL)	Water Level (ft BTOR)	Date Measured	Water Level Elevation (ft MSL)	Head Difference Zone 3 - Zone 1 (dH) (ft)	Thickness Zone 2 (dL) (ft)	Verticle Gradient (dH/dL)
87-02(1)	589.21	16.64	June 25, 2015	572.57	2.76	7.00	0.39
87-02(3)	588.63	13.30		575.33			
87-04(1)	589.08	14.60	June 25, 2015	574.48	2.07	7.00	0.30
87-04(3)	589.49	12.94		576.55			
87-05(1)	589.37	14.50	June 25, 2015	574.87	1.89	7.00	0.27
87-05(3)	589.46	12.70		576.76			
87-13(1)	590.06	15.50	June 25, 2015	574.56	2.41	7.00	0.34
87-13(3)	589.91	12.94		576.97			
87-14(1)	589.06	14.30	June 25, 2015	574.76	2.74	7.00	0.39
87-14(3)	590.35	12.85		577.50			
87-15(1)	590.27	13.57	June 25, 2015	576.70	0.83	7.00	0.12
87-15(3)	589.87	12.34		577.53			

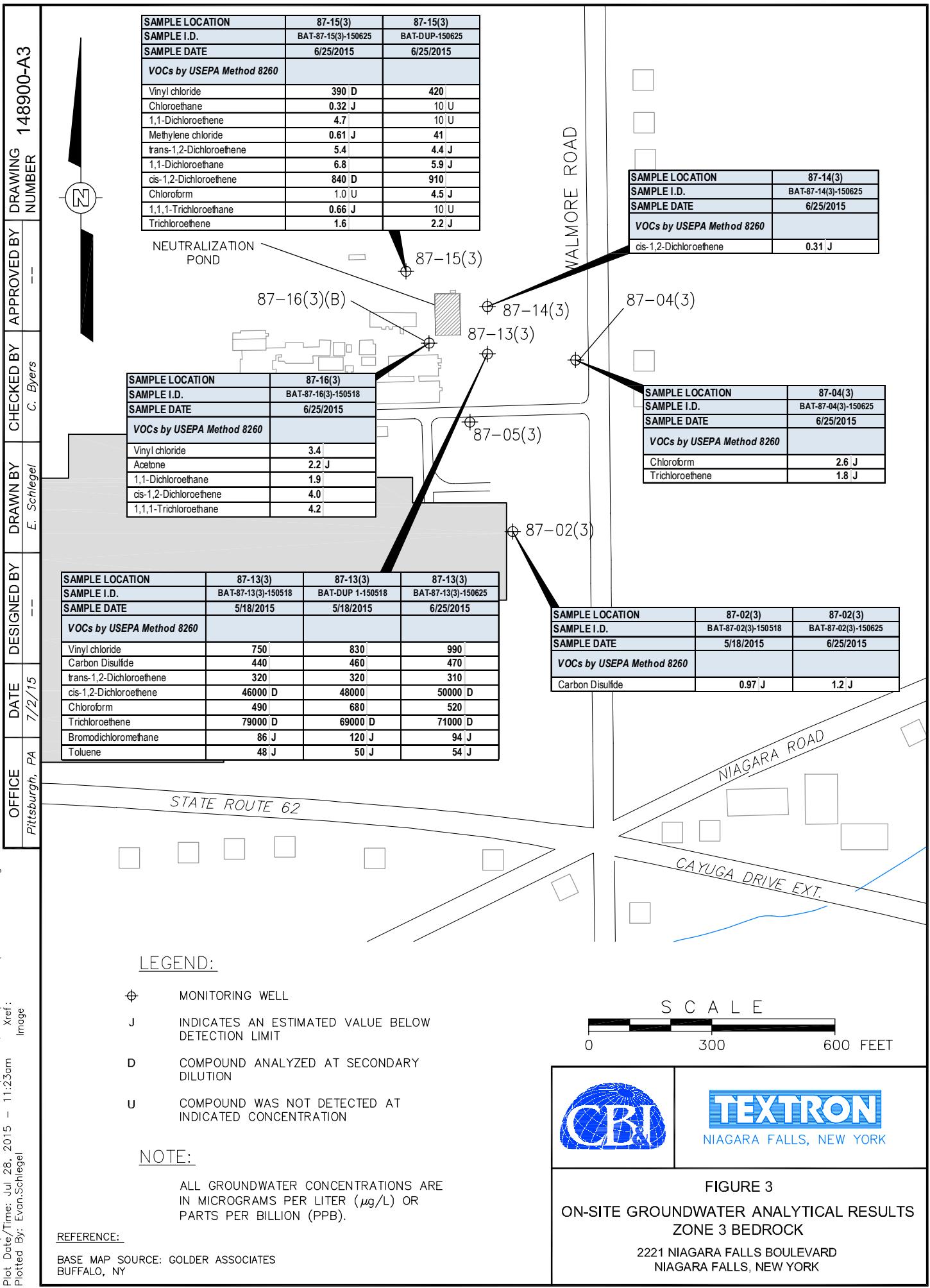
Note: Positive vertical gradients are upwards from Zone 3 to Zone 1.

## *Figures*

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***Attachment A***

***Laboratory Analytical Report***

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ALS Environmental  
ALS Group USA, Corp  
1565 Jefferson Rd, Building 300, Suite 360  
Rochester, NY 14623  
T: 585-288-5380  
F: 585-288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

June 02, 2015

Analytical Report for Service Request No: R1503862

Ms. Cecelia Byers  
CB&I Environmental & Infrastructure  
2790 Mossside Boulevard  
Monroeville, PA 15146

**Laboratory Results for: Textron Wheatfield/Semiannual Groundwater - 148900**

Dear Ms. Byers:

Enclosed are the results of the sample(s) submitted to our laboratory on May 20, 2015. For your reference, these analyses have been assigned our service request number **R1503862**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at [Janice.Jaeger@alsglobal.com](mailto:Janice.Jaeger@alsglobal.com).

Respectfully submitted,

**ALS Group USA Corp. dba ALS Environmental**

A handwritten signature in black ink, appearing to read "Janice Jaeger".

Janice Jaeger  
Project Manager

Page 1 of 39

## ALS Environmental

**Client:** CB&I Environmental  
**Service Request No.:** R1503862  
**Project:** Textron Wheatfield Semiannual  
**Date Received:** 5/20/15  
**Sample Matrix:** Water  
**Project/Case No.:**

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS).

#### Sample Receipt

Water samples were received for analysis at ALS Environmental on 5/20/15. The samples were received in good condition and consistent with the accompanying chain of custody form. All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory.

#### Volatile Organics

Twelve water samples were analyzed for a site specific list of Volatiles by method 5030C/8260C from SW-846.

All initial calibration criteria were met for all compounds. All Continuing Calibration Verification (CCV) standards were within 20% Difference (D) except Bromomethane on the 05/24/15 and 05/25/15 CCV's and Acetone on the 05/27/15 CCV. All samples with positive detections for these compounds should be considered as estimated.

All Tuning criteria were within QC limits.

All Laboratory Control Sample (LCS) recoveries were within limits except Dichlorodifluoromethane was outside limits high on the 05/05/15 LCS and has been flagged with an \*\*. No data was affected.

Site specific QC was performed on BAT-EW-6-150518 and BAT-87-02(3)-15-518. All MS/MSD recoveries and RPD's were acceptable.

Various compounds for BAT-87-13(3)-150518 and BAT-87-13(3)-150518DUP have been flagged with an "E" as being outside the calibration range of the instrument. The samples were repeated at dilutions and both sets of data have been reported out.

All Internal Standard (IS) Areas were within limits.

All surrogate standard recoveries were within limits.

The Method blank associated with these samples was free of contamination.

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

# ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: Semiannual Groundwater - 148900  
 Submission: R1503862  
 Client: CB&I  
 Client Rep: JJAEGER  
 Project: Textron Wheatfield

Batch Complete: Yes  
 Diskette Requested: No  
 Date: 6/18/15  
 Custody Seal: Present/Absent:  
 Chain of Custody: Present/Absent:  
 Date Revised:  
 Date Due: 6/3/15  
 Protocol: SW846  
 Shipping No.:  
 SDG #: BAT-FB1-150518

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks
R1503862-001	BAT-FB1-150518	Water	8260C	5/18/15	5/20/15			
R1503862-009	BAT-87-13(3)-150518	Water	8260C	5/18/15	5/20/15			
R1503862-009.R01	BAT-87-13(3)-150518	Water	8260C	5/18/15	5/20/15			
R1503862-010	BAT-DUP-1-150518	Water	8260C	5/18/15	5/20/15			
R1503862-010.R01	BAT-DUP-1-150518	Water	8260C	5/18/15	5/20/15			
R1503862-011QC	BAT-87-02(3)-150518	Water	8260C	5/18/15	5/20/15			
R1503862-012	TRIP BLANK	Water	8260C	5/15/15	5/20/15			



Folder Comments:

CLP Batching Form

## REPORT QUALIFIERS AND DEFINITIONS

- U** Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J** Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).
- B** Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E** Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E** Organics- Concentration has exceeded the calibration range for that specific analysis.
- D** Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- \* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
- H** Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
- # Spike was diluted out.
- +** Correlation coefficient for MSA is <0.995.
- N** Inorganics- Matrix spike recovery was outside laboratory limits.
- N** Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
- S** Concentration has been determined using Method of Standard Additions (MSA).
- W** Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
- P** Concentration >40% (25% for CLP) difference between the two GC columns.
- C** Confirmed by GC/MS
- Q** DoD reports: indicates a pesticide/Aroclor is not confirmed (>100% Difference between two GC columns).
- X** See Case Narrative for discussion.
- MRL** Method Reporting Limit. Also known as:
- LOQ** Limit of Quantitation (LOQ)  
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
- MDL** Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
- LOD** Limit of Detection. A value at or above the MDL which has been verified to be detectable.
- ND** Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



### Rochester Lab ID # for State Certifications<sup>1</sup>

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

<sup>1</sup> Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>



## **CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM**

25857

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 | +1 585 288 8475 (fax) PAGE

## CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

25856

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 2 OF 2

Project Name <i>Textron</i>	Project Number 148900	ANALYSIS REQUESTED (Include Method Number and Container Preservative)																
Project Manager CECILIA BYERS	Report CC LISA SCHMIDT	PRESERVATIVE	1															
Company/Address CB : I 2790 MOSSIDE BLVD. MONROEVILLE, PA 15146	Email CECILIA.BYERS@CBI.COM	NUMBER OF CONTAINERS	Preservative Key 0. NONE 1. HCl 2. HNO <sub>3</sub> 3. H <sub>2</sub> SO <sub>4</sub> 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO <sub>4</sub> 8. Other _____															
Phone # 518 - 281 - 2034		GC/MS NoAs • 8240 • 8241 • 825 GC/MS SYDAs • 8270 • 825 GC NoAs • 8021 • 801/802 Pesticides • 8081 • 808 PCPs • 8082 • 808 METALS TOTAL • (151 in comments below) METALS Dissolved • (151 in comments below)	REMARKS/ ALTERNATE DESCRIPTION															
Sampled Signature <i>Kevin Cronin</i>	Sample's Printed Name KEVIN CRONIN	CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX												
BAT-DUP-1-(50518)		5/15/18	—	GW	3	X												
BAT-87-02(3)-150518			1510	—	3	X												
BAT-87-02(3)-150518MS				—	3	X												
BAT-87-02(3)-150518MSD				—	3	X												
TRI BLANK					3	X												
SPECIAL INSTRUCTIONS/COMMENTS Metals							TURNAROUND REQUIREMENTS			REPORT REQUIREMENTS			INVOICE INFORMATION					
							<b>RUSH (SURCHARGES APPLY)</b> <b>STANDARD</b> — 1 day — 2 day — 3 day — 4 day — 5 day			I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required)  III. Results + QC and Calibration Summaries  IV. Data Validation Report with Raw Data			PO # _____  BILL TO: _____					
							REQUESTED REPORT DATE _____											
										Edata <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No								
See OAPP <input type="checkbox"/>																		
STATE WHERE SAMPLES WERE COLLECTED																		
RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY													
<i>Kevin Cronin</i> Printed Name KEVIN CRONIN	Signature <i>Gregory L. Esmeralda</i>	Signature	Signature	Signature	Signature													
Firm CB : I	Firm ALS	Firm	Firm	Firm	Firm													
Date/Time 5/15/18 1500	Date/Time 5/20/18 09:33	Date/Time	Date/Time	Date/Time	Date/Time													
R1503862 CB&I Environmental & Infrastructure Textron Wheelfield													5					



R1503862  
CB&I Environmental & Infrastructure  
Textron Wheatfield

5

### Cooler Receipt and Preservation Check Form

Project/Client

CBT I

Folder Number

R1503862

Cooler received on

5-20-15

by: HE

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y N
2	Custody papers properly completed (ink, signed)?	Y N
3	Did all bottles arrive in good condition (unbroken)?	Y N
4	Circle: Wet Ice Dry Ice Gel packs present?	Y N

5a	Perchlorate samples have required headspace?	Y N NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y N NA
6	Where did the bottles originate?	ALS/ROC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set NA

8. Temperature Readings Date: 5-20-15 Time: 10:04

ID: IR#3 IR#5 From: Temp Blank Sample Bottle

Observed Temp (°C)	4.3						
Correction Factor (°C)	-0.4						
Corrected Temp (°C)	3.9						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: \_\_\_\_\_ Ice melted Poorly Packed Same Day Rule

& Client Approval to Run Samples: \_\_\_\_\_ Standing Approval Client aware at drop-off Client notified by: \_\_\_\_\_

All samples held in storage location:	RODA	by HE	on 5-20-15	at 10:05
5035 samples placed in storage location:	by _____	on _____	at _____	

PC Secondary Review: HE 5-20-15

Cooler Breakdown: Date: 5-20-15 Time: 14:20 by: HE

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)?
2. Did all bottle labels and tags agree with custody papers?
3. Were correct containers used for the tests indicated?
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated

YES NO  
YES NO  
YES NO

N/A

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: \_\_\_\_\_

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO <sub>3</sub>								
≤2	H <sub>2</sub> SO <sub>4</sub>								
<4	NaHSO <sub>4</sub>								
Residual Chlorine (-)	For CN Phenol and S22			If +, contact PM to add Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (CN), ascorbic (phenol).					
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

\*\*Not to be tested before analysis - pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers:

Other Comments:

\*BAT-87-3(3)-150518 : 1 of 3 vials has sig. headspace.

BAT-DUP-1-150518 : All 3 vials have sig. headspace.

\* \* BAT-EW-3-150518 : Vial 3 labelled as BAT-ES-3-150518. Sample went into the lab per C.O.C.

HE 5-20-15

PC Secondary Review:

HE 5-20-15

\* significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-FB1-150518  
**Lab Code:** R1503862-001

**Service Request:** R1503862  
**Date Collected:** 5/18/15 0920  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:48

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8835.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water  
  
**Sample Name:** BAT-FB1-150518  
**Lab Code:** R1503862-001

**Service Request:** R1503862  
**Date Collected:** 5/18/15 0920  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:48

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8835.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	5/24/15 23:48	
Toluene-d8	97	87-121	5/24/15 23:48	
Dibromofluoromethane	99	89-119	5/24/15 23:48	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-13(3)-150518  
**Lab Code:** R1503862-009

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:00

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8867.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 200

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	200 U	200	42	
75-01-4	Vinyl Chloride	750	200	64	
75-00-3	Chloroethane	200 U	200	48	
74-83-9	Bromomethane	200 U	200	58	
75-35-4	1,1-Dichloroethene	200 U	200	120	
67-64-1	Acetone	1000 U	1000	250	
75-15-0	Carbon Disulfide	440	200	44	
75-09-2	Methylene Chloride	200 U	200	120	
156-60-5	trans-1,2-Dichloroethene	320	200	66	
75-34-3	1,1-Dichloroethane	200 U	200	40	
156-59-2	cis-1,2-Dichloroethene	45000 E	200	60	
78-93-3	2-Butanone (MEK)	1000 U	1000	170	
67-66-3	Chloroform	490	200	50	
71-55-6	1,1,1-Trichloroethane	200 U	200	72	
56-23-5	Carbon Tetrachloride	200 U	200	90	
71-43-2	Benzene	200 U	200	40	
107-06-2	1,2-Dichloroethane	200 U	200	72	
79-01-6	Trichloroethene	78000 E	200	44	
78-87-5	1,2-Dichloropropane	200 U	200	40	
75-27-4	Bromodichloromethane	86 J	200	64	
10061-01-5	cis-1,3-Dichloropropene	200 U	200	48	
108-10-1	4-Methyl-2-pentanone (MIBK)	1000 U	1000	140	
108-88-3	Toluene	48 J	200	40	
10061-02-6	trans-1,3-Dichloropropene	200 U	200	40	
79-00-5	1,1,2-Trichloroethane	200 U	200	68	
127-18-4	Tetrachloroethene	200 U	200	60	
591-78-6	2-Hexanone	1000 U	1000	340	
124-48-1	Dibromochloromethane	200 U	200	62	
108-90-7	Chlorobenzene	200 U	200	58	
100-41-4	Ethylbenzene	200 U	200	40	
179601-23-1	m,p-Xylenes	400 U	400	66	
95-47-6	o-Xylene	200 U	200	40	
100-42-5	Styrene	200 U	200	40	
75-25-2	Bromoform	200 U	200	84	
79-34-5	1,1,2,2-Tetrachloroethane	200 U	200	50	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-13(3)-150518  
**Lab Code:** R1503862-009

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:00

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8867.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 200

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	5/25/15 17:00	
Toluene-d8	98	87-121	5/25/15 17:00	
Dibromofluoromethane	100	89-119	5/25/15 17:00	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-13(3)-150518  
**Lab Code:** R1503862-009  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 22:55

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8910.D\

**Analysis Lot:** 446223  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 500

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	500 U	500	110	
75-01-4	Vinyl Chloride	760 D	500	160	
75-00-3	Chloroethane	500 U	500	120	
74-83-9	Bromomethane	500 U	500	150	
75-35-4	1,1-Dichloroethene	500 U	500	290	
67-64-1	Acetone	2500 U	2500	620	
75-15-0	Carbon Disulfide	460 DJ	500	110	
75-09-2	Methylene Chloride	500 U	500	300	
156-60-5	trans-1,2-Dichloroethene	330 DJ	500	170	
75-34-3	1,1-Dichloroethane	500 U	500	100	
156-59-2	cis-1,2-Dichloroethene	46000 D	500	150	
78-93-3	2-Butanone (MEK)	2500 U	2500	410	
67-66-3	Chloroform	500 U	500	130	
71-55-6	1,1,1-Trichloroethane	500 U	500	180	
56-23-5	Carbon Tetrachloride	500 U	500	230	
71-43-2	Benzene	500 U	500	100	
107-06-2	1,2-Dichloroethane	500 U	500	180	
79-01-6	Trichloroethene	79000 D	500	110	
78-87-5	1,2-Dichloropropane	500 U	500	100	
75-27-4	Bromodichloromethane	500 U	500	160	
10061-01-5	cis-1,3-Dichloropropene	500 U	500	120	
108-10-1	4-Methyl-2-pentanone (MIBK)	2500 U	2500	340	
108-88-3	Toluene	500 U	500	100	
10061-02-6	trans-1,3-Dichloropropene	500 U	500	100	
79-00-5	1,1,2-Trichloroethane	500 U	500	170	
127-18-4	Tetrachloroethene	500 U	500	150	
591-78-6	2-Hexanone	2500 U	2500	830	
124-48-1	Dibromochloromethane	500 U	500	160	
108-90-7	Chlorobenzene	500 U	500	150	
100-41-4	Ethylbenzene	500 U	500	100	
179601-23-1	m,p-Xylenes	1000 U	1000	170	
95-47-6	o-Xylene	500 U	500	100	
100-42-5	Styrene	500 U	500	100	
75-25-2	Bromoform	500 U	500	210	
79-34-5	1,1,2,2-Tetrachloroethane	500 U	500	130	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-13(3)-150518  
**Lab Code:** R1503862-009  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 22:55

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8910.D\

**Analysis Lot:** 446223  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 500

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/26/15 22:55	
Toluene-d8	96	87-121	5/26/15 22:55	
Dibromofluoromethane	100	89-119	5/26/15 22:55	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:30

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8868.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 250

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	250 U	250	53	
75-01-4	Vinyl Chloride	830	250	80	
75-00-3	Chloroethane	250 U	250	60	
74-83-9	Bromomethane	250 U	250	73	
75-35-4	1,1-Dichloroethene	250 U	250	150	
67-64-1	Acetone	1300 U	1300	310	
75-15-0	Carbon Disulfide	460	250	55	
75-09-2	Methylene Chloride	250 U	250	150	
156-60-5	trans-1,2-Dichloroethene	320	250	83	
75-34-3	1,1-Dichloroethane	250 U	250	50	
156-59-2	cis-1,2-Dichloroethene	48000	250	75	
78-93-3	2-Butanone (MEK)	1300 U	1300	210	
67-66-3	Chloroform	680	250	63	
71-55-6	1,1,1-Trichloroethane	250 U	250	90	
56-23-5	Carbon Tetrachloride	250 U	250	120	
71-43-2	Benzene	250 U	250	50	
107-06-2	1,2-Dichloroethane	250 U	250	90	
79-01-6	Trichloroethene	81000 E	250	55	
78-87-5	1,2-Dichloropropane	250 U	250	50	
75-27-4	Bromodichloromethane	120 J	250	80	
10061-01-5	cis-1,3-Dichloropropene	250 U	250	60	
108-10-1	4-Methyl-2-pentanone (MIBK)	1300 U	1300	170	
108-88-3	Toluene	50 J	250	50	
10061-02-6	trans-1,3-Dichloropropene	250 U	250	50	
79-00-5	1,1,2-Trichloroethane	250 U	250	85	
127-18-4	Tetrachloroethene	250 U	250	75	
591-78-6	2-Hexanone	1300 U	1300	420	
124-48-1	Dibromochloromethane	250 U	250	78	
108-90-7	Chlorobenzene	250 U	250	73	
100-41-4	Ethylbenzene	250 U	250	50	
179601-23-1	m,p-Xylenes	500 U	500	83	
95-47-6	o-Xylene	250 U	250	50	
100-42-5	Styrene	250 U	250	50	
75-25-2	Bromoform	250 U	250	110	
79-34-5	1,1,2,2-Tetrachloroethane	250 U	250	63	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:30

**Units:** Percent  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8868.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 250

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/25/15 17:30	
Toluene-d8	97	87-121	5/25/15 17:30	
Dibromofluoromethane	101	89-119	5/25/15 17:30	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 23:25

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8911.D\

**Analysis Lot:** 446223  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1000

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1000 U	1000	210	
75-01-4	Vinyl Chloride	730 DJ	1000	320	
75-00-3	Chloroethane	1000 U	1000	240	
74-83-9	Bromomethane	1000 U	1000	290	
75-35-4	1,1-Dichloroethene	1000 U	1000	570	
67-64-1	Acetone	5000 U	5000	1300	
75-15-0	Carbon Disulfide	480 DJ	1000	220	
75-09-2	Methylene Chloride	1000 U	1000	600	
156-60-5	trans-1,2-Dichloroethene	330 DJ	1000	330	
75-34-3	1,1-Dichloroethane	1000 U	1000	200	
156-59-2	cis-1,2-Dichloroethene	41000 D	1000	300	
78-93-3	2-Butanone (MEK)	5000 U	5000	810	
67-66-3	Chloroform	1000 U	1000	250	
71-55-6	1,1,1-Trichloroethane	1000 U	1000	360	
56-23-5	Carbon Tetrachloride	1000 U	1000	450	
71-43-2	Benzene	1000 U	1000	200	
107-06-2	1,2-Dichloroethane	1000 U	1000	360	
79-01-6	Trichloroethene	69000 D	1000	220	
78-87-5	1,2-Dichloropropane	1000 U	1000	200	
75-27-4	Bromodichloromethane	1000 U	1000	320	
10061-01-5	cis-1,3-Dichloropropene	1000 U	1000	240	
108-10-1	4-Methyl-2-pentanone (MIBK)	5000 U	5000	670	
108-88-3	Toluene	1000 U	1000	200	
10061-02-6	trans-1,3-Dichloropropene	1000 U	1000	200	
79-00-5	1,1,2-Trichloroethane	1000 U	1000	340	
127-18-4	Tetrachloroethene	1000 U	1000	300	
591-78-6	2-Hexanone	5000 U	5000	1700	
124-48-1	Dibromochloromethane	1000 U	1000	310	
108-90-7	Chlorobenzene	1000 U	1000	290	
100-41-4	Ethylbenzene	1000 U	1000	200	
179601-23-1	m,p-Xylenes	2000 U	2000	330	
95-47-6	o-Xylene	1000 U	1000	200	
100-42-5	Styrene	1000 U	1000	200	
75-25-2	Bromoform	1000 U	1000	420	
79-34-5	1,1,2,2-Tetrachloroethane	1000 U	1000	250	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 23:25

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\msvoal0\data\052615\A8911.D\

**Analysis Lot:** 446223  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1000

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/26/15 23:25	
Toluene-d8	97	87-121	5/26/15 23:25	
Dibromofluoromethane	99	89-119	5/26/15 23:25	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 02:05

**Sample Name:** BAT-87-02(3)-150518      **Units:** µg/L  
**Lab Code:** R1503862-011      **Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8958.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	0.97 J	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** R1503862-011

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 02:05

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8958.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	5/28/15 02:05	
Toluene-d8	97	87-121	5/28/15 02:05	
Dibromofluoromethane	103	89-119	5/28/15 02:05	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** TRIP BLANK  
**Lab Code:** R1503862-012

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:19

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052415\A8834.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** TRIP BLANK  
**Lab Code:** R1503862-012

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:19

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8834.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/24/15 23:19	
Toluene-d8	97	87-121	5/24/15 23:19	
Dibromofluoromethane	99	89-119	5/24/15 23:19	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/24/15 22:49

**Sample Name:** Method Blank  
**Lab Code:** RQ1505558-04

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8833.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505558-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/24/15 22:49

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8833.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	5/24/15 22:49	
Toluene-d8	98	87-121	5/24/15 22:49	
Dibromofluoromethane	100	89-119	5/24/15 22:49	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505539-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/25/15 10:26

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8855.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505539-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/25/15 10:26

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8855.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/25/15 10:26	
Toluene-d8	97	87-121	5/25/15 10:26	
Dibromofluoromethane	100	89-119	5/25/15 10:26	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/26/15 22:26

**Sample Name:** Method Blank  
**Lab Code:** RQ1505661-04      **Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C      **Analysis Lot:** 446223  
**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8909.D\      **Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505661-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/26/15 22:26

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS****Analytical Method:** 8260C**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8909.D\**Analysis Lot:** 446223**Instrument Name:** R-MS-10**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85-122	5/26/15 22:26	
Toluene-d8	96	87-121	5/26/15 22:26	
Dibromofluoromethane	100	89-119	5/26/15 22:26	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505783-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/27/15 17:42

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8941.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505783-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/27/15 17:42

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8941.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	5/27/15 17:42	
Toluene-d8	97	87-121	5/27/15 17:42	
Dibromofluoromethane	100	89-119	5/27/15 17:42	

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** 5/15/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15

**Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** R1503862-011

**Units:** µg/L  
**Basis:** NA

**Analytical Method:** 8260C

BAT-87-02(3)-150518MS	BAT-87-02(3)-150518DMS
Matrix Spike	Duplicate Matrix Spike
RQ1505783-05	RQ1505783-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chloromethane	ND	45.5	50.0	91	48.3	50.0	96	55 - 160	6	30
Vinyl Chloride	ND	44.9	50.0	90	46.9	50.0	94	60 - 157	4	30
Chloroethane	ND	45.7	50.0	91	47.5	50.0	95	70 - 140	4	30
Bromomethane	ND	26.1	50.0	52	26.5	50.0	53	10 - 162	1	30
1,1-Dichloroethene	ND	46.8	50.0	94	48.0	50.0	96	72 - 125	2	30
Acetone	ND	42.3	50.0	85	50.0	50.0	100	29 - 151	17	30
Carbon Disulfide	0.97	47.7	50.0	94	49.5	50.0	97	34 - 162	4	30
Methylene Chloride	ND	46.4	50.0	93	48.6	50.0	97	75 - 121	5	30
trans-1,2-Dichloroethene	ND	49.6	50.0	99	51.0	50.0	102	77 - 125	3	30
1,1-Dichloroethane	ND	50.1	50.0	100	51.6	50.0	103	74 - 132	3	30
cis-1,2-Dichloroethene	ND	47.4	50.0	95	49.6	50.0	99	72 - 133	5	30
2-Butanone (MEK)	ND	43.7	50.0	87	46.9	50.0	94	46 - 141	7	30
Chloroform	ND	48.7	50.0	97	50.7	50.0	101	75 - 130	4	30
1,1,1-Trichloroethane	ND	51.1	50.0	102	52.9	50.0	106	74 - 127	3	30
Carbon Tetrachloride	ND	53.2	50.0	106	54.3	50.0	109	71 - 135	2	30
Benzene	ND	48.6	50.0	97	49.5	50.0	99	76 - 129	2	30
1,2-Dichloroethane	ND	48.6	50.0	97	50.3	50.0	101	72 - 132	3	30
Trichloroethene	ND	48.8	50.0	98	51.2	50.0	102	62 - 142	5	30
1,2-Dichloropropane	ND	47.5	50.0	95	50.4	50.0	101	79 - 124	6	30
Bromodichloromethane	ND	49.2	50.0	98	52.0	50.0	104	76 - 127	5	30
cis-1,3-Dichloropropene	ND	45.6	50.0	91	46.3	50.0	93	52 - 134	2	30
4-Methyl-2-pentanone (MIBK)	ND	48.3	50.0	96	52.8	50.0	106	60 - 141	9	30
Toluene	ND	47.9	50.0	96	49.4	50.0	99	79 - 125	3	30
trans-1,3-Dichloropropene	ND	40.7	50.0	81	42.5	50.0	85	64 - 123	4	30
1,1,2-Trichloroethane	ND	46.6	50.0	93	48.8	50.0	98	82 - 115	4	30
Tetrachloroethene	ND	50.0	50.0	100	52.1	50.0	104	67 - 137	4	30
2-Hexanone	ND	54.0	50.0	108	58.5	50.0	117	56 - 132	8	30
Dibromochloromethane	ND	55.0	50.0	110	56.8	50.0	114	72 - 128	3	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** 5/15/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15

## **Matrix Spike Summary**

**Sample Name:** BAT-87-02(3)-150518      **Units:** µg/L  
**Lab Code:** R1503862-011      **Basis:** NA

Analytical Method: 8260C

Analyte Name	BAT-87-02(3)-150518MS				BAT-87-02(3)-150518DMS					
	Matrix Spike RQ1505783-05			Duplicate Matrix Spike RQ1505783-06			% Rec Limits	RPD Limit		
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Chlorobenzene	ND	51.1	50.0	102	52.6	50.0	105	76 - 125	3	30
Ethylbenzene	ND	47.2	50.0	94	48.7	50.0	97	72 - 134	3	30
m,p-Xylenes	ND	105	100	105	108	100	108	68 - 138	3	30
o-Xylene	ND	49.6	50.0	99	51.5	50.0	103	68 - 134	4	30
Styrene	ND	19.9	50.0	40	20.7	50.0	41	34 - 156	4	30
Bromoform	ND	52.3	50.0	105	56.0	50.0	112	58 - 133	7	30
1,1,2,2-Tetrachloroethane	ND	54.1	50.0	108	56.6	50.0	113	72 - 122	5	30

Results flagged with an asterisk (\*) indicate values outside control criteria

**Results flagged with a pound (#) indicate the control criteria is not applicable.**

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446162

**Lab Control Sample**  
**RQ1505558-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Chloromethane	18.4	20.0	92	64 - 140
Vinyl Chloride	18.1	20.0	90	69 - 136
Chloroethane	18.2	20.0	91	71 - 128
Bromomethane	14.1	20.0	71	41 - 159
1,1-Dichloroethene	19.1	20.0	96	74 - 135
Acetone	16.1	20.0	80	51 - 146
Carbon Disulfide	17.1	20.0	85	63 - 141
Methylene Chloride	19.5	20.0	98	73 - 122
trans-1,2-Dichloroethene	19.5	20.0	98	78 - 124
1,1-Dichloroethane	20.4	20.0	102	76 - 128
cis-1,2-Dichloroethene	19.3	20.0	96	80 - 121
2-Butanone (MEK)	19.0	20.0	95	66 - 129
Chloroform	19.9	20.0	100	76 - 120
1,1,1-Trichloroethane	19.7	20.0	99	71 - 123
Carbon Tetrachloride	20.1	20.0	100	66 - 128
Benzene	19.4	20.0	97	76 - 118
1,2-Dichloroethane	20.3	20.0	102	72 - 130
Trichloroethene	22.2	20.0	111	76 - 123
1,2-Dichloropropane	19.6	20.0	98	80 - 119
Bromodichloromethane	20.7	20.0	104	79 - 122
cis-1,3-Dichloropropene	18.8	20.0	94	77 - 125
4-Methyl-2-pentanone (MIBK)	18.4	20.0	92	68 - 129
Toluene	19.2	20.0	96	77 - 120
trans-1,3-Dichloropropene	19.0	20.0	95	72 - 123
1,1,2-Trichloroethane	19.7	20.0	98	79 - 117
Tetrachloroethene	18.8	20.0	94	69 - 124
2-Hexanone	19.7	20.0	98	61 - 131
Dibromochloromethane	21.6	20.0	108	79 - 125
Chlorobenzene	20.6	20.0	103	80 - 121
Ethylbenzene	18.0	20.0	90	76 - 120
m,p-Xylenes	40.5	40.0	101	78 - 123
o-Xylene	19.7	20.0	98	77 - 131
Styrene	20.5	20.0	102	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446162

**Lab Control Sample**  
RQ1505558-03

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Bromoform	22.2	20.0	111	65 - 138
1,1,2,2-Tetrachloroethane	19.1	20.0	95	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 446166

**Lab Control Sample**

RQ1505539-03

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Chloromethane	20.0	20.0	100	64 - 140
Vinyl Chloride	20.5	20.0	102	69 - 136
Chloroethane	20.7	20.0	104	71 - 128
Bromomethane	15.7	20.0	79	41 - 159
1,1-Dichloroethene	21.1	20.0	105	74 - 135
Acetone	14.0	20.0	70	51 - 146
Carbon Disulfide	19.7	20.0	98	63 - 141
Methylene Chloride	20.0	20.0	100	73 - 122
trans-1,2-Dichloroethene	21.6	20.0	108	78 - 124
1,1-Dichloroethane	21.0	20.0	105	76 - 128
cis-1,2-Dichloroethene	21.1	20.0	105	80 - 121
2-Butanone (MEK)	18.7	20.0	93	66 - 129
Chloroform	21.1	20.0	105	76 - 120
1,1,1-Trichloroethane	21.0	20.0	105	71 - 123
Carbon Tetrachloride	21.3	20.0	107	66 - 128
Benzene	20.6	20.0	103	76 - 118
1,2-Dichloroethane	20.5	20.0	103	72 - 130
Trichloroethene	20.8	20.0	104	76 - 123
1,2-Dichloropropane	20.4	20.0	102	80 - 119
Bromodichloromethane	21.2	20.0	106	79 - 122
cis-1,3-Dichloropropene	19.8	20.0	99	77 - 125
4-Methyl-2-pentanone (MIBK)	17.1	20.0	85	68 - 129
Toluene	20.6	20.0	103	77 - 120
trans-1,3-Dichloropropene	19.5	20.0	97	72 - 123
1,1,2-Trichloroethane	19.5	20.0	97	79 - 117
Tetrachloroethene	21.1	20.0	105	69 - 124
2-Hexanone	18.9	20.0	94	61 - 131
Dibromochloromethane	21.2	20.0	106	79 - 125
Chlorobenzene	21.6	20.0	108	80 - 121
Ethylbenzene	19.8	20.0	99	76 - 120
m,p-Xylenes	44.5	40.0	111	78 - 123
o-Xylene	21.3	20.0	107	77 - 131
Styrene	22.0	20.0	110	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446166

**Lab Control Sample**  
RQ1505539-03

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Bromoform	21.2	20.0	106	65 - 138
1,1,2,2-Tetrachloroethane	22.1	20.0	111	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 446223

**Lab Control Sample**  
**RQ1505661-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>		<b>% Rec Limits</b>
		<b>Amount</b>	<b>% Rec</b>	
Chloromethane	16.8	20.0	84	64 - 140
Vinyl Chloride	16.2	20.0	81	69 - 136
Chloroethane	17.5	20.0	88	71 - 128
Bromomethane	15.4	20.0	77	41 - 159
1,1-Dichloroethene	17.3	20.0	87	74 - 135
Acetone	18.0	20.0	90	51 - 146
Carbon Disulfide	20.8	20.0	104	63 - 141
Methylene Chloride	18.4	20.0	92	73 - 122
trans-1,2-Dichloroethene	18.3	20.0	92	78 - 124
1,1-Dichloroethane	18.4	20.0	92	76 - 128
cis-1,2-Dichloroethene	18.5	20.0	93	80 - 121
2-Butanone (MEK)	19.1	20.0	95	66 - 129
Chloroform	19.1	20.0	95	76 - 120
1,1,1-Trichloroethane	17.5	20.0	87	71 - 123
Carbon Tetrachloride	17.4	20.0	87	66 - 128
Benzene	17.8	20.0	89	76 - 118
1,2-Dichloroethane	19.8	20.0	99	72 - 130
Trichloroethene	18.8	20.0	94	76 - 123
1,2-Dichloropropane	18.6	20.0	93	80 - 119
Bromodichloromethane	19.4	20.0	97	79 - 122
cis-1,3-Dichloropropene	18.3	20.0	91	77 - 125
4-Methyl-2-pentanone (MIBK)	18.9	20.0	95	68 - 129
Toluene	17.9	20.0	89	77 - 120
trans-1,3-Dichloropropene	18.0	20.0	90	72 - 123
1,1,2-Trichloroethane	19.5	20.0	97	79 - 117
Tetrachloroethene	17.3	20.0	86	69 - 124
2-Hexanone	20.2	20.0	101	61 - 131
Dibromochloromethane	21.1	20.0	106	79 - 125
Chlorobenzene	19.5	20.0	98	80 - 121
Ethylbenzene	16.6	20.0	83	76 - 120
m,p-Xylenes	37.8	40.0	95	78 - 123
o-Xylene	18.8	20.0	94	77 - 131
Styrene	20.1	20.0	100	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446223

**Lab Control Sample**  
**RQ1505661-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Bromoform	21.0	20.0	105	65 - 138
1,1,2,2-Tetrachloroethane	20.4	20.0	102	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

Analytical Method: 8260C

Units: µg/L  
Basis: NA

Analysis Lot: 446543

**Lab Control Sample**  
**RQ1505783-03**

Analyte Name	Result	Spike	% Rec	% Rec Limits
		Amount		
Chloromethane	19.8	20.0	99	64 - 140
Vinyl Chloride	19.0	20.0	95	69 - 136
Chloroethane	16.3	20.0	81	71 - 128
Bromomethane	16.6	20.0	83	41 - 159
1,1-Dichloroethene	19.8	20.0	99	74 - 135
Acetone	13.6	20.0	68	51 - 146
Carbon Disulfide	19.3	20.0	96	63 - 141
Methylene Chloride	18.8	20.0	94	73 - 122
trans-1,2-Dichloroethene	20.0	20.0	100	78 - 124
1,1-Dichloroethane	20.1	20.0	100	76 - 128
cis-1,2-Dichloroethene	20.3	20.0	101	80 - 121
2-Butanone (MEK)	18.7	20.0	94	66 - 129
Chloroform	19.8	20.0	99	76 - 120
1,1,1-Trichloroethane	20.1	20.0	100	71 - 123
Carbon Tetrachloride	20.3	20.0	102	66 - 128
Benzene	19.3	20.0	97	76 - 118
1,2-Dichloroethane	20.0	20.0	100	72 - 130
Trichloroethene	19.8	20.0	99	76 - 123
1,2-Dichloropropane	19.5	20.0	98	80 - 119
Bromodichloromethane	19.3	20.0	97	79 - 122
cis-1,3-Dichloropropene	20.0	20.0	100	77 - 125
4-Methyl-2-pentanone (MIBK)	19.1	20.0	96	68 - 129
Toluene	19.3	20.0	96	77 - 120
trans-1,3-Dichloropropene	19.6	20.0	98	72 - 123
1,1,2-Trichloroethane	18.3	20.0	92	79 - 117
Tetrachloroethene	20.5	20.0	102	69 - 124
2-Hexanone	21.0	20.0	105	61 - 131
Dibromochloromethane	21.8	20.0	109	79 - 125
Chlorobenzene	21.0	20.0	105	80 - 121
Ethylbenzene	18.9	20.0	95	76 - 120
m,p-Xylenes	42.2	40.0	105	78 - 123
o-Xylene	20.3	20.0	101	77 - 131
Styrene	21.2	20.0	106	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 446543

**Lab Control Sample**  
RQ1505783-03

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Bromoform	21.3	20.0	106	65 - 138
1,1,2,2-Tetrachloroethane	21.6	20.0	108	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



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[www.alsglobal.com](http://www.alsglobal.com)

June 02, 2015

Analytical Report for Service Request No: R1503862

Ms. Cecelia Byers  
CB&I Environmental & Infrastructure  
2790 Mosside Boulevard  
Monroeville, PA 15146

**Laboratory Results for: Textron Wheatfield/Semiannual Groundwater - 148900**

Dear Ms. Byers:

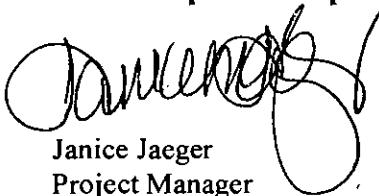
Enclosed are the results of the sample(s) submitted to our laboratory on May 20, 2015. For your reference, these analyses have been assigned our service request number **R1503862**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at [Janice.Jaeger@alsglobal.com](mailto:Janice.Jaeger@alsglobal.com).

Respectfully submitted,

**ALS Group USA Corp. dba ALS Environmental**



Janice Jaeger  
Project Manager

Page 1 of 526



## SDG NARRATIVE

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## ALS Environmental

**Client:** CB&I Environmental  
**Service Request No.:** R1503862  
**Project:** Textron Wheatfield Semiannual  
**Date Received:** 5/20/15  
**Sample Matrix:** Water  
**Project/Case No.:**

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS).

#### Sample Receipt

Water samples were received for analysis at ALS Environmental on 5/20/15. The samples were received in good condition and consistent with the accompanying chain of custody form. All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory.

#### Volatile Organics

Twelve water samples were analyzed for a site specific list of Volatiles by method 5030C/8260C from SW-846.

All initial calibration criteria were met for all compounds. All Continuing Calibration Verification (CCV) standards were within 20% Difference (D) except Bromomethane on the 05/24/15 and 05/25/15 CCV's and Acetone on the 05/27/15 CCV. All samples with positive detections for these compounds should be considered as estimated.

All Tuning criteria were within QC limits.

All Laboratory Control Sample (LCS) recoveries were within limits except Dichlorodifluoromethane was outside limits high on the 05/05/15 LCS and has been flagged with an \*\*. No data was affected.

Site specific QC was performed on BAT-EW-6-150518 and BAT-87-02(3)-15-518. All MS/MSD recoveries and RPD's were acceptable.

Various compounds for BAT-87-13(3)-150518 and BAT-87-13(3)-150518DUP have been flagged with an "E" as being outside the calibration range of the instrument. The samples were repeated at dilutions and both sets of data have been reported out.

All Internal Standard (IS) Areas were within limits.

All surrogate standard recoveries were within limits.

The Method blank associated with these samples was free of contamination.

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

# ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: Semiannual Groundwater - 148900  
 Submission: R1503862  
 Client: CB&I  
 Client Rep: JJAEGER  
 Project: Textron Wheatfield

Batch Complete: Yes  
 Diskette Requested: No  
 Date: 6/18/15  
 Custody Seal: Present/Absent:  
 Chain of Custody: Present/Absent:

Date Revised:  
 Date Due: 6/3/15  
 Protocol: SW846  
 Shipping No.:  
 SDG #: BAT-FB1-150518

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1503862-001	BAT-FB1-150518	Water	8260C	5/18/15	5/20/15			
R1503862-009	BAT-87-13(3)-150518	Water	8260C	5/18/15	5/20/15			
R1503862-009.R01	BAT-87-13(3)-150518	Water	8260C	5/18/15	5/20/15			
R1503862-010	BAT-DUP-1-150518	Water	8260C	5/18/15	5/20/15			
R1503862-010.R01	BAT-DUP-1-150518	Water	8260C	5/18/15	5/20/15			
R1503862-011QC	BAT-87-02(3)-150518	Water	8260C	5/15/15	5/20/15			
R1503862-012	TRIP BLANK	Water	8260C	5/15/15	5/20/15			

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CLP Batching Form

Page 1



**ALS Environmental**

## REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% (25% for CLP) difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ( $\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



### Rochester Lab ID # for State Certifications<sup>1</sup>

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	Pennsylvania ID# 68-786
DoD ELAP #65817	New Jersey ID # NY004	Rhode Island ID # 158
Florida ID # E87674	New York ID # 10145	Virginia #460167
Illinois ID #200047	North Carolina #676	

<sup>1</sup> Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>



## CHAINS OF CUSTODY

**ALS Environmental - Rochester, NY**  
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## **CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM**

25857

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2

Project Name <b>TEXTRON</b>		Project Number <b>148900</b>		ANALYSIS REQUESTED (Include Method Number and Container Preservative)															
Project Manager <b>CECILIA BYERS</b>		Report CC <b>LISA SCHMIDT</b>																	
Company/Address <b>CB&amp;I</b> <b>2790 MOSSIDE BLVD.</b> <b>MONROEVILLE, PA 15146</b>																			
Phone # <b>518-281-2034</b>		Email <b>CECILIA_BYERS@CBIA.COM</b>																	
Sampler's Signature <b>Kevin Cronin</b>		Sampler's Printed Name <b>KEVIN CRONIN</b>																	
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING		MATRIX	NUMBER OF CONTAINERS	Preservative Key													
		DATE	TIME			GC/MS VOAs 8081-821-CLP GC/MS SPVOAs 8070-825 GC VOAs 8021-801-802 PESTICIDES 8081-808 PCBs 8082-808 METALS, TOTAL (List in comments below) METALS, DISSOLVED (List in comments below)													
BAT-FB1-150518		05/18/15	0920	GW	3 X														
BAT-FB2-150518			0925	GW	X														
<del>BAT-2</del> BAT-EW-2-150518			1000	GW	X														
BAT-EW-3-150518			1015	GW	X														
BAT-EW-4-150518			1025	GW	X														
BAT-EW-5-150518			1045	GW	X														
BAT-EW-6-150518			1120	GW	X														
BAT-EW-6-150518 MS			1120	GW	X														
BAT-EW-6-150518 MS			1120	GW	X														
BAT-BGP-2-150518	05/18/15	—	GW	X															
BAT-87-13(3)-150518		1320	GW	X															
SPECIAL INSTRUCTIONS/COMMENTS					TURNAROUND REQUIREMENTS					REPORT REQUIREMENTS					INVOICE INFORMATION				
Metals					RUSH (SURCHARGES APPLY) <b>STANDARD</b> 1 day    2 day    3 day 4 day    5 day					I. Results Only ✓ II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data					PO # BILL TO: _____				
See QAPP <input type="checkbox"/>																			
STATE WHERE SAMPLES WERE COLLECTED <b>NY</b>																			
RELINQUISHED BY		RECEIVED BY		RELINQUISHED BY		RECEIVED BY		RELINQUISHED BY		RECEIVED BY									
<b>G</b> Signature <b>Kevin Cronin</b>		<b>G</b> Signature <b>Gregory O. Esmerian</b>		<b>G</b> Signature		<b>G</b> Signature		<b>G</b> Signature		<b>G</b> Signature									
Printed Name <b>KEVIN CRONIN</b>		Printed Name <b>GREGORY O. ESMERIAN</b>		Printed Name		Printed Name		Printed Name		Printed Name									
Firm <b>CB&amp;I</b>		Firm <b>A2S</b>		Firm		Firm		Firm		Firm									
Date/Time <b>5/19/15 (150)</b>		Date/Time <b>5/18/15 (19:35)</b>		Date/Time		Date/Time		Date/Time		Date/Time									
<b>R1503862</b> CB&I Environmental & Infrastructure Textron Wheastfield																			

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## **CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM**

25856

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Project Name <b>TEXTRON</b>		Project Number <b>148900</b>		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																			
Project Manager <b>CECELIA BYERS</b>		Report CC <b>LISA SCHMIDHORN</b>																					
Company/Address <b>CB : I</b> <b>2790 MASSIDE BLVD.</b> <b>MONROEVILLE, PA 15146</b>				PRESERVATIVE																			
Phone # <b>518-281-2034</b>		Email <b>CECELIA.BYERS@CBI.COM</b>																					
Sampler's Signature <b>Kevin Cronin</b>		Sampler's Printed Name <b>KEVIN CRONIN</b>																					
CLIENT SAMPLE ID		FOR OFFICE USE ONLY LAB ID		SAMPLING		NUMBER OF CONTAINERS		Preservative Key															
BAT-DUP 1-150518				DATE 5/15/18		TIME —		MATRIX GW		GC/MS VOAs o 8280 o 8244 o CLP		GC/MS STOAs o 8270 o 825		GC VOAs o 8021 o 5017602		PESTICIDES o 8081 o 808		PCBs o 8002 o 808		METALS TOTAL (List in comments below)		METALS DISSOLVED (List in comments below)	
BAT-87-02(3)-150518				1510		—		3 X															
BAT-87-02(3)-150518MS				↓		↓		4		3 X													
BAT-87-02(3)-150518MSD				↓		↓		5		3 X													
TRIP BLANK																							
SPECIAL INSTRUCTIONS/COMMENTS Metals												TURNAROUND REQUIREMENTS		REPORT REQUIREMENTS		INVOICE INFORMATION							
												RUSH (SURCHARGES APPLY) <b>STANDARD</b> 1 day — 2 day — 3 day 4 day — 5 day		<input checked="" type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data		PO # _____ BILL TO: _____							
												REQUESTED REPORT DATE _____		<input type="checkbox"/> Edata <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
See QAPP <input type="checkbox"/>																							
STATE WHERE SAMPLES WERE COLLECTED																							
<input checked="" type="checkbox"/> RELINQUISHED BY		<input checked="" type="checkbox"/> RECEIVED BY		<input checked="" type="checkbox"/> RELINQUISHED BY		<input checked="" type="checkbox"/> RECEIVED BY		<input checked="" type="checkbox"/> RELINQUISHED BY		<input checked="" type="checkbox"/> RECEIVED BY													
Signature <b>Kevin Cronin</b>		Signature <b>John Emerick</b>		Signature		Signature		Signature		Signature													
Printed Name <b>Kevin Cronin</b>		Printed Name <b>Gregory O. Emerick</b>		Printed Name		Printed Name		Printed Name		Printed Name													
Firm <b>CB : I</b>		Firm <b>ALS</b>		Firm		Firm		Firm		Firm													
Date/Time <b>5/15/18 1500</b>		Date/Time <b>5/20/18 09:33</b>		Date/Time		Date/Time		Date/Time		Date/Time													
												<b>R1503862</b> CB&I Environmental & Infrastructure Textron Whefield		 <span style="float: right;">5</span>									

Distribution: White - Lab Copy; Yellow - Return to Originator

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# Cooler Receipt and Preservation Check Form

R1503862

CB&I Environmental & Infrastructure  
Textron Wheatfield

5

Project/Client

CBT

Folder Number

R1503862

Cooler received on

by: HE

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
2	Custody papers properly completed (ink, signed)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
3	Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
4	Circle: Wet Ice Dry Ice Gel packs present?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

5a	Perchlorate samples have required headspace?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6	Where did the bottles originate?	<input checked="" type="checkbox"/> ALS/ROC <input type="checkbox"/> CLIENT
7	Soil VOA received as:	Bulk Encore 5035set <input type="checkbox"/> NA

8. Temperature Readings Date: 5-20-15 Time: 10:04

ID: IR#3 IR#5

From: Temp Blank Sample Bottle

Observed Temp (°C)	4.3						
Correction Factor (°C)	-0.4						
Corrected Temp (°C)	3.9						
Within 0-6°C?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N					

If out of Temperature, note packing/ice condition: \_\_\_\_\_ Ice melted Poorly Packed Same Day Rule

&amp; Client Approval to Run Samples: \_\_\_\_\_ Standing Approval Client aware at drop-off Client notified by: \_\_\_\_\_

All samples held in storage location:	ROD	by HE	on 5-20-15	at 10:05
5035 samples placed in storage location:	by _____	on _____	at _____	

PC Secondary Review: *IR#3 IR#5*

Cooler Breakdown: Date: 5-20-15 Time: 14:10 by: HE

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)?
2. Did all bottle labels and tags agree with custody papers?
3. Were correct containers used for the tests indicated?
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated

YES  NO  
 YES  NO  
 YES  NO

N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO <sub>3</sub>								
≤2	H <sub>2</sub> SO <sub>4</sub>								
<4	NaHSO <sub>4</sub>								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (CN), ascorbic (phenol).					
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

\*\*Not to be tested before analysis - pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust:

Bottle lot numbers:

Other Comments:

\*BAT-87-B(3)-150518 : 1 of 3 vials has sig. headspace.

BAF-Dup1-150518 : All 3 vials have sig. headspace.

\*BAT-EW-3-150518 : Vial3 labelled as BAT-ES-3-150518. Sample went into the lab per C.O.C.

HE 5-20-15

PC Secondary Review:

*IR#3 IR#5*

\*significant air bubbles: VOA &gt; 5-6 mm : WC &gt; 1 in. diameter

0000S

**ALS ENVIRONMENTAL**  
**Chain of Custody Report**

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1503862-001.01	8260C				
		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1015	In Lab / FNAEGLER	
		5/24/15	1103	R-001-S10 / FNAEGLER	
R1503862-001.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-001.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-002.01	8260C				
		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1015	In Lab / FNAEGLER	
		5/24/15	1103	R-001-S10 / FNAEGLER	
R1503862-002.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-002.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-003.01	8260C				
		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1015	In Lab / FNAEGLER	
		5/24/15	1103	R-001-S10 / FNAEGLER	
R1503862-003.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-003.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-004.01	8260C				
		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1015	In Lab / FNAEGLER	

**ALS ENVIRONMENTAL**  
**Chain of Custody Report**

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/24/15	1103	R-001-S10 / FNAEGLER	
R1503862-004.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-004.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-005.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1004	R-001-S10 / FNAEGLER	
		5/25/15	1007	In Lab / KRUEST	
		5/25/15	1010	R-001-S10 / KRUEST	
R1503862-005.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-005.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-006.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1004	R-001-S10 / FNAEGLER	
		5/25/15	1007	In Lab / KRUEST	
		5/25/15	1010	R-001-S10 / KRUEST	
R1503862-006.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-006.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-007.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1015	In Lab / FNAEGLER	
		5/24/15	1103	R-001-S10 / FNAEGLER	
R1503862-007.02		5/20/15	1423	SMO / GLAFORCE	

**ALS ENVIRONMENTAL**  
**Chain of Custody Report**

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-007.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-007.04		5/20/15	1435	SMO / GLAFORCE	
		5/20/15	1435	R-001 / GLAFORCE	
R1503862-007.05		5/20/15	1435	SMO / GLAFORCE	
		5/20/15	1435	R-001 / GLAFORCE	
R1503862-007.06		5/20/15	1435	SMO / GLAFORCE	
		5/20/15	1435	R-001 / GLAFORCE	
R1503862-007.07		5/20/15	1435	SMO / GLAFORCE	
		5/20/15	1435	R-001 / GLAFORCE	
R1503862-007.08		5/20/15	1435	SMO / GLAFORCE	
		5/20/15	1435	R-001 / GLAFORCE	
R1503862-007.09		5/20/15	1435	SMO / GLAFORCE	
		5/20/15	1435	R-001 / GLAFORCE	
R1503862-008.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1004	R-001-S10 / FNAEGLER	
		5/25/15	1007	In Lab / KRUEST	
		5/25/15	1010	R-001-S10 / KRUEST	
R1503862-008.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-008.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-009.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1004	R-001-S10 / FNAEGLER	

# ALS ENVIRONMENTAL

## Chain of Custody Report

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/25/15	1007	In Lab / KRUEST	
		5/25/15	1010	R-001-S10 / KRUEST	
		5/26/15	1046	In Lab / FNAEGLER	
		5/26/15	1403	R-001-S10 / KRUEST	
R1503862-009.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-009.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-010.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1004	R-001-S10 / FNAEGLER	
		5/25/15	1007	In Lab / KRUEST	
		5/25/15	1010	R-001-S10 / KRUEST	
		5/26/15	1046	In Lab / FNAEGLER	
		5/26/15	1403	R-001-S10 / KRUEST	
R1503862-010.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-010.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-011.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1004	R-001-S10 / FNAEGLER	
		5/25/15	1007	In Lab / KRUEST	
		5/25/15	1010	R-001-S10 / KRUEST	
		5/26/15	1046	In Lab / FNAEGLER	
		5/26/15	1403	R-001-S10 / KRUEST	
		5/27/15	1657	In Lab / FNAEGLER	
		5/27/15	1716	R-001-S10 / DLIPANI	
R1503862-011.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-011.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	

**ALS ENVIRONMENTAL**  
**Chain of Custody Report**

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1503862-011.04		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-011.05		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-011.06		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-011.07		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-011.08		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-011.09		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-012.01	8260C	5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
		5/24/15	1015	In Lab / FNAEGLER	
		5/24/15	1103	R-001-S10 / FNAEGLER	
R1503862-012.02		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-012.03		5/20/15	1423	SMO / GLAFORCE	
		5/20/15	1423	R-001 / GLAFORCE	
R1503862-012.04		5/20/15	1430	SMO / GLAFORCE	
		5/20/15	1430	R-001 / GLAFORCE	
R1503862-012.05		5/20/15	1430	SMO / GLAFORCE	
		5/20/15	1430	R-001 / GLAFORCE	
R1503862-012.06		5/20/15	1430	SMO / GLAFORCE	
		5/20/15	1430	R-001 / GLAFORCE	



**ALS Environmental**

# **VOLATILE ORGANICS QC SUMMARY**

**ALS Environmental - Rochester, NY**  
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623  
Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

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## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** 5/15/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15

**Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** BAT-87-02(3)-150518      **Units:** µg/L  
**Lab Code:** R1503862-011      **Basis:** NA

**Analytical Method:** 8260C

BAT-87-02(3)-150518MS	BAT-87-02(3)-150518DMS
Matrix Spike	Duplicate Matrix Spike
RQ1505783-05	RQ1505783-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chloromethane	ND	45.5	50.0	91	48.3	50.0	96	55 - 160	6	30
Vinyl Chloride	ND	44.9	50.0	90	46.9	50.0	94	60 - 157	4	30
Chloroethane	ND	45.7	50.0	91	47.5	50.0	95	70 - 140	4	30
Bromomethane	ND	26.1	50.0	52	26.5	50.0	53	10 - 162	1	30
1,1-Dichloroethene	ND	46.8	50.0	94	48.0	50.0	96	72 - 125	2	30
Acetone	ND	42.3	50.0	85	50.0	50.0	100	29 - 151	17	30
Carbon Disulfide	0.97	47.7	50.0	94	49.5	50.0	97	34 - 162	4	30
Methylene Chloride	ND	46.4	50.0	93	48.6	50.0	97	75 - 121	5	30
trans-1,2-Dichloroethene	ND	49.6	50.0	99	51.0	50.0	102	77 - 125	3	30
1,1-Dichloroethane	ND	50.1	50.0	100	51.6	50.0	103	74 - 132	3	30
cis-1,2-Dichloroethene	ND	47.4	50.0	95	49.6	50.0	99	72 - 133	5	30
2-Butanone (MEK)	ND	43.7	50.0	87	46.9	50.0	94	46 - 141	7	30
Chloroform	ND	48.7	50.0	97	50.7	50.0	101	75 - 130	4	30
1,1,1-Trichloroethane	ND	51.1	50.0	102	52.9	50.0	106	74 - 127	3	30
Carbon Tetrachloride	ND	53.2	50.0	106	54.3	50.0	109	71 - 135	2	30
Benzene	ND	48.6	50.0	97	49.5	50.0	99	76 - 129	2	30
1,2-Dichloroethane	ND	48.6	50.0	97	50.3	50.0	101	72 - 132	3	30
Trichloroethene	ND	48.8	50.0	98	51.2	50.0	102	62 - 142	5	30
1,2-Dichloropropane	ND	47.5	50.0	95	50.4	50.0	101	79 - 124	6	30
Bromodichloromethane	ND	49.2	50.0	98	52.0	50.0	104	76 - 127	5	30
cis-1,3-Dichloropropene	ND	45.6	50.0	91	46.3	50.0	93	52 - 134	2	30
4-Methyl-2-pentanone (MIBK)	ND	48.3	50.0	96	52.8	50.0	106	60 - 141	9	30
Toluene	ND	47.9	50.0	96	49.4	50.0	99	79 - 125	3	30
trans-1,3-Dichloropropene	ND	40.7	50.0	81	42.5	50.0	85	64 - 123	4	30
1,1,2-Trichloroethane	ND	46.6	50.0	93	48.8	50.0	98	82 - 115	4	30
Tetrachloroethene	ND	50.0	50.0	100	52.1	50.0	104	67 - 137	4	30
2-Hexanone	ND	54.0	50.0	108	58.5	50.0	117	56 - 132	8	30
Dibromochloromethane	ND	55.0	50.0	110	56.8	50.0	114	72 - 128	3	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** 5/15/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15

## **Matrix Spike Summary**

**Sample Name:** BAT-87-02(3)-150518      **Units:** µg/L  
**Lab Code:** R1503862-011      **Basis:** NA

**Analytical Method: 8260C**

Analyte Name	BAT-87-02(3)-150518MS				BAT-87-02(3)-150518DMS					
	Sample Result	Matrix Spike RQ1505783-05			Duplicate Matrix Spike RQ1505783-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Chlorobenzene	ND	51.1	50.0	102	52.6	50.0	105	76 - 125	3	30
Ethylbenzene	ND	47.2	50.0	94	48.7	50.0	97	72 - 134	3	30
m,p-Xylenes	ND	105	100	105	108	100	108	68 - 138	3	30
o-Xylene	ND	49.6	50.0	99	51.5	50.0	103	68 - 134	4	30
Styrene	ND	19.9	50.0	40	20.7	50.0	41	34 - 156	4	30
Bromoform	ND	52.3	50.0	105	56.0	50.0	112	58 - 133	7	30
1,1,2,2-Tetrachloroethane	ND	54.1	50.0	108	56.6	50.0	113	72 - 122	5	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446162

**Lab Control Sample**  
**RQ1505558-03**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Chloromethane	18.4	20.0	92	64 - 140
Vinyl Chloride	18.1	20.0	90	69 - 136
Chloroethane	18.2	20.0	91	71 - 128
Bromomethane	14.1	20.0	71	41 - 159
1,1-Dichloroethene	19.1	20.0	96	74 - 135
Acetone	16.1	20.0	80	51 - 146
Carbon Disulfide	17.1	20.0	85	63 - 141
Methylene Chloride	19.5	20.0	98	73 - 122
trans-1,2-Dichloroethene	19.5	20.0	98	78 - 124
1,1-Dichloroethane	20.4	20.0	102	76 - 128
cis-1,2-Dichloroethene	19.3	20.0	96	80 - 121
2-Butanone (MEK)	19.0	20.0	95	66 - 129
Chloroform	19.9	20.0	100	76 - 120
1,1,1-Trichloroethane	19.7	20.0	99	71 - 123
Carbon Tetrachloride	20.1	20.0	100	66 - 128
Benzene	19.4	20.0	97	76 - 118
1,2-Dichloroethane	20.3	20.0	102	72 - 130
Trichloroethene	22.2	20.0	111	76 - 123
1,2-Dichloropropane	19.6	20.0	98	80 - 119
Bromodichloromethane	20.7	20.0	104	79 - 122
cis-1,3-Dichloropropene	18.8	20.0	94	77 - 125
4-Methyl-2-pentanone (MIBK)	18.4	20.0	92	68 - 129
Toluene	19.2	20.0	96	77 - 120
trans-1,3-Dichloropropene	19.0	20.0	95	72 - 123
1,1,2-Trichloroethane	19.7	20.0	98	79 - 117
Tetrachloroethene	18.8	20.0	94	69 - 124
2-Hexanone	19.7	20.0	98	61 - 131
Dibromochloromethane	21.6	20.0	108	79 - 125
Chlorobenzene	20.6	20.0	103	80 - 121
Ethylbenzene	18.0	20.0	90	76 - 120
m,p-Xylenes	40.5	40.0	101	78 - 123
o-Xylene	19.7	20.0	98	77 - 131
Styrene	20.5	20.0	102	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 446162

**Lab Control Sample**  
**RQ1505558-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Bromoform	22.2	20.0	111	65 - 138
1,1,2,2-Tetrachloroethane	19.1	20.0	95	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446166

**Lab Control Sample**  
**RQ1505539-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Chloromethane	20.0	20.0	100	64 - 140
Vinyl Chloride	20.5	20.0	102	69 - 136
Chloroethane	20.7	20.0	104	71 - 128
Bromomethane	15.7	20.0	79	41 - 159
1,1-Dichloroethene	21.1	20.0	105	74 - 135
Acetone	14.0	20.0	70	51 - 146
Carbon Disulfide	19.7	20.0	98	63 - 141
Methylene Chloride	20.0	20.0	100	73 - 122
trans-1,2-Dichloroethene	21.6	20.0	108	78 - 124
1,1-Dichloroethane	21.0	20.0	105	76 - 128
cis-1,2-Dichloroethene	21.1	20.0	105	80 - 121
2-Butanone (MEK)	18.7	20.0	93	66 - 129
Chloroform	21.1	20.0	105	76 - 120
1,1,1-Trichloroethane	21.0	20.0	105	71 - 123
Carbon Tetrachloride	21.3	20.0	107	66 - 128
Benzene	20.6	20.0	103	76 - 118
1,2-Dichloroethane	20.5	20.0	103	72 - 130
Trichloroethene	20.8	20.0	104	76 - 123
1,2-Dichloropropane	20.4	20.0	102	80 - 119
Bromodichloromethane	21.2	20.0	106	79 - 122
cis-1,3-Dichloropropene	19.8	20.0	99	77 - 125
4-Methyl-2-pentanone (MIBK)	17.1	20.0	85	68 - 129
Toluene	20.6	20.0	103	77 - 120
trans-1,3-Dichloropropene	19.5	20.0	97	72 - 123
1,1,2-Trichloroethane	19.5	20.0	97	79 - 117
Tetrachloroethene	21.1	20.0	105	69 - 124
2-Hexanone	18.9	20.0	94	61 - 131
Dibromochloromethane	21.2	20.0	106	79 - 125
Chlorobenzene	21.6	20.0	108	80 - 121
Ethylbenzene	19.8	20.0	99	76 - 120
m,p-Xylenes	44.5	40.0	111	78 - 123
o-Xylene	21.3	20.0	107	77 - 131
Styrene	22.0	20.0	110	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446166

**Lab Control Sample**  
**RQ1505539-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Bromoform	21.2	20.0	106	65 - 138
1,1,2,2-Tetrachloroethane	22.1	20.0	111	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446223

**Lab Control Sample**  
**RQ1505661-03**

<b>Analyst Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Chloromethane	16.8	20.0	84	64 - 140
Vinyl Chloride	16.2	20.0	81	69 - 136
Chloroethane	17.5	20.0	88	71 - 128
Bromomethane	15.4	20.0	77	41 - 159
1,1-Dichloroethene	17.3	20.0	87	74 - 135
Acetone	18.0	20.0	90	51 - 146
Carbon Disulfide	20.8	20.0	104	63 - 141
Methylene Chloride	18.4	20.0	92	73 - 122
trans-1,2-Dichloroethene	18.3	20.0	92	78 - 124
1,1-Dichloroethane	18.4	20.0	92	76 - 128
cis-1,2-Dichloroethene	18.5	20.0	93	80 - 121
2-Butanone (MEK)	19.1	20.0	95	66 - 129
Chloroform	19.1	20.0	95	76 - 120
1,1,1-Trichloroethane	17.5	20.0	87	71 - 123
Carbon Tetrachloride	17.4	20.0	87	66 - 128
Benzene	17.8	20.0	89	76 - 118
1,2-Dichloroethane	19.8	20.0	99	72 - 130
Trichloroethene	18.8	20.0	94	76 - 123
1,2-Dichloropropane	18.6	20.0	93	80 - 119
Bromodichloromethane	19.4	20.0	97	79 - 122
cis-1,3-Dichloropropene	18.3	20.0	91	77 - 125
4-Methyl-2-pentanone (MIBK)	18.9	20.0	95	68 - 129
Toluene	17.9	20.0	89	77 - 120
trans-1,3-Dichloropropene	18.0	20.0	90	72 - 123
1,1,2-Trichloroethane	19.5	20.0	97	79 - 117
Tetrachloroethene	17.3	20.0	86	69 - 124
2-Hexanone	20.2	20.0	101	61 - 131
Dibromochloromethane	21.1	20.0	106	79 - 125
Chlorobenzene	19.5	20.0	98	80 - 121
Ethylbenzene	16.6	20.0	83	76 - 120
m,p-Xylenes	37.8	40.0	95	78 - 123
o-Xylene	18.8	20.0	94	77 - 131
Styrene	20.1	20.0	100	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 446223

**Lab Control Sample**  
RQ1505661-03

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Bromoform	21.0	20.0	105	65 - 138
1,1,2,2-Tetrachloroethane	20.4	20.0	102	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 446543

**Lab Control Sample**  
**RQ1505783-03**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Chloromethane	19.8	20.0	99	64 - 140
Vinyl Chloride	19.0	20.0	95	69 - 136
Chloroethane	16.3	20.0	81	71 - 128
Bromomethane	16.6	20.0	83	41 - 159
1,1-Dichloroethene	19.8	20.0	99	74 - 135
Acetone	13.6	20.0	68	51 - 146
Carbon Disulfide	19.3	20.0	96	63 - 141
Methylene Chloride	18.8	20.0	94	73 - 122
trans-1,2-Dichloroethene	20.0	20.0	100	78 - 124
1,1-Dichloroethane	20.1	20.0	100	76 - 128
cis-1,2-Dichloroethene	20.3	20.0	101	80 - 121
2-Butanone (MEK)	18.7	20.0	94	66 - 129
Chloroform	19.8	20.0	99	76 - 120
1,1,1-Trichloroethane	20.1	20.0	100	71 - 123
Carbon Tetrachloride	20.3	20.0	102	66 - 128
Benzene	19.3	20.0	97	76 - 118
1,2-Dichloroethane	20.0	20.0	100	72 - 130
Trichloroethene	19.8	20.0	99	76 - 123
1,2-Dichloropropane	19.5	20.0	98	80 - 119
Bromodichloromethane	19.3	20.0	97	79 - 122
cis-1,3-Dichloropropene	20.0	20.0	100	77 - 125
4-Methyl-2-pentanone (MIBK)	19.1	20.0	96	68 - 129
Toluene	19.3	20.0	96	77 - 120
trans-1,3-Dichloropropene	19.6	20.0	98	72 - 123
1,1,2-Trichloroethane	18.3	20.0	92	79 - 117
Tetrachloroethene	20.5	20.0	102	69 - 124
2-Hexanone	21.0	20.0	105	61 - 131
Dibromochloromethane	21.8	20.0	109	79 - 125
Chlorobenzene	21.0	20.0	105	80 - 121
Ethylbenzene	18.9	20.0	95	76 - 120
m,p-Xylenes	42.2	40.0	105	78 - 123
o-Xylene	20.3	20.0	101	77 - 131
Styrene	21.2	20.0	106	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 446543

**Lab Control Sample**  
**RQ1505783-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Bromoform	21.3	20.0	106	65 - 138
1,1,2,2-Tetrachloroethane	21.6	20.0	108	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15 22:49

**Method Blank Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** Method Blank      **Instrument ID:** R-MS-10  
**Lab Code:** RQ1505558-04      **File ID:** I:\ACQUADATA\MSVOA10\DATA\052415\A8833.D\  
**Analytical Method:** 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1505558-03	I:\ACQUADATA\MSVOA10\DATA\052415\A8831.D\	5/24/15 21:50
TRIP BLANK	R1503862-012	I:\ACQUADATA\MSVOA10\DATA\052415\A8834.D\	5/24/15 23:19
BAT-FB1-150518	R1503862-001	I:\ACQUADATA\MSVOA10\DATA\052415\A8835.D\	5/24/15 23:48
BAT-FB2-150518	R1503862-002	I:\ACQUADATA\MSVOA10\DATA\052415\A8836.D\	5/25/15 00:18
BAT-EW-2-150518	R1503862-003	I:\ACQUADATA\MSVOA10\DATA\052415\A8837.D\	5/25/15 00:47
BAT-EW-3-150518	R1503862-004	I:\ACQUADATA\MSVOA10\DATA\052415\A8838.D\	5/25/15 01:17
BAT-EW-6-150518	R1503862-007	I:\ACQUADATA\MSVOA10\DATA\052415\A8839.D\	5/25/15 01:47
BAT-EW-6-150518MS	RQ1505558-05	I:\ACQUADATA\MSVOA10\DATA\052415\A8847.D\	5/25/15 05:43
BAT-EW-6-150518DMS	RQ1505558-06	I:\ACQUADATA\MSVOA10\DATA\052415\A8848.D\	5/25/15 06:13

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15 10:26

**Method Blank Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** Method Blank      **Instrument ID:** R-MS-10  
**Lab Code:** RQ1505539-04      **File ID:** I:\ACQUADATA\MSVOA10\DATA\052515\A8855.D\  
**Analytical Method:** 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1505539-03	I:\ACQUADATA\MSVOA10\DATA\052515\A8853.D\	5/25/15 09:27
BAT-EW-4-150518	R1503862-005	I:\ACQUADATA\MSVOA10\DATA\052515\A8864.D\	5/25/15 15:32
BAT-EW-5-150518	R1503862-006	I:\ACQUADATA\MSVOA10\DATA\052515\A8865.D\	5/25/15 16:01
BAT-DUP-2-150518	R1503862-008	I:\ACQUADATA\MSVOA10\DATA\052515\A8866.D\	5/25/15 16:31
BAT-87-13(3)-150518	R1503862-009	I:\ACQUADATA\MSVOA10\DATA\052515\A8867.D\	5/25/15 17:00
BAT-DUP-1-150518	R1503862-010	I:\ACQUADATA\MSVOA10\DATA\052515\A8868.D\	5/25/15 17:30

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15 22:26

**Method Blank Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** Method Blank      **Instrument ID:** R-MS-10  
**Lab Code:** RQ1505661-04      **File ID:** I:\ACQUADATA\msvoa10\data\052615\A8909.D\  
**Analytical Method:** 8260C

This Method Blank applies to the following analyses:

<b>Sample Name</b>	<b>Lab Code</b>	<b>File ID</b>	<b>Date Analyzed</b>
Lab Control Sample	RQ1505661-03	I:\ACQUADATA\msvoa10\data\052615\A8907.D\ I:\ACQUADATA\msvoa10\data\052615\A8910.D\ I:\ACQUADATA\msvoa10\data\052615\A8911.D\<	5/26/15 21:27 5/26/15 22:55 5/26/15 23:25
BAT-87-13(3)-150518DL	R1503862-009		
BAT-DUP-1-150518DL	R1503862-010		

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15 17:42

**Method Blank Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** Method Blank      **Instrument ID:** R-MS-10  
**Lab Code:** RQ1505783-04      **File ID:** I:\ACQUADATA\MSVOA10\DATA\052715\A8941.D\  
**Analytical Method:** 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1505783-03	I:\ACQUADATA\MSVOA10\DATA\052715\A8939.D\	5/27/15 16:42
BAT-87-02(3)-150518	R1503862-011	I:\ACQUADATA\MSVOA10\DATA\052715\A8958.D\	5/28/15 02:05
BAT-87-02(3)-150518MS	RQ1505783-05	I:\ACQUADATA\MSVOA10\DATA\052715\A8959.D\	5/28/15 02:34
BAT-87-02(3)-150518DMS	RQ1505783-06	I:\ACQUADATA\MSVOA10\DATA\052715\A8960.D\	5/28/15 03:04

Client:  
Project:CB&I  
Textron Wheatfield/Semiannual Groundwater-148900Service Request: R1503862  
Date Analyzed: 05/06/15 15:32

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

File ID: I:\ACQUDATA\msvoa10\data\050615\A8250.D\  
Instrument ID: R-MS-10Analytical Method: 8260C  
Analysis Lot:

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	26.7	114707	Pass
75	95	30	60	48.1	206805	Pass
95	95	100	100	100.0	430315	Pass
96	95	5	9	6.8	29200	Pass
173	174	0	2	1.0	3466	Pass
174	95	50	120	81.6	351083	Pass
175	174	5	9	7.4	25806	Pass
176	174	95	101	96.1	337237	Pass
177	176	5	9	6.4	21447	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial Calibration CAL	0.5 ppb	I:\ACQUDATA\msvoa10\data\050615\A8252.D\	05/06/15 16:31	
Initial Calibration CAL	1.0 ppb	I:\ACQUDATA\msvoa10\data\050615\A8253.D\	05/06/15 17:01	
Initial Calibration CAL	2.0 ppb	I:\ACQUDATA\msvoa10\data\050615\A8254.D\	05/06/15 17:31	
Initial Calibration CAL	5.0 ppb	I:\ACQUDATA\msvoa10\data\050615\A8255.D\	05/06/15 18:01	
Initial Calibration CAL	20 ppb	I:\ACQUDATA\msvoa10\data\050615\A8256.D\	05/06/15 19:46	
Initial Calibration CAL	50 ppb	I:\ACQUDATA\msvoa10\data\050615\A8257.D\	05/06/15 19:00	
Initial Calibration CAL	100 ppb	I:\ACQUDATA\msvoa10\data\050615\A8258.D\	05/06/15 19:30	
Initial Calibration CAL	150 ppb	I:\ACQUDATA\msvoa10\data\050615\A8259.D\	05/06/15 20:01	
Initial Calibration CAL	200 ppb	I:\ACQUDATA\msvoa10\data\050615\A8260.D\	05/06/15 20:31	

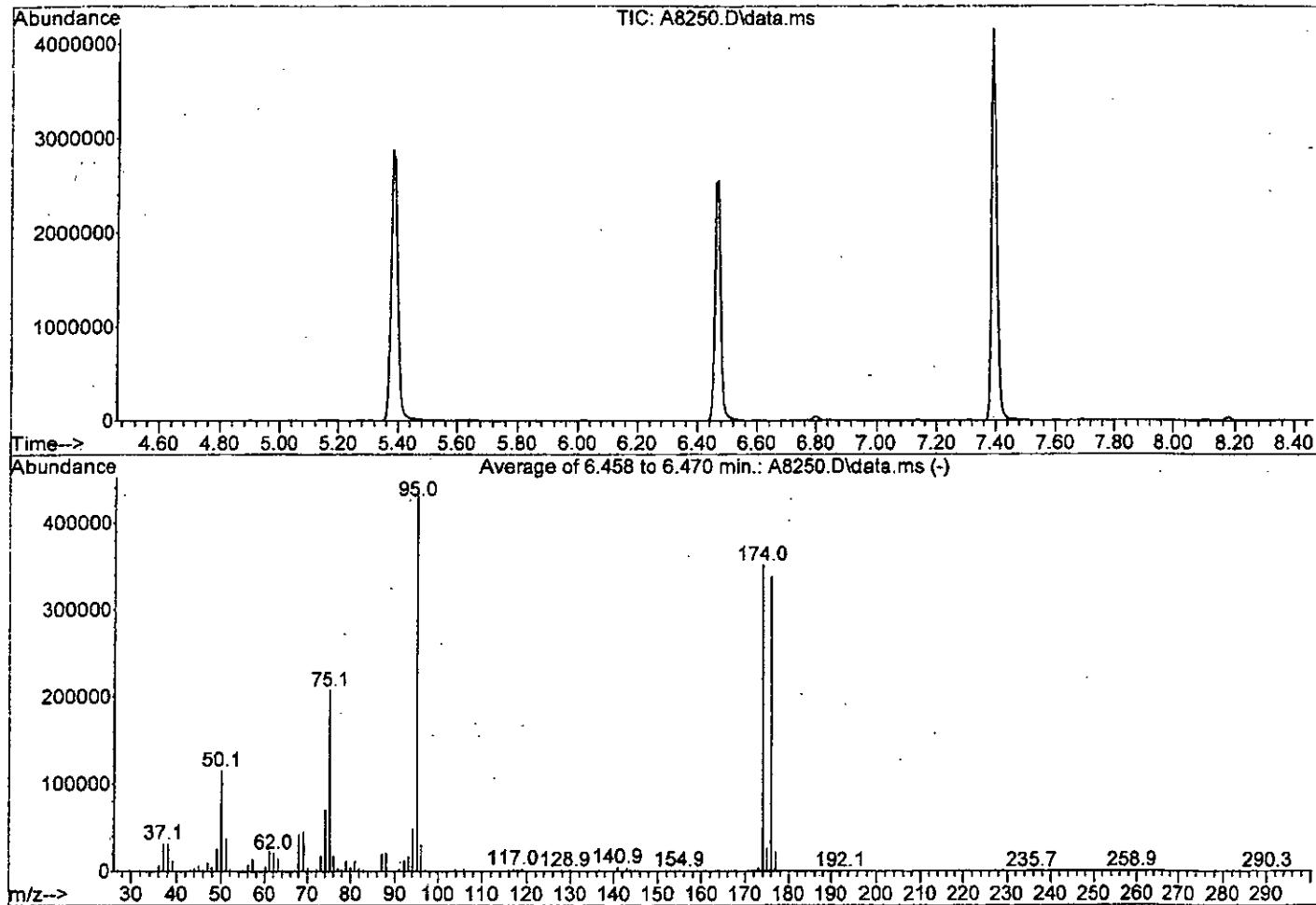
Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8250.D  
 Acq On : 6 May 2015 3:32 pm  
 Operator : F. NAEGLER  
 Sample : TUNE  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA10

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006

5/7/15



AutoFind: Scans 389, 390, 391; Background Corrected with Scan 384

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.7	114707	PASS
75	95	30	60	48.1	206805	PASS
95	95	100	100	100.0	430315	PASS
96	95	5	9	6.8	29200	PASS
173	174	0.00	2	1.0	3466	PASS
174	95	50	120	81.6	351083	PASS
175	174	5	9	7.4	25806	PASS
176	174	95	101	96.1	337237	PASS
177	176	5	9	6.4	21447	PASS

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15 20:53

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\msvoa10\data\052415\A8829.D\  
**Instrument ID:** R-MS-10

**Analytical Method:** 8260C  
**Analysis Lot:** 446162

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	27.26	109451	Pass
75	95	30	60	48.40	194347	Pass
95	95	100	100	100.00	401515	Pass
96	95	5	9	5.89	23640	Pass
173	174	0	2	1.02	3642	Pass
174	95	50	120	88.69	356117	Pass
175	174	5	9	7.28	25939	Pass
176	174	95	101	96.62	344085	Pass
177	176	5	9	6.51	22416	Pass

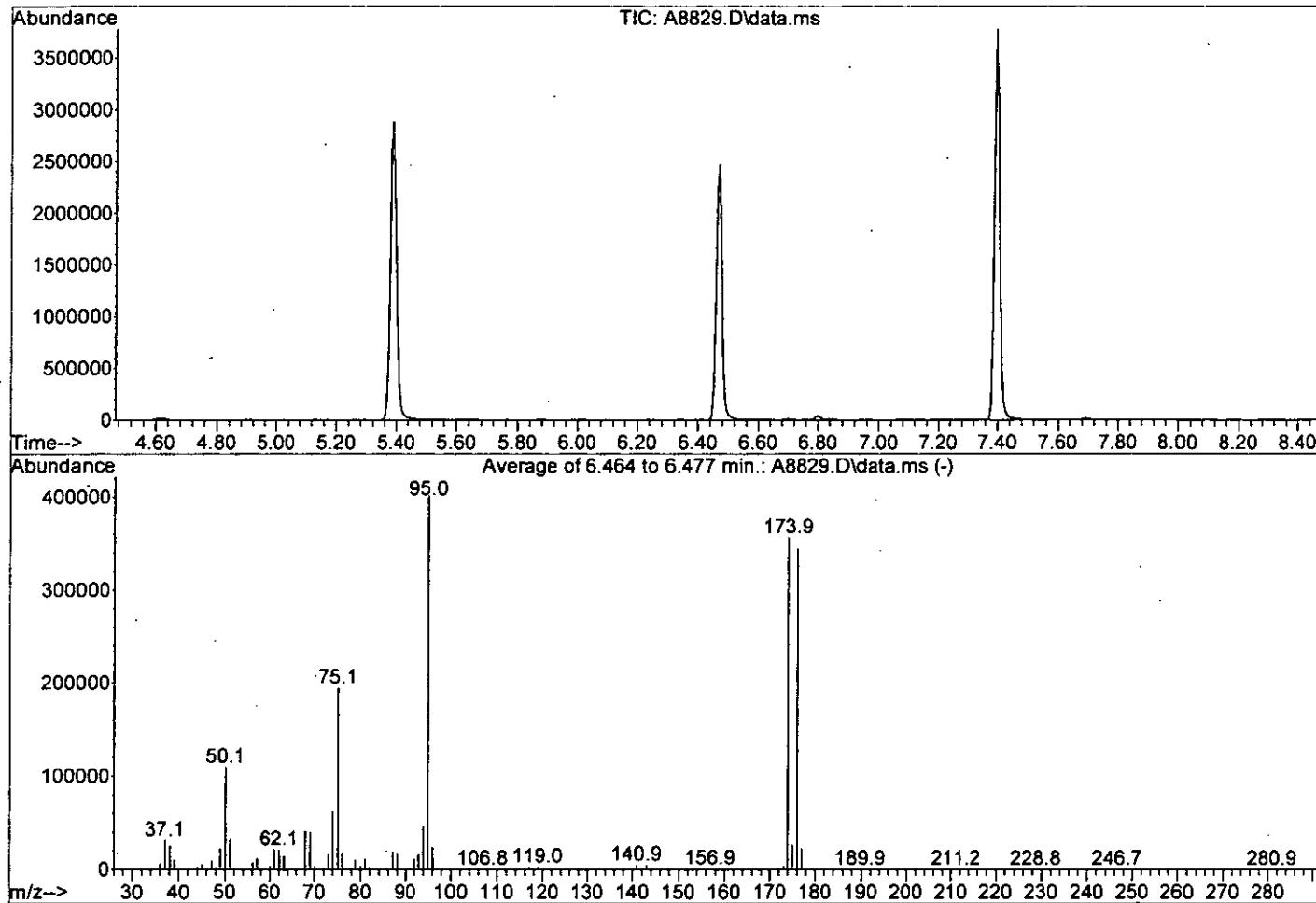
Sample Name	Lab Code	File ID	Date Analyzed	Q	
Continuing Calibration Verification	RQ1505558-02	I:\ACQUDATA\MSVOA10\DATA\052415\A8830.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8831.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8833.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8834.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8835.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8836.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8837.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8838.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8839.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8847.D\ I:\ACQUDATA\MSVOA10\DATA\052415\A8848.D	5/24/15 21:20 5/24/15 21:50 5/24/15 22:49 5/24/15 23:19 5/24/15 23:48 5/25/15 00:18 5/25/15 00:47 5/25/15 01:17 5/25/15 01:47 5/25/15 05:43 5/25/15 06:13	5/24/15 21:20 5/24/15 21:50 5/24/15 22:49 5/24/15 23:19 5/24/15 23:48 5/25/15 00:18 5/25/15 00:47 5/25/15 01:17 5/25/15 01:47 5/25/15 05:43 5/25/15 06:13	
Lab Control Sample	RQ1505558-03				
Method Blank	RQ1505558-04				
TRIP BLANK	R1503862-012				
BAT-FB1-150518	R1503862-001				
BAT-FB2-150518	R1503862-002				
BAT-EW-2-150518	R1503862-003				
BAT-EW-3-150518	R1503862-004				
BAT-EW-6-150518	R1503862-007				
BAT-EW-6-150518MS	RQ1505558-05				
BAT-EW-6-150518DMS	RQ1505558-06				

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8829.D  
 Acq On : 24 May 2015 8:53 pm  
 Operator : F.Naegler  
 Sample : TUNE *2Q15D5558-O1*  
 Misc :  
 ALS Vial : 25 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUADATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006

25/25/15



AutoFind: Scans 390, 391, 392; Background Corrected with Scan 384

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.3	109451	PASS
75	95	30	60	48.4	194347	PASS
95	95	100	100	100.0	401515	PASS
96	95	5	9	5.9	23640	PASS
173	174	0.00	2	1.0	3642	PASS
174	95	50	120	88.7	356117	PASS
175	174	5	9	7.3	25939	PASS
176	174	95	101	96.6	344085	PASS
177	176	5	9	6.5	22416	PASS

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15 08:28

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\msvoa10\data\052515\A8851.D\**Analytical Method:** 8260C**Instrument ID:** R-MS-10**Analysis Lot:** 446166

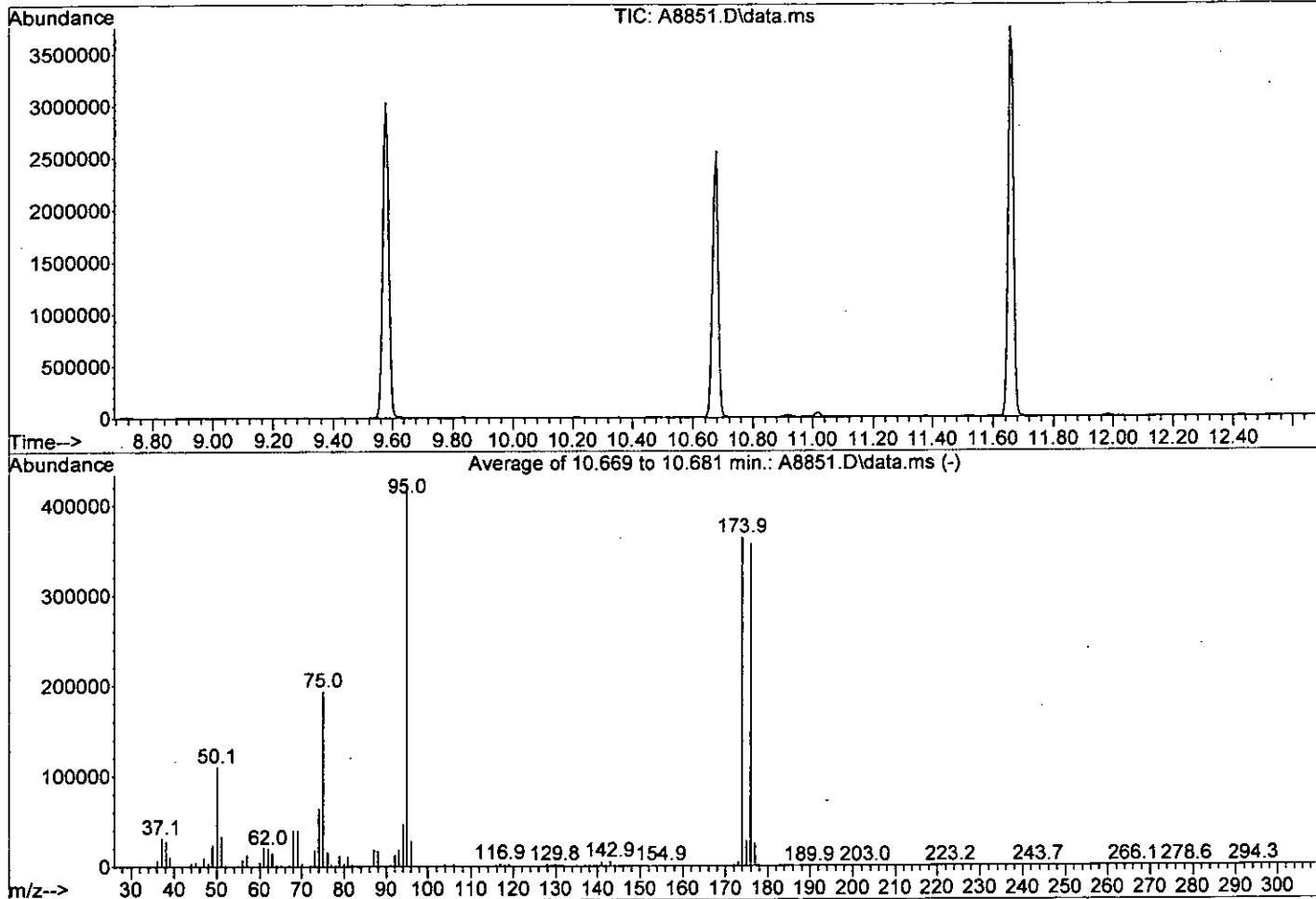
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	26.61	109941	Pass
75	95	30	60	46.85	193547	Pass
95	95	100	100	100.00	413120	Pass
96	95	5	9	6.69	27619	Pass
173	174	0	2	1.12	4075	Pass
174	95	50	120	88.00	363541	Pass
175	174	5	9	7.54	27408	Pass
176	174	95	101	98.03	356373	Pass
177	176	5	9	6.91	24611	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1505539-02	I:\ACQUDATA\MSVOA10\DATA\052515\A8852.D\	5/25/15 08:57	
Lab Control Sample	RQ1505539-03	I:\ACQUDATA\MSVOA10\DATA\052515\A8853.D\	5/25/15 09:27	
Method Blank	RQ1505539-04	I:\ACQUDATA\MSVOA10\DATA\052515\A8855.D\	5/25/15 10:26	
BAT-EW-4-150518	R1503862-005	I:\ACQUDATA\MSVOA10\DATA\052515\A8864.D\	5/25/15 15:32	
BAT-EW-5-150518	R1503862-006	I:\ACQUDATA\MSVOA10\DATA\052515\A8865.D\	5/25/15 16:01	
BAT-DUP-2-150518	R1503862-008	I:\ACQUDATA\MSVOA10\DATA\052515\A8866.D\	5/25/15 16:31	
BAT-87-13(3)-150518	R1503862-009	I:\ACQUDATA\MSVOA10\DATA\052515\A8867.D\	5/25/15 17:00	
BAT-DUP-1-150518	R1503862-010	I:\ACQUDATA\MSVOA10\DATA\052515\A8868.D\	5/25/15 17:30	

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8851.D  
 Acq On : 25 May 2015 8:28 am  
 Operator : K.Ruest  
 Sample : TUNE PQ150538-01, 5539-01 Inst : MSVOA10  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Title : MS#10 - 8260B WATERS 10mL Purge  
 Last Update : Thu May 07 14:25:48 2015



AutoFind: Scans 1580, 1581, 1582; Background Corrected with Scan 1574

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw	Result Pass/Fail
50	95	15	40	26.6	109941	PASS
75	95	30	60	46.9	193547	PASS
95	95	100	100	100.0	413120	PASS
96	95	5	9	6.7	27619	PASS
173	174	0.00	2	1.1	4075	PASS
174	95	50	120	88.0	363541	PASS
175	174	5	9	7.5	27408	PASS
176	174	95	101	98.0	356373	PASS
177	176	5	9	6.9	24611	PASS

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15 20:31

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\msvoa10\data\052615\A8905.D\  
**Instrument ID:** R-MS-10

**Analytical Method:** 8260C  
**Analysis Lot:** 446223

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	26.06	108624	Pass
75	95	30	60	46.65	194475	Pass
95	95	100	100	100.00	416875	Pass
96	95	5	9	6.41	26725	Pass
173	174	0	2	1.05	3743	Pass
174	95	50	120	85.55	356651	Pass
175	174	5	9	7.50	26731	Pass
176	174	95	101	98.59	351637	Pass
177	176	5	9	6.55	23029	Pass

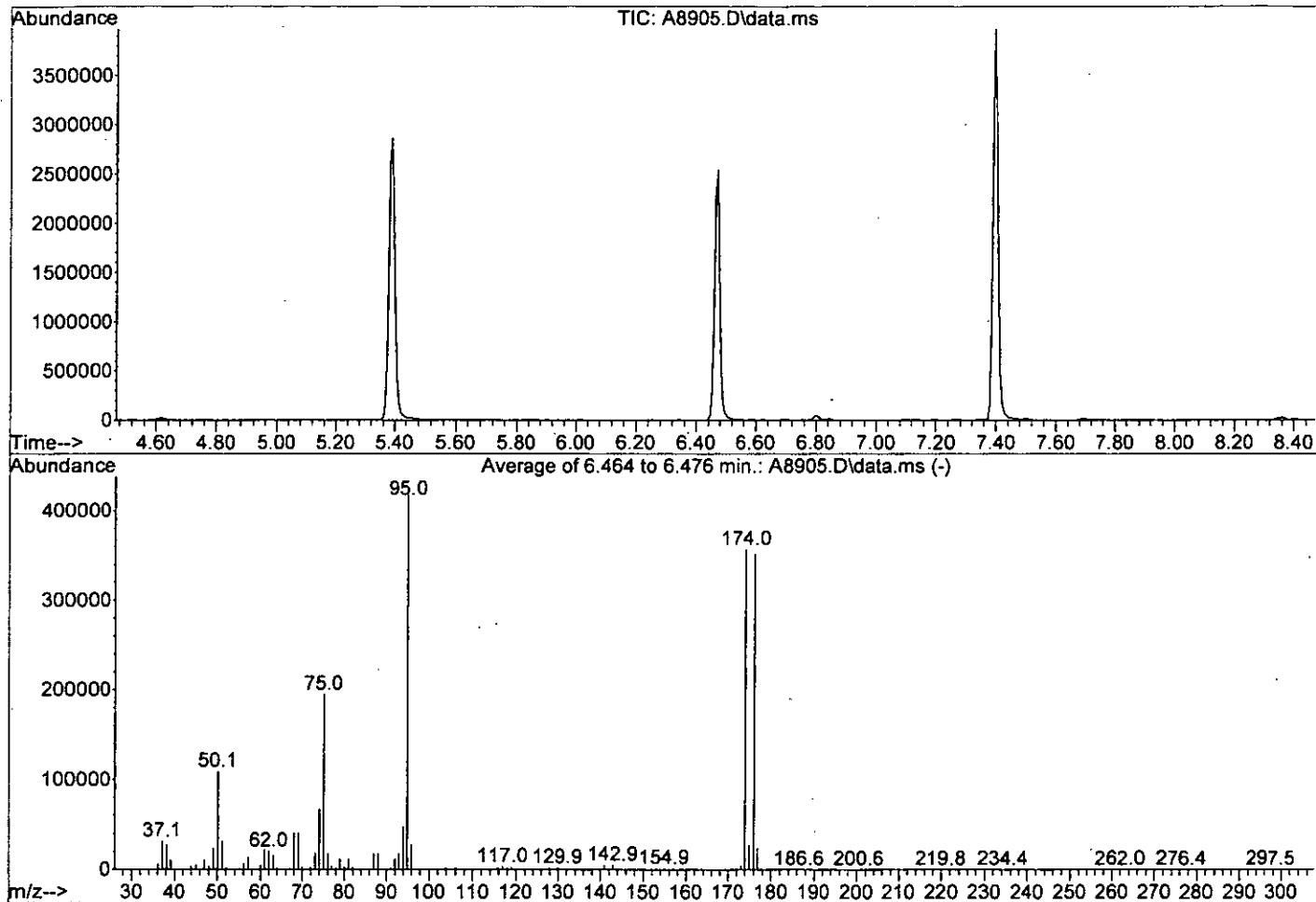
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1505661-02	I:\ACQUDATA\msvoa10\data\052615\A8906.D\ 	5/26/15 20:57	
Lab Control Sample	RQ1505661-03	I:\ACQUDATA\msvoa10\data\052615\A8907.D\ 	5/26/15 21:27	
Method Blank	RQ1505661-04	I:\ACQUDATA\msvoa10\data\052615\A8909.D\ 	5/26/15 22:26	
BAT-87-13(3)-150518DL	R1503862-009	I:\ACQUDATA\msvoa10\data\052615\A8910.D\ 	5/26/15 22:55	
BAT-DUP-1-150518DL	R1503862-010	I:\ACQUDATA\msvoa10\data\052615\A8911.D\ 	5/26/15 23:25	

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8905.D  
 Acq On : 26 May 2015 8:31 pm  
 Operator : F. Naegler  
 Sample : TUNE LQ1505661-01 Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUADATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006

FJ Sk7/15



AutoFind: Scans 390, 391, 392; Background Corrected with Scan 384

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.1	108624	PASS
75	95	30	60	46.7	194475	PASS
95	95	100	100	100.0	416875	PASS
96	95	5	9	6.4	26725	PASS
173	174	0.00	2	1.0	3743	PASS
174	95	50	120	85.6	356651	PASS
175	174	5	9	7.5	26731	PASS
176	174	95	101	98.6	351637	PASS
177	176	5	9	6.5	23029	PASS

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15 15:39

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\MSVOA10\DATA\052715\A8937.D\  
**Instrument ID:** R-MS-10

**Analytical Method:** 8260C  
**Analysis Lot:** 446543

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	27.47	107643	Pass
75	95	30	60	47.87	187592	Pass
95	95	100	100	100.00	391851	Pass
96	95	5	9	6.40	25094	Pass
173	174	0	2	0.96	3037	Pass
174	95	50	120	80.74	316373	Pass
175	174	5	9	7.12	22529	Pass
176	174	95	101	96.83	306347	Pass
177	176	5	9	6.46	19799	Pass

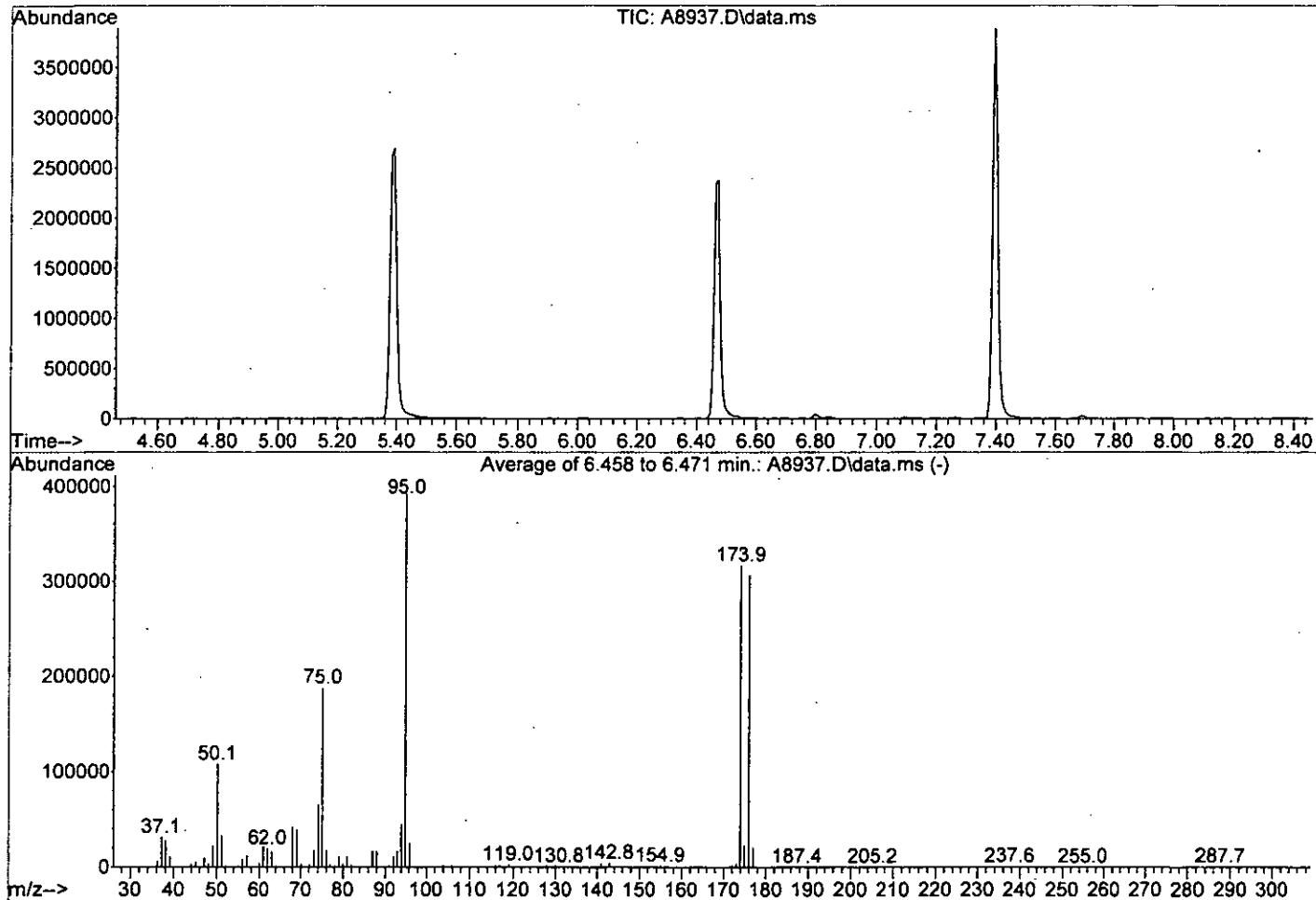
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1505783-02	I:\ACQUDATA\MSVOA10\DATA\052715\A8938.D\ 	5/27/15 16:12	
Lab Control Sample	RQ1505783-03	I:\ACQUDATA\MSVOA10\DATA\052715\A8939.D\ 	5/27/15 16:42	
Method Blank	RQ1505783-04	I:\ACQUDATA\MSVOA10\DATA\052715\A8941.D\ 	5/27/15 17:42	
BAT-87-02(3)-150518	R1503862-011	I:\ACQUDATA\MSVOA10\DATA\052715\A8958.D\ 	5/28/15 02:05	
BAT-87-02(3)-150518MS	RQ1505783-05	I:\ACQUDATA\MSVOA10\DATA\052715\A8959.D\ 	5/28/15 02:34	
BAT-87-02(3)-150518DMS	RQ1505783-06	I:\ACQUDATA\MSVOA10\DATA\052715\A8960.D\ 	5/28/15 03:04	

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8937.D  
 Acq On : 27 May 2015 3:39 pm  
 Operator : F. Naegler  
 Sample : TUNE PQ1505783 - 01 Inst : MSVOA10  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUADATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006

FN  
5/27/15



AutoFind: Scans 389, 390, 391; Background Corrected with Scan 384

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.5	107643	PASS
75	95	30	60	47.9	187592	PASS
95	95	100	100	100.0	391851	PASS
96	95	5	9	6.4	25094	PASS
173	174	0.00	2	1.0	3037	PASS
174	95	50	120	80.7	316373	PASS
175	174	5	9	7.1	22529	PASS
176	174	95	101	96.8	306347	PASS
177	176	5	9	6.5	19799	PASS

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900      **Service Request:** R1503862  
**Date Analyzed:** 5/24/15 21:20

**Internal Standard Area and RT Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\MSVOA10\DATA\052415\A8830.D\  
**Instrument ID:** R-MS-10  
**Analytical Method:** 8260C

**Lab Code:** RQ1505558-02  
**Analysis Lot:** 446162  
**Signal ID:**

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	774,971	11.66	1,502,136	6.15	1,341,602	9.58
<b>Upper Limit ==&gt;</b>	1,549,942	12.16	3,004,272	6.65	2,683,204	10.08
<b>Lower Limit ==&gt;</b>	387,486	11.16	751,068	5.65	670,801	9.08
<b>ICAL Result ==&gt;</b>	825,795	11.66	1,474,627	6.15	1,395,683	9.58

**Associated Analyses**

Lab Control Sample	RQ1505558-03	753,812	11.66	1,483,141	6.15	1,362,078	9.58
Method Blank	RQ1505558-04	729,804	11.66	1,423,769	6.15	1,312,859	9.58
TRIP BLANK	R1503862-012	739,585	11.66	1,444,258	6.15	1,342,346	9.58
BAT-FB1-150518	R1503862-001	732,299	11.66	1,394,739	6.15	1,288,932	9.58
BAT-FB2-150518	R1503862-002	723,358	11.66	1,422,444	6.15	1,296,751	9.58
BAT-EW-2-150518	R1503862-003	737,713	11.66	1,450,044	6.15	1,305,751	9.58
BAT-EW-3-150518	R1503862-004	725,594	11.66	1,441,950	6.15	1,315,283	9.58
BAT-EW-6-150518	R1503862-007	725,624	11.66	1,454,250	6.15	1,306,663	9.58
BAT-EW-6-150518MS	RQ1505558-05	787,506	11.66	1,455,576	6.15	1,347,661	9.58
BAT-EW-6-150518DMS	RQ1505558-06	771,924	11.66	1,484,452	6.15	1,327,480	9.58

Results flagged with an asterisk (\*) indicate values outside control criteria.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15 21:20

**Internal Standard Area and RT Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\MSVOA10\DATA\052415\A8830.D\  
**Instrument ID:** R-MS-10  
**Analytical Method:** 8260C

**Lab Code:** RQ1505558-02  
**Analysis Lot:** 446162  
**Signal ID:**

Pentafluorobenzene		
	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	998,279	4.96
<b>Upper Limit ==&gt;</b>	1,996,558	5.46
<b>Lower Limit ==&gt;</b>	499,140	4.46
<b>ICAL Result ==&gt;</b>	960,841	4.97

*Associated Analyses*

Lab Control Sample	RQ1505558-03	973,748	4.97
Method Blank	RQ1505558-04	916,036	4.97
TRIP BLANK	R1503862-012	915,962	4.96
BAT-FB1-150518	R1503862-001	887,031	4.97
BAT-FB2-150518	R1503862-002	918,734	4.97
BAT-EW-2-150518	R1503862-003	929,997	4.96
BAT-EW-3-150518	R1503862-004	933,043	4.97
BAT-EW-6-150518	R1503862-007	938,865	4.97
BAT-EW-6-150518MS	RQ1505558-05	976,436	4.97
BAT-EW-6-150518DMS	RQ1505558-06	972,179	4.96

Results flagged with an asterisk (\*) indicate values outside control criteria.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15 08:57

**Internal Standard Area and RT Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\MSVOA10\DATA\052515\A8852.D\  
**Instrument ID:** R-MS-10  
**Analytical Method:** 8260C

**Lab Code:** RQ1505539-02  
**Analysis Lot:** 446166  
**Signal ID:**

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	777,811	11.66	1,458,844	6.15	1,345,766	9.58
<b>Upper Limit ==&gt;</b>	1,555,622	12.16	2,917,688	6.65	2,691,532	10.08
<b>Lower Limit ==&gt;</b>	388,906	11.16	729,422	5.65	672,883	9.08
<b>ICAL Result ==&gt;</b>	825,795	11.66	1,474,627	6.15	1,395,683	9.58

**Associated Analyses**

Lab Control Sample	RQ1505539-03	750,752	11.66	1,442,405	6.15	1,319,036	9.58
Method Blank	RQ1505539-04	729,970	11.66	1,411,218	6.15	1,301,936	9.58
BAT-EW-4-150518	R1503862-005	728,273	11.66	1,408,982	6.15	1,288,156	9.58
BAT-EW-5-150518	R1503862-006	723,069	11.66	1,425,412	6.15	1,286,115	9.58
BAT-DUP-2-150518	R1503862-008	720,266	11.66	1,441,279	6.15	1,312,413	9.58
BAT-87-13(3)-150518	R1503862-009	742,060	11.66	1,435,177	6.15	1,308,216	9.58
BAT-DUP-1-150518	R1503862-010	715,938	11.66	1,414,939	6.15	1,293,708	9.58

Results flagged with an asterisk (\*) indicate values outside control criteria.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15 08:57

**Internal Standard Area and RT Summary  
Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\MSVOA10\DATA\052515\A8852.D\  
**Instrument ID:** R-MS-10  
**Analytical Method:** 8260C

**Lab Code:** RQ1505539-02  
**Analysis Lot:** 446166  
**Signal ID:**

<b>Pentafluorobenzene</b>		
	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	967,237	4.97
<b>Upper Limit ==&gt;</b>	1,934,474	5.47
<b>Lower Limit ==&gt;</b>	483,619	4.47
<b>ICAL Result ==&gt;</b>	960,841	4.97

**Associated Analyses**

Lab Control Sample	RQ1505539-03	946,415	4.97
Method Blank	RQ1505539-04	908,841	4.97
BAT-EW-4-150518	R1503862-005	901,520	4.97
BAT-EW-5-150518	R1503862-006	917,711	4.97
BAT-DUP-2-150518	R1503862-008	941,074	4.96
BAT-87-13(3)-150518	R1503862-009	926,967	4.96
BAT-DUP-1-150518	R1503862-010	906,323	4.97

Results flagged with an asterisk (\*) indicate values outside control criteria.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15 20:57

**Internal Standard Area and RT Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\msvoa10\data\052615\A8906.D\

**Lab Code:** RQ1505661-02

**Instrument ID:** R-MS-10

**Analysis Lot:** 446223

**Analytical Method:** 8260C

**Signal ID:**

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
<b>Results ==&gt;</b>	789,445	11.66	1,519,655	6.15	1,356,642	9.58
<b>Upper Limit ==&gt;</b>	1,578,890	12.16	3,039,310	6.65	2,713,284	10.08
<b>Lower Limit ==&gt;</b>	394,723	11.16	759,828	5.65	678,321	9.08
<b>ICAL Result ==&gt;</b>	825,795	11.66	1,474,627	6.15	1,395,683	9.58

**Associated Analyses**

Lab Control Sample	RQ1505661-03	771,047	11.66	1,500,351	6.15	1,344,520	9.58
Method Blank	RQ1505661-04	748,929	11.66	1,445,618	6.15	1,330,425	9.58
BAT-87-13(3)-150518DL	R1503862-009	753,048	11.66	1,446,695	6.15	1,329,559	9.58
BAT-DUP-1-150518DL	R1503862-010	744,586	11.66	1,462,428	6.15	1,338,551	9.58

Results flagged with an asterisk (\*) indicate values outside control criteria.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15 20:57

**Internal Standard Area and RT Summary  
Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\msvoa10\data\052615\A8906.D\

**Lab Code:** RQ1505661-02

**Instrument ID:** R-MS-10

**Analysis Lot:** 446223

**Analytical Method:** 8260C

**Signal ID:**

<b>Pentafluorobenzene</b>		
	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	999,388	4.96
<b>Upper Limit ==&gt;</b>	1,998,776	5.46
<b>Lower Limit ==&gt;</b>	499,694	4.46
<b>ICAL Result ==&gt;</b>	960,841	4.97

**Associated Analyses**

Lab Control Sample	RQ1505661-03	983,408	4.96
Method Blank	RQ1505661-04	922,274	4.97
BAT-87-13(3)-150518DL	R1503862-009	936,149	4.97
BAT-DUP-1-150518DL	R1503862-010	941,129	4.97

Results flagged with an asterisk (\*) indicate values outside control criteria.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15 16:12

**Internal Standard Area and RT Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\MSVOA10\DATA\052715\A8938.D\  
**Instrument ID:** R-MS-10  
**Analytical Method:** 8260C

**Lab Code:** RQ1505783-02  
**Analysis Lot:** 446543  
**Signal ID:**

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	792,098	11.66	1,539,504	6.15	1,346,702	9.58
<b>Upper Limit ==&gt;</b>	1,584,196	12.16	3,079,008	6.65	2,693,404	10.08
<b>Lower Limit ==&gt;</b>	396,049	11.16	769,752	5.65	673,351	9.08
<b>ICAL Result ==&gt;</b>	825,795	11.66	1,474,627	6.15	1,395,683	9.58

**Associated Analyses**

Lab Control Sample	RQ1505783-03	777,285	11.66	1,527,217	6.15	1,321,604	9.58
Method Blank	RQ1505783-04	732,004	11.66	1,441,836	6.15	1,296,706	9.58
BAT-87-02(3)-150518	R1503862-011	735,656	11.66	1,490,015	6.15	1,358,801	9.58
BAT-87-02(3)-150518MS	RQ1505783-05	794,276	11.66	1,561,241	6.15	1,365,965	9.58
BAT-87-02(3)-150518DMS	RQ1505783-06	788,080	11.66	1,531,863	6.15	1,346,561	9.58

Results flagged with an asterisk (\*) indicate values outside control criteria.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/27/15 16:12

**Internal Standard Area and RT Summary  
Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\MSVOA10\DATA\052715\A8938.D\

**Lab Code:** RQ1505783-02

**Instrument ID:** R-MS-10

**Analysis Lot:** 446543

**Analytical Method:** 8260C

**Signal ID:**

<b>Pentafluorobenzene</b>		
	<b>Area</b>	<b>RT</b>
<b>Results ==&gt;</b>	1,014,460	4.97
<b>Upper Limit ==&gt;</b>	2,028,920	5.47
<b>Lower Limit ==&gt;</b>	507,230	4.47
<b>ICAL Result ==&gt;</b>	960,841	4.97

**Associated Analyses**

Lab Control Sample	RQ1505783-03	1,003,288	4.97
Method Blank	RQ1505783-04	937,321	4.97
BAT-87-02(3)-150518	R1503862-011	968,664	4.96
BAT-87-02(3)-150518MS	RQ1505783-05	1,036,946	4.97
BAT-87-02(3)-150518DMS	RQ1505783-06	1,009,741	4.97

Results flagged with an asterisk (\*) indicate values outside control criteria.



## VOLATILE ORGANICS SAMPLE DATA

**ALS Environmental - Rochester, NY**  
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623  
Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-FB1-150518  
**Lab Code:** R1503862-001

**Service Request:** R1503862  
**Date Collected:** 5/18/15 0920  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:48

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052415\A8835.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-FB1-150518  
**Lab Code:** R1503862-001

**Service Request:** R1503862  
**Date Collected:** 5/18/15 0920  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:48

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052415\A8835.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	5/24/15 23:48	
Toluene-d8	97	87-121	5/24/15 23:48	
Dibromofluoromethane	99	89-119	5/24/15 23:48	

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA10\DATA\052415\  
 Data File : A8835.D  
 Acq On : 24 May 2015 11:48 pm  
 Operator : F.Naegler  
 Sample : R1503862-001|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 25 00:03:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	4.969	168	887031	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1394739	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1288932	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	732299	50.00	ug/L	0.00
<hr/>						
System Monitoring Compounds						
43) surr4,Dibromomethane	4.835	113	432544	49.70	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	99.40%		
46) surr1,1,2-dichloroetha...	5.414	65	463714	51.84	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	103.68%		
64) SURR3,Toluene-d8	8.042	98	1610420	48.53	ug/L	0.00
Spiked Amount .50.000	Range 87 - 121		Recovery =	97.06%		
69) SURR2,BFB	10.675	95	627282	46.52	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	93.04%		
<hr/>						
Target Compounds					Qvalue	
15) Acetone	2.238	2.214	43 1490	500	m <sup>(+)</sup>	Below Cal # 51
16) 2-Propanol	2.329	45	590	1.27	ug/L	91
19) Acetonitrile	2.396	40	880	2.15	ug/L	# 1
38) Tetrahydrofuran	4.500	42	714	0.28	ug/L	# 35
88) Cyclohexanone	10.614	55	211	0.51	ug/L	# 74

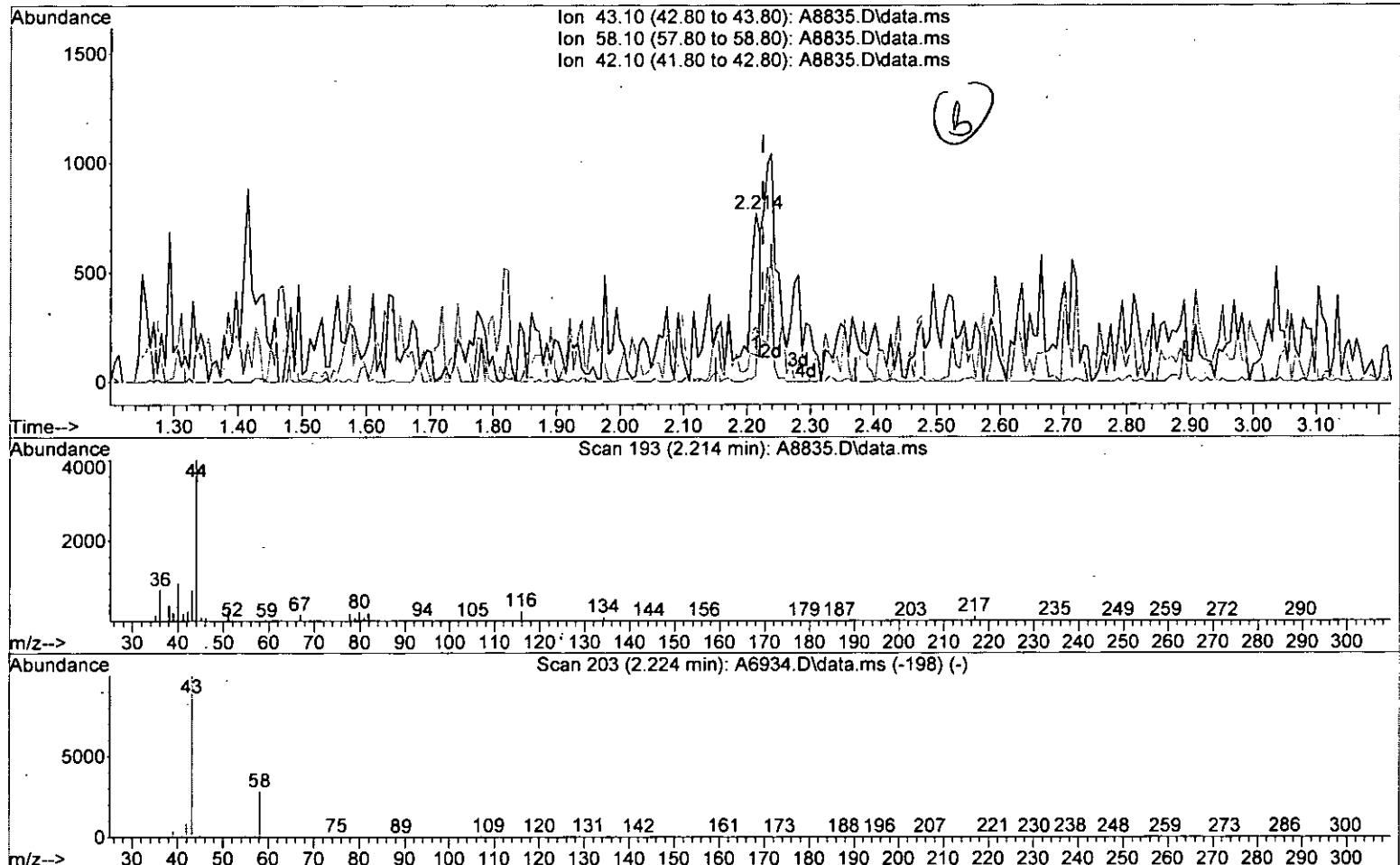
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/26/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8835.D  
 Acq On : 24 May 2015 11:48 pm  
 Operator : F.Naegler  
 Sample : R1503862-001|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 25 00:03:52 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8835.D\data.ms

## (15) Acetone (P)

2.214min (-0.011) -1.00 ug/L

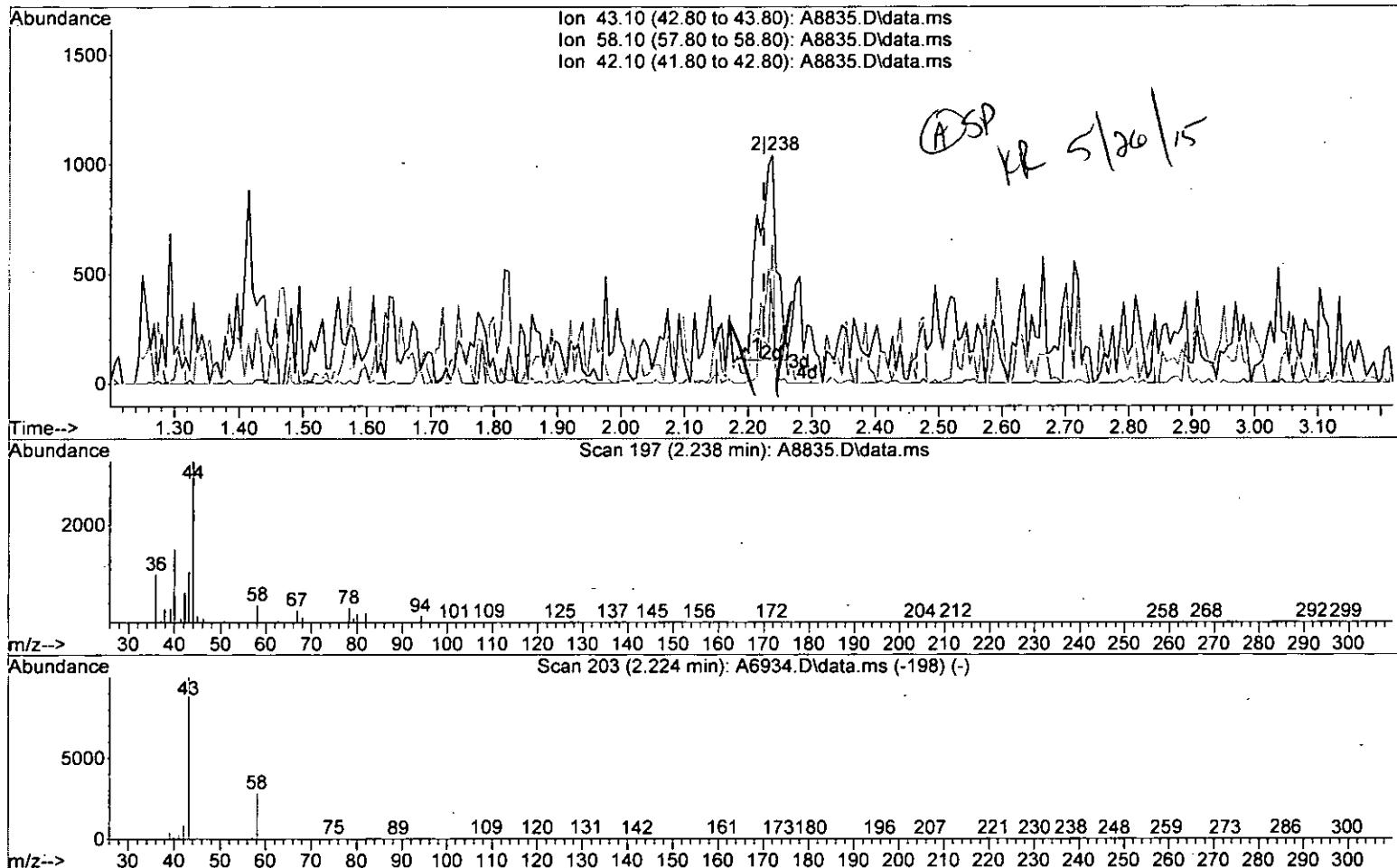
response 588

Ion	Exp%	Act%
43.10	100	100
58.10	24.80	3.52#
42.10	8.00	32.55#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa10\data\052415\  
 Data File : A8835.D  
 Acq On : 24 May 2015 11:48 pm  
 Operator : F.Naegler  
 Sample : R1503862-001|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 25 00:03:52 2015  
 Quant Method : I:\ACQUUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8835.D\data.ms

(15) Acetone (P)

2.238min (+0.013) -1.00 ug/L m

response 1890

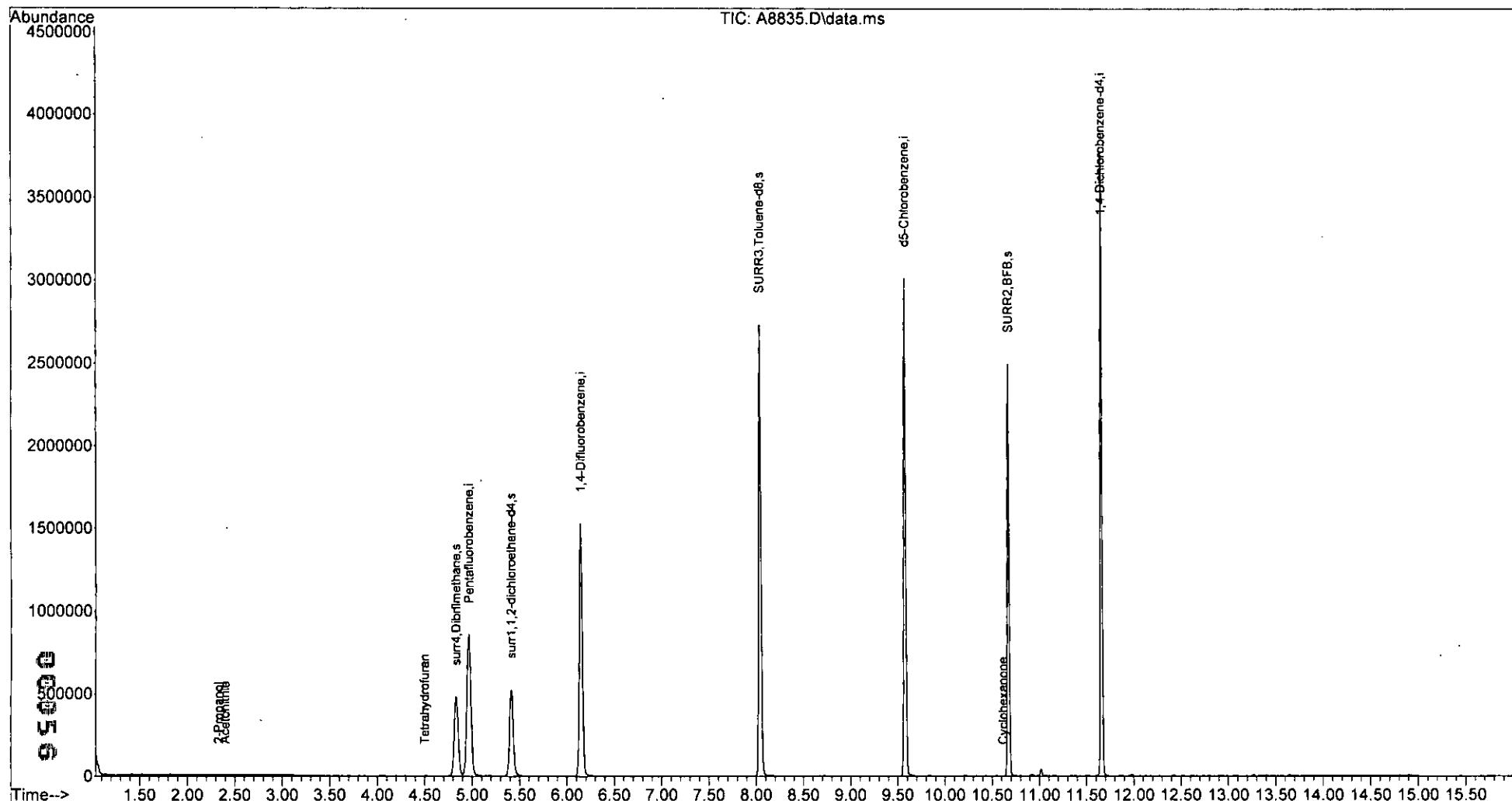
Ion	Exp%	Act%
43.10	100	100
58.10	24.80	35.09
42.10	8.00	60.40#
0.00	0.00	0.00

*wave*

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA10\DATA\052415\  
Data File : A8835.D  
Acq On : 24 May 2015 11:48 pm  
Operator : F.Naegler  
Sample : R1503862-001|1.0 Inst : MSVOA10  
Misc : CBI 13429 T4  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 25 00:03:52 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



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## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:00

**Sample Name:** BAT-87-13(3)-150518  
**Lab Code:** R1503862-009

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052515\A8867.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 200

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	200 U	200	42	
75-01-4	Vinyl Chloride	750	200	64	
75-00-3	Chloroethane	200 U	200	48	
74-83-9	Bromomethane	200 U	200	58	
75-35-4	1,1-Dichloroethene	200 U	200	120	
67-64-1	Acetone	1000 U	1000	250	
75-15-0	Carbon Disulfide	440	200	44	
75-09-2	Methylene Chloride	200 U	200	120	
156-60-5	trans-1,2-Dichloroethene	320	200	66	
75-34-3	1,1-Dichloroethane	200 U	200	40	
156-59-2	cis-1,2-Dichloroethene	45000 E	200	60	
78-93-3	2-Butanone (MEK)	1000 U	1000	170	
67-66-3	Chloroform	490	200	50	
71-55-6	1,1,1-Trichloroethane	200 U	200	72	
56-23-5	Carbon Tetrachloride	200 U	200	90	
71-43-2	Benzene	200 U	200	40	
107-06-2	1,2-Dichloroethane	200 U	200	72	
79-01-6	Trichloroethene	78000 E	200	44	
78-87-5	1,2-Dichloropropane	200 U	200	40	
75-27-4	Bromodichloromethane	86 J	200	64	
10061-01-5	cis-1,3-Dichloropropene	200 U	200	48	
108-10-1	4-Methyl-2-pentanone (MIBK)	1000 U	1000	140	
108-88-3	Toluene	48 J	200	40	
10061-02-6	trans-1,3-Dichloropropene	200 U	200	40	
79-00-5	1,1,2-Trichloroethane	200 U	200	68	
127-18-4	Tetrachloroethene	200 U	200	60	
591-78-6	2-Hexanone	1000 U	1000	340	
124-48-1	Dibromochloromethane	200 U	200	62	
108-90-7	Chlorobenzene	200 U	200	58	
100-41-4	Ethylbenzene	200 U	200	40	
179601-23-1	m,p-Xylenes	400 U	400	66	
95-47-6	o-Xylene	200 U	200	40	
100-42-5	Styrene	200 U	200	40	
75-25-2	Bromoform	200 U	200	84	
79-34-5	1,1,2,2-Tetrachloroethane	200 U	200	50	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water  
  
**Sample Name:** BAT-87-13(3)-150518  
**Lab Code:** R1503862-009

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:00

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052515\A8867.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 200

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	5/25/15 17:00	
Toluene-d8	98	87-121	5/25/15 17:00	
Dibromofluoromethane	100	89-119	5/25/15 17:00	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8867.D  
 Acq On : 25 May 2015 5:00 pm  
 Operator : K.Ruest  
 Sample : R1503862-009|200 Inst : .MSVOA10  
 Misc : OB+I 13429 T4  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 26 16:25:44 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

RT /500

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.963	168	926967	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1435177	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1308216	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	742060	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	449337	50.17	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	100.34%	
46) surr1,1,2-dichloroetha...	5.414	65	472136	51.30	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	102.60%	
64) SURR3,Toluene-d8	8.042	98	1677463	49.13	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	98.26%	
69) SURR2,BFB	10.675	95	620342	44.70	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	89.40%	
<b>Target Compounds</b>						
4) Vinyl Chloride	1.348	62	47973	3.74	ug/L	93
13) 1,1-Dicethene	2.195	96	1902	0.28	ug/L	# 77
15) Acetone	2.238	43	1724	Below Cal		86
18) Carbon Disulfide	2.378	76	54491	2.22	ug/L	99
22) Methylene Chloride	2.591	84	3901	0.47	ug/L	87
26) trans-1,2-Dichloroethene	2.860	96	12379	1.61	ug/L	# 76
33) cis-1,2-Dichloroethene	4.055	96	2063166	223.94	ug/L	98(E)
39) Chloroform	4.561	83	37570	2.46	ug/L	89
53) Trichloroethene	6.499	130	3871147	389.50	ug/L	96(E)
59) Bromodichloromethane	7.176	83	4773	0.43	ug/L	96
65) Toluene	8.115	91	9140	0.24	ug/L	88
82) (m+p)Xylene	9.840	106	3334	0.21	ug/L	95

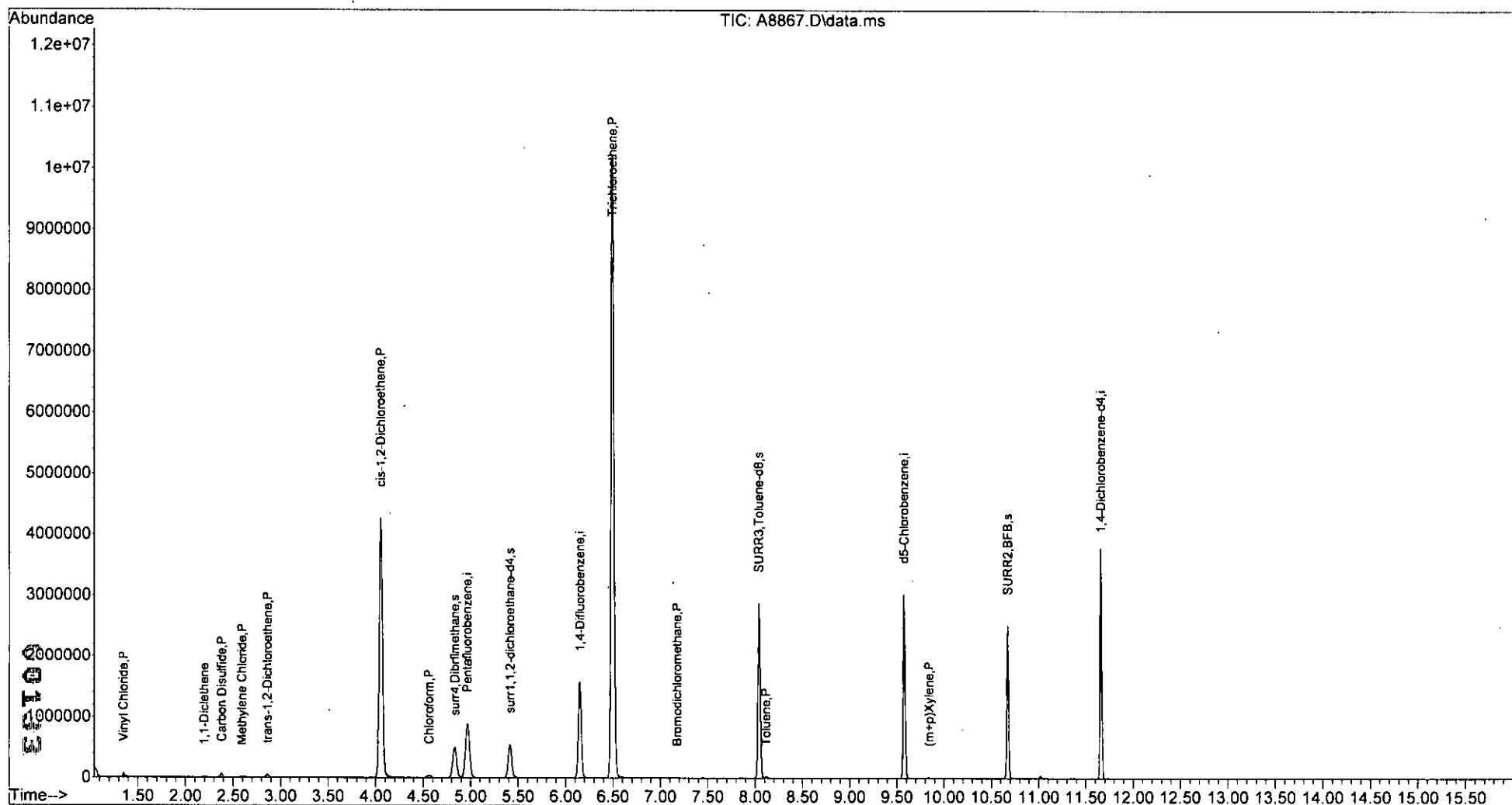
(#) = qualifier out of range (m) = manual integration (+) = signals summed

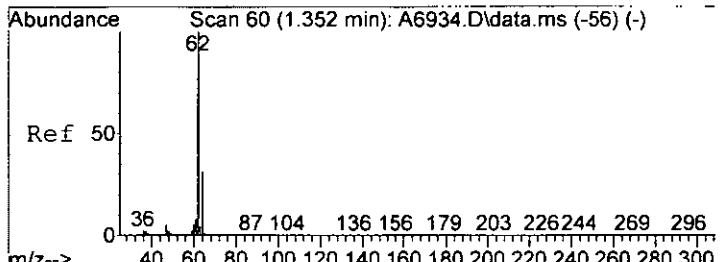
5/26/15

## Quantitation Report (QT Reviewed)

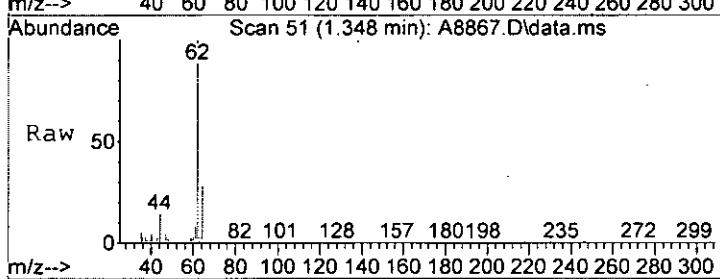
Data Path : I:\ACQUDATA\msvoa10\data\052515\  
Data File : A8867.D  
Acq On : 25 May 2015 5:00 pm  
Operator : K.Ruest  
Sample : R1503862-009|200 Inst : MSVOA10  
Misc : OB+I 13429 T4  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 26 16:25:44 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration

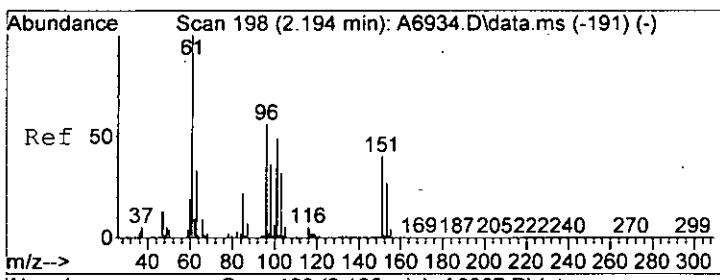
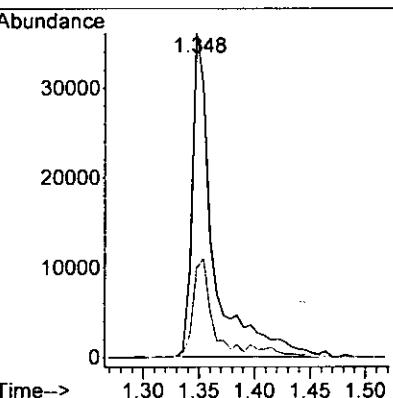
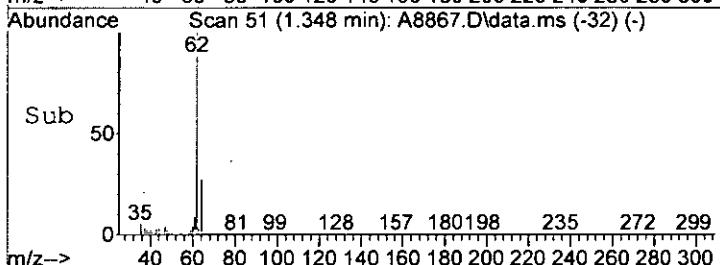




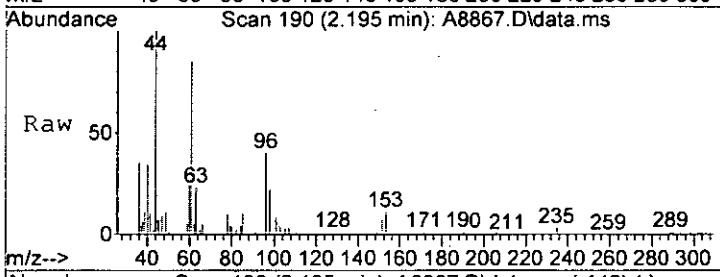
#4  
 Vinyl Chloride  
 Concen: 3.74 ug/L  
 RT: 1.348 min Scan# 51  
 Delta R.T. 0.000 min  
 Lab File: A8867.D  
 Acq: 25 May 2015 5:00 pm



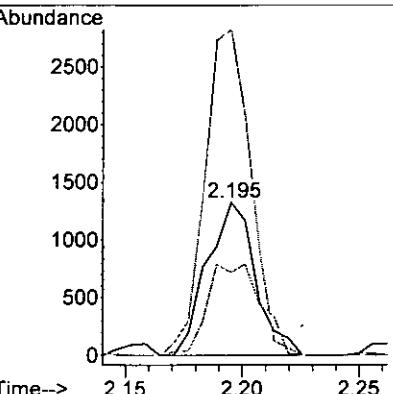
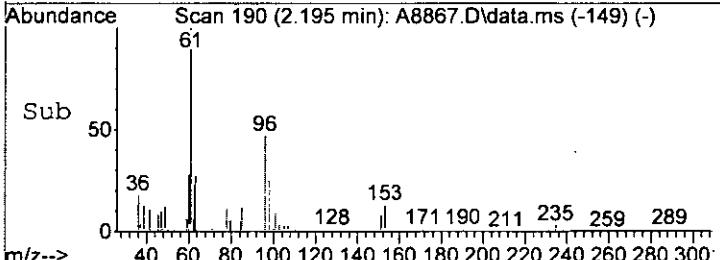
Tgt Ion: 62 Resp: 47973  
 Ion Ratio Lower Upper  
 62 100  
 64 27.6 11.7 51.7

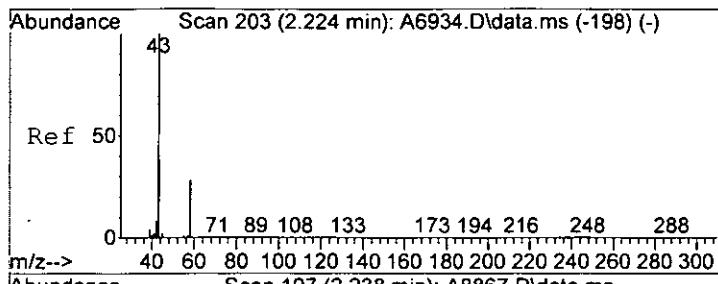


#13  
 1,1-Dicethene  
 Concen: 0.28 ug/L  
 RT: 2.195 min Scan# 190  
 Delta R.T. 0.000 min  
 Lab File: A8867.D  
 Acq: 25 May 2015 5:00 pm

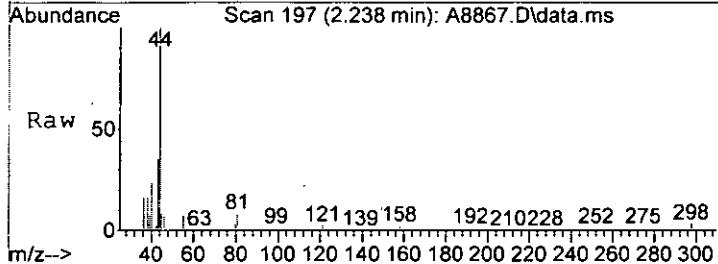


Tgt Ion: 96 Resp: 1902  
 Ion Ratio Lower Upper  
 96 100  
 98 54.0 43.2 83.2  
 61 213.3 155.6 195.6#

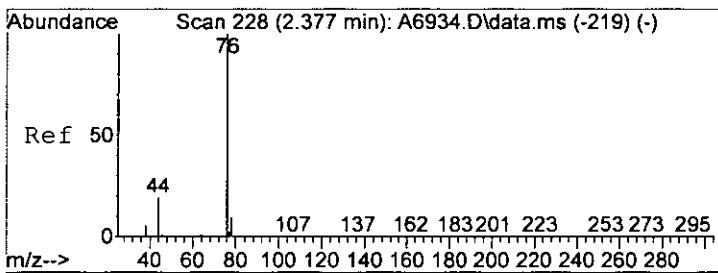
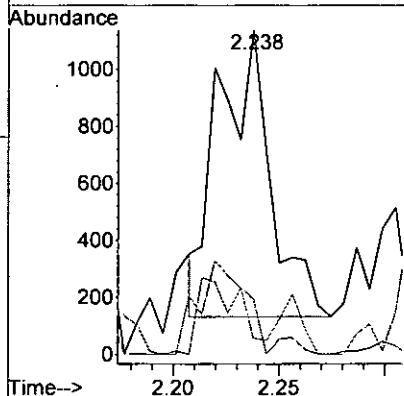
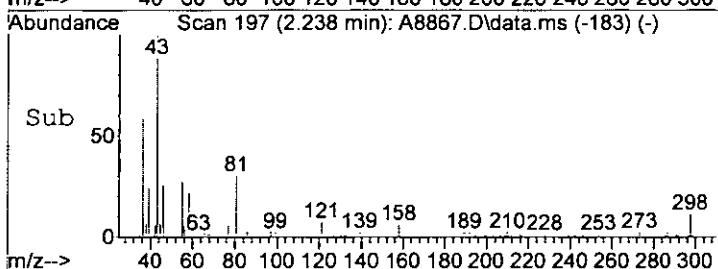




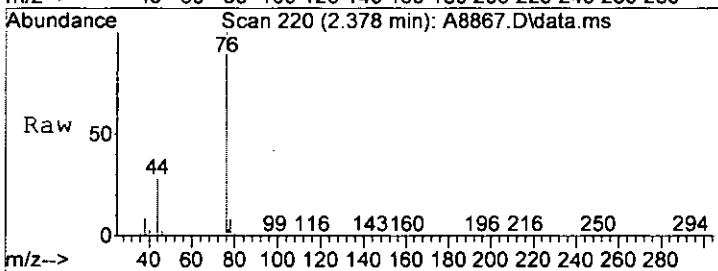
#15  
Acetone  
Concen: Below Cal  
RT: 2.238 min Scan# 197  
Delta R.T. 0.013 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm



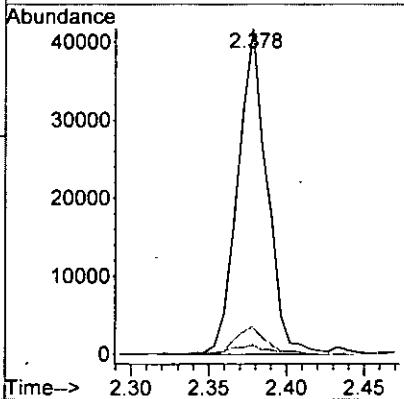
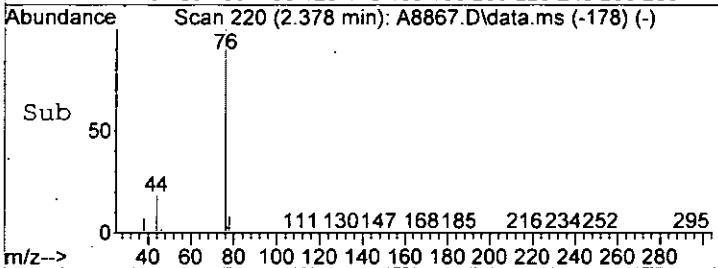
Tgt Ion: 43 Resp: 1724  
Ion Ratio Lower Upper  
43 100  
58 17.1 4.8 44.8  
42 4.9 0.0 28.0

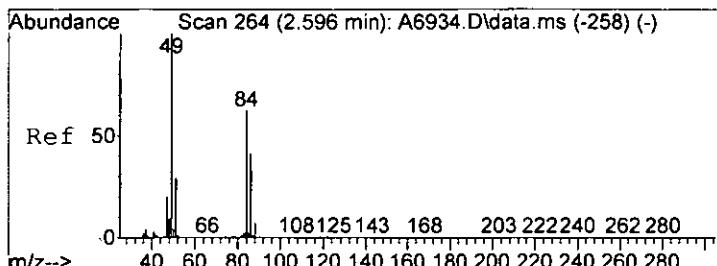


#18  
Carbon Disulfide  
Concen: 2.22 ug/L  
RT: 2.378 min Scan# 220  
Delta R.T. 0.000 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm

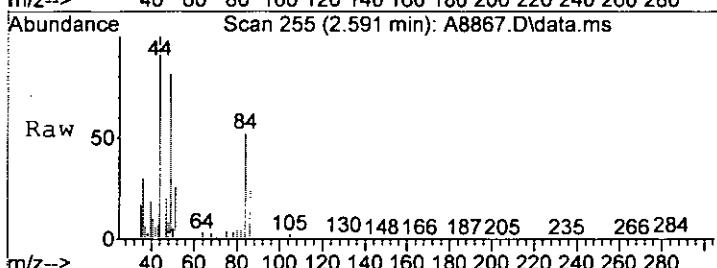


Tgt Ion: 76 Resp: 54491  
Ion Ratio Lower Upper  
76 100  
78 8.4 0.0 29.0  
77 2.8 0.0 22.5

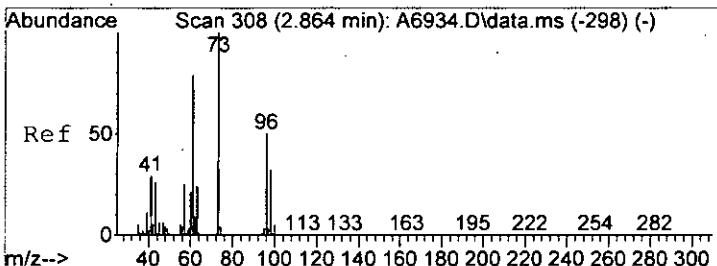
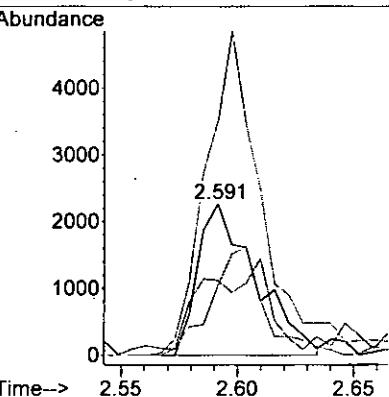
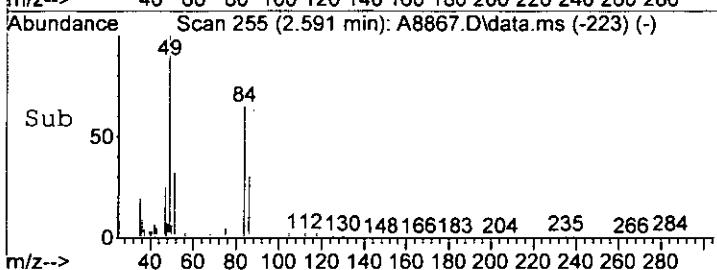




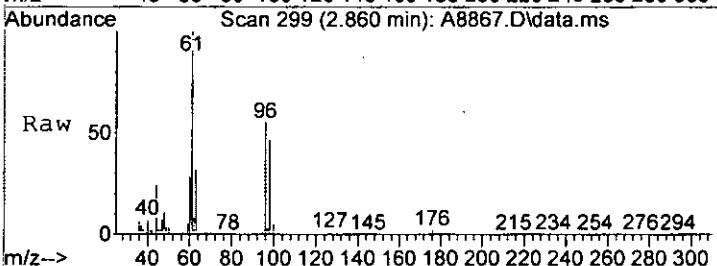
#22  
Methylene Chloride  
Concen: 0.47 ug/L  
RT: 2.591 min Scan# 255  
Delta R.T. -0.006 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm



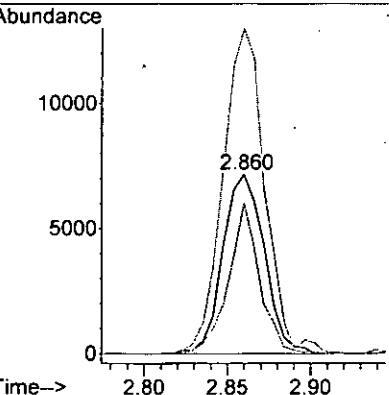
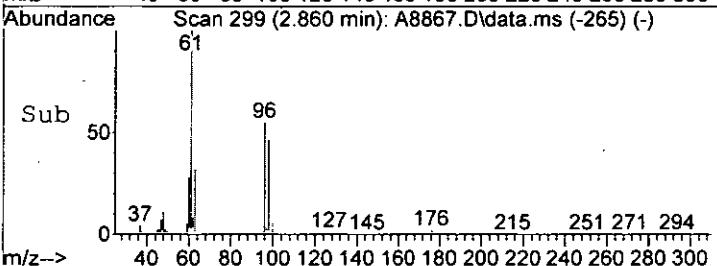
Tgt Ion:	84	Resp:	3901
Ion Ratio		Lower	Upper
84	100		
86	46.1	45.5	85.5
49	155.6	125.6	165.6
51	49.4	22.9	62.9

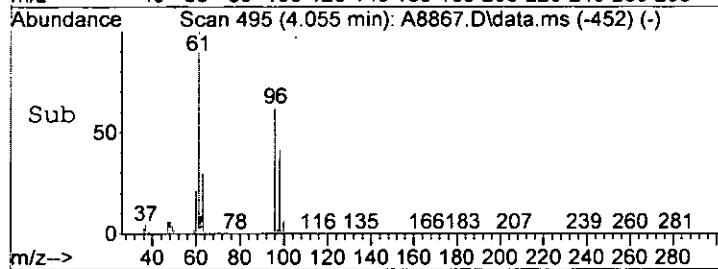
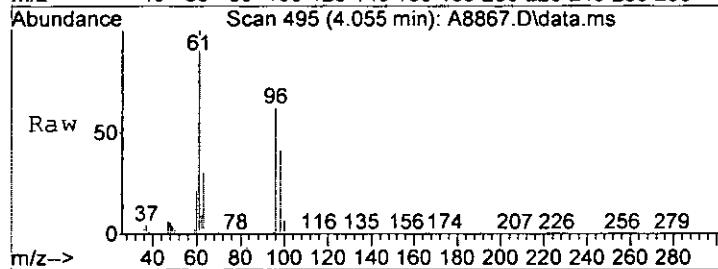
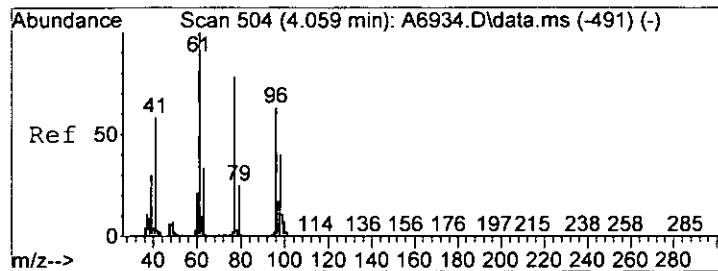


#26  
trans-1,2-Dichloroethene  
Concen: 1.61 ug/L  
RT: 2.860 min Scan# 299  
Delta R.T. 0.000 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm



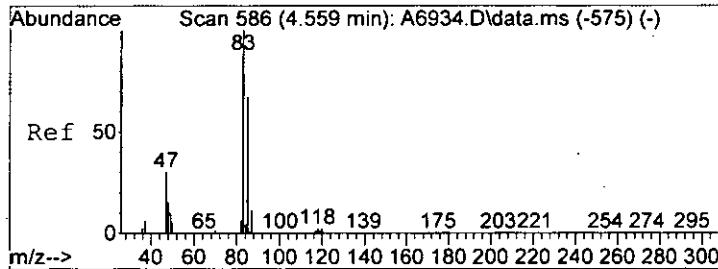
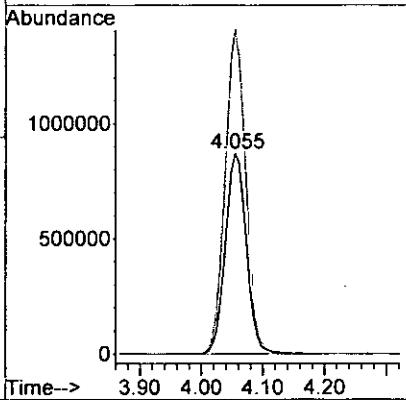
Tgt Ion:	96	Resp:	12379
Ion Ratio		Lower	Upper
96	100		
98	84.2	44.7	84.7
61	181.4	130.9	170.9#





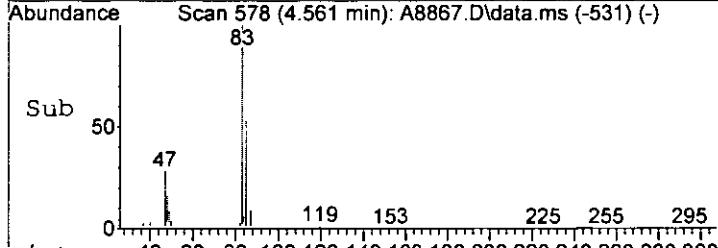
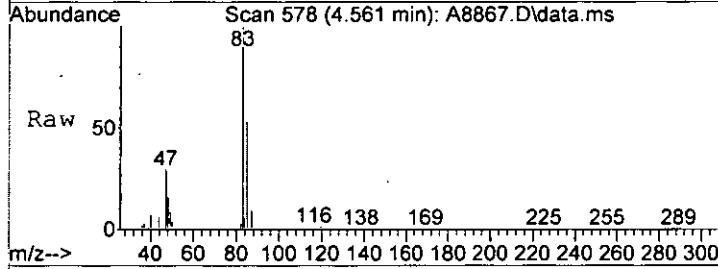
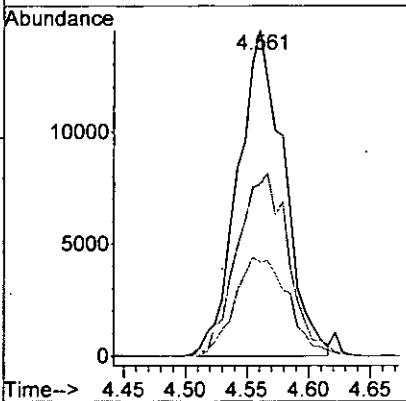
#33  
cis-1, 2-Dichloroethene  
Concen: 223.94 ug/L  
RT: 4.055 min Scan# 495  
Delta R.T. 0.000 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm

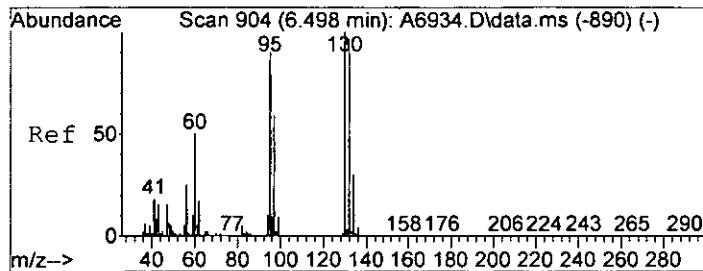
Tgt Ion: 96 Resp: 2063166  
Ion Ratio Lower Upper  
96 100  
61 161.5 138.8 178.8



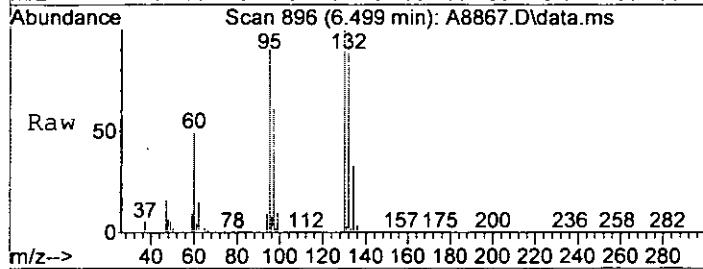
#39  
Chloroform  
Concen: 2.46 ug/L  
RT: 4.561 min Scan# 578  
Delta R.T. 0.000 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm

Tgt Ion: 83 Resp: 37570  
Ion Ratio Lower Upper  
83 100  
85 52.7 44.0 84.0  
47 28.8 9.9 49.9

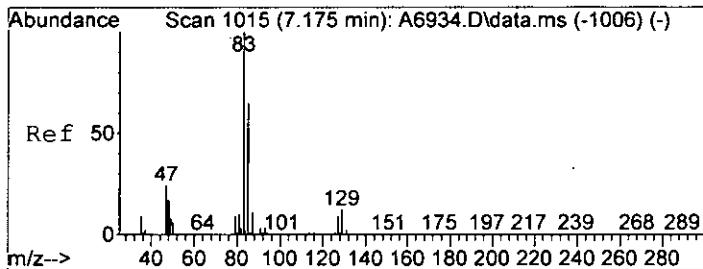
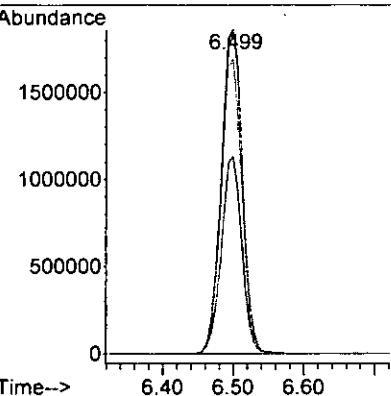
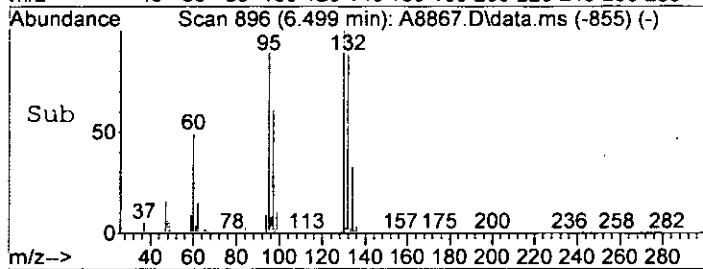




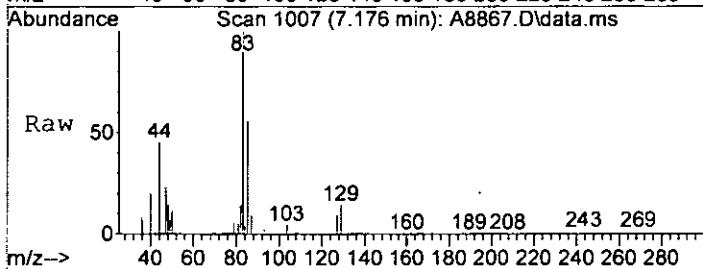
#53  
Trichloroethene  
Concen: 389.50 ug/L  
RT: 6.499 min Scan# 896  
Delta R.T. 0.000 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm



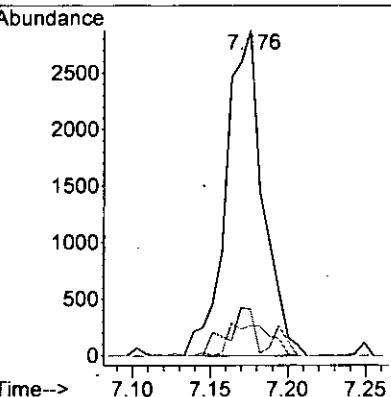
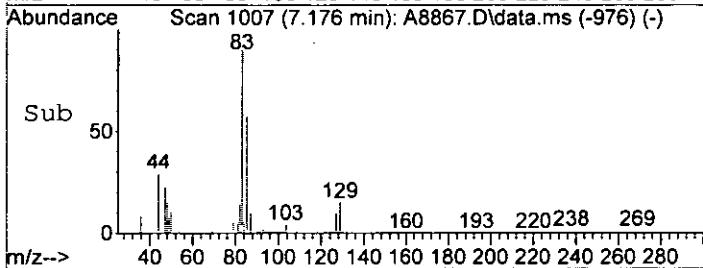
Tgt Ion: 130 Resp: 3871147  
Ion Ratio Lower Upper  
130 100  
132 99.7 76.6 116.6  
95 90.9 76.5 116.5  
97 61.0 42.4 82.4

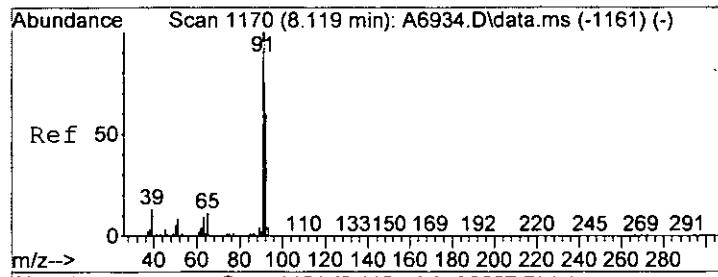


#59  
Bromodichloromethane  
Concen: 0.43 ug/L  
RT: 7.176 min Scan# 1007  
Delta R.T. 0.000 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm

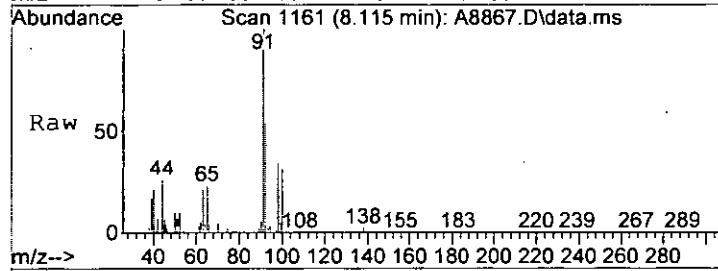


Tgt Ion: 83 Resp: 4773  
Ion Ratio Lower Upper  
83 100  
129 14.2 0.0 31.3  
127 9.3 0.0 29.1

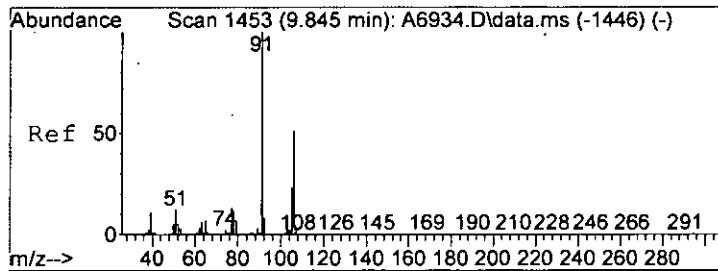
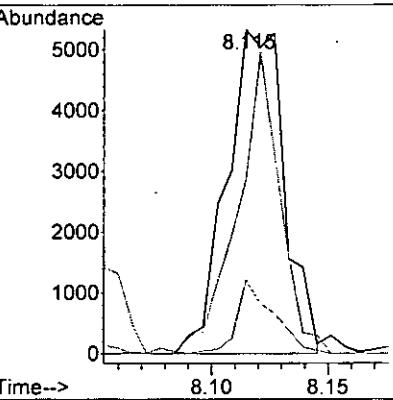
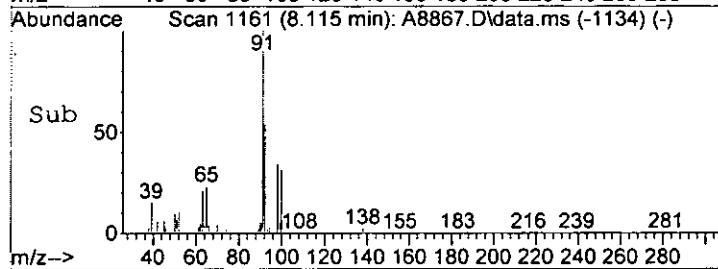




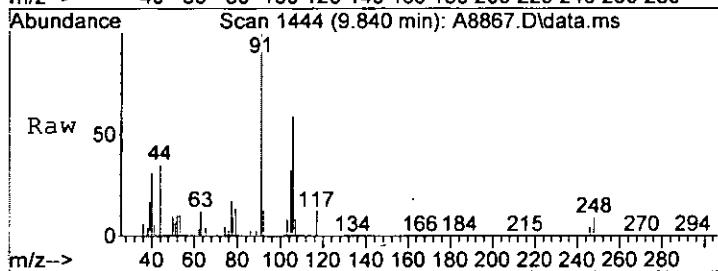
#65  
Toluene  
Concen: 0.24 ug/L  
RT: 8.115 min Scan# 1161  
Delta R.T. -0.006 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm



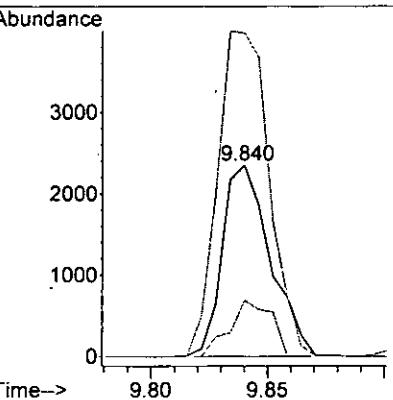
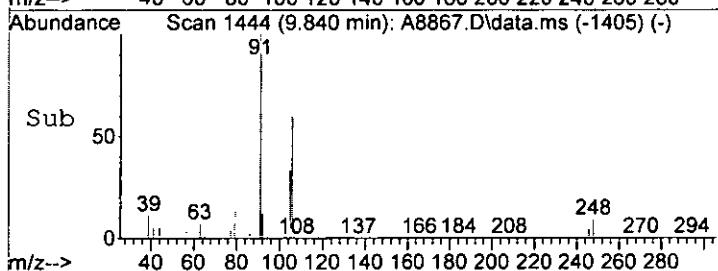
Tgt Ion: 91 Resp: 9140  
Ion Ratio Lower Upper  
91 100  
92 53.8 40.7 80.7  
65 22.6 0.0 32.3



#82  
(m+p) Xylene  
Concen: 0.21 ug/L  
RT: 9.840 min Scan# 1444  
Delta R.T. -0.012 min  
Lab File: A8867.D  
Acq: 25 May 2015 5:00 pm



Tgt Ion: 106 Resp: 3334  
Ion Ratio Lower Upper  
106 100  
91 169.3 157.1 197.1  
77 29.2 7.2 47.2



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-13(3)-150518  
**Lab Code:** R1503862-009  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 22:55

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8910.D\**Analysis Lot:** 446223**Instrument Name:** R-MS-10**Dilution Factor:** 500

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	500 U	500	110	
75-01-4	Vinyl Chloride	760 D	500	160	
75-00-3	Chloroethane	500 U	500	120	
74-83-9	Bromomethane	500 U	500	150	
75-35-4	1,1-Dichloroethene	500 U	500	290	
67-64-1	Acetone	2500 U	2500	620	
75-15-0	Carbon Disulfide	460 DJ	500	110	
75-09-2	Methylene Chloride	500 U	500	300	
156-60-5	trans-1,2-Dichloroethene	330 DJ	500	170	
75-34-3	1,1-Dichloroethane	500 U	500	100	
156-59-2	cis-1,2-Dichloroethene	46000 D	500	150	
78-93-3	2-Butanone (MEK)	2500 U	2500	410	
67-66-3	Chloroform	500 U	500	130	
71-55-6	1,1,1-Trichloroethane	500 U	500	180	
56-23-5	Carbon Tetrachloride	500 U	500	230	
71-43-2	Benzene	500 U	500	100	
107-06-2	1,2-Dichloroethane	500 U	500	180	
79-01-6	Trichloroethene	79000 D	500	110	
78-87-5	1,2-Dichloropropane	500 U	500	100	
75-27-4	Bromodichloromethane	500 U	500	160	
10061-01-5	cis-1,3-Dichloropropene	500 U	500	120	
108-10-1	4-Methyl-2-pentanone (MIBK)	2500 U	2500	340	
108-88-3	Toluene	500 U	500	100	
10061-02-6	trans-1,3-Dichloropropene	500 U	500	100	
79-00-5	1,1,2-Trichloroethane	500 U	500	170	
127-18-4	Tetrachloroethene	500 U	500	150	
591-78-6	2-Hexanone	2500 U	2500	830	
124-48-1	Dibromochloromethane	500 U	500	160	
108-90-7	Chlorobenzene	500 U	500	150	
100-41-4	Ethylbenzene	500 U	500	100	
179601-23-1	m,p-Xylenes	1000 U	1000	170	
95-47-6	o-Xylene	500 U	500	100	
100-42-5	Styrene	500 U	500	100	
75-25-2	Bromoform	500 U	500	210	
79-34-5	1,1,2,2-Tetrachloroethane	500 U	500	130	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-I3(3)-150518  
**Lab Code:** R1503862-009  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15 1320  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 22:55

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS****Analytical Method:** 8260C**Data File Name:** I:\ACQUDATA\msvoa10\data\052615\A8910.D\**Analysis Lot:** 446223**Instrument Name:** R-MS-10**Dilution Factor:** 500

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/26/15 22:55	
Toluene-d8	96	87-121	5/26/15 22:55	
Dibromofluoromethane	100	89-119	5/26/15 22:55	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052615\

Data File : A8910.D

Acq On : 26 May 2015 10:55 pm

Operator : F. Naegler

Sample : R1503862-009|500.0

Inst : MSVOA10

Misc : CBI 13429 T4

ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 27 16:54:50 2015

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M

Quant Title : MS#10 - 8260B WATERS 10mL Purge

QLast Update : Thu May 07 14:25:48 2015

Response via : Initial Calibration

(DL)

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	936149	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1446695	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1329559	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	753048	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromoethane	4.835	113	451698	50.03	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	100.06%	
46) surr1,1,2-dichloroetha...	5.414	65	469535	50.61	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	101.22%	
64) Surr3,Toluene-d8	8.042	98	1657005	48.14	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	96.28%	
69) Surr2,BFB	10.675	95	636399	45.50	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	91.00%	
<b>Target Compounds</b>						
4) Vinyl Chloride	1.354	62	19767m	1.52	ug/L	
15) Acetone	2.232	43	2520	Below Cal	#	62
18) Carbon Disulfide	2.378	76	22444	0.91	ug/L	98
22) Methylene Chloride	2.598	84	2504	0.30	ug/L	# 77
26) trans-1,2-Dichloroethene	2.854	96	5050m	0.65	ug/L	
33) cis-1,2-Dichloroethene	4.055	96	853652	91.75	ug/L	96
53) Trichloroethene	6.499	130	1581370	157.84	ug/L	94
117) 1,2,3-Tribromobenzene	13.650	180	2473	0.23	ug/L	89

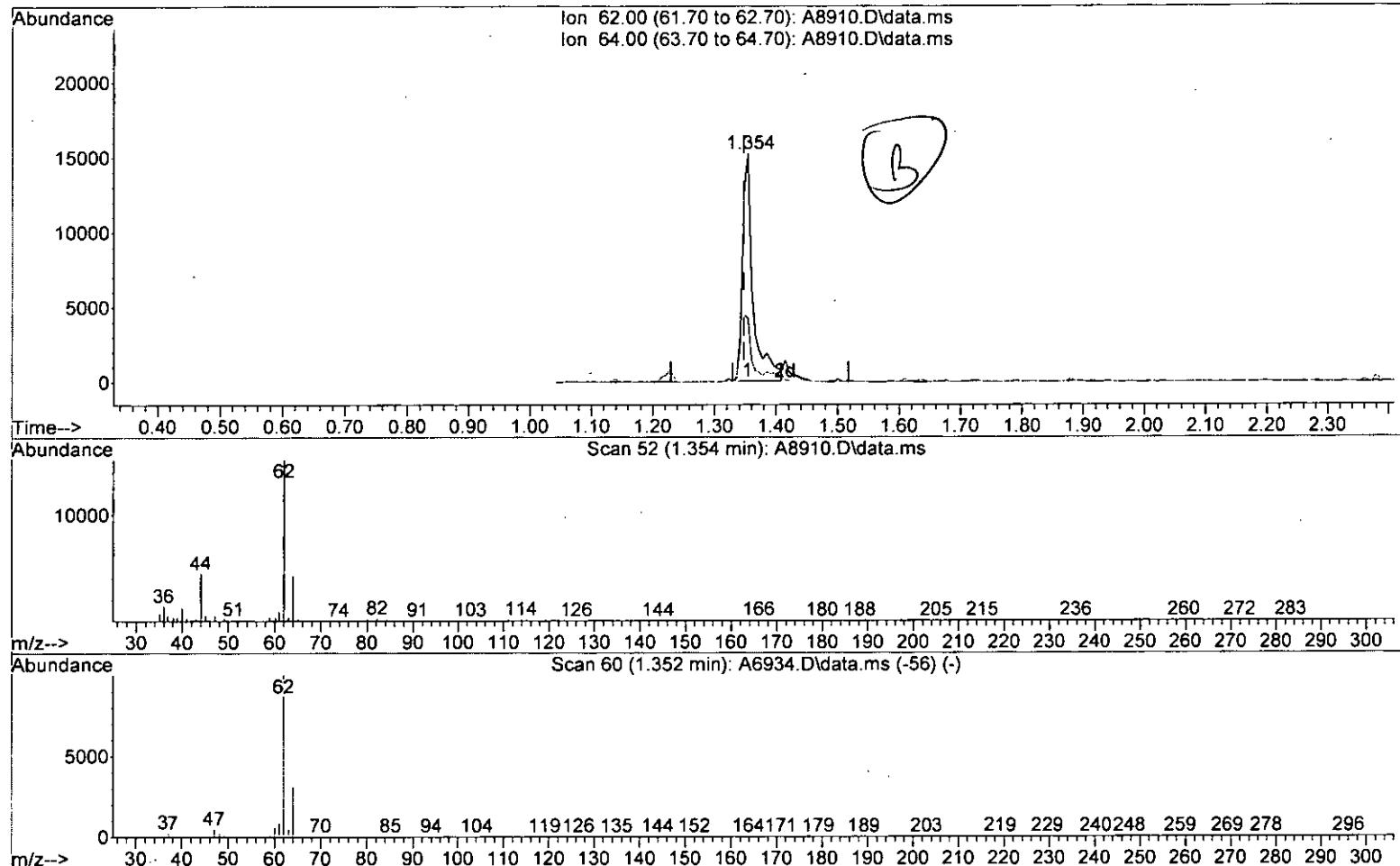
(#= qualifier out of range (m)= manual integration (+)= signals summed

(YR)  
5/27/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8910.D  
 Acq On : 26 May 2015 10:55 pm  
 Operator : F. Naegler  
 Sample : R1503862-009|500.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 26 23:10:59 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8910.D\data.ms

(4) Vinyl Chloride (P)

1.354min (+0.006) 1.41 ug/L

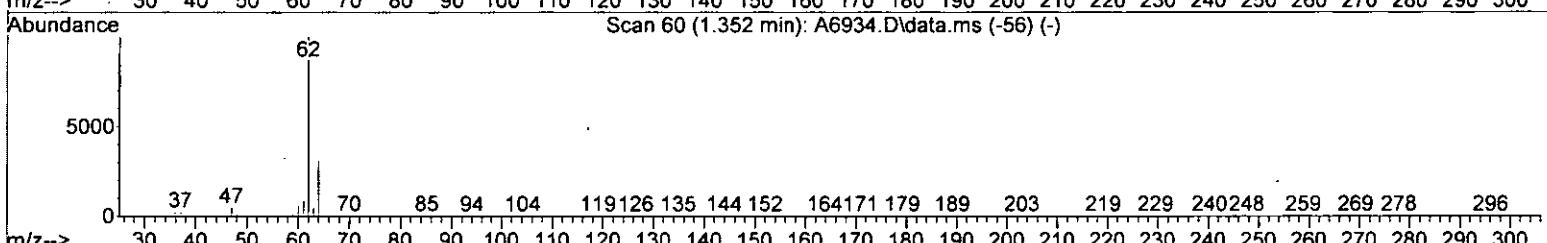
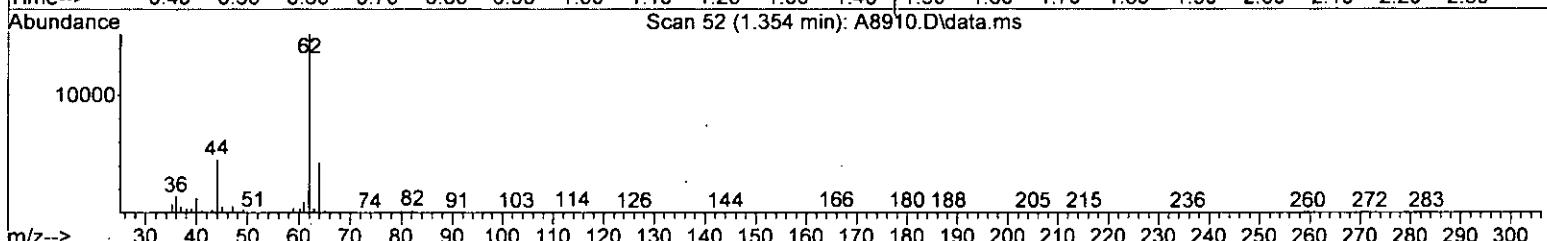
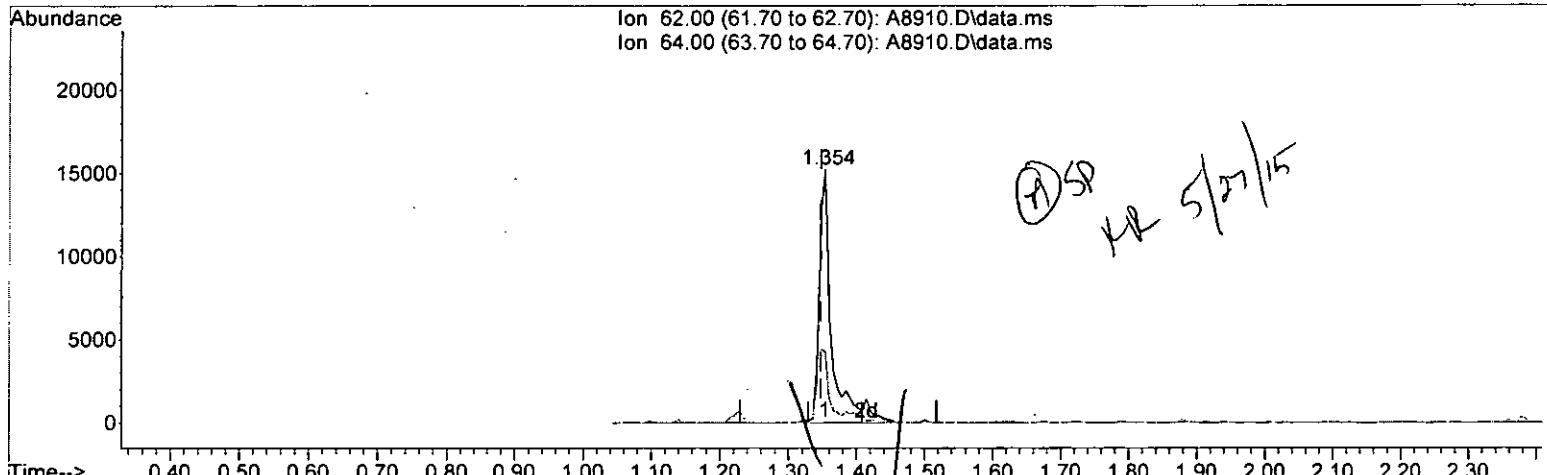
response 18257

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	28.00
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8910.D  
 Acq On : 26 May 2015 10:55 pm  
 Operator : F. Naegler  
 Sample : R1503862-009|500.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 26 23:10:59 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8910.D\data.ms

(4) Vinyl Chloride (P)

1.354min (+0.006) 1.52 ug/L m

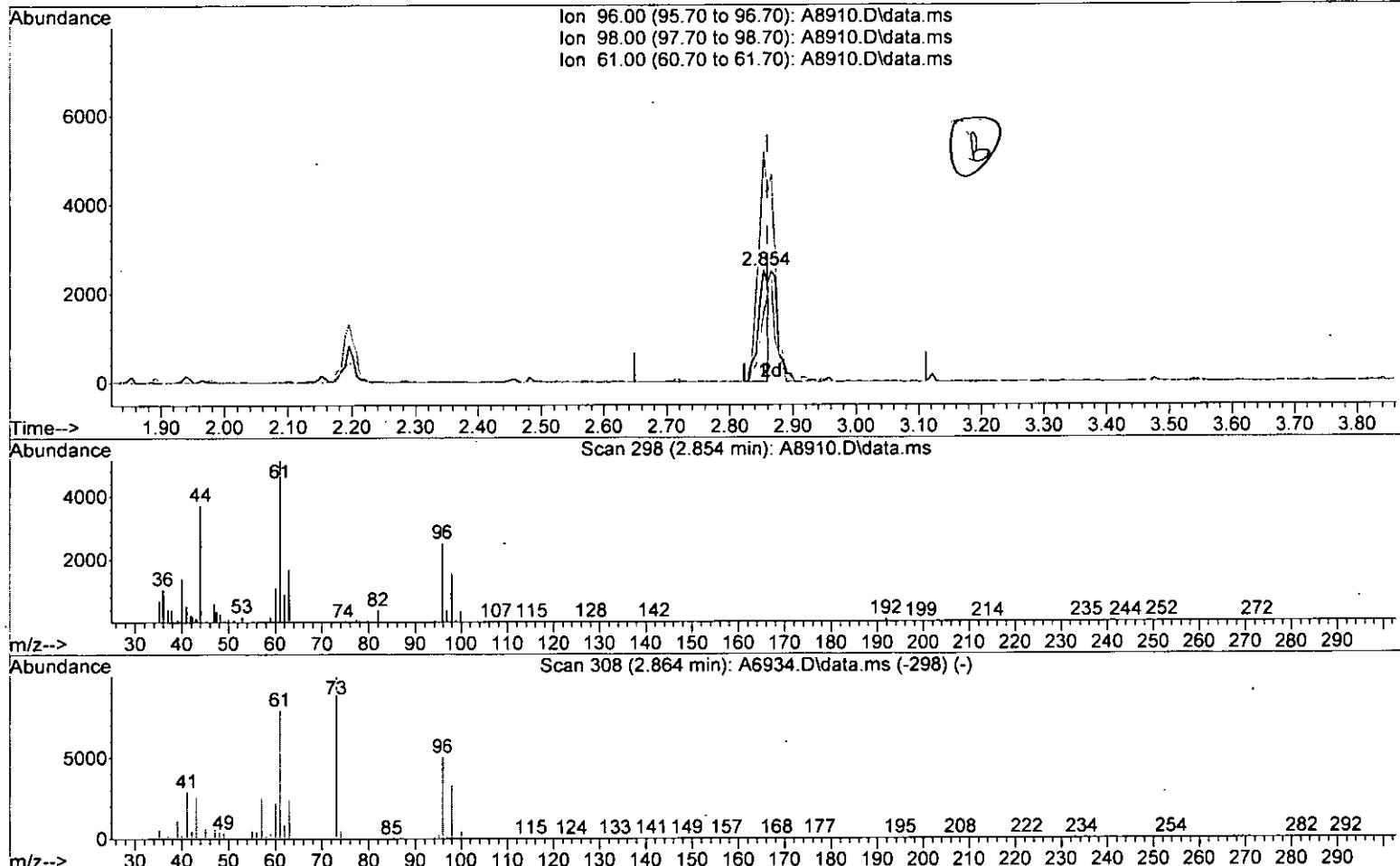
response 19767

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	28.00
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8910.D  
 Acq On : 26 May 2015 10:55 pm  
 Operator : F. Naegler  
 Sample : R1503862-009|500.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 26 23:10:59 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8910.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.854min (-0.006) 0.35 ug/L

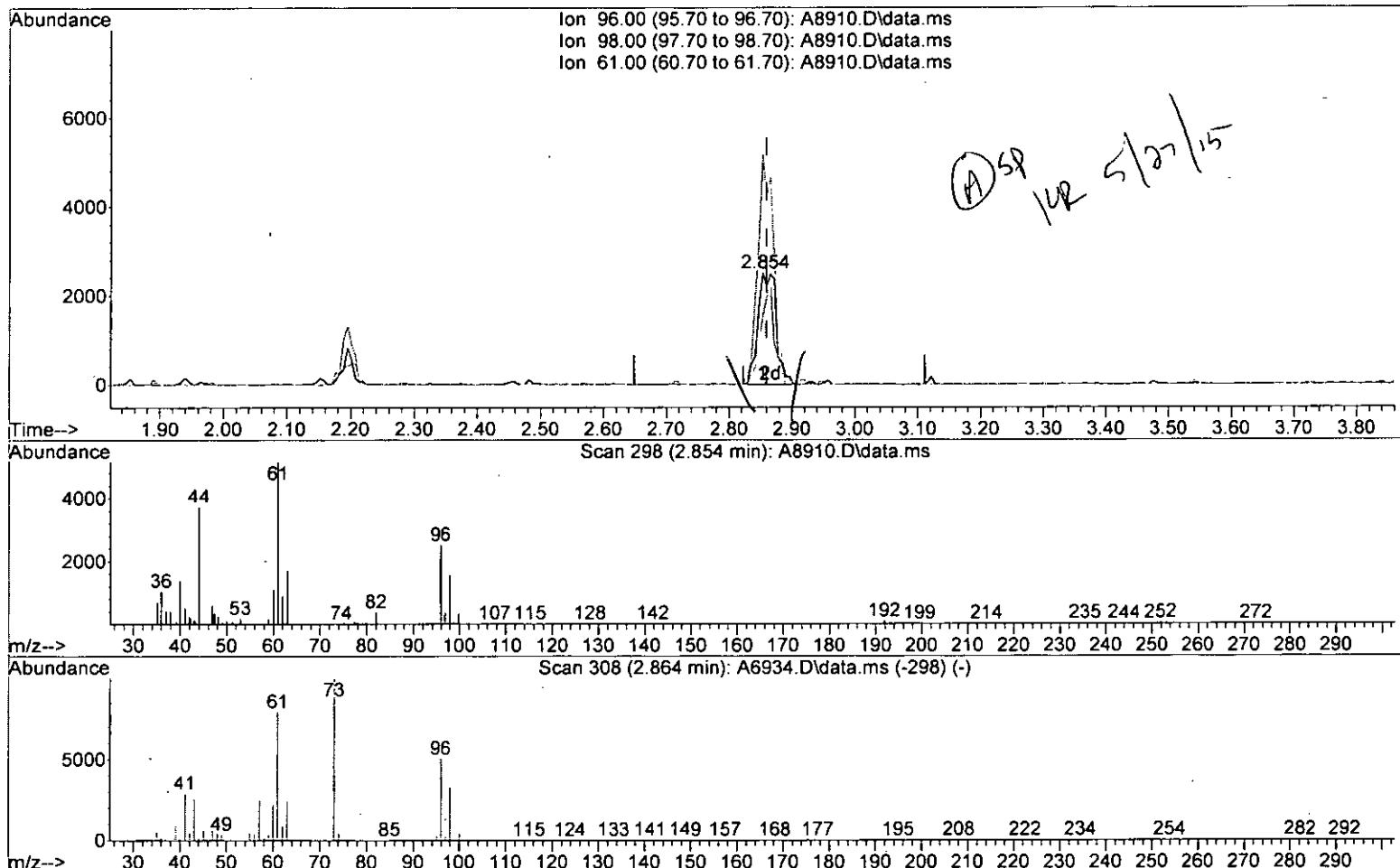
response 2748

Ion	Exp%	Act%
96.00	100	100
98.00	64.70	61.59
61.00	150.90	205.44#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa10\data\052615\  
 Data File : A8910.D  
 Acc On : 26 May 2015 10:55 pm  
 Operator : F. Naegler  
 Sample : R1503862-009|500.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 26 23:10:59 2015  
 Quant Method : I:\ACQUUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8910.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.854min (-0.006) 0.65 ug/L m

response 5050

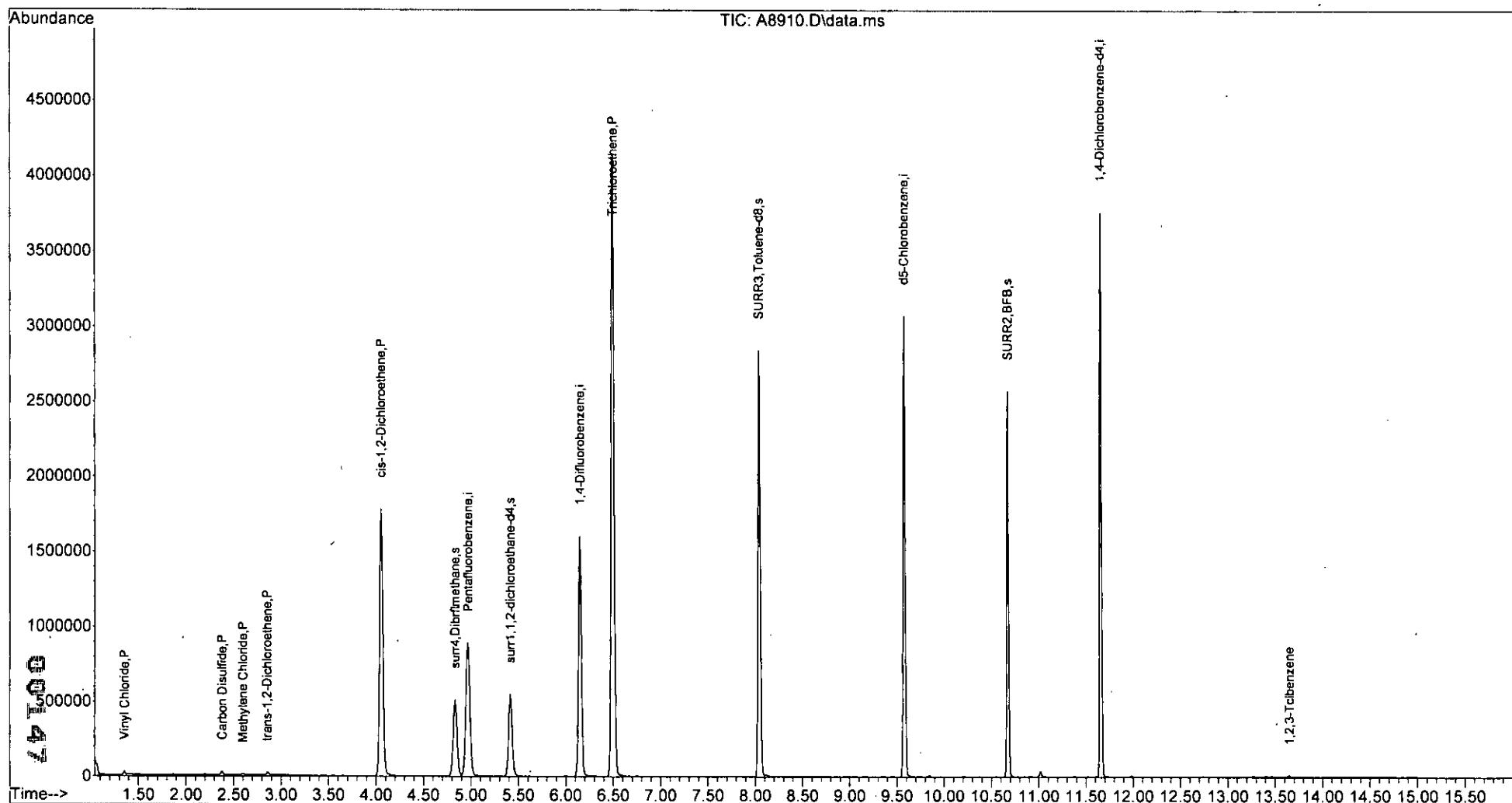
Ion	Exp%	Act%
96.00	100	100
98.00	64.70	61.59
61.00	150.90	205.44#
0.00	0.00	0.00

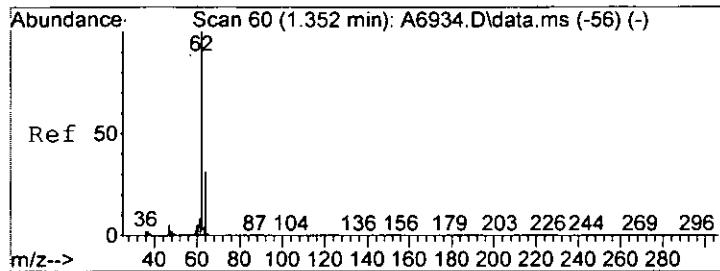
*WV*

## Quantitation Report (QT Reviewed)

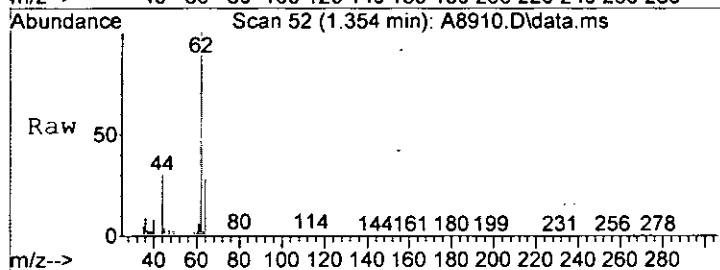
Data Path : I:\ACQUDATA\msvoa10\data\052615\  
Data File : A8910.D  
Acq On : 26 May 2015 10:55 pm  
Operator : F. Naegler  
Sample : R1503862-009|500.0  
Misc : CBI 13429 T4  
ALS Vial : 31 Sample Multiplier: 1  
Inst : MSVOA10

Quant Time: May 27 16:54:50 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration

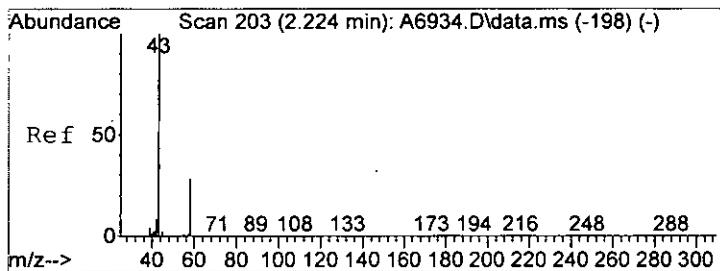
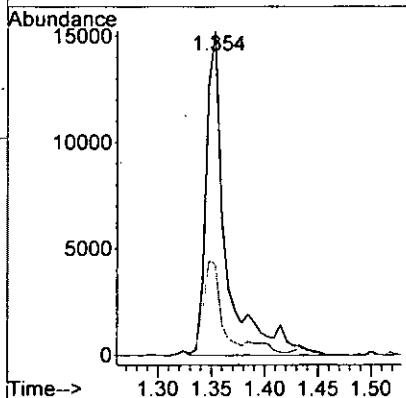
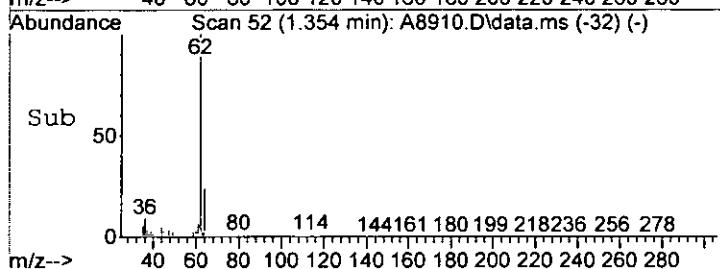




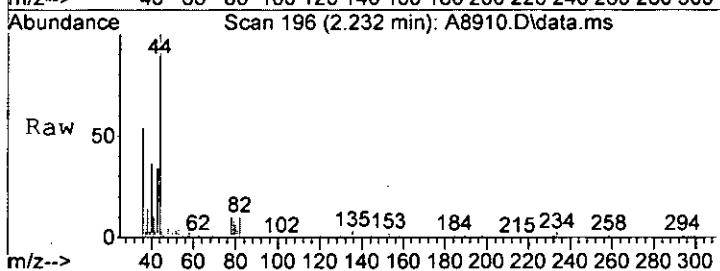
#4  
 Vinyl Chloride  
 Concen: 1.52 ug/L m  
 RT: 1.354 min Scan# 52  
 Delta R.T. 0.006 min  
 Lab File: A8910.D  
 Acq: 26 May 2015 10:55 pm



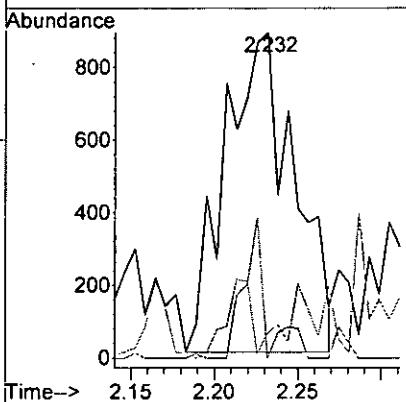
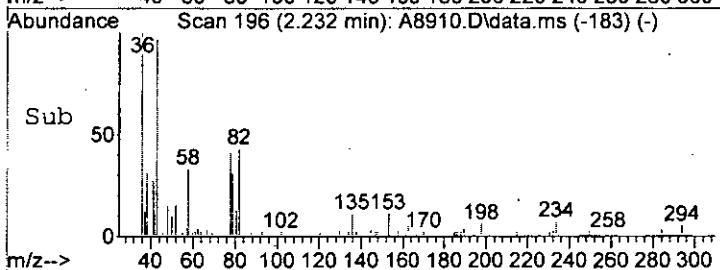
Tgt Ion: 62 Resp: 19767  
 Ion Ratio Lower Upper  
 62 100  
 64 28.0 11.7 51.7

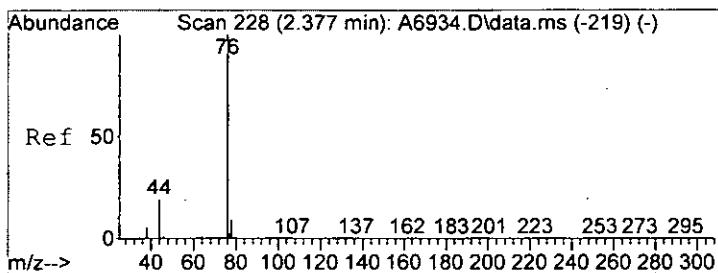


#15  
 Acetone  
 Concen: Below Cal  
 RT: 2.232 min Scan# 196  
 Delta R.T. 0.007 min  
 Lab File: A8910.D  
 Acq: 26 May 2015 10:55 pm

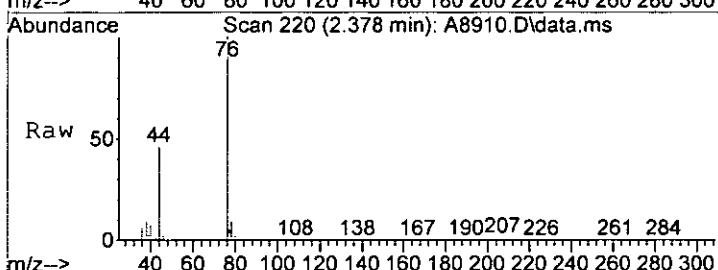


Tgt Ion: 43 Resp: 2520  
 Ion Ratio Lower Upper  
 43 100  
 58 0.0 4.8 44.8#  
 42 7.6 0.0 28.0

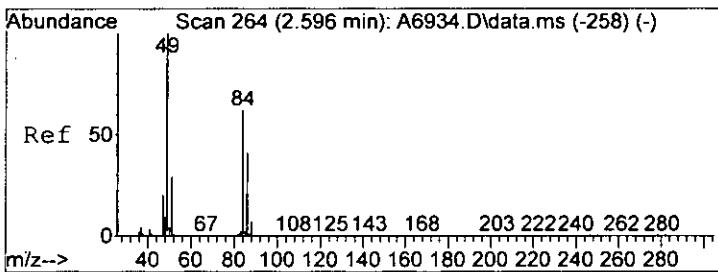
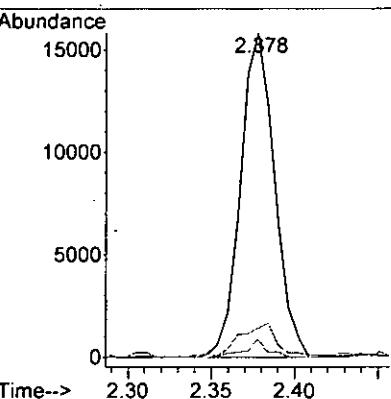
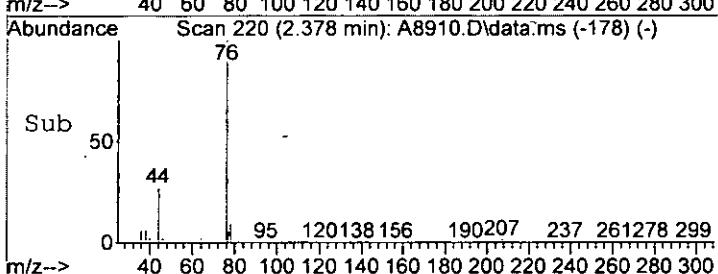




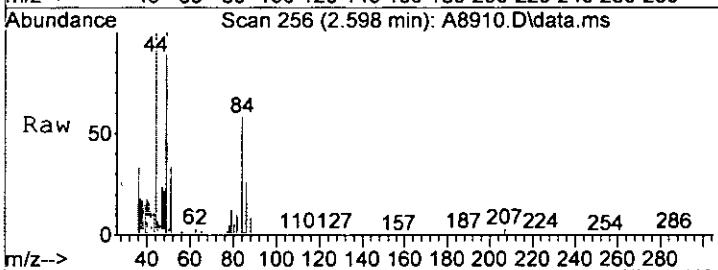
#18  
Carbon Disulfide  
Concen: 0.91 ug/L  
RT: 2.378 min Scan# 220  
Delta R.T. 0.000 min  
Lab File: A8910.D  
Acq: 26 May 2015 10:55 pm



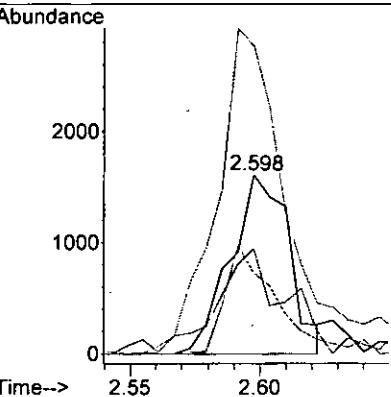
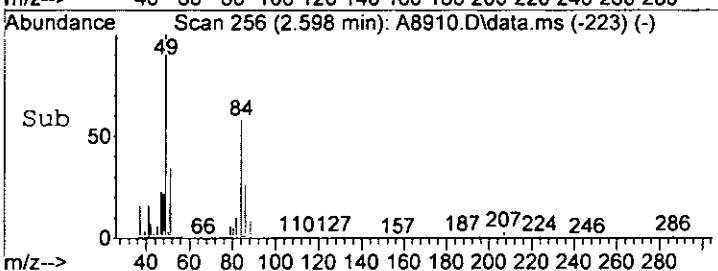
Tgt Ion: 76 Resp: 22444  
Ion Ratio Lower Upper  
76 100  
78 8.8 0.0 29.0  
77 5.5 0.0 22.5

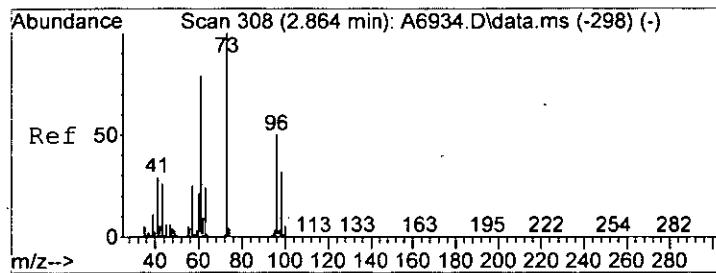


#22  
Methylene Chloride  
Concen: 0.30 ug/L  
RT: 2.598 min Scan# 256  
Delta R.T. 0.000 min  
Lab File: A8910.D  
Acq: 26 May 2015 10:55 pm



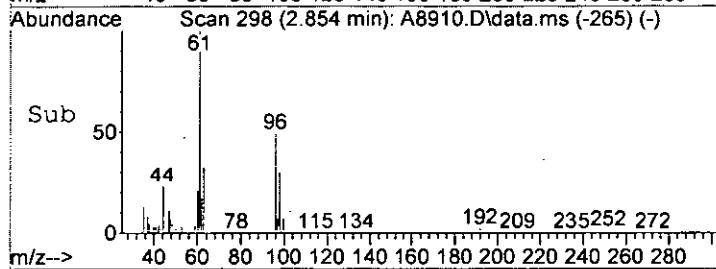
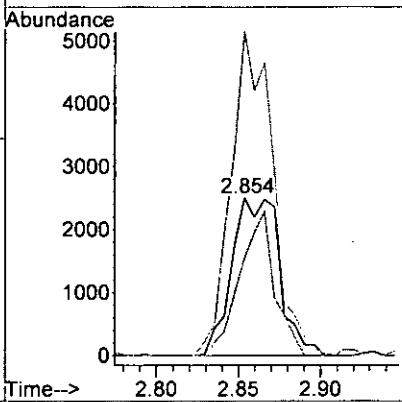
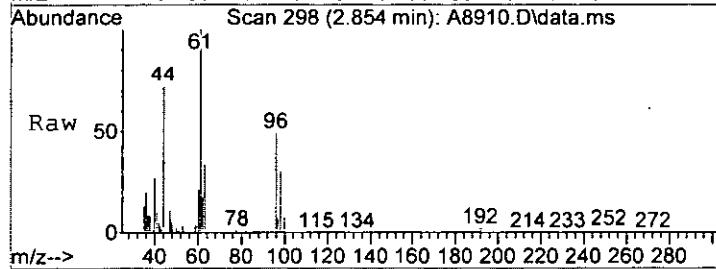
Tgt Ion: 84 Resp: 2504  
Ion Ratio Lower Upper  
84 100  
86 45.0 45.5 85.5#  
49 172.2 125.6 165.6#  
51 58.7 22.9 62.9





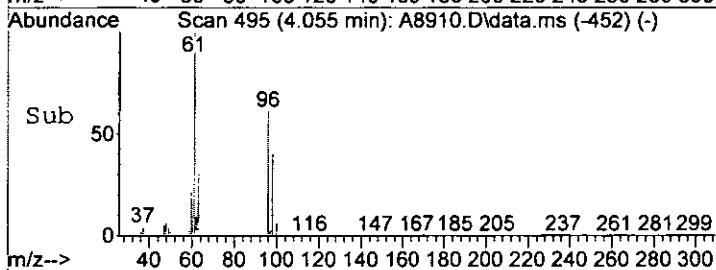
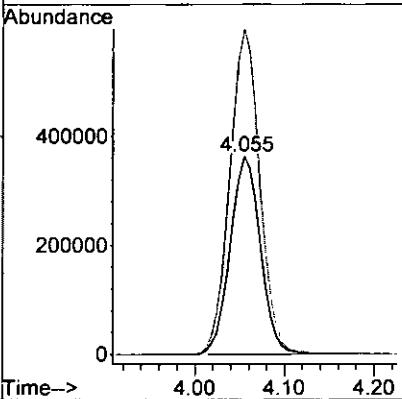
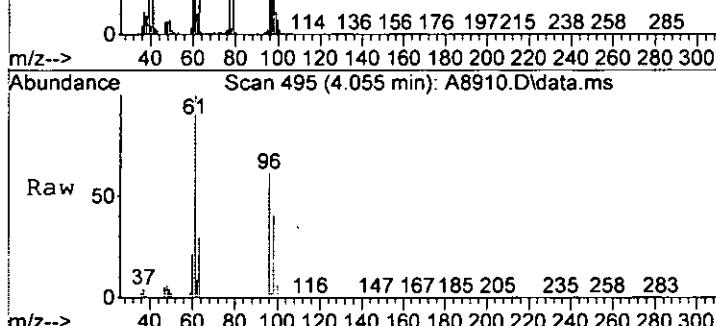
#26  
trans-1,2-Dichloroethene  
Concen: 0.65 ug/L m  
RT: 2.854 min Scan# 298  
Delta R.T. -0.006 min  
Lab File: A8910.D  
Acq: 26 May 2015 10:55 pm

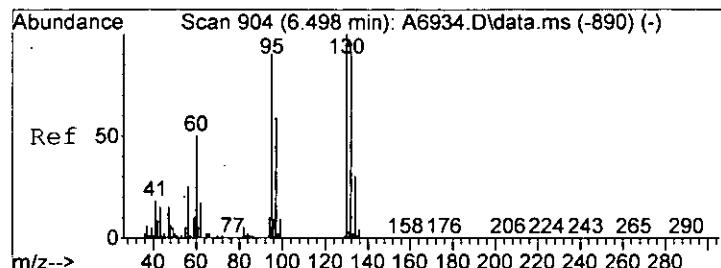
Tgt Ion: 96 Resp: 5050  
Ion Ratio Lower Upper  
96 100  
98 61.6 44.7 84.7  
61 205.4 130.9 170.9#



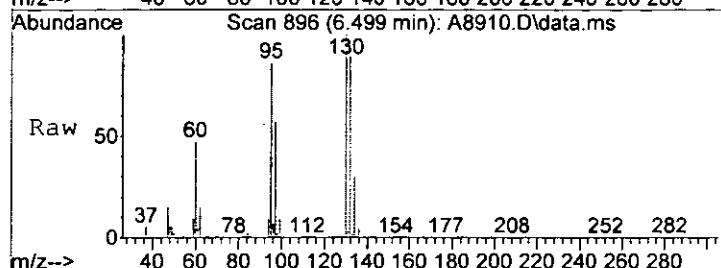
#33  
cis-1,2-Dichloroethene  
Concen: 91.75 ug/L  
RT: 4.055 min Scan# 495  
Delta R.T. 0.000 min  
Lab File: A8910.D  
Acq: 26 May 2015 10:55 pm

Tgt Ion: 96 Resp: 853652  
Ion Ratio Lower Upper  
96 100  
61 164.4 138.8 178.8

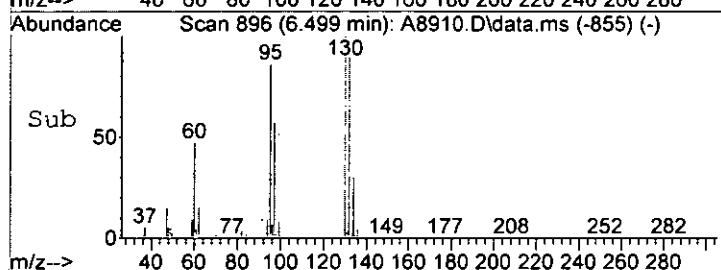
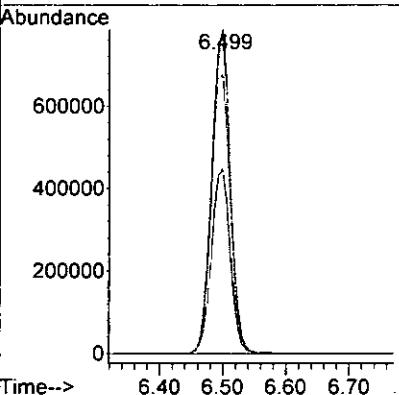




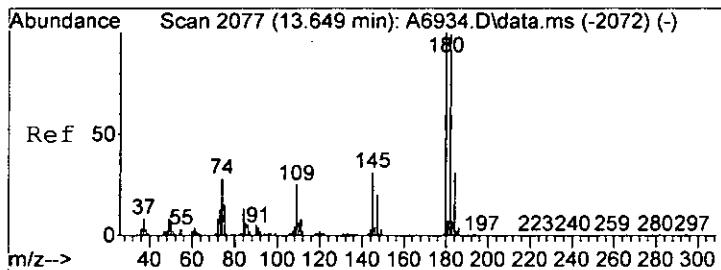
#53  
Trichloroethene  
Concen: 157.84 ug/L  
RT: 6.499 min Scan# 896  
Delta R.T. 0.000 min  
Lab File: A8910.D  
Acq: 26 May 2015 10:55 pm



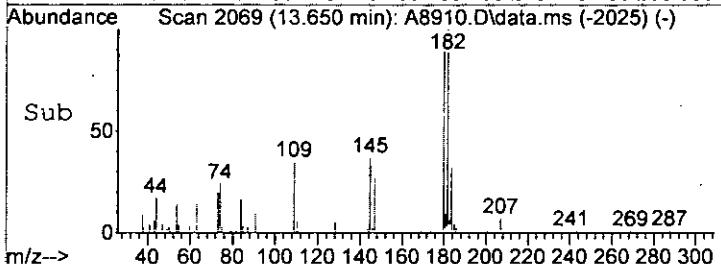
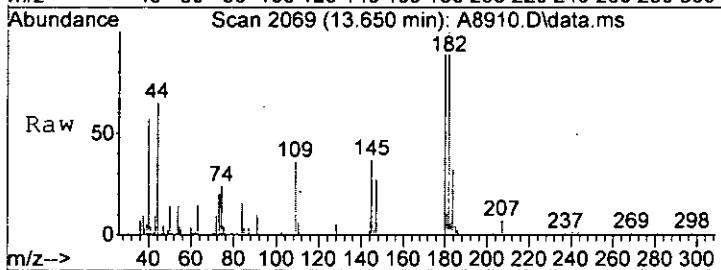
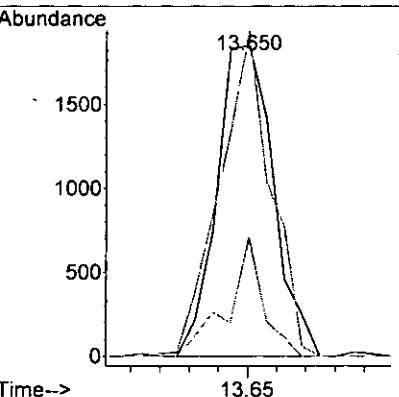
Tgt	Ion	130	158	1370
Ion	Ratio	100	Lower	Upper
130	100			
132	95.6	76.6	116.6	
95	86.5	76.5	116.5	
97	56.9	42.4	82.4	



#117  
1,2,3-Tclbenzene  
Concen: 0.23 ug/L  
RT: 13.650 min Scan# 2069  
Delta R.T. 0.000 min  
Lab File: A8910.D  
Acq: 26 May 2015 10:55 pm



Tgt	Ion	180	2473	
Ion	Ratio	100	Lower	Upper
180	100			
182	104.7	75.7	115.7	
145	38.2	9.6	49.6	



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:30

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052515\A8868.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 250

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	250 U	250	53	
75-01-4	Vinyl Chloride	830	250	80	
75-00-3	Chloroethane	250 U	250	60	
74-83-9	Bromomethane	250 U	250	73	
75-35-4	1,1-Dichloroethene	250 U	250	150	
67-64-1	Acetone	1300 U	1300	310	
75-15-0	Carbon Disulfide	460	250	55	
75-09-2	Methylene Chloride	250 U	250	150	
156-60-5	trans-1,2-Dichloroethene	320	250	83	
75-34-3	1,1-Dichloroethane	250 U	250	50	
156-59-2	cis-1,2-Dichloroethene	48000	250	75	
78-93-3	2-Butanone (MEK)	1300 U	1300	210	
67-66-3	Chloroform	680	250	63	
71-55-6	1,1,1-Trichloroethane	250 U	250	90	
56-23-5	Carbon Tetrachloride	250 U	250	120	
71-43-2	Benzene	250 U	250	50	
107-06-2	1,2-Dichloroethane	250 U	250	90	
79-01-6	Trichloroethene	81000 E	250	55	
78-87-5	1,2-Dichloropropane	250 U	250	50	
75-27-4	Bromodichloromethane	120 J	250	80	
10061-01-5	cis-1,3-Dichloropropene	250 U	250	60	
108-10-1	4-Methyl-2-pentanone (MIBK)	1300 U	1300	170	
108-88-3	Toluene	50 J	250	50	
10061-02-6	trans-1,3-Dichloropropene	250 U	250	50	
79-00-5	1,1,2-Trichloroethane	250 U	250	85	
127-18-4	Tetrachloroethene	250 U	250	75	
591-78-6	2-Hexanone	1300 U	1300	420	
124-48-1	Dibromochloromethane	250 U	250	78	
108-90-7	Chlorobenzene	250 U	250	73	
100-41-4	Ethylbenzene	250 U	250	50	
179601-23-1	m,p-Xylenes	500 U	500	83	
95-47-6	o-Xylene	250 U	250	50	
100-42-5	Styrene	250 U	250	50	
75-25-2	Bromoform	250 U	250	110	
79-34-5	1,1,2,2-Tetrachloroethane	250 U	250	63	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/25/15 17:30

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052515\A8868.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 250

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/25/15 17:30	
Toluene-d8	97	87-121	5/25/15 17:30	
Dibromofluoromethane	101	89-119	5/25/15 17:30	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8868.D  
 Acq On : 25 May 2015 5:30 pm  
 Operator : K.Ruest  
 Sample : R1503862-010|250 Inst : MSVOA10  
 Misc : OB+I 13429 T4  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 26 16:27:46 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

RT /1000

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	4.969	168	906323	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1414939	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1293708	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	715938	50.00	ug/L	0.00
<hr/>						
System Monitoring Compounds						
43) surr4,Dibromomethane	4.835	113	443864	50.27	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	100.54%	
46) surr1,1,2-dichloroetha...	5.414	65	465344	51.28	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	102.56%	
64) SURR3,Toluene-d8	8.042	98	1639557	48.70	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	97.40%	
69) SURR2,BFB	10.675	95	622860	45.53	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	91.06%	
<hr/>						
Target Compounds				Qvalue		
4) Vinyl Chloride	1.354	62	41811m	3.33	ug/L	
13) 1,1-Dicethene	2.189	96	1686	0.25	ug/L #	59
15) Acetone	2.213	43	836	Below Cal		84
18) Carbon Disulfide	2.378	76	43789	1.83	ug/L	97
22) Methylene Chloride	2.591	84	2960	0.36	ug/L #	85
26) trans-1,2-Dichloroethene	2.860	96	9538	1.27	ug/L #	60
33) cis-1,2-Dichloroethene	4.055	96	1716449	190.55	ug/L	98
39) Chloroform	4.561	83	40816	2.73	ug/L	92
53) Trichloroethene	6.499	130	3157716	322.26	ug/L	96(E)
59) Bromodichloromethane	7.170	83	5421	0.49	ug/L	82
65) Toluene	8.115	91	7747	0.20	ug/L	95
<hr/>						

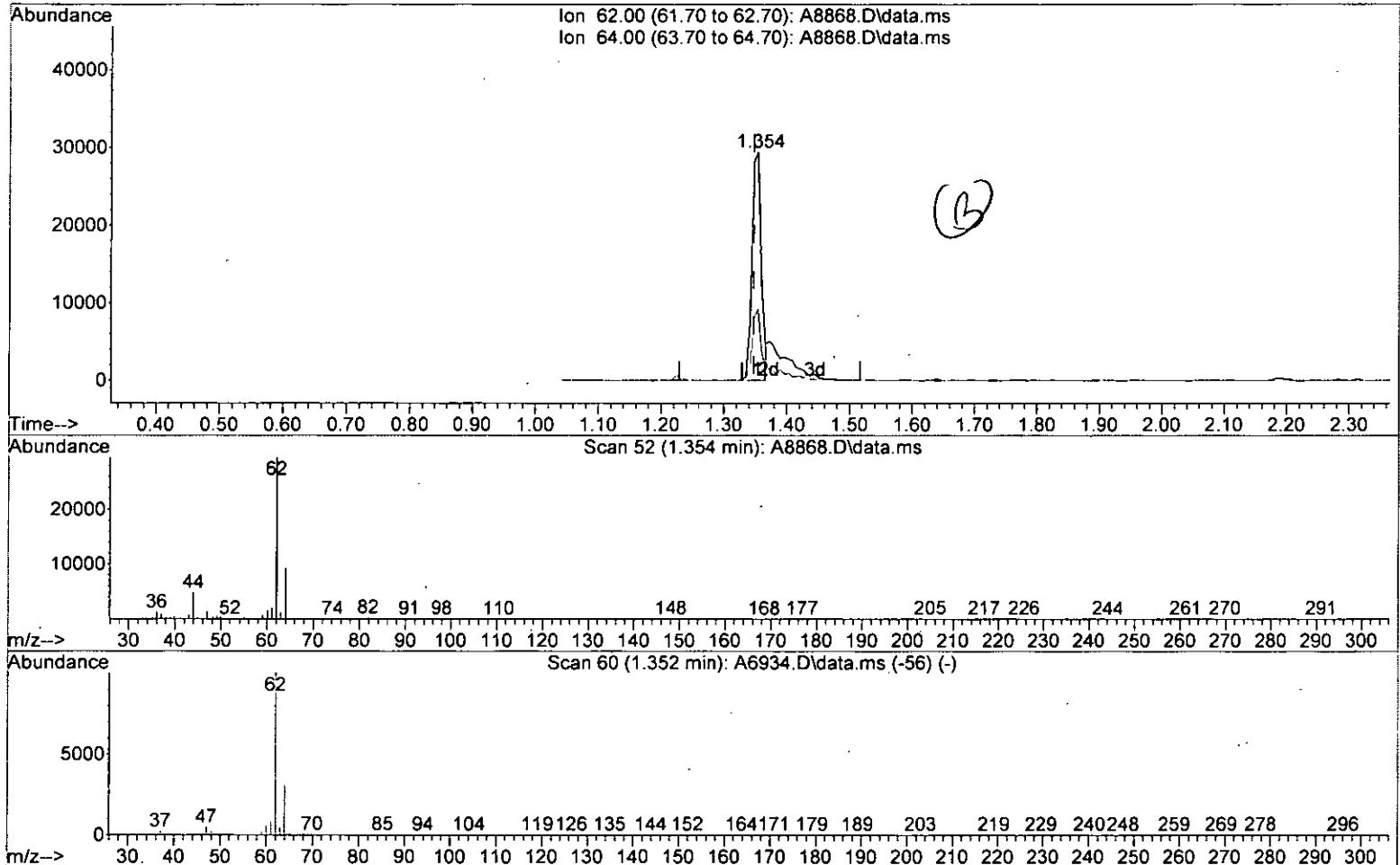
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/26/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8868.D  
 Acq On : 25 May 2015 5:30 pm  
 Operator : K.Ruest  
 Sample : R1503862-010|250 Inst : MSVOA10  
 Misc : OB+I 13429 T4  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 25 17:45:21 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8868.D\data.ms

(4) Vinyl Chloride (P)

1.354min (+0.006) 2.40 ug/L

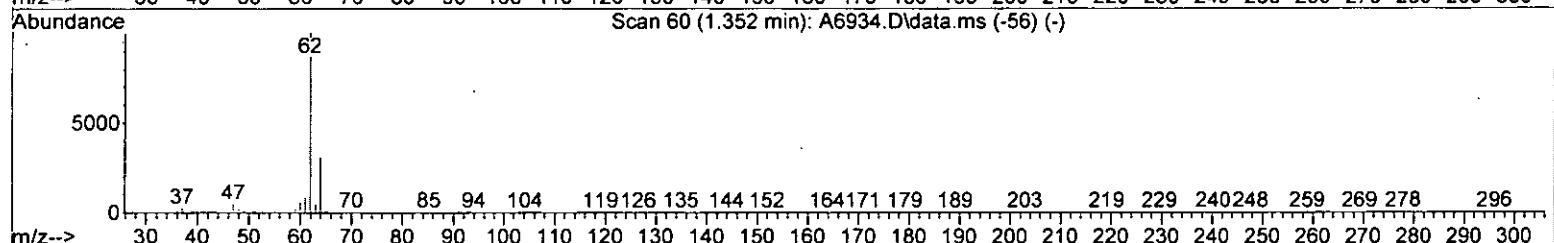
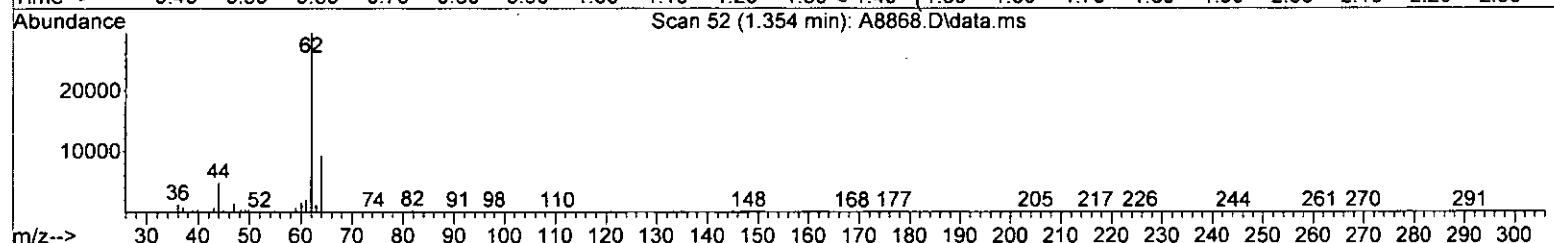
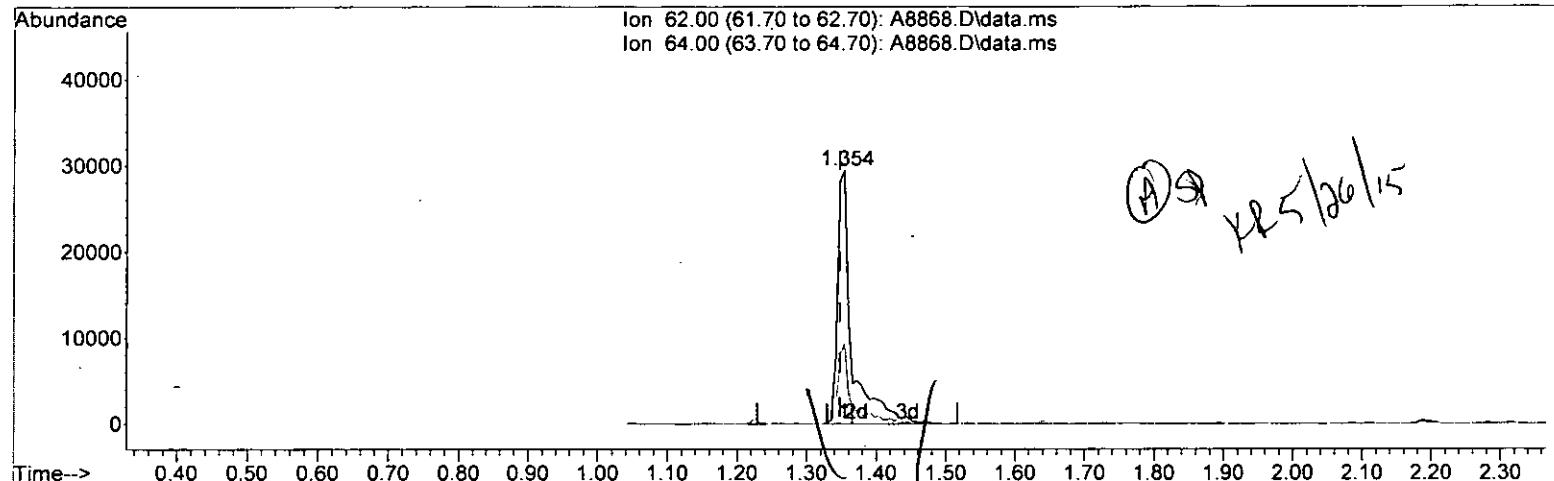
response 30082

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	31.29
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8868.D  
 Acq On : 25 May 2015 5:30 pm  
 Operator : K.Ruest  
 Sample : R1503862-010|250 Inst : MSVOA10  
 Misc : OB+I 13429 T4  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 25 17:45:21 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8868.D\data.ms

(4) Vinyl Chloride (P)

1.354min (+0.006) 3.33 ug/L m

response 41811

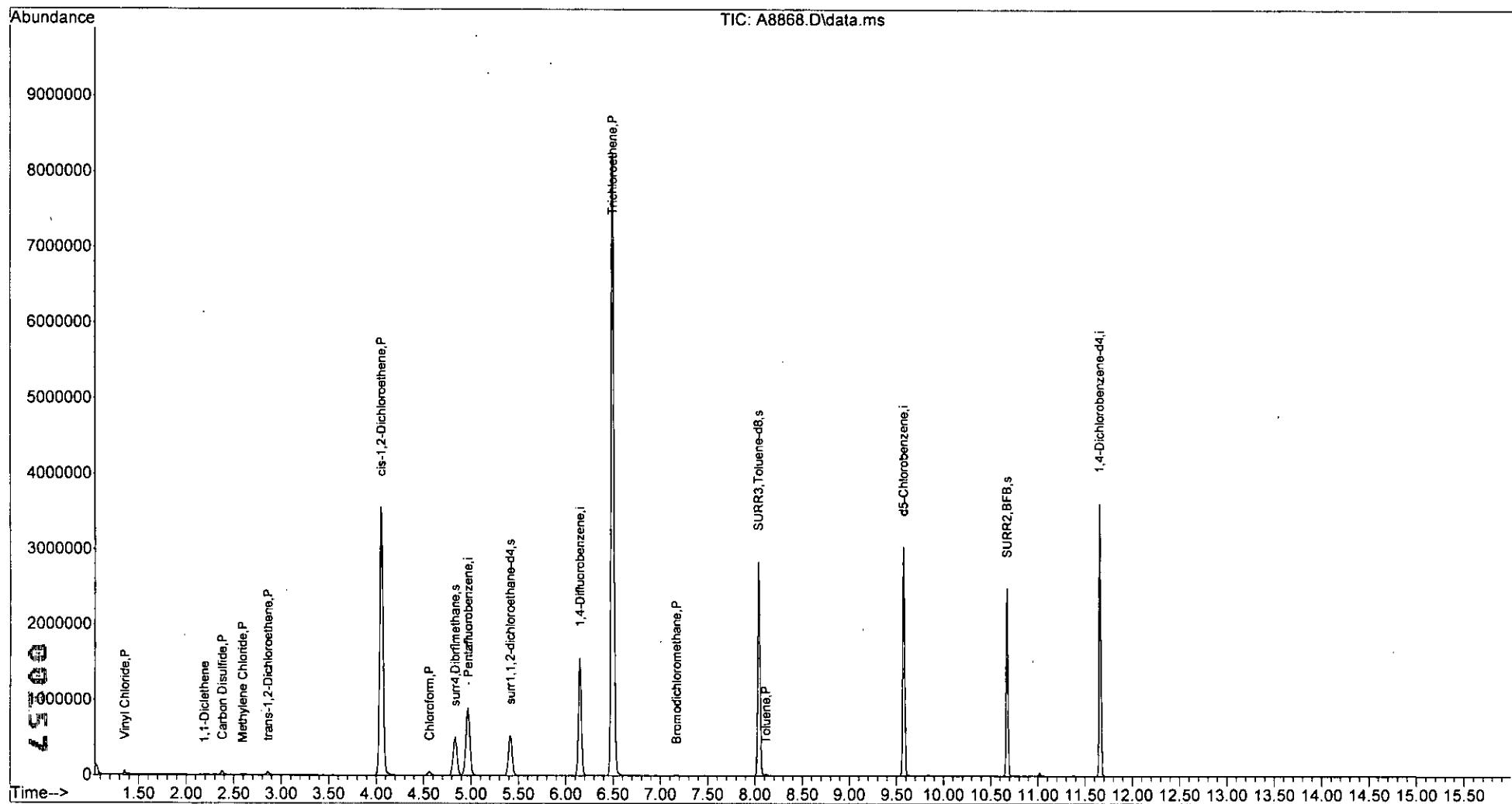
Ion	Exp%	Act%
62.00	100	100
64.00	31.70	31.29
0.00	0.00	0.00
0.00	0.00	0.00

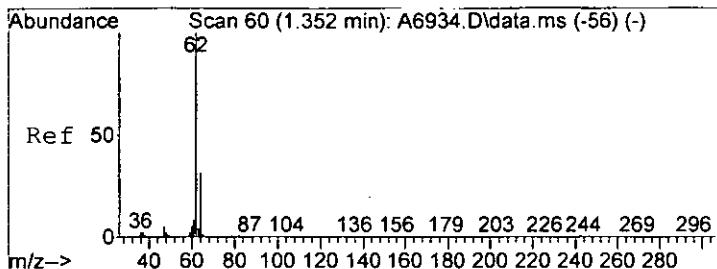
W  
S

## Quantitation Report (QT Reviewed)

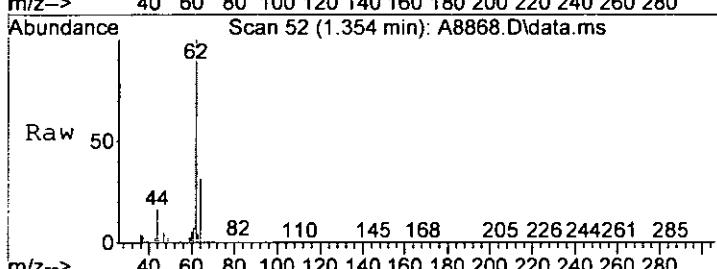
Data Path : I:\ACQUDATA\msvoa10\data\052515\  
Data File : A8868.D  
Acq On : 25 May 2015 5:30 pm  
Operator : K.Ruest  
Sample : R1503862-0101250 Inst : MSVOA10  
Misc : OB+I 13429 T4  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 26 16:27:46 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration

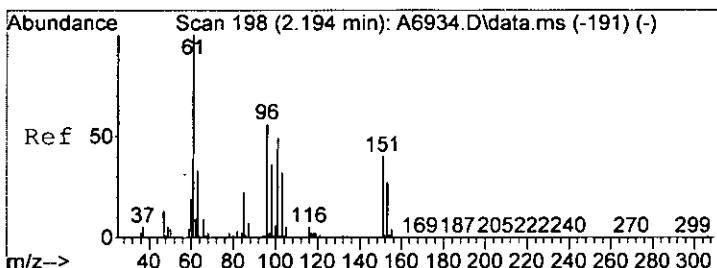
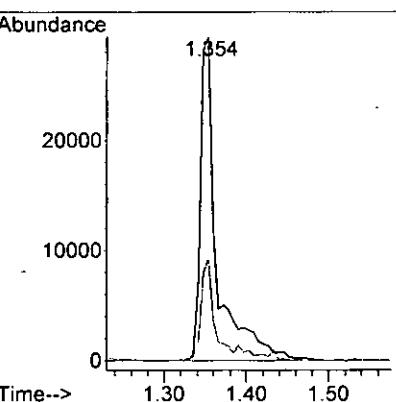
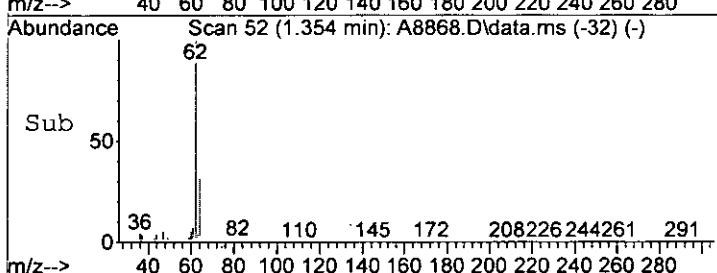




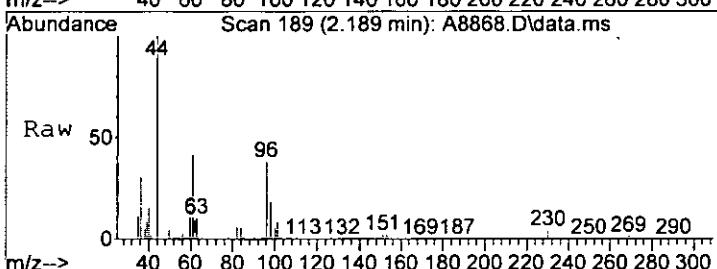
#4  
 Vinyl Chloride  
 Concen: 3.33 ug/L m  
 RT: 1.354 min Scan# 52  
 Delta R.T. 0.006 min  
 Lab File: A8868.D  
 Acq: 25 May 2015 5:30 pm



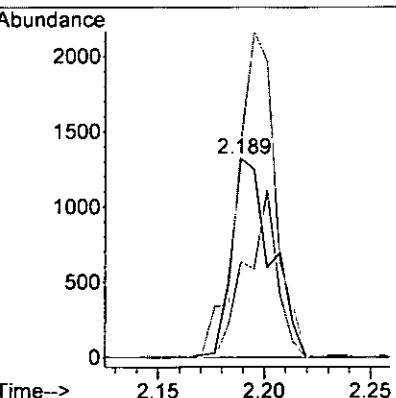
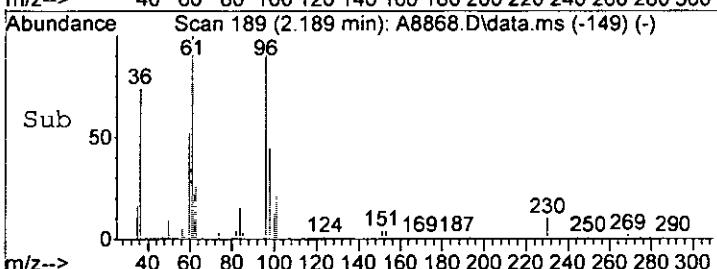
Tgt Ion: 62 Resp: 41811  
 Ion Ratio Lower Upper  
 62 100  
 64 31.3 11.7 51.7

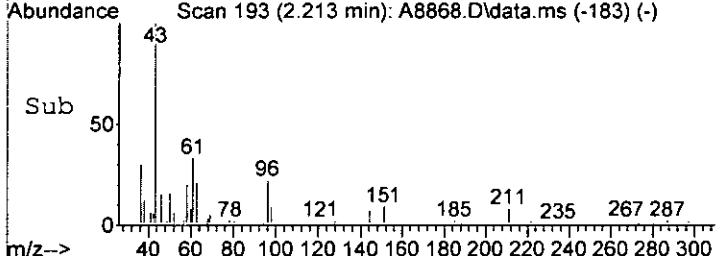
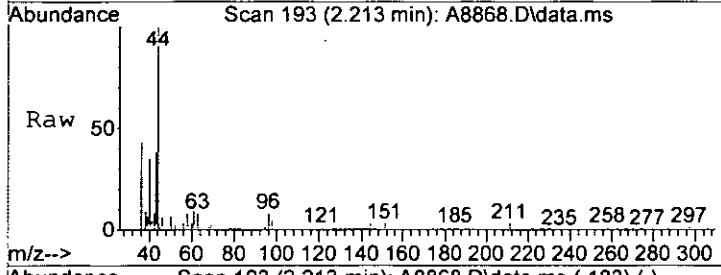
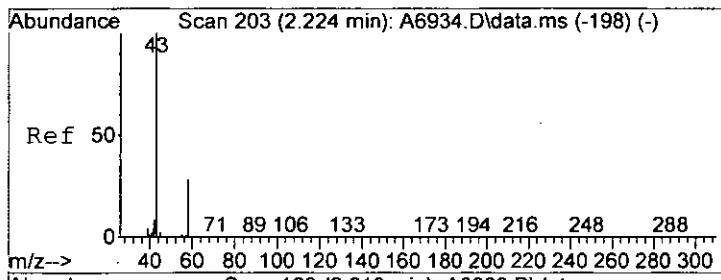


#13  
 1,1-Dicethene  
 Concen: 0.25 ug/L  
 RT: 2.189 min Scan# 189  
 Delta R.T. -0.006 min  
 Lab File: A8868.D  
 Acq: 25 May 2015 5:30 pm



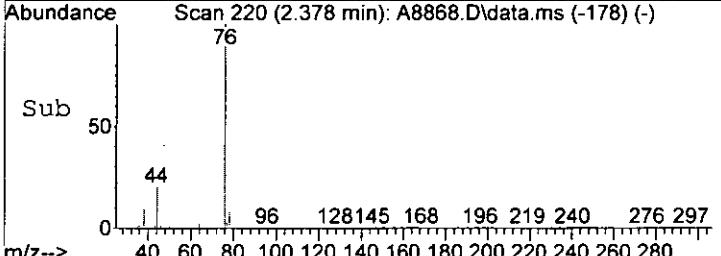
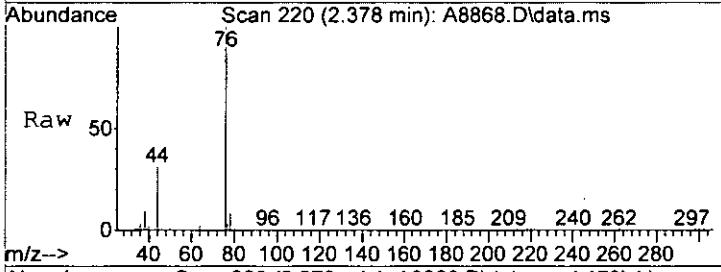
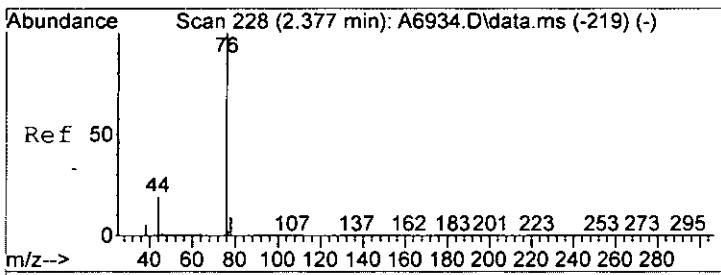
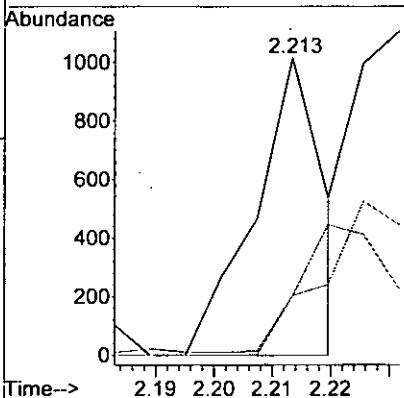
Tgt Ion: 96 Resp: 1686  
 Ion Ratio Lower Upper  
 96 100  
 98 48.0 43.2 83.2  
 61 108.3 155.6 195.6#





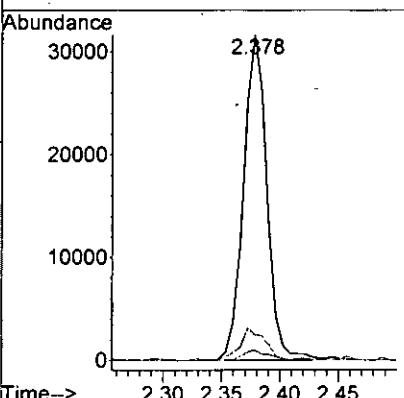
#15  
Acetone  
Concen: Below Cal  
RT: 2.213 min Scan# 193  
Delta R.T. -0.012 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm

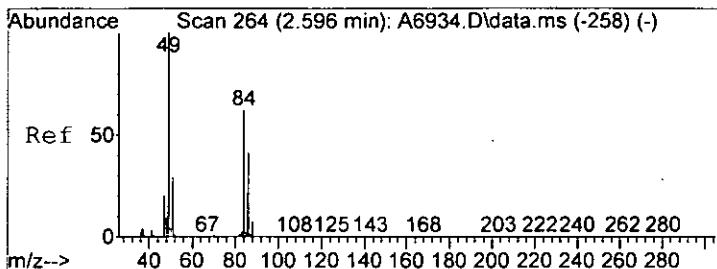
Tgt Ion: 43 Resp: 836  
Ion Ratio Lower Upper  
43 100  
58 19.9 4.8 44.8  
42 19.9 0.0 28.0



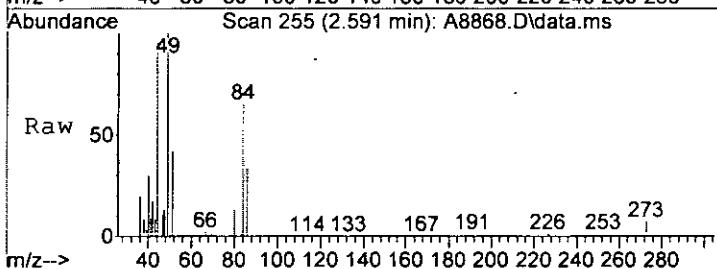
#18  
Carbon Disulfide  
Concen: 1.83 ug/L  
RT: 2.378 min Scan# 220  
Delta R.T. 0.000 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm

Tgt Ion: 76 Resp: 43789  
Ion Ratio Lower Upper  
76 100  
78 7.7 0.0 29.0  
77 3.0 0.0 22.5

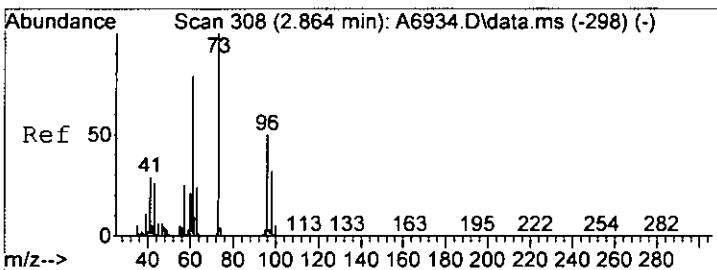
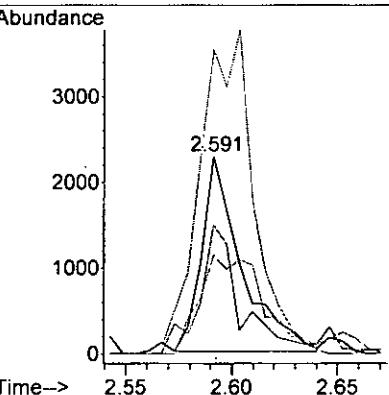
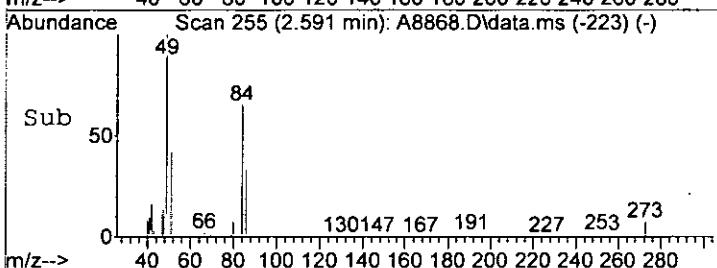




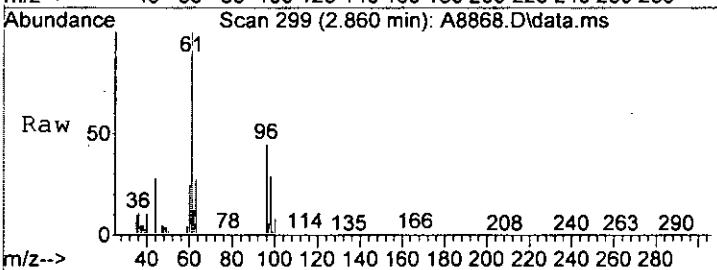
#22  
Methylene Chloride  
Concen: 0.36 ug/L  
RT: 2.591 min Scan# 255  
Delta R.T. -0.006 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm



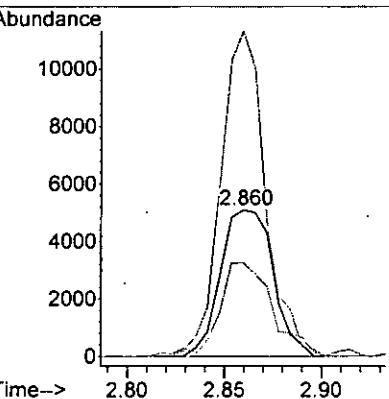
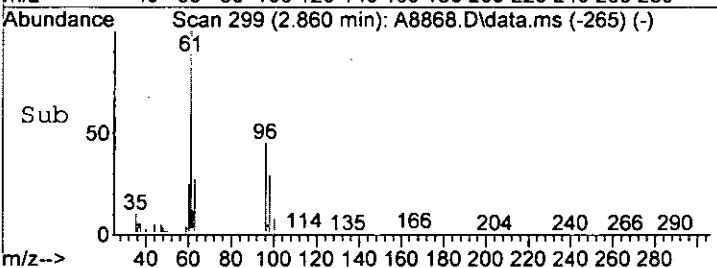
Tgt Ion: 84 Resp: 2960  
Ion Ratio Lower Upper  
84 100  
86 50.1 45.5 85.5  
49 153.8 125.6 165.6  
51 65.1 22.9 62.9#

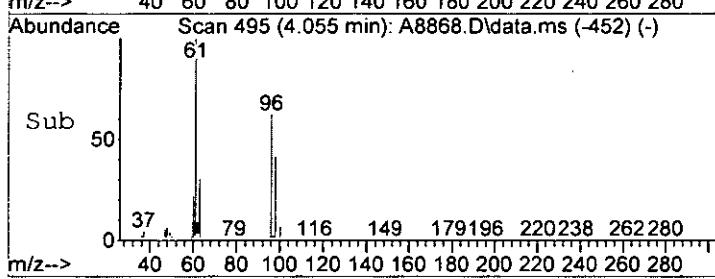
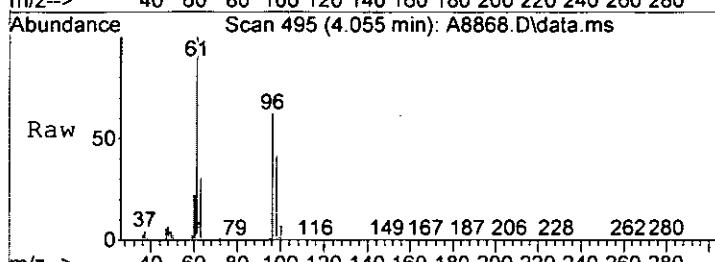
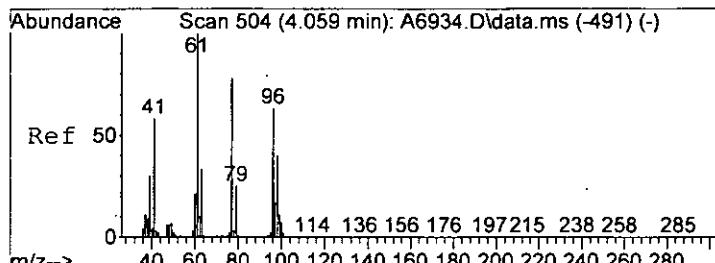


#26  
trans-1,2-Dichloroethene  
Concen: 1.27 ug/L  
RT: 2.860 min Scan# 299  
Delta R.T. 0.000 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm



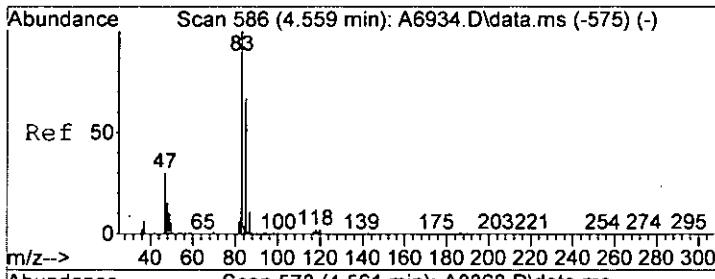
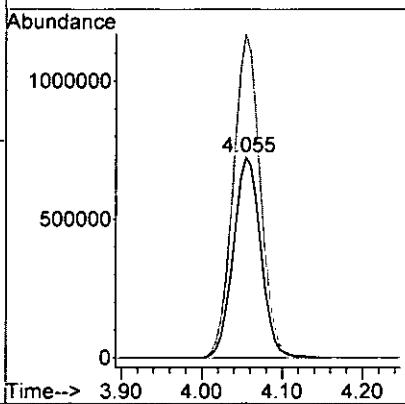
Tgt Ion: 96 Resp: 9538  
Ion Ratio Lower Upper  
96 100  
98 63.9 44.7 84.7  
61 222.5 130.9 170.9#





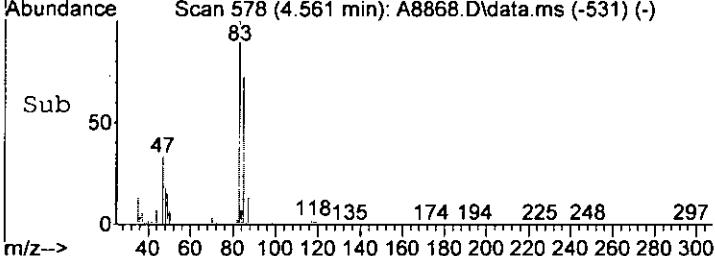
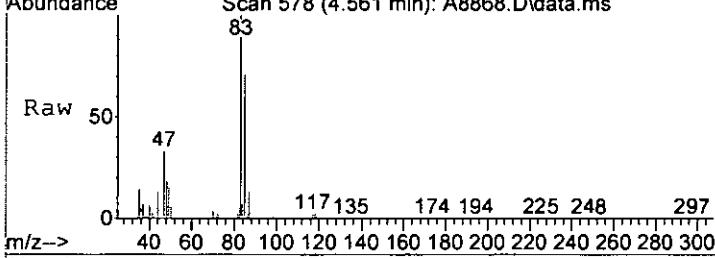
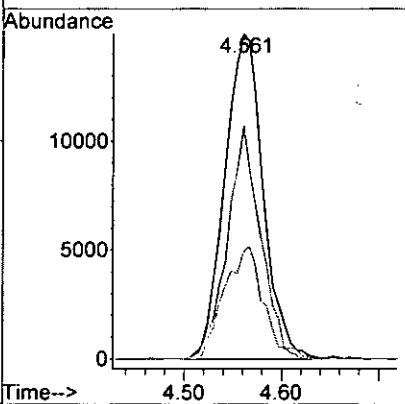
#33  
cis-1,2-Dichloroethene  
Concen: 190.55 ug/L  
RT: 4.055 min Scan# 495  
Delta R.T. 0.000 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm

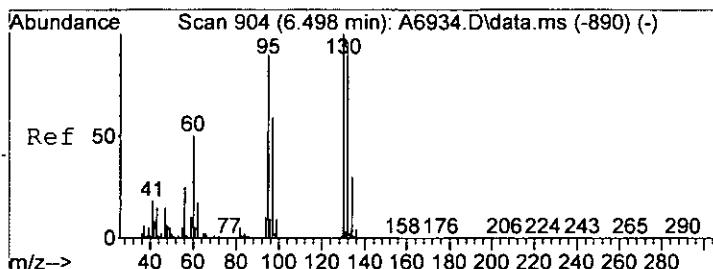
Tgt Ion: .96 Resp: 1716449  
Ion Ratio Lower Upper  
96 100  
61 161.2 138.8 178.8



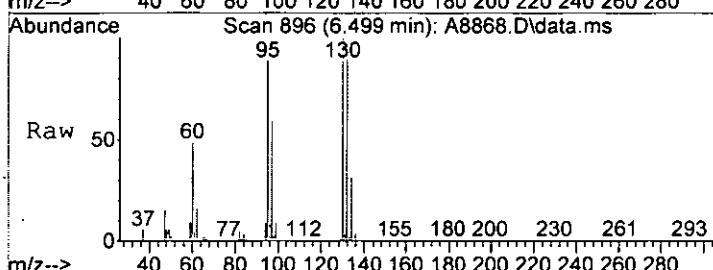
#39  
Chloroform  
Concen: 2.73 ug/L  
RT: 4.561 min Scan# 578  
Delta R.T. 0.000 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm

Tgt Ion: 83 Resp: 40816  
Ion Ratio Lower Upper  
83 100  
85 71.5 44.0 84.0  
47 32.9 9.9 49.9

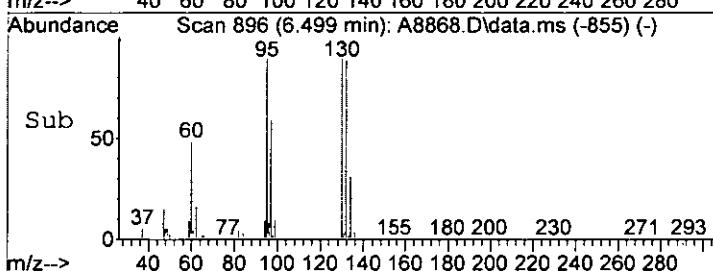
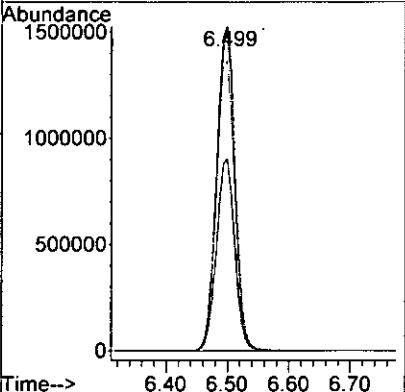




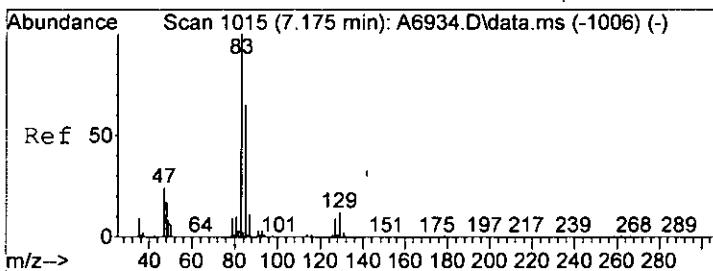
#53  
Trichloroethene  
Concen: 322.26 ug/L  
RT: 6.499 min Scan# 896  
Delta R.T. 0.000 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm



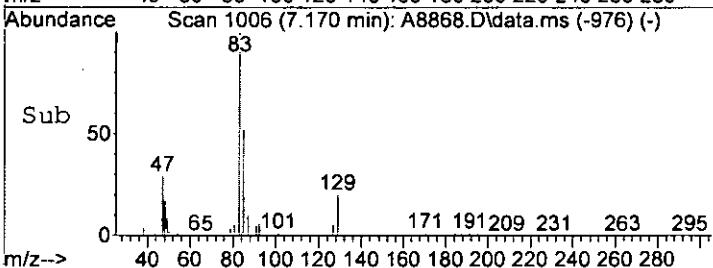
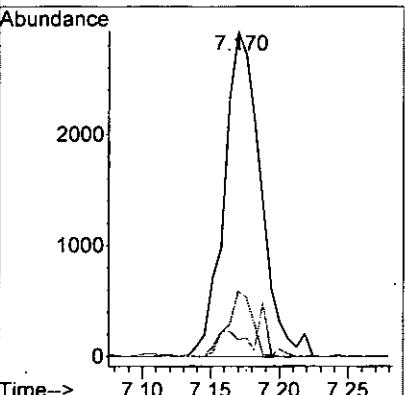
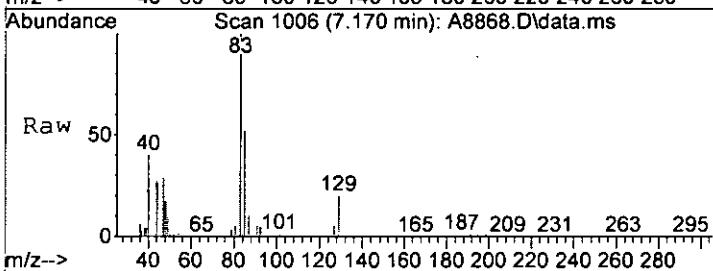
Tgt Ion: 130 Resp: 3157716  
Ion Ratio Lower Upper  
130 100  
132 97.3 76.6 116.6  
95 89.5 76.5 116.5  
97 59.3 42.4 82.4

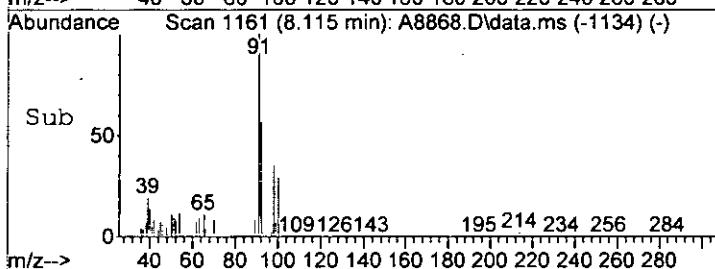
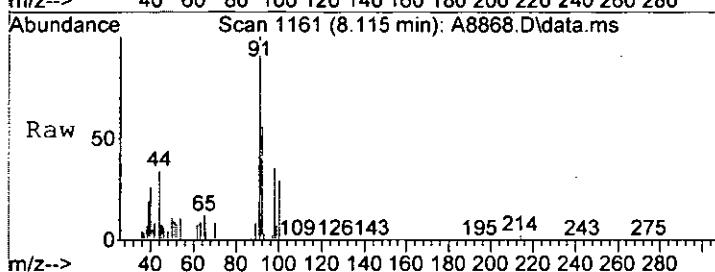
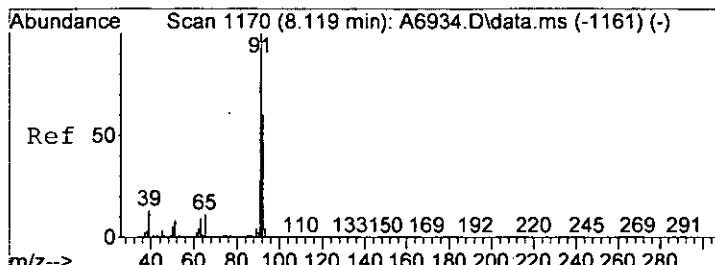


#59  
Bromodichloromethane  
Concen: 0.49 ug/L  
RT: 7.170 min Scan# 1006  
Delta R.T. -0.006 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm



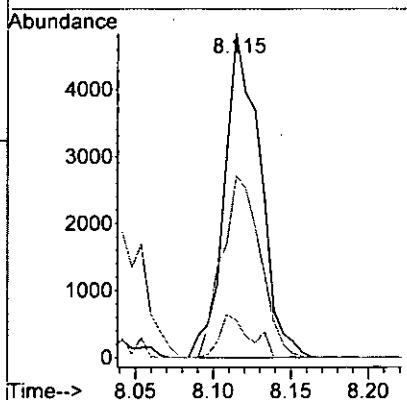
Tgt Ion: 83 Resp: 5421  
Ion Ratio Lower Upper  
83 100  
129 20.1 0.0 31.3  
127 5.1 0.0 29.1





# 65  
Toluene  
Concen: 0.20 ug/L  
RT: 8.115 min Scan# 1161  
Delta R.T. -0.006 min  
Lab File: A8868.D  
Acq: 25 May 2015 5:30 pm

Tgt	Ion:	91	Resp:	7747
Ion	Ratio	Lower	Upper	
91	100			
92	56.1	40.7	80.7	
65	11.5	0.0	32.3	



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 23:25

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8911.D\

**Analysis Lot:** 446223  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1000

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1000 U	1000	210	
75-01-4	Vinyl Chloride	730 DJ	1000	320	
75-00-3	Chloroethane	1000 U	1000	240	
74-83-9	Bromomethane	1000 U	1000	290	
75-35-4	1,1-Dichloroethene	1000 U	1000	570	
67-64-1	Acetone	5000 U	5000	1300	
75-15-0	Carbon Disulfide	480 DJ	1000	220	
75-09-2	Methylene Chloride	1000 U	1000	600	
156-60-5	trans-1,2-Dichloroethene	330 DJ	1000	330	
75-34-3	1,1-Dichloroethane	1000 U	1000	200	
156-59-2	cis-1,2-Dichloroethene	41000 D	1000	300	
78-93-3	2-Butanone (MEK)	5000 U	5000	810	
67-66-3	Chloroform	1000 U	1000	250	
71-55-6	1,1,1-Trichloroethane	1000 U	1000	360	
56-23-5	Carbon Tetrachloride	1000 U	1000	450	
71-43-2	Benzene	1000 U	1000	200	
107-06-2	1,2-Dichloroethane	1000 U	1000	360	
79-01-6	Trichloroethene	69000 D	1000	220	
78-87-5	1,2-Dichloropropane	1000 U	1000	200	
75-27-4	Bromodichloromethane	1000 U	1000	320	
10061-01-5	cis-1,3-Dichloropropene	1000 U	1000	240	
108-10-1	4-Methyl-2-pentanone (MIBK)	5000 U	5000	670	
108-88-3	Toluene	1000 U	1000	200	
I0061-02-6	trans-1,3-Dichloropropene	1000 U	1000	200	
79-00-5	1,1,2-Trichloroethane	1000 U	1000	340	
127-18-4	Tetrachloroethene	1000 U	1000	300	
591-78-6	2-Hexanone	5000 U	5000	1700	
124-48-1	Dibromochloromethane	1000 U	1000	310	
108-90-7	Chlorobenzene	1000 U	1000	290	
100-41-4	Ethylbenzene	1000 U	1000	200	
179601-23-1	m,p-Xylenes	2000 U	2000	330	
95-47-6	o-Xylene	1000 U	1000	200	
100-42-5	Styrene	1000 U	1000	200	
75-25-2	Bromoform	1000 U	1000	420	
79-34-5	1,1,2,2-Tetrachloroethane	1000 U	1000	250	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-DUP-1-150518  
**Lab Code:** R1503862-010  
**Run Type:** Dilution

**Service Request:** R1503862  
**Date Collected:** 5/18/15  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/26/15 23:25

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS****Analytical Method:** 8260C**Data File Name:** I:\ACQUDATA\msvoa10\data\052615\A8911.D\

**Analysis Lot:** 446223  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1000

<b>Surrogate Name</b>	<b>%Rec</b>	<b>Control Limits</b>	<b>Date Analyzed</b>	<b>Q</b>
4-Bromofluorobenzene	91	85-122	5/26/15 23:25	
Toluene-d8	97	87-121	5/26/15 23:25	
Dibromofluoromethane	99	89-119	5/26/15 23:25	

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8911.D  
 Acq On : 26 May 2015 11:25 pm  
 Operator : F. Naegler  
 Sample : R1503862-010|1000.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: May 27 16:57:01 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

DL

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	941129	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1462428	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1338551	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	744586	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromoethane	4.835	113	450012	49.31	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	98.62%	
46) surr1,1,2-dichloroetha...	5.414	65	478485	51.02	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	102.04%	
64) SURR3,Toluene-d8	8.042	98	1685445	48.44	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	96.88%	
69) SURR2,BFB	10.675	95	641522	45.37	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	90.74%	
<b>Target Compounds</b>						
4) Vinyl Chloride	1.348	62	9500m	0.73	ug/L	
15) Acetone	2.238	43	647	Below Cal		91
18) Carbon Disulfide	2.378	76	12021	0.48	ug/L	90
26) trans-1,2-Dichloroethene	2.866	96	2601	0.33	ug/L #	57
33) cis-1,2-Dichloroethene	4.055	96	385962	41.26	ug/L	100
53) Trichloroethene	6.499	130	700883	69.21	ug/L	95

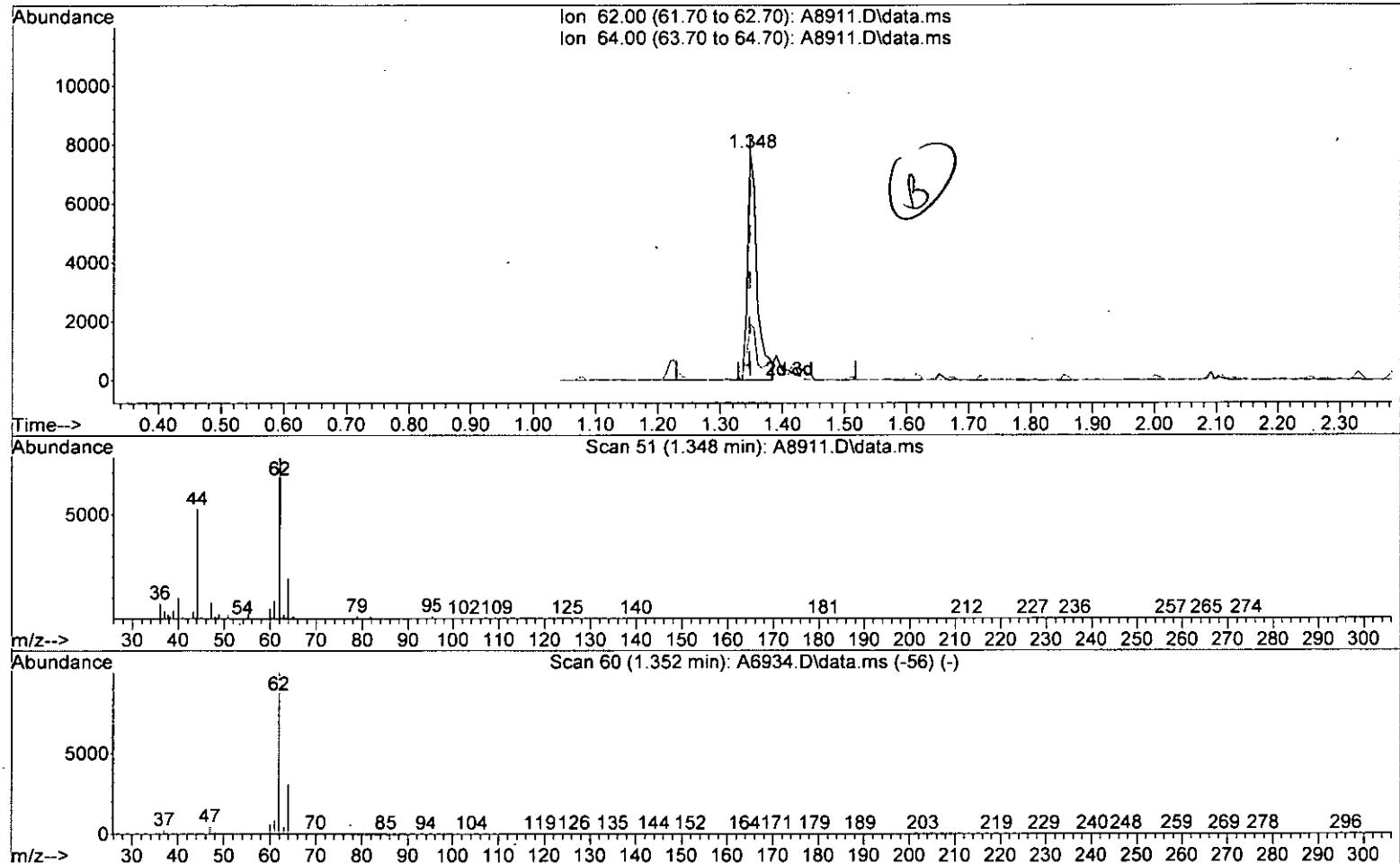
(#) = qualifier out of range (m) = manual integration (+) = signals summed

WR  
5/27/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8911.D  
 Acq On : 26 May 2015 11:25 pm  
 Operator : F. Naegler  
 Sample : R1503862-010|1000.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: May 26 23:40:35 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8911.D\data.ms

(4) Vinyl Chloride (P)

1.348min (+0.000) 0.63 ug/L

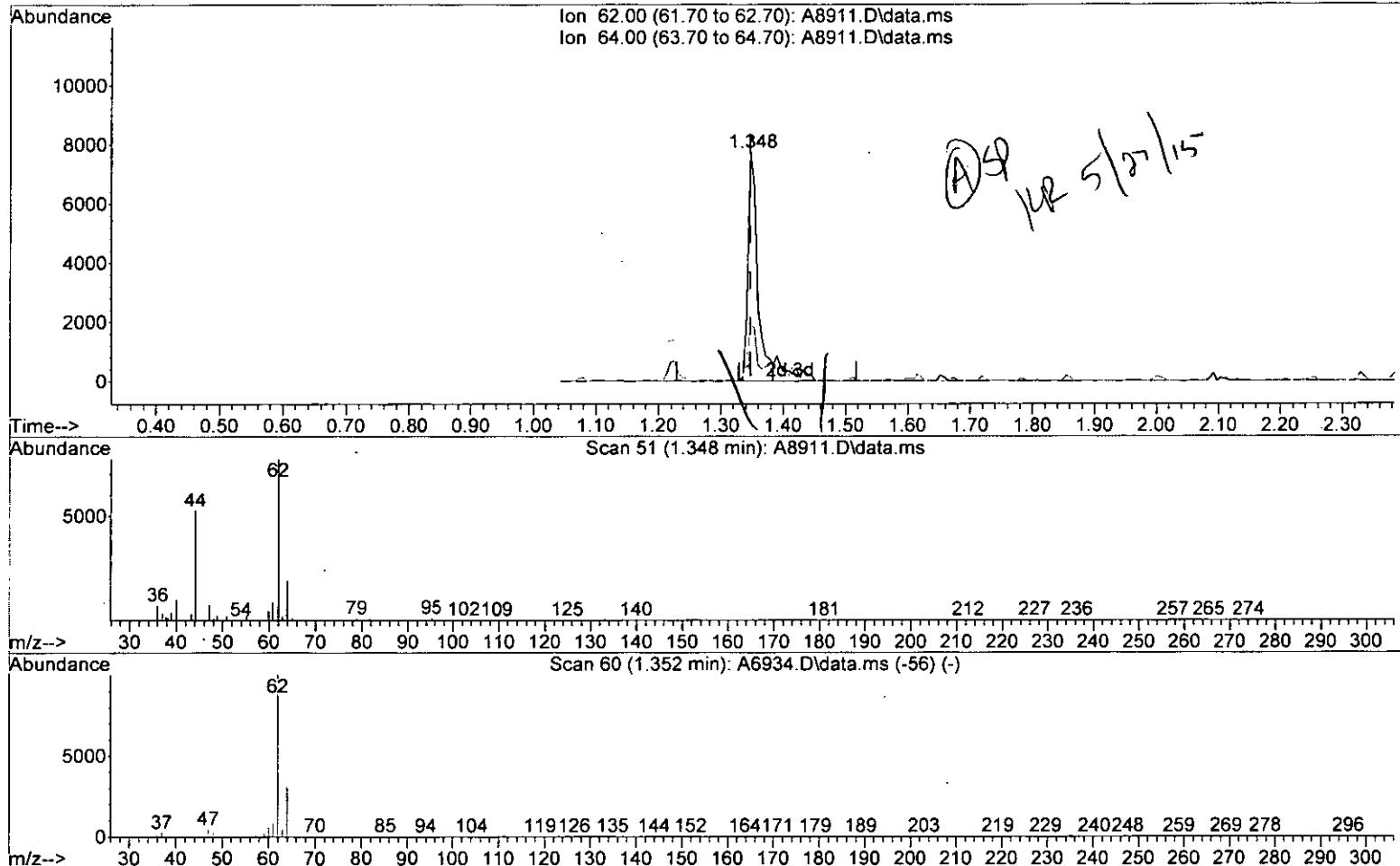
response 8206

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	24.87
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8911.D  
 Acq On : 26 May 2015 11:25 pm  
 Operator : F. Naegler  
 Sample : R1503862-010|1000.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: May 26 23:40:35 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8911.D\data.ms

(4) Vinyl Chloride (P)

1.348min (+0.000) 0.73 ug/L m

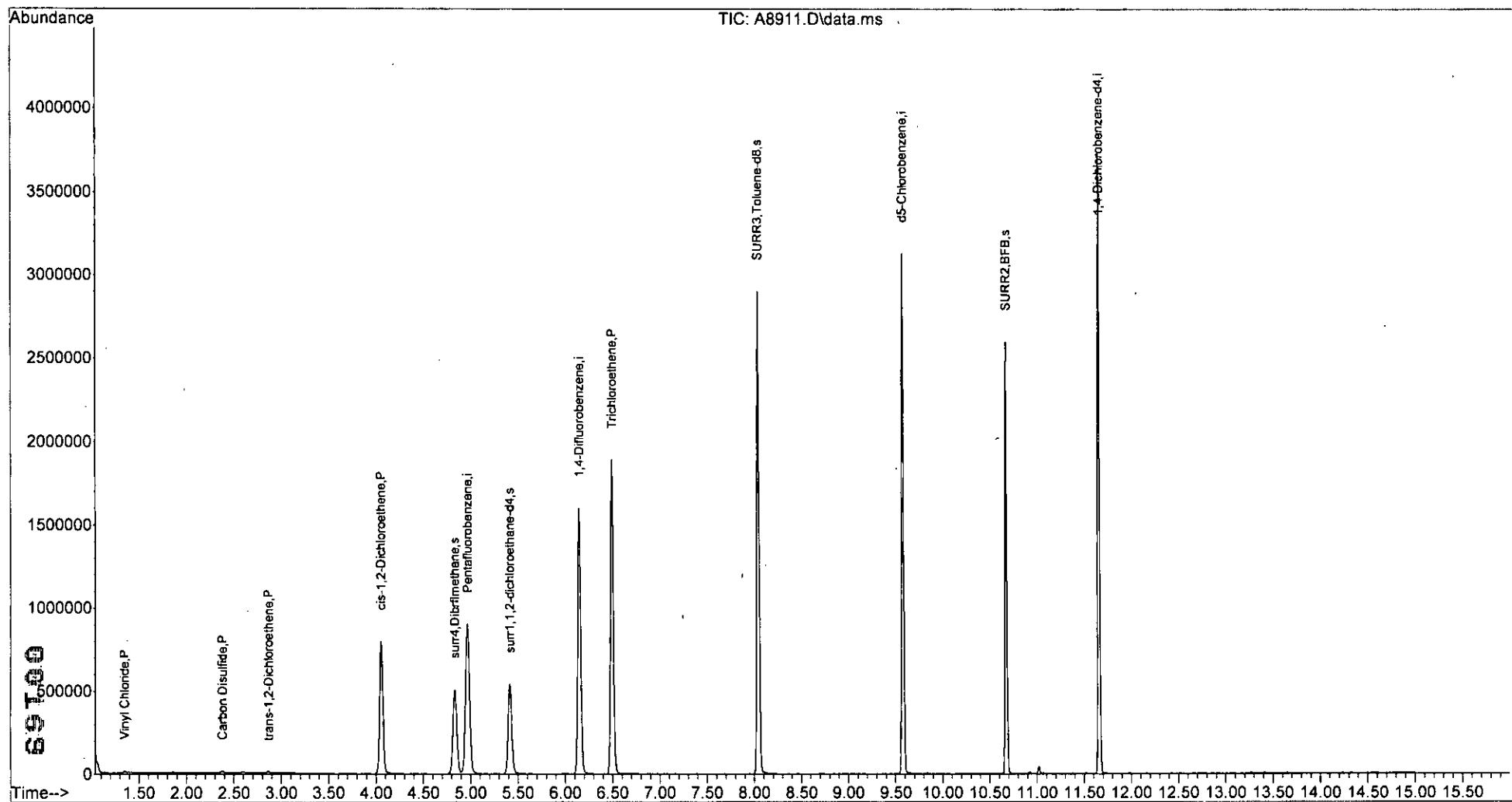
response 9500

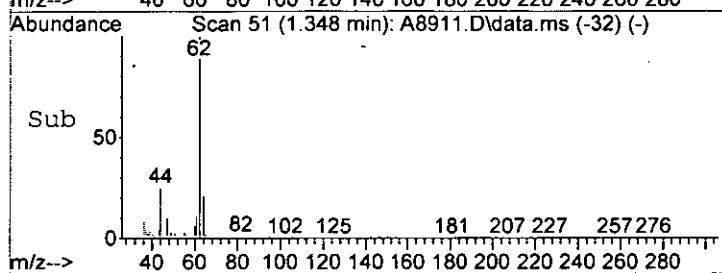
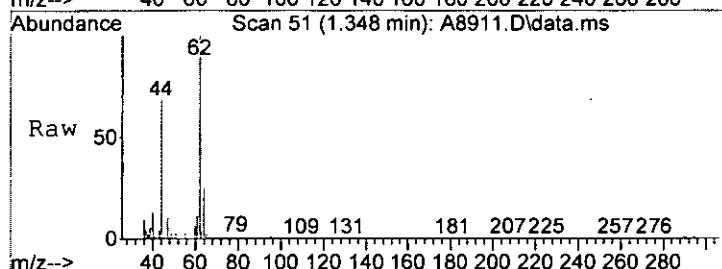
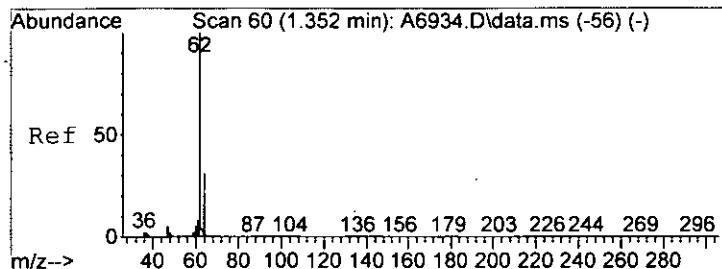
Ion	Exp%	Act%
62.00	100	100
64.00	31.70	24.87
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
Data File : A8911.D  
Acq On : 26 May 2015 11:25 pm  
Operator : F. Naegler  
Sample : R1503862-010|1000.0 Inst : MSVOA10  
Misc : CBI 13429 T4  
ALS Vial : 32 Sample Multiplier: 1

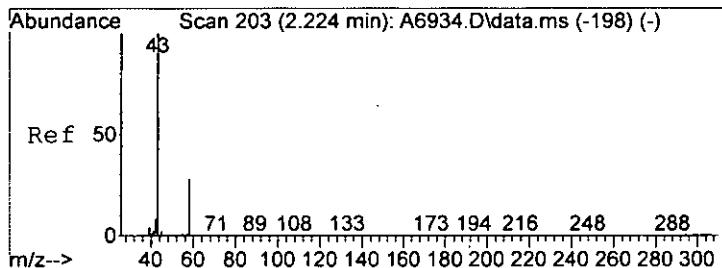
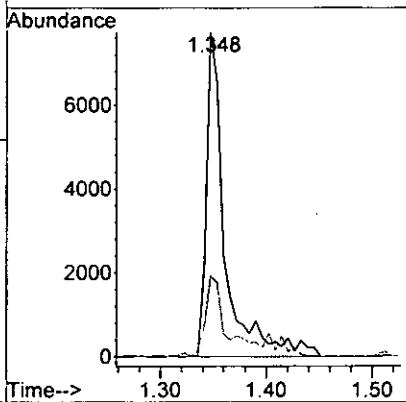
Quant Time: May 27 16:57:01 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration





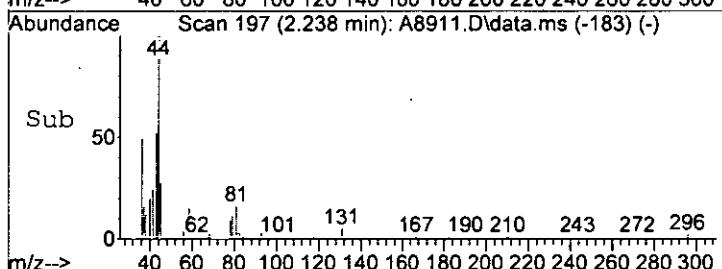
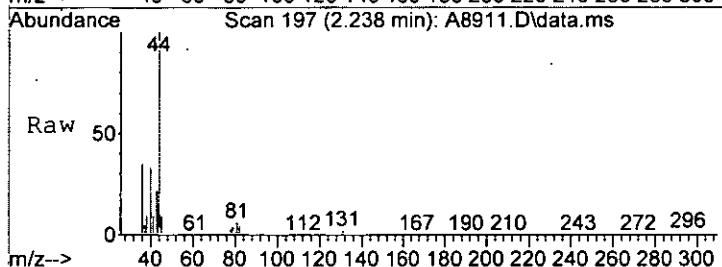
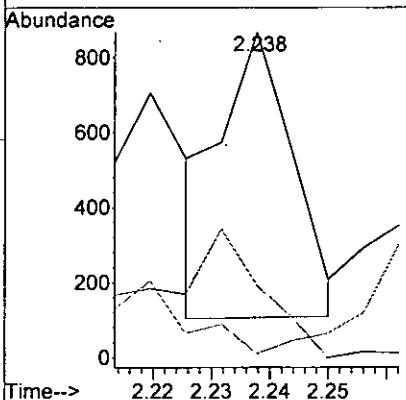
#4  
 Vinyl Chloride  
 Concen: 0.73 ug/L m  
 RT: 1.348 min Scan# 51  
 Delta R.T. 0.000 min  
 Lab File: A8911.D  
 Acq: 26 May 2015 11:25 pm

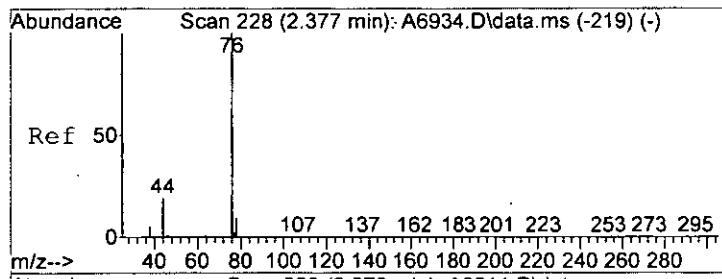
Tgt Ion: 62 Resp: 9500  
 Ion Ratio Lower Upper  
 62 100  
 64 24.9 11.7 51.7



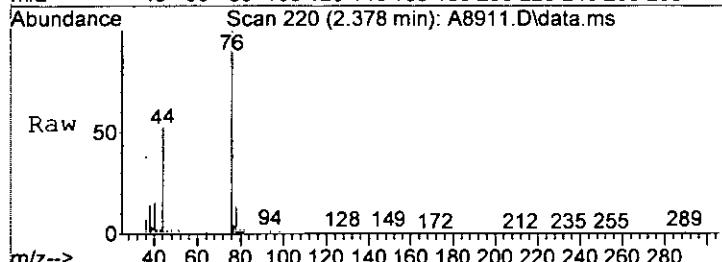
#15  
 Acetone  
 Concen: Below Cal  
 RT: 2.238 min Scan# 197  
 Delta R.T. 0.013 min  
 Lab File: A8911.D  
 Acq: 26 May 2015 11:25 pm

Tgt Ion: 43 Resp: 647  
 Ion Ratio Lower Upper  
 43 100  
 58 22.1 4.8 44.8  
 42 1.2 0.0 28.0

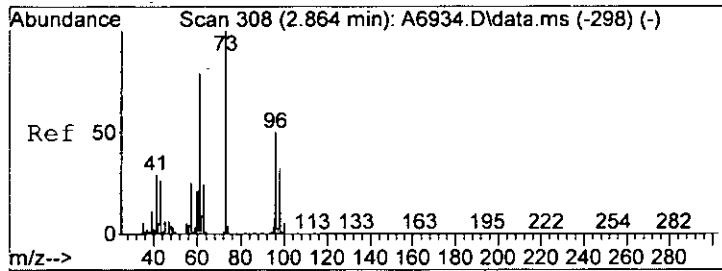
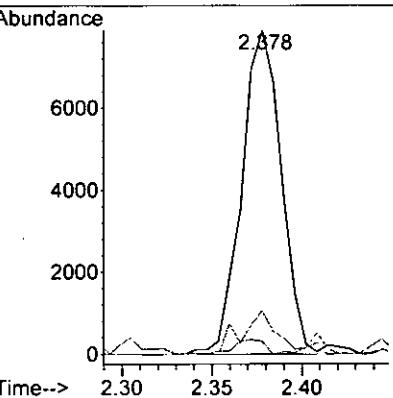
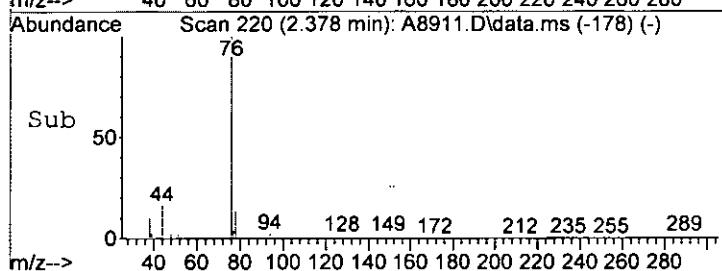




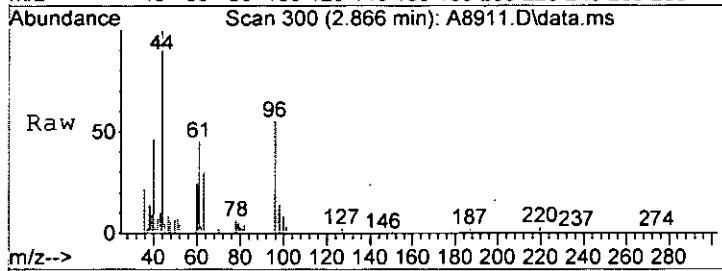
#18  
Carbon Disulfide  
Concen: 0.48 ug/L  
RT: 2.378 min Scan# 220  
Delta R.T. 0.000 min  
Lab File: A8911.D  
Acq: 26 May 2015 11:25 pm



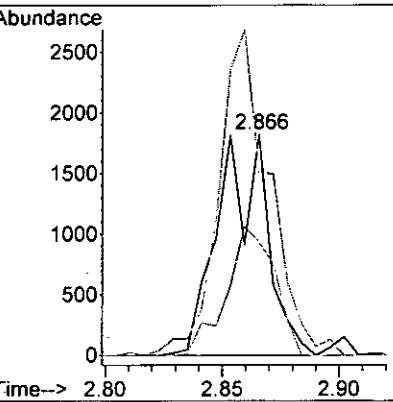
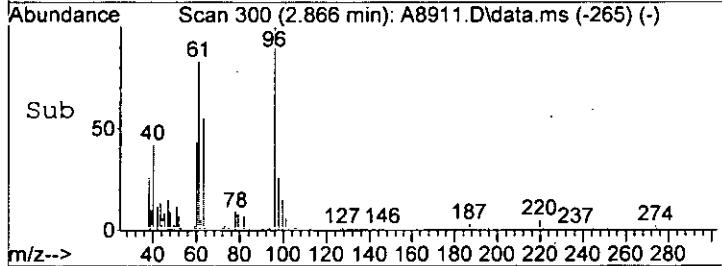
Tgt Ion: 76 Resp: 12021  
Ion Ratio Lower Upper  
76 100  
78 13.3 0.0 29.0  
77 3.9 0.0 22.5

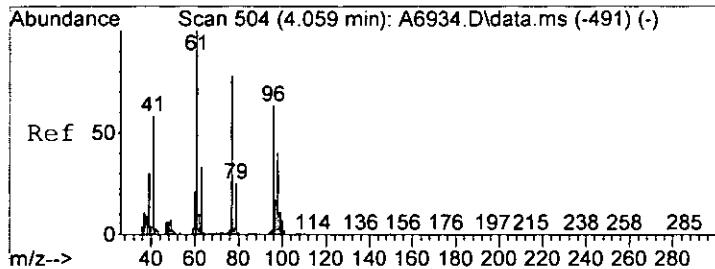


#26  
trans-1,2-Dichloroethene  
Concen: 0.33 ug/L  
RT: 2.866 min Scan# 300  
Delta R.T. 0.006 min  
Lab File: A8911.D  
Acq: 26 May 2015 11:25 pm

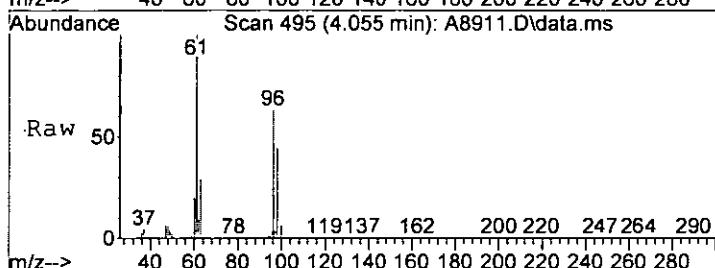


Tgt Ion: 96 Resp: 2601  
Ion Ratio Lower Upper  
96 100  
98 51.0 44.7 84.7  
61 83.0 130.9 170.9#

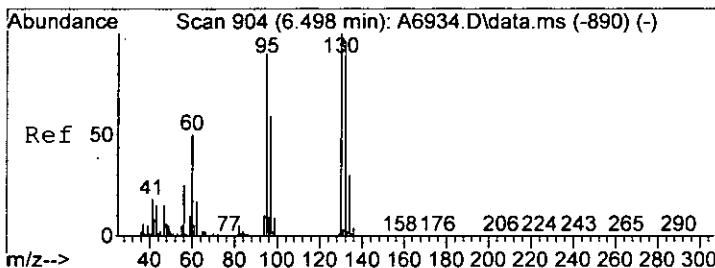
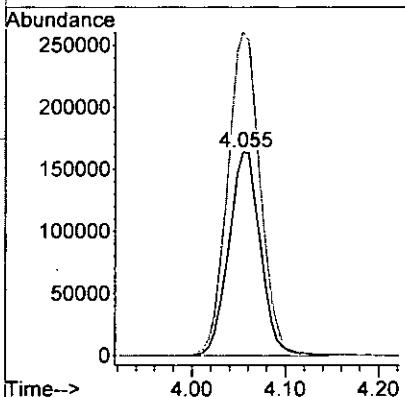
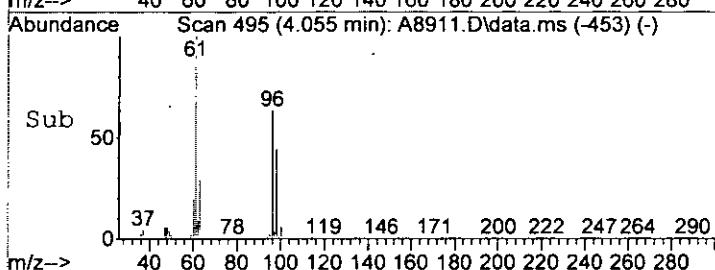




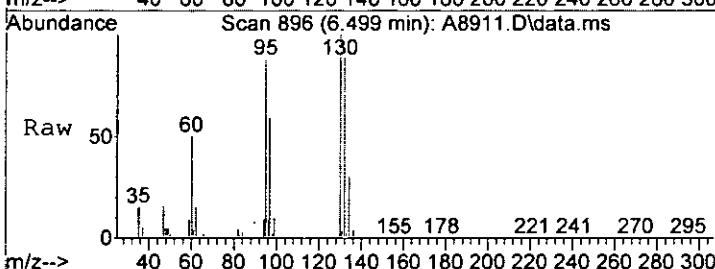
#33  
cis-1, 2-Dichloroethene  
Concen: 41.26 ug/L  
RT: 4.055 min Scan# 495  
Delta R.T. 0.000 min  
Lab File: A8911.D  
Acq: 26 May 2015 11:25 pm



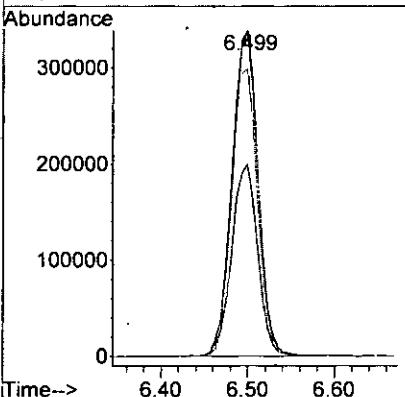
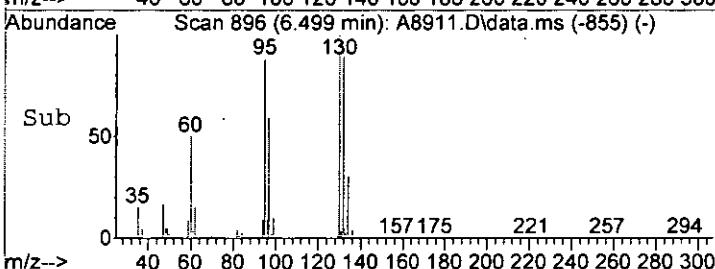
Tgt Ion: 96 Resp: 385962  
Ion Ratio Lower Upper  
96 100  
61 159.1 138.8 178.8



#53  
Trichloroethene  
Concen: 69.21 ug/L  
RT: 6.499 min Scan# 896  
Delta R.T. 0.000 min  
Lab File: A8911.D  
Acq: 26 May 2015 11:25 pm



Tgt Ion: 130 Resp: 700883  
Ion Ratio Lower Upper  
130 100  
132 98.5 76.6 116.6  
95 88.3 76.5 116.5  
97 58.9 42.4 82.4



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** R1503862-011

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 02:05

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052715\A8958.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	0.97 J	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water  
  
**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** R1503862-011

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 02:05

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8958.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	5/28/15 02:05	
Toluene-d8	97	87-121	5/28/15 02:05	
Dibromofluoromethane	103	89-119	5/28/15 02:05	

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8958.D  
 Acq On : 28 May 2015 2:05 am  
 Operator : F. Naegler  
 Sample : R1503862-011|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 29 15:23:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	4.963	168	968664	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1490015	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1358801	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	735656	50.00	ug/L	0.00
<hr/>						
System Monitoring Compounds						
43) surr4,Dibromomethane	4.829	113	478174	51.42	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	102.84%	
46) surr1,1,2-dichloroetha...	5.414	65	490226	51.30	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	102.60%	
64) SURR3,Toluene-d8	8.042	98	1713804	48.34	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	96.68%	
69) SURR2,BFB	10.675	95	640216	44.44	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	88.88%	
<hr/>						
Target Compounds						
15) Acetone	2.232	43	3269	Below Cal	76	Qvalue
18) Carbon Disulfide	2.378	76	24905	0.97	ug/L	96
23) TBA	2.695	59	5923	9.10	ug/L	57
88) Cyclohexanone	10.620	55	301	0.69	ug/L #	60

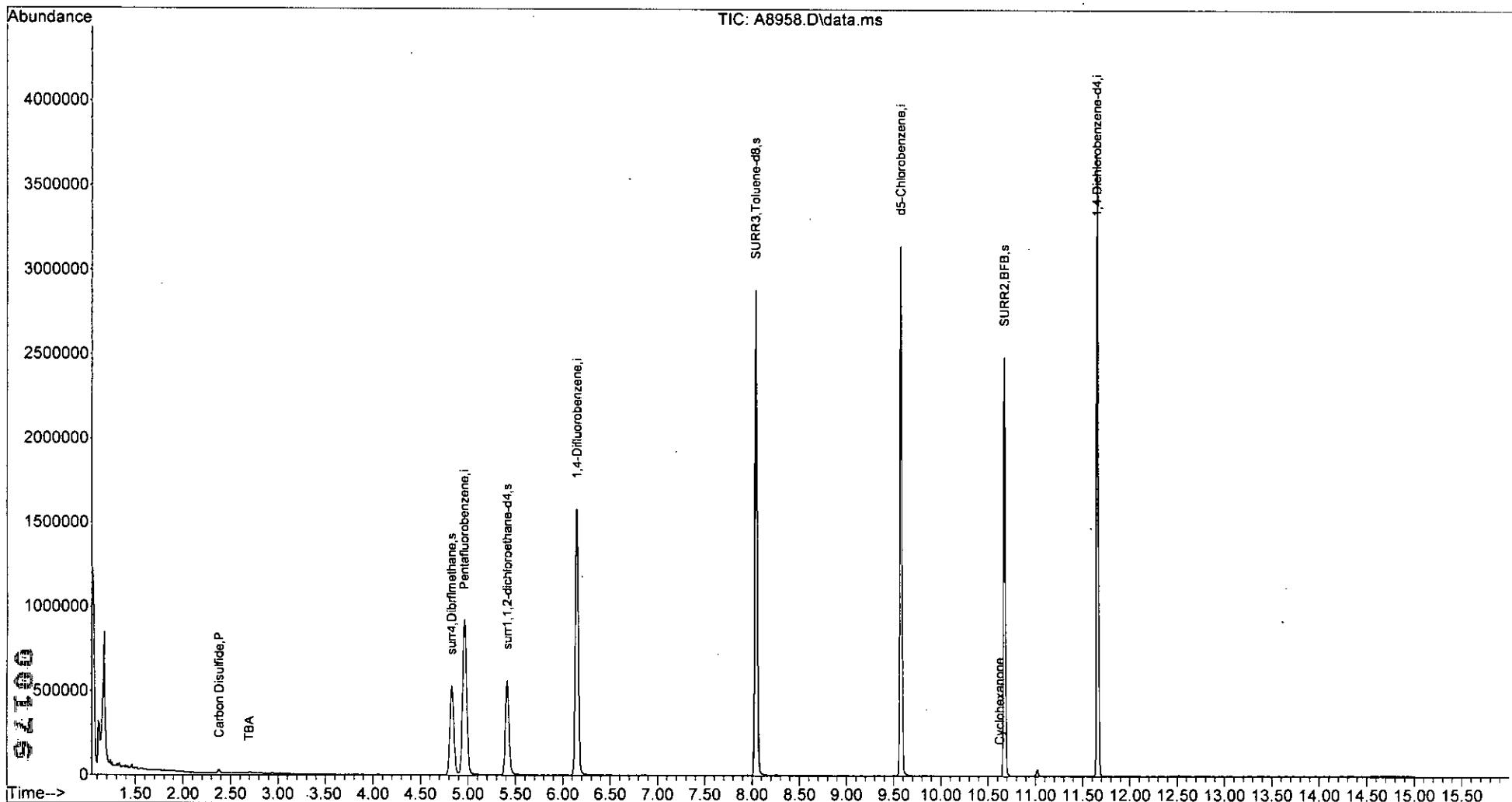
(#) = qualifier out of range (m) = manual integration (+) = signals summed

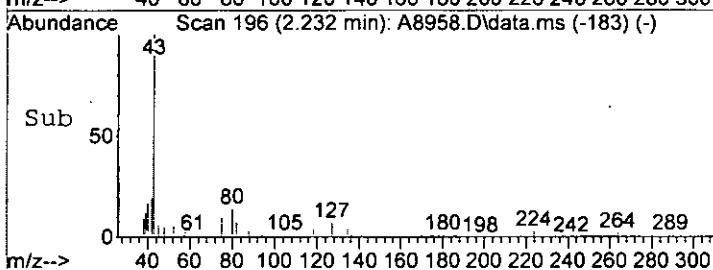
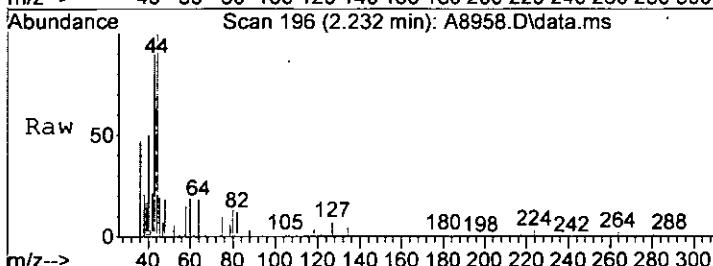
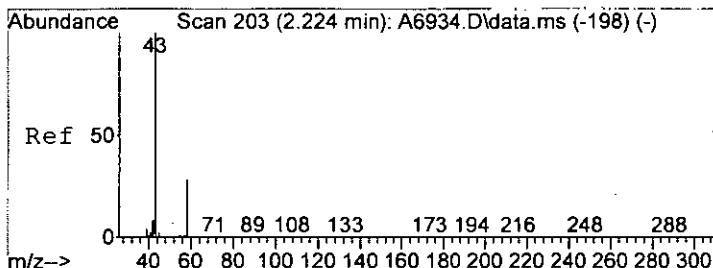
YF  
5/29/15

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
Data File : A8958.D  
Acq On : 28 May 2015 2:05 am  
Operator : F. Naegler  
Sample : R1503862-011|1.0 Inst : MSVOA10  
Misc : CBI 13429 T4  
ALS Vial : 22 Sample Multiplier: 1

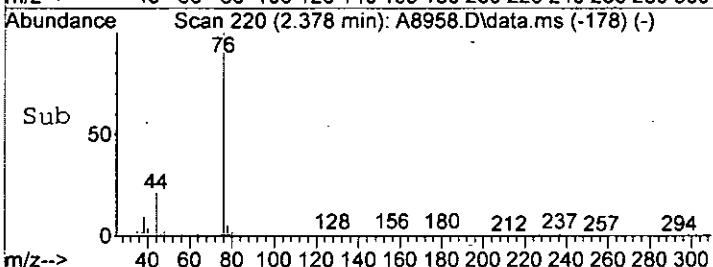
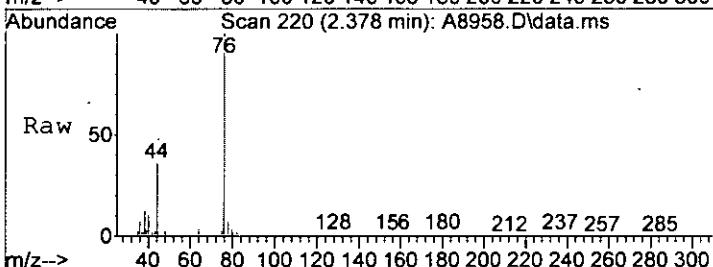
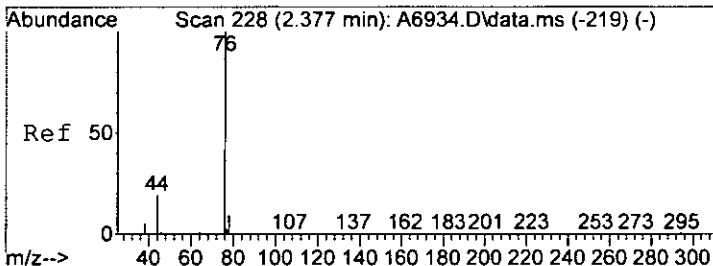
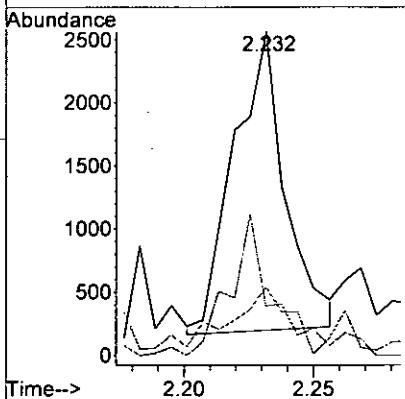
Quant Time: May 29 15:23:24 2015  
Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration





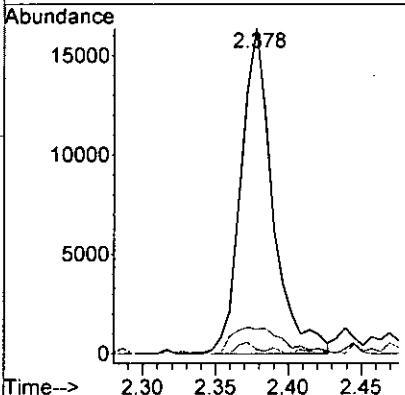
#15  
Acetone  
Concen: Below Cal  
RT: 2.232 min Scan# 196  
Delta R.T. 0.007 min  
Lab File: A8958.D  
Acq: 28 May 2015 2:05 am

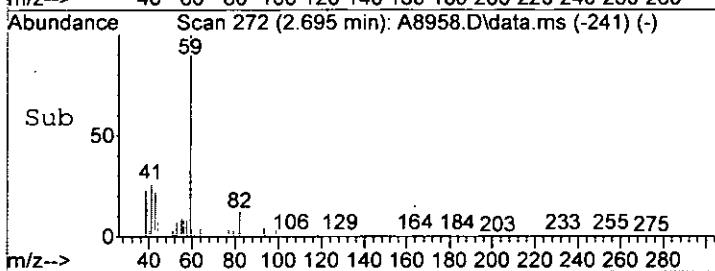
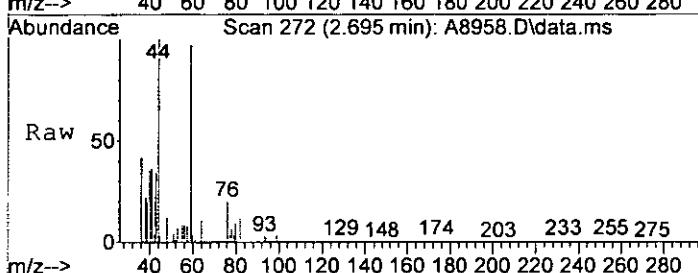
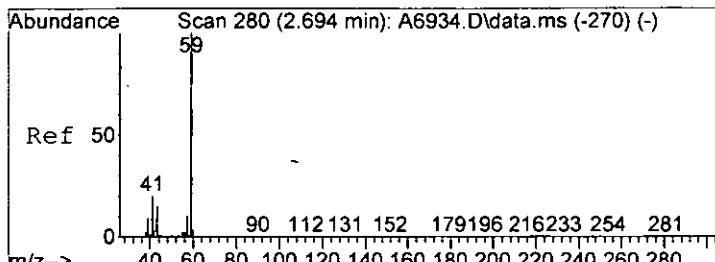
Tgt Ion: 43 Resp: 3269  
Ion Ratio Lower Upper  
43 100  
58 15.2 4.8 44.8  
42 21.0 0.0 28.0



#18  
Carbon Disulfide  
Concen: 0.97 ug/L  
RT: 2.378 min Scan# 220  
Delta R.T. 0.000 min  
Lab File: A8958.D  
Acq: 28 May 2015 2:05 am

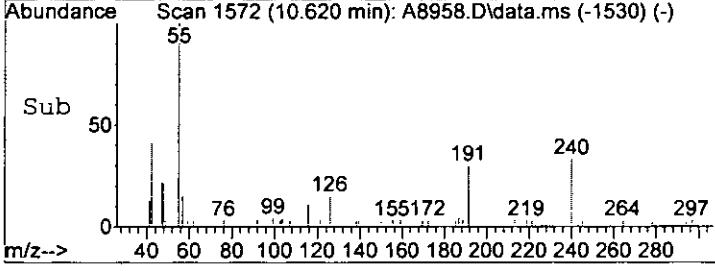
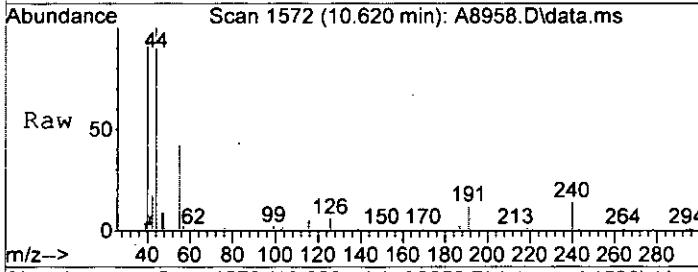
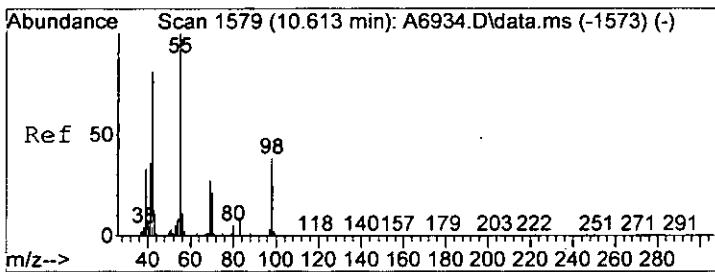
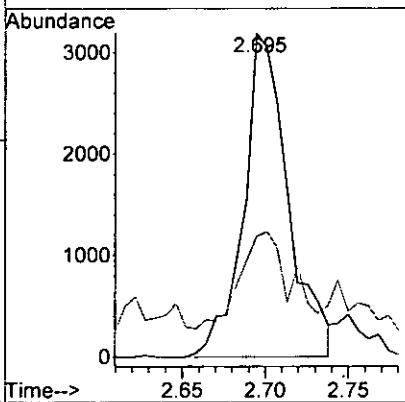
Tgt Ion: 76 Resp: 24905  
Ion Ratio Lower Upper  
76 100  
78 7.5 0.0 29.0  
77 1.2 0.0 22.5





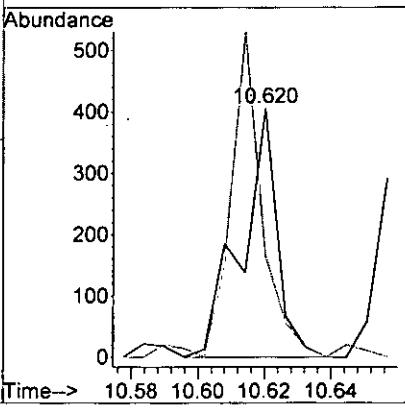
#23  
TBA  
Concen: 9.10 ug/L  
RT: 2.695 min Scan# 272  
Delta R.T. 0.000 min  
Lab File: A8958.D  
Acq: 28 May 2015 2:05 am

Tgt Ion: 59 Resp: 5923  
Ion Ratio Lower Upper  
59 100  
41 37.1 0.0 37.9



#88  
Cyclohexanone  
Concen: 0.69 ug/L  
RT: 10.620 min Scan# 1572  
Delta R.T. 0.006 min  
Lab File: A8958.D  
Acq: 28 May 2015 2:05 am

Tgt Ion: 55 Resp: 301  
Ion Ratio Lower Upper  
55 100  
42 40.9 55.2 95.2#



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** TRIP BLANK  
**Lab Code:** R1503862-012

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:19

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** 1:\ACQUDATA\MSVOA10\DATA\052415\A8834.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2-Tetrachloroethane	1.0 U	1.0	0.25	



**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water  
**Sample Name:** TRIP BLANK  
**Lab Code:** R1503862-012

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/24/15 23:19

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA10\DATA\052415\A8834.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/24/15 23:19	
Toluene-d8	97	87-121	5/24/15 23:19	
Dibromofluoromethane	99	89-119	5/24/15 23:19	

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUADATA\MSVOA10\DATA\052415\  
 Data File : A8834.D  
 Acq On : 24 May 2015 11:19 pm  
 Operator : F.Naegler  
 Sample : R1503862-012|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 24 23:34:11 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.963	168	915962	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1444258	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1342346	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	739585	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromoethane	4.829	113	447376	49.64	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	99.28%		
46) surr1,1,2-dichloroetha...	5.414	65	471171	50.87	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	101.74%		
64) SURR3,Toluene-d8	8.042	98	1666794	48.51	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	97.02%		
69) SURR2,BFB	10.675	95	638531	45.73	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	91.46%		
<b>Target Compounds</b>						
15) Acetone	2.232	43	1371	Below Cal	81	
16) 2-Propanol	2.323	45	106	0.39 ug/L #	1	
19) Acetonitrile	2.445	40	930	2.20 ug/L #	1	
80) Cyclohexanone	10.614	55	311	0.72 ug/L #	58	
115) Hexachlorobt	13.413	225	1053	0.20 ug/L #	64	
117) 1,2,3-Tclbenzene	13.650	180	2455	0.23 ug/L	89	

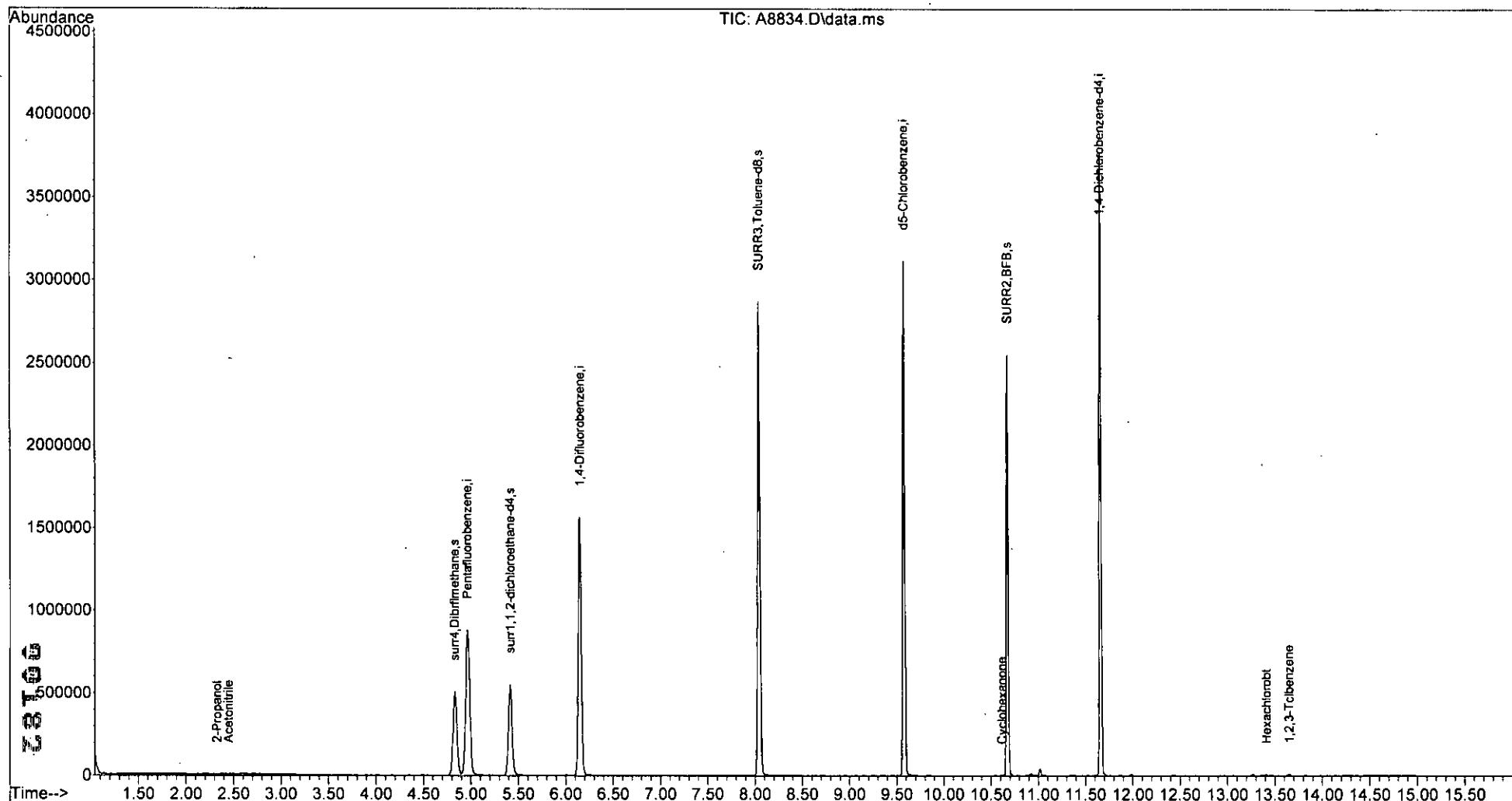
(#) = qualifier out of range (m) = manual integration (+) = signals summed

5/26/15

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA10\DATA\052415\  
Data File : A8834.D  
Acq On : 24 May 2015 11:19 pm  
Operator : F.Naegler  
Sample : R1503862-012|1.0 Inst : MSVOA10  
Misc : CBI 13429 T4  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 24 23:34:11 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration





**ALS Environmental**

# **VOLATILE ORGANICS STANDARDS DATA**

**ALS Environmental - Rochester, NY**  
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[www.alsglobal.com](http://www.alsglobal.com)

# Initial Calibration - Summary Report

Calibration ID:	RC1500051	5/6/15	Instrument ID: Column Name:	R-MS-10 1
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Analyte	Type	Curve Fit	Weighting	Mid RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3366	$\leq 20$	16.9
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.7004	$\leq 20$	9.2
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5106	$\leq 20$	10.0
1,1,2-Trichloroethane	T	Average RF		0.100	0.2413	$\leq 20$	7.1
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3854	$\leq 20$	6.2
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.9257	$\leq 20$	4.3
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3684	$\leq 20$	8.3
1,1-Dichloropropene	T	Average RF			0.4042	$\leq 20$	8.2
1,2,3-Trichlorobenzene	T	Average RF			0.7069	$\leq 20$	7.9
1,2,3-Trichloropropene	T	Average RF			0.1503	$\leq 20$	4.5
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.8584	$\leq 20$	6.3
1,2,4-Trimethylbenzene	T	Average RF			2.266	$\leq 20$	7.4
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.09343	$\leq 20$	9.5
1,2-Dibromoethane	T	Average RF		0.100	0.2435	$\leq 20$	9.9
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5071	$\leq 20$	8.3
1,2-Dichlorobenzene	T	Average RF		0.400	1.362	$\leq 20$	4.1
1,2-Dichloroethane	T	Average RF		0.100	0.4326	$\leq 20$	6.4
1,2-Dichloropropene	T	Average RF		0.100	0.3694	$\leq 20$	7.1
1,3,5-Trichlorobenzene	T	Average RF			0.9978	$\leq 20$	6.1
1,3,5-Trimethylbenzene	T	Average RF			2.219	$\leq 20$	8.3
1,3-Dichlorobenzene	T	Average RF		0.600	1.474	$\leq 20$	4.6
1,3-Dichloropropene	T	Average RF			0.4369	$\leq 20$	7.3
1,4-Dichlorobenzene	T	Average RF		0.500	1.545	$\leq 20$	4.0
1,4-Dioxane	T	Average RF			0.001843	$\leq 20$	9.9
1-Butanol	T	Quadratic	1/X2		0.005814	$\geq 0.99$	0.9951
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.4816	$\leq 20$	14.4
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.5610	$\leq 20$	10.5
2,2-Dichloropropene	T	Average RF			0.5982	$\leq 20$	9.2
2,3,6-Trichlorotoluene	T	Average RF			0.4556	$\leq 20$	11.7
2,4,5-Trichlorotoluene	T	Average RF			0.5213	$\leq 20$	15.2
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			1.168	$\leq 20$	8.2
2,4-Dichlorobenzotrifluoride	T	Average RF			0.6183	$\leq 20$	10.1
2,5-Dichlorobenzotrifluoride	T	Average RF			0.7008	$\leq 20$	7.7
2-Butanone (MEK)	T	Average RF		0.05	0.2352	$\leq 20$	11.3
2-Chloro-1,3-butadiene	T	Average RF			1.077	$\leq 20$	11.4
2-Chlorobenzotrifluoride	T	Average RF			0.5181	$\leq 20$	14.9
2-Chloroethyl Vinyl Ether	T	Average RF			0.1728	$\leq 20$	12.9
2-Chlorotoluene	T	Average RF			1.863	$\leq 20$	6.5
2-Hexanone	T	Average RF		0.05	0.2256	$\leq 20$	14.0
2-Methyl-1-propanol	T	Average RF			0.01300	$\leq 20$	17.3
2-Methyl-2-propanol	T	Average RF			0.03358	$\leq 20$	11.9
2-Nitropropane	T	Average RF			0.04263	$\leq 20$	16.0
2-Propanol	T	Average RF			0.02621	$\leq 20$	14.0
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.248	$\leq 20$	6.6
3,4-Dichlorobenzotrifluoride	T	Average RF			0.6591	$\leq 20$	10.2
3-Chloro-1-propene	T	Average RF			0.2397	$\leq 20$	6.5
3-Chlorobenzotrifluoride	T	Average RF			0.5472	$\leq 20$	12.0
3-Chlorotoluene	T	Average RF			1.967	$\leq 20$	4.4
4-Chlorotoluene	T	Average RF			2.220	$\leq 20$	5.6
4-Isopropyltoluene	T	Average RF			2.330	$\leq 20$	7.5
4-Methyl-2-pentanone	T	Average RF		0.05	0.3164	$\leq 20$	12.9
Acetone	T	Quadratic	1/X	0.05	0.1691	$\geq 0.99$	0.9909

# Initial Calibration - Summary Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetonitrile	T	Average RF			0.02305	<=20	12.2
Acrolein	T	Average RF			0.07561	<=20	11.1
Acrylonitrile	T	Average RF			0.1616	<=20	8.7
Benzene	T	Average RF		0.500	1.253	<=20	7.3
Bromobenzene	T	Average RF			0.7243	<=20	4.6
Bromochloromethane	T	Average RF			0.3056	<=20	4.4
Bromodichloromethane	T	Average RF		0.200	0.3893	<=20	10.1
Bromoform	T	Average RF		0.100	0.1624	<=20	18.4
Bromomethane	T	Average RF		0.100	0.2864	<=20	7.4
Carbon Disulfide	T	Average RF		0.100	1.323	<=20	10.0
Carbon Tetrachloride	T	Average RF		0.05	0.1235	<=20	13.9
Chlorobenzene	T	Average RF		0.500	0.9831	<=20	6.3
Chloroethane	T	Average RF		0.100	0.3399	<=20	6.4
Chloroform	T	Average RF		0.200	0.8234	<=20	5.6
Chloromethane	T	Average RF		0.100	0.9504	<=20	9.7
Cyclohexane	T	Average RF		0.100	0.4754	<=20	11.5
Cyclohexanone	T	Average RF			0.01611	<=20	16.2
Dibromochloromethane	T	Average RF		0.100	0.2981	<=20	16.9
Dibromomethane	T	Average RF			0.1625	<=20	6.5
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5192	<=20	16.1
Dichlorofluoromethane (CFC 21)	T	Average RF			0.8305	<=20	13.8
Dichloromethane	T	Average RF		0.100	0.4520	<=20	6.5
Diethyl Ether	T	Average RF			0.4025	<=20	10.9
Diisopropyl Ether	T	Average RF			2.538	<=20	6.9
Ethyl Methacrylate	T	Average RF			0.2898	<=20	18.6
Ethyl tert-Butyl Ether	T	Average RF			1.733	<=20	9.0
Ethylbenzene	T	Average RF		0.100	0.5157	<=20	11.1
Hexachlorobutadiene	T	Average RF			0.3554	<=20	6.7
Iodomethane	T	Average RF			0.5455	<=20	11.7
Isopropylbenzene (Cumene)	T	Average RF		0.100	1.512	<=20	9.5
Methacrylonitrile	T	Average RF			0.1379	<=20	5.9
Methyl Acetate	T	Average RF		0.100	0.3642	<=20	6.6
Methyl Methacrylate	T	Average RF			0.1455	<=20	13.1
Methyl tert-Butyl Ether	T	Average RF		0.100	1.053	<=20	5.3
Methylcyclohexane	T	Average RF		0.100	0.5121	<=20	13.5
Naphthalene	T	Average RF			1.609	<=20	8.9
Propionitrile	T	Average RF			0.05838	<=20	10.3
Styrene	T	Average RF		0.300	1.042	<=20	13.2
Tetrachloroethylene (PCE)	T	Average RF		0.200	0.3005	<=20	7.9
Tetrahydrofuran (THF)	T	Average RF			0.1454	<=20	9.8
Toluene	T	Average RF		0.400	1.353	<=20	5.2
Trichloroethene (TCE)	T	Average RF		0.200	0.3463	<=20	8.4
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.6683	<=20	4.7
Vinyl Acetate	T	Average RF			0.07465	<=20	19.8
Vinyl Chloride	T	Average RF		0.100	0.6923	<=20	7.4
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4970	<=20	6.1
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4412	<=20	15.1
m,p-Xylenes	T	Average RF		0.100	0.6204	<=20	9.1
n-Butyl Acetate	T	Average RF			0.5418	<=20	19.9
n-Butylbenzene	T	Average RF			2.058	<=20	7.4
n-Heptane	T	Average RF			0.5448	<=20	9.0
n-Propylbenzene	T	Average RF			2.971	<=20	7.3

# Initial Calibration - Summary Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
o-Xylene	T	Average RF		0.300	0.6155	<=20	10.7
sec-Butylbenzene	T	Average RF			2.615	<=20	7.9
tert-Amyl Methyl Ether	T	Average RF			0.7222	<=20	13.8
tert-Butylbenzene	T	Average RF			1.926	<=20	7.2
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4146	<=20	5.3
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3677	<=20	17.3
trans-1,4-Dichloro-2-butene	T	Average RF			0.1091	<=20	13.1
1,2-Dichloroethane-d4	S	Average RF			0.3206	<=20	3.8
4-Bromofluorobenzene	S	Average RF			0.4834	<=20	4.8
Dibromofluoromethane	S	Average RF			0.3120	<=20	4.6
Toluene-d8	S	Average RF			1.190	<=20	3.8

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10
		Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1500051-01	0.5 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8252.D	5/6/15 16:31
02	RC1500051-02	1.0 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8253.D	5/6/15 17:01
03	RC1500051-03	2.0 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8254.D	5/6/15 17:31
04	RC1500051-04	5.0 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8255.D	5/6/15 18:01
05	RC1500051-05	20 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8256.D	5/6/15 18:31
06	RC1500051-06	50 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8257.D	5/6/15 19:00
07	RC1500051-07	100 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8258.D	5/6/15 19:30
08	RC1500051-08	150 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8259.D	5/6/15 20:01
09	RC1500051-09	200 PPB STD	I:\ACQUIDATA\msvoa10\data\050615\A8260.D	5/6/15 20:31

Analyte	Curve Fit			Weighting		
1,1,1,2-Tetrachloroethane	Average RF			RSD = 16.9		Average RF = 0.3366
#	Amount	RF	#	Amount	RF	#
01	0.500	0.2643	02	1.000	0.2981	03
05	20.000	0.3021	06	50.000	0.3423	07
09	200.000	0.4359				08
1,1,1-Trichloroethane (TCA)	Average RF			RSD = 9.2		Average RF = 0.7004
#	Amount	RF	#	Amount	RF	#
01	0.500	0.6459	02	1.000	0.6542	03
05	20.000	0.6442	06	50.000	0.6953	07
09	200.000	0.8231				08
1,1,2,2-Tetrachloroethane	Average RF			RSD = 10.0		Average RF = 0.5106
#	Amount	RF	#	Amount	RF	#
01	0.500	0.4084	02	1.000	0.4653	03
05	20.000	0.5135	06	50.000	0.5205	07
09	200.000	0.5844				08
1,1,2-Trichloroethane	Average RF			RSD = 7.1		Average RF = 0.2413
#	Amount	RF	#	Amount	RF	#
01	0.500	0.2170	02	1.000	0.2269	03
05	20.000	0.2310	06	50.000	0.2348	07
09	200.000	0.2729				08
1,1,2-Trichlorotrifluoroethane	Average RF			RSD = 6.2		Average RF = 0.3854
#	Amount	RF	#	Amount	RF	#
01	0.500	0.3567	02	1.000	0.3693	03
05	20.000	0.3624	06	50.000	0.3742	07
09	200.000	0.4316				08
1,1-Dichloroethane (1,1-DCA)	Average RF			RSD = 4.3		Average RF = 0.9257
#	Amount	RF	#	Amount	RF	#
01	0.500	0.8894	02	1.000	0.9332	03
05	20.000	0.8728	06	50.000	0.9254	07
09	200.000	0.9988				08
1,1-Dichloroethene (1,1-DCE)	Average RF			RSD = 8.3		Average RF = 0.3684
#	Amount	RF	#	Amount	RF	#
01	0.500	0.3518	02	1.000	0.3195	03
05	20.000	0.3506	06	50.000	0.3594	07
09	200.000	0.4266				08

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10								
		Signal ID:	1								
<b>Analyte</b>	<b>Curve Fit</b>	<b>Weighting</b>									
<b>1,1-Dichloropropene</b>	Average RF	RSD = 8.2	Average RF = 0.4042								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3667	02	1.000	0.3906	03	2.000	0.3913	04	5.000	0.3999
05	20.000	0.3657	06	50.000	0.3964	07	100.000	0.4224	08	150.000	0.4355
09	200.000	0.4691									
<b>1,2,3-Trichlorobenzene</b>	Average RF	RSD = 7.9	Average RF = 0.7069								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6185	02	1.000	0.6318	03	2.000	0.7321	04	5.000	0.7089
05	20.000	0.6684	06	50.000	0.7316	07	100.000	0.7737	08	150.000	0.7324
09	200.000	0.7648									
<b>1,2,3-Trichloropropane</b>	Average RF	RSD = 4.5	Average RF = 0.1503								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1608	02	1.000	0.1466	03	2.000	0.1544	04	5.000	0.1552
05	20.000	0.1433	06	50.000	0.1404	07	100.000	0.1474	08	150.000	0.1480
09	200.000	0.1567									
<b>1,2,4-Trichlorobenzene</b>	Average RF	RSD = 6.3	Average RF = 0.8584								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7664	02	1.000	0.8728	03	2.000	0.8140	04	5.000	0.8311
05	20.000	0.8189	06	50.000	0.8845	07	100.000	0.9238	08	150.000	0.8891
09	200.000	0.9254									
<b>1,2,4-Trimethylbenzene</b>	Average RF	RSD = 7.4	Average RF = 2.266								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.910	02	1.000	2.167	03	2.000	2.222	04	5.000	2.348
05	20.000	2.259	06	50.000	2.418	07	100.000	2.483	08	150.000	2.349
09	200.000	2.236									
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	Average RF	RSD = 9.5	Average RF = 0.09343								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.08199	02	1.000	0.1011	03	2.000	0.09101	04	5.000	0.08448
05	20.000	0.08620	06	50.000	0.08870	07	100.000	0.1007	08	150.000	0.09980
09	200.000	0.1069									
<b>1,2-Dibromoethane</b>	Average RF	RSD = 9.9	Average RF = 0.2435								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2147	02	1.000	0.2149	03	2.000	0.2362	04	5.000	0.2313
05	20.000	0.2358	06	50.000	0.2416	07	100.000	0.2666	08	150.000	0.2648
09	200.000	0.2854									
<b>1,2-Dichloro-1,1,2-trifluoroethane (CFC</b>	Average RF	RSD = 8.3	Average RF = 0.5071								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4309	02	1.000	0.5179	03	2.000	0.4794	04	5.000	0.5050
05	20.000	0.4666	06	50.000	0.5228	07	100.000	0.5363	08	150.000	0.5679
09	200.000	0.5368									
<b>1,2-Dichlorobenzene</b>	Average RF	RSD = 4.1	Average RF = 1.362								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.269	02	1.000	1.299	03	2.000	1.386	04	5.000	1.361
05	20.000	1.322	06	50.000	1.369	07	100.000	1.438	08	150.000	1.397
09	200.000	1.422									

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10								
		Signal ID:	1								
Analyte	Curve Fit	Weighting									
1,2-Dichloroethane	Average RF	RSD = 6.4	Average RF = 0.4326								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3934	02	1.000	0.4049	03	2.000	0.4369	04	5.000	0.4343
05	20.000	0.4068	06	50.000	0.4321	07	100.000	0.4521	08	150.000	0.4525
09	200.000	0.4804									
1,2-Dichloroethane-d4	Average RF	RSD = 3.8	Average RF = 0.3206								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3101	04	60.000	0.3205	05	70.000	0.3126	07	100.000	0.3147
08	125.000	0.3225	09	150.000	0.3434						
1,2-Dichloropropane	Average RF	RSD = 7.1	Average RF = 0.3694								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3484	02	1.000	0.3665	03	2.000	0.3655	04	5.000	0.3492
05	20.000	0.3415	06	50.000	0.3568	07	100.000	0.3815	08	150.000	0.3910
09	200.000	0.4244									
1,3,5-Trichlorobenzene	Average RF	RSD = 6.1	Average RF = 0.9978								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9694	02	1.000	0.9435	03	2.000	0.9572	04	5.000	0.9827
05	20.000	0.9179	06	50.000	1.039	07	100.000	1.027	08	150.000	1.025
09	200.000	1.119									
1,3,5-Trimethylbenzene	Average RF	RSD = 8.3	Average RF = 2.219								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.859	02	1.000	2.043	03	2.000	2.211	04	5.000	2.263
05	20.000	2.178	06	50.000	2.384	07	100.000	2.473	08	150.000	2.334
09	200.000	2.222									
1,3-Dichlorobenzene	Average RF	RSD = 4.6	Average RF = 1.474								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.519	02	1.000	1.381	03	2.000	1.383	04	5.000	1.481
05	20.000	1.405	06	50.000	1.486	07	100.000	1.545	08	150.000	1.512
09	200.000	1.556									
1,3-Dichloropropane	Average RF	RSD = 7.3	Average RF = 0.4369								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4169	02	1.000	0.4056	03	2.000	0.4430	04	5.000	0.4064
05	20.000	0.4076	06	50.000	0.4274	07	100.000	0.4662	08	150.000	0.4667
09	200.000	0.4922									
1,4-Dichlorobenzene	Average RF	RSD = 4.0	Average RF = 1.545								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.571	02	1.000	1.446	03	2.000	1.628	04	5.000	1.539
05	20.000	1.459	06	50.000	1.520	07	100.000	1.602	08	150.000	1.564
09	200.000	1.579									
1,4-Dioxane	Average RF	RSD = 9.9	Average RF = 0.001843								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.001640	03	40.000	0.001888	04	100.000	0.001717	05	400.000	0.001696
06	1000.000	0.001677	07	2000.000	0.002050	08	3000.000	0.002000	09	4000.000	0.002078
1-Butanol	Quadratic	I/X2	COD = 0.9951	Y = 1.783E-5 X <sup>2</sup> + 0.004874 X + -0.001061							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.003746	03	100.000	0.004733	04	250.000	0.004339	05	1000.000	0.004843
06	2500.000	0.005876	07	5000.000	0.007252	08	7500.000	0.007694	09	10000.000	0.008028

# Initial Calibration - Detailed Report

Calibration ID: RC1500051						Instrument ID:	R-MS-10	
						Signal ID:	1	
Analyte			Curve Fit		Weighting			
1-Chloro-4-(trifluoromethyl)benzene			Average RF		RSD = 14.4		Average RF = 0.4816	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3854	02	1.000	0.4227	03	2.000	0.4888
05	20.000	0.4287	06	50.000	0.4922	07	100.000	0.5137
09	200.000	0.6160				08	150.000	0.5355
2,2-Dichloro-1,1,1-trifluoroethane (CFC)			Average RF		RSD = 10.5		Average RF = 0.5610	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4886	02	1.000	0.5085	03	2.000	0.5506
05	20.000	0.5129	06	50.000	0.5581	07	100.000	0.5785
09	200.000	0.6734				08	150.000	0.6261
2,2-Dichloropropane			Average RF		RSD = 9.2		Average RF = 0.5982	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5006	02	1.000	0.5922	03	2.000	0.5930
05	20.000	0.5477	06	50.000	0.5915	07	100.000	0.6363
09	200.000	0.6864				08	150.000	0.6503
2,3,6-Trichlorotoluene			Average RF		RSD = 11.7		Average RF = 0.4556	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3904	02	1.000	0.3872	03	2.000	0.4599
05	20.000	0.4204	06	50.000	0.4810	07	100.000	0.5000
09	200.000	0.5403				08	150.000	0.4980
2,4,5-Trichlorotoluene			Average RF		RSD = 15.2		Average RF = 0.5213	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3882	02	1.000	0.4801	03	2.000	0.4746
05	20.000	0.4785	06	50.000	0.5777	07	100.000	0.5893
09	200.000	0.6364				08	150.000	0.5859
2,4-, 2,5-, and 2,6-Dichlorotoluene Coel:			Average RF		RSD = 8.2		Average RF = 1.168	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.9878	02	3.000	1.081	03	6.000	1.143
05	60.000	1.146	06	150.000	1.300	07	300.000	1.276
09	600.000	1.183				08	450.000	1.214
2,4-Dichlorobenzotrifluoride			Average RF		RSD = 10.1		Average RF = 0.6183	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5580	02	1.000	0.6406	03	2.000	0.5801
05	20.000	0.5374	06	50.000	0.6311	07	100.000	0.6300
09	200.000	0.7503				08	150.000	0.6470
2,5-Dichlorobenzotrifluoride			Average RF		RSD = 7.7		Average RF = 0.7008	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6825	02	1.000	0.6937	03	2.000	0.6919
05	20.000	0.6183	06	50.000	0.7111	07	100.000	0.7204
09	200.000	0.8075				08	150.000	0.7341
2-Butanone (MEK)			Average RF		RSD = 11.3		Average RF = 0.2352	
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2851	02	1.000	0.1935	03	2.000	0.2441
05	20.000	0.2091	06	50.000	0.2272	07	100.000	0.2345
09	200.000	0.2570				08	150.000	0.2397

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10									
		Signal ID:	1									
Analyte	Curve Fit	Weighting										
<b>2-Chloro-1,3-butadiene</b>	Average RF	RSD = 11.4	Average RF = 1.077									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	1.046	02	1.000	0.9692	03	2.000	1.062	04	5.000	1.084	
05	20.000	0.8418	06	50.000	1.113	07	100.000	1.119	08	150.000	1.186	
09	200.000	1.269										
<b>2-Chlorobenzotrifluoride</b>	Average RF	RSD = 14.9	Average RF = 0.5181									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.4248	02	1.000	0.4540	03	2.000	0.4807	04	5.000	0.4910	
05	20.000	0.4589	06	50.000	0.5440	07	100.000	0.5531	08	150.000	0.5865	
09	200.000	0.6694										
<b>2-Chloroethyl Vinyl Ether</b>	Average RF	RSD = 12.9	Average RF = 0.1728									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.1615	02	1.000	0.1586	03	2.000	0.1580	04	5.000	0.1644	
05	20.000	0.1416	06	50.000	0.1755	07	100.000	0.1848	08	150.000	0.1979	
09	200.000	0.2125										
<b>2-Chlorotoluene</b>	Average RF	RSD = 6.5	Average RF = 1.863									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	1.599	02	1.000	1.766	03	2.000	1.910	04	5.000	1.890	
05	20.000	1.806	06	50.000	1.904	07	100.000	1.980	08	150.000	1.959	
09	200.000	1.949										
<b>2-Hexanone</b>	Average RF	RSD = 14.0	Average RF = 0.2256									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.2157	02	1.000	0.1849	03	2.000	0.2185	04	5.000	0.1999	
05	20.000	0.1942	06	50.000	0.2274	07	100.000	0.2525	08	150.000	0.2593	
09	200.000	0.2775										
<b>2-Methyl-1-propanol</b>	Average RF	RSD = 17.3	Average RF = 0.01300									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
03	40.000	0.01126	04	100.000	0.01091	05	400.000	0.01095	06	1000.000	0.01188	
07	2000.000	0.01465	08	3000.000	0.01515	09	4000.000	0.01617				
<b>2-Methyl-2-propanol</b>	Average RF	RSD = 11.9	Average RF = 0.03358									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	10.000	0.02798	02	20.000	0.02881	03	40.000	0.03507	04	100.000	0.03207	
05	400.000	0.03146	06	1000.000	0.03235	07	2000.000	0.03766	08	3000.000	0.03788	
09	4000.000	0.03893										
<b>2-Nitropropane</b>	Average RF	RSD = 16.0	Average RF = 0.04263									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
03	4.000	0.03671	04	10.000	0.03876	05	40.000	0.03745	06	100.000	0.04055	
07	200.000	0.04924	08	300.000	0.05308							
<b>2-Propanol</b>	Average RF	RSD = 14.0	Average RF = 0.02621									
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	10.000	0.02346	02	20.000	0.02420	03	40.000	0.02192	04	100.000	0.02336	
05	400.000	0.02368	06	1000.000	0.02709	07	2000.000	0.03037	08	3000.000	0.03069	
09	4000.000	0.03115										

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051						Instrument ID:	R-MS-10			
							Signal ID:	1			
Analyte	Curve Fit			Weighting							
3,4- and 2,3-Dichlorotoluene Coelution	Average RF			RSD = 6.6	Average RF = 1.248						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.134	02	2.000	1.178	03	4.000	1.223	04	10.000	1.274
05	40.000	1.233	06	100.000	1.395	07	200.000	1.351	08	300.000	1.249
09	400.000	1.194									
3,4-Dichlorobenzotrifluoride	Average RF			RSD = 10.2	Average RF = 0.6591						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5820	02	1.000	0.6446	03	2.000	0.6063	04	5.000	0.6241
05	20.000	0.5932	06	50.000	0.6895	07	100.000	0.6947	08	150.000	0.7059
09	200.000	0.7916									
3-Chloro-1-propene	Average RF			RSD = 6.5	Average RF = 0.2397						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2321	02	1.000	0.2390	03	2.000	0.2200	04	5.000	0.2334
05	20.000	0.2183	06	50.000	0.2436	07	100.000	0.2570	08	150.000	0.2490
09	200.000	0.2647									
3-Chlorobenzotrifluoride	Average RF			RSD = 12.0	Average RF = 0.5472						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4541	02	1.000	0.5360	03	2.000	0.5465	04	5.000	0.5105
05	20.000	0.4841	06	50.000	0.5494	07	100.000	0.5703	08	150.000	0.5958
09	200.000	0.6785									
3-Chlorotoluene	Average RF			RSD = 4.4	Average RF = 1.967						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.842	02	1.000	1.890	03	2.000	1.944	04	5.000	2.019
05	20.000	1.859	06	50.000	2.080	07	100.000	2.033	08	150.000	1.999
09	200.000	2.034									
4-Bromofluorobenzene	Average RF			RSD = 4.8	Average RF = 0.4834						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4799	04	60.000	0.4761	05	70.000	0.4624	07	100.000	0.4687
08	125.000	0.4858	09	150.000	0.5278						
4-Chlorotoluene	Average RF			RSD = 5.6	Average RF = 2.220						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.119	02	1.000	1.980	03	2.000	2.299	04	5.000	2.229
05	20.000	2.149	06	50.000	2.321	07	100.000	2.393	08	150.000	2.296
09	200.000	2.196									
4-Isopropyltoluene	Average RF			RSD = 7.5	Average RF = 2.330						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.048	02	1.000	2.143	03	2.000	2.316	04	5.000	2.375
05	20.000	2.294	06	50.000	2.517	07	100.000	2.610	08	150.000	2.422
09	200.000	2.243									
4-Methyl-2-pentanone	Average RF			RSD = 12.9	Average RF = 0.3164						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2719	02	1.000	0.2821	03	2.000	0.2989	04	5.000	0.3076
05	20.000	0.2728	06	50.000	0.3218	07	100.000	0.3438	08	150.000	0.3613
09	200.000	0.3872									

# Initial Calibration - Detailed Report

Calibration ID: RC1500051						Instrument ID:	R-MS-10				
						Signal ID:	1				
<b>Analyte</b>		<b>Curve Fit</b>		<b>Weighting</b>							
<b>Acetone</b>			Quadratic	I/X	COD = 0.9909	$Y = 0.003673 X^2 + 0.1296 X + 0.01361$					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.2936	05	20.000	0.1346	06	50.000	0.1404	07	100.000	0.1495
08	150.000	0.1548	09	200.000	0.1414						
<b>Acetonitrile</b>			Average RF		RSD = 12.2	Average RF = 0.02305					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.01960	03	10.000	0.02465	04	25.000	0.01901	05	100.000	0.02219
06	250.000	0.02267	07	500.000	0.02403	08	750.000	0.02474	09	1000.000	0.02748
<b>Acrolein</b>			Average RF		RSD = 11.1	Average RF = 0.07561					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.06107	02	5.000	0.07881	03	10.000	0.07112	04	25.000	0.07339
05	100.000	0.06738	06	250.000	0.07659	07	500.000	0.07967	08	750.000	0.08451
09	1000.000	0.08794									
<b>Acrylonitrile</b>			Average RF		RSD = 8.7	Average RF = 0.1616					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1452	02	5.000	0.1392	03	10.000	0.1608	04	25.000	0.1525
05	100.000	0.1643	06	250.000	0.1627	07	500.000	0.1750	08	750.000	0.1734
09	1000.000	0.1818									
<b>Benzene</b>			Average RF		RSD = 7.3	Average RF = 1.253					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.284	02	1.000	1.102	03	2.000	1.278	04	5.000	1.214
05	20.000	1.154	06	50.000	1.217	07	100.000	1.300	08	150.000	1.327
09	200.000	1.402									
<b>Bromobenzene</b>			Average RF		RSD = 4.6	Average RF = 0.7243					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7305	02	1.000	0.6936	03	2.000	0.7277	04	5.000	0.7174
05	20.000	0.6838	06	50.000	0.6996	07	100.000	0.7305	08	150.000	0.7390
09	200.000	0.7962									
<b>Bromochloromethane</b>			Average RF		RSD = 4.4	Average RF = 0.3056					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2899	02	1.000	0.3305	03	2.000	0.3021	04	5.000	0.2945
05	20.000	0.2894	06	50.000	0.3062	07	100.000	0.3112	08	150.000	0.3095
09	200.000	0.3169									
<b>Bromodichloromethane</b>			Average RF		RSD = 10.1	Average RF = 0.3893					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3543	02	1.000	0.3592	03	2.000	0.3743	04	5.000	0.3619
05	20.000	0.3561	06	50.000	0.3855	07	100.000	0.4172	08	150.000	0.4313
09	200.000	0.4634									
<b>Bromoform</b>			Average RF		RSD = 18.4	Average RF = 0.1624					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1234	03	2.000	0.1483	04	5.000	0.1418	05	20.000	0.1495
06	50.000	0.1723	07	100.000	0.1979	08	150.000	0.2034			
<b>Bromomethane</b>			Average RF		RSD = 7.4	Average RF = 0.2864					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3189	02	1.000	0.2766	03	2.000	0.2912	04	5.000	0.2641
05	20.000	0.2578	06	50.000	0.2713	07	100.000	0.2851	08	150.000	0.3001
09	200.000	0.3126									

# Initial Calibration - Detailed Report

Calibration ID: RC1500051								Instrument ID:	R-MS-10		
								Signal ID:	1		
<b>Analyte</b>		<b>Curve Fit</b>		<b>Weighting</b>							
<b>Carbon Disulfide</b>			Average RF		RSD = 10.0		Average RF = 1.323				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.332	02	1.000	1.366	03	2.000	1.347	04	5.000	1.309
05	20.000	1.016	06	50.000	1.304	07	100.000	1.304	08	150.000	1.429
09	200.000	1.501									
<b>Carbon Tetrachloride</b>			Average RF		RSD = 13.9		Average RF = 0.1235				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1218	02	1.000	0.1121	03	2.000	0.1055	04	5.000	0.1122
05	20.000	0.1062	06	50.000	0.1230	07	100.000	0.1346	08	150.000	0.1406
09	200.000	0.1559									
<b>Chlorobenzene</b>			Average RF		RSD = 6.3		Average RF = 0.9831				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9365	02	1.000	0.9043	03	2.000	0.9523	04	5.000	0.9698
05	20.000	0.9240	06	50.000	0.9846	07	100.000	1.055	08	150.000	1.045
09	200.000	1.076									
<b>Chloroethane</b>			Average RF		RSD = 6.4		Average RF = 0.3399				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3471	02	1.000	0.3602	03	2.000	0.3216	04	5.000	0.3140
05	20.000	0.3137	06	50.000	0.3282	07	100.000	0.3431	08	150.000	0.3582
09	200.000	0.3731									
<b>Chloroform</b>			Average RF		RSD = 5.6		Average RF = 0.8234				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7967	02	1.000	0.7722	03	2.000	0.8062	04	5.000	0.8126
05	20.000	0.7776	06	50.000	0.8146	07	100.000	0.8510	08	150.000	0.8653
09	200.000	0.9147									
<b>Chloromethane</b>			Average RF		RSD = 9.7		Average RF = 0.9504				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8764	02	1.000	0.8872	03	2.000	0.8927	04	5.000	0.8437
05	20.000	0.9139	06	50.000	0.9604	07	100.000	1.011	08	150.000	1.050
09	200.000	1.119									
<b>Cyclohexane</b>			Average RF		RSD = 11.5		Average RF = 0.4754				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4368	02	1.000	0.4546	03	2.000	0.4542	04	5.000	0.4330
05	20.000	0.4078	06	50.000	0.4757	07	100.000	0.5040	08	150.000	0.5332
09	200.000	0.5794									
<b>Cyclohexanone</b>			Average RF		RSD = 16.2		Average RF = 0.01611				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.01299	02	20.000	0.01336	03	40.000	0.01609	04	100.000	0.01527
05	400.000	0.01408	06	1000.000	0.01521	07	2000.000	0.01883	08	3000.000	0.01914
09	4000.000	0.01997									
<b>Dibromochloromethane</b>			Average RF		RSD = 16.9		Average RF = 0.2981				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2264	02	1.000	0.2577	03	2.000	0.2689	04	5.000	0.2724
05	20.000	0.2771	06	50.000	0.3075	07	100.000	0.3426	08	150.000	0.3522
09	200.000	0.3786									

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10								
		Signal ID:	1								
Analyte	Curve Fit	Weighting									
Dibromofluoromethane	Average RF	RSD = 4.6	Average RF = 0.3120								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3023	04	60.000	0.3065	05	70.000	0.3034	07	100.000	0.3060
08	125.000	0.3142	09	150.000	0.3398						
Dibromomethane	Average RF	RSD = 6.5	Average RF = 0.1625								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1443	02	1.000	0.1666	03	2.000	0.1614	04	5.000	0.1679
05	20.000	0.1525	06	50.000	0.1558	07	100.000	0.1650	08	150.000	0.1679
09	200.000	0.1811									
Dichlorodifluoromethane (CFC 12)	Average RF	RSD = 16.1	Average RF = 0.5192								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3968	02	1.000	0.4846	03	2.000	0.4141	04	5.000	0.4532
05	20.000	0.5573	06	50.000	0.5648	07	100.000	0.5838	08	150.000	0.5901
Dichlorofluoromethane (CFC 21)	Average RF	RSD = 13.8	Average RF = 0.8305								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7651	02	1.000	0.7221	03	2.000	0.6972	04	5.000	0.7400
05	20.000	0.7842	06	50.000	0.8781	07	100.000	0.9038	08	150.000	0.9662
Dichloromethane	Average RF	RSD = 6.5	Average RF = 0.4520								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5134	02	1.000	0.4512	03	2.000	0.4616	04	5.000	0.4205
05	20.000	0.4277	06	50.000	0.4280	07	100.000	0.4380	08	150.000	0.4505
09	200.000	0.4766									
Diethyl Ether	Average RF	RSD = 10.9	Average RF = 0.4025								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3062	02	1.000	0.3605	03	2.000	0.4257	04	5.000	0.4081
05	20.000	0.3986	06	50.000	0.4146	07	100.000	0.4266	08	150.000	0.4344
Diisopropyl Ether	Average RF	RSD = 6.9	Average RF = 2.538								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.207	02	1.000	2.329	03	2.000	2.492	04	5.000	2.481
05	20.000	2.620	06	50.000	2.668	07	100.000	2.684	08	150.000	2.714
09	200.000	2.644									
Ethyl Methacrylate	Average RF	RSD = 18.6	Average RF = 0.2898								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2180	02	1.000	0.2409	03	2.000	0.2617	04	5.000	0.2557
05	20.000	0.2695	06	50.000	0.2989	07	100.000	0.3412	08	150.000	0.3478
09	200.000	0.3744									
Ethyl tert-Butyl Ether	Average RF	RSD = 9.0	Average RF = 1.733								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.478	02	1.000	1.544	03	2.000	1.691	04	5.000	1.679
05	20.000	1.748	06	50.000	1.772	07	100.000	1.834	08	150.000	1.917
09	200.000	1.936									

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10								
		Signal ID:	1								
<b>Analyte</b>	<b>Curve Fit</b>		<b>Weighting</b>								
<b>Ethylbenzene</b>	<b>Average RF</b>		<b>RSD = 11.1</b>								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4604	02	1.000	0.4615	03	2.000	0.4914	04	5.000	0.4908
05	20.000	0.4683	06	50.000	0.5130	07	100.000	0.5596	08	150.000	0.5744
09	200.000	0.6217									
<b>Hexachlorobutadiene</b>	<b>Average RF</b>		<b>RSD = 6.7</b>	<b>Average RF = 0.3554</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3808	02	1.000	0.3585	03	2.000	0.3195	04	5.000	0.3531
05	20.000	0.3201	06	50.000	0.3532	07	100.000	0.3653	08	150.000	0.3589
09	200.000	0.3895									
<b>Iodomethane</b>	<b>Average RF</b>		<b>RSD = 11.7</b>	<b>Average RF = 0.5455</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6079	02	1.000	0.5012	03	2.000	0.5133	04	5.000	0.4590
05	20.000	0.4574	06	50.000	0.5740	07	100.000	0.5743	08	150.000	0.6049
09	200.000	0.6179									
<b>Isopropylbenzene (Cumene)</b>	<b>Average RF</b>		<b>RSD = 9.5</b>	<b>Average RF = 1.512</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.225	02	1.000	1.392	03	2.000	1.487	04	5.000	1.507
05	20.000	1.476	06	50.000	1.630	07	100.000	1.703	08	150.000	1.638
09	200.000	1.549									
<b>Methacrylonitrile</b>	<b>Average RF</b>		<b>RSD = 5.9</b>	<b>Average RF = 0.1379</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1315	02	1.000	0.1332	03	2.000	0.1397	04	5.000	0.1303
05	20.000	0.1289	06	50.000	0.1354	07	100.000	0.1437	08	150.000	0.1453
09	200.000	0.1533									
<b>Methyl Acetate</b>	<b>Average RF</b>		<b>RSD = 6.6</b>	<b>Average RF = 0.3642</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3622	02	1.000	0.3742	03	2.000	0.3543	04	5.000	0.3418
05	20.000	0.3255	06	50.000	0.3504	07	100.000	0.3794	08	150.000	0.3885
09	200.000	0.4013									
<b>Methyl Methacrylate</b>	<b>Average RF</b>		<b>RSD = 13.1</b>	<b>Average RF = 0.1455</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1243	02	1.000	0.1202	03	2.000	0.1414	04	5.000	0.1394
05	20.000	0.1333	06	50.000	0.1480	07	100.000	0.1611	08	150.000	0.1656
09	200.000	0.1765									
<b>Methyl tert-Butyl Ether</b>	<b>Average RF</b>		<b>RSD = 5.3</b>	<b>Average RF = 1.053</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9905	02	1.000	1.013	03	2.000	1.062	04	5.000	1.014
05	20.000	1.008	06	50.000	1.028	07	100.000	1.103	08	150.000	1.111
09	200.000	1.151									
<b>Methylcyclohexane</b>	<b>Average RF</b>		<b>RSD = 13.5</b>	<b>Average RF = 0.5121</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4480	02	1.000	0.4780	03	2.000	0.4804	04	5.000	0.4612
05	20.000	0.4414	06	50.000	0.5126	07	100.000	0.5577	08	150.000	0.5867
09	200.000	0.6425									

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10								
		Signal ID:	1								
Analyte	Curve Fit	Weighting									
Naphthalene	Average RF	RSD = 8.9	Average RF = 1.609								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.463	02	1.000	1.353	03	2.000	1.527	04	5.000	1.606
05	20.000	1.602	06	50.000	1.705	07	100.000	1.821	08	150.000	1.718
09	200.000	1.685									
Propionitrile	Average RF	RSD = 10.3	Average RF = 0.05838								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.05760	02	5.000	0.04606	03	10.000	0.05879	04	25.000	0.05669
05	100.000	0.05440	06	250.000	0.05845	07	500.000	0.06379	08	750.000	0.06348
09	1000.000	0.06613									
Styrene	Average RF	RSD = 13.2	Average RF = 1.042								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8100	02	1.000	0.9196	03	2.000	0.9641	04	5.000	0.9990
05	20.000	1.006	06	50.000	1.100	07	100.000	1.202	08	150.000	1.183
09	200.000	1.196									
Tetrachloroethylene (PCE)	Average RF	RSD = 7.9	Average RF = 0.3005								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2969	02	1.000	0.3072	03	2.000	0.2823	04	5.000	0.2972
05	20.000	0.2620	06	50.000	0.2866	07	100.000	0.3087	08	150.000	0.3183
09	200.000	0.3453									
Tetrahydrofuran (THF)	Average RF	RSD = 9.8	Average RF = 0.1454								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1413	02	1.000	0.1630	03	2.000	0.1502	04	5.000	0.1162
05	20.000	0.1341	06	50.000	0.1409	07	100.000	0.1534	08	150.000	0.1502
09	200.000	0.1591									
Toluene	Average RF	RSD = 5.2	Average RF = 1.353								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.286	02	1.000	1.283	03	2.000	1.414	04	5.000	1.330
05	20.000	1.258	06	50.000	1.325	07	100.000	1.415	08	150.000	1.424
09	200.000	1.444									
Toluene-d8	Average RF	RSD = 3.8	Average RF = 1.190								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.170	04	60.000	1.174	05	70.000	1.160	07	100.000	1.159
08	125.000	1.198	09	150.000	1.276						
Trichloroethene (TCE)	Average RF	RSD = 8.4	Average RF = 0.3463								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3038	02	1.000	0.3475	03	2.000	0.3294	04	5.000	0.3381
05	20.000	0.3224	06	50.000	0.3407	07	100.000	0.3615	08	150.000	0.3704
09	200.000	0.4025									
Trichlorofluoromethane (CFC 11)	Average RF	RSD = 4.7	Average RF = 0.6683								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5984	02	1.000	0.6930	03	2.000	0.6858	04	5.000	0.6681
05	20.000	0.6534	06	50.000	0.6746	07	100.000	0.6592	08	150.000	0.6719
09	200.000	0.7101									

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10								
		Signal ID:	1								
Analyte	Curve Fit	Weighting									
Vinyl Acetate	Average RF	RSD = 19.8	Average RF = 0.07465								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.04980	03	2.000	0.09640	04	5.000	0.07685	05	20.000	0.05842
06	50.000	0.07251	07	100.000	0.07834	08	150.000	0.07854	09	200.000	0.08633
Vinyl Chloride	Average RF	RSD = 7.4	Average RF = 0.6923								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6483	02	1.000	0.6271	03	2.000	0.6957	04	5.000	0.6599
05	20.000	0.6520	06	50.000	0.6962	07	100.000	0.7212	08	150.000	0.7441
cis-1,2-Dichloroethene	Average RF	RSD = 6.1	Average RF = 0.4970								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4682	02	1.000	0.4659	03	2.000	0.4948	04	5.000	0.4849
05	20.000	0.4701	06	50.000	0.4900	07	100.000	0.5207	08	150.000	0.5233
cis-1,3-Dichloropropene	Average RF	RSD = 15.1	Average RF = 0.4412								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3405	02	1.000	0.3852	03	2.000	0.4116	04	5.000	0.4105
05	20.000	0.4138	06	50.000	0.4547	07	100.000	0.4923	08	150.000	0.5118
m,p-Xylenes	Average RF	RSD = 9.1	Average RF = 0.6204								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5485	02	2.000	0.5372	03	4.000	0.6174	04	10.000	0.6117
05	40.000	0.5811	06	100.000	0.6429	07	200.000	0.6904	08	300.000	0.6761
n-Butyl Acetate	Average RF	RSD = 19.9	Average RF = 0.5418								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4033	03	2.000	0.4982	04	5.000	0.4564	05	20.000	0.5005
06	50.000	0.5740	07	100.000	0.6698	08	150.000	0.6901			
n-Butylbenzene	Average RF	RSD = 7.4	Average RF = 2.058								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.796	02	1.000	1.925	03	2.000	2.008	04	5.000	2.073
05	20.000	1.998	06	50.000	2.216	07	100.000	2.301	08	150.000	2.144
n-Heptane	Average RF	RSD = 9.0	Average RF = 0.5448								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5576	02	1.000	0.5149	03	2.000	0.4784	04	5.000	0.5105
05	20.000	0.5012	06	50.000	0.5446	07	100.000	0.5819	08	150.000	0.5809
n-Propylbenzene	Average RF	RSD = 7.3	Average RF = 2.971								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.623	02	1.000	3.063	03	2.000	3.093	04	5.000	3.074
05	20.000	2.964	06	50.000	3.199	07	100.000	3.200	08	150.000	2.883
09	200.000	2.637									

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10								
		Signal ID:	1								
<b>Analyte</b>	<b>Curve Fit</b>		<b>Weighting</b>								
<b>o-Xylene</b>	<b>Average RF</b>		<b>RSD = 10.7</b>								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5319	02	1.000	0.5594	03	2.000	0.5842	04	5.000	0.5883
05	20.000	0.5701	06	50.000	0.6230	07	100.000	0.6669	08	150.000	0.6822
09	200.000	0.7333									
<b>sec-Butylbenzene</b>	<b>Average RF</b>		<b>RSD = 7.9</b>	<b>Average RF = 2.615</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.199	02	1.000	2.531	03	2.000	2.678	04	5.000	2.692
05	20.000	2.592	06	50.000	2.832	07	100.000	2.897	08	150.000	2.654
09	200.000	2.462									
<b>tert-Amyl Methyl Ether</b>	<b>Average RF</b>		<b>RSD = 13.8</b>	<b>Average RF = 0.7222</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5607	02	1.000	0.6193	03	2.000	0.6791	04	5.000	0.6796
05	20.000	0.7127	06	50.000	0.7560	07	100.000	0.7905	08	150.000	0.8375
09	200.000	0.8648									
<b>tert-Butylbenzene</b>	<b>Average RF</b>		<b>RSD = 7.2</b>	<b>Average RF = 1.926</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.661	02	1.000	1.844	03	2.000	1.861	04	5.000	1.965
05	20.000	1.828	06	50.000	2.017	07	100.000	2.105	08	150.000	2.041
09	200.000	2.013									
<b>trans-1,2-Dichloroethene</b>	<b>Average RF</b>		<b>RSD = 5.3</b>	<b>Average RF = 0.4146</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4177	02	1.000	0.3856	03	2.000	0.4072	04	5.000	0.4098
05	20.000	0.3890	06	50.000	0.4067	07	100.000	0.4280	08	150.000	0.4316
09	200.000	0.4561									
<b>trans-1,3-Dichloropropene</b>	<b>Average RF</b>		<b>RSD = 17.3</b>	<b>Average RF = 0.3677</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2723	02	1.000	0.3393	03	2.000	0.3155	04	5.000	0.3334
05	20.000	0.3431	06	50.000	0.3784	07	100.000	0.4230	08	150.000	0.4367
09	200.000	0.4677									
<b>trans-1,4-Dichloro-2-butene</b>	<b>Average RF</b>		<b>RSD = 13.1</b>	<b>Average RF = 0.1091</b>							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1112	02	1.000	0.1025	03	2.000	0.09048	04	5.000	0.09872
05	20.000	0.09553	06	50.000	0.1058	07	100.000	0.1219	08	150.000	0.1220
09	200.000	0.1337									

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10
		Signal ID:	1

**Analyte**
**1,1,1,2-Tetrachloroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.39	-21.5	02	1.000	0.89	-11.4	03	2.000	1.83	-8.3
04	5.000	4.43	-11.4	05	20.000	17.95	-10.2	06	50.000	50.85	1.7
07	100.000	114.02	14.0	08	150.000	176.55	17.7	09	200.000	259.00	29.5

**1,1,1-Trichloroethane (TCA)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-7.8	02	1.000	0.93	-6.6	03	2.000	1.90	-5.2
04	5.000	4.72	-5.7	05	20.000	18.39	-8.0	06	50.000	49.63	-0.7
07	100.000	106.91	6.9	08	150.000	164.34	9.6	09	200.000	235.02	17.5

**1,1,2,2-Tetrachloroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.40	-20.0	02	1.000	0.91	-8.9	03	2.000	1.95	-2.4
04	5.000	4.99	-0.2	05	20.000	20.11	0.6	06	50.000	50.97	1.9
07	100.000	107.44	7.4	08	150.000	160.72	7.1	09	200.000	228.89	14.4

**1,1,2-Trichloroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-10.1	02	1.000	0.94	-5.9	03	2.000	1.95	-2.6
04	5.000	5.11	2.3	05	20.000	19.15	-4.2	06	50.000	48.67	-2.7
07	100.000	103.80	3.8	08	150.000	159.47	6.3	09	200.000	226.24	13.1

**1,1,2-Trichlorotrifluoroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-7.4	02	1.000	0.96	-4.2	03	2.000	2.08	4.1
04	5.000	4.88	-2.4	05	20.000	18.81	-6.0	06	50.000	48.55	-2.9
07	100.000	101.62	1.6	08	150.000	157.72	5.1	09	200.000	223.97	12.0

**1,1-Dichloroethane (1,1-DCA)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-3.9	02	1.000	1.01	0.8	03	2.000	1.98	-0.8
04	5.000	4.81	-3.8	05	20.000	18.86	-5.7	06	50.000	49.99	0.0
07	100.000	104.89	4.9	08	150.000	150.96	0.6	09	200.000	215.79	7.9

**1,1-Dichloroethene (1,1-DCE)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.5	02	1.000	0.87	-13.3	03	2.000	1.99	-0.5
04	5.000	4.94	-1.1	05	20.000	19.04	-4.8	06	50.000	48.77	-2.5
07	100.000	102.98	3.0	08	150.000	161.92	7.9	09	200.000	231.62	15.8

**1,1-Dichloropropene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-9.3	02	1.000	0.97	-3.4	03	2.000	1.94	-3.2
04	5.000	4.95	-1.1	05	20.000	18.10	-9.5	06	50.000	49.04	-1.9
07	100.000	104.50	4.5	08	150.000	161.61	7.7	09	200.000	232.13	16.1

# Initial Calibration - Detailed Report

**Calibration ID:** RC1500051

**Instrument ID:**

R-MS-10

**Signal ID:**

1

## Analyte

### 1,2,3-Trichlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-12.5	02	1.000	0.89	-10.6	03	2.000	2.07	3.6
04	5.000	5.01	0.3	05	20.000	18.91	-5.5	06	50.000	51.75	3.5
07	100.000	109.44	9.4	08	150.000	155.41	3.6	09	200.000	216.39	8.2

### 1,2,3-Trichloropropane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	7.0	02	1.000	0.98	-2.5	03	2.000	2.05	2.7
04	5.000	5.16	3.3	05	20.000	19.07	-4.7	06	50.000	46.70	-6.6
07	100.000	98.09	-1.9	08	150.000	147.73	-1.5	09	200.000	208.49	4.2

### 1,2,4-Trichlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-10.7	02	1.000	1.02	1.7	03	2.000	1.90	-5.2
04	5.000	4.84	-3.2	05	20.000	19.08	-4.6	06	50.000	51.52	3.0
07	100.000	107.61	7.6	08	150.000	155.35	3.6	09	200.000	215.60	7.8

### 1,2,4-Trimethylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.42	-15.7	02	1.000	0.96	-4.3	03	2.000	1.96	-1.9
04	5.000	5.18	3.6	05	20.000	19.94	-0.3	06	50.000	53.35	6.7
07	100.000	109.59	9.6	08	150.000	155.51	3.7	09	200.000	197.36	-1.3

### 1,2-Dibromo-3-chloropropane (DBCP)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-12.3	02	1.000	1.08	8.2	03	2.000	1.95	-2.6
04	5.000	4.52	-9.6	05	20.000	18.45	-7.7	06	50.000	47.47	-5.1
07	100.000	107.79	7.8	08	150.000	160.23	6.8	09	200.000	228.86	14.4

### 1,2-Dibromoethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-11.8	02	1.000	0.88	-11.7	03	2.000	1.94	-3.0
04	5.000	4.75	-5.0	05	20.000	19.37	-3.1	06	50.000	49.62	-0.8
07	100.000	109.51	9.5	08	150.000	163.12	8.7	09	200.000	234.42	17.2

### 1,2-Dichloro-1,1,2-trifluoroethane (CFC)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.42	-15.0	02	1.000	1.02	2.1	03	2.000	1.89	-5.5
04	5.000	4.98	-0.4	05	20.000	18.41	-8.0	06	50.000	51.55	3.1
07	100.000	105.77	5.8	08	150.000	167.99	12.0	09	200.000	211.73	5.9

### 1,2-Dichlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-6.8	02	1.000	0.95	-4.7	03	2.000	2.03	1.7
04	5.000	4.99	-0.1	05	20.000	19.40	-3.0	06	50.000	50.22	0.4
07	100.000	105.52	5.5	08	150.000	153.84	2.6	09	200.000	208.75	4.4

# Initial Calibration - Detailed Report

Calibration ID: RC1500051

Instrument ID: R-MS-10

Signal ID: 1

## Analyte

### 1,2-Dichloroethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-9.1	02	1.000	0.94	-6.4	03	2.000	2.02	1.0
04	5.000	5.02	0.4	05	20.000	18.81	-6.0	06	50.000	49.94	-0.1
07	100.000	104.51	4.5	08	150.000	156.90	4.6	09	200.000	222.10	11.0

### 1,2-Dichloroethane-d4

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	48.36	-3.3	04	60.000	59.98	0.0	05	70.000	68.23	-2.5
07	100.000	98.16	-1.8	08	125.000	125.73	0.6	09	150.000	160.66	7.1

### 1,2-Dichloropropane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-5.7	02	1.000	0.99	-0.8	03	2.000	1.98	-1.1
04	5.000	4.73	-5.5	05	20.000	18.49	-7.5	06	50.000	48.30	-3.4
07	100.000	103.27	3.3	08	150.000	158.76	5.8	09	200.000	229.74	14.9

### 1,3,5-Trichlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-2.8	02	1.000	0.95	-5.4	03	2.000	1.92	-4.1
04	5.000	4.92	-1.5	05	20.000	18.40	-8.0	06	50.000	52.07	4.1
07	100.000	102.89	2.9	08	150.000	154.10	2.7	09	200.000	224.22	12.1

### 1,3,5-Trimethylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.42	-16.2	02	1.000	0.92	-7.9	03	2.000	1.99	-0.3
04	5.000	5.10	2.0	05	20.000	19.64	-1.8	06	50.000	53.74	7.5
07	100.000	111.48	11.5	08	150.000	157.81	5.2	09	200.000	200.31	0.2

### 1,3-Dichlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	3.1	02	1.000	0.94	-6.3	03	2.000	1.88	-6.2
04	5.000	5.02	0.4	05	20.000	19.06	-4.7	06	50.000	50.42	0.8
07	100.000	104.80	4.8	08	150.000	153.81	2.5	09	200.000	211.14	5.6

### 1,3-Dichloropropane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.6	02	1.000	0.93	-7.2	03	2.000	2.03	1.4
04	5.000	4.65	-7.0	05	20.000	18.66	-6.7	06	50.000	48.91	-2.2
07	100.000	106.71	6.7	08	150.000	160.23	6.8	09	200.000	225.34	12.7

### 1,4-Dichlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	1.7	02	1.000	0.94	-6.4	03	2.000	2.11	5.3
04	5.000	4.98	-0.4	05	20.000	18.88	-5.6	06	50.000	49.18	-1.6
07	100.000	103.64	3.6	08	150.000	151.83	1.2	09	200.000	204.36	2.2

# Initial Calibration - Detailed Report

Calibration ID: RC1500051

Instrument ID: R-MS-10

Signal ID: 1

## Analyte

### 1,4-Dioxane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	20.000	17.79	-11.0	03	40.000	40.96	2.4	04	100.000	93.13	-6.9
05	400.000	368.09	-8.0	06	1000.000	909.86	-9.0	07	2000.000	2,224.54	11.2
08	3000.000	3,255.39	8.5	09	4000.000	4,509.62	12.7				

### 1-Butanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	50.000	49.13	-1.7	03	100.000	107.14	7.1	04	250.000	229.57	-8.2
05	1000.000	939.84	-6.0	06	2500.000	2,548.95	2.0	07	5000.000	5,352.80	7.1
08	7500.000	7,610.84	1.5	09	10000.000	9,656.73	-3.4				

### 1-Chloro-4-(trifluoromethyl)benzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.40	-20.0	02	1.000	0.88	-12.2	03	2.000	2.03	1.5
04	5.000	4.69	-6.2	05	20.000	17.80	-11.0	06	50.000	51.10	2.2
07	100.000	106.66	6.7	08	150.000	166.78	11.2	09	200.000	255.79	27.9

### 2,2-Dichloro-1,1,1-trifluoroethane (CFC)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-12.9	02	1.000	0.91	-9.4	03	2.000	1.96	-1.9
04	5.000	4.92	-1.5	05	20.000	18.28	-8.6	06	50.000	49.74	-0.5
07	100.000	103.12	3.1	08	150.000	167.41	11.6	09	200.000	240.08	20.0

### 2,2-Dichloropropane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.42	-16.3	02	1.000	0.99	-1.0	03	2.000	1.98	-0.9
04	5.000	4.89	-2.1	05	20.000	18.31	-8.4	06	50.000	49.44	-1.1
07	100.000	106.38	6.4	08	150.000	163.07	8.7	09	200.000	229.50	14.8

### 2,3,6-Trichlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-14.3	02	1.000	0.85	-15.0	03	2.000	2.02	0.9
04	5.000	4.64	-7.1	05	20.000	18.46	-7.7	06	50.000	52.79	5.6
07	100.000	109.75	9.7	08	150.000	163.97	9.3	09	200.000	237.19	18.6

### 2,4,5-Trichlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.37	-25.5	02	1.000	0.92	-7.9	03	2.000	1.82	-9.0
04	5.000	4.61	-7.7	05	20.000	18.36	-8.2	06	50.000	55.41	10.8
07	100.000	113.04	13.0	08	150.000	168.59	12.4	09	200.000	244.14	22.1

### 2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	1.500	1.27	-15.4	02	3.000	2.78	-7.4	03	6.000	5.87	-2.1
04	15.000	15.17	1.2	05	60.000	58.85	-1.9	06	150.000	167.00	11.3
07	300.000	327.67	9.2	08	450.000	467.80	4.0	09	600.000	607.54	1.3

# Initial Calibration - Detailed Report

Calibration ID: RC1500051

Instrument ID:

R-MS-10

Signal ID:

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**Analyte****2,4-Dichlorobenzotrifluoride**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-9.8	02	1.000	1.04	3.6	03	2.000	1.88	-6.2
04	5.000	4.77	-4.6	05	20.000	17.38	-13.1	06	50.000	51.04	2.1
07	100.000	101.90	1.9	08	150.000	156.96	4.6	09	200.000	242.71	21.4

**2,5-Dichlorobenzotrifluoride**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-2.6	02	1.000	0.99	-1.0	03	2.000	1.97	-1.3
04	5.000	4.62	-7.5	05	20.000	17.64	-11.8	06	50.000	50.73	1.5
07	100.000	102.79	2.8	08	150.000	157.11	4.7	09	200.000	230.43	15.2

**2-Butanone (MEK)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.61	21.2	02	1.000	0.82	-17.7	03	2.000	2.08	3.8
04	5.000	4.82	-3.5	05	20.000	17.78	-11.1	06	50.000	48.28	-3.4
07	100.000	99.68	-0.3	08	150.000	152.84	1.9	09	200.000	218.50	9.2

**2-Chloro-1,3-butadiene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-2.9	02	1.000	0.90	-10.0	03	2.000	1.97	-1.4
04	5.000	5.04	0.7	05	20.000	15.64	-21.8	06	50.000	51.70	3.4
07	100.000	103.90	3.9	08	150.000	165.20	10.1	09	200.000	235.71	17.9

**2-Chlorobenzotrifluoride**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.41	-18.0	02	1.000	0.88	-12.4	03	2.000	1.86	-7.2
04	5.000	4.74	-5.2	05	20.000	17.72	-11.4	06	50.000	52.51	5.0
07	100.000	106.77	6.8	08	150.000	169.83	13.2	09	200.000	258.43	29.2

**2-Chloroethyl Vinyl Ether**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-6.5	02	1.000	0.92	-8.2	03	2.000	1.83	-8.5
04	5.000	4.76	-4.8	05	20.000	16.39	-18.0	06	50.000	50.80	1.6
07	100.000	106.95	6.9	08	150.000	171.83	14.6	09	200.000	245.98	23.0

**2-Chlorotoluene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-14.2	02	1.000	0.95	-5.2	03	2.000	2.05	2.6
04	5.000	5.07	1.5	05	20.000	19.39	-3.0	06	50.000	51.12	2.2
07	100.000	106.31	6.3	08	150.000	157.78	5.2	09	200.000	209.29	4.6

**2-Hexanone**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.4	02	1.000	0.82	-18.0	03	2.000	1.94	-3.1
04	5.000	4.43	-11.4	05	20.000	17.22	-13.9	06	50.000	50.41	0.8
07	100.000	111.97	12.0	08	150.000	172.45	15.0	09	200.000	246.08	23.0

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## Analyte

### 2-Methyl-1-propanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	40.000	34.67	-13.3	04	100.000	83.98	-16.0	05	400.000	336.95	-15.8
06	1000.000	913.91	-8.6	07	2000.000	2,254.99	12.7	08	3000.000	3,497.51	16.6
09	4000.000	4,975.35	24.4								

### 2-Methyl-2-propanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	10.000	8.33	-16.7	02	20.000	17.16	-14.2	03	40.000	41.78	4.4
04	100.000	95.50	-4.5	05	400.000	374.79	-6.3	06	1000.000	963.51	-3.6
07	2000.000	2,242.95	12.1	08	3000.000	3,384.21	12.8	09	4000.000	4,637.19	15.9

### 2-Nitropropane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	4.000	3.44	-13.9	04	10.000	9.09	-9.1	05	40.000	35.14	-12.1
06	100.000	95.12	-4.9	07	200.000	231.01	15.5	08	300.000	373.52	24.5

### 2-Propanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	10.000	8.95	-10.5	02	20.000	18.46	-7.7	03	40.000	33.45	-16.4
04	100.000	89.12	-10.9	05	400.000	361.34	-9.7	06	1000.000	1,033.51	3.4
07	2000.000	2,316.76	15.8	08	3000.000	3,512.46	17.1	09	4000.000	4,753.05	18.8

### 3,4- and 2,3-Dichlorotoluene Coelution

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	1.000	0.91	-9.1	02	2.000	1.89	-5.6	03	4.000	3.92	-2.0
04	10.000	10.21	2.1	05	40.000	39.53	-1.2	06	100.000	111.77	11.8
07	200.000	216.51	8.3	08	300.000	300.30	0.1	09	400.000	382.64	-4.3

### 3,4-Dichlorobenzotrifluoride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-11.7	02	1.000	0.98	-2.2	03	2.000	1.84	-8.0
04	5.000	4.73	-5.3	05	20.000	18.00	-10.0	06	50.000	52.30	4.6
07	100.000	105.40	5.4	08	150.000	160.65	7.1	09	200.000	240.21	20.1

### 3-Chloro-1-propene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-3.1	02	1.000	1.00	-0.3	03	2.000	1.84	-8.2
04	5.000	4.87	-2.6	05	20.000	18.22	-8.9	06	50.000	50.81	1.6
07	100.000	107.22	7.2	08	150.000	155.82	3.9	09	200.000	220.90	10.4

### 3-Chlorobenzotrifluoride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.41	-17.0	02	1.000	0.98	-2.1	03	2.000	2.00	-0.1
04	5.000	4.66	-6.7	05	20.000	17.69	-11.5	06	50.000	50.20	0.4
07	100.000	104.21	4.2	08	150.000	163.32	8.9	09	200.000	247.98	24.0

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## Analyte

### 3-Chlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-6.3	02	1.000	0.96	-3.9	03	2.000	1.98	-1.1
04	5.000	5.13	2.6	05	20.000	18.91	-5.5	06	50.000	52.89	5.8
07	100.000	103.37	3.4	08	150.000	152.46	1.6	09	200.000	206.78	3.4

### 4-Bromofluorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	49.63	-0.7	04	60.000	59.08	-1.5	05	70.000	66.95	-4.4
07	100.000	96.96	-3.0	08	125.000	125.61	0.5	09	150.000	163.76	9.2

### 4-Chlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.5	02	1.000	0.89	-10.8	03	2.000	2.07	3.5
04	5.000	5.02	0.4	05	20.000	19.36	-3.2	06	50.000	52.28	4.6
07	100.000	107.80	7.8	08	150.000	155.08	3.4	09	200.000	197.80	-1.1

### 4-Isopropyltoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-12.1	02	1.000	0.92	-8.0	03	2.000	1.99	-0.6
04	5.000	5.10	1.9	05	20.000	19.70	-1.5	06	50.000	54.02	8.0
07	100.000	112.01	12.0	08	150.000	155.94	4.0	09	200.000	192.55	-3.7

### 4-Methyl-2-pentanone

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-14.1	02	1.000	0.89	-10.8	03	2.000	1.89	-5.5
04	5.000	4.86	-2.8	05	20.000	17.25	-13.8	06	50.000	50.86	1.7
07	100.000	108.67	8.7	08	150.000	171.32	14.2	09	200.000	244.78	22.4

### Acetone

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
04	5.000	6.06	21.1	05	20.000	15.40	-23.0	06	50.000	47.65	-4.7
07	100.000	104.02	4.0	08	150.000	159.54	6.4	09	200.000	192.15	-3.9

### Acetonitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	5.000	4.25	-14.9	03	10.000	10.69	6.9	04	25.000	20.62	-17.5
05	100.000	96.29	-3.7	06	250.000	245.95	-1.6	07	500.000	521.35	4.3
08	750.000	805.12	7.3	09	1000.000	1,192.27	19.2				

### Acrolein

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	2.500	2.02	-19.2	02	5.000	5.21	4.2	03	10.000	9.41	-5.9
04	25.000	24.27	-2.9	05	100.000	89.12	-10.9	06	250.000	253.24	1.3
07	500.000	526.85	5.4	08	750.000	838.29	11.8	09	1000.000	1,163.10	16.3

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**Analyte****Acrylonitrile**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	2.500	2.25	-10.2	02	5.000	4.30	-13.9	03	10.000	9.95	-0.5
04	25.000	23.59	-5.6	05	100.000	101.62	1.6	06	250.000	251.63	0.7
07	500.000	541.42	8.3	08	750.000	804.37	7.2	09	1000.000	1,124.66	12.5

**Benzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.5	02	1.000	0.88	-12.1	03	2.000	2.04	2.0
04	5.000	4.84	-3.1	05	20.000	18.42	-7.9	06	50.000	48.56	-2.9
07	100.000	103.71	3.7	08	150.000	158.88	5.9	09	200.000	223.79	11.9

**Bromobenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	0.9	02	1.000	0.96	-4.2	03	2.000	2.01	0.5
04	5.000	4.95	-0.9	05	20.000	18.88	-5.6	06	50.000	48.29	-3.4
07	100.000	100.86	0.9	08	150.000	153.06	2.0	09	200.000	219.88	9.9

**Bromochloromethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-5.1	02	1.000	1.08	8.1	03	2.000	1.98	-1.1
04	5.000	4.82	-3.6	05	20.000	18.94	-5.3	06	50.000	50.11	0.2
07	100.000	101.85	1.8	08	150.000	151.90	1.3	09	200.000	207.43	3.7

**Bromodichloromethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-9.0	02	1.000	0.92	-7.7	03	2.000	1.92	-3.8
04	5.000	4.65	-7.0	05	20.000	18.30	-8.5	06	50.000	49.52	-1.0
07	100.000	107.18	7.2	08	150.000	166.20	10.8	09	200.000	238.08	19.0

**Bromoform**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.76	-24.0	03	2.000	1.83	-8.7	04	5.000	4.37	-12.7
05	20.000	18.41	-8.0	06	50.000	53.07	6.1	07	100.000	121.88	21.9
08	150.000	187.92	25.3								

**Bromomethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.56	11.3	02	1.000	0.97	-3.4	03	2.000	2.03	1.7
04	5.000	4.61	-7.8	05	20.000	18.00	-10.0	06	50.000	47.36	-5.3
07	100.000	99.55	-0.5	08	150.000	157.16	4.8	09	200.000	218.29	9.1

**Carbon Disulfide**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	0.6	02	1.000	1.03	3.2	03	2.000	2.04	1.8
04	5.000	4.95	-1.1	05	20.000	15.36	-23.2	06	50.000	49.28	-1.4
07	100.000	98.59	-1.4	08	150.000	161.97	8.0	09	200.000	226.94	13.5

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## Analyte

### Carbon Tetrachloride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-1.4	02	1.000	0.91	-9.2	03	2.000	1.71	-14.6
04	5.000	4.54	-9.2	05	20.000	17.19	-14.0	06	50.000	49.78	-0.4
07	100.000	108.95	8.9	08	150.000	170.72	13.8	09	200.000	252.43	26.2

### Chlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.7	02	1.000	0.92	-8.0	03	2.000	1.94	-3.1
04	5.000	4.93	-1.4	05	20.000	18.80	-6.0	06	50.000	50.07	0.1
07	100.000	107.34	7.3	08	150.000	159.46	6.3	09	200.000	218.91	9.5

### Chloroethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.1	02	1.000	1.06	6.0	03	2.000	1.89	-5.4
04	5.000	4.62	-7.6	05	20.000	18.46	-7.7	06	50.000	48.27	-3.5
07	100.000	100.95	0.9	08	150.000	158.05	5.4	09	200.000	219.52	9.8

### Chloroform

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-3.2	02	1.000	0.94	-6.2	03	2.000	1.96	-2.1
04	5.000	4.93	-1.3	05	20.000	18.89	-5.6	06	50.000	49.47	-1.1
07	100.000	103.35	3.3	08	150.000	157.62	5.1	09	200.000	222.18	11.1

### Chloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-7.8	02	1.000	0.93	-6.6	03	2.000	1.88	-6.1
04	5.000	4.44	-11.2	05	20.000	19.23	-3.8	06	50.000	50.53	1.1
07	100.000	106.33	6.3	08	150.000	165.67	10.4	09	200.000	235.48	17.7

### Cyclohexane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-8.1	02	1.000	0.96	-4.4	03	2.000	1.91	-4.5
04	5.000	4.55	-8.9	05	20.000	17.16	-14.2	06	50.000	50.03	0.1
07	100.000	106.01	6.0	08	150.000	168.25	12.2	09	200.000	243.75	21.9

### Cyclohexanone

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	10.000	8.07	-19.3	02	20.000	16.59	-17.0	03	40.000	39.97	-0.1
04	100.000	94.81	-5.2	05	400.000	349.72	-12.6	06	1000.000	944.38	-5.6
07	2000.000	2,338.68	16.9	08	3000.000	3,565.31	18.8	09	4000.000	4,959.13	24.0

### Dibromochloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.38	-24.1	02	1.000	0.86	-13.6	03	2.000	1.80	-9.8
04	5.000	4.57	-8.6	05	20.000	18.59	-7.1	06	50.000	51.57	3.1
07	100.000	114.92	14.9	08	150.000	177.17	18.1	09	200.000	253.96	27.0

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## Analyte

### Dibromofluoromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	48.44	-3.1	04	60.000	58.93	-1.8	05	70.000	68.06	-2.8
07	100.000	98.07	-1.9	08	125.000	125.86	0.7	09	150.000	163.35	8.9

### Dibromomethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-11.2	02	1.000	1.03	2.5	03	2.000	1.99	-0.7
04	5.000	5.17	3.4	05	20.000	18.77	-6.2	06	50.000	47.94	-4.1
07	100.000	101.52	1.5	08	150.000	154.95	3.3	09	200.000	222.86	11.4

### Dichlorodifluoromethane (CFC 12)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.38	-23.6	02	1.000	0.93	-6.7	03	2.000	1.60	-20.2
04	5.000	4.36	-12.7	05	20.000	21.47	7.3	06	50.000	54.39	8.8
07	100.000	112.44	12.4	08	150.000	170.48	13.7	09	200.000	241.92	21.0

### Dichlorofluoromethane (CFC 21)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-7.9	02	1.000	0.87	-13.1	03	2.000	1.68	-16.1
04	5.000	4.46	-10.9	05	20.000	18.89	-5.6	06	50.000	52.86	5.7
07	100.000	108.82	8.8	08	150.000	174.50	16.3	09	200.000	245.17	22.6

### Dichloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	13.6	02	1.000	1.00	-0.2	03	2.000	2.04	2.1
04	5.000	4.65	-7.0	05	20.000	18.93	-5.4	06	50.000	47.35	-5.3
07	100.000	96.92	-3.1	08	150.000	149.53	-0.3	09	200.000	210.92	5.5

### Diethyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.38	-23.9	02	1.000	0.90	-10.4	03	2.000	2.12	5.8
04	5.000	5.07	1.4	05	20.000	19.80	-1.0	06	50.000	51.50	3.0
07	100.000	105.98	6.0	08	150.000	161.86	7.9	09	200.000	222.66	11.3

### Diisopropyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-13.0	02	1.000	0.92	-8.2	03	2.000	1.96	-1.8
04	5.000	4.89	-2.2	05	20.000	20.65	3.2	06	50.000	52.56	5.1
07	100.000	105.79	5.8	08	150.000	160.40	6.9	09	200.000	208.40	4.2

### Ethyl Methacrylate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.38	-24.8	02	1.000	0.83	-16.9	03	2.000	1.81	-9.7
04	5.000	4.41	-11.8	05	20.000	18.60	-7.0	06	50.000	51.57	3.1
07	100.000	117.76	17.8	08	150.000	180.01	20.0	09	200.000	258.38	29.2

# Initial Calibration - Detailed Report

Calibration ID: RC1500051

Instrument ID:

R-MS-10

Signal ID:

1

## Analyte

### Ethyl tert-Butyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-14.7	02	1.000	0.89	-10.9	03	2.000	1.95	-2.4
04	5.000	4.84	-3.1	05	20.000	20.17	0.8	06	50.000	51.13	2.3
07	100.000	105.81	5.8	08	150.000	165.93	10.6	09	200.000	223.39	11.7

### Ethylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-10.7	02	1.000	0.89	-10.5	03	2.000	1.91	-4.7
04	5.000	4.76	-4.8	05	20.000	18.16	-9.2	06	50.000	49.74	-0.5
07	100.000	108.52	8.5	08	150.000	167.08	11.4	09	200.000	241.13	20.6

### Hexachlorobutadiene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	7.1	02	1.000	1.01	0.9	03	2.000	1.80	-10.1
04	5.000	4.97	-0.6	05	20.000	18.01	-9.9	06	50.000	49.68	-0.6
07	100.000	102.77	2.8	08	150.000	151.48	1.0	09	200.000	219.17	9.6

### Iodomethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.56	11.4	02	1.000	0.92	-8.1	03	2.000	1.88	-5.9
04	5.000	4.21	-15.9	05	20.000	16.77	-16.2	06	50.000	52.61	5.2
07	100.000	105.27	5.3	08	150.000	166.32	10.9	09	200.000	226.52	13.3

### Isopropylbenzene (Cumene)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.41	-19.0	02	1.000	0.92	-7.9	03	2.000	1.97	-1.7
04	5.000	4.98	-0.3	05	20.000	19.53	-2.4	06	50.000	53.92	7.8
07	100.000	112.66	12.7	08	150.000	162.48	8.3	09	200.000	204.87	2.4

### Methacrylonitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.7	02	1.000	0.97	-3.4	03	2.000	2.03	1.3
04	5.000	4.72	-5.5	05	20.000	18.69	-6.5	06	50.000	49.08	-1.8
07	100.000	104.17	4.2	08	150.000	157.98	5.3	09	200.000	222.33	11.2

### Methyl Acetate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.03	2.8	03	2.000	1.95	-2.7
04	5.000	4.69	-6.2	05	20.000	17.88	-10.6	06	50.000	48.11	-3.8
07	100.000	104.18	4.2	08	150.000	160.01	6.7	09	200.000	220.37	10.2

### Methyl Methacrylate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-14.6	02	1.000	0.83	-17.4	03	2.000	1.94	-2.8
04	5.000	4.79	-4.2	05	20.000	18.32	-8.4	06	50.000	50.84	1.7
07	100.000	110.69	10.7	08	150.000	170.66	13.8	09	200.000	242.58	21.3

# Initial Calibration - Detailed Report

Calibration ID:	RC1500051	Instrument ID:	R-MS-10
		Signal ID:	1

**Analyte**
**Methyl tert-Butyl Ether**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-6.0	02	1.000	0.96	-3.9	03	2.000	2.02	0.8
04	5.000	4.82	-3.7	05	20.000	19.14	-4.3	06	50.000	48.78	-2.4
07	100.000	104.69	4.7	08	150.000	158.16	5.4	09	200.000	218.58	9.3

**Methylcyclohexane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-12.5	02	1.000	0.93	-6.6	03	2.000	1.88	-6.2
04	5.000	4.50	-9.9	05	20.000	17.24	-13.8	06	50.000	50.05	0.1
07	100.000	108.92	8.9	08	150.000	171.86	14.6	09	200.000	250.94	25.5

**Naphthalene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-9.1	02	1.000	0.84	-15.9	03	2.000	1.90	-5.1
04	5.000	4.99	-0.2	05	20.000	19.91	-0.4	06	50.000	52.99	6.0
07	100.000	113.19	13.2	08	150.000	160.15	6.8	09	200.000	209.50	4.8

**Propionitrile**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	2.500	2.47	-1.3	02	5.000	3.95	-21.1	03	10.000	10.07	0.7
04	25.000	24.28	-2.9	05	100.000	93.19	-6.8	06	250.000	250.34	0.1
07	500.000	546.39	9.3	08	750.000	815.53	8.7	09	1000.000	1,132.84	13.3

**Styrene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.39	-22.3	02	1.000	0.88	-11.8	03	2.000	1.85	-7.5
04	5.000	4.79	-4.2	05	20.000	19.31	-3.4	06	50.000	52.79	5.6
07	100.000	115.29	15.3	08	150.000	170.21	13.5	09	200.000	229.59	14.8

**Tetrachloroethene (PCE)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-1.2	02	1.000	1.02	2.2	03	2.000	1.88	-6.1
04	5.000	4.95	-1.1	05	20.000	17.44	-12.8	06	50.000	47.69	-4.6
07	100.000	102.72	2.7	08	150.000	158.90	5.9	09	200.000	229.78	14.9

**Tetrahydrofuran (THF)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-2.8	02	1.000	1.12	12.1	03	2.000	2.07	3.3
04	5.000	4.00	-20.1	05	20.000	18.45	-7.7	06	50.000	48.45	-3.1
07	100.000	105.52	5.5	08	150.000	155.00	3.3	09	200.000	218.83	9.4

**Toluene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.95	-5.2	03	2.000	2.09	4.5
04	5.000	4.91	-1.7	05	20.000	18.59	-7.0	06	50.000	48.97	-2.1
07	100.000	104.54	4.5	08	150.000	157.81	5.2	09	200.000	213.38	6.7

# Initial Calibration - Detailed Report

Calibration ID: RC1500051

Instrument ID: R-MS-10

Signal ID: 1

## Analyte

### Toluene-d8

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	49.16	-1.7	04	60.000	59.23	-1.3	05	70.000	68.28	-2.5
07	100.000	97.40	-2.6	08	125.000	125.90	0.7	09	150.000	160.96	7.3

### Trichloroethene (TCE)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-12.3	02	1.000	1.00	0.3	03	2.000	1.90	-4.9
04	5.000	4.88	-2.3	05	20.000	18.62	-6.9	06	50.000	49.20	-1.6
07	100.000	104.40	4.4	08	150.000	160.44	7.0	09	200.000	232.50	16.3

### Trichlorofluoromethane (CFC 11)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-10.4	02	1.000	1.04	3.7	03	2.000	2.05	2.6
04	5.000	5.00	0.0	05	20.000	19.56	-2.2	06	50.000	50.47	0.9
07	100.000	98.64	-1.4	08	150.000	150.81	0.5	09	200.000	212.53	6.3

### Vinyl Acetate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.67	-33.3	03	2.000	2.58	29.1	04	5.000	5.15	3.0
05	20.000	15.65	-21.7	06	50.000	48.57	-2.9	07	100.000	104.94	4.9
08	150.000	157.82	5.2	09	200.000	231.30	15.7				

### Vinyl Chloride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-6.4	02	1.000	0.91	-9.4	03	2.000	2.01	0.5
04	5.000	4.77	-4.7	05	20.000	18.84	-5.8	06	50.000	50.28	0.6
07	100.000	104.17	4.2	08	150.000	161.22	7.5	09	200.000	227.16	13.6

### cis-1,2-Dichloroethene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-5.8	02	1.000	0.94	-6.3	03	2.000	1.99	-0.4
04	5.000	4.88	-2.4	05	20.000	18.92	-5.4	06	50.000	49.30	-1.4
07	100.000	104.78	4.8	08	150.000	157.97	5.3	09	200.000	223.20	11.6

### cis-1,3-Dichloropropene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.39	-22.8	02	1.000	0.87	-12.7	03	2.000	1.87	-6.7
04	5.000	4.65	-7.0	05	20.000	18.76	-6.2	06	50.000	51.53	3.1
07	100.000	111.58	11.6	08	150.000	174.00	16.0	09	200.000	249.51	24.8

### m,p-Xylenes

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	1.000	0.88	-11.6	02	2.000	1.73	-13.4	03	4.000	3.98	-0.5
04	10.000	9.86	-1.4	05	40.000	37.47	-6.3	06	100.000	103.63	3.6
07	200.000	222.59	11.3	08	300.000	326.95	9.0	09	400.000	437.14	9.3

# Initial Calibration - Detailed Report

**Calibration ID:** RC1500051

**Instrument ID:**
**R-MS-10**
**Signal ID:**
**1**
**Analyte**
**n-Butyl Acetate**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.74	-25.6	03	2.000	1.84	-8.0	04	5.000	4.21	-15.8
05	20.000	18.48	-7.6	06	50.000	52.97	5.9	07	100.000	123.63	23.6
08	150.000	191.08	27.4								

**n-Butylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-12.7	02	1.000	0.94	-6.4	03	2.000	1.95	-2.4
04	5.000	5.04	0.8	05	20.000	19.42	-2.9	06	50.000	53.86	7.7
07	100.000	111.85	11.9	08	150.000	156.27	4.2	09	200.000	199.90	-0.1

**n-Heptane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.3	02	1.000	0.95	-5.5	03	2.000	1.76	-12.2
04	5.000	4.69	-6.3	05	20.000	18.40	-8.0	06	50.000	49.98	0.0
07	100.000	106.81	6.8	08	150.000	159.95	6.6	09	200.000	232.47	16.2

**n-Propylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.44	-11.7	02	1.000	1.03	3.1	03	2.000	2.08	4.1
04	5.000	5.17	3.5	05	20.000	19.96	-0.2	06	50.000	53.85	7.7
07	100.000	107.72	7.7	08	150.000	145.59	-2.9	09	200.000	177.55	-11.2

**o-Xylene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-13.6	02	1.000	0.91	-9.1	03	2.000	1.90	-5.1
04	5.000	4.78	-4.4	05	20.000	18.52	-7.4	06	50.000	50.61	1.2
07	100.000	108.35	8.3	08	150.000	166.25	10.8	09	200.000	238.30	19.1

**sec-Butylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.42	-15.9	02	1.000	0.97	-3.2	03	2.000	2.05	2.4
04	5.000	5.15	3.0	05	20.000	19.82	-0.9	06	50.000	54.15	8.3
07	100.000	110.77	10.8	08	150.000	152.20	1.5	09	200.000	188.25	-5.9

**tert-Amyl Methyl Ether**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.39	-22.4	02	1.000	0.86	-14.2	03	2.000	1.88	-6.0
04	5.000	4.70	-5.9	05	20.000	19.74	-1.3	06	50.000	52.34	4.7
07	100.000	109.45	9.4	08	150.000	173.94	16.0	09	200.000	239.47	19.7

**tert-Butylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-13.7	02	1.000	0.96	-4.3	03	2.000	1.93	-3.4
04	5.000	5.10	2.0	05	20.000	18.98	-5.1	06	50.000	52.36	4.7
07	100.000	109.28	9.3	08	150.000	158.92	5.9	09	200.000	209.00	4.5

# Initial Calibration - Detailed Report

**Calibration ID:** RC1500051

**Instrument ID:** R-MS-10

**Signal ID:** 1

**Analyte**
**trans-1,2-Dichloroethene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	0.7	02	1.000	0.93	-7.0	03	2.000	1.96	-1.8
04	5.000	4.94	-1.2	05	20.000	18.76	-6.2	06	50.000	49.04	-1.9
07	100.000	103.23	3.2	08	150.000	156.13	4.1	09	200.000	219.98	10.0

**trans-1,3-Dichloropropene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.37	-25.9	02	1.000	0.92	-7.7	03	2.000	1.72	-14.2
04	5.000	4.53	-9.3	05	20.000	18.66	-6.7	06	50.000	51.46	2.9
07	100.000	115.03	15.0	08	150.000	178.14	18.8	09	200.000	254.40	27.2

**trans-1,4-Dichloro-2-butene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	1.9	02	1.000	0.94	-6.0	03	2.000	1.66	-17.1
04	5.000	4.52	-9.5	05	20.000	17.52	-12.4	06	50.000	48.49	-3.0
07	100.000	111.71	11.7	08	150.000	167.82	11.9	09	200.000	245.08	22.5

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 07 09:13:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

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Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	921885	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1425855	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1351123	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	778182	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.829	113	422382	49.56	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	99.12%	
46) surr1,1,2-dichloroetha...	5.414	65	436128	49.16	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	98.32%	
64) SURR3,Toluene-d8	8.042	98	1646154	50.30	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	100.60%	
69) SURR2,BFB	10.675	95	669832	46.66	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	93.32%	
<b>Target Compounds</b>						
					Qvalue	
2) Dichlorodifluoromethane	1.165	85	3658m	0.42	ug/L	
3) Chloromethane	1.281	50	8079	0.74	ug/L	96
4) Vinyl Chloride	1.354	62	5977m	0.59	ug/L	
5) Bromomethane	1.573	94	2940	0.83	ug/L	# 64
6) Chloroethane	1.634	64	3200m	0.55	ug/L	
7) Freon 21	1.768	67	7053	0.44	ug/L	93
8) Trichlorofluoromethane	1.817	101	5517	0.44	ug/L	96
9) Diethyl Ether	2.012	59	2823	0.43	ug/L	# 61
10) Freon 123a	2.012	67	3972	0.40	ug/L	90
11) Freon 123	2.061	83	4504	0.41	ug/L	85
12) Acrolein	2.110	56	2815	2.92	ug/L	# 59
13) 1,1-Dicethene	2.195	96	3243	0.46	ug/L	# 82
14) Freon 113	2.195	101	3288	0.42	ug/L	85
15) Acetone	2.226	43	4339	2.00	ug/L	98
16) 2-Propanol	2.329	45	4326	10.86	ug/L	62
17) Iodomethane	2.323	142	5604m	1.18	ug/L	
18) Carbon Disulfide	2.378	76	12277	0.47	ug/L	98
20) Allyl Chloride	2.488	76	2140	0.51	ug/L	# 46
21) Methyl Acetate	2.500	43	3339	0.69	ug/L	68
22) Methylene Chloride	2.597	84	4733	0.60	ug/L	# 79
23) TBA	2.695	59	5158	8.57	ug/L	68
24) Acrylonitrile	2.823	53	6692	3.00	ug/L	85
25) Methyl-t-Butyl Ether	2.860	73	9131	0.44	ug/L	# 39
26) trans-1,2-Dichloroethene	2.860	96	3851	0.48	ug/L	# 90
27) 1,1-Dicethane	3.311	63	8199	0.55	ug/L	93
28) Vinyl Acetate	3.384	86	375m	0.26	ug/L	
29) DIPE	3.402	45	20348	0.63	ug/L	# 67
30) 2-Chloro-1,3-Butadiene	3.414	53	9639	0.56	ug/L	84
31) ETBE	3.872	59	13622m	0.50	ug/L	
32) 2,2-Dichloropropane	4.048	77	4615	0.39	ug/L	95
33) cis-1,2-Dichloroethene	4.048	96	4316	0.48	ug/L	# 76
34) 2-Butanone	4.103	43	2628m	0.88	ug/L	
35) Propionitrile	4.170	54	2655	3.28	ug/L	89
36) Bromochloromethane	4.414	130	2673m	0.53	ug/L	

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 07 09:13:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Methacrylonitrile	4.402	67	1212	0.51	ug/L	96
38) Tetrahydrofuran	4.493	42	1303	0.67	ug/L #	38
39) Chloroform	4.561	83	7345	0.52	ug/L #	76
40) 1,1,1-Trichloroethane	4.847	97	5954m	0.46	ug/L	
42) Cyclohexane	4.957	41	6228m	0.57	ug/L	
44) Carbontetrachloride	5.140	121	1736	0.45	ug/L	82
45) 1,1-Dichloropropene	5.158	75	5229	0.45	ug/L	85
47) Benzene	5.499	78	18312	0.53	ug/L	86
48) 1,2-Dichloroethane	5.554	62	5609	0.48	ug/L	91
49) Iso-Butyl Alcohol	5.505	43	2936m	9.36	ug/L	
50) TAME	5.755	73	7995m	0.36	ug/L	
51) n-Heptane	6.011	43	7950	0.66	ug/L #	70
52) 1-Butanol	6.524	56	2096	11.71	ug/L	88
53) Trichloroethene	6.499	130	4332	0.46	ug/L #	87
54) Methylcyclohexane	6.755	55	6388m	0.49	ug/L	
55) 1,2-Diclpropane	6.798	63	4967	0.54	ug/L	94
56) Dibromomethane	6.938	93	2058	0.44	ug/L	88
58) Methyl Methacrylate	7.023	69	1772	0.39	ug/L #	45
59) Bromodichloromethane	7.176	83	5052	0.44	ug/L	82
60) 2-Nitropropane	7.462	41	1141m	0.59	ug/L	
61) 2-Chloroethylvinyl Ether	7.596	63	2303	0.52	ug/L	68
62) cis-1,3-Dichloropropene	7.731	75	4855	0.35	ug/L	78
63) 4-Methyl-2-pentanone	7.956	43	3877m	0.55	ug/L	
65) Toluene	8.121	91	18343	0.50	ug/L	91
66) trans-1,3-Dichloropropene	8.395	75	3883	0.32	ug/L	90
67) Ethyl Methacrylate	8.548	69	3108	0.33	ug/L #	53
68) 1,1,2-Trichloroethane	8.584	97	3094m	0.45	ug/L	
71) Tetrachloroethene	8.730	164	4012	0.54	ug/L #	70
72) 2-Hexanone	8.895	43	2914	0.60	ug/L #	61
73) 1,3-Dichloropropane	8.767	76	5633	0.53	ug/L #	73
74) Dibromochloromethane	8.999	129	3059	0.36	ug/L	89
75) N-Butyl Acetate	9.054	43	5468	0.45	ug/L	92
76) 1,2-Dibromoethane	9.102	107	2901	0.45	ug/L	95
77) 3-Chlorobenzotrifluoride	9.627	180	6136	0.42	ug/L	90
78) Chlorobenzene	9.608	112	12653	0.51	ug/L	88
79) 4-Chlorobenzotrifluoride	9.681	180	5207	0.40	ug/L	96
80) 1,1,1,2-Tetrachloroethane	9.694	131	3571	0.38	ug/L	83
81) Ethylbenzene	9.730	106	6220	0.47	ug/L #	64
82) (m+p)Xylene	9.846	106	14823	0.93	ug/L #	85
83) o-Xylene	10.206	106	7187	0.45	ug/L	89
84) Styrene	10.218	104	10944	0.40	ug/L	89
85) Bromoform	10.376	173	1896	0.36	ug/L	81
86) 2-Chlorobenzotrifluoride	10.456	180	5739	0.40	ug/L	86
87) Isopropylbenzene	10.547	105	16549	0.42	ug/L	88
88) Cyclohexanone	10.608	55	3511	6.77	ug/L	97
89) trans-1,4-Dichloro-2-B...	10.852	53	1502	0.56	ug/L #	43
91) 1,1,2,2-Tetrachloroethane	10.815	83	3178	0.42	ug/L	93
92) Bromobenzene	10.797	156	5685	0.54	ug/L #	76
93) 1,2,3-Trichloropropane	10.852	110	1251m	0.59	ug/L	
94) n-Propylbenzene	10.907	91	20408	0.47	ug/L	98
95) 2-Chlorotoluene	10.974	91	12440	0.45	ug/L	91

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 07 09:13:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

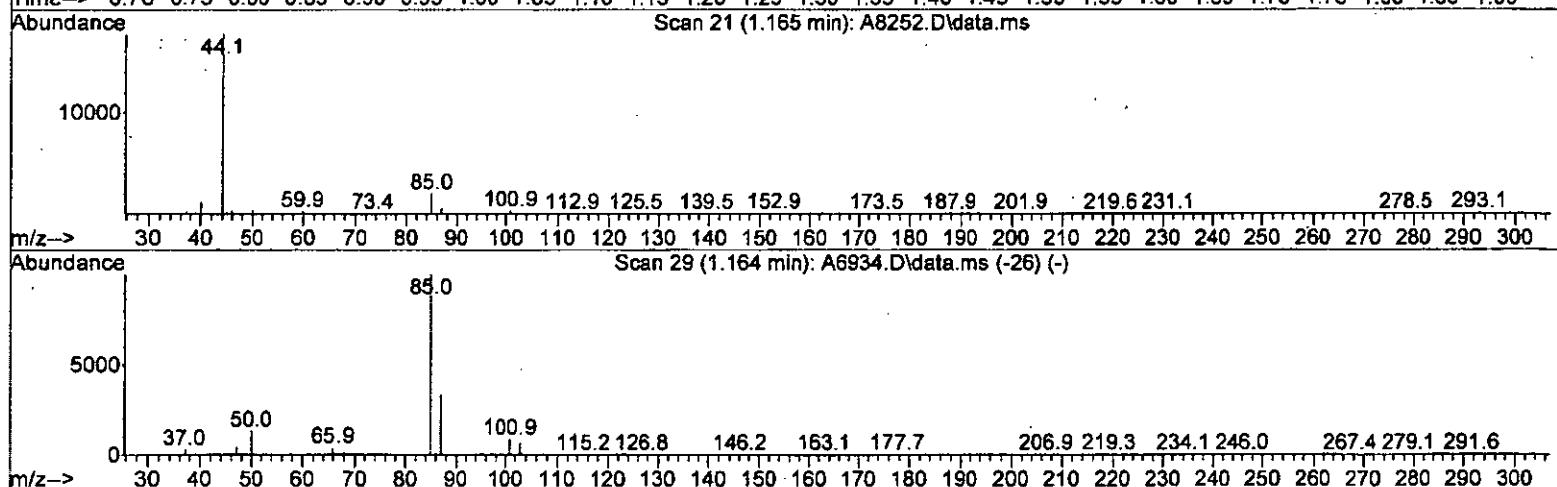
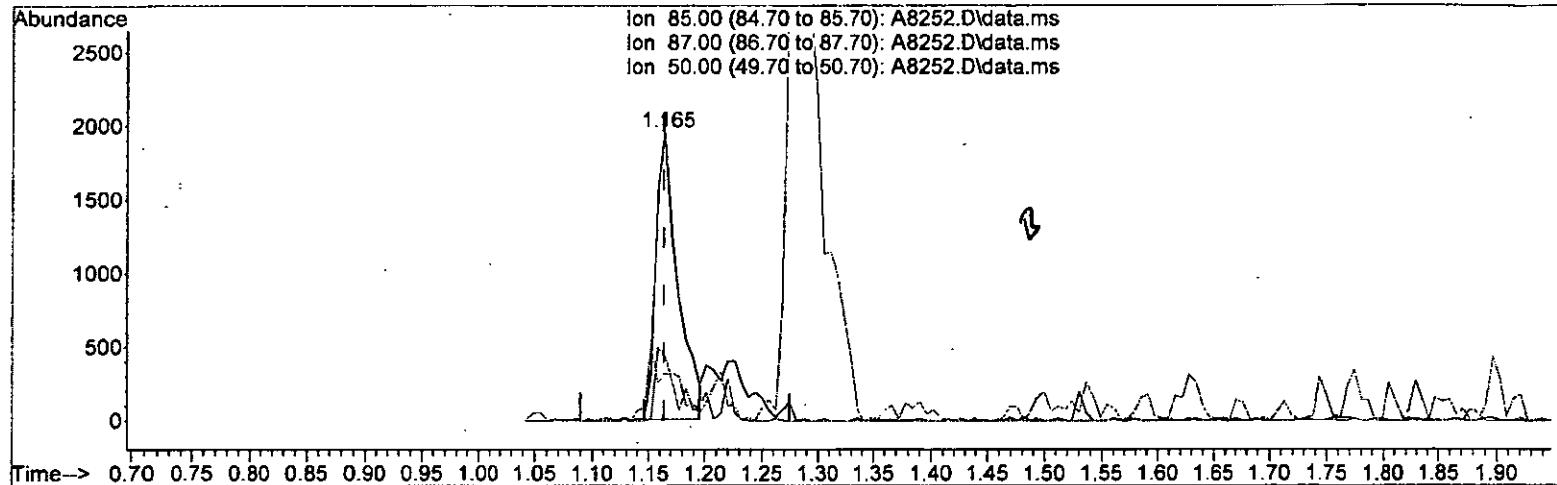
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 3-Chlorotoluene	11.029	91	14338	0.49	ug/L	89
97) 4-Chlorotoluene	11.065	91	16493	0.51	ug/L	97
98) 1,3,5-Trimethylbenzene	11.065	105	14465	0.45	ug/L	83
99) tert-Butylbenzene	11.340	119	12929	0.46	ug/L	95
100) 1,2,4-Trimethylbenzene	11.376	105	14861	0.44	ug/L	97
101) 3,4-Dichlorobenzotrifl...	11.443	214	4529	0.43	ug/L	82
102) sec-Butylbenzene	11.523	105	17110	0.45	ug/L	84
103) p-Isopropyltoluene	11.651	119	15936	0.47	ug/L	95
104) 1,3-Dclbenz	11.602	146	11824	0.56	ug/L	90
105) 1,4-Dclbenz	11.681	146	12228	0.57	ug/L	94
106) 2,4-Dichlorobenzotrifl...	11.730	214	4342	0.45	ug/L	88
107) 2,5-Dichlorobenzotrifl...	11.779	214	5311	0.49	ug/L	90
108) n-Butylbenzene	11.980	91	13973	0.47	ug/L	93
109) 1,2-Dclbenz	11.986	146	9879	0.51	ug/L	89
110) 1,2-Dibromo-3-chloropr...	12.608	157	638	0.42	ug/L	# 66
111) Trielution Dichlorotol...	12.736	125	23060	1.34	ug/L	90
112) 1,3,5-Trichlorobenzene	12.785	180	7544	0.52	ug/L	90
113) Coelution Dichlorotoluene	13.059	125	17649	0.99	ug/L	92
114) 1,2,4-Tcbenzene	13.266	180	5964	0.49	ug/L	95
115) Hexachlorobt	13.406	225	2963	0.54	ug/L	89
116) Naphthalen	13.461	128	11384	0.53	ug/L	97
117) 1,2,3-Tclbenzene	13.650	180	4813	0.53	ug/L	84
118) 2,4,5-Trichlorotoluene	14.235	159	3021m	0.51	ug/L	
119) 2,3,6-Trichlorotoluene	14.321	159	3038m	0.60	ug/L	

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

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(2) Dichlorodifluoromethane (P)

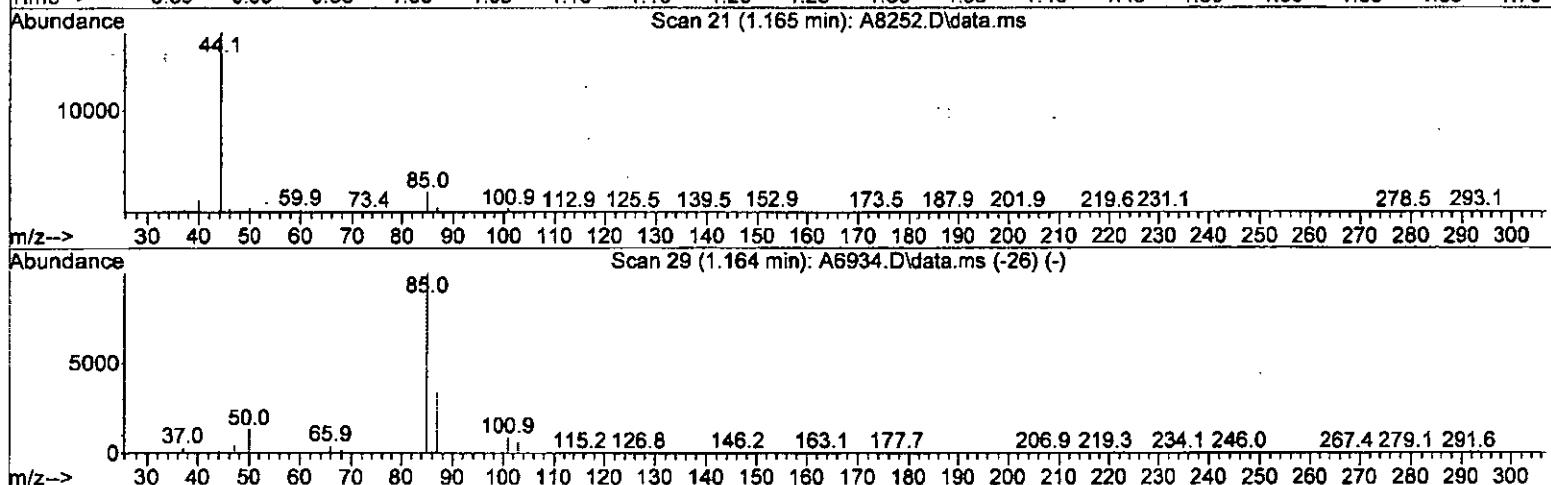
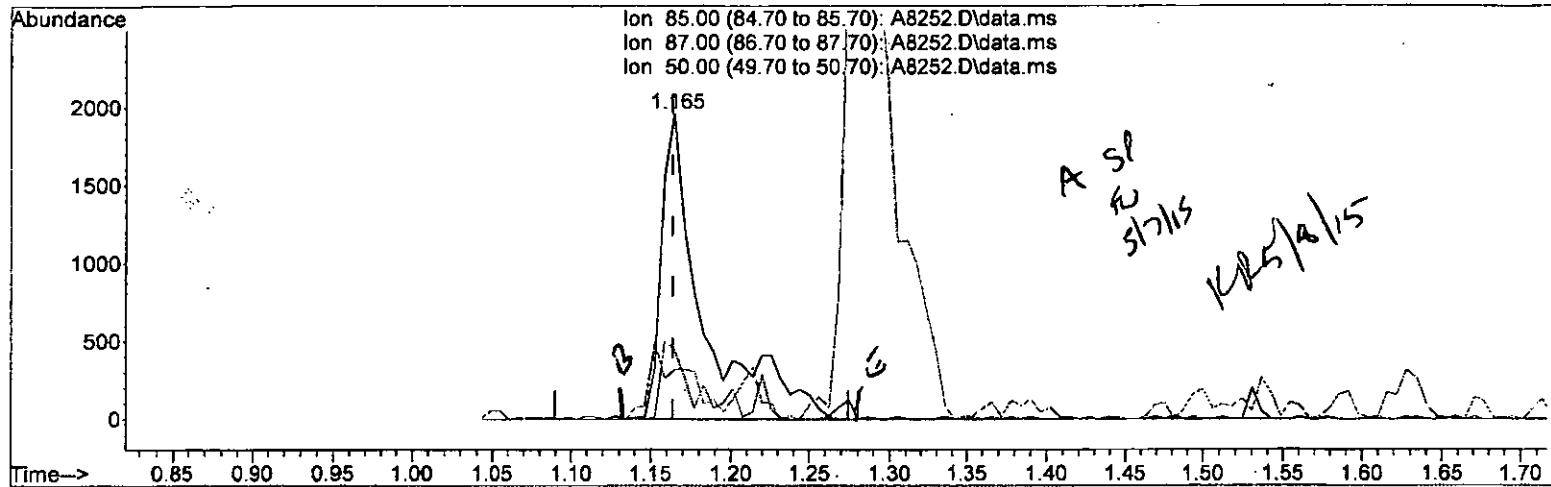
1.165min (+0.001) 0.29 ug/L

response 2579

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	22.66
50.00	15.00	16.23
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(2) Dichlorodifluoromethane (P)

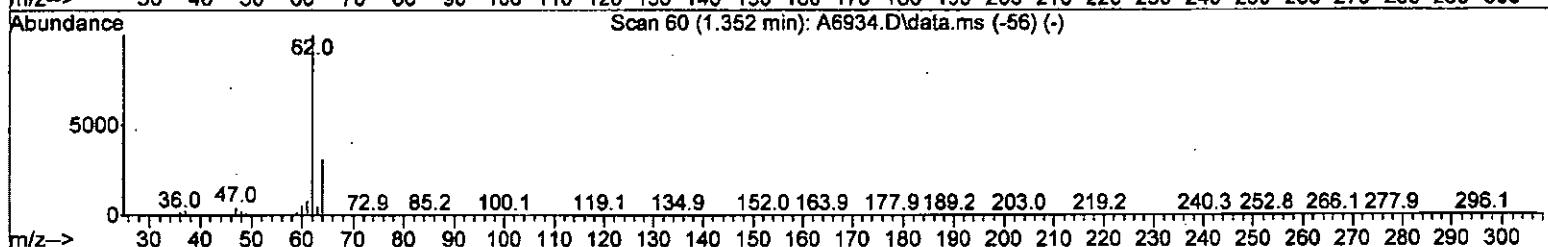
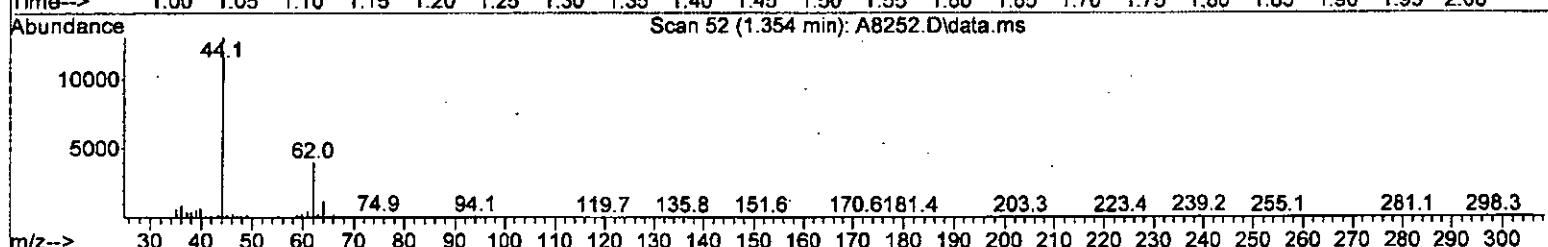
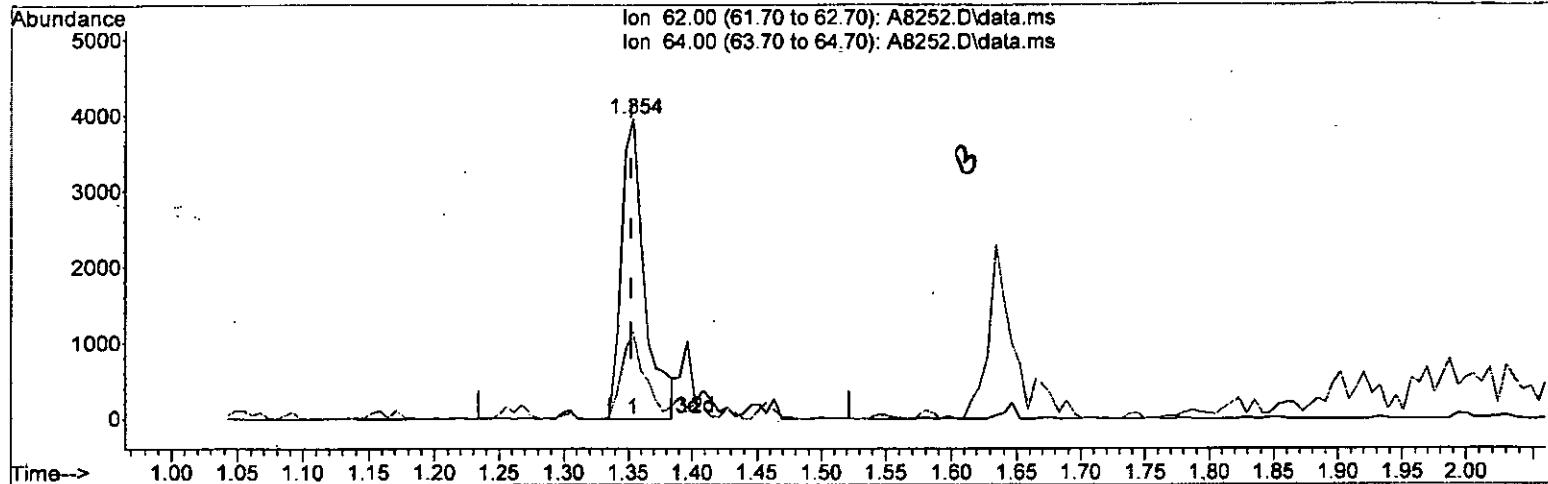
1.165min (+0.001) 0.42 ug/L m

response 3658

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	22.66
50.00	15.00	16.23
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(4) Vinyl Chloride (P)

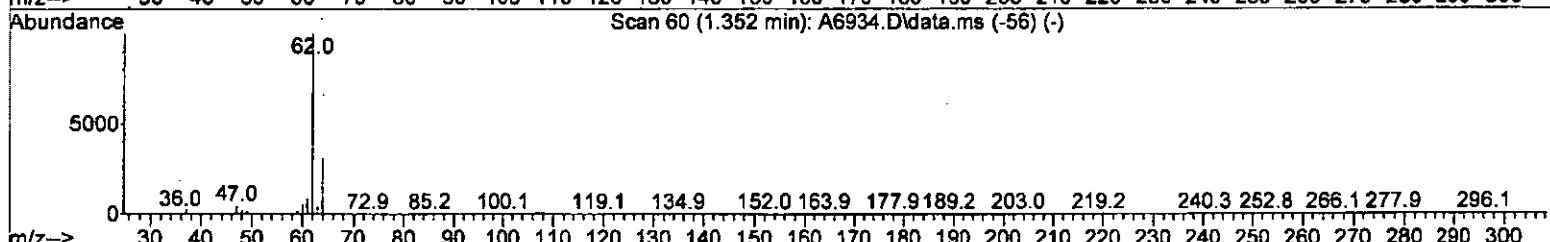
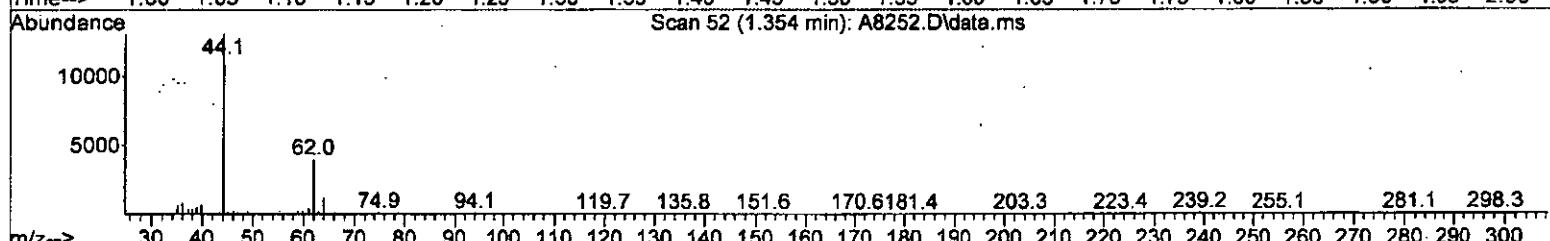
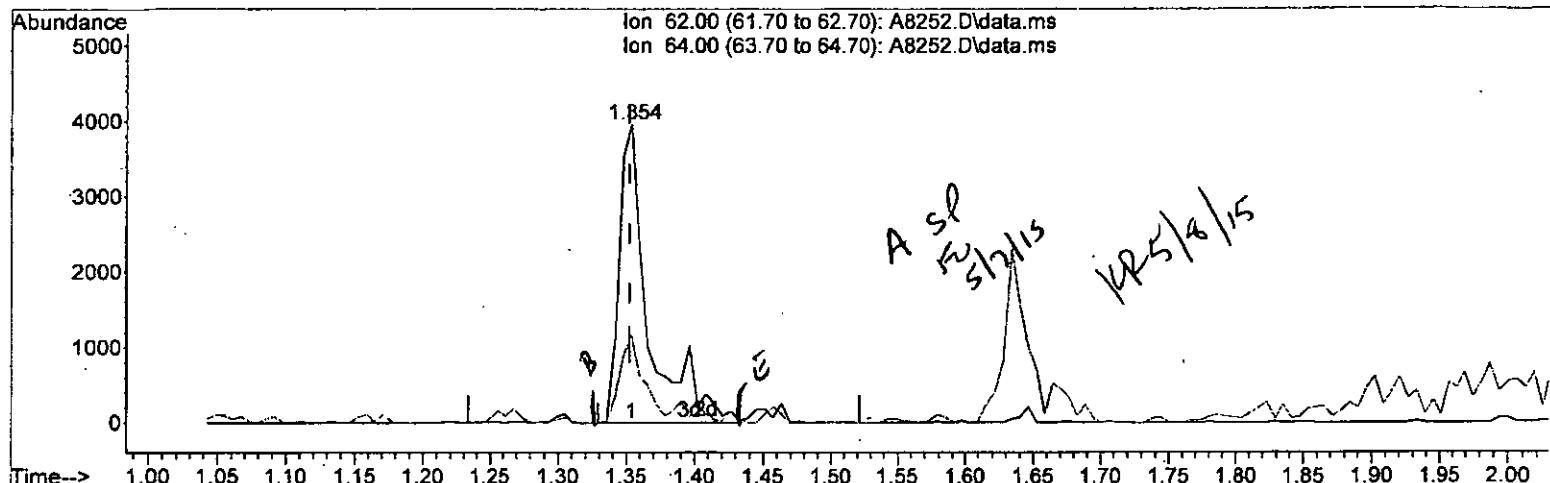
1.354min (+0.002) 0.49 ug/L

response 5008

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	29.02
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(4) Vinyl Chloride (P)

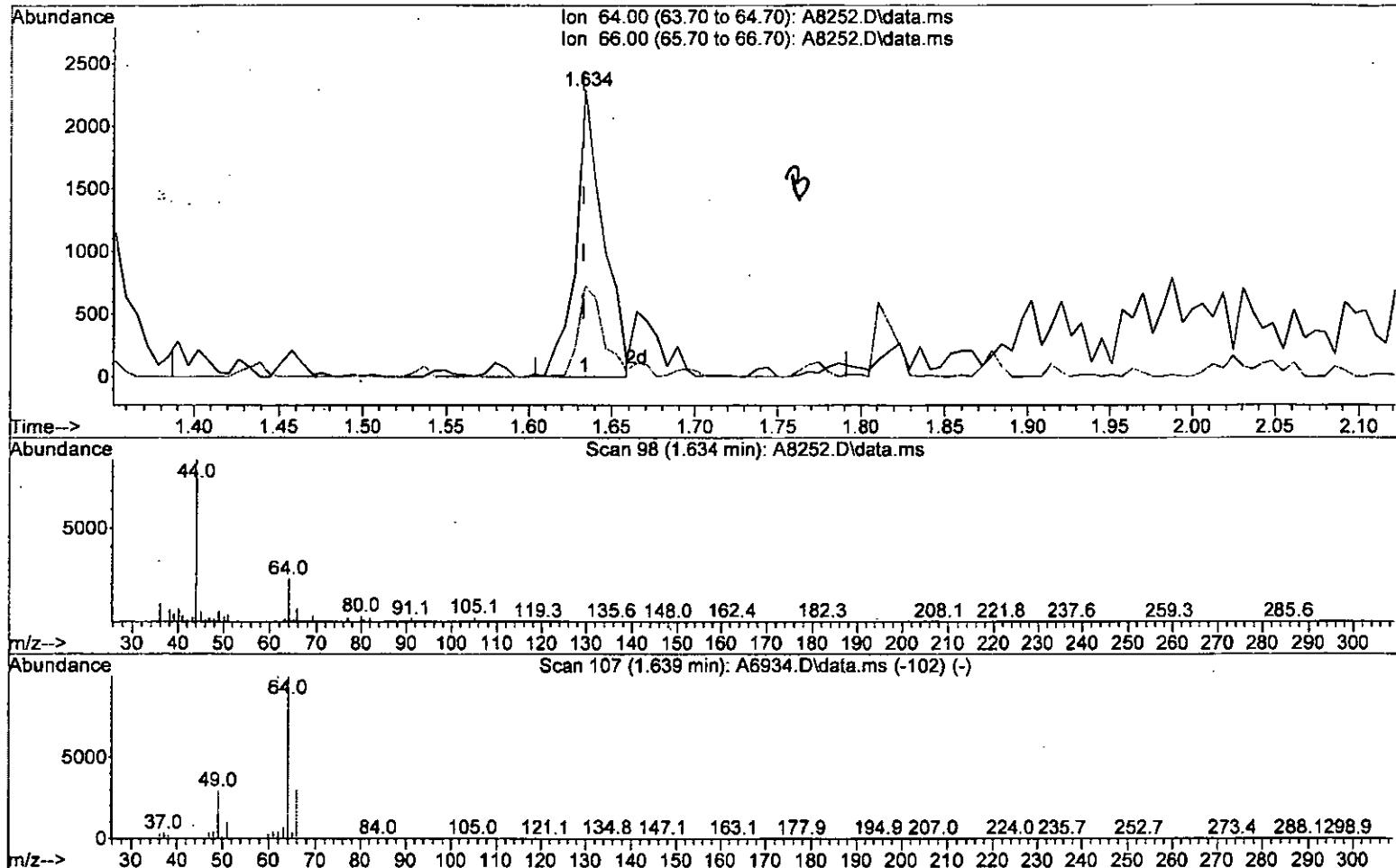
1.354min (+0.002) 0.59 ug/L m

response 5977

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	29.02
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(6) Chloroethane (P)

1.634min (+0.001) 0.45 ug/L

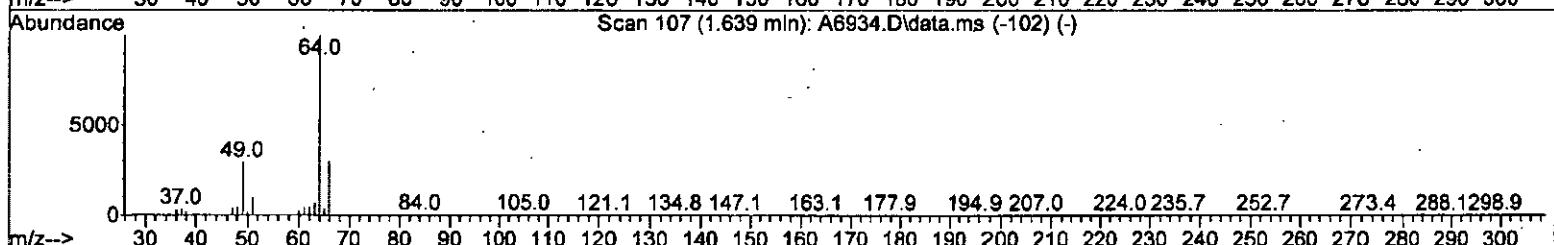
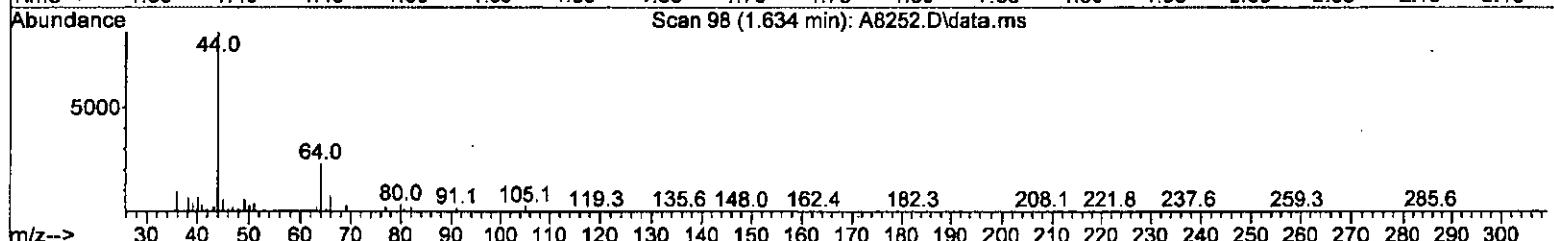
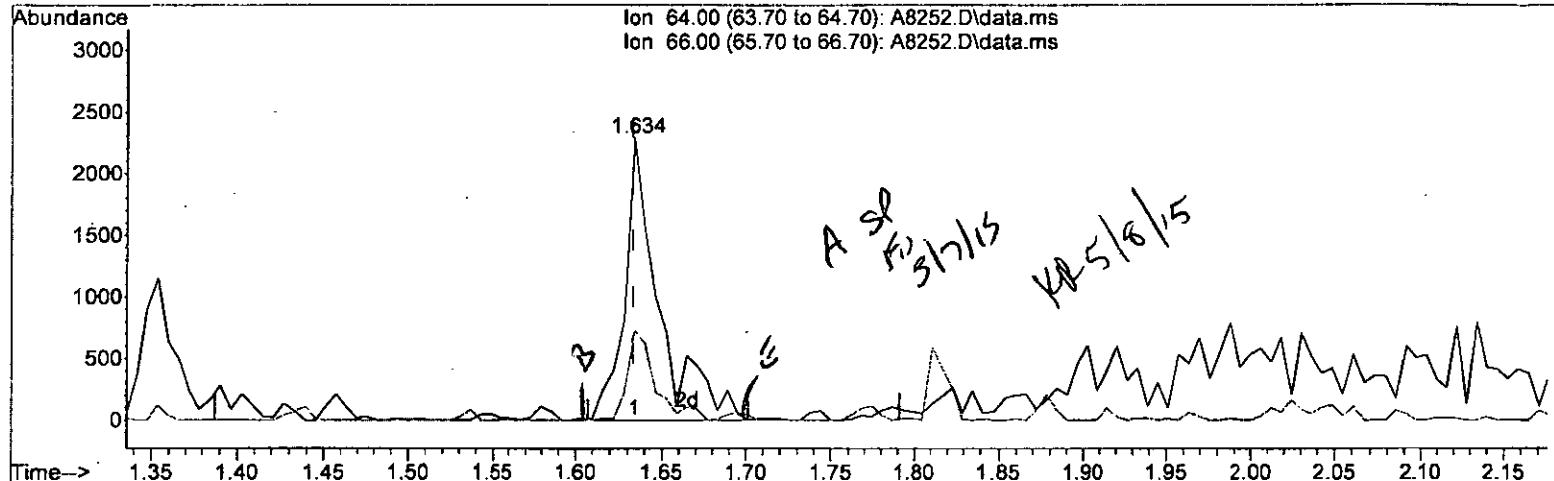
response 2600

Ion	Exp%	Act%
64.00	100	100
66.00	33.00	31.61
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(6) Chloroethane (P)

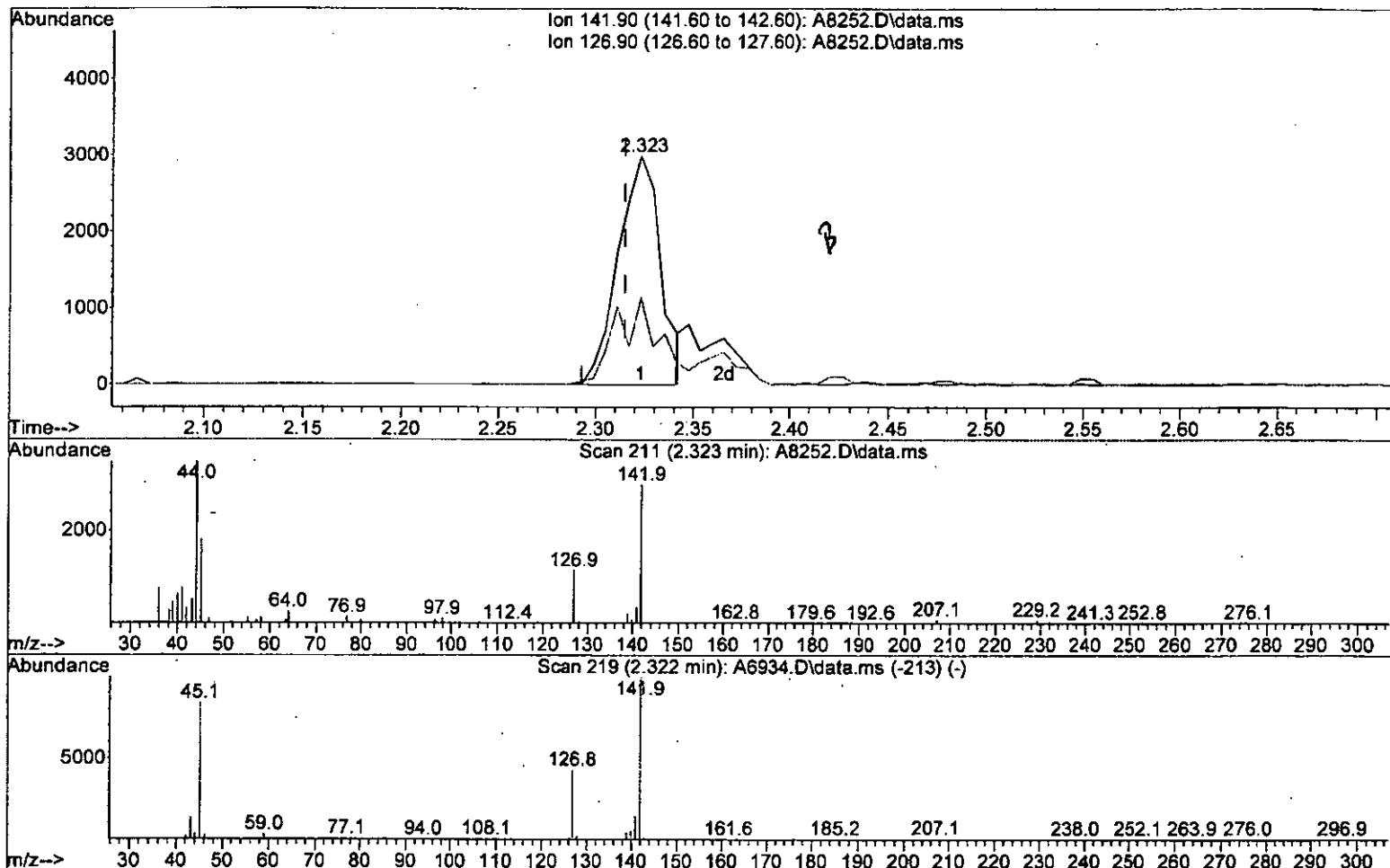
1.634min (+0.001) 0.55 ug/L m

response 3200

Ion	Exp%	Act%
64.00	100	100
66.00	33.00	31.61
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(17) Iodomethane

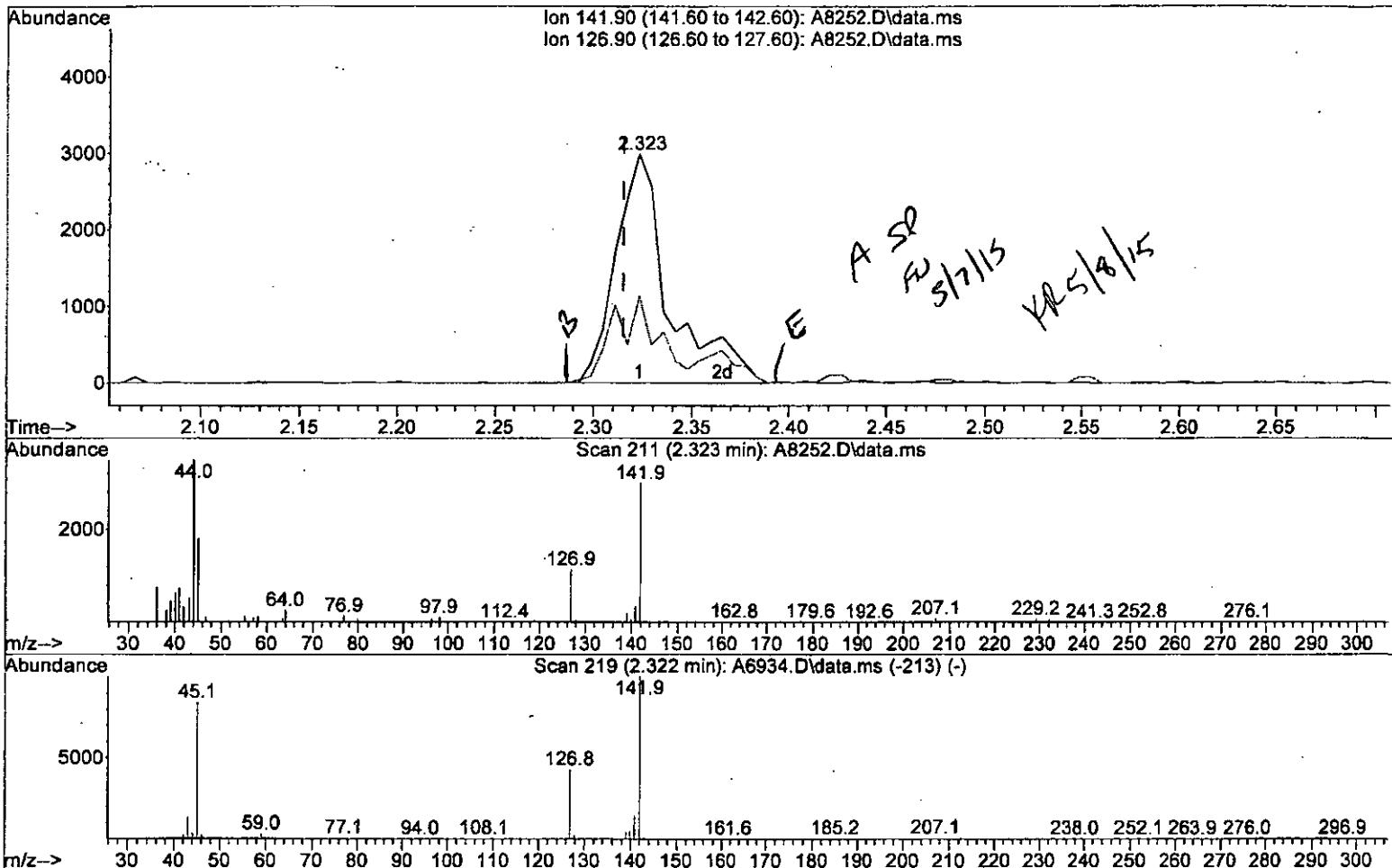
2.323min (+0.008) 0.94 ug/L

response 4464

Ion	Exp%	Act%
141.90	100	100
126.90	43.50	37.95
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(17) Iodomethane

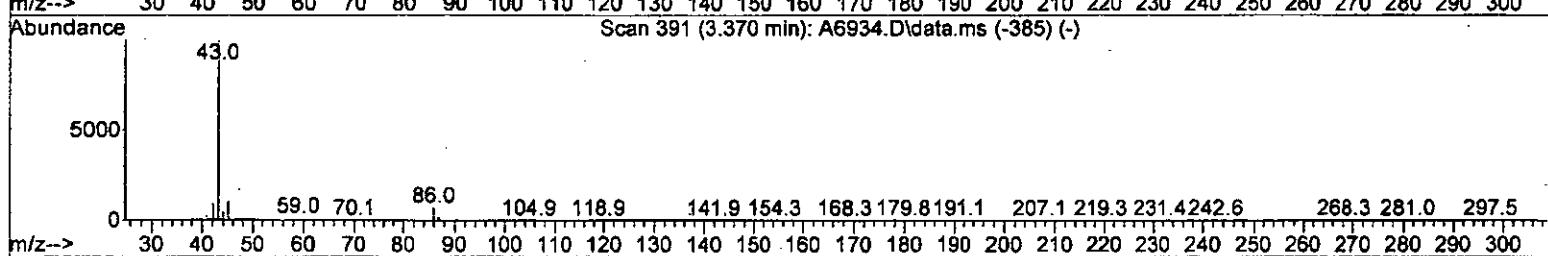
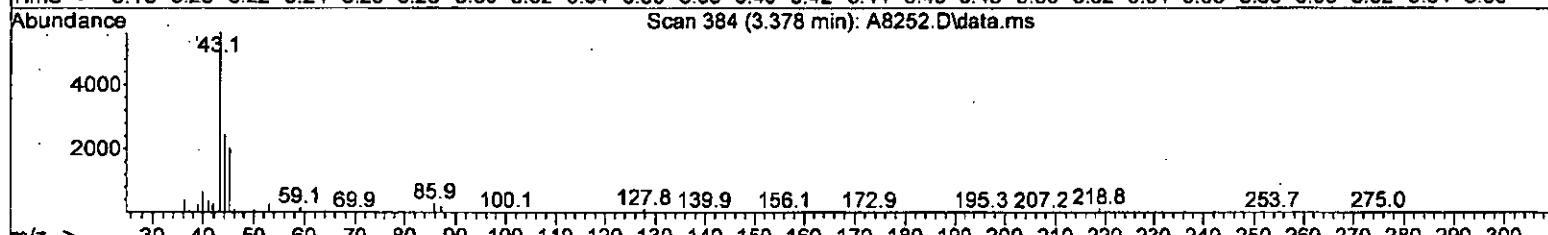
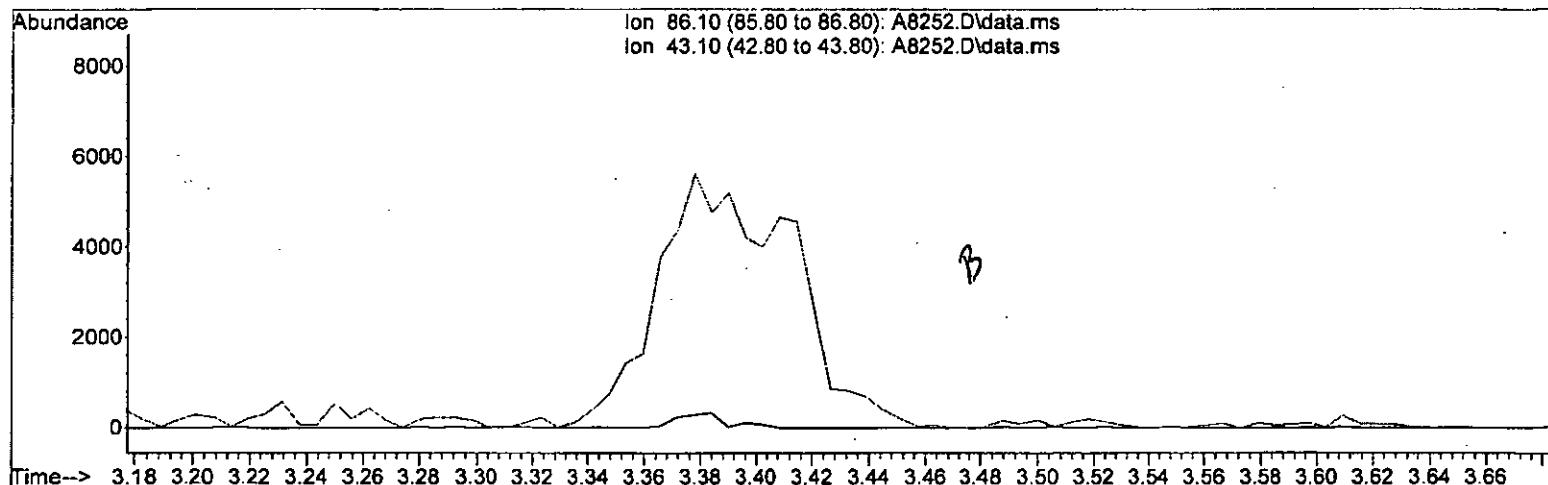
2.323min (+0.008) 1.18 ug/L m

response 5604

Ion	Exp%	Act%
141.90	100	100
126.90	43.50	37.95
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(28) Vinyl Acetate

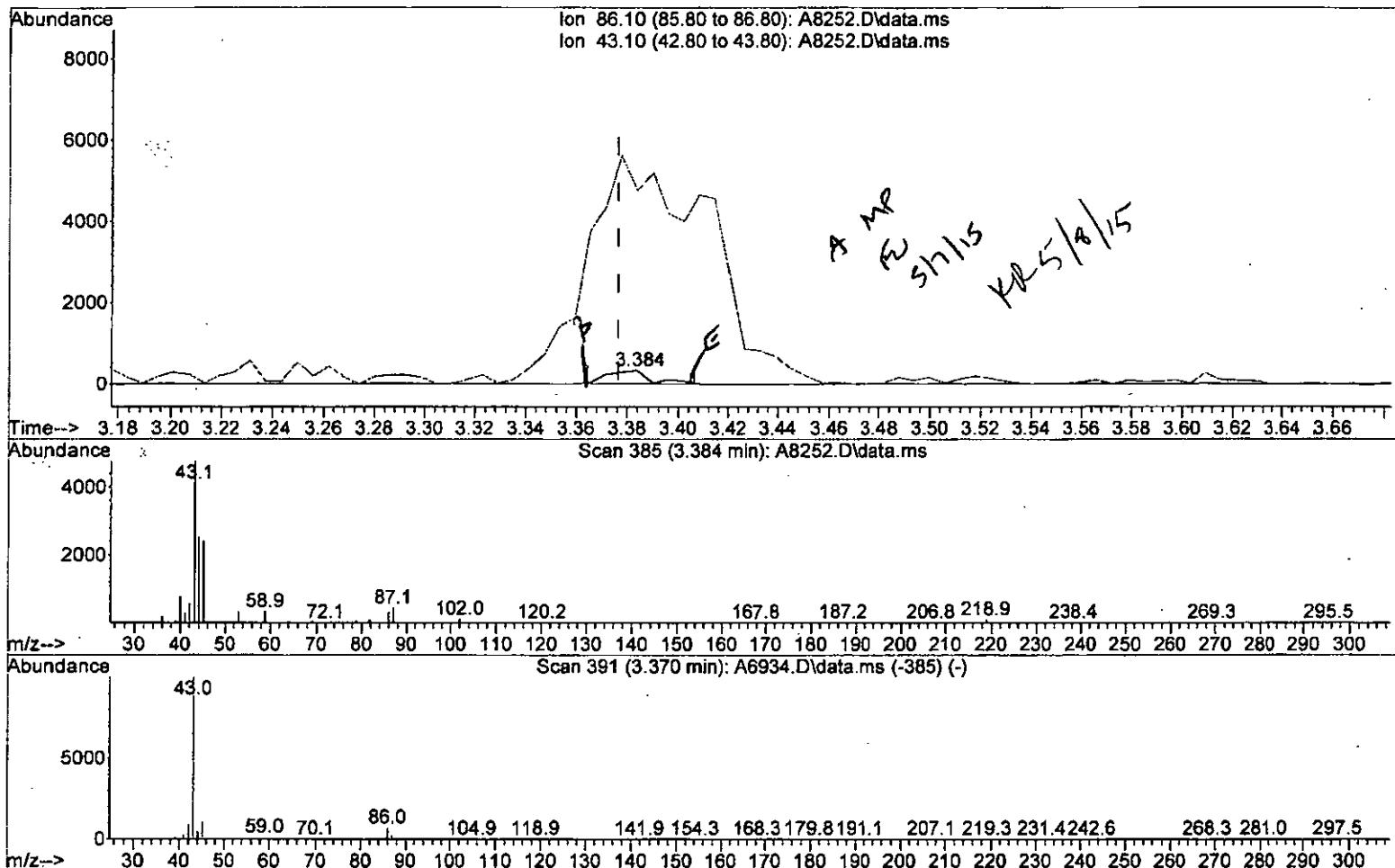
3.377min (-3.377) 0.00 ug/L

response 0

Ion	Exp%	Act%
86.10	100	0.00
43.10	1730.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(28) Vinyl Acetate

3.384min (+0.007) 0.26 ug/L m

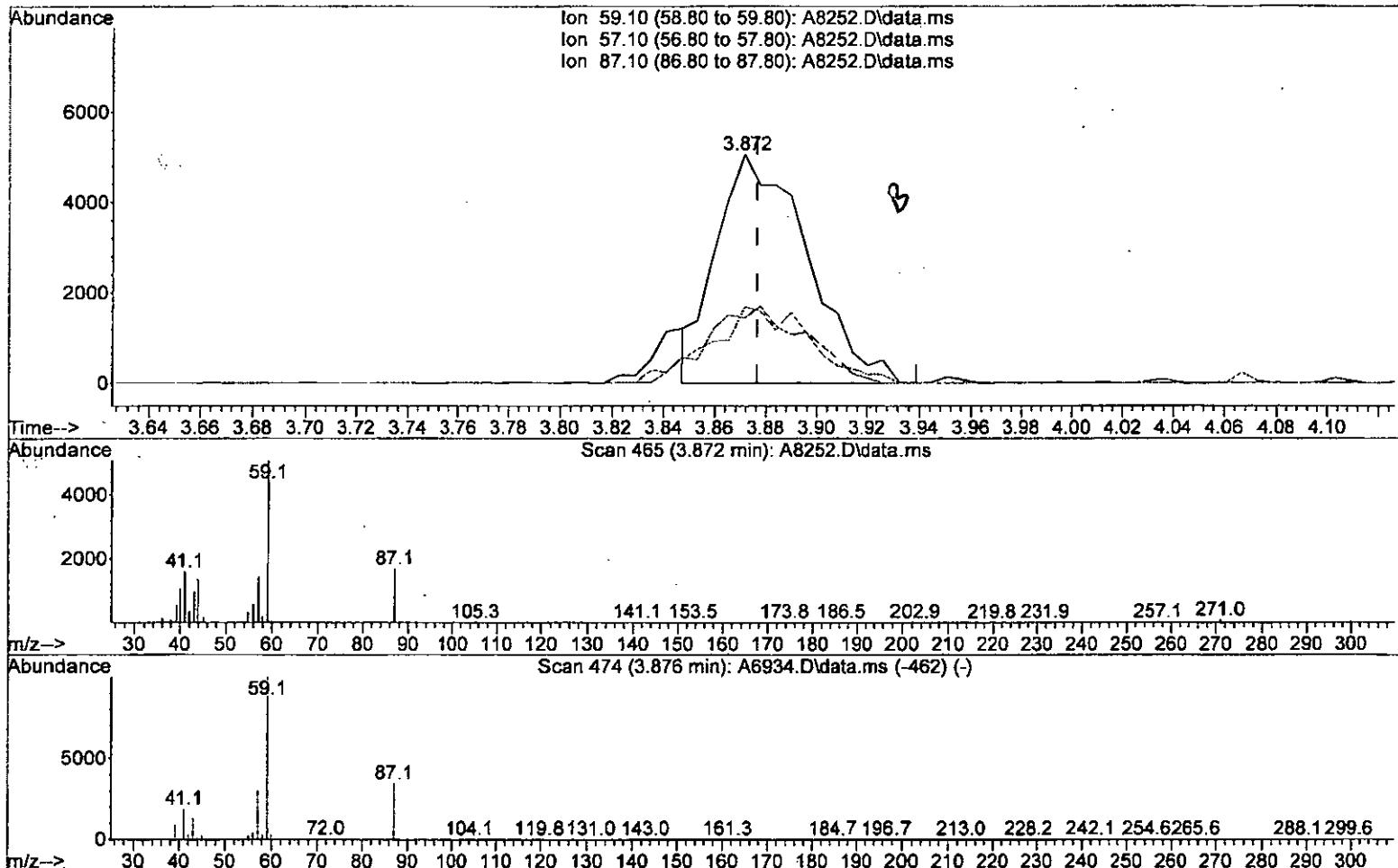
response 375

Ion	Exp%	Act%
86.10	100	100
43.10	1730.10	1445.29#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(31) ETBE

3.872min (-0.005) 0.45 ug/L

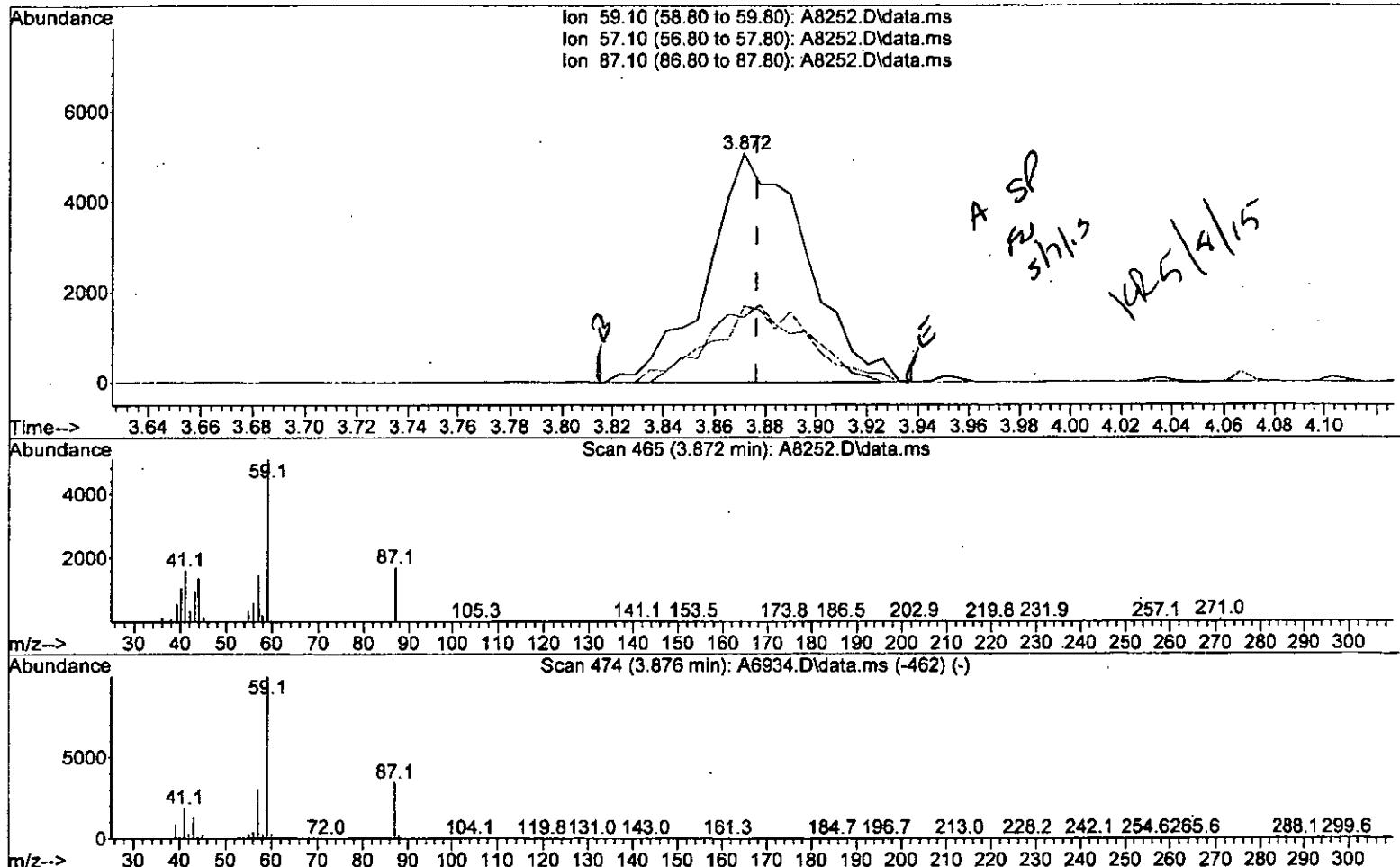
response 12454

Ion	Exp%	Act%
59.10	100	100
57.10	30.90	28.47
87.10	37.30	33.37
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(31) ETBE

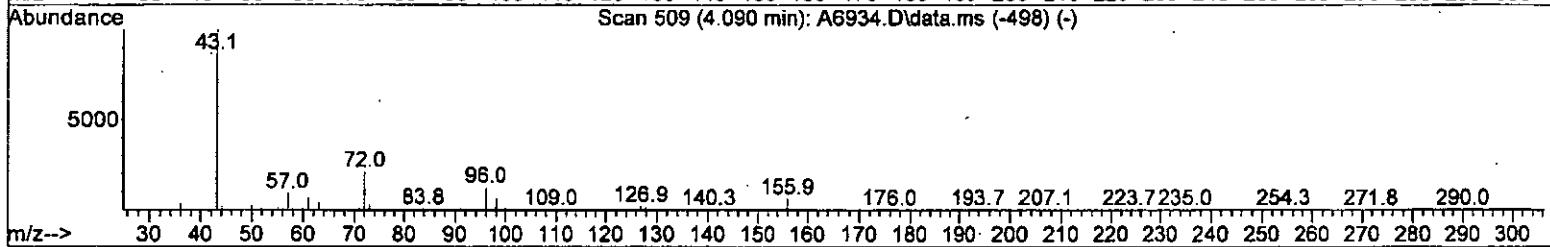
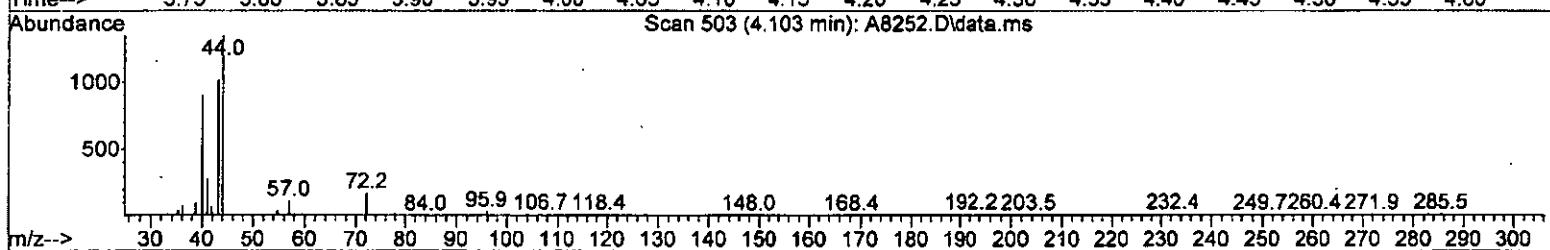
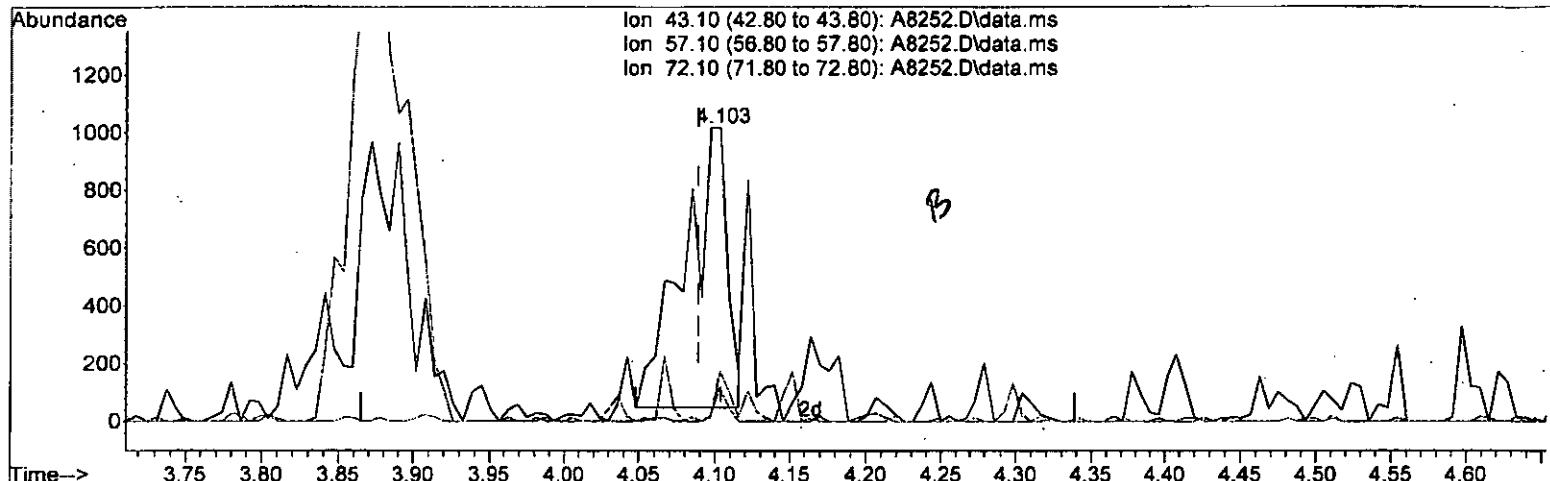
3.872min (-0.005) 0.50 ug/L m

response 13622

Ion	Exp%	Act%
59.10	100	100
57.10	30.90	28.47
87.10	37.30	33.37
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(34) 2-Butanone (P)

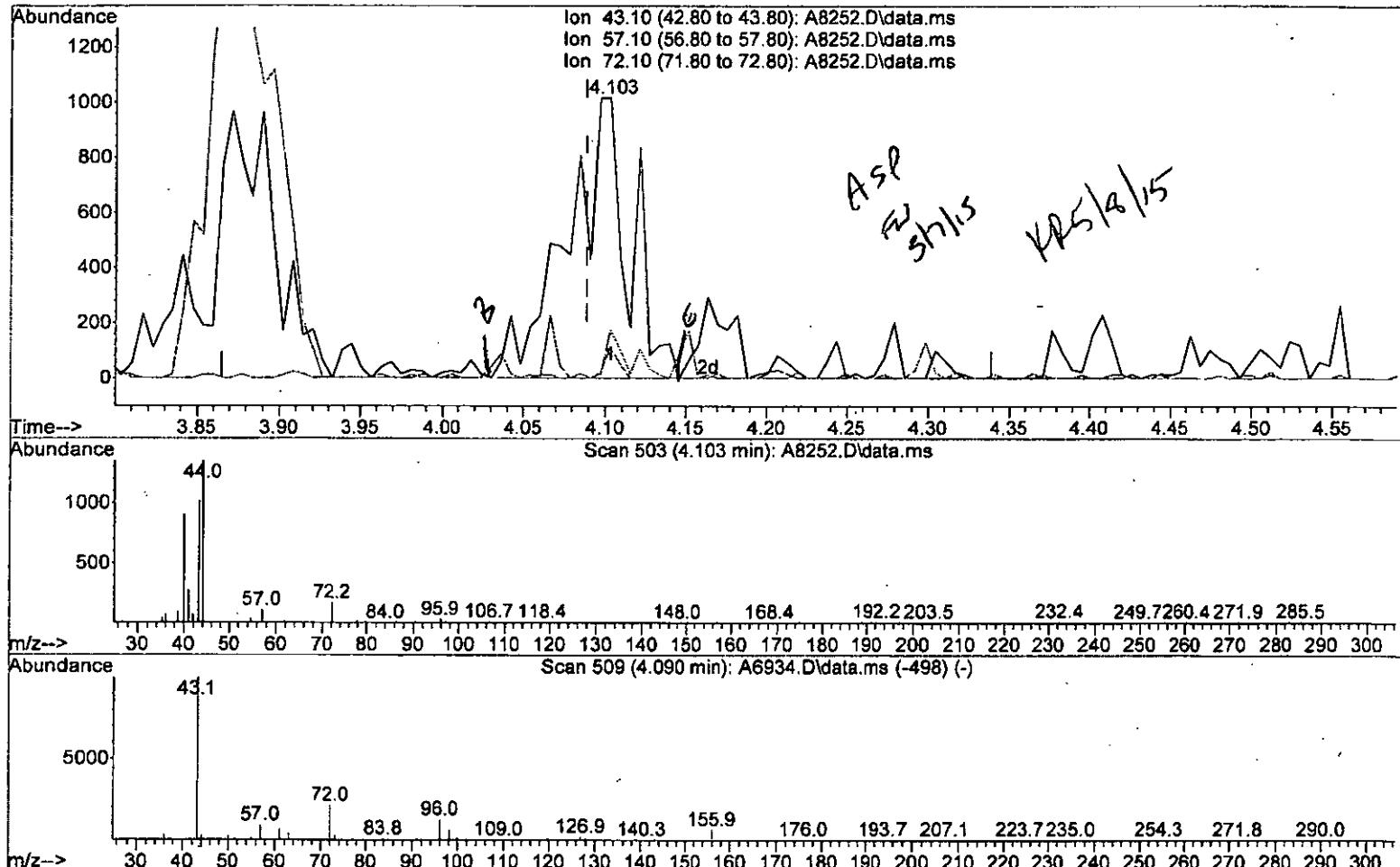
4.103min (+0.014) 0.63 ug/L

response 1889

Ion	Exp%	Act%
43.10	100	100
57.10	7.80	11.12
72.10	22.60	17.13
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(34) 2-Butanone (P)

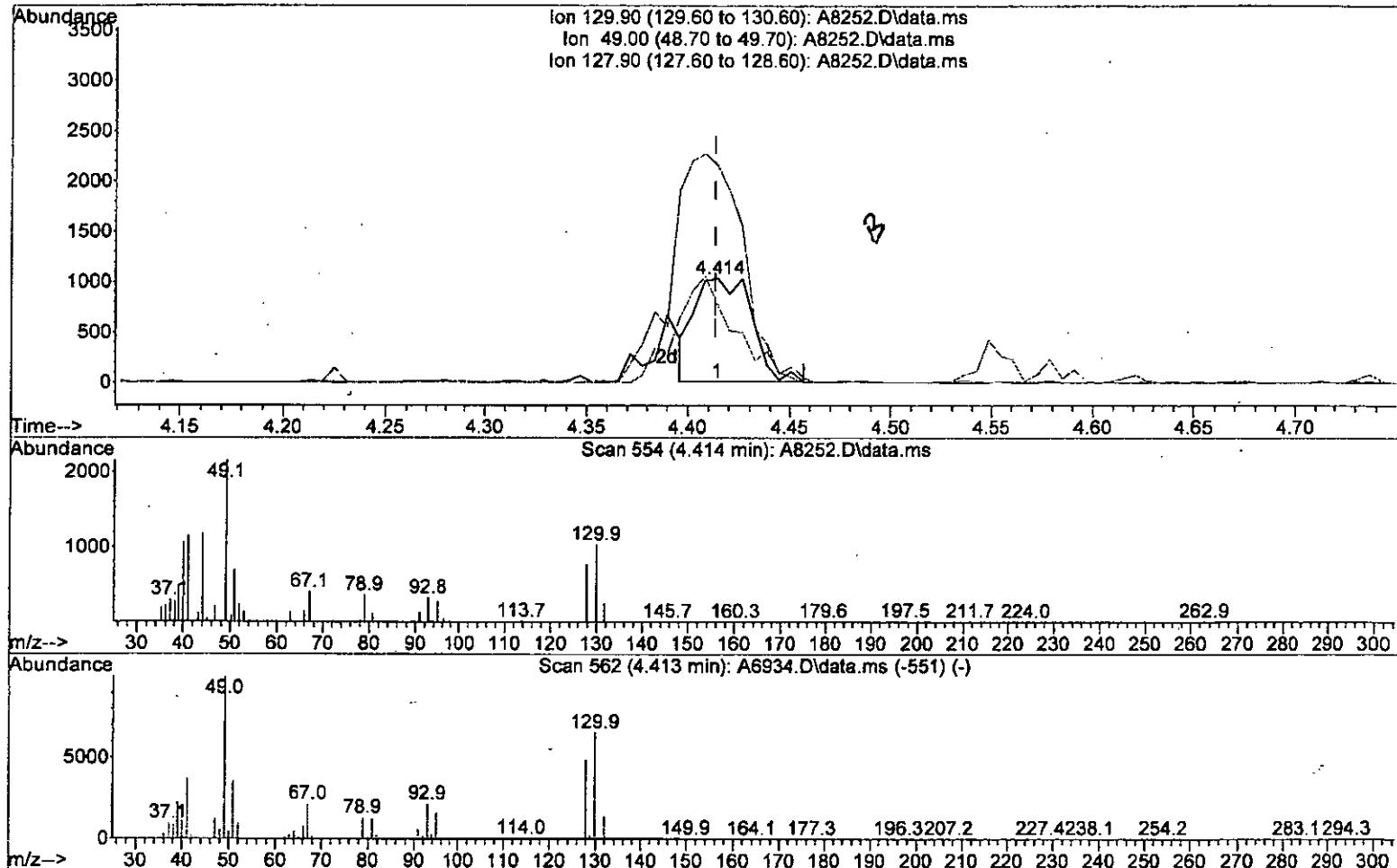
4.103min (+0.014) 0.88 ug/L m

response 2628

Ion	Exp%	Act%
43.10	100	100
57.10	7.80	11.12
72.10	22.60	17.13
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(36) Bromochloromethane

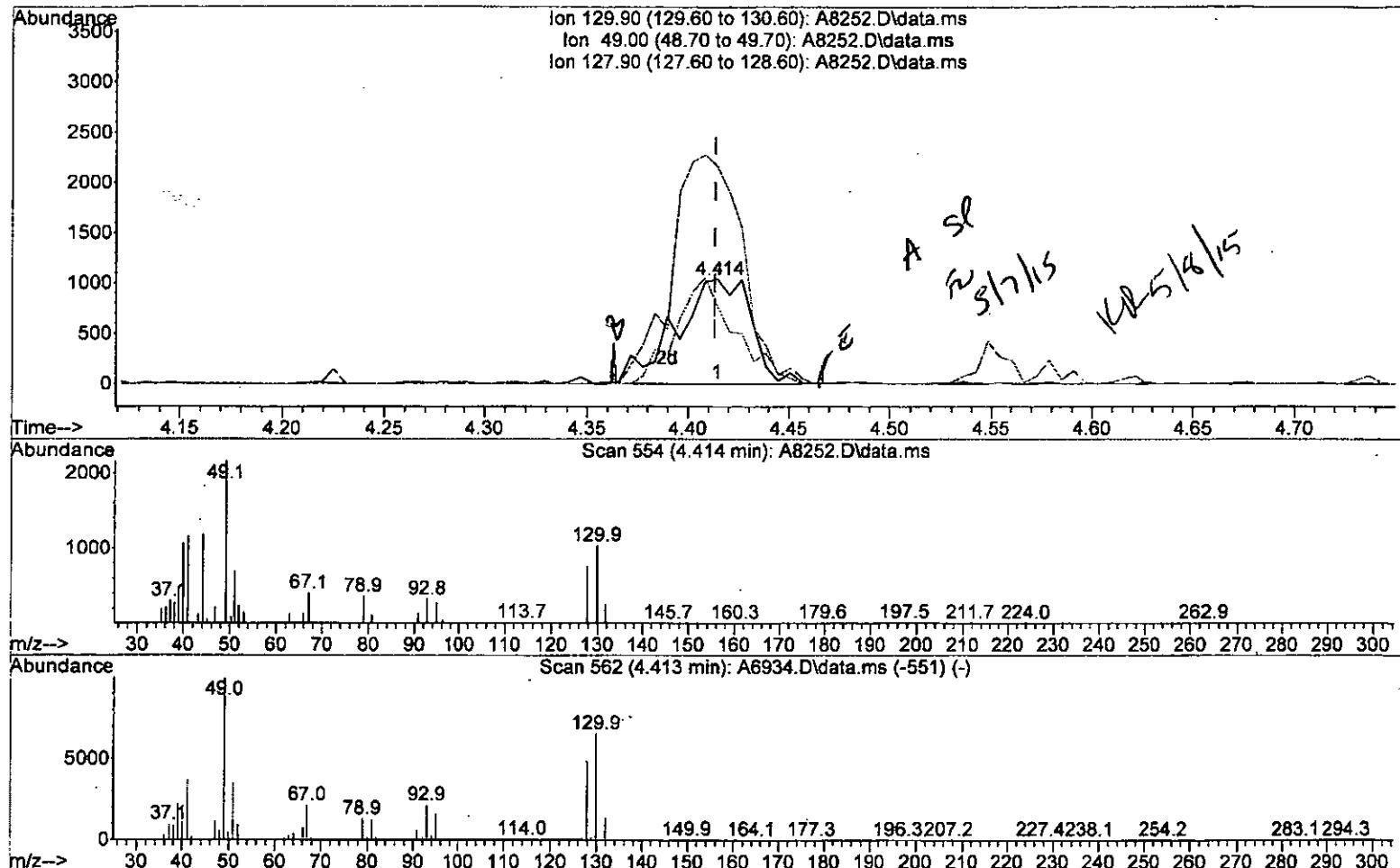
4.414min (+0.001) 0.39 ug/L

response 1976

Ion	Exp%	Act%
129.90	100	100
49.00	133.80	207.72#
127.90	75.20	74.13
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(36) Bromochloromethane

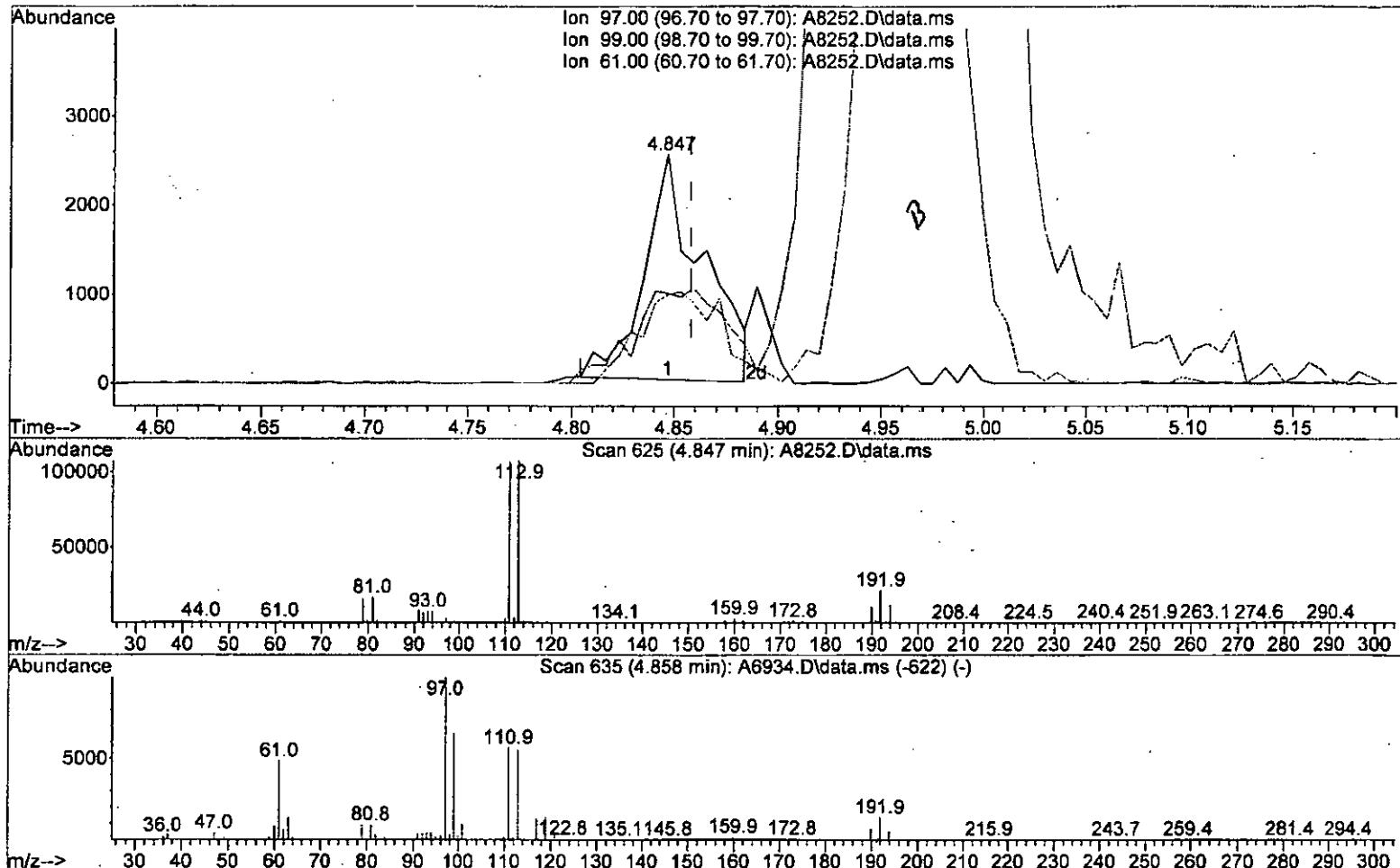
4.414min (+0.001) 0.53 ug/L m

response 2673

Ion	Exp%	Act%
129.90	100	100
49.00	133.80	207.72#
127.90	75.20	74.13
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(40) 1,1,1-Trichloroethane (P)

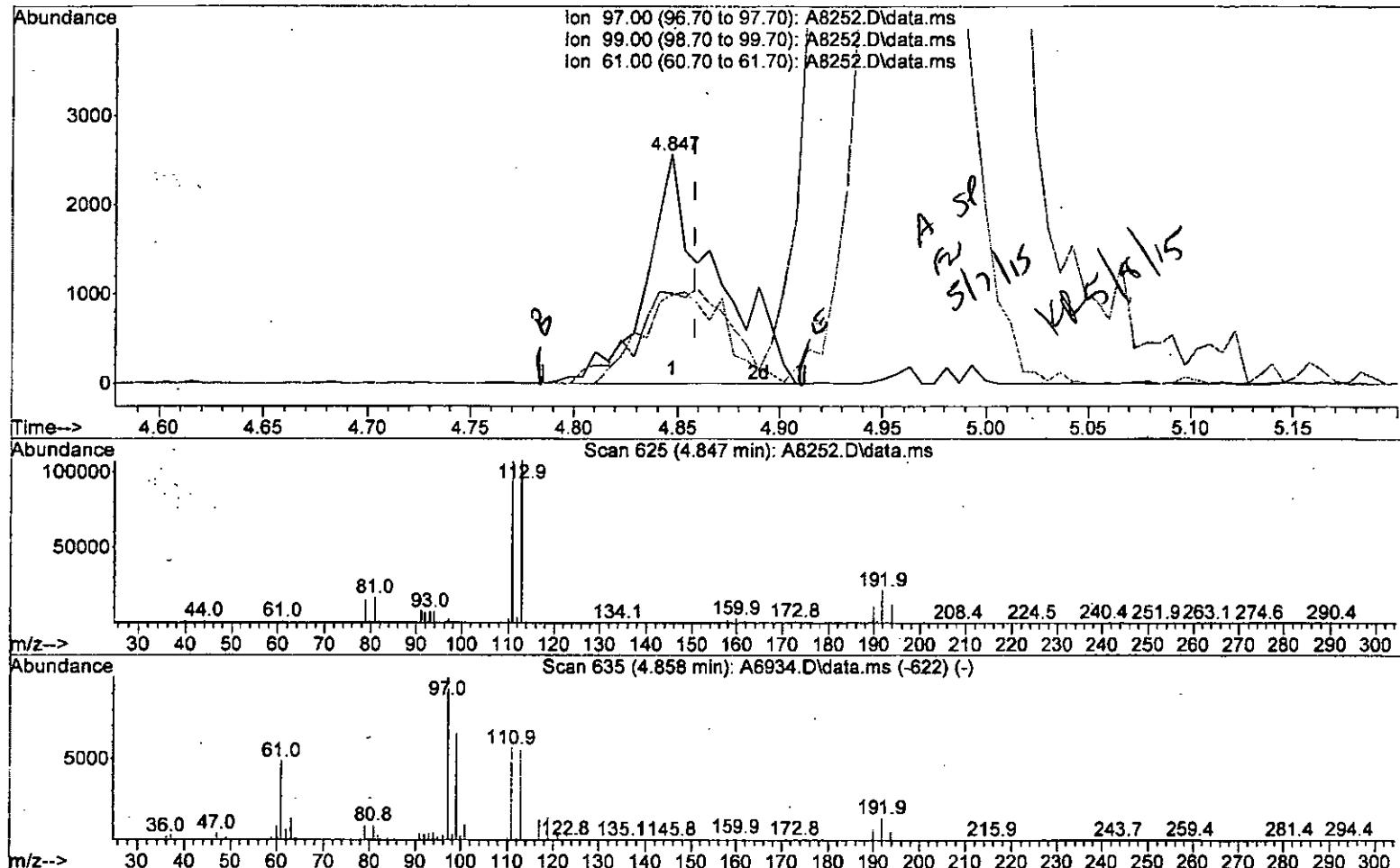
4.847min (-0.011) 0.38 ug/L

response 4964

Ion	Exp%	Act%
97.00	100	100
99.00	60.90	39.35#
61.00	45.20	38.61
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(40) 1,1,1-Trichloroethane (P)

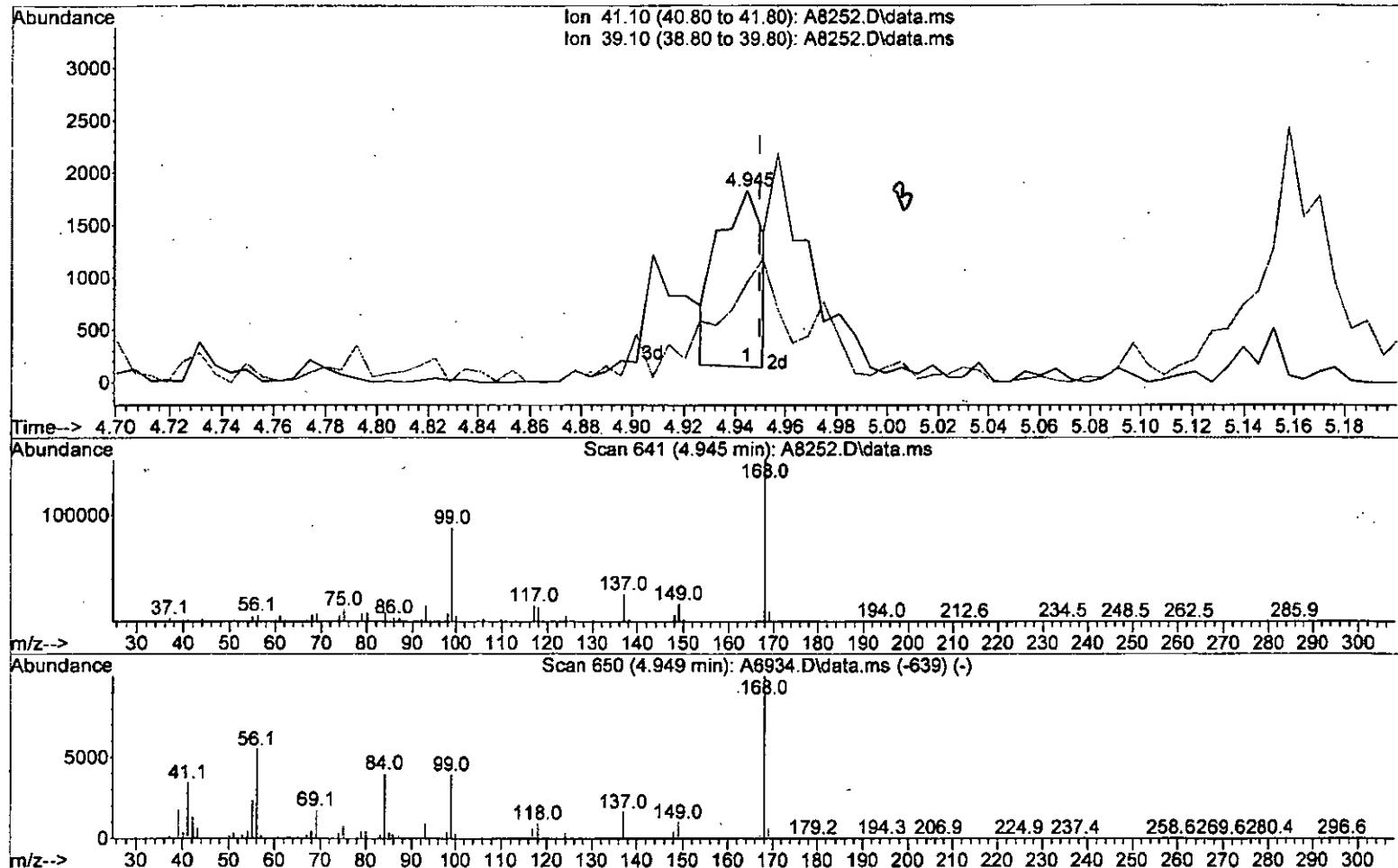
4.847min (-0.011) 0.46 ug/L m

response 5954

Ion	Exp%	Act%
97.00	100	100
99.00	60.90	39.35#
61.00	45.20	38.61
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(42) Cyclohexane (P)

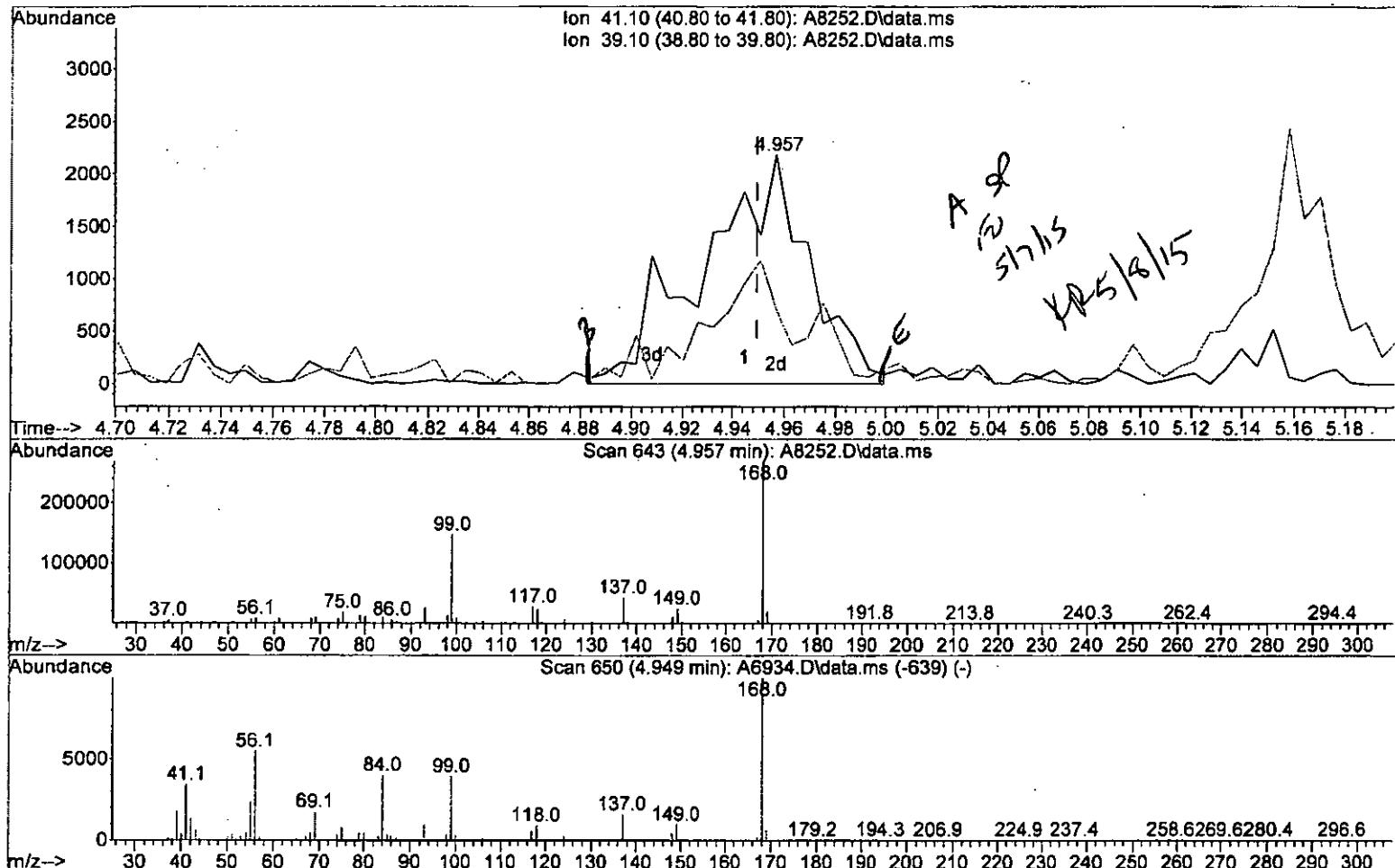
4.945min (-0.005) 0.19 ug/L

response 2030

Ion	Exp%	Act%
41.10	100	100
39.10	49.60	52.00
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(42) Cyclohexane (P)

4.957min (+0.007) 0.57 ug/L m

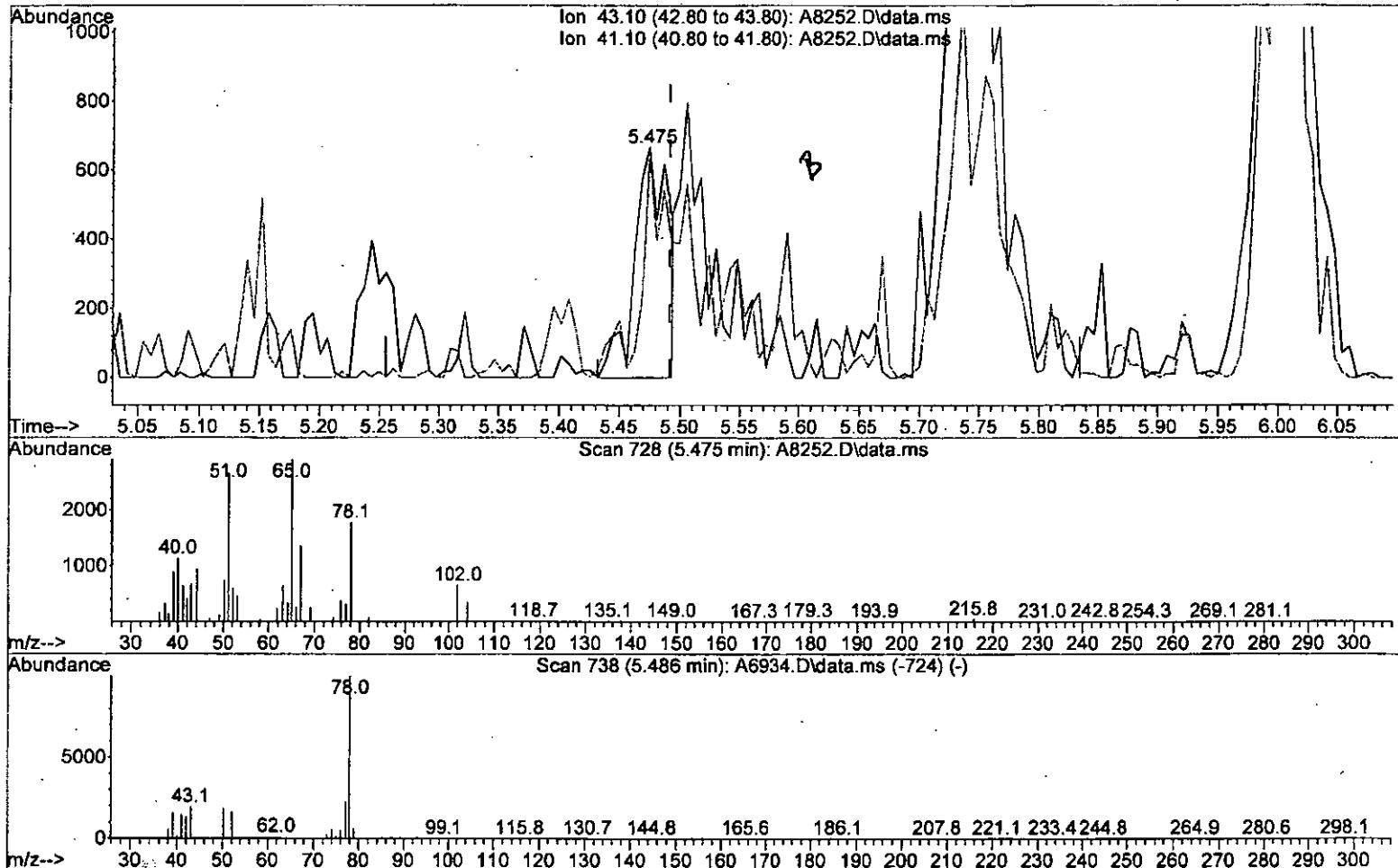
response 6228

Ion	Exp%	Act%
41.10	100	100
39.10	49.60	32.19
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(49) Iso-Butyl Alcohol

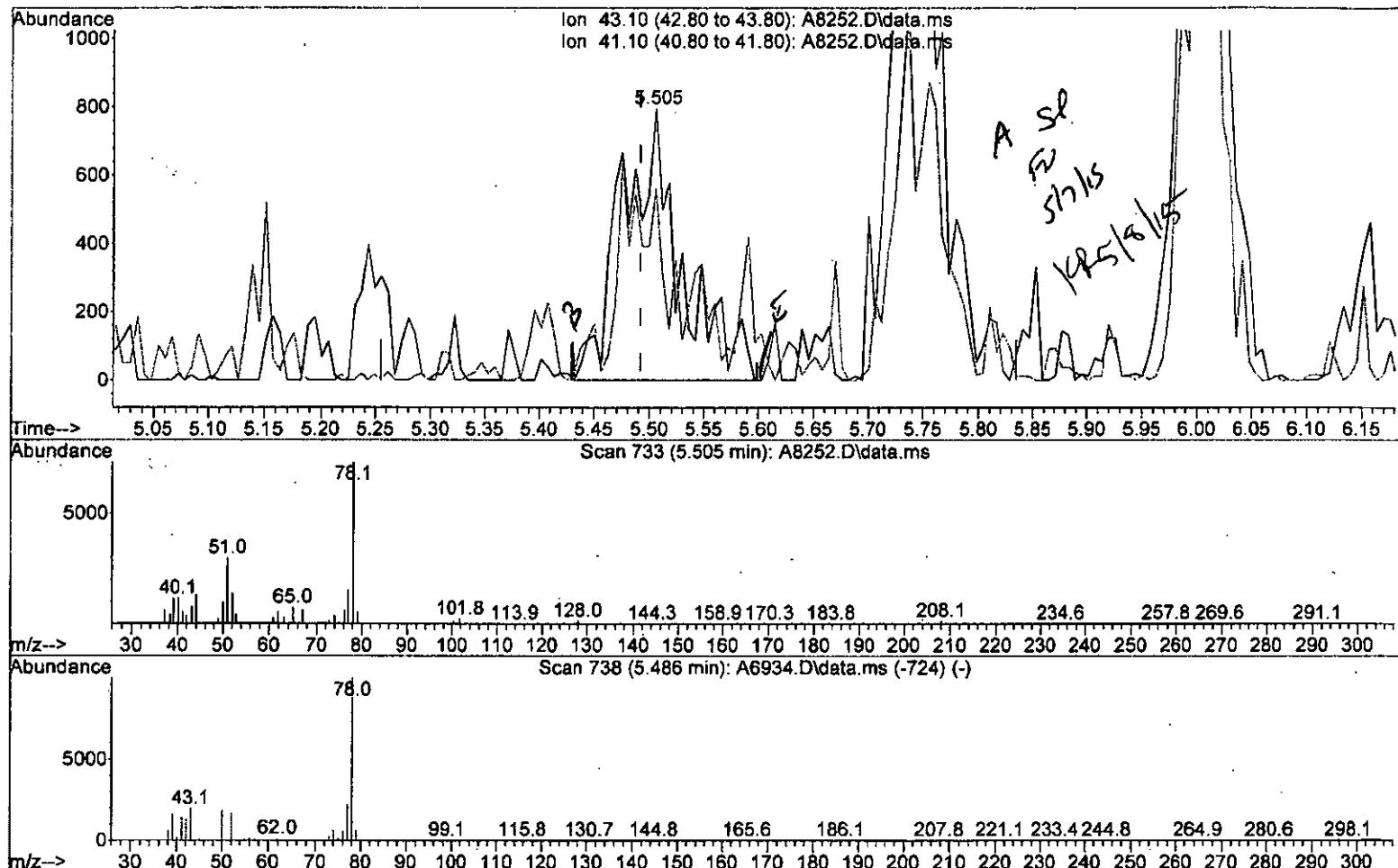
5.475min (-0.017) 4.06 ug/L

response 1272

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	97.29
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msv0a10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(49) Iso-Butyl Alcohol

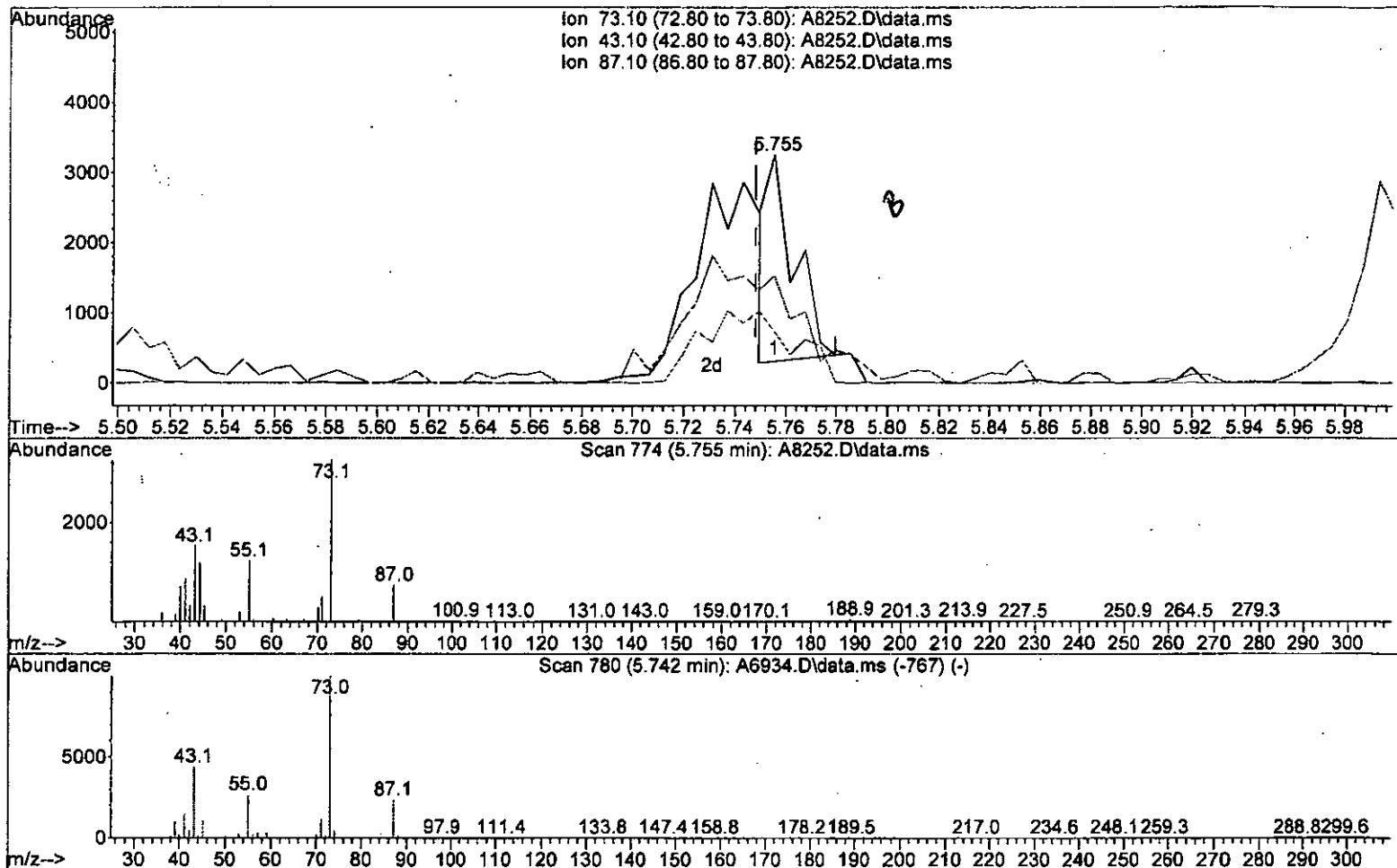
5.505min (+0.013) 9.36 ug/L m

response 2936

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	70.44
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(50) TAME

5.755min (+0.007) 0.10 ug/L

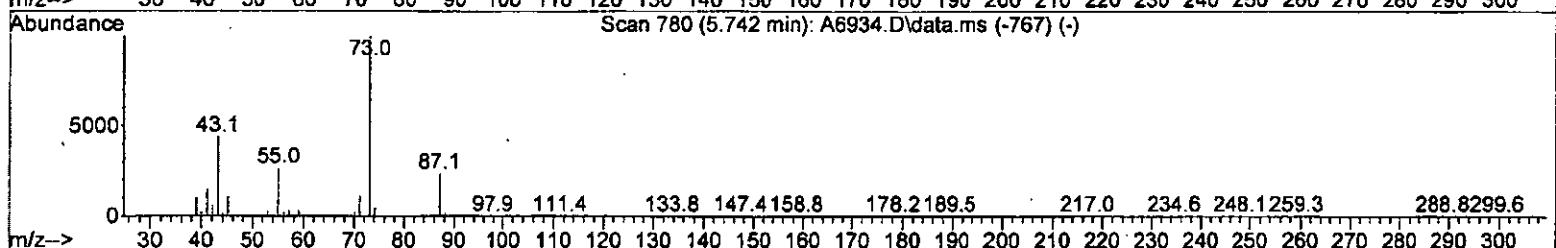
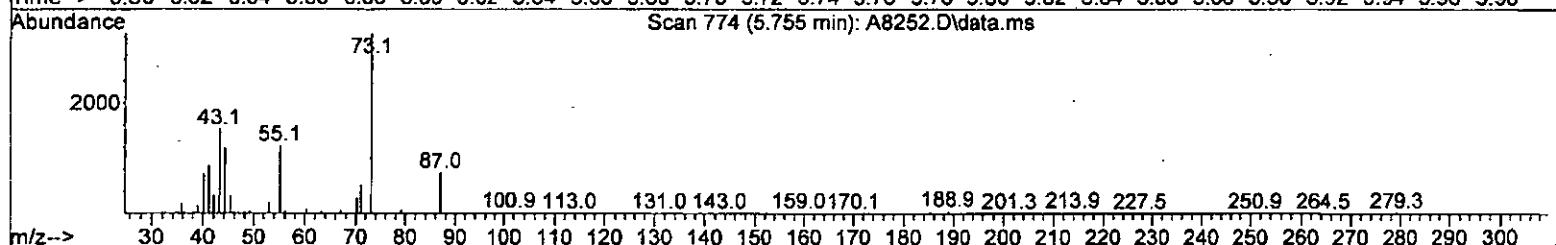
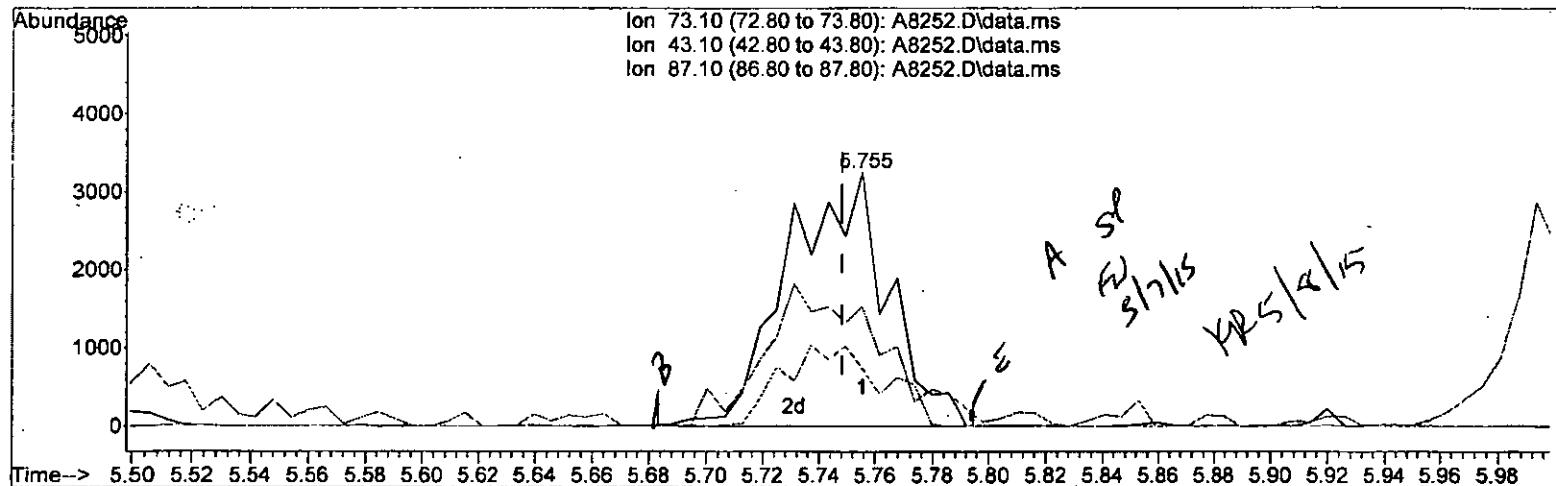
response 2137

Ion	Exp%	Act%
73.10	100	100
43.10	37.80	46.92
87.10	23.80	22.72
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(50) TAME

5.755min (+0.007) 0.36 ug/L m

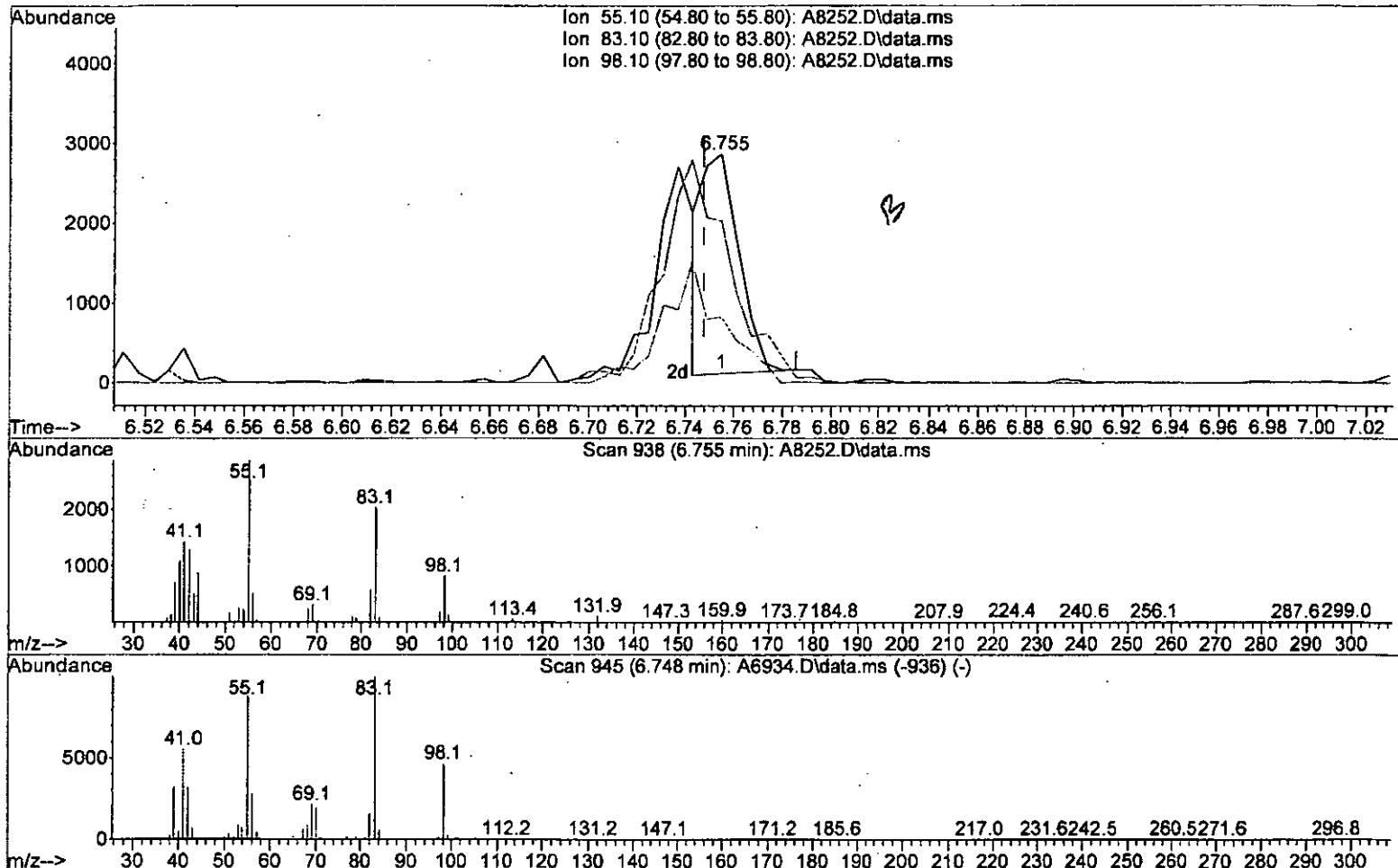
response 7995

Ion	Exp%	Act%
73.10	100	100
43.10	37.80	46.92
87.10	23.80	22.72
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(54) Methylcyclohexane (P)

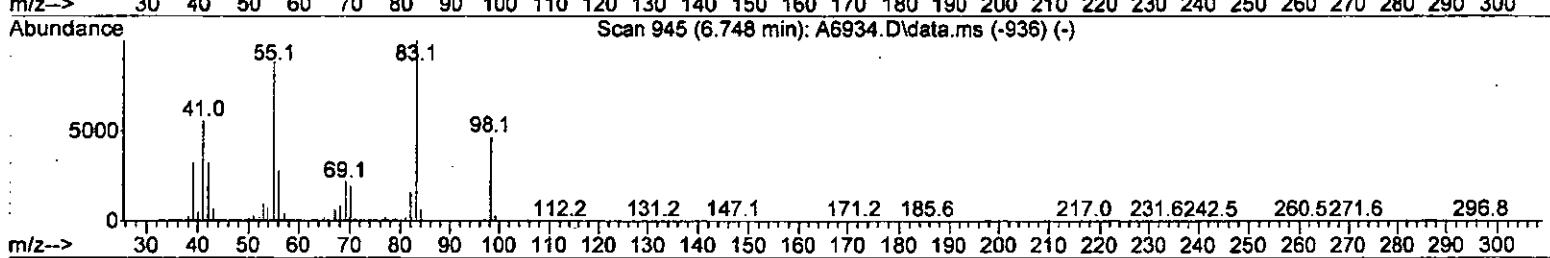
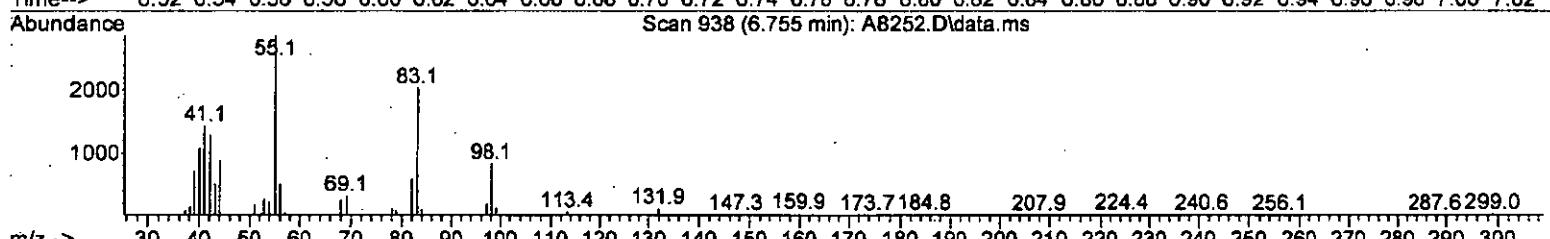
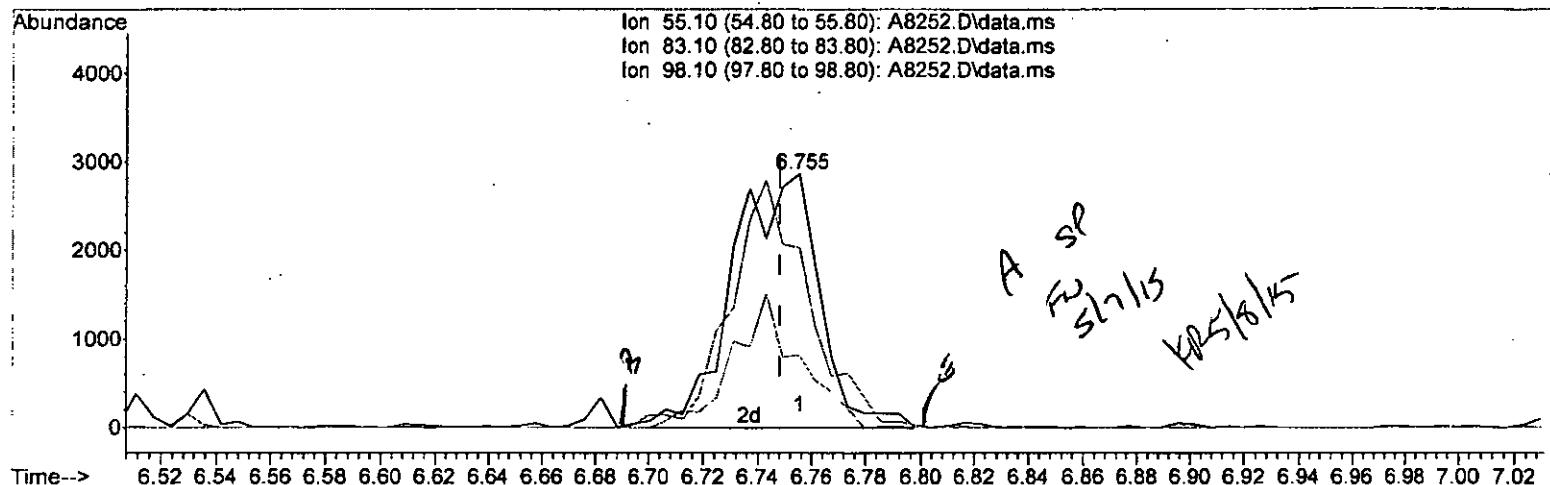
6.755min (+0.007) 0.22 ug/L

response 2870

Ion	Exp%	Act%
55.10	100	100
83.10	118.00	70.76#
98.10	52.10	28.68#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(54) Methylcyclohexane (P)

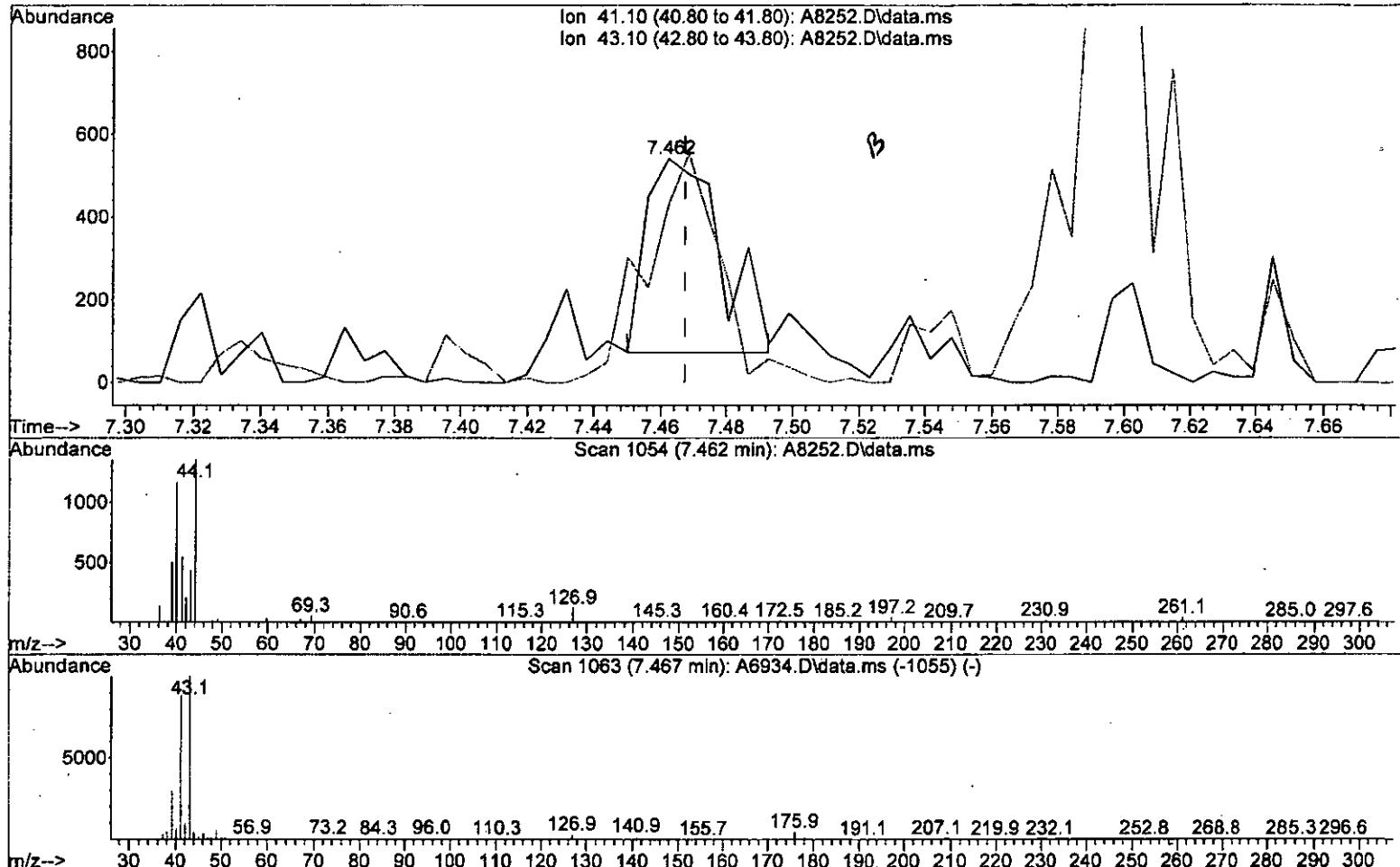
6.755min (+0.007) 0.49 ug/L m

response 6388

Ion	Exp%	Act%
55.10	100	100
83.10	118.00	70.76#
98.10	52.10	28.68#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(60) 2-Nitropropane

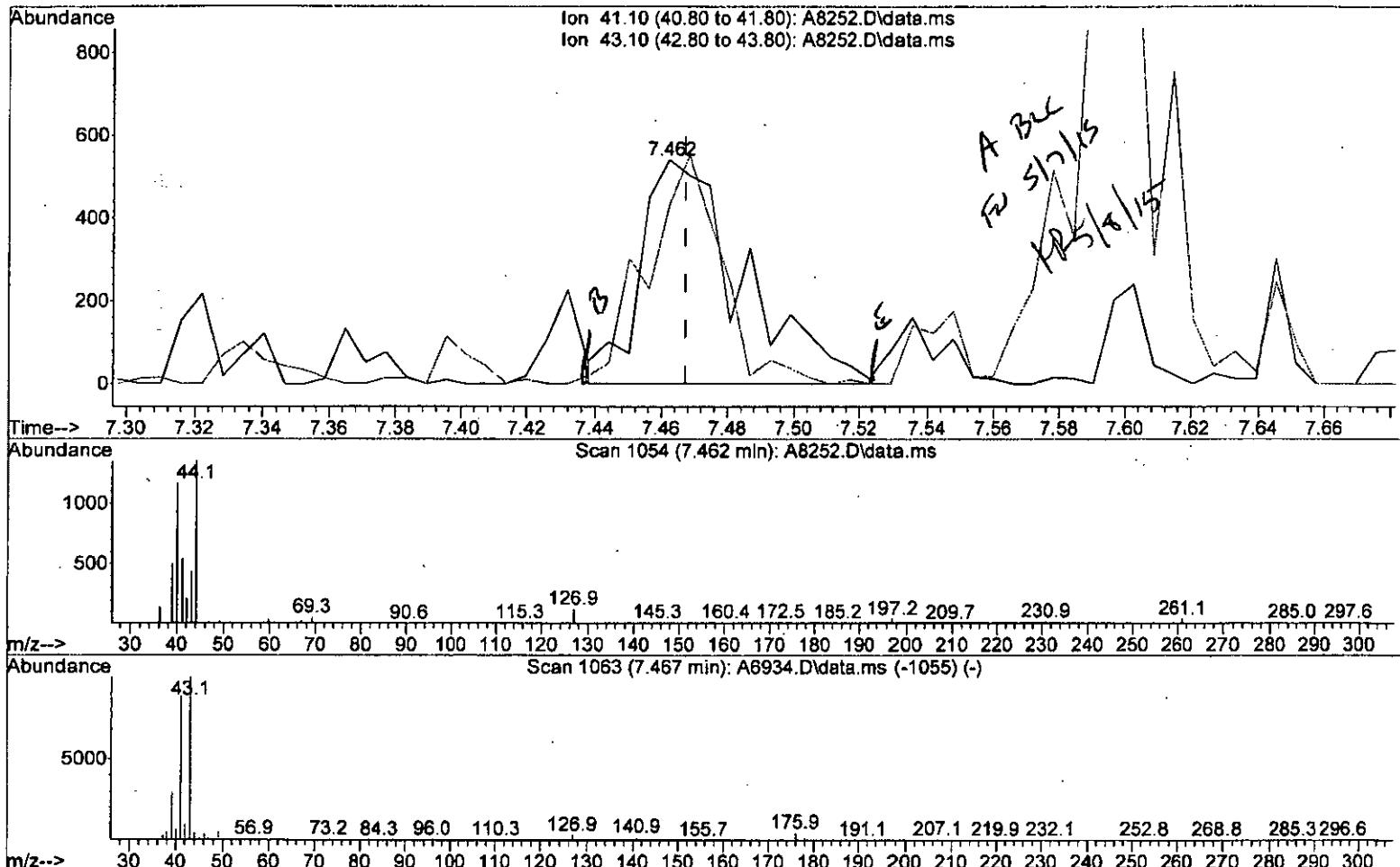
7.462min (-0.005) 0.38 ug/L

response 743

Ion	Exp%	Act%
41.10	100	100
43.10	111.20	79.85#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(60) 2-Nitropropane

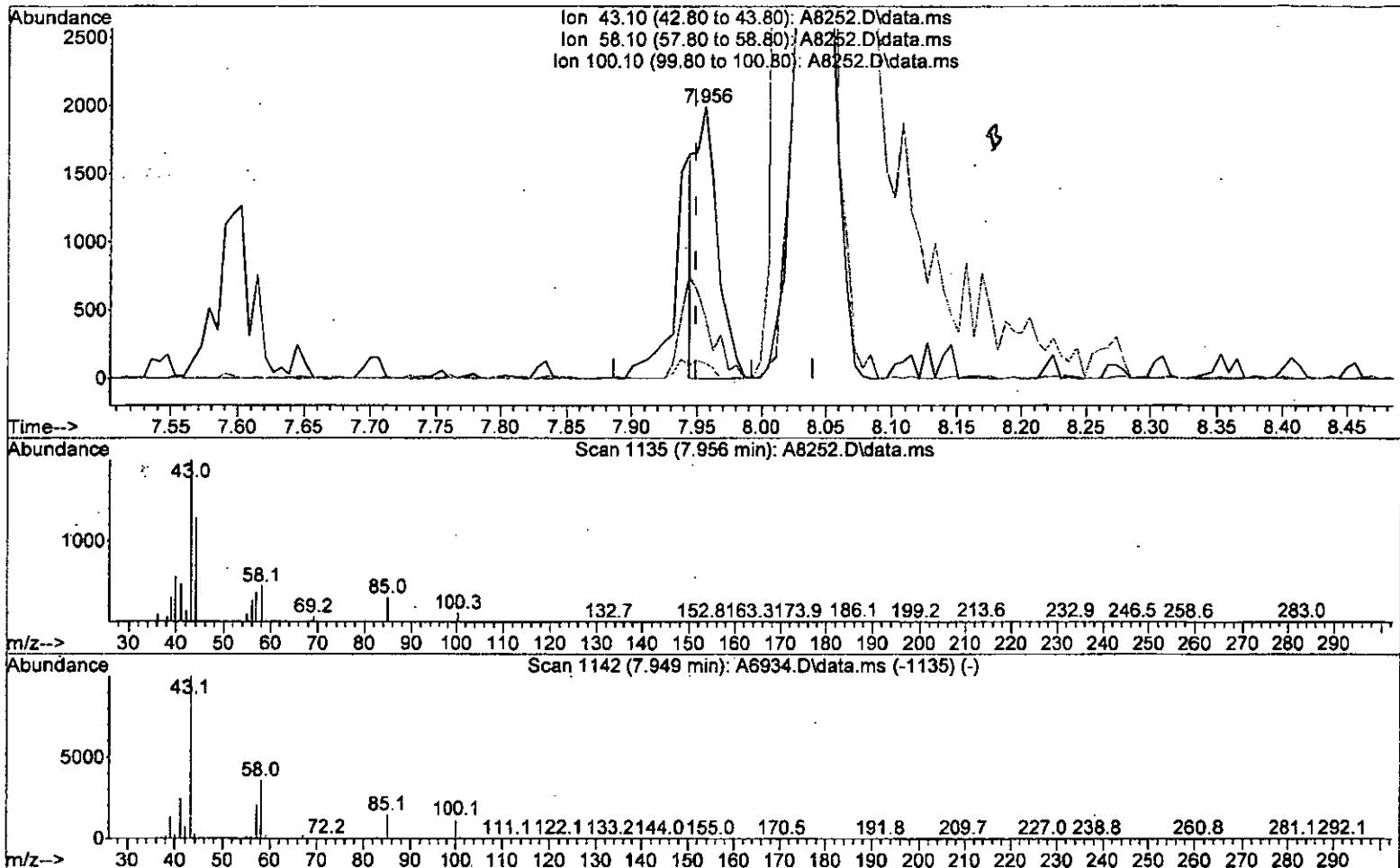
7.462min (-0.005) 0.59 ug/L m

response 1141

Ion	Exp%	Act%
41.10	100	100
43.10	111.20	79.85#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoal0\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - .8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(63) 4-Methyl-2-pentanone (P)

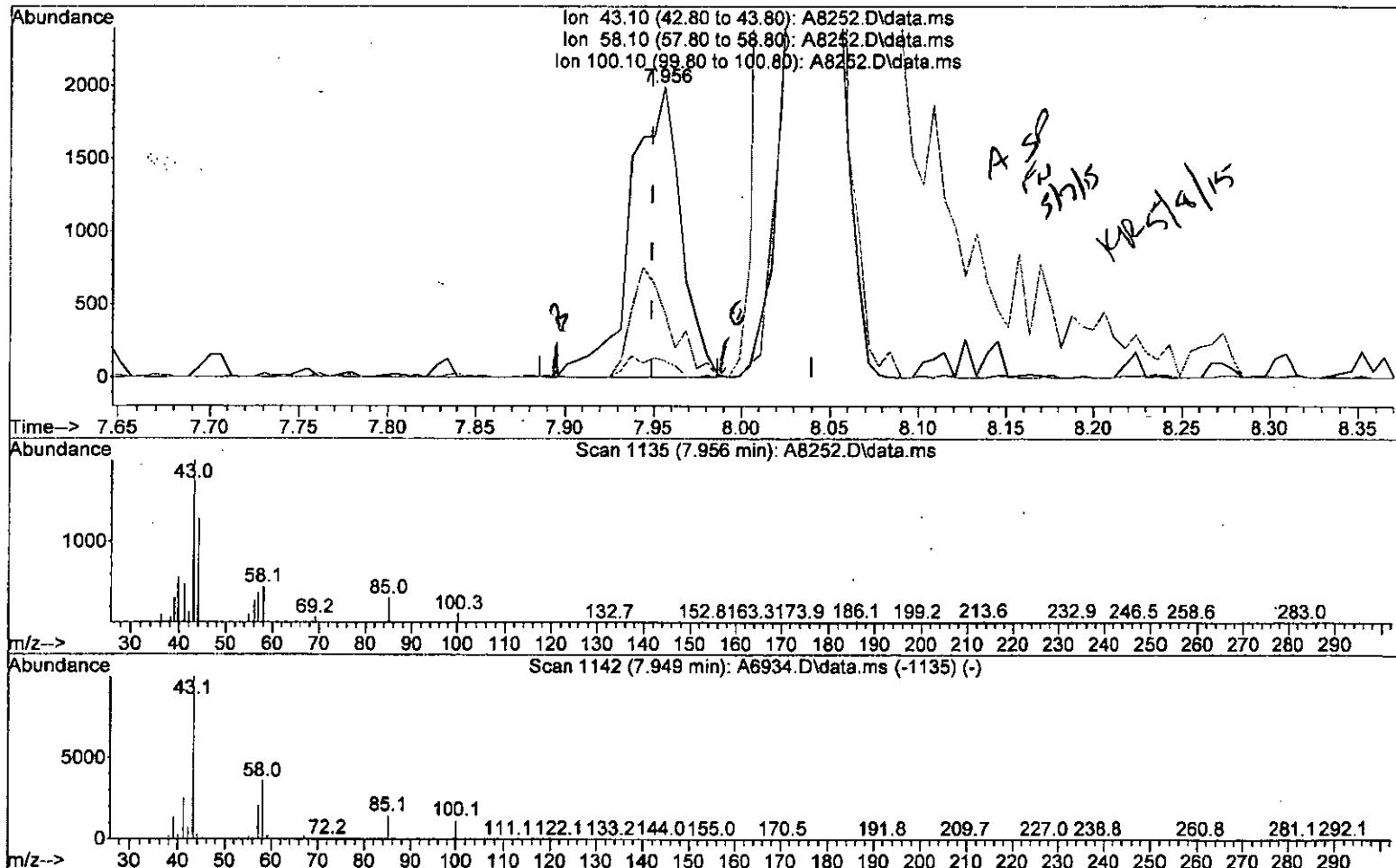
7.956min (+0.007) 0.32 ug/L

response 2302

Ion	Exp%	Act%
43.10	100	100
58.10	36.50	22.42
100.10	13.70	5.73
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(63) 4-Methyl-2-pentanone (P)

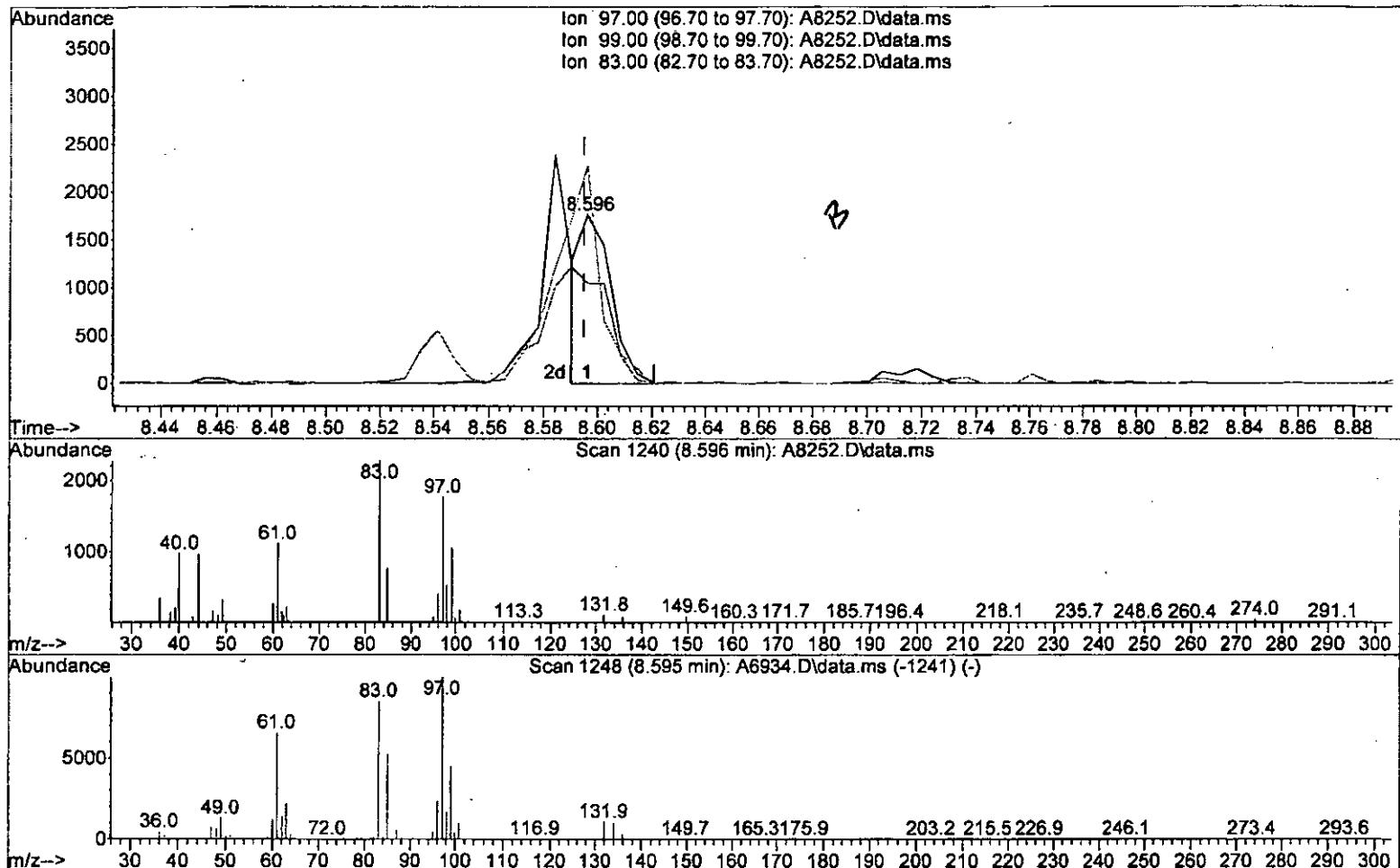
7.956min (+0.007) 0.55 ug/L m

response 3877

Ion	Exp%	Act%
43.10	100	100
58.10	36.50	22.42
100.10	13.70	5.73
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(68) 1,1,2-Trichloroethane (P)

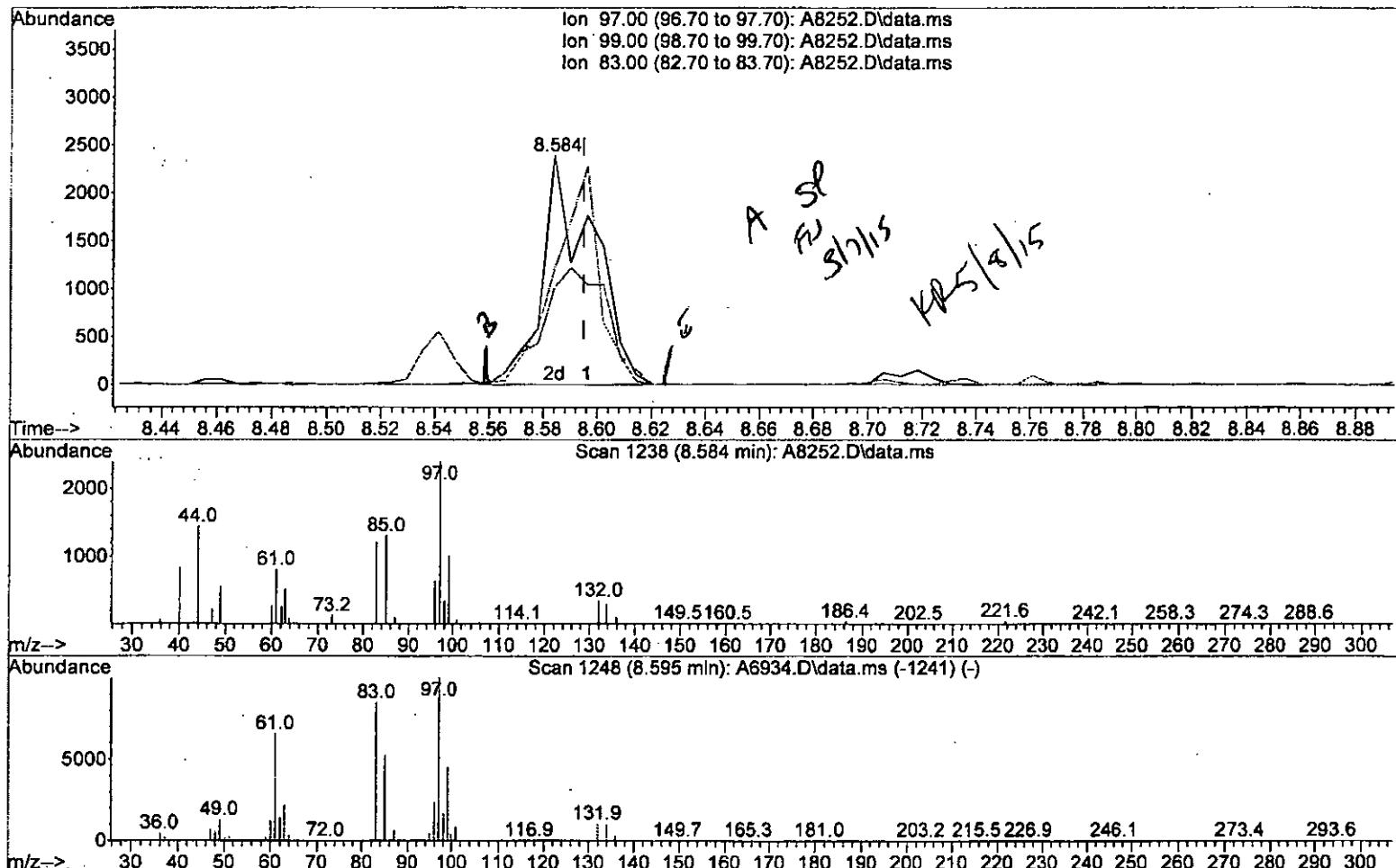
8.596min (+0.001) 0.20 ug/L

response 1367

Ion	Exp%	Act%
97.00	100	100
99.00	58.80	59.22
83.00	82.00	129.12#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(68) 1,1,2-Trichloroethane (P)

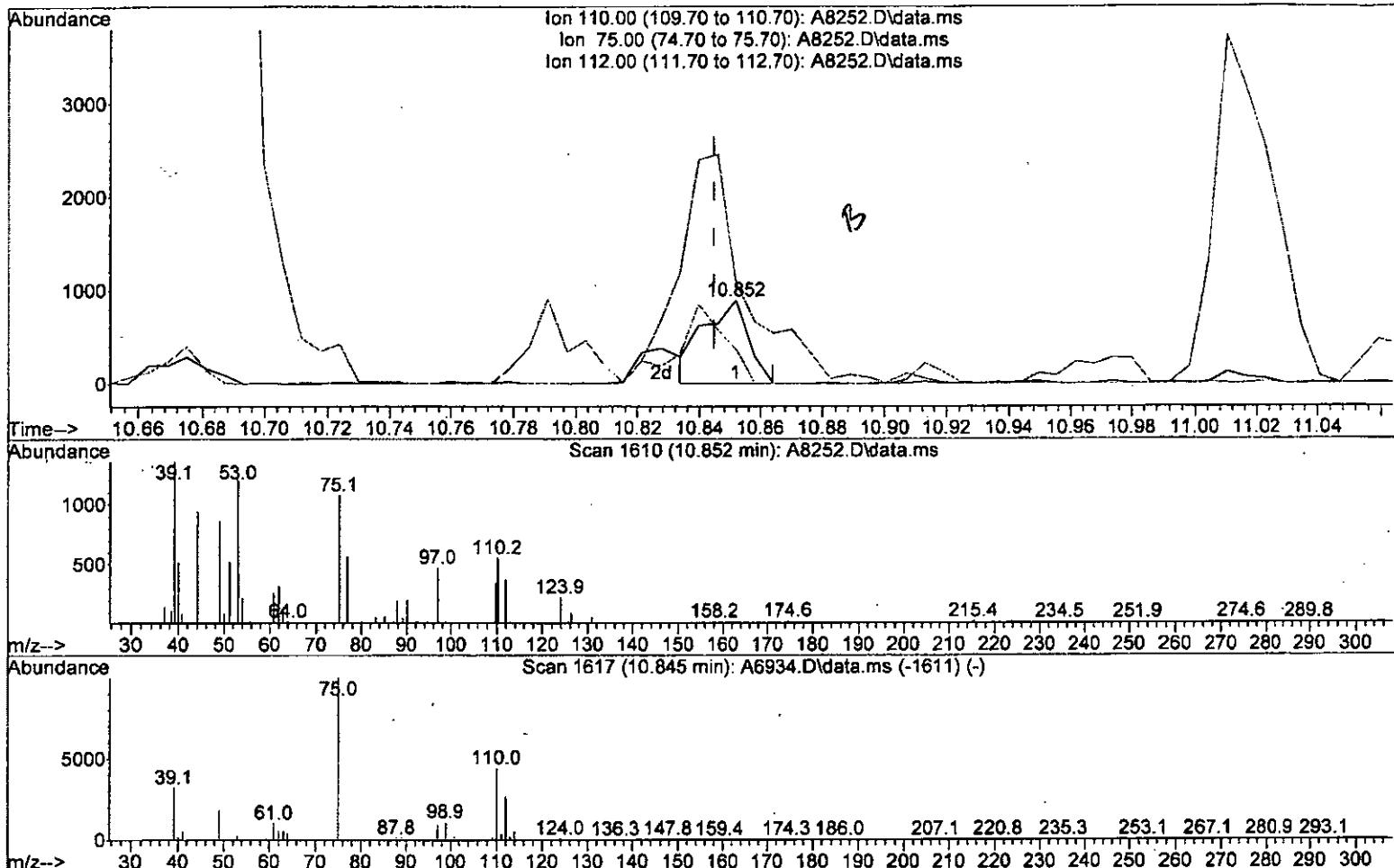
8.584min (-0.011) 0.45 ug/L m

response 3094

Ion	Exp%	Act%
97.00	100	100
99.00	58.80	42.26
83.00	82.00	50.48#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 . Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(93) 1,2,3-Trichloropropane

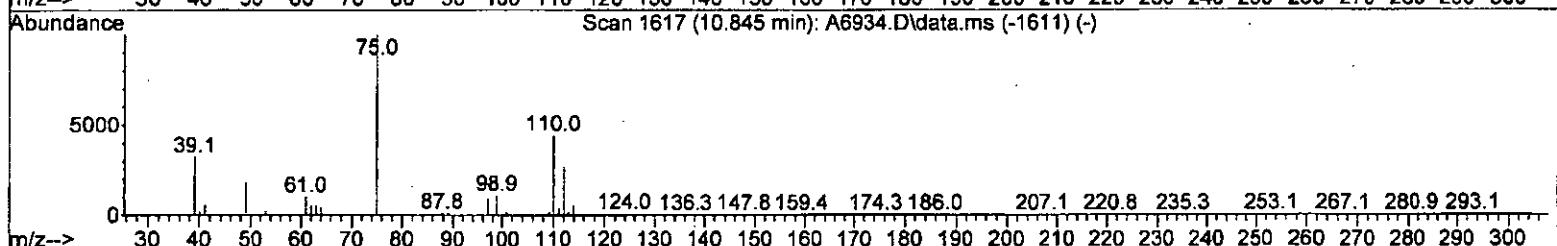
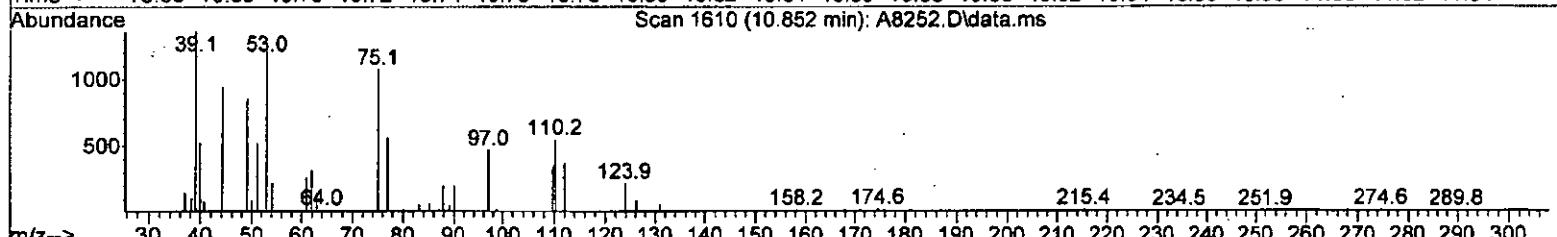
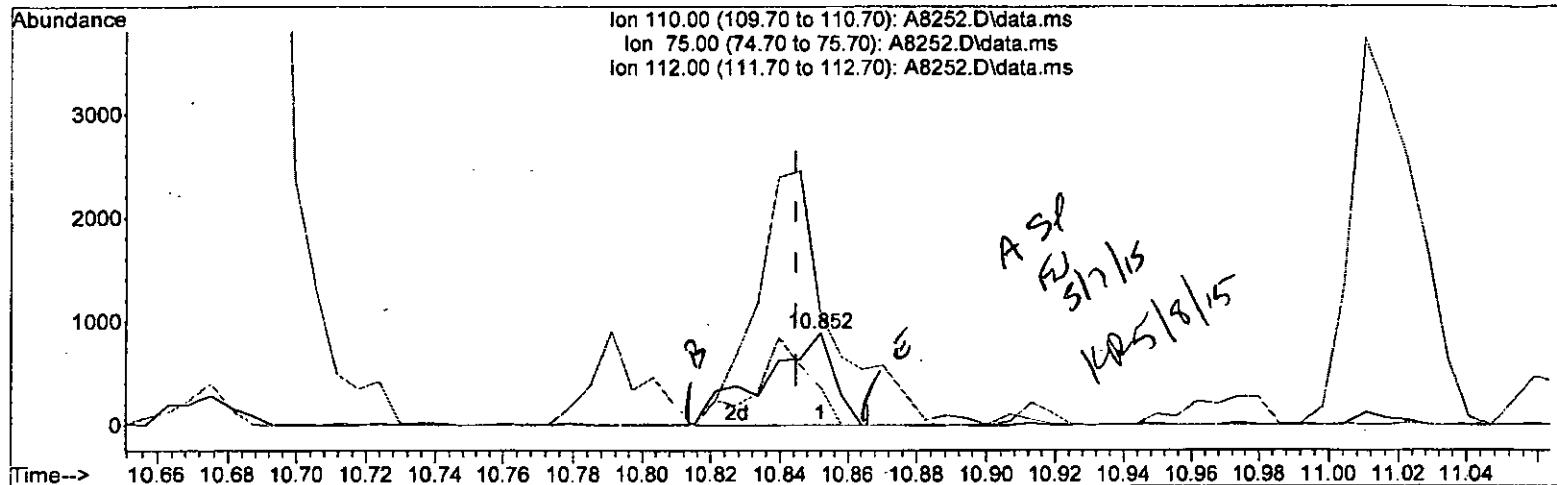
10.852min (+0.007) 0.42 ug/L

response 890

Ion	Exp%	Act%
110.00	100	100
75.00	238.20	121.06#
112.00	60.70	41.33
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(93) 1,2,3-Trichloropropane

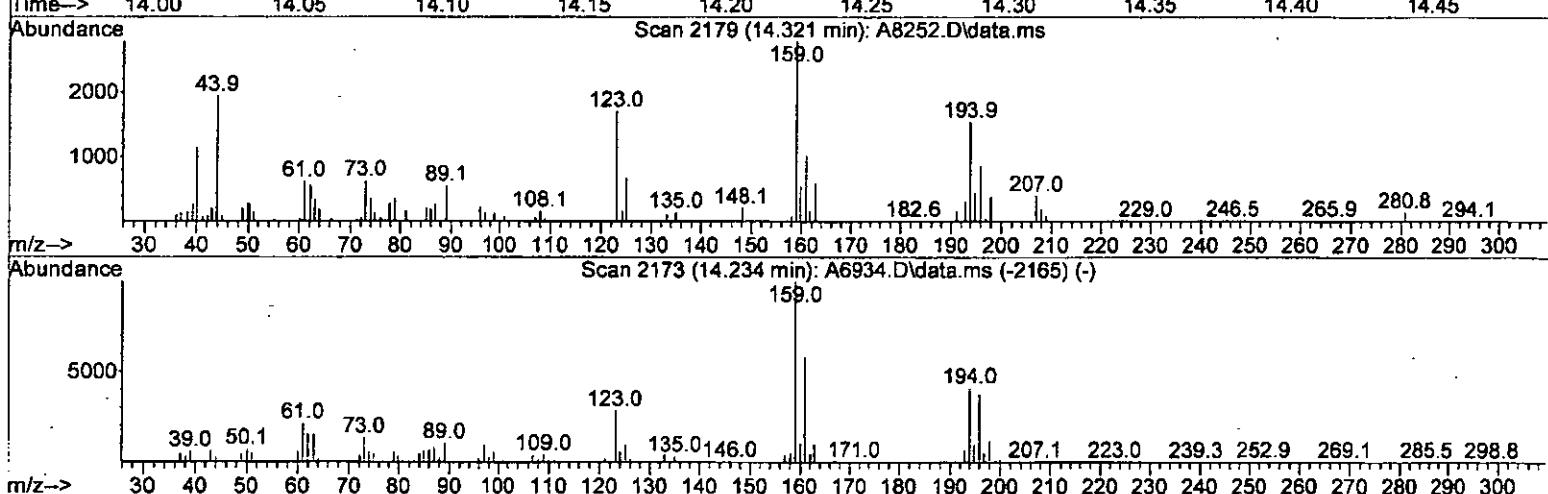
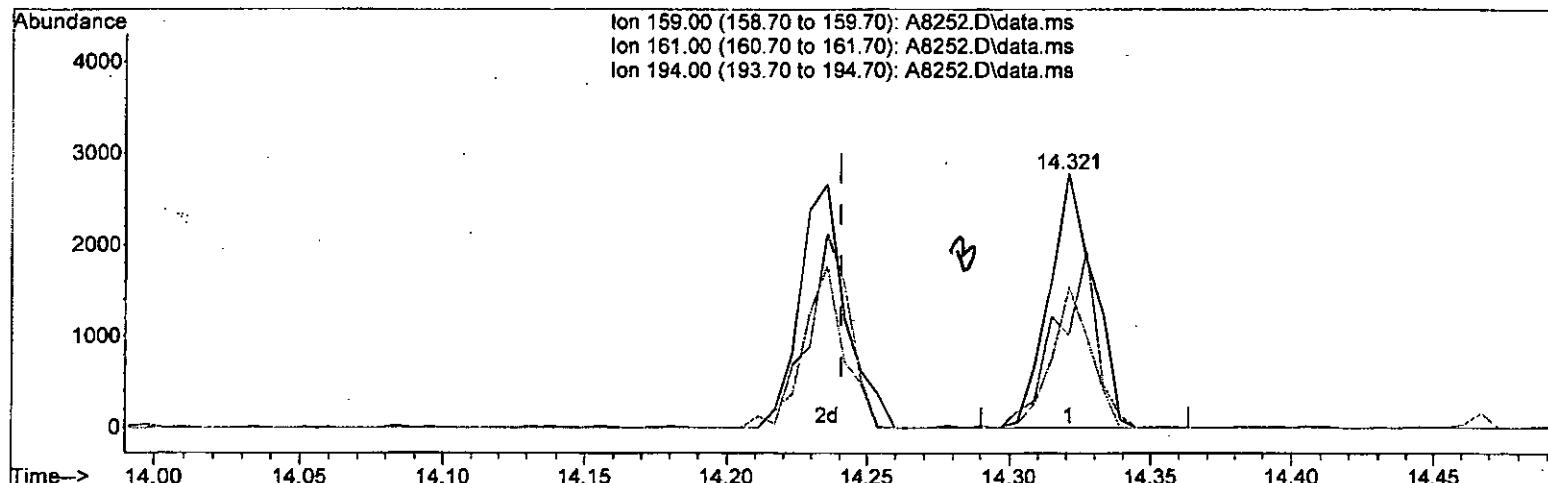
10.852min (+0.007) 0.59 ug/L m

response 1251

Ion	Exp%	Act%
110.00	100	100
75.00	238.20	196.53#
112.00	60.70	67.09
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(118) 2,4,5-Trichlorotoluène

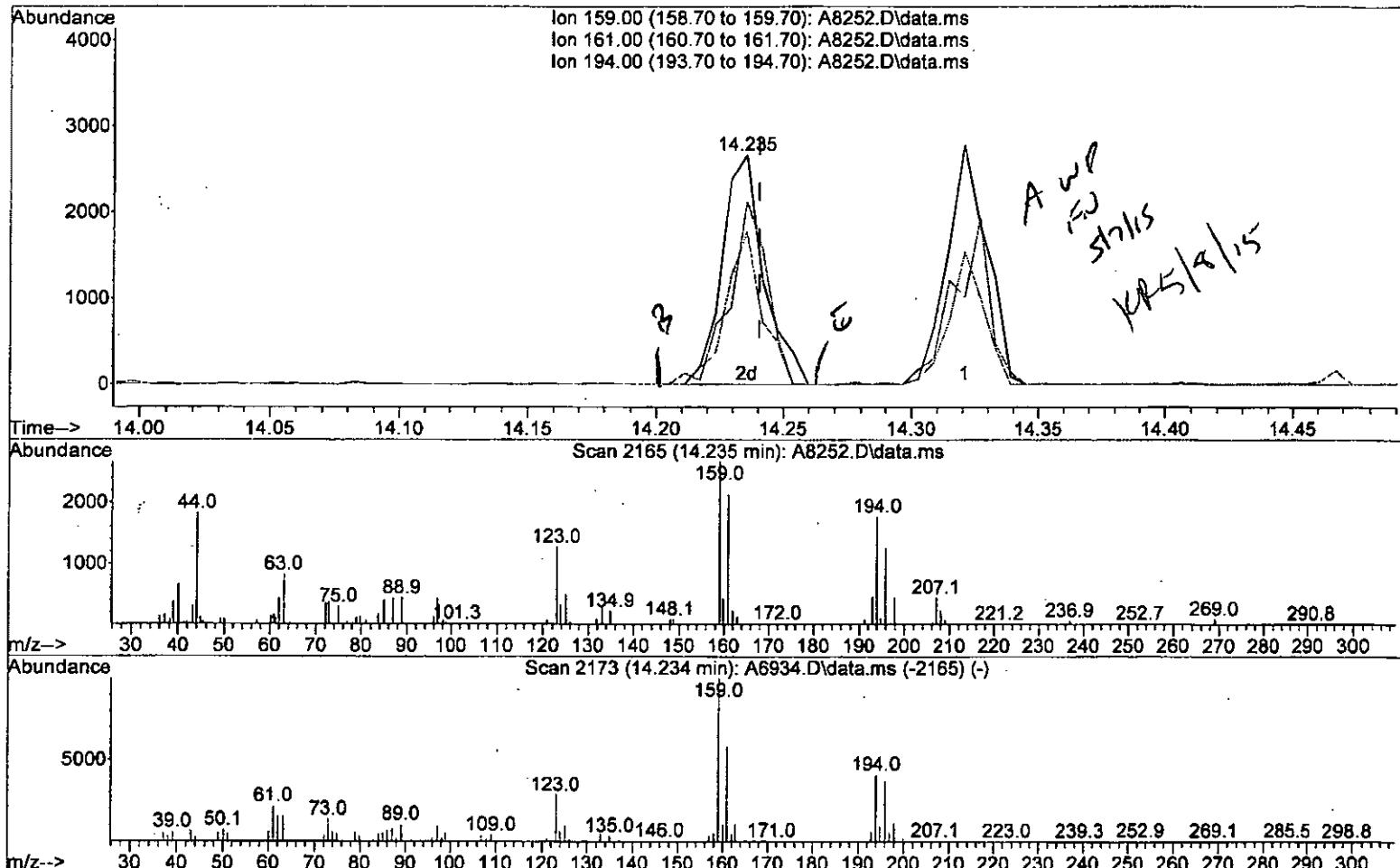
14.321min (+0.080) 0.51 ug/L

response 3037

Ion	Exp%	Act%
159.00	100	100
161.00	62.00	42.36
194.00	43.50	55.44
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(118) 2,4,5-Trichlorotoluene

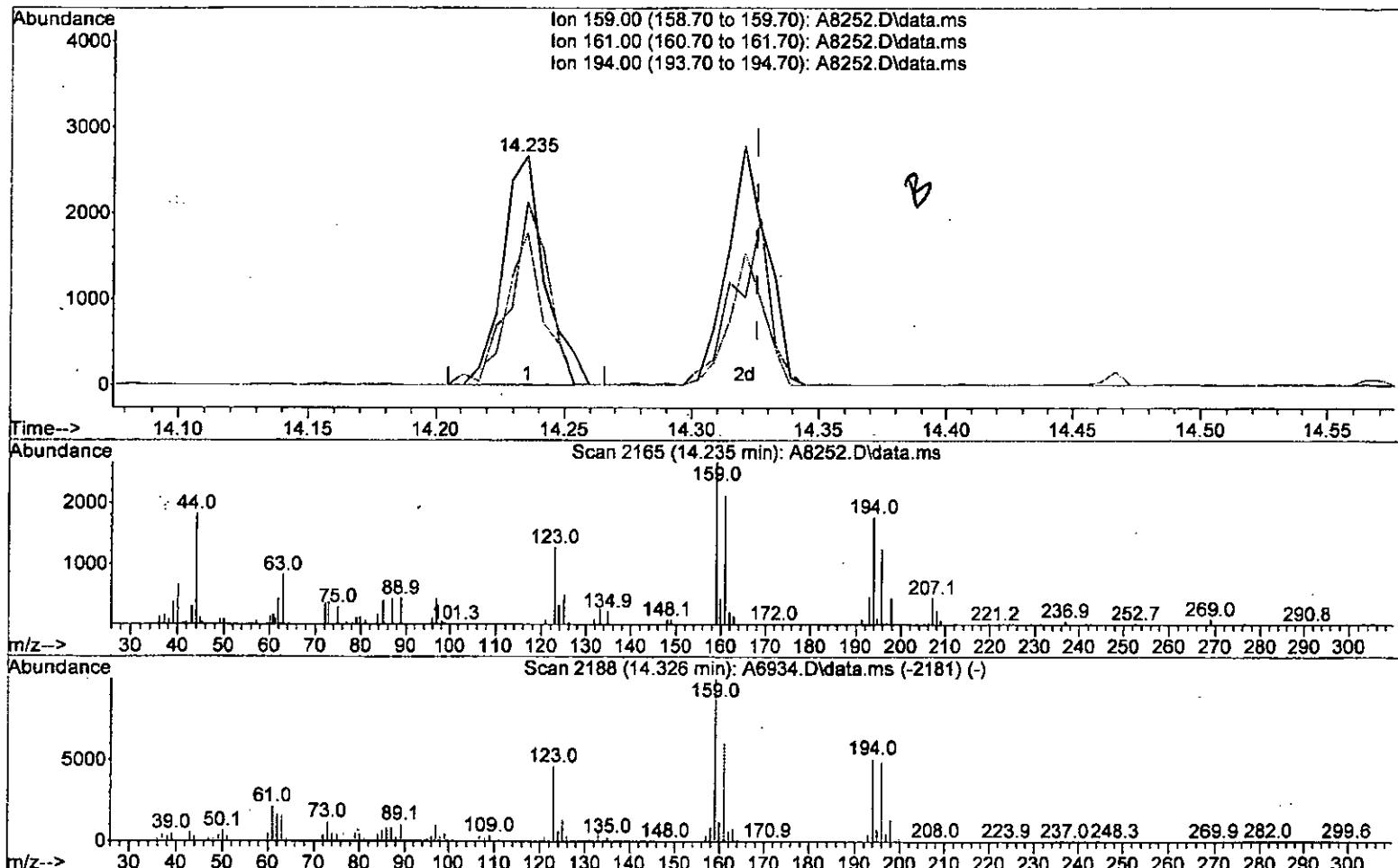
14.235min (-0.005) 0.51 ug/L m

response 3021

Ion	Exp%	Act%
159.00	100	100
161.00	62.00	79.71
194.00	43.50	66.42#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(119) 2,3,6-Trichlorotoluene

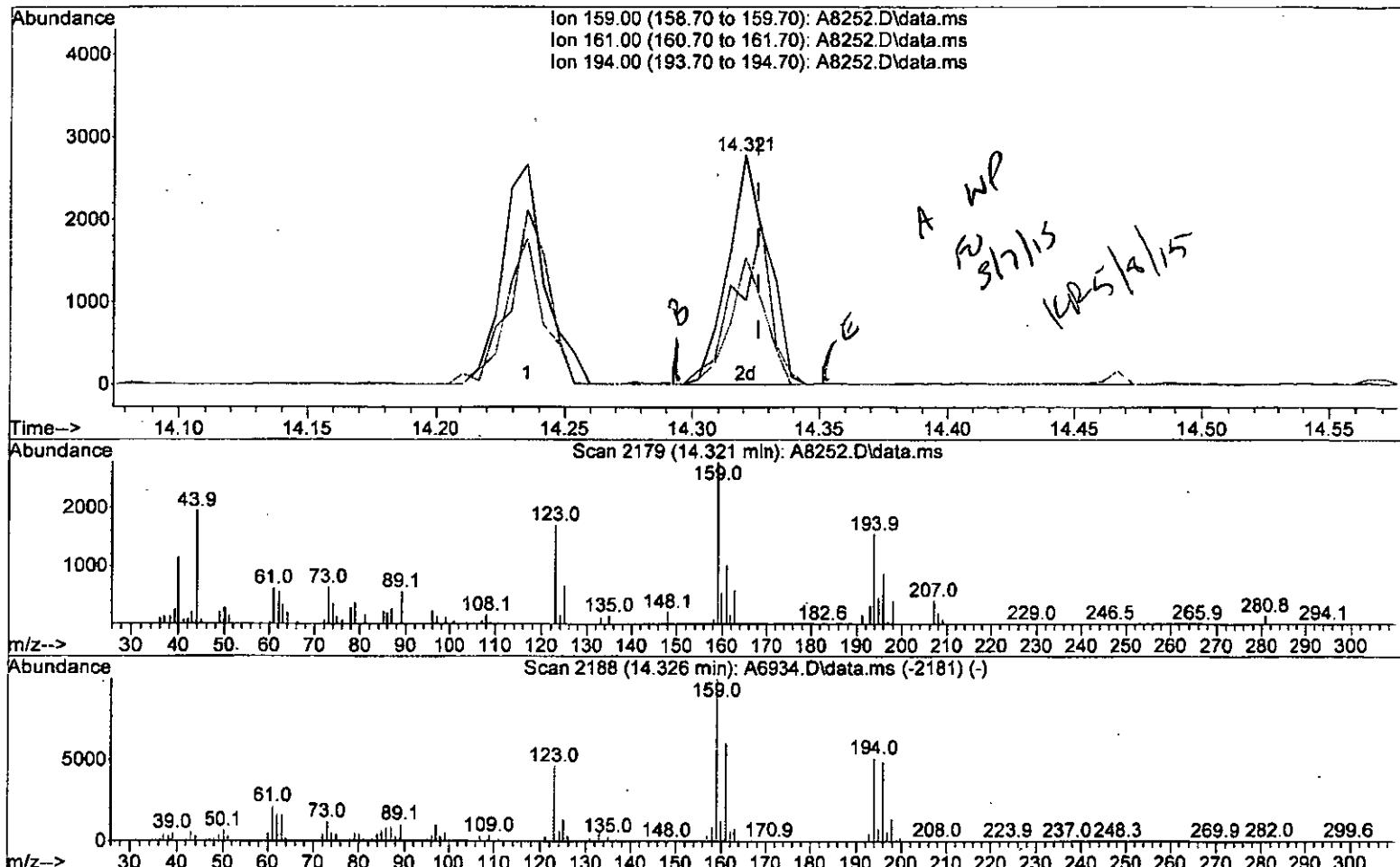
14.235min (-0.090) 0.60 ug/L

response 3020

Ion	Exp%	Act%
159.00	100	100
161.00	62.90	79.71
194.00	47.30	66.42
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8252.D  
 Acq On : 6 May 2015 4:31 pm  
 Operator : F. NAEGLER  
 Sample : 0.5 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8252.D\data.ms

(119) 2,3,6-Trichlorotoluene

14.321min (-0.005) 0.60 ug/L m

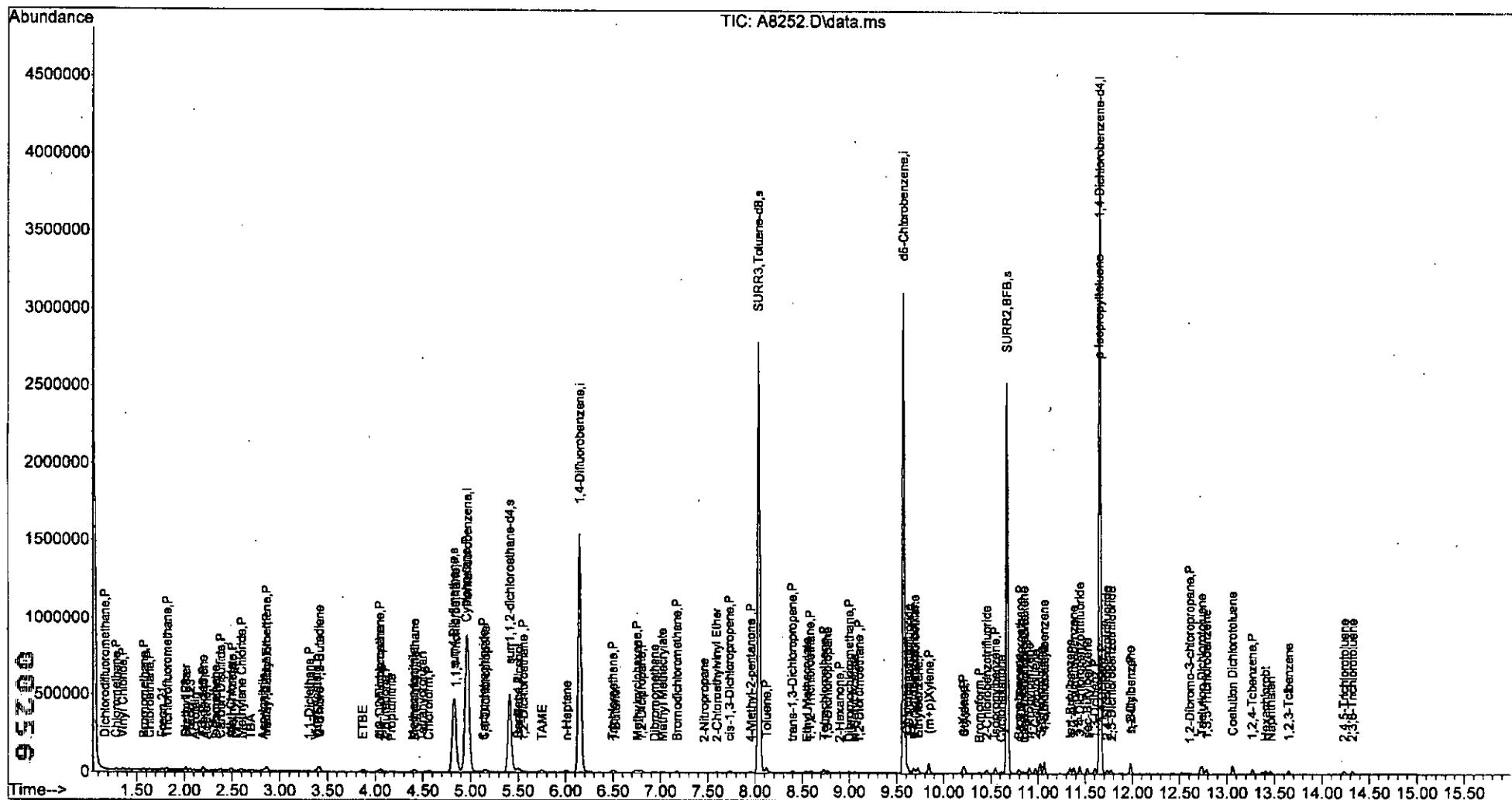
response 3038

Ion	Exp%	Act%
159.00	100	100
161.00	62.90	36.46#
194.00	47.30	55.44
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
Data File : A8252.D  
Acq On : 6 May 2015 4:31 pm  
Operator : F. NAEGLER  
Sample : 0.5 PPB STD  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 07 09:13:00 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvao10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 07 10:01:27 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

FD  
5/7/15

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	919700	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1429798	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1336653	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	776663	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	430936	50.43	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	100.86%	
46) surr1,1,2-dichloroetha...	5.414	65	448817	50.45	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	100.90%	
64) SURR3,Toluene-d8	8.041	98	1652534	50.35	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	100.70%	
69) SURR2,BFB	10.675	95	664158	46.14	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	92.28%	
<b>Target Compounds</b>						
					Qvalue	
2) Dichlorodifluoromethane.	1.159	85	8914m	1.02	ug/L	
3) Chloromethane	1.281	50	16320	1.49	ug/L	93
4) Vinyl Chloride	1.354	62	11534	1.13	ug/L	85
5) Bromomethane	1.573	94	5088	1.45	ug/L	92
6) Chloroethane	1.640	64	6626	1.14	ug/L	88
7) Freon 21	1.768	67	13283	0.84	ug/L	99
8) Trichlorofluoromethane	1.811	101	12747	1.01	ug/L	90
9) Diethyl Ether	2.012	59	6631	1.01	ug/L	# 78
10) Freon 123a	2.012	67	9527m	0.96	ug/L	
11) Freon 123	2.061	83	9353	0.85	ug/L	# 71
12) Acrolein	2.104	56	7248	7.54	ug/L	84
13) 1,1-Dicethene	2.195	96	5876	0.83	ug/L	# 77
14) Freon 113	2.195	101	6793	0.88	ug/L	86
15) Acetone	2.226	43	6740	3.11	ug/L	89
16) 2-Propanol	2.329	45	8902m	22.41	ug/L	
17) Iodomethane	2.317	142	9219m	1.95	ug/L	
18) Carbon Disulfide	2.378	76	25125	0.97	ug/L	100
19) Acetonitrile	2.451	40	1803	5.98	ug/L	# 38
20) Allyl Chloride	2.488	76	4396	1.05	ug/L	# 63
21) Methyl Acetate	2.506	43	6883	1.42	ug/L	80
22) Methylene Chloride	2.597	84	8299	1.06	ug/L	# 67
23) TBA	2.701	59	10600	17.65	ug/L	71
24) Acrylonitrile	2.823	53	12800	5.75	ug/L	99
25) Methyl-t-Butyl Ether	2.866	73	18625	0.90	ug/L	68
26) trans-1,2-Dichloroethene	2.860	96	7093	0.89	ug/L	93
27) 1,1-Dicethane	3.311	63	17165	1.15	ug/L	88
28) Vinyl Acetate	3.378	86	916	0.65	ug/L	# 1
29) DIPE	3.402	45	42837	1.32	ug/L	# 77
30) 2-Chloro-1,3-Butadiene	3.408	53	17827	1.03	ug/L	83
31) ETBE	3.884	59	28405	1.04	ug/L	96
32) 2,2-Dichloropropane	4.054	77	10893m	0.93	ug/L	
33) cis-1,2-Dichloroethene	4.054	96	8569	0.96	ug/L	# 69
34) 2-Butanone	4.115	43	3559	1.20	ug/L	66
35) Propionitrile	4.176	54	4236	5.25	ug/L	88

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 07 10:01:27 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.414	130	6079	1.22	ug/L	# 75
37) Methacrylonitrile	4.408	67	2451	1.03	ug/L	88
38) Tetrahydrofuran	4.524	42	2999m	1.53	ug/L	
39) Chloroform	4.554	83	14203m	1.01	ug/L	
40) 1,1,1-Trichloroethane	4.853	97	12034m	0.93	ug/L	
42) Cyclohexane	4.938	41	12999	1.19	ug/L	88
44) Carbontetrachloride	5.140	121	3207	0.82	ug/L	# 57
45) 1,1-Dichloropropene	5.152	75	11169	0.97	ug/L	94
47) Benzene	5.499	78	31500	0.90	ug/L	85
48) 1,2-Dichloroethane	5.536	62	11579	1.00	ug/L	# 69
49) Iso-Butyl Alcohol	5.499	43	5255	16.71	ug/L	99
50) TAME	5.737	73	17710	0.79	ug/L	89
51) n-Heptane	6.005	43	14724	1.22	ug/L	# 77
52) 1-Butanol	6.523	56	5356m	29.83	ug/L	
53) Trichloroethene	6.493	130	9936	1.05	ug/L	# 81
54) Methylcyclohexane	6.743	55	13670	1.05	ug/L	# 61
55) 1,2-Diclpropane	6.792	63	10481	1.13	ug/L	91
56) Dibromomethane	6.938	93	4764	1.02	ug/L	# 78
57) 1,4-Dioxane	7.011	88	938	15.58	ug/L	99
58) Methyl Methacrylate	7.029	69	3437	0.76	ug/L	93
59) Bromodichloromethane	7.176	83	10273	0.88	ug/L	94
60) 2-Nitropropane	7.474	41	1936m	1.00	ug/L	
61) 2-Chloroethylvinyl Ether	7.590	63	4536	1.02	ug/L	74
62) cis-1,3-Dichloropropene	7.737	75	11015	0.79	ug/L	90
63) 4-Methyl-2-pentanone	7.950	43	8066	1.13	ug/L	92
65) Toluene	8.121	91	36698	0.99	ug/L	98
66) trans-1,3-Dichloropropene	8.395	75	9704	0.81	ug/L	85
67) Ethyl Methacrylate	8.541	69	6889	0.73	ug/L	# 52
68) 1,1,2-Trichloroethane	8.590	97	6489	0.94	ug/L	83
71) Tetrachloroethene	8.736	164	8212	1.11	ug/L	# 73
72) 2-Hexanone	8.889	43	4943	1.03	ug/L	87
73) 1,3-Dichloropropane	8.767	76	10844	1.03	ug/L	83
74) Dibromochloromethane	9.005	129	6888	0.83	ug/L	94
75) N-Butyl Acetate	9.053	43	10781	0.90	ug/L	91
76) 1,2-Dibromoethane	9.102	107	5746	0.90	ug/L	# 62
77) 3-Chlorobenzotrifluoride	9.627	180	14328	1.00	ug/L	90
78) Chlorobenzene	9.602	112	24175	0.99	ug/L	97
79) 4-Chlorobenzotrifluoride	9.681	180	11299	0.87	ug/L	86
80) 1,1,1,2-Tetrachloroethane	9.694	131	7970	0.87	ug/L	97
81) Ethylbenzene	9.724	106	12336	0.95	ug/L	# 81
82) (m+p)Xylene	9.840	106	28721	1.82	ug/L	# 69
83) o-Xylene	10.206	106	14955	0.95	ug/L	97
84) Styrene	10.218	104	24583	0.91	ug/L	96
85) Bromoform	10.370	173	3300	0.64	ug/L	93
86) 2-Chlorobenzotrifluoride	10.462	180	12137	0.86	ug/L	94
87) Isopropylbenzene	10.547	105	37221	0.96	ug/L	94
88) Cyclohexanone	10.608	55	7145	13.93	ug/L	89
89) trans-1,4-Dichloro-2-B...	10.858	53	2740	1.04	ug/L	# 53
91) 1,1,2,2-Tetrachloroethane	10.809	83	7227	0.96	ug/L	93
92) Bromobenzene	10.797	156	10774	1.02	ug/L	95
93) 1,2,3-Trichloropropane	10.840	110	2277	1.08	ug/L	# 81

Data Path : I:\ACQUADATA\msvao10\data\050615\  
Data File : A8253.D  
Acq On : 6 May 2015 5:01 pm  
Operator : F. NAEGLER  
Sample : 1.0 PPB STD  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA10

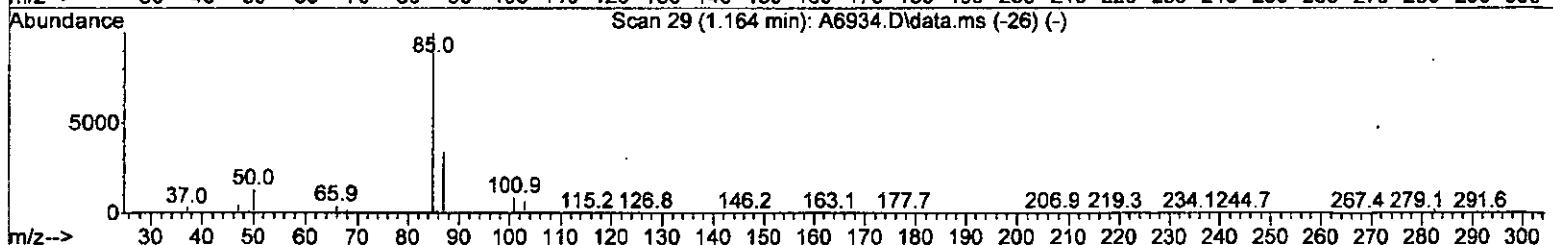
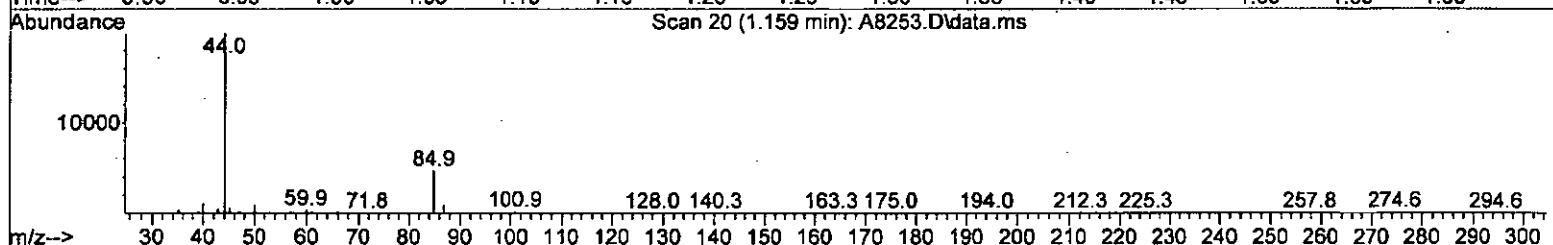
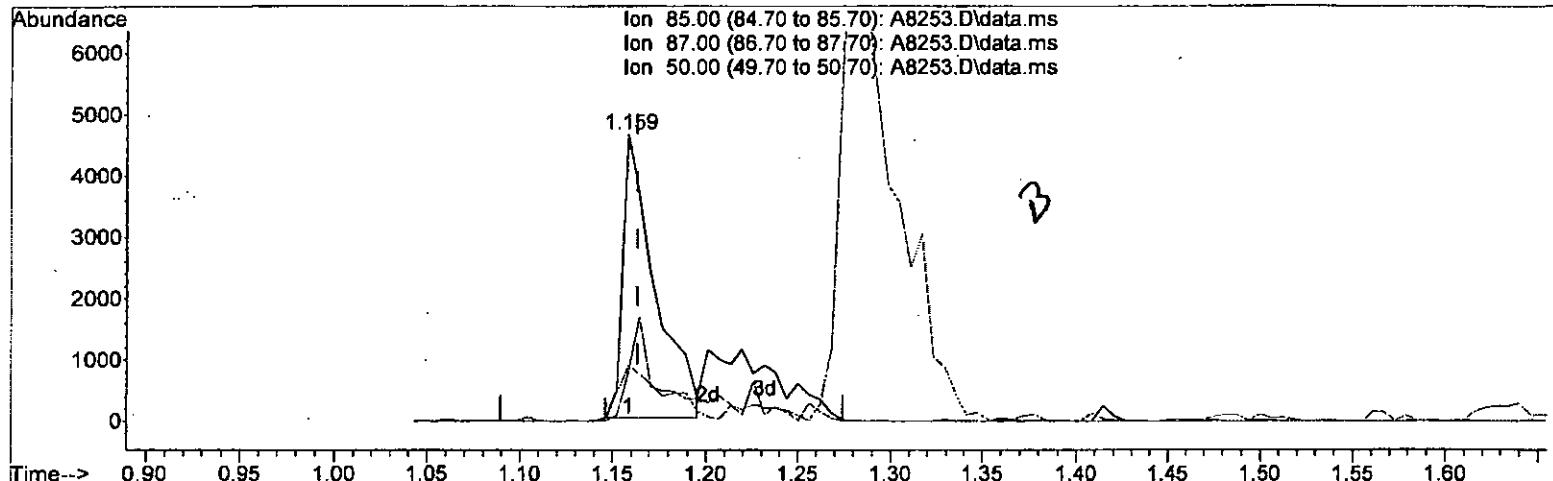
Quant Time: May 07 10:01:27 2015  
Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.907	91	47573	1.10	ug/L	93
95) 2-Chlorotoluene	10.968	91	27433	1.00	ug/L	96
96) 3-Chlorotoluene	11.023	91	29362	1.01	ug/L	98
97) 4-Chlorotoluene	11.065	91	30760	0.95	ug/L	96
98) 1,3,5-Trimethylbenzene	11.065	105	31735	0.98	ug/L	97
99) tert-Butylbenzene	11.340	119	28637	1.02	ug/L	92
100) 1,2,4-Trimethylbenzene	11.376	105	33665	1.01	ug/L	87
101) 3,4-Dichlorobenzotrifl...	11.443	214	10012	0.96	ug/L	81
102) sec-Butylbenzene	11.522	105	39320	1.03	ug/L	98
103) p-Isopropyltoluene	11.644	119	33292	0.99	ug/L	99
104) 1,3-Dclbenz	11.602	146	21445	1.03	ug/L	98
105) 1,4-Dclbenz	11.681	146	22460	1.04	ug/L	96
106) 2,4-Dichlorobenzotrifl...	11.736	214	9950	1.03	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.772	214	10775	1.01	ug/L	93
108) n-Butylbenzene	11.980	91	29904	1.00	ug/L	93
109) 1,2-Dclbenz	11.986	146	20173	1.04	ug/L	92
110) 1,2-Dibromo-3-chloropr...	12.608	157	1570	1.04	ug/L	# 62
111) Trielution Dichlorotol...	12.730	125	50381	2.93	ug/L	97
112) 1,3,5-Trichlorobenzene	12.784	180	14656	1.01	ug/L	98
113) Coelution Dichlorotoluene	13.059	125	36604	2.05	ug/L	92
114) 1,2,4-Tcbenzene	13.266	180	13558	1.11	ug/L	90
115) Hexachlorobt	13.406	225	5569	1.02	ug/L	84
116) Naphthalen	13.461	128	21011	0.98	ug/L	98
117) 1,2,3-Tclbenzene	13.644	180	9814	1.08	ug/L	91
118) 2,4,5-Trichlorotoluene	14.235	159	7458	1.26	ug/L	85
119) 2,3,6-Trichlorotoluene	14.321	159	6014	1.19	ug/L	89

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

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(2) Dichlorodifluoromethane (P)

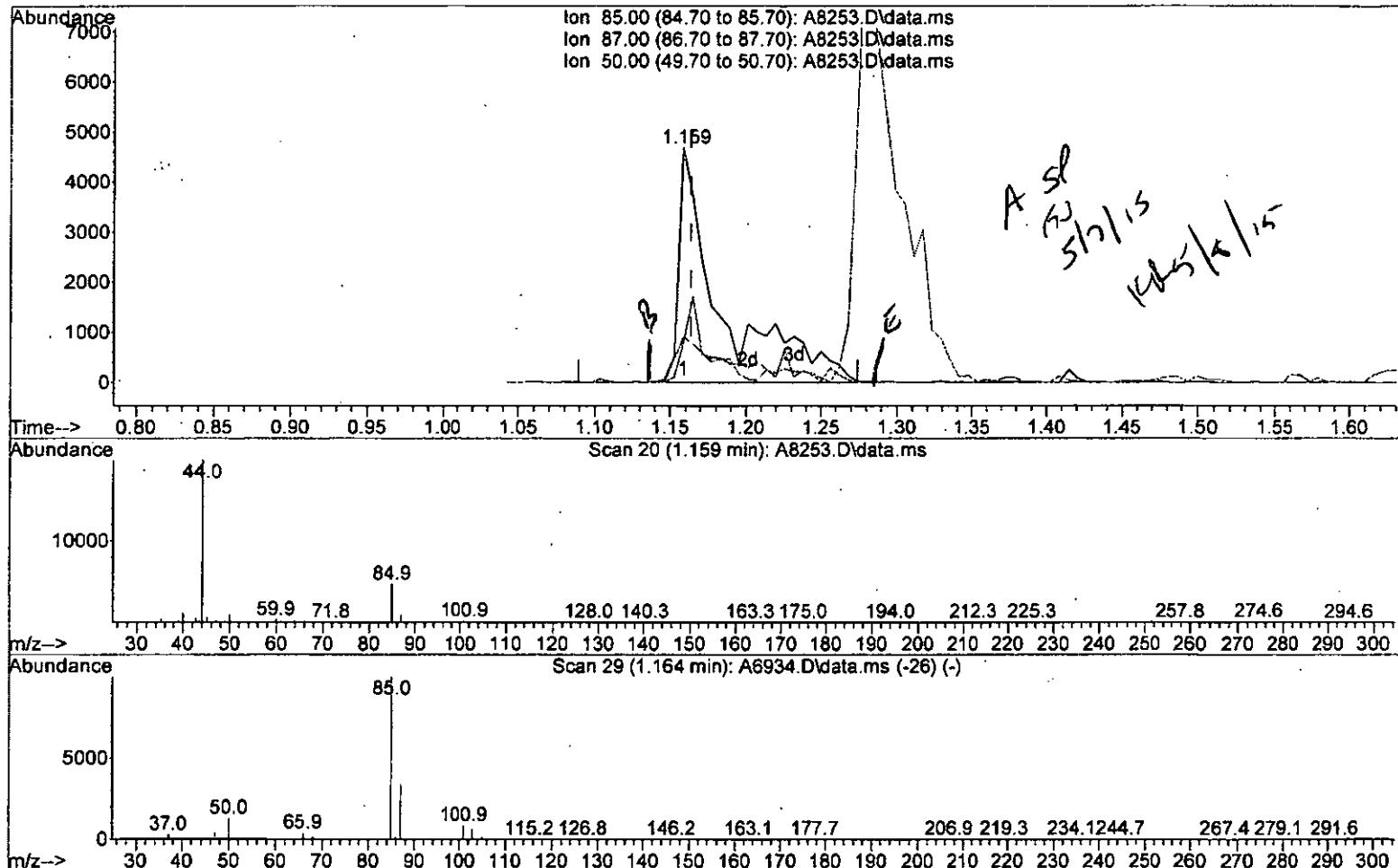
1.159min (-0.005) 0.64 ug/L

response 5560

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	17.34
50.00	15.00	19.50
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(2) Dichlorodifluoromethane (P)

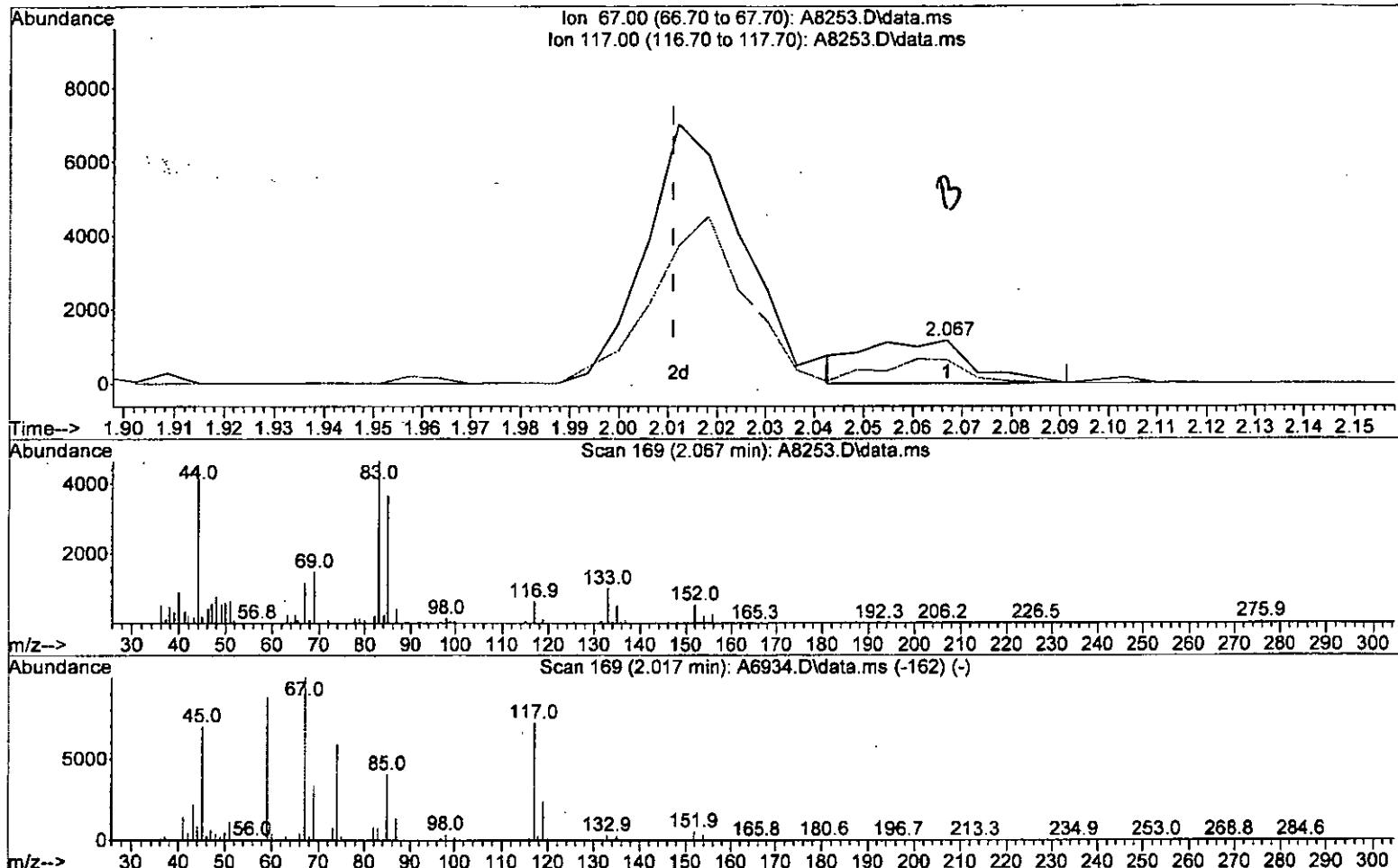
1.159min (-0.005) 1.02 ug/L m

response 8914

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	17.34
50.00	15.00	19.50
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



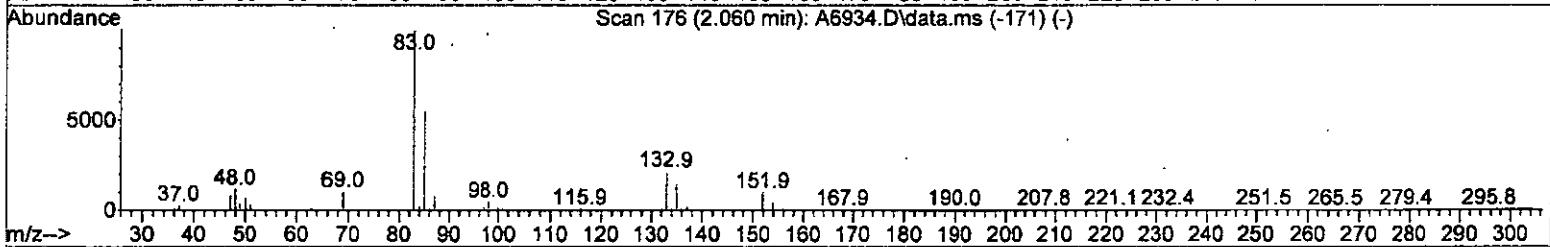
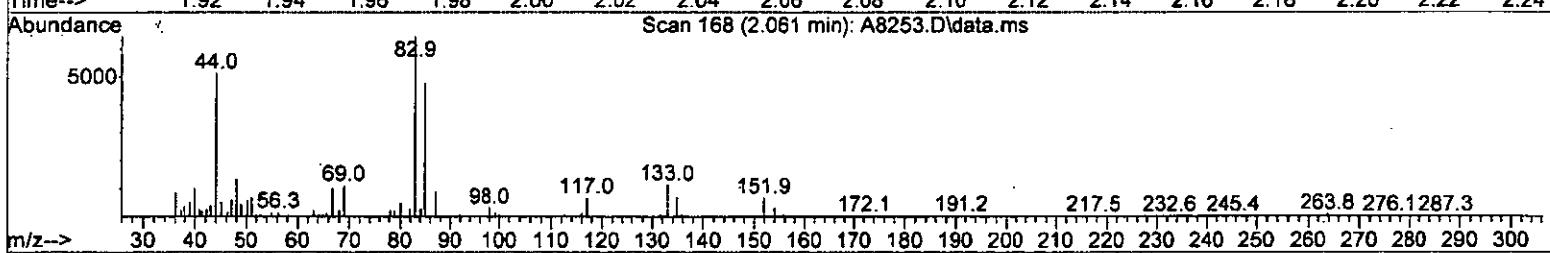
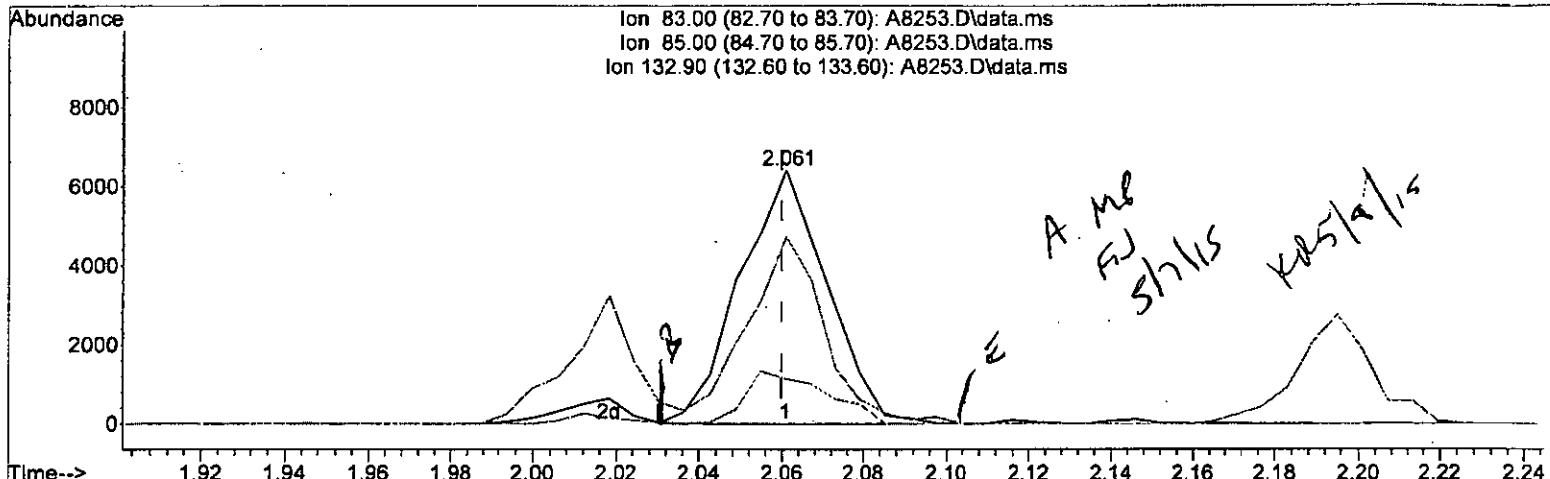
TIC: A8253.D\data.ms

(10) Freon 123a  
 2.067min (+0.056) 0.18 ug/L  
 response 1754

Ion	Exp%	Act%
67.00	100	100
117.00	72.50	53.97
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvola10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(11) Freon 123

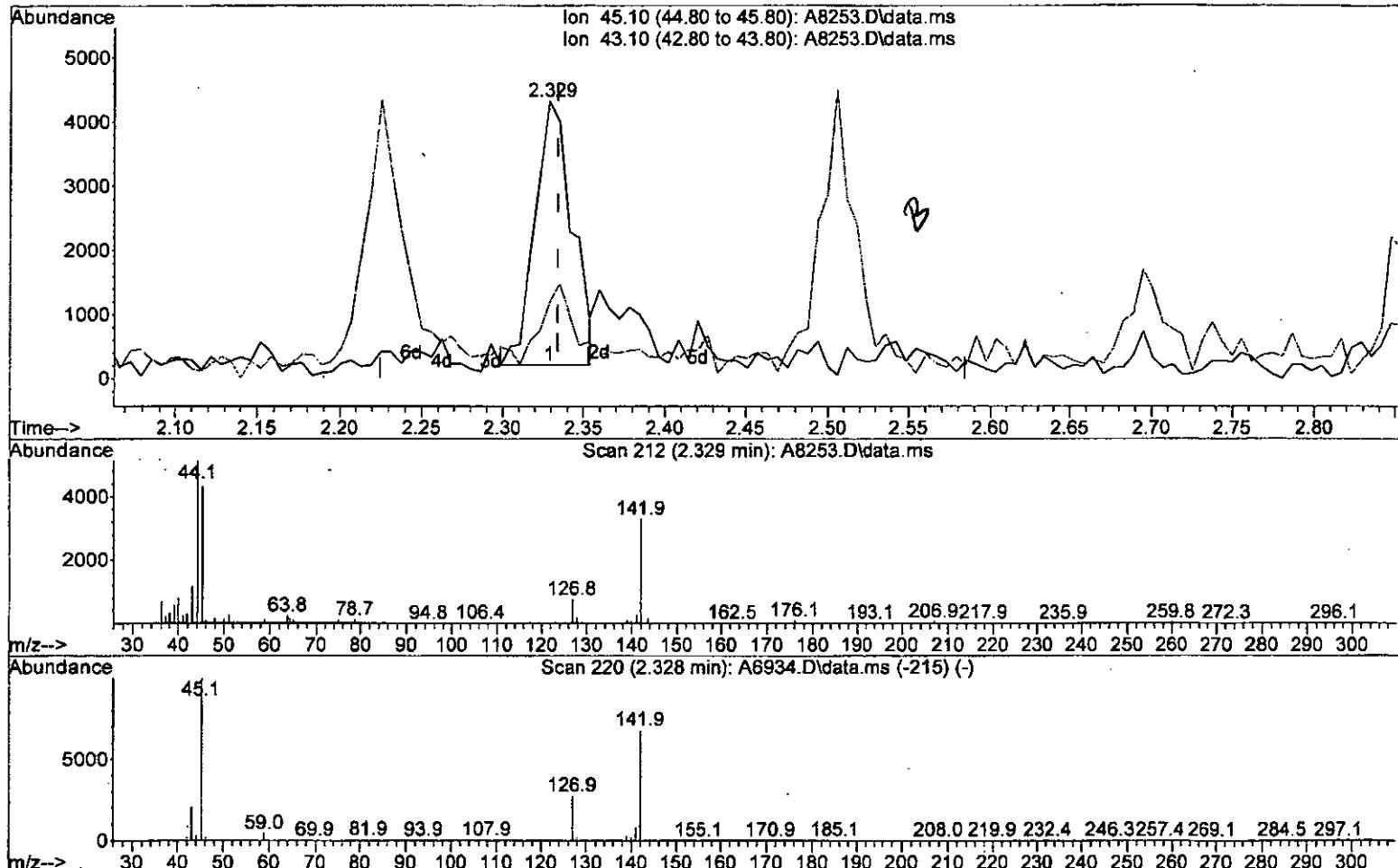
2.061min (+0.001) 0.85 ug/L

response 9353

Ion	Exp%	Act%
83.00	100	100
85.00	47.30	73.93#
132.90	19.90	17.67
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(16) 2-Propanol

2.329min (-0.005) 16.41 ug/L

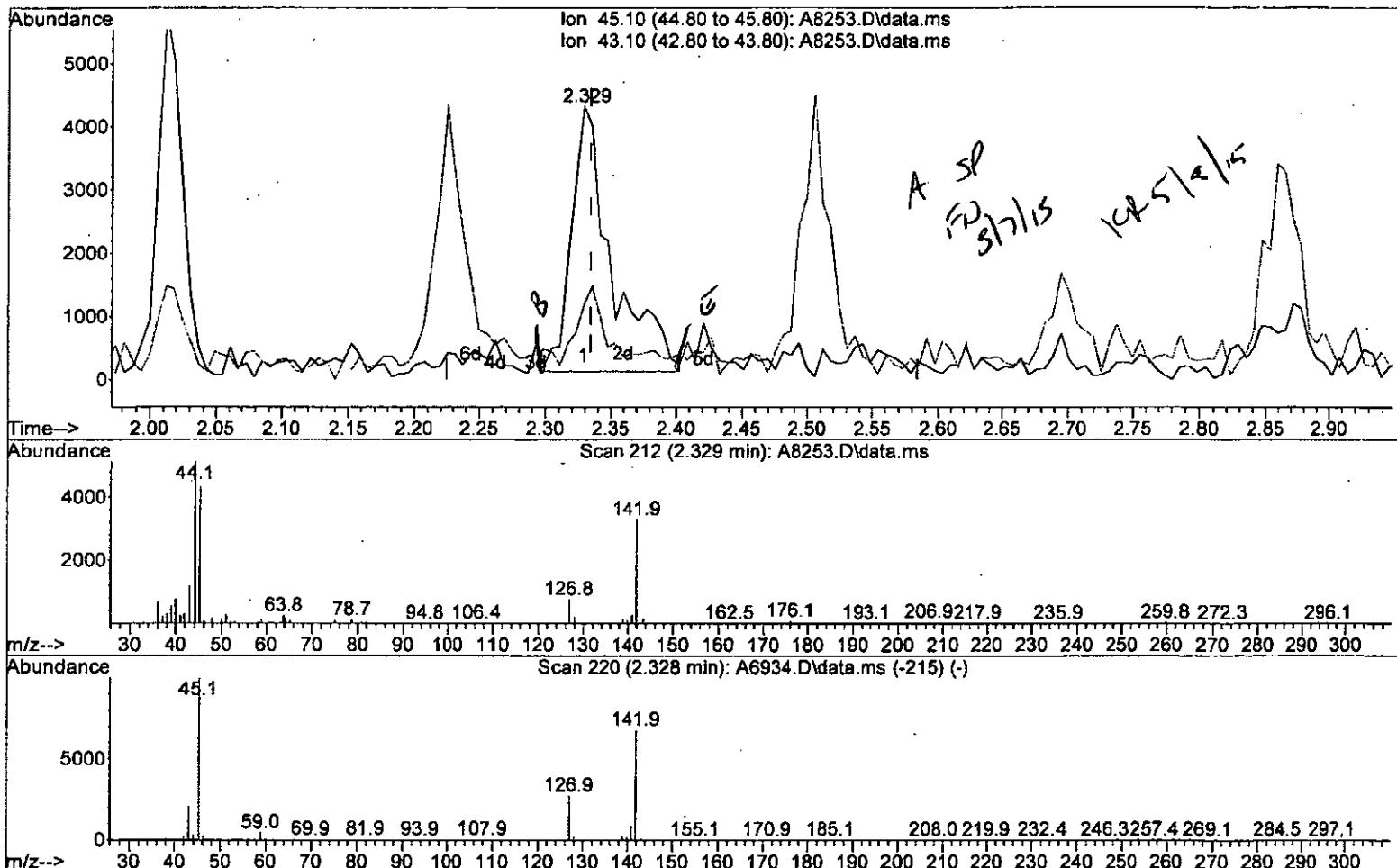
response 6520

Ion	Exp%	Act%
45.10	100	100
43.10	18.20	27.41
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(16) 2-Propanol

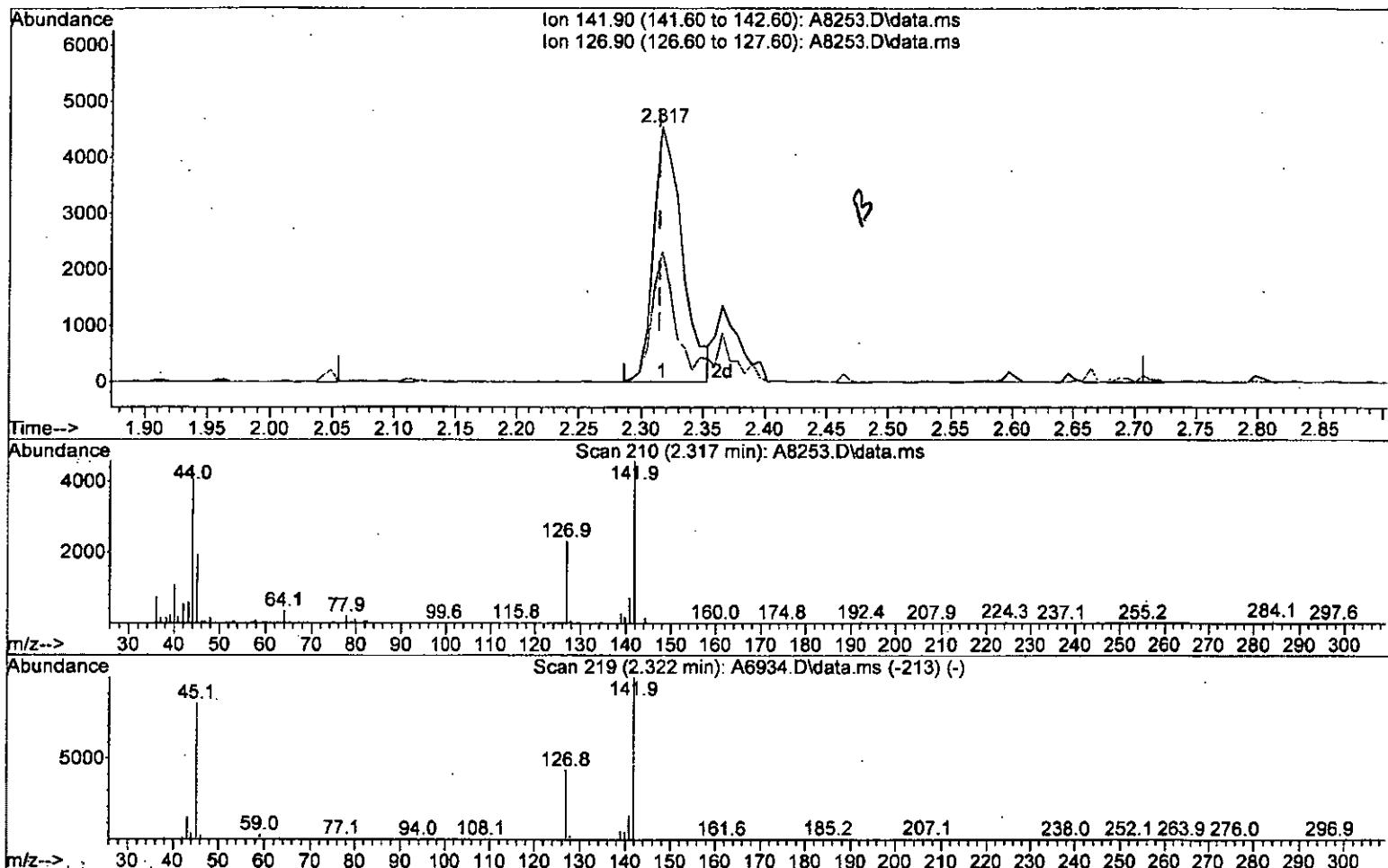
2.329min (-0.005) 22.41 ug/L m

response 8902

Ion	Exp%	Act%
45.10	100	100
43.10	18.20	27.41
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 07 09:18:12 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(17) Iodomethane

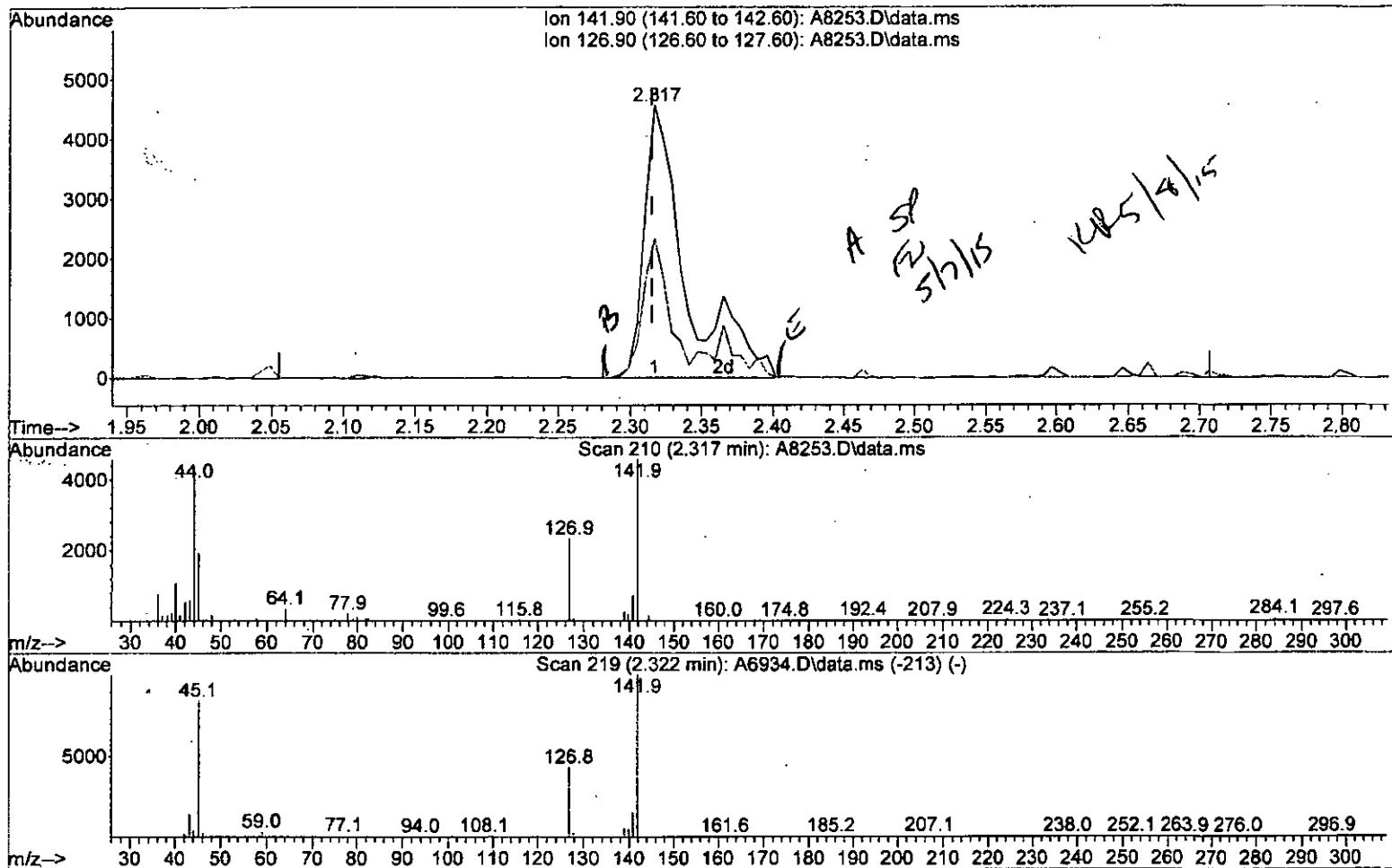
2.317min (+0.002) 1.55 ug/L

response 7324

Ion	Exp%	Act%
141.90	100	100
126.90	43.50	50.96
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1.

Quant Time: May 07 09:18:12 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(17) Iodomethane

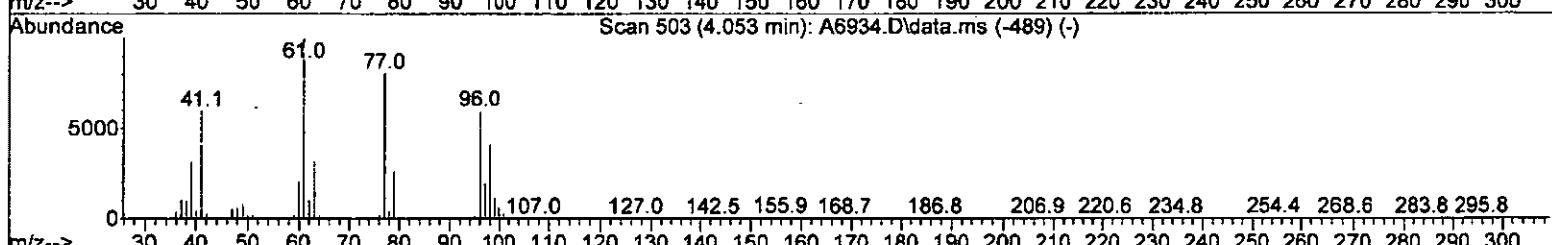
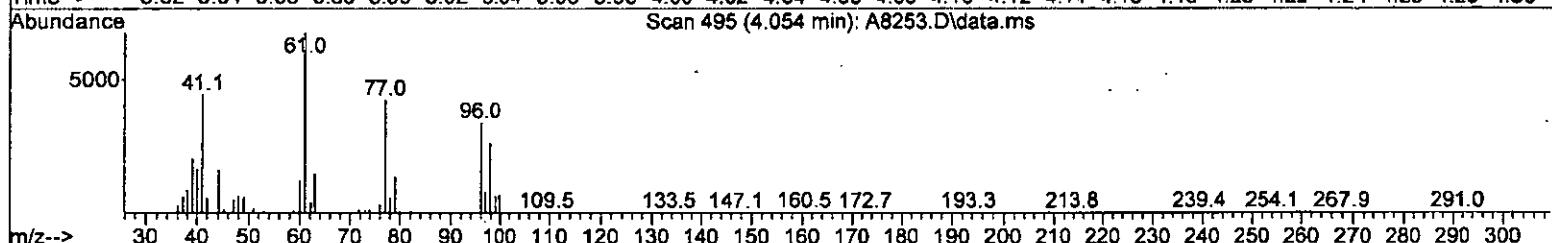
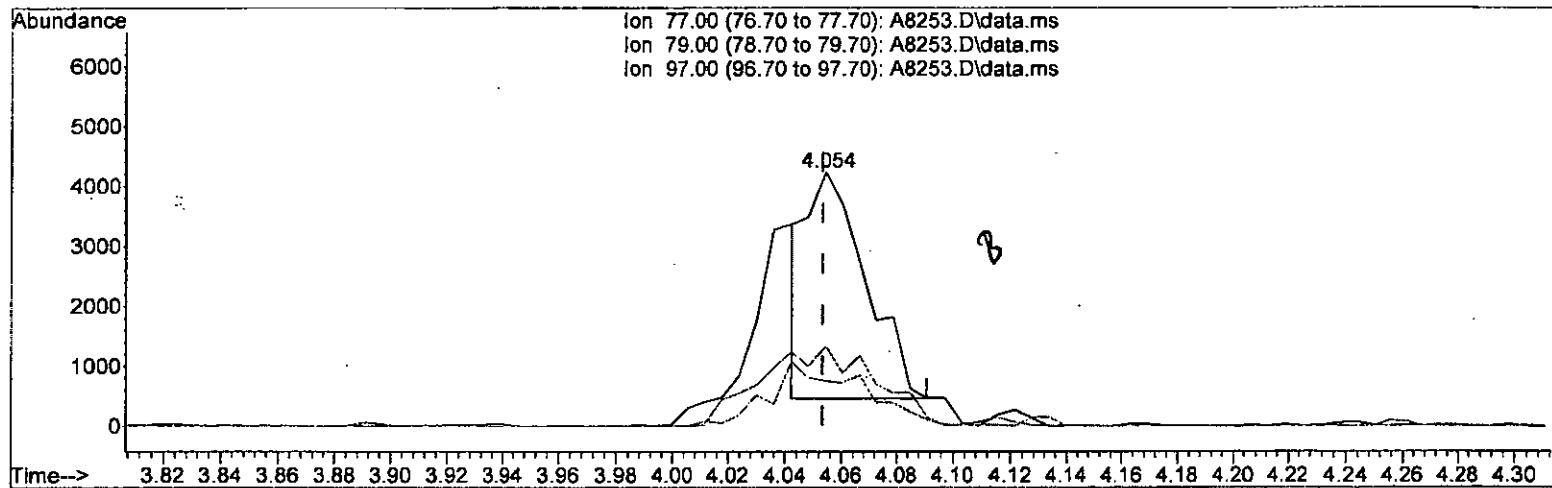
2.317min (+0.002) 1.95 ug/L m

response 9219

Ion	Exp%	Act%
141.90	100	100
126.90	43.50	50.96
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(32) 2,2-Dichloropropane

4.054min (+0.001) 0.48 ug/L

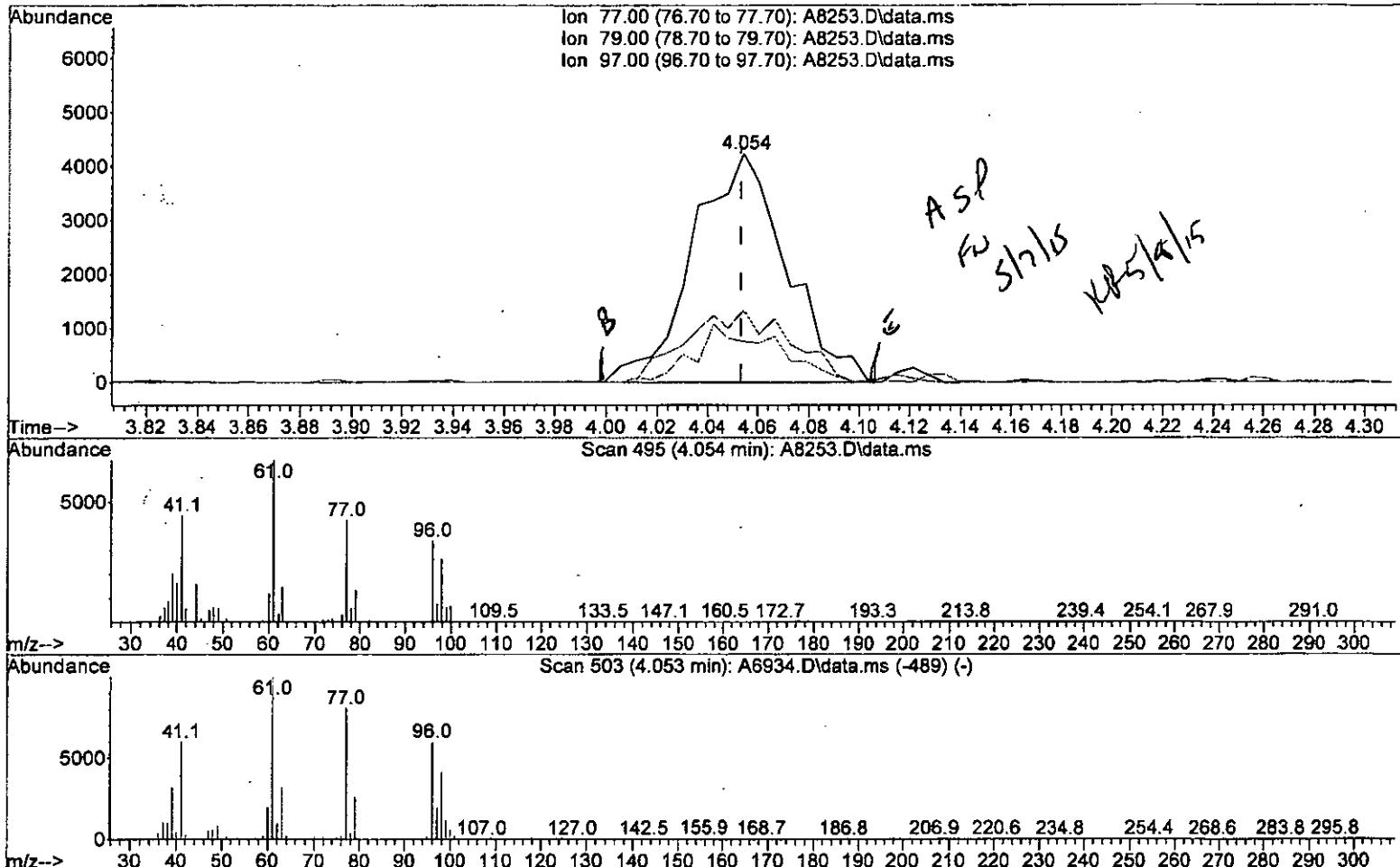
response 5546

Ion	Exp%	Act%
77.00	100	100
79.00	32.50	31.54
97.00	21.80	17.86
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(32) 2,2-Dichloropropane

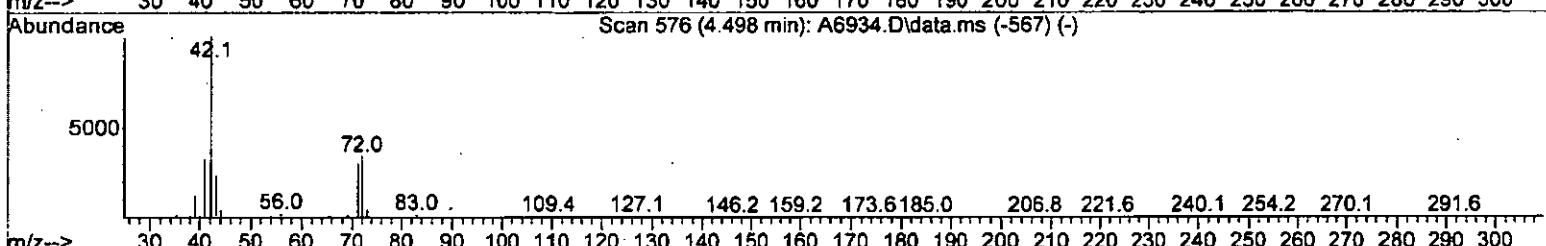
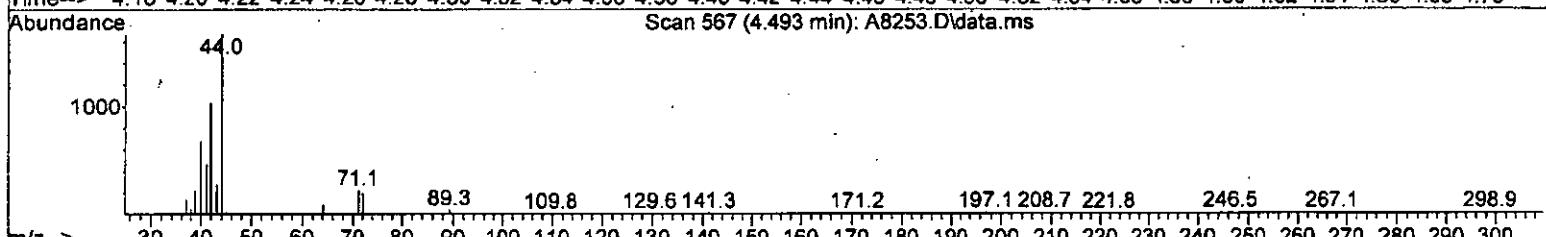
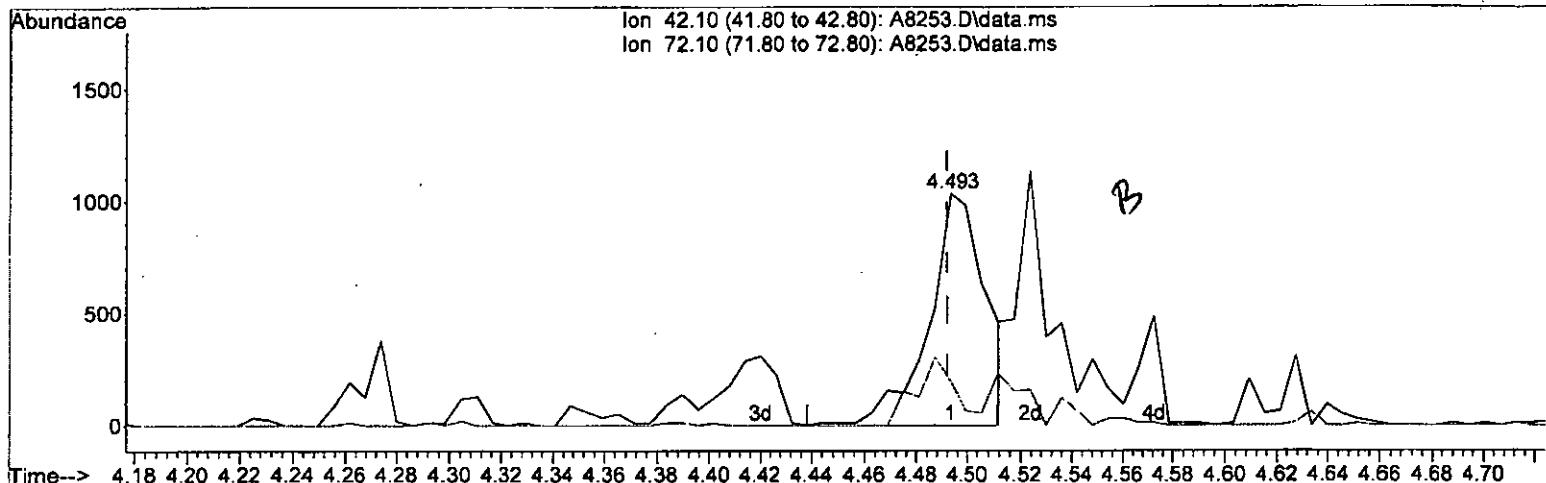
4.054min (+0.001) 0.93 ug/L m

response 10893

Ion	Exp%	Act%
77.00	100	100
79.00	32.50	31.54
97.00	21.80	17.86
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(38) Tetrahydrofuran

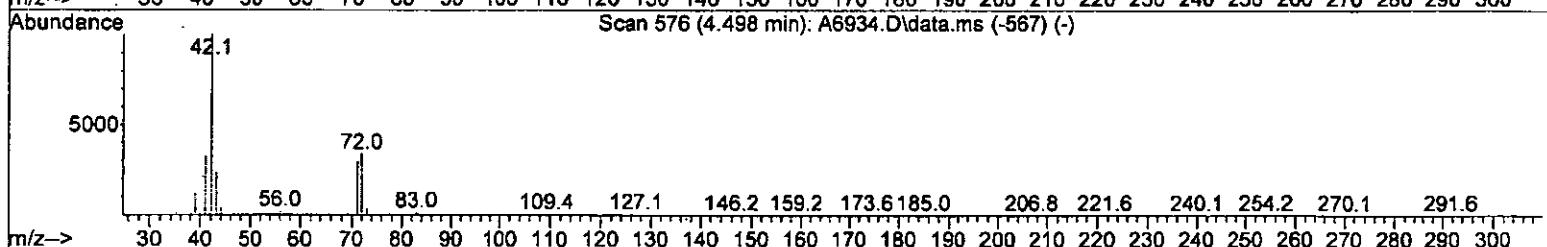
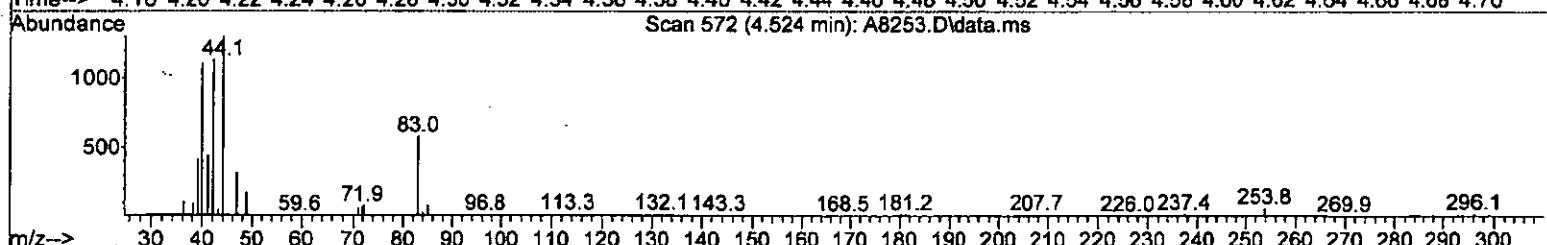
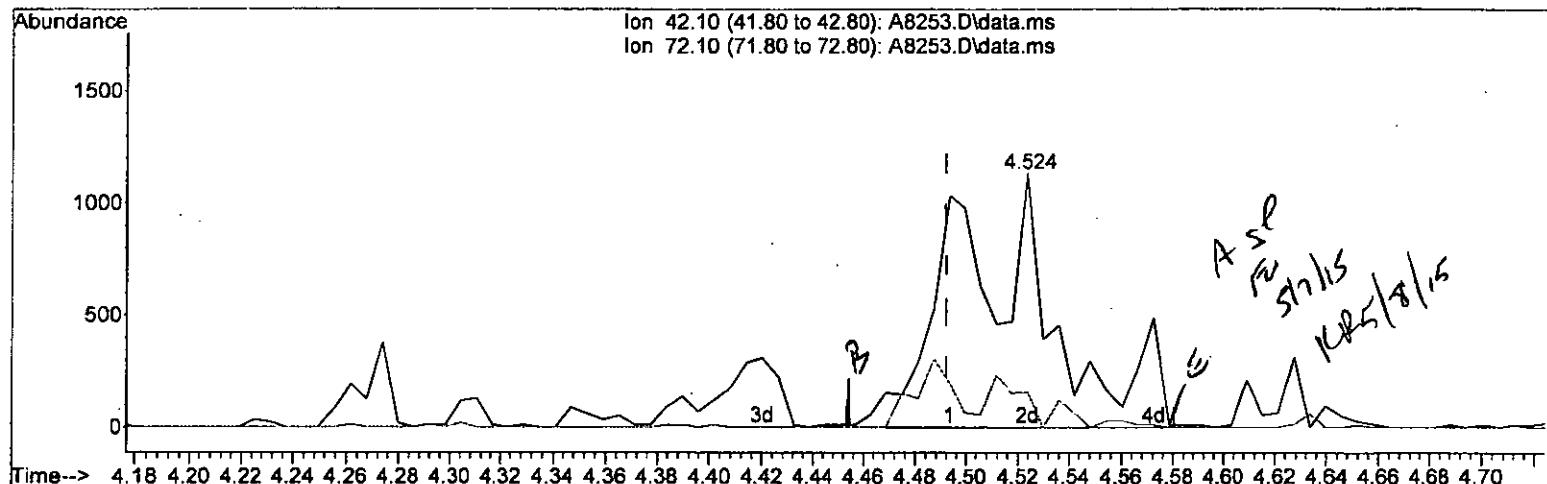
4.493min (+0.001) 0.81 ug/L

response 1577

Ion	Exp%	Act%
42.10	100	100
72.10	40.30	18.78#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(38) Tetrahydrofuran

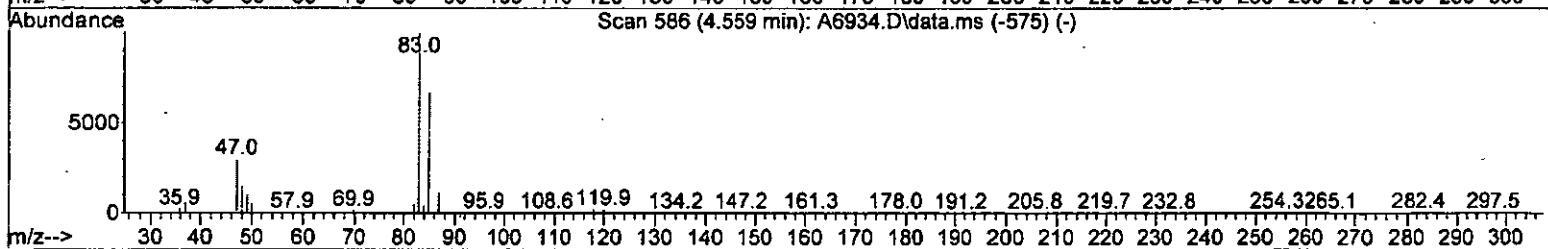
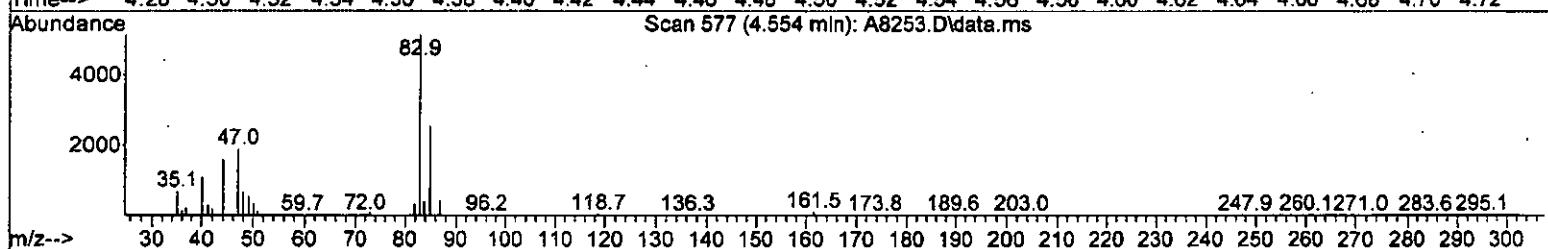
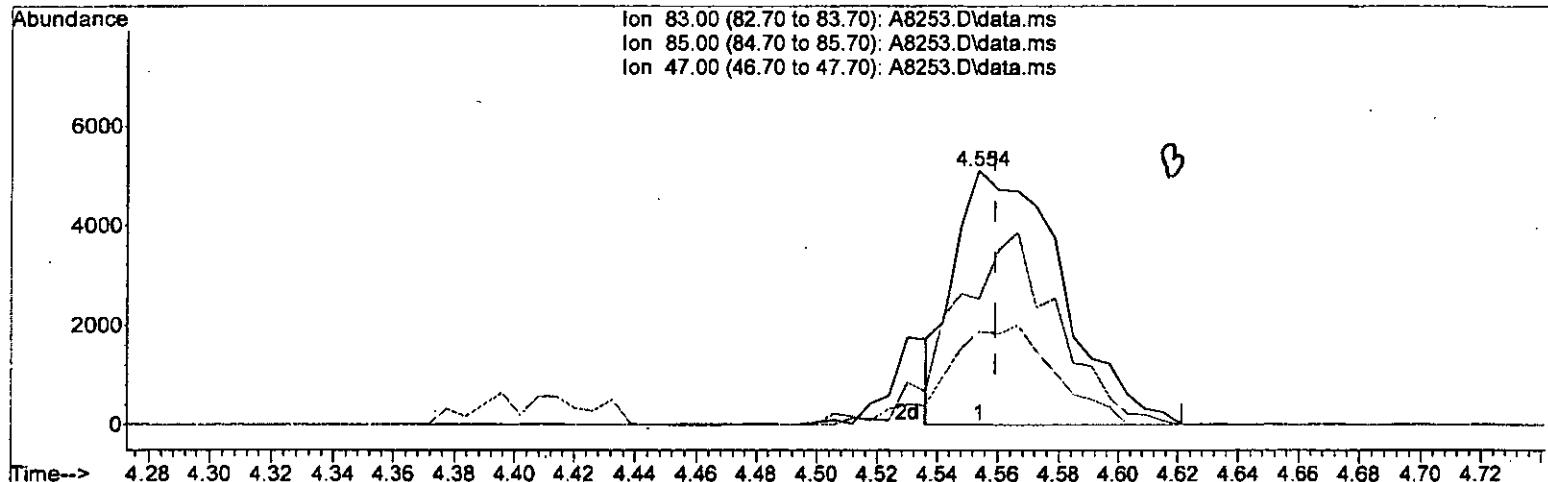
4.524min (+0.032) 1.53 ug/L m

response 2999

Ion	Exp%	Act%
42.10	100	100
72.10	40.30	7.42#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(39) Chloroform (P)

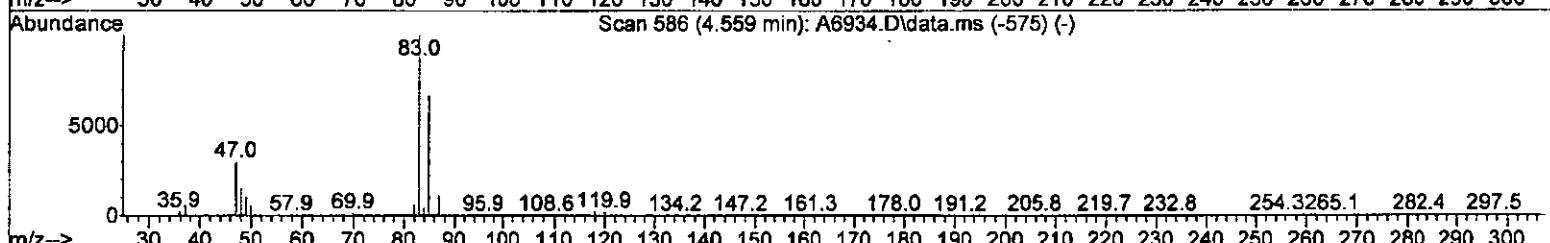
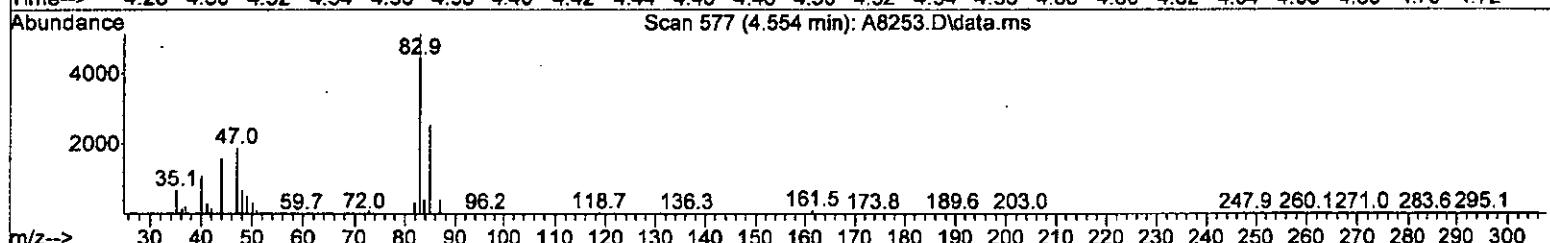
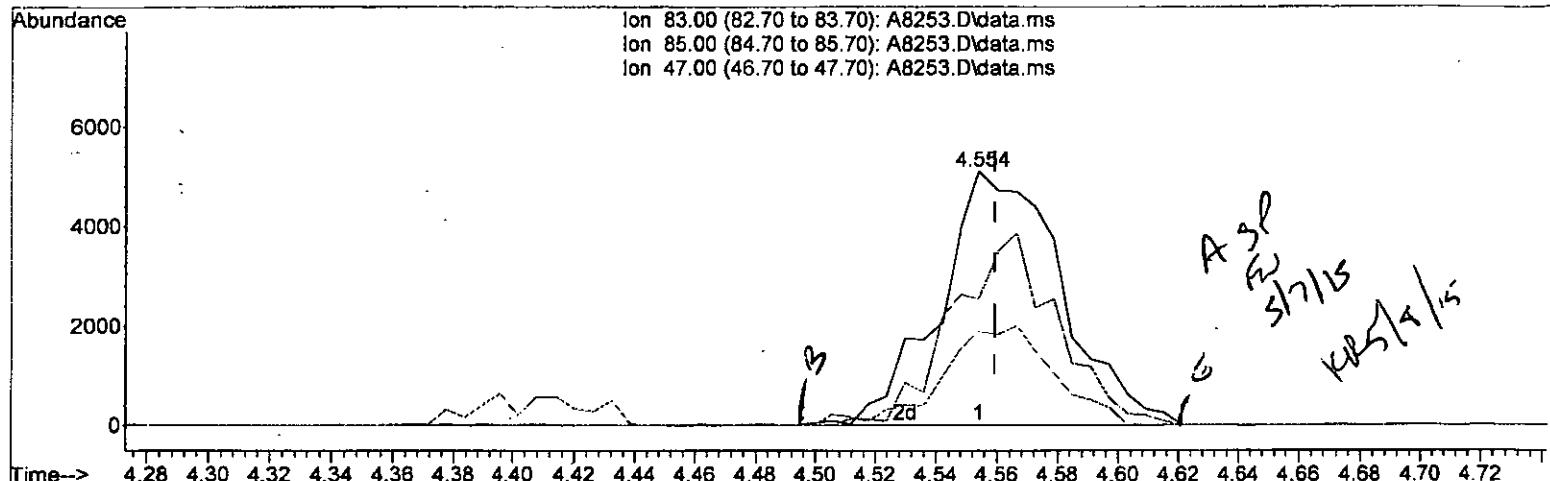
4.554min (-0.005) 0.89 ug/L

response 12510

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	49.62
47.00	29.90	36.74
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(39) Chloroform (P)

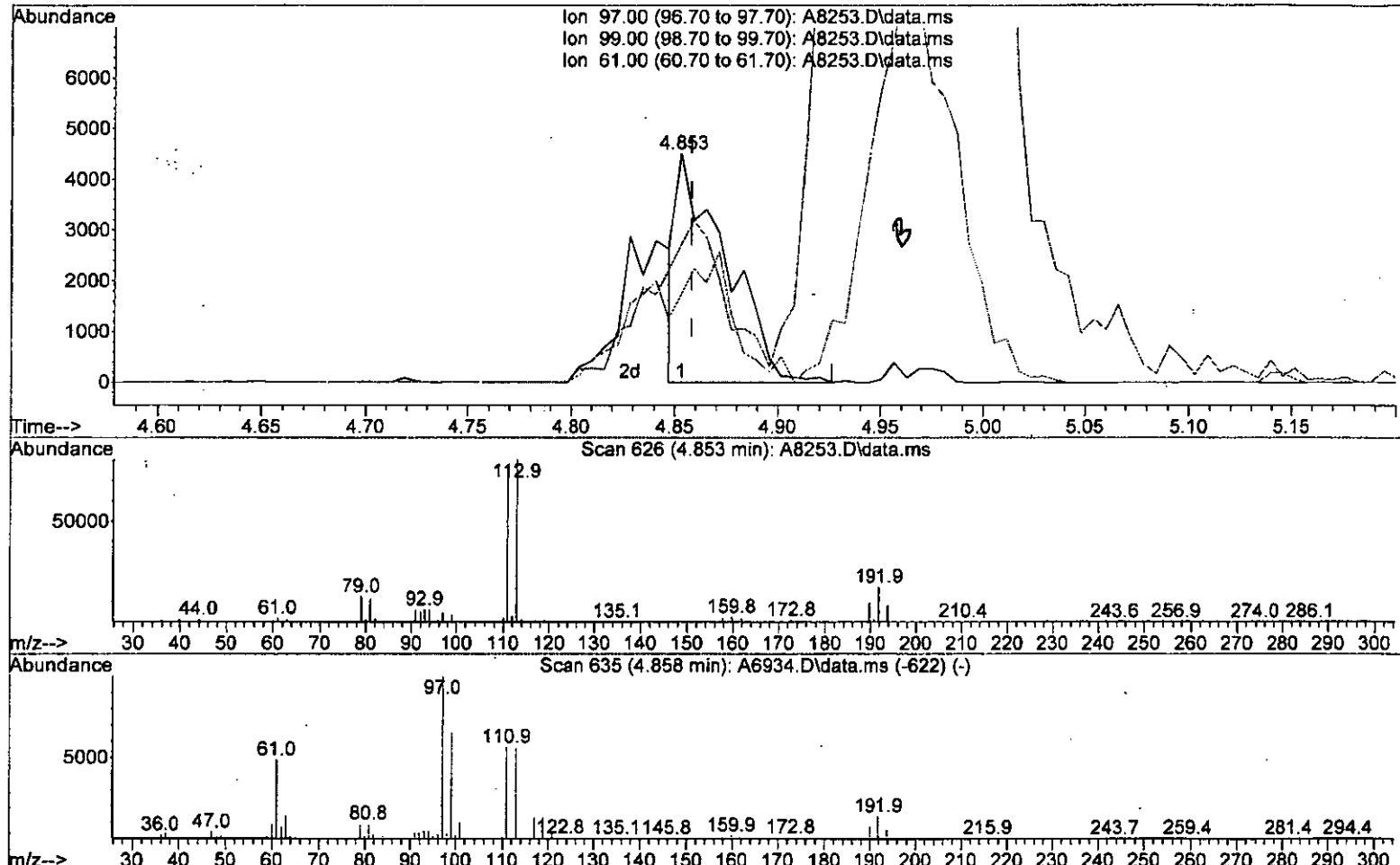
4.554min (-0.005) 1.01 ug/L m

response 14203

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	49.62
47.00	29.90	36.74
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(40) 1,1,1-Trichloroethane (P)

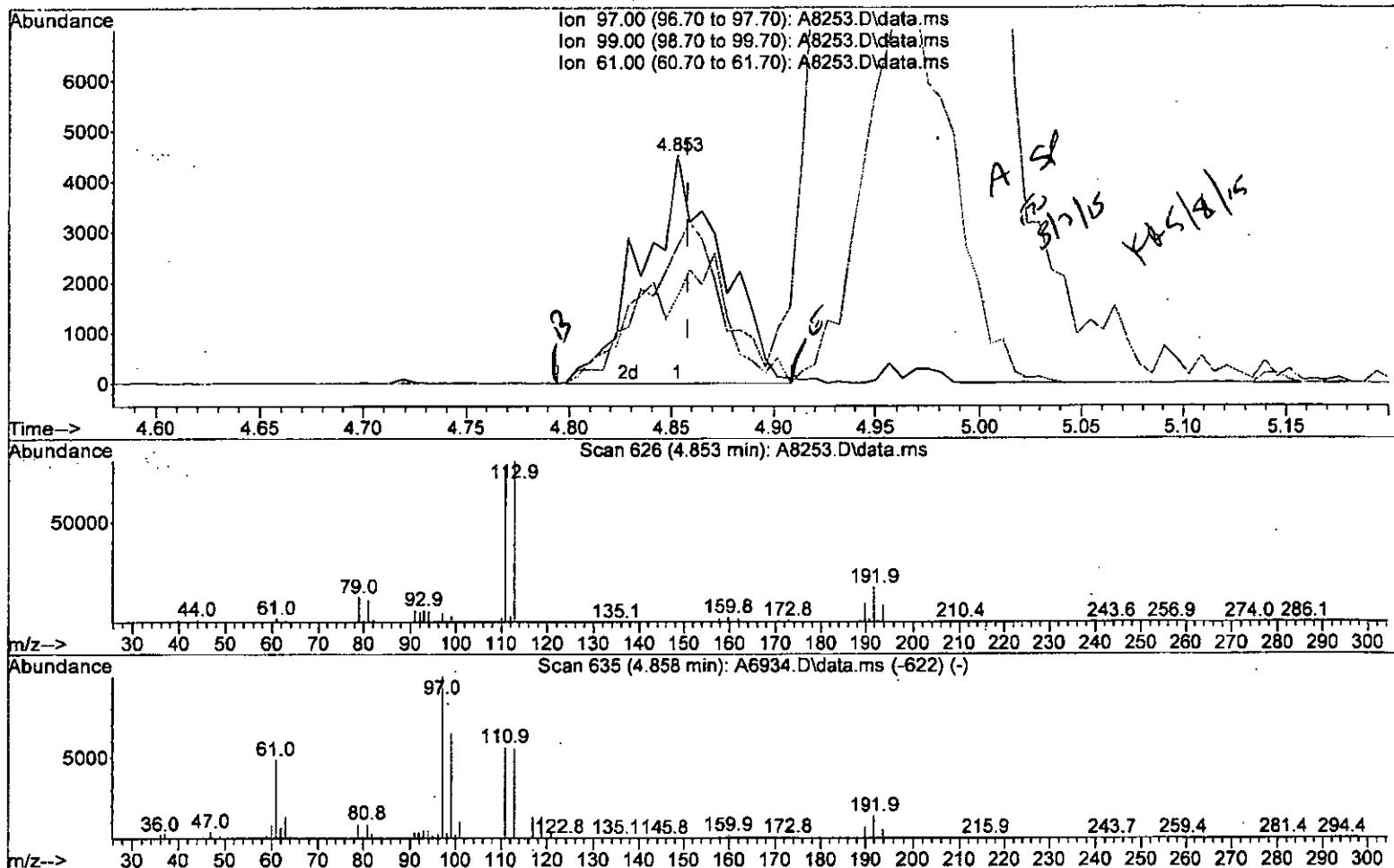
4.853min (-0.005) 0.58 ug/L

response 7436

Ion	Exp%	Act%
97.00	100	100
99.00	60.90	60.30
61.00	45.20	42.98
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(40) 1,1,1-Trichloroethane (P)

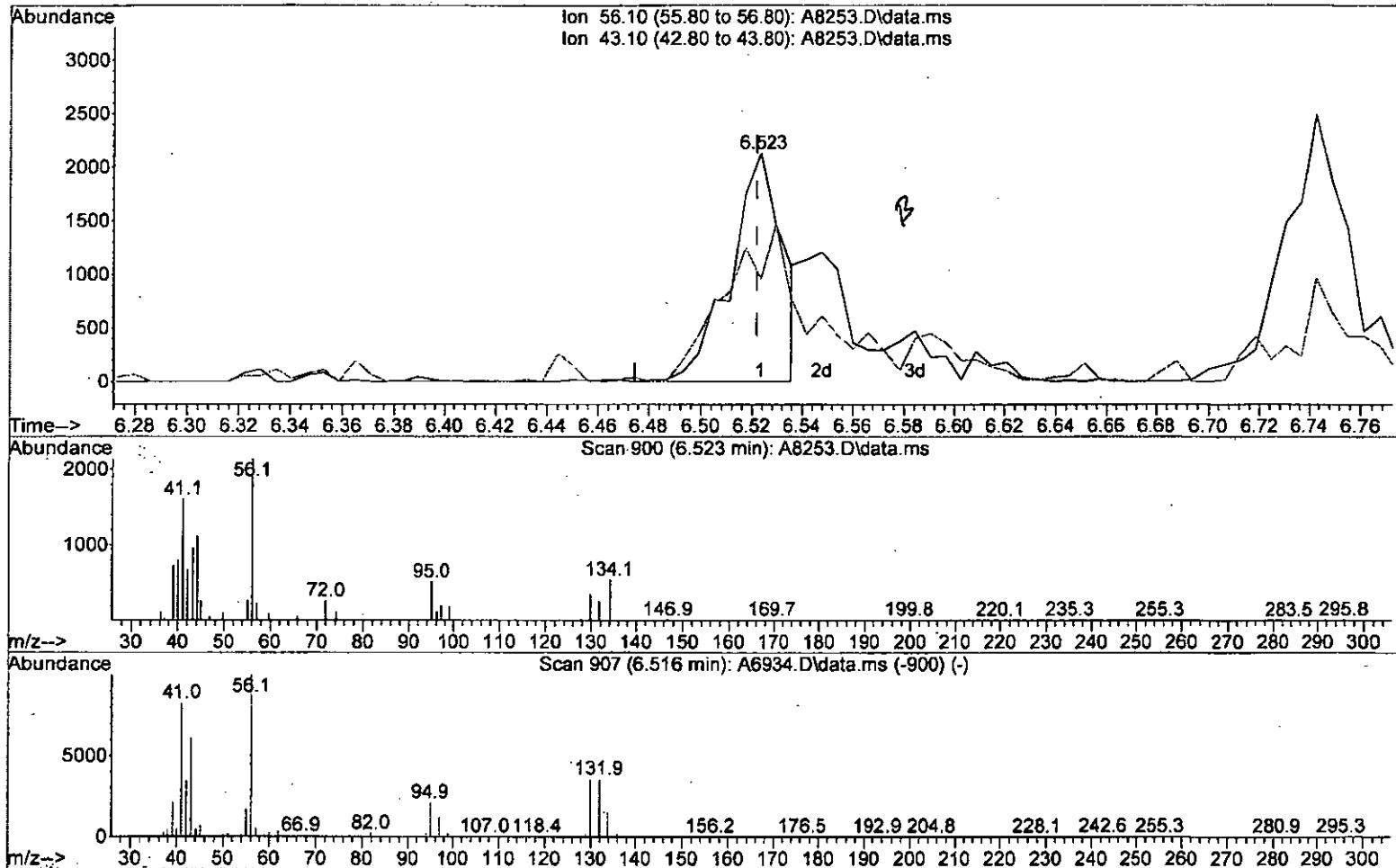
4.853min (-0.005) 0.93 ug/L m

response 12034

Ion	Exp%	Act%
97.00	100	100
99.00	60.90	60.30
61.00	45.20	38.37
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(52) 1-Butanol

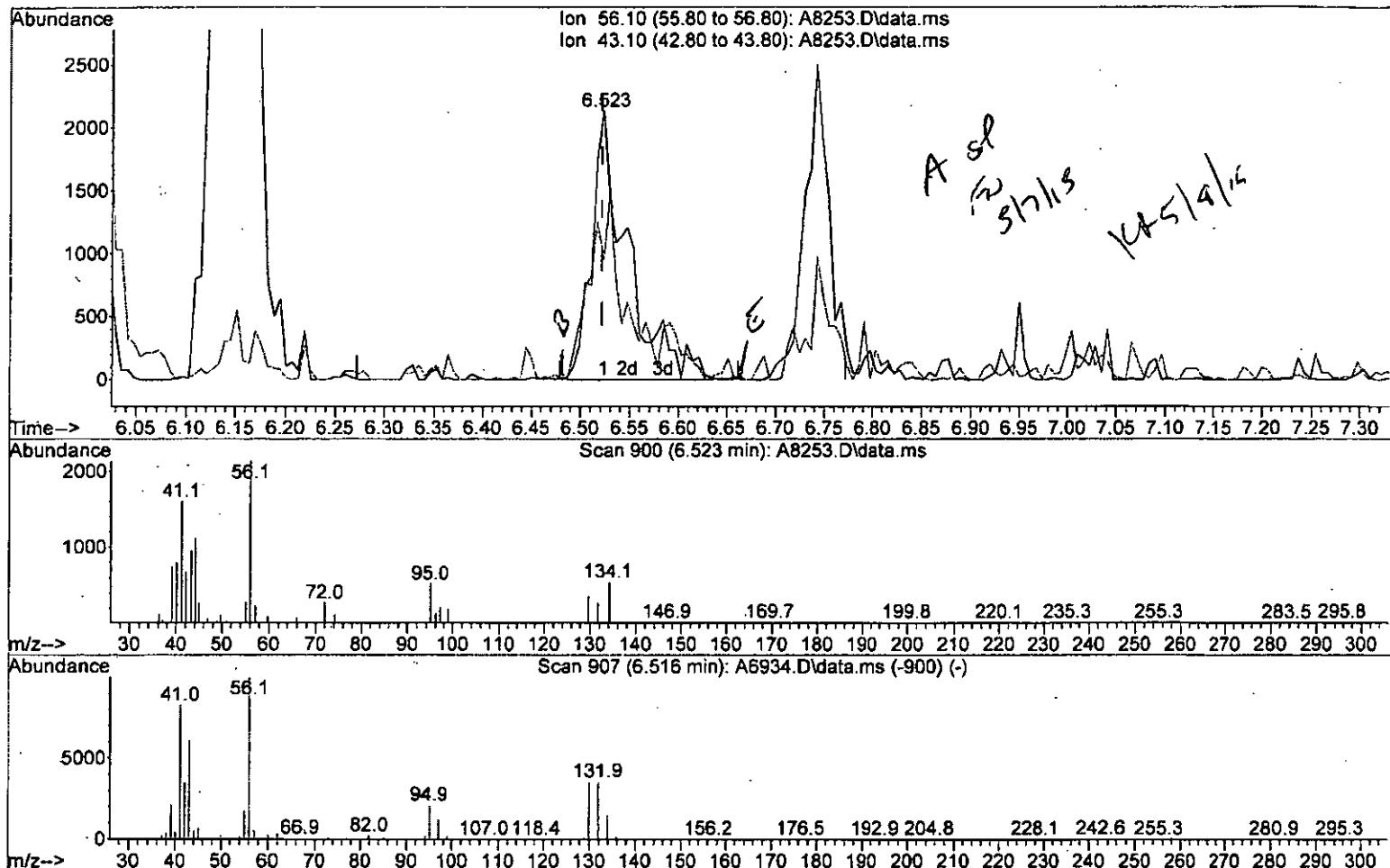
6.523min (+0.001) 16.94 ug/L

response 3042

Ion	Exp%	Act%
56.10	100	100
43.10	54.10	44.86
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 07 09:18:12 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(52) 1-Butanol

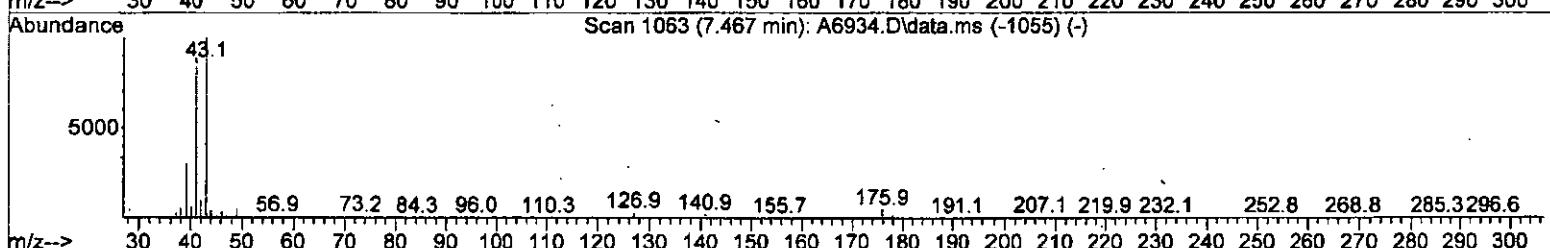
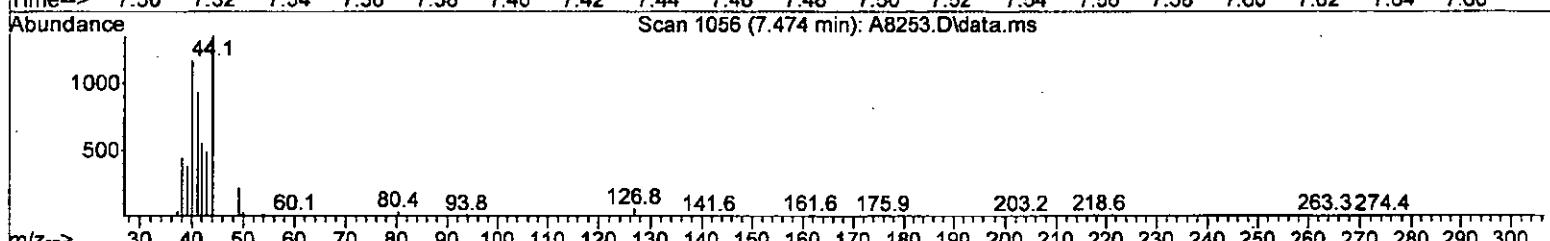
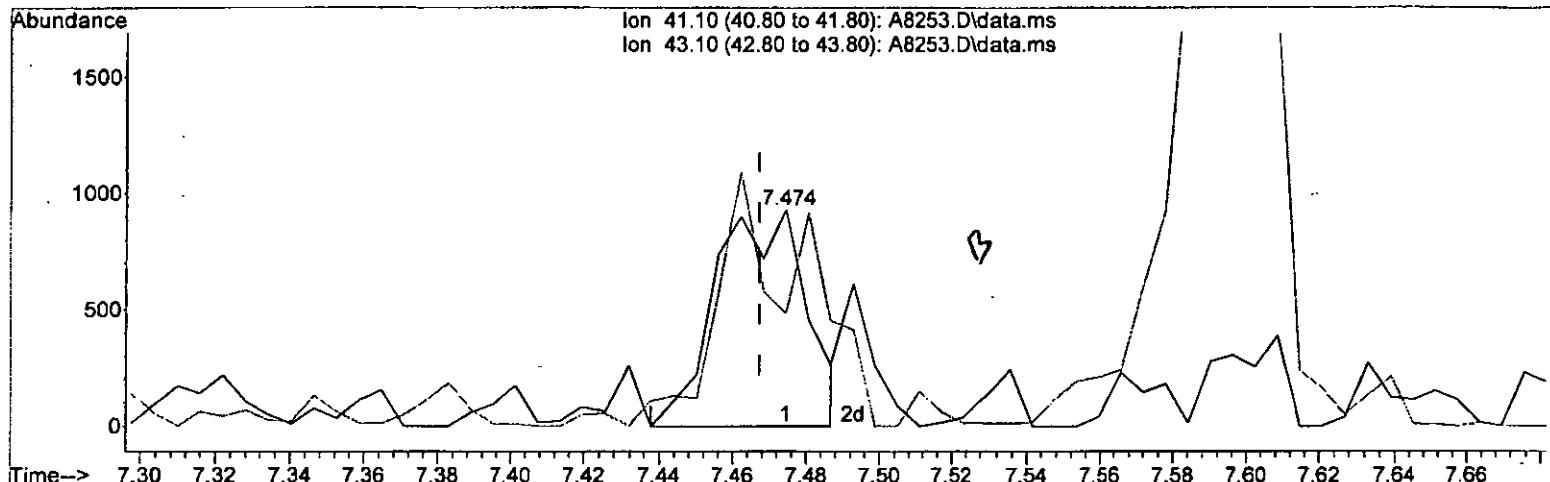
6.523min (+0.001) 29.83 ug/L m

response 5356

Ion	Exp%	Act%
56.10	100	100
43.10	54.10	44.86
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(60) 2-Nitropropane

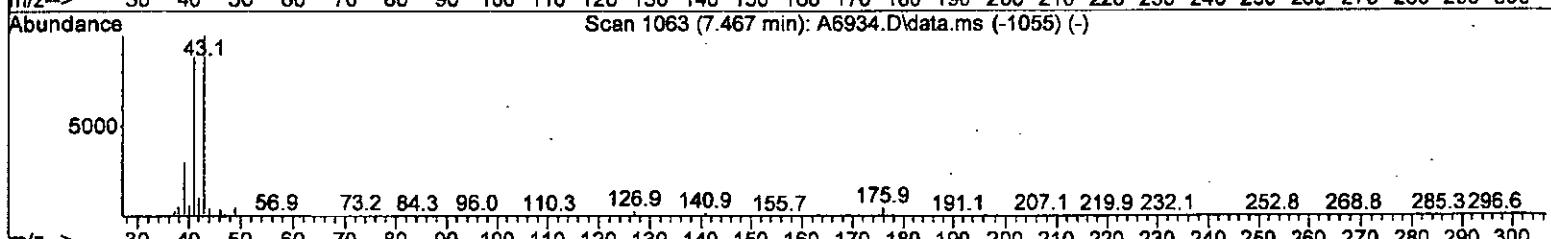
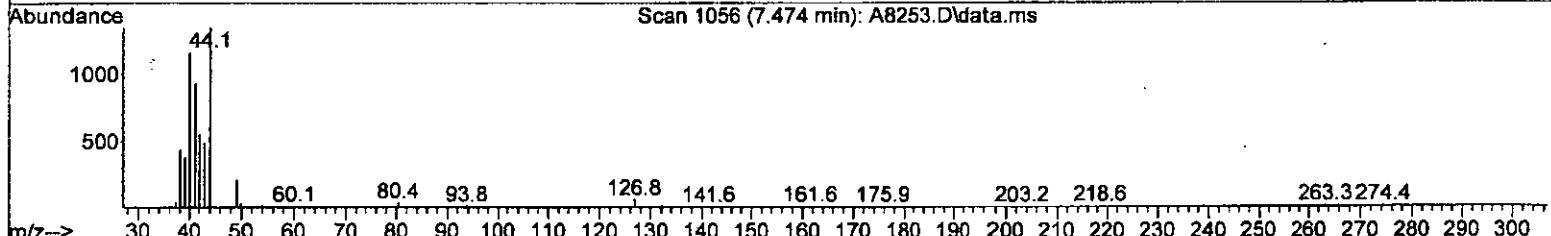
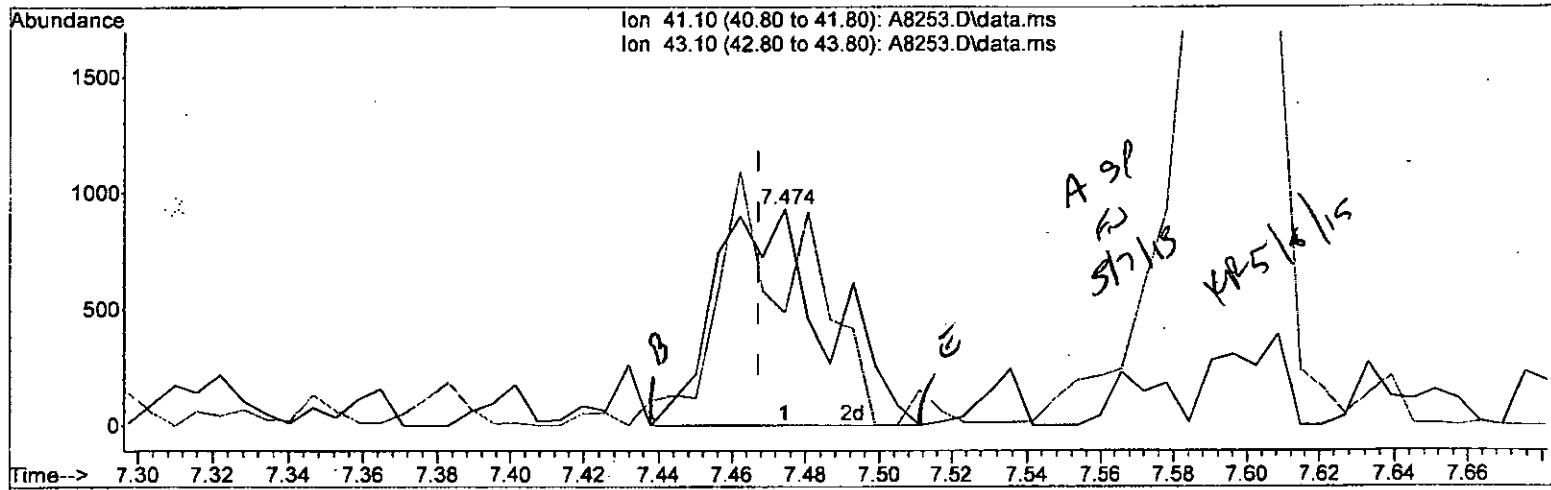
7.474min (+0.007) 0.82 ug/L

response 1587

Ion	Exp%	Act%
41.10	100	100
43.10	111.20	52.21#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8253.D  
 Acq On : 6 May 2015 5:01 pm  
 Operator : F. NAEGLER  
 Sample : 1.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 17:16:18 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8253.D\data.ms

(60) 2-Nitropropane

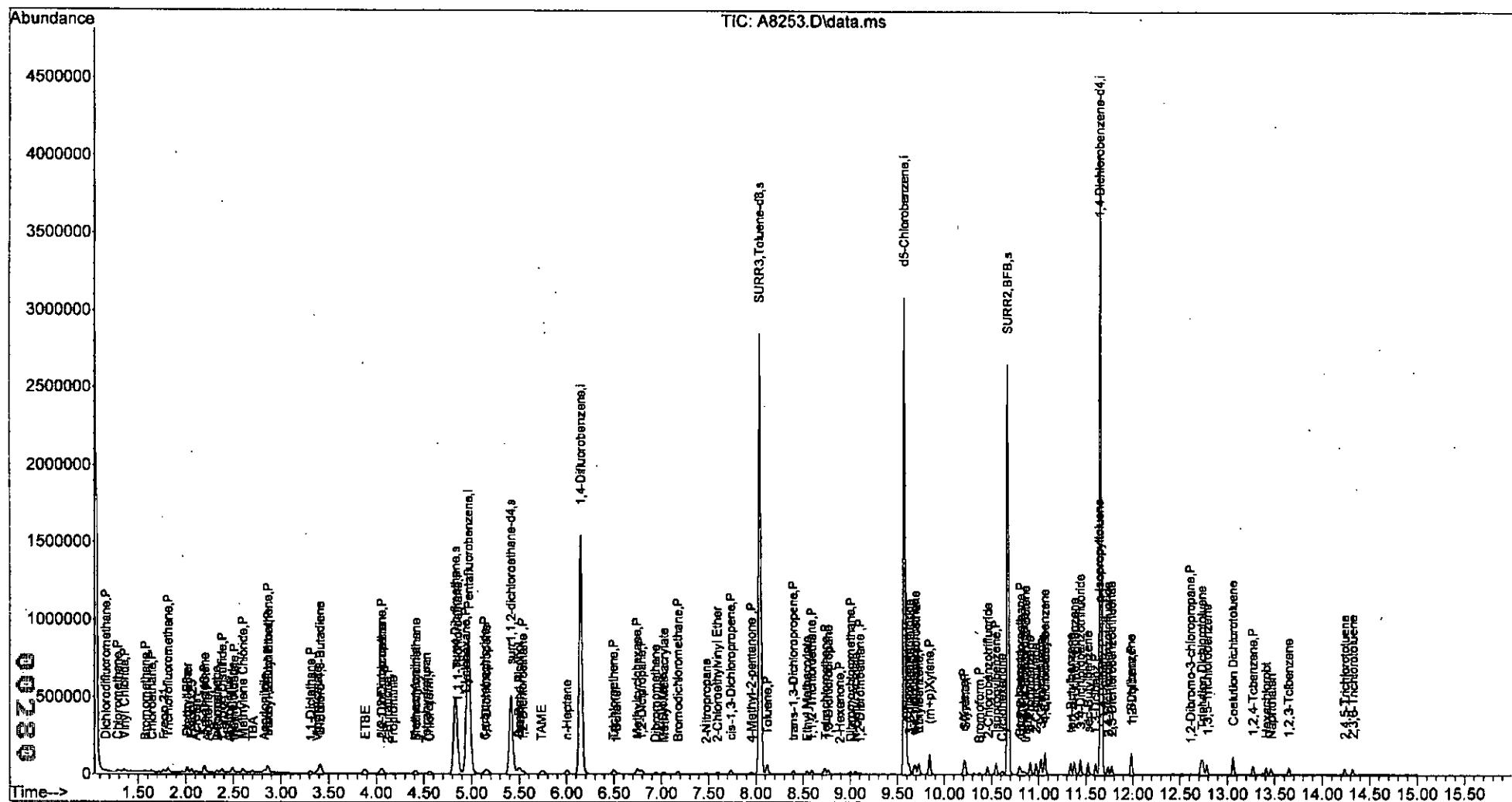
7.474min (+0.007) 1.00 ug/L m

response 1936

Ion	Exp%	Act%
41.10	100	100
43.10	111.20	52.21#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
Data File : A8253.D  
Acq Oh : 6 May 2015 5:01 pm  
Operator : F. NAEGLER  
Sample : 1.0 PPB STD  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 07 10:01:27 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 07 10:04:32 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

FW Sh1/S

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	946317	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.146	114	1460028	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1382906	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	790285	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	441550	50.60	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 101.20%		
46) surr1,1,2-dichloroetha...	5.414	65	456616	50.26	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 100.52%		
64) SURR3,Toluene-d8	8.042	98	1699285	50.71	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 101.42%		
69) SURR2,BFB	10.669	95	691588	47.05	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 94.10%		
<b>Target Compounds</b>						
					Qvalue	
2) Dichlorodifluoromethane	1.165	85	15675m	1.74	ug/L	
3) Chloromethane	1.281	50	33792	3.00	ug/L	84
4) Vinyl Chloride	1.354	62	26336m	2.51	ug/L	
5) Bromomethane	1.573	94	11021	3.05	ug/L	86
6) Chloroethane	1.634	64	12174	2.03	ug/L	86
7) Freon 21	1.762	67	26389	1.61	ug/L	92
8) Trichlorofluoromethane	1.811	101	25958	2.00	ug/L	98
9) Diethyl Ether	2.012	59	16114	2.37	ug/L	83
10) Freon 123a	2.012	67	18145	1.78	ug/L	86
11) Freon 123	2.061	83	20843	1.85	ug/L #	65
12) Acrolein	2.104	56	13461	13.62	ug/L	97
13) 1,1-Dicethene	2.195	96	13869	1.92	ug/L #	74
14) Freon 113	2.195	101	15184	1.91	ug/L	99
15) Acetone	2.226	43	13188	5.91	ug/L	97
16) 2-Propanol	2.329	45	16598	40.60	ug/L	95
17) Iodomethane	2.323	142	19429m	3.99	ug/L	
18) Carbon Disulfide	2.378	76	50978	1.92	ug/L	99
19) Acetonitrile	2.451	40	4665	15.04	ug/L #	84
20) Allyl Chloride	2.488	76	8326	1.94	ug/L #	1
21) Methyl Acetate	2.500	43	13412	2.69	ug/L	80
22) Methylene Chloride	2.598	84	17474	2.17	ug/L #	69
23) TBA	2.695	59	26551	42.97	ug/L	79
24) Acrylonitrile	2.823	53	30431	13.28	ug/L	97
25) Methyl-t-Butyl Ether	2.860	73	40205	1.89	ug/L	83
26) trans-1,2-Dichloroethene	2.860	96	15413	1.87	ug/L #	84
27) 1,1-Dicethane	3.305	63	34766	2.27	ug/L	87
28) Vinyl Acetate	3.366	86	3649	2.51	ug/L #	1
29) DIPE	3.408	45	94326	2.83	ug/L #	75
30) 2-Chloro-1,3-Butadiene	3.414	53	40201	2.26	ug/L	97
31) ETBE	3.878	59	64002	2.27	ug/L	84
32) 2,2-Dichloropropane	4.049	77	22447	1.87	ug/L	89
33) cis-1,2-Dichloroethene	4.061	96	18731	2.04	ug/L	86
34) 2-Butanone	4.103	43	9239	3.02	ug/L	82
35) Propionitrile	4.158	54	11126	13.40	ug/L	91

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 07 10:04:32 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.414	130	11435	2.22	ug/L	93
37) Methacrylonitrile	4.396	67	5289	2.16	ug/L #	69
38) Tetrahydrofuran	4.506	42	5686	2.83	ug/L #	65
39) Chloroform	4.567	83	30517	2.11	ug/L	93
40) 1,1,1-Trichloroethane	4.853	97	25148	1.89	ug/L	93
42) Cyclohexane	4.945	41	26527	2.38	ug/L	86
44) Carbontetrachloride	5.158	121	6160	1.55	ug/L	86
45) 1,1-Dichloropropene	5.158	75	22855	1.94	ug/L	79
47) Benzene	5.499	78	74649	2.10	ug/L	90
48) 1,2-Dichloroethane	5.542	62	25515	2.15	ug/L	89
49) Iso-Butyl Alcohol	5.481	43	13157m	40.97	ug/L	
50) TAME	5.743	73	39659	1.74	ug/L	79
51) n-Heptane	6.012	43	27938	2.28	ug/L	79
52) 1-Butanol	6.524	56	13821m	75.39	ug/L	
53) Trichloroethene	6.493	130	19238	2.00	ug/L	94
54) Methylcyclohexane	6.743	55	28056	2.11	ug/L #	67
55) 1,2-Diclpropane	6.786	63	21347	2.25	ug/L	93
56) Dibromomethane	6.938	93	9427	1.98	ug/L	98
57) 1,4-Dioxane	7.005	88	2205	35.86	ug/L #	70
58) Methyl Methacrylate	7.024	69	8259	1.79	ug/L #	31
59) Bromodichloromethane	7.170	83	21862	1.84	ug/L	93
60) 2-Nitropropane	7.463	41	4288	2.16	ug/L	99
61) 2-Chloroethylvinyl Ether	7.597	63	9227	2.04	ug/L	95
62) cis-1,3-Dichloropropene	7.737	75	24039	1.70	ug/L	91
63) 4-Methyl-2-pentanone	7.950	43	17457	2.40	ug/L	85
65) Toluene	8.115	91	82562	2.18	ug/L	93
66) trans-1,3-Dichloropropene	8.395	75	18425	1.50	ug/L	94
67) Ethyl Methacrylate	8.542	69	15286	1.59	ug/L #	49
68) 1,1,2-Trichloroethane	8.590	97	13719	1.95	ug/L #	74
71) Tetrachloroethene	8.731	164	15614	2.04	ug/L	95
72) 2-Hexanone	8.889	43	12089	2.44	ug/L	81
73) 1,3-Dichloropropane	8.767	76	24505	2.25	ug/L #	77
74) Dibromochloromethane	8.999	129	14877	1.72	ug/L	84
75) N-Butyl Acetate	9.054	43	27561	2.22	ug/L	87
76) 1,2-Dibromoethane	9.096	107	13065	1.99	ug/L	99
77) 3-Chlorobenzotrifluoride	9.627	180	30231	2.04	ug/L #	86
78) Chlorobenzene	9.602	112	52678	2.08	ug/L	93
79) 4-Chlorobenzotrifluoride	9.682	180	27041	2.01	ug/L	92
80) 1,1,1,2-Tetrachloroethane	9.694	131	17073	1.80	ug/L	92
81) Ethylbenzene	9.724	106	27184	2.02	ug/L	98
82) (m+p)Xylene	9.840	106	68302	4.19	ug/L	94
83) o-Xylene	10.206	106	32318	1.98	ug/L	95
84) Styrene	10.218	104	53328	1.90	ug/L	93
85) Bromoform	10.377	173	8201	1.54	ug/L	96
86) 2-Chlorobenzotrifluoride	10.456	180	26593	1.83	ug/L	93
87) Isopropylbenzene	10.547	105	82248	2.06	ug/L	99
88) Cyclohexanone	10.608	55	17806	33.54	ug/L	96
89) trans-1,4-Dichloro-2-B...	10.864	53	5005	1.84	ug/L #	69
91) 1,1,2,2-Tetrachloroethane	10.816	83	15747	2.05	ug/L	84
92) Bromobenzene	10.797	156	23004	2.13	ug/L #	86
93) 1,2,3-Trichloropropane	10.840	110	4880	2.28	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

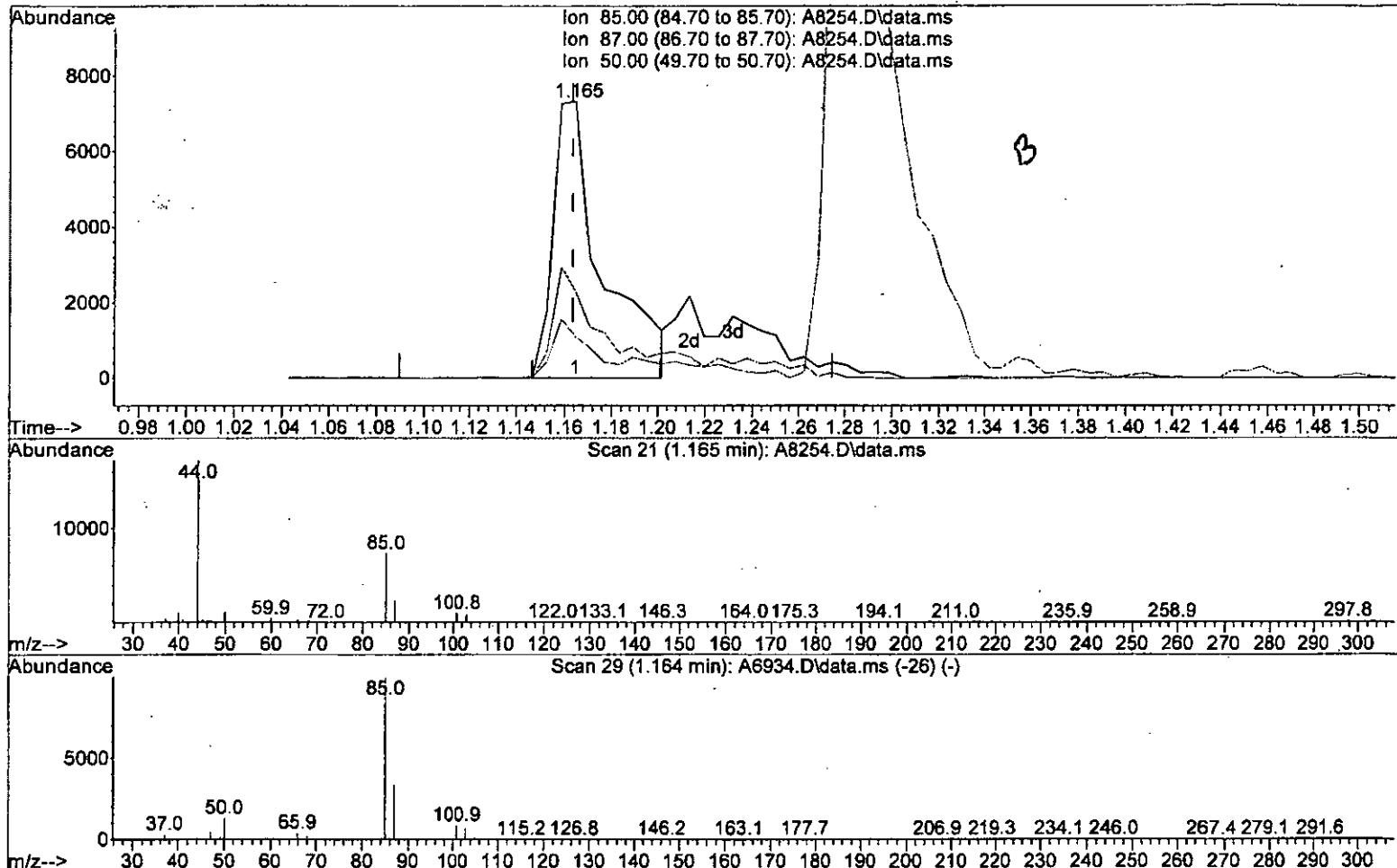
Quant Time: May 07 10:04:32 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.907	91	97775	2.23	ug/L	97
95) 2-Chlorotoluene	10.974	91	60387	2.17	ug/L	97
96) 3-Chlorotoluene	11.023	91	61467	2.07	ug/L	97
97) 4-Chlorotoluene	11.065	91	72667	2.20	ug/L	98
98) 1,3,5-Trimethylbenzene	11.065	105	69892	2.12	ug/L	97
99) tert-Butylbenzene	11.340	119	58836	2.07	ug/L	97
100) 1,2,4-Trimethylbenzene	11.376	105	70236	2.06	ug/L	98
101) 3,4-Dichlorobenzotrifl...	11.443	214	19165	1.80	ug/L	98
102) sec-Butylbenzene	11.523	105	84659	2.17	ug/L	97
103) p-Isopropyltoluene	11.645	119	73212	2.13	ug/L	98
104) 1,3-Dclbenz	11.602	146	43707	2.06	ug/L	96
105) 1,4-Dclbenz	11.681	146	51454	2.34	ug/L	90
106) 2,4-Dichlorobenzotrifl...	11.730	214	18339	1.86	ug/L	86
107) 2,5-Dichlorobenzotrifl...	11.773	214	21871	2.01	ug/L	93
108) n-Butylbenzene	11.980	91	63480	2.09	ug/L	94
109) 1,2-Dclbenz	11.986	146	43817	2.21	ug/L	93
110) 1,2-Dibromo-3-chloropr...	12.608	157	2877	1.88	ug/L	88
111) Trielution Dichlorotol...	12.730	125	108406	6.19	ug/L	96
112) 1,3,5-Trichlorobenzene	12.785	180	30258	2.05	ug/L	99
113) Coelution Dichlorotoluene	13.059	125	77291	4.25	ug/L	96
114) 1,2,4-Tcbenzene	13.266	180	25731	2.07	ug/L	91
115) Hexachlorobt	13.406	225	10099	1.82	ug/L #	81
116) Naphthalen	13.455	128	48261	2.20	ug/L	98
117) 1,2,3-Tclbenzene	13.650	180	23144	2.49	ug/L	97
118) 2,4,5-Trichlorotoluene	14.236	159	15003	2.48	ug/L	93
119) 2,3,6-Trichlorotoluene	14.321	159	14537m	2.82	ug/L	

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

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 06 17:46:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(2) Dichlorodifluoromethane (P)

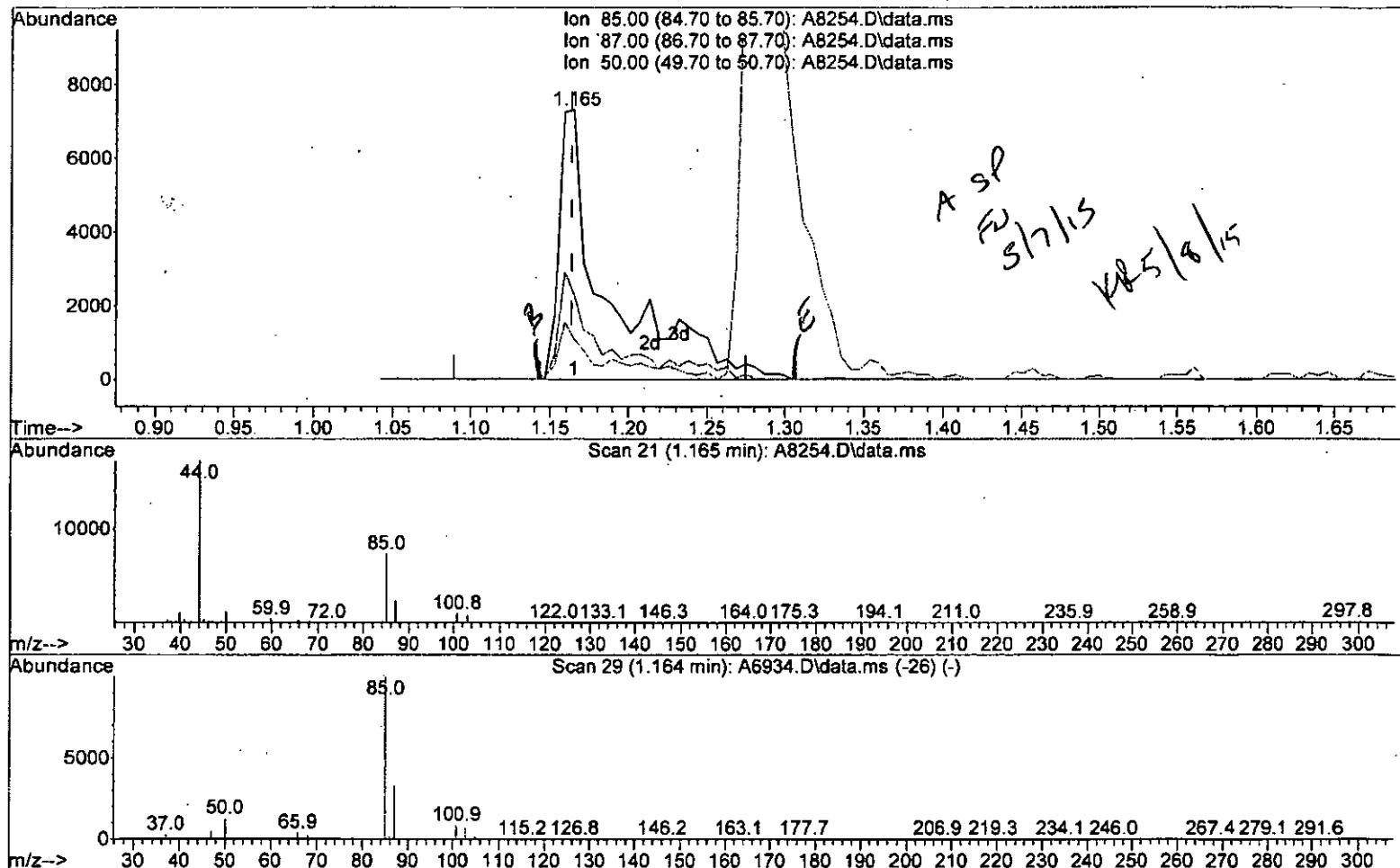
1.165min (+0.001) 1.18 ug/L

response 10617

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.26
50.00	15.00	14.86
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 06 17:46:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



(2) Dichlorodifluoromethane (P)

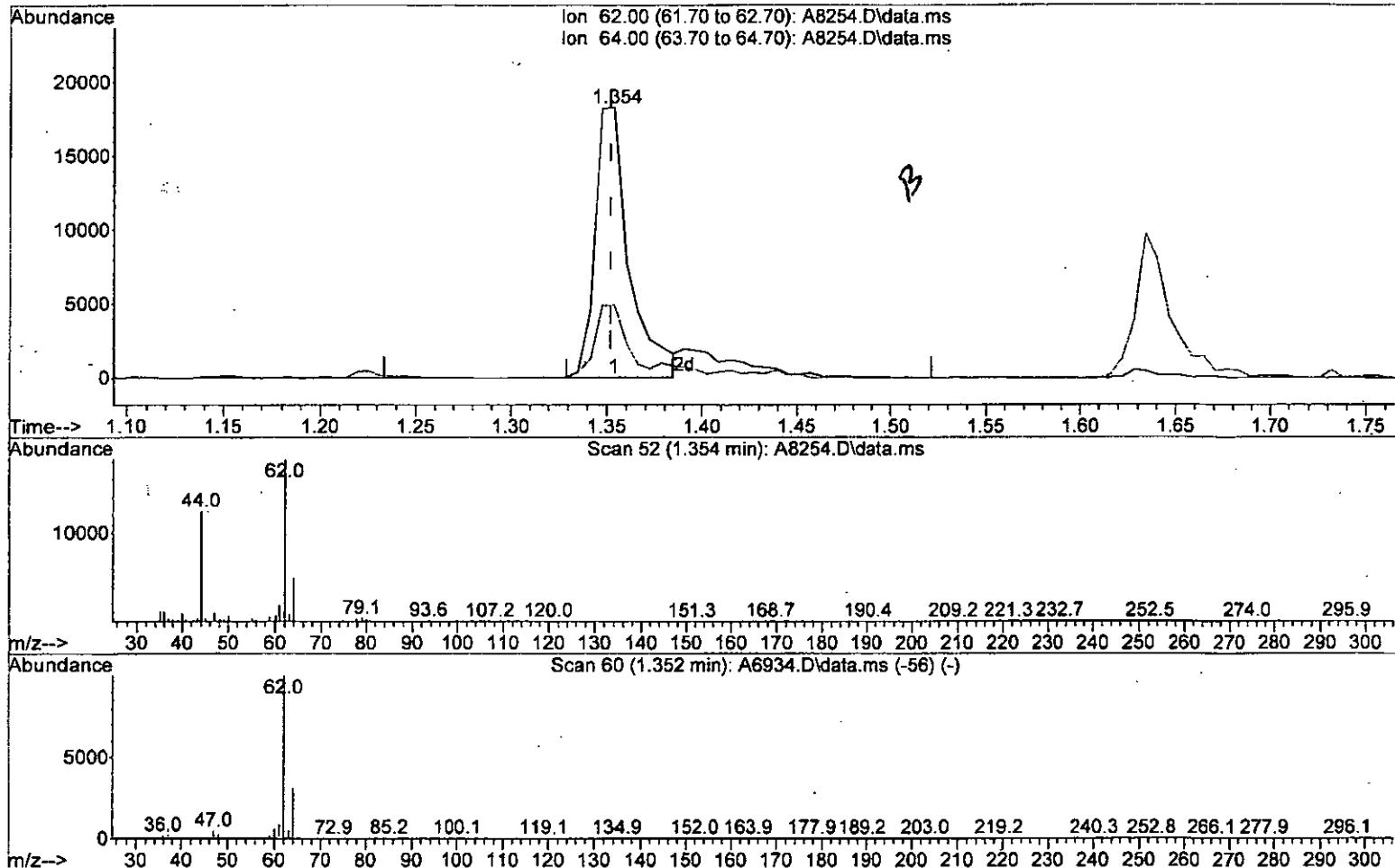
1.165min (+0.001) 1.74 ug/L m

response 15675

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.26
50.00	15.00	14.86
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 06 17:46:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(4) Vinyl Chloride (P)

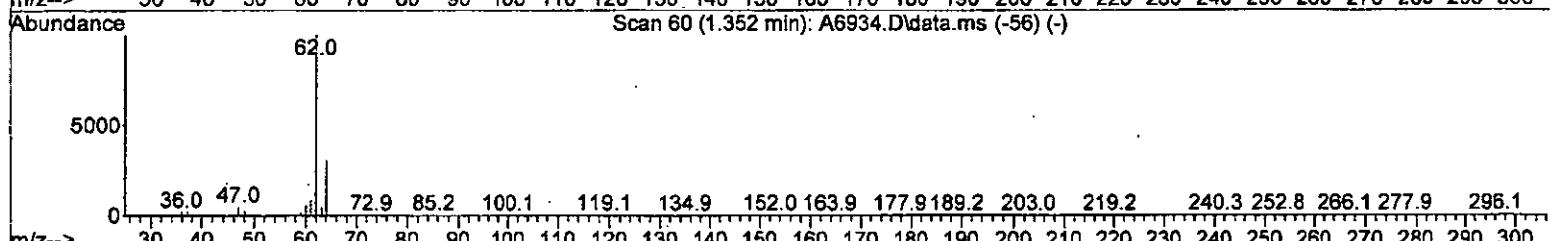
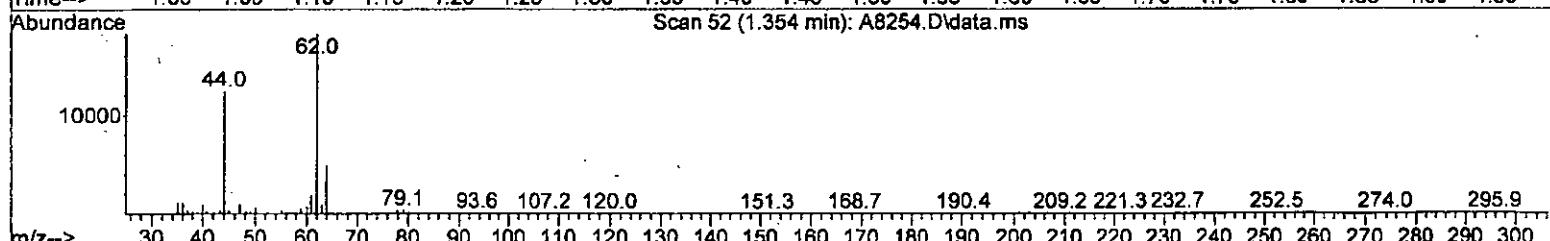
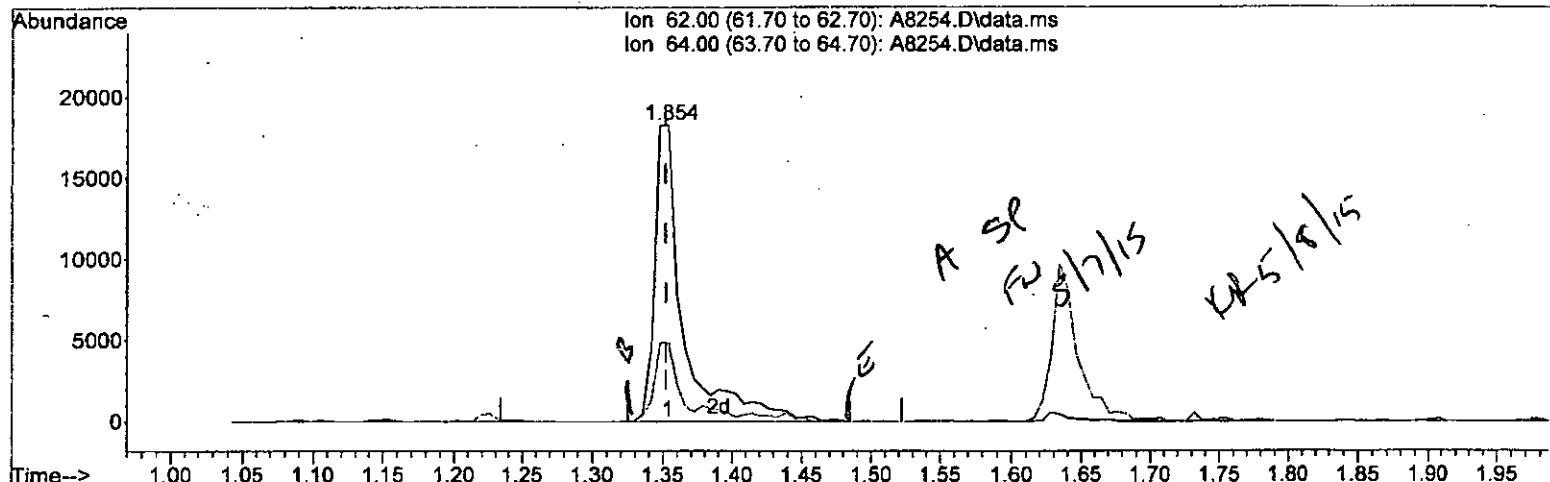
1.354min (+0.002) 2.09 ug/L

response 21858

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	26.70
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 06 17:46:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(4) Vinyl Chloride (P)

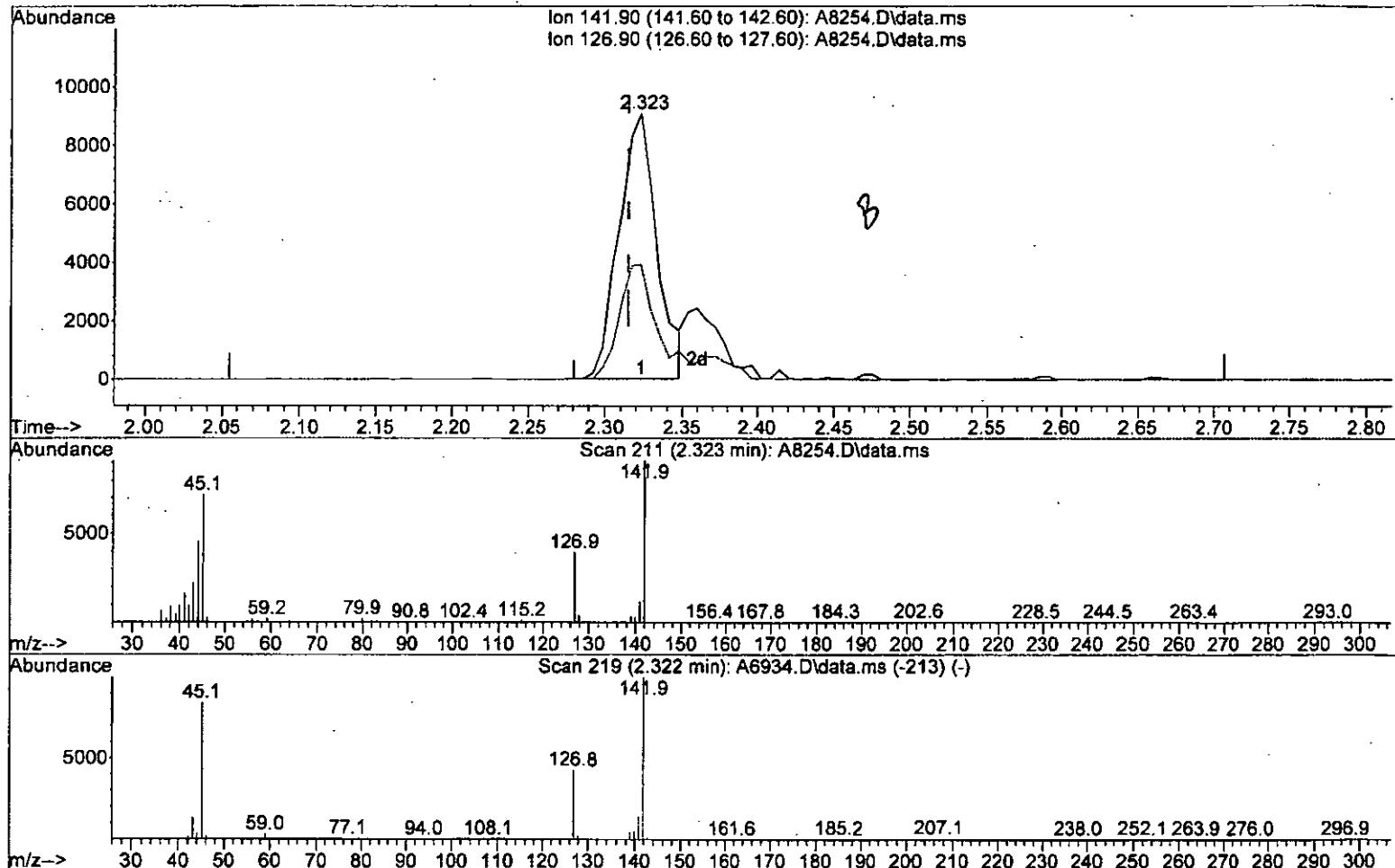
1.354min (+0.002) 2.51 ug/L m

response 26336

Ion	Exp%	Act%
62.00	100	100
64.00	31.70	26.70
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 07 09:26:03 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(17) Iodomethane

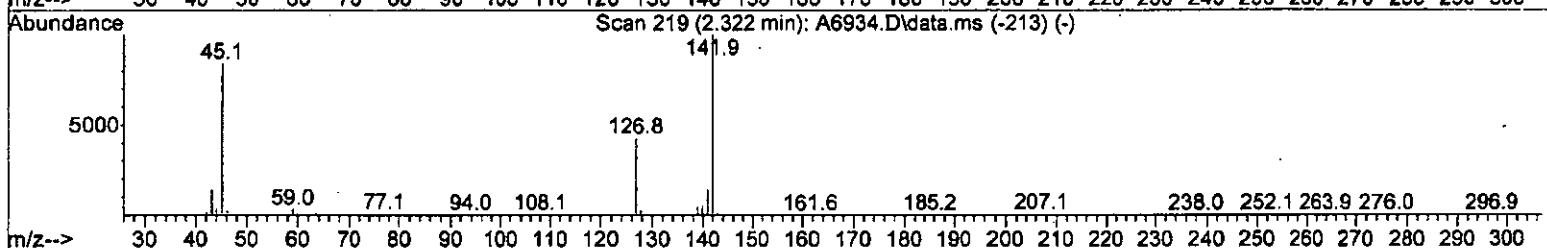
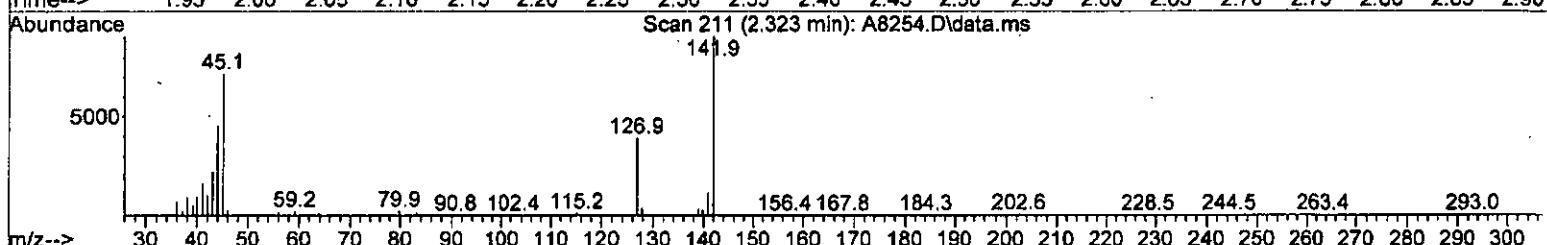
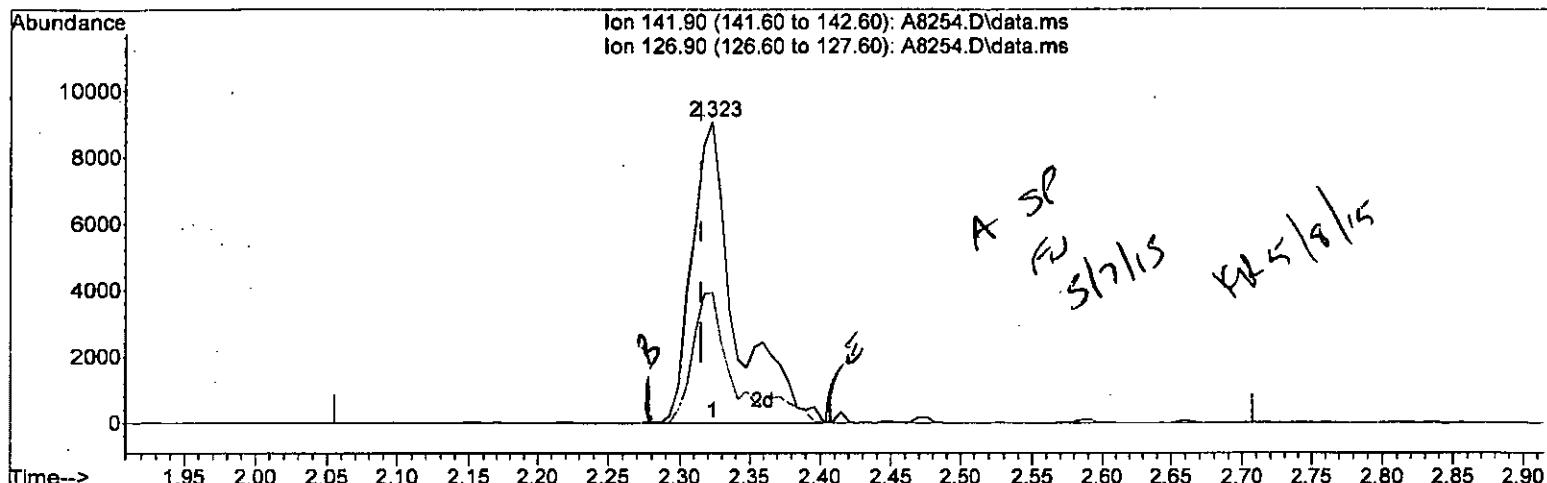
2.323min (+0.008) 3.15 ug/L

response 15301

Ion	Exp%	Act%
141.90	100	100
126.90	43.50	43.16
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 07 09:26:03 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(17) Iodomethane

2.323min (+0.008) 3.99 ug/L m

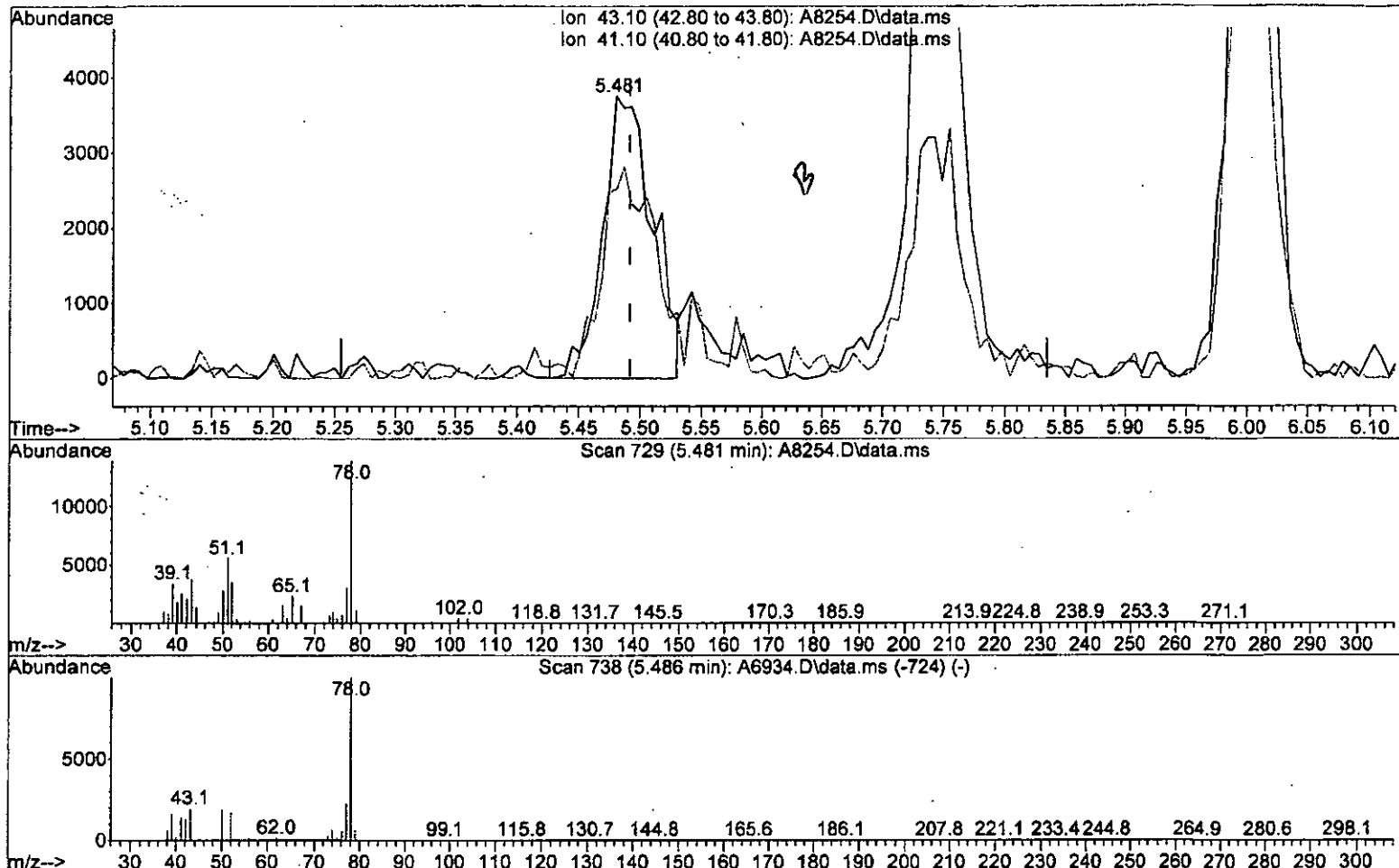
response 19429

Ion	Exp%	Act%
141.90	100	100
126.90	43.50	43.16
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
Data File : A8254.D  
Acq On : 6 May 2015 5:31 pm  
Operator : F. NAEGLER  
Sample : 2.0 PPB STD  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 07 09:26:03 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



TIC: A8254.D\data.ms

(49) Iso-Butyl Alcohol

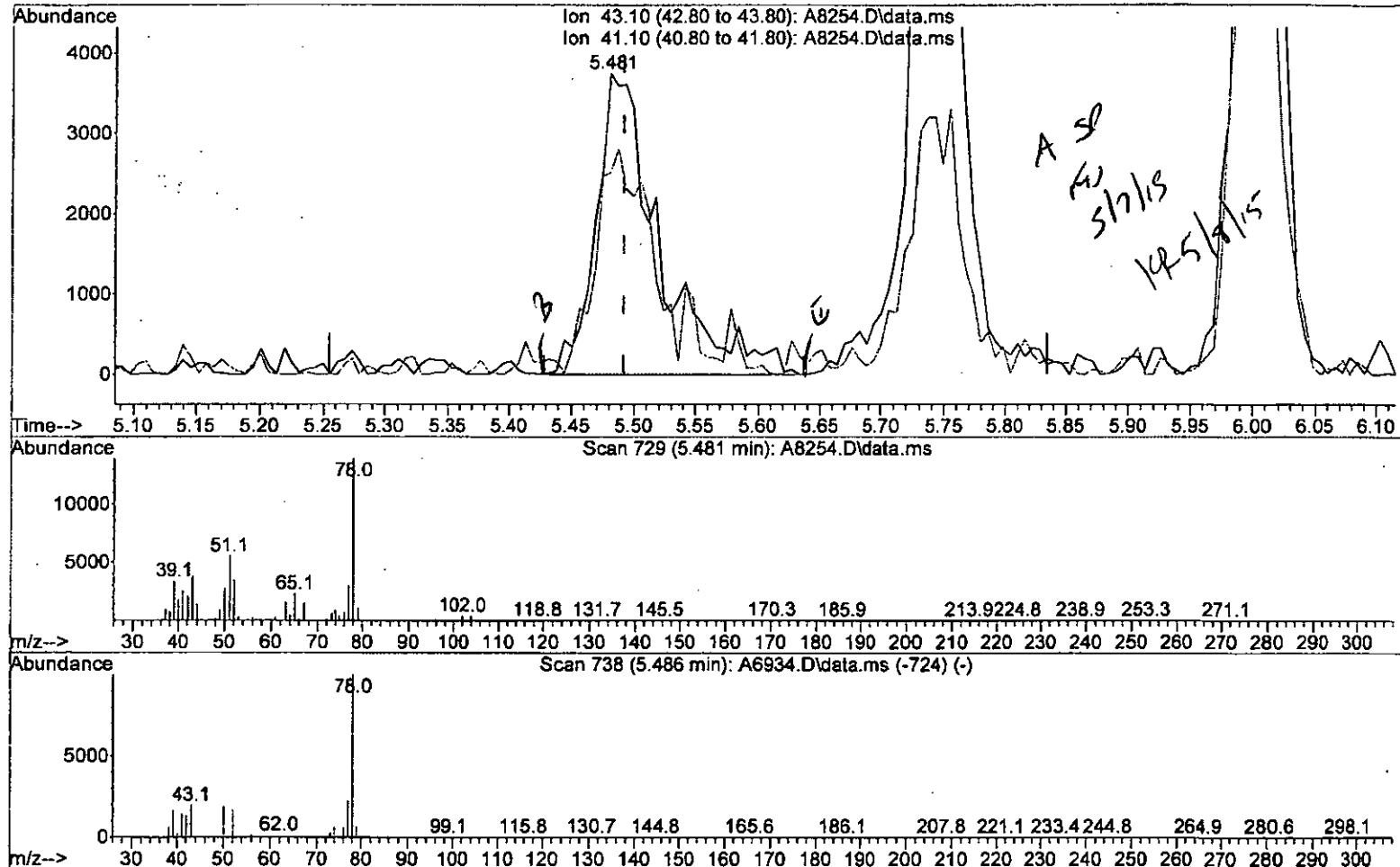
5.481min (-0.011) 33.00 ug/L

response 10599

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	67.04
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvao10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 07 09:26:03 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(49) Iso-Butyl Alcohol

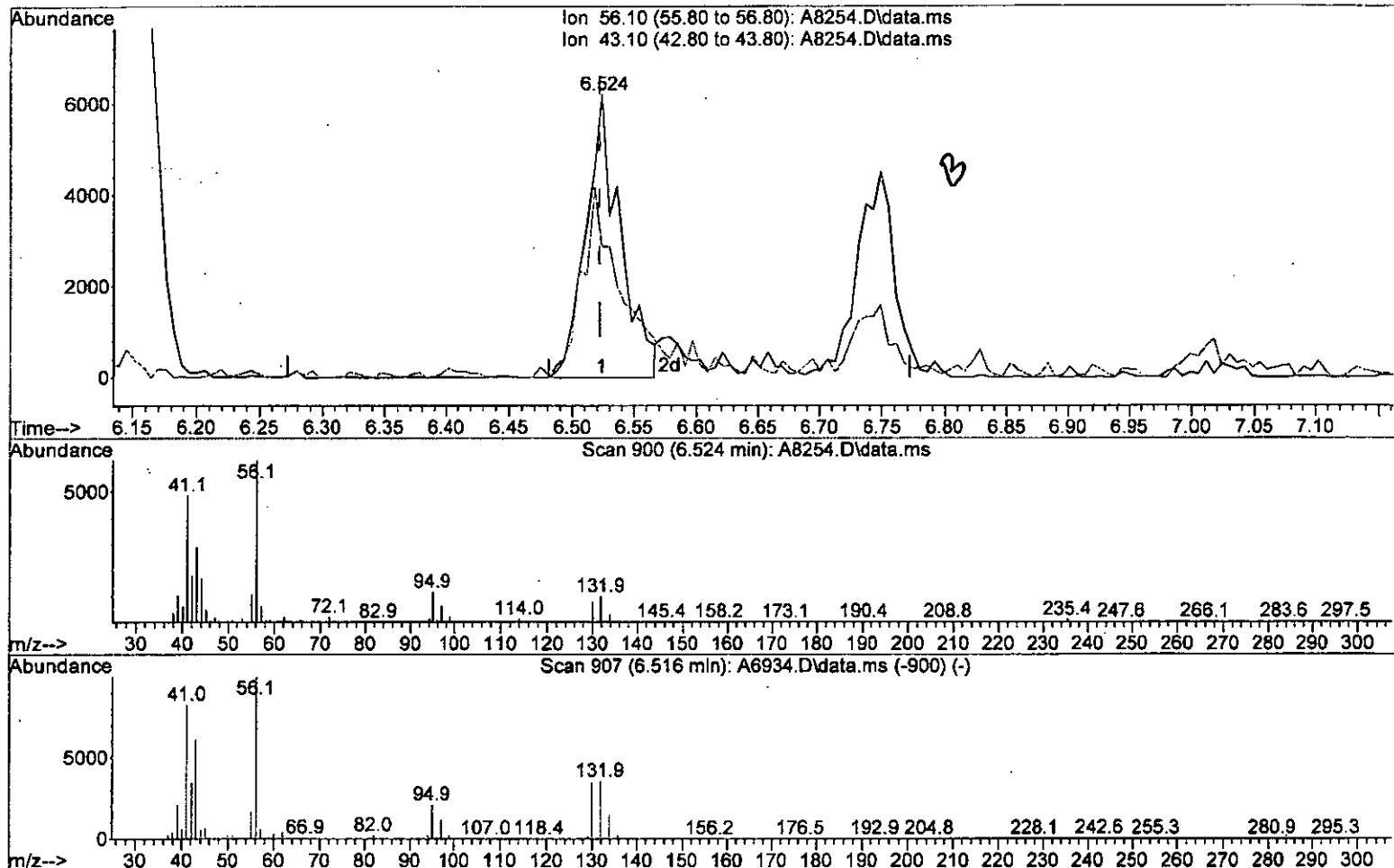
5.481min (-0.011) 40.97 ug/L m

response 13157

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	67.04
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 07 09:26:03 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(52) 1-Butanol

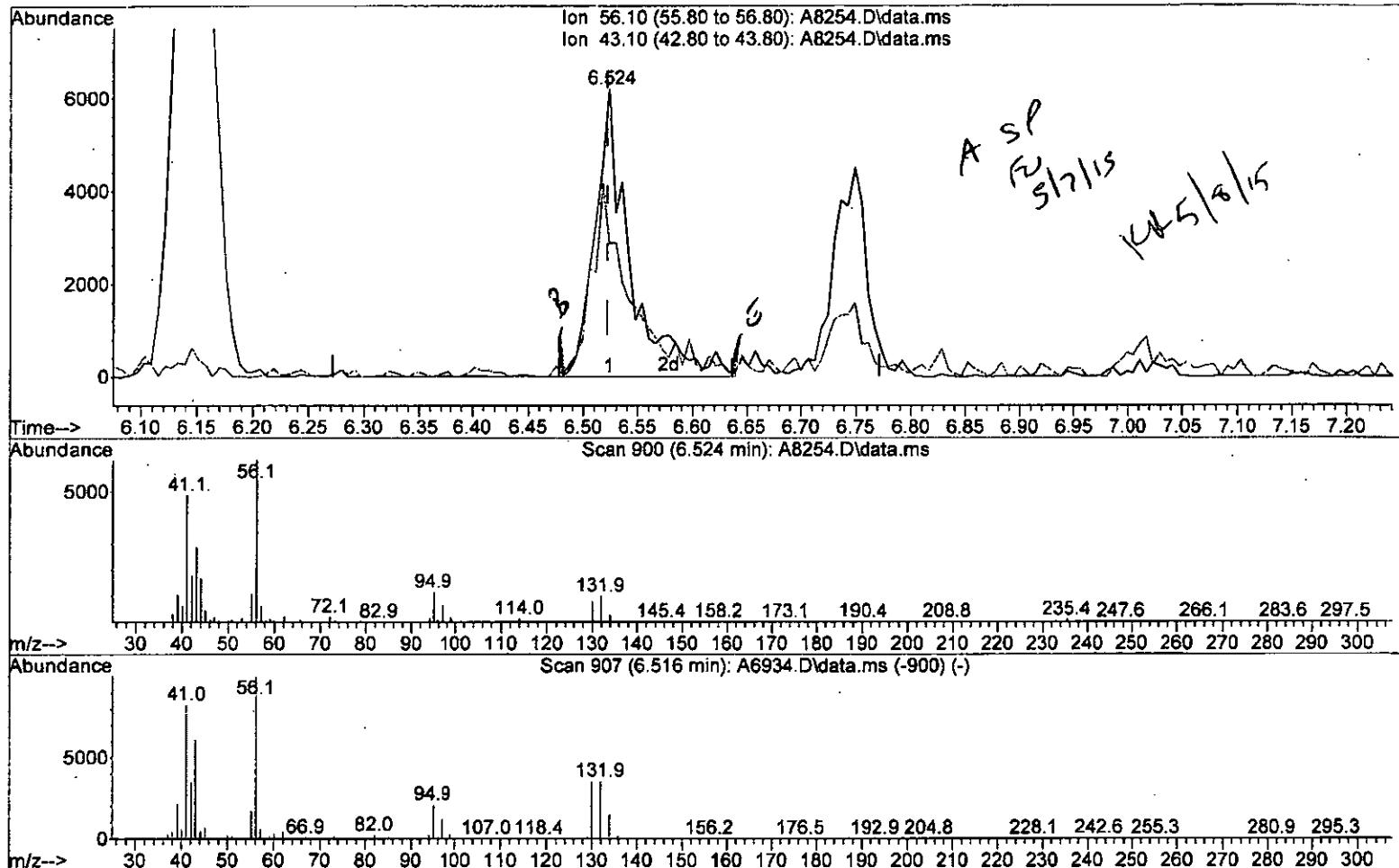
6.524min (+0.002) 65.30 ug/L

response 11971

Ion	Exp%	Act%
56.10	100	100
43.10	54.10	46.33
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 07 09:26:03 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(52) 1-Butanol

6.524min (+0.002) 75.39 ug/L m

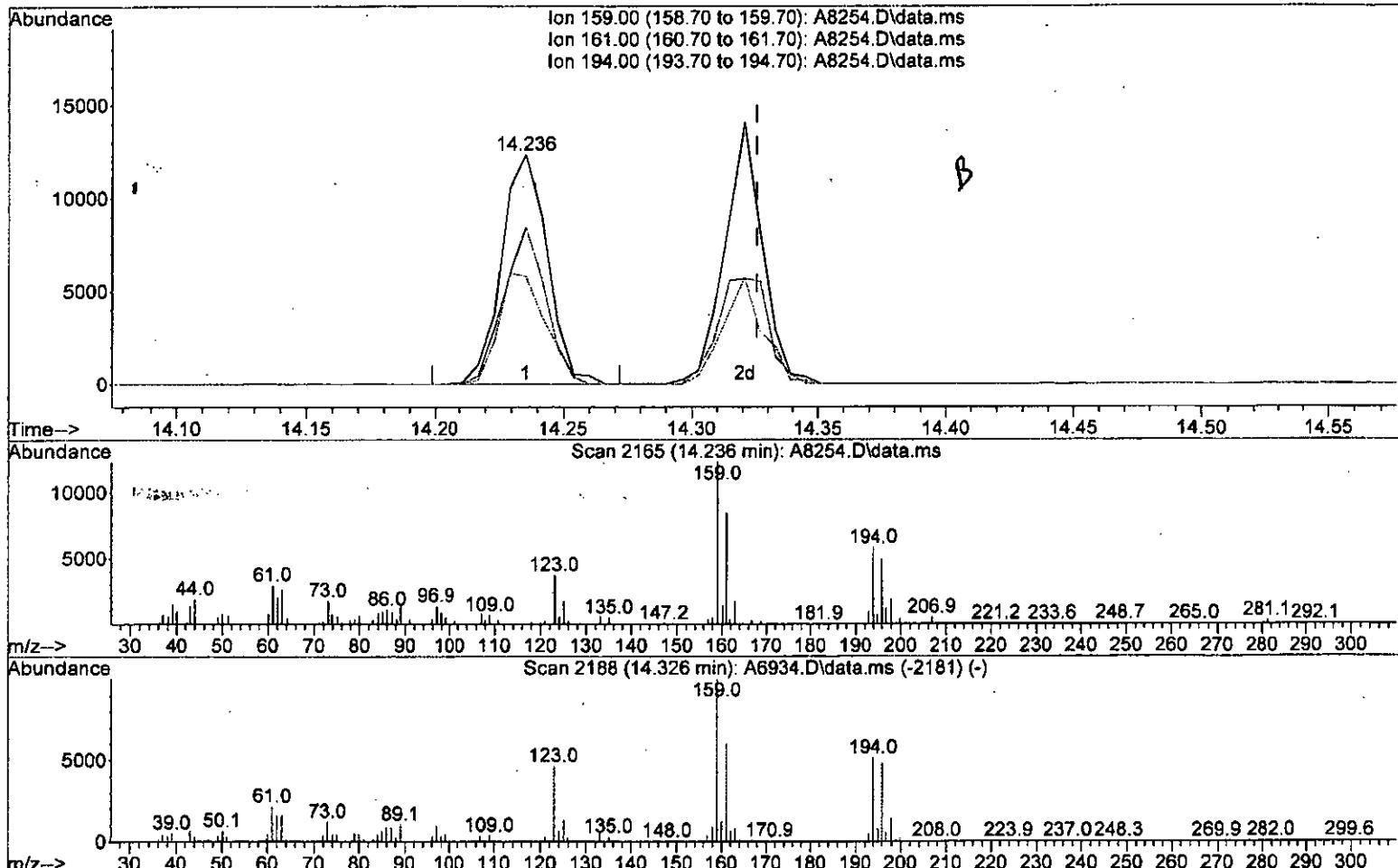
response 13821

Ion	Exp%	Act%
56.10	100	100
43.10	54.10	46.33
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 17:46:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(119) 2,3,6-Trichlorotoluene

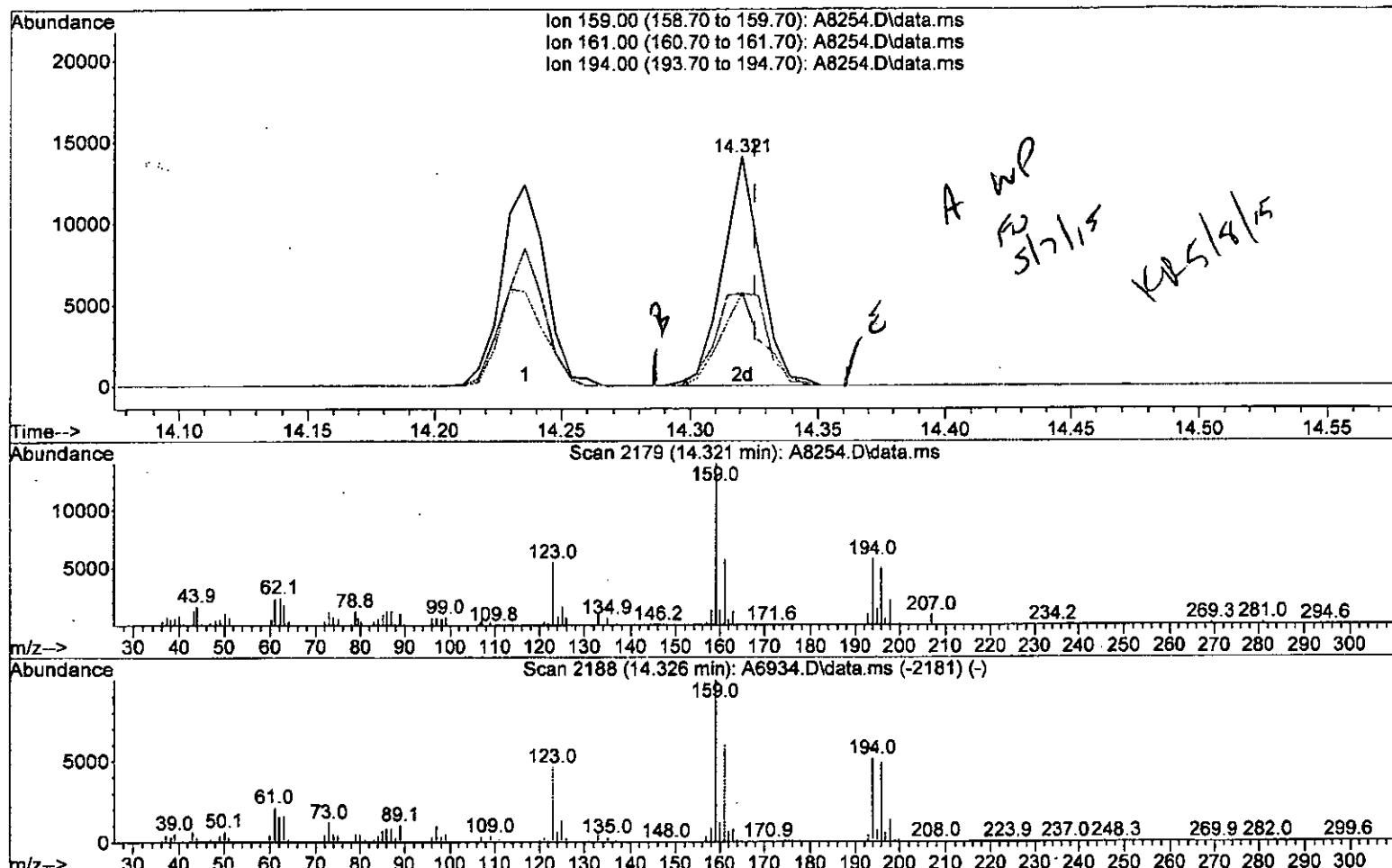
14.236min (-0.090) 2.91 ug/L

response 15003

Ion	Exp%	Act%
159.00	100	100
161.00	62.90	68.40
194.00	47.30	47.04
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 06 17:46:24 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - B260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8254.D\data.ms

(119) 2,3,6-Trichlorotoluene

14.321min (-0.005) 2.82 ug/L m

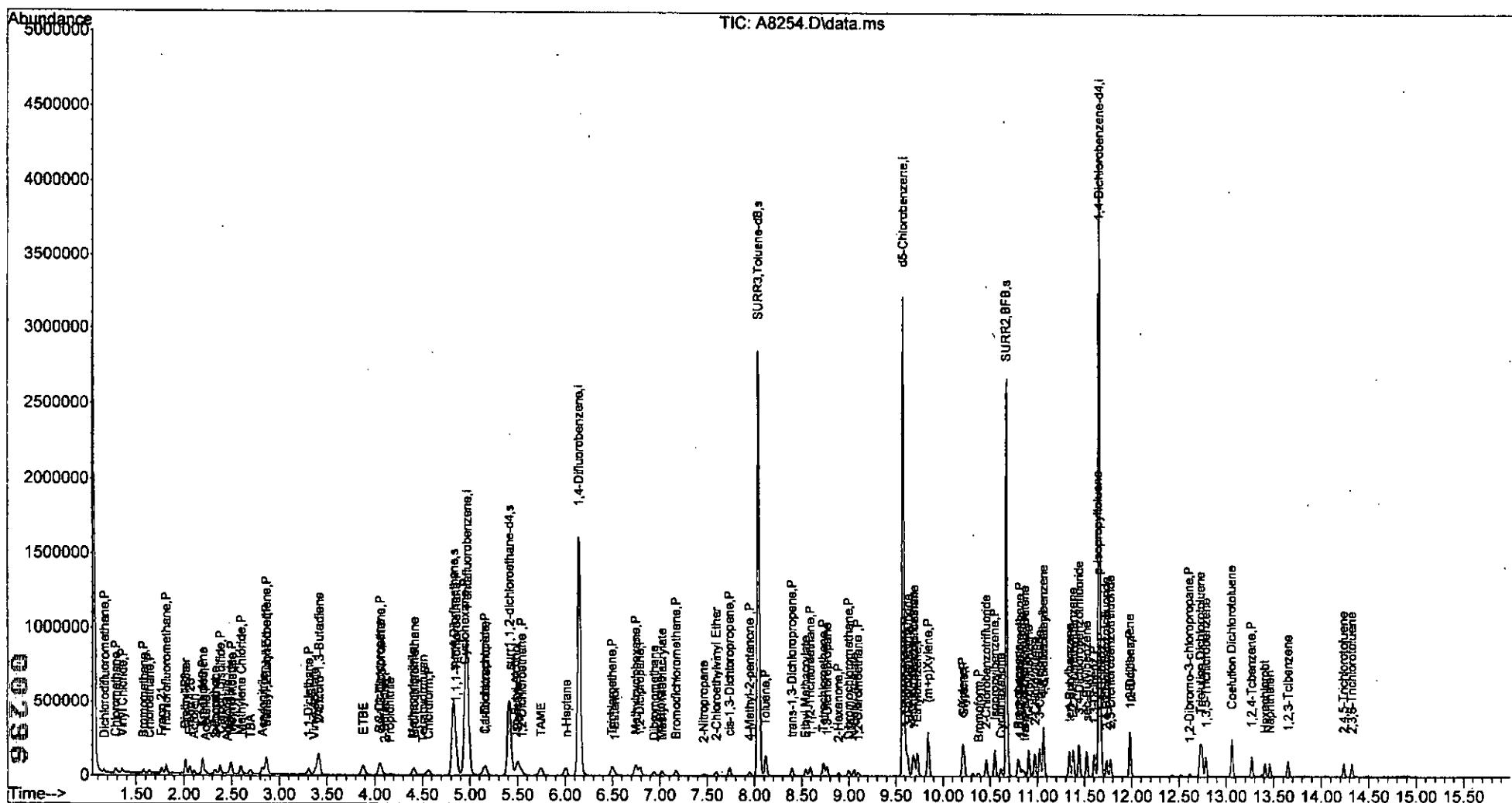
response 14537

Ion	Exp%	Act%
159.00	100	100
161.00	62.90	40.29#
194.00	47.30	40.70
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8254.D  
 Acq On : 6 May 2015 5:31 pm  
 Operator : F. NAEGLER  
 Sample : 2.0 PPB STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 07 10:04:32 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 07 10:06:25 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Fu Shhs

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.963	168	944649	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.146	114	1442159	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1372786	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	788682	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.829	113	530386	61.53	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 123.06%	#
46) surr1,1,2-dichloroetha...	5.414	65	554683	61.81	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 123.62%	#
64) SURR3,Toluene-d8	8.042	98	2032177	61.39	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 122.78%	#
69) SURR2,BFB	10.675	95	823867	56.74	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 113.48%	
<b>Target Compounds</b>						
					Qvalue	
2) Dichlorodifluoromethane	1.159	85	42816	4.77	ug/L	94
3) Chloromethane	1.281	50	79703	7.10	ug/L	96
4) Vinyl Chloride	1.348	62	62336	5.96	ug/L	99
5) Bromomethane	1.573	94	24949	6.91	ug/L	99
6) Chloroethane	1.634	64	29665	4.96	ug/L	98
7) Freon 21	1.762	67	69908	4.29	ug/L	96
8) Trichlorofluoromethane	1.811	101	63110	4.88	ug/L	98
9) Diethyl Ether	2.012	59	38554	5.69	ug/L	# 76
10) Freon 123a	2.012	67	47703	4.68	ug/L	94
11) Freon 123	2.061	83	52186	4.63	ug/L	78
12) Acrolein	2.104	56	34662	35.13	ug/L	98
13) 1,1-Dicethene	2.195	96	34402	4.76	ug/L	# 86
14) Freon 113	2.195	101	35544	4.47	ug/L	100
15) Acetone	2.226	43	27737	12.45	ug/L	94
16) 2-Propanol	2.329	45	44141	108.16	ug/L	98
17) Iodomethane	2.317	142	43357	8.93	ug/L	97
18) Carbon Disulfide	2.378	76	123656	4.67	ug/L	99
19) Acetonitrile	2.445	40	8979	29.00	ug/L	# 79
20) Allyl Chloride	2.488	76	22045	5.15	ug/L	# 1
21) Methyl Acetate	2.500	43	32284	6.48	ug/L	85
22) Methylene Chloride	2.591	84	39719	4.95	ug/L	# 61
23) TBA	2.689	59	60589	98.23	ug/L	69
24) Acrylonitrile	2.817	53	72037	31.50	ug/L	100
25) Methyl-t-Butyl Ether	2.860	73	95828	4.50	ug/L	93
26) trans-1,2-Dichloroethene	2.860	96	38713	4.71	ug/L	# 75
27) 1,1-Dicethane	3.311	63	84133	5.50	ug/L	99
28) Vinyl Acetate	3.378	86	7260	4.99	ug/L	# 86
29) DIPE	3.408	45	234359	7.06	ug/L	# 74
30) 2-Chloro-1,3-Butadiene	3.414	53	102447	5.77	ug/L	87
31) ETBE	3.878	59	158569	5.64	ug/L	90
32) 2,2-Dichloropropane	4.048	77	55311	4.62	ug/L	92
33) cis-1,2-Dichloroethene	4.048	96	45803	5.00	ug/L	95
34) 2-Butanone	4.091	43	21441	7.02	ug/L	90
35) Propionitrile	4.164	54	26775	32.30	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 07 10:06:25 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Bromochloromethane	4.408	130	27821	5.42	ug/L #	76
37) Methacrylonitrile	4.414	67	12307	5.04	ug/L #	53
38) Tetrahydrofuran	4.500	42	10975	5.47	ug/L #	68
39) Chloroform	4.567	83	76762	5.31	ug/L	97
40) 1,1,1-Trichloroethane	4.847	97	62411	4.71	ug/L	94
42) Cyclohexane	4.939	41	62445	5.66	ug/L	100
44) Carbontetrachloride	5.164	121	16174	4.12	ug/L #	70
45) 1,1-Dichloropropene	5.158	75	57667	4.96	ug/L	94
47) Benzene	5.499	78	175029	4.98	ug/L	84
48) 1,2-Dichloroethane	5.542	62	62635	5.34	ug/L	93
49) Iso-Butyl Alcohol	5.487	43	31482m	99.24	ug/L	
50) TAME	5.743	73	98007	4.34	ug/L	84
51) n-Heptane	6.005	43	73628	6.07	ug/L	79
52) 1-Butanol	6.511	56	31288m	172.79	ug/L	
53) Trichloroethene	6.493	130	48764	5.13	ug/L	90
54) Methylcyclohexane	6.743	55	66506	5.07	ug/L #	84
55) 1,2-Diclpropane	6.792	63	50353	5.37	ug/L	92
56) Dibromomethane	6.938	93	24221	5.14	ug/L	93
57) 1,4-Dioxane	7.011	88	4952m	81.52	ug/L	
58) Methyl Methacrylate	7.017	69	20099	4.41	ug/L #	68
59) Bromodichloromethane	7.170	83	52190	4.45	ug/L	98
60) 2-Nitropropane	7.462	41	11179	5.71	ug/L #	78
61) 2-Chloroethylvinyl Ether	7.590	63	23716	5.31	ug/L	95
62) cis-1,3-Dichloropropene	7.737	75	59199	4.23	ug/L	91
63) 4-Methyl-2-pentanone	7.950	43	44357	6.19	ug/L	80
65) Toluene	8.121	91	191788	5.14	ug/L	97
66) trans-1,3-Dichloropropene	8.395	75	48075	3.96	ug/L	99
67) Ethyl Methacrylate	8.542	69	36869	3.87	ug/L #	58
68) 1,1,2-Trichloroethane	8.590	97	35588	5.12	ug/L	96
71) Tetrachloroethene	8.730	164	40801	5.36	ug/L	93
72) 2-Hexanone	8.889	43	27444	5.57	ug/L	79
73) 1,3-Dichloropropane	8.767	76	55787	5.17	ug/L #	74
74) Dibromochloromethane	8.999	129	37395	4.36	ug/L	94
75) N-Butyl Acetate	9.054	43	62654	5.09	ug/L	96
76) 1,2-Dibromoethane	9.096	107	31746	4.87	ug/L	94
77) 3-Chlorobenzotrifluoride	9.627	180	70077	4.77	ug/L	92
78) Chlorobenzene	9.602	112	133132	5.29	ug/L	96
79) 4-Chlorobenzotrifluoride	9.682	180	62001	4.64	ug/L	91
80) 1,1,1,2-Tetrachloroethane	9.694	131	40925	4.34	ug/L	90
81) Ethylbenzene	9.730	106	67383	5.03	ug/L	98
82) (m+p)Xylene	9.840	106	167944	10.38	ug/L #	84
83) o-Xylene	10.206	106	80757	4.99	ug/L	90
84) Styrene	10.224	104	137136	4.92	ug/L	93
85) Bromoform	10.377	173	19461	3.68	ug/L	92
86) 2-Chlorobenzotrifluoride	10.456	180	67404	4.68	ug/L	91
87) Isopropylbenzene	10.547	105	206894	5.22	ug/L	98
88) Cyclohexanone	10.614	55	41925	79.56	ug/L	84
89) trans-1,4-Dichloro-2-B...	10.864	53	13552	5.02	ug/L #	61
91) 1,1,2,2-Tetrachloroethane	10.809	83	40208	5.24	ug/L	99
92) Bromobenzene	10.797	156	56580	5.25	ug/L #	89
93) 1,2,3-Trichloropropane	10.840	110	12243	5.74	ug/L	93

Data Path : I:\ACQUDATA\msvao10\data\050615\  
Data File : A8255.D  
Acq On : 6 May 2015 6:01 pm  
Operator : F. NAEGLER  
Sample : 5.0 PPB STD  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

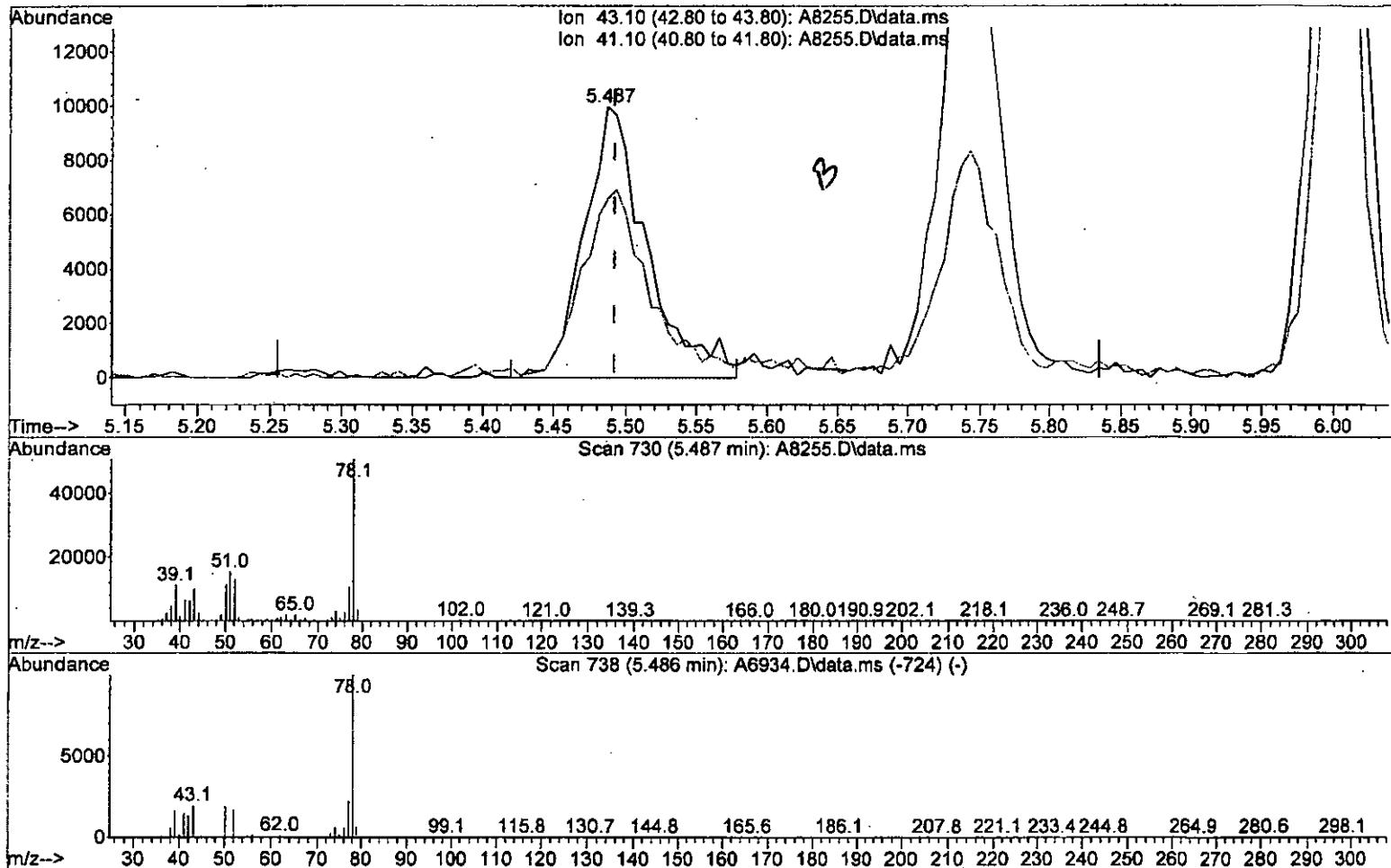
Quant Time: May 07 10:06:25 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) n-Propylbenzene	10.907	91	242434	5.53	ug/L	98
95) 2-Chlorotoluene	10.974	91	149052	5.37	ug/L	97
96) 3-Chlorotoluene	11.023	91	159230	5.37	ug/L	99
97) 4-Chlorotoluene	11.065	91	175792	5.33	ug/L	99
98) 1,3,5-Trimethylbenzene	11.065	105	178462	5.43	ug/L	96
99) tert-Butylbenzene	11.340	119	155008	5.45	ug/L	96
100) 1,2,4-Trimethylbenzene	11.376	105	185213	5.45	ug/L	100
101) 3,4-Dichlorobenzotrifl...	11.443	214	49222	4.63	ug/L	92
102) sec-Butylbenzene	11.523	105	212342	5.46	ug/L	97
103) p-Isopropyltoluene	11.645	119	187325	5.47	ug/L	97
104) 1,3-Dclbenz	11.602	146	116771	5.50	ug/L	95
105) 1,4-Dclbenz	11.681	146	121409	5.54	ug/L	98
106) 2,4-Dichlorobenzotrifl...	11.736	214	46537	4.74	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.773	214	51117	4.70	ug/L	97
108) n-Butylbenzene	11.980	91	163509	5.39	ug/L	97
109) 1,2-Dclbenz	11.980	146	107304	5.43	ug/L	97
110) 1,2-Dibromo-3-chloropr...	12.608	157	6663	4.36	ug/L	98
111) Trielution Dichlorotol...	12.730	125	279552	16.00	ug/L	99
112) 1,3,5-Trichlorobenzene	12.785	180	77506	5.25	ug/L	98
113) Coelution Dichlorotoluene	13.059	125	200965	11.07	ug/L	94
114) 1,2,4-Tcbenzene	13.266	180	65548	5.28	ug/L	97
115) Hexachlorobt	13.406	225	27851	5.04	ug/L	90
116) Naphthalen	13.461	128	126659	5.79	ug/L	96
117) 1,2,3-Tc1benzene	13.650	180	55908	6.04	ug/L	100
118) 2,4,5-Trichlorotoluene	14.236	159	37945	6.30	ug/L	97
119) 2,3,6-Trichlorotoluene	14.321	159	33372	6.49	ug/L	96

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

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 07 09:28:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8255.D\data.ms

(49) Iso-Butyl Alcohol

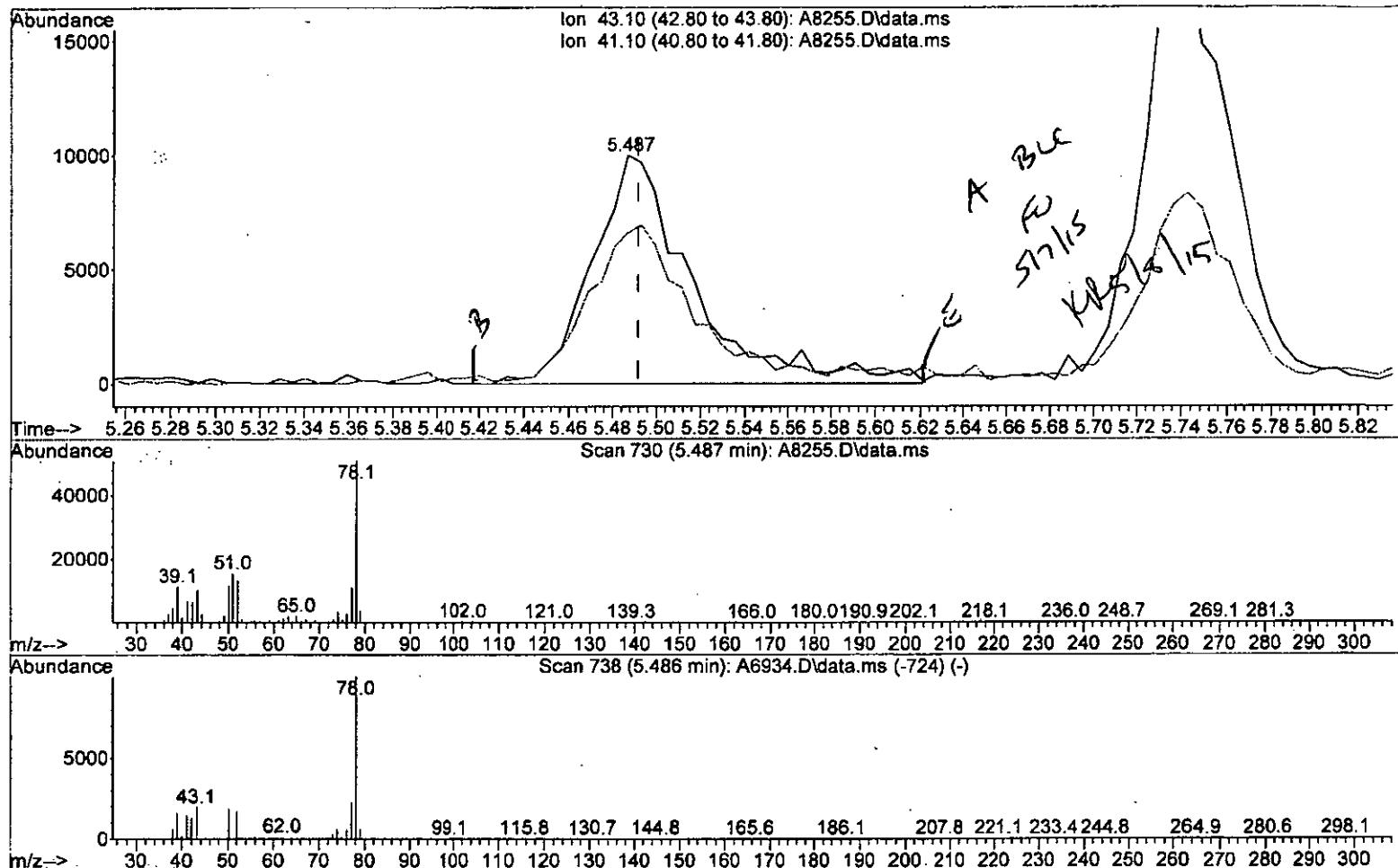
5.487min (-0.005) 95.24 ug/L

response 30215

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	65.95
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 07 09:28:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration.



TIC: A8255.D\data.ms

(49) Iso-Butyl Alcohol

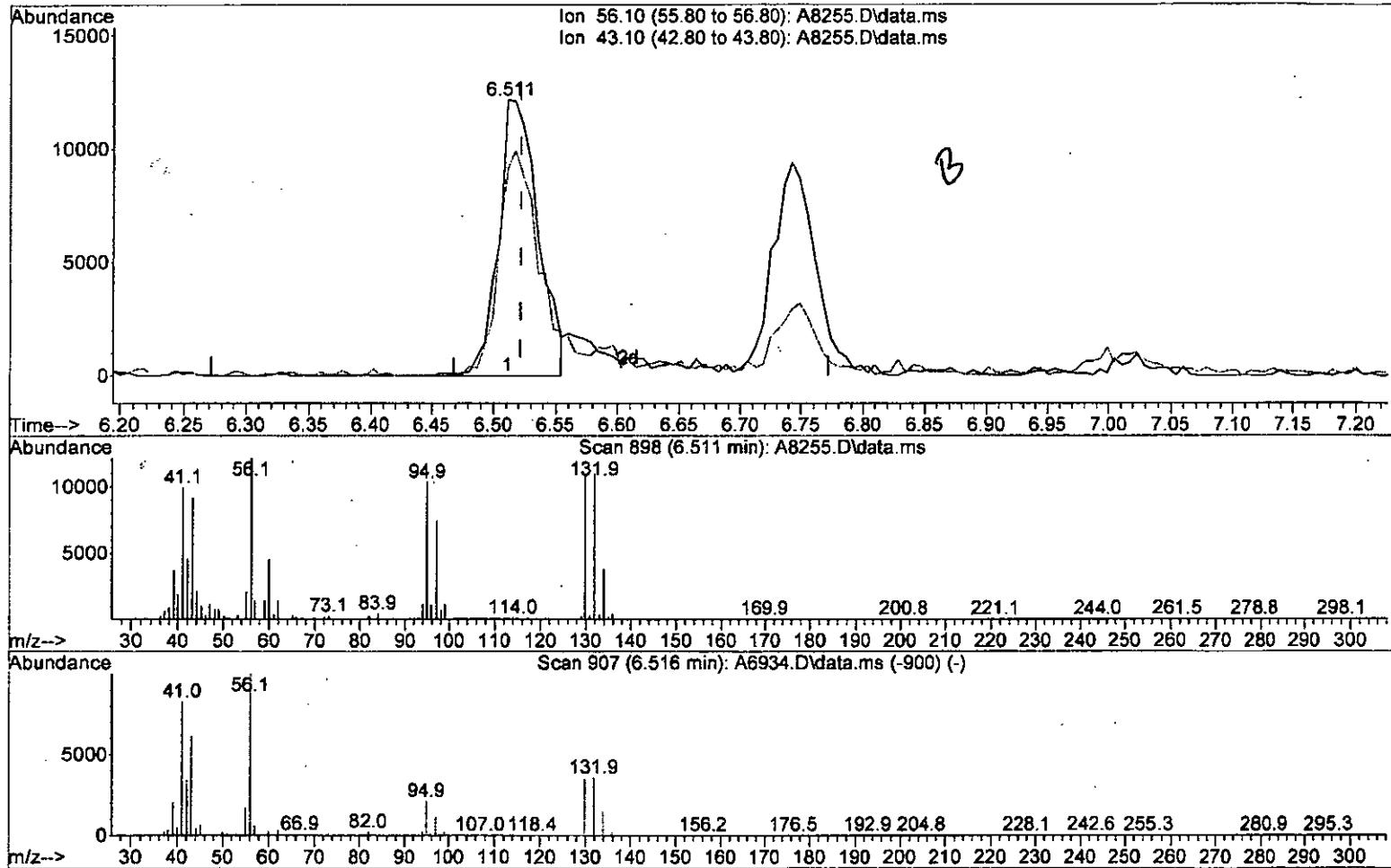
5.487min (-0.005) 99.24 ug/L m

response 31482

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	65.95
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 07 09:28:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8255.D\data.ms

(52) 1-Butanol

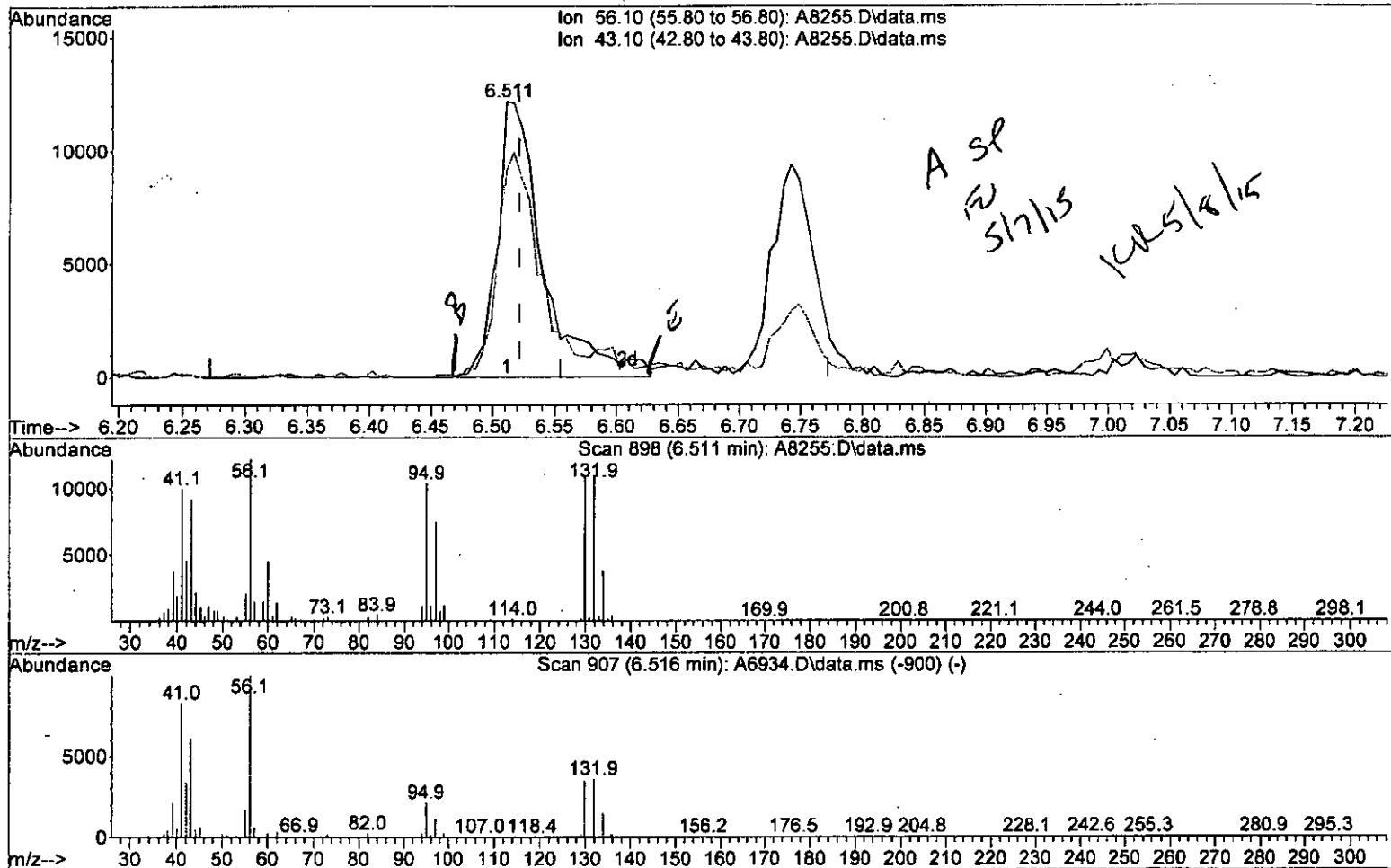
6.511min (-0.011) 147.01 ug/L

response 26620

Ion	Exp%	Act%
56.10	100	100
43.10	54.10	75.12#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 07 09:28:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8255.D\data.ms

(52) 1-Butanol

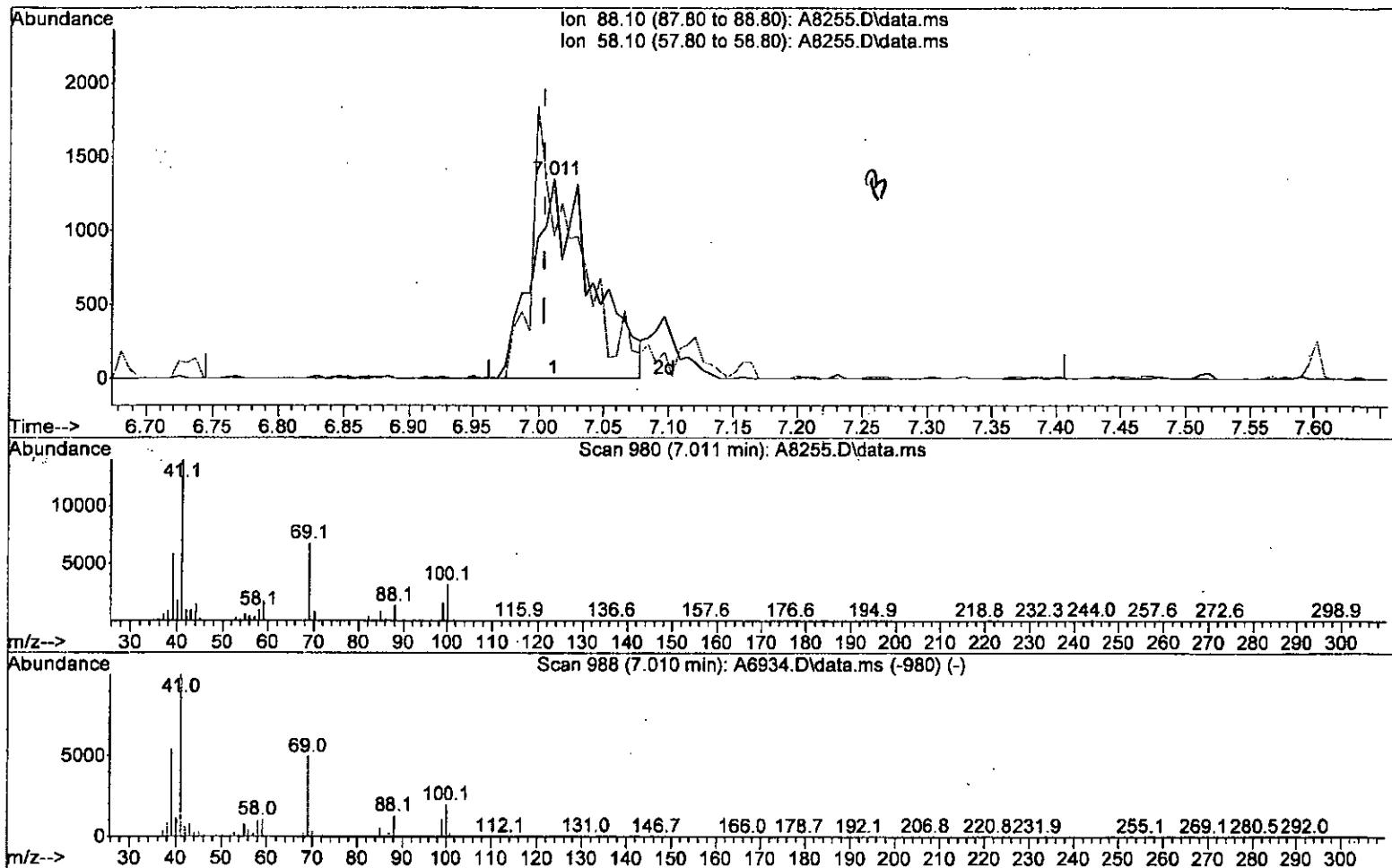
6.511min (-0.011) 172.79 ug/L m

response 31288

Ion	Exp%	Act%
56.10	100	100
43.10	54.10	75.12#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 06 18:16:26 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8255.D\data.ms

(57) 1,4-Dioxane

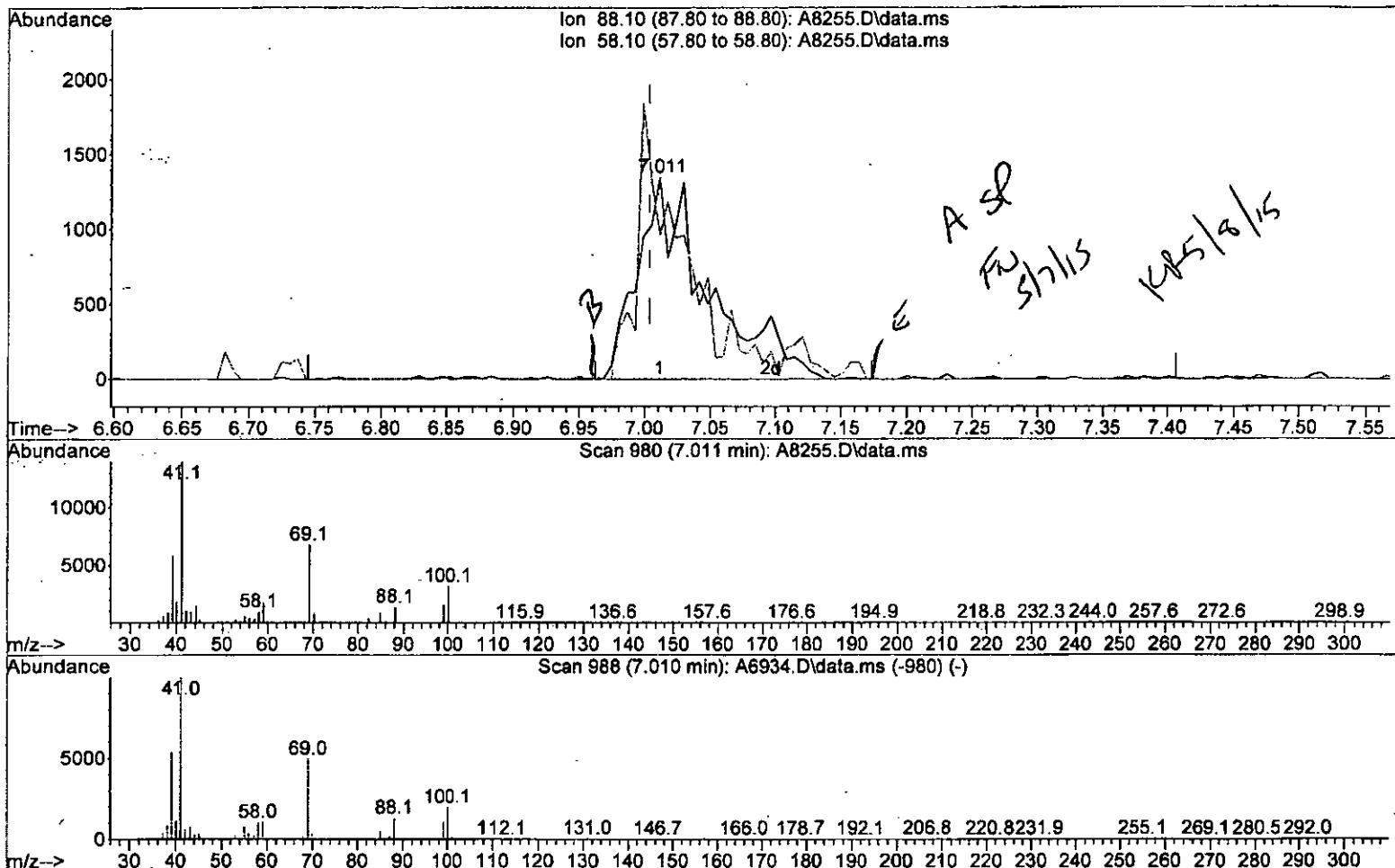
7.011min (+0.007) 70.92 ug/L

response 4308

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	71.55
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8255.D  
 Acq On : 6 May 2015 6:01 pm  
 Operator : F. NAEGLER  
 Sample : 5.0 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 06 18:16:26 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8255.D\data.ms

(57) 1,4-Dioxane

7.011min (+0.007) 81.52 ug/L m

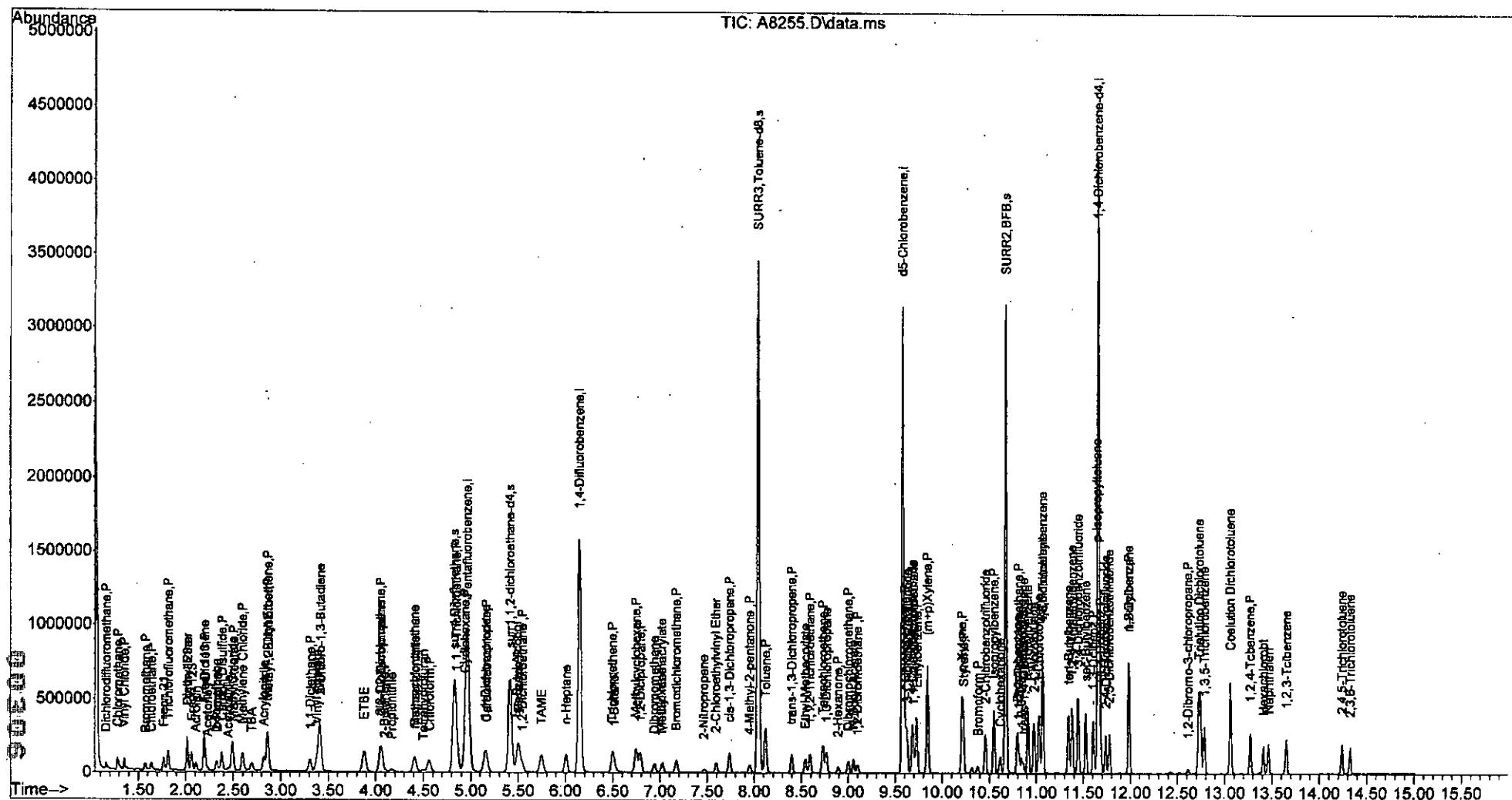
response 4952

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	71.55
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
Data File : A8255.D  
Acq On : 6 May 2015 6:01 pm  
Operator : F. NAEGLER  
Sample : 5.0 PPB STD  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 07 10:06:25 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



Data Path : I:\ACQUADATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 MISC :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 07 10:53:28 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

FP 5/7/15

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	949389	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.146	114	1466574	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1380271	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	796836	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,DibromoMethane	4.829	113	622912	71.06	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 142.12%#	
46) surr1,1,2-dichloroetha...	5.414	65	641733	70.32	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 140.64%#	
64) SURR3,Toluene-d8	8.041	98	2382430	70.77	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 141.54%#	
69) SURR2,BFB	10.675	95	949418	64.30	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 128.60%#	
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	211640m	23.48	ug/L	
3) Chloromethane	1.281	50	347073	30.75	ug/L	94
4) Vinyl Chloride	1.354	62	247604	23.55	ug/L	99
5) Bromomethane	1.573	94	97912	26.98	ug/L	99
6) Chloroethane	1.640	64	119128	19.81	ug/L	95
7) Freon 21	1.762	67	297818	18.17	ug/L	97
8) Trichlorofluoromethane	1.811	101	248148	19.09	ug/L	99
9) Diethyl Ether	2.012	59	151358	22.23	ug/L #	78
10) Freon 123a	2.012	67	177210	17.32	ug/L	87
11) Freon 123	2.061	83	194771	17.21	ug/L	79
12) Acrolein	2.110	56	127938	129.01	ug/L	93
13) 1,1-Dicethene	2.195	96	133151	18.33	ug/L #	85
14) Freon 113	2.195	101	137613	17.23	ug/L	100
15) Acetone	2.226	43	51133m	22.84	ug/L	
16) 2-Propanol	2.329	45	179860	438.53	ug/L	91
17) Iodomethane	2.323	142	173700	35.60	ug/L	96
18) Carbon Disulfide	2.378	76	385992	14.49	ug/L	97
19) Acetonitrile	2.451	40	42141	135.42	ug/L	96
20) Allyl Chloride	2.488	76	82915	19.27	ug/L #	6
21) Methyl Acetate	2.500	43	123610	24.69	ug/L	85
22) Methylene Chloride	2.597	84	162416	20.13	ug/L #	66
23) TBA	2.695	59	238962	385.49	ug/L	77
24) Acrylonitrile	2.817	53	311911	135.69	ug/L	95
25) Methyl-t-Butyl Ether	2.866	73	382890	17.89	ug/L	88
26) trans-1,2-Dichloroethene	2.860	96	147726	17.88	ug/L #	78
27) 1,1-Dicethane	3.305	63	331462	21.54	ug/L	98
28) Vinyl Acetate	3.378	86	22187	15.19	ug/L #	65
29) DIPE	3.408	45	994988	29.81	ug/L #	74
30) 2-Chloro-1,3-Butadiene	3.420	53	319679	17.91	ug/L	87
31) ETBE	3.878	59	663727	23.51	ug/L	91
32) 2,2-Dichloropropane	4.048	77	207998	17.27	ug/L	96
33) cis-1,2-Dichloroethene	4.054	96	178533	19.40	ug/L	87
34) 2-Butanone	4.091	43	79408	25.87	ug/L	90
35) Propionitrile	4.164	54	103289	123.97	ug/L	99

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 07 10:53:28 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.408	130	109885	21.31	ug/L #	64
37) Methacrylonitrile	4.402	67	48951	19.96	ug/L #	37
38) Tetrahydrofuran	4.499	42	50942	25.25	ug/L	71
39) Chloroform	4.560	83	295285	20.33	ug/L	96
40) 1,1,1-Trichloroethane	4.859	97	244637	18.35	ug/L	98
42) Cyclohexane	4.951	41	239227	21.33	ug/L	88
44) Carbontetrachloride	5.158	121	62294	15.61	ug/L	88
45) 1,1-Dichloropropene	5.158	75	214541	18.14	ug/L	94
47) Benzene	5.499	78	677106	18.96	ug/L	81
48) 1,2-Dichloroethane	5.536	62	238618	20.01	ug/L	92
49) Iso-Butyl Alcohol	5.487	43	128448m	398.15	ug/L	
50) TAME	5.743	73	418073	18.21	ug/L	82
51) n-Heptane	6.005	43	294038	23.85	ug/L #	80
52) 1-Butanol	6.517	56	142059	771.46	ug/L	81
53) Trichloroethene	6.493	130	189140	19.58	ug/L	96
54) Methylcyclohexane	6.749	55	258967	19.40	ug/L #	82
55) 1,2-Diclpropane	6.792	63	200360	21.03	ug/L	96
56) Dibromomethane	6.938	93	89458	18.66	ug/L	97
57) 1,4-Dioxane	6.999	88	19903m	322.20	ug/L	
58) Methyl Methacrylate	7.023	69	78190	16.86	ug/L #	54
59) Bromodichloromethane	7.176	83	208922	17.51	ug/L	97
60) 2-Nitropropane	7.468	41	43942	22.06	ug/L	94
61) 2-Chloroethylvinyl Ether	7.596	63	83051	18.29	ug/L	89
62) cis-1,3-Dichloropropene	7.737	75	242732	17.04	ug/L	99
63) 4-Methyl-2-pentanone	7.950	43	160039	21.95	ug/L	87
65) Toluene	8.121	91	737900	19.44	ug/L	97
66) trans-1,3-Dichloropropene	8.401	75	201254	16.28	ug/L	98
67) Ethyl Methacrylate	8.541	69	158071	16.32	ug/L #	50
68) 1,1,2-Trichloroethane	8.590	97	135540	19.18	ug/L	98
71) Tetrachloroethene	8.730	164	144677	18.90	ug/L	98
72) 2-Hexanone	8.895	43	107205	21.65	ug/L	85
73) 1,3-Dichloropropane	8.767	76	225024	20.73	ug/L #	74
74) Dibromochloromethane	8.999	129	152966	17.75	ug/L	100
75) N-Butyl Acetate	9.053	43	276336	22.31	ug/L	91
76) 1,2-Dibromoethane	9.096	107	130210	19.85	ug/L	98
77) 3-Chlorobenzotrifluoride	9.627	180	267273	18.11	ug/L	96
78) Chlorobenzene	9.602	112	510129	20.18	ug/L	98
79) 4-Chlorobenzotrifluoride	9.681	180	236714	17.63	ug/L	94
80) 1,1,1-Tetrachloroethane	9.694	131	166805	17.59	ug/L	98
81) Ethylbenzene	9.730	106	258558	19.21	ug/L	92
82) (m+p) Xylene	9.840	106	641688	39.45	ug/L	87
83) o-Xylene	10.206	106	314735	19.33	ug/L	99
84) Styrene	10.218	104	555696	19.84	ug/L	99
85) Bromoform	10.376	173	82515	15.51	ug/L	97
86) 2-Chlorobenzotrifluoride	10.456	180	253343	17.48	ug/L	89
87) Isopropylbenzene	10.547	105	815131	20.44	ug/L	99
88) Cyclohexanone	10.614	55	155493	293.49	ug/L	94
89) trans-1,4-Dichloro-2-B...	10.858	53	52745	19.42	ug/L #	76
91) 1,1,2,2-Tetrachloroethane	10.815	83	163661	21.11	ug/L	94
92) Bromobenzene	10.797	156	217956	20.03	ug/L	93
93) 1,2,3-Trichloropropane	10.840	110	45674	21.19	ug/L	97

Data Path : I:\ACQUDATA\msvao10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

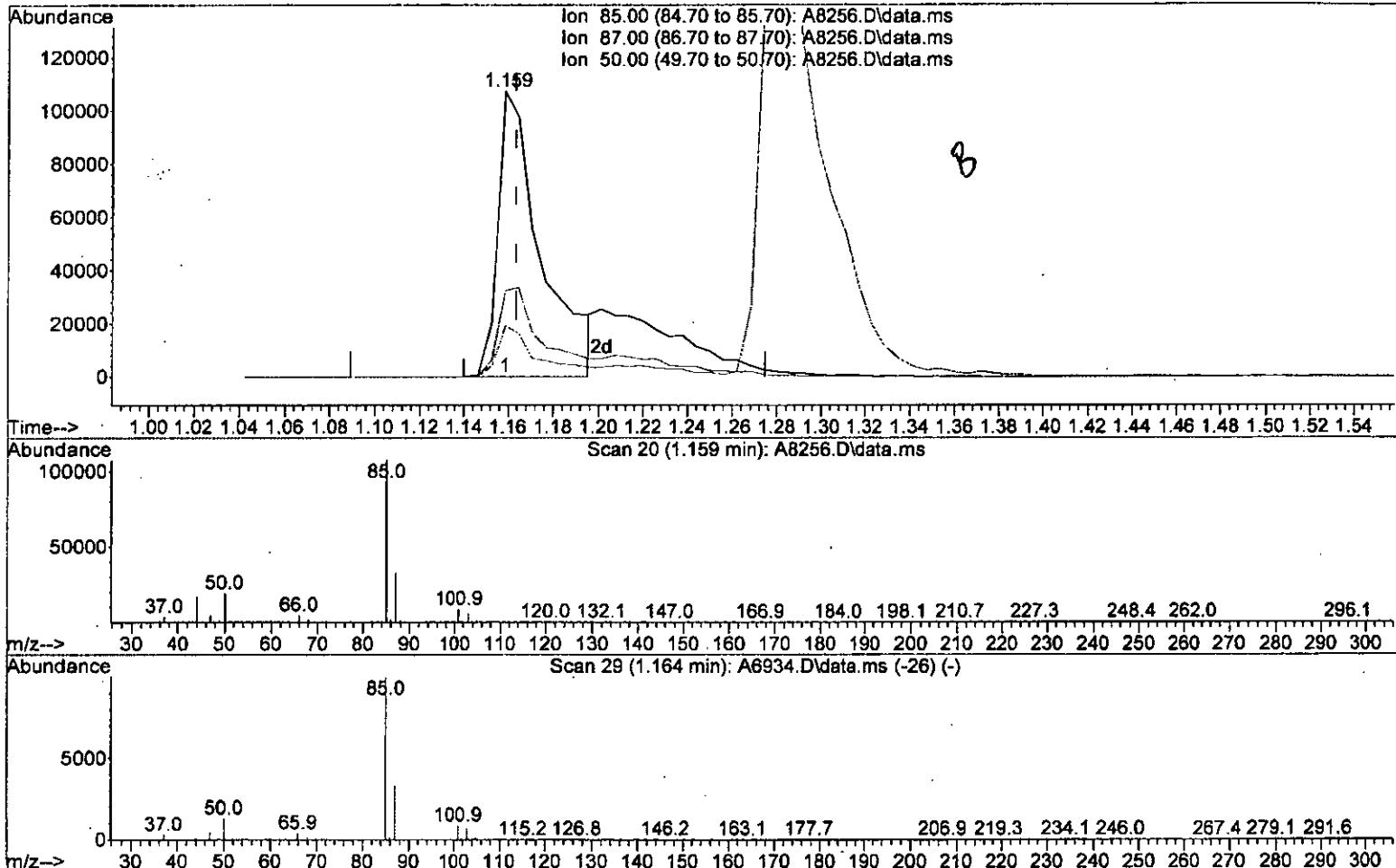
Quant Time: May 07 10:53:28 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.907	91	944830	21.35	ug/L	100
95) 2-Chlorotoluene	10.974	91	575592	20.53	ug/L	98
96) 3-Chlorotoluene	11.023	91	592655	19.79	ug/L	98
97) 4-Chlorotoluene	11.065	91	685064	20.57	ug/L	97
98) 1,3,5-Trimethylbenzene	11.065	105	694247	20.89	ug/L	98
99) tert-Butylbenzene	11.340	119	582565	20.28	ug/L	97
100) 1,2,4-Trimethylbenzene	11.376	105	720085	20.96	ug/L	98
101) 3,4-Dichlorobenzotrifl...	11.443	214	189084	17.62	ug/L	92
102) sec-Butylbenzene	11.523	105	826113	21.01	ug/L	98
103) p-Isopropyltoluene	11.644	119	731296	21.14	ug/L	97
104) 1,3-Dclbenz	11.602	146	447665	20.89	ug/L	97
105) 1,4-Dclbenz	11.681	146	465009	21.01	ug/L	95
106) 2,4-Dichlorobenzotrifl...	11.736	214	171292	17.26	ug/L	95
107) 2,5-Dichlorobenzotrifl...	11.772	214	197062	17.93	ug/L	95
108) n-Butylbenzene	11.980	91	636940	20.79	ug/L	98
109) 1,2-Dclbenz	11.986	146	421219	21.10	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.614	157	27476	17.79	ug/L	88
111) Trielution Dichlorotol...	12.730	125	1095500	62.05	ug/L	98
112) 1,3,5-Trichlorobenzene	12.784	180	292570	19.62	ug/L	98
113) Coelution Dichlorotoluene	13.059	125	786062	42.86	ug/L	94
114) 1,2,4-Tcbenzene	13.266	180	261015	20.80	ug/L	97
115) Hexachlorobt	13.406	225	102022	18.28	ug/L	98
116) Naphthalen	13.461	128	510532	23.11	ug/L	99
117) 1,2,3-Tclbenzene	13.650	180	213035	22.77	ug/L	98
118) 2,4,5-Trichlorotoluene	14.235	159	152513	25.04	ug/L	99
119) 2,3,6-Trichlorotoluene	14.321	159	133994	25.79	ug/L	97

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

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1.

Quant Time: May 06 18:46:13 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(2) Dichlorodifluoromethane (P)

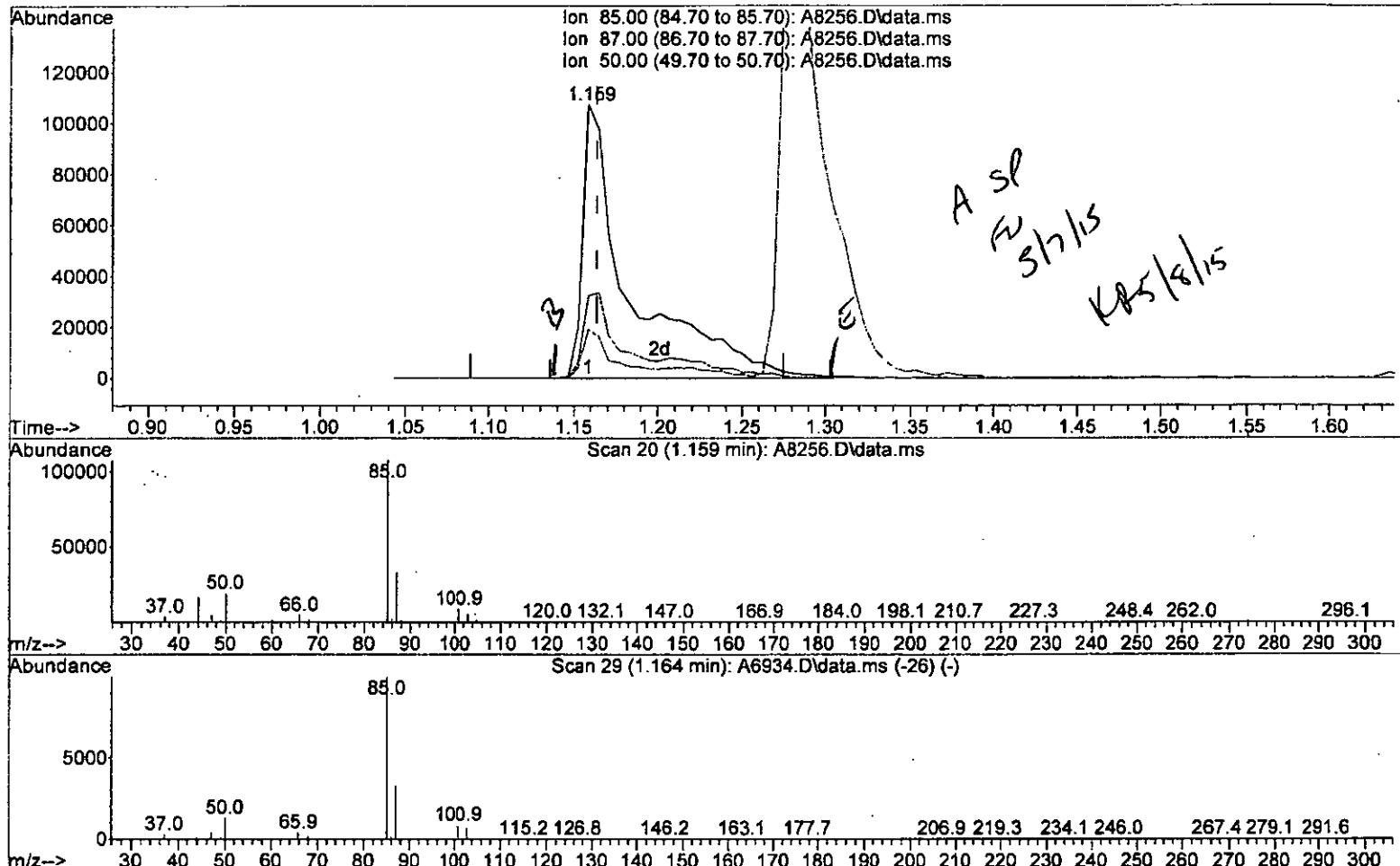
1.159min (-0.005) 15.93 ug/L

response 143545

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	30.22
50.00	15.00	17.84
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 06 18:46:13 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(2) Dichlorodifluoromethane (P)

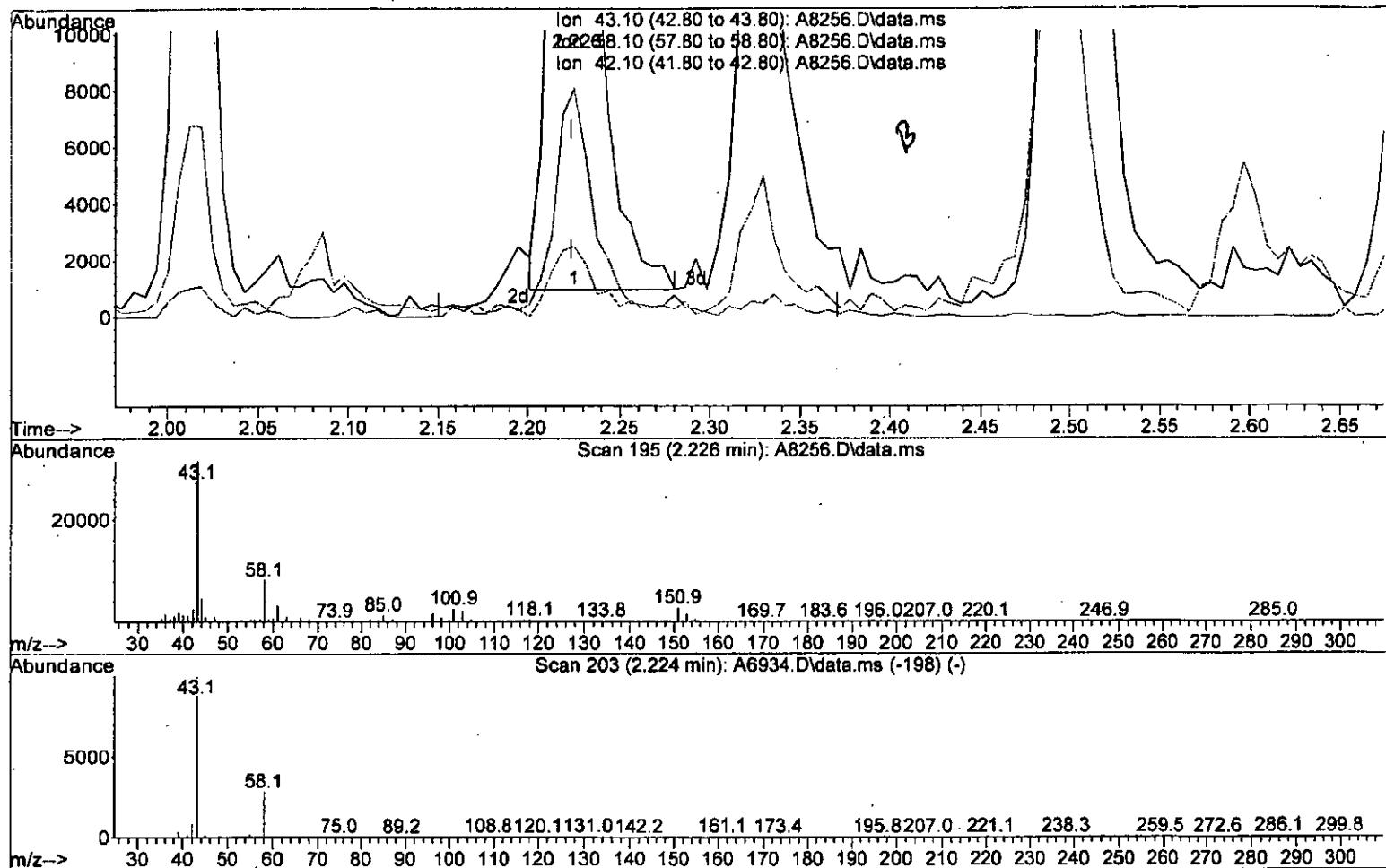
1.159min (-0.005) 23.48 ug/L m

response 211640

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	30.22
50.00	15.00	17.84
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 07 10:07:10 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(15) Acetone (P)

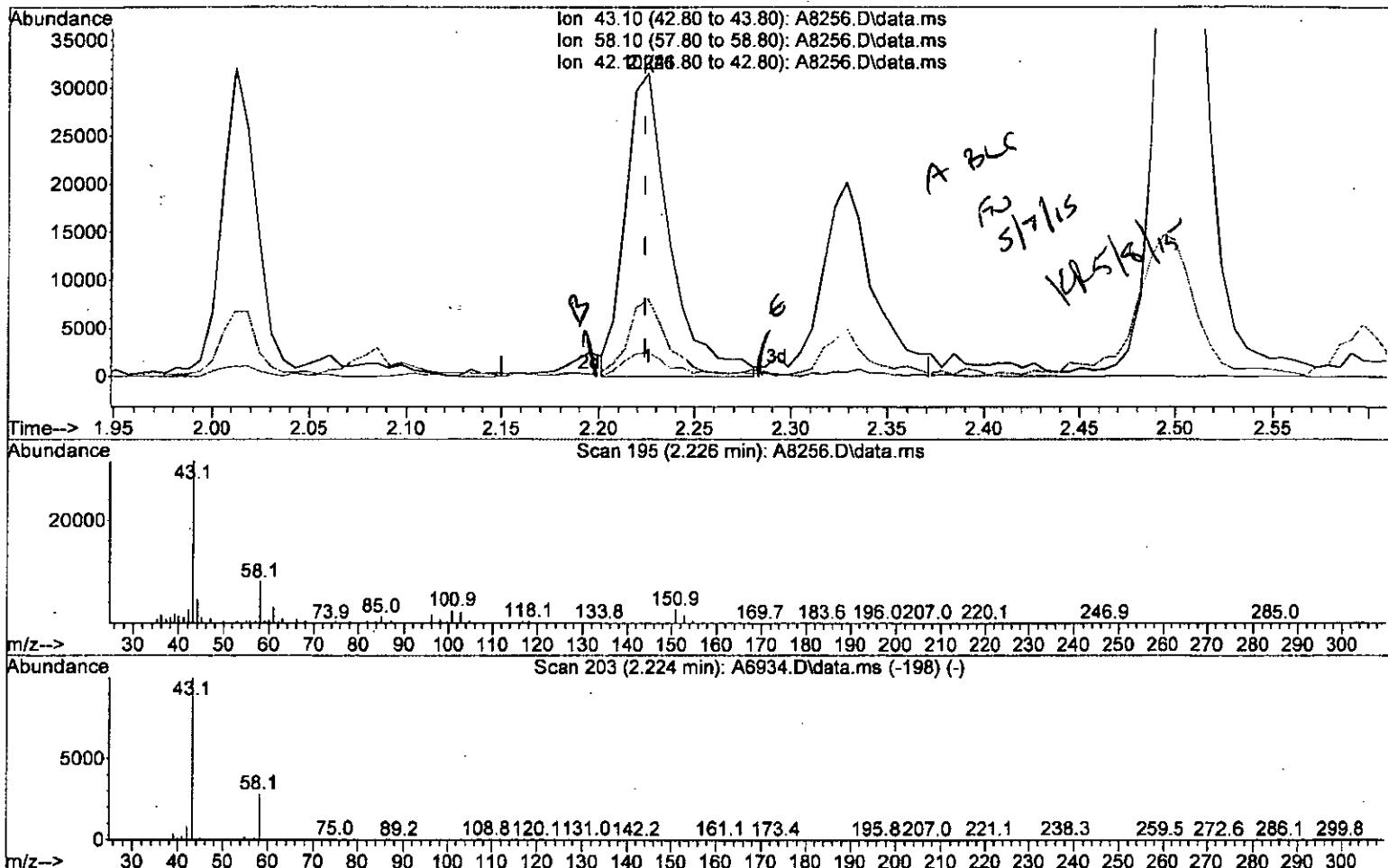
2.226min (+0.002) 20.78 ug/L

response 46524

Ion	Exp%	Act%
43.10	100	100
58.10	24.80	25.57
42.10	8.00	7.90
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 07 10:53:28 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(15) Acetone (P)

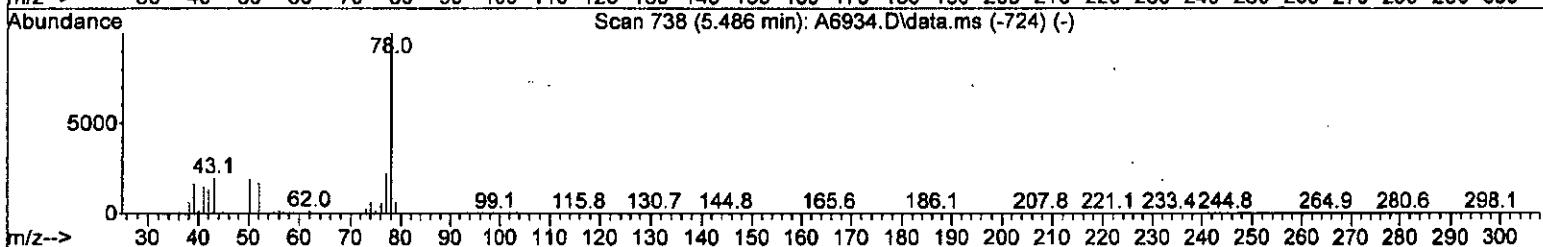
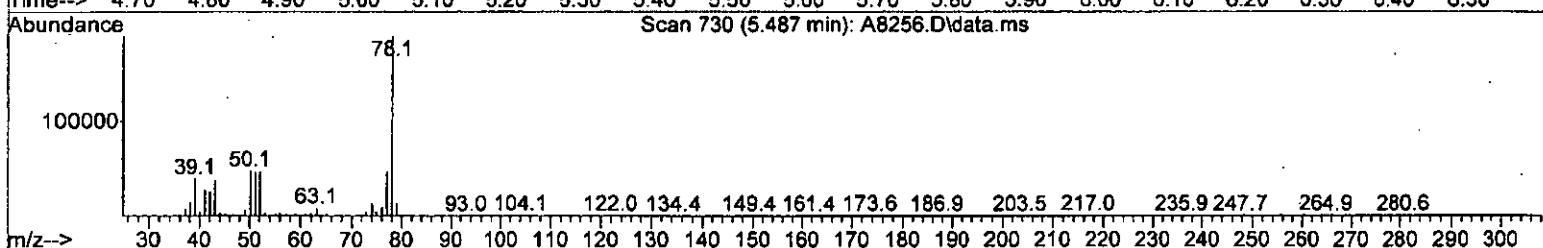
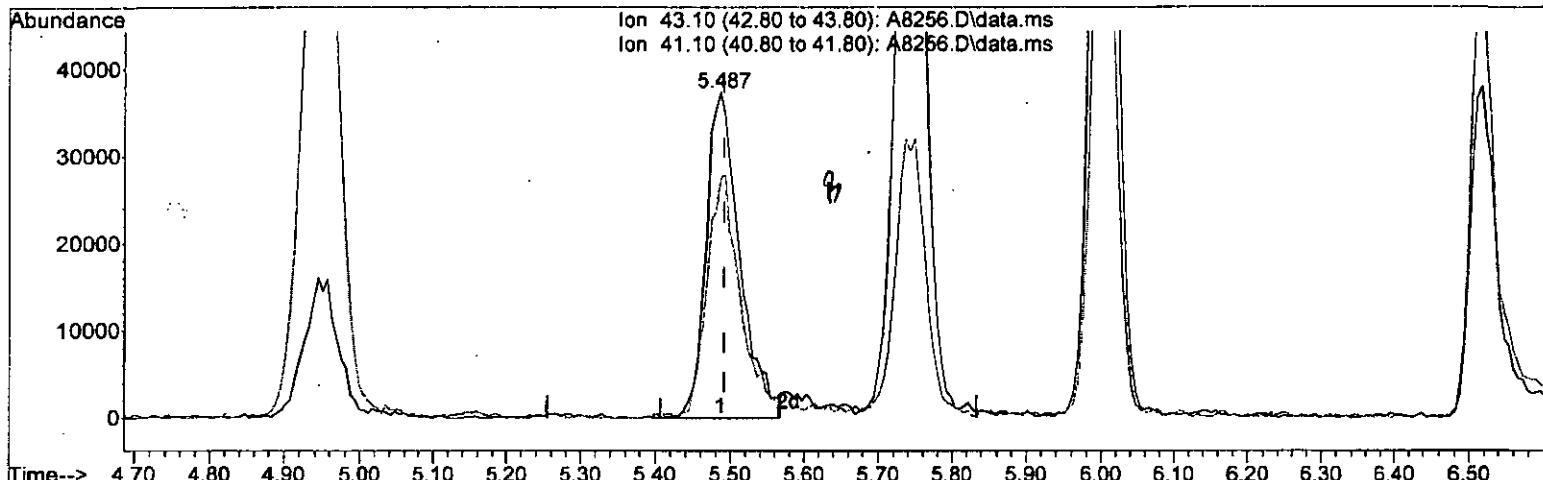
2.226min (+0.002) 22.84 ug/L m

response 51133

Ion	Exp%	Act%
43.10	100	100
58.10	24.80	25.57
42.10	8.00	7.90
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 07 09:37:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(49) Iso-Butyl Alcohol

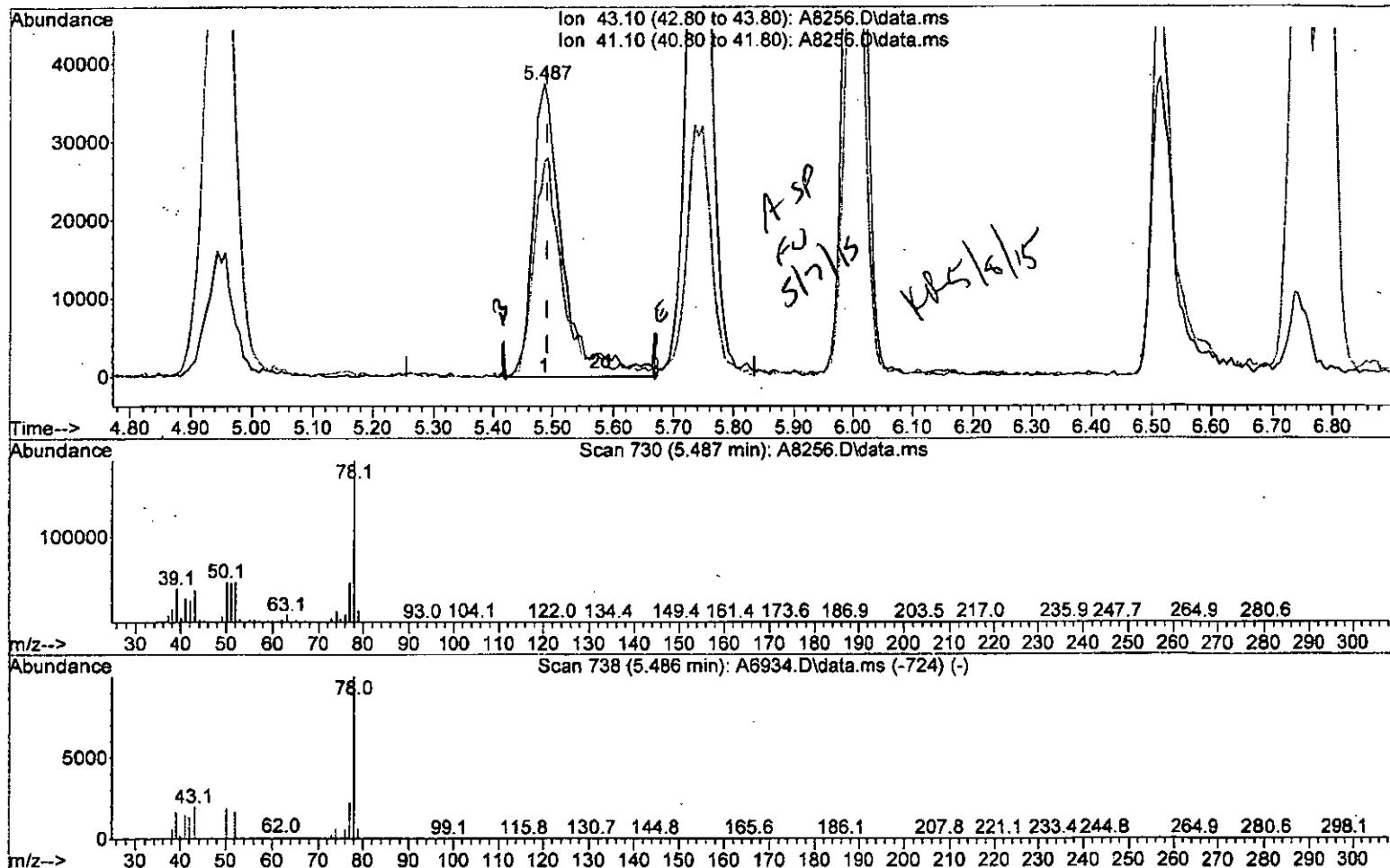
5.487min (-0.005) 362.84 ug/L

response 117055

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	73.44
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 07 09:37:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(49) Iso-Butyl Alcohol

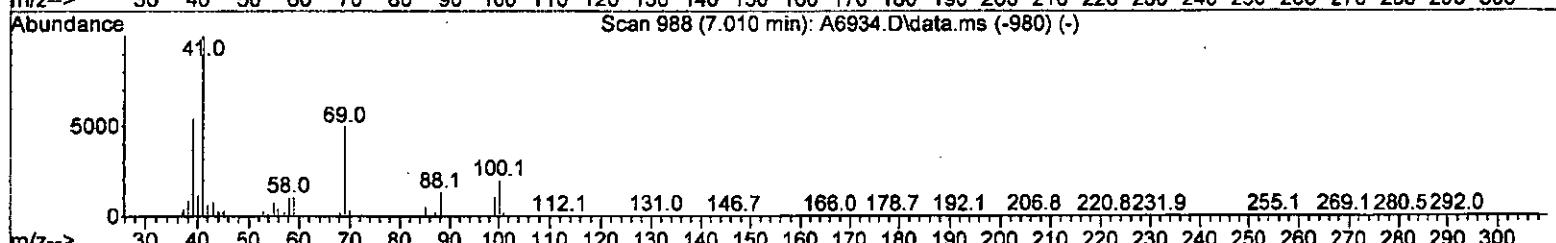
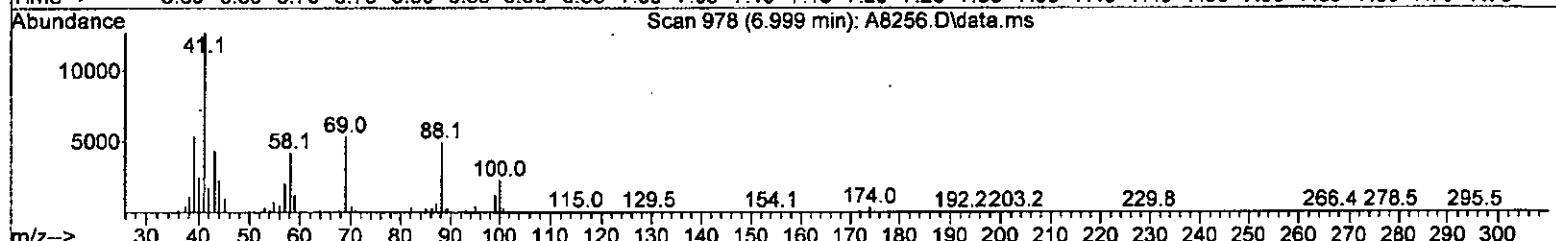
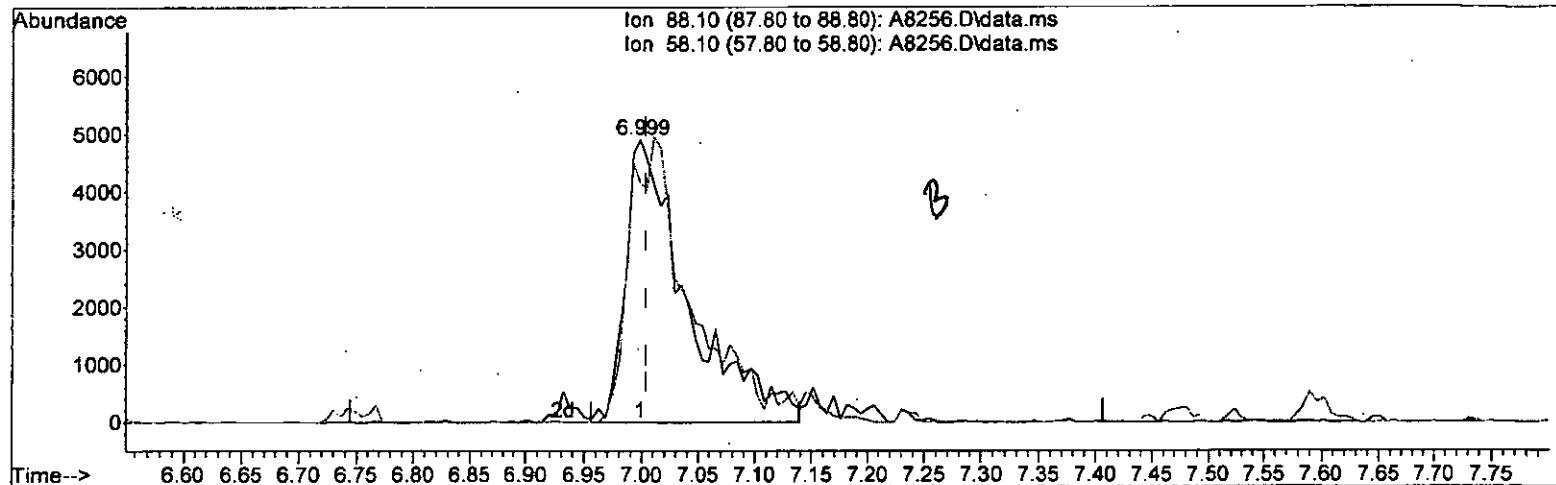
5.487min (-0.005) 398.15 ug/L m

response 128448

Ion	Exp%	Act%
43.10	100	100
41.10	80.50	73.44
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 06 18:46:13 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(57) 1,4-Dioxane

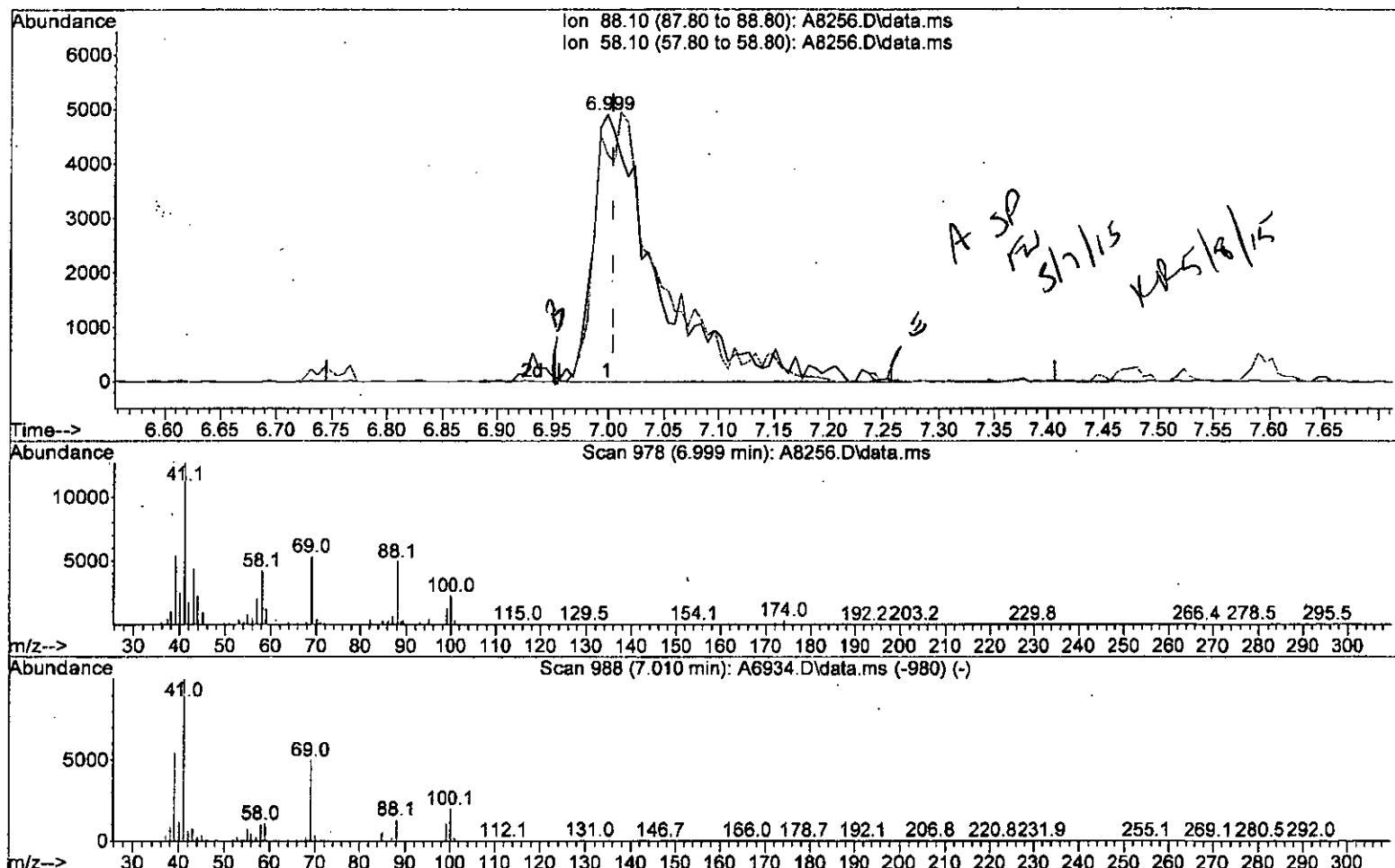
6.999min (-0.005) 300.43 ug/L

response 18558

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	84.87#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8256.D  
 Acq On : 6 May 2015 6:31 pm  
 Operator : F. NAEGLER  
 Sample : 20 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 06 18:46:13 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8256.D\data.ms

(57) 1,4-Dioxane

6.999min (-0.005) 322.20 ug/L m

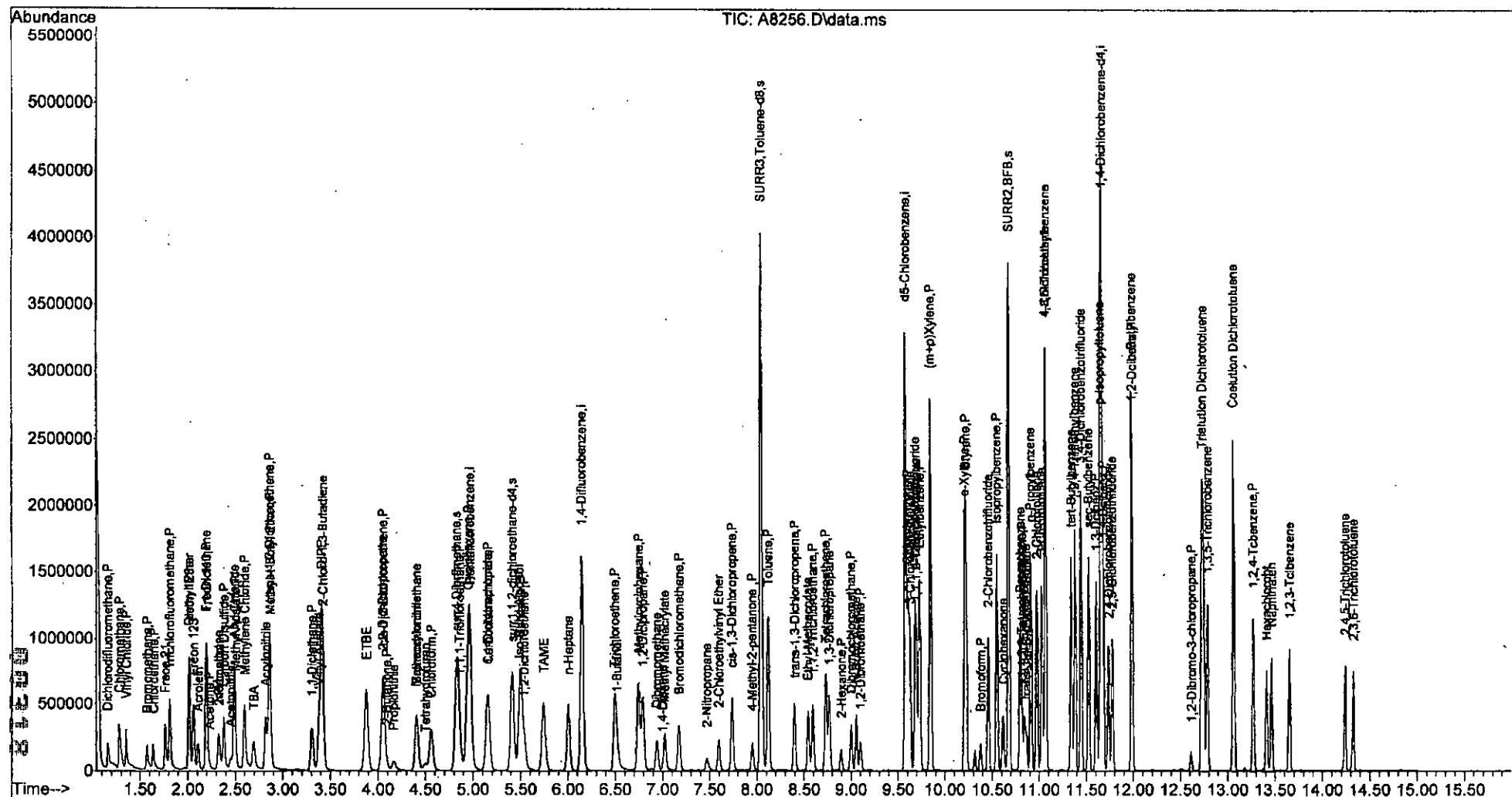
response 19903

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	84.87#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
Data File : A8256.D  
Acq On : 6 May 2015 6:31 pm  
Operator : F. NAEGLER  
Sample : 20 PPB STD  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 07 10:53:28 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



Data Path : I:\ACQUDATA\msv0a10\data\050615\  
 Data File : A8257.D  
 Acq On : 6 May 2015 7:00 pm  
 Operator : F. NAEGLER  
 Sample : 50 PPB STD  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 07 09:38:34 2015  
 Quant Method : I:\ACQUDATA\MSV0A10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

EW  
5/7/15

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	960841	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1474627	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1395683	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	825795	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromoform	4.835	113	445808	50.58	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 101.16%		
46) surr1,1,2-dichloroethane	5.414	65	457316	49.84	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 99.68%		
64) SURR3,Toluene-d8	8.042	98	1724660	50.95	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 101.90%		
69) SURR2,BFB	10.675	95	707602	47.66	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 95.32%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	542694	59.49	ug/L	99
3) Chloromethane	1.281	50	922823	80.78	ug/L	98
4) Vinyl Chloride	1.348	62	668928	62.86	ug/L	99
5) Bromomethane	1.573	94	260661	70.97	ug/L	99
6) Chloroethane	1.634	64	315333	51.82	ug/L	93
7) Freon 21	1.762	67	843693	50.85	ug/L	97
8) Trichlorofluoromethane	1.811	101	648201	49.27	ug/L	100
9) Diethyl Ether	2.012	59	398346	57.81	ug/L	# 77
10) Freon 123a	2.012	67	502353	48.50	ug/L	92
11) Freon 123	2.061	83	536236m	46.82	ug/L	
12) Acrolein	2.110	56	367947	366.60	ug/L	99
13) 1,1-Dicethane	2.195	96	345280	46.96	ug/L	# 83
14) Freon 113	2.195	101	359534	44.48	ug/L	89
15) Acetone	2.226	43	134940	59.55	ug/L	100
16) 2-Propanol	2.329	45	520643	1254.29	ug/L	96
17) Iodomethane	2.317	142	551496	111.67	ug/L	100
18) Carbon Disulfide	2.378	76	1252938	46.49	ug/L	99
19) Acetonitrile	2.451	40	108935	345.89	ug/L	93
20) Allyl Chloride	2.488	76	234028	53.74	ug/L	# 3
21) Methyl Acetate	2.506	43	336714	66.45	ug/L	84
22) Methylene Chloride	2.597	84	411263	50.36	ug/L	# 64
23) TBA	2.695	59	621738	991.02	ug/L	72
24) Acrylonitrile	2.823	53	781656	336.00	ug/L	100
25) Methyl-t-Butyl Ether	2.866	73	987469	45.60	ug/L	87
26) trans-1,2-Dichloroethene	2.860	96	390743	46.74	ug/L	# 80
27) 1,1-Dicethane	3.305	63	889174	57.10	ug/L	97
28) Vinyl Acetate	3.378	86	69672	47.12	ug/L	# 70
29) DIPE	3.408	45	2563161	75.87	ug/L	# 73
30) 2-Chloro-1,3-Butadiene	3.414	53	1069646	59.21	ug/L	84
31) ETBE	3.878	59	1703085	59.61	ug/L	92
32) 2,2-Dichloropropane	4.055	77	568343	46.63	ug/L	96
33) cis-1,2-Dichloroethene	4.055	96	470846	50.57	ug/L	85
34) 2-Butanone	4.085	43	218256	70.25	ug/L	87
35) Propionitrile	4.164	54	280829	333.03	ug/L	98

Data Path : I:\ACQUADATA\msvoa10\data\050615\

Data File : A8257.D

Acq On : 6 May 2015 7:00 pm

Operator : F. NAEGLER

Sample : 50 PPB STD

Inst : MSVOA10

Misc :

ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 07 09:38:34 2015

Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M

Quant Title : MS#10 - 8260B WATERS 10mL Purge

QLast Update : Wed May 06 16:24:30 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.408	130	294245	56.37	ug/L	# 65
37) Methacrylonitrile	4.408	67	130092	52.41	ug/L	# 39
38) Tetrahydrofuran	4.500	42	135387	66.30	ug/L	69
39) Chloroform	4.561	83	782743	53.24	ug/L	97
40) 1,1,1-Trichloroethane	4.853	97	668098	49.53	ug/L	95
42) Cyclohexane	4.945	41	701474	62.20	ug/L	89
44) Carbontetrachloride	5.152	121	181354	45.19	ug/L	88
45) 1,1-Dichloropropene	5.158	75	584610	49.17	ug/L	100
47) Benzene	5.499	78	1794490	49.97	ug/L	83
48) 1,2-Dichloroethane	5.542	62	637172	53.13	ug/L	93
49) Iso-Butyl Alcohol	5.493	43	350305	1079.92	ug/L	89
50) TAME	5.743	73	1114853	48.29	ug/L	84
51) n-Heptane	6.005	43	803009	64.77	ug/L	80
52) 1-Butanol	6.517	56	433223	2339.80	ug/L	79
53) Trichloroethene	6.493	130	502438	51.72	ug/L	96
54) Methylcyclohexane	6.743	55	755916	56.32	ug/L	# 78
55) 1,2-Diclpropane	6.792	63	526207	54.93	ug/L	99
56) Dibromomethane	6.938	93	229766	47.66	ug/L	95
57) 1,4-Dioxane	7.005	88	49467	796.43	ug/L	# 66
58) Methyl Methacrylate	7.023	69	218190	46.79	ug/L	# 55
59) Bromodichloromethane	7.170	83	568534	47.40	ug/L	99
60) 2-Nitropropane	7.468	41	119593	59.72	ug/L	95
61) 2-Chloroethylvinyl Ether	7.597	63	258798	56.67	ug/L	95
62) cis-1,3-Dichloropropene	7.737	75	670538	46.83	ug/L	94
63) 4-Methyl-2-pentanone	7.950	43	474591	64.73	ug/L	89
65) Toluene	8.121	91	1954321	51.20	ug/L	99
66) trans-1,3-Dichloropropene	8.395	75	558062	44.90	ug/L	98
67) Ethyl Methacrylate	8.541	69	440728	45.25	ug/L	# 47
68) 1,1,2-Trichloroethane	8.590	97	346286	48.73	ug/L	94
71) Tetrachloroethene	8.730	164	400072	51.68	ug/L	97
72) 2-Hexanone	8.895	43	317365	63.38	ug/L	88
73) 1,3-Dichloropropane	8.767	76	596500	54.35	ug/L	# 76
74) Dibromochloromethane	8.999	129	429176	49.26	ug/L	97
75) N-Butyl Acetate	9.054	43	801083	63.97	ug/L	92
76) 1,2-Dibromoethane	9.096	107	337254	50.85	ug/L	99
77) 3-Chlorobenzotrifluoride	9.627	180	766787	51.38	ug/L	100
78) Chlorobenzene	9.602	112	1374127	53.75	ug/L	99
79) 4-Chlorobenzotrifluoride	9.681	180	686990	50.60	ug/L	95
80) 1,1,1,2-Tetrachloroethane	9.694	131	477793	49.83	ug/L	98
81) Ethylbenzene	9.730	106	715996	52.60	ug/L	97
82) (m+p)Xylene	9.846	106	1794578	109.12	ug/L	88
83) o-Xylene	10.206	106	869537	52.82	ug/L	97
84) Styrene	10.224	104	1535906	54.23	ug/L	94
85) Bromoform	10.376	173	240520	44.72	ug/L	97
86) 2-Chlorobenzotrifluoride	10.456	180	759265	51.82	ug/L	92
87) Isopropylbenzene	10.547	105	2275630	56.44	ug/L	99
88) Cyclohexanone	10.614	55	424581	792.53	ug/L	94
89) trans-1,4-Dichloro-2-B...	10.864	53	147666	53.76	ug/L	82
91) 1,1,2,2-Tetrachloroethane	10.815	83	429830	53.49	ug/L	97
92) Bromobenzene	10.797	156	577687	51.24	ug/L	94
93) 1,2,3-Trichloropropane	10.840	110	115926	51.90	ug/L	# 86

Data Path : I:\ACQUADATA\msvoa10\data\050615\

Data File : A8257.D

Acq On : 6 May 2015 7:00 pm

Operator : F. NAEGLER

Sample : 50 PPB STD

Inst : MSVOA10

Misc :

ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 07 09:38:34 2015

Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M

Quant Title : MS#10 - 8260B WATERS 10mL Purge

QLast Update : Wed May 06 16:24:30 2015

Response via : Initial Calibration

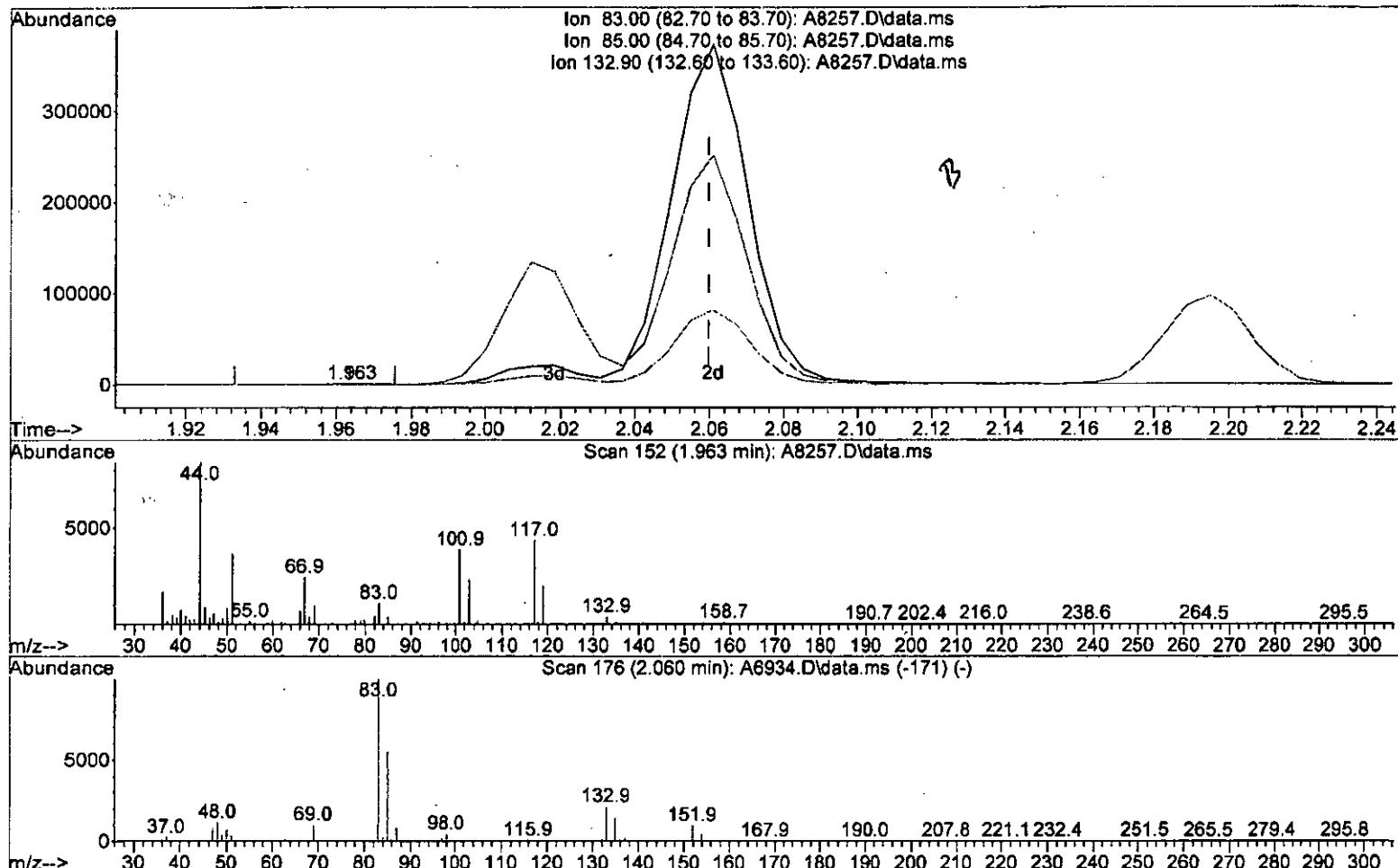
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.907	91	2642021	57.60	ug/L	99
95) 2-Chlorotoluene	10.974	91	1572421	54.11	ug/L	97
96) 3-Chlorotoluene	11.023	91	1718062	55.36	ug/L	100
97) 4-Chlorotoluene	11.065	91	1917038	55.54	ug/L	98
98) 1,3;5-Trimethylbenzene	11.065	105	1969003	57.17	ug/L	98
99) tert-Butylbenzene	11.340	119	1665603	55.95	ug/L	98
100) 1,2,4-Trimethylbenzene	11.376	105	1996535	56.07	ug/L	94
101) 3,4-Dichlorobenzotrifl...	11.443	214	569358	51.19	ug/L	99
102) sec-Butylbenzene	11.523	105	2338709	57.40	ug/L	98
103) p-Isopropyltoluene	11.645	119	2078708	57.99	ug/L	98
104) 1,3-Dclbenz	11.602	146	1227454	55.26	ug/L	98
105) 1,4-Dclbenz	11.681	146	1255049	54.71	ug/L	96
106) 2,4-Dichlorobenzotrifl...	11.736	214	521190	50.68	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.773	214	587231	51.56	ug/L	98
108) n-Butylbenzene	11.980	91	1830273	57.63	ug/L	98
109) 1,2-Dclbenz	11.986	146	1130157	54.63	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.614	157	73246	45.75	ug/L	90
111) Trielution Dichlorotol...	12.730	125	3221540	176.06	ug/L	97
112) 1,3,5-Trichlorobenzene	12.785	180	858028	55.52	ug/L	97
113) Coelution Dichlorotoluene	13.059	125	2303453	121.19	ug/L	94
114) 1,2,4-Tcbenzene	13.266	180	730421	56.15	ug/L	95
115) Hexachlorobt	13.406	225	291639	50.42	ug/L	97
116) Naphthalen	13.461	128	1407968	61.51	ug/L	97
117) 1,2,3-Tclbenzene	13.650	180	604167	62.30	ug/L	99
118) 2,4,5-Trichlorotoluene	14.235	159	477102	75.60	ug/L	97
119) 2,3,6-Trichlorotoluene	14.321	159	397177	73.76	ug/L	98

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

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8257.D  
 Acq On : 6 May 2015 7:00 pm  
 Operator : F. NAEGLER  
 Sample : 50 PPB STD  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 19:16:05 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8257.D\data.ms

(11) Freon 123

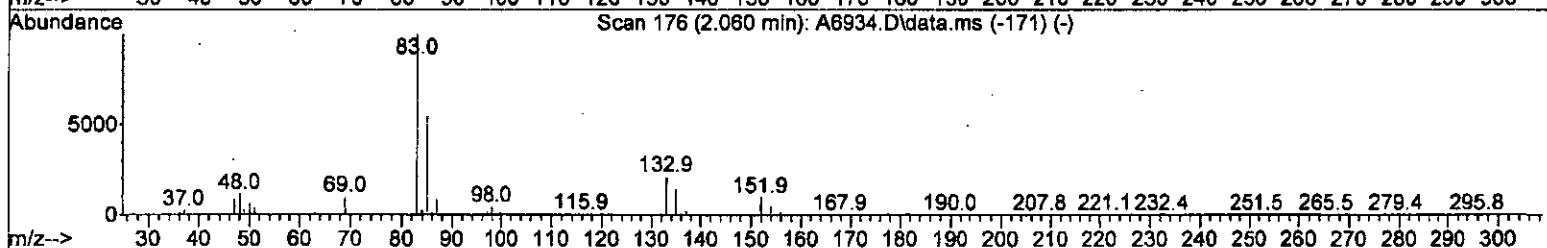
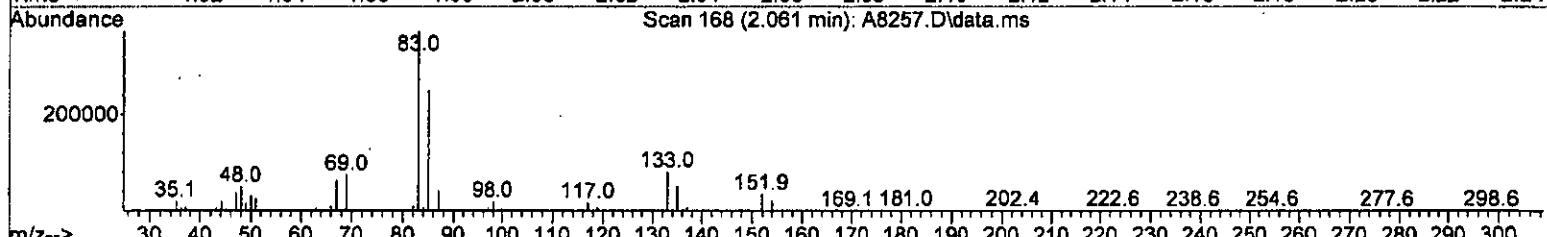
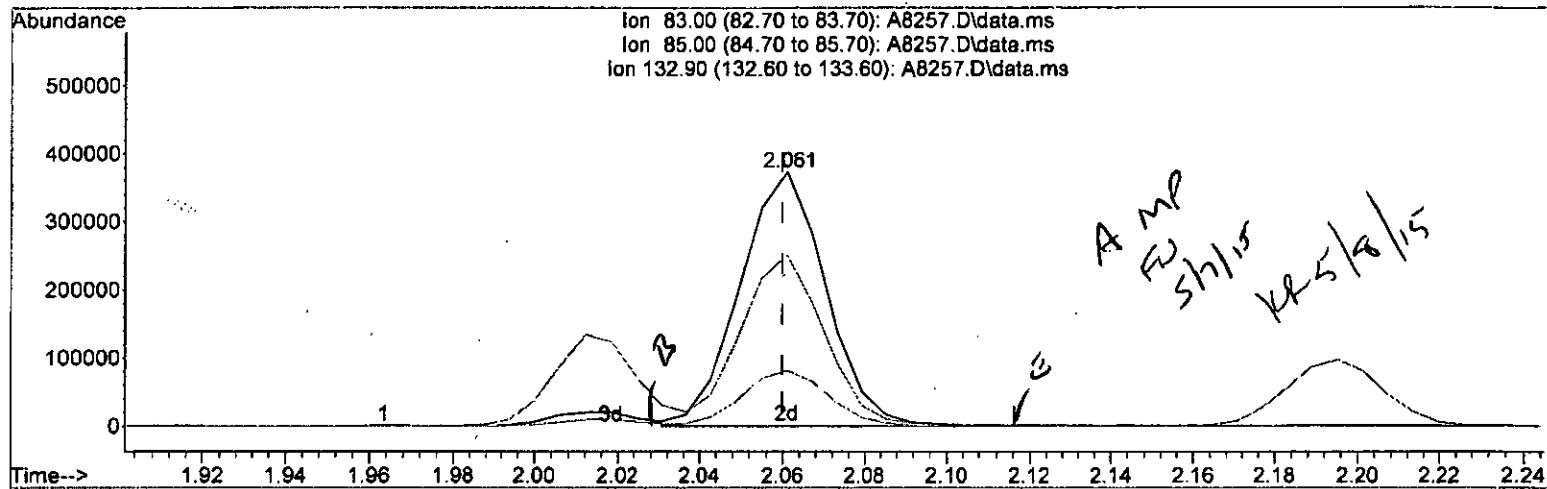
1.963min (-0.096) 0.07 ug/L

response 838

Ion	Exp%	Act%
83.00	100	100
85.00	47.30	35.85
132.90	19.90	35.75
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8257.D  
 Acq On : 6 May 2015 7:00 pm  
 Operator : F. NAEGLER  
 Sample : 50 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 19:16:05 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration



TIC: A8257.D\data.ms

(11) Freon 123

2.061min (+0.001) 46.82 ug/L m

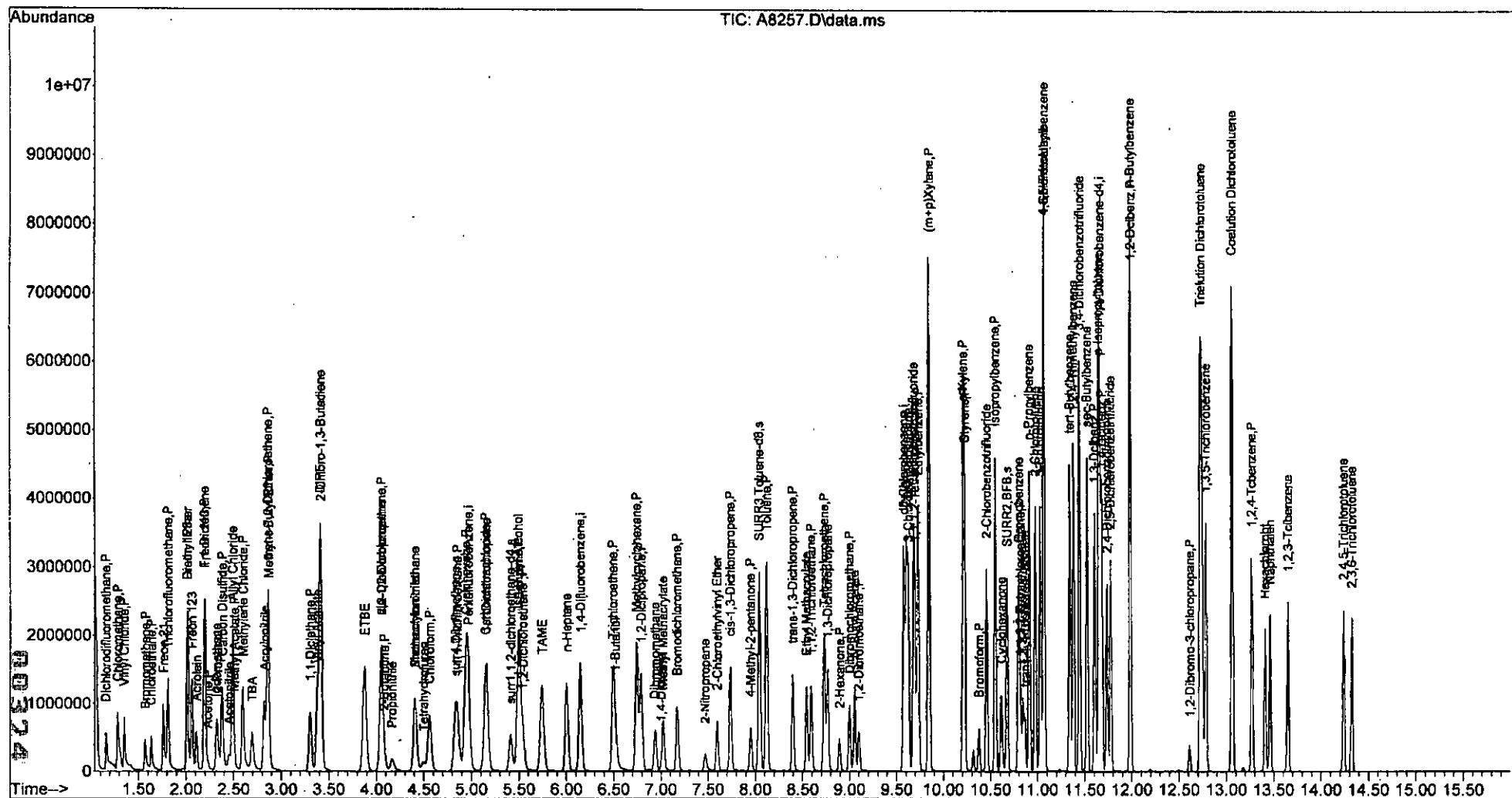
response 536236

Ion	Exp%	Act%
83.00	100	100
85.00	47.30	67.36#
132.90	19.90	21.85
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
Data File : A8257.D  
Acq On : 6 May 2015 7:00 pm  
Operator : F. NAEGLER  
Sample : 50 PPB STD  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 07 09:38:34 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvao10\data\050615\  
 Data File : A8258.D  
 Acq On : 6 May 2015 7:30 pm  
 Operator : F. NAEGLER  
 Sample : 100 PPB STD  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 06 19:46:09 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

4/5/15

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	1002892	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1529104	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1431577	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	874920	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	935871	102.40	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 204.80%	#	
46) surr1,1,2-dichloroetha...	5.414	65	962503	101.16	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 202.32%	#	
64) SURR3,Toluene-d8	8.042	98	3543305	100.95	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 201.90%	#	
69) SURR2,BFB	10.675	95	1433466	93.11	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 186.22%	#	
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	1170997	122.99	ug/L	99
3) Chloromethane	1.281	50	2027080	170.01	ug/L	97
4) Vinyl Chloride	1.348	62	1446596	130.24	ug/L	98
5) Bromomethane	1.567	94	571894	149.18	ug/L	98
6) Chloroethane	1.634	64	688276	108.36	ug/L	94
7) Freon 21	1.762	67	1812854	104.68	ug/L	99
8) Trichlorofluoromethane	1.811	101	1322174	96.29	ug/L	100
9) Diethyl Ether	2.012	59	855640	118.97	ug/L	# 76
10) Freon 123a	2.012	67	1075780	99.51	ug/L	94
11) Freon 123	2.061	83	1160443	97.07	ug/L	78
12) Acrolein	2.110	56	798990	762.68	ug/L	100
13) 1,1-Dicethene	2.195	96	760929	99.15	ug/L	# 81
14) Freon 113	2.195	101	785504	93.11	ug/L	93
15) Acetone	2.226	43	299935	126.82	ug/L	97
16) 2-Propanol	2.329	45	1218176	2811.67	ug/L	96
17) Iodomethane	2.317	142	1151858	223.46	ug/L	98
18) Carbon Disulfide	2.378	76	2616485	93.01	ug/L	99
19) Acetonitrile	2.451	40	241016	733.19	ug/L	92
20) Allyl Chloride	2.488	76	515430	113.39	ug/L	# 1
21) Methyl Acetate	2.506	43	760945	143.88	ug/L	85
22) Methylene Chloride	2.598	84	878575	103.07	ug/L	# 64
23) TBA	2.695	59	1510682	2306.99	ug/L	75
24) Acrylonitrile	2.823	53	1755457	722.95	ug/L	100
25) Methyl-t-Butyl Ether	2.866	73	2211995	97.86	ug/L	87
26) trans-1,2-Dichloroethene	2.860	96	858528	98.39	ug/L	# 79
27) 1,1-Dicethane	3.305	63	1947500	119.82	ug/L	97
28) Vinyl Acetate	3.378	86	157131	101.81	ug/L	# 69
29) DIPE	3.408	45	5384516	152.70	ug/L	# 74
30) 2-Chloro-1,3-Butadiene	3.414	53	2243556	118.97	ug/L	87
31) ETBE	3.878	59	3678280	123.34	ug/L	92
32) 2,2-Dichloropropane	4.049	77	1276309	100.33	ug/L	98
33) cis-1,2-Dichloroethene	4.055	96	1044452	107.47	ug/L	88
34) 2-Butanone	4.091	43	470311	145.04	ug/L	87
35) Propionitrile	4.170	54	639758	726.87	ug/L	95

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8258.D  
 Acq On : 6 May 2015 7:30 pm  
 Operator : F. NAEGLER  
 Sample : 100 PPB STD  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 06 19:46:09 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.408	130	624266	114.59	ug/L	# 66
37) Methacrylonitrile	4.408	67	288180	111.23	ug/L	# 30
38) Tetrahydrofuran	4.500	42	307744	144.39	ug/L	74
39) Chloroform	4.561	83	1706919	111.22	ug/L	95
40) 1,1,1-Trichloroethane	4.853	97	1502035	106.68	ug/L	96
42) Cyclohexane	4.945	41	1541295	131.80	ug/L	90
44) Carbontetrachloride	5.152	121	411607	98.92	ug/L	87
45) 1,1-Dichloropropene	5.158	75	1291649	104.76	ug/L	98
47) Benzene	5.499	78	3974497	106.74	ug/L	83
48) 1,2-Dichloroethane	5.542	62	1382701	111.19	ug/L	92
49) Iso-Butyl Alcohol	5.493	43	896275	2664.59	ug/L	91
50) TAME	5.743	73	2417372	100.98	ug/L	83
51) n-Heptane	6.005	43	1779583	138.42	ug/L	80
52) 1-Butanol	6.518	56	1108884	5775.61	ug/L	85
53) Trichloroethene	6.499	130	1105475	109.74	ug/L	94
54) Methylcyclohexane	6.749	55	1705691	122.56	ug/L	# 78
55) 1,2-Diclpropane	6.792	63	1166706	117.46	ug/L	98
56) Dibromomethane	6.938	93	504545	100.93	ug/L	96
57) 1,4-Dioxane	6.999	88	125411	1947.20	ug/L	# 66
58) Methyl Methacrylate	7.024	69	492604	101.88	ug/L	# 53
59) Bromodichloromethane	7.176	83	1275926	102.58	ug/L	99
60) 2-Nitropropane	7.469	41	301188	145.04	ug/L	99
61) 2-Chloroethylvinyl Ether	7.597	63	565027	119.32	ug/L	92
62) cis-1,3-Dichloropropene	7.737	75	1505505	101.39	ug/L	94
63) 4-Methyl-2-pentanone	7.950	43	1051453	138.30	ug/L	89
65) Toluene	8.121	91	4325845	109.29	ug/L	99
66) trans-1,3-Dichloropropene	8.395	75	1293549	100.37	ug/L	99
67) Ethyl Methacrylate	8.542	69	1043549	103.32	ug/L	# 51
68) 1,1,2-Trichloroethane	8.590	97	765806	103.92	ug/L	95
71) Tetrachloroethene	8.731	164	883803	111.29	ug/L	97
72) 2-Hexanone	8.895	43	723072	140.78	ug/L	88
73) 1,3-Dichloropropane	8.767	76	1334784	118.57	ug/L	# 79
74) Dibromochloromethane	8.999	129	980972	109.77	ug/L	98
75) N-Butyl Acetate	9.054	43	1917720	149.30	ug/L	90
76) 1,2-Dibromoethane	9.096	107	763441	112.22	ug/L	97
77) 3-Chlorobenzotrifluoride	9.627	180	1632800	106.66	ug/L	99
78) Chlorobenzene	9.608	112	3021316	115.21	ug/L	99
79) 4-Chlorobenzotrifluoride	9.682	180	1470865	105.63	ug/L	95
80) 1,1,1,2-Tetrachloroethane	9.694	131	1098891	111.72	ug/L	98
81) Ethylbenzene	9.730	106	1602347	114.77	ug/L	91
82) (m+p)Xylene	9.846	106	3953656	234.38	ug/L	94
83) o-Xylene	10.206	106	1909357	113.07	ug/L	97
84) Styrene	10.224	104	3440328	118.43	ug/L	95
85) Bromoform	10.377	173	566565	102.69	ug/L	99
86) 2-Chlorobenzotrifluoride	10.456	180	1583710	105.38	ug/L	90
87) Isopropylbenzene	10.547	105	4877256	117.94	ug/L	99
88) Cyclohexanone	10.614	55	1078478	1962.63	ug/L	90
89) trans-1,4-Dichloro-2-B...	10.864	53	348904	123.85	ug/L	85
91) 1,1,2,2-Tetrachloroethane	10.815	83	960045	112.77	ug/L	100
92) Bromobenzene	10.797	156	1278255	107.01	ug/L	96
93) 1,2,3-Trichloropropane	10.840	110	258000	109.02	ug/L	90

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8258.D  
 Acq On : 6 May 2015 7:30 pm  
 Operator : F. NAEGLER  
 Sample : 100 PPB STD Inst : MSVOA10  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 06 19:46:09 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

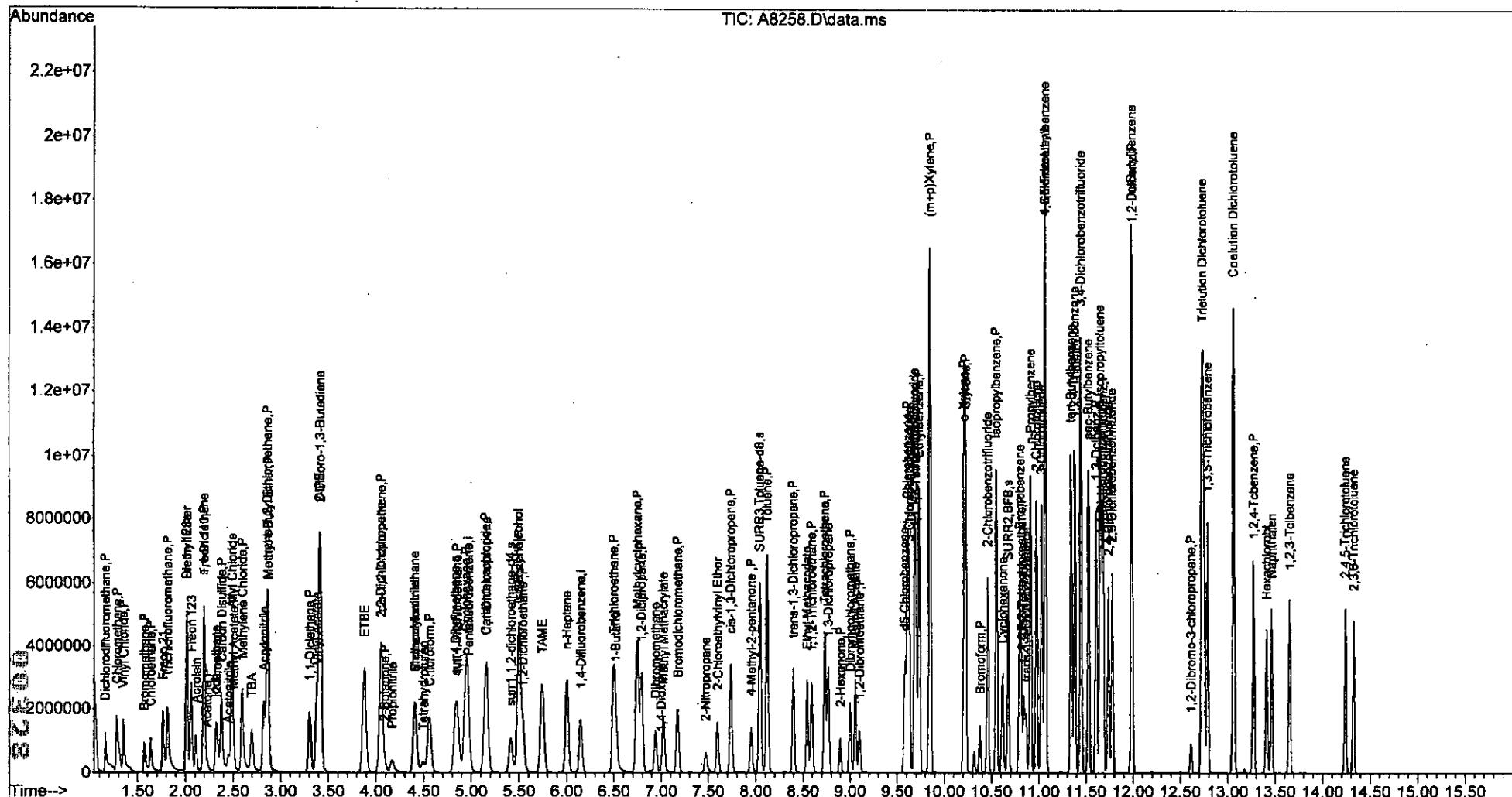
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) n-Propylbenzene	10.913	91	5599590	115.23	ug/L	96
95) 2-Chlorotoluene	10.974	91	3464812	112.54	ug/L	96
96) 3-Chlorotoluene	11.029	91	3557754	108.20	ug/L	98
97) 4-Chlorotoluene	11.065	91	4188130	114.52	ug/L	97
98) 1,3,5-Trimethylbenzene	11.065	105	4327793	118.61	ug/L	96
99) tert-Butylbenzene	11.340	119	3682876	116.76	ug/L	96
100) 1,2,4-Trimethylbenzene	11.376	105	4345017	115.16	ug/L	93
101) 3,4-Dichlorobenzotrifl...	11.443	214	1215644	103.16	ug/L	99
102) sec-Butylbenzene	11.523	105	5068885	117.42	ug/L	97
103) p-Isopropyltoluene	11.645	119	4566663	120.23	ug/L	98
104) 1,3-Dclbenz	11.608	146	2703057	114.87	ug/L	96
105) 1,4-Dclbenz	11.681	146	2802374	115.31	ug/L	98
106) 2,4-Dichlorobenzotrifl...	11.736	214	1102461	101.19	ug/L	94
107) 2,5-Dichlorobenzotrifl...	11.773	214	1260535	104.45	ug/L	99
108) n-Butylbenzene	11.980	91	4027174	119.69	ug/L	97
109) 1,2-Dclbenz	11.986	146	2515648	114.78	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.608	157	176229	103.89	ug/L	96
111) Trielution Dichlorotol...	12.730	125	6697083	345.45	ug/L	97
112) 1,3,5-Trichlorobenzene	12.785	180	1796515	109.72	ug/L	97
113) Coelution Dichlorotoluene	13.059	125	4727247	234.75	ug/L	97
114) 1,2,4-Tcbenzene	13.272	180	1616454	117.29	ug/L	99
115) Hexachlorobt	13.406	225	639148	104.30	ug/L	96
116) Naphthalen	13.461	128	3186215	131.37	ug/L	98
117) 1,2,3-Tclbenzene	13.650	180	1353828	131.76	ug/L	98
118) 2,4,5-Trichlorotoluene	14.236	159	1031149	154.21	ug/L	97
119) 2,3,6-Trichlorotoluene	14.321	159	874896	153.36	ug/L	98

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

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
Data File : A8258.D  
Acq On : 6 May 2015 7:30 pm  
Operator : F. NAEGLER  
Sample : 100 PPB STD  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 19:46:09 2015  
Quant Method : I:\ACQUUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration.



Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8259.D  
 Acq On : 6 May 2015 8:01 pm  
 Operator : F. NAEGLER  
 Sample : 150 PPB STD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 06 20:16:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

EW 5/7/15

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	1009160	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1527917	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1452484	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	904711	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	1200111	131.41	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 262.82%	#	
46) surr1,1,2-dichloroetha...	5.414	65	1231936	129.58	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 259.16%	#	
64) SURR3,Toluene-d8	8.048	98	4576583	130.50	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 261.00%	#	
69) SURR2,BFB	10.675	95	1855663	120.62	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 241.24%	#	
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	1786447	186.46	ug/L	98
3) Chloromethane	1.281	50	3177944	264.87	ug/L	99
4) Vinyl Chloride	1.348	62	2252705	201.56	ug/L	98
5) Bromomethane	1.567	94	908503	235.52	ug/L	97
6) Chloroethane	1.634	64	1084321	169.64	ug/L	94
7) Freon 21	1.762	67	2925102	167.86	ug/L	99
8) Trichlorofluoromethane	1.811	101	2034067	147.22	ug/L	99
9) Diethyl Ether	2.012	59	1315009	181.71	ug/L	# 78
10) Freon 123a	2.012	67	1719301	158.05	ug/L	94
11) Freon 123	2.061	83	1895604	157.58	ug/L	81
12) Acrolein	2.104	56	1279238	1213.52	ug/L	97
13) 1,1-Dicethene	2.195	96	1203928	155.90	ug/L	# 83
14) Freon 113	2.195	101	1226763	144.51	ug/L	95
15) Acetone	2.226	43	468691	196.94	ug/L	99
16) 2-Propanol	2.329	45	1858429	4262.79	ug/L	99
17) Iodomethane	2.317	142	1831214	353.05	ug/L	100
18) Carbon Disulfide	2.378	76	4325552	152.81	ug/L	100
19) Acetonitrile	2.451	40	374528	1132.26	ug/L	91
20) Allyl Chloride	2.488	76	753727	164.79	ug/L	# 8
21) Methyl Acetate	2.500	43	1176117	221.00	ug/L	84
22) Methylene Chloride	2.597	84	1363973	159.02	ug/L	# 65
23) TBA	2.695	59	2293599	3480.84	ug/L	79
24) Acrylonitrile	2.823	53	2624337	1074.07	ug/L	100
25) Methyl-t-Butyl Ether	2.866	73	3362430	147.84	ug/L	86
26) trans-1,2-Dichloroethene	2.860	96	1306606	148.81	ug/L	# 83
27) 1,1-Dicethane	3.305	63	2820338	172.44	ug/L	97
28) Vinyl Acetate	3.372	86	237793	153.11	ug/L	# 60
29) DIPE	3.408	45	8215307	231.53	ug/L	# 76
30) 2-Chloro-1,3-Butadiene	3.414	53	3589769	189.18	ug/L	85
31) ETBE	3.878	59	5804457	193.42	ug/L	92
32) 2,2-Dichloropropane	4.055	77	1968821	153.81	ug/L	98
33) cis-1,2-Dichloroethene	4.055	96	1584403	162.01	ug/L	# 84
34) 2-Butanone	4.085	43	725587	222.37	ug/L	88
35) Propionitrile	4.164	54	960863	1084.92	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8259.D  
 Acq On : 6 May 2015 8:01 pm  
 Operator : F. NAEGLER  
 Sample : 150 PPB STD Inst : MSVOA10  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 06 20:16:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.414	130	936903	170.90	ug/L	# 68
37) Methacrylonitrile	4.408	67	439761	168.69	ug/L	# 36
38) Tetrahydrofuran	4.493	42	454854	212.08	ug/L	78
39) Chloroform	4.561	83	2619580	169.63	ug/L	96
40) 1,1,1-Trichloroethane	4.853	97	2323370	163.99	ug/L	96
42) Cyclohexane	4.951	41	2444273	209.18	ug/L	89
44) Carbontetrachloride	5.152	121	644486	155.00	ug/L	89
45) 1,1-Dichloropropene	5.158	75	1996064	162.01	ug/L	97
47) Benzene	5.505	78	6084111	163.52	ug/L	82
48) 1,2-Dichloroethane	5.542	62	2074189	166.93	ug/L	92
49) Iso-Butyl Alcohol	5.493	43	1389052	4132.81	ug/L	91
50) TAME	5.743	73	3838891	160.49	ug/L	83
51) n-Heptane	6.005	43	2662886	207.29	ug/L	80
52) 1-Butanol	6.524	56	1763443	9192.02	ug/L	81
53) Trichloroethene	6.499	130	1697630	168.66	ug/L	96
54) Methylcyclohexane	6.749	55	2689190	193.37	ug/L	# 80
55) 1,2-Diclpropane	6.792	63	1792178	180.56	ug/L	95
56) Dibromomethane	6.938	93	769454	154.05	ug/L	96
57) 1,4-Dioxane	7.005	88	183384	2849.53	ug/L	# 55
58) Methyl Methacrylate	7.023	69	758886	157.07	ug/L	# 53
59) Bromodichloromethane	7.176	83	1976932	159.06	ug/L	99
60) 2-Nitropropane	7.468	41	486615	234.52	ug/L	96
61) 2-Chloroethylvinyl Ether	7.596	63	907094	191.70	ug/L	90
62) cis-1,3-Dichloropropene	7.737	75	2345878	158.11	ug/L	94
63) 4-Methyl-2-pentanone	7.950	43	1656330	218.04	ug/L	89
65) Toluene	8.121	91	6525197	164.99	ug/L	96
66) trans-1,3-Dichloropropene	8.395	75	2001751	155.45	ug/L	97
67) Ethyl Methacrylate	8.548	69	1594019	157.95	ug/L	# 60
68) 1,1,2-Trichloroethane	8.590	97	1175655	159.67	ug/L	97
71) Tetrachloroethene	8.730	164	1387175	172.17	ug/L	98
72) 2-Hexanone	8.895	43	1129957	216.83	ug/L	91
73) 1,3-Dichloropropane	8.767	76	2033498	178.04	ug/L	# 76
74) Dibromochloromethane	8.999	129	1534485	169.23	ug/L	99
75) N-Butyl Acetate	9.054	43	3007270	230.75	ug/L	92
76) 1,2-Dibromoethane	9.102	107	1153793	167.15	ug/L	99
77) 3-Chlorobenzotrifluoride	9.627	180	2596354	167.15	ug/L	98
78) Chlorobenzene	9.608	112	4553857	171.15	ug/L	99
79) 4-Chlorobenzotrifluoride	9.681	180	2333461	165.16	ug/L	94
80) 1,1,1,2-Tetrachloroethane	9.694	131	1726404	173.00	ug/L	98
81) Ethylbenzene	9.730	106	2502884	176.69	ug/L	# 73
82) (m+p) Xylene	9.846	106	5892085	344.26	ug/L	# 77
83) o-Xylene	10.212	106	2972551	173.50	ug/L	# 85
84) Styrene	10.224	104	5153574	174.86	ug/L	98
85) Bromoform	10.376	173	886332	158.34	ug/L	97
86) 2-Chlorobenzotrifluoride	10.462	180	2555808	167.62	ug/L	94
87) Isopropylbenzene	10.553	105	7136921	170.10	ug/L	92
88) Cyclohexanone	10.614	55	1668152	2992.03	ug/L	93
89) trans-1,4-Dichloro-2-B...	10.864	53	531795	186.05	ug/L	85
91) 1,1,2,2-Tetrachloroethane	10.815	83	1485028	168.70	ug/L	98
92) Bromobenzene	10.797	156	2005806	162.39	ug/L	96
93) 1,2,3-Trichloropropane	10.840	110	401794	164.18	ug/L	90

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8259.D  
 Acq On : 6 May 2015 8:01 pm  
 Operator : F. NAEGLER  
 Sample : 150 PPB STD Inst : MSVOA10  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 06 20:16:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

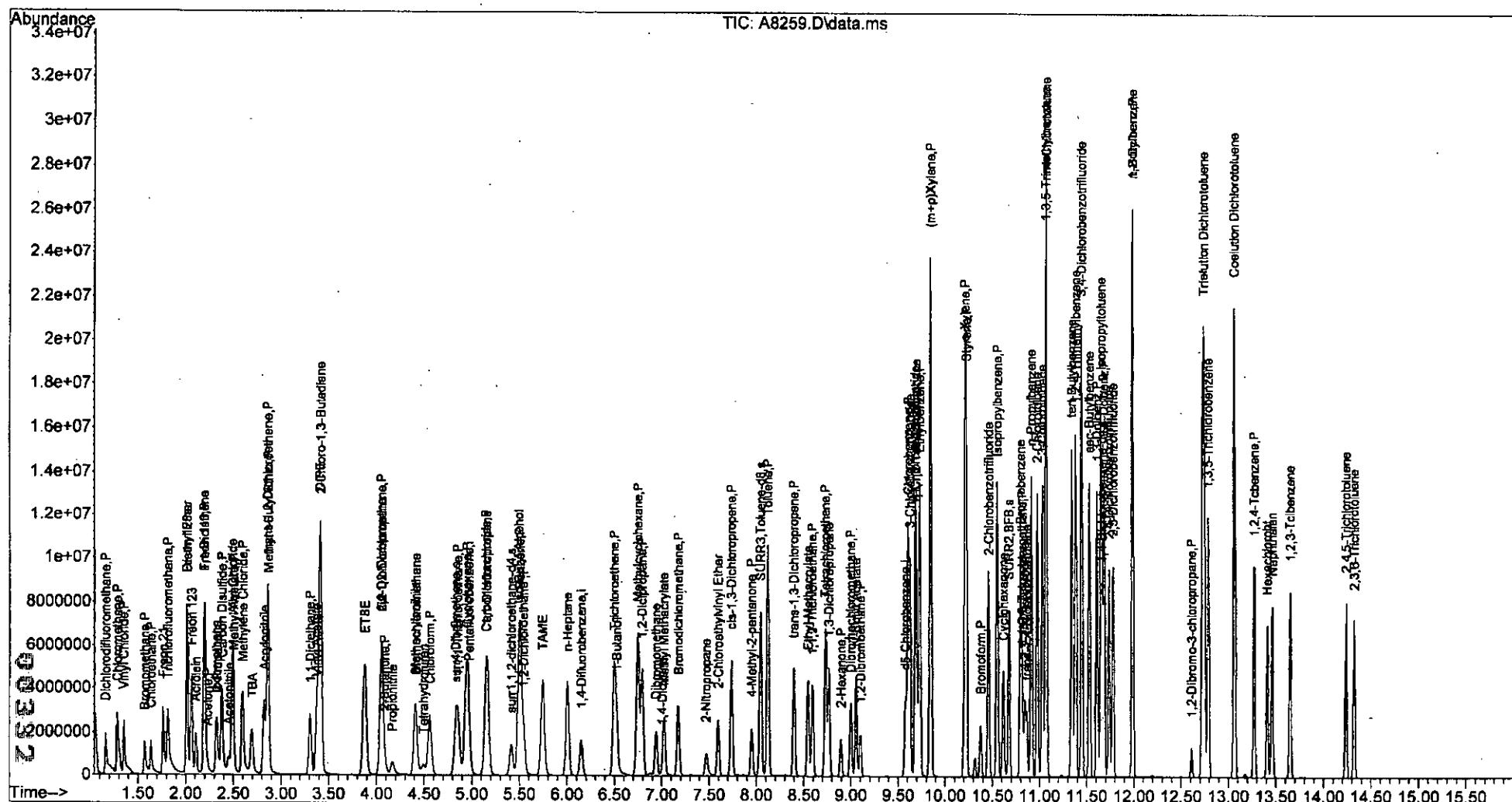
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) n-Propylbenzene	10.913	91	7825633	155.73	ug/L	84
95) 2-Chlorotoluene	10.974	91	5317486	167.03	ug/L	95
96) 3-Chlorotoluene	11.029	91	5426001	159.59	ug/L	93
97) 4-Chlorotoluene	11.071	91	6230297	164.76	ug/L	89
98) 1,3;5-Trimethylbenzene	11.065	105	6334976	167.90	ug/L	90
99) tert-Butylbenzene	11.340	119	5538374	169.80	ug/L	95
100) 1,2,4-Trimethylbenzene	11.382	105	6375653	163.42	ug/L	84
101) 3,4-Dichlorobenzotrifl...	11.443	214	1915898	157.23	ug/L	97
102) sec-Butylbenzene	11.529	105	7202068	161.35	ug/L	88
103) p-Isopropyltoluene	11.651	119	6574195	167.39	ug/L	92
104) 1,3-Dclbenz	11.608	146	4102427	168.60	ug/L	97
105) 1,4-Dclbenz	11.681	146	4245235	168.93	ug/L	98
106) 2,4-Dichlorobenzotrifl...	11.736	214	1756003	155.86	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.779	214	1992349	159.66	ug/L	99
108) n-Butylbenzene	11.986	91	5818201	167.23	ug/L	90
109) 1,2-Dclbenz	11.986	146	3792536	167.34	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.608	157	270880	154.43	ug/L	98
111) Trielution Dichlorotol...	12.736	125	9886849	493.19	ug/L	91
112) 1,3,5-Trichlorobenzene	12.785	180	2782118	164.31	ug/L	95
113) Coelution Dichlorotoluene	13.059	125	6779952	325.60	ug/L	95
114) 1,2,4-Tcbenzene	13.272	180	2413038	169.33	ug/L	98
115) Hexachlorobt	13.406	225	974219	153.74	ug/L	97
116) Naphthalen	13.461	128	4661764	185.88	ug/L	99
117) 1,2,3-Tclbenzene	13.650	180	1987933	187.10	ug/L	98
118) 2,4,5-Trichlorotoluene	14.235	159	1590318	230.01	ug/L	97
119) 2,3,6-Trichlorotoluene	14.321	159	1351709	229.13	ug/L	97

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

Data Path : I:\ACQUADATA\msvoa10\data\050615\  
Data File : A8259.D  
Acq On : 6 May 2015 8:01 pm  
Operator : F. NAEGLER  
Sample : 150 PPB STD  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 20:16:17 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



Data Path : I:\ACQUADATA\msvola10\data\050615\  
 Data File : A8260.D  
 Acq On : 6 May 2015 8:31 pm  
 Operator : F. NAEGLER  
 Sample : 200 PPB STD  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 20:46:17 2015  
 Quant Method : I:\ACQUADATA\MSVOLA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

4/7/15

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	1033793	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1542023	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1477018	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	925250	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	1571889	170.55	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 341.10%	#	
46) surr1,1,2-dichloroetha...	5.414	65	1588711	165.57	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 331.14%	#	
64) SURR3,Toluene-d8	8.048	98	5905134	166.84	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 333.68%	#	
69) SURR2,BFB	10.675	95	2441626	157.26	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 314.52%	#	
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	2596947	264.60	ug/L	98
3) Chloromethane	1.281	50	4627354	376.48	ug/L	100
4) Vinyl Chloride	1.348	62	3251701	284.01	ug/L	98
5) Bromomethane	1.567	94	1292698	327.13	ug/L	98
6) Chloroethane	1.634	64	1542802	235.62	ug/L	94
7) Freon 21	1.762	67	4209980	235.84	ug/L	99
8) Trichlorofluoromethane	1.811	101	2936528	207.47	ug/L	99
9) Diethyl Ether	2.012	59	1853169	249.98	ug/L	# 78
10) Freon 123a	2.012	67	2219760	199.20	ug/L	94
11) Freon 123	2.061	83	2784810	225.98	ug/L	# 77
12) Acrolein	2.104	56	1818228	1683.72	ug/L	95
13) 1,1-Dicethene	2.195	96	1764152	223.00	ug/L	# 85
14) Freon 113	2.195	101	1784586	205.20	ug/L	92
15) Acetone	2.226	43	584919	239.92	ug/L	97
16) 2-Propanol	2.329	45	2576209	5768.40	ug/L	98
17) Iodomethane	2.317	142	2554924	480.84	ug/L	99
18) Carbon Disulfide	2.378	76	6208488	214.11	ug/L	99
19) Acetonitrile	2.451	40	568166	1676.73	ug/L	94
20) Allyl Chloride	2.488	76	1094618	233.61	ug/L	# 21
21) Methyl Acetate	2.500	43	1659296	304.36	ug/L	85
22) Methylene Chloride	2.597	84	1970916	224.31	ug/L	# 66
23) TBA	2.695	59	3219499	4769.60	ug/L	78
24) Acrylonitrile	2.823	53	3758849	1501.74	ug/L	99
25) Methyl-t-Butyl Ether	2.866	73	4760497	204.32	ug/L	86
26) trans-1,2-Dichloroethene	2.860	96	1885887	209.66	ug/L	# 83
27) 1,1-Dicethane	3.305	63	4130034	246.51	ug/L	99
28) Vinyl Acetate	3.378	86	357008	224.39	ug/L	# 73
29) DIPE	3.408	45	10934164	300.82	ug/L	81
30) 2-Chloro-1,3-Butadiene	3.414	53	5246957	269.93	ug/L	87
31) ETBE	3.878	59	8005245	260.40	ug/L	93
32) 2,2-Dichloropropane	4.054	77	2838469	216.47	ug/L	98
33) cis-1,2-Dichloroethene	4.054	96	2293409	228.92	ug/L	85
34) 2-Butanone	4.091	43	1062625	317.91	ug/L	86
35) Propionitrile	4.170	54	1367306	1507.05	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\050615\

Data File : A8260.D

Acq On : 6 May 2015 8:31 pm

Operator : F. NAEGLER

Sample : 200 PPB STD

Inst : MSVOA10

Misc :

ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 20:46:17 2015

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M

Quant Title : MS#10 - 8260B WATERS 10mL Purge

QLast Update : Wed May 06 16:24:30 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.414	130	1310607	233.38	ug/L	# 70
37) Methacrylonitrile	4.408	67	634006	237.40	ug/L	# 38
38) Tetrahydrofuran	4.493	42	657862	299.43	ug/L	75
39) Chloroform	4.560	83	3782646	239.11	ug/L	97
40) 1,1,1-Trichloroethane	4.853	97	3403699	234.52	ug/L	96
42) Cyclohexane	4.951	41	3573785	303.05	ug/L	90
44) Carbontetrachloride	5.152	121	961734	229.19	ug/L	86
45) 1,1-Dichloropropene	5.164	75	2893587	232.71	ug/L	97
47) Benzene	5.505	78	8648567	230.32	ug/L	81
48) 1,2-Dichloroethane	5.542	62	2963151	236.29	ug/L	91
49) Iso-Butyl Alcohol	5.499	43	1994224	5879.09	ug/L	88
50) TAME	5.743	73	5334020	220.96	ug/L	84
51) n-Heptane	6.005	43	3905893	301.27	ug/L	81
52) 1-Butanol	6.523	56	2475910	12787.72	ug/L	83
53) Trichloroethene	6.499	130	2482834	244.41	ug/L	96
54) Methylcyclohexane	6.749	55	3962911	282.36	ug/L	# 80
55) 1,2-Diclpropane	6.792	63	2617447	261.30	ug/L	97
56) Dibromomethane	6.938	93	1116881	221.56	ug/L	99
57) 1,4-Dioxane	7.011	88	256383	3947.39	ug/L	# 63
58) Methyl Methacrylate	7.023	69	1088663	223.26	ug/L	# 54
59) Bromodichloromethane	7.176	83	2858117	227.85	ug/L	98
60) 2-Nitropropane	7.468	41	749376	357.86	ug/L	100
61) 2-Chloroethylvinyl Ether	7.596	63	1310497	274.42	ug/L	92
62) cis-1,3-Dichloropropene	7.737	75	3394969	226.73	ug/L	93
63) 4-Methyl-2-pentanone	7.950	43	2388412	311.53	ug/L	90
65) Toluene	8.121	91	8904581	223.09	ug/L	89
66) trans-1,3-Dichloropropene	8.401	75	2885060	221.99	ug/L	96
67) Ethyl Methacrylate	8.547	69	2309087	226.71	ug/L	# 58
68) 1,1,2-Trichloroethane	8.596	97	1683294	226.52	ug/L	98
71) Tetrachloroethene	8.730	164	2039787	248.96	ug/L	97
72) 2-Hexanone	8.895	43	1639634	309.41	ug/L	88
73) 1,3-Dichloropropane	8.767	76	2908209	250.39	ug/L	# 76
74) Dibromochloromethane	8.999	129	2236706	242.58	ug/L	100
75) N-Butyl Acetate	9.053	43	4231966	319.33	ug/L	93
76) 1,2-Dibromoethane	9.102	107	1686139	240.22	ug/L	98
77) 3-Chlorobenzotrifluoride	9.633	180	4008818	253.80	ug/L	99
78) Chlorobenzene	9.608	112	6357429	234.97	ug/L	93
79) 4-Chlorobenzotrifluoride	9.687	180	3639222	253.31	ug/L	96
80) 1,1,1,2-Tetrachloroethane	9.700	131	2575426	253.79	ug/L	97
81) Ethylbenzene	9.730	106	3673340	255.01	ug/L	# 54
82) (m+p)Xylene	9.852	106	8010966	460.28	ug/L	# 68
83) o-Xylene	10.212	106	4332661	248.68	ug/L	# 70
84) Styrene	10.224	104	7068638	235.85	ug/L	88
85) Bromoform	10.376	173	1341885	235.74	ug/L	97
86) 2-Chlorobenzotrifluoride	10.462	180	3954917	255.07	ug/L	91
87) Isopropylbenzene	10.553	105	9150508	214.47	ug/L	76
88) Cyclohexanone	10.614	55	2359487	4161.72	ug/L	92
89) trans-1,4-Dichloro-2-B...	10.864	53	789739	271.71	ug/L	83
91) 1,1,2,2-Tetrachloroethane	10.815	83	2162848	240.24	ug/L	98
92) Bromobenzene	10.797	156	2946914	233.29	ug/L	96
93) 1,2,3-Trichloropropane	10.846	110	579925	231.71	ug/L	89

Data Path : I:\ACQUDATA\msvola10\data\050615\  
 Data File : A8260.D  
 Acq On : 6 May 2015 8:31 pm  
 Operator : F. NAEGLER  
 Sample : 200 PPB STD  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 20:46:17 2015  
 Quant Method : I:\ACQUDATA\MSVOLA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Wed May 06 16:24:30 2015  
 Response via : Initial Calibration

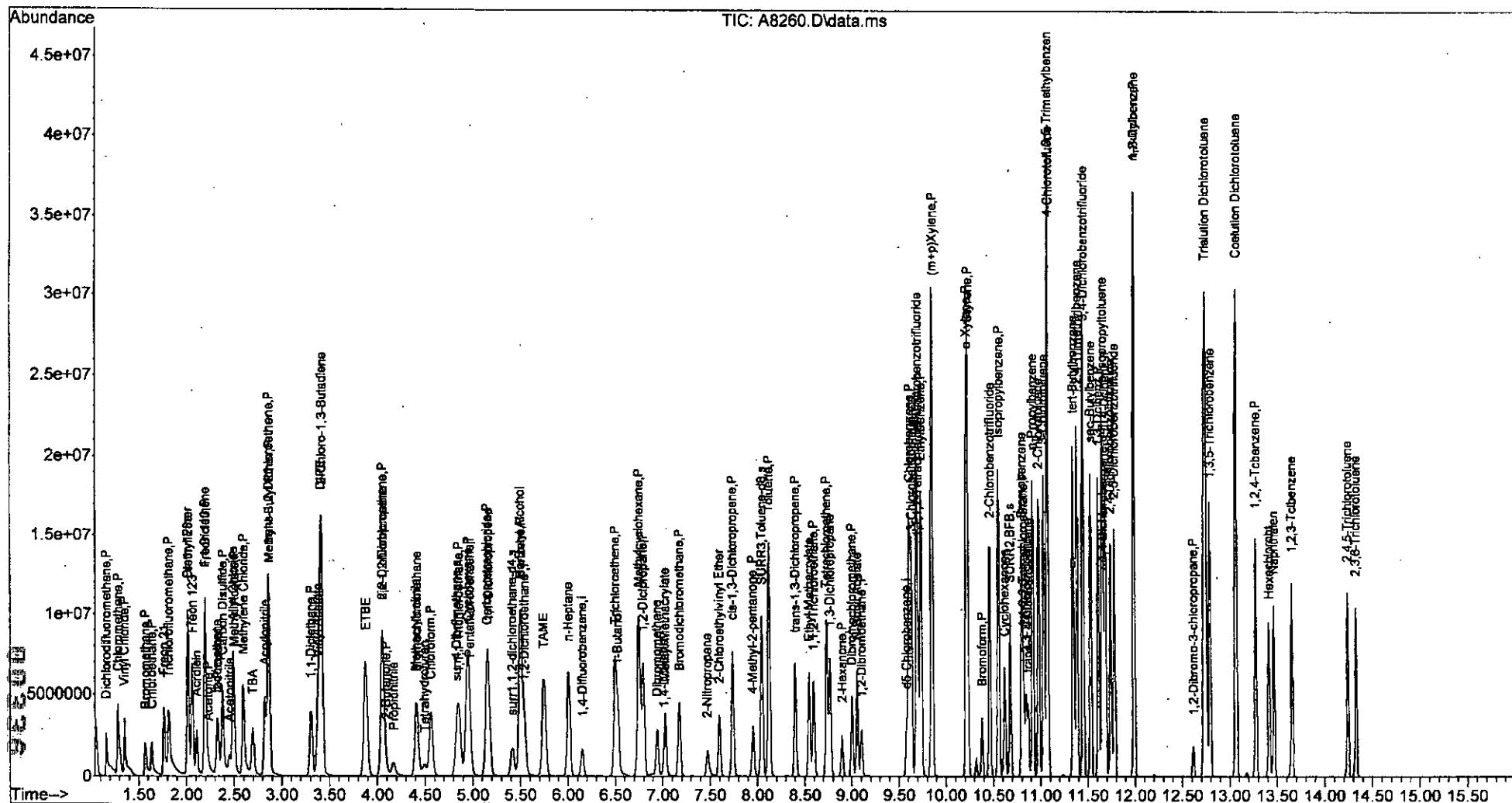
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.913	91	9760167	189.92	ug/L	68
95) 2-Chlorotoluene	10.974	91	7213444	221.56	ug/L	89
96) 3-Chlorotoluene	11.029	91	7526097	216.44	ug/L	85
97) 4-Chlorotoluene	11.071	91	8126856	210.14	ug/L	75
98) 1,3,5-Trimethylbenzene	11.065	105	8223670	213.12	ug/L	79
99) tert-Butylbenzene	11.340	119	7448863	223.31	ug/L	88
100) 1,2,4-Trimethylbenzene	11.382	105	8274806	207.39	ug/L	# 67
101) 3,4-Dichlorobenzotrifl...	11.449	214	2929721	235.10	ug/L	99
102) sec-Butylbenzene	11.529	105	9110126	199.56	ug/L	74
103) p-Isopropyltoluene	11.650	119	8301847	206.69	ug/L	76
104) 1,3-Dclbenz	11.608	146	5759223	231.43	ug/L	91
105) 1,4-Dclbenz	11.681	146	5843694	227.37	ug/L	93
106) 2,4-Dichlorobenzotrifl...	11.736	214	2776970	241.01	ug/L	94
107) 2,5-Dichlorobenzotrifl...	11.779	214	2988447	234.17	ug/L	98
108) n-Butylbenzene	11.986	91	7611408	213.91	ug/L	76
109) 1,2-Dclbenz	11.986	146	5262942	227.07	ug/L	93
110) 1,2-Dibromo-3-chloropr...	12.614	157	395697	220.58	ug/L	93
111) Trielution Dichlorotol...	12.736	125	13131542	640.51	ug/L	79
112) 1,3,5-Trichlorobenzene	12.791	180	4139981	239.08	ug/L	97
113) Coelution Dichlorotoluene	13.065	125	8835280	414.88	ug/L	81
114) 1,2,4-Tcbenzene	13.272	180	3424887	235.00	ug/L	98
115) Hexachlorobt	13.412	225	1441514	222.44	ug/L	98
116) Naphthalen	13.461	128	6236815	243.16	ug/L	97
117) 1,2,3-Tclbenzene	13.650	180	2830687	260.51	ug/L	98
118) 2,4,5-Trichlorotoluene	14.235	159	2355291	333.09	ug/L	97
119) 2,3,6-Trichlorotoluene	14.321	159	1999677	331.45	ug/L	98

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

Data Path : I:\ACQUADATA\msvoya10\data\050615\  
Data File : A8260.D  
Acq On : 6 May 2015 8:31 pm  
Operator : F. NAEGLER  
Sample : 200 PPB STD  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 06 20:46:17 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Wed May 06 16:24:30 2015  
Response via : Initial Calibration



# Initial Calibration Verification Summary Report

Calibration ID:	RC1500051	5/6/15	Instrument ID: Column Name:	R-MS-10 1
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Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1500051-10	T	Average RF	50	48.38	ppm	-3.2	<=30
1,1,1-Trichloroethane (TCA)	RC1500051-10	T	Average RF	50	47.05	ppm	-5.9	<=30
1,1,2,2-Tetrachloroethane	RC1500051-10	T	Average RF	50	50.19	ppm	0.4	<=30
1,1,2-Trichloroethane	RC1500051-10	T	Average RF	50	47.31	ppm	-5.4	<=30
1,1,2-Trichlorotrifluoroethane	RC1500051-10	T	Average RF	50	45.15	ppm	-9.7	<=30
1,1-Dichloroethane (1,1-DCA)	RC1500051-10	T	Average RF	50	47.43	ppm	-5.1	<=30
1,1-Dichloroethene (1,1-DCE)	RC1500051-10	T	Average RF	50	44.09	ppm	-11.8	<=30
1,1-Dichloropropene	RC1500051-10	T	Average RF	50	45.00	ppm	-10.0	<=30
1,2,3-Trichlorobenzene	RC1500051-10	T	Average RF	50	50.33	ppm	0.7	<=30
1,2,3-Trichloropropane	RC1500051-10	T	Average RF	50	47.51	ppm	-5.0	<=30
1,2,4-Trichlorobenzene	RC1500051-10	T	Average RF	50	50.90	ppm	1.8	<=30
1,2,4-Trimethylbenzene	RC1500051-10	T	Average RF	50	51.06	ppm	2.1	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1500051-10	T	Average RF	50	52.03	ppm	4.1	<=30
1,2-Dibromoethane	RC1500051-10	T	Average RF	50	49.54	ppm	-0.9	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1500051-10	T	Average RF	50	57.99	ppm	16.0	<=30
1,2-Dichlorobenzene	RC1500051-10	T	Average RF	50	48.99	ppm	-2.0	<=30
1,2-Dichloroethane	RC1500051-10	T	Average RF	50	48.06	ppm	-3.9	<=30
1,2-Dichloropropene	RC1500051-10	T	Average RF	50	46.99	ppm	-6.0	<=30
1,3,5-Trichlorobenzene	RC1500051-10	T	Average RF	50	51.51	ppm	3.0	<=30
1,3,5-Trimethylbenzene	RC1500051-10	T	Average RF	50	51.57	ppm	3.1	<=30
1,3-Dichlorobenzene	RC1500051-10	T	Average RF	50	48.00	ppm	-4.0	<=30
1,3-Dichloropropene	RC1500051-10	T	Average RF	50	48.00	ppm	-4.0	<=30
1,4-Dichlorobenzene	RC1500051-10	T	Average RF	50	47.06	ppm	-5.9	<=30
1,4-Dioxane	RC1500051-10	T	Average RF	1000	1031	ppm	3.1	<=30
1-Butanol	RC1500051-10	T	Quadratic	2500	2721	ppm	8.8	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1500051-10	T	Average RF	50	50.21	ppm	0.4	<=30
2,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1500051-10	T	Average RF	50	53.27	ppm	6.5	<=30
2,2-Dichloropropane	RC1500051-10	T	Average RF	50	42.40	ppm	-15.2	<=30
2,3,6-Trichlorotoluene	RC1500051-10	T	Average RF	50	56.34	ppm	12.7	<=30
2,4,5-Trichlorotoluene	RC1500051-10	T	Average RF	50	56.10	ppm	12.2	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1500051-10	T	Average RF	150	164.1	ppm	9.4	<=30
2,4-Dichlorobenzotrifluoride	RC1500051-10	T	Average RF	50	49.76	ppm	-0.5	<=30
2,5-Dichlorobenzotrifluoride	RC1500051-10	T	Average RF	50	49.01	ppm	-2.0	<=30
2-Butanone (MEK)	RC1500051-10	T	Average RF	50	50.05	ppm	0.1	<=30
2-Chloro-1,3-butadiene	RC1500051-10	T	Average RF	50	48.56	ppm	-2.9	<=30
2-Chlorobenzotrifluoride	RC1500051-10	T	Average RF	50	50.77	ppm	1.5	<=30
2-Chloroethyl Vinyl Ether	RC1500051-10	T	Average RF	50	54.20	ppm	8.4	<=30
2-Chlorotoluene	RC1500051-10	T	Average RF	50	48.43	ppm	-3.1	<=30
2-Hexanone	RC1500051-10	T	Average RF	50	54.50	ppm	9.0	<=30
2-Methyl-1-propanol	RC1500051-10	T	Average RF	1000	985.5	ppm	-1.5	<=30
2-Methyl-2-propanol	RC1500051-10	T	Average RF	1000	1035	ppm	3.5	<=30
2-Nitropropane	RC1500051-10	T	Average RF	100	95.59	ppm	-4.4	<=30
2-Propanol	RC1500051-10	T	Average RF	1000	1131	ppm	13.1	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1500051-10	T	Average RF	100	110.2	ppm	10.2	<=30
3,4-Dichlorobenzotrifluoride	RC1500051-10	T	Average RF	50	49.67	ppm	-0.7	<=30
3-Chloro-1-propene	RC1500051-10	T	Average RF	50	43.36	ppm	-13.3	<=30
3-Chlorobenzotrifluoride	RC1500051-10	T	Average RF	50	49.27	ppm	-1.5	<=30
3-Chlorotoluene	RC1500051-10	T	Average RF	50	51.60	ppm	3.2	<=30
4-Chlorotoluene	RC1500051-10	T	Average RF	50	49.44	ppm	-1.1	<=30
4-Isopropyltoluene	RC1500051-10	T	Average RF	50	53.05	ppm	6.1	<=30
4-Methyl-2-pentanone	RC1500051-10	T	Average RF	50	53.26	ppm	6.5	<=30

# Initial Calibration Verification Summary Report

<b>Calibration ID:</b>	RC1500051	<b>Instrument ID:</b>	R-MS-10
		<b>Column Name:</b>	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1500051-10	T	Quadratic	50	49.38	ppm	-1.2	<=30
Acetonitrile	RC1500051-10	T	Average RF	250	235.1	ppm	-6.0	<=30
Acrolein	RC1500051-10	T	Average RF	100	87.24	ppm	-12.8	<=30
Acrylonitrile	RC1500051-10	T	Average RF	250	249.2	ppm	-0.3	<=30
Benzene	RC1500051-10	T	Average RF	50	46.25	ppm	-7.5	<=30
Bromobenzene	RC1500051-10	T	Average RF	50	46.75	ppm	-6.5	<=30
Bromochloromethane	RC1500051-10	T	Average RF	50	46.97	ppm	-6.1	<=30
Bromodichloromethane	RC1500051-10	T	Average RF	50	48.88	ppm	-2.2	<=30
Bromoform	RC1500051-10	T	Average RF	50	52.79	ppm	5.6	<=30
Bromomethane	RC1500051-10	T	Average RF	50	42.37	ppm	-15.3	<=30
Carbon Disulfide	RC1500051-10	T	Average RF	50	47.97	ppm	-4.1	<=30
Carbon Tetrachloride	RC1500051-10	T	Average RF	50	48.07	ppm	-3.9	<=30
Chlorobenzene	RC1500051-10	T	Average RF	50	47.61	ppm	-4.8	<=30
Chloroethane	RC1500051-10	T	Average RF	50	44.08	ppm	-11.8	<=30
Chloroform	RC1500051-10	T	Average RF	50	46.74	ppm	-6.5	<=30
Chloromethane	RC1500051-10	T	Average RF	50	46.93	ppm	-6.1	<=30
Cyclohexane	RC1500051-10	T	Average RF	50	52.35	ppm	4.7	<=30
Cyclohexanone	RC1500051-10	T	Average RF	1000	971.7	ppm	-2.8	<=30
Dibromochloromethane	RC1500051-10	T	Average RF	50	50.66	ppm	1.3	<=30
Dibromomethane	RC1500051-10	T	Average RF	50	47.26	ppm	-5.5	<=30
Dichlorodifluoromethane (CFC 12)	RC1500051-10	T	Average RF	50	49.23	ppm	-1.5	<=30
Dichlorofluoromethane (CFC 21)	RC1500051-10	T	Average RF	50	61.34	ppm	22.7	<=30
Dichloromethane	RC1500051-10	T	Average RF	50	44.30	ppm	-11.4	<=30
Diethyl Ether	RC1500051-10	T	Average RF	50	50.90	ppm	1.8	<=30
Diisopropyl Ether	RC1500051-10	T	Average RF	50	43.96	ppm	-12.1	<=30
Ethyl Methacrylate	RC1500051-10	T	Average RF	50	55.68	ppm	11.4	<=30
Ethyl tert-Butyl Ether	RC1500051-10	T	Average RF	50	43.58	ppm	-12.8	<=30
Ethylbenzene	RC1500051-10	T	Average RF	50	44.23	ppm	-11.5	<=30
Hexachlorobutadiene	RC1500051-10	T	Average RF	50	47.93	ppm	-4.1	<=30
Iodomethane	RC1500051-10	T	Average RF	50	49.88	ppm	-0.2	<=30
Isopropylbenzene (Cumene)	RC1500051-10	T	Average RF	50	51.70	ppm	3.4	<=30
Methacrylonitrile	RC1500051-10	T	Average RF	50	47.98	ppm	-4.0	<=30
Methyl Acetate	RC1500051-10	T	Average RF	50	53.33	ppm	6.7	<=30
Methyl Methacrylate	RC1500051-10	T	Average RF	50	53.55	ppm	7.1	<=30
Methyl tert-Butyl Ether	RC1500051-10	T	Average RF	50	47.27	ppm	-5.5	<=30
Methylcyclohexane	RC1500051-10	T	Average RF	50	53.44	ppm	6.9	<=30
Naphthalene	RC1500051-10	T	Average RF	50	53.54	ppm	7.1	<=30
Propionitrile	RC1500051-10	T	Average RF	250	252.0	ppm	0.8	<=30
Styrene	RC1500051-10	T	Average RF	50	50.09	ppm	0.2	<=30
Tetrachloroethene (PCE)	RC1500051-10	T	Average RF	50	46.03	ppm	-7.9	<=30
Tetrahydrofuran (THF)	RC1500051-10	T	Average RF	50	51.44	ppm	2.9	<=30
Toluene	RC1500051-10	T	Average RF	50	46.91	ppm	-6.2	<=30
Trichloroethene (TCE)	RC1500051-10	T	Average RF	50	47.62	ppm	-4.8	<=30
Trichlorofluoromethane (CFC 11)	RC1500051-10	T	Average RF	50	45.60	ppm	-8.8	<=30
Vinyl Acetate	RC1500051-10	T	Average RF	50	47.17	ppm	-5.7	<=30
Vinyl Chloride	RC1500051-10	T	Average RF	50	44.72	ppm	-10.6	<=30
cis-1,2-Dichloroethene	RC1500051-10	T	Average RF	50	47.10	ppm	-5.8	<=30
cis-1,3-Dichloropropene	RC1500051-10	T	Average RF	50	48.73	ppm	-2.5	<=30
m,p-Xylenes	RC1500051-10	T	Average RF	100	98.63	ppm	-1.4	<=30
n-Butyl Acetate	RC1500051-10	T	Average RF	50	61.41	ppm	22.8	<=30
n-Butylbenzene	RC1500051-10	T	Average RF	50	51.87	ppm	3.7	<=30

# Initial Calibration Verification Summary Report

<b>Calibration ID:</b>	RC1500051	<b>Instrument ID:</b>	R-MS-10
		<b>Column Name:</b>	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1500051-10	T	Average RF	50	47.78	ppm	-4.4	<=30
n-Propylbenzene	RC1500051-10	T	Average RF	50	51.16	ppm	2.3	<=30
o-Xylene	RC1500051-10	T	Average RF	50	47.88	ppm	-4.2	<=30
sec-Butylbenzene	RC1500051-10	T	Average RF	50	51.84	ppm	3.7	<=30
tert-Amyl Methyl Ether	RC1500051-10	T	Average RF	50	47.39	ppm	-5.2	<=30
tert-Butylbenzene	RC1500051-10	T	Average RF	50	49.87	ppm	-0.3	<=30
trans-1,2-Dichloroethene	RC1500051-10	T	Average RF	50	45.68	ppm	-8.6	<=30
trans-1,3-Dichloropropene	RC1500051-10	T	Average RF	50	48.71	ppm	-2.6	<=30
trans-1,4-Dichloro-2-butene	RC1500051-10	T	Average RF	50	47.68	ppm	-4.6	<=30
1,2-Dichloroethane-d4	RC1500051-10	S	Average RF	50	49.49	ppm	-1.0	<=30
4-Bromofluorobenzene	RC1500051-10	S	Average RF	50	49.30	ppm	-1.4	<=30
Dibromofluoromethane	RC1500051-10	S	Average RF	50	48.97	ppm	-2.1	<=30
Toluene-d8	RC1500051-10	S	Average RF	50	49.17	ppm	-1.7	<=30

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8264.D  
 Acq On : 6 May 2015 10:31 pm  
 Operator : F. NAEGLER  
 Sample : 50 PPB ICV  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 07 12:50:39 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 12:42:58 2015  
 Response via : Initial Calibration

FD  
5/7/15

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	964887	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1466598	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1395022	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	830453	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	448198	48.97	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	97.94%		
46) surr1,1,2-dichloroetha...	5.414	65	465450	49.49	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	98.98%		
64) SURR3,Toluene-d8	8.042	98	1715688	49.17	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	98.34%		
69) SURR2,BFB	10.675	95	699041	49.30	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	98.60%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	493297	49.23	ug/L	95
3) Chloromethane	1.281	50	860704	46.93	ug/L	98
4) Vinyl Chloride	1.354	62	597495	44.72	ug/L	98
5) Bromomethane	1.573	94	234160	42.37	ug/L	100
6) Chloroethane	1.634	64	289178	44.08	ug/L	92
7) Freon 21	1.762	67	983186	61.34	ug/L	100
8) Trichlorofluoromethane	1.811	101	588120	45.60	ug/L	99
9) Diethyl Ether	2.012	59	395387	50.90	ug/L	# 73
10) Freon 123a	2.012	67	567472	57.99	ug/L	92
11) Freon 123	2.061	83	576765m	53.27	ug/L	
12) Acrolein	2.110	56	127291	87.24	ug/L	96
13) 1,1-Dicethene	2.195	96	313421	44.09	ug/L	# 74
14) Freon 113	2.195	101	335780	45.15	ug/L	91
15) Acetone	2.226	43	140055	49.38	ug/L	95
16) 2-Propanol	2.329	45	572285	1131.26	ug/L	95
17) Iodomethane	2.317	142	525112	49.88	ug/L	100
18) Carbon Disulfide	2.378	76	1224816	47.97	ug/L	100
19) Acetonitrile	2.451	40	104564	235.09	ug/L	94
20) Allyl Chloride	2.488	76	200552	43.36	ug/L	# 1
21) Methyl Acetate	2.506	43	374781	53.33	ug/L	88
22) Methylene Chloride	2.598	84	386375	44.30	ug/L	# 61
23) TBA	2.695	59	670974	1035.45	ug/L	70
24) Acrylonitrile	2.823	53	777411	249.21	ug/L	99
25) Methyl-t-Butyl Ether	2.866	73	960968	47.27	ug/L	87
26) trans-1,2-Dichloroethene	2.860	96	365476	45.68	ug/L	# 81
27) 1,1-Dicethane	3.305	63	847286	47.43	ug/L	97
28) Vinyl Acetate	3.378	86	67954	47.17	ug/L	# 59
29) DIPE	3.408	45	2152810	43.96	ug/L	# 75
30) 2-Chloro-1,3-Butadiene	3.414	53	1008822	48.56	ug/L	87
31) ETBE	3.878	59	1457433	43.58	ug/L	94
32) 2,2-Dichloropropane	4.048	77	489461	42.40	ug/L	95
33) cis-1,2-Dichloroethene	4.055	96	451658	47.10	ug/L	89
34) 2-Butanone	4.091	43	227176	50.05	ug/L	83
35) Propionitrile	4.170	54	283864	251.98	ug/L	100

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8264.D  
 Acq On : 6 May 2015 10:31 pm  
 Operator : F. NAEGLER  
 Sample : 50 PPB ICV  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 07 12:50:39 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 12:42:58 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Bromochloromethane	4.408	130	276971	46.97	ug/L	# 62
37) Methacrylonitrile	4.402	67	127709	47.98	ug/L	# 47
38) Tetrahydrofuran	4.500	42	144344	51.44	ug/L	73
39) Chloroform	4.561	83	742729	46.74	ug/L	97
40) 1,1,1-Trichloroethane	4.859	97	635972	47.05	ug/L	98
42) Cyclohexane	4.951	41	729970	52.35	ug/L	91
44) Carbontetrachloride	5.152	121	174192	48.07	ug/L	# 79
45) 1,1-Dichloropropene	5.164	75	533526	45.00	ug/L	98
47) Benzene	5.499	78	1699820	46.25	ug/L	81
48) 1,2-Dichloroethane	5.542	62	609873	48.06	ug/L	91
49) Iso-Butyl Alcohol	5.493	43	375670	985.45	ug/L	90
50) TAME	5.743	73	1003942	47.39	ug/L	81
51) n-Heptane	6.005	43	763548	47.78	ug/L	80
52) 1-Butanol	6.517	56	464894	2720.72	ug/L	78
53) Trichloroethene	6.493	130	483640	47.62	ug/L	98
54) Methylcyclohexane	6.749	55	802656	53.44	ug/L	# 79
55) 1,2-Diclpropane	6.792	63	509222	46.99	ug/L	98
56) Dibromomethane	6.938	93	225247	47.26	ug/L	94
57) 1,4-Dioxane	7.005	88	55748	1031.00	ug/L	# 39
58) Methyl Methacrylate	7.023	69	228564	53.55	ug/L	# 46
59) Bromodichloromethane	7.176	83	558068	48.88	ug/L	98
60) 2-Nitropropane	7.469	41	119531	95.59	ug/L	99
61) 2-Chloroethylvinyl Ether	7.597	63	274633	54.20	ug/L	89
62) cis-1,3-Dichloropropene	7.737	75	630579	48.73	ug/L	94
63) 4-Methyl-2-pentanone	7.950	43	494232	53.26	ug/L	89
65) Toluene	8.121	91	1862053	46.91	ug/L	96
66) trans-1,3-Dichloropropene	8.395	75	525358	48.71	ug/L	94
67) Ethyl Methacrylate	8.541	69	473293	55.68	ug/L	# 54
68) 1,1,2-Trichloroethane	8.590	97	334812	47.31	ug/L	97
71) Tetrachloroethene	8.730	164	385916	46.03	ug/L	98
72) 2-Hexanone	8.895	43	342991	54.50	ug/L	90
73) 1,3-Dichloropropane	8.767	76	585086	48.00	ug/L	# 76
74) Dibromochloromethane	8.999	129	421433	50.66	ug/L	98
75) N-Butyl Acetate	9.054	43	928296	61.41	ug/L	92
76) 1,2-Dibromoethane	9.102	107	336530	49.54	ug/L	94
77) 3-Chlorobenzotrifluoride	9.627	180	752265	49.27	ug/L	98
78) Chlorobenzene	9.602	112	1305968	47.61	ug/L	100
79) 4-Chlorobenzotrifluoride	9.681	180	674732	50.21	ug/L	94
80) 1,1,1,2-Tetrachloroethane	9.694	131	454385	48.38	ug/L	98
81) Ethylbenzene	9.730	106	636306	44.23	ug/L	97
82) (m+p)Xylene	9.846	106	1707075	98.63	ug/L	89
83) o-Xylene	10.206	106	822160	47.88	ug/L	97
84) Styrene	10.224	104	1456462	50.09	ug/L	95
85) Bromoform	10.376	173	239160	52.79	ug/L	96
86) 2-Chlorobenzotrifluoride	10.456	180	733880	50.77	ug/L	91
87) Isopropylbenzene	10.547	105	2181133	51.70	ug/L	97
88) Cyclohexanone	10.614	55	436658	971.70	ug/L	92
89) trans-1,4-Dichloro-2-B...	10.864	53	145130	47.68	ug/L	82
91) 1,1,2,2-Tetrachloroethane	10.815	83	425696	50.19	ug/L	98
92) Bromobenzene	10.797	156	562372	46.75	ug/L	93
93) 1,2,3-Trichloropropane	10.840	110	118605	47.51	ug/L	95

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 Sample : 50 PPB ICV  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

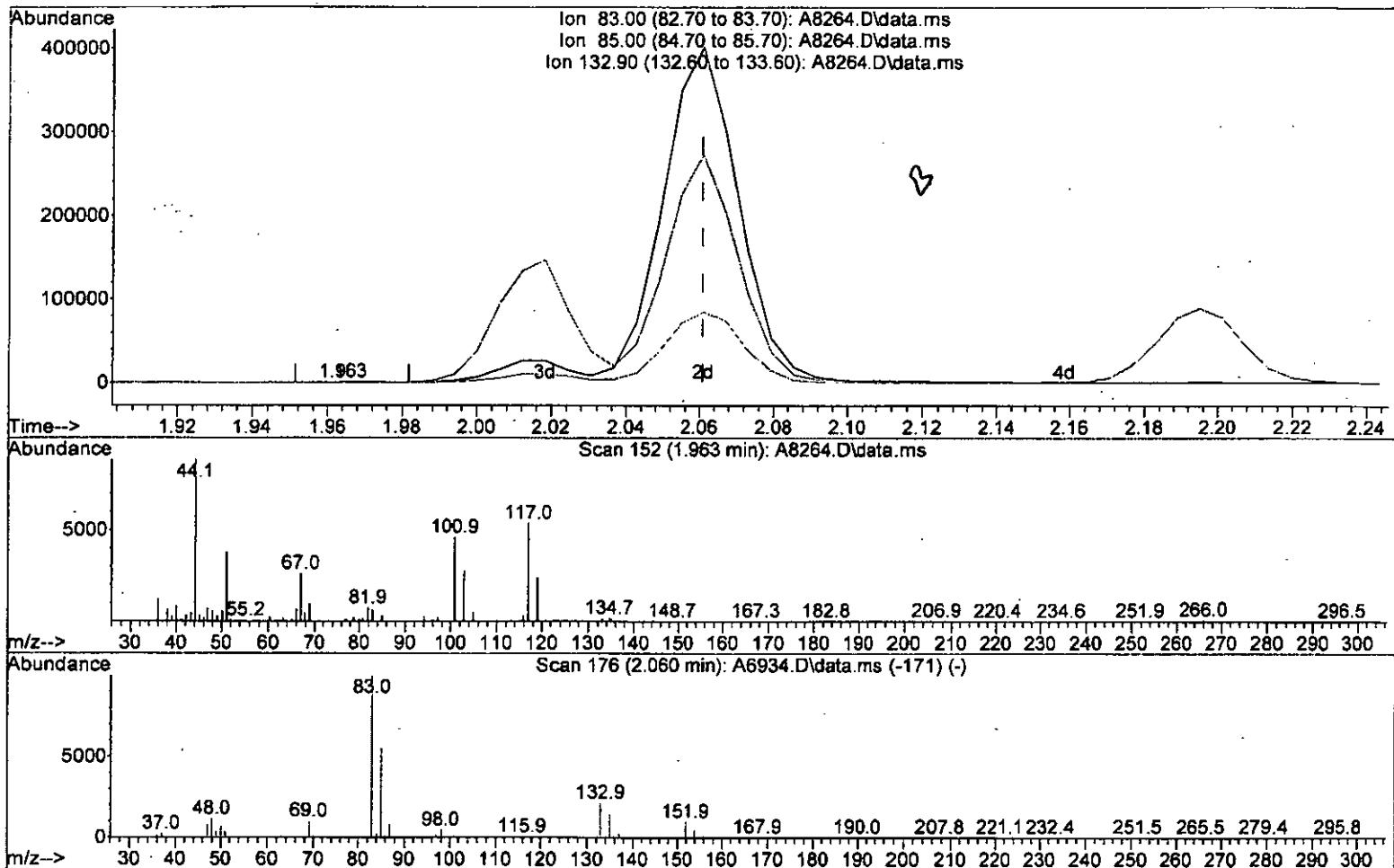
Quant Time: May 07 12:50:39 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 12:42:58 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.907	91	2524105	51.16	ug/L	99
95) 2-Chlorotoluene	10.974	91	1498082	48.43	ug/L	96
96) 3-Chlorotoluene	11.023	91	1685588	51.60	ug/L	98
97) 4-Chlorotoluene	11.065	91	1823198	49.44	ug/L	97
98) 1,3,5-Trimethylbenzene	11.065	105	1900259	51.57	ug/L	97
99) tert-Butylbenzene	11.340	119	1595457	49.87	ug/L	98
100) 1,2,4-Trimethylbenzene	11.376	105	1921358	51.06	ug/L	97
101) 3,4-Dichlorobenzotrifl...	11.443	214	543741	49.67	ug/L	98
102) sec-Butylbenzene	11.523	105	2251473	51.84	ug/L	98
103) p-Isopropyltoluene	11.645	119	2053039	53.05	ug/L	98
104) 1,3-Dclbenz	11.602	146	1175279	48.00	ug/L	98
105) 1,4-Dclbenz	11.681	146	1207885	47.06	ug/L	99
106) 2,4-Dichlorobenzotrifl...	11.736	214	510995	49.76	ug/L	98
107) 2,5-Dichlorobenzotrifl...	11.773	214	570516	49.01	ug/L	99
108) n-Butylbenzene	11.980	91	1772584	51.87	ug/L	97
109) 1,2-Dclbenz	11.986	146	1108674	48.99	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.608	157	80734	52.03	ug/L	98
111) Trielution Dichlorotol...	12.730	125	3183376	164.09	ug/L	97
112) 1,3,5-Trichlorobenzene	12.785	180	853627	51.51	ug/L	98
113) Coelution Dichlorotoluene	13.059	125	2284520	110.23	ug/L	95
114) 1,2,4-Tcbenzene	13.266	180	725726	50.90	ug/L	98
115) Hexachlorobt	13.406	225	282932	47.93	ug/L	94
116) Naphthalen	13.461	128	1430660	53.54	ug/L	97
117) 1,2,3-Tclbenzene	13.650	180	590964	50.33	ug/L	97
118) 2,4,5-Trichlorotoluene	14.235	159	485723	56.10	ug/L	97
119) 2,3,6-Trichlorotoluene	14.321	159	426315	56.34	ug/L	98

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

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8264.D  
 Acq On : 6 May 2015 10:31 pm  
 Operator : F. NAEGLER  
 Sample : 50 PPB ICV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 07 12:50:00 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 12:42:58 2015  
 Response via : Initial Calibration



TIC: A8264.D\data.ms

(11) Freon 123

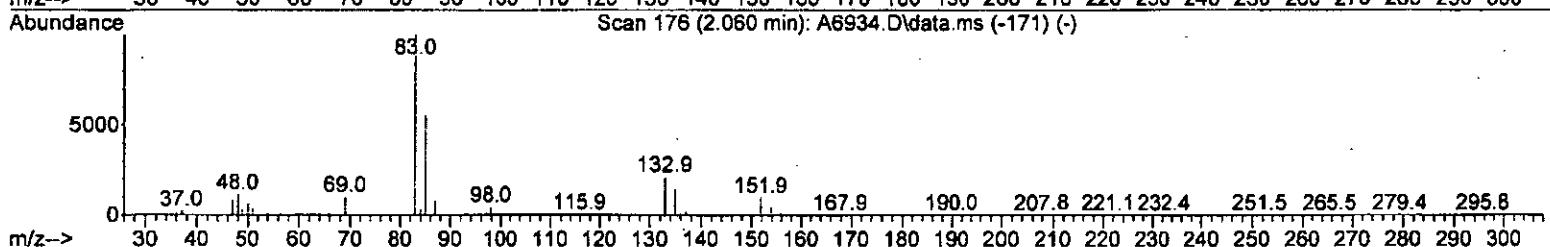
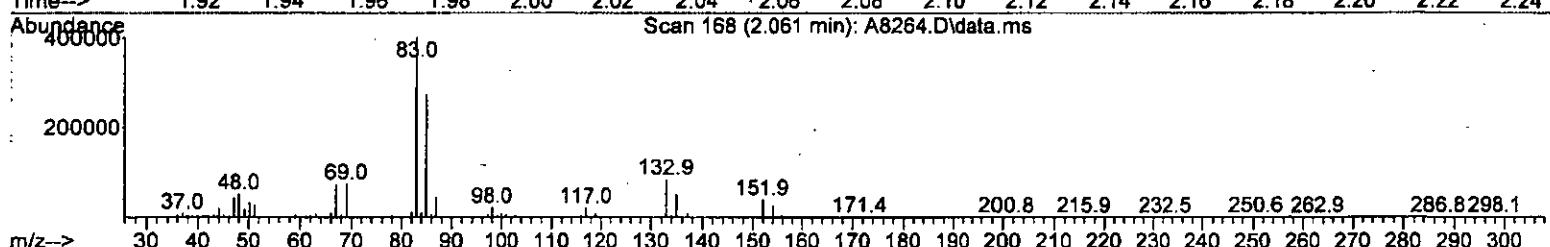
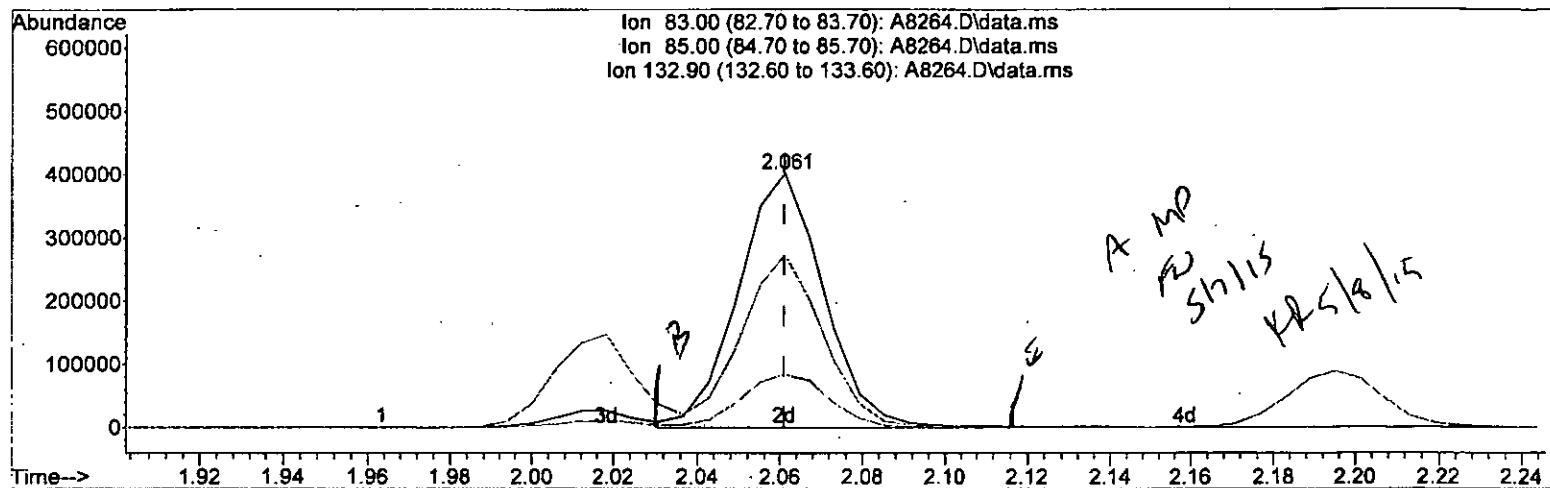
1.963min (-0.097) 0.07 ug/L

response 809

Ion	Exp%	Act%
83.00	100	100
85.00	47.30	48.99
132.90	19.90	23.88
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
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TIC: A8264.D\data.ms

(11) Freon 123

2.061min (+0.000) 53.27 ug/L m

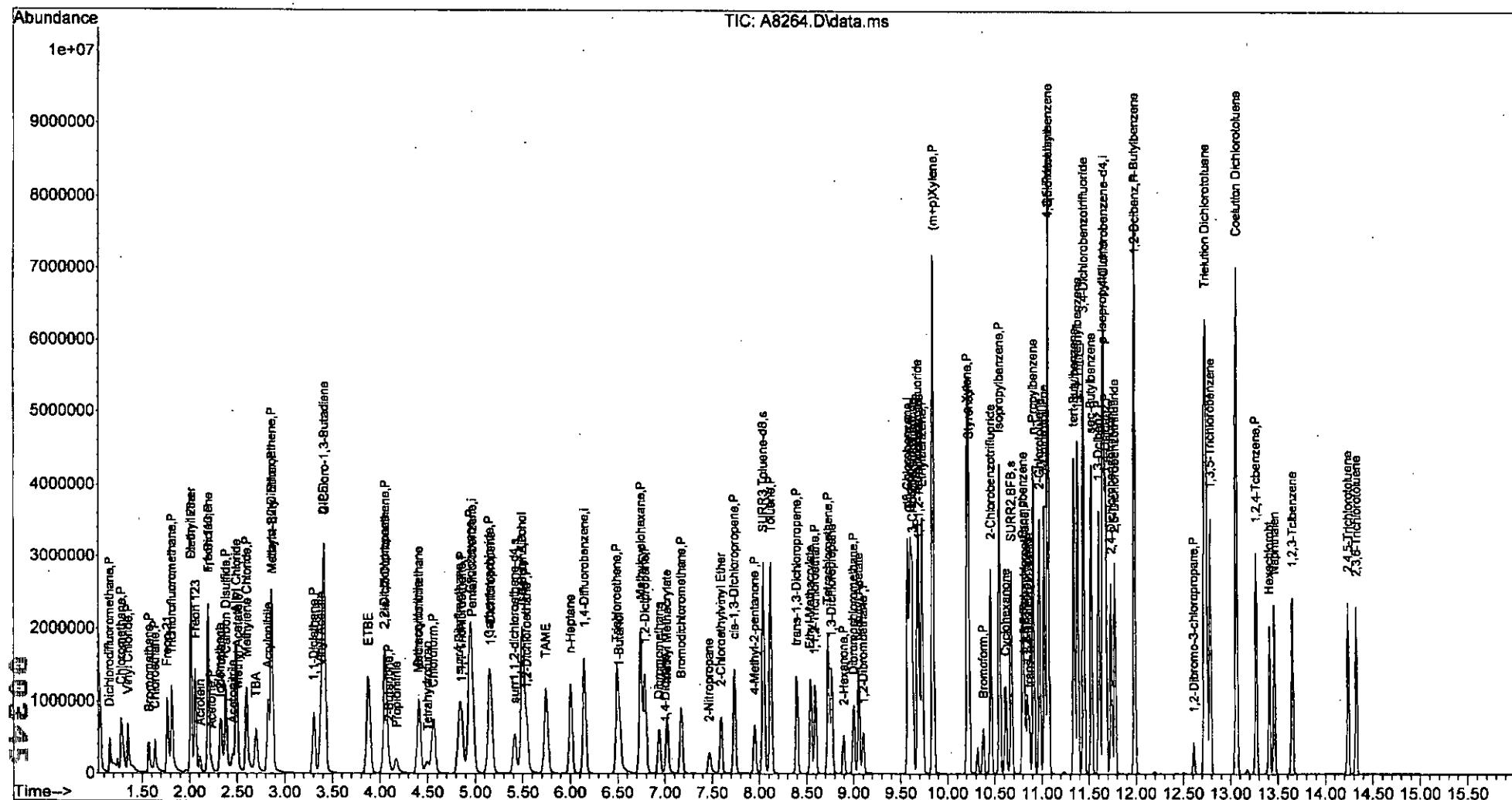
response 576765

Ion	Exp%	Act%
83.00	100	100
85.00	47.30	67.95#
132.90	19.90	20.99
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
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Response via : Initial Calibration



**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/24/15

**Continuing Calibration Verification Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Calibration Date:** 5/6/15  
**Calibration ID:** RC1500051  
**Analysis Lot:** 446162  
**Units:**  $\mu\text{g/L}$

**File ID:** I:\ACQUADATA\MSVOA10\DATA\052415\A8830.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	50.0	47.3	0.9504	0.8997	-5.3	NA	$\pm 20\%$	Average RF
Vinyl Chloride	50.0	48.5	0.6923	0.6721	-2.9	NA	$\pm 20\%$	Average RF
Chloroethane	50.0	47.5	0.3399	0.3230	-5.0	NA	$\pm 20\%$	Average RF
Bromomethane	50.0	39.8	0.2864	0.2282	-20.3 *	NA	$\pm 20\%$	Average RF
1,1-Dichloroethene	50.0	48.4	0.3684	0.3567	-3.2	NA	$\pm 20\%$	Average RF
Acetone	50.0	47.8	NA	NA	-4.4	$\pm 20\%$	Quadratic	
Carbon Disulfide	50.0	48.5	1.323	1.285	-2.9	NA	$\pm 20\%$	Average RF
Methylene Chloride	50.0	44.4	0.4520	0.4015	-11.2	NA	$\pm 20\%$	Average RF
trans-1,2-Dichloroethene	50.0	47.1	0.4146	0.3908	-5.7	NA	$\pm 20\%$	Average RF
1,1-Dichloroethane	50.0	47.1	0.9257	0.8726	-5.7	NA	$\pm 20\%$	Average RF
cis-1,2-Dichloroethene	50.0	46.2	0.4970	0.4589	-7.7	NA	$\pm 20\%$	Average RF
2-Butanone (MEK)	50.0	46.5	0.2352	0.2185	-7.1	NA	$\pm 20\%$	Average RF
Chloroform	50.0	46.9	0.8234	0.7730	-6.1	NA	$\pm 20\%$	Average RF
1,1,1-Trichloroethane	50.0	46.9	0.7004	0.6566	-6.3	NA	$\pm 20\%$	Average RF
Carbon Tetrachloride	50.0	49.3	0.1235	0.1218	-1.4	NA	$\pm 20\%$	Average RF
Benzene	50.0	46.8	1.253	1.173	-6.4	NA	$\pm 20\%$	Average RF
1,2-Dichloroethane	50.0	47.4	0.4326	0.4098	-5.3	NA	$\pm 20\%$	Average RF
Trichloroethene	50.0	52.0	0.3463	0.3604	4.1	NA	$\pm 20\%$	Average RF
1,2-Dichloropropane	50.0	46.4	0.3694	0.3431	-7.1	NA	$\pm 20\%$	Average RF
Bromodichloromethane	50.0	47.7	0.3893	0.3713	-4.6	NA	$\pm 20\%$	Average RF
cis-1,3-Dichloropropene	50.0	46.1	0.4412	0.4069	-7.8	NA	$\pm 20\%$	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	48.4	0.3164	0.3061	-3.3	NA	$\pm 20\%$	Average RF
Toluene	50.0	46.9	1.353	1.268	-6.3	NA	$\pm 20\%$	Average RF
trans-1,3-Dichloropropene	50.0	45.7	0.3677	0.3363	-8.5	NA	$\pm 20\%$	Average RF
1,1,2-Trichloroethane	50.0	45.5	0.2413	0.2193	-9.1	NA	$\pm 20\%$	Average RF
Tetrachloroethene	50.0	47.0	0.3005	0.2823	-6.1	NA	$\pm 20\%$	Average RF
2-Hexanone	50.0	51.4	0.2256	0.2318	2.8	NA	$\pm 20\%$	Average RF
Dibromochloromethane	50.0	52.6	0.2981	0.3135	5.2	NA	$\pm 20\%$	Average RF
Chlorobenzene	50.0	50.0	0.9831	0.9833	0.0	NA	$\pm 20\%$	Average RF
Ethylbenzene	50.0	49.6	0.5157	0.5112	-0.9	NA	$\pm 20\%$	Average RF
m,p-Xylenes	100	102	0.6204	0.6319	1.9	NA	$\pm 20\%$	Average RF
o-Xylene	50.0	49.1	0.6155	0.6046	-1.8	NA	$\pm 20\%$	Average RF
Styrene	50.0	51.7	1.042	1.077	3.4	NA	$\pm 20\%$	Average RF
Bromoform	50.0	53.2	0.1624	0.1726	6.3	NA	$\pm 20\%$	Average RF
1,1,2,2-Tetrachloroethane	50.0	44.1	0.5106	0.4507	-11.7	NA	$\pm 20\%$	Average RF
4-Bromofluorobenzene	50.0	46.4	0.4834	0.4488	-7.2	NA	$\pm 20\%$	Average RF
Toluene-d8	50.0	48.4	1.190	1.153	-3.1	NA	$\pm 20\%$	Average RF
Dibromofluoromethane	50.0	49.9	0.3120	0.3117	-0.1	NA	$\pm 20\%$	Average RF

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 25 08:40:45 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

5/25/15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)
1 i	Pentafluorobenzene	1.0000	1.0000	0.0	104	0.00
2 P	Dichlorodifluoromethane	0.5192	0.5490	-5.7	101	0.00
3 P	Chloromethane	0.9504	0.8997	5.3	97	0.00
4 P	Vinyl Chloride	0.6923	0.6721	2.9	100	0.00
5 P	Bromomethane	0.2864	0.2282	20.3#	87	0.00 <input checked="" type="checkbox"/>
6 P	Chloroethane	0.3399	0.3230	5.0	102	0.00
7	Freon 21	0.8305	0.8848	-6.5	105	0.00
8 P	Trichlorofluoromethane	0.6683	0.6788	-1.6	105	0.00
9	Diethyl Ether	0.4025	0.3926	2.5	98	0.00
10	Freon 123a	0.5071	0.5419	-6.9	108	0.00
11	Freon 123	0.5610	0.5773	-2.9	107	0.00
12	Acrolein	0.0756	0.0544	28.0#	74	0.00
13	1,1-Dicethene	0.3684	0.3567	3.2	103	0.00
14 P	Freon 113	0.3854	0.3785	1.8	105	0.00
15 P	Acetone	0.1691	0.1409	4.4	16.7	0.00
16	2-Propanol	0.0262	0.0268	-2.3	103	0.00
17	Iodomethane	0.5455	0.2902	46.8#	53	0.00
18 P	Carbon Disulfide	1.3232	1.2845	2.9	102	0.00
19	Acetonitrile	0.0230	0.0239	-3.9	110	0.00
20	Allyl Chloride	0.2397	0.2521	-5.2	108	0.00
21 P	Methyl Acetate	0.3642	0.3463	4.9	103	0.00
22 P	Methylene Chloride	0.4520	0.4015	11.2	97	0.00
23	TBA	0.0336	0.0311	7.4	100	0.00
24	Acrylonitrile	0.1616	0.1544	4.5	99	0.00
25 P	Methyl-t-Butyl Ether	1.0534	0.9412	10.7	95	0.00
26 P	trans-1,2-Dichloroethene	0.4146	0.3908	5.7	100	0.00
27 P	1,1-Dicethane	0.9257	0.8726	5.7	98	0.00
28	Vinyl Acetate	0.0747	0.0316	57.7#	45#	0.00
29	DIPE	2.5377	0.0000	100.0#	0#	0.00
30	2-Chloro-1,3-Butadiene	1.0766	1.1459	-6.4	107	0.00
31	ETBE	1.7332	0.0000	100.0#	0#	3.88#
32	2,2-Dichloropropane	0.5982	0.4163	30.4#	73	0.00
33 P	cis-1,2-Dichloroethene	0.4970	0.4589	7.7	97	0.00
34 P	2-Butanone	0.2352	0.2185	7.1	100	0.00
35	Propionitrile	0.0584	0.0541	7.4	96	0.00
36	Bromoform	0.3056	0.2922	4.4	99	0.00
37	Methacrylonitrile	0.1379	0.1208	12.4	93	0.00
38	Tetrahydrofuran	0.1454	0.1271	12.6	94	0.00
39 P	Chloroform	0.8234	0.7730	6.1	99	0.00
40 P	1,1,1-Trichloroethane	0.7004	0.6566	6.3	98	0.00
41 i	1,4-Difluorobenzene	1.0000	1.0000	0.0	102	0.00
42 P	Cyclohexane	0.4754	0.4780	-0.5	102	0.00
43 s	surr4,Dibromoform	0.3120	0.3117	0.1	105	0.00
44 P	Carbontetrachloride	0.1235	0.1218	1.4	101	0.00
45	1,1-Dichloropropene	0.4042	0.3784	6.4	97	0.00
46 s	surr1,1,2-dichloroethane-d4	0.3206	0.3152	1.7	104	0.00

## Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 25 08:40:45 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)	
47 P	Benzene	1.2531	1.1729	6.4	98	0.00	
48 P	1,2-Dichloroethane	0.4326	0.4098	5.3	97	0.00	
49	Iso-Butyl Alcohol	0.0130	0.0112	13.8	96	0.00	
50	TAME	0.7222	0.0000	100.0#	0#	-5.74#	
51	n-Heptane	0.5448	0.4592	15.7	86	0.00	
52	1-Butanol	0.0058	0.0000	100.0#	0#	-6.52#	
53 P	Trichloroethene	0.3463	0.3604	-4.1	108	0.00	
54 P	Methylcyclohexane	0.5121	0.5019	2.0	100	0.00	
55 P	1,2-Diclpropane	0.3694	0.3431	7.1	98	0.00	
56	Dibromomethane	0.1625	0.1490	8.3	97	0.00	
57	1,4-Dioxane	0.0018	0.0018	0.0	111	0.00	
58	Methyl Methacrylate	0.1455	0.1332	8.5	92	0.00	
59 P	Bromodichloromethane	0.3893	0.3713	4.6	98	0.00	
60	2-Nitropropane	0.0426	0.0452	-6.1	114	0.00	
61	2-Chloroethylvinyl Ether	0.1728	0.1594	7.8	93	0.00	
62 P	cis-1,3-Dichloropropene	0.4412	0.4069	7.8	91	0.00	
63 P	4-Methyl-2-pentanone	0.3164	0.3061	3.3	97	0.00	
64 s	SURR3, Toluene-d8	1.1896	1.1526	3.1	100	0.00	
65 P	Toluene	1.3531	1.2678	6.3	97	0.00	
66 P	trans-1,3-Dichloropropene	0.3677	0.3363	8.5	91	0.00	
67	Ethyl Methacrylate	0.2898	0.2752	5.0	94	0.00	
68 P	1,1,2-Trichloroethane	0.2413	0.2193	9.1	95	0.00	
69 s	SURR2, BFB	0.4834	0.4488	7.2	95	0.00	
70 i	d5-Chlorobenzene	1.0000	1.0000	0.0	96	0.00	
71 P	Tetrachloroethene	0.3005	0.2823	6.1	95	0.00	
72 P	2-Hexanone	0.2256	0.2318	-2.7	98	0.00	
73	1,3-Dichloropropane	0.4369	0.4291	1.8	97	0.00	
74 P	Dibromochloromethane	0.2981	0.3135	-5.2	98	0.00	
75	N-Butyl Acetate	0.5418	0.5650	-4.3	95	0.00	
76 P	1,2-Dibromoethane	0.2435	0.2405	1.2	96	0.00	
77	3-Chlorobenzotrifluoride	0.5472	0.0001	100.0#	0#	0.00	
78 P	Chlorobenzene	0.9831	0.9833	-0.0	96	0.00	
79	4-Chlorobenzotrifluoride	0.4816	0.0001	100.0#	0#	0.00	
80	1,1,1,2-Tetrachloroethane	0.3366	0.3309	1.7	93	0.00	
81 P	Ethylbenzene	0.5157	0.5112	0.9	96	0.00	
82 P	(m+p) Xylene	0.6204	0.6319	-1.9	94	0.00	
83 P	o-Xylene	0.6155	0.6046	1.8	93	0.00	
84 P	Styrene	1.0423	1.0772	-3.3	94	0.00	
85 P	Bromoform	0.1624	0.1726	-6.3	96	0.00	
86	2-Chlorobenzotrifluoride	0.5181	0.0000	100.0#	0#	0.00	
87 P	Isopropylbenzene	1.5120	1.5573	-3.0	92	0.00	
88	Cyclohexanone	0.0161	0.0099	M	38.5#	62	0.00
89	trans-1,4-Dichloro-2-Butene	0.1091	0.0911	16.5	83	0.00	
90 i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	94	0.00	
91 P	1,1,2,2-Tetrachloroethane	0.5106	0.4507	11.7	81	0.00	

Data Path : I:\ACQUDATA\msvola10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 25 08:40:45 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
92	Bromobenzene	0.7243	0.7071	2.4	95	0.00
93	1,2,3-Trichloropropane	0.1503	0.1460	2.9	98	0.00
94	n-Propylbenzene	2.9707	3.1827	-7.1	93	0.00
95	2-Chlorotoluene	1.8626	1.8794	-0.9	93	0.00
96	3-Chlorotoluene	1.9669	0.0000	100.0#	0#	11.03#
97	4-Chlorotoluene	2.2203	2.2722	-2.3	92	0.00
98	1,3,5-Trimethylbenzene	2.2186	2.2874	-3.1	90	0.00
99	tert-Butylbenzene	1.9260	1.9357	-0.5	90	0.00
100	1,2,4-Trimethylbenzene	2.2658	2.3749	-4.8	92	0.00
101	3,4-Dichlorobenzotrifluorid	0.6591	0.0002	100.0#	0#	0.01
102	sec-Butylbenzene	2.6151	2.7248	-4.2	90	0.00
103	p-Isopropyltoluene	2.3299	2.4035	-3.2	90	0.00
104 P	1,3-Dclbenz	1.4741	1.4240	3.4	90	0.00
105 P	1,4-Dclbenz	1.5453	1.4741	4.6	91	0.00
106	2,4-Dichlorobenzotrifluorid	0.6183	0.0001	100.0#	0#	0.00
107	2,5-Dichlorobenzotrifluorid	0.7008	0.0001	100.0#	0#	-0.02
108	n-Butylbenzene	2.0576	2.0765	-0.9	88	0.00
109 P	1,2-Dclbenz	1.3624	1.3612	0.1	93	0.00
110 P	1,2-Dibromo-3-chloropropane	0.0934	0.0907	2.9	96	0.00
111	Trielution Dichlorotoluene	1.1680	0.0004	100.0#	0#	0.00
112	1,3,5-Trichlorobenzene	0.9978	0.0001	100.0#	0#	-0.01
113	Coelution Dichlorotoluene	1.2478	0.0004	100.0#	0#	0.00
114 P	1,2,4-Tcbenzene	0.8584	0.8090	5.8	86	0.00
115	Hexachlorobt	0.3554	0.3182	10.5	85	0.00
116	Naphthalen	1.6087	1.5938	0.9	88	0.00
117	1,2,3-Tclbenzene	0.7069	0.6815	3.6	87	0.00
118	2,4,5-Trichlorotoluene	0.5213	0.0002	100.0#	0#	0.00
119	2,3,6-Trichlorotoluene	0.4556	0.0001	100.0#	0#	0.01

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV LQ15D5556-02 Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 25 08:40:45 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.963	168	998279	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.146	114	1502136	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1341602	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	774971	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromofl methane	4.829	113	468153	49.94	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	99.88%		
46) surr1,1,2-dichloroetha...	5.414	65	473461	49.15	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	98.30%		
64) SURR3,Toluene-d8	8.041	98	1731290	48.44	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	96.88%		
69) SURR2,BFB	10.675	95	674200	46.42	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	92.84%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	548089	52.87	ug/L	98
3) Chloromethane	1.281	50	898178	47.33	ug/L	99
4) Vinyl Chloride	1.348	62	670942	48.54	ug/L	98
5) Bromomethane	1.567	94	227821	39.84	ug/L	100
6) Chloroethane	1.634	64	322464	47.51	ug/L	92
7) Freon 21	1.762	67	883281	53.27	ug/L	100
8) Trichlorofluoromethane	1.811	101	677614	50.79	ug/L	97
9) Diethyl Ether	2.012	59	391902	48.76	ug/L	# 76
10) Freon 123a	2.012	67	540938	53.43	ug/L	96
11) Freon 123	2.061	83	576337	51.45	ug/L	81
12) Acrolein	2.104	56	271682	179.97	ug/L	97
13) 1,1-Dicethene	2.195	96	356131	48.42	ug/L	# 86
14) Freon 113	2.195	101	377821	49.11	ug/L	96
15) Acetone	2.226	43	140646	47.82	ug/L	95
16) 2-Propanol	2.329	45	534284	1020.81	ug/L	94
17) Iodomethane	2.317	142	289672	26.60	ug/L	100
18) Carbon Disulfide	2.378	76	1282300	48.54	ug/L	100
19) Acetonitrile	2.451	40	119301	259.25	ug/L	93
20) Allyl Chloride	2.488	76	251696	52.60	ug/L	# 12
21) Methyl Acetate	2.500	43	345736	47.55	ug/L	84
22) Methylene Chloride	2.591	84	400846	44.42	ug/L	# 58
23) TBA	2.695	59	620285	925.21	ug/L	65
24) Acrylonitrile	2.817	53	770837	238.84	ug/L	98
25) Methyl-t-Butyl Ether	2.860	73	939577	44.68	ug/L	86
26) trans-1,2-Dichloroethene	2.860	96	390167m	47.13	ug/L	
27) 1,1-Dicethane	3.305	63	871093	47.13	ug/L	98
28) Vinyl Acetate	3.372	86	31511	21.14	ug/L	# 77
30) 2-Chloro-1,3-Butadiene	3.414	53	1143901	53.22	ug/L	86
32) 2,2-Dichloropropane	4.048	77	415624	34.80	ug/L	96
33) cis-1,2-Dichloroethene	4.054	96	458130	46.17	ug/L	92
34) 2-Butanone	4.085	43	218160	46.45	ug/L	.89
35) Propionitrile	4.164	54	269916	231.59	ug/L	96
36) Bromochloromethane	4.408	130	291648	47.80	ug/L	# 73
37) Methacrylonitrile	4.408	67	120602	43.80	ug/L	# 31

X 5/25/15

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 08:40:45 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Tetrahydrofuran	4.493	42	126833	43.69	ug/L	80
39) Chloroform	4.560	83	771657	46.94	ug/L	97
40) 1,1,1-Trichloroethane	4.853	97	655508	46.87	ug/L	93
42) Cyclohexane	4.945	41	718025	50.27	ug/L	94
44) Carbontetrachloride	5.152	121	182892	49.28	ug/L	87
45) 1,1-Dichloropropene	5.158	75	568467	46.82	ug/L	96
47) Benzene	5.499	78	1761879	46.80	ug/L	81
48) 1,2-Dichloroethane	5.536	62	615606	47.37	ug/L	89
49) Iso-Butyl Alcohol	5.493	43	334986	857.94	ug/L	94
51) n-Heptane	6.005	43	689797	42.14	ug/L	79
53) Trichloroethene	6.493	130	541322	52.04	ug/L	94
54) Methylcyclohexane	6.743	55	753876	49.00	ug/L	# 79
55) 1,2-Diclpropane	6.792	63	515379	46.44	ug/L	98
56) Dibromomethane	6.938	93	223749	45.83	ug/L	99
57) 1,4-Dioxane	7.005	88	54757m	988.72	ug/L	
58) Methyl Methacrylate	7.023	69	200137	45.78	ug/L	# 59
59) Bromodichloromethane	7.170	83	557705	47.69	ug/L	99
60) 2-Nitropropane	7.468	41	135871	106.08	ug/L	96
61) 2-Chloroethylvinyl Ether	7.596	63	239429	46.13	ug/L	93
62) cis-1,3-Dichloropropene	7.737	75	611193	46.11	ug/L	94
63) 4-Methyl-2-pentanone	7.950	43	459786	48.37	ug/L	88
65) Toluene	8.121	91	1904426	46.85	ug/L	98
66) trans-1,3-Dichloropropene	8.395	75	505185	45.73	ug/L	97
67) Ethyl Methacrylate	8.541	69	413354	47.48	ug/L	# 52
68) 1,1,2-Trichloroethane	8.590	97	329438	45.45	ug/L	94
71) Tetrachloroethene	8.730	164	378673	46.96	ug/L	99
72) 2-Hexanone	8.889	43	310951	51.38	ug/L	89
73) 1,3-Dichloropropane	8.767	76	575726	49.11	ug/L	# 77
74) Dibromochloromethane	8.999	129	420626	52.58	ug/L	98
75) N-Butyl Acetate	9.053	43	757963	52.14	ug/L	92
76) 1,2-Dibromoethane	9.096	107	322607	49.38	ug/L	100
78) Chlorobenzene	9.602	112	1319205	50.01	ug/L	97
80) 1,1,1,2-Tetrachloroethane	9.694	131	443998	49.16	ug/L	96
81) Ethylbenzene	9.730	106	685876	49.57	ug/L	98
82) (m+p) Xylene	9.846	106	1695458	101.86	ug/L	93
83) o-Xylene	10.206	106	811123	49.12	ug/L	96
84) Styrene	10.218	104	1445204	51.68	ug/L	99
85) Bromoform	10.376	173	231601	53.16	ug/L	98
87) Isopropylbenzene	10.547	105	2089297	51.50	ug/L	99
88) Cyclohexanone	10.614	55	265121	613.47	ug/L	91
89) trans-1,4-Dichloro-2-B...	10.864	53	122194	41.75	ug/L	83
91) 1,1,2,2-Tetrachloroethane	10.809	83	349281	44.13	ug/L	98
92) Bromobenzene	10.797	156	548010	48.82	ug/L	92
93) 1,2,3-Trichloropropane	10.840	110	113171	48.58	ug/L	# 82
94) n-Propylbenzene	10.907	91	2466473	53.57	ug/L	98
95) 2-Chlorotoluene	10.974	91	1456506	50.45	ug/L	97
97) 4-Chlorotoluene	11.065	91	1760909	51.17	ug/L	96
98) 1,3,5-Trimethylbenzene	11.065	105	1772704	51.55	ug/L	99
99) tert-Butylbenzene	11.340	119	1500111	50.25	ug/L	97
100) 1,2,4-Trimethylbenzene	11.376	105	1840449	52.41	ug/L	96
102) sec-Butylbenzene	11.523	105	2111662	52.10	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 25 08:40:45 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

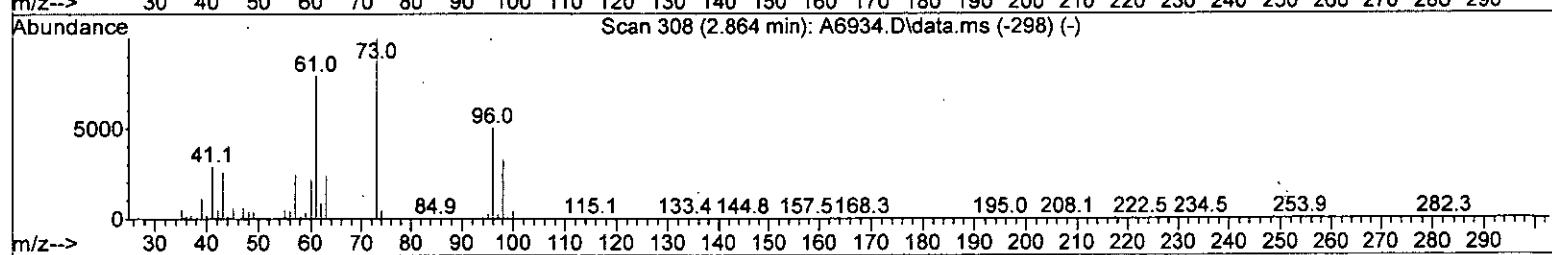
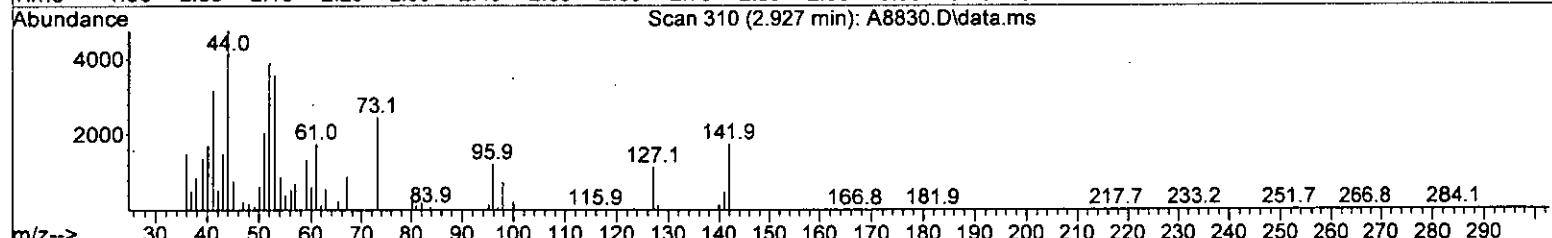
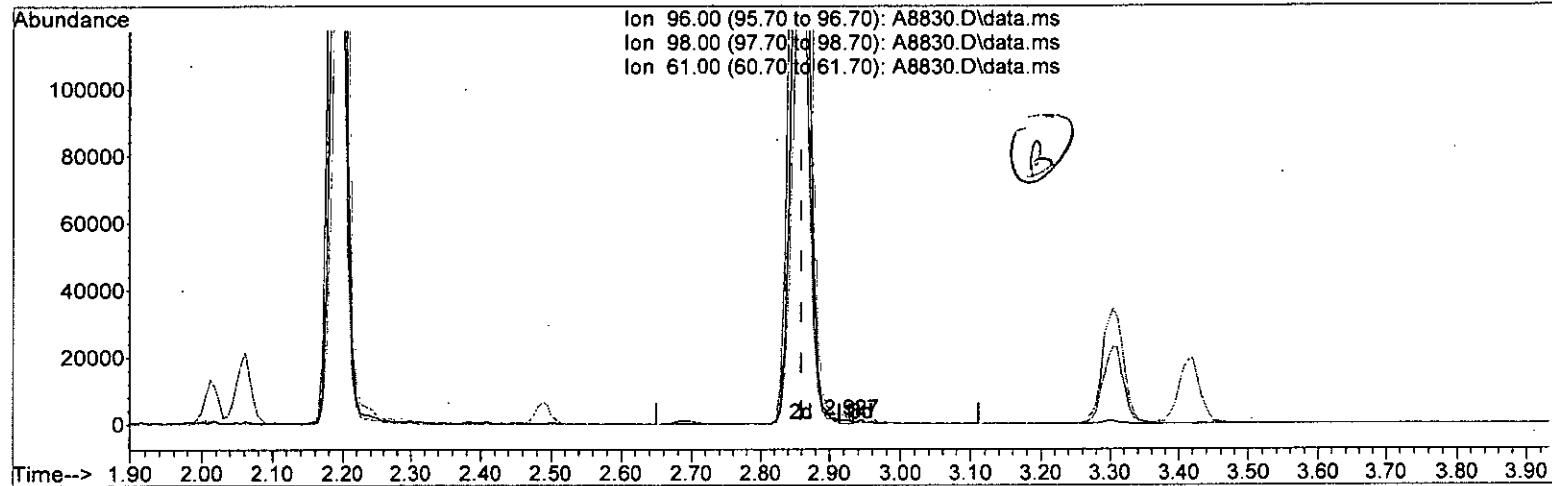
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
103) p-Isopropyltoluene	11.644	119	1862638	51.58	ug/L	98
104) 1,3-Dclbenz	11.602	146	1103526	48.30	ug/L	97
105) 1,4-Dclbenz	11.681	146	1142380	47.70	ug/L	97
108) n-Butylbenzene	11.980	91	1609212	50.46	ug/L	96
109) 1,2-Dclbenz	11.980	146	1054918	49.96	ug/L	96
110) 1,2-Dibromo-3-chloropr...	12.614	157	70300	48.55	ug/L	92
114) 1,2,4-Tcbenzene	13.266	180	626948	47.12	ug/L	98
115) Hexachlorobt	13.406	225	246580	44.76	ug/L	97
116) Naphthalen	13.461	128	1235154	49.54	ug/L	98
117) 1,2,3-Tclbenzene	13.650	180	528180	48.21	ug/L	96

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 24 21:35:35 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8830.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.927min (+0.067) 0.12 ug/L

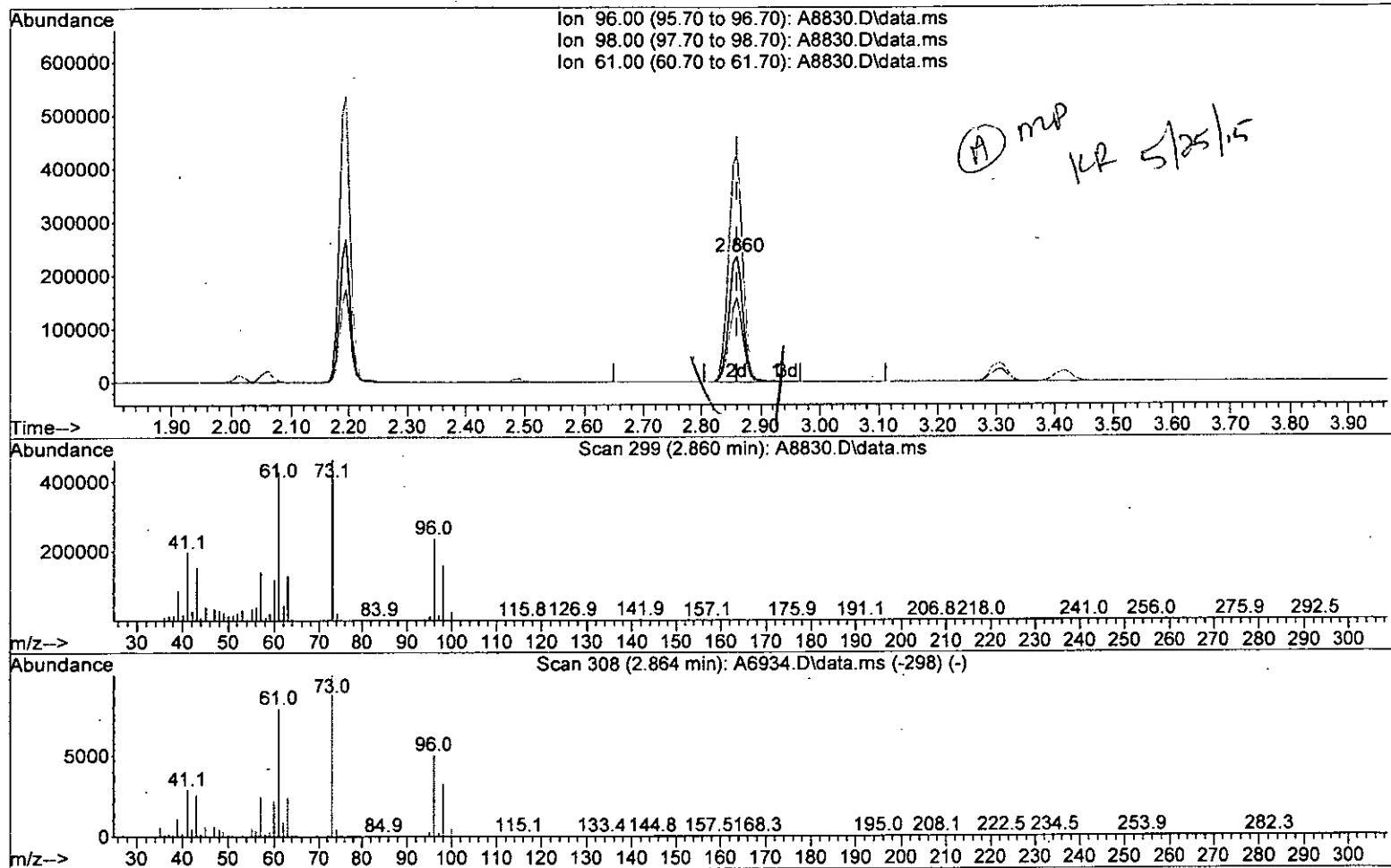
response 997

Ion	Exp%	Act%
96.00	100	100
98.00	64.70	61.05
61.00	150.90	143.55
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 24 21:35:35 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8830.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.860min (+0.000) 47.13 ug/L m

response 390167

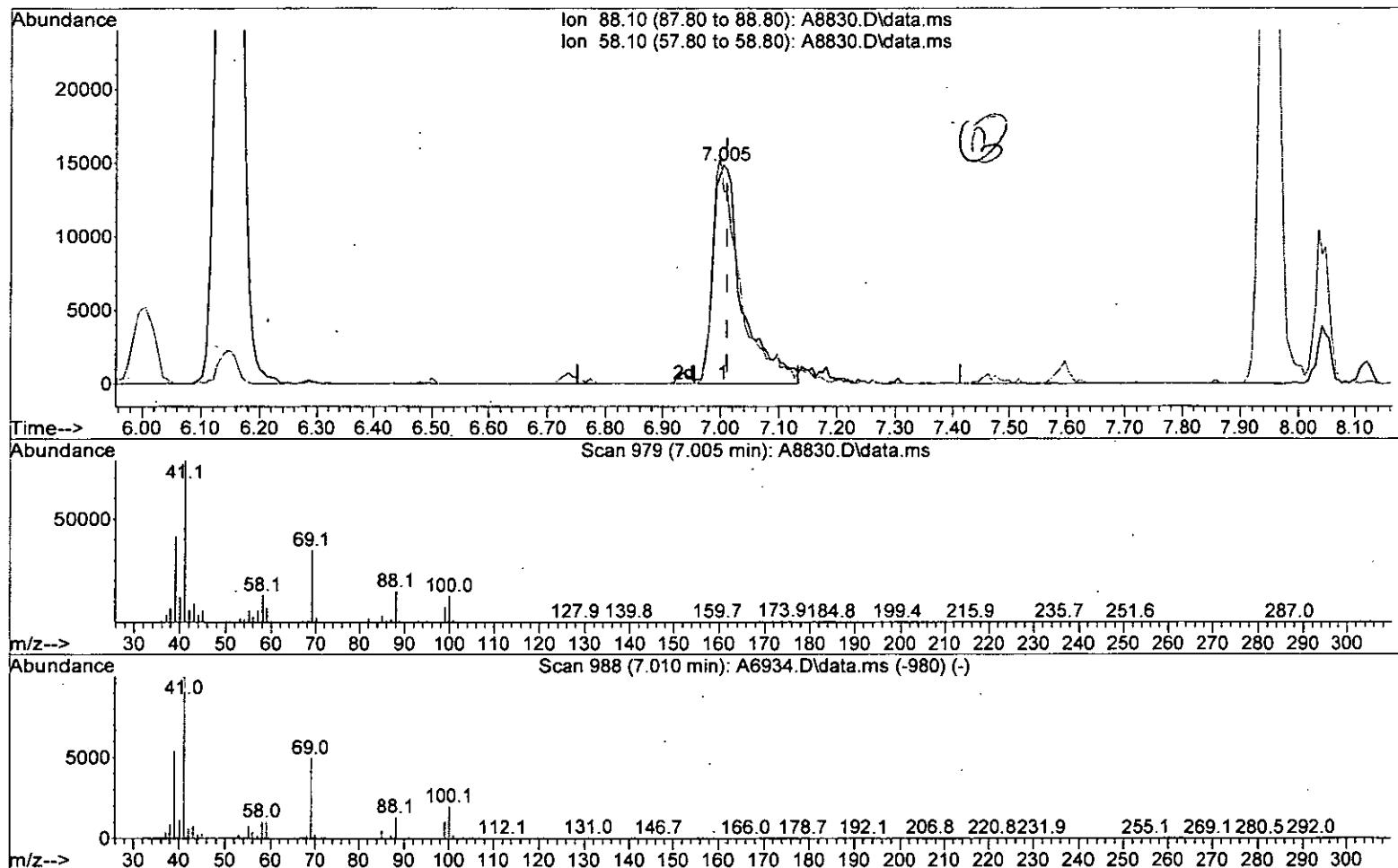
Ion	Exp%	Ad%
96.00	100	100
98.00	64.70	67.18
61.00	150.90	181.13#
0.00	0.00	0.00

*47.13*

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV  
 MISC :  
 ALS Vial : 26 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 24 21:35:35 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8830.D\data.ms

(57) 1,4-Dioxane

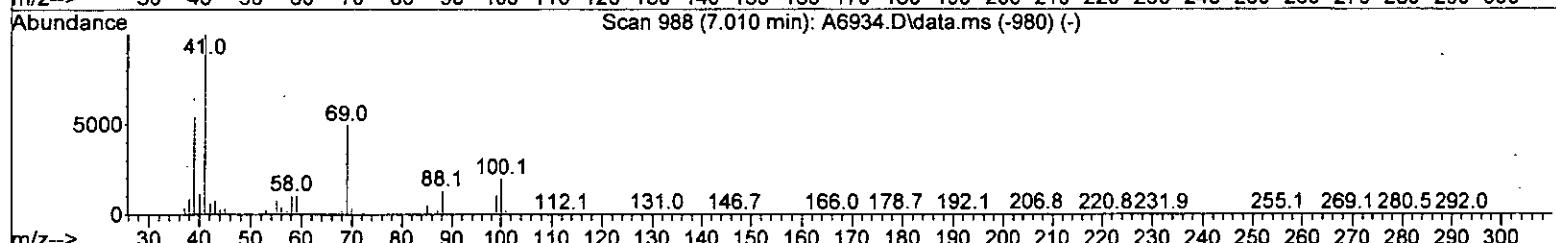
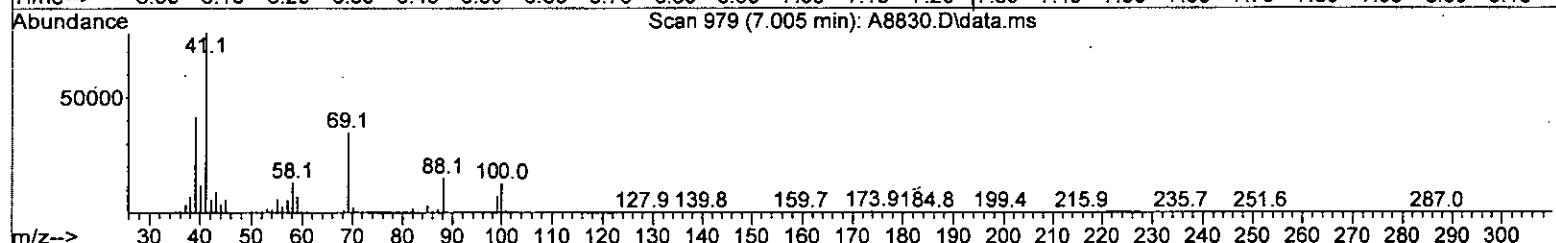
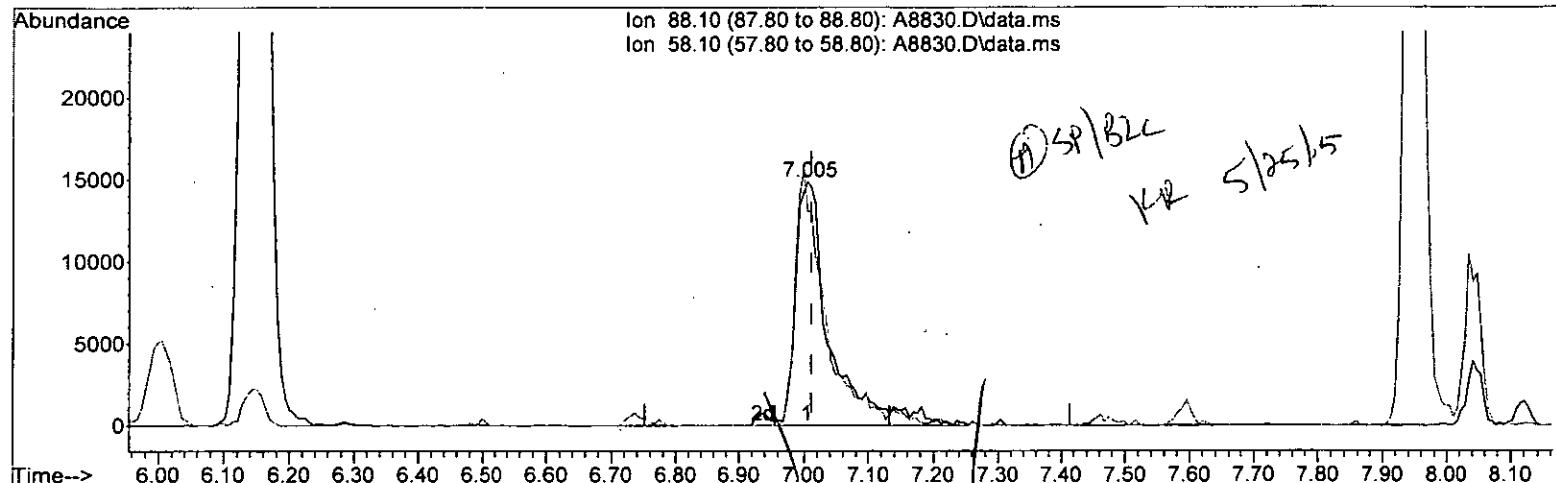
7.005min (-0.006) 924.69 ug/L

response 51211

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	87.61#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8830.D  
 Acq On : 24 May 2015 9:20 pm  
 Operator : F.Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 24 21:35:35 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8830.D\data.ms

## (57) 1,4-Dioxane

7.005min (-0.006) 988.72 ug/L m

response 54757

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	87.61#
0.00	0.00	0.00
0.00	0.00	0.00

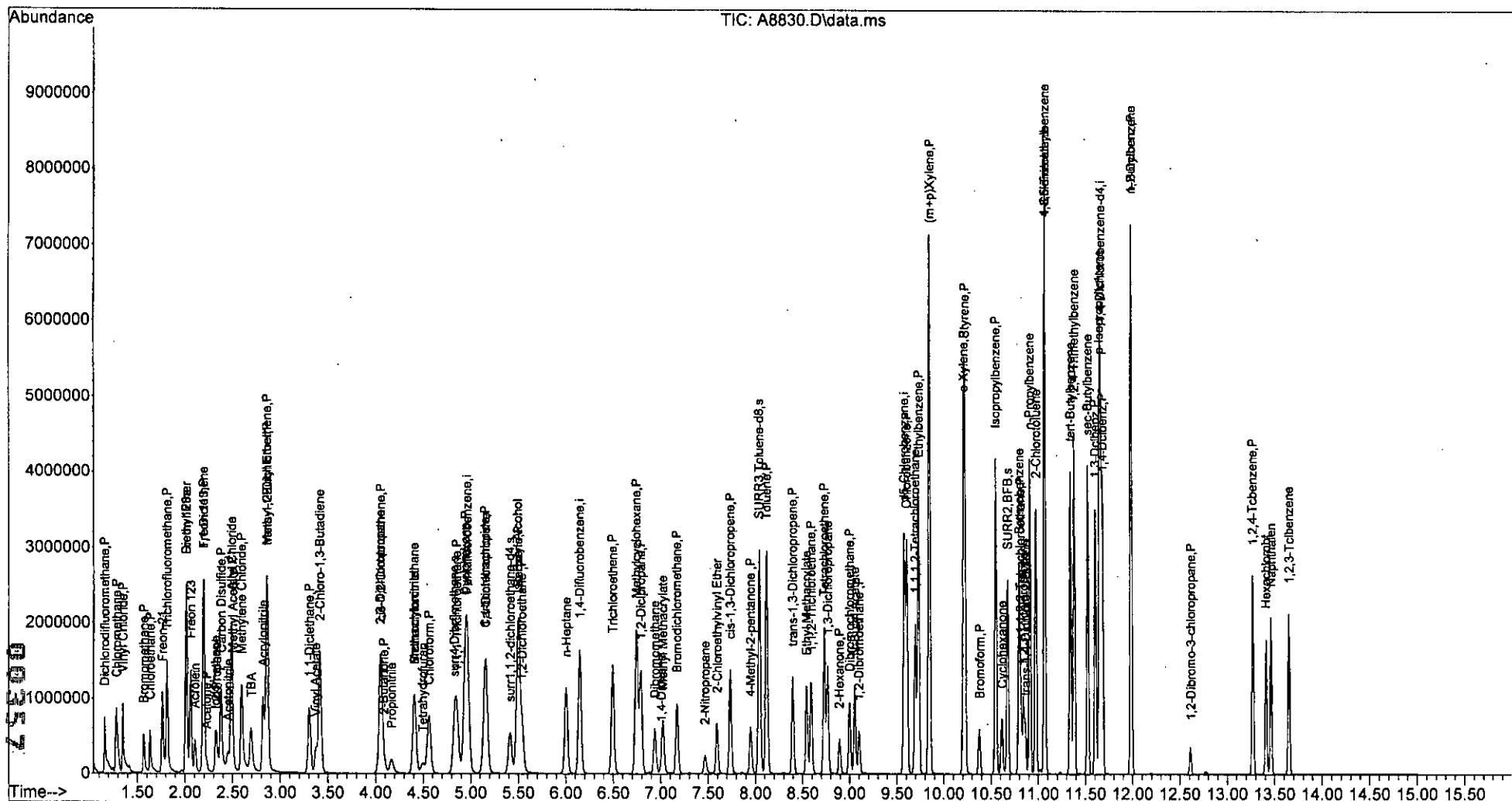
*W.W.*

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
Data File : A8830.D  
Acq On : 24 May 2015 9:20 pm  
Operator : F.Naegler  
Sample : CCV  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 08:40:45 2015  
Quant Method : I:\ACQUUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/25/15

**Continuing Calibration Verification Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Calibration Date:** 5/6/15  
**Calibration ID:** RC1500051  
**Analysis Lot:** 446166  
**Units:**  $\mu\text{g/L}$

**File ID:** I:\ACQUDATA\MSVOA10\DATA\052515\A8852.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	50.0	51.4	0.9504	0.9771	2.8	NA	$\pm 20\%$	Average RF
Vinyl Chloride	50.0	53.4	0.6923	0.7397	6.8	NA	$\pm 20\%$	Average RF
Chloroethane	50.0	52.0	0.3399	0.3532	3.9	NA	$\pm 20\%$	Average RF
Bromomethane	50.0	39.7	0.2864	0.2271	-20.7 *	NA	$\pm 20\%$	Average RF
1,1-Dichloroethene	50.0	52.3	0.3684	0.3851	4.5	NA	$\pm 20\%$	Average RF
Acetone	50.0	43.9	NA	NA	NA	-12.3	$\pm 20\%$	Quadratic
Carbon Disulfide	50.0	49.5	1.323	1.311	-0.9	NA	$\pm 20\%$	Average RF
Methylene Chloride	50.0	48.6	0.4520	0.4389	-2.9	NA	$\pm 20\%$	Average RF
trans-1,2-Dichloroethene	50.0	51.1	0.4146	0.4238	2.2	NA	$\pm 20\%$	Average RF
1,1-Dichloroethane	50.0	48.5	0.9257	0.8979	-3.0	NA	$\pm 20\%$	Average RF
cis-1,2-Dichloroethene	50.0	48.3	0.4970	0.4802	-3.4	NA	$\pm 20\%$	Average RF
2-Butanone (MEK)	50.0	46.1	0.2352	0.2170	-7.7	NA	$\pm 20\%$	Average RF
Chloroform	50.0	49.2	0.8234	0.8100	-1.6	NA	$\pm 20\%$	Average RF
1,1,1-Trichloroethane	50.0	49.9	0.7004	0.6990	-0.2	NA	$\pm 20\%$	Average RF
Carbon Tetrachloride	50.0	53.4	0.1235	0.1318	6.7	NA	$\pm 20\%$	Average RF
Benzene	50.0	49.3	1.253	1.236	-1.4	NA	$\pm 20\%$	Average RF
1,2-Dichloroethane	50.0	48.6	0.4326	0.4209	-2.7	NA	$\pm 20\%$	Average RF
Trichloroethene	50.0	50.1	0.3463	0.3471	0.2	NA	$\pm 20\%$	Average RF
1,2-Dichloropropane	50.0	48.9	0.3694	0.3612	-2.2	NA	$\pm 20\%$	Average RF
Bromodichloromethane	50.0	50.5	0.3893	0.3933	1.0	NA	$\pm 20\%$	Average RF
cis-1,3-Dichloropropene	50.0	50.7	0.4412	0.4476	1.4	NA	$\pm 20\%$	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	46.6	0.3164	0.2947	-6.9	NA	$\pm 20\%$	Average RF
Toluene	50.0	49.7	1.353	1.344	-0.7	NA	$\pm 20\%$	Average RF
trans-1,3-Dichloropropene	50.0	50.1	0.3677	0.3683	0.2	NA	$\pm 20\%$	Average RF
1,1,2-Trichloroethane	50.0	47.6	0.2413	0.2296	-4.8	NA	$\pm 20\%$	Average RF
Tetrachloroethene	50.0	49.5	0.3005	0.2977	-0.9	NA	$\pm 20\%$	Average RF
2-Hexanone	50.0	48.7	0.2256	0.2199	-2.5	NA	$\pm 20\%$	Average RF
Dibromochloromethane	50.0	52.9	0.2981	0.3155	5.8	NA	$\pm 20\%$	Average RF
Chlorobenzene	50.0	51.9	0.9831	1.020	3.8	NA	$\pm 20\%$	Average RF
Ethylbenzene	50.0	52.9	0.5157	0.5455	5.8	NA	$\pm 20\%$	Average RF
m,p-Xylenes	100	108	0.6204	0.6696	7.9	NA	$\pm 20\%$	Average RF
o-Xylene	50.0	51.8	0.6155	0.6380	3.7	NA	$\pm 20\%$	Average RF
Styrene	50.0	53.8	1.042	1.122	7.6	NA	$\pm 20\%$	Average RF
Bromoform	50.0	52.4	0.1624	0.1701	4.8	NA	$\pm 20\%$	Average RF
1,1,2,2-Tetrachloroethane	50.0	51.7	0.5106	0.5283	3.5	NA	$\pm 20\%$	Average RF
4-Bromofluorobenzene	50.0	47.9	0.4834	0.4630	-4.2	NA	$\pm 20\%$	Average RF
Toluene-d8	50.0	49.4	1.190	1.175	-1.3	NA	$\pm 20\%$	Average RF
Dibromofluoromethane	50.0	50.3	0.3120	0.3138	0.6	NA	$\pm 20\%$	Average RF

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 09:16:07 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

(K.R.) 5/25/15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
1 i	Pentafluorobenzene	1.0000	1.0000	0.0	101	0.00
2 P	Dichlorodifluoromethane	0.5192	0.6200	-19.4	111	0.00
3 P	Chloromethane	0.9504	0.9771	-2.8	102	0.00
4 P	Vinyl Chloride	0.6923	0.7397	-6.8	107	0.00
5 P	Bromomethane	0.2864	0.2271	20.7#	84	0.00 X
6 P	Chloroethane	0.3399	0.3532	-3.9	108	0.00
7	Freon 21	0.8305	0.9063	-9.1	104	0.00
8 P	Trichlorofluoromethane	0.6683	0.7327	-9.6	109	0.00
9	Diethyl Ether	0.4025	0.4030	-0.1	98	0.00
10	Freon 123a	0.5071	0.5464	-7.7	105	0.00
11	Freon 123	0.5610	0.5996	-6.9	108	0.00
12	Acrolein	0.0756	0.0662	12.4	87	0.00
13	1,1-Dicethene	0.3684	0.3851	-4.5	108	0.00
14 P	Freon 113	0.3854	0.4143	-7.5	111	0.00
15 P	Acetone	0.1691	0.1301	12.3	23.1#	93 0.00 X (R)
16	2-Propanol	0.0262	0.0262	0.0	97	0.00
17	Iodomethane	0.5455	0.2778	49.1#	49#	0.00 X
18 P	Carbon Disulfide	1.3232	1.3110	0.9	101	0.00
19	Acetonitrile	0.0230	0.0239	-3.9	106	0.00
20	Allyl Chloride	0.2397	0.2578	-7.6	107	0.00
21 P	Methyl Acetate	0.3642	0.3642	0.0	105	0.00
22 P	Methylene Chloride	0.4520	0.4389	2.9	103	0.00
23	TBA	0.0336	0.0312	7.1	97	0.00
24	Acrylonitrile	0.1616	0.1603	0.8	99	0.00
25 P	Methyl-t-Butyl Ether	1.0534	0.9632	8.6	94	0.00
26 P	trans-1,2-Dichloroethene	0.4146	0.4238	-2.2	105	0.00
27 P	1,1-Dicethane	0.9257	0.8979	3.0	98	0.00
28	Vinyl Acetate	0.0747	0.0662	11.4	92	0.00
29	DIPE	2.5377	0.0015	99.9#	0#	0.00
30	2-Chloro-1,3-Butadiene	1.0766	1.1647	-8.2	105	0.00
31	ETBE	1.7332	0.0000	100.0#	0#	-3.88#
32	2,2-Dichloropropane	0.5982	0.6156	-2.9	105	0.00
33 P	cis-1,2-Dichloroethene	0.4970	0.4802	3.4	99	0.00
34 P	2-Butanone	0.2352	0.2170	7.7	96	0.00
35	Propionitrile	0.0584	0.0529	9.4	91	0.00
36	Bromochloromethane	0.3056	0.2875	5.9	95	0.00
37	Methacrylonitrile	0.1379	0.1243	9.9	92	0.00
38	Tetrahydrofuran	0.1454	0.1324	8.9	95	0.00
39 P	Chloroform	0.8234	0.8100	1.6	100	0.00
40 P	1,1,1-Trichloroethane	0.7004	0.6990	0.2	101	0.00
41 i	1,4-Difluorobenzene	1.0000	1.0000	0.0	99	0.00
42 P	Cyclohexane	0.4754	0.4929	-3.7	103	0.00
43 s	surr4, Dibromoethane	0.3120	0.3138	-0.6	103	0.00
44 P	Carbontetrachloride	0.1235	0.1318	-6.7	106	0.00
45	1,1-Dichloropropene	0.4042	0.4065	-0.6	101	0.00
46 s	surr1,1,2-dichloroethane-d4	0.3206	0.3238	-1.0	103	0.00

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 09:16:07 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47 P	Benzene	1.2531	1.2355	1.4	100	0.00
48 P	1,2-Dichloroethane	0.4326	0.4209	2.7	96	0.00
49	Iso-Butyl Alcohol	0.0130	0.0113	13.1	94	0.00
50	TAME	0.7222	0.0000	100.0#	0#	-5.74#
51	n-Heptane	0.5448	0.5623	-3.2	102	0.00
52	1-Butanol	0.0058	0.0000	100.0#	0#	-6.52#
53 P	Trichloroethene	0.3463	0.3471	-0.2	101	0.00
54 P	Methylcyclohexane	0.5121	0.5312	-3.7	103	0.00
55 P	1,2-Dicloropropane	0.3694	0.3612	2.2	100	0.00
56	Dibromomethane	0.1625	0.1587	2.3	101	0.00
57	1,4-Dioxane	0.0018	0.0019	-5.6	110	0.00
58	Methyl Methacrylate	0.1455	0.1333	8.4	89	0.00
59 P	Bromodichloromethane	0.3893	0.3933	-1.0	101	0.00
60	2-Nitropropane	0.0426	0.0505	-18.5	123	0.00
61	2-Chloroethylvinyl Ether	0.1728	0.1560	9.7	88	0.00
62 P	cis-1,3-Dichloropropene	0.4412	0.4476	-1.5	97	0.00
63 P	4-Methyl-2-pentanone	0.3164	0.2947	6.9	91	0.00
64 S	SURR3,Toluene-d8	1.1896	1.1746	1.3	99	0.00
65 P	Toluene	1.3531	1.3440	0.7	100	0.00
66 P	trans-1,3-Dichloropropene	0.3677	0.3683	-0.2	96	0.00
67	Ethyl Methacrylate	0.2898	0.2849	1.7	94	0.00
68 P	1,1,2-Trichloroethane	0.2413	0.2296	4.8	97	0.00
69 S	SURR2,BFB	0.4834	0.4630	4.2	95	0.00
70 i	d5-Chlorobenzene	1.0000	1.0000	0.0	96	0.00
71 P	Tetrachloroethene	0.3005	0.2977	0.9	100	0.00
72 P	2-Hexanone	0.2256	0.2199	2.5	93	0.00
73	1,3-Dichloropropene	0.4369	0.4335	0.8	98	0.00
74 P	Dibromochloromethane	0.2981	0.3155	-5.8	99	0.00
75	N-Butyl Acetate	0.5418	0.5630	-3.9	95	0.00
76 P	1,2-Dibromoethane	0.2435	0.2485	-2.1	99	0.00
77	3-Chlorobenzotrifluoride	0.5472	0.5761	-5.3	101	0.00
78 P	Chlorobenzene	0.9831	1.0203	-3.8	100	0.00
79	4-Chlorobenzotrifluoride	0.4816	0.5165	-7.2	101	0.00
80	1,1,1,2-Tetrachloroethane	0.3366	0.3530	-4.9	99	0.00
81 P	Ethylbenzene	0.5157	0.5455	-5.8	103	0.00
82 P	(m+p)Xylene	0.6204	0.6696	-7.9	100	0.00
83 P	o-Xylene	0.6155	0.6380	-3.7	99	0.00
84 P	Styrene	1.0423	1.1216	-7.6	98	0.00
85 P	Bromoform	0.1624	0.1701	-4.7	95	0.00
86	2-Chlorobenzotrifluoride	0.5181	0.5584	-7.8	99	0.00
87 P	Isopropylbenzene	1.5120	1.6552	-9.5	98	0.00
88	Cyclohexanone	0.0161	0.0255	51	-58.4#	162
89	trans-1,4-Dichloro-2-Butene	0.1091	0.0976	10.5	89	0.00
90 i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	94	0.00
91 P	1,1,2,2-Tetrachloroethane	0.5106	0.5283	-3.5	96	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:16:07 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)
92	Bromobenzene	0.7243	0.7303	-0.8	98	0.00
93	1,2,3-Trichloropropane	0.1503	0.1407	6.4	94	0.00
94	n-Propylbenzene	2.9707	3.3839	-13.9	100	0.00
95	2-Chlorotoluene	1.8626	1.9749	-6.0	98	0.00
96	3-Chlorotoluene	1.9669	2.1341	-8.5	97	0.00
97	4-Chlorotoluene	2.2203	2.3788	-7.1	97	0.00
98	1,3,5-Trimethylbenzene	2.2186	2.4399	-10.0	96	0.00
99	tert-Butylbenzene	1.9260	2.0484	-6.4	96	0.00
100	1,2,4-Trimethylbenzene	2.2658	2.4934	-10.0	97	0.00
101	3,4-Dichlorobenzotrifluorid	0.6591	0.7049	-6.9	96	0.00
102	sec-Butylbenzene	2.6151	2.8867	-10.4	96	0.00
103	p-Isopropyltoluene	2.3299	2.5770	-10.6	96	0.00
104 P	1,3-Dclbenz	1.4741	1.4999	-1.8	95	0.00
105 P	1,4-Dclbenz	1.5453	1.5552	-0.6	96	0.00
106	2,4-Dichlorobenzotrifluorid	0.6183	0.6472	-4.7	97	0.00
107	2,5-Dichlorobenzotrifluorid	0.7008	0.7232	-3.2	96	0.00
108	n-Butylbenzene	2.0576	2.2396	-8.8	95	0.00
109 P	1,2-Dclbenz	1.3624	1.3870	-1.8	95	0.00
110 P	1,2-Dibromo-3-chloropropane	0.0934	0.0915	2.0	97	0.00
111	Trielution Dichlorotoluene	1.1680	1.3055	-11.8	95	0.00
112	1,3,5-Trichlorobenzene	0.9978	1.0482	-5.1	95	0.00
113	Coelution Dichlorotoluene	1.2478	1.3926	-11.6	94	0.00
114 P	1,2,4-Tcbenzene	0.8584	0.8632	-0.6	92	0.00
115	Hexachlorobt	0.3554	0.3625	-2.0	97	0.00
116	Naphthalen	1.6087	1.6571	-3.0	92	0.00
117	1,2,3-Tclbenzene	0.7069	0.7226	-2.2	93	0.00
118	2,4,5-Trichlorotoluene	0.5213	0.5466	-4.9	89	0.00
119	2,3,6-Trichlorotoluene	0.4556	0.4868	-6.8	95	0.00

(#= Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV LQ1504334 - 02, 5539 - 02 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:16:07 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	967237	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.146	114	1458844	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1345766	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	777811	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.829	113	457826	50.29	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.58%			
46) surr1,1,2-dichloroetha...	5.414	65	472350	50.49	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.98%			
64) SURR3,Toluene-d8	8.042	98	1713623	49.37	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.74%			
69) SURR2,BFB	10.675	95	675499	47.89	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.78%			
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	599687m	59.71	ug/L	
3) Chloromethane	1.281	50	945105	51.40	ug/L	100
4) Vinyl Chloride	1.354	62	715497	53.42	ug/L	97
5) Bromomethane	1.573	94	219685	39.65	ug/L	97
6) Chloroethane	1.640	64	341632	51.95	ug/L	91
7) Freon 21	1.762	67	876634	54.56	ug/L	100
8) Trichlorofluoromethane	1.811	101	708704	54.82	ug/L	99
9) Diethyl Ether	2.012	59	389844m	50.06	ug/L	
10) Freon 123a	2.012	67	528471	53.88	ug/L	92
11) Freon 123	2.061	83	579915	53.43	ug/L	81
12) Acrolein	2.110	56	319932	218.74	ug/L	94
13) 1,1-Dicethene	2.195	96	372436	52.26	ug/L	# 80
14) Freon 113	2.195	101	400711	53.75	ug/L	94
15) Acetone	2.226	43	125863	43.87	ug/L	96
16) 2-Propanol	2.329	45	506991	999.75	ug/L	92
17) Iodomethane	2.323	142	268700	25.46	ug/L	98
18) Carbon Disulfide	2.378	76	1268059	49.54	ug/L	99
19) Acetonitrile	2.451	40	115704	259.51	ug/L	98
20) Allyl Chloride	2.488	76	249361	53.78	ug/L	# 23
21) Methyl Acetate	2.506	43	352260	50.00	ug/L	83
22) Methylene Chloride	2.598	84	424553	48.56	ug/L	# 64
23) TBA	2.695	59	602861	928.08	ug/L	61
24) Acrylonitrile	2.823	53	775379	247.96	ug/L	98
25) Methyl-t-Butyl Ether	2.866	73	931636	45.72	ug/L	87
26) trans-1,2-Dichloroethene	2.860	96	409881	51.10	ug/L	# 82
27) 1,1-Dicethane	3.305	63	868493	48.50	ug/L	99
28) Vinyl Acetate	3.378	86	64079	44.37	ug/L	# 76
30) 2-Chloro-1,3-Butadiene	3.421	53	1126498	54.09	ug/L	85
32) 2,2-Dichloropropane	4.055	77	595391	51.45	ug/L	98
33) cis-1,2-Dichloroethene	4.055	96	464452	48.31	ug/L	# 84
34) 2-Butanone	4.091	43	209882	46.13	ug/L	89
35) Propionitrile	4.164	54	255957	226.66	ug/L	97
36) Bromochloromethane	4.408	130	278109	47.05	ug/L	# 69
37) Methacrylonitrile	4.408	67	120186	45.05	ug/L	# 35

YF  
5/26/15

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:16:07 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Tetrahydrofuran	4.494	42	128049	45.53	ug/L	75
39) Chloroform	4.561	83	783496	49.19	ug/L	95
40) 1,1,1-Trichloroethane	4.859	97	676097	49.90	ug/L	96
42) Cyclohexane	4.951	41	719137	51.84	ug/L	92
44) Carbontetrachloride	5.152	121	192312	53.36	ug/L	86
45) 1,1-Dichloropropene	5.158	75	593078	50.29	ug/L	95
47) Benzene	5.499	78	1802457	49.30	ug/L	84
48) 1,2-Dichloroethane	5.542	62	613978	48.64	ug/L	89
49) Iso-Butyl Alcohol	5.493	43	329732	869.55	ug/L	86
51) n-Heptane	6.005	43	820332	51.61	ug/L	#
53) Trichloroethene	6.493	130	506309	50.12	ug/L	94
54) Methylcyclohexane	6.749	55	774899	51.87	ug/L	#
55) 1,2-Diclpropane	6.792	63	526890	48.88	ug/L	92
56) Dibromomethane	6.938	93	231491	48.82	ug/L	99
57) 1,4-Dioxane	7.005	88	54412m	1011.64	ug/L	
58) Methyl Methacrylate	7.024	69	194495	45.81	ug/L	#
59) Bromodichloromethane	7.170	83	573809	50.52	ug/L	99
60) 2-Nitropropane	7.469	41	147209	118.35	ug/L	88
61) 2-Chloroethylvinyl Ether	7.597	63	227557	45.15	ug/L	91
62) cis-1,3-Dichloropropene	7.737	75	652941	50.72	ug/L	95
63) 4-Methyl-2-pentanone	7.950	43	429903	46.57	ug/L	90
65) Toluene	8.121	91	1960681	49.66	ug/L	99
66) trans-1,3-Dichloropropene	8.395	75	537328	50.08	ug/L	99
67) Ethyl Methacrylate	8.542	69	415560	49.15	ug/L	#
68) 1,1,2-Trichloroethane	8.590	97	334941	47.58	ug/L	93
71) Tetrachloroethene	8.731	164	400605	49.53	ug/L	96
72) 2-Hexanone	8.895	43	295916	48.74	ug/L	87
73) 1,3-Dichloropropane	8.767	76	583456	49.62	ug/L	#
74) Dibromochloromethane	8.999	129	424529	52.90	ug/L	98
75) N-Butyl Acetate	9.054	43	757624	51.96	ug/L	92
76) 1,2-Dibromoethane	9.096	107	334429	51.03	ug/L	95
77) 3-Chlorobenzotrifluoride	9.627	180	775333	52.64	ug/L	98
78) Chlorobenzene	9.602	112	1373043	51.89	ug/L	99
79) 4-Chlorobenzotrifluoride	9.682	180	695152	53.62	ug/L	96
80) 1,1,1,2-Tetrachloroethane	9.694	131	475000	52.43	ug/L	98
81) Ethylbenzene	9.730	106	734082	52.89	ug/L	94
82) (m+p)Xylene	9.846	106	1802175	107.93	ug/L	92
83) o-Xylene	10.206	106	858588	51.83	ug/L	98
84) Styrene	10.218	104	1509430	53.81	ug/L	98
85) Bromoform	10.377	173	228949	52.39	ug/L	99
86) 2-Chlorobenzotrifluoride	10.456	180	751483	53.89	ug/L	91
87) Isopropylbenzene	10.547	105	2227477	54.73	ug/L	100
88) Cyclohexanone	10.614	55	686414	1583.40	ug/L	96
89) trans-1,4-Dichloro-2-B...	10.864	53	131312	44.72	ug/L	81
91) 1,1,2,2-Tetrachloroethane	10.809	83	410898	51.73	ug/L	99
92) Bromobenzene	10.797	156	568014	50.41	ug/L	93
93) 1,2,3-Trichloropropane	10.840	110	109406	46.79	ug/L	#
94) n-Propylbenzene	10.907	91	2631998	56.95	ug/L	99
95) 2-Chlorotoluene	10.974	91	1536061	53.01	ug/L	97
96) 3-Chlorotoluene	11.029	91	1659904	54.25	ug/L	97
97) 4-Chlorotoluene	11.065	91	1850260	53.57	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

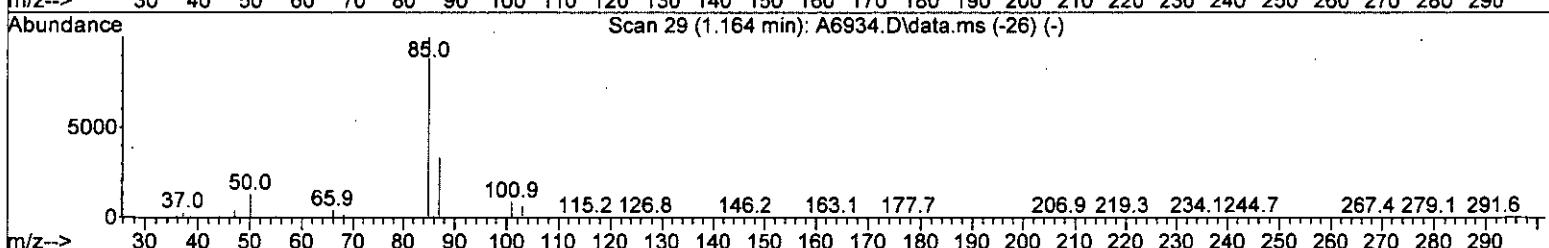
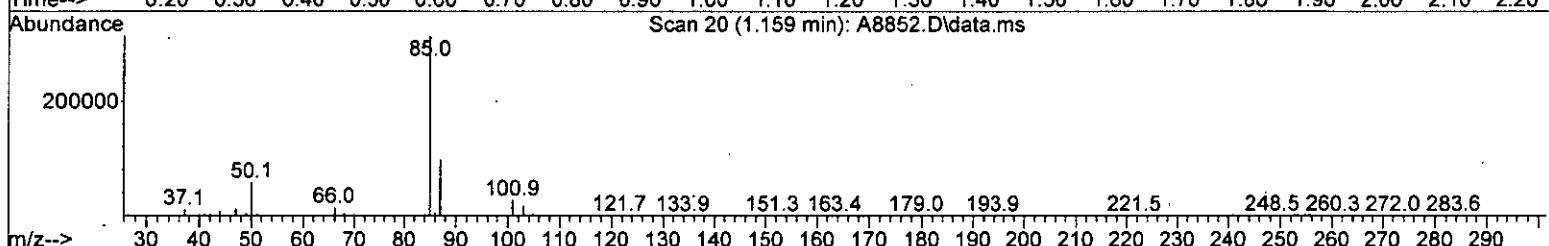
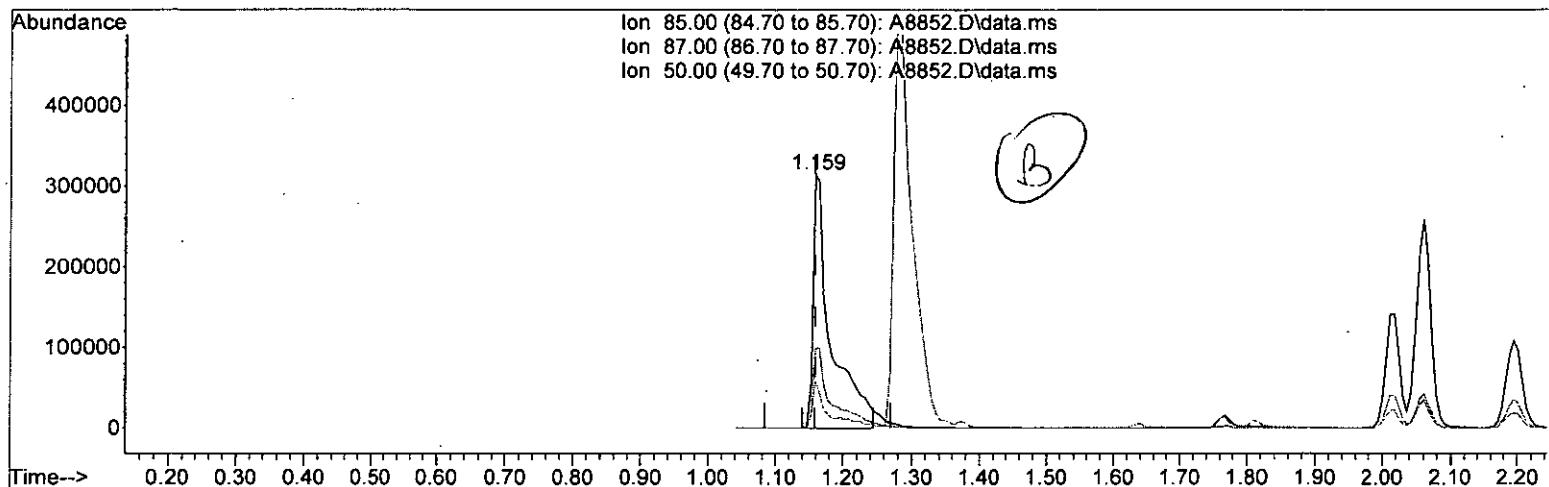
Quant Time: May 25 09:16:07 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	1, 3, 5-Trimethylbenzene	11.065	105	1897777	54.99	ug/L	97
99)	tert-Butylbenzene	11.340	119	1593305	53.18	ug/L	97
100)	1, 2, 4-Trimethylbenzene	11.376	105	1939363	55.02	ug/L	96
101)	3, 4-Dichlorobenzotrifl...	11.443	214	548292	53.48	ug/L	99
102)	sec-Butylbenzene	11.523	105	2245290	55.19	ug/L	97
103)	p-Isopropyltoluene	11.645	119	2004397	55.30	ug/L	99
104)	1, 3-Dclbenz	11.602	146	1166628	50.88	ug/L	97
105)	1, 4-Dclbenz	11.681	146	1209686	50.32	ug/L	97
106)	2, 4-Dichlorobenzotrifl...	11.736	214	503400	52.34	ug/L	97
107)	2, 5-Dichlorobenzotrifl...	11.773	214	562503	51.60	ug/L	97
108)	n-Butylbenzene	11.980	91	1741977	54.42	ug/L	97
109)	1, 2-Dclbenz	11.986	146	1078807	50.90	ug/L	98
110)	1, 2-Dibromo-3-chloropr...	12.614	157	71138	48.94	ug/L	94
111)	Trielution Dichlorotol...	12.730	125	3046307	167.65	ug/L	97
112)	1, 3, 5-Trichlorobenzene	12.785	180	815268	52.52	ug/L	97
113)	Coelution Dichlorotoluene	13.059	125	2166313	111.60	ug/L	94
114)	1, 2, 4-Tcbenzene	13.266	180	671382	50.28	ug/L	97
115)	Hexachlorobt	13.406	225	281964	51.00	ug/L	97
116)	Naphthalen	13.461	128	1288880	51.50	ug/L	98
117)	1, 2, 3-Tclbenzene	13.650	180	562011	51.11	ug/L	98
118)	2, 4, 5-Trichlorotoluene	14.236	159	425138	52.42	ug/L	98
119)	2, 3, 6-Trichlorotoluene	14.321	159	378676	53.43	ug/L	97

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

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:13:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8852.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 57.43 ug/L

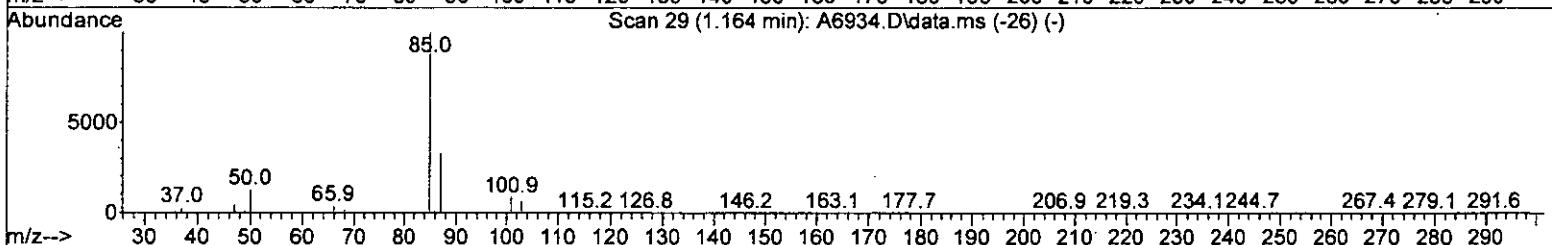
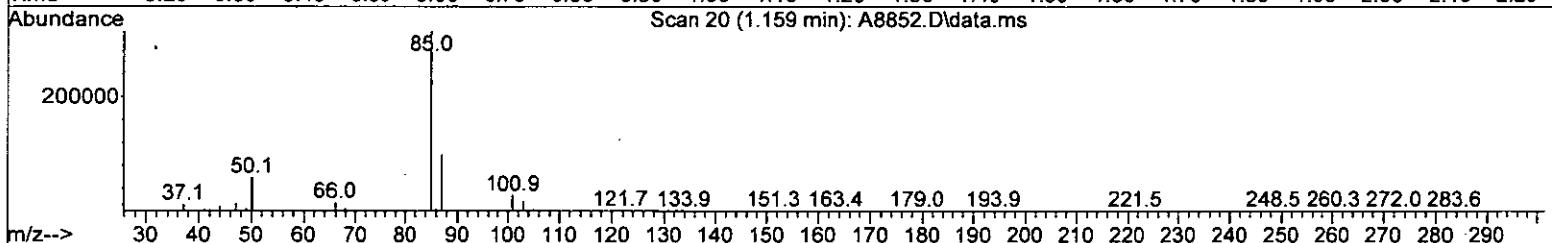
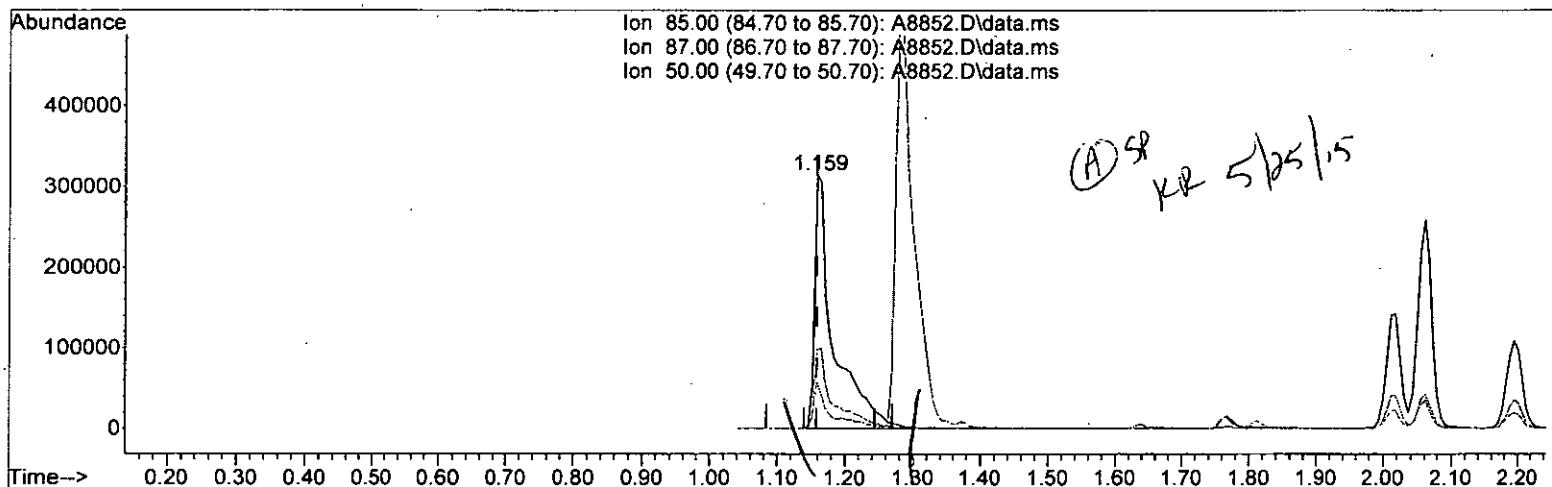
response 576766

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.17
50.00	15.00	18.38
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:13:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8852.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 59.71 ug/L m

response 599687

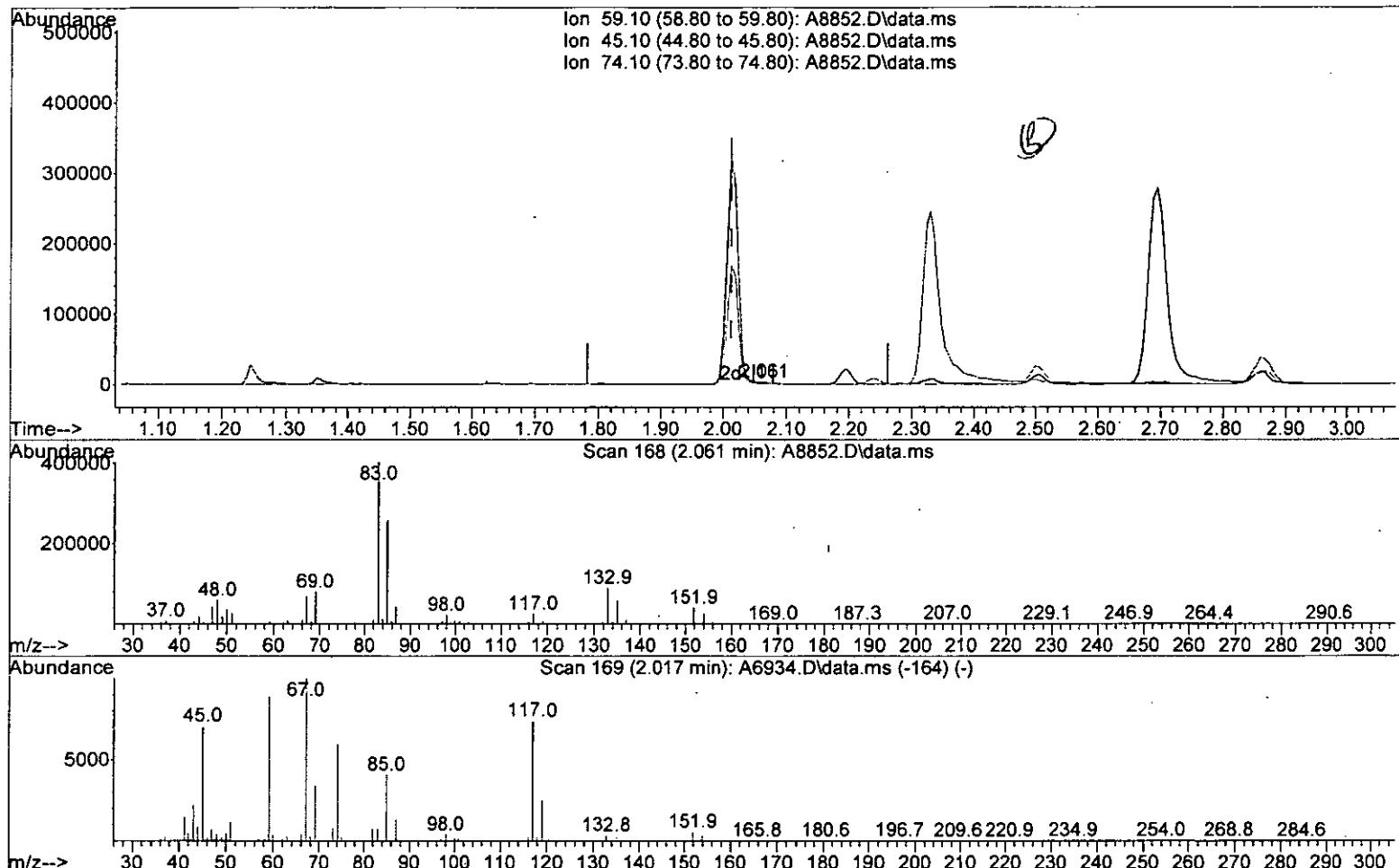
Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.17
50.00	15.00	18.38
0.00	0.00	0.00

W<sup>N</sup> 27

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 09:13:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8852.D\data.ms

## (9) Diethyl Ether

2.061min (+0.049) 0.08 ug/L

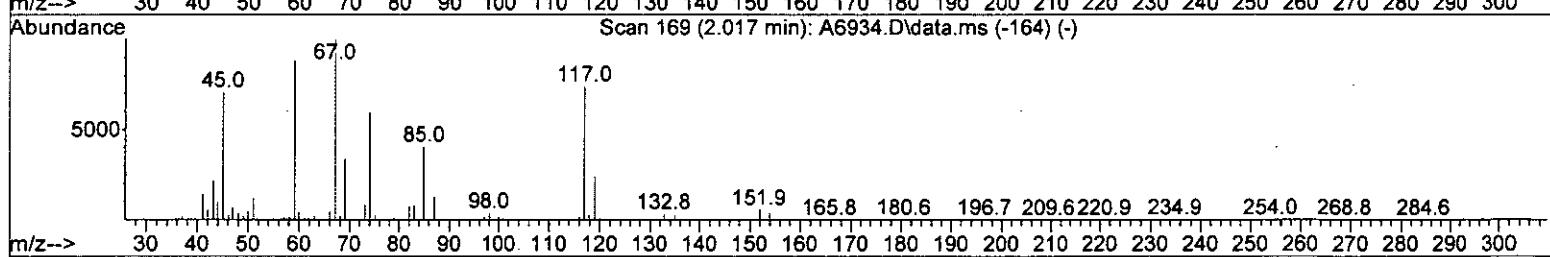
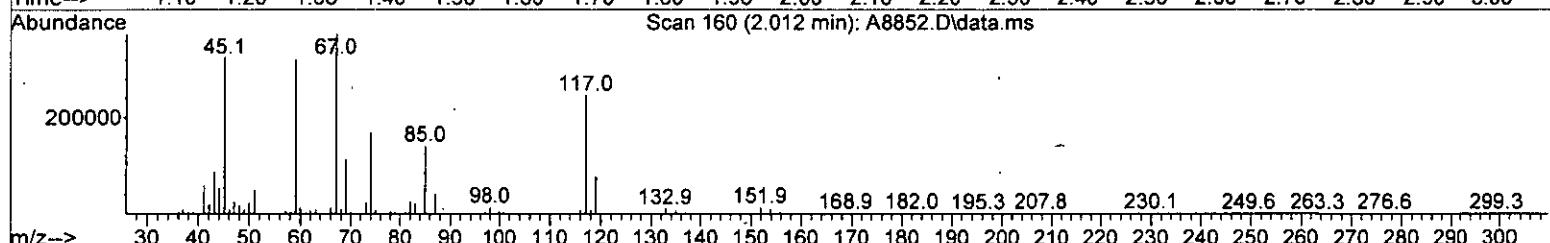
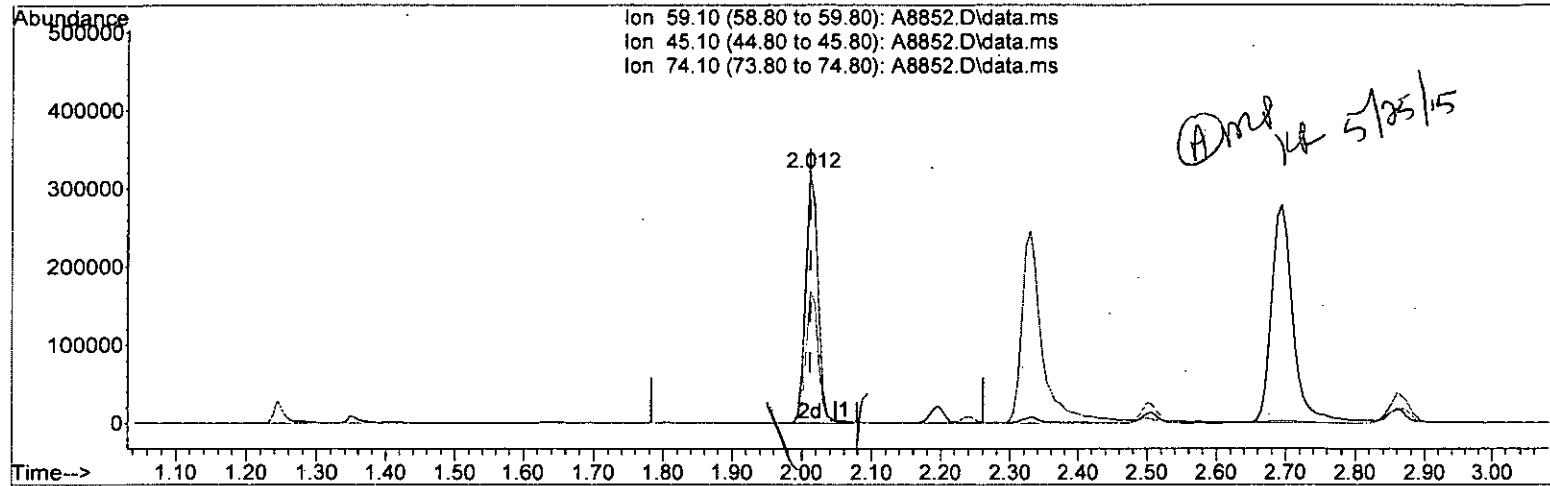
response 636

Ion	Exp%	Act%
59.10	100	100
45.10	73.90	80.15
74.10	64.70	45.28
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:13:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8852.D\data.ms

(9) Diethyl Ether

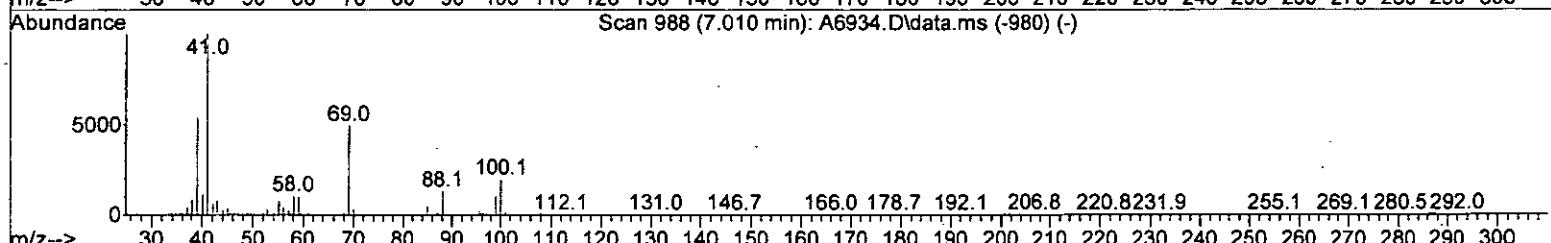
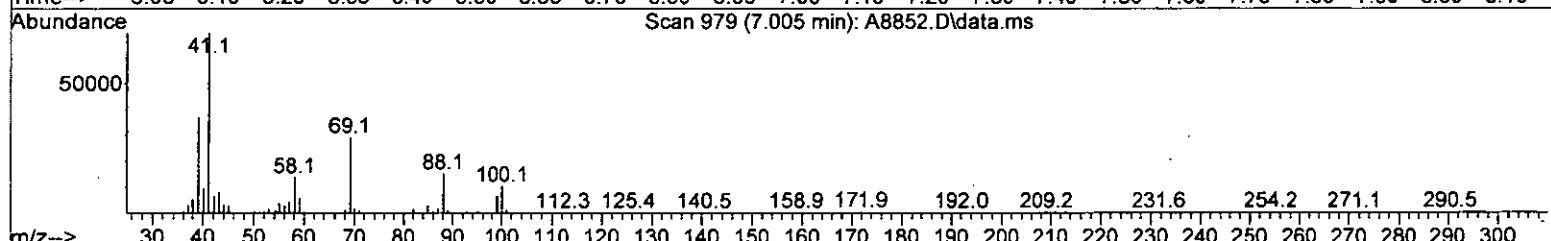
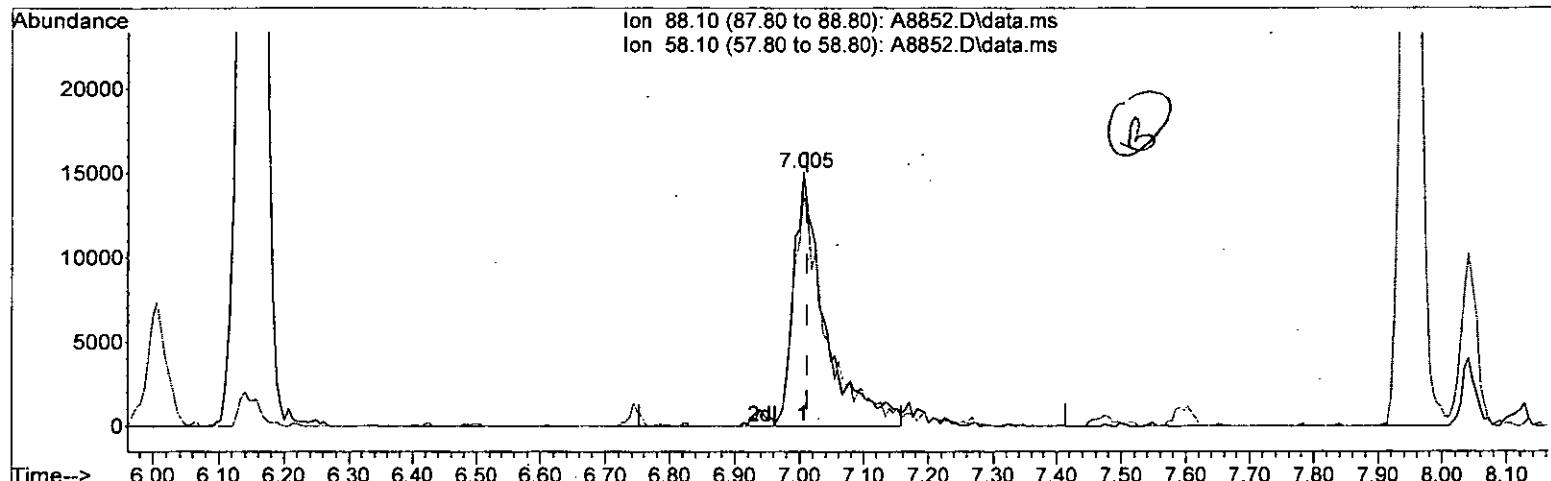
2.012min (+0.000) 50.06 ug/L m

response 389844

Ion	Exp%	Act%
59.10	100	100
45.10	73.90	101.34#
74.10	64.70	52.68
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:13:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8852.D\data.ms

(57) 1,4-Dioxane

7.005min (-0.006) 947.89 ug/L

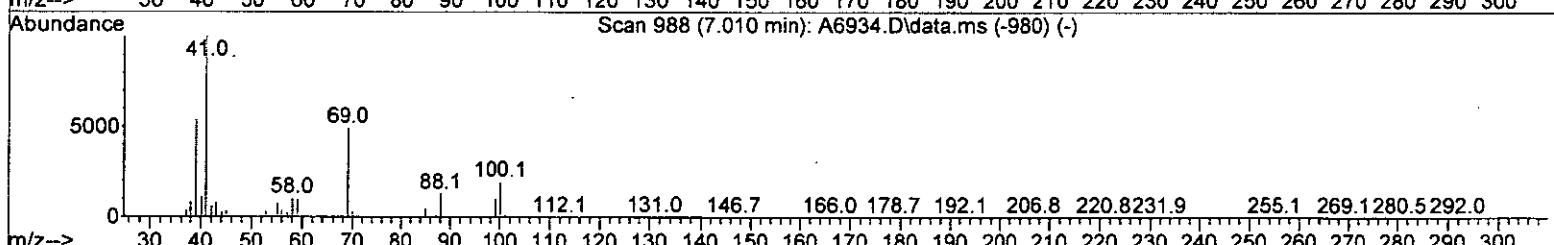
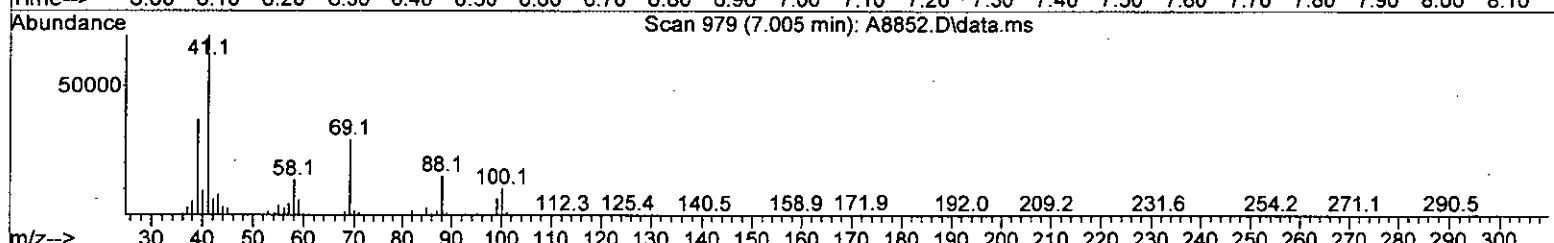
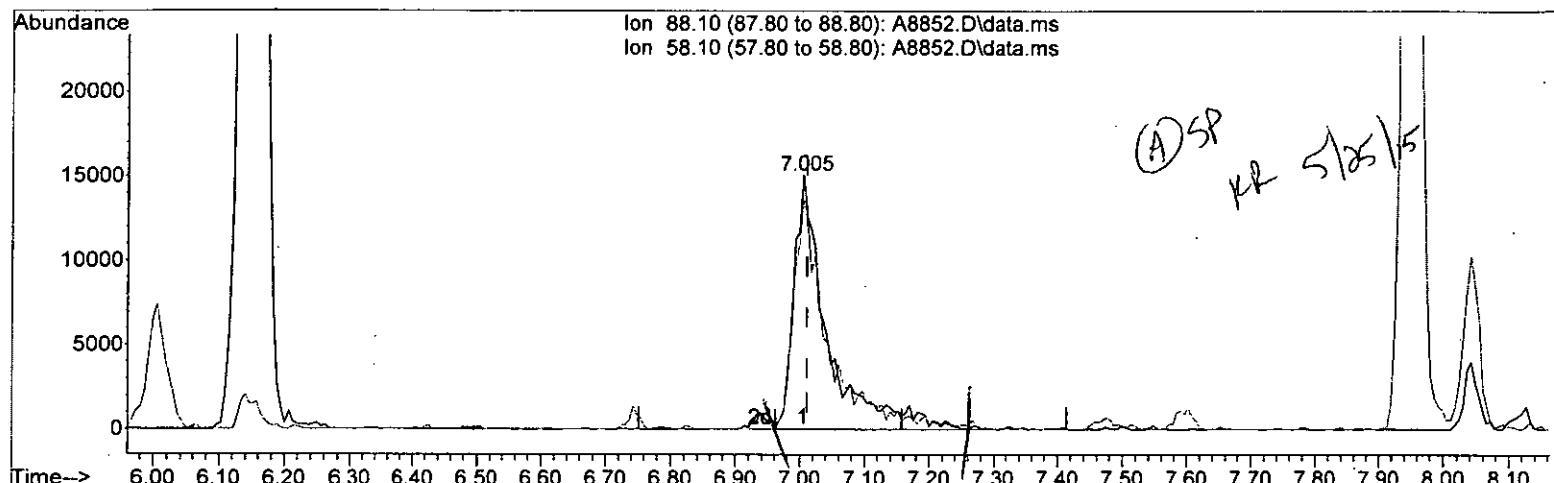
response 50983

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	89.98#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msv0a10\data\052515\  
 Data File : A8852.D  
 Acq On : 25 May 2015 8:57 am  
 Operator : K.Ruest  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 25 09:13:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8852.D\data.ms

(57) 1,4-Dioxane

7.005min (-0.006) 1011.64 ug/L m

response 54412

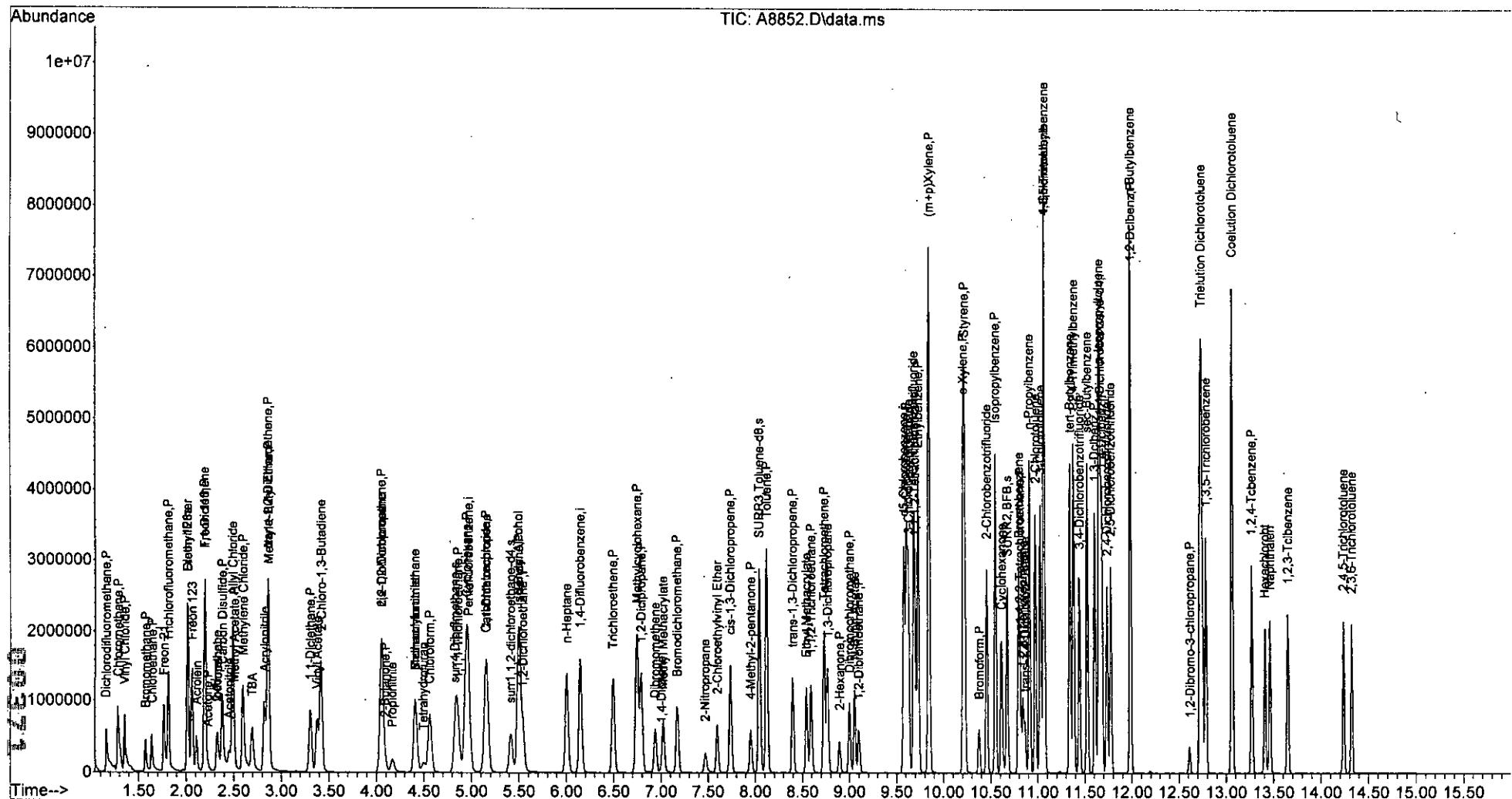
Ion	Exp%	Act%
88.10	100	100
58.10	61.10	89.98#
0.00	0.00	0.00
0.00	0.00	0.00

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
Data File : A8852.D  
Acq On : 25 May 2015 8:57 am  
Operator : K.Ruest  
Sample : CCV  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 09:16:07 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900

**Service Request:** R1503862  
**Date Analyzed:** 5/26/15

**Continuing Calibration Verification Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Calibration Date:** 5/6/15  
**Calibration ID:** RC1500051  
**Analysis Lot:** 446223  
**Units:**  $\mu\text{g/L}$

**File ID:** I:\ACQUADAT\msvoa10\data\052615\A8906.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	50.0	49.5	0.9504	0.9399	-1.1	NA	$\pm 20\%$	Average RF
Vinyl Chloride	50.0	50.2	0.6923	0.6951	0.4	NA	$\pm 20\%$	Average RF
Chloroethane	50.0	51.1	0.3399	0.3473	2.2	NA	$\pm 20\%$	Average RF
Bromomethane	50.0	41.8	0.2864	0.2395	-16.4	NA	$\pm 20\%$	Average RF
1,1-Dichloroethene	50.0	49.9	0.3684	0.3676	-0.2	NA	$\pm 20\%$	Average RF
Acetone	50.0	46.0	NA	NA	-7.9	$\pm 20\%$	Quadratic	
Carbon Disulfide	50.0	51.1	1.323	1.353	2.3	NA	$\pm 20\%$	Average RF
Methylene Chloride	50.0	47.5	0.4520	0.4293	-5.0	NA	$\pm 20\%$	Average RF
trans-1,2-Dichloroethene	50.0	49.6	0.4146	0.4110	-0.9	NA	$\pm 20\%$	Average RF
1,1-Dichloroethane	50.0	48.3	0.9257	0.8937	-3.5	NA	$\pm 20\%$	Average RF
cis-1,2-Dichloroethene	50.0	48.7	0.4970	0.4840	-2.6	NA	$\pm 20\%$	Average RF
2-Butanone (MEK)	50.0	48.1	0.2352	0.2262	-3.8	NA	$\pm 20\%$	Average RF
Chloroform	50.0	48.7	0.8234	0.8026	-2.5	NA	$\pm 20\%$	Average RF
1,1,1-Trichloroethane	50.0	48.8	0.7004	0.6839	-2.4	NA	$\pm 20\%$	Average RF
Carbon Tetrachloride	50.0	50.6	0.1235	0.1251	1.2	NA	$\pm 20\%$	Average RF
Benzene	50.0	48.7	1.253	1.220	-2.6	NA	$\pm 20\%$	Average RF
1,2-Dichloroethane	50.0	49.2	0.4326	0.4258	-1.6	NA	$\pm 20\%$	Average RF
Trichloroethene	50.0	50.2	0.3463	0.3476	0.4	NA	$\pm 20\%$	Average RF
1,2-Dichloropropane	50.0	48.3	0.3694	0.3572	-3.3	NA	$\pm 20\%$	Average RF
Bromodichloromethane	50.0	49.4	0.3893	0.3842	-1.3	NA	$\pm 20\%$	Average RF
cis-1,3-Dichloropropene	50.0	49.0	0.4412	0.4322	-2.0	NA	$\pm 20\%$	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	48.3	0.3164	0.3056	-3.4	NA	$\pm 20\%$	Average RF
Toluene	50.0	48.0	1.353	1.298	-4.1	NA	$\pm 20\%$	Average RF
trans-1,3-Dichloropropene	50.0	47.3	0.3677	0.3481	-5.3	NA	$\pm 20\%$	Average RF
1,1,2-Trichloroethane	50.0	46.9	0.2413	0.2261	-6.3	NA	$\pm 20\%$	Average RF
Tetrachloroethene	50.0	48.7	0.3005	0.2927	-2.6	NA	$\pm 20\%$	Average RF
2-Hexanone	50.0	50.6	0.2256	0.2282	1.2	NA	$\pm 20\%$	Average RF
Dibromochloromethane	50.0	53.8	0.2981	0.3208	7.6	NA	$\pm 20\%$	Average RF
Chlorobenzene	50.0	50.7	0.9831	0.9959	1.3	NA	$\pm 20\%$	Average RF
Ethylbenzene	50.0	50.3	0.5157	0.5184	0.5	NA	$\pm 20\%$	Average RF
m,p-Xylenes	100	105	0.6204	0.6521	5.1	NA	$\pm 20\%$	Average RF
o-Xylene	50.0	51.1	0.6155	0.6287	2.1	NA	$\pm 20\%$	Average RF
Styrene	50.0	53.3	1.042	1.111	6.6	NA	$\pm 20\%$	Average RF
Bromoform	50.0	52.2	0.1624	0.1696	4.4	NA	$\pm 20\%$	Average RF
1,1,2,2-Tetrachloroethane	50.0	48.7	0.5106	0.4968	-2.7	NA	$\pm 20\%$	Average RF
4-Bromofluorobenzene	50.0	46.0	0.4834	0.4450	-7.9	NA	$\pm 20\%$	Average RF
Toluene-d8	50.0	47.9	1.190	1.140	-4.2	NA	$\pm 20\%$	Average RF
Dibromofluoromethane	50.0	48.3	0.3120	0.3015	-3.4	NA	$\pm 20\%$	Average RF

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8906.D  
 Acq On : 26 May 2015 8:57 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 27 09:20:49 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

FP  
5/27/15

	Compound	AvgRF	CCRF	%Dev	Area	Dev(min)
1 i	Pentafluorobenzene	1.0000	1.0000	0.0	104	0.00
2 P	Dichlorodifluoromethane	0.5192	0.5627	-8.4	104	0.00
3 P	Chloromethane	0.9504	0.9399	1.1	102	0.00
4 P	Vinyl Chloride	0.6923	0.6951	-0.4	104	0.00
5 P	Bromomethane	0.2864	0.2395	16.4	92	0.00
6 P	Chloroethane	0.3399	0.3473	-2.2	110	0.00
7	Freon 21	0.8305	0.8583	-3.3	102	0.00
8 P	Trichlorofluoromethane	0.6683	0.7130	-6.7	110	0.00
9	Diethyl Ether	0.4025	0.4149	-3.1	104	0.00
10	Freon 123a	0.5071	0.5117	-0.9	102	0.00
11	Freon 123	0.5610	0.5497	2.0	102	0.00
12	Acrolein	0.0756	0.0602	20.4#	82	0.00 ①
13	1,1-Dicethene	0.3684	0.3676	0.2	106	0.00
14 P	Freon 113	0.3854	0.3975	-3.1	110	0.00
15 P	Acetone	0.1691	0.1360	7.9 19.6	101	0.00
16	2-Propanol	0.0262	0.0268	-2.3	103	0.00
17	Iodomethane	0.5455	0.3365	38.3#	61	0.00 NT
18 P	Carbon Disulfide	1.3232	1.3534	-2.3	108	0.00
19	Acetonitrile	0.0230	0.0263	-14.3	121	0.00
20	Allyl Chloride	0.2397	0.2548	-6.3	109	0.00
21 P	Methyl Acetate	0.3642	0.3572	1.9	106	0.00
22 P	Methylene Chloride	0.4520	0.4293	5.0	104	0.00
23	TBA	0.0336	0.0318	5.4	102	0.00
24	Acrylonitrile	0.1616	0.1561	3.4	100	0.00
25 P	Methyl-t-Butyl Ether	1.0534	0.9837	6.6	100	0.00
26 P	trans-1,2-Dichloroethene	0.4146	0.4110	0.9	105	0.00
27 P	1,1-Dicethane	0.9257	0.8937	3.5	100	0.00
28	Vinyl Acetate	0.0747	0.0529	29.2#	76	0.00 NT
29	DIPE	2.5377	0.0017	99.9#	0#	0.00
30	2-Chloro-1,3-Butadiene	1.0766	1.2235	-13.6	114	0.00
31	ETBE	1.7332	0.0000	100.0#	0#	-3.88#
32	2,2-Dichloropropane	0.5982	0.5305	11.3	93	0.00
33 P	cis-1,2-Dichloroethene	0.4970	0.4840	2.6	103	0.00
34 P	2-Butanone	0.2352	0.2262	3.8	104	0.00
35	Propionitrile	0.0584	0.0544	6.8	97	-0.01
36	Bromochloromethane	0.3056	0.3002	1.8	102	0.00
37	Methacrylonitrile	0.1379	0.1242	9.9	95	0.00
38	Tetrahydrofuran	0.1454	0.1346	7.4	99	0.00
39 P	Chloroform	0.8234	0.8026	2.5	102	0.00
40 P	1,1,1-Trichloroethane	0.7004	0.6839	2.4	102	0.00
41 i	1,4-Difluorobenzene	1.0000	1.0000	0.0	103	0.00
42 P	Cyclohexane	0.4754	0.4481	5.7	97	0.00
43 s	sur4,Dibromoethane	0.3120	0.3015	3.4	103	0.00
44 P	Carbontetrachloride	0.1235	0.1251	-1.3	105	0.00
45	1,1-Dichloropropene	0.4042	0.3870	4.3	101	0.00
46 s	sur1,1,2-dichloroethane-d4	0.3206	0.3137	2.2	104	0.00

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8906.D  
 Acq On : 26 May 2015 8:57 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 27 09:20:49 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	Dev(min)
47 P	Benzene	1.2531	1.2201	2.6	103	0.00
48 P	1,2-Dichloroethane	0.4326	0.4258	1.6	102	0.00
49	Iso-Butyl Alcohol	0.0130	0.0113	13.1	98	-0.01
50	TAME	0.7222	0.0000	100.0#	0#	5.74#
51	n-Heptane	0.5448	0.4885	10.3	92	0.00
52	1-Butanol	0.0058	0.0000	100.0#	0#	-6.52#
53 P	Trichloroethene	0.3463	0.3476	-0.4	105	0.00
54 P	Methylcyclohexane	0.5121	0.4820	5.9	97	0.00
55 P	1,2-Diclpropane	0.3694	0.3572	3.3	103	0.00
56	Dibromomethane	0.1625	0.1557	4.2	103	0.00
57	1,4-Dioxane	0.0018	0.0017	5.6	107	0.00
58	Methyl Methacrylate	0.1455	0.1337	8.1	93	0.00
59 P	Bromodichloromethane	0.3893	0.3842	1.3	103	0.00
60	2-Nitropropane	0.0426	0.0470	-10.3	119	0.00
61	2-Chloroethylvinyl Ether	0.1728	0.1607	7.0	94	0.00
62 P	cis-1,3-Dichloropropene	0.4412	0.4322	2.0	98	0.00
63 P	4-Methyl-2-pentanone	0.3164	0.3056	3.4	98	0.00
64 S	SURR3, Toluene-d8	1.1896	1.1401	4.2	100	0.00
65 P	Toluene	1.3531	1.2978	4.1	101	0.00
66 P	trans-1,3-Dichloropropene	0.3677	0.3481	5.3	95	0.00
67	Ethyl Methacrylate	0.2898	0.2818	2.8	97	0.00
68 P	1,1,2-Trichloroethane	0.2413	0.2261	6.3	99	0.00
69 S	SURR2, BFB	0.4834	0.4450	7.9	96	0.00
70 i	d5-Chlorobenzene	1.0000	1.0000	0.0	97	0.00
71 P	Tetrachloroethene	0.3005	0.2927	2.6	99	0.00
72 P	2-Hexanone	0.2256	0.2282	-1.2	98	0.00
73	1,3-Dichloropropane	0.4369	0.4367	0.0	99	0.00
74 P	Dibromochloromethane	0.2981	0.3208	-7.6	101	0.00
75	N-Butyl Acetate	0.5418	0.5687	-5.0	96	0.00
76 P	1,2-Dibromoethane	0.2435	0.2404	1.3	97	0.00
77	3-Chlorobenzotrifluoride	0.5472	0.0008	99.9#	0#	0.00
78 P	Chlorobenzene	0.9831	0.9959	-1.3	98	0.00
79	4-Chlorobenzotrifluoride	0.4816	0.0005	99.9#	0#	-0.01
80	1,1,1,2-Tetrachloroethane	0.3366	0.3411	-1.3	97	0.00
81 P	Ethylbenzene	0.5157	0.5184	-0.5	98	0.00
82 P	(m+p) Xylene	0.6204	0.6521	-5.1	99	0.00
83 P	o-Xylene	0.6155	0.6287	-2.1	98	0.00
84 P	Styrene	1.0423	1.1105	-6.5	98	0.00
85 P	Bromoform	0.1624	0.1696	-4.4	96	0.00
86	2-Chlorobenzotrifluoride	0.5181	0.0004	99.9#	0#	0.00
87 P	Isopropylbenzene	1.5120	1.6039	-6.1	96	0.00
88	Cyclohexanone	0.0161	0.0112	30.4#	72	0.00
89	trans-1,4-Dichloro-2-Butene	0.1091	0.0903	17.2	83	0.00
90 i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	96	0.00
91 P	1,1,2,2-Tetrachloroethane	0.5106	0.4968	2.7	91	0.00

## Evaluate Continuing Calibration Report

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8906.D  
 Acq On : 26 May 2015 8:57 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 27 09:20:49 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
92	Bromobenzene	0.7243	0.7193	0.7	98	0.00
93	1,2,3-Trichloropropane	0.1503	0.1457	3.1	99	0.00
94	n-Propylbenzene	2.9707	3.2640	-9.9	98	0.00
95	2-Chlorotoluene	1.8626	1.9357	-3.9	97	0.00
96	3-Chlorotoluene	1.9669	0.0000	100.0#	0#	11.03#
97	4-Chlorotoluene	2.2203	2.3444	-5.6	97	0.00
98	1,3,5-Trimethylbenzene	2.2186	2.3936	-7.9	96	0.00
99	tert-Butylbenzene	1.9260	1.9893	-3.3	94	0.00
100	1,2,4-Trimethylbenzene	2.2658	2.4371	-7.6	96	0.00
101	3,4-Dichlorobenzotrifluorid	0.6591	0.0014	99.0#	0#	0.00
102	sec-Butylbenzene	2.6151	2.8113	-7.5	95	0.00
103	p-Isopropyltoluene	2.3299	2.4675	-5.9	94	0.00
104 P	1,3-Dclbenz	1.4741	1.4805	-0.4	95	0.00
105 P	1,4-Dclbenz	1.5453	1.5445	0.1	97	0.00
106	2,4-Dichlorobenzotrifluorid	0.6183	0.0014	99.0#	0#	0.00
107	2,5-Dichlorobenzotrifluorid	0.7008	0.0012	99.8#	0#	0.00
108	n-Butylbenzene	2.0576	2.1369	-3.9	92	0.00
109 P	1,2-Dclbenz	1.3624	1.3887	-1.9	97	0.00
110 P	1,2-Dibromo-3-chloropropane	0.0934	0.0904	3.2	97	0.00
111	Trielution Dichlorotoluene	1.1680	0.0026	99.8#	0#	0.01
112	1,3,5-Trichlorobenzene	0.9978	0.0030	99.7#	0#	0.00
113	Coelution Dichlorotoluene	1.2478	0.0032	99.7#	0#	0.00
114 P	1,2,4-Tcbenzene	0.8584	0.8180	4.7	88	0.00
115	Hexachlorobt	0.3554	0.3279	7.7	89	0.00
116	Naphthalen	1.6087	1.5647	2.7	88	0.00
117	1,2,3-Tclbenzene	0.7069	0.6883	2.6	90	0.00
118	2,4,5-Trichlorotoluene	0.5213	0.0059	98.9#	1#	0.00
119	2,3,6-Trichlorotoluene	0.4556	0.0047	99.0#	1#	0.00

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

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8906.D  
 Acq On : 26 May 2015 8:57 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 27 09:20:49 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.963	168	999388	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.146	114	1519655	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1356642	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	789445	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromofl methane	4.829	113	458114	48.31	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 96.62%		
46) surr1,1,2-dichloroetha...	5.408	65	476720	48.92	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 97.84%		
64) SURR3,Toluene-d8	8.042	98	1732510	47.92	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 95.84%		
69) SURR2,BFB	10.669	95	676303	46.03	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 92.06%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	562322	54.19	ug/L	98
3) Chloromethane	1.281	50	939360	49.45	ug/L	98
4) Vinyl Chloride	1.348	62	694650	50.20	ug/L	97
5) Bromomethane	1.567	94	239343	41.81	ug/L	100
6) Chloroethane	1.634	64	347070	51.08	ug/L	95
7) Freon 21	1.762	67	857819	51.67	ug/L	100
8) Trichlorofluoromethane	1.811	101	712604	53.35	ug/L	99
9) Diethyl Ether	2.012	59	414666	51.54	ug/L #	78
10) Freon 123a	2.012	67	511431	50.46	ug/L	90
11) Freon 123	2.061	83	549399	48.99	ug/L	82
12) Acrolein	2.104	56	300814	199.05	ug/L	99
13) 1,1-Dicethene	2.195	96	367341	49.89	ug/L #	82
14) Freon 113	2.195	101	397221	51.57	ug/L	92
15) Acetone	2.220	43	135937	46.03	ug/L	99
16) 2-Propanol	2.323	45	535364	1021.74	ug/L	90
17) Iodomethane	2.317	142	336304	30.84	ug/L	99
18) Carbon Disulfide	2.378	76	1352619	51.14	ug/L	99
19) Acetonitrile	2.451	40	131363	285.15	ug/L	98
20) Allyl Chloride	2.488	76	254691	53.17	ug/L #	19
21) Methyl Acetate	2.500	43	356992	49.04	ug/L	83
22) Methylene Chloride	2.598	84	429080	47.50	ug/L #	62
23) TBA	2.689	59	635308	946.56	ug/L	68
24) Acrylonitrile	2.817	53	780233	241.48	ug/L	98
25) Methyl-t-Butyl Ether	2.860	73	983077	46.69	ug/L	85
26) trans-1,2-Dichloroethene	2.860	96	410707	49.56	ug/L #	83
27) 1,1-Dicethane	3.305	63	893188	48.27	ug/L	96
28) Vinyl Acetate	3.372	86	52906	35.46	ug/L #	96
30) 2-Chloro-1,3-Butadiene	3.414	53	1222707	56.82	ug/L	85
32) 2,2-Dichloropropane	4.055	77	530204	44.35	ug/L	97
33) cis-1,2-Dichloroethene	4.055	96	483694	48.70	ug/L #	85
34) 2-Butanone	4.085	43	226062	48.08	ug/L	87
35) Propionitrile	4.158	54	271584	232.76	ug/L	97
36) Bromochloromethane	4.408	130	300053	49.12	ug/L #	65
37) Methacrylonitrile	4.402	67	124104	45.02	ug/L #	34

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8906.D  
 Acq On : 26 May 2015 8:57 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 27 09:20:49 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Tetrahydrofuran	4.487	42	134528	46.29	ug/L	# 67
39) Chloroform	4.561	83	802114	48.74	ug/L	95
40) 1,1,1-Trichloroethane	4.853	97	683482	48.82	ug/L	96
42) Cyclohexane	4.945	41	680923	47.13	ug/L	93
44) Carbontetrachloride	5.152	121	190075	50.62	ug/L	87
45) 1,1-Dichloropropene	5.158	75	588044	47.87	ug/L	97
47) Benzene	5.499	78	1854074	48.68	ug/L	85
48) 1,2-Dichloroethane	5.536	62	647123	49.22	ug/L	89
49) Iso-Butyl Alcohol	5.487	43	343782	870.32	ug/L	91
51) n-Heptane	6.005	43	742425	44.84	ug/L	81
53) Trichloroethene	6.493	130	528223	50.19	ug/L	95
54) Methylcyclohexane	6.743	55	732480	47.06	ug/L	# 80
55) 1,2-Dicloroppane	6.786	63	542770	48.34	ug/L	100
56) Dibromomethane	6.938	93	236682	47.92	ug/L	98
57) 1,4-Dioxane	7.005	88	52997	945.91	ug/L	80
58) Methyl Methacrylate	7.024	69	203111	45.93	ug/L	# 48
59) Bromodichloromethane	7.170	83	583849	49.35	ug/L	99
60) 2-Nitropropane	7.469	41	142866	110.26	ug/L	98
61) 2-Chloroethylvinyl Ether	7.597	63	244251	46.52	ug/L	92
62) cis-1,3-Dichloropropene	7.737	75	656788	48.98	ug/L	94
63) 4-Methyl-2-pentanone	7.950	43	464372	48.29	ug/L	90
65) Toluene	8.121	91	1972159	47.95	ug/L	98
66) trans-1,3-Dichloropropene	8.395	75	528990	47.33	ug/L	97
67) Ethyl Methacrylate	8.542	69	428267	48.63	ug/L	# 48
68) 1,1,2-Trichloroethane	8.590	97	343539	46.85	ug/L	95
71) Tetrachloroethene	8.731	164	397120	48.70	ug/L	99
72) 2-Hexanone	8.895	43	309533	50.58	ug/L	87
73) 1,3-Dichloropropane	8.767	76	592463	49.98	ug/L	# 76
74) Dibromochloromethane	8.999	129	435145	53.79	ug/L	99
75) N-Butyl Acetate	9.054	43	771564	52.49	ug/L	92
76) 1,2-Dibromoethane	9.096	107	326070	49.36	ug/L	100
78) Chlorobenzene	9.602	112	1351052	50.65	ug/L	98
80) 1,1,1,2-Tetrachloroethane	9.694	131	462775	50.67	ug/L	97
81) Ethylbenzene	9.730	106	703310	50.26	ug/L	97
82) (m+p)Xylene	9.846	106	1769462	105.12	ug/L	91
83) o-Xylene	10.206	106	852875	51.07	ug/L	95
84) Styrene	10.224	104	1506615	53.28	ug/L	95
85) Bromoform	10.377	173	230045	52.22	ug/L	100
87) Isopropylbenzene	10.547	105	2175930	53.04	ug/L	100
88) Cyclohexanone	10.614	55	305221	698.43	ug/L	93
89) trans-1,4-Dichloro-2-B...	10.864	53	122482	41.38	ug/L	79
91) 1,1,2,2-Tetrachloroethane	10.815	83	392232	48.65	ug/L	98
92) Bromobenzene	10.797	156	567824	49.65	ug/L	98
93) 1,2,3-Trichloropropene	10.840	110	115023	48.47	ug/L	92
94) n-Propylbenzene	10.907	91	2576759	54.94	ug/L	99
95) 2-Chlorotoluene	10.974	91	1528121	51.96	ug/L	97
97) 4-Chlorotoluene	11.065	91	1850759	52.79	ug/L	98
98) 1,3,5-Trimethylbenzene	11.065	105	1889610	53.94	ug/L	97
99) tert-Butylbenzene	11.340	119	1570449	51.64	ug/L	98
100) 1,2,4-Trimethylbenzene	11.376	105	1923925	53.78	ug/L	95
102) sec-Butylbenzene	11.523	105	2219358	53.75	ug/L	97

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8906.D  
 Acq On : 26 May 2015 8:57 pm  
 Operator : F. Naegler  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 27 09:20:49 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) p-Isopropyltoluene	11.645	119	1947932	52.95	ug/L	97
104) 1,3-Dclbenz	11.602	146	1168761	50.22	ug/L	98
105) 1,4-Dclbenz	11.681	146	1219330	49.98	ug/L	98
108) n-Butylbenzene	11.980	91	1686989	51.93	ug/L	98
109) 1,2-Dclbenz	11.986	146	1096305	50.96	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.614	157	71386	48.39	ug/L	91
111) Trielution Dichlorotol...	12.724	125	6108	0.33	ug/L	94
113) Coelution Dichlorotoluene	13.059	125	5034	0.26	ug/L	89
114) 1,2,4-Tcbenzene	13.266	180	645743	47.64	ug/L	98
115) Hexachlorobt	13.406	225	258878	46.13	ug/L	97
116) Naphthalen	13.461	128	1235258	48.63	ug/L	98
117) 1,2,3-Tclbenzene	13.650	180	543365	48.68	ug/L	99
118) 2,4,5-Trichlorotoluene	14.236	159	4644	0.56	ug/L	88
119) 2,3,6-Trichlorotoluene	14.321	159	3710	0.52	ug/L	94

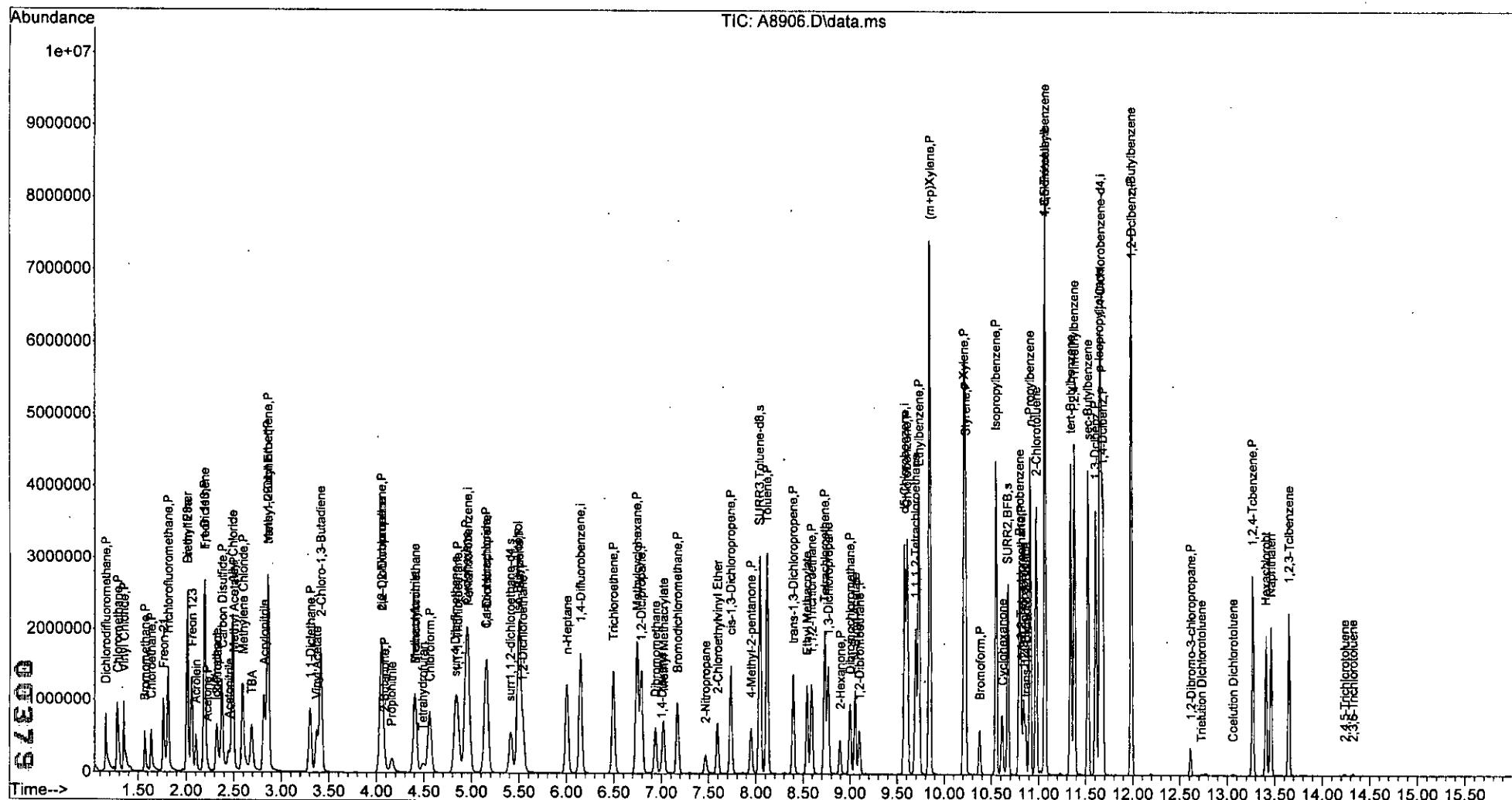
(#) = qualifier out of range (m) = manual integration (+) = signals summed

**Quantitation Report (OT Reviewed)**

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
Data File : A8906.D  
Acq On : 26 May 2015 8:57 pm  
Operator : F. Naegler  
Sample : CCV  
Misc :  
ALS Vial : 27 Sample Multiplier: 1

Inst : MSVQA10

Quant Time: May 27 09:20:49 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL·Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



Client:  
Project:CB&I  
Textron Wheatfield/Semiannual Groundwater - 148900Service Request: R1503862  
Date Analyzed: 5/27/15

**Continuing Calibration Verification Summary**  
**Volatile Organic Compounds by GC/MS**

Analytical Method: 8260C

 Calibration Date: 5/6/15  
 Calibration ID: RC1500051  
 Analysis Lot: 446543  
 Units: µg/L

File ID: I:\ACQUDATA\MSVOA10\DATA\052715\A8938.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	50.0	53.4	0.9504	1.016	6.9	NA	± 20 %	Average RF
Vinyl Chloride	50.0	51.6	0.6923	0.7140	3.1	NA	± 20 %	Average RF
Chloroethane	50.0	50.8	0.3399	0.3450	1.5	NA	± 20 %	Average RF
Bromomethane	50.0	45.8	0.2864	0.2624	-8.4	NA	± 20 %	Average RF
1,1-Dichloroethene	50.0	51.6	0.3684	0.3798	3.1	NA	± 20 %	Average RF
Acetone	50.0	34.1	NA	NA	NA	-31.9 *	± 20 %	Quadratic
Carbon Disulfide	50.0	45.5	1.323	1.204	-9.0	NA	± 20 %	Average RF
Methylene Chloride	50.0	46.8	0.4520	0.4229	-6.4	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	50.5	0.4146	0.4186	0.9	NA	± 20 %	Average RF
1,1-Dichloroethane	50.0	51.2	0.9257	0.9474	2.4	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.1	0.4970	0.4974	0.1	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	47.4	0.2352	0.2230	-5.2	NA	± 20 %	Average RF
Chloroform	50.0	49.5	0.8234	0.8145	-1.1	NA	± 20 %	Average RF
1,1,1-Trichloroethane	50.0	50.6	0.7004	0.7088	1.2	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	51.7	0.1235	0.1278	3.5	NA	± 20 %	Average RF
Benzene	50.0	49.5	1.253	1.241	-1.0	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	50.5	0.4326	0.4369	1.0	NA	± 20 %	Average RF
Trichloroethene	50.0	49.7	0.3463	0.3445	-0.5	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	49.9	0.3694	0.3684	-0.3	NA	± 20 %	Average RF
Bromodichloromethane	50.0	49.9	0.3893	0.3885	-0.2	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	52.2	0.4412	0.4603	4.3	NA	± 20 %	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	50.6	0.3164	0.3203	1.2	NA	± 20 %	Average RF
Toluene	50.0	48.6	1.353	1.314	-2.9	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	52.9	0.3677	0.3894	5.9	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	48.9	0.2413	0.2357	-2.3	NA	± 20 %	Average RF
Tetrachloroethene	50.0	50.9	0.3005	0.3060	1.8	NA	± 20 %	Average RF
2-Hexanone	50.0	54.1	0.2256	0.2439	8.1	NA	± 20 %	Average RF
Dibromochloromethane	50.0	55.9	0.2981	0.3334	11.8	NA	± 20 %	Average RF
Chlorobenzene	50.0	52.3	0.9831	1.028	4.6	NA	± 20 %	Average RF
Ethylbenzene	50.0	51.8	0.5157	0.5342	3.6	NA	± 20 %	Average RF
m,p-Xylenes	100	107	0.6204	0.6625	6.8	NA	± 20 %	Average RF
o-Xylene	50.0	51.5	0.6155	0.6335	2.9	NA	± 20 %	Average RF
Styrene	50.0	53.6	1.042	1.117	7.2	NA	± 20 %	Average RF
Bromoform	50.0	57.7	0.1624	0.1874	15.4	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	53.9	0.5106	0.5503	7.8	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	44.5	0.4834	0.4300	-11.1	NA	± 20 %	Average RF
Toluene-d8	50.0	48.4	1.190	1.151	-3.2	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	49.2	0.3120	0.3067	-1.7	NA	± 20 %	Average RF

Data Path : I:\ACQUDATA\msvao10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 17:19:33 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)	
1 i	Pentafluorobenzene	1.0000	1.0000	0.0	106	0.00	
2 P	Dichlorodifluoromethane	0.5192	0.5888	-13.4	110	0.00	
3 P	Chloromethane	0.9504	1.0159	-6.9	112	0.00	
4 P	Vinyl Chloride	0.6923	0.7140	-3.1	108	0.00	
5 P	Bromomethane	0.2864	0.2624	8.4	102	0.00	
6 P	Chloroethane	0.3399	0.3450	-1.5	111	0.00	
7	Freon 21	0.8305	0.7880	5.1	95	0.00	
8 P	Trichlorofluoromethane	0.6683	0.5640	15.6	88	0.00	
9	Diethyl Ether	0.4025	0.4189	-4.1	107	0.00	
10	Freon 123a	0.5071	0.4817	5.0	97	0.00	
11	Freon 123	0.5610	0.5236	6.7	99	0.00	
12	Acrolein	0.0756	0.0569	24.7#	79	0.00	
13	1,1-Dicléthene	0.3684	0.3798	-3.1	112	0.00	
14 P	Freon 113	0.3854	0.3940	-2.2	111	0.00	
15 P	Acetone	0.1691	0.1036	31.9	30.7#	78	0.00
16	2-Propanol	0.0262	0.0221	15.6	86	0.00	
17	Iodomethane	0.5455	0.5081	6.9	93	0.00	
18 P	Carbon Disulfide	1.3232	1.2039	9.0	97	0.00	
19	Acetonitrile	0.0230	0.0142	38.3#	66	0.00	
20	Allyl Chloride	0.2397	0.2883	-20.3#	125	0.00	
21 P	Methyl Acetate	0.3642	0.3544	2.7	107	0.00	
22 P	Methylene Chloride	0.4520	0.4229	6.4	104	0.00	
23	TBA	0.0336	0.0303	9.8	99	0.00	
24	Acrylonitrile	0.1616	0.1619	-0.2	105	0.00	
25 P	Methyl-t-Butyl Ether	1.0534	1.0361	1.6	106	0.00	
26 P	trans-1,2-Dichloroethene	0.4146	0.4186	-1.0	109	0.00	
27 P	1,1-Dicléthane	0.9257	0.9474	-2.3	108	0.00	
28	Vinyl Acetate	0.0747	0.0676	9.5	98	0.00	
29	DIPE	2.5377	2.6331	-3.8	104	0.00	
30	2-Chloro-1,3-Butadiene	1.0766	1.1423	-6.1	108	0.00	
31	ETBE	1.7332	1.7172	0.9	102	0.00	
32	2,2-Dichloropropane	0.5982	0.6377	-6.6	114	0.00	
33 P	cis-1,2-Dichloroethene	0.4970	0.4974	-0.1	107	0.00	
34 P	2-Butanone	0.2352	0.2230	5.2	104	0.00	
35	Propionitrile	0.0584	0.0554	5.1	100	0.00	
36	Bromochloromethane	0.3056	0.3042	0.5	105	0.00	
37	Methacrylonitrile	0.1379	0.1308	5.1	102	0.00	
38	Tetrahydrofuran	0.1454	0.1419	2.4	106	0.00	
39 P	Chloroform	0.8234	0.8145	1.1	106	0.00	
40 P	1,1,1-Trichloroethane	0.7004	0.7088	-1.2	108	0.00	
41 i	1,4-Difluorobenzene	1.0000	1.0000	0.0	104	0.00	
42 P	Cyclohexane	0.4754	0.4492	5.5	99	0.00	
43 s	surr4,Dibromoethane	0.3120	0.3067	1.7	106	0.00	
44 P	Carbontetrachloride	0.1235	0.1278	-3.5	109	0.00	
45	1,1-Dichloropropene	0.4042	0.4062	-0.5	107	0.00	
46 s	surr1,1,2-dichloroethane-d4	0.3206	0.3167	1.2	107	0.00	

## Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 17:19:33 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
47 P	Benzene	1.2531	1.2405	1.0	106	0.00
48 P	1,2-Dichloroethane	0.4326	0.4369	-1.0	106	0.00
49	Iso-Butyl Alcohol	0.0130	0.0119	8.5	105	0.00
50	TAME	0.7222	0.7373	-2.1	102	0.00
51	n-Heptane	0.5448	0.5690	-4.4	109	0.00
52	1-Butanol	0.0058	0.0053	8.6	94	0.00
53 P	Trichloroethene	0.3463	0.3445	0.5	106	0.00
54 P	Methylcyclohexane	0.5121	0.4703	8.2	96	0.00
55 P	1,2-Dicloropropane	0.3694	0.3684	0.3	108	0.00
56	Dibromomethane	0.1625	0.1596	1.8	107	0.00
57	1,4-Dioxane	0.0018	0.0015	16.7	95	0.00
58	Methyl Methacrylate	0.1455	0.1448	0.5	102	0.00
59 P	Bromodichloromethane	0.3893	0.3885	0.2	105	0.00
60	2-Nitropropane	0.0426	0.0518	-21.6#	133	0.00
61	2-Chloroethylvinyl Ether	0.1728	0.1763	-2.0	105	0.00
62 P	cis-1,3-Dichloropropene	0.4412	0.4603	-4.3	106	0.00
63 P	4-Methyl-2-pentanone	0.3164	0.3203	-1.2	104	0.00
64 s	SURR3, Toluene-d8	1.1896	1.1510	3.2	103	0.00
65 P	Toluene	1.3531	1.3142	2.9	104	0.00
66 P	trans-1,3-Dichloropropene	0.3677	0.3894	-5.9	107	0.00
67	Ethyl Methacrylate	0.2898	0.3086	-6.5	108	0.00
68 P	1,1,2-Trichloroethane	0.2413	0.2357	2.3	105	0.00
69 s	SURR2, BFB	0.4834	0.4300	11.0	94	0.00
70 i	d5-Chlorobenzene	1.0000	1.0000	0.0	96	0.00
71 P	Tetrachloroethene	0.3005	0.3060	-1.8	103	0.00
72 P	2-Hexanone	0.2256	0.2439	-8.1	103	0.00
73	1,3-Dichloropropane	0.4369	0.4656	-6.6	105	0.00
74 P	Dibromochloromethane	0.2981	0.3334	-11.8	105	0.00
75	N-Butyl Acetate	0.5418	0.6166	-13.8	104	0.00
76 P	1,2-Dibromoethane	0.2435	0.2642	-8.5	106	0.00
77	3-Chlorobenzotrifluoride	0.5472	0.5547	-1.4	97	0.00
78 P	Chlorobenzene	0.9831	1.0284	-4.6	101	0.00
79	4-Chlorobenzotrifluoride	0.4816	0.4963	-3.1	97	0.00
80	1,1,1,2-Tetrachloroethane	0.3366	0.3637	-8.1	103	0.00
81 P	Ethylbenzene	0.5157	0.5342	-3.6	100	0.00
82 P	(m+p) Xylene	0.6204	0.6625	-6.8	99	0.00
83 P	o-Xylene	0.6155	0.6335	-2.9	98	0.00
84 P	Styrene	1.0423	1.1175	-7.2	98	0.00
85 P	Bromoform	0.1624	0.1874	-15.4	105	0.00
86	2-Chlorobenzotrifluoride	0.5181	0.5253	-1.4	93	0.00
87 P	Isopropylbenzene	1.5120	1.6242	-7.4	96	0.00
88	Cyclohexanone	0.0161	0.0132	18.0	84	0.00
89	trans-1,4-Dichloro-2-Butene	0.1091	0.1136	-4.1	104	0.00
90 i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	96	0.00
91 P	1,1,2,2-Tetrachloroethane	0.5106	0.5503	-7.8	101	0.00

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 17:19:33 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	Dev (min)
92	Bromobenzene	0.7243	0.7277	-0.5	100	0.00
93	1,2,3-Trichloropropane	0.1503	0.1457	3.1	100	0.00
94	n-Propylbenzene	2.9707	3.2191	-8.4	97	0.00
95	2-Chlorotoluene	1.8626	1.9246	-3.3	97	0.00
96	3-Chlorotoluene	1.9669	1.9870	-1.0	92	0.00
97	4-Chlorotoluene	2.2203	2.3155	-4.3	96	0.00
98	1,3,5-Trimethylbenzene	2.2186	2.3711	-6.9	95	0.00
99	tert-Butylbenzene	1.9260	2.0008	-3.9	95	0.00
100	1,2,4-Trimethylbenzene	2.2658	2.4224	-6.9	96	0.00
101	3,4-Dichlorobenzotrifluorid	0.6591	0.6779	-2.9	94	0.00
102	sec-Butylbenzene	2.6151	2.8344	-8.4	96	0.00
103	p-Isopropyltoluene	2.3299	2.5388	-9.0	97	0.00
104 P	1,3-Dclbenz	1.4741	1.5325	-4.0	99	0.00
105 P	1,4-Dclbenz	1.5453	1.5646	-1.2	99	0.00
106	2,4-Dichlorobenzotrifluorid	0.6183	0.6146	0.6	93	0.00
107	2,5-Dichlorobenzotrifluorid	0.7008	0.6927	1.2	93	0.00
108	n-Butylbenzene	2.0576	2.2358	-8.7	97	0.00
109 P	1,2-Dclbenz	1.3624	1.4369	-5.5	101	0.00
110 P	1,2-Dibromo-3-chloropropane	0.0934	0.1046	-12.0	113	0.00
111	Trielution Dichlorotoluene	1.1680	1.2951	-10.9	96	0.00
112	1,3,5-Trichlorobenzene	0.9978	1.0512	-5.4	97	0.00
113	Coelution Dichlorotoluene	1.2478	1.4194	-13.8	98	0.00
114 P	1,2,4-Tcbenzene	0.8584	0.9577	-11.6	104	0.00
115	Hexachlorobt	0.3554	0.3658	-2.9	99	0.00
116	Naphthalen	1.6087	1.9892	-23.7#	112	0.00
117	1,2,3-Tclbenzene	0.7069	0.8441	-19.4	111	0.00
118	2,4,5-Trichlorotoluene	0.5213	0.6250	-19.9	104	0.00
119	2,3,6-Trichlorotoluene	0.4556	0.5455	-19.7	109	0.00

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

μT

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV PQ1505783 - 02  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 17:19:33 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	1014460	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1539504	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1346702	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	792098	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.829	113	472219	49.15	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	98.30%		
46) surr1,1,2-dichloroetha...	5.414	65	487601	49.39	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	98.78%		
64) SURR3,Toluene-d8	8.042	98	1772006	48.38	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	96.76%		
69) SURR2,BFB	10.675	95	661971	44.47	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	88.94%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	597338m	56.71	ug/L	
3) Chloromethane	1.281	50	1030591	53.44	ug/L	99
4) Vinyl Chloride	1.348	62	724324	51.57	ug/L	96
5) Bromomethane	1.573	94	266218	45.81	ug/L	92
6) Chloroethane	1.634	64	350023	50.75	ug/L	95
7) Freon 21	1.762	67	799437	47.44	ug/L	98
8) Trichlorofluoromethane	1.811	101	572168	42.20	ug/L	100
9) Diethyl Ether	2.012	59	424986	52.04	ug/L	# 73
10) Freon 123a	2.012	67	488696	47.50	ug/L	90
11) Freon 123	2.061	83	531144	46.66	ug/L	77
12) Acrolein	2.110	56	288848	188.29	ug/L	96
13) 1,1-Dicethene	2.195	96	385262	51.55	ug/L	# 88
14) Freon 113	2.195	101	399730	51.12	ug/L	100
15) Acetone	2.226	43	105111	34.07	ug/L	96
16) 2-Propanol	2.329	45	447882	842.08	ug/L	94
17) Iodomethane	2.317	142	515470	46.57	ug/L	98
18) Carbon Disulfide	2.378	76	1221352	45.49	ug/L	100
19) Acetonitrile	2.451	40	72099	154.18	ug/L	99
20) Allyl Chloride	2.488	76	292507	60.15	ug/L	# 15
21) Methyl Acetate	2.500	43	359556	48.66	ug/L	84
22) Methylene Chloride	2.598	84	429006	46.79	ug/L	# 57
23) TBA	2.695	59	615404	903.29	ug/L	64
24) Acrylonitrile	2.823	53	821108	250.36	ug/L	100
25) Methyl-t-Butyl Ether	2.866	73	1051118	49.18	ug/L	83
26) trans-1,2-Dichloroethene	2.860	96	424620	50.47	ug/L	# 80
27) 1,1-Dicethane	3.305	63	961139	51.18	ug/L	99
28) Vinyl Acetate	3.372	86	68558	45.26	ug/L	# 78
29) DIPE	3.408	45	2671179	51.88	ug/L	# 76
30) 2-Chloro-1,3-Butadiene	3.415	53	1158818	53.05	ug/L	88
31) ETBE	3.878	59	1742018	49.54	ug/L	93
32) 2,2-Dichloropropane	4.055	77	646910	53.30	ug/L	98
33) cis-1,2-Dichloroethene	4.055	96	504634	50.05	ug/L	87
34) 2-Butanone	4.097	43	226183	47.39	ug/L	86
35) Propionitrile	4.164	54	281046	237.29	ug/L	97

16  
5/29/15

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 17:19:33 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.408	130	308636	49.78	ug/L	# 67
37) Methacrylonitrile	4.408	67	132673	47.41	ug/L	# 15
38) Tetrahydrofuran	4.494	42	143924	48.79	ug/L	69
39) Chloroform	4.561	83	826273	49.46	ug/L	97
40) 1,1,1-Trichloroethane	4.853	97	719037	50.60	ug/L	90
42) Cyclohexane	4.945	41	691488	47.24	ug/L	90
44) Carbontetrachloride	5.146	121	196811	51.74	ug/L	86
45) 1,1-Dichloropropene	5.158	75	625311	50.25	ug/L	95
47) Benzene	5.499	78	1909822	49.50	ug/L	82
48) 1,2-Dichloroethane	5.542	62	672587	50.50	ug/L	92
49) Iso-Butyl Alcohol	5.493	43	366211	915.15	ug/L	91
50) TAME	5.743	73	1135034	51.04	ug/L	82
51) n-Heptane	6.005	43	876004	52.22	ug/L	80
52) 1-Butanol	6.518	56	405499	2319.11	ug/L	81
53) Trichloroethene	6.493	130	530290	49.74	ug/L	96
54) Methylcyclohexane	6.749	55	724011	45.92	ug/L	# 82
55) 1,2-Diclpropane	6.792	63	567207	49.87	ug/L	99
56) Dibromomethane	6.938	93	245638	49.09	ug/L	93
57) 1,4-Dioxane	7.011	88	46791m	824.37	ug/L	
58) Methyl Methacrylate	7.024	69	222927	49.76	ug/L	# 52
59) Bromodichloromethane	7.176	83	598139	49.91	ug/L	97
60) 2-Nitropropane	7.469	41	159344	121.39	ug/L	98
61) 2-Chloroethylvinyl Ether	7.597	63	271481	51.04	ug/L	90
62) cis-1,3-Dichloropropene	7.737	75	708709	52.17	ug/L	95
63) 4-Methyl-2-pentanone	7.950	43	493108	50.62	ug/L	87
65) Toluene	8.121	91	2023250	48.56	ug/L	99
66) trans-1,3-Dichloropropene	8.395	75	599439	52.94	ug/L	96
67) Ethyl Methacrylate	8.542	69	475036	53.24	ug/L	# 58
68) 1,1,2-Trichloroethane	8.590	97	362846	48.85	ug/L	95
71) Tetrachloroethene	8.731	164	412152	50.92	ug/L	98
72) 2-Hexanone	8.895	43	328429	54.06	ug/L	89
73) 1,3-Dichloropropane	8.767	76	627025	53.29	ug/L	# 77
74) Dibromochloromethane	8.999	129	448983	55.91	ug/L	97
75) N-Butyl Acetate	9.054	43	830431	56.91	ug/L	92
76) 1,2-Dibromoethane	9.096	107	355857	54.26	ug/L	100
77) 3-Chlorobenzotrifluoride	9.627	180	747020	50.68	ug/L	98
78) Chlorobenzene	9.608	112	1384949	52.30	ug/L	95
79) 4-Chlorobenzotrifluoride	9.682	180	668386	51.52	ug/L	96
80) 1,1,1,2-Tetrachloroethane	9.694	131	489815	54.02	ug/L	98
81) Ethylbenzene	9.730	106	719426	51.80	ug/L	92
82) (m+p)Xylene	9.846	106	1784359	106.79	ug/L	93
83) o-Xylene	10.206	106	853177	51.47	ug/L	94
84) Styrene	10.224	104	1504914	53.61	ug/L	95
85) Bromoform	10.377	173	252356	57.71	ug/L	99
86) 2-Chlorobenzotrifluoride	10.456	180	707406	50.70	ug/L	91
87) Isopropylbenzene	10.547	105	2187324	53.71	ug/L	99
88) Cyclohexanone	10.614	55	354763	817.79	ug/L	90
89) trans-1,4-Dichloro-2-B...	10.864	53	153028	52.08	ug/L	84
91) 1,1,2,2-Tetrachloroethane	10.816	83	435863	53.88	ug/L	99
92) Bromobenzene	10.797	156	576443	50.24	ug/L	94
93) 1,2,3-Trichloropropane	10.840	110	115442	48.48	ug/L	# 84

Data Path : I:\ACQUDATA\msvola10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

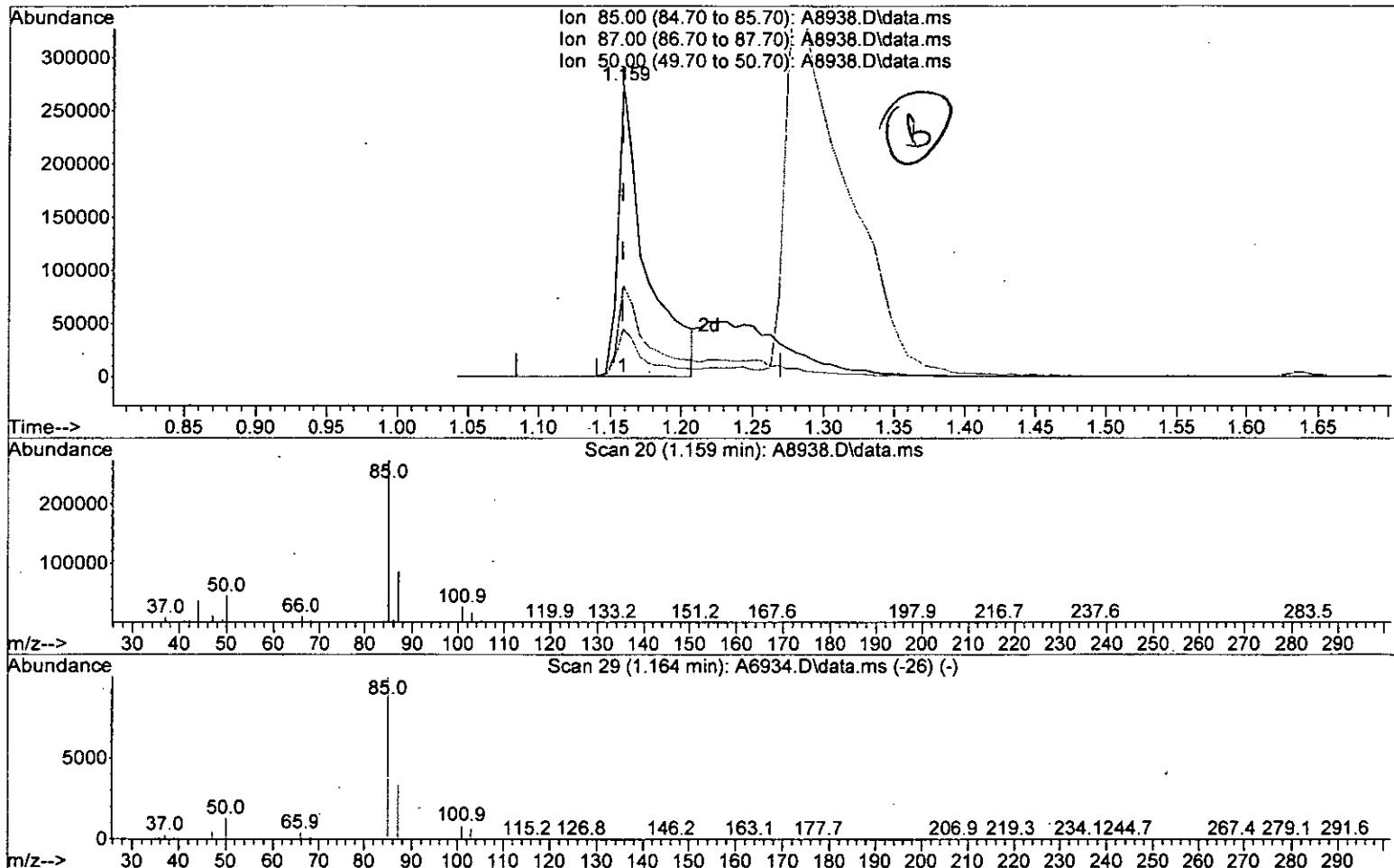
Quant Time: May 27 17:19:33 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.907	91	2549833	54.18	ug/L	100
95) 2-Chlorotoluene	10.974	91	1524485	51.67	ug/L	96
96) 3-Chlorotoluene	11.029	91	1573872	50.51	ug/L	96
97) 4-Chlorotoluene	11.065	91	1834073	52.14	ug/L	96
98) 1,3,5-Trimethylbenzene	11.065	105	1878176	53.44	ug/L	97
99) tert-Butylbenzene	11.340	119	1584826	51.94	ug/L	98
100) 1,2,4-Trimethylbenzene	11.376	105	1918801	53.46	ug/L	95
101) 3,4-Dichlorobenzotrifl...	11.443	214	536950	51.43	ug/L	100
102) sec-Butylbenzene	11.523	105	2245106	54.19	ug/L	98
103) p-Isopropyltoluene	11.645	119	2010946	54.48	ug/L	98
104) 1,3-Dclbenz	11.602	146	1213910	51.98	ug/L	98
105) 1,4-Dclbenz	11.681	146	1239321	50.62	ug/L	97
106) 2,4-Dichlorobenzotrifl...	11.736	214	486853	49.70	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.779	214	548673	49.42	ug/L	96
108) n-Butylbenzene	11.980	91	1770991	54.33	ug/L	97
109) 1,2-Dclbenz	11.986	146	1138163	52.73	ug/L	100
110) 1,2-Dibromo-3-chloropr...	12.614	157	82883	56.00	ug/L	91
111) Trielution Dichlorotol...	12.736	125	3077607	166.32	ug/L	98
112) 1,3,5-Trichlorobenzene	12.785	180	832655	52.68	ug/L	97
113) Coelution Dichlorotoluene	13.059	125	2248577	113.75	ug/L	95
114) 1,2,4-Tcbenzene	13.266	180	758614	55.78	ug/L	97
115) Hexachlorobt	13.406	225	289769	51.46	ug/L	96
116) Naphthalen	13.461	128	1575644	61.83	ug/L	97
117) 1,2,3-Tclbenzene	13.650	180	668593	59.70	ug/L	98
118) 2,4,5-Trichlorotoluene	14.236	159	495057	59.94	ug/L	98
119) 2,3,6-Trichlorotoluene	14.321	159	432067	59.87	ug/L	96

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

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 16:27:21 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8938.D\data.ms

## (2) Dichlorodifluoromethane (P)

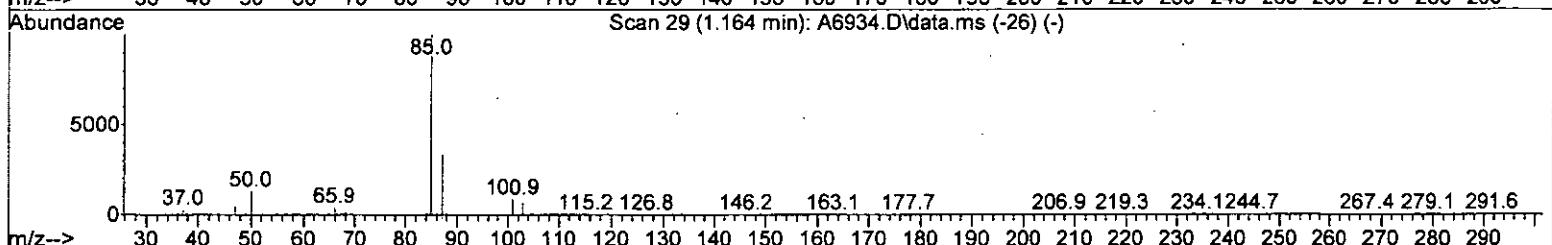
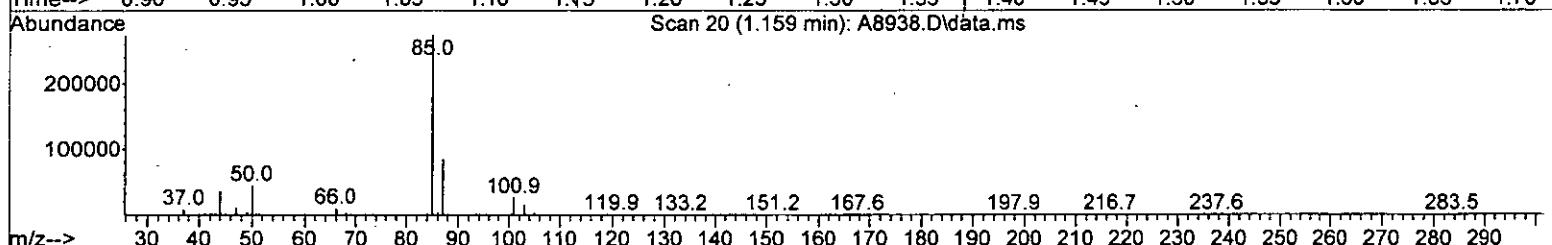
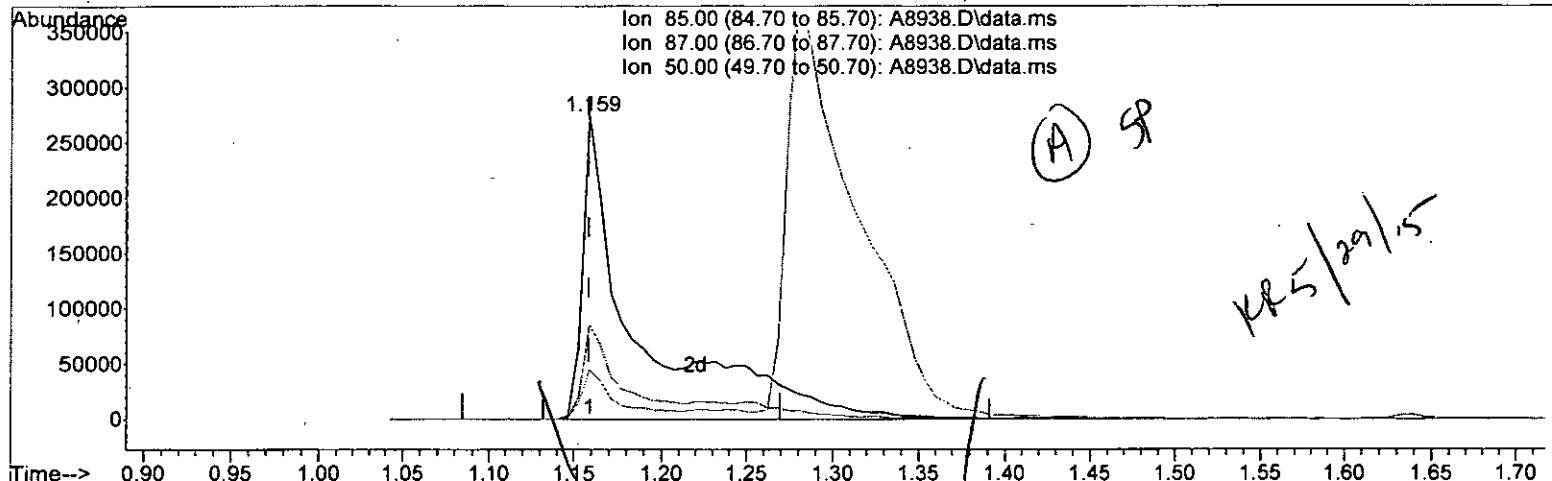
1.159min (+0.000) 35.63 ug/L

response 375380

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.03
50.00	15.00	16.23
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 16:27:21 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8938.D\data.ms

## (2) Dichlorodifluoromethane (P)

1.159min (+0.000) 56.71 ug/L m

response 597338

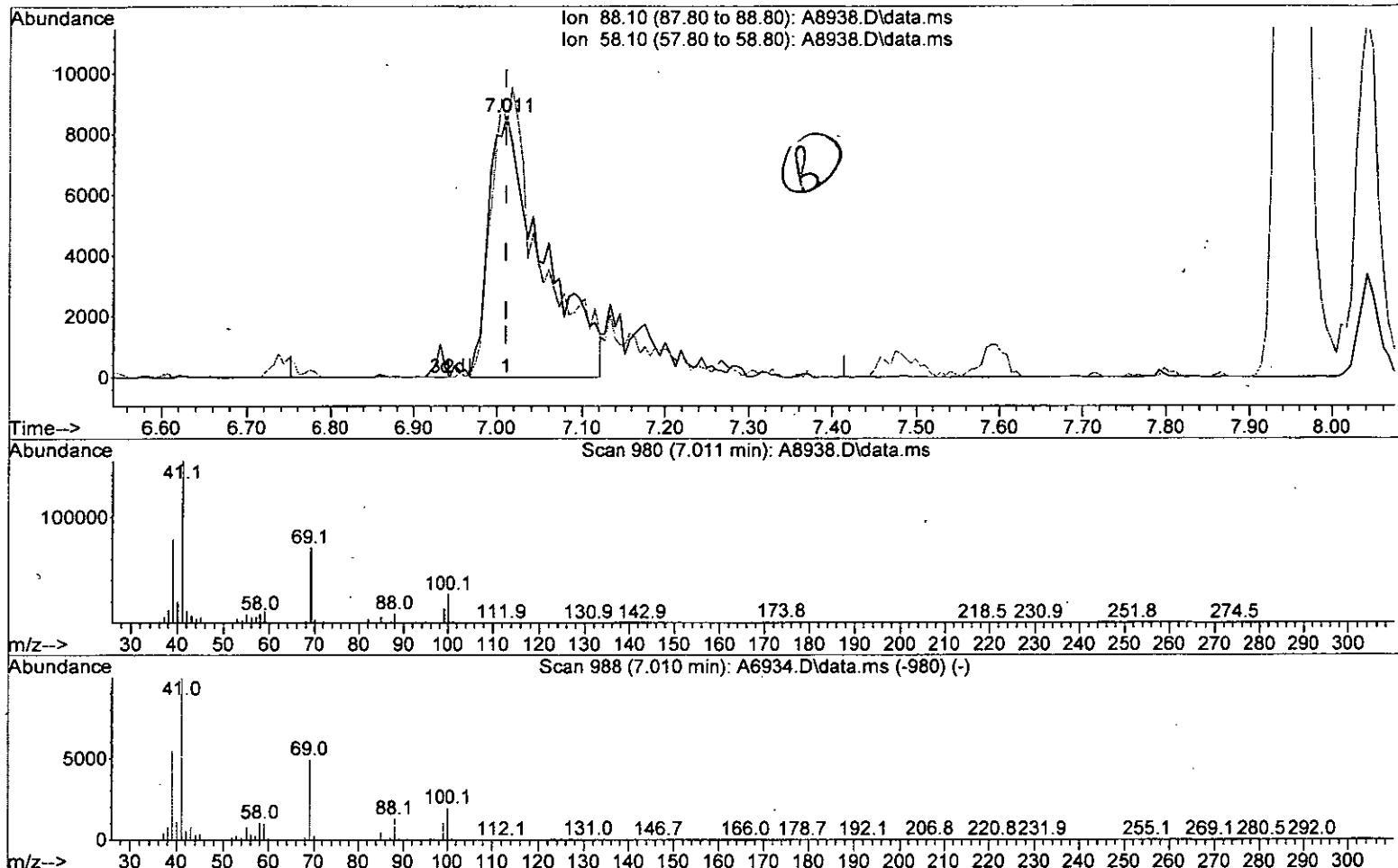
Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.03
50.00	15.00	16.23
0.00	0.00	0.00

## Quantitation Report (Yearit)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 16:27:21 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8938.D\data.ms

(57) 1,4-Dioxane

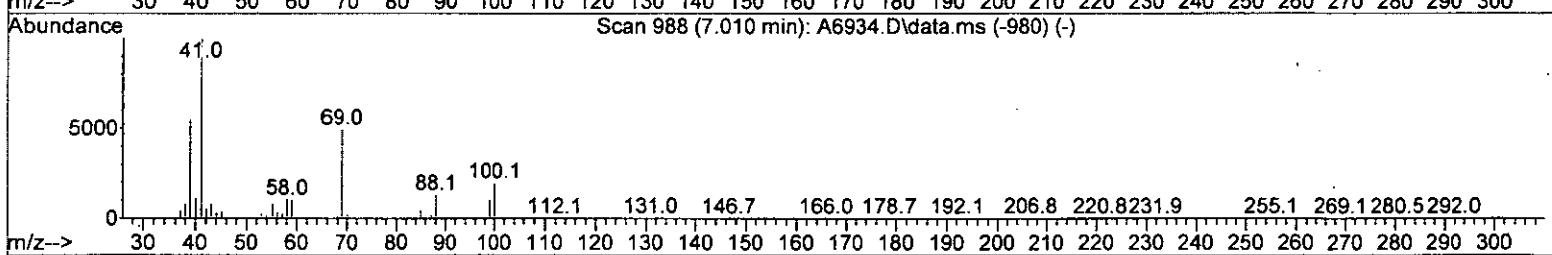
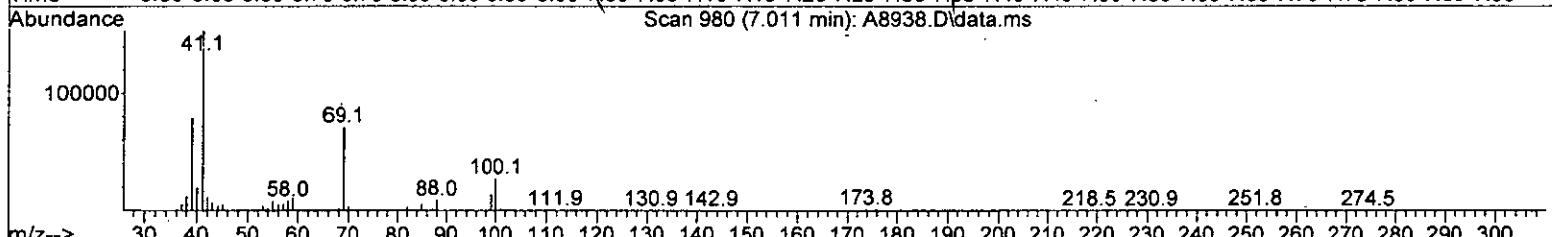
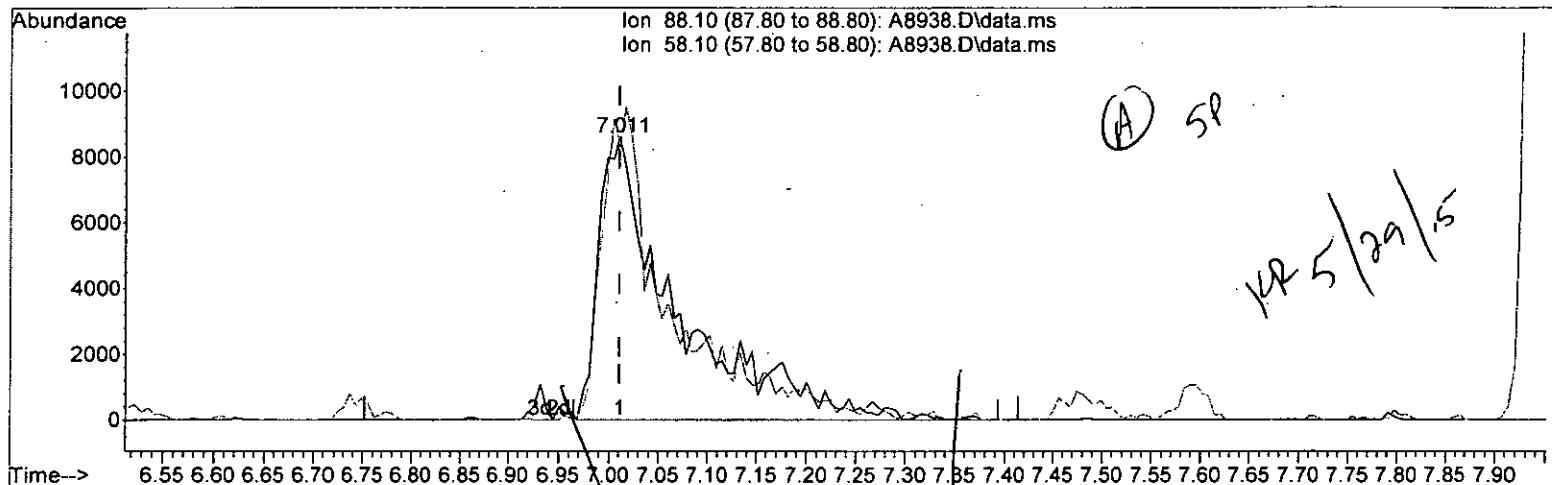
7.011min (+0.000) 661.63 ug/L

response 37554

Ion	Exp%	Ad%
88.10	100	100
58.10	61.10	96.01#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8938.D  
 Acq On : 27 May 2015 4:12 pm  
 Operator : F. Naegler  
 Sample : CCV Inst : MSVOA10  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 16:27:21 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8938.D\data.ms

## (57) 1,4-Dioxane

7.011min (+0.000) 824.37 ug/L m

response 46791

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	96.01#
0.00	0.00	0.00
0.00	0.00	0.00

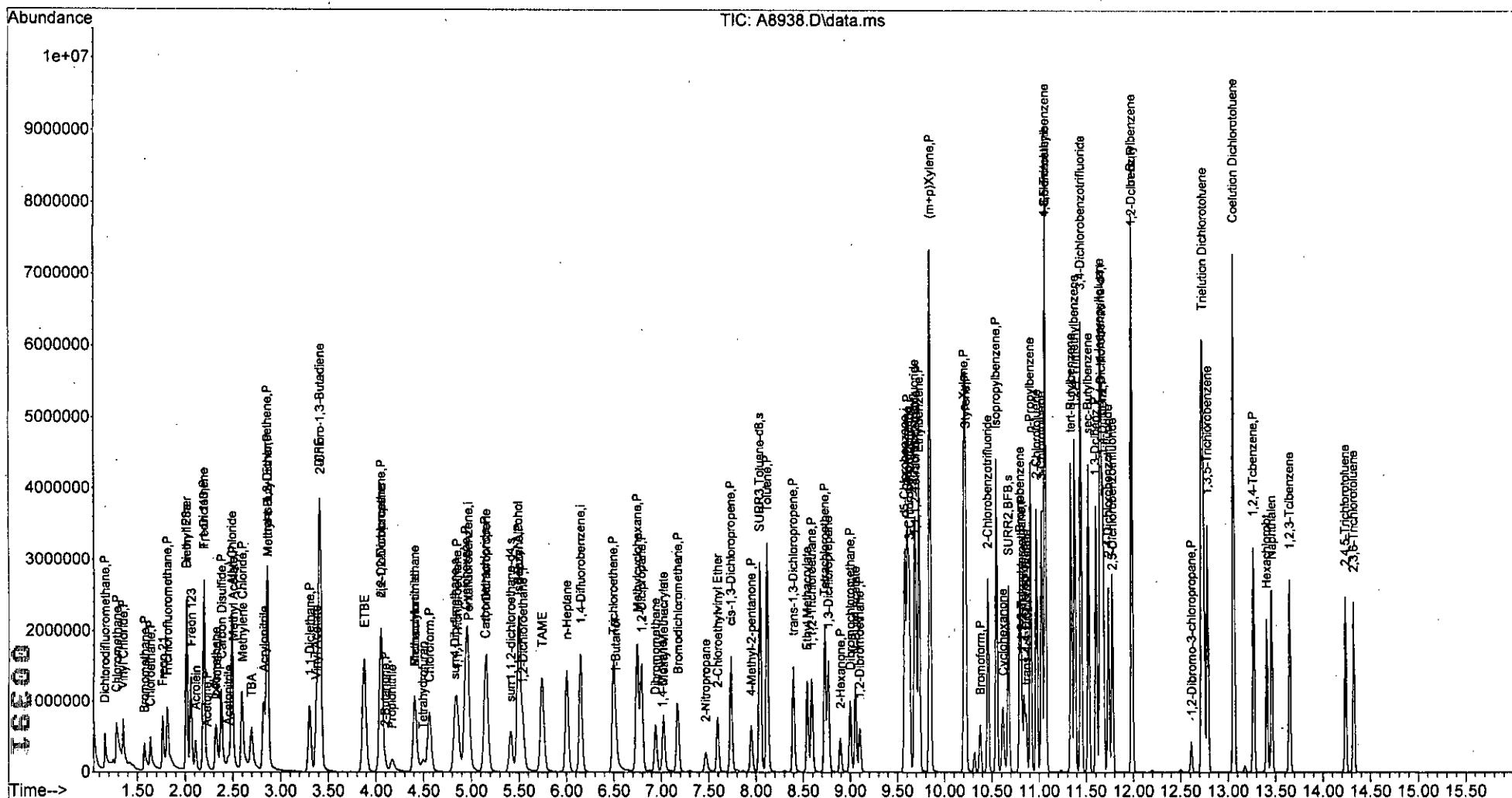
*W/H*

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
Data File : A8938.D  
Acq On : 27 May 2015 4:12 pm  
Operator : F. Naegler  
Sample : CCV  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 17:19:33 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration





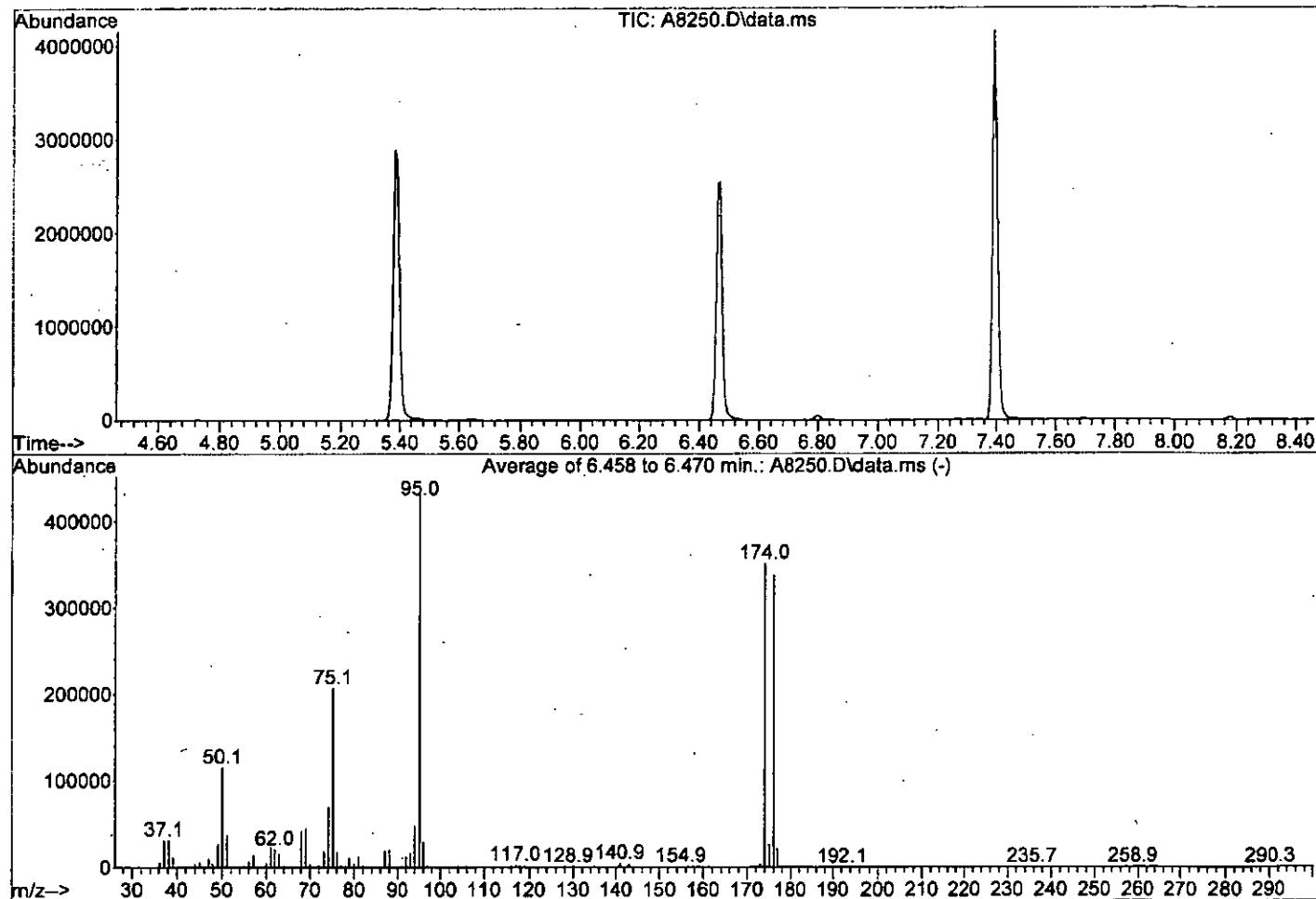
# VOLATILE ORGANICS RAW QC DATA

**ALS Environmental - Rochester, NY**  
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623  
Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

Data Path : I:\ACQUDATA\msvoa10\data\050615\  
 Data File : A8250.D  
 Acq On : 6 May 2015 3:32 pm  
 Operator : F. NAEGLER  
 Sample : TUNE Inst : MSVOA10  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 389, 390, 391; Background Corrected with Scan 384

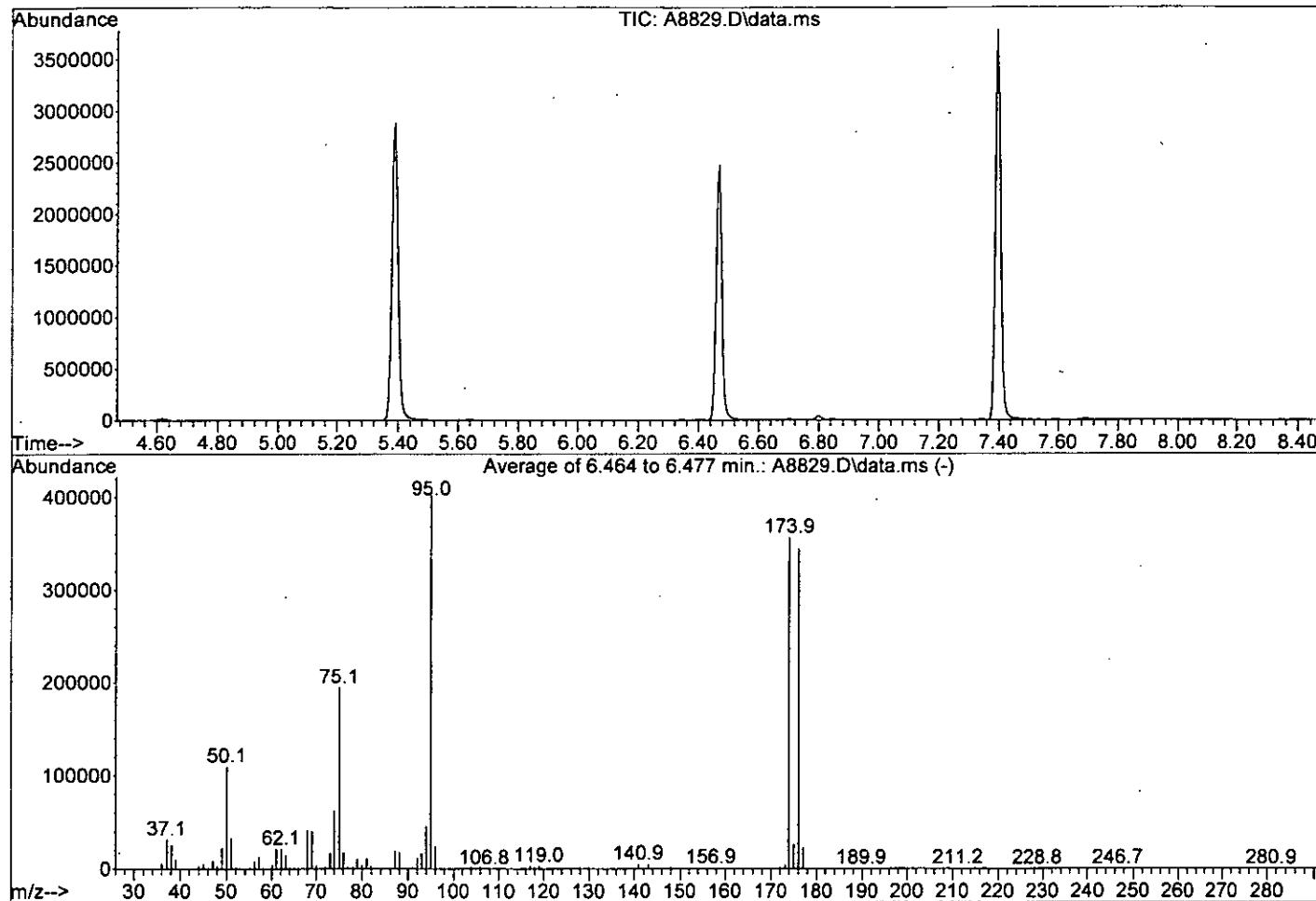
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.7	114707	PASS
75	95	30	60	48.1	206805	PASS
95	95	100	100	100.0	430315	PASS
96	95	5	9	6.8	29200	PASS
173	174	0.00	2	1.0	3466	PASS
174	95	50	120	81.6	351083	PASS
175	174	5	9	7.4	25806	PASS
176	174	95	101	96.1	337237	PASS
177	176	5	9	6.4	21447	PASS

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8829.D  
 Acq On : 24 May 2015 8:53 pm  
 Operator : F.Naegler  
 Sample : TUNE *PQKDS558 -D1*  
 Misc :  
 ALS Vial : 25 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006

✓ 5/25/15



AutoFind: Scans 390, 391, 392; Background Corrected with Scan 384

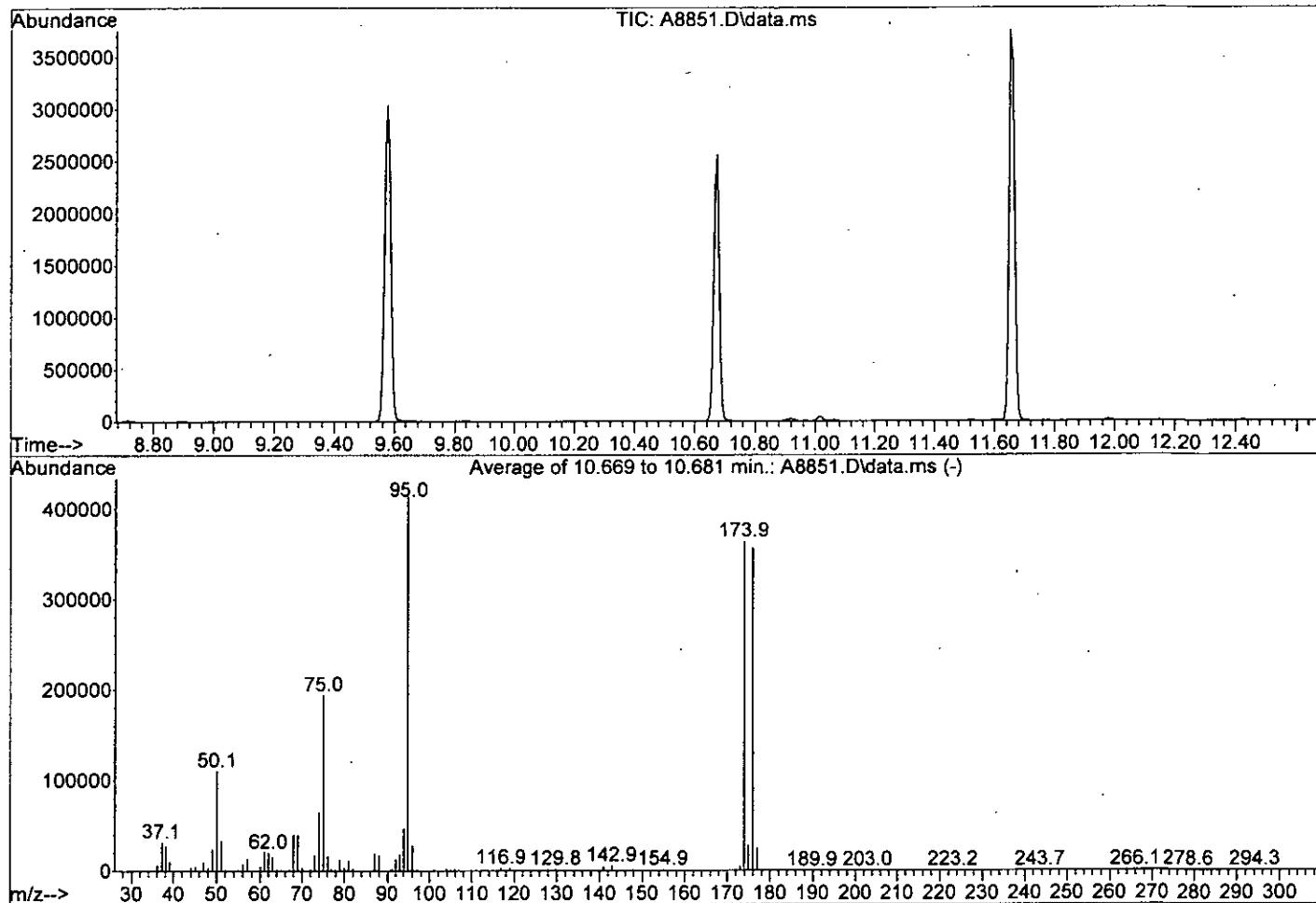
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.3	109451	PASS
75	95	30	60	48.4	194347	PASS
95	95	100	100	100.0	401515	PASS
96	95	5	9	5.9	23640	PASS
173	174	0.00	2	1.0	3642	PASS
174	95	50	120	88.7	356117	PASS
175	174	5	9	7.3	25939	PASS
176	174	95	101	96.6	344085	PASS
177	176	5	9	6.5	22416	PASS

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8851.D  
 Acq On : 25 May 2015 8:28 am  
 Operator : K.Ruest  
 Sample : TUNE *PQ1504538-01, 5539-01* Inst : MSVOA10  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Title : MS#10 - 8260B WATERS 10mL Purge  
 Last Update : Thu May 07 14:25:48 2015

*W5/25/15*



AutoFind: Scans 1580, 1581, 1582; Background Corrected with Scan 1574

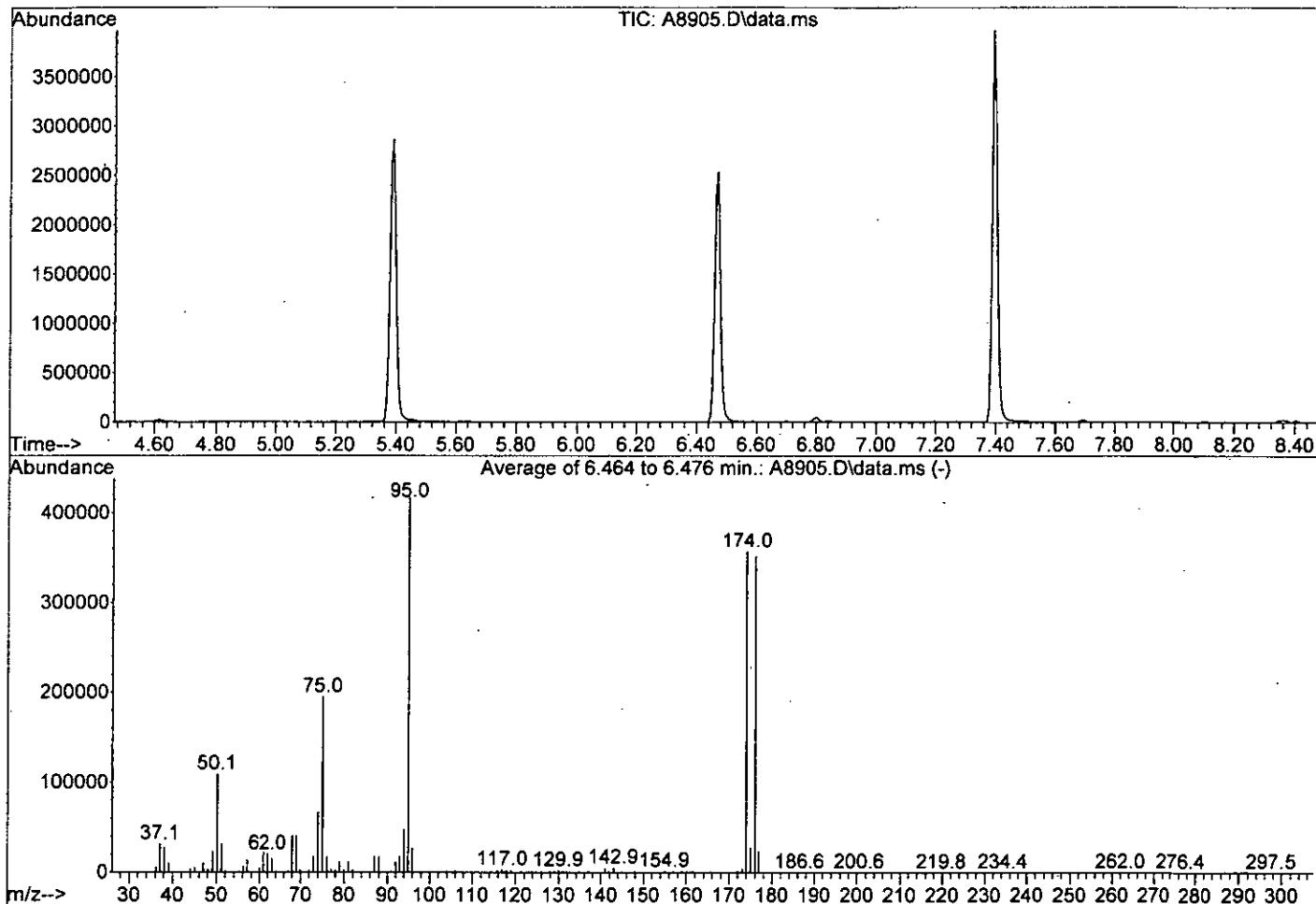
Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	26.6	109941	PASS
75	95	30	60	46.9	193547	PASS
95	95	100	100	100.0	413120	PASS
96	95	5	9	6.7	27619	PASS
173	174	0.00	2	1.1	4075	PASS
174	95	50	120	88.0	363541	PASS
175	174	5	9	7.5	27408	PASS
176	174	95	101	98.0	356373	PASS
177	176	5	9	6.9	24611	PASS

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8905.D  
 Acq On : 26 May 2015 8:31 pm  
 Operator : F. Naegler  
 Sample : TUNE *PQ1505661-01* Inst : MSVOA10  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUADATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006

*FN Sept 15*



AutoFind: Scans 390, 391, 392; Background Corrected with Scan 384

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.1	108624	PASS
75	95	30	60	46.7	194475	PASS
95	95	100	100	100.0	416875	PASS
96	95	5	9	6.4	26725	PASS
173	174	0.00	2	1.0	3743	PASS
174	95	50	120	85.6	356651	PASS
175	174	5	9	7.5	26731	PASS
176	174	95	101	98.6	351637	PASS
177	176	5	9	6.5	23029	PASS

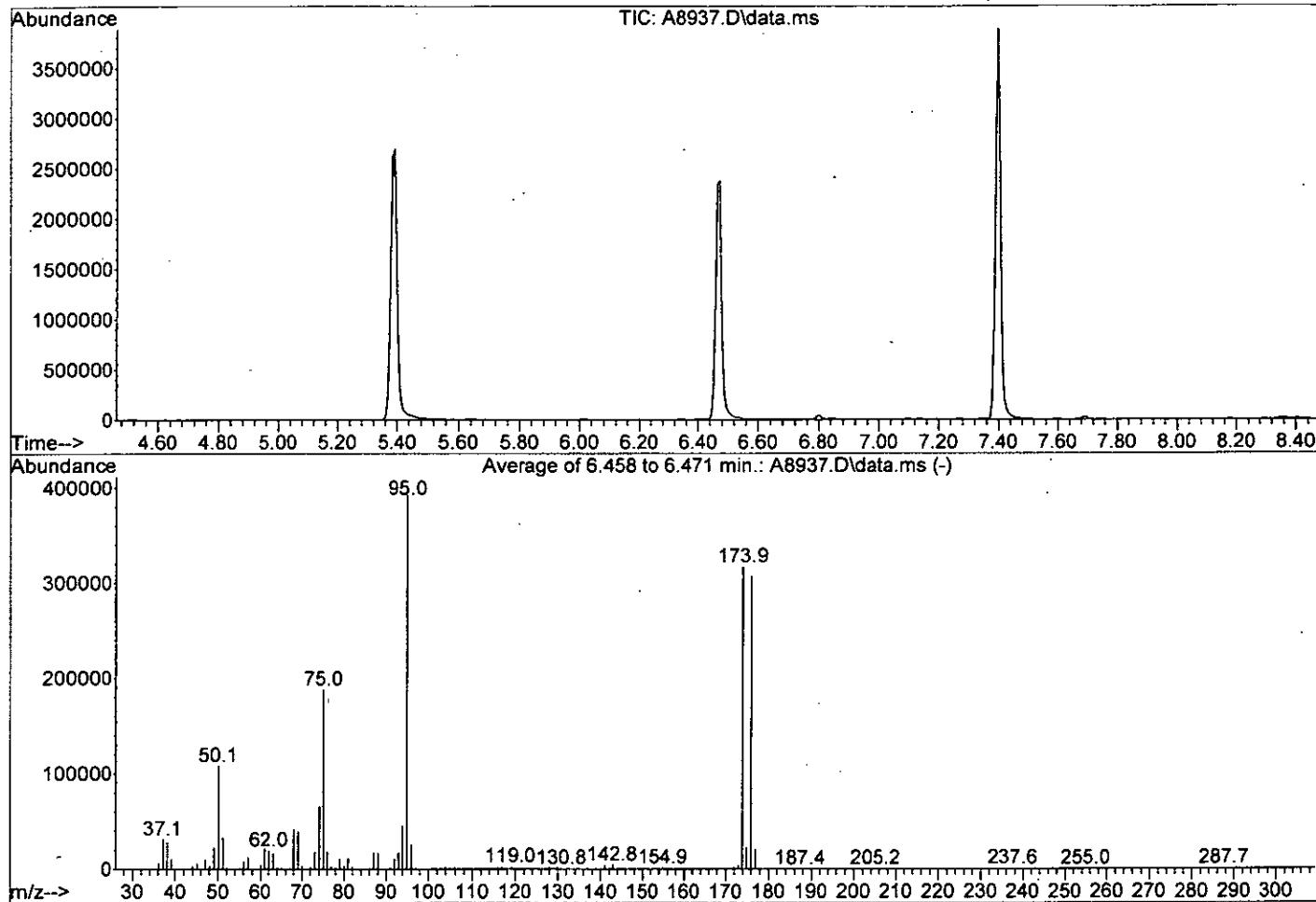
Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8937.D  
 Acq On : 27 May 2015 3:39 pm  
 Operator : F. Naegler  
 Sample : TUNE *RQ1505783 - 01*  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA10

Integration File: CPD4.P

FN  
5/27/15

Method : I:\ACQUDATA\MSVOA10\METHODS\T050615.M  
 Title : 8260B WATERS  
 Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 389, 390, 391; Background Corrected with Scan 384

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	27.5	107643	PASS
75	95	30	60	47.9	187592	PASS
95	95	100	100	100.0	391851	PASS
96	95	5	9	6.4	25094	PASS
173	174	0.00	2	1.0	3037	PASS
174	95	50	120	80.7	316373	PASS
175	174	5	9	7.1	22529	PASS
176	174	95	101	96.8	306347	PASS
177	176	5	9	6.5	19799	PASS

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505558-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/24/15 22:49

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8833.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&L  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505558-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/24/15 22:49

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8833.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	5/24/15 22:49	
Toluene-d8	98	87-121	5/24/15 22:49	
Dibromofluoromethane	100	89-119	5/24/15 22:49	

Data Path : I:\ACQUDATA\MSVOA10\DATA\052415\  
 Data File : A8833.D  
 Acq On : 24 May 2015 10:49 pm  
 Operator : F.Naegler  
 Sample : MBLK *1Q1505554-04*  
 Misc :  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 24 23:04:32 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	916036	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1423769	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1312859	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	729804	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.829	113	444347	50.01	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.02%			
46) surr1,1,2-dichloroetha...	5.414	65	464992	50.93	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 101.86%			
64) SURR3,Toluene-d8	8.041	98	1663961	49.12	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.24%			
69) SURR2,BFB	10.675	95	632430	45.94	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 91.88%			
<b>Target Compounds</b>						
15) Acetone	2.226	43	1127	Below Cal	# 49	
16) 2-Propanol	2.323	45	1097	2.28	ug/L # 43	
23) TBA	2.689	59	838	1.36	ug/L # 22	
38) Tetrahydrofuran	4.512	42	801	0.30	ug/L # 35	
80) Cyclohexanone	10.608	55	1022	2.42	ug/L # 47	
114) 1,2,4-Tcbenzene	13.266	180	3218	0.26	ug/L # 76	
115) Hexachlorobt	13.406	225	1633	0.31	ug/L # 82	
116) Naphthalen	13.455	128	5370	0.23	ug/L 89	
117) 1,2,3-Tclbenzene	13.650	180	3837	0.37	ug/L 81	

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

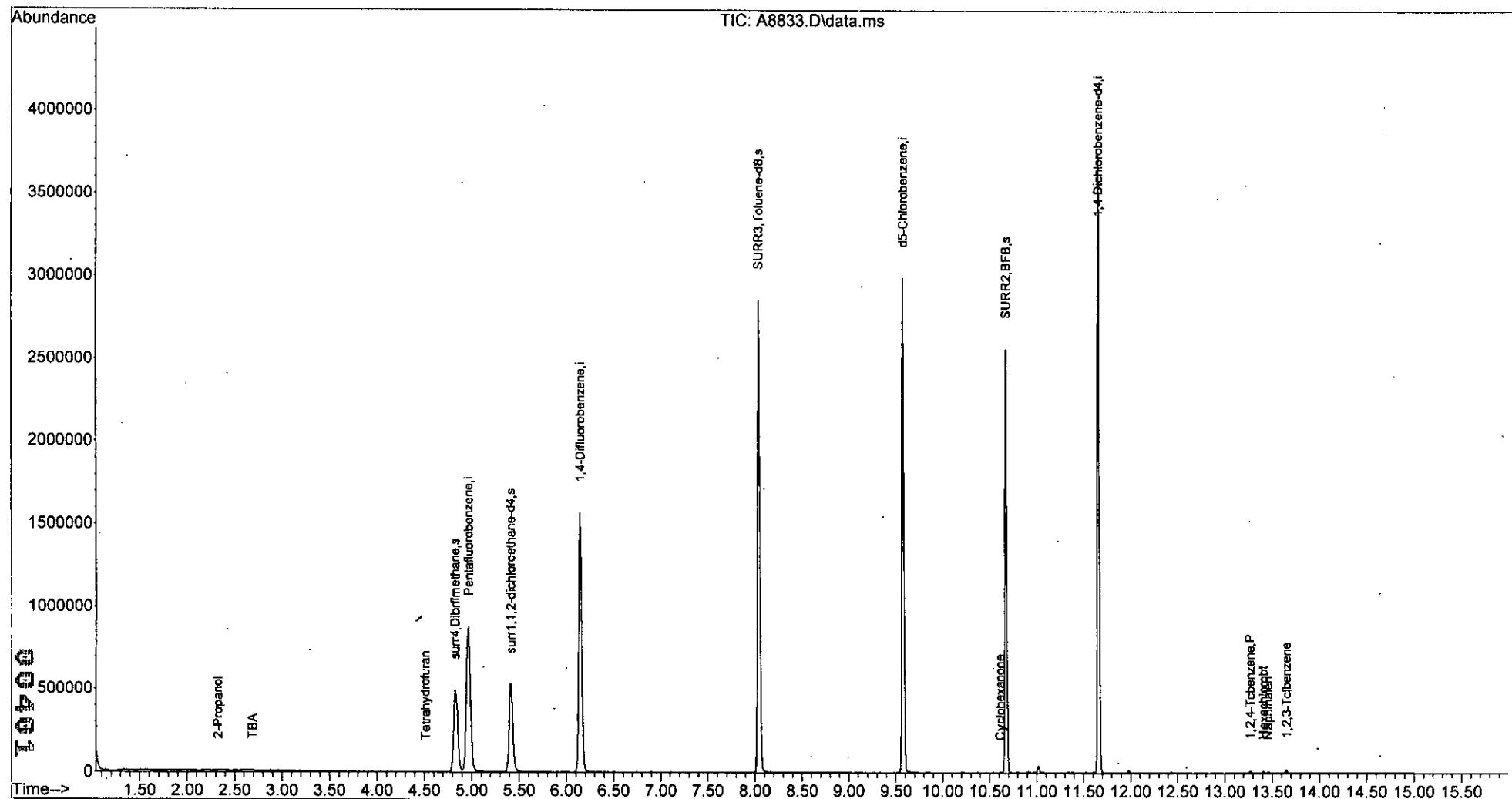
PF  
5/26/15

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA10\DATA\052415\  
Data File : A8833.D  
Acq On : 24 May 2015 10:49 pm  
Operator : F.Naegler  
Sample : MBLK  
Misc :  
ALS Vial : 29 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 24 23:04:32 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505539-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/25/15 10:26

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8855.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505539-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/25/15 10:26

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8855.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	5/25/15 10:26	
Toluene-d8	97	87-121	5/25/15 10:26	
Dibromofluoromethane	100	89-119	5/25/15 10:26	

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8855.D  
 Acq On : 25 May 2015 10:26 am  
 Operator : K.Ruest  
 Sample : VBLK LQ1505538-04, 5539-04 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 26 15:49:27 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	908841	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1411218	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1301936	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	729970	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	441852	50.17	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	100.34%	
46) surr1,1,2-dichloroetha...	5.414	65	460014	50.83	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	101.66%	
64) SURR3,Toluene-d8	8.042	98	1634672	48.69	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	97.38%	
69) SURR2,BFB	10.675	95	623262	45.68	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	91.36%	
<b>Target Compounds</b>						
114) 1,2,4-Tcbenzene	13.266	180	2894	0.23	ug/L	83
115) Hexachlorobt	13.412	225	1429	0.28	ug/L #	81
116) Naphthalen	13.461	128	5559	0.24	ug/L	91
117) 1,2,3-Tclbenzene	13.644	180	3717	0.36	ug/L #	48

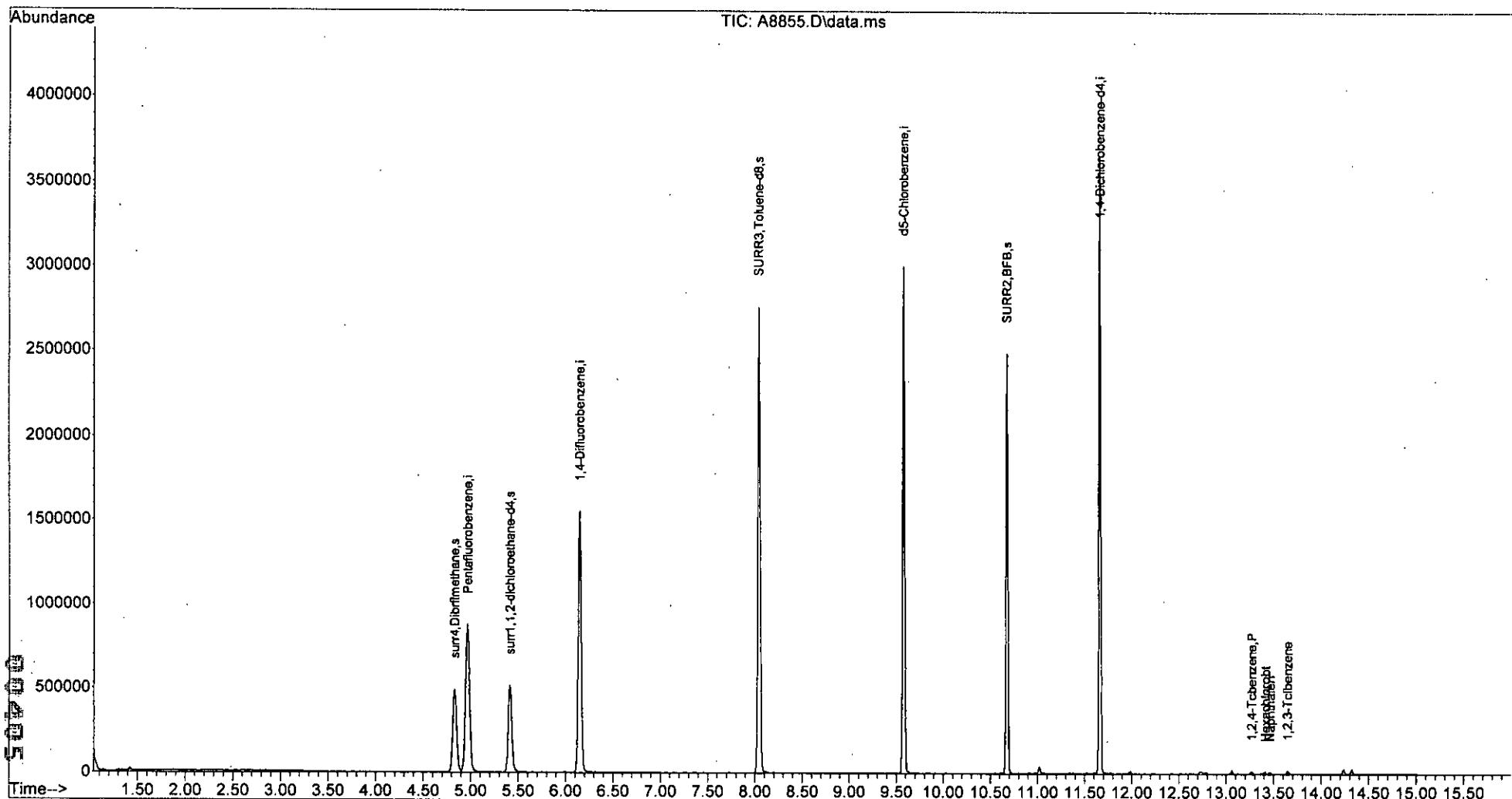
(#) = qualifier out of range (m) = manual integration (+) = signals summed

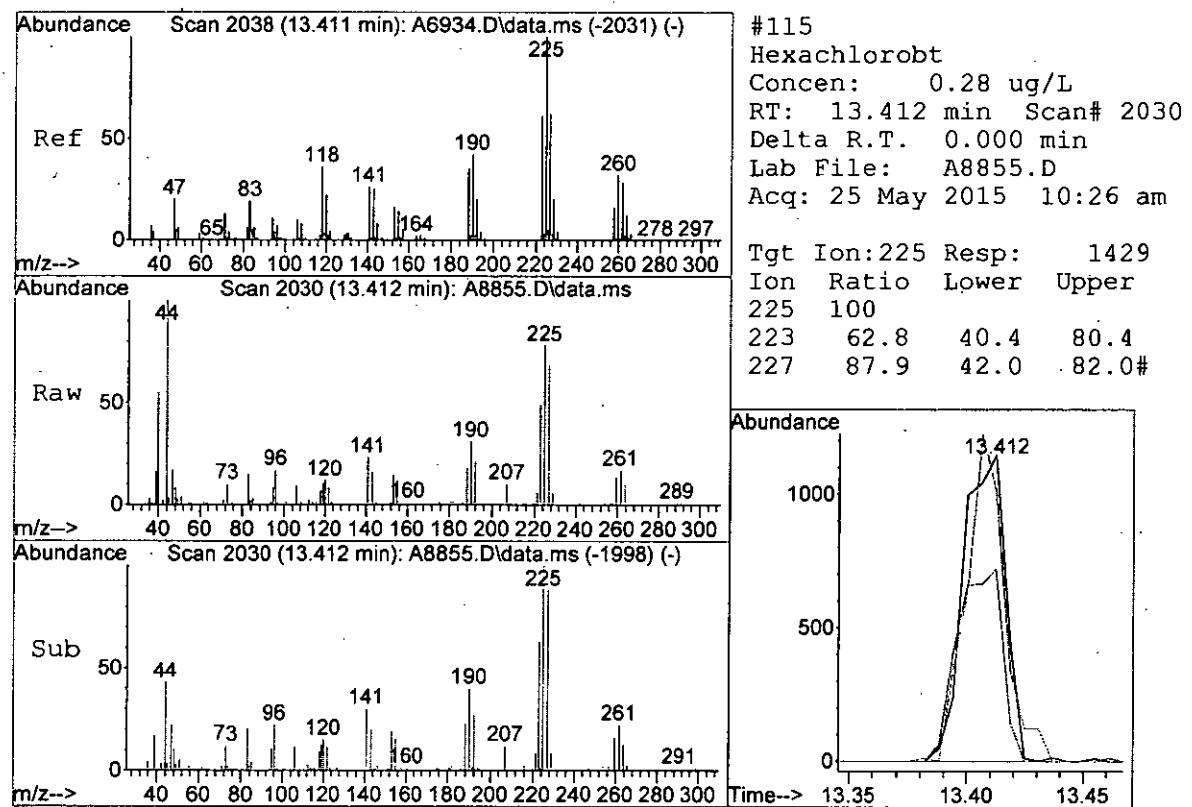
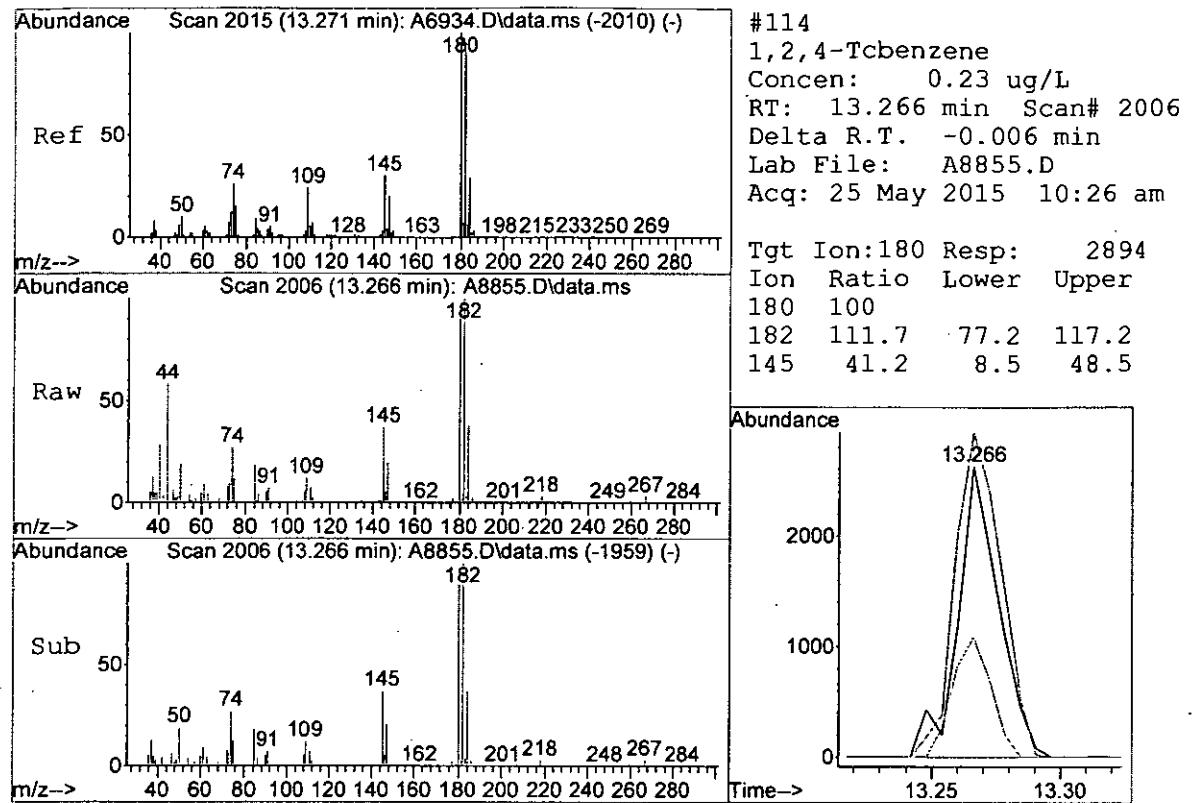
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5/26/15

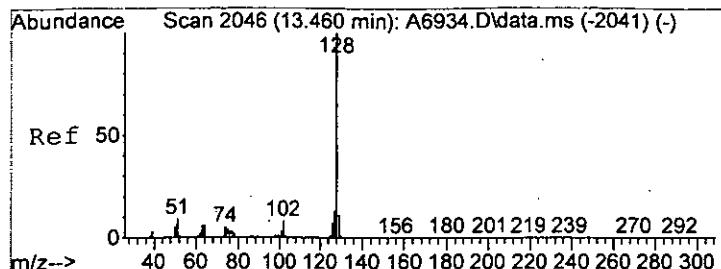
## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
Data File : A8855.D  
Acq On : 25 May 2015 10:26 am  
Operator : K.Ruest  
Sample : VBLK  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

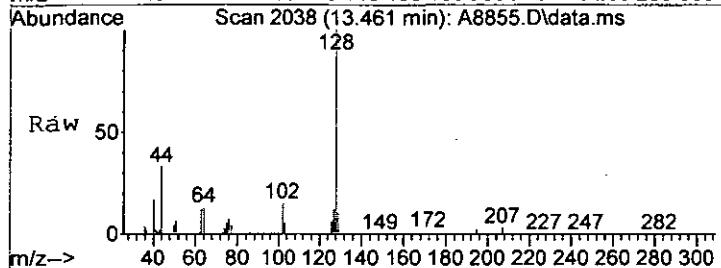
Quant Time: May 26 15:49:27 2015  
Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



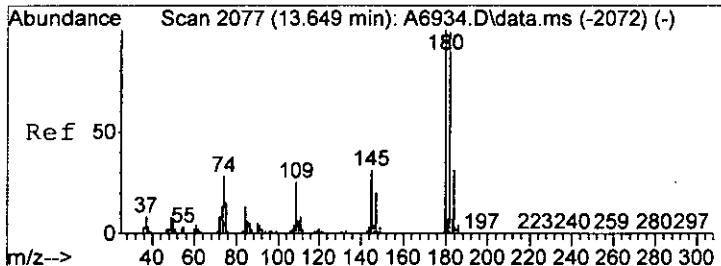
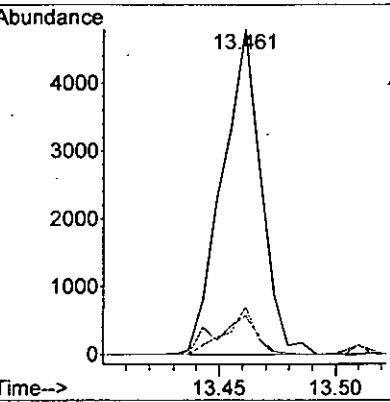
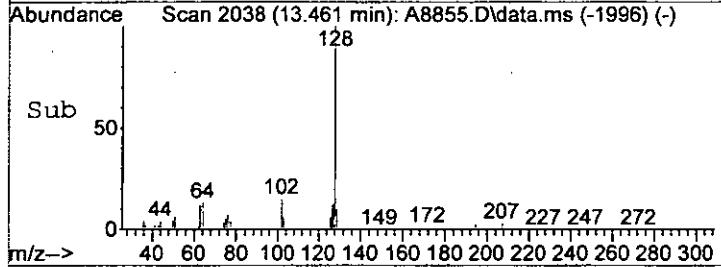




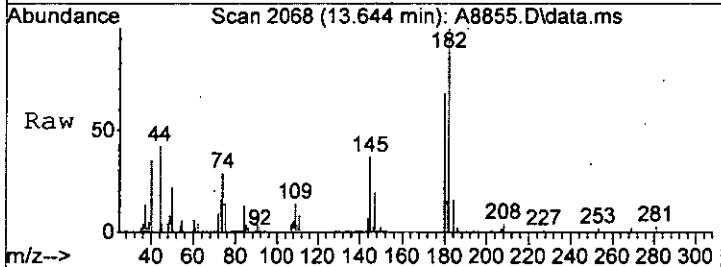
#116  
Naphthalen  
Concen: 0.24 ug/L  
RT: 13.461 min Scan# 2038  
Delta R.T. 0.000 min  
Lab File: A8855.D  
Acq: 25 May 2015 10:26 am



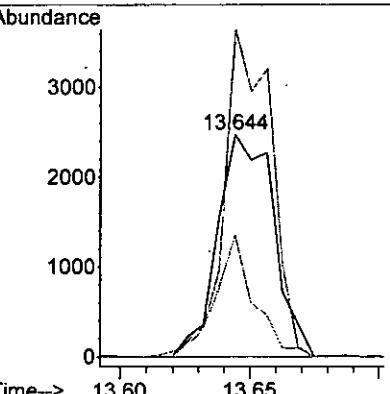
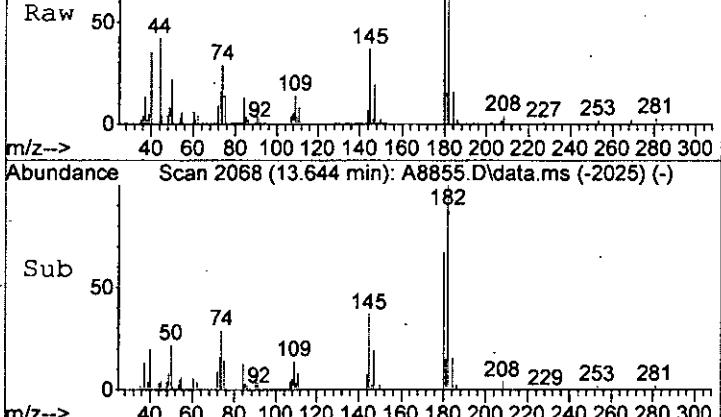
Tgt Ion:128 Resp: 5559  
Ion Ratio Lower Upper  
128 100  
127 11.9 0.0 33.2  
102 14.6 0.0 28.4



#117  
1,2,3-Tclbenzene  
Concen: 0.36 ug/L  
RT: 13.644 min Scan# 2068  
Delta R.T. -0.006 min  
Lab File: A8855.D  
Acq: 25 May 2015 10:26 am



Tgt Ion:180 Resp: 3717  
Ion Ratio Lower Upper  
180 100  
182 147.4 75.7 115.7#  
145 54.7 9.6 49.6#



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505661-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/26/15 22:26

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8909.D\**Analysis Lot:** 446223**Instrument Name:** R-MS-10**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505661-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/26/15 22:26

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS****Analytical Method:** 8260C**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8909.D\**Analysis Lot:** 446223**Instrument Name:** R-MS-10**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85-122	5/26/15 22:26	
Toluene-d8	96	87-121	5/26/15 22:26	
Dibromofluoromethane	100	89-119	5/26/15 22:26	

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
 Data File : A8909.D  
 Acq On : 26 May 2015 10:26 pm  
 Operator : F. Naegler  
 Sample : MBLK *PQ KDS661-04* Inst : MSVOA10  
 Misc :  
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 27 16:51:59 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	922274	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1445618	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1330425	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	748929	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.829	113	450190	49.90	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.80%			
46) surr1,1,2-dichloroetha...	5.414	65	474054	51.14	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 102.28%			
64) SURR3,Toluene-d8	8.041	98	1658305	48.22	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.44%			
69) SURR2,BFB	10.675	95	627760	44.91	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 89.82%			
<b>Target Compounds</b>						
12) Acrolein	2.110	56	887	0.64	ug/L	# 14
88) Cyclohexanone	10.614	55	1369	3.19	ug/L	# 45
114) 1,2,4-Tcbenzene	13.272	180	3773	0.29	ug/L	93
115) Hexachlorobt	13.412	225	1701	0.32	ug/L	96
116) Naphthalen	13.461	128	5348	0.22	ug/L	88
117) 1,2,3-Tclbenzene	13.644	180	4691	0.44	ug/L	# 68

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

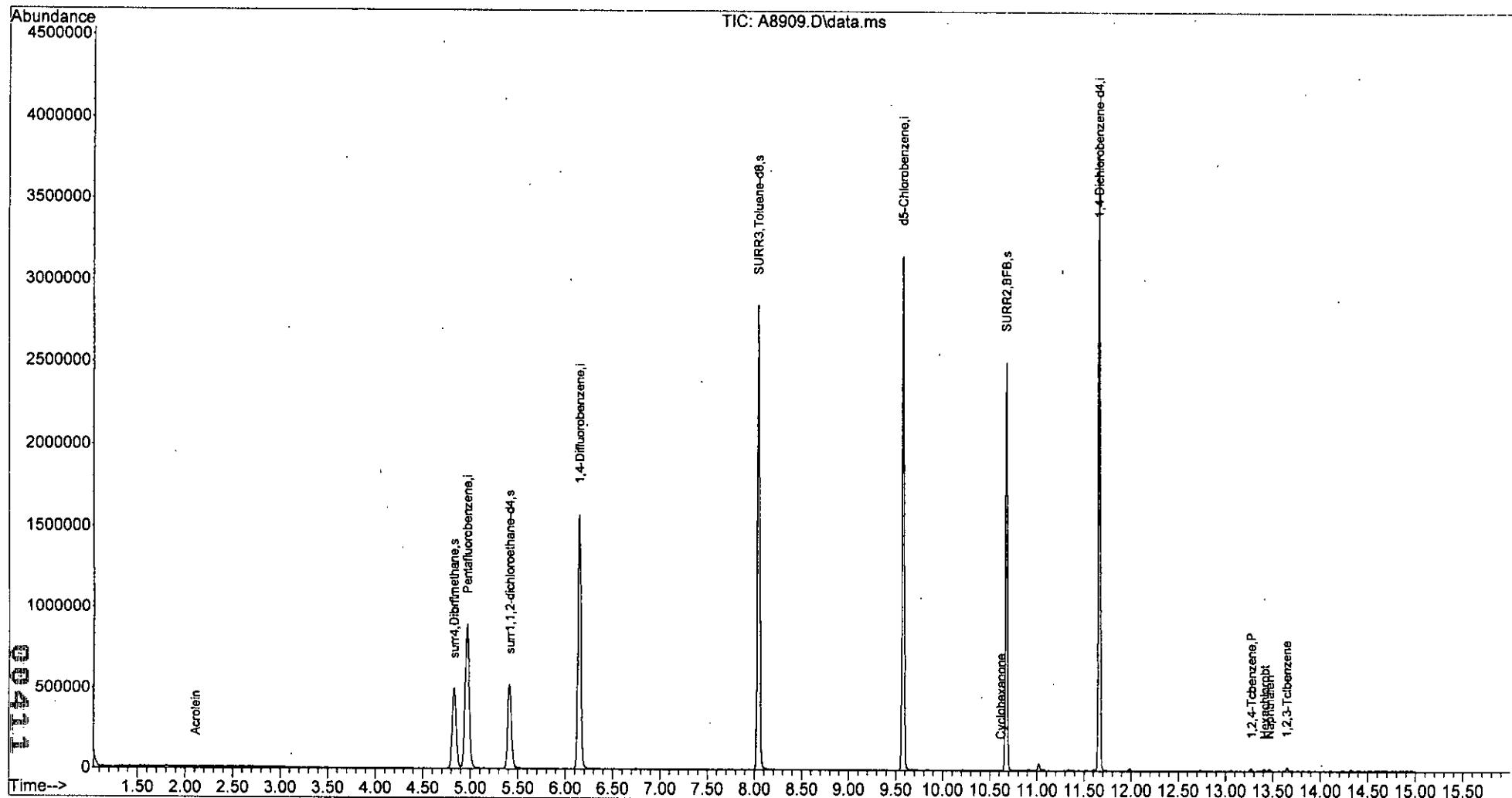
*4/5/15*

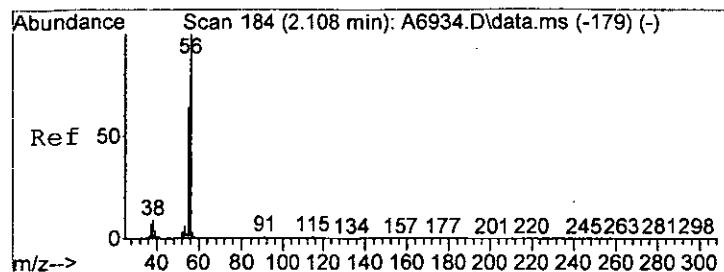
## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa10\data\052615\  
Data File : A8909.D  
Acq On : 26 May 2015 10:26 pm  
Operator : F. Naegler  
Sample : MBLK  
Misc :  
ALS Vial : 30 Sample Multiplier: 1

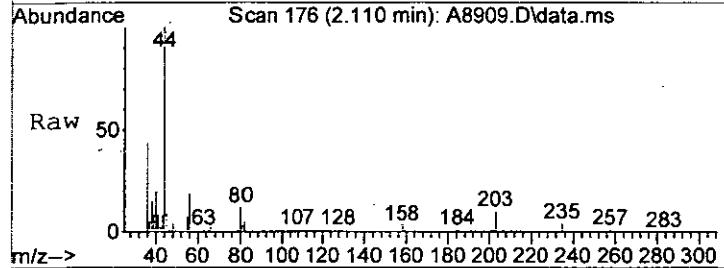
Inst : MSVOA10

Quant Time: May 27 16:51:59 2015  
Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration

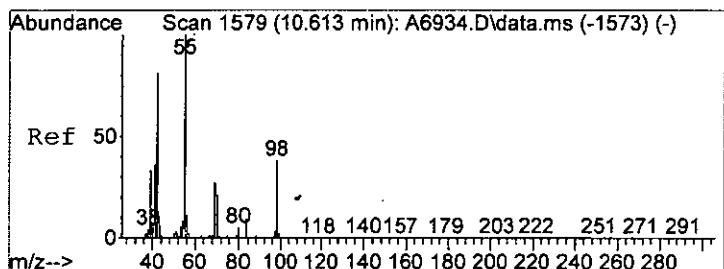
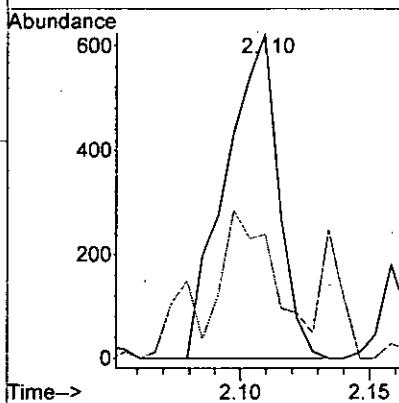
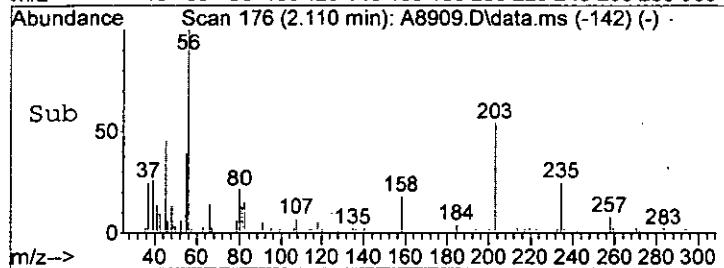




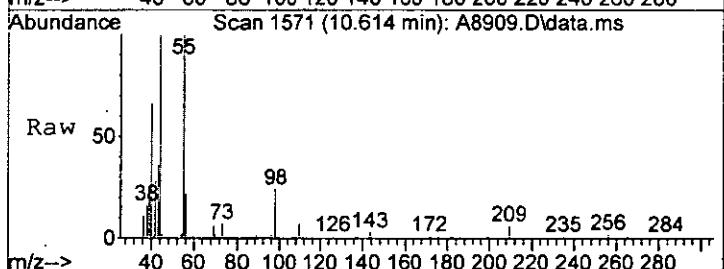
#12  
Acrolein  
Concen: 0.64 ug/L  
RT: 2.110 min Scan# 176  
Delta R.T. 0.006 min  
Lab File: A8909.D  
Acq: 26 May 2015 10:26 pm



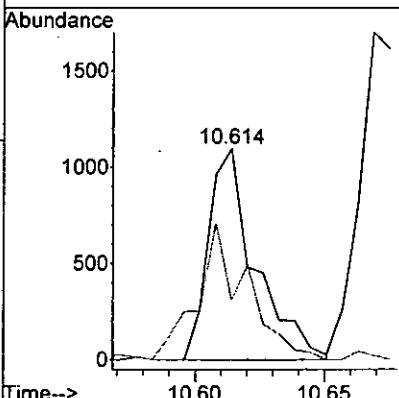
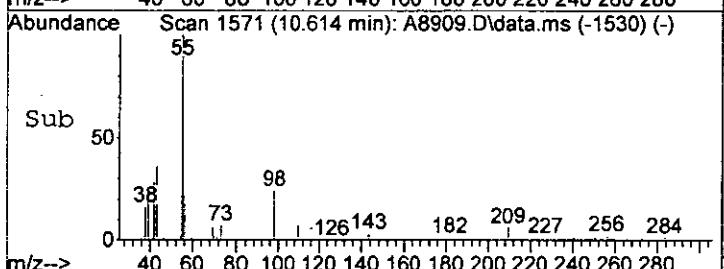
Tgt Ion: 56 Resp: 887  
Ion Ratio Lower Upper  
56 100  
55 138.2 48.6 88.6#

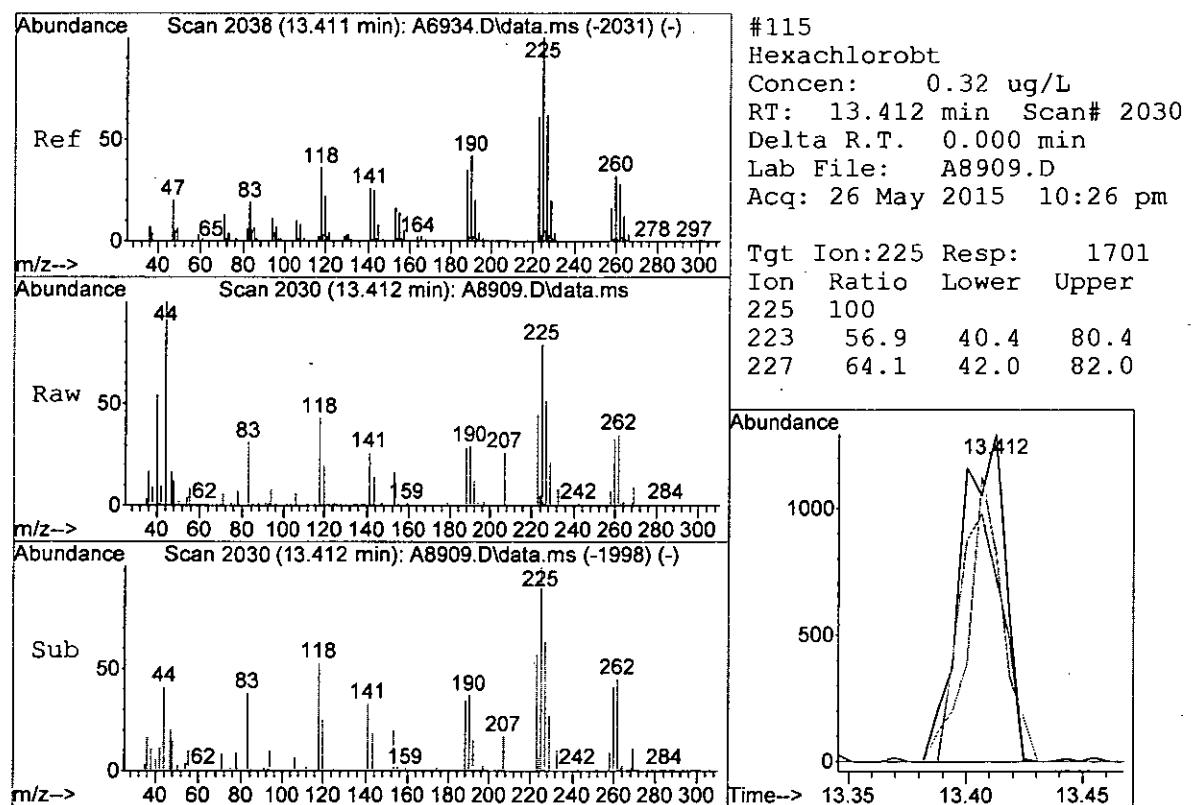
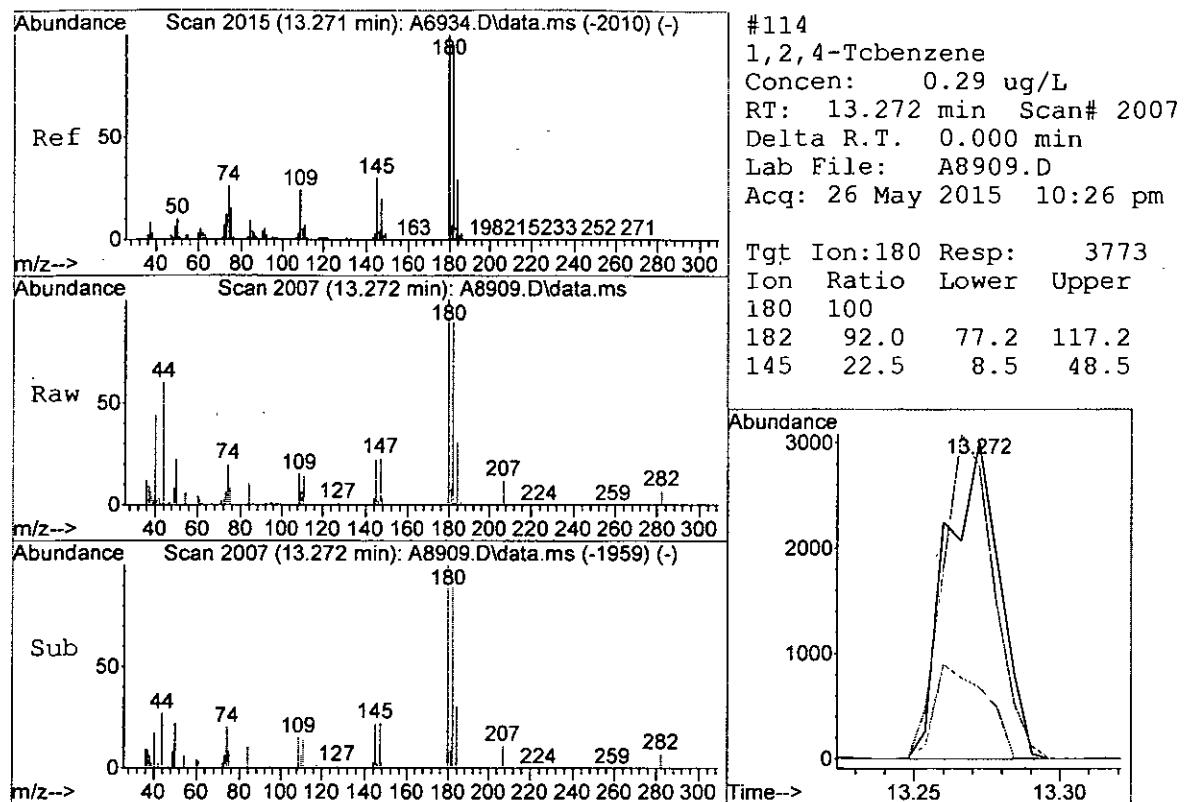


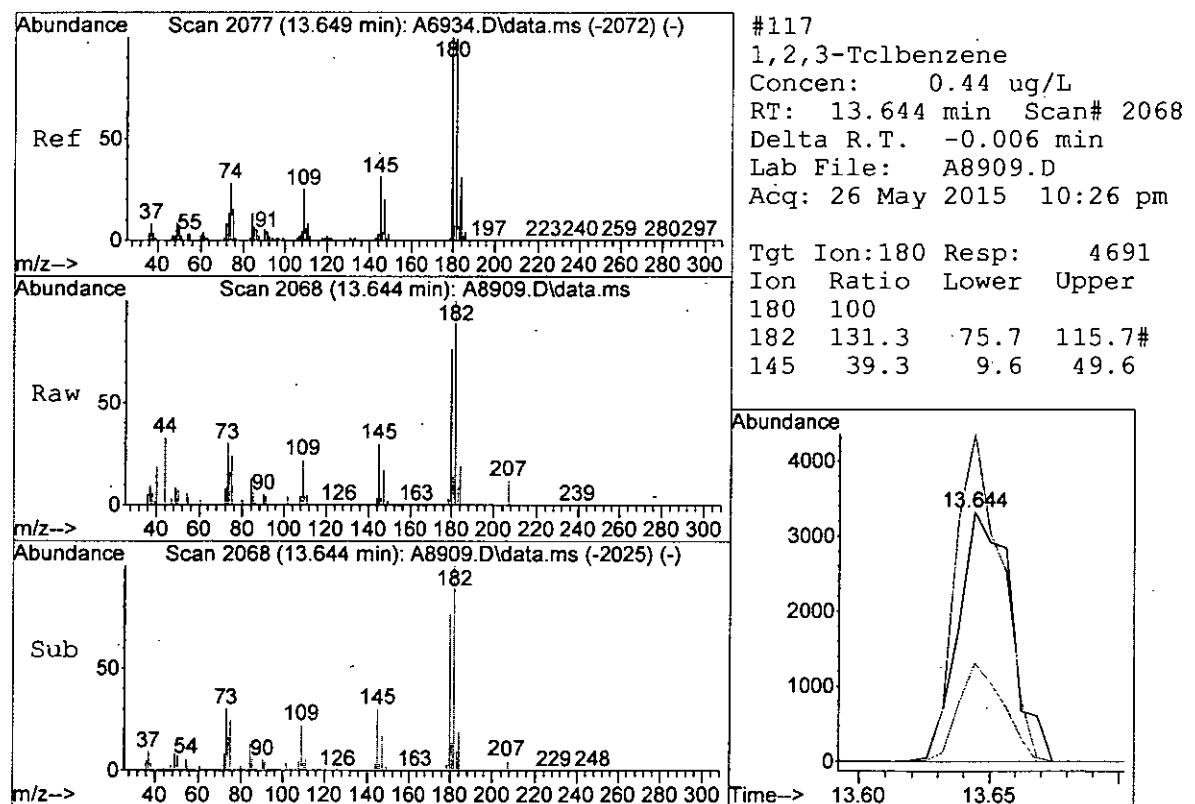
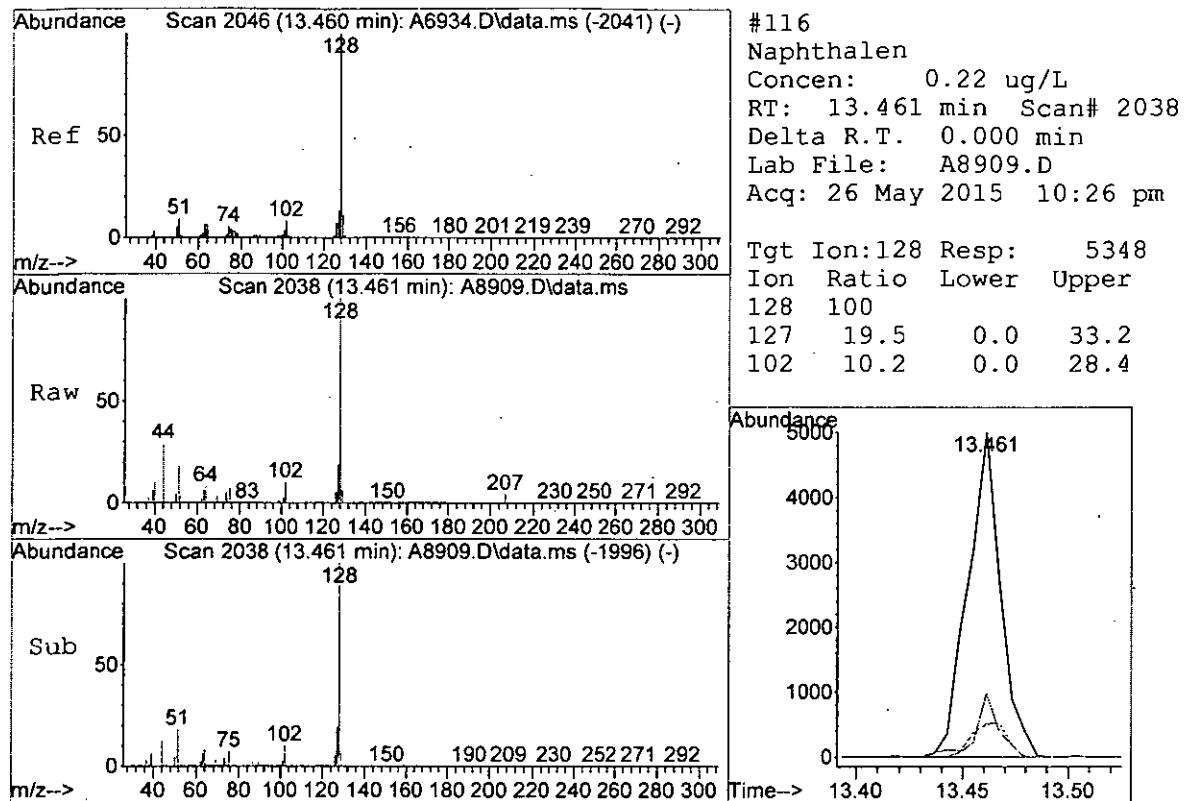
#88  
Cyclohexanone  
Concen: 3.19 ug/L  
RT: 10.614 min Scan# 1571  
Delta R.T. 0.000 min  
Lab File: A8909.D  
Acq: 26 May 2015 10:26 pm



Tgt Ion: 55 Resp: 1369  
Ion Ratio Lower Upper  
55 100  
42 27.9 55.2 95.2#







## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505783-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/27/15 17:42

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8941.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1505783-04

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/27/15 17:42

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8941.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	5/27/15 17:42	
Toluene-d8	97	87-121	5/27/15 17:42	
Dibromofluoromethane	100	89-119	5/27/15 17:42	

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8941.D  
 Acq On : 27 May 2015 5:42 pm  
 Operator : F. Naegler  
 Sample : MBLK *PQ1605743-04* Inst : MSVOA10  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 14:10:43 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	4.969	168	937321	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1441836	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1296706	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	732004	50.00	ug/L	0.00
<hr/>						
System Monitoring Compounds						
43) surr4,Dibromoform	4.835	113	451631	50.19	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	100.38%	
46) surr1,1,2-dichloroethane	5.408	65	466655	50.47	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	100.94%	
64) SURR3,Toluene-d8	8.042	98	1665647	48.56	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	97.12%	
69) SURR2,BFB	10.675	95	622479	44.65	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	89.30%	
<hr/>						
Target Compounds						
15) Acetone	2.226	43	2266	Below Cal	#	63
52) 1-Butanol	6.530	56	2065m	25.53	ug/L	
88) Cyclohexanone	10.614	55	2321	5.56	ug/L	78
111) Trielution Dichlorotoluene	12.736	125	5927	0.35	ug/L	86
113) Coelution Dichlorotoluene	13.059	125	4752	0.26	ug/L	87
114) 1,2,4-Tribromobenzene	13.272	180	2804	0.22	ug/L	64
115) Hexachlorobutane	13.412	225	1624	0.31	ug/L	75
117) 1,2,3-Tribromobenzene	13.644	180	2415	0.23	ug/L	75
118) 2,4,5-Trichlorotoluene	14.235	159	3062	0.40	ug/L	54
119) 2,3,6-Trichlorotoluene	14.321	159	2103	0.32	ug/L	84

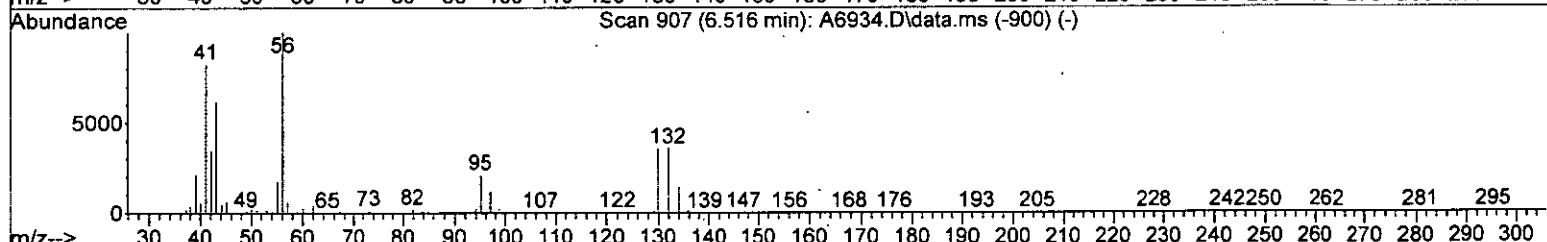
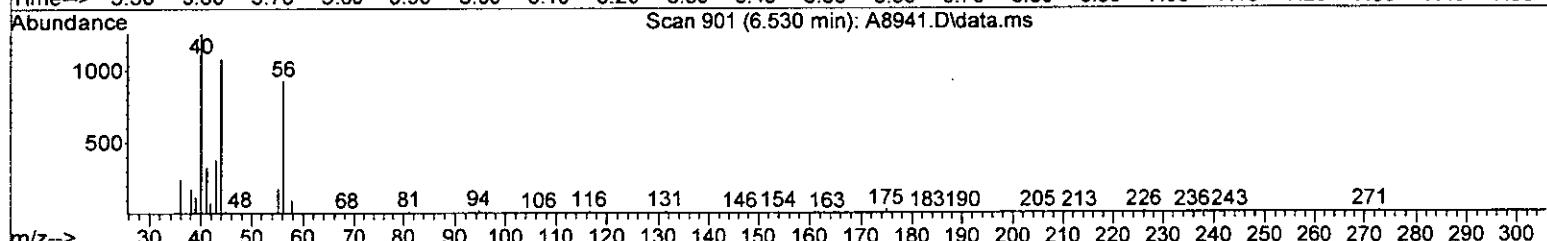
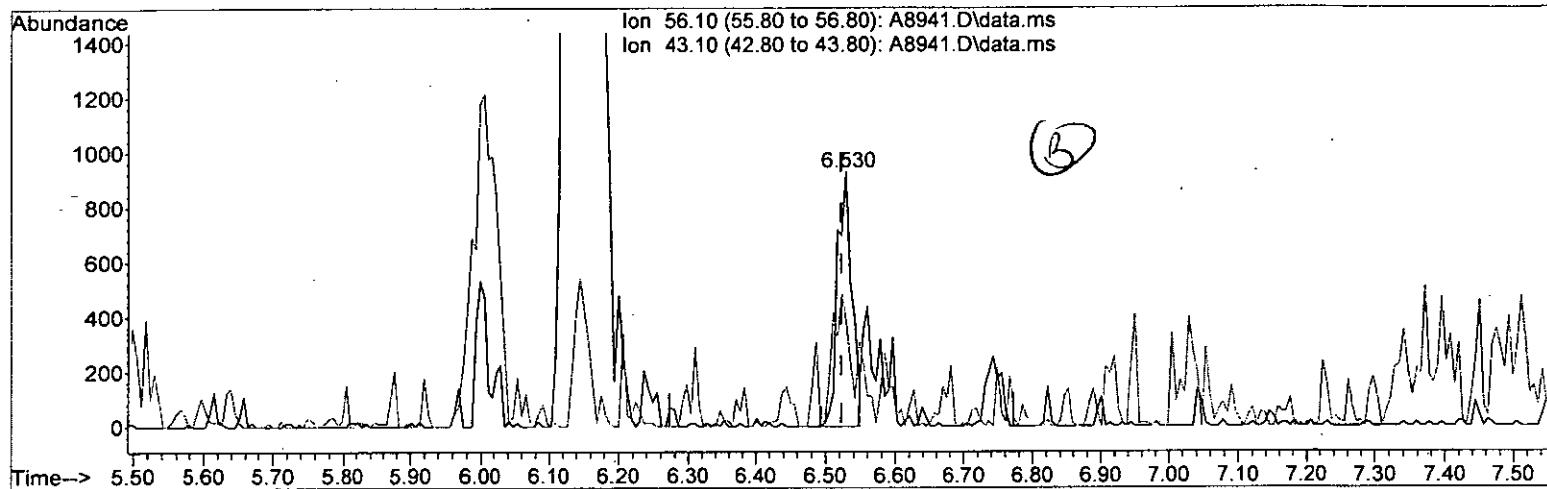
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*KF*  
*5/29/15*

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8941.D  
 Acq On : 27 May 2015 5:42 pm  
 Operator : F. Naegler  
 Sample : MBLK  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 17:57:16 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8941.D\data.ms

(52) 1-Butanol

6.530min (+0.007) 20.16 ug/L

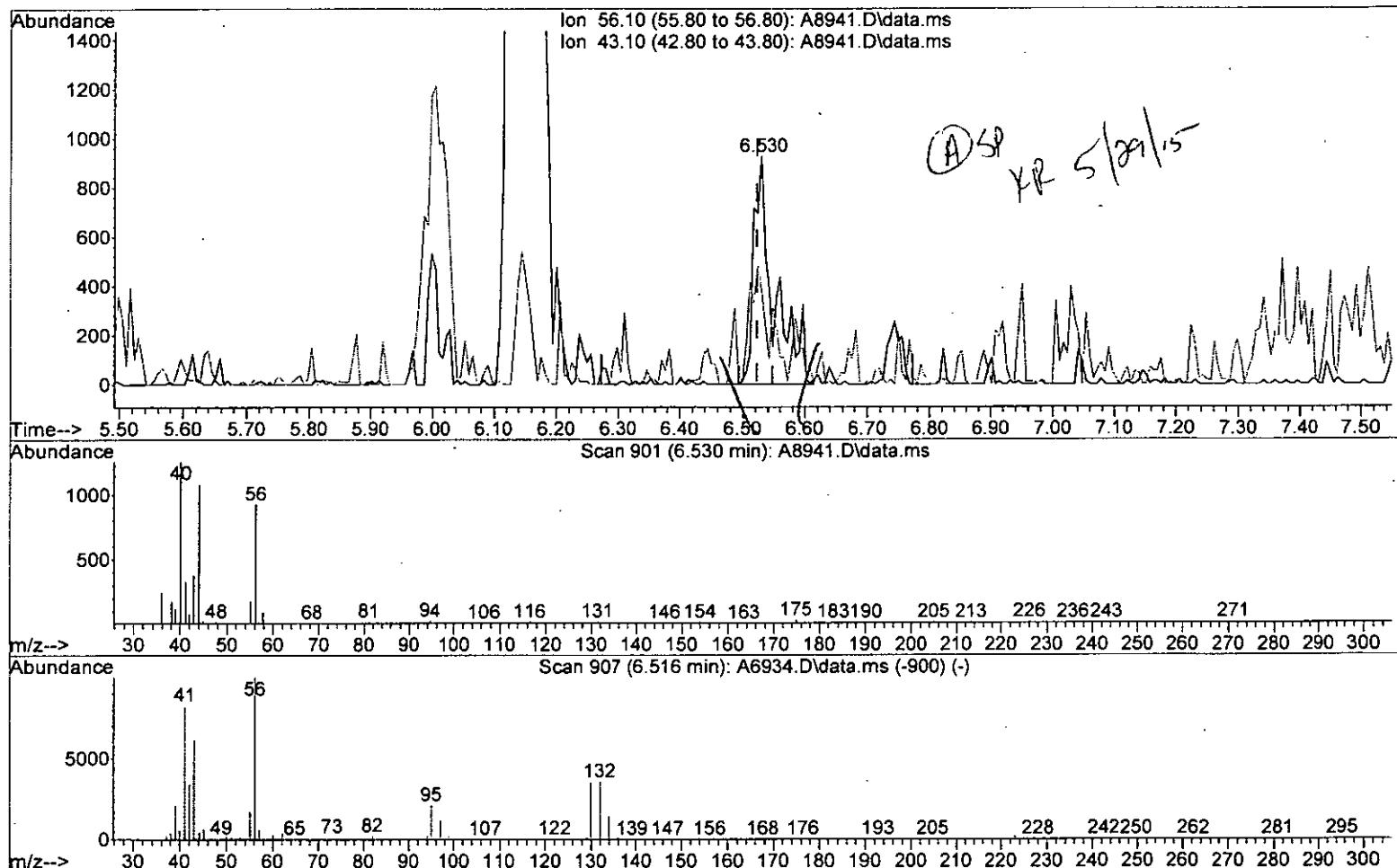
response 1308

Ion	Exp %	Act %
56.10	100	100
43.10	54.10	40.71
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8941.D  
 Acq On : 27 May 2015 5:42 pm  
 Operator : F. Naegler  
 Sample : MBLK  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 17:57:16 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8941.D\data.ms

(52) 1-Butanol

6.530min (+0.007) 25.53 ug/L m

response 2065

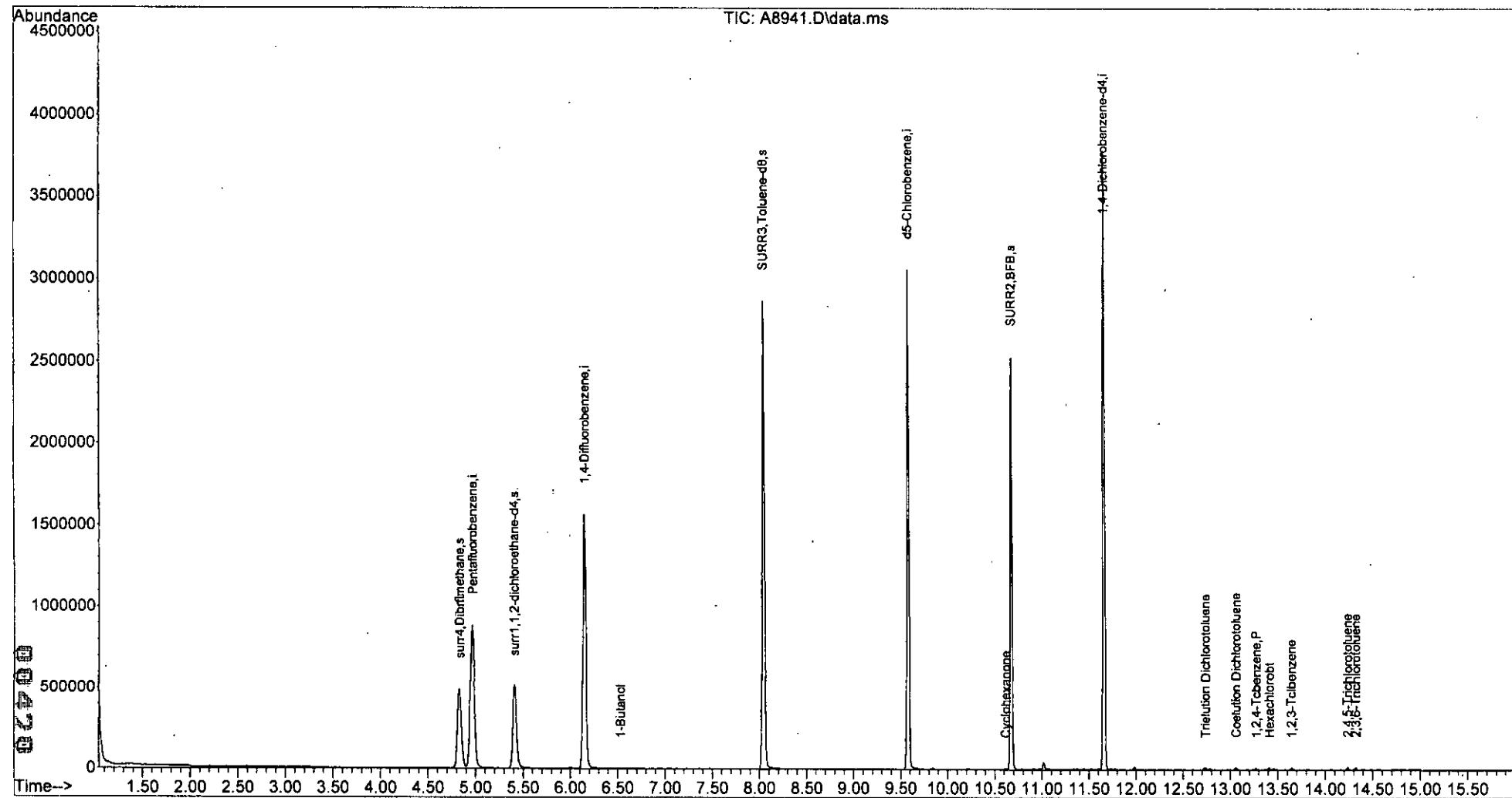
Ion	Exp%	Act%
56.10	100	100
43.10	54.10	40.71
0.00	0.00	0.00
0.00	0.00	0.00

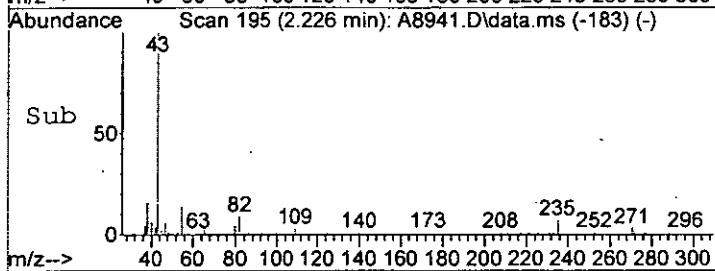
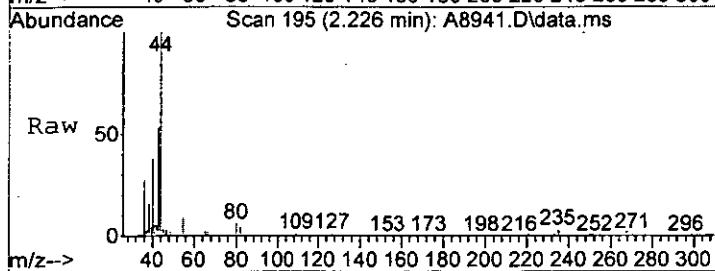
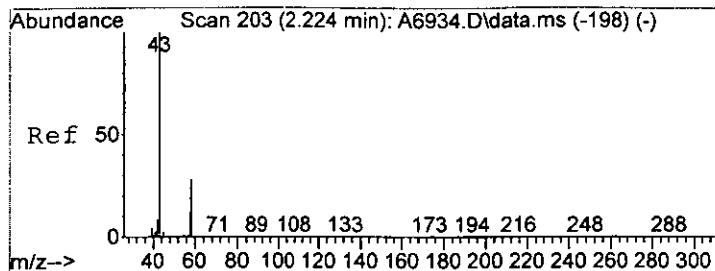
W/N

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
Data File : A8941.D  
Acq On : 27 May 2015 5:42 pm  
Operator : F. Naegler  
Sample : MBLK  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

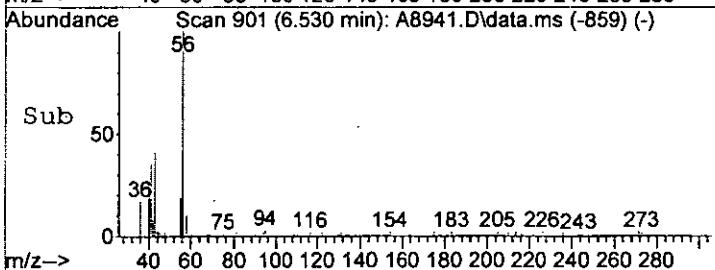
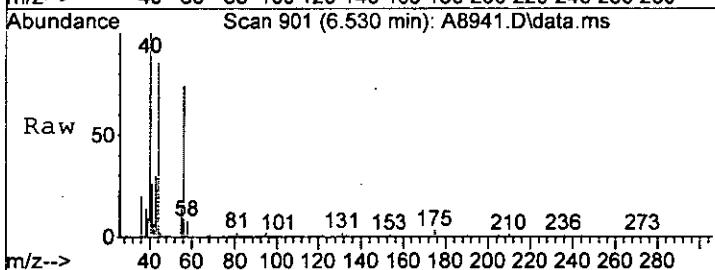
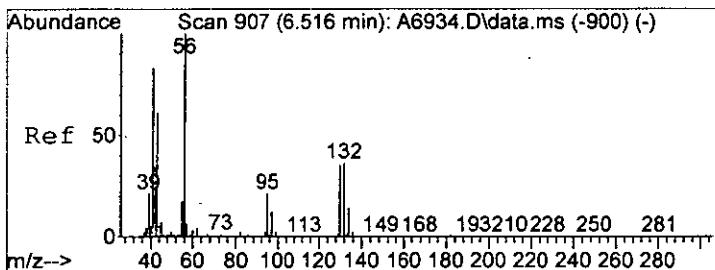
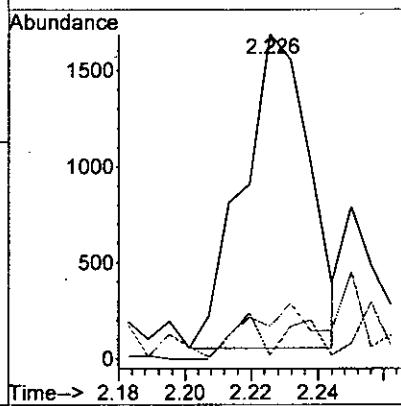
Quant Time: May 29 14:10:43 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration





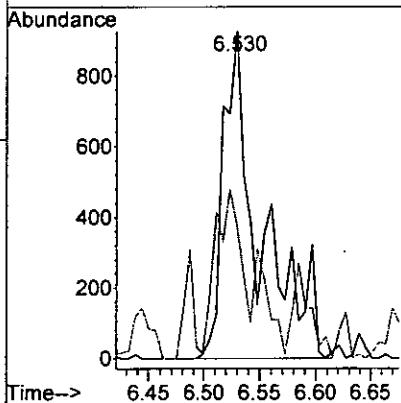
#15  
Acetone  
Concen: Below Cal  
RT: 2.226 min Scan# 195  
Delta R.T. 0.001 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm

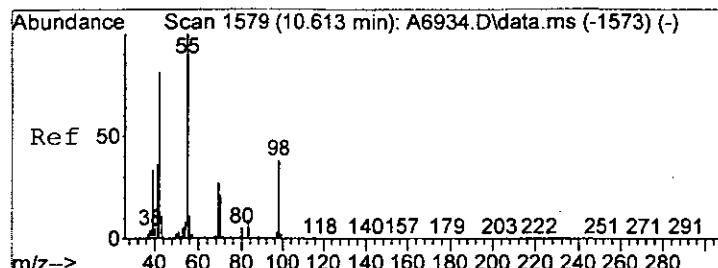
Tgt Ion: 43 Resp: 2266  
Ion Ratio Lower Upper  
43 100  
58 1.2 4.8 44.8#  
42 9.9 0.0 28.0



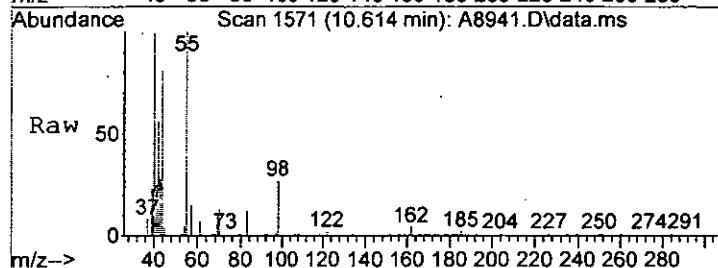
#52  
1-Butanol  
Concen: 25.53 ug/L m  
RT: 6.530 min Scan# 901  
Delta R.T. 0.007 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm

Tgt Ion: 56 Resp: 2065  
Ion Ratio Lower Upper  
56 100  
43 40.7 34.1 74.1

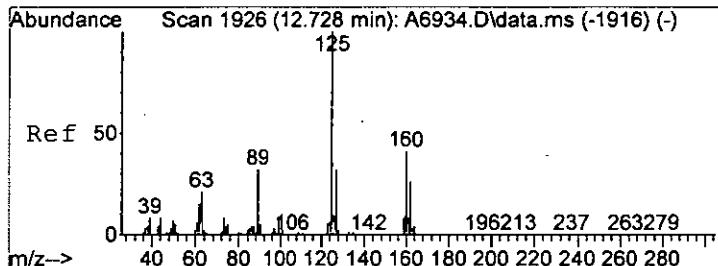
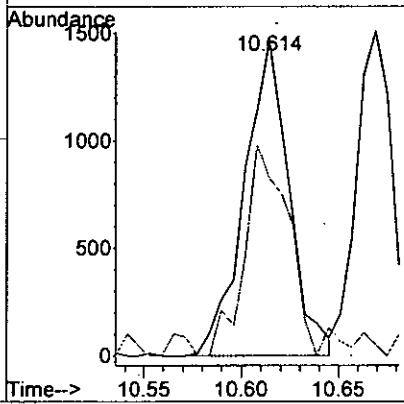
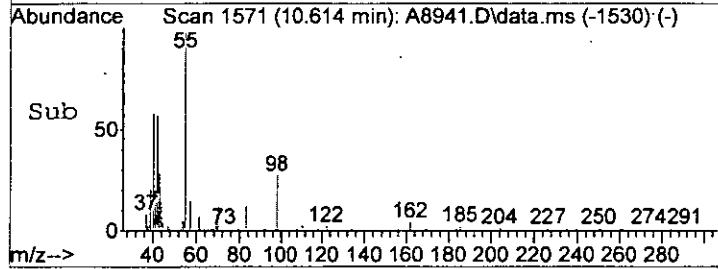




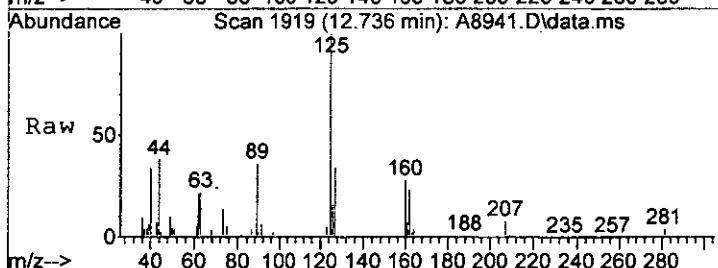
#88  
Cyclohexanone  
Concen: 5.56 ug/L  
RT: 10.614 min Scan# 1571  
Delta R.T. 0.000 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm



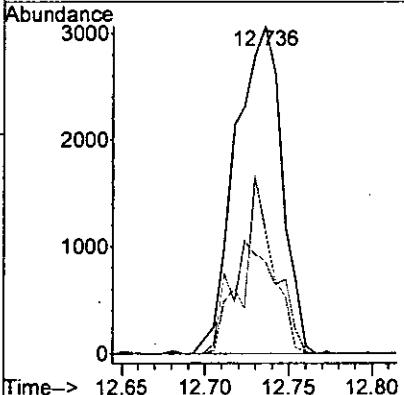
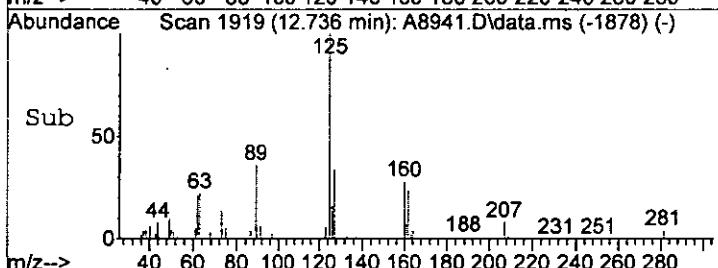
Tgt Ion: 55 Resp: 2321  
Ion Ratio Lower Upper  
55 100  
42 56.3 55.2 95.2

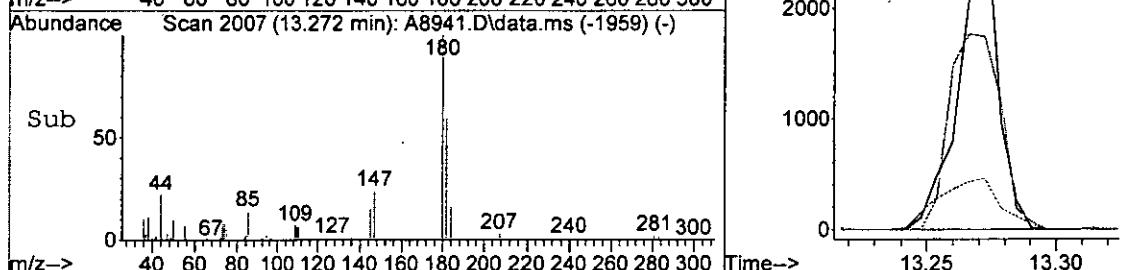
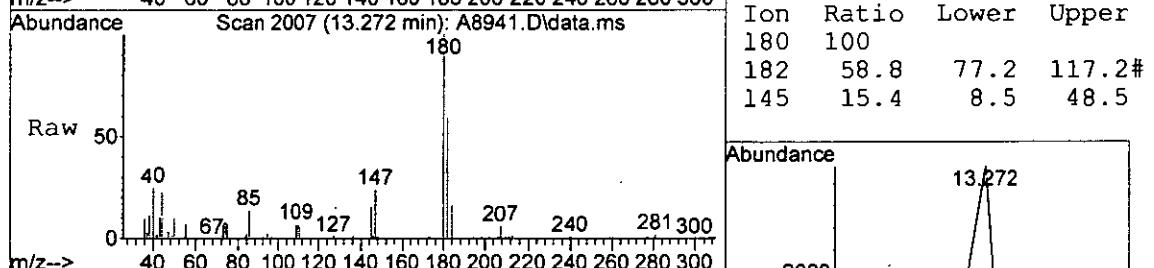
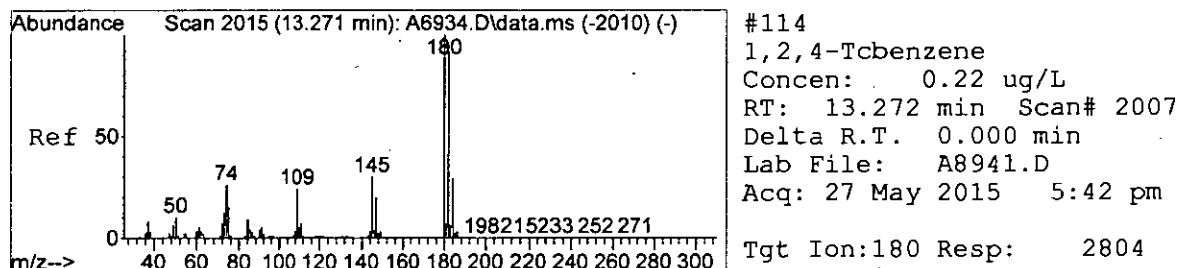
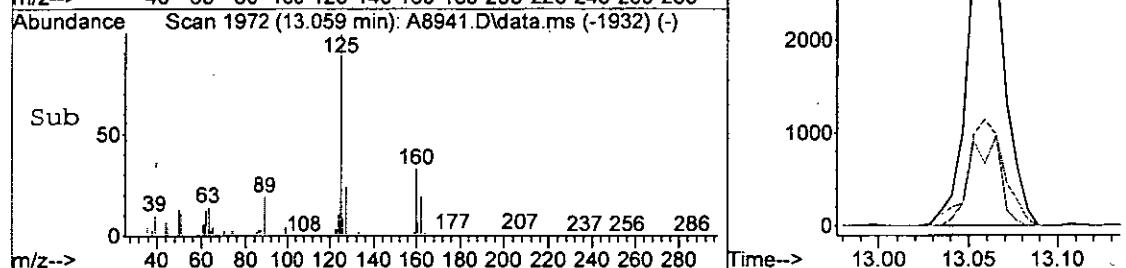
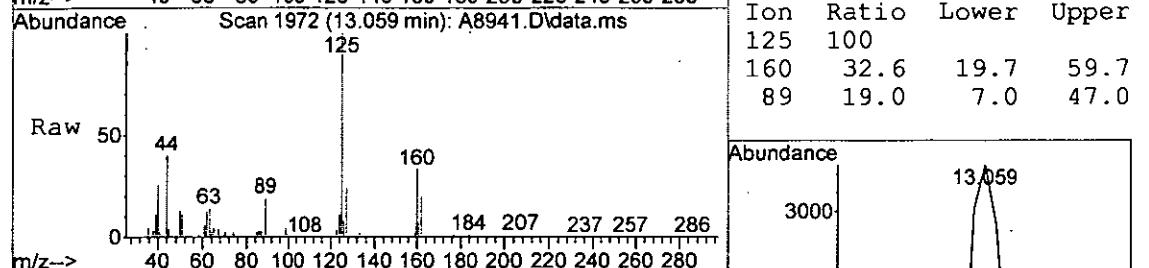
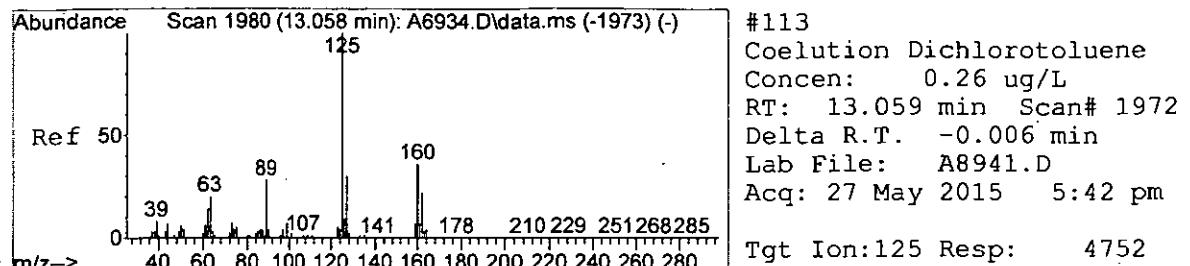


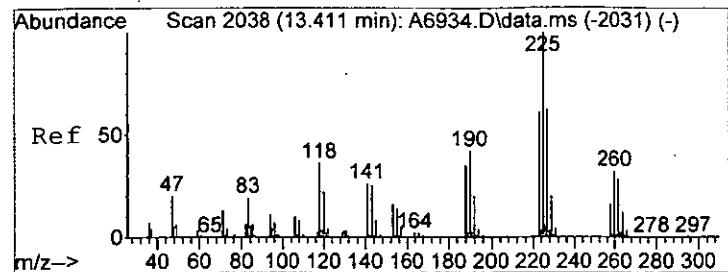
#111  
Trielution Dichlorotoluene  
Concen: 0.35 ug/L  
RT: 12.736 min Scan# 1919  
Delta R.T. 0.000 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm



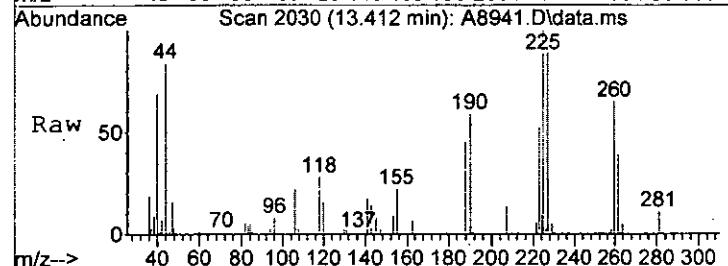
Tgt Ion: 125 Resp: 5927  
Ion Ratio Lower Upper  
125 100  
160 28.3 21.1 61.1  
89 37.7 14.2 54.2



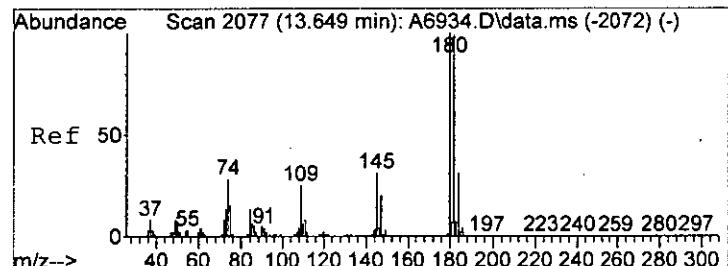
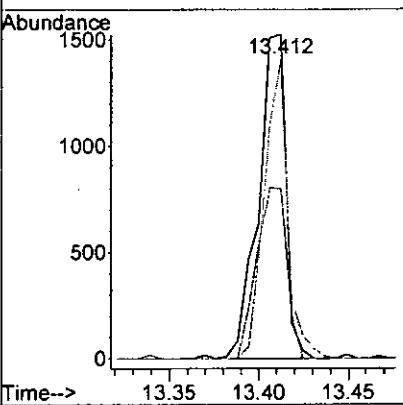
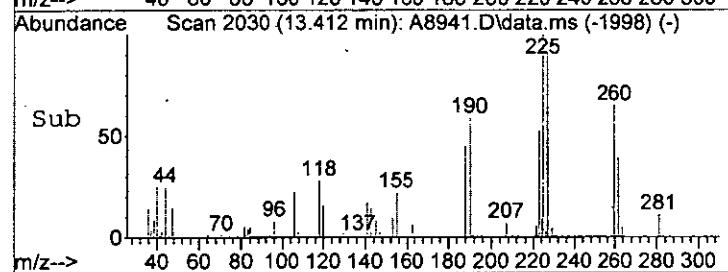




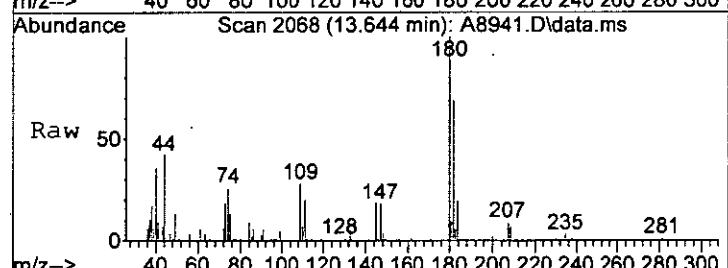
#115  
Hexachlorobutene  
Concen: 0.31 ug/L  
RT: 13.412 min Scan# 2030  
Delta R.T. 0.000 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm



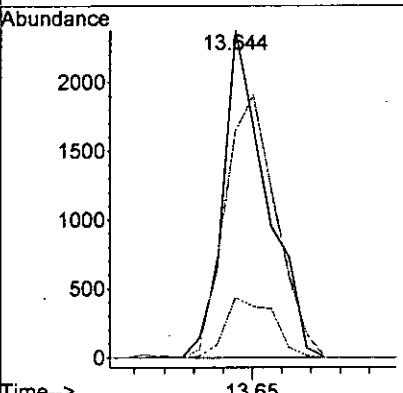
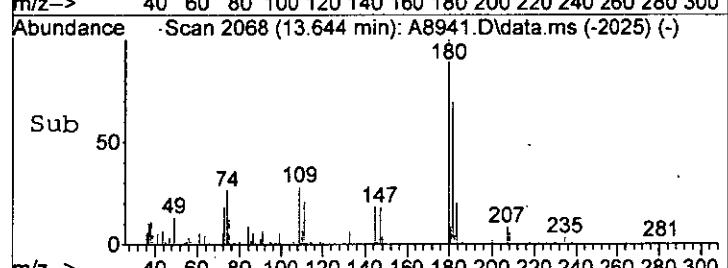
Tgt Ion:225 Resp: 1624  
Ion Ratio Lower Upper  
225 100  
223 52.5 40.4 80.4  
227 92.0 42.0 82.0#

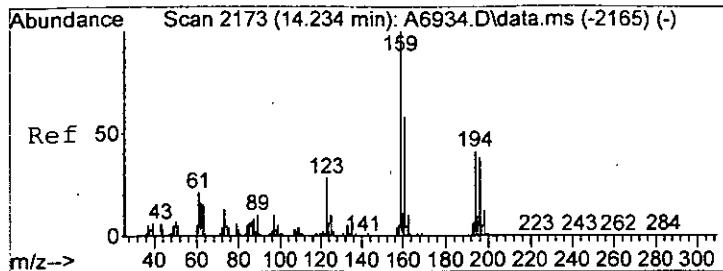


#117  
1,2,3-Tribenzene  
Concen: 0.23 ug/L  
RT: 13.644 min Scan# 2068  
Delta R.T. -0.006 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm

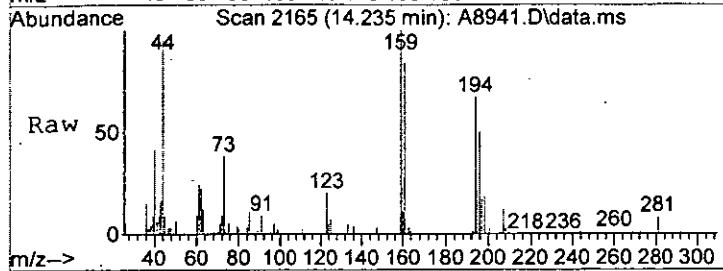


Tgt Ion:180 Resp: 2415  
Ion Ratio Lower Upper  
180 100  
182 69.3 75.7 115.7#  
145 18.9 9.6 49.6

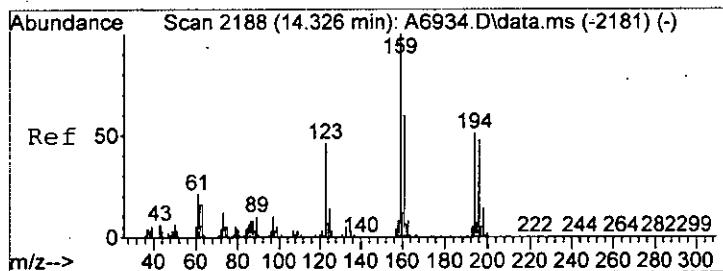
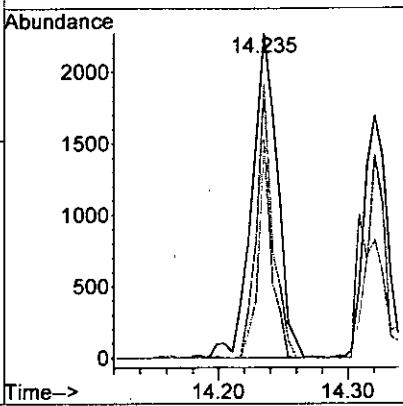
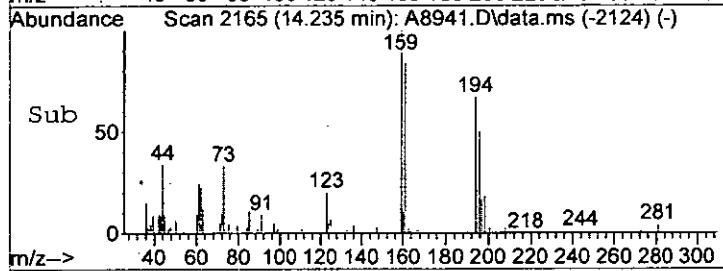




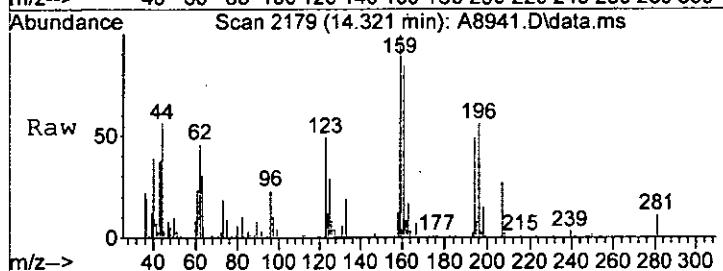
#118  
2,4,5-Trichlorotoluene  
Concen: 0.40 ug/L  
RT: 14.235 min Scan# 2165  
Delta R.T. 0.000 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm



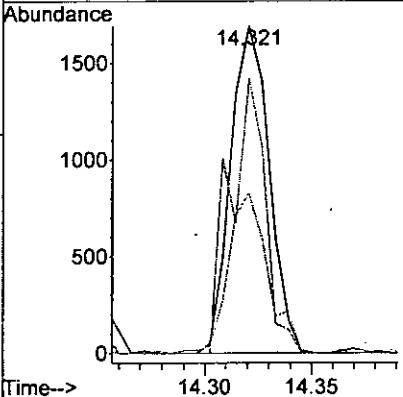
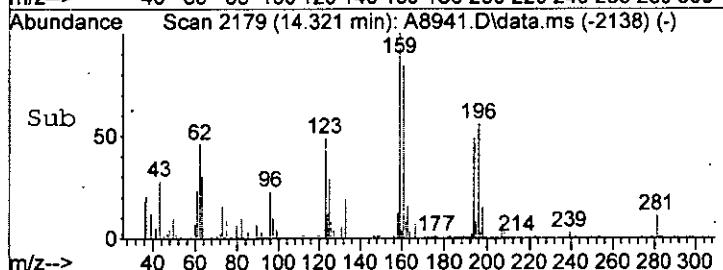
Tgt Ion:159 Resp: 3062  
Ion Ratio Lower Upper  
159 100  
161 84.4 42.0 82.0#  
194 87.8 23.5 63.5#



#119  
2,3,6-Trichlorotoluene  
Concen: 0.32 ug/L  
RT: 14.321 min Scan# 2179  
Delta R.T. 0.000 min  
Lab File: A8941.D  
Acq: 27 May 2015 5:42 pm



Tgt Ion:159 Resp: 2103  
Ion Ratio Lower Upper  
159 100  
161 83.7 42.9 82.9#  
194 48.8 27.3 67.3



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/24/15 21:50

**Sample Name:** Lab Control Sample      **Units:** µg/L  
**Lab Code:** RQ1505558-03      **Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8831.D

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	18.4	1.0	0.21	
75-01-4	Vinyl Chloride	18.1	1.0	0.32	
75-00-3	Chloroethane	18.2	1.0	0.24	
74-83-9	Bromomethane	14.1	1.0	0.29	
75-35-4	1,1-Dichloroethene	19.1	1.0	0.57	
67-64-1	Acetone	16.1	5.0	1.3	
75-15-0	Carbon Disulfide	17.1	1.0	0.22	
75-09-2	Methylene Chloride	19.5	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	19.5	1.0	0.33	
75-34-3	1,1-Dichloroethane	20.4	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	19.3	1.0	0.30	
78-93-3	2-Butanone (MEK)	19.0	5.0	0.81	
67-66-3	Chloroform	19.9	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	19.7	1.0	0.36	
56-23-5	Carbon Tetrachloride	20.1	1.0	0.45	
71-43-2	Benzene	19.4	1.0	0.20	
107-06-2	1,2-Dichloroethane	20.3	1.0	0.36	
79-01-6	Trichloroethene	22.2	1.0	0.22	
78-87-5	1,2-Dichloropropane	19.6	1.0	0.20	
75-27-4	Bromodichloromethane	20.7	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	18.8	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	18.4	5.0	0.67	
108-88-3	Toluene	19.2	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	19.0	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	19.7	1.0	0.34	
127-18-4	Tetrachloroethene	18.8	1.0	0.30	
591-78-6	2-Hexanone	19.7	5.0	1.7	
124-48-1	Dibromochloromethane	21.6	1.0	0.31	
108-90-7	Chlorobenzene	20.6	1.0	0.29	
100-41-4	Ethylbenzene	18.0	1.0	0.20	
179601-23-1	m,p-Xylenes	40.5	2.0	0.33	
95-47-6	o-Xylene	19.7	1.0	0.20	
100-42-5	Styrene	20.5	1.0	0.20	
75-25-2	Bromoform	22.2	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	19.1	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1505558-03

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/24/15 21:50

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052415\A8831.D\

**Analysis Lot:** 446162  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	5/24/15 21:50	
Toluene-d8	98	87-121	5/24/15 21:50	
Dibromofluoromethane	101	89-119	5/24/15 21:50	

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS *PQ1505358-03* Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 25 08:44:03 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

*5/25/15*

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	973748	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1483141	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1362078	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	753812	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromofl methane	4.829	113	467476	50.51	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 101.02%		
46) surr1,1,2-dichloroetha...	5.414	65	475607	50.01	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 100.02%		
64) SURR3,Toluene-d8	8.042	98	1723695	48.85	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 97.70%		
69) SURR2,BFB	10.675	95	660977	46.09	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 92.18%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.159	85	182811m	18.08	ug/L	
3) Chloromethane	1.281	50	339575	18.35	ug/L	99
4) Vinyl Chloride	1.348	62	243443	18.06	ug/L	96
5) Bromomethane	1.573	94	78719	14.11	ug/L	96
6) Chloroethane	1.634	64	120509	18.20	ug/L	95
7) Freon 21	1.762	67	384146	23.75	ug/L	98
8) Trichlorofluoromethane	1.811	101	255150	19.60	ug/L	99
9) Diethyl Ether	2.012	59	164892m	21.03	ug/L	
10) Freon 123a	2.012	67	220050	22.28	ug/L	94
11) Freon 123	2.061	83	220790m	20.21	ug/L	
12) Acrolein	2.110	56	40947	27.81	ug/L	96
13) 1,1-Dicethene	2.195	96	137178	19.12	ug/L	# 82
14) Freon 113	2.195	101	135786	18.09	ug/L	98
15) Acetone	2.226	43	54179	16.07	ug/L	90
16) 2-Propanol	2.329	45	227110	444.85	ug/L	92
17) Iodomethane	2.323	142	67205	6.33	ug/L	90
18) Carbon Disulfide	2.378	76	439591	17.06	ug/L	99
19) Acetonitrile	2.451	40	52141	116.16	ug/L	98
20) Allyl Chloride	2.488	76	78197	16.75	ug/L	# 1
21) Methyl Acetate	2.500	43	139645	19.69	ug/L	80
22) Methylene Chloride	2.597	84	171991	19.54	ug/L	# 64
23) TBA	2.695	59	279410	427.26	ug/L	69
24) Acrylonitrile	2.817	53	322051	102.30	ug/L	99
25) Methyl-t-Butyl Ether	2.860	73	390296	19.03	ug/L	87
26) trans-1,2-Dichloroethene	2.860	96	157767	19.54	ug/L	# 82
27) 1,1-Dicethane	3.305	63	368319	20.43	ug/L	95
28) Vinyl Acetate	3.378	86	10798	7.43	ug/L	# 93
30) 2-Chloro-1,3-Butadiene	3.414	53	346253	16.51	ug/L	84
32) 2,2-Dichloropropane	4.055	77	167711	14.40	ug/L	91
33) cis-1,2-Dichloroethene	4.055	96	186812	19.30	ug/L	86
34) 2-Butanone	4.091	43	87186	19.03	ug/L	85
35) Propionitrile	4.164	54	116487	102.46	ug/L	100
36) Bromochloromethane	4.408	130	125220	21.04	ug/L	# 66
37) Methacrylonitrile	4.408	67	49914	18.58	ug/L	# 50

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 25 08:44:03 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Tetrahydrofuran	4.500	42	55029	19.43	ug/L	78
39) Chloroform	4.561	83	319808	19.94	ug/L	97
40) 1,1,1-Trichloroethane	4.853	97	269059	19.72	ug/L	93
42) Cyclohexane	4.951	41	271472	19.25	ug/L	87
44) Carbontetrachloride	5.152	121	73582	20.08	ug/L	86
45) 1,1-Dichloropropene	5.164	75	219411	18.30	ug/L	98
47) Benzene	5.505	78	722746	19.44	ug/L	85
48) 1,2-Dichloroethane	5.542	62	261009	20.34	ug/L	93
49) Iso-Butyl Alcohol	5.487	43	152148	394.66	ug/L	95
51) n-Heptane	6.005	43	262563	16.25	ug/L	80
53) Trichloroethene	6.493	130	228441	22.24	ug/L	96
54) Methylcyclohexane	6.743	55	280230	18.45	ug/L	# 78
55) 1,2-Diclpropane	6.792	63	215180	19.64	ug/L	100
56) Dibromomethane	6.938	93	93558	19.41	ug/L	94
57) 1,4-Dioxane	6.999	88	26471m	484.09	ug/L	
58) Methyl Methacrylate	7.023	69	87852m	20.35	ug/L	
59) Bromodichloromethane	7.170	83	239488	20.74	ug/L	97
60) 2-Nitropropane	7.468	41	56834	44.94	ug/L	99
61) 2-Chloroethylvinyl Ether	7.596	63	89558	17.48	ug/L	87
62) cis-1,3-Dichloropropene	7.737	75	245804	18.78	ug/L	97
63) 4-Methyl-2-pentanone	7.950	43	172875	18.42	ug/L	86
65) Toluene	8.121	91	770812	19.20	ug/L	97
66) trans-1,3-Dichloropropene	8.395	75	206785	18.96	ug/L	98
67) Ethyl Methacrylate	8.541	69	171841	19.99	ug/L	# 46
68) 1,1,2-Trichloroethane	8.590	97	140693	19.66	ug/L	99
71) Tetrachloroethene	8.730	164	154087	18.82	ug/L	96
72) 2-Hexanone	8.889	43	120998	19.69	ug/L	87
73) 1,3-Dichloropropane	8.767	76	247040	20.76	ug/L	# 79
74) Dibromochloromethane	8.999	129	175544	21.61	ug/L	97
75) N-Butyl Acetate	9.054	43	290131	19.66	ug/L	92
76) 1,2-Dibromoethane	9.096	107	140130	21.13	ug/L	96
78) Chlorobenzene	9.602	112	552141	20.62	ug/L	96
80) 1,1,1,2-Tetrachloroethane	9.694	131	181619	19.81	ug/L	97
81) Ethylbenzene	9.724	106	252734	17.99	ug/L	93
82) (m+p)Xylene	9.840	106	685088	40.54	ug/L	# 86
83) o-Xylene	10.206	106	329821	19.67	ug/L	98
84) Styrene	10.218	104	581241	20.47	ug/L	100
85) Bromoform	10.376	173	98221	22.21	ug/L	97
87) Isopropylbenzene	10.547	105	848753	20.61	ug/L	99
88) Cyclohexanone	10.608	55	202064	460.53	ug/L	90
89) trans-1,4-Dichloro-2-B...	10.864	53	48479	16.31	ug/L	86
91) 1,1,2,2-Tetrachloroethane	10.815	83	146713	19.06	ug/L	98
92) Bromobenzene	10.797	156	230939	21.15	ug/L	# 87
93) 1,2,3-Trichloropropane	10.840	110	49418	21.81	ug/L	97
94) n-Propylbenzene	10.907	91	1007444	22.49	ug/L	98
95) 2-Chlorotoluene	10.974	91	606567	21.60	ug/L	96
97) 4-Chlorotoluene	11.065	91	735875	21.98	ug/L	98
98) 1,3,5-Trimethylbenzene	11.065	105	720646	21.55	ug/L	97
99) tert-Butylbenzene	11.340	119	604920	20.83	ug/L	96
100) 1,2,4-Trimethylbenzene	11.376	105	752102	22.02	ug/L	96
102) sec-Butylbenzene	11.523	105	830836	21.07	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 25 08:44:03 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) p-Isopropyltoluene	11.644	119	760535	21.65	ug/L	97
104) 1,3-Dclbenz	11.602	146	466078	20.97	ug/L	98
105) 1,4-Dclbenz	11.681	146	491733	21.11	ug/L	96
108) n-Butylbenzene	11.980	91	643230	20.74	ug/L	96
109) 1,2-Dclbenz	11.980	146	443618	21.60	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.608	157	33146	23.53	ug/L	84
114) 1,2,4-Tcbenzene	13.266	180	272214	21.03	ug/L	95
115) Hexachlorobt	13.406	225	104127	19.43	ug/L	98
116) Naphthalen	13.461	128	549259	22.65	ug/L	98
117) 1,2,3-Tclbenzene	13.650	180	235731	22.12	ug/L	99

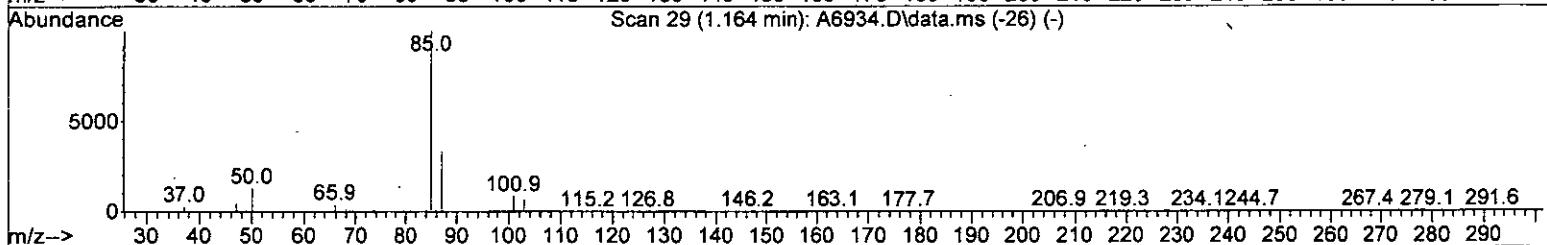
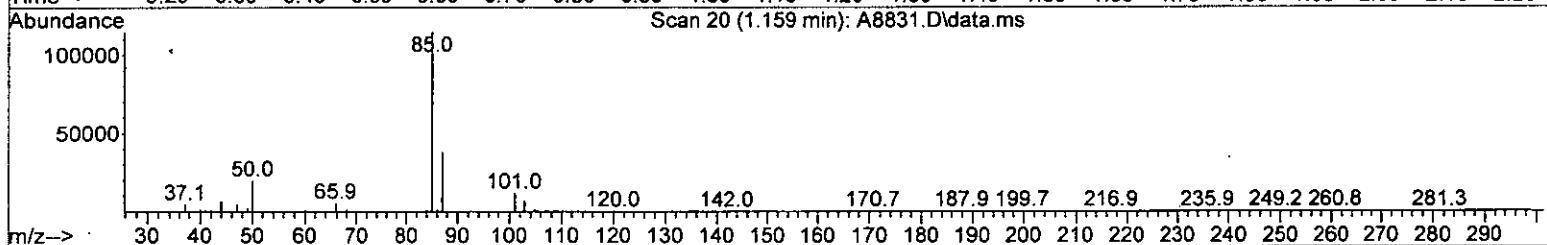
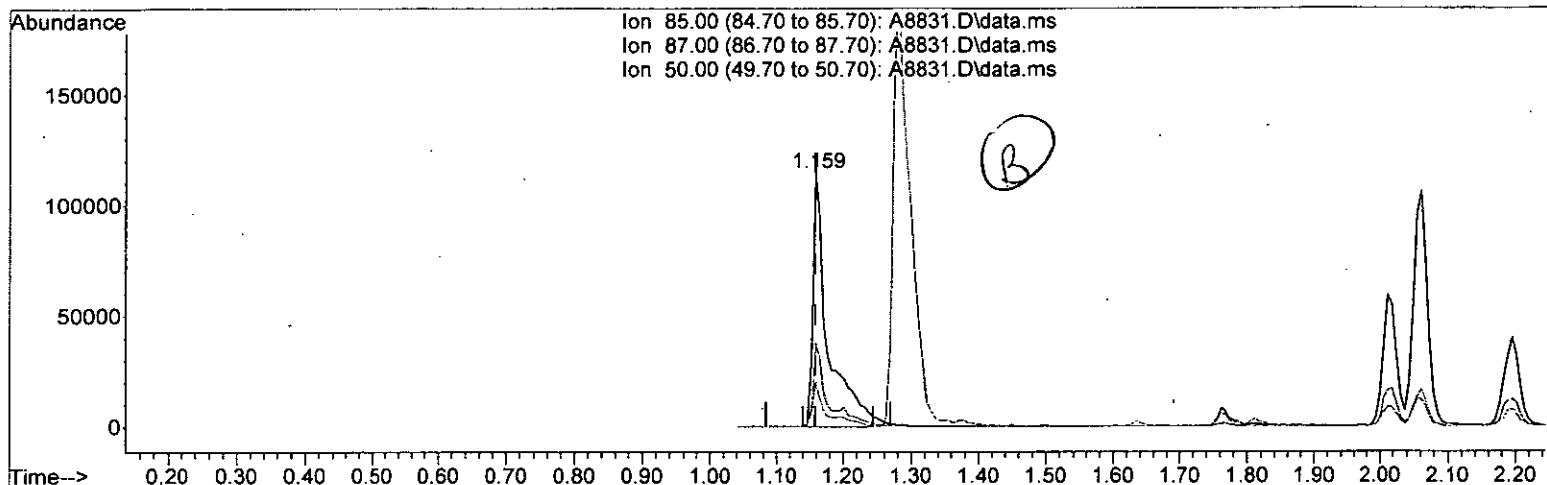
(#) = qualifier out of range. (m) = manual integration (+) = signals summed

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

(2) Dichlorodifluoromethane (P)

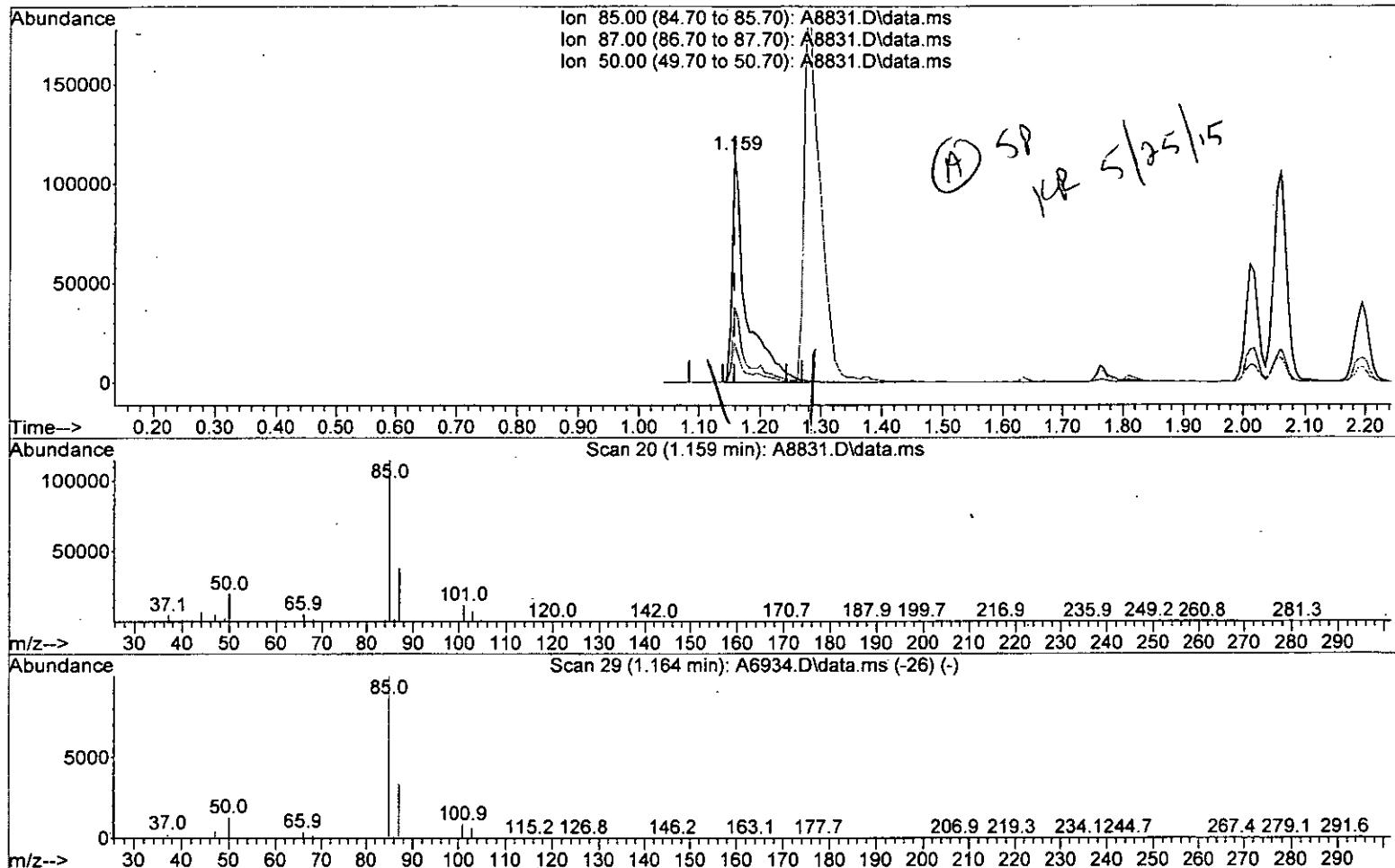
1.159min (+0.000) 17.69 ug/L

response 178887

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	32.97
50.00	15.00	17.16
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 18.08 ug/L m

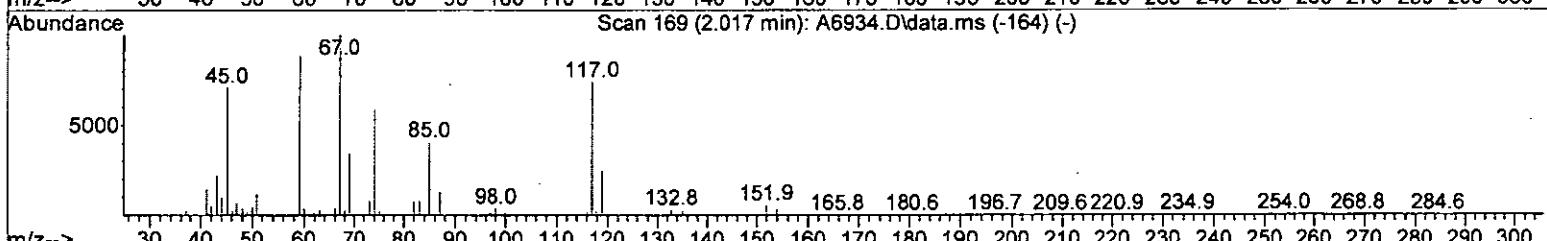
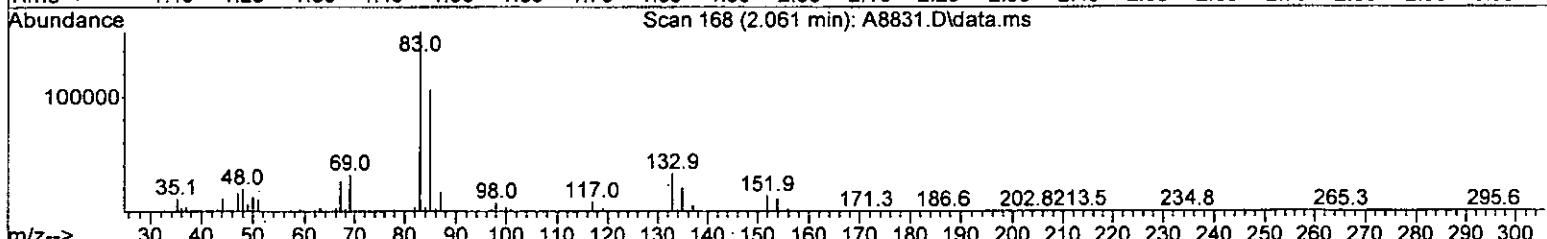
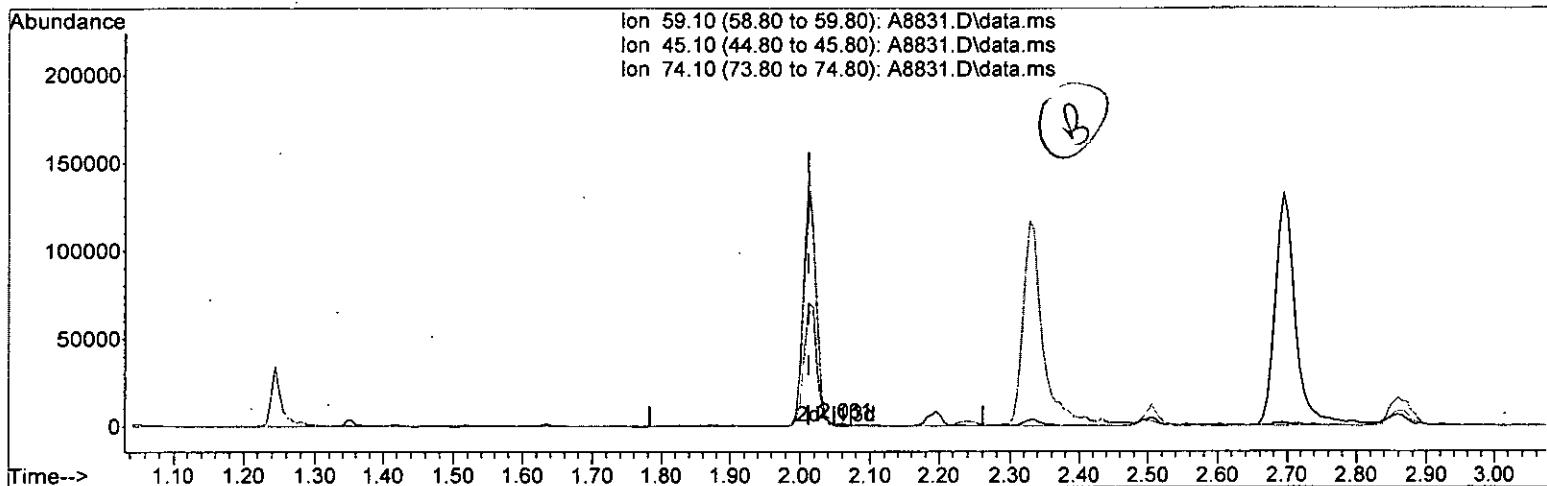
response 182811

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	32.97
50.00	15.00	17.16
0.00	0.00	0.00

*W.H.*

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

## (9) Diethyl Ether

2.061min (+0.049) 0.18 ug/L

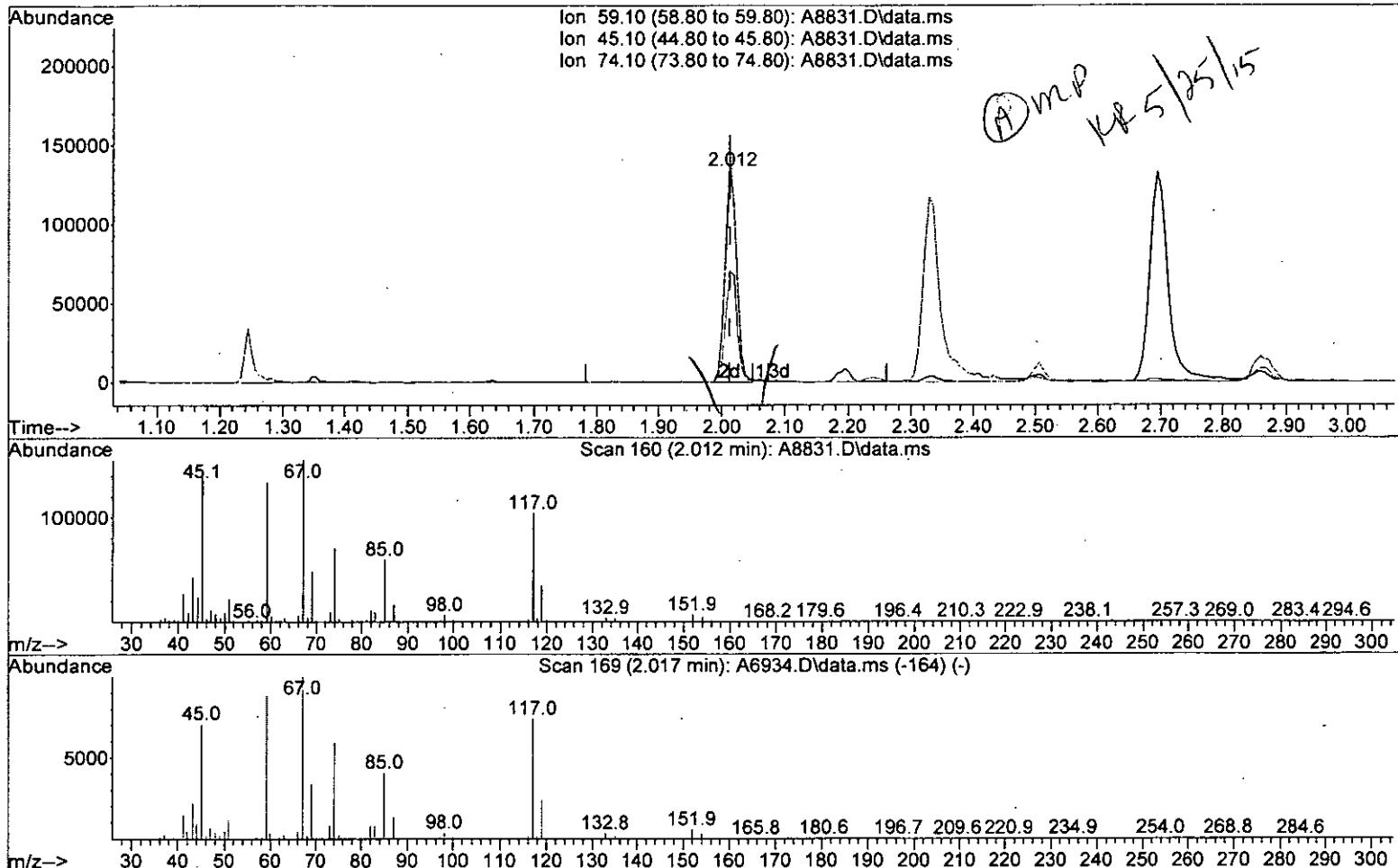
response 1448

Ion	Exp%	Act%
59.10	100	100
45.10	73.90	62.11
74.10	64.70	58.60
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



## (9) Diethyl Ether

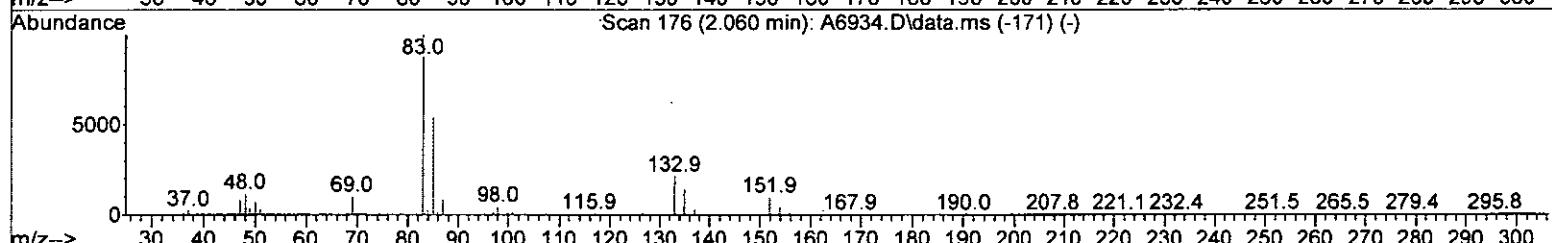
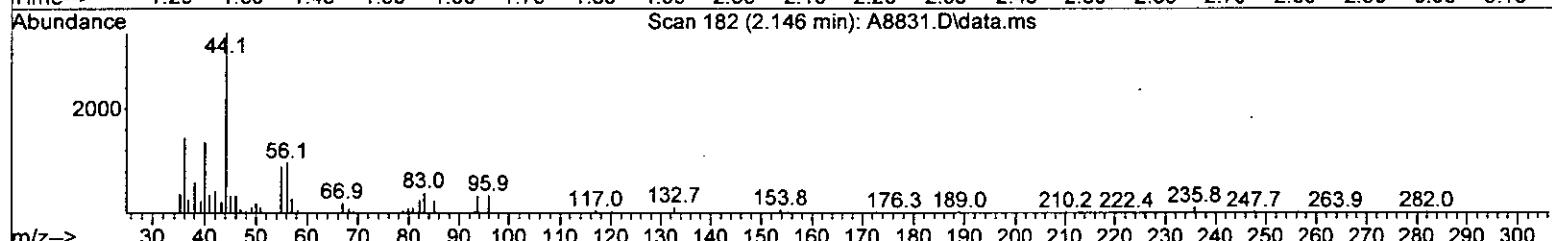
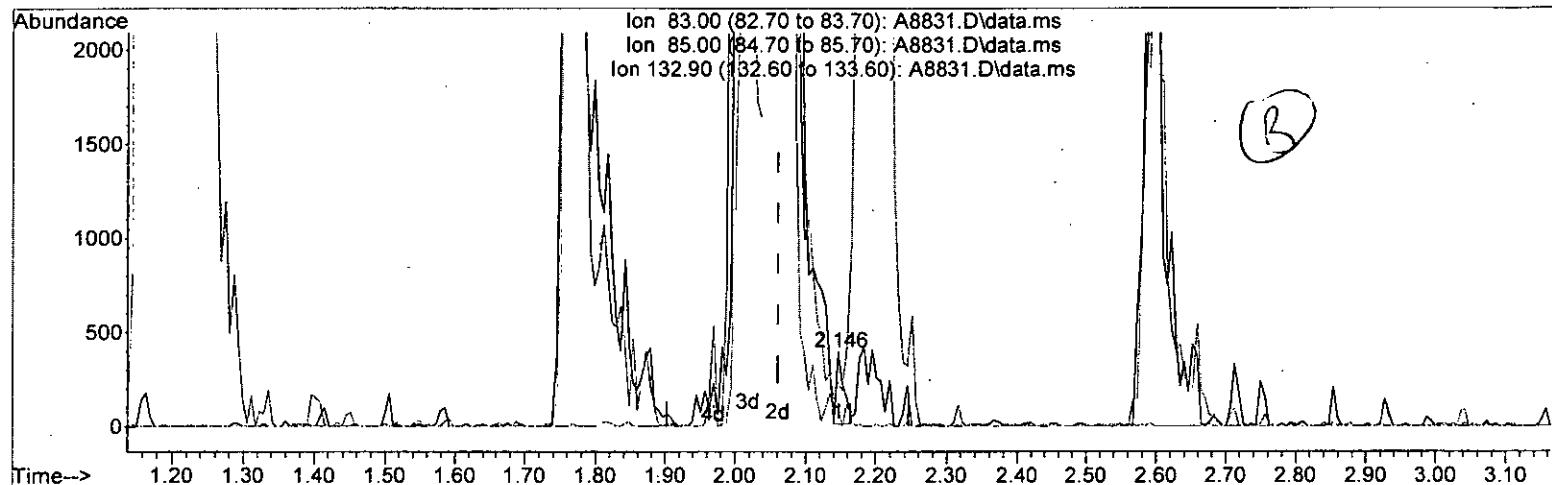
2.012min (+0.000) 21.03 ug/L m

response 164892

Ion	Exp%	Act%
59.10	100	100
45.10	73.90	107.99#
74.10	64.70	52.55
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

(11) Freon 123

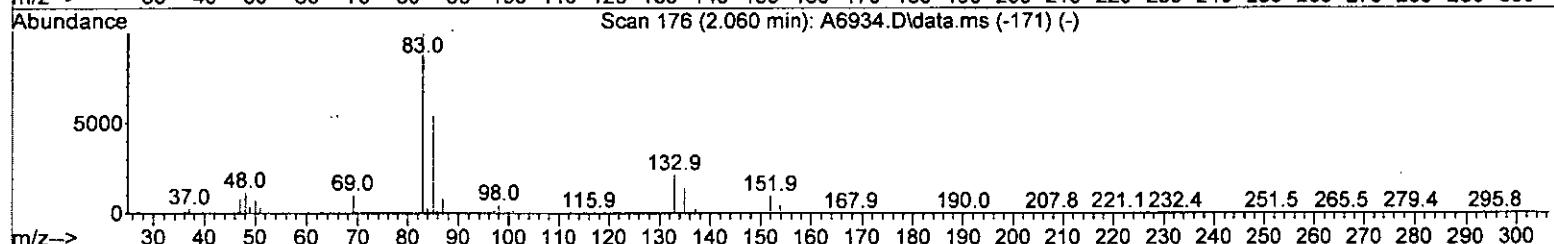
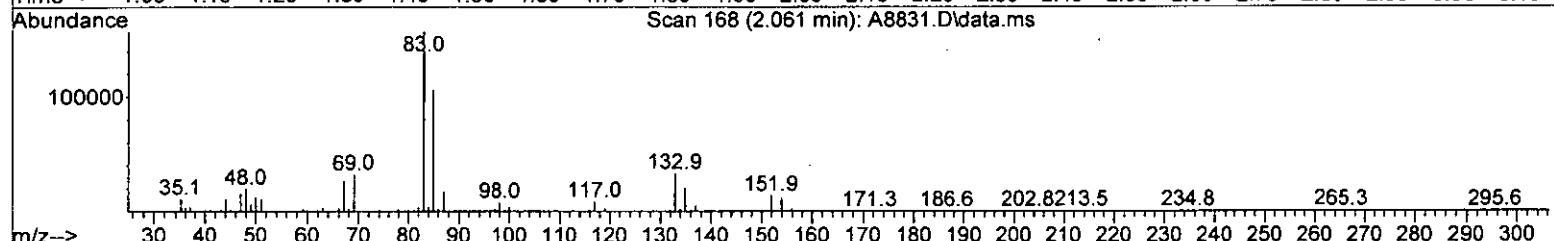
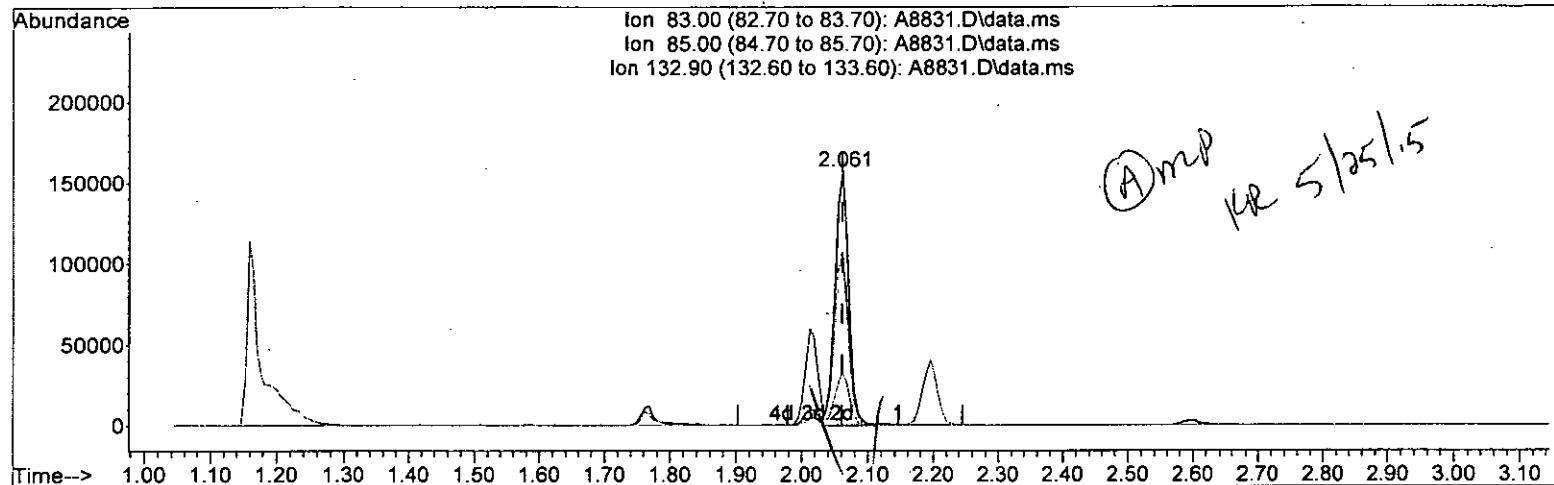
2.146min (+0.085) 0.03 ug/L

response 278

Ion	Exp%	Act%
83.00	100	100
85.00	47.30	58.38
132.90	19.90	29.70
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

(11) Freon 123

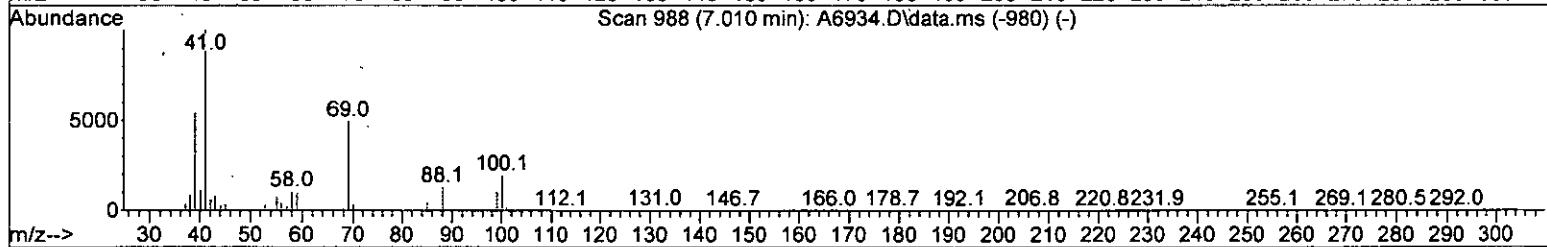
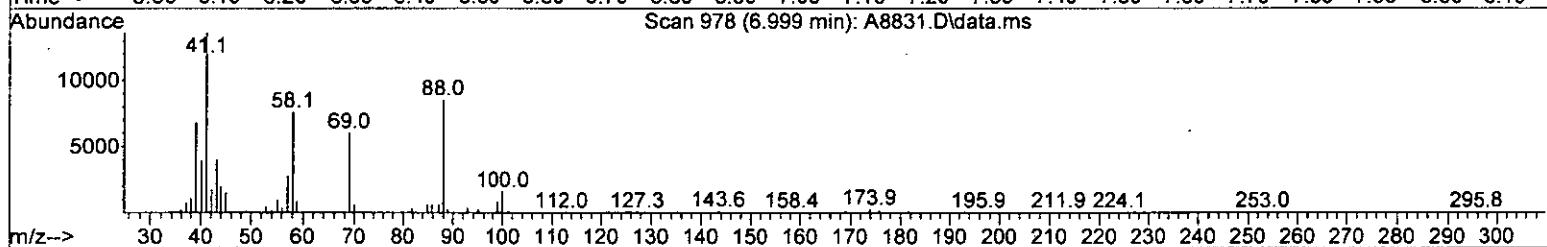
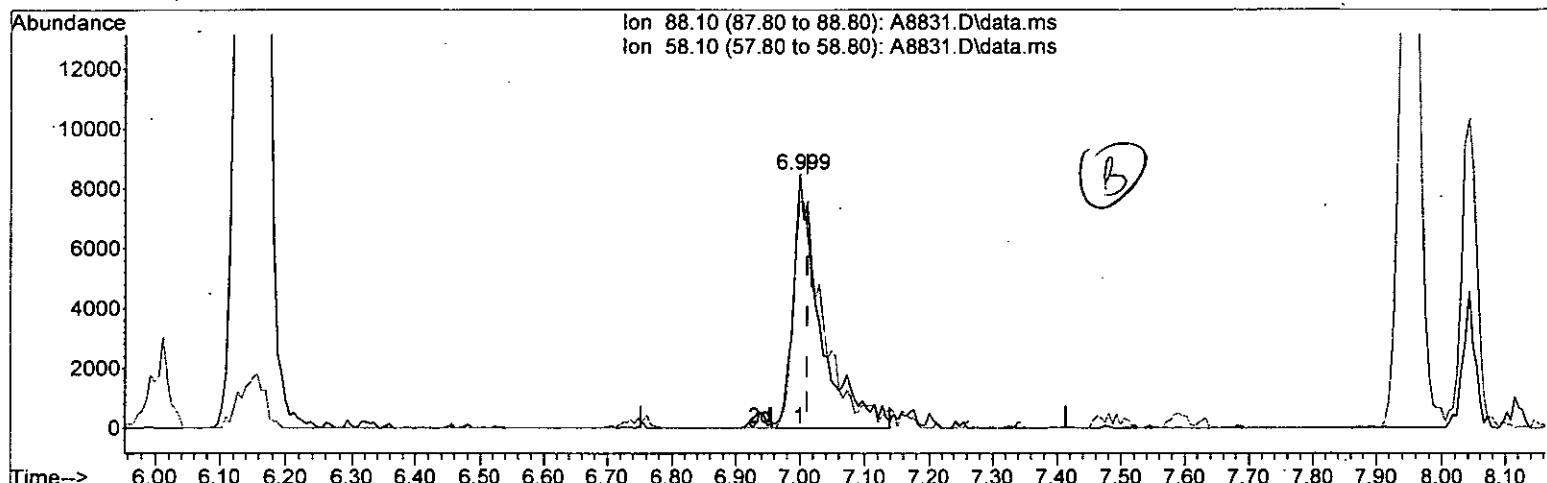
2.061min (+0.000) 20.21 ug/L m

response 220790

Ion	Exp%	Act%
83.00	100	100
85.00	47.30	67.62#
132.90	19.90	20.97
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

(57) 1,4-Dioxane

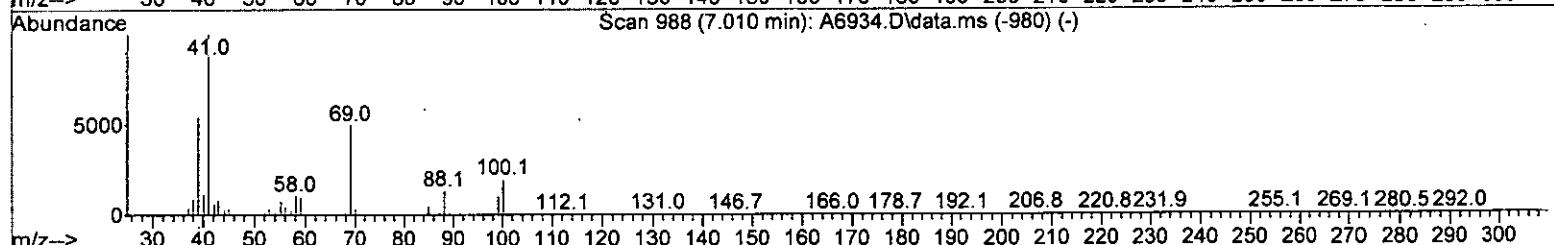
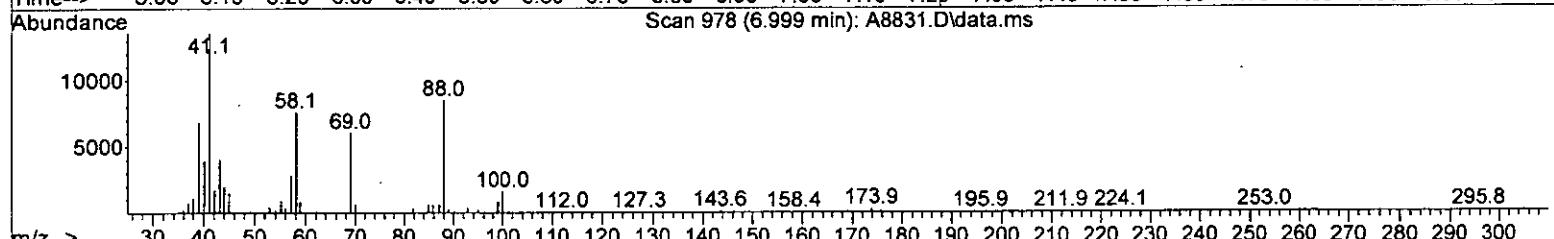
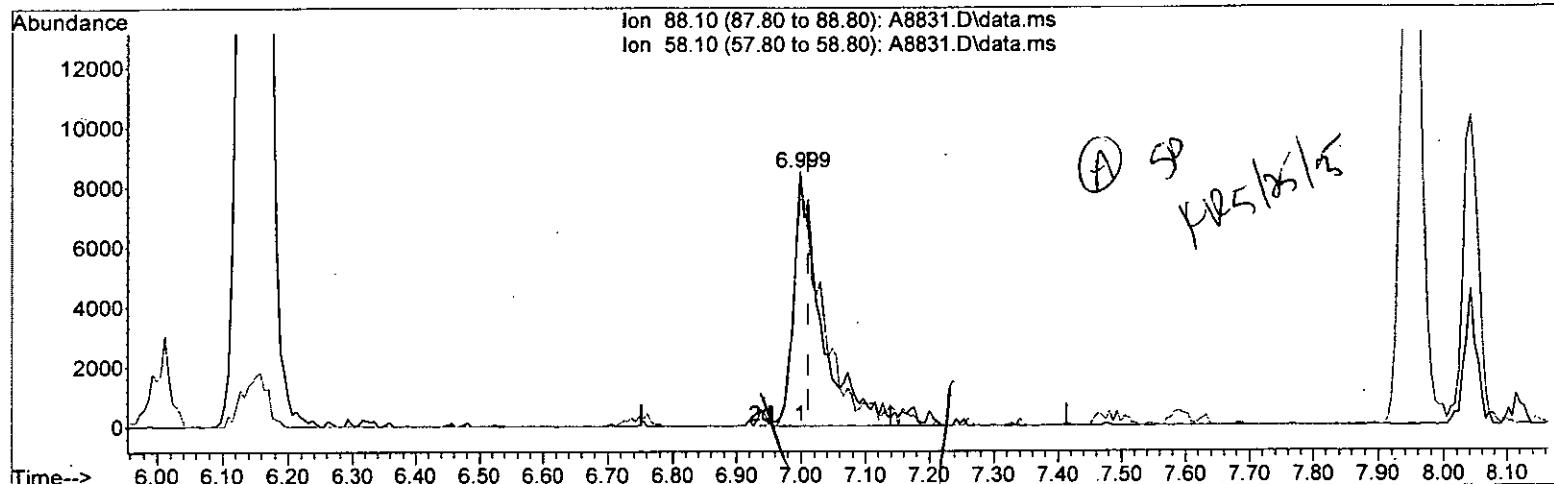
6.999min (-0.012) 457.39 ug/L

response 25011

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	89.39#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

(57) 1,4-Dioxane

6.999min (-0.012) 484.09 ug/L m

response 26471

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	89.39#
0.00	0.00	0.00
0.00	0.00	0.00

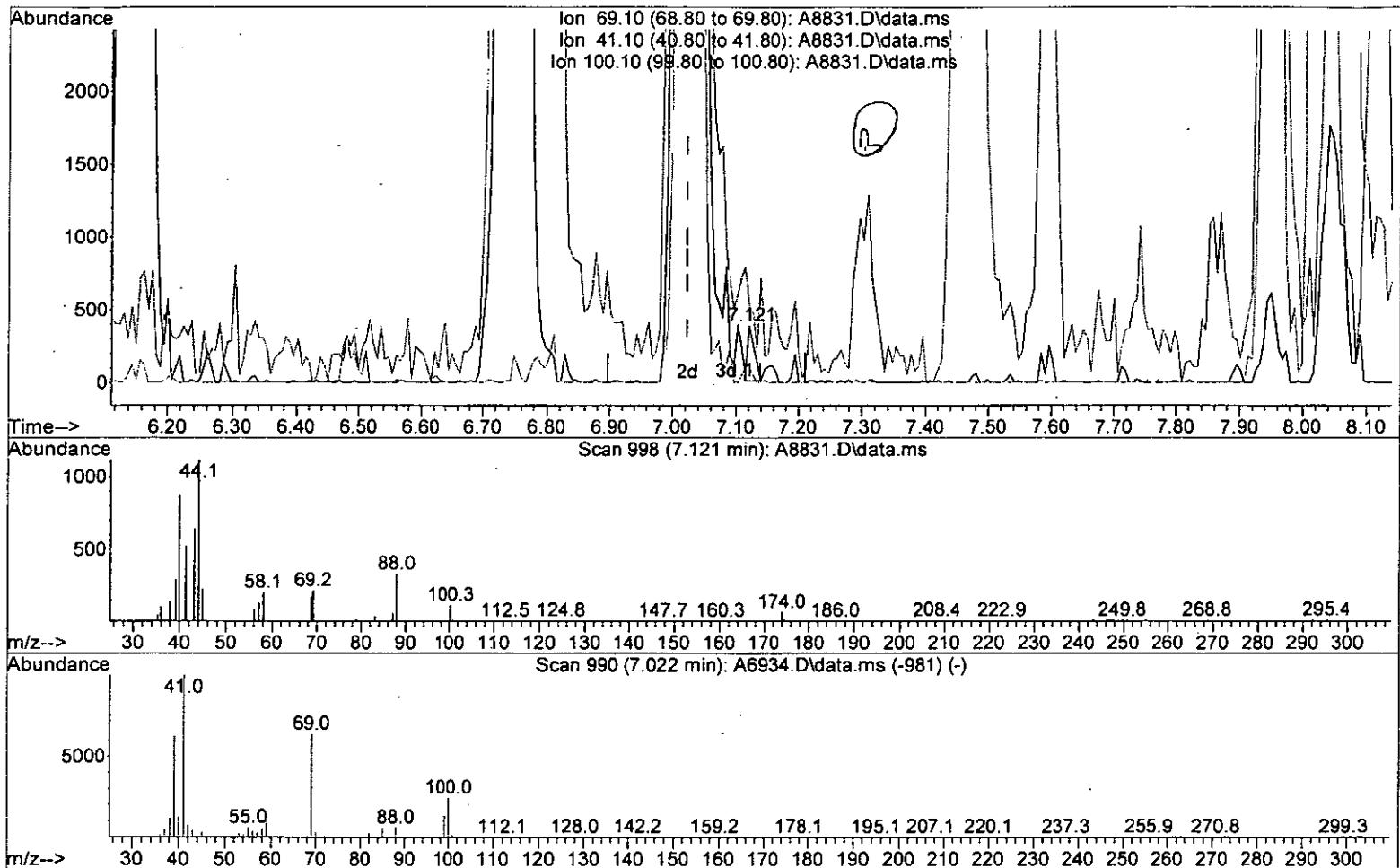
*WPA*

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
 Data File : A8831.D  
 Acq On : 24 May 2015 9:50 pm  
 Operator : F.Naegler  
 Sample : LCS  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 24 22:05:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8831.D\data.ms

(58) Methyl Methacrylate

7.121min (+0.098) 0.06 ug/L

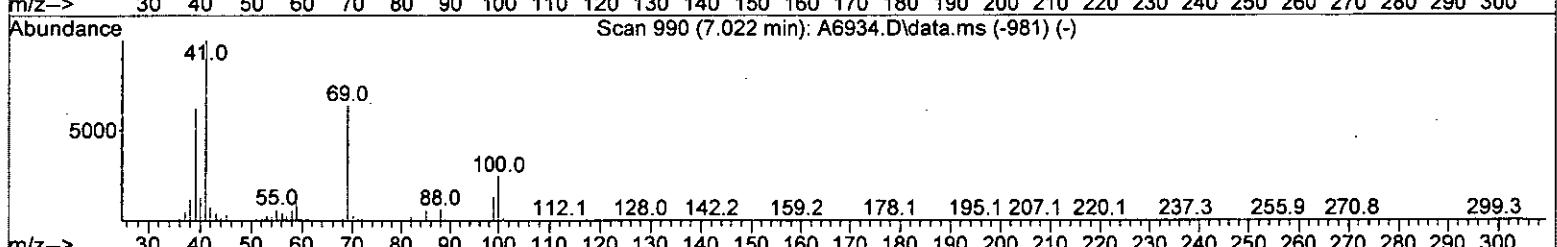
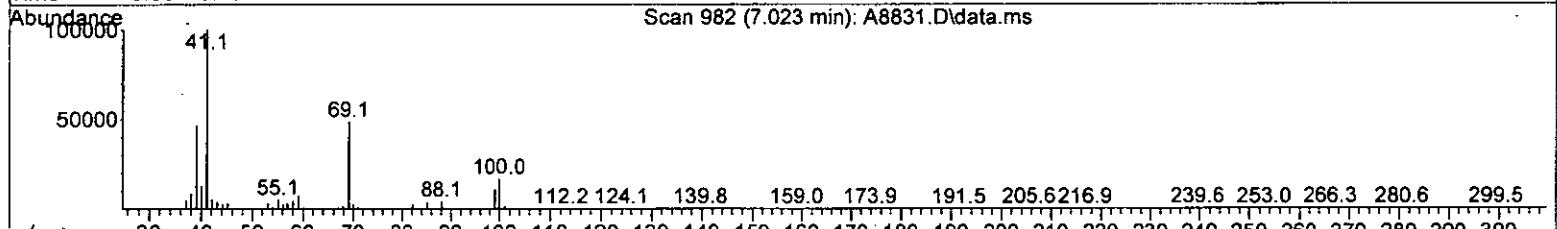
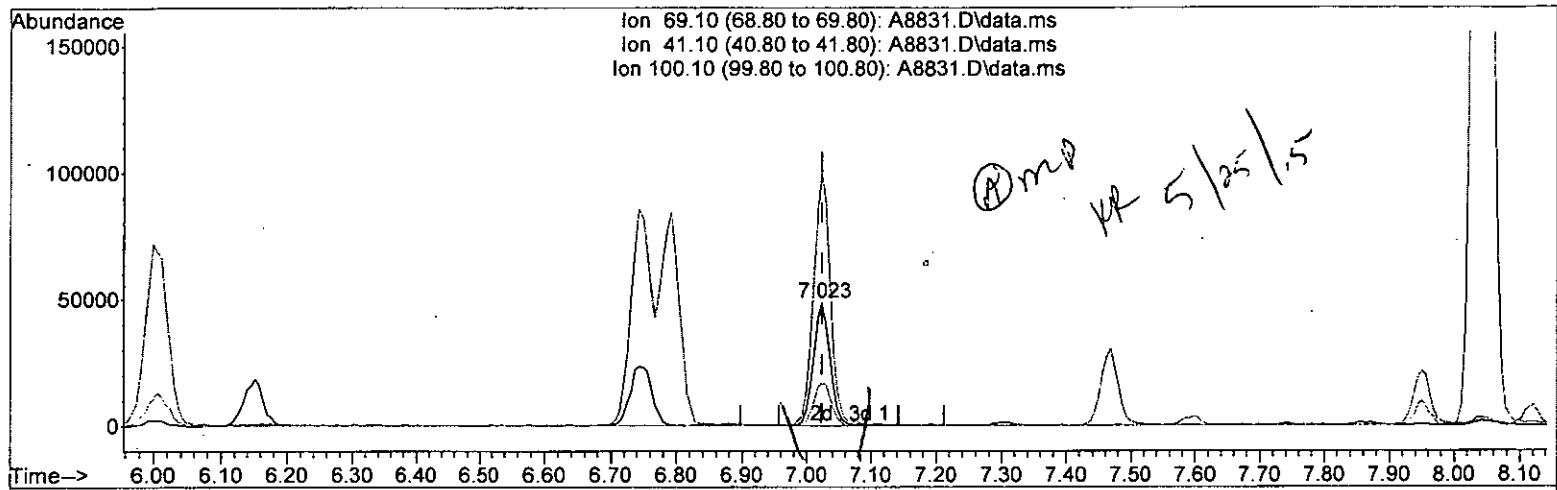
response 275

Ion	Exp%	Act%
69.10	100	100
41.10	141.70	133.25
100.10	37.10	30.43
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052415\  
Data File : A8831.D  
Acq On : 24 May 2015 9:50 pm  
Operator : F.Naegler  
Sample : LCS Inst : MSVOA10  
Misc :  
ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 24 22:05:12 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



TIC: A8831.D\data.ms

**(58) Methyl Methacrylate**

7.023 min (+0.000) 20.35 µg/L m

response 87852

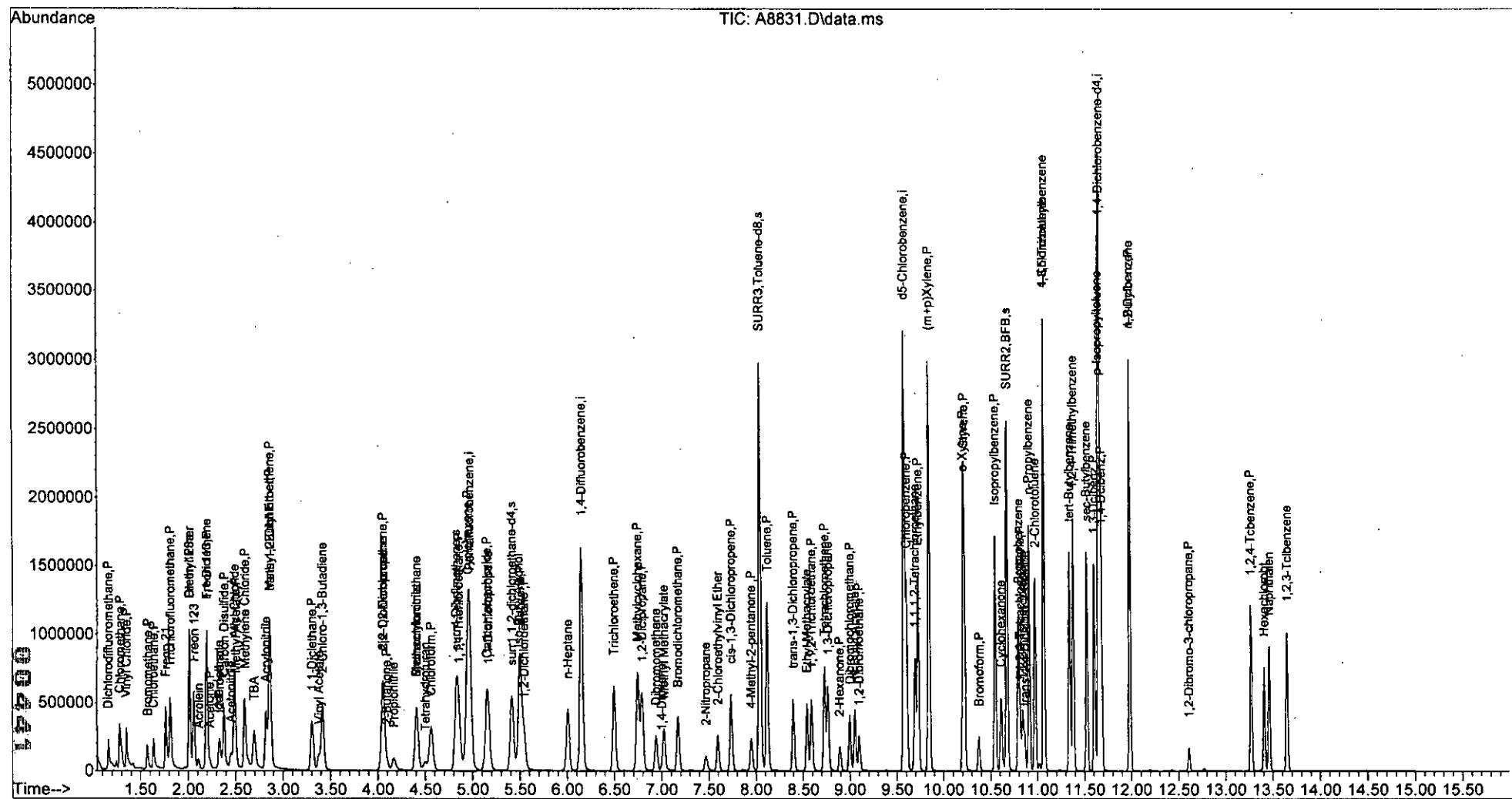
Ion	Exp%	Act%
69.10	100	100
41.10	141.70	206.63#
100.10	37.10	34.20
0.00	0.00	0.00

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUDATA\msvoa10\data\052415\  
Data File : A8831.D  
Acq On : 24 May 2015 9:50 pm  
Operator : F.Naegler  
Sample : LCS  
Misc :  
ALS Vial : 27 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 08:44:03 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/25/15 09:27

**Sample Name:** Lab Control Sample      **Units:** µg/L  
**Lab Code:** RO1505539-03      **Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** 1:\ACQUUDATA\MSVOA10\DATA\052515\A8853.DAT

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	20.0	1.0	0.21	
75-01-4	Vinyl Chloride	20.5	1.0	0.32	
75-00-3	Chloroethane	20.7	1.0	0.24	
74-83-9	Bromomethane	15.7	1.0	0.29	
75-35-4	1,1-Dichloroethene	21.1	1.0	0.57	
67-64-1	Acetone	14.0	5.0	1.3	
75-15-0	Carbon Disulfide	19.7	1.0	0.22	
75-09-2	Methylene Chloride	20.0	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	21.6	1.0	0.33	
75-34-3	1,1-Dichloroethane	21.0	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	21.1	1.0	0.30	
78-93-3	2-Butanone (MEK)	18.7	5.0	0.81	
67-66-3	Chloroform	21.1	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	21.0	1.0	0.36	
56-23-5	Carbon Tetrachloride	21.3	1.0	0.45	
71-43-2	Benzene	20.6	1.0	0.20	
107-06-2	1,2-Dichloroethane	20.5	1.0	0.36	
79-01-6	Trichloroethene	20.8	1.0	0.22	
78-87-5	1,2-Dichloropropane	20.4	1.0	0.20	
75-27-4	Bromodichloromethane	21.2	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	19.8	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	17.1	5.0	0.67	
108-88-3	Toluene	20.6	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	19.5	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	19.5	1.0	0.34	
127-18-4	Tetrachloroethene	21.1	1.0	0.30	
591-78-6	2-Hexanone	18.9	5.0	1.7	
124-48-1	Dibromochloromethane	21.2	1.0	0.31	
108-90-7	Chlorobenzene	21.6	1.0	0.29	
100-41-4	Ethylbenzene	19.8	1.0	0.20	
179601-23-1	m,p-Xylenes	44.5	2.0	0.33	
95-47-6	o-Xylene	21.3	1.0	0.20	
100-42-5	Styrene	22.0	1.0	0.20	
75-25-2	Bromoform	21.2	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	22.1	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1505539-03

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/25/15 09:27

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052515\A8853.D\

**Analysis Lot:** 446166  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	5/25/15 09:27	
Toluene-d8	98	87-121	5/25/15 09:27	
Dibromofluoromethane	99	89-119	5/25/15 09:27	

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS HQ15D536-03, 5539-03 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:47:16 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	946415	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1442405	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1319036	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	750752	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	444053	49.33	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 98.66%		
46) surr1,1,2-dichloroetha...	5.414	65	449949	48.64	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 97.28%		
64) Surr3,Toluene-d8	8.042	98	1688381	49.20	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 98.40%		
69) Surr2,BFB	10.675	95	644814	46.24	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 92.48%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.165	85	200735m	20.43	ug/L	
3) Chloromethane	1.281	50	360519	20.04	ug/L	98
4) Vinyl Chloride	1.354	62	268552	20.49	ug/L	96
5) Bromomethane	1.573	94	85156	15.71	ug/L	96
6) Chloroethane	1.634	64	133350	20.73	ug/L	93
7) Freon 21	1.768	67	383255	24.38	ug/L	99
8) Trichlorofluoromethane	1.811	101	275388	21.77	ug/L	97
9) Diethyl Ether	2.012	59	158631	20.82	ug/L	# 75
10) Freon 123a	2.018	67	220763	23.00	ug/L	99
11) Freon 123	2.061	83	218456	20.57	ug/L	80
12) Acrolein	2.110	56	48552	33.93	ug/L	93
13) 1,1-Dicethene	2.195	96	146919	21.07	ug/L	# 79
14) Freon 113	2.195	101	153775	21.08	ug/L	84
15) Acetone	2.226	43	47516	14.01	ug/L	96
16) 2-Propanol	2.329	45	199821	402.70	ug/L	98
17) Iodomethane	2.323	142	74776	7.24	ug/L	93
18) Carbon Disulfide	2.378	76	493056	19.69	ug/L	100
19) Acetonitrile	2.451	40	48874	112.03	ug/L	98
20) Allyl Chloride	2.488	76	98585	21.73	ug/L	# 25
21) Methyl Acetate	2.506	43	134994	19.58	ug/L	86
22) Methylene Chloride	2.597	84	171408	20.04	ug/L	# 63
23) TBA	2.695	59	237681	373.95	ug/L	70
24) Acrylonitrile	2.823	53	302657	98.92	ug/L	96
25) Methyl-t-Butyl Ether	2.866	73	375332	18.82	ug/L	85
26) trans-1,2-Dichloroethene	2.860	96	169650	21.62	ug/L	# 81
27) 1,1-Dicethane	3.305	63	367207	20.96	ug/L	98
28) Vinyl Acetate	3.372	86	23831	16.87	ug/L	# 90
30) 2-Chloro-1,3-Butadiene	3.414	53	398442	19.55	ug/L	84
32) 2,2-Dichloropropane	4.055	77	241183	21.30	ug/L	98
33) cis-1,2-Dichloroethene	4.055	96	198215	21.07	ug/L	88
34) 2-Butanone	4.085	43	83140	18.67	ug/L	75
35) Propionitrile	4.164	54	106999	96.84	ug/L	94
36) Bromochloromethane	4.408	130	119625m	20.68	ug/L	
37) Methacrylonitrile	4.414	67	45685	17.50	ug/L	# 50

YR  
5/8/15

Data Path : I:\ACQUDATA\msvoa10\data\052515\

Data File : A8853.D

Acq On : 25 May 2015 9:27 am

Operator : K.Ruest

Sample : LCS

Inst : MSVOA10

Misc :

ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:47:16 2015

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M

Quant Title : MS#10 - 8260B WATERS 10mL Purge

QLast Update : Thu May 07 14:25:48 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Tetrahydrofuran	4.493	42	52478	19.07	ug/L	75
39) Chloroform	4.561	83	328569	21.08	ug/L	92
40) 1,1,1-Trichloroethane	4.859	97	278249	20.99	ug/L	93
42) Cyclohexane	4.951	41	270208	19.70	ug/L	94
44) Carbontetrachloride	5.152	121	76011	21.33	ug/L	86
45) 1,1-Dichloropropene	5.164	75	231678	19.87	ug/L	97
47) Benzene	5.499	78	745981	20.64	ug/L	82
48) 1,2-Dichloroethane	5.536	62	256282	20.54	ug/L	94
49) Iso-Butyl Alcohol	5.493	43	139202	371.28	ug/L	91
51) n-Heptane	6.005	43	332889	21.18	ug/L	81
53) Trichloroethene	6.499	130	207763	20.80	ug/L	96
54) Methylcyclohexane	6.743	55	285821	19.35	ug/L	# 77
55) 1,2-Dicloropropane	6.792	63	217313	20.39	ug/L	98
56) Dibromomethane	6.938	93	94160	20.09	ug/L	96
57) 1,4-Dioxane	7.005	88	24574m	462.09	ug/L	
58) Methyl Methacrylate	7.023	69	83646	19.93	ug/L	# 66
59) Bromodichloromethane	7.176	83	237462	21.15	ug/L	97
60) 2-Nitropropane	7.468	41	57036	46.38	ug/L	89
61) 2-Chloroethylvinyl Ether	7.596	63	84232	16.90	ug/L	98
62) cis-1,3-Dichloropropene	7.737	75	252566	19.84	ug/L	97
63) 4-Methyl-2-pentanone	7.950	43	155956	17.09	ug/L	91
65) Toluene	8.121	91	804240	20.60	ug/L	99
66) trans-1,3-Dichloropropene	8.395	75	206515	19.47	ug/L	98
67) Ethyl Methacrylate	8.541	69	163741	19.59	ug/L	# 54
68) 1,1,2-Trichloroethane	8.590	97	135398	19.45	ug/L	94
71) Tetrachloroethene	8.730	164	166926	21.06	ug/L	92
72) 2-Hexanone	8.889	43	112354	18.88	ug/L	82
73) 1,3-Dichloropropane	8.767	76	235940	20.47	ug/L	# 73
74) Dibromochloromethane	8.999	129	166412	21.16	ug/L	99
75) N-Butyl Acetate	9.054	43	272142	19.04	ug/L	92
76) 1,2-Dibromoethane	9.102	107	134101	20.88	ug/L	97
77) 3-Chlorobenzotrifluoride	9.627	180	304752	21.11	ug/L	97
78) Chlorobenzene	9.602	112	560965	21.63	ug/L	99
79) 4-Chlorobenzotrifluoride	9.681	180	270362	21.28	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.694	131	188574	21.24	ug/L	96
81) Ethylbenzene	9.724	106	269058	19.78	ug/L	# 91
82) (m+p)Xylene	9.846	106	728401	44.51	ug/L	87
83) o-Xylene	10.206	106	346005	21.31	ug/L	98
84) Styrene	10.218	104	603648	21.95	ug/L	99
85) Bromoform	10.376	173	90838	21.21	ug/L	99
86) 2-Chlorobenzotrifluoride	10.456	180	285107	20.86	ug/L	94
87) Isopropylbenzene	10.547	105	908727	22.78	ug/L	100
88) Cyclohexanone	10.608	55	298403	702.30	ug/L	92
89) trans-1,4-Dichloro-2-B...	10.864	53	49398	17.17	ug/L	# 76
91) 1,1,2,2-Tetrachloroethane	10.809	83	169603	22.12	ug/L	94
92) Bromobenzene	10.797	156	233629	21.48	ug/L	95
93) 1,2,3-Trichloropropane	10.840	110	45172	20.01	ug/L	# 87
94) n-Propylbenzene	10.907	91	1082331	24.26	ug/L	98
95) 2-Chlorotoluene	10.974	91	643034	22.99	ug/L	96
96) 3-Chlorotoluene	11.023	91	646286	21.88	ug/L	100
97) 4-Chlorotoluene	11.065	91	770649	23.12	ug/L	96

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:47:16 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

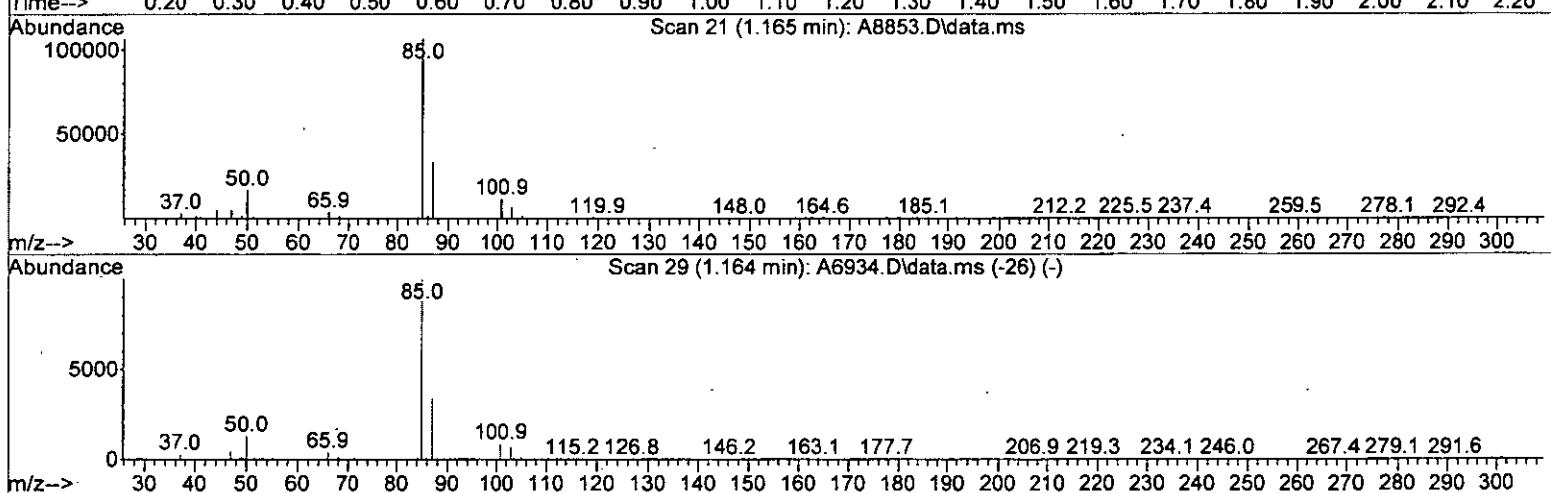
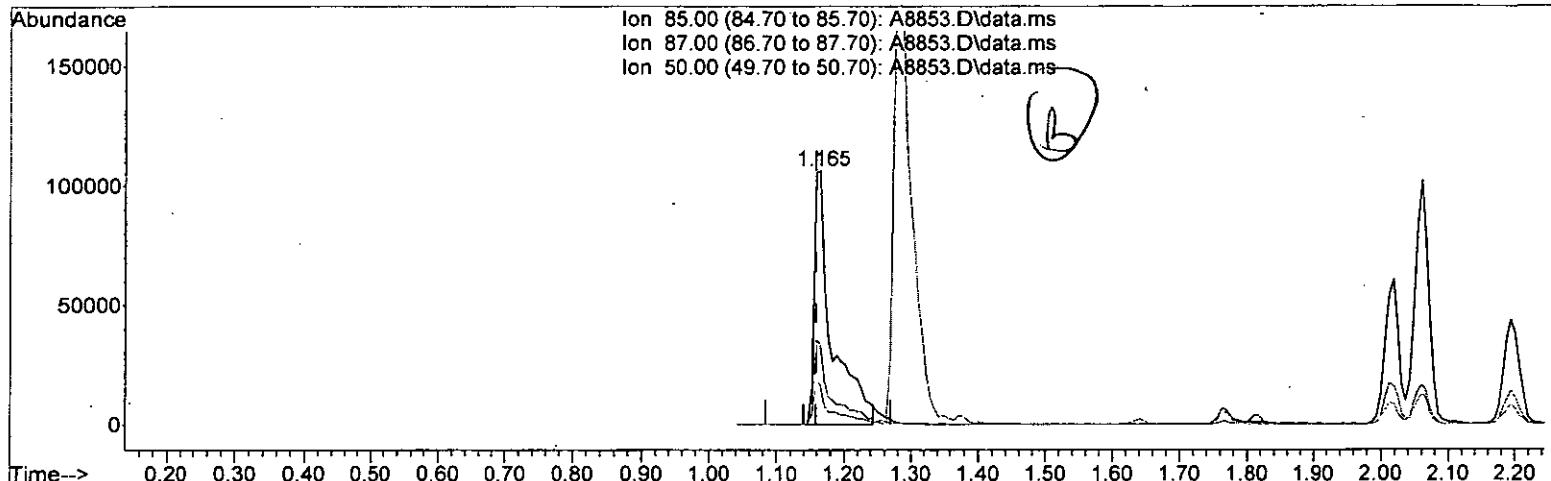
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	1,3,5-Trimethylbenzene	11.065	105	775585	23.28	ug/L	95
99)	tert-Butylbenzene	11.340	119	651964	22.54	ug/L	96
100)	1,2,4-Trimethylbenzene	11.376	105	793030	23.31	ug/L	96
101)	3,4-Dichlorobenzotrifl...	11.443	214	213757	21.60	ug/L	96
102)	sec-Butylbenzene	11.523	105	920838	23.45	ug/L	97
103)	p-Isopropyltoluene	11.644	119	815422	23.31	ug/L	97
104)	1,3-Dclbenz	11.602	146	482292	21.79	ug/L	97
105)	1,4-Dclbenz	11.681	146	506153	21.81	ug/L	98
106)	2,4-Dichlorobenzotrifl...	11.736	214	197436	21.27	ug/L	98
107)	2,5-Dichlorobenzotrifl...	11.773	214	222587	21.15	ug/L	99
108)	n-Butylbenzene	11.980	91	716710	23.20	ug/L	98
109)	1,2-Dclbenz	11.986	146	444947	21.75	ug/L	99
110)	1,2-Dibromo-3-chloropr...	12.614	157	28895	20.60	ug/L	88
111)	Trielution Dichlorotol...	12.730	125	1192449	67.99	ug/L	97
112)	1,3,5-Trichlorobenzene	12.785	180	326006	21.76	ug/L	95
113)	Coelution Dichlorotoluene	13.059	125	852843	45.52	ug/L	94
114)	1,2,4-Tcbenzene	13.266	180	295603	22.93	ug/L	96
115)	Hexachlorobt	13.406	225	120443	22.57	ug/L	97
116)	Naphthalen	13.461	128	547378	22.66	ug/L	99
117)	1,2,3-Tclbenzene	13.650	180	241958	22.80	ug/L	99
118)	2,4,5-Trichlorotoluene	14.235	159	178023	22.74	ug/L	99
119)	2,3,6-Trichlorotoluene	14.321	159	170053	24.86	ug/L	96

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:42:43 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8853.D\data.ms

(2) Dichlorodifluoromethane (P)

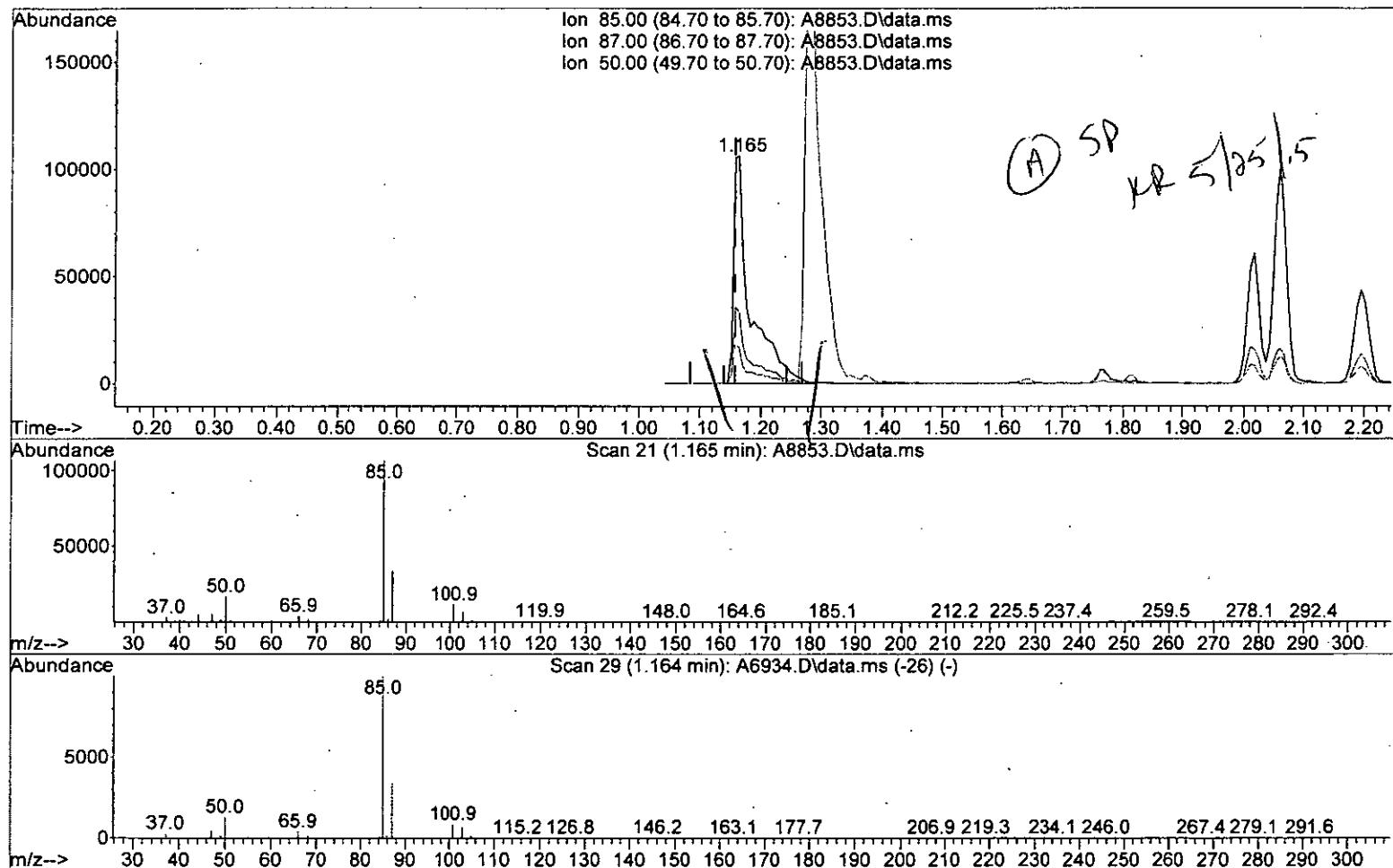
1.165min (+0.006) 19.76 ug/L

response 194220

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.45
50.00	15.00	15.70
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:42:43 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8853.D\data.ms

(2) Dichlorodifluoromethane (P)

1.165min (+0.006) 20.43 ug/L m

response 200735

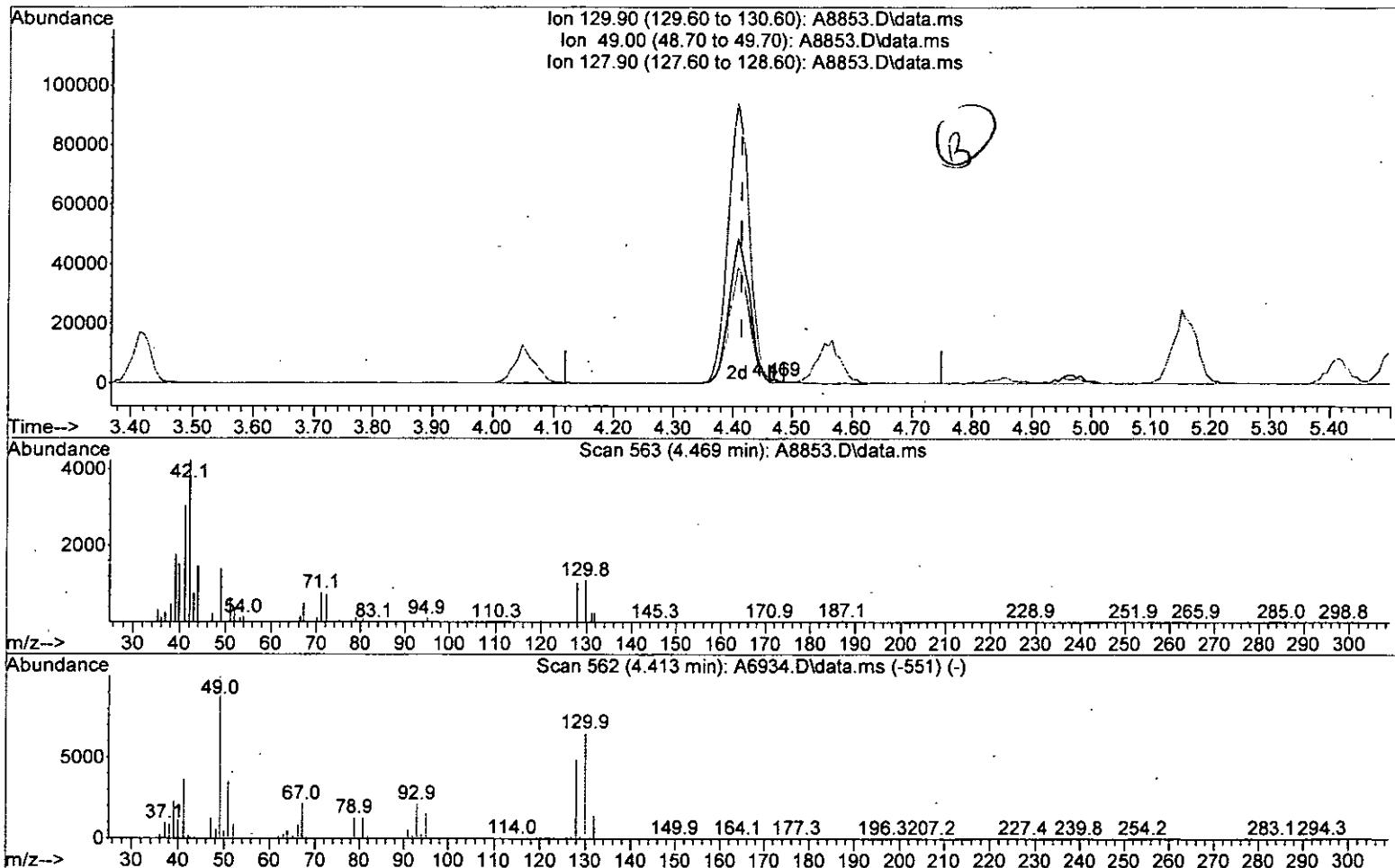
Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.45
50.00	15.00	15.70
0.00	0.00	0.00

MM  
AS

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:42:43 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8853.D\data.ms

(36) Bromochloromethane

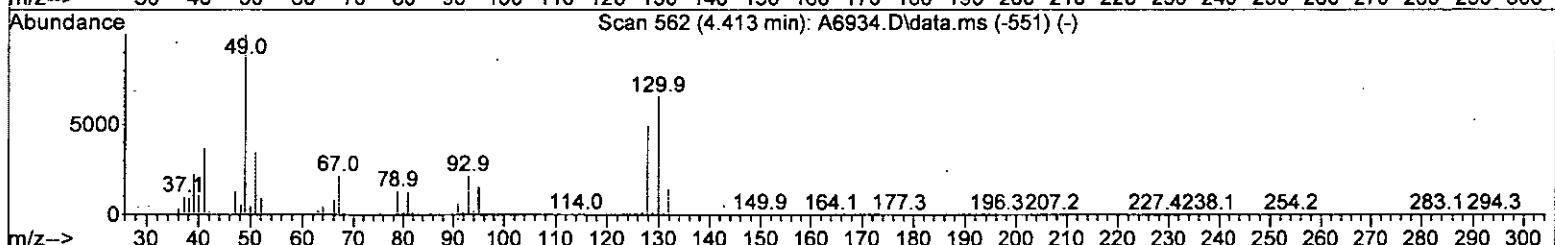
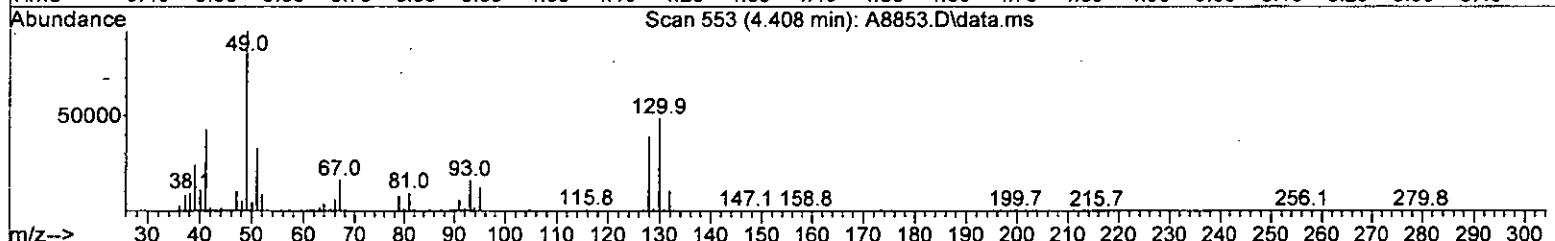
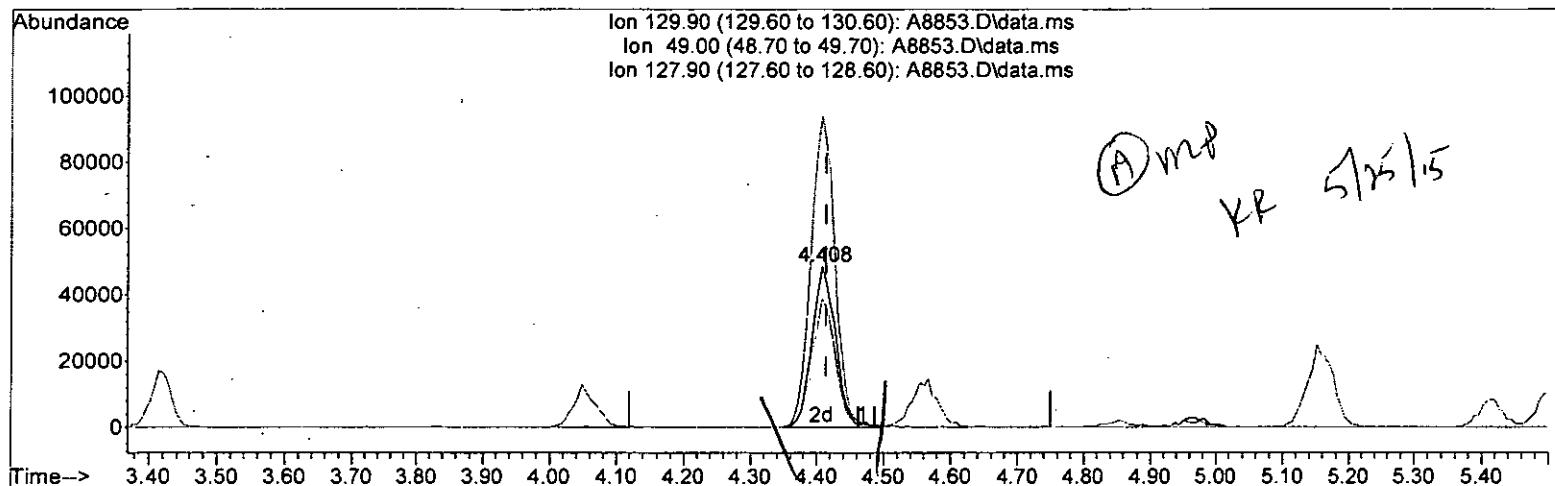
4.469min (+0.055) 0.12 ug/L

response 717

Ion	Exp%	Act%
129.90	100	100
49.00	133.80	126.16
127.90	75.20	93.55
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:42:43 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8853.D\data.ms

## (36) Bromochloromethane

4.408min (-0.006) 20.68 ug/L m

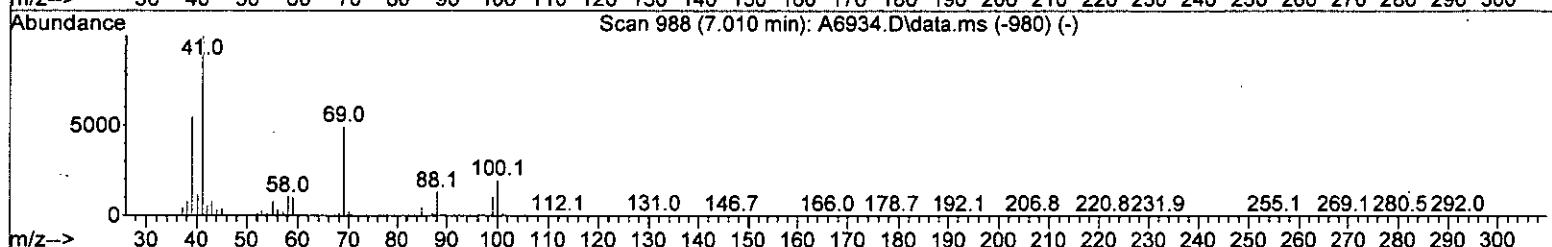
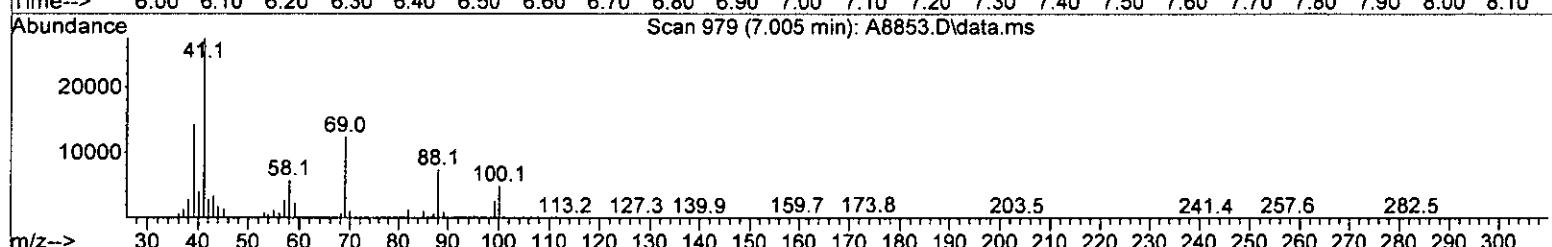
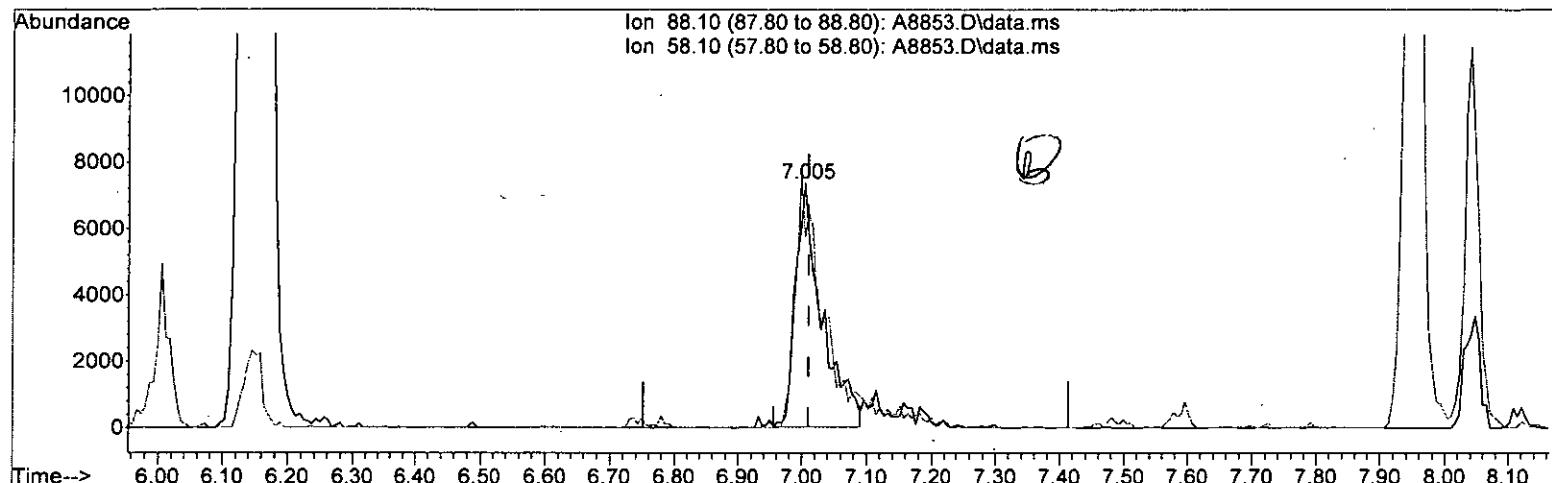
response 119625

Ion	Exp%	Act%
129.90	100	100
49.00	133.80	194.25#
127.90	75.20	80.33
0.00	0.00	0.00

*WW*

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:42:43 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8853.D\data.ms

(57) 1,4-Dioxane

7.005min (-0.006) 393.18 ug/L

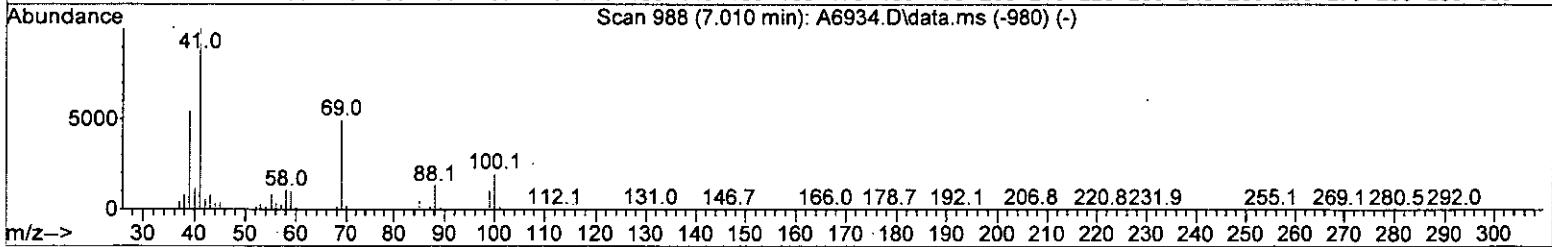
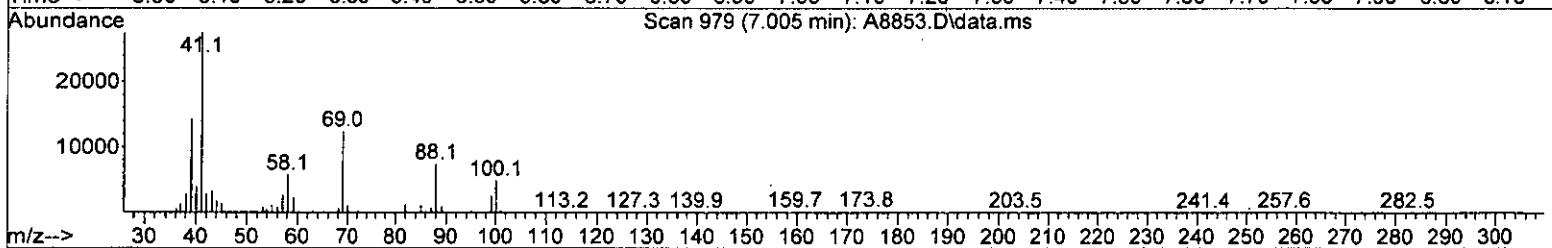
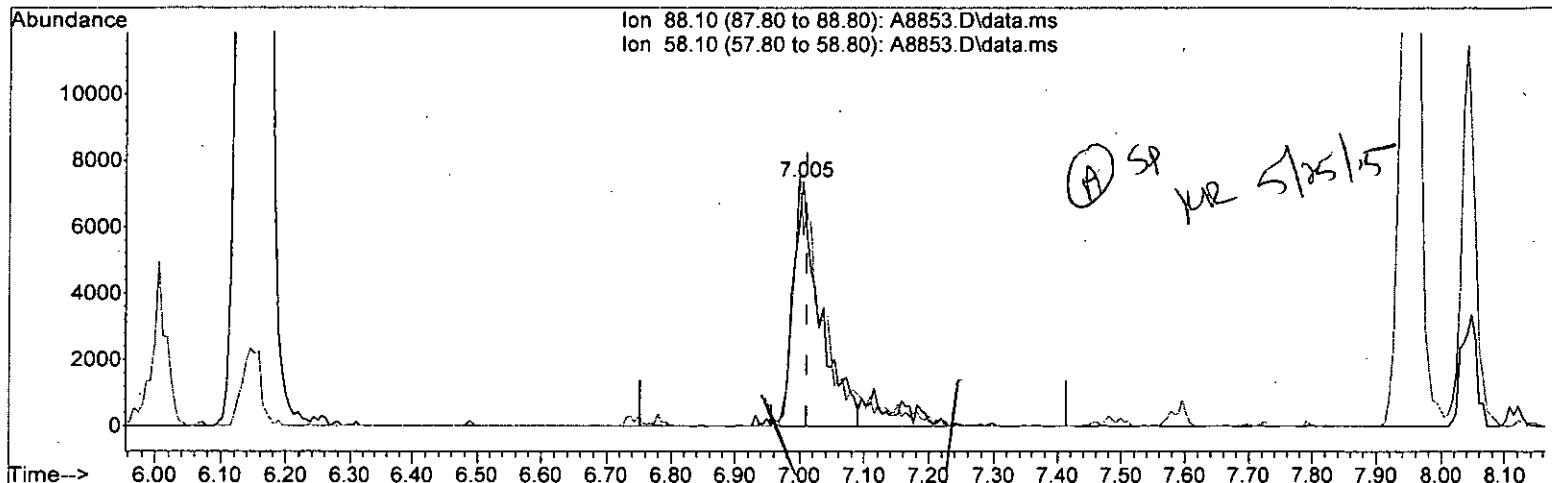
response 20909

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	77.82
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 25 09:42:43 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8853.D\data.ms

(57) 1,4-Dioxane

7.005min (-0.006) 462.09 ug/L m

response 24574

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	77.82
0.00	0.00	0.00
0.00	0.00	0.00

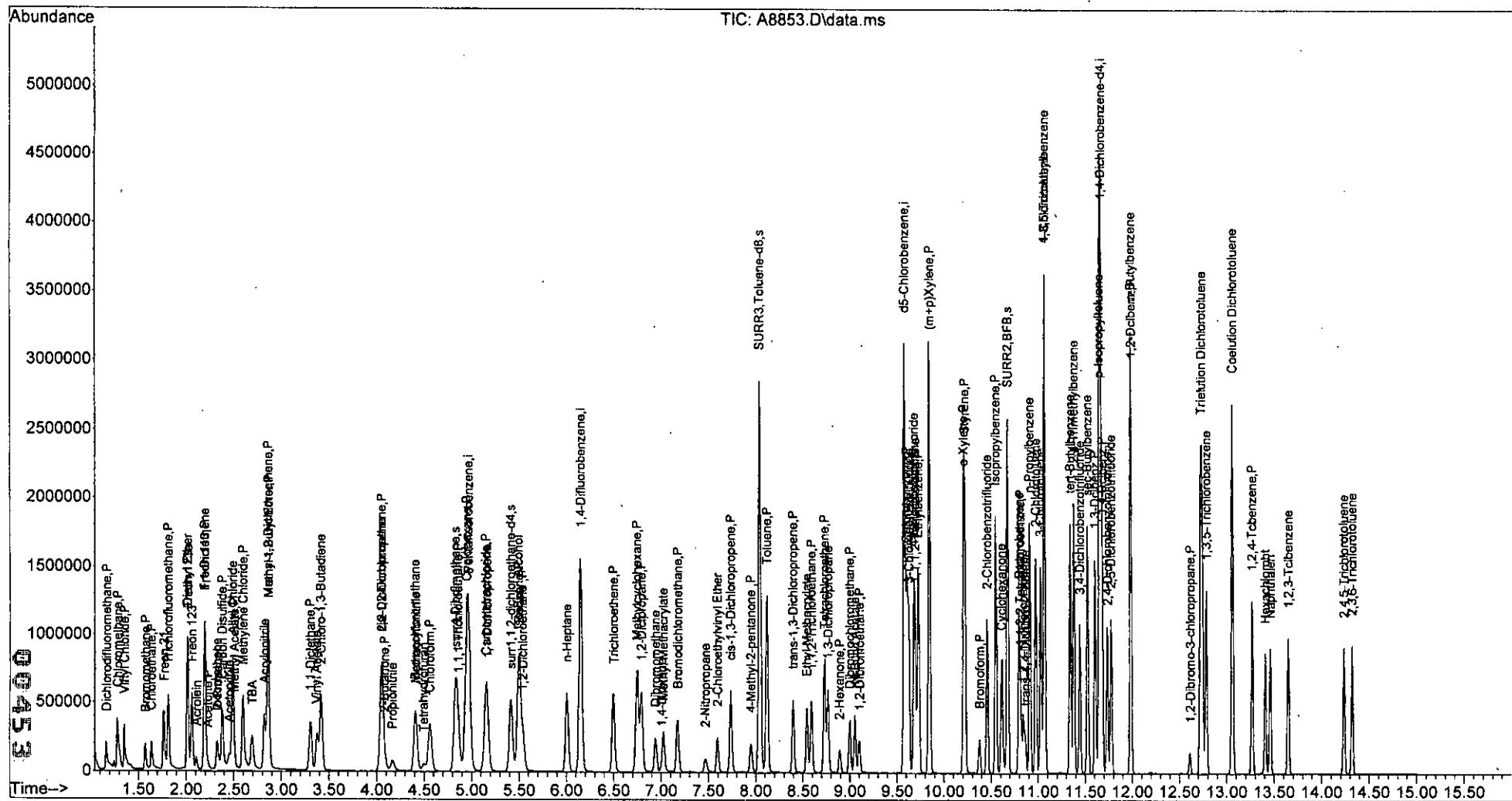
*b/w*

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa10\data\052515\  
 Data File : A8853.D  
 Acq On : 25 May 2015 9:27 am  
 Operator : K.Ruest  
 Sample : LCS  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 25 09:47:16 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1505661-03

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/26/15 21:27

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8907.D\**Analysis Lot:** 446223**Instrument Name:** R-MS-10**Dilution Factor:** 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
74-87-3	Chloromethane	16.8		1.0	0.21	
75-01-4	Vinyl Chloride	16.2		1.0	0.32	
75-00-3	Chloroethane	17.5		1.0	0.24	
74-83-9	Bromomethane	15.4		1.0	0.29	
75-35-4	1,1-Dichloroethene	17.3		1.0	0.57	
67-64-1	Acetone	18.0		5.0	1.3	
75-15-0	Carbon Disulfide	20.8		1.0	0.22	
75-09-2	Methylene Chloride	18.4		1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	18.3		1.0	0.33	
75-34-3	1,1-Dichloroethane	18.4		1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	18.5		1.0	0.30	
78-93-3	2-Butanone (MEK)	19.1		5.0	0.81	
67-66-3	Chloroform	19.1		1.0	0.25	
71-55-6	1,1,1-Trichloroethane	17.5		1.0	0.36	
56-23-5	Carbon Tetrachloride	17.4		1.0	0.45	
71-43-2	Benzene	17.8		1.0	0.20	
107-06-2	1,2-Dichloroethane	19.8		1.0	0.36	
79-01-6	Trichloroethene	18.8		1.0	0.22	
78-87-5	1,2-Dichloropropane	18.6		1.0	0.20	
75-27-4	Bromodichloromethane	19.4		1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	18.3		1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	18.9		5.0	0.67	
108-88-3	Toluene	17.9		1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	18.0		1.0	0.20	
79-00-5	1,1,2-Trichloroethane	19.5		1.0	0.34	
127-18-4	Tetrachloroethene	17.3		1.0	0.30	
591-78-6	2-Hexanone	20.2		5.0	1.7	
124-48-1	Dibromochloromethane	21.1		1.0	0.31	
108-90-7	Chlorobenzene	19.5		1.0	0.29	
100-41-4	Ethylbenzene	16.6		1.0	0.20	
179601-23-1	m,p-Xylenes	37.8		2.0	0.33	
95-47-6	o-Xylene	18.8		1.0	0.20	
100-42-5	Styrene	20.1		1.0	0.20	
75-25-2	Bromoform	21.0		1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	20.4		1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1505661-03

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/26/15 21:27

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\msvoa10\data\052615\A8907.D\

**Analysis Lot:** 446223  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	5/26/15 21:27	
Toluene-d8	97	87-121	5/26/15 21:27	
Dibromofluoromethane	99	89-119	5/26/15 21:27	

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8907.D  
 Acq On : 26 May 2015 9:27 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 27 09:23:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.963	168	983408	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.146	114	1500351	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1344520	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.663	152	771047	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	461592	49.30	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	98.60%	
46) surr1,1,2-dichloroetha...	5.414	65	468831	48.73	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	97.46%	
64) SURR3,Toluene-d8	8.042	98	1724933	48.32	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	96.64%	
69) SURR2,BFB	10.675	95	665885	45.90	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	91.80%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.159	85	156936	15.37	ug/L	97
3) Chloromethane	1.281	50	314255	16.81	ug/L	96
4) Vinyl Chloride	1.348	62	220703	16.21	ug/L	99
5) Bromomethane	1.567	94	86803	15.41	ug/L	95
6) Chloroethane	1.634	64	117129	17.52	ug/L	95
7) Freon 21	1.762	67	395336	24.20	ug/L	99
8) Trichlorofluoromethane	1.811	101	226725	17.25	ug/L	98
9) Diethyl Ether	2.012	59	164786	20.81	ug/L	# 74
10) Freon 123a	2.012	67	240065	24.07	ug/L	92
11) Freon 123	2.061	83	240668	21.81	ug/L	# 77
12) Acrolein	2.104	56	44677	30.04	ug/L	92
13) 1,1-Dicethene	2.195	96	125443	17.31	ug/L	# 76
14) Freon 113	2.195	101	122721	16.19	ug/L	92
15) Acetone	2.226	43	59682	17.98	ug/L	98
16) 2-Propanol	2.329	45	214586	416.19	ug/L	95
17) Iodomethane	2.323	142	73089	6.81	ug/L	95
18) Carbon Disulfide	2.378	76	540861	20.78	ug/L	99
19) Acetonitrile	2.451	40	54403	120.01	ug/L	97
20) Allyl Chloride	2.488	76	75437	16.00	ug/L	# 10
21) Methyl Acetate	2.500	43	141730	19.79	ug/L	89
22) Methylene Chloride	2.598	84	163345	18.38	ug/L	# 65
23) TBA	2.689	59	275276	416.81	ug/L	70
24) Acrylonitrile	2.817	53	319740	100.57	ug/L	92
25) Methyl-t-Butyl Ether	2.860	73	389552	18.80	ug/L	85
26) trans-1,2-Dichloroethene	2.860	96	149499	18.33	ug/L	# 87
27) 1,1-Dicethane	3.305	63	334747	18.39	ug/L	97
28) Vinyl Acetate	3.372	86	17719	12.07	ug/L	98
30) 2-Chloro-1,3-Butadiene	3.414	53	429856	20.30	ug/L	87
32) 2,2-Dichloropropane	4.048	77	185820	15.79	ug/L	99
33) cis-1,2-Dichloroethene	4.055	96	180915	18.51	ug/L	90
34) 2-Butanone	4.085	43	88331	19.09	ug/L	88
35) Propionitrile	4.164	54	113872	99.18	ug/L	96
36) Bromochloromethane	4.408	130	122827	20.44	ug/L	# 69
37) Methacrylonitrile	4.402	67	50971	18.79	ug/L	# 23

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8907.D  
 Acq On : 26 May 2015 9:27 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 27 09:23:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Tetrahydrofuran	4.494	42	56241	19.67	ug/L	82
39) Chloroform	4.561	83	309181	19.09	ug/L	98
40) 1,1,1-Trichloroethane	4.847	97	240543	17.46	ug/L	97
42) Cyclohexane	4.951	41	286459	20.08	ug/L	86
44) Carbontetrachloride	5.146	121	64605	17.43	ug/L	91
45) 1,1-Dichloropropene	5.158	75	197530	16.29	ug/L	95
47) Benzene	5.499	78	669895	17.82	ug/L	83
48) 1,2-Dichloroethane	5.536	62	257157	19.81	ug/L	91
49) Iso-Butyl Alcohol	5.493	43	147851	379.12	ug/L	91
51) n-Heptane	5.999	43	249514	15.26	ug/L	# 77
53) Trichloroethylene	6.499	130	195782	18.84	ug/L	94
54) Methylcyclohexane	6.743	55	300466	19.55	ug/L	# 76
55) 1,2-Dicopropane	6.792	63	206205	18.60	ug/L	91
56) Dibromomethane	6.938	93	93137	19.10	ug/L	95
57) 1,4-Dioxane	7.005	88	24126	436.15	ug/L	86
58) Methyl Methacrylate	7.024	69	84842	19.43	ug/L	# 47
59) Bromodichloromethane	7.170	83	226099	19.36	ug/L	98
60) 2-Nitropropane	7.469	41	56355	44.05	ug/L	96
61) 2-Chloroethylvinyl Ether	7.597	63	98151	18.93	ug/L	99
62) cis-1,3-Dichloropropene	7.737	75	242165	18.29	ug/L	91
63) 4-Methyl-2-pentanone	7.950	43	179548	18.91	ug/L	90
65) Toluene	8.121	91	726412	17.89	ug/L	98
66) trans-1,3-Dichloropropene	8.395	75	198437	17.98	ug/L	98
67) Ethyl Methacrylate	8.548	69	168383	19.37	ug/L	# 55
68) 1,1,2-Trichloroethane	8.590	97	140868	19.46	ug/L	97
71) Tetrachloroethylene	8.730	164	139558	17.27	ug/L	93
72) 2-Hexanone	8.895	43	122522	20.20	ug/L	91
73) 1,3-Dichloropropane	8.767	76	239176	20.36	ug/L	# 73
74) Dibromochloromethane	8.999	129	169207	21.11	ug/L	99
75) N-Butyl Acetate	9.054	43	291875	20.04	ug/L	93
76) 1,2-Dibromoethane	9.096	107	134708	20.57	ug/L	100
78) Chlorobenzene	9.602	112	516672	19.54	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.694	131	174080	19.23	ug/L	95
81) Ethylbenzene	9.730	106	230455	16.62	ug/L	97
82) (m+p)Xylene	9.846	106	631296	37.84	ug/L	91
83) o-Xylene	10.206	106	310387	18.75	ug/L	96
84) Styrene	10.224	104	562054	20.05	ug/L	94
85) Bromoform	10.377	173	91500	20.96	ug/L	92
87) Isopropylbenzene	10.547	105	756064	18.60	ug/L	99
88) Cyclohexanone	10.614	55	235878	544.62	ug/L	93
89) trans-1,4-Dichloro-2-B...	10.864	53	43642	14.88	ug/L	81
91) 1,1,2,2-Tetrachloroethane	10.809	83	160934	20.44	ug/L	91
92) Bromobenzene	10.797	156	223814	20.04	ug/L	95
93) 1,2,3-Trichloropropene	10.840	110	46126	19.90	ug/L	# 80
94) n-Propylbenzene	10.907	91	893075	19.49	ug/L	99
95) 2-Chlorotoluene	10.974	91	567741	19.77	ug/L	96
97) 4-Chlorotoluene	11.065	91	693564	20.26	ug/L	98
98) 1,3,5-Trimethylbenzene	11.065	105	676408	19.77	ug/L	98
99) tert-Butylbenzene	11.340	119	545252	18.36	ug/L	98
100) 1,2,4-Trimethylbenzene	11.376	105	698879	20.00	ug/L	96
102) sec-Butylbenzene	11.523	105	766240	19.00	ug/L	99

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8907.D  
 Acq On : 26 May 2015 9:27 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 27 09:23:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
103) p-Isopropyltoluene	11.645	119	693105	19.29	ug/L	97
104) 1,3-Dclbenz	11.602	146	445103	19.58	ug/L	96
105) 1,4-Dclbenz	11.681	146	475253	19.94	ug/L	96
108) n-Butylbenzene	11.980	91	583152	18.38	ug/L	98
109) 1,2-Dclbenz	11.986	146	430526	20.49	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.608	157	29519	20.49	ug/L	97
111) Trielution Dichlorotol...	12.730	125	4022	0.22	ug/L	80
114) 1,2,4-Tcbenzene	13.266	180	260195	19.66	ug/L	98
115) Hexachlorobt	13.406	225	94235	17.19	ug/L	97
116) Naphthalen	13.461	128	529828	21.36	ug/L	98
117) 1,2,3-Tclbenzene	13.650	180	232216	21.30	ug/L	98
119) 2,3,6-Trichlorotoluene	14.321	159	2327	0.33	ug/L	87

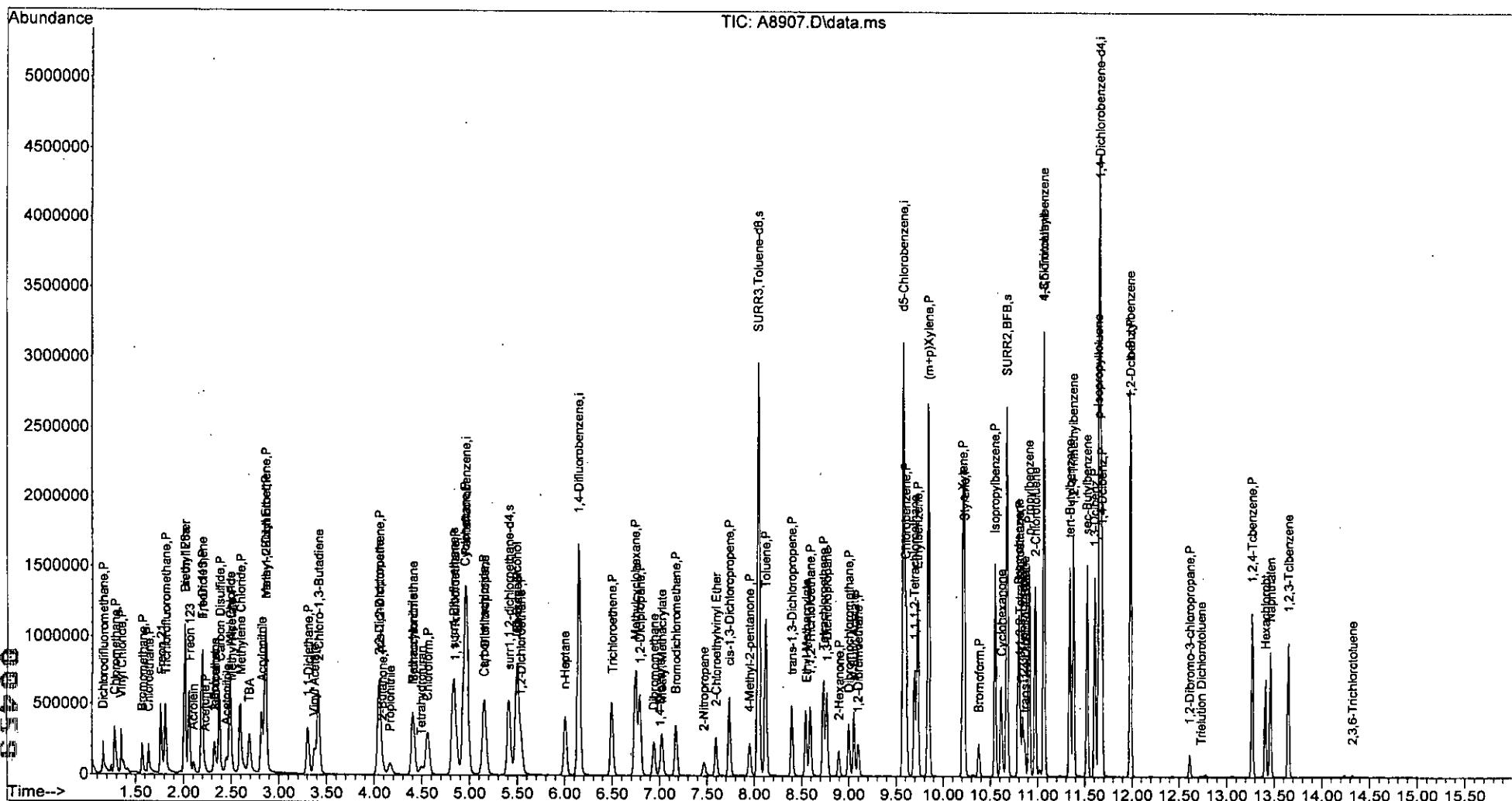
(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052615\  
 Data File : A8907.D  
 Acq On : 26 May 2015 9:27 pm  
 Operator : F. Naegler  
 Sample : LCS  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 09:23:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1505783-03

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/27/15 16:42

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8939.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	19.8	1.0	0.21	
75-01-4	Vinyl Chloride	19.0	1.0	0.32	
75-00-3	Chloroethane	16.3	1.0	0.24	
74-83-9	Bromomethane	16.6	1.0	0.29	
75-35-4	1,1-Dichloroethene	19.8	1.0	0.57	
67-64-1	Acetone	13.6	5.0	1.3	
75-15-0	Carbon Disulfide	19.3	1.0	0.22	
75-09-2	Methylene Chloride	18.8	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	20.0	1.0	0.33	
75-34-3	1,1-Dichloroethane	20.1	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	20.3	1.0	0.30	
78-93-3	2-Butanone (MEK)	18.7	5.0	0.81	
67-66-3	Chloroform	19.8	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	20.1	1.0	0.36	
56-23-5	Carbon Tetrachloride	20.3	1.0	0.45	
71-43-2	Benzene	19.3	1.0	0.20	
107-06-2	1,2-Dichloroethane	20.0	1.0	0.36	
79-01-6	Trichloroethene	19.8	1.0	0.22	
78-87-5	1,2-Dichloropropane	19.5	1.0	0.20	
75-27-4	Bromodichloromethane	19.3	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	20.0	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	19.1	5.0	0.67	
108-88-3	Toluene	19.3	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	19.6	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	18.3	1.0	0.34	
127-18-4	Tetrachloroethene	20.5	1.0	0.30	
59I-78-6	2-Hexanone	21.0	5.0	1.7	
124-48-1	Dibromochloromethane	21.8	1.0	0.31	
108-90-7	Chlorobenzene	21.0	1.0	0.29	
100-41-4	Ethylbenzene	18.9	1.0	0.20	
179601-23-1	m,p-Xylenes	42.2	2.0	0.33	
95-47-6	o-Xylene	20.3	1.0	0.20	
100-42-5	Styrene	21.2	1.0	0.20	
75-25-2	Bromoform	21.3	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	21.6	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water  
  
**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1505783-03

**Service Request:** R1503862  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 5/27/15 16:42

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8939.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85-122	5/27/15 16:42	
Toluene-d8	96	87-121	5/27/15 16:42	
Dibromofluoromethane	99	89-119	5/27/15 16:42	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS *P01505783-03*  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 17:23:29 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	1003288	50.00	ug/L	0.00
41) 1,4-Difluorobenzene	6.152	114	1527217	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1321604	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.657	152	777285	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.829	113	470160	49.33	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 98.66%		
46) surr1,1,2-dichloroetha...	5.414	65	483556	49.37	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 98.74%		
64) SURR3,Toluene-d8	8.042	98	1742962	47.97	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 95.94%		
69) SURR2,BFB	10.675	95	651675	44.13	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 88.26%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.159	85	184007m	17.66	ug/L	
3) Chloromethane	1.281	50	377529	19.80	ug/L	100
4) Vinyl Chloride	1.348	62	263378	18.96	ug/L	98
5) Bromomethane	1.573	94	95177	16.56	ug/L	99
6) Chloroethane	1.634	64	111031	16.28	ug/L	95
7) Freon 21	1.762	67	397607	23.86	ug/L	99
8) Trichlorofluoromethane	1.811	101	261539	19.50	ug/L	96
9) Diethyl Ether	2.012	59	171339	21.21	ug/L #	77
10) Freon 123a	2.012	67	238004	23.39	ug/L	89
11) Freon 123	2.061	83	238173	21.16	ug/L	82
12) Acrolein	2.110	56	42732	28.17	ug/L	98
13) 1,1-Dicethene	2.195	96	146657	19.84	ug/L #	79
14) Freon 113	2.195	101	158700	20.52	ug/L	96
15) Acetone	2.226	43	49163m	13.55	ug/L	
16) 2-Propanol	2.329	45	208190	395.78	ug/L	97
17) Iodomethane	2.317	142	208927	19.09	ug/L	99
18) Carbon Disulfide	2.378	76	511308	19.26	ug/L	99
19) Acetonitrile	2.457	40	35570	76.91	ug/L	95
20) Allyl Chloride	2.488	76	96926	20.15	ug/L #	1
21) Methyl Acetate	2.500	43	141674	19.39	ug/L	86
22) Methylene Chloride	2.598	84	170277	18.78	ug/L #	68
23) TBA	2.695	59	275499	408.88	ug/L	61
24) Acrylonitrile	2.817	53	313599	96.68	ug/L	96
25) Methyl-t-Butyl Ether	2.866	73	408870	19.34	ug/L	81
26) trans-1,2-Dichloroethene	2.860	96	166758	20.04	ug/L #	78
27) 1,1-Dicethane	3.305	63	373225	20.09	ug/L	99
28) Vinyl Acetate	3.378	86	27279	18.21	ug/L #	83
29) DIPE	3.408	45	985674m	19.36	ug/L	
30) 2-Chloro-1,3-Butadiene	3.414	53	420056	19.44	ug/L	88
31) ETBE	3.878	59	640342	18.41	ug/L	93
32) 2,2-Dichloropropane	4.048	77	257977	21.49	ug/L	97
33) cis-1,2-Dichloroethene	4.061	96	202232	20.28	ug/L	92
34) 2-Butanone	4.091	43	88453	18.74	ug/L	88
35) Propionitrile	4.158	54	107398	91.69	ug/L	94

*PF  
5/29/15*

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 17:23:29 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.414	130	123067	20.07	ug/L #	66
37) Methacrylonitrile	4.408	67	51090	18.46	ug/L #	36
38) Tetrahydrofuran	4.487	42	55058	18.87	ug/L	72
39) Chloroform	4.561	83	327280	19.81	ug/L	95
40) 1,1,1-Trichloroethane	4.853	97	282067	20.07	ug/L	91
42) Cyclohexane	4.951	41	300455	20.69	ug/L	90
44) Carbontetrachloride	5.152	121	76696	20.33	ug/L	98
45) 1,1-Dichloropropene	5.158	75	235269	19.06	ug/L	96
47) Benzene	5.499	78	739822	19.33	ug/L	84
48) 1,2-Dichloroethane	5.536	62	264275	20.00	ug/L	92
49) Iso-Butyl Alcohol	5.493	43	154447	389.06	ug/L	87
50) TAME	5.743	73	439340	19.92	ug/L	84
51) n-Heptane	6.005	43	354942	21.33	ug/L	79
52) 1-Butanol	6.517	56	200083	1241.88	ug/L	77
53) Trichloroethene	6.499	130	209316	19.79	ug/L	94
54) Methylcyclohexane	6.749	55	317673	20.31	ug/L #	78
55) 1,2-Diclpropane	6.792	63	220319	19.53	ug/L	95
56) Dibromomethane	6.938	93	95457	19.23	ug/L	93
57) 1,4-Dioxane	7.011	88	34074m	605.15	ug/L	
58) Methyl Methacrylate	7.023	69	89812	20.21	ug/L #	46
59) Bromodichloromethane	7.176	83	229938	19.34	ug/L	98
60) 2-Nitropropane	7.469	41	59273	45.52	ug/L	95
61) 2-Chloroethylvinyl Ether	7.597	63	103830	19.68	ug/L	94
62) cis-1,3-Dichloropropene	7.737	75	268840	19.95	ug/L	96
63) 4-Methyl-2-pentanone	7.950	43	184831	19.13	ug/L	86
65) Toluene	8.121	91	795620	19.25	ug/L	97
66) trans-1,3-Dichloropropene	8.395	75	220062	19.59	ug/L	98
67) Ethyl Methacrylate	8.541	69	182557	20.63	ug/L #	50
68) 1,1,2-Trichloroethane	8.590	97	135026	18.32	ug/L	86
71) Tetrachloroethene	8.730	164	162737	20.49	ug/L	95
72) 2-Hexanone	8.889	43	125102	20.98	ug/L	83
73) 1,3-Dichloropropane	8.767	76	239472m	20.74	ug/L	
74) Dibromochloromethane	8.999	129	172095	21.84	ug/L	98
75) N-Butyl Acetate	9.054	43	329340	23.00	ug/L	91
76) 1,2-Dibromoethane	9.096	107	139845	21.73	ug/L	94
77) 3-Chlorobenzotrifluoride	9.627	180	314377	21.73	ug/L	97
78) Chlorobenzene	9.608	112	546488	21.03	ug/L	95
79) 4-Chlorobenzotrifluoride	9.681	180	286510	22.51	ug/L	96
80) 1,1,1,2-Tetrachloroethane	9.694	131	188609	21.20	ug/L	97
81) Ethylbenzene	9.730	106	258172	18.94	ug/L	99
82) (m+p) Xylene	9.846	106	691143	42.15	ug/L #	87
83) o-Xylene	10.206	106	329424	20.25	ug/L	97
84) Styrene	10.224	104	582576	21.15	ug/L	92
85) Bromoform	10.376	173	91285	21.27	ug/L	99
86) 2-Chlorobenzotrifluoride	10.456	180	299725	21.89	ug/L	91
87) Isopropylbenzene	10.547	105	856153	21.42	ug/L	99
88) Cyclohexanone	10.614	55	171070	401.83	ug/L	88
89) trans-1,4-Dichloro-2-B...	10.864	53	56243	19.51	ug/L #	77
91) 1,1,2,2-Tetrachloroethane	10.809	83	171391	21.59	ug/L	97
92) Bromobenzene	10.797	156	231430	20.55	ug/L	94
93) 1,2,3-Trichloropropane	10.840	110	48878	20.92	ug/L #	89

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 17:23:29 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

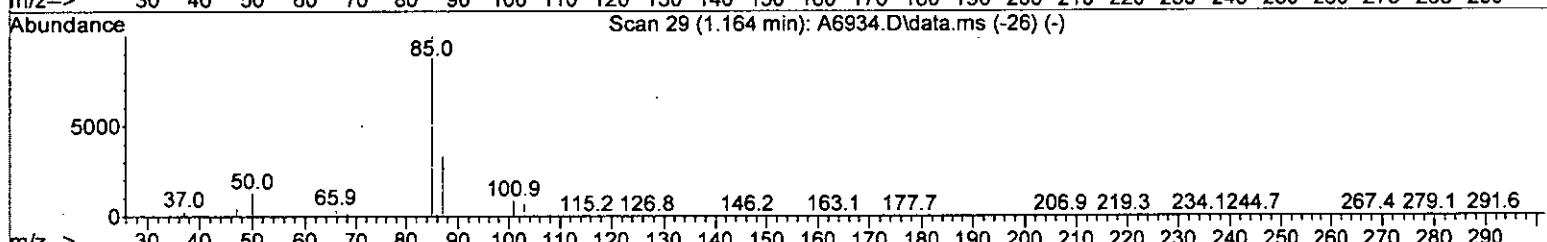
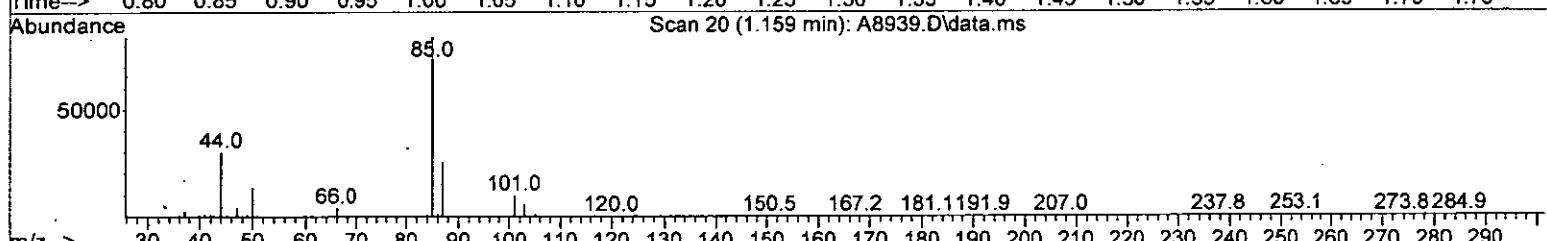
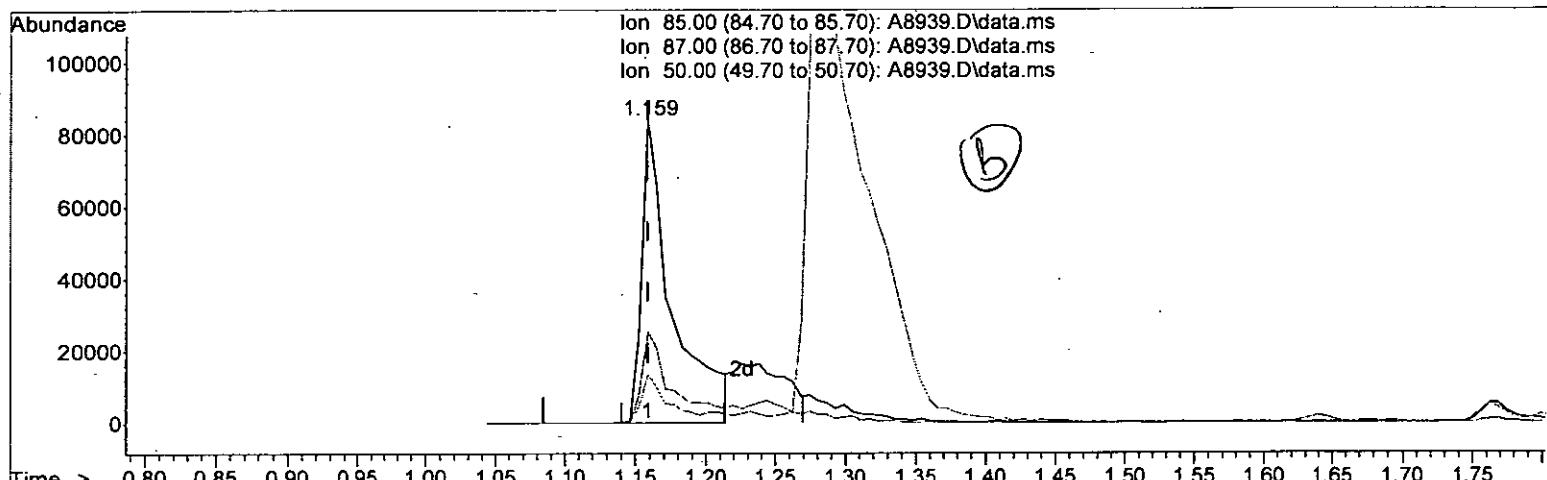
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
94) n-Propylbenzene	10.907	91	1010166	21.87	ug/L	100
95) 2-Chlorotoluene	10.974	91	600588	20.74	ug/L	98
96) 3-Chlorotoluene	11.023	91	669264	21.89	ug/L	99
97) 4-Chlorotoluene	11.065	91	726578	21.05	ug/L	95
98) 1,3,5-Trimethylbenzene	11.065	105	736897	21.37	ug/L	97
99) tert-Butylbenzene	11.340	119	616531	20.59	ug/L	97
100) 1,2,4-Trimethylbenzene	11.376	105	758803	21.54	ug/L	98
101) 3,4-Dichlorobenzotrifl...	11.443	214	220365	21.51	ug/L	99
102) sec-Butylbenzene	11.523	105	878613	21.61	ug/L	97
103) p-Isopropyltoluene	11.645	119	799361	22.07	ug/L	97
104) 1,3-Dclbenz	11.602	146	472353	20.61	ug/L	98
105) 1,4-Dclbenz	11.681	146	495275	20.62	ug/L	96
106) 2,4-Dichlorobenzotrifl...	11.736	214	200519	20.86	ug/L	96
107) 2,5-Dichlorobenzotrifl...	11.773	214	226605	20.80	ug/L	95
108) n-Butylbenzene	11.980	91	689530	21.56	ug/L	97
109) 1,2-Dclbenz	11.986	146	451293	21.31	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.608	157	30714	21.15	ug/L	96
111) Trielution Dichlorotol...	12.730	125	1276541	70.30	ug/L	97
112) 1,3,5-Trichlorobenzene	12.785	180	348702	22.48	ug/L	99
113) Coelution Dichlorotoluene	13.059	125	931739	48.03	ug/L	94
114) 1,2,4-Tcbenzene	13.266	180	303634	22.75	ug/L	95
115) Hexachlororobt	13.406	225	120031	21.72	ug/L	96
116) Naphthalen	13.461	128	611355	24.45	ug/L	97
117) 1,2,3-Tclbenzene	13.650	180	262546	23.89	ug/L	99
118) 2,4,5-Trichlorotoluene	14.236	159	205444	25.35	ug/L	99
119) 2,3,6-Trichlorotoluene	14.321	159	196940	27.81	ug/L	99

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 11.80 ug/L

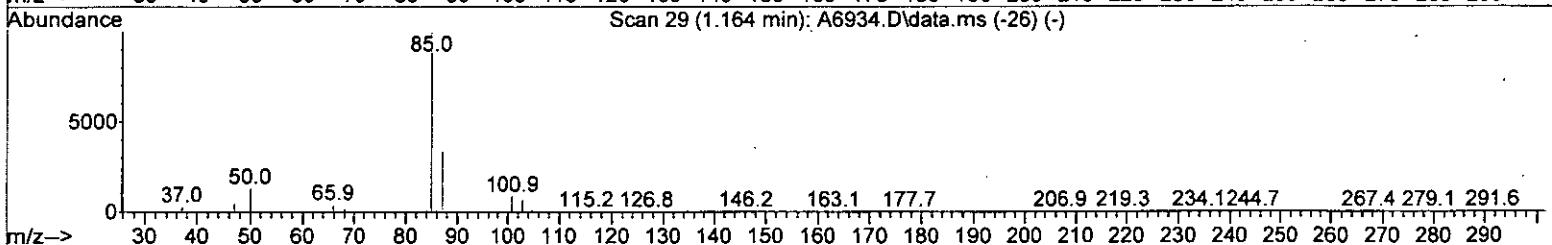
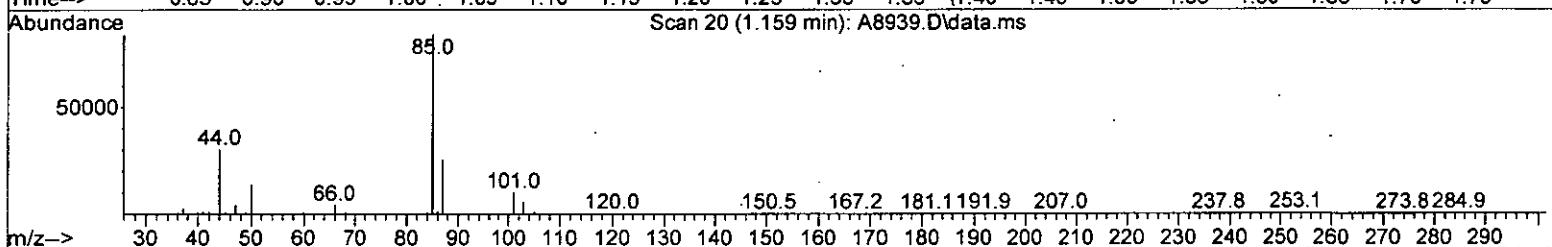
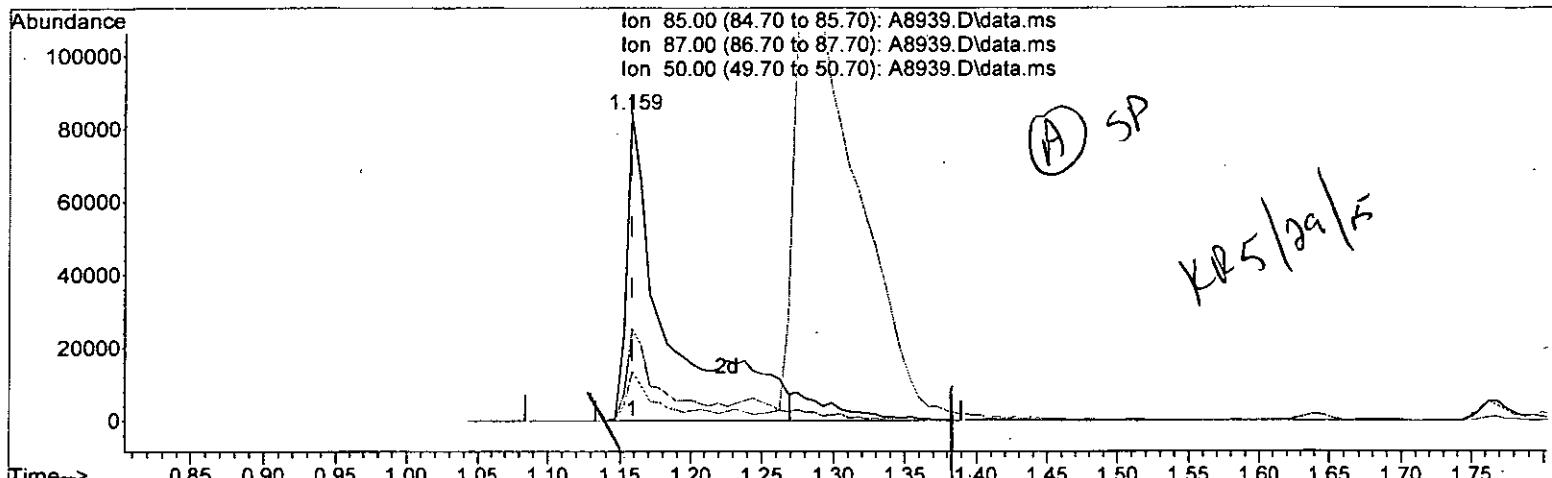
response 122966

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	30.13
50.00	15.00	16.11
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 17.66 ug/L m

response 184007

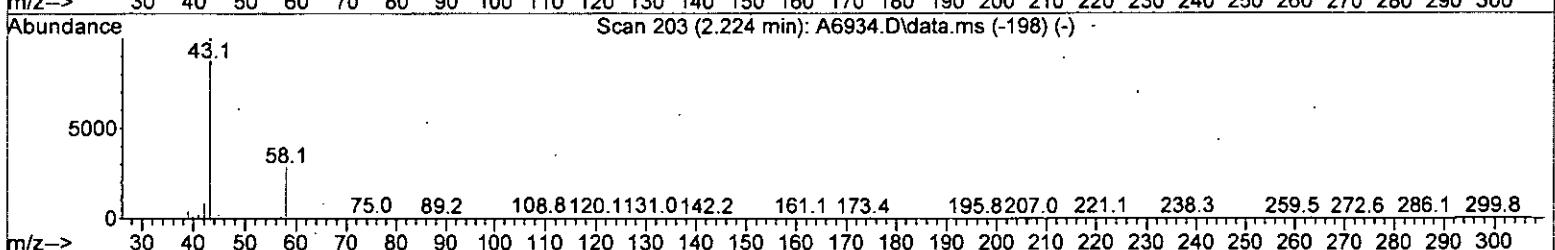
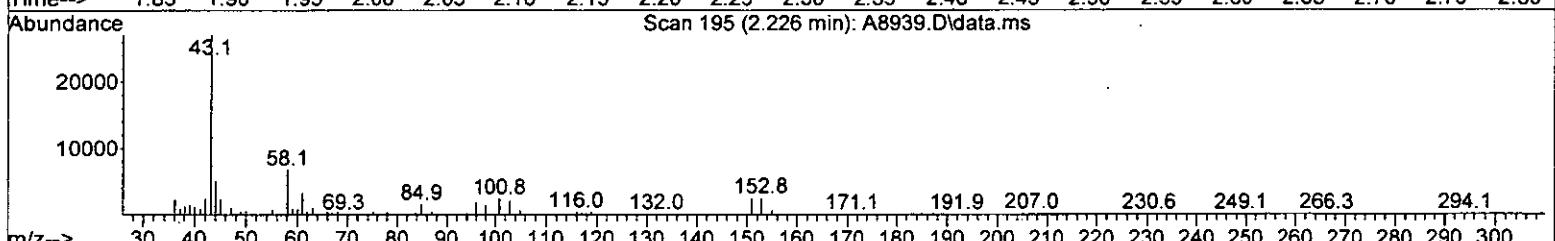
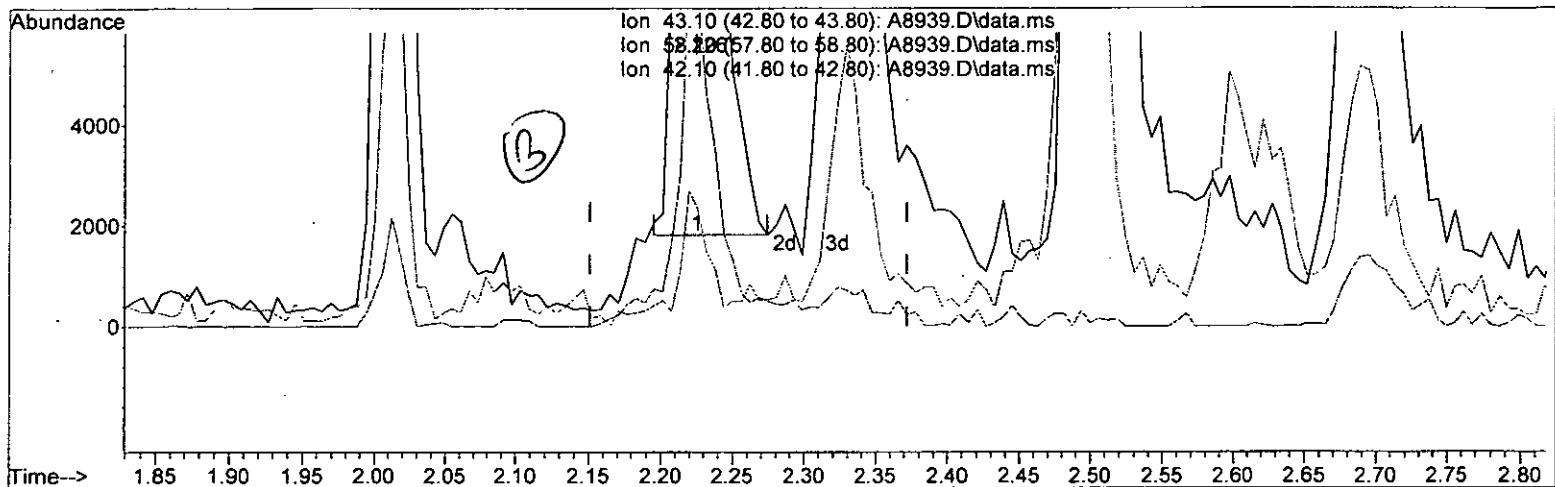
Ion	Exp%	Act%
85.00	100	100
87.00	31.50	30.13
50.00	15.00	16.11
0.00	0.00	0.00

22  
22

## Quantitation Report (Yeast)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

(15) Acetone (P)

2.226min (+0.001) 10.34 ug/L

response 40706

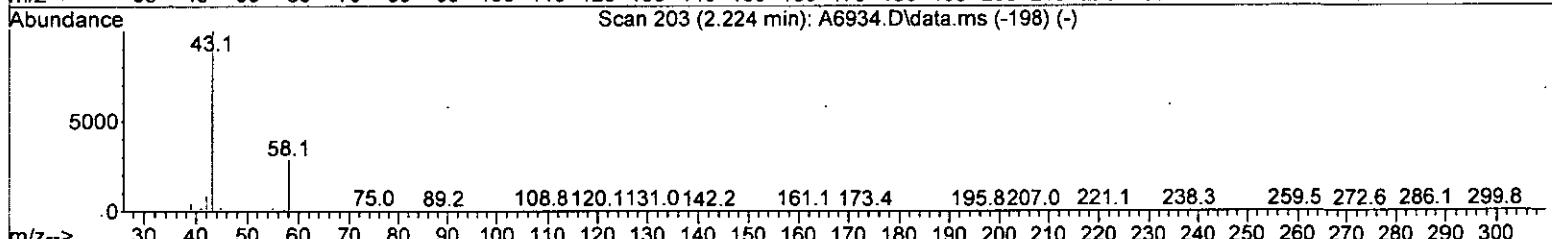
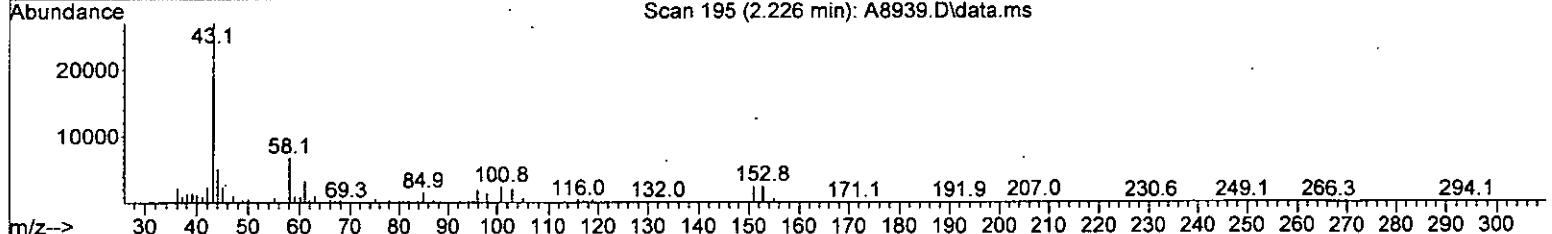
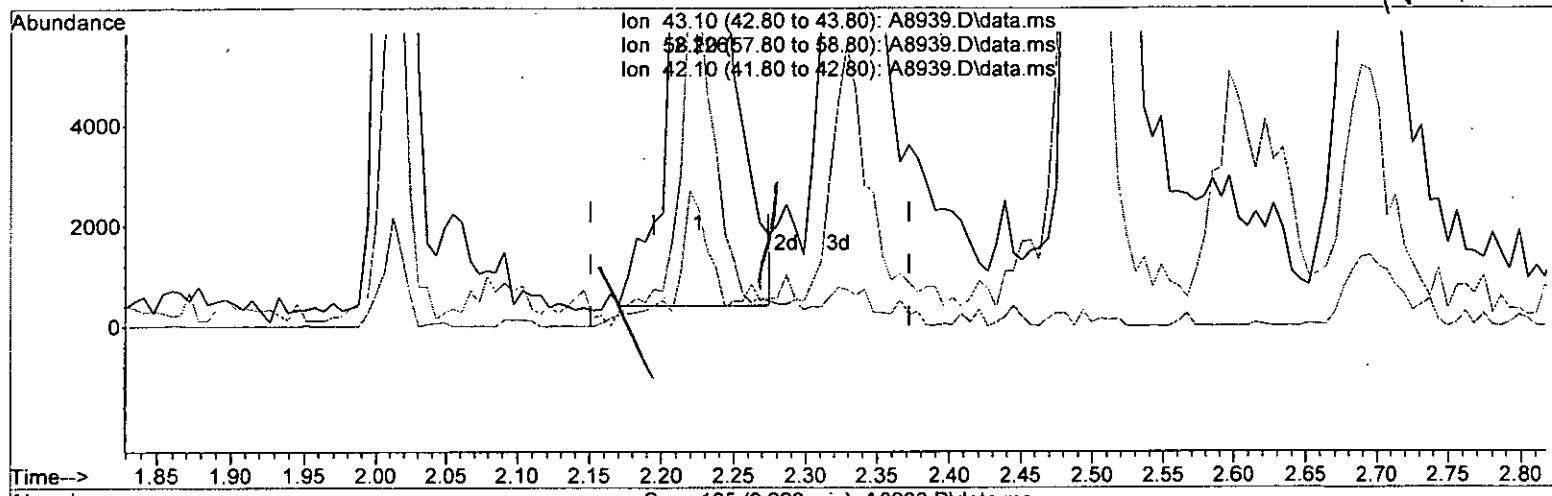
Ion	Exp%	Act%
43.10	100	100
58.10	24.80	24.93
42.10	8.00	8.65
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

(A) BrC  
X 85/29/15



TIC: A8939.D\data.ms

(15) Acetone (P)

2.226min (+0.001) 13.55 ug/L m

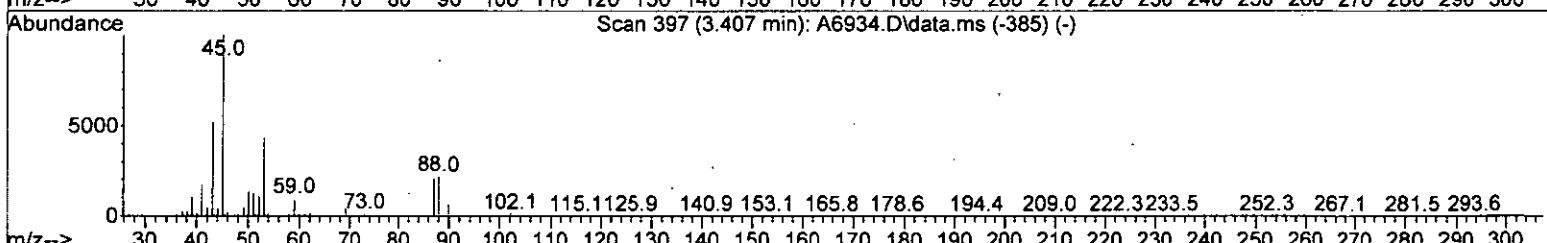
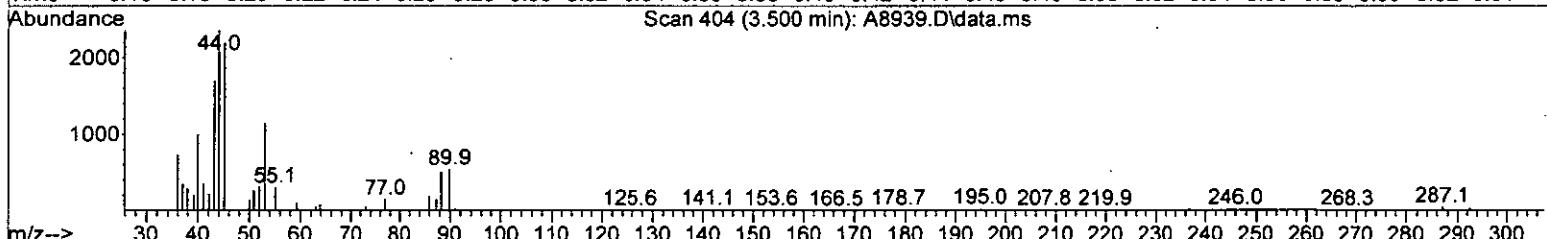
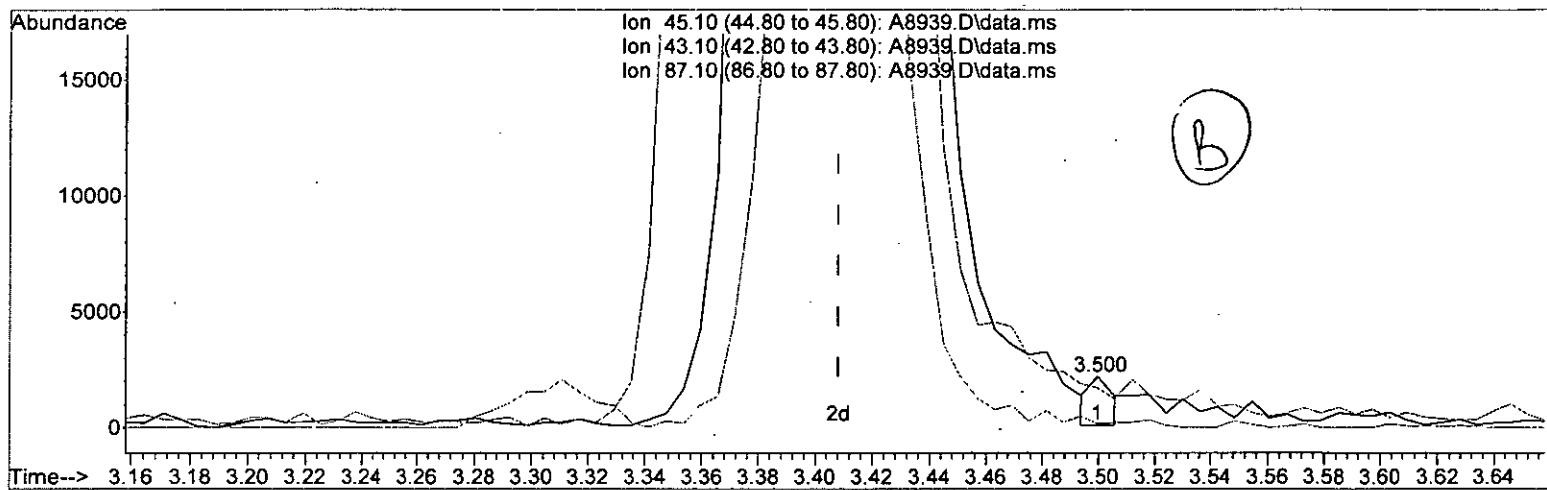
response 49163

Ion	Exp%	Act%
43.10	100	100
58.10	24.80	24.93
42.10	8.00	8.65
0.00	0.00	0.00

W/M

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

## (29) DIPE

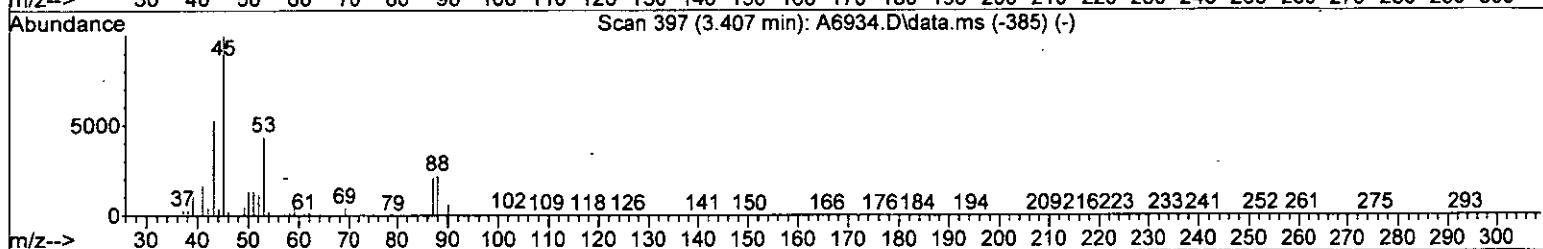
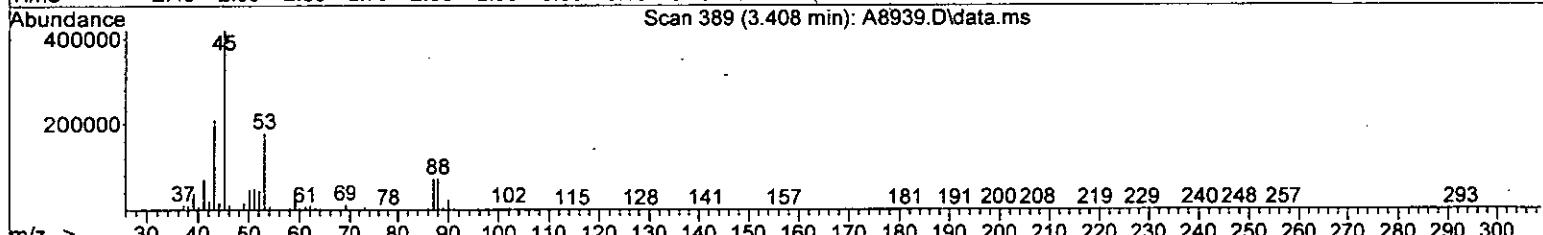
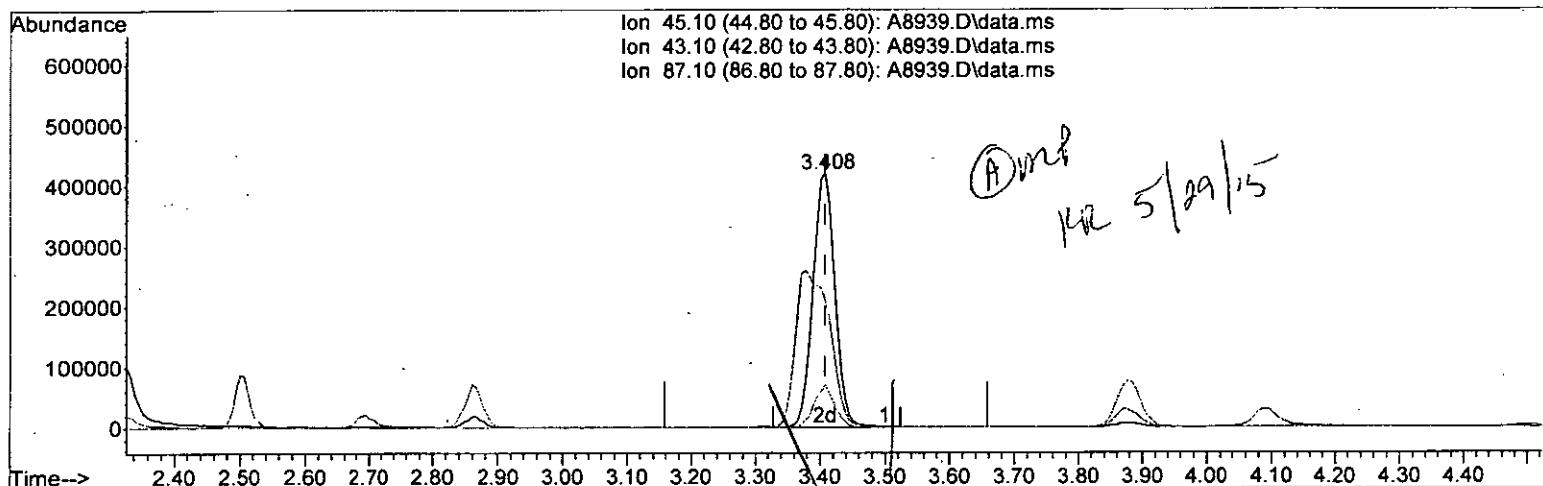
3.500min (+0.092) 0.02 ug/L

response 1224

Ion	Exp%	Act%
45.10	100	100
43.10	74.80	77.25
87.10	21.90	6.93
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 17:23:29 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

## (29) DIPE

3.408min (+0.000) 19.36 ug/L m

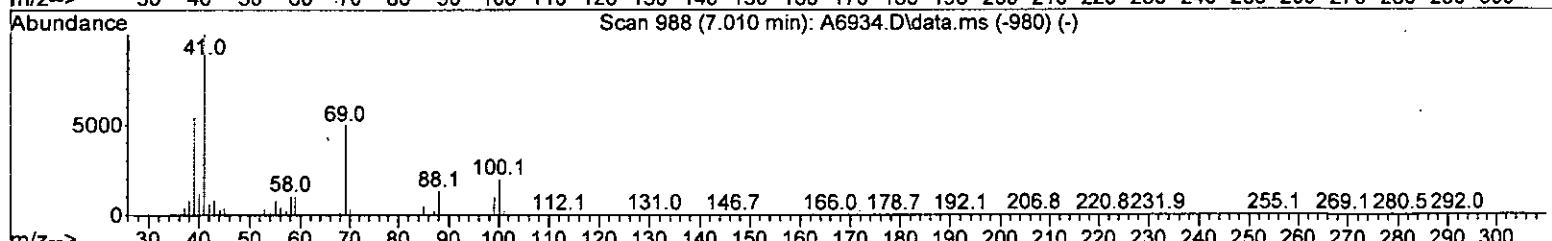
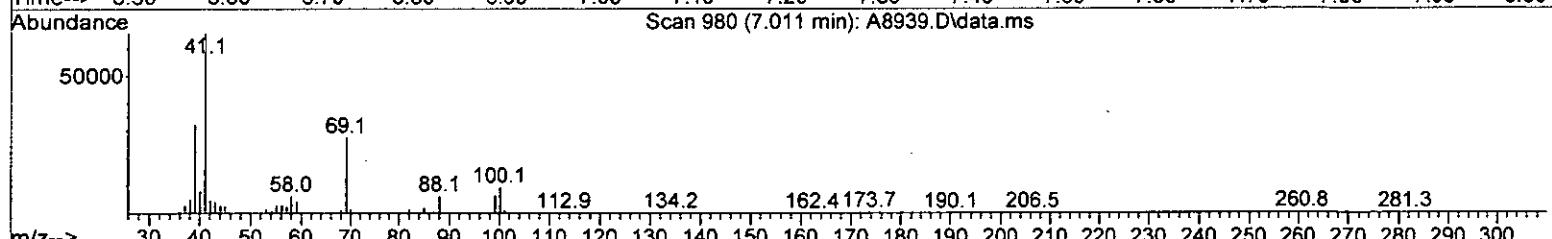
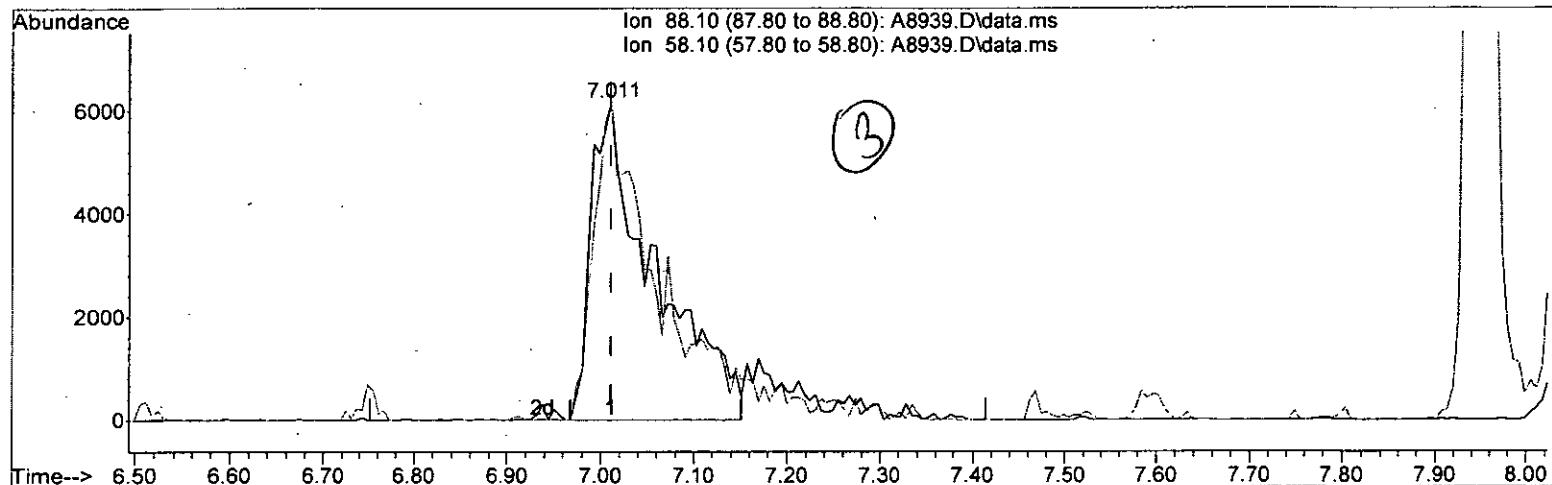
response 985674

Ion	Exp%	Act%
45.10	100	100
43.10	74.80	49.92#
87.10	21.90	16.92
0.00	0.00	0.00

*Wm*

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

(57) 1,4-Dioxane

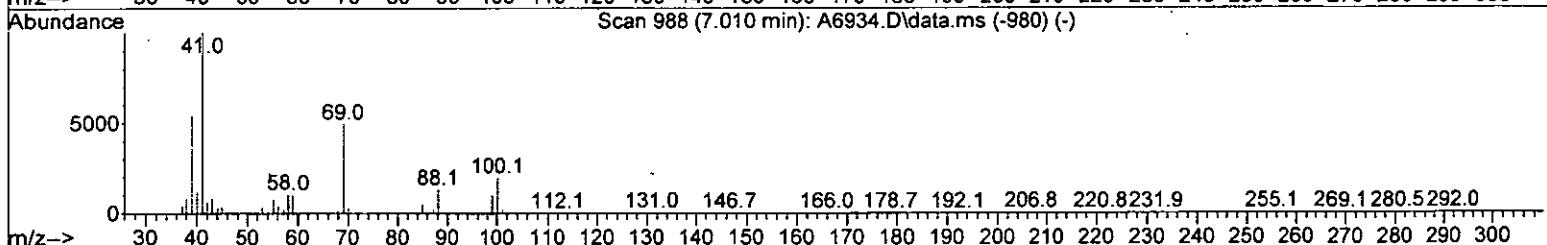
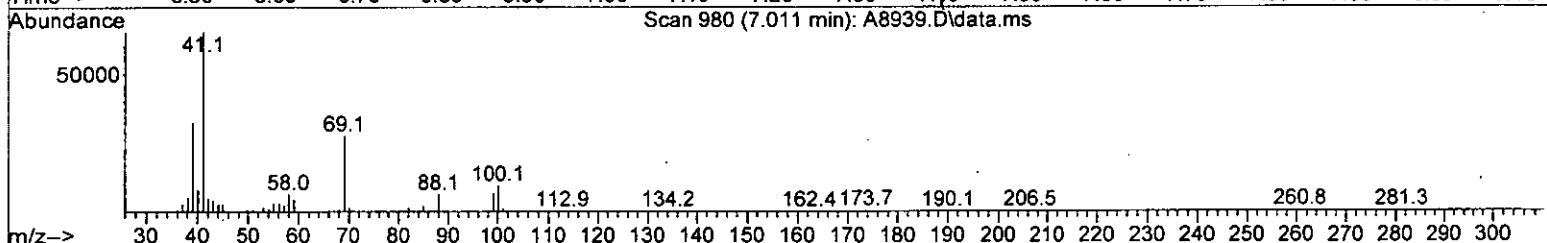
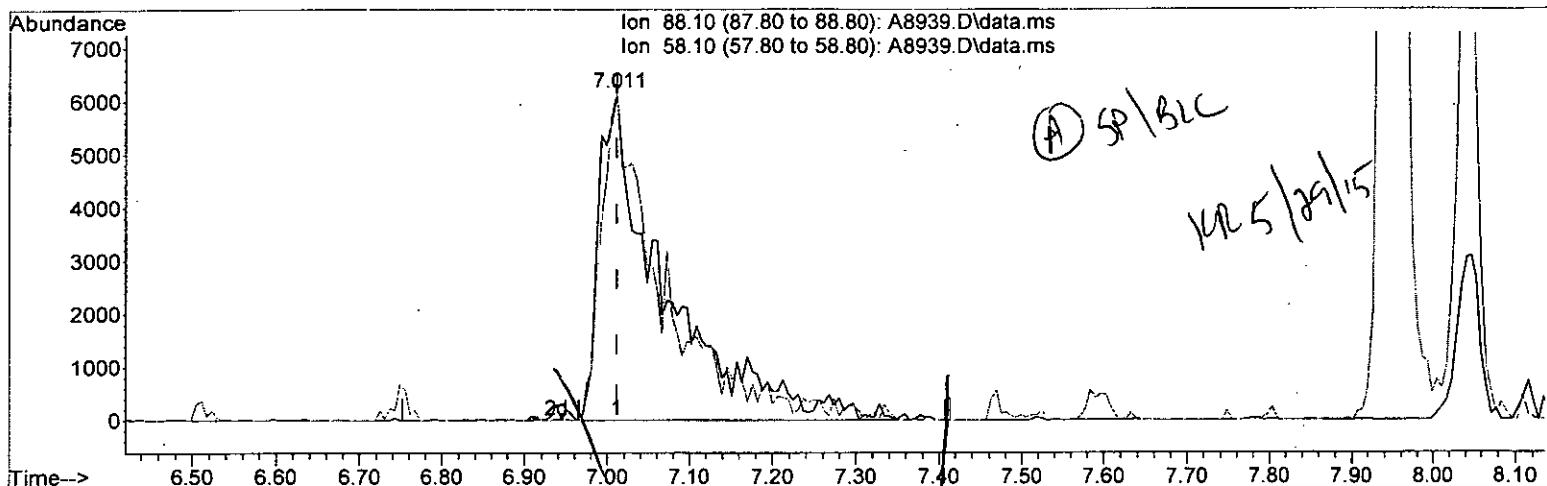
7.011min (+0.000) 518.39 ug/L

response 29189

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	99.95#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS  
 Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

## (57) 1,4-Dioxane

7.011min (+0.000) 605.15 ug/L m

response 34074

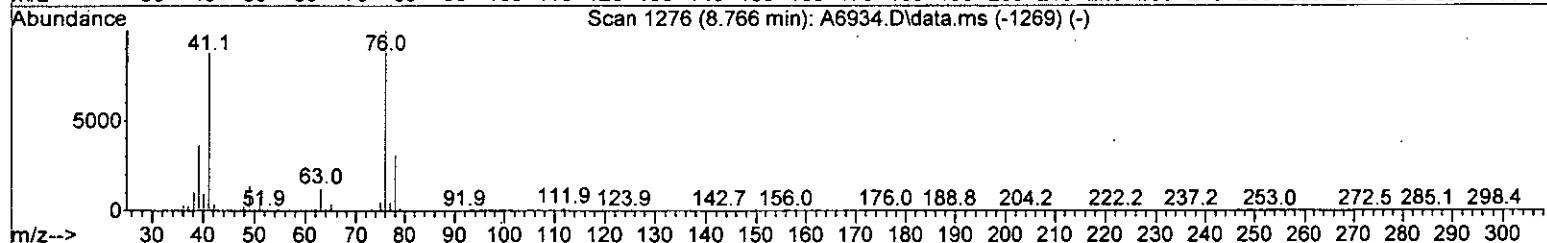
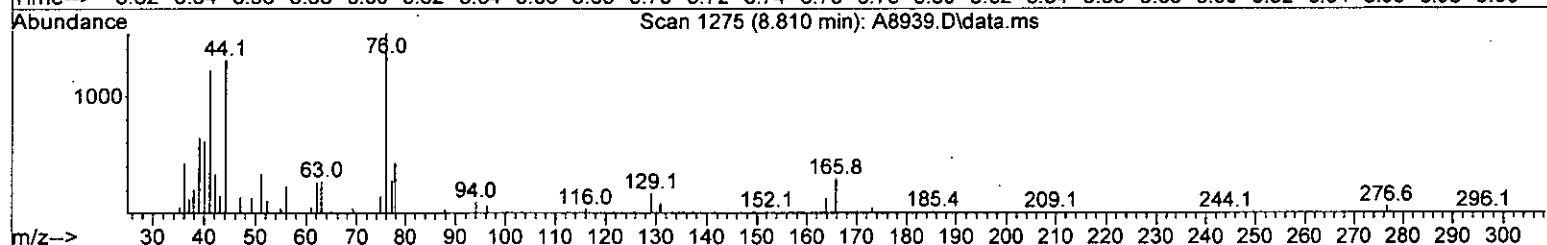
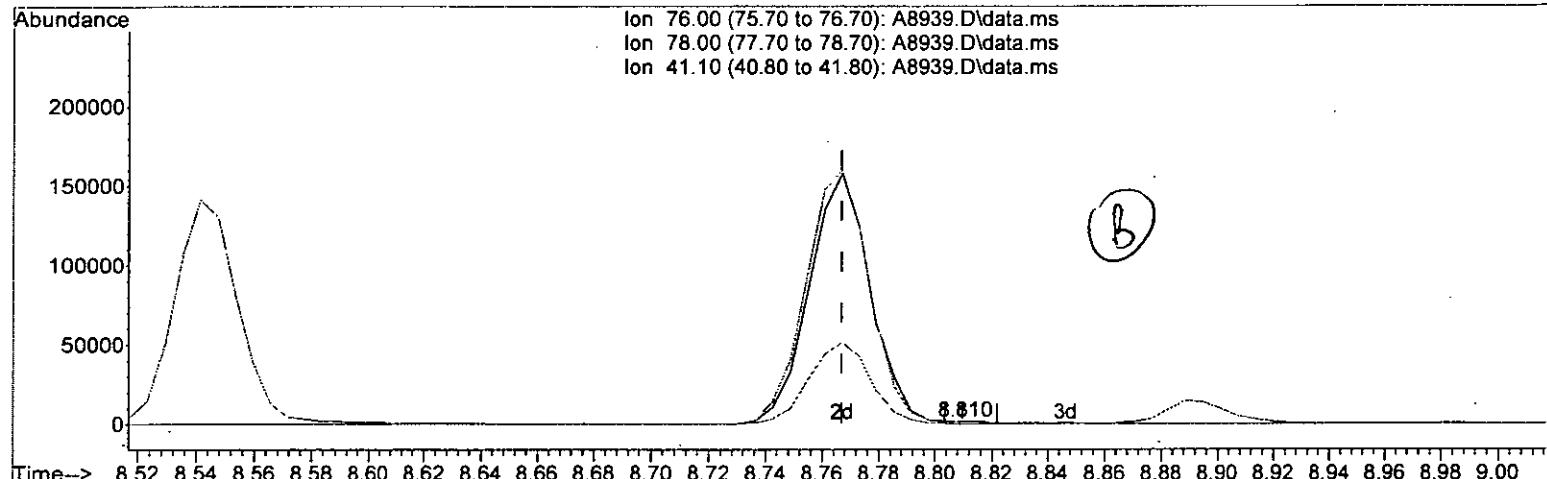
Ion	Exp%	Act%
88.10	100	100
58.10	61.10	99.95#
0.00	0.00	0.00
0.00	0.00	0.00

WLR 5/29/15

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

(73) 1,3-Dichloropropane

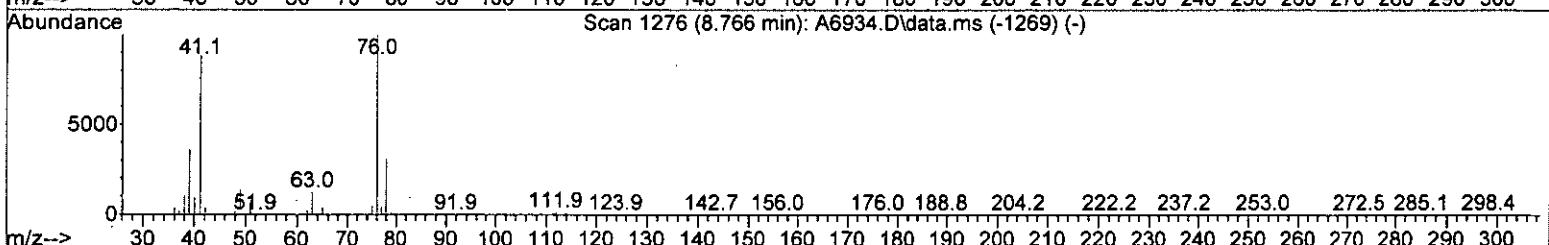
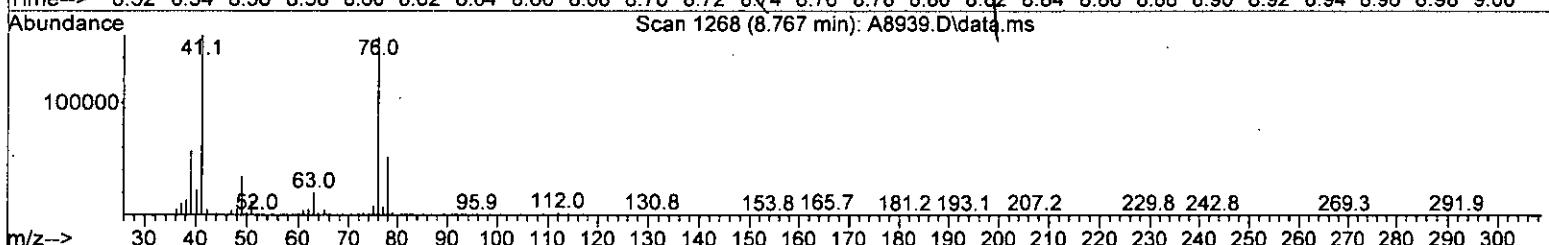
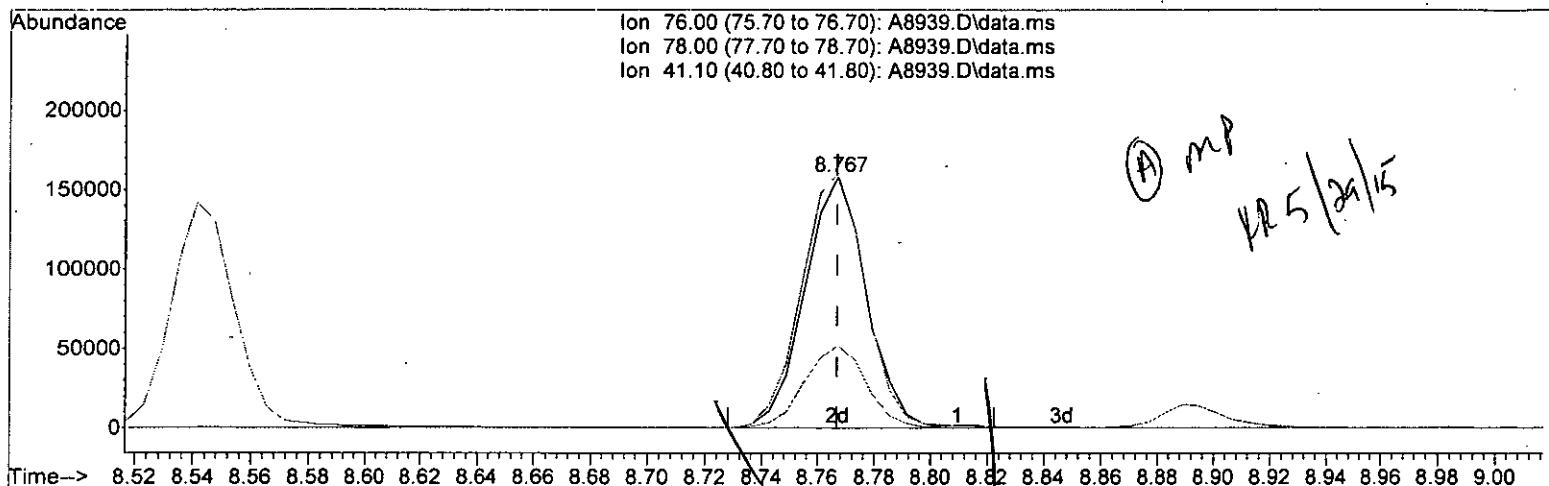
8.810min (+0.043) 0.11 ug/L

response 1245

Ion	Exp%	Act%
76.00	100	100
78.00	34.60	28.43
41.10	73.90	79.48
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8939.D  
 Acq On : 27 May 2015 4:42 pm  
 Operator : F. Naegler  
 Sample : LCS Inst : MSVOA10  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 27 16:57:36 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8939.D\data.ms

(73) 1,3-Dichloropropane

8.767min (+0.000) 20.74 ug/L m

response 239472

Ion	Exp%	Act%
76.00	100	100
78.00	34.60	32.58
41.10	73.90	101.09#
0.00	0.00	0.00

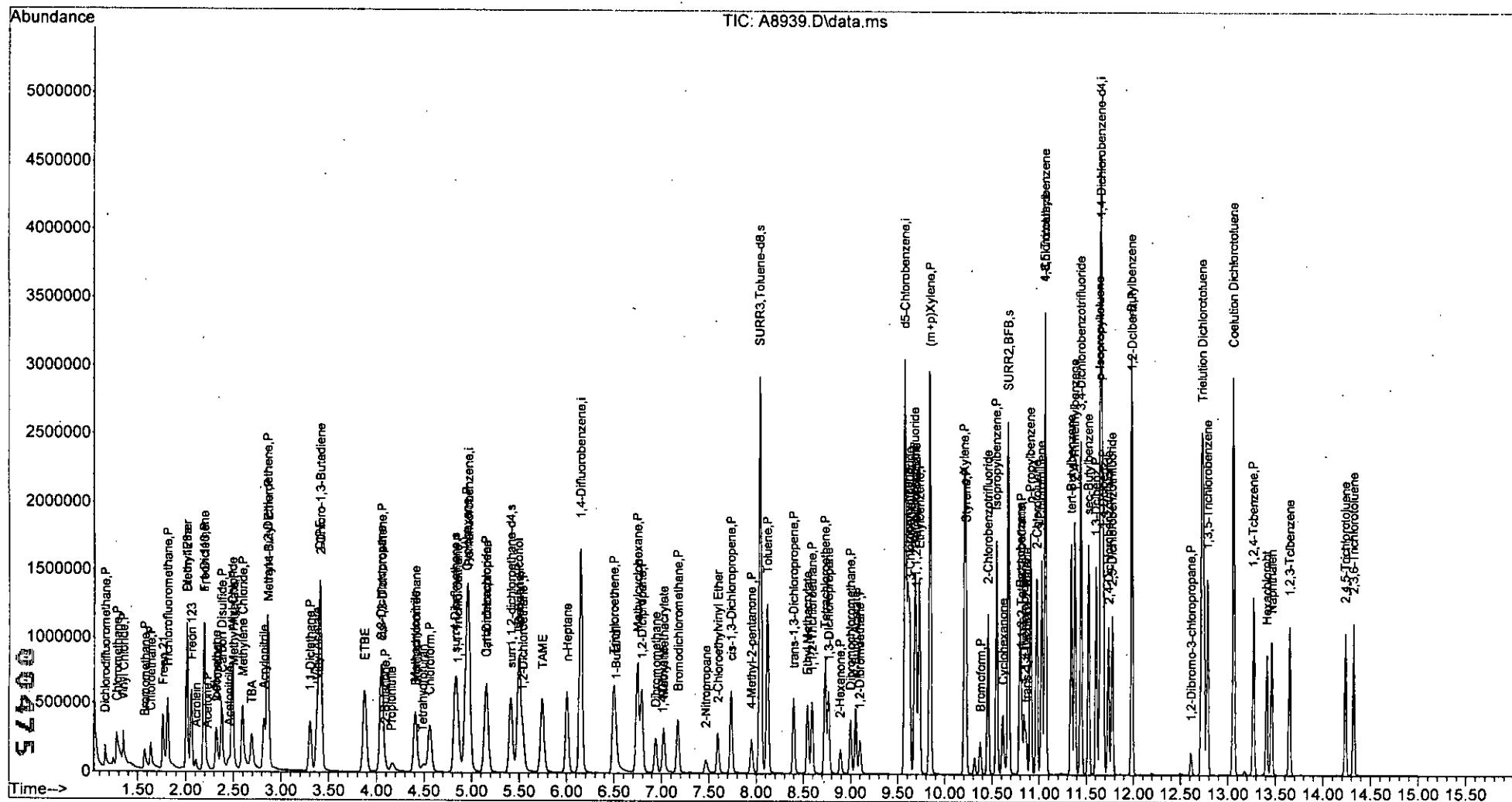
UV/NH

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
Data File : A8939.D  
Acq On : 27 May 2015 4:42 pm  
Operator : F. Naegler  
Sample : LCS  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 27 17:23:29 2015  
Quant Method : I:\ACQUUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



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Pages

00476-00495

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 02:34

**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** RQ1505783-05  
**Run Type:** Matrix Spike

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8959.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	45.5	1.0	0.21	
75-01-4	Vinyl Chloride	44.9	1.0	0.32	
75-00-3	Chloroethane	45.7	1.0	0.24	
74-83-9	Bromomethane	26.1	1.0	0.29	
75-35-4	1,1-Dichloroethene	46.8	1.0	0.57	
67-64-1	Acetone	42.3	5.0	1.3	
75-15-0	Carbon Disulfide	47.7	1.0	0.22	
75-09-2	Methylene Chloride	46.4	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	49.6	1.0	0.33	
75-34-3	1,1-Dichloroethane	50.1	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	47.4	1.0	0.30	
78-93-3	2-Butanone (MEK)	43.7	5.0	0.81	
67-66-3	Chloroform	48.7	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	51.1	1.0	0.36	
56-23-5	Carbon Tetrachloride	53.2	1.0	0.45	
71-43-2	Benzene	48.6	1.0	0.20	
107-06-2	1,2-Dichloroethane	48.6	1.0	0.36	
79-01-6	Trichloroethene	48.8	1.0	0.22	
78-87-5	1,2-Dichloropropane	47.5	1.0	0.20	
75-27-4	Bromodichloromethane	49.2	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	45.6	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	48.3	5.0	0.67	
108-88-3	Toluene	47.9	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	40.7	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	46.6	1.0	0.34	
127-18-4	Tetrachloroethene	50.0	1.0	0.30	
591-78-6	2-Hexanone	54.0	5.0	1.7	
124-48-1	Dibromochloromethane	55.0	1.0	0.31	
108-90-7	Chlorobenzene	51.1	1.0	0.29	
100-41-4	Ethylbenzene	47.2	1.0	0.20	
179601-23-1	m,p-Xylenes	105	2.0	0.33	
95-47-6	o-Xylene	49.6	1.0	0.20	
100-42-5	Styrene	19.9	1.0	0.20	
75-25-2	Bromoform	52.3	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	54.1	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** RQ1505783-05  
**Run Type:** Matrix Spike

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 02:34

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS****Analytical Method:** 8260C**Analysis Lot:** 446543**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8959.D\**Instrument Name:** R-MS-10**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85-122	5/28/15 02:34	
Toluene-d8	95	87-121	5/28/15 02:34	
Dibromofluoromethane	100	89-119	5/28/15 02:34	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 *RQ1505783 -05* Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 29 15:29:37 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	1036946	50.00	ug/L	0.00
41) 1, 4-Difluorobenzene	6.152	114	1561241	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1365965	50.00	ug/L	0.00
90) 1, 4-Dichlorobenzene-d4	11.663	152	794276	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromoethane	4.829	113	486017	49.88	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	99.76%	
46) surr1,1,2-dichloroetha...	5.414	65	499794	49.92	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	99.84%	
64) SURR3,Toluene-d8	8.042	98	1767880	47.60	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	95.20%	
69) SURR2,BFB	10.675	95	662566	43.89	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	87.78%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.159	85	461814m	42.89	ug/L	
3) Chloromethane	1.281	50	897239	45.52	ug/L	99
4) Vinyl Chloride	1.348	62	644213	44.87	ug/L	95
5) Bromomethane	1.573	94	154883	26.08	ug/L	98
6) Chloroethane	1.634	64	321967	45.67	ug/L	97
7) Freon 21	1.762	67	959187	55.69	ug/L	99
8) Trichlorofluoromethane	1.811	101	565211	40.78	ug/L	100
9) Diethyl Ether	2.012	59	437544	52.41	ug/L	# 77
10) Freon 123a	2.012	67	568464	54.06	ug/L	96
11) Freon 123	2.061	83	589809	50.69	ug/L	82
12) Acrolein	2.110	56	40908	26.09	ug/L	89
13) 1,1-Dicethene	2.195	96	357391	46.78	ug/L	# 82
14) Freon 113	2.195	101	393285	49.21	ug/L	91
15) Acetone	2.226	43	130400m	42.26	ug/L	
16) 2-Propanol	2.335	45	371597	683.50	ug/L	93
17) Iodomethane	2.317	142	411337	36.36	ug/L	99
18) Carbon Disulfide	2.378	76	1309859	47.73	ug/L	100
19) Acetonitrile	2.457	40	76796	160.66	ug/L	95
20) Allyl Chloride	2.488	76	245688	49.43	ug/L	# 63
21) Methyl Acetate	2.506	43	309890	41.03	ug/L	86
22) Methylene Chloride	2.598	84	434633m	46.37	ug/L	
23) TBA	2.701	59	598069	858.81	ug/L	63
24) Acrylonitrile	2.823	53	720418	214.90	ug/L	98
25) Methyl-t-Butyl Ether	2.866	73	1035052	47.38	ug/L	84
26) trans-1,2-Dichloroethene	2.860	96	426626	49.61	ug/L	# 83
27) 1,1-Dicethane	3.305	63	962484	50.14	ug/L	98
28) Vinyl Acetate	3.378	86	55486	35.84	ug/L	# 72
29) DIPE	3.408	45	2391802	45.45	ug/L	# 75
30) 2-Chloro-1,3-Butadiene	3.414	53	528934	23.69	ug/L	89
31) ETBE	3.878	59	1539238	42.82	ug/L	91
32) 2,2-Dichloropropane	4.055	77	455039	36.68	ug/L	96
33) cis-1,2-Dichloroethene	4.055	96	488525	47.40	ug/L	92
34) 2-Butanone	4.091	43	212937	43.65	ug/L	91
35) Propionitrile	4.170	54	276511	228.40	ug/L	97

✓  
5/29/15

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 29 15:29:37 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
36) Bromochloromethane	4.408	130	311847	49.21	ug/L #	68
37) Methacrylonitrile	4.402	67	80018	27.98	ug/L #	23
38) Tetrahydrofuran	4.500	42	140556	46.61	ug/L	74
39) Chloroform	4.561	83	832150	48.73	ug/L	97
40) 1,1,1-Trichloroethane	4.853	97	742428	51.11	ug/L	94
42) Cyclohexane	4.951	41	689816	46.47	ug/L	89
44) Carbontetrachloride	5.152	121	205301	53.22	ug/L	85
45) 1,1-Dichloropropene	5.158	75	584738	46.33	ug/L	98
47) Benzene	5.506	78	1901956	48.61	ug/L	86
48) 1,2-Dichloroethane	5.542	62	657080	48.64	ug/L	90
49) Iso-Butyl Alcohol	5.499	43	336992	830.41	ug/L	90
50) TAME	5.749	73	1059412	46.98	ug/L	84
51) n-Heptane	6.005	43	696639	40.95	ug/L	81
52) 1-Butanol	6.524	56	377821	2153.76	ug/L	76
53) Trichloroethene	6.493	130	527480	48.79	ug/L	93
54) Methylcyclohexane	6.743	55	728597	45.57	ug/L #	78
55) 1,2-Diclpropane	6.792	63	547609	47.47	ug/L	96
56) Dibromomethane	6.938	93	252713	49.80	ug/L	99
57) 1,4-Dioxane	7.017	88	32360m	562.19	ug/L	
58) Methyl Methacrylate	7.024	69	144252	31.75	ug/L #	42
59) Bromodichloromethane	7.176	83	598031	49.20	ug/L	97
60) 2-Nitropropane	7.469	41	174670	131.21	ug/L	99
62) cis-1,3-Dichloropropene	7.737	75	628360	45.61	ug/L	95
63) 4-Methyl-2-pentanone	7.950	43	476639	48.25	ug/L	91
65) Toluene	8.121	91	2023247	47.89	ug/L	99
66) trans-1,3-Dichloropropene	8.395	75	467193	40.69	ug/L	100
67) Ethyl Methacrylate	8.542	69	294553	32.55	ug/L #	54
68) 1,1,2-Trichloroethane	8.590	97	351359	46.64	ug/L	95
71) Tetrachloroethene	8.731	164	410208	49.97	ug/L	94
72) 2-Hexanone	8.895	43	332532	53.97	ug/L	86
73) 1,3-Dichloropropane	8.767	76	618245m	51.80	ug/L	
74) Dibromochloromethane	8.999	129	447911	54.99	ug/L	96
75) N-Butyl Acetate	9.054	43	717461	48.48	ug/L	93
76) 1,2-Dibromoethane	9.096	107	353497	53.14	ug/L	95
77) 3-Chlorobenzotrifluoride	9.627	180	773629	51.75	ug/L	98
78) Chlorobenzene	9.608	112	1373609	51.14	ug/L	97
79) 4-Chlorobenzotrifluoride	9.682	180	686466	52.17	ug/L	96
80) 1,1,1,2-Tetrachloroethane	9.694	131	500307	54.40	ug/L	97
81) Ethylbenzene	9.730	106	665576	47.24	ug/L	93
82) (m+p)Xylene	9.846	106	1777010	104.85	ug/L	90
83) o-Xylene	10.206	106	834601	49.64	ug/L	99
84) Styrene	10.224	104	566216	19.89	ug/L	96
85) Bromoform	10.377	173	231834	52.27	ug/L	99
86) 2-Chlorobenzotrifluoride	10.456	180	747398	52.81	ug/L	93
87) Isopropylbenzene	10.547	105	2177213	52.71	ug/L	98
88) Cyclohexanone	10.614	55	190415	432.75	ug/L	94
89) trans-1,4-Dichloro-2-B...	10.864	53	59833	20.08	ug/L #	76
91) 1,1,2,2-Tetrachloroethane	10.815	83	438604	54.07	ug/L	98
92) Bromobenzene	10.797	156	562901	48.93	ug/L	94
93) 1,2,3-Trichloropropane	10.840	110	118100	49.46	ug/L #	87
94) n-Propylbenzene	10.907	91	2511043	53.21	ug/L	98

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 29 15:29:37 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

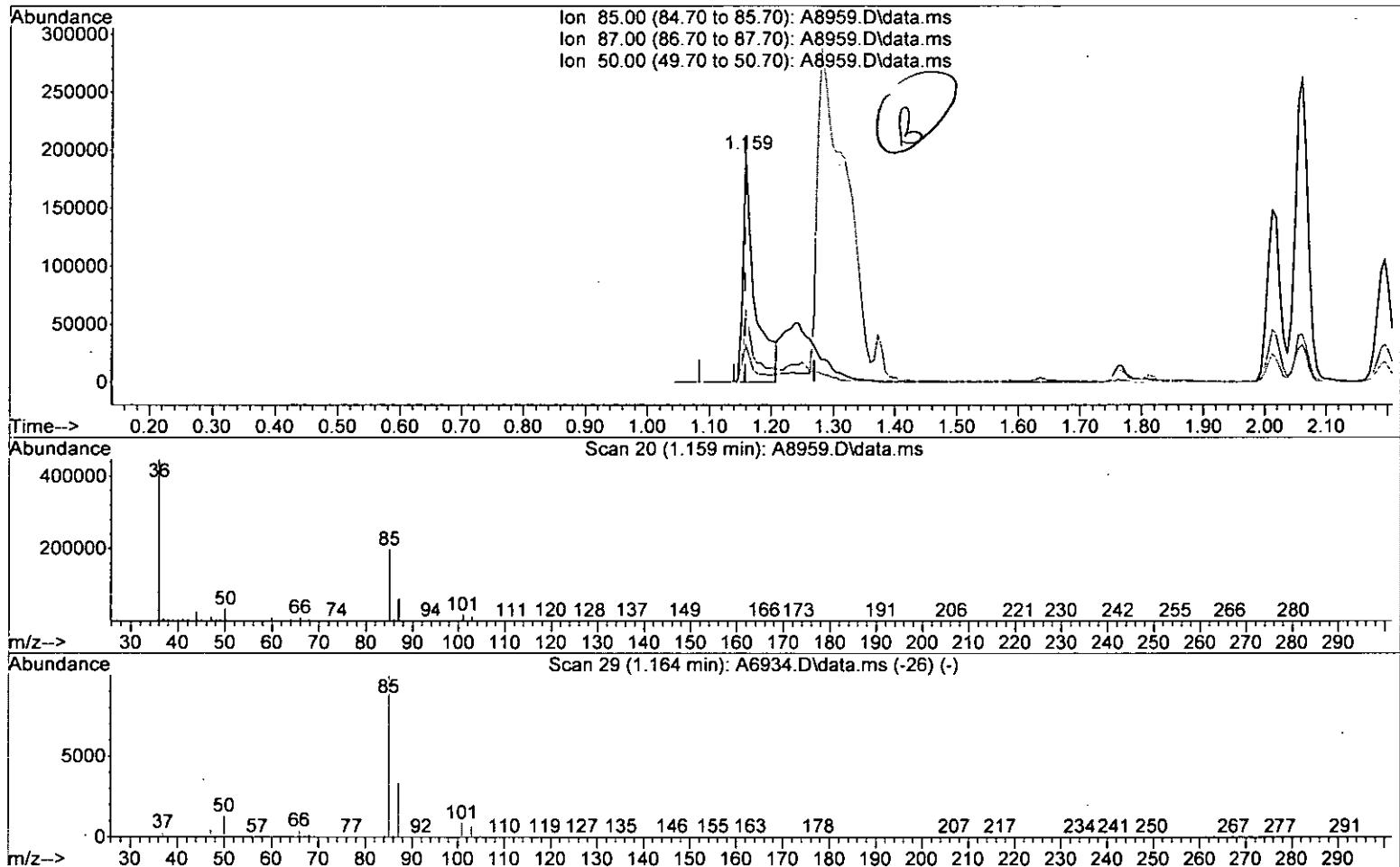
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 2-Chlorotoluene	10.974	91	1505222	50.87	ug/L	97
96) 3-Chlorotoluene	11.029	91	1645622	52.67	ug/L	96
97) 4-Chlorotoluene	11.065	91	1792695	50.83	ug/L	97
98) 1,3,5-Trimethylbenzene	11.065	105	1858820	52.74	ug/L	97
99) tert-Butylbenzene	11.340	119	1568031	51.25	ug/L	98
100) 1,2,4-Trimethylbenzene	11.376	105	1881879	52.28	ug/L	95
101) 3,4-Dichlorobenzotrifl...	11.443	214	513232	49.02	ug/L	99
102) sec-Butylbenzene	11.523	105	2176138	52.38	ug/L	98
103) p-Isopropyltoluene	11.645	119	1974894	53.36	ug/L	98
104) 1,3-Dclbenz	11.608	146	1175591	50.20	ug/L	96
105) 1,4-Dclbenz	11.681	146	1214841	49.49	ug/L	97
106) 2,4-Dichlorobenzotrifl...	11.736	214	496312	50.53	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.773	214	550904	49.48	ug/L	99
108) n-Butylbenzene	11.980	91	1664127	50.91	ug/L	98
109) 1,2-Dclbenz	11.986	146	1120702	51.78	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.608	157	85076	57.32	ug/L	98
111) Trielution Dichlorotol...	12.730	125	3128380	168.60	ug/L	97
112) 1,3,5-Trichlorobenzene	12.785	180	829178	52.31	ug/L	98
113) Coelution Dichlorotoluene	13.059	125	2288525	115.46	ug/L	94
114) 1,2,4-Tcbenzene	13.266	180	746314	54.73	ug/L	97
115) Hexachlorobt	13.406	225	253883	44.97	ug/L	98
116) Naphthalen	13.461	128	1597813	62.52	ug/L	98
117) 1,2,3-Tclbenzene	13.650	180	642118	57.18	ug/L	98
118) 2,4,5-Trichlorotoluene	14.236	159	464371	56.07	ug/L	98
119) 2,3,6-Trichlorotoluene	14.321	159	440534	60.87	ug/L	97

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 23.89 ug/L

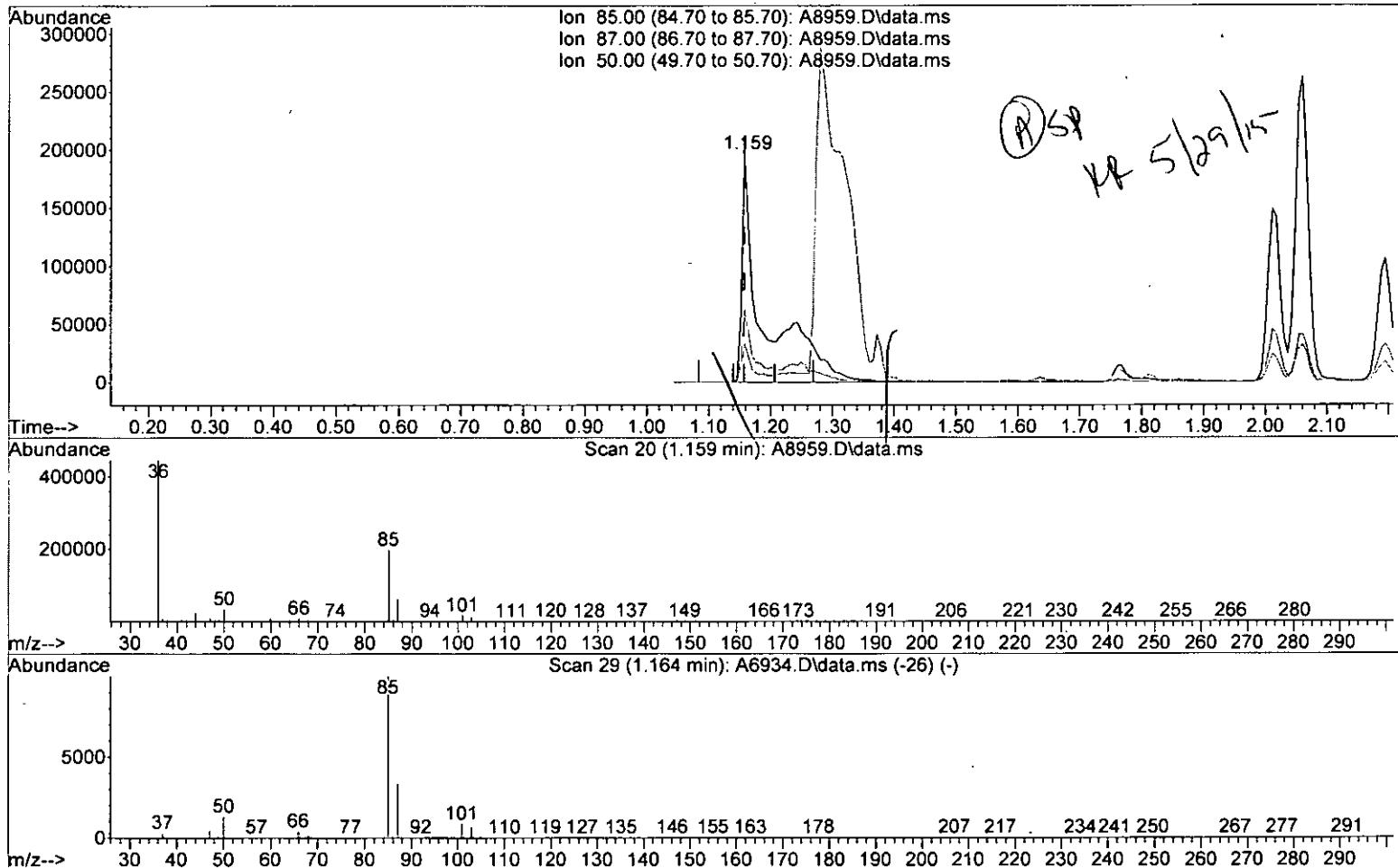
response 257273

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.40
50.00	15.00	16.57
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 42.89 ug/L m

response 461814

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	31.40
50.00	15.00	16.57
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\

Data File : A8959.D

Acq On : 28 May 2015 2:34 am

Operator : F. Naegler

Sample : R1503862-011MS|1.0

Inst : MSVOA10

Misc : CBI 13429 T4

ALS Vial : 23 Sample Multiplier: 1

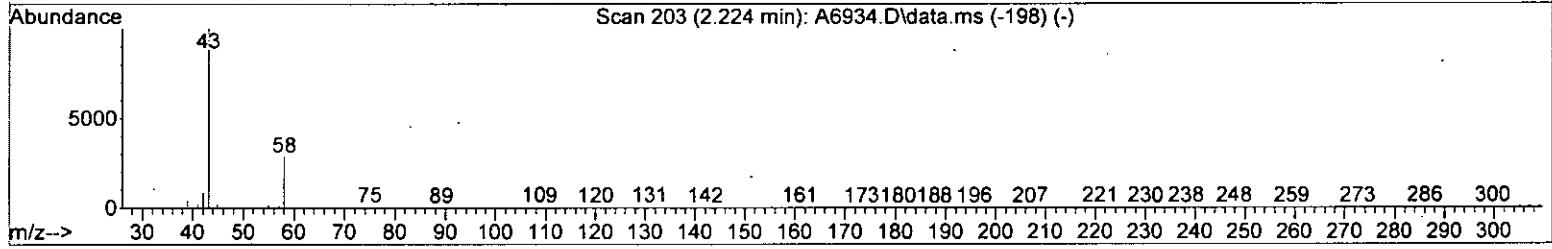
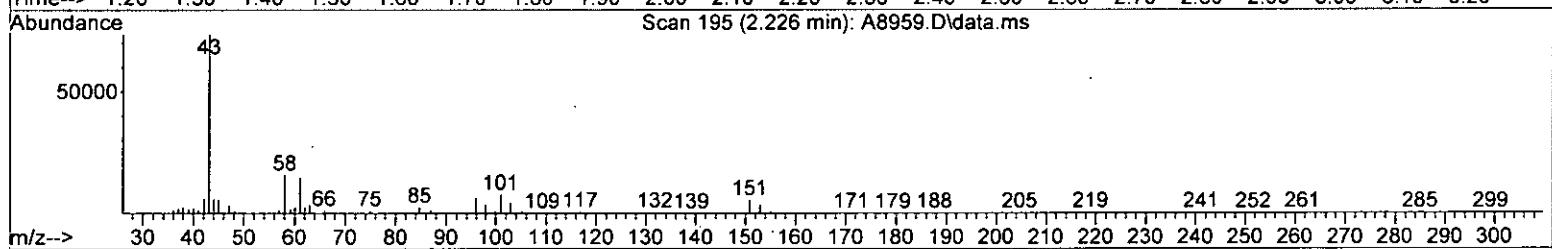
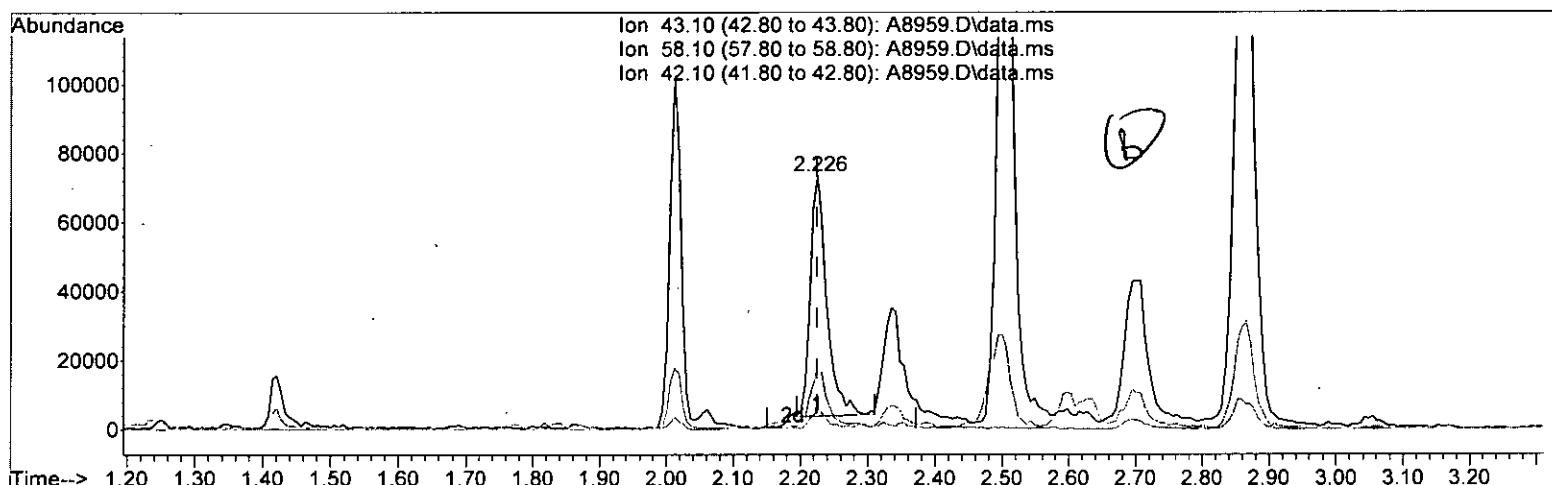
Quant Time: May 28 02:50:00 2015

Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M

Quant Title : MS#10 - 8260B WATERS 10mL Purge

QLast Update : Thu May 07 14:25:48 2015

Response via : Initial Calibration



TIC: A8959.D\data.ms

(15) Acetone (P)

2.226min (+0.001) 37.52 ug/L

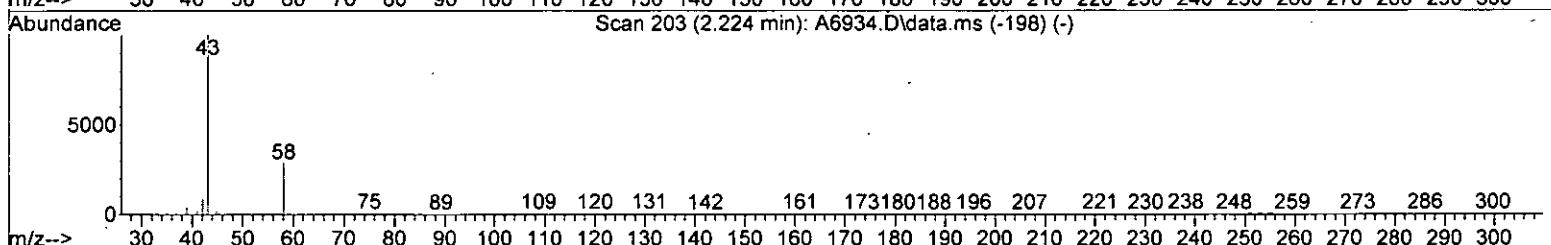
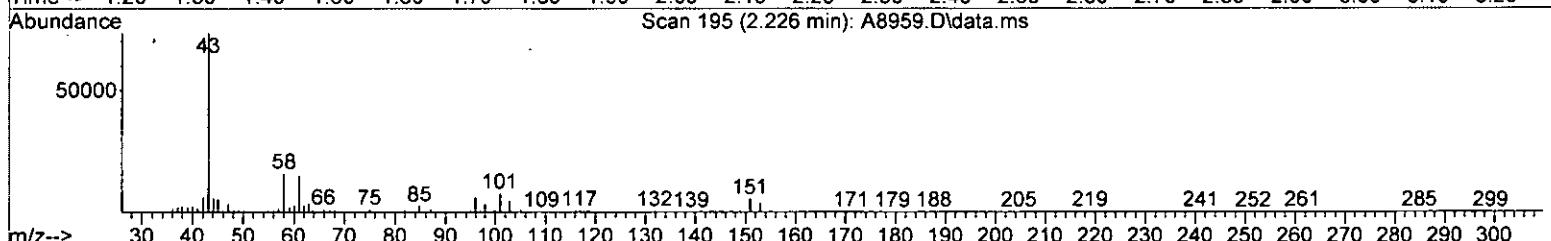
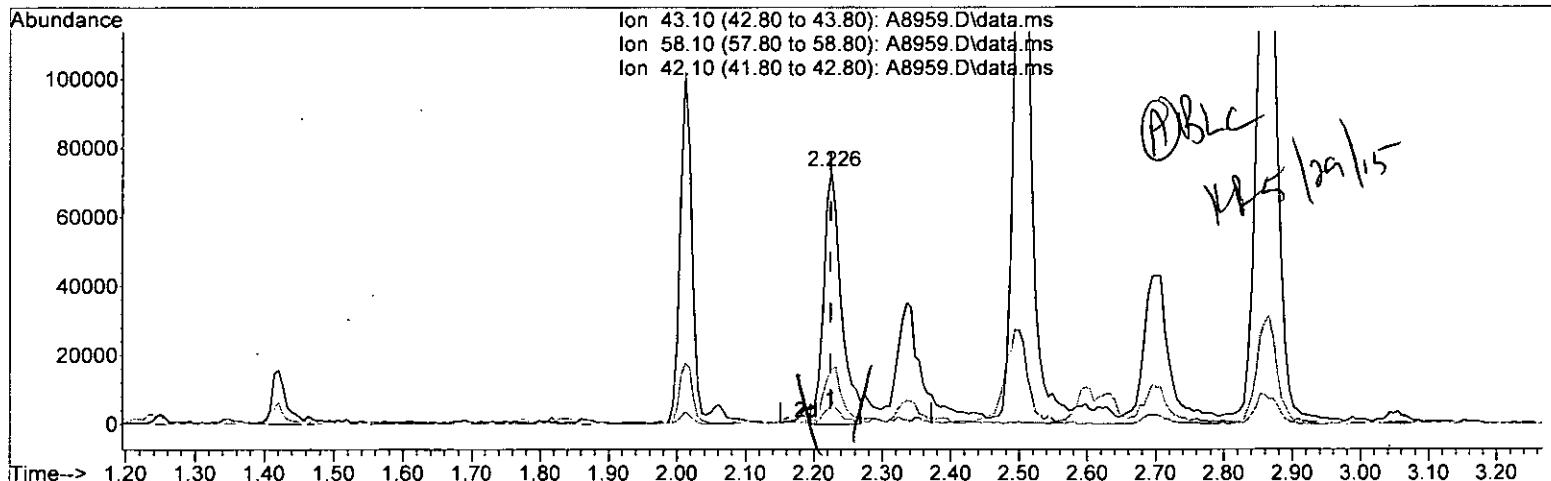
response 117087

Ion	Exp%	Act%
43.10	100	100
58.10	24.80	21.36
42.10	8.00	7.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(15) Acetone (P)

2.226min (+0.001) 42.26 ug/L m

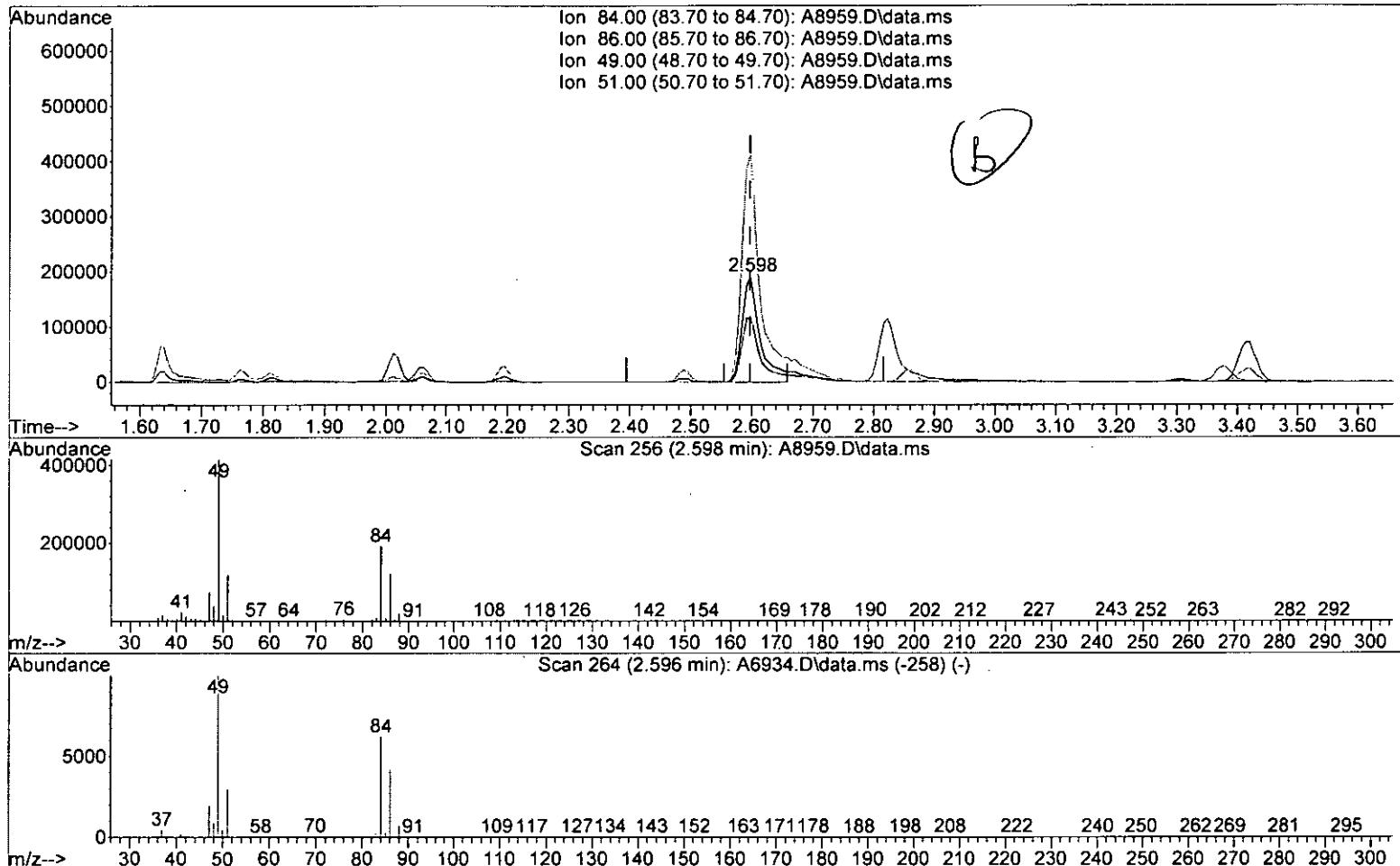
response 130400

Ion	Exp%	Act%
43.10	100	100
58.10	24.80	21.36
42.10	8.00	7.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(22) Methylene Chloride (P)

2.598min (+0.000) 41.16 ug/L

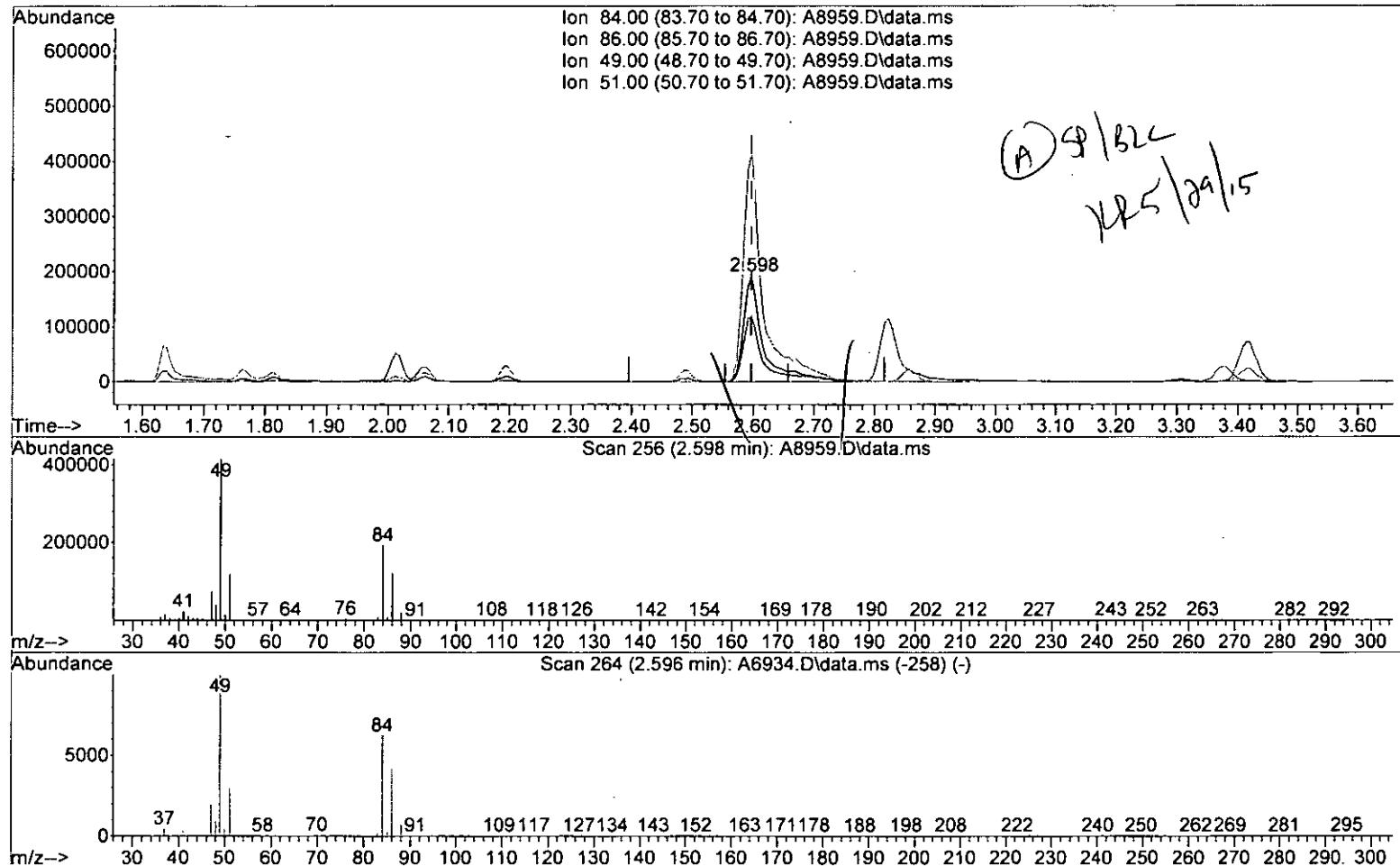
response 385746

Ion	Exp%	Act%
84.00	100	100
86.00	65.50	62.61
49.00	145.60	215.61#
51.00	42.90	61.45

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(22) Methylene Chloride (P)

2.598min (+0.000) 46.37 ug/L m

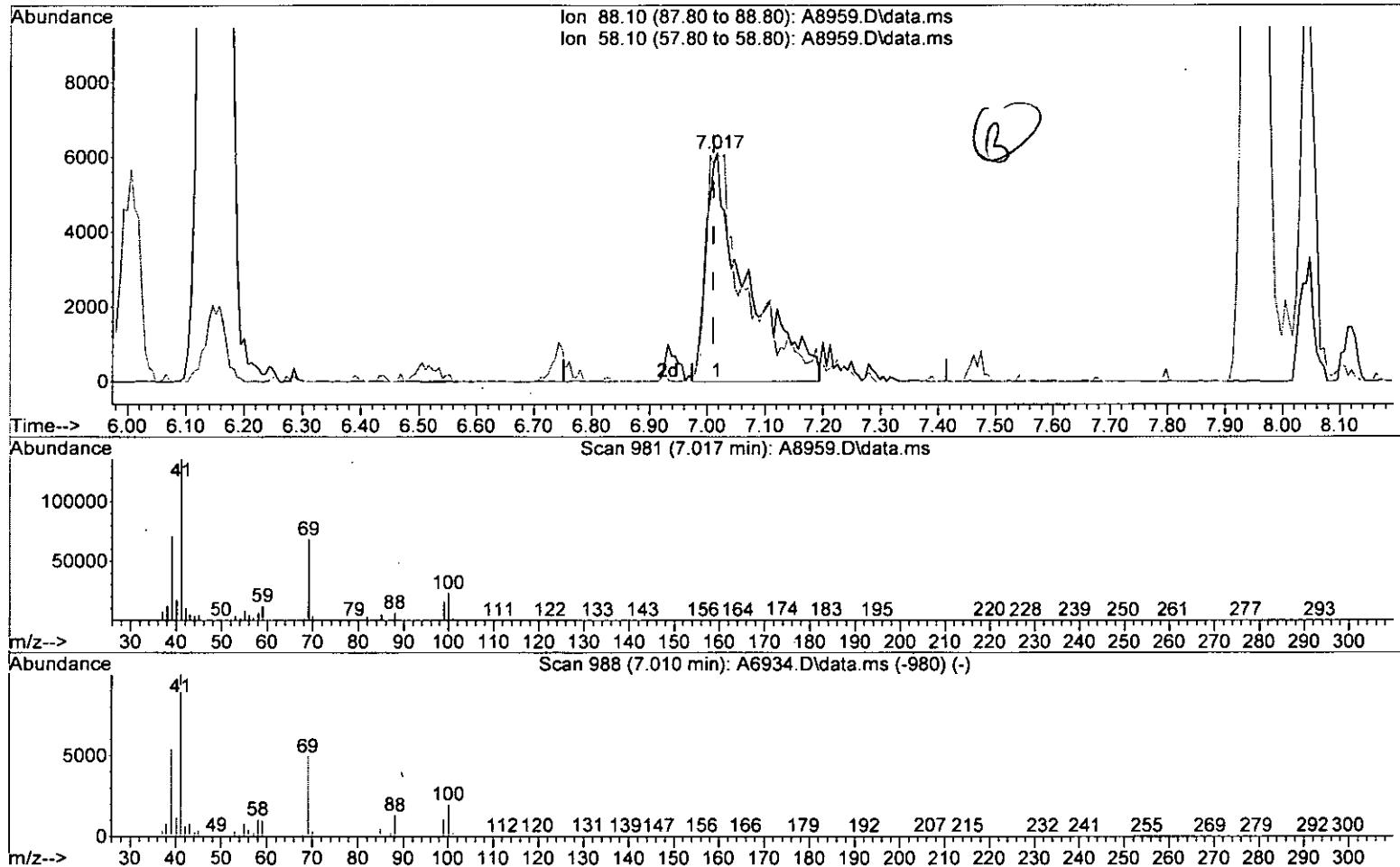
response 434633

Ion	Exp%	Act%
84.00	100	100
86.00	65.50	62.61
49.00	145.60	215.61#
51.00	42.90	61.45

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(57) 1,4-Dioxane

7.017min (+0.006) 519.50 ug/L

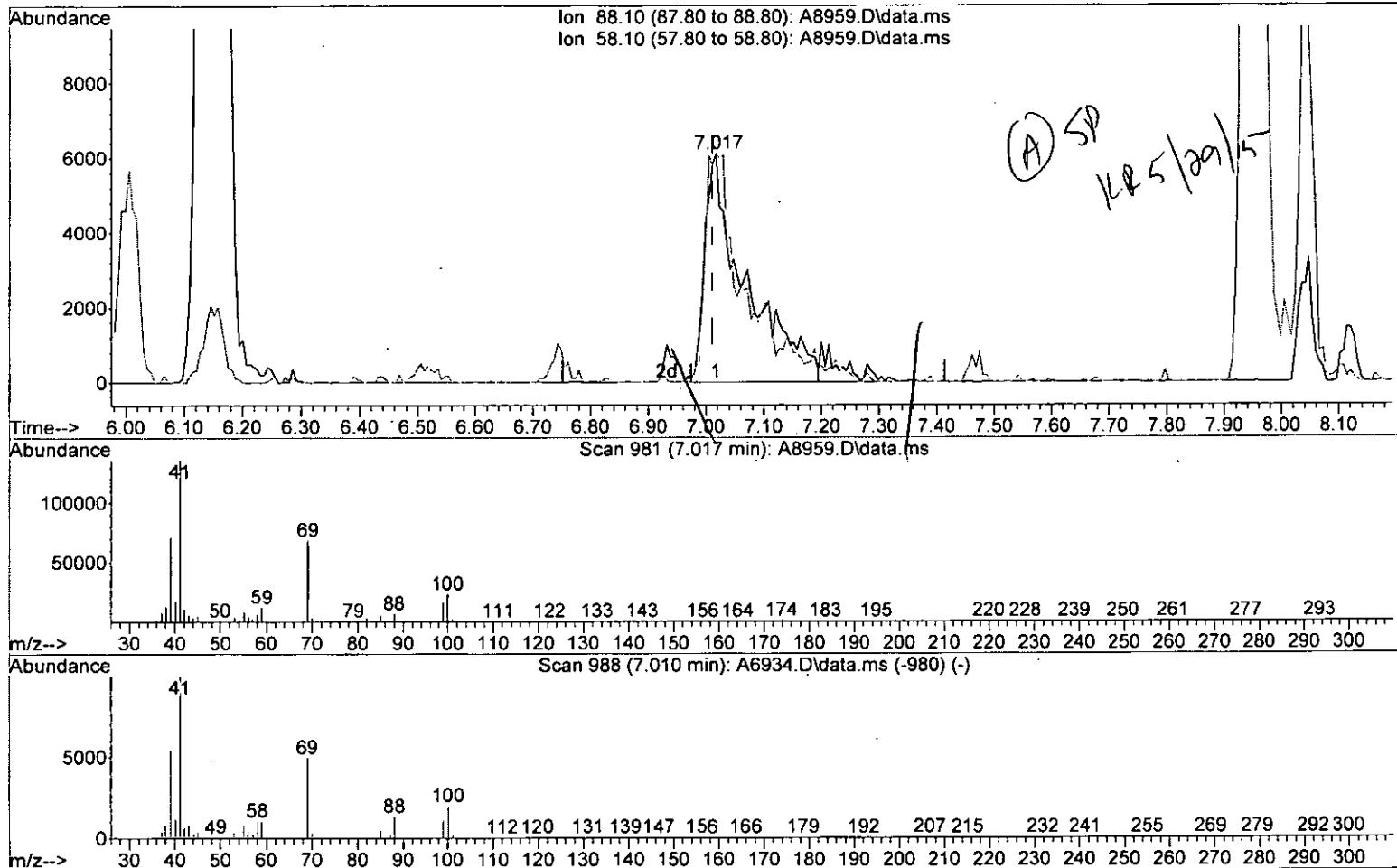
response 29903

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	99.33#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(57) 1,4-Dioxane

7.017min (+0.006) 562.19 ug/L m

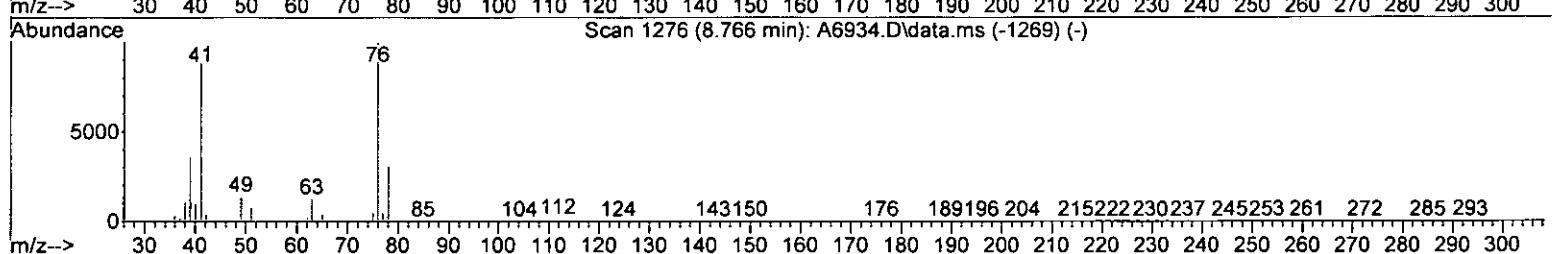
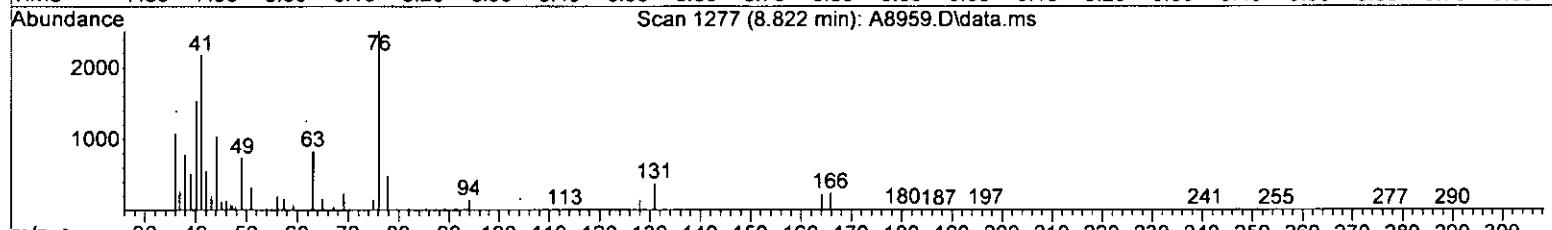
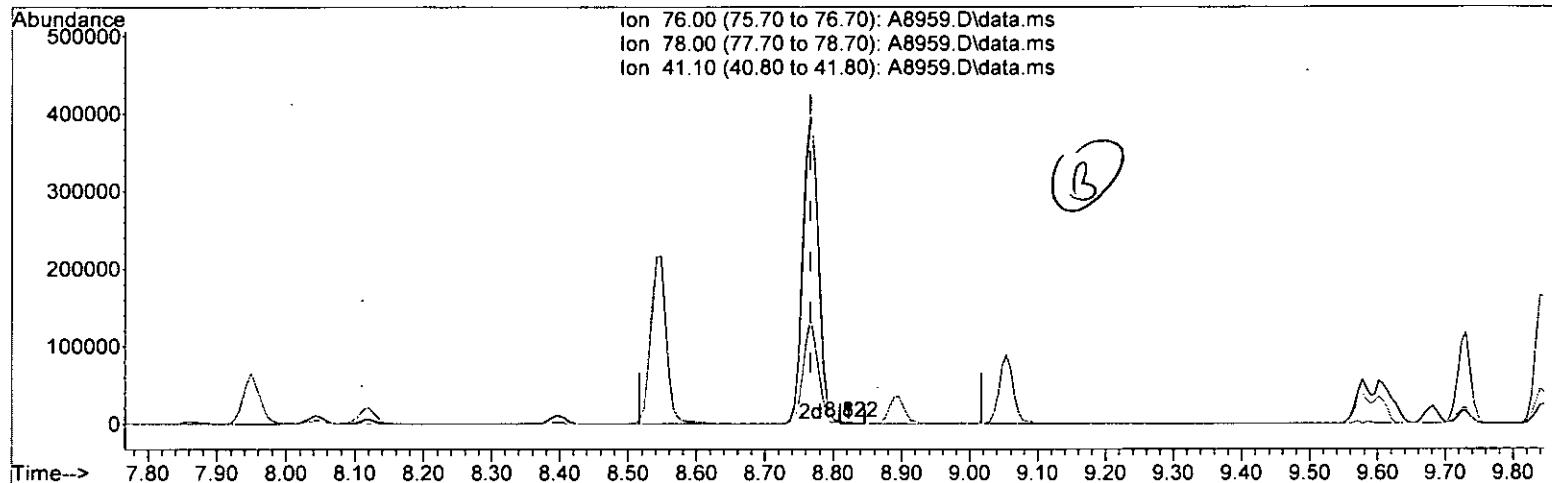
response 32360

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	99.33#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(73) 1,3-Dichloropropane

8.822min (+0.055) 0.24 ug/L

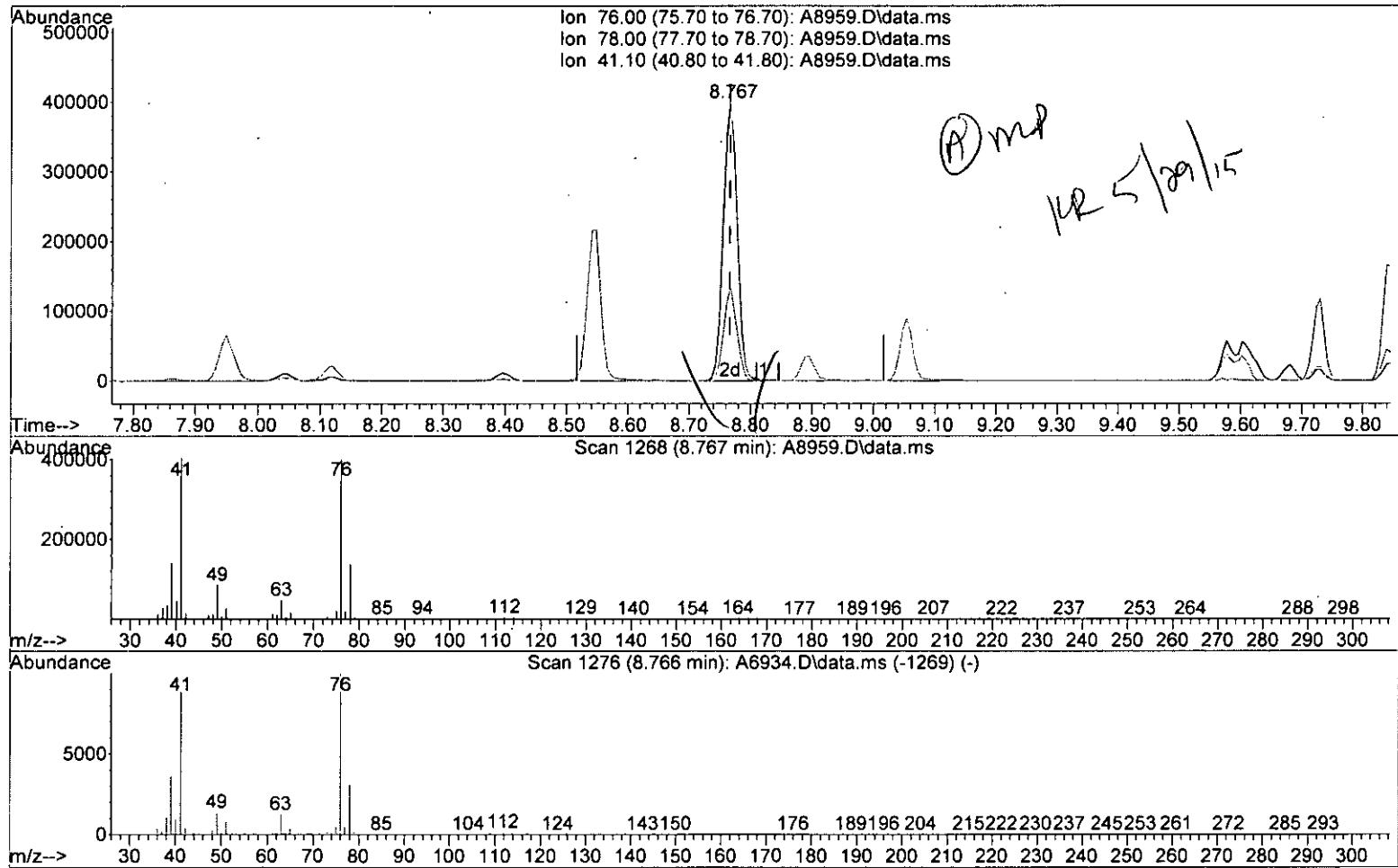
response 2859

Ion	Exp%	Act%
76.00	100	100
78.00	34.60	18.96
41.10	73.90	86.54
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8959.D  
 Acq On : 28 May 2015 2:34 am  
 Operator : F. Naegler  
 Sample : R1503862-011MS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 28 02:50:00 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8959.D\data.ms

(73) 1,3-Dichloropropane

8.767min (+0.000) 51.80 ug/L m

response 618245

Ion	Exp%	Act%
76.00	100	100
78.00	34.60	34.29
41.10	73.90	101.01#
0.00	0.00	0.00

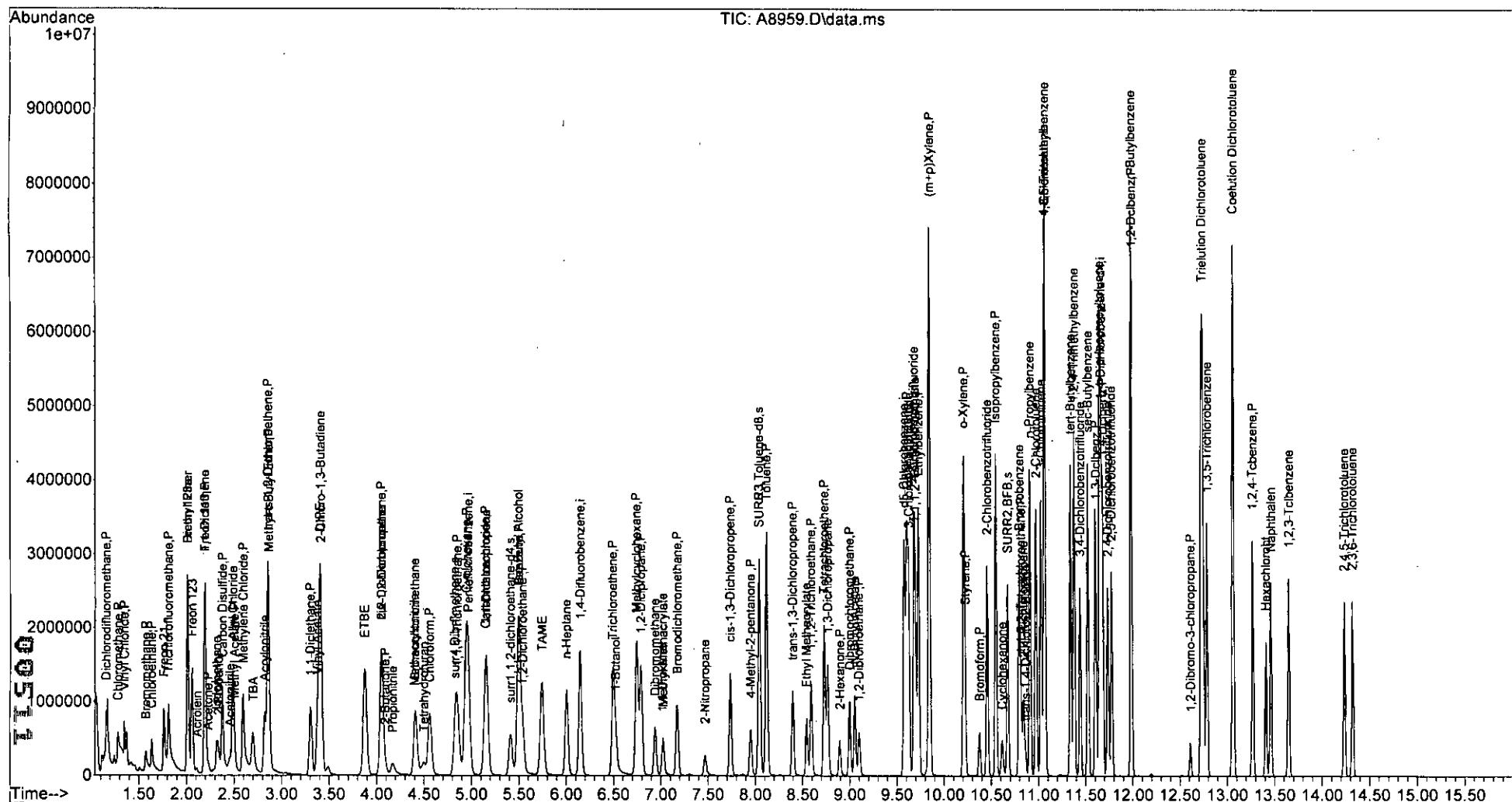
MLA

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
Data File : A8959.D  
Acq On : 28 May 2015 2:34 am  
Operator : F. Naegler  
Sample : R1503862-011MS|1.0  
Misc : CBI 13429 T4  
ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 29 15:29:37 2015  
Quant Method : I:\ACQUADATA\MSV рA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** RQ1505783-06  
**Run Type:** Duplicate Matrix Spike

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 03:04

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8960.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	48.3	1.0	0.21	
75-01-4	Vinyl Chloride	46.9	1.0	0.32	
75-00-3	Chloroethane	47.5	1.0	0.24	
74-83-9	Bromomethane	26.5	1.0	0.29	
75-35-4	1,1-Dichloroethene	48.0	1.0	0.57	
67-64-1	Acetone	50.0	5.0	1.3	
75-15-0	Carbon Disulfide	49.5	1.0	0.22	
75-09-2	Methylene Chloride	48.6	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	51.0	1.0	0.33	
75-34-3	1,1-Dichloroethane	51.6	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	49.6	1.0	0.30	
78-93-3	2-Butanone (MEK)	46.9	5.0	0.81	
67-66-3	Chloroform	50.7	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	52.9	1.0	0.36	
56-23-5	Carbon Tetrachloride	54.3	1.0	0.45	
71-43-2	Benzene	49.5	1.0	0.20	
107-06-2	1,2-Dichloroethane	50.3	1.0	0.36	
79-01-6	Trichloroethene	51.2	1.0	0.22	
78-87-5	1,2-Dichloropropane	50.4	1.0	0.20	
75-27-4	Bromodichloromethane	52.0	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	46.3	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	52.8	5.0	0.67	
108-88-3	Toluene	49.4	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	42.5	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	48.8	1.0	0.34	
127-18-4	Tetrachloroethene	52.1	1.0	0.30	
591-78-6	2-Hexanone	58.5	5.0	1.7	
124-48-1	Dibromochloromethane	56.8	1.0	0.31	
108-90-7	Chlorobenzene	52.6	1.0	0.29	
100-41-4	Ethylbenzene	48.7	1.0	0.20	
179601-23-1	m,p-Xylenes	108	2.0	0.33	
95-47-6	o-Xylene	51.5	1.0	0.20	
100-42-5	Styrene	20.7	1.0	0.20	
75-25-2	Bromoform	56.0	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	56.6	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/Semiannual Groundwater - 148900  
**Sample Matrix:** Water

**Sample Name:** BAT-87-02(3)-150518  
**Lab Code:** RQ1505783-06  
**Run Type:** Duplicate Matrix Spike

**Service Request:** R1503862  
**Date Collected:** 5/15/15 1510  
**Date Received:** 5/20/15  
**Date Analyzed:** 5/28/15 03:04

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA10\DATA\052715\A8960.D\

**Analysis Lot:** 446543  
**Instrument Name:** R-MS-10  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85-122	5/28/15 03:04	
Toluene-d8	94	87-121	5/28/15 03:04	
Dibromofluoromethane	100	89-119	5/28/15 03:04	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8960.D  
 Acq On : 28 May 2015 3:04 am  
 Operator : F. Naegler  
 Sample : R1503862-011DMS|1.0 *RQ1503862-06* Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 29 15:31:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	4.969	168	1009741	50.00	ug/L	0.00
41) 1, 4-Difluorobenzene	6.152	114	1531863	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.578	117	1346561	50.00	ug/L	0.00
90) 1, 4-Dichlorobenzene-d4	11.663	152	788080	50.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
43) surr4,Dibromomethane	4.835	113	476441	49.84	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	99.68%	
46) surr1,1,2-dichloroetha...	5.414	65	492573	50.14	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	100.28%	
64) SURR3,Toluene-d8	8.042	98	1716728	47.10	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	94.20%	
69) SURR2,BFB	10.675	95	668852	45.16	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	90.32%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.159	85	474427m	45.25	ug/L	
3) Chloromethane	1.281	50	926048	48.25	ug/L	98
4) Vinyl Chloride	1.348	62	655206	46.86	ug/L	97
5) Bromomethane	1.573	94	153098	26.47	ug/L	90
6) Chloroethane	1.634	64	325860	47.47	ug/L	98
7) Freon 21	1.762	67	975611	58.17	ug/L	98
8) Trichlorofluoromethane	1.811	101	568443	42.12	ug/L	98
9) Diethyl Ether	2.012	59	432660	53.22	ug/L	# 76
10) Freon 123a	2.012	67	577892	56.43	ug/L	93
11) Freon 123	2.061	83	594173	52.44	ug/L	79
12) Acrolein	2.110	56	45984	30.12	ug/L	84
13) 1,1-Dicethene	2.195	96	356807	47.96	ug/L	# 80
14) Freon 113	2.195	101	392299	50.41	ug/L	94
15) Acetone	2.226	43	148363	50.03	ug/L	99
16) 2-Propanol	2.335	45	474091	895.52	ug/L	95
17) Iodomethane	2.317	142	440942	40.02	ug/L	97
18) Carbon Disulfide	2.378	76	1322290	49.48	ug/L	99
19) Acetonitrile	2.457	40	64477	138.53	ug/L	99
20) Allyl Chloride	2.488	76	244237	50.46	ug/L	# 48
21) Methyl Acetate	2.506	43	309494	42.08	ug/L	86
22) Methylene Chloride	2.598	84	443295	48.57	ug/L	# 63
23) TBA	2.695	59	661383	975.31	ug/L	66
24) Acrylonitrile	2.823	53	773979	237.09	ug/L	99
25) Methyl-t-Butyl Ether	2.866	73	1056548	49.67	ug/L	85
26) trans-1,2-Dichloroethene	2.860	96	426683	50.96	ug/L	# 83
27) 1,1-Dicethane	3.305	63	964936	51.62	ug/L	98
28) Vinyl Acetate	3.378	86	57052	37.84	ug/L	# 81
29) DIPE	3.408	45	2449755	47.80	ug/L	# 74
30) 2-Chloro-1,3-Butadiene	3.414	53	559499	25.73	ug/L	88
31) ETBE	3.878	59	1593331	45.52	ug/L	92
32) 2,2-Dichloropropane	4.055	77	447804	37.07	ug/L	97
33) cis-1,2-Dichloroethene	4.061	96	497789	49.60	ug/L	94
34) 2-Butanone	4.097	43	222694	46.88	ug/L	88
35) Propionitrile	4.170	54	272900	231.49	ug/L	95

YF  
5/29/15

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8960.D  
 Acq On : 28 May 2015 3:04 am  
 Operator : F. Naegler  
 Sample : R1503862-011DMS|1.0  
 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 29 15:31:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Bromochloromethane	4.414	130	315065	51.05	ug/L #	70
37) Methacrylonitrile	4.414	67	87785	31.52	ug/L #	47
38) Tetrahydrofuran	4.494	42	143774	48.96	ug/L	80
39) Chloroform	4.561	83	843674	50.73	ug/L	98
40) 1,1,1-Trichloroethane	4.853	97	748675	52.93	ug/L	96
42) Cyclohexane	4.951	41	706286	48.49	ug/L	91
44) Carbontetrachloride	5.146	121	205567	54.31	ug/L #	76
45) 1,1-Dichloropropene	5.164	75	596159	48.14	ug/L	97
47) Benzene	5.506	78	1899632	49.48	ug/L	83
48) 1,2-Dichloroethane	5.542	62	666819	50.31	ug/L	91
49) Iso-Butyl Alcohol	5.493	43	390744	981.33	ug/L	88
50) TAME	5.743	73	1102470	49.82	ug/L	84
51) n-Heptane	6.005	43	717151	42.97	ug/L	81
52) 1-Butanol	6.524	56	469291	2642.38	ug/L	79
53) Trichloroethene	6.499	130	542876	51.17	ug/L	92
54) Methylcyclohexane	6.749	55	744983	47.49	ug/L #	83
55) 1,2-Diclpropane	6.792	63	569836	50.35	ug/L	100
56) Dibromomethane	6.938	93	257971	51.82	ug/L	98
57) 1,4-Dioxane	7.017	88	57197m	1012.73	ug/L	
58) Methyl Methacrylate	7.024	69	158696	35.60	ug/L #	57
59) Bromodichloromethane	7.176	83	619667	51.96	ug/L	99
60) 2-Nitropropane	7.469	41	176966	135.49	ug/L	99
62) cis-1,3-Dichloropropene	7.737	75	626291	46.33	ug/L	96
63) 4-Methyl-2-pentanone	7.950	43	511357	52.75	ug/L	90
65) Toluene	8.121	91	2045912	49.35	ug/L	99
66) trans-1,3-Dichloropropene	8.395	75	478192	42.45	ug/L	99
67) Ethyl Methacrylate	8.541	69	310282	34.95	ug/L #	50
68) 1,1,2-Trichloroethane	8.590	97	360320	48.75	ug/L	95
71) Tetrachloroethene	8.730	164	421719	52.11	ug/L	96
72) 2-Hexanone	8.895	43	355105	58.46	ug/L	86
73) 1,3-Dichloropropane	8.767	76	636089	54.06	ug/L #	78
74) Dibromochloromethane	8.999	129	455864	56.77	ug/L	98
75) N-Butyl Acetate	9.054	43	725103	49.70	ug/L	93
76) 1,2-Dibromoethane	9.102	107	365669	55.76	ug/L	93
77) 3-Chlorobenzotrifluoride	9.627	180	786758	53.38	ug/L	98
78) Chlorobenzene	9.608	112	1391305	52.55	ug/L	95
79) 4-Chlorobenzotrifluoride	9.682	180	695039	53.58	ug/L	97
80) 1,1,1,2-Tetrachloroethane	9.694	131	502472	55.43	ug/L	96
81) Ethylbenzene	9.730	106	676085	48.68	ug/L	95
82) (m+p) Xylene	9.846	106	1805883	108.09	ug/L	92
83) o-Xylene	10.206	106	853030	51.46	ug/L	98
84) Styrene	10.224	104	581768	20.73	ug/L	98
85) Bromoform	10.377	173	244973	56.02	ug/L	100
86) 2-Chlorobenzotrifluoride	10.456	180	754260	54.06	ug/L	91
87) Isopropylbenzene	10.547	105	2219174	54.50	ug/L	100
88) Cyclohexanone	10.614	55	241535	556.84	ug/L	89
89) trans-1,4-Dichloro-2-B...	10.864	53	59575	20.28	ug/L #	78
91) 1,1,2,2-Tetrachloroethane	10.815	83	455289	56.57	ug/L	99
92) Bromobenzene	10.797	156	576241	50.48	ug/L	95
93) 1,2,3-Trichloropropane	10.840	110	127708	53.90	ug/L	93
94) n-Propylbenzene	10.913	91	2584664	55.20	ug/L	98

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
 Data File : A8960.D  
 Acq On : 28 May 2015 3:04 am  
 Operator : F. Naegler  
 Sample : R1503862-011DMS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 29 15:31:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration

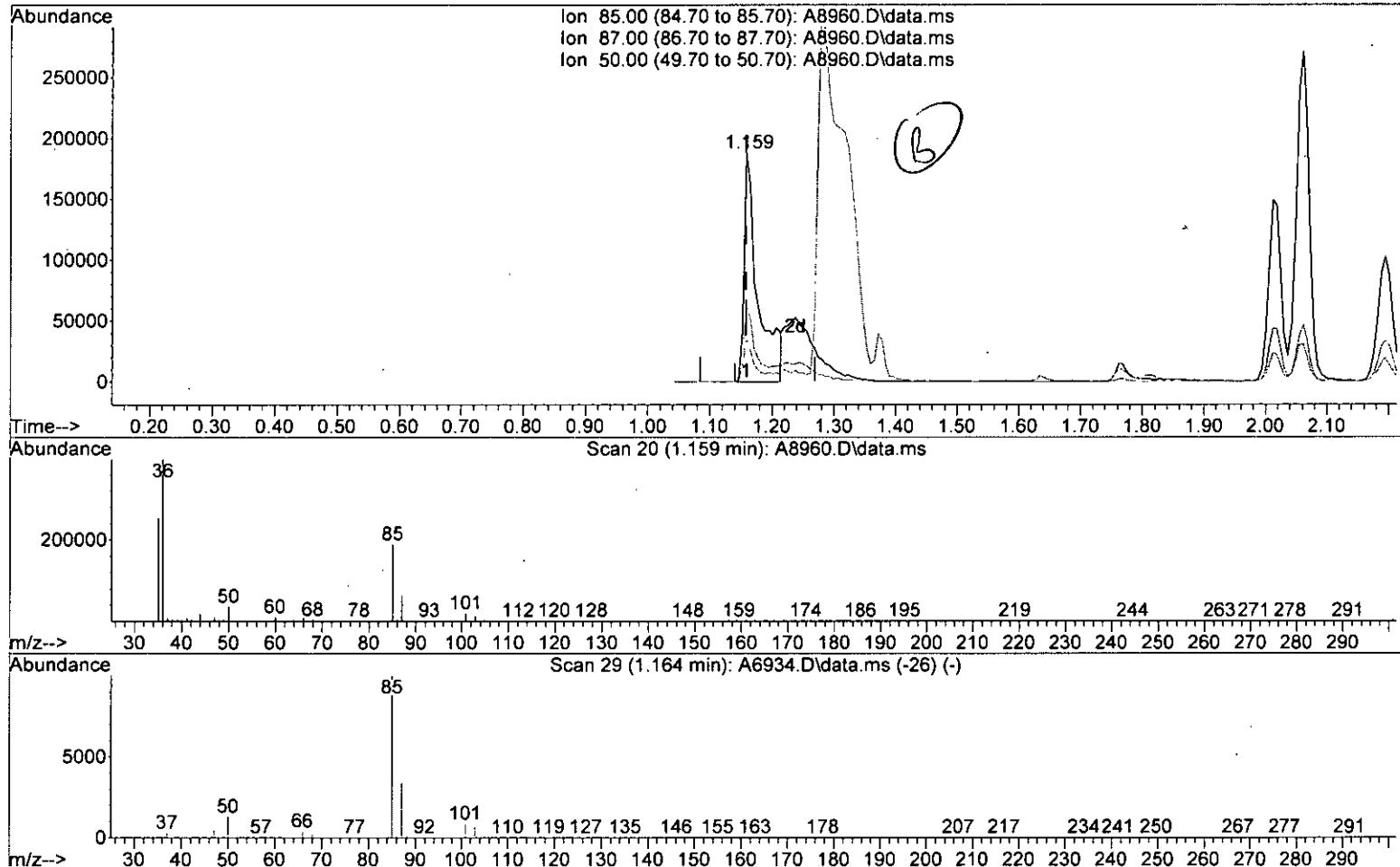
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
95) 2-Chlorotoluene	10.974	91	1521033	51.81	ug/L	96
96) 3-Chlorotoluene	11.023	91	1655068	53.39	ug/L	99
97) 4-Chlorotoluene	11.065	91	1857422	53.08	ug/L	96
98) 1, 3, 5-Trimethylbenzene	11.065	105	1899974	54.33	ug/L	97
99) tert-Butylbenzene	11.340	119	1620399	53.38	ug/L	97
100) 1, 2, 4-Trimethylbenzene	11.376	105	1937237	54.25	ug/L	96
101) 3, 4-Dichlorobenzotrifl...	11.443	214	525038	50.54	ug/L	99
102) sec-Butylbenzene	11.523	105	2222364	53.92	ug/L	98
103) p-Isopropyltoluene	11.645	119	2053052	55.91	ug/L	97
104) 1, 3-Dclbenz	11.608	146	1210582	52.11	ug/L	94
105) 1, 4-Dclbenz	11.681	146	1258815	51.68	ug/L	96
106) 2, 4-Dichlorobenzotrifl...	11.736	214	489120	50.19	ug/L	99
107) 2, 5-Dichlorobenzotrifl...	11.773	214	552686	50.03	ug/L	98
108) n-Butylbenzene	11.980	91	1733599	53.45	ug/L	96
109) 1, 2-Dclbenz	11.986	146	1159000	53.97	ug/L	99
110) 1, 2-Dibromo-3-chloropr...	12.608	157	91338	62.02	ug/L	96
111) Trielution Dichlorotol...	12.730	125	3177742	172.61	ug/L	97
112) 1, 3, 5-Trichlorobenzene	12.785	180	841366	53.50	ug/L	96
113) Coelution Dichlorotoluene	13.059	125	2341363	119.05	ug/L	94
114) 1, 2, 4-Tcbenzene	13.266	180	778933	57.57	ug/L	98
115) Hexachlorobt	13.406	225	261352	46.65	ug/L	95
116) Naphthalen	13.461	128	1679330	66.23	ug/L	98
117) 1, 2, 3-Tclbenzene	13.650	180	681474	61.16	ug/L	97
118) 2, 4, 5-Trichlorotoluene	14.236	159	498189	60.63	ug/L	98
119) 2, 3, 6-Trichlorotoluene	14.321	159	462633	64.43	ug/L	98

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8960.D  
 Acq On : 28 May 2015 3:04 am  
 Operator : F. Naegler  
 Sample : R1503862-011DMS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 28 03:19:38 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8960.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 27.60 ug/L

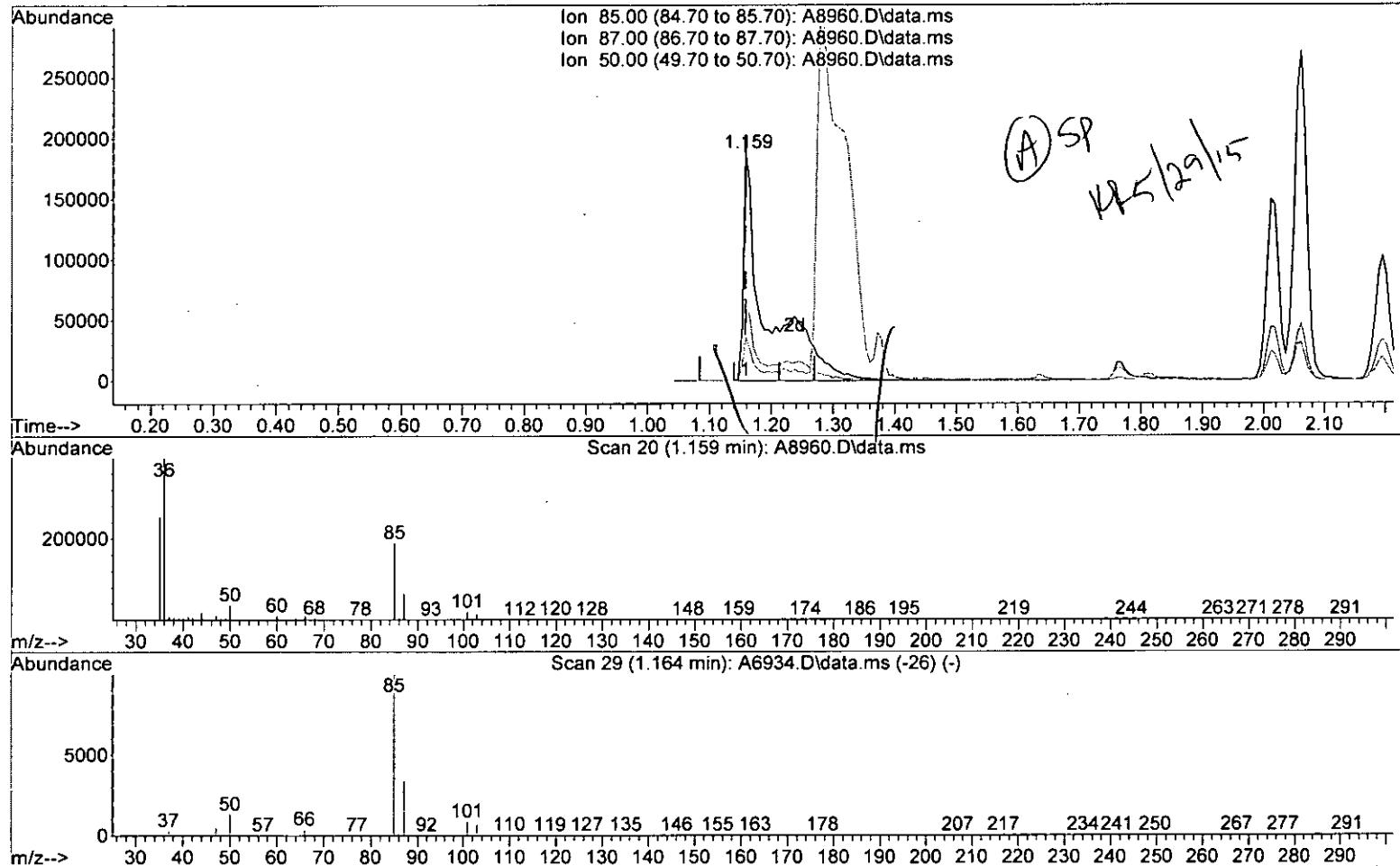
response 289381

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	33.18
50.00	15.00	18.92
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8960.D  
 Acq On : 28 May 2015 3:04 am  
 Operator : F. Naegler  
 Sample : R1503862-011DMS|1.0  
 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 28 03:19:38 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8960.D\data.ms

(2) Dichlorodifluoromethane (P)

1.159min (+0.000) 45.25 ug/L m

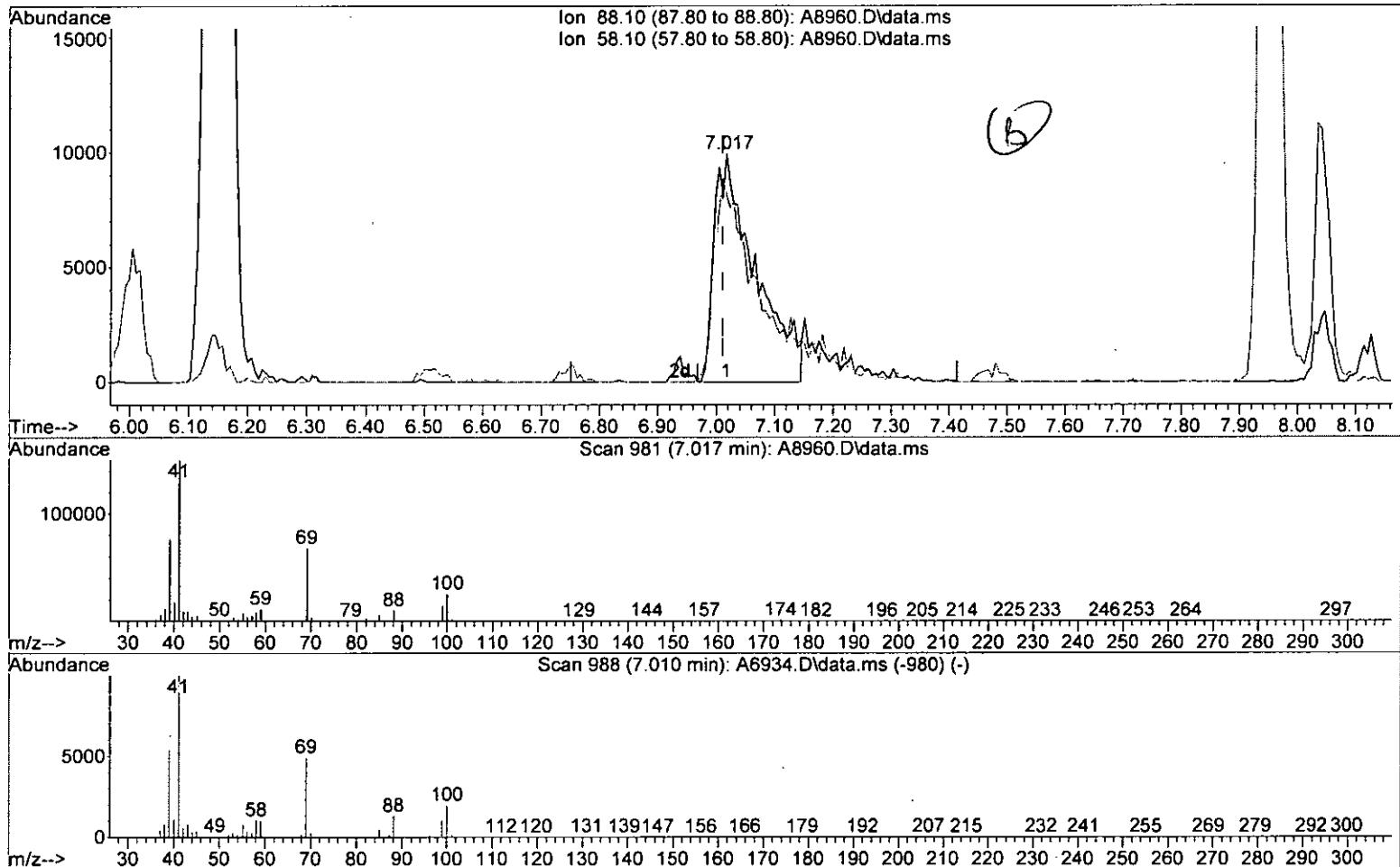
response 474427

Ion	Exp%	Act%
85.00	100	100
87.00	31.50	33.18
50.00	15.00	18.92
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8960.D  
 Acq On : 28 May 2015 3:04 am  
 Operator : F. Naegler  
 Sample : R1503862-011DMS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 28 03:19:38 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8960.D\data.ms

(57) 1,4-Dioxane

7.017min (+0.006) 855.96 ug/L

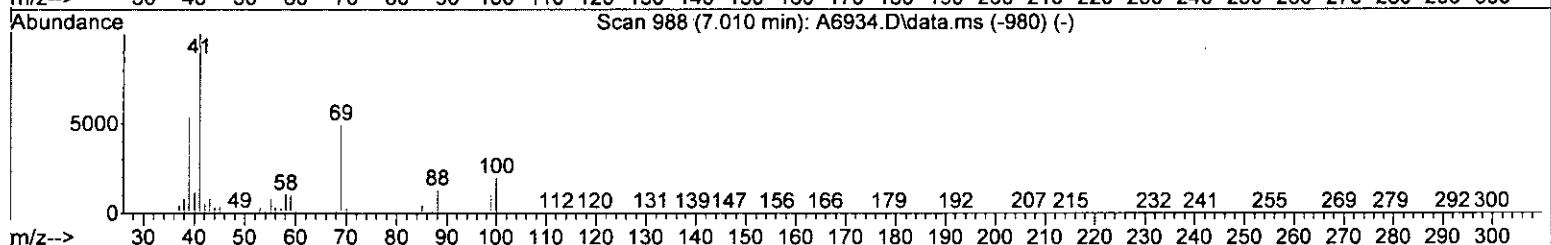
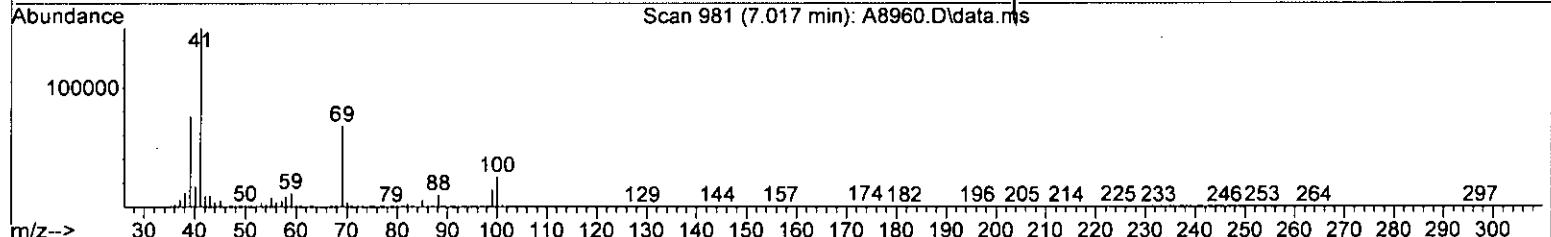
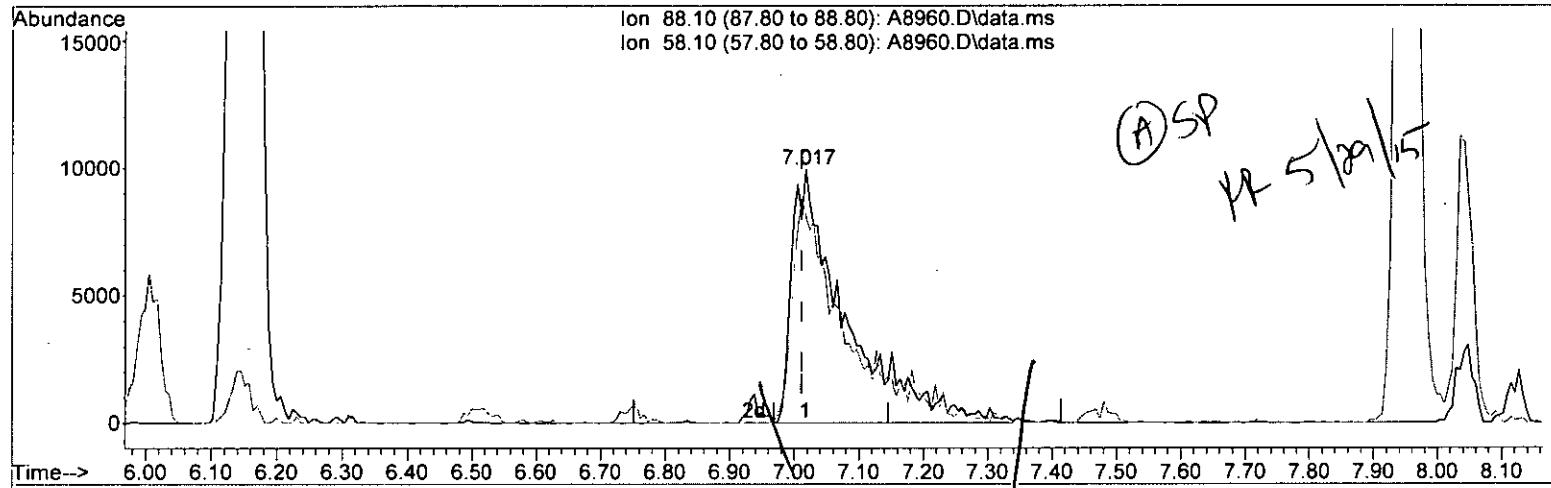
response 48343

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	81.52#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa10\data\052715\  
 Data File : A8960.D  
 Acq On : 28 May 2015 3:04 am  
 Operator : F. Naegler  
 Sample : R1503862-011DMS|1.0 Inst : MSVOA10  
 Misc : CBI 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 28 03:19:38 2015  
 Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W050615.M  
 Quant Title : MS#10 - 8260B WATERS 10mL Purge  
 QLast Update : Thu May 07 14:25:48 2015  
 Response via : Initial Calibration



TIC: A8960.D\data.ms

(57) 1,4-Dioxane

7.017min (+0.006) 1012.73 ug/L m

response 57197

Ion	Exp%	Act%
88.10	100	100
58.10	61.10	81.52#
0.00	0.00	0.00
0.00	0.00	0.00

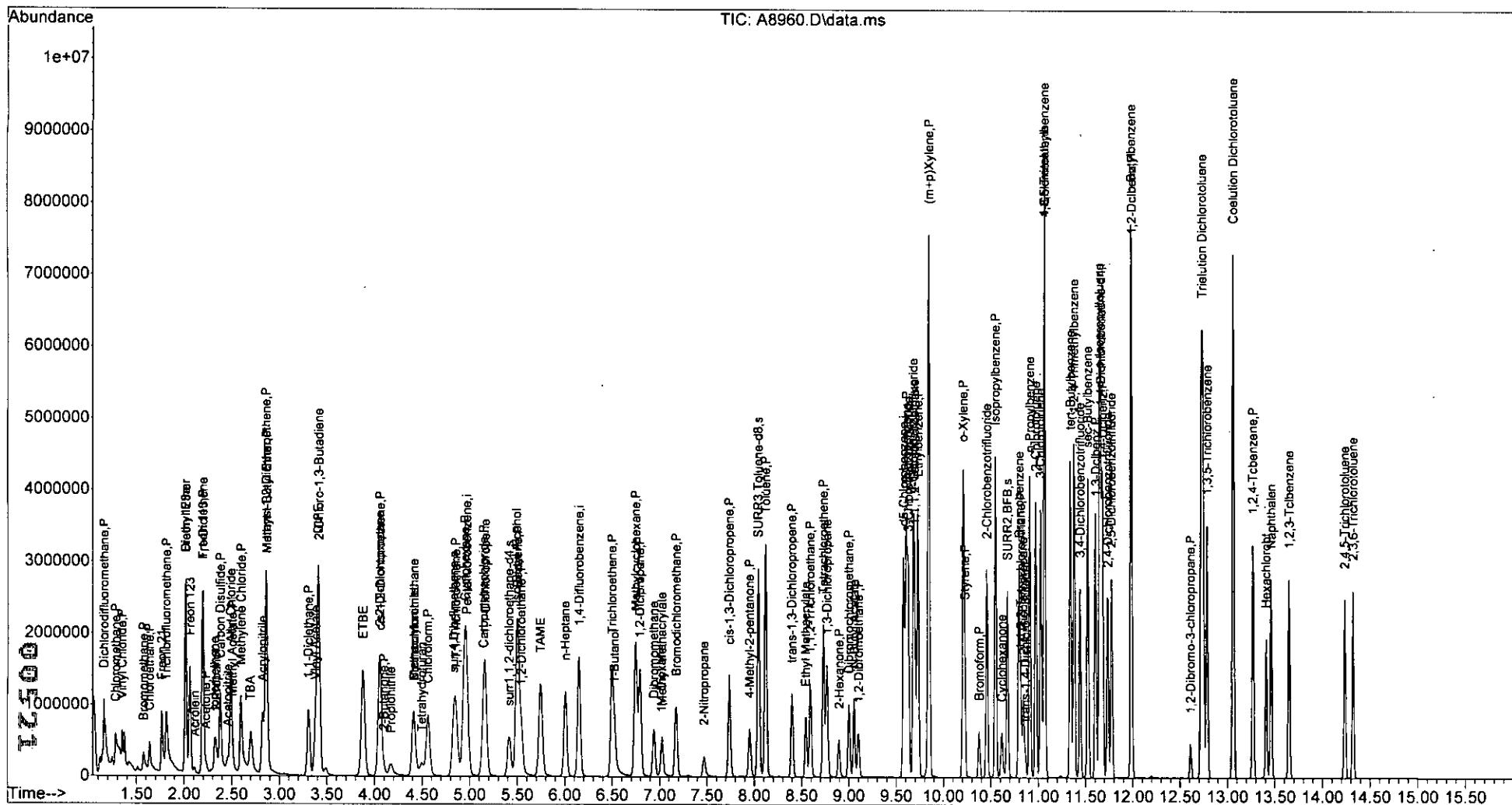
WWX

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUDATA\msvoa10\data\052715\  
Data File : A8960.D  
Acq On : 28 May 2015 3:04 am  
Operator : F. Naegler  
Sample : R1503862-011DMS|1.0  
Misc : CBI 13429 T4  
ALS Vial : 24 Sample Multiplier: 1

Inst : MSVOA10

Quant Time: May 29 15:31:20 2015  
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W050615.M  
Quant Title : MS#10 - 8260B WATERS 10mL Purge  
QLast Update : Thu May 07 14:25:48 2015  
Response via : Initial Calibration



Analysis: M65C  
 Date: 5/6/15  
 Instr. MS #10

Analyst: F. Naugler

Data Path: j:\acquidata\msvoa\j\1050615

Tune Method: T050615.M4  
 Run Method: W050615.M  
 LIMS Run#: —

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	TUNE								A8244	Y	
2	CCV								45	(N)	
3	LCS								46	(N)	
4	MBLK								47	—	
5	MBLK								48	—	Recalibrate!
1	BLK								49	Y	
1	TUNE								50	Y	
2	ICALBLK								51	Y	
3	0.5 ppb Std								52	Y	
4	1.0								53	Y	
5	2.0								54	Y	
6	5.0								55	Y	
7	20								56	Y	
8	50								57	Y	
9	100								58	Y	
10	150								59	Y	
11	200	↓							60	Y	
12	BLK								61	Y	
13	BLK								62	Y	
14	BLK								63	Y	
15	Sppb ICV								64	Y	
WATER ICAL TABLE											
	CONC (PPB)	0.5	1.0	2.0	5.0	20	50	100	150	200	
	1° T/G = 80716	10ml/1ml	5ml/5ml	10ml/5ml	2ml/5ml	2ml/5ml	5ml/5ml	10ml/5ml	15ml/5ml	20ml/5ml	
	1° HSL = 80863	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	1° Fr = 80865	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	1° HBo = 80514	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	1° OCC = 80330	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	SURR = 80872	—	—	—	1ml/5ml	2ml/5ml	—	5ml/5ml	7.5ml/5ml	10ml/5ml	

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

Fr Secondary 200	: 80315 - 12.5ml
TK Secondary 500	: 80762 - 5ml
HSL Secondary	: 80794 -
HBo Secondary	: 80314 -
OCC Secondary	: 80331 -

5ml  
(ICV)

Combined IS/Surr 500: 80685  
 Surrogate : —  
 Internal Std : —

Primary : \_\_\_\_\_  
 Primary : \_\_\_\_\_  
 Primary : \_\_\_\_\_  
 Primary : \_\_\_\_\_  
 Primary : \_\_\_\_\_

Analysis: 8260C  
Date: 5/24/15 #2  
Instr. MS #10

Analyst: F. Wagner

Data Path: f:\acquodata\msvoa\w1\052415

Tune Method: T05s6015.m  
Run Method: W05s015.m  
LIMS Run#: 4446162

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G Primary	500	<u>81090 - Sml</u>	SML (CCV)
HSL Primary	500	<u>81179 - Sml</u>	
Fr Primary	500	<u>80865 - Sml</u>	
Primary		_____	
Primary		_____	

Fr Secondary 200	<u>80981 - 5L</u>	-12.5L	Combined IS
T/G Secondary 500	<u>80.762 - 2w</u>	50ml - 5L	Surrogate
HSL Secondary 500	<u>81165 - 2w</u>	50ml - 5L	Internal Std
Secondary	<u>                          </u>	(Lcs)	
Secondary	<u>                          </u>	(5L)	

Combined IS/Surr 500 : 81272  
Surrogate : —  
Internal Std : —

Analysis: 8260 Waters

Analyst: K. Ruest

Date: 5/25/15

Data Path: j:\acquidata\msvoa\01\052515

Instr. 1D

Tune Method: W205D615

Run Method:

LIMS Run#: UN6164(0) / UN6166

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	TUNE (anhydrous)		W205D55346 - 01	Q5539.01					A48851	Y	(auto) 8.26
2	CCR		02	02					A48852	YC	Bromine ↓ odd ↓
1	LCS		03	03					A48853	Y	
2	WUL			-					A48854	NO	WUL
3				04					A48855	MB	
4	R15D3791-001	1.0			10050	3	1	42	A48856	Y	
5	003	1.0						42	A48857	Y	
6	004	1.0						42	A48858	Y	
7	005	1.0						42	A48859	Y	
8	R15D3792-010	1.0			10050	3	2	42	A48860	Y	
9	011	1.0						42	A48861	Y	
10	005	2.0	25/50mLs					42	A48862	Y	(DL)
11	009	5.0	10/50mLs					42	A48863	Y	(DL)
12	R15D37802-005	1.0			13429	4	1	42	A48864	Y	
13	006	10	5/50mLs					42	A48865	Y	
14	008	10	↓					42	A48866	Y	
15	007	200	1/200mLs					42	A48867	Y	ROT 1/500
16	610	250	1/250mLs					42	A48868	Y	ROT 1/1000
17	011	100	1/200mLs					42	A48869	Y	ROT 1/2
18	ms	012	100					42	A48870	Y	
19	msD	011	100	↓				42	A48871	Y	↓
20	R15D3971-001	1.0	ms		10050	3	2	42	A48872	Y	
21	001	1.0	msD			↓	3	42	A48873	Y	
22	141645TD							-	A48874	-	
23	↓							-	A48875	-	
24	BUL							-	A48876	-	
25	↓							-	A48877	-	
											END
											PF 5/25/15

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

Primary occ	81087
Primary fit	810805
Primary T6	81090
Primary HSL	87179
Primary	

500 SUL → 50mLs = CCR

500 Secondary fit: 80981 - 5uL  
 500 Secondary occ: 81088  
 Secondary T6: 81762 uL  
 Secondary HSL: 87105  
 Secondary

-10.6uL  
 Samples 5mLs  
 1.2uL  
 4.2mL vial = ms/10  
 Combined IS/Surr 500 : 81272  
 Surrogate Internal Std : /  
 Runlog-MSVOAr2 9/20/13  
 Page 147

Analysis: 8260 C  
Date: 5/26/15 #2  
Instr. MS #10

Analyst: F. Haugler

Tune Method: TOSO615.M  
Run Method: WOS-0615.M  
LIMS Run#: 444223

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
26	TUNE		RQ15050601-01						A8905	Y	
27	CCV		02						106	Y	
28	LGS		03						07	Y	
29	MBUS		—						08	(N)	
30	MBLIC	↓	04						09	Y	
31	R1503862-009	500.0	1 50ml → 5 50ml	[REDACTED]	13429	4	2	c2	10	Y	
32	↓ -010	1000.0	1 100ml → 5 50ml	[REDACTED]		↓	2	c2	11	Y	
33	↓ V -011	2.0	25 5ml	[REDACTED]	↓	↓	2	c2	12	(N) RA-111	
34	R1503955-001	1.0		[REDACTED]	9145	2	1	c2	13	Y	
35	↓ -002	1.0		[REDACTED]	↓	↓	1	c2	14	Y	
36	R1502608-072	1.0		[REDACTED]	9866	2	1	c2	15	Y	
37	-043	1.0		[REDACTED]			1	c2	16	Y	
38	-044	1.0		[REDACTED]			1	c2	17	Y	
39	-045	1.0		[REDACTED]			1	c2	18	Y	
40	-047	1.0		[REDACTED]			1	c2	19	Y	
41	↓ -062	1.0		[REDACTED]	↓	↓	1	c2	20	Y	20 ml 20% TGA
42	(R1503935-003)	1.0		[REDACTED]	7969	2	1	c2	21	X(N)	MASS CAM Rot
43	↓ -001	1.2		[REDACTED]			1	c2	22	(X)	Rot 1/2.5
44	↓ -002	5.0	10 5ml	[REDACTED]			1	c2	23	(N)	Rot 1/1
45	↓ -004	1.0		[REDACTED]			1	c2	24	X	
46	↓ V -025	1.0		[REDACTED]	↓	↓	1	c2	25	X V	
47	(R1503862-011A5)	2.0	25 5ml	[REDACTED]	13429	4	3	c2	26	(N)	Rot 1/1
48	↓ -011A5	2.0	↓	[REDACTED]	↓	↓	3	c2	27	(N)	↓
49	BLK								28		

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All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G	Primary 500	<u>81090 - Sat</u>	
HSL	Primary 500	<u>81179 - Sat</u>	SatL
Fr	Primary 500	<u>80865 - Sat</u>	(CCV)
	Primary	<u>                  </u>	
	Primary	<u>                  </u>	

Fr Secondary 200	<u>80981 - Sun</u>	-12 Sun	Com
HG Secondary 500	<u>80762 - 2nd</u>	Sun	Sum
M&L Secondary 500	<u>81165 - 2nd</u>	-Sun	Inter
Secondary		(Lis)	(SPLK)
Secondary			

Combined IS/Surr Sos : 81272  
Surrogate : -  
Internal Std : -

Analysis: 8260C  
Date: 5/27/15  
Instr. MS#10

Analyst: F. Nagler

Data Path: j:\acquidata\msvoa\wl 052715

Tune Method: T050615.M  
Run Method: W05-0615.M  
LIMS Run#: 446543.M

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	TUNE								A8929	Y	
2	CCV								30	(N)	
2	GAS STD								31	-	
1	TUNE								32	Y	
2	CCV								33	(W)	install new trap.
1	200 ppb std								34	Y	
2	BLK								35	Y	
3	BLK								36	Y	
1	TUNE		RQ1505783.A1						37	Y	
2	CCV			02					38	Y	
3	LCS			03					39	Y	
4	MBLK								40	(W)	
5	MBLK								41	Y	
6	R1503773-046	1.0			6734	2	1	C2	42	Y	
7	-047	1.0				1	1	C2	43	Y	
8	-048	1.0				1	1	C2	44	Y	
9	~049	1.0				1	1	C2	45	Y	* Same as R1503952-001
10	R1503952-002	2.0	25/50mL		6734	2	1	C2	46	Y	
11	R1503773-028	1.0			6734	2	1	C2	47	Y	
12	-029	1.0				1	1	C2	48	Y	
13	-030	1.0				1	1	C2	49	Y	
14	-031	1.0				1	1	C2	50	Y	
15	-032	1.0				1	1	C2	51	Y	
16	-040	1.0				1	1	C2	52	Y	
17	-041	1.0				1	1	C2	53	Y	
18	-042	1.0				1	1	C2	54	Y	
19	-043	1.0				1	1	C2	55	Y	
20	-044	1.0				1	1	C2	56	Y	
21	~045	1.0				1	1	C2	57	Y	
22	R1503862-011	1.0			CBT	13429	4	C2	58	Y	
23	-011MS	1.0	RQ1505783.05			1	1	S	59	Y	
24	-011MSD	1.0		06		1	1	C2	60	Y	
45						1	1	S	61	Y	
46						1	1	S	62	Y	
47						1	1	S	63	Y	
48						1	1	S	64	Y	
49						1	1	S	65	Y	
50						1	1	S	66	Y	
51						1	1	S	67	Y	
52						1	1	S	68	Y	
53						1	1	S	69	Y	
54						1	1	S	70	Y	
55						1	1	S	71	Y	
56						1	1	S	72	Y	
57						1	1	S	73	Y	
58						1	1	S	74	Y	
59						1	1	S	75	Y	
60						1	1	S	76	Y	
61						1	1	S	77	Y	
62						1	1	S	78	Y	
63						1	1	S	79	Y	
64						1	1	S	80	Y	
65						1	1	S	81	Y	
66						1	1	S	82	Y	
67						1	1	S	83	Y	
68						1	1	S	84	Y	
69						1	1	S	85	Y	
70						1	1	S	86	Y	
71						1	1	S	87	Y	
72						1	1	S	88	Y	
73						1	1	S	89	Y	
74						1	1	S	90	Y	
75						1	1	S	91	Y	
76						1	1	S	92	Y	
77						1	1	S	93	Y	
78						1	1	S	94	Y	
79						1	1	S	95	Y	
80						1	1	S	96	Y	
81						1	1	S	97	Y	
82						1	1	S	98	Y	
83						1	1	S	99	Y	
84						1	1	S	100	Y	
85						1	1	S	101	Y	
86						1	1	S	102	Y	
87						1	1	S	103	Y	
88						1	1	S	104	Y	
89						1	1	S	105	Y	
90						1	1	S	106	Y	
91						1	1	S	107	Y	
92						1	1	S	108	Y	
93						1	1	S	109	Y	
94						1	1	S	110	Y	
95						1	1	S	111	Y	
96						1	1	S	112	Y	
97						1	1	S	113	Y	
98						1	1	S	114	Y	
99						1	1	S	115	Y	
100						1	1	S	116	Y	
101						1	1	S	117	Y	
102						1	1	S	118	Y	
103						1	1	S	119	Y	
104						1	1	S	120	Y	
105						1	1	S	121	Y	
106						1	1	S	122	Y	
107						1	1	S	123	Y	
108						1	1	S	124	Y	
109						1	1	S	125	Y	
110						1	1	S	126	Y	
111						1	1	S	127	Y	
112						1	1	S	128	Y	
113						1	1	S	129	Y	
114						1	1	S	130	Y	
115						1	1	S	131	Y	
116						1	1	S	132	Y	
117						1	1	S	133	Y	
118						1	1	S	134	Y	
119						1	1	S	135	Y	
120						1	1	S	136	Y	
121						1	1	S	137	Y	
122						1	1	S	138	Y	
123						1	1	S	139	Y	
124						1	1	S	140	Y	
125						1	1	S	141	Y	
126						1	1	S	142	Y	
127						1	1	S	143	Y	
128						1	1	S	144	Y	
129						1	1	S	145	Y	
130						1	1	S	146	Y	
131						1	1	S	147	Y	
132						1	1	S	148	Y	
133						1	1	S	149	Y	
134						1	1	S	150	Y	
135						1	1	S	151	Y	
136						1	1	S	152	Y	
137						1	1	S	153	Y	
138						1	1	S	154	Y	
139						1	1	S	155	Y	
140						1	1	S	156	Y	
141						1	1	S	157	Y	
142						1	1	S	158	Y	
143						1	1	S	159	Y	
144						1	1	S	160	Y	
145						1	1	S	161	Y	
146						1	1	S	162	Y	
147						1	1	S	163	Y	
148						1	1	S	164	Y	
149						1	1	S	165	Y	
150						1	1	S	166	Y	
151						1	1	S	167	Y	
152						1	1	S	168	Y	
153						1	1	S	169	Y	
154						1	1	S	170	Y	
155						1	1	S	171	Y	
156						1	1	S	172	Y	
157						1	1	S	173	Y	
158						1	1	S	174	Y	
159						1	1	S	175	Y	
160						1	1	S	176	Y	
161						1	1	S	177	Y	
162						1	1	S	178	Y	
163						1	1	S	179	Y	
164						1	1	S	180	Y	
165						1	1	S	181	Y	
166						1	1	S	182	Y	
167						1	1	S	183	Y	
168						1	1	S	184	Y	
169						1	1	S	185	Y	
170						1	1	S	186	Y	
171				</td							



ALS Environmental  
ALS Group USA, Corp  
1565 Jefferson Rd, Building 300, Suite 360  
Rochester, NY 14623  
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[www.alsglobal.com](http://www.alsglobal.com)

July 09, 2015

**Analytical Report for Service Request No: R1505119**

Ms. Cecelia Byers  
CB&I Environmental & Infrastructure  
2790 Mossside Boulevard  
Monroeville, PA 15146

**Laboratory Results for: Textron Wheatfield/148900**

Dear Ms. Byers:

Enclosed are the results of the sample(s) submitted to our laboratory on June 25, 2015. For your reference, these analyses have been assigned our service request number **R1505119**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at [Janice.Jaeger@alsglobal.com](mailto:Janice.Jaeger@alsglobal.com).

Respectfully submitted,

**ALS Group USA Corp. dba ALS Environmental**

A handwritten signature in black ink, appearing to read "Janice Jaeger".

Janice Jaeger  
Project Manager

Page 1 of 36

CC: Lisa Schermerhorn

## ALS Environmental

**Client:** CB&I  
**Service Request No.:** R1505119  
**Project:** Textron Wheatfield  
**Date Received:** 6/25/15  
**Sample Matrix:** Water  
**Project/Case No.:**

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS).

#### Sample Receipt

Water samples were received for analysis at ALS Environmental on 6/25/15. The samples were received in good condition and consistent with the accompanying chain of custody form. All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory. Due to a laboratory error, all 3 vials for 87-05-03 were broken in the laboratory and the client was notified.

#### Volatile Organics

Water samples were analyzed for a site specific list of Volatiles by method 5030C/8260C from SW-846.

All initial and continuing calibration criteria were met for all compounds.

All Tuning criteria were within QC limits.

87-02-3 and 87-04-3 were analyzed at dilutions due to the Sulfur dioxide present in the sample.

Various compounds for 87-15-3 and 87-13-3 have been flagged with an "E" as being outside the calibration range of the instrument. The samples were repeated at dilutions and both sets of data have been reported out.

All Laboratory Control Sample (LCS) recoveries were within limits.

Site specific QC was performed on 87-02-3 as requested. All MS/MSD recoveries and RPD's were acceptable.

All Internal Standard (IS) Areas were within limits.

All surrogate standard recoveries were within limits.

The Method blank associated with these samples was free of contamination.

All samples were analyzed within recommended holding times.

# ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 148900  
 Submission: R1505119  
 Client: CB&I  
 Client Rep: JJAEGER  
 Project: Textron Wheatfield

Batch Complete: Yes  
 Diskette Requested: No  
 Date: 7/1/15  
 Custody Seal: Present/Absent:  
 Chain of Custody: Present/Absent:

Date Revised:  
 Date Due: 7/10/15  
 Protocol: SW846  
 Shipping No.:  
 SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH	% Solids	Remarks	Sample Condition
R1505119-001QC	87-02-3	Water	8260C	6/25/15	6/25/15				
R1505119-003	87-04-3	Water	8260C	6/25/15	6/25/15				
R1505119-004	87-16-3	Water	8260C	6/25/15	6/25/15				
R1505119-005	87-14-3	Water	8260C	6/25/15	6/25/15				
R1505119-006	87-15-3	Water	8260C	6/25/15	6/25/15				
R1505119-006.R01	87-15-3	Water	8260C	6/25/15	6/25/15				
R1505119-007	87-13-3	Water	8260C	6/25/15	6/25/15				
R1505119-007.R01	87-13-3	Water	8260C	6/25/15	6/25/15				
R1505119-008	DUP	Water	8260C	6/25/15	6/25/15				
R1505119-009	TRIP BLANK	Water	8260C	6/25/15	6/25/15				



Folder Comments: in excel



**ALS** Environmental

## REPORT QUALIFIERS AND DEFINITIONS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
  - J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).
  - B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
  - E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
  - F Organics- Concentration has exceeded the calibration range for that specific analysis.
  - D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
  - \* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
  - H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
  - # Spike was diluted out.
  - + Correlation coefficient for MSA is <0.995.
  - N Inorganics- Matrix spike recovery was outside laboratory limits.
  - N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
  - S Concentration has been determined using Method of Standard Additions (MSA).
  - W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
  - P Concentration >40% (25% for CLP) difference between the two GC columns.
  - C Confirmed by GC/MS
  - Q DoD reports: indicates a pesticide/Aroclor is not confirmed ( $\geq 100\%$  Difference between two GC columns).
  - X See Case Narrative for discussion.
- MRL Method Reporting Limit. Also known as:  
LOQ Limit of Quantitation (LOQ)  
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
- MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
- LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.
- ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



### Rochester Lab ID # for State Certifications<sup>1</sup>

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

<sup>1</sup> Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>



## **CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM**

27360

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 | +1 585 288 8475 (fax) PAGE

Distribution: White - Lab Copy; Yellow - Return to Originator

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**R1505119** 5  
CB&I Environmental & Infrastructure  
Textron Wheatfield



## Cooler Receipt and Preservation Check Form

R1505119  
CB&I Environmental & Infrastructure  
Textron Wheatfield

5

Project/Client CB&IFolder Number R15-5119Cooler received on 6/25/15by: DW

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<u>Y</u> <u>NP</u>
2	Custody papers properly completed (ink, signed)?	<u>X</u> <u>N</u>
3	Did all bottles arrive in good condition (unbroken)?	<u>Y</u> <u>NP</u>
4	Circle: Wet Ice Dry Ice Gel packs present?	<u>CD</u> <u>N</u>

5a	Perchlorate samples have required headspace?	<u>Y</u> <u>N</u> <u>NA</u>
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<u>Y</u> <u>N</u> <u>NA</u>
6	Where did the bottles originate?	<u>ALS/ROC</u> <u>CLIENT</u>
7	Soil VOA received as:	Bulk Encore 5035set NA

8. Temperature Readings Date: 6/25/15 Time: 1705ID: IR#3 IR#5

From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>11.4</u>							
Correction Factor (°C)	<u>-0.4</u>							
Corrected Temp (°C)	<u>12.15</u>							
Within 0-6°C?	<u>Y</u> <u>NP</u>	<u>Y</u> <u>N</u>						

If out of Temperature, note packing/ice condition: \_\_\_\_\_ \* Ice melted Poorly Packed Same Day Rule

&amp; Client Approval to Run Samples: \_\_\_\_\_ Standing Approval Client aware at drop-off Client notified by: \_\_\_\_\_

All samples held in storage location:	<u>R-cc2</u>	by <u>DW</u>	on <u>6/25/15</u>	at <u>1705</u>
5035 samples placed in storage location:		by _____	on _____	at _____

PC Secondary Review: VM 6/29/15Cooler Breakdown: Date: 6/25/15 Time: 2229 by: DW

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated NA

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH	Yes=All samples OK
≥12	NaOH									
≤2	HNO <sub>3</sub>									
≤2	H <sub>2</sub> SO <sub>4</sub>									
<4	NaHSO <sub>4</sub>									
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (CN), ascorbic (phenol).						
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	-	-							
	ZnAcetate	-	-							
	HCl	**	**	4114070	6/16					

\*\*Not to be tested before analysis - pH tested and recorded by VOAs on a separate worksheet

No=Samples were preserved at The lab as listed

PM OK to Adjust: \_\_\_\_\_

Bottle lot numbers: 5-120-002

Other Comments:

\* Broken vials for samples

- 3 vials for 87-05(3)  
dw 6/25/15 - 2 vials for 87-15-(3)
- 2 vials for 87-14-(3) - 1 vial for Trip Blank
- 2 vials for DLP - vial for 87-16-(3)
- 2 vials for 87-02(3)

PC Secondary Review: VM 6/29/15

\*significant air bubbles: VOA &gt; 5-6 mm : WC &gt; 1 in. diameter

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 20:14

**Sample Name:** 87-02-3  
**Lab Code:** R1505119-001

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4363.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	5.0 U	5.0	1.1	
75-01-4	Vinyl Chloride	5.0 U	5.0	1.6	
75-00-3	Chloroethane	5.0 U	5.0	1.2	
74-83-9	Bromomethane	5.0 U	5.0	1.5	
75-35-4	1,1-Dichloroethene	5.0 U	5.0	2.9	
67-64-1	Acetone	25 U	25	6.2	
75-15-0	Carbon Disulfide	1.2 J	5.0	1.1	
75-09-2	Methylene Chloride	5.0 U	5.0	3.0	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	1.7	
75-34-3	1,1-Dichloroethane	5.0 U	5.0	1.0	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	1.5	
78-93-3	2-Butanone (MEK)	25 U	25	4.1	
67-66-3	Chloroform	5.0 U	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	5.0 U	5.0	1.8	
56-23-5	Carbon Tetrachloride	5.0 U	5.0	2.3	
71-43-2	Benzene	5.0 U	5.0	1.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	1.8	
79-01-6	Trichloroethene	5.0 U	5.0	1.1	
78-87-5	1,2-Dichloropropane	5.0 U	5.0	1.0	
75-27-4	Bromodichloromethane	5.0 U	5.0	1.6	
10061-01-5	cis-1,3-Dichloropropene	5.0 U	5.0	1.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	25 U	25	3.4	
108-88-3	Toluene	5.0 U	5.0	1.0	
10061-02-6	trans-1,3-Dichloropropene	5.0 U	5.0	1.0	
79-00-5	1,1,2-Trichloroethane	5.0 U	5.0	1.8	
127-18-4	Tetrachloroethene	5.0 U	5.0	1.5	
591-78-6	2-Hexanone	25 U	25	8.3	
124-48-1	Dibromochloromethane	5.0 U	5.0	1.6	
108-90-7	Chlorobenzene	5.0 U	5.0	1.5	
100-41-4	Ethylbenzene	5.0 U	5.0	1.0	
179601-23-1	m,p-Xylenes	10 U	10	1.7	
95-47-6	o-Xylene	5.0 U	5.0	1.0	
100-42-5	Styrene	5.0 U	5.0	1.0	
75-25-2	Bromoform	5.0 U	5.0	2.1	
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U	5.0	1.3	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-02-3  
**Lab Code:** R1505119-001

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 20:14

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4363.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	6/29/15 20:14	
Toluene-d8	108	87-121	6/29/15 20:14	
Dibromofluoromethane	106	89-119	6/29/15 20:14	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1040  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:43

**Sample Name:** 87-04-3  
**Lab Code:** R1505119-003

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4362.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	5.0 U	5.0	1.1	
75-01-4	Vinyl Chloride	5.0 U	5.0	1.6	
75-00-3	Chloroethane	5.0 U	5.0	1.2	
74-83-9	Bromomethane	5.0 U	5.0	1.5	
75-35-4	1,1-Dichloroethene	5.0 U	5.0	2.9	
67-64-1	Acetone	25 U	25	6.2	
75-15-0	Carbon Disulfide	5.0 U	5.0	1.1	
75-09-2	Methylene Chloride	5.0 U	5.0	3.0	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	1.7	
75-34-3	1,1-Dichloroethane	5.0 U	5.0	1.0	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	1.5	
78-93-3	2-Butanone (MEK)	25 U	25	4.1	
67-66-3	Chloroform	2.6 J	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	5.0 U	5.0	1.8	
56-23-5	Carbon Tetrachloride	5.0 U	5.0	2.3	
71-43-2	Benzene	5.0 U	5.0	1.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	1.8	
79-01-6	Trichloroethene	1.8 J	5.0	1.1	
78-87-5	1,2-Dichloropropane	5.0 U	5.0	1.0	
75-27-4	Bromodichloromethane	5.0 U	5.0	1.6	
10061-01-5	cis-1,3-Dichloropropene	5.0 U	5.0	1.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	25 U	25	3.4	
108-88-3	Toluene	5.0 U	5.0	1.0	
10061-02-6	trans-1,3-Dichloropropene	5.0 U	5.0	1.0	
79-00-5	1,1,2-Trichloroethane	5.0 U	5.0	1.8	
127-18-4	Tetrachloroethene	5.0 U	5.0	1.5	
591-78-6	2-Hexanone	25 U	25	8.3	
124-48-1	Dibromochloromethane	5.0 U	5.0	1.6	
108-90-7	Chlorobenzene	5.0 U	5.0	1.5	
100-41-4	Ethylbenzene	5.0 U	5.0	1.0	
179601-23-1	m,p-Xylenes	10 U	10	1.7	
95-47-6	o-Xylene	5.0 U	5.0	1.0	
100-42-5	Styrene	5.0 U	5.0	1.0	
75-25-2	Bromoform	5.0 U	5.0	2.1	
79-34-5	1,1,2-Tetrachloroethane	5.0 U	5.0	1.3	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-04-3  
**Lab Code:** R1505119-003

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1040  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:43

**Units:** Percent  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4362.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85-122	6/29/15 19:43	
Toluene-d8	109	87-121	6/29/15 19:43	
Dibromofluoromethane	106	89-119	6/29/15 19:43	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1125  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 13:28

**Sample Name:** 87-16-3  
**Lab Code:** R1505119-004

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4324.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	3.4	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	2.2 J	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.9	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	4.0	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	4.2	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1125  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 13:28

**Sample Name:** 87-16-3  
**Lab Code:** R1505119-004

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUUDATA\MSVOA12\DATA\062815\MM4324.D

**Analysis Lot:** 450948

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	% Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	112	85-122	6/28/15 13:28		
Toluene-d8	108	87-121	6/28/15 13:28		
Dibromofluoromethane	108	89-119	6/28/15 13:28		

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 12:10  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:08

**Sample Name:** 87-14-3  
**Lab Code:** R1505119-005

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4351.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	0.31 J	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water  
  
**Sample Name:** 87-14-3  
**Lab Code:** R1505119-005

**Service Request:** R1505119  
**Date Collected:** 6/25/15 12:10  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:08

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4351.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	109	85-122	6/29/15 14:08	
Toluene-d8	108	87-121	6/29/15 14:08	
Dibromofluoromethane	106	89-119	6/29/15 14:08	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water  
**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:38

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4352.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	440 E	1.0	0.32	
75-00-3	Chloroethane	0.32 J	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	4.7	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	0.61 J	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	5.4	1.0	0.33	
75-34-3	1,1-Dichloroethane	6.8	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	950 E	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	0.66 J	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.6	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water  
  
**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:38

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4352.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85-122	6/29/15 14:38	
Toluene-d8	109	87-121	6/29/15 14:38	
Dibromofluoromethane	107	89-119	6/29/15 14:38	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:40

**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006  
**Run Type:** Dilution

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4354.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	10 U	10	2.1	
75-01-4	Vinyl Chloride	390 D	10	3.2	
75-00-3	Chloroethane	10 U	10	2.4	
74-83-9	Bromomethane	10 U	10	2.9	
75-35-4	1,1-Dichloroethene	6.1 DJ	10	5.7	
67-64-1	Acetone	50 U	50	13	
75-15-0	Carbon Disulfide	10 U	10	2.2	
75-09-2	Methylene Chloride	10 U	10	6.0	
156-60-5	trans-1,2-Dichloroethene	5.4 DJ	10	3.4	
75-34-3	1,1-Dichloroethane	7.1 DJ	10	2.0	
156-59-2	cis-1,2-Dichloroethene	840 D	10	3.0	
78-93-3	2-Butanone (MEK)	50 U	50	8.2	
67-66-3	Chloroform	3.4 DJ	10	2.5	
71-55-6	1,1,1-Trichloroethane	10 U	10	3.6	
56-23-5	Carbon Tetrachloride	10 U	10	4.5	
71-43-2	Benzene	10 U	10	2.0	
107-06-2	1,2-Dichloroethane	10 U	10	3.6	
79-01-6	Trichloroethene	2.4 DJ	10	2.2	
78-87-5	1,2-Dichloropropane	10 U	10	2.0	
75-27-4	Bromodichloromethane	10 U	10	3.2	
10061-01-5	cis-1,3-Dichloropropene	10 U	10	2.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	50 U	50	6.7	
108-88-3	Toluene	10 U	10	2.0	
10061-02-6	trans-1,3-Dichloropropene	10 U	10	2.0	
79-00-5	1,1,2-Trichloroethane	10 U	10	3.5	
127-18-4	Tetrachloroethene	10 U	10	3.0	
591-78-6	2-Hexanone	50 U	50	17	
124-48-1	Dibromochloromethane	10 U	10	3.1	
108-90-7	Chlorobenzene	10 U	10	2.9	
100-41-4	Ethylbenzene	10 U	10	2.0	
179601-23-1	m,p-Xylenes	20 U	20	3.4	
95-47-6	o-Xylene	10 U	10	2.0	
100-42-5	Styrene	10 U	10	2.0	
75-25-2	Bromoform	10 U	10	4.2	
79-34-5	1,1,2,2-Tetrachloroethane	10 U	10	2.5	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006  
**Run Type:** Dilution

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:40

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4354.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	6/29/15 15:40	
Toluene-d8	109	87-121	6/29/15 15:40	
Dibromofluoromethane	106	89-119	6/29/15 15:40	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 14:29

**Sample Name:** 87-13-3  
**Lab Code:** R1505119-007

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4326.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 200

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	200 U	200	42	
75-01-4	Vinyl Chloride	990	200	64	
75-00-3	Chloroethane	200 U	200	48	
74-83-9	Bromomethane	200 U	200	58	
75-35-4	1,1-Dichloroethene	200 U	200	120	
67-64-1	Acetone	1000 U	1000	250	
75-15-0	Carbon Disulfide	470	200	44	
75-09-2	Methylene Chloride	200 U	200	120	
156-60-5	trans-1,2-Dichloroethene	310	200	66	
75-34-3	1,1-Dichloroethane	200 U	200	40	
156-59-2	cis-1,2-Dichloroethene	49000 E	200	60	
78-93-3	2-Butanone (MEK)	1000 U	1000	170	
67-66-3	Chloroform	520	200	50	
71-55-6	1,1,1-Trichloroethane	200 U	200	72	
56-23-5	Carbon Tetrachloride	200 U	200	90	
71-43-2	Benzene	200 U	200	40	
107-06-2	1,2-Dichloroethane	200 U	200	72	
79-01-6	Trichloroethene	71000 E	200	44	
78-87-5	1,2-Dichloropropane	200 U	200	40	
75-27-4	Bromodichloromethane	94 J	200	64	
10061-01-5	cis-1,3-Dichloropropene	200 U	200	48	
108-10-1	4-Methyl-2-pentanone (MIBK)	1000 U	1000	140	
108-88-3	Toluene	54 J	200	40	
10061-02-6	trans-1,3-Dichloropropene	200 U	200	40	
79-00-5	1,1,2-Trichloroethane	200 U	200	68	
127-18-4	Tetrachloroethene	200 U	200	60	
591-78-6	2-Hexanone	1000 U	1000	340	
124-48-1	Dibromochloromethane	200 U	200	62	
108-90-7	Chlorobenzene	200 U	200	58	
100-41-4	Ethylbenzene	200 U	200	40	
179601-23-1	m,p-Xylenes	400 U	400	66	
95-47-6	o-Xylene	200 U	200	40	
100-42-5	Styrene	200 U	200	40	
75-25-2	Bromoform	200 U	200	84	
79-34-5	1,1,2,2-Tetrachloroethane	200 U	200	50	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-13-3  
**Lab Code:** R1505119-007

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 14:29

Units:  $\mu\text{g/L}$   
Basis: NA

## **Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C **Analysis Lot:** 450948  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUDATA\MSVOA12\DATA\062815\MM4326.D\  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 200

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	110	85-122	6/28/15 14:29		
Toluene-d8	109	87-121	6/28/15 14:29		
Dibromofluoromethane	109	89-119	6/28/15 14:29		

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:13

**Sample Name:** 87-13-3      **Units:** µg/L  
**Lab Code:** R1505119-007      **Basis:** NA  
**Run Type:** Dilution

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4361.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 500

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	500 U	500	110	
75-01-4	Vinyl Chloride	1100 D	500	160	
75-00-3	Chloroethane	500 U	500	120	
74-83-9	Bromomethane	500 U	500	150	
75-35-4	1,1-Dichloroethene	500 U	500	290	
67-64-1	Acetone	2500 U	2500	620	
75-15-0	Carbon Disulfide	680 D	500	110	
75-09-2	Methylene Chloride	500 U	500	300	
156-60-5	trans-1,2-Dichloroethene	390 DJ	500	170	
75-34-3	1,1-Dichloroethane	500 U	500	100	
156-59-2	cis-1,2-Dichloroethene	50000 D	500	150	
78-93-3	2-Butanone (MEK)	2500 U	2500	410	
67-66-3	Chloroform	1200 D	500	130	
71-55-6	1,1,1-Trichloroethane	500 U	500	180	
56-23-5	Carbon Tetrachloride	500 U	500	230	
71-43-2	Benzene	500 U	500	100	
107-06-2	1,2-Dichloroethane	500 U	500	180	
79-01-6	Trichloroethene	71000 D	500	110	
78-87-5	1,2-Dichloropropane	500 U	500	100	
75-27-4	Bromodichloromethane	270 DJ	500	160	
10061-01-5	cis-1,3-Dichloropropene	500 U	500	120	
108-10-1	4-Methyl-2-pentanone (MIBK)	2500 U	2500	340	
108-88-3	Toluene	500 U	500	100	
10061-02-6	trans-1,3-Dichloropropene	500 U	500	100	
79-00-5	1,1,2-Trichloroethane	500 U	500	170	
127-18-4	Tetrachloroethene	500 U	500	150	
591-78-6	2-Hexanone	2500 U	2500	830	
124-48-1	Dibromochloromethane	500 U	500	160	
108-90-7	Chlorobenzene	500 U	500	150	
100-41-4	Ethylbenzene	500 U	500	100	
179601-23-1	m,p-Xylenes	1000 U	1000	170	
95-47-6	o-Xylene	500 U	500	100	
100-42-5	Styrene	500 U	500	100	
75-25-2	Bromoform	500 U	500	210	
79-34-5	1,1,2,2-Tetrachloroethane	500 U	500	130	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-13-3  
**Lab Code:** R1505119-007  
**Run Type:** Dilution

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:13

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4361.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 500

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	114	85-122	6/29/15 19:13	
Toluene-d8	109	87-121	6/29/15 19:13	
Dibromofluoromethane	109	89-119	6/29/15 19:13	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:09

**Sample Name:** DUP  
**Lab Code:** R1505119-008

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4353.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	10 U	10	2.1	
75-01-4	Vinyl Chloride	420	10	3.2	
75-00-3	Chloroethane	10 U	10	2.4	
74-83-9	Bromomethane	10 U	10	2.9	
75-35-4	1,1-Dichloroethene	10 U	10	5.7	
67-64-1	Acetone	50 U	50	13	
75-15-0	Carbon Disulfide	10 U	10	2.2	
75-09-2	Methylene Chloride	41	10	6.0	
156-60-5	trans-1,2-Dichloroethene	4.4 J	10	3.4	
75-34-3	1,1-Dichloroethane	5.9 J	10	2.0	
156-59-2	cis-1,2-Dichloroethene	910	10	3.0	
78-93-3	2-Butanone (MEK)	50 U	50	8.2	
67-66-3	Chloroform	4.5 J	10	2.5	
71-55-6	1,1,1-Trichloroethane	10 U	10	3.6	
56-23-5	Carbon Tetrachloride	10 U	10	4.5	
71-43-2	Benzene	10 U	10	2.0	
107-06-2	1,2-Dichloroethane	10 U	10	3.6	
79-01-6	Trichloroethene	2.2 J	10	2.2	
78-87-5	1,2-Dichloropropane	10 U	10	2.0	
75-27-4	Bromodichloromethane	10 U	10	3.2	
10061-01-5	cis-1,3-Dichloropropene	10 U	10	2.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	50 U	50	6.7	
108-88-3	Toluene	10 U	10	2.0	
10061-02-6	trans-1,3-Dichloropropene	10 U	10	2.0	
79-00-5	1,1,2-Trichloroethane	10 U	10	3.5	
127-18-4	Tetrachloroethene	10 U	10	3.0	
591-78-6	2-Hexanone	50 U	50	17	
124-48-1	Dibromochloromethane	10 U	10	3.1	
108-90-7	Chlorobenzene	10 U	10	2.9	
100-41-4	Ethylbenzene	10 U	10	2.0	
179601-23-1	m,p-Xylenes	20 U	20	3.4	
95-47-6	o-Xylene	10 U	10	2.0	
100-42-5	Styrene	10 U	10	2.0	
75-25-2	Bromoform	10 U	10	4.2	
79-34-5	1,1,2,2-Tetrachloroethane	10 U	10	2.5	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** DUP  
**Lab Code:** R1505119-008

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:09

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4353.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	6/29/15 15:09	
Toluene-d8	108	87-121	6/29/15 15:09	
Dibromofluoromethane	104	89-119	6/29/15 15:09	

ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 12:57

**Sample Name:** TRIP BLANK  
**Lab Code:** R1505119-009

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUUDATA\MSVOA12\DATA\062815\MM4323.D\

Analysis Lot: 450948

**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** TRIP BLANK  
**Lab Code:** R1505119-009

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 12:57

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	108	85-122	6/28/15 12:57		
Toluene-d8	107	87-121	6/28/15 12:57		
Dibromofluoromethane	106	89-119	6/28/15 12:57		

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/28/15 11:25

**Sample Name:** Method Blank  
**Lab Code:** RQ1507088-04

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4320.D\

**Analysis Lot:** 450948

**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/28/15 11:25

**Sample Name:** Method Blank  
**Lab Code:** RQ1507088-04

Units:  $\mu\text{g/L}$   
Basis: NA

## **Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUDATA\MSV рA12\DATA\062815\MM4320.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	110	85-122	6/28/15 11:25		
Toluene-d8	108	87-121	6/28/15 11:25		
Dibromofluoromethane	109	89-119	6/28/15 11:25		

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/29/15 12:35

**Sample Name:** Method Blank  
**Lab Code:** RQ1507136-04

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4348.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1507136-04

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/29/15 12:35

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4348.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	6/29/15 12:35	
Toluene-d8	111	87-121	6/29/15 12:35	
Dibromofluoromethane	107	89-119	6/29/15 12:35	

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15

**Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** 87-02-3  
**Lab Code:** R1505119-001

**Units:** µg/L  
**Basis:** NA

**Analytical Method:** 8260C

<b>Analyte Name</b>	<b>Sample Result</b>	87-02-3MS Matrix Spike RQ1507136-07			87-02-3DMS Duplicate Matrix Spike RQ1507136-08			<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
		<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>			
Chloromethane	ND	295	250	118	297	250	119	55 - 160	<1	30
Vinyl Chloride	ND	269	250	107	275	250	110	60 - 157	2	30
Chloroethane	ND	249	250	100	219	250	87	70 - 140	13	30
Bromomethane	ND	139	250	56	138	250	55	10 - 162	1	30
1,1-Dichloroethene	ND	254	250	102	260	250	104	72 - 125	2	30
Acetone	ND	225	250	90	223	250	89	29 - 151	<1	30
Carbon Disulfide	1.2	223	250	89	226	250	90	34 - 162	1	30
Methylene Chloride	ND	249	250	100	261	250	104	75 - 121	5	30
trans-1,2-Dichloroethene	ND	264	250	106	266	250	106	77 - 125	<1	30
1,1-Dichloroethane	ND	247	250	99	259	250	104	74 - 132	5	30
cis-1,2-Dichloroethene	ND	260	250	104	269	250	108	72 - 133	4	30
2-Butanone (MEK)	ND	282	250	113	273	250	109	46 - 141	3	30
Chloroform	ND	256	250	102	259	250	104	75 - 130	1	30
1,1,1-Trichloroethane	ND	247	250	99	245	250	98	74 - 127	<1	30
Carbon Tetrachloride	ND	221	250	89	232	250	93	71 - 135	5	30
Benzene	ND	261	250	104	263	250	105	76 - 129	<1	30
1,2-Dichloroethane	ND	236	250	94	244	250	98	72 - 132	4	30
Trichloroethene	ND	260	250	104	265	250	106	62 - 142	2	30
1,2-Dichloropropane	ND	249	250	100	259	250	104	79 - 124	4	30
Bromodichloromethane	ND	241	250	96	246	250	98	76 - 127	2	30
cis-1,3-Dichloropropene	ND	178	250	71	177	250	71	52 - 134	<1	30
4-Methyl-2-pentanone (MIBK)	ND	262	250	105	262	250	105	60 - 141	<1	30
Toluene	ND	258	250	103	264	250	105	79 - 125	2	30
trans-1,3-Dichloropropene	ND	171	250	68	173	250	69	64 - 123	2	30
1,1,2-Trichloroethane	ND	258	250	103	269	250	108	82 - 115	4	30
Tetrachloroethene	ND	238	250	95	246	250	99	67 - 137	3	30
2-Hexanone	ND	246	250	99	239	250	96	56 - 132	3	30
Dibromochloromethane	ND	226	250	90	234	250	94	72 - 128	4	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15

**Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** 87-02-3  
**Lab Code:** R1505119-001  
**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

<b>Analyte Name</b>	<b>Sample Result</b>	87-02-3MS			87-02-3DMS			<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
		<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>			
Chlorobenzene	ND	246	250	98	246	250	98	76 - 125	<1	30
Ethylbenzene	ND	226	250	90	231	250	92	72 - 134	2	30
m,p-Xylenes	ND	504	500	101	502	500	100	68 - 138	<1	30
o-Xylene	ND	246	250	98	255	250	102	68 - 134	4	30
Styrene	ND	149	250	60	154	250	62	34 - 156	3	30
Bromoform	ND	194	250	78	203	250	81	58 - 133	5	30
1,1,2,2-Tetrachloroethane	ND	241	250	96	251	250	100	72 - 122	4	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 450948

**Lab Control Sample**

RQ1507088-03

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Chloromethane	23.1	20.0	116	64 - 140
Vinyl Chloride	20.9	20.0	104	69 - 136
Chloroethane	16.0	20.0	80	71 - 128
Bromomethane	20.3	20.0	101	41 - 159
1,1-Dichloroethene	19.7	20.0	99	74 - 135
Acetone	17.0	20.0	85	51 - 146
Carbon Disulfide	20.8	20.0	104	63 - 141
Methylene Chloride	19.3	20.0	96	73 - 122
trans-1,2-Dichloroethene	20.1	20.0	101	78 - 124
1,1-Dichloroethane	19.4	20.0	97	76 - 128
cis-1,2-Dichloroethene	20.7	20.0	104	80 - 121
2-Butanone (MEK)	21.1	20.0	105	66 - 129
Chloroform	20.2	20.0	101	76 - 120
1,1,1-Trichloroethane	18.3	20.0	91	71 - 123
Carbon Tetrachloride	18.7	20.0	93	66 - 128
Benzene	20.6	20.0	103	76 - 118
1,2-Dichloroethane	18.6	20.0	93	72 - 130
Trichloroethene	20.0	20.0	100	76 - 123
1,2-Dichloropropane	19.7	20.0	98	80 - 119
Bromodichloromethane	18.9	20.0	94	79 - 122
cis-1,3-Dichloropropene	18.4	20.0	92	77 - 125
4-Methyl-2-pentanone (MIBK)	19.4	20.0	97	68 - 129
Toluene	19.5	20.0	98	77 - 120
trans-1,3-Dichloropropene	18.9	20.0	95	72 - 123
1,1,2-Trichloroethane	19.9	20.0	100	79 - 117
Tetrachloroethene	18.8	20.0	94	69 - 124
2-Hexanone	17.9	20.0	90	61 - 131
Dibromochloromethane	18.1	20.0	90	79 - 125
Chlorobenzene	18.7	20.0	94	80 - 121
Ethylbenzene	17.6	20.0	88	76 - 120
m,p-Xylenes	38.4	40.0	96	78 - 123
o-Xylene	19.1	20.0	96	77 - 131
Styrene	19.1	20.0	95	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 450948

**Lab Control Sample**  
**RQ1507088-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Bromoform	17.1	20.0	86	65 - 138
1,1,2,2-Tetrachloroethane	18.3	20.0	92	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: CB&I  
 Project: Textron Wheatfield/148900  
 Sample Matrix: Water

Service Request: R1505119  
 Date Analyzed: 6/29/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

Analytical Method: 8260C

Units:  $\mu\text{g/L}$   
 Basis: NA

Analysis Lot: 451047

**Lab Control Sample**  
**RQ1507136-03**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Chloromethane	23.9	20.0	119	64 - 140
Vinyl Chloride	21.8	20.0	109	69 - 136
Chloroethane	17.8	20.0	89	71 - 128
Bromomethane	18.3	20.0	91	41 - 159
1,1-Dichloroethene	20.1	20.0	101	74 - 135
Acetone	16.7	20.0	84	51 - 146
Carbon Disulfide	20.0	20.0	100	63 - 141
Methylene Chloride	20.5	20.0	103	73 - 122
trans-1,2-Dichloroethene	20.8	20.0	104	78 - 124
1,1-Dichloroethane	20.7	20.0	103	76 - 128
cis-1,2-Dichloroethene	21.3	20.0	106	80 - 121
2-Butanone (MEK)	22.5	20.0	112	66 - 129
Chloroform	21.6	20.0	108	76 - 120
1,1,1-Trichloroethane	20.1	20.0	100	71 - 123
Carbon Tetrachloride	19.0	20.0	95	66 - 128
Benzene	20.9	20.0	104	76 - 118
1,2-Dichloroethane	19.5	20.0	98	72 - 130
Trichloroethene	20.9	20.0	105	76 - 123
1,2-Dichloropropane	20.7	20.0	103	80 - 119
Bromodichloromethane	19.3	20.0	96	79 - 122
cis-1,3-Dichloropropene	19.4	20.0	97	77 - 125
4-Methyl-2-pentanone (MIBK)	21.2	20.0	106	68 - 129
Toluene	20.6	20.0	103	77 - 120
trans-1,3-Dichloropropene	20.1	20.0	100	72 - 123
1,1,2-Trichloroethane	21.6	20.0	108	79 - 117
Tetrachloroethene	20.3	20.0	102	69 - 124
2-Hexanone	19.7	20.0	98	61 - 131
Dibromochloromethane	18.9	20.0	94	79 - 125
Chlorobenzene	19.9	20.0	99	80 - 121
Ethylbenzene	17.8	20.0	89	76 - 120
m,p-Xylenes	39.9	40.0	100	78 - 123
o-Xylene	20.0	20.0	100	77 - 131
Styrene	19.8	20.0	99	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/29/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C**Units:**  $\mu\text{g/L}$   
**Basis:** NA**Analysis Lot:** 451047

**Lab Control Sample**  
**RQ1507136-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Bromoform	17.4	20.0	87	65 - 138
1,1,2,2-Tetrachloroethane	19.4	20.0	97	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



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F: 585-288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

July 09, 2015

**Analytical Report for Service Request No: R1505119**

Ms. Cecelia Byers  
CB&I Environmental & Infrastructure  
2790 Mosside Boulevard  
Monroeville, PA 15146

**Laboratory Results for: Textron Wheatfield/148900**

Dear Ms. Byers:

Enclosed are the results of the sample(s) submitted to our laboratory on June 25, 2015. For your reference, these analyses have been assigned our service request number **R1505119**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at [Janice.Jaeger@alsglobal.com](mailto:Janice.Jaeger@alsglobal.com).

Respectfully submitted,

**ALS Group USA Corp. dba ALS Environmental**

Janice Jaeger  
Project Manager

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CC: Lisa Schermerhorn



**ALS Environmental**

## **SDG NARRATIVE**

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Phone (585) 288-5380 Fax (585) 288-8475  
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## ALS Environmental

**Client:** CB&I  
**Service Request No.:** R1505119  
**Project:** Textron Wheatfield  
**Date Received:** 6/25/15  
**Sample Matrix:** Water  
**Project/Case No.:**

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS).

#### Sample Receipt

Water samples were received for analysis at ALS Environmental on 6/25/15. The samples were received in good condition and consistent with the accompanying chain of custody form. All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory. Due to a laboratory error, all 3 vials for 87-05-03 were broken in the laboratory and the client was notified.

#### Volatile Organics

Water samples were analyzed for a site specific list of Volatiles by method 5030C/8260C from SW-846.

All initial and continuing calibration criteria were met for all compounds.

All Tuning criteria were within QC limits.

87-02-3 and 87-04-3 were analyzed at dilutions due to the Sulfur dioxide present in the sample.

Various compounds for 87-15-3 and 87-13-3 have been flagged with an "E" as being outside the calibration range of the instrument. The samples were repeated at dilutions and both sets of data have been reported out.

All Laboratory Control Sample (LCS) recoveries were within limits.

Site specific QC was performed on 87-02-3 as requested. All MS/MSD recoveries and RPD's were acceptable.

All Internal Standard (IS) Areas were within limits.

All surrogate standard recoveries were within limits.

The Method blank associated with these samples was free of contamination.

All samples were analyzed within recommended holding times.

# ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 148900	Batch Complete: Yes	Date Revised:
Submission: R1505119	Diskette Requested: No	Date Due: 7/10/15
Client: CB&I	Date: 7/1/15	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: Textron Wheatfield	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks
Sample Condition								
R1505119-001QC	87-02-3	Water	8260C	6/25/15	6/25/15			
R1505119-003	87-04-3	Water	8260C	6/25/15	6/25/15			
R1505119-004	87-16-3	Water	8260C	6/25/15	6/25/15			
R1505119-005	87-14-3	Water	8260C	6/25/15	6/25/15			
R1505119-006	87-15-3	Water	8260C	6/25/15	6/25/15			
R1505119-006.R01	87-15-3	Water	8260C	6/25/15	6/25/15			
R1505119-007	87-13-3	Water	8260C	6/25/15	6/25/15			
R1505119-007.R01	87-13-3	Water	8260C	6/25/15	6/25/15			
R1505119-008	DUP	Water	8260C	6/25/15	6/25/15			
R1505119-009	TRIP BLANK	Water	8260C	6/25/15	6/25/15			

CEC 4

Folder Comments: in excel

## REPORT QUALIFIERS AND DEFINITIONS

- U** Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
  - J** Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).
  - B** Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
  - E** Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
  - F** Organics- Concentration has exceeded the calibration range for that specific analysis.
  - D** Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
  - \* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
  - H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
  - # Spike was diluted out.
  - + Correlation coefficient for MSA is <0.995.
  - N Inorganics- Matrix spike recovery was outside laboratory limits.
  - N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
  - S Concentration has been determined using Method of Standard Additions (MSA).
  - W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
  - P Concentration >40% (25% for CLP) difference between the two GC columns.
  - C Confirmed by GC/MS
  - Q DoD reports: indicates a pesticide/Aroclor is not confirmed ( $\geq 100\%$  Difference between two GC columns).
  - X See Case Narrative for discussion.
- MRL Method Reporting Limit. Also known as:  
 LOQ Limit of Quantitation (LOQ)  
 The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
- MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
- LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.
- ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



### Rochester Lab ID # for State Certifications<sup>1</sup>

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

<sup>1</sup> Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>



## CHAINS OF CUSTODY

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# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

27360

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name <b>Textron</b>		Project Number <b>148900</b>		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																
Project Manager <b>Cecelia Byers</b>		Report CC		PRESERVATIVE																
Company/Address <b>CB&amp;I Shaw 2796 Mossside Drive Monroeville PA 15146</b>				NUMBER OF CONTAINERS	GC/MS VOAs o 8230 o 824 o CLP GC/MS SV/OAs o 8210 o 825	GC VOAs o 8021 o 801/802 PESTICIDES o 8081 o 808 PCBs o 8082 o 808	METALS - TOTAL (List in comments below)	METALS - DISSOLVED (List in comments below)												
Phone # <b>518-281-2034</b>		Email							Preservative Key 0. NONE 1. HCl 2. HNO3 3. H2SO4 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO4 8. Other _____											
Sampler's Signature <b>[Signature]</b>		Sampler's Printed Name <b>John Moyer</b>		REMARKS/ ALTERNATE DESCRIPTION																
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX																
87-02-(3)		6-25-15	0900	GW																
87-05-(3)			0950																	
87-04-(3)			1040																	
87-16-(3)			1125																	
87-14-(3)			1210																	
87-15-(3)			1300																	
87-13-(3)			1340																	
87-02-(3) MS			0900																	
87-02-(3) MSD			0900																	
DUP			-																	
Trip Break		-	-																	
SPECIAL INSTRUCTIONS/COMMENTS Metals					TURNAROUND REQUIREMENTS				REPORT REQUIREMENTS				INVOICE INFORMATION							
5 day TAT requested.					RUSH (SURCHARGES APPLY)				I. Results Only				PO # _____ BILL TO: _____							
					1 day      2 day      3 day 4 day      5 day				II. Results + QC Summaries (LCS, DUP, MS/MSD as required)											
					III. Results + QC and Calibration Summaries															
					IV. Data Validation Report with Raw Data															
					Edata Yes No															
See OAPP <input type="checkbox"/>					REQUESTED REPORT DATE															
STATE WHERE SAMPLES WERE COLLECTED <b>NH</b>																				
RElinquished BY <b>[Signature]</b>		RECEIVED BY <b>[Signature]</b>		RElinquished BY		RECEIVED BY		RElinquished BY		RECEIVED BY										
Signature <b>John Moyer</b>		Signature <b>Daniel WRC</b>		Signature		Signature		Signature		Signature										
Printed Name <b>CB&amp;I</b>		Printed Name <b>ALS</b>		Printed Name		Printed Name		Printed Name		Printed Name										
Firm <b>6/25/15</b>		Firm <b>6/25/15 / 1700</b>		Firm		Firm		Firm		Firm										
Date/Time		Date/Time		Date/Time		Date/Time		Date/Time		Date/Time										





## Cooler Receipt and Preservation Check Form

Project/Client CB&IFolder Number R15-5119Cooler received on 6/25/15by dlw

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
2	Custody papers properly completed (ink, signed)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
3	Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

5a	Perchlorate samples have required headspace?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6	Where did the bottles originate?	ALS ROC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set NA

8. Temperature Readings Date: 6/25/15 Time: 1705ID: IR#5

From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>11.9</u>						
Correction Factor (°C)	<u>+0.4</u>						
Corrected Temp (°C)	<u>12.5</u>						
Within 0-6°C?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N					

If out of Temperature, note packing/ice condition: Ice melted Poorly Packed Same Day Rule& Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by: \_\_\_\_\_

All samples held in storage location:	<u>R-002</u>	by <u>dlw</u>	on <u>6/25/15</u>	at <u>1705</u>
5035 samples placed in storage location:		by _____	on _____	at _____

PC Secondary Review: VMS 6/29/15Cooler Breakdown: Date: 6/25/15 Time: 1705 by: dlw

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)?  YES  NO
2. Did all bottle labels and tags agree with custody papers?  YES  NO
3. Were correct containers used for the tests indicated?  YES  NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized  Tedlar® Bags Inflated NA

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO <sub>3</sub>								
≤2	H <sub>2</sub> SO <sub>4</sub>								
<4	NaHSO <sub>4</sub>								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (CN), ascorbic (phenol).					
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4114070	6/16				

\*\*Not to be tested before analysis - pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 5-120-002

Other Comments:

\* Broken vials for samples

- 3 vials for Test 87-05C3 dlw 6/25/15
- 2 vials for 87-14-③
- 2 vials for Dup
- 2 vials for 87-02③
- 2 vials for 87-15-③
- 1 vial for Trip Blank
- vial for 87-16-3

PC Secondary Review: VMS 6/29/15

\*significant air bubbles: VOA &gt; 5-6 mm : WC &gt; 1 in. diameter



**ALS ENVIRONMENTAL**  
**Chain of Custody Report**

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1505119-001.01	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0949	R-001-S12 / KRUEST	
		6/29/15	1423	In Lab / KRUEST	
		6/29/15	1431	R-001-S12 / BWOJTASIEWICZ	
R1505119-001.02					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-001.03					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-001.04					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-001.05					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-001.06					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-001.07					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-003.01					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0946	In Lab / KRUEST	
		6/28/15	0950	R-001-S12 / KRUEST	
R1505119-003.02	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/29/15	1423	In Lab / KRUEST	
		6/29/15	1431	R-001-S12 / BWOJTASIEWICZ	
R1505119-003.03					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-004.01					



**ALS ENVIRONMENTAL**  
**Chain of Custody Report**

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0946	In Lab / KRUEST	
		6/28/15	0950	R-001-S12 / KRUEST	
R1505119-004.02					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-005.01	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0949	R-001-S12 / KRUEST	
		6/29/15	1430	In Lab / KRUEST	
		6/29/15	1431	R-001-S12 / BWOJTASIEWICZ	
R1505119-006.01	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0949	R-001-S12 / KRUEST	
		6/29/15	1430	In Lab / KRUEST	
		6/29/15	1431	R-001-S12 / BWOJTASIEWICZ	
R1505119-007.01	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0946	In Lab / KRUEST	
		6/28/15	0950	R-001-S12 / KRUEST	
R1505119-007.02					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/29/15	1423	In Lab / KRUEST	
R1505119-007.03					
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
R1505119-008.01	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0949	R-001-S12 / KRUEST	
		6/29/15	1430	In Lab / KRUEST	
		6/29/15	1431	R-001-S12 / BWOJTASIEWICZ	



**ALS ENVIRONMENTAL**  
**Chain of Custody Report**

**Client:** CB&I Environmental & Infrastructure  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119

<b>Bottle ID</b>	<b>Tests</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
R1505119-009.01	8260C				
		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	
		6/28/15	0946	In Lab / KRUEST	
		6/28/15	0950	R-001-S12 / KRUEST	
R1505119-009.02		6/25/15	2232	SMO / DWARD	
		6/25/15	2233	R-001 / DWARD	



**ALS Environmental**

# **VOLATILE ORGANICS QC SUMMARY**

**ALS Environmental - Rochester, NY**  
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## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15

**Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** 87-02-3  
**Lab Code:** R1505119-001

**Units:** µg/L  
**Basis:** NA

**Analytical Method:** 8260C

<b>Analyte Name</b>	<b>Sample Result</b>	87-02-3MS			87-02-3DMS			<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>			
		Matrix Spike RQ1507136-07			Duplicate Matrix Spike RQ1507136-08								
		<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>						
Chloromethane	ND	295	250	118	297	250	119	55 - 160	<1	30			
Vinyl Chloride	ND	269	250	107	275	250	110	60 - 157	2	30			
Chloroethane	ND	249	250	100	219	250	87	70 - 140	13	30			
Bromomethane	ND	139	250	56	138	250	55	10 - 162	1	30			
1,1-Dichloroethene	ND	254	250	102	260	250	104	72 - 125	2	30			
Acetone	ND	225	250	90	223	250	89	29 - 151	<1	30			
Carbon Disulfide	1.2	223	250	89	226	250	90	34 - 162	1	30			
Methylene Chloride	ND	249	250	100	261	250	104	75 - 121	5	30			
trans-1,2-Dichloroethene	ND	264	250	106	266	250	106	77 - 125	<1	30			
1,1-Dichloroethane	ND	247	250	99	259	250	104	74 - 132	5	30			
cis-1,2-Dichloroethene	ND	260	250	104	269	250	108	72 - 133	4	30			
2-Butanone (MEK)	ND	282	250	113	273	250	109	46 - 141	3	30			
Chloroform	ND	256	250	102	259	250	104	75 - 130	1	30			
1,1,1-Trichloroethane	ND	247	250	99	245	250	98	74 - 127	<1	30			
Carbon Tetrachloride	ND	221	250	89	232	250	93	71 - 135	5	30			
Benzene	ND	261	250	104	263	250	105	76 - 129	<1	30			
1,2-Dichloroethane	ND	236	250	94	244	250	98	72 - 132	4	30			
Trichloroethene	ND	260	250	104	265	250	106	62 - 142	2	30			
1,2-Dichloropropane	ND	249	250	100	259	250	104	79 - 124	4	30			
Bromodichloromethane	ND	241	250	96	246	250	98	76 - 127	2	30			
cis-1,3-Dichloropropene	ND	178	250	71	177	250	71	52 - 134	<1	30			
4-Methyl-2-pentanone (MIBK)	ND	262	250	105	262	250	105	60 - 141	<1	30			
Toluene	ND	258	250	103	264	250	105	79 - 125	2	30			
trans-1,3-Dichloropropene	ND	171	250	68	173	250	69	64 - 123	2	30			
1,1,2-Trichloroethane	ND	258	250	103	269	250	108	82 - 115	4	30			
Tetrachloroethene	ND	238	250	95	246	250	99	67 - 137	3	30			
2-Hexanone	ND	246	250	99	239	250	96	56 - 132	3	30			
Dibromochloromethane	ND	226	250	90	234	250	94	72 - 128	4	30			

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15

**Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** 87-02-3 **Units:** µg/L  
**Lab Code:** R1505119-001 **Basis:** NA

Analytical Method: 8260C

Analyte Name	87-02-3MS				87-02-3DMS					
	Matrix Spike			RQ1507136-07	Duplicate Matrix Spike			RQ1507136-08	% Rec Limits	RPD
	Sample Result	Result	Spike Amount		Result	Spike Amount	% Rec			
Chlorobenzene	ND	246	250	98	246	250	98	76 - 125	<1	30
Ethylbenzene	ND	226	250	90	231	250	92	72 - 134	2	30
m,p-Xylenes	ND	504	500	101	502	500	100	68 - 138	<1	30
o-Xylene	ND	246	250	98	255	250	102	68 - 134	4	30
Styrene	ND	149	250	60	154	250	62	34 - 156	3	30
Bromoform	ND	194	250	78	203	250	81	58 - 133	5	30
1,1,2,2-Tetrachloroethane	ND	241	250	96	251	250	100	72 - 122	4	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 450948

**Lab Control Sample**  
**RQ1507088-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Chloromethane	23.1	20.0	116	64 - 140
Vinyl Chloride	20.9	20.0	104	69 - 136
Chloroethane	16.0	20.0	80	71 - 128
Bromomethane	20.3	20.0	101	41 - 159
1,1-Dichloroethene	19.7	20.0	99	74 - 135
Acetone	17.0	20.0	85	51 - 146
Carbon Disulfide	20.8	20.0	104	63 - 141
Methylene Chloride	19.3	20.0	96	73 - 122
trans-1,2-Dichloroethene	20.1	20.0	101	78 - 124
1,1-Dichloroethane	19.4	20.0	97	76 - 128
cis-1,2-Dichloroethene	20.7	20.0	104	80 - 121
2-Butanone (MEK)	21.1	20.0	105	66 - 129
Chloroform	20.2	20.0	101	76 - 120
1,1,1-Trichloroethane	18.3	20.0	91	71 - 123
Carbon Tetrachloride	18.7	20.0	93	66 - 128
Benzene	20.6	20.0	103	76 - 118
1,2-Dichloroethane	18.6	20.0	93	72 - 130
Trichloroethene	20.0	20.0	100	76 - 123
1,2-Dichloropropane	19.7	20.0	98	80 - 119
Bromodichloromethane	18.9	20.0	94	79 - 122
cis-1,3-Dichloropropene	18.4	20.0	92	77 - 125
4-Methyl-2-pentanone (MIBK)	19.4	20.0	97	68 - 129
Toluene	19.5	20.0	98	77 - 120
trans-1,3-Dichloropropene	18.9	20.0	95	72 - 123
1,1,2-Trichloroethane	19.9	20.0	100	79 - 117
Tetrachloroethene	18.8	20.0	94	69 - 124
2-Hexanone	17.9	20.0	90	61 - 131
Dibromochloromethane	18.1	20.0	90	79 - 125
Chlorobenzene	18.7	20.0	94	80 - 121
Ethylbenzene	17.6	20.0	88	76 - 120
m,p-Xylenes	38.4	40.0	96	78 - 123
o-Xylene	19.1	20.0	96	77 - 131
Styrene	19.1	20.0	95	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C

**Units:**  $\mu\text{g/L}$   
**Basis:** NA

**Analysis Lot:** 450948

**Lab Control Sample**  
RQ1507088-03

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Bromoform	17.1	20.0	86	65 - 138
1,1,2,2-Tetrachloroethane	18.3	20.0	92	74 - 127

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/29/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C**Units:** µg/L  
**Basis:** NA**Analysis Lot:** 451047

**Lab Control Sample**  
**RQ1507136-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Chloromethane	23.9	20.0	119	64 - 140
Vinyl Chloride	21.8	20.0	109	69 - 136
Chloroethane	17.8	20.0	89	71 - 128
Bromomethane	18.3	20.0	91	41 - 159
1,1-Dichloroethene	20.1	20.0	101	74 - 135
Acetone	16.7	20.0	84	51 - 146
Carbon Disulfide	20.0	20.0	100	63 - 141
Methylene Chloride	20.5	20.0	103	73 - 122
trans-1,2-Dichloroethene	20.8	20.0	104	78 - 124
1,1-Dichloroethane	20.7	20.0	103	76 - 128
cis-1,2-Dichloroethene	21.3	20.0	106	80 - 121
2-Butanone (MEK)	22.5	20.0	112	66 - 129
Chloroform	21.6	20.0	108	76 - 120
1,1,1-Trichloroethane	20.1	20.0	100	71 - 123
Carbon Tetrachloride	19.0	20.0	95	66 - 128
Benzene	20.9	20.0	104	76 - 118
1,2-Dichloroethane	19.5	20.0	98	72 - 130
Trichloroethene	20.9	20.0	105	76 - 123
1,2-Dichloropropane	20.7	20.0	103	80 - 119
Bromodichloromethane	19.3	20.0	96	79 - 122
cis-1,3-Dichloropropene	19.4	20.0	97	77 - 125
4-Methyl-2-pentanone (MIBK)	21.2	20.0	106	68 - 129
Toluene	20.6	20.0	103	77 - 120
trans-1,3-Dichloropropene	20.1	20.0	100	72 - 123
1,1,2-Trichloroethane	21.6	20.0	108	79 - 117
Tetrachloroethene	20.3	20.0	102	69 - 124
2-Hexanone	19.7	20.0	98	61 - 131
Dibromochloromethane	18.9	20.0	94	79 - 125
Chlorobenzene	19.9	20.0	99	80 - 121
Ethylbenzene	17.8	20.0	89	76 - 120
m,p-Xylenes	39.9	40.0	100	78 - 123
o-Xylene	20.0	20.0	100	77 - 131
Styrene	19.8	20.0	99	81 - 122

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/29/15

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C**Units:** µg/L  
**Basis:** NA**Analysis Lot:** 451047

**Lab Control Sample**  
**RQ1507136-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike</b>	<b>% Rec</b>	<b>% Rec Limits</b>
		<b>Amount</b>		
Bromoform	17.4	20.0	87	65 - 138
1,1,2,2-Tetrachloroethane	19.4	20.0	97	74 - 127

**Results flagged with an asterisk (\*) indicate values outside control criteria.**

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15 11:25

**Method Blank Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** Method Blank      **Instrument ID:** R-MS-12  
**Lab Code:** RQ1507088-04      **File ID:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4320.D\  
**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1507088-03	I:\ACQUADATA\MSVOA12\DATA\062815\MM4318.D\	6/28/15 10:24
TRIP BLANK	R1505119-009	I:\ACQUADATA\MSVOA12\DATA\062815\MM4323.D\	6/28/15 12:57
87-16-3	R1505119-004	I:\ACQUADATA\MSVOA12\DATA\062815\MM4324.D\	6/28/15 13:28
87-13-3	R1505119-007	I:\ACQUADATA\MSVOA12\DATA\062815\MM4326.D\	6/28/15 14:29

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Analyzed:** 6/29/15 12:35

**Method Blank Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** Method Blank      **Instrument ID:** R-MS-12  
**Lab Code:** RQ1507136-04      **File ID:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4348.D\  
**Analytical Method:** 8260C

This Method Blank applies to the following analyses:

<b>Sample Name</b>	<b>Lab Code</b>	<b>File ID</b>	<b>Date Analyzed</b>
Lab Control Sample	RQ1507136-03	I:\ACQUADATA\MSVOA12\DATA\062915\MM4345.D\	6/29/15 11:03
87-14-3	R1505119-005	I:\ACQUADATA\MSVOA12\DATA\062915\MM4351.D\	6/29/15 14:08
87-15-3	R1505119-006	I:\ACQUADATA\MSVOA12\DATA\062915\MM4352.D\	6/29/15 14:38
DUP	R1505119-008	I:\ACQUADATA\MSVOA12\DATA\062915\MM4353.D\	6/29/15 15:09
87-15-3DL	R1505119-006	I:\ACQUADATA\MSVOA12\DATA\062915\MM4354.D\	6/29/15 15:40
87-13-3DL	R1505119-007	I:\ACQUADATA\MSVOA12\DATA\062915\MM4361.D\	6/29/15 19:13
87-04-3	R1505119-003	I:\ACQUADATA\MSVOA12\DATA\062915\MM4362.D\	6/29/15 19:43
87-02-3	R1505119-001	I:\ACQUADATA\MSVOA12\DATA\062915\MM4363.D\	6/29/15 20:14
87-02-3MS	RQ1507136-07	I:\ACQUADATA\MSVOA12\DATA\062915\MM4364.D\	6/29/15 20:44
87-02-3DMS	RQ1507136-08	I:\ACQUADATA\MSVOA12\DATA\062915\MM4365.D\	6/29/15 21:15

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119  
**Date Analyzed:** 06/04/15 11:38

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\msvoa12\Data\060415\MM3683.D\  
**Instrument ID:** R-MS-12

**Analytical Method:** 8260C  
**Analysis Lot:**

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.1	98344	Pass
75	95	30	60	53.0	259072	Pass
95	95	100	100	100.0	488420	Pass
96	95	5	9	6.4	31464	Pass
173	174	0	2	1.5	5092	Pass
174	95	50	120	71.3	348224	Pass
175	174	5	9	8.7	30371	Pass
176	174	95	101	95.1	331072	Pass
177	176	5	9	6.8	22661	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q	
Initial Calibration CAL	0.5 ppb	I:\ACQUDATA\msvoa12\Data\060415\MM3685.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3686.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3687.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3688.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3689.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3690.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3691.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3692.D\ I:\ACQUDATA\msvoa12\Data\060415\MM3693.D	06/04/15 12:40 06/04/15 13:10 06/04/15 13:41 06/04/15 14:11 06/04/15 14:42 06/04/15 15:12 06/04/15 15:43 06/04/15 16:13 06/04/15 16:43	06/04/15 12:40 06/04/15 13:10 06/04/15 13:41 06/04/15 14:11 06/04/15 14:42 06/04/15 15:12 06/04/15 15:43 06/04/15 16:13 06/04/15 16:43	

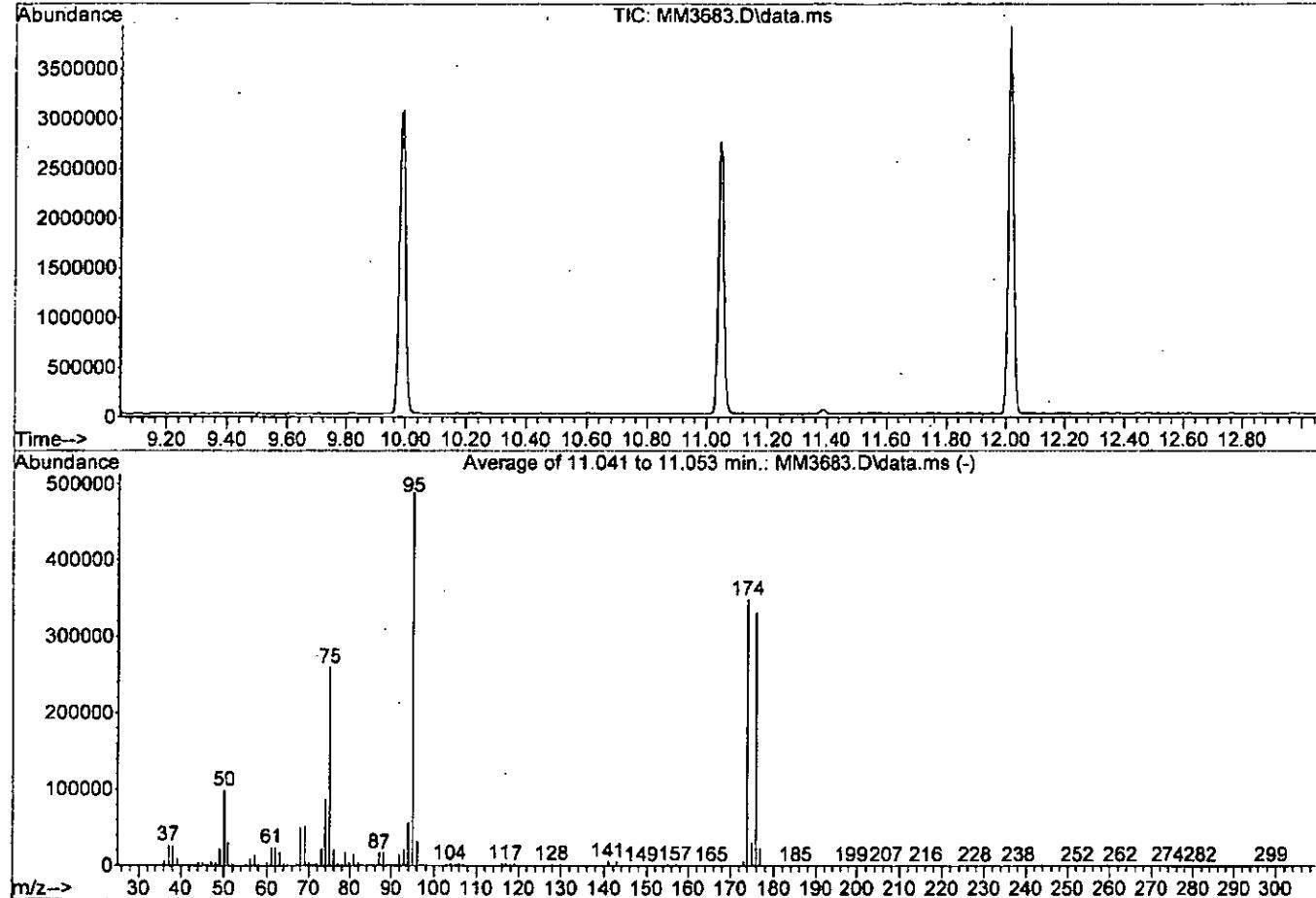
Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3683.D  
 Acq On : 4 Jun 2015 11:38 am  
 Operator : K.Ruest  
 Sample : TUNE  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA-12

Integration File: INTP60.P

JULY 15/15

Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Title : MS#12 - 8260B WATERS 10mL Purge  
 Last Update : Fri Jun 05 10:26:54 2015



AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	98344	PASS
75	95	30	60	53.0	259072	PASS
95	95	100	100	100.0	488420	PASS
96	95	5	9	6.4	31464	PASS
173	174	0.00	2	1.5	5092	PASS
174	95	50	120	71.3	348224	PASS
175	174	5	9	8.7	30371	PASS
176	174	95	101	95.1	331072	PASS
177	176	5	9	6.8	22661	PASS

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15 09:15

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\msvoa12\DATA\062815\MM4316.D\  
**Instrument ID:** R-MS-12

**Analytical Method:** 8260C  
**Analysis Lot:** 450948

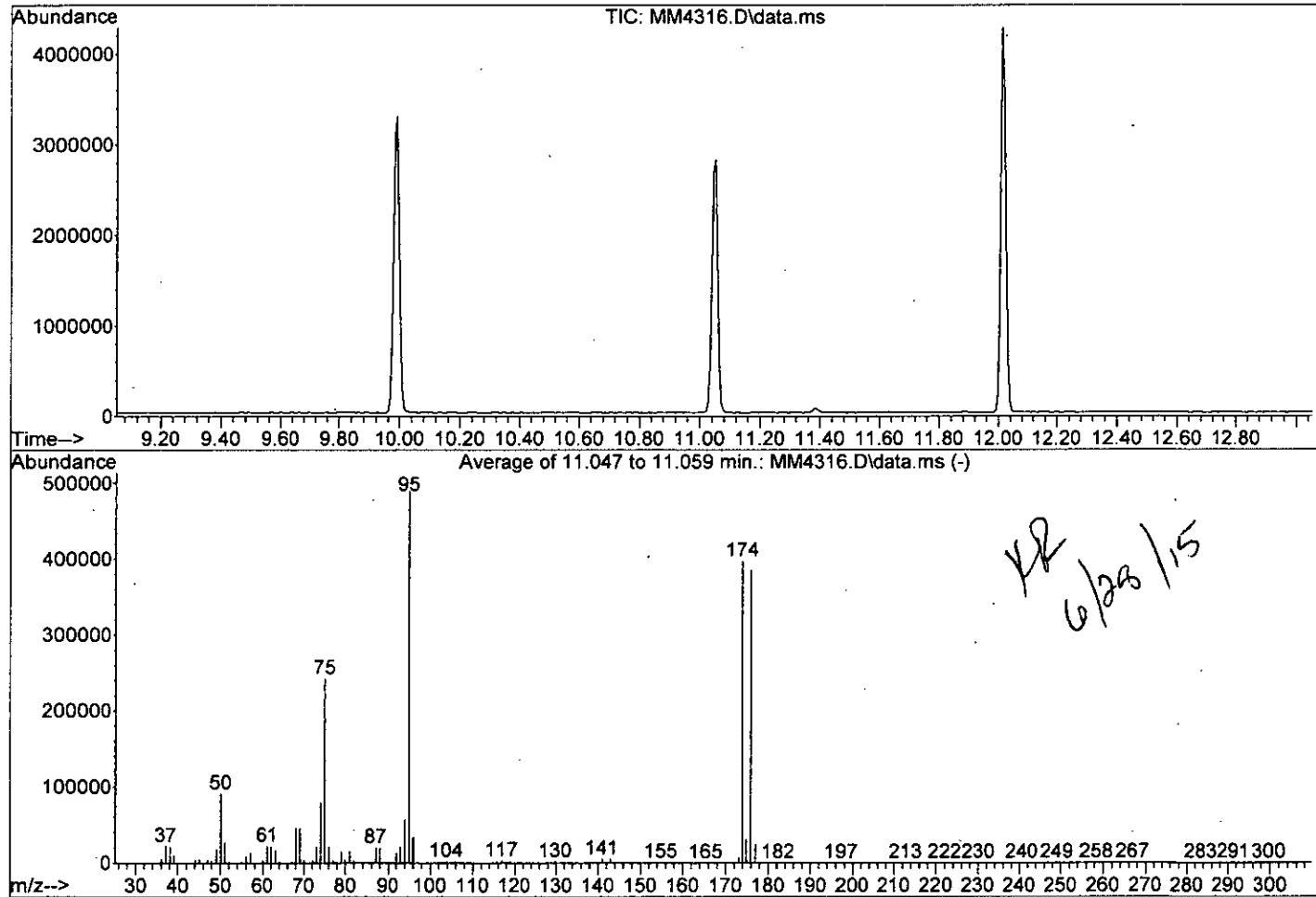
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.60	90968	Pass
75	95	30	60	49.55	242325	Pass
95	95	100	100	100.00	489073	Pass
96	95	5	9	6.95	34003	Pass
173	174	0	2	1.59	6291	Pass
174	95	50	120	81.13	396800	Pass
175	174	5	9	7.66	30397	Pass
176	174	95	101	96.98	384832	Pass
177	176	5	9	6.36	24483	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1507088-02	I:\ACQUDATA\MSVOA12\DATA\062815\MM4317.D\	6/28/15 09:54	
Lab Control Sample	RQ1507088-03	I:\ACQUDATA\MSVOA12\DATA\062815\MM4318.D\	6/28/15 10:24	
Method Blank	RQ1507088-04	I:\ACQUDATA\MSVOA12\DATA\062815\MM4320.D\	6/28/15 11:25	
TRIP BLANK	R1505119-009	I:\ACQUDATA\MSVOA12\DATA\062815\MM4323.D\	6/28/15 12:57	
87-16-3	R1505119-004	I:\ACQUDATA\MSVOA12\DATA\062815\MM4324.D\	6/28/15 13:28	
87-13-3	R1505119-007	I:\ACQUDATA\MSVOA12\DATA\062815\MM4326.D\	6/28/15 14:29	

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4316.D  
 Acq On : 28 Jun 2015 9:15 am  
 Operator : K.Ruest  
 Sample : TUNE *RQ1507088-01*  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Title : MS#12 - 8260B WATERS 10mL Purge  
 Last Update : Fri Jun 05 14:19:46 2015



AutoFind: Scans 1632, 1633, 1634; Background Corrected with Scan 1626

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	18.6	90968	PASS
75	95	30	60	49.5	242325	PASS
95	95	100	100	100.0	489073	PASS
96	95	5	9	7.0	34003	PASS
173	174	0.00	2	1.6	6291	PASS
174	95	50	120	81.1	396800	PASS
175	174	5	9	7.7	30397	PASS
176	174	95	101	97.0	384832	PASS
177	176	5	9	6.4	24483	PASS

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119  
**Date Analyzed:** 6/29/15 10:02

**Tune Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\msvoa12\DATA\062915\MM4343.D\**Analytical Method:** 8260C**Instrument ID:** R-MS-12**Analysis Lot:** 451047

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.67	83907	Pass
75	95	30	60	48.61	230891	Pass
95	95	100	100	100.00	474962	Pass
96	95	5	9	6.41	30426	Pass
173	174	0	2	1.46	5529	Pass
174	95	50	120	79.47	377451	Pass
175	174	5	9	7.57	28558	Pass
176	174	95	101	99.17	374312	Pass
177	176	5	9	5.87	21977	Pass

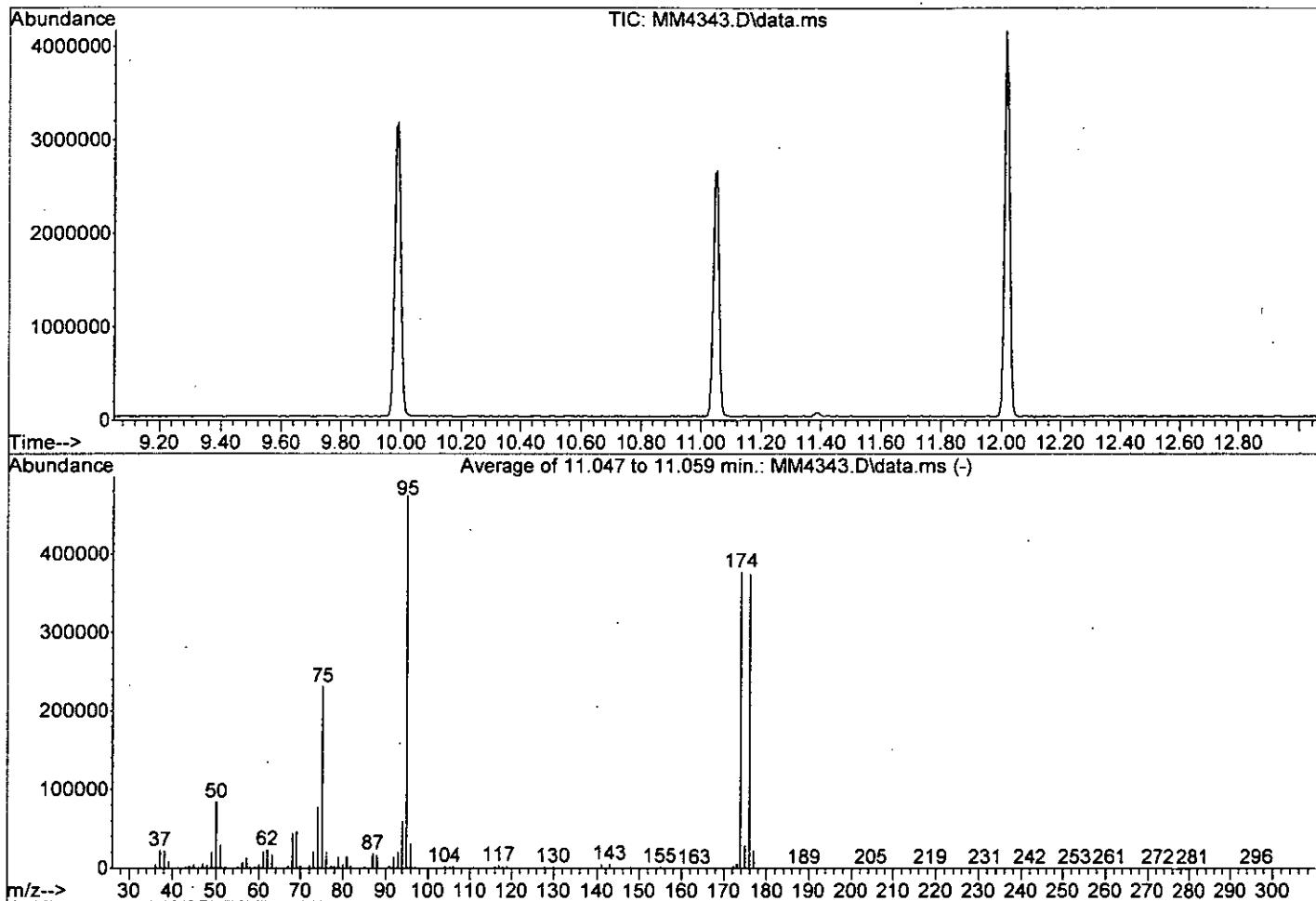
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1507136-02	I:\ACQUDATA\MSVOA12\DATA\062915\MM4344.D\	6/29/15 10:32	
Lab Control Sample	RQ1507136-03	I:\ACQUDATA\MSVOA12\DATA\062915\MM4345.D\	6/29/15 11:03	
Method Blank	RQ1507136-04	I:\ACQUDATA\MSVOA12\DATA\062915\MM4348.D\	6/29/15 12:35	
87-14-3	R1505119-005	I:\ACQUDATA\MSVOA12\DATA\062915\MM4351.D\	6/29/15 14:08	
87-15-3	R1505119-006	I:\ACQUDATA\MSVOA12\DATA\062915\MM4352.D\	6/29/15 14:38	
DUP	R1505119-008	I:\ACQUDATA\MSVOA12\DATA\062915\MM4353.D\	6/29/15 15:09	
87-15-3DL	R1505119-006	I:\ACQUDATA\MSVOA12\DATA\062915\MM4354.D\	6/29/15 15:40	
87-13-3DL	R1505119-007	I:\ACQUDATA\MSVOA12\DATA\062915\MM4361.D\	6/29/15 19:13	
87-04-3	R1505119-003	I:\ACQUDATA\MSVOA12\DATA\062915\MM4362.D\	6/29/15 19:43	
87-02-3	R1505119-001	I:\ACQUDATA\MSVOA12\DATA\062915\MM4363.D\	6/29/15 20:14	
87-02-3MS	RQ1507136-07	I:\ACQUDATA\MSVOA12\DATA\062915\MM4364.D\	6/29/15 20:44	
87-02-3DMS	RQ1507136-08	I:\ACQUDATA\MSVOA12\DATA\062915\MM4365.D\	6/29/15 21:15	

Data Path : I:\ACQUUDATA\msvoa12\Data\062915\  
 Data File : MM4343.D  
 Accq On : 29 Jun 2015 10:02 am  
 Operator : K.Ruest  
 Sample : TUNE (P01507136-0) Inst : MSVOA-12  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Title : MS#12 - 8260B WATERS 10mL Purge  
 Last Update : Fri Jun 05 14:19:46 2015

7/26/2015



AutoFind: Scans 1632, 1633, 1634; Background Corrected with Scan 1626

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	17.7	83907	PASS
75	95	30	60	48.6	230891	PASS
95	95	100	100	100.0	474962	PASS
96	95	5	9	6.4	30426	PASS
173	174	0.00	2	1.5	5529	PASS
174	95	50	120	79.5	377451	PASS
175	174	5	9	7.6	28558	PASS
176	174	95	101	99.2	374312	PASS
177	176	5	9	5.9	21977	PASS

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15 09:54

**Internal Standard Area and RT Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\MSVOA12\DATA\062815\MM4317.D\  
**Instrument ID:** R-MS-12  
**Analytical Method:** 8260C

**Lab Code:** RQ1507088-02  
**Analysis Lot:** 450948  
**Signal ID:**

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	940,332	12.02	1,611,080	6.77	1,583,751	9.99
<b>Upper Limit ==&gt;</b>	1,880,664	12.52	3,222,160	7.27	3,167,502	10.49
<b>Lower Limit ==&gt;</b>	470,166	11.52	805,540	6.27	791,876	9.49
<b>ICAL Result ==&gt;</b>	811,080	12.02	1,567,087	6.77	1,461,862	9.99

**Associated Analyses**

Lab Control Sample	RQ1507088-03	883,423	12.02	1,640,666	6.77	1,574,115	9.99
Method Blank	RQ1507088-04	796,655	12.02	1,514,274	6.77	1,488,975	9.99
TRIP BLANK	R1505119-009	760,851	12.02	1,503,871	6.77	1,442,072	9.99
87-16-3	R1505119-004	772,034	12.02	1,471,333	6.77	1,438,446	9.99
87-13-3	R1505119-007	781,599	12.02	1,486,430	6.77	1,441,298	9.99

Results flagged with an asterisk (\*) indicate values outside control criteria.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119  
**Date Analyzed:** 6/28/15 09:54

**Internal Standard Area and RT Summary  
Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4317.D\  
**Instrument ID:** R-MS-12  
**Analytical Method:** 8260C

**Lab Code:** RQ1507088-02  
**Analysis Lot:** 450948  
**Signal ID:**

**Pentafluorobenzene**

	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	961,774	5.74
<b>Upper Limit ==&gt;</b>	1,923,548	6.24
<b>Lower Limit ==&gt;</b>	480,887	5.24
<b>ICAL Result ==&gt;</b>	943,892	5.74

***Associated Analyses***

Lab Control Sample	RQ1507088-03	981,592	5.74
Method Blank	RQ1507088-04	896,382	5.74
TRIP BLANK	R1505119-009	880,131	5.74
87-16-3	R1505119-004	890,166	5.74
87-13-3	R1505119-007	882,408	5.74

Results flagged with an asterisk (\*) indicate values outside control criteria.

## ALS Group USA, Corp. dba ALS Environmental

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119  
**Date Analyzed:** 6/29/15 10:32

**Internal Standard Area and RT Summary**  
**Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4344.D\

**Lab Code:** RQ1507136-02

**Instrument ID:** R-MS-12

**Analysis Lot:** 451047

**Analytical Method:** 8260C

**Signal ID:**

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	916,293	12.02	1,580,808	6.77	1,569,057	9.99
<b>Upper Limit ==&gt;</b>	1,832,586	12.52	3,161,616	7.27	3,138,114	10.49
<b>Lower Limit ==&gt;</b>	458,147	11.52	790,404	6.27	784,529	9.49
<b>ICAL Result ==&gt;</b>	811,080	12.02	1,567,087	6.77	1,461,862	9.99

**Associated Analyses**

Lab Control Sample	RQ1507136-03	886,182	12.02	1,550,773	6.77	1,521,844	9.99
Method Blank	RQ1507136-04	781,942	12.02	1,439,526	6.77	1,420,025	9.99
87-14-3	R1505119-005	762,506	12.02	1,460,122	6.77	1,437,493	9.99
87-15-3	R1505119-006	756,941	12.02	1,453,896	6.77	1,428,357	9.99
DUP	R1505119-008	758,547	12.02	1,435,760	6.77	1,378,880	9.99
87-15-3DL	R1505119-006	743,999	12.02	1,441,874	6.77	1,415,660	9.99
87-13-3DL	R1505119-007	767,298	12.02	1,420,922	6.77	1,411,211	9.99
87-04-3	R1505119-003	745,424	12.02	1,429,742	6.77	1,402,936	9.99
87-02-3	R1505119-001	759,541	12.02	1,433,646	6.77	1,416,990	9.99
87-02-3MS	RQ1507136-07	889,114	12.02	1,529,049	6.77	1,488,830	9.99
87-02-3DMS	RQ1507136-08	896,800	12.02	1,530,809	6.77	1,504,026	9.99

Results flagged with an asterisk (\*) indicate values outside control criteria.

**ALS Group USA, Corp. dba ALS Environmental**

## QA/QC Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900

**Service Request:** R1505119  
**Date Analyzed:** 6/29/15 10:32

**Internal Standard Area and RT Summary  
Volatile Organic Compounds by GC/MS**

**File ID:** I:\ACQUDATA\MSVOA12\DATA\062915\MM4344.D\  
**Instrument ID:** R-MS-12  
**Analytical Method:** 8260C

**Lab Code:** RQ1507136-02  
**Analysis Lot:** 451047  
**Signal ID:**

**Pentafluorobenzene**

	<u>Area</u>	<u>RT</u>
<b>Results ==&gt;</b>	944,811	5.74
<b>Upper Limit ==&gt;</b>	1,889,622	6.24
<b>Lower Limit ==&gt;</b>	472,406	5.24
<b>ICAL Result ==&gt;</b>	943,892	5.74

**Associated Analyses**

Lab Control Sample	RQ1507136-03	926,910	5.74
Method Blank	RQ1507136-04	856,120	5.74
87-14-3	R1505119-005	838,737	5.74
87-15-3	R1505119-006	861,315	5.74
DUP	R1505119-008	832,262	5.74
87-15-3DL	R1505119-006	833,242	5.74
87-13-3DL	R1505119-007	826,050	5.74
87-04-3	R1505119-003	836,971	5.74
87-02-3	R1505119-001	854,342	5.74
87-02-3MS	RQ1507136-07	913,428	5.74
87-02-3DMS	RQ1507136-08	925,707	5.74

Results flagged with an asterisk (\*) indicate values outside control criteria.



**ALS Environmental**

## **VOLATILE ORGANICS SAMPLE DATA**

**ALS Environmental - Rochester, NY**  
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623  
Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 20:14

**Sample Name:** 87-02-3  
**Lab Code:** R1505119-001

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4363.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	5.0 U	5.0	1.1	
75-01-4	Vinyl Chloride	5.0 U	5.0	1.6	
75-00-3	Chloroethane	5.0 U	5.0	1.2	
74-83-9	Bromomethane	5.0 U	5.0	1.5	
75-35-4	1,1-Dichloroethene	5.0 U	5.0	2.9	
67-64-1	Acetone	25 U	25	6.2	
75-15-0	Carbon Disulfide	1.2 J	5.0	1.1	
75-09-2	Methylene Chloride	5.0 U	5.0	3.0	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	1.7	
75-34-3	1,1-Dichloroethane	5.0 U	5.0	1.0	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	1.5	
78-93-3	2-Butanone (MEK)	25 U	25	4.1	
67-66-3	Chloroform	5.0 U	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	5.0 U	5.0	1.8	
56-23-5	Carbon Tetrachloride	5.0 U	5.0	2.3	
71-43-2	Benzene	5.0 U	5.0	1.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	1.8	
79-01-6	Trichloroethene	5.0 U	5.0	1.1	
78-87-5	1,2-Dichloropropane	5.0 U	5.0	1.0	
75-27-4	Bromodichloromethane	5.0 U	5.0	1.6	
10061-01-5	cis-1,3-Dichloropropene	5.0 U	5.0	1.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	25 U	25	3.4	
108-88-3	Toluene	5.0 U	5.0	1.0	
10061-02-6	trans-1,3-Dichloropropene	5.0 U	5.0	1.0	
79-00-5	1,1,2-Trichloroethane	5.0 U	5.0	1.8	
127-18-4	Tetrachloroethene	5.0 U	5.0	1.5	
591-78-6	2-Hexanone	25 U	25	8.3	
124-48-1	Dibromochloromethane	5.0 U	5.0	1.6	
108-90-7	Chlorobenzene	5.0 U	5.0	1.5	
100-41-4	Ethylbenzene	5.0 U	5.0	1.0	
179601-23-1	m,p-Xylenes	10 U	10	1.7	
95-47-6	o-Xylene	5.0 U	5.0	1.0	
100-42-5	Styrene	5.0 U	5.0	1.0	
75-25-2	Bromoform	5.0 U	5.0	2.1	
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U	5.0	1.3	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-02-3  
**Lab Code:** R1505119-001

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 20:14

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA12\DATA\062915\MM4363.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	6/29/15 20:14	
Toluene-d8	108	87-121	6/29/15 20:14	
Dibromofluoromethane	106	89-119	6/29/15 20:14	

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4363.D  
 Acq On : 29 Jun 2015 8:14 pm  
 Operator : K.Ruest  
 Sample : R1505119-001|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 30 15:08:00 2015 ↑ 502  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	854342	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1433646	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1416990	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.022	152	759541	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.597	113	413108	53.25	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	106.50%		
48) surr1,1,2-dichloroetha...	6.103	65	440539	53.16	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	106.32%		
65) SURR3,Toluene-d8	8.529	98	1823544	53.82	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	107.64%		
70) SURR2,BFB	11.053	95	698155	54.23	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	108.46%		
<b>Target Compounds</b>						
18) Carbon Disulfide	2.640	76	4764	0.24	ppb	93

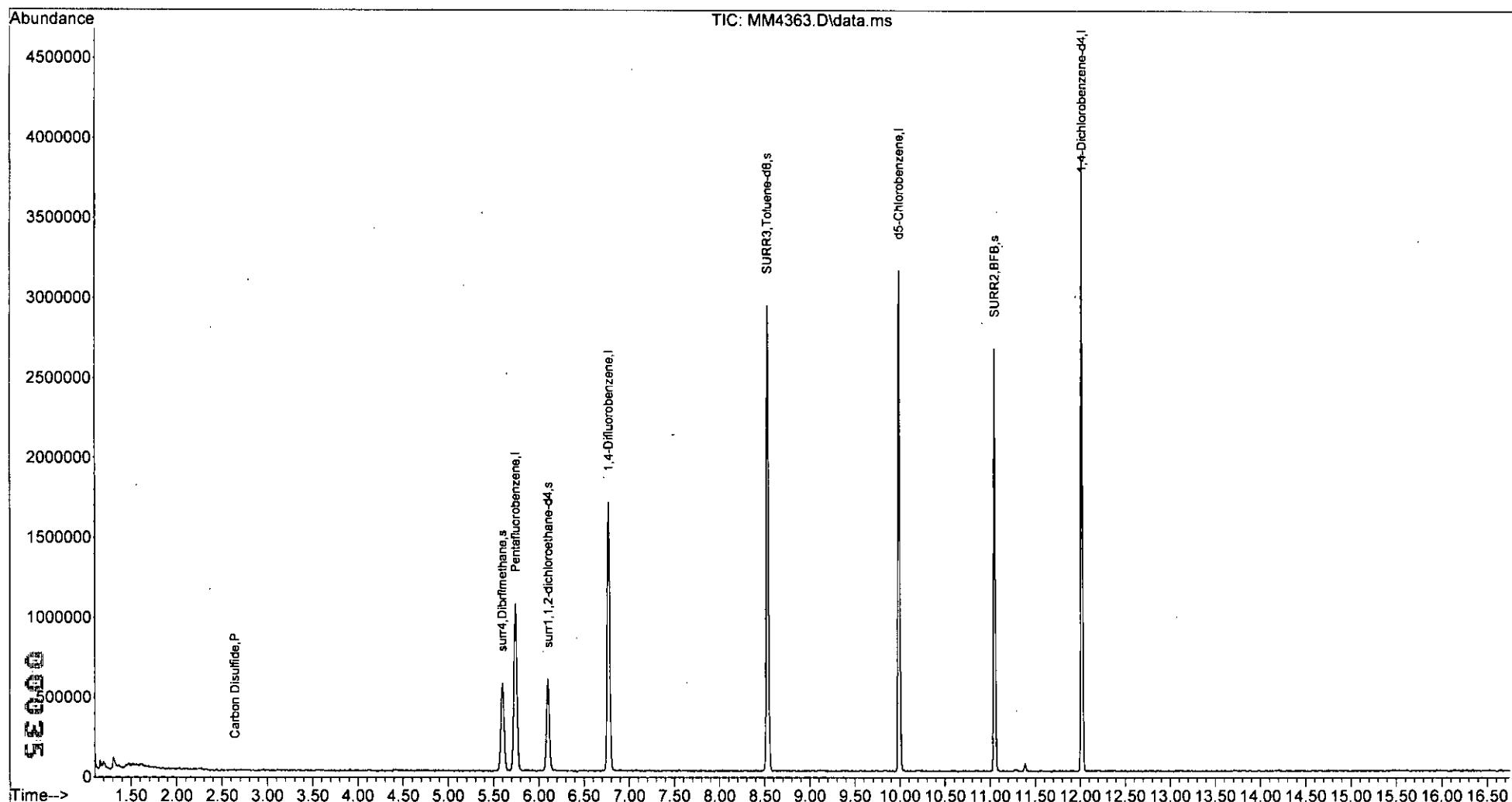
(#) = qualifier out of range (m) = manual integration (+) = signals summed

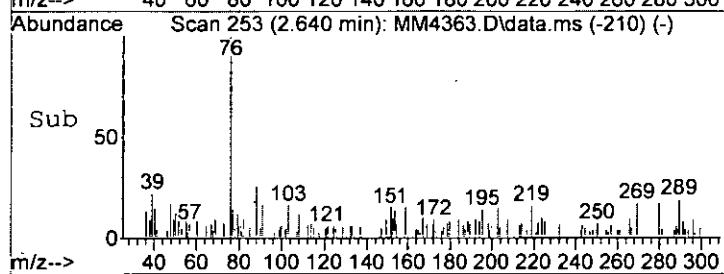
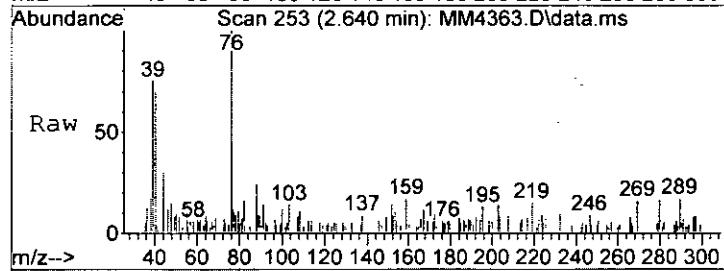
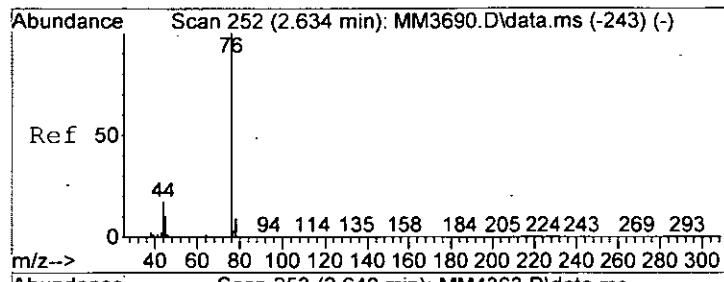
XL  
6/30/15

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
Data File : MM4363.D  
Acq On : 29 Jun 2015 8:14 pm  
Operator : K.Ruest  
Sample : R1505119-001|5.0  
Misc : CB&I 13429 T4  
ALS Vial : 23 Sample Multiplier: 1

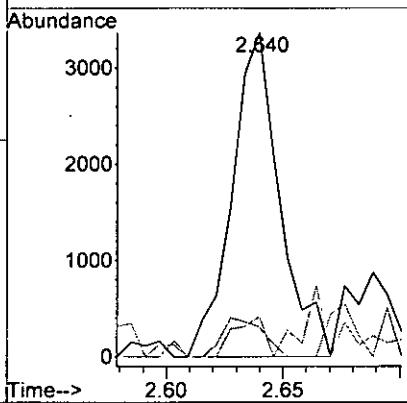
Inst : MSVOA-12  
Quant Time: Jun 30 15:08:00 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration





#18  
 Carbon Disulfide  
 Concen: 0.24 ppb  
 RT: 2.640 min Scan# 253  
 Delta R.T. 0.006 min  
 Lab File: MM4363.D  
 Acq: 29 Jun 2015 8:14 pm

Tgt Ion: 76 Resp: 4764  
 Ion Ratio Lower Upper  
 76 100  
 78 9.2 0.0 28.8  
 77 12.3 0.0 22.6



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1040  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:43

**Sample Name:** 87-04-3  
**Lab Code:** R1505119-003

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4362.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	5.0 U	5.0	1.1	
75-01-4	Vinyl Chloride	5.0 U	5.0	1.6	
75-00-3	Chloroethane	5.0 U	5.0	1.2	
74-83-9	Bromomethane	5.0 U	5.0	1.5	
75-35-4	1,1-Dichloroethene	5.0 U	5.0	2.9	
67-64-1	Acetone	25 U	25	6.2	
75-15-0	Carbon Disulfide	5.0 U	5.0	1.1	
75-09-2	Methylene Chloride	5.0 U	5.0	3.0	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	1.7	
75-34-3	1,1-Dichloroethane	5.0 U	5.0	1.0	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	1.5	
78-93-3	2-Butanone (MEK)	25 U	25	4.1	
67-66-3	Chloroform	2.6 J	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	5.0 U	5.0	1.8	
56-23-5	Carbon Tetrachloride	5.0 U	5.0	2.3	
71-43-2	Benzene	5.0 U	5.0	1.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	1.8	
79-01-6	Trichloroethene	1.8 J	5.0	1.1	
78-87-5	1,2-Dichloropropane	5.0 U	5.0	1.0	
75-27-4	Bromodichloromethane	5.0 U	5.0	1.6	
10061-01-5	cis-1,3-Dichloropropene	5.0 U	5.0	1.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	25 U	25	3.4	
108-88-3	Toluene	5.0 U	5.0	1.0	
10061-02-6	trans-1,3-Dichloropropene	5.0 U	5.0	1.0	
79-00-5	1,1,2-Trichloroethane	5.0 U	5.0	1.8	
127-18-4	Tetrachloroethene	5.0 U	5.0	1.5	
591-78-6	2-Hexanone	25 U	25	8.3	
124-48-1	Dibromochloromethane	5.0 U	5.0	1.6	
108-90-7	Chlorobenzene	5.0 U	5.0	1.5	
100-41-4	Ethylbenzene	5.0 U	5.0	1.0	
179601-23-1	m,p-Xylenes	10 U	10	1.7	
95-47-6	o-Xylene	5.0 U	5.0	1.0	
100-42-5	Styrene	5.0 U	5.0	1.0	
75-25-2	Bromoform	5.0 U	5.0	2.1	
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U	5.0	1.3	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-04-3  
**Lab Code:** R1505119-003

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1040  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:43

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUDATA\MSVOA12\DATA\062915\MM4362.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85-122	6/29/15 19:43	
Toluene-d8	109	87-121	6/29/15 19:43	
Dibromofluoromethane	106	89-119	6/29/15 19:43	

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4362.D  
 Acq On : 29 Jun 2015 7:43 pm  
 Operator : K.Ruest  
 Sample : R1505119-003|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 30 14:55:34 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

$\uparrow \text{SO}_2$

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	5.743	168	836971	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1429742	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1402936	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	745424	50.00	ppb	0.00
<hr/>						
System Monitoring Compounds						
45) surr4,Dibromoethane	5.596	113	411882	53.24	ppb	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	106.48%
48) surr1,1,2-dichloroetha...	6.102	65	429355	51.95	ppb	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	103.90%
65) SURR3,Toluene-d8	8.535	98	1838389	54.40	ppb	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	108.80%
70) SURR2,BFB	11.047	95	703073	54.76	ppb	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	109.52%
<hr/>						
Target Compounds						
40) Chloroform	5.328	83	6102	0.51	ppb	# 72
54) Trichloroethene	7.078	130	2757	0.36	ppb	# 41
<hr/>						

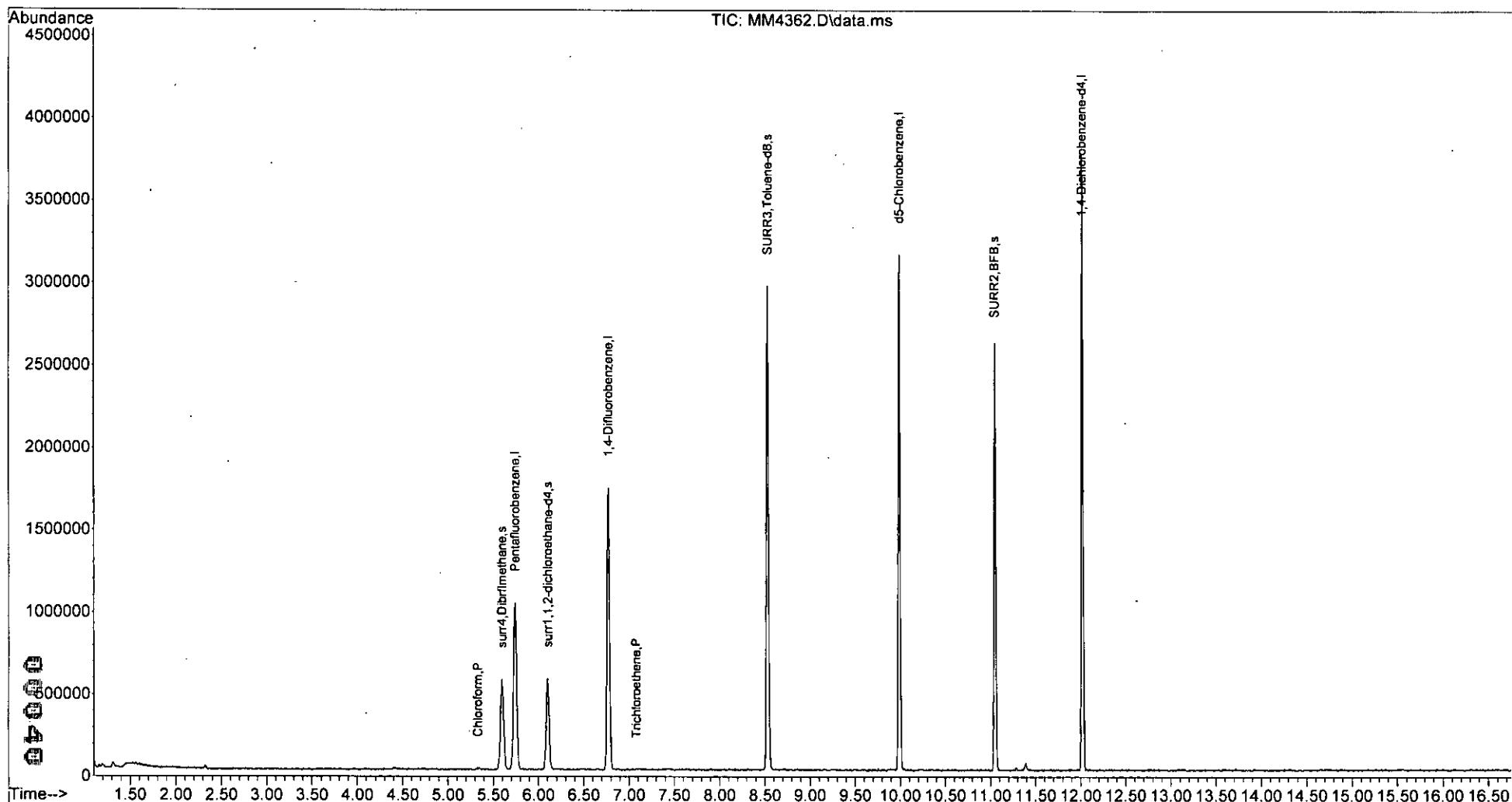
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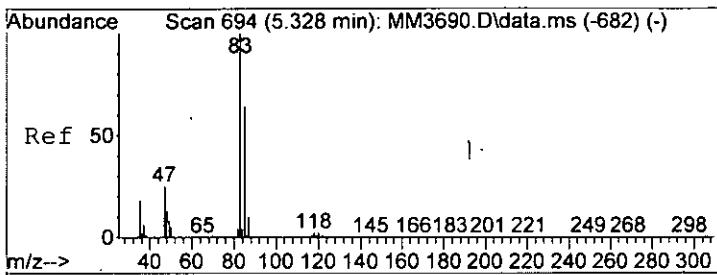
KR  
6/30/15

## Quantitation Report (QT Reviewed)

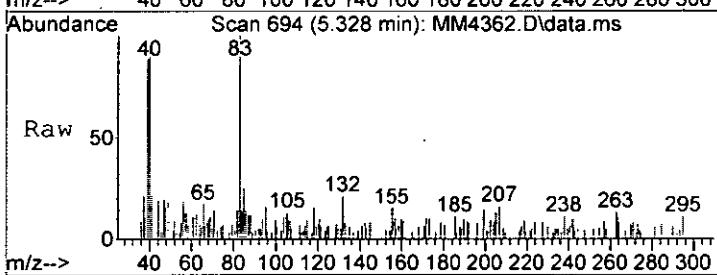
Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
Data File : MM4362.D  
Acq On : 29 Jun 2015 7:43 pm  
Operator : K.Ruest  
Sample : R1505119-003|5.0 Inst : MSVOA-12  
Misc : CB&I 13429 T4  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 30 14:55:34 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration

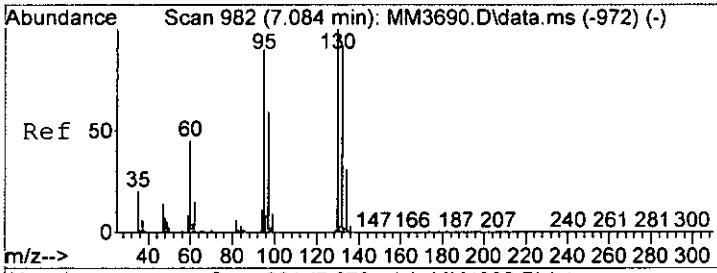
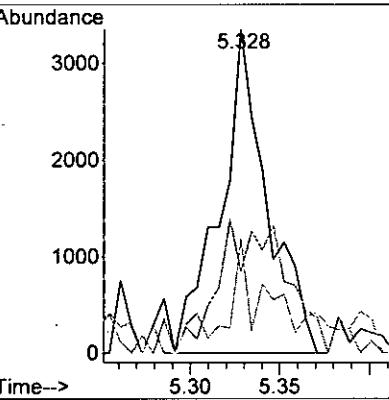
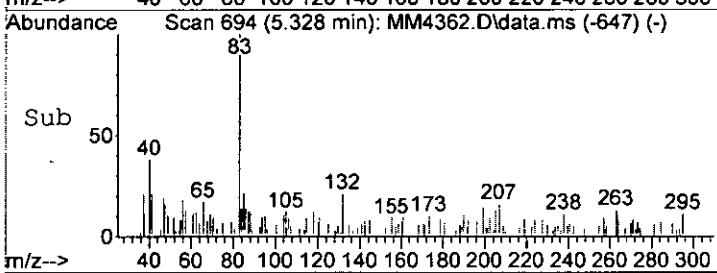




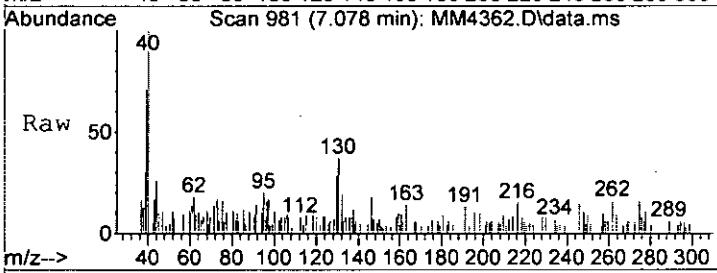
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Chloroform  
Concen: 0.51 ppb  
RT: 5.328 min Scan# 694  
Delta R.T. -0.000 min  
Lab File: MM4362.D  
Acq: 29 Jun 2015 7:43 pm



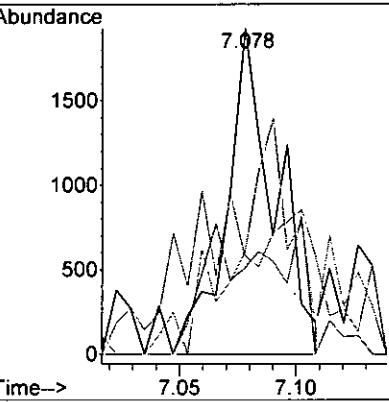
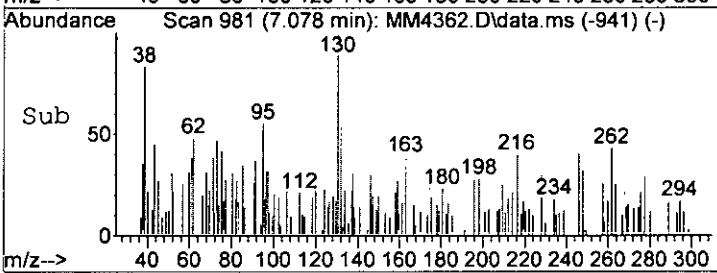
Tgt Ion: 83 Resp: 6102  
Ion Ratio Lower Upper  
83 100  
85 39.3 43.8 83.8#  
47 35.0 4.7 44.7



# 54  
Trichloroethene  
Concen: 0.36 ppb  
RT: 7.078 min Scan# 981  
Delta R.T. -0.006 min  
Lab File: MM4362.D  
Acq: 29 Jun 2015 7:43 pm



Tgt Ion: 130 Resp: 2757  
Ion Ratio Lower Upper  
130 100  
132 30.2 72.7 112.7#  
95 31.3 69.8 109.8#  
97 26.4 38.8 78.8#



## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1125  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 13:28

**Sample Name:** 87-16-3  
**Lab Code:** R1505119-004

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C **Analysis Lot:** 450948  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUDATA\MSVOA12\DATA\062815\MM4324.D\  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	3.4	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	2.2 J	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.9	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	4.0	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	4.2	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1125  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 13:28

**Sample Name:** 87-16-3  
**Lab Code:** R1505119-004

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUDATA\MSV ро A12\DATA\062815\MM4324.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	112	85-122	6/28/15 13:28		
Toluene-d8	108	87-121	6/28/15 13:28		
Dibromofluoromethane	108	89-119	6/28/15 13:28		



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4324.D  
 Acq On : 28 Jun 2015 1:28 pm  
 Operator : K.Ruest  
 Sample : R1505119-004|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 29 15:40:14 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	5.743	168	890166	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1471333	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1438446	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	772034	50.00	ppb	0.00
<hr/>						
System Monitoring Compounds						
45) surr4,Dibromoform	5.596	113	431519	54.20	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	108.40%	
48) surr1,1,2-dichloroethane	6.102	65	465576	54.74	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	109.48%	
65) SURR3,Toluene-d8	8.535	98	1875999	53.95	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	107.90%	
70) SURR2,BFB	11.053	95	738052	55.86	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	111.72%	
<hr/>						
Target Compounds						
4) Vinyl Chloride	1.433	62	32030m	3.43	ppb	Qvalue
15) Acetone	2.487	43	2774	2.22	ppb	78
28) 1,1-Dicethane	3.798	63	22514	1.86	ppb	83
34) cis-1,2-Dichloroethene	4.712	96	31483	4.04	ppb	# 75
41) 1,1,1-Trichloroethane	5.609	97	51866	4.23	ppb	90
54) Trichloroethene	7.084	130	1686	0.21	ppb	# 75
112) Trielution Dichlorotoluene	13.083	125	2820	0.21	ppb	# 79M
120) 2,3,6-Trichlorotoluene	14.662	159	2016	0.38	ppb	# 78 M
<hr/>						

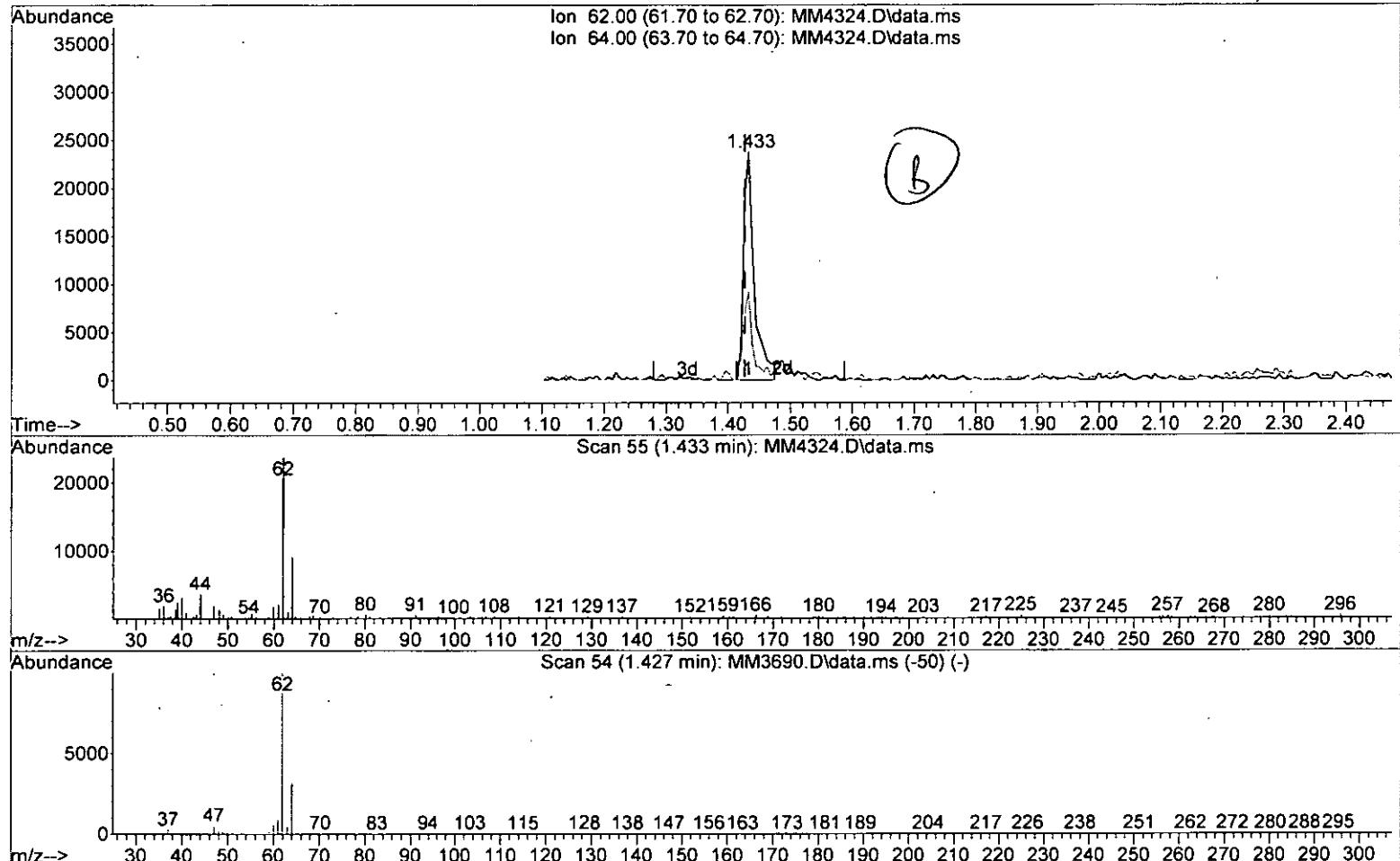
(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓  
6/29/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4324.D  
 Acq On : 28 Jun 2015 1:28 pm  
 Operator : K.Ruest  
 Sample : R1505119-004|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 28 13:44:01 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4324.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 3.08 ppb

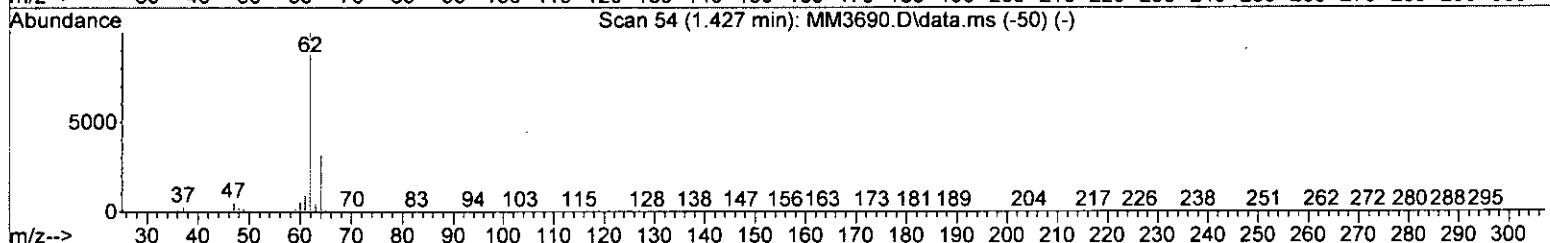
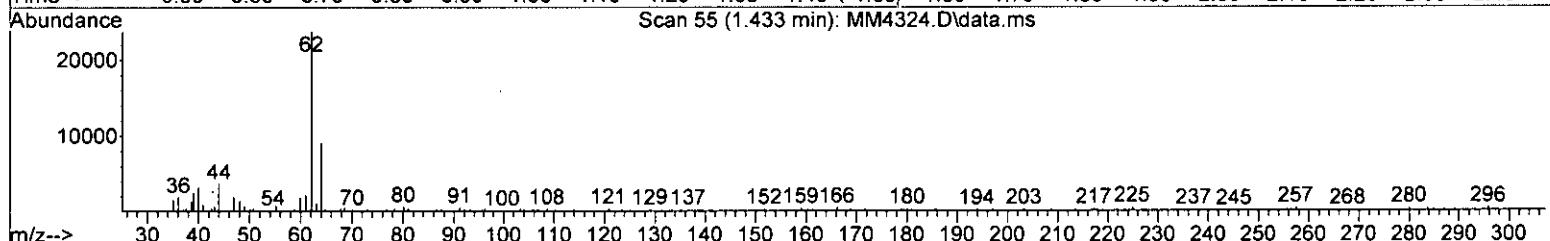
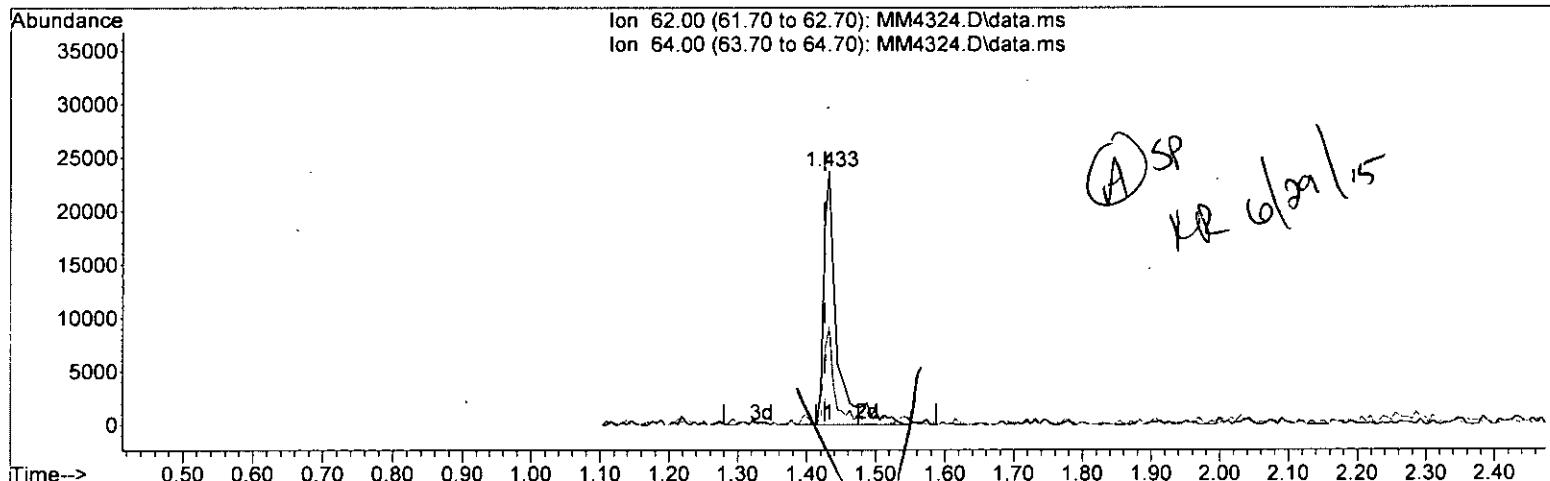
response 28726

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	38.24
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4324.D  
 Acq On : 28 Jun 2015 1:28 pm  
 Operator : K.Ruest  
 Sample : R1505119-004|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 28 13:44:01 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4324.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 3.43 ppb m

response 32030

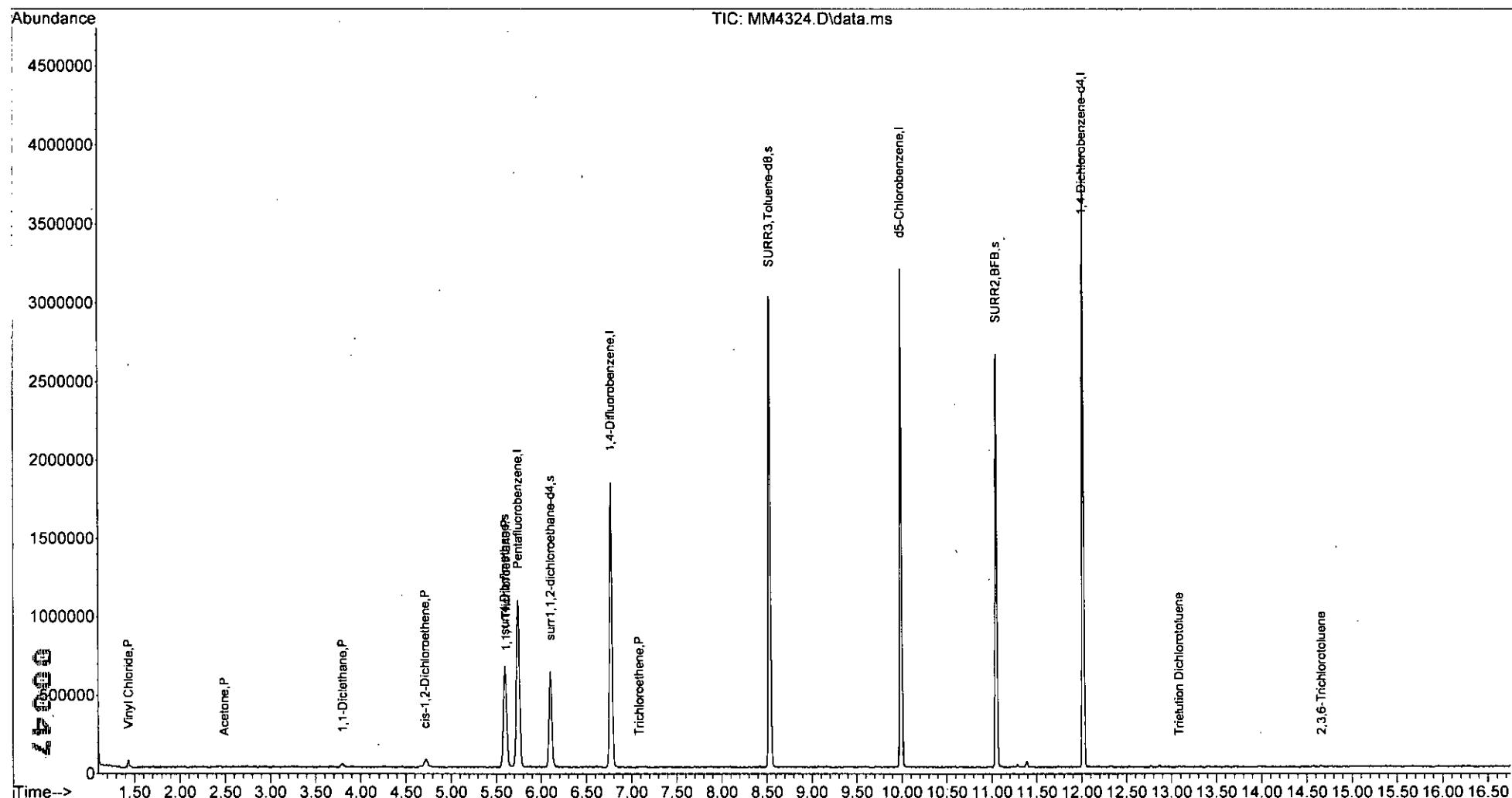
Ion	Exp%	Act%
62.00	100	100
64.00	31.50	38.24
0.00	0.00	0.00
0.00	0.00	0.00

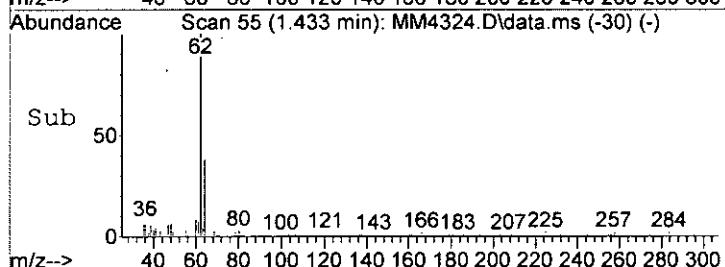
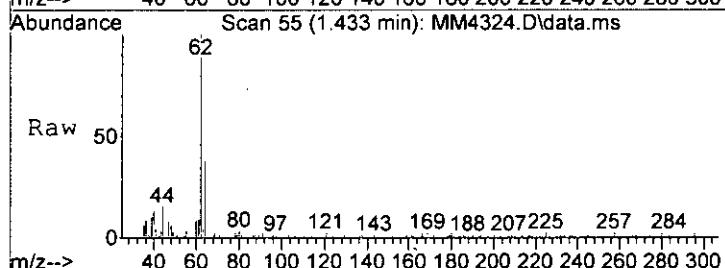
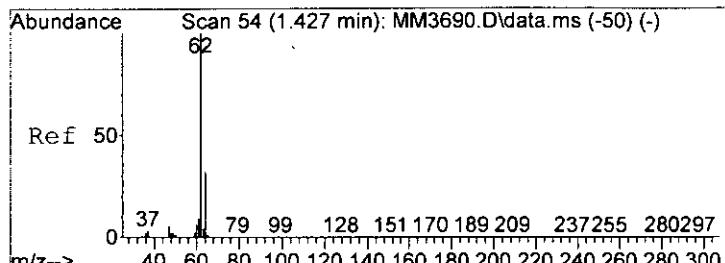
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## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
Data File : MM4324.D  
Acq On : 28 Jun 2015 1:28 pm  
Operator : K.Ruest  
Sample : R1505119-004|1.0 Inst : MSVOA-12  
Misc : CB&I 13429 T4  
ALS Vial : 8 Sample Multiplier: 1

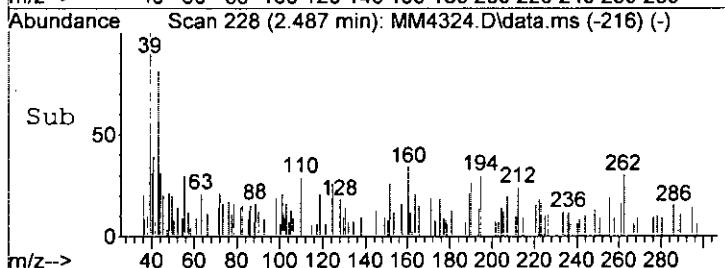
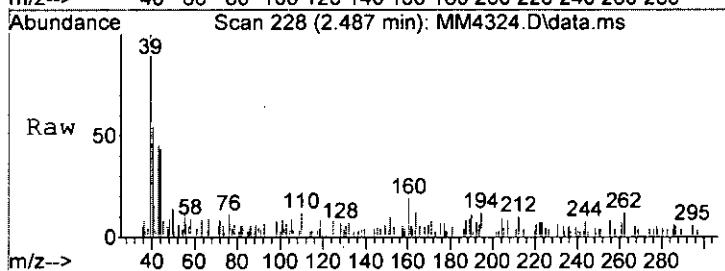
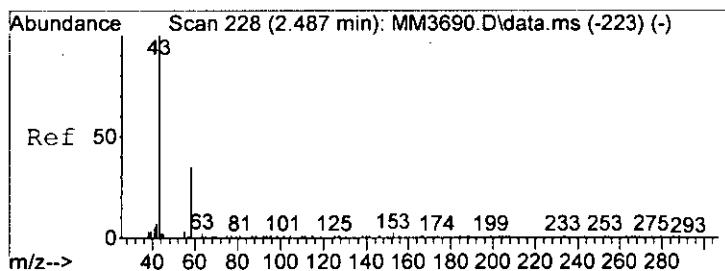
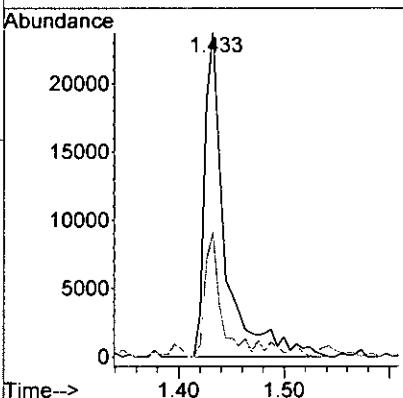
Quant Time: Jun 29 15:40:14 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration





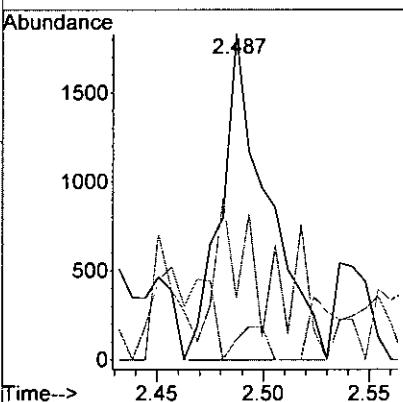
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Vinyl Chloride  
Concen: 3.43 ppb m  
RT: 1.433 min Scan# 55  
Delta R.T. 0.006 min  
Lab File: MM4324.D  
Acq: 28 Jun 2015 1:28 pm

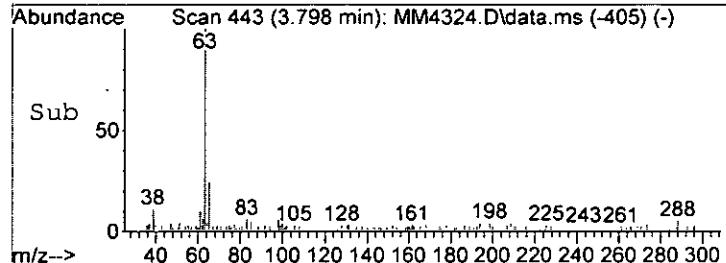
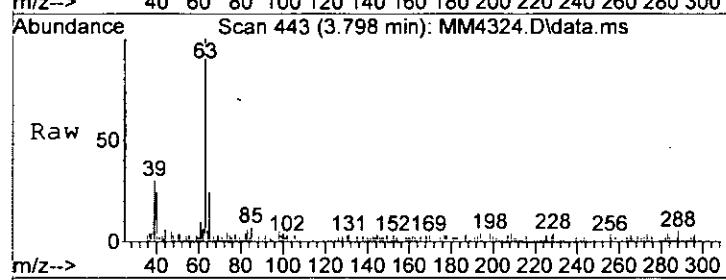
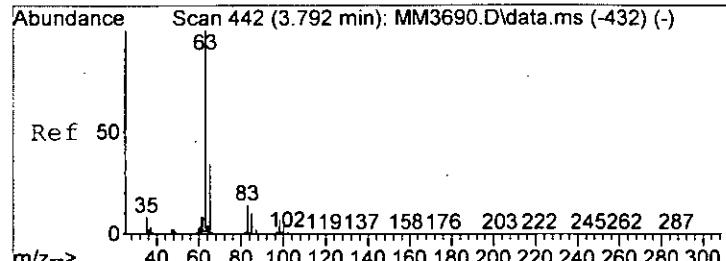
Tgt Ion: 62 Resp: 32030  
Ion Ratio Lower Upper  
62 100  
64 38.2 11.5 51.5



#15  
Acetone  
Concen: 2.22 ppb  
RT: 2.487 min Scan# 228  
Delta R.T. -0.000 min  
Lab File: MM4324.D  
Acq: 28 Jun 2015 1:28 pm

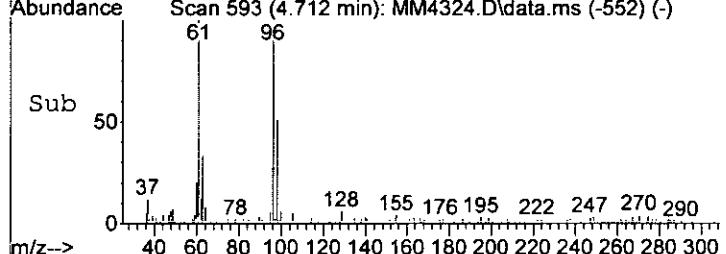
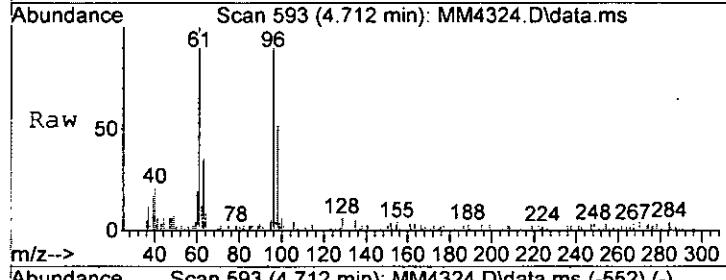
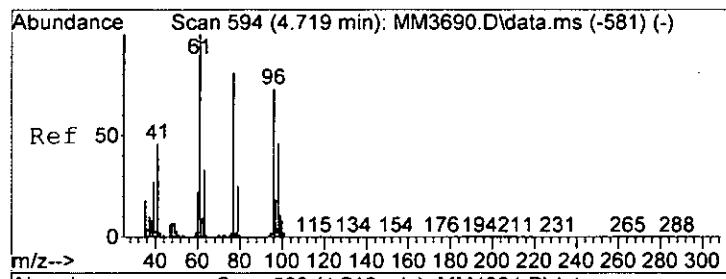
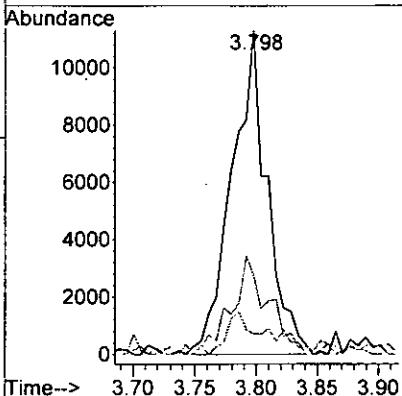
Tgt Ion: 43 Resp: 2774  
Ion Ratio Lower Upper  
43 100  
58 18.8 13.9 53.9  
42 6.2 0.0 27.3





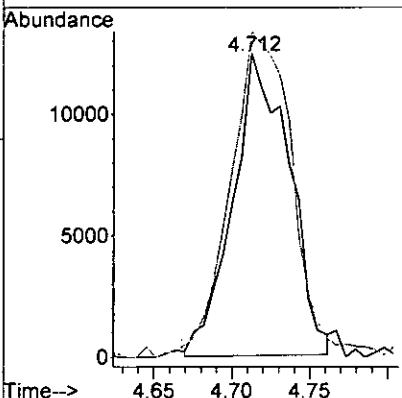
#28  
1,1-Dicethane  
Concen: 1.86 ppb  
RT: 3.798 min Scan# 443  
Delta R.T. 0.006 min  
Lab File: MM4324.D  
Acq: 28 Jun 2015 1:28 pm

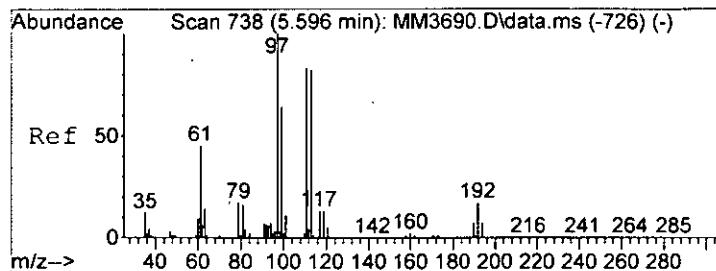
Tgt Ion: 63 Resp: 22514  
Ion Ratio Lower Upper  
63 100  
65 24.4 13.8 53.8  
83 6.3 0.0 34.1



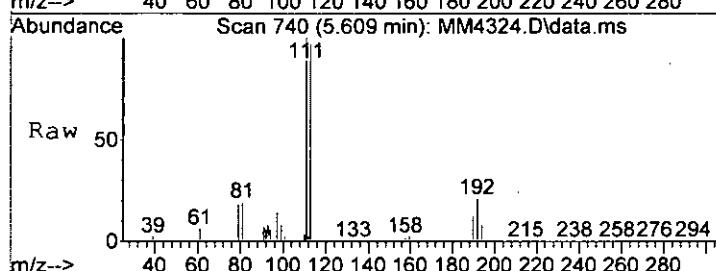
#34  
cis-1,2-Dichloroethene  
Concen: 4.04 ppb  
RT: 4.712 min Scan# 593  
Delta R.T. -0.006 min  
Lab File: MM4324.D  
Acq: 28 Jun 2015 1:28 pm

Tgt Ion: 96 Resp: 31483  
Ion Ratio Lower Upper  
96 100  
61 107.0 117.6 157.6#

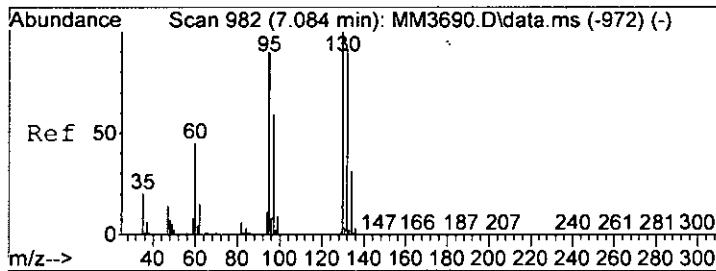
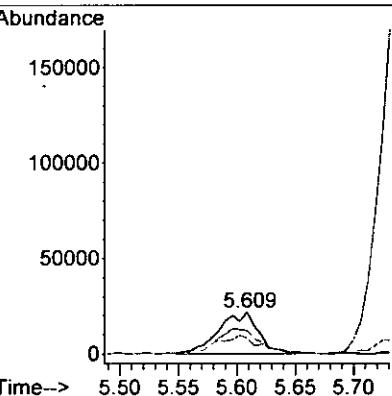
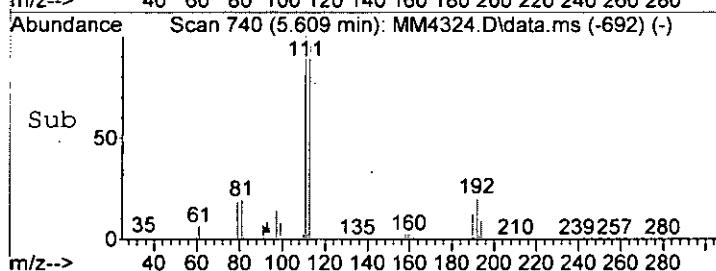




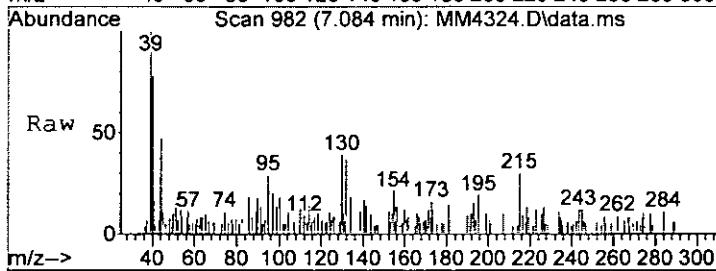
#41  
1,1,1-Trichloroethane  
Concen: 4.23 ppb  
RT: 5.609 min Scan# 740  
Delta R.T. 0.012 min  
Lab File: MM4324.D  
Acq: 28 Jun 2015 1:28 pm



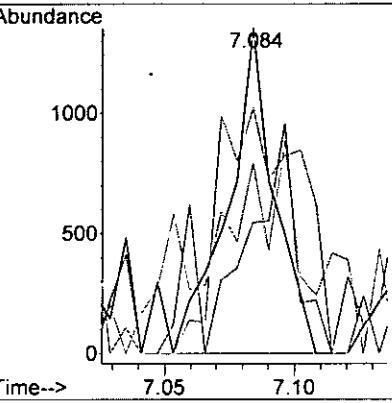
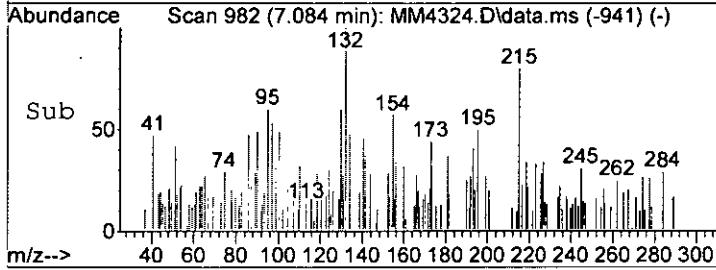
Tgt Ion: 97 Resp: 51866  
Ion Ratio Lower Upper  
97 100  
99 56.1 43.8 83.8  
61 39.2 25.3 65.3



#54  
Trichloroethene  
Concen: 0.21 ppb  
RT: 7.084 min Scan# 982  
Delta R.T. -0.000 min  
Lab File: MM4324.D  
Acq: 28 Jun 2015 1:28 pm



Tgt Ion: 130 Resp: 1686  
Ion Ratio Lower Upper  
130 100  
132 75.6 72.7 112.7  
95 58.8 69.8 109.8#  
97 40.3 38.8 78.8



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 12:10  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:08

**Sample Name:** 87-14-3  
**Lab Code:** R1505119-005

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4351.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	0.31 J	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-14-3  
**Lab Code:** R1505119-005

**Service Request:** R1505119  
**Date Collected:** 6/25/15 12:10  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:08

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4351.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	109	85-122	6/29/15 14:08	
Toluene-d8	108	87-121	6/29/15 14:08	
Dibromofluoromethane	106	89-119	6/29/15 14:08	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4351.D  
 Acq On : 29 Jun 2015 2:08 pm  
 Operator : K.Ruest  
 Sample : R1505119-005|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 30 10:43:22 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	838737	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1460122	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1437493	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	762506	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoethane	5.596	113	417977	52.90	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	105.80%	
48) surr1,1,2-dichloroetha...	6.102	65	435747	51.63	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	103.26%	
65) SURR3,Toluene-d8	8.529	98	1870161	54.19	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	108.38%	
70) SURR2,BFB	11.047	95	713223	54.40	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	108.80%	
<b>Target Compounds</b>						
34) cis-1,2-Dichloroethene	4.719	96	2278m	0.31	ppb	Qvalue
119) 2,4,5-Trichlorotolene	14.564	159	1663	0.28	ppb	# 70
120) 2,3,6-Trichlorotoluene	14.656	159	1116	0.22	ppb	# 1

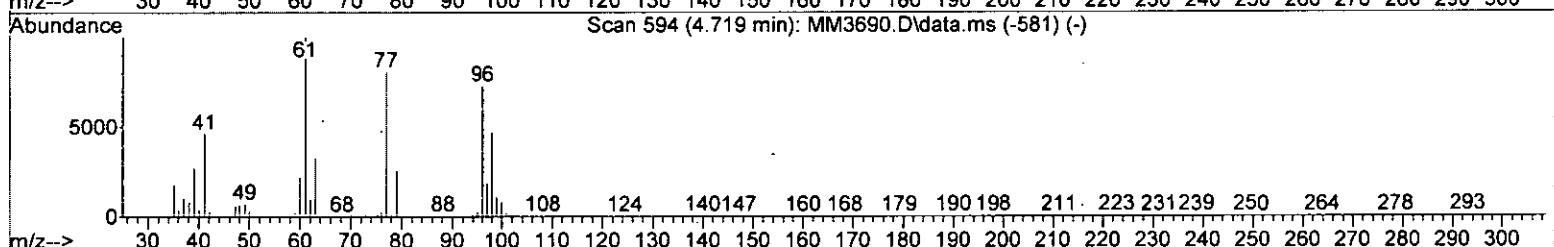
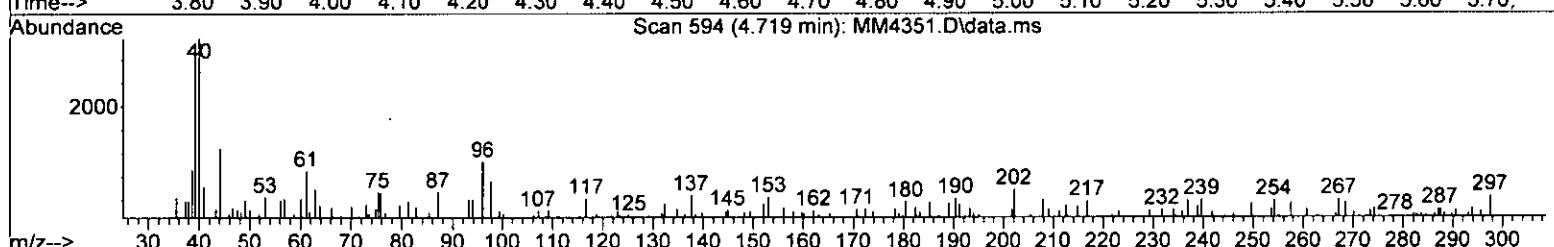
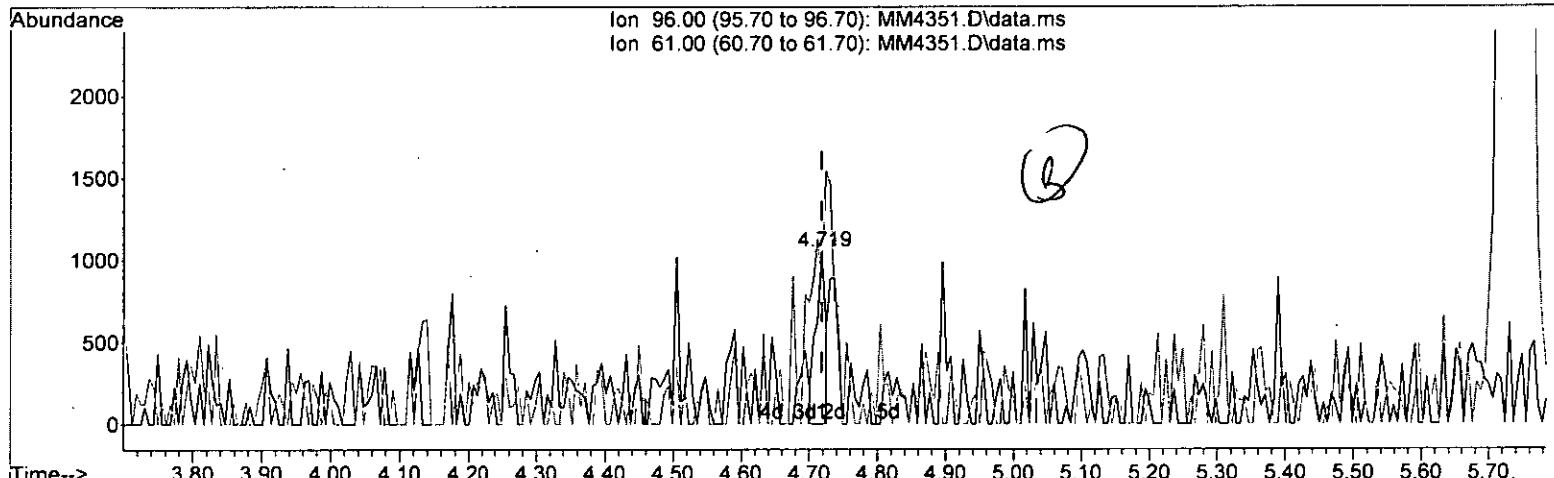
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR  
6/30/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4351.D  
 Acq On : 29 Jun 2015 2:08 pm  
 Operator : K.Ruest  
 Sample : R1505119-005|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 29 14:24:22 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4351.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.719min (-0.000) 0.14 ppb

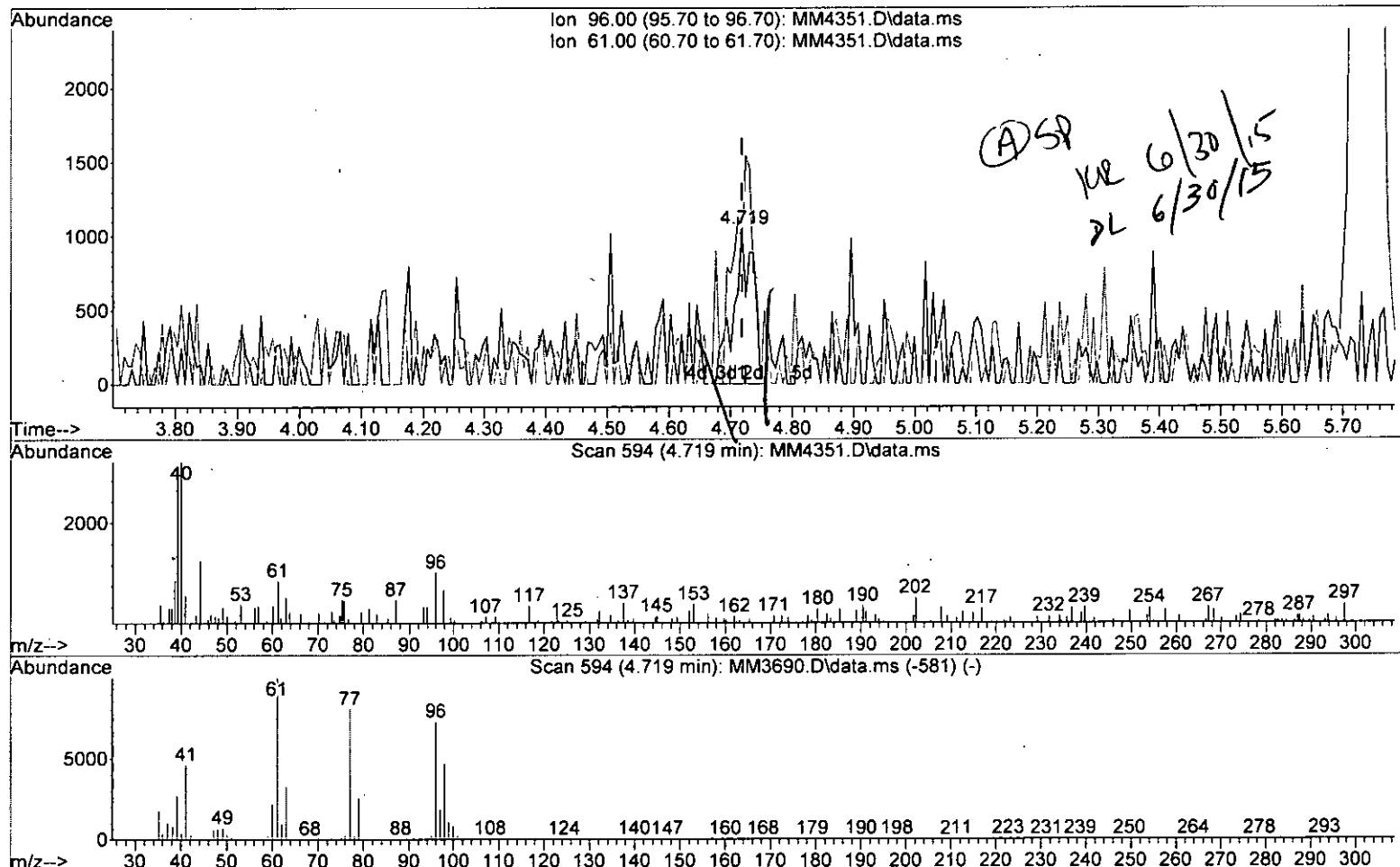
response 1019

Ion	Exp%	Act%
96.00	100	100
61.00	137.60	84.68#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4351.D  
 Acq On : 29 Jun 2015 2:08 pm  
 Operator : K.Ruest  
 Sample : R1505119-005|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 29 14:24:22 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4351.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.719min (-0.000) 0.31 ppb m

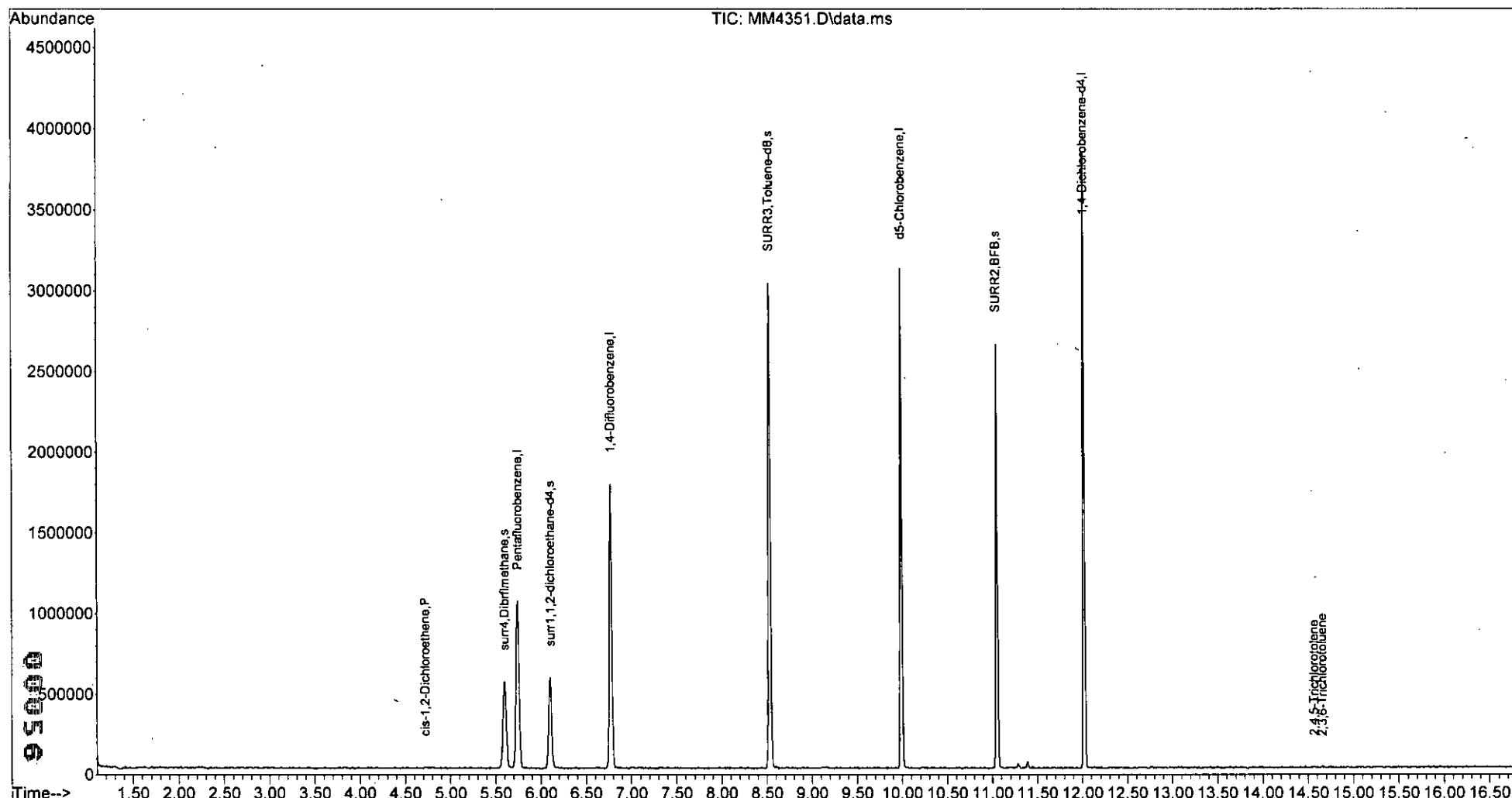
response 2278

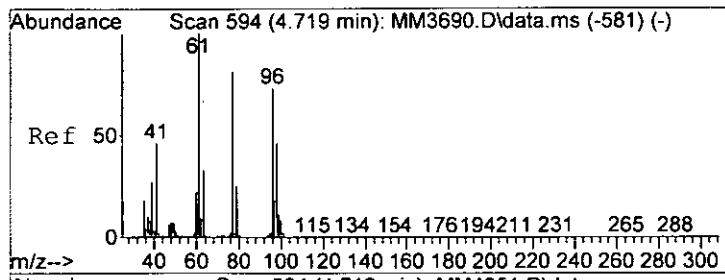
Ion	Exp%	Act%
96.00	100	100
61.00	137.60	84.68#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

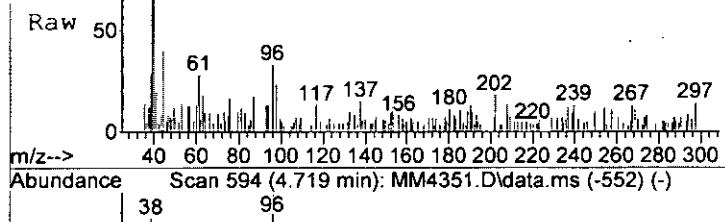
Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
Data File : MM4351.D  
Acq On : 29 Jun 2015 2:08 pm  
Operator : K.Ruest  
Sample : R1505119-005|1.0  
Inst : MSVOA-12  
Misc : CB&I 13429 T4  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 30 10:43:22 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration

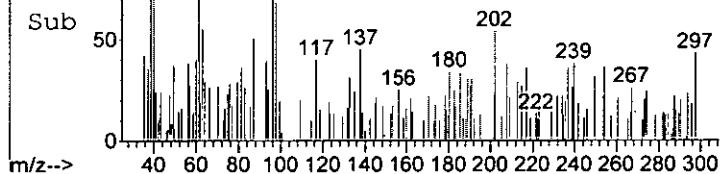




Abundance Scan 594 (4.719 min): MM4351.D\data.ms

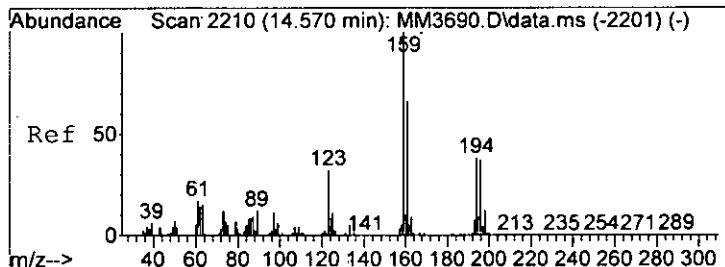
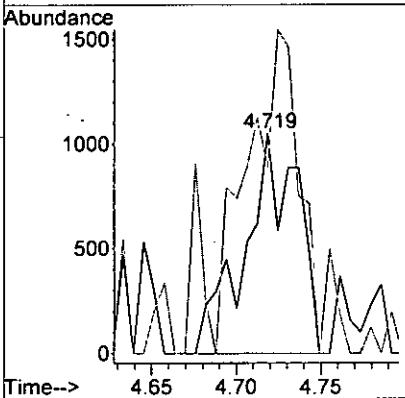


Abundance Scan 594 (4.719 min): MM4351.D\data.ms (-552) (-)

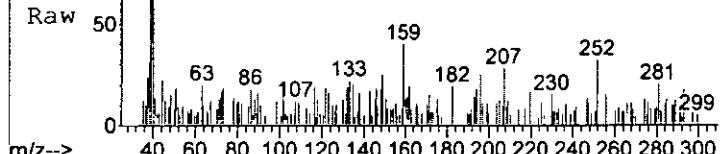


#34  
cis-1,2-Dichloroethene  
Concen: 0.31 ppb m  
RT: 4.719 min Scan# 594  
Delta R.T. -0.000 min  
Lab File: MM4351.D  
Acq: 29 Jun 2015 2:08 pm

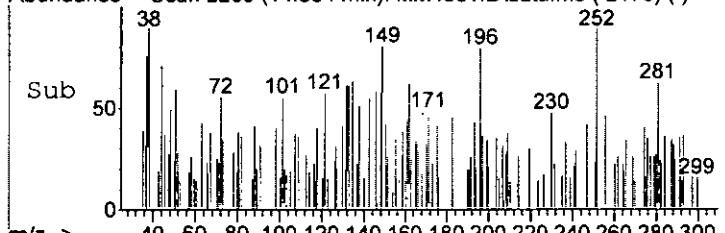
Tgt Ion: 96 Resp: 2278  
Ion Ratio Lower Upper  
96 100  
61 84.7 117.6 157.6#



Abundance Scan 2209 (14.564 min): MM4351.D\data.ms

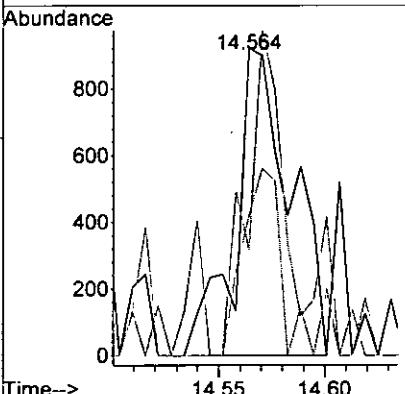


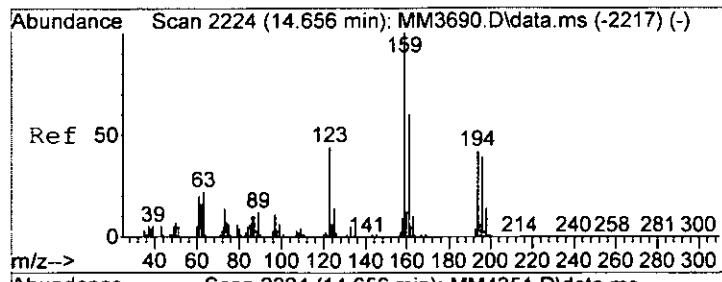
Abundance Scan 2209 (14.564 min): MM4351.D\data.ms (-2170) (-)



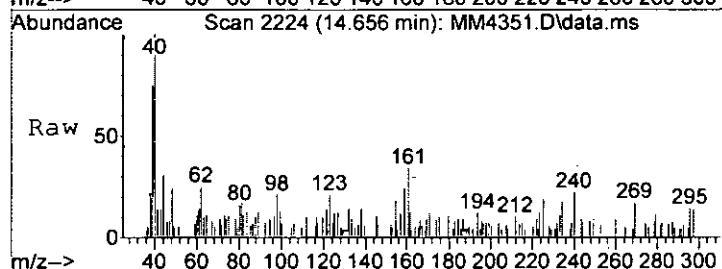
#119  
2,4,5-Trichlorotolene  
Concen: 0.28 ppb  
RT: 14.564 min Scan# 2209  
Delta R.T. -0.012 min  
Lab File: MM4351.D  
Acq: 29 Jun 2015 2:08 pm

Tgt Ion: 159 Resp: 1663  
Ion Ratio Lower Upper  
159 100  
161 34.4 53.2 79.8#  
194 45.6 30.6 45.8

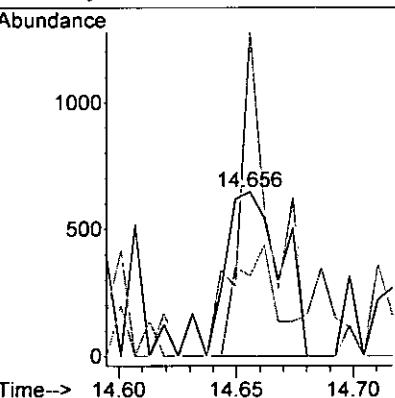
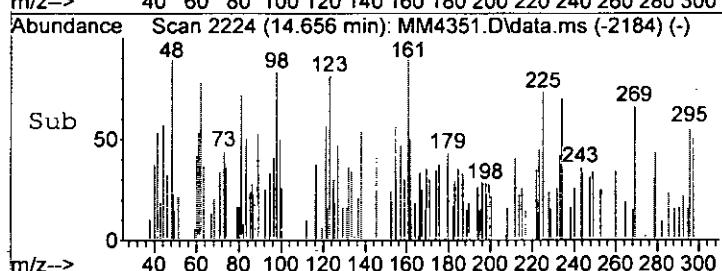




#120  
2,3,6-Trichlorotoluene  
Concen: 0.22 ppb  
RT: 14.656 min Scan# 2224  
Delta R.T. -0.006 min  
Lab File: MM4351.D  
Acq: 29 Jun 2015 2:08 pm



Tgt Ion:159 Resp: 1116  
Ion Ratio Lower Upper  
159 100  
161 196.9 48.4 72.6#  
194 48.8 34.1 51.1



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:38

**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4352.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	440 E	1.0	0.32	
75-00-3	Chloroethane	0.32 J	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	4.7	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	0.61 J	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	5.4	1.0	0.33	
75-34-3	1,1-Dichloroethane	6.8	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	950 E	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	0.66 J	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.6	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 14:38

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4352.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85-122	6/29/15 14:38	
Toluene-d8	109	87-121	6/29/15 14:38	
Dibromofluoromethane	107	89-119	6/29/15 14:38	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4352.D  
 Acq On : 29 Jun 2015 2:38 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 30 14:10:44 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

PT 10

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	5.743	168	861315	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1453896	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1428357	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	756941	50.00	ppb	0.00
<hr/>						
System Monitoring Compounds						
45) surr4,Dibromoethane	5.596	113	422509	53.70	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 107.40%		
48) surr1,1,2-dichloroetha...	6.102	65	446244	53.10	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 106.20%		
65) Surr3,Toluene-d8	8.529	98	1864980	54.27	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 108.54%		
70) Surr2,BFB	11.053	95	716454	54.88	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 109.76%		
<hr/>						
Target Compounds						
4) Vinyl Chloride	1.433	62	3934368m	435.87	ppb	E
6) Chloroethane	1.731	64	1932	0.32	ppb	79
13) 1,1-Dicethene	2.432	96	29882	4.72	ppb	# 87
22) Methylene Chloride	2.932	84	4073	0.61	ppb	# 58
26) trans-1,2-Dichloroethene	3.249	96	38395	5.42	ppb	# 83
28) 1,1-Dicethane	3.792	63	79958	6.84	ppb	88
34) cis-1,2-Dichloroethene	4.719	96	7175759	951.04	ppb	84 E
41) 1,1,1-Trichloroethane	5.596	97	7809	0.66	ppb	89
54) Trichloroethene	7.084	130	12117	1.56	ppb	90
<hr/>						

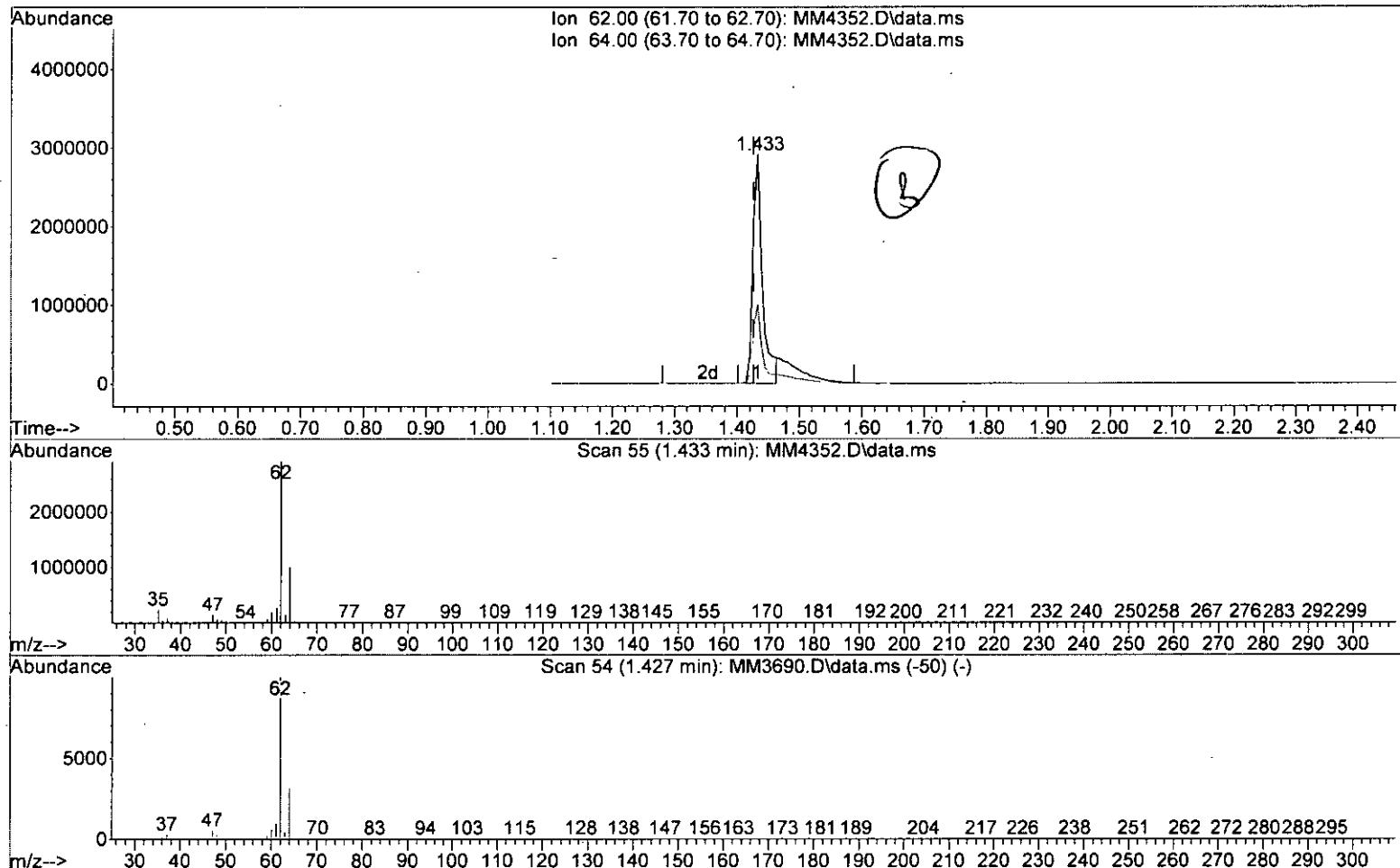
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KF  
6/30/15  
D2  
6/30/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4352.D  
 Acq On : 29 Jun 2015 2:38 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 29 14:54:52 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4352.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 347.72 ppb

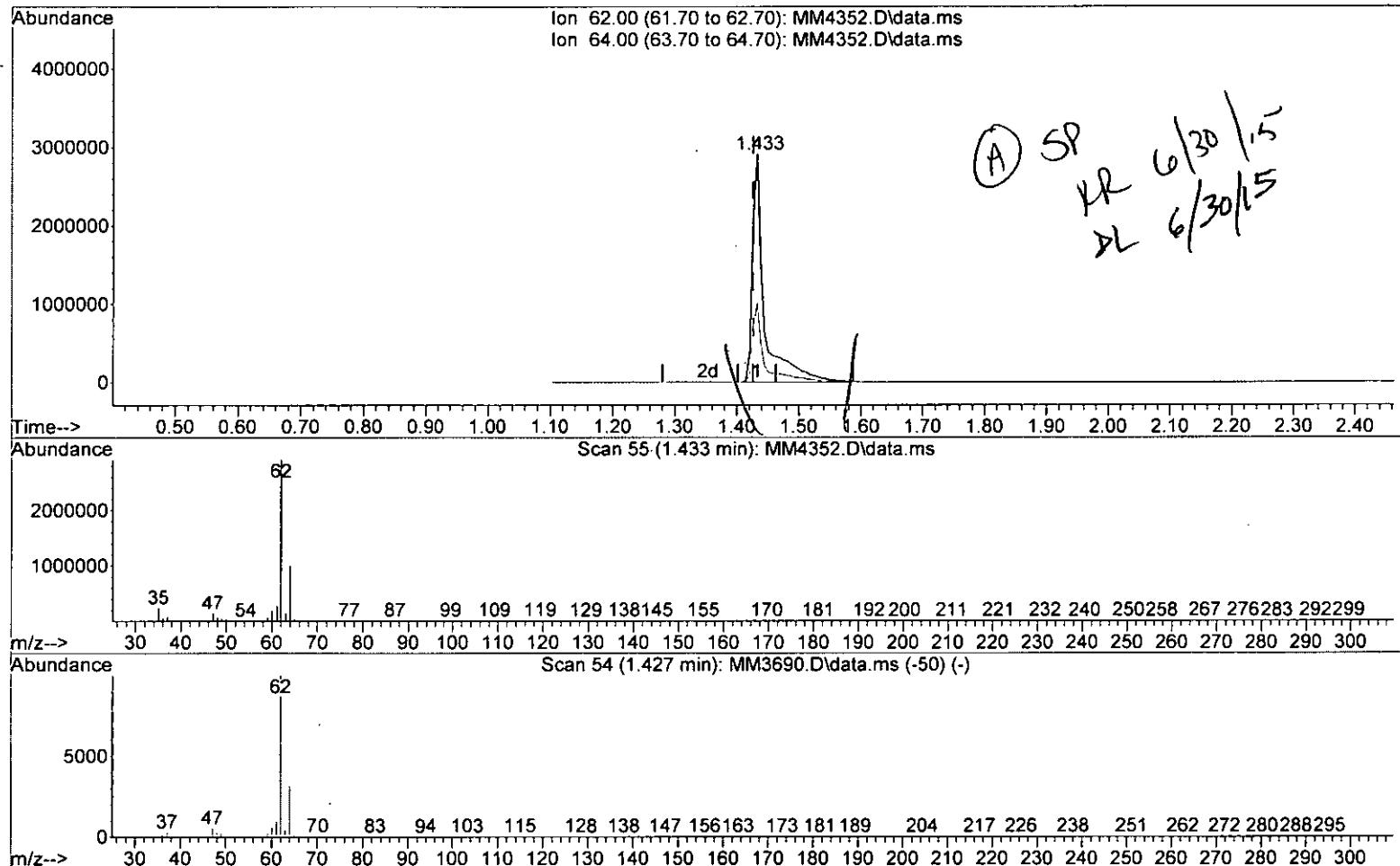
response 3138693

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	34.27
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\062915\  
 Data File : MM4352.D  
 Acq On : 29 Jun 2015 2:38 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 29 14:54:52 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4352.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 435.87 ppb m

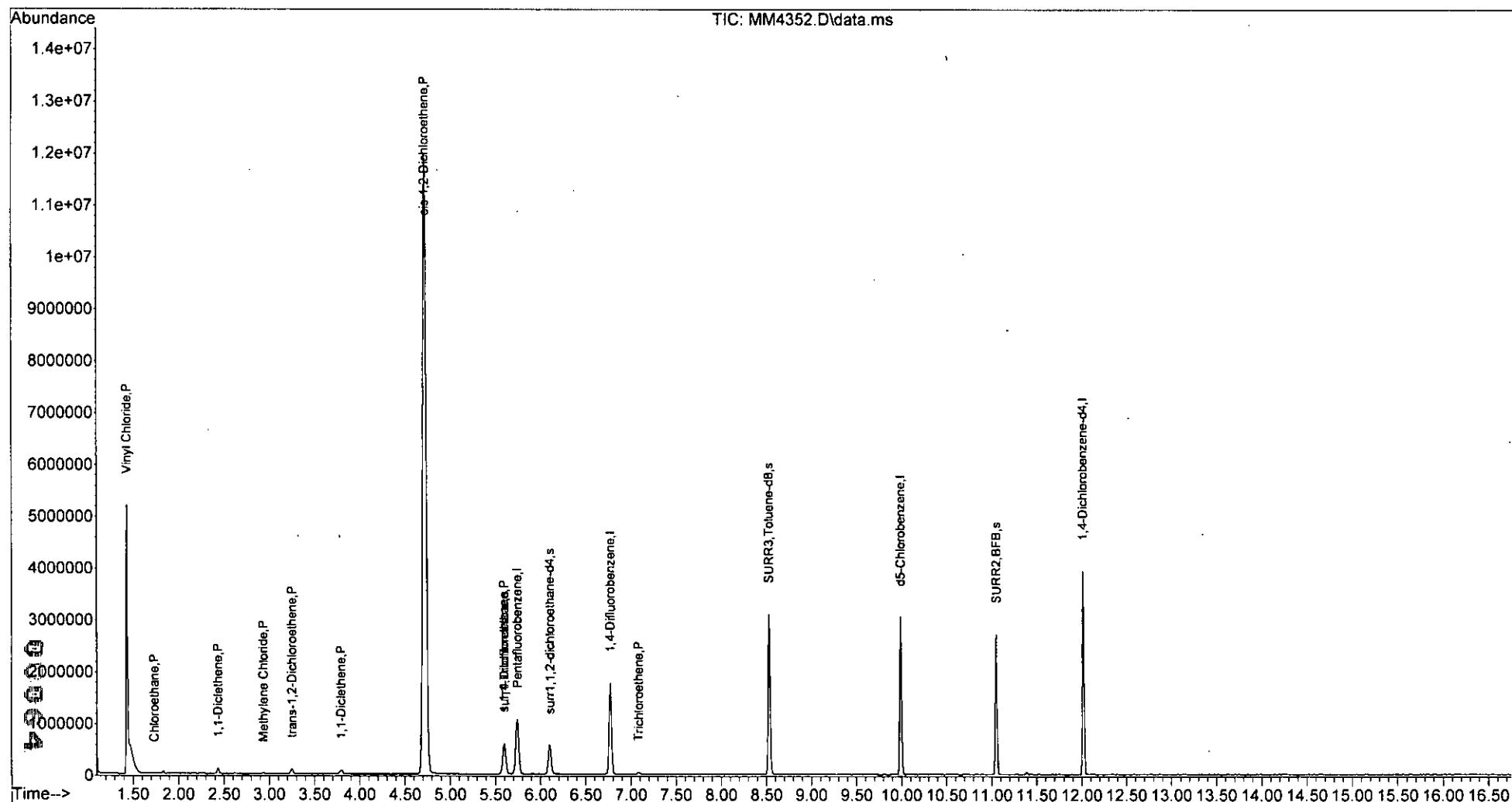
response 3934368

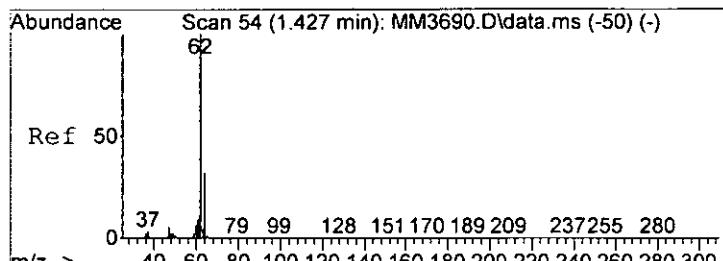
Ion	Exp%	Act%
62.00	100	100
64.00	31.50	34.27
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

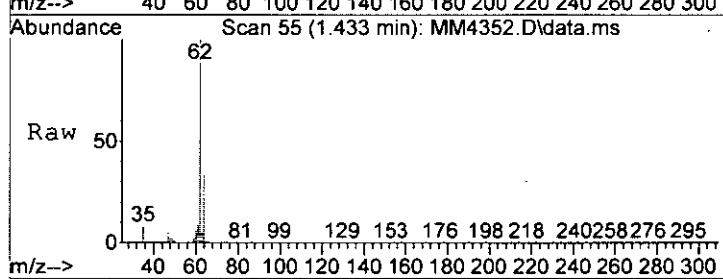
Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
Data File : MM4352.D  
Acq On : 29 Jun 2015 2:38 pm  
Operator : K.Ruest  
Sample : R1505119-006|1.0  
Misc : CB&I 13429 T4  
ALS Vial : 12 Sample Multiplier: 1  
Inst : MSVOA-12

Quant Time: Jun 30 14:10:44 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration

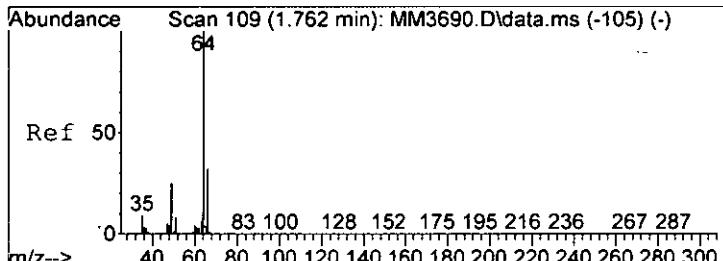
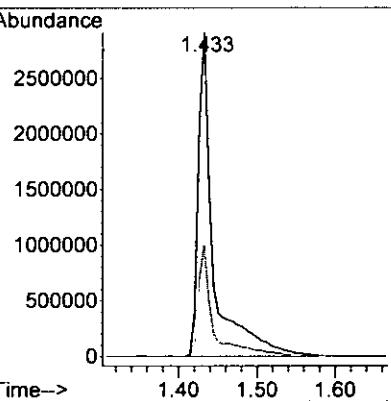
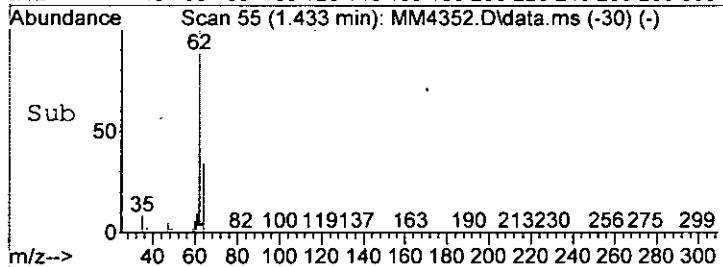




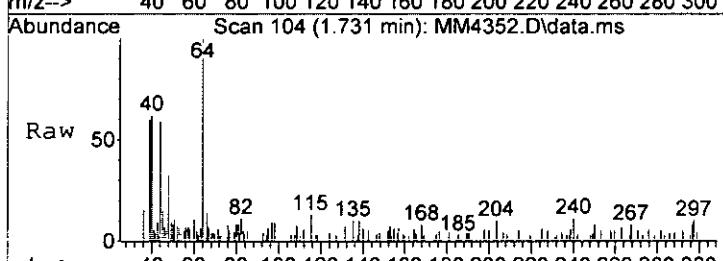
#4  
Vinyl Chloride  
Concen: 435.87 ppb m  
RT: 1.433 min Scan# 55  
Delta R.T. 0.006 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm



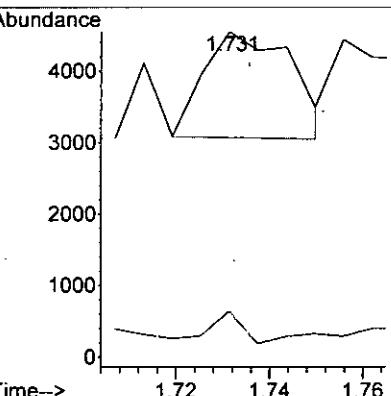
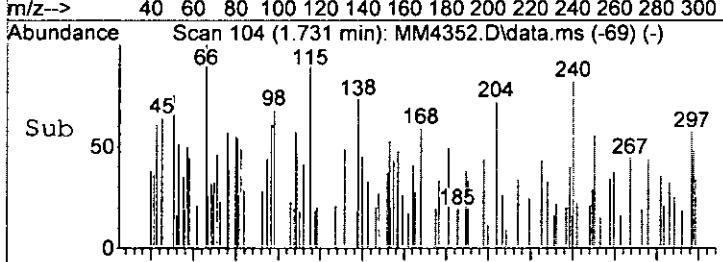
Tgt Ion: 62 Resp: 3934368  
Ion Ratio Lower Upper  
62 100  
64 34.3 11.5 51.5

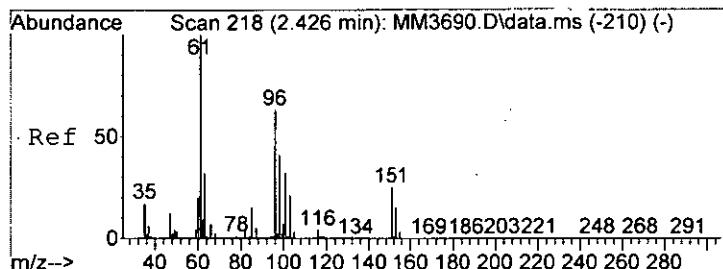


#6  
Chloroethane  
Concen: 0.32 ppb  
RT: 1.731 min Scan# 104  
Delta R.T. -0.031 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm

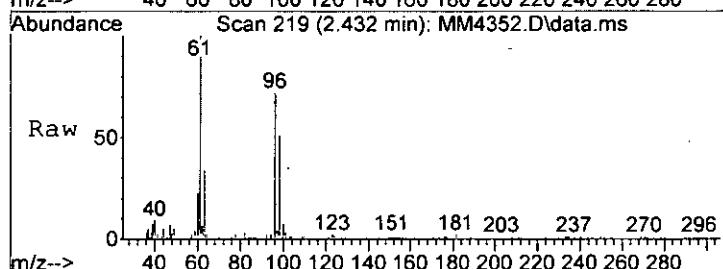


Tgt Ion: 64 Resp: 1932  
Ion Ratio Lower Upper  
64 100  
66 20.5 12.0 52.0

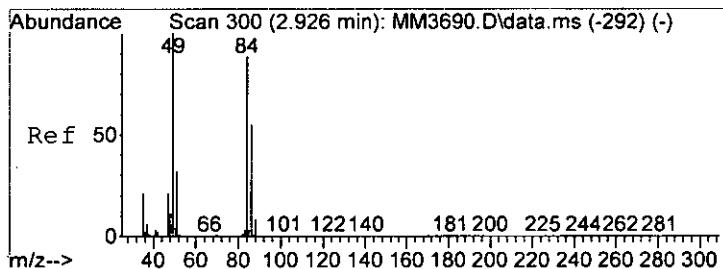
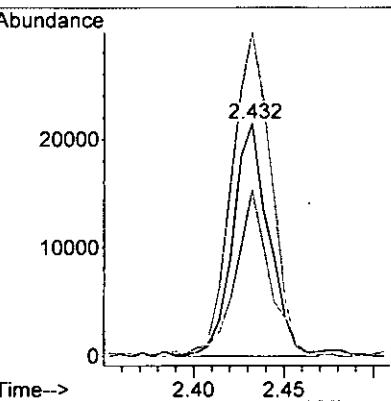
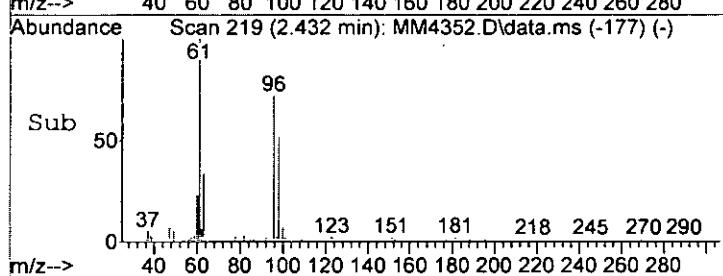




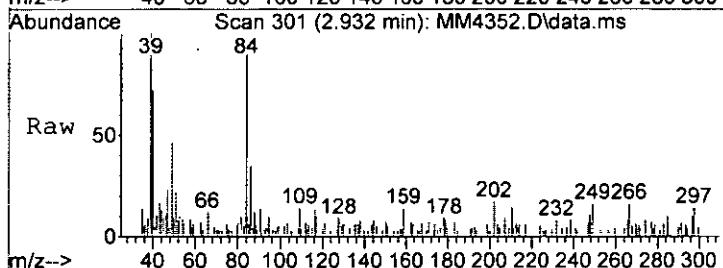
#13  
1,1-Dicethene  
Concen: 4.72 ppb  
RT: 2.432 min Scan# 219  
Delta R.T. 0.006 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm



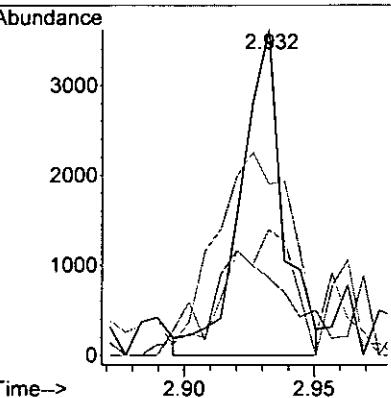
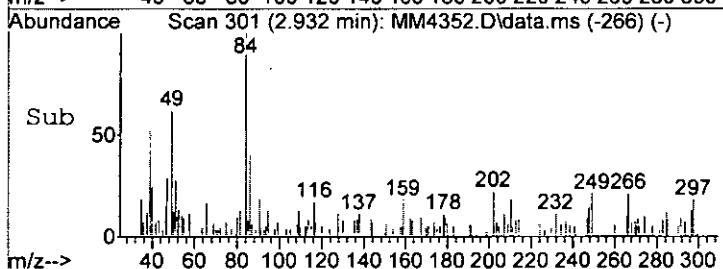
Tgt Ion: 96 Resp: 29882  
Ion Ratio Lower Upper  
96 100  
98 71.2 45.2 85.2  
61 139.1 139.4 179.4#

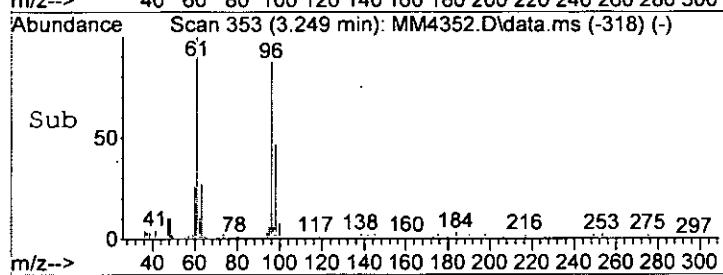
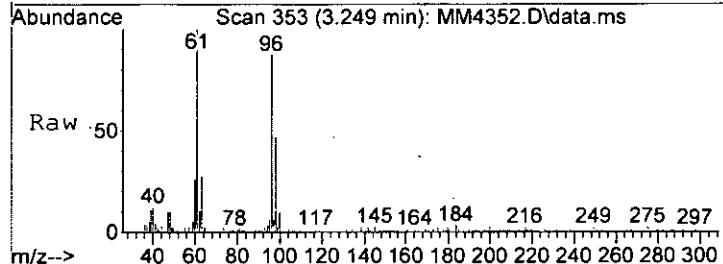
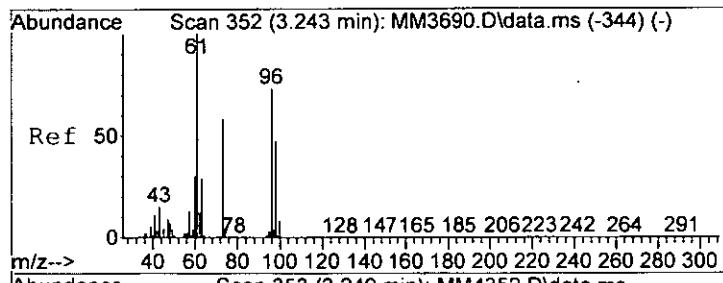


#22  
Methylene Chloride  
Concen: 0.61 ppb  
RT: 2.932 min Scan# 301  
Delta R.T. 0.012 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm



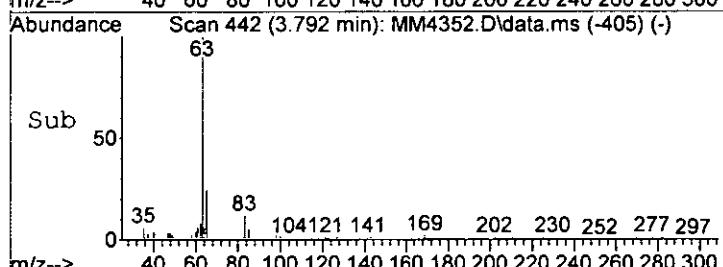
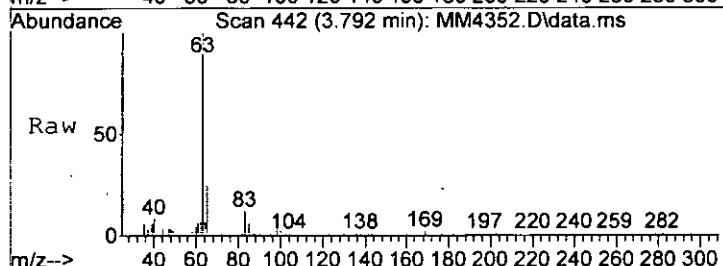
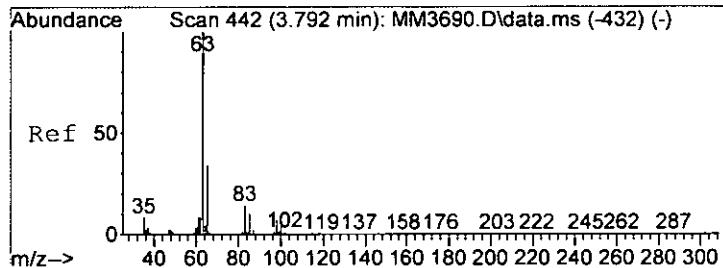
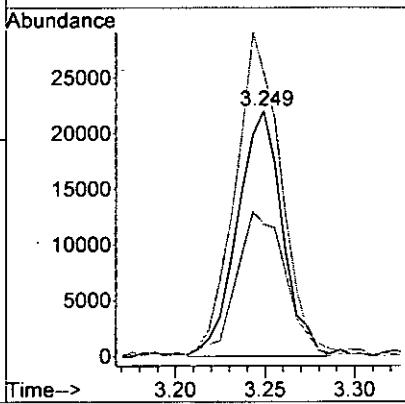
Tgt Ion: 84 Resp: 4073  
Ion Ratio Lower Upper  
84 100  
86 38.5 41.7 81.7#  
49 52.6 92.0 132.0#  
51 23.8 15.8 55.8





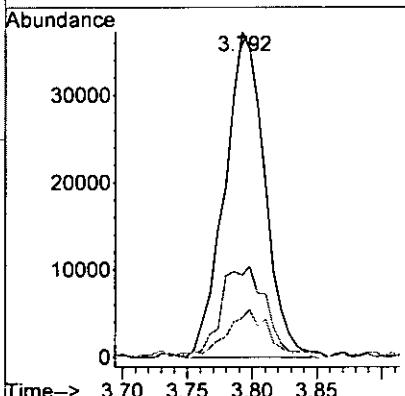
#26  
trans-1,2-Dichloroethene  
Concen: 5.42 ppb  
RT: 3.249 min Scan# 353  
Delta R.T. 0.006 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm

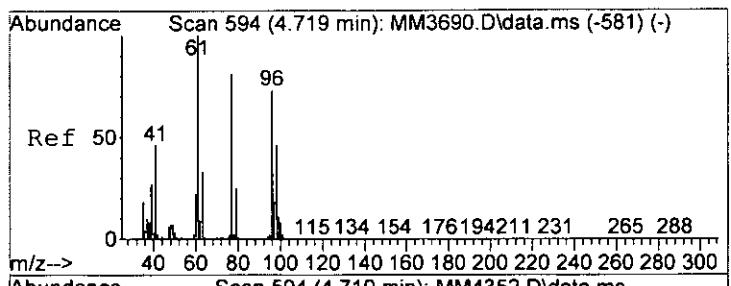
Tgt Ion: 96 Resp: 38395  
Ion Ratio Lower Upper  
96 100  
98 53.7 44.2 84.2  
61 115.2 116.9 156.9#



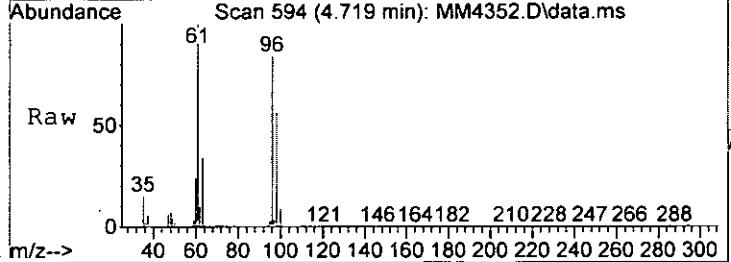
#28  
1,1-Dicethane  
Concen: 6.84 ppb  
RT: 3.792 min Scan# 442  
Delta R.T. -0.000 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm

Tgt Ion: 63 Resp: 79958  
Ion Ratio Lower Upper  
63 100  
65 25.2 13.8 53.8  
83 11.9 0.0 34.1

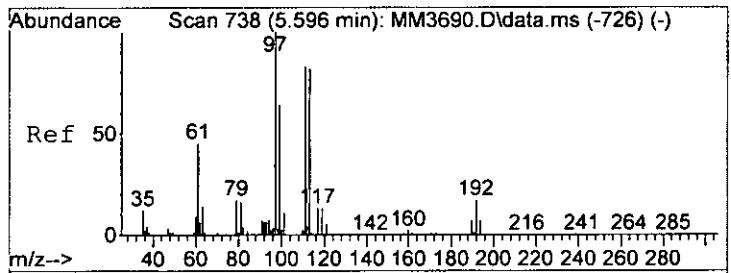
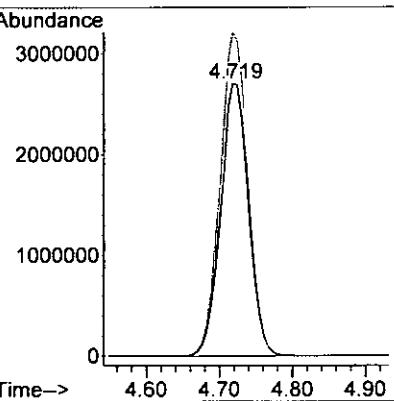
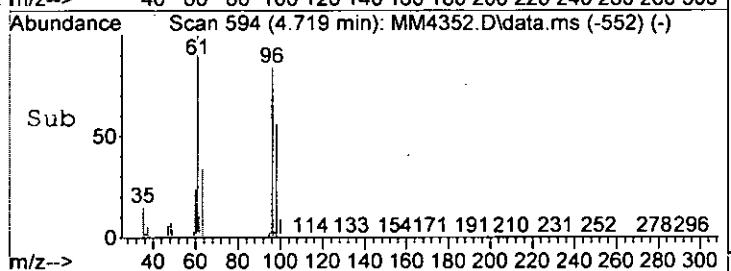




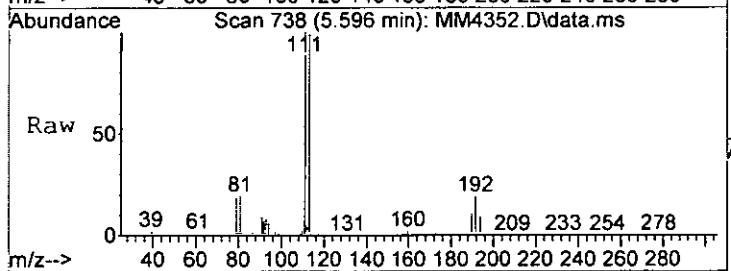
#34  
cis-1, 2-Dichloroethene  
Concen: 951.04 ppb  
RT: 4.719 min Scan# 594  
Delta R.T. -0.000 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm



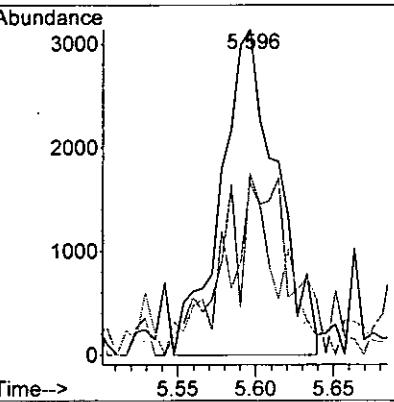
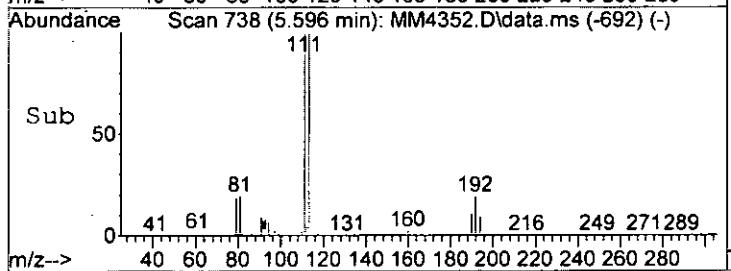
Tgt Ion: 96 Resp: 7175759  
Ion Ratio Lower Upper  
96 100  
61 118.9 117.6 157.6

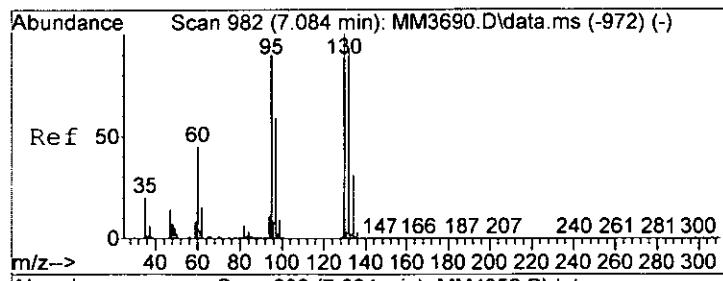


#41  
1,1,1-Trichloroethane  
Concen: 0.66 ppb  
RT: 5.596 min Scan# 738  
Delta R.T. -0.000 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm

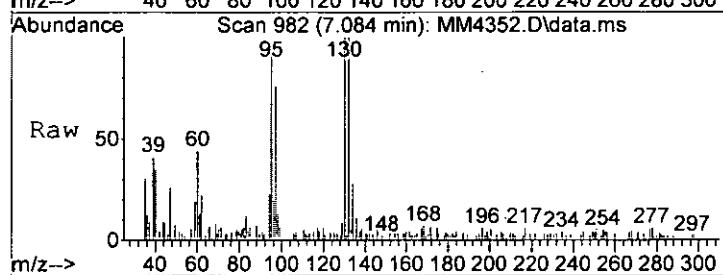


Tgt Ion: 97 Resp: 7809  
Ion Ratio Lower Upper  
97 100  
99 55.8 43.8 83.8  
61 52.9 25.3 65.3

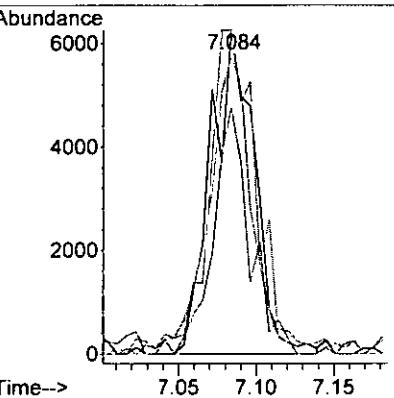
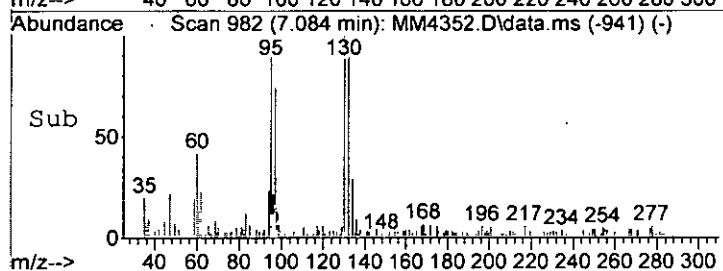




#54  
Trichloroethene  
Concen: 1.56 ppb  
RT: 7.084 min Scan# 982  
Delta R.T. -0.000 min  
Lab File: MM4352.D  
Acq: 29 Jun 2015 2:38 pm



Tgt	Ion:130	Resp:	12117
Ion	Ratio	Lower	Upper
130	100		
132	100.5	72.7	112.7
95	92.1	69.8	109.8
97	76.6	38.8	78.8



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:40

**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006  
**Run Type:** Dilution

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4354.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	10 U	10	2.1	
75-01-4	Vinyl Chloride	390 D	10	3.2	
75-00-3	Chloroethane	10 U	10	2.4	
74-83-9	Bromomethane	10 U	10	2.9	
75-35-4	1,1-Dichloroethene	6.1 DJ	10	5.7	
67-64-1	Acetone	50 U	50	13	
75-15-0	Carbon Disulfide	10 U	10	2.2	
75-09-2	Methylene Chloride	10 U	10	6.0	
156-60-5	trans-1,2-Dichloroethene	5.4 DJ	10	3.4	
75-34-3	1,1-Dichloroethane	7.1 DJ	10	2.0	
156-59-2	cis-1,2-Dichloroethene	840 D	10	3.0	
78-93-3	2-Butanone (MEK)	50 U	50	8.2	
67-66-3	Chloroform	3.4 DJ	10	2.5	
71-55-6	1,1,1-Trichloroethane	10 U	10	3.6	
56-23-5	Carbon Tetrachloride	10 U	10	4.5	
71-43-2	Benzene	10 U	10	2.0	
107-06-2	1,2-Dichloroethane	10 U	10	3.6	
79-01-6	Trichloroethene	2.4 DJ	10	2.2	
78-87-5	1,2-Dichloropropane	10 U	10	2.0	
75-27-4	Bromodichloromethane	10 U	10	3.2	
10061-01-5	cis-1,3-Dichloropropene	10 U	10	2.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	50 U	50	6.7	
108-88-3	Toluene	10 U	10	2.0	
10061-02-6	trans-1,3-Dichloropropene	10 U	10	2.0	
79-00-5	1,1,2-Trichloroethane	10 U	10	3.5	
127-18-4	Tetrachloroethene	10 U	10	3.0	
591-78-6	2-Hexanone	50 U	50	17	
124-48-1	Dibromochloromethane	10 U	10	3.1	
108-90-7	Chlorobenzene	10 U	10	2.9	
100-41-4	Ethylbenzene	10 U	10	2.0	
179601-23-1	m,p-Xylenes	20 U	20	3.4	
95-47-6	o-Xylene	10 U	10	2.0	
100-42-5	Styrene	10 U	10	2.0	
75-25-2	Bromoform	10 U	10	4.2	
79-34-5	1,1,2,2-Tetrachloroethane	10 U	10	2.5	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-15-3  
**Lab Code:** R1505119-006  
**Run Type:** Dilution

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1300  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:40

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4354.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	6/29/15 15:40	
Toluene-d8	109	87-121	6/29/15 15:40	
Dibromofluoromethane	106	89-119	6/29/15 15:40	

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4354.D  
 Acq On : 29 Jun 2015 3:40 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|10  
 Misc : CB&I 13429 T4  
 ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 30 14:17:58 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

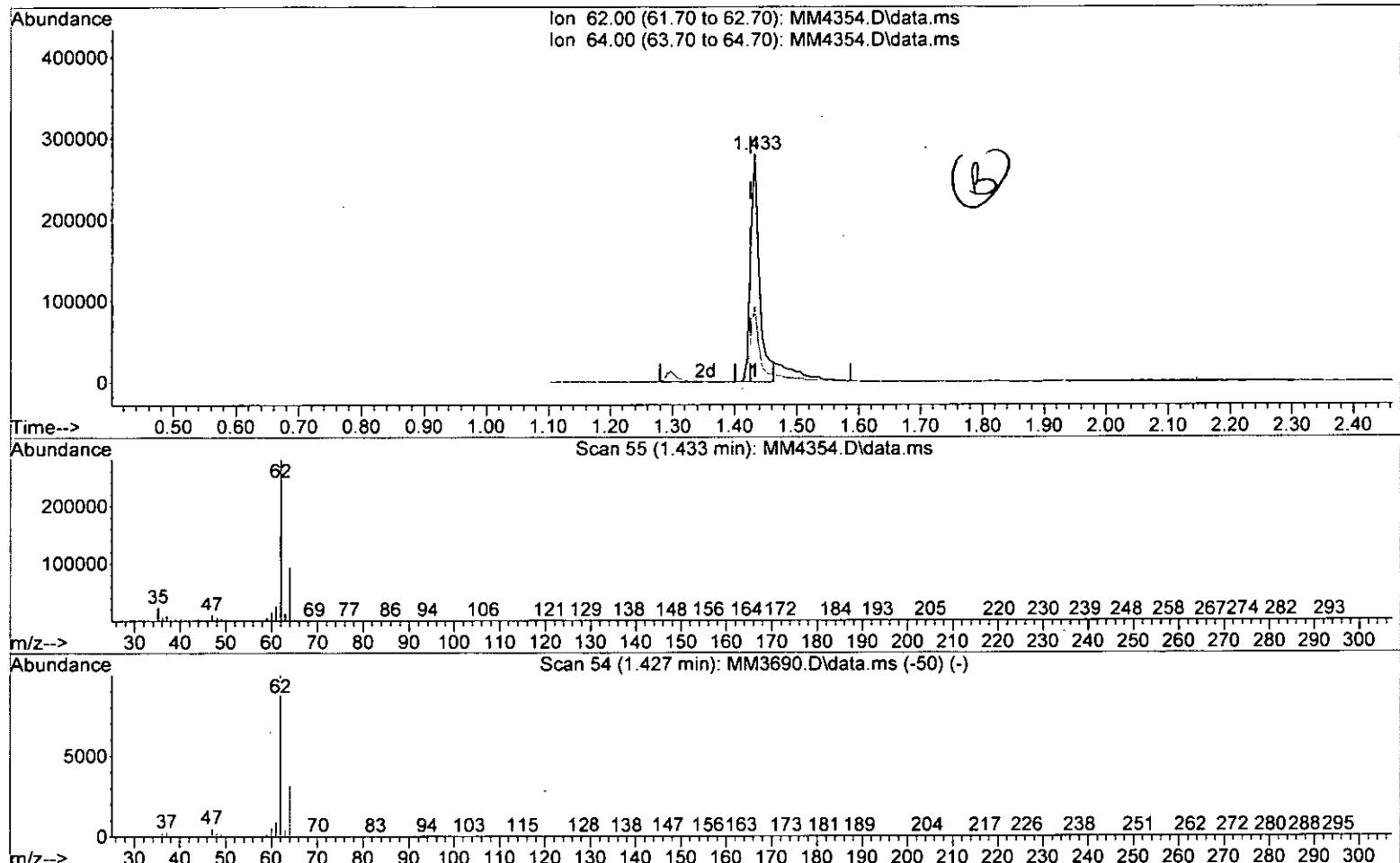
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	5.743	168	833242	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1441874	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1415660	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	743999	50.00	ppb	0.00
<hr/>						
System Monitoring Compounds						
45) surr4,Dibromomethane	5.596	113	412523	52.87	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	105.74%		
48) surr1,1,2-dichloroetha...	6.096	65	435591	52.26	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	104.52%		
65) SURR3,Toluene-d8	8.529	98	1851386	54.33	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	108.66%		
70) SURR2,BFB	11.053	95	716657	55.35	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	110.70%		
<hr/>						
Target Compounds						
4) Vinyl Chloride	1.433	62	338253m	38.74	ppb	Qvalue
13) 1,1-Dicethene	2.432	96	3755	0.61	ppb	# 61
26) trans-1,2-Dichloroethene	3.237	96	3674	0.54	ppb	# 66
28) 1,1-Dicethane	3.798	63	7979m	0.71	ppb	
34) cis-1,2-Dichloroethene	4.725	96	615848	84.37	ppb	# 81
40) Chloroform	5.334	83	4020m	0.34	ppb	
54) Trichloroethene	7.078	130	1829	0.24	ppb	# 48
<hr/>						

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4354.D  
 Acq On : 29 Jun 2015 3:40 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 29 15:56:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4354.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 32.07 ppb

response 280070

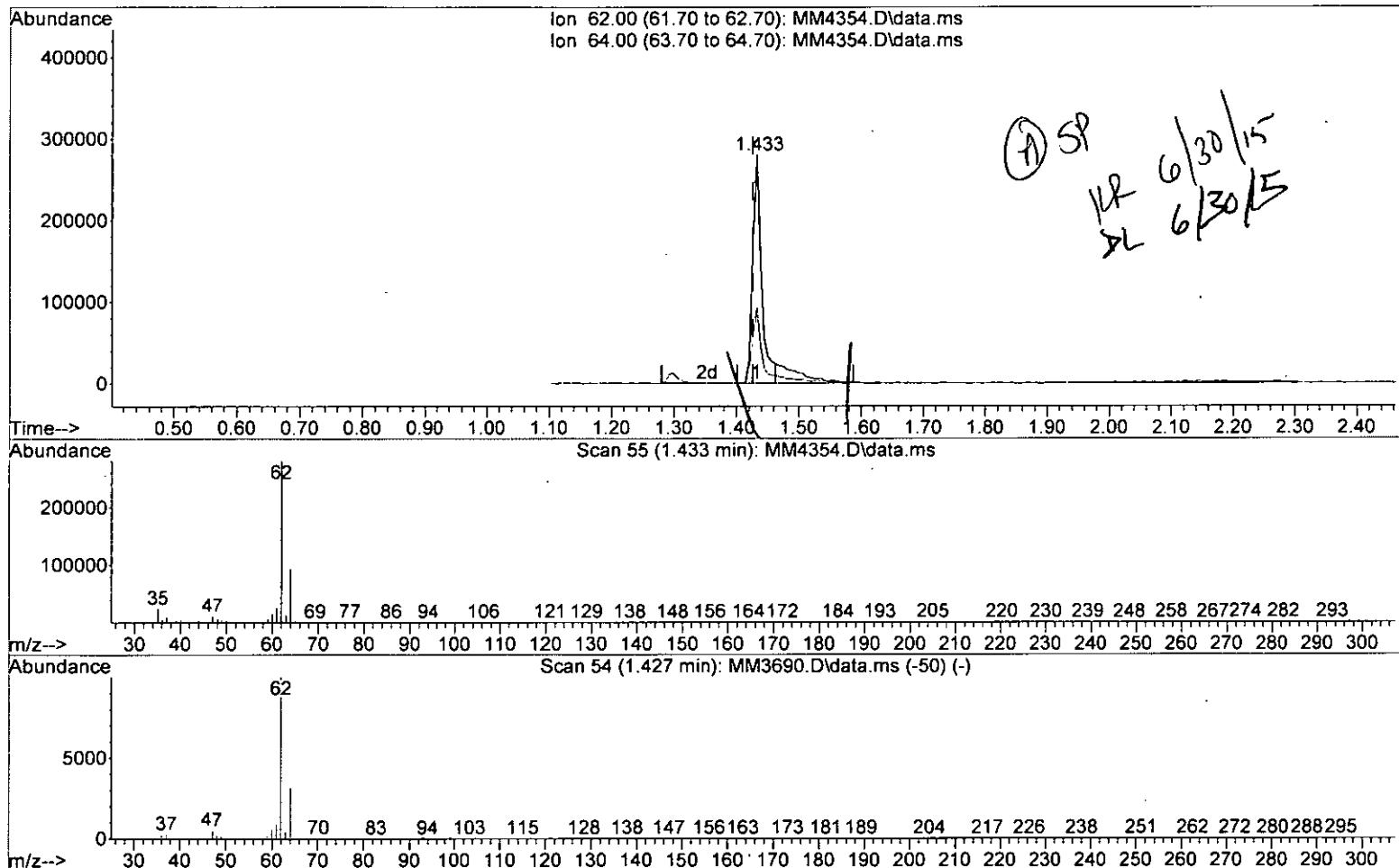
Ion	Exp%	Act%
62.00	100	100
64.00	31.50	33.18
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4354.D  
 Acq On : 29 Jun 2015 3:40 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|10  
 Misc : CB&I 13429 T4  
 ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 15:56:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4354.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 38.74 ppb m

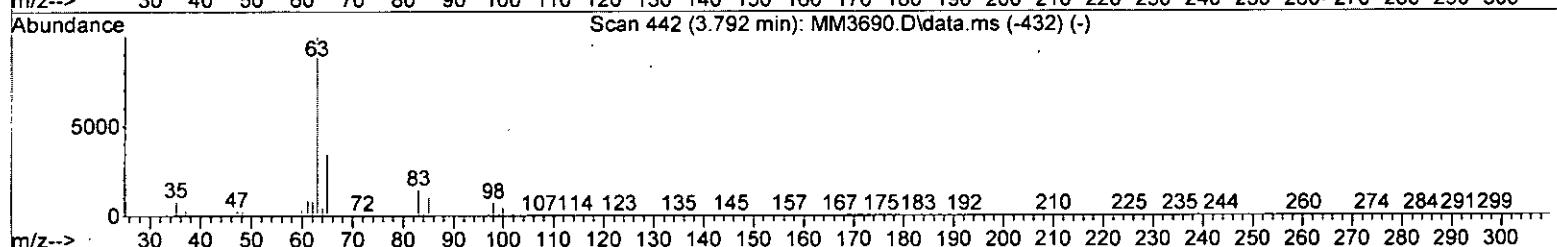
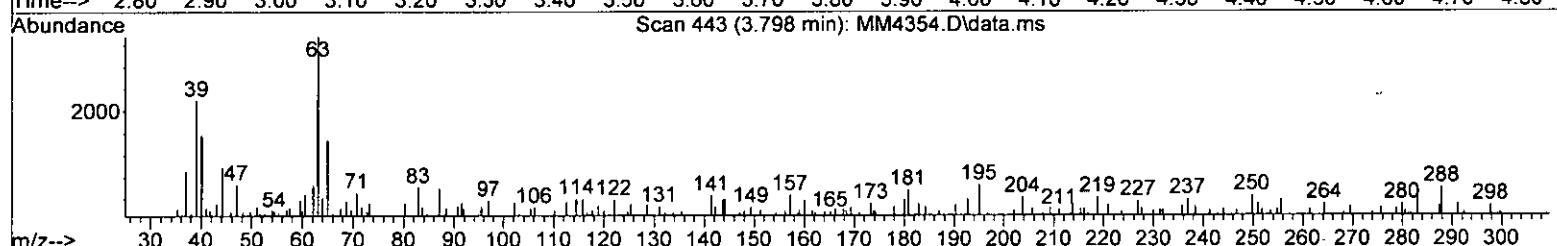
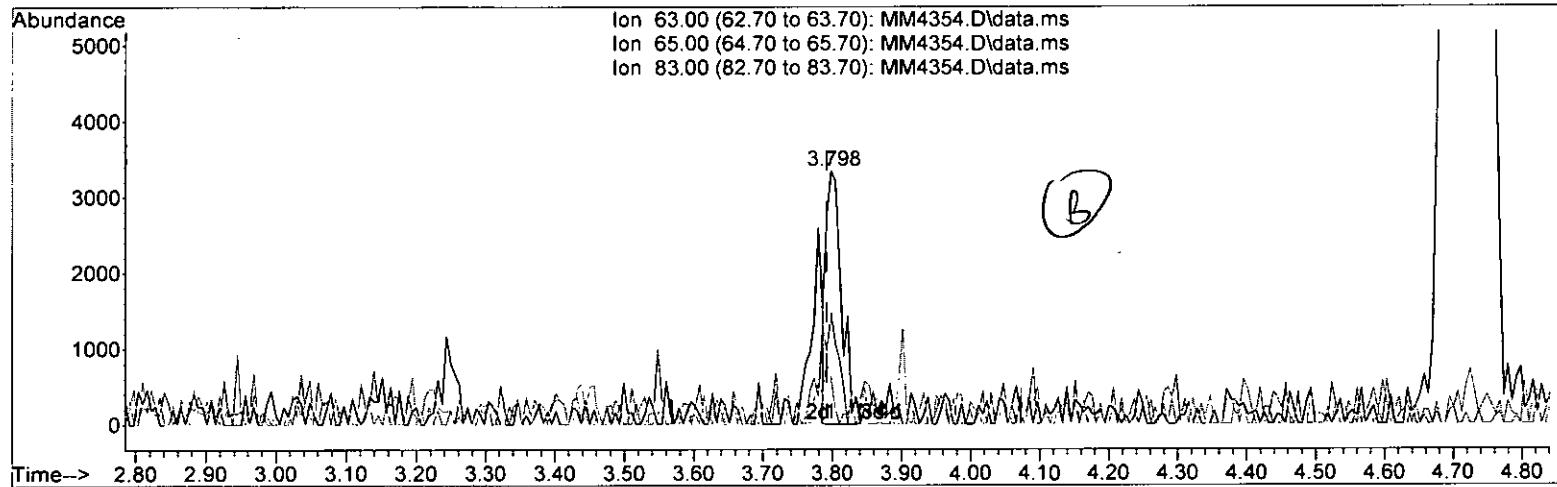
response 338253

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	33.18
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4354.D  
 Accq On : 29 Jun 2015 3:40 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 29 15:56:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4354.D\data.ms

(28) 1,1-Dicethane (P)

3.798min (+0.006) 0.46 ppb

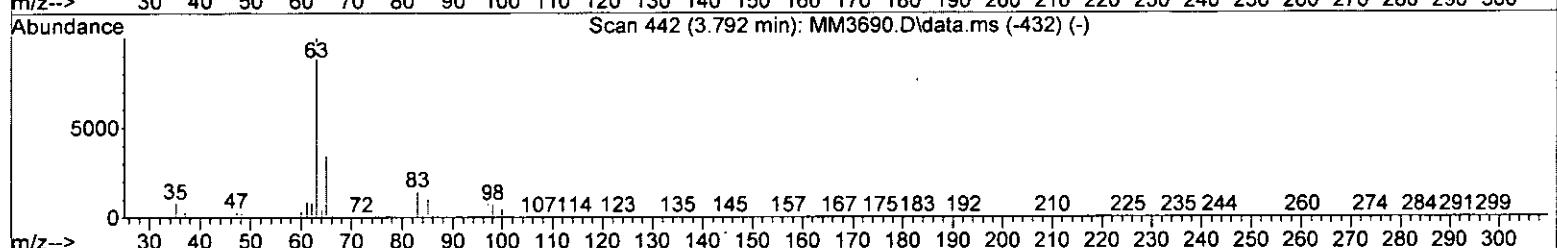
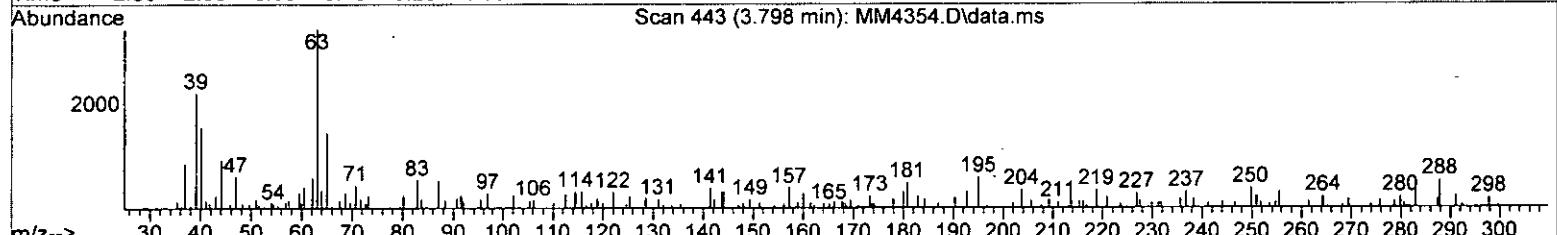
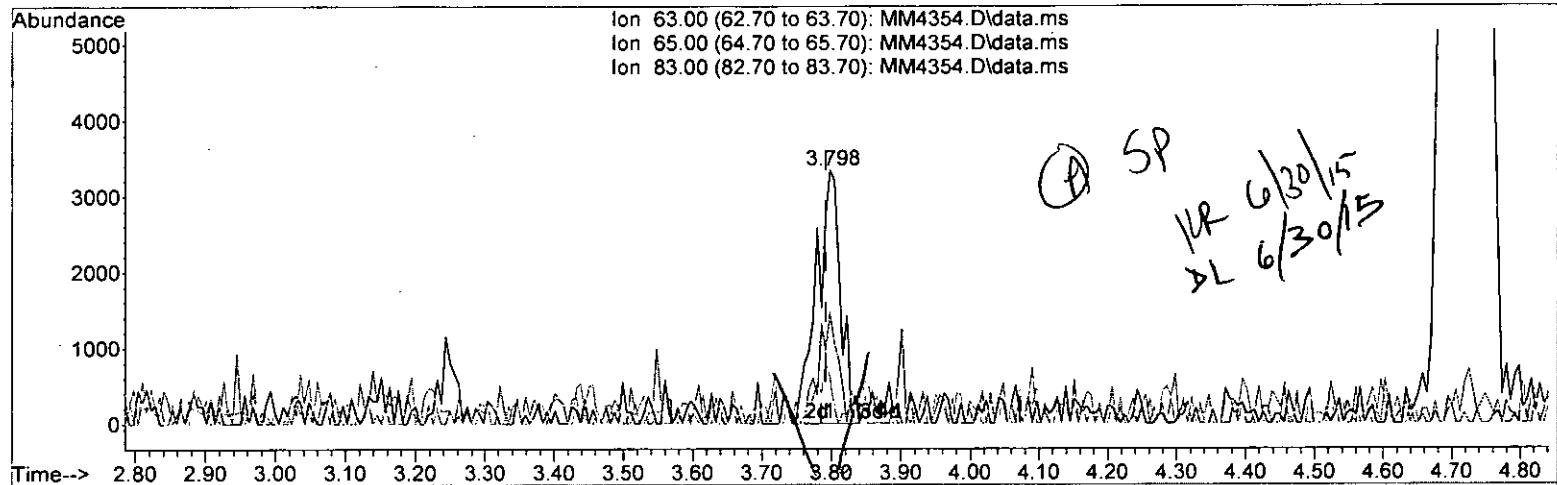
response 5194

Ion	Exp%	Act%
63.00	100	100
65.00	33.80	43.72
83.00	14.10	25.66
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\062915\  
 Data File : MM4354.D  
 Acq On : 29 Jun 2015 3:40 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 29 15:56:02 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4354.D\data.ms

(28) 1,1-Dicethane (P)

3.798min (+0.006) 0.71 ppb m

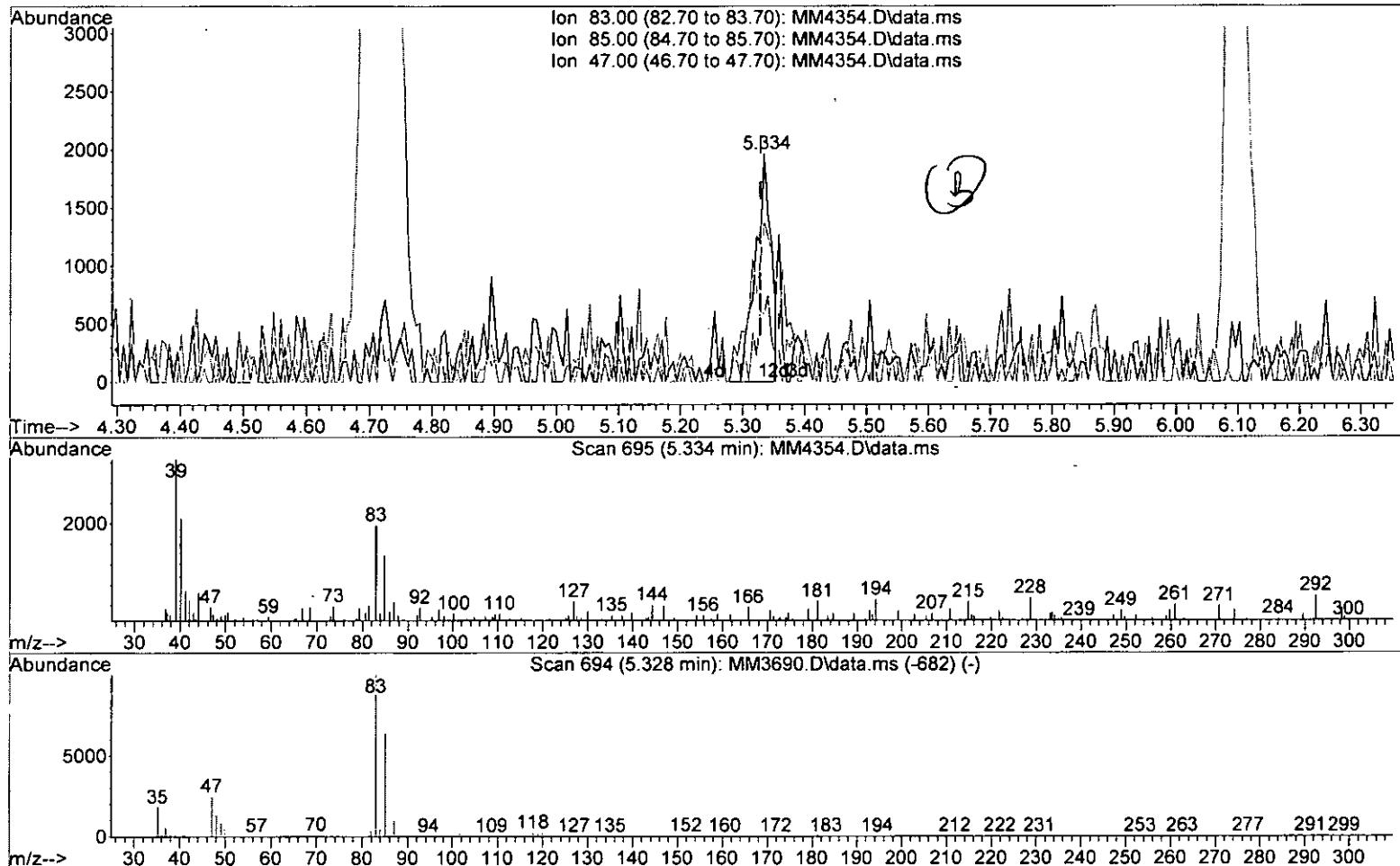
response 7979

Ion	Exp%	Act%
63.00	100	100
65.00	33.80	43.72
83.00	14.10	18.21
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4354.D  
 Acq On : 29 Jun 2015 3:40 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 29 15:56:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4354.D\data.ms

(40) Chloroform (P)

5.334min (+0.006) 0.29 ppb

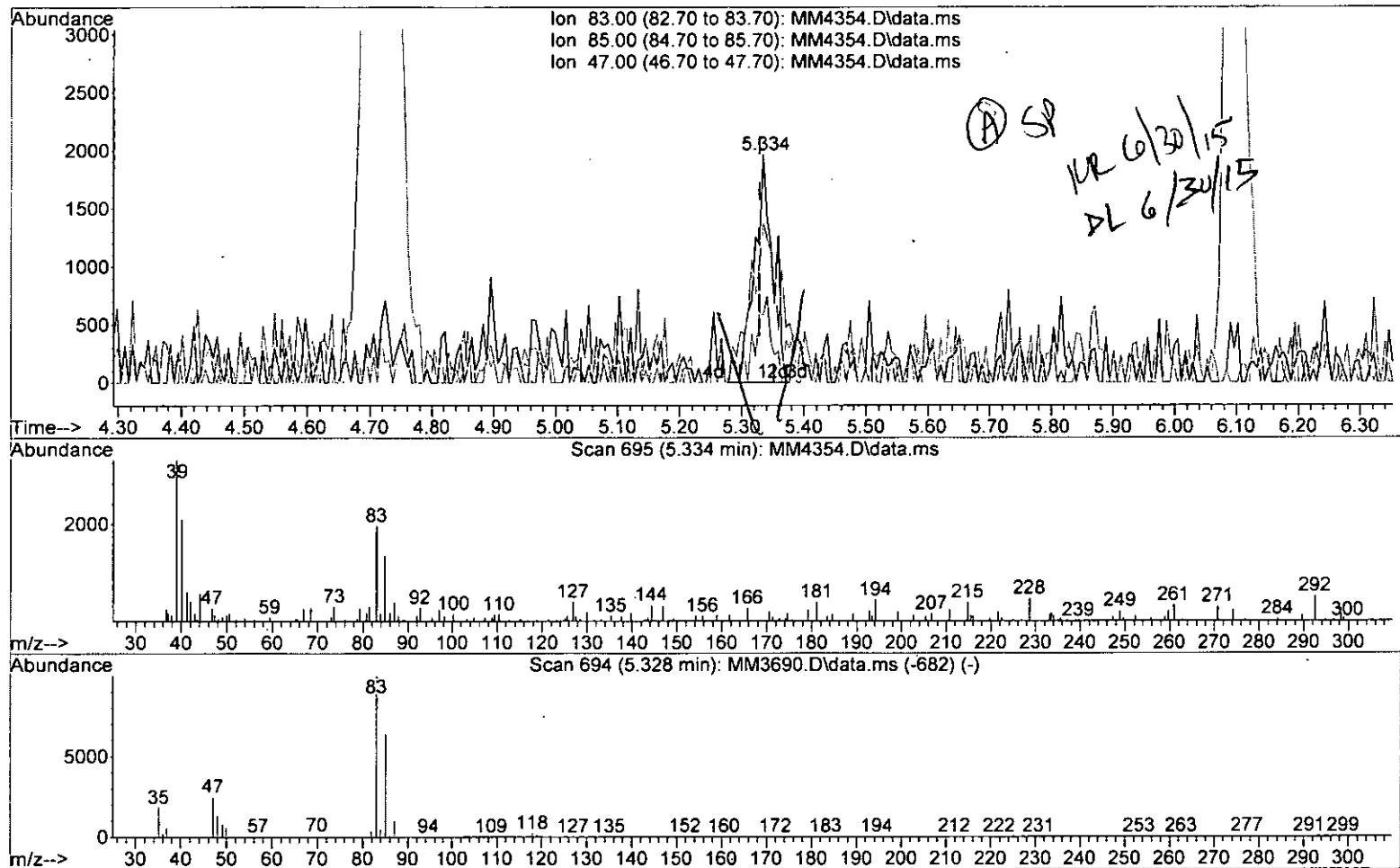
response 3440

Ion	Exp%	Act%
83.00	100	100
85.00	63.80	70.25
47.00	24.70	29.60
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4354.D  
 Acq On : 29 Jun 2015 3:40 pm  
 Operator : K.Ruest  
 Sample : R1505119-006|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 29 15:56:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4354.D\data.ms

(40) Chloroform (P)

5.334min (+0.006) 0.34 ppb m

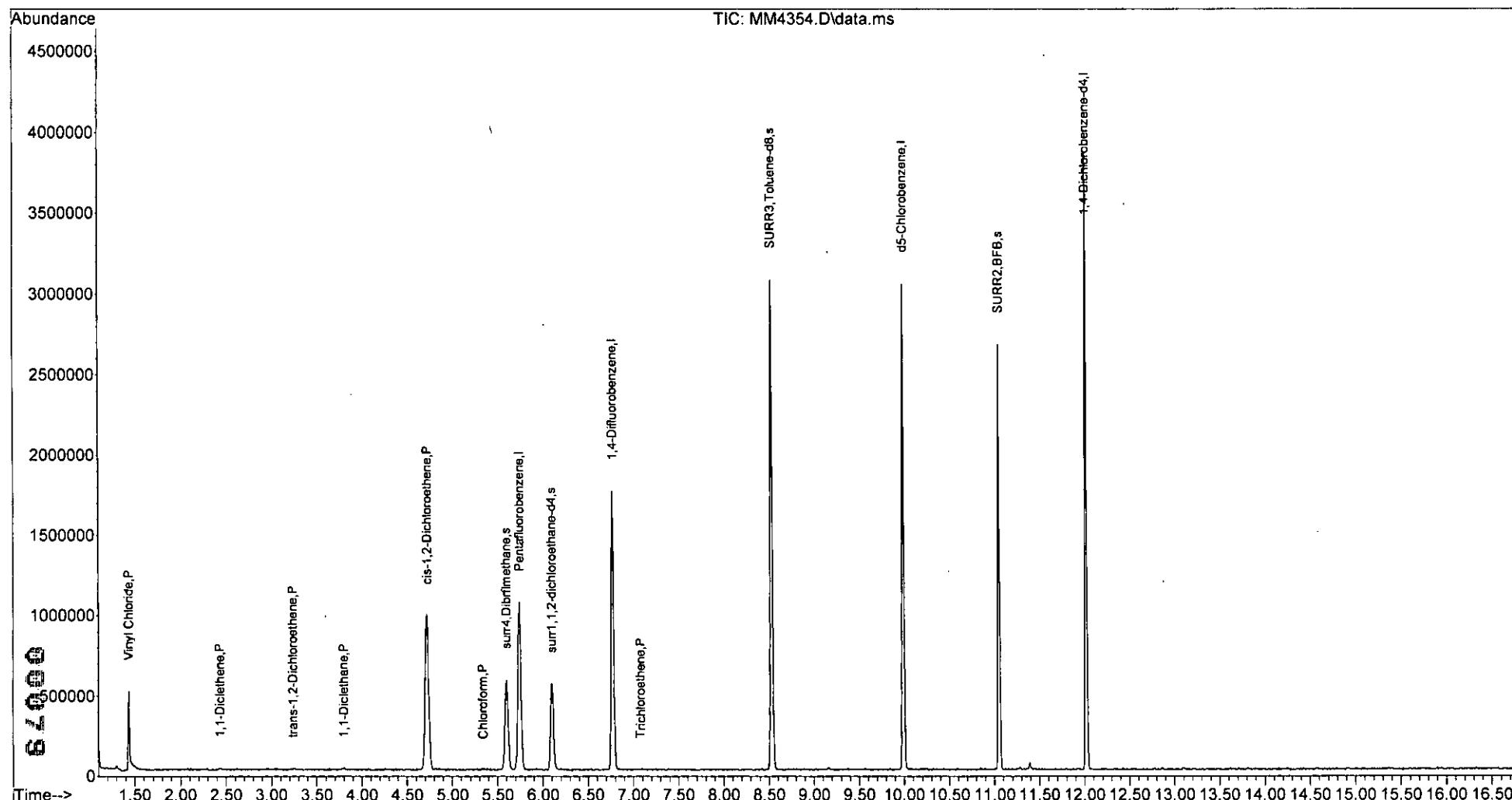
response 4020

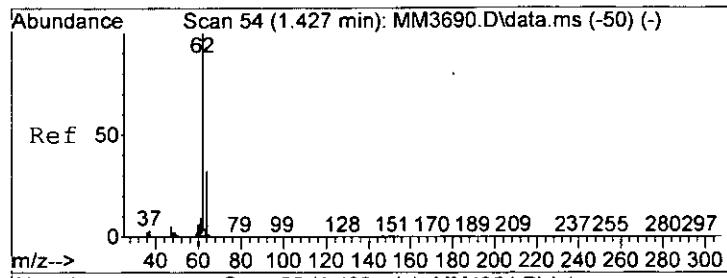
Ion	Exp%	Act%
83.00	100	100
85.00	63.80	70.25
47.00	24.70	18.24
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

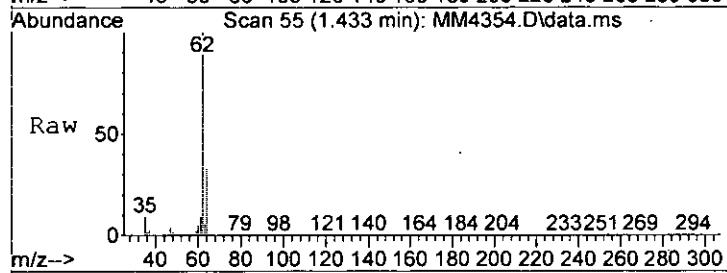
Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
Data File : MM4354.D  
Acq On : 29 Jun 2015 3:40 pm  
Operator : K.Ruest  
Sample : R1505119-006|10  
Misc : CB&I 13429 T4  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 30 14:17:58 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration

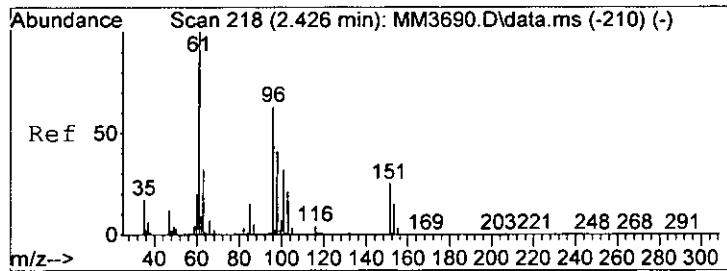
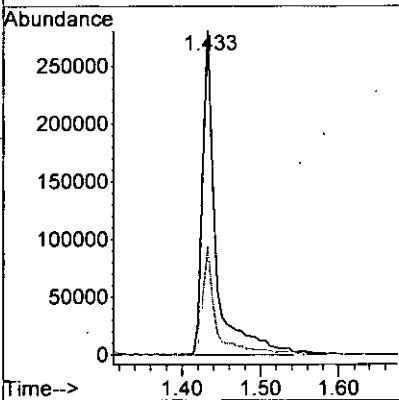
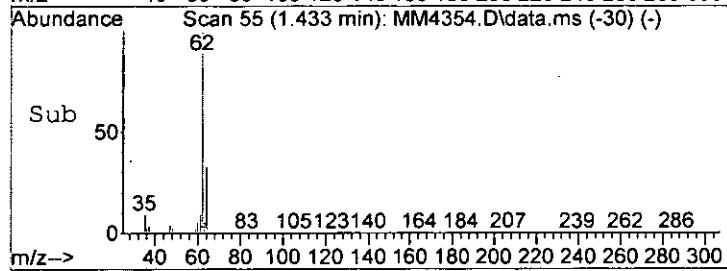




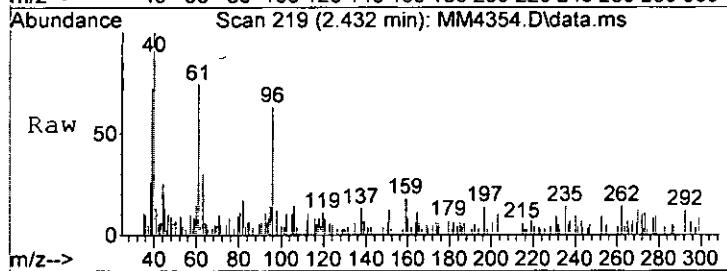
#4  
Vinyl Chloride  
Concen: 38.74 ppb m  
RT: 1.433 min Scan# 55  
Delta R.T. 0.006 min  
Lab File: MM4354.D  
Acq: 29 Jun 2015 3:40 pm



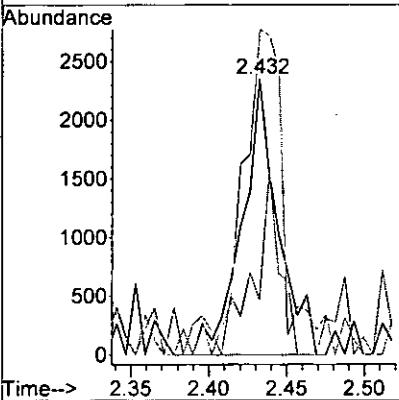
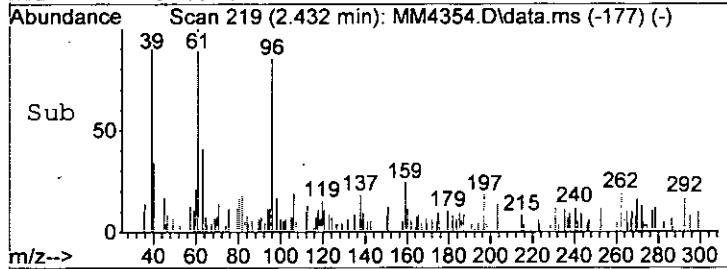
Tgt Ion: 62 Resp: 338253  
Ion Ratio Lower Upper  
62 100  
64 33.2 11.5 51.5

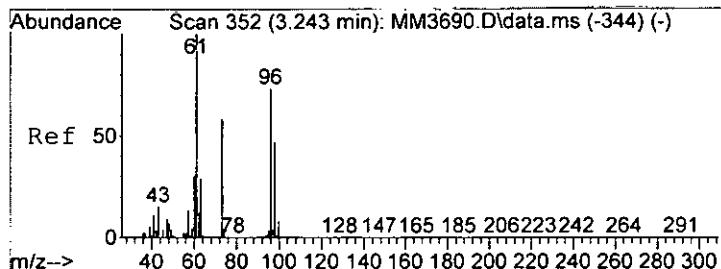


#13  
1,1-Dicethene  
Concen: 0.61 ppb  
RT: 2.432 min Scan# 219  
Delta R.T. 0.006 min  
Lab File: MM4354.D  
Acq: 29 Jun 2015 3:40 pm

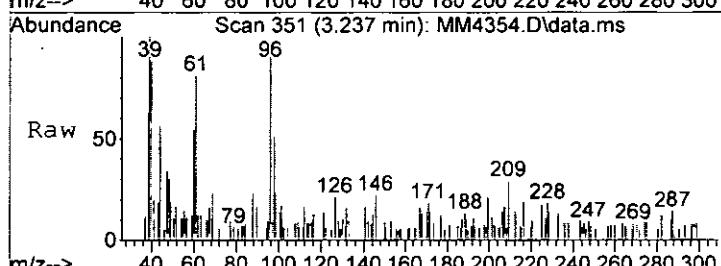


Tgt Ion: 96 Resp: 3755  
Ion Ratio Lower Upper  
96 100  
98 19.8 45.2 85.2#  
61 117.9 139.4 179.4#

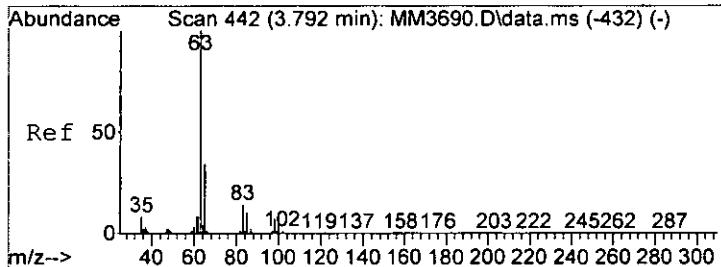
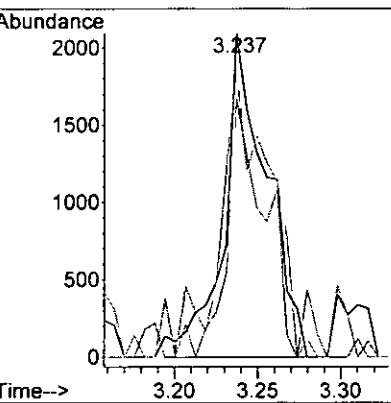
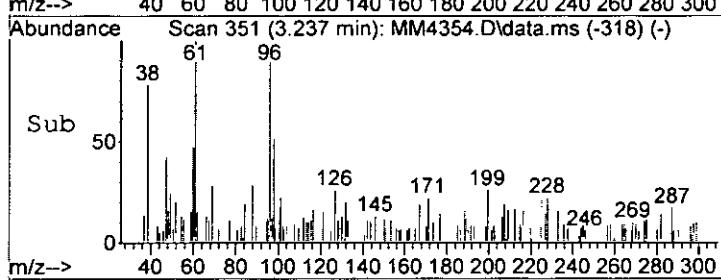




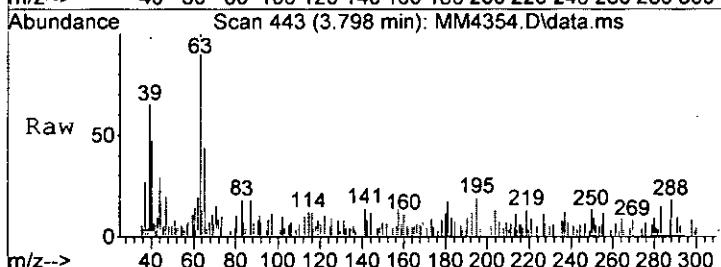
#26  
trans-1,2-Dichloroethene  
Concen: 0.54 ppb  
RT: 3.237 min Scan# 351  
Delta R.T. -0.006 min  
Lab File: MM4354.D  
Acq: 29 Jun 2015 3:40 pm



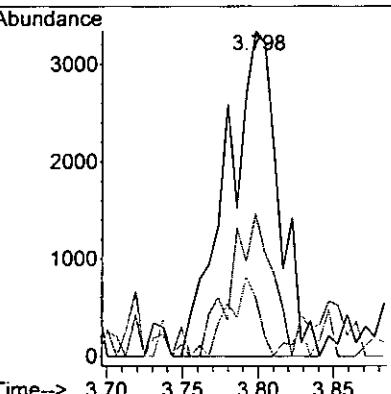
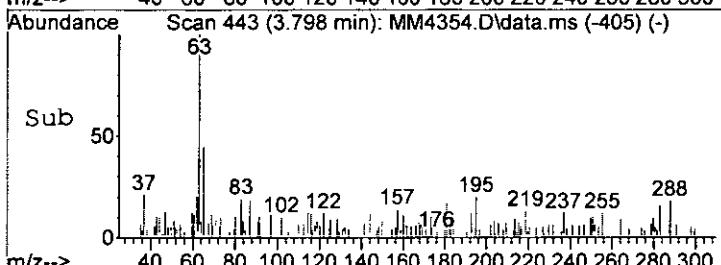
Tgt Ion: 96 Resp: 3674  
Ion Ratio Lower Upper  
96 100  
98 79.9 44.2 84.2  
61 87.8 116.9 156.9#

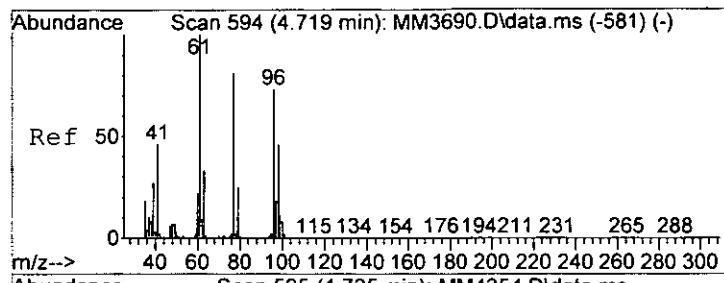


#28  
1,1-Dicethane  
Concen: 0.71 ppb m  
RT: 3.798 min Scan# 443  
Delta R.T. 0.006 min  
Lab File: MM4354.D  
Acq: 29 Jun 2015 3:40 pm

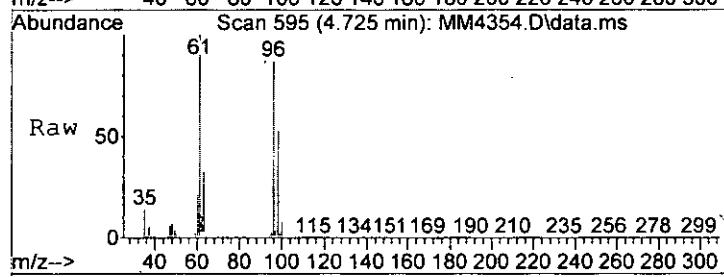


Tgt Ion: 63 Resp: 7979  
Ion Ratio Lower Upper  
63 100  
65 43.7 13.8 53.8  
83 18.2 0.0 34.1

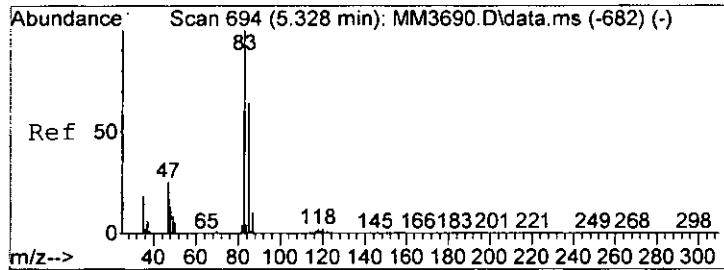
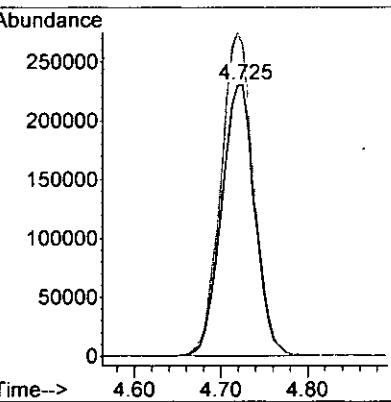
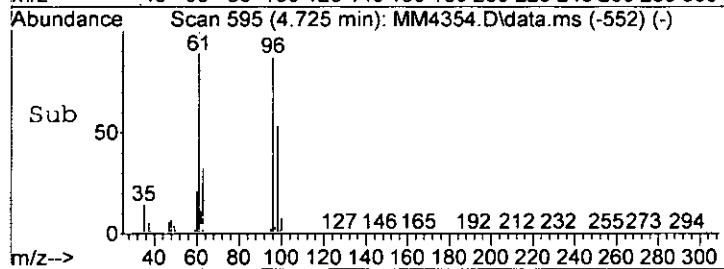




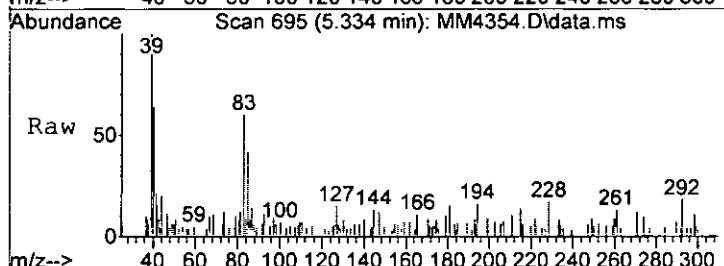
#34  
cis-1,2-Dichloroethene  
Concen: 84.37 ppb  
RT: 4.725 min Scan# 595  
Delta R.T. 0.006 min  
Lab File: MM4354.D  
Acq: 29 Jun 2015 3:40 pm



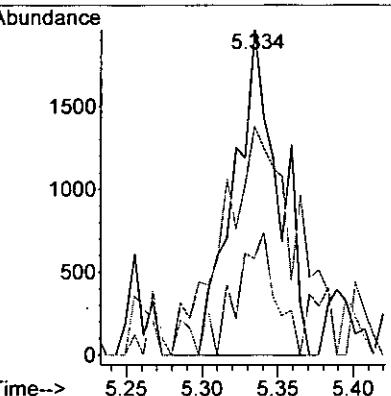
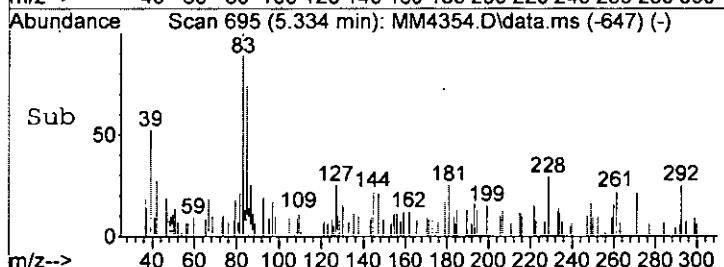
Tgt Ion: 96 Resp: 615848  
Ion Ratio Lower Upper  
96 100  
61 114.5 117.6 157.6#

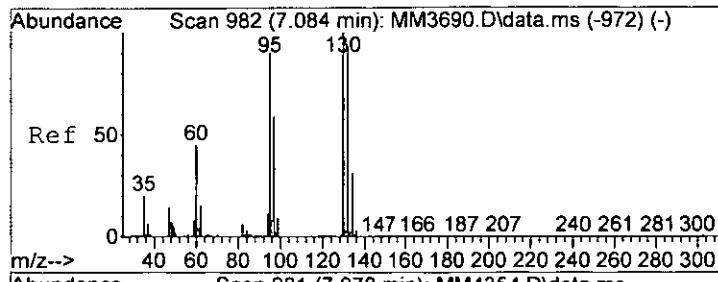


#40  
Chloroform  
Concen: 0.34 ppb m  
RT: 5.334 min Scan# 695  
Delta R.T. 0.006 min  
Lab File: MM4354.D  
Acq: 29 Jun 2015 3:40 pm

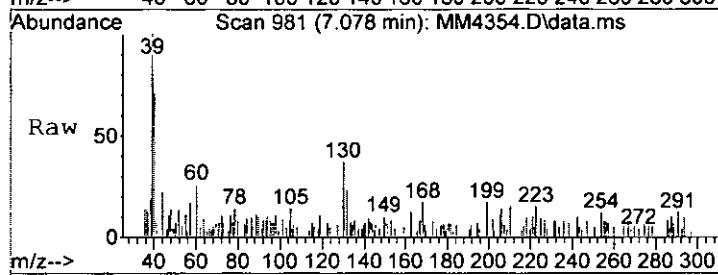


Tgt Ion: 83 Resp: 4020  
Ion Ratio Lower Upper  
83 100  
85 70.2 43.8 83.8  
47 18.2 4.7 44.7

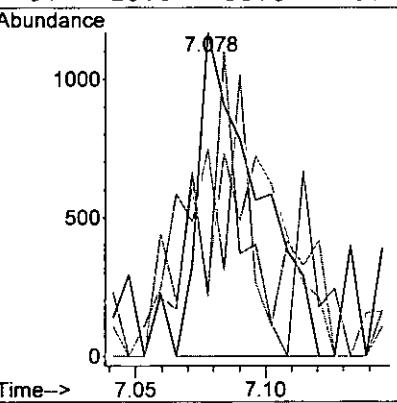
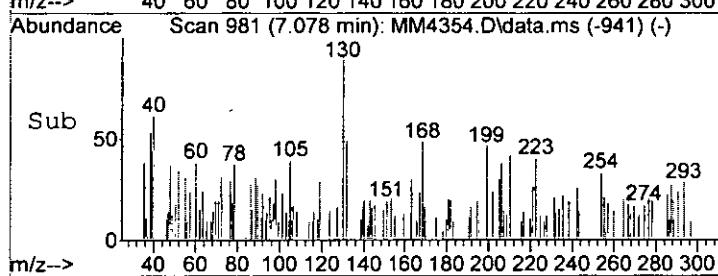




#54  
Trichloroethene  
Concen: 0.24 ppb  
RT: 7.078 min Scan# 981  
Delta R.T. -0.006 min  
Lab File: MM4354.D  
Acq: 29 Jun 2015 3:40 pm



Tgt Ion:130 Resp: 1829  
Ion Ratio Lower Upper  
130 100  
132 63.9 72.7 112.7#  
95 21.5 69.8 109.8#  
97 18.5 38.8 78.8#



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 14:29

**Sample Name:** 87-13-3  
**Lab Code:** R1505119-007

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUDATA\MSVOA12\DATA\062815\MM4326.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 200

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	200 U	200	42	
75-01-4	Vinyl Chloride	990	200	64	
75-00-3	Chloroethane	200 U	200	48	
74-83-9	Bromomethane	200 U	200	58	
75-35-4	1,1-Dichloroethene	200 U	200	120	
67-64-1	Acetone	1000 U	1000	250	
75-15-0	Carbon Disulfide	470	200	44	
75-09-2	Methylene Chloride	200 U	200	120	
156-60-5	trans-1,2-Dichloroethene	310	200	66	
75-34-3	1,1-Dichloroethane	200 U	200	40	
156-59-2	cis-1,2-Dichloroethene	49000 E	200	60	
78-93-3	2-Butanone (MEK)	1000 U	1000	170	
67-66-3	Chloroform	520	200	150	
71-55-6	1,1,1-Trichloroethane	200 U	200	72	
56-23-5	Carbon Tetrachloride	200 U	200	90	
71-43-2	Benzene	200 U	200	40	
107-06-2	1,2-Dichloroethane	200 U	200	72	
79-01-6	Trichloroethene	71000 E	200	44	
78-87-5	1,2-Dichloropropane	200 U	200	40	
75-27-4	Bromodichloromethane	94 J	200	64	
10061-01-5	cis-1,3-Dichloropropene	200 U	200	48	
108-10-1	4-Methyl-2-pentanone (MIBK)	1000 U	1000	140	
108-88-3	Toluene	54 J	200	40	
10061-02-6	trans-1,3-Dichloropropene	200 U	200	40	
79-00-5	1,1,2-Trichloroethane	200 U	200	68	
127-18-4	Tetrachloroethene	200 U	200	60	
591-78-6	2-Hexanone	1000 U	1000	340	
124-48-1	Dibromochloromethane	200 U	200	62	
108-90-7	Chlorobenzene	200 U	200	58	
100-41-4	Ethylbenzene	200 U	200	40	
179601-23-1	m,p-Xylenes	400 U	400	66	
95-47-6	o-Xylene	200 U	200	40	
100-42-5	Styrene	200 U	200	40	
75-25-2	Bromoform	200 U	200	84	
79-34-5	1,1,2,2-Tetrachloroethane	200 U	200	50	

**ALS Group USA, Corp. dba ALS Environmental**

Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 14:29

**Sample Name:** 87-13-3  
**Lab Code:** R1505119-007

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUUDATA\MS\VOA12\DATA\062815\MM4326.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 200

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	110	85-122	6/28/15 14:29		
Toluene-d8	109	87-121	6/28/15 14:29		
Dibromofluoromethane	109	89-119	6/28/15 14:29		

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4326.D  
 Acq On : 28 Jun 2015 2:29 pm  
 Operator : K.Ruest  
 Sample : R1505119-007|200 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 29 15:44:35 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

RT 500

IC  
6/29/15

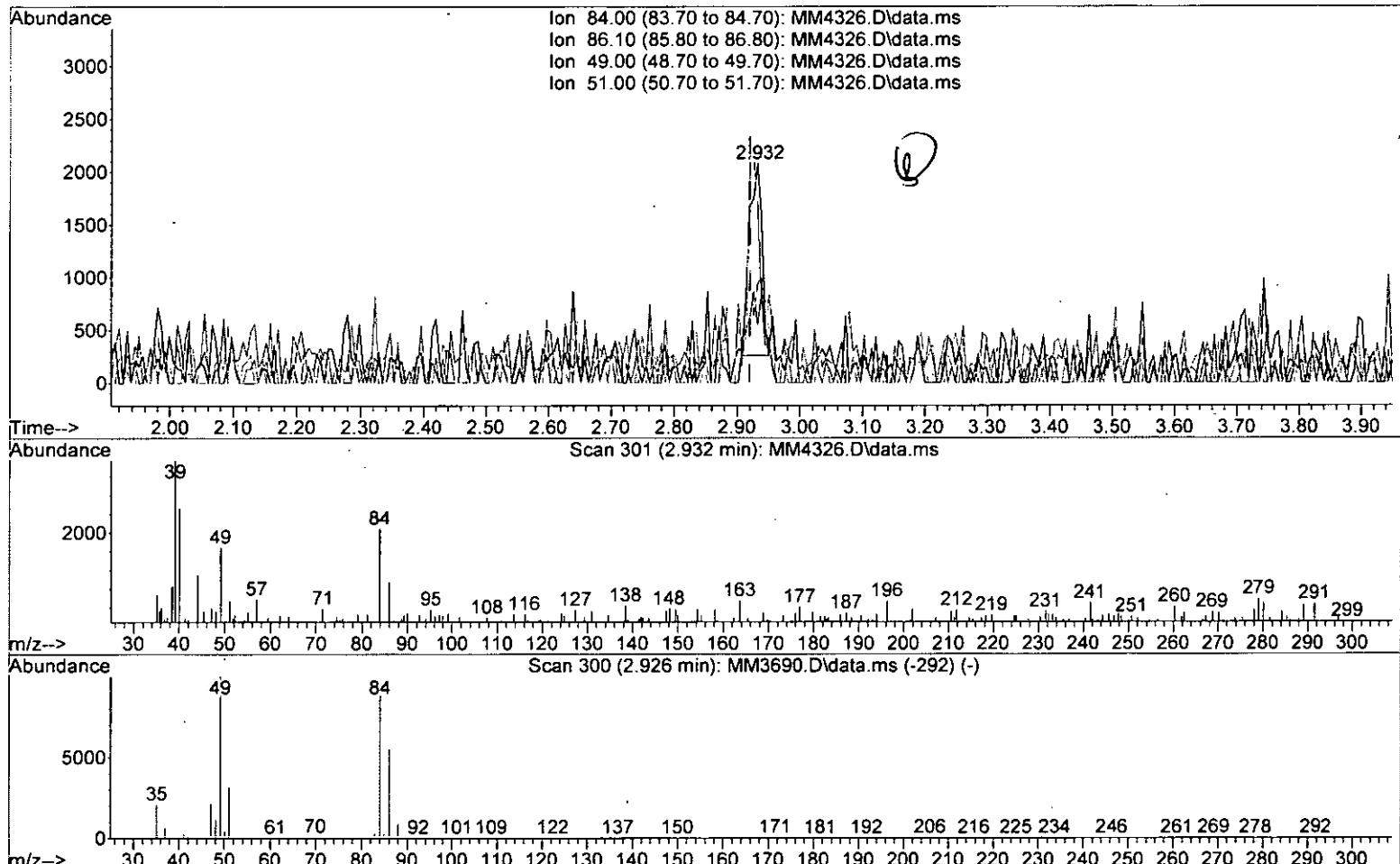
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	882408	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1486430	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1441298	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	781599	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoethane	5.596	113	436852	54.31	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 108.62%		
48) surr1,1,2-dichloroetha...	6.102	65	462579	53.84	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 107.68%		
65) SURR3,Toluene-d8	8.529	98	1917449	54.58	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 109.16%		
70) SURR2,BFB	11.053	95	737459	55.25	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 110.50%		
<b>Target Compounds</b>						
4) Vinyl Chloride	1.433	62	45558	4.93	ppb	97
13) 1,1-Dicethene	2.432	96	2450	0.38	ppb	# 64
18) Carbon Disulfide	2.634	76	49060	2.36	ppb	98
22) Methylene Chloride	2.932	84	3801m	0.55	ppb	
26) trans-1,2-Dichloroethene	3.249	96	11164	1.54	ppb	# 63
34) cis-1,2-Dichloroethene	4.719	96	1875215	242.59	ppb	90(E)
40) Chloroform	5.340	83	32738	2.59	ppb	88
54) Trichloroethene	7.084	130	2806993	352.99	ppb	94(E)
60) Bromodichloromethane	7.712	83	4779	0.47	ppb	68
66) Toluene	8.608	91	9156	0.27	ppb	78
83) (m+p)Xylene	10.242	106	4156	0.27	ppb	92

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4326.D  
 Acq On : 28 Jun 2015 2:29 pm  
 Operator : K.Ruest  
 Sample : R1505119-007|200 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 28 14:45:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4326.D\data.ms

(22) Methylene Chloride (P)

2.932min (+0.012) 0.37 ppb

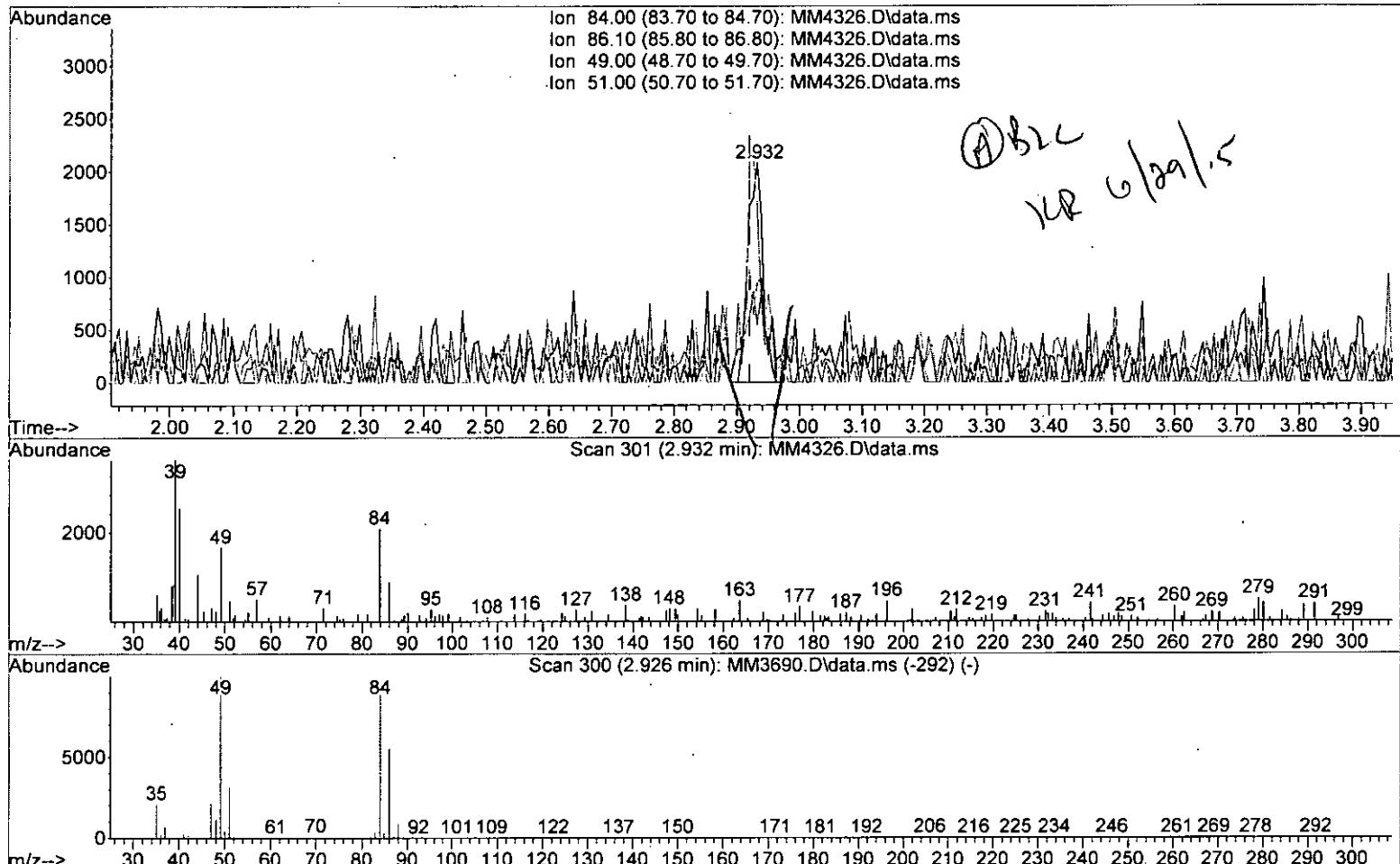
response 2540

Ion	Exp%	Act%
84.00	100	100
86.10	61.70	45.24
49.00	112.00	80.94#
51.00	35.80	26.13

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4326.D  
 Acq On : 28 Jun 2015 2:29 pm  
 Operator : K.Ruest  
 Sample : R1505119-007|200 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 28 14:45:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4326.D\data.ms

(22) Methylene Chloride (P)

2.932min (+0.012) 0.55 ppb m

response 3801

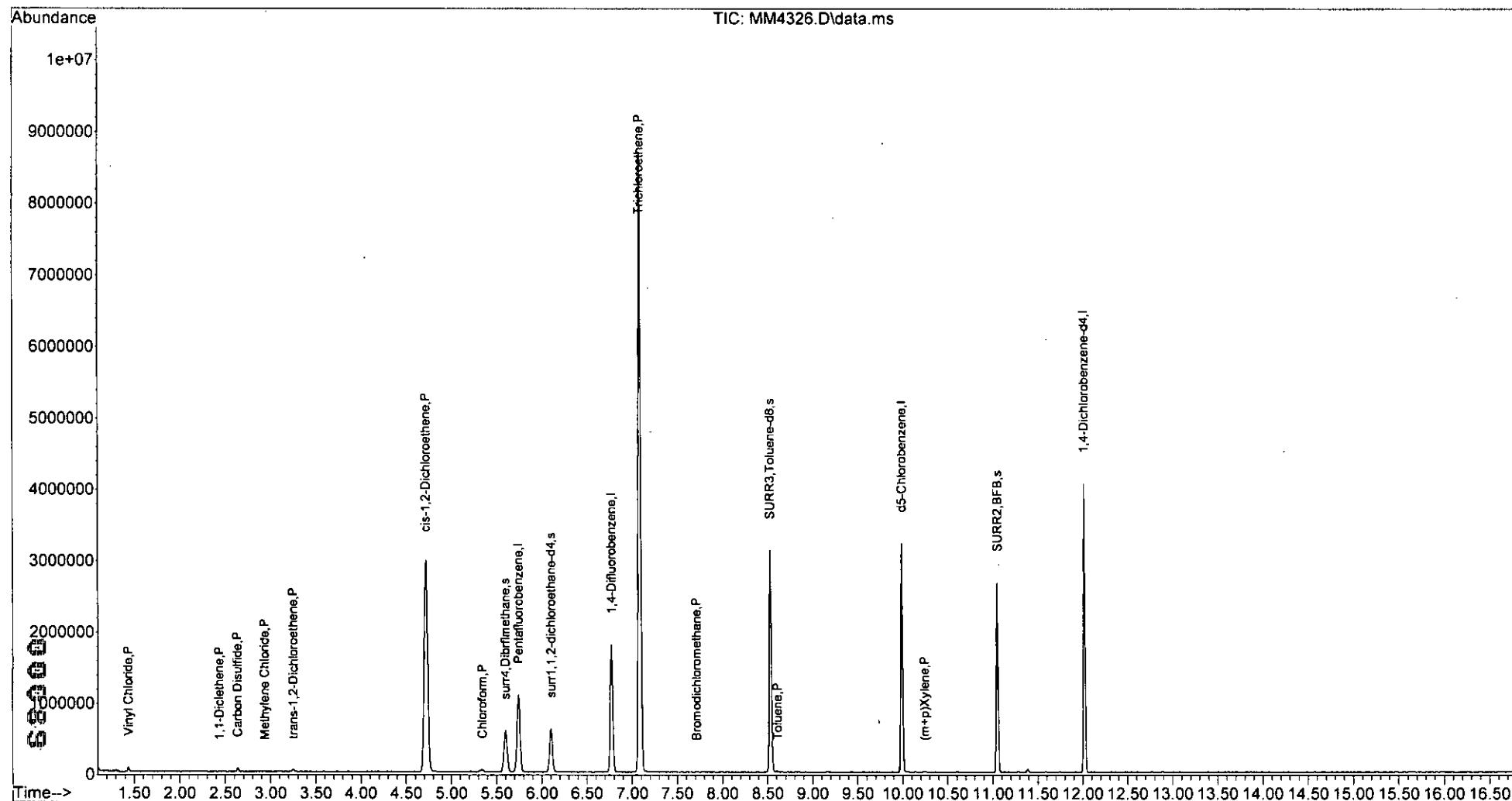
Ion	Exp%	Act%
84.00	100	100
86.10	61.70	45.24
49.00	112.00	80.94#
51.00	35.80	26.13

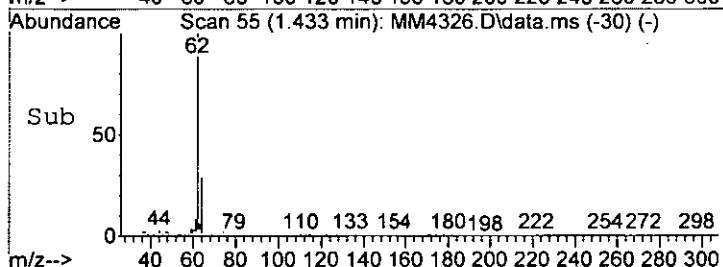
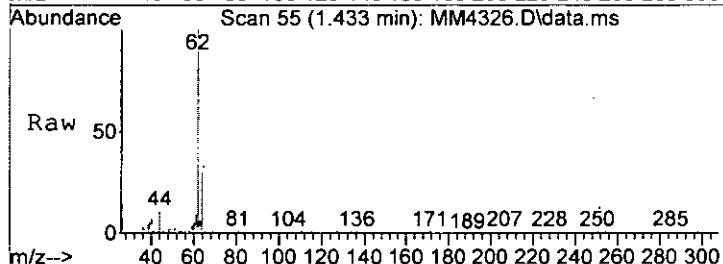
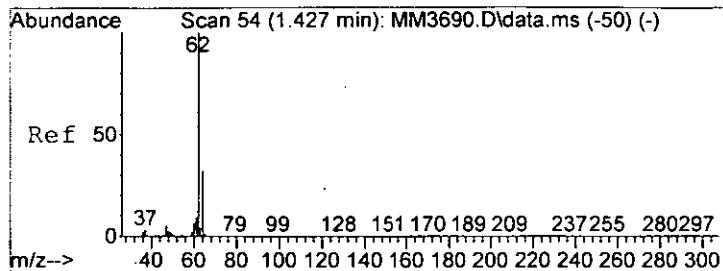
## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
Data File : MM4326.D  
Acq On : 28 Jun 2015 2:29 pm  
Operator : K.Ruest  
Sample : R1505119-007|200  
Misc : CB&I 13429 T4  
ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA-12

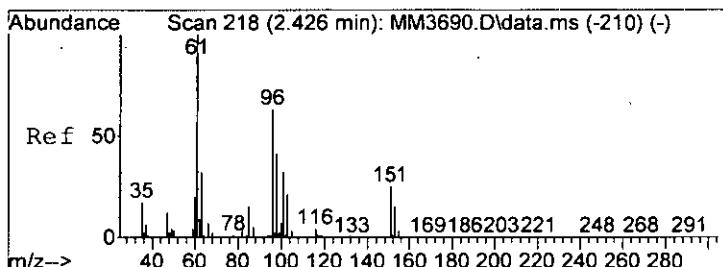
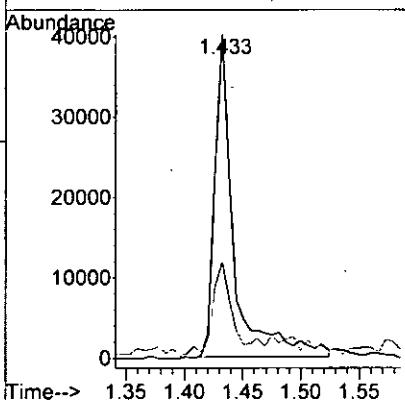
Quant Time: Jun 29 15:44:35 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration





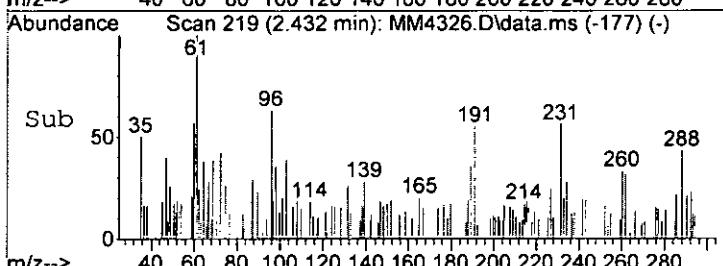
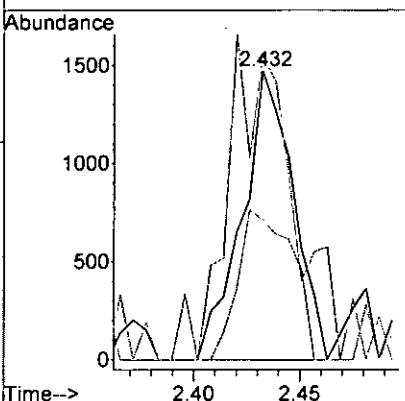
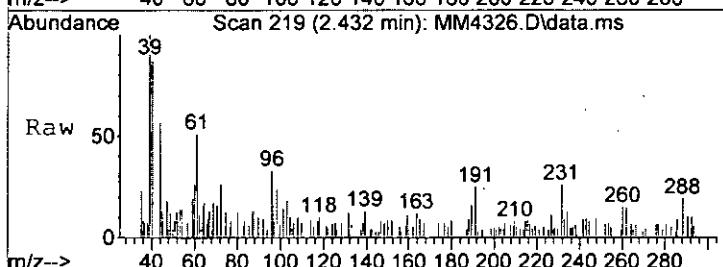
#4  
 Vinyl Chloride  
 Concen: 4.93 ppb  
 RT: 1.433 min Scan# 55  
 Delta R.T. 0.006 min  
 Lab File: MM4326.D  
 Acq: 28 Jun 2015 2:29 pm

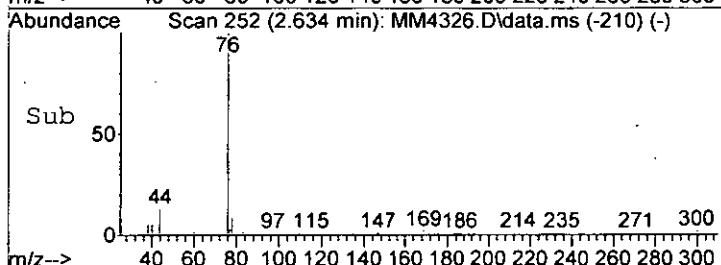
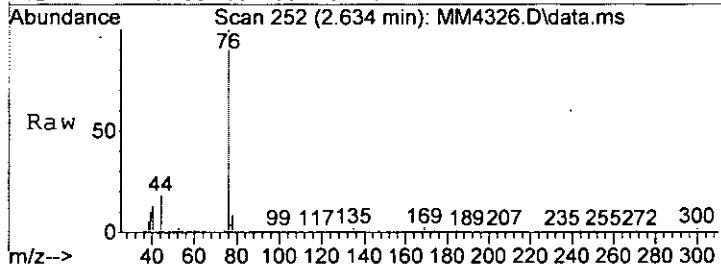
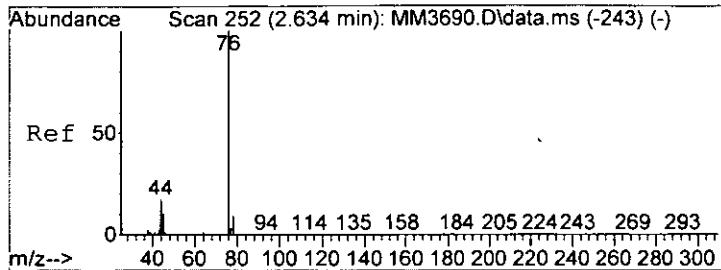
Tgt Ion: 62 Resp: 45558  
 Ion Ratio Lower Upper  
 62 100  
 64 29.7 11.5 51.5



#13  
 1,1-Dicethene  
 Concen: 0.38 ppb  
 RT: 2.432 min Scan# 219  
 Delta R.T. 0.006 min  
 Lab File: MM4326.D  
 Acq: 28 Jun 2015 2:29 pm

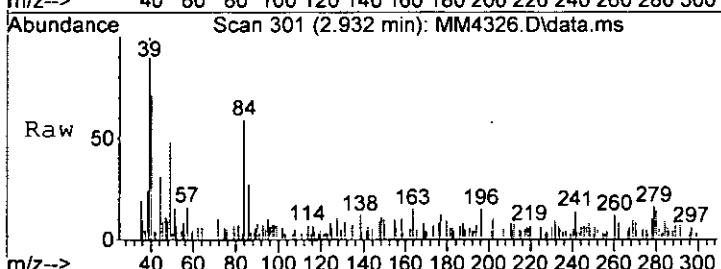
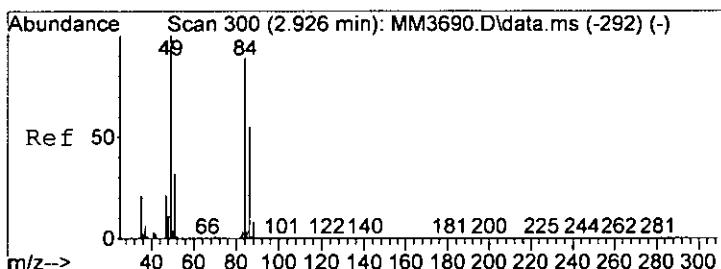
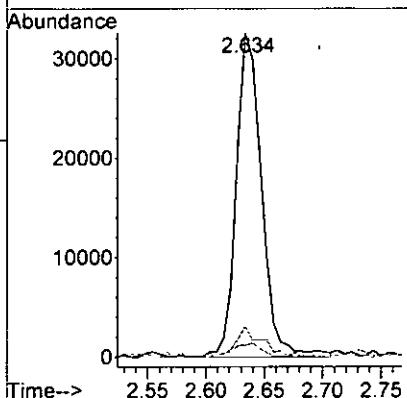
Tgt Ion: 96 Resp: 2450  
 Ion Ratio Lower Upper  
 96 100  
 98 48.4 45.2 85.2  
 61 104.9 139.4 179.4#





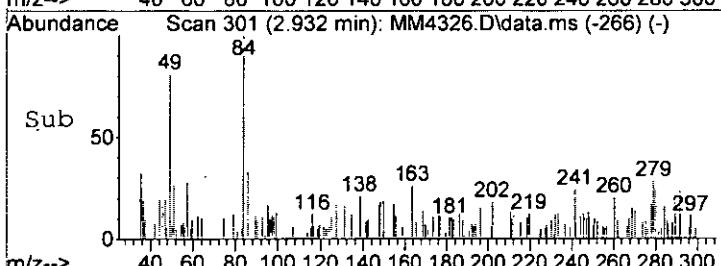
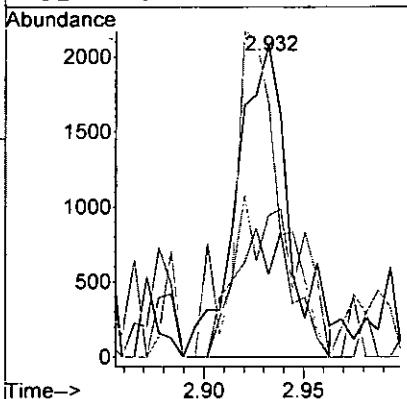
#18  
Carbon Disulfide  
Concen: 2.36 ppb  
RT: 2.634 min Scan# 252  
Delta R.T. -0.000 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm

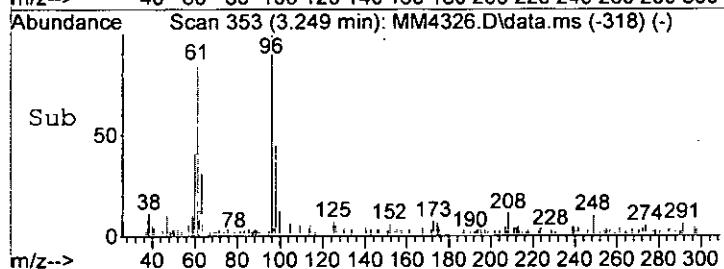
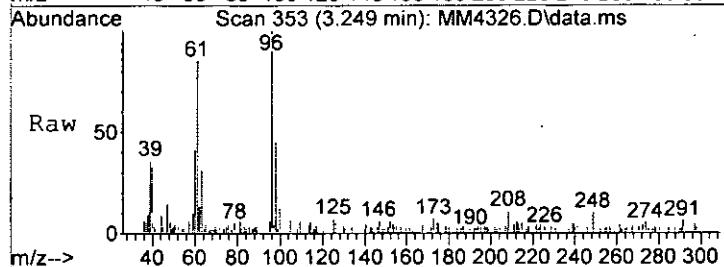
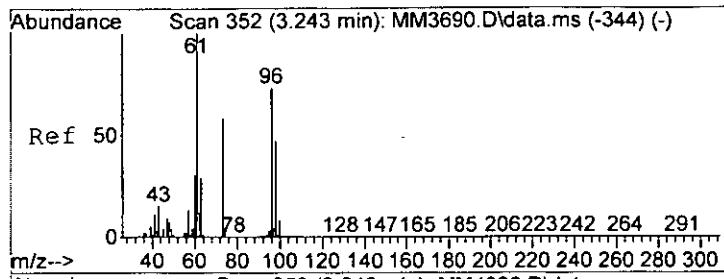
Tgt Ion: 76 Resp: 49060  
Ion Ratio Lower Upper  
76 100  
78 9.4 0.0 28.8  
77 3.5 0.0 22.6



#22  
Methylene Chloride  
Concen: 0.55 ppb m  
RT: 2.932 min Scan# 301  
Delta R.T. 0.012 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm

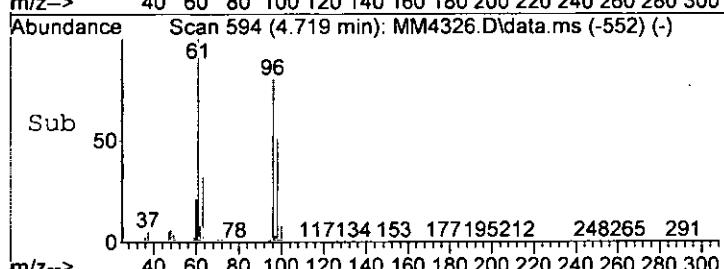
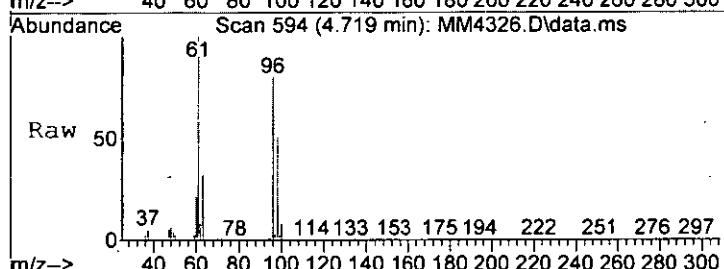
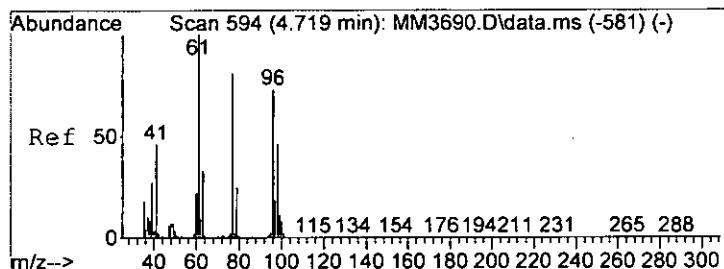
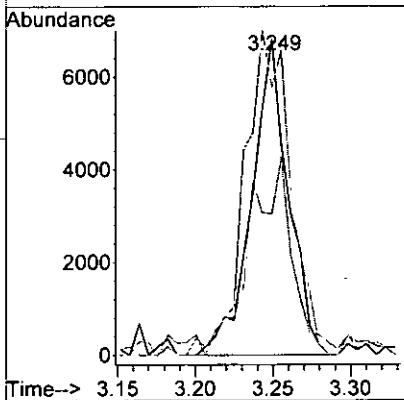
Tgt Ion: 84 Resp: 3801  
Ion Ratio Lower Upper  
84 100  
86 45.2 41.7 81.7  
49 80.9 92.0 132.0#  
51 26.1 15.8 55.8





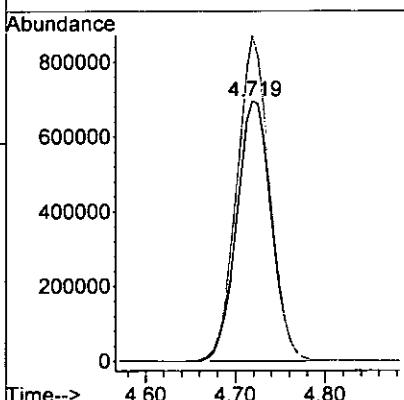
#26  
trans-1,2-Dichloroethene  
Concen: 1.54 ppb  
RT: 3.249 min Scan# 353  
Delta R.T. 0.006 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm

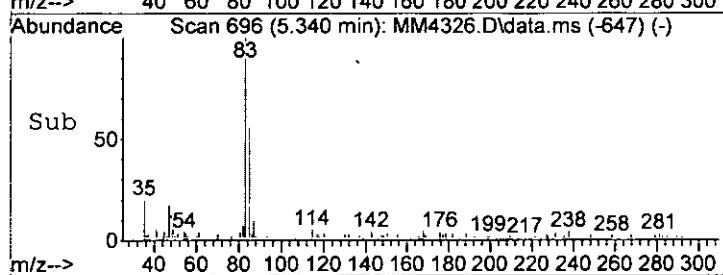
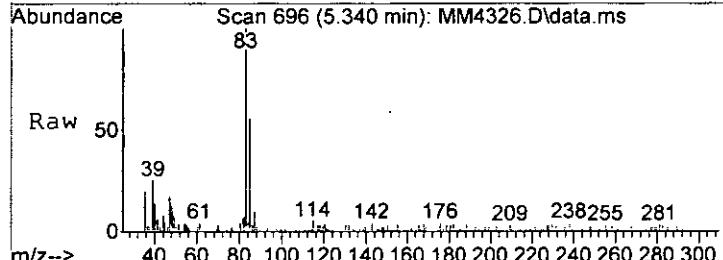
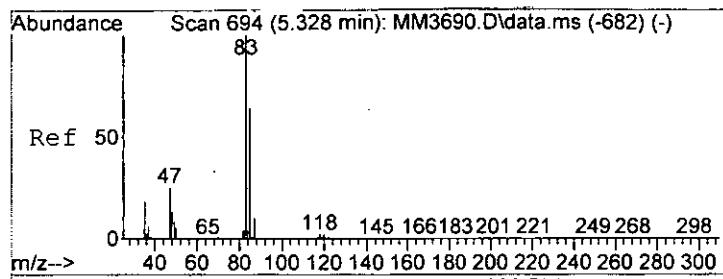
Tgt Ion: 96 Resp: 11164  
Ion Ratio Lower Upper  
96 100  
98 44.8 44.2 84.2  
61 84.8 116.9 156.9#



#34  
cis-1,2-Dichloroethene  
Concen: 242.59 ppb  
RT: 4.719 min Scan# 594  
Delta R.T. -0.000 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm

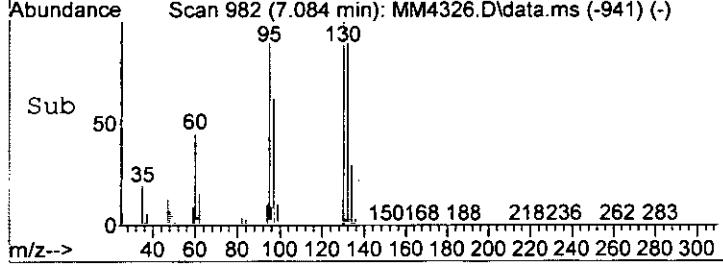
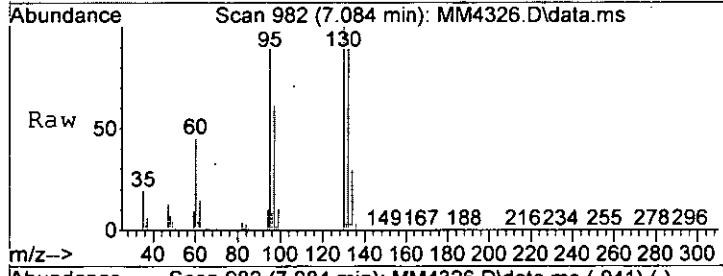
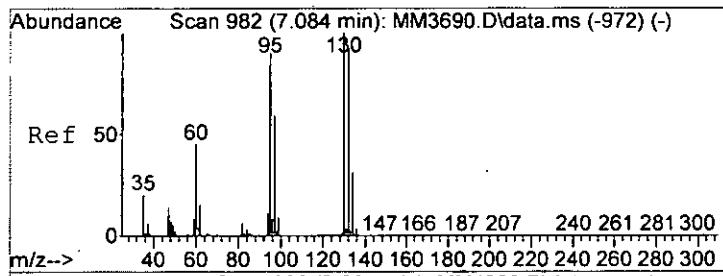
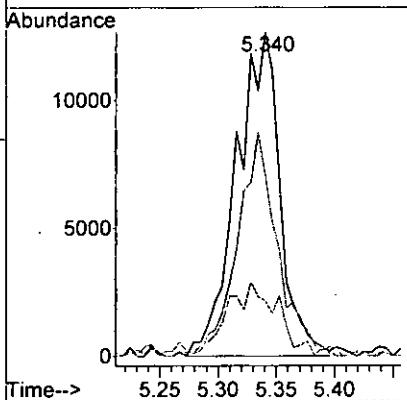
Tgt Ion: 96 Resp: 1875215  
Ion Ratio Lower Upper  
96 100  
61 125.3 117.6 157.6





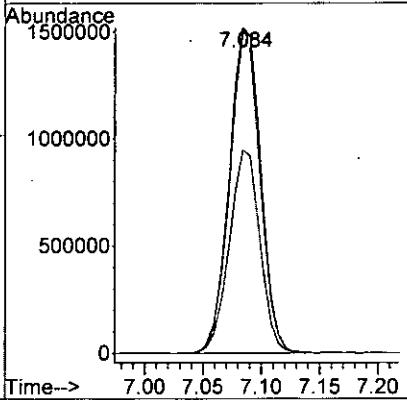
# 40  
Chloroform  
Concen: 2.59 ppb  
RT: 5.340 min Scan# 696  
Delta R.T. 0.012 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm

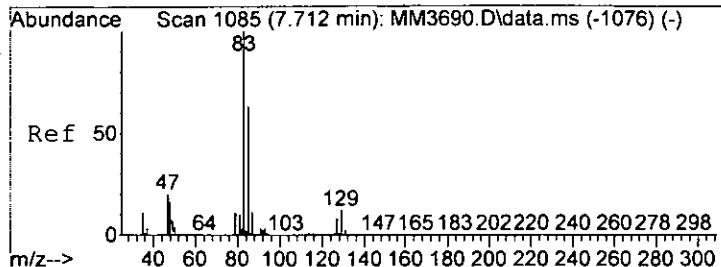
Tgt Ion: 83 Resp: 32738  
Ion Ratio Lower Upper  
83 100  
85 55.8 43.8 83.8  
47 17.1 4.7 44.7



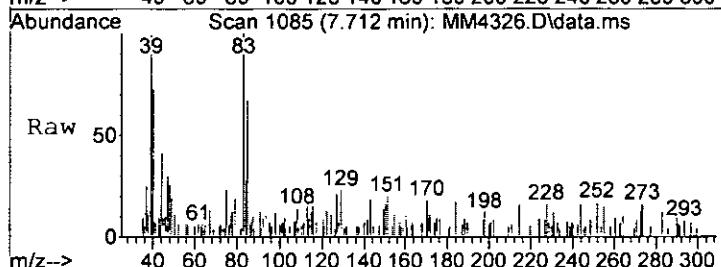
# 54  
Trichloroethene  
Concen: 352.99 ppb  
RT: 7.084 min Scan# 982  
Delta R.T. -0.000 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm

Tgt Ion: 130 Resp: 2806993  
Ion Ratio Lower Upper  
130 100  
132 96.7 72.7 112.7  
95 98.0 69.8 109.8  
97 62.4 38.8 78.8

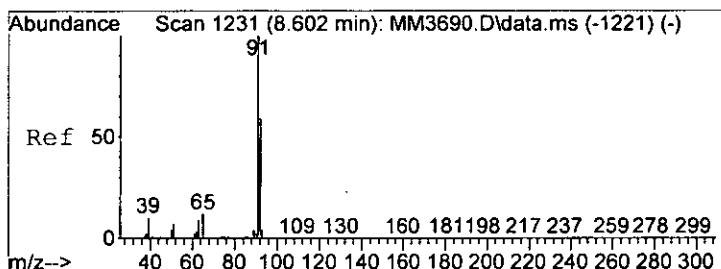
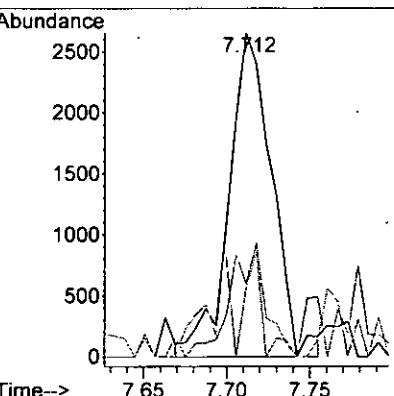
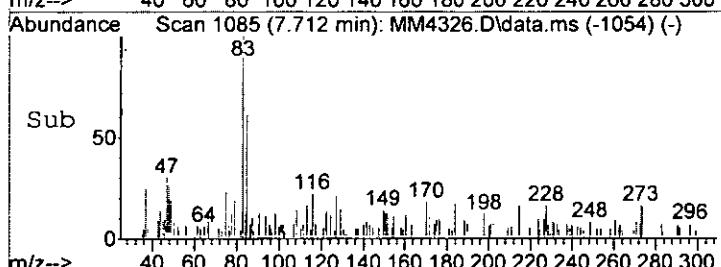




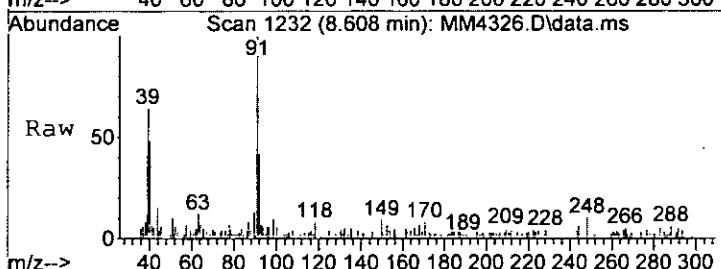
# 60  
Bromodichloromethane  
Concen: 0.47 ppb  
RT: 7.712 min Scan# 1085  
Delta R.T. -0.000 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm



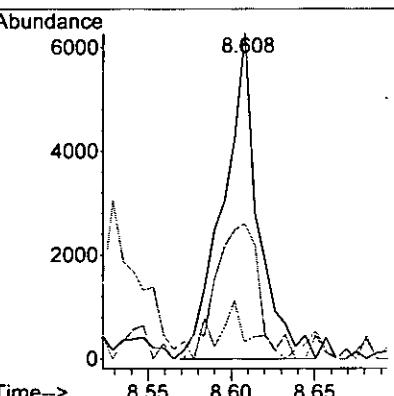
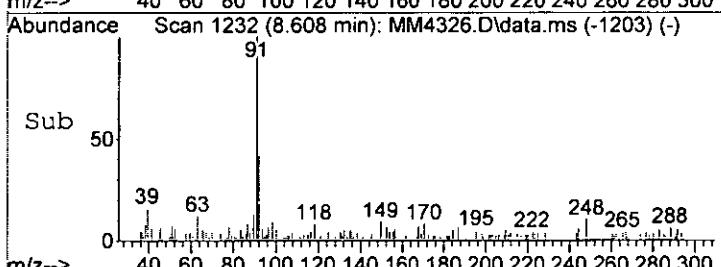
Tgt Ion: 83 Resp: 4779  
Ion Ratio Lower Upper  
83 100  
129 22.6 0.0 31.7  
127 21.0 0.0 28.0

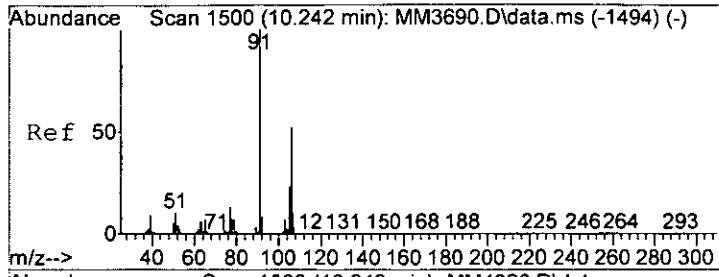


# 66  
Toluene  
Concen: 0.27 ppb  
RT: 8.608 min Scan# 1232  
Delta R.T. 0.006 min  
Lab File: MM4326.D  
Acq: 28 Jun 2015 2:29 pm

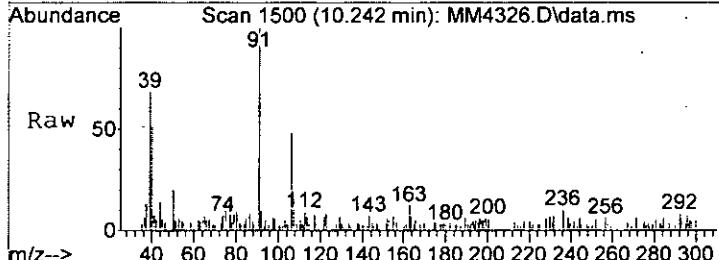


Tgt Ion: 91 Resp: 9156  
Ion Ratio Lower Upper  
91 100  
92 41.6 39.1 79.1  
65 5.1 0.0 32.0

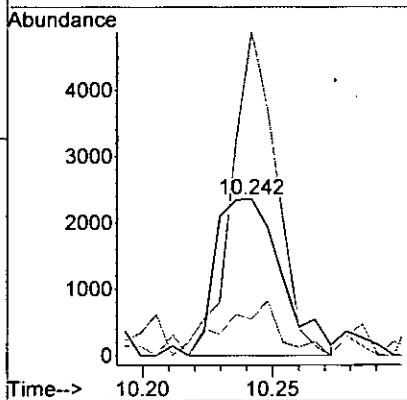
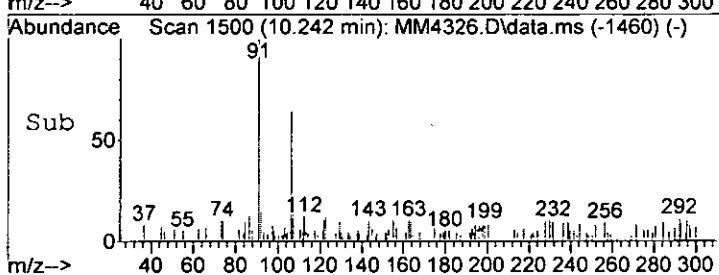




# 83  
 (m+p) Xylene  
 Concen: 0.27 ppb  
 RT: 10.242 min Scan# 1500  
 Delta R.T. -0.006 min  
 Lab File: MM4326.D  
 Acq: 28 Jun 2015 2:29 pm



Tgt	Ion:	106	Resp:	4156
Ion	Ratio	Lower	Upper	
106	100			
91	207.1	173.9	213.9	
77	23.1	5.9	45.9	



## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:13

**Sample Name:** 87-13-3  
**Lab Code:** R1505119-007  
**Run Type:** Dilution

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4361.D\  
**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 500

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	500 U	500	110	
75-01-4	Vinyl Chloride	1100 D	500	160	
75-00-3	Chloroethane	500 U	500	120	
74-83-9	Bromomethane	500 U	500	150	
75-35-4	1,1-Dichloroethene	500 U	500	290	
67-64-1	Acetone	2500 U	2500	620	
75-15-0	Carbon Disulfide	680 D	500	110	
75-09-2	Methylene Chloride	500 U	500	300	
156-60-5	trans-1,2-Dichloroethene	390 DJ	500	170	
75-34-3	1,1-Dichloroethane	500 U	500	100	
156-59-2	cis-1,2-Dichloroethene	50000 D	500	150	
78-93-3	2-Butanone (MEK)	2500 U	2500	410	
67-66-3	Chloroform	1200 D	500	130	
71-55-6	1,1,1-Trichloroethane	500 U	500	180	
56-23-5	Carbon Tetrachloride	500 U	500	230	
71-43-2	Benzene	500 U	500	100	
107-06-2	1,2-Dichloroethane	500 U	500	180	
79-01-6	Trichloroethene	71000 D	500	110	
78-87-5	1,2-Dichloropropane	500 U	500	100	
75-27-4	Bromodichloromethane	270 DJ	500	160	
10061-01-5	cis-1,3-Dichloropropene	500 U	500	120	
108-10-1	4-Methyl-2-pentanone (MIBK)	2500 U	2500	340	
108-88-3	Toluene	500 U	500	100	
10061-02-6	trans-1,3-Dichloropropene	500 U	500	100	
79-00-5	1,1,2-Trichloroethane	500 U	500	170	
127-18-4	Tetrachloroethene	500 U	500	150	
591-78-6	2-Hexanone	2500 U	2500	830	
124-48-1	Dibromochloromethane	500 U	500	160	
108-90-7	Chlorobenzene	500 U	500	150	
100-41-4	Ethylbenzene	500 U	500	100	
179601-23-1	m,p-Xylenes	1000 U	1000	170	
95-47-6	o-Xylene	500 U	500	100	
100-42-5	Styrene	500 U	500	100	
75-25-2	Bromoform	500 U	500	210	
79-34-5	1,1,2,2-Tetrachloroethane	500 U	500	130	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 1340  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 19:13

**Sample Name:** 87-13-3  
**Lab Code:** R1505119-007  
**Run Type:** Dilution

Units: Percent  
Basis: NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUUDATA\MSVOA12\DATA\062915\MM4361.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 500

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	114	85-122	6/29/15 19:13	
Toluene-d8	109	87-121	6/29/15 19:13	
Dibromofluoromethane	109	89-119	6/29/15 19:13	

Data Path : I:\ACQUDATA\msvoa12\Data\062915\

Data File : MM4361.D

Acq On : 29 Jun 2015 7:13 pm

Operator : K.Ruest

Sample : R1505119-007|500

Inst : MSVOA-12

Misc : CB&amp;I 13429 T4

ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 30 14:53:16 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	826050	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1420922	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1411211	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	767298	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoform	5.596	113	417910	54.35	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	108.70%	
48) surr1,1,2-dichloroethane	6.102	65	445038	54.18	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	108.36%	
65) SURR3,Toluene-d8	8.535	98	1827671	54.42	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	108.84%	
70) SURR2,BFB	11.053	95	725004	56.82	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	113.64%	
<b>Target Compounds</b>						
4) Vinyl Chloride	1.433	62	18992	2.19	ppb	# 50
18) Carbon Disulfide	2.640	76	26264	1.35	ppb	93
22) Methylene Chloride	2.938	84	2145m	0.33	ppb	
26) trans-1,2-Dichloroethene	3.249	96	5300	0.78	ppb	90
34) cis-1,2-Dichloroethene	4.719	96	724441	100.11	ppb	85
40) Chloroform	5.334	83	28940	2.45	ppb	83
54) Trichloroethene	7.084	130	1085415	142.79	ppb	94
60) Bromodichloromethane	7.718	83	5183	0.53	ppb	64

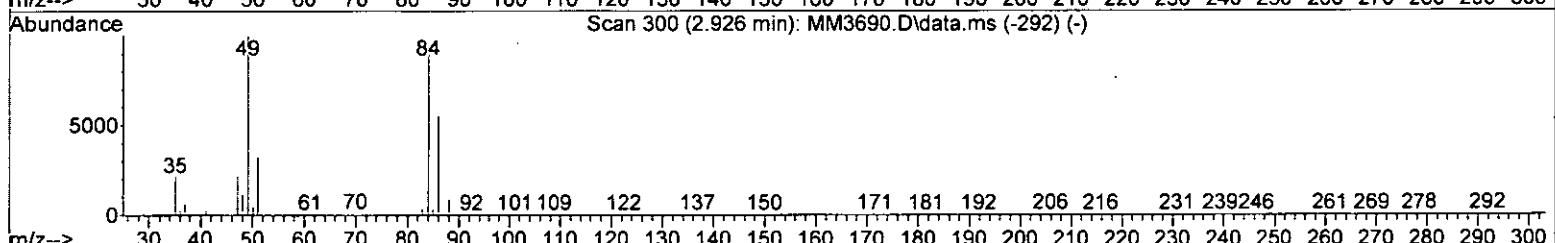
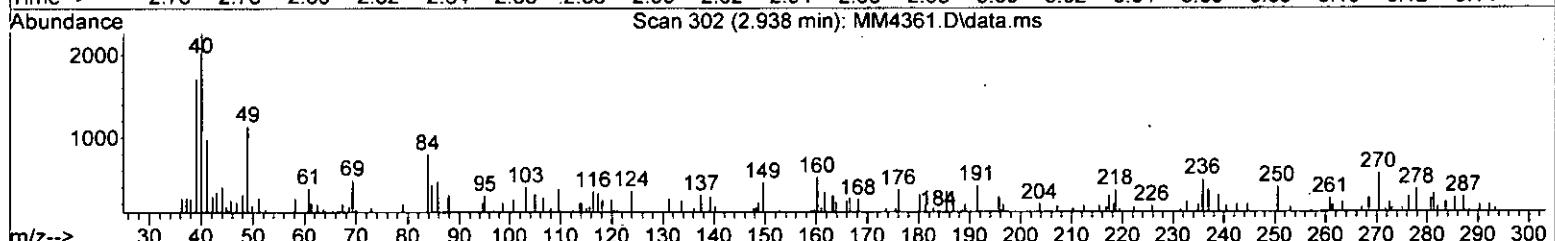
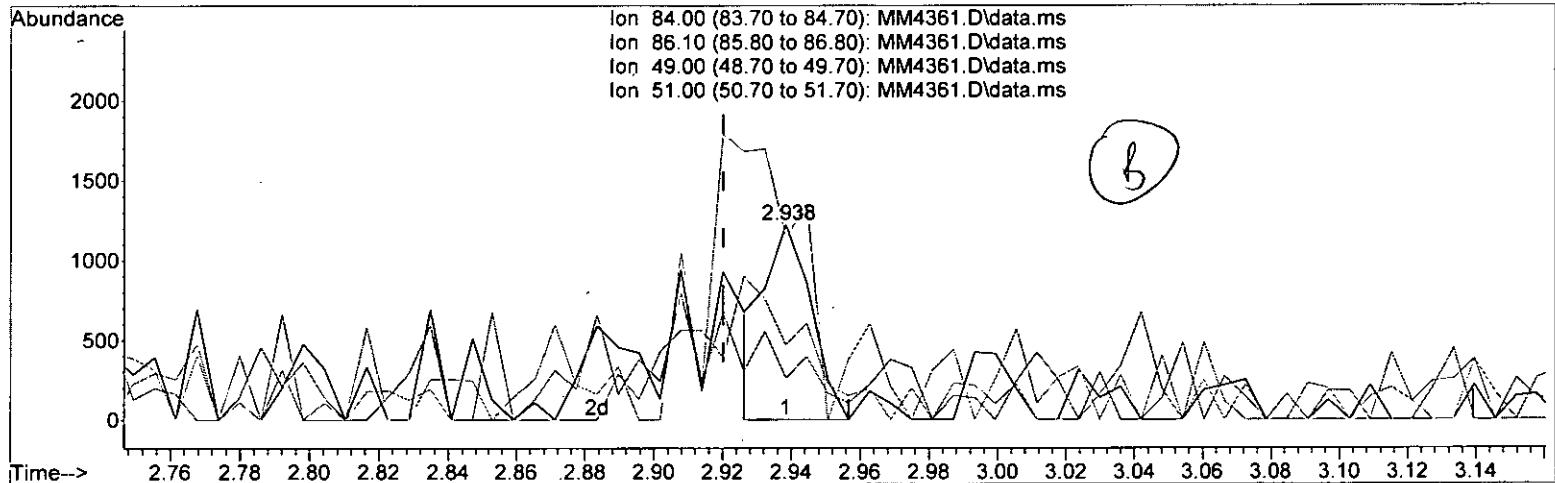
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Kf  
6/30/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4361.D  
 Acq On : 29 Jun 2015 7:13 pm  
 Operator : K.Ruest  
 Sample : R1505119-007|500 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 29 19:29:05 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4361.D\data.ms

(22) Methylene Chloride (P)

2.938min (+0.018) 0.18 ppb

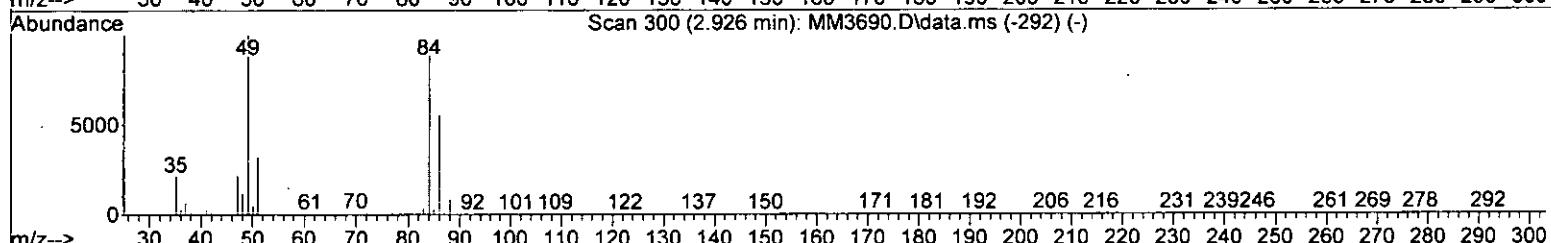
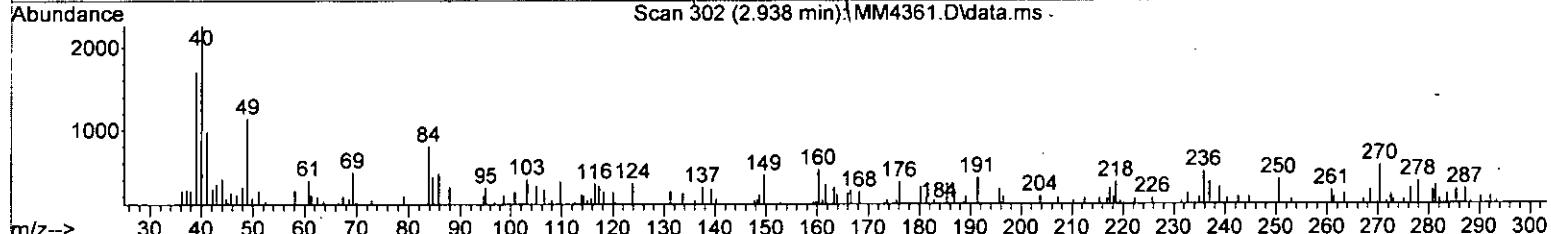
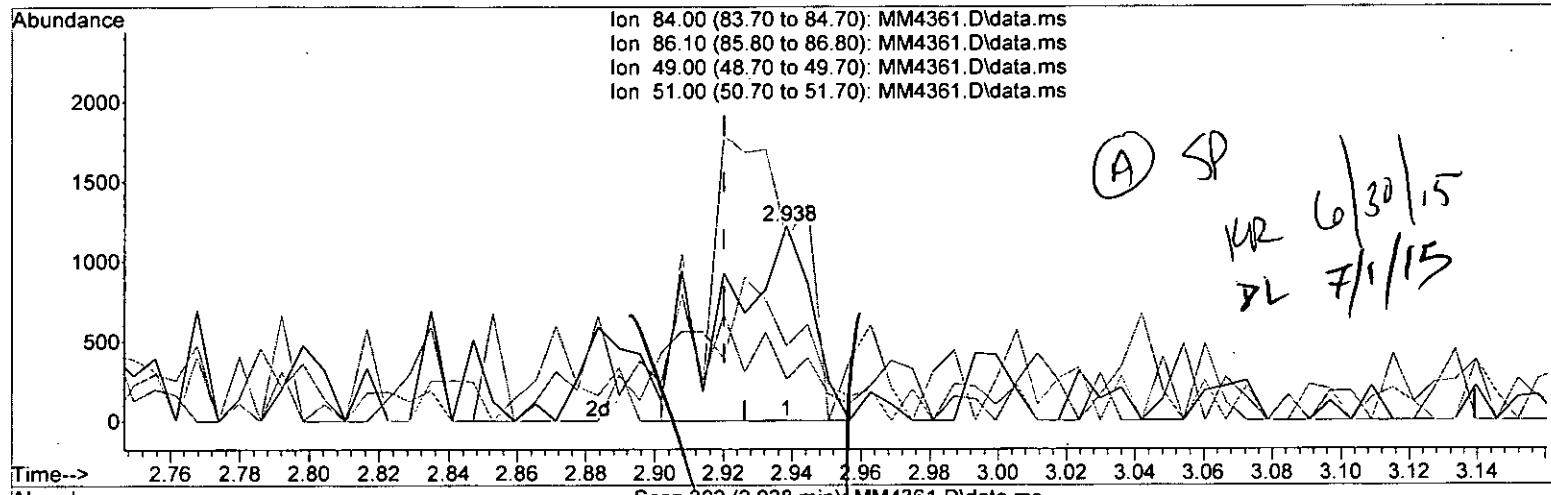
response 1152

Ion	Exp%	Act%
84.00	100	100
86.10	61.70	38.33#
49.00	112.00	93.04
51.00	35.80	21.38

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4361.D  
 Acq On : 29 Jun 2015 7:13 pm  
 Operator : K.Ruest  
 Sample : R1505119-007|500 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 29 19:29:05 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4361.D\data.ms

(22) Methylene Chloride (P)

2.938min (+0.018) 0.33 ppb m

response 2145

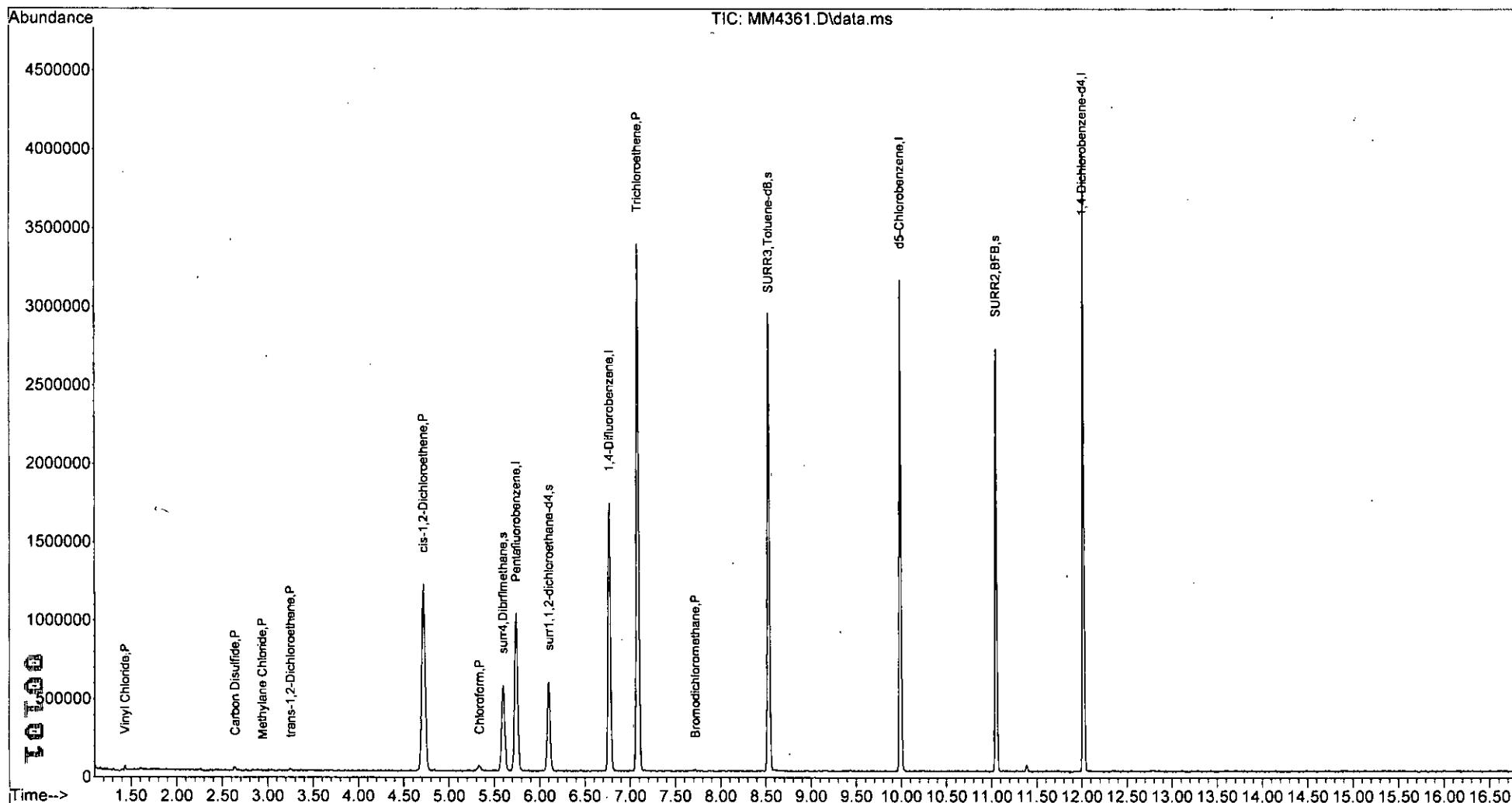
Ion	Exp%	Act%
84.00	100	100
86.10	61.70	58.72
49.00	112.00	142.53#
51.00	35.80	32.75

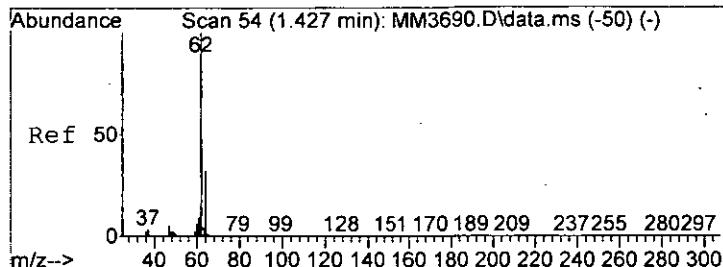
## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
Data File : MM4361.D  
Acq On : 29 Jun 2015 7:13 pm  
Operator : K.Ruest  
Sample : R1505119-0071500  
Misc : CB&I 13429 T4  
ALS Vial : 21 Sample Multiplier: 1

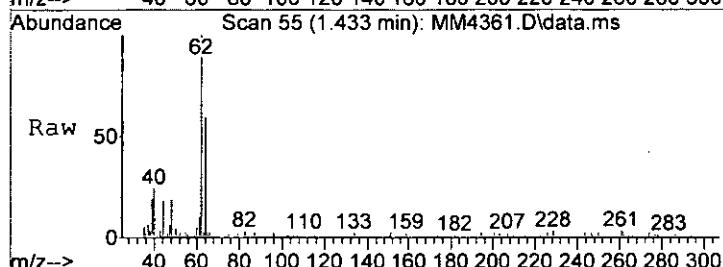
Inst : MSVOA-12

Quant Time: Jun 30 14:53:16 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration

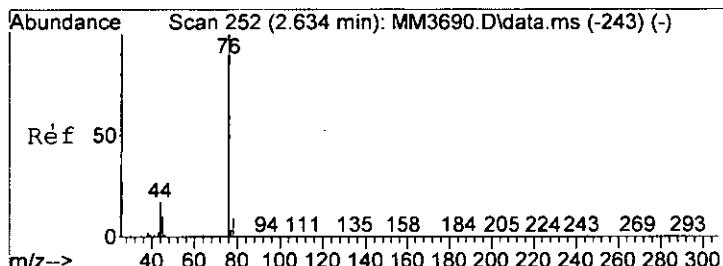
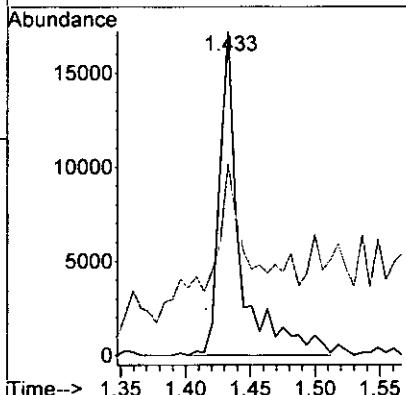
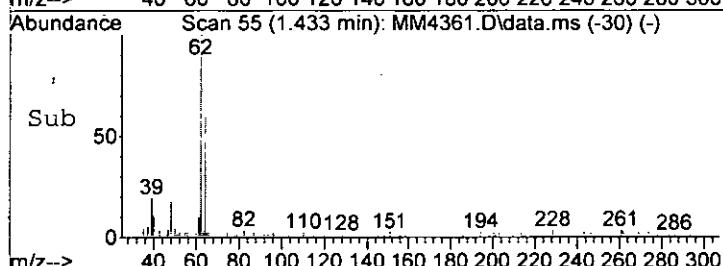




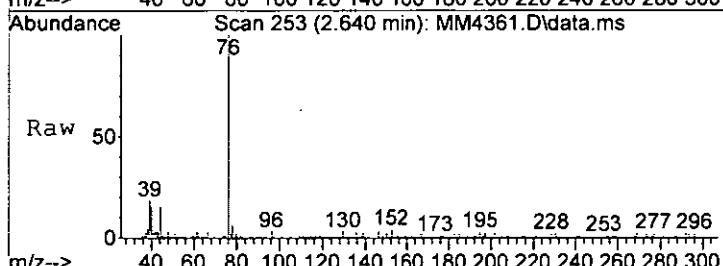
#4  
Vinyl Chloride  
Concen: 2.19 ppb  
RT: 1.433 min Scan# 55  
Delta R.T. 0.006 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm



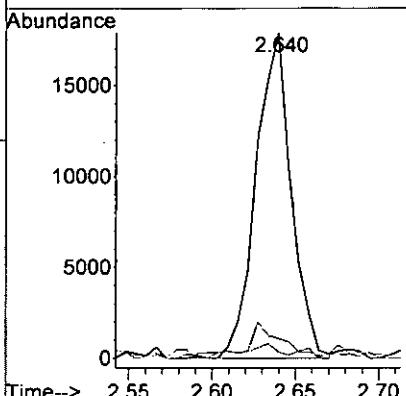
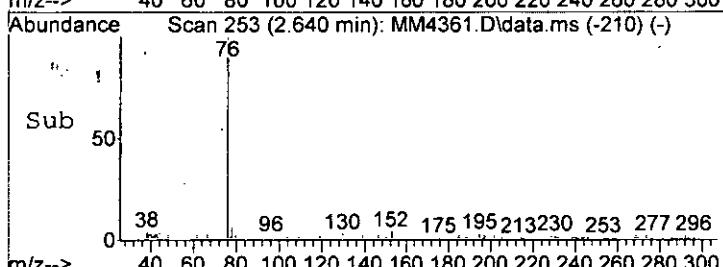
Tgt Ion: 62 Resp: 18992  
Ion Ratio Lower Upper  
62 100  
64 59.2 11.5 51.5#

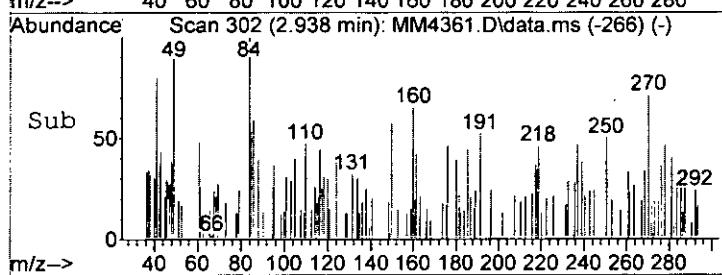
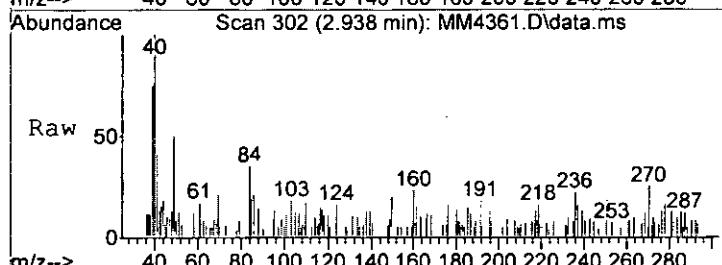
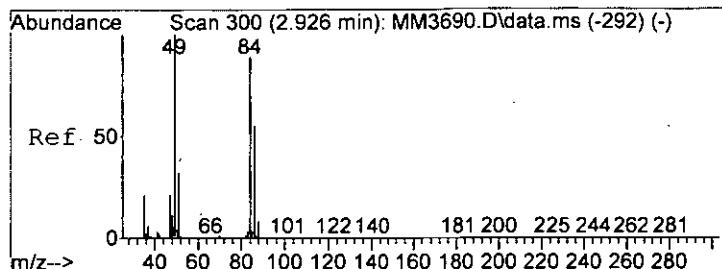


#18  
Carbon Disulfide  
Concen: 1.35 ppb  
RT: 2.640 min Scan# 253  
Delta R.T. 0.006 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm



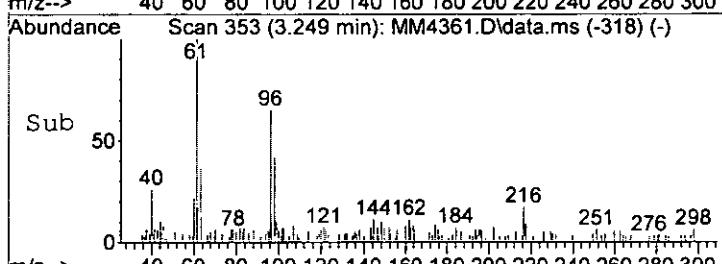
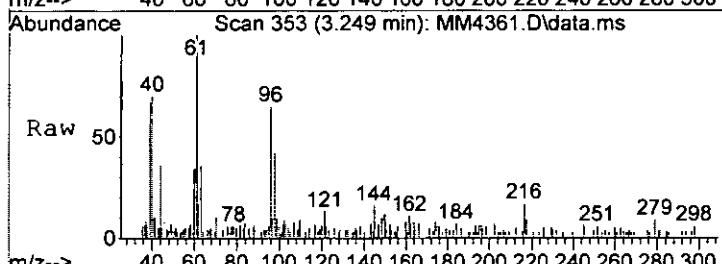
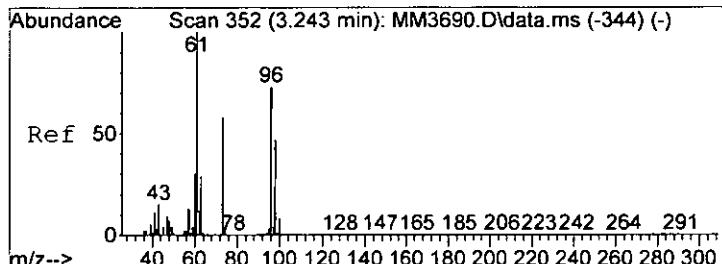
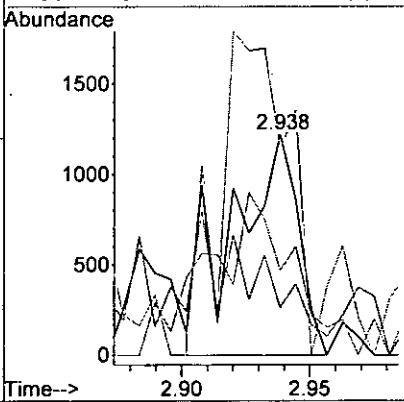
Tgt Ion: 76 Resp: 26264  
Ion Ratio Lower Upper  
76 100  
78 6.0 0.0 28.8  
77 1.7 0.0 22.6





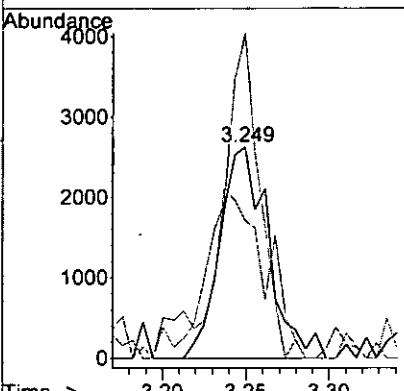
#22  
Methylene Chloride  
Concen: 0.33 ppb m  
RT: 2.938 min Scan# 302  
Delta R.T. 0.018 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm

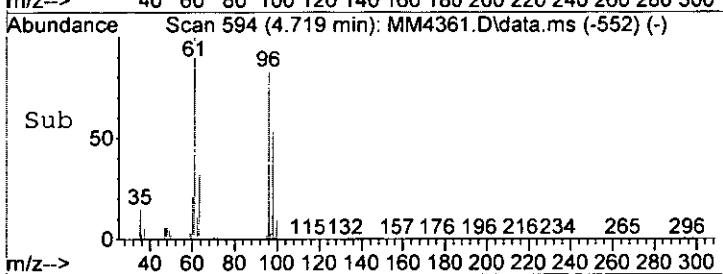
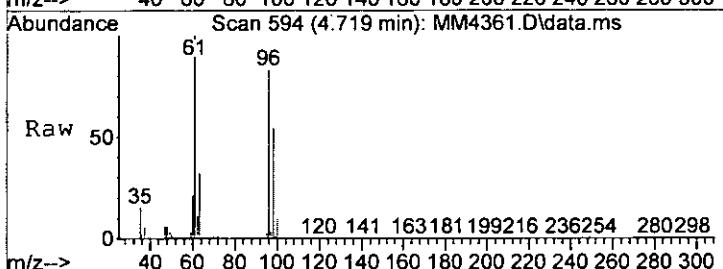
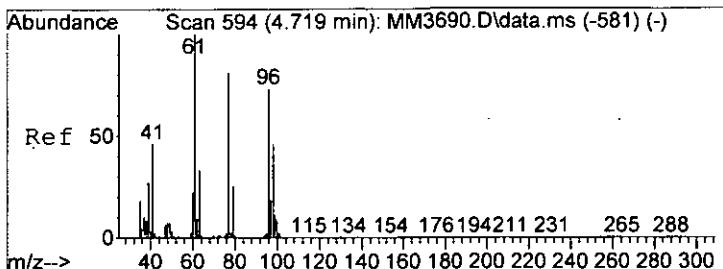
Tgt Ion: 84 Resp: 2145  
Ion Ratio Lower Upper  
84 100  
86 58.7 41.7 81.7  
49 142.5 92.0 132.0#  
51 32.7 15.8 55.8



#26  
trans-1,2-Dichloroethene  
Concen: 0.78 ppb  
RT: 3.249 min Scan# 353  
Delta R.T. 0.006 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm

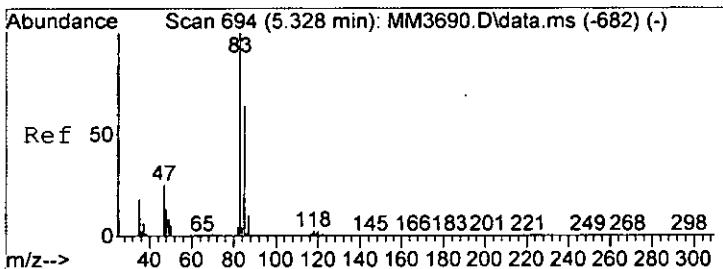
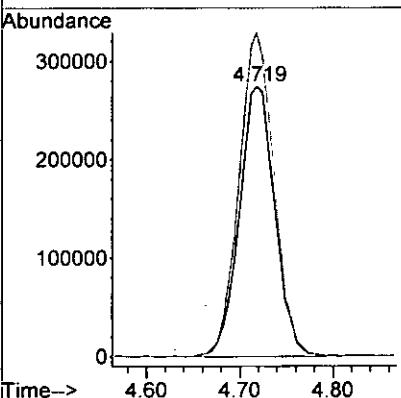
Tgt Ion: 96 Resp: 5300  
Ion Ratio Lower Upper  
96 100  
98 65.3 44.2 84.2  
61 153.9 116.9 156.9





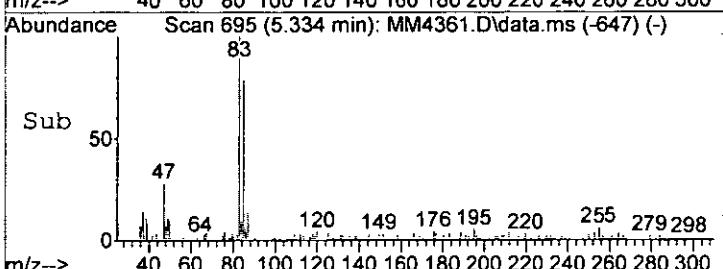
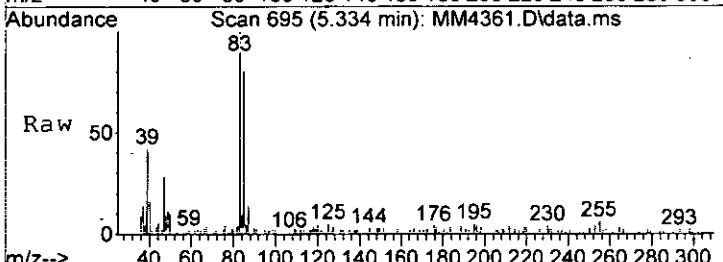
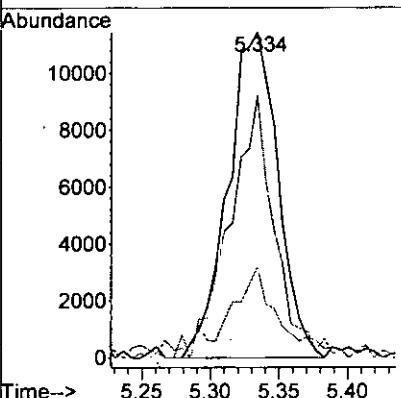
# 34  
cis-1,2-Dichloroethene  
Concen: 100.11 ppb  
RT: 4.719 min Scan# 594  
Delta R.T. -0.000 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm

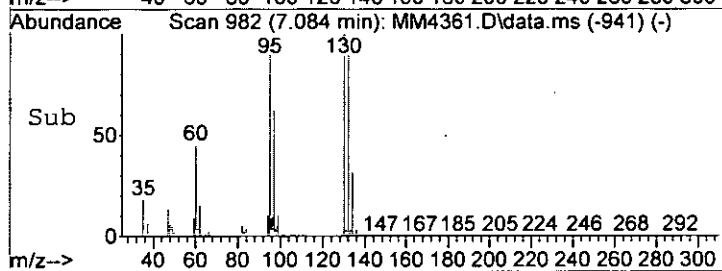
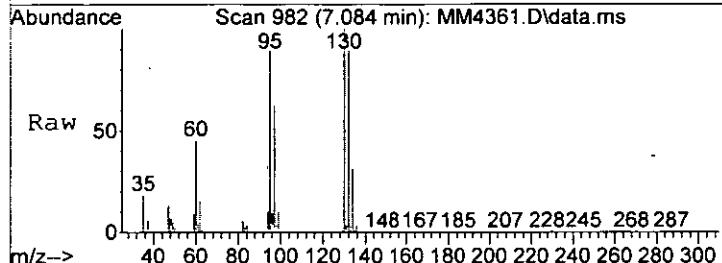
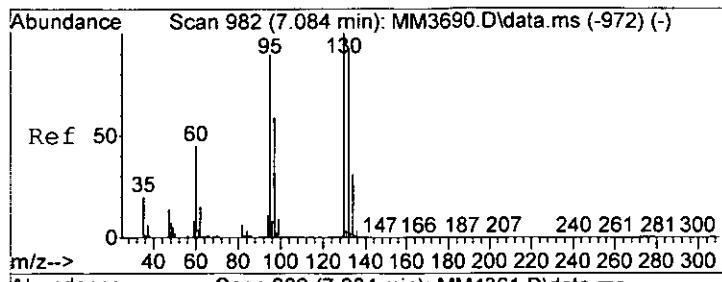
Tgt Ion: 96 Resp: 724441  
Ion Ratio Lower Upper  
96 100  
61 119.9 117.6 157.6



# 40  
Chloroform  
Concen: 2.45 ppb  
RT: 5.334 min Scan# 695  
Delta R.T. 0.006 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm

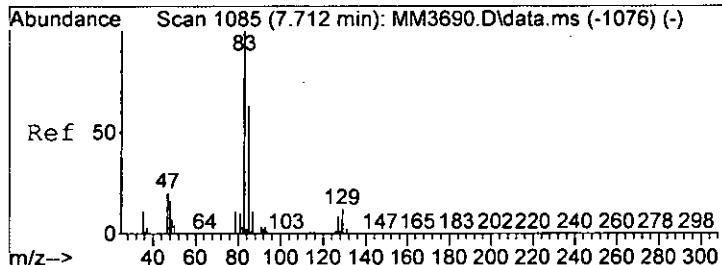
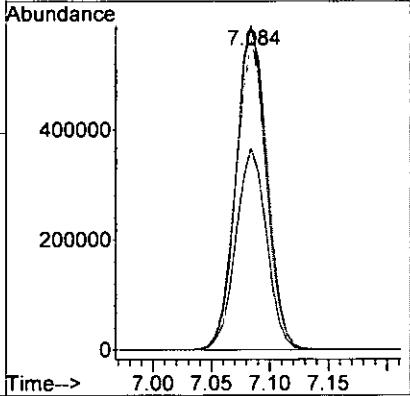
Tgt Ion: 83 Resp: 28940  
Ion Ratio Lower Upper  
83 100  
85 80.4 43.8 83.8  
47 27.8 4.7 44.7





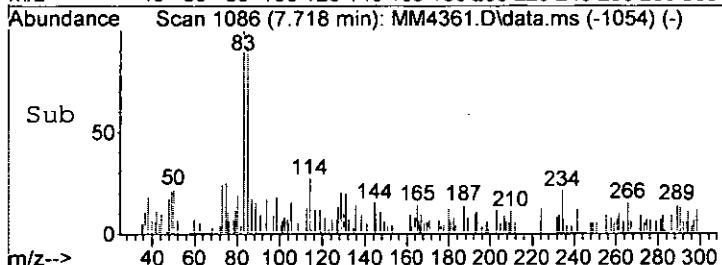
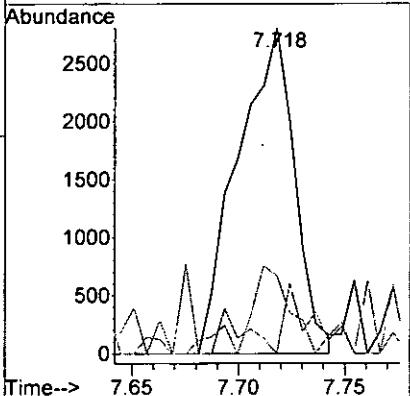
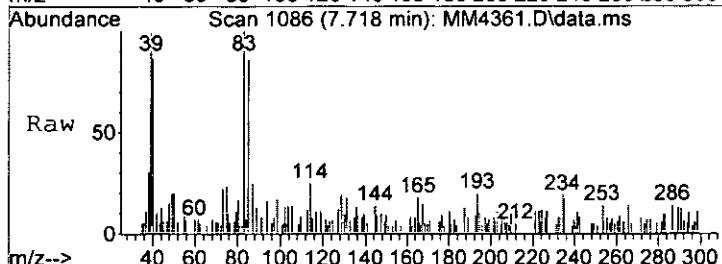
#54  
Trichloroethene  
Concen: 142.79 ppb  
RT: 7.084 min Scan# 982  
Delta R.T. -0.000 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm

Tgt Ion: 130 Resp: 1085415  
Ion Ratio Lower Upper  
130 100  
132 96.1 72.7 112.7  
95 98.1 69.8 109.8  
97 62.2 38.8 78.8



#60  
Bromodichloromethane  
Concen: 0.53 ppb  
RT: 7.718 min Scan# 1086  
Delta R.T. 0.006 min  
Lab File: MM4361.D  
Acq: 29 Jun 2015 7:13 pm

Tgt Ion: 83 Resp: 5183  
Ion Ratio Lower Upper  
83 100  
129 0.0 0.0 31.7  
127 23.8 0.0 28.0



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:09

**Sample Name:** DUP  
**Lab Code:** R1505119-008

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4353.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	10 U	10	2.1	
75-01-4	Vinyl Chloride	420	10	3.2	
75-00-3	Chloroethane	10 U	10	2.4	
74-83-9	Bromomethane	10 U	10	2.9	
75-35-4	1,1-Dichloroethene	10 U	10	5.7	
67-64-1	Acetone	50 U	50	13	
75-15-0	Carbon Disulfide	10 U	10	2.2	
75-09-2	Methylene Chloride	41	10	6.0	
156-60-5	trans-1,2-Dichloroethene	4.4 J	10	3.4	
75-34-3	1,1-Dichloroethane	5.9 J	10	2.0	
156-59-2	cis-1,2-Dichloroethene	910	10	3.0	
78-93-3	2-Butanone (MEK)	50 U	50	8.2	
67-66-3	Chloroform	4.5 J	10	2.5	
71-55-6	1,1,1-Trichloroethane	10 U	10	3.6	
56-23-5	Carbon Tetrachloride	10 U	10	4.5	
71-43-2	Benzene	10 U	10	2.0	
107-06-2	1,2-Dichloroethane	10 U	10	3.6	
79-01-6	Trichloroethene	2.2 J	10	2.2	
78-87-5	1,2-Dichloropropane	10 U	10	2.0	
75-27-4	Bromodichloromethane	10 U	10	3.2	
10061-01-5	cis-1,3-Dichloropropene	10 U	10	2.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	50 U	50	6.7	
108-88-3	Toluene	10 U	10	2.0	
10061-02-6	trans-1,3-Dichloropropene	10 U	10	2.0	
79-00-5	1,1,2-Trichloroethane	10 U	10	3.5	
127-18-4	Tetrachloroethene	10 U	10	3.0	
591-78-6	2-Hexanone	50 U	50	17	
124-48-1	Dibromochloromethane	10 U	10	3.1	
108-90-7	Chlorobenzene	10 U	10	2.9	
100-41-4	Ethylbenzene	10 U	10	2.0	
179601-23-1	m,p-Xylenes	20 U	20	3.4	
95-47-6	o-Xylene	10 U	10	2.0	
100-42-5	Styrene	10 U	10	2.0	
75-25-2	Bromoform	10 U	10	4.2	
79-34-5	1,1,2,2-Tetrachloroethane	10 U	10	2.5	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** DUP  
**Lab Code:** R1505119-008

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 15:09

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4353.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	6/29/15 15:09	
Toluene-d8	108	87-121	6/29/15 15:09	
Dibromofluoromethane	104	89-119	6/29/15 15:09	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4353.D  
 Acq On : 29 Jun 2015 3:09 pm  
 Operator : K.Ruest  
 Sample : R1505119-008|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 30 14:14:49 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	5.743	168	832262	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1435760	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1378880	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	758547	50.00	ppb	0.00
<hr/>						
System Monitoring Compounds						
45) surr4,Dibromoethane	5.597	113	402066	51.75	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	103.50%		
48) surr1,1,2-dichloroetha...	6.103	65	446561	53.81	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	107.62%		
65) SURR3,Toluene-d8	8.529	98	1825906	53.81	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	107.62%		
70) SURR2,BFB	11.047	95	714868	55.45	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	110.90%		
<hr/>						
Target Compounds				Qvalue		
4) Vinyl Chloride	1.433	62	366451	42.01	ppb	100
12) Acrolein	2.292	56	421	0.70	ppb	91
13) 1,1-Dicloethene	2.439	96	2484	0.41	ppb	# 73
22) Methylene Chloride	2.933	84	26474	4.07	ppb	92
26) trans-1,2-Dichloroethene	3.262	96	3010m	0.44	ppb	
28) 1,1-Dicloethane	3.786	63	6616	0.59	ppb	91
34) cis-1,2-Dichloroethene	4.719	96	664435	91.13	ppb	# 80
40) Chloroform	5.328	83	5374	0.45	ppb	83
54) Trichloroethene	7.084	130	1664m	0.22	ppb	
<hr/>						

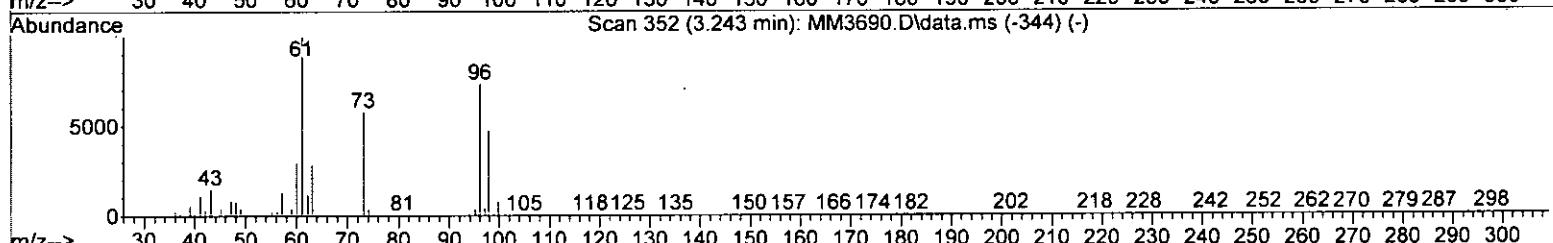
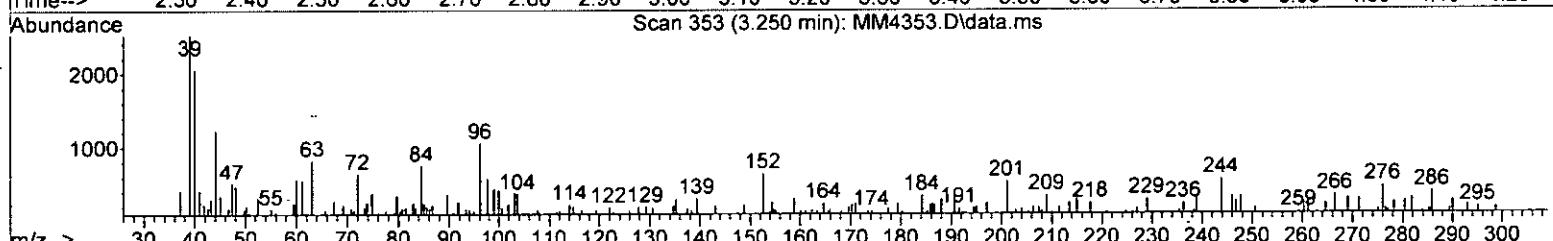
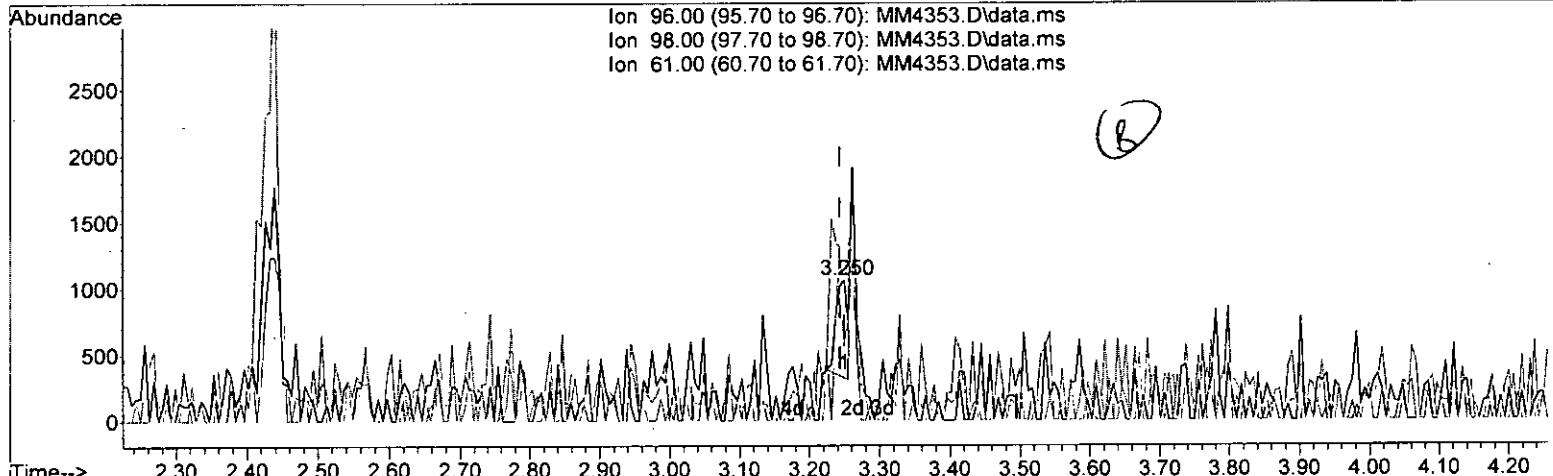
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR  
6/30/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoal2\Data\062915\  
 Data File : MM4353.D  
 Acq On : 29 Jun 2015 3:09 pm  
 Operator : K.Ruest  
 Sample : R1505119-008|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 29 15:25:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4353.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.250min (+0.006) 0.12 ppb

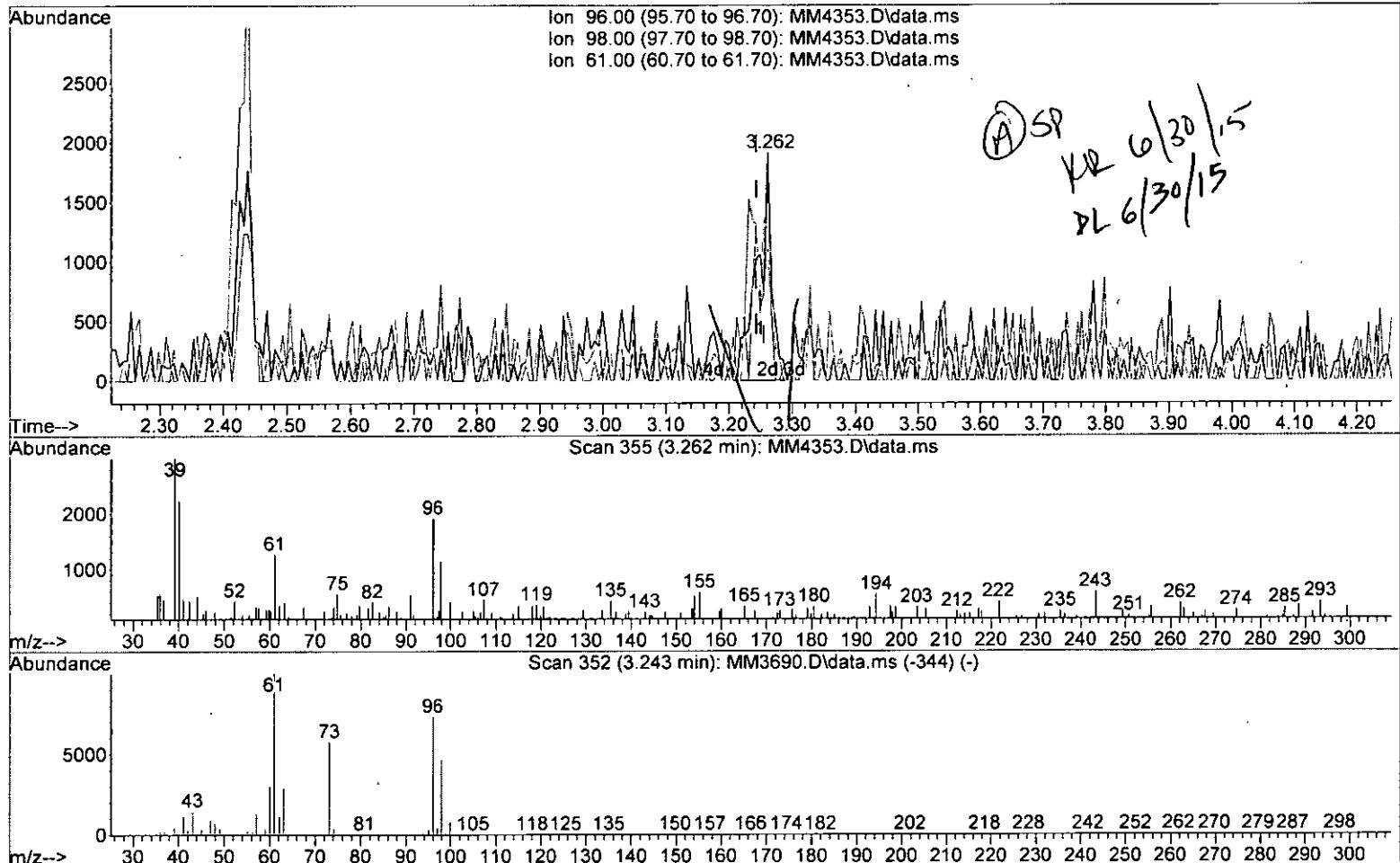
response 845

Ion	Exp%	Act%
96.00	100	100
98.00	64.20	54.58
61.00	136.90	52.50#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4353.D  
 Acq On : 29 Jun 2015 3:09 pm  
 Operator : K.Ruest  
 Sample : R1505119-008;10  
 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 29 15:25:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4353.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.262min (+0.018) 0.44 ppb m

response 3010

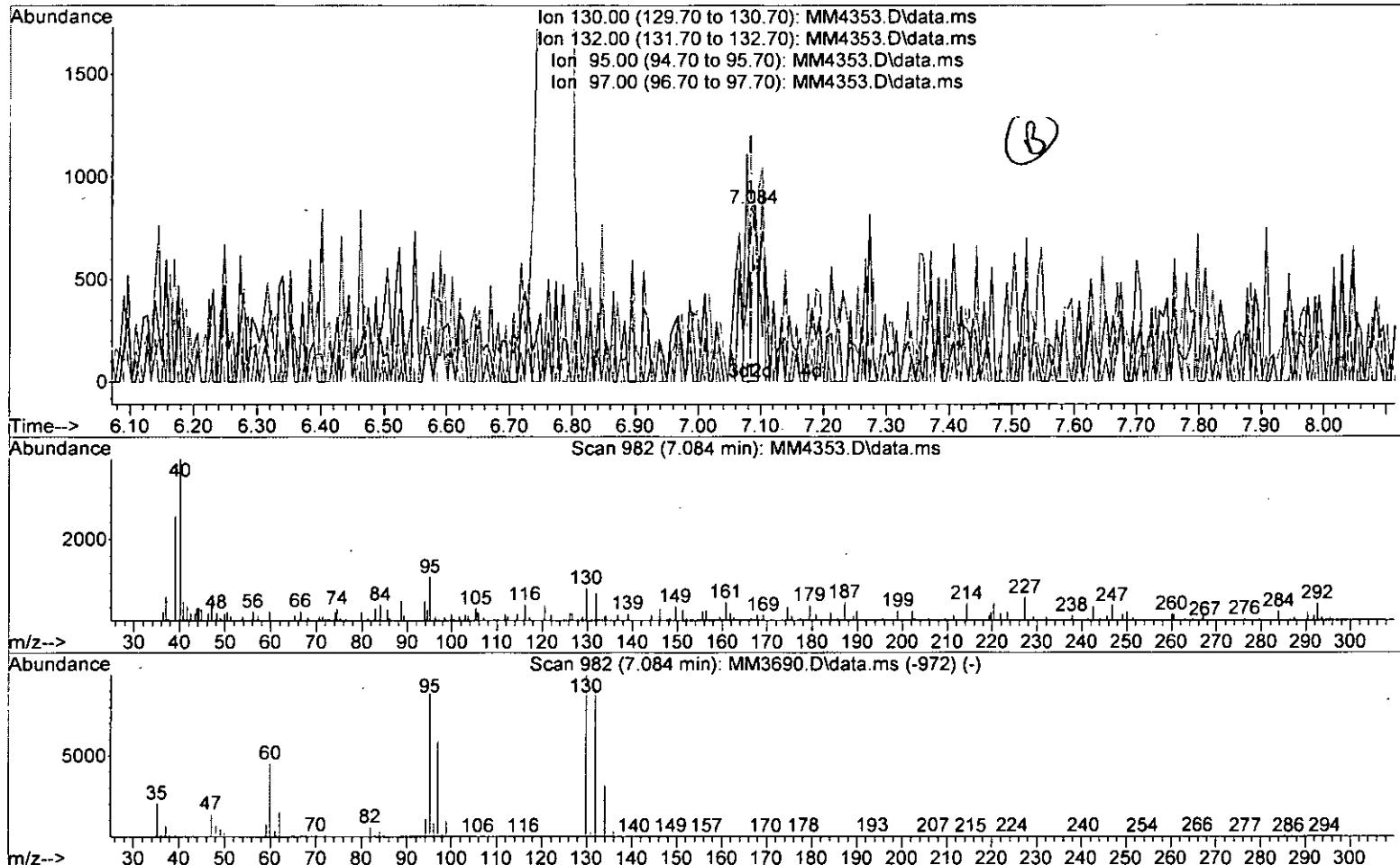
Ion	Exp%	Act%
96.00	100	100
98.00	64.20	59.10
61.00	136.90	66.11#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4353.D  
 Acq On : 29 Jun 2015 3:09 pm  
 Operator : K.Ruest  
 Sample : R1505119-008|10  
 Misc : CB&I 13429 T4  
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 15:25:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4353.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.000) 0.12 ppb

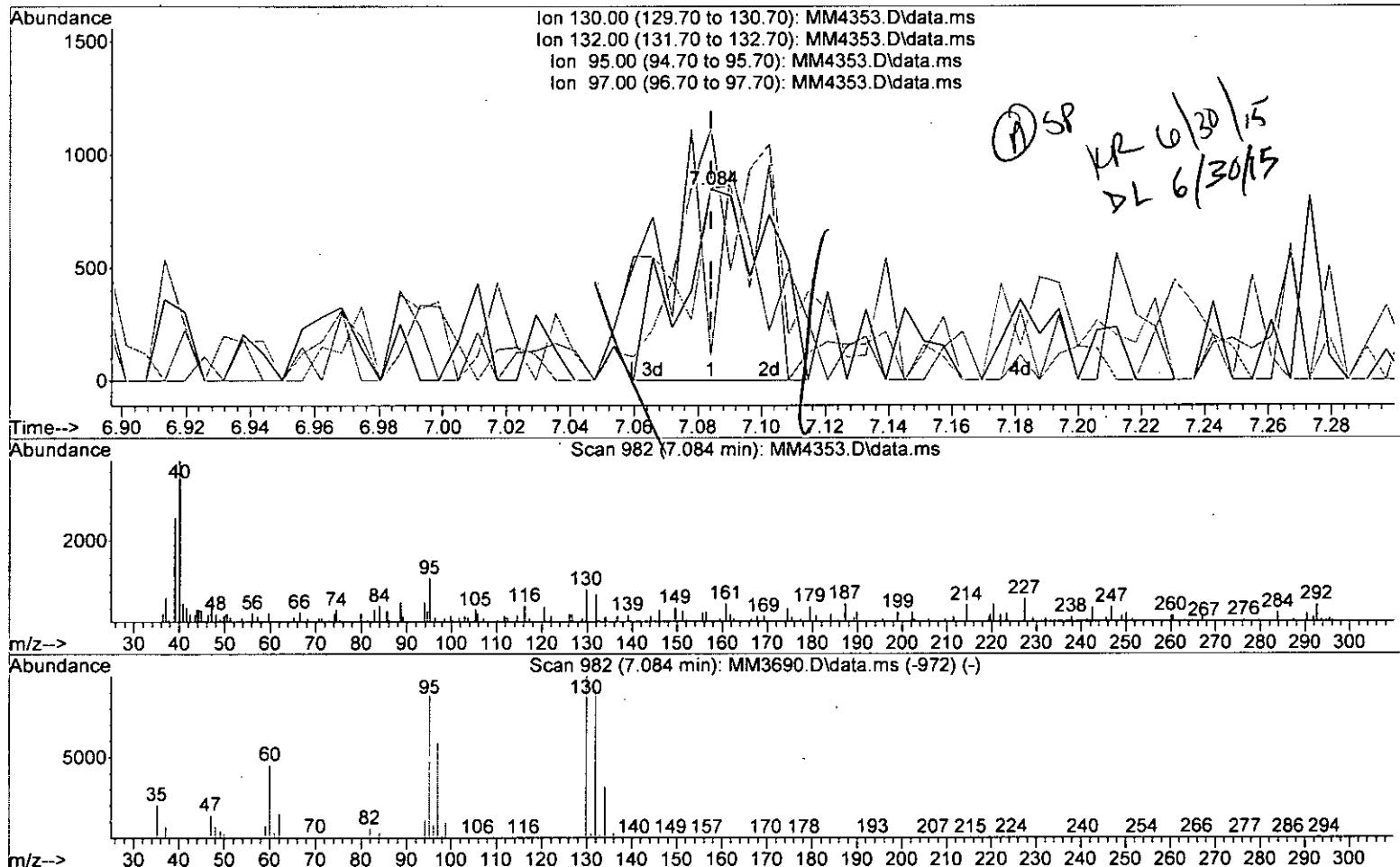
response 921

Ion	Exp%	Act%
130.00	100	100
132.00	92.70	100.47
95.00	89.80	131.68#
97.00	58.80	13.00#

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4353.D  
 Acq On : 29 Jun 2015 3:09 pm  
 Operator : K.Ruest  
 Sample : R1505119-008|10 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 29 15:25:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4353.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.000) 0.22 ppb m

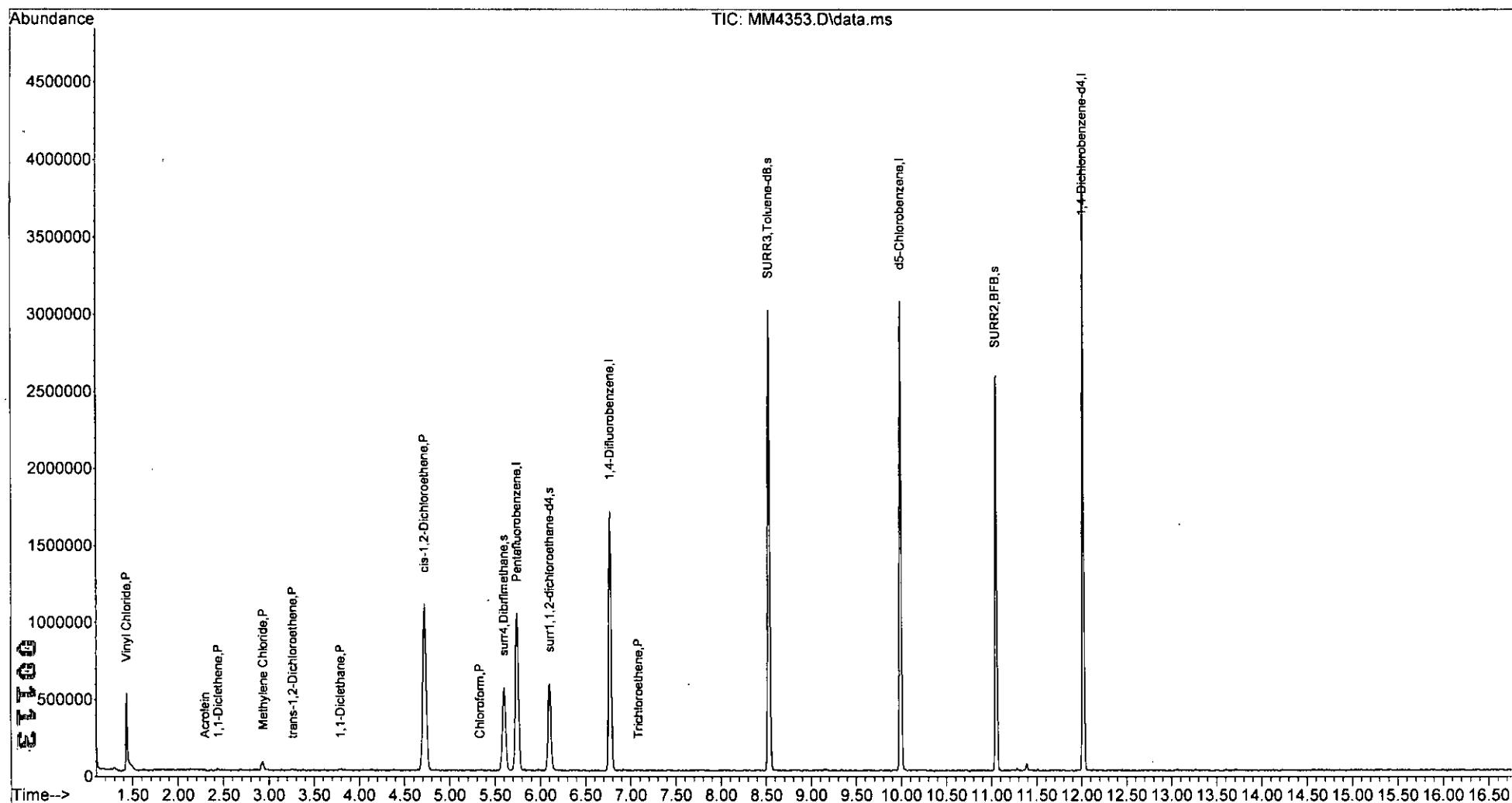
response 1664

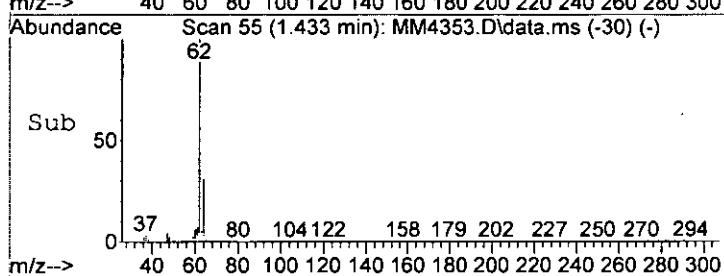
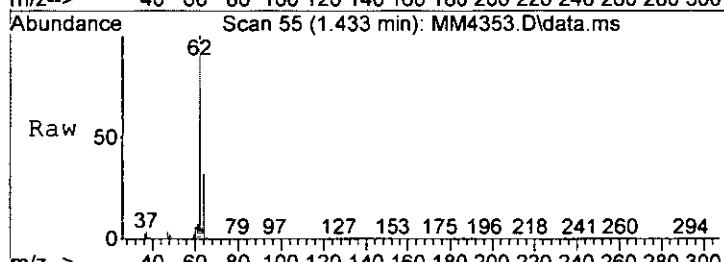
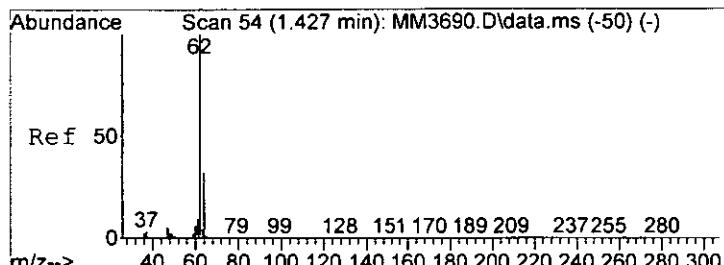
Ion	Exp%	Act%
130.00	100	100
132.00	92.70	85.70
95.00	89.80	131.68#
97.00	58.80	13.00#

Data Path : I:\ACQUDATA\msvao12\Data\062915\  
Data File : MM4353.D  
Acq On : 29 Jun 2015 3:09 pm  
Operator : K.Ruest  
Sample : R1505119-008|10  
Misc : CB&I 13429 T4  
ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA-12

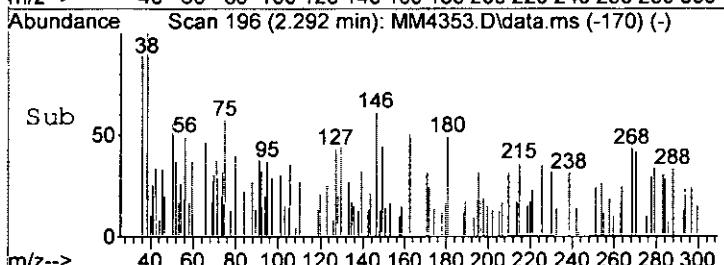
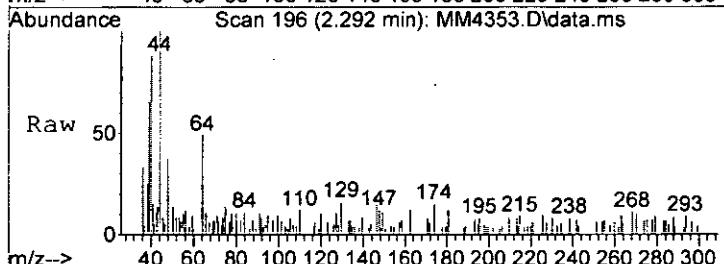
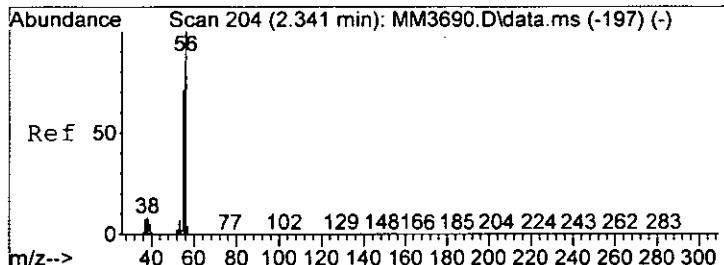
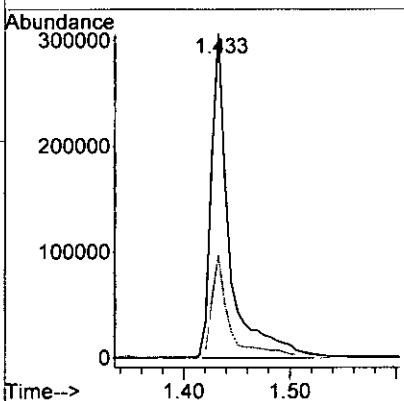
Quant Time: Jun 30 14:14:49 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration





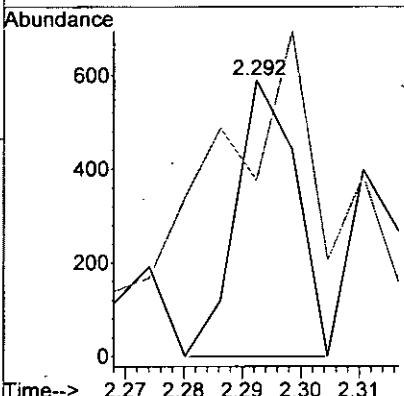
#4  
Vinyl Chloride  
Concen: 42.01 ppb  
RT: 1.433 min Scan# 55  
Delta R.T. 0.006 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm

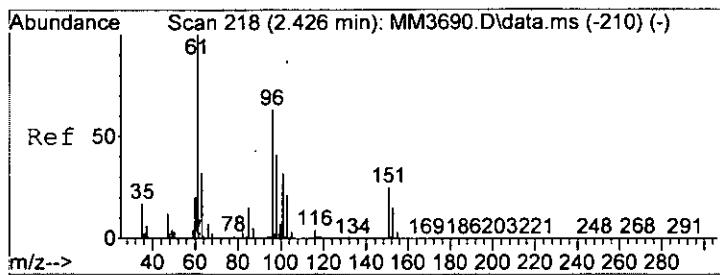
Tgt Ion: 62 Resp: 366451  
Ion Ratio Lower Upper  
62 100  
64 31.5 11.5 51.5



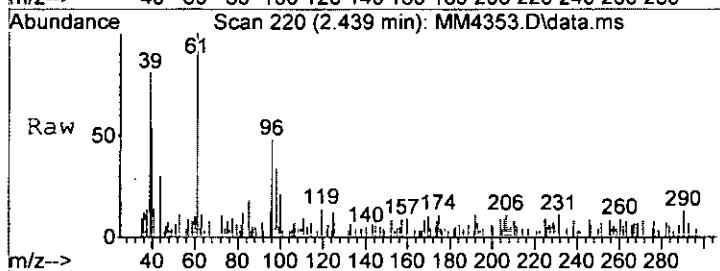
#12  
Acrolein  
Concen: 0.70 ppb  
RT: 2.292 min Scan# 196  
Delta R.T. -0.043 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm

Tgt Ion: 56 Resp: 421  
Ion Ratio Lower Upper  
56 100  
55 63.7 51.6 91.6

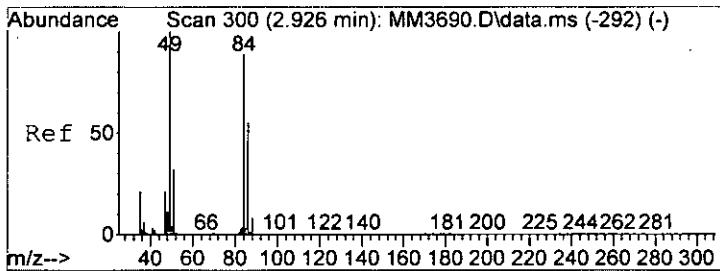
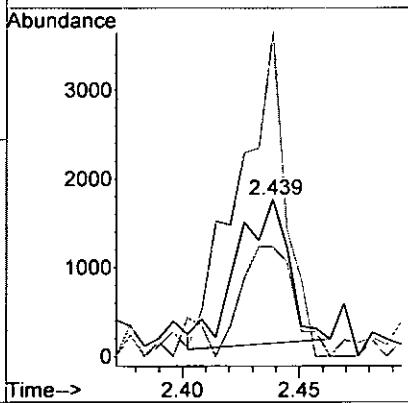
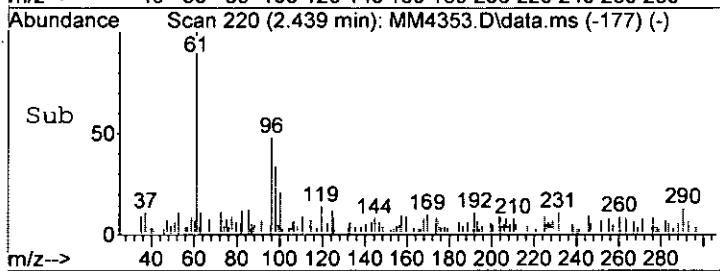




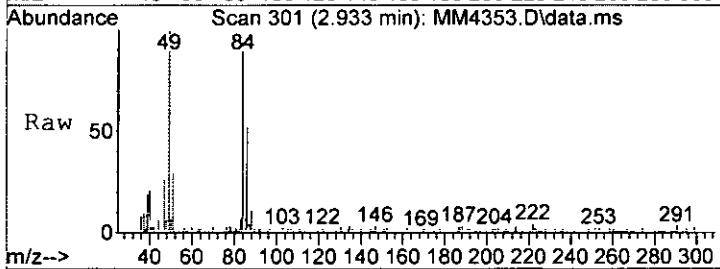
#13  
1,1-Dicloethene  
Concen: 0.41 ppb  
RT: 2.439 min Scan# 220  
Delta R.T. 0.012 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm



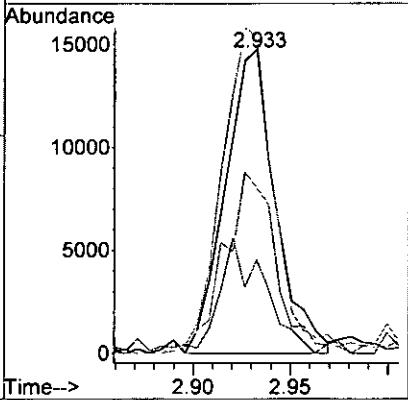
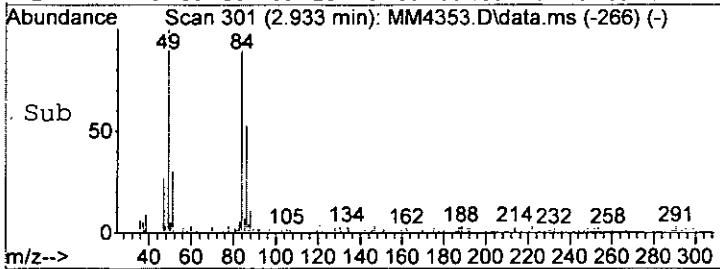
Tgt Ion: 96 Resp: 2484  
Ion Ratio Lower Upper  
96 100  
98 69.9 45.2 85.2  
61 206.2 139.4 179.4#

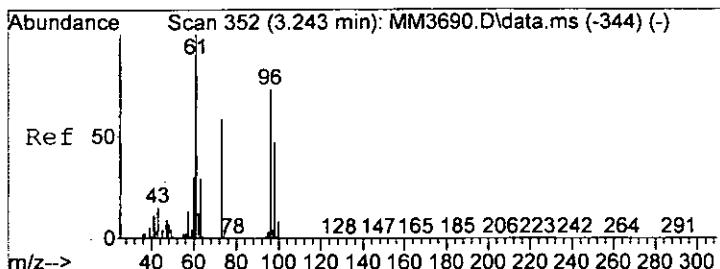


#22  
Methylene Chloride  
Concen: 4.07 ppb  
RT: 2.933 min Scan# 301  
Delta R.T. 0.012 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm

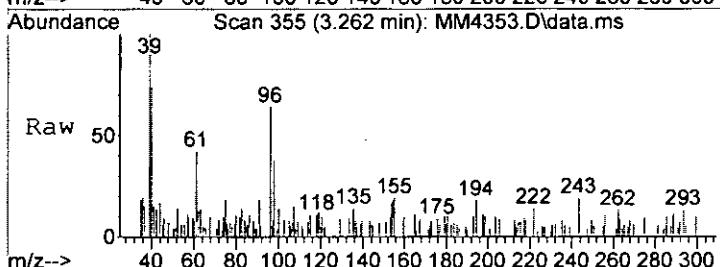


Tgt Ion: 84 Resp: 26474  
Ion Ratio Lower Upper  
84 100  
86 54.4 41.7 81.7  
49 104.3 92.0 132.0  
51 32.2 15.8 55.8

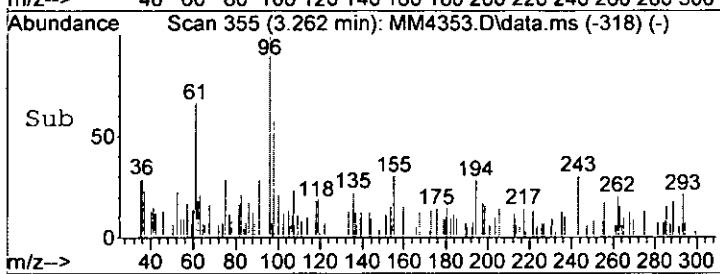
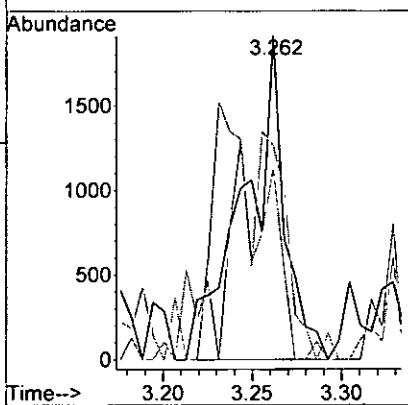




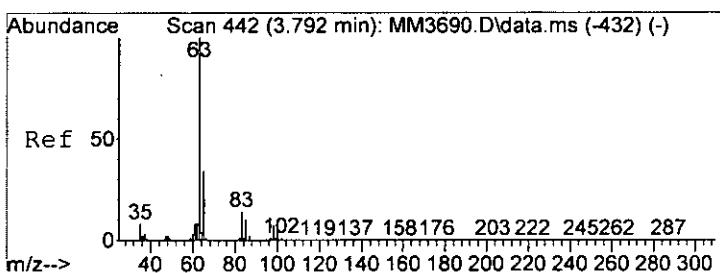
#26  
trans-1,2-Dichloroethene  
Concen: 0.44 ppb m  
RT: 3.262 min Scan# 355  
Delta R.T. 0.018 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm



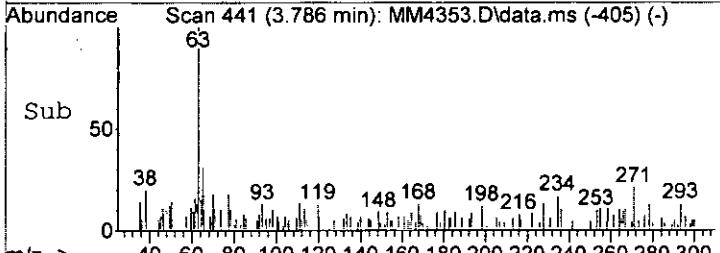
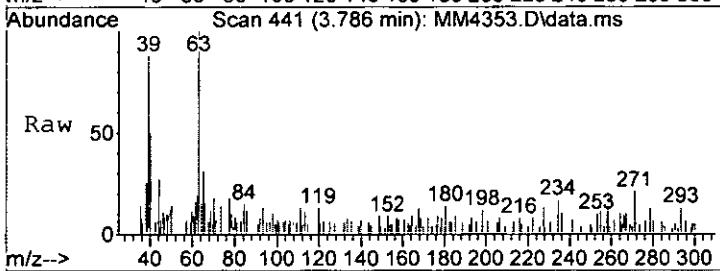
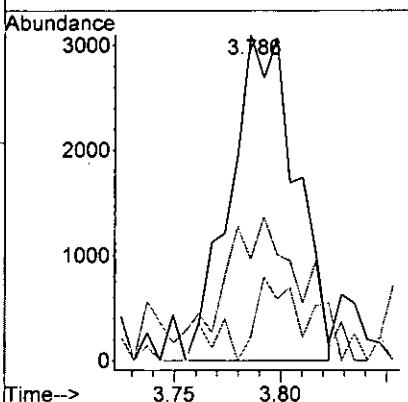
Tgt Ion: 96 Resp: 3010  
Ion Ratio Lower Upper  
96 100  
98 59.1 44.2 84.2  
61 66.1 116.9 156.9#

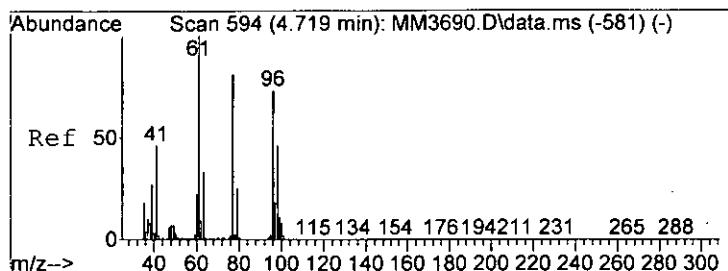


#28  
1,1-Dicethane  
Concen: 0.59 ppb  
RT: 3.786 min Scan# 441  
Delta R.T. -0.006 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm



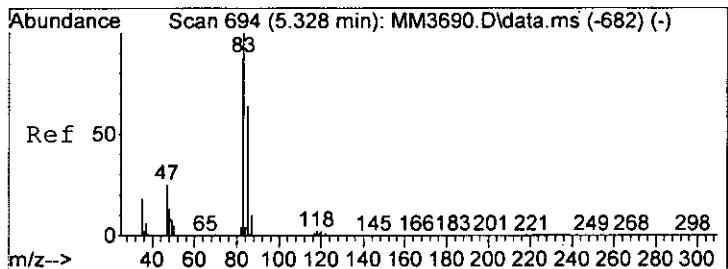
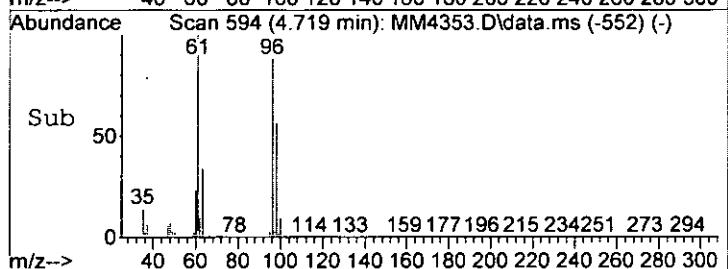
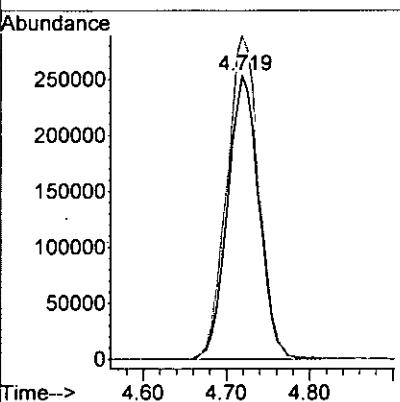
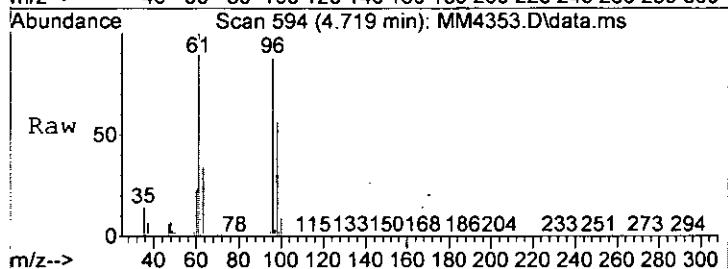
Tgt Ion: 63 Resp: 6616  
Ion Ratio Lower Upper  
63 100  
65 31.0 13.8 53.8  
83 7.0 0.0 34.1





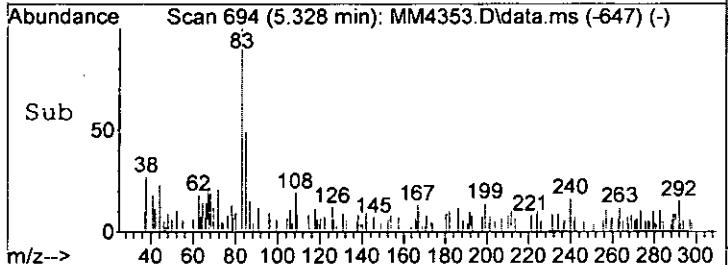
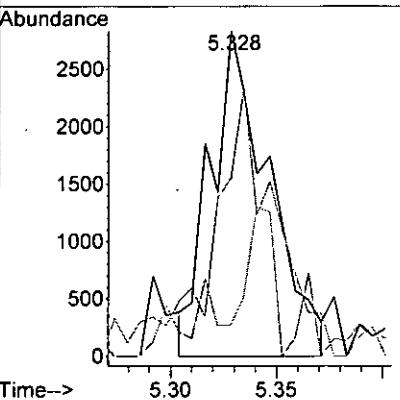
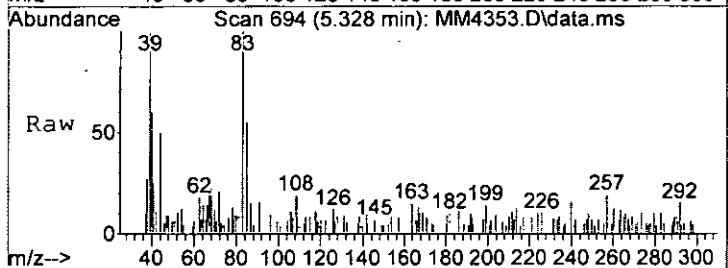
# 34  
cis-1,2-Dichloroethene  
Concen: 91.13 ppb  
RT: 4.719 min Scan# 594  
Delta R.T. 0.000 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm

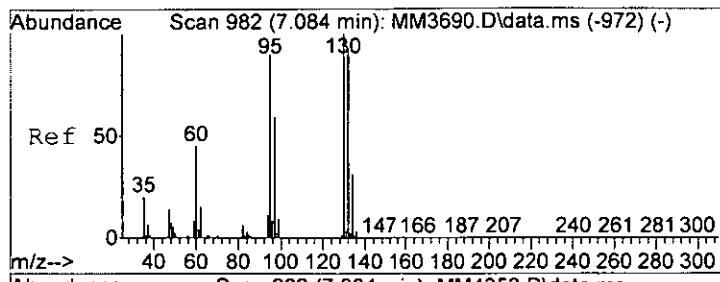
Tgt Ion: 96 Resp: 664435  
Ion Ratio Lower Upper  
96 100  
61 114.1 117.6 157.6#



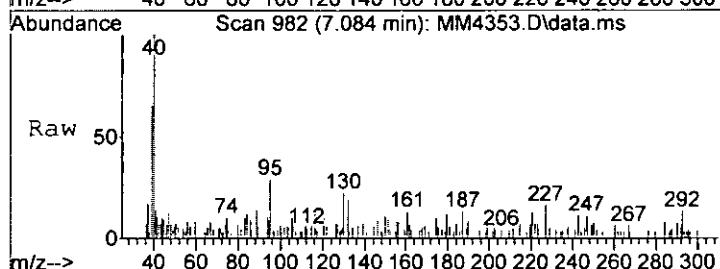
# 40  
Chloroform  
Concen: 0.45 ppb  
RT: 5.328 min Scan# 694  
Delta R.T. 0.000 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm

Tgt Ion: 83 Resp: 5374  
Ion Ratio Lower Upper  
83 100  
85 54.8 43.8 83.8  
47 9.5 4.7 44.7

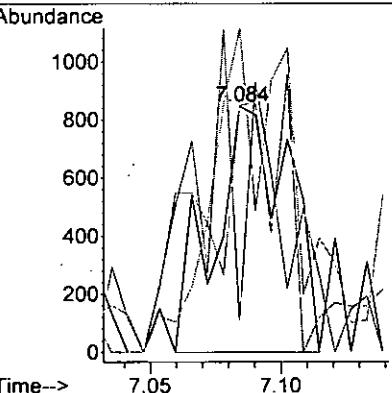
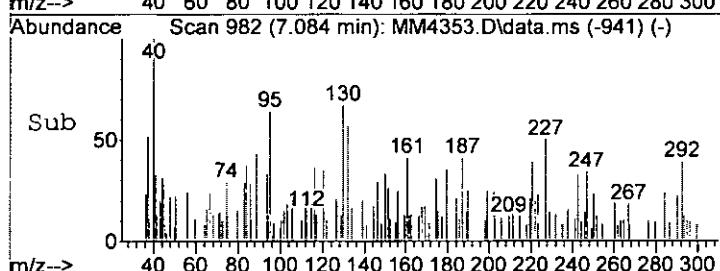




#54  
Trichloroethene  
Concen: 0.22 ppb m  
RT: 7.084 min Scan# 982  
Delta R.T. 0.000 min  
Lab File: MM4353.D  
Acq: 29 Jun 2015 3:09 pm



Tgt	Ion:130	Resp:	1664
Ion	Ratio	Lower	Upper
130	100		
132	85.7	72.7	112.7
95	131.7	69.8	109.8#
97	13.0	38.8	78.8#



ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 12:57

**Sample Name:** TRIP BLANK  
**Lab Code:** R1505119-009

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C

Analysis Lot: 450948

**Prep Method:** EPA 5030C

**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4323.DV

**Instrument Name:** R-MS-12

**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/28/15 12:57

**Sample Name:** TRIP BLANK  
**Lab Code:** R1505119-009

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C **Analysis Lot:** 450948  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUDATA\MSVOA12\DATA\062815\MM4323.D\ **Instrument Name:** R-MS-1  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	108	85-122	6/28/15 12:57		
Toluene-d8	107	87-121	6/28/15 12:57		
Dibromofluoromethane	106	89-119	6/28/15 12:57		

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUADATA\MSVOA12\DATA\062815\  
 Data File : MM4323.D  
 Acq On : 28 Jun 2015 12:57 pm  
 Operator : K.Ruest  
 Sample : R1505119-009|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 28 13:13:30 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	5.743	168	880131	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1503871	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1442072	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	760851	50.00	ppb	0.00
<hr/>						
System Monitoring Compounds						
45) surr4,Dibromomethane	5.597	113	430225	52.87	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	105.74%		
48) surr1,1,2-dichloroetha...	6.103	65	464483	53.43	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	106.86%		
65) SURR3,Toluene-d8	8.529	98	1892990	53.26	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	106.52%		
70) SURR2,BFB	11.047	95	729962	54.05	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	108.10%		
2) MeO <sub>2</sub>	2.914		2893	0.42 mle		
<hr/>						
Target Compounds				Qvalue		
12) Acrolein	2.292	56	343	0.54	ppb	80
15) Acetone	2.475	43	1560	1.26	ppb	95
16) 2-Propanol	2.597	45	252	1.03	ppb	97
17) Iodomethane	2.603	142	388	1.28	ppb	98
19) Acetonitrile	2.762	40	1132	7.15	ppb	# 1
21) Methyl Acetate	2.908	43	711	0.26	ppb	86
23) TBA	3.115	59	500	1.14	ppb	87
35) 2-Butanone	4.804	43	720	0.44	ppb	92
36) Propionitrile	4.865	54	558	1.13	ppb	64
38) Methacrylonitrile	5.091	67	388	0.21	ppb	# 4
39) Tetrahydrofuran	5.225	42	363	0.33	ppb	96
53) 1-Butanol	7.151	56	480	3.82	ppb	# 1
58) 1,4-Dioxane	7.456	88	293	5.12	ppb	85
61) 2-Nitropropane	8.023	41	275	0.21	ppb	99
73) 2-Hexanone	9.328	43	648	0.22	ppb	# 58
90) Cyclohexanone	10.980	55	598	2.86	ppb	# 42
91) trans-1,4-Dichloro-2-B...	11.230	53	412	0.22	ppb	# 66
94) 1,2,3-Trichloropropane	11.248	110	405	0.21	ppb	# 1
111) 1,2-Dibromo-3-chlorop...	12.900	157	318	0.24	ppb	# 21
112) Trielution Dichlorotol...	13.071	125	2865	0.21	ppb	# 53 M
119) 2,4,5-Trichlorotolene	14.570	159	2524	0.42	ppb	87 M
120) 2,3,6-Trichlorotoluene	14.570	159	2524	0.49	ppb	94 M/WP
<hr/>						

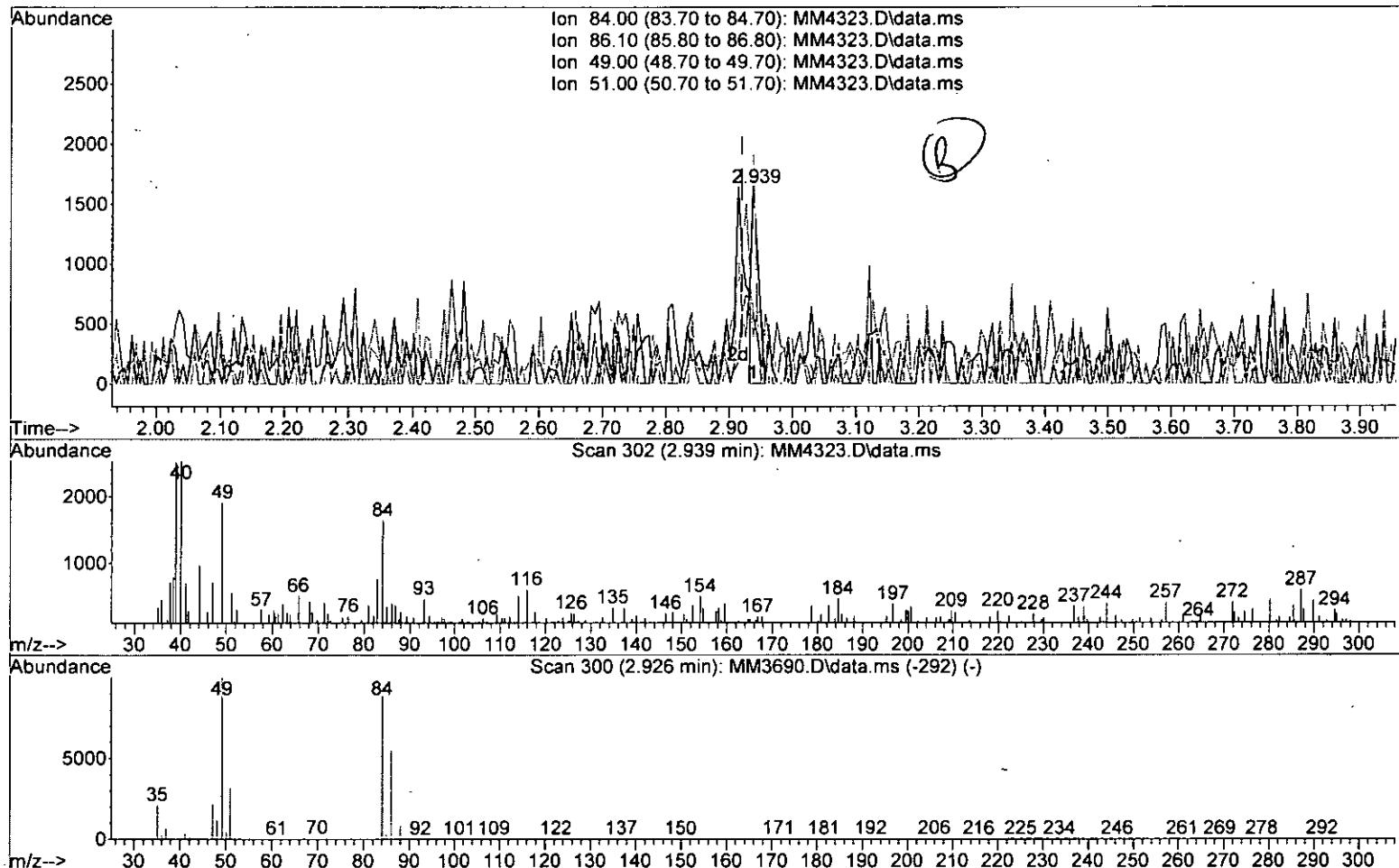
(#) = qualifier out of range (m) = manual integration (+) = signals summed

YF  
6/29/15

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4323.D  
 Acq On : 28 Jun 2015 12:57 pm  
 Operator : K.Ruest  
 Sample : R1505119-009|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 28 13:13:30 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4323.D\data.ms

(22) Methylene Chloride (P)

2.939min (+0.018) 0.17 ppb

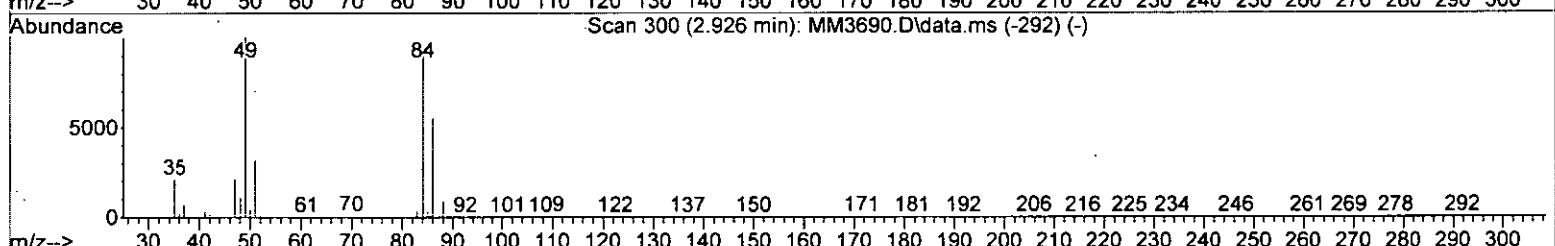
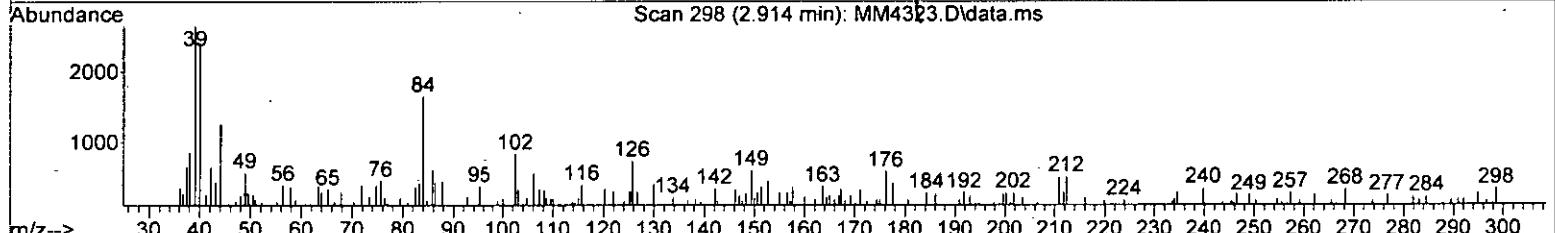
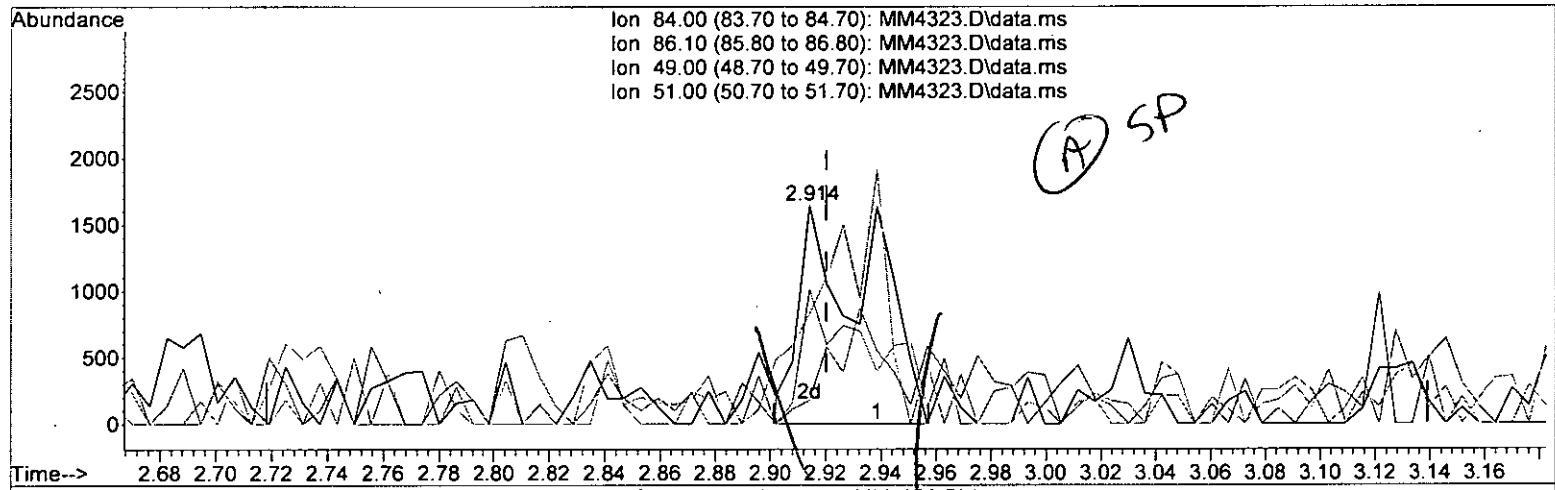
response 1166

Ion	Exp%	Act%
84.00	100	100
86.10	61.70	46.06
49.00	112.00	116.51
51.00	35.80	40.31

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\062815\  
 Data File : MM4323.D  
 Acc On : 28 Jun 2015 12:57 pm  
 Operator : K.Ruest  
 Sample : R1505119-009|1.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 28 13:13:30 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4323.D\data.ms

(22) Methylene Chloride (P)

2.914min (-0.006) 0.42 ppb m

response 2893

JL 6/30/15

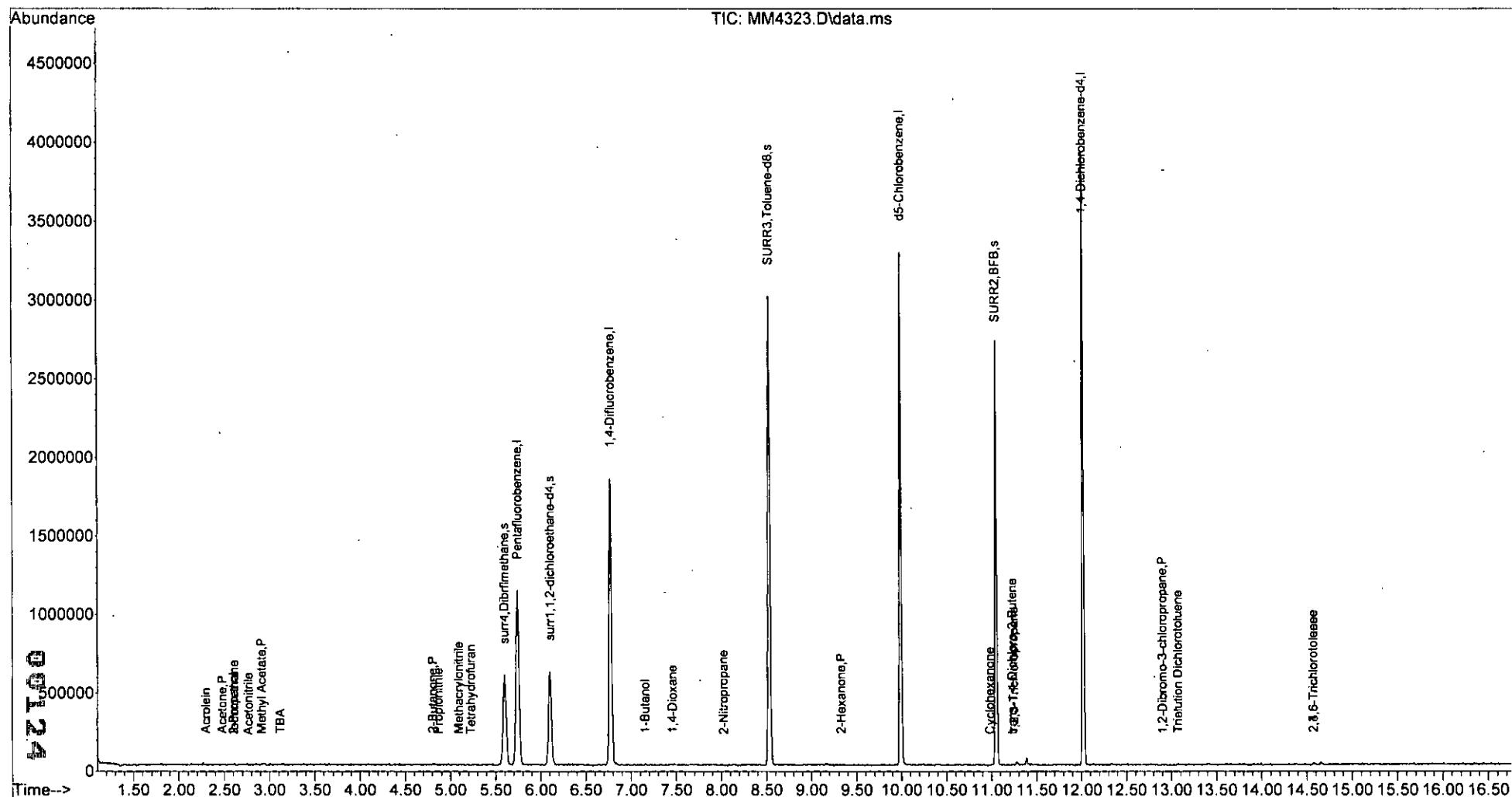
Ion	Exp%	Act%
84.00	100	100
86.10	61.70	36.44#
49.00	112.00	34.19#
51.00	35.80	10.66#

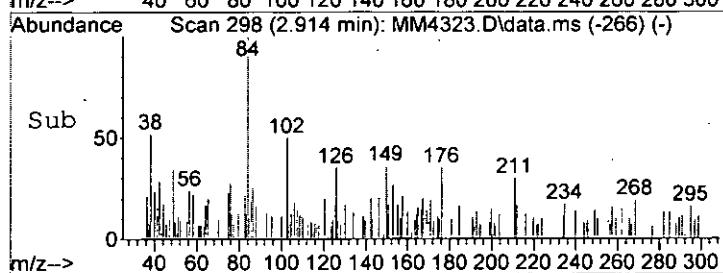
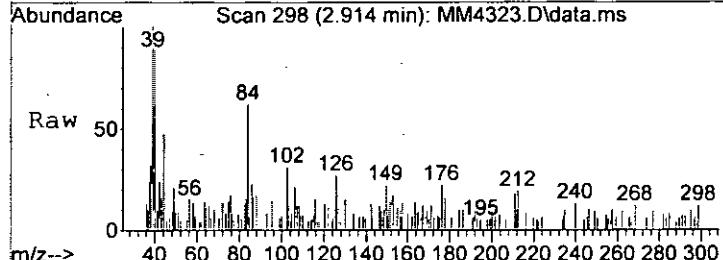
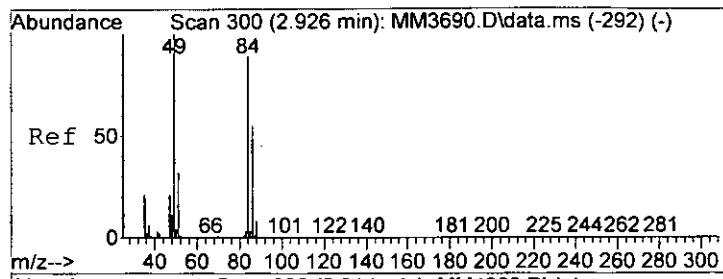
JL 6/30/15

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA12\DATA\062815\  
Data File : MM4323.D  
Acq On : 28 Jun 2015 12:57 pm  
Operator : K.Ruest  
Sample : R1505119-009|1:0 Inst : MSVOA-12  
Misc : CB&I 13429 T4  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 28 13:13:30 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration

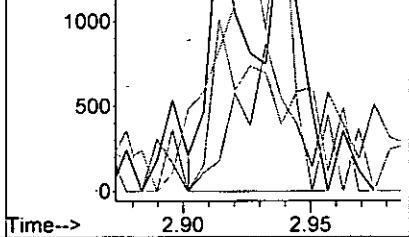




#22  
Methylene Chloride  
Concen: 0.42 ppb m  
RT: 2.914 min Scan# 298  
Delta R.T. -0.006 min  
Lab File: MM4323.D  
Acq: 28 Jun 2015 12:57 pm

Tgt Ion:	84	Resp:	2893
Ion Ratio		Lower	Upper
84	100		
86	36.4	41.7	81.7#
49	34.2	92.0	132.0#
51	10.7	15.8	55.8#

Abundance: 1500  
Ion 84.00 (83.70 to 84.70): M  
Ion 86.10 (85.80 to 86.80): M  
Ion 49.00 (48.70 to 49.70): M  
Ion 51.00 (50.70 to 51.70): M





# VOLATILE ORGANICS STANDARDS DATA

**ALS Environmental - Rochester, NY**  
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623  
Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

*Initial Calibration - Summary Report*

*KRC/5/15*

*6260 Waters - WO60415*

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.2738	<=20	6.0
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.6880	<=20	9.4
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.4225	<=20	6.8
1,1,2-Trichloroethane	T	Average RF		0.100	0.1833	<=20	3.9
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3640	<=20	5.2
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.6788	<=20	5.9
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3677	<=20	7.4
1,1-Dichloropropene	T	Average RF			0.3441	<=20	9.0
1,2,3-Trichlorobenzene	T	Average RF			0.4939	<=20	3.3
1,2,3-Trichloropropane	T	Average RF			0.1286	<=20	10.6
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.6041	<=20	3.8
1,2,4-Trimethylbenzene	T	Average RF			2.008	<=20	4.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08551	<=20	9.6
1,2-Dibromoethane	T	Average RF		0.100	0.1939	<=20	7.0
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123)	T	Average RF			0.5540	<=20	7.8
1,2-Dichlorobenzene	T	Average RF		0.400	1.052	<=20	4.0
1,2-Dichloroethane	T	Average RF		0.100	0.3177	<=20	8.6
1,2-Dichloropropane	T	Average RF		0.100	0.2370	<=20	6.4
1,3,5-Trichlorobenzene	T	Average RF			0.6596	<=20	5.7
1,3,5-Trimethylbenzene	T	Average RF			1.989	<=20	3.3
1,3-Dichlorobenzene	T	Average RF		0.600	1.125	<=20	3.1
1,3-Dichloropropane	T	Average RF			0.3283	<=20	4.4
1,4-Dichlorobenzene	T	Average RF		0.500	1.172	<=20	4.9
1,4-Dioxane	T	Average RF			0.001904	<=20	18.3
1-Butanol	T	Average RF			0.004180	<=20	4.8
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3476	<=20	4.5
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	T	Average RF			0.6437	<=20	9.1
2,2-Dichloropropane	T	Average RF			0.6467	<=20	3.4
2,3,6-Trichlorotoluene	T	Average RF			0.3395	<=20	5.8
2,4,5-Trichlorotoluene	T	Average RF			0.3948	<=20	5.1
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.8856	<=20	2.9
2,4-Dichlorobenzotrifluoride	T	Average RF			0.4190	<=20	4.2
2,5-Dichlorobenzotrifluoride	T	Average RF			0.4712	<=20	5.5
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.09211	<=20	6.1
2-Chloro-1,3-butadiene	T	Average RF			0.7387	<=20	3.6
2-Chlorobenzotrifluoride	T	Average RF			0.7253	<=20	7.4
2-Chloroethyl Vinyl Ether	T	Average RF			0.1094	<=20	5.5
2-Chlorotoluene	T	Average RF			1.610	<=20	4.3
2-Hexanone	T	Average RF		0.05	0.1012	<=20	8.8
2-Methyl-1-propanol	T	Average RF			0.006582	<=20	9.8
2-Methyl-2-propanol	T	Average RF			0.02483	<=20	4.4
2-Nitropropane	T	Average RF			0.04423	<=20	10.1
2-Propanol	T	Average RF			0.01392	<=20	6.1
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			0.9488	<=20	4.5
3,4-Dichlorobenzotrifluoride	T	Average RF			0.4749	<=20	6.4
3-Chloro-1-propene	T	Average RF			0.2213	<=20	6.5
3-Chlorobenzotrifluoride	T	Average RF			0.3837	<=20	4.2
3-Chlorotoluene	T	Average RF			1.706	<=20	3.8
4-Chlorotoluene	T	Average RF			1.990	<=20	3.4
4-Isopropyltoluene	T	Average RF			1.869	<=20	4.6
4-Methyl-2-pentanone	T	Average RF		0.05	0.1351	<=20	3.9

# Initial Calibration - Summary Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result	
Acetone	T	Average RF		0.05	0.07009	$\leq 20$	10.0	
Acetonitrile	T	Average RF			0.008996	$\leq 20$	14.4	
Acrolein	T	Average RF			0.03600	$\leq 20$	16.1	
Acrylonitrile	T	Average RF			0.07966	$\leq 20$	7.6	
Benzene	T	Average RF		0.500	0.9909	$\leq 20$	5.6	
Bromobenzene	T	Average RF			0.5788	$\leq 20$	3.0	
Bromoform	T	Average RF			0.2421	$\leq 20$	10.8	
Bromochloromethane	T	Average RF		0.200	0.3420	$\leq 20$	4.7	
Bromodichloromethane	T	Average RF			0.100	0.2560	$\leq 20$	2.8
Bromomethane	T	Average RF			0.100	0.2975	$\leq 20$	7.1
Carbon Disulfide	T	Average RF			0.100	1.178	$\leq 20$	6.1
Carbon Tetrachloride	T	Average RF		0.05	0.1088	$\leq 20$	3.5	
Chlorobenzene	T	Average RF		0.500	0.8139	$\leq 20$	5.3	
Chloroethane	T	Average RF		0.100	0.3477	$\leq 20$	8.9	
Chloroform	T	Average RF		0.200	0.7154	$\leq 20$	6.2	
Chloromethane	T	Average RF		0.100	0.4149	$\leq 20$	6.6	
Cyclohexane	T	Average RF		0.100	0.2271	$\leq 20$	8.6	
Cyclohexanone	T	Average RF			0.01376	$\leq 20$	3.8	
Dibromochloromethane	T	Average RF		0.100	0.2472	$\leq 20$	9.3	
Dibromomethane	T	Average RF			0.1277	$\leq 20$	8.9	
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.4266	$\leq 20$	6.3	
Dichlorofluoromethane (CFC 21)	T	Average RF			0.8681	$\leq 20$	4.7	
Dichloromethane	T	Average RF		0.100	0.3908	$\leq 20$	6.9	
Diethyl Ether	T	Average RF			0.3453	$\leq 20$	7.1	
Diisopropyl Ether	T	Average RF			1.180	$\leq 20$	5.0	
Ethyl Methacrylate	T	Average RF			0.2473	$\leq 20$	9.8	
Ethyl tert-Butyl Ether	T	Average RF			1.176	$\leq 20$	6.0	
Ethylbenzene	T	Average RF		0.100	0.4406	$\leq 20$	6.7	
Hexachlorobutadiene	T	Average RF			0.2326	$\leq 20$	10.6	
Iodomethane	T	Linear Equal			0.3852	$\geq 0.99$	0.9990	
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.321	$\leq 20$	4.3	
Methacrylonitrile	T	Average RF			0.1050	$\leq 20$	11.6	
Methyl Acetate	T	Average RF		0.100	0.1526	$\leq 20$	6.7	
Methyl Methacrylate	T	Average RF			0.1156	$\leq 20$	4.6	
Methyl tert-Butyl Ether	T	Average RF		0.100	0.9554	$\leq 20$	3.0	
Methylcyclohexane	T	Average RF		0.100	0.2502	$\leq 20$	3.5	
Naphthalene	T	Average RF			1.268	$\leq 20$	6.5	
Propionitrile	T	Average RF			0.02812	$\leq 20$	7.8	
Styrene	T	Average RF		0.300	0.8926	$\leq 20$	2.1	
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2293	$\leq 20$	8.5	
Tetrahydrofuran (THF)	T	Average RF			0.06265	$\leq 20$	13.7	
Toluene	T	Average RF		0.400	1.137	$\leq 20$	2.1	
Trichloroethene (TCE)	T	Average RF		0.200	0.2675	$\leq 20$	3.9	
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7809	$\leq 20$	4.4	
Vinyl Acetate	T	Average RF			0.08139	$\leq 20$	14.2	
Vinyl Chloride	T	Average RF		0.100	0.5240	$\leq 20$	9.4	
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4380	$\leq 20$	3.8	
cis-1,3-Dichloropropene	T	Average RF		0.200	0.3982	$\leq 20$	3.4	
m,p-Xylenes	T	Average RF		0.100	0.5370	$\leq 20$	2.7	
n-Butyl Acetate	T	Average RF			0.2659	$\leq 20$	5.9	
n-Butylbenzene	T	Average RF			1.677	$\leq 20$	5.2	
n-Heptane	T	Average RF			0.2111	$\leq 20$	6.6	

### *Initial Calibration - Summary Report*

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			2.612	<=20	4.5
o-Xylene	T	Average RF	0.300	0.5200	<=20	4.8	
sec-Butylbenzene	T	Average RF		2.197	<=20	6.3	
tert-Amyl Methyl Ether	T	Average RF		1.026	<=20	5.3	
tert-Butylbenzene	T	Average RF		1.602	<=20	6.1	
trans-1,2-Dichloroethene	T	Average RF	0.100	0.4109	<=20	4.0	
trans-1,3-Dichloropropene	T	Average RF	0.100	0.3408	<=20	2.6	
trans-1,4-Dichloro-2-butene	T	Average RF		0.1249	<=20	7.3	
1,2-Dichloroethane-d4	S	Average RF		0.2890	<=20	7.4	
4-Bromofluorobenzene	S	Average RF		0.4490	<=20	7.4	
Dibromofluoromethane	S	Average RF		0.2706	<=20	6.3	
Toluene-d8	S	Average RF		1.182	<=20	7.5	

8260 Waters

## Initial Calibration - Detailed Report

KF6/5/15

Calibration ID:	RC1500064	W060415	Instrument ID:	R-MS-12
			Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
11	RC1500064-11	5.0ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3688.D	6/4/15 14:11
01	RC1500064-01	0.5ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3685.D	6/4/15 12:40
02	RC1500064-02	1.0ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3686.D	6/4/15 13:10
03	RC1500064-03	2.0ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3687.D	6/4/15 13:41
05	RC1500064-05	20ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3689.D	6/4/15 14:42
06	RC1500064-06	50ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3690.D	6/4/15 15:12
07	RC1500064-07	100ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3691.D	6/4/15 15:43
08	RC1500064-08	150ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3692.D	6/4/15 16:13
09	RC1500064-09	200ppb	I:\ACQUUDATA\msvoa12\Data\060415\MM3693.D	6/4/15 16:43

Analyte			Curve Fit		Weighting						
1,1,2-Tetrachloroethane			Average RF		RSD = 6.0		Average RF = 0.2738				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#		
01	0.500	0.2643	02	1.000	0.2473	03	2.000	0.2942	11	5.000	0.2532
05	20.000	0.2774	06	50.000	0.2695	07	100.000	0.2794	08	150.000	0.2873
1,1,1-Trichloroethane (TCA)			Average RF		RSD = 9.4		Average RF = 0.6880				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#		
01	0.500	0.8445	02	1.000	0.7201	03	2.000	0.6991	11	5.000	0.6459
05	20.000	0.6741	06	50.000	0.6552	07	100.000	0.6311	08	150.000	0.6599
1,1,2,2-Tetrachloroethane			Average RF		RSD = 6.8		Average RF = 0.4225				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#		
01	0.500	0.4961	02	1.000	0.4041	03	2.000	0.4146	11	5.000	0.4076
05	20.000	0.4323	06	50.000	0.4163	07	100.000	0.4131	08	150.000	0.4135
1,1,2-Trichloroethane			Average RF		RSD = 3.9		Average RF = 0.1833				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#		
01	0.500	0.1998	02	1.000	0.1891	03	2.000	0.1761	11	5.000	0.1837
05	20.000	0.1821	06	50.000	0.1780	07	100.000	0.1794	08	150.000	0.1802
1,1,2-Trichlorotrifluoroethane			Average RF		RSD = 5.2		Average RF = 0.3640				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#		
02	1.000	0.3994	03	2.000	0.3508	11	5.000	0.3681	05	20.000	0.3753
06	50.000	0.3460	07	100.000	0.3409	08	150.000	0.3612	09	200.000	0.3707
1,1-Dichloroethane (1,1-DCA)			Average RF		RSD = 5.9		Average RF = 0.6788				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#		
01	0.500	0.7751	02	1.000	0.6982	03	2.000	0.6825	11	5.000	0.6581
05	20.000	0.6806	06	50.000	0.6545	07	100.000	0.6397	08	150.000	0.6543
1,1-Dichloroethene (1,1-DCE)			Average RF		RSD = 7.4		Average RF = 0.3677				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#		
01	0.500	0.3624	02	1.000	0.4297	03	2.000	0.3796	11	5.000	0.3393
05	20.000	0.3651	06	50.000	0.3504	07	100.000	0.3420	08	150.000	0.3649

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID: R-MS-12					
						Signal ID: 1					
Analyte			Curve Fit		Weighting						
<b>1,1-Dichloropropene</b>			Average RF		RSD = 9.0		Average RF = 0.3441				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4225	02	1.000	0.3528	03	2.000	0.3275	11	5.000	0.3410
05	20.000	0.3336	06	50.000	0.3243	07	100.000	0.3200	08	150.000	0.3324
09	200.000	0.3426									
<b>1,2,3-Trichlorobenzene</b>			Average RF		RSD = 3.3		Average RF = 0.4939				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4699	03	2.000	0.5167	11	5.000	0.4992	05	20.000	0.5122
06	50.000	0.5005	07	100.000	0.4901	08	150.000	0.4807	09	200.000	0.4817
<b>1,2,3-Trichloropropane</b>			Average RF		RSD = 10.6		Average RF = 0.1286				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1611	03	2.000	0.1270	11	5.000	0.1286	05	20.000	0.1264
06	50.000	0.1233	07	100.000	0.1234	08	150.000	0.1204	09	200.000	0.1183
<b>1,2,4-Trichlorobenzene</b>			Average RF		RSD = 3.8		Average RF = 0.6041				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6343	02	1.000	0.6020	03	2.000	0.6468	11	5.000	0.5967
05	20.000	0.6082	06	50.000	0.5976	07	100.000	0.5823	08	150.000	0.5856
09	200.000	0.5831									
<b>1,2,4-Trimethylbenzene</b>			Average RF		RSD = 4.0		Average RF = 2.008				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.136	02	1.000	2.017	03	2.000	1.946	11	5.000	1.978
05	20.000	2.150	06	50.000	1.984	07	100.000	1.940	08	150.000	1.970
09	200.000	1.948									
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>			Average RF		RSD = 9.6		Average RF = 0.08551				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.09639	03	2.000	0.09903	11	5.000	0.08515	05	20.000	0.08214
06	50.000	0.08562	07	100.000	0.08135	08	150.000	0.07871	09	200.000	0.07572
<b>1,2-Dibromoethane</b>			Average RF		RSD = 7.0		Average RF = 0.1939				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2122	02	1.000	0.2205	03	2.000	0.1817	11	5.000	0.1888
05	20.000	0.1915	06	50.000	0.1950	07	100.000	0.1852	08	150.000	0.1849
09	200.000	0.1852									
<b>1,2-Diebromo-1,1,2-trifluoroethane (CFC)</b>			Average RF		RSD = 7.8		Average RF = 0.5540				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.6436	03	2.000	0.5812	11	5.000	0.5598	05	20.000	0.5490
06	50.000	0.5365	07	100.000	0.5251	08	150.000	0.5036	09	200.000	0.5335
<b>1,2-Dichlorobenzene</b>			Average RF		RSD = 4.0		Average RF = 1.052				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.143	02	1.000	1.044	03	2.000	1.046	11	5.000	0.9911
05	20.000	1.081	06	50.000	1.037	07	100.000	1.019	08	150.000	1.047
09	200.000	1.056									
<b>1,2-Dichloroethane</b>			Average RF		RSD = 8.6		Average RF = 0.3177				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3748	02	1.000	0.3541	03	2.000	0.3026	11	5.000	0.3055
05	20.000	0.3108	06	50.000	0.3034	07	100.000	0.3034	08	150.000	0.2977
09	200.000	0.3066									

# Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID: R-MS-12				
						Signal ID: 1				
Analyte		Curve Fit		Weighting						
<b>1,2-Dichloroethane-d4</b>			Average RF		RSD = 7.4		Average RF = 0.2890			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
06	50.000	0.3139	03	60.000	0.3083	11	70.000	0.2990	05	100.000
07	125.000	0.2726	08	150.000	0.2598					0.2806
<b>1,2-Dichloropropane</b>			Average RF		RSD = 6.4		Average RF = 0.2370			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
01	0.500	0.2534	02	1.000	0.2629	03	2.000	0.2469	11	5.000
05	20.000	0.2342	06	50.000	0.2308	07	100.000	0.2266	08	150.000
09	200.000	0.2365								0.2293
<b>1,3,5-Trichlorobenzene</b>			Average RF		RSD = 5.7		Average RF = 0.6596			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
01	0.500	0.5925	02	1.000	0.7051	03	2.000	0.6254	11	5.000
05	20.000	0.7106	06	50.000	0.6352	07	100.000	0.6598	08	150.000
09	200.000	0.6700								0.6730
<b>1,3,5-Trimethylbenzene</b>			Average RF		RSD = 3.3		Average RF = 1.989			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
01	0.500	1.898	02	1.000	2.063	03	2.000	1.951	11	5.000
05	20.000	2.109	06	50.000	1.976	07	100.000	1.924	08	150.000
09	200.000	2.008								2.006
<b>1,3-Dichlorobenzene</b>			Average RF		RSD = 3.1		Average RF = 1.125			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
01	0.500	1.156	02	1.000	1.148	03	2.000	1.130	11	5.000
05	20.000	1.188	06	50.000	1.098	07	100.000	1.088	08	150.000
09	200.000	1.127								1.114
<b>1,3-Dichloropropane</b>			Average RF		RSD = 4.4		Average RF = 0.3283			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
02	1.000	0.3028	03	2.000	0.3111	11	5.000	0.3423	05	20.000
06	50.000	0.3449	07	100.000	0.3289	08	150.000	0.3298	09	200.000
<b>1,4-Dichlorobenzene</b>			Average RF		RSD = 4.9		Average RF = 1.172			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
02	1.000	1.197	03	2.000	1.282	11	5.000	1.147	05	20.000
06	50.000	1.138	07	100.000	1.111	08	150.000	1.135	09	200.000
<b>1,4-Dioxane</b>			Average RF		RSD = 18.3		Average RF = 0.001904			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
03	40.000	0.002602	11	100.000	0.002047	05	400.000	0.001986	06	1000.000
07	2000.000	0.001690	08	3000.000	0.001621	09	4000.000	0.001653		0.001732
<b>1-Butanol</b>			Average RF		RSD = 4.8		Average RF = 0.004180			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
02	50.000	0.004139	03	100.000	0.004571	11	250.000	0.003978	05	1000.000
06	2500.000	0.004321	07	5000.000	0.004294	08	7500.000	0.004037	09	10000.000
<b>1-Chloro-4-(trifluoromethyl)benzene</b>			Average RF		RSD = 4.5		Average RF = 0.3476			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount
01	0.500	0.3476	02	1.000	0.3338	03	2.000	0.3253	11	5.000
05	20.000	0.3552	06	50.000	0.3327	07	100.000	0.3532	08	150.000
09	200.000	0.3747								0.3625

## Initial Calibration - Detailed Report

Calibration ID:	RC1500064						Instrument ID:	R-MS-12						
							Signal ID:	1						
Analyte			Curve Fit		Weighting									
<b>2,2-Dichloro-1,1,1-trifluoroethane (CFC)</b>			Average RF		RSD = 9.1		Average RF = 0.6437							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.7339	02	1.000	0.7482	03	2.000	0.6365	11	5.000	0.6123			
05	20.000	0.6454	06	50.000	0.6226	07	100.000	0.6011	08	150.000	0.5767			
09	200.000	0.6168												
<b>2,2-Dichloropropane</b>			Average RF		RSD = 3.4		Average RF = 0.6467							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.6792	03	2.000	0.6332	11	5.000	0.6314	05	20.000	0.6746			
06	50.000	0.6502	07	100.000	0.6133	08	150.000	0.6475	09	200.000	0.6443			
<b>2,3,6-Trichlorotoluene</b>			Average RF		RSD = 5.8		Average RF = 0.3395							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.3837	03	2.000	0.3189	11	5.000	0.3432	05	20.000	0.3402			
06	50.000	0.3309	07	100.000	0.3241	08	150.000	0.3333	09	200.000	0.3420			
<b>2,4,5-Trichlorotoluene</b>			Average RF		RSD = 5.1		Average RF = 0.3948							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.4312	03	2.000	0.4019	11	5.000	0.3868	05	20.000	0.4117			
06	50.000	0.3676	07	100.000	0.3748	08	150.000	0.3918	09	200.000	0.3927			
<b>2,4-, 2,5-, and 2,6-Dichlorotoluene Coefit</b>			Average RF		RSD = 2.9		Average RF = 0.8856							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	1.500	0.9161	02	3.000	0.8657	03	6.000	0.8995	11	15.000	0.8877			
05	60.000	0.9185	06	150.000	0.8379	07	300.000	0.8734	08	450.000	0.8934			
09	600.000	0.8786												
<b>2,4-Dichlorobenzotrifluoride</b>			Average RF		RSD = 4.2		Average RF = 0.4190							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.4043	03	2.000	0.4077	11	5.000	0.4163	05	20.000	0.4405			
06	50.000	0.3917	07	100.000	0.4180	08	150.000	0.4380	09	200.000	0.4360			
<b>2,5-Dichlorobenzotrifluoride</b>			Average RF		RSD = 5.5		Average RF = 0.4712							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.5053	02	1.000	0.4437	03	2.000	0.4334	11	5.000	0.4663			
05	20.000	0.4809	06	50.000	0.4480	07	100.000	0.4698	08	150.000	0.4941			
09	200.000	0.4988												
<b>2-Butanone (MEK)</b>			Average RF		RSD = 6.1		Average RF = 0.09211							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
11	5.000	0.08561	05	20.000	0.09835	06	50.000	0.09705	07	100.000	0.09602			
08	150.000	0.08878	09	200.000	0.08686									
<b>2-Chloro-1,3-butadiene</b>			Average RF		RSD = 3.6		Average RF = 0.7387							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.7590	02	1.000	0.7631	03	2.000	0.6952	11	5.000	0.7283			
05	20.000	0.7833	06	50.000	0.7184	07	100.000	0.7218	08	150.000	0.7397			
09	200.000	0.7398												
<b>2-Chlorobenzotrifluoride</b>			Average RF		RSD = 7.4		Average RF = 0.7253							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.8364	02	1.000	0.7253	03	2.000	0.7206	11	5.000	0.7713			
05	20.000	0.7118	06	50.000	0.6499	07	100.000	0.6728	08	150.000	0.7161			
09	200.000	0.7233												

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID: R-MS-12					
						Signal ID: 1					
Analyte			Curve Fit		Weighting						
<b>2-Chloroethyl Vinyl Ether</b>			Average RF			RSD = 5.5	Average RF = 0.1094				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1038	03	2.000	0.09760	11	5.000	0.1145	05	20.000	0.1135
06	50.000	0.1149	07	100.000	0.1129	08	150.000	0.1085	09	200.000	0.1093
<b>2-Chlorotoluene</b>			Average RF			RSD = 4.3	Average RF = 1.610				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.664	02	1.000	1.459	03	2.000	1.622	11	5.000	1.607
05	20.000	1.714	06	50.000	1.606	07	100.000	1.578	08	150.000	1.619
<b>2-Hexanone</b>			Average RF			RSD = 8.8	Average RF = 0.1012				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.08814	11	5.000	0.1131	05	20.000	0.1070	06	50.000	0.1081
07	100.000	0.1026	08	150.000	0.09447	09	200.000	0.09523			
<b>2-Methyl-1-propanol</b>			Average RF			RSD = 9.8	Average RF = 0.006582				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.007989	11	100.000	0.006336	05	400.000	0.006595	06	1000.000	0.006463
07	2000.000	0.006413	08	3000.000	0.006182	09	4000.000	0.006097			
<b>2-Methyl-2-propanol</b>			Average RF			RSD = 4.4	Average RF = 0.02483				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.02472	11	100.000	0.02398	05	400.000	0.02522	06	1000.000	0.02677
07	2000.000	0.02540	08	3000.000	0.02426	09	4000.000	0.02344			
<b>2-Nitropropane</b>			Average RF			RSD = 10.1	Average RF = 0.04423				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.04492	03	4.000	0.04844	11	10.000	0.03375	05	40.000	0.04446
06	100.000	0.04572	07	200.000	0.04693	08	300.000	0.04443	09	400.000	0.04518
<b>2-Propanol</b>			Average RF			RSD = 6.1	Average RF = 0.01392				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01451	03	40.000	0.01522	11	100.000	0.01324	05	400.000	0.01411
06	1000.000	0.01442	07	2000.000	0.01406	08	3000.000	0.01264	09	4000.000	0.01316
<b>3,4- and 2,3-Dichlorotoluene Coelution</b>			Average RF			RSD = 4.5	Average RF = 0.9488				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.042	02	2.000	0.9343	03	4.000	0.9098	11	10.000	0.9351
05	40.000	0.9903	06	100.000	0.9071	07	200.000	0.9391	08	300.000	0.9512
<b>3,4-Dichlorobenzotrifluoride</b>			Average RF			RSD = 6.4	Average RF = 0.4749				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4924	02	1.000	0.4792	03	2.000	0.4701	11	5.000	0.4211
05	20.000	0.4747	06	50.000	0.4431	07	100.000	0.4670	08	150.000	0.5067
<b>3-Chloro-1-propene</b>			Average RF			RSD = 6.5	Average RF = 0.2213				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2421	03	2.000	0.2152	11	5.000	0.2339	05	20.000	0.2377
06	50.000	0.2182	07	100.000	0.2082	08	150.000	0.2081	09	200.000	0.2069

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID: R-MS-12					
						Signal ID: 1					
<b>Analyte</b>		<b>Curve Fit</b>		<b>Weighting</b>							
<b>3-Chlorobenzotrifluoride</b>			<b>Average RF</b>		RSD = 4.2	Average RF = 0.3837					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3726	02	1.000	0.3657	03	2.000	0.3756	11	5.000	0.3791
05	20.000	0.3852	06	50.000	0.3697	07	100.000	0.3888	08	150.000	0.4034
09	200.000	0.4135									
<b>3-Chlorotoluene</b>			<b>Average RF</b>		RSD = 3.8	Average RF = 1.706					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.715	02	1.000	1.610	03	2.000	1.738	11	5.000	1.704
05	20.000	1.781	06	50.000	1.608	07	100.000	1.678	08	150.000	1.787
09	200.000	1.730									
<b>4-Bromofluorobenzene</b>			<b>Average RF</b>		RSD = 7.4	Average RF = 0.4490					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4974	03	60.000	0.4701	11	70.000	0.4610	05	100.000	0.4353
07	125.000	0.4224	08	150.000	0.4078						
<b>4-Chlorotoluene</b>			<b>Average RF</b>		RSD = 3.4	Average RF = 1.990					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.937	02	1.000	1.855	03	2.000	2.070	11	5.000	2.002
05	20.000	2.084	06	50.000	1.999	07	100.000	1.978	08	150.000	1.986
09	200.000	2.004									
<b>4-Isopropyltoluene</b>			<b>Average RF</b>		RSD = 4.6	Average RF = 1.869					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.753	02	1.000	1.793	03	2.000	1.939	11	5.000	1.908
05	20.000	2.041	06	50.000	1.878	07	100.000	1.814	08	150.000	1.863
09	200.000	1.828									
<b>4-Methyl-2-pentanone</b>			<b>Average RF</b>		RSD = 3.9	Average RF = 0.1351					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1360	11	5.000	0.1275	05	20.000	0.1387	06	50.000	0.1416
07	100.000	0.1395	08	150.000	0.1309	09	200.000	0.1316			
<b>Acetone</b>			<b>Average RF</b>		RSD = 10.0	Average RF = 0.07009					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.08328	11	5.000	0.07516	05	20.000	0.07049	06	50.000	0.06483
07	100.000	0.06403	08	150.000	0.06522	09	200.000	0.06761			
<b>Acetonitrile</b>			<b>Average RF</b>		RSD = 14.4	Average RF = 0.008996					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.009063	11	25.000	0.006571	05	100.000	0.008901	06	250.000	0.008295
07	500.000	0.009578	08	750.000	0.01039	09	1000.000	0.01017			
<b>Acrolein</b>			<b>Average RF</b>		RSD = 16.1	Average RF = 0.03600					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.04187	03	10.000	0.02303	11	25.000	0.03305	05	100.000	0.03780
06	250.000	0.03879	07	500.000	0.03907	08	750.000	0.03755	09	1000.000	0.03684
<b>Acrylonitrile</b>			<b>Average RF</b>		RSD = 7.6	Average RF = 0.07966					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.09388	03	10.000	0.07805	11	25.000	0.07323	05	100.000	0.07812
06	250.000	0.07981	07	500.000	0.07928	08	750.000	0.07826	09	1000.000	0.07666

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID:	R-MS-12				
						Signal ID:	1				
<b>Analyte</b>		<b>Curve Fit</b>		<b>Weighting</b>							
<b>Benzene</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.127	02	1.000	0.9977	03	2.000	0.9623	11	5.000	0.9395
05	20.000	1.011	06	50.000	0.9587	07	100.000	0.9572	08	150.000	0.9696
09	200.000	0.9952									
<b>Bromobenzene</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5940	02	1.000	0.5945	03	2.000	0.5707	11	5.000	0.5836
05	20.000	0.6063	06	50.000	0.5656	07	100.000	0.5526	08	150.000	0.5653
09	200.000	0.5761									
<b>Bromochloromethane</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2996	03	2.000	0.2535	11	5.000	0.2407	05	20.000	0.2421
06	50.000	0.2389	07	100.000	0.2217	08	150.000	0.2219	09	200.000	0.2186
09	200.000	0.3367									
<b>Bromodichloromethane</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3514	02	1.000	0.3734	03	2.000	0.3529	11	5.000	0.3440
05	20.000	0.3442	06	50.000	0.3286	07	100.000	0.3221	08	150.000	0.3249
09	200.000	0.3367									
<b>Bromoform</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2406	03	2.000	0.2516	11	5.000	0.2630	05	20.000	0.2623
06	50.000	0.2595	07	100.000	0.2545	08	150.000	0.2570	09	200.000	0.2592
09	200.000	0.2595									
<b>Bromomethane</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3166	02	1.000	0.2864	03	2.000	0.3135	11	5.000	0.2677
05	20.000	0.2826	06	50.000	0.2797	07	100.000	0.2862	08	150.000	0.3169
09	200.000	0.3276									
<b>Carbon Disulfide</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.331	02	1.000	1.235	03	2.000	1.181	11	5.000	1.124
05	20.000	1.220	06	50.000	1.119	07	100.000	1.116	08	150.000	1.141
09	200.000	1.140									
<b>Carbon Tetrachloride</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1107	03	2.000	0.1140	11	5.000	0.1070	05	20.000	0.1103
06	50.000	0.1049	07	100.000	0.1035	08	150.000	0.1071	09	200.000	0.1129
09	200.000	0.1049									
<b>Chlorobenzene</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9225	02	1.000	0.7884	03	2.000	0.7875	11	5.000	0.7847
05	20.000	0.8294	06	50.000	0.8067	07	100.000	0.7906	08	150.000	0.8006
09	200.000	0.8146									
<b>Chloroethane</b>											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4106	02	1.000	0.3816	03	2.000	0.3434	11	5.000	0.3124
05	20.000	0.3572	06	50.000	0.3343	07	100.000	0.3223	08	150.000	0.3308
09	200.000	0.3365									

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID: R-MS-12					
Signal ID: 1											
Analyte	Curve Fit			Weighting							
Chloroform	Average RF			RSD = 6.2	Average RF = 0.7154						
#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.7762	03	2.000	0.7808	11	5.000	0.7185			
06	50.000	0.6814	07	100.000	0.6601	08	150.000	0.6853			
Chloromethane			Average RF			RSD = 6.6					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.4680	02	1.000	0.4425	03	2.000	0.4223			
05	20.000	0.4232	06	50.000	0.4059	07	100.000	0.3844			
09	200.000	0.3960									
Cyclohexane			Average RF			RSD = 8.6					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.2681	03	2.000	0.2448	11	5.000	0.2183			
06	50.000	0.2185	07	100.000	0.2148	08	150.000	0.2103			
Cyclohexanone			Average RF			RSD = 3.8					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	20.000	0.01410	03	40.000	0.01374	11	100.000	0.01393			
06	1000.000	0.01459	07	2000.000	0.01351	08	3000.000	0.01313			
Dibromochloromethane			Average RF			RSD = 9.3					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.3000	02	1.000	0.2509	03	2.000	0.2159			
05	20.000	0.2491	06	50.000	0.2506	07	100.000	0.2410			
09	200.000	0.2447									
Dibromofluoromethane			Average RF			RSD = 6.3					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
06	50.000	0.2935	03	60.000	0.2817	11	70.000	0.2815			
07	125.000	0.2586	08	150.000	0.2521						
Dibromomethane			Average RF			RSD = 8.9					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.1450	03	2.000	0.1471	11	5.000	0.1204			
06	50.000	0.1218	07	100.000	0.1210	08	150.000	0.1201			
Dichlorodifluoromethane (CFC 12)			Average RF			RSD = 6.3					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.4455	02	1.000	0.4374	03	2.000	0.3751			
05	20.000	0.4593	06	50.000	0.4379	07	100.000	0.4149			
09	200.000	0.4437									
Dichlorofluoromethane (CFC 21)			Average RF			RSD = 4.7					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.9524	02	1.000	0.9004	03	2.000	0.8773			
05	20.000	0.8769	06	50.000	0.8609	07	100.000	0.8337			
09	200.000	0.8466									
Dichloromethane			Average RF			RSD = 6.9					
#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.4546	03	2.000	0.3951	11	5.000	0.3823			
06	50.000	0.3790	07	100.000	0.3683	08	150.000	0.3764			
09	200.000	0.3830									

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID: R-MS-12					
						Signal ID: 1					
<b>Analyte</b>		<b>Curve Fit</b>		<b>Weighting</b>							
<b>Diethyl Ether</b>			Average RF		RSD = 7.1						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3968	03	2.000	0.3651	11	5.000	0.3399	05	20.000	0.3386
06	50.000	0.3416	07	100.000	0.3285	08	150.000	0.3254	09	200.000	0.3266
<b>Diisopropyl Ether</b>			Average RF		RSD = 5.0		Average RF = 1.180				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.326	02	1.000	1.213	03	2.000	1.160	11	5.000	1.160
05	20.000	1.147	06	50.000	1.144	07	100.000	1.138	08	150.000	1.156
<b>Ethyl Methacrylate</b>			Average RF		RSD = 9.8		Average RF = 0.2473				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3026	02	1.000	0.2252	03	2.000	0.2466	11	5.000	0.2141
05	20.000	0.2452	06	50.000	0.2511	07	100.000	0.2506	08	150.000	0.2442
<b>Ethyl tert-Butyl Ether</b>			Average RF		RSD = 6.0		Average RF = 1.176				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.338	02	1.000	1.214	03	2.000	1.218	11	5.000	1.139
05	20.000	1.145	06	50.000	1.146	07	100.000	1.132	08	150.000	1.124
<b>Ethylbenzene</b>			Average RF		RSD = 6.7		Average RF = 0.4406				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4957	02	1.000	0.4425	03	2.000	0.3886	11	5.000	0.4312
05	20.000	0.4656	06	50.000	0.4347	07	100.000	0.4241	08	150.000	0.4330
<b>Hexachlorobutadiene</b>			Average RF		RSD = 10.6		Average RF = 0.2326				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2686	03	2.000	0.2721	11	5.000	0.2119	05	20.000	0.2328
06	50.000	0.2173	07	100.000	0.2085	08	150.000	0.2243	09	200.000	0.2249
<b>Iodomethane</b>			Linear	Equal		R2 = 0.9990		Y = 0.4618 X + -0.01136			
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2156	11	5.000	0.2473	05	20.000	0.3939	06	50.000	0.4479
07	100.000	0.4788	08	150.000	0.4603	09	200.000	0.4526			
<b>Isopropylbenzene (Cumene)</b>			Average RF		RSD = 4.3		Average RF = 2.321				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.355	02	1.000	2.388	03	2.000	2.464	11	5.000	2.245
05	20.000	2.463	06	50.000	2.269	07	100.000	2.216	08	150.000	2.266
<b>Methacrylonitrile</b>			Average RF		RSD = 11.6		Average RF = 0.1050				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1183	03	2.000	0.1284	11	5.000	0.1016	05	20.000	0.1038
06	50.000	0.1008	07	100.000	0.09777	08	150.000	0.09608	09	200.000	0.09293
<b>Methyl Acetate</b>			Average RF		RSD = 6.7		Average RF = 0.1526				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1631	03	2.000	0.1720	11	5.000	0.1472	05	20.000	0.1472
06	50.000	0.1539	07	100.000	0.1501	08	150.000	0.1400	09	200.000	0.1475

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID:	R-MS-12			
						Signal ID:	1			
<b>Analyte</b>			<b>Curve Fit</b>	<b>Weighting</b>						
<b>Methyl Methacrylate</b>										
Average RF			RSD = 4.6			Average RF = 0.1156				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
02	1.000	0.1144	03	2.000	0.1258	11	5.000	0.1078		
06	50.000	0.1178	07	100.000	0.1155	08	150.000	0.1120		
<b>Methyl tert-Butyl Ether</b>			Average RF			RSD = 3.0				
						Average RF = 0.9554				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
01	0.500	0.9069	02	1.000	0.9273	03	2.000	0.9404		
05	20.000	0.9673	06	50.000	0.9848	07	100.000	0.9689		
09	200.000	0.9493								
<b>Methylcyclohexane</b>			Average RF			RSD = 3.5				
						Average RF = 0.2502				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
02	1.000	0.2346	03	2.000	0.2517	11	5.000	0.2495		
06	50.000	0.2508	07	100.000	0.2503	08	150.000	0.2435		
<b>Naphthalene</b>			Average RF			RSD = 6.5				
						Average RF = 1.268				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
01	0.500	1.455	02	1.000	1.261	03	2.000	1.259		
05	20.000	1.292	06	50.000	1.306	07	100.000	1.251		
09	200.000	1.175								
<b>Propionitrile</b>			Average RF			RSD = 7.8				
						Average RF = 0.02812				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
03	10.000	0.03121	11	25.000	0.02461	05	100.000	0.02862		
07	500.000	0.02852	08	750.000	0.02718	09	1000.000	0.02671		
<b>Styrene</b>			Average RF			RSD = 2.1				
						Average RF = 0.8926				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
01	0.500	0.8765	02	1.000	0.8915	03	2.000	0.8708		
05	20.000	0.9049	06	50.000	0.8984	07	100.000	0.8885		
09	200.000	0.9231								
<b>Tetrachloroethene (PCE)</b>			Average RF			RSD = 8.5				
						Average RF = 0.2293				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
01	0.500	0.2569	02	1.000	0.2535	03	2.000	0.2439		
05	20.000	0.2393	06	50.000	0.2123	07	100.000	0.2128		
09	200.000	0.2230								
<b>Tetrahydrofuran (THF)</b>			Average RF			RSD = 13.7				
						Average RF = 0.06265				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
03	2.000	0.06791	11	5.000	0.07959	05	20.000	0.06224		
07	100.000	0.05817	08	150.000	0.05653	09	200.000	0.05550		
<b>Toluene</b>			Average RF			RSD = 2.1				
						Average RF = 1.137				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
01	0.500	1.163	02	1.000	1.174	03	2.000	1.129		
05	20.000	1.162	06	50.000	1.118	07	100.000	1.112		
09	200.000	1.138								
<b>Toluene-d8</b>			Average RF			RSD = 7.5				
						Average RF = 1.182				
#	Amount	RF	#	Amount	RF	#	Amount	RF		
06	50.000	1.271	03	60.000	1.262	11	70.000	1.244		
07	125.000	1.104	08	150.000	1.067	05	100.000	1.142		

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID:	R-MS-12				
						Signal ID:	1				
<b>Analyte</b>		<b>Curve Fit</b>		<b>Weighting</b>							
<b>Trichloroethene (TCE)</b>			<b>Average RF</b>		<b>RSD = 3.9</b>	<b>Average RF = 0.2675</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2848	02	1.000	0.2560	03	2.000	0.2566	11	5.000	0.2588
05	20.000	0.2766	06	50.000	0.2630	07	100.000	0.2618	08	150.000	0.2723
09	200.000	0.2775									
<b>Trichlorofluoromethane (CFC 11)</b>			<b>Average RF</b>		<b>RSD = 4.4</b>	<b>Average RF = 0.7809</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7916	02	1.000	0.8475	03	2.000	0.8023	11	5.000	0.7625
05	20.000	0.8007	06	50.000	0.7795	07	100.000	0.7284	08	150.000	0.7534
09	200.000	0.7621									
<b>Vinyl Acetate</b>			<b>Average RF</b>		<b>RSD = 14.2</b>	<b>Average RF = 0.08139</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1089	03	2.000	0.07806	11	5.000	0.07872	05	20.000	0.08296
06	50.000	0.07978	07	100.000	0.07629	08	150.000	0.07338	09	200.000	0.07303
<b>Vinyl Chloride</b>			<b>Average RF</b>		<b>RSD = 9.4</b>	<b>Average RF = 0.5240</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6344	02	1.000	0.5555	03	2.000	0.4732	11	5.000	0.4801
05	20.000	0.5419	06	50.000	0.5194	07	100.000	0.4934	08	150.000	0.5078
09	200.000	0.5103									
<b>cis-1,2-Dichloroethene</b>			<b>Average RF</b>		<b>RSD = 3.8</b>	<b>Average RF = 0.4380</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4636	02	1.000	0.4647	03	2.000	0.4332	11	5.000	0.4246
05	20.000	0.4310	06	50.000	0.4293	07	100.000	0.4155	08	150.000	0.4376
09	200.000	0.4426									
<b>cis-1,3-Dichloropropene</b>			<b>Average RF</b>		<b>RSD = 3.4</b>	<b>Average RF = 0.3982</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4282	02	1.000	0.4038	03	2.000	0.3966	11	5.000	0.3768
05	20.000	0.3960	06	50.000	0.3928	07	100.000	0.3904	08	150.000	0.3966
09	200.000	0.4022									
<b>m,p-Xylenes</b>			<b>Average RF</b>		<b>RSD = 2.7</b>	<b>Average RF = 0.5370</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5477	02	2.000	0.5477	03	4.000	0.5216	11	10.000	0.5122
05	40.000	0.5523	06	100.000	0.5415	07	200.000	0.5224	08	300.000	0.5375
09	400.000	0.5500									
<b>n-Butyl Acetate</b>			<b>Average RF</b>		<b>RSD = 5.9</b>	<b>Average RF = 0.2659</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2929	02	1.000	0.2808	03	2.000	0.2596	11	5.000	0.2553
05	20.000	0.2670	06	50.000	0.2754	07	100.000	0.2665	08	150.000	0.2409
09	200.000	0.2544									
<b>n-Butylbenzene</b>			<b>Average RF</b>		<b>RSD = 5.2</b>	<b>Average RF = 1.677</b>					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.838	02	1.000	1.587	03	2.000	1.564	11	5.000	1.660
05	20.000	1.763	06	50.000	1.658	07	100.000	1.610	08	150.000	1.711
09	200.000	1.701									

## Initial Calibration - Detailed Report

Calibration ID: RC1500064						Instrument ID: R-MS-12								
						Signal ID: 1								
Analyte		Curve Fit		Weighting										
<b>n-Heptane</b>		Average RF			RSD = 6.6	Average RF = 0.2111								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.2370	03	2.000	0.2265	11	5.000	0.1995	05	20.000	0.2011			
06	50.000	0.2048	07	100.000	0.1985	08	150.000	0.2087	09	200.000	0.2124			
<b>n-Propylbenzene</b>		Average RF			RSD = 4.5	Average RF = 2.612								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	2.642	02	1.000	2.566	03	2.000	2.681	11	5.000	2.657			
05	20.000	2.850	06	50.000	2.625	07	100.000	2.510	08	150.000	2.534			
<b>o-Xylene</b>		Average RF			RSD = 4.8	Average RF = 0.5200								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.5425	02	1.000	0.4752	03	2.000	0.4911	11	5.000	0.5207			
05	20.000	0.5375	06	50.000	0.5225	07	100.000	0.5087	08	150.000	0.5290			
<b>sec-Butylbenzene</b>		Average RF			RSD = 6.3	Average RF = 2.197								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	2.503	02	1.000	2.107	03	2.000	2.247	11	5.000	2.128			
05	20.000	2.317	06	50.000	2.170	07	100.000	2.084	08	150.000	2.129			
<b>tert-Amyl Methyl Ether</b>		Average RF			RSD = 5.3	Average RF = 1.026								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	1.069	02	1.000	1.152	03	2.000	0.9731	11	5.000	0.9823			
05	20.000	1.011	06	50.000	1.030	07	100.000	1.007	08	150.000	1.006			
<b>tert-Butylbenzene</b>		Average RF			RSD = 6.1	Average RF = 1.602								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	1.819	02	1.000	1.528	03	2.000	1.547	11	5.000	1.641			
05	20.000	1.684	06	50.000	1.556	07	100.000	1.510	08	150.000	1.565			
<b>trans-1,2-Dichloroethene</b>		Average RF			RSD = 4.0	Average RF = 0.4109								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.4072	02	1.000	0.4403	03	2.000	0.4316	11	5.000	0.4109			
05	20.000	0.4127	06	50.000	0.3946	07	100.000	0.3864	08	150.000	0.4057			
<b>trans-1,3-Dichloropropene</b>		Average RF			RSD = 2.6	Average RF = 0.3408								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
01	0.500	0.3399	02	1.000	0.3435	03	2.000	0.3391	11	5.000	0.3195			
05	20.000	0.3431	06	50.000	0.3438	07	100.000	0.3450	08	150.000	0.3419			
<b>trans-1,4-Dichloro-2-butene</b>		Average RF			RSD = 7.3	Average RF = 0.1249								
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF			
02	1.000	0.1441	03	2.000	0.1115	11	5.000	0.1270	05	20.000	0.1216			
06	50.000	0.1247	07	100.000	0.1246	08	150.000	0.1234	09	200.000	0.1222			

# Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

**Analyte**
**1,1,2-Tetrachloroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-3.4	02	1.000	0.90	-9.7	03	2.000	2.15	7.5
11	5.000	4.62	-7.5	05	20.000	20.27	1.3	06	50.000	49.22	-1.6
07	100.000	102.06	2.1	08	150.000	157.40	4.9	09	200.000	212.83	6.4

**1,1,1-Trichloroethane (TCA)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.61	22.8	02	1.000	1.05	4.7	03	2.000	2.03	1.6
11	5.000	4.69	-6.1	05	20.000	19.60	-2.0	06	50.000	47.62	-4.8
07	100.000	91.74	-8.3	08	150.000	143.89	-4.1	09	200.000	192.33	-3.8

**1,1,2,2-Tetrachloroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.59	17.4	02	1.000	0.96	-4.4	03	2.000	1.96	-1.9
11	5.000	4.82	-3.5	05	20.000	20.46	2.3	06	50.000	49.26	-1.5
07	100.000	97.77	-2.2	08	150.000	146.80	-2.1	09	200.000	191.69	-4.2

**1,1,2-Trichloroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	9.0	02	1.000	1.03	3.2	03	2.000	1.92	-4.0
11	5.000	5.01	0.2	05	20.000	19.86	-0.7	06	50.000	48.54	-2.9
07	100.000	97.82	-2.2	08	150.000	147.43	-1.7	09	200.000	198.28	-0.9

**1,1,2-Trichlorotrifluoroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.10	9.7	03	2.000	1.93	-3.6	11	5.000	5.06	1.1
05	20.000	20.62	3.1	06	50.000	47.52	-5.0	07	100.000	93.63	-6.4
08	150.000	148.83	-0.8	09	200.000	203.65	1.8				

**1,1-Dichloroethane (1,1-DCA)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	14.2	02	1.000	1.03	2.8	03	2.000	2.01	0.5
11	5.000	4.85	-3.1	05	20.000	20.05	0.3	06	50.000	48.21	-3.6
07	100.000	94.23	-5.8	08	150.000	144.57	-3.6	09	200.000	196.38	-1.8

**1,1-Dichloroethene (1,1-DCE)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-1.4	02	1.000	1.17	16.9	03	2.000	2.06	3.2
11	5.000	4.61	-7.7	05	20.000	19.86	-0.7	06	50.000	47.65	-4.7
07	100.000	93.01	-7.0	08	150.000	148.86	-0.8	09	200.000	204.40	2.2

**1,1-Dichloropropene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.61	22.8	02	1.000	1.03	2.5	03	2.000	1.90	-4.8
11	5.000	4.96	-0.9	05	20.000	19.39	-3.0	06	50.000	47.12	-5.8
07	100.000	92.99	-7.0	08	150.000	144.89	-3.4	09	200.000	199.17	-0.4

# Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

**Analyte**
**1,2,3-Trichlorobenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.95	-4.8	03	2.000	2.09	4.6	11	5.000	5.05	1.1
05	20.000	20.74	3.7	06	50.000	50.67	1.3	07	100.000	99.23	-0.8
08	150.000	146.00	-2.7	09	200.000	195.05	-2.5				

**1,2,3-Trichloropropane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.25	25.3	03	2.000	1.98	-1.2	11	5.000	5.00	0.0
05	20.000	19.67	-1.7	06	50.000	47.95	-4.1	07	100.000	95.96	-4.0
08	150.000	140.46	-6.4	09	200.000	184.12	-7.9				

**1,2,4-Trichlorobenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	5.0	02	1.000	1.00	-0.3	03	2.000	2.14	7.1
11	5.000	4.94	-1.2	05	20.000	20.14	0.7	06	50.000	49.47	-1.1
07	100.000	96.40	-3.6	08	150.000	145.41	-3.1	09	200.000	193.05	-3.5

**1,2,4-Trimethylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	6.4	02	1.000	1.00	0.5	03	2.000	1.94	-3.1
11	5.000	4.93	-1.5	05	20.000	21.42	7.1	06	50.000	49.41	-1.2
07	100.000	96.61	-3.4	08	150.000	147.21	-1.9	09	200.000	194.03	-3.0

**1,2-Dibromo-3-chloropropane (DBCP)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.13	12.7	03	2.000	2.32	15.8	11	5.000	4.98	-0.4
05	20.000	19.21	-3.9	06	50.000	50.06	0.1	07	100.000	95.13	-4.9
08	150.000	138.07	-8.0	09	200.000	177.10	-11.5				

**1,2-Dibromoethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.55	9.4	02	1.000	1.14	13.7	03	2.000	1.87	-6.3
11	5.000	4.87	-2.6	05	20.000	19.75	-1.2	06	50.000	50.28	0.6
07	100.000	95.50	-4.5	08	150.000	143.06	-4.6	09	200.000	191.10	-4.5

**1,2-Dichloro-1,1,2-trifluoroethane (CFC**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.16	16.2	03	2.000	2.10	4.9	11	5.000	5.05	1.0
05	20.000	19.82	-0.9	06	50.000	48.42	-3.2	07	100.000	94.78	-5.2
08	150.000	136.35	-9.1	09	200.000	192.59	-3.7				

**1,2-Dichlorobenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	8.7	02	1.000	0.99	-0.8	03	2.000	1.99	-0.6
11	5.000	4.71	-5.8	05	20.000	20.57	2.8	06	50.000	49.32	-1.4
07	100.000	96.93	-3.1	08	150.000	149.41	-0.4	09	200.000	200.78	0.4

# Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

**Analyte**
**1,2-Dichloroethane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.59	18.0	02	1.000	1.11	11.5	03	2.000	1.91	-4.7
11	5.000	4.81	-3.8	05	20.000	19.57	-2.2	06	50.000	47.75	-4.5
07	100.000	95.52	-4.5	08	150.000	140.59	-6.3	09	200.000	193.04	-3.5

**1,2-Dichloroethane-d4**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	54.30	8.6	03	60.000	64.00	6.7	11	70.000	72.42	3.5
05	100.000	97.10	-2.9	07	125.000	117.88	-5.7	08	150.000	134.83	-10.1

**1,2-Dichloropropane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	6.9	02	1.000	1.11	10.9	03	2.000	2.08	4.2
11	5.000	4.49	-10.3	05	20.000	19.76	-1.2	06	50.000	48.69	-2.6
07	100.000	95.61	-4.4	08	150.000	145.11	-3.3	09	200.000	199.52	-0.2

**1,3,5-Trichlorobenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-10.2	02	1.000	1.07	6.9	03	2.000	1.99	-5.2
11	5.000	5.04	0.8	05	20.000	21.55	7.7	06	50.000	48.15	-3.7
07	100.000	100.04	0.0	08	150.000	153.04	2.0	09	200.000	203.16	1.6

**1,3,5-Trimethylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.6	02	1.000	1.04	3.7	03	2.000	1.96	-1.9
11	5.000	4.94	-1.3	05	20.000	21.21	6.0	06	50.000	49.69	-0.6
07	100.000	96.72	-3.3	08	150.000	151.29	0.9	09	200.000	201.94	1.0

**1,3-Dibromobenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.7	02	1.000	1.02	2.0	03	2.000	2.01	0.4
11	5.000	4.79	-4.2	05	20.000	21.12	5.6	06	50.000	48.80	-2.4
07	100.000	96.68	-3.3	08	150.000	148.51	-1.0	09	200.000	200.27	0.1

**1,3-Dichloropropene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.92	-7.8	03	2.000	1.90	-5.2	11	5.000	5.21	4.3
05	20.000	20.49	2.4	06	50.000	52.53	5.1	07	100.000	100.18	0.2
08	150.000	150.68	0.5	09	200.000	201.24	0.6				

**1,4-Dichlorobenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.02	2.2	03	2.000	2.19	9.4	11	5.000	4.90	-2.1
05	20.000	20.87	4.3	06	50.000	48.54	-2.9	07	100.000	94.80	-5.2
08	150.000	145.24	-3.2	09	200.000	195.08	-2.5				

## Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

### Analyte

#### 1,4-Dioxane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	40.000	54.65	36.6	11	100.000	107.47	7.5	05	400.000	417.07	4.3
06	1000.000	909.32	-9.1	07	2000.000	1,775.13	-11.2	08	3000.000	2,553.83	-14.9
09	4000.000	3,472.87	-13.2								

#### 1-Butanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	50.000	49.51	-1.0	03	100.000	109.36	9.4	11	250.000	237.95	-4.8
05	1000.000	977.63	-2.2	06	2500.000	2,584.54	3.4	07	5000.000	5,136.73	2.7
08	7500.000	7,243.11	-3.4	09	10000.000	9,598.86	-4.0				

#### 1-Chloro-4-(trifluoromethyl)benzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	0.0	02	1.000	0.96	-4.0	03	2.000	1.87	-6.4
11	5.000	4.94	-1.2	05	20.000	20.44	2.2	06	50.000	47.86	-4.3
07	100.000	101.60	1.6	08	150.000	156.43	4.3	09	200.000	215.57	7.8

#### 2,2-Dichloro-1,1,1-trifluoroethane (CFC)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	14.0	02	1.000	1.16	16.2	03	2.000	1.98	-1.1
11	5.000	4.76	-4.9	05	20.000	20.05	0.3	06	50.000	48.36	-3.3
07	100.000	93.38	-6.6	08	150.000	134.39	-10.4	09	200.000	191.62	-4.2

#### 2,2-Dichloropropane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.05	5.0	03	2.000	1.96	-2.1	11	5.000	4.88	-2.4
05	20.000	20.86	4.3	06	50.000	50.27	0.5	07	100.000	94.83	-5.2
08	150.000	150.18	0.1	09	200.000	199.26	-0.4				

#### 2,3,6-Trichlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.13	13.0	03	2.000	1.88	-6.1	11	5.000	5.05	1.1
05	20.000	20.04	0.2	06	50.000	48.73	-2.5	07	100.000	95.45	-4.6
08	150.000	147.24	-1.8	09	200.000	201.45	0.7				

#### 2,4,5-Trichlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.09	9.2	03	2.000	2.04	1.8	11	5.000	4.90	-2.0
05	20.000	20.86	4.3	06	50.000	46.56	-6.9	07	100.000	94.93	-5.1
08	150.000	148.84	-0.8	09	200.000	198.92	-0.5				

#### 2,4-, 2,5-, and 2,6-Dichlorotoluene Coefnt

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	1.500	1.55	3.4	02	3.000	2.93	-2.3	03	6.000	6.09	1.6
11	15.000	15.03	0.2	05	60.000	62.23	3.7	06	150.000	141.91	-5.4
07	300.000	295.86	-1.4	08	450.000	453.92	0.9	09	600.000	595.21	-0.8

## Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

**Analyte**
**2,4-Dichlorobenzotrifluoride**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.96	-3.5	03	2.000	1.95	-2.7	11	5.000	4.97	-0.6
05	20.000	21.02	5.1	06	50.000	46.73	-6.5	07	100.000	99.74	-0.3
08	150.000	156.78	4.5	09	200.000	208.07	4.0				

**2,5-Dichlorobenzotrifluoride**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	7.2	02	1.000	0.94	-5.8	03	2.000	1.84	-8.0
11	5.000	4.95	-1.0	05	20.000	20.41	2.1	06	50.000	47.55	-4.9
07	100.000	99.72	-0.3	08	150.000	157.30	4.9	09	200.000	211.73	5.9

**2-Butanone (MEK)**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
11	5.000	4.65	-7.1	05	20.000	21.36	6.8	06	50.000	52.68	5.4
07	100.000	104.24	4.2	08	150.000	144.57	-3.6	09	200.000	188.60	-5.7

**2-Chloro-1,3-butadiene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.7	02	1.000	1.03	3.3	03	2.000	1.88	-5.9
11	5.000	4.93	-1.4	05	20.000	21.21	6.0	06	50.000	48.62	-2.8
07	100.000	97.70	-2.3	08	150.000	150.20	0.1	09	200.000	200.29	0.1

**2-Chlorobenzotrifluoride**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.58	15.3	02	1.000	1.00	0.0	03	2.000	1.99	-0.6
11	5.000	5.32	6.3	05	20.000	19.63	-1.9	06	50.000	44.81	-10.4
07	100.000	92.76	-7.2	08	150.000	148.09	-1.3	09	200.000	199.46	-0.3

**2-Chloroethyl Vinyl Ether**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.95	-5.1	03	2.000	1.78	-10.8	11	5.000	5.23	4.7
05	20.000	20.76	3.8	06	50.000	52.54	5.1	07	100.000	103.18	3.2
08	150.000	148.82	-0.8	09	200.000	199.92	0.0				

**2-Chlorotoluene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	3.4	02	1.000	0.91	-9.4	03	2.000	2.01	0.7
11	5.000	4.99	-0.2	05	20.000	21.29	6.5	06	50.000	49.87	-0.3
07	100.000	98.02	-2.0	08	150.000	150.88	0.6	09	200.000	201.43	0.7

**2-Hexanone**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	2.000	1.74	-12.9	11	5.000	5.58	11.7	05	20.000	21.13	5.7
06	50.000	53.40	6.8	07	100.000	101.35	1.4	08	150.000	139.99	-6.7
09	200.000	188.15	-5.9								

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## Analyte

### 2-Methyl-1-propanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	40.000	48.55	21.4	11	100.000	96.27	-3.7	05	400.000	400.80	0.2
06	1000.000	981.84	-1.8	07	2000.000	1,948.56	-2.6	08	3000.000	2,817.52	-6.1
09	4000.000	3,705.33	-7.4								

### 2-Methyl-2-propanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	40.000	39.82	-0.4	11	100.000	96.60	-3.4	05	400.000	406.35	1.6
06	1000.000	1,078.35	7.8	07	2000.000	2,046.14	2.3	08	3000.000	2,931.27	-2.3
09	4000.000	3,776.24	-5.6								

### 2-Nitropropane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	2.000	2.03	1.6	03	4.000	4.38	9.5	11	10.000	7.63	-23.7
05	40.000	40.21	0.5	06	100.000	103.37	3.4	07	200.000	212.21	6.1
08	300.000	301.35	0.5	09	400.000	408.59	2.1				

### 2-Propanol

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	20.000	20.85	4.3	03	40.000	43.73	9.3	11	100.000	95.10	-4.9
05	400.000	405.37	1.3	06	1000.000	1,035.83	3.6	07	2000.000	2,020.68	1.0
08	3000.000	2,723.99	-9.2	09	4000.000	3,783.05	-5.4				

### 3,4- and 2,3-Dichlorotoluene Coelution

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	1.000	1.10	9.8	02	2.000	1.97	-1.5	03	4.000	3.84	-4.1
11	10.000	9.86	-1.4	05	40.000	41.75	4.4	06	100.000	95.61	-4.4
07	200.000	197.95	-1.0	08	300.000	300.75	0.3	09	400.000	392.12	-2.0

### 3,4-Dichlorobenzotrifluoride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	3.7	02	1.000	1.01	0.9	03	2.000	1.98	-1.0
11	5.000	4.43	-11.3	05	20.000	19.99	0.0	06	50.000	46.66	-6.7
07	100.000	98.34	-1.7	08	150.000	160.06	6.7	09	200.000	218.73	9.4

### 3-Chloro-1-propene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.09	9.4	03	2.000	1.94	-2.8	11	5.000	5.29	5.7
05	20.000	21.48	7.4	06	50.000	49.31	-1.4	07	100.000	94.10	-5.9
08	150.000	141.08	-5.9	09	200.000	187.00	-6.5				

### 3-Chlorobenzotrifluoride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-2.9	02	1.000	0.95	-4.7	03	2.000	1.96	-2.1
11	5.000	4.94	-1.2	05	20.000	20.07	0.4	06	50.000	48.17	-3.7
07	100.000	101.31	1.3	08	150.000	157.70	5.1	09	200.000	215.51	7.8

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### Analyte

#### 3-Chlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	0.5	02	1.000	0.94	-5.6	03	2.000	2.04	1.9
11	5.000	5.00	-0.1	05	20.000	20.89	4.4	06	50.000	47.13	-5.7
07	100.000	98.36	-1.6	08	150.000	157.16	4.8	09	200.000	202.90	1.5

#### 4-Bromofluorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	55.39	10.8	03	60.000	62.82	4.7	11	70.000	71.87	2.7
05	100.000	96.95	-3.0	07	125.000	117.59	-5.9	08	150.000	136.23	-9.2

#### 4-Chlorotoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-2.7	02	1.000	0.93	-6.8	03	2.000	2.08	4.0
11	5.000	5.03	0.6	05	20.000	20.94	4.7	06	50.000	50.21	0.4
07	100.000	99.37	-0.6	08	150.000	149.65	-0.2	09	200.000	201.32	0.7

#### 4-Isopropyltoluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-6.2	02	1.000	0.96	-4.0	03	2.000	2.08	3.8
11	5.000	5.11	2.1	05	20.000	21.84	9.2	06	50.000	50.25	0.5
07	100.000	97.10	-2.9	08	150.000	149.55	-0.3	09	200.000	195.61	-2.2

#### 4-Methyl-2-pentanone

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	2.000	2.01	0.6	11	5.000	4.72	-5.7	05	20.000	20.53	2.7
06	50.000	52.41	4.8	07	100.000	103.21	3.2	08	150.000	145.32	-3.1
09	200.000	194.85	-2.6								

#### Acetone

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	2.000	2.38	18.8	11	5.000	5.36	7.2	05	20.000	20.12	0.6
06	50.000	46.25	-7.5	07	100.000	91.35	-8.6	08	150.000	139.57	-7.0
09	200.000	192.94	-3.5								

#### Acetonitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	10.000	10.07	0.7	11	25.000	18.26	-27.0	05	100.000	98.95	-1.1
06	250.000	230.53	-7.8	07	500.000	532.35	6.5	08	750.000	866.51	15.5
09	1000.000	1,130.52	13.1								

#### Acrolein

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	5.000	5.82	16.3	03	10.000	6.40	-36.0	11	25.000	22.95	-8.2
05	100.000	105.00	5.0	06	250.000	269.37	7.7	07	500.000	542.60	8.5
08	750.000	782.39	4.3	09	1000.000	1,023.29	2.3				

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### Analyte

#### Acrylonitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	5.000	5.89	17.9	03	10.000	9.80	-2.0	11	25.000	22.98	-8.1
05	100.000	98.07	-1.9	06	250.000	250.47	0.2	07	500.000	497.60	-0.5
08	750.000	736.77	-1.8	09	1000.000	962.38	-3.8				

#### Benzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	13.7	02	1.000	1.01	0.7	03	2.000	1.94	-2.9
11	5.000	4.74	-5.2	05	20.000	20.41	2.1	06	50.000	48.38	-3.2
07	100.000	96.60	-3.4	08	150.000	146.77	-2.2	09	200.000	200.86	0.4

#### Bromobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.6	02	1.000	1.03	2.7	03	2.000	1.97	-1.4
11	5.000	5.04	0.8	05	20.000	20.95	4.8	06	50.000	48.86	-2.3
07	100.000	95.49	-4.5	08	150.000	146.52	-2.3	09	200.000	199.09	-0.5

#### Bromochloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.24	23.7	03	2.000	2.09	4.7	11	5.000	4.97	-0.6
05	20.000	20.00	0.0	06	50.000	49.33	-1.3	07	100.000	91.58	-8.4
08	150.000	137.48	-8.3	09	200.000	180.60	-9.7				

#### Bromodichloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.7	02	1.000	1.09	9.2	03	2.000	2.06	3.2
11	5.000	5.03	0.6	05	20.000	20.13	0.6	06	50.000	48.04	-3.9
07	100.000	94.17	-5.8	08	150.000	142.50	-5.0	09	200.000	196.87	-1.6

#### Bromoform

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.94	-6.0	03	2.000	1.97	-1.7	11	5.000	5.14	2.8
05	20.000	20.49	2.5	06	50.000	50.69	1.4	07	100.000	99.43	-0.6
08	150.000	150.62	0.4	09	200.000	202.54	1.3				

#### Bromomethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	6.4	02	1.000	0.96	-3.7	03	2.000	2.11	5.4
11	5.000	4.50	-10.0	05	20.000	19.00	-5.0	06	50.000	47.00	-6.0
07	100.000	96.20	-3.8	08	150.000	159.82	6.5	09	200.000	220.25	10.1

#### Carbon Disulfide

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.56	12.9	02	1.000	1.05	4.8	03	2.000	2.00	0.2
11	5.000	4.77	-4.6	05	20.000	20.71	3.5	06	50.000	47.48	-5.0
07	100.000	94.74	-5.3	08	150.000	145.22	-3.2	09	200.000	193.43	-3.3

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#### Carbon Tetrachloride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.02	1.7	03	2.000	2.10	4.8	11	5.000	4.92	-1.6
05	20.000	20.28	1.4	06	50.000	48.18	-3.6	07	100.000	95.14	-4.9
08	150.000	147.70	-1.5	09	200.000	207.54	3.8				

#### Chlorobenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	13.3	02	1.000	0.97	-3.1	03	2.000	1.94	-3.2
11	5.000	4.82	-3.6	05	20.000	20.38	1.9	06	50.000	49.56	-0.9
07	100.000	97.14	-2.9	08	150.000	147.55	-1.6	09	200.000	200.16	0.1

#### Chloroethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.59	18.1	02	1.000	1.10	9.7	03	2.000	1.98	-1.2
11	5.000	4.49	-10.1	05	20.000	20.55	2.7	06	50.000	48.08	-3.8
07	100.000	92.70	-7.3	08	150.000	142.71	-4.9	09	200.000	193.60	-3.2

#### Chloroform

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.09	8.5	03	2.000	2.18	9.1	11	5.000	5.02	0.4
05	20.000	20.26	1.3	06	50.000	47.62	-4.8	07	100.000	92.28	-7.7
08	150.000	143.69	-4.2	09	200.000	194.63	-2.7				

#### Chloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.56	12.8	02	1.000	1.07	6.7	03	2.000	2.04	1.8
11	5.000	4.64	-7.2	05	20.000	20.40	2.0	06	50.000	48.92	-2.2
07	100.000	92.66	-7.3	08	150.000	146.91	-2.1	09	200.000	190.88	-4.6

#### Cyclohexene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.18	18.1	03	2.000	2.16	7.8	11	5.000	4.81	-3.9
05	20.000	19.19	-4.1	06	50.000	48.11	-3.8	07	100.000	94.59	-5.4
08	150.000	138.88	-7.4	09	200.000	197.44	-1.3				

#### Cyclohexanone

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	20.000	20.49	2.5	03	40.000	39.94	-0.2	11	100.000	101.25	1.2
05	400.000	408.44	2.1	06	1000.000	1,060.59	6.1	07	2000.000	1,963.39	-1.8
08	3000.000	2,861.78	-4.6	09	4000.000	3,788.58	-5.3				

#### Dibromochloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.61	21.4	02	1.000	1.02	1.5	03	2.000	1.75	-12.6
11	5.000	4.61	-7.7	05	20.000	20.15	0.8	06	50.000	50.68	1.4
07	100.000	97.52	-2.5	08	150.000	148.23	-1.2	09	200.000	198.01	-1.0

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#### Dibromofluoromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	54.23	8.5	03	60.000	62.47	4.1	11	70.000	72.82	4.0
05	100.000	94.64	-5.4	07	125.000	119.49	-4.4	08	150.000	139.74	-6.8

#### Dibromomethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.14	13.6	03	2.000	2.30	15.2	11	5.000	4.71	-5.7
05	20.000	19.22	-3.9	06	50.000	47.69	-4.6	07	100.000	94.75	-5.2
08	150.000	141.15	-5.9	09	200.000	193.32	-3.3				

#### Dichlorodifluoromethane (CFC 12)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	4.4	02	1.000	1.03	2.5	03	2.000	1.76	-12.1
11	5.000	4.64	-7.2	05	20.000	21.53	7.7	06	50.000	51.32	2.6
07	100.000	97.26	-2.7	08	150.000	151.15	0.8	09	200.000	207.98	4.0

#### Dichlorofluoromethane (CFC 21)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.55	9.7	02	1.000	1.04	3.7	03	2.000	2.02	1.1
11	5.000	4.90	-1.9	05	20.000	20.20	1.0	06	50.000	49.59	-0.8
07	100.000	96.04	-4.0	08	150.000	140.45	-6.4	09	200.000	195.07	-2.5

#### Dichloromethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.16	16.3	03	2.000	2.02	1.1	11	5.000	4.89	-2.2
05	20.000	19.84	-0.8	06	50.000	48.50	-3.0	07	100.000	94.24	-5.8
08	150.000	144.48	-3.7	09	200.000	196.01	-2.0				

#### Diethyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.15	14.9	03	2.000	2.11	5.7	11	5.000	4.92	-1.6
05	20.000	19.61	-1.9	06	50.000	49.46	-1.1	07	100.000	95.14	-4.9
08	150.000	141.37	-5.8	09	200.000	189.16	-5.4				

#### Diisopropyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.56	12.4	02	1.000	1.03	2.8	03	2.000	1.97	-1.7
11	5.000	4.92	-1.7	05	20.000	19.43	-2.8	06	50.000	48.46	-3.1
07	100.000	96.41	-3.6	08	150.000	146.97	-2.0	09	200.000	199.44	-0.3

#### Ethyl Methacrylate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.61	22.4	02	1.000	0.91	-9.0	03	2.000	1.99	-0.3
11	5.000	4.33	-13.4	05	20.000	19.83	-0.9	06	50.000	50.76	1.5
07	100.000	101.34	1.3	08	150.000	148.11	-1.3	09	200.000	199.13	-0.4

# Initial Calibration - Detailed Report

Calibration ID: RC1500064

Instrument ID: R-MS-12

Signal ID: 1

## Analyte

### Ethyl tert-Butyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	13.8	02	1.000	1.03	3.2	03	2.000	2.07	3.5
11	5.000	4.84	-3.2	05	20.000	19.47	-2.7	06	50.000	48.73	-2.5
07	100.000	96.23	-3.8	08	150.000	143.40	-4.4	09	200.000	192.05	-4.0

### Ethylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.56	12.5	02	1.000	1.00	0.4	03	2.000	1.76	-11.8
11	5.000	4.89	-2.1	05	20.000	21.14	5.7	06	50.000	49.33	-1.3
07	100.000	96.25	-3.8	08	150.000	147.40	-1.7	09	200.000	204.24	2.1

### Hexachlorobutadiene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.16	15.5	03	2.000	2.34	17.0	11	5.000	4.56	-8.9
05	20.000	20.02	0.1	06	50.000	46.73	-6.5	07	100.000	89.65	-10.4
08	150.000	144.68	-3.5	09	200.000	193.43	-3.3				

### Iodomethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	2.000	2.16	8.2	11	5.000	3.91	-21.8	05	20.000	18.29	-8.5
06	50.000	49.73	-0.5	07	100.000	104.91	4.9	08	150.000	150.75	0.5
09	200.000	197.24	-1.4								

### Isopropylbenzene (Cumene)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	1.5	02	1.000	1.03	2.9	03	2.000	2.12	6.2
11	5.000	4.84	-3.3	05	20.000	21.22	6.1	06	50.000	48.87	-2.3
07	100.000	95.48	-4.5	08	150.000	146.41	-2.4	09	200.000	191.73	-4.1

### Methacrylonitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.13	12.7	03	2.000	2.45	22.3	11	5.000	4.84	-3.2
05	20.000	19.78	-1.1	06	50.000	48.03	-3.9	07	100.000	93.14	-6.9
08	150.000	137.29	-8.5	09	200.000	177.07	-11.5				

### Methyl Acetate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.07	6.8	03	2.000	2.25	12.7	11	5.000	4.82	-3.5
05	20.000	19.29	-3.6	06	50.000	50.42	0.8	07	100.000	98.34	-1.7
08	150.000	137.55	-8.3	09	200.000	193.34	-3.3				

### Methyl Methacrylate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.99	-1.0	03	2.000	2.18	8.8	11	5.000	4.66	-6.8
05	20.000	20.50	2.5	06	50.000	50.94	1.9	07	100.000	99.86	-0.1
08	150.000	145.27	-3.2	09	200.000	195.76	-2.1				

## Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

### Analyte

#### Methyl tert-Butyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-5.1	02	1.000	0.97	-2.9	03	2.000	1.97	-1.6
11	5.000	5.22	4.5	05	20.000	20.25	1.2	06	50.000	51.54	3.1
07	100.000	101.42	1.4	08	150.000	149.99	0.0	09	200.000	198.73	-0.6

#### Methylcyclohexane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.94	-6.2	03	2.000	2.01	0.6	11	5.000	4.99	-0.3
05	20.000	20.52	2.6	06	50.000	50.12	0.2	07	100.000	100.03	0.0
08	150.000	146.01	-2.7	09	200.000	211.36	5.7				

#### Naphthalene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	14.8	02	1.000	0.99	-0.5	03	2.000	1.99	-0.7
11	5.000	4.76	-4.8	05	20.000	20.38	1.9	06	50.000	51.51	3.0
07	100.000	98.72	-1.3	08	150.000	142.32	-5.1	09	200.000	185.38	-7.3

#### Propionitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	10.000	11.10	11.0	11	25.000	21.87	-12.5	05	100.000	101.75	1.8
06	250.000	266.89	6.8	07	500.000	507.11	1.4	08	750.000	724.74	-3.4
09	1000.000	949.78	-5.0								

#### Styrene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-1.8	02	1.000	1.00	-0.1	03	2.000	1.95	-2.4
11	5.000	4.87	-2.7	05	20.000	20.28	1.4	06	50.000	50.33	0.7
07	100.000	99.54	-0.5	08	150.000	153.05	2.0	09	200.000	206.83	3.4

#### Tetrachloroethene (PCE)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.56	12.0	02	1.000	1.11	10.5	03	2.000	2.13	6.3
11	5.000	4.43	-11.4	05	20.000	20.87	4.3	06	50.000	46.28	-7.4
07	100.000	92.78	-7.2	08	150.000	143.40	-4.4	09	200.000	194.49	-2.8

#### Tetrahydrofuran (THF)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
03	2.000	2.17	8.4	11	5.000	6.35	27.0	05	20.000	19.87	-0.6
06	50.000	46.76	-6.5	07	100.000	92.85	-7.1	08	150.000	135.36	-9.8
09	200.000	177.19	-11.4								

#### Toluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.3	02	1.000	1.03	3.3	03	2.000	1.99	-0.7
11	5.000	4.89	-2.2	05	20.000	20.44	2.2	06	50.000	49.16	-1.7
07	100.000	97.79	-2.2	08	150.000	148.20	-1.2	09	200.000	200.21	0.1

## Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

### Analyte

#### Toluene-d8

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
06	50.000	53.77	7.5	03	60.000	64.09	6.8	11	70.000	73.69	5.3
05	100.000	96.61	-3.4	07	125.000	116.83	-6.5	08	150.000	135.44	-9.7

#### Trichloroethene (TCE)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	6.5	02	1.000	0.96	-4.3	03	2.000	1.92	-4.1
11	5.000	4.84	-3.3	05	20.000	20.68	3.4	06	50.000	49.16	-1.7
07	100.000	97.88	-2.1	08	150.000	152.72	1.8	09	200.000	207.45	3.7

#### Trichlorofluoromethane (CFC 11)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	1.4	02	1.000	1.09	8.5	03	2.000	2.05	2.7
11	5.000	4.88	-2.4	05	20.000	20.51	2.5	06	50.000	49.91	-0.2
07	100.000	93.28	-6.7	08	150.000	144.72	-3.5	09	200.000	195.20	-2.4

#### Vinyl Acetate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.34	33.8	03	2.000	1.92	-4.1	11	5.000	4.84	-3.3
05	20.000	20.39	1.9	06	50.000	49.01	-2.0	07	100.000	93.73	-6.3
08	150.000	135.23	-9.8	09	200.000	179.45	-10.3				

#### Vinyl Chloride

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.61	21.1	02	1.000	1.06	6.0	03	2.000	1.81	-9.7
11	5.000	4.58	-8.4	05	20.000	20.68	3.4	06	50.000	49.57	-0.9
07	100.000	94.17	-5.8	08	150.000	145.36	-3.1	09	200.000	194.76	-2.6

#### cis-1,2-Dichloroethylene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	5.8	02	1.000	1.06	6.1	03	2.000	1.98	-1.1
11	5.000	4.85	-3.1	05	20.000	19.68	-1.6	06	50.000	49.01	-2.0
07	100.000	94.85	-5.1	08	150.000	149.85	-0.1	09	200.000	202.08	1.0

#### cis-1,3-Dichloropropene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	7.5	02	1.000	1.01	1.4	03	2.000	1.99	-0.4
11	5.000	4.73	-5.4	05	20.000	19.89	-0.5	06	50.000	49.32	-1.4
07	100.000	98.06	-1.9	08	150.000	149.41	-0.4	09	200.000	202.04	1.0

#### m,p-Xylenes

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	1.000	1.02	2.0	02	2.000	2.04	2.0	03	4.000	3.89	-2.9
11	10.000	9.54	-4.6	05	40.000	41.14	2.9	06	100.000	100.84	0.8
07	200.000	194.57	-2.7	08	300.000	300.29	0.1	09	400.000	409.66	2.4

# Initial Calibration - Detailed Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Signal ID:	1

**Analyte**
**n-Butyl Acetate**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.55	10.2	02	1.000	1.06	5.6	03	2.000	1.95	-2.3
11	5.000	4.80	-4.0	05	20.000	20.09	0.4	06	50.000	51.80	-3.6
07	100.000	100.23	0.2	08	150.000	135.89	-9.4	09	200.000	191.37	-4.3

**n-Butylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.55	9.6	02	1.000	0.95	-5.4	03	2.000	1.87	-6.7
11	5.000	4.95	-1.0	05	20.000	21.03	5.1	06	50.000	49.42	-1.2
07	100.000	96.02	-4.0	08	150.000	153.03	2.0	09	200.000	202.88	1.4

**n-Heptane**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.12	12.3	03	2.000	2.15	7.3	11	5.000	4.73	-5.5
05	20.000	19.05	-4.7	06	50.000	48.52	-3.0	07	100.000	94.05	-5.9
08	150.000	148.30	-1.1	09	200.000	201.23	0.6				

**n-Propylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	1.1	02	1.000	0.98	-1.8	03	2.000	2.05	2.6
11	5.000	5.09	1.7	05	20.000	21.82	9.1	06	50.000	50.23	0.5
07	100.000	96.08	-3.9	08	150.000	145.52	-3.0	09	200.000	187.29	-6.4

**o-Xylene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	4.3	02	1.000	0.91	-8.6	03	2.000	1.89	-5.6
11	5.000	5.01	0.1	05	20.000	20.67	3.4	06	50.000	50.24	0.5
07	100.000	97.81	-2.2	08	150.000	152.59	1.7	09	200.000	212.69	6.3

**sec-Butylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	13.9	02	1.000	0.96	-4.1	03	2.000	2.05	2.3
11	5.000	4.84	-3.1	05	20.000	21.10	5.5	06	50.000	49.39	-1.2
07	100.000	94.88	-5.1	08	150.000	145.40	-3.1	09	200.000	189.91	-5.0

**tert-Amyl Methyl Ether**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	4.2	02	1.000	1.12	12.3	03	2.000	1.90	-5.1
11	5.000	4.79	-4.2	05	20.000	19.71	-1.5	06	50.000	50.20	0.4
07	100.000	98.12	-1.9	08	150.000	147.13	-1.9	09	200.000	195.43	-2.3

**tert-Butylbenzene**

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.57	13.5	02	1.000	0.95	-4.6	03	2.000	1.93	-3.5
11	5.000	5.12	2.4	05	20.000	21.02	5.1	06	50.000	48.54	-2.9
07	100.000	94.23	-5.8	08	150.000	146.52	-2.3	09	200.000	196.18	-1.9

## Initial Calibration - Detailed Report

<b>Calibration ID:</b>	RC1500064	<b>Instrument ID:</b>	R-MS-12
		<b>Signal ID:</b>	1

### Analyte

#### trans-1,2-Dichloroethene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	-0.9	02	1.000	1.07	7.2	03	2.000	2.10	5.0
11	5.000	5.00	0.0	05	20.000	20.09	0.5	06	50.000	48.01	-4.0
07	100.000	94.04	-6.0	08	150.000	148.09	-1.3	09	200.000	198.90	-0.5

#### trans-1,3-Dichloropropene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	-0.3	02	1.000	1.01	0.8	03	2.000	1.99	-0.5
11	5.000	4.69	-6.2	05	20.000	20.14	0.7	06	50.000	50.45	0.9
07	100.000	101.24	1.2	08	150.000	150.52	0.3	09	200.000	206.08	3.0

#### trans-1,4-Dichloro-2-butene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	1.15	15.4	03	2.000	1.79	-10.7	11	5.000	5.08	1.7
05	20.000	19.47	-2.6	06	50.000	49.93	-0.1	07	100.000	99.78	-0.2
08	150.000	148.22	-1.2	09	200.000	195.66	-2.2				

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:58:01 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	889727	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1478479	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1380392	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	731691	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.596	113	430381	53.79	ppb	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 107.58%	
48) surr1,1,2-dichloroetha...	6.102	65	477228	55.84	ppb	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 111.68%	
65) SURR3,Toluene-d8	8.529	98	1866611	53.42	ppb	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 106.84%	
70) SURR2,BFB	11.047	95	717337	54.03	ppb	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 108.06%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	3964	0.51	ppb	85
3) Chloromethane	1.347	50	4164	0.56	ppb	99
4) Vinyl Chloride	1.427	62	5644	0.61	ppb	78
5) Bromomethane	1.689	94	2817m	0.52	ppb	
6) Chloroethane	1.762	64	3653	0.59	ppb	99
7) Freon 21	1.933	67	8474	0.55	ppb	93
8) Trichlorofluoromethane	1.975	101	7043	0.51	ppb	93
9) Diethyl Ether	2.225	59	3797	0.62	ppb	# 75
10) Freon 123a	2.237	67	7295	0.73	ppb	# 75
11) Freon 123	2.292	83	6530	0.57	ppb	# 76
13) 1,1-Dicethene	2.432	96	3224	0.49	ppb	# 79
14) Freon 113	2.438	101	4202	0.65	ppb	83
16) 2-Propanol	2.664	45	4247	17.32	ppb	66
18) Carbon Disulfide	2.634	76	11838	0.57	ppb	92
19) Acetonitrile	2.762	40	1026	6.29	ppb	# 14
20) Allyl Chloride	2.792	76	1477m	0.38	ppb	
21) Methyl Acetate	2.829	43	2711	1.00	ppb	90
22) Methylene Chloride	2.920	84	4741	0.68	ppb	# 63
23) TBA	3.097	59	5478m	12.40	ppb	
24) Acrylonitrile	3.213	53	4553m	3.19	ppb	
25) Methyl-t-Butyl Ether	3.274	73	8069	0.47	ppb	86
26) trans-1,2-Dichloroethene	3.243	96	3623	0.50	ppb	# 57
28) 1,1-Dicethane	3.786	63	6896m	0.57	ppb	
29) Vinyl Acetate	3.908	86	903	0.62	ppb	# 33
30) DIPE	3.944	45	11801	0.56	ppb	84
31) 2-Chloro-1,3-Butadiene	3.926	53	6753	0.51	ppb	88
32) ETBE	4.530	59	11906	0.57	ppb	95
33) 2,2-Dichloropropane	4.719	77	6747m	0.59	ppb	
34) cis-1,2-Dichloroethene	4.712	96	4125	0.53	ppb	# 70
36) Propionitrile	4.877	54	312	0.62	ppb	56
37) Bromochloromethane	5.139	130	2840m	0.66	ppb	
40) Chloroform	5.328	83	11210m	0.88	ppb	
41) 1,1,1-Trichloroethane	5.596	97	7514	0.61	ppb	81
42) TAME	6.401	73	9513	0.52	ppb	85

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:58:01 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Carbontetrachloride	5.877	121	2524m	0.78	ppb	
47) 1,1-Dichloropropene	5.877	75	6246	0.61	ppb	82
49) Benzene	6.182	78	16656	0.57	ppb	87
50) 1,2-Dichloroethane	6.212	62	5542	0.59	ppb	95
52) n-Heptane	6.651	43	4629	0.74	ppb	# 80
53) 1-Butanol	7.121	56	3366	27.23	ppb	85
54) Trichloroethene	7.084	130	4211m	0.53	ppb	
55) Methylcyclohexane	7.303	55	4943m	0.67	ppb	
56) 1,2-Diclpropane	7.358	63	3747m	0.53	ppb	
57) Dibromomethane	7.492	93	3330	0.88	ppb	# 72
59) Methyl Methacrylate	7.572	69	2444	0.70	ppb	# 78
60) Bromodichloromethane	7.724	83	5195m	0.50	ppb	
62) 2-Chloroethylvinyl Ether	8.114	63	2024	0.63	ppb	94
63) cis-1,3-Dichloropropene	8.230	75	6331	0.54	ppb	70
66) Toluene	8.602	91	17195	0.51	ppb	91
67) trans-1,3-Dichloropropene	8.870	75	5025	0.50	ppb	94
68) Ethyl Methacrylate	9.004	69	4474	0.61	ppb	90
69) 1,1,2-Trichloroethane	9.047	97	2954	0.54	ppb	# 61
72) Tetrachloroethene	9.181	164	3546	0.56	ppb	# 78
74) 1,3-Dichloropropane	9.218	76	5895	0.65	ppb	86
75) Dibromochloromethane	9.431	129	4141	0.61	ppb	81
76) N-Butyl Acetate	9.474	43	4043m	0.55	ppb	
77) 1,2-Dibromoethane	9.529	107	2929	0.55	ppb	99
78) Chlorobenzene	10.010	112	12734	0.57	ppb	85
79) 3-CBTF	10.035	180	5144	0.49	ppb	# 75
80) 4-CBTF	10.083	180	4798	0.50	ppb	# 73
81) 1,1,1,2-Tetrachloroethane	10.102	131	3649	0.47	ppb	95
82) Ethylbenzene	10.132	106	6842	0.56	ppb	# 47
83) (m+p) Xylene	10.242	106	15121	1.02	ppb	89
84) o-Xylene	10.595	106	7488	0.52	ppb	# 62
85) Styrene	10.614	104	12099	0.49	ppb	# 80
87) Bromoform	10.760	173	2422	0.65	ppb	94
88) 2-CBTF	10.833	180	6120	0.58	ppb	# 74
89) Isopropylbenzene	10.931	105	17231	0.51	ppb	92
91) trans-1,4-Dichloro-2-B...	11.236	53	1398	0.76	ppb	88
92) 1,1,2,2-Tetrachloroethane	11.181	83	3630	0.59	ppb	83
93) Bromobenzene	11.175	156	4346	0.51	ppb	# 69
94) 1,2,3-Trichloropropane	11.199	110	1199	0.64	ppb	# 34
95) n-Propylbenzene	11.278	91	19330	0.51	ppb	92
96) 2-Chlorotoluene	11.339	91	12175	0.52	ppb	97
97) 3-Chlorotoluene	11.394	91	12546	0.50	ppb	91
98) 4-Chlorotoluene	11.437	91	14174	0.49	ppb	95
99) 1,3,5-Trimethylbenzene	11.431	105	13890	0.48	ppb	93
100) tert-Butylbenzene	11.705	119	13312	0.57	ppb	91
101) 1,2,4-Trimethylbenzene	11.735	105	15630	0.53	ppb	97
102) 3,4-DCBTF	11.803	214	3603	0.52	ppb	87
103) sec-Butylbenzene	11.882	105	18313	0.57	ppb	92
104) p-Isopropyltoluene	12.004	119	12826	0.47	ppb	90
105) 1,3-Dclbenz	11.967	146	8456	0.51	ppb	96
106) 1,4-Dclbenz	12.034	146	10849	0.63	ppb	90
107) 2,4-DCBTF	12.089	214	3670	0.60	ppb	# 74

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:58:01 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12.- 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev	(Min)
108) 2,5-DCBTF	12.126	214	3697	0.54	ppb	#	74
109) n-Butylbenzene	12.333	91	13447	0.55	ppb		86
110) 1,2-Dclbenz	12.333	146	8362	0.54	ppb	#	76
111) 1,2-Dibromo-3-chloropr...	12.961	157	900	0.72	ppb	#	66
112) Trielution Dichlorotol...	13.064	125	20110	1.55	ppb	#	89
113) 1,3,5 Trichlorobenzene	13.132	180	4335	0.45	ppb	#	75
114) Coelution Dichlorotoluene	13.406	125	15252	1.10	ppb		95
115) 1,2,4-Tcbenzene	13.613	180	4641	0.53	ppb	#	70
116) Hexachlorobt	13.747	225	2164	0.64	ppb		83
117) Naphthalen	13.796	128	10647	0.57	ppb		91
118) 1,2,3-Tclbenzene	13.991	180	3529	0.49	ppb		90
119) 2,4,5-Trichlorotolene	14.576	159	3713	0.64	ppb	#	80
120) 2,3,6-Trichlorotoluene	14.662	159	2692	0.54	ppb	#	76

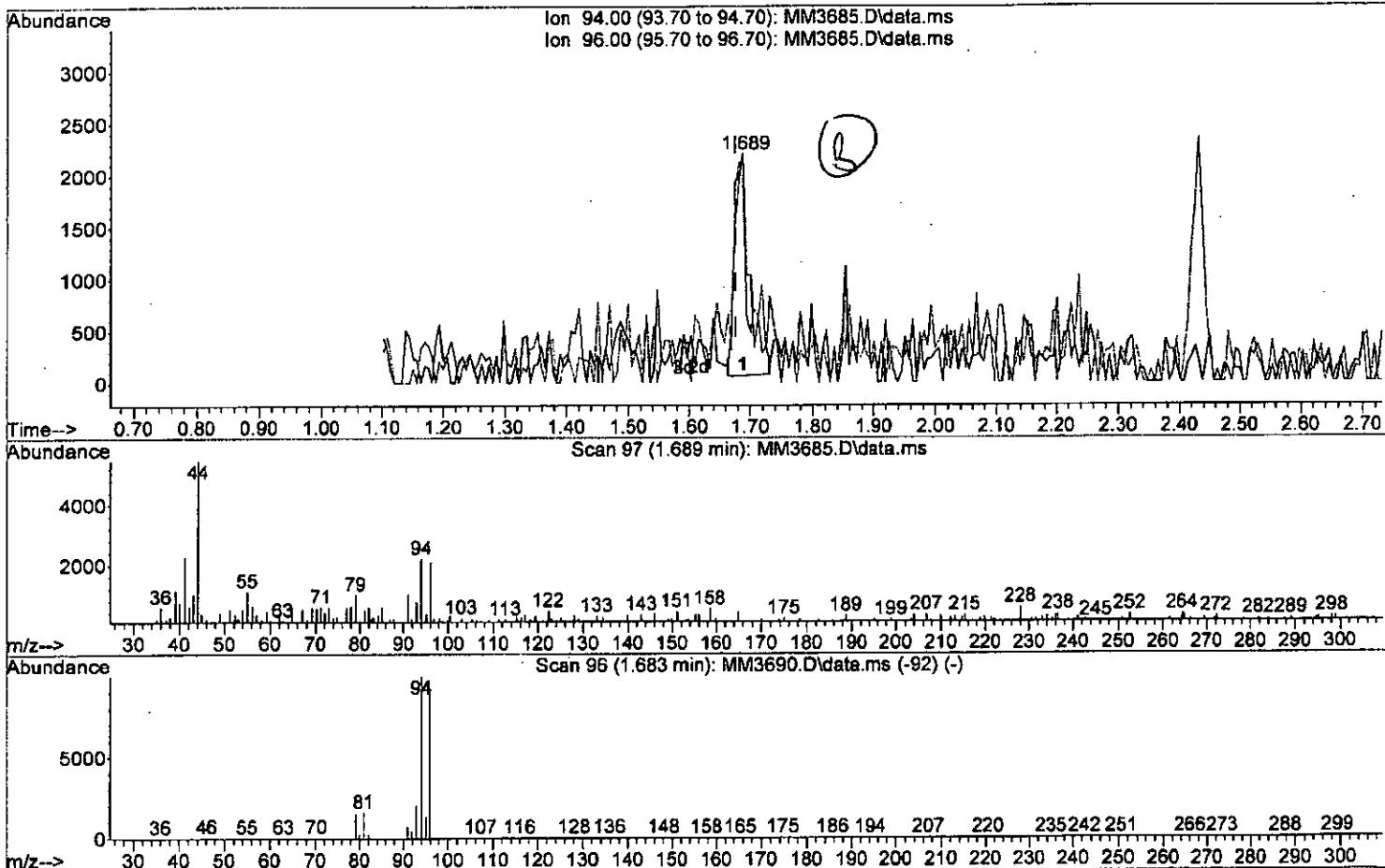
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(5) Bromomethane (P)

1.689min (+0.012) 0.63 ppb

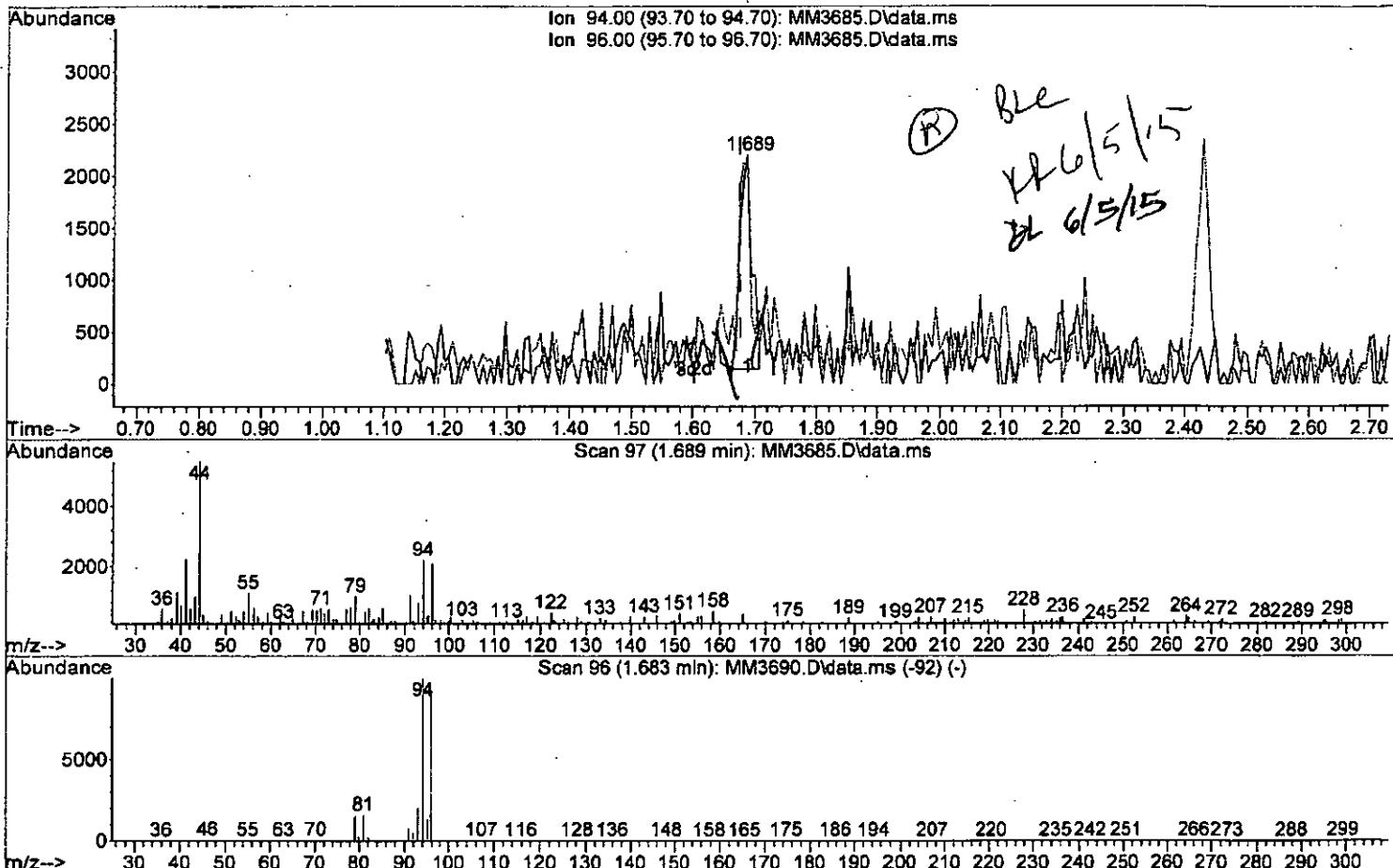
response 3418

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	94.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(5) Bromomethane (P)

1.689min (+0.012) 0.52 ppb m

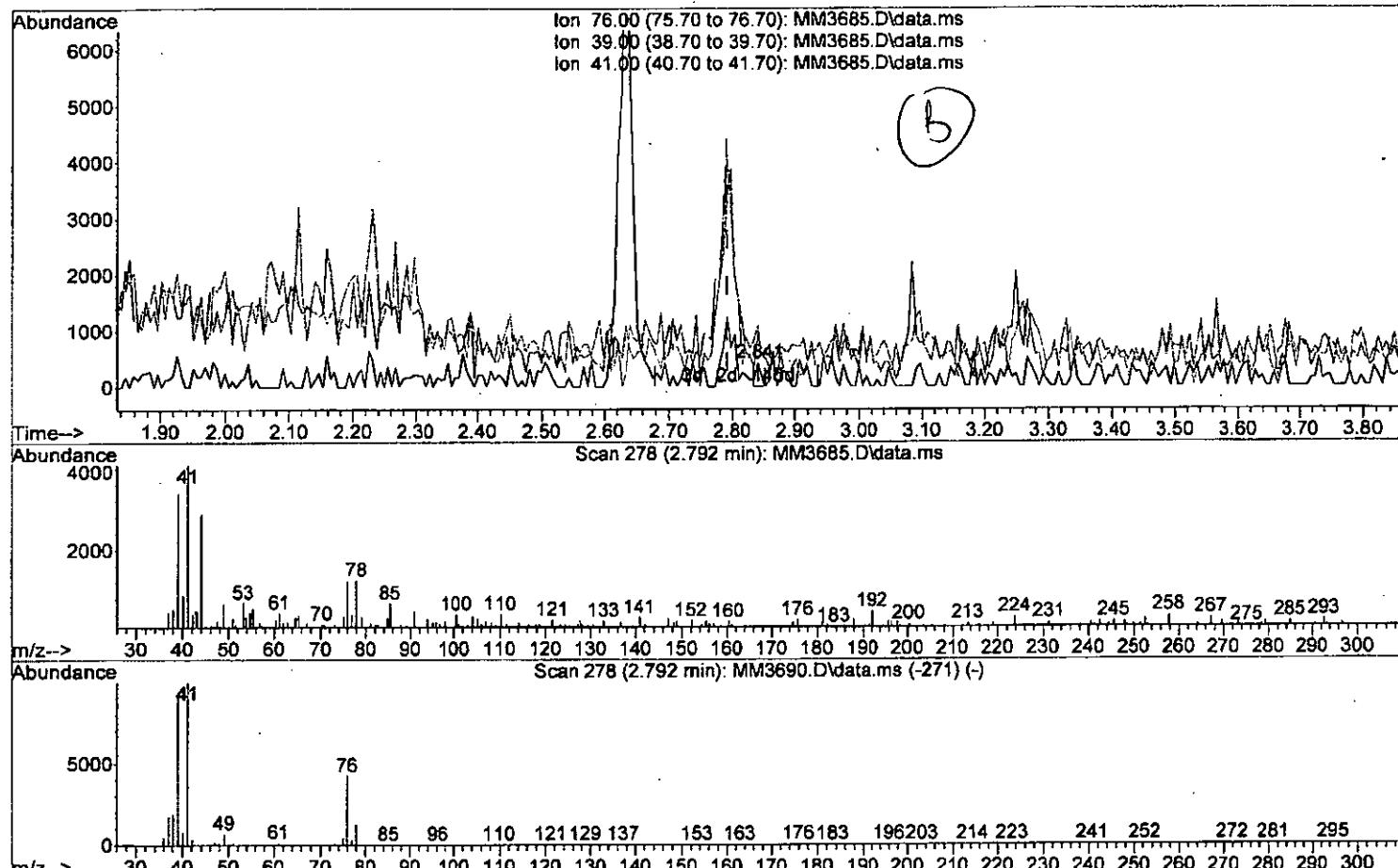
response 2817

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	94.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(20) Allyl Chloride

2.841min (+0.049) 0.06 ppb

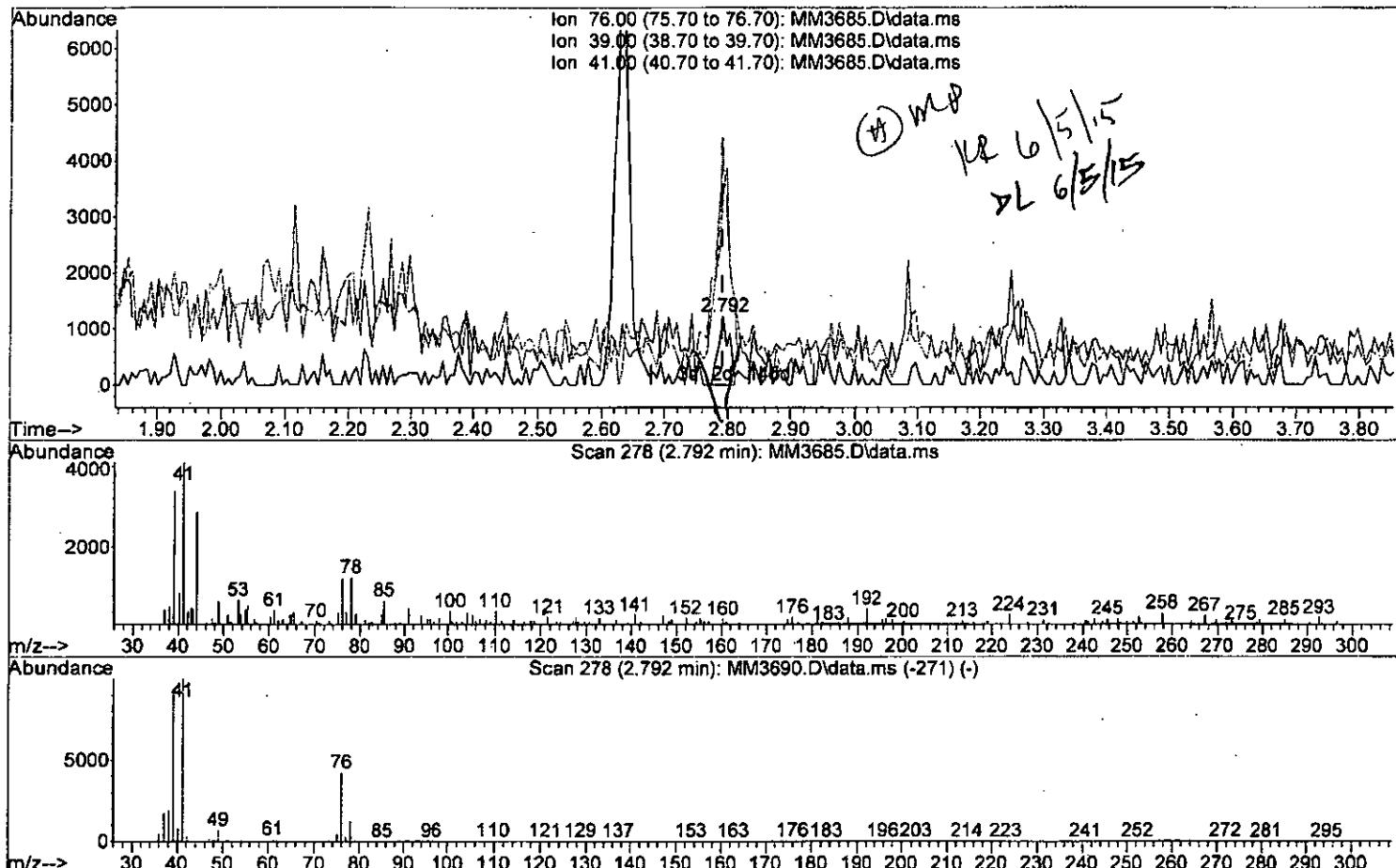
response 223

Ion	Exp%	Act%
76.00	100	100
39.00	218.60	216.71
41.00	260.30	254.59
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



(20) Allyl Chloride

2.792min (+0.000) 0.38 ppb m

response 1477

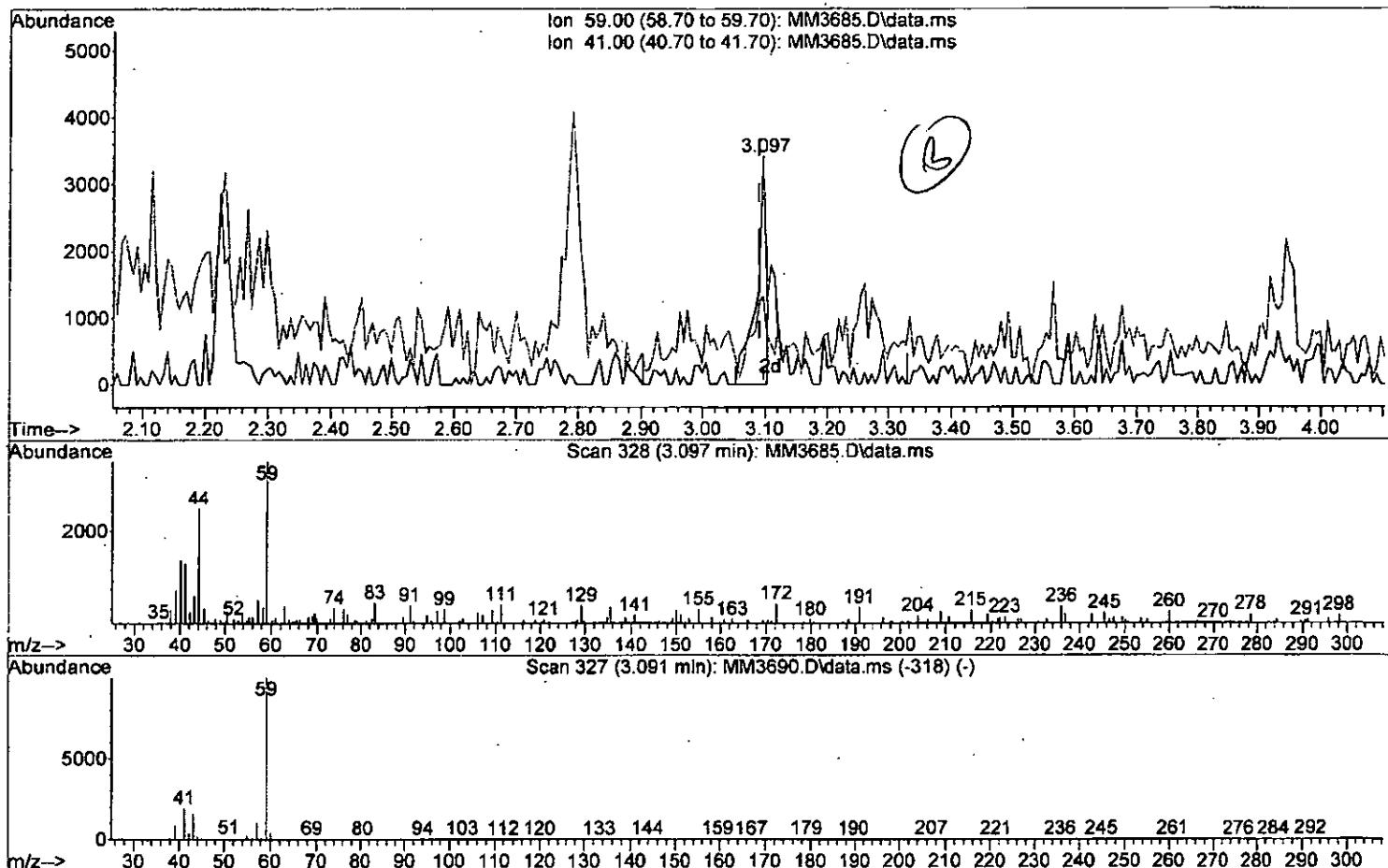
Ion	Exp%	Act%
76.00	100	100
39.00	218.60	275.63#
41.00	260.30	333.09#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(23) TBA

3.097min (+0.006) 8.09 ppb

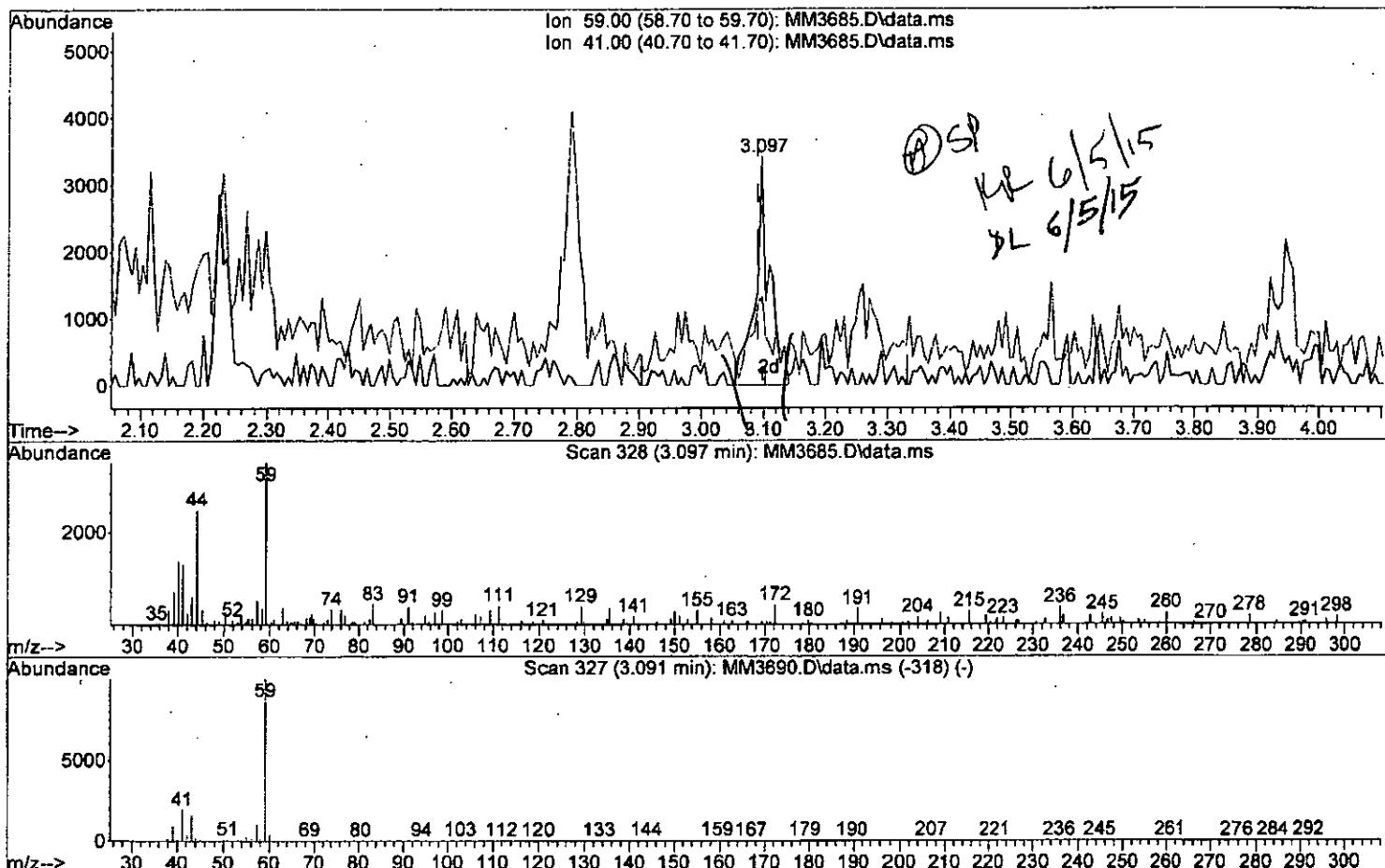
response 3572

Ion	Exp%	Act%
59.00	100	100
41.00	19.50	38.73
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(23) TBA

3.097min (+0.006) 12.40 ppb m

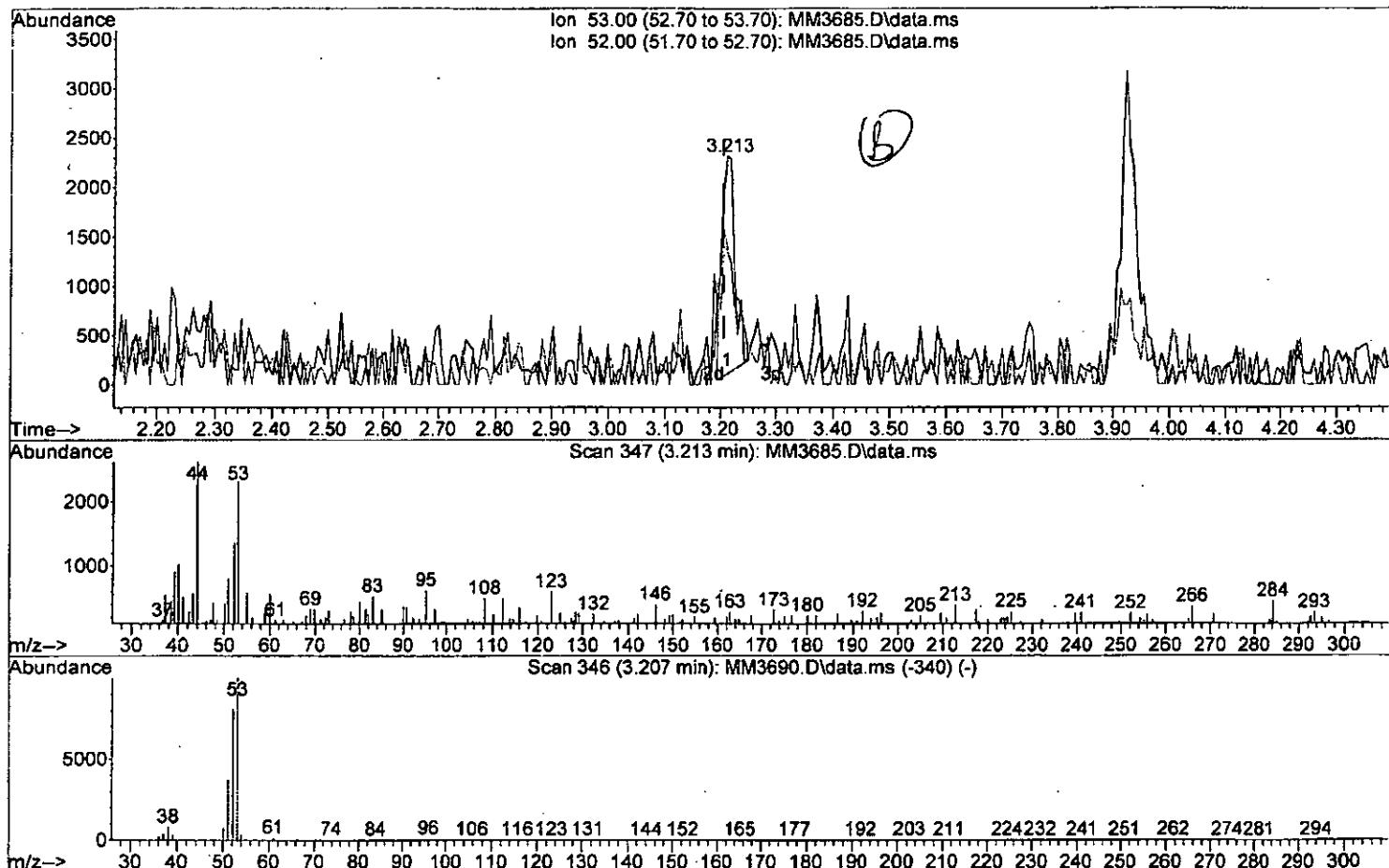
response 5478

Ion	Exp%	Act%
59.00	100	100
41.00	19.50	38.73
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(24) Acrylonitrile

3.213min (+0.007) 2.44 ppb

response 3478

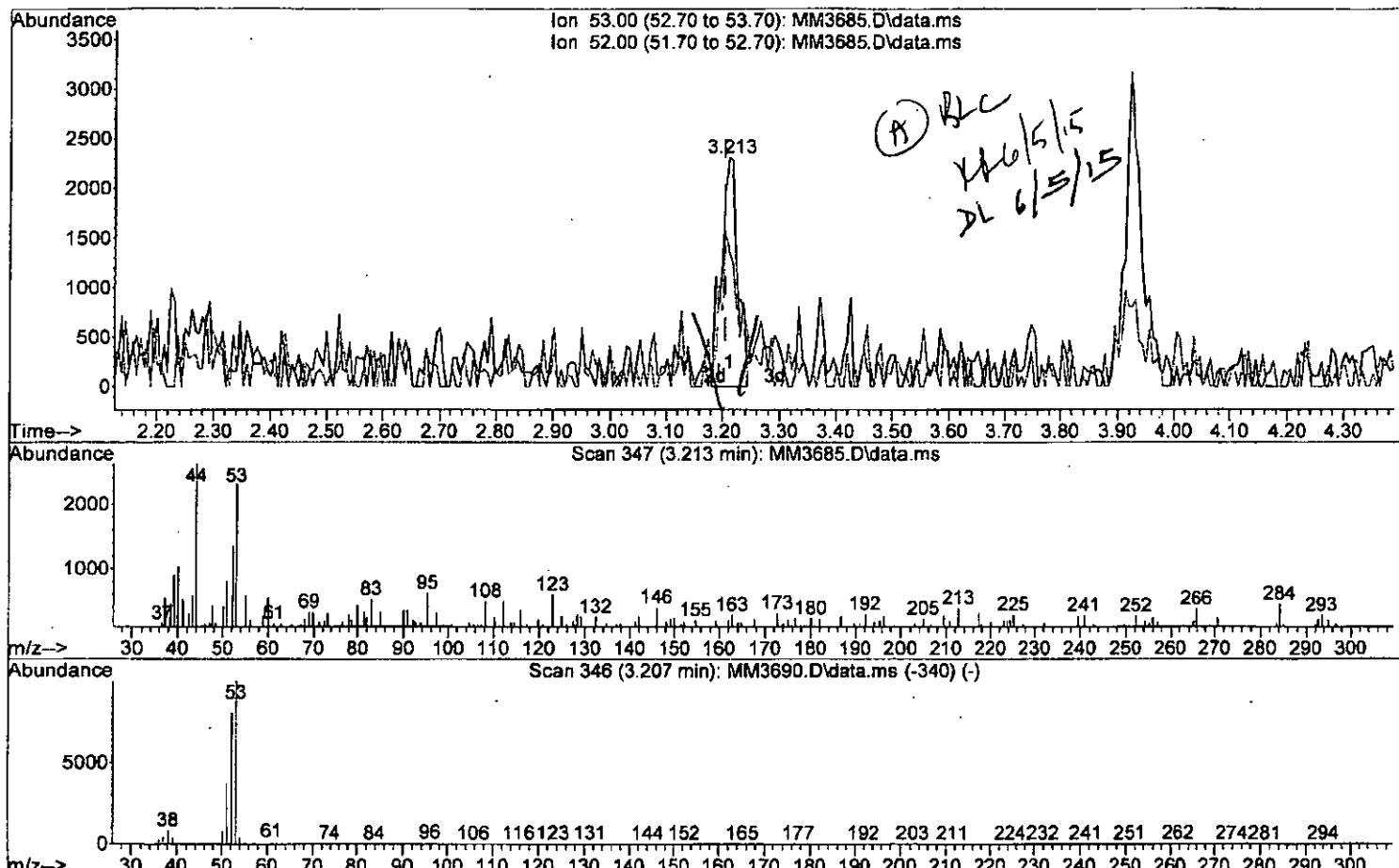
Ion	Exp%	Act%
53.00	100	100
52.00	80.60	58.06#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



(24) Acrylonitrile

3.213min (+0.007) 3.19 ppb m

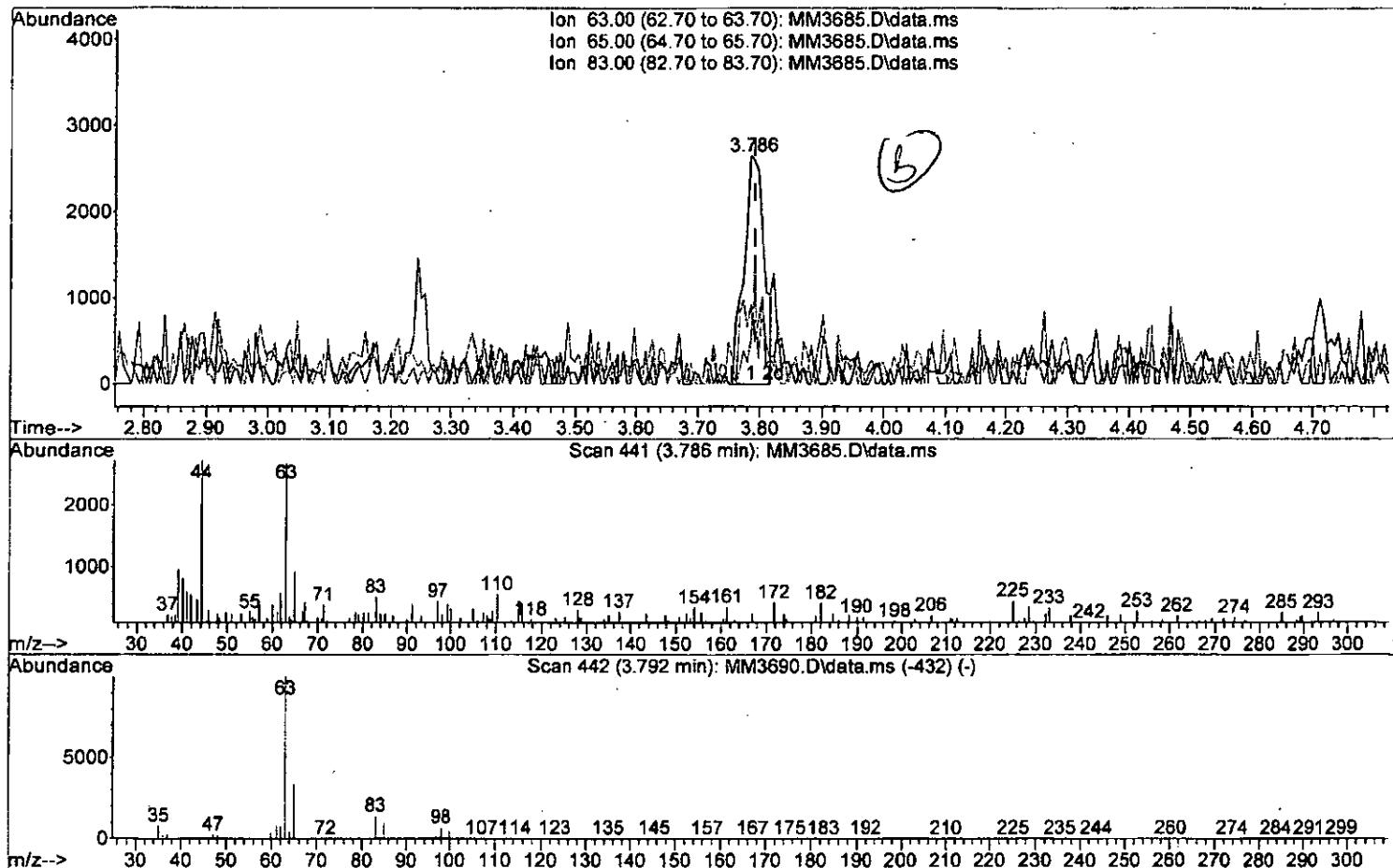
response 4553

Ion	Exp%	Act%
53.00	100	100
52.00	80.60	58.06#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvao12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(28) 1,1-Dicethane (P)

3.786min (-0.006) 0.49 ppb

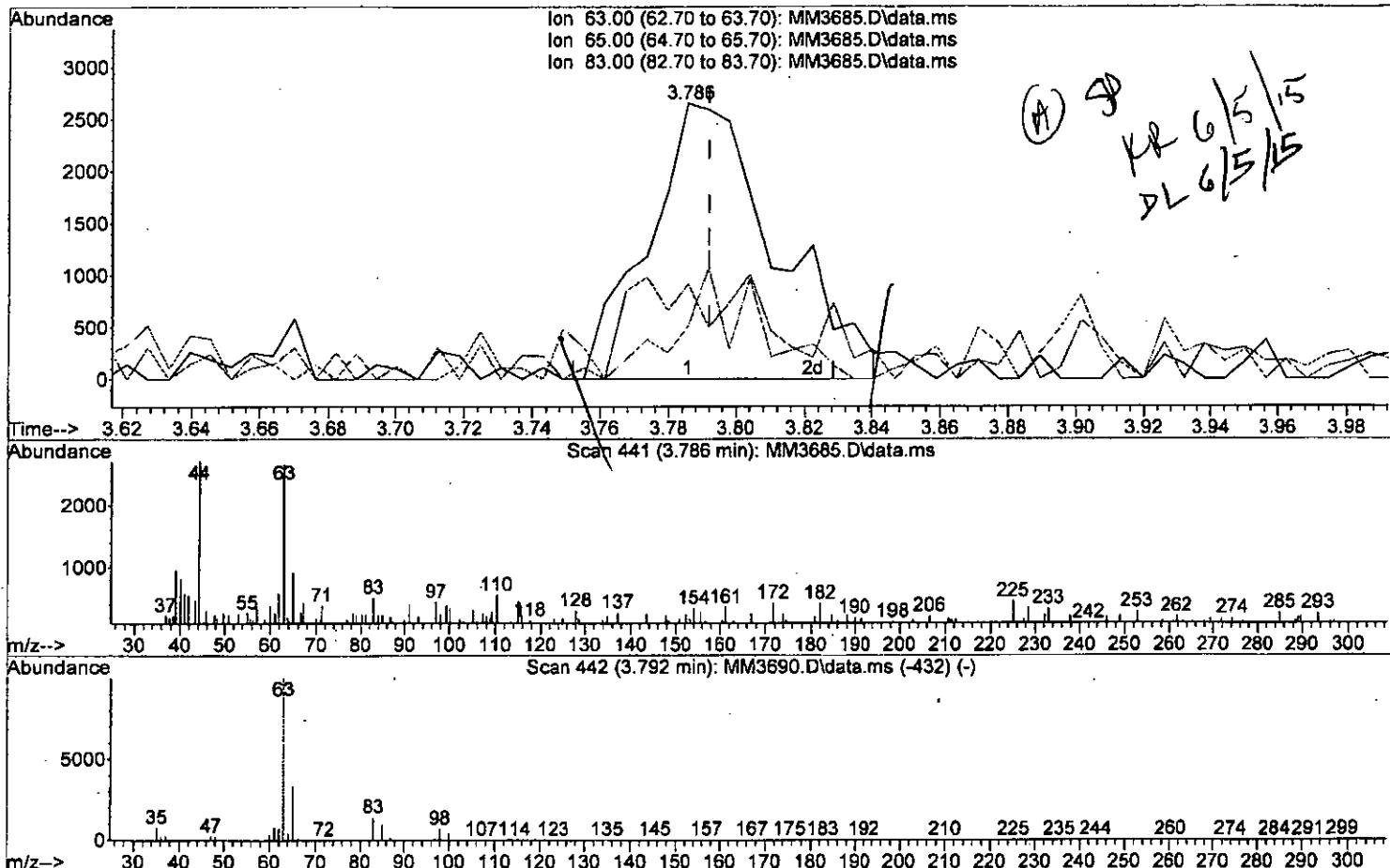
response 5971

Ion	Exp%	Act%
63.00	100	100
65.00	33.80	34.40
83.00	14.10	19.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(28) 1,1-Dicethane (P)

3.786min (-0.006) 0.57 ppb m

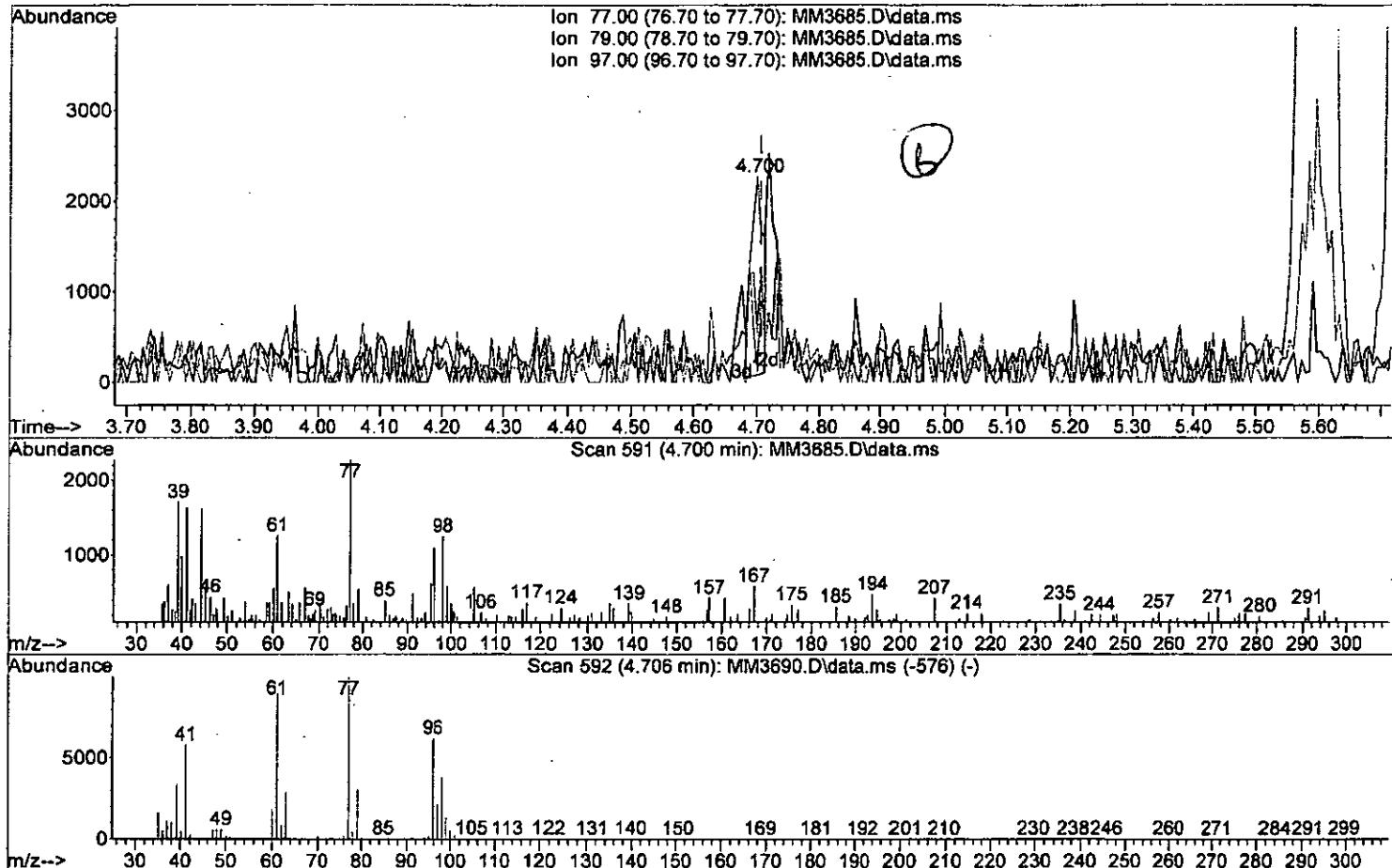
response: 6896

Ion	Exp%	Act%
63.00	100	100
65.00	33.80	34.40
83.00	14.10	19.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(33) 2,2-Dichloropropane

4.700min (-0.006) 0.26 ppb

response 3026

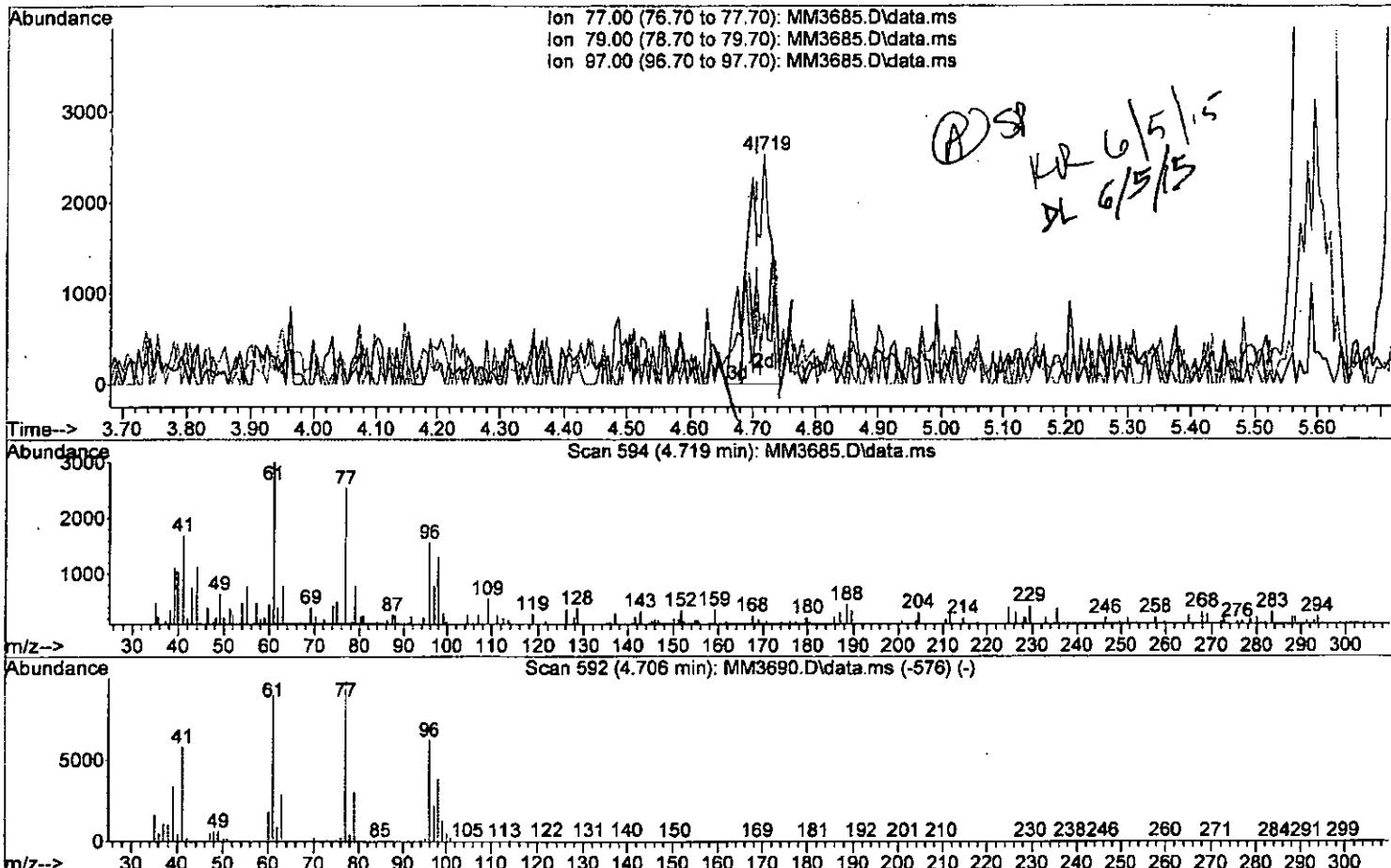
Ion	Exp%	Act%
77.00	100	100
79.00	30.50	23.96
97.00	21.60	5.46
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(33) 2,2-Dichloropropane

4.719min (+0.012) 0.59 ppb m

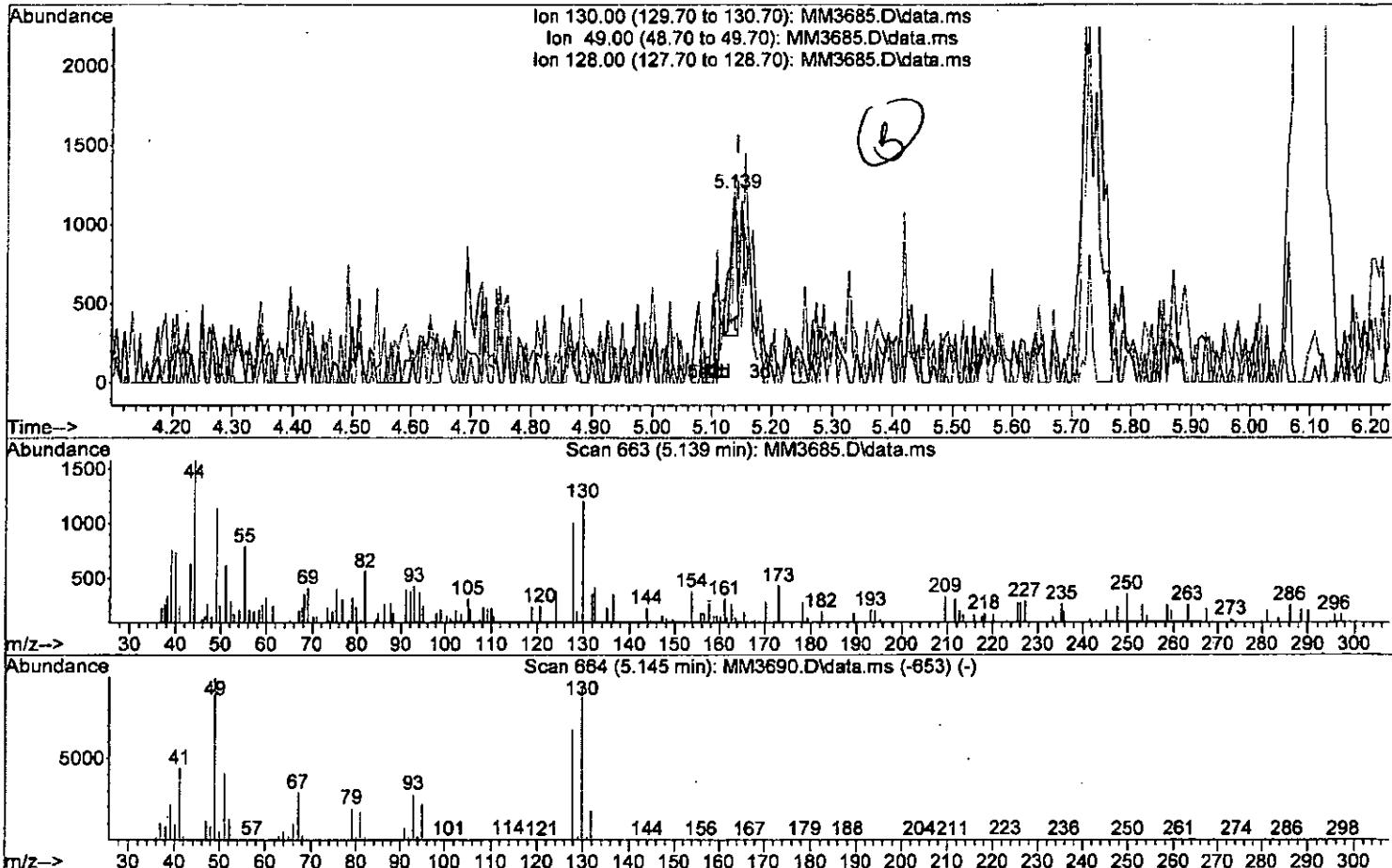
response 6747

Ion	Exp%	Act%
77.00	100	100
79.00	30.50	30.60
97.00	21.60	30.52
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(37) Bromochloromethane

5.139min (-0.006) 0.14 ppb

response 610

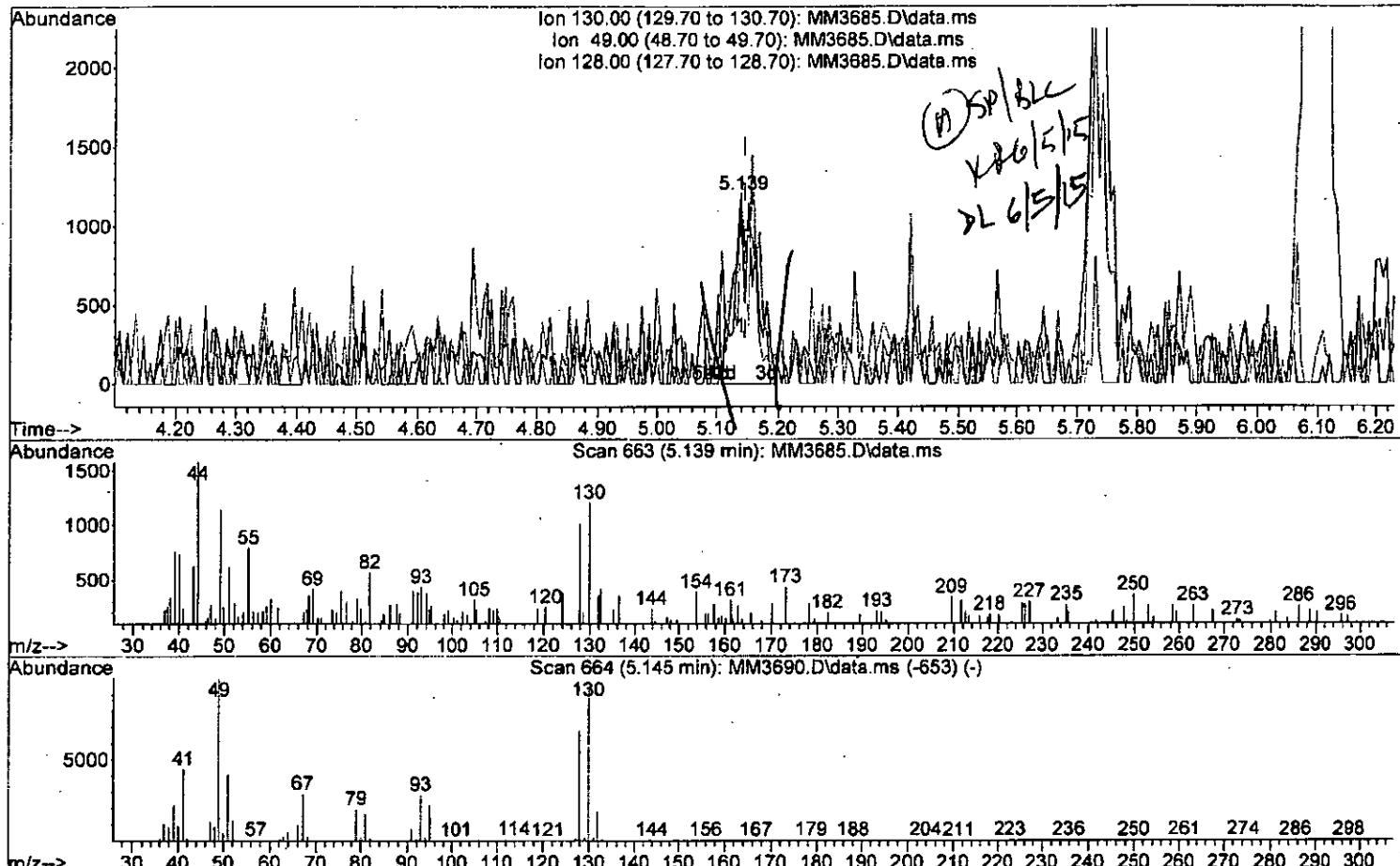
Ion	Exp%	Act%
130.00	100	100
49.00	106.10	95.09
128.00	72.20	100.42#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(37) Bromochloromethane

5.139min (-0.006) 0.66 ppb m

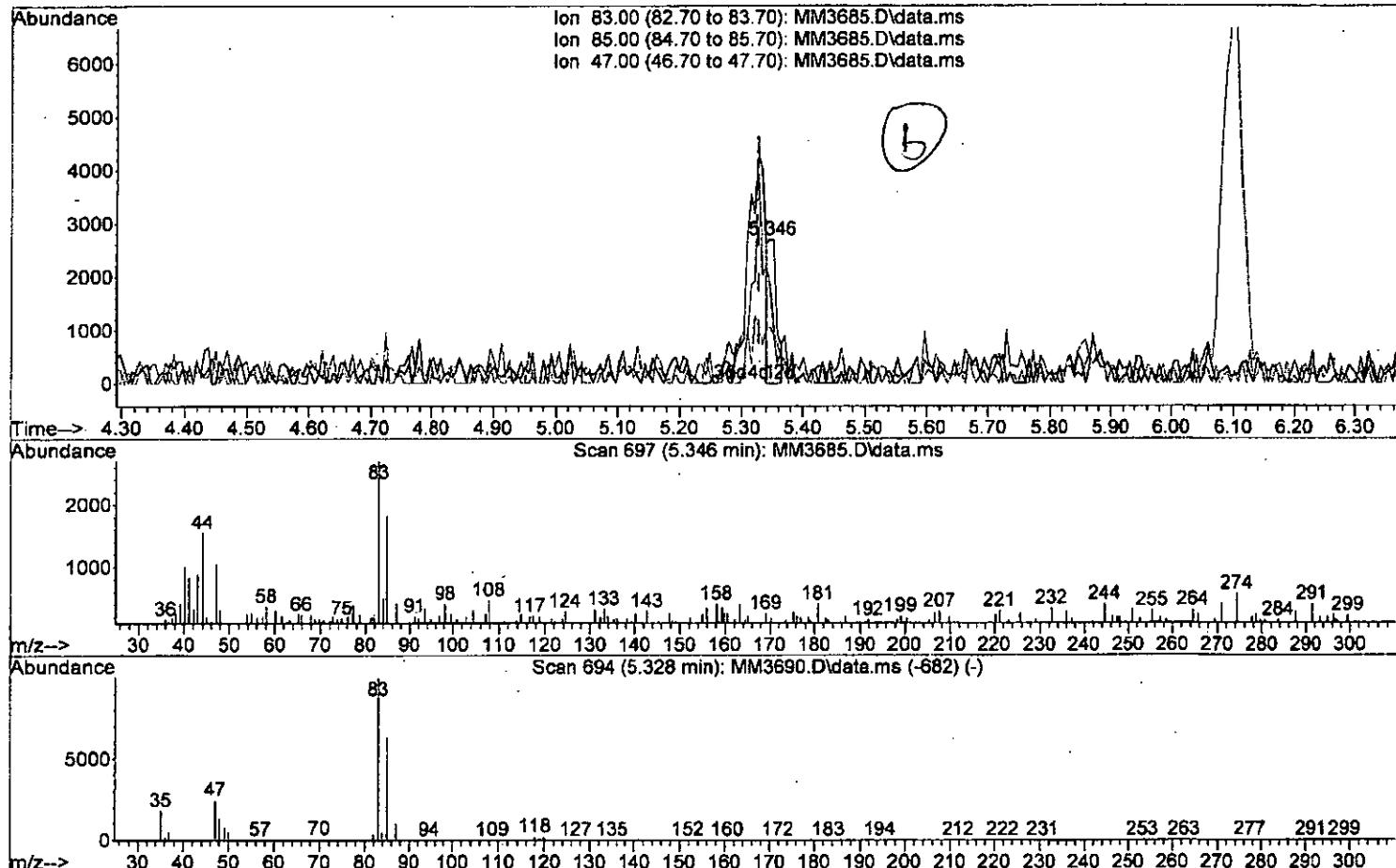
response 2840

Ion	Exp%	Act%
130.00	100	100
49.00	106.10	95.09
128.00	72.20	83.85
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(40) Chloroform (P)

5.346min (+0.018) 0.20 ppb

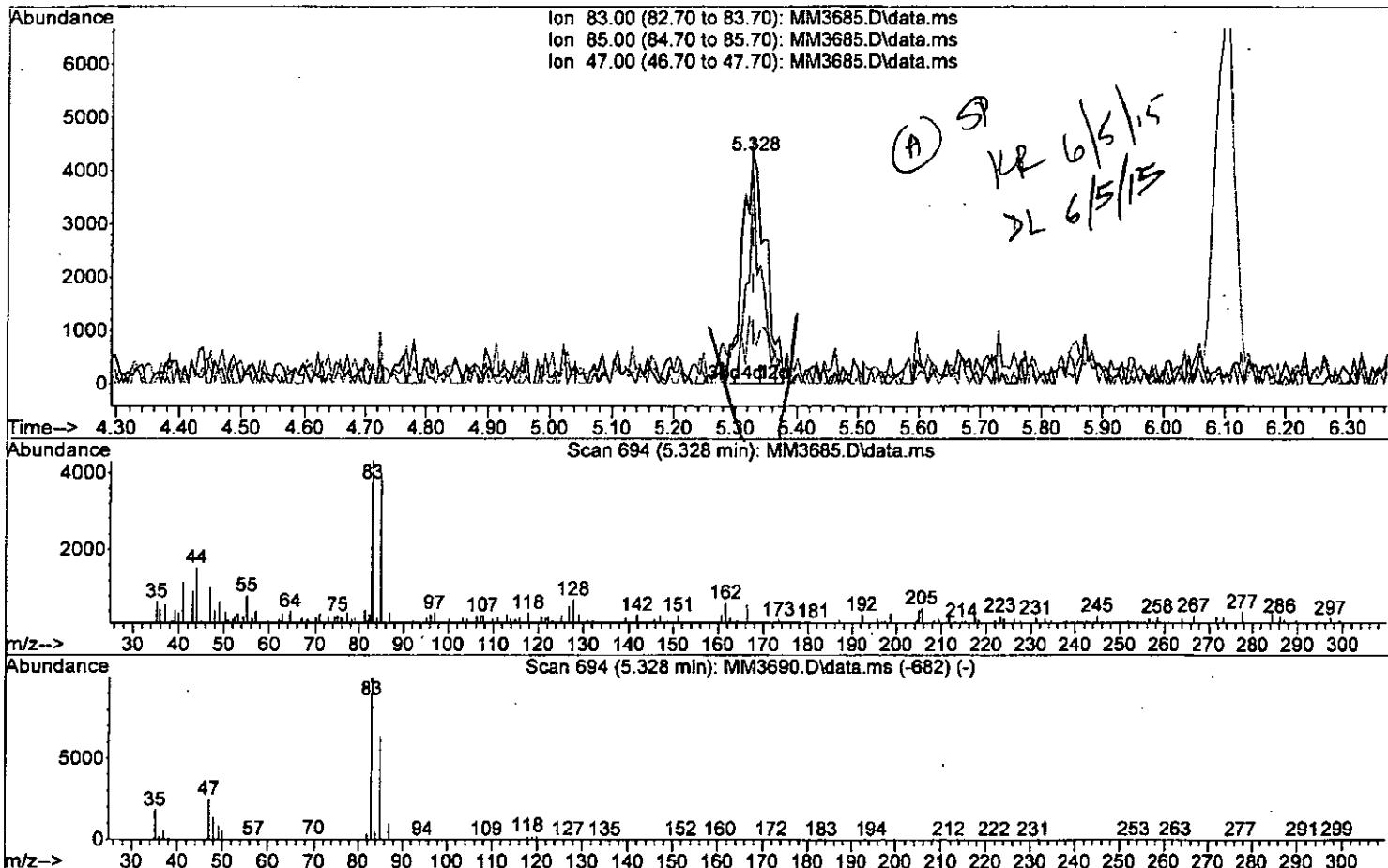
response 2559

Ion	Exp%	Act%
83.00	100	100
85.00	63.80	67.45
47.00	24.70	39.15
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(40) Chloroform (P)

5.328min (-0.000) 0.88 ppb m

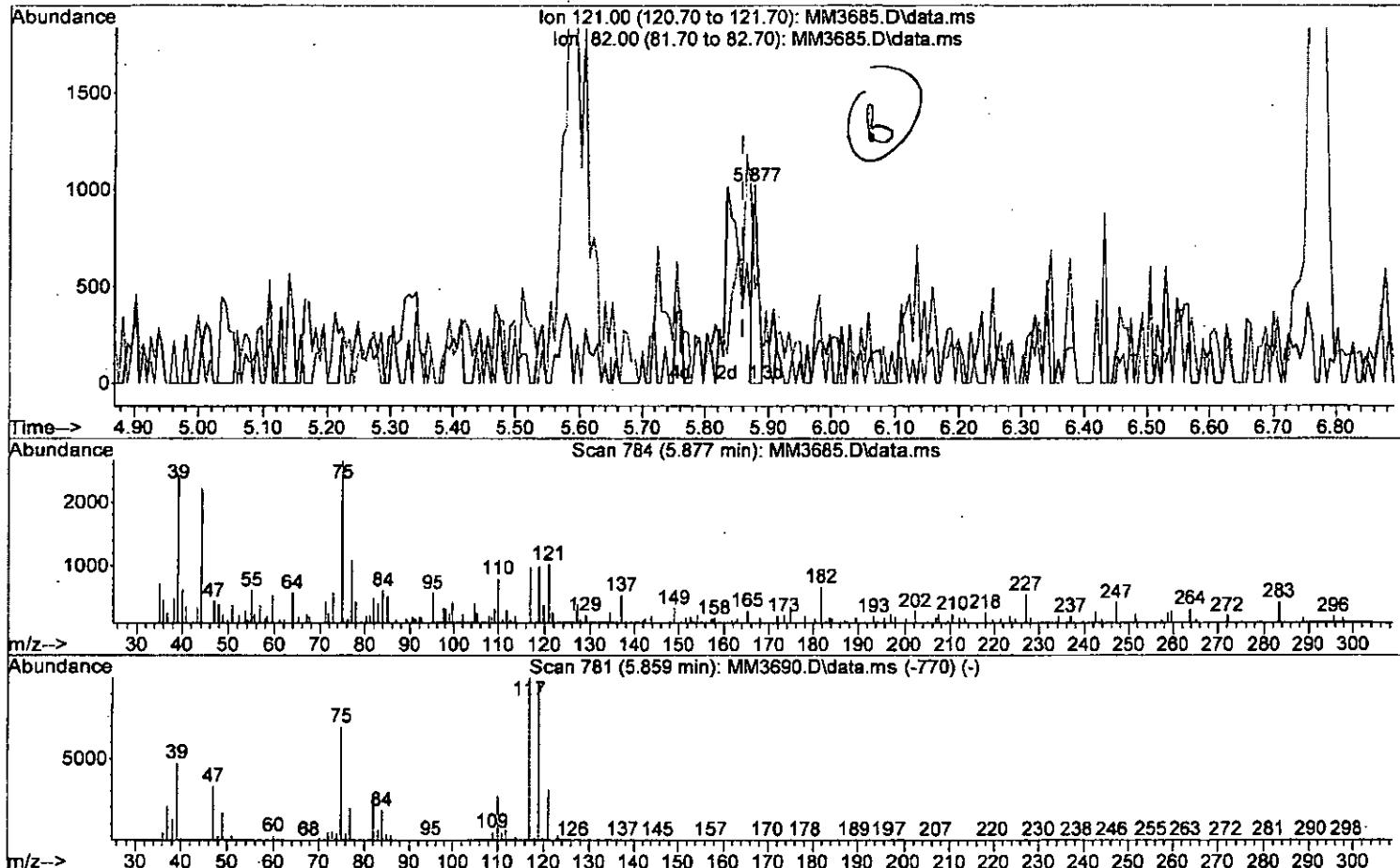
response 11210

Ion	Exp%	Act%
83.00	100	100
85.00	63.80	91.16#
47.00	24.70	23.57
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(46) Carbontetrachloride (P)

5.877min (+0.018) 0.20 ppb

response 634

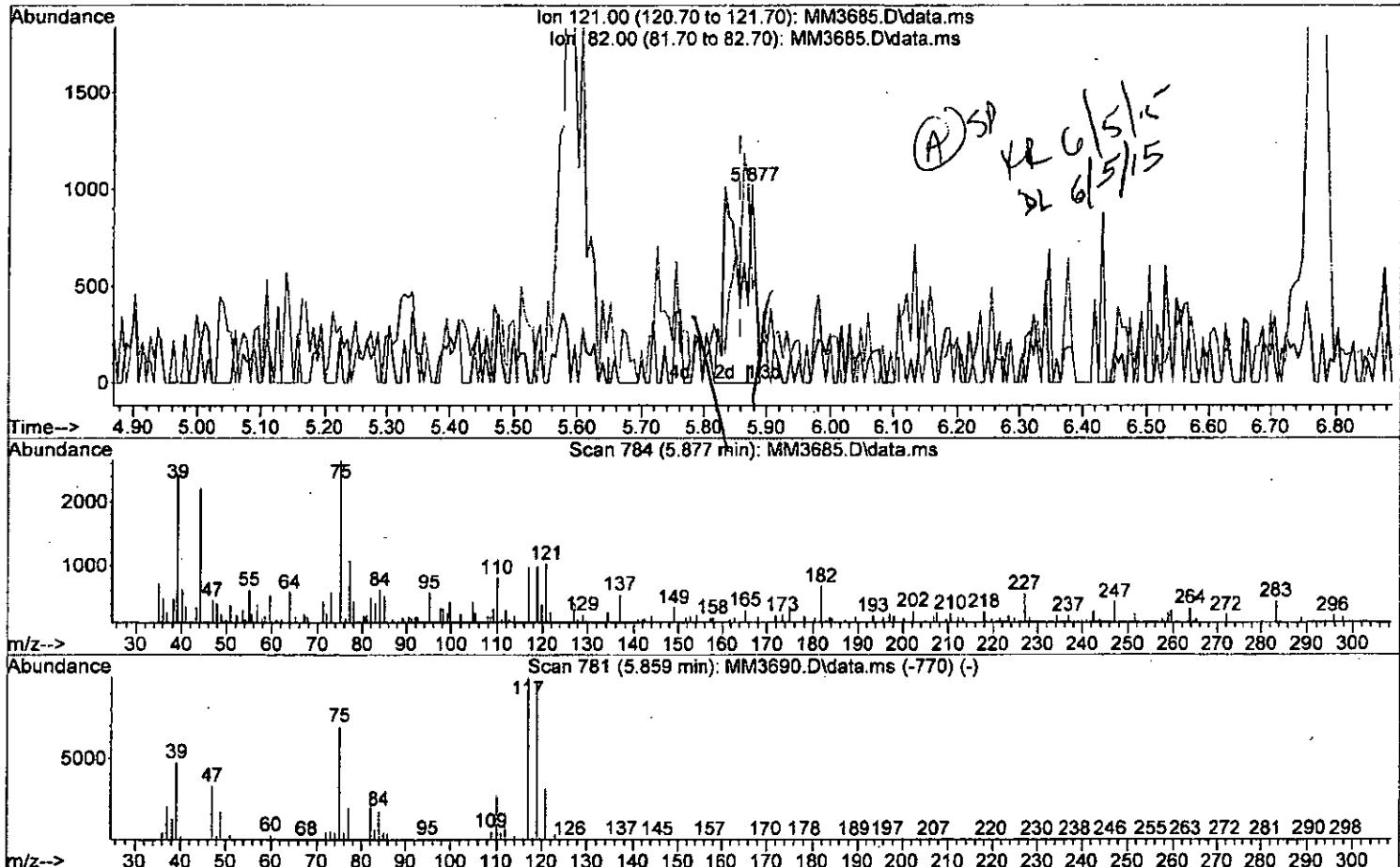
Ion	Exp%	Act%
121.00	100	100
82.00	93.50	47.31#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(46) Carbontetrachloride (P)

5.877min (+0.018) 0.78 ppb m

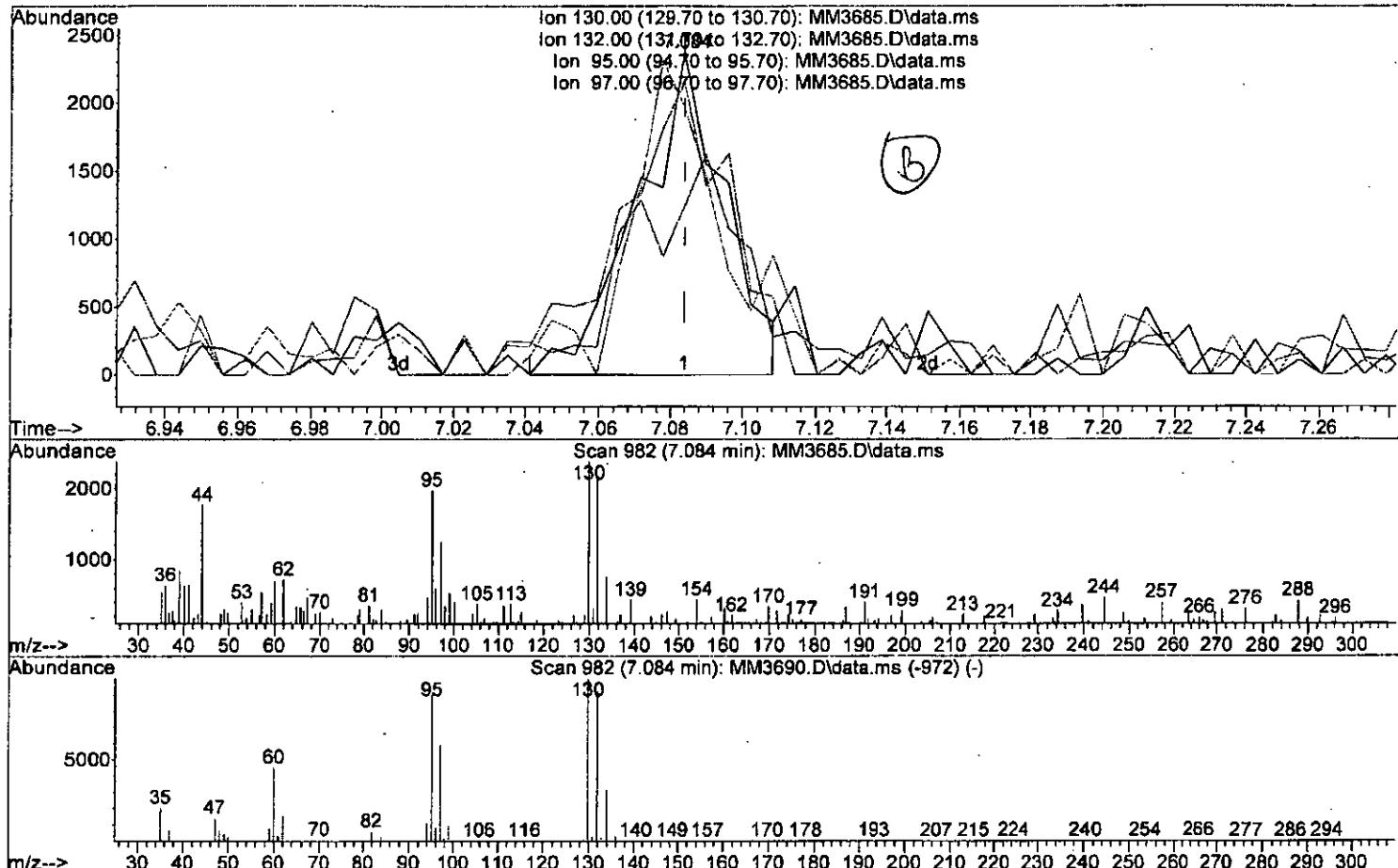
response 2524

Ion	Exp%	Act%
121.00	100	100
82.00	93.50	47.31#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msv0a12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(54) Trichloroethene (P)

7.084min (-0.000) 0.50 ppb

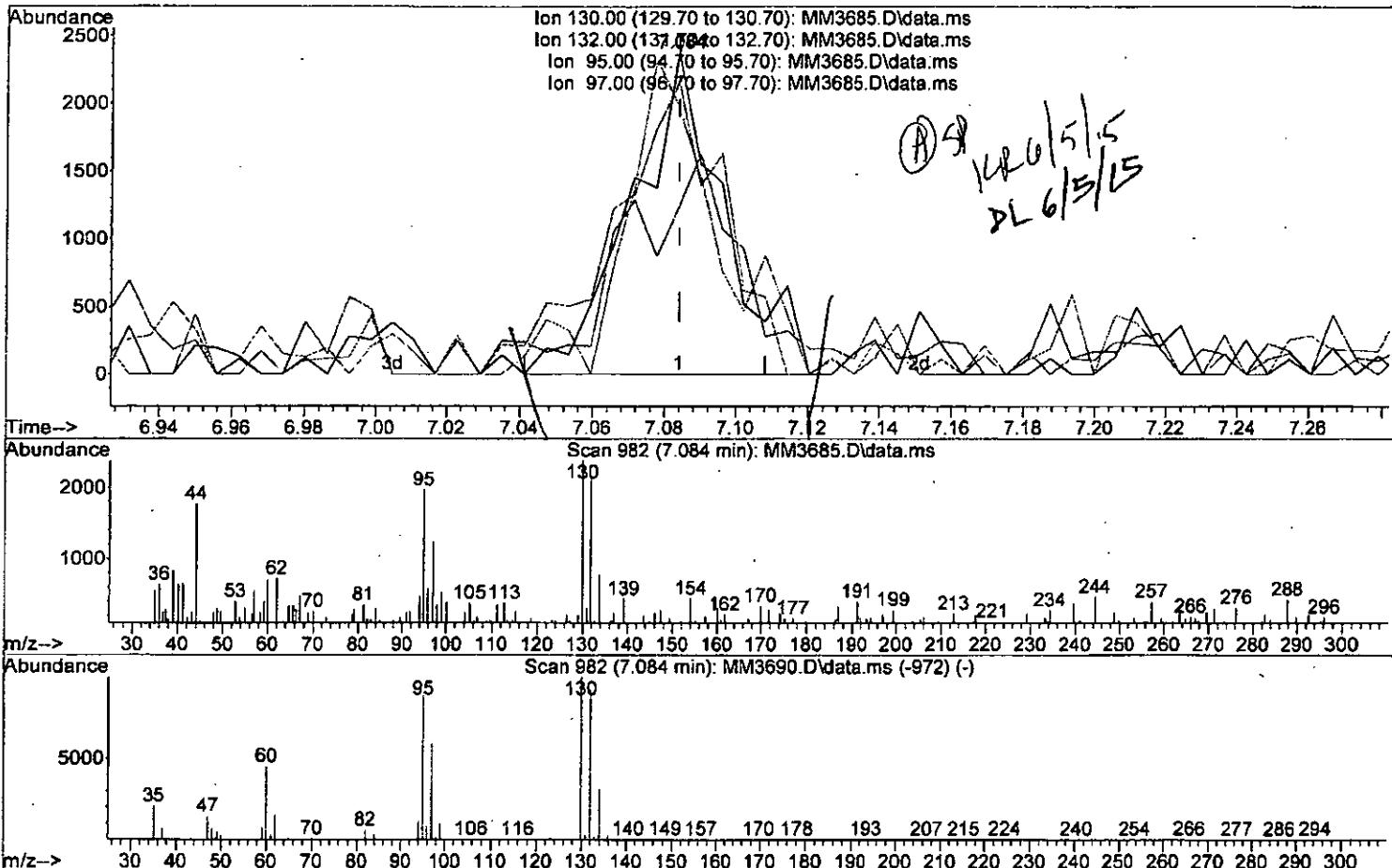
response 3972

Ion	Exp%	Act%
130.00	100	100
132.00	92.70	95.58
95.00	89.80	82.90
97.00	58.80	52.23

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(54) Trichloroethene (P)

7.084min (-0.000) 0.53 ppb m.

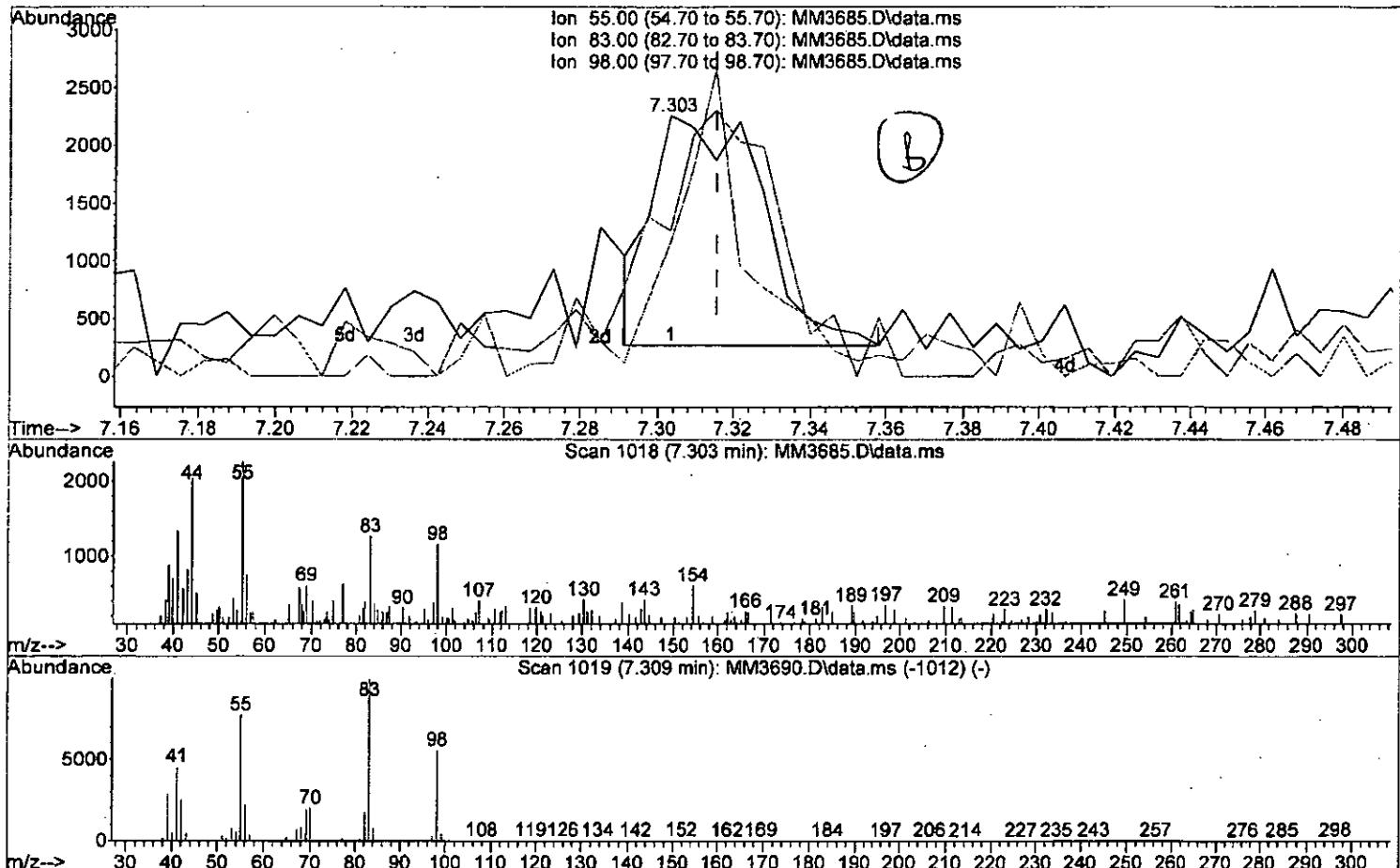
response 4211

Ion	Exp%	Act%
130.00	100	100
132.00	92.70	90.69
95.00	89.80	82.90
97.00	58.80	52.23

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(55) Methylcyclohexane (P)

7.303min (-0.012) 0.53 ppb

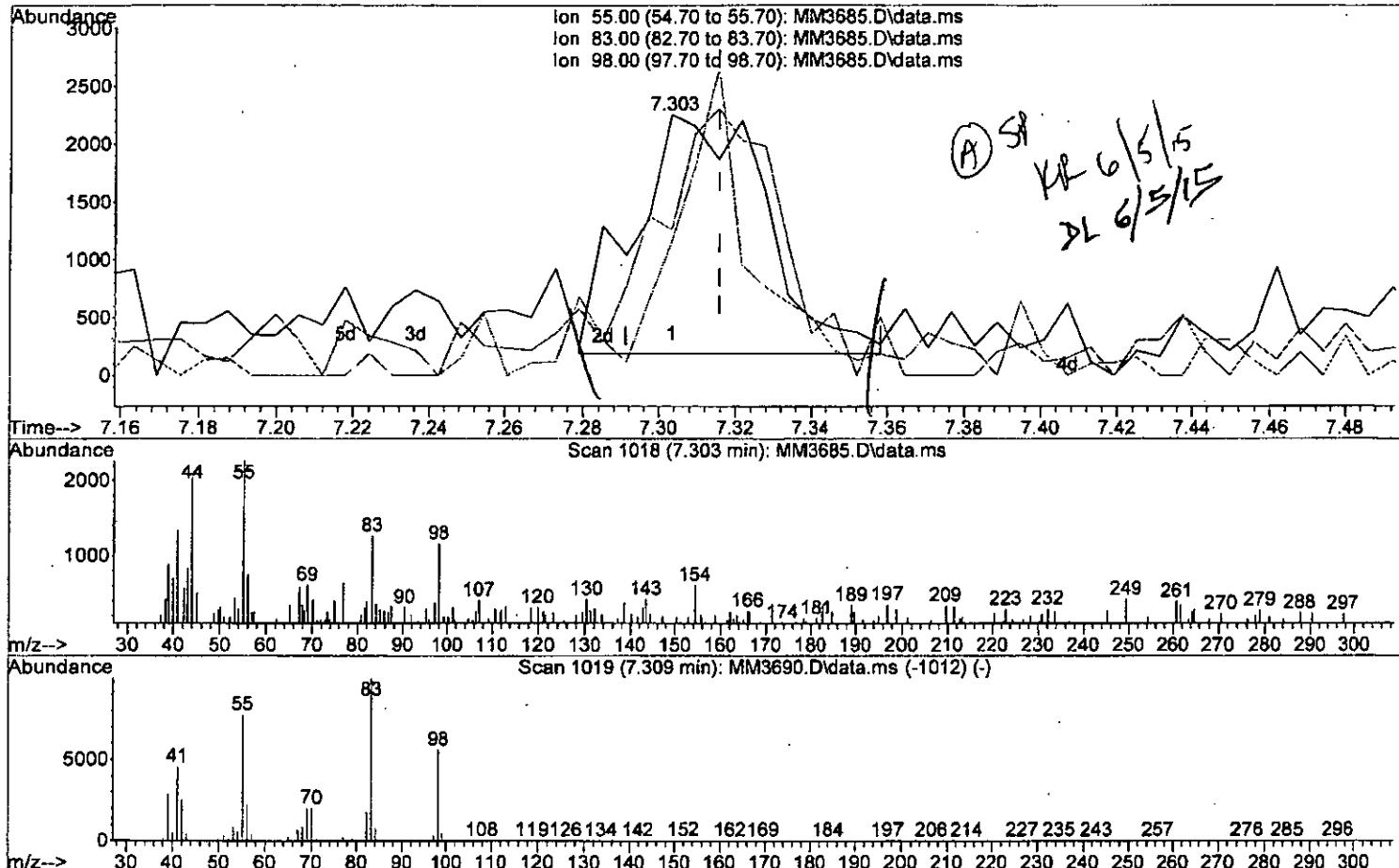
response 3924

Ion	Exp%	Act%
55.00	100	100
83.00	129.00	55.88#
98.00	71.90	51.31#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(55) Methylcyclohexane (P)

7.303min (-0.012) 0.67 ppb m

response 4943

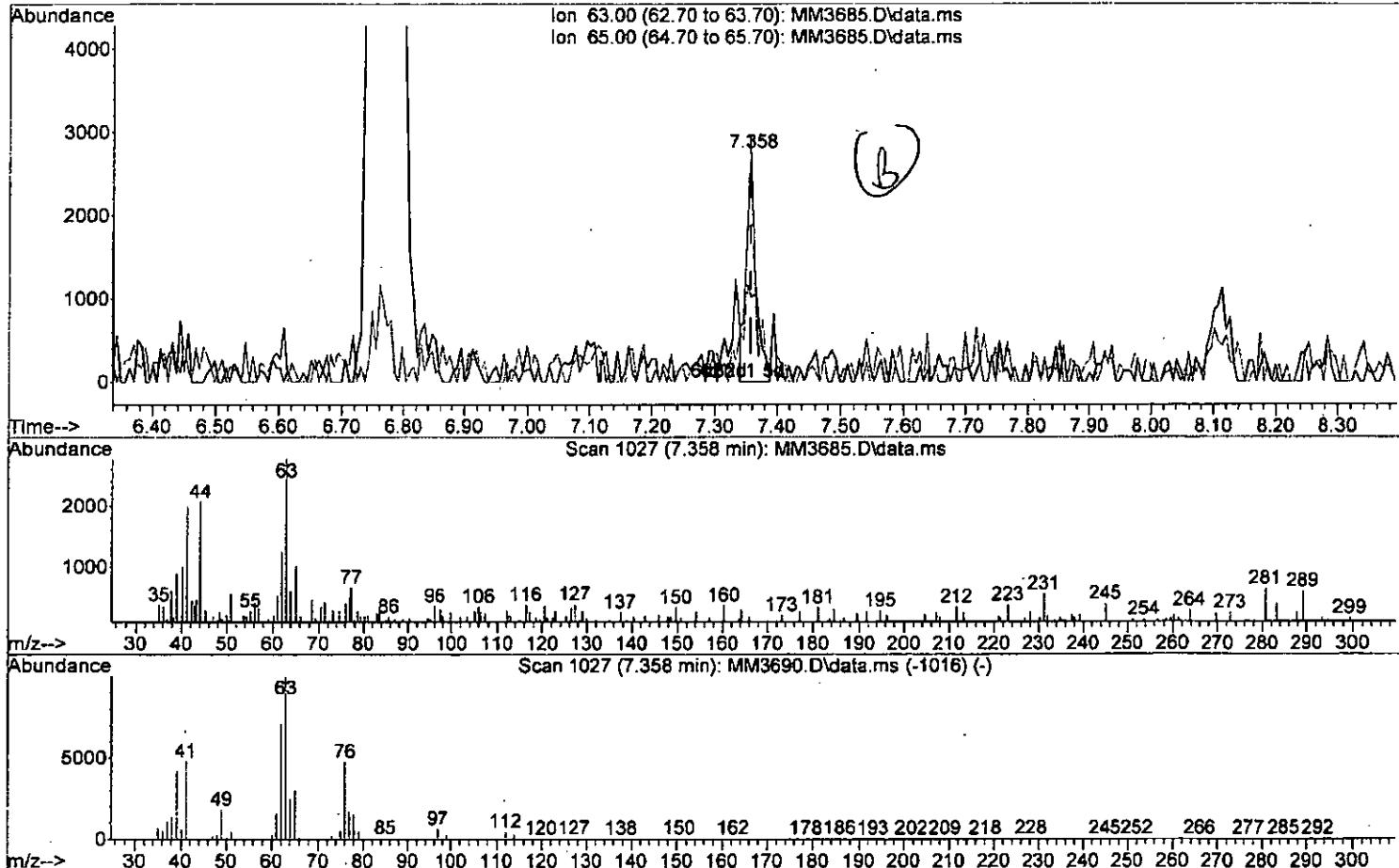
Ion	Exp%	Act%
55.00	100	100
83.00	129.00	55.88#
98.00	71.90	51.31#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(56) 1,2-DiC<sub>3</sub>Propane (P)

7.358min (-0.000) 0.41 ppb

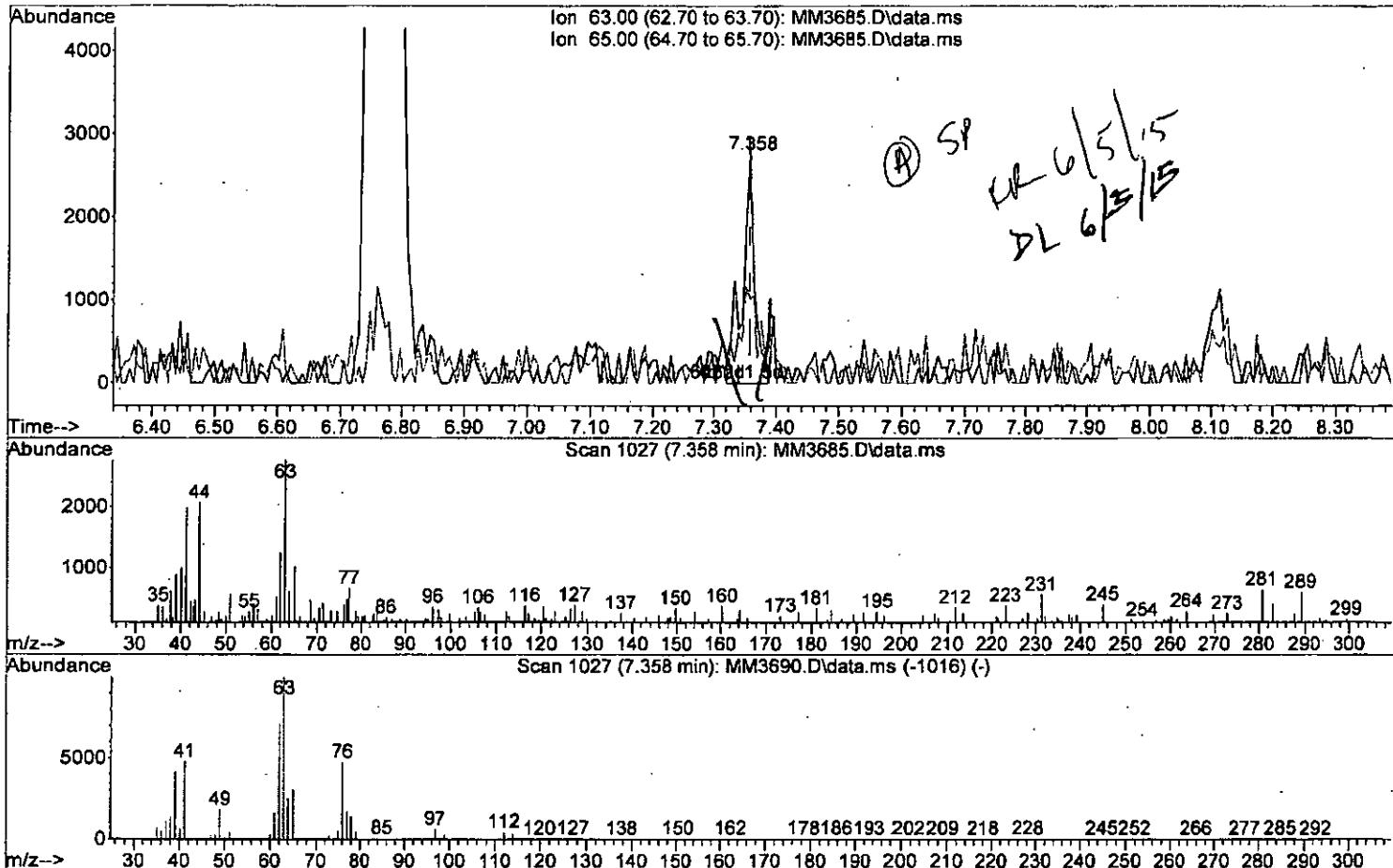
response 2882

Ion	Exp%	Act%
63.00	100	100
65.00	30.60	36.88
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(56) 1,2-Dicpropane (P)

7.358min (-0.000) 0.53 ppb m

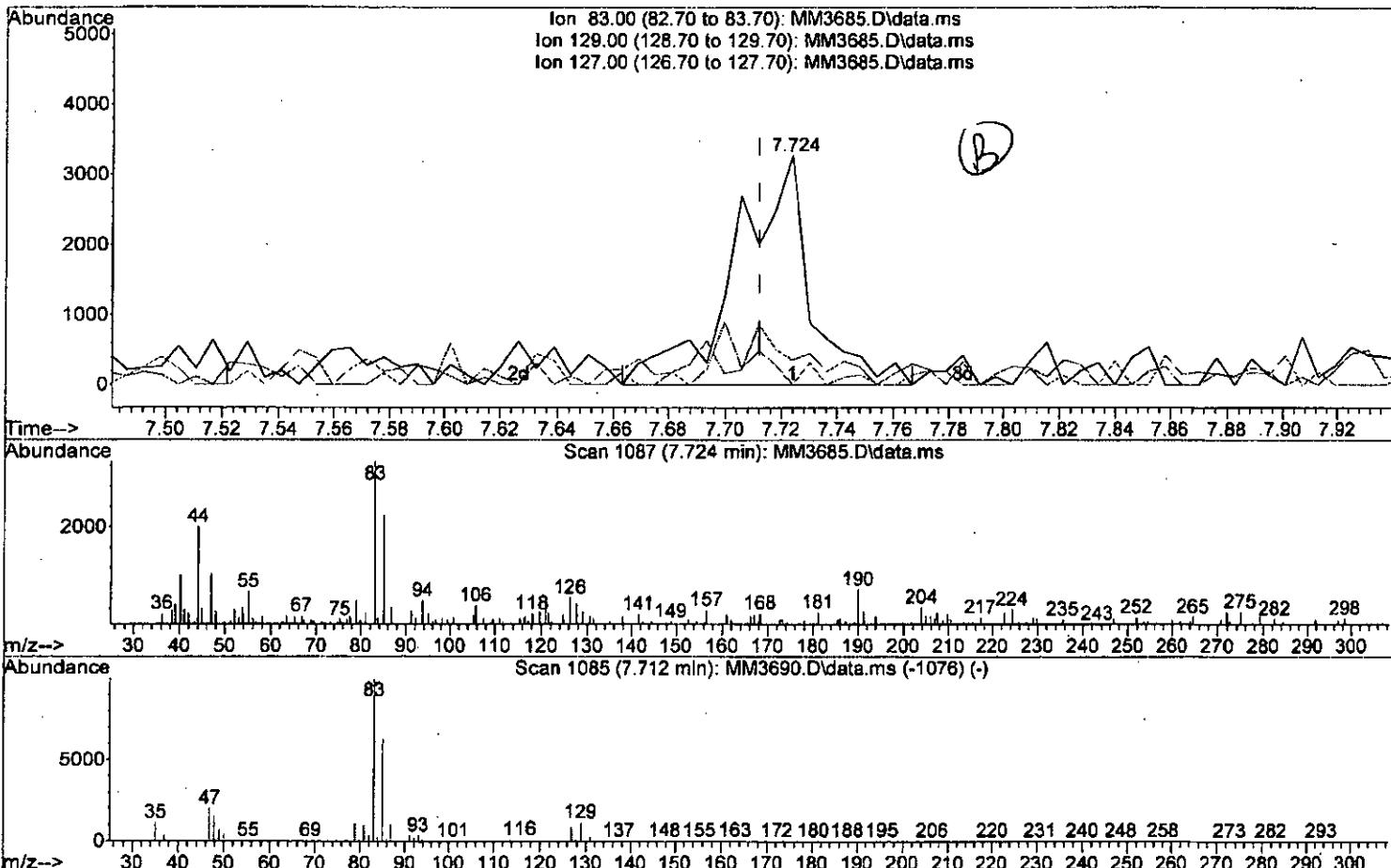
response 3747

Ion	Exp%	Act%
63.00	100	100
65.00	30.60	36.88
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(60) Bromodichloromethane (P)

7.724min (+0.012) 0.59 ppb

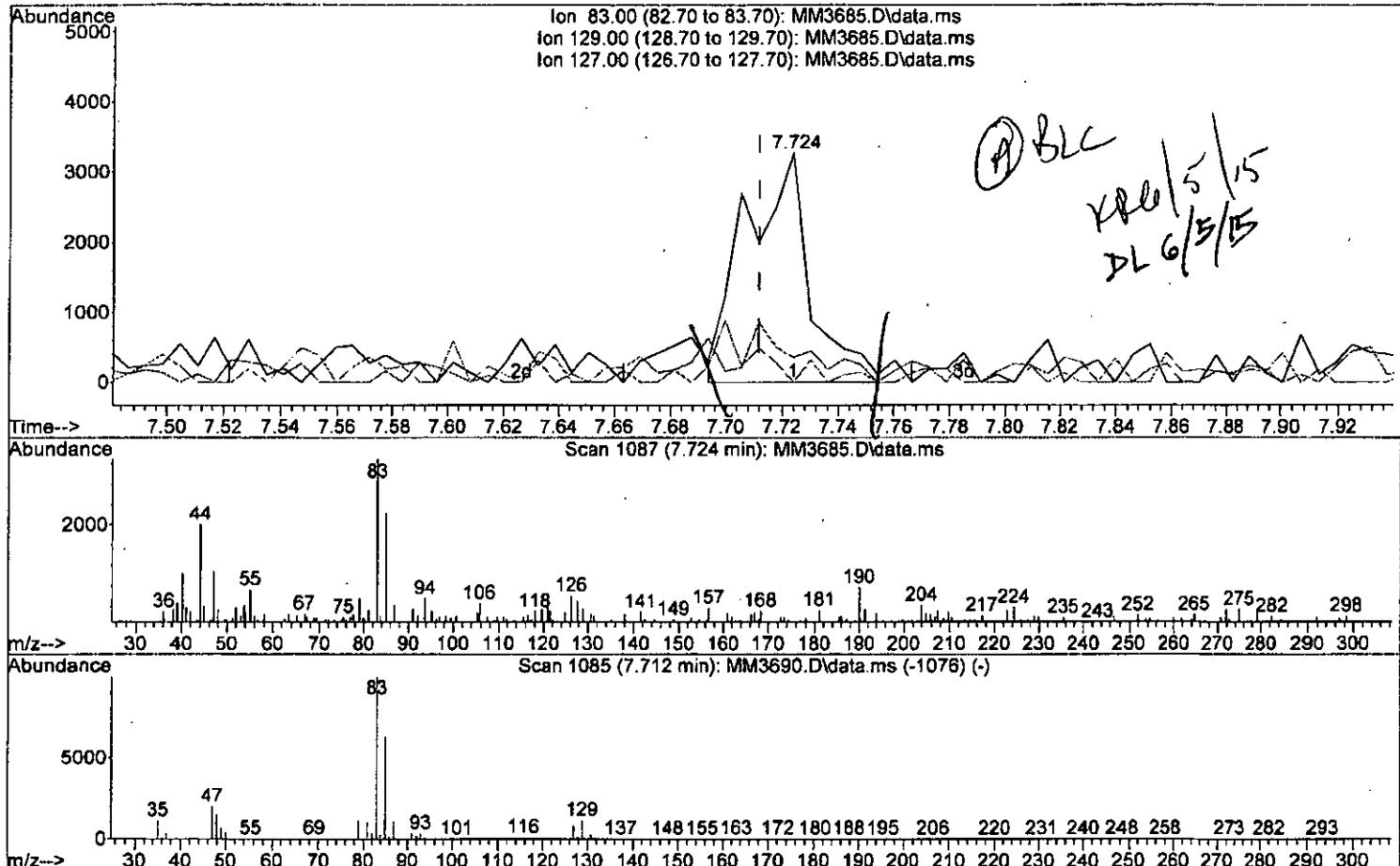
response 6106

Ion	Exp%	Act%
83.00	100	100
129.00	11.70	10.04
127.00	8.00	14.10
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(60) Bromodichloromethane (P)

7.724min (+0.012) 0.50 ppb m

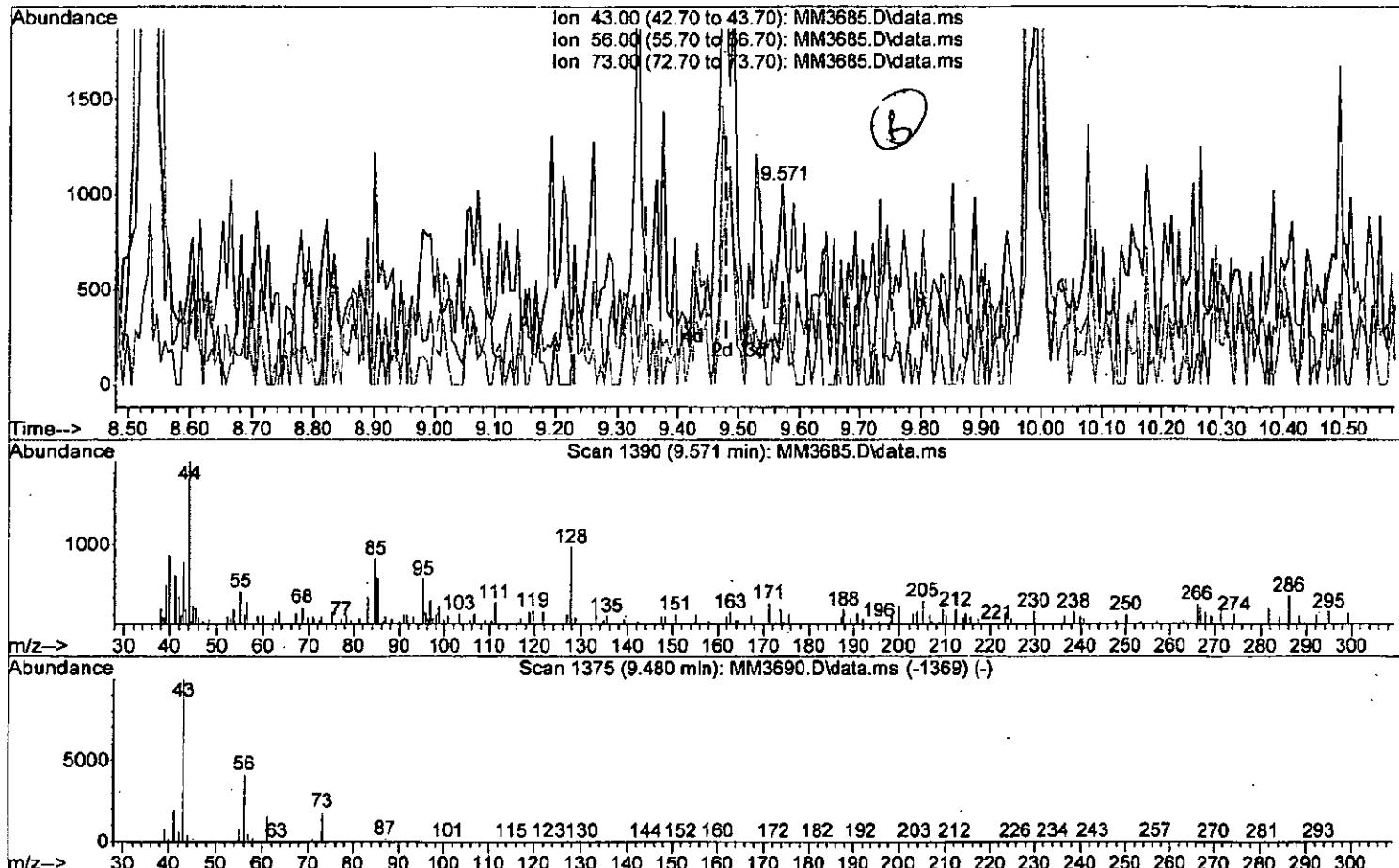
response 5195

Ion	Exp%	Act%
83.00	100	100
129.00	11.70	10.68
127.00	8.00	14.99
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

(76) N-Butyl Acetate

9.571min (+0.091) 0.08 ppb

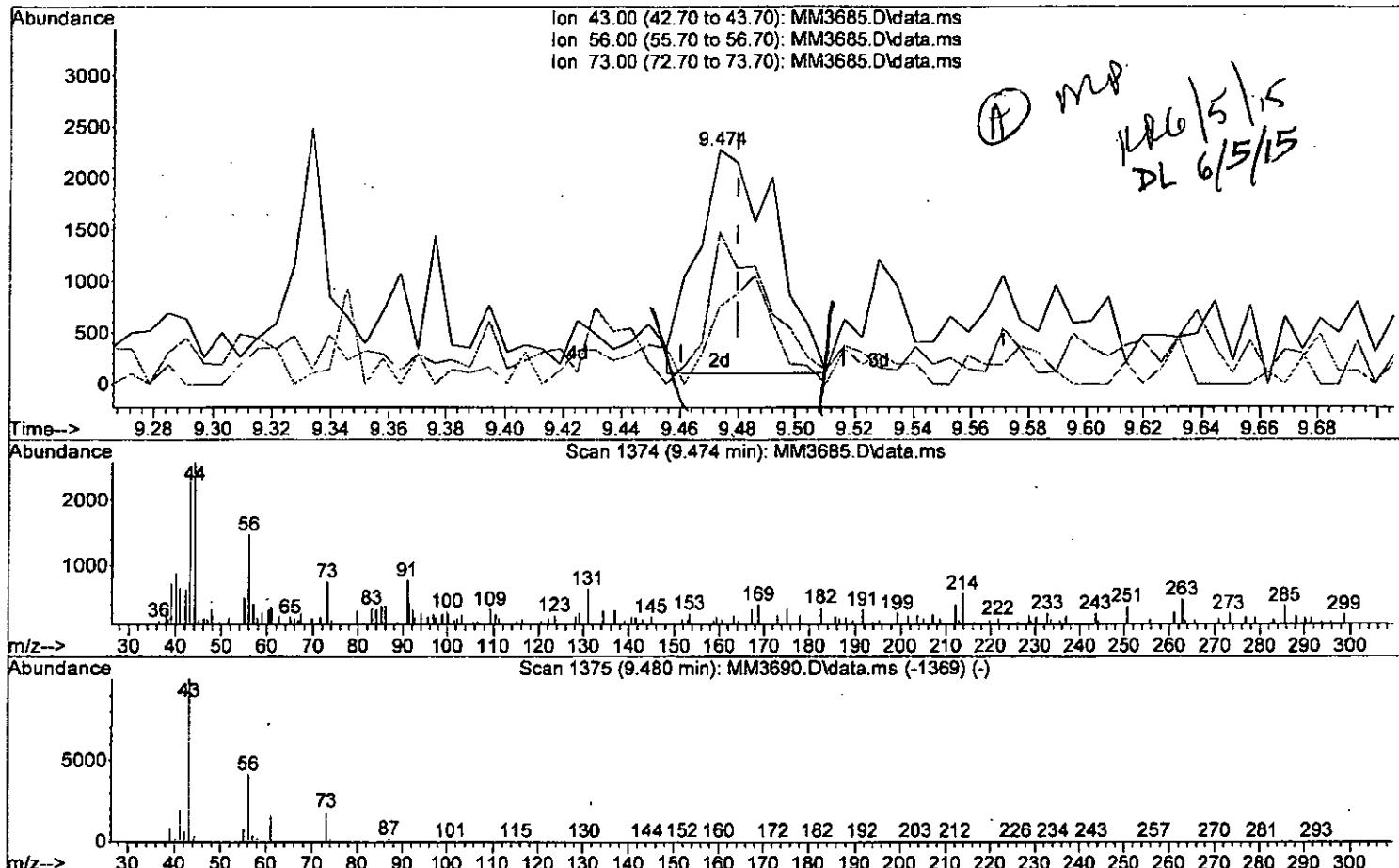
response 587

Ion	Exp%	Act%
43.00	100	100
56.00	41.30	51.19
73.00	18.50	17.13
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3685.D  
 Acq On : 4 Jun 2015 12:40 pm  
 Operator : K.Ruest  
 Sample : 0.5ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 05 08:47:31 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3685.D\data.ms

## (76) N-Butyl Acetate

9.474min (-0.006) 0.55 ppb m

response 4043

Ion	Exp%	Act%
43.00	100	100
56.00	41.30	64.41#
73.00	18.50	32.95
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\

Data File : MM3685.D

Acq On : 4 Jun 2015 12:40 pm

Operator : K.Ruest

Sample : 0.5ppb

Misc : 8260 WATER ICAL

ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

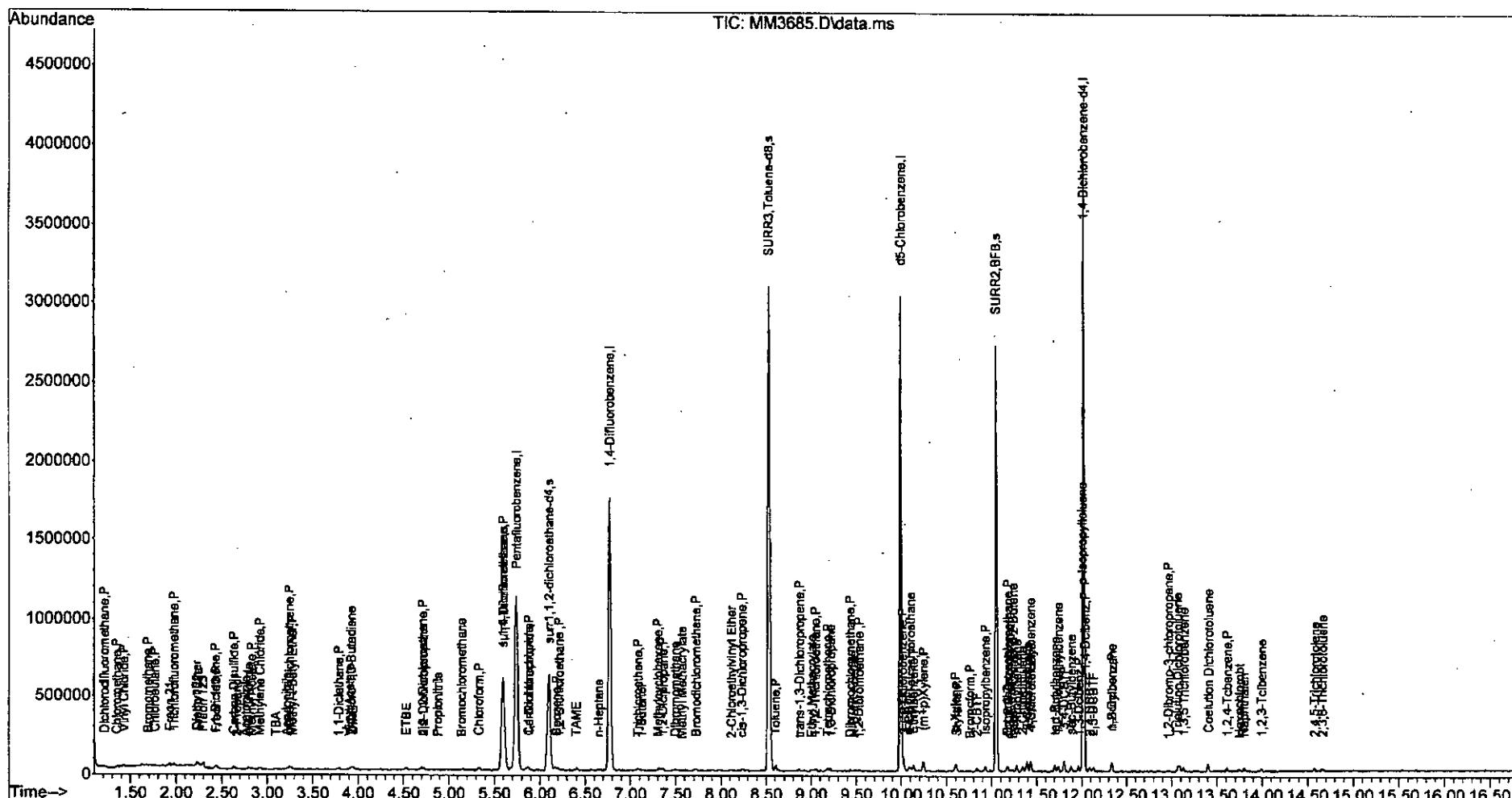
Quant Time: Jun 05 08:58:01 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 08:46:49 2015

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 09:12:07 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.737	168	898779	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1482497	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1392808	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	737650	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoethane	5.597	113	426443	53.16	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 106.32%		
48) surr1,1,2-dichloroetha...	6.096	65	463968	54.14	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 108.28%		
65) SURR3,Toluene-d8	8.529	98	1893219	54.03	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 108.06%		
70) SURR2,BFB	11.047	95	716465	53.82	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 107.64%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	7862m	1.01	ppb	
3) Chloromethane	1.341	50	7955	1.07	ppb	100
4) Vinyl Chloride	1.427	62	9985	1.07	ppb	87
5) Bromomethane	1.683	94	5149m	0.94	ppb	
6) Chloroethane	1.762	64	6859	1.10	ppb	98
7) Freon 21	1.927	67	16186	1.04	ppb	92
8) Trichlorofluoromethane	1.975	101	15234	1.09	ppb	89
9) Diethyl Ether	2.231	59	7133	1.15	ppb	# 81
10) Freon 123a	2.231	67	11569	1.15	ppb	# 65
11) Freon 123	2.298	83	13449	1.16	ppb	92
12) Acrolein	2.341	56	3763m	5.80	ppb	
13) 1,1-Dicethene	2.426	96	7725	1.17	ppb	# 82
14) Freon 113	2.439	101	7180	1.10	ppb	97
16) 2-Propanol	2.652	45	5217	21.07	ppb	73
17) Iodomethane	2.573	142	3936	0.57	ppb	82
18) Carbon Disulfide	2.634	76	22191	1.05	ppb	94
19) Acetonitrile	2.762	40	1252	7.60	ppb	# 44
20) Allyl Chloride	2.798	76	4351	1.09	ppb	# 78
21) Methyl Acetate	2.829	43	2931	1.07	ppb	78
22) Methylene Chloride	2.920	84	8172	1.16	ppb	# 79
23) TBA	3.097	59	9796	21.95	ppb	99
24) Acrylonitrile	3.213	53	8438m	5.86	ppb	
25) Methyl-t-Butyl Ether	3.262	73	16669	0.97	ppb	69
26) trans-1,2-Dichloroethene	3.243	96	7915	1.07	ppb	# 76
28) 1,1-Dicethane	3.792	63	12550	1.03	ppb	93
29) Vinyl Acetate	3.908	86	1958m	1.34	ppb	
30) DIPE	3.944	45	21806	1.03	ppb	92
31) 2-Chloro-1,3-Butadiene	3.926	53	13718	1.03	ppb	96
32) ETBE	4.524	59	21815	1.03	ppb	89
33) 2,2-Dichloropropane	4.700	77	12209	1.05	ppb	79
34) cis-1,2-Dichloroethene	4.713	96	8353	1.06	ppb	95
37) Bromochloromethane	5.152	130	5385m	1.24	ppb	
38) Methacrylonitrile	5.164	67	2127m	1.10	ppb	
40) Chloroform	5.328	83	13953	1.09	ppb	81

6/5/15

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 09:12:07 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
41) 1,1,1-Trichloroethane	5.597	97	12945m	1.04	ppb	
42) TAME	6.401	73	20708	1.12	ppb	90
44) Cyclohexane	5.676	41	7950m	1.18	ppb	
46) Carbontetrachloride	5.865	121	3282m	1.02	ppb	
47) 1,1-Dichloropropene	5.877	75	10461	1.03	ppb	97
49) Benzene	6.176	78	29582	1.01	ppb	99
50) 1,2-Dichloroethane	6.212	62	10498	1.11	ppb	85
51) Iso-Butyl Alcohol	6.206	43	6644	34.04	ppb	# 72
52) n-Heptane	6.639	43	7028	1.12	ppb	91
53) 1-Butanol	7.121	56	6136	49.51	ppb	# 67
54) Trichloroethene	7.090	130	7589	0.96	ppb	94
55) Methylcyclohexane	7.304	55	6957	0.94	ppb	# 70
56) 1,2-Diclpropane	7.346	63	7794m	1.11	ppb	
57) Dibromomethane	7.493	93	4299	1.14	ppb	# 78
59) Methyl Methacrylate	7.584	69	3393	0.97	ppb	# 71
60) Bromodichloromethane	7.712	83	11072	1.07	ppb	90
61) 2-Nitropropane	7.992	41	2664	2.02	ppb	84
62) 2-Chloroethylvinyl Ether	8.102	63	3077	0.95	ppb	77
63) cis-1,3-Dichloropropene	8.236	75	11972	1.01	ppb	88
64) 4-Methyl-2-pentanone	8.438	43	4764	1.19	ppb	86
66) Toluene	8.602	91	34813	1.03	ppb	93
67) trans-1,3-Dichloropropene	8.864	75	10184	1.01	ppb	93
68) Ethyl Methacrylate	9.004	69	6676	0.91	ppb	86
69) 1,1,2-Trichloroethane	9.053	97	5608m	1.03	ppb	
72) Tetrachloroethene	9.181	164	7062m	1.11	ppb	
74) 1,3-Dichloropropane	9.212	76	8436	0.92	ppb	82
75) Dibromochloromethane	9.437	129	6989	1.02	ppb	83
76) N-Butyl Acetate	9.480	43	7823	1.06	ppb	84
77) 1,2-Dibromoethane	9.529	107	6143	1.14	ppb	98
78) Chlorobenzene	10.016	112	21963	0.97	ppb	91
79) 3-CBTF	10.029	180	10188	0.95	ppb	# 84
80) 4-CBTF	10.077	180	9297	0.96	ppb	87
81) 1,1,1,2-Tetrachloroethane	10.102	131	6888	0.89	ppb	97
82) Ethylbenzene	10.126	106	12326	1.00	ppb	# 89
83) (m+p)Xylene	10.242	106	30514	2.04	ppb	95
84) o-Xylene	10.596	106	13238	0.91	ppb	97
85) Styrene	10.608	104	24833	1.00	ppb	88
87) Bromoform	10.754	173	3550	0.94	ppb	96
88) 2-CBTF	10.833	180	10701	1.00	ppb	# 83
89) Isopropylbenzene	10.925	105	35223	1.03	ppb	90
90) Cyclohexanone	10.992	55	4160	20.19	ppb	83
91) trans-1,4-Dichloro-2-B...	11.230	53	2126	1.15	ppb	81
92) 1,1,2,2-Tetrachloroethane	11.181	83	5961	0.96	ppb	97
93) Bromobenzene	11.175	156	8771	1.03	ppb	# 81
94) 1,2,3-Trichloropropane	11.211	110	2376	1.25	ppb	# 59
95) n-Propylbenzene	11.278	91	37856	0.98	ppb	98
96) 2-Chlorotoluene	11.339	91	21520	0.91	ppb	96
97) 3-Chlorotoluene	11.394	91	23749m	0.94	ppb	
98) 4-Chlorotoluene	11.437	91	27364	0.93	ppb	99
99) 1,3,5-Trimethylbenzene	11.431	105	30440	1.04	ppb	96
100) tert-Butylbenzene	11.699	119	22543	0.95	ppb	92

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvao12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 09:12:07 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

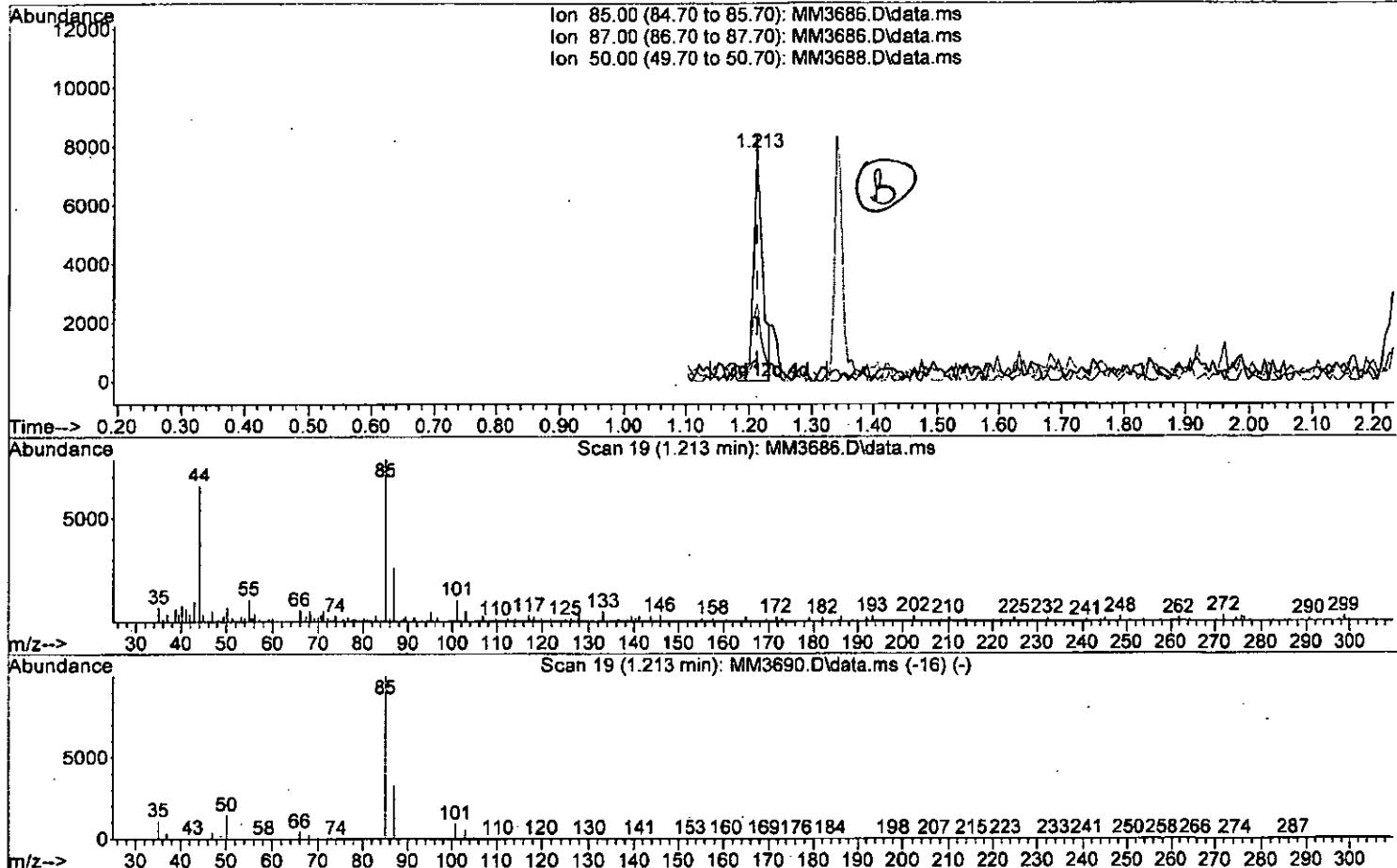
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-Trimethylbenzene	11.736	105	29757	1.00	ppb	93
102) 3,4-DCBT	11.797	214	7070	1.01	ppb	# 86
103) sec-Butylbenzene	11.882	105	31078	0.96	ppb	98
104) p-Isopropyltoluene	12.004	119	26453	0.96	ppb	91
105) 1,3-Dclbenz	11.967	146	16930	1.02	ppb	96
106) 1,4-Dclbenz	12.034	146	17661	1.02	ppb	96
107) 2,4-DCBT	12.089	214	5964	0.96	ppb	89
108) 2,5-DCBT	12.132	214	6546	0.94	ppb	93
109) n-Butylbenzene	12.333	91	23410	0.95	ppb	99
110) 1,2-Dclbenz	12.333	146	15397	0.99	ppb	91
111) 1,2-Dibromo-3-chloropr...	12.961	157	1422	1.13	ppb	# 71
112) Trielution Dichlorotol...	13.077	125	38314	2.93	ppb	95
113) 1,3,5 Trichlorobenzene	13.126	180	10403	1.07	ppb	# 89
114) Coelution Dichlorotoluene	13.400	125	27567	1.97	ppb	# 89
115) 1,2,4-Tcbenzene	13.607	180	8882	1.00	ppb	# 78
116) Hexachlorobt	13.747	225	3963	1.16	ppb	96
117) Naphthalen	13.802	128	18606	0.99	ppb	92
118) 1,2,3-Tclbenzene	13.991	180	6933	0.95	ppb	# 78
119) 2,4,5-Trichlorotolene	14.570	159	6362m	1.09	ppb	
120) 2,3,6-Trichlorotoluene	14.656	159	5661	1.13	ppb	93

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msv0a12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSV0A12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (0.000) 0.98 ppb

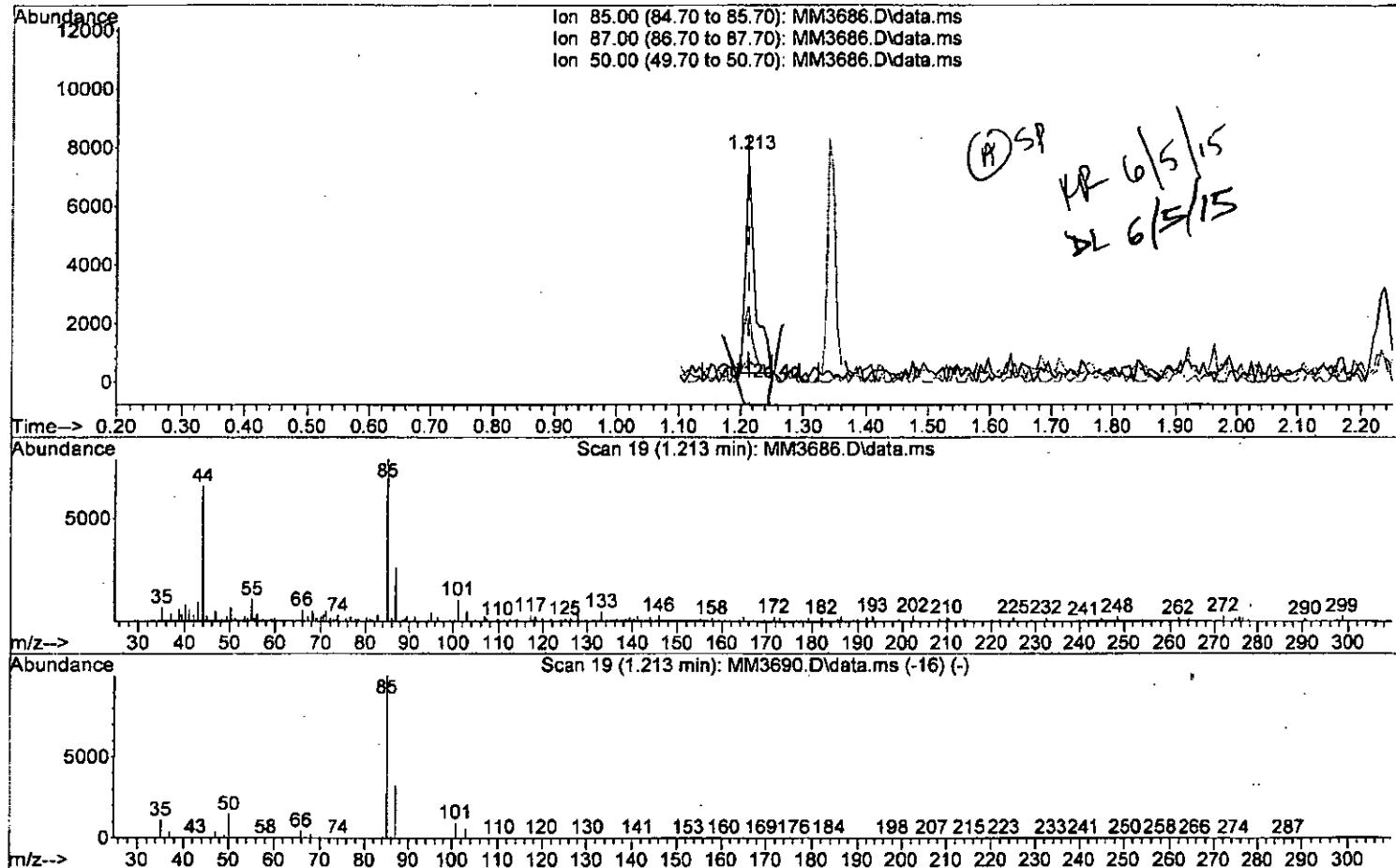
response 7630

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	33.59
50.00	14.50	9.64
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



(2) Dichlorodifluoromethane (P)

1.213min (0.000) 1.01 ppb m

response 7862

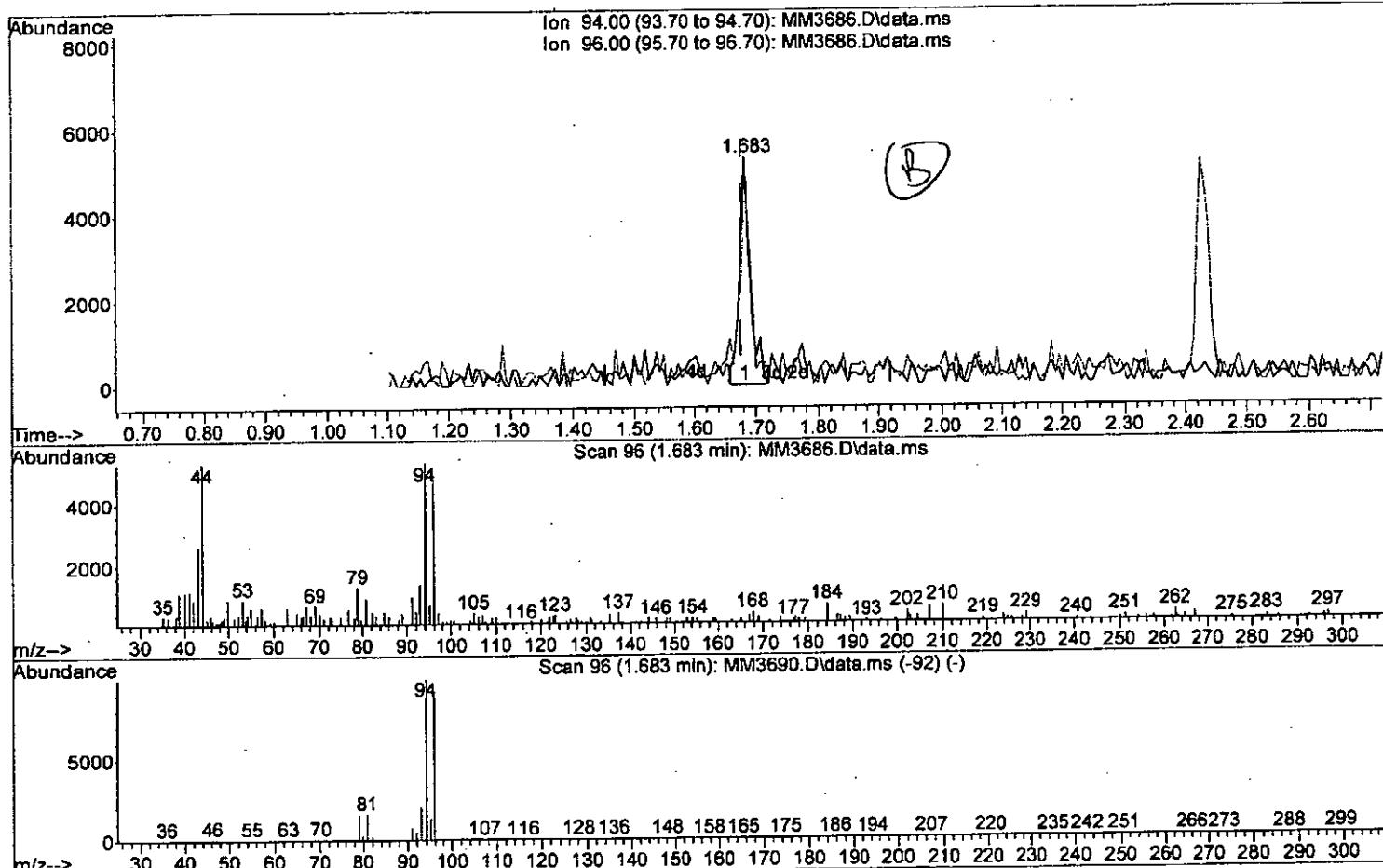
Ion	Exp%	Act%
85.00	100	100
87.00	32.00	33.59
50.00	14.50	9.64
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B.WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

## (5) Bromomethane (P)

1.683min (+0.006) 1.17 ppb

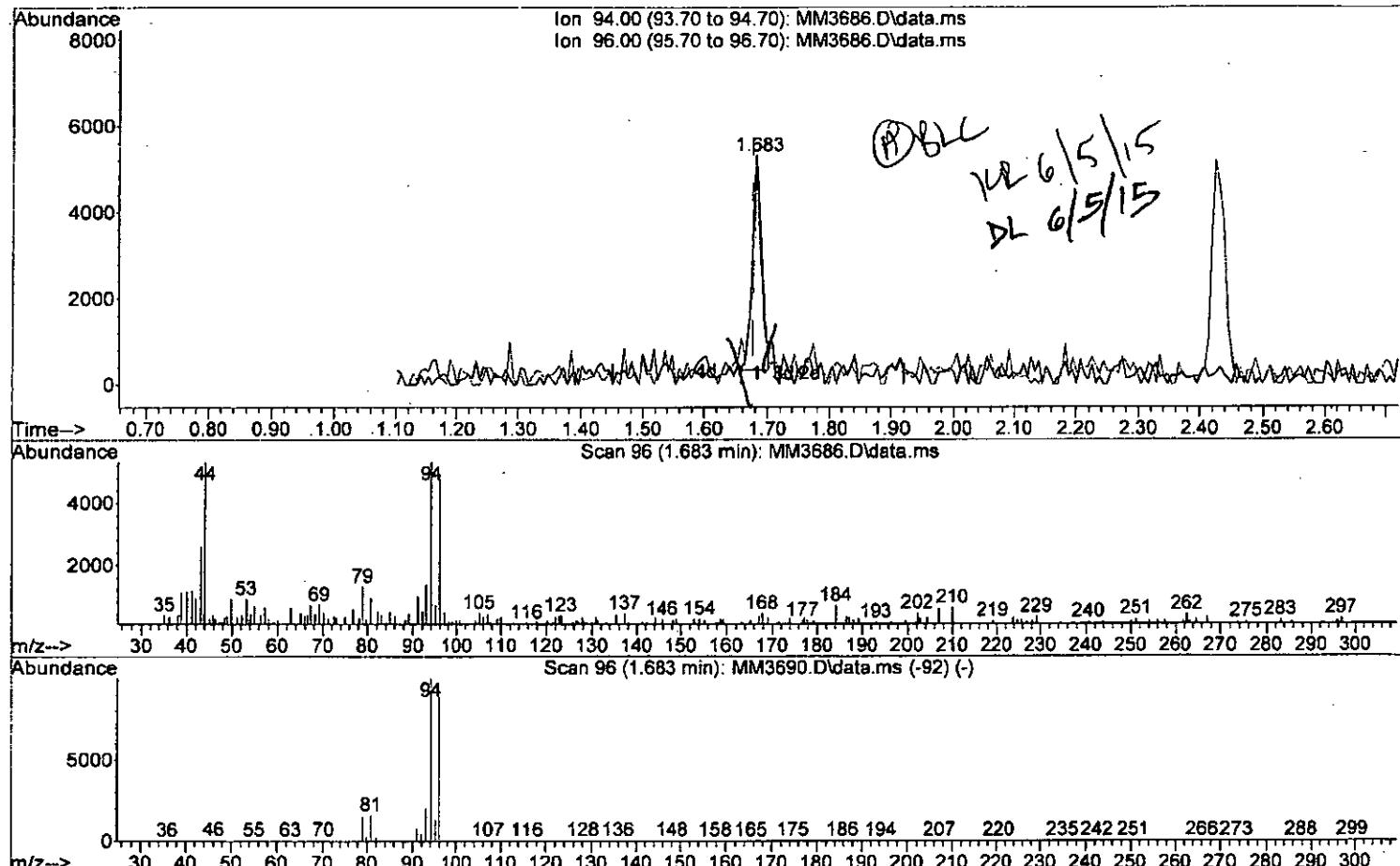
response 6423

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	90.36
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvcoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL.Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(5) Bromomethane (P)

1.683min (+0.006) 0.94 ppb m

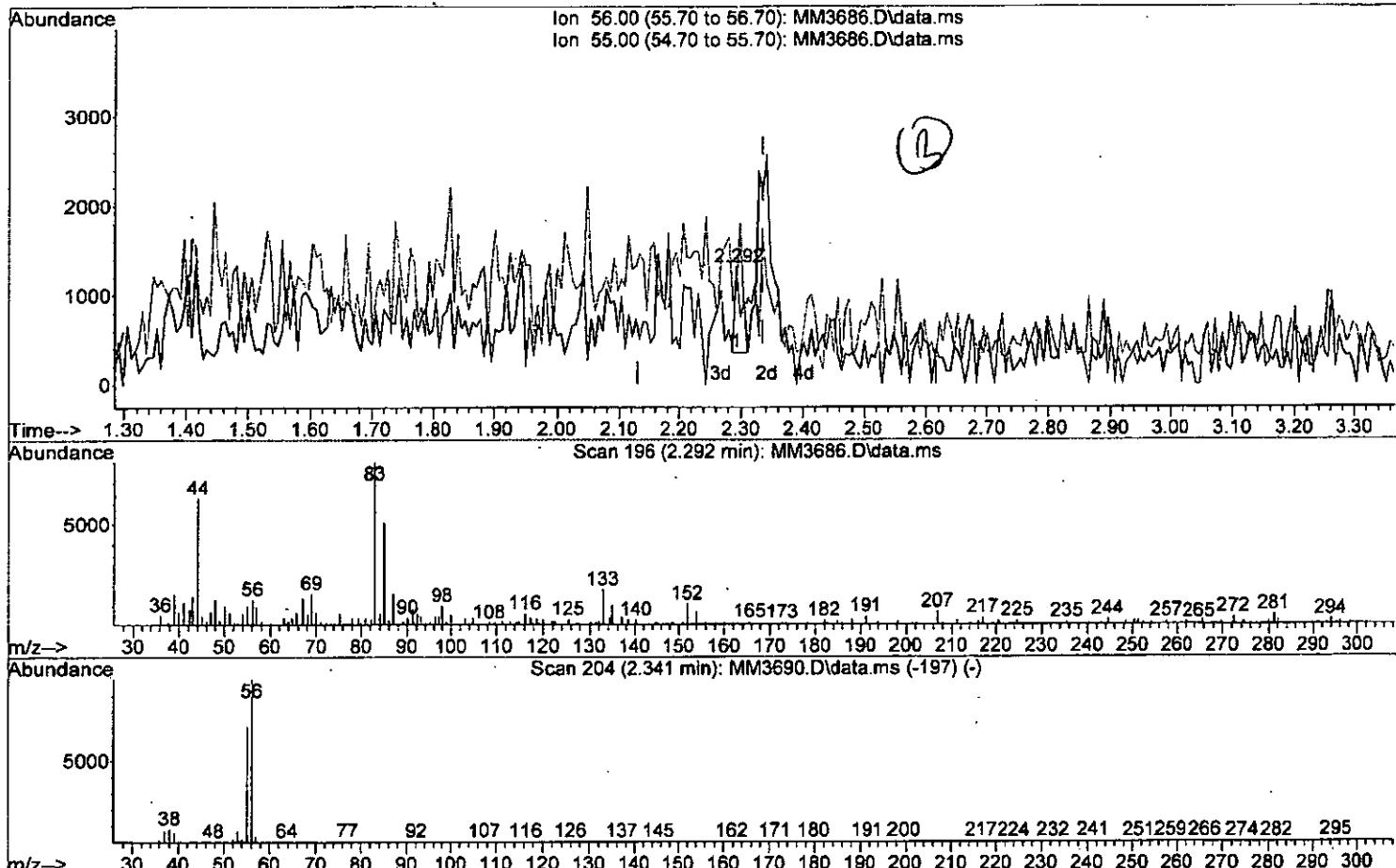
response 5149

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	90.36
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(12) Acrolein

2.292min (-0.043) 1.08 ppb

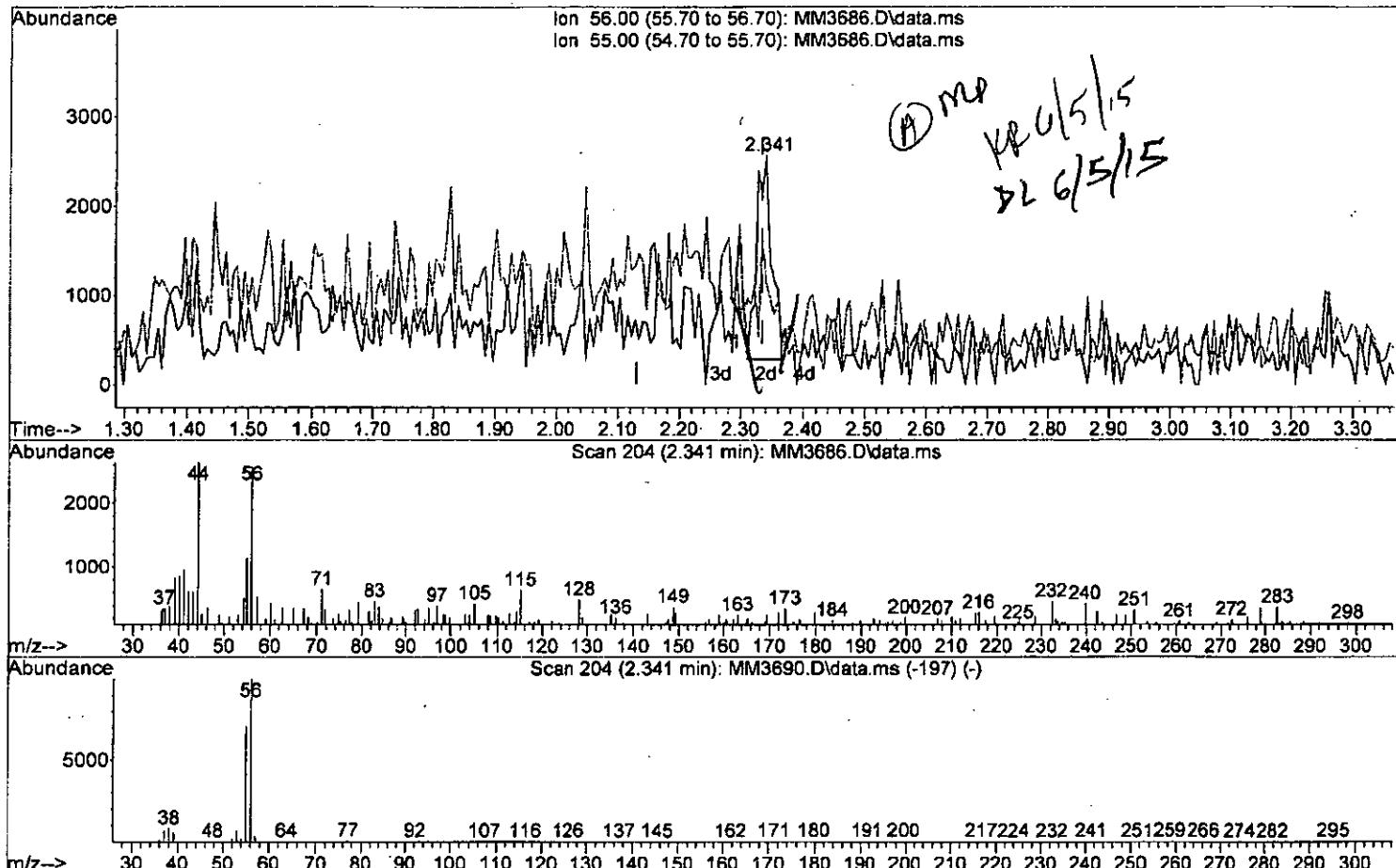
response 699

Ion	Exp%	Act%
56.00	100	100
55.00	71.60	78.79
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(12) Acrolein

2.341min (+0.006) 5.80 ppb m

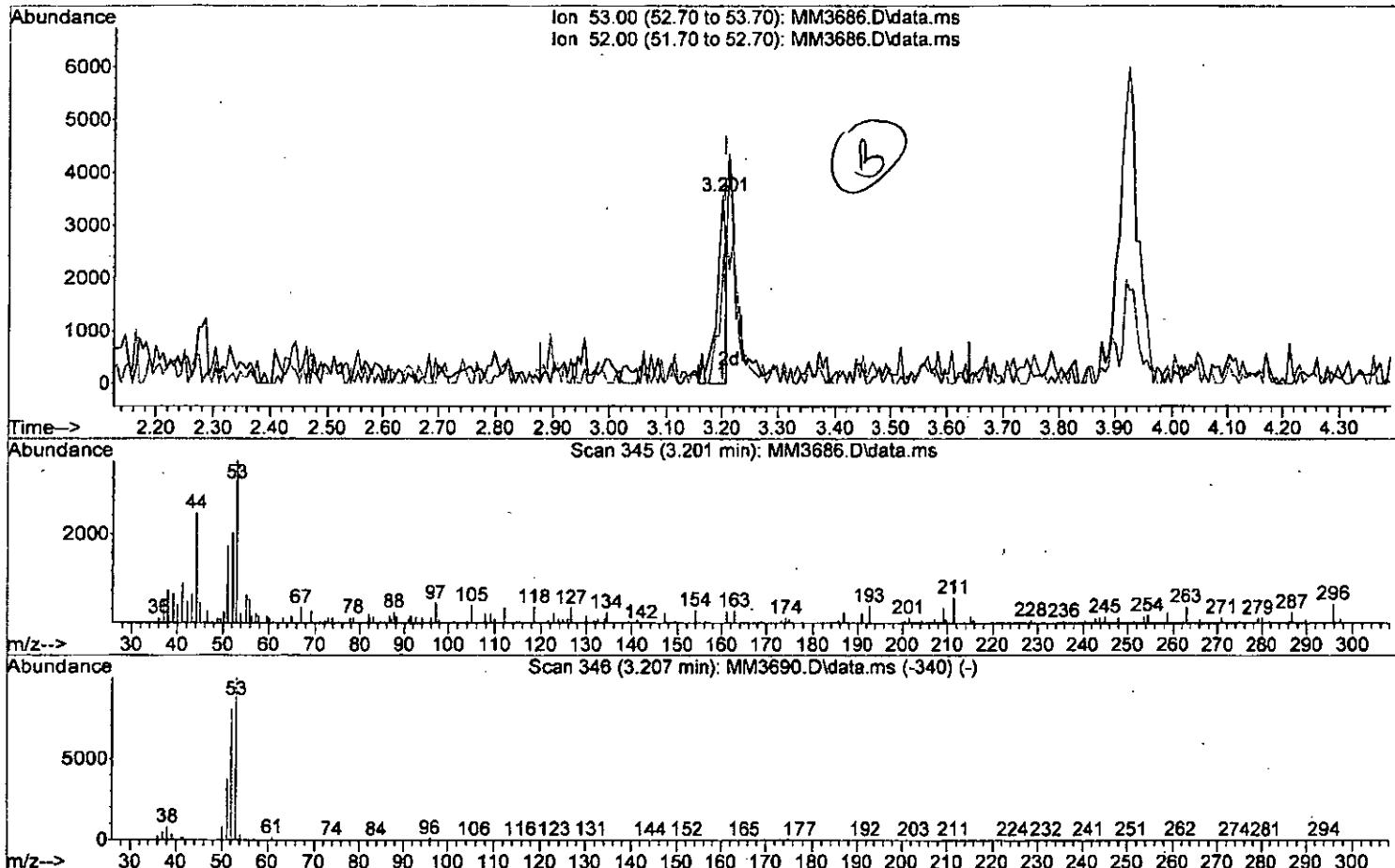
response 3763

Ion	Exp%	Act%
56.00	100	100
55.00	71.60	44.41#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUIDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12.  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUIDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(24) Acrylonitrile

3.201min (-0.005) 2.88 ppb

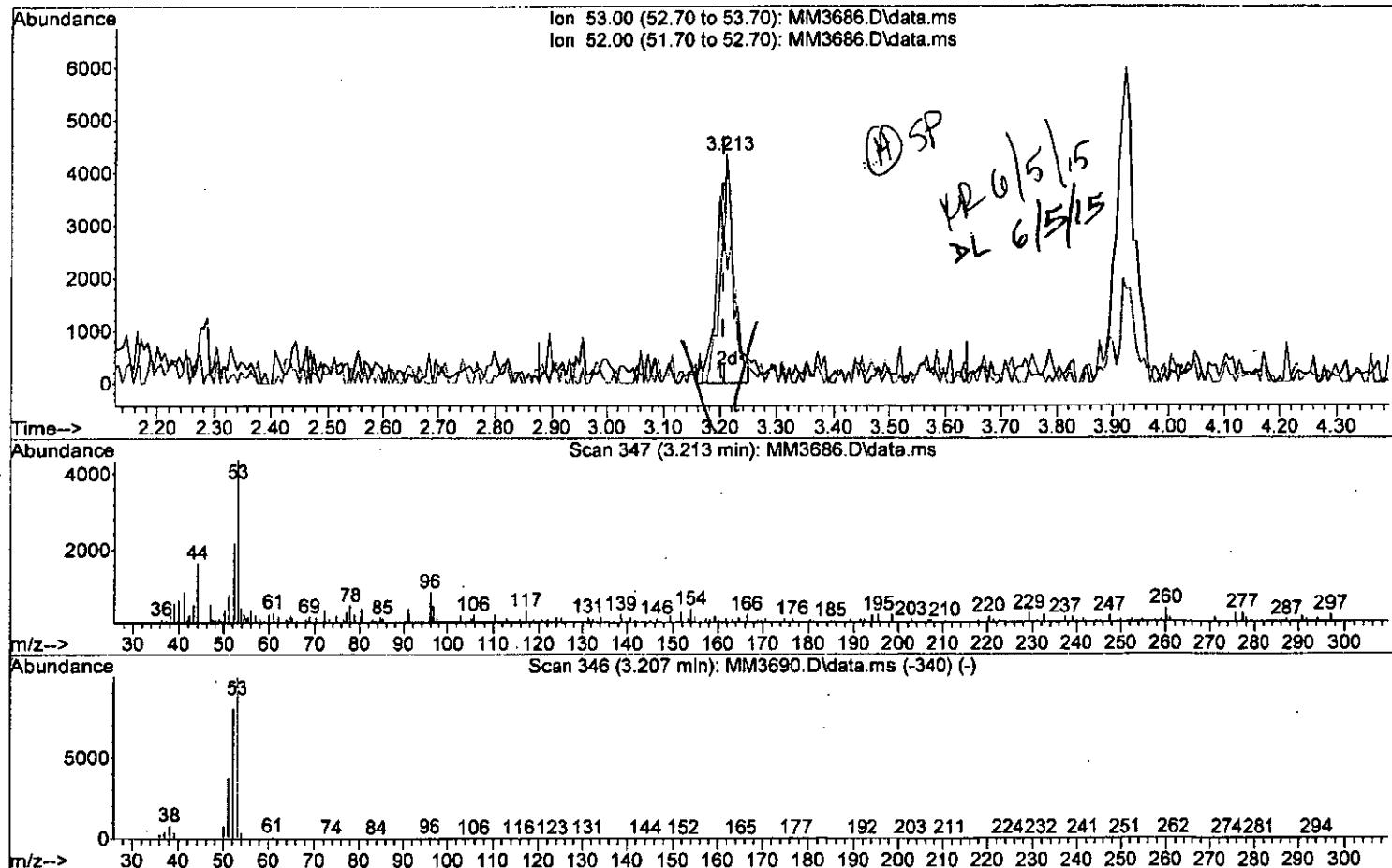
response 4153

Ion	Exp%	Act%
53.00	100	100
52.00	80.60	57.04#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

## (24) Acrylonitrile

3.213min (+0.007) 5.86 ppb m

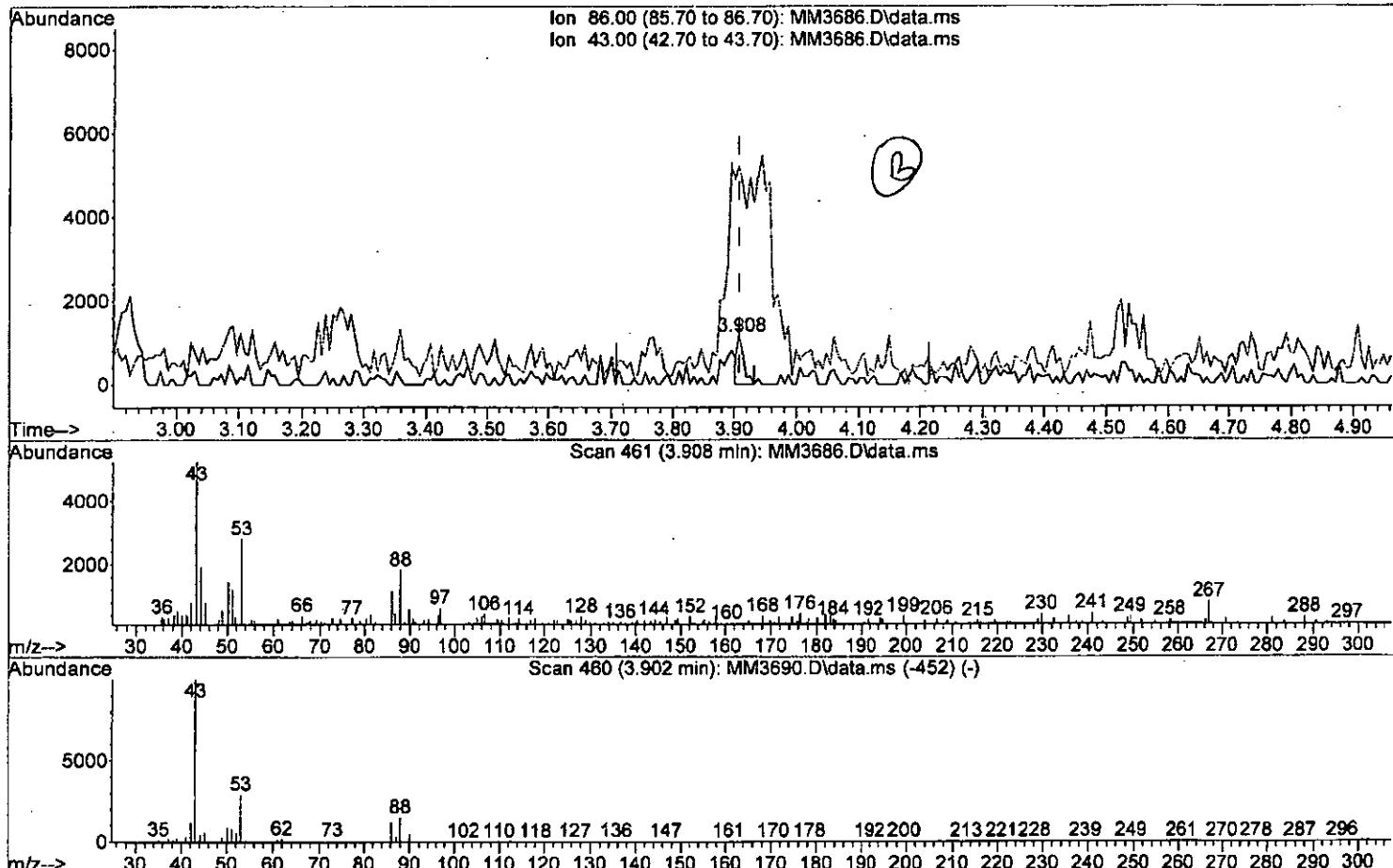
response 8438

Ion	Exp%	Act%
53.00	100	100
52.00	80.60	49.98#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(29) Vinyl Acetate

3.908min (0.000) 0.56 ppb

response 824

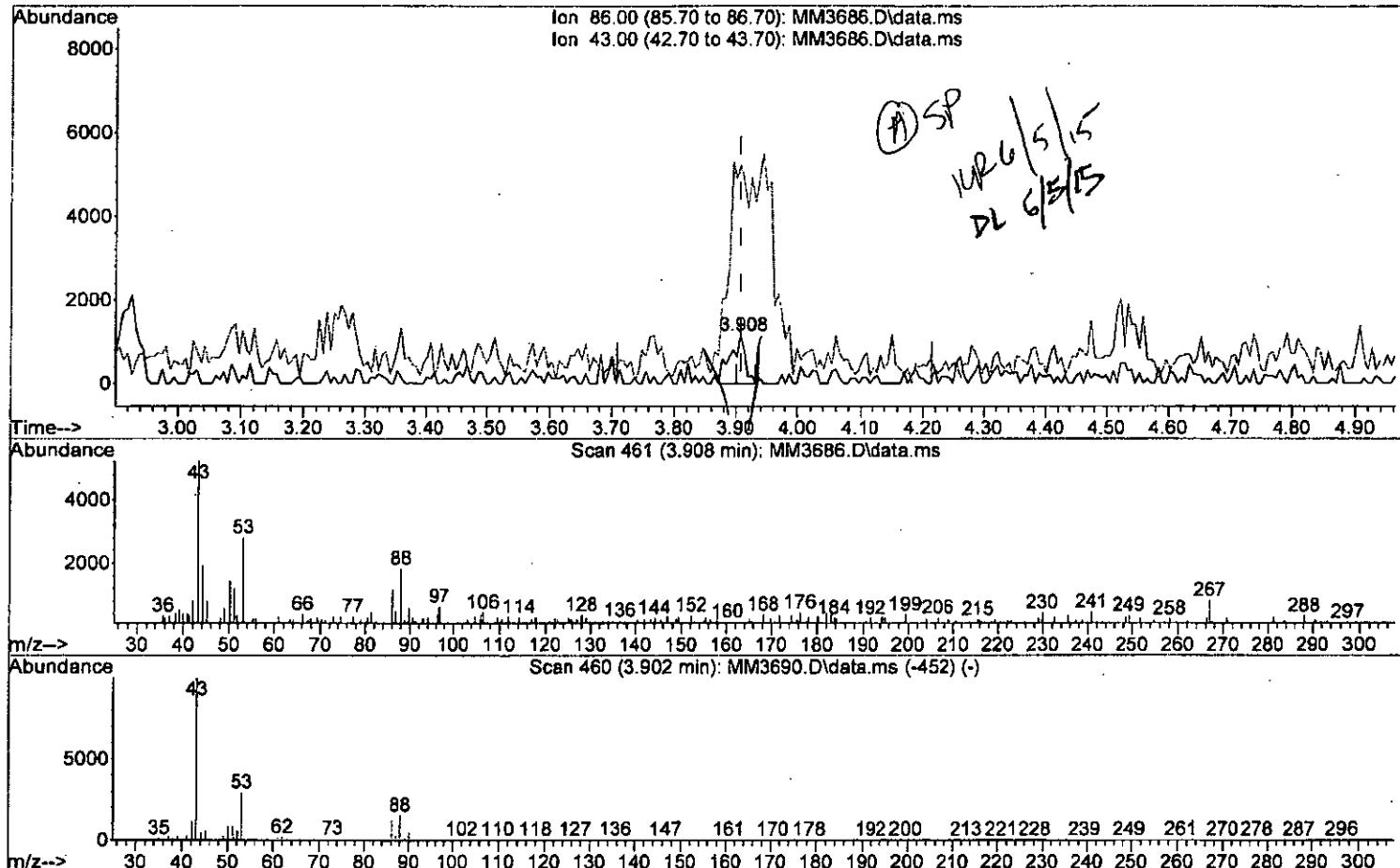
Ion	Exp%	Act%
86.00	100	100
43.00	799.60	454.00#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(29) Vinyl Acetate

3.908min (0.000) 1.34 ppb m

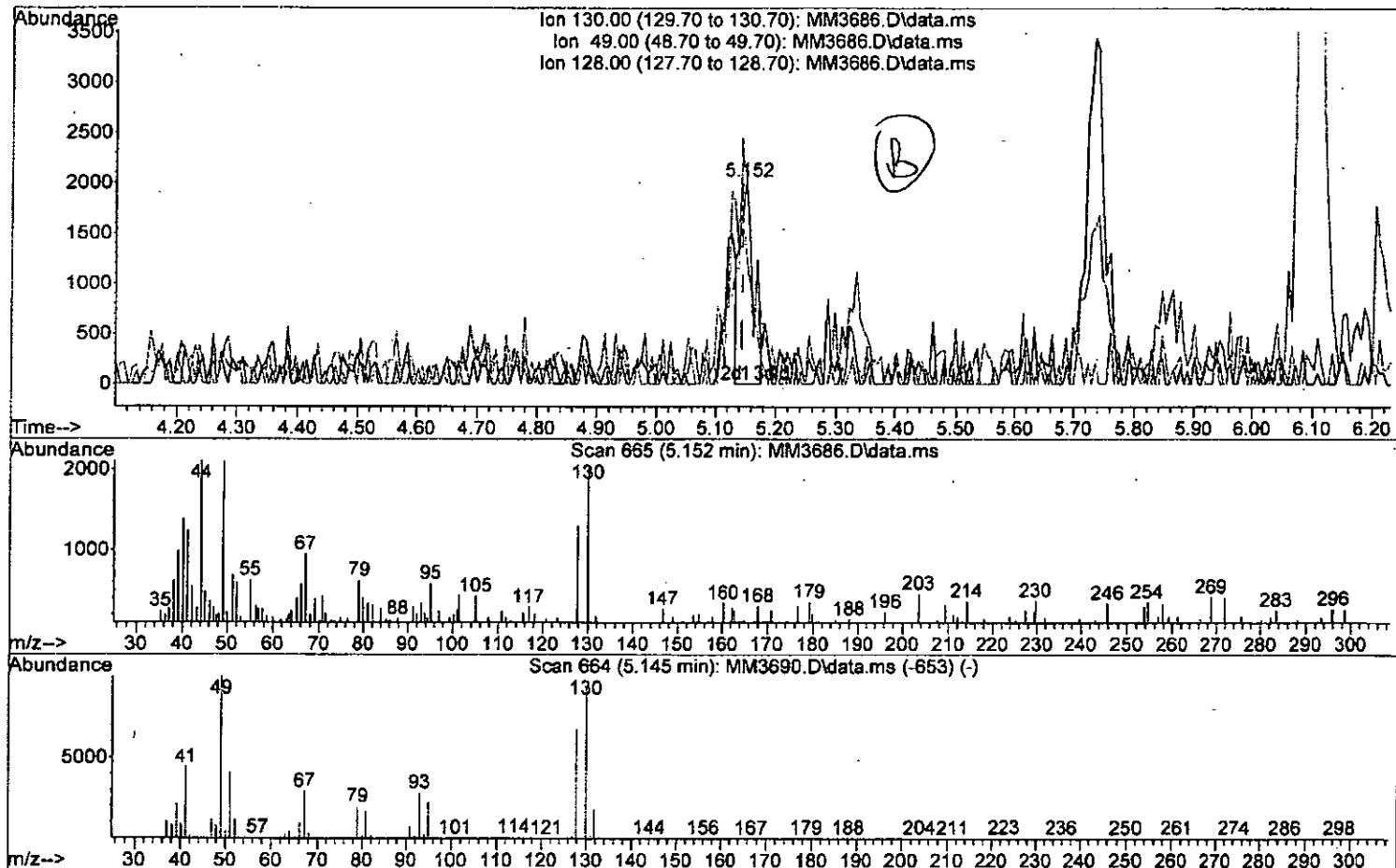
response 1958

Ion	Exp%	Act%
86.00	100	100
43.00	799.60	454.00#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(37) Bromochloromethane

5.152min (+0.006) 0.71 ppb

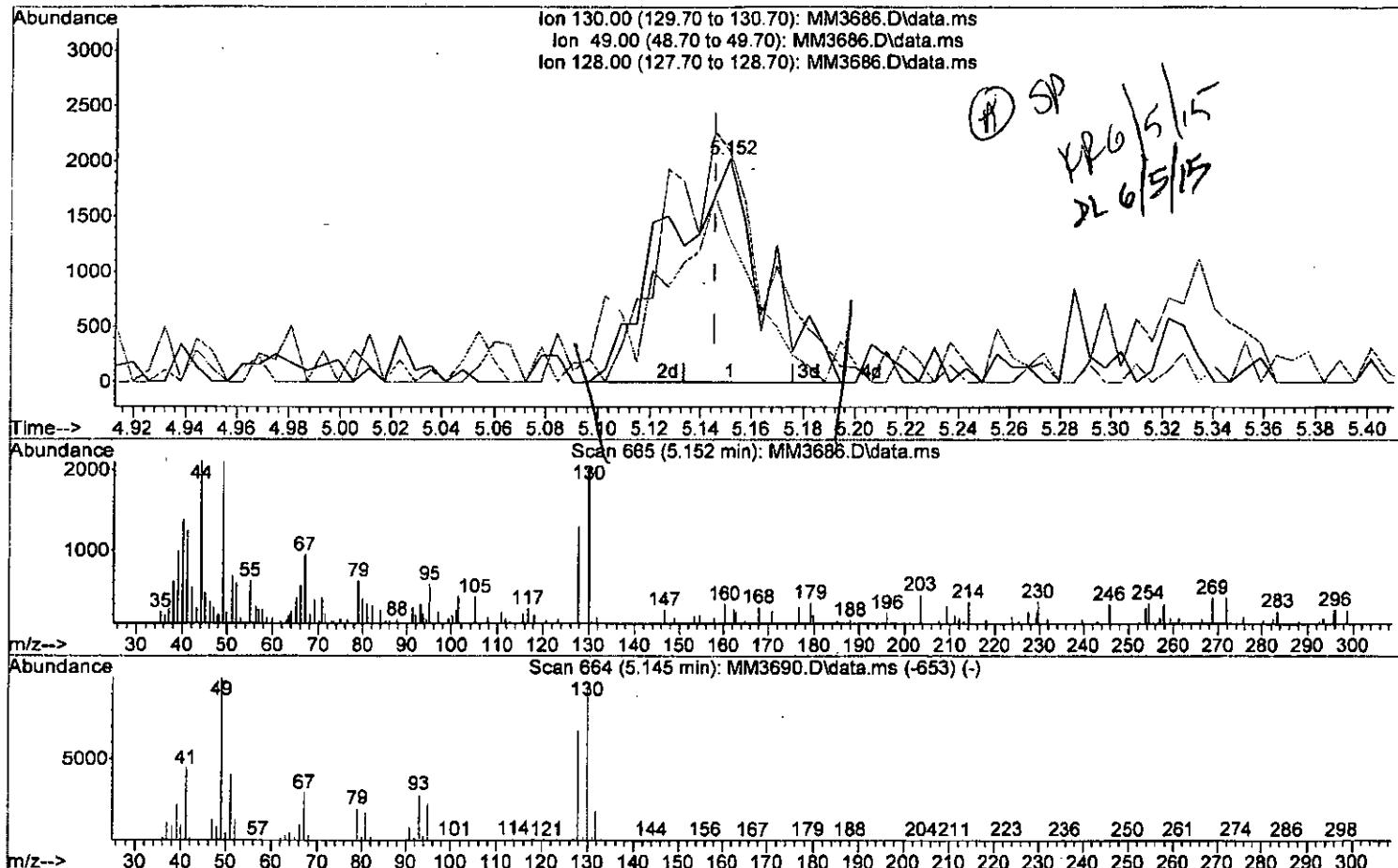
response 3095

Ion	Exp%	Act%
130.00	100	100
49.00	106.10	97.66
128.00	72.20	60.57
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(37) Bromochloromethane

5.152min (+0.006) 1.24 ppb m

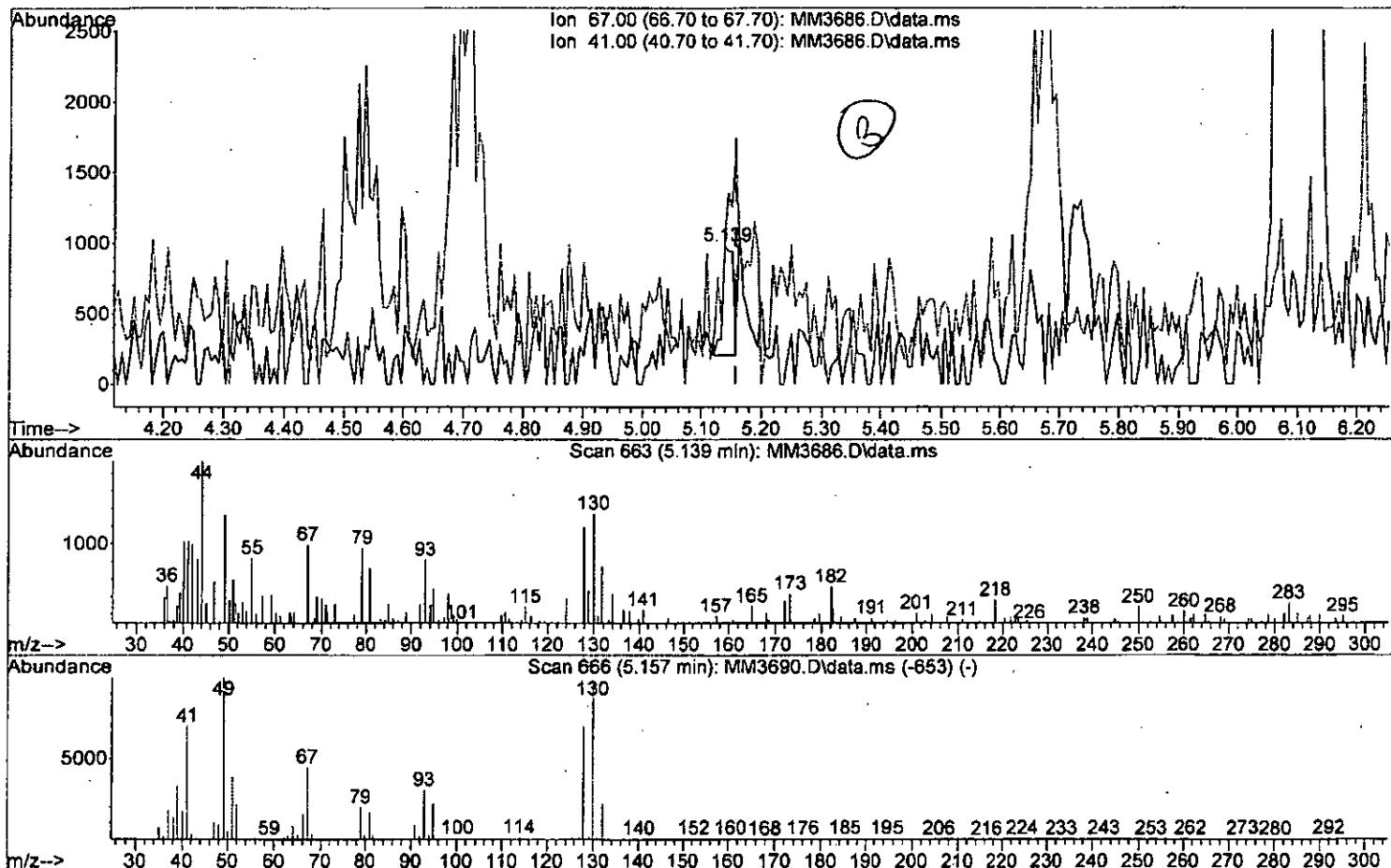
response 5385

Ion	Exp%	Act%
130.00	100	100
49.00	106.10	103.26
128.00	72.20	64.05
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(38) Methacrylonitrile

5.139min (-0.018) 0.51 ppb

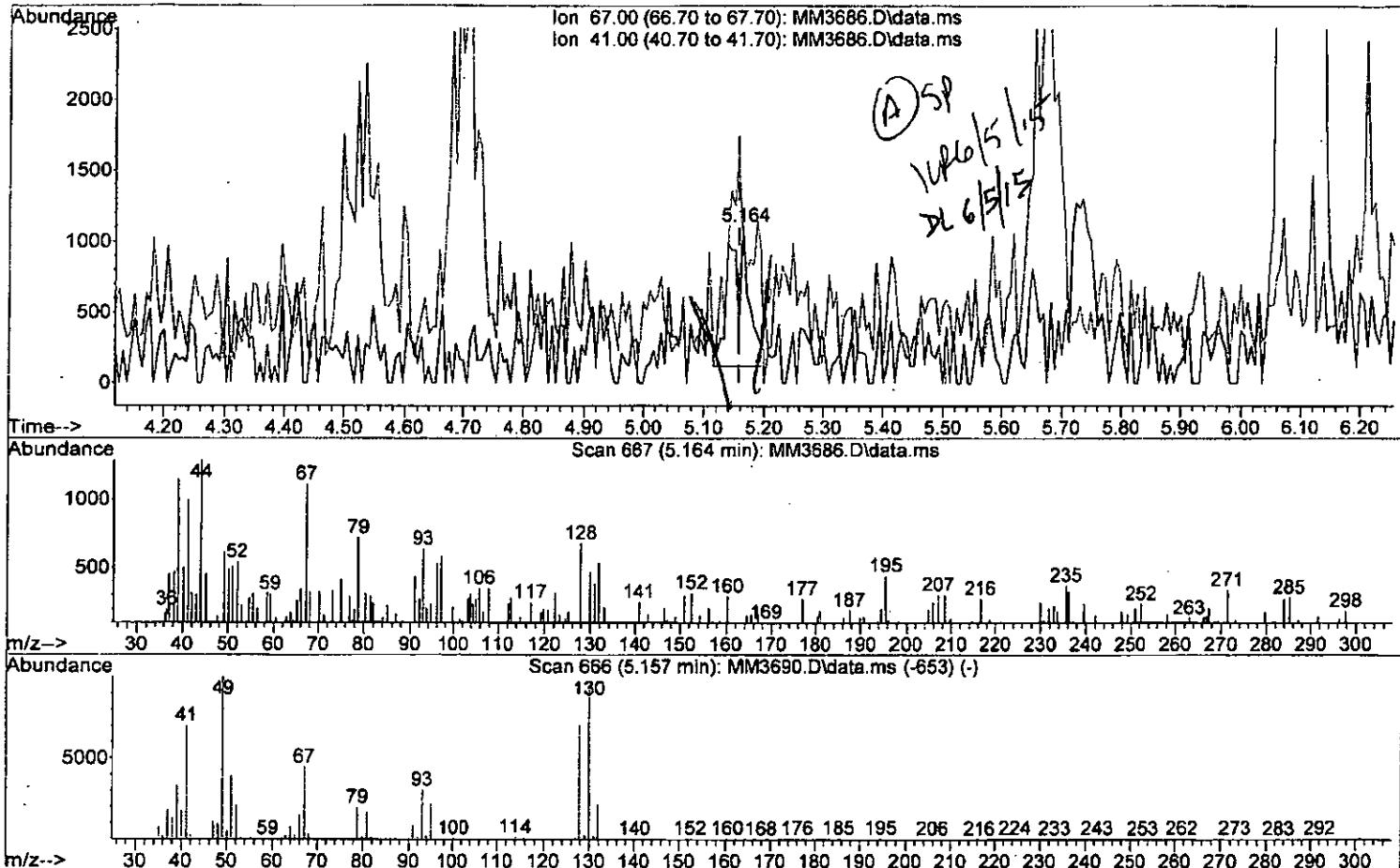
response 984

Ion	Exp%	Act%
67.00	100	100
41.00	159.00	104.89#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(38) Methacrylonitrile

5.164min (+0.006) 1.10 ppb m

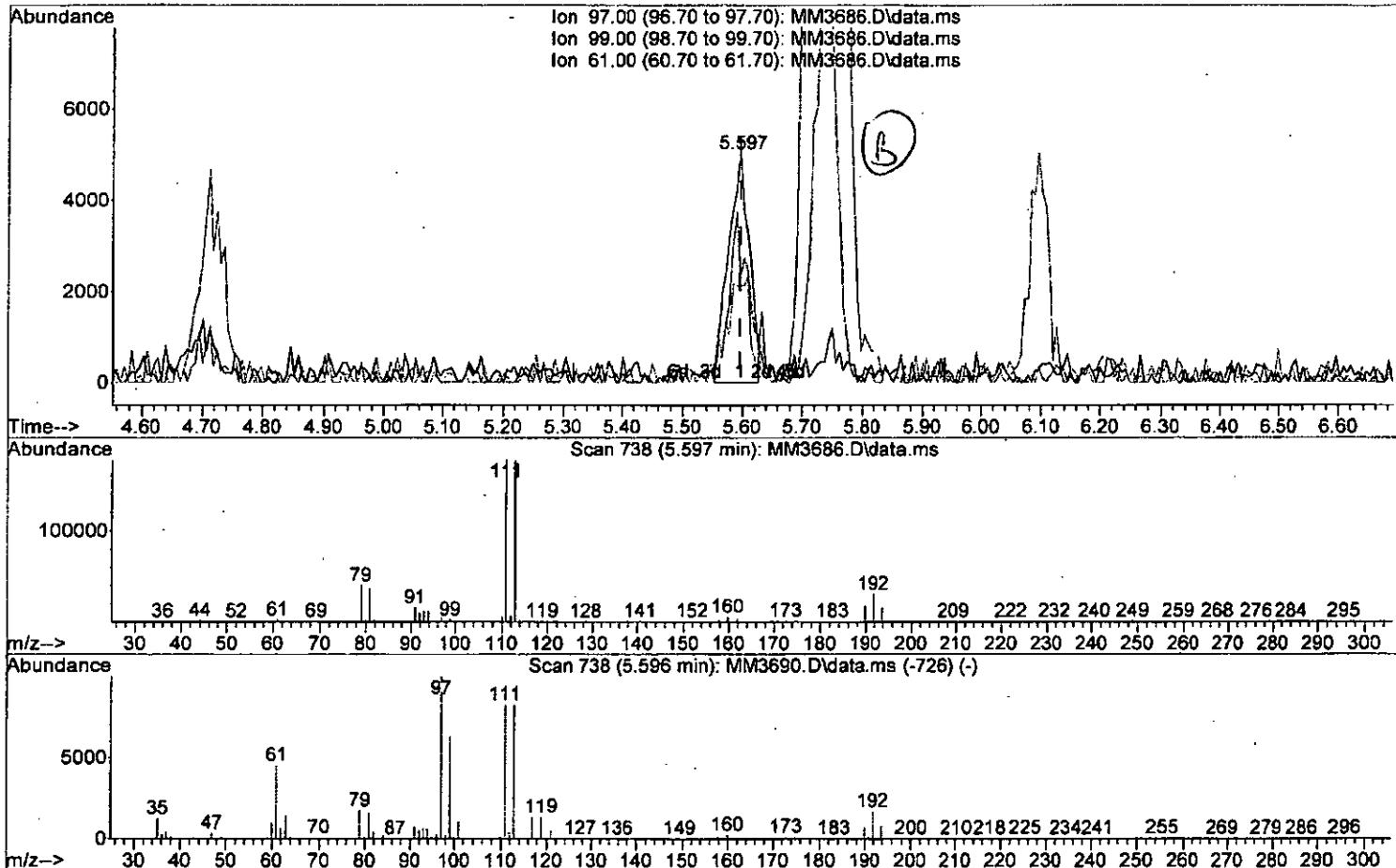
response 2127

Ion	Exp%	Act%
67.00	100	100
41.00	159.00	89.63#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.597min (-0.000) 0.98 ppb

response 12167

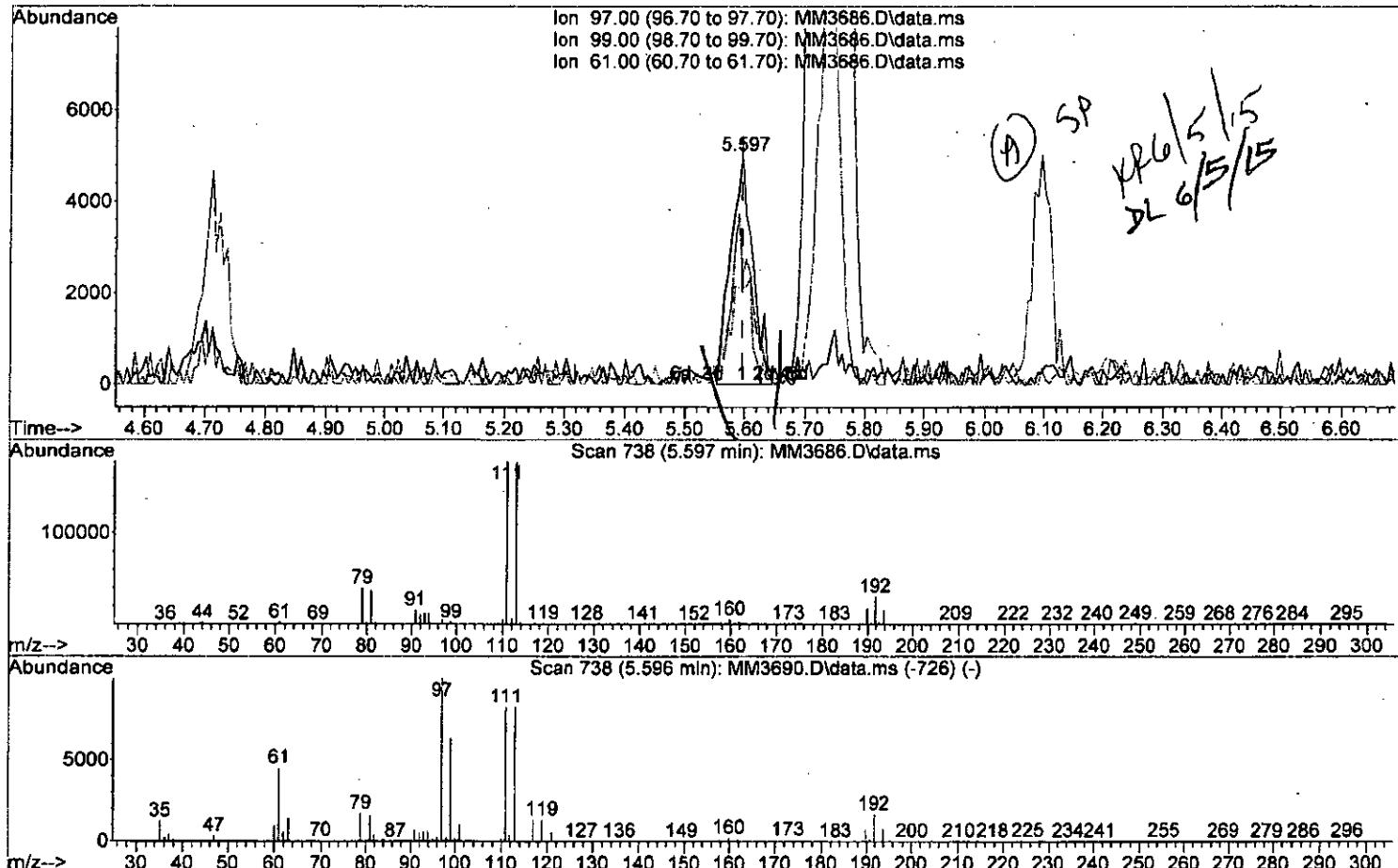
Ion	Exp%	Act%
97.00	100	100
99.00	63.80	46.15
61.00	45.30	42.20
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.597min (-0.000) 1.04 ppb m

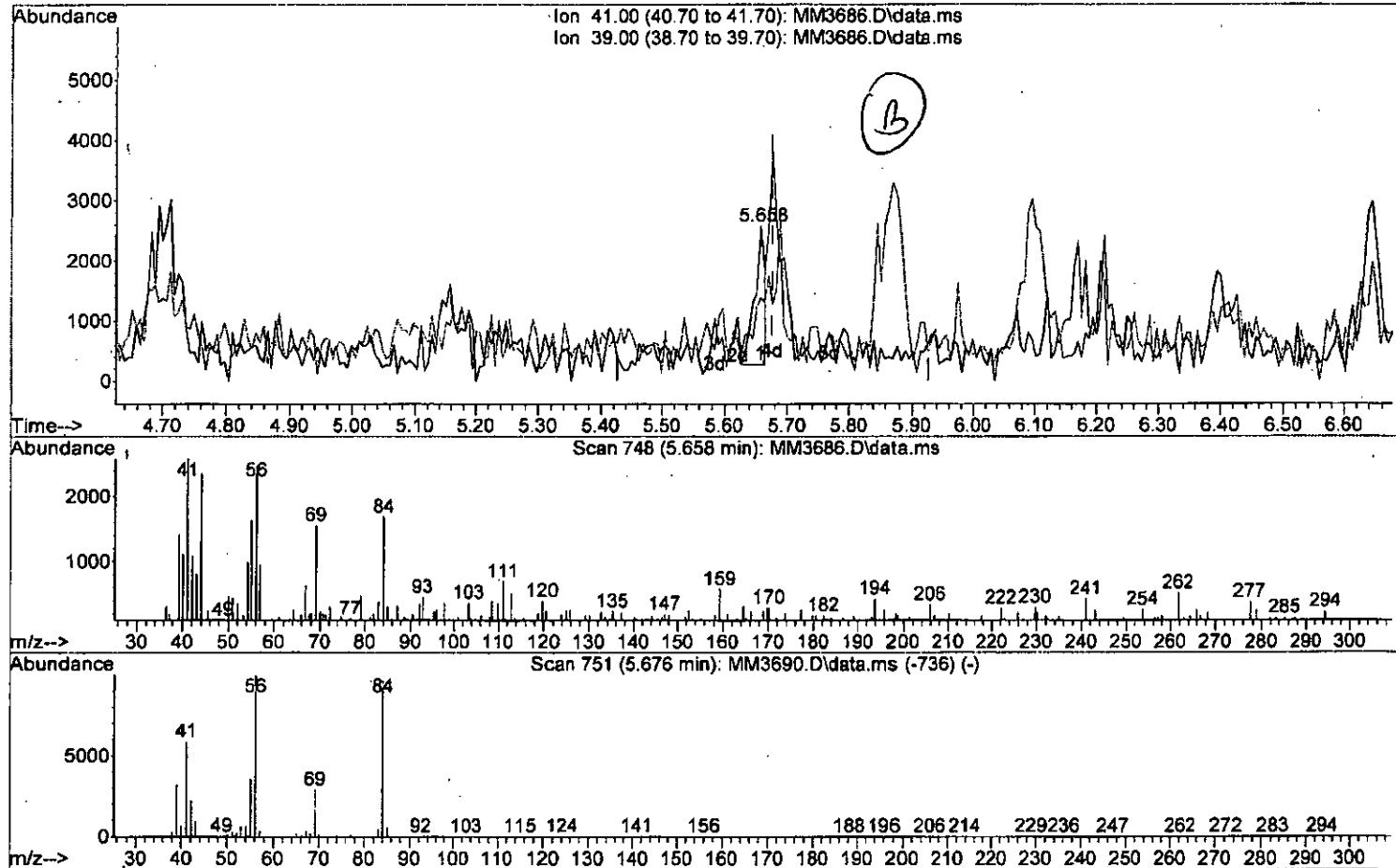
response 12945

Ion	Exp%	Act%
97.00	100	100
99.00	63.80	46.15
61.00	45.30	42.20
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.Oppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(44) Cyclohexane (P)

5.658min (-0.018) 0.37 ppb

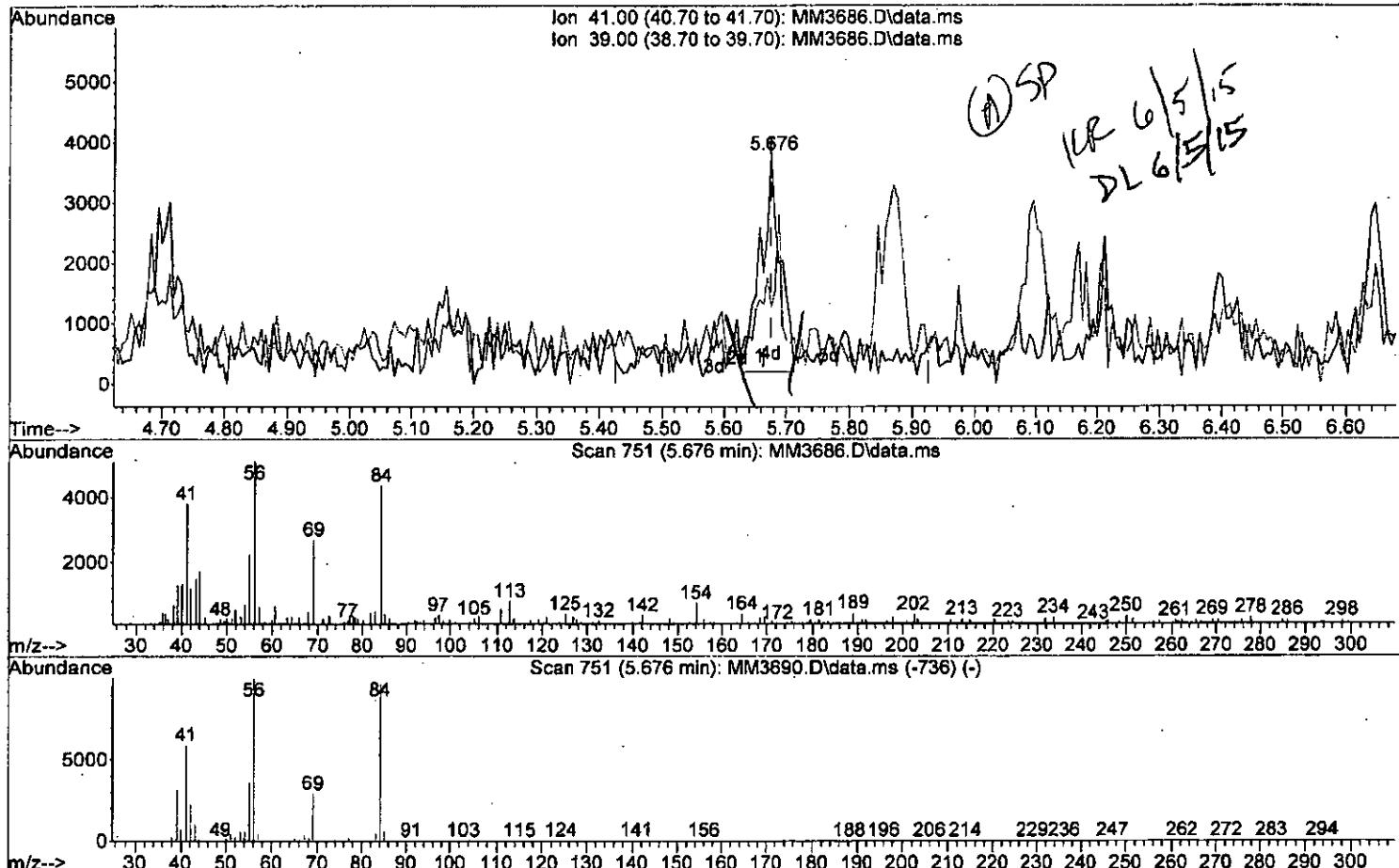
response 2518

Ion	Exp%	Act%
41.00	100	100
39.00	54.70	54.37
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(44) Cyclohexane (P)

5.676min (0.000) 1.18 ppb m

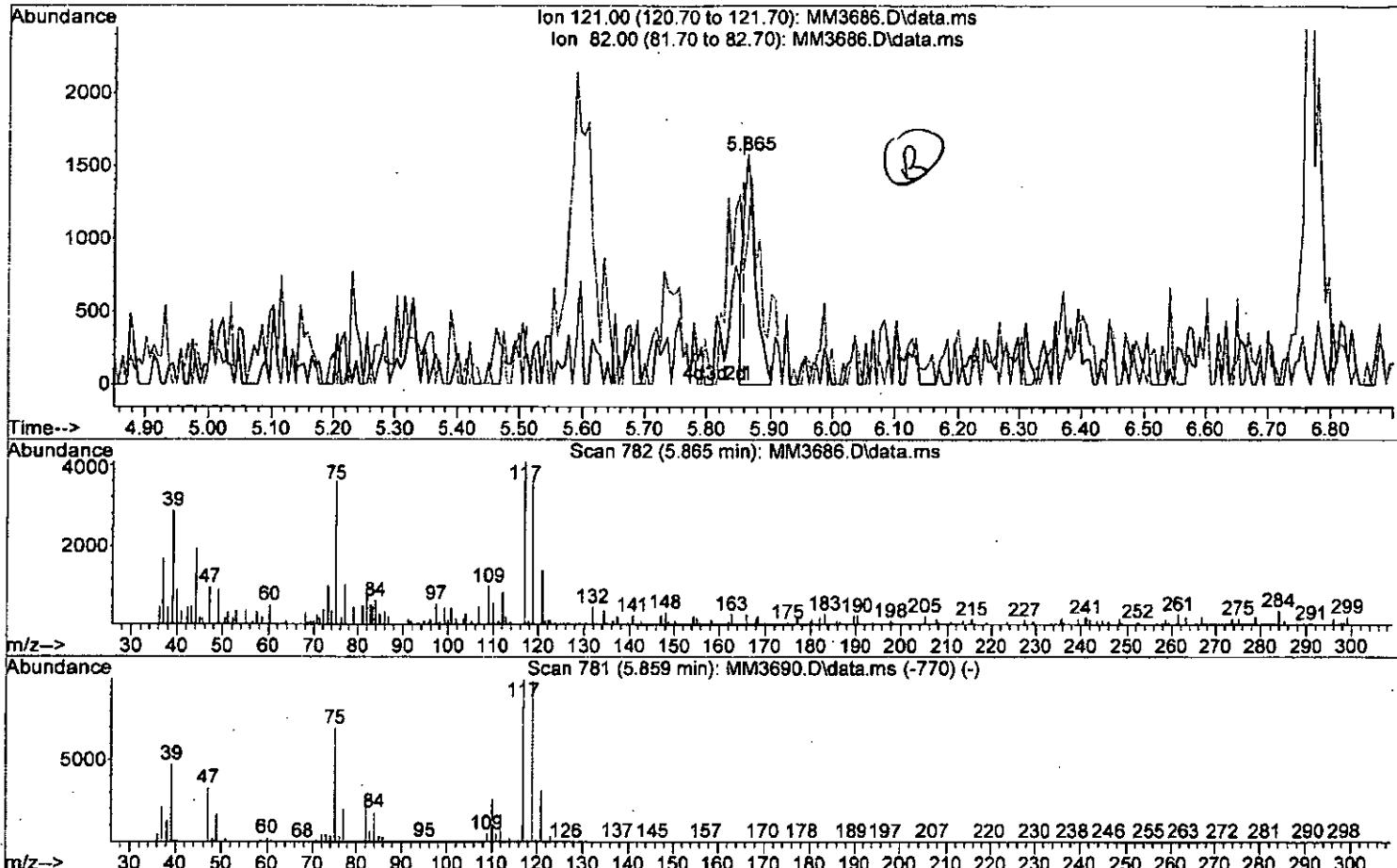
response 7950

Ion	Exp%	Act%
41.00	100	100
39.00	54.70	33.30#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(46) Carbontetrachloride (P)

5.865min (+0.006) 0.63 ppb

response 2020

Ion	Exp%	Act%
121.00	100	100
82.00	93.50	64.87#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\

Data File : MM3686.D

Acq On : 4 Jun 2015 1:10 pm

Operator : K.Ruest

Sample : 1.0ppb

Misc : 8260 WATER ICAL

ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

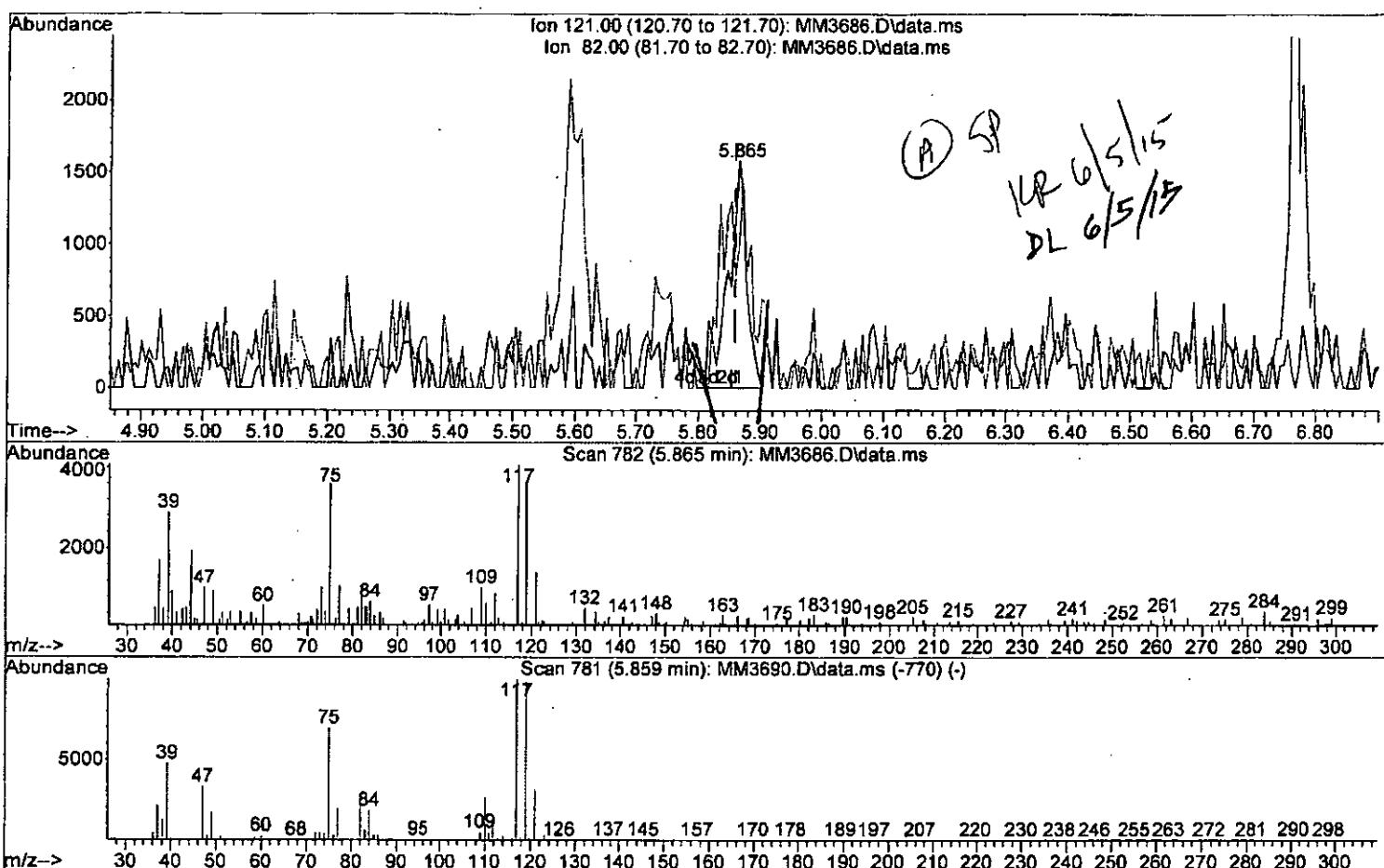
Quant Time: Jun 05 08:47:37 2015

Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 08:46:49 2015

Response via : Initial Calibration



TIC: MM3686.D\data.ms

(46) Carbontetrachloride (P)

5.865min (+0.006) 1.02 ppb m

response 3282

Ion Exp% Act%

121.00 100 100

82.00 93.50 72.81#

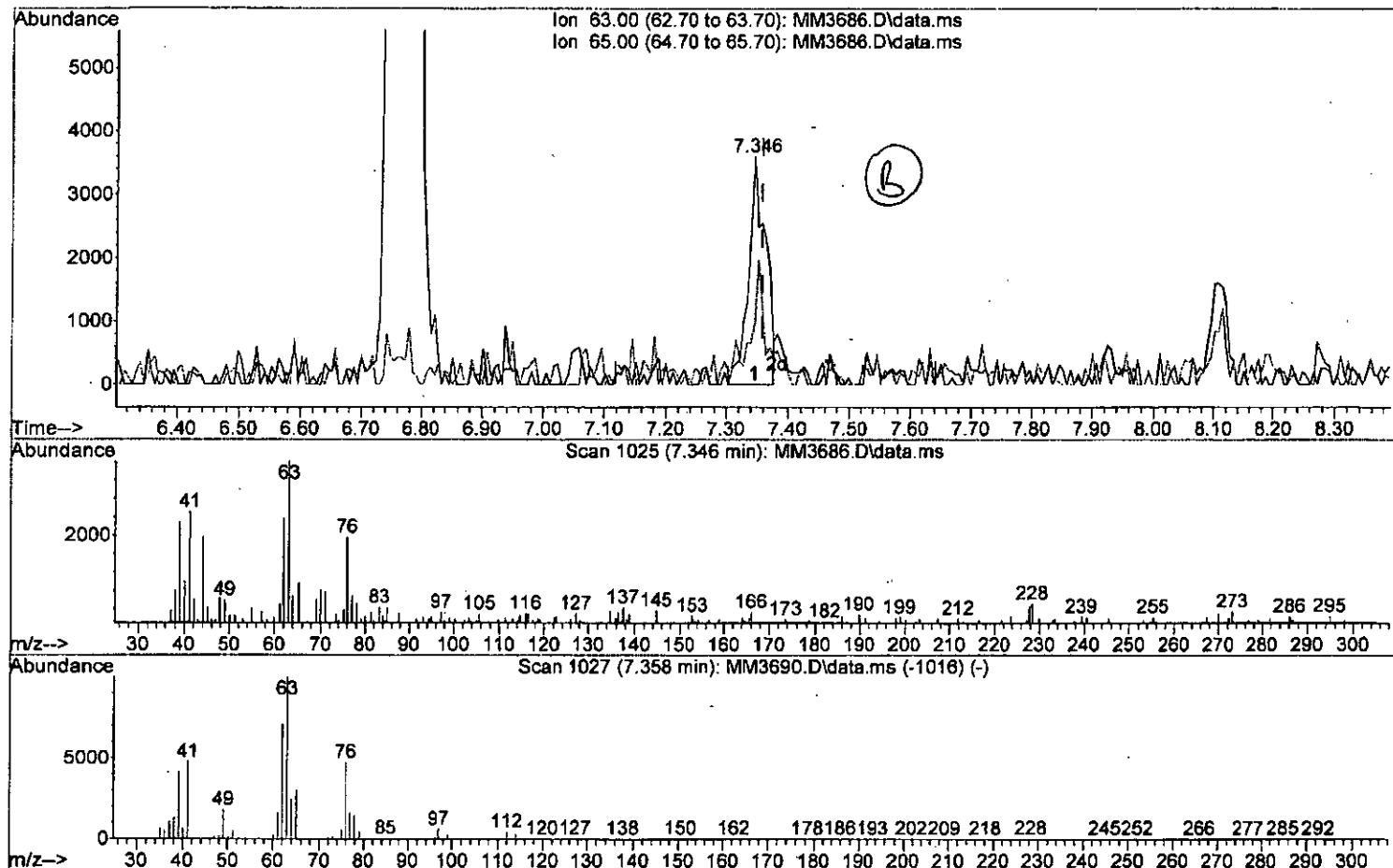
0.00 0.00 0.00

0.00 0.00 0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(56) 1,2-Dicpropane (P)

7.346min (-0.012) 0.99 ppb

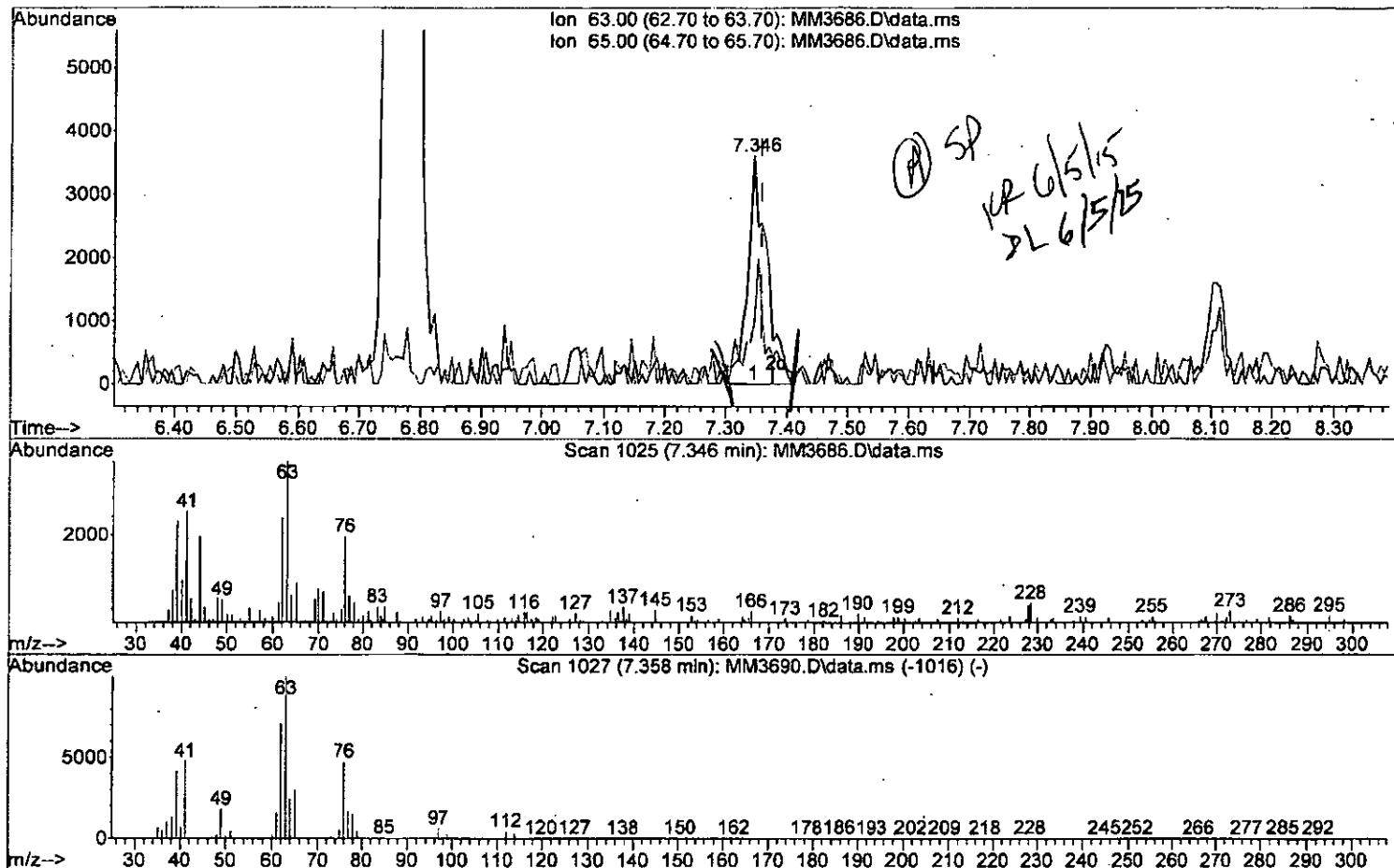
response 6957

Ion	Exp%	Act%
63.00	100	100
65.00	30.60	26.64
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(56) 1,2-Dicloropropane (P)

7.346min (-0.012) 1.11 ppb m

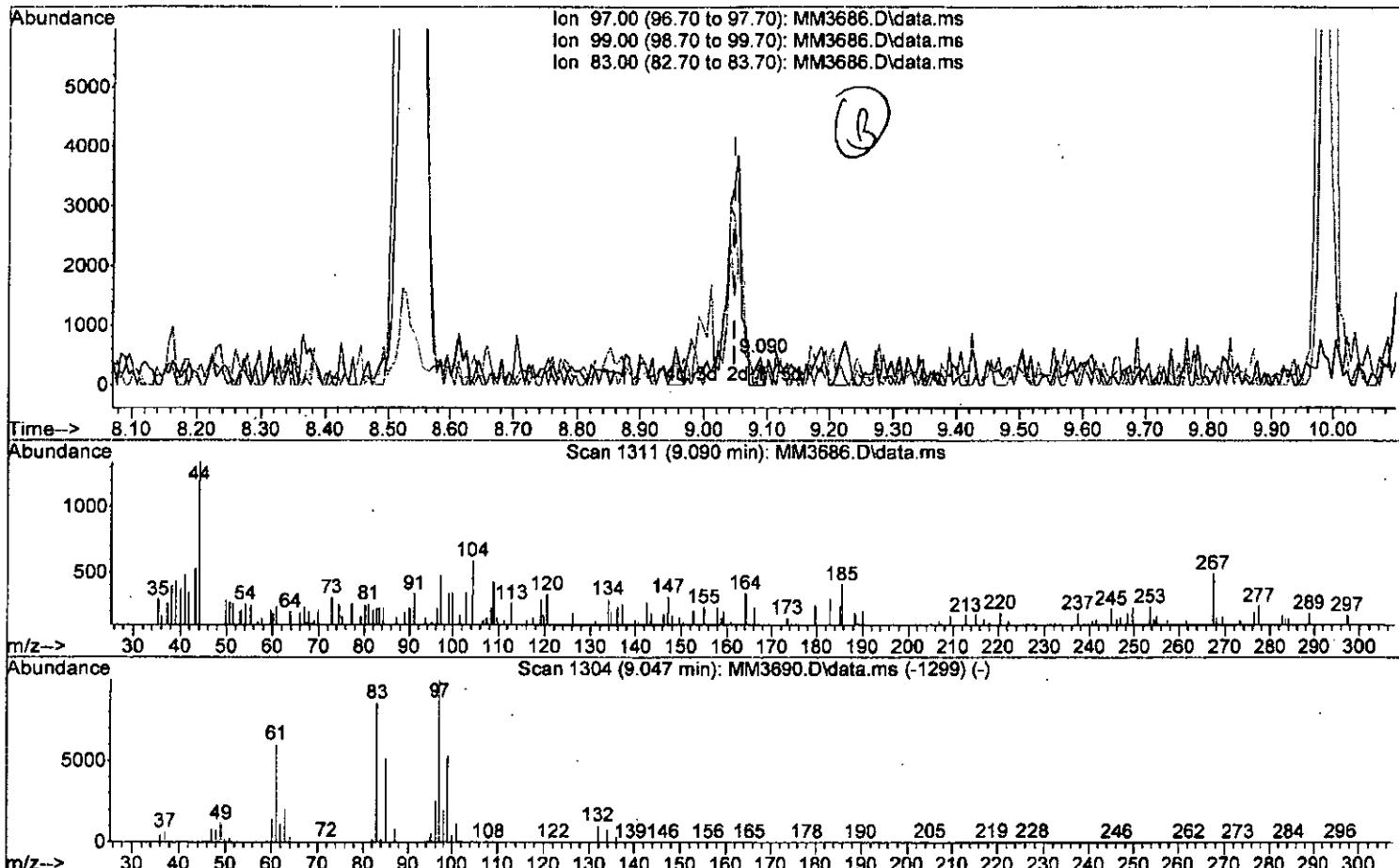
response 7794

Ion	Exp%	Act%
63.00	100	100
65.00	30.60	26.64
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(69) 1,1,2-Trichloroethane (P)

0.090min (+0.043) 0.07 ppb

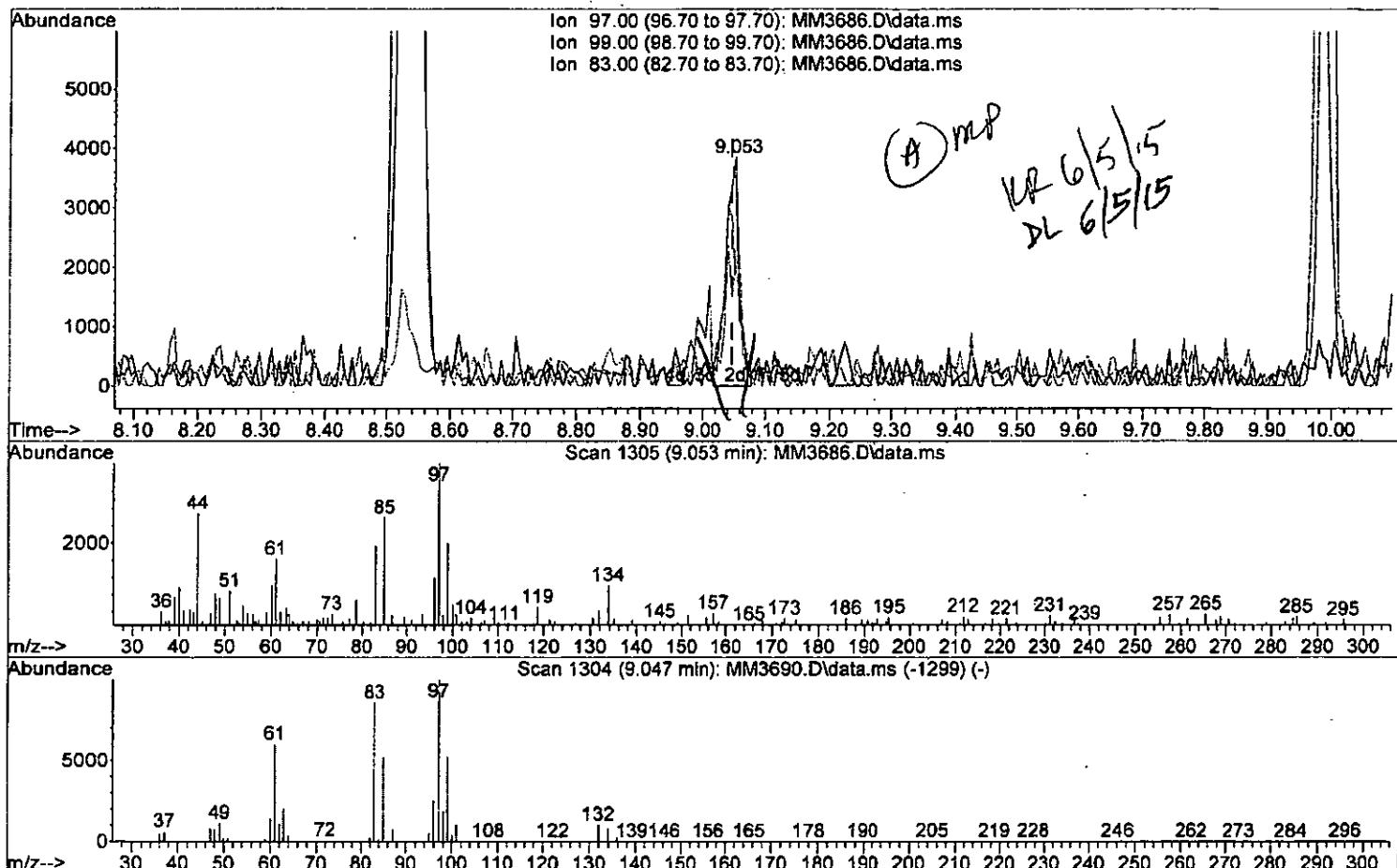
response 356

Ion	Exp%	Act%
97.00	100	100
99.00	59.90	71.25
83.00	85.40	93.87
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvao12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(89) 1,1,2-Trichloroethane (P)

9.053min (+0.006) 1.03 ppb m

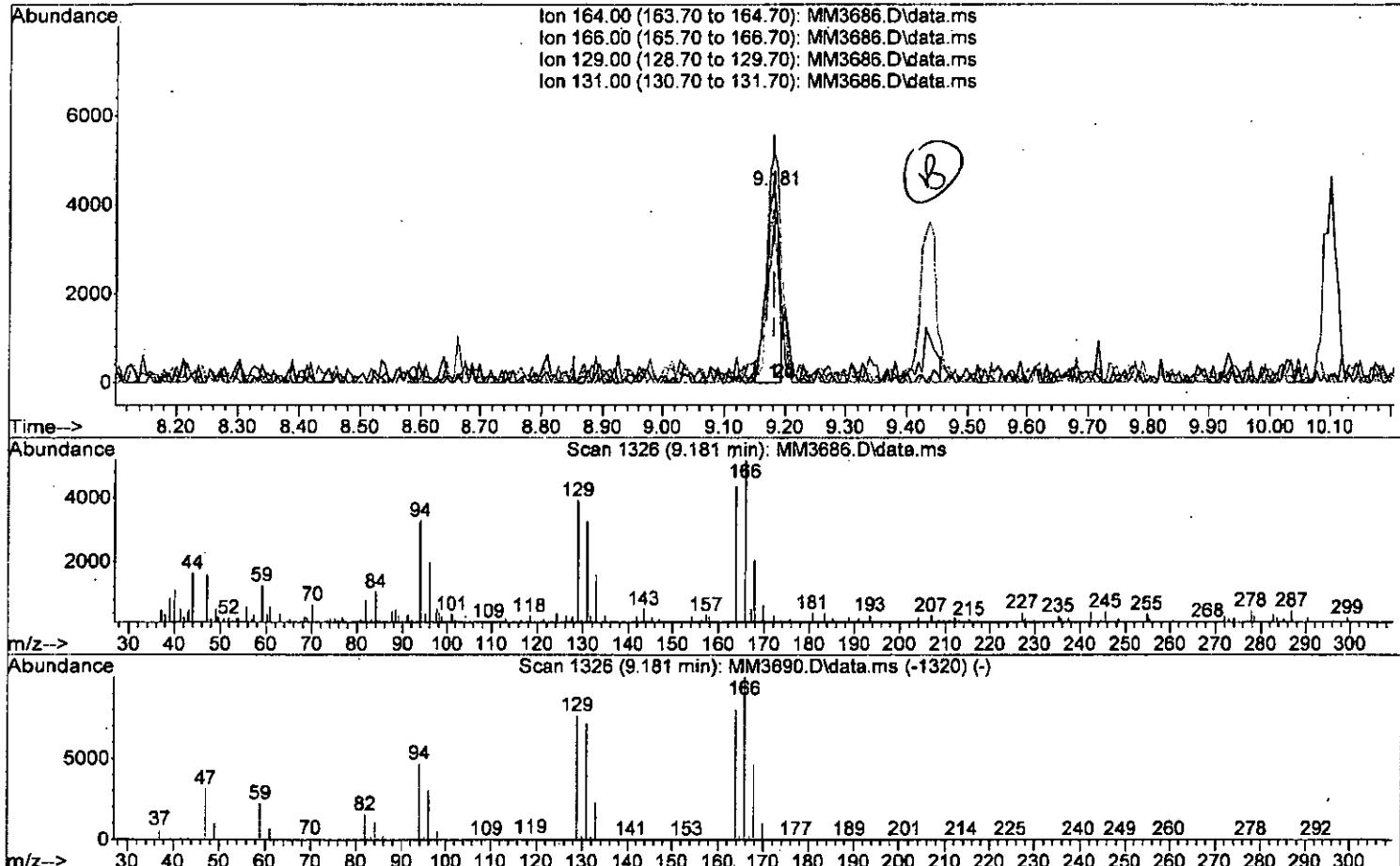
response 5508

Ion	Exp%	Act%
97.00	100	100
99.00	59.90	51.65
83.00	85.40	50.01#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(72) Tetrachloroethene (P)

9.181min (-0.000) 0.93 ppb

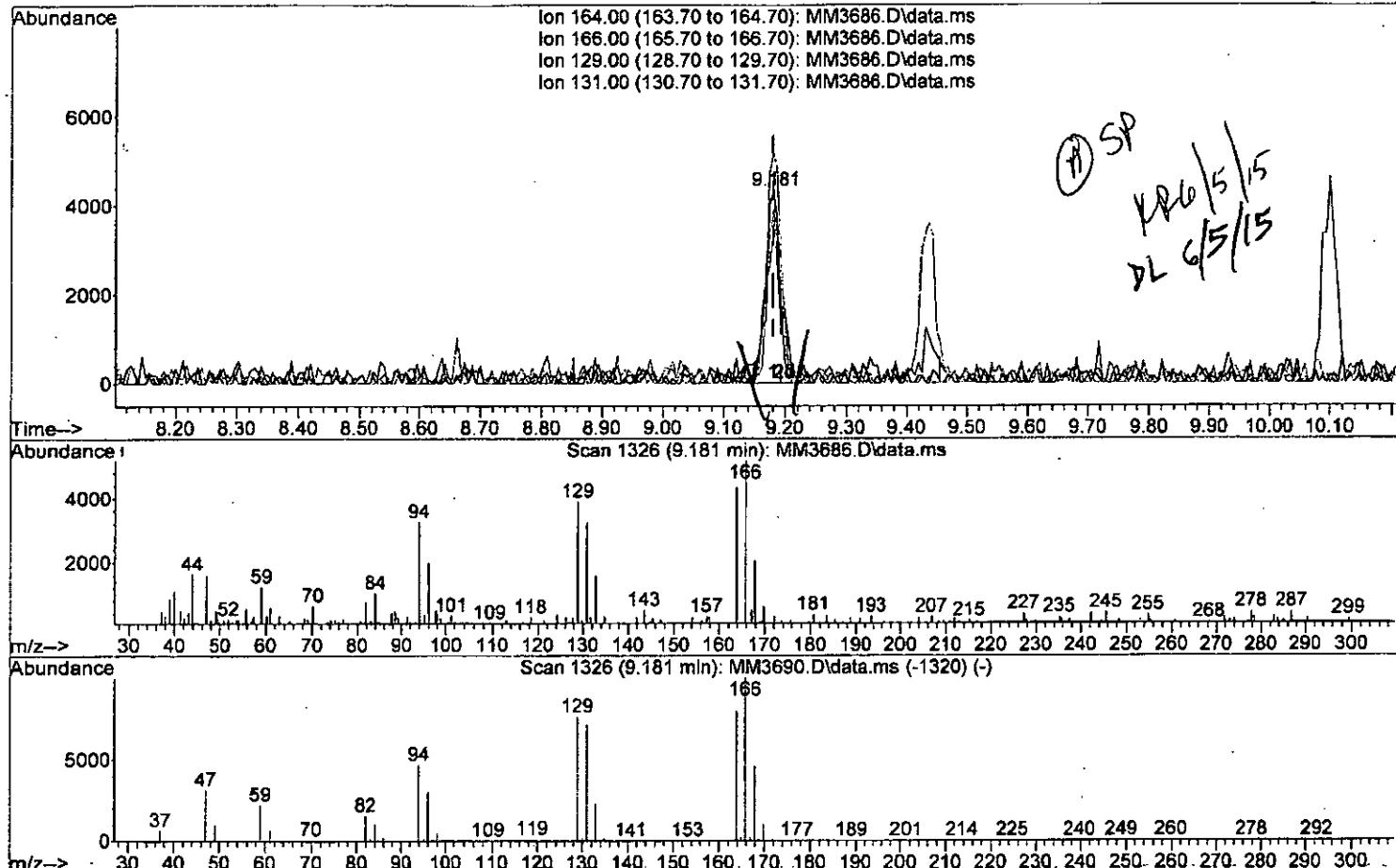
response 5989

Ion	Exp%	Act%
164.00	100	100
166.00	125.00	118.95
129.00	95.20	89.79
131.00	89.40	81.53

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(72) Tetrachloroethene (P)

9.181min (-0.000) 1.11 ppb m

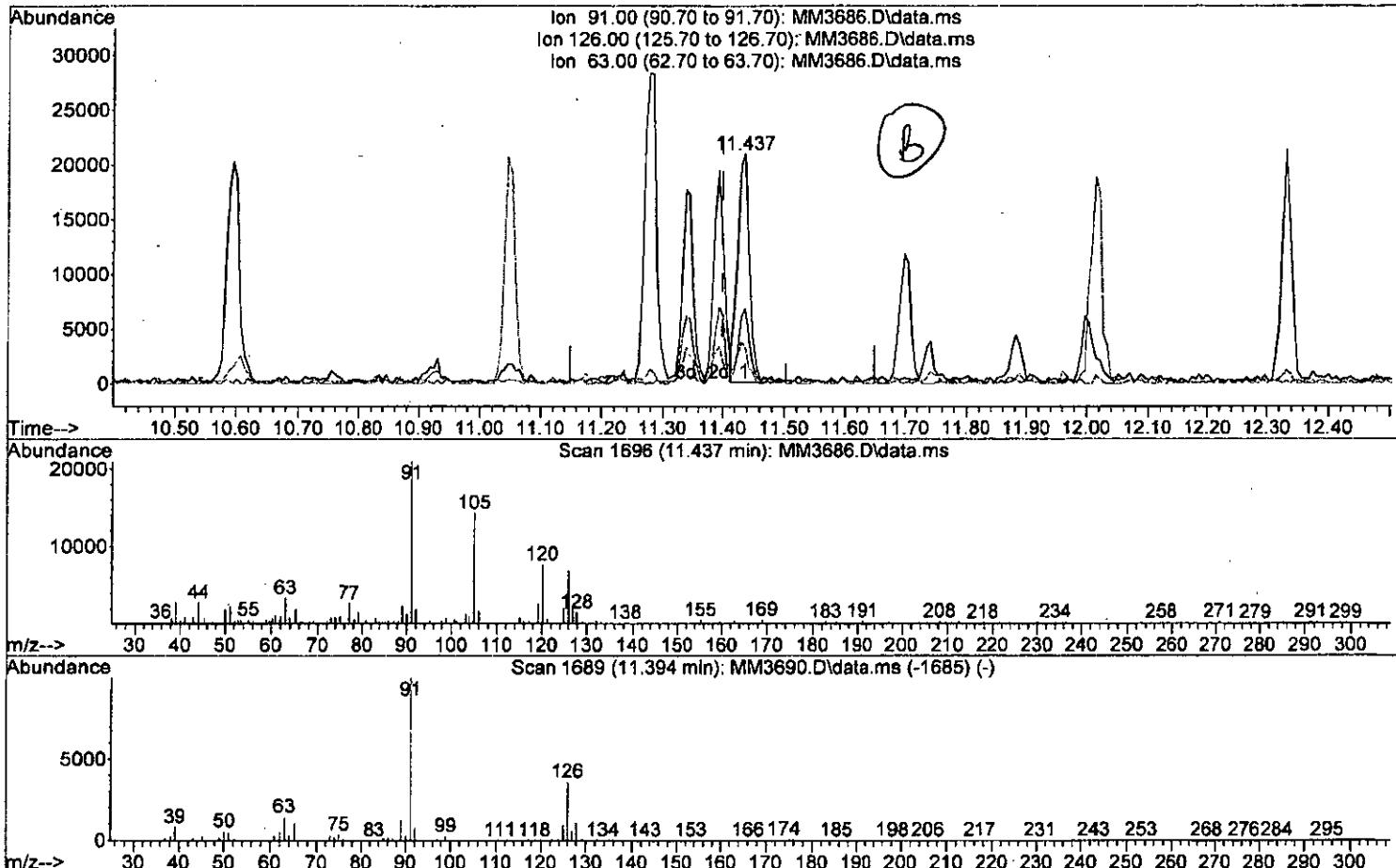
response 7062

Ion	Exp%	Act%
164.00	100	100
166.00	125.00	118.95
129.00	95.20	89.79
131.00	89.40	74.73

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.Oppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



(97) 3-Chlorotoluene

11.437min (+0.037) 1.11 ppb

response 28099

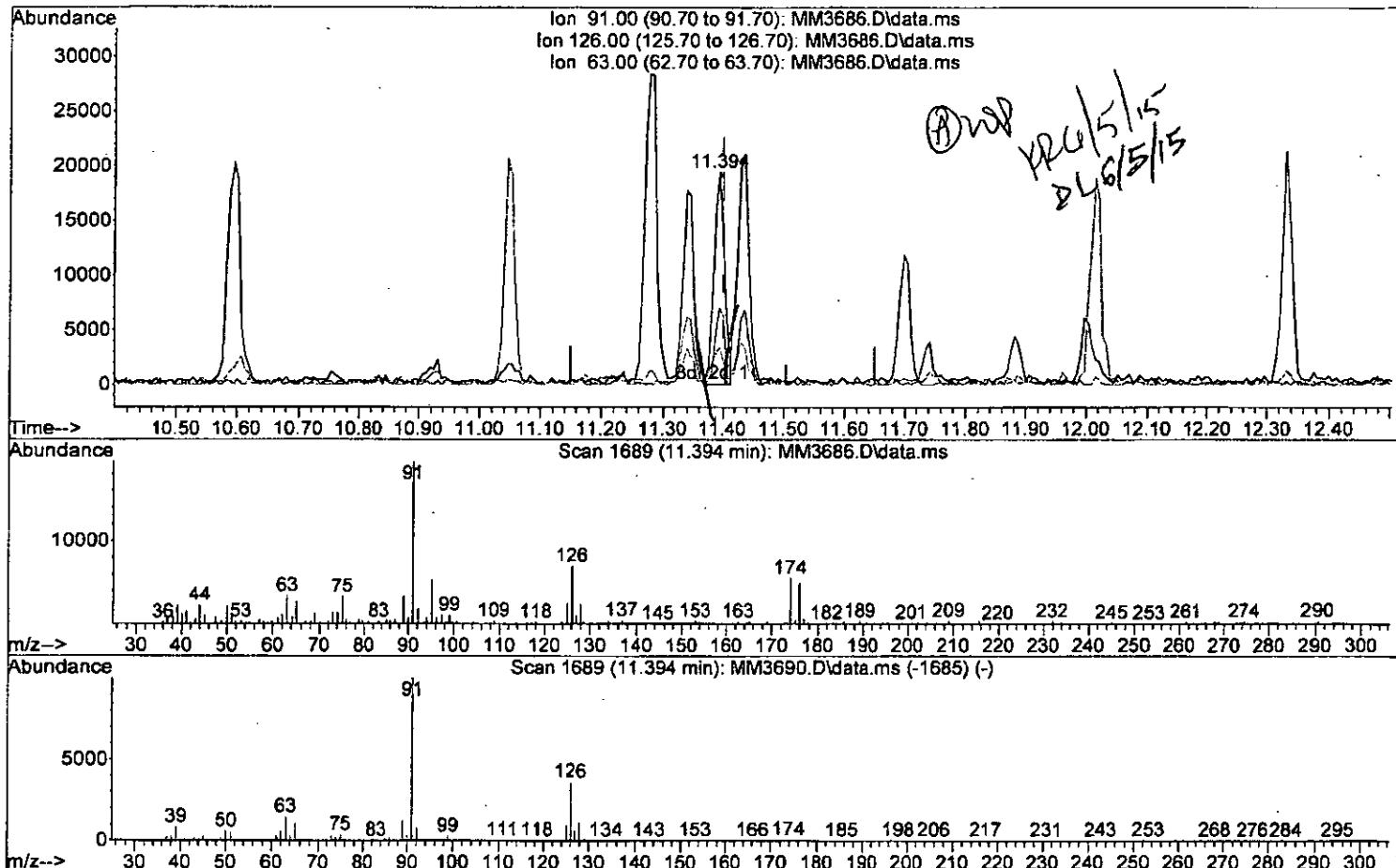
Ion	Exp%	Act%
91.00	100	100
126.00	36.30	32.53
63.00	14.60	15.85
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msv0a12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(97) 3-Chlorotoluene

11.394min (-0.006) 0.84 ppb m

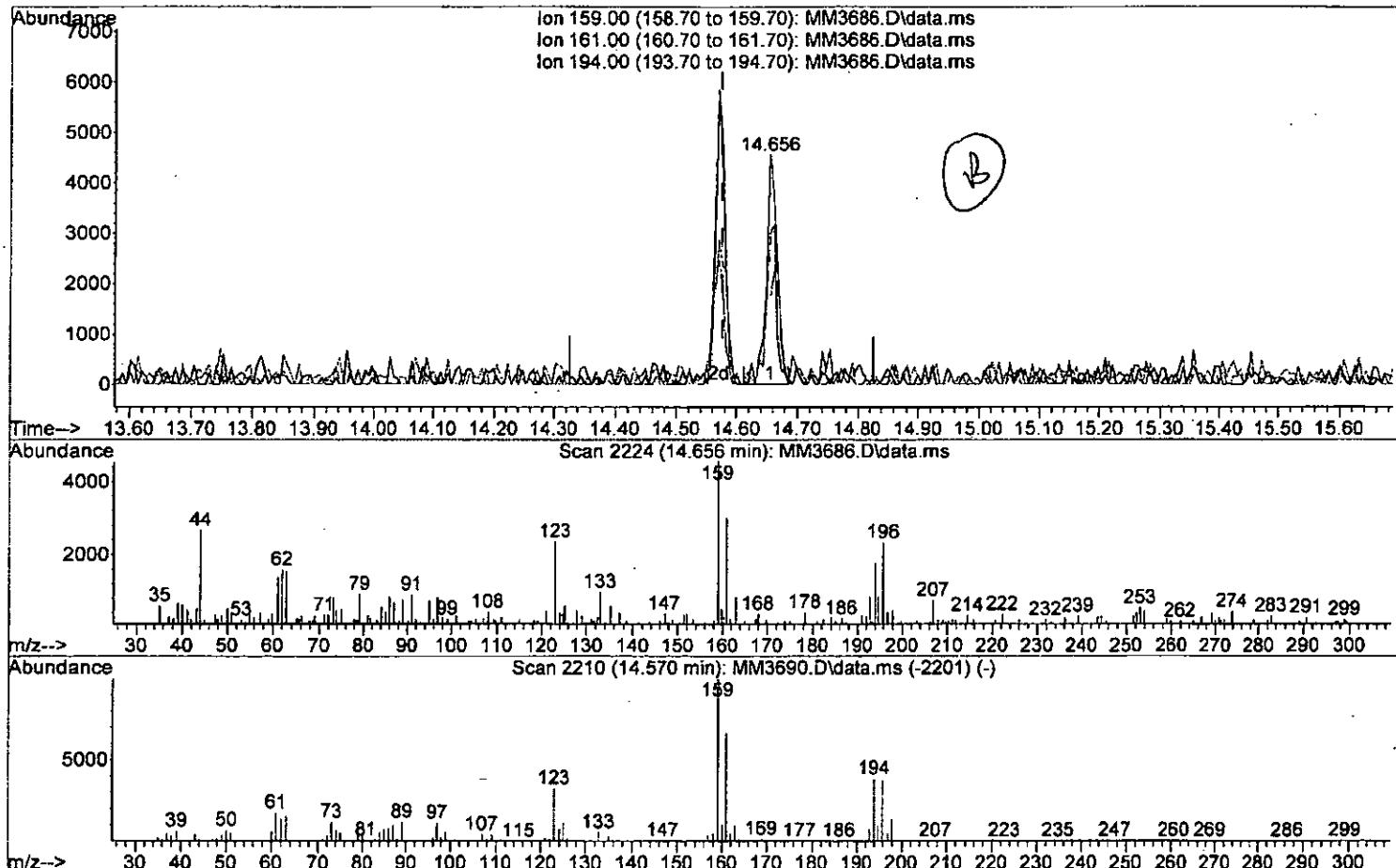
response 23749

Ion	Exp%	Act%
91.00	100	100
126.00	36.30	35.84
63.00	14.60	17.60#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(119) 2,4,5-Trichlorotoluene

14.656min (+0.079) 0.97 ppb

response 5661

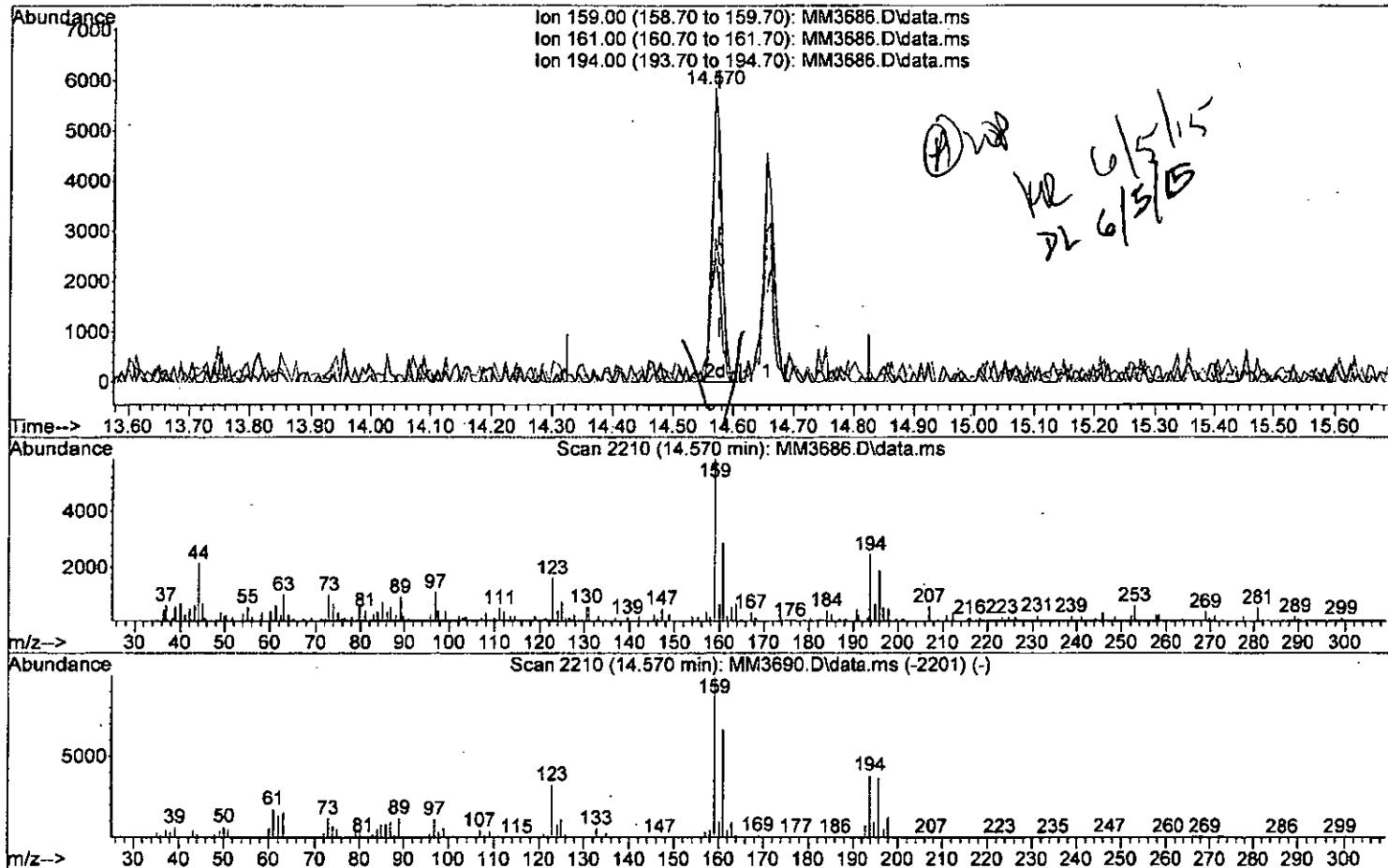
Ion	Exp%	Act%
159.00	100	100
161.00	66.50	66.04
194.00	38.20	38.85
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoya12\Data\060415\  
 Data File : MM3686.D  
 Acq On : 4 Jun 2015 1:10 pm  
 Operator : K.Ruest  
 Sample : 1.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:37 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3686.D\data.ms

(119) 2,4,5-Trichlorotolene

14.570min (-0.006) 1.09 ppb m

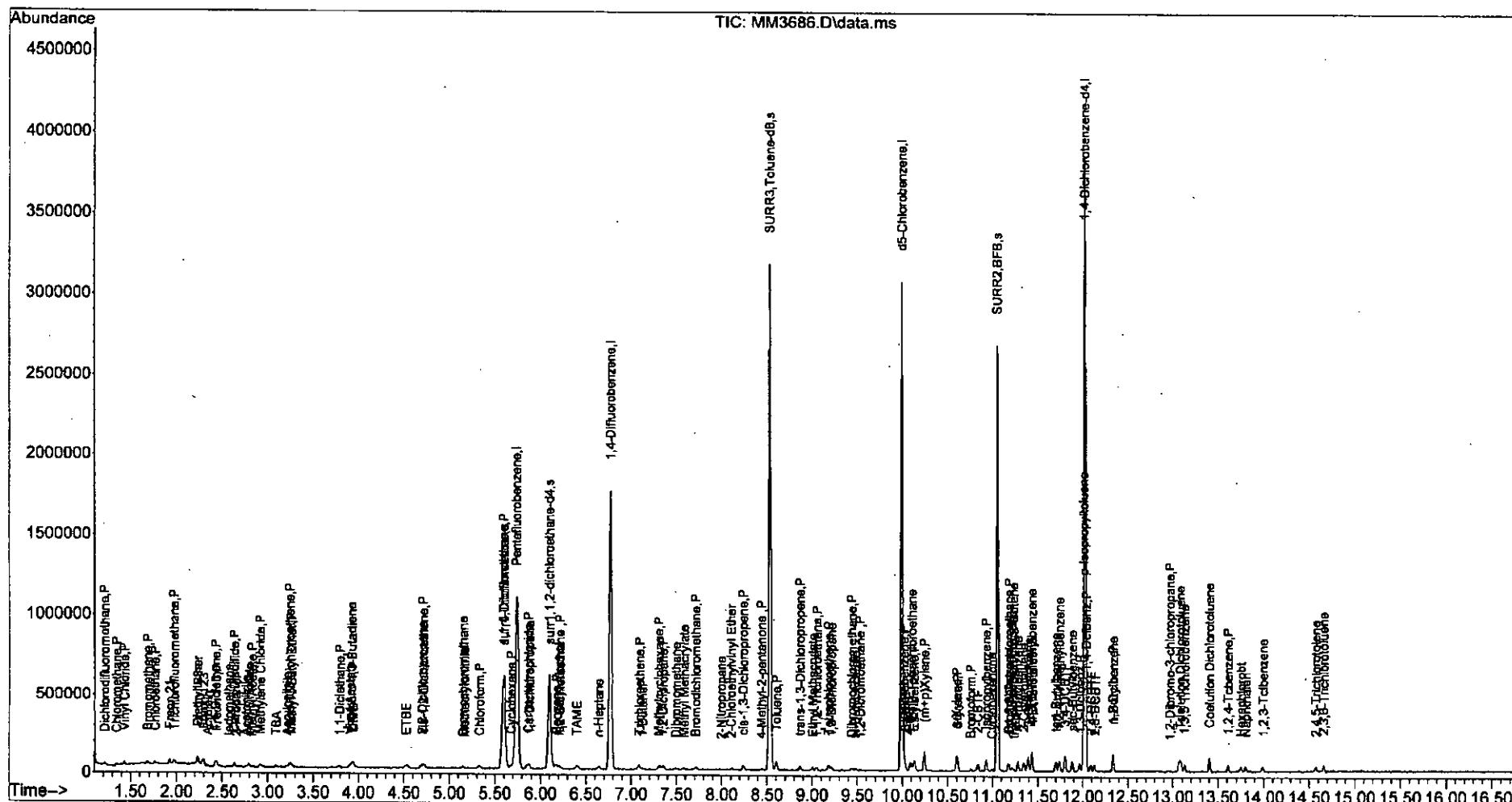
response 6362

Ion	Exp%	Act%
159.00	100	100
161.00	66.50	48.87#
194.00	38.20	42.00
0.00	0.00	0.00

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUUDATA\msvola12\Data\060415\  
Data File : MM3686.D  
Acq On : 4 Jun 2015 1:10 pm  
Operator : K.Ruest  
Sample : 1.0ppb Inst : MSVOA-12  
Misc : 8260 WATER ICAL  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 05 09:12:07 2015  
Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 08:46:49 2015  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 09:18:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	901515	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1485964	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1399505	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	730318	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.590	113	502327	62.47	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 124.94%	#	
48) surr1,1,2-dichloroetha...	6.096	65	549708	64.00	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 128.00%	#	
65) SURR3,Toluene-d8	8.529	98	2250811	64.09	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 128.18%	#	
70) SURR2,BFB	11.047	95	838210	62.82	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 125.64%	#	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	13527	1.73	ppb	85
3) Chloromethane	1.341	50	15228	2.04	ppb	83
4) Vinyl Chloride	1.427	62	17063	1.82	ppb	99
5) Bromomethane	1.683	94	11306	2.05	ppb	97
6) Chloroethane	1.768	64	12383	1.99	ppb	82
7) Freon 21	1.920	67	31636	2.02	ppb	88
8) Trichlorofluoromethane	1.975	101	28931	2.05	ppb	86
9) Diethyl Ether	2.231	59	13164	2.11	ppb	88
10) Freon 123a	2.237	67	20957m	2.07	ppb	
11) Freon 123	2.292	83	22954	1.98	ppb	97
12) Acrolein	2.335	56	4152	6.38	ppb	86
13) 1,1-Dicethene	2.432	96	13688	2.07	ppb	88
14) Freon 113	2.439	101	12650	1.93	ppb	# 76
15) Acetone	2.487	43	3003	2.40	ppb	69
16) 2-Propanol	2.652	45	10974	44.18	ppb	82
17) Iodomethane	2.567	142	7775	1.12	ppb	77
18) Carbon Disulfide	2.634	76	42572	2.01	ppb	98
19) Acetonitrile	2.756	40	1634m	9.89	ppb	
20) Allyl Chloride	2.798	76	7759	1.94	ppb	# 78
21) Methyl Acetate	2.829	43	6202	2.25	ppb	91
22) Methylene Chloride	2.920	84	14247	2.02	ppb	87
23) TBA	3.097	59	17827	39.82	ppb	74
24) Acrylonitrile	3.213	53	14072	9.74	ppb	91
25) Methyl-t-Butyl Ether	3.268	73	33911	1.97	ppb	94
26) trans-1,2-Dichloroethene	3.243	96	15562	2.10	ppb	# 73
28) 1,1-Dicethane	3.792	63	24613	2.01	ppb	95
29) Vinyl Acetate	3.902	86	2815	1.92	ppb	# 58
30) DIPE	3.944	45	41834	1.97	ppb	# 79
31) 2-Chloro-1,3-Butadiene	3.932	53	25068	1.88	ppb	84
32) ETBE	4.524	59	43912	2.07	ppb	90
33) 2,2-Dichloropropane	4.706	77	22834	1.96	ppb	96
34) cis-1,2-Dichloroethene	4.719	96	15620	1.98	ppb	98
36) Propionitrile	4.889	54	5627m	11.09	ppb	
37) Bromochloromethane	5.139	130	9140m	2.09	ppb	

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 09:18:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Methacrylonitrile	5.145	67	4629	2.40	ppb	# 46
39) Tetrahydrofuran	5.255	42	2449m	2.16	ppb	
40) Chloroform	5.328	83	28155	2.18	ppb	95
41) 1,1,1-Trichloroethane	5.584	97	25209	2.02	ppb	88
42) TAME	6.407	73	35089	1.90	ppb	97
44) Cyclohexane	5.682	41	14548	2.16	ppb	81
46) Carbontetrachloride	5.859	121	6776m	2.10	ppb	
47) 1,1-Dichloropropene	5.871	75	19465	1.90	ppb	86
49) Benzene	6.170	78	57195	1.94	ppb	94
50) 1,2-Dichloroethane	6.212	62	17987	1.91	ppb	84
51) Iso-Butyl Alcohol	6.212	43	9497	48.55	ppb	88
52) n-Heptane	6.645	43	13464	2.15	ppb	82
53) 1-Butanol	7.127	56	13585	109.36	ppb	93
54) Trichloroethene	7.090	130	15250	1.92	ppb	# 84
55) Methylcyclohexane	7.316	55	14961	2.01	ppb	90
56) 1,2-Diclpropane	7.352	63	14676	2.08	ppb	97
57) Dibromomethane	7.492	93	8741m	2.30	ppb	
58) 1,4-Dioxane	7.566	88	3093m	53.85	ppb	
59) Methyl Methacrylate	7.578	69	7478	2.14	ppb	# 76
60) Bromodichloromethane	7.712	83	20974	2.02	ppb	85
61) 2-Nitropropane	7.986	41	5758	4.35	ppb	90
62) 2-Chloroethylvinyl Ether	8.108	63	5801	1.78	ppb	# 61
63) cis-1,3-Dichloropropene	8.242	75	23575	1.99	ppb	92
64) 4-Methyl-2-pentanone	8.437	43	8083	2.01	ppb	96
66) Toluene	8.602	91	67104	1.99	ppb	100
67) trans-1,3-Dichloropropene	8.864	75	20155	1.99	ppb	94
68) Ethyl Methacrylate	8.998	69	14659	1.99	ppb	86
69) 1,1,2-Trichloroethane	9.041	97	10465	1.92	ppb	94
72) Tetrachloroethene	9.181	164	13651	2.13	ppb	93
73) 2-Hexanone	9.334	43	4934	1.74	ppb	90
74) 1,3-Dichloropropane	9.212	76	17415	1.90	ppb	89
75) Dibromochloromethane	9.431	129	12087	1.75	ppb	# 55
76) N-Butyl Acetate	9.480	43	14534	1.96	ppb	91
77) 1,2-Dibromoethane	9.529	107	10171	1.87	ppb	89
78) Chlorobenzene	10.016	112	44087	1.94	ppb	95
79) 3-CBTF	10.029	180	21028	1.96	ppb	93
80) 4-CBTF	10.083	180	18211	1.87	ppb	93
81) 1,1,1,2-Tetrachloroethane	10.096	131	16469	2.11	ppb	# 74
82) Ethylbenzene	10.132	106	21755	1.76	ppb	99
83) (m+p) Xylene	10.242	106	58404	3.89	ppb	94
84) o-Xylene	10.596	106	27494	1.89	ppb	# 77
85) Styrene	10.608	104	48747	1.95	ppb	94
87) Bromoform	10.760	173	7351	1.97	ppb	81
88) 2-CBTF	10.833	180	21052	1.99	ppb	86
89) Isopropylbenzene	10.925	105	71983	2.12	ppb	88
90) Cyclohexanone	10.992	55	8026	39.35	ppb	99
91) trans-1,4-Dichloro-2-B...	11.223	53	3256	1.78	ppb	96
92) 1,1,2,2-Tetrachloroethane	11.181	83	12112	1.96	ppb	93
93) Bromobenzene	11.175	156	16672	1.97	ppb	86
94) 1,2,3-Trichloropropane	11.211	110	3710	1.98	ppb	# 79
95) n-Propylbenzene	11.278	91	78318	2.05	ppb	99

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 09:18:20 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

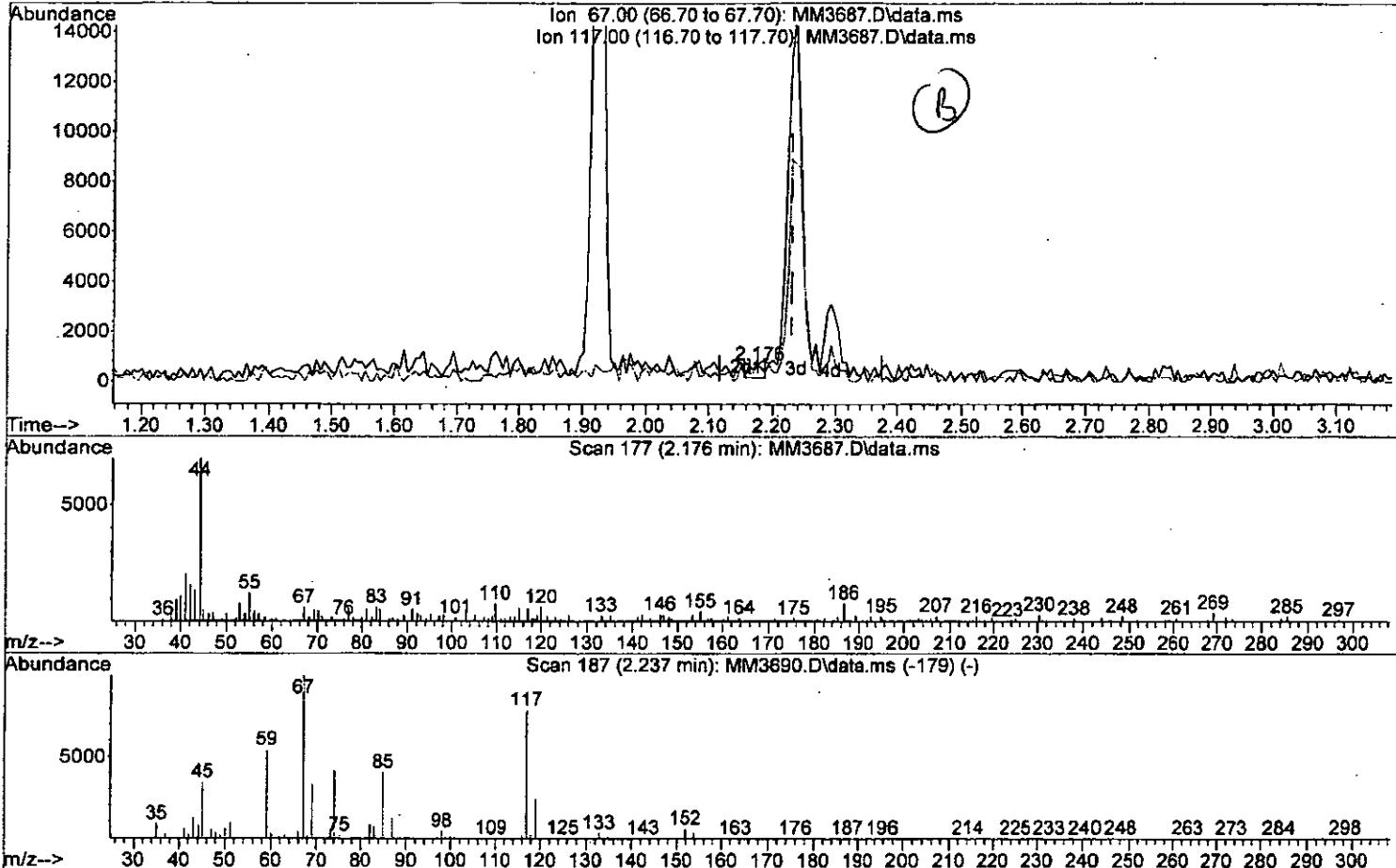
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
96) 2-Chlorotoluene	11.339	91	47385	2.01	ppb	94
97) 3-Chlorotoluene	11.394	91	50779	2.03	ppb	96
98) 4-Chlorotoluene	11.437	91	60462	2.08	ppb	93
99) 1,3,5-Trimethylbenzene	11.431	105	57008	1.96	ppb	95
100) tert-Butylbenzene	11.699	119	45181	1.93	ppb	92
101) 1,2,4-Trimethylbenzene	11.736	105	56851	1.94	ppb	93
102) 3,4-DCBTF	11.803	214	13734	1.98	ppb	# 86
103) sec-Butylbenzene	11.882	105	65640	2.05	ppb	95
104) p-Isopropyltoluene	11.998	119	56642	2.08	ppb	98
105) 1,3-Dclbenz	11.961	146	32999	2.01	ppb	92
106) 1,4-Dclbenz	12.034	146	37438	2.19	ppb	88
107) 2,4-DCBTF	12.089	214	11911	1.95	ppb	97
108) 2,5-DCBTF	12.126	214	12662	1.84	ppb	# 86
109) n-Butylbenzene	12.333	91	45693	1.87	ppb	99
110) 1,2-Dclbenz	12.333	146	30547	1.99	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.955	157	2893	2.32	ppb	# 76
112) Trielution Dichlorotol...	13.071	125	78833	6.09	ppb	93
113) 1,3,5 Trichlorobenzene	13.126	180	18271	1.90	ppb	97
114) Coelution Dichlorotoluene	13.400	125	53153	3.84	ppb	97
115) 1,2,4-Tcbenzene	13.607	180	18894	2.14	ppb	82
116) Hexachlorobt	13.747	225	7949	2.34	ppb	86
117) Naphthalen	13.796	128	36775	1.99	ppb	96
118) 1,2,3-Tclbenzene	13.985	180	15095	2.09	ppb	94
119) 2,4,5-Trichlorotolene	14.570	159	11740	2.04	ppb	97
120) 2,3,6-Trichlorotoluene	14.662	159	9317	1.88	ppb	98

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

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(10) Freon 123a

2.176min (-0.055) 0.07 ppb

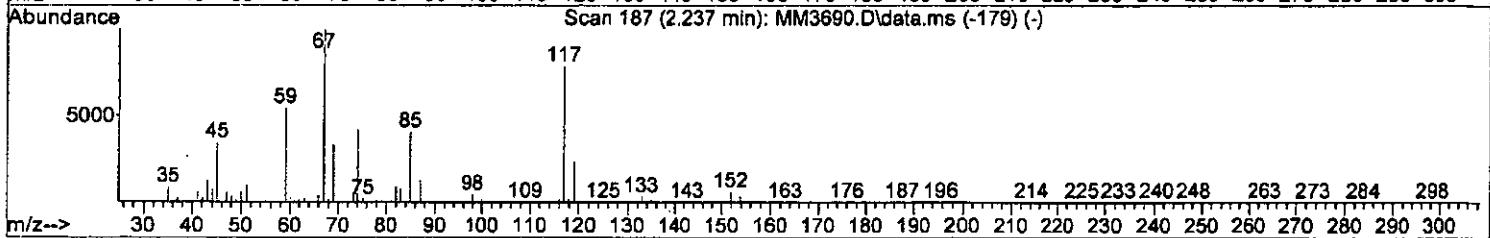
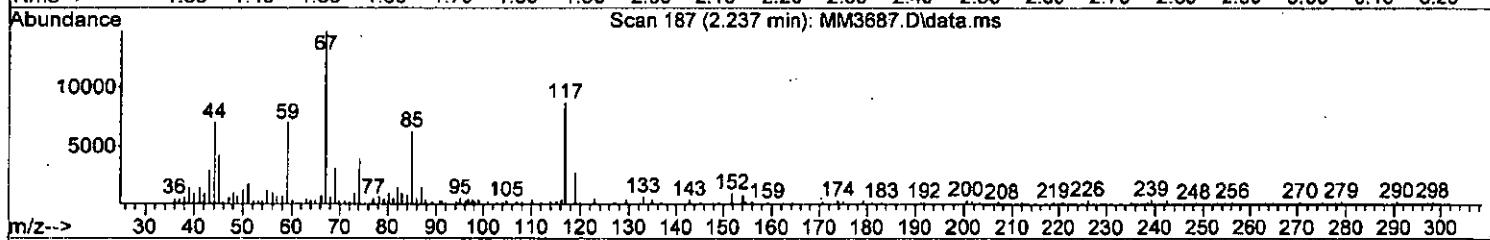
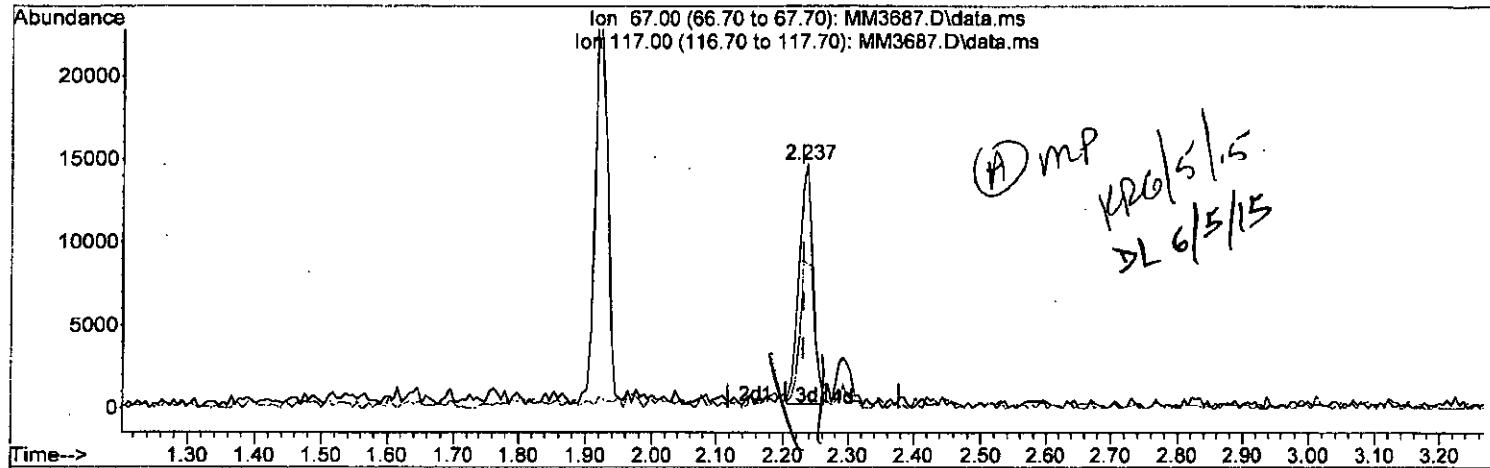
response 736

Ion	Exp%	Act%
67.00	100	100
117.00	79.00	90.30
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(10) Freon 123a

2.237min (+0.006) 2.07 ppb m

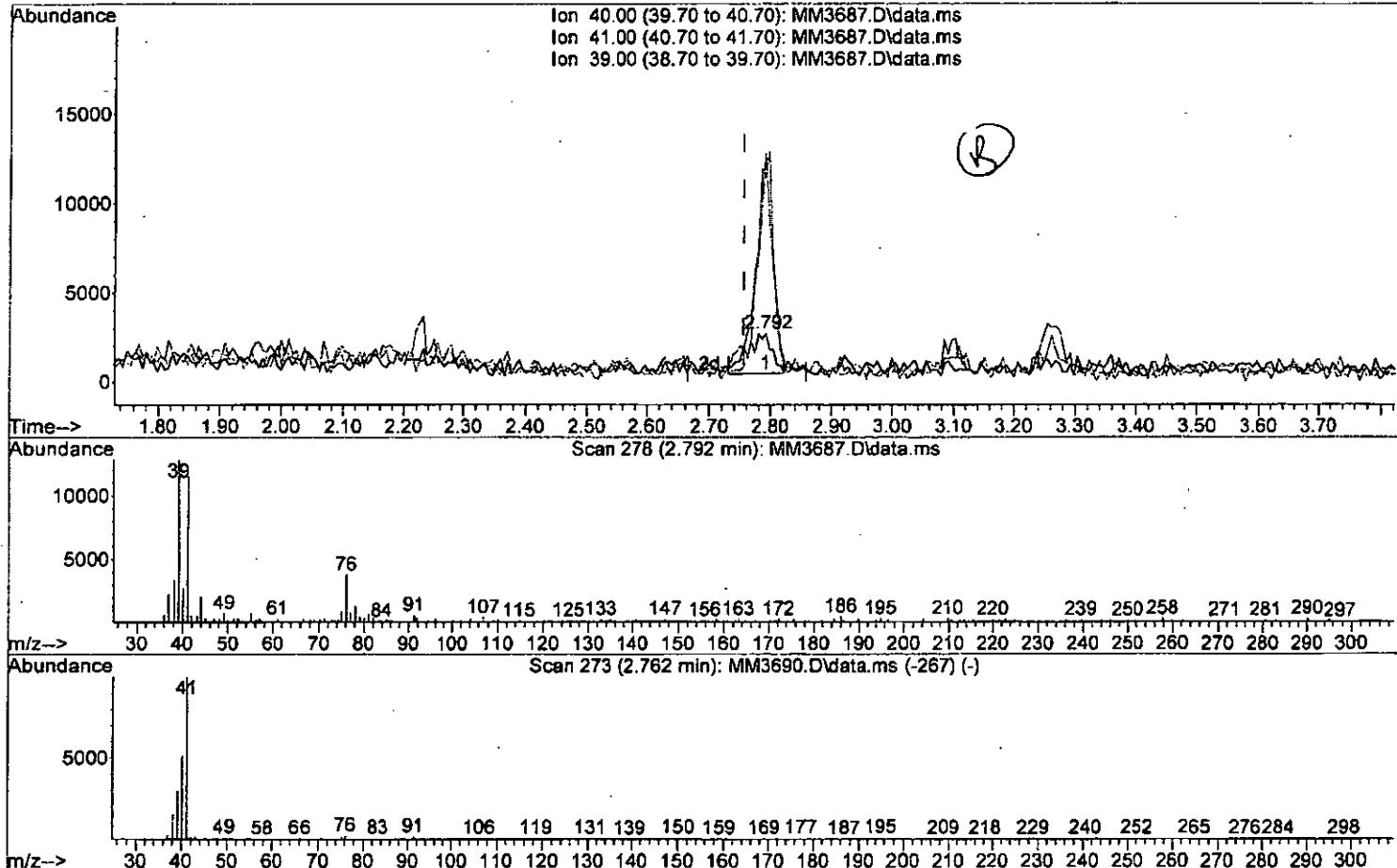
response 20957

Ion	Exp%	Act%
67.00	100	100
117.00	79.00	58.93#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(19) Acetonitrile

2.792min (+0.036) 38.06 ppb

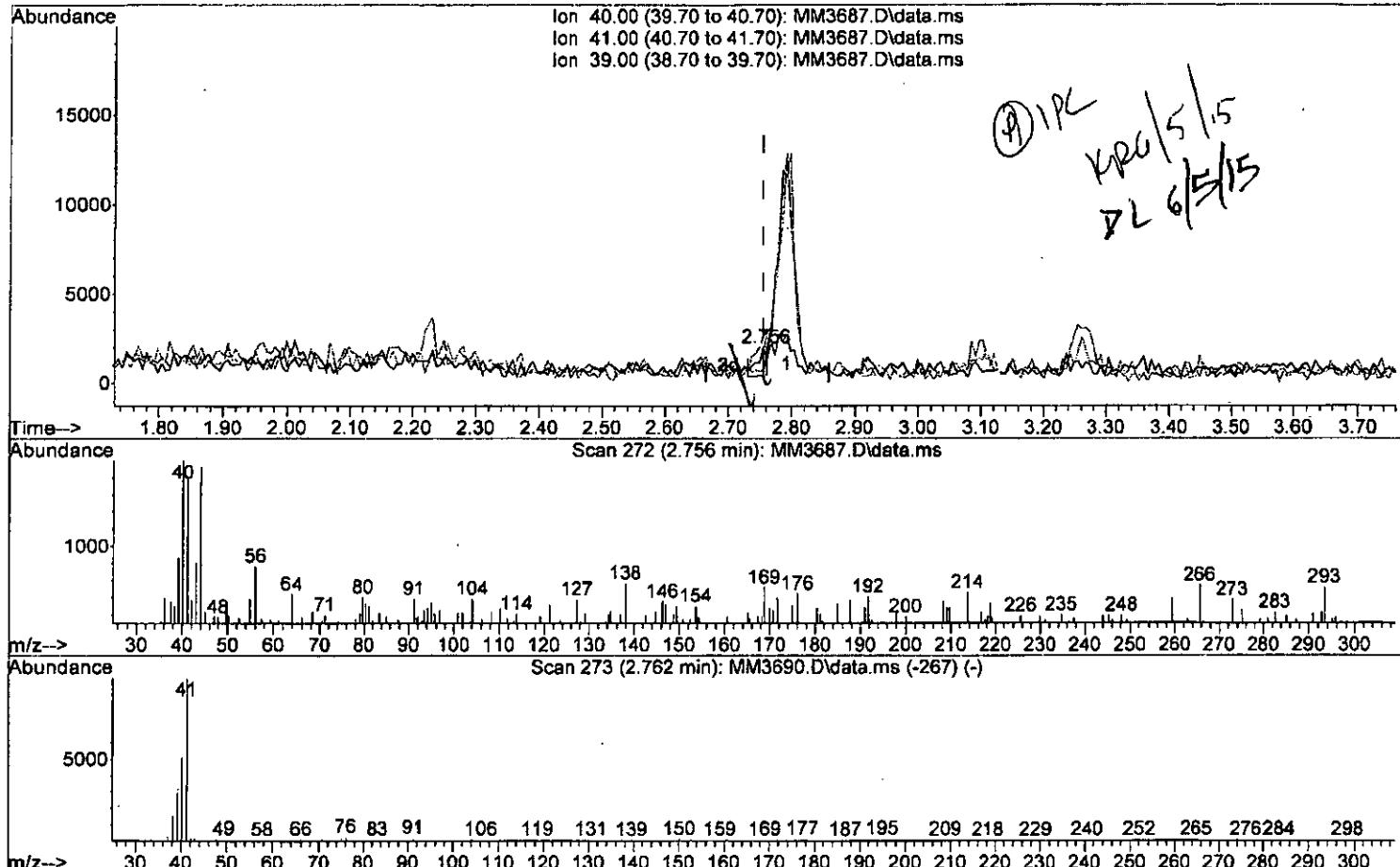
response 6288

Ion	Exp%	Act%
40.00	100	100
41.00	194.30	423.20#
39.00	58.40	472.56#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msv0a12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(19) Acetonitrile

2.756min (-0.000) 9.89 ppb m

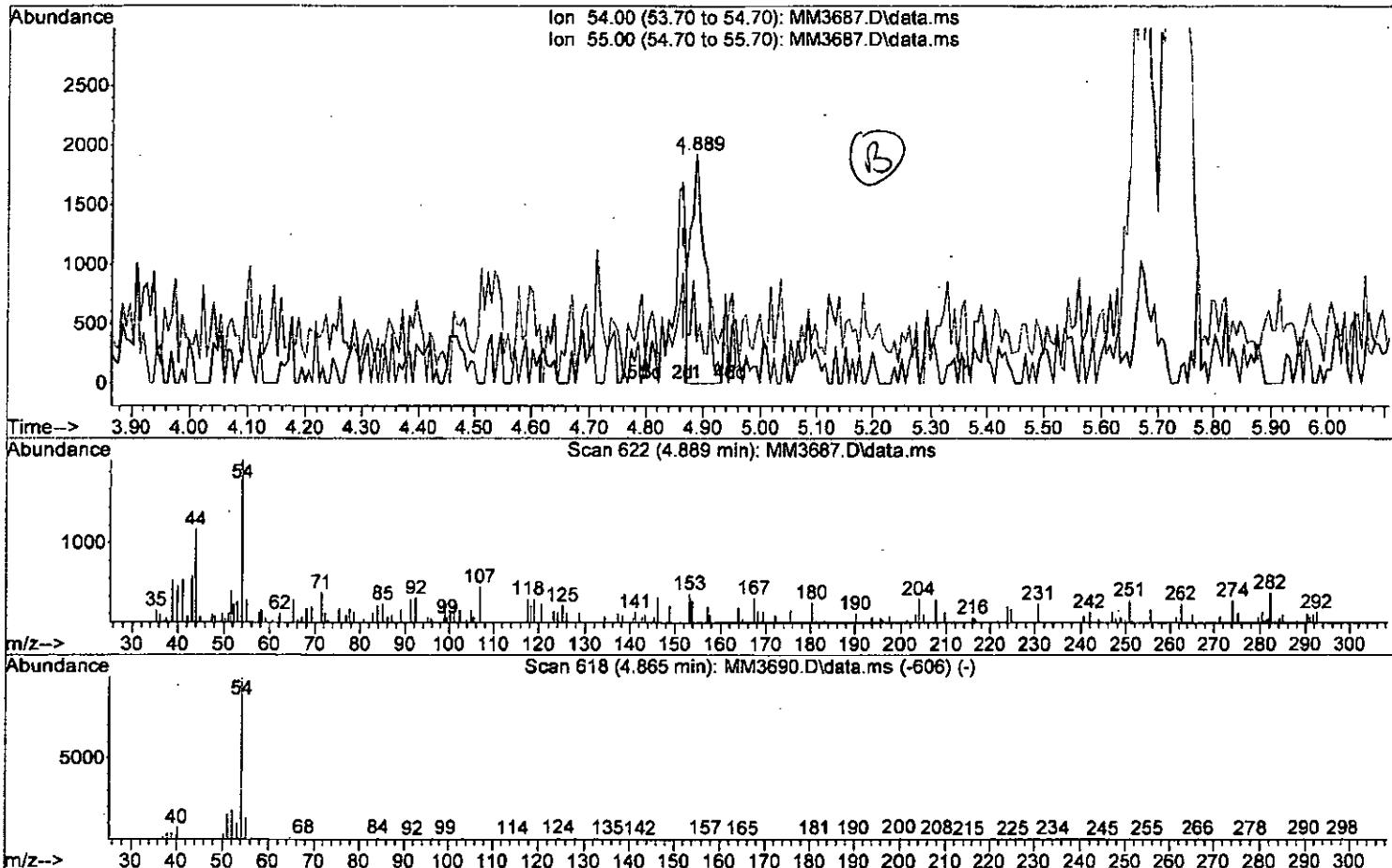
response 1634

Ion	Exp%	Act%
40.00	100	100
41.00	194.30	88.01#
39.00	58.40	42.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(36) Propionitrile

4.889min (+0.024) 6.33 ppb

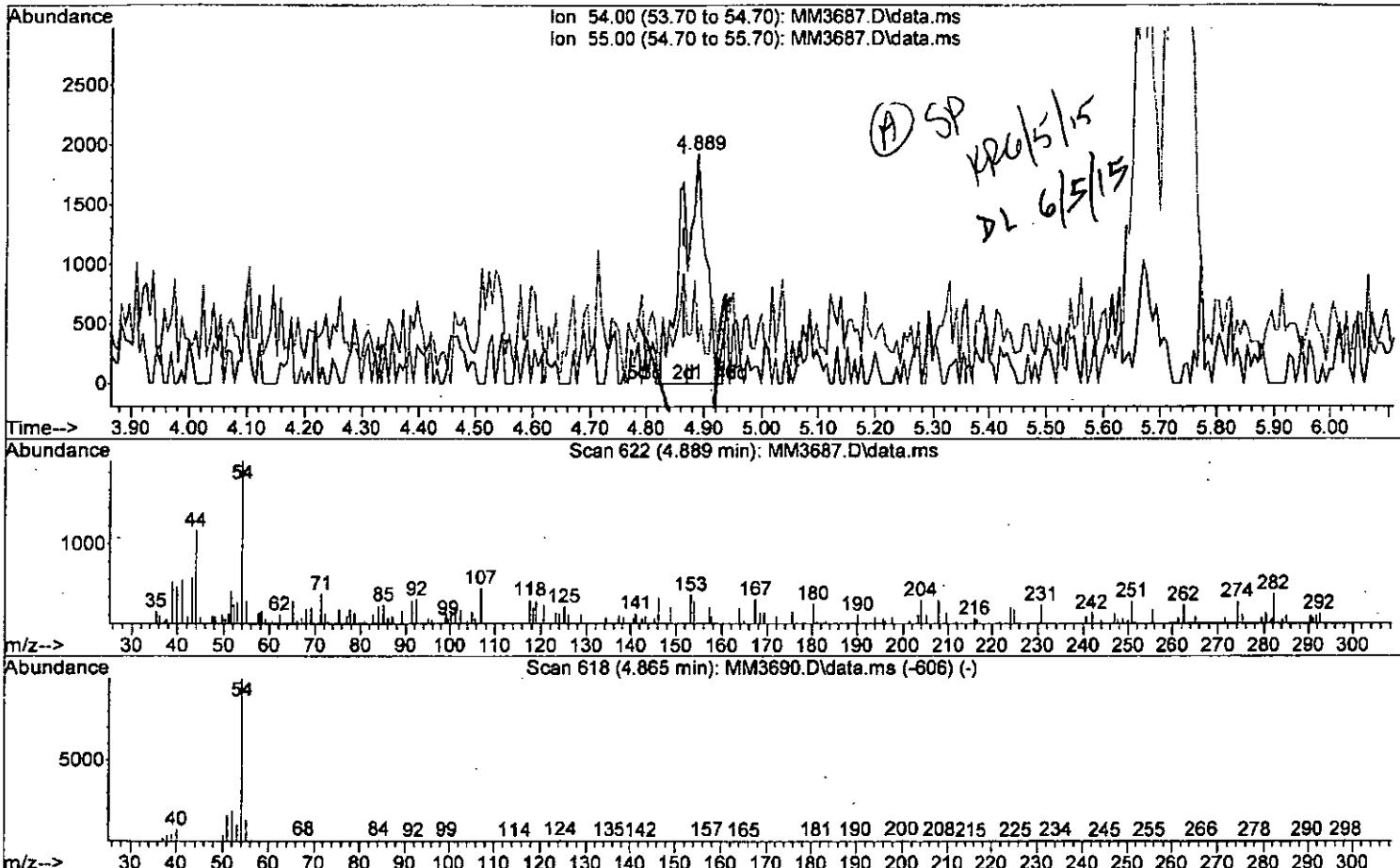
response 3210

Ion	Exp%	Act%
54.00	100	100
55.00	15.00	18.35
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(36) Propionitrile

4.889min (+0.024) 11.09 ppb m

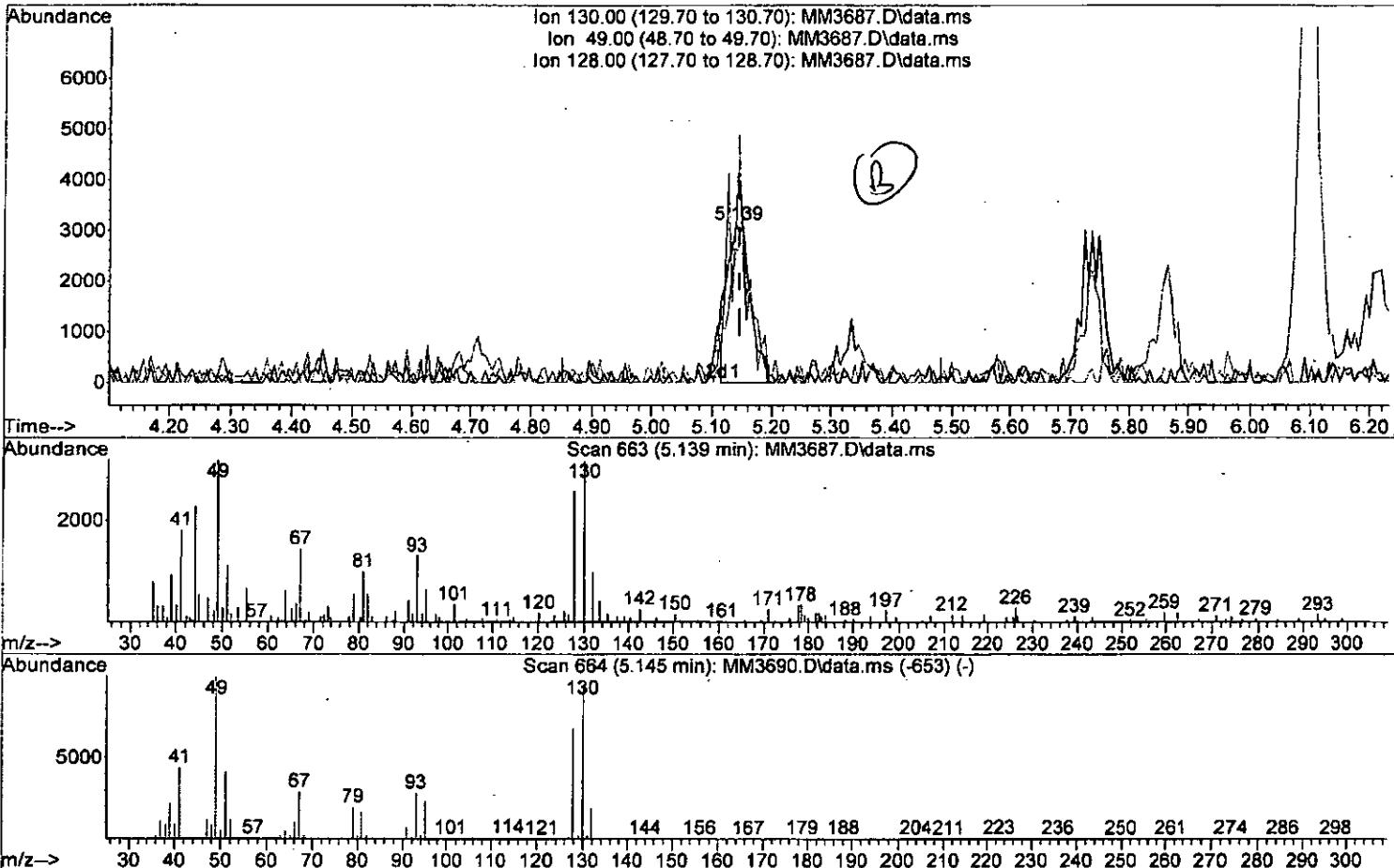
response 5627

Ion	Exp%	Act%
54.00	100	100
55.00	15.00	18.35
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge.  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(37) Bromochloromethane

5.139min (-0.006) 1.89 ppb

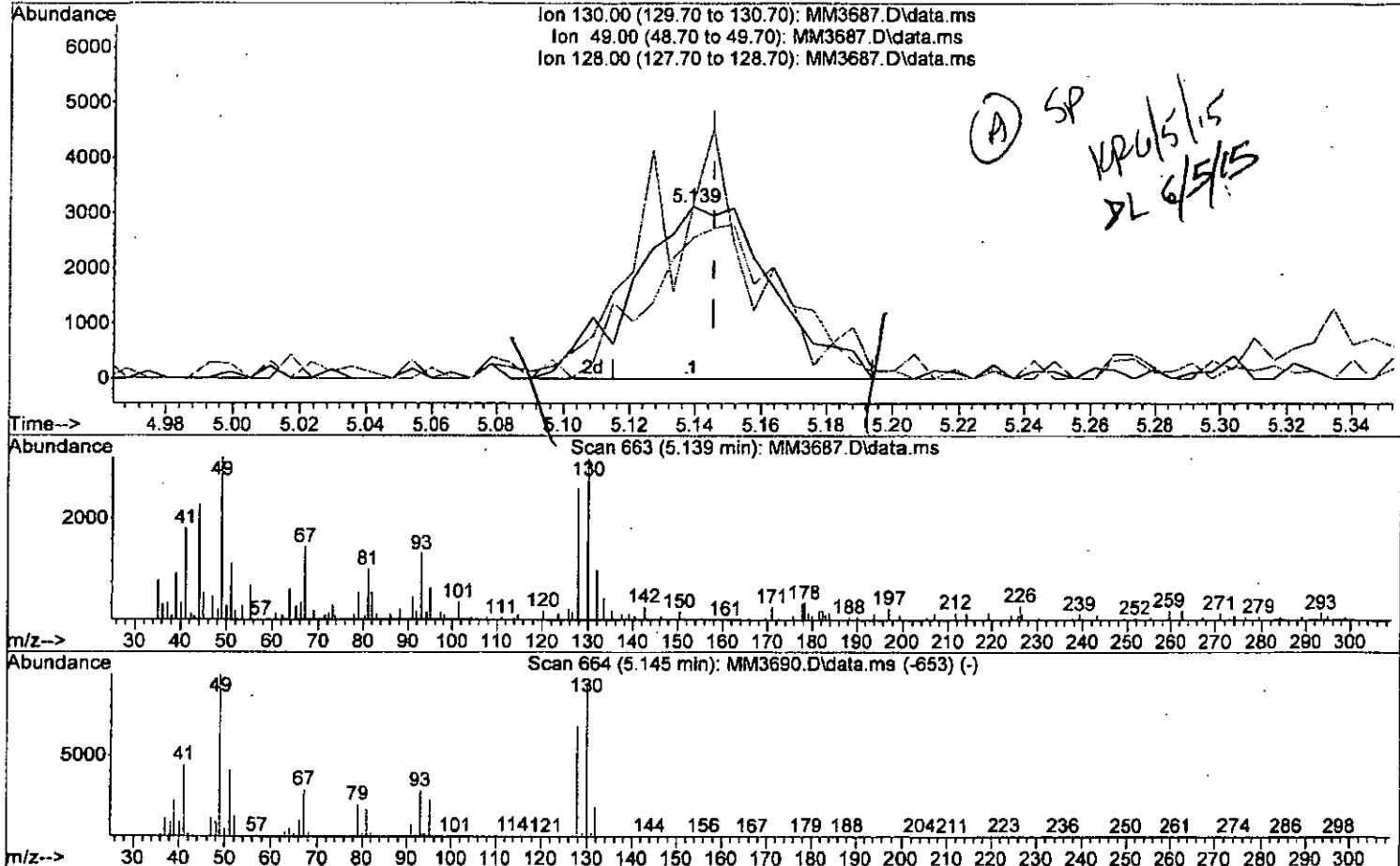
response 8271

Ion	Exp%	Act%
130.00	100	100
49.00	106.10	100.58
128.00	72.20	81.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(37) Bromochloromethane

5.139min (-0.006) 2.09 ppb m

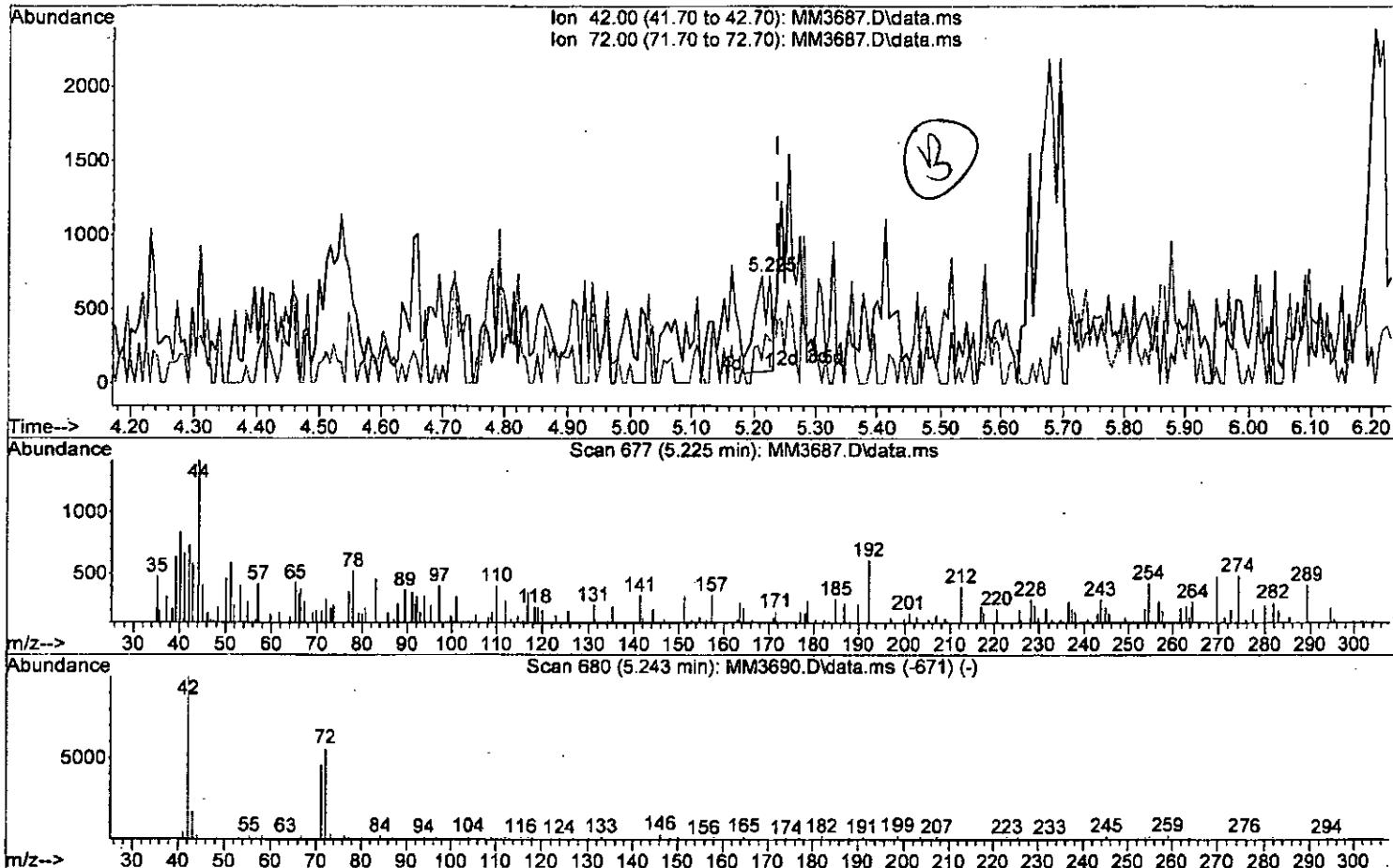
response 9140

Ion	Exp%	Act%
130.00	100	100
49.00	106.10	100.58
128.00	72.20	81.83
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(39) Tetrahydrofuran

5.225min (-0.012) 1.00 ppb

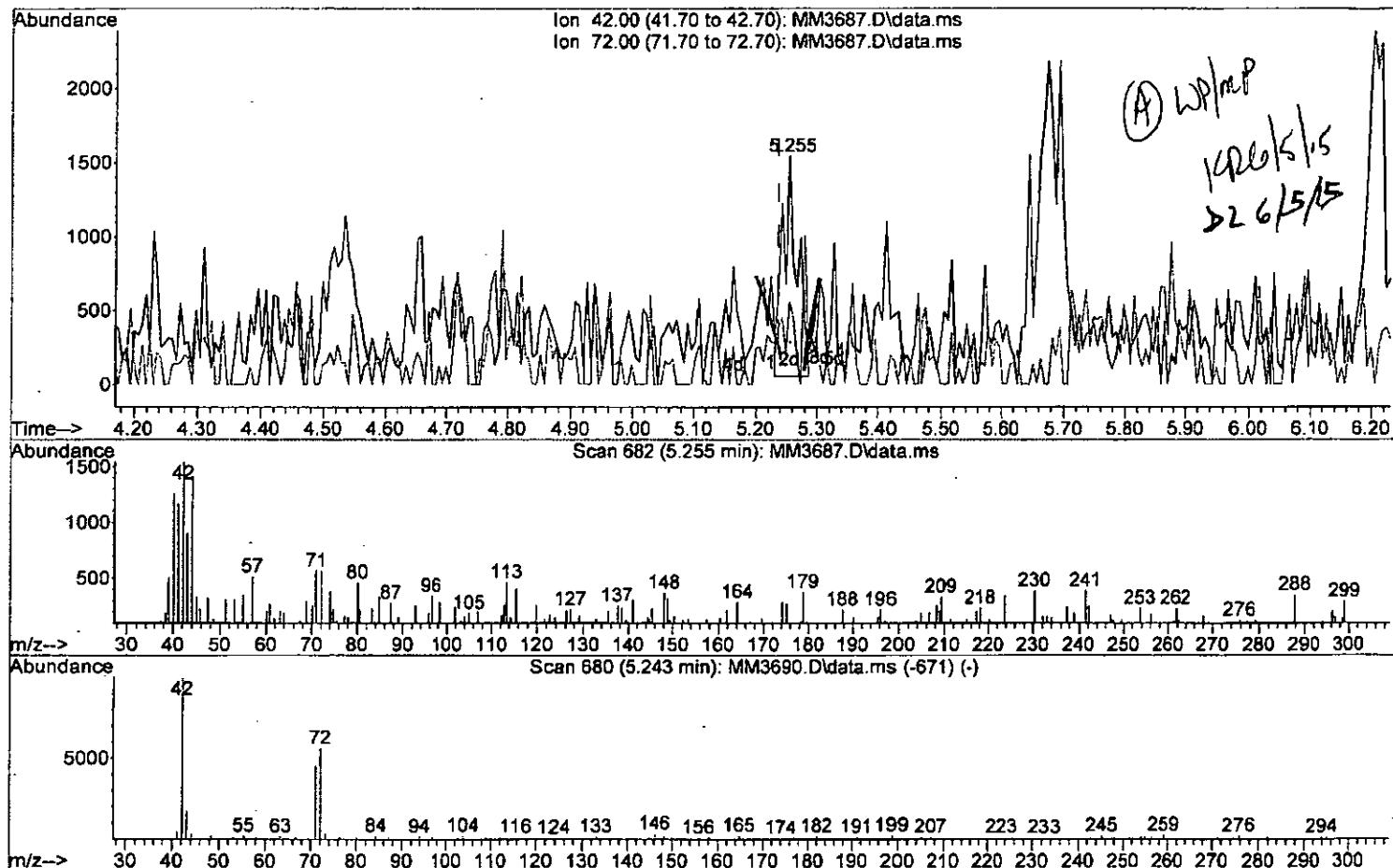
response 1132

Ion	Exp%	Act%
42.00	100	100
72.00	55.20	40.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(39) Tetrahydrofuran

5.255min (+0.018) 2.16 ppb m

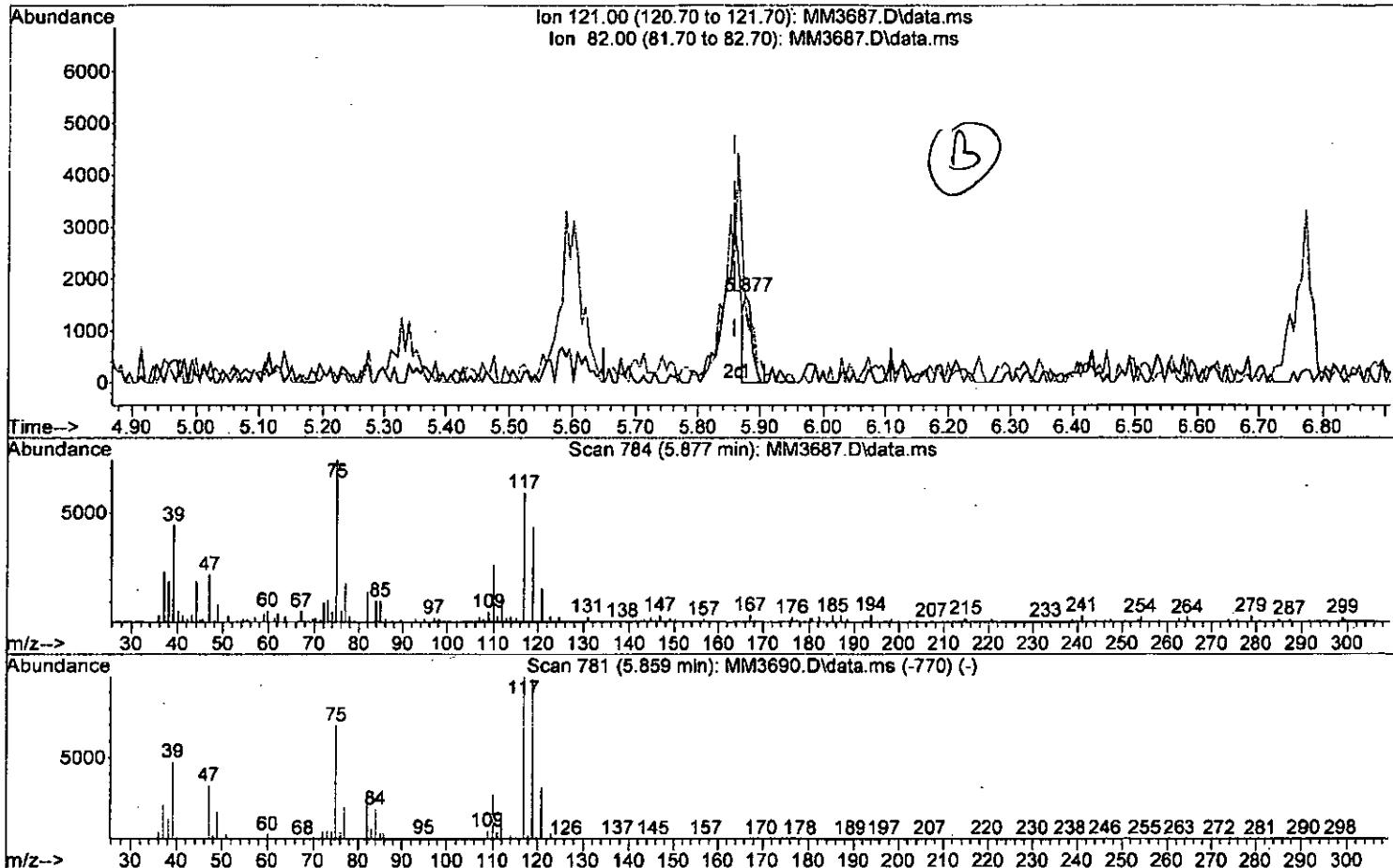
response 2449

Ion	Exp%	Act%
42.00	100	100
72.00	55.20	36.12
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(46) Carbontetrachloride (P)

5.877min (+0.018) 0.45 ppb

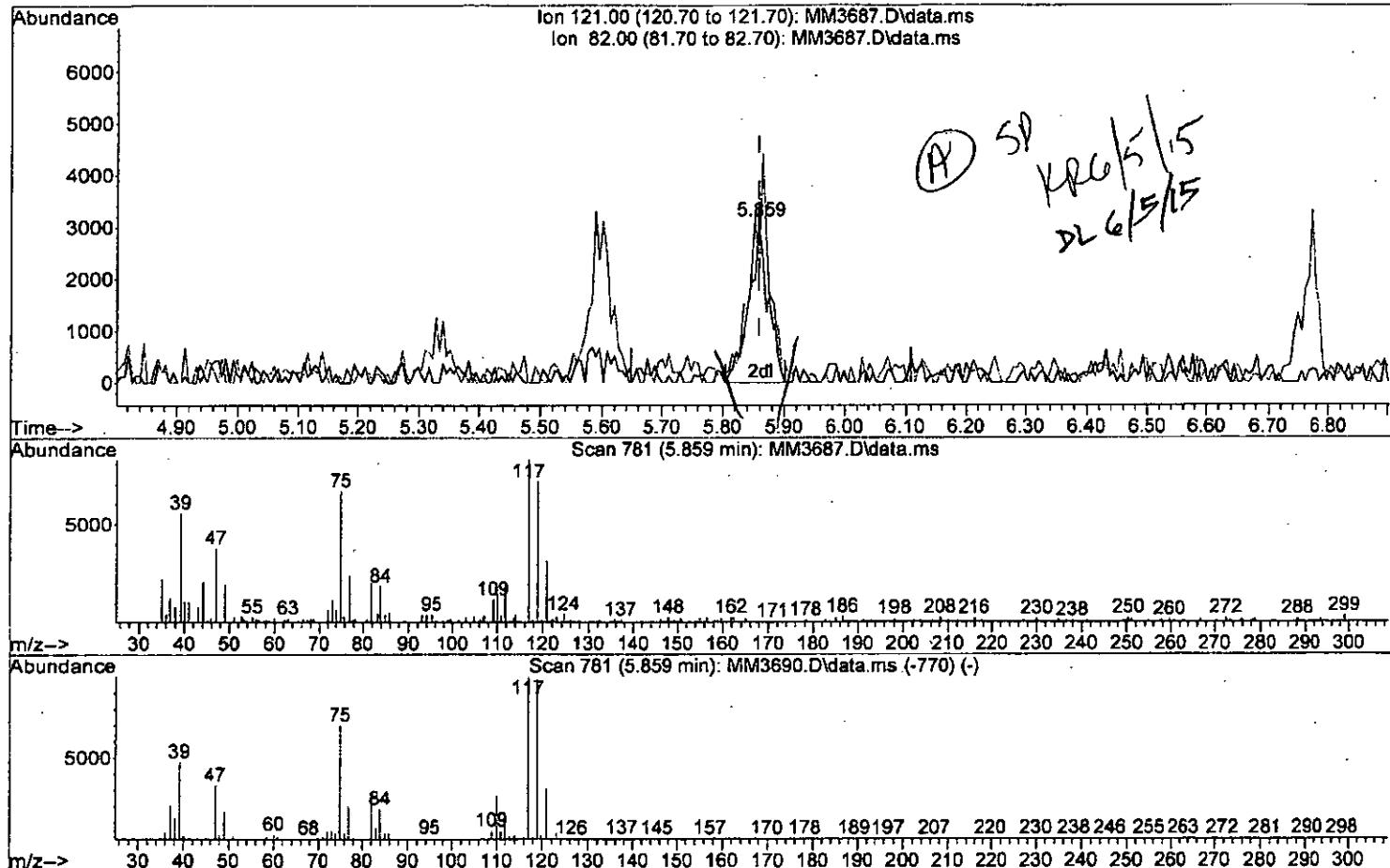
response 1447

Ion	Exp%	Act%
121.00	100	100
82.00	93.50	85.61
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 09:18:20 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



(46) Carbontetrachloride (P)

5.859min (-0.000) 2.10 ppb m

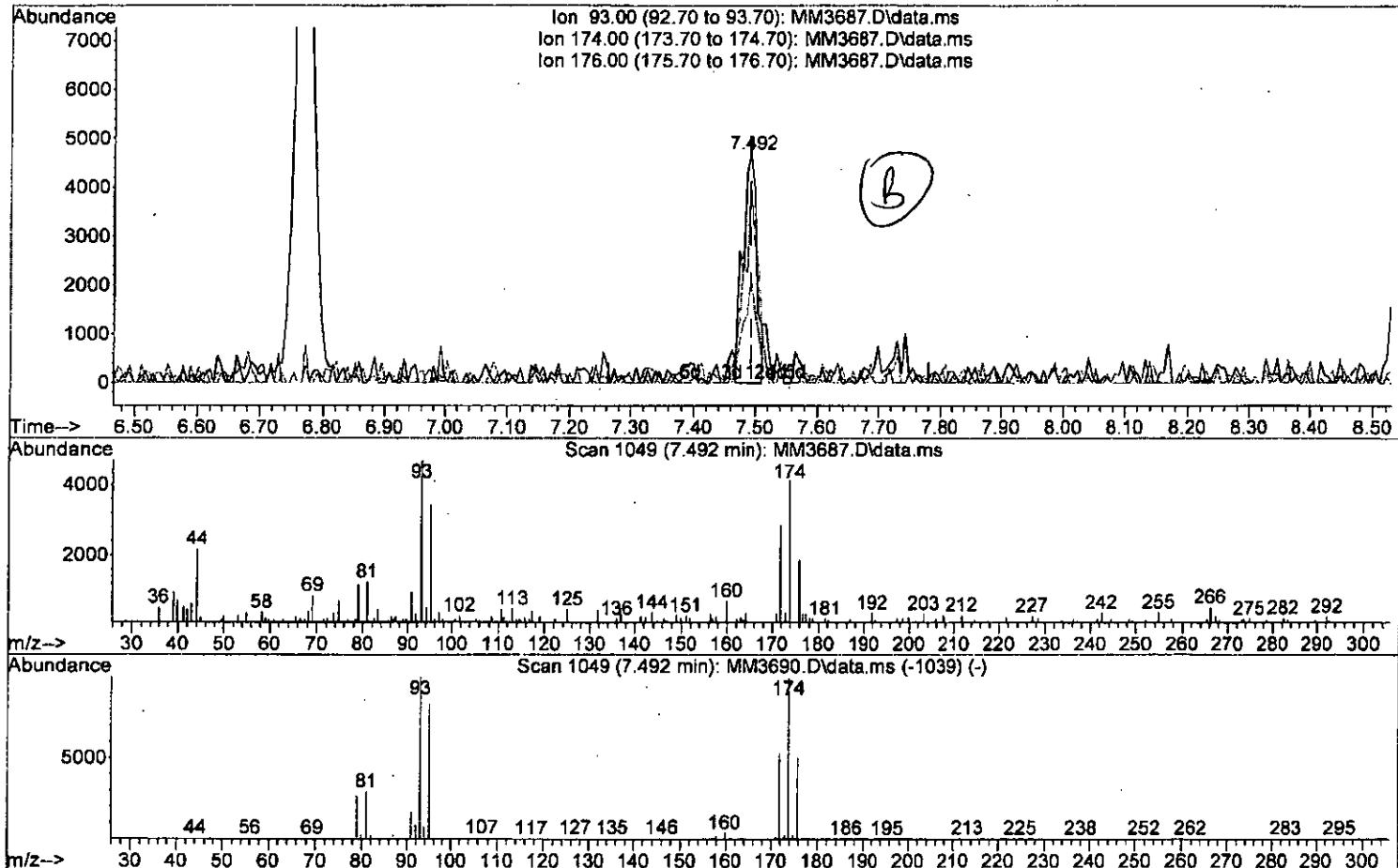
response 6776

Ion	Exp%	Act%
121.00	100	100
82.00	93.50	64.54#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(57) Dibromomethane

7.492min (-0.000) 1.98 ppb

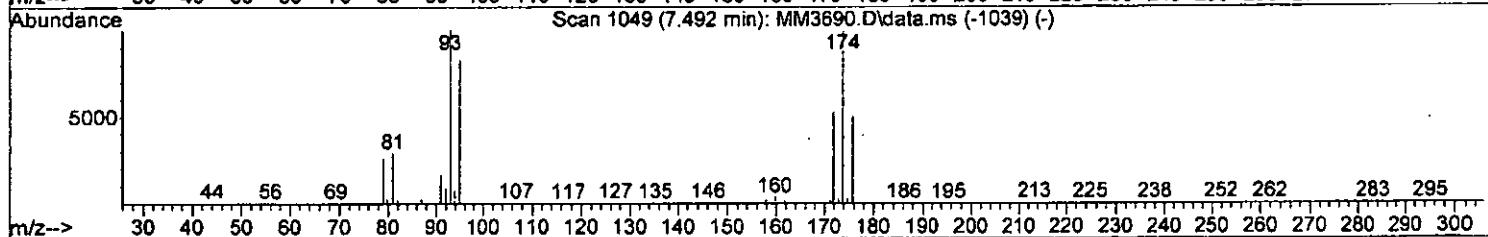
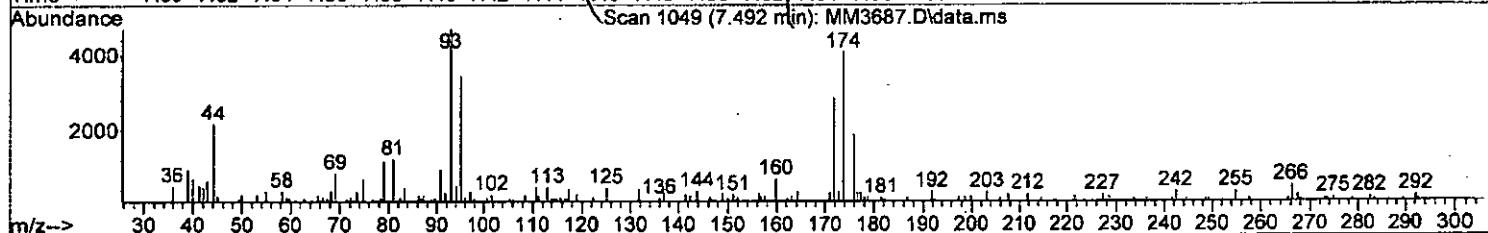
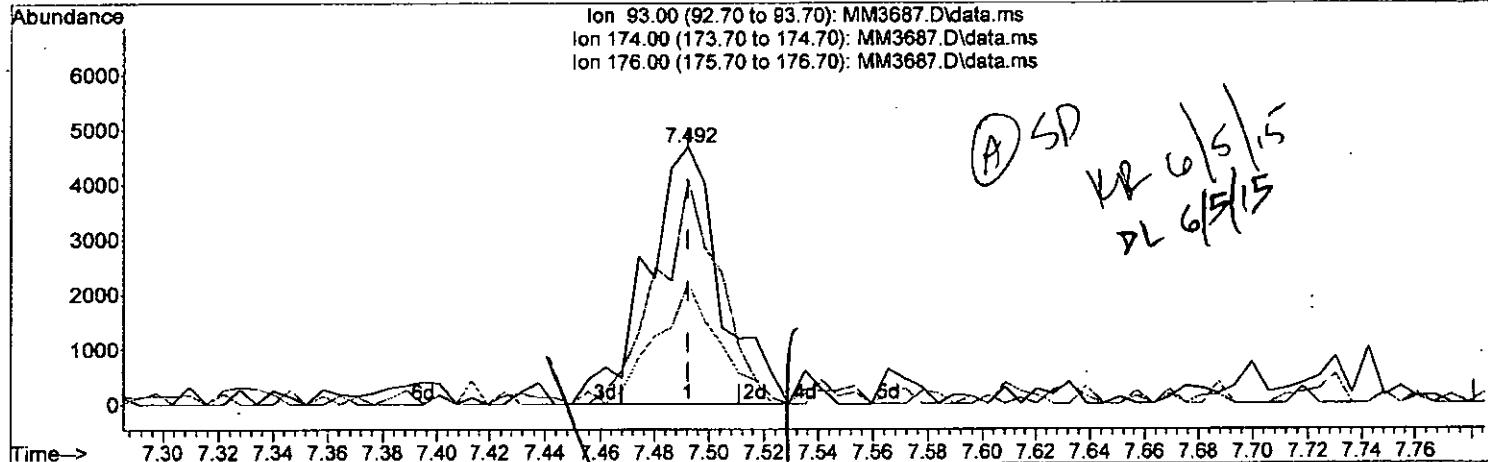
response 7520

Ion	Exp%	Act%
93.00	100	100
174.00	99.50	87.49
176.00	50.60	46.97
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(57) Dibromomethane

7.492min (-0.000) 2.30 ppb m

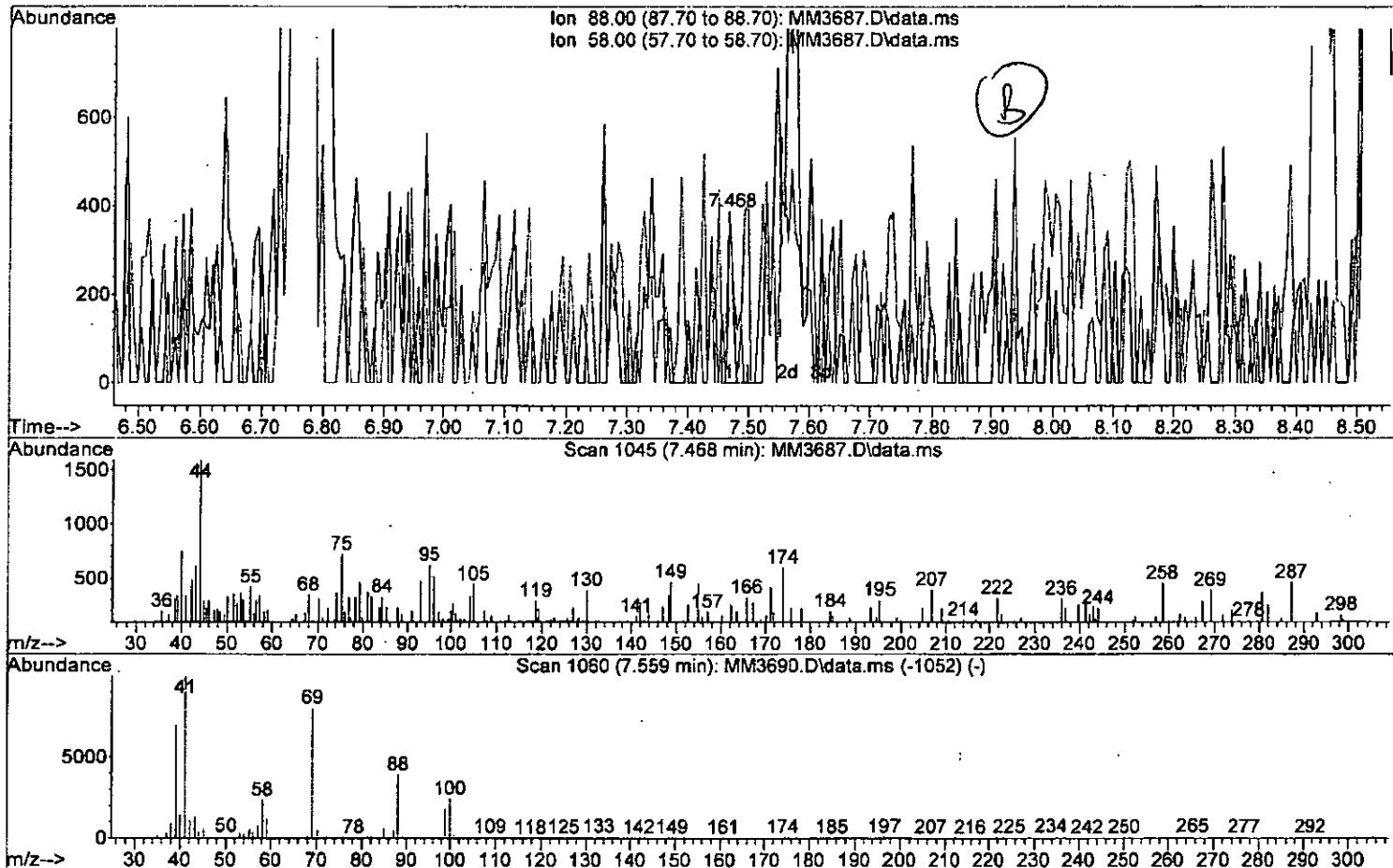
response 8741

Ion	Exp%	Act%
93.00	100	100
174.00	99.50	87.49
176.00	50.60	39.80
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.Oppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(58) 1,4-Dioxane

7.468min (-0.085) 5.52 ppb

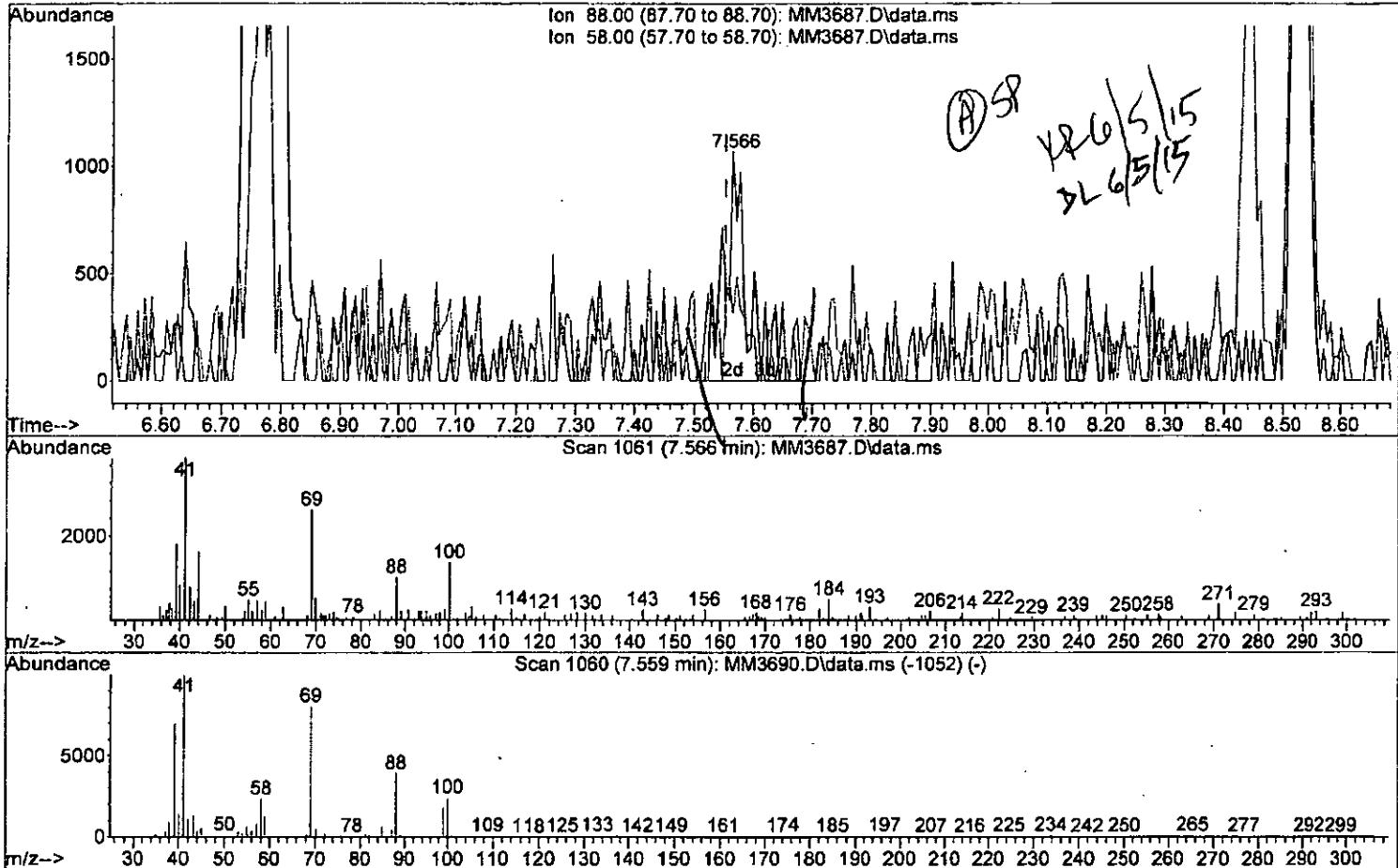
response 317

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	48.71
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3687.D  
 Acq On : 4 Jun 2015 1:41 pm  
 Operator : K.Ruest  
 Sample : 2.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 05 08:47:42 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3687.D\data.ms

(58) 1,4-Dioxane

7.566min (+0.012) 53.85 ppb m

response 3093

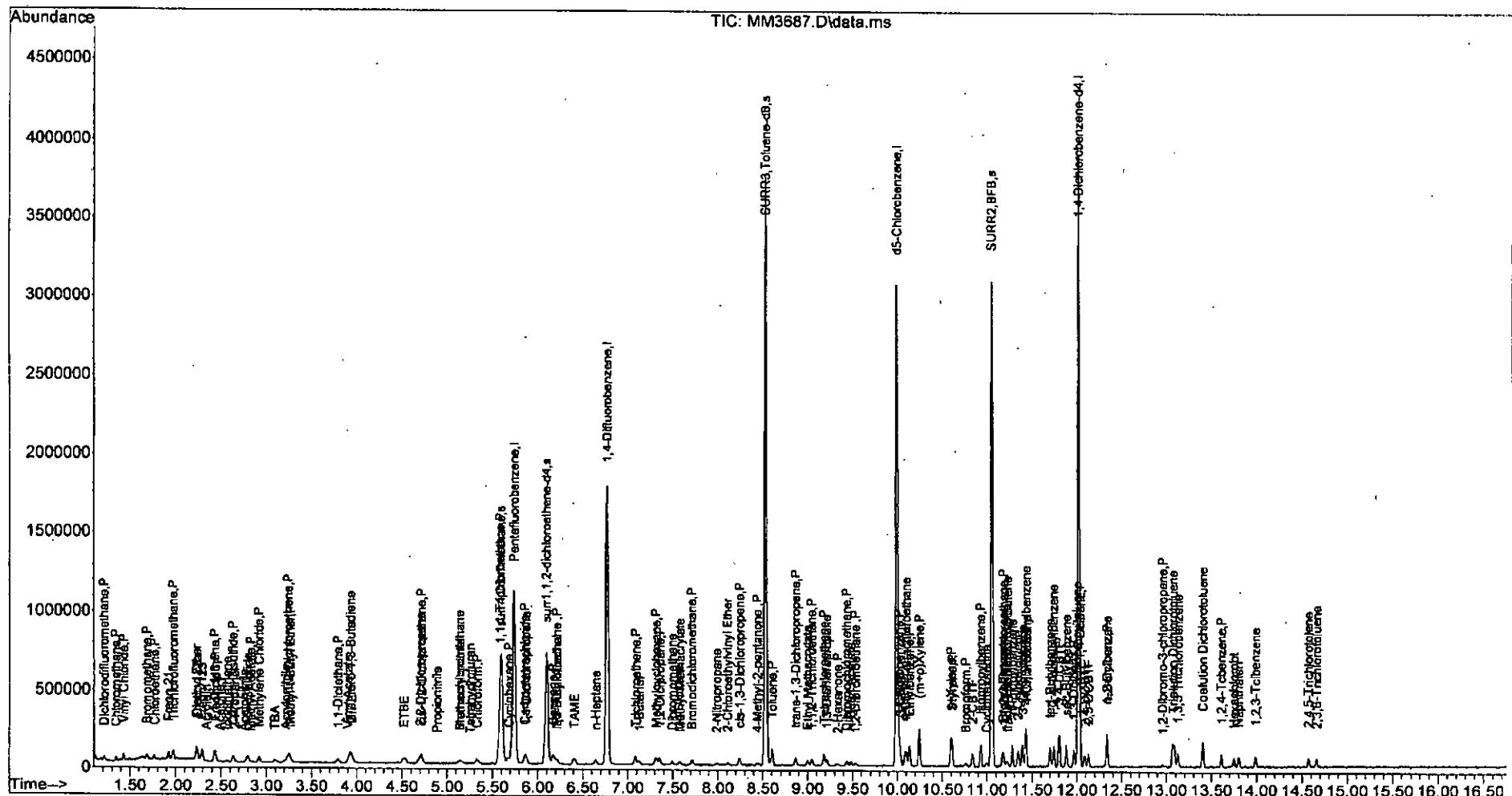
Ion	Exp%	Act%
88.00	100	100
58.00	60.70	29.71#
0.00	0.00	0.00
0.00	0.00	0.00

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUUDATA\msvola12\Data\060415\  
Data File : MM3687.D  
Acq On : 4 Jun 2015 1:41 pm  
Operator : K.Ruest  
Sample : 2.0ppb  
Misc : 8260 WATER ICAL  
ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 09:18:20 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 08:46:49 2015  
Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 13:52:06 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.737	168	903035	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.767	114	1480911	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1390447	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	734348	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibrommethane	5.597	113	583555	72.82	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 145.64%	#	
48) surr1,1,2-dichloroetha...	6.097	65	619915	72.42	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 144.84%	#	
65) SURR3,Toluene-d8	8.529	98	2579355	73.69	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 147.38%	#	
70) SURR2,BFB	11.047	95	955816	71.87	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 143.74%	#	
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.213	85	35763	4.57	ppb	99
3) Chloromethane	1.341	50	34781	4.64	ppb	97
4) Vinyl Chloride	1.427	62	43359	4.61	ppb	100
5) Bromomethane	1.677	94	24177	4.38	ppb	86
6) Chloroethane	1.762	64	28212	4.52	ppb	86
7) Freon 21	1.927	67	76881	4.91	ppb	98
8) Trichlorofluoromethane	1.975	101	68859	4.88	ppb	93
9) Diethyl Ether	2.225	59	30691	4.92	ppb	93
10) Freon 123a	2.231	67	50549	4.99	ppb	95
11) Freon 123	2.292	83	55290	4.76	ppb	96
12) Acrolein	2.335	56	14923	22.89	ppb	84
13) 1,1-Dicethene	2.426	96	30643	4.62	ppb	99
14) Freon 113	2.433	101	33237	5.06	ppb	80
15) Acetone	2.487	43	6787	5.42	ppb	74
16) 2-Propanol	2.652	45	23908	96.08	ppb	94
17) Iodomethane	2.567	142	22334	3.21	ppb	91
18) Carbon Disulfide	2.634	76	101484	4.79	ppb	99
19) Acetonitrile	2.762	40	2967	17.93	ppb	# 60
20) Allyl Chloride	2.792	76	21126	5.29	ppb	90
21) Methyl Acetate	2.835	43	13295	4.82	ppb	96
22) Methylene Chloride	2.920	84	34524	4.89	ppb	93
23) TBA	3.091	59	43315	96.60	ppb	82
24) Acrylonitrile	3.207	53	33064	22.84	ppb	95
25) Methyl-t-Butyl Ether	3.262	73	90130	5.22	ppb	97
26) trans-1,2-Dichloroethene	3.250	96	37103	5.00	ppb	# 81
28) 1,1-Dicethane	3.786	63	59428	4.83	ppb	94
29) Vinyl Acetate	3.908	86	7109	4.84	ppb	# 82
30) DIPE	3.938	45	104783	4.92	ppb	88
31) 2-Chloro-1,3-Butadiene	3.926	53	65768	4.92	ppb	89
32) ETBE	4.530	59	102859	4.84	ppb	93
33) 2,2-Dichloropropane	4.694	77	57020	4.88	ppb	85
34) cis-1,2-Dichloroethene	4.719	96	38343	4.85	ppb	86
35) 2-Butanone	4.780	43	7731m	4.61	ppb	
36) Propionitrile	4.865	54	11111	21.87	ppb	96

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 13:52:06 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.139	130	21736	4.97	ppb	93
38) Methacrylonitrile	5.158	67	9179	4.74	ppb	99
39) Tetrahydrofuran	5.249	42	7187	6.34	ppb	# 62
40) Chloroform	5.322	83	64884	5.02	ppb	99
41) 1,1,1-Trichloroethane	5.597	97	58328	4.68	ppb	95
42) TAME	6.407	73	88705	4.79	ppb	92
44) Cyclohexane	5.676	41	32325	4.82	ppb	96
46) Carbontetrachloride	5.859	121	15848	4.92	ppb	98
47) 1,1-Dichloropropene	5.871	75	50498	4.96	ppb	91
49) Benzene	6.170	78	139137	4.74	ppb	97
50) 1,2-Dichloroethane	6.206	62	45235	4.81	ppb	94
51) Iso-Butyl Alcohol	6.212	43	18767	96.27	ppb	83
52) n-Heptane	6.639	43	29542	4.73	ppb	85
53) 1-Butanol	7.121	56	29459	237.95	ppb	83
54) Trichloroethene	7.084	130	38323	4.84	ppb	88
55) Methylcyclohexane	7.310	55	36947	4.98	ppb	97
56) 1,2-Dicopropane	7.352	63	31499	4.48	ppb	97
57) Dibromomethane	7.486	93	17823	4.71	ppb	# 78
58) 1,4-Dioxane	7.554	88	6062m	105.89	ppb	
59) Methyl Methacrylate	7.572	69	15960	4.58	ppb	84
60) Bromodichloromethane	7.718	83	50944	4.93	ppb	97
61) 2-Nitropropane	7.980	41	9996	7.57	ppb	92
62) 2-Chloroethylvinyl Ether	8.102	63	16958	5.23	ppb	91
63) cis-1,3-Dichloropropene	8.242	75	55801	4.73	ppb	91
64) 4-Methyl-2-pentanone	8.444	43	18877	4.72	ppb	92
66) Toluene	8.602	91	164702	4.89	ppb	96
67) trans-1,3-Dichloropropene	8.864	75	47313	4.69	ppb	94
68) Ethyl Methacrylate	8.998	69	31700	4.33	ppb	89
69) 1,1,2-Trichloroethane	9.047	97	27201	5.00	ppb	90
72) Tetrachloroethene	9.175	164	28244	4.43	ppb	95
73) 2-Hexanone	9.328	43	15720	5.58	ppb	92
74) 1,3-Dichloropropane	9.212	76	47594	5.21	ppb	93
75) Dibromochloromethane	9.431	129	31716	4.61	ppb	96
76) N-Butyl Acetate	9.480	43	35498	4.82	ppb	100
77) 1,2-Dibromoethane	9.529	107	26245	4.87	ppb	83
78) Chlorobenzene	10.016	112	109113	4.82	ppb	95
79) 3-CBTF	10.029	180	52708	4.94	ppb	86
80) 4-CBTF	10.084	180	47757	4.94	ppb	97
81) 1,1,1,2-Tetrachloroethane	10.102	131	35205	4.54	ppb	92
82) Ethylbenzene	10.132	106	59958	4.89	ppb	98
83) (m+p) Xylene	10.242	106	142439	9.54	ppb	93
84) o-Xylene	10.596	106	72406	5.01	ppb	95
85) Styrene	10.608	104	120796	4.87	ppb	98
87) Bromoform	10.760	173	19315	5.14	ppb	81
88) 2-CBTF	10.833	180	56643	5.32	ppb	# 84
89) Isopropylbenzene	10.925	105	164870	4.84	ppb	99
90) Cyclohexanone	10.992	55	20460	99.75	ppb	90
91) trans-1,4-Dichloro-2-B...	11.230	53	9324	5.08	ppb	89
92) 1,1,2,2-Tetrachloroethane	11.181	83	29935	4.82	ppb	83
93) Bromobenzene	11.169	156	42857	5.04	ppb	87
94) 1,2,3-Trichloropropene	11.211	110	9443	5.00	ppb	95

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 13:52:06 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10ML Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

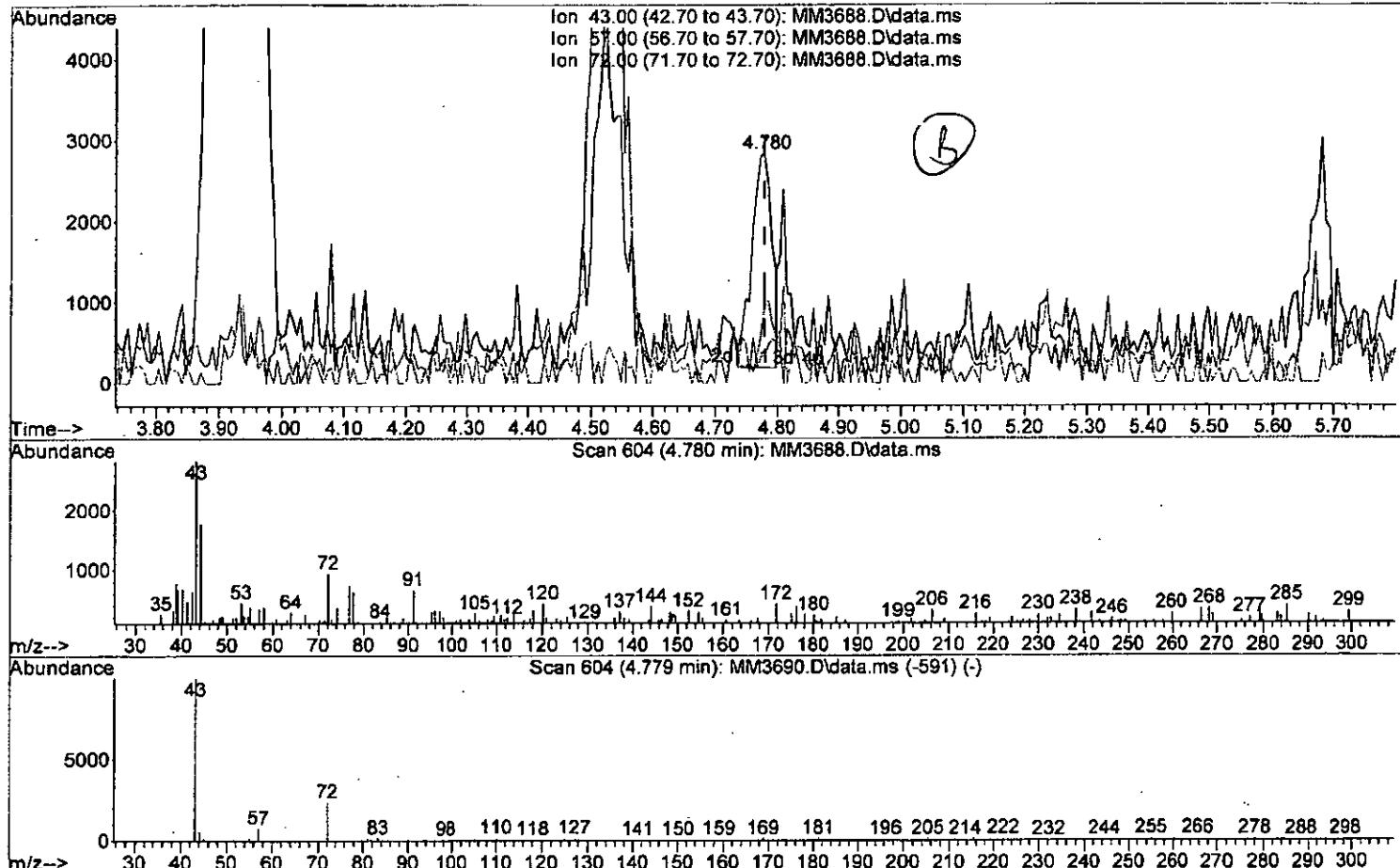
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
95) n-Propylbenzene	11.278	91	195116	5.09	ppb	97
96) 2-Chlorotoluene	11.339	91	117979	4.99	ppb	98
97) 3-Chlorotoluene	11.394	91	125168m	4.98	ppb	
98) 4-Chlorotoluene	11.431	91	146999	5.03	ppb	97
99) 1,3,5-Trimethylbenzene	11.431	105	144205	4.94	ppb	98
100) tert-Butylbenzene	11.699	119	120497	5.12	ppb	92
101) 1,2,4-Trimethylbenzene	11.736	105	145275	4.93	ppb	96
102) 3,4-DCBT	11.797	214	30923	4.43	ppb	93
103) sec-Butylbenzene	11.882	105	156302	4.84	ppb	94
104) p-Isopropyltoluene	12.004	119	140137	5.11	ppb	95
105) 1,3-Dclbenz	11.961	146	79189	4.79	ppb	96
106) 1,4-Dclbenz	12.034	146	84265	4.90	ppb	98
107) 2,4-DCBT	12.089	214	30573	4.97	ppb	90
108) 2,5-DCBT	12.132	214	34245	4.95	ppb	94
109) n-Butylbenzene	12.333	91	121937	4.95	ppb	96
110) 1,2-Dclbenz	12.339	146	72784	4.71	ppb	93
111) 1,2-Dibromo-3-chloropr...	12.955	157	6253	4.98	ppb	98
112) Trielution Dichlorotol...	13.077	125	195566	15.03	ppb	97
113) 1,3,5 Trichlorobenzene	13.126	180	48806	5.04	ppb	89
114) Coelution Dichlorotoluene	13.400	125	137345	9.86	ppb	97
115) 1,2,4-Tcbenzene	13.613	180	43816	4.94	ppb	92
116) Hexachlorobt	13.747	225	15564	4.56	ppb	93
117) Naphthalen	13.802	128	88621	4.76	ppb	96
118) 1,2,3-Tclbenzene	13.985	180	36657	5.05	ppb	94
119) 2,4,5-Trichlorotolene	14.570	159	28406m	4.90	ppb	
120) 2,3,6-Trichlorotoluene	14.656	159	25201	5.05	ppb	98

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvola12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:47 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3688.D\data.ms

(35) 2-Butanone (P)

4.780min (+0.000) 3.53 ppb

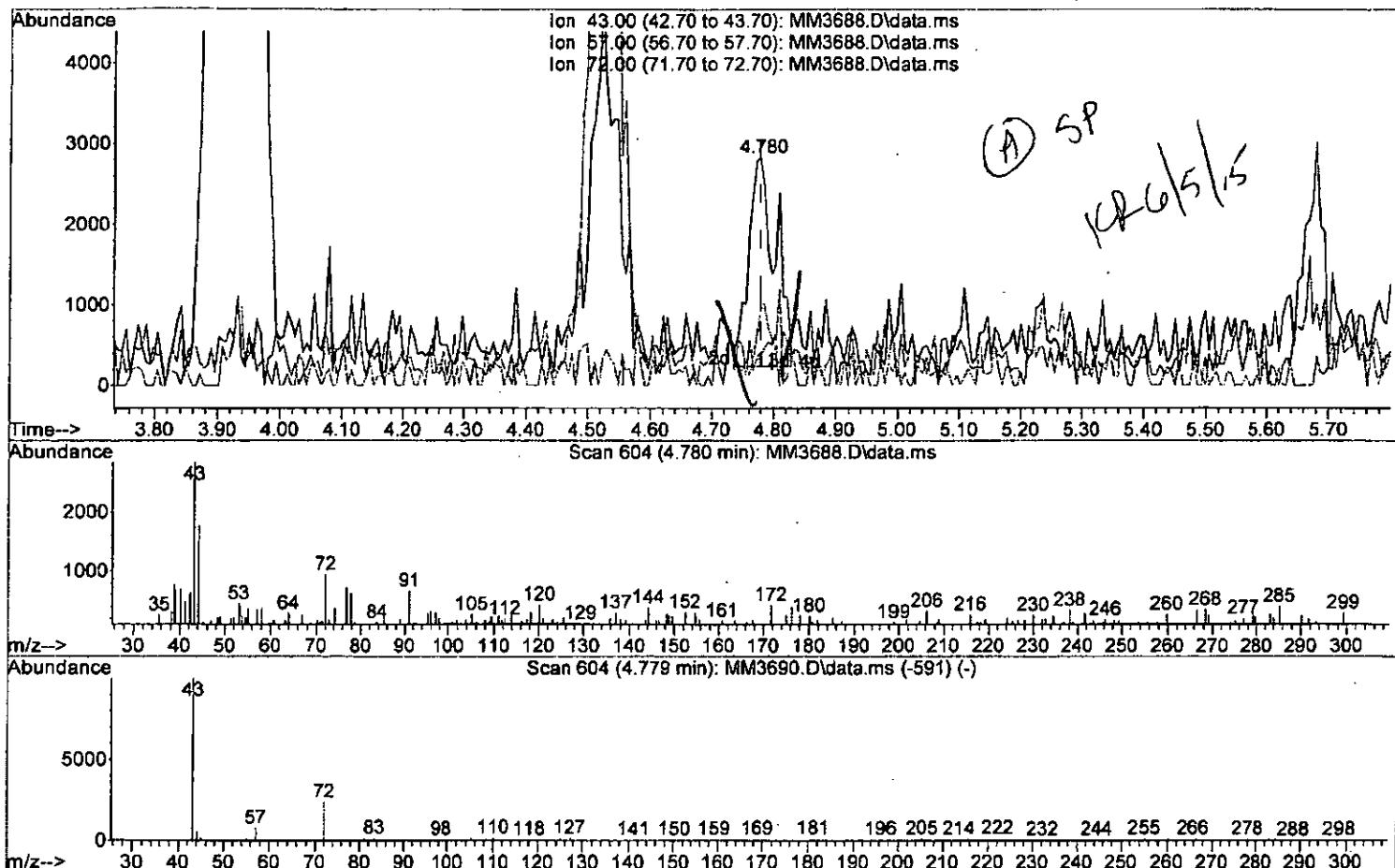
response 5934

Ion	Exp%	Act%
43.00	100	100
57.00	6.30	11.87
72.00	26.90	33.17
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 08:47:47 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3688.D\data.ms

(35) 2-Butanone (P)

4.780min (+0.000) 4.61 ppb m

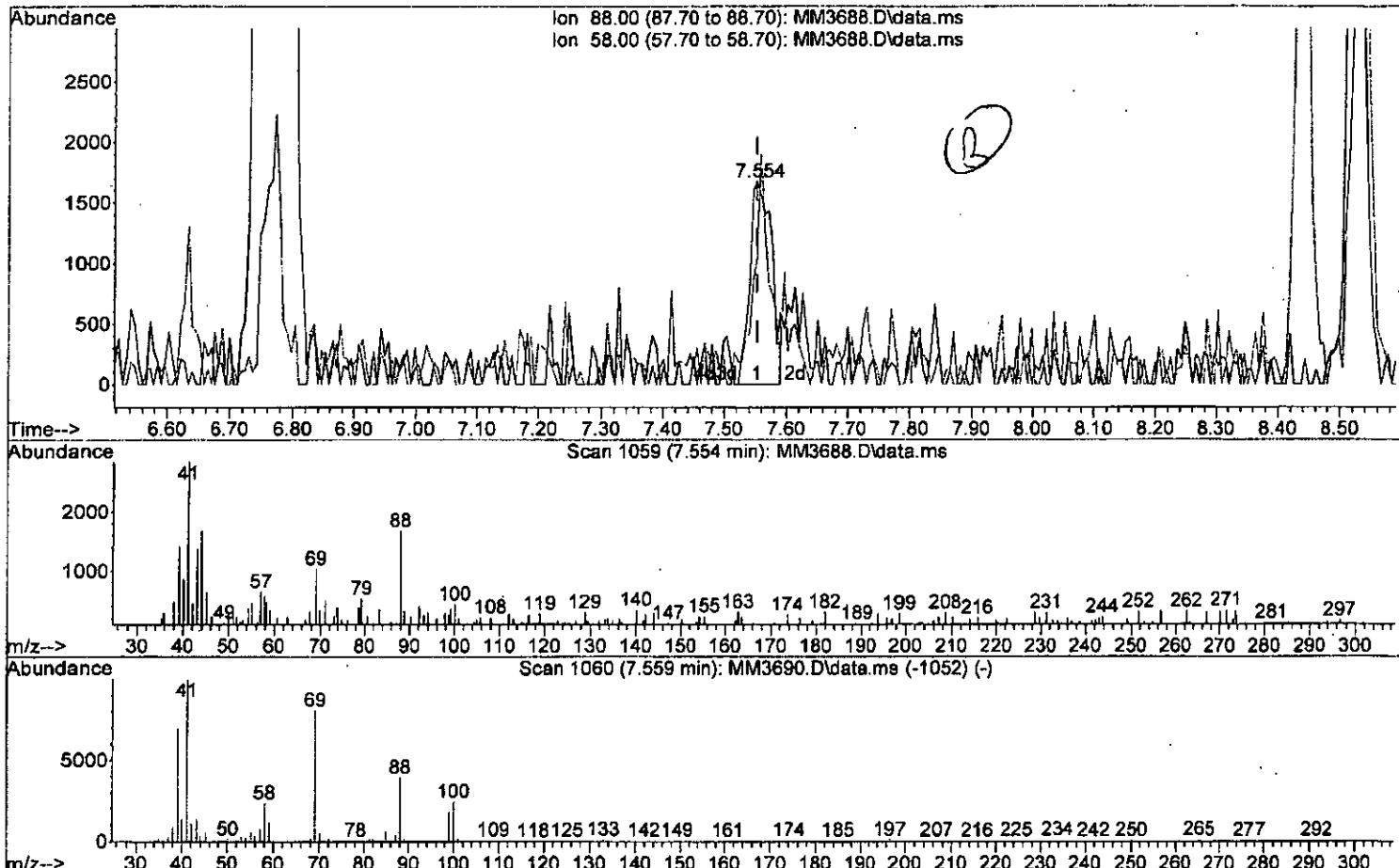
response 7731

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	11.87
72.00	28.90	33.17
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msv0a12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 08:47:47 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3688.D\data.ms

(58) 1,4-Dioxane

7.554min (+0.000) 71.99 ppb

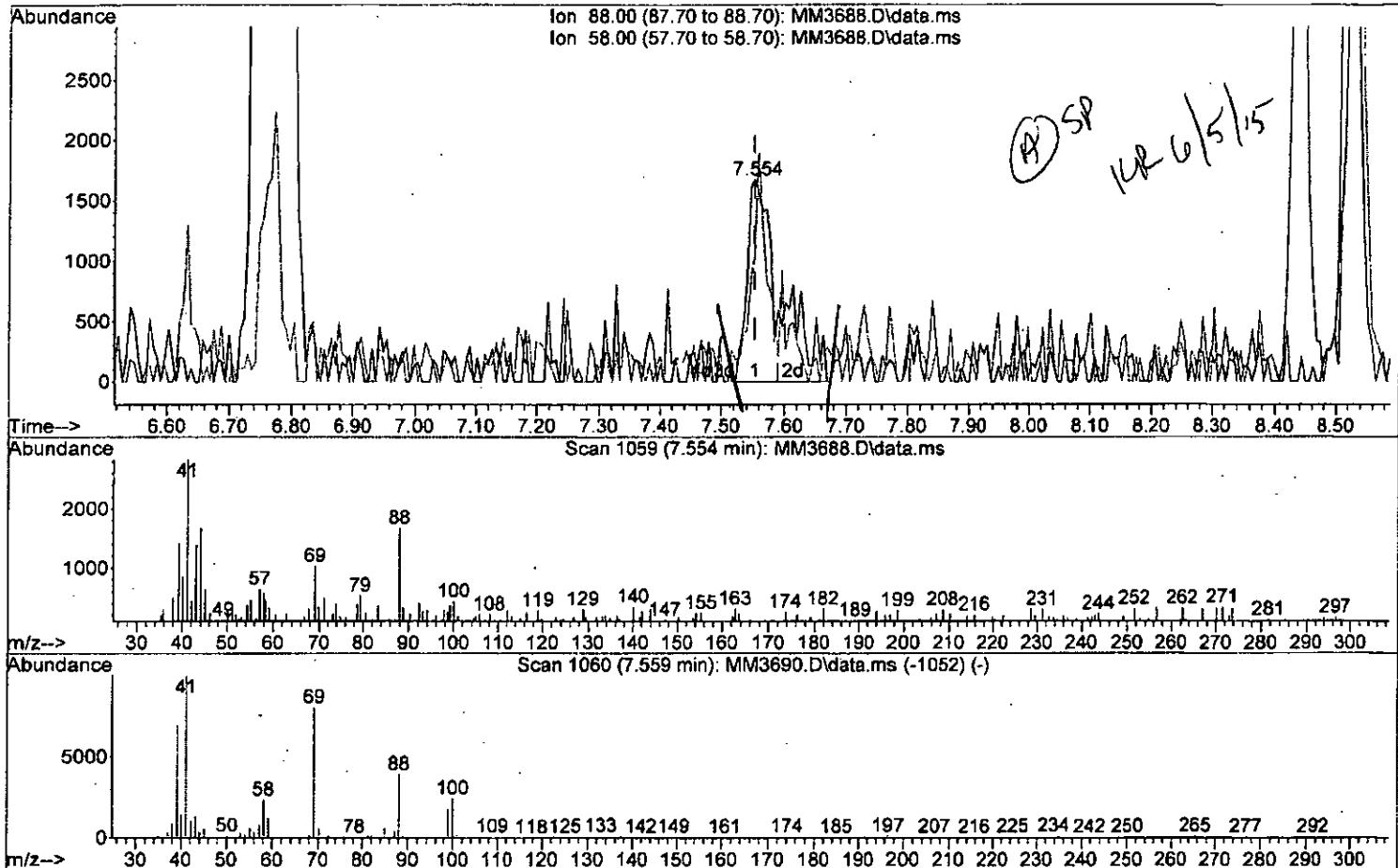
response 4121

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	62.02
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 08:47:47 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3688.D\data.ms

(58) 1,4-Dioxane

7.554min (+0.000) 105.89 ppb m

response 6062

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	34.27#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\

Data File : MM3688.D

Acq On : 4 Jun 2015 2:11 pm

Operator : K.Ruest

Sample : 5.0ppb

Misc : 8260 WATER ICAL

ALS Vial : 10 Sample Multiplier: 1

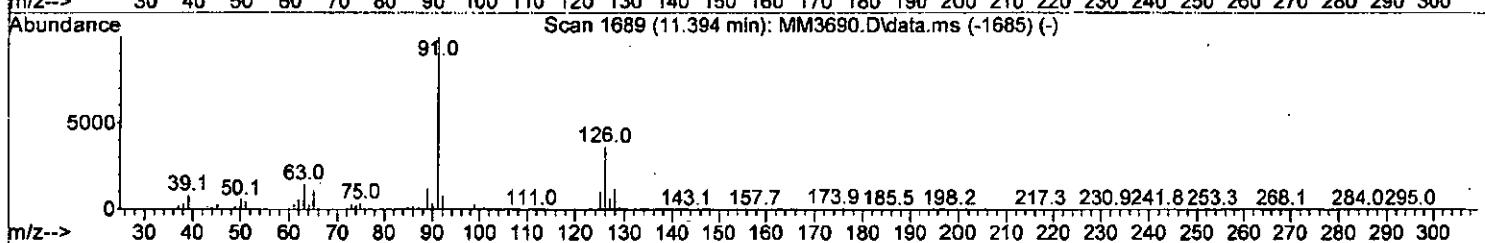
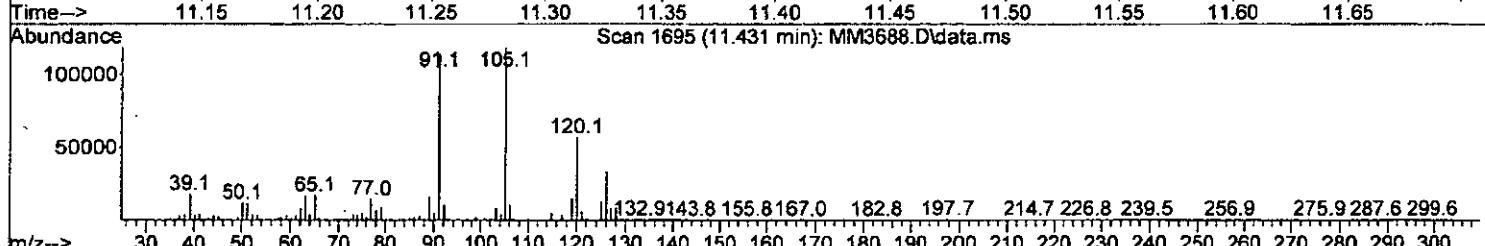
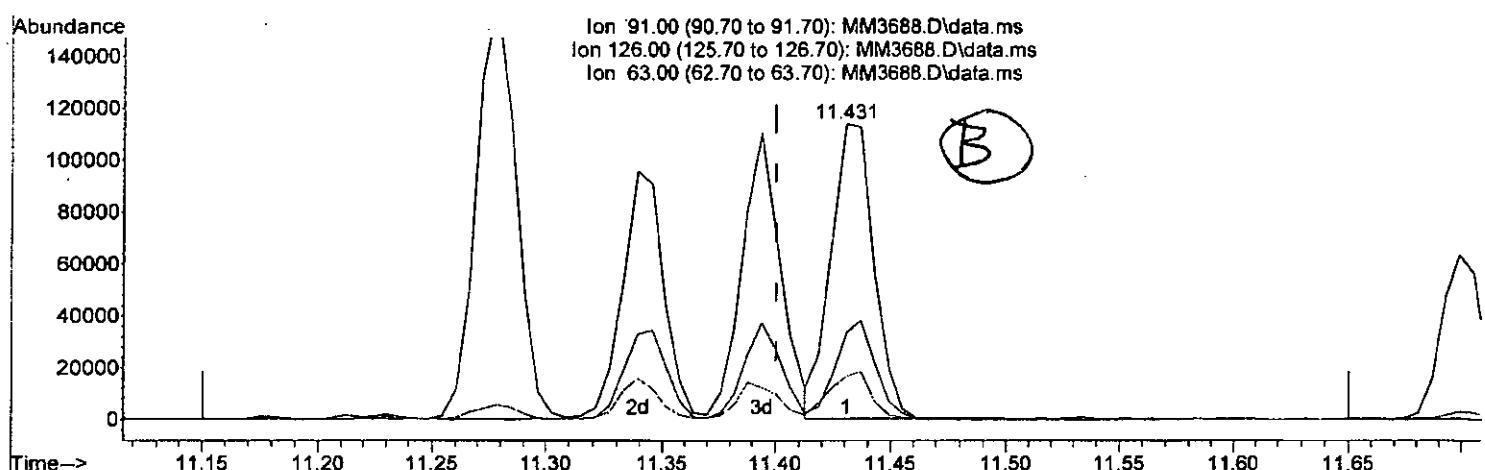
Quant Time: Jun 05 09:20:30 2015

Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 08:46:49 2015

Response via : Initial Calibration



TIC: MM3688.D\data.ms

(97) 3-Chlorotoluene

11.431min (+0.031) 5.82 ppb

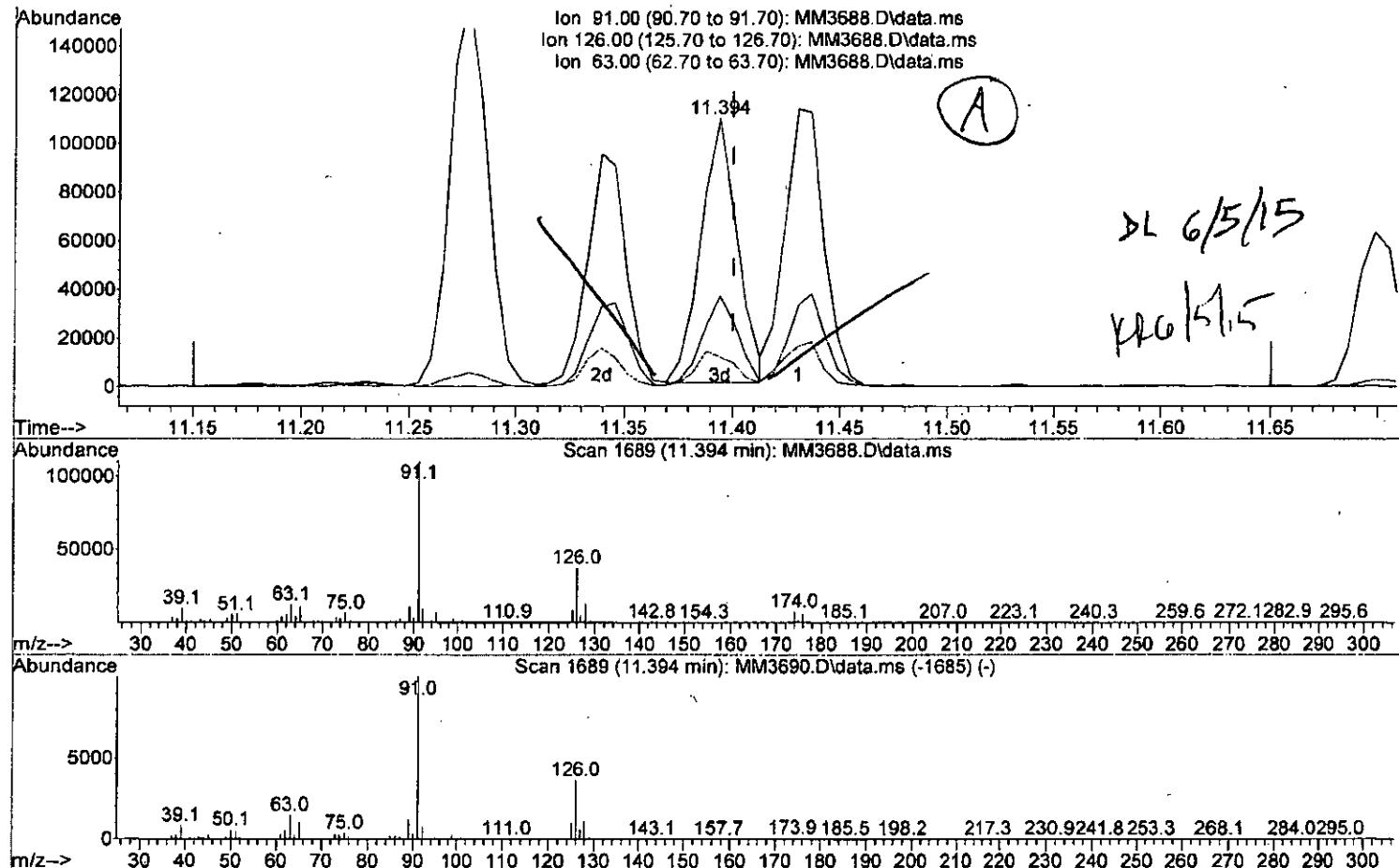
response 146332

Ion	Exp%	Act%
91.00	100	100
126.00	36.30	29.46
63.00	14.60	14.62
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoal2\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.Oppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 09:20:30 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



(97) 3-Chlorotoluene

11.394min (-0.006) 4.98 ppb m

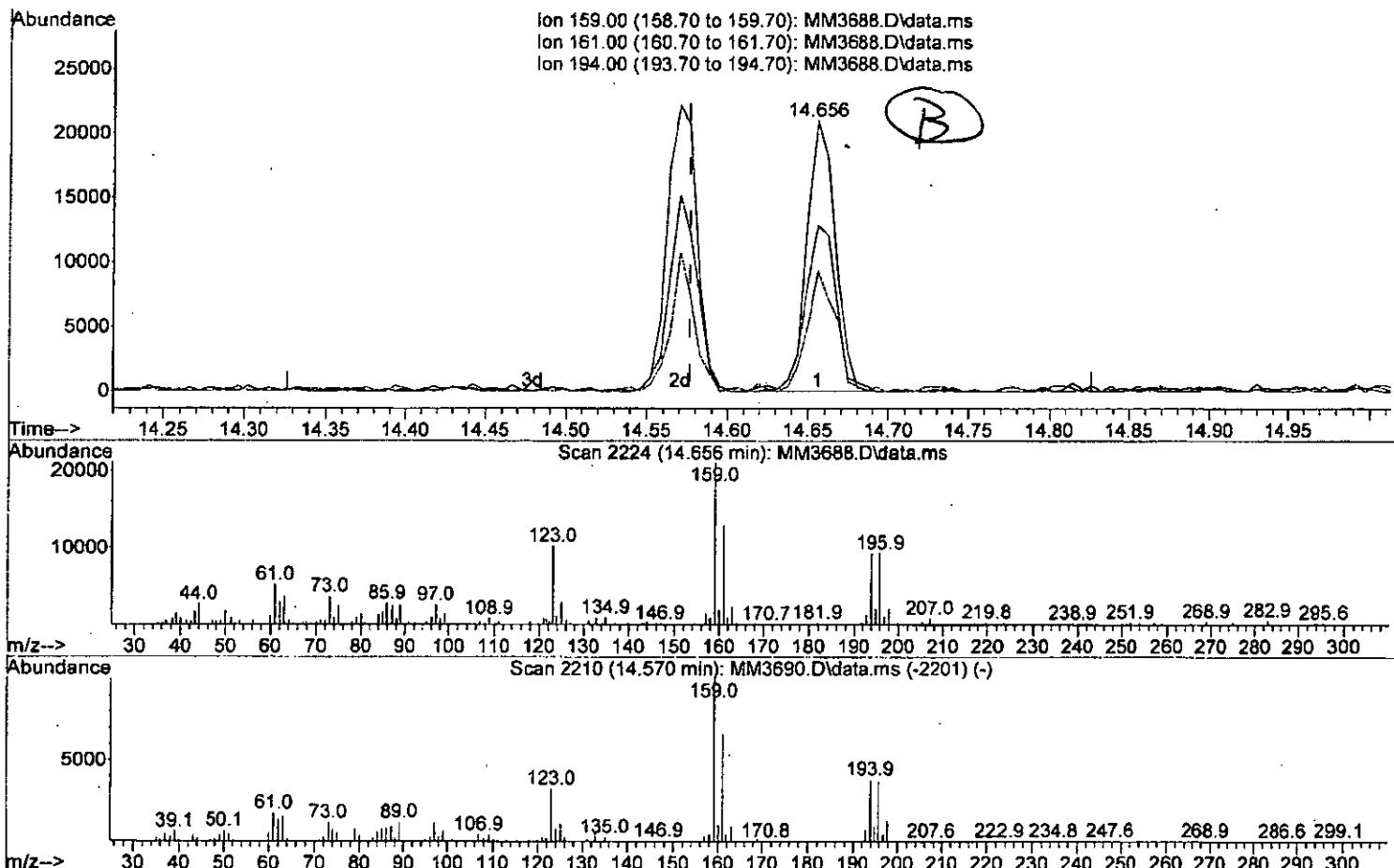
response 125168

Ion	Exp%	Act%
91.00	100	100
126.00	36.30	33.81
63.00	14.60	11.17#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 09:20:30 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3688.D\data.ms

(119) 2,4,5-Trichlorotoluene

14.666min (+0.079) 4.34 ppb

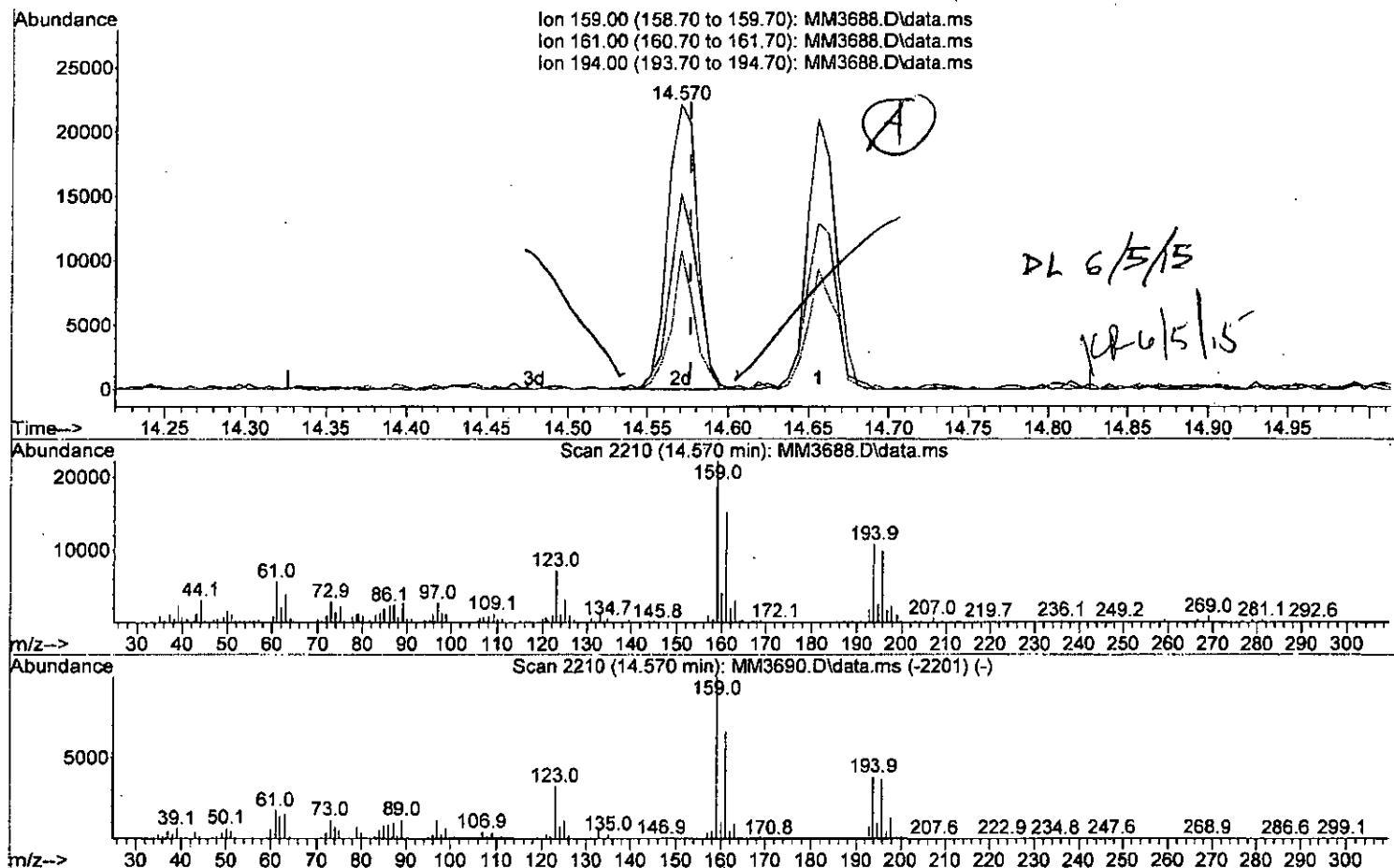
response 25201

Ion	Exp%	Act%
159.00	100	100
161.00	66.50	61.41
194.00	38.20	44.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3688.D  
 Acq On : 4 Jun 2015 2:11 pm  
 Operator : K.Ruest  
 Sample : 5.0ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 09:20:30 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3688.D\data.ms

(119) 2,4,5-Trichlorotoluene

14.570min (-0.006) 4.90 ppb m

response 28406

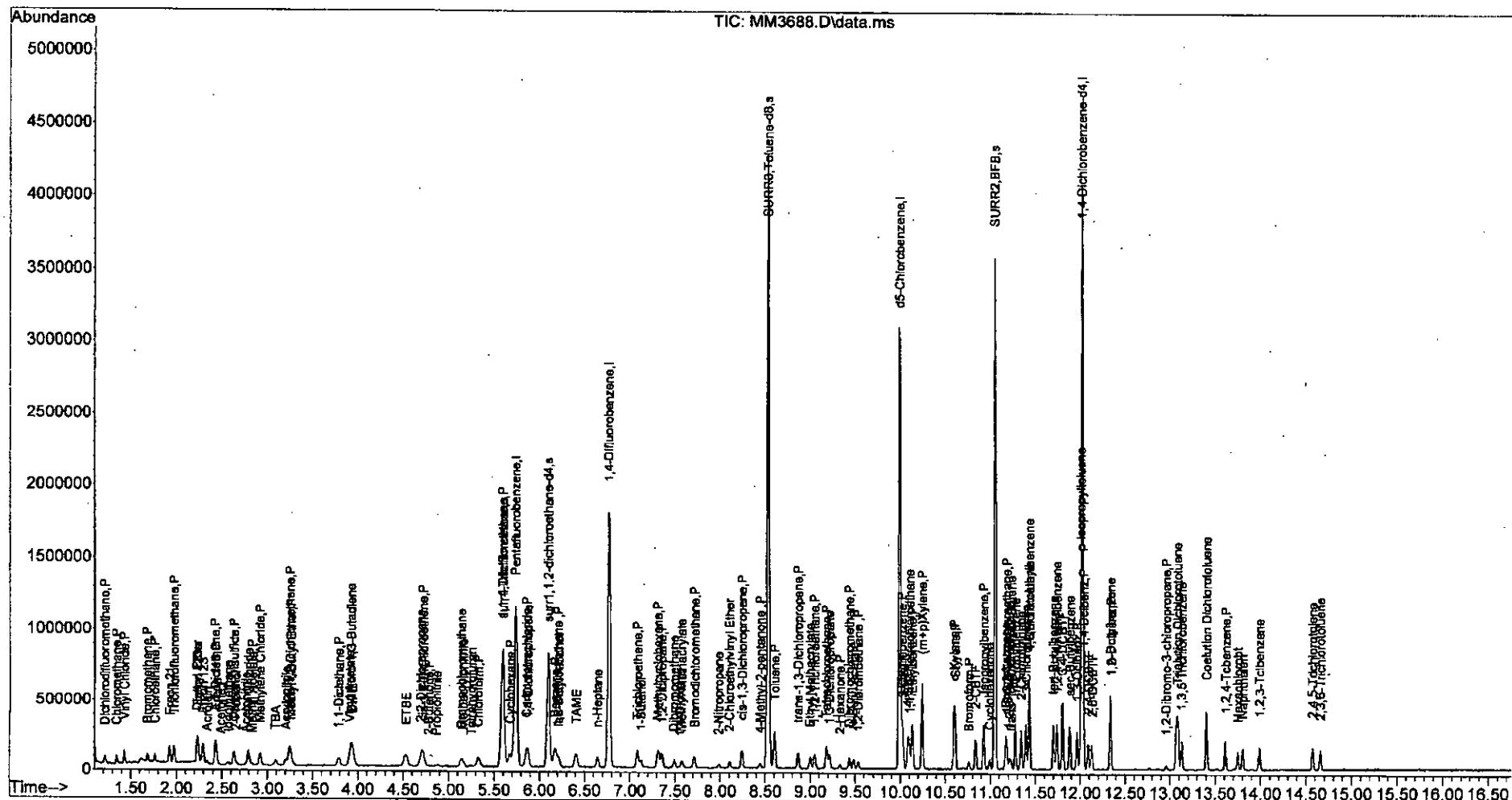
Ion	Exp%	Act%
159.00	100	100
161.00	66.50	68.81
194.00	38.20	48.64#
0.00	0.00	0.00

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUUDATA\msvcoa12\Data\060415\  
Data File : MM3688.D  
Acq On : 4 Jun 2015 2:11 pm  
Operator : K.Ruest  
Sample : 5.0ppb  
Misc : 8260 WATER ICAL  
ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 13:52:06 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 08:46:49 2015  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3689.D  
 Acc On : 4 Jun 2015 2:42 pm  
 Operator : K.Ruest  
 Sample : 20ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 09:23:02 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.737	168	929690	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1546739	50.00	ppb	0.00
71) d5-Chlorobenzene	9.986	117	1435928	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	770648	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.597	113	792102	94.64	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 189.28%		
48) surr1,1,2-dichloroetha...	6.096	65	868113	97.10	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 194.20%		
65) SURR3,Toluene-d8	8.529	98	3531662	96.61	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 193.22%		
70) SURR2,BFB	11.047	95	1346632	96.95	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 193.90%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	170796	21.19	ppb	94
3) Chloromethane	1.341	50	157364	20.40	ppb	99
4) Vinyl Chloride	1.427	62	201504	20.80	ppb	97
5) Bromomethane	1.683	94	105091	18.49	ppb	85
6) Chloroethane	1.762	64	132847	20.67	ppb	94
7) Freon 21	1.920	67	326092	20.23	ppb	100
8) Trichlorofluoromethane	1.975	101	297743	20.50	ppb	99
9) Diethyl Ether	2.225	59	125926	19.61	ppb	95
10) Freon 123a	2.231	67	204165	19.59	ppb	95
11) Freon 123	2.292	83	239995	20.05	ppb	99
12) Acrolein	2.335	56	70281	104.72	ppb	90
13) 1,1-Dicethene	2.426	96	135770	19.86	ppb	98
14) Freon 113	2.439	101	139561	20.62	ppb	95
15) Acetone	2.487	43	26215	20.33	ppb	98
16) 2-Propanol	2.652	45	104918	409.57	ppb	94
17) Iodomethane	2.573	142	146483	20.45	ppb	98
18) Carbon Disulfide	2.634	76	453758	20.79	ppb	98
19) Acetonitrile	2.756	40	16551m	97.14	ppb	
20) Allyl Chloride	2.792	76	88378	21.48	ppb	# 85
21) Methyl Acetate	2.829	43	54738	19.29	ppb	93
22) Methylene Chloride	2.920	84	144137	19.84	ppb	93
23) TBA	3.091	59	187585	406.35	ppb	98
24) Acrylonitrile	3.207	53	145259	97.45	ppb	94
25) Methyl-t-Butyl Ether	3.262	73	359709	20.25	ppb	94
26) trans-1,2-Dichloroethene	3.237	96	153486	20.09	ppb	95
28) 1,1-Dicethane	3.786	63	253102	20.00	ppb	95
29) Vinyl Acetate	3.896	86	30852	20.39	ppb	# 78
30) DIPE	3.944	45	426472	19.43	ppb	97
31) 2-Chloro-1,3-Butadiene	3.920	53	291286	21.18	ppb	96
32) ETBE	4.524	59	425811	19.47	ppb	98
33) 2,2-Dichloropropane	4.706	77	250850	20.86	ppb	98
34) cis-1,2-Dichloroethene	4.713	96	160290	19.68	ppb	100
35) 2-Butanone	4.774	43	36575	21.16	ppb	93
36) Propionitrile	4.871	54	53212	101.72	ppb	95

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3689.D  
 Acq On : 4 Jun 2015 2:42 pm  
 Operator : K.Ruest  
 Sample : 20ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 09:23:02 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Bromochloromethane	5.139	130	90043	20.00	ppb	93
38) Methacrylonitrile	5.158	67	38606m	19.37	ppb	
39) Tetrahydrofuran	5.243	42	23147	19.83	ppb	95
40) Chloroform	5.328	83	269461	20.26	ppb	100
41) 1,1,1-Trichloroethane	5.590	97	250680	19.52	ppb	96
42) TAME	6.407	73	375864	19.71	ppb	96
44) Cyclohexane	5.670	41	134782	19.23	ppb	87
46) Carbontetrachloride	5.859	121	68254	20.28	ppb	94
47) 1,1-Dichloropropene	5.871	75	206416	19.39	ppb	93
49) Benzene	6.170	78	625732	20.41	ppb	98
50) 1,2-Dichloroethane	6.212	62	192271	19.57	ppb	96
51) Iso-Butyl Alcohol	6.206	43	81609	400.80	ppb	85
52) n-Heptane	6.639	43	124398	19.05	ppb	98
53) 1-Butanol	7.121	56	126414	977.63	ppb	99
54) Trichloroethene	7.084	130	171162	20.68	ppb	92
55) Methylcyclohexane	7.310	55	158811	20.51	ppb	95
56) 1,2-Diclpropane	7.352	63	144909	19.74	ppb	94
57) Dibromomethane	7.493	93	75903	19.22	ppb	93
58) 1,4-Dioxane	7.553	88	24571	410.95	ppb	91
59) Methyl Methacrylate	7.578	69	73336	20.17	ppb	85
60) Bromodichloromethane	7.712	83	212979	19.73	ppb	97
61) 2-Nitropropane	7.986	41	55014	39.91	ppb	93
62) 2-Chloroethylvinyl Ether	8.108	63	70247	20.76	ppb	95
63) cis-1,3-Dichloropropene	8.242	75	245033	19.89	ppb	98
64) 4-Methyl-2-pentanone	8.437	43	85832	20.53	ppb	96
66) Toluene	8.602	91	718864	20.44	ppb	98
67) trans-1,3-Dichloropropene	8.864	75	212270	20.14	ppb	96
68) Ethyl Methacrylate	8.998	69	151688	19.83	ppb	95
69) 1,1,2-Trichloroethane	9.047	97	112646	19.83	ppb	91
72) Tetrachloroethene	9.181	164	137427	20.87	ppb	95
73) 2-Hexanone	9.328	43	61435	21.13	ppb	98
74) 1,3-Dichloropropane	9.212	76	193150	20.49	ppb	98
75) Dibromochloromethane	9.431	129	143065	20.15	ppb	94
76) N-Butyl Acetate	9.480	43	153359	20.15	ppb	97
77) 1,2-Dibromoethane	9.529	107	109971	19.75	ppb	99
78) Chlorobenzene	10.016	112	476362	20.38	ppb	98
79) 3-CBTF	10.029	180	221235	20.07	ppb	95
80) 4-CBTF	10.083	180	204043	20.44	ppb	97
81) 1,1,1,2-Tetrachloroethane	10.102	131	159351	19.91	ppb	97
82) Ethylbenzene	10.132	106	267443	21.14	ppb	93
83) (m+p)Xylene	10.242	106	634475	41.14	ppb	99
84) o-Xylene	10.596	106	308750	20.67	ppb	94
85) Styrene	10.608	104	519775	20.28	ppb	98
87) Bromoform	10.760	173	80842	20.49	ppb	96
88) 2-CBTF	10.833	180	219429	19.63	ppb	96
89) Isopropylbenzene	10.925	105	759256	21.22	ppb	100
90) Cyclohexanone	10.986	55	86617	402.41	ppb	90
91) trans-1,4-Dichloro-2-B...	11.230	53	37478	19.46	ppb	98
92) 1,1,2,2-Tetrachloroethane	11.181	83	133250	20.46	ppb	97
93) Bromobenzene	11.169	156	186908	20.95	ppb	# 81
94) 1,2,3-Trichloropropane	11.211	110	38966	19.67	ppb	95

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3689.D  
 Acq On : 4 Jun 2015 2:42 pm  
 Operator : K.Ruest  
 Sample : 20ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 09:23:02 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

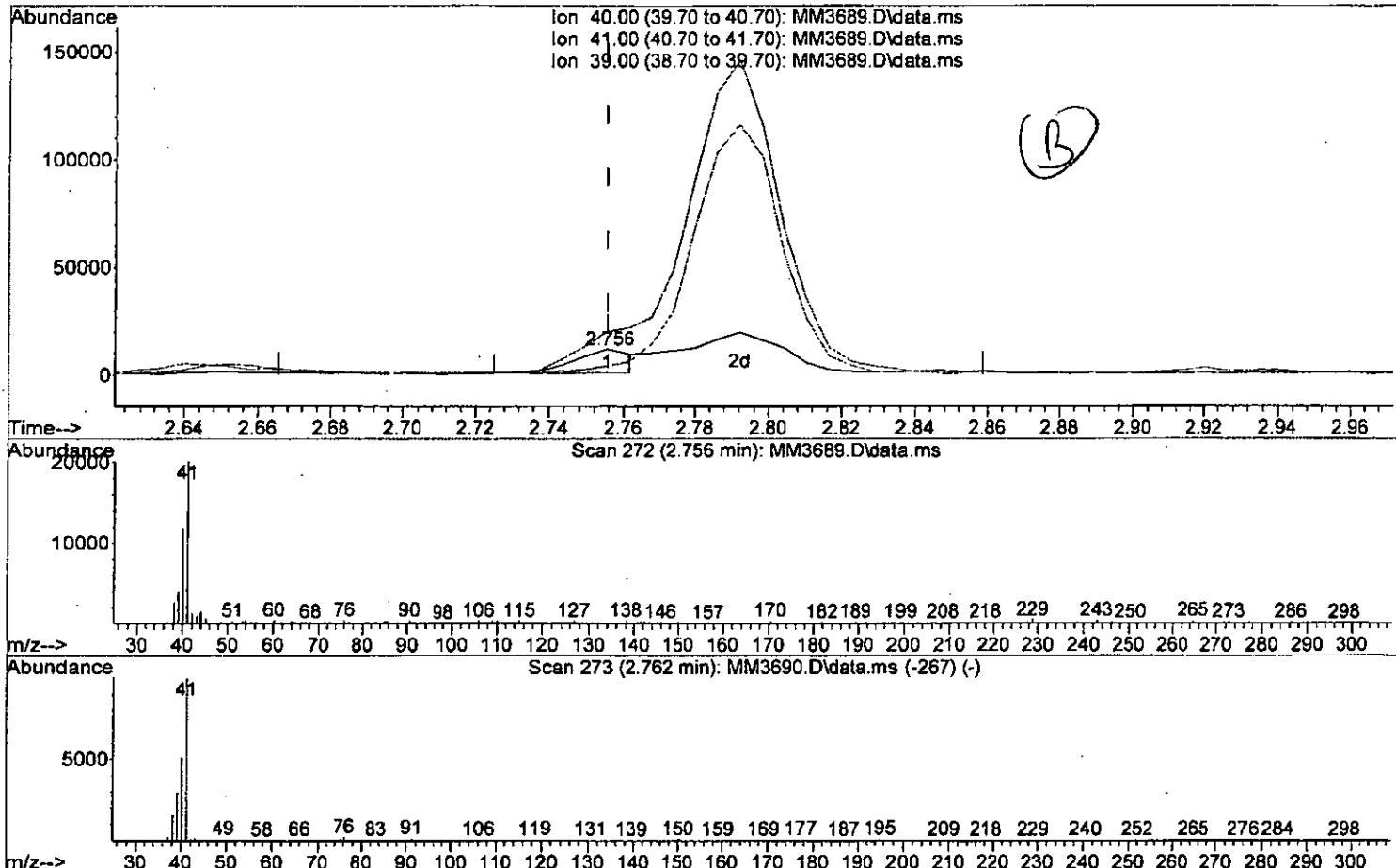
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) n-Propylbenzene	11.278	91	878649	21.82	ppb	98
96) 2-Chlorotoluene	11.339	91	528349	21.29	ppb	98
97) 3-Chlorotoluene	11.394	91	549104	20.82	ppb	98
98) 4-Chlorotoluene	11.437	91	642524	20.95	ppb	99
99) 1,3,5-Trimethylbenzene	11.431	105	650177	21.21	ppb	99
100) tert-Butylbenzene	11.699	119	519096	21.02	ppb	98
101) 1,2,4-Trimethylbenzene	11.736	105	662783	21.42	ppb	95
102) 3,4-DCBTF	11.803	214	146340	19.99	ppb	94
103) sec-Butylbenzene	11.882	105	714333	21.10	ppb	97
104) p-Isopropyltoluene	12.004	119	629085	21.87	ppb	98
105) 1,3-Dclbenz	11.961	146	366251	21.12	ppb	94
106) 1,4-Dclbenz	12.040	146	376902	20.87	ppb	97
107) 2,4-DCBTF	12.089	214	135784	21.02	ppb	97
108) 2,5-DCBTF	12.126	214	148243	20.41	ppb	96
109) n-Butylbenzene	12.333	91	543477	21.03	ppb	98
110) 1,2-Dclbenz	12.339	146	333376	20.57	ppb	96
111) 1,2-Dibromo-3-chloropr...	12.955	157	25320	19.21	ppb	89
112) Trielution Dichlorotol...	13.077	125	849439	62.23	ppb	98
113) 1,3,5 Trichlorobenzene	13.132	180	219038	21.55	ppb	94
114) Coelution Dichlorotoluene	13.400	125	610518	41.75	ppb	97
115) 1,2,4-Tcbenzene	13.613	180	187481	20.14	ppb	99
116) Hexachlorobt	13.747	225	71751	20.02	ppb	93
117) Naphthalen	13.802	128	398196	20.38	ppb	99
118) 1,2,3-Tclbenzene	13.985	180	157900	20.74	ppb	92
119) 2,4,5-Trichlorotolene	14.570	159	126925	20.85	ppb	93
120) 2,3,6-Trichlorotoluene	14.656	159	104855	20.04	ppb	97

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

Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3689.D  
 Acq On : 4 Jun 2015 2:42 pm  
 Operator : K.Ruest  
 Sample : 20ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 08:47:52 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3689.D\data.ms

(19) Acetonitrile

2.756min (-0.000) 67.46 ppb

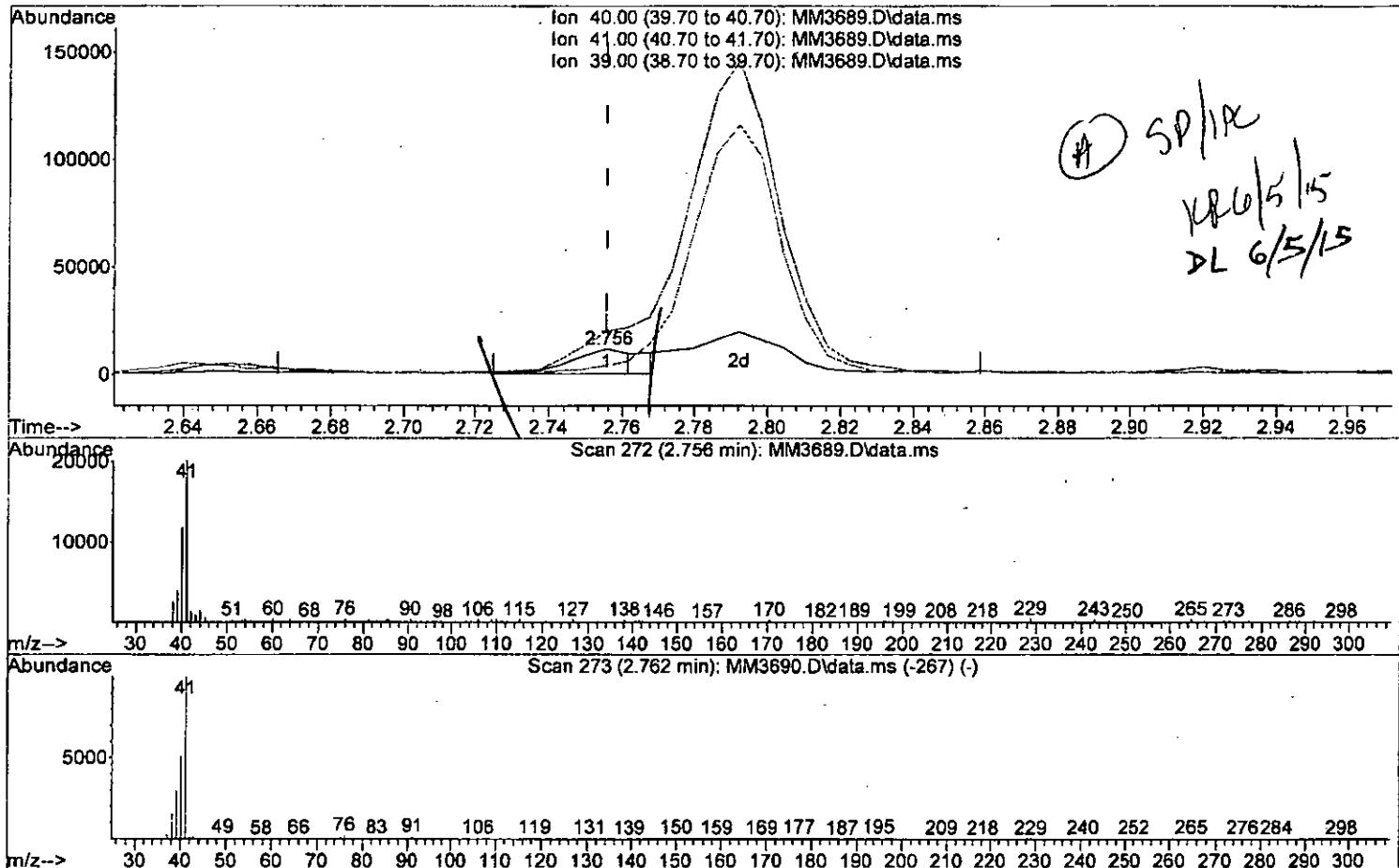
response 11494

Ion	Exp%	Act%
40.00	100	100
41.00	194.30	170.75#
39.00	58.40	34.18#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3689.D  
 Acq On : 4 Jun 2015 2:42 pm  
 Operator : K.Ruest  
 Sample : 20ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 08:47:52 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3689.D\data.ms

(19) Acetonitrile

2.756min (-0.000) 97.14 ppb m

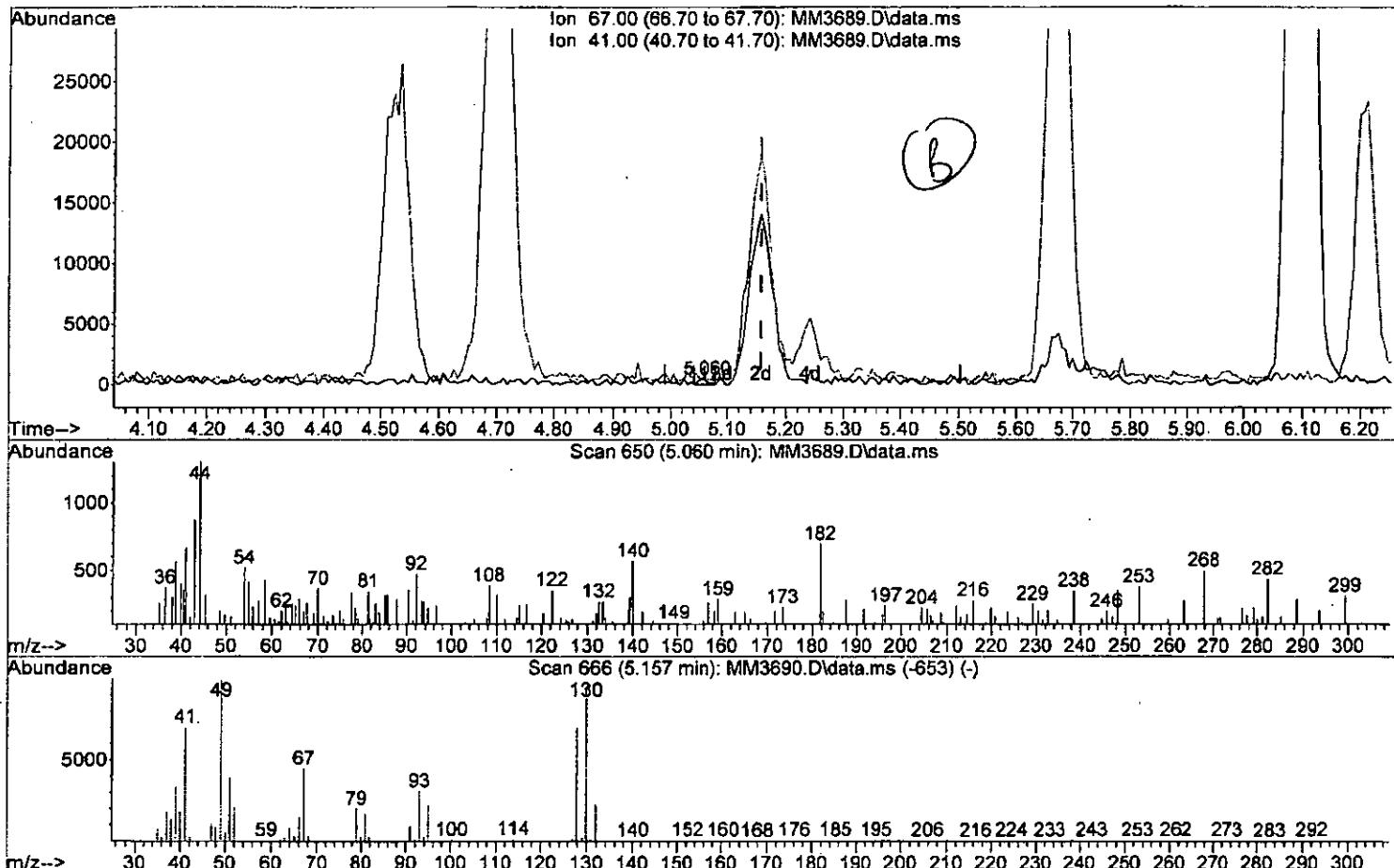
response 16551

Ion	Exp%	Act%
40.00	100	100
41.00	194.30	170.75#
39.00	58.40	34.18#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3689.D  
 Acq On : 4 Jun 2015 2:42 pm  
 Operator : K.Ruest  
 Sample : 20ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 08:47:52 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3689.D\data.ms

(38) Methacrylonitrile

5.060min (-0.098) 0.26 ppb

response 510

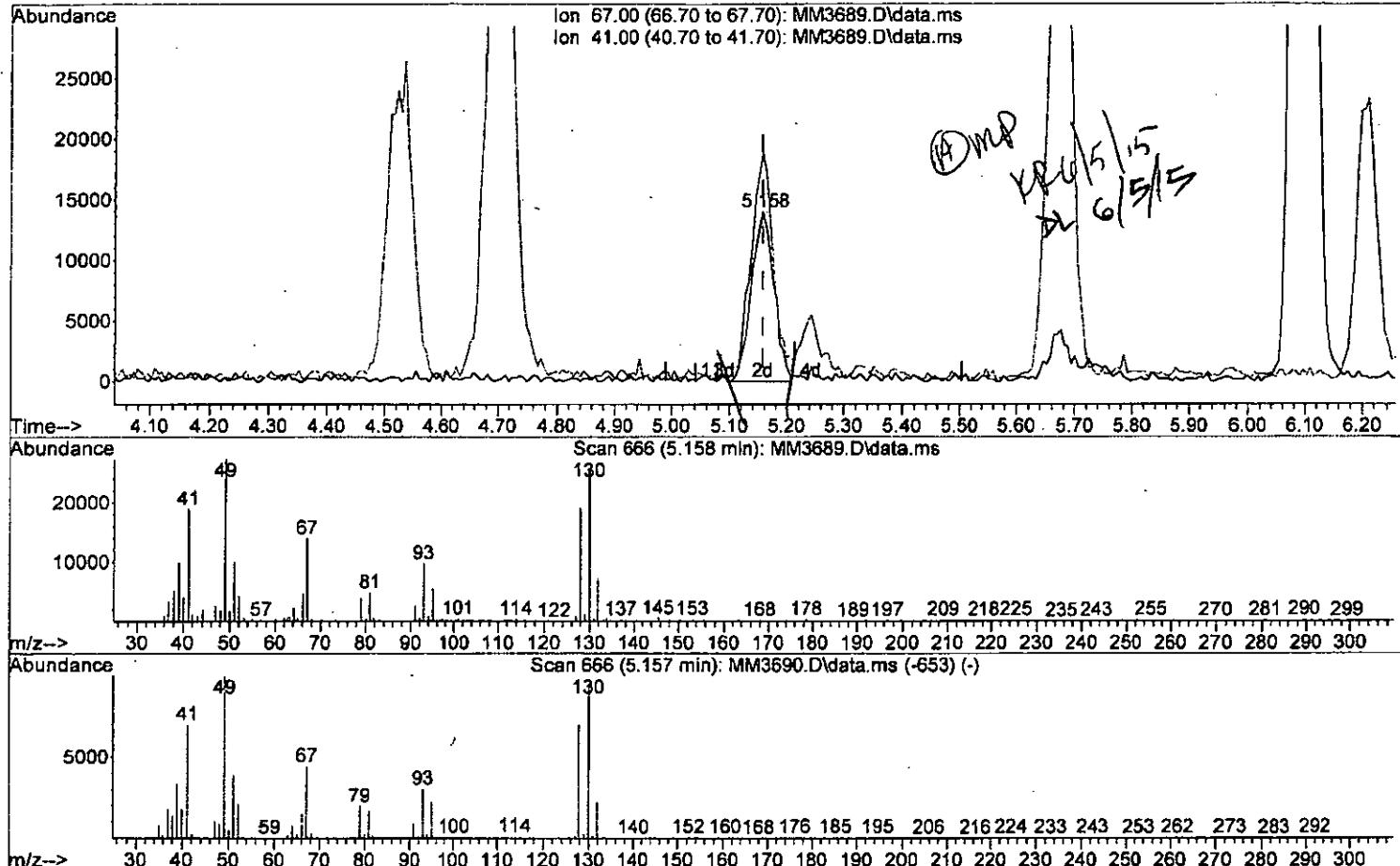
Ion	Exp%	Act%
67.00	100	100
41.00	159.00	147.88
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3689.D  
 Acq On : 4 Jun 2015 2:42 pm  
 Operator : K.Ruest  
 Sample : 20ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:47:52 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3689.D\data.ms

## (38) Methacrylonitrile

5.158min (-0.000) 19.37 ppb m

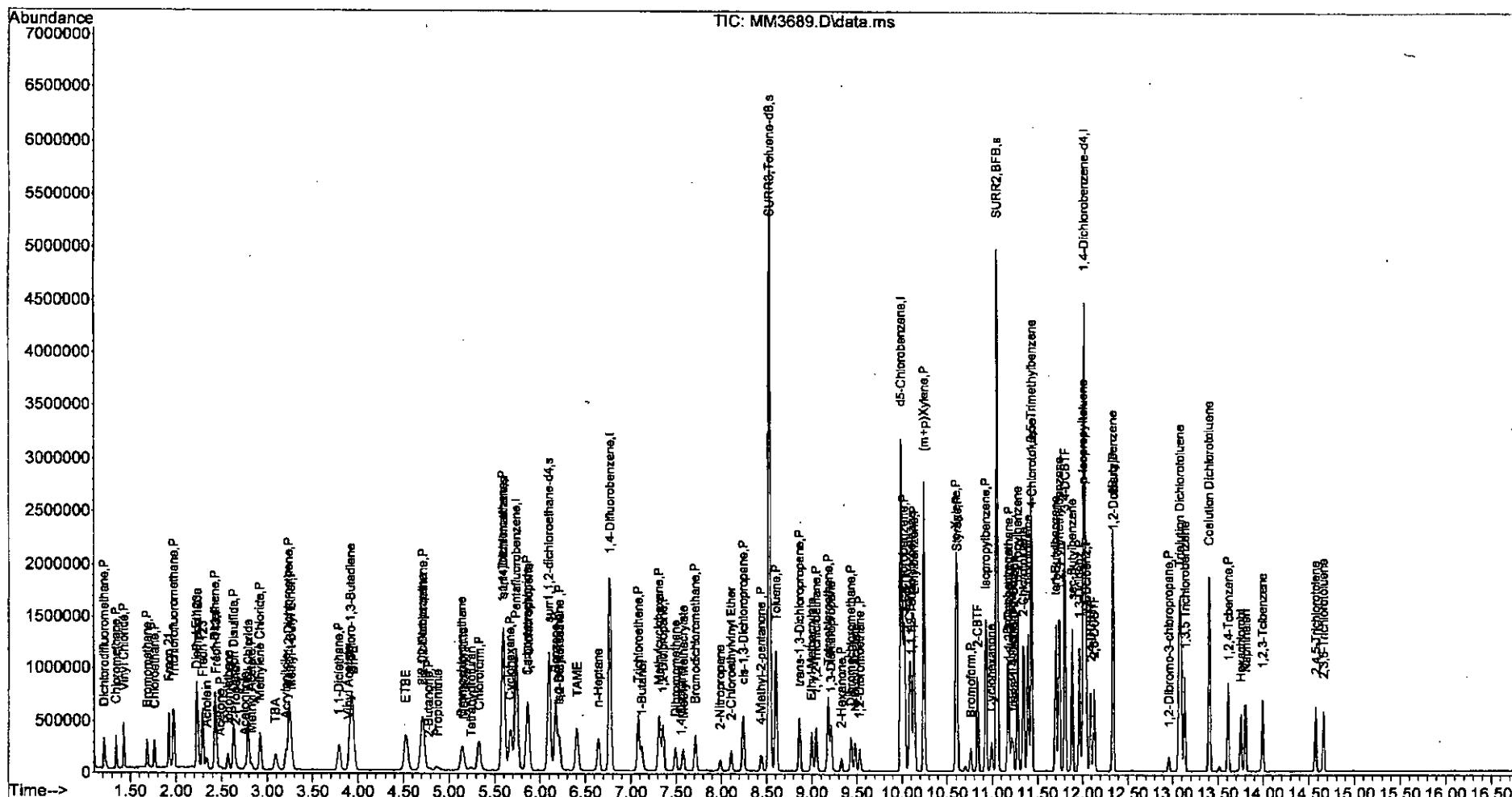
response 38606

Ion	Exp%	Act%
67.00	100	100
41.00	159.00	134.94#
0.00	0.00	0.00
0.00	0.00	0.00

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUUDATA\msvola12\Data\060415\  
Data File : MM3689.D  
Acq On : 4 Jun 2015 2:42 pm  
Operator : K.Ruest  
Sample : 20ppb  
Misc : 8260 WATER ICAL  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 09:23:02 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 08:46:49 2015  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3690.D  
 Acq On : 4 Jun 2015 3:12 pm  
 Operator : K.Ruest  
 Sample : 50ppb  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 09:25:10 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	943892	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1567087	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1461862	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	811080	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,DibromoMethane	5.596	113	459892	54.23	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 108.46%			
48) surr1,1,2-dichloroetha...	6.096	65	491843	54.30	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.60%			
65) SURR3,Toluene-d8	8.529	98	1991505	53.77	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.54%			
70) SURR2,BFB	11.053	95	779481	55.39	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 110.78%			
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	413334	50.50	ppb	100
3) Chloromethane	1.347	50	383152	48.92	ppb	100
4) Vinyl Chloride	1.427	62	490302	49.85	ppb	100
5) Bromomethane	1.683	94	263960	45.75	ppb	100
6) Chloroethane	1.762	64	315542	48.37	ppb	100
7) Freon 21	1.926	67	812622	49.65	ppb	100
8) Trichlorofluoromethane	1.975	101	735808	49.91	ppb	100
9) Diethyl Ether	2.231	59	322432	49.46	ppb	100
10) Freon 123a	2.237	67	506417	47.85	ppb	100
11) Freon 123	2.292	83	587699	48.36	ppb	100
12) Acrolein	2.341	56	183056	268.65	ppb	100
13) 1,1-Dicethene	2.426	96	330745	47.66	ppb	100
14) Freon 113	2.438	101	326548	47.52	ppb	100
15) Acetone	2.487	43	61189	46.73	ppb	100
16) 2-Propanol	2.652	45	272187	1046.55	ppb	100
17) Iodomethane	2.573	142	422778	58.14	ppb	100
18) Carbon Disulfide	2.634	76	1056091	47.65	ppb	100
19) Acetonitrile	2.762	40	39150	226.31	ppb	100
20) Allyl Chloride	2.792	76	205980	49.31	ppb	100
21) Methyl Acetate	2.829	43	145265	50.42	ppb	100
22) Methylene Chloride	2.926	84	357779	48.50	ppb	100
23) TBA	3.091	59	505412	1078.35	ppb	100
24) Acrylonitrile	3.207	53	376667	248.90	ppb	100
25) Methyl-t-Butyl Ether	3.262	73	929581	51.54	ppb	100
26) trans-1,2-Dichloroethene	3.243	96	372428	48.01	ppb	100
28) 1,1-Dicethane	3.792	63	617755	48.08	ppb	100
29) Vinyl Acetate	3.902	86	75302	49.01	ppb	100
30) DIPE	3.944	45	1079563	48.46	ppb	100
31) 2-Chloro-1,3-Butadiene	3.926	53	678082	48.57	ppb	100
32) ETBE	4.530	59	1082125	48.73	ppb	100
33) 2,2-Dichloropropane	4.706	77	613731	50.27	ppb	100
34) cis-1,2-Dichloroethene	4.719	96	405250	49.01	ppb	100
35) 2-Butanone	4.779	43	91600	52.20	ppb	100
36) Propionitrile	4.865	54	141700	266.79	ppb	100

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3690.D  
 Acq On : 4 Jun 2015 3:12 pm  
 Operator : K.Ruest  
 Sample : 50ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 09:25:10 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.145	130	225483	49.33	ppb	100
38) Methacrylonitrile	5.157	67	95180	47.04	ppb	100
39) Tetrahydrofuran	5.243	42	55302	46.66	ppb	100
40) Chloroform	5.328	83	643141	47.62	ppb	100
41) 1,1,1-Trichloroethane	5.596	97	618476	47.44	ppb	100
42) TAME	6.407	73	972099	50.20	ppb	100
44) Cyclohexane	5.676	41	342453	48.23	ppb	100
46) Carbontetrachloride	5.859	121	164314	48.18	ppb	100
47) 1,1-Dichloropropene	5.871	75	508175	47.12	ppb	100
49) Benzene	6.176	78	1502364	48.38	ppb	100
50) 1,2-Dichloroethane	6.212	62	475427	47.75	ppb	100
51) Iso-Butyl Alcohol	6.206	43	202548	981.84	ppb	100
52) n-Heptane	6.645	43	320944	48.52	ppb	100
53) 1-Butanol	7.121	56	338594	2584.54	ppb	100
54) Trichloroethene	7.084	130	412166	49.16	ppb	100
55) Methylcyclohexane	7.309	55	392999	50.11	ppb	100
56) 1,2-Diclpropane	7.358	63	361759	48.64	ppb	100
57) Dibromomethane	7.492	93	190839	47.69	ppb	100
58) 1,4-Dioxane	7.559	88	54275m	895.95	ppb	
59) Methyl Methacrylate	7.578	69	184592	50.10	ppb	100
60) Bromodichloromethane	7.712	83	514975	47.10	ppb	100
61) 2-Nitropropane	7.986	41	143287	102.60	ppb	100
62) 2-Chloroethylvinyl Ether	8.108	63	180129	52.54	ppb	100
63) cis-1,3-Dichloropropene	8.242	75	615517	49.32	ppb	100
64) 4-Methyl-2-pentanone	8.443	43	221960	52.41	ppb	100
66) Toluene	8.602	91	1751509	49.16	ppb	100
67) trans-1,3-Dichloropropene	8.864	75	538772	50.45	ppb	100
68) Ethyl Methacrylate	8.998	69	393442	50.76	ppb	100
69) 1,1,2-Trichloroethane	9.047	97	278943	48.47	ppb	100
72) Tetrachloroethene	9.181	164	310309	46.28	ppb	100
73) 2-Hexanone	9.327	43	158048	53.40	ppb	100
74) 1,3-Dichloropropane	9.212	76	504246	52.53	ppb	100
75) Dibromochloromethane	9.437	129	366279	50.68	ppb	100
76) N-Butyl Acetate	9.480	43	402645	51.96	ppb	100
77) 1,2-Dibromoethane	9.529	107	285034	50.28	ppb	100
78) Chlorobenzene	10.016	112	1179306	49.56	ppb	100
79) 3-CBTF	10.035	180	540467	48.17	ppb	100
80) 4-CBTF	10.083	180	486390	47.86	ppb	100
81) 1,1,1,2-Tetrachloroethane	10.102	131	393979	48.35	ppb	100
82) Ethylbenzene	10.132	106	635496	49.33	ppb	100
83) (m+p) Xylene	10.242	106	1583296	100.84	ppb	100
84) o-Xylene	10.595	106	763796	50.24	ppb	100
85) Styrene	10.608	104	1313363	50.33	ppb	100
87) Bromoform	10.760	173	210485	50.69	ppb	100
88) 2-CBTF	10.833	180	527159	44.81	ppb	100
89) Isopropylbenzene	10.925	105	1840082	48.87	ppb	100
90) Cyclohexanone	10.986	55	236720	1044.96	ppb	100
91) trans-1,4-Dichloro-2-B...	11.229	53	101128	49.90	ppb	100
92) 1,1,2,2-Tetrachloroethane	11.181	83	337636	49.26	ppb	100
93) Bromobenzene	11.175	156	458732	48.86	ppb	100
94) 1,2,3-Trichloropropane	11.211	110	99995	47.95	ppb	100

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3690.D  
 Acq On : 4 Jun 2015 3:12 pm  
 Operator : K.Ruest  
 Sample : 50ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 09:25:10 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

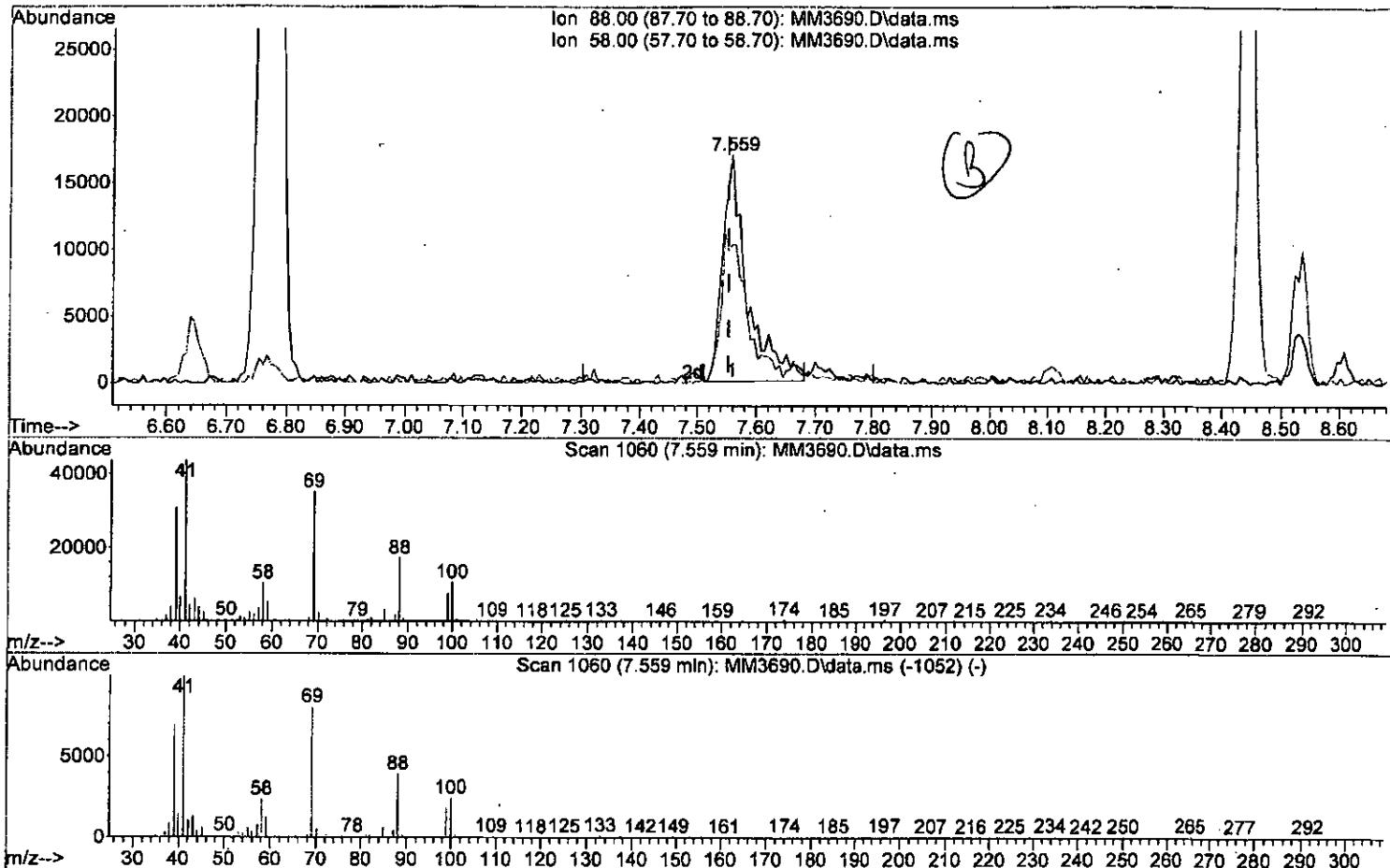
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) n-Propylbenzene	11.278	91	2128811	50.23	ppb	100
96) 2-Chlorotoluene	11.345	91	1302331	49.87	ppb	100
97) 3-Chlorotoluene	11.394	91	1304033	46.99	ppb	100
98) 4-Chlorotoluene	11.437	91	1621125	50.21	ppb	100
99) 1,3,5-Trimethylbenzene	11.431	105	1603044	49.70	ppb	100
100) tert-Butylbenzene	11.705	119	1261761	48.54	ppb	100
101) 1,2,4-Trimethylbenzene	11.742	105	1609282	49.41	ppb	100
102) 3,4-DCBTF	11.803	214	359385	46.66	ppb	100
103) sec-Butylbenzene	11.882	105	1760005	49.39	ppb	100
104) p-Isopropyltoluene	12.004	119	1523221	50.32	ppb	100
105) 1,3-Dclbenz	11.961	146	890627	48.80	ppb	100
106) 1,4-Dclbenz	12.040	146	922742	48.54	ppb	100
107) 2,4-DCBTF	12.089	214	317685	46.73	ppb	100
108) 2,5-DCBTF	12.132	214	363400	47.55	ppb	100
109) n-Butylbenzene	12.333	91	1344390	49.42	ppb	100
110) 1,2-Dclbenz	12.339	146	841436	49.32	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.955	157	69447	50.06	ppb	100
112) Trielution Dichlorotol...	13.077	125	2038800	141.91	ppb	100
113) 1,3,5 Trichlorobenzene	13.132	180	515207	48.15	ppb	100
114) Coelution Dichlorotoluene	13.406	125	1471540	95.61	ppb	100
115) 1,2,4-Tcbenzene	13.613	180	484695	49.47	ppb	100
116) Hexachlorobt	13.747	225	176281	46.73	ppb	100
117) Naphthalen	13.802	128	1059250	51.51	ppb	100
118) 1,2,3-Tclbenzene	13.991	180	405943	50.67	ppb	100
119) 2,4,5-Trichlorotolene	14.570	159	298172	46.54	ppb	100
120) 2,3,6-Trichlorotoluene	14.656	159	268404	48.73	ppb	100

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3690.D  
 Acq On : 4 Jun 2015 3:12 pm  
 Operator : K.Ruest  
 Sample : 50ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 08:47:57 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3690.D\data.ms

(58) 1,4-Dioxane

7.559min (+0.006) 814.87 ppb

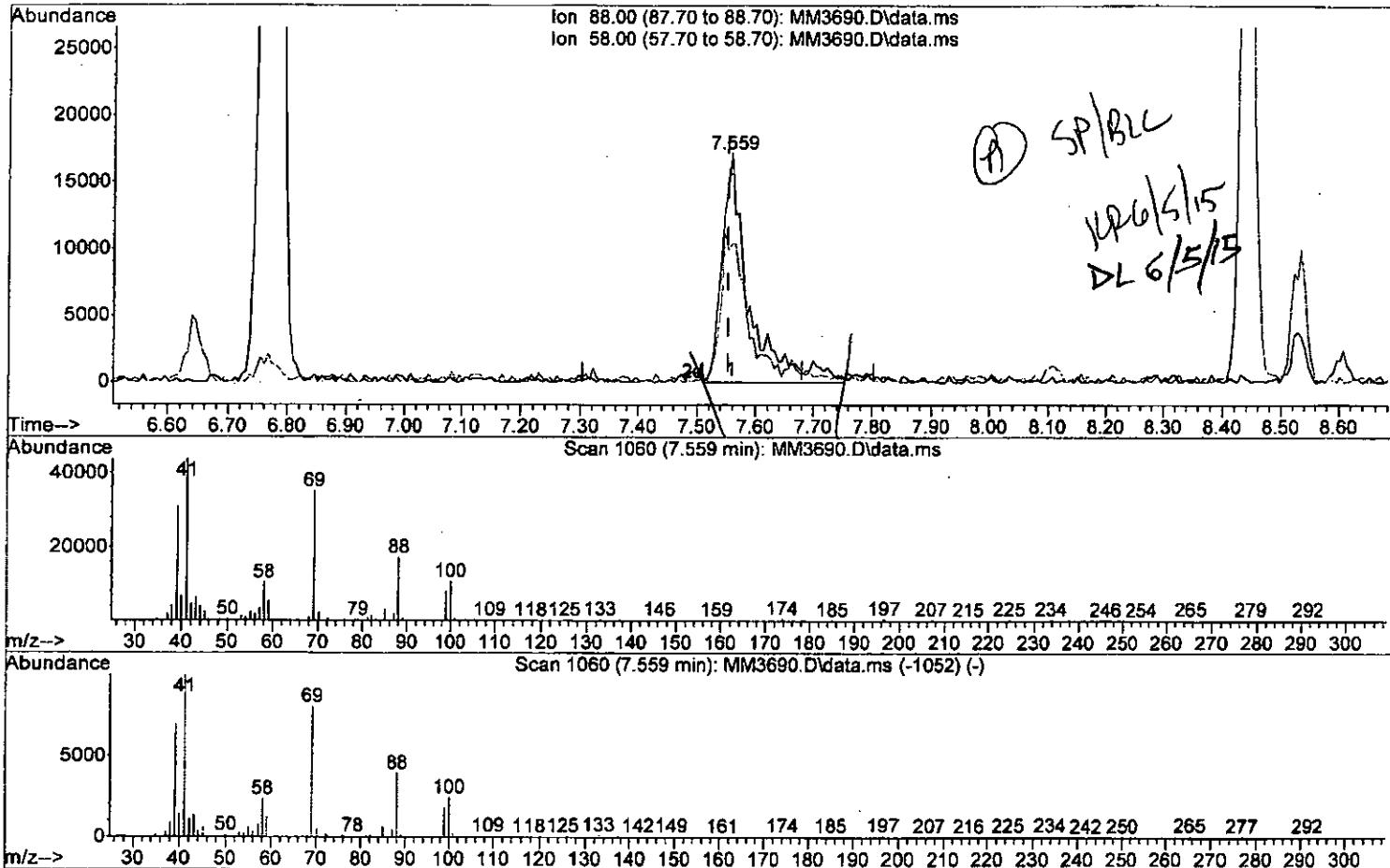
response 49363

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	60.72
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3690.D  
 Acq On : 4 Jun 2015 3:12 pm  
 Operator : K.Ruest  
 Sample : 50ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 08:47:57 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3690.D\data.ms

(58) 1,4-Dioxane

7.559min (+0.006) 895.95 ppb m

response 54275

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	60.72
0.00	0.00	0.00
0.00	0.00	0.00

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\

Data File : MM3690.D

Acq On : 4 Jun 2015 3:12 pm

Operator : K.Ruest

Sample : 50ppb

Misc : 8260 WATER TCAI

ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

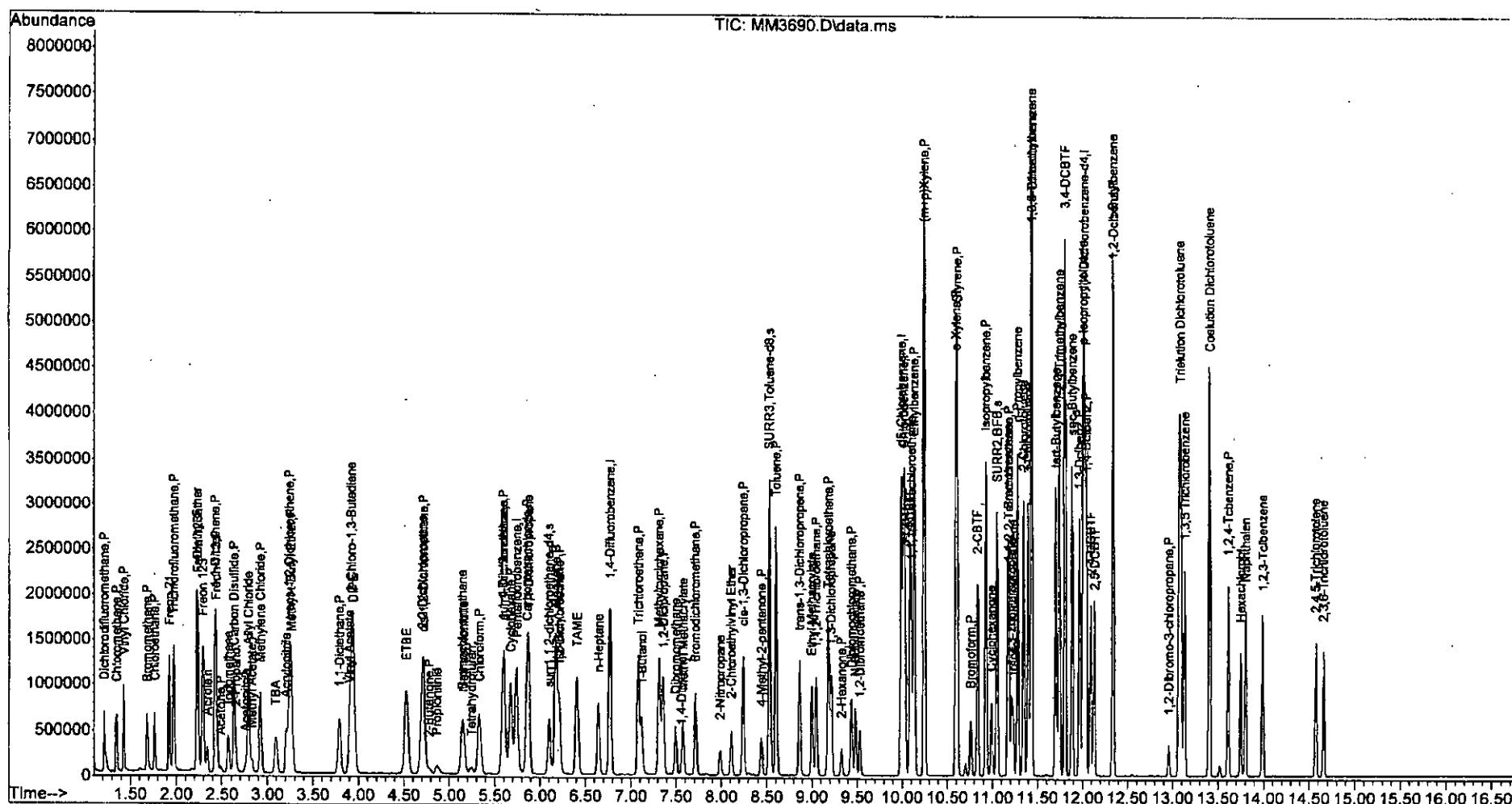
Quant Time: Jun 05 09:25:10 2015

Quant Time: Sun 03 09:25:10 2019  
Quant Method : T:\ACQ\DATA\MSVOA12\METHODS\W060415.M

Quant Method : 1:\ACQUDATA\MSV0A12\METHODS\W06  
Quant Title : MS#12 = 8260B WATERS 10Ti Burgess

Last Update : Fri Jun 05 08:46:48 2015

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3691.D  
 Acc On : 4 Jun 2015 3:43 pm  
 Operator : K.Ruest  
 Sample : 100ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 05 08:48:02 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	973497	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1579470	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1499651	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	832234	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.597	113	1021303	119.49	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 238.98%		
48) surr1,1,2-dichloroetha...	6.097	65	1076230	117.88	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 235.76%		
65) SURR3,Toluene-d8	8.535	98	4361135	116.83	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 233.66%		
70) SURR2,BFB	11.053	95	1667882	117.59	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 235.18%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	807872	95.70	ppb	95
3) Chloromethane	1.341	50	748439	92.66	ppb	99
4) Vinyl Chloride	1.427	62	960734	94.70	ppb	99
5) Bromomethane	1.683	94	557164	93.64	ppb	96
6) Chloroethane	1.762	64	627502	93.26	ppb	99
7) Freon 21	1.927	67	1623134	96.16	ppb	97
8) Trichlorofluoromethane	1.975	101	1418236	93.27	ppb	99
9) Diethyl Ether	2.231	59	639616	95.14	ppb	96
10) Freon 123a	2.238	67	1022427	93.67	ppb	98
11) Freon 123	2.292	83	1170415	93.38	ppb	99
12) Acrolein	2.335	56	380304	541.16	ppb	96
13) 1,1-Dicethene	2.427	96	665873	93.04	ppb	97
14) Freon 113	2.439	101	663645	93.63	ppb	100
15) Acetone	2.481	43	124662	92.31	ppb	88
16) 2-Propanol	2.646	45	547633	2041.60	ppb	96
17) Iodomethane	2.567	142	932152	124.29	ppb	95
18) Carbon Disulfide	2.634	76	2173567	95.08	ppb	99
19) Acetonitrile	2.756	40	93243	522.62	ppb	93
20) Allyl Chloride	2.792	76	405446	94.10	ppb	92
21) Methyl Acetate	2.829	43	292220	98.34	ppb	97
22) Methylene Chloride	2.926	84	717072	94.24	ppb	96
23) TBA	3.091	59	989088	2046.14	ppb	98
24) Acrylonitrile	3.207	53	771776	494.49	ppb	99
25) Methyl-t-Butyl Ether	3.262	73	1886429	101.42	ppb	98
26) trans-1,2-Dichloroethene	3.243	96	752274	94.04	ppb	95
28) 1,1-Dicethane	3.792	63	1245472	93.99	ppb	98
29) Vinyl Acetate	3.908	86	148541	93.73	ppb	# 74
30) DIPE	3.945	45	2215398	96.41	ppb	99
31) 2-Chloro-1,3-Butadiene	3.926	53	1405244	97.59	ppb	99
32) ETBE	4.530	59	2203809	96.23	ppb	98
33) 2,2-Dichloropropane	4.707	77	1194001	94.82	ppb	99
34) cis-1,2-Dichloroethene	4.719	96	808882	94.85	ppb	98
35) 2-Butanone	4.774	43	186948	103.30	ppb	96
36) Propionitrile	4.871	54	277688	506.92	ppb	99

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3691.D  
 Acq On : 4 Jun 2015 3:43 pm  
 Operator : K.Ruest  
 Sample : 100ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 05 08:48:02 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.152	130	431727	91.58	ppb	96
38) Methacrylonitrile	5.158	67	190359	91.23	ppb	# 85
39) Tetrahydrofuran	5.243	42	113258	92.66	ppb	91
40) Chloroform	5.328	83	1285279	92.28	ppb	96
41) 1,1,1-Trichloroethane	5.597	97	1228771	91.39	ppb	98
42) TAME	6.407	73	1959702	98.12	ppb	97
44) Cyclohexane	5.676	41	678569	94.82	ppb	92
46) Carbontetrachloride	5.859	121	326987	95.14	ppb	99
47) 1,1-Dichloropropene	5.871	75	1010734	92.99	ppb	97
49) Benzene	6.176	78	3023653	96.60	ppb	99
50) 1,2-Dichloroethane	6.212	62	958505	95.52	ppb	99
51) Iso-Butyl Alcohol	6.206	43	405154	1948.56	ppb	100
52) n-Heptane	6.645	43	627037	94.05	ppb	97
53) 1-Butanol	7.121	56	678266	5136.73	ppb	99
54) Trichloroethene	7.084	130	827098	97.88	ppb	97
55) Methylcyclohexane	7.310	55	790533	100.00	ppb	98
56) 1,2-Diclpropane	7.352	63	715932	95.51	ppb	100
57) Dibromomethane	7.493	93	382147	94.75	ppb	96
58) 1,4-Dioxane	7.554	88	106791	1749.05	ppb	86
59) Methyl Methacrylate	7.578	69	364709	98.22	ppb	98
60) Bromodichloromethane	7.712	83	1017493	92.33	ppb	99
61) 2-Nitropropane	7.986	41	296482	210.62	ppb	96
62) 2-Chloroethylvinyl Ether	8.108	63	356547	103.18	ppb	93
63) cis-1,3-Dichloropropene	8.242	75	1233384	98.06	ppb	100
64) 4-Methyl-2-pentanone	8.444	43	440536	103.21	ppb	96
66) Toluene	8.602	91	3511273	97.79	ppb	99
67) trans-1,3-Dichloropropene	8.864	75	1089744	101.24	ppb	99
68) Ethyl Methacrylate	8.998	69	791707	101.34	ppb	98
69) 1,1,2-Trichloroethane	9.047	97	566561	97.68	ppb	97
72) Tetrachloroethene	9.181	164	638153	92.78	ppb	98
73) 2-Hexanone	9.328	43	307704	101.35	ppb	97
74) 1,3-Dichloropropane	9.212	76	986491	100.18	ppb	94
75) Dibromochloromethane	9.437	129	722957	97.52	ppb	100
76) N-Butyl Acetate	9.480	43	799235	100.54	ppb	99
77) 1,2-Dibromoethane	9.529	107	555335	95.50	ppb	97
78) Chlorobenzene	10.016	112	2371273	97.14	ppb	97
79) 3-CBTF	10.035	180	1165995	101.31	ppb	98
80) 4-CBTF	10.084	180	1059232	101.60	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.102	131	838035	100.26	ppb	93
82) Ethylbenzene	10.132	106	1271855	96.25	ppb	94
83) (m+p)Xylene	10.242	106	3133803	194.57	ppb	99
84) o-Xylene	10.596	106	1525647	97.81	ppb	97
85) Styrene	10.608	104	2664791	99.54	ppb	98
87) Bromoform	10.760	173	423637	99.43	ppb	99
88) 2-CBTF	10.839	180	1119809	92.76	ppb	99
89) Isopropylbenzene	10.931	105	3688878	95.48	ppb	99
90) Cyclohexanone	10.992	55	449650	1934.44	ppb	92
91) trans-1,4-Dichloro-2-B...	11.230	53	207389	99.74	ppb	95
92) 1,1,2,2-Tetrachloroethane	11.181	83	687563	97.77	ppb	99
93) Bromobenzene	11.175	156	919830	95.49	ppb	92
94) 1,2,3-Trichloropropane	11.211	110	205319	95.96	ppb	96

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3691.D  
 Acq On : 4 Jun 2015 3:43 pm  
 Operator : K.Ruest  
 Sample : 100ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 05 08:48:02 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

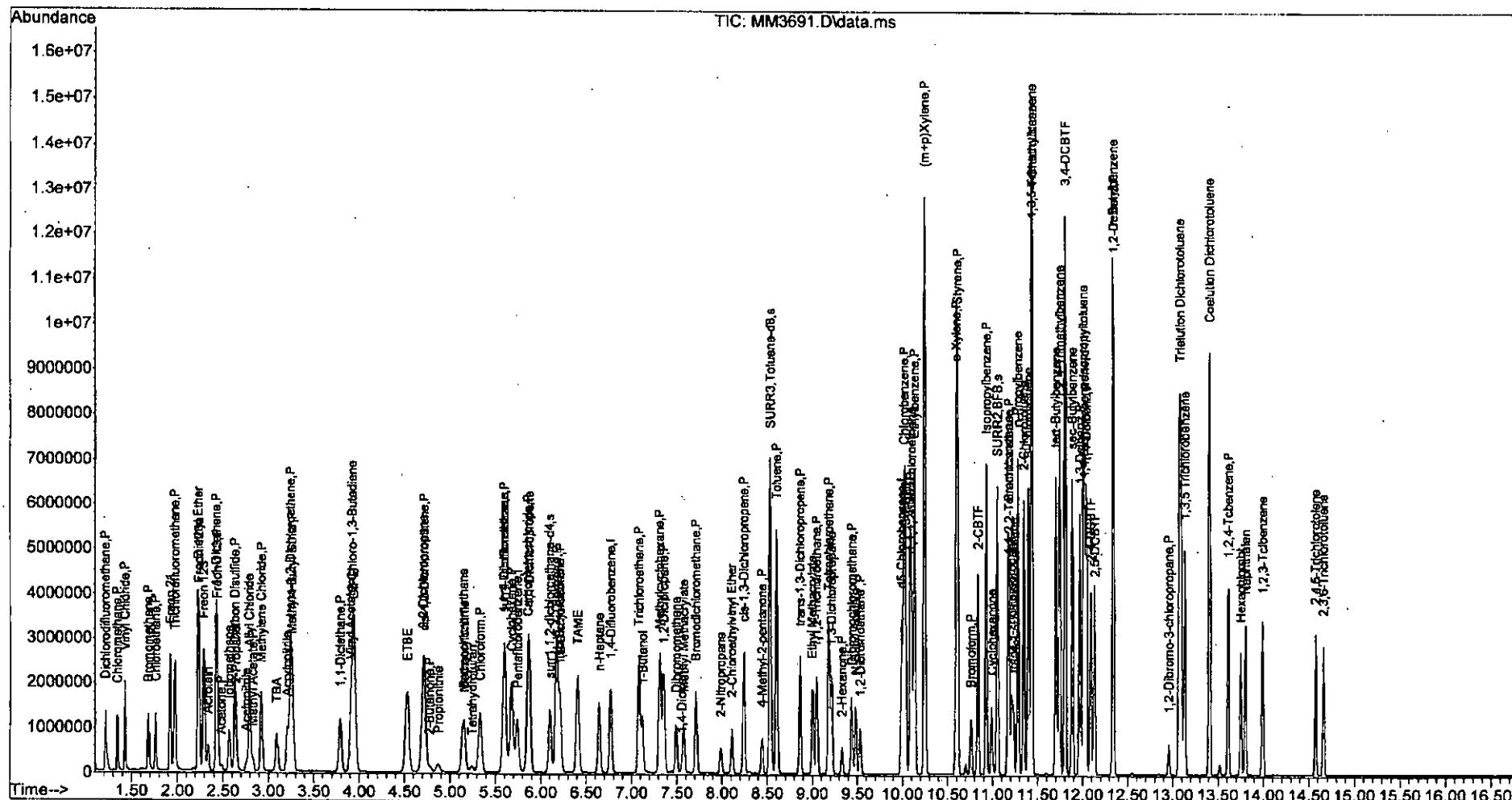
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) n-Propylbenzene	11.278	91	4177838	96.08	ppb	97
96) 2-Chlorotoluene	11.345	91	2626784	98.02	ppb	98
97) 3-Chlorotoluene	11.394	91	2792570	98.07	ppb	99
98) 4-Chlorotoluene	11.437	91	3292171	99.38	ppb	100
99) 1,3,5-Trimethylbenzene	11.431	105	3202057	96.75	ppb	98
100) tert-Butylbenzene	11.699	119	2513177	94.23	ppb	99
101) 1,2,4-Trimethylbenzene	11.742	105	3228544	96.61	ppb	99
102) 3,4-DCBTF	11.803	214	777307	98.34	ppb	97
103) sec-Butylbenzene	11.882	105	3469499	94.88	ppb	99
104) p-Isopropyltoluene	12.004	119	3020115	97.24	ppb	100
105) 1,3-Dclbenz	11.967	146	1810417	96.68	ppb	98
106) 1,4-Dclbenz	12.040	146	1849157	94.80	ppb	98
107) 2,4-DCBTF	12.089	214	695672	99.74	ppb	96
108) 2,5-DCBTF	12.132	214	781997	99.72	ppb	98
109) n-Butylbenzene	12.333	91	2680072	96.01	ppb	99
110) 1,2-Dclbenz	12.339	146	1696645	96.93	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.955	157	135406	95.13	ppb	91
112) Trielution Dichlorotol...	13.077	125	4361300	295.86	ppb	99
113) 1,3,5 Trichlorobenzene	13.132	180	1098265	100.04	ppb	96
114) Coelution Dichlorotoluene	13.406	125	3126092	197.95	ppb	98
115) 1,2,4-Tcbenzene	13.613	180	969185	96.40	ppb	99
116) Hexachlorobt	13.747	225	347020	89.65	ppb	94
117) Naphthalen	13.802	128	2082967	98.72	ppb	98
118) 1,2,3-Tclbenzene	13.991	180	815720	99.23	ppb	95
119) 2,4,5-Trichlorotolene	14.570	159	623865	94.90	ppb	96
120) 2,3,6-Trichlorotoluene	14.656	159	539416	95.45	ppb	98

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

**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUUDATA\msvola12\Data\060415\  
Data File : MM3691.D  
Acq On : 4 Jun 2015 3:43 pm  
Operator : K.Ruest  
Sample : 100ppb Inst : MSVOA-12  
Misc : 8260 WATER ICAL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 05 08:48:02 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 08:46:49 2015  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3692.D  
 Acq On : 4 Jun 2015 4:13 pm  
 Operator : K.Ruest  
 Sample : 150ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 14 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 09:28:29 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.737	168	983983	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1611955	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1536623	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.022	152	842212	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,DibromoMethane	5.597	113	1218940	139.74	ppb	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 279.48%	#
48) surr1,1,2-dichloroetha...	6.096	65	1256325	134.83	ppb	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 269.66%	#
65) SURR3,Toluene-d8	8.535	98	5160044	135.44	ppb	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 270.88%	#
70) SURR2,BFB	11.053	95	1971994	136.23	ppb	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 272.46%	#
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	1269070	148.73	ppb	99
3) Chloromethane	1.341	50	1199467	146.91	ppb	98
4) Vinyl Chloride	1.427	62	1498919	146.18	ppb	98
5) Bromomethane	1.677	94	935616	155.56	ppb	97
6) Chloroethane	1.762	64	976432	143.58	ppb	99
7) Freon 21	1.920	67	2399387	140.63	ppb	100
8) Trichlorofluoromethane	1.975	101	2224024	144.70	ppb	100
9) Diethyl Ether	2.225	59	960697	141.37	ppb	95
10) Freon 123a	2.231	67	1486699	134.75	ppb	93
11) Freon 123	2.292	83	1702487	134.39	ppb	99
12) Acrolein	2.335	56	554275	780.31	ppb	96
13) 1,1-Dicethene	2.426	96	1077154	148.90	ppb	97
14) Freon 113	2.439	101	1066191	148.83	ppb	99
15) Acetone	2.487	43	192513	141.03	ppb	86
16) 2-Propanol	2.646	45	746194	2752.20	ppb	98
17) Iodomethane	2.567	142	1358765	179.24	ppb	97
18) Carbon Disulfide	2.634	76	3367681	145.75	ppb	100
19) Acetonitrile	2.756	40	153407	850.66	ppb	87
20) Allyl Chloride	2.792	76	614413	141.08	ppb	98
21) Methyl Acetate	2.829	43	413135	137.55	ppb	97
22) Methylene Chloride	2.920	84	1111171	144.48	ppb	94
23) TBA	3.091	59	1432215	2931.27	ppb	100
24) Acrylonitrile	3.207	53	1155040	732.16	ppb	95
25) Methyl-t-Butyl Ether	3.262	73	2819986	150.00	ppb	97
26) trans-1,2-Dichloroethene	3.243	96	1197475	148.09	ppb	99
28) 1,1-Dicethane	3.792	63	1931336	144.19	ppb	97
29) Vinyl Acetate	3.902	86	216610	135.23	ppb	# 93
30) DIPE	3.944	45	3413459	146.97	ppb	97
31) 2-Chloro-1,3-Butadiene	3.926	53	2183596	150.03	ppb	99
32) ETBE	4.530	59	3319449	143.40	ppb	100
33) 2,2-Dichloropropane	4.707	77	1911298	150.17	ppb	100
34) cis-1,2-Dichloroethene	4.713	96	1291674	149.85	ppb	97
35) 2-Butanone	4.780	43	262063	143.26	ppb	99
36) Propionitrile	4.865	54	401138	724.47	ppb	93

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3692.D  
 Acc On : 4 Jun 2015 4:13 pm  
 Operator : K.Ruest  
 Sample : 150ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 14 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 05 09:28:29 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev{Min}
37) Bromochloromethane	5.145	130	655108	137.48	ppb	92
38) Methacrylonitrile	5.158	67	283621	134.47	ppb	94
39) Tetrahydrofuran	5.237	42	166888	135.07	ppb	86
40) Chloroform	5.328	83	2022905	143.69	ppb	99
41) 1,1,1-Trichloroethane	5.597	97	1948114	143.35	ppb	98
42) TAME	6.407	73	2970244	147.14	ppb	98
44) Cyclohexane	5.676	41	1016795	139.22	ppb	100
46) Carbontetrachloride	5.859	121	518085	147.70	ppb	96
47) 1,1-Dichloropropene	5.871	75	1607200	144.89	ppb	95
49) Benzene	6.176	78	4688723	146.78	ppb	98
50) 1,2-Dichloroethane	6.212	62	1439767	140.59	ppb	96
51) Iso-Butyl Alcohol	6.206	43	597882	2817.52	ppb	94
52) n-Heptane	6.645	43	1009023	148.30	ppb	95
53) 1-Butanol	7.121	56	976069	7243.11	ppb	98
54) Trichloroethene	7.084	130	1316960	152.72	ppb	98
55) Methylcyclohexane	7.316	55	1177723	145.98	ppb	96
56) 1,2-Diclpropane	7.358	63	1108949	144.96	ppb	97
57) Dibromomethane	7.493	93	580986	141.15	ppb	99
58) 1,4-Dioxane	7.554	88	156797m	2516.31	ppb	
59) Methyl Methacrylate	7.578	69	541482	142.88	ppb	99
60) Bromodichloromethane	7.712	83	1571271	139.70	ppb	98
61) 2-Nitropropane	7.986	41	429679	299.10	ppb	97
62) 2-Chloroethylvinyl Ether	8.108	63	524836	148.82	ppb	96
63) cis-1,3-Dichloropropene	8.242	75	1917987	149.41	ppb	100
64) 4-Methyl-2-pentanone	8.444	43	633008	145.32	ppb	96
66) Toluene	8.602	91	5431084	148.21	ppb	98
67) trans-1,3-Dichloropropene	8.864	75	1653590	150.52	ppb	99
68) Ethyl Methacrylate	9.004	69	1180822	148.11	ppb	94
69) 1,1,2-Trichloroethane	9.047	97	871409	147.22	ppb	97
72) Tetrachloroethene	9.181	164	1010685	143.40	ppb	97
73) 2-Hexanone	9.328	43	435485	139.99	ppb	96
74) 1,3-Dichloropropane	9.212	76	1520375	150.68	ppb	95
75) Dibromochloromethane	9.437	129	1125993	148.23	ppb	99
76) N-Butyl Acetate	9.480	43	1110325	136.31	ppb	98
77) 1,2-Dibromoethane	9.529	107	852410	143.06	ppb	95
78) Chlorobenzene	10.016	112	3690587	147.55	ppb	98
79) 3-CBT	10.035	180	1859754	157.70	ppb	96
80) 4-CBT	10.090	180	1671119	156.43	ppb	99
81) 1,1,1,2-Tetrachloroethane	10.102	131	1324307	154.63	ppb	97
82) Ethylbenzene	10.138	106	1995886	147.40	ppb	# 90
83) (m+p) Xylene	10.248	106	4955794	300.29	ppb	88
84) o-Xylene	10.602	106	2438683	152.59	ppb	93
85) Styrene	10.608	104	4198404	153.05	ppb	99
87) Bromoform	10.760	173	649432	150.62	ppb	97
88) 2-CBT	10.839	180	1809298	148.09	ppb	97
89) Isopropylbenzene	10.931	105	5724499	146.41	ppb	97
90) Cyclohexanone	10.992	55	663254	2819.58	ppb	87
91) trans-1,4-Dichloro-2-B...	11.230	53	311747	148.15	ppb	98
92) 1,1,2,2-Tetrachloroethane	11.181	83	1044696	146.80	ppb	97
93) Bromobenzene	11.175	156	1428364	146.52	ppb	92
94) 1,2,3-Trichloropropane	11.211	110	304147	140.46	ppb	93

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3692.D  
 Acq On : 4 Jun 2015 4:13 pm  
 Operator : K.Ruest  
 Sample : 150ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 05 09:28:29 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

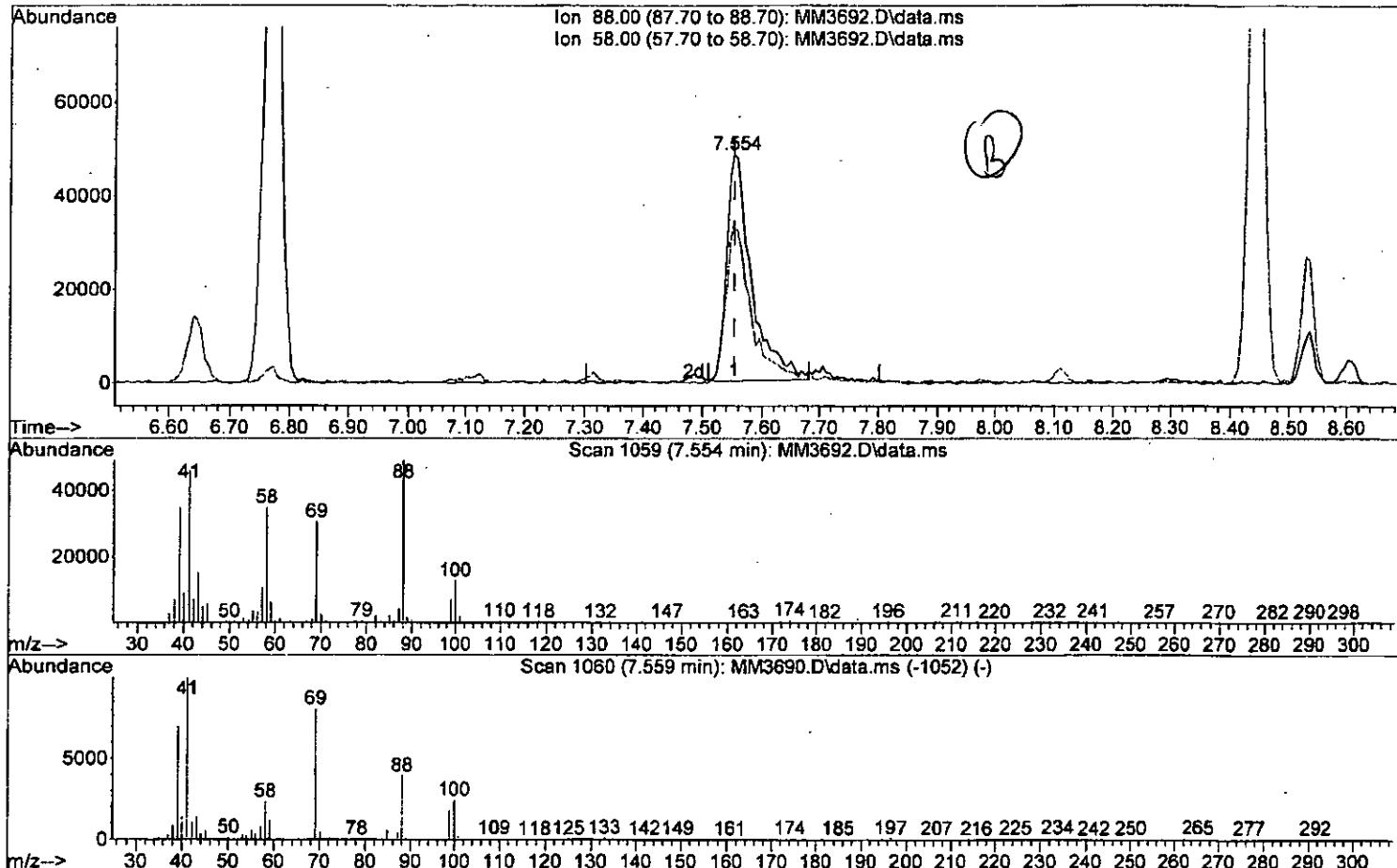
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
95) n-Propylbenzene	11.285	91	6403413	145.52	ppb	95
96) 2-Chlorotoluene	11.345	91	4091783	150.88	ppb	99
97) 3-Chlorotoluene	11.394	91	4515511	156.70	ppb	99
98) 4-Chlorotoluene	11.437	91	5017257	149.66	ppb	98
99) 1,3,5-Trimethylbenzene	11.431	105	5068397	151.32	ppb	97
100) tert-Butylbenzene	11.705	119	3954753	146.52	ppb	99
101) 1,2,4-Trimethylbenzene	11.742	105	4978437	147.21	ppb	99
102) 3,4-DCBTF	11.803	214	1280264	160.06	ppb	99
103) sec-Butylbenzene	11.888	105	5380448	145.40	ppb	96
104) p-Isopropyltoluene	12.004	119	4707057	149.75	ppb	98
105) 1,3-Dclbenz	11.967	146	2814329	148.51	ppb	99
106) 1,4-Dclbenz	12.040	146	2866913	145.24	ppb	98
107) 2,4-DCBTF	12.089	214	1106652	156.78	ppb	100
108) 2,5-DCBTF	12.132	214	1248328	157.30	ppb	99
109) n-Butylbenzene	12.333	91	4322277	153.01	ppb	98
110) 1,2-Dclbenz	12.339	146	2646600	149.41	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.955	157	198883	138.07	ppb	94
112) Trielution Dichlorotol...	13.077	125	6771597	453.92	ppb	99
113) 1,3,5 Trichlorobenzene	13.132	180	1700311	153.04	ppb	98
114) Coelution Dichlorotoluene	13.406	125	4806592	300.75	ppb	97
115) 1,2,4-Tcbenzene	13.613	180	1479568	145.41	ppb	98
116) Hexachlorobt	13.747	225	566780	144.68	ppb	97
117) Naphthalen	13.802	128	3039011	142.32	ppb	99
118) 1,2,3-Tclbenzene	13.991	180	1214544	146.00	ppb	97
119) 2,4,5-Trichlorotolene	14.570	159	989889	148.80	ppb	96
120) 2,3,6-Trichlorotoluene	14.656	159	842093	147.24	ppb	96

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3692.D  
 Acq On : 4 Jun 2015 4:13 pm  
 Operator : K.Ruest  
 Sample : 150ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 05 08:48:07 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3692.D\data.ms

(58) 1,4-Dioxane

7.554min (-0.000) 2290.51 ppb

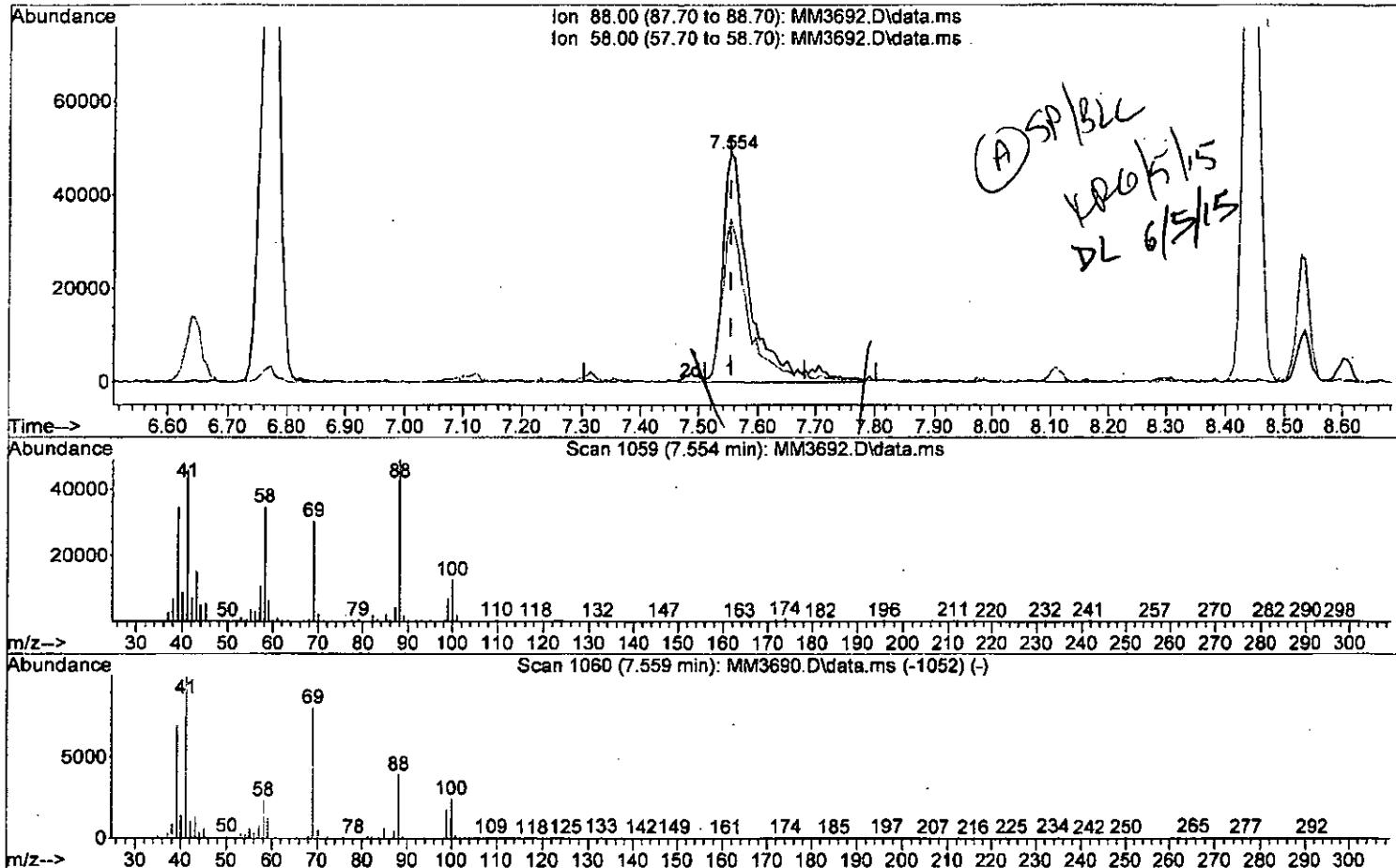
response 142727

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	70.87
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\  
 Data File : MM3692.D  
 Acq On : 4 Jun 2015 4:13 pm  
 Operator : K.Ruest  
 Sample : 150ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 05 08:48:07 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3692.D\data.ms

(58) 1,4-Dioxane

7.554min (-0.000) 2516.31 ppb m

response 156797

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	70.87
0.00	0.00	0.00
0.00	0.00	0.00

**Quantitation Report (OT Reviewed)**

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\

Data File : MM3692.D

Acq On : 4 Jun 2015 4:13 pm

Operator : K.Ruest

Sample : 150ppb

Misc : 8260 WATER TCAI

ALS Vial : 14 Sam

AES vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

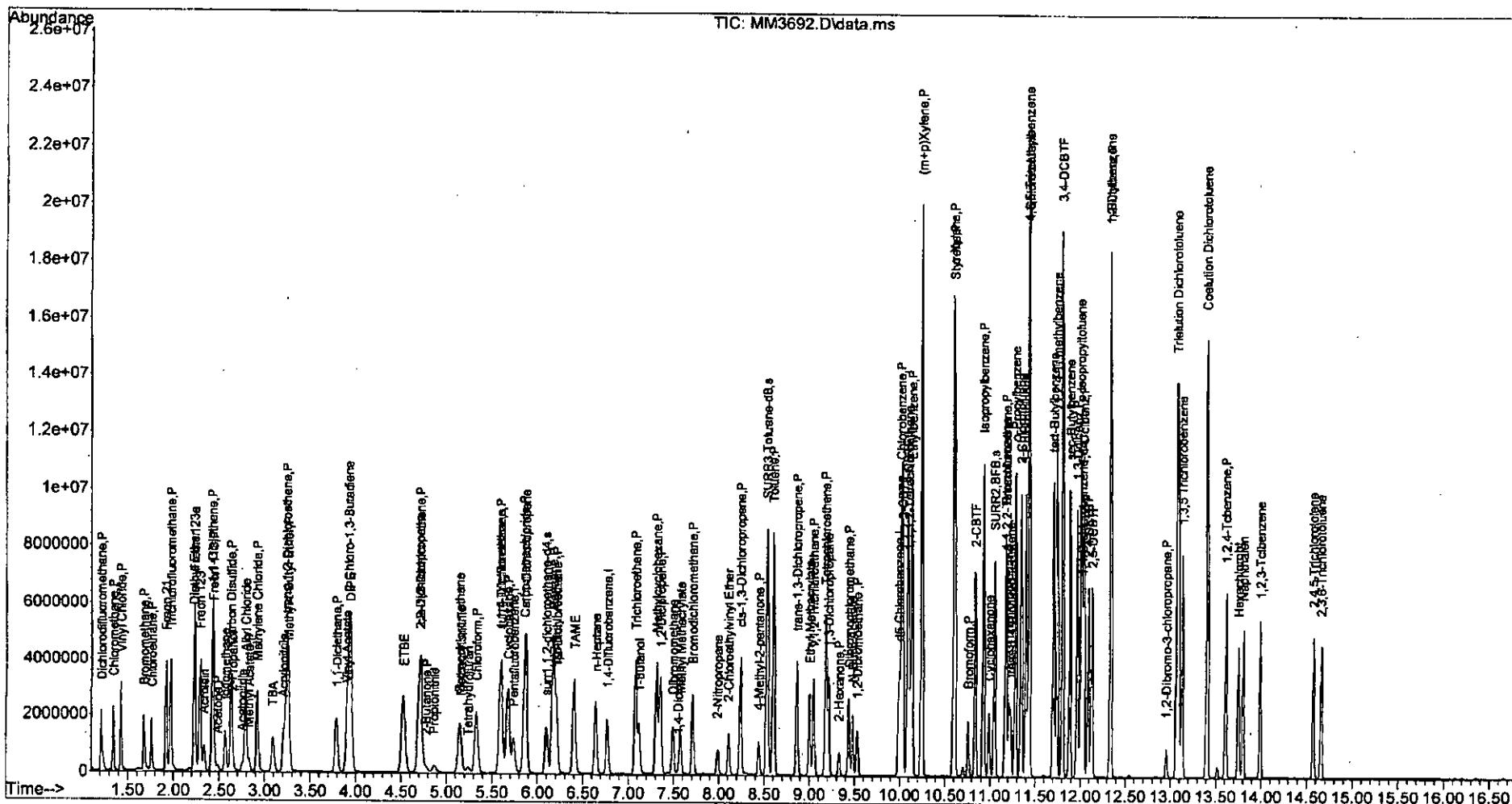
Quant Time: Jun 05 09:28:29 2015

Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

Last Update : Fri Jun 05 08:46:49 2015

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3693.D  
 Acq On : 4 Jun 2015 4:43 pm  
 Operator : K.Ruest  
 Sample : 200ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 05 09:30:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	995391	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1600668	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1536782	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.022	152	852989	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoethane	5.597	113	476595	55.02	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 110.04%		
48) surr1,1,2-dichloroetha...	6.096	65	494950	53.49	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 106.98%		
65) SURR3,Toluene-d8	8.529	98	2090320	55.25	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 110.50%		
70) SURR2,BFB	11.053	95	786702	54.73	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 109.46%		
<i>KR 6/5/15</i>						
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	1766459	204.65	ppb	97
3) Chloromethane	1.341	50	1576513	190.88	ppb	99
4) Vinyl Chloride	1.427	62	2031598	195.86	ppb	98
5) Bromomethane	1.677	94	1304316	214.38	ppb	98
6) Chloroethane	1.762	64	1339973	194.78	ppb	98
7) Freon 21	1.920	67	3370977	195.31	ppb	98
8) Trichlorofluoromethane	1.969	101	3034511	195.17	ppb	99
9) Diethyl Ether	2.225	59	1300371	189.16	ppb	97
10) Freon 123a	2.231	67	2124232	190.33	ppb	91
11) Freon 123	2.292	83	2455688	191.62	ppb	98
12) Acrolein	2.335	56	733341	1020.57	ppb	99
13) 1,1-Dicethene	2.426	96	1496179	204.46	ppb	98
14) Freon 113	2.439	101	1475886	203.65	ppb	96
15) Acetone	2.487	43	269205	194.95	ppb	88
16) 2-Propanol	2.646	45	1048320	3822.22	ppb	98
17) Iodomethane	2.567	142	1801920	234.98	ppb	97
18) Carbon Disulfide	2.634	76	4537699	194.14	ppb	98
19) Acetonitrile	2.756	40	202468	1109.85	ppb	# 93
20) Allyl Chloride	2.792	76	823817	187.00	ppb	99
21) Methyl Acetate	2.829	43	587423	193.34	ppb	96
22) Methylene Chloride	2.920	84	1524929	196.01	ppb	93
23) TBA	3.091	59	1866457	3776.24	ppb	100
24) Acrylonitrile	3.207	53	1526232	956.37	ppb	98
25) Methyl-t-Butyl Ether	3.262	73	3779620	198.73	ppb	96
26) trans-1,2-Dichloroethene	3.243	96	1626975	198.90	ppb	99
28) 1,1-Dicethane	3.792	63	2653945	195.87	ppb	97
29) Vinyl Acetate	3.908	86	290781	179.45	ppb	# 85
30) DIPE	3.944	45	4685816	199.44	ppb	99
31) 2-Chloro-1,3-Butadiene	3.926	53	2945540	200.06	ppb	98
32) ETBE	4.530	59	4497090	192.05	ppb	99
33) 2,2-Dichloropropane	4.707	77	2565434	199.26	ppb	98
34) cis-1,2-Dichloroethene	4.719	96	1762113	202.08	ppb	96
35) 2-Butanone	4.780	43	345831	186.89	ppb	100
36) Propionitrile	4.865	54	531791	949.43	ppb	92

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3693.D  
 Acq On : 4 Jun 2015 4:43 pm  
 Operator : K.Ruest  
 Sample : 200ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 15 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 09:30:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Bromochloromethane	5.145	130	870559	180.60	ppb	95
38) Methacrylonitrile	5.158	67	370025	173.43	ppb	# 78
39) Tetrahydrofuran	5.237	42	220988	176.81	ppb	88
40) Chloroform	5.328	83	2771795	194.63	ppb	98
41) 1,1,1-Trichloroethane	5.597	97	2634081	191.60	ppb	98
42) TAME	6.407	73	3991050	195.44	ppb	98
44) Cyclohexane	5.676	41	1435445	197.93	ppb	98
46) Carbontetrachloride	5.859	121	722886	207.54	ppb	98
47) 1,1-Dichloropropene	5.871	75	2193800	199.17	ppb	97
49) Benzene	6.176	78	6371735	200.88	ppb	98
50) 1,2-Dichloroethane	6.212	62	1963022	193.04	ppb	99
51) Iso-Butyl Alcohol	6.206	43	780772	3705.33	ppb	99
52) n-Heptane	6.645	43	1359610	201.24	ppb	99
53) 1-Butanol	7.127	56	1284468	9598.86	ppb	100
54) Trichloroethene	7.084	130	1776485	207.45	ppb	94
55) Methylcyclohexane	7.316	55	1692841	211.30	ppb	96
56) 1,2-Diclpropane	7.358	63	1514042	199.30	ppb	100
57) Dibromomethane	7.493	93	790137	193.32	ppb	97
58) 1,4-Dioxane	7.554	88	211730m	3421.85	ppb	
59) Methyl Methacrylate	7.578	69	724583	192.55	ppb	97
60) Bromodichloromethane	7.712	83	2155556	193.00	ppb	98
61) 2-Nitropropane	7.986	41	578503	405.53	ppb	100
62) 2-Chloroethylvinyl Ether	8.108	63	700120	199.92	ppb	100
63) cis-1,3-Dichloropropene	8.242	75	2575418	202.04	ppb	98
64) 4-Methyl-2-pentanone	8.444	43	842811	194.85	ppb	96
66) Toluene	8.602	91	7285635	200.22	ppb	97
67) trans-1,3-Dichloropropene	8.864	75	2248087	206.08	ppb	98
68) Ethyl Methacrylate	9.004	69	1576488	199.13	ppb	96
69) 1,1,2-Trichloroethane	9.047	97	1163778	198.00	ppb	98
72) Tetrachloroethene	9.181	164	1370881	194.49	ppb	96
73) 2-Hexanone	9.328	43	585372	188.15	ppb	99
74) 1,3-Dichloropropane	9.212	76	2030667	201.24	ppb	96
75) Dibromochloromethane	9.437	129	1504317	198.01	ppb	99
76) N-Butyl Acetate	9.480	43	1563763	191.95	ppb	99
77) 1,2-Dibromoethane	9.529	107	1138736	191.10	ppb	99
78) Chlorobenzene	10.016	112	5007222	200.16	ppb	96
79) 3-CBTF	10.035	180	2541847	215.51	ppb	97
80) 4-CBTF	10.090	180	2303129	215.57	ppb	100
81) 1,1,1,2-Tetrachloroethane	10.102	131	1790864	209.08	ppb	96
82) Ethylbenzene	10.138	106	2765804	204.24	ppb	# 80
83) (m+p) Xylene	10.248	106	6761524	409.66	ppb	# 76
84) o-Xylene	10.602	106	3399487	212.69	ppb	91
85) Styrene	10.614	104	5674125	206.83	ppb	100
87) Bromoform	10.760	173	884483	202.54	ppb	98
88) 2-CBTF	10.839	180	2468029	199.46	ppb	96
89) Isopropylbenzene	10.931	105	7592408	191.73	ppb	94
90) Cyclohexanone	10.992	55	889289	3732.73	ppb	89
91) trans-1,4-Dichloro-2-B...	11.230	53	416795	195.57	ppb	97
92) 1,1,2,2-Tetrachloroethane	11.181	83	1381606	191.69	ppb	99
93) Bromobenzene	11.175	156	1965708	199.09	ppb	93
94) 1,2,3-Trichloropropane	11.211	110	403791	184.12	ppb	92

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3693.D  
 Acq On : 4 Jun 2015 4:43 pm  
 Operator : K.Ruest  
 Sample : 200ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 05 09:30:24 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
95) n-Propylbenzene	11.285	91	8346693	187.29	ppb	90
96) 2-Chlorotoluene	11.345	91	5532707	201.43	ppb	99
97) 3-Chlorotoluene	11.400	91	5904327	202.30	ppb	97
98) 4-Chlorotoluene	11.437	91	6836009	201.34	ppb	95
99) 1,3,5-Trimethylbenzene	11.431	105	6852088	201.99	ppb	94
100) tert-Butylbenzene	11.705	119	5362657	196.18	ppb	97
101) 1,2,4-Trimethylbenzene	11.742	105	6645751	194.03	ppb	96
102) 3,4-DCBTF	11.803	214	1771912	218.73	ppb	96
103) sec-Butylbenzene	11.888	105	7117475	189.91	ppb	93
104) p-Isopropyltoluene	12.004	119	6235669	195.88	ppb	94
105) 1,3-Dclbenz	11.967	146	3843931	200.27	ppb	98
106) 1,4-Dclbenz	12.040	146	3900030	195.08	ppb	97
107) 2,4-DCBTF	12.089	214	1487472	208.07	ppb	100
108) 2,5-DCBTF	12.132	214	1701818	211.73	ppb	100
109) n-Butylbenzene	12.333	91	5803800	202.86	ppb	95
110) 1,2-Dclbenz	12.339	146	3602200	200.78	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.955	157	258363	177.10	ppb	89
112) Trielution Dichlorotol...	13.083	125	8992978	595.21	ppb	95
113) 1,3,5 Trichlorobenzene	13.132	180	2285962	203.16	ppb	99
114) Coelution Dichlorotoluene	13.406	125	6346954	392.12	ppb	93
115) 1,2,4-Tcbenzene	13.613	180	1989382	193.05	ppb	99
116) Hexachlorobt	13.747	225	767426	193.43	ppb	99
117) Naphthalen	13.802	128	4009056	185.38	ppb	99
118) 1,2,3-Tclbenzene	13.991	180	1643373	195.05	ppb	98
119) 2,4,5-Trichlorotolene	14.577	159	1339810	198.85	ppb	94
120) 2,3,6-Trichlorotoluene	14.662	159	1166868	201.45	ppb	97

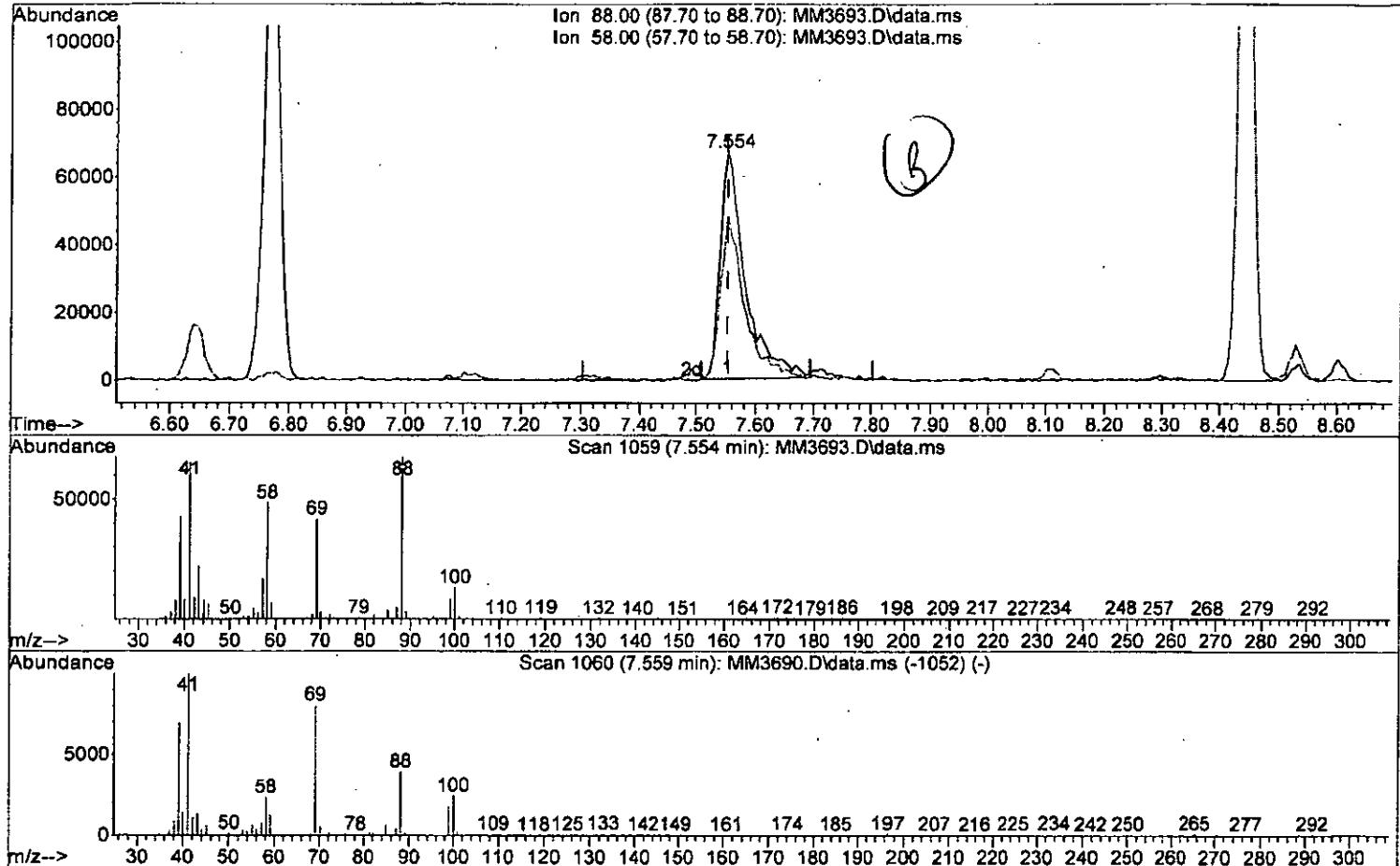
(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3693.D  
 Acq On : 4 Jun 2015 4:43 pm  
 Operator : K.Ruest  
 Sample : 200ppb  
 Misc : 8260 WATER ICAL  
 ALS Vial : 15 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 08:48:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration



TIC: MM3693.D\data.ms

(58) 1,4-Dioxane

7.554min (0.000) 3138.47 ppb

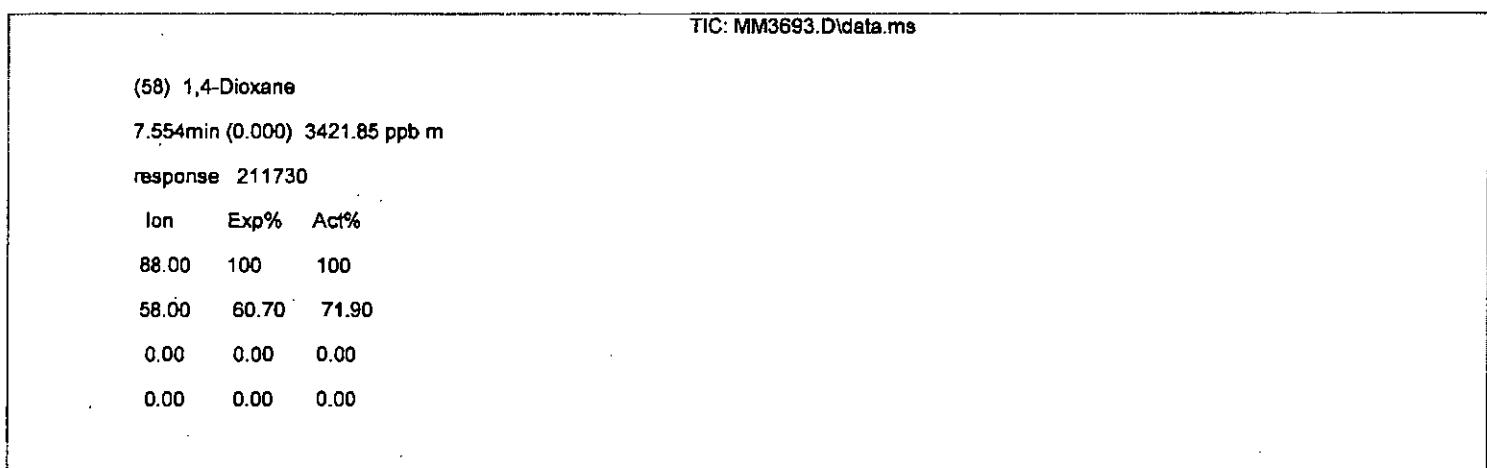
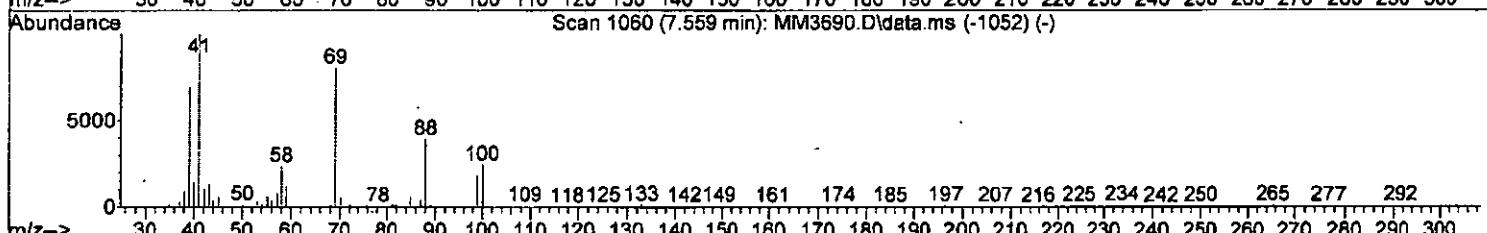
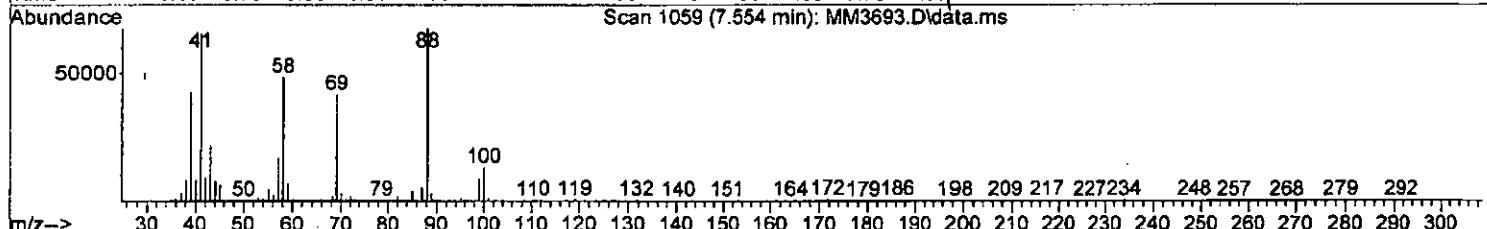
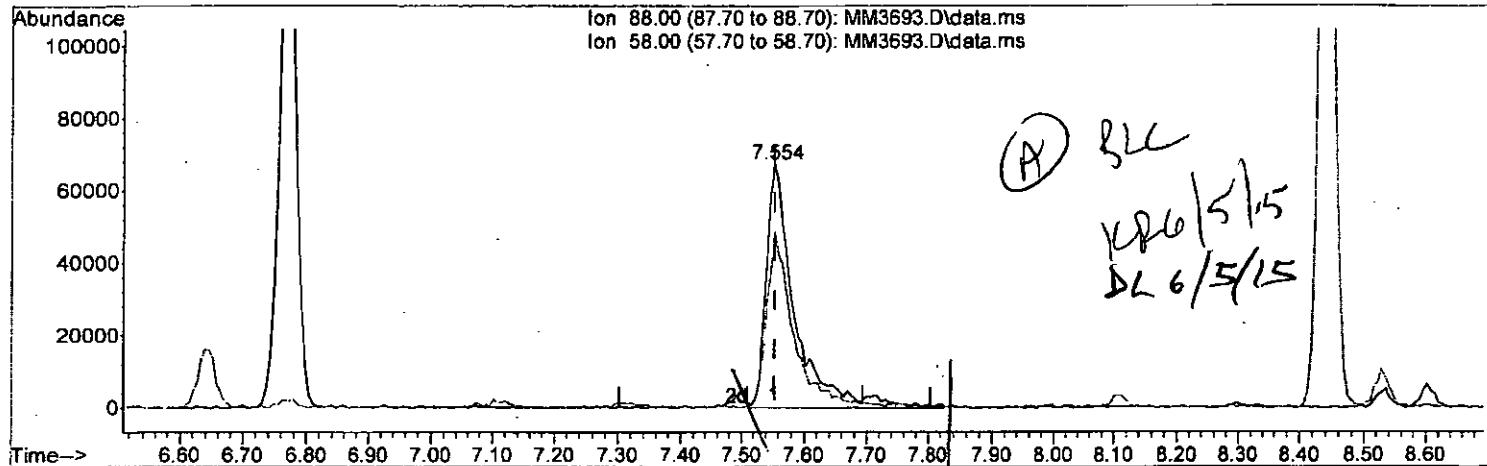
response 194196

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	71.90
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3693.D  
 Acq On : 4 Jun 2015 4:43 pm  
 Operator : K.Ruest  
 Sample : 200ppb Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 05 08:48:12 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 08:46:49 2015  
 Response via : Initial Calibration

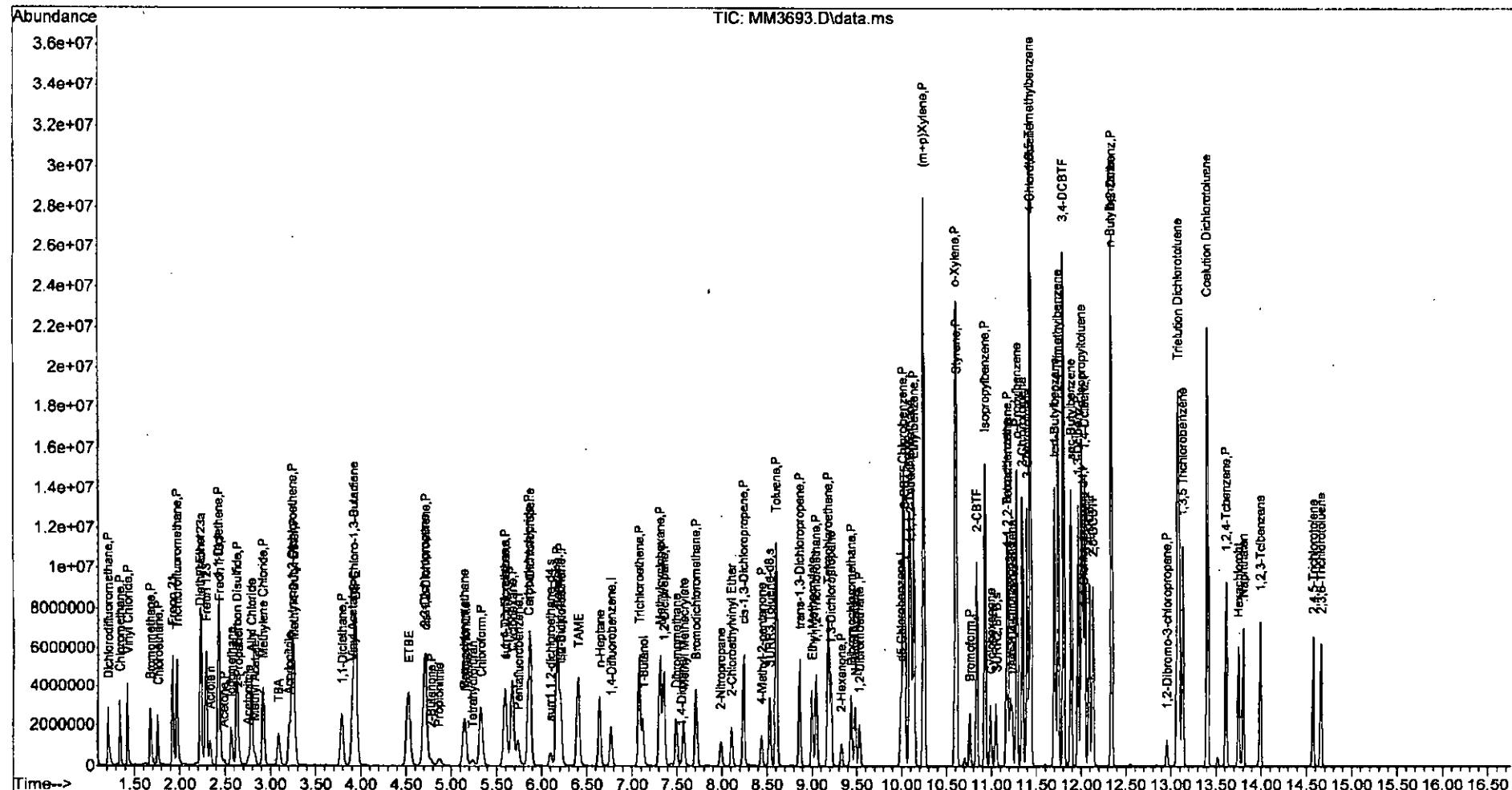


**Quantitation Report (QT Reviewed)**

Data Path : I:\ACQUUDATA\msvola12\Data\060415\  
Data File : MM3693.D  
Acq On : 4 Jun 2015 4:43 pm  
Operator : K.Ruest  
Sample : 200ppb  
Misc : 8260 WATER ICAL  
ALS Vial : 15 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 09:30:24 2015  
Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 08:46:49 2015  
Response via : Initial Calibration



*Initial Calibration Verification Summary Report*

XL6/5/15

Calibration ID:	RC1500064 8260 Waters - W060415	Instrument ID: Column Name:	R-MS-12 1
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Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1500064-10	T	Average RF	50	46.93	ppm	-6.1	≤=30
1,1,1-Trichloroethane (TCA)	RC1500064-10	T	Average RF	50	43.56	ppm	-12.9	≤=30
1,1,2,2-Tetrachloroethane	RC1500064-10	T	Average RF	50	46.67	ppm	-6.7	≤=30
1,1,2-Trichloroethane	RC1500064-10	T	Average RF	50	46.47	ppm	-7.1	≤=30
1,1,2-Trichlorotrifluoroethane	RC1500064-10	T	Average RF	50	40.24	ppm	-19.5	≤=30
1,1-Dichloroethane (1,1-DCA)	RC1500064-10	T	Average RF	50	45.02	ppm	-10.0	≤=30
1,1-Dichloroethene (1,1-DCE)	RC1500064-10	T	Average RF	50	42.14	ppm	-15.7	≤=30
1,1-Dichloropropene	RC1500064-10	T	Average RF	50	41.07	ppm	-17.9	≤=30
1,2,3-Trichlorobenzene	RC1500064-10	T	Average RF	50	47.39	ppm	-5.2	≤=30
1,2,3-Trichloropropene	RC1500064-10	T	Average RF	50	46.88	ppm	-6.2	≤=30
1,2,4-Trichlorobenzene	RC1500064-10	T	Average RF	50	47.70	ppm	-4.6	≤=30
1,2,4-Trimethylbenzene	RC1500064-10	T	Average RF	50	47.09	ppm	-5.8	≤=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1500064-10	T	Average RF	50	46.25	ppm	-7.5	≤=30
1,2-Dibromoethane	RC1500064-10	T	Average RF	50	46.14	ppm	-7.7	≤=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123)	RC1500064-10	T	Average RF	50	47.68	ppm	-4.6	≤=30
1,2-Dichlorobenzene	RC1500064-10	T	Average RF	50	46.73	ppm	-6.5	≤=30
1,2-Dichloroethane	RC1500064-10	T	Average RF	50	45.76	ppm	-8.5	≤=30
1,2-Dichloropropane	RC1500064-10	T	Average RF	50	46.38	ppm	-7.2	≤=30
1,3,5-Trichlorobenzene	RC1500064-10	T	Average RF	50	46.83	ppm	-6.3	≤=30
1,3,5-Trimethylbenzene	RC1500064-10	T	Average RF	50	47.09	ppm	-5.8	≤=30
1,3-Dichlorobenzene	RC1500064-10	T	Average RF	50	46.16	ppm	-7.7	≤=30
1,3-Dichloropropane	RC1500064-10	T	Average RF	50	47.33	ppm	-5.3	≤=30
1,4-Dichlorobenzene	RC1500064-10	T	Average RF	50	46.14	ppm	-7.7	≤=30
1,4-Dioxane	RC1500064-10	T	Average RF	1000	895.3	ppm	-10.5	≤=30
1-Butanol	RC1500064-10	T	Average RF	2500	2597	ppm	3.9	≤=30
1-Chloro-4-(trifluoromethyl)benzene	RC1500064-10	T	Average RF	50	43.45	ppm	-13.1	≤=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	RC1500064-10	T	Average RF	50	44.33	ppm	-11.3	≤=30
2,2-Dichloropropane	RC1500064-10	T	Average RF	50	45.91	ppm	-8.2	≤=30
2,3,6-Trichlorotoluene	RC1500064-10	T	Average RF	50	46.93	ppm	-6.1	≤=30
2,4,5-Trichlorotoluene	RC1500064-10	T	Average RF	50	44.86	ppm	-10.3	≤=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1500064-10	T	Average RF	150	136.9	ppm	-8.7	≤=30
2,4-Dichlorobenzotrifluoride	RC1500064-10	T	Average RF	50	45.31	ppm	-9.4	≤=30
2,5-Dichlorobenzotrifluoride	RC1500064-10	T	Average RF	50	44.36	ppm	-11.3	≤=30
2-Butanone (MEK)	RC1500064-10	T	Average RF	50	53.76	ppm	7.5	≤=30
2-Chloro-1,3-butadiene	RC1500064-10	T	Average RF	50	46.12	ppm	-7.8	≤=30
2-Chlorobenzotrifluoride	RC1500064-10	T	Average RF	50	43.20	ppm	-13.6	≤=30
2-Chloroethyl Vinyl Ether	RC1500064-10	T	Average RF	50	54.65	ppm	9.3	≤=30
2-Chlorotoluene	RC1500064-10	T	Average RF	50	47.62	ppm	-4.8	≤=30
2-Hexanone	RC1500064-10	T	Average RF	50	53.15	ppm	6.3	≤=30
2-Methyl-1-propanol	RC1500064-10	T	Average RF	1000	945.5	ppm	-5.5	≤=30
2-Methyl-2-propanol	RC1500064-10	T	Average RF	1000	1022	ppm	2.2	≤=30
2-Nitropropane	RC1500064-10	T	Average RF	100	102.2	ppm	2.2	≤=30
2-Propanol	RC1500064-10	T	Average RF	1000	989.0	ppm	-1.1	≤=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1500064-10	T	Average RF	100	94.50	ppm	-5.5	≤=30
3,4-Dichlorobenzotrifluoride	RC1500064-10	T	Average RF	50	44.44	ppm	-11.1	≤=30
3-Chloro-1-propene	RC1500064-10	T	Average RF	50	42.29	ppm	-15.4	≤=30
3-Chlorobenzotrifluoride	RC1500064-10	T	Average RF	50	43.79	ppm	-12.4	≤=30
3-Chlorotoluene	RC1500064-10	T	Average RF	50	46.04	ppm	-7.9	≤=30
4-Chlorotoluene	RC1500064-10	T	Average RF	50	47.91	ppm	-4.2	≤=30
4-Isopropyltoluene	RC1500064-10	T	Average RF	50	48.72	ppm	-2.6	≤=30
4-Methyl-2-pentanone	RC1500064-10	T	Average RF	50	54.32	ppm	8.6	≤=30

# Initial Calibration Verification Summary Report

<b>Calibration ID:</b>	RC1500064	<b>Instrument ID:</b>	R-MS-12
		<b>Column Name:</b>	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1500064-10	T	Average RF	50	48.09	ppm	-3.8	<=30
Acetonitrile	RC1500064-10	T	Average RF	250	212.4	ppm	-15.0	<=30
Acrolein	RC1500064-10	T	Average RF	100	92.70	ppm	-7.3	<=30
Acrylonitrile	RC1500064-10	T	Average RF	250	239.7	ppm	-4.1	<=30
Benzene	RC1500064-10	T	Average RF	50	45.38	ppm	-9.2	<=30
Bromobenzene	RC1500064-10	T	Average RF	50	46.57	ppm	-6.9	<=30
Bromochloromethane	RC1500064-10	T	Average RF	50	44.30	ppm	-11.4	<=30
Bromodichloromethane	RC1500064-10	T	Average RF	50	45.67	ppm	-8.7	<=30
Bromoform	RC1500064-10	T	Average RF	50	48.36	ppm	-3.3	<=30
Bromomethane	RC1500064-10	T	Average RF	50	46.36	ppm	-7.3	<=30
Carbon Disulfide	RC1500064-10	T	Average RF	50	51.12	ppm	2.2	<=30
Carbon Tetrachloride	RC1500064-10	T	Average RF	50	43.47	ppm	-13.1	<=30
Chlorobenzene	RC1500064-10	T	Average RF	50	45.28	ppm	-9.4	<=30
Chloroethane	RC1500064-10	T	Average RF	50	43.89	ppm	-12.2	<=30
Chloroform	RC1500064-10	T	Average RF	50	46.10	ppm	-7.8	<=30
Chloromethane	RC1500064-10	T	Average RF	50	50.91	ppm	1.8	<=30
Cyclohexane	RC1500064-10	T	Average RF	50	42.57	ppm	-14.9	<=30
Cyclohexanone	RC1500064-10	T	Average RF	1000	1049	ppm	4.9	<=30
Dibromochloromethane	RC1500064-10	T	Average RF	50	47.34	ppm	-5.3	<=30
Dibromomethane	RC1500064-10	T	Average RF	50	45.33	ppm	-9.3	<=30
Dichlorodifluoromethane (CFC 12)	RC1500064-10	T	Average RF	50	48.08	ppm	-3.8	<=30
Dichlorofluoromethane (CFC 21)	RC1500064-10	T	Average RF	50	49.81	ppm	-0.4	<=30
Dichloromethane	RC1500064-10	T	Average RF	50	45.57	ppm	-8.9	<=30
Diethyl Ether	RC1500064-10	T	Average RF	50	48.17	ppm	-3.7	<=30
Diisopropyl Ether	RC1500064-10	T	Average RF	50	44.89	ppm	-10.2	<=30
Ethyl Methacrylate	RC1500064-10	T	Average RF	50	50.85	ppm	1.7	<=30
Ethyl tert-Butyl Ether	RC1500064-10	T	Average RF	50	44.40	ppm	-11.2	<=30
Ethylbenzene	RC1500064-10	T	Average RF	50	40.64	ppm	-18.7	<=30
Hexachlorobutadiene	RC1500064-10	T	Average RF	50	42.46	ppm	-15.1	<=30
Jodomethane	RC1500064-10	T	Linear	50	50.52	ppm	1.0	<=30
Isopropylbenzene (Cumene)	RC1500064-10	T	Average RF	50	46.43	ppm	-7.1	<=30
Methacrylonitrile	RC1500064-10	T	Average RF	50	47.39	ppm	-5.2	<=30
Methyl Acetate	RC1500064-10	T	Average RF	50	48.47	ppm	-3.1	<=30
Methyl Methacrylate	RC1500064-10	T	Average RF	50	50.46	ppm	0.9	<=30
Methyl tert-Butyl Ether	RC1500064-10	T	Average RF	50	48.14	ppm	-3.7	<=30
Methylcyclohexane	RC1500064-10	T	Average RF	50	44.67	ppm	-10.7	<=30
Naphthalene	RC1500064-10	T	Average RF	50	48.04	ppm	-3.9	<=30
Propionitrile	RC1500064-10	T	Average RF	250	245.6	ppm	-1.8	<=30
Styrene	RC1500064-10	T	Average RF	50	46.92	ppm	-6.2	<=30
Tetrachloroethylene (PCE)	RC1500064-10	T	Average RF	50	43.28	ppm	-13.4	<=30
Tetrahydrofuran (THF)	RC1500064-10	T	Average RF	50	49.97	ppm	-0.1	<=30
Toluene	RC1500064-10	T	Average RF	50	45.73	ppm	-8.5	<=30
Trichloroethene (TCE)	RC1500064-10	T	Average RF	50	47.00	ppm	-6.0	<=30
Trichlorofluoromethane (CFC 11)	RC1500064-10	T	Average RF	50	45.37	ppm	-9.3	<=30
Vinyl Acetate	RC1500064-10	T	Average RF	50	41.95	ppm	-16.1	<=30
Vinyl Chloride	RC1500064-10	T	Average RF	50	47.03	ppm	-5.9	<=30
cis-1,2-Dichloroethene	RC1500064-10	T	Average RF	50	46.28	ppm	-7.4	<=30
cis-1,3-Dichloropropene	RC1500064-10	T	Average RF	50	46.01	ppm	-8.0	<=30
m,p-Xylenes	RC1500064-10	T	Average RF	100	92.35	ppm	-7.7	<=30
n-Butyl Acetate	RC1500064-10	T	Average RF	50	48.43	ppm	-3.1	<=30
n-Butylbenzene	RC1500064-10	T	Average RF	50	46.79	ppm	-6.4	<=30

## Initial Calibration Verification Summary Report

Calibration ID:	RC1500064	Instrument ID:	R-MS-12
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1500064-10	T	Average RF	50	44.29	ppm	-11.4	<=30
n-Propylbenzene	RC1500064-10	T	Average RF	50	47.20	ppm	-5.6	<=30
o-Xylene	RC1500064-10	T	Average RF	50	46.24	ppm	-7.5	<=30
sec-Butylbenzene	RC1500064-10	T	Average RF	50	46.41	ppm	-7.2	<=30
tert-Amyl Methyl Ether	RC1500064-10	T	Average RF	50	47.81	ppm	-4.4	<=30
tert-Butylbenzene	RC1500064-10	T	Average RF	50	45.74	ppm	-8.5	<=30
trans-1,2-Dichloroethene	RC1500064-10	T	Average RF	50	44.34	ppm	-11.3	<=30
trans-1,3-Dichloropropene	RC1500064-10	T	Average RF	50	46.77	ppm	-6.5	<=30
trans-1,4-Dichloro-2-butene	RC1500064-10	T	Average RF	50	50.67	ppm	1.3	<=30
1,2-Dichloroethane-d4	RC1500064-10	S	Average RF	50	54.74	ppm	9.5	<=30
4-Bromofluorobenzene	RC1500064-10	S	Average RF	50	55.41	ppm	10.8	<=30
Dibromofluoromethane	RC1500064-10	S	Average RF	50	53.92	ppm	7.8	<=30
Toluene-d8	RC1500064-10	S	Average RF	50	54.34	ppm	8.7	<=30

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3698.D  
 Acq On : 4 Jun 2015 7:15 pm  
 Operator : K.Ruest  
 Sample : ICV  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 05 14:26:41 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	933266	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1536667	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1464134	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	787899	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.597	113	448404	53.92	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 107.84%		
48) surr1,1,2-dichloroetha...	6.096	65	486270	54.74	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 109.48%		
65) SURR3,Toluene-d8	8.529	98	1973682	54.34	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 108.68%		
70) SURR2,BFB	11.047	95	764583	55.41	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 110.82%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	382840	48.08	ppb	99
3) Chloromethane	1.341	50	394228	50.91	ppb	99
4) Vinyl Chloride	1.427	62	459961	47.03	ppb	99
5) Bromomethane	1.683	94	257410	46.36	ppb	96
6) Chloroethane	1.762	64	284816	43.89	ppb	98
7) Freon 21	1.927	67	807103	49.81	ppb	100
8) Trichlorofluoromethane	1.975	101	661246	45.37	ppb	99
9) Diethyl Ether	2.231	59	310478	48.17	ppb	99
10) Freon 123a	2.237	67	493110	47.68	ppb	98
11) Freon 123	2.292	83	532587	44.33	ppb	99
12) Acrolein	2.335	56	62290	92.70	ppb	96
13) 1,1-Dicethane	2.433	96	289205	42.14	ppb	99
14) Freon 113	2.439	101	273446	40.24	ppb	91
15) Acetone	2.494	43	62908	48.09	ppb	88
16) 2-Propanol	2.652	45	256966	989.04	ppb	98
17) Iodomethane	2.573	142	424791	50.52	ppb	99
18) Carbon Disulfide	2.634	76	1124306	51.12	ppb	100
19) Acetonitrile	2.762	40	35673	212.45	ppb	95
20) Allyl Chloride	2.792	76	174659	42.29	ppb	# 89
21) Methyl Acetate	2.829	43	138075	48.47	ppb	92
22) Methylene Chloride	2.920	84	332423	45.57	ppb	95
23) TBA	3.091	59	473610	1022.00	ppb	98
24) Acrylonitrile	3.207	53	356466	239.74	ppb	98
25) Methyl-t-Butyl Ether	3.262	73	858469	48.14	ppb	99
26) trans-1,2-Dichloroethene	3.243	96	340051	44.34	ppb	96
28) 1,1-Dicethane	3.792	63	570408	45.02	ppb	97
29) Vinyl Acetate	3.902	86	63727	41.95	ppb	# 69
30) DIPE	3.944	45	988789	44.89	ppb	99
31) 2-Chloro-1,3-Butadiene	3.926	53	635980	46.12	ppb	97
32) ETBE	4.524	59	974710	44.40	ppb	98
33) 2,2-Dichloropropane	4.706	77	554171	45.91	ppb	99
34) cis-1,2-Dichloroethene	4.719	96	378369	46.28	ppb	93
35) 2-Butanone	4.774	43	92433	53.76	ppb	89
36) Propionitrile	4.871	54	128928	245.60	ppb	97

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3698.D  
 Acq On : 4 Jun 2015 7:15 pm  
 Operator : K.Ruest  
 Sample : ICV  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 05 14:26:41 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Bromochloromethane	5.139	130	200231	44.30	ppb	89
38) Methacrylonitrile	5.158	67	92857	47.39	ppb	# 84
39) Tetrahydrofuran	5.237	42	58438	49.97	ppb	# 72
40) Chloroform	5.328	83	615555	46.10	ppb	97
41) 1,1,1-Trichloroethane	5.597	97	559402	43.56	ppb	97
42) TAME	6.407	73	915414	47.81	ppb	97
44) Cyclohexane	5.676	41	297117	42.57	ppb	98
46) Carbontetrachloride	5.859	121	145368	43.47	ppb	100
47) 1,1-Dichloropropene	5.871	75	434322	41.07	ppb	95
49) Benzene	6.170	78	1382046	45.38	ppb	97
50) 1,2-Dichloroethane	6.212	62	446747	45.76	ppb	97
51) Iso-Butyl Alcohol	6.212	43	191258	945.46	ppb	97
52) n-Heptane	6.645	43	287285	44.29	ppb	98
53) 1-Butanol	7.121	56	333608	2596.89	ppb	100
54) Trichloroethene	7.084	130	386383	47.00	ppb	96
55) Methylcyclohexane	7.316	55	343445	44.67	ppb	97
56) 1,2-Diclpropane	7.352	63	337861	46.38	ppb	97
57) Dibromomethane	7.493	93	177852	45.33	ppb	94
58) 1,4-Dioxane	7.553	88	52401m	895.30	ppb	
59) Methyl Methacrylate	7.578	69	179285	50.46	ppb	99
60) Bromodichloromethane	7.712	83	480034	45.67	ppb	99
61) 2-Nitropropane	7.986	41	138965	102.24	ppb	99
62) 2-Chloroethylvinyl Ether	8.108	63	183743	54.65	ppb	92
63) cis-1,3-Dichloropropene	8.242	75	563027	46.01	ppb	97
64) 4-Methyl-2-pentanone	8.444	43	225563	54.32	ppb	94
66) Toluene	8.602	91	1597639	45.73	ppb	100
67) trans-1,3-Dichloropropene	8.864	75	489796	46.77	ppb	99
68) Ethyl Methacrylate	8.998	69	386457	50.85	ppb	99
69) 1,1,2-Trichloroethane	9.047	97	261832	46.47	ppb	96
72) Tetrachloroethene	9.181	164	290647	43.28	ppb	98
73) 2-Hexanone	9.328	43	157535	53.15	ppb	98
74) 1,3-Dichloropropane	9.212	76	455072	47.33	ppb	99
75) Dibromochemicalmethane	9.437	129	342627	47.34	ppb	97
76) N-Butyl Acetate	9.480	43	377056	48.43	ppb	98
77) 1,2-Dibromoethane	9.529	107	261923	46.14	ppb	100
78) Chlorobenzene	10.016	112	1079277	45.28	ppb	98
79) 3-CBTF	10.035	180	492039	43.79	ppb	98
80) 4-CBTF	10.083	180	442250	43.45	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.102	131	376229	46.93	ppb	97
82) Ethylbenzene	10.132	106	524339	40.64	ppb	99
83) (m+p)Xylene	10.242	106	1452189	92.35	ppb	97
84) o-Xylene	10.596	106	704133	46.24	ppb	99
85) Styrene	10.608	104	1226316	46.92	ppb	98
87) Bromoform	10.760	173	195054	48.36	ppb	95
88) 2-CBTF	10.839	180	493795	43.20	ppb	93
89) Isopropylbenzene	10.925	105	1698367	46.43	ppb	100
90) Cyclohexanone	10.986	55	227479	1049.18	ppb	88
91) trans-1,4-Dichloro-2-B...	11.230	53	99704	50.67	ppb	98
92) 1,1,2,2-Tetrachloroethane	11.181	83	310744	46.67	ppb	97
93) Bromobenzene	11.175	156	424753	46.57	ppb	96
94) 1,2,3-Trichloropropane	11.211	110	94956	46.88	ppb	93

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3698.D  
 Acq On : 4 Jun 2015 7:15 pm  
 Operator : K.Ruest  
 Sample : ICV  
 Misc : 8260 WATER ICAL  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 05 14:26:41 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) n-Propylbenzene	11.278	91	1942967	47.20	ppb	99
96) 2-Chlorotoluene	11.345	91	1208163	47.62	ppb	98
97) 3-Chlorotoluene	11.394	91	1237573	46.04	ppb	99
98) 4-Chlorotoluene	11.437	91	1502715	47.91	ppb	99
99) 1,3,5-Trimethylbenzene	11.431	105	1475780	47.09	ppb	99
100) tert-Butylbenzene	11.699	119	1154884	45.74	ppb	98
101) 1,2,4-Trimethylbenzene	11.742	105	1489706	47.09	ppb	99
102) 3,4-DCBT	11.803	214	332530	44.44	ppb	95
103) sec-Butylbenzene	11.882	105	1606478	46.41	ppb	99
104) p-Isopropyltoluene	12.004	119	1434444	48.72	ppb	98
105) 1,3-Dclbenz	11.967	146	818372	46.16	ppb	98
106) 1,4-Dclbenz	12.040	146	851993	46.14	ppb	99
107) 2,4-DCBT	12.089	214	299167	45.31	ppb	99
108) 2,5-DCBT	12.126	214	329380	44.36	ppb	96
109) n-Butylbenzene	12.333	91	1236427	46.79	ppb	99
110) 1,2-Dclbenz	12.339	146	774406	46.73	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.955	157	62318	46.25	ppb	92
112) Trielution Dichlorotol...	13.077	125	1910671	136.91	ppb	99
113) 1,3,5 Trichlorobenzene	13.132	180	486687	46.83	ppb	99
114) Coelution Dichlorotoluene	13.406	125	1412953	94.50	ppb	99
115) 1,2,4-Tcbenzene	13.613	180	454020	47.70	ppb	99
116) Hexachlorobt	13.747	225	155599	42.46	ppb	96
117) Naphthalen	13.802	128	959616	48.04	ppb	99
118) 1,2,3-Tclbenzene	13.991	180	368809	47.39	ppb	98
119) 2,4,5-Trichlorotolene	14.570	159	279114	44.86	ppb	95
120) 2,3,6-Trichlorotoluene	14.656	159	251085	46.93	ppb	99

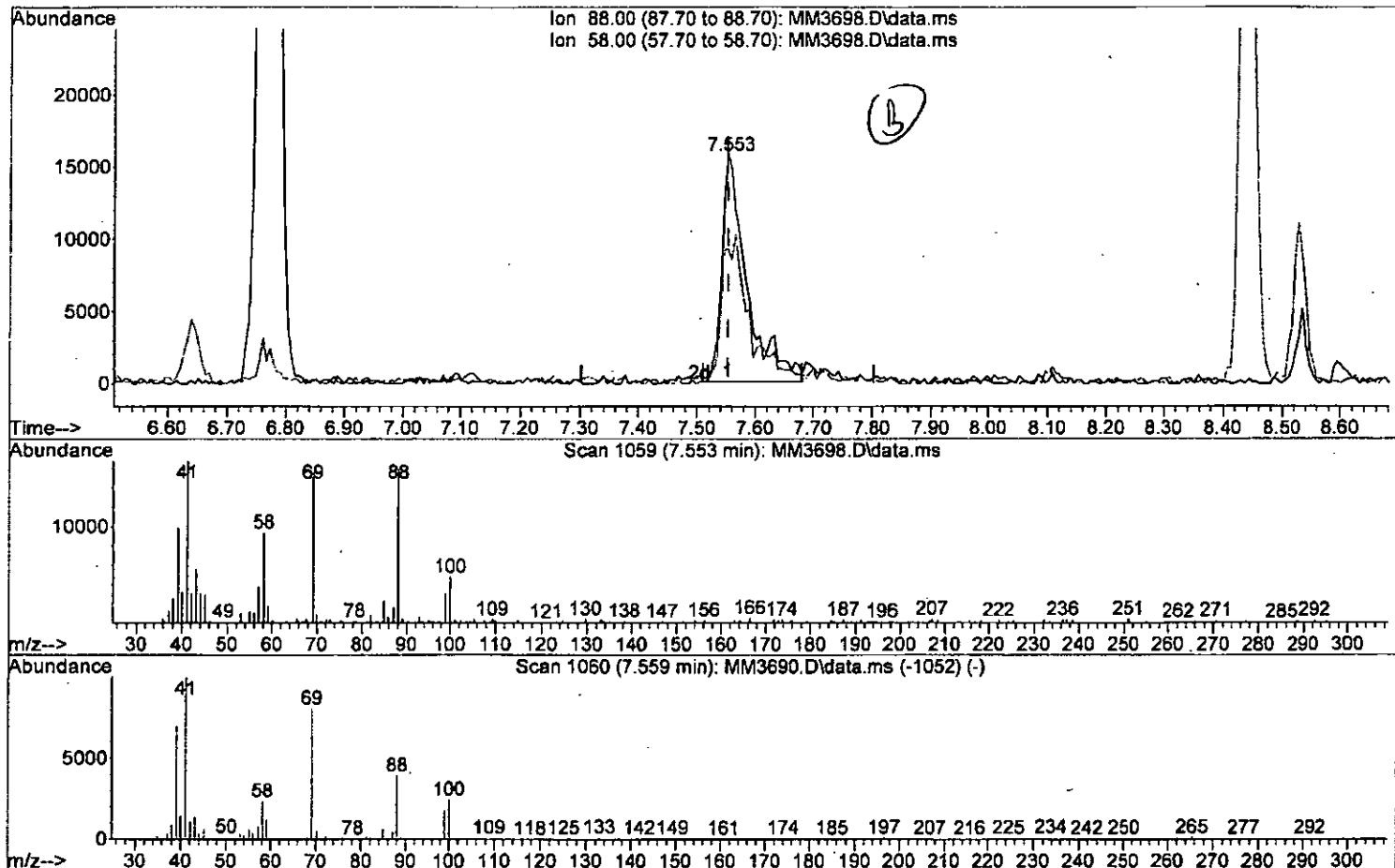
(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\060415\  
 Data File : MM3698.D  
 Acq On : 4 Jun 2015 7:15 pm  
 Operator : K.Ruest  
 Sample : ICV  
 Misc : 8260 WATER ICAL  
 ALS Vial : 20 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 05 10:27:43 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 10:26:54 2015  
 Response via : Initial Calibration



TIC: MM3698.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 799.64 ppb

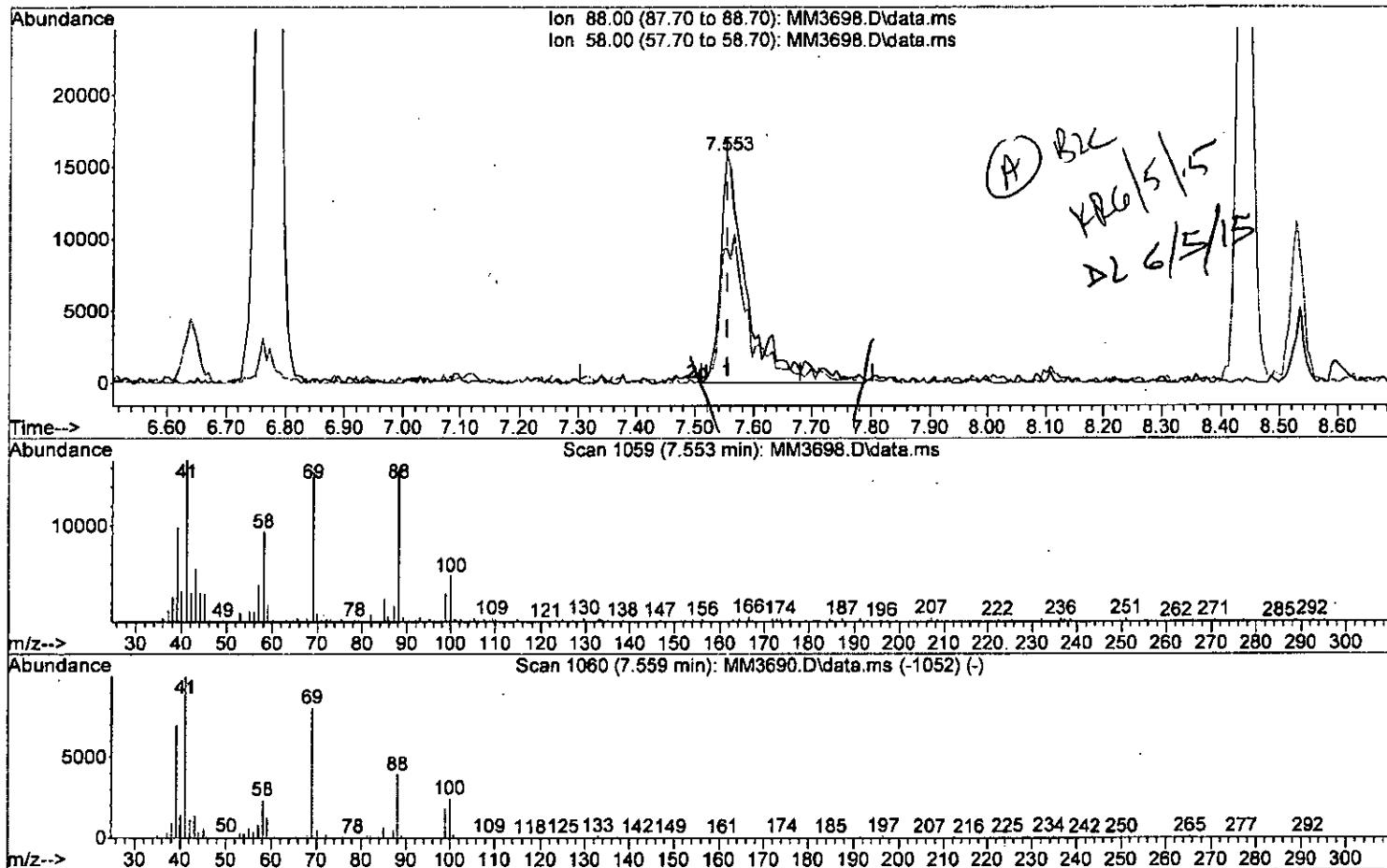
response 46802

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	59.05
0.00	0.00	0.00
0.00	0.00	0.00

## QUANTITATION REPORT (Qeart)

Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3698.D  
 Acq On : 4 Jun 2015 7:15 pm  
 Operator : K.Ruest  
 Sample : ICV  
 Inst : MSVOA-12  
 Misc : 8260 WATER ICAL  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 05 10:27:43 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 10:26:54 2015  
 Response via : Initial Calibration



TIC: MM3698.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 895.30 ppb m

response 52401

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	59.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report      (QT Reviewed)

Data Path : I:\ACQUUDATA\msvoa12\Data\060415\

Data File : MM3698.D

Acq On : 4 Jun 2015 7:15 PM

Operator : K. Buest

Sample : TCY

Sample : TCV  
Miss : 8360 WATER TGAII

MISC : 8260 WATER TOWER  
MISCELLANEOUS : 8260 WATER TOWER

ALS Vial : 20 Sample Multiplier: 1

Inst : MSVOA-12

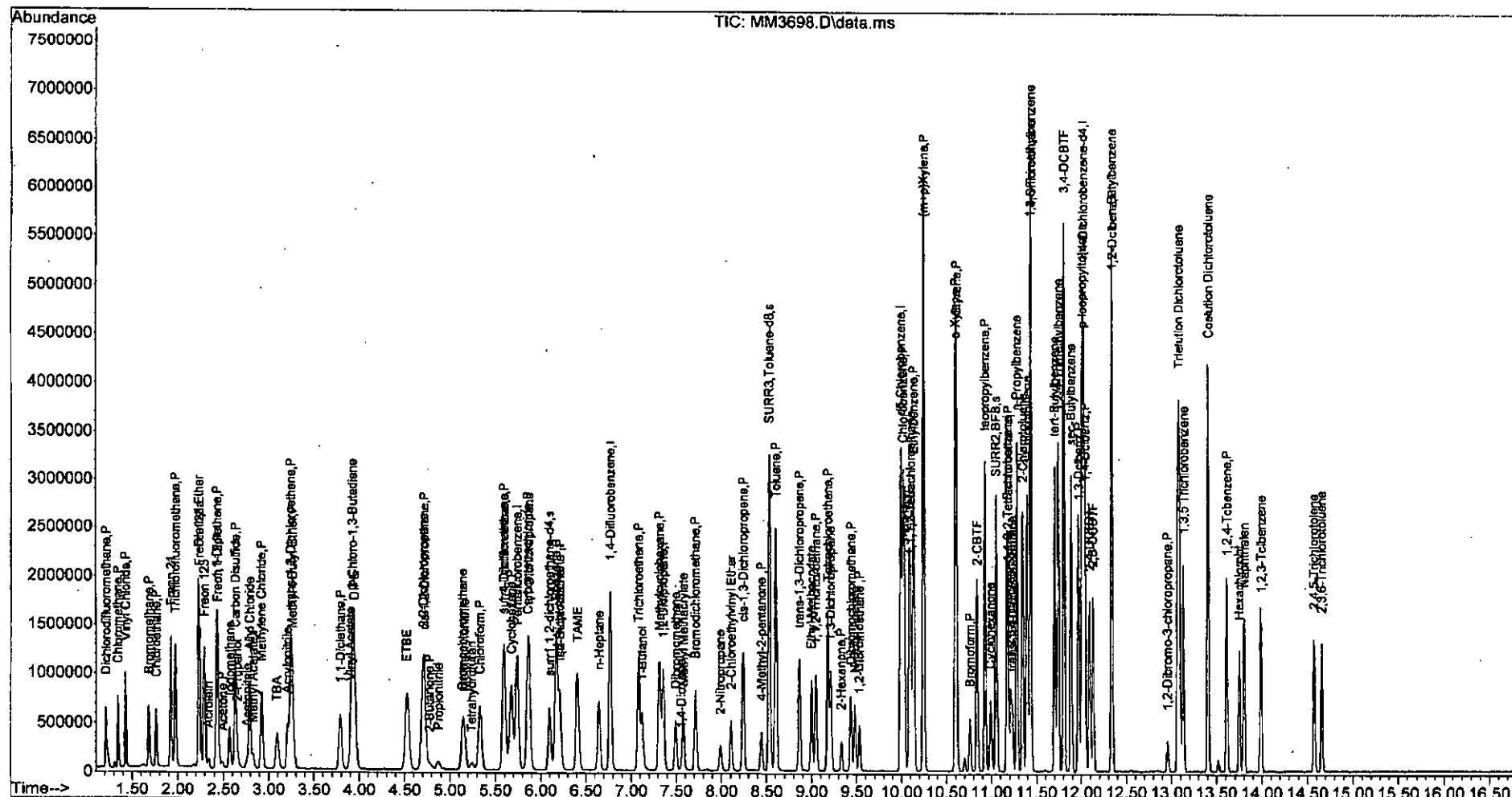
Quant Time: Jun 05 14:26:41 2015

Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:12:59 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

X8 U/28/15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
1	I Pentafluorobenzene	1.0000	1.0000	0.0	102	0.00
2	P Dichlorodifluoromethane	0.4266	0.4697	-10.1	109	0.00
3	P Chloromethane	0.4149	0.4356	-5.0	109	0.00
4	P Vinyl Chloride	0.5240	0.5406	-3.2	106	0.00
5	P Bromomethane	0.2975	0.3141	-5.6	114	0.01
6	P Chloroethane	0.3477	0.3299	5.1	101	0.00
7	Freon 21	0.8681	0.9006	-3.7	107	0.00
8	P Trichlorofluoromethane	0.7809	0.7106	9.0	93	0.00
9	Diethyl Ether	0.3453	0.3447	0.2	103	0.00
10	Freon 123a	0.5540	0.5534	0.1	105	0.00
11	Freon 123	0.6437	0.6358	1.2	104	0.00
12	Acrolein	0.0360	0.0084	41.5	26.7#	22# M
13	P 1,1-Dicethene	0.3677	0.3706	-0.8	108	0.00
14	P Freon 113	0.3640	0.3772	-3.6	111	0.00
15	P Acetone	0.0701	0.0801	-14.3	126	0.00
16	2-Propanol	0.0139	0.0153	-10.1	108	0.00
17	Iodomethane	0.3852	0.2668	39.8	30.7#	61 0.00 M
18	P Carbon Disulfide	1.1784	1.1463	2.7	104	0.00
19	Acetonitrile	0.0090	0.0085	5.6	104	0.02
20	Allyl Chloride	0.2213	0.2304	-4.1	108	0.00
21	P Methyl Acetate	0.1526	0.1694	-11.0	112	0.00
22	P Methylene Chloride	0.3908	0.4149	-6.2	112	0.00
23	TBA	0.0248	0.0275	-10.9	105	0.00
24	Acrylonitrile	0.0797	0.0899	-12.8	115	0.00
25	P Methyl-t-Butyl Ether	0.9554	1.0274	-7.5	106	0.00
26	P trans-1,2-Dichloroethene	0.4109	0.4293	-4.5	111	0.00
27	Halothane	0.0000	0.0000	0.0	196	0.00
28	P 1,1-Dicethane	0.6788	0.6923	-2.0	108	0.00
29	Vinyl Acetate	0.0814	0.0752	7.6	96	0.00
30	DIPE	1.1802	1.2012	-1.8	107	0.00
31	2-Chloro-1,3-Butadiene	0.7387	0.7120	3.6	101	0.00
32	ETBE	1.1762	1.1569	1.6	103	0.00
33	2,2-Dichloropropane	0.6467	0.6576	-1.7	103	0.00
34	P cis-1,2-Dichloroethene	0.4380	0.4661	-6.4	111	0.00
35	P 2-Butanone	0.0921	0.1099	-19.3	115	0.00
36	Propionitrile	0.0281	0.0322	-14.6	109	0.00
37	Bromochloromethane	0.2421	0.2549	-5.3	109	0.00
38	Methacrylonitrile	0.1050	0.1161	-10.6	117	0.00
39	Tetrahydrofuran	0.0626	0.0695	-11.0	121	0.00
40	P Chloroform	0.7154	0.7299	-2.0	109	0.00
41	P 1,1,1-Trichloroethane	0.6880	0.6693	2.7	104	0.00
42	TAME	1.0258	1.0721	-4.5	106	0.00
43	I 1,4-Difluorobenzene	1.0000	1.0000	0.0	103	0.00
44	P Cyclohexane	0.2271	0.2254	0.7	106	0.00
45	s surr4, Dibromoethane	0.2706	0.2934	-8.4	103	0.00
46	P Carbontetrachloride	0.1088	0.1004	7.7	98	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1  
 Inst : MSVOA-12

Quant Time: Jun 28 10:12:59 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
47	1,1-Dichloropropene	0.3441	0.3308	3.9	105	0.00
48 s	surrl,1,2-dichloroethane-d4	0.2890	0.3073	-6.3	101	0.00
49 P	Benzene	0.9909	1.0360	-4.6	111	0.00
50 P	1,2-Dichloroethane	0.3177	0.3047	4.1	103	0.00
51	Iso-Butyl Alcohol	0.0066	0.0068	-3.0	108	0.00
52	n-Heptane	0.2111	0.2094	0.8	105	0.00
53	1-Butanol	0.0042	0.0048	-14.3	114	0.00
54 P	Trichloroethene	0.2675	0.2776	-3.8	109	0.00
55 P	Methylcyclohexane	0.2502	0.2744	-9.7	112	0.00
56 P	1,2-Diclpropane	0.2370	0.2356	0.6	105	0.00
57	Dibromomethane	0.1277	0.1304	-2.1	110	0.00
58	1,4-Dioxane	0.0019	0.0019	0.0	115	0.00
59	Methyl Methacrylate	0.1156	0.1205	-4.2	105	0.00
60 P	Bromodichloromethane	0.3420	0.3412	0.2	107	0.00
61	2-Nitropropane	0.0442	0.0350	MT 20.8#	79	0.00
62	2-Chloroethylvinyl Ether	0.1094	0.1117	-2.1	100	0.00
63 P	cis-1,3-Dichloropropene	0.3982	0.4020	-1.0	105	0.00
64 P	4-Methyl-2-pentanone	0.1351	0.1455	-7.7	106	0.00
65 s	SURR3, Toluene-d8	1.1817	1.2792	-8.3	103	0.00
66 P	Toluene	1.1367	1.1809	-3.9	109	0.00
67 P	trans-1,3-Dichloropropene	0.3408	0.3452	-1.3	103	0.00
68	Ethyl Methacrylate	0.2473	0.2554	-3.3	105	0.00
69 P	1,1,2-Trichloroethane	0.1833	0.1948	-6.3	112	0.00
70 s	SURR2, BFB	0.4490	0.5040	-12.2	104	0.00
71 I	d5-Chlorobenzene	1.0000	1.0000	0.0	108	0.00
72 P	Tetrachloroethene	0.2293	0.2154	6.1	110	0.00
73 P	2-Hexanone	0.1012	0.1019	-0.7	102	0.00
74	1,3-Dichloropropane	0.3283	0.3517	-7.1	110	0.00
75 P	Dibromochloromethane	0.2472	0.2312	6.5	100	0.00
76	N-Butyl Acetate	0.2659	0.2552	4.0	100	0.00
77 P	1,2-Dibromoethane	0.1939	0.1993	-2.8	111	0.00
78 P	Chlorobenzene	0.8139	0.7961	2.2	107	0.00
79	3-CBTF	0.3837	0.7971	-107.7#	234#	0.00
80	4-CBTF	0.3476	0.7093	-104.1#	231#	0.00
81	1,1,1,2-Tetrachloroethane	0.2738	0.2885	-5.4	116	0.00
82 P	Ethylbenzene	0.4406	0.4355	1.2	109	0.00
83 P	(m+p) Xylene	0.5370	0.5346	0.4	107	0.00
84 P	o-Xylene	0.5200	0.5228	-0.5	108	0.00
85 P	Styrene	0.8926	0.8924	0.0	108	0.00
86 I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	116	0.00
87 P	Bromoform	0.2560	0.2254	12.0	101	0.00
88	2-CBTF	0.7253	1.3347	-84.0#	238#	0.00
89 P	Isopropylbenzene	2.3212	2.1755	6.3	111	0.00
90	Cyclohexanone	0.0138	0.0350	MT -153.6#	278#	0.00
91	trans-1,4-Dichloro-2-Butene	0.1249	0.1136	9.0	106	0.00

Data Path : I:\ACQUADATA\msvola12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV Inst : MSVOA-12  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 28 10:12:59 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
92 P	1,1,2,2-Tetrachloroethane	0.4225	0.4197	0.7	117	0.00
93	Bromobenzene	0.5788	0.5381	7.0	110	0.00
94	1,2,3-Trichloropropane	0.1286	0.1257	2.3	118	0.00
95	n-Propylbenzene	2.6124	2.5441	2.6	112	0.00
96	2-Chlorotoluene	1.6100	1.5325	4.8	111	0.00
97	3-Chlorotoluene	1.7057	3.3244	-94.9#	240#	0.00 *
98	4-Chlorotoluene	1.9904	1.8258	8.3	106	0.00
99	1,3,5-Trimethylbenzene	1.9889	1.9056	4.2	112	0.00
100	tert-Butylbenzene	1.6024	1.5104	5.7	113	0.00
101	1,2,4-Trimethylbenzene	2.0077	1.9327	3.7	113	0.00
102	3,4-DCBTF	0.4749	0.9489	-99.8#	248#	0.00 *
103	sec-Butylbenzene	2.1969	2.1564	1.8	115	0.00
104	p-Isopropyltoluene	1.8686	1.8598	0.5	115	0.00
105 P	1,3-Dclbenz	1.1251	1.1072	1.6	117	0.00
106 P	1,4-Dclbenz	1.1719	1.1408	2.7	116	0.00
107	2,4-DCBTF	0.4190	0.8607	-105.4#	255#	0.00 *
108	2,5-DCBTF	0.4712	0.9745	-106.8#	252#	0.00 *
109	n-Butylbenzene	1.6769	1.6330	2.6	114	0.00
110 P	1,2-Dclbenz	1.0516	1.0400	1.1	116	0.00
111 P	1,2-Dibromo-3-chloropropane	0.0855	0.0844	1.3	114	0.00
112	Trielution Dichlorotoluene	0.8856	1.7766	-100.6#	246#	0.00 *
113	1,3,5 Trichlorobenzene	0.6596	1.3714	-107.9#	250#	0.00 *
114	Coelution Dichlorotoluene	0.9488	1.9489	-105.4#	249#	0.00 *
115 P	1,2,4-Tcbenzene	0.6041	0.6047	-0.1	117	0.00
116	Hexachlorobt	0.2326	0.2088	10.2	111	0.00
117	Naphthalen	1.2677	1.3526	-6.7	120	0.00
118	1,2,3-Tclbenzene	0.4939	0.5242	-6.1	121	0.00
119	2,4,5-Trichlorotolene	0.3948	0.7279	-84.4#	230#	0.00 *
120	2,3,6-Trichlorotoluene	0.3395	0.6211	-82.9#	218#	0.00 *

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

\* Spike 2x (10uL) OCC  
 - NT's this run.

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV **RQ1507088-02**  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:12:59 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	961774	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1611080	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1583751	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.022	152	940332	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.603	113	472744	54.23	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 108.46%		
48) surr1,1,2-dichloroetha...	6.102	65	495113	53.17	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 106.34%		
65) SURR3,Toluene-d8	8.535	98	2060887	54.12	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 108.24%		
70) SURR2,BFB	11.053	95	811976	56.12	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 112.24%		
<b>Target Compounds</b>						
				Qvalue		
2) Dichlorodifluoromethane	1.213	85	451785m	55.05	ppb	
3) Chloromethane	1.347	50	418950	52.50	ppb	99
4) Vinyl Chloride	1.433	62	519892	51.58	ppb	94
5) Bromomethane	1.689	94	302089	52.79	ppb	99
6) Chloroethane	1.768	64	317299	47.44	ppb	97
7) Freon 21	1.926	67	866132	51.87	ppb	98
8) Trichlorofluoromethane	1.975	101	683424	45.50	ppb	99
9) Diethyl Ether	2.231	59	331570	49.92	ppb	96
10) Freon 123a	2.237	67	532267	49.94	ppb	93
11) Freon 123	2.298	83	611538	49.39	ppb	98
12) Acrolein	2.341	56	40500m	58.49	ppb	
13) 1,1-Dicethene	2.432	96	356411	50.39	ppb	95
14) Freon 113	2.445	101	362805	51.81	ppb	97
15) Acetone	2.487	43	77079	57.17	ppb	92
16) 2-Propanol	2.646	45	294796	1101.01	ppb	98
17) Iodomethane	2.573	142	256611	30.12	ppb	92
18) Carbon Disulfide	2.634	76	1102448	48.64	ppb	98
19) Acetonitrile	2.774	40	40727m	235.36	ppb	
20) Allyl Chloride	2.798	76	221619	52.06	ppb	# 78
21) Methyl Acetate	2.829	43	162931	55.50	ppb	95
22) Methylene Chloride	2.926	84	399063	53.09	ppb	97
23) TBA	3.091	59	528858	1107.39	ppb	100
24) Acrylonitrile	3.213	53	432158	282.03	ppb	93
25) Methyl-t-Butyl Ether	3.261	73	988126	53.77	ppb	98
26) trans-1,2-Dichloroethene	3.249	96	412862	52.24	ppb	97
28) 1,1-Dicethane	3.792	63	665861	50.99	ppb	95
29) Vinyl Acetate	3.908	86	72318	46.19	ppb	# 70
30) DIPE	3.950	45	1155329	50.89	ppb	94
31) 2-Chloro-1,3-Butadiene	3.932	53	684740	48.19	ppb	91
32) ETBE	4.530	59	1112701	49.18	ppb	99
33) 2,2-Dichloropropane	4.706	77	632420	50.84	ppb	98
34) cis-1,2-Dichloroethene	4.719	96	448248	53.20	ppb	96
35) 2-Butanone	4.786	43	105721	59.67	ppb	93
36) Propionitrile	4.865	54	154765	286.07	ppb	91

YR  
6/26/15

Data Path : I:\ACQUDATA\msvoa12\Data\062815\

Data File : MM4317.D

Acq On : 28 Jun 2015 9:54 am

Operator : K.Ruest

Sample : CCV

Misc :

ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:12:59 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.151	130	245121	52.63	ppb	91
38) Methacrylonitrile	5.157	67	111639	55.29	ppb	# 74
39) Tetrahydrofuran	5.237	42	66858	55.48	ppb	83
40) Chloroform	5.328	83	701983	51.01	ppb	99
41) 1,1,1-Trichloroethane	5.596	97	643737	48.65	ppb	95
42) TAME	6.407	73	1031099	52.26	ppb	94
44) Cyclohexane	5.682	41	363121	49.62	ppb	95
46) Carbontetrachloride	5.859	121	161682	46.12	ppb	96
47) 1,1-Dichloropropene	5.877	75	532947	48.07	ppb	96
49) Benzene	6.176	78	1669082	52.28	ppb	98
50) 1,2-Dichloroethane	6.212	62	490853	47.96	ppb	97
51) Iso-Butyl Alcohol	6.206	43	219067	1032.91	ppb	93
52) n-Heptane	6.645	43	337418	49.62	ppb	94
53) 1-Butanol	7.120	56	386602	2870.41	ppb	100
54) Trichloroethene	7.084	130	447269	51.89	ppb	98
55) Methylcyclohexane	7.316	55	442038	54.83	ppb	95
56) 1,2-Diclpropane	7.358	63	379515	49.69	ppb	99
57) Dibromomethane	7.492	93	210119	51.08	ppb	93
58) 1,4-Dioxane	7.547	88	62600	1020.15	ppb	90
59) Methyl Methacrylate	7.578	69	194060	52.09	ppb	93
60) Bromodichloromethane	7.712	83	549689	49.88	ppb	99
61) 2-Nitropropane	7.986	41	112742	79.11	ppb	93
62) 2-Chloroethylvinyl Ether	8.108	63	180035	51.08	ppb	91
63) cis-1,3-Dichloropropene	8.242	75	647602	50.48	ppb	97
64) 4-Methyl-2-pentanone	8.437	43	234490	53.86	ppb	95
66) Toluene	8.602	91	1902517	51.94	ppb	99
67) trans-1,3-Dichloropropene	8.864	75	556212	50.66	ppb	98
68) Ethyl Methacrylate	8.998	69	411434	51.63	ppb	89
69) 1,1,2-Trichloroethane	9.047	97	313768	53.11	ppb	94
72) Tetrachloroethene	9.181	164	341098	46.96	ppb	96
73) 2-Hexanone	9.327	43	161326	50.32	ppb	96
74) 1,3-Dichloropropane	9.212	76	556958	53.56	ppb	98
75) Dibromochloromethane	9.437	129	366112	46.76	ppb	97
76) N-Butyl Acetate	9.480	43	404096	47.98	ppb	96
77) 1,2-Dibromoethane	9.529	107	315575	51.39	ppb	99
78) Chlorobenzene	10.016	112	1260864	48.91	ppb	98
79) 3-CBT	10.035	180	1262345	103.85	ppb	97
80) 4-CBT	10.083	180	1123308	102.02	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.102	131	456885	52.69	ppb	97
82) Ethylbenzene	10.132	106	689718	49.42	ppb	98
83) (m+p) Xylene	10.242	106	1693241	99.55	ppb	99
84) o-Xylene	10.595	106	827944	50.26	ppb	95
85) Styrene	10.608	104	1413373	49.99	ppb	99
87) Bromoform	10.760	173	211973	44.03	ppb	97
88) 2-CBT	10.839	180	1255045	92.01	ppb	95
89) Isópropylbenzene	10.925	105	2045676	46.86	ppb	98
90) Cyclohexanone	10.992	55	657593	2541.28	ppb	87
91) trans-1,4-Dichloro-2-B...	11.229	53	106838	45.50	ppb	91
92) 1,1,2,2-Tetrachloroethane	11.181	83	394659	49.67	ppb	99
93) Bromobenzene	11.175	156	506006	46.49	ppb	96
94) 1,2,3-Trichloropropane	11.211	110	118224	48.90	ppb	95

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 28 10:12:59 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
95) n-Propylbenzene	11.278	91	2392256	48.69	ppb	99
96) 2-Chlorotoluene	11.345	91	1441079	47.59	ppb	99
97) 3-Chlorotoluene	11.394	91	3126002	97.45	ppb	98
98) 4-Chlorotoluene	11.437	91	1716846	45.86	ppb	98
99) 1,3,5-Trimethylbenzene	11.431	105	1791906	47.91	ppb	98
100) tert-Butylbenzene	11.699	119	1420295	47.13	ppb	99
101) 1,2,4-Trimethylbenzene	11.742	105	1817334	48.13	ppb	98
102) 3,4-DCBT	11.803	214	892323	99.92	ppb	97
103) sec-Butylbenzene	11.882	105	2027716	49.08	ppb	99
104) p-Isopropyltoluene	12.004	119	1748864	49.77	ppb	99
105) 1,3-Dclbenz	11.967	146	1041152	49.21	ppb	97
106) 1,4-Dclbenz	12.040	146	1072770	48.67	ppb	98
107) 2,4-DCBT	12.089	214	809360	102.70	ppb	95
108) 2,5-DCBT	12.132	214	916385	103.42	ppb	98
109) n-Butylbenzene	12.333	91	1535609	48.69	ppb	100
110) 1,2-Dclbenz	12.339	146	977957	49.45	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.961	157	79318	49.32	ppb	98
112) Trielution Dichlorotol...	13.077	125	5011899	300.91	ppb	98
113) 1,3,5 Trichlorobenzene	13.132	180	1289586	103.96	ppb	98
114) Coelution Dichlorotoluene	13.406	125	3665279	205.41	ppb	98
115) 1,2,4-Tcbenzene	13.613	180	568654	50.06	ppb	95
116) Hexachlorobt	13.747	225	196388	44.90	ppb	99
117) Naphthalen	13.802	128	1271914	53.35	ppb	100
118) 1,2,3-Tclbenzene	13.991	180	492881	53.07	ppb	100
119) 2,4,5-Trichlorotolene	14.576	159	684449	92.18	ppb	94
120) 2,3,6-Trichlorotoluene	14.662	159	584033	91.46	ppb	95

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

Data Path : I:\ACQUDATA\msvoa12\Data\062815\

Data File : MM4317.D

Acq On : 28 Jun 2015 9:54 am

Operator : K.Ruest

Sample : CCV

Inst : MSVOA-12

Misc :

ALS Vial : 1 Sample Multiplier: 1

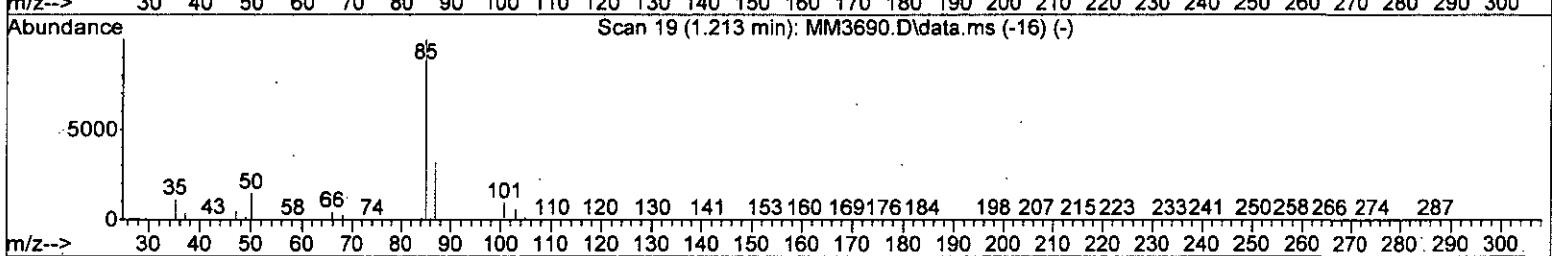
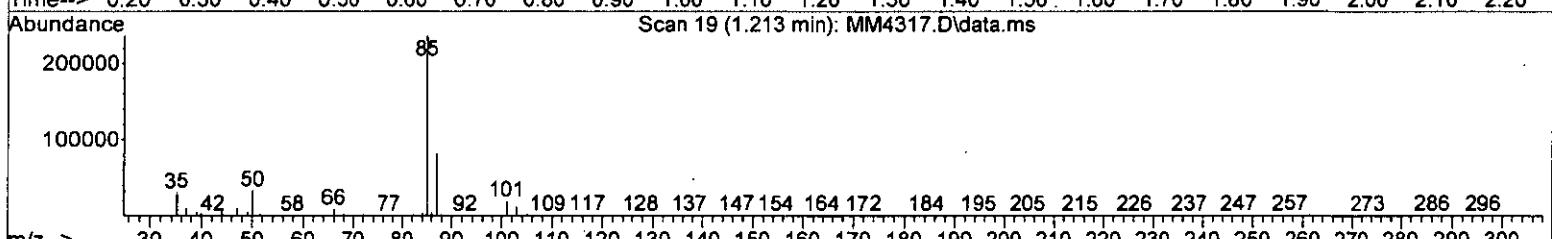
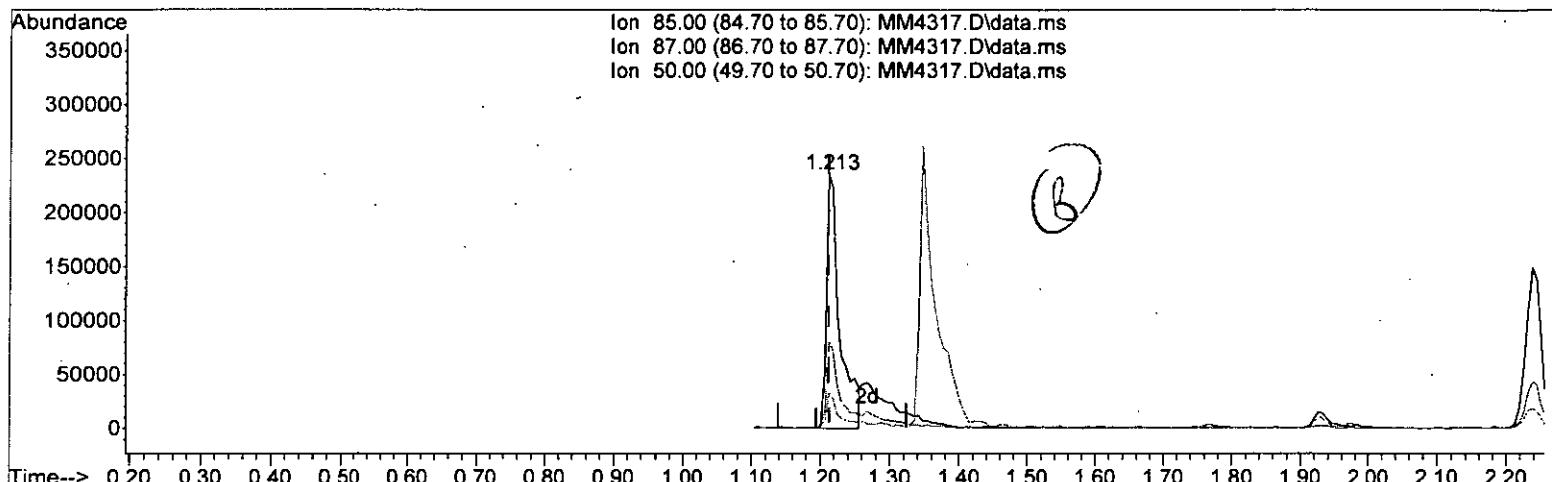
Quant Time: Jun 28 10:09:52 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration



TIC: MM4317.D\data.ms

(2) Dichlorodifluoromethane (P)

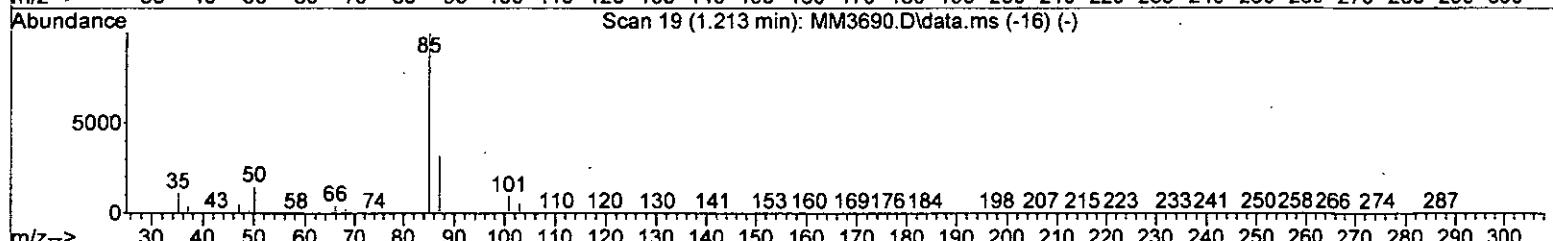
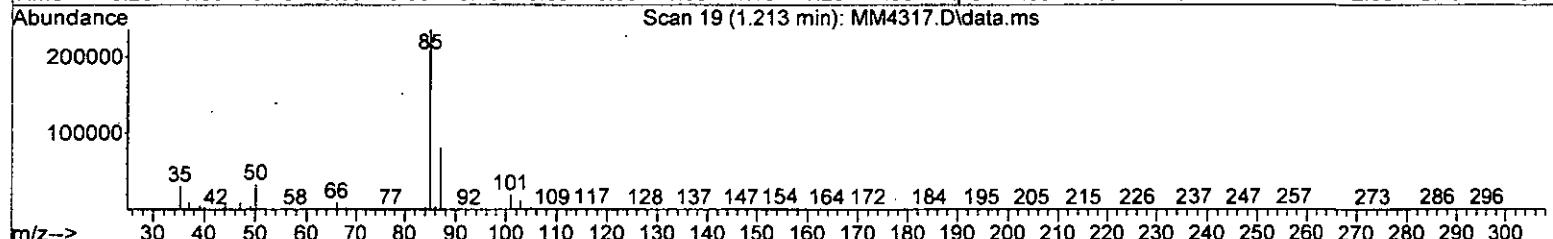
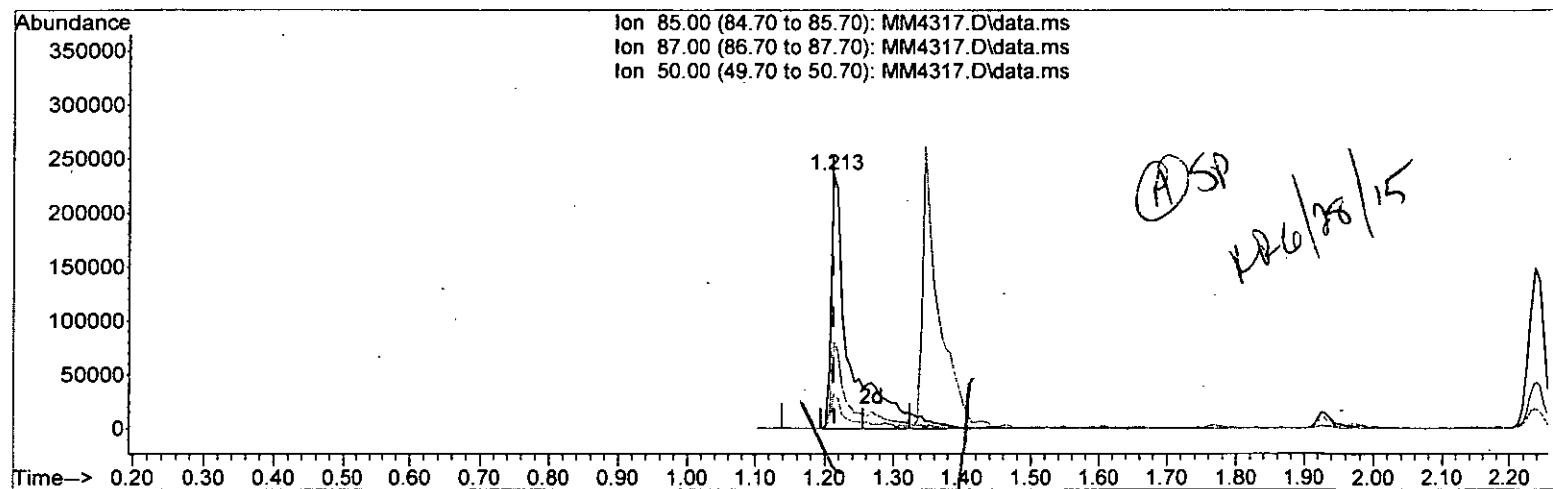
1.213min (-0.000) 38.63 ppb

response 317038

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	34.38
50.00	14.50	13.78
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 28 10:09:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4317.D\data.ms

## (2) Dichlorodifluoromethane (P)

1.213min (-0.000) 55.05 ppb m

response 451785

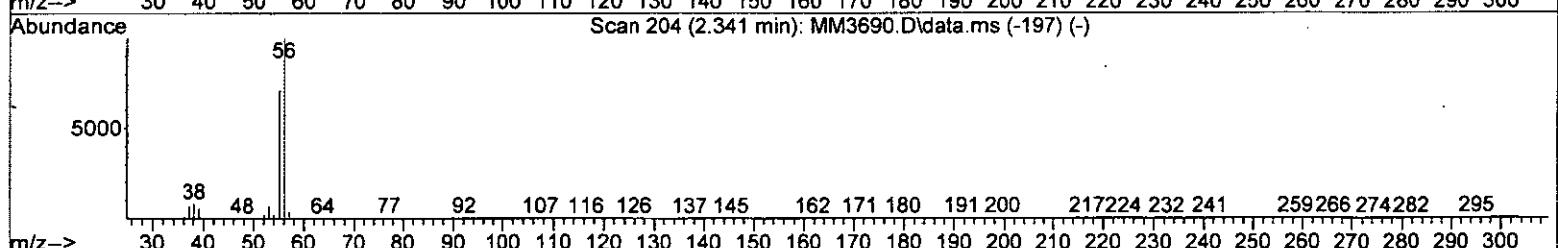
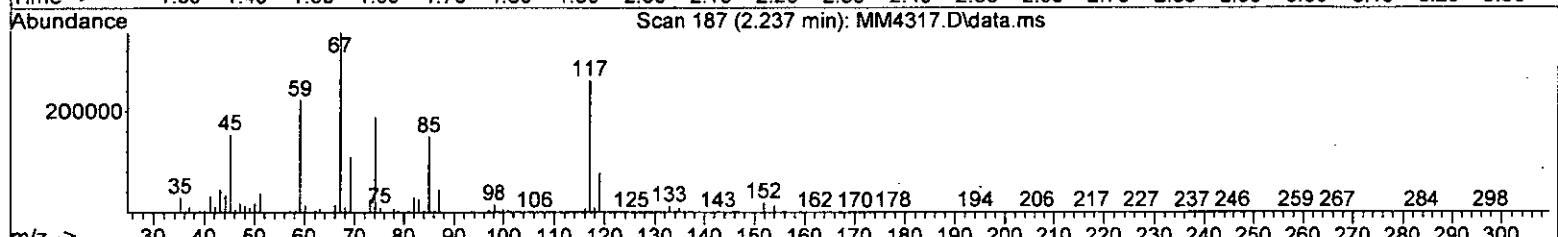
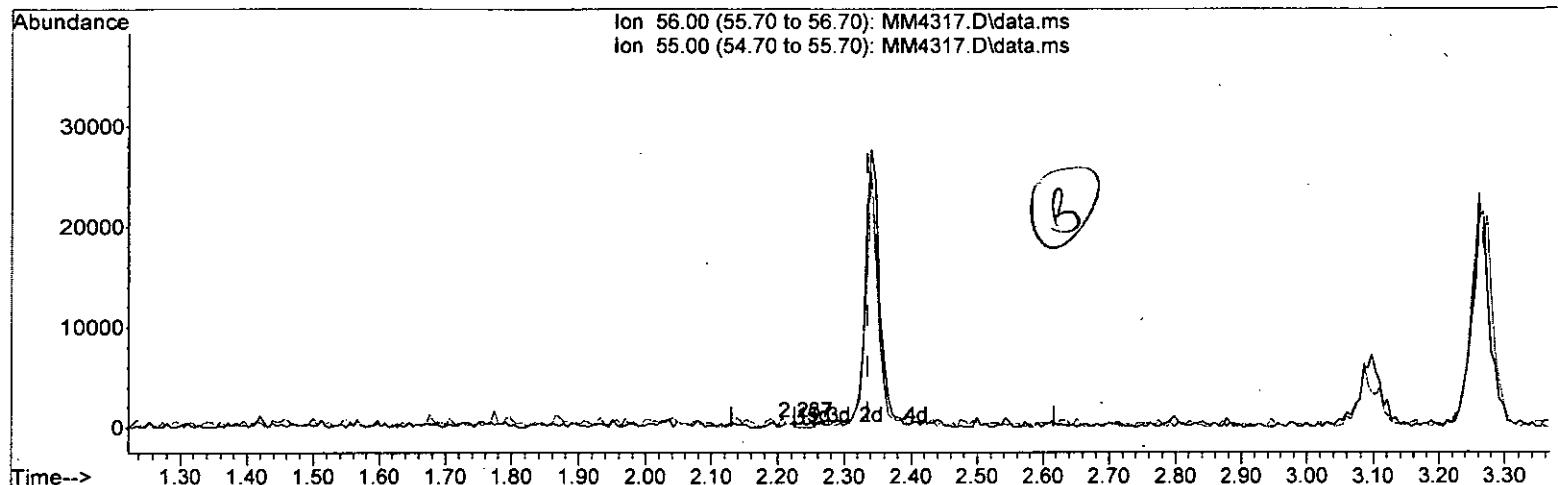
Ion	Exp%	Act%
85.00	100	100
87.00	32.00	34.38
50.00	14.50	13.78
0.00	0.00	0.00

MV  
1/30

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:09:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4317.D\data.ms

(12) Acrolein

2.237min (-0.098) 0.89 ppb

response 616

Ion	Exp%	Act%
56.00	100	100
55.00	71.60	68.53
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062815\

Data File : MM4317.D

Acq On : 28 Jun 2015 9:54 am

Operator : K.Ruest

Sample : CCV

Inst : MSVOA-12

Misc :

ALS Vial : 1 Sample Multiplier: 1

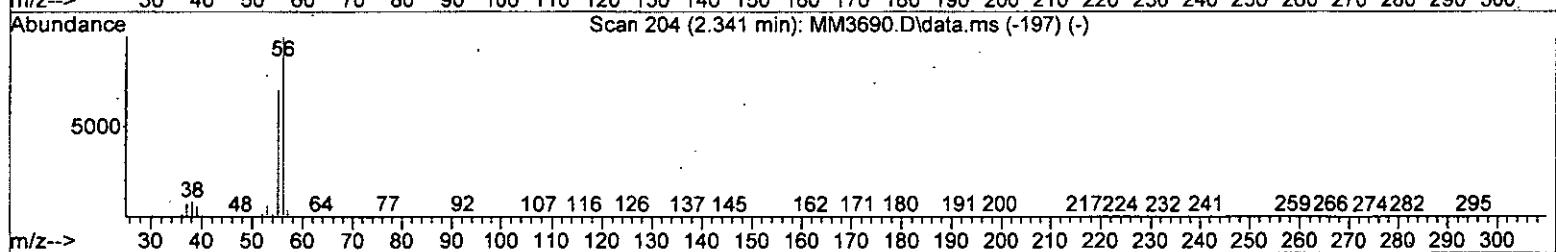
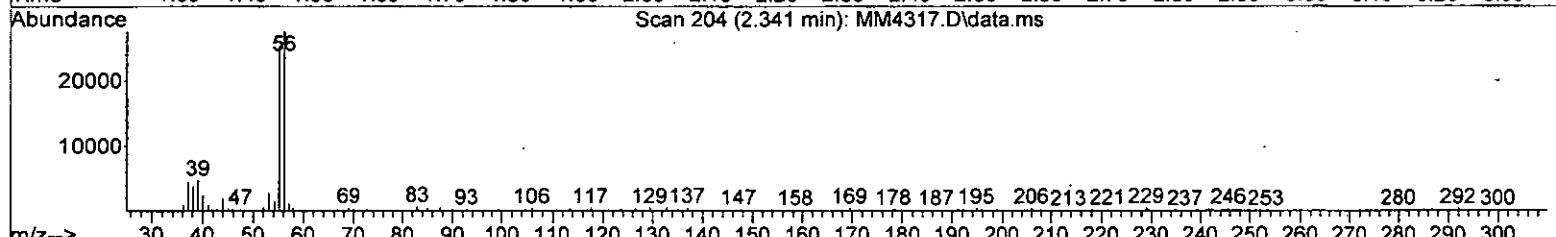
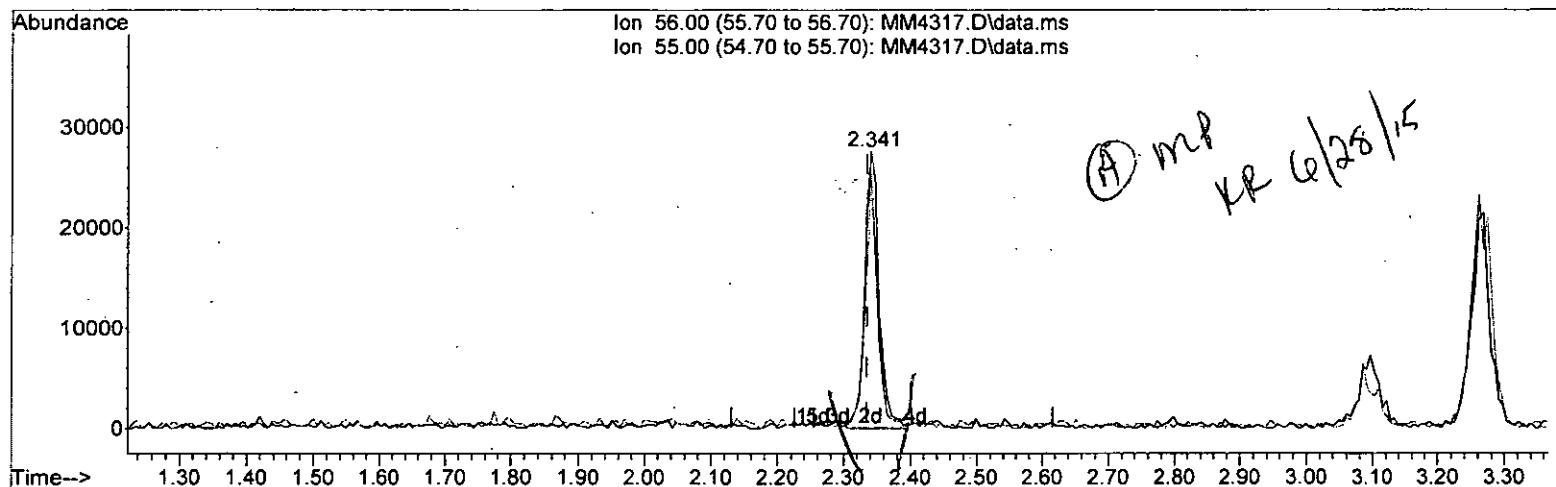
Quant Time: Jun 28 10:09:52 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration



TIC: MM4317.D\data.ms

## (12) Acrolein

2.341min (+0.006) 58.49 ppb m

response 40500

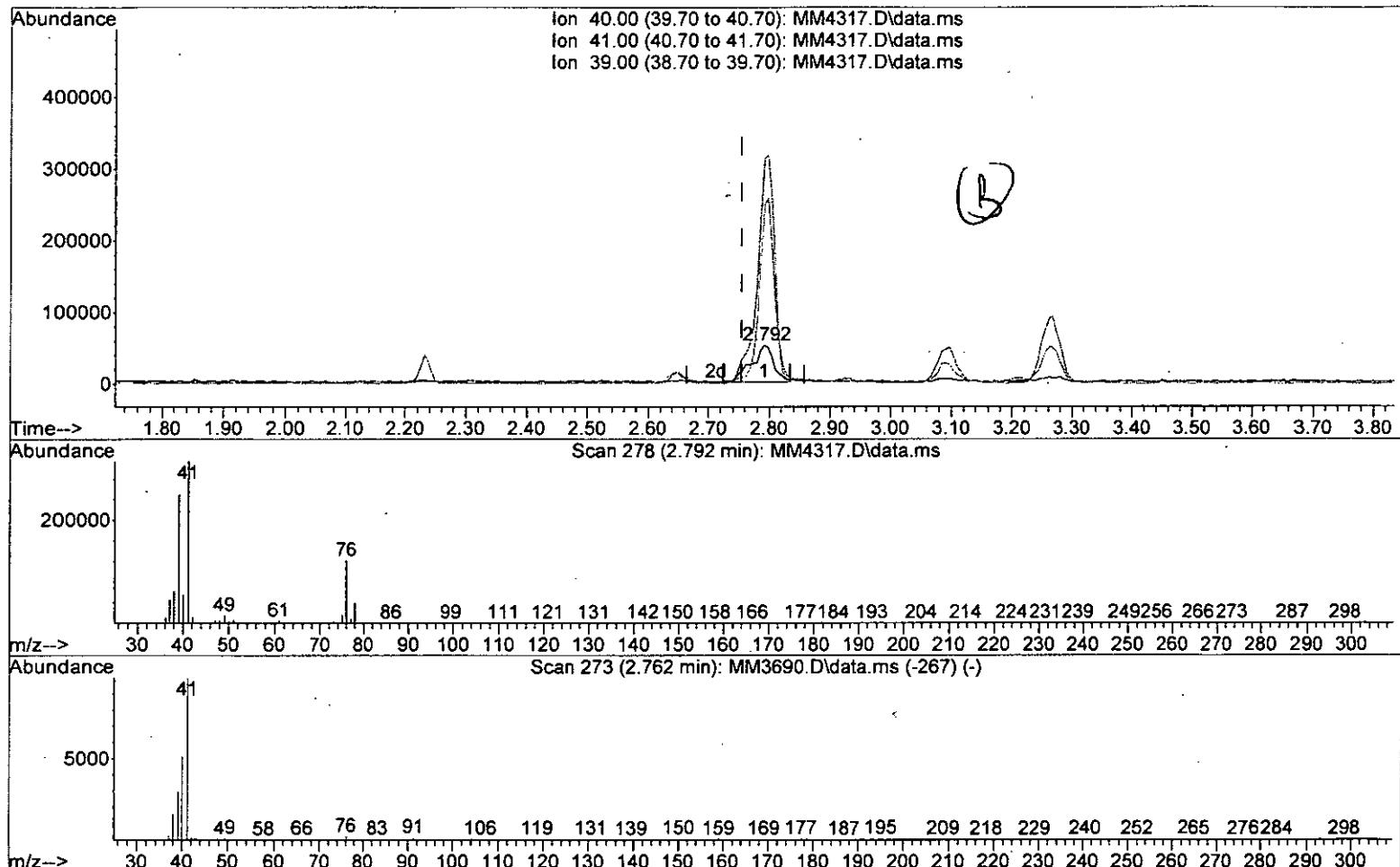
Ion	Exp%	Act%
56.00	100	100
55.00	71.60	91.66#
0.00	0.00	0.00
0.00	0.00	0.00

2/14

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:09:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4317.D\data.ms

## (19) Acetonitrile

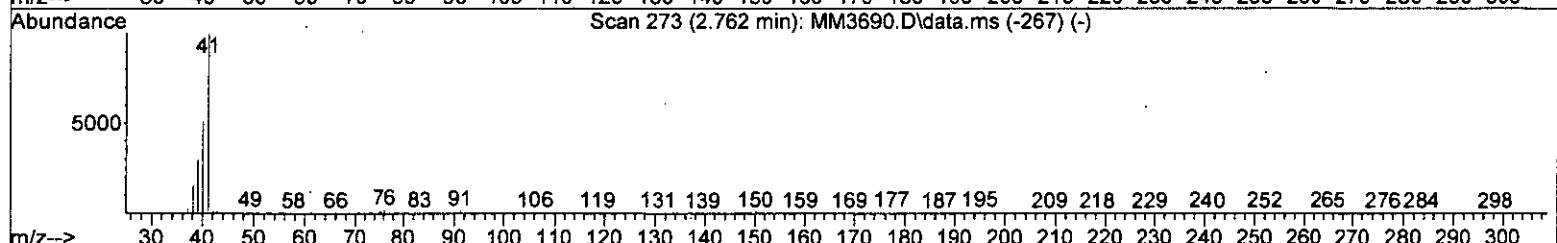
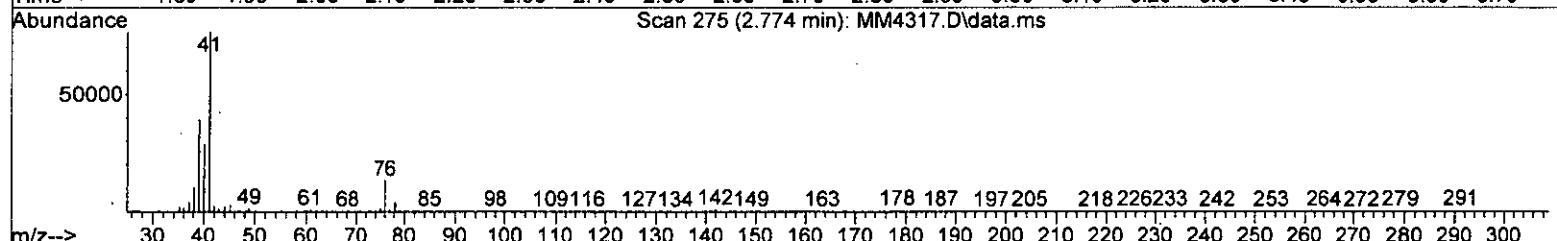
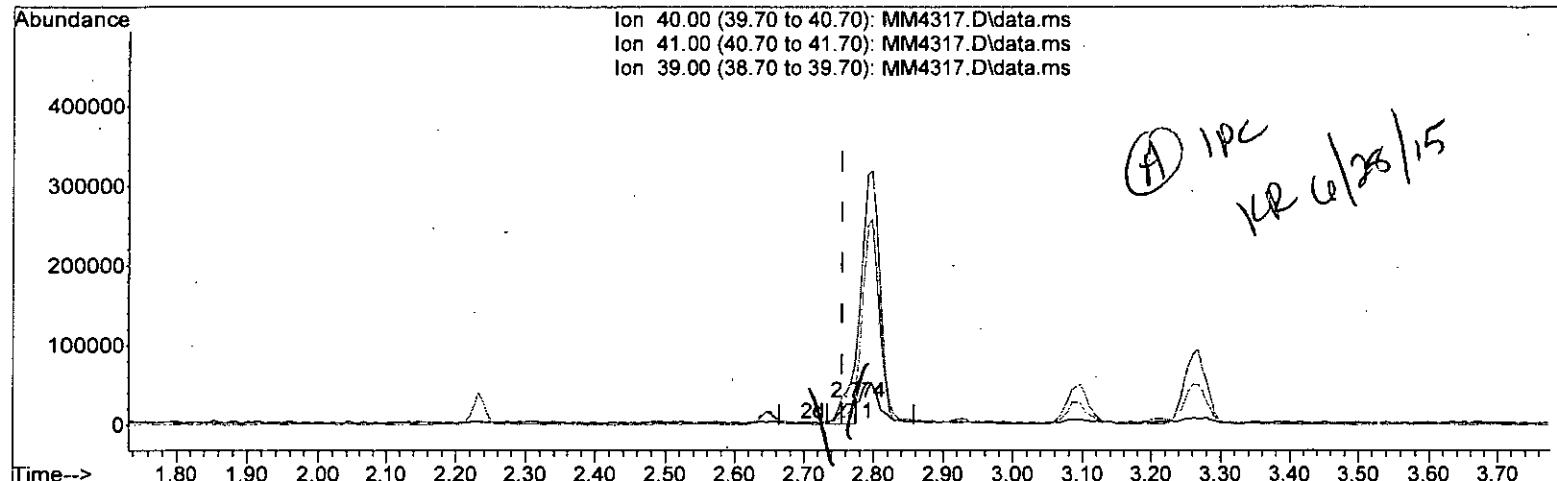
2.792min (+0.037) 744.51 ppb

response 128832

Ion	Exp%	Act%
40.00	100	100
41.00	194.30	579.71#
39.00	58.40	460.93#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4317.D  
 Acq On : 28 Jun 2015 9:54 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 28 10:09:52 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4317.D\data.ms

## (19) Acetonitrile

2.774min (+0.019) 235.36 ppb m

response 40727

Ion	Exp%	Act%
40.00	100	100
41.00	194.30	266.03#
39.00	58.40	136.50#
0.00	0.00	0.00

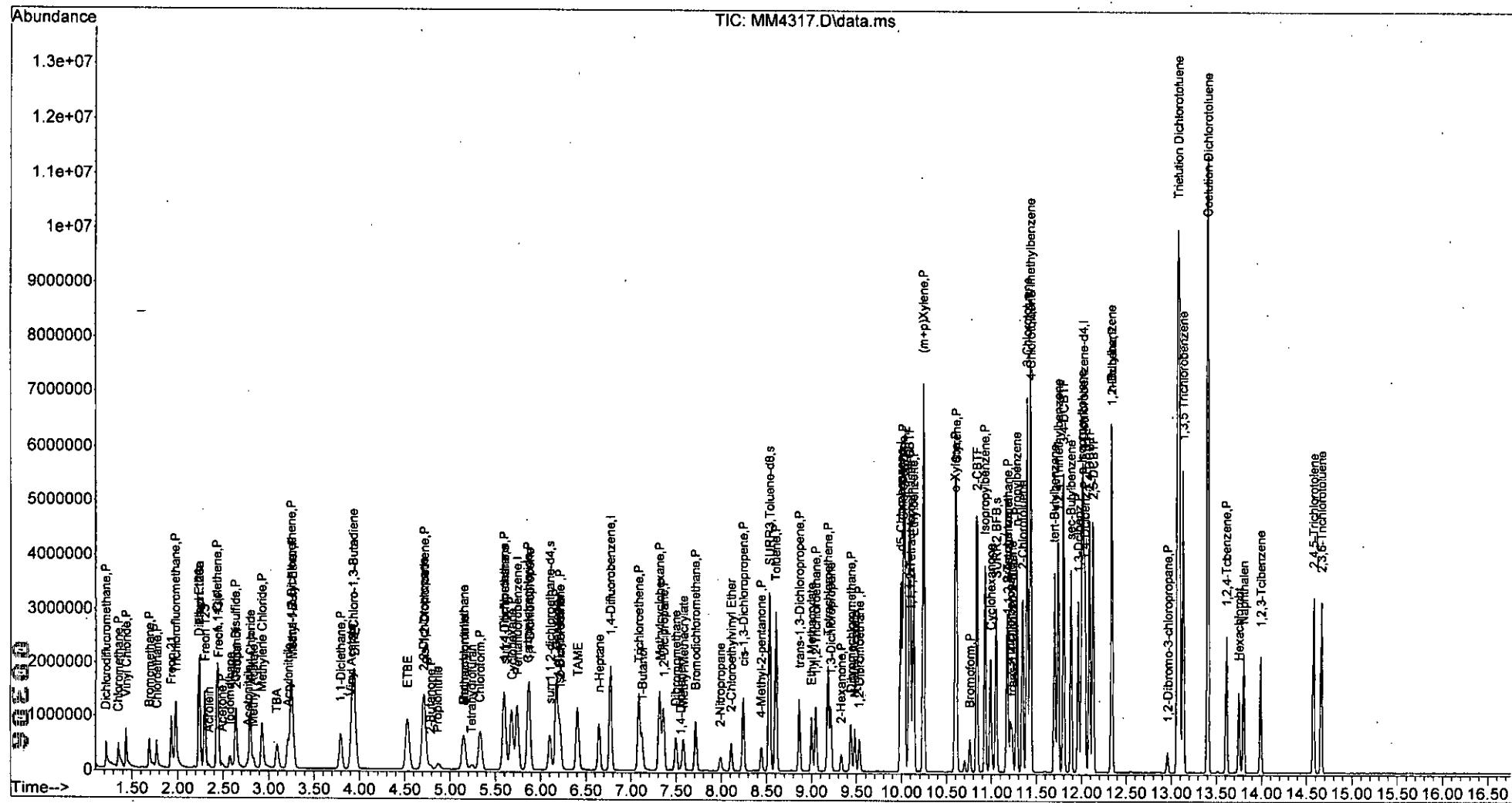
BM  
6/28

**Quantitation Report (OT Reviewed)**

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
Data File : MM4317.D  
Acq On : 28 Jun 2015 9:54 am  
Operator : K.Ruest  
Sample : CCV  
Misc :  
ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:12:59 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvao12\Data\062915\

Data File : MM4344.D

Acq On : 29 Jun 2015 10:32 am

Operator : K.Ruest

Sample : CCV

Misc :

ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 10:50:38 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

6/29/15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)
1	I Pentafluorobenzene	1.0000	1.0000	0.0	100	0.00
2	P Dichlorodifluoromethane	0.4266	0.4621	-8.3	106	0.00
3	P Chloromethane	0.4149	0.4135	0.3	102	0.00
4	P Vinyl Chloride	0.5240	0.5434	-3.7	105	0.00
5	P Bromomethane	0.2975	0.2829	4.9	101	0.01
6	P Chloroethane	0.3477	0.3101	10.8	93	0.00
7	Freon 21	0.8681	0.8751	-0.8	102	0.00
8	P Trichlorofluoromethane	0.7809	0.7568	3.1	97	0.00
9	Diethyl Ether	0.3453	0.3150	8.8	92	0.00
10	Freon 123a	0.5540	0.5329	3.8	99	0.00
11	Freon 123	0.6437	0.6391	0.7	103	0.00
12	Acrolein	0.0360	0.0079	45.1	78.1#	20#
13	P 1,1-Dicethene	0.3677	0.3838	-4.4	110	0.00
14	P Freon 113	0.3640	0.3843	-5.6	111	0.00
15	P Acetone	0.0701	0.0701	0.0	108	0.00
16	2-Propanol	0.0139	0.0121	12.9	84	0.00
17	Iodomethane	0.3852	0.2684	39.4	30.3#	60
18	P Carbon Disulfide	1.1784	1.1645	1.2	104	0.00
19	Acetonitrile	0.0090	0.0083	7.8	100	0.00
20	Allyl Chloride	0.2213	0.2320	-4.8	106	0.00
21	P Methyl Acetate	0.1526	0.1526	0.0	99	0.00
22	P Methylene Chloride	0.3908	0.3729	4.6	98	0.00
23	TBA	0.0248	0.0227	8.5	85	0.00
24	Acrylonitrile	0.0797	0.0827	-3.8	104	0.00
25	P Methyl-t-Butyl Ether	0.9554	0.9731	-1.9	99	0.00
26	P trans-1,2-Dichloroethene	0.4109	0.4409	-7.3	112	0.00
27	Halothane	0.0000	0.0000	0.0	129	-0.01
28	P 1,1-Dicethane	0.6788	0.6786	0.0	104	0.00
29	Vinyl Acetate	0.0814	0.0713	12.4	89	0.00
30	DIPE	1.1802	1.1657	1.2	102	0.00
31	2-Chloro-1,3-Butadiene	0.7387	0.7360	0.4	103	0.00
32	ETBE	1.1762	1.1044	6.1	96	0.00
33	2,2-Dichloropropane	0.6467	0.6677	-3.2	103	0.00
34	P cis-1,2-Dichloroethene	0.4380	0.4703	-7.4	110	0.00
35	P 2-Butanone	0.0921	0.0993#	-7.8	102	0.00
36	Propionitrile	0.0281	0.0288	-2.5	96	0.00
37	Bromochloromethane	0.2421	0.2552	-5.4	107	0.00
38	Methacrylonitrile	0.1050	0.1050	0.0	104	0.00
39	Tetrahydrofuran	0.0626	0.0601	4.0	103	0.00
40	P Chloroform	0.7154	0.7332	-2.5	108	0.00
41	P 1,1,1-Trichloroethane	0.6880	0.6708	2.5	102	0.00
42	TAME	1.0258	0.9977	2.7	97	0.00
43	I 1,4-Difluorobenzene	1.0000	1.0000	0.0	101	0.00
44	P Cyclohexane	0.2271	0.2281	-0.4	105	0.00
45	s surr4, Dibromoethane	0.2706	0.2915	-7.7	100	0.00
46	P Carbontetrachloride	0.1088	0.1045	4.0	101	0.00

## Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4344.D  
 Acq On : 29 Jun 2015 10:32 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 29 10:50:38 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev(min)
47	1,1-Dichloropropene	0.3441	0.3447	-0.2	107	0.00
48 s	surrl,1,2-dichloroethane-d4	0.2890	0.2947	-2.0	95	0.00
49 P	Benzene	0.9909	1.0359	-4.5	109	0.00
50 P	1,2-Dichloroethane	0.3177	0.3030	4.6	101	0.00
51	Iso-Butyl Alcohol	0.0066	0.0058	12.1	91	0.00
52	n-Heptane	0.2111	0.2108	0.1	104	0.00
53	1-Butanol	0.0042	0.0039	7.1	90	0.00
54 P	Trichloroethene	0.2675	0.2818	-5.3	108	0.00
55 P	Methylcyclohexane	0.2502	0.2752	-10.0	111	0.00
56 P	1,2-Diclpropane	0.2370	0.2387	-0.7	104	0.00
57	Dibromomethane	0.1277	0.1250	2.1	104	0.00
58	1,4-Dioxane	0.0019	0.0017	10.5	97	0.00
59	Methyl Methacrylate	0.1156	0.1156	0.0	99	0.00
60 P	Bromodichloromethane	0.3420	0.3258	4.7	100	0.00
61	2-Nitropropane	0.0442	0.0310	29.9#	68	0.00
62	2-Chloroethylvinyl Ether	0.1094	0.1077	1.6	95	0.00
63 P	cis-1,3-Dichloropropene	0.3982	0.3949	0.8	101	0.00
64 P	4-Methyl-2-pentanone	0.1351	0.1256	7.0	89	0.00
65 s	SURR3,Toluene-d8	1.1817	1.2837	-8.6	102	0.00
66 P	Toluene	1.1367	1.1950	-5.1	108	0.00
67 P	trans-1,3-Dichloropropene	0.3408	0.3365	1.3	99	0.00
68	Ethyl Methacrylate	0.2473	0.2351	4.9	94	0.00
69 P	1,1,2-Trichloroethane	0.1833	0.1902	-3.8	108	0.00
70 s	SURR2,BFB	0.4490	0.5079	-13.1	103	0.00
71 I	d5-Chlorobenzene	1:0000	1.0000	0.0	107	0.00
72 P	Tetrachloroethene	0.2293	0.2184	4.8	110	0.00
73 P	2-Hexanone	0.1012	0.0903	10.8	90	0.00
74	1,3-Dichloropropane	0.3283	0.3328	-1.4	104	0.00
75 P	Dibromochloromethane	0.2472	0.2252	8.9	96	0.00
76	N-Butyl Acetate	0.2659	0.2304	13.4	90	0.00
77 P	1,2-Dibromoethane	0.1939	0.1864	3.9	103	0.00
78 P	Chlorobenzene	0.8139	0.8015	1.5	107	0.00
79	3-CBTF	0.3837	0.3827	0.3	111	0.00
80	4-CBTF	0.3476	0.3466	0.3	112	0.00
81	1,1,1,2-Tetrachloroethane	0.2738	0.2604	4.9	104	0.00
82 P	Ethylbenzene	0.4406	0.4297	2.5	106	0.00
83 P	(m+p) Xylene	0.5370	0.5380	-0.2	107	0.00
84 P	o-Xylene	0.5200	0.5180	0.4	106	0.00
85 P	Styrene	0.8926	0.8959	-0.4	107	0.00
86 I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	113	0.00
87 P	Bromoform	0.2560	0.2196	14.2	96	0.00
88	2-CBTF	0.7253	0.6435	11.3	112	0.00
89 P	Isopropylbenzene	2.3212	2.2235	4.2	111	0.00
90	Cyclohexanone	0.0138	0.0285	106.5#	221#	0.00
91	trans-1,4-Dichloro-2-Butene	0.1249	0.1059	15.2	96	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062915\

Data File : MM4344.D

Acq On : 29 Jun 2015 10:32 am

Operator : K.Ruest

Sample : CCV

Misc :

ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 10:50:38 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)
92 P	1,1,2,2-Tetrachloroethane	0.4225	0.3849	8.9	104	0.00
93	Bromobenzene	0.5788	0.5512	4.8	110	0.00
94	1,2,3-Trichloropropane	0.1286	0.1202	6.5	110	0.00
95	n-Propylbenzene	2.6124	2.5686	1.7	111	0.00
96	2-Chlorotoluene	1.6100	1.5811	1.8	111	0.00
97	3-Chlorotoluene	1.7057	1.5597	8.6	110	0.00
98	4-Chlorotoluene	1.9904	1.9180	3.6	108	0.00
99	1,3,5-Trimethylbenzene	1.9889	1.9047	4.2	109	0.00
100	tert-Butylbenzene	1.6024	1.5139	5.5	110	0.00
101	1,2,4-Trimethylbenzene	2.0077	1.9357	3.6	110	0.00
102	3,4-DCBTF	0.4749	0.4529	4.6	115	0.00
103	sec-Butylbenzene	2.1969	2.1174	3.6	110	0.00
104	p-Isopropyltoluene	1.8686	1.8497	1.0	111	0.00
105 P	1,3-Dclbenz	1.1251	1.0973	2.5	113	0.00
106 P	1,4-Dclbenz	1.1719	1.1297	3.6	112	0.00
107	2,4-DCBTF	0.4190	0.4122	1.6	119	0.00
108	2,5-DCBTF	0.4712	0.4652	1.3	117	0.00
109	n-Butylbenzene	1.6769	1.6360	2.4	112	0.00
110 P	1,2-Dclbenz	1.0516	1.0311	1.9	112	0.00
111 P	1,2-Dibromo-3-chloropropane	0.0855	0.0729	14.7	96	0.00
112	Trielution Dichlorotoluene	0.8856	0.8552	3.4	115	0.00
113	1,3,5 Trichlorobenzene	0.6596	0.6661	-1.0	118	0.00
114	Coelution Dichlorotoluene	0.9488	0.9191	3.1	114	0.00
115 P	1,2,4-Tcbenzene	0.6041	0.5900	2.3	112	0.00
116	Hexachlorobt	0.2326	0.2175	6.5	113	0.00
117	Naphthalen	1.2677	1.2338	2.7	107	0.00
118	1,2,3-Tclbenzene	0.4939	0.4826	2.3	109	0.00
119	2,4,5-Trichlorotolene	0.3948	0.3479	11.9	107	0.00
120	2,3,6-Trichlorotoluene	0.3395	0.3073	9.5	105	0.00

(#) = Out of Range

SPCC's out = 1 CCC's out = 0

Data Path : I:\ACQUDATA\msvoa12\Data\062915\

Data File : MM4344.D

Acq On : 29 Jun 2015 10:32 am

Operator : K.Ruest

Sample : CCV PQ1507136-02

Misc :

ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 10:50:38 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	944811	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1580808	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1569057	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.022	152	916293	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoethane	5.596	113	460731	53.86	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 107.72%		
48) surr1,1,2-dichloroetha...	6.102	65	465843	50.98	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 101.96%		
65) SURR3,Toluene-d8	8.535	98	2029247	54.31	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 108.62%		
70) SURR2,BFB	11.047	95	802889	56.56	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 113.12%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	436584m	54.15	ppb	Qvalue
3) Chloromethane	1.347	50	390726	49.84	ppb	99
4) Vinyl Chloride	1.433	62	513378m	51.85	ppb	
5) Bromomethane	1.689	94	267249	47.54	ppb	93
6) Chloroethane	1.768	64	292972m	44.59	ppb	
7) Freon 21	1.926	67	826823	50.41	ppb	100
8) Trichlorofluoromethane	1.975	101	715058	48.46	ppb	94
9) Diethyl Ether	2.231	59	297582	45.61	ppb	95
10) Freon 123a	2.237	67	503503	48.09	ppb	97
11) Freon 123	2.298	83	603845	49.64	ppb	99
12) Acrolein	2.341	56	37363	54.93	ppb	83
13) 1,1-Dicethene	2.432	96	362649	52.20	ppb	98
14) Freon 113	2.438	101	363063	52.78	ppb	97
15) Acetone	2.487	43	66257	50.03	ppb	95
16) 2-Propanol	2.646	45	228480	868.65	ppb	97
17) Iodomethane	2.579	142	253547	30.29	ppb	99
18) Carbon Disulfide	2.634	76	1100261	49.41	ppb	99
19) Acetonitrile	2.755	40	39323	231.32	ppb	# 73
20) Allyl Chloride	2.798	76	219198	52.42	ppb	95
21) Methyl Acetate	2.829	43	144197	50.00	ppb	94
22) Methylene Chloride	2.926	84	352330	47.71	ppb	97
23) TBA	3.091	59	429314	915.09	ppb	94
24) Acrylonitrile	3.213	53	390806	259.62	ppb	93
25) Methyl-t-Butyl Ether	3.261	73	919360	50.93	ppb	96
26) trans-1,2-Dichloroethene	3.249	96	416572	53.65	ppb	92
28) 1,1-Dicethane	3.792	63	641192	49.99	ppb	97
29) Vinyl Acetate	3.902	86	67333	43.78	ppb	97
30) DIPE	3.944	45	1101380	49.39	ppb	99
31) 2-Chloro-1,3-Butadiene	3.932	53	695360	49.81	ppb	98
32) ETBE	4.530	59	1043460	46.95	ppb	99
33) 2,2-Dichloropropane	4.712	77	630895	51.63	ppb	99
34) cis-1,2-Dichloroethene	4.719	96	444310	53.68	ppb	96
35) 2-Butanone	4.779	43	93784	53.88	ppb	88
36) Propionitrile	4.871	54	136088	256.07	ppb	97

YR  
6/29/15

Data Path : I:\ACQUADATA\msvoa12\Data\062915\

Data File : MM4344.D

Acq On : 29 Jun 2015 10:32 am

Operator : K.Ruest

Sample : CCV

Misc :

ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 10:50:38 2015

Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Bromochloromethane	5.151	130	241079	52.69	ppb	89
38) Methacrylonitrile	5.157	67	99251	50.04	ppb	# 70
39) Tetrahydrofuran	5.243	42	56800	47.98	ppb	83
40) Chloroform	5.334	83	692768	51.25	ppb	98
41) 1,1,1-Trichloroethane	5.602	97	633788	48.75	ppb	96
42) TAME	6.407	73	942660	48.63	ppb	95
44) Cyclohexane	5.676	41	360606	50.22	ppb	98
46) Carbontetrachloride	5.865	121	165252	48.04	ppb	98
47) 1,1-Dichloropropene	5.877	75	544974	50.10	ppb	99
49) Benzene	6.176	78	1637610	52.27	ppb	97
50) 1,2-Dichloroethane	6.212	62	479030	47.70	ppb	99
51) Iso-Butyl Alcohol	6.200	43	183646	882.48	ppb	97
52) n-Heptane	6.645	43	333191	49.93	ppb	98
53) 1-Butanol	7.120	56	305716	2313.33	ppb	96
54) Trichloroethene	7.084	130	445452	52.67	ppb	97
55) Methylcyclohexane	7.316	55	435116	55.01	ppb	94
56) 1,2-Diclpropane	7.358	63	377351	50.35	ppb	98
57) Dibromomethane	7.492	93	197593	48.95	ppb	96
58) 1,4-Dioxane	7.553	88	52486	871.71	ppb	98
59) Methyl Methacrylate	7.578	69	182722	49.99	ppb	88
60) Bromodichloromethane	7.712	83	514996	47.63	ppb	96
61) 2-Nitropropane	7.986	41	97918	70.03	ppb	# 81
62) 2-Chloroethylvinyl Ether	8.108	63	170315	49.25	ppb	100
63) cis-1,3-Dichloropropene	8.242	75	624199	49.58	ppb	99
64) 4-Methyl-2-pentanone	8.437	43	198560	46.48	ppb	91
66) Toluene	8.602	91	1889134	52.57	ppb	98
67) trans-1,3-Dichloropropene	8.864	75	531866	49.37	ppb	97
68) Ethyl Methacrylate	8.998	69	371651	47.53	ppb	96
69) 1,1,2-Trichloroethane	9.047	97	300724	51.88	ppb	98
72) Tetrachloroethene	9.181	164	342661	47.61	ppb	98
73) 2-Hexanone	9.327	43	141663	44.60	ppb	97
74) 1,3-Dichloropropane	9.212	76	522164	50.68	ppb	99
75) Dibromochloromethane	9.437	129	353404	45.56	ppb	96
76) N-Butyl Acetate	9.480	43	361455	43.32	ppb	99
77) 1,2-Dibromoethane	9.529	107	292473	48.07	ppb	95
78) Chlorobenzene	10.016	112	1257602	49.24	ppb	99
79) 3-CBTF	10.035	180	600461	49.86	ppb	98
80) 4-CBTF	10.083	180	543903	49.86	ppb	97
81) 1,1,1,2-Tetrachloroethane	10.102	131	408629	47.56	ppb	99
82) Ethylbenzene	10.132	106	674253	48.77	ppb	99
83) (m+p)Xylene	10.242	106	1688271	100.18	ppb	98
84) o-Xylene	10.595	106	812808	49.81	ppb	98
85) Styrene	10.608	104	1405745	50.19	ppb	99
87) Bromoform	10.760	173	201188	42.89	ppb	99
88) 2-CBTF	10.839	180	589626	44.36	ppb	92
89) Isopropylbenzene	10.931	105	2037351	47.90	ppb	99
90) Cyclohexanone	10.986	55	522077	2070.51	ppb	88
91) trans-1,4-Dichloro-2-B...	11.229	53	97056	42.41	ppb	99
92) 1,1,2,2-Tetrachloroethane	11.181	83	352682	45.55	ppb	97
93) Bromobenzene	11.175	156	505046	47.62	ppb	98
94) 1,2,3-Trichloropropane	11.211	110	110152	46.76	ppb	96

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4344.D  
 Acq On : 29 Jun 2015 10:32 am  
 Operator : K.Ruest  
 Sample : CCV  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

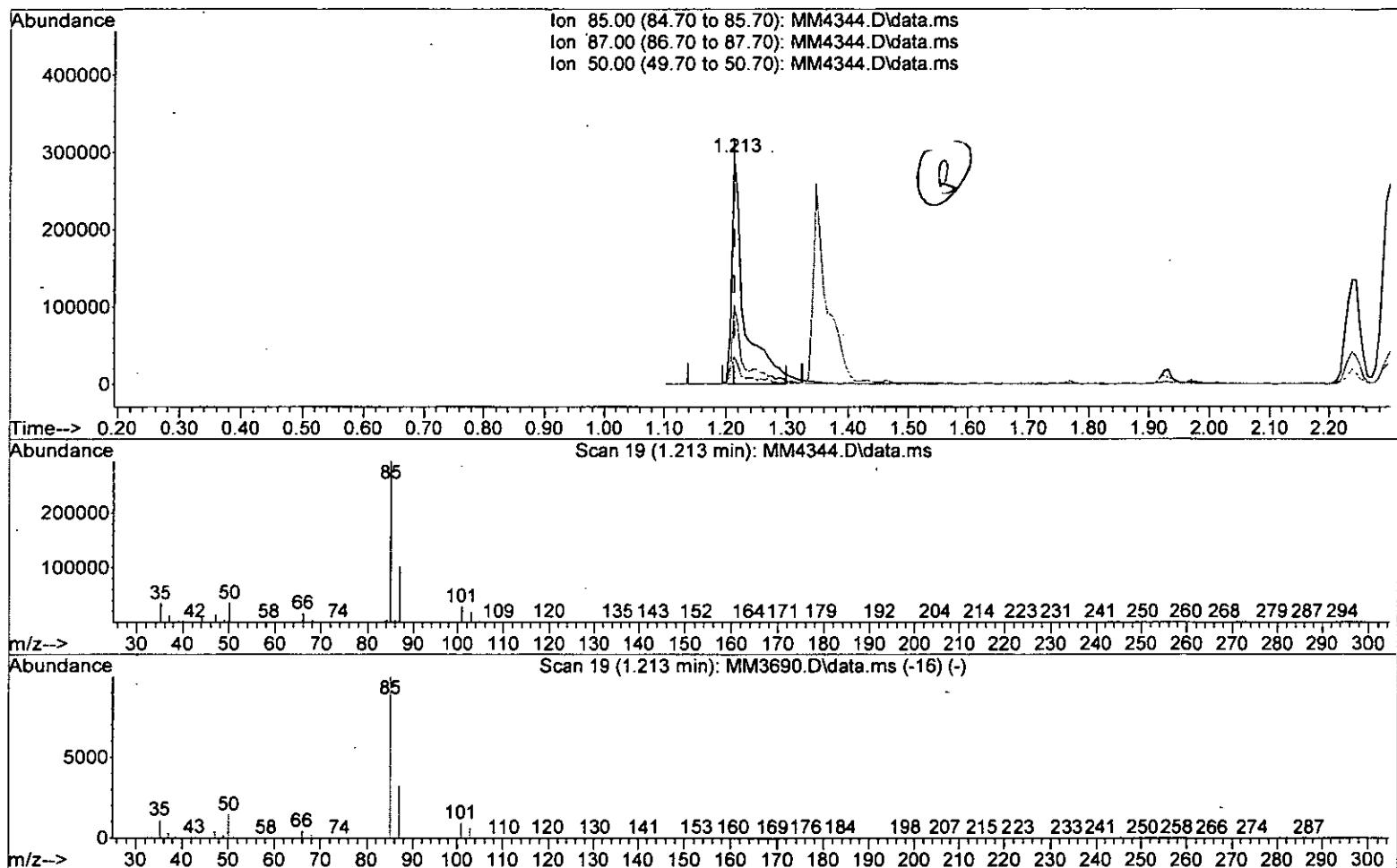
Quant Time: Jun 29 10:50:38 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
95) n-Propylbenzene	11.278	91	2353562	49.16	ppb	98
96) 2-Chlorotoluene	11.345	91	1448718	49.10	ppb	97
97) 3-Chlorotoluene	11.394	91	1429151	45.72	ppb	96
98) 4-Chlorotoluene	11.437	91	1757413	48.18	ppb	99
99) 1,3,5-Trimethylbenzene	11.431	105	1745240	47.88	ppb	99
100) tert-Butylbenzene	11.705	119	1387199	47.24	ppb	99
101) 1,2,4-Trimethylbenzene	11.742	105	1773700	48.21	ppb	98
102) 3,4-DCBTF	11.803	214	415029	47.69	ppb	97
103) sec-Butylbenzene	11.882	105	1940113	48.19	ppb	99
104) p-Isopropyltoluene	12.004	119	1694847	49.49	ppb	99
105) 1,3-Dclbenz	11.967	146	1005416	48.76	ppb	97
106) 1,4-Dclbenz	12.040	146	1035113	48.20	ppb	98
107) 2,4-DCBTF	12.089	214	377674	49.18	ppb	95
108) 2,5-DCBTF	12.132	214	426245	49.37	ppb	98
109) n-Butylbenzene	12.333	91	1499078	48.78	ppb	99
110) 1,2-Dclbenz	12.339	146	944810	49.02	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.961	157	66803	42.63	ppb	96
112) Trielution Dichlorotol...	13.077	125	2350968	144.85	ppb	98
113) 1,3,5 Trichlorobenzene	13.132	180	610315	50.49	ppb	99
114) Coelution Dichlorotoluene	13.406	125	1684241	96.86	ppb	97
115) 1,2,4-Tcbenzene	13.613	180	540656	48.84	ppb	99
116) Hexachlorobt	13.753	225	199278	46.76	ppb	96
117) Naphthalen	13.802	128	1130543	48.67	ppb	98
118) 1,2,3-Tclbenzene	13.991	180	442171	48.86	ppb	99
119) 2,4,5-Trichlorotolene	14.576	159	318784	44.06	ppb	96
120) 2,3,6-Trichlorotoluene	14.662	159	281546	45.25	ppb	98

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

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4344.D  
 Acq On : 29 Jun 2015 10:32 am  
 Operator : K.Ruest  
 Sample : CCV Inst : MSVOA-12  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 29 10:48:41 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4344.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 51.81 ppb

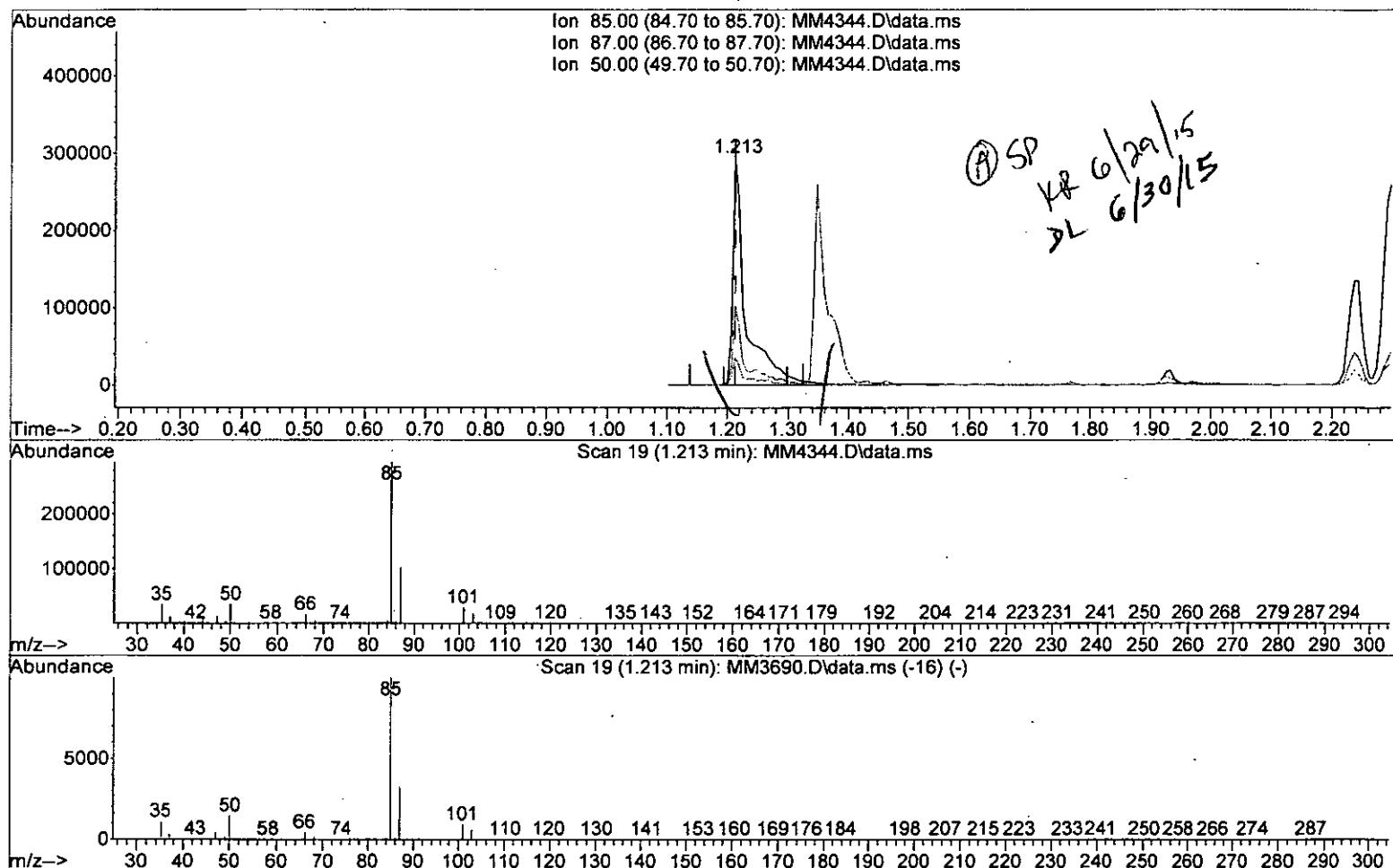
response 417702

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	34.47
50.00	14.50	11.82
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvao12\Data\062915\  
 Data File : MM4344.D  
 Acq On : 29 Jun 2015 10:32 am  
 Operator : K.Ruest  
 Sample : CCV  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 29 10:48:41 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4344.D\data.ms

(2) Dichlorodifluoromethane (P)

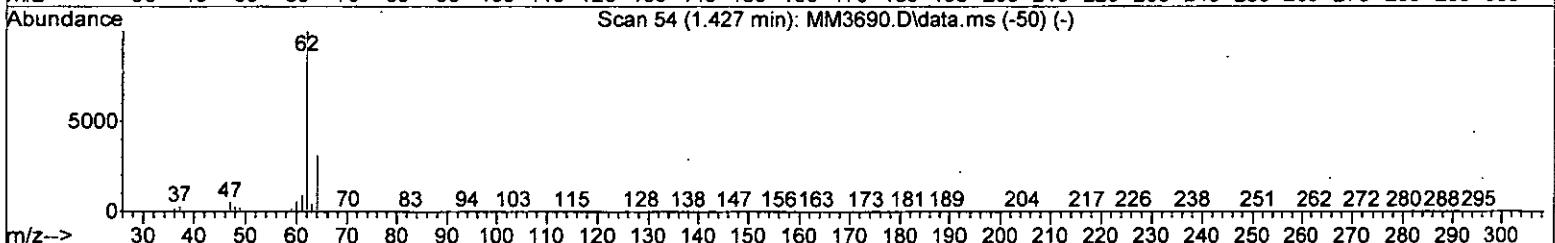
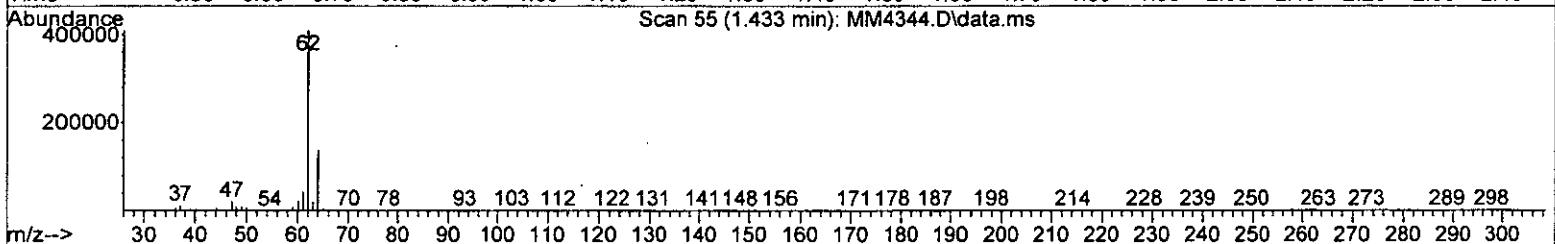
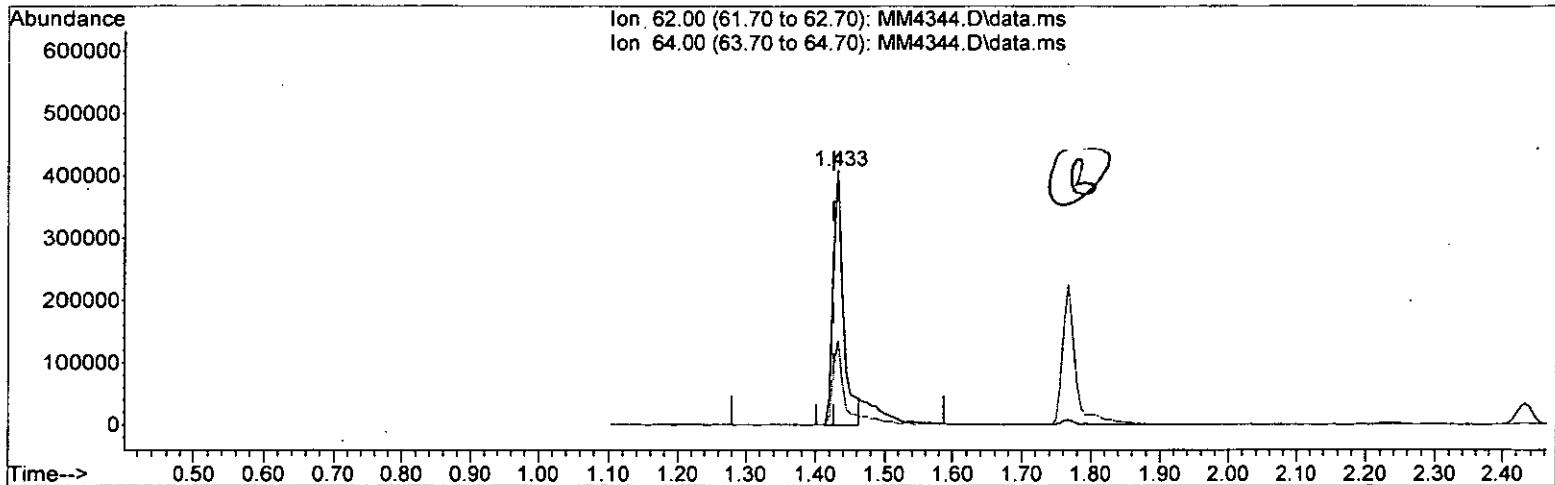
1.213min (-0.000) 54.15 ppb m

response 436584

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	34.47
50.00	14.50	11.82
0.00	0.00	0.00

Data Path : I:\ACQUUDATA\msvoa12\Data\062915\  
 Data File : MM4344.D  
 Acq On : 29 Jun 2015 10:32 am  
 Operator : K.Ruest  
 Sample : CCV  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 29 10:48:41 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4344.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 42.72 ppb

response 422974

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	33.27
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062915\

Data File : MM4344.D

Acq On : 29 Jun 2015 10:32 am

Operator : K.Ruest

Sample : CCV

Misc :

ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA-12

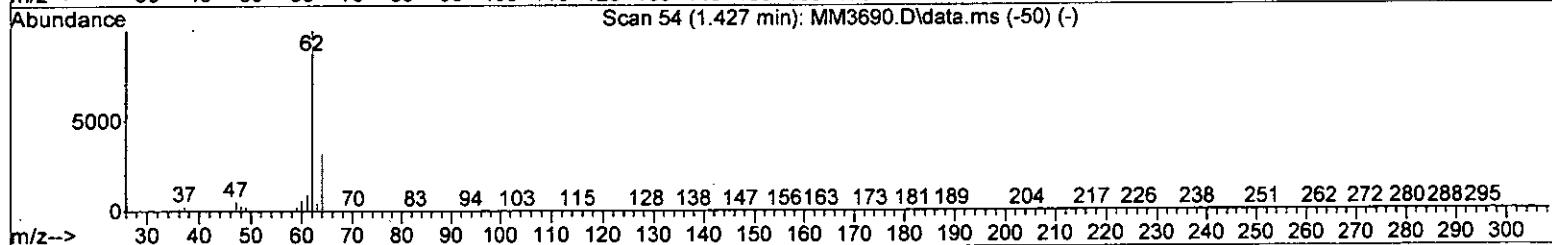
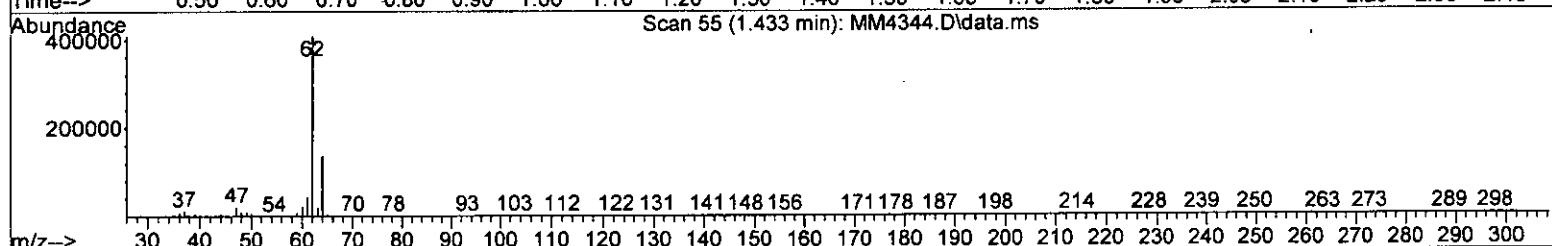
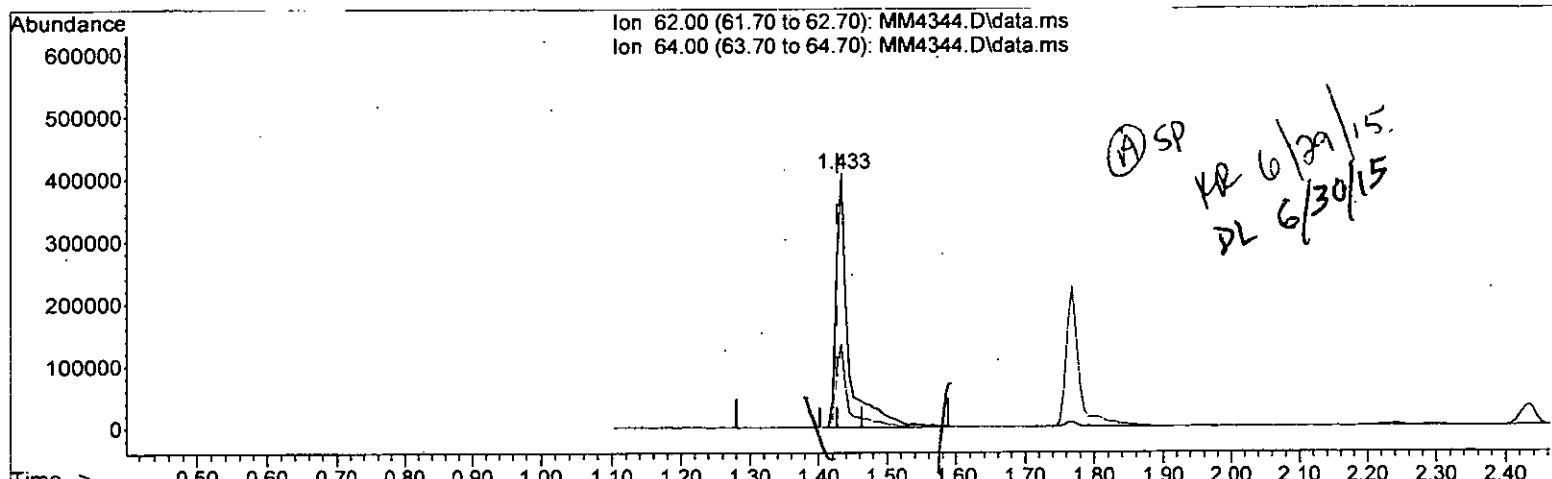
Quant Time: Jun 29 10:48:41 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration



TIC: MM4344.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 51.85 ppb m

response 513378

Ion Exp% Act%

62.00 100 100

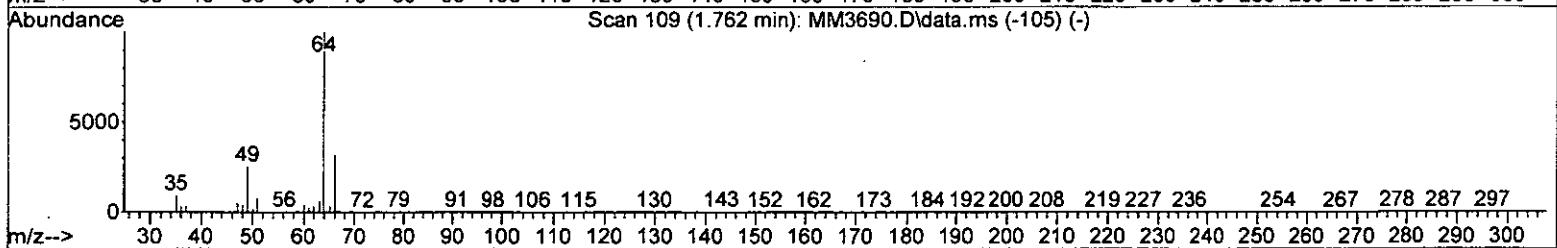
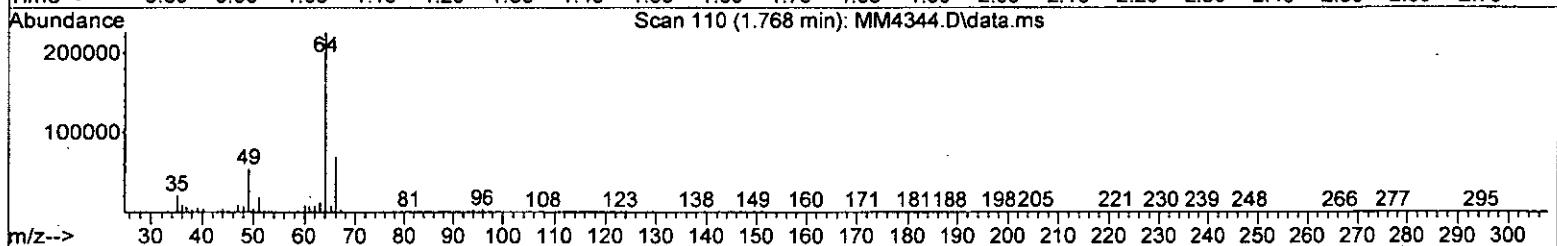
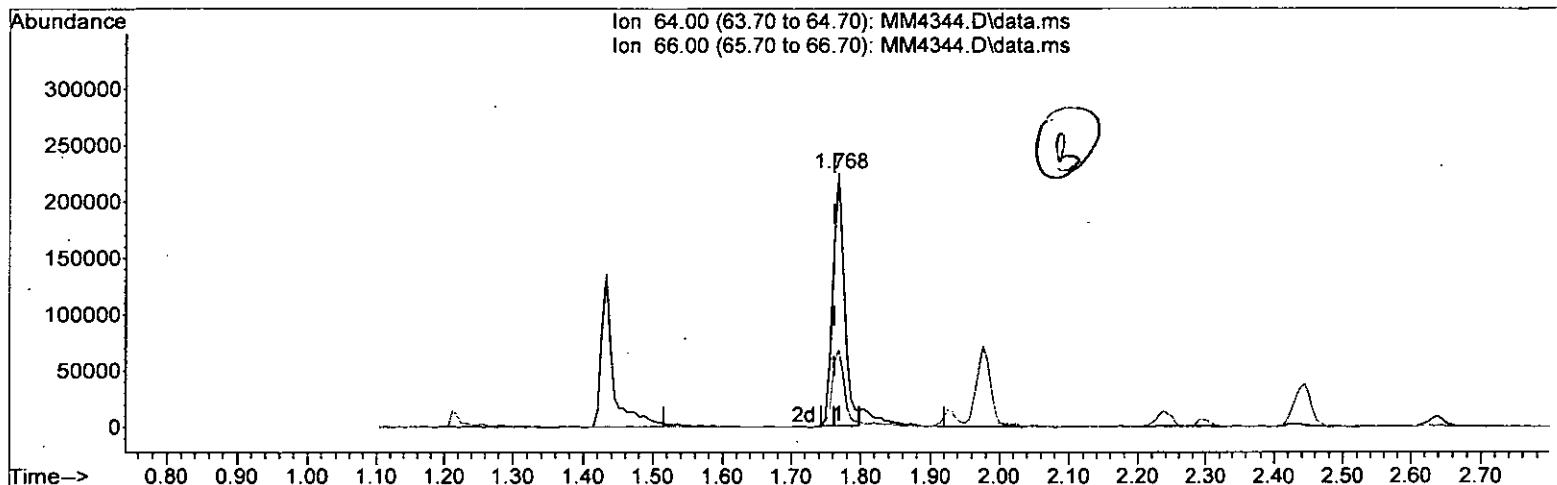
64.00 31.50 33.27

0.00 0.00 0.00

0.00 0.00 0.00

Data Path : I:\ACQUUDATA\msvoa12\Data\062915\  
 Data File : MM4344.D  
 Acq On : 29 Jun 2015 10:32 am  
 Operator : K.Ruest  
 Sample : CCV  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 29 10:48:41 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4344.D\data.ms

(6) Chloroethane (P)

1.768min (+0.006) 39.26 ppb

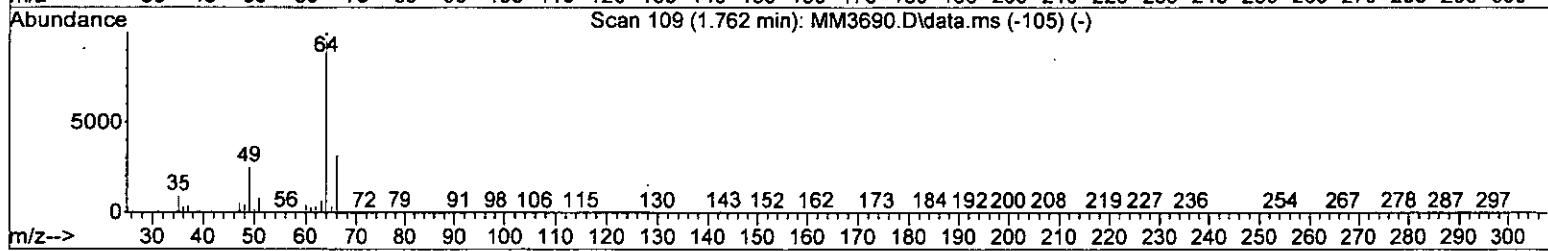
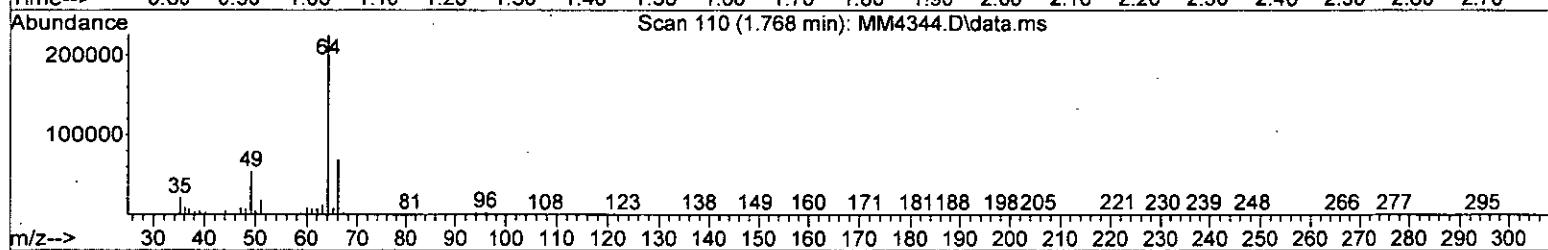
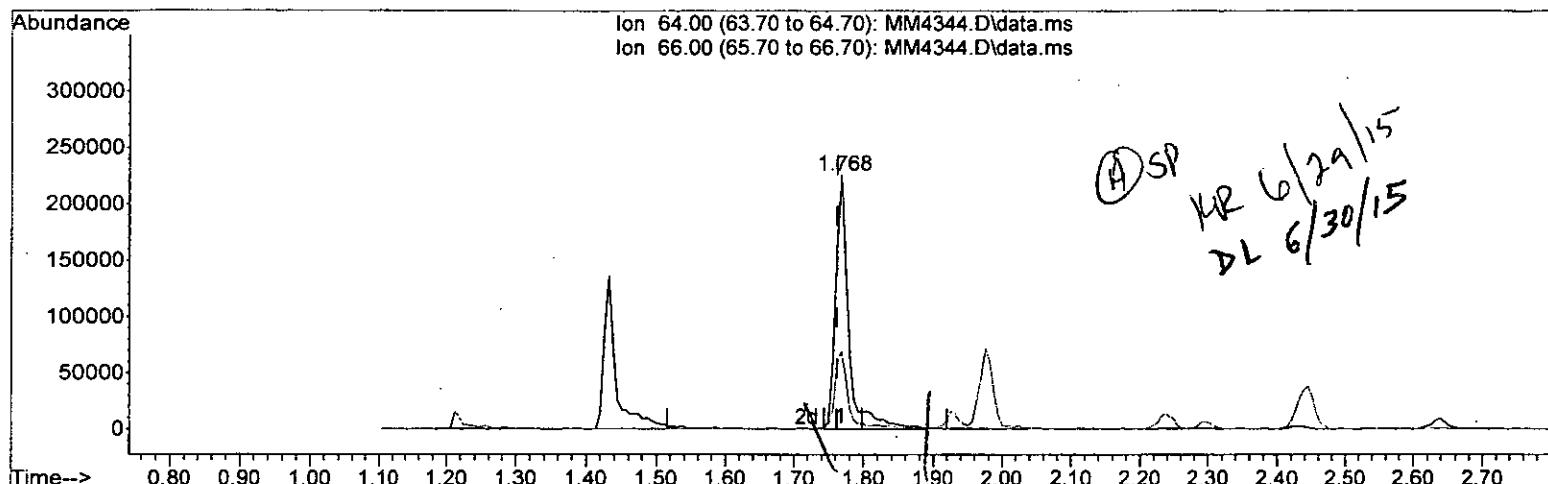
response 257926

Ion	Exp%	Act%
64.00	100	100
66.00	32.00	30.55
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4344.D  
 Acq On : 29 Jun 2015 10:32 am  
 Operator : K.Ruest  
 Sample : CCV Inst : MSVOA-12  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 29 10:48:41 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4344.D\data.ms

(6) Chloroethane (P)

1.768min (+0.006) 44.59 ppb m

response 292972

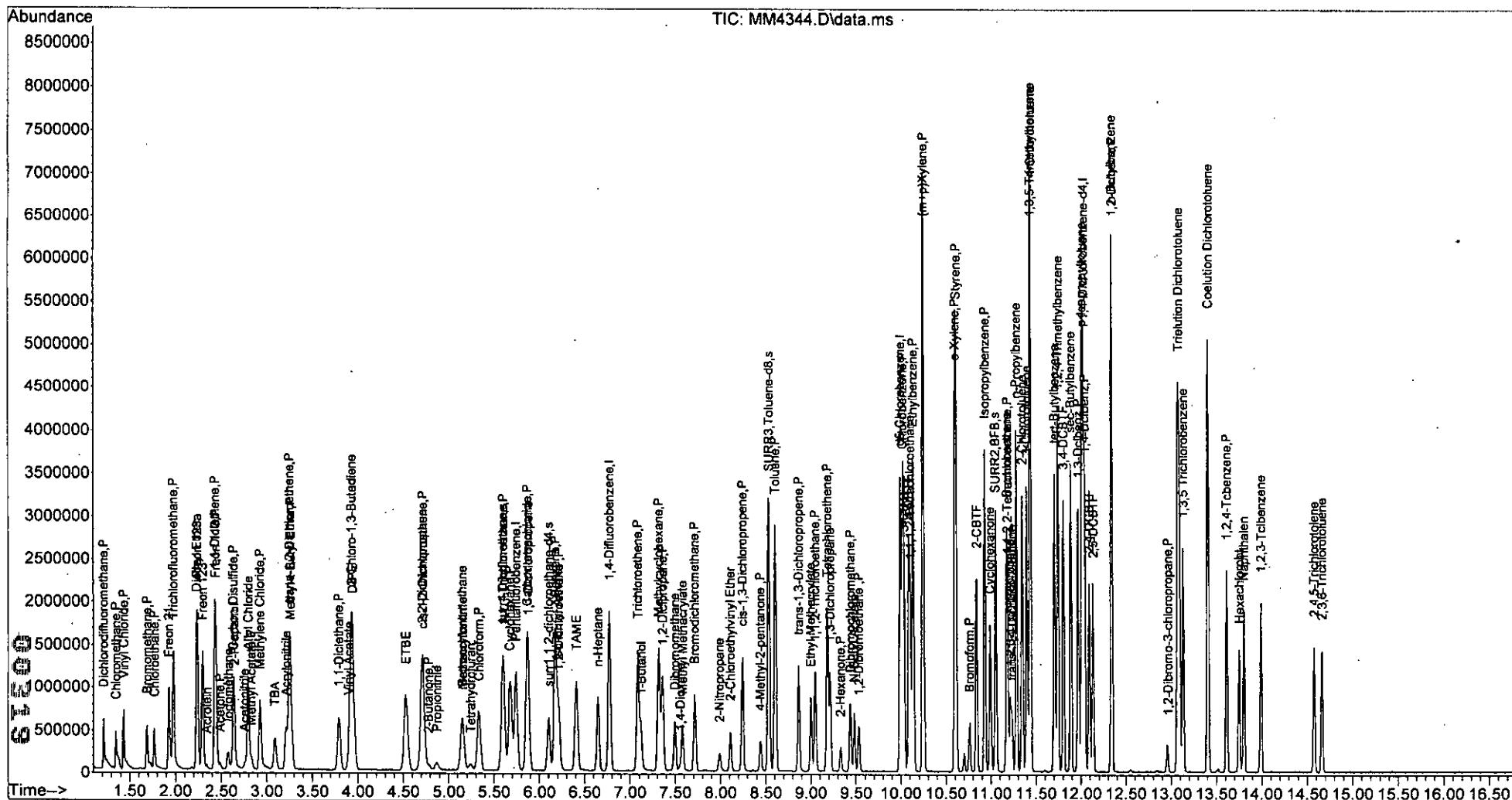
Ion	Exp%	Act%
64.00	100	100
66.00	32.00	30.55
0.00	0.00	0.00
0.00	0.00	0.00

**Quantitation Report (OT Reviewed)**

Data Path : I:\ACQUUDATA\msvoa12\Data\062915\  
Data File : MM4344.D  
Acq On : 29 Jun 2015 10:32 am  
Operator : K.Ruest  
Sample : CCV  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 10:50:38 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration





# VOLATILE ORGANICS RAW QC DATA

**ALS Environmental - Rochester, NY**  
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623  
Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

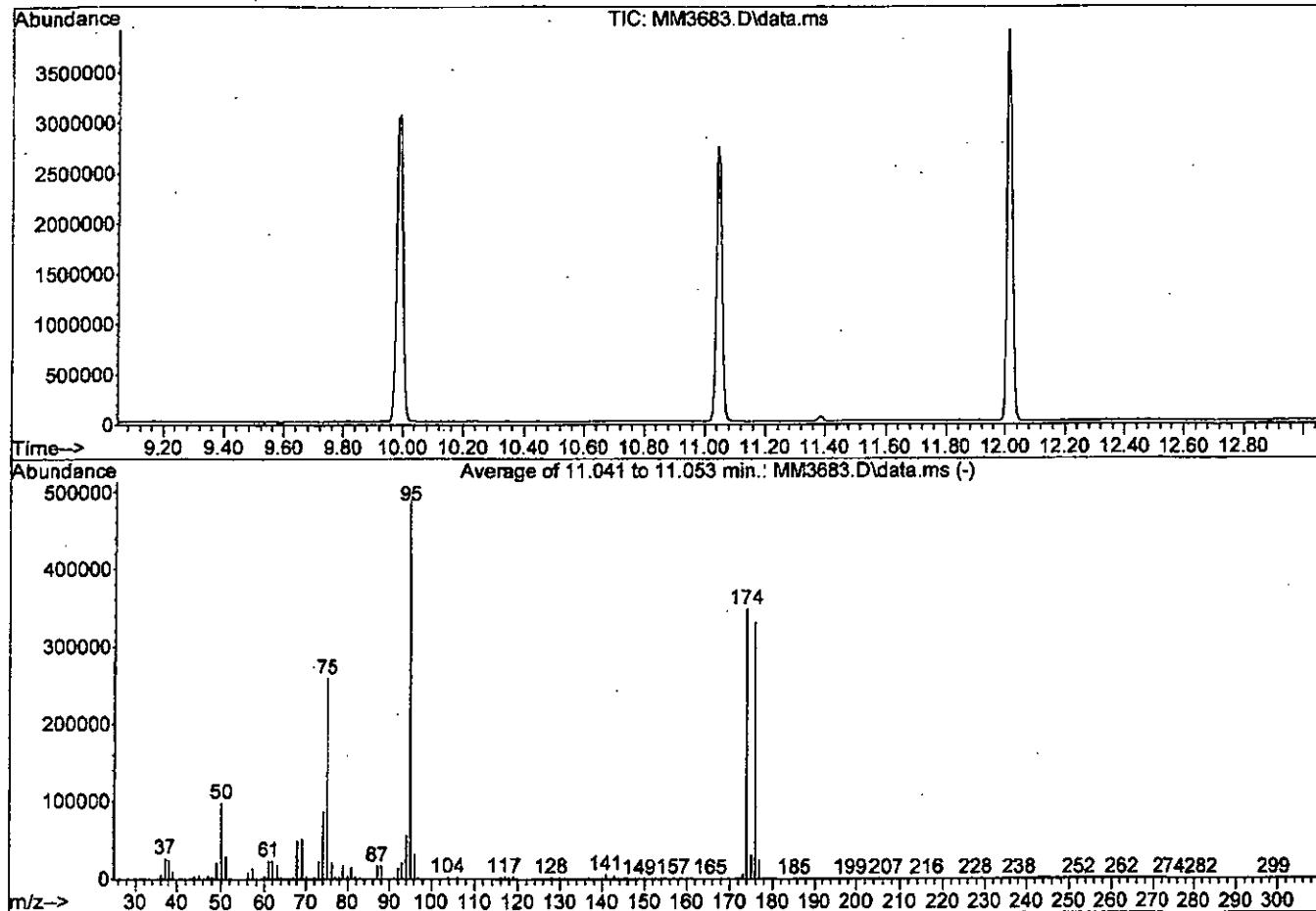
Data Path : I:\ACQUDATA\msvoa12\Data\060415\  
 Data File : MM3683.D  
 Acq On : 4 Jun 2015 11:38 am  
 Operator : K.Ruest  
 Sample : TUNE  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA-12

Integration File: INTP60.P

KR 6/5/15

Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Title : MS#12 - 8260B WATERS 10mL Purge  
 Last Update : Fri Jun 05 10:26:54 2015



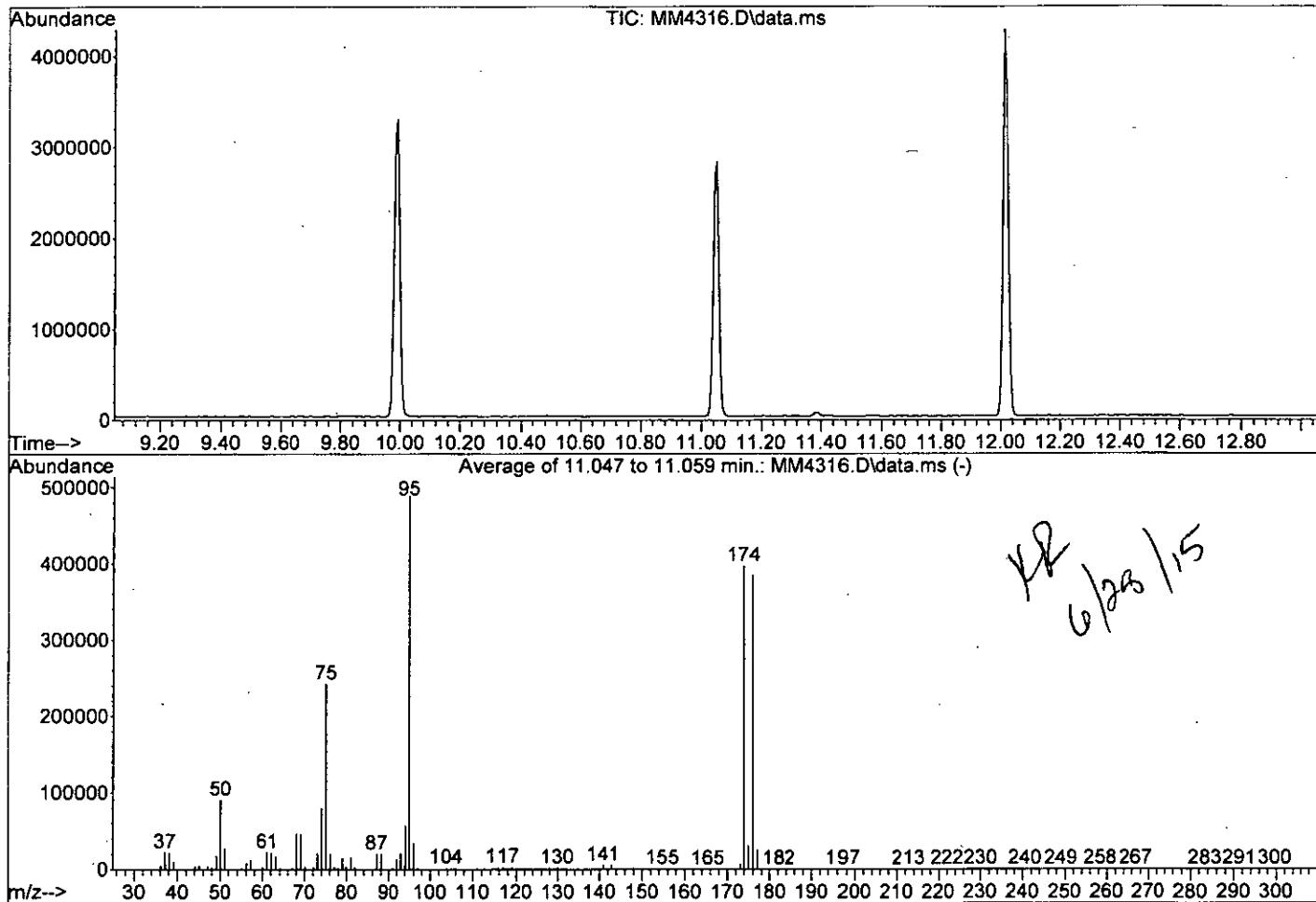
AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	98344	PASS
75	95	30	60	53.0	259072	PASS
95	95	100	100	100.0	488420	PASS
96	95	5	9	6.4	31464	PASS
173	174	0.00	2	1.5	5092	PASS
174	95	50	120	71.3	348224	PASS
175	174	5	9	8.7	30371	PASS
176	174	95	101	95.1	331072	PASS
177	176	5	9	6.8	22661	PASS

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4316.D  
 Acq On : 28 Jun 2015 9:15 am  
 Operator : K.Ruest  
 Sample : TUNE *RQ1507088-01*  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Title : MS#12 - 8260B WATERS 10mL Purge  
 Last Update : Fri Jun 05 14:19:46 2015



AutoFind: Scans 1632, 1633, 1634; Background Corrected with Scan 1626

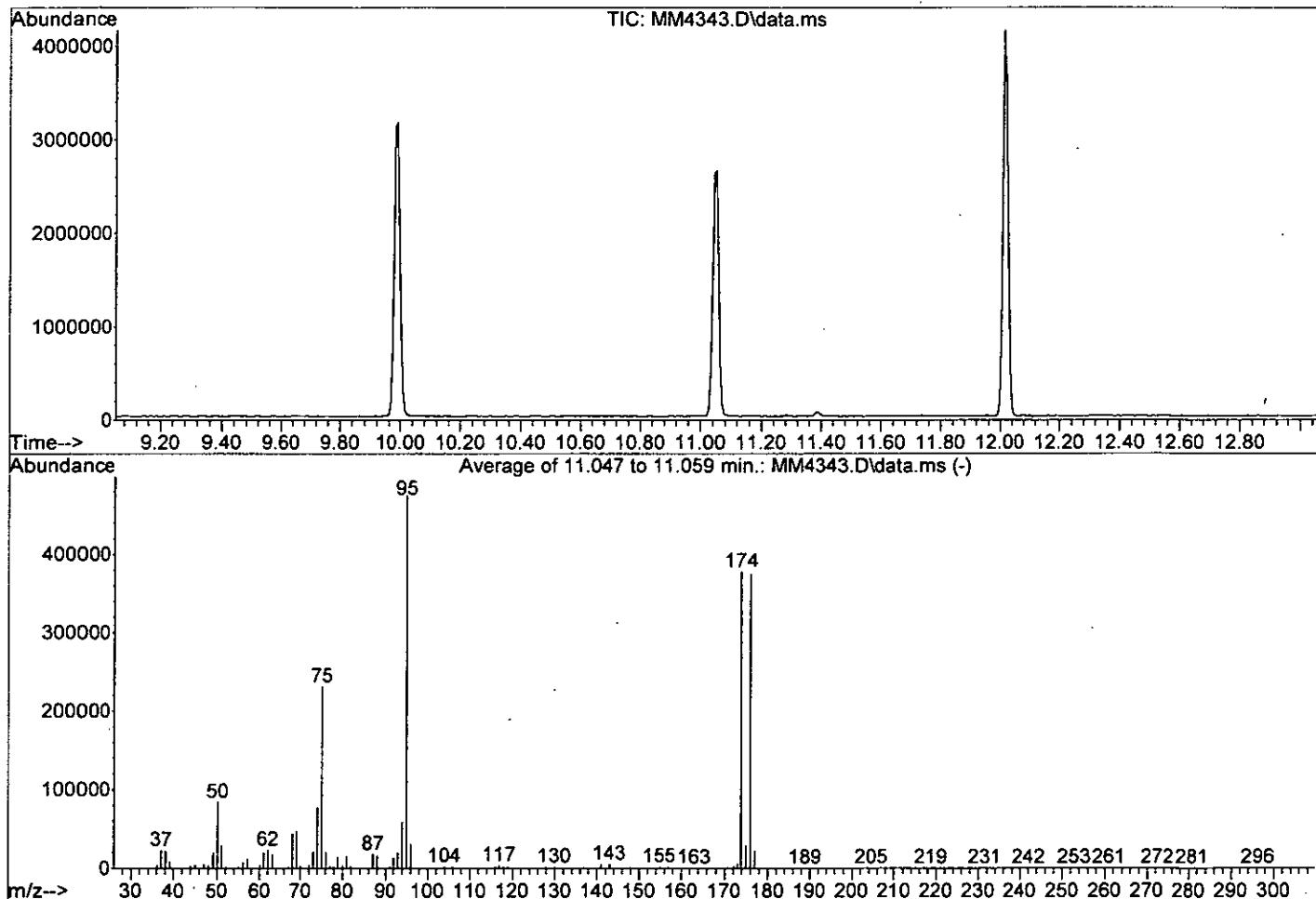
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	90968	PASS
75	95	30	60	49.5	242325	PASS
95	95	100	100	100.0	489073	PASS
96	95	5	9	7.0	34003	PASS
173	174	0.00	2	1.6	6291	PASS
174	95	50	120	81.1	396800	PASS
175	174	5	9	7.7	30397	PASS
176	174	95	101	97.0	384832	PASS
177	176	5	9	6.4	24483	PASS

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4343.D  
 Acq On : 29 Jun 2015 10:02 am  
 Operator : K.Ruest  
 Sample : TUNE (P01507136-0) Inst : MSVOA-12  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Title : MS#12 - 8260B WATERS 10mL Purge  
 Last Update : Fri Jun 05 14:19:46 2015

4/26/2015



AutoFind: Scans 1632, 1633, 1634; Background Corrected with Scan 1626

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	17.7	83907	PASS
75	95	30	60	48.6	230891	PASS
95	95	100	100	100.0	474962	PASS
96	95	5	9	6.4	30426	PASS
173	174	0.00	2	1.5	5529	PASS
174	95	50	120	79.5	377451	PASS
175	174	5	9	7.6	28558	PASS
176	174	95	101	99.2	374312	PASS
177	176	5	9	5.9	21977	PASS

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/28/15 11:25

**Sample Name:** Method Blank  
**Lab Code:** RQ1507088-04

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4320.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1507088-04

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/28/15 11:25

Units:  $\mu\text{g/L}$   
Basis: NA

## Volatile Organic Compounds by GC/MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	110	85-122	6/28/15 11:25		
Toluene-d8	108	87-121	6/28/15 11:25		
Dibromofluoromethane	109	89-119	6/28/15 11:25		

Data Path : I:\ACQUDATA\MSVOA12\DATA\062815\

Data File : MM4320.D

Acq On : 28 Jun 2015 11:25 am

Operator : K.Ruest

Sample : VBLK RQ1507088-04

Inst : MSVOA-12

Misc :

ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 28 11:41:37 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	896382	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1514274	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1488975	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	796655	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoethane	5.597	113	447756	54.64	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 109.28%		
48) surr1,1,2-dichloroetha...	6.097	65	480377	54.88	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 109.76%		
65) SURR3,Toluene-d8	8.529	98	1930329	53.94	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 107.88%		
70) SURR2,BFB	11.047	95	749050	55.08	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 110.16%		
<b>Target Compounds</b>						
5) Bromomethane	1.683	94	1084	0.20	ppb	# 58
12) Acrolein	2.335	56	358	0.55	ppb	80
15) Acetone	2.487	43	1277	1.02	ppb	78
16) 2-Propanol	2.609	45	366	1.47	ppb	70
17) Iodomethane	2.475	142	393	1.28	ppb	70
19) Acetonitrile	2.774	40	871	5.40	ppb	# 1
21) Methyl Acetate	2.829	43	550	0.20	ppb	92
35) 2-Butanone	4.792	43	1201	0.73	ppb	# 28
36) Propionitrile	4.871	54	510	1.01	ppb	81
39) Tetrahydrofuran	5.213	42	335	0.30	ppb	73
53) 1-Butanol	7.121	56	1318	10.41	ppb	79
58) 1,4-Dioxane	7.633	88	306	5.31	ppb	76
61) 2-Nitropropane	7.962	41	594	0.44	ppb	# 39
62) 2-Chloroethylvinyl Ether	8.096	63	795	0.24	ppb	# 45
90) Cyclohexanone	10.000	55	206	0.94	ppb	78
102) 3,4-DCBTF	11.803	214	1587	0.21	ppb	# 78M
111) 1,2-Dibromo 3-chloroprop...	12.961	157	1056	0.78	ppb	# 80
112) Trielution Dichlorotolu...	13.083	125	11573	0.82	ppb	# 67WT
113) 1,3,5 Trichlorobenzene	13.126	180	3861	0.37	ppb	# 68
114) Coelution Dichlorotoluene	13.406	125	9392	0.62	ppb	# 77
115) 1,2,4-Tribromobenzene	13.613	180	3510	0.36	ppb	# 65
116) Hexachlorobutane	13.747	225	2245	0.61	ppb	# 52
117) Naphthalen	13.802	128	6011	0.30	ppb	90
118) 1,2,3-Tribromobenzene	13.991	180	3087	0.39	ppb	# 75
119) 2,4,5-Trichlorotoluene	14.570	159	11222	1.78	ppb	87
120) 2,3,6-Trichlorotoluene	14.662	159	9831	1.82	ppb	# 87

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

6/29/15

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA12\DATA\062815\

Data File : MM4320.D

Acq On : 28 Jun 2015 11:25 am

Operator : K.Ruest

Sample : VBLK

Misc :

ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA-12

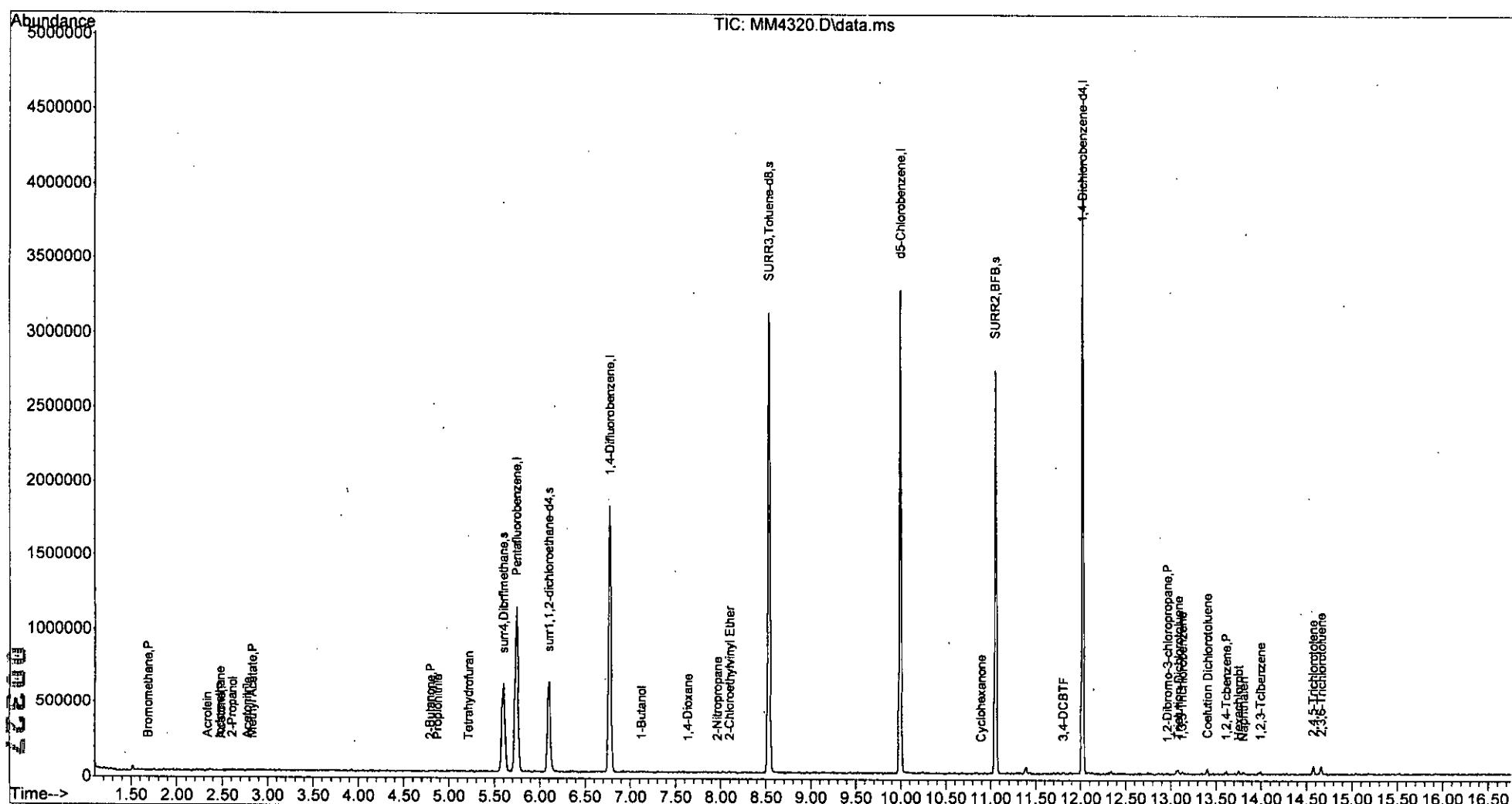
Quant Time: Jun 28 11:41:37 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/29/15 12:35

**Sample Name:** Method Blank  
**Lab Code:** RQ1507136-04

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4348.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	1.0 U	1.0	0.21	
75-01-4	Vinyl Chloride	1.0 U	1.0	0.32	
75-00-3	Chloroethane	1.0 U	1.0	0.24	
74-83-9	Bromomethane	1.0 U	1.0	0.29	
75-35-4	1,1-Dichloroethene	1.0 U	1.0	0.57	
67-64-1	Acetone	5.0 U	5.0	1.3	
75-15-0	Carbon Disulfide	1.0 U	1.0	0.22	
75-09-2	Methylene Chloride	1.0 U	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	1.0 U	1.0	0.33	
75-34-3	1,1-Dichloroethane	1.0 U	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	1.0 U	1.0	0.30	
78-93-3	2-Butanone (MEK)	5.0 U	5.0	0.81	
67-66-3	Chloroform	1.0 U	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	1.0 U	1.0	0.36	
56-23-5	Carbon Tetrachloride	1.0 U	1.0	0.45	
71-43-2	Benzene	1.0 U	1.0	0.20	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	0.36	
79-01-6	Trichloroethene	1.0 U	1.0	0.22	
78-87-5	1,2-Dichloropropane	1.0 U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0 U	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	1.0 U	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.67	
108-88-3	Toluene	1.0 U	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	1.0 U	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	1.0 U	1.0	0.34	
127-18-4	Tetrachloroethene	1.0 U	1.0	0.30	
591-78-6	2-Hexanone	5.0 U	5.0	1.7	
124-48-1	Dibromochloromethane	1.0 U	1.0	0.31	
108-90-7	Chlorobenzene	1.0 U	1.0	0.29	
100-41-4	Ethylbenzene	1.0 U	1.0	0.20	
179601-23-1	m,p-Xylenes	2.0 U	2.0	0.33	
95-47-6	o-Xylene	1.0 U	1.0	0.20	
100-42-5	Styrene	1.0 U	1.0	0.20	
75-25-2	Bromoform	1.0 U	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** RQ1507136-04

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/29/15 12:35

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4348.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	6/29/15 12:35	
Toluene-d8	111	87-121	6/29/15 12:35	
Dibromofluoromethane	107	89-119	6/29/15 12:35	

Data Path : I:\ACQUDATA\MSVOA12\DATA\062915\

Data File : MM4348.D

Acq On : 29 Jun 2015 12:35 pm

Operator : K.Ruest

Sample : VBLK RQ1507136-04

Misc :

ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 12:50:52 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	856120	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1439526	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1420025	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	781942	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoethane	5.597	113	416446	53.46	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	106.92%	
48) surr1,1,2-dichloroetha...	6.096	65	442884	53.22	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	106.44%	
65) SURR3,Toluene-d8	8.535	98	1880992	55.29	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	110.58%	
70) SURR2,BFB	11.053	95	717636	55.52	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	111.04%	
<b>Target Compounds</b>						
12) Acrolein	2.341	56	310	0.50	ppb	84
15) Acetone	2.463	43	638	0.53	ppb	89
16) 2-Propanol	2.670	45	399	1.67	ppb	62
17) Iodomethane	2.621	142	336	1.27	ppb	80
19) Acetonitrile	2.762	40	801	5.20	ppb	# 1
24) Acrylonitrile	3.286	53	748	0.55	ppb	9
35) 2-Butanone	4.725	43	424	0.27	ppb	85
36) Propionitrile	4.865	54	603	1.25	ppb	62
39) Tetrahydrofuran	5.237	42	400	0.37	ppb	76
53) 1-Butanol	7.084	56	802	6.66	ppb	74
58) 1,4-Dioxane	7.474	88	950	17.33	ppb	79
61) 2-Nitropropane	7.986	41	413	0.32	ppb	# 1
90) Cyclohexanone	10.980	55	406	1.89	ppb	7
91) trans-1,4-Dichloro-2-B...	11.242	53	539	0.28	ppb	# 18
94) 1,2,3-Trichloropropane	11.169	110	416	0.21	ppb	# 1
112) Trielution Dichlorotol...	13.077	125	4169	0.30	ppb	# 84
114) Coelution Dichlorotoluene	13.400	125	3431	0.23	ppb	# 62
115) 1,2,4-Tribenzene	13.613	180	2576	0.27	ppb	# 66
116) Hexachlorobut...	13.747	225	1019	0.28	ppb	# 48
118) 1,2,3-Tribenzene	13.997	180	2097	0.27	ppb	95
119) 2,4,5-Trichlorotoluene	14.576	159	3366	0.55	ppb	# 91
120) 2,3,6-Trichlorotoluene	14.662	159	2544	0.48	ppb	# 63

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

6/20/15

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUADATA\MSVOA12\DATA\062915\

Data File : MM4348.D

Acq On : 29 Jun 2015 12:35 pm

Operator : K.Ruest

Sample : VBLK

Inst : MSVOA-12

Misc :

ALS Vial : 8 Sample Multiplier: 1

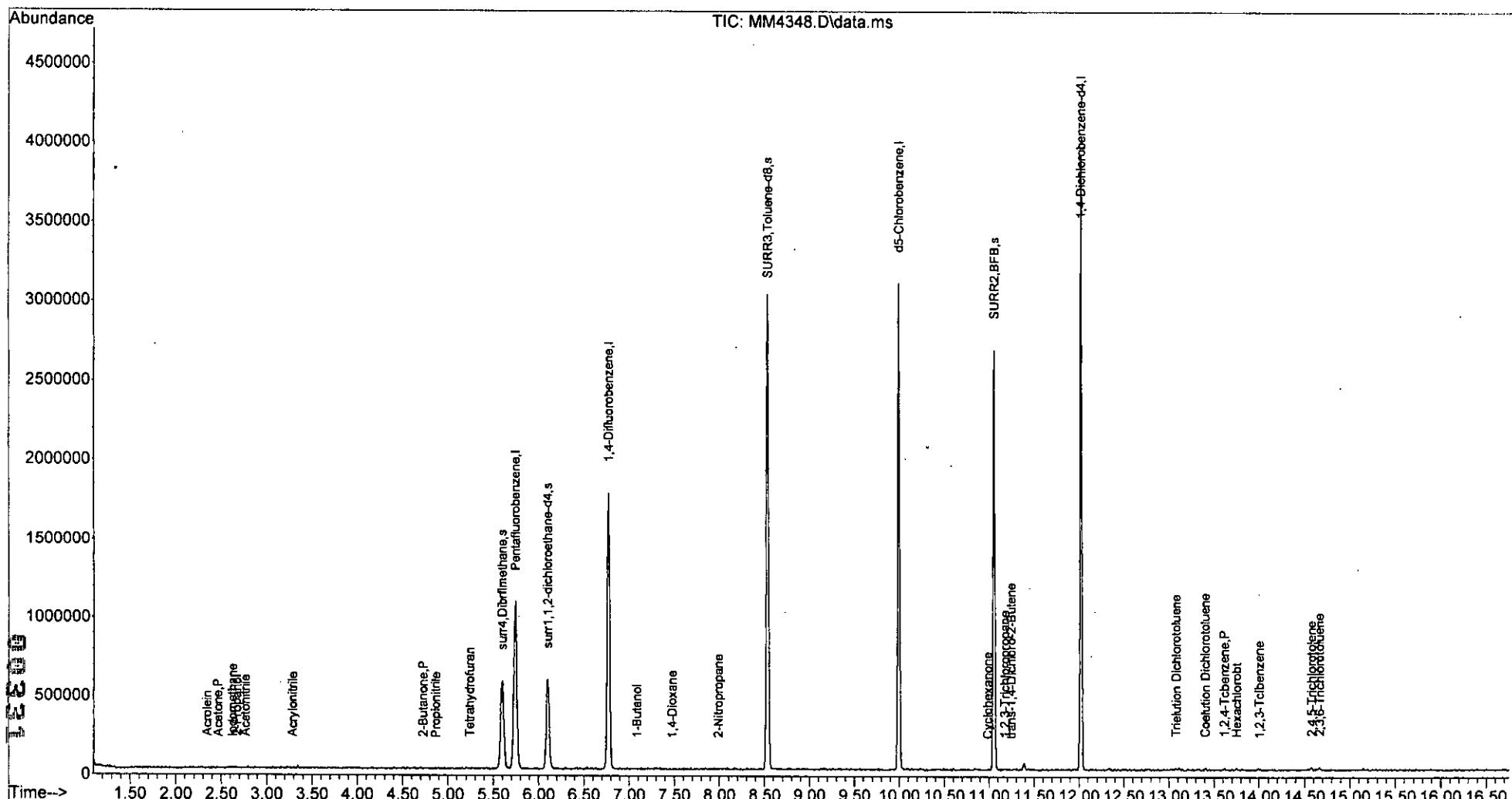
Quant Time: Jun 29 12:50:52 2015

Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/28/15 10:24

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1507088-03

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Prep Method:** EPA 5030C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4318.D\

**Analysis Lot:** 450948  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	23.1	1.0	0.21	
75-01-4	Vinyl Chloride	20.9	1.0	0.32	
75-00-3	Chloroethane	16.0	1.0	0.24	
74-83-9	Bromomethane	20.3	1.0	0.29	
75-35-4	1,1-Dichloroethene	19.7	1.0	0.57	
67-64-1	Acetone	17.0	5.0	1.3	
75-15-0	Carbon Disulfide	20.8	1.0	0.22	
75-09-2	Methylene Chloride	19.3	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	20.1	1.0	0.33	
75-34-3	1,1-Dichloroethane	19.4	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	20.7	1.0	0.30	
78-93-3	2-Butanone (MEK)	21.1	5.0	0.81	
67-66-3	Chloroform	20.2	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	18.3	1.0	0.36	
56-23-5	Carbon Tetrachloride	18.7	1.0	0.45	
71-43-2	Benzene	20.6	1.0	0.20	
107-06-2	1,2-Dichloroethane	18.6	1.0	0.36	
79-01-6	Trichloroethene	20.0	1.0	0.22	
78-87-5	1,2-Dichloropropane	19.7	1.0	0.20	
75-27-4	Bromodichloromethane	18.9	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	18.4	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	19.4	5.0	0.67	
108-88-3	Toluene	19.5	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	18.9	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	19.9	1.0	0.34	
127-18-4	Tetrachloroethene	18.8	1.0	0.30	
591-78-6	2-Hexanone	17.9	5.0	1.7	
124-48-1	Dibromochloromethane	18.1	1.0	0.31	
108-90-7	Chlorobenzene	18.7	1.0	0.29	
100-41-4	Ethylbenzene	17.6	1.0	0.20	
179601-23-1	m,p-Xylenes	38.4	2.0	0.33	
95-47-6	o-Xylene	19.1	1.0	0.20	
100-42-5	Styrene	19.1	1.0	0.20	
75-25-2	Bromoform	17.1	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	18.3	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/28/15 10:24

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1507088-03

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS****Analytical Method:** 8260C**Analysis Lot:** 450948**Prep Method:** EPA 5030C**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062815\MM4318.D\**Instrument Name:** R-MS-12**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	110	85-122	6/28/15 10:24		
Toluene-d8	108	87-121	6/28/15 10:24		
Dibromofluoromethane	108	89-119	6/28/15 10:24		

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS RQ1507088 - 03 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:53:38 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	981592	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1640666	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1574115	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	883423	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.597	113	477163	53.75	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 107.50%		
48) surr1,1,2-dichloroetha...	6.096	65	487560	51.41	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 102.82%		
65) SURR3,Toluene-d8	8.529	98	2097826	54.10	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 108.20%		
70) SURR2,BFB	11.047	95	808359	54.87	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 109.74%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	200905m	23.99	ppb	
3) Chloromethane	1.347	50	188428	23.14	ppb	98
4) Vinyl Chloride	1.433	62	214614m	20.86	ppb	
5) Bromomethane	1.689	94	118259m	20.25	ppb	
6) Chloroethane	1.768	64	109410	16.03	ppb	90
7) Freon 21	1.927	67	340796	20.00	ppb	99
8) Trichlorofluoromethane	1.975	101	284359	18.55	ppb	98
9) Diethyl Ether	2.231	59	130960	19.32	ppb	98
10) Freon 123a	2.237	67	215277	19.79	ppb	96
11) Freon 123	2.298	83	236375	18.70	ppb	97
12) Acrolein	2.341	56	10906	15.43	ppb	94
13) 1,1-Dicloethene	2.433	96	142514	19.74	ppb	95
14) Freon 113	2.445	101	137185	19.20	ppb	99
15) Acetone	2.487	43	23331	16.96	ppb	88
16) 2-Propanol	2.646	45	93803	343.26	ppb	93
17) Iodomethane	2.573	142	124635	14.98	ppb	95
18) Carbon Disulfide	2.640	76	480334	20.76	ppb	100
19) Acetonitrile	2.774	40	21501	121.74	ppb	# 72
20) Allyl Chloride	2.798	76	82444	18.98	ppb	# 87
21) Methyl Acetate	2.829	43	59050	19.71	ppb	87
22) Methylene Chloride	2.926	84	148053	19.30	ppb	95
23) TBA	3.091	59	179165	367.58	ppb	98
24) Acrylonitrile	3.213	53	163977	104.85	ppb	97
25) Methyl-t-Butyl Ether	3.262	73	377130	20.11	ppb	99
26) trans-1,2-Dichloroethene	3.249	96	162268	20.12	ppb	95
28) 1,1-Dicloethane	3.798	63	258494	19.40	ppb	95
29) Vinyl Acetate	3.908	86	26622	16.66	ppb	99
30) DIPE	3.944	45	437851	18.90	ppb	96
31) 2-Chloro-1,3-Butadiene	3.926	53	253607	17.49	ppb	98
32) ETBE	4.524	59	418150	18.11	ppb	99
33) 2,2-Dichloropropane	4.706	77	244618	19.27	ppb	97
34) cis-1,2-Dichloroethene	4.719	96	178210	20.72	ppb	92
35) 2-Butanone	4.786	43	38076	21.06	ppb	85
36) Propionitrile	4.865	54	57038	103.30	ppb	95

KL  
6/28/15

Data Path : I:\ACQUADATA\msvoa12\Data\062815\

Data File : MM4318.D

Acq On : 28 Jun 2015 10:24 am

Operator : K.Ruest

Sample : LCS

Inst : MSVOA-12

Misc :

ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:53:38 2015

Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Bromochloromethane	5.152	130	100706	21.19	ppb	97
38) Methacrylonitrile	5.158	67	40712	19.76	ppb	# 81
39) Tetrahydrofuran	5.237	42	25942	21.09	ppb	91
40) Chloroform	5.334	83	283822	20.21	ppb	98
41) 1,1,1-Trichloroethane	5.597	97	246519	18.25	ppb	93
42) TAME	6.401	73	404310	20.08	ppb	95
44) Cyclohexane	5.676	41	131875	17.70	ppb	99
46) Carbontetrachloride	5.865	121	66686m	18.68	ppb	
47) 1,1-Dichloropropene	5.871	75	207587	18.39	ppb	92
49) Benzene	6.176	78	668398	20.56	ppb	97
50) 1,2-Dichloroethane	6.212	62	193352	18.55	ppb	96
51) Iso-Butyl Alcohol	6.206	43	75171	348.04	ppb	90
52) n-Heptane	6.645	43	140512	20.29	ppb	94
53) 1-Butanol	7.115	56	129434	943.68	ppb	98
54) Trichloroethene	7.084	130	175477	19.99	ppb	94
55) Methylcyclohexane	7.316	55	155780	18.98	ppb	92
56) 1,2-Diclpropane	7.352	63	152930	19.66	ppb	98
57) Dibromomethane	7.492	93	78244	18.68	ppb	92
58) 1,4-Dioxane	7.547	88	23686m	379.04	ppb	
59) Methyl Methacrylate	7.578	69	72870	19.21	ppb	# 83
60) Bromodichloromethane	7.712	83	211826	18.87	ppb	98
61) 2-Nitropropane	7.980	41	37898	26.11	ppb	91
62) 2-Chloroethylvinyl Ether	8.108	63	76459	21.30	ppb	98
63) cis-1,3-Dichloropropene	8.242	75	240908	18.44	ppb	98
64) 4-Methyl-2-pentanone	8.437	43	85982	19.39	ppb	84
66) Toluene	8.602	91	727925	19.52	ppb	98
67) trans-1,3-Dichloropropene	8.864	75	211451	18.91	ppb	97
68) Ethyl Methacrylate	8.998	69	159120	19.61	ppb	93
69) 1,1,2-Trichloroethane	9.047	97	119786	19.91	ppb	97
72) Tetrachloroethene	9.181	164	135519	18.77	ppb	95
73) 2-Hexanone	9.328	43	57102	17.92	ppb	95
74) 1,3-Dichloropropane	9.212	76	204368	19.77	ppb	97
75) Dibromochloromethane	9.431	129	140616	18.07	ppb	99
76) N-Butyl Acetate	9.480	43	147536	17.63	ppb	95
77) 1,2-Dibromoethane	9.529	107	117517	19.25	ppb	96
78) Chlorobenzene	10.016	112	479947	18.73	ppb	97
79) 3-CBT	10.029	180	238968	19.78	ppb	97
80) 4-CBT	10.083	180	215680	19.71	ppb	97
81) 1,1,1,2-Tetrachloroethane	10.102	131	165462	19.20	ppb	97
82) Ethylbenzene	10.132	106	244294	17.61	ppb	# 90
83) (m+p)Xylene	10.242	106	649946	38.44	ppb	99
84) o-Xylene	10.596	106	313345	19.14	ppb	95
85) Styrene	10.608	104	535188	19.05	ppb	99
87) Bromoform	10.760	173	77435	17.12	ppb	97
88) 2-CBT	10.833	180	239807	18.71	ppb	95
89) Isopropylbenzene	10.925	105	779854	19.02	ppb	97
90) Cyclohexanone	10.986	55	212451	873.91	ppb	86
91) trans-1,4-Dichloro-2-B...	11.230	53	37221	16.87	ppb	91
92) 1,1,2,2-Tetrachloroethane	11.181	83	136894	18.34	ppb	94
93) Bromobenzene	11.175	156	190228	18.60	ppb	98
94) 1,2,3-Trichloropropane	11.211	110	42450	18.69	ppb	# 85

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:53:38 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

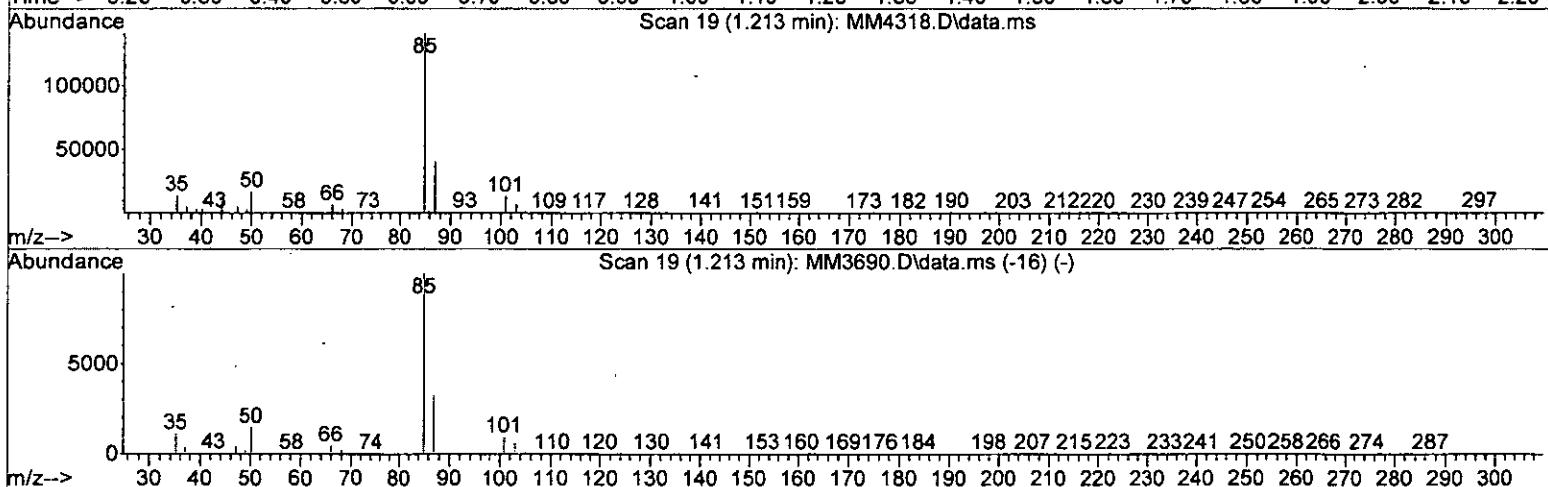
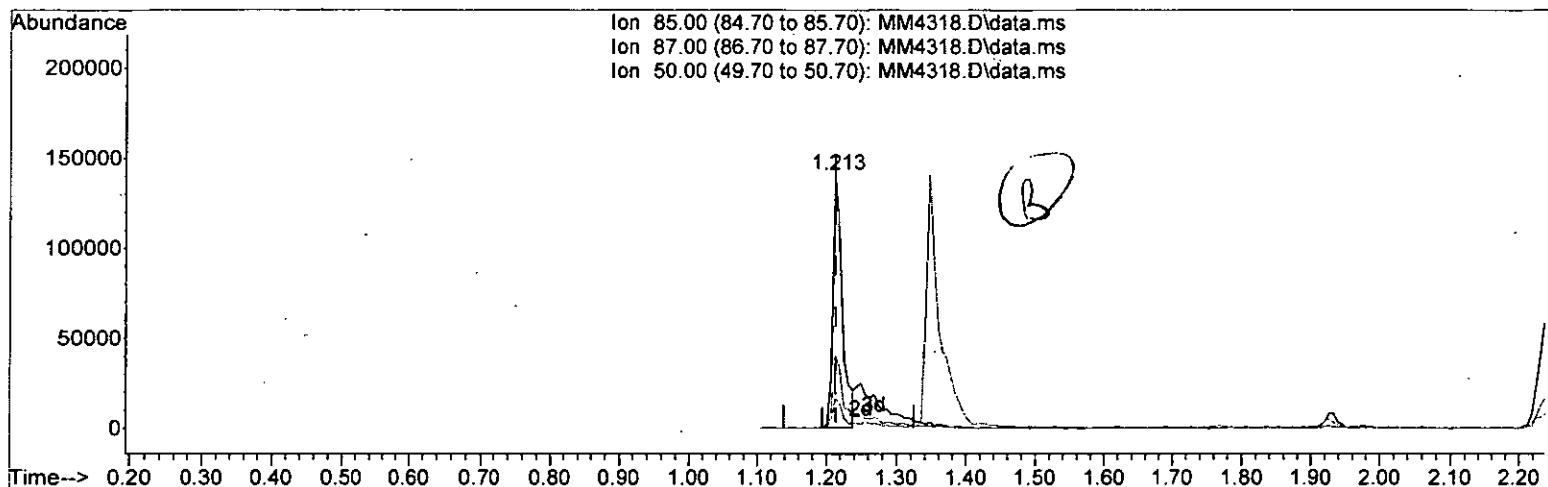
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
95) n-Propylbenzene	11.278	91	899758	19.49	ppb	97
96) 2-Chlorotoluene	11.339	91	546051	19.20	ppb	97
97) 3-Chlorotoluene	11.394	91	567975	18.85	ppb	98
98) 4-Chlorotoluene	11.431	91	678266	19.29	ppb	96
99) 1,3,5-Trimethylbenzene	11.431	105	658008	18.72	ppb	99
100) tert-Butylbenzene	11.699	119	539113	19.04	ppb	98
101) 1,2,4-Trimethylbenzene	11.742	105	678576	19.13	ppb	98
102) 3,4-DCBT	11.803	214	164926	19.66	ppb	92
103) sec-Butylbenzene	11.882	105	752259	19.38	ppb	99
104) p-Isopropyltoluene	12.004	119	666133	20.18	ppb	96
105) 1,3-Dclbenz	11.961	146	384429	19.34	ppb	99
106) 1,4-Dclbenz	12.040	146	397825	19.21	ppb	97
107) 2,4-DCBT	12.089	214	152891	20.65	ppb	95
108) 2,5-DCBT	12.126	214	169299	20.34	ppb	93
109) n-Butylbenzene	12.333	91	584726	19.74	ppb	98
110) 1,2-Dclbenz	12.339	146	372254	20.03	ppb	94
111) 1,2-Dibromo-3-chloropr...	12.955	157	26533	17.56	ppb	90
112) Trielution Dichlorotol...	13.071	125	957341	61.18	ppb	94
113) 1,3,5 Trichlorobenzene	13.132	180	246413	21.14	ppb	92
114) Coelution Dichlorotoluene	13.406	125	697209	41.59	ppb	99
115) 1,2,4-Tcbenzene	13.613	180	223251	20.92	ppb	97
116) Hexachlorobt	13.747	225	88748	21.60	ppb	97
117) Naphthalen	13.802	128	481592	21.50	ppb	99
118) 1,2,3-Tclbenzene	13.991	180	191335	21.93	ppb	99
119) 2,4,5-Trichlorotolene	14.570	159	197772	28.35	ppb	93
120) 2,3,6-Trichlorotoluene	14.656	159	181348	30.23	ppb	99

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Accq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 MISC :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 15.44 ppb

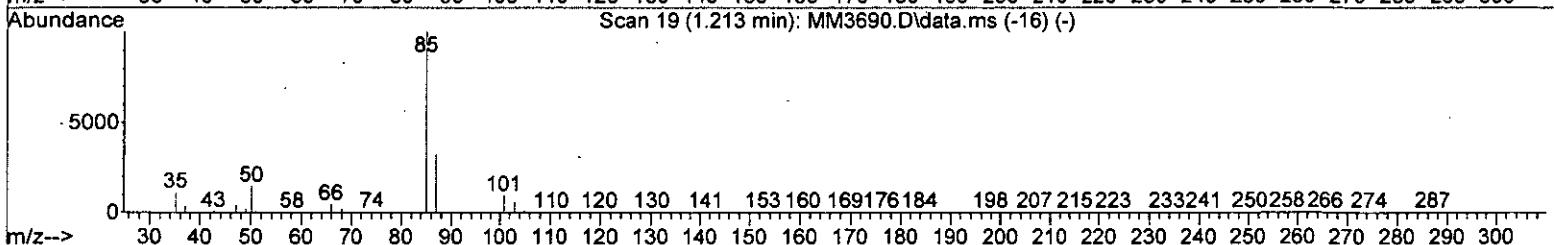
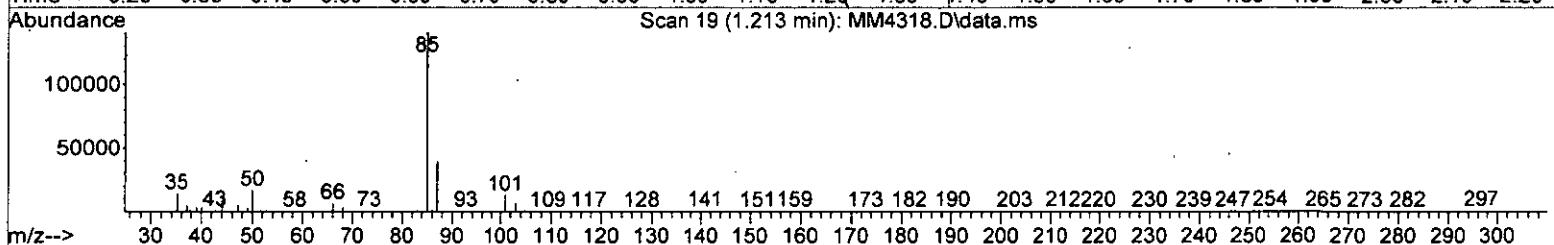
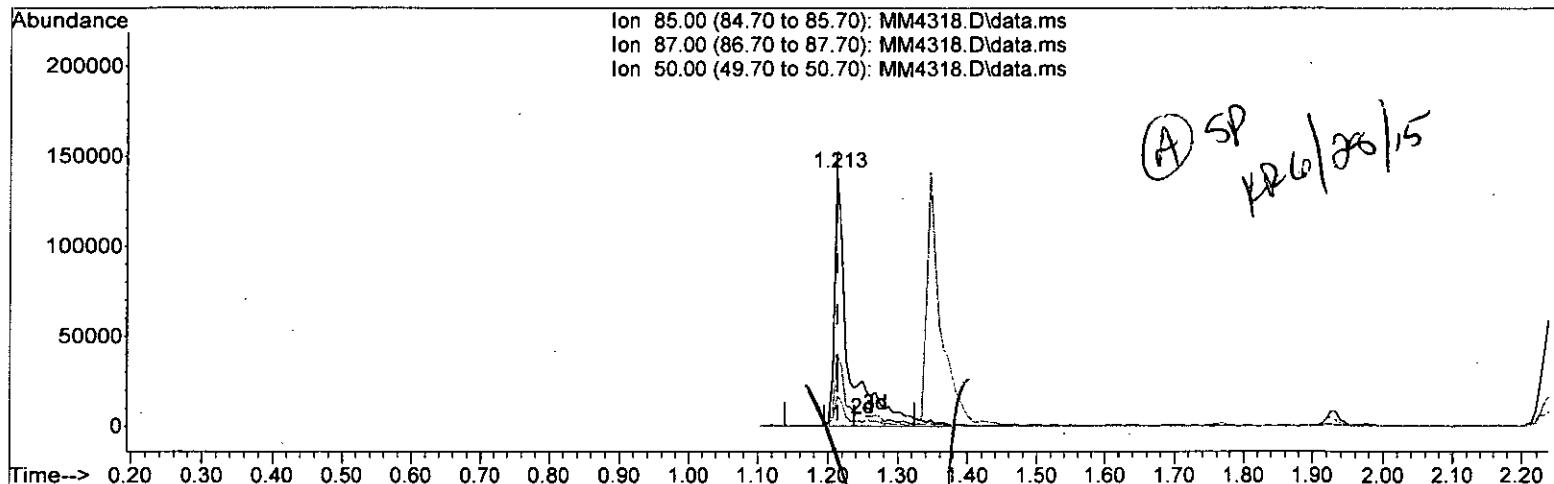
response 129298

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	28.43
50.00	14.50	11.77
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 23.99 ppb m

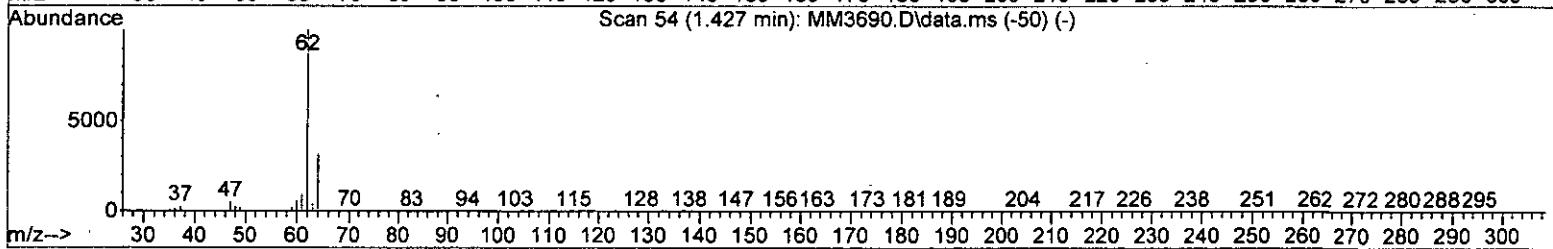
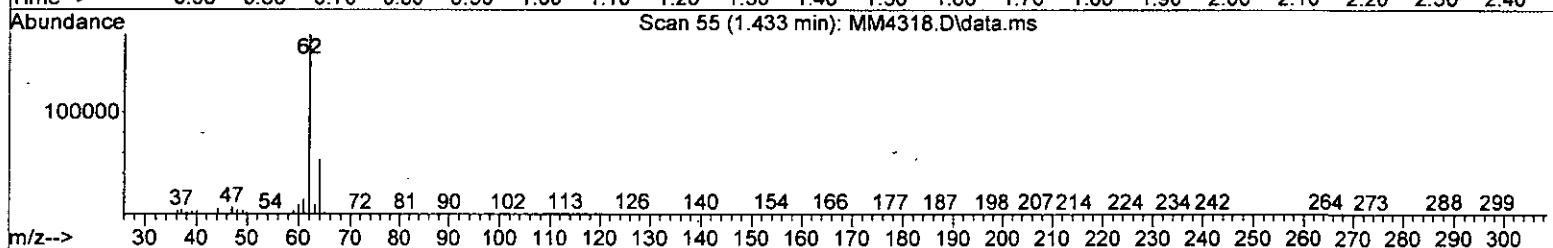
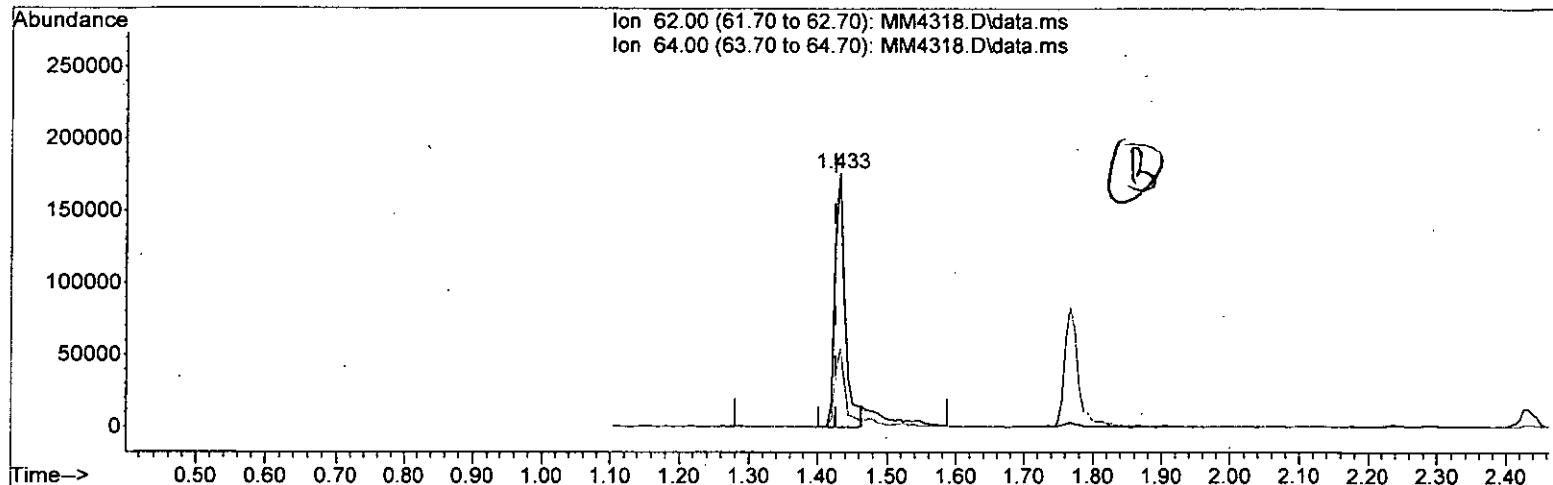
response 200905

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	28.43
50.00	14.50	11.77
0.00	0.00	0.00

*W/S*

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 17.30 ppb

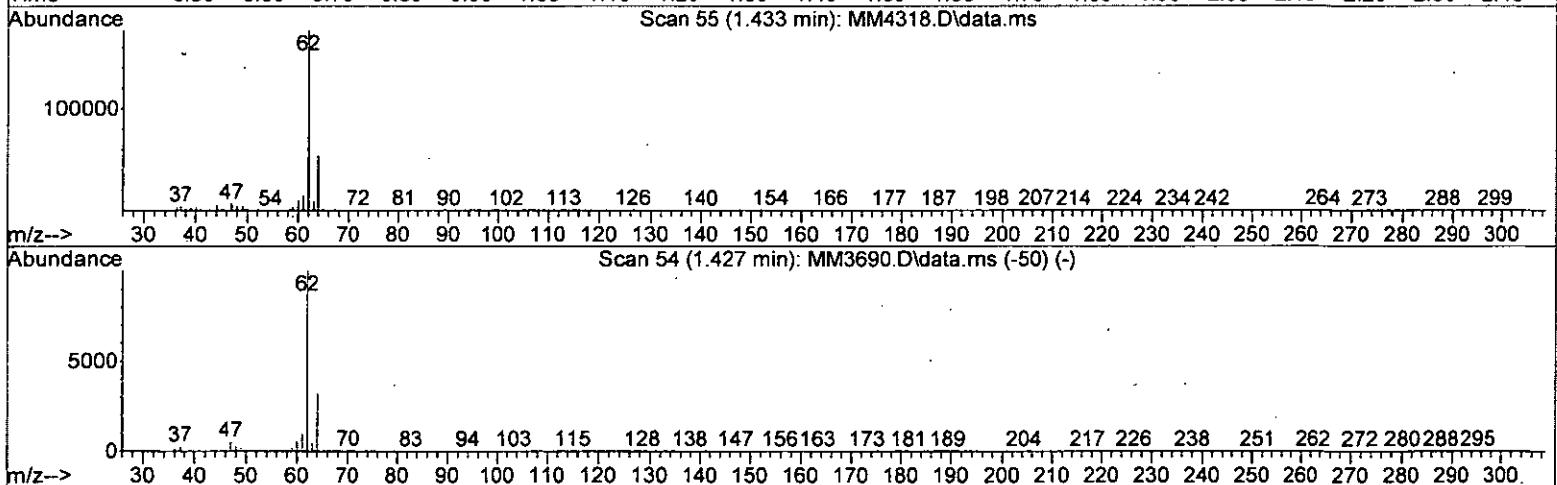
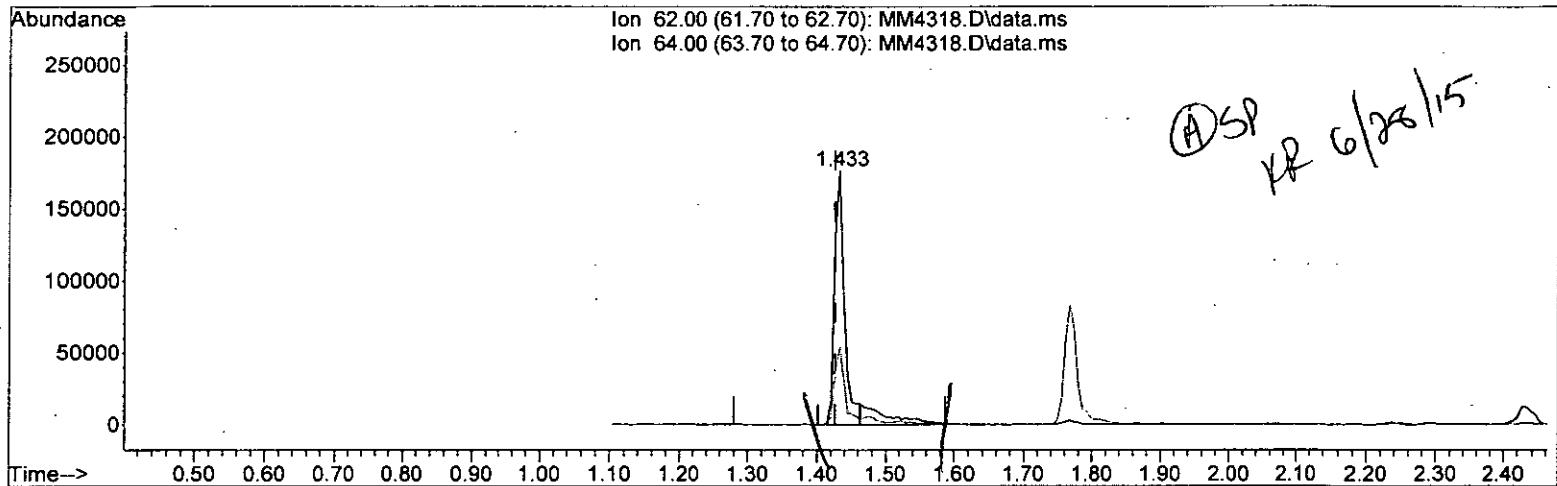
response 177985

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	30.39
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(4) Vinyl Chloride (P)

1.433min (+0.006) 20.86 ppb m

response 214614

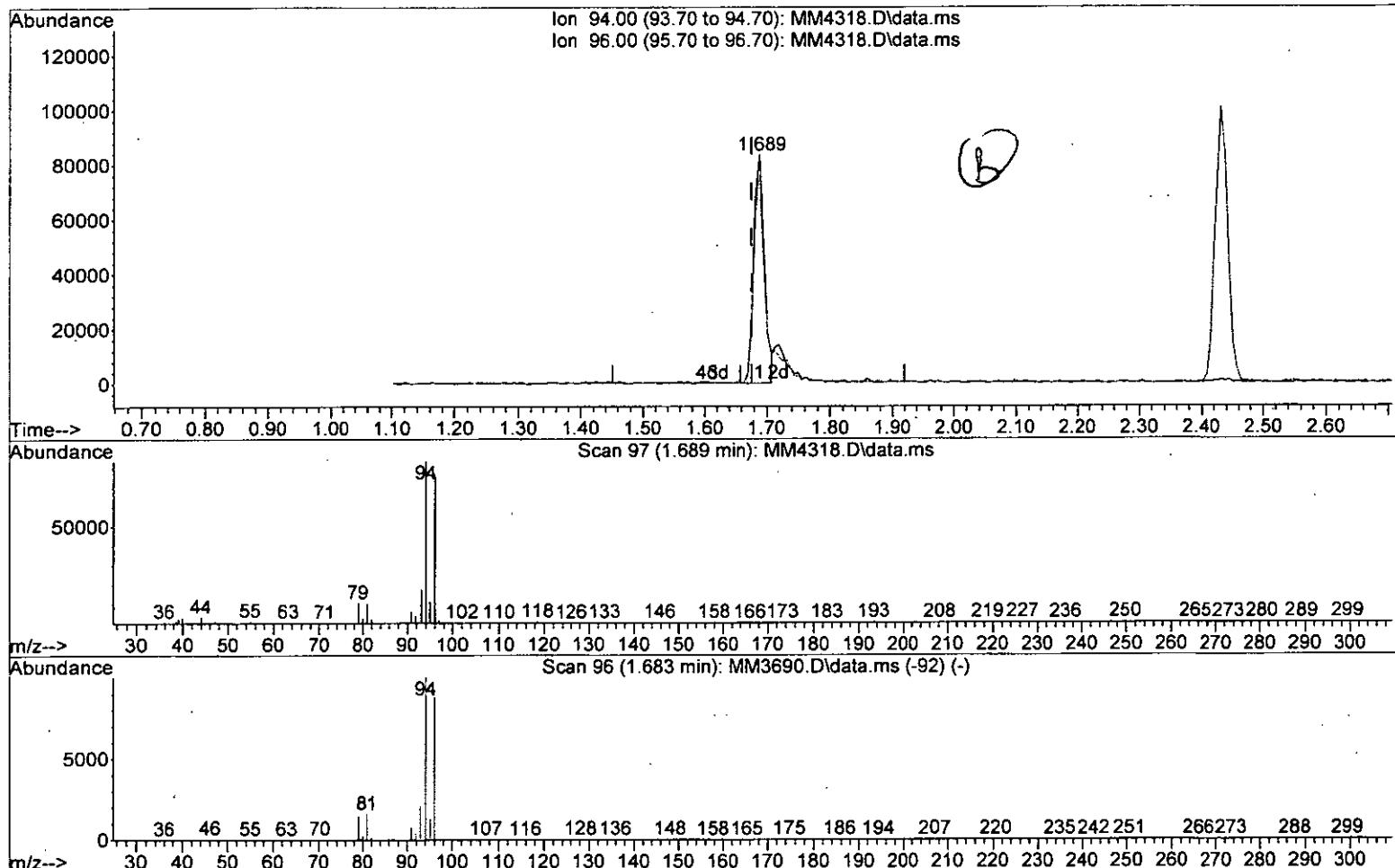
Ion	Exp%	Act%
62.00	100	100
64.00	31.50	30.39
0.00	0.00	0.00
0.00	0.00	0.00

MM  
SL.

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

## (5) Bromomethane (P)

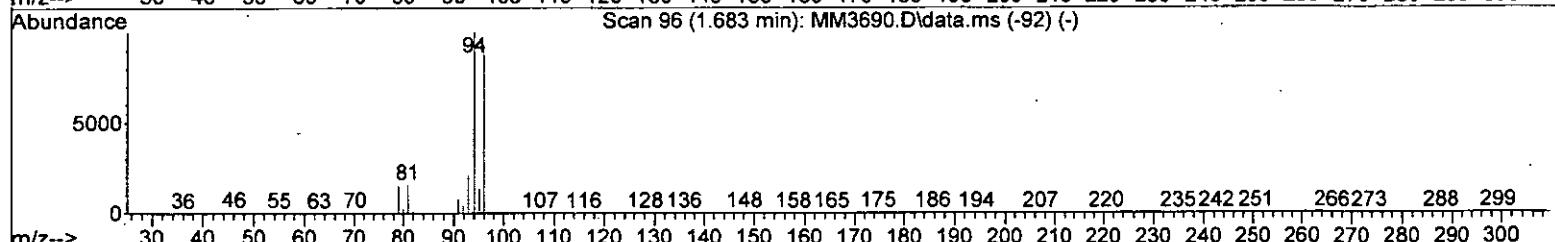
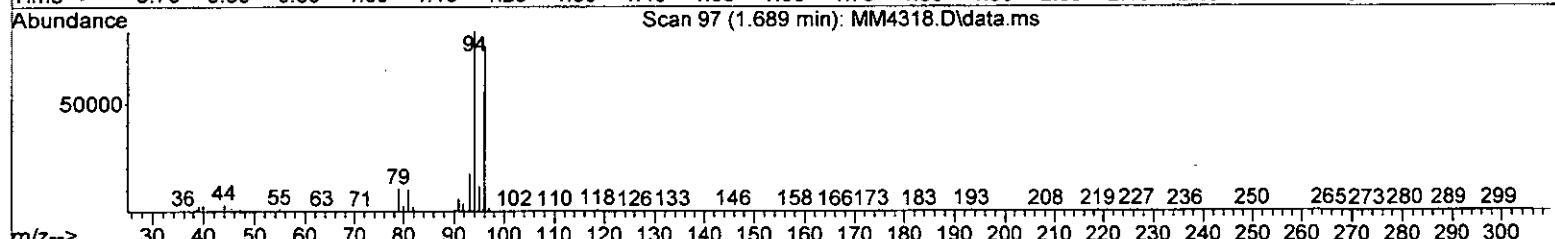
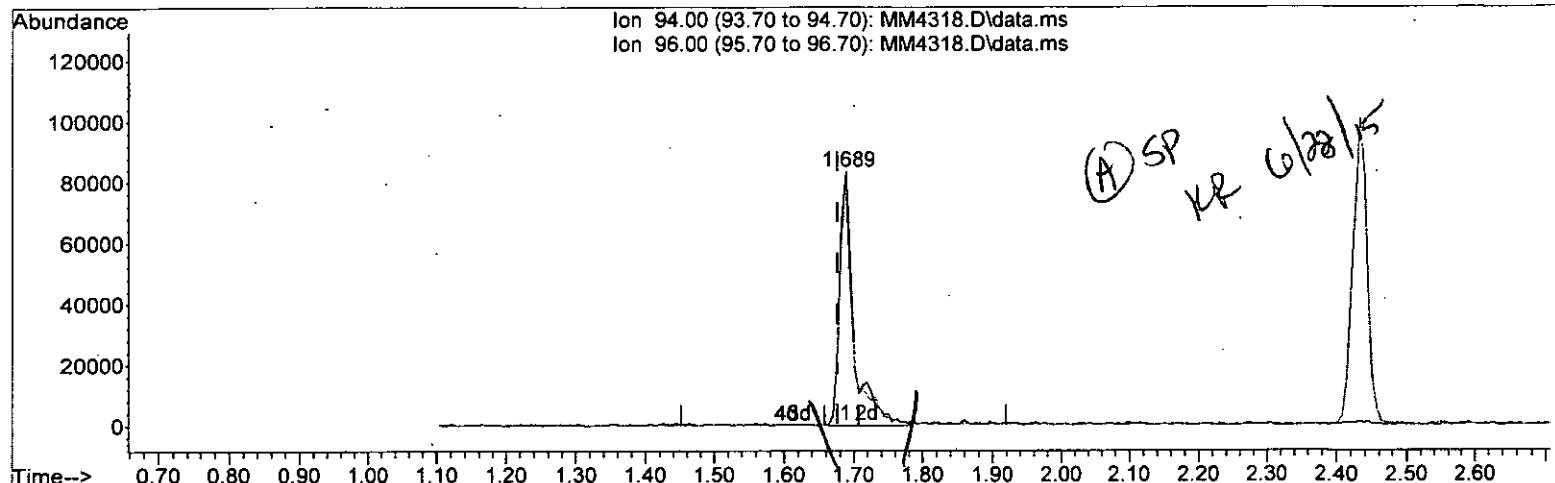
1.689min (+0.012) 16.13 ppb

response 94221

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	91.37
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(5) Bromomethane (P)

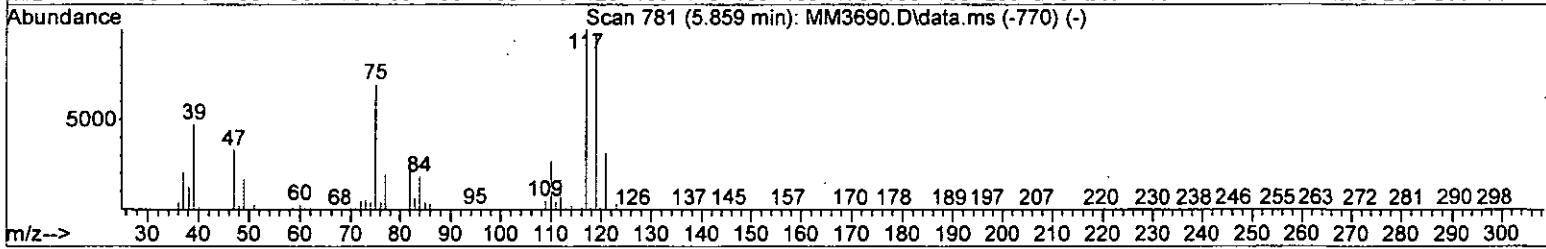
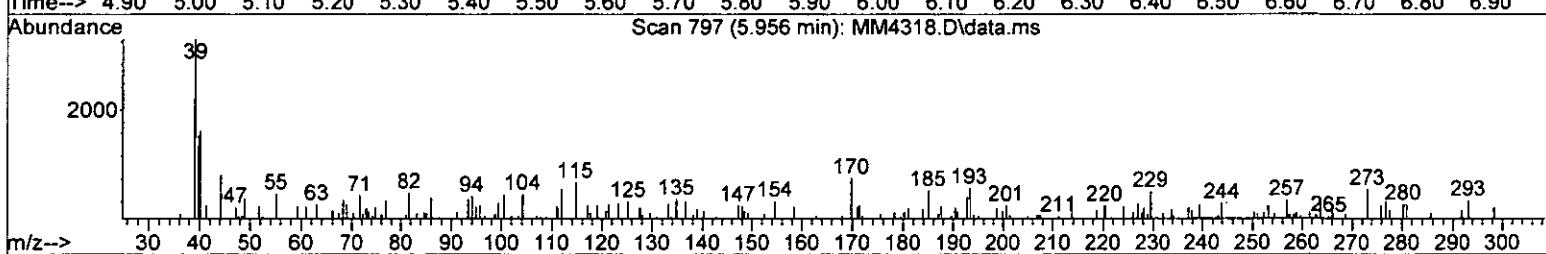
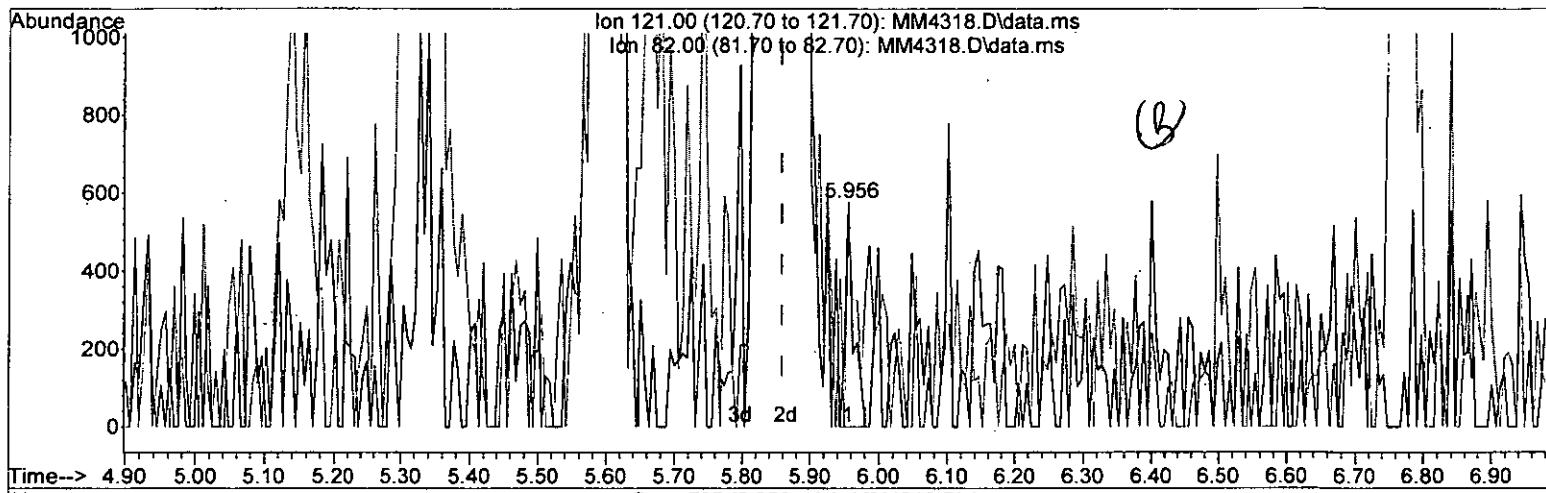
1.689min (+0.012) 20.25 ppb m

response 118259

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	91.37
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvao12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(46) Carbontetrachloride (P)

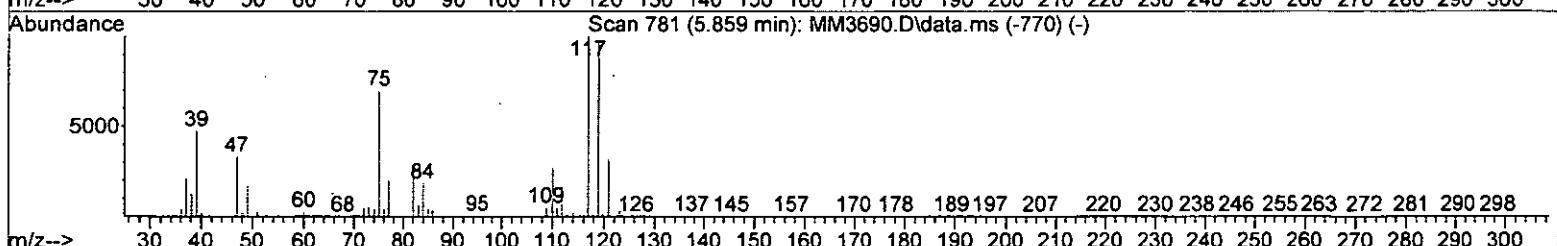
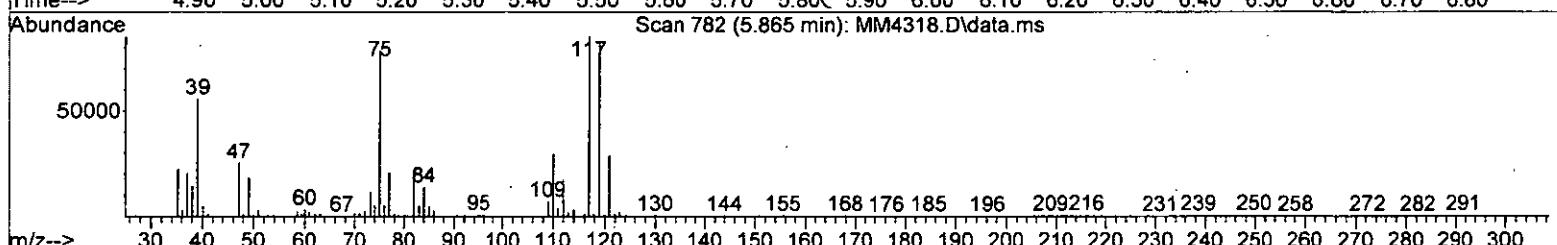
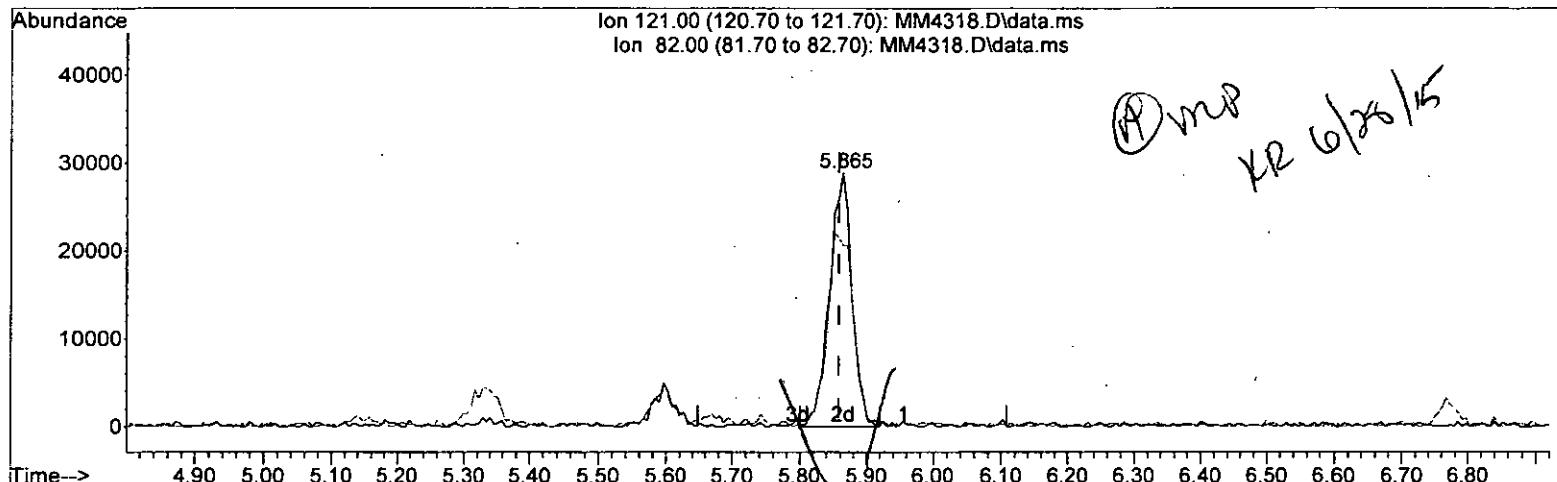
5.956min (+0.097) 0.13 ppb

response 463

Ion	Exp%	Act%
121.00	100	100
82.00	93.50	93.91
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(46) Carbontetrachloride (P)

5.865min (+0.006) 18.68 ppb m

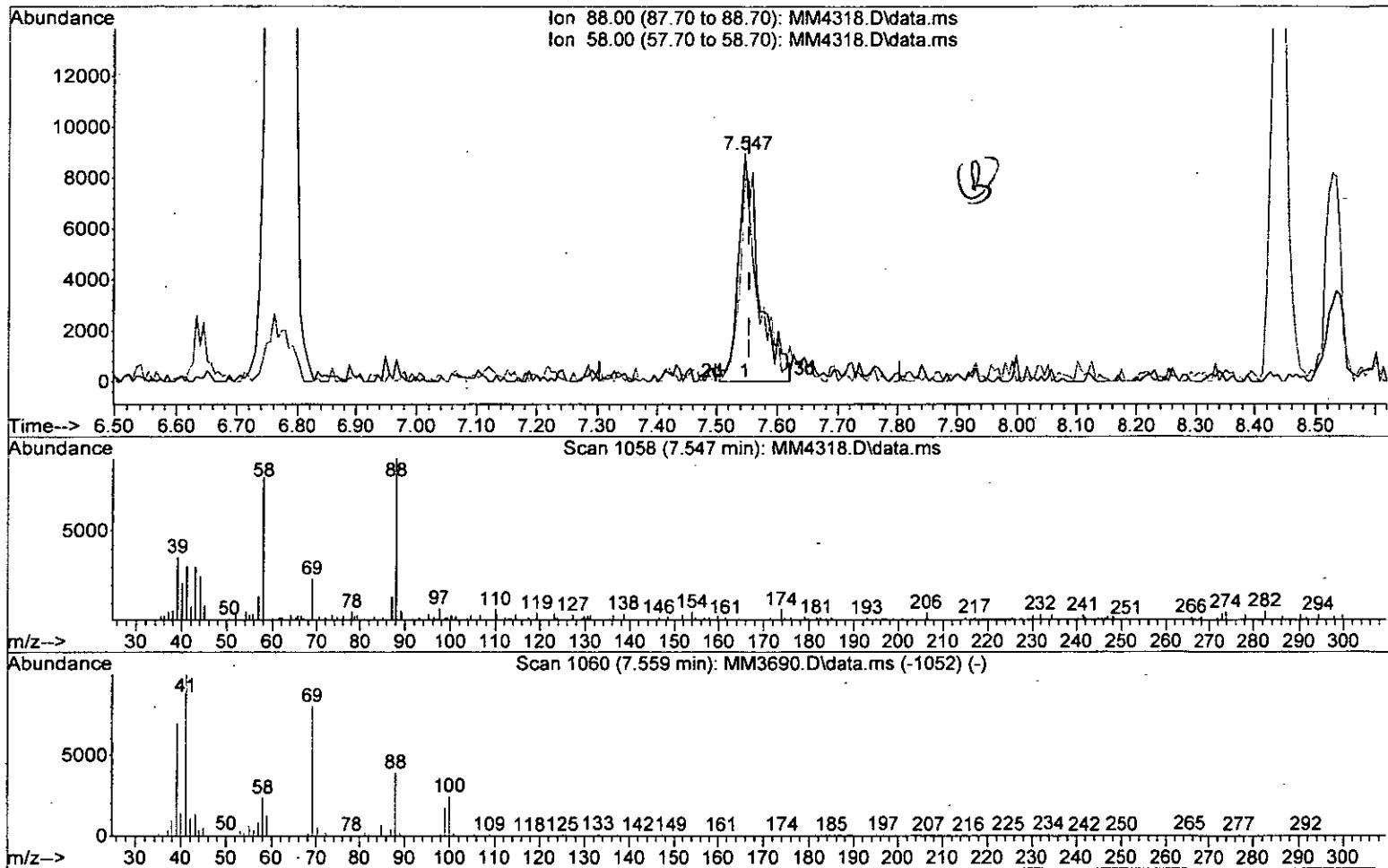
response 66686

Ion	Exp%	Act%
121.00	100	100
82.00	93.50	71.48#
0.00	0.00	0.00
0.00	0.00	0.00

EW  
CH.

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



(58) 1,4-Dioxane

7.547min (-0.006) 340.93 ppb

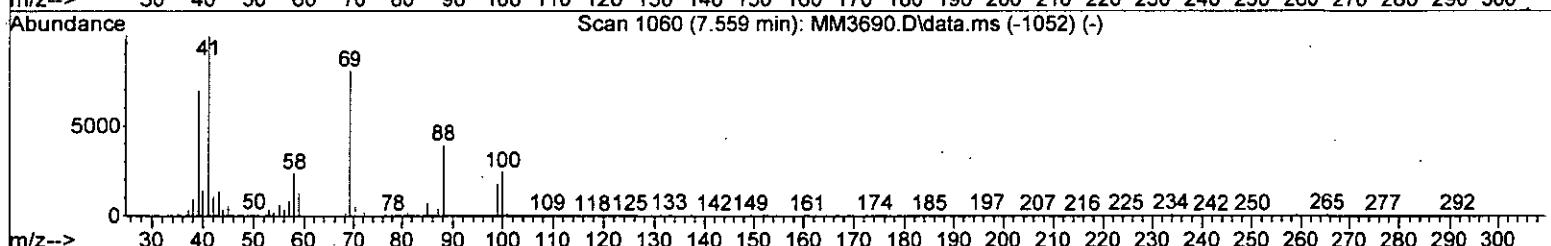
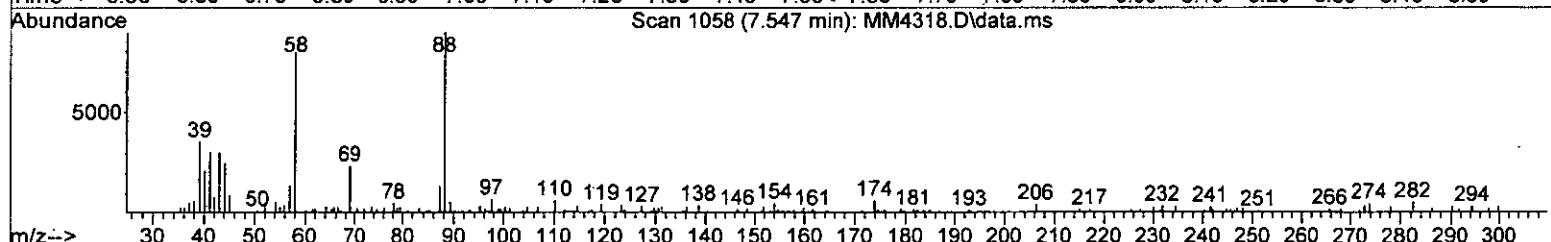
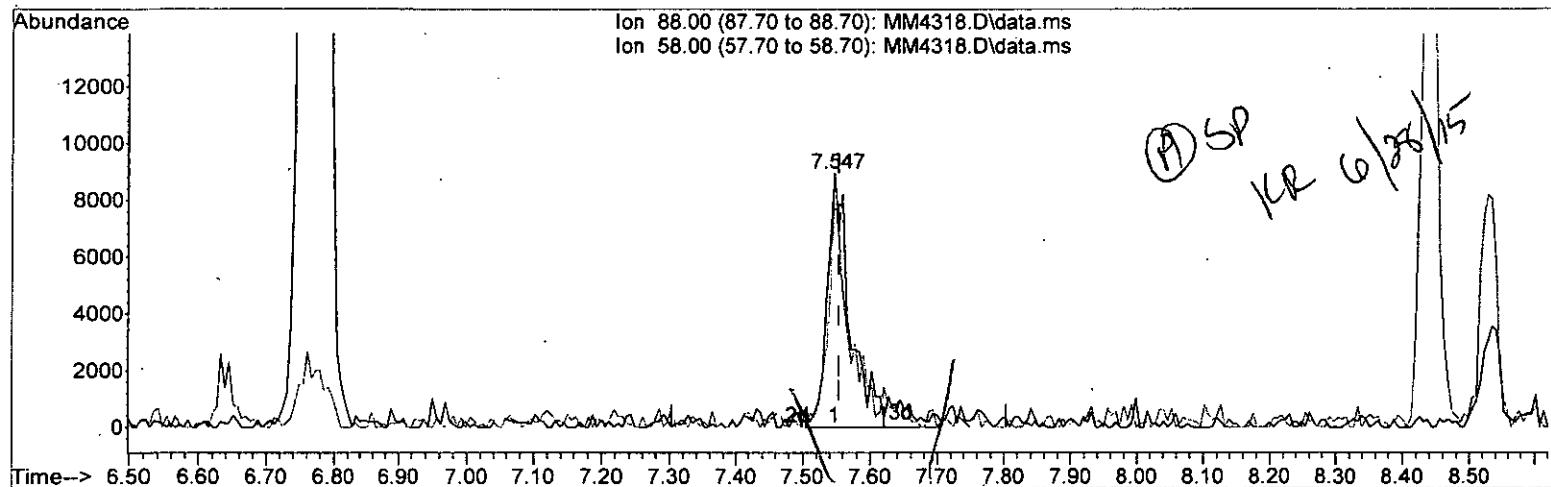
response 21305

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	89.05#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
 Data File : MM4318.D  
 Acq On : 28 Jun 2015 10:24 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 10:40:32 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4318.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 379.04 ppb m

response 23686

Ion	Exp%	Act%
88.00	100	100
58.00	60.70	89.05#
0.00	0.00	0.00
0.00	0.00	0.00

www  
clt

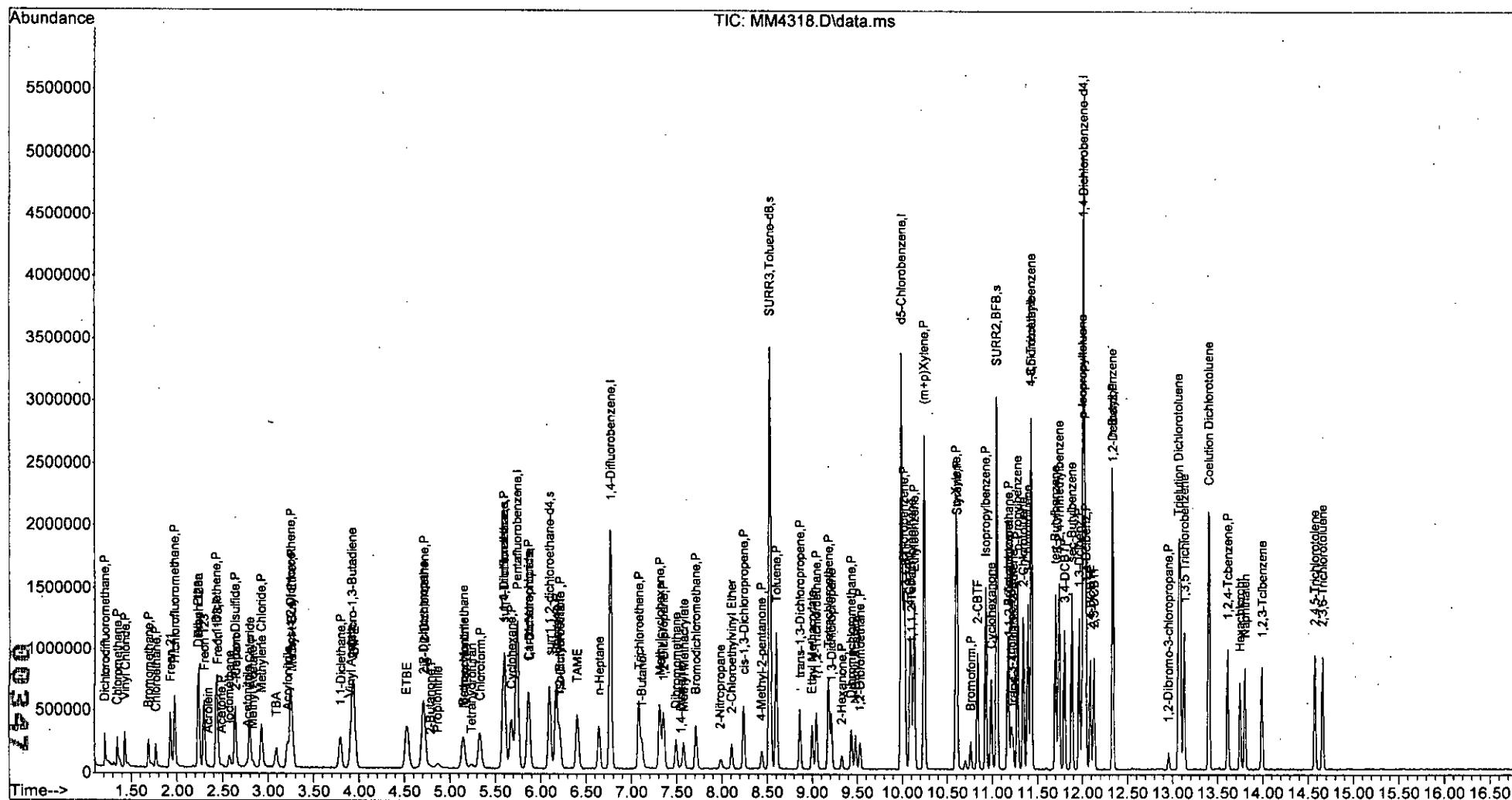
## Quantitation Report

(QT Reviewed)

Data Path : I:\ACQUADATA\msvoa12\Data\062815\  
Data File : MM4318.D  
Acq On : 28 Jun 2015 10:24 am  
Operator : K.Ruest  
Sample : LCS  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 28 10:53:38 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/29/15 11:03

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1507136-03      **Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4345.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	23.9	1.0	0.21	
75-01-4	Vinyl Chloride	21.8	1.0	0.32	
75-00-3	Chloroethane	17.8	1.0	0.24	
74-83-9	Bromomethane	18.3	1.0	0.29	
75-35-4	1,1-Dichloroethene	20.1	1.0	0.57	
67-64-1	Acetone	16.7	5.0	1.3	
75-15-0	Carbon Disulfide	20.0	1.0	0.22	
75-09-2	Methylene Chloride	20.5	1.0	0.60	
156-60-5	trans-1,2-Dichloroethene	20.8	1.0	0.33	
75-34-3	1,1-Dichloroethane	20.7	1.0	0.20	
156-59-2	cis-1,2-Dichloroethene	21.3	1.0	0.30	
78-93-3	2-Butanone (MEK)	22.5	5.0	0.81	
67-66-3	Chloroform	21.6	1.0	0.25	
71-55-6	1,1,1-Trichloroethane	20.1	1.0	0.36	
56-23-5	Carbon Tetrachloride	19.0	1.0	0.45	
71-43-2	Benzene	20.9	1.0	0.20	
107-06-2	1,2-Dichloroethane	19.5	1.0	0.36	
79-01-6	Trichloroethene	20.9	1.0	0.22	
78-87-5	1,2-Dichloropropane	20.7	1.0	0.20	
75-27-4	Bromodichloromethane	19.3	1.0	0.32	
10061-01-5	cis-1,3-Dichloropropene	19.4	1.0	0.24	
108-10-1	4-Methyl-2-pentanone (MIBK)	21.2	5.0	0.67	
108-88-3	Toluene	20.6	1.0	0.20	
10061-02-6	trans-1,3-Dichloropropene	20.1	1.0	0.20	
79-00-5	1,1,2-Trichloroethane	21.6	1.0	0.34	
127-18-4	Tetrachloroethene	20.3	1.0	0.30	
591-78-6	2-Hexanone	19.7	5.0	1.7	
124-48-1	Dibromochloromethane	18.9	1.0	0.31	
108-90-7	Chlorobenzene	19.9	1.0	0.29	
100-41-4	Ethylbenzene	17.8	1.0	0.20	
179601-23-1	m,p-Xylenes	39.9	2.0	0.33	
95-47-6	o-Xylene	20.0	1.0	0.20	
100-42-5	Styrene	19.8	1.0	0.20	
75-25-2	Bromoform	17.4	1.0	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	19.4	1.0	0.25	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** RQ1507136-03

**Service Request:** R1505119  
**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/29/15 11:03

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS****Analytical Method:** 8260C**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4345.D\**Analysis Lot:** 451047**Instrument Name:** R-MS-12**Dilution Factor:** 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	113	85-122	6/29/15 11:03	
Toluene-d8	106	87-121	6/29/15 11:03	
Dibromofluoromethane	109	89-119	6/29/15 11:03	

Data Path : I:\ACQUDATA\msvoa12\Data\062915\

Data File : MM4345.D

Acq On : 29 Jun 2015 11:03 am

Operator : K.Ruest

Sample : LCS RG1507136-03

Inst : MSVOA-12

Misc :

ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:23:45 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	926910	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1550773	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1521844	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	886182	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoform	5.603	113	458445	54.63	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	= 109.26%		
48) surr1,1,2-dichloroetha...	6.103	65	471315	52.58	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	= 105.16%		
65) SURR3,Toluene-d8	8.535	98	1950701	53.22	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	= 106.44%		
70) SURR2,BFB	11.053	95	789665	56.70	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	= 113.40%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	208213m	26.33	ppb	
3) Chloromethane	1.347	50	183497	23.86	ppb	95
4) Vinyl Chloride	1.433	62	211985	21.82	ppb	95
5) Bromomethane	1.689	94	100677m	18.26	ppb	
6) Chloroethane	1.768	64	114530	17.77	ppb	100
7) Freon 21	1.927	67	350081	21.75	ppb	99
8) Trichlorofluoromethane	1.975	101	293974	20.31	ppb	99
9) Diethyl Ether	2.231	59	132816	20.75	ppb	90
10) Freon 123a	2.237	67	206134	20.07	ppb	95
11) Freon 123	2.298	83	229358	19.22	ppb	94
12) Acrolein	2.341	56	9280	13.91	ppb	83
13) 1,1-Dicethene	2.433	96	137130	20.12	ppb	98
14) Freon 113	2.445	101	141529	20.97	ppb	97
15) Acetone	2.494	43	21712	16.71	ppb	88
16) 2-Propanol	2.646	45	99890	387.10	ppb	91
17) Iodomethane	2.573	142	105819	13.59	ppb	91
18) Carbon Disulfide	2.640	76	436143	19.97	ppb	99
19) Acetonitrile	2.768	40	14276	85.60	ppb	88
20) Allyl Chloride	2.798	76	78990	19.25	ppb	# 92
21) Methyl Acetate	2.829	43	56143	19.84	ppb	92
22) Methylene Chloride	2.926	84	148798	20.54	ppb	97
23) TBA	3.091	59	203408	441.94	ppb	92
24) Acrylonitrile	3.213	53	171169	115.91	ppb	97
25) Methyl-t-Butyl Ether	3.262	73	378774	21.39	ppb	96
26) trans-1,2-Dichloroethene	3.243	96	158113	20.76	ppb	99
28) 1,1-Dicethane	3.792	63	259966	20.66	ppb	95
29) Vinyl Acetate	3.914	86	29426m	19.50	ppb	
30) DIPE	3.951	45	409060	18.70	ppb	96
31) 2-Chloro-1,3-Butadiene	3.926	53	232359	16.97	ppb	99
32) ETBE	4.536	59	404282	18.54	ppb	98
33) 2,2-Dichloropropane	4.713	77	242551	20.23	ppb	95
34) cis-1,2-Dichloroethene	4.719	96	172945	21.30	ppb	96
35) 2-Butanone	4.780	43	38424	22.50	ppb	97
36) Propionitrile	4.877	54	61042	117.08	ppb	98

YF  
6/29/15

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 11:23:45 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Bromochloromethane	5.145	130	97405	21.70	ppb	97
38) Methacrylonitrile	5.158	67	41656m	21.41	ppb	
39) Tetrahydrofuran	5.243	42	25938	22.33	ppb	87
40) Chloroform	5.334	83	286226	21.58	ppb	91
41) 1,1,1-Trichloroethane	5.603	97	255712	20.05	ppb	94
42) TAME	6.407	73	391213	20.57	ppb	94
44) Cyclohexane	5.682	41	125583	17.83	ppb	96
46) Carbontetrachloride	5.859	121	64044	18.98	ppb	91
47) 1,1-Dichloropropene	5.877	75	205571	19.26	ppb	93
49) Benzene	6.176	78	641851	20.88	ppb	99
50) 1,2-Dichloroethane	6.212	62	192140	19.50	ppb	94
51) Iso-Butyl Alcohol	6.200	43	85131	417.01	ppb	80
52) n-Heptane	6.645	43	139654	21.33	ppb	98
53) 1-Butanol	7.121	56	138722	1070.03	ppb	97
54) Trichloroethene	7.084	130	173670	20.93	ppb	97
55) Methylcyclohexane	7.316	55	163286	21.04	ppb	96
56) 1,2-Diclpropane	7.358	63	152091	20.69	ppb	95
57) Dibromomethane	7.493	93	83282	21.03	ppb	91
58) 1,4-Dioxane	7.560	88	24637	417.11	ppb	87
59) Methyl Methacrylate	7.578	69	78881	22.00	ppb	# 84
60) Bromodichloromethane	7.712	83	204778	19.30	ppb	98
61) 2-Nitropropane	7.986	41	40232	29.33	ppb	92
62) 2-Chloroethylvinyl Ether	8.108	63	70451	20.77	ppb	97
63) cis-1,3-Dichloropropene	8.242	75	239945	19.43	ppb	98
64) 4-Methyl-2-pentanone	8.444	43	88729	21.17	ppb	92
66) Toluene	8.602	91	726604	20.61	ppb	96
67) trans-1,3-Dichloropropene	8.864	75	212308	20.09	ppb	94
68) Ethyl Methacrylate	8.998	69	155297	20.25	ppb	95
69) 1,1,2-Trichloroethane	9.047	97	123031	21.64	ppb	93
72) Tetrachloroethene	9.181	164	141882	20.33	ppb	# 88
73) 2-Hexanone	9.328	43	60705	19.70	ppb	87
74) 1,3-Dichloropropane	9.212	76	220080	22.02	ppb	95
75) Dibromochloromethane	9.437	129	142203	18.90	ppb	96
76) N-Butyl Acetate	9.480	43	145095	17.93	ppb	93
77) 1,2-Dibromoethane	9.529	107	120322	20.39	ppb	92
78) Chlorobenzene	10.016	112	492130	19.87	ppb	99
79) 3-CBTF	10.029	180	250542	21.45	ppb	97
80) 4-CBTF	10.084	180	225570	21.32	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.102	131	165400	19.85	ppb	97
82) Ethylbenzene	10.132	106	238795	17.81	ppb	92
83) (m+p)Xylene	10.242	106	651296	39.85	ppb	94
84) o-Xylene	10.596	106	317002	20.03	ppb	99
85) Styrene	10.608	104	537142	19.77	ppb	98
87) Bromoform	10.760	173	79140	17.44	ppb	97
88) 2-CBTF	10.839	180	256216	19.93	ppb	94
89) Isopropylbenzene	10.931	105	757409	18.41	ppb	99
90) Cyclohexanone	10.986	55	259706	1064.97	ppb	83
91) trans-1,4-Dichloro-2-B...	11.230	53	37701	17.04	ppb	89
92) 1,1,2,2-Tetrachloroethane	11.181	83	145273	19.40	ppb	99
93) Bromobenzene	11.175	156	200010	19.50	ppb	96
94) 1,2,3-Trichloropropane	11.211	110	44304	19.45	ppb	# 81

Data Path : I:\ACQUDATA\msvoa12\Data\062915\

Data File : MM4345.D

Acq On : 29 Jun 2015 11:03 am

Operator : K.Ruest

Sample : LCS

Inst : MSVOA-12

Misc :

ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:23:45 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

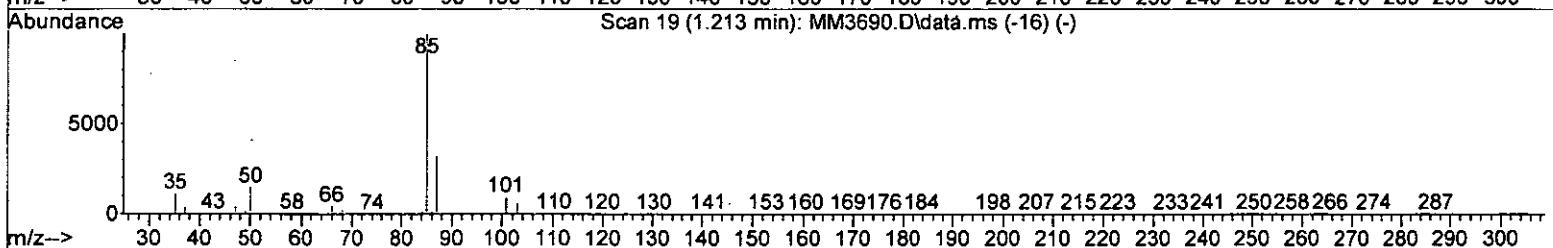
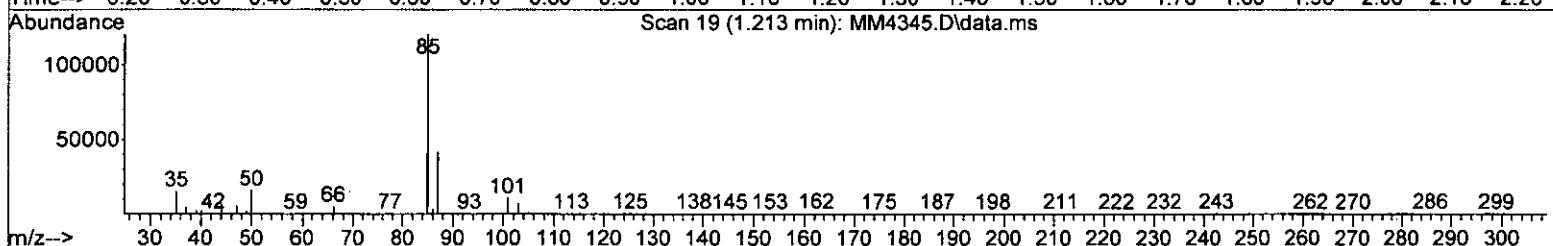
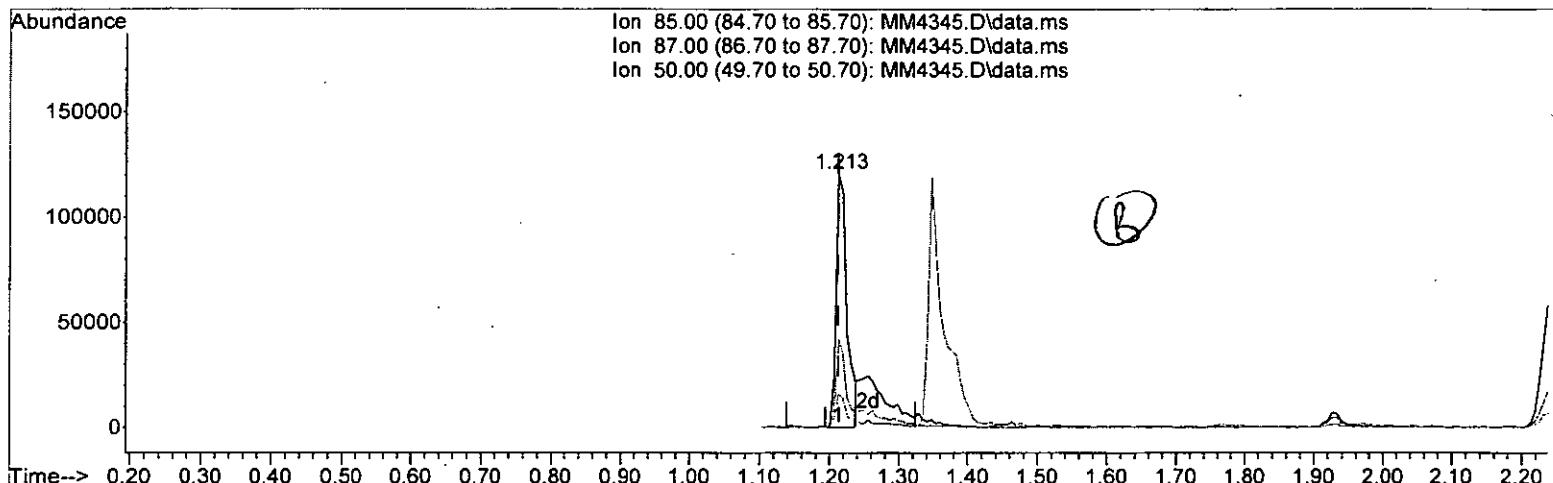
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) n-Propylbenzene	11.278	91	914831	19.76	ppb	99
96) 2-Chlorotoluene	11.345	91	549625	19.26	ppb	99
97) 3-Chlorotoluene	11.394	91	602885	19.94	ppb	97
98) 4-Chlorotoluene	11.437	91	673505	19.09	ppb	100
99) 1,3,5-Trimethylbenzene	11.431	105	671438	19.05	ppb	98
100) tert-Butylbenzene	11.705	119	541537	19.07	ppb	100
101) 1,2,4-Trimethylbenzene	11.742	105	690208	19.40	ppb	98
102) 3,4-DCBT	11.803	214	177376	21.08	ppb	89
103) sec-Butylbenzene	11.882	105	765900	19.67	ppb	97
104) p-Isopropyltoluene	12.004	119	679107	20.51	ppb	99
105) 1,3-Dclbenz	11.961	146	395327	19.83	ppb	99
106) 1,4-Dclbenz	12.040	146	403212	19.41	ppb	98
107) 2,4-DCBT	12.089	214	156093	21.02	ppb	93
108) 2,5-DCBT	12.132	214	174118	20.85	ppb	95
109) n-Butylbenzene	12.333	91	596148	20.06	ppb	98
110) 1,2-Dclbenz	12.339	146	374459	20.09	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.961	157	31418	20.73	ppb	87
112) Trielution Dichlorotol...	13.083	125	999093	63.65	ppb	99
113) 1,3,5 Trichlorobenzene	13.132	180	267238	22.86	ppb	96
114) Coelution Dichlorotoluene	13.406	125	727735	43.28	ppb	97
115) 1,2,4-Tcbenzene	13.613	180	236176	22.06	ppb	99
116) Hexachlorobt	13.747	225	90765	22.02	ppb	91
117) Naphthalen	13.802	128	532507	23.70	ppb	98
118) 1,2,3-Tclbenzene	13.991	180	219629	25.09	ppb	93
119) 2,4,5-Trichlorotolene	14.577	159	176624	25.24	ppb	93
120) 2,3,6-Trichlorotoluene	14.656	159	165060	27.43	ppb	96

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

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:19:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4345.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 16.15 ppb

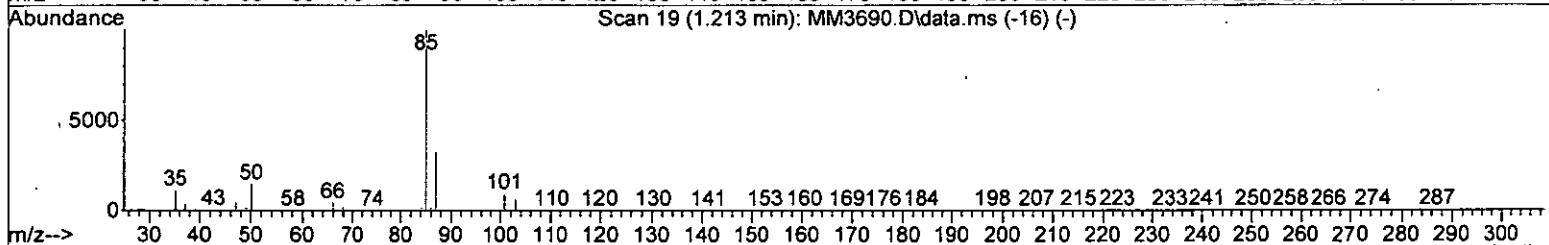
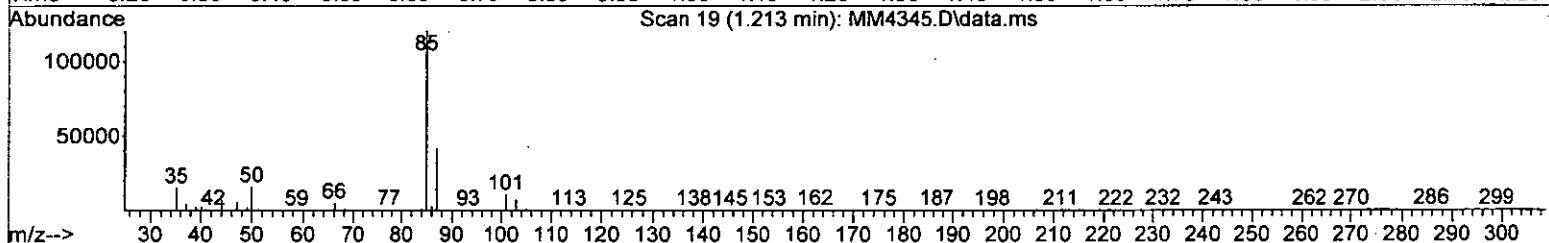
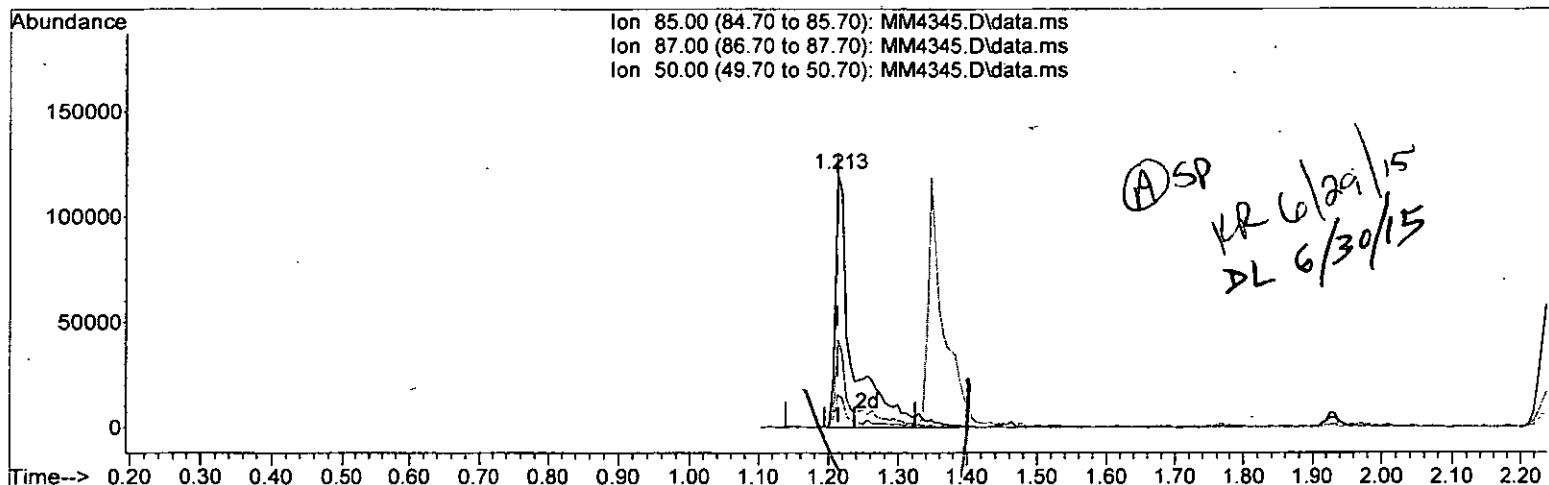
response 127731

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	34.46
50.00	14.50	13.11
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:19:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4345.D\data.ms

(2) Dichlorodifluoromethane (P)

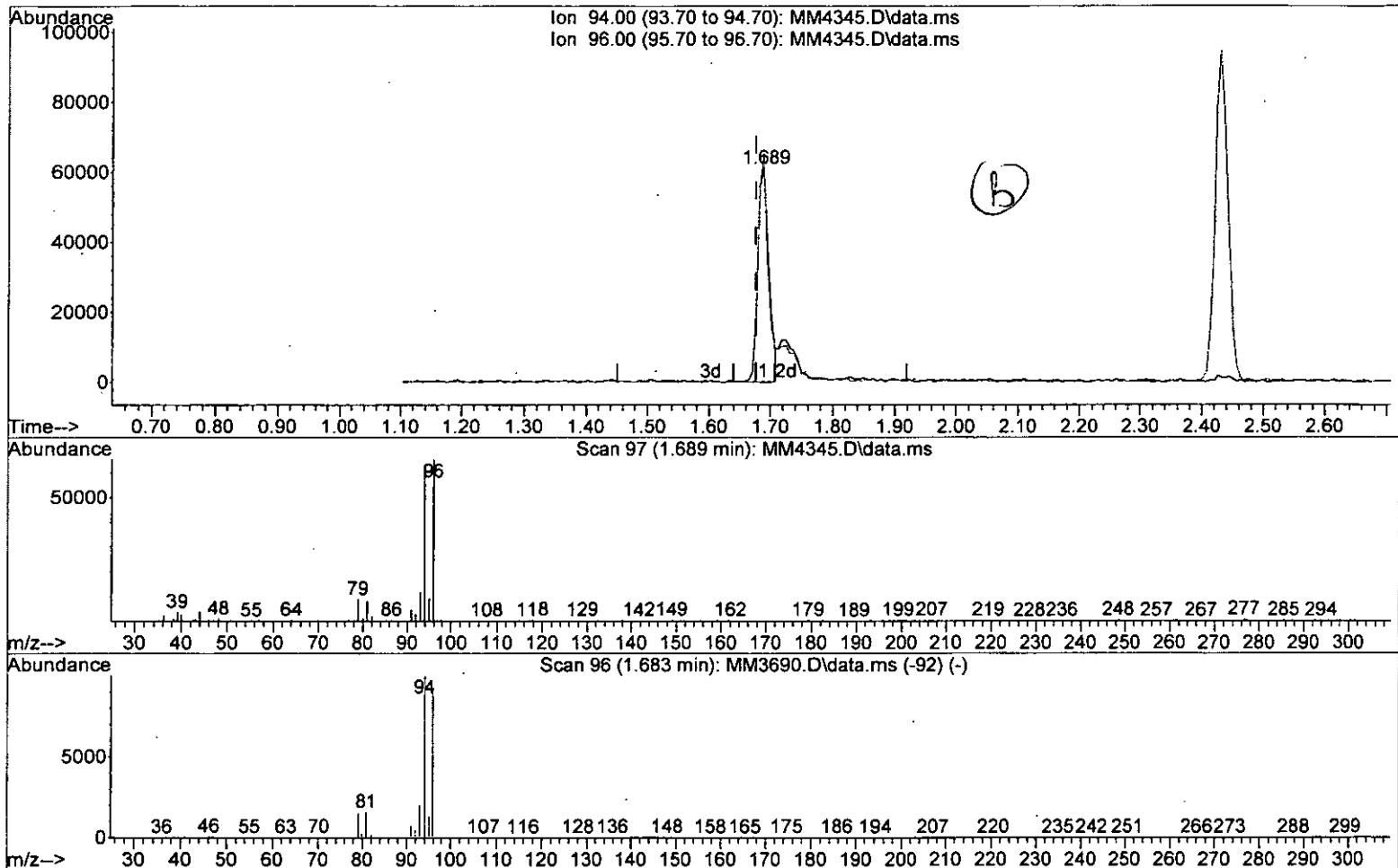
1.213min (-0.000) 26.33 ppb m

response 208213

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	34.46
50.00	14.50	13.11
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:19:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4345.D\data.ms

## (5) Bromomethane (P)

1.689min (+0.012) 13.66 ppb

response 75334

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	106.59
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUADATA\msvoa12\Data\062915\

Data File : MM4345.D

Acq On : 29 Jun 2015 11:03 am

Operator : K.Ruest

Sample : LCS

Inst : MSVOA-12

Misc :

ALS Vial : 5 Sample Multiplier: 1

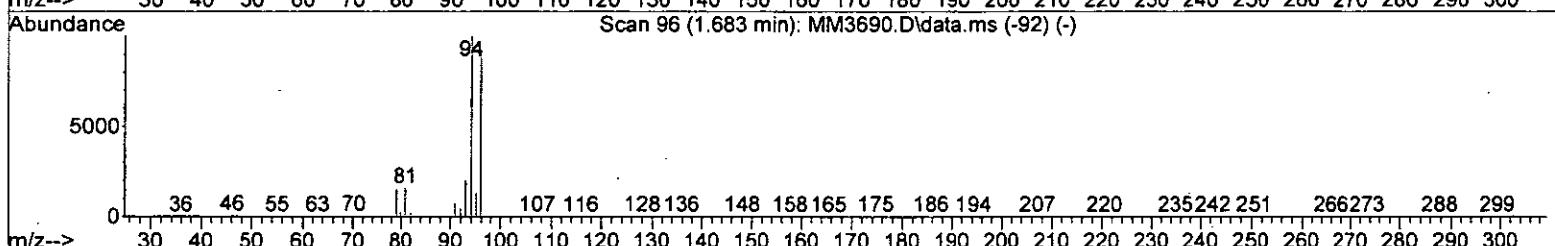
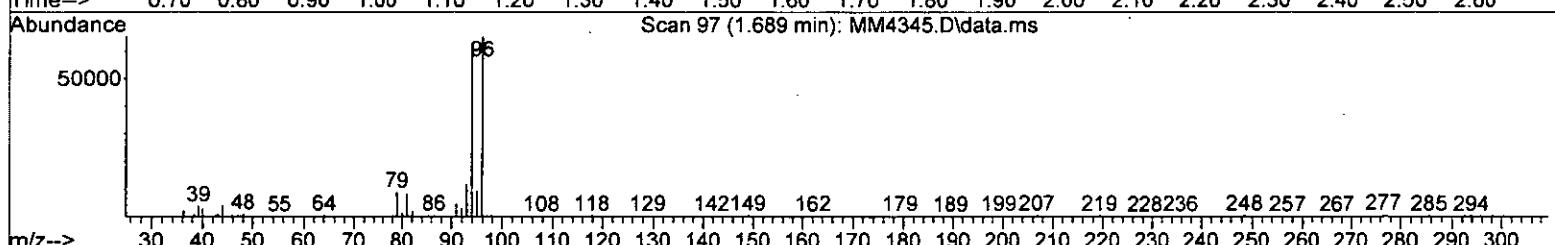
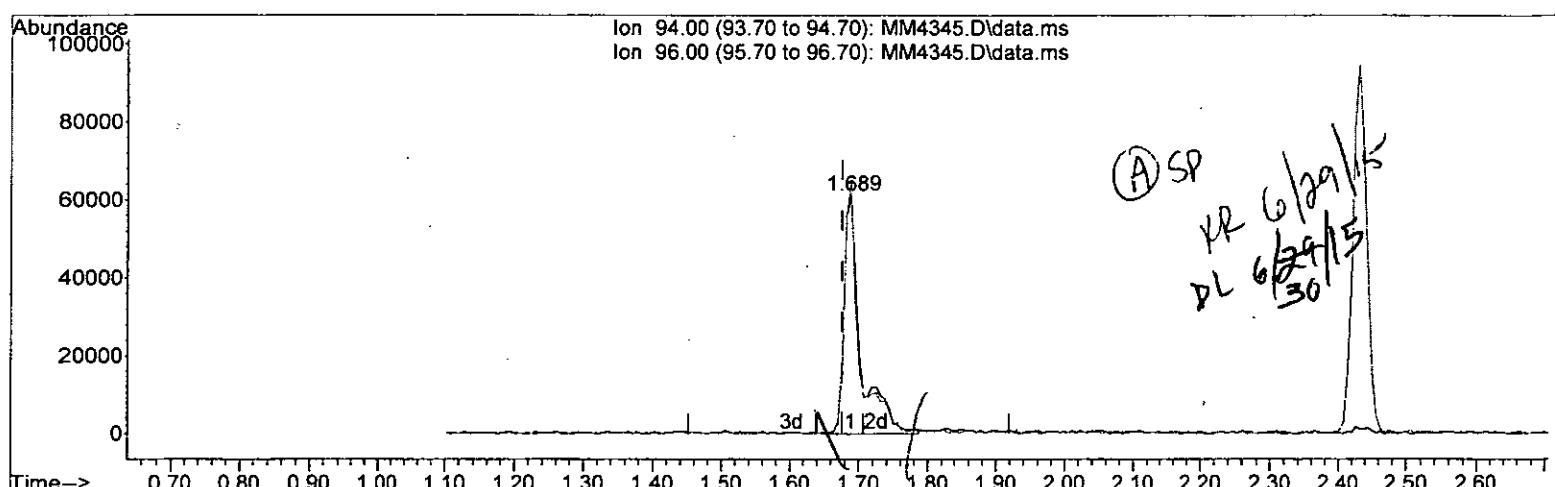
Quant Time: Jun 29 11:19:17 2015

Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration



TIC: MM4345.D\data.ms

## (5) Bromomethane (P)

1.689min (+0.012) 18.26 ppb m

response 100677

Ion Exp% Act%

94.00 100 100

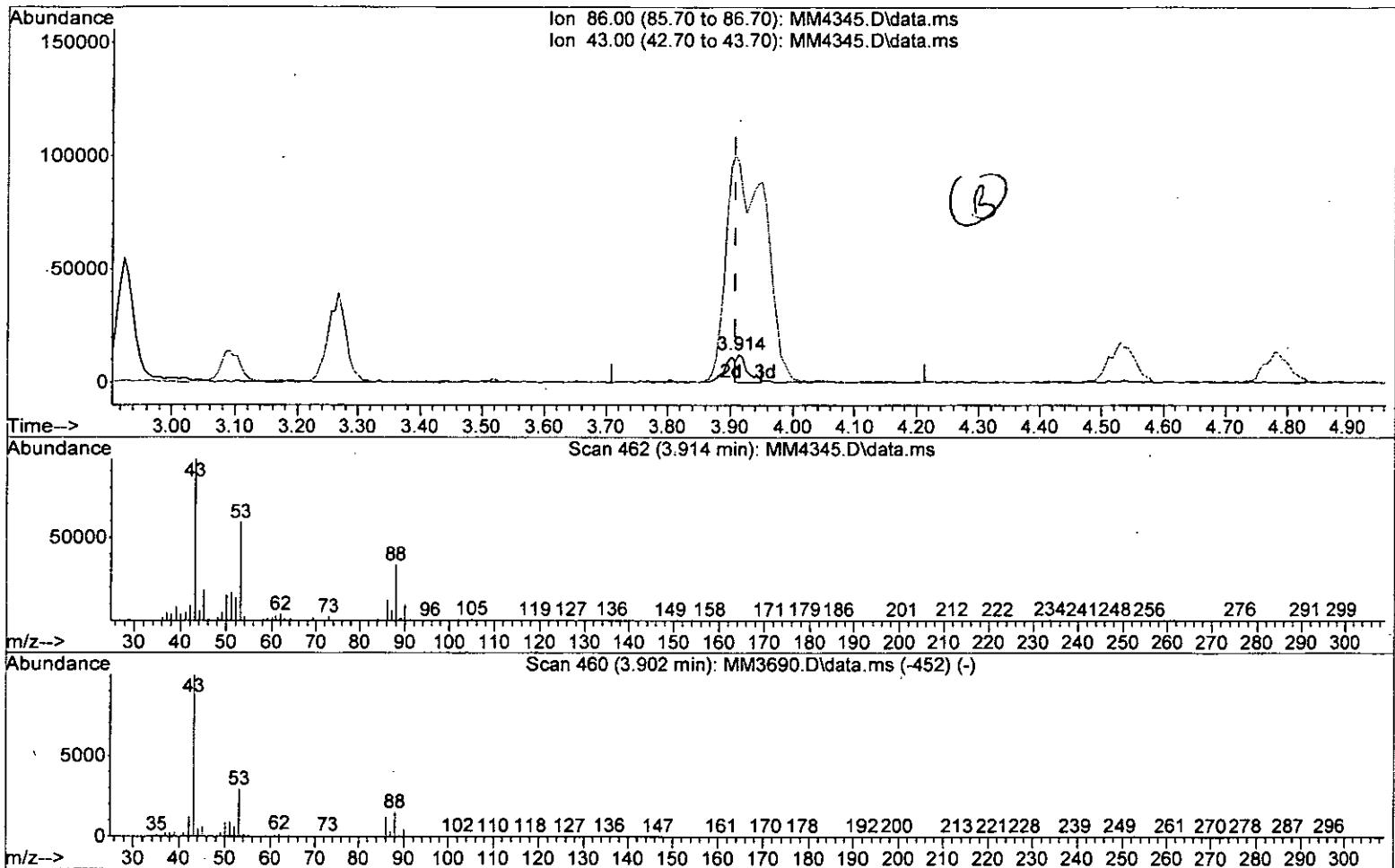
96.00 91.80 106.59

0.00 0.00 0.00

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:19:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4345.D\data.ms

(29) Vinyl Acetate

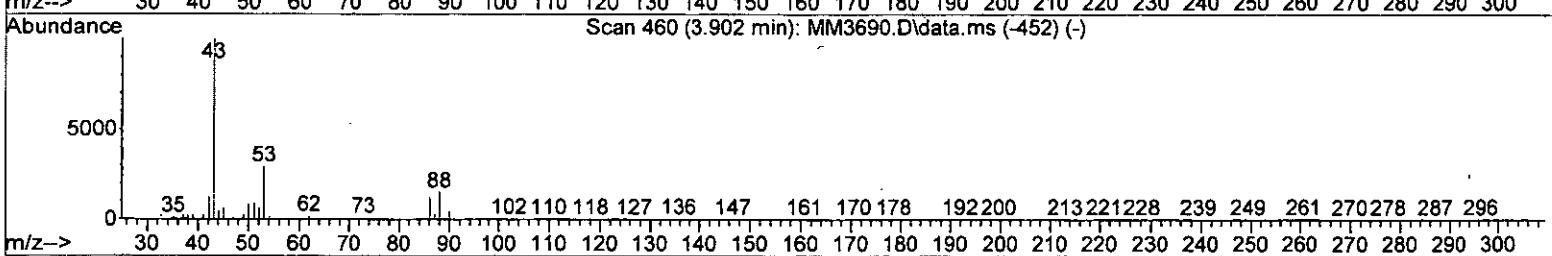
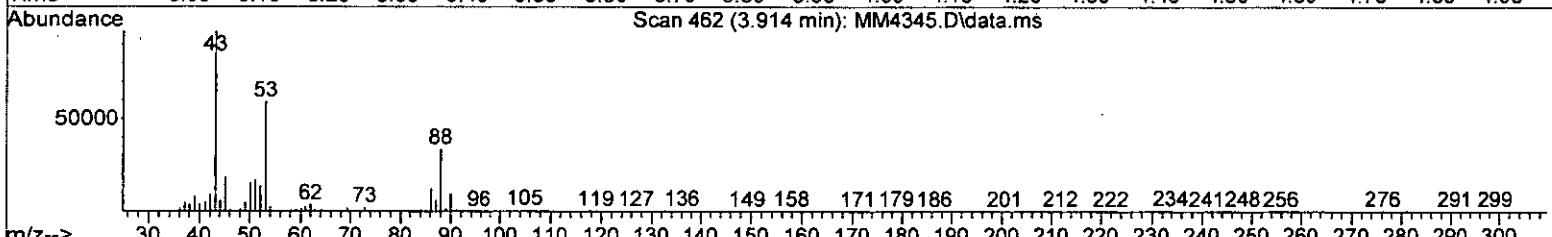
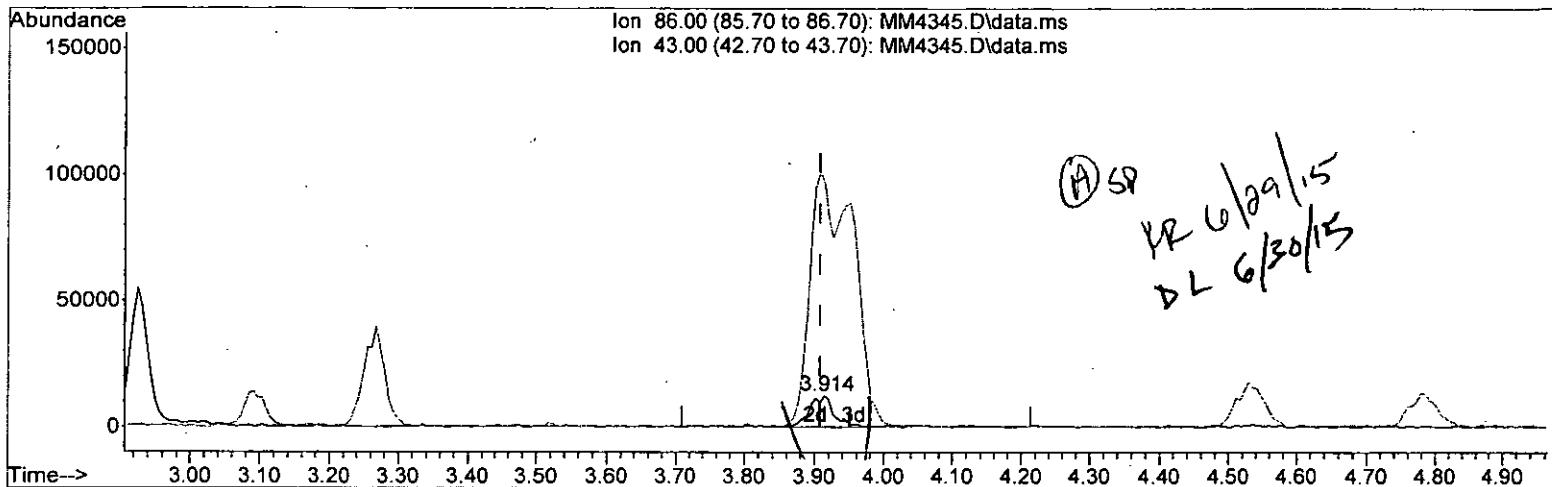
3.914min (+0.006). 8.98 ppb

response 13547

Ion	Exp%	Act%
86.00	100	100
43.00	799.60	786.31
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS  
 Inst : MSVOA-12  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:19:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4345.D\data.ms

(29) Vinyl Acetate

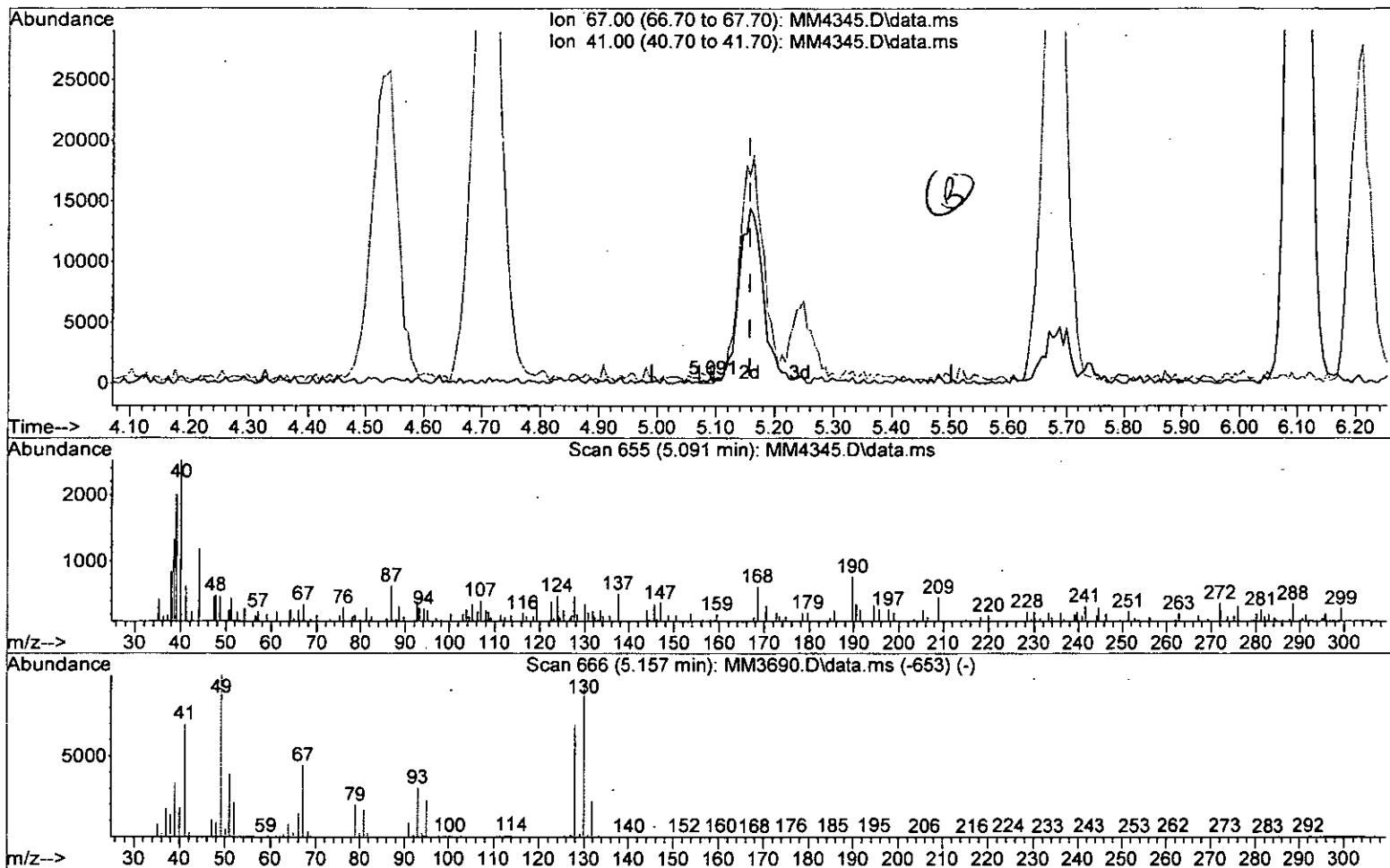
3.914min (+0.006) 19.50 ppb m

response 29426

Ion	Exp%	Act%
86.00	100	100
43.00	799.60	786.31
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:19:17 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4345.D\data.ms

(38) Methacrylonitrile

5.091min (-0.067) 0.15 ppb

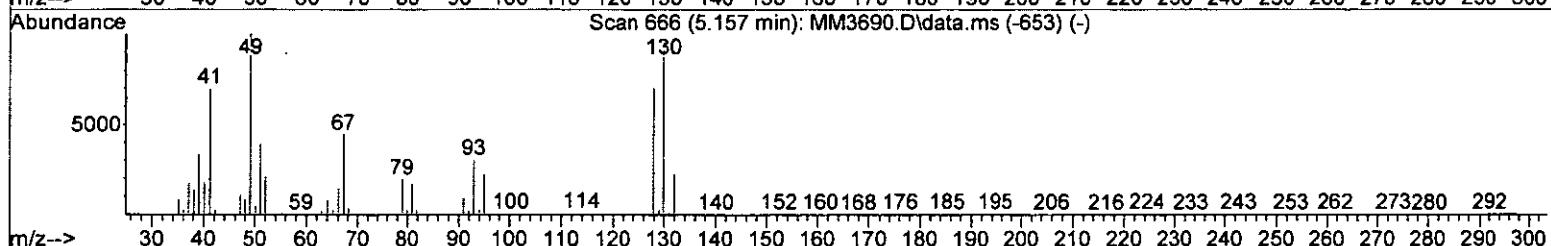
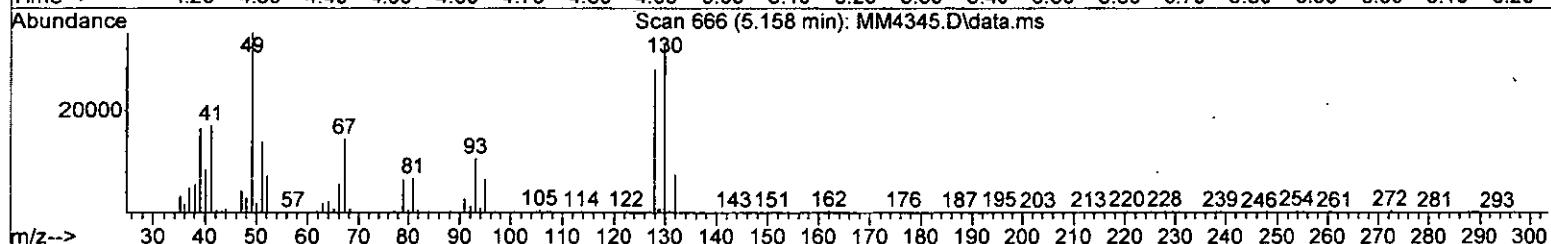
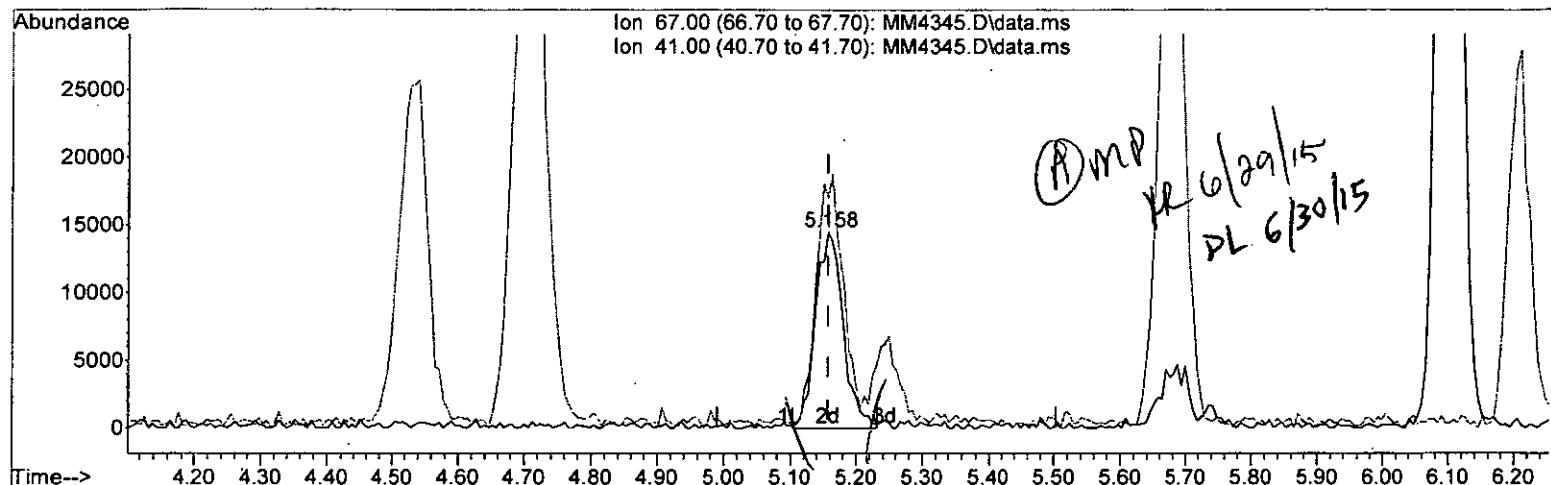
response 299

Ion	Exp%	Act%
67.00	100	100
41.00	159.00	175.07
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS Inst : MSVOA-12  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 29 11:19:17 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4345.D\data.ms

(38) Methacrylonitrile

5.158min (0.000) 21.41 ppb m

response 41656

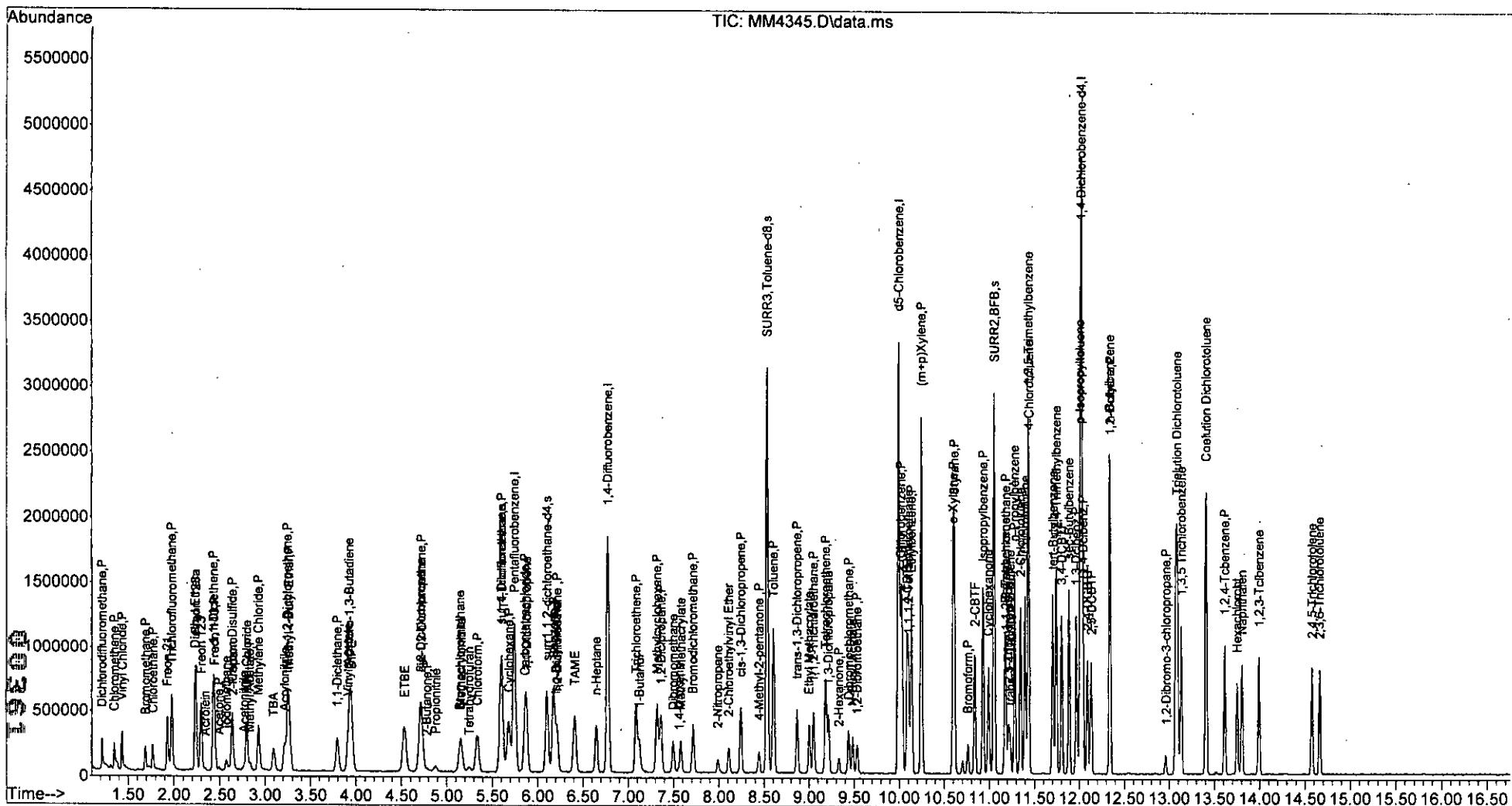
Ion	Exp%	Act%
67.00	100	100
41.00	159.00	117.33#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\062915\  
 Data File : MM4345.D  
 Acq On : 29 Jun 2015 11:03 am  
 Operator : K.Ruest  
 Sample : LCS  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 11:23:45 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 20:44

**Sample Name:** 87-02-3  
**Lab Code:** RQ1507136-07  
**Run Type:** Matrix Spike

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4364.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	295	5.0	1.1	
75-01-4	Vinyl Chloride	269	5.0	1.6	
75-00-3	Chloroethane	249	5.0	1.2	
74-83-9	Bromomethane	139	5.0	1.5	
75-35-4	1,1-Dichloroethene	254	5.0	2.9	
67-64-1	Acetone	225	25	6.2	
75-15-0	Carbon Disulfide	223	5.0	1.1	
75-09-2	Methylene Chloride	249	5.0	3.0	
156-60-5	trans-1,2-Dichloroethene	264	5.0	1.7	
75-34-3	1,1-Dichloroethane	247	5.0	1.0	
156-59-2	cis-1,2-Dichloroethene	260	5.0	1.5	
78-93-3	2-Butanone (MEK)	282	25	4.1	
67-66-3	Chloroform	256	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	247	5.0	1.8	
56-23-5	Carbon Tetrachloride	221	5.0	2.3	
71-43-2	Benzene	261	5.0	1.0	
107-06-2	1,2-Dichloroethane	236	5.0	1.8	
79-01-6	Trichloroethene	260	5.0	1.1	
78-87-5	1,2-Dichloropropane	249	5.0	1.0	
75-27-4	Bromodichloromethane	241	5.0	1.6	
10061-01-5	cis-1,3-Dichloropropene	178	5.0	1.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	262	25	3.4	
108-88-3	Toluene	258	5.0	1.0	
10061-02-6	trans-1,3-Dichloropropene	171	5.0	1.0	
79-00-5	1,1,2-Trichloroethane	258	5.0	1.8	
127-18-4	Tetrachloroethene	238	5.0	1.5	
591-78-6	2-Hexanone	246	25	8.3	
124-48-1	Dibromochloromethane	226	5.0	1.6	
108-90-7	Chlorobenzene	246	5.0	1.5	
100-41-4	Ethylbenzene	226	5.0	1.0	
179601-23-1	m,p-Xylenes	504	10	1.7	
95-47-6	o-Xylene	246	5.0	1.0	
100-42-5	Styrene	149	5.0	1.0	
75-25-2	Bromoform	194	5.0	2.1	
79-34-5	1,1,2,2-Tetrachloroethane	241	5.0	1.3	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Sample Name:** 87-02-3  
**Lab Code:** RQ1507136-07  
**Run Type:** Matrix Spike

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 20:44

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4364.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85-122	6/29/15 20:44	
Toluene-d8	108	87-121	6/29/15 20:44	
Dibromofluoromethane	106	89-119	6/29/15 20:44	

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA12\DATA\062915\  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 *RQ 1507136-05* Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

*N502*

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	913428	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1529049	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1488830	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.022	152	889114	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromoform	5.596	113	436746	52.78	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.56%			
48) surr1,1,2-dichloroetha...	6.102	65	454025	51.37	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 102.74%			
65) SURR3,Toluene-d8	8.535	98	1948552	53.92	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.84%			
70) SURR2,BFB	11.047	95	766217	55.80	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 111.60%			
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	489692	62.83	Qvalue	
3) Chloromethane	1.347	50	320522	42.15	ppb	93
4) Vinyl Chloride	1.433	62	447511	59.05	ppb	99
5) Bromomethane	1.689	94	514240	53.72	ppb	94
6) Chloroethane	1.768	51	107208	19.73	ppb	91
7) Freon 21	1.926	67	316726	49.87	ppb	98
8) Trichlorofluoromethane	1.975	101	895743	56.49	ppb	99
9) Diethyl Ether	2.231	59	668176	46.84	ppb	99
10) Freon 123a	2.237	67	315385	49.99	ppb	97
11) Freon 123	2.298	83	525114	51.88	ppb	98
12) Acrolein	2.341	56	587881	49.99	ppb	99
13) 1,1-Dicethene	2.432	96	19012	28.91	ppb	91
14) Freon 113	2.438	101	341726	50.87	ppb	94
15) Acetone	2.493	43	342729	51.54	ppb	93
16) 2-Propanol	2.646	45	57690	45.06	ppb	96
17) Iodomethane	2.573	142	238999	939.86	ppb	100
18) Carbon Disulfide	2.634	76	263077	32.42	ppb	97
19) Acetonitrile	2.768	40	960485	44.62	ppb	99
20) Allyl Chloride	2.798	76	44534	270.98	ppb	# 79
21) Methyl Acetate	2.835	43	94573	23.39	ppb	96
22) Methylene Chloride	2.926	84	149226	53.52	ppb	93
23) TBA	3.091	59	356083	49.88	ppb	94
24) Acrylonitrile	3.213	53	468441	1032.80	ppb	99
25) Methyl-t-Butyl Ether	3.268	73	352000	241.87	ppb	98
26) trans-1,2-Dichloroethene	3.249	96	907717	52.01	ppb	99
28) 1,1-Dicethane	3.792	63	396649	52.84	ppb	90
29) Vinyl Acetate	3.902	86	612513	49.39	ppb	96
30) DIPE	3.944	45	65222	43.86	ppb	97
31) 2-Chloro-1,3-Butadiene	3.932	53	1076306	49.92	ppb	96
32) ETBE	4.530	59	415767	39.20	ppb	99
33) 2,2-Dichloropropane	4.706	77	549747	46.65	ppb	96
34) cis-1,2-Dichloroethene	4.719	96	95008	46.53	ppb	99
35) 2-Butanone	4.786	43	141481	51.96	ppb	93
36) Propionitrile	4.865	54	275.36	56.46	ppb	89

*6/30/15*

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUADATA\MSVOA12\DATA\062915\

Data File : MM4364.D

Acq On : 29 Jun 2015 8:44 pm

Operator : K.Ruest

Sample : R1505119-001MS|5.0

Inst : MSVOA-12

Misc : CB&amp;I 13429 T4

ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015

Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.145	130	246427	55.71	ppb	94
38) Methacrylonitrile	5.164	67	82115	42.82	ppb	# 80
39) Tetrahydrofuran	5.243	42	61678	53.89	ppb	90
40) Chloroform	5.334	83	669143	51.20	ppb	98
41) 1,1,1-Trichloroethane	5.596	97	621815	49.48	ppb	97
42) TAME	6.407	73	954891	50.95	ppb	94
44) Cyclohexane	5.676	41	331713	47.76	ppb	96
46) Carbontetrachloride	5.865	121	147318	44.28	ppb	98
47) 1,1-Dichloropropene	5.871	75	507888	48.27	ppb	93
49) Benzene	6.176	78	1581196	52.18	ppb	97
50) 1,2-Dichloroethane	6.212	62	457879	47.14	ppb	97
51) Iso-Butyl Alcohol	6.212	43	185940	923.75	ppb	99
52) n-Heptane	6.645	43	303193	46.98	ppb	97
53) 1-Butanol	7.121	56	338923	2651.41	ppb	100
54) Trichloroethene	7.084	130	424682	51.92	ppb	97
55) Methylcyclohexane	7.316	55	398853	52.13	ppb	96
56) 1,2-Diclpropane	7.358	63	361149	49.82	ppb	97
57) Dibromomethane	7.492	93	200049	51.24	ppb	97
58) 1,4-Dioxane	7.553	88	51499	884.27	ppb	86
59) Methyl Methacrylate	7.578	69	156568	44.28	ppb	94
60) Bromodichloromethane	7.712	83	503346	48.12	ppb	95
61) 2-Nitropropane	7.986	41	102037	75.44	ppb	100
63) cis-1,3-Dichloropropene	8.242	75	432483	35.52	ppb	99
64) 4-Methyl-2-pentanone	8.443	43	216880	52.49	ppb	98
66) Toluene	8.602	91	1791705	51.54	ppb	100
67) trans-1,3-Dichloropropene	8.864	75	355861	34.15	ppb	98
68) Ethyl Methacrylate	8.998	69	329252	43.54	ppb	97
69) 1,1,2-Trichloroethane	9.047	97	289231	51.59	ppb	94
72) Tetrachloroethene	9.181	164	325071	47.60	ppb	94
73) 2-Hexanone	9.327	43	148490	49.27	ppb	89
74) 1,3-Dichloropropane	9.212	76	505263	51.68	ppb	98
75) Dibromochloromethane	9.437	129	332421	45.17	ppb	96
76) N-Butyl Acetate	9.480	43	375580	47.44	ppb	98
77) 1,2-Dibromoethane	9.529	107	285445	49.44	ppb	94
78) Chlorobenzene	10.016	112	1190859	49.14	ppb	97
79) 3-CBTF	10.035	180	572057	50.06	ppb	97
80) 4-CBTF	10.083	180	534262	51.62	ppb	99
81) 1,1,1,2-Tetrachloroethane	10.102	131	402654	49.39	ppb	94
82) Ethylbenzene	10.132	106	592535	45.17	ppb	98
83) (m+p)Xylene	10.242	106	1611217	100.76	ppb	100
84) o-Xylene	10.595	106	760892	49.14	ppb	95
85) Styrene	10.608	104	793678	29.86	ppb	98
87) Bromoform	10.760	173	176556	38.79	ppb	98
88) 2-CBTF	10.839	180	576192	44.67	ppb	92
89) Isopropylbenzene	10.931	105	1917866	46.46	ppb	99
90) Cyclohexanone	10.992	55	159159	650.51	ppb	85
91) trans-1,4-Dichloro-2-B...	11.229	53	24675	11.11	ppb	92
92) 1,1,2,2-Tetrachloroethane	11.181	83	362379	48.23	ppb	99
93) Bromobenzene	11.175	156	475705	46.22	ppb	97
94) 1,2,3-Trichloropropane	11.211	110	108179	47.32	ppb	92
95) n-Propylbenzene	11.278	91	2211053	47.60	ppb	99

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUADATA\MSVOA12\DATA\062915  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

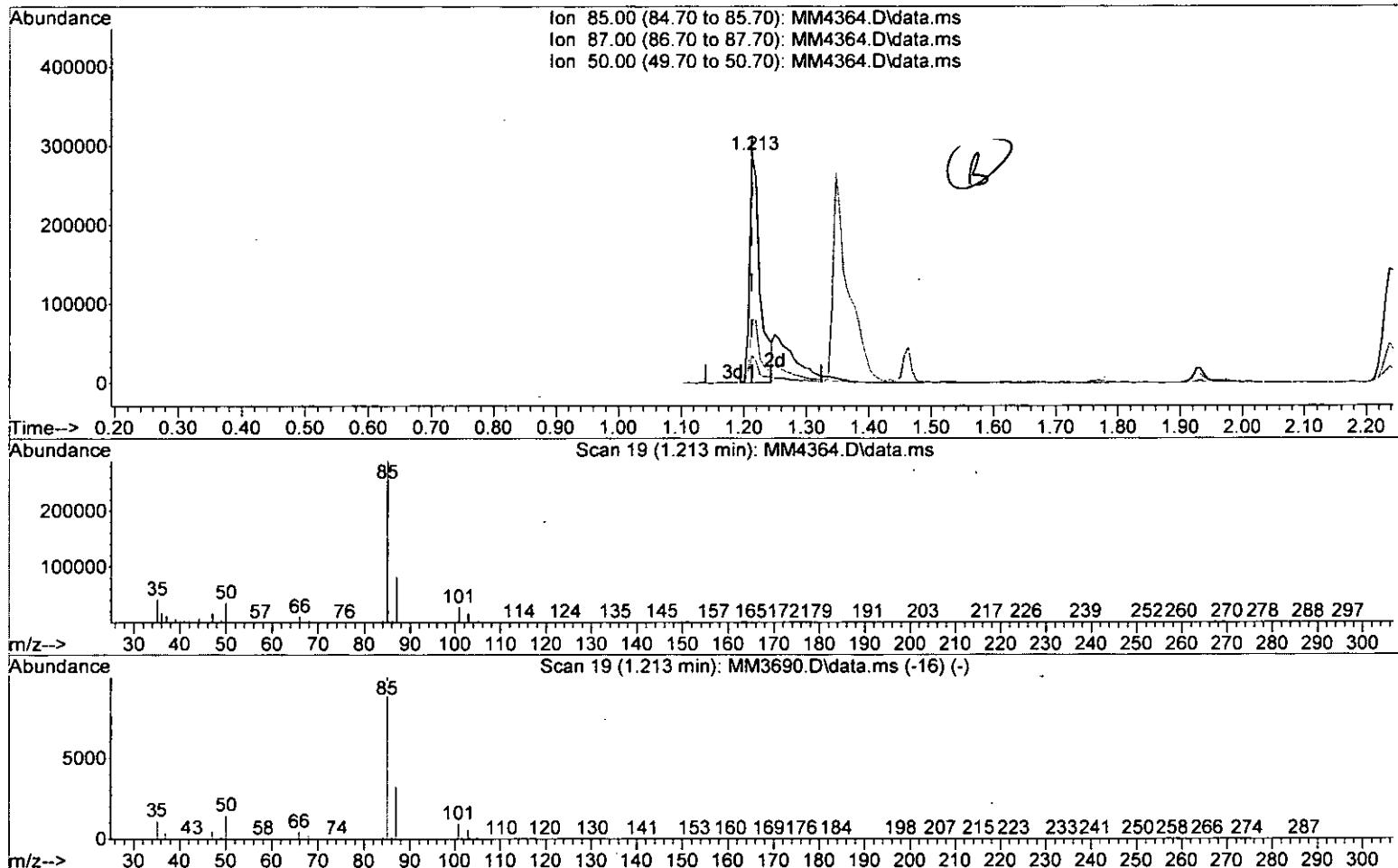
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 2-Chlorotoluene	11.345	91	1337298	46.71	ppb	99
97) 3-Chlorotoluene	11.394	91	1408937	46.45	ppb	98
98) 4-Chlorotoluene	11.437	91	1655676	46.78	ppb	99
99) 1,3,5-Trimethylbenzene	11.431	105	1641590	46.41	ppb	98
100) tert-Butylbenzene	11.705	119	1313843	46.11	ppb	99
101) 1,2,4-Trimethylbenzene	11.742	105	1675498	46.93	ppb	99
102) 3,4-DCBTF	11.803	214	389411	46.12	ppb	96
103) sec-Butylbenzene	11.882	105	1839127	47.08	ppb	99
104) p-Isopropyltoluene	12.004	119	1621512	48.80	ppb	99
105) 1,3-Dclbenz	11.967	146	962912	48.13	ppb	97
106) 1,4-Dclbenz	12.040	146	986908	47.36	ppb	97
107) 2,4-DCBTF	12.089	214	352216	47.27	ppb	99
108) 2,5-DCBTF	12.132	214	410221	48.96	ppb	98
109) n-Butylbenzene	12.333	91	1414968	47.45	ppb	99
110) 1,2-Dclbenz	12.339	146	892313	47.72	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.955	157	69402	45.64	ppb	94
112) Trielution Dichlorotol...	13.077	125	2196080	139.44	ppb	98
113) 1,3,5 Trichlorobenzene	13.132	180	576183	49.13	ppb	99
114) Coelution Dichlorotoluene	13.406	125	1601630	94.93	ppb	99
115) 1,2,4-Tcbenzene	13.613	180	520730	48.48	ppb	98
116) Hexachlorobt	13.753	225	179519	43.41	ppb	94
117) Naphthalen	13.802	128	1146508	50.86	ppb	99
118) 1,2,3-Tclbenzene	13.991	180	429146	48.87	ppb	95
119) 2,4,5-Trichlorotolene	14.576	159	293689	41.83	ppb	96
120) 2,3,6-Trichlorotoluene	14.662	159	264879	43.87	ppb	91

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4364.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 42.15 ppb

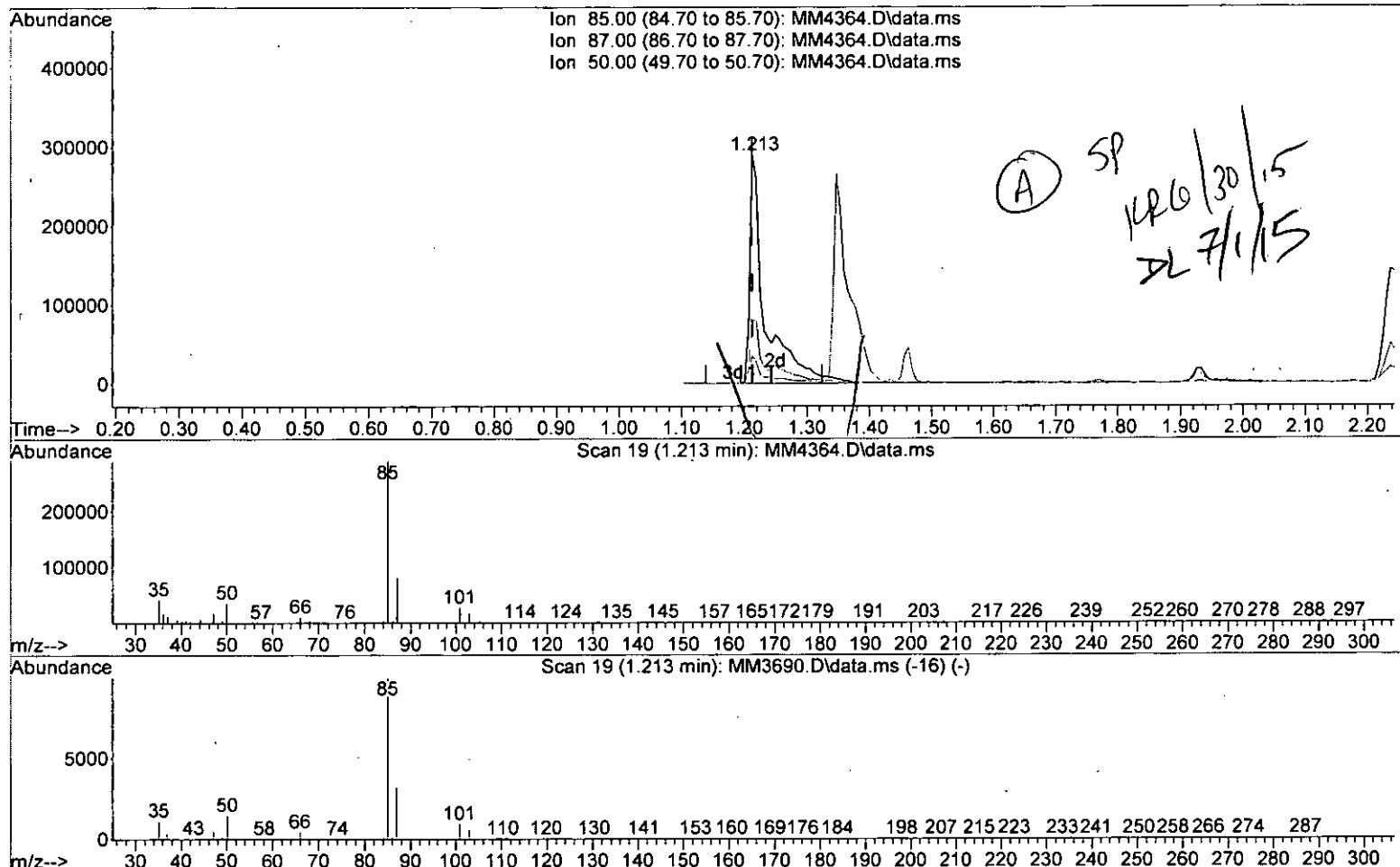
response 328522

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	27.94
50.00	14.50	12.05
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4364.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 62.83 ppb m

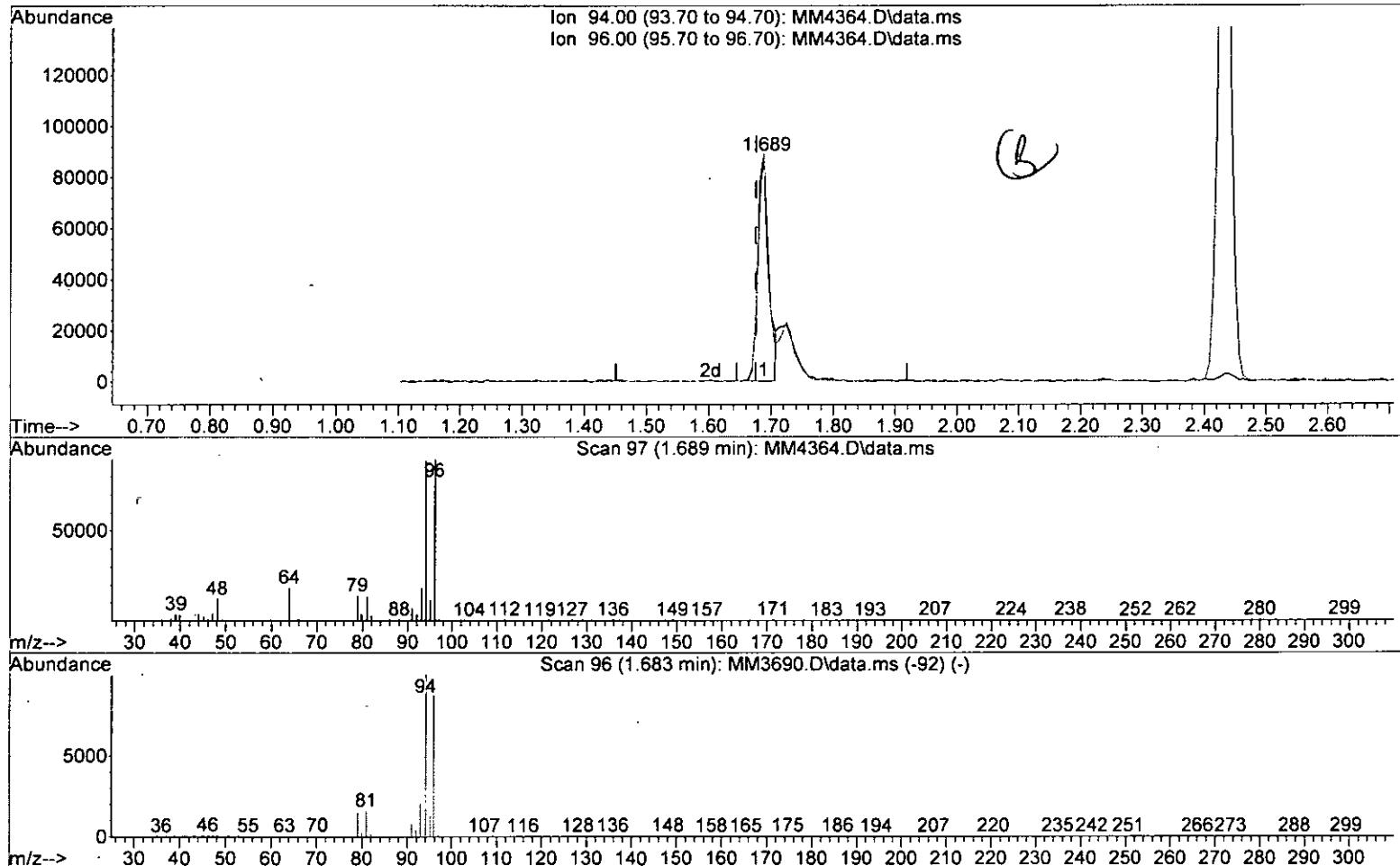
response 489692

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	27.94
50.00	14.50	12.05
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4364.D\data.ms

(5) Bromomethane (P)

1.689min (+0.012) 19.73 ppb

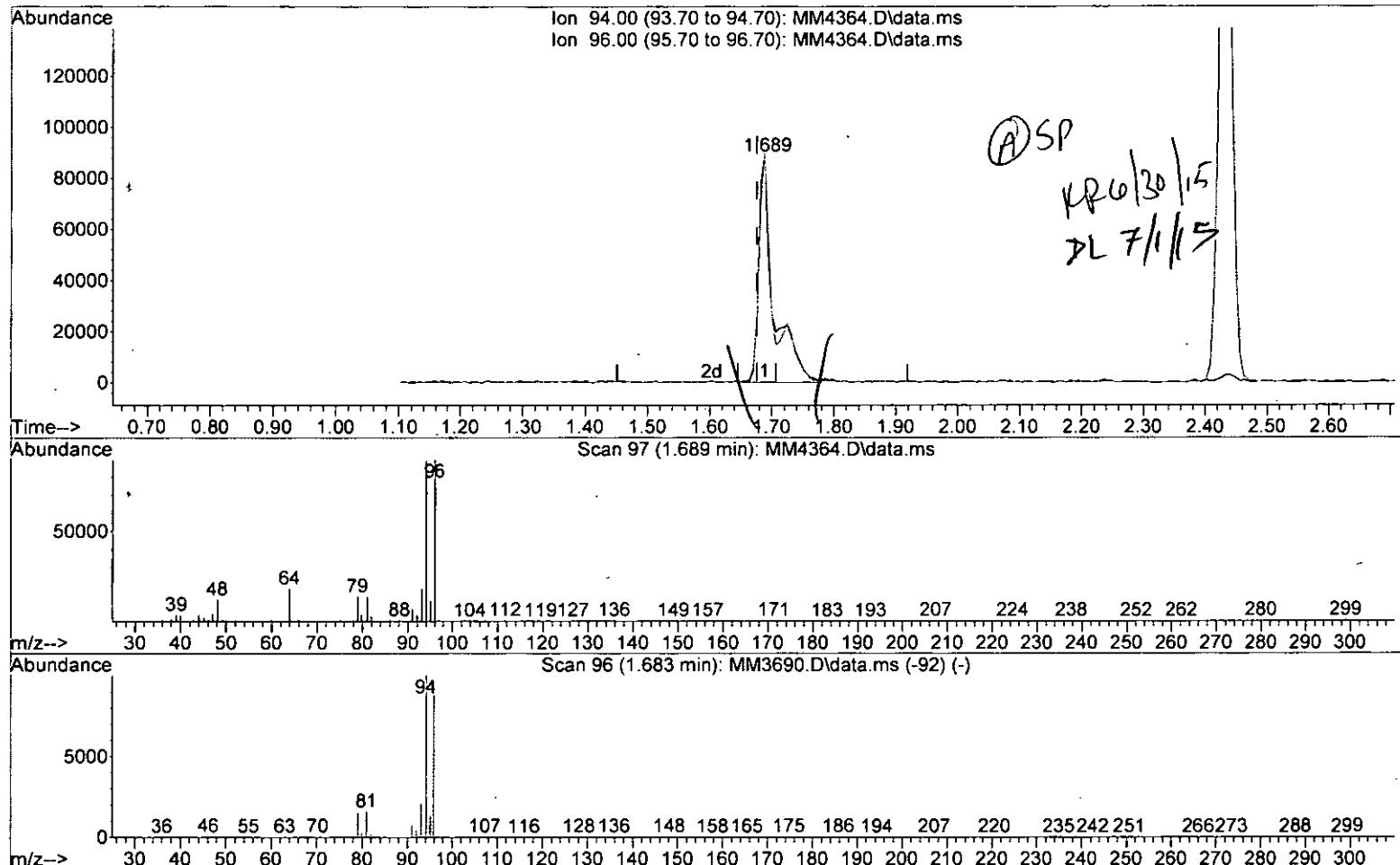
response 107208

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	100.81
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



(5) Bromomethane (P)

1.689min (+0.012) 27.89 ppb m

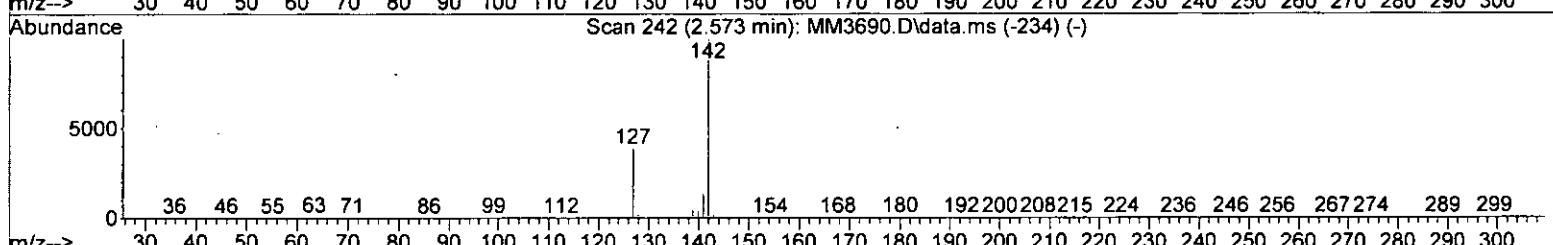
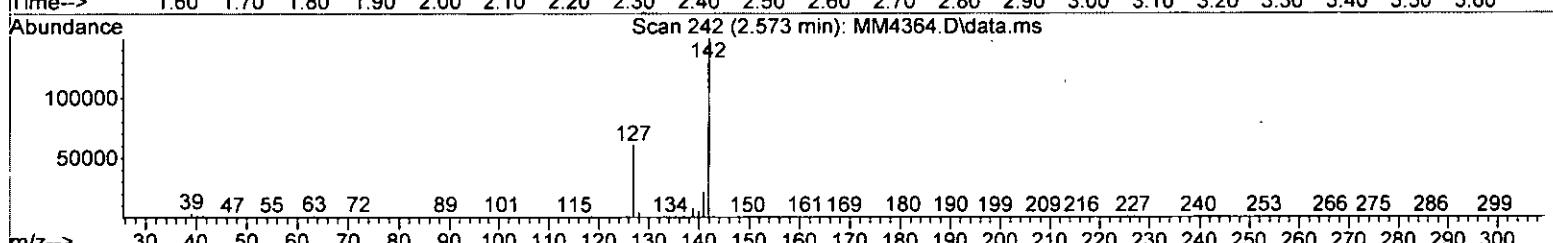
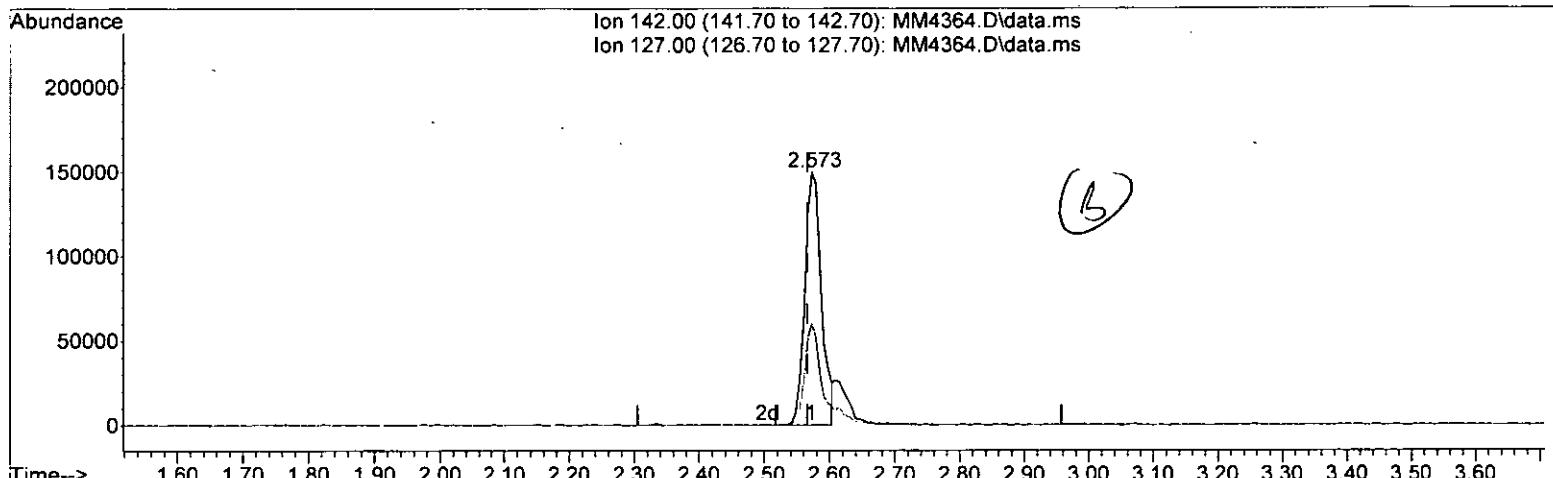
response 151542

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	100.81
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4364.D\data.ms

(17) Iodomethane

2.573min (+0.007) 32.42 ppb

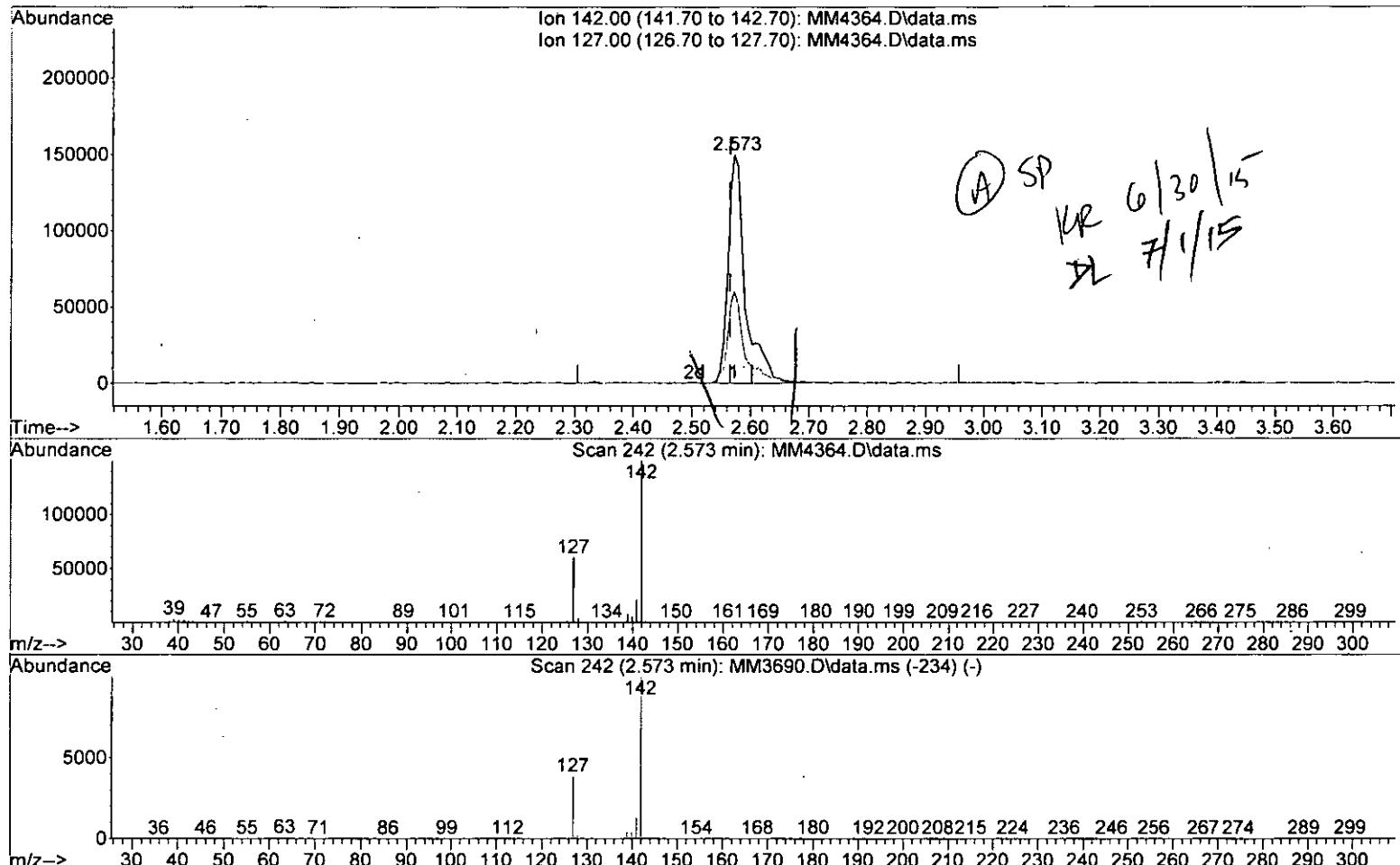
response 263077

Ion	Exp%	Act%
142.00	100	100
127.00	38.60	40.15
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4364.D  
 Acq On : 29 Jun 2015 8:44 pm  
 Operator : K.Ruest  
 Sample : R1505119-001MS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 29 21:00:55 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4364.D\data.ms

## (17) Iodomethane

2.573min (+0.007) 37.21 ppb m

response 303521

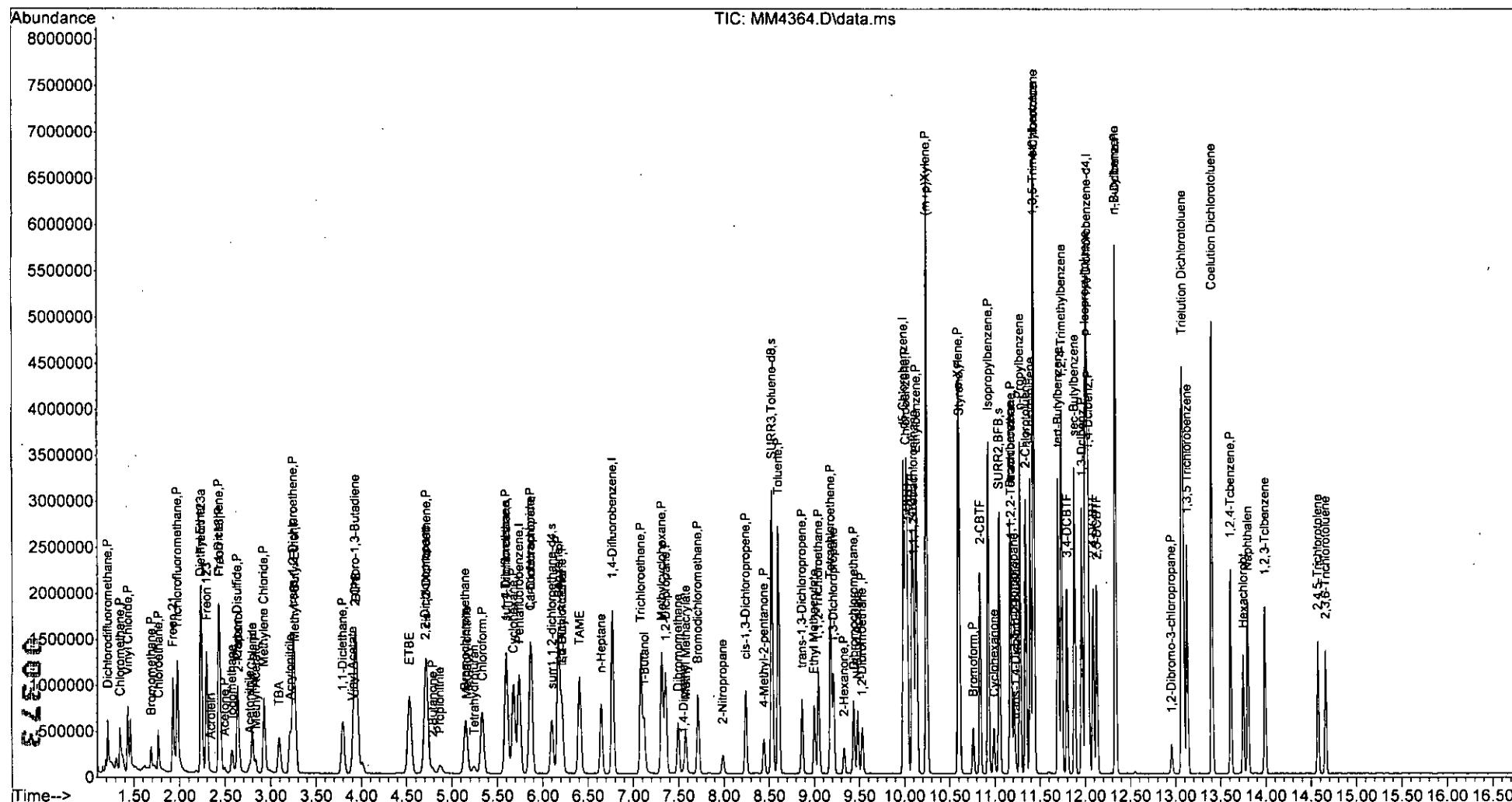
Ion	Exp%	Act%
142.00	100	100
127.00	38.60	40.15
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA12\DATA\062915\  
Data File : MM4364.D  
Acq On : 29 Jun 2015 8:44 pm  
Operator : K.Ruest  
Sample : R1505119-001MS|5.0  
Misc : CB&I 13429 T4  
ALS Vial : 24 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 21:00:55 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration



## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 21:15

**Sample Name:** 87-02-3  
**Lab Code:** RQ1507136-08  
**Run Type:** Duplicate Matrix Spike

**Units:** µg/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4365.D\  
**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
74-87-3	Chloromethane	297	5.0	1.1	
75-01-4	Vinyl Chloride	275	5.0	1.6	
75-00-3	Chloroethane	219	5.0	1.2	
74-83-9	Bromomethane	138	5.0	1.5	
75-35-4	1,1-Dichloroethene	260	5.0	2.9	
67-64-1	Acetone	223	25	6.2	
75-15-0	Carbon Disulfide	226	5.0	1.1	
75-09-2	Methylene Chloride	261	5.0	3.0	
156-60-5	trans-1,2-Dichloroethene	266	5.0	1.7	
75-34-3	1,1-Dichloroethane	259	5.0	1.0	
156-59-2	cis-1,2-Dichloroethene	269	5.0	1.5	
78-93-3	2-Butanone (MEK)	273	25	4.1	
67-66-3	Chloroform	259	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	245	5.0	1.8	
56-23-5	Carbon Tetrachloride	232	5.0	2.3	
71-43-2	Benzene	263	5.0	1.0	
107-06-2	1,2-Dichloroethane	244	5.0	1.8	
79-01-6	Trichloroethene	265	5.0	1.1	
78-87-5	1,2-Dichloropropane	259	5.0	1.0	
75-27-4	Bromodichloromethane	246	5.0	1.6	
10061-01-5	cis-1,3-Dichloropropene	177	5.0	1.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	262	25	3.4	
108-88-3	Toluene	264	5.0	1.0	
10061-02-6	trans-1,3-Dichloropropene	173	5.0	1.0	
79-00-5	1,1,2-Trichloroethane	269	5.0	1.8	
127-18-4	Tetrachloroethene	246	5.0	1.5	
591-78-6	2-Hexanone	239	25	8.3	
124-48-1	Dibromochloromethane	234	5.0	1.6	
108-90-7	Chlorobenzene	246	5.0	1.5	
100-41-4	Ethylbenzene	231	5.0	1.0	
179601-23-1	m,p-Xylenes	502	10	1.7	
95-47-6	o-Xylene	255	5.0	1.0	
100-42-5	Styrene	154	5.0	1.0	
75-25-2	Bromoform	203	5.0	2.1	
79-34-5	1,1,2,2-Tetrachloroethane	251	5.0	1.3	

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** CB&I  
**Project:** Textron Wheatfield/148900  
**Sample Matrix:** Water

**Service Request:** R1505119  
**Date Collected:** 6/25/15 0900  
**Date Received:** 6/25/15  
**Date Analyzed:** 6/29/15 21:15

**Sample Name:** 87-02-3  
**Lab Code:** RQ1507136-08  
**Run Type:** Duplicate Matrix Spike

**Units:** Percent  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260C  
**Data File Name:** I:\ACQUADATA\MSVOA12\DATA\062915\MM4365.D\

**Analysis Lot:** 451047  
**Instrument Name:** R-MS-12  
**Dilution Factor:** 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	114	85-122	6/29/15 21:15	
Toluene-d8	107	87-121	6/29/15 21:15	
Dibromofluoromethane	108	89-119	6/29/15 21:15	

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUADATA\MSVOA12\DATA\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0 RQ1507136-06 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

↑ SO<sub>2</sub>

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	5.743	168	925707	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1530809	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1504026	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.022	152	896800	50.00	ppb	0.00
<b>System Monitoring Compounds</b>						
45) surr4,Dibromomethane	5.603	113	446360	53.88	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 107.76%			
48) surr1,1,2-dichloroetha...	6.102	65	457056	51.65	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 103.30%			
65) SURR3,Toluene-d8	8.535	98	1941060	53.65	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.30%			
70) SURR2,BFB	11.053	95	783309	56.98	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 113.96%			
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.213	85	464115	58.76	ppb	97
3) Chloromethane	1.347	50	456831	59.48	ppb	98
4) Vinyl Chloride	1.433	62	533887	55.03	ppb	91
5) Bromomethane	1.689	94 <sup>51</sup>	111552	20.25	ppb	77.53
6) Chloroethane	1.768	64 <sup>613</sup>	281547	43.74	ppb	99
7) Freon 21	1.926	67	902270	56.14	ppb	97
8) Trichlorofluoromethane	1.975	101	685487	47.41	ppb	97
9) Diethyl Ether	2.231	59	321876	50.35	ppb	99
10) Freon 123a	2.237	67	538603	52.51	ppb	93
11) Freon 123	2.298	83	597968	50.17	ppb	98
12) Acrolein	2.341	56	17818	26.73	ppb	91
13) 1,1-Dicethene	2.432	96	353533	51.93	ppb	96
14) Freon 113	2.439	101	347600	51.57	ppb	93
15) Acetone	2.487	43	57972	44.68	ppb	83
16) 2-Propanol	2.646	45	266784	1035.21	ppb	99
17) Iodomethane	2.573	142	374465	45.03	ppb	96
18) Carbon Disulfide	2.634	76	983915	45.10	ppb	100
19) Acetonitrile	2.768	40	49521	297.33	ppb	94
20) Allyl Chloride	2.798	76	99627	24.32	ppb	# 84
21) Methyl Acetate	2.835	43	156773	55.48	ppb	93
22) Methylene Chloride	2.926	84	377625	52.19	ppb	99
23) TBA	3.097	59	493679	1074.00	ppb	99
24) Acrylonitrile	3.213	53	384900	260.97	ppb	95
25) Methyl-t-Butyl Ether	3.268	73	950854	53.76	ppb	97
26) trans-1,2-Dichloroethene	3.249	96	404986	53.24	ppb	94
28) 1,1-Dicethane	3.792	63	651801	51.86	ppb	96
29) Vinyl Acetate	3.908	86	62570	41.52	ppb	# 88
30) DIPE	3.950	45	1074998	49.20	ppb	98
31) 2-Chloro-1,3-Butadiene	3.926	53	508939	37.21	ppb	99
32) ETBE	4.536	59	1037160	47.63	ppb	95
33) 2,2-Dichloropropane	4.712	77	562069	46.94	ppb	99
34) cis-1,2-Dichloroethene	4.719	96	436651	53.85	ppb	90
35) 2-Butanone	4.780	43	92973	54.52	ppb	92
36) Propionitrile	4.871	54	151931	291.78	ppb	92

KF  
6/30/15

Data Path : I:\ACQUDATA\MSVOA12\DATA\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
37) Bromochloromethane	5.145	130	246831	55.06	ppb	95
38) Methacrylonitrile	5.158	67	88323	45.45	ppb	# 70
39) Tetrahydrofuran	5.249	42	67501	58.20	ppb	79
40) Chloroform	5.334	83	685553	51.76	ppb	96
41) 1,1,1-Trichloroethane	5.596	97	624147	49.00	ppb	99
42) TAME	6.407	73	976273	51.40	ppb	94
44) Cyclohexane	5.676	41	328711	47.28	ppb	96
46) Carbontetrachloride	5.865	121	154860	46.49	ppb	91
47) 1,1-Dichloropropene	5.877	75	506100	48.04	ppb	95
49) Benzene	6.176	78	1593539	52.53	ppb	97
50) 1,2-Dichloroethane	6.212	62	474832	48.82	ppb	99
51) Iso-Butyl Alcohol	6.212	43	197617	980.64	ppb	90
52) n-Heptane	6.645	43	300650	46.53	ppb	96
53) 1-Butanol	7.121	56	346555	2708.00	ppb	96
54) Trichloroethene	7.084	130	433322	52.91	ppb	94
55) Methylcyclohexane	7.316	55	397995	51.96	ppb	90
56) 1,2-Diclpropane	7.358	63	376146	51.83	ppb	99
57) Dibromomethane	7.492	93	205404	52.55	ppb	97
58) 1,4-Dioxane	7.553	886087452106	893.66	ppb	1043.39	97
59) Methyl Methacrylate	7.578	69	172214	48.65	ppb	85
60) Bromodichloromethane	7.712	83	515589	49.24	ppb	97
61) 2-Nitropropane	7.986	41	109402	80.79	ppb	91
63) cis-1,3-Dichloropropene	8.242	75	432631	35.49	ppb	98
64) 4-Methyl-2-pentanone	8.443	43	216545	52.35	ppb	96
66) Toluene	8.602	91	1835302	52.74	ppb	99
67) trans-1,3-Dichloropropene	8.864	75	361722	34.67	ppb	97
68) Ethyl Methacrylate	8.998	69	341734	45.13	ppb	91
69) 1,1,2-Trichloroethane	9.047	97	302466	53.88	ppb	92
72) Tetrachloroethene	9.181	164	339797	49.26	ppb	96
73) 2-Hexanone	9.327	43	145609	47.82	ppb	91
74) 1,3-Dichloropropane	9.212	76	530924	53.76	ppb	99
75) Dibromochloromethane	9.437	129	348429	46.86	ppb	98
76) N-Butyl Acetate	9.480	43	389717	48.73	ppb	98
77) 1,2-Dibromoethane	9.529	107	296890	50.91	ppb	99
78) Chlorobenzene	10.016	112	1203575	49.16	ppb	97
79) 3-CBTF	10.035	180	594313	51.49	ppb	99
80) 4-CBTF	10.083	180	543009	51.93	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.102	131	415144	50.41	ppb	91
82) Ethylbenzene	10.132	106	612026	46.18	ppb	98
83) (m+p)Xylene	10.248	106	1623319	100.49	ppb	99
84) o-Xylene	10.595	106	799263	51.09	ppb	94
85) Styrene	10.608	104	825952	30.76	ppb	98
87) Bromoform	10.760	173	186296	40.58	ppb	93
88) 2-CBTF	10.839	180	600687	46.17	ppb	90
89) Isopropylbenzene	10.931	105	1941018	46.62	ppb	99
90) Cyclohexanone	10.992	55	160016	648.40	ppb	86
91) trans-1,4-Dichloro-2-B...	11.230	53	27445	12.25	ppb	90
92) 1,1,2,2-Tetrachloroethane	11.181	83	380716	50.24	ppb	96
93) Bromobenzene	11.175	156	493618	47.55	ppb	96
94) 1,2,3-Trichloropropane	11.211	110	107154	46.47	ppb	91
95) n-Propylbenzene	11.278	91	2246041	47.94	ppb	99

## Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\MSVOA12\DATA\062915\

Data File : MM4365.D

Acq On : 29 Jun 2015 9:15 pm

Operator : K.Ruest

Sample : R1505119-001DMS|5.0

Inst : MSVOA-12

Misc : CB&amp;I 13429.T4

ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Jun 05 14:19:46 2015

Response via : Initial Calibration

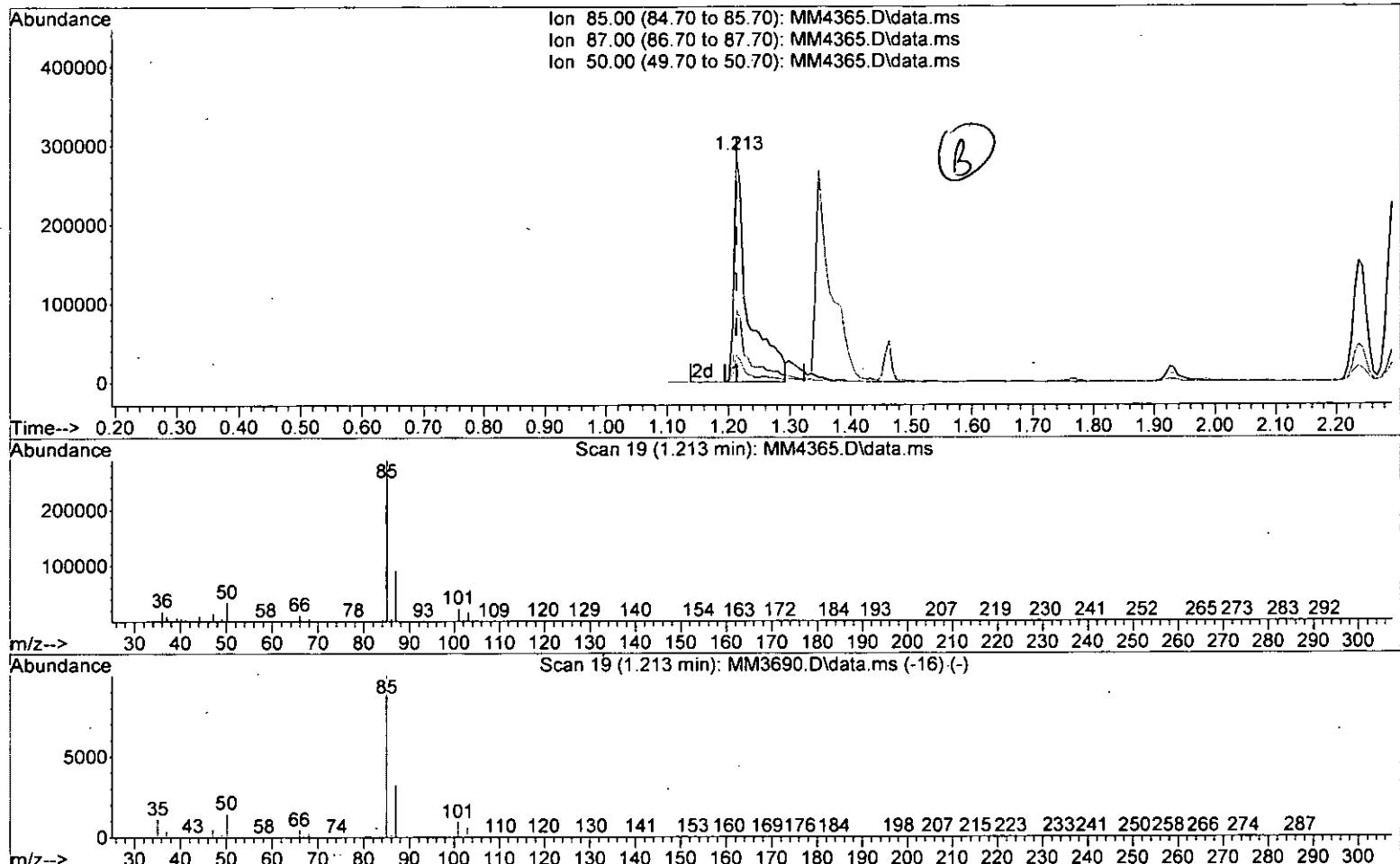
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
96) 2-Chlorotoluene	11.345	91	1357820	47.02	ppb	99
97) 3-Chlorotoluene	11.394	91	1488287	48.65	ppb	97
98) 4-Chlorotoluene	11.437	91	1632650	45.73	ppb	98
99) 1, 3, 5-Trimethylbenzene	11.431	105	1659875	46.53	ppb	99
100) tert-Butylbenzene	11.705	119	1341215	46.67	ppb	99
101) 1, 2, 4-Trimethylbenzene	11.742	105	1702761	47.28	ppb	99
102) 3, 4-DCBTF	11.803	214	395962	46.49	ppb	95
103) sec-Butylbenzene	11.882	105	1851615	46.99	ppb	98
104) p-Isopropyltoluene	12.004	119	1648887	49.20	ppb	98
105) 1, 3-Dclbenz	11.967	146	965618	47.85	ppb	98
106) 1, 4-Dclbenz	12.040	146	991110	47.15	ppb	98
107) 2, 4-DCBTF	12.089	214	359276	47.80	ppb	96
108) 2, 5-DCBTF	12.132	214	414936	49.10	ppb	97
109) n-Butylbenzene	12.333	91	1419660	47.20	ppb	99
110) 1, 2-Dclbenz	12.339	146	913043	48.41	ppb	99
111) 1, 2-Dibromo-3-chloropr...	12.961	157	72283	47.13	ppb	92
112) Trielution Dichlorotol...	13.077	125	2270015	142.90	ppb	98
113) 1, 3, 5 Trichlorobenzene	13.132	180	600170	50.73	ppb	100
114) Coelution Dichlorotoluene	13.406	125	1667168	97.97	ppb	100
115) 1, 2, 4-Tcbenzene	13.613	180	544272	50.24	ppb	98
116) Hexachlorobt	13.753	225	196406	47.09	ppb	95
117) Naphthalen	13.802	128	1224303	53.85	ppb	99
118) 1, 2, 3-Tclbenzene	13.991	180	461712	52.12	ppb	96
119) 2, 4, 5-Trichlorotolene	14.576	159	356955	50.41	ppb	93
120) 2, 3, 6-Trichlorotoluene	14.662	159	317779	52.18	ppb	90

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

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msv0a12\Data\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUADATA\MSV0A12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4365.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 58.76 ppb

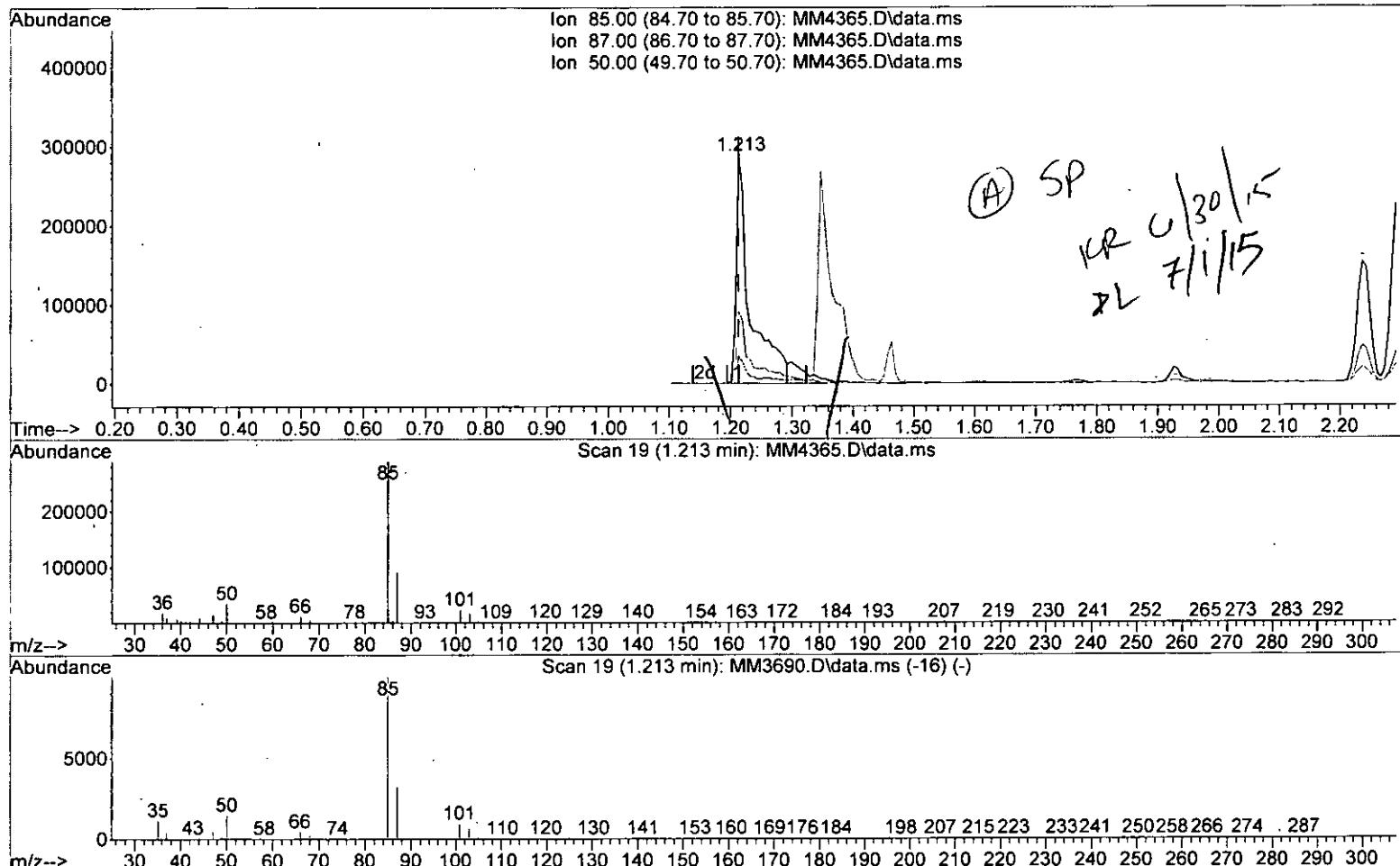
response 464115

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	31.43
50.00	14.50	11.85
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4365.D\data.ms

(2) Dichlorodifluoromethane (P)

1.213min (-0.000) 65.75 ppb m

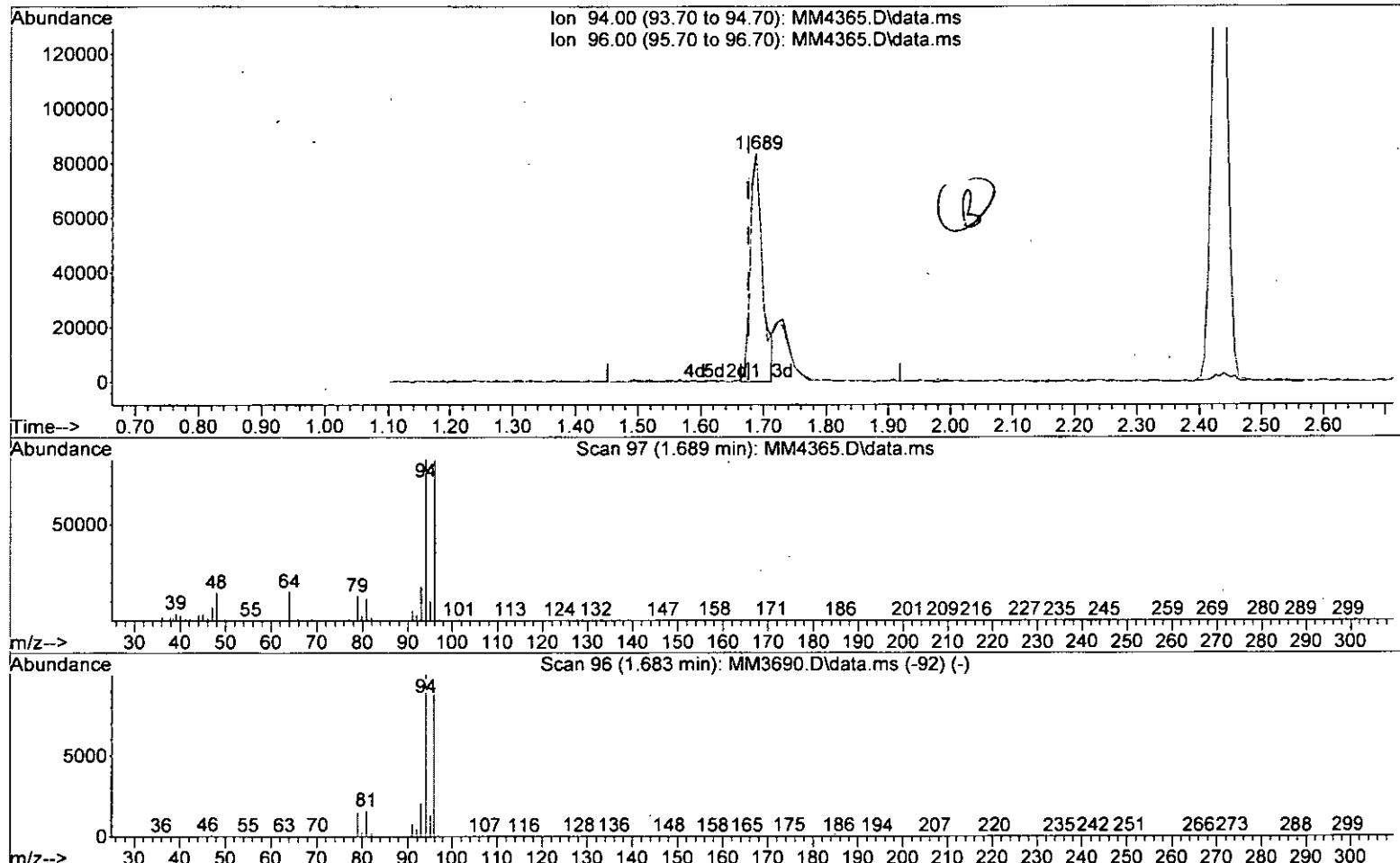
response 519327

Ion	Exp%	Act%
85.00	100	100
87.00	32.00	31.43
50.00	14.50	11.85
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4365.D\data.ms

(5) Bromomethane (P)

1.689min (+0.012) 20.25 ppb

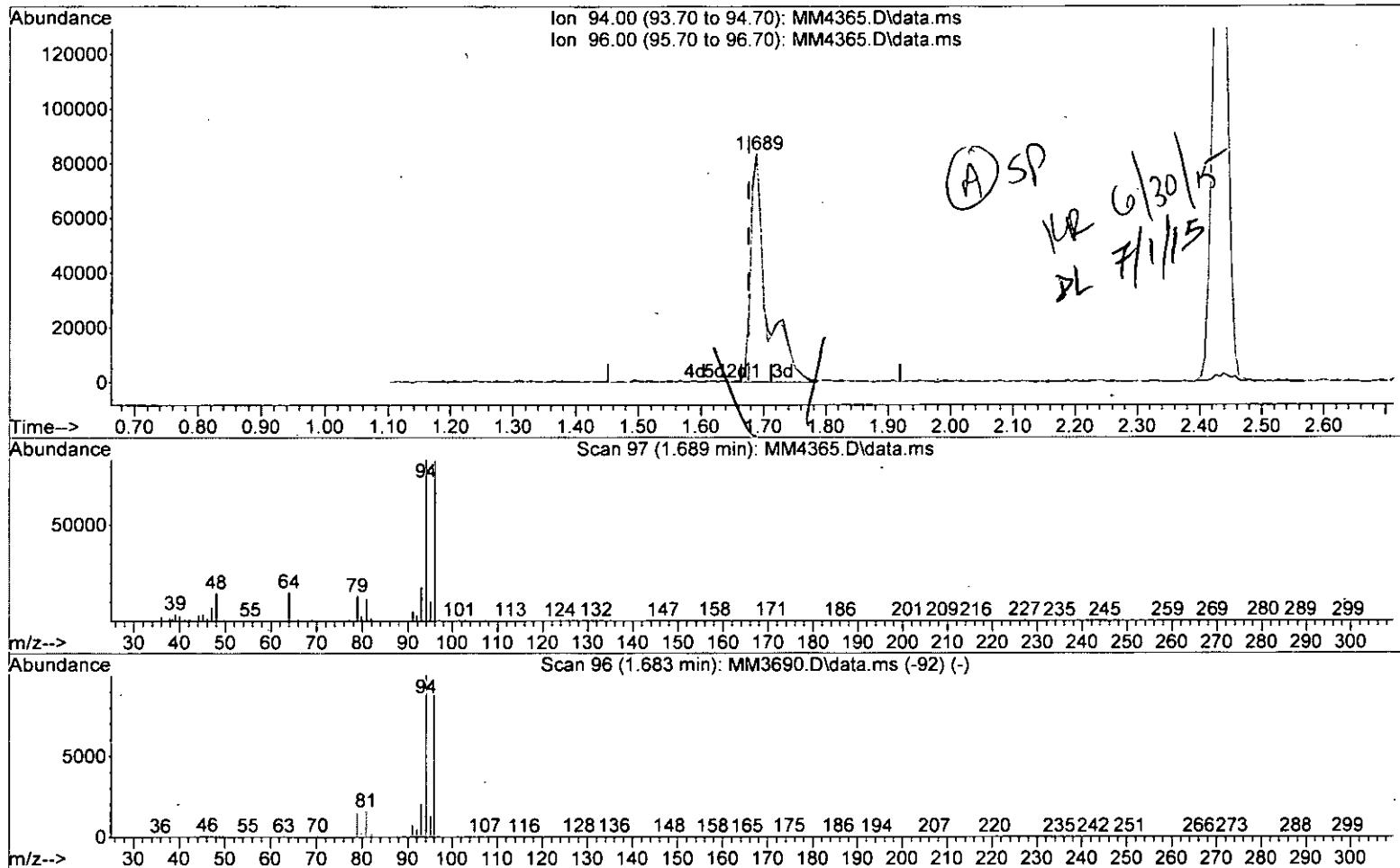
response 111552

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	99.27
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4365.D\data.ms

(5) Bromomethane (P)

1.689min (+0.012) 27.53 ppb m

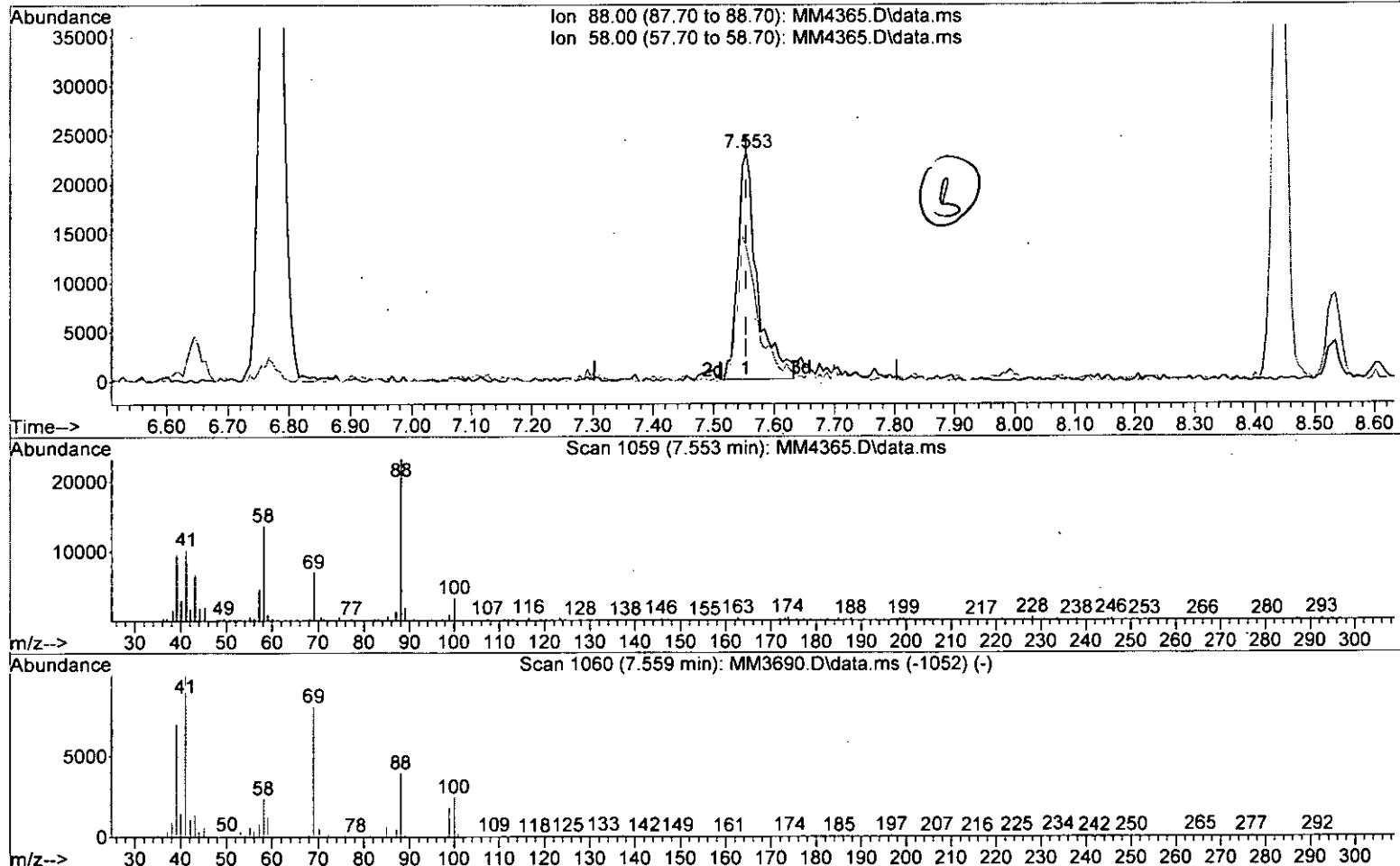
response 151613

Ion	Exp%	Act%
94.00	100	100
96.00	91.80	99.27
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUUDATA\msvoa12\Data\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0 Inst : MSVOA-12  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUUDATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4365.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 893.66 ppb

response 52106

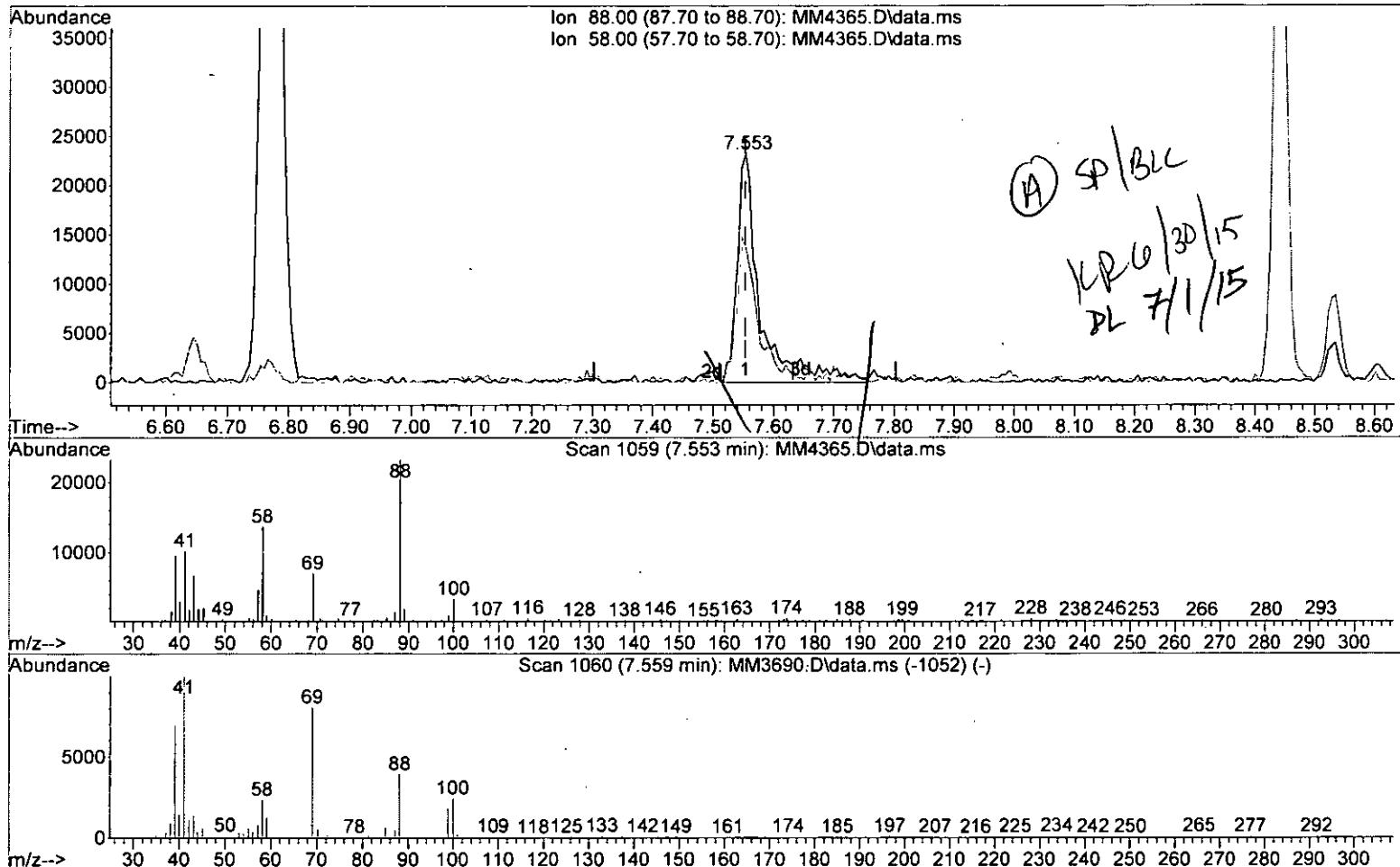
Ion	Exp%	Act%
88.00	100	100
58.00	60.70	58.74
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : I:\ACQUADATA\msvoa12\Data\062915\  
 Data File : MM4365.D  
 Acq On : 29 Jun 2015 9:15 pm  
 Operator : K.Ruest  
 Sample : R1505119-001DMS|5.0  
 Misc : CB&I 13429 T4  
 ALS Vial : 25 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 21:31:29 2015  
 Quant Method : I:\ACQUADATA\MSVOA12\METHODS\W060415.M  
 Quant Title : MS#12 - 8260B WATERS 10mL.Purge  
 QLast Update : Fri Jun 05 14:19:46 2015  
 Response via : Initial Calibration



TIC: MM4365.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 1043.39 ppb m

response 60836

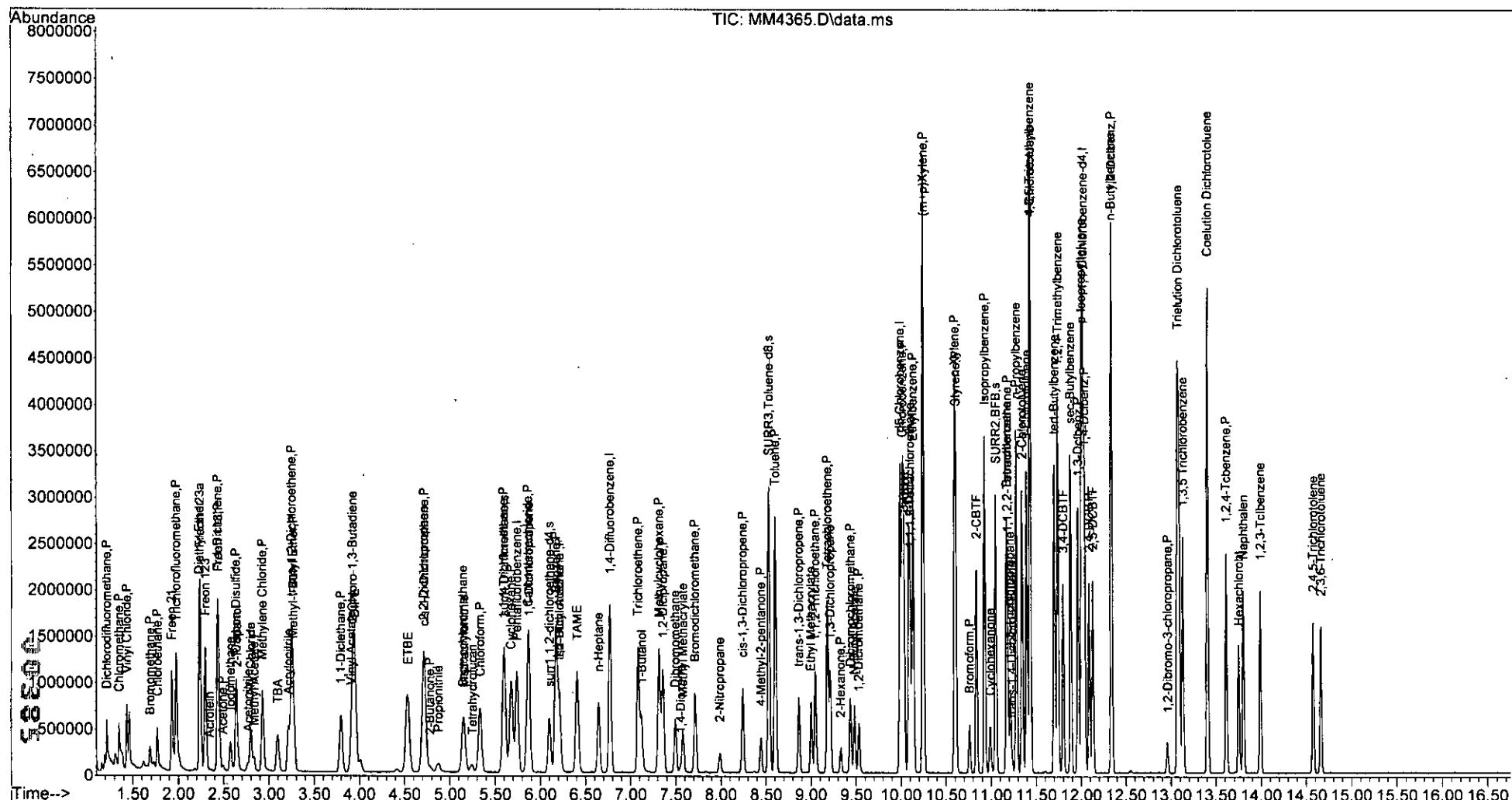
Ion	Exp%	Act%
88.00	100	100
58.00	60.70	58.74
0.00	0.00	0.00
0.00	0.00	0.00

**Quantitation Report (Not Reviewed)**

Data Path : I:\ACQUDATA\MSVOA12\DATA\062915\  
Data File : MM4365.D  
Acq On : 29 Jun 2015 9:15 pm  
Operator : K.Ruest  
Sample : R1505119-001DMS|5.0  
Misc : CB&I 13429 T4  
ALS Vial : 25 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Jun 29 21:31:29 2015  
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W060415.M  
Quant Title : MS#12 - 8260B WATERS 10mL Purge  
QLast Update : Fri Jun 05 14:19:46 2015  
Response via : Initial Calibration



Analysis: 82100 Waters

Analyst: L. Jurek

Tune Method: W000415

Date: 6/4/15

Data Path: j:\acquidata\msvoa\2\060415

Run Method: ↓

Instr. 12

LIMS Run#: -ICAL-

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								MM3679		
2	BLK								MM3680		
3	BLK								MM3681		
4	BLK								MM3682		
5	TUNE (carbon is/bs)								MM3683	Y	(auto)
6	1BLK	Spont	(500ppm) Surr(supern)	FV					MM3684	Y	
7	0.5ppb	5uL	-	-	2mols				MM3685	Y	82100 Water ICAL
8	1.0	10uL	-	-					MM3686	Y	
9	2.0	20uL	-	1uL					MM3687	Y	
10	5.0	50uL	-	2uL					MM3688	Y	
11	20	-	2uL	5uL					MM3689	Y	
12	SD	-	5uL	-					MM3690	Y	
13	100	-	10uL	7.5uL					MM3691	Y	
14	150	-	15uL	10uL					MM3692	Y	
15	200	-	20uL	-	↓				MM3693	Y	↓
16	8UL								MM3694	-	
17									MM3695	-	
18									MM3696	-	
19	↓								MM3697	-	
20	ICV								MM3698	Y	
21	BLK								MM3699	-	
22	↓								MM3700	-	

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

SD Primary OCL: 810617  
 Primary HDO: 81279  
 Primary fpt: 81371  
 Primary TSL: 81574  
 Primary Tb: 81550

SD Secondary fpt: 80981 - 12.5uL  
 SD Secondary OCL: 810688  
 Secondary HDO: 80990 5uL  
 Secondary TSL: 81377  
 Secondary Tb: 81492

50mL = ICV

EDD

KR 6/4/15

Combined IS/Surr SD: 81485

Surrogate SD:

Internal Std:

Analysis: SO2CO Water  
 Date: 6/28/15  
 Instr. 12

Analyst: L. Luerst

Data Path: j:\acquidata\msvoa\21 062815

Tune Method: W060915  
 Run Method: ↓  
 LIMS Run#: 450948

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	NH4SND								MM4314		
2	BUL								MM4315		
3	TUNE (Carbonyl Sulfide)	PQ15070885 - 01							MM4216Y	Y	(auto) 9:15
4	CCV	02							MM4317	YC	
5	LCS	03							MM4318	YQ	
6	WALK	-							MM4319	Q	NPt 4.0
7	↓	04							MM4320	YB	
8	P1504923 - 002	1.0		[REDACTED]	1603	4	2	L2	MM4321	Y	1/4 - ↓ SW config ms
9	↓	006	1.0		↓	↓	2	L2	MM4322	Y	
10	P1505119 - 009	1.0		[REDACTED]	13429	4	1	L2	MM4323	Y	
11	↓	004	1.0				1	L2	MM4324	Y	
12	↓	003	100	1/100 mls			1	L2	MM4325	Q	NPt 2.0 / (5.0 for SO2?)
13	P15049416 - 007	200	1/200 mls				1	L2	MM4326	Y	NPt SO2
14	BUL	-							MM4327	-	
15	001	1.0							MM4328	Y	
16	002 006	1.0							MM4329	Y	
17	005 008	10	5/50mls						MM4330	Y	
18	006 004	10							MM4331	Y	
19	003 003	10							MM4332	Y	
20	MSD 005	1.0		PQ15070885 - 05			2	L2	MM4333	Y	003 - 10.0
21	↓	005	1.0	↓			2	L2	MM4334	Q	004 - 10.0 - Npt 5.0
22	BUL						3	L2	MM4335	Y	003 - 10.0
23	↓								MM4336	YQ	005 - MS
24									MM4337	YQ	005 - mSD
									MM4338	-	BUL
									MM4339		
									MM4340		
											END
											6/28/15

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

Primary H2O: 52139  
 Primary OCC: 52129 \* 10uL (2x) - Nt's  
 Primary Fr+: 52140 5uL → 50mL  
 Primary HSL: 52773 = CCV  
 Primary T6: 51995

200 Secondary Fr+ : 52115 - 5uL  
 500 Secondary H2O: 51970  
 Secondary OCC: 52130 2uL  
 Secondary Fr+: 52141  
 Secondary T6: 52142  
 Secondary HSL: 52142

50mL = L1S  
 4.2uL Internal Std  
 1.2mL vial = MS 10

- 10.6uL Combined IS/Surr Surrogate Internal Std

Runlog-MSVOAr2 9/20/13  
 Page 21

Analysis: 8260 waters  
Date: 6/29/15  
Instr. 12

Analyst: K. Puerst

Data Path: j:\acquidata\msvoa\2\062915

Tune Method: W060415

Run Method: ↓  
LIMS Run#: 451047

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	H16H STD								MMU341		
2	BUL								MMU342		
3	TUNE (carbon/sur)	RQ1507136 - 01							MMU343	YT (auto)	10:02
4	CCV		02						MMU344	YC	
5	LCS		03						MMU345	YQ	
6	VBL2		-						MMU346	(D) npt/c/o	
7									MMU347	(D) ↓	
8	↓		04						MMU348	YB	
9	R1504910-010	1.0			8855	2	1	22	MMU349	Y	
10	R1505119-001	100	1/100mLs		13429	4	1	22	MMU350	(D)	npt 2.0 / 5.0 (SO2)
11	005	1.0					1	22	MMU351	Y	
12	006	1.0					1	22	MMU352	(Y)	npt 10 (w/ same vial)
13	008	10	5/50mLs				1	22	MMU353	Y	
14	006	10	↓			↓	1	22	MMU354	(Y)	DL
15	R1504910-008	50	1/50mLs		8855	2	1	22	MMU355	(D) Y	npt 1/100 (Y)
16	009	50	↓				1	22	MMU356	Y	
17	003	1.0					2	22	MMU357	Y	
18	002	10	5/50mLs				2	22	MMU358	(Y)	DL
19	004	10	↓			↓	2	22	MMU359	(Y)	DL
20	R1504946-004	5.0	10/50mLs		13429	4	2	22	MMU360	Y	
21	R1505119-007	500	1/500mLs				2	22	MMU361	(Y)	DL
22	003	5.0	10/50mLs				2	22	MMU362	Y	X↑SO2
23	001	5.0					2	22	MMU363	Y	
24	MS 001	5.0	RQ1507136-05				2	22	MMU364	YQ	
25	MS 001	5.0	↓	DL		↓	2	22	MMU365	YQ	21:15 ✓
26	H16H STD						-	-	MMU366	-	
27	BUL						-	-	MMU367	-	
											END
											KR (6/29/15)

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary H2O: 82139  
Primary OCL: 82129  
Primary Fr+: 82140 5uL → 50mL = CCV  
Primary Tl: 82095  
Primary HSL: 82173

500 Secondary Fr+ : 8215 - 5uL  
500 Secondary H2O: 821810  
Secondary OCL: 82130 2uL  
Secondary HSL: 82142  
Secondary Tl: 82141  
- 0.6uL Combined IS/Surr 500 : 81952  
50mL Surrogate Internal Std :  
50mL = LCS  
4.7uL  
4.7mL vial = ms 10