



# **Summary Report for Storonske Cooperage Site Groundwater Investigation (4-42-021) Schodack, New York**

*Prepared for*

New York State Department of Environmental Conservation  
625 Broadway  
Albany, New York 12233



*Prepared by*

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(315) 431-4610

December 2010  
Revision: DRAFT  
EA Project No.: 14474.22

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## 1. INTRODUCTION

### 1.1 PROJECT BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C., and its affiliate EA Science and Technology (EA) to perform groundwater monitoring at the Storonske Cooperage site (NYSDEC Site No. 4-42-021). The area is located in a suburban portion of Rensselaer County, in the town of Schodack, New York (Figure 1).

This work assignment is being conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004441-22).

### 1.2 OBJECTIVE

The overall purpose of the groundwater monitoring program at the Storonske Cooperage site is to demonstrate that the selected remedy (currently groundwater monitoring for natural attenuation) is achieving the remedial objectives set forth in the Record of Decision (ROD) for Operable Unit 2 dated March 1993. The monitoring program consisted of collecting quarterly monitoring well gauging data and one groundwater sampling event at the site (Figure 2).

This report was completed to discuss the field activities, summarize the groundwater analytical results, and evaluate the selected remedy for compliance with remedial objectives in the ROD.

### 1.3 REPORT ORGANIZATION

A summary of field activities completed during October 2010 is provided in Section 2. Analytical results are summarized in table format and presented in Section 3.

The following are provided as appendixes:

- **Appendix A**—Daily Field Reports
- **Appendix B**—Monitoring Well Inspection Form
- **Appendix C**—Groundwater Sampling Forms
- **Appendix D**—Laboratory Analytical Data, Form Is, Chain of Custody Forms.

## 2. FIELD ACTIVITIES

This section presents the overall approach of the field investigation activities that were performed to meet the stated objectives of the groundwater sampling. EA's approach for implementing the Work Assignment included field sampling activities designed to evaluate the presence or absence of contaminants of concern (COCs) at the site and to summarize the concentrations of potential COCs through laboratory analysis.

The field investigation program was performed from 13 to 15 October and included the collection and analysis of 24 groundwater samples from site monitoring wells.

Copies of the daily field reports are provided in Appendix A. Site sampling locations are detailed in Figure 2.

### 2.1 GROUNDWATER SAMPLING

Twenty-four groundwater samples were collected from the monitoring wells using a submersible pump and dedicated section of polyethylene tubing or disposable polyethylene bailer. Each monitoring well was inspected prior to sampling and gauging, and their condition was noted on a monitoring well inspection checklist (Appendix B). Two monitoring wells (MW-9D and MW-11DD) were observed to be blocked and could not be sampled.

Prior to sampling, water level measurements were taken from each monitoring well to prepare a groundwater contour map and evaluate groundwater flow direction (Figures 3A and 3B). All monitoring wells were purged until water quality parameters (pH, conductivity, oxygen reduction potential, temperature, dissolved oxygen, and turbidity) were stabilized. If the monitoring well was pumped dry, the well was allowed to recharge before a sample was collected. Once groundwater parameters were stabilized, samples were collected, placed in a cooler with ice, and delivered to Chemtech Consulting Group, Mountainside, New Jersey.

Groundwater samples were analyzed for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (USEPA) Method 8260. Historically, groundwater samples obtained at the site were analyzed using USEPA Method 624. USEPA Method 8260 is an updated USEPA method for analyzing VOCs, which is capable of obtaining the same detection levels as USEPA Method 624. Groundwater sampling forms are provided in Appendix C.

### 3. FIELD SAMPLING RESULTS

The following section presents the analytical results of the groundwater samples collected during the field investigation in October 2010. Groundwater samples were analyzed by Chemtech Consulting Group, Mountainside, New Jersey. Chemtech Consulting Group is a New York State Department of Health Environmental Lead Proficiency Analytical Testing- and Environmental Laboratory Approval Program-certified laboratory for VOC analysis in accordance with the NYSDEC Analytical Services Protocol.

Laboratory analytical data, Form Is, and chain of custody forms are provided in Appendix D.

#### 3.1 HYDROGEOLOGY

Groundwater level measurements were taken prior to the initiation of the groundwater sampling event on 13 October 2010. All groundwater measurements were taken from the top of the inner polyvinyl chloride casing using an oil/water interface probe. Depth to water in the overburden ranged from 8.98 ft below top of inner casing (MW-15S) to 37.93 ft below top of inner casing (MW-8S). The depth to water in the bedrock aquifer ranged from 3.68 ft below top of inner casing (MW-5D) to 36.92 ft below top of inner casing (MW-14D). Table 1 shows the depth to groundwater at each monitoring well location during the gauging event.

Monitoring wells at the site are installed in both overburden and bedrock monitoring wells. Based on the October 2010 groundwater level measurements, the direction of groundwater flow in both the overburden and bedrock aquifers is to the east-southeast. Groundwater elevations measured at three unknown monitoring wells (UK-1, UK-2, and UK-3) were not used to interpret groundwater flow direction due to uncertainty of the material the wells were completed in (overburden or bedrock). Hydraulic groundwater gradients for the overburden and bedrock monitoring wells were calculated to be 0.025 and 0.039, respectively. Interpreted groundwater elevation surface maps illustrating the direction of groundwater flow for the gauging event are shown in Figures 3A and 3B. Groundwater flow is consistent with those presented in the Long-Term Monitoring Plan and generally follows the site topography.

#### 3.2 GROUNDWATER SAMPLING RESULTS OCTOBER 2010

Three VOC analytes were detected above the NYSDEC Ambient Water Quality Standards (AWQS) Class GA standard. The chlorinated volatile organic compound (CVOC) 1,1,1-trichloroethane (1,1,1-TCA) was detected in three monitoring wells MW-7S (11 µg/L) MW-20D (5.4 µg/L) and UK-01 (4.9 µg/L) above the NYSDEC AWQS standard of 5 µg/L. The CVOC 1,1-dichloroethane (1,1-DCA) was detected above the NYSDEC AWQS standard of 5 µg/L in, MW-12S (5.4 µg/L), and MW-20D (5.8 µg/L). *Cis*-1,2-Dichloroethene (*cis*-1,2-DCE) was detected at a concentration of 5.6 µg/L in MW-6S, above the AWQS standard of 5 µg/L. Groundwater analytical results are summarized in Table 2. A groundwater tag map indicating

analytes detected above their corresponding NYSDEC AWQS values is shown in Figure 4. Laboratory analytical data, Form Is, and chain of custody forms are provided in Appendix D.

### **3.3 HISTORICAL DATA**

Analytical results for the October 2010 sampling event were compared with available historical data to determine if monitoring wells can be removed from the sampling program. Historical groundwater analytical data results are summarized in Table 3. The following groundwater analytical trends were observed:

- Several analytes have historically been detected in groundwater at concentrations which exceed the NYSDEC AWQS: 1,2-dichloroethane, 1,1-DCA, 1,1,1-TCA, tetrachloroethene (PCE), and vinyl chloride (VC).
- Groundwater analytical results from the sampling events completed from August 1999 to the present have been non-detect in the following monitoring wells: MW-1S, MW-1D, MW-1DD MW-4D, MW-5D, MW-6DD, MW-7D, MW-8DD, MW-11D, MW-13DD, and MW-21.
- Analytical data for MW-15D indicated an estimated concentration of 1,1,1-TCA at 1.1 µg/L (below the NYSDEC AWQS of 5 µg/L) during the August 1999 sampling event. Results for subsequent sampling events were all non-detect at MW-15D.

## 4. CONCLUSIONS / RECOMMENDATIONS

### 4.1 GROUNDWATER RESULTS AND EVALUATION

PCE and 1,1,1-TCA were the primary COCs in groundwater at the Storonske Cooperage site. The 1993 ROD for Operable Unit 2, groundwater selected a “no action” remedy for overburden and shallow bedrock groundwater. Under the “no action” remedy, continued periodic monitoring of groundwater would be performed. This remedy was selected based on the implementation of a soil vapor extraction (SVE) system on-site, specified under the 1992 ROD for Operable Unit 1 “on-site soil”. The SVE system was expected to reduce the continuing source of VOCs to groundwater and further enhance the rate of natural attenuation of VOCs in groundwater.

#### 4.1.1 Groundwater Monitoring Results

Historical PCE groundwater data indicate that natural attenuation is occurring in groundwater. Through anaerobic dechlorination, common breakdown compounds of PCE (trichloroethene, *cis*-1,2-DCE, 1,2-dichloroethane, and VC) have been consistently observed throughout the monitoring well network. PCE and its breakdown compounds were typically detected at levels below the NYSDEC AWQS during the historical and current groundwater monitoring events. The sample from MW-6S revealed a detection of *cis*-1,2 DCE at a concentration of 5.6 µg/L above the AWQS standard of 5 µg/L. The MW-6S is the only sample since May 2005 that has shown detections of PCE and corresponding breakdown compounds above NYSDEC AWQS since May 2005. These compounds were commonly detected in monitoring wells immediately east and downgradient of the site. The one exception being *cis*-1,2-DCE, which was detected at monitoring wells located further southeast and downgradient of the site at concentrations below NYSDEC AWQS.

1,1,1-TCA historically appears to be more prevalent in groundwater, with detections in a wider range of monitoring wells across the site. 1,1,1-TCA was also historically detected at higher concentrations than PCE and its breakdown compounds. When 1,1,1-TCA naturally attenuates under anaerobic conditions, its common breakdown compounds include 1,1-DCA and then chloroethane. Historically, monitoring wells MW-2S, MW-6S, MW-7S, MW-9D, MW-12S, and MW-20D reported concentrations of both 1,1,1-TCA and 1,1-DCA above NYSDEC AWQS. These monitoring wells are located across the site both laterally and vertically, from shallow on-site wells (MW-2S, MW-6S, & MW-7S), to bedrock monitoring well MW-9D just east and downgradient, and further southeast/downgradient at shallow monitoring well MW-12S and bedrock monitoring well MW-20D.

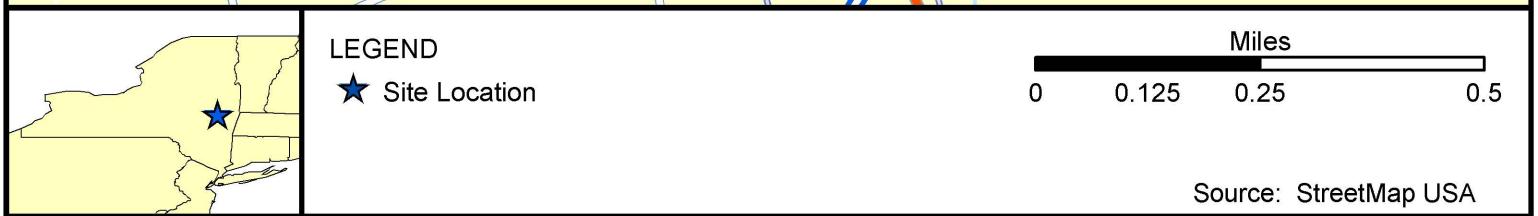
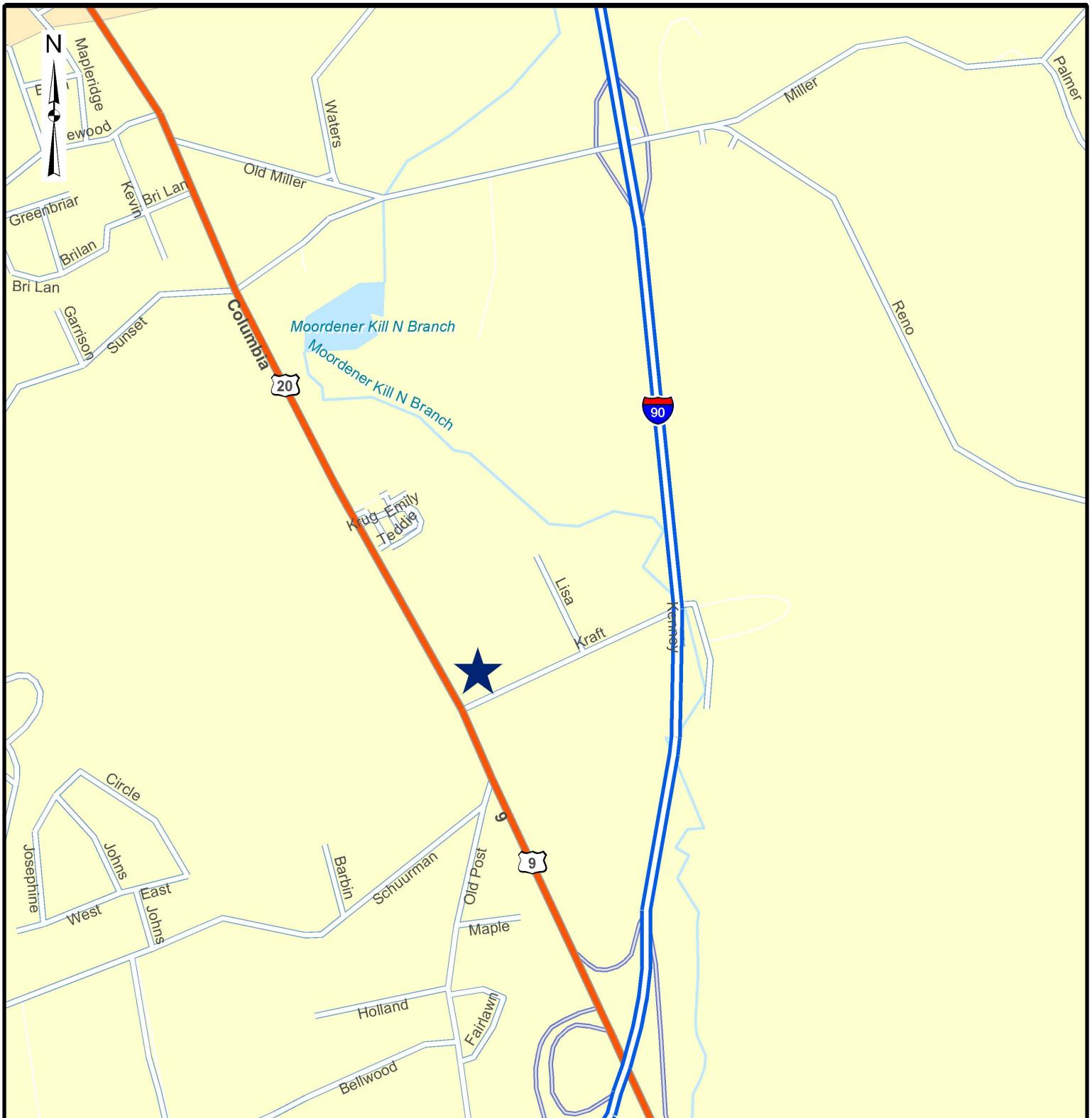
1,1,1-TCA and 1,1-DCA were detected above NYSDEC AWQS at the highest frequency during the October 2005 monitoring event. The most recent groundwater monitoring event conducted in October 2010 revealed continued detections of 1,1,1-TCA at monitoring wells MW-7S, and MW-20D, as well as UK-1. Detections of 1,1-DCA were observed over the applicable NYSDEC

AWQS in monitoring wells MW-12S and MW-20D. However, no detections of chloroethane have historically been reported in any of the site monitoring wells.

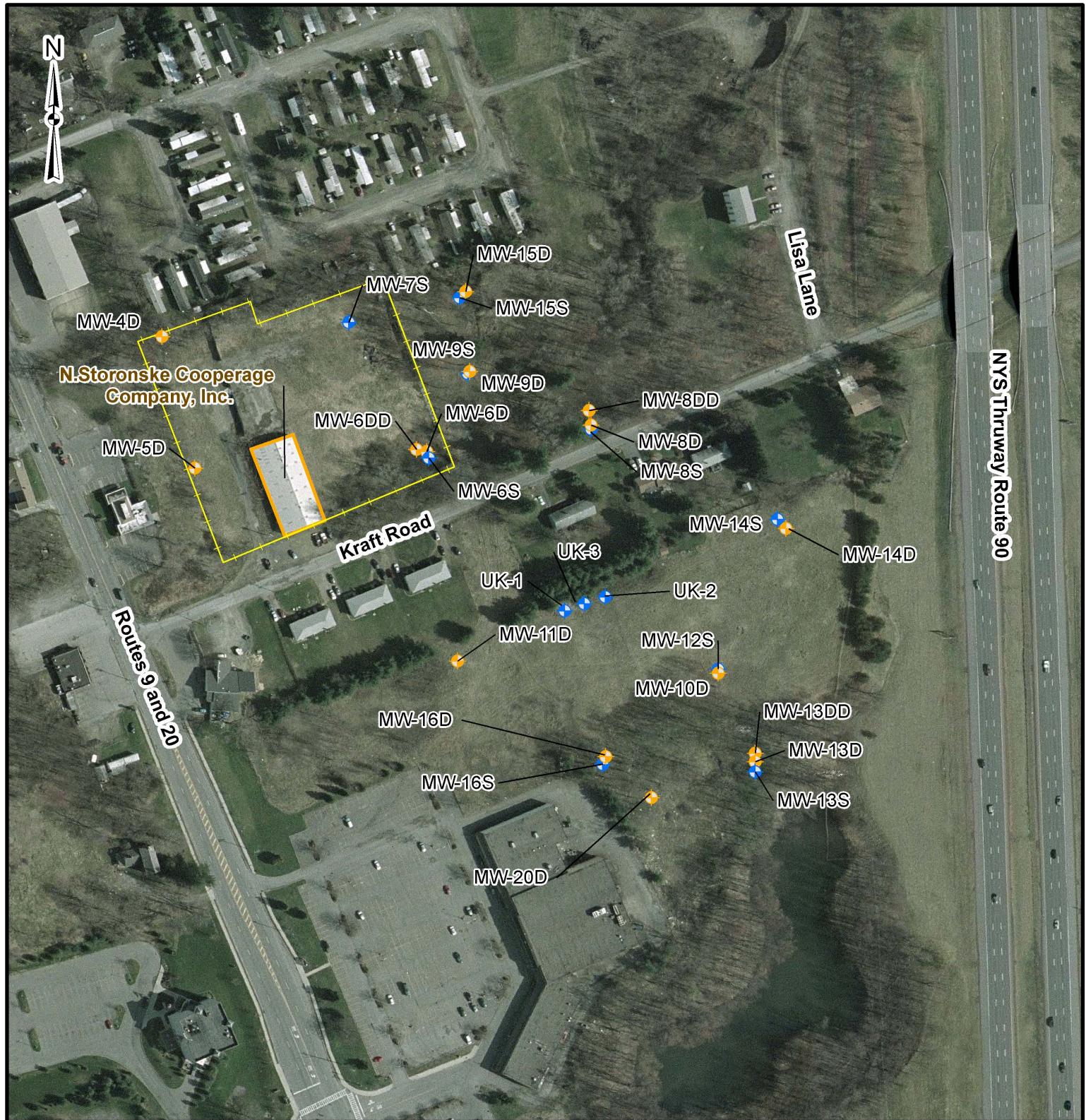
#### **4.2 RECOMMENDATIONS**

Based on a comparison between October 2010 results and historical data, it is recommended that the following monitoring activities be completed:

- Collection of monitored natural attenuation parameters at monitoring wells located upgradient of the former source area (MW-4D and MW-5D), onsite (MW-7S and MW-6S), and downgradient of the site (UK-2, MW-12S, MW-10D, and MW-20D).
- Continued groundwater monitoring including quarterly monitoring well gauging and 15-month groundwater sampling events (January 2012).



 EA Engineering, Science, and Technology, Inc.	 STATE OF NEW YORK ENVIRONMENTAL CONSERVATION DEPARTMENT	<b>STORONSKE COOPERAGE SITE (4-42-021)</b> <b>SUMMARY REPORT</b> <b>SCHODACK, NEW YORK</b>	<b>FIGURE 1</b> <b>SITE LOCATION MAP</b>
PROJECT MGR: JCH	DESIGNED BY: CJS	CREATED BY: DCC	CHECKED BY: JCH
SCALE: AS SHOWN	DATE: NOVEMBER 2010	PROJECT NO: 14474.22	FILE NO: GIS/PROJECTS/ FIGURE1.MXD



#### Legend

- [Yellow Box] Fence Line Monitoring Wells
- [Orange Box] Buildings
- [Blue Diamond] Surficial
- [Orange Diamond] Bedrock

0 50 100 200 300 400 500 Feet

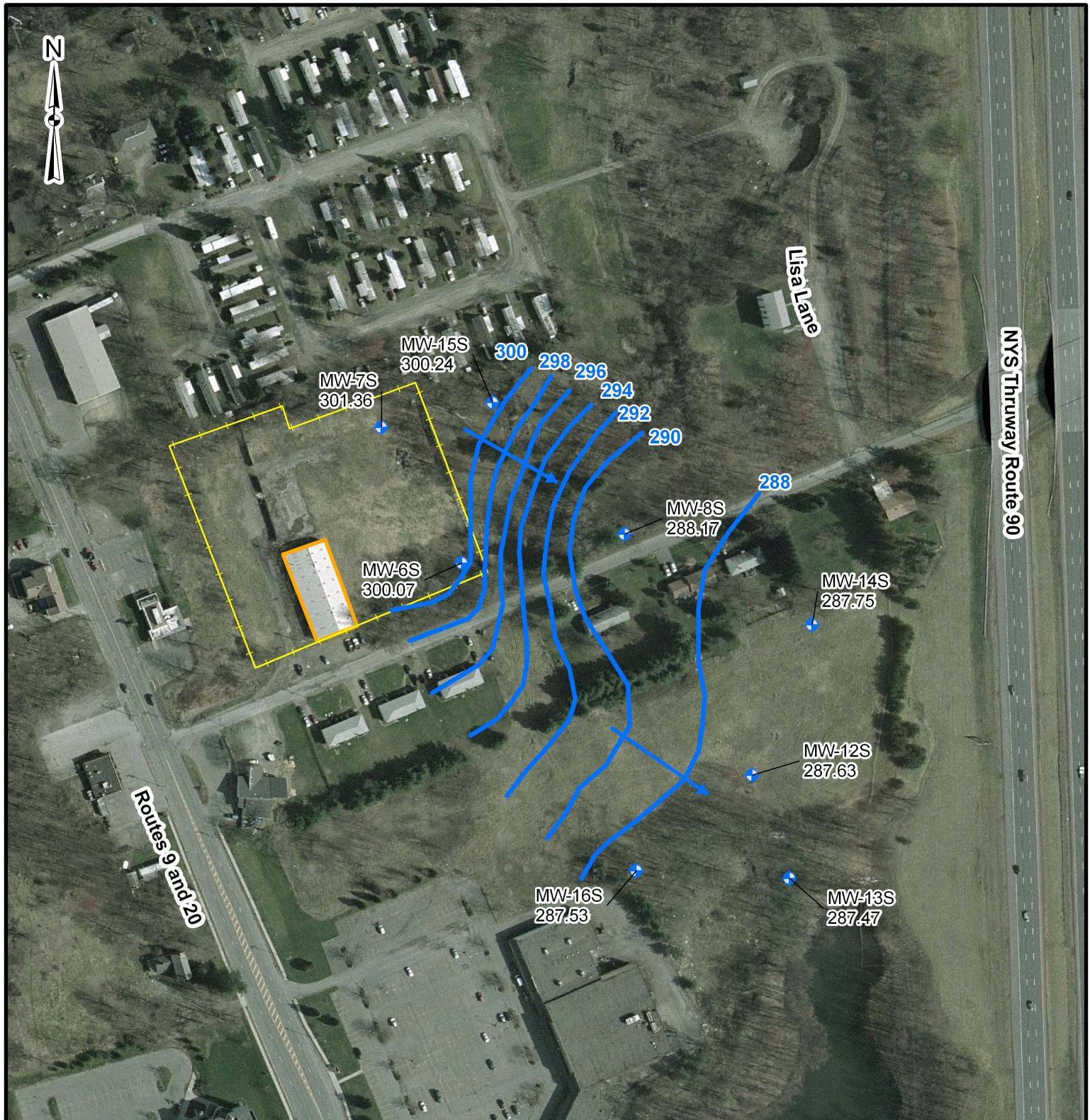
Source: NYS-GIS Clearinghouse



#### STORONSKE COOPERAGE SITE (4-42-021) SUMMARY REPORT SCHODACK, NEW YORK

FIGURE 2  
MONITORING WELL LOCATIONS

PROJECT MGR: JCH	DESIGNED BY: CJS	CREATED BY: DCC	CHECKED BY: JCH	SCALE: AS SHOWN	DATE: NOVEMBER 2010	PROJECT NO: 14474.22	FILE NO: GIS/PROJECTS/ FIGURE2.MXD
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#### Legend

- ◆ Monitoring Well
- Shallow Groundwater Contour 2 ft
- Fence Line
- Buildings

Feet

0 50 100 200 300 400 500

Source: NYS-GIS Clearinghouse



STORONSKE COOPERAGE SITE (4-42-021)  
SUMMARY REPORT OCTOBER 2010  
SCHODACK, NEW YORK

FIGURE 3A  
ESTIMATED SHALLOW  
GROUNDWATER CONTOURS  
(FT AMSL) (OCTOBER 2010)

PROJECT MGR:  
JCH

DESIGNED BY:  
RER

CREATED BY:  
RER

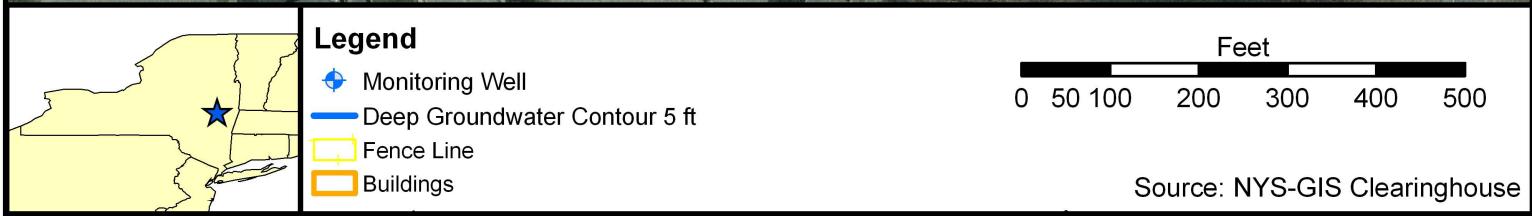
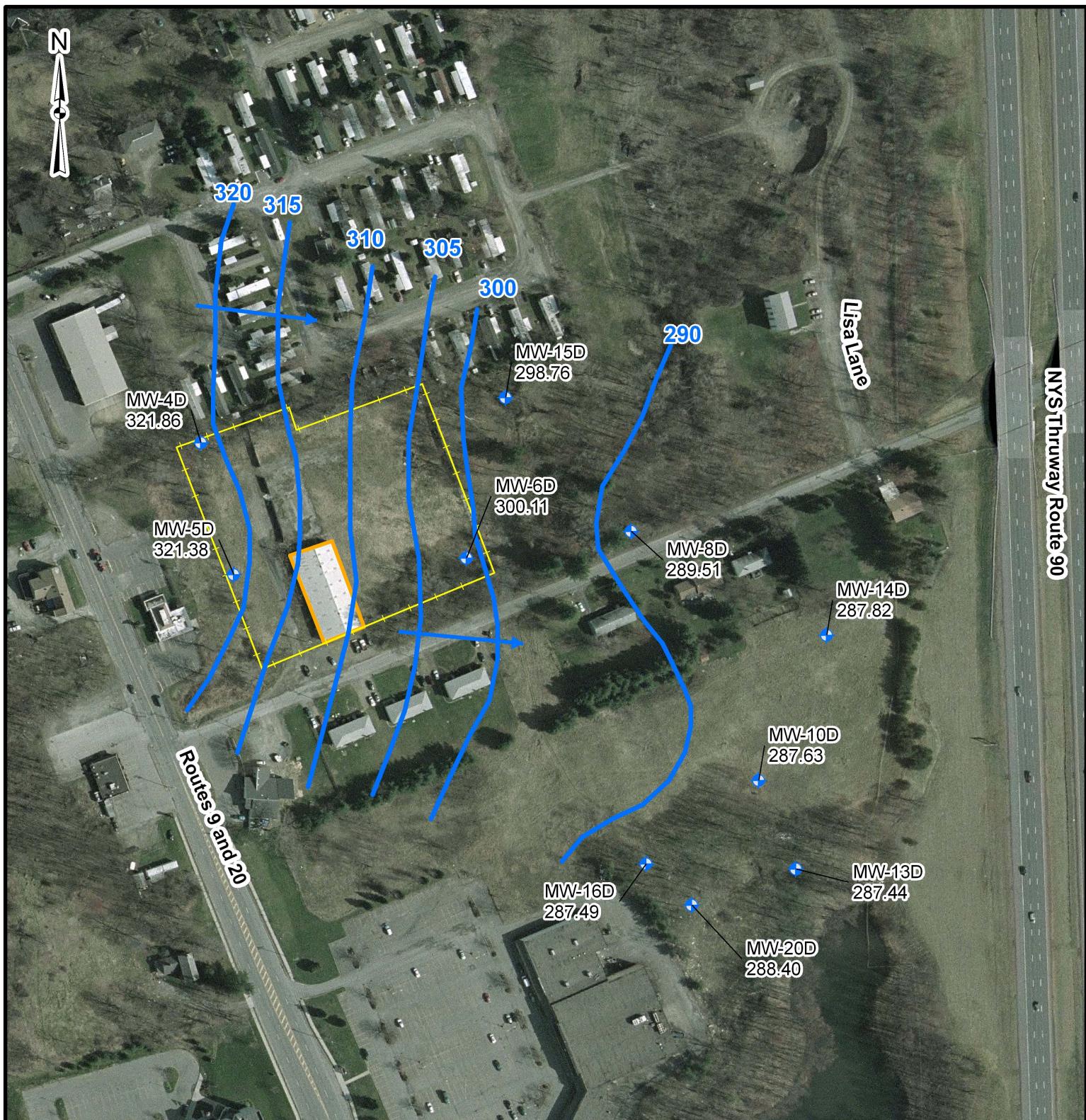
CHECKED BY:  
JAV

SCALE:  
AS SHOWN

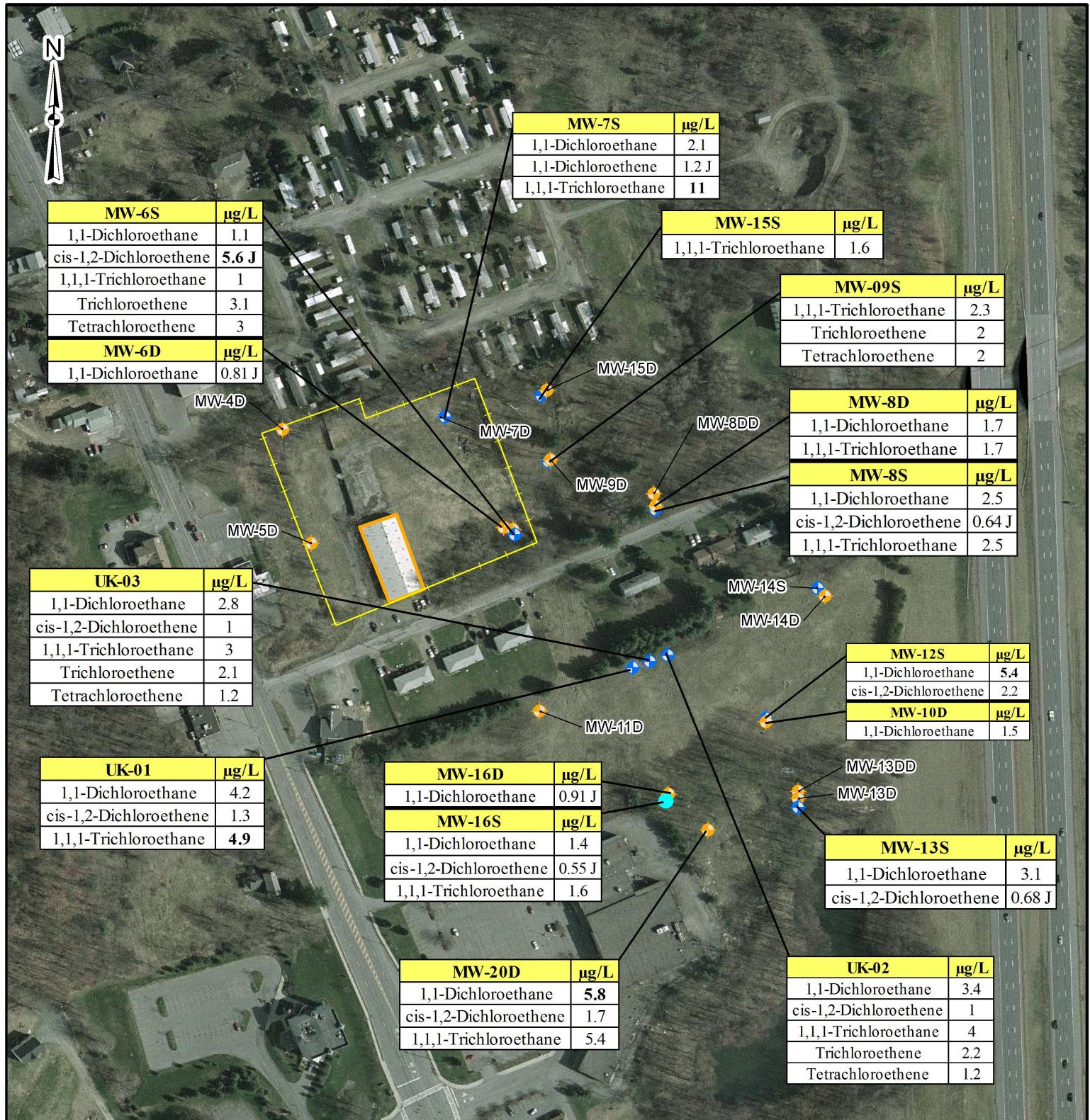
DATE:  
OCTOBER 2010

PROJECT NO:  
14474.22

FILE NO:  
GIS/PROJECTS/  
FIGURE3A.MXD



 EA Engineering, Science, and Technology, Inc.	 STATE OF ENVIRONMENTAL CONSERVATION NEW YORK STATE	<b>STORONSKY COOPERAGE SITE (4-42-021)</b> <b>SUMMARY REPORT OCTOBER 2010</b> <b>SCHODACK, NEW YORK</b>	<b>FIGURE 3B</b> <b>ESTIMATED DEEP</b> <b>GROUNDWATER CONTOURS</b> <b>(FT AMSL) (OCTOBER 2010)</b>
PROJECT MGR: JCH	DESIGNED BY: RER	CREATED BY: RER	CHECKED BY: JAV
SCALE: AS SHOWN	DATE: OCTOBER 2010	PROJECT NO: 14474.22	FILE NO: GIS/PROJECTS/ FIGURE3B.MXD



### Legend

- Fence Line Monitoring Well
- Buildings
- Surficial
- Bedrock

0 50 100 200 300 400 500

Source: NYS-GIS Clearinghouse

TABLE 1 GROUNDWATER TABLE GAUGING INFORMATION

Well Number	TOIC Elevation (ft/amsl)	BTOIC WATER LEVEL (ft)	Groundwater Table Elevation (ft AMSL) 13 October 2010
MW-6S	314.86	14.79	300.07
MW-7S	323.36	22.00	301.36
MW-8S	326.10	37.93	288.17
MW-9S	No TOIC	11.25	--
MW-12S	322.27	34.64	287.63
MW-13S	311.17	23.70	287.47
MW-14S	324.63	36.88	287.75
MW-15S	309.22	8.98	300.24
MW-16S	320.87	33.34	287.53
MW-4D	326.73	4.87	321.86
MW-5D	325.06	3.68	321.38
MW-6D	314.48	14.37	300.11
MW-8D	326.01	36.50	289.51
MW-9D	310.84	Obstruction	---
MW-10D	321.84	34.21	287.63
MW-11D	327.40	Obstruction	---
MW-13D	311.46	24.02	287.44
MW-14D	324.74	36.92	287.82
MW-15D	309.87	11.11	298.76
MW-16D	321.2	33.71	287.49
MW-20D	317.05	28.65	288.40
MW-6DD	315.21	13.97	301.24
MW-8DD	325.46	35.62	289.84
MW-13DD	311.85	23.67	288.18
UK-1	327.02	39.18	287.84
UK-2	327.18	39.34	287.84
UK-3	327.51	39.67	287.84
NOTE: TOIC = Top of Inner Casing BTOIC = Below top of Inner Casing			

TABLE 2 GROUNDWATER ANALYTICAL RESULTS OCTOBER 2010

Parameter	MW-4D	MW-5D	MW-6S	MW-6D	MW-6DD	MW-7S	MW-8S	MW-8D	MW-8DD	NYSDEC Ambient Water Quality Standard Values (ppb)
<b>UNITED STATES ENVIRONMENTAL PROTECTION AGENCY METHOD 8260B (µg/L)</b>										
1,1-Dichloroethane	U	U	1.1	0.81 J	U	2.1	2.5	1.7 J	U	5
1,1,-Dichloroethene	U	U	U	U	U	1.2 J	U	U	U	5
cis-1,2-Dichloroethene	U	U	<b>5.6 J</b>	U	U	U	0.64 J	U	U	5
1,1,1-Trichloroethane	U	U	1	U	U	<b>11</b>	2.5	1.7 U	U	5
Trichloroethene	U	U	3.1	U	U	U	U	U	U	5
Tetrachloroethene	U	U	2.6	U	U	U	U	U	U	5
Parameter	MW-9S	MW-10D	MW-12S	MW-13S	MW-13D	MW-13DD	MW-14S	MW-14D	MW-15S	
<b>UNITED STATES ENVIRONMENTAL PROTECTION AGENCY METHOD 8260B (µg/L)</b>										
1,1-Dichloroethane	U	1.5	<b>5.4</b>	3.1	U	U	U	U	U	5
1,1,-Dichloroethene	U	U	U	U	U	U	U	U	U	5
cis-1,2-Dichloroethene	U	U	2.2	0.68 J	U	U	U	U	U	5
1,1,1-Trichloroethane	2.3	U	U	U	U	U	U	U	1.6	5
Trichloroethene	2	U	U	U	U	U	U	U	U	5
Tetrachloroethene	2	U	U	U	U	U	U	U	U	5
Parameter	MW-16S	MW-16D	MW-20D	UK-01	UK-02	UK-03	DUPPLICATE- 1 <sup>(b)</sup>	DUPPLICATE- 2 <sup>(c)</sup>		
<b>UNITED STATES ENVIRONMENTAL PROTECTION AGENCY METHOD 8260B (µg/L)</b>										
1,1-Dichloroethane	1.4	0.91 J	<b>5.8</b>	4.2	3.4	2.8	2.7	2.1		5
1,1,-Dichloroethene	U	U	U	U	U	U	U	0.98 J		5
cis-1,2-Dichloroethene	0.55 J	U	1.7	1.3	1	1	0.81 J	U		5
1,1,1-Trichloroethane	1.6	U	<b>5.4</b>	<b>4.9</b>	4	3	3.6	<b>11</b>		5
Trichloroethene	U	U	U	U	U	2.2	2.1	2.4	U	5
Tetrachloroethene	U	U	U	U	U	1.2	1.2	1.6	U	5

(a) NYSDEC AWQS Guidance Value

(b) Duplicate Sample was collected from UK-02

(c) Duplicate Sample was collected from MW-7S

NOTE: NYSDEC = New State Department of Environmental Conservation

µg/L = micrograms per liter (ppb)

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

J = Estimated value, concentration below laboratory reporting limit.

All analytical data results provided by Chemtech Consulting Group, Inc.

Only parameters that had at least one detection from the data set are shown.

**Bold** values indicate that the analyte was detected above the NYSDEC AWQS.

TABLE 3 HISTORICAL GROUNDWATER ANALYTICAL RESULTS

DATE	MW-1S			MW-1D			MW-1DD			MW-2S			MW-4D			MW-5D			MW-6S			MW-6D									
	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE							
October 1989																															
November 1991																															
February 1992	<1			<1			610			<1			<1			6			<1			<1									
June 1992							160	5	5.6	0	0	0	0	0	0	5			<1			<1									
17 July 1997							160	5	5.6	0	0	0	0	0	0	0	0	0	0	0	0	0									
4 November 1997							140	0	9	1	0	0	0	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns								
14 July 1998							170	0	9	0	0	0.3	0	0	0	0.6	0	0	0	0	0	0	0								
4 November 1998							57	0	2.1	0	0	0	0	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns								
14 July 1999							32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
8 December 1999							66	0	4	0	0	1	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns								
May 2005							8.3		1.0J							1.7			0.3J												
October 2005							74		12							1.2															
April 2008	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	<1	<1	<1						
July 2009	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	<1	<1	<1	<1	<1	2.6	3.1	5.6	<1	<1	<1							
October 2010	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	<1	<1	<1	<1	<1	ns	ns	ns	ns	ns	ns							
	MW-6DD			MW-7S			MW-7D			MW-8S			MW-8D			MW-8DD			MW-9S			MW-9D									
DATE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE							
October 1989	1,400			24			<5			<5			450			1,500			<5			<5									
November 1991	2,300			24			<5			<5			370			1,300			<5			<5									
February 1992	530			28			<1			2			610			13,000			<1			<1									
June 1992	1,200			20									800			5,000															
17 July 1997																3,200	24	18	0	0	0										
4 November 1997																560	7	0	0	0	0										
14 July 1998																1,200	8	12	0	0	0										
4 November 1998																160	2.6	0	0	0	0										
14 July 1999																690	6	6.1	0	0	0										
8 December 1999																250	10	2	ns	ns	ns										
May 2005	33	1.1 J		4.7 J									0.83 J				260 D	10	14												
October 2005	91	4.4 J	4.4 J	16												240 D	7.2	6.4													
April 2008																ns	ns	ns													
July 2009	<1	<1	<1	<1	<1	<1	ns	ns	ns	<1	1.3	<1	<1	<1	<1	<1	<1	<1	2	1.3	<1	ns	ns	ns							
October 2010	<1	<1	<1	<1	<1	<1	ns	ns	ns	<1	0.64	<1	<1	<1	<1	<1	<1	<1	2	2	<1	ns	ns	ns							
	MW-10D			MW-11D			MW-12S			MW-13S			MW-13D			MW-13DD			MW-14S			MW-14D									
DATE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE							
October 1989	<5			<5			<5			<5			43			750			9			<5									
November 1991	<5			<5			<5			<5			130			940			<5			<5									
February 1992	<1			<1			<1			<1			190			850			4			<1									
June 1992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	360	11	19.5	0	0	0	0	0	0	0	0	0				
17 July 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	440	12	30	3	0	0	0	0	0	0	0	0				
4 November 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	500	11	24	5	0	0	0	0	0	0	0	0				
14 July 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	340	11	18	2	0	0	0	0	0	0	0	0				
4 November 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	230	6.7	14	2.2	0	0	0	0	0	0	0	0				
14 July 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	230	6.7	14	3	0	0	0	0	0	0	0	0				
8 December 1999	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	11	6.4	26	10	1.4 J	1.6 J	2.9									
May 2005				0.3 J	1.1 J											36	9.3	21	16	4.1 J	1.2										
October 2005				1.4 J			12																								
April 2008																															
July 2009	<1	<1	<1	ns	ns	ns	<1	<1	2.2	<1	<1	0.62 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1				
October 2010	<1	<1	<1	ns	ns	ns	<1	<1	2.2	<1	<1	0.68	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1				
	MW-15S			MW-15D			MW-16S			MW-16D			MW-20D			MW-21			UK-01			UK-02									
DATE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE							
October 1989																															
November 1991																															
February 1992																															
June 1992	17 July 1997	0	0	0	<b>8.9</b>	0.7	0.5				0	0	0	<b>8.9</b>	0.7	0.5				<b>8.9</b>	0.7	0.5									
4 November 1997	ns	ns	ns	<b>58</b>	4	<b>8</b>				ns	ns	ns	<b>58</b>	4	<b>8</b>				<b>58</b>	4	<b>8</b>										
14 July 1998	0	0	0	<b>19</b>	2	1				0	0	0	<b>19</b>	2	1				<b>19</b>	2	1										
4 November 1998	ns	ns	ns	<b>57</b>	<b>5.2</b>	<b>5.3</b>				ns	ns	ns	<b>57</b>	<b>5.2</b>	<b>5.3</b>				<b>57</b>	<b>5.2</b>	<b>5.3</b>										
14 July 1999	0	0	0	22	0	0				0	0	0	22	0	0				22	0	0										
8 December 1999	ns	ns	ns	<b>40</b>	4	4				ns	ns	ns	<b>40</b>	4	4				<b>40</b>	4	4										
May 2005				1.4 J									1.4 J				7.7			1.4 J			1.2 J			1.2 J					
October 2005				7.7												7.7						7.7</									

DATE	UK-03		
	PCE	TCE	DCE
October 1989			
November 1991			
February 1992			
June 1992			
17 July 1997			
4 November 1997			
14 July 1998			
4 November 1998			
14 July 1999			
8 December 1999			
May 2005			
October 2005			
April 2008			
July 2009	1.4	2.4	1.4
October 2010	1.2	2.1	1

## **Appendix A**

### **Daily Field Reports**

**DAILY OBSERVATION REPORT**

NYSDEC

**Day: Wednesday****Date: 10-13-10**

Temperature: (F) 34 (am)

64 (pm)

Wind Direction: ENE (am) ENE (pm)

**Project Name**

Storonske Cooperage

**NYSDEC Site # 4-42-021**

Weather: (am) Clear

(pm) Clear

**Contract # D-004441-22**

Arrive at site 1300 (pm)

**Schodack, New York**

Leave site: 1700 (pm)

**HEALTH & SAFETY:**Are there any changes to the Health & Safety Plan?  
(If yes, list the deviation under items for concern)

Yes ( ) No (x)

Are monitoring results at acceptable levels?

Soil Yes ( ) n/a (x) \* No ( )

Waters Yes (x) n/a ( ) \* No ( )

Air Yes ( ) n/a (x) \* No ( )

• If No, provide comments

**OTHER ITEMS:**Site Sketch Attached: Yes ( ) No (x)  
Photos Taken: Yes ( ) No (x)**DESCRIPTION OF DAILY WORK PERFORMED:**

Onsite to gauge monitoring wells and conduct well inspection. Began purging and sampling wells using a submersible pump in the afternoon.

**PROJECT TOTALS:****SAMPLING (Soil/Water/Air)****Contractor Sample ID:****DEC Sample ID:****Description:**

MW-16S		GW
MW-16D		GW
MW-20D		GW

**CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:**

(Name of contractor) personnel: James Peterson and Robert Peterson

(Name of Subcontractor) personnel:

(Name of contractor) equipment: Submersible pump, water quality meter, water meter

(\*Indicates active equipment)

Other Subcontractors:

**VISITORS TO SITE:**

1. None

**PROJECT SCHEDULE ISSUES:**

None

**PROJECT BUDGET ISSUES:**

None.

**ITEMS OF CONCERN:**

None.

**COMMENTS:**

None.

**ATTACHMENT(S) TO THIS REPORT:**

None

**SITE REPRESENTATIVE:**

Name: *James Peterson*

CC:

**DAILY OBSERVATION REPORT**

NYSDEC

**Day: Thursday****Date: 10-14-10**

Temperature: (F) 34 (am)

61 (pm)

Wind Direction: SE (am) SE (pm)

Weather: (am) Partly cloudy

(pm) Overcast

**Project Name**

Storonske Cooperage

**NYSDEC Site # 4-42-021****Contract # D-004441-22**

Arrive at site 0645 (am)

**Schodack, New York**

Leave site: 1700 (pm)

**HEALTH & SAFETY:**

Are there any changes to the Health & Safety Plan?  
(If yes, list the deviation under items for concern)

Yes ( ) No (x)

Are monitoring results at acceptable levels?

Soil Yes ( ) n/a (x) \* No ( )

Waters Yes (x) n/a ( ) \* No ( )

Air Yes ( ) n/a (x) \* No ( )

• If No, provide comments

**OTHER ITEMS:**

Site Sketch Attached: Yes ( ) No (x)  
Photos Taken: Yes ( ) No (x)

**DESCRIPTION OF DAILY WORK PERFORMED:**

Onsite to purge and sample monitoring wells using a submersible pump.

**PROJECT TOTALS:****SAMPLING (Soil/Water/Air)****Contractor Sample ID:****DEC Sample ID:****Description:**

MW-13DD		GW (grab)
MW-13D		GW (grab)
MW-13S		GW (grab)
MW-10D		GW (grab)
MW-12S		GW (grab)
MW-14S		GW (grab)
MW-14D		GW (grab)
UK-3		GW (grab)
UK-1		GW (grab)
UK-2		GW (grab)
MW-8S		GW (grab)
MW-8DD		GW (grab)
MW-8D		GW (grab)
MW-15S		GW (grab)
MW-9S		GW (grab)

**DAILY OBSERVATION REPORT****Day: Thursday      Date: 10-14-10**

MW-5D	
MW-4D	
MW-7S	

GW (grab)
GW (grab)
GW (grab)

**CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:**

(Name of contractor) personnel: James Peterson and Robert Peterson

(Name of Subcontractor) personnel:

(Name of contractor) equipment: Submersible pump, water quality meter, water meter

(\*Indicates active equipment)

Other Subcontractors:

**VISITORS TO SITE:**

1. None

**PROJECT SCHEDULE ISSUES:**

None

**PROJECT BUDGET ISSUES:**

None.

**ITEMS OF CONCERN:**

None.

**COMMENTS:**

None.

**ATTACHMENT(S) TO THIS REPORT:**

None

**SITE REPRESENTATIVE:**

Name: *James Peterson*

CC:

**DAILY OBSERVATION REPORT**

NYSDEC

**Day: Friday****Date: 10-15-10****Project Name**

Storonske Cooperage

**NYSDEC Site # 4-42-021**

Temperature: (F)

45 (am)

50 (pm)

Wind Direction: NW (am)

NW (pm)

Weather: (am) Rain

(pm) na

**Contract # D-004441-22**

Arrive at site 0630 (am)

**Schodack, New York**

Leave site: 0900 (am)

**HEALTH & SAFETY:**

Are there any changes to the Health &amp; Safety Plan?

Yes ( ) No (x)

(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil

Yes ( ) n/a (x)

\* No ( )

Waters

Yes (x) n/a ( )

\* No ( )

Air

Yes ( ) n/a (x)

\* No ( )

• If No, provide comments

**OTHER ITEMS:**

Site Sketch Attached:

Yes ( ) No (x)

Photos Taken:

Yes ( ) No (x)

**DESCRIPTION OF DAILY WORK PERFORMED:**

Onsite to purge and sample monitoring wells using a submersible pump.

**PROJECT TOTALS:****SAMPLING (Soil/Water/Air)****Contractor Sample ID:****DEC Sample ID:****Description:**

MW-6DD

GW (grab)

MW-6D

GW (grab)

MW-6S

GW (grab)

**CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:**

(Name of contractor) personnel: James Peterson and Robert Peterson

(Name of Subcontractor) personnel:

(Name of contractor) equipment: Submersible pump, water quality meter, water meter

(\*Indicates active equipment)

Other Subcontractors:

**VISITORS TO SITE:**

1. None

**PROJECT SCHEDULE ISSUES:**

None

**PROJECT BUDGET ISSUES:**

None.

**ITEMS OF CONCERN:**

None.

**COMMENTS:**

None.

**ATTACHMENT(S) TO THIS REPORT:**

None

**SITE REPRESENTATIVE:**

Name: *James Peterson*

CC:

## **Appendix B**

### **Monitoring Well Inspection Form**



EA Engineering PC and its Affiliate,  
EA Science and Technology

**GROUNDWATER GAUGING  
STORONSKE COOPERAGE SITE**

<b>Site ID:</b> 14474.22	<b>EA Personnel:</b> JP/RP	<b>Client:</b> NYSDEC		
<b>Location:</b> Schodack	<b>Gauge Date:</b> 10/13/2010	<b>Weather:</b> 60F, Clear		
<b>Well Gauging</b>				
Well (ID)	DTW (ft btoc)	TDOW (ft btoc)	TOIC (ft/amsl)	Well Condition Notes
MW-6S	14.79	20.79	314.86	No lock
MW-7S	22.00	30.28	323.36	No lock
MW-8S	37.93	42.79	326.10	
MW-9S	11.25	18.55	---	No well cap. Loose casing.
MW-12S	34.64	64.23	322.27	
MW-13S	23.70	54.05	311.17	
MW-14S	36.88	50.02	324.63	
MW-15S	8.98	19.99	309.22	
MW-16S	33.34	46.90	320.87	
MW-4D	4.87	11.69	326.73	No well cap. No lock
MW-5D	3.68	40.81	325.06	Casing cover broken. No lock
MW-6D	14.37	39.88	314.48	No well cap. No lock
MW-8D	36.50	72.18	326.01	Casing cover broken.
MW-9D			310.84	Obstruction
MW-10D	34.21	65.61	321.84	No well cap. No lock, casing cover broken
MW-11D			327.40	Obstruction
MW-13D	24.02	93.04	311.46	
MW-14D	36.92	98.11	324.74	
MW-16D	33.71	82.88	321.20	
MW-15D	11.11	50.57	309.87	
MW-20D	28.65	36.15	317.05	No well cap
MW-6DD	13.97	130.77	315.21	Casing cover broken. No lock
MW-8DD	35.62	36.56	325.46	Casing cover broken.
MW-13DD	23.67	180.25	311.85	
UK-1	39.18	46.60	327.02	
UK-2	39.34	51.22	327.18	No well cap
UK-3	39.67	59.23	327.51	No lock

Comments and Observations

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## **Appendix C**

### **Groundwater Sampling Forms**



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-16S	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Good	sunny
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/13/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1536	2

Purge Date:	Purge Time:
13-Oct-10	1539
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft): 0.16	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D: 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Monsoon

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1539	33.36	0.00	0.2	7.89	105	14.85	0.549	8.10	>800
1542	33.36	0.60	0.2	7.18	118	13.82	0.542	7.76	522
1545	33.36	1.20	0.2	6.98	127	14.03	0.586	7.68	300
1548	33.36	1.80	0.2	6.89	132	14.2	0.593	7.63	170
1551	33.36	2.40	0.2	6.85	133	14.2	0.597	7.66	37.4
1554	33.36	3.00	0.2	6.84	131	14.17	0.597	7.62	21.2

Total Quantity of Water Removed (gal): 0  
Samplers: JP/RP  
Sampling Date: 10/13/2010

Sampling Time: 1600  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



EA Engineering PC and its Affiliate,  
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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-16D	EA Personnel: JP/RP	Client: NYSDEC
Location: Storonske Cooperage Site	Well Condition: Good	Weather: sunny 70
Sounding Method: Water meter	Gauge Date: 10/13/2010	Measurement Ref: TOC
Stick Up/Down (ft): Up 2 ft	Gauge Time: 1505	Well Diameter (in): 3

Purge Date: 13-Oct-10	Purge Time: 1510
Purge Method: Low flow - submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1510	34.69	0.00	0.2	8.35	45	15.28	0.759	3.02	19.9
1513	36.10	0.60	0.2	8.42	47	14.1	0.79	2.01	20.2
1516	37.68	1.20	0.2	8.43	47	14.49	0.791	1.86	21.6
1519	38.69	1.80	0.2	8.44	46	14.55	0.798	1.97	27
1522	39.44	2.40	0.2	8.43	46	15.02	0.793	1.92	28.8
1525	40.73	3.00	0.2	8.43	46	14.46	0.801	2.14	25.4

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/13/2010

Sampling Time: 1527  
Split Sample With: MS/MSD  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

## GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-13D	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Good	Sunny
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	0725	4

Purge Date:	Purge Time:
14-Oct-10	727
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Monsoon

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
727	24.75	0.00	0.2	8.19	128	9.88	0.665	9.78	5.7
730	24.78	0.60	0.2	7.89	128	10.14	0.665	8.21	4
733	24.81	1.20	0.2	7.80	121	10.49	0.666	7.78	3.3
736	24.82	1.80	0.2	7.77	114	10.76	0.666	7.78	2.9
739	24.82	2.40	0.2	7.76	107	10.84	0.668	7.75	2.5
742	24.83	3.00	0.2	7.76	102	10.88	0.668	7.72	2.3

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 745  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_



EA Engineering PC and its Affiliate,  
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## GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-13DD	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Good	partly cloudy 35
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	0658	4

Purge Date:	Purge Time:
14-Oct-10	658
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
658	25.09	0.00	0.2	8.62	81	9.6	0.766	7.27	37
701	25.47	0.60	0.2	8.92	78	10.39	0.767	4.26	6.6
704	25.86	1.20	0.2	8.94	78	10.57	0.771	3.81	4
707	26.09	1.80	0.2	8.94	78	10.82	0.769	3.50	3
710	26.20	2.40	0.2	8.95	78	10.87	0.771	3.36	2.6
713	26.25	3.00	0.2	8.95	78	11.08	0.771	3.29	2.6

Total Quantity of Water Removed (gal): 0

Samplers: JP/RP

Sampling Date: 10/14/2010

Sampling Time: 0715

Split Sample With: NA

Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



EA Engineering PC and its Affiliate,  
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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-13S	EA Personnel: JP/RP	Client: NYSDEC
Location: Storonske Cooperage Site	Well Condition: Good	Weather: sunny
Sounding Method: Water meter	Gauge Date: 10/14/2010	Measurement Ref: TOC
Stick Up/Down (ft): Up 2 ft	Gauge Time: 0750	Well Diameter (in): 2

Purge Date: 14-Oct-10	Purge Time: 0753
Purge Method: Low flow - Monsoon submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
0753	23.70	0.00	0.2	7.73	109	9.67	0.506	7.05	185
0756	23.71	0.60	0.2	6.87	104	10.26	0.512	6.22	65.5
0759	23.71	1.20	0.2	6.60	109	10.42	0.515	5.90	43.7
0802	23.71	1.80	0.2	6.54	111	10.6	0.516	5.88	11.7
0805	23.71	2.40	0.2	6.51	113	10.69	0.516	5.85	8.9
0808	23.71	3.00	0.2	6.49	114	10.68	0.517	5.8	6.7

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 0810  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

### GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-10D	EA Personnel: JP/RP	Client: NYSDEC
Location: Storonske Cooperage Site	Well Condition: No well cap/No lock	Weather: sunny 45
Sounding Method: Water meter	Gauge Date: 10/14/2010	Measurement Ref: TOC
Stick Up/Down (ft): Up 2 ft	Gauge Time: 0828	Well Diameter (in): 3

Purge Date: 14-Oct-10	Purge Time: 0828
Purge Method: Low flow - Monsoon submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
0828	34.87	0.00	0.2	7.42	-116	9.25	0.716	1.93	8.3
0831	35.37	0.60	0.2	7.59	-152	9.34	0.725	0.30	7.9
0834	35.72	1.20	0.2	7.66	-174	9.61	0.733	0.00	6.2
0837	35.91	1.80	0.2	7.69	-189	9.9	0.734	0.00	6
0840	36.08	2.40	0.2	7.71	-199	10.03	0.734	0.00	6
0843	36.19	3.00	0.2	7.73	-206	10.11	0.734	0.00	5.9
0846	36.28	3.60	0.2	7.74	-214	10.23	0.734	0.00	6
0849	36.30	4.20	0.2	7.74	-216	10.29	0.733	0	6.2

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 0852  
Split Sample With: MS/MSD  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-12S	EA Personnel: JP/RP	Client: NYSDEC
Location: Storonske Cooperage Site	Well Condition: Good	Weather: sunny
Sounding Method: Water meter	Gauge Date: 10/14/2010	Measurement Ref: TOC
Stick Up/Down (ft): Up 2 ft	Gauge Time: 0855	Well Diameter (in): 2

Purge Date: 14-Oct-10	Purge Time: 0900
Purge Method: Low flow - Monsoon submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
0900	34.66	0.00	0.2	7.43	-60	9.19	0.505	8.28	5.9
0903	34.66	0.60	0.2	6.99	-19	9.03	0.514	8.37	5
0906	34.66	1.20	0.2	6.86	1	9.01	0.522	8.82	2.2
0909	34.66	1.80	0.2	6.79	18	9.06	0.528	8.74	1.7
0912	34.66	2.40	0.2	6.76	31	9.17	0.529	9.19	1.7
0915	34.66	3.00	0.2	6.73	43	9.29	0.529	9.29	1.5
0918	34.66	3.60	0.2	6.70	54	9.4	0.528	9.1	1.4
0921	34.66	4.20	0.2	6.64	63	9.49	0.529	8.69	1.4
0924	34.66	4.80	0.2	6.54	75	9.63	0.537	8.19	1.3
0927	34.66	5.40	0.2	6.47	83	9.74	0.544	7.78	1.6
0930	34.66	6.00	0.2	6.43	88	9.81	0.546	7.8	2

Total Quantity of Water Removed (gal): \_\_\_\_\_

Samplers: \_\_\_\_\_ JP/RP

Sampling Date: \_\_\_\_\_ 10/14/2010

Sampling Time: \_\_\_\_\_ 0935

Split Sample With: \_\_\_\_\_ NA

Sample Type: \_\_\_\_\_ GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14D	EA Personnel: JP/RP	Client: NYSDEC
Location: Storonske Cooperage Site	Well Condition: Good	Weather: sunny
Sounding Method: Water meter	Gauge Date: 10/14/2010	Measurement Ref: TOC
Stick Up/Down (ft): Up 2 ft	Gauge Time: 1013	Well Diameter (in): 3

Purge Date: 14-Oct-10	Purge Time: 1015
Purge Method: Low flow - Monsoon submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1015	37.85	0.00	0.2	7.42	43	11.61	0.941	3.29	9.7
1018	38.85	0.60	0.2	7.66	9	11.41	0.962	0.00	6.8
1021	39.52	1.20	0.2	7.68	-4	11.85	0.952	0.00	9.2
1024	41.21	1.80	0.2	7.69	-17	12	0.934	0.00	9.6
1027	42.00	2.40	0.2	7.68	-21	12.16	0.926	0.00	8.6
1030	43.12	3.00	0.2	7.68	-23	12.23	0.92	0.00	8.6

Total Quantity of Water Removed (gal): 0  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 1033  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14S	EA Personnel: JP/RP	Client: NYSDEC
Location: Storonske Cooperage Site	Well Condition: Good	Weather: sunny 55
Sounding Method: Water meter	Gauge Date: 10/14/2010	Measurement Ref: TOC
Stick Up/Down (ft): Up 2 ft	Gauge Time: 0945	Well Diameter (in): 2

Purge Date: 14-Oct-10	Purge Time: 0945
Purge Method: Low flow - Grundfos submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
0945	37.02	0.00	0.2	6.93	39	10.12	0.677	6.15	181
0948	36.87	0.60	0.2	6.97	30	10.18	0.685	5.17	140
0951	36.87	1.20	0.2	7.01	35	10.42	0.704	5.25	87.7
0954	36.87	1.80	0.2	7.05	30	10.62	0.725	5.15	40.2
0957	36.87	2.40	0.2	7.07	31	11.1	0.716	4.86	16.3
1000	36.87	3.00	0.2	7.08	31	11.17	0.715	4.80	13.4
1003	36.87	3.60	0.2	7.08	32	11.5	0.714	4.70	9.4

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 1005  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
UK-1	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Good	sunny
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1112	2

Purge Date:	Purge Time:
14-Oct-10	1115
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1114	39.45	0.00	0.2	6.88	91	14.45	0.666	8.32	>800
1117	39.28	0.60	0.2	6.40	130	14.07	0.670	7.07	>800
1120	39.27	1.20	0.2	6.35	139	13.09	0.700	7.46	>800
1123	39.27	1.80	0.2	6.34	142	13.27	0.703	7.19	>800
1126	39.27	2.40	0.2	6.38	129	13.65	0.709	7.49	>800
1129	39.27	3.00	0.2	6.32	139	13.86	0.708	7.39	776
1132	39.27	3.60	0.2	6.31	143	14.04	0.709	7.33	715
1135	39.27	4.20	0.2	6.31	145	14.21	0.708	7.23	531
1138	39.27	4.80	0.2	6.3	147	14.43	0.710	7.1	419
1141	39.27	5.40	0.2	6.36	145	14.45	0.703	7.49	344
1144	39.27	6.00	0.2	6.31	148	14.51	0.699	7.39	438
1147	39.27	6.60	0.2	6.31	149	14.57	0.699	7.4	363

Total Quantity of Water Removed (gal): \_\_\_\_\_

Samplers: JP/RP

Sampling Date: 10/14/2010

Sampling Time: 1150

NA

Split Sample With: GW

Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
UK-3	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	No lock	sunny 60
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1050	4

Purge Date:	Purge Time:
14-Oct-10	1050
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1050	39.67	0.00	0.2	7.89	55	13.45	0.527	6.18	8.8
1053	39.66	0.60	0.2	6.92	88	13.7	0.529	5.01	9.5
1056	39.66	1.20	0.2	6.70	97	13.85	0.530	4.92	7.9
1059	39.66	1.80	0.2	6.58	100	14.02	0.531	4.83	5.4
1102	39.66	2.40	0.2	6.56	101	14.25	0.531	4.72	3.6
1105	39.66	3.00	0.2	6.55	101	14.37	0.530	4.71	3.6

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 1107  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-8S	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Good	sunny
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1230	2

Purge Date:	Purge Time:
14-Oct-10	1234
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1234	37.95	0.00	0.2	6.96	29	15.21	0.370	2.81	>800
1237	37.95	0.60	0.2	6.51	59	14.85	0.352	1.59	644
1240	37.95	1.20	0.2	6.37	78	14.82	0.356	1.30	290
1243	37.95	1.80	0.2	6.33	80	14.86	0.361	1.23	186
1246	37.95	2.40	0.2	6.29	84	14.94	0.365	1.19	116
1249	37.95	3.00	0.2	6.26	91	15.02	0.365	1.23	85.7
1252	37.95	3.60	0.2	6.24	96	15.03	0.365	0.22	56.2
1255	37.95	4.20	0.2	6.22	102	15.05	0.365	1.07	36.4
1258	37.95	4.80	0.2	6.21	104	15.02	0.366	1.14	22.1

Total Quantity of Water Removed (gal): \_\_\_\_\_

Samplers: \_\_\_\_\_ JP/RP

Sampling Date: \_\_\_\_\_ 10/14/2010

Sampling Time: \_\_\_\_\_ 1300

Split Sample With: \_\_\_\_\_ NA

Sample Type: \_\_\_\_\_ GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



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## GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-8D	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Fair	overcast
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1309	4

Purge Date:	Purge Time:
14-Oct-10	1309
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1306	36.91	0.00	0.2	8.76	41	16.19	0.432	4.52	140
1312	37.39	0.60	0.2	8.47	46	16.13	0.673	0.00	88.9
1315	37.67	1.20	0.2	8.38	35	16.03	0.698	0.00	100
1318	38.37	1.80	0.2	8.39	10	13.09	0.763	0.00	4.2
1321	38.63	2.40	0.2	8.41	-2	13.07	0.756	0.00	4.5
1324	38.84	3.00	0.2	8.42	-11	13.22	0.745	0	3.7
1327	39.14	3.60	0.2	8.43	-20	13.43	0.724	0	3.8
1330	39.62	4.20	0.2	8.45	-27	13.35	0.691	0	3.4
1333	40.03	4.80	0.2	8.47	-34	13.14	0.684	0	3.5
1336	40.28	5.40	0.2	8.47	-37	13.25	0.667	0	3.5

Total Quantity of Water Removed (gal): \_\_\_\_\_

Samplers: JP/RP

Sampling Date: 10/14/2010

Sampling Time: 1338

Split Sample With: NA

Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

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# **GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-8DD	<b>EA Personnel:</b> JP/RP	<b>Client:</b> NYSDEC
<b>Location:</b> Storonske Cooperage Site	<b>Well Condition:</b> casing cover broken	<b>Weather:</b> overcast
<b>Sounding Method:</b> Water meter	<b>Gauge Date:</b> 10/14/2010	<b>Measurement Ref:</b> TOC
<b>Stick Up/Down (ft):</b> Up 2 ft	<b>Gauge Time:</b> ---	<b>Well Diameter (in):</b> 4

Purge Date: 14-Oct-10	Purge Time: 1255
Purge Method: Low flow - Monsoon submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D: 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

**Total Quantity of Water Removed (gal):**

**Samplers:** \_\_\_\_\_

**Sampling Date:** 10/14/2010

**Sampling Time:** 1340

**Split Sample With:** NA

**Sample Type:** GW

**COMMENTS AND OBSERVATIONS:** Well was bailed to obstruction and allowed to recharge. After recharge parameters and GW samples were collected with a bailer



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15S	EA Personnel: JP/RP	Client: NYSDEC
Location: Storonske Cooperage Site	Well Condition: Good	Weather: sunny
Sounding Method: Water meter	Gauge Date: 10/14/2010	Measurement Ref: TOC
Stick Up/Down (ft): Up 1.5 ft	Gauge Time: 1400	Well Diameter (in): 2

Purge Date: 14-Oct-10	Purge Time: 1403
Purge Method: Low flow - Monsoon submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1403	8.94	0.00	0.2	7.44	104	13.69	0.505	10.51	251
1406	8.94	0.60	0.2	6.65	129	13.53	0.503	9.52	20.6
1409	8.94	1.20	0.2	6.51	143	13.6	0.500	9.41	11.1
1412	8.94	1.80	0.2	6.44	151	13.65	0.504	9.30	5.6
1415	8.94	2.40	0.2	6.41	156	13.66	0.509	9.20	3.3
1418	8.94	3.00	0.2	6.39	158	13.66	0.506	9.24	2.7

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 1420  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-9S	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Fair	overcast 65
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1429	2

Purge Date:	Purge Time:
14-Oct-10	1429
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1429	12.96	0.00	0.2	6.62	1	13.96	0.415	0.00	190
1432	12.56	0.60	0.2	6.43	33	14.15	0.375	2.04	37.8
1435	12.27	1.20	0.2	6.32	59	14.32	0.368	3.03	13.6
1438	12.11	1.80	0.2	6.27	72	14.58	0.367	3.29	7.8
1441	12.11	2.40	0.2	6.25	84	14.68	0.362	3.47	4.3
1444	12.11	3.00	0.2	6.23	92	14.77	0.359	3.52	3.6
1447	12.11	3.60	0.2	6.22	98	14.87	0.360	3.5	3.7
1450	12.11	4.20	0.2	6.21	101	14.9	0.360	3.53	3.3

Total Quantity of Water Removed (gal): \_\_\_\_\_

Samplers: JP/RP

Sampling Date: 10/14/2010

Sampling Time: 1455

Split Sample With: NA

Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



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### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-6D	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	No lock / No Gripper cap	Rain, cloudy
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/15/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	0713	4

Purge Date:	Purge Time:
15-Oct-10	0715
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
0715	14.63	0.00	0.2	7.58	53	11.44	0.840	11.08	13.3
0718	15.16	0.60	0.2	7.33	14	11.52	0.840	10.83	6.5
0721	15.35	1.20	0.2	7.30	0	11.5	0.830	11.02	7.1
0724	16.31	1.80	0.2	7.29	-3	11.95	0.842	9.51	5.7
0727	15.89	2.40	0.2	7.31	8	12.12	0.841	10.12	3.8
0730	16.31	3.00	0.2	7.35	21	12.38	0.839	9.13	2.8
0733	16.58	3.60	0.2	7.37	32	12.61	0.838	9.47	2.3
0736	16.61	4.20	0.2	7.39	35	12.54	0.838	9.53	2.2
0739	16.89	4.80	0.2	7.4	38	12.31	0.838	9.51	2.4

Total Quantity of Water Removed (gal): \_\_\_\_\_

Samplers: \_\_\_\_\_ JP/RP

Sampling Date: \_\_\_\_\_ 10/15/2010

Sampling Time: \_\_\_\_\_ 0742

Split Sample With: \_\_\_\_\_ NA

Sample Type: \_\_\_\_\_ GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

## GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-6DD	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Casing cover broken / No lock	Rain 45

Purge Date:	Purge Time:
15-Oct-10	1645
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
0645	13.97	0.00	0.2	8.18	85	11.2	0.578	3.29	3.5
0648	14.33	0.60	0.2	8.26	87	11.57	0.572	1.68	11.4
0651	14.60	1.20	0.2	8.26	86	12	0.572	1.49	8.1
0654	14.78	1.80	0.2	8.27	85	11.99	0.573	1.42	7.3
0657	15.00	2.40	0.2	8.27	80	11.74	0.573	1.26	6.2
0700	15.21	3.00	0.2	8.27	77	11.88	0.572	1.27	6.6

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/15/2010

Sampling Time: 0703  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-5D	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	No lock/casing cover broken	sunny
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 1 ft	1507	4

Purge Date:	Purge Time:
14-Oct-10	1507
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1507	4.24	0.00	0.2	7.04	63	14.65	1.200	0.00	6.7
1510	4.60	0.60	0.2	7.07	57	14.88	1.190	0.00	5
1513	4.60	1.20	0.2	7.10	54	15.05	1.160	0.00	3.7
1516	4.60	1.80	0.2	7.10	52	15.22	1.190	0.00	3.6
1519	4.93	2.40	0.2	7.12	47	15.29	1.180	0.00	3
1522	5.18	3.00	0.2	7.13	44	15.31	1.170	0.00	2.8

Total Quantity of Water Removed (gal): 0

Samplers: JP/RP

Sampling Date: 10/14/2010

Sampling Time: 1524

Split Sample With: NA

Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-4D	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	No well cap / No lock	overcast 60
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1531	4

Purge Date:	Purge Time:
14-Oct-10	1531
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1531	5.36	0.00	0.2	7.25	39	14.37	0.825	1.81	236
1534	5.60	0.60	0.2	6.74	57	14.19	0.836	0.31	101
1537	5.83	1.20	0.2	6.60	71	14.22	0.839	0.00	545
1540	6.05	1.80	0.2	6.56	72	14.37	0.838	0.00	43.6
1543	6.34	2.40	0.2	6.53	62	14.57	0.838	0.00	50.9
1546	6.76	3.00	0.2	6.52	62	14.63	0.842	0	46.6
1549	6.94	3.60	0.2	6.51	68	14.66	0.840	0	38.2

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 1552  
Split Sample With: NA  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-7S	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	Good	overcast 60
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2.5 ft	1600	2

Purge Date:	Purge Time:
14-Oct-10	1600
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1600	22.91	0.00	0.2	7.27	-93	12.62	0.762	0.18	45
1603	22.88	0.60	0.2	7.44	-54	12.47	0.769	0.00	97.2
1606	22.91	1.20	0.2	7.34	-93	12.84	0.767	0.00	58.3
1609	22.91	1.80	0.2	7.24	-75	13	0.775	0.00	38.2
1612	22.91	2.40	0.2	7.21	-68	13.02	0.778	0.00	30
1615	22.91	3.00	0.2	7.19	-65	13.04	0.779	0.00	24.1

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 1618  
Split Sample With: Duplicate-02  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
UK-2	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	No well cap	sunny 65
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/14/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1155	2

Purge Date:	Purge Time:
14-Oct-10	1155
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
		Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
	0	Submersible
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:
0	0	Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1155	40.18	0.00	0.2	6.79	119	15.2	0.494	8.51	87.4
1158	39.76	0.60	0.2	6.63	124	14.82	0.527	5.81	78.3
1201	39.76	1.20	0.2	6.58	121	14.93	0.533	5.43	58.3
1204	39.76	1.80	0.2	6.53	121	15.08	0.548	4.33	26.7
1207	39.76	2.40	0.2	6.47	126	15.15	0.540	4.08	26.8
1210	39.76	3.00	0.2	6.45	127	15.26	0.537	4.06	27.7

Total Quantity of Water Removed (gal): \_\_\_\_\_  
Samplers: JP/RP  
Sampling Date: 10/14/2010

Sampling Time: 1213  
Split Sample With: Duplicate-01  
Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

### GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW-20D	JP/RP	NYSDEC
Location:	Well Condition:	Weather:
Storonske Cooperage Site	No well cap	sunny 65
Sounding Method:	Gauge Date:	Measurement Ref:
Water meter	10/13/2010	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
Up 2 ft	1608	2

Purge Date:	Purge Time:
13-Oct-10	1608
Purge Method:	Field Technician:
Low flow - Monsoon submersible	JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft): 0.16	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D: 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (Liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (oC)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)
1608	28.67	0.00	0.2	6.97	11	16.78	0.511	5.06	>800
1611	28.67	0.60	0.2	6.81	56	16.99	0.509	4.69	>800
1614	28.67	1.20	0.2	6.75	85	16.48	0.521	4.80	>800
1617	28.67	1.80	0.2	6.72	93	16.21	0.525	5.01	429
1620	28.67	2.40	0.2	6.71	91	16.04	0.526	5.22	154
1623	28.67	3.00	0.2	6.69	89	15.94	0.525	4.45	88.9
1626	28.67	3.60	0.2	6.69	88	15.92	0.525	5.46	56.6
1629	28.67	4.20	0.2	6.68	88	15.87	0.525	5.57	41.2
1632		4.80	0.2	6.68	88	15.83	0.526	5.61	25.5

Total Quantity of Water Removed (gal): 1.98

Samplers: JP/RP

Sampling Date: 10/13/2010

Sampling Time: 1635

Split Sample With: NA

Sample Type: GW

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_



EA Engineering PC and its Affiliate,  
EA Science and Technology

# **GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-6S	<b>EA Personnel:</b> JP/RP	<b>Client:</b> NYSDEC
<b>Location:</b> Storonske Cooperage Site	<b>Well Condition:</b> No lock	<b>Weather:</b> Rain, Cloudy
<b>Sounding Method:</b> Water meter	<b>Gauge Date:</b> 10/15/2010	<b>Measurement Ref:</b> TOC
<b>Stick Up/Down (ft):</b> Up 2 ft	<b>Gauge Time:</b> 0755	<b>Well Diameter (in):</b> 2

Purge Date: 15-Oct-10	Purge Time: 0759
Purge Method: Low flow - Monsoon submersible	Field Technician: JP/RP

Well Volume		
A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC: Up 1-2ft.
B. Depth to Water (ft):	E. Well Volume (gal) C*D: 0	Pump Type: Submersible
C. Liquid Depth (ft) (A-B): 0	F. Five Well Volumes (gal) (E3): 0	Pump Designation: Grundfos

**Total Quantity of Water Removed (gal):**

**Samplers:** JP/RP

**Sampling Date:** 10/15/2010

**Sampling Time:** 0801

**Split Sample With:**

**Sample Type:** GW

**COMMENTS AND OBSERVATIONS:** Well was bailed due to obstruction. Three well volumes were pumped. Sample and parameters collected after 3 well volumes.

## **Appendix F**

### **Laboratory Analytical Data, Form Is, and Chain of Custody Forms**

**DATA PACKAGE  
VOLATILE ORGANICS****PROJECT NAME : STORONSKE COOPERAGE SITE NYSDEC EA#14474.22****EA ENGINEERING SCIENCE & TECHNOLOGY  
6712 Brooklawn Parkway Suite 104****East Syracuse, NY - 13211-2158****Phone No: 3154314610****ORDER ID : B3902  
ATTENTION : Jim Hayward**



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**Cover Page****Order ID :** B3902**Project ID :** Storonske Cooperage Site NYSDEC EA#14474.22**Client :** EA Engineering Science & Technology

<b>Lab Sample Number</b>	<b>Client Sample Number</b>
B3902-01	4-42-021-MW-16D
B3902-02	B3902-01MS
B3902-03	B3902-01MSD
B3902-04	4-42-021-MW-16S
B3902-05	4-42-021-MW-20D
B3902-06	4-42-021-MW-13DD
B3902-07	4-42-021-MW-13D
B3902-08	4-42-021-MW-13S
B3902-09	4-42-021-MW-10D
B3902-10	B3902-09MS
B3902-11	B3902-09MSD
B3902-12	4-42-021-MW-12S
B3902-13	4-42-021-MW-14S
B3902-14	4-42-021-MW-14D
B3902-15	4-42-021-UK-3
B3902-16	4-42-021-UK-1
B3902-17	4-42-021-UK-2
B3902-18	4-42-021-MW-8S
B3902-19	4-42-021-MW-8DD
B3902-20	4-42-021-MW-8D
B3902-21	4-42-021-MW-15S
B3902-22	4-42-021-MW-9S
B3902-23	4-42-021-MW-5D
B3902-24	4-42-021-MW-4D
B3902-25	4-42-021-MW-7S
B3902-26	4-42-021-MW-6DD
B3902-27	4-42-021-MW-6D
B3902-28	4-42-021-MW-6S
B3902-29	4-42-021-DUPLICATE-01
B3902-30	4-42-021-DUPLICATE-02
B3902-31	4-42-021-TRIPBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : \_\_\_\_\_

**DATA REPORTING QUALIFIERS- ORGANIC**

For reporting results, the following "Result Qualifiers" are used:

- |           |   |
|-----------|---|
| Value     | If the result is a value greater than or equal to the detection limit, report the value   |
| <b>U</b>  | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U. This is the detection limit attainable for this particular sample based on any concentration or dilution that may have been required.   |
| <b>ND</b> | Indicates the compound was analyzed for but was not detected  |
| <b>J</b>  | Indicates an estimated value. This flag is used:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L, and a concentration of 3ug/L was calculated, report as 3 J. |
| <b>B</b>  | Indicates the analyte was found in the blank as well as the sample.   |
| <b>E</b>  | Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.  |
| <b>D</b>  | This flag identifies all compounds identified in an analysis at a secondary dilution factor.  |
| <b>P</b>  | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns.  |
| <b>N</b>  | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.   |
| <b>A</b>  | This flag indicates that a Tentatively Identified Compound is a suspected Aldol-condensation product.   |

**CASE NARRATIVE**

**EA Engineering Science & Technology**

**Project Name: Storonske Cooperage Site NYSDEC EA#14474.22**

**Project # N/A**

**Chemtech Project # B3902**

**A. Number of Samples and Date of Receipt:**

31 Water samples were received on 10/16/2010.

**B. Parameters**

According to the Chain of Custody document, the following analyses were requested: VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

**C. Analytical Techniques:**

The analysis performed on instrument MSVOA F were done using GC column RTX624, which is 75 meters, 0.53 mm id, 3.0 um df, Restek Cat. #10974. The Trap was supplied by Supelco, VOCARB 3000, Tekmar 2000 Concentrator. The analysis performed on instrument MSVOA G were done using GC column RTX-VMS which is 20 meters, 0.18 mm id, 1.0 um df, Restek Cat. #49914. The Trap was supplied by OI Analytical, OI #10 Trap , OI Eclipse 4660 Concentrator. The analysis of VOC-TCLVOA-10 was based on method 8260B.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD for VF024113.D{B3902-03MSD} recoveries met criteria except for Acetone[22%], Bromoform[25%] and Carbon disulfide[25%] .

The Blank Spike for VF024110.D{BSF1019W1} met requirements for all samples except for Acetone[160%], Bromomethane[155%] .

The Blank Spike for VG031006.D{BSG1019W1} met requirements for all samples except for Dichlorodifluoromethane[135%] .

The Blank Spike for VG031032.D{BSG1020W1} met requirements for all samples except for Dichlorodifluoromethane[125%] .

The Blank Spike Duplicate met requirements for all samples .

The Continuous Calibration Data file ID VF024092.D and VF024108.D met the requirements except for Acetone. This compound was biased high and not present in any of the samples.

The Continuous Calibration Data file ID VG031004.D met the requirements except for Dichlorodifluoromethane and Bromomethane. These compounds were biased high and not present in any of the samples.

The Continuous Calibration Data file ID VG031004.D met the requirements except for Dichlorodifluoromethane and Bromomethane. Trichlorofluoromethane These compounds were biased high and not present in any of the samples  
The Tuning criteria met requirements.

**E. Additional Comments:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature \_\_\_\_\_



# VOLATILES

# DATA



VOLATILES  
QC  
DATA

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: **CHEMTECH**Client: **EA Engineering Science & Technology**Lab Code: **CHEM**CASE No.: **B3902**SAS No.: **B3902**SDG NO.: **B3902**Analytical Method: **EPA SW846 8260**

	Lab Sample ID.	Client Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBF1018W1	VBF1018W1	93	98	97	96	0
02	BSF1018W1	BSF1018W1	92	100	92	90	0
03	B3902-31	4-42-021-TRIPBLANK	93	96	99	102	0
04	B3902-01	4-42-021-MW-16D	96	99	96	97	0
05	B3902-04	4-42-021-MW-16S	100	100	97	99	0
06	B3902-05	4-42-021-MW-20D	102	105	94	98	0
07	B3902-06	4-42-021-MW-13DD	104	103	99	100	0
08	B3902-07	4-42-021-MW-13D	107	104	98	101	0
09	B3902-08	4-42-021-MW-13S	109	105	97	101	0
10	B3902-12	4-42-021-MW-12S	110	103	99	100	0
11	B3902-13	4-42-021-MW-14S	114	107	99	101	0
12	B3902-14	4-42-021-MW-14D	113	107	100	101	0
13	VBF1019W1	VBF1019W1	95	104	98	98	0
14	BSF1019W1	BSF1019W1	93	96	91	88	0
15	B3902-02MS	4-42-021-MW-16DMS	102	103	100	99	0
16	B3902-03MSD	4-42-021-MW-16DMSD	96	101	100	97	0
17	B3902-15	4-42-021-UK-3	89	95	97	97	0
18	B3902-16	4-42-021-UK-1	90	98	95	95	0
19	B3902-17	4-42-021-UK-2	93	107	97	97	0
20	B3902-18	4-42-021-MW-8S	97	101	96	97	0
21	B3902-20	4-42-021-MW-8D	105	103	99	98	0

## QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (66-150)

SMC2 (DBFM) =Dibromofluoromethane (76-130)

SMC3 (TOL) =Toluene-d8 (78-121)

SMC4 (BFB) =4-Bromofluorobenzene (70-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & TechnologyLab Code: CHEM CASE No.: B3902 SAS No.: B3902 SDG NO.: B3902Analytical Method: EPA SW846 8260

22	B3902-21	4-42-021-MW-15S	107	108	99	101	0
23	B3902-22	4-42-021-MW-9S	108	104	98	100	0
24	B3902-23	4-42-021-MW-5D	112	105	101	101	0
25	B3902-24	4-42-021-MW-4D	112	105	99	101	0

## QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (66-150)

SMC2 (DBFM) =Dibromofluoromethane (76-130)

SMC3 (TOL) =Toluene-d8 (78-121)

SMC4 (BFB) =4-Bromofluorobenzene (70-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: **CHEMTECH**Client: **EA Engineering Science & Technology**Lab Code: **CHEM**CASE No.: **B3902**SAS No.: **B3902**SDG NO.: **B3902**Analytical Method: **EPA SW846 8260**

	Lab Sample ID.	Client Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBG1019W1	VBG1019W1	95	100	91	90	0
02	BSG1019W1	BSG1019W1	91	91	88	89	0
03	B3902-25	4-42-021-MW-7S	81	83	85	86	0
04	B3902-26	4-42-021-MW-6DD	86	82	94	96	0
05	B3902-27	4-42-021-MW-6D	88	90	89	90	0
06	B3902-28	4-42-021-MW-6S	92	97	92	95	0
07	B3902-29	4-42-021-DUPLICATE-01	90	91	90	96	0
08	B3902-30	4-42-021-DUPLICATE-02	88	88	92	96	0
09	B3902-09	4-42-021-MW-10D	93	87	93	97	0
10	B3902-10MS	4-42-021-MW-10DMS	95	86	93	97	0
11	B3902-11MSD	4-42-021-MW-10DMSD	87	79	93	96	0
12	VBG1020W1	VBG1020W1	100	107	89	92	0
13	BSG1020W1	BSG1020W1	84	93	84	86	0
14	B3902-19	4-42-021-MW-8DD	83	84	79	83	0

## QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (66-150)

SMC2 (DBFM) =Dibromofluoromethane (76-130)

SMC3 (TOL) =Toluene-d8 (78-121)

SMC4 (BFB) =4-Bromofluorobenzene (70-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: **CHEMTECH** Client: **EA Engineering Science & Technology**

Lab Code: **CHEM** Cas No: **B3902** SAS No : **B3902** SDG No: **B3902**

Matrix Spike - EPA Sample No : **B3902-10** Analytical Method: **EPA SW846 8260** Datafile : **VG031015.D**

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC#	QC LIMITS REC
Dichlorodifluoromethane	50	0	73	146	(24-175)
Chloromethane	50	0	48	96	(29-190)
Vinyl Chloride	50	0	51	102	(39-171)
Bromomethane	50	0	58	116	(34-167)
Chloroethane	50	0	53	106	(38-170)
Trichlorofluoromethane	50	0	61	122	(38-171)
1,1,2-Trichlorotrifluoroethane	50	0	56	112	(47-152)
1,1-Dichloroethene	50	0	54	108	(47-149)
Acetone	250	0	210	84	(28-181)
Carbon Disulfide	50	0	40	80	(34-160)
Methyl tert-butyl Ether	50	0	48	96	(39-166)
Methyl Acetate	50	0	50	100	(29-176)
Methylene Chloride	50	0	51	102	(48-149)
trans-1,2-Dichloroethene	50	0	55	110	(53-143)
1,1-Dichloroethane	50	1.5	52	101	(57-150)
Cyclohexane	50	0	51	102	(42-159)
2-Butanone	250	0	200	80	(47-160)
Carbon Tetrachloride	50	0	50	100	(38-158)
cis-1,2-Dichloroethene	50	0	50	100	(41-160)
Chloroform	50	0	52	104	(56-152)
1,1,1-Trichloroethane	50	0	52	104	(57-148)
Methylecyclohexane	50	0	54	108	(41-152)
Benzene	50	0	52	104	(59-140)
1,2-Dichloroethane	50	0	56	112	(56-151)
Trichloroethene	50	0	59	118	(49-146)
1,2-Dichloropropane	50	0	53	106	(63-140)
Bromodichloromethane	50	0	56	112	(60-144)
4-Methyl-2-Pentanone	250	0	240	96	(51-160)
Toluene	50	0	52	104	(60-139)
t-1,3-Dichloropropene	50	0	43	86	(51-148)
cis-1,3-Dichloropropene	50	0	40	80	(53-143)
1,1,2-Trichloroethane	50	0	54	108	(65-138)
2-Hexanone	250	0	370	148	(44-170)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 6 Out of 89 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: **CHEMTECH** Client: **EA Engineering Science & Technology**

Lab Code: **CHEM** Cas No: **B3902** SAS No : **B3902** SDG No: **B3902**

Matrix Spike - EPA Sample No : **B3902-10** Analytical Method: **EPA SW846 8260** Datafile : **VG031015.D**

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC#	QC LIMITS REC
Dibromochloromethane	50	0	57	114	(56-146)
1,2-Dibromoethane	50	0	58	116	(63-142)
Tetrachloroethene	50	0	56	112	(23-148)
Chlorobenzene	50	0	54	108	(57-136)
Ethyl Benzene	50	0	51	102	(49-146)
m/p-Xylenes	100	0	100	100	(51-140)
o-Xylene	50	0	51	102	(54-139)
Styrene	50	0	51	102	(48-141)
Bromoform	50	0	55	110	(48-141)
Isopropylbenzene	50	0	50	100	(48-143)
1,1,2,2-Tetrachloroethane	50	0	43	86	(52-151)
1,3-Dichlorobenzene	50	0	50	100	(63-129)
1,4-Dichlorobenzene	50	0	52	104	(57-134)
1,2-Dichlorobenzene	50	0	51	102	(57-136)
1,2-Dibromo-3-Chloropropane	50	0	56	112	(46-157)
1,2,4-Trichlorobenzene	50	0	47	94	(53-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 6 Out of 89 outside limits

**WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : B3902-11 Analytical Method: EPA SW846 8260 Datafile : VG031016.D

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	MSD %	QC LIMITS RPD	REC
Dichlorodifluoromethane	50	72	144	1	20	(24-175)
Chloromethane	50	50	100	4	20	(29-190)
Vinyl Chloride	50	51	102	0	20	(39-171)
Bromomethane	50	64	128	10	20	(34-167)
Chloroethane	50	53	106	0	20	(38-170)
Trichlorofluoromethane	50	62	124	2	20	(38-171)
1,1,2-Trichlorotrifluoroethane	50	54	108	4	20	(47-152)
1,1-Dichloroethene	50	53	106	2	20	(47-149)
Acetone	250	220	88	5	20	(28-181)
Carbon Disulfide	50	41	82	2	20	(34-160)
Methyl tert-butyl Ether	50	48	96	0	20	(39-166)
Methyl Acetate	50	53	106	6	20	(29-176)
Methylene Chloride	50	52	104	2	20	(48-149)
trans-1,2-Dichloroethene	50	52	104	6	20	(53-143)
1,1-Dichloroethane	50	51	99	2	20	(57-150)
Cyclohexane	50	50	100	2	20	(42-159)
2-Butanone	250	210	84	5	20	(47-160)
Carbon Tetrachloride	50	50	100	0	20	(38-158)
cis-1,2-Dichloroethene	50	49	98	2	20	(41-160)
Chloroform	50	50	100	4	20	(56-152)
1,1,1-Trichloroethane	50	52	104	0	20	(57-148)
Methylecyclohexane	50	54	108	0	20	(41-152)
Benzene	50	52	104	0	20	(59-140)
1,2-Dichloroethane	50	55	110	2	20	(56-151)
Trichloroethene	50	61	122	3	20	(49-146)
1,2-Dichloropropane	50	54	108	2	20	(63-140)
Bromodichloromethane	50	54	108	4	20	(60-144)
4-Methyl-2-Pentanone	250	260	104	8	20	(51-160)
Toluene	50	54	108	4	20	(60-139)
t-1,3-Dichloropropene	50	45	90	5	20	(51-148)
cis-1,3-Dichloropropene	50	41	82	2	20	(53-143)
1,1,2-Trichloroethane	50	57	114	5	20	(65-138)
2-Hexanone	250	380	152	3	20	(44-170)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 1 Out of 89 outside limits

Spike Recovery : 12 Out of 178 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: **CHEMTECH** Client: **EA Engineering Science & Technology**

Lab Code: **CHEM** Cas No: **B3902** SAS No : **B3902** SDG No: **B3902**

Matrix Spike - EPA Sample No : **B3902-11** Analytical Method: **EPA SW846 8260** Datafile : **VG031016.D**

<b>COMPOUND</b>	<b>SPIKE ADDED (ug/L)</b>	<b>MSD CONCENTRATION (ug/L)</b>	<b>MSD % % (ug/L)</b>		<b>QC LIMITS RPD REC</b>	
			<b>%</b>	<b>%</b>	<b>RPD</b>	<b>REC</b>
Dibromochloromethane	50	57	114	0	20	(56-146)
1,2-Dibromoethane	50	60	120	3	20	(63-142)
Tetrachloroethene	50	58	116	4	20	(23-148)
Chlorobenzene	50	54	108	0	20	(57-136)
Ethyl Benzene	50	51	102	0	20	(49-146)
m/p-Xylenes	100	100	100	0	20	(51-140)
o-Xylene	50	51	102	0	20	(54-139)
Styrene	50	52	104	2	20	(48-141)
Bromoform	50	54	108	2	20	(48-141)
Isopropylbenzene	50	50	100	0	20	(48-143)
1,1,2,2-Tetrachloroethane	50	41	82	5	20	(52-151)
1,3-Dichlorobenzene	50	53	106	6	20	(63-129)
1,4-Dichlorobenzene	50	52	104	0	20	(57-134)
1,2-Dichlorobenzene	50	53	106	4	20	(57-136)
1,2-Dibromo-3-Chloropropane	50	57	114	2	20	(46-157)
1,2,4-Trichlorobenzene	50	50	100	6	20	(53-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 1 Out of 89 outside limits

Spike Recovery : 12 Out of 178 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: **CHEMTECH** Client: **EA Engineering Science & Technology**

Lab Code: **CHEM** Cas No: **B3902** SAS No : **B3902** SDG No: **B3902**

Matrix Spike - EPA Sample No : **B3902-02** Analytical Method: **EPA SW846 8260** Datafile : **VF024112.D**

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC#	QC LIMITS REC
Dichlorodifluoromethane	50	0	61	122	(24-175)
Chloromethane	50	0	64	128	(29-190)
Vinyl Chloride	50	0	64	128	(39-171)
Bromomethane	50	0	74	148	(34-167)
Chloroethane	50	0	70	140	(38-170)
Trichlorofluoromethane	50	0	66	132	(38-171)
1,1,2-Trichlorotrifluoroethane	50	0	63	126	(47-152)
1,1-Dichloroethene	50	0	67	134	(47-149)
Acetone	250	0	350	140	(28-181)
Carbon Disulfide	50	0	49	98	(34-160)
Methyl tert-butyl Ether	50	0	65	130	(39-166)
Methyl Acetate	50	0	61	122	(29-176)
Methylene Chloride	50	0	62	124	(48-149)
trans-1,2-Dichloroethene	50	0	63	126	(53-143)
1,1-Dichloroethane	50	0.91	66	130	(57-150)
Cyclohexane	50	0	64	128	(42-159)
2-Butanone	250	0	280	112	(47-160)
Carbon Tetrachloride	50	0	56	112	(38-158)
cis-1,2-Dichloroethene	50	0	65	130	(41-160)
Chloroform	50	0	65	130	(56-152)
1,1,1-Trichloroethane	50	0	62	124	(57-148)
Methylecyclohexane	50	0	51	102	(41-152)
Benzene	50	0	54	108	(59-140)
1,2-Dichloroethane	50	0	55	110	(56-151)
Trichloroethene	50	0	52	104	(49-146)
1,2-Dichloropropane	50	0	56	112	(63-140)
Bromodichloromethane	50	0	55	110	(60-144)
4-Methyl-2-Pentanone	250	0	290	116	(51-160)
Toluene	50	0	53	106	(60-139)
t-1,3-Dichloropropene	50	0	50	100	(51-148)
cis-1,3-Dichloropropene	50	0	52	104	(53-143)
1,1,2-Trichloroethane	50	0	56	112	(65-138)
2-Hexanone	250	0	290	116	(44-170)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 7 Out of 89 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: **CHEMTECH** Client: **EA Engineering Science & Technology**

Lab Code: **CHEM** Cas No: **B3902** SAS No : **B3902** SDG No: **B3902**

Matrix Spike - EPA Sample No : **B3902-02** Analytical Method: **EPA SW846 8260** Datafile : **VF024112.D**

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC#	QC LIMITS REC
Dibromochloromethane	50	0	55	110	(56-146)
1,2-Dibromoethane	50	0	55	110	(63-142)
Tetrachloroethene	50	0	38	76	(23-148)
Chlorobenzene	50	0	50	100	(57-136)
Ethyl Benzene	50	0	50	100	(49-146)
m/p-Xylenes	100	0	98	98	(51-140)
o-Xylene	50	0	49	98	(54-139)
Styrene	50	0	39	78	(48-141)
Bromoform	50	0	50	100	(48-141)
Isopropylbenzene	50	0	48	96	(48-143)
1,1,2,2-Tetrachloroethane	50	0	49	98	(52-151)
1,3-Dichlorobenzene	50	0	47	94	(63-129)
1,4-Dichlorobenzene	50	0	47	94	(57-134)
1,2-Dichlorobenzene	50	0	47	94	(57-136)
1,2-Dibromo-3-Chloropropane	50	0	48	96	(46-157)
1,2,4-Trichlorobenzene	50	0	47	94	(53-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 7 Out of 89 outside limits

**WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : B3902-03 Analytical Method: EPA SW846 8260 Datafile : VF024113.D

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % (ug/L)	QC LIMITS RPD	REC
Dichlorodifluoromethane	50	57	114   7	20	(24-175)
Chloromethane	50	62	124   3	20	(29-190)
Vinyl Chloride	50	60	120   6	20	(39-171)
Bromomethane	50	68	136   8	20	(34-167)
Chloroethane	50	72	144   3	20	(38-170)
Trichlorofluoromethane	50	63	126   5	20	(38-171)
1,1,2-Trichlorotrifluoroethane	50	63	126   0	20	(47-152)
1,1-Dichloroethene	50	70	140   4	20	(47-149)
Acetone	250	280	112   22*	20	(28-181)
Carbon Disulfide	50	38	76   25*	20	(34-160)
Methyl tert-butyl Ether	50	60	120   8	20	(39-166)
Methyl Acetate	50	53	106   14	20	(29-176)
Methylene Chloride	50	60	120   3	20	(48-149)
trans-1,2-Dichloroethene	50	60	120   5	20	(53-143)
1,1-Dichloroethane	50	60	118   10	20	(57-150)
Cyclohexane	50	59	118   8	20	(42-159)
2-Butanone	250	260	104   7	20	(47-160)
Carbon Tetrachloride	50	49	98   13	20	(38-158)
cis-1,2-Dichloroethene	50	60	120   8	20	(41-160)
Chloroform	50	59	118   10	20	(56-152)
1,1,1-Trichloroethane	50	57	114   8	20	(57-148)
Methylecyclohexane	50	48	96   6	20	(41-152)
Benzene	50	51	102   6	20	(59-140)
1,2-Dichloroethane	50	51	102   8	20	(56-151)
Trichloroethene	50	51	102   2	20	(49-146)
1,2-Dichloropropane	50	52	104   7	20	(63-140)
Bromodichloromethane	50	49	98   12	20	(60-144)
4-Methyl-2-Pentanone	250	260	104   11	20	(51-160)
Toluene	50	51	102   4	20	(60-139)
t-1,3-Dichloropropene	50	43	86   15	20	(51-148)
cis-1,3-Dichloropropene	50	44	88   17	20	(53-143)
1,1,2-Trichloroethane	50	52	104   7	20	(65-138)
2-Hexanone	250	260	104   11	20	(44-170)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 5 Out of 89 outside limits

Spike Recovery : 13 Out of 178 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: **CHEMTECH** Client: **EA Engineering Science & Technology**

Lab Code: **CHEM** Cas No: **B3902** SAS No : **B3902** SDG No: **B3902**

Matrix Spike - EPA Sample No : **B3902-03** Analytical Method: **EPA SW846 8260** Datafile : **VF024113.D**

<b>COMPOUND</b>	<b>SPIKE ADDED (ug/L)</b>	<b>MSD CONCENTRATION (ug/L)</b>	<b>MSD % % (ug/L)</b>		<b>QC LIMITS RPD REC</b>	
			<b>%</b>	<b>%</b>	<b>RPD</b>	<b>REC</b>
Dibromochloromethane	50	47	94	16	20	(56-146)
1,2-Dibromoethane	50	51	102	8	20	(63-142)
Tetrachloroethene	50	40	80	5	20	(23-148)
Chlorobenzene	50	47	94	6	20	(57-136)
Ethyl Benzene	50	47	94	6	20	(49-146)
m/p-Xylenes	100	91	91	7	20	(51-140)
o-Xylene	50	46	92	6	20	(54-139)
Styrene	50	37	74	5	20	(48-141)
Bromoform	50	39	78	25*	20	(48-141)
Isopropylbenzene	50	45	90	6	20	(48-143)
1,1,2,2-Tetrachloroethane	50	46	92	6	20	(52-151)
1,3-Dichlorobenzene	50	44	88	7	20	(63-129)
1,4-Dichlorobenzene	50	44	88	7	20	(57-134)
1,2-Dichlorobenzene	50	44	88	7	20	(57-136)
1,2-Dibromo-3-Chloropropane	50	44	88	9	20	(46-157)
1,2,4-Trichlorobenzene	50	43	86	9	20	(53-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 5 Out of 89 outside limits

Spike Recovery : 13 Out of 178 outside limits

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSF1018W1 Analytical Method: EPA SW846 8260 Datafile : VF024094.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		22	110	(35-124)
Chloromethane	20		23	115	(37-148)
Vinyl Chloride	20		23	115	(45-144)
Bromomethane	20		24	120	(44-146)
Chloroethane	20		19	95	(46-148)
Trichlorofluoromethane	20		22	110	(56-137)
1,1,2-Trichlorotrifluoroethane	20		24	120	(52-142)
1,1-Dichloroethene	20		22	110	(57-135)
Acetone	100		100	100	(50-149)
Carbon Disulfide	20		24	120	(36-155)
Methyl tert-butyl Ether	20		23	115	(60-144)
Methyl Acetate	20		22	110	(51-158)
Methylene Chloride	20		23	115	(61-138)
trans-1,2-Dichloroethene	20		23	115	(59-137)
1,1-Dichloroethane	20		23	115	(64-142)
Cyclohexane	20		22	110	(56-141)
2-Butanone	100		110	110	(56-152)
Carbon Tetrachloride	20		20	100	(59-138)
cis-1,2-Dichloroethene	20		22	110	(64-137)
Chloroform	20		22	110	(67-138)
1,1,1-Trichloroethane	20		21	105	(65-132)
Methylcyclohexane	20		20	100	(56-137)
Benzene	20		20	100	(66-135)
1,2-Dichloroethane	20		20	100	(65-137)
Trichloroethene	20		19	95	(65-134)
1,2-Dichloropropane	20		20	100	(68-137)
Bromodichloromethane	20		20	100	(67-134)
4-Methyl-2-Pentanone	100		110	110	(63-146)
Toluene	20		19	95	(67-133)
t-1,3-Dichloropropene	20		21	105	(66-135)
cis-1,3-Dichloropropene	20		20	100	(66-132)
1,1,2-Trichloroethane	20		20	100	(67-136)
2-Hexanone	100		110	110	(56-153)
Dibromochloromethane	20		20	100	(64-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 89 outside limits

Comments: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSF1018W1 Analytical Method: EPA SW846 8260 Datafile : VF024094.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % LIMITS REC#	QC REC
1,2-Dibromoethane	20		20	100	(66-137)
Tetrachloroethene	20		17	85	(37-178)
Chlorobenzene	20		19	95	(67-133)
Ethyl Benzene	20		20	100	(66-133)
m/p-Xylenes	40		39	98	(65-134)
o-Xylene	20		19	95	(65-134)
Styrene	20		20	100	(65-136)
Bromoform	20		20	100	(56-157)
Isopropylbenzene	20		19	95	(66-133)
1,1,2,2-Tetrachloroethane	20		20	100	(63-136)
1,3-Dichlorobenzene	20		19	95	(66-131)
1,4-Dichlorobenzene	20		20	100	(65-131)
1,2-Dichlorobenzene	20		19	95	(66-132)
1,2-Dibromo-3-Chloropropane	20		20	100	(54-141)
1,2,4-Trichlorobenzene	20		19	95	(61-133)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 89 outside limits

Comments: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSF1019W1 Analytical Method: EPA SW846 8260 Datafile : VF024110.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		22	110	(35-124)
Chloromethane	20		25	125	(37-148)
Vinyl Chloride	20		25	125	(45-144)
Bromomethane	20		31	155*	(44-146)
Chloroethane	20		29	145	(46-148)
Trichlorofluoromethane	20		27	135	(56-137)
1,1,2-Trichlorotrifluoroethane	20		24	120	(52-142)
1,1-Dichloroethene	20		23	115	(57-135)
Acetone	100		160	160*	(50-149)
Carbon Disulfide	20		25	125	(36-155)
Methyl tert-butyl Ether	20		25	125	(60-144)
Methyl Acetate	20		21	105	(51-158)
Methylene Chloride	20		24	120	(61-138)
trans-1,2-Dichloroethene	20		24	120	(59-137)
1,1-Dichloroethane	20		24	120	(64-142)
Cyclohexane	20		23	115	(56-141)
2-Butanone	100		110	110	(56-152)
Carbon Tetrachloride	20		20	100	(59-138)
cis-1,2-Dichloroethene	20		23	115	(64-137)
Chloroform	20		23	115	(67-138)
1,1,1-Trichloroethane	20		20	100	(65-132)
Methylcyclohexane	20		19	95	(56-137)
Benzene	20		19	95	(66-135)
1,2-Dichloroethane	20		20	100	(65-137)
Trichloroethene	20		19	95	(65-134)
1,2-Dichloropropane	20		20	100	(68-137)
Bromodichloromethane	20		20	100	(67-134)
4-Methyl-2-Pentanone	100		100	100	(63-146)
Toluene	20		19	95	(67-133)
t-1,3-Dichloropropene	20		20	100	(66-135)
cis-1,3-Dichloropropene	20		20	100	(66-132)
1,1,2-Trichloroethane	20		20	100	(67-136)
2-Hexanone	100		100	100	(56-153)
Dibromochloromethane	20		19	95	(64-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 6 Out of 89 outside limits

Comments: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSF1019W1 Analytical Method: EPA SW846 8260 Datafile : VF024110.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % LIMITS REC#	QC REC
1,2-Dibromoethane	20		19	95	(66-137)
Tetrachloroethene	20		22	110	(37-178)
Chlorobenzene	20		19	95	(67-133)
Ethyl Benzene	20		20	100	(66-133)
m/p-Xylenes	40		39	98	(65-134)
o-Xylene	20		19	95	(65-134)
Styrene	20		20	100	(65-136)
Bromoform	20		20	100	(56-157)
Isopropylbenzene	20		19	95	(66-133)
1,1,2,2-Tetrachloroethane	20		19	95	(63-136)
1,3-Dichlorobenzene	20		19	95	(66-131)
1,4-Dichlorobenzene	20		19	95	(65-131)
1,2-Dichlorobenzene	20		19	95	(66-132)
1,2-Dibromo-3-Chloropropane	20		20	100	(54-141)
1,2,4-Trichlorobenzene	20		19	95	(61-133)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 6 Out of 89 outside limits

Comments: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSG1019W1 Analytical Method: EPA SW846 8260 Datafile : VG031006.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		27	135*	(35-124)
Chloromethane	20		24	120	(37-148)
Vinyl Chloride	20		24	120	(45-144)
Bromomethane	20		29	145	(44-146)
Chloroethane	20		25	125	(46-148)
Trichlorofluoromethane	20		24	120	(56-137)
1,1,2-Trichlorotrifluoroethane	20		23	115	(52-142)
1,1-Dichloroethene	20		23	115	(57-135)
Acetone	100		100	100	(50-149)
Carbon Disulfide	20		25	125	(36-155)
Methyl tert-butyl Ether	20		21	105	(60-144)
Methyl Acetate	20		18	90	(51-158)
Methylene Chloride	20		22	110	(61-138)
trans-1,2-Dichloroethene	20		21	105	(59-137)
1,1-Dichloroethane	20		22	110	(64-142)
Cyclohexane	20		22	110	(56-141)
2-Butanone	100		89	89	(56-152)
Carbon Tetrachloride	20		21	105	(59-138)
cis-1,2-Dichloroethene	20		21	105	(64-137)
Chloroform	20		22	110	(67-138)
1,1,1-Trichloroethane	20		22	110	(65-132)
Methylcyclohexane	20		22	110	(56-137)
Benzene	20		22	110	(66-135)
1,2-Dichloroethane	20		21	105	(65-137)
Trichloroethene	20		24	120	(65-134)
1,2-Dichloropropane	20		21	105	(68-137)
Bromodichloromethane	20		21	105	(67-134)
4-Methyl-2-Pentanone	100		93	93	(63-146)
Toluene	20		20	100	(67-133)
t-1,3-Dichloropropene	20		21	105	(66-135)
cis-1,3-Dichloropropene	20		21	105	(66-132)
1,1,2-Trichloroethane	20		20	100	(67-136)
2-Hexanone	100		110	110	(56-153)
Dibromochloromethane	20		20	100	(64-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 89 outside limits

Comments: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSG1019W1 Analytical Method: EPA SW846 8260 Datafile : VG031006.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % LIMITS REC#	QC REC
1,2-Dibromoethane	20		20	100	(66-137)
Tetrachloroethene	20		22	110	(37-178)
Chlorobenzene	20		21	105	(67-133)
Ethyl Benzene	20		21	105	(66-133)
m/p-Xylenes	40		42	105	(65-134)
o-Xylene	20		21	105	(65-134)
Styrene	20		20	100	(65-136)
Bromoform	20		22	110	(56-157)
Isopropylbenzene	20		20	100	(66-133)
1,1,2,2-Tetrachloroethane	20		16	80	(63-136)
1,3-Dichlorobenzene	20		20	100	(66-131)
1,4-Dichlorobenzene	20		20	100	(65-131)
1,2-Dichlorobenzene	20		20	100	(66-132)
1,2-Dibromo-3-Chloropropane	20		21	105	(54-141)
1,2,4-Trichlorobenzene	20		21	105	(61-133)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 89 outside limits

Comments: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSG1020W1 Analytical Method: EPA SW846 8260 Datafile : VG031032.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		25	125*	(35-124)
Chloromethane	20		21	105	(37-148)
Vinyl Chloride	20		21	105	(45-144)
Bromomethane	20		23	115	(44-146)
Chloroethane	20		20	100	(46-148)
Trichlorofluoromethane	20		21	105	(56-137)
1,1,2-Trichlorotrifluoroethane	20		20	100	(52-142)
1,1-Dichloroethene	20		20	100	(57-135)
Acetone	100		78	78	(50-149)
Carbon Disulfide	20		20	100	(36-155)
Methyl tert-butyl Ether	20		20	100	(60-144)
Methyl Acetate	20		19	95	(51-158)
Methylene Chloride	20		20	100	(61-138)
trans-1,2-Dichloroethene	20		20	100	(59-137)
1,1-Dichloroethane	20		20	100	(64-142)
Cyclohexane	20		20	100	(56-141)
2-Butanone	100		80	80	(56-152)
Carbon Tetrachloride	20		22	110	(59-138)
cis-1,2-Dichloroethene	20		19	95	(64-137)
Chloroform	20		21	105	(67-138)
1,1,1-Trichloroethane	20		21	105	(65-132)
Methylcyclohexane	20		21	105	(56-137)
Benzene	20		22	110	(66-135)
1,2-Dichloroethane	20		22	110	(65-137)
Trichloroethene	20		23	115	(65-134)
1,2-Dichloropropane	20		21	105	(68-137)
Bromodichloromethane	20		22	110	(67-134)
4-Methyl-2-Pentanone	100		93	93	(63-146)
Toluene	20		20	100	(67-133)
t-1,3-Dichloropropene	20		22	110	(66-135)
cis-1,3-Dichloropropene	20		21	105	(66-132)
1,1,2-Trichloroethane	20		20	100	(67-136)
2-Hexanone	100		100	100	(56-153)
Dibromochloromethane	20		22	110	(64-137)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 89 outside limits

Comments: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Client: EA Engineering Science & Technology  
 Lab Code: CHEM Cas No: B3902 SAS No : B3902 SDG No: B3902  
 Matrix Spike - EPA Sample No : BSG1020W1 Analytical Method: EPA SW846 8260 Datafile : VG031032.D

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % LIMITS REC#	QC REC
1,2-Dibromoethane	20		21	105	(66-137)
Tetrachloroethene	20		27	135	(37-178)
Chlorobenzene	20		21	105	(67-133)
Ethyl Benzene	20		21	105	(66-133)
m/p-Xylenes	40		42	105	(65-134)
o-Xylene	20		21	105	(65-134)
Styrene	20		21	105	(65-136)
Bromoform	20		22	110	(56-157)
Isopropylbenzene	20		20	100	(66-133)
1,1,2,2-Tetrachloroethane	20		18	90	(63-136)
1,3-Dichlorobenzene	20		19	95	(66-131)
1,4-Dichlorobenzene	20		20	100	(65-131)
1,2-Dichlorobenzene	20		20	100	(66-132)
1,2-Dibromo-3-Chloropropane	20		20	100	(54-141)
1,2,4-Trichlorobenzene	20		20	100	(61-133)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 89 outside limits

Comments: \_\_\_\_\_

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF1018W1

Lab Name: CHEMTECHContract: EAEN05Lab Code: CHEMCase No.: B3902SAS No.: B3902 SDG NO.: B3902Lab File ID: VF024093.DLab Sample ID: VBF1018W1Date Analyzed: 10/18/2010Time Analyzed: 12:18GC Column: RTX-VMS ID: 0.53 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAF

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSF1018W1	BSF1018W1	VF024094.D	10/18/2010
4-42-021-TRIPBLANK	B3902-31	VF024096.D	10/18/2010
4-42-021-MW-16D	B3902-01	VF024097.D	10/18/2010
4-42-021-MW-16S	B3902-04	VF024098.D	10/18/2010
4-42-021-MW-20D	B3902-05	VF024099.D	10/18/2010
4-42-021-MW-13DD	B3902-06	VF024100.D	10/18/2010
4-42-021-MW-13D	B3902-07	VF024101.D	10/18/2010
4-42-021-MW-13S	B3902-08	VF024102.D	10/18/2010
4-42-021-MW-12S	B3902-12	VF024103.D	10/18/2010
4-42-021-MW-14S	B3902-13	VF024104.D	10/18/2010
4-42-021-MW-14D	B3902-14	VF024105.D	10/18/2010

COMMENTS:

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## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF1019W1

Lab Name: CHEMTECHContract: EAEN05Lab Code: CHEMCase No.: B3902SAS No.: B3902 SDG NO.: B3902Lab File ID: VF024109.DLab Sample ID: VBF1019W1Date Analyzed: 10/19/2010Time Analyzed: 12:04GC Column: RTX-VMS ID: 0.53 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAF

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSF1019W1	BSF1019W1	VF024110.D	10/19/2010
4-42-021-MW-16DMS	B3902-02MS	VF024112.D	10/19/2010
4-42-021-MW-16DMSD	B3902-03MSD	VF024113.D	10/19/2010
4-42-021-UK-3	B3902-15	VF024114.D	10/19/2010
4-42-021-UK-1	B3902-16	VF024115.D	10/19/2010
4-42-021-UK-2	B3902-17	VF024116.D	10/19/2010
4-42-021-MW-8S	B3902-18	VF024117.D	10/19/2010
4-42-021-MW-8D	B3902-20	VF024119.D	10/19/2010
4-42-021-MW-15S	B3902-21	VF024120.D	10/19/2010
4-42-021-MW-9S	B3902-22	VF024121.D	10/19/2010
4-42-021-MW-5D	B3902-23	VF024122.D	10/19/2010
4-42-021-MW-4D	B3902-24	VF024123.D	10/19/2010

COMMENTS:

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## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG1019W1

Lab Name: CHEMTECHContract: EAEN05Lab Code: CHEMCase No.: B3902SAS No.: B3902 SDG NO.: B3902Lab File ID: VG031005.DLab Sample ID: VBG1019W1Date Analyzed: 10/19/2010Time Analyzed: 12:26GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG1019W1	BSG1019W1	VG031006.D	10/19/2010
4-42-021-MW-7S	B3902-25	VG031008.D	10/19/2010
4-42-021-MW-6DD	B3902-26	VG031009.D	10/19/2010
4-42-021-MW-6D	B3902-27	VG031010.D	10/19/2010
4-42-021-MW-6S	B3902-28	VG031011.D	10/19/2010
4-42-021-DUPLICATE-01	B3902-29	VG031012.D	10/19/2010
4-42-021-DUPLICATE-02	B3902-30	VG031013.D	10/19/2010
4-42-021-MW-10D	B3902-09	VG031014.D	10/19/2010
4-42-021-MW-10DMS	B3902-10MS	VG031015.D	10/19/2010
4-42-021-MW-10DMSD	B3902-11MSD	VG031016.D	10/19/2010

COMMENTS:

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG1020W1

Lab Name: CHEMTECHContract: EAEN05Lab Code: CHEM Case No.: B3902SAS No.: B3902 SDG NO.: B3902Lab File ID: VG031031.DLab Sample ID: VBG1020W1Date Analyzed: 10/20/2010Time Analyzed: 13:24GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG1020W1	BSG1020W1	VG031032.D	10/20/2010
4-42-021-MW-8DD	B3902-19	VG031034.D	10/20/2010

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: EAEN05  
 Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
 Lab File ID: VF024030.D BFB Injection Date: 10/12/2010  
 Instrument ID: MSVOAF BFB Injection Time: 10:11  
 GC Column: RTX-VMS ID: 0.53 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.1
75	30.0 - 60.0% of mass 95	45.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 ( 0.0 ) 1
174	50.0 - 100.0% of mass 95	74.3
175	5.0 - 9.0% of mass 174	5.7 ( 7.6 ) 1
176	95.0 - 101.0% of mass 174	72.4 ( 97.4 ) 1
177	5.0 - 9.0% of mass 176	5 ( 6.9 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD001	1 PPB ICC	VF024035.D	10/12/2010	17:17
VSTD005	5 PPB ICC	VF024036.D	10/12/2010	17:47
VSTD010	10 PPB ICC	VF024037.D	10/12/2010	18:16
VSTD020	20 PPB ICC	VF024038.D	10/12/2010	18:45
VSTD050	50 PPB ICC	VF024039.D	10/12/2010	19:15
VSTD100	100 PPB ICC	VF024040.D	10/12/2010	19:44

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: EAEN05  
 Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
 Lab File ID: VF024090.D BFB Injection Date: 10/18/2010  
 Instrument ID: MSVOAF BFB Injection Time: 09:36  
 GC Column: RTX-VMS ID: 0.53 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.8
75	30.0 - 60.0% of mass 95	47
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 ( 0.0 ) 1
174	50.0 - 100.0% of mass 95	76.8
175	5.0 - 9.0% of mass 174	5.4 ( 7 ) 1
176	95.0 - 101.0% of mass 174	75.6 ( 98.5 ) 1
177	5.0 - 9.0% of mass 176	4.9 ( 6.5 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD050	50 PPB CCC	VF024092.D	10/18/2010	11:16
VBF1018W1	VBF1018W1	VF024093.D	10/18/2010	12:18
BSF1018W1	BSF1018W1	VF024094.D	10/18/2010	13:26
4-42-021-TRIPBLANK	B3902-31	VF024096.D	10/18/2010	15:19
4-42-021-MW-16D	B3902-01	VF024097.D	10/18/2010	15:49
4-42-021-MW-16S	B3902-04	VF024098.D	10/18/2010	16:18
4-42-021-MW-20D	B3902-05	VF024099.D	10/18/2010	16:48
4-42-021-MW-13DD	B3902-06	VF024100.D	10/18/2010	17:18
4-42-021-MW-13D	B3902-07	VF024101.D	10/18/2010	17:47
4-42-021-MW-13S	B3902-08	VF024102.D	10/18/2010	18:17
4-42-021-MW-12S	B3902-12	VF024103.D	10/18/2010	18:46
4-42-021-MW-14S	B3902-13	VF024104.D	10/18/2010	19:16
4-42-021-MW-14D	B3902-14	VF024105.D	10/18/2010	19:45

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	EAEN05
Lab Code:	CHEM	Case No.:	B3902
Lab File ID:	VF024106.D	SAS No.:	B3902
Instrument ID:	MSVOAF	BFB Injection Date:	10/19/2010
GC Column:	RTX-VMS ID: 0.53 (mm)	BFB Injection Time:	09:33
		Heated Purge:	Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.5
75	30.0 - 60.0% of mass 95	48.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 ( 0.0 ) 1
174	50.0 - 100.0% of mass 95	74.1
175	5.0 - 9.0% of mass 174	5.4 ( 7.3 ) 1
176	95.0 - 101.0% of mass 174	72 ( 97.1 ) 1
177	5.0 - 9.0% of mass 176	4.6 ( 6.4 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD050	50 PPB CCC	VF024108.D	10/19/2010	11:14
VBF1019W1	VBF1019W1	VF024109.D	10/19/2010	12:04
BSF1019W1	BSF1019W1	VF024110.D	10/19/2010	12:42
4-42-021-MW-16DMS	B3902-02MS	VF024112.D	10/19/2010	13:52
4-42-021-MW-16DMSD	B3902-03MSD	VF024113.D	10/19/2010	14:21
4-42-021-UK-3	B3902-15	VF024114.D	10/19/2010	14:51
4-42-021-UK-1	B3902-16	VF024115.D	10/19/2010	15:20
4-42-021-UK-2	B3902-17	VF024116.D	10/19/2010	15:50
4-42-021-MW-8S	B3902-18	VF024117.D	10/19/2010	16:20
4-42-021-MW-8D	B3902-20	VF024119.D	10/19/2010	17:20
4-42-021-MW-15S	B3902-21	VF024120.D	10/19/2010	17:50
4-42-021-MW-9S	B3902-22	VF024121.D	10/19/2010	18:19
4-42-021-MW-5D	B3902-23	VF024122.D	10/19/2010	18:49
4-42-021-MW-4D	B3902-24	VF024123.D	10/19/2010	19:19

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: EAEN05  
Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
Lab File ID: VG030796.D BFB Injection Date: 10/07/2010  
Instrument ID: MSVOAG BFB Injection Time: 11:02  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.5
75	30.0 - 60.0% of mass 95	43.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 ( 0.0 ) 1
174	50.0 - 100.0% of mass 95	71
175	5.0 - 9.0% of mass 174	5.1 ( 7.2 ) 1
176	95.0 - 101.0% of mass 174	68.6 ( 96.7 ) 1
177	5.0 - 9.0% of mass 176	4.1 ( 6 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD100	100 PPB ICC	VG030797.D	10/07/2010	11:47
VSTD050	50 PPB ICC	VG030798.D	10/07/2010	12:15
VSTD020	20 PPB ICC	VG030799.D	10/07/2010	12:43
VSTD010	10 PPB ICC	VG030800.D	10/07/2010	13:12
VSTD005	5 PPB ICC	VG030801.D	10/07/2010	13:40
VSTD001	1 PPB ICC	VG030802.D	10/07/2010	14:08

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: EAEN05  
 Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
 Lab File ID: VG031003.D BFB Injection Date: 10/19/2010  
 Instrument ID: MSVOAG BFB Injection Time: 10:35  
 GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.8
75	30.0 - 60.0% of mass 95	43.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.9
173	Less than 2.0% of mass 174	0.0 ( 0.0 ) 1
174	50.0 - 100.0% of mass 95	69.3
175	5.0 - 9.0% of mass 174	4.9 ( 7.1 ) 1
176	95.0 - 101.0% of mass 174	68.1 ( 98.3 ) 1
177	5.0 - 9.0% of mass 176	4.5 ( 6.7 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD050	50 PPB CCC	VG031004.D	10/19/2010	11:07
VBG1019W1	VBG1019W1	VG031005.D	10/19/2010	12:26
BSG1019W1	BSG1019W1	VG031006.D	10/19/2010	12:57
4-42-021-MW-7S	B3902-25	VG031008.D	10/19/2010	13:51
4-42-021-MW-6DD	B3902-26	VG031009.D	10/19/2010	14:18
4-42-021-MW-6D	B3902-27	VG031010.D	10/19/2010	14:46
4-42-021-MW-6S	B3902-28	VG031011.D	10/19/2010	15:14
4-42-021-DUPLICATE-01	B3902-29	VG031012.D	10/19/2010	15:41
4-42-021-DUPLICATE-02	B3902-30	VG031013.D	10/19/2010	16:09
4-42-021-MW-10D	B3902-09	VG031014.D	10/19/2010	16:36
4-42-021-MW-10DMS	B3902-10MS	VG031015.D	10/19/2010	17:03
4-42-021-MW-10DMSD	B3902-11MSD	VG031016.D	10/19/2010	17:31

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: EAEN05  
 Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
 Lab File ID: VG031029.D BFB Injection Date: 10/20/2010  
 Instrument ID: MSVOAG BFB Injection Time: 09:56  
 GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	42.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.5 ( 0.7 ) 1
174	50.0 - 100.0% of mass 95	71.9
175	5.0 - 9.0% of mass 174	4.5 ( 6.3 ) 1
176	95.0 - 101.0% of mass 174	71 ( 98.7 ) 1
177	5.0 - 9.0% of mass 176	4.4 ( 6.2 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD050	50 PPB CCC	VG031030.D	10/20/2010	10:28
VBG1020W1	VBG1020W1	VG031031.D	10/20/2010	13:24
BSG1020W1	BSG1020W1	VG031032.D	10/20/2010	13:58
4-42-021-MW-8DD	B3902-19	VG031034.D	10/20/2010	15:00



## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
Lab File ID: VF024092.D Date Analyzed: 10/18/2010  
Instrument ID: MSVOAF Time Analyzed: 11:16  
GC Column: RTX-VMS ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1580453	3.23	2970449	3.64	2728786	6.53
	3160906	3.73	5940898	4.14	5457572	7.03
	790226.5	2.73	1485225	3.14	1364393	6.03
EPA SAMPLE NO.						
4-42-021-MW-16D	1284134	3.23	2446434	3.64	2341668	6.53
4-42-021-MW-16S	1245680	3.23	2409951	3.64	2338794	6.53
4-42-021-MW-20D	1179946	3.23	2299081	3.64	2190639	6.53
4-42-021-MW-13DD	1089904	3.23	2137937	3.64	2088408	6.53
4-42-021-MW-13D	1108968	3.23	2211997	3.64	2141968	6.53
4-42-021-MW-13S	1065083	3.23	2148485	3.64	2099431	6.54
4-42-021-MW-12S	1025217	3.23	2072769	3.64	2013112	6.54
4-42-021-MW-14S	964751	3.23	1974139	3.65	1928640	6.54
4-42-021-MW-14D	983012	3.23	1991051	3.64	1944807	6.54
4-42-021-TRIPBLANK	1396586	3.24	2624419	3.65	2599885	6.54
BSF1018W1	1503706	3.23	2831104	3.64	2561783	6.53
VBF1018W1	1363369	3.23	2546102	3.64	2432440	6.53

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
Lab File ID: VF024092.D Date Analyzed: 10/18/2010  
Instrument ID: MSVOAF Time Analyzed: 11:16  
GC Column: RTX-VMS ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	1429542	8.97				
UPPER LIMIT	2859084	9.47				
LOWER LIMIT	714771	8.47				
EPA SAMPLE NO.						
4-42-021-MW-16D	1277337	8.97				
4-42-021-MW-16S	1287983	8.97				
4-42-021-MW-20D	1209196	8.97				
4-42-021-MW-13DD	1137468	8.97				
4-42-021-MW-13D	1161713	8.97				
4-42-021-MW-13S	1123959	8.97				
4-42-021-MW-12S	1088722	8.97				
4-42-021-MW-14S	1032857	8.97				
4-42-021-MW-14D	1036787	8.97				
4-42-021-TRIPBLANK	1399062	8.97				
BSF1018W1	1355730	8.97				
VBF1018W1	1338556	8.96				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
 Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
 Lab File ID: VF024108.D Date Analyzed: 10/19/2010  
 Instrument ID: MSVOAF Time Analyzed: 11:14  
 GC Column: RTX-VMS ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1494892	3.23	2815366	3.65	2591654	6.54
	2989784	3.73	5630732	4.15	5183308	7.04
	747446	2.73	1407683	3.15	1295827	6.04
EPA SAMPLE NO.						
4-42-021-MW-16DMS	1283259	3.24	2497471	3.65	2459027	6.54
4-42-021-MW-16DMSD	1388101	3.24	2695661	3.65	2637547	6.55
4-42-021-UK-3	1471969	3.24	2788658	3.65	2675957	6.54
4-42-021-UK-1	1365841	3.24	2563366	3.65	2453875	6.55
4-42-021-UK-2	1385795	3.24	2591553	3.65	2514954	6.54
4-42-021-MW-8S	1243927	3.24	2388389	3.65	2290306	6.54
4-42-021-MW-8D	1063254	3.23	2106829	3.65	2023348	6.54
4-42-021-MW-15S	1079852	3.24	2136842	3.65	2098503	6.54
4-42-021-MW-9S	1024392	3.24	2056201	3.65	1990425	6.54
4-42-021-MW-5D	963401	3.24	1942721	3.65	1905259	6.54
4-42-021-MW-4D	1000175	3.24	2026222	3.65	1994579	6.55
BSF1019W1	1395916	3.24	2650894	3.65	2367755	6.54
VBF1019W1	1354650	3.23	2559865	3.65	2461343	6.54

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
Lab File ID: VF024108.D Date Analyzed: 10/19/2010  
Instrument ID: MSVOAF Time Analyzed: 11:14  
GC Column: RTX-VMS ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	1364904	8.97				
	2729808	9.47				
	682452	8.47				
EPA SAMPLE NO.						
4-42-021-MW-16DMS	1347143	8.97				
4-42-021-MW-16DMSD	1441030	8.97				
4-42-021-UK-3	1480587	8.97				
4-42-021-UK-1	1351728	8.97				
4-42-021-UK-2	1363357	8.97				
4-42-021-MW-8S	1245658	8.97				
4-42-021-MW-8D	1104066	8.97				
4-42-021-MW-15S	1133683	8.97				
4-42-021-MW-9S	1080302	8.97				
4-42-021-MW-5D	1030139	8.97				
4-42-021-MW-4D	1072220	8.97				
BSF1019W1	1275255	8.97				
VBF1019W1	1342464	8.97				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
 Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
 Lab File ID: VG031004.D Date Analyzed: 10/19/2010  
 Instrument ID: MSVOAG Time Analyzed: 11:07  
 GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	643051	3.88	1062256	4.68	868017	9.65
	1286102	4.38	2124512	5.18	1736034	10.15
	321525.5	3.38	531128	4.18	434008.5	9.15
EPA SAMPLE NO.						
4-42-021-MW-10D	528698	3.90	846787	4.70	721879	9.65
4-42-021-MW-10DMS	536052	3.89	862053	4.70	761810	9.65
4-42-021-MW-10DMSD	560822	3.90	887421	4.70	779387	9.65
4-42-021-MW-7S	589254	3.89	961426	4.69	832540	9.65
4-42-021-MW-6DD	600859	3.90	953284	4.70	816371	9.66
4-42-021-MW-6D	581566	3.90	955359	4.71	801131	9.66
4-42-021-MW-6S	584861	3.89	945507	4.70	800268	9.65
4-42-021-DUPLICATE-01	583245	3.90	929053	4.70	784569	9.66
4-42-021-DUPLICATE-02	552899	3.89	862403	4.70	741525	9.66
BSG1019W1	594953	3.89	973217	4.70	775395	9.65
VBG1019W1	657630	3.89	1095980	4.68	882374	9.65

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
Lab File ID: VG031004.D Date Analyzed: 10/19/2010  
Instrument ID: MSVOAG Time Analyzed: 11:07  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	457791	13.35				
	915582	13.85				
	228895.5	12.85				
EPA SAMPLE NO.						
4-42-021-MW-10D	380232	13.36				
4-42-021-MW-10DMS	403324	13.36				
4-42-021-MW-10DMSD	405850	13.35				
4-42-021-MW-7S	430771	13.36				
4-42-021-MW-6DD	424369	13.36				
4-42-021-MW-6D	422409	13.36				
4-42-021-MW-6S	424722	13.36				
4-42-021-DUPLICATE-01	405357	13.36				
4-42-021-DUPLICATE-02	393822	13.35				
BSG1019W1	411555	13.35				
VBG1019W1	481576	13.36				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
Lab File ID: VG031030.D Date Analyzed: 10/20/2010  
Instrument ID: MSVOAG Time Analyzed: 10:28  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	599813	3.88	978990	4.69	803065	9.65
	1199626	4.38	1957980	5.19	1606130	10.15
	299906.5	3.38	489495	4.19	401532.5	9.15
EPA SAMPLE NO.						
4-42-021-MW-8DD	572481	3.89	895847	4.69	729627	9.67
BSG1020W1	627152	3.88	997128	4.70	824259	9.66
VBG1020W1	610030	3.89	990083	4.70	783598	9.65

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EAEN05  
Lab Code: CHEM Case No.: B3902 SAS No.: B3902 SDG NO.: B3902  
Lab File ID: VG031030.D Date Analyzed: 10/20/2010  
Instrument ID: MSVOAG Time Analyzed: 10:28  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	419866	13.35				
	839732	13.85				
	209933	12.85				
EPA SAMPLE NO.						
4-42-021-MW-8DD	393514	13.38				
BSG1020W1	446262	13.36				
VBG1020W1	435417	13.36				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

**CHEMTECH**

VOLATILES  
SAMPLE  
DATA

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16D	SDG No.:	B3902
Lab Sample ID:	B3902-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024097.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	0.91	J	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16D	SDG No.:	B3902
Lab Sample ID:	B3902-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024097.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	47.8		66 - 150		96%	SPK: 50
1868-53-7	Dibromofluoromethane	49.7		76 - 130		99%	SPK: 50
2037-26-5	Toluene-d8	48.1		78 - 121		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.2		70 - 131		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1284130	3.23				
540-36-3	1,4-Difluorobenzene	2446430	3.64				
3114-55-4	Chlorobenzene-d5	2341670	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1277340	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

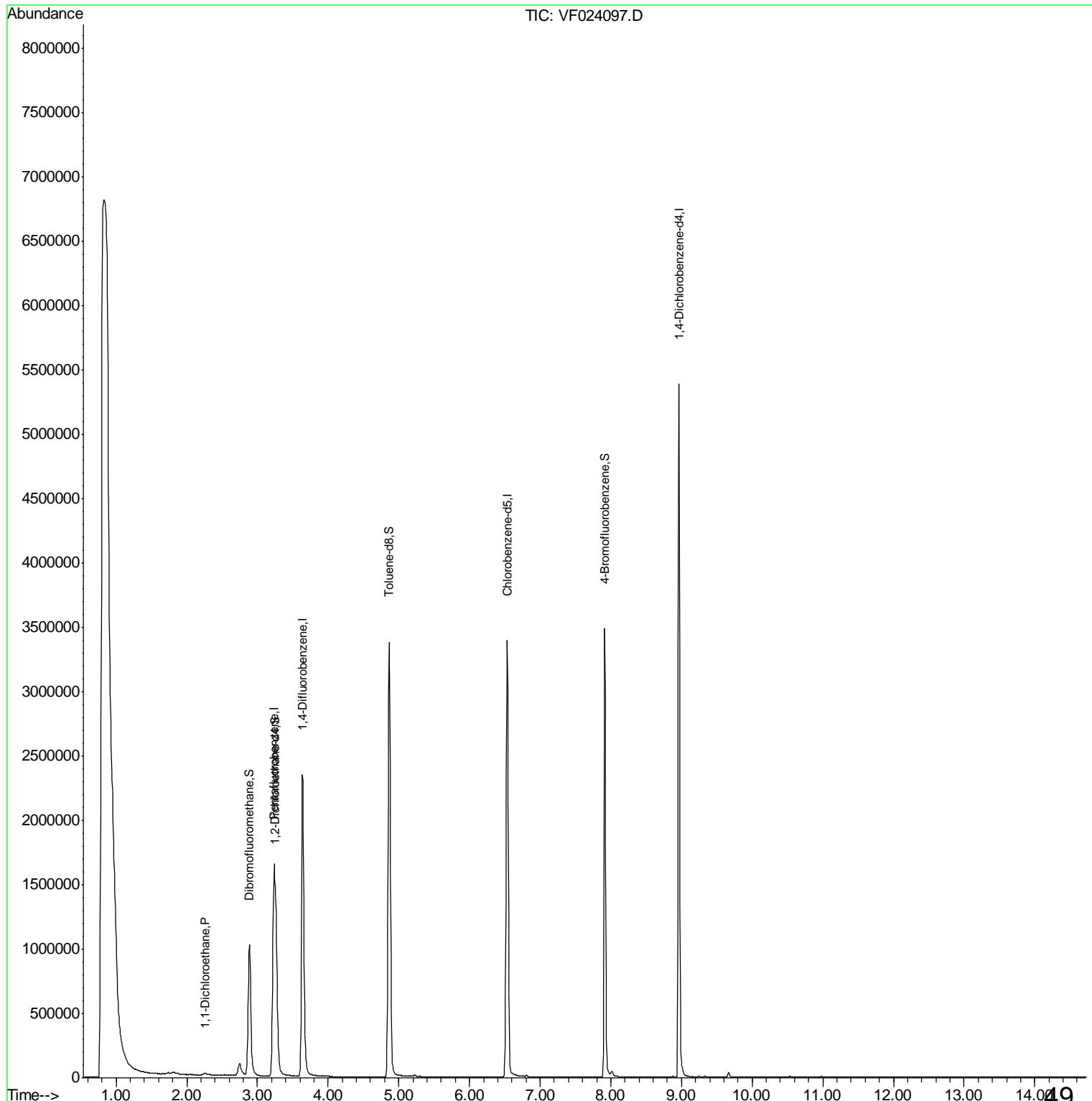
N = Presumptive Evidence of a Compound

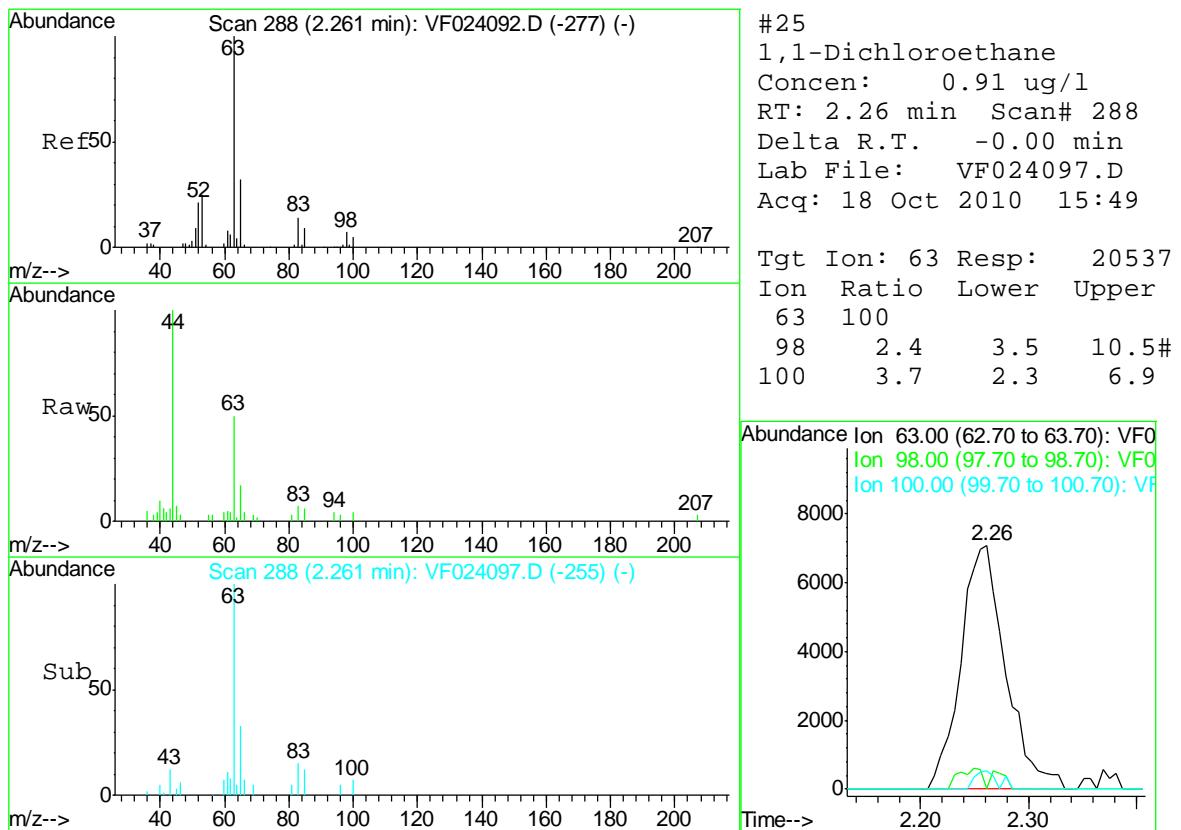
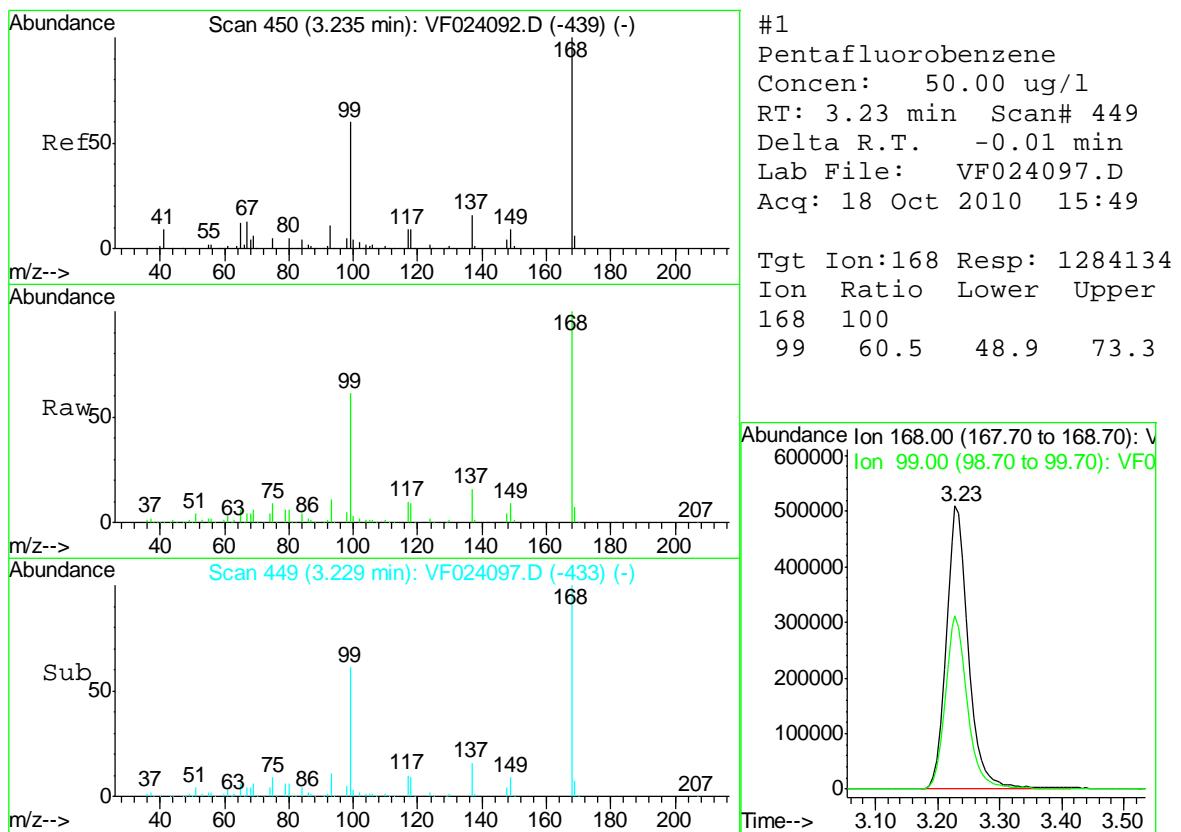
\* = Values outside of QC limits

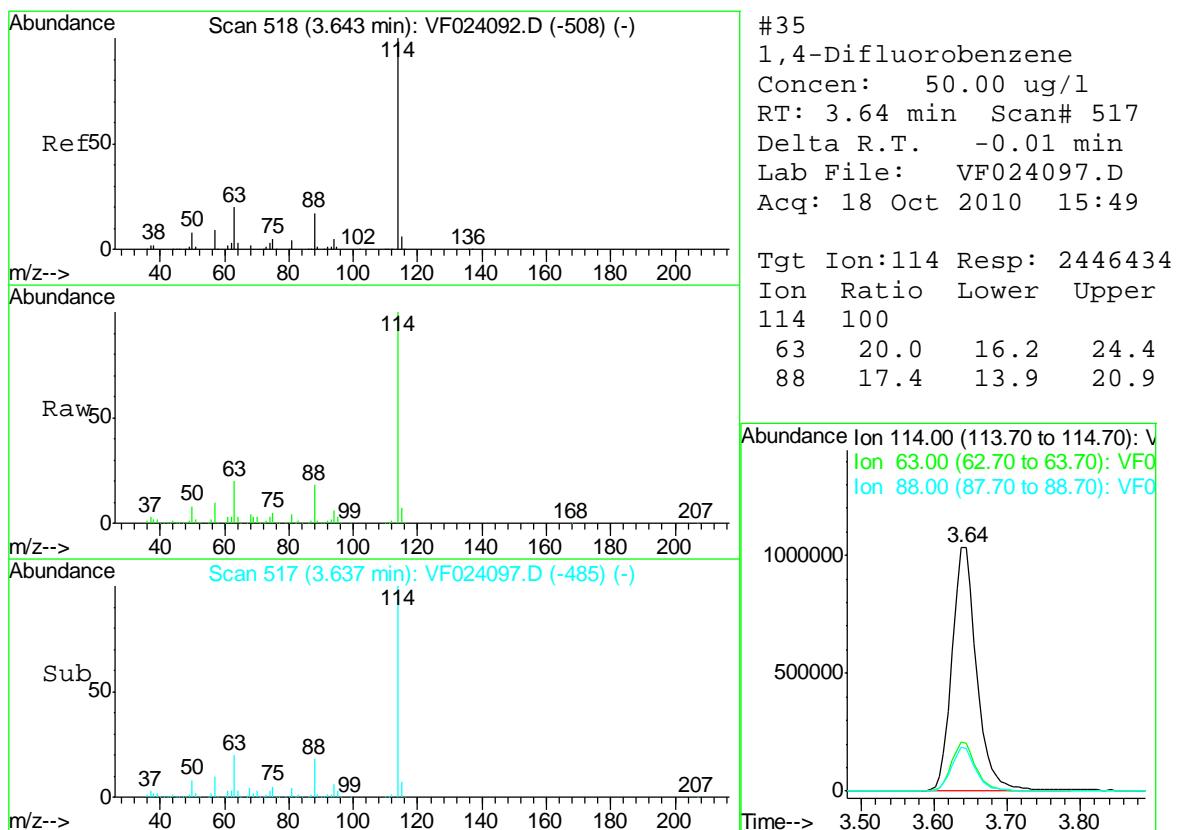
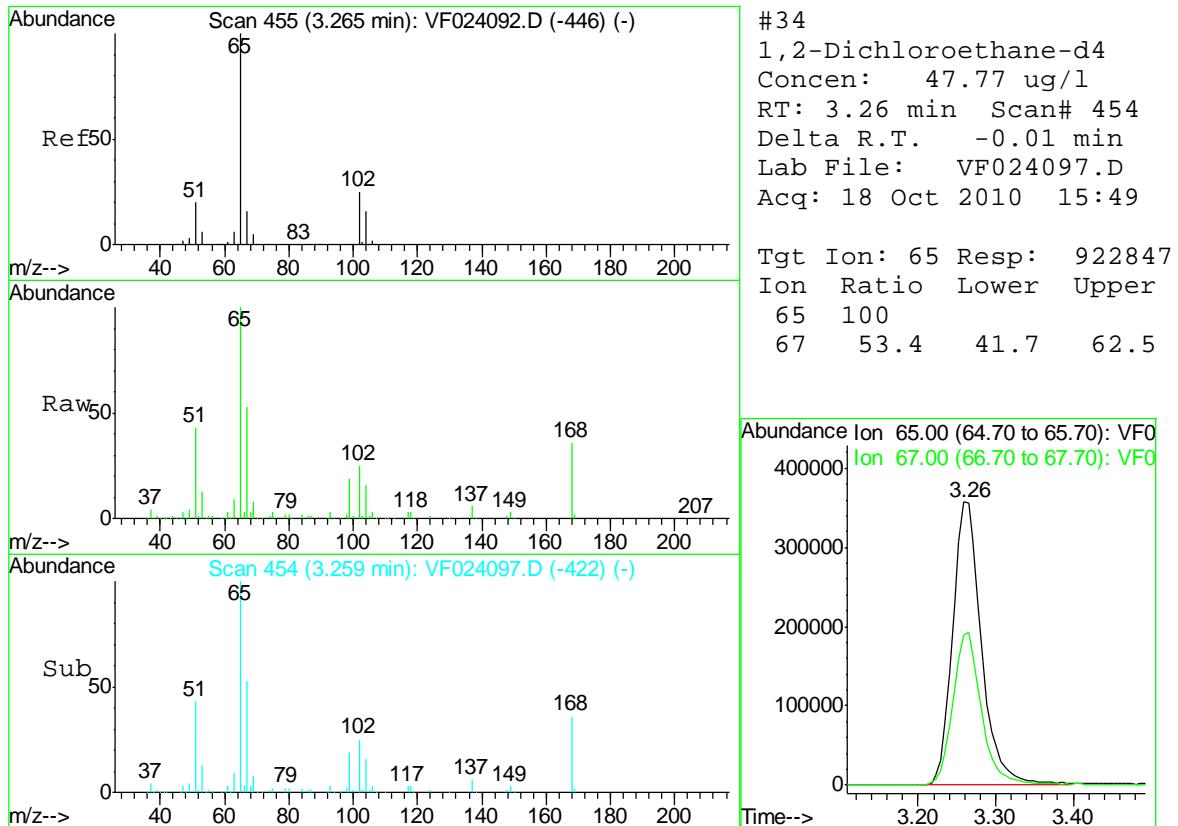
D = Dilution

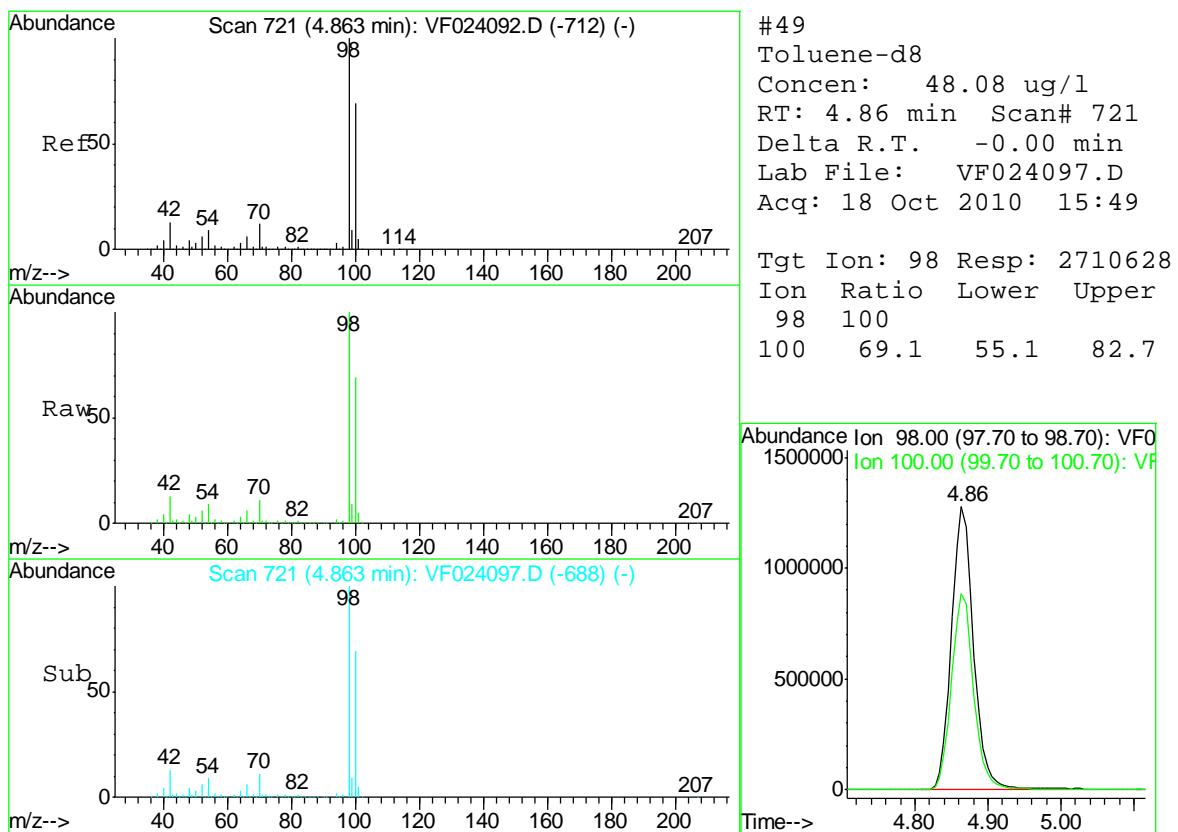
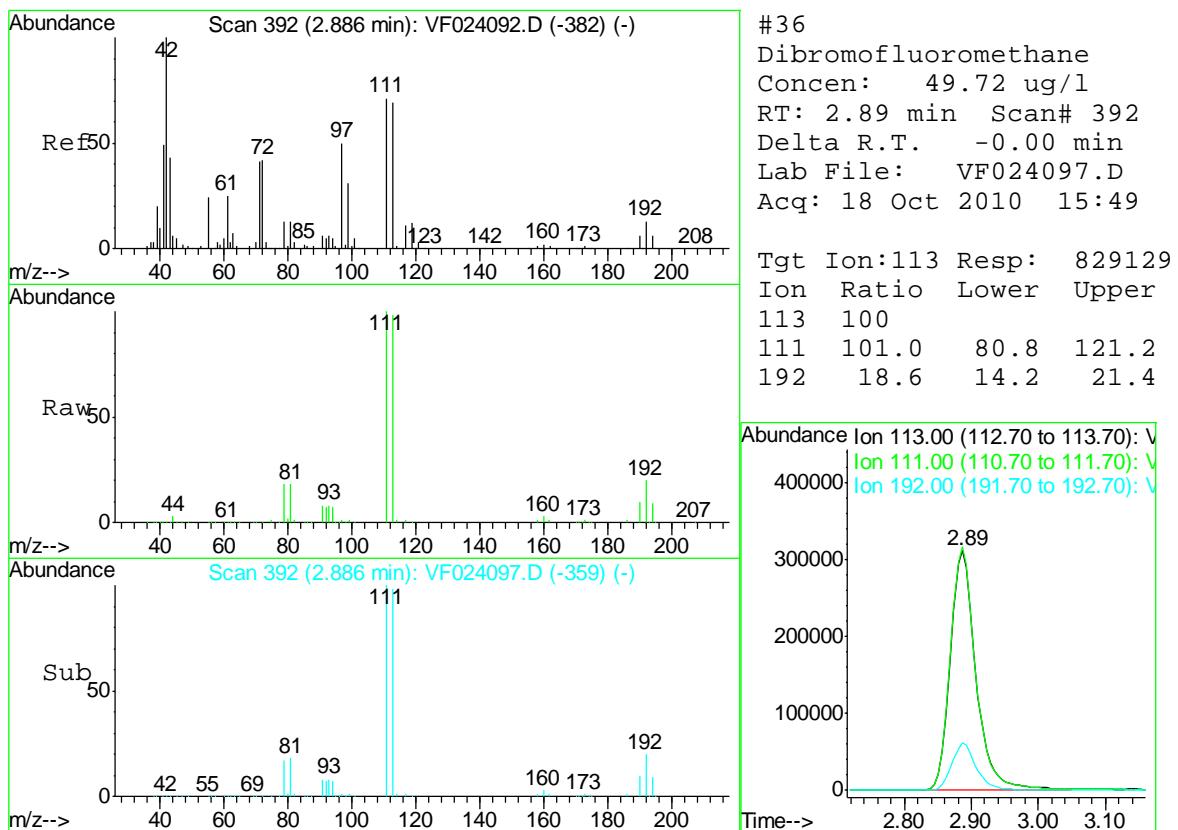
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024097.D  
Acq On : 18 Oct 2010 15:49  
Operator : MS  
Sample : B3902-01  
Misc : 5.0mL,MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

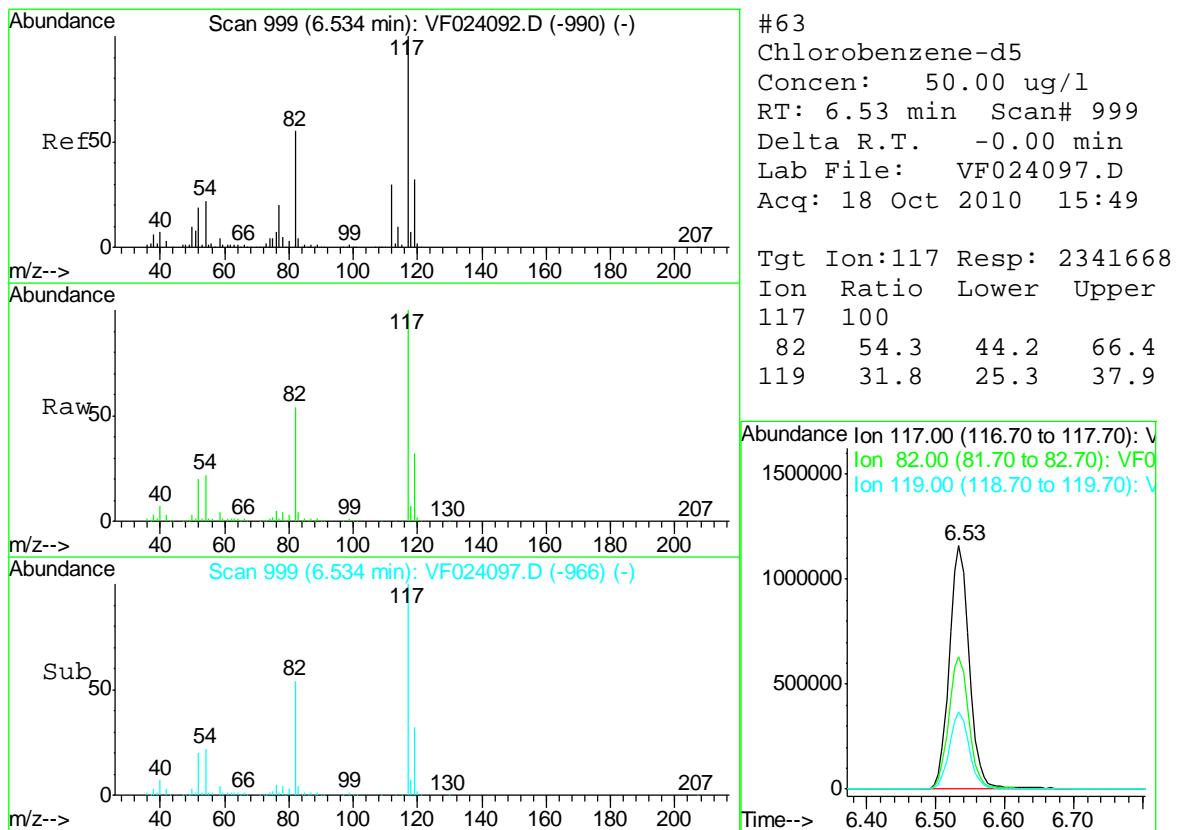
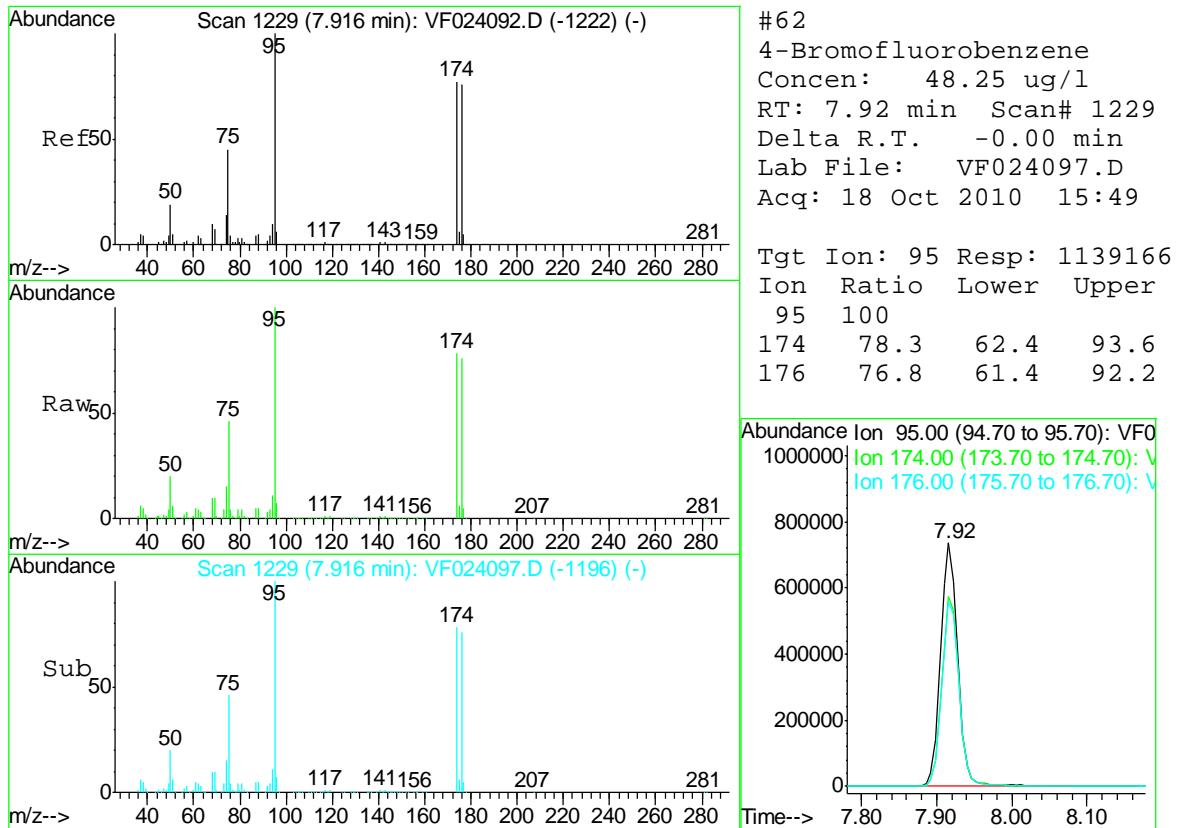
Quant Time: Oct 18 16:22:21 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration

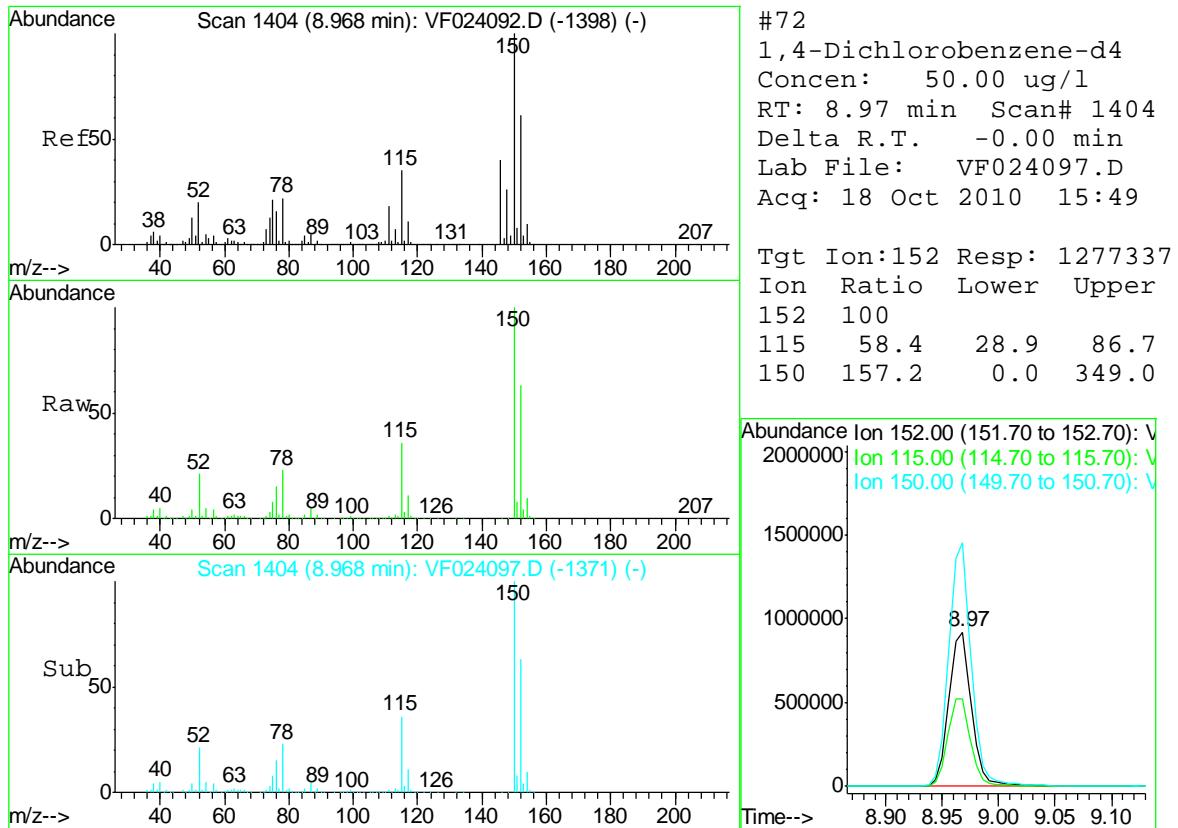












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024097.D  
 Acq On : 18 Oct 2010 15:49  
 Operator : MS  
 Sample : B3902-01  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 18 16:22:21 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1284134	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2446434	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.53	117	2341668	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1277337	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	922847	47.77	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	95.54%	
36) Dibromofluoromethane	2.89	113	829129	49.72	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	99.44%	
49) Toluene-d8	4.86	98	2710628	48.08	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	96.16%	
62) 4-Bromofluorobenzene	7.92	95	1139166	48.25	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	96.50%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.26	63	20537	0.91	ug/l # 91

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024097.D  
 Acq On : 18 Oct 2010 15:49  
 Operator : MS  
 Sample : B3902-01  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

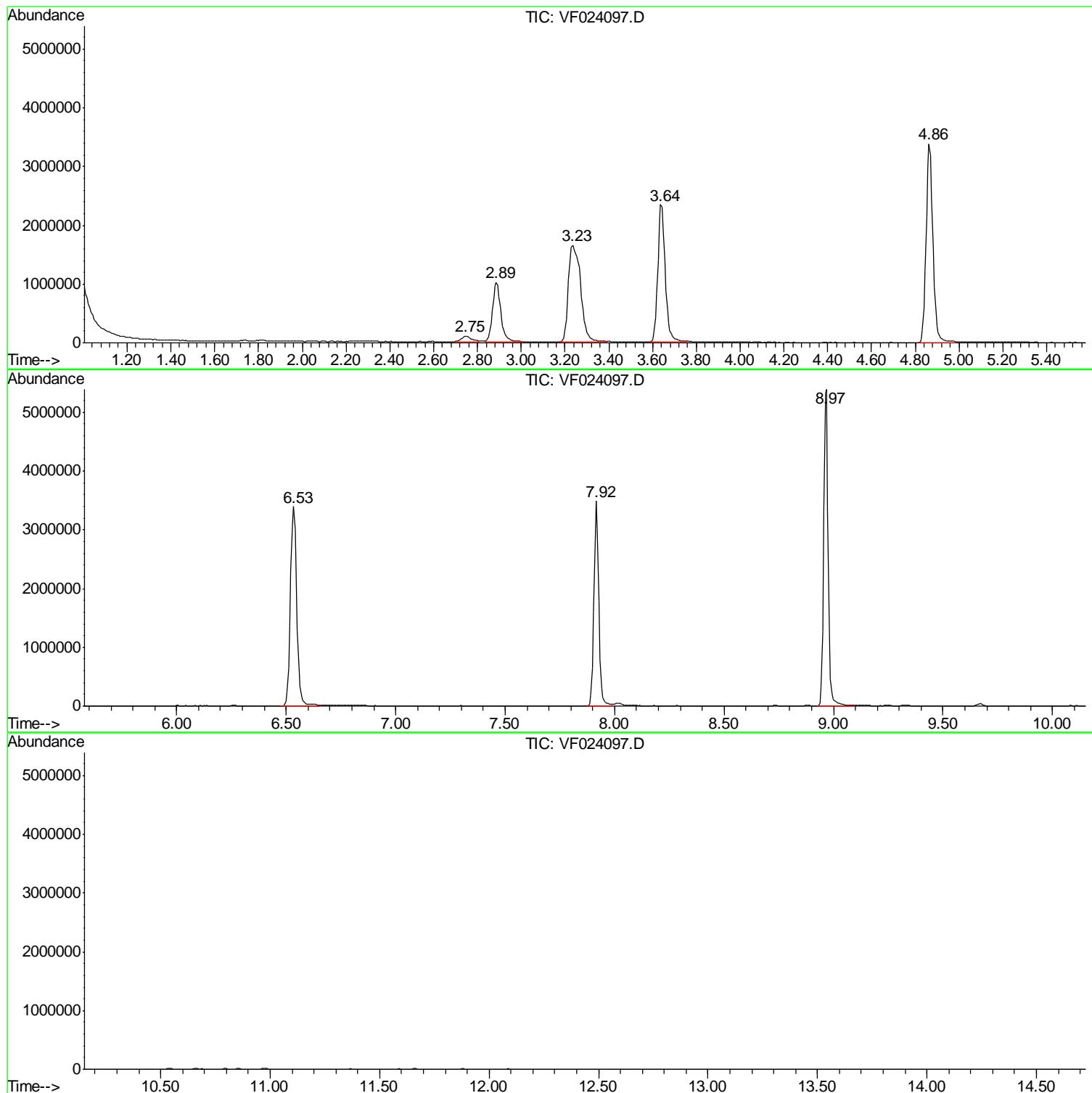
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.748	360	369	379	rBV	88796	286194	3.69%	0.677%
2	2.886	383	392	412	rVB	1013341	2651624	34.18%	6.269%
3	3.235	440	450	476	rBV2	1650738	6462679	83.29%	15.279%
4	3.637	508	517	537	rBV	2342736	5517217	71.11%	13.044%
5	4.863	712	721	741	rBV	3383911	7299012	94.07%	17.256%
6	6.534	989	999	1019	rBV	3391846	6895750	88.88%	16.303%
7	7.916	1222	1229	1241	rBV	3484343	5426442	69.94%	12.829%
8	8.968	1397	1404	1425	rBV	5387060	7758909	100.00%	18.344%

Sum of corrected areas: 42297827

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024097.D  
Acq On : 18 Oct 2010 15:49  
Operator : MS  
Sample : B3902-01  
Misc : 5.0mL,MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024097.D  
Acq On : 18 Oct 2010 15:49  
Operator : MS  
Sample : B3902-01  
Misc : 5.0mL,MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024097.D  
Acq On : 18 Oct 2010 15:49  
Operator : MS  
Sample : B3902-01  
Misc : 5.0mL,MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16S	SDG No.:	B3902
Lab Sample ID:	B3902-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024098.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1.4		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.55	J	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1.6		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16S	SDG No.:	B3902
Lab Sample ID:	B3902-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024098.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	50		66 - 150		100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		76 - 130		100%	SPK: 50
2037-26-5	Toluene-d8	48.5		78 - 121		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.5		70 - 131		99%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1245680		3.23			
540-36-3	1,4-Difluorobenzene	2409950		3.64			
3114-55-4	Chlorobenzene-d5	2338790		6.53			
3855-82-1	1,4-Dichlorobenzene-d4	1287980		8.97			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

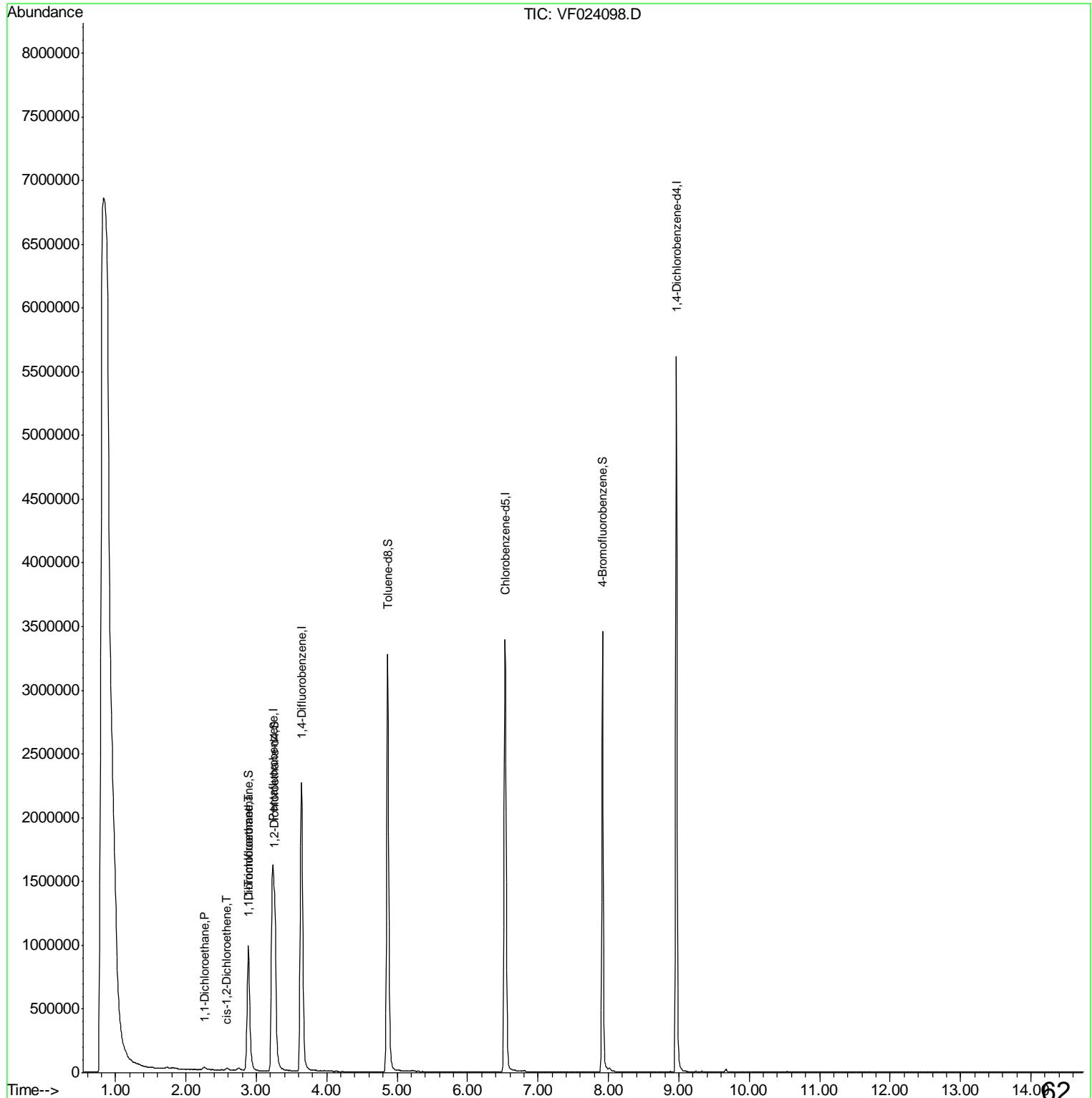
N = Presumptive Evidence of a Compound

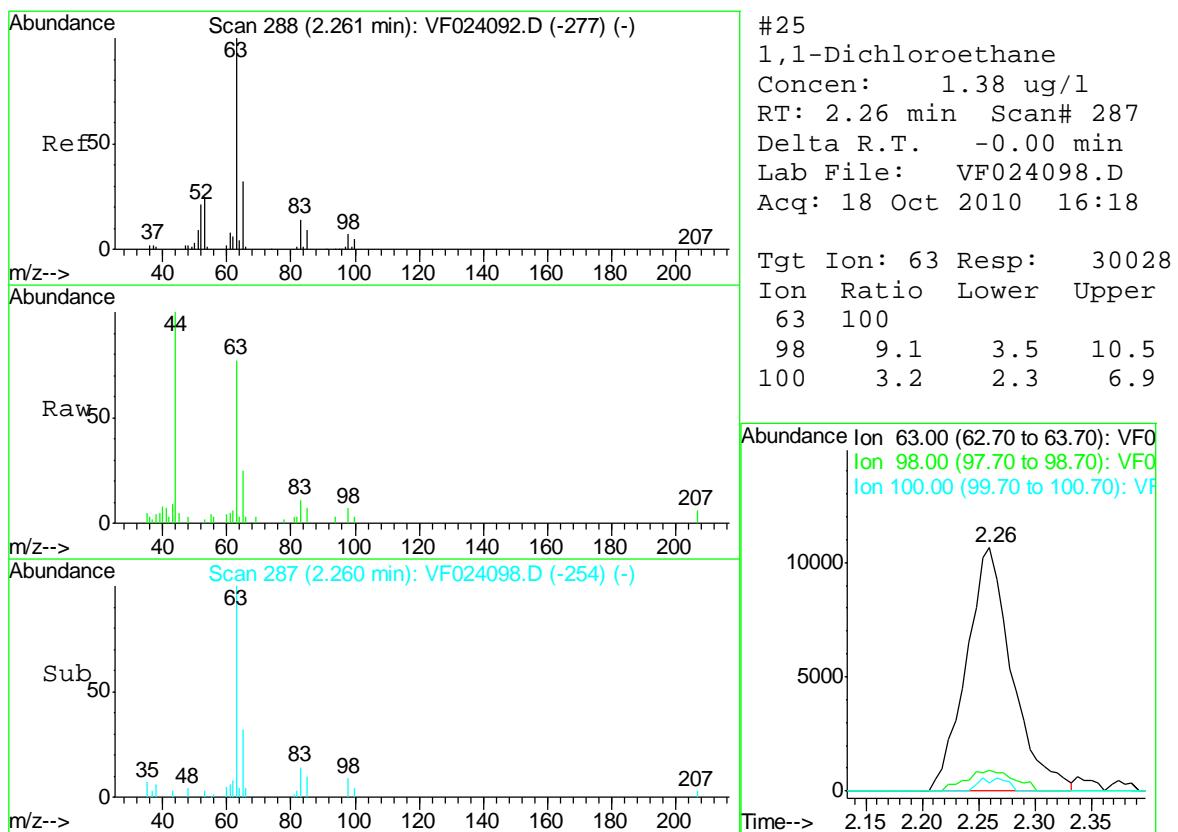
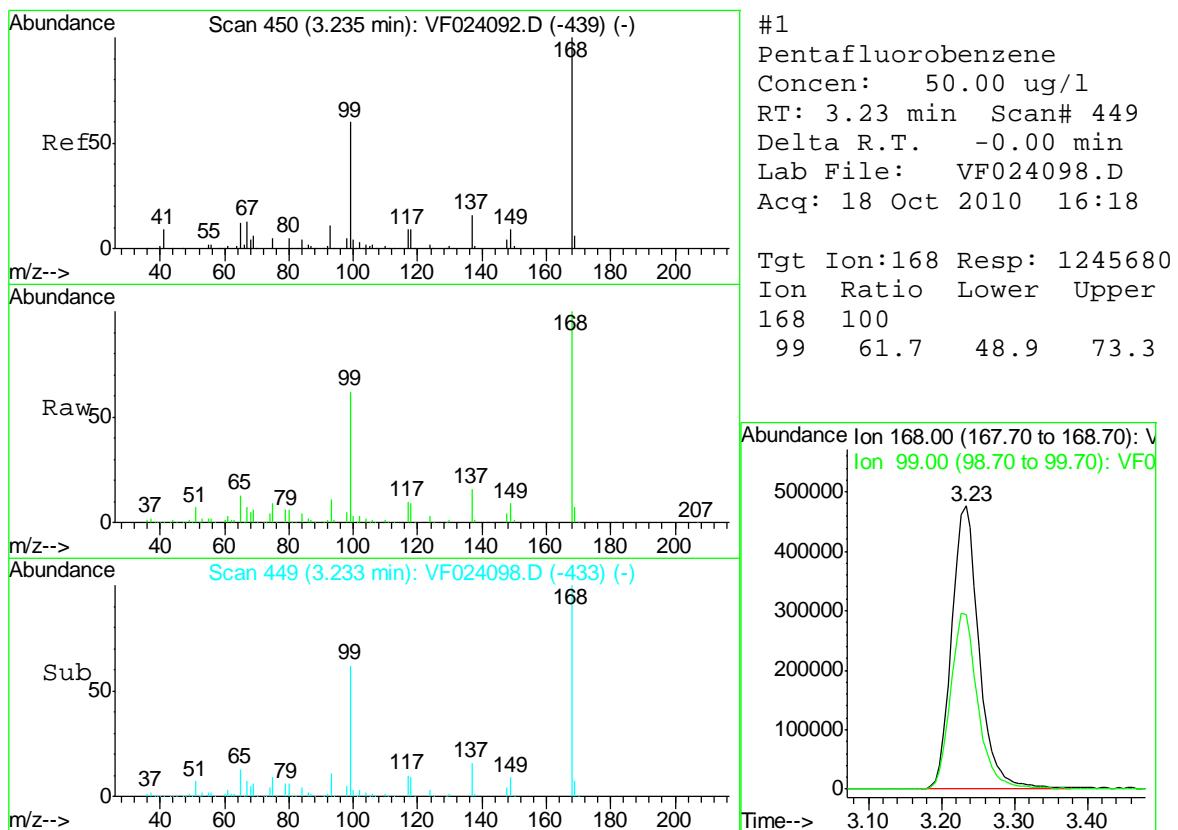
\* = Values outside of QC limits

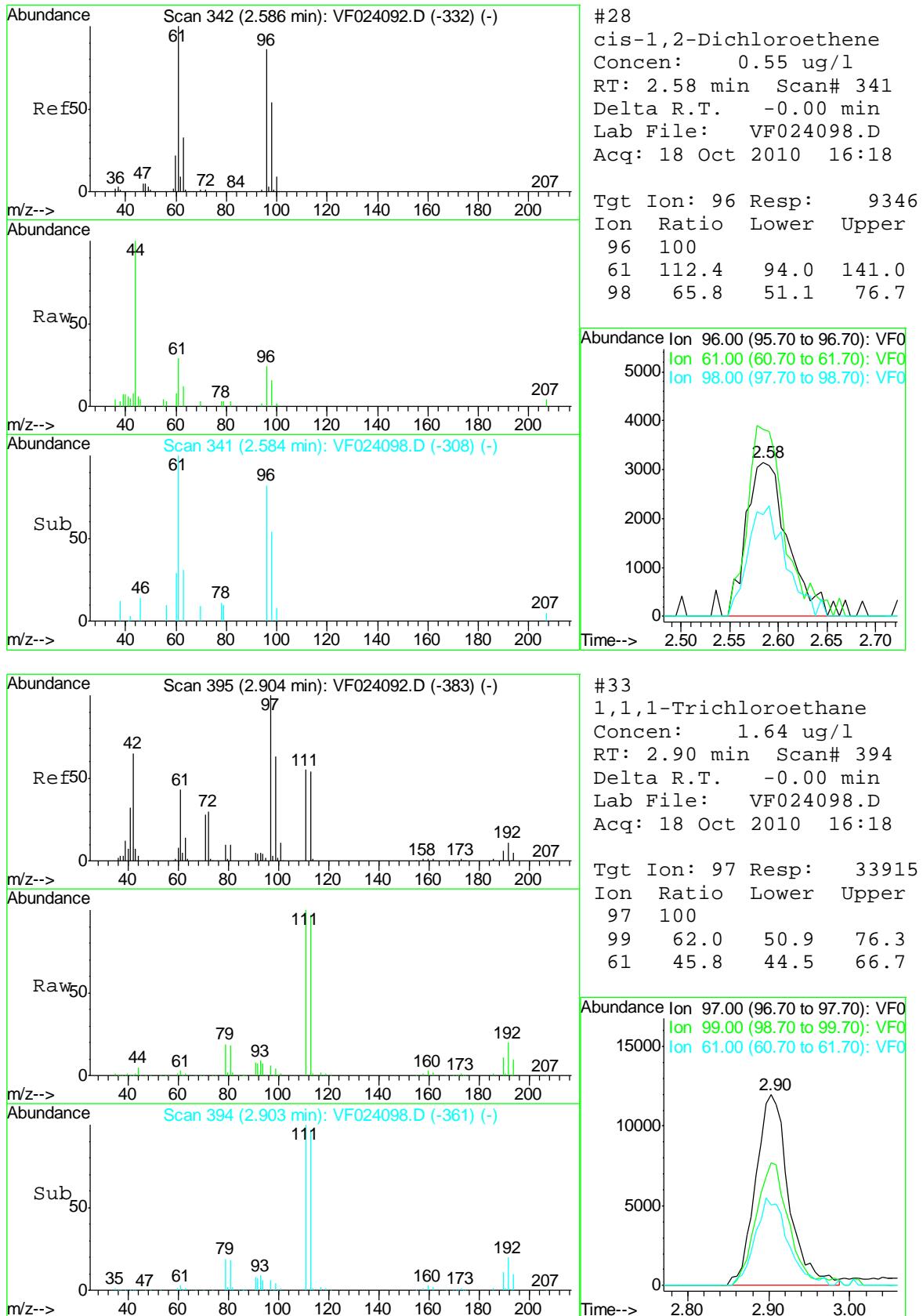
D = Dilution

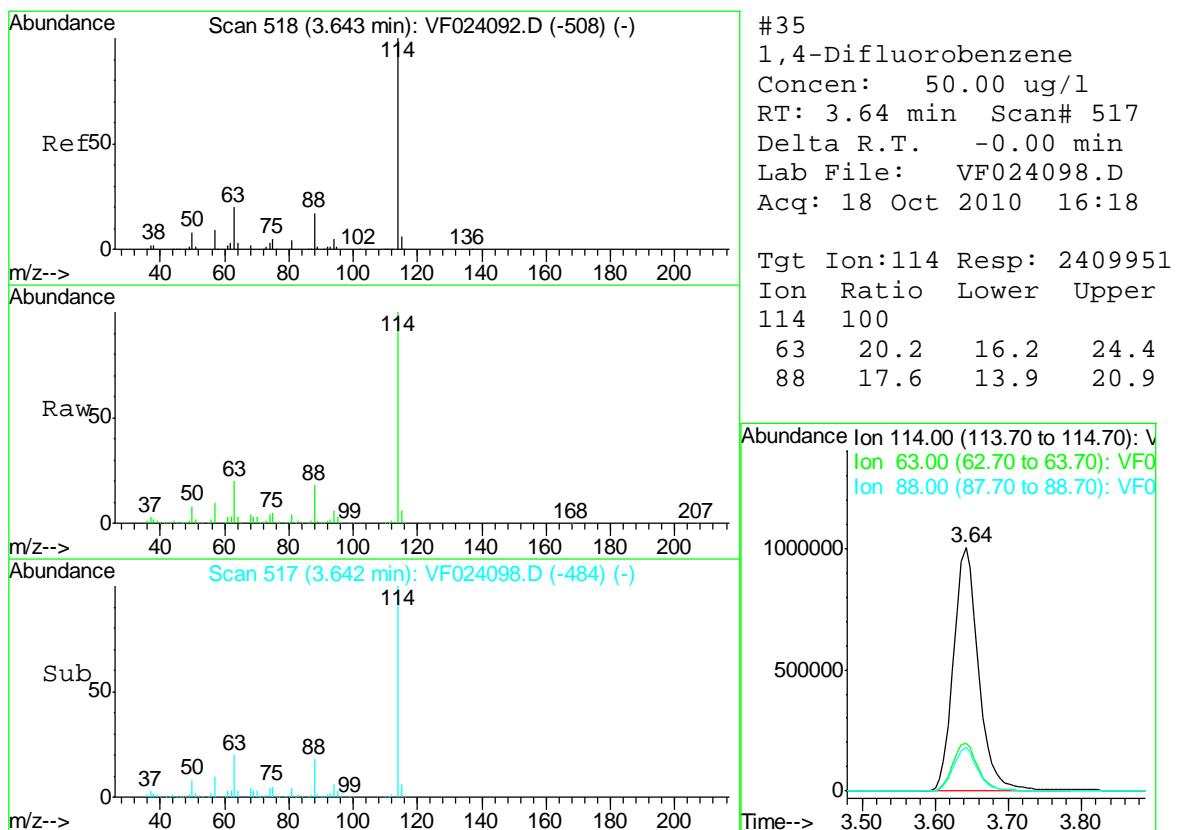
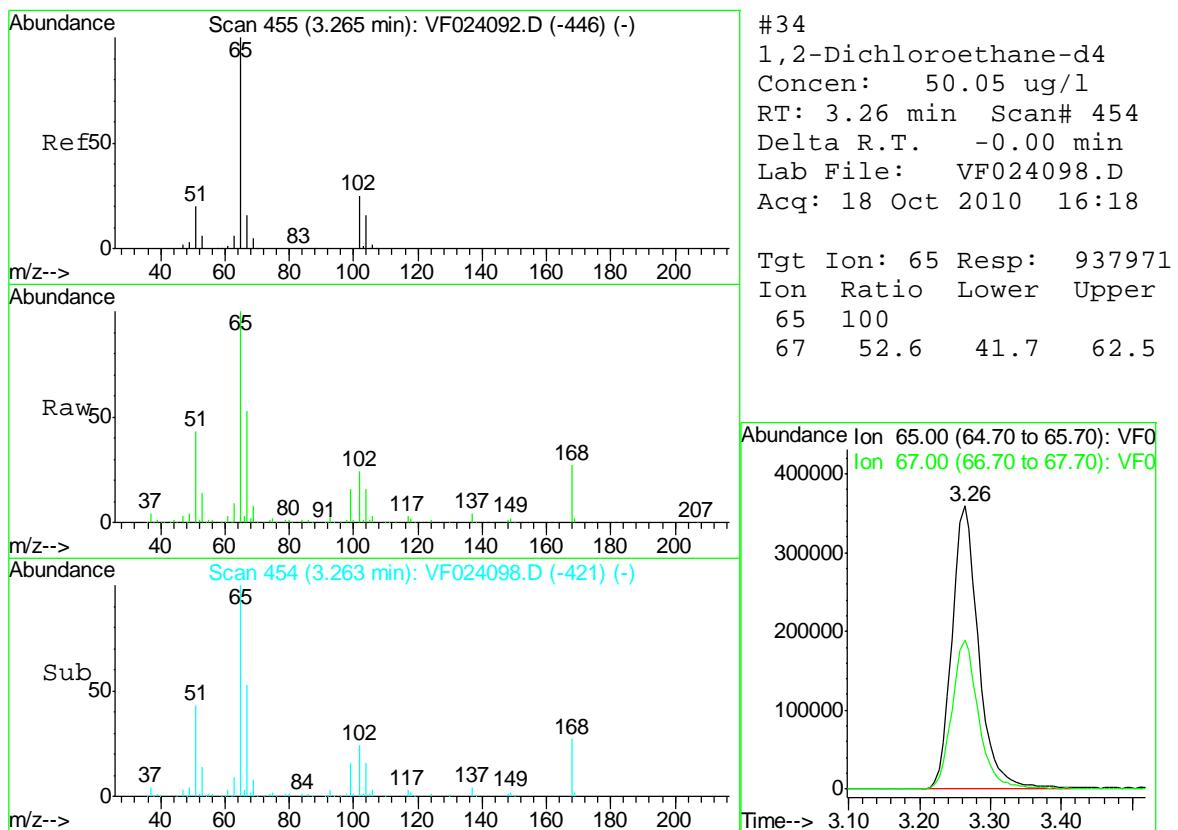
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Data File : VF024098.D  
Acq On : 18 Oct 2010 16:18  
Operator : MS  
Sample : B3902-04  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

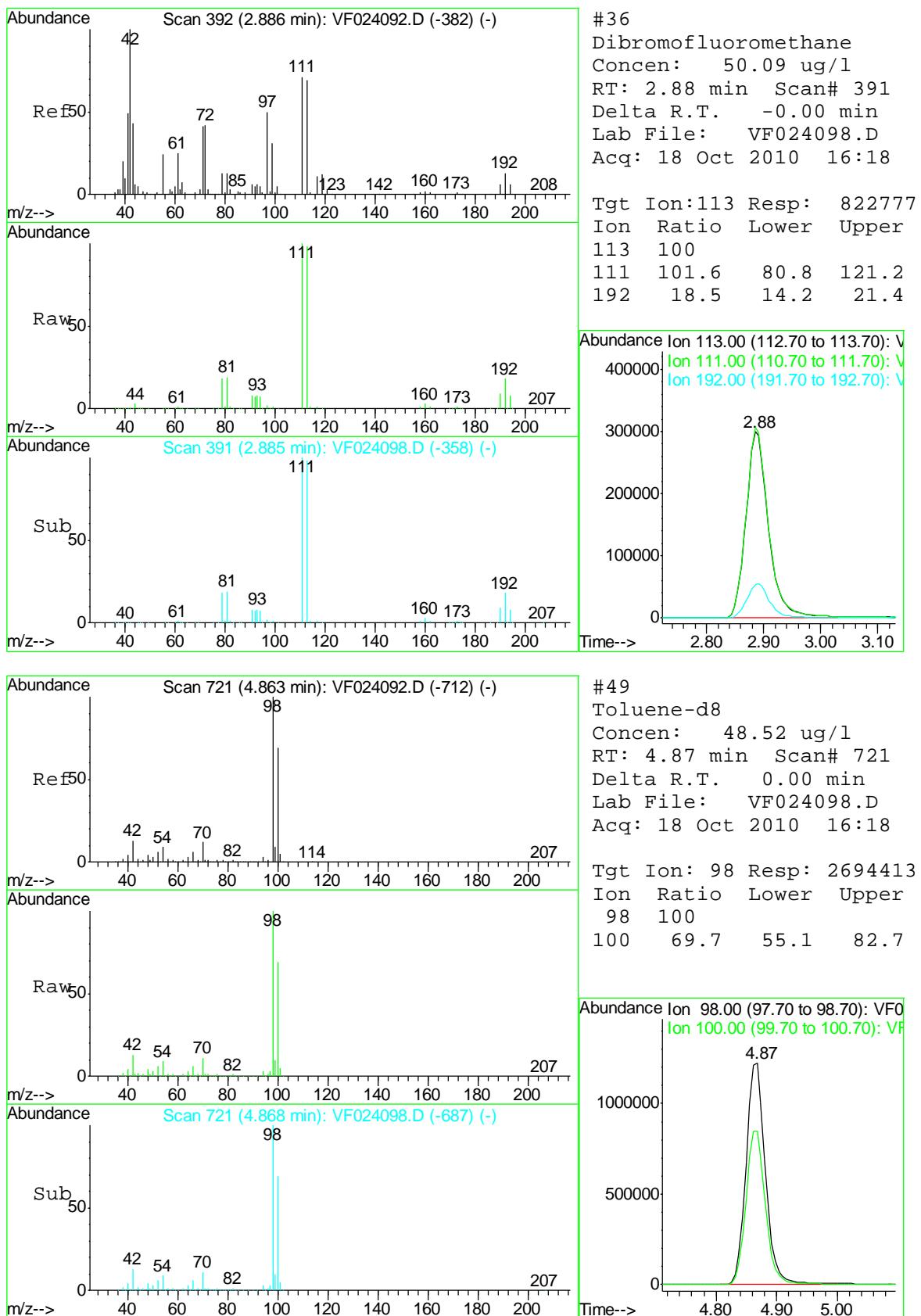
Quant Time: Oct 18 16:45:24 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration

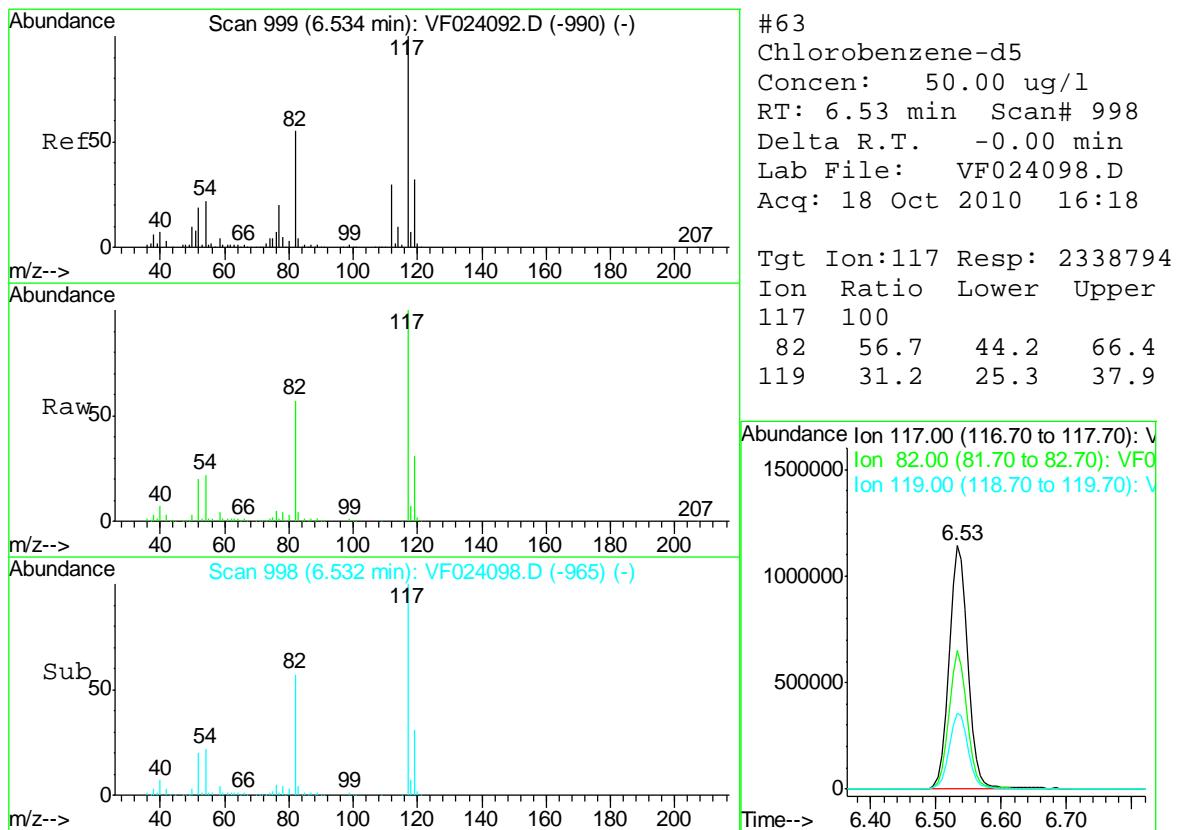
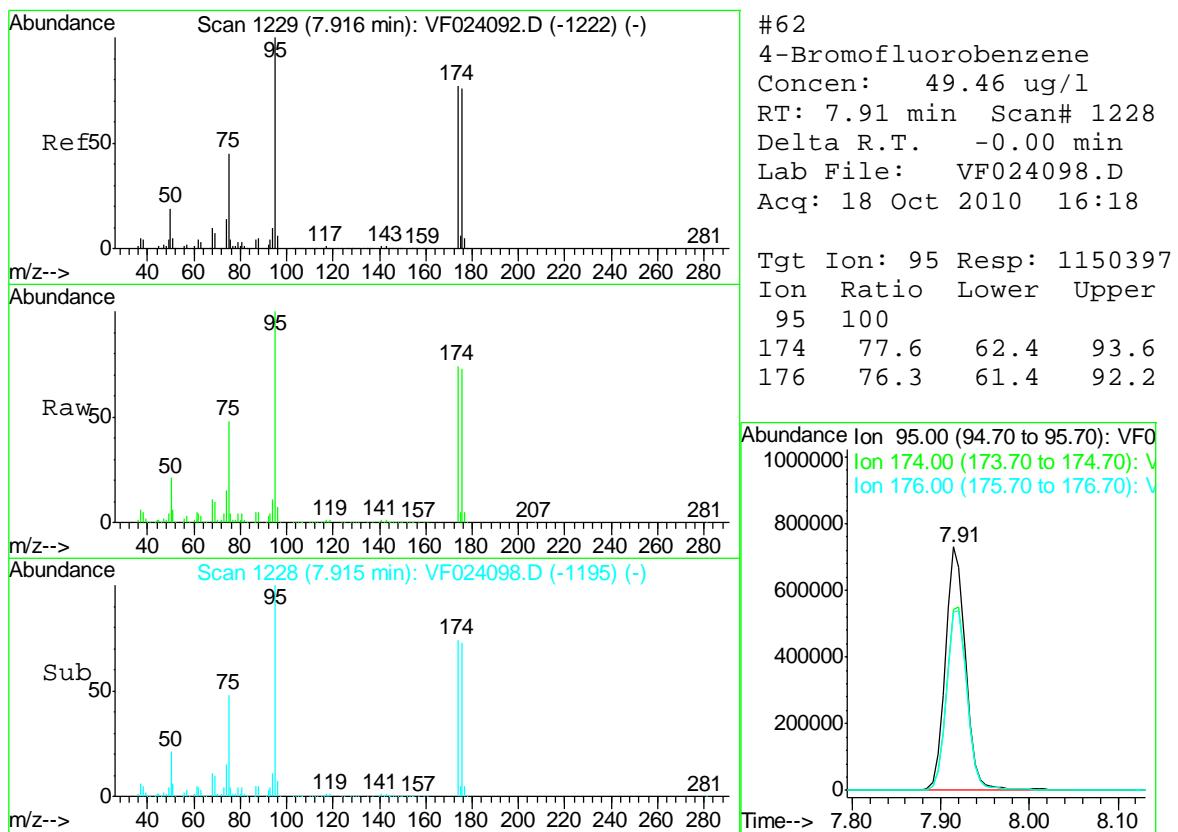


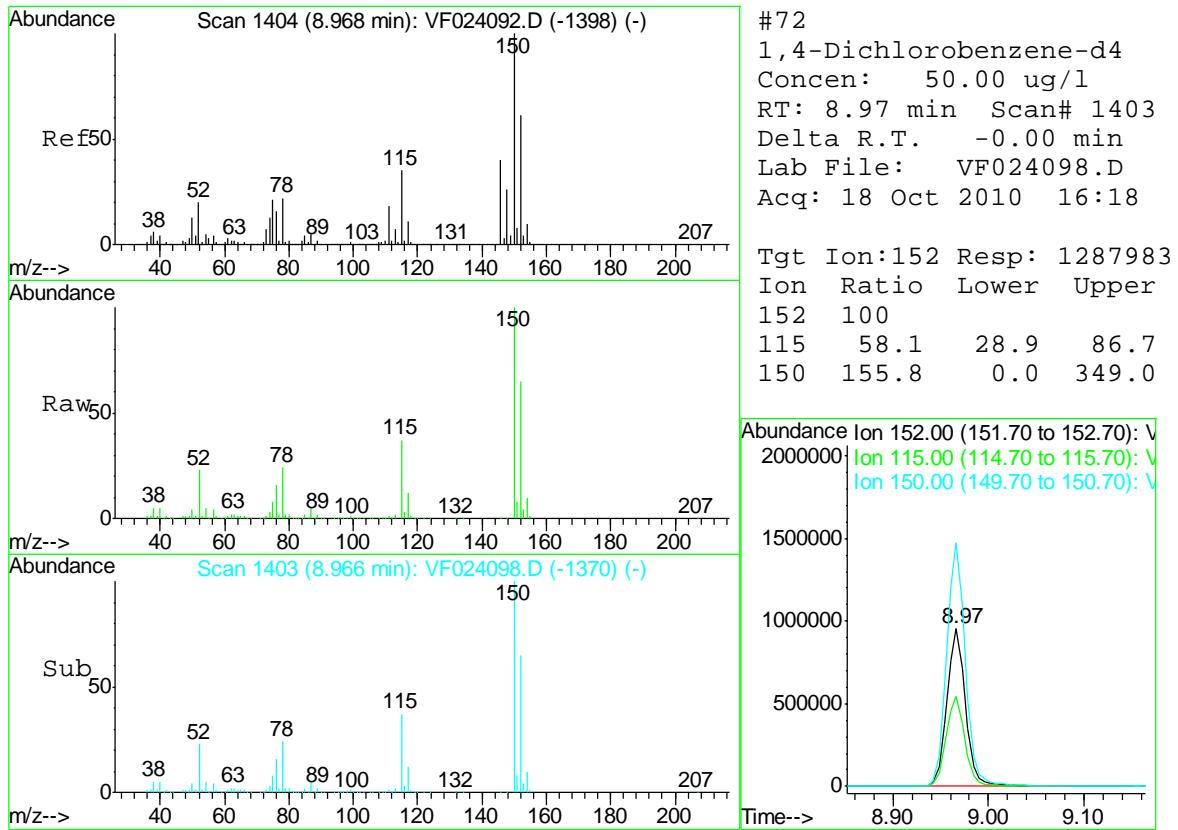












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024098.D  
 Acq On : 18 Oct 2010 16:18  
 Operator : MS  
 Sample : B3902-04  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 18 16:45:24 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1245680	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2409951	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.53	117	2338794	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1287983	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	937971	50.05	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	100.10%	
36) Dibromofluoromethane	2.88	113	822777	50.09	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	100.18%	
49) Toluene-d8	4.87	98	2694413	48.52	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	97.04%	
62) 4-Bromofluorobenzene	7.91	95	1150397	49.46	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	98.92%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.26	63	30028	1.38	ug/l 95
28) cis-1,2-Dichloroethene	2.58	96	9346	0.55	ug/l 96
33) 1,1,1-Trichloroethane	2.90	97	33915	1.64	ug/l 93

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024098.D  
 Acq On : 18 Oct 2010 16:18  
 Operator : MS  
 Sample : B3902-04  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

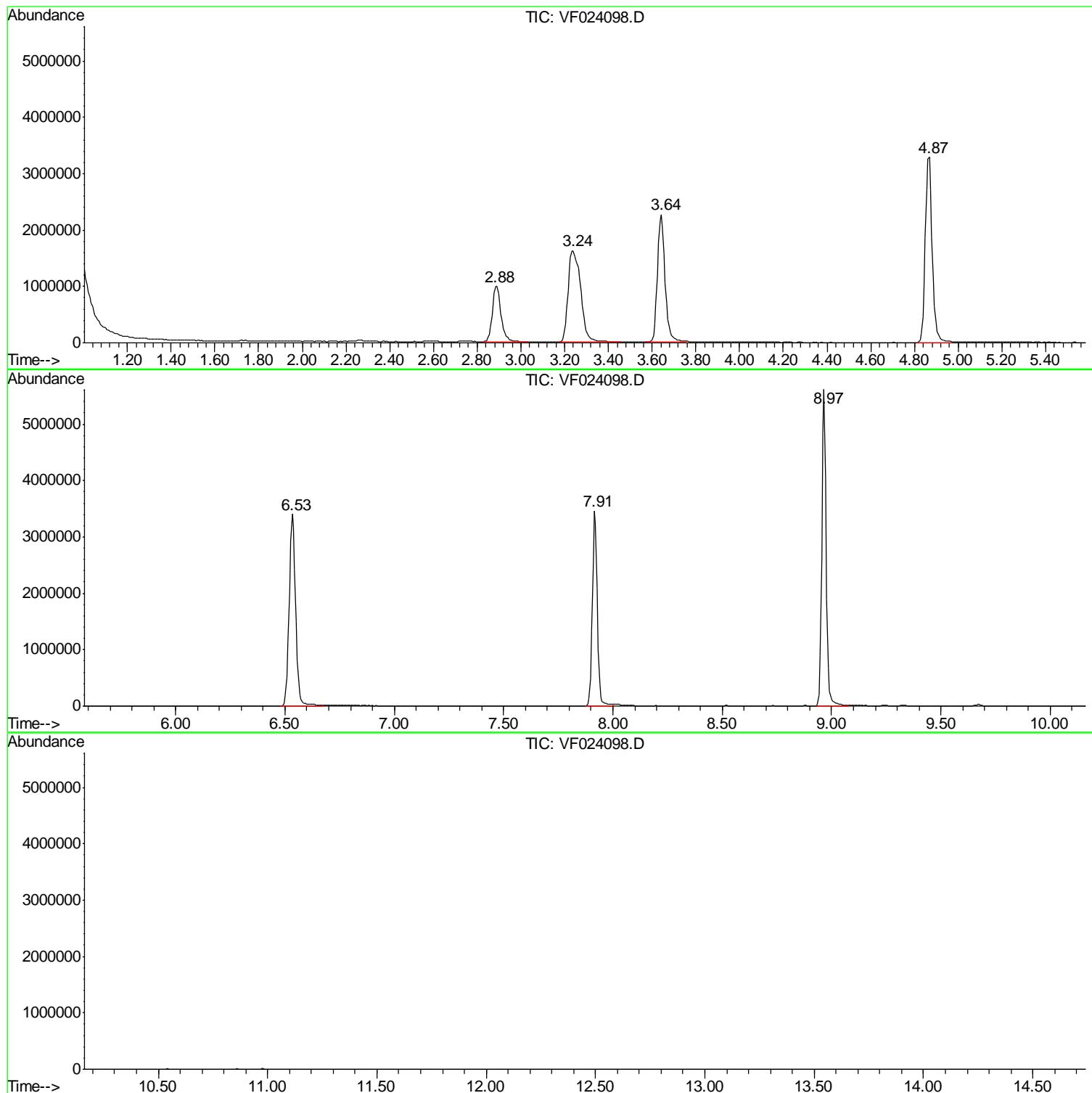
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.885	381	391	415	rVB	985011	2756791	35.36%	6.520%
2	3.239	439	450	486	rBV2	1618099	6485547	83.18%	15.340%
3	3.642	505	517	536	rBV	2264401	5505461	70.61%	13.021%
4	4.868	711	721	738	rBV	3281400	7306189	93.71%	17.280%
5	6.532	989	998	1022	rBV	3397650	6936626	88.97%	16.406%
6	7.915	1221	1228	1242	rBV	3456818	5492583	70.45%	12.991%
7	8.966	1397	1403	1422	rBV	5611858	7796777	100.00%	18.441%

Sum of corrected areas: 42279974

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024098.D  
Acq On : 18 Oct 2010 16:18  
Operator : MS  
Sample : B3902-04  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024098.D  
Acq On : 18 Oct 2010 16:18  
Operator : MS  
Sample : B3902-04  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024098.D  
Acq On : 18 Oct 2010 16:18  
Operator : MS  
Sample : B3902-04  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-20D	SDG No.:	B3902
Lab Sample ID:	B3902-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024099.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	5.8		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1.7		0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	5.4		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-20D	SDG No.:	B3902
Lab Sample ID:	B3902-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024099.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	51.2		66 - 150		102%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		76 - 130		105%	SPK: 50
2037-26-5	Toluene-d8	46.9		78 - 121		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	49		70 - 131		98%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1179950	3.23				
540-36-3	1,4-Difluorobenzene	2299080	3.64				
3114-55-4	Chlorobenzene-d5	2190640	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1209200	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

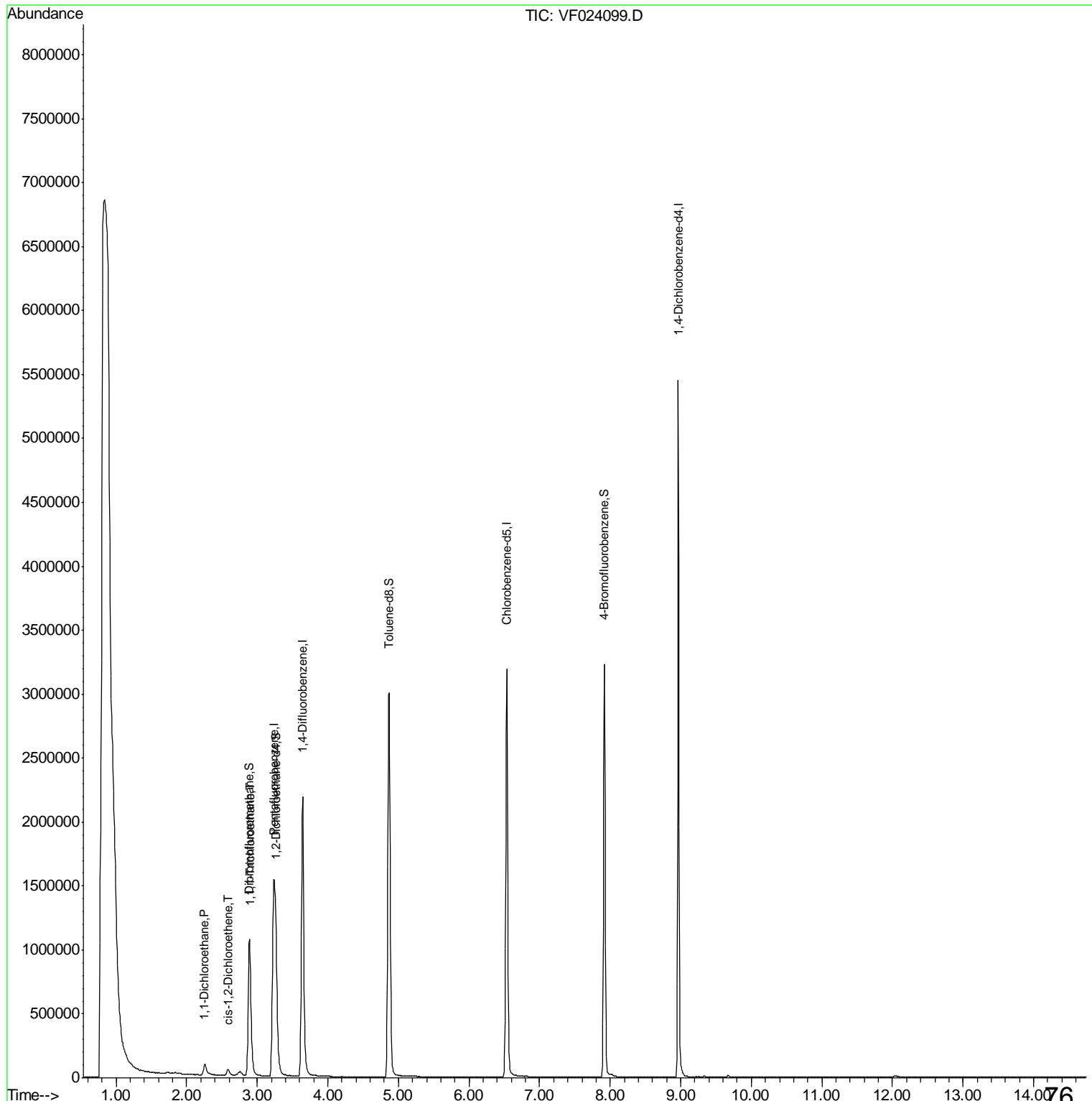
N = Presumptive Evidence of a Compound

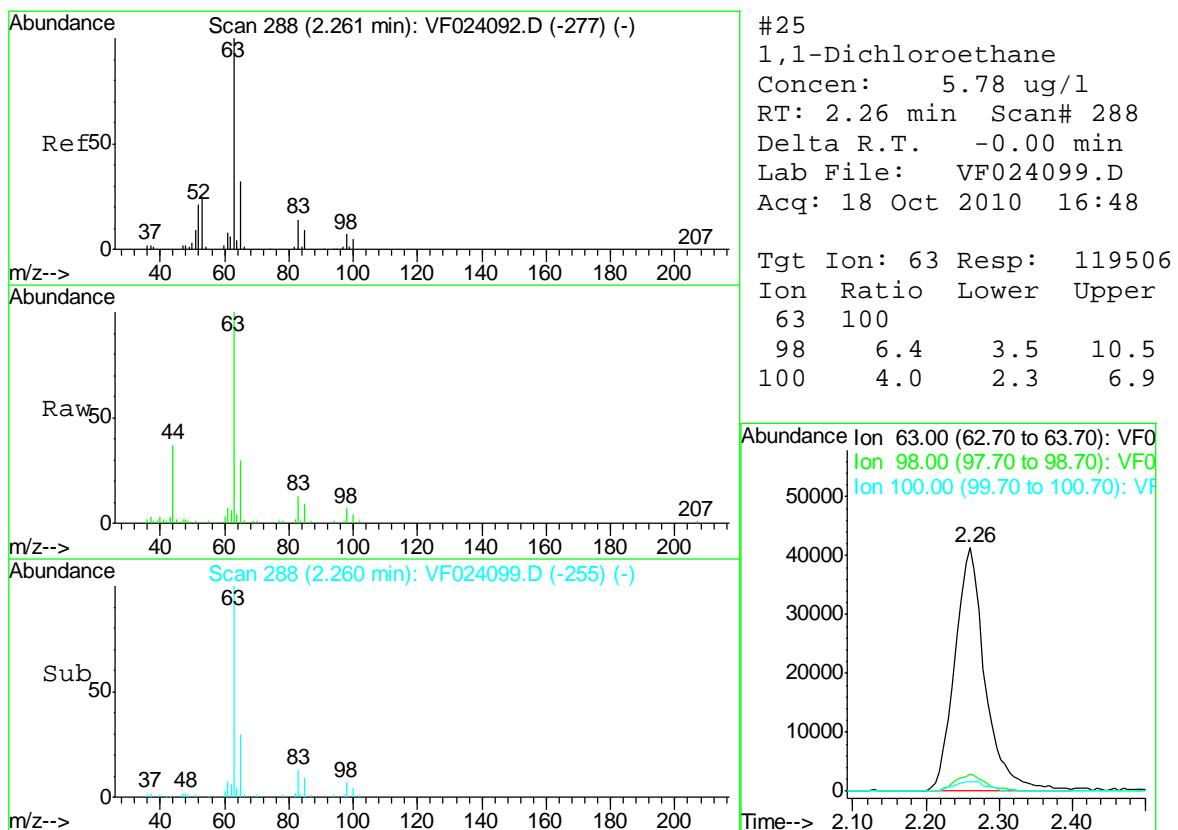
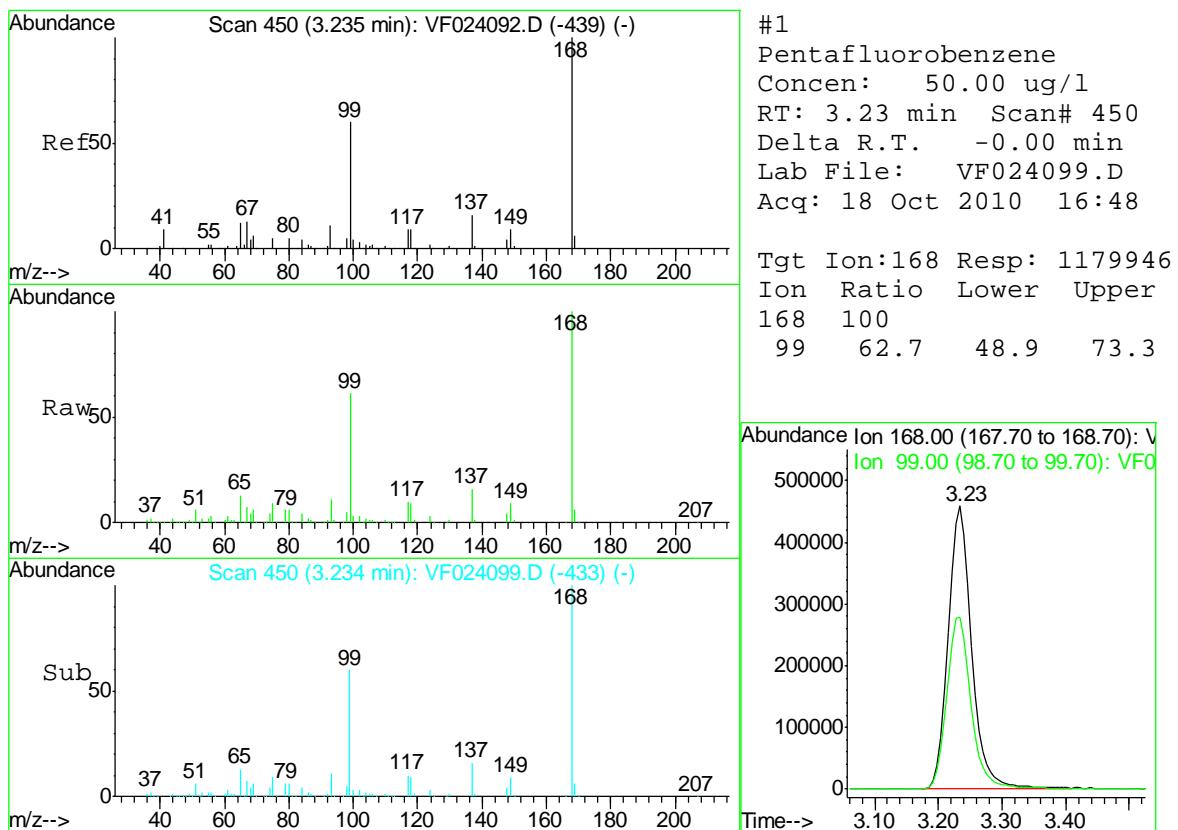
\* = Values outside of QC limits

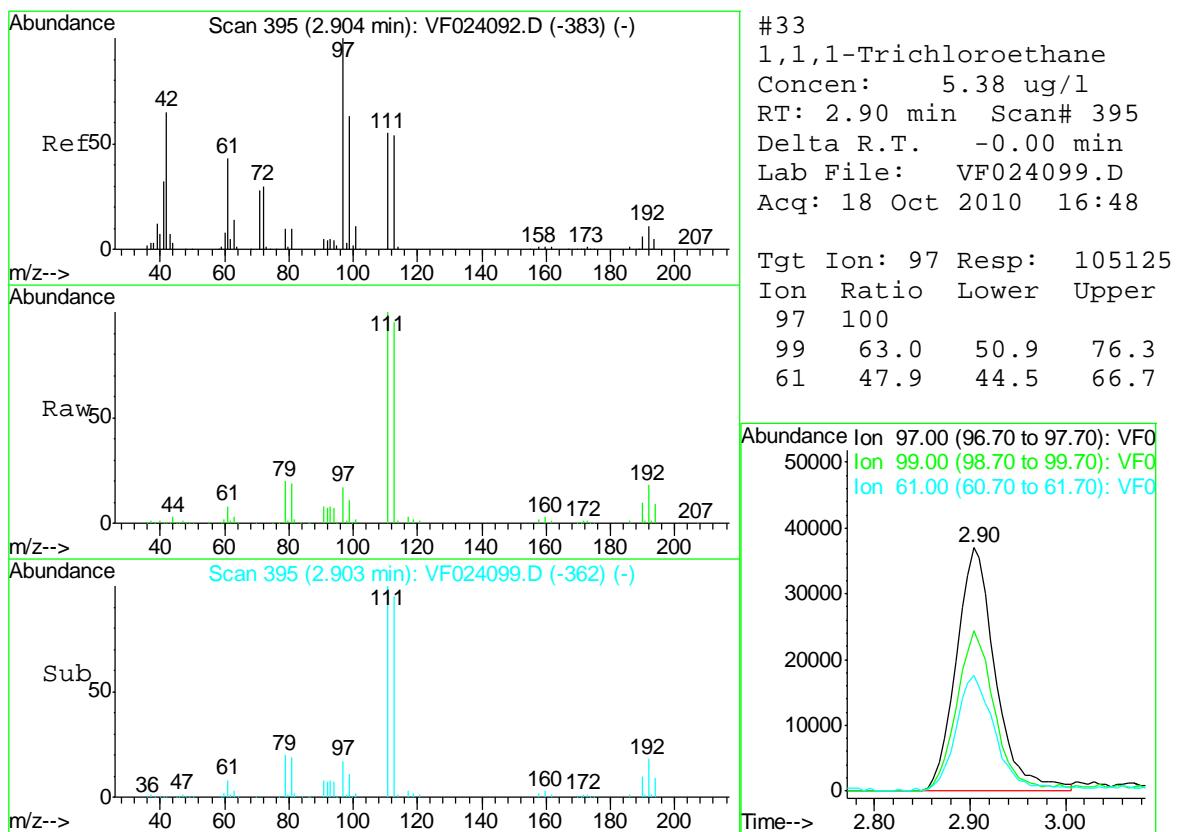
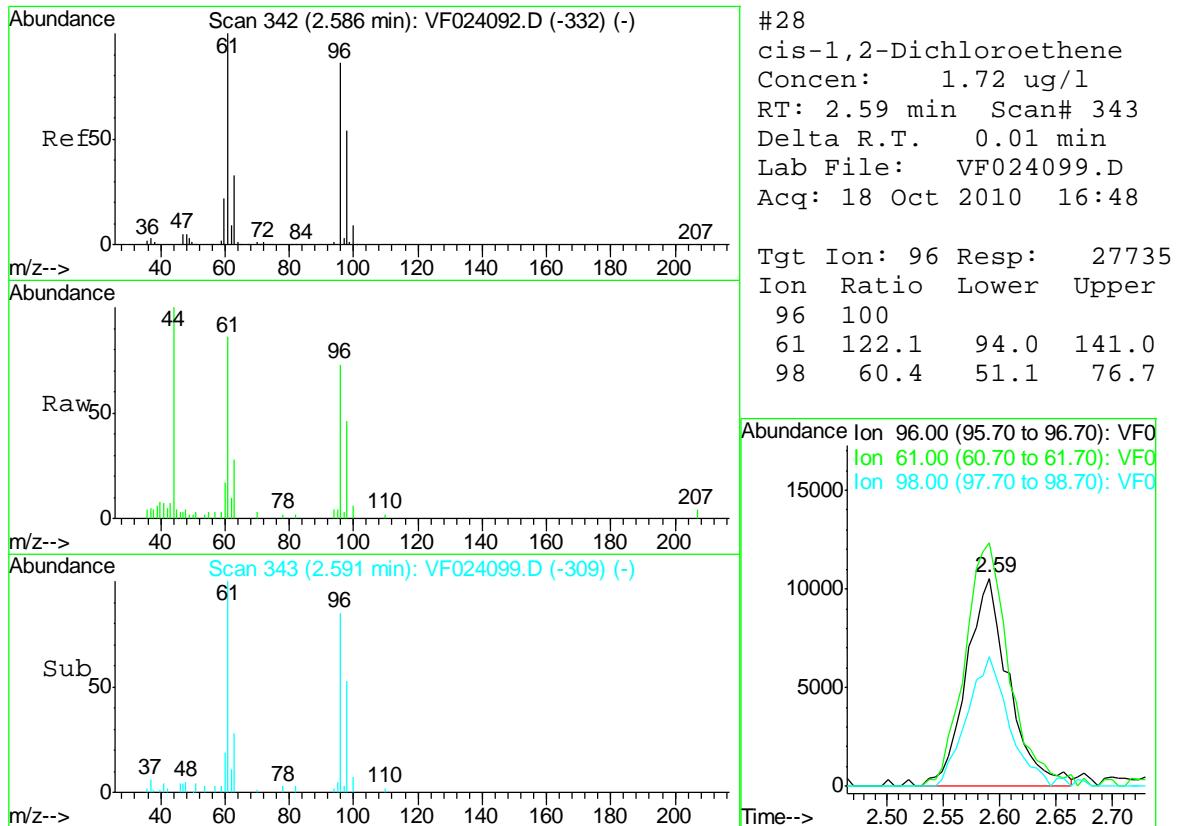
D = Dilution

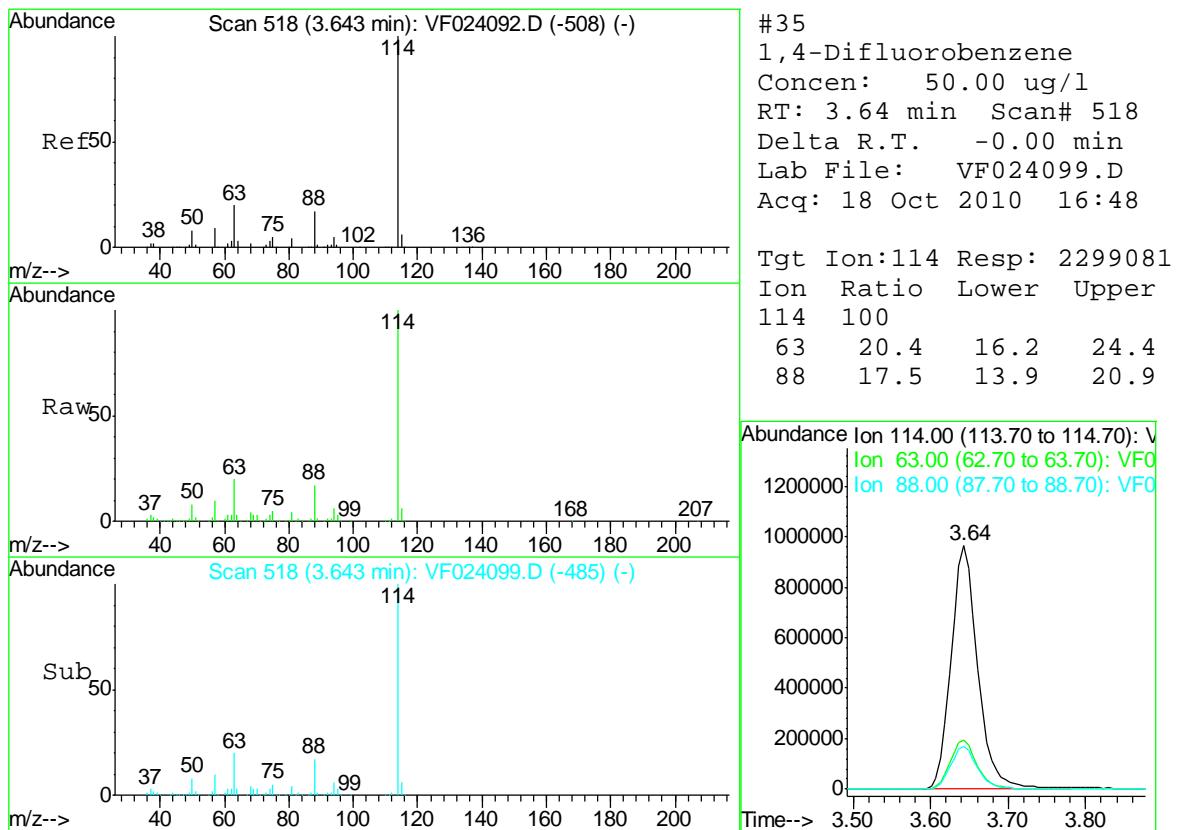
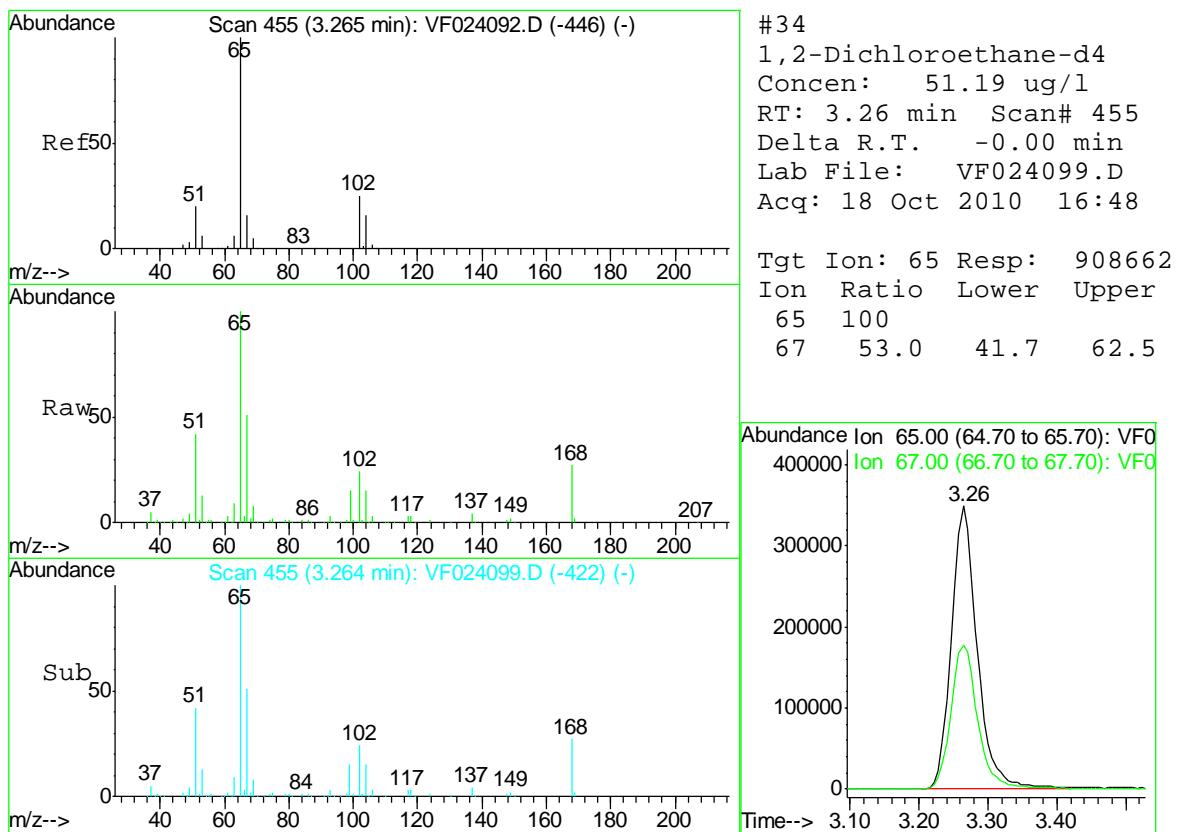
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Data File : VF024099.D  
Acq On : 18 Oct 2010 16:48  
Operator : MS  
Sample : B3902-05  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

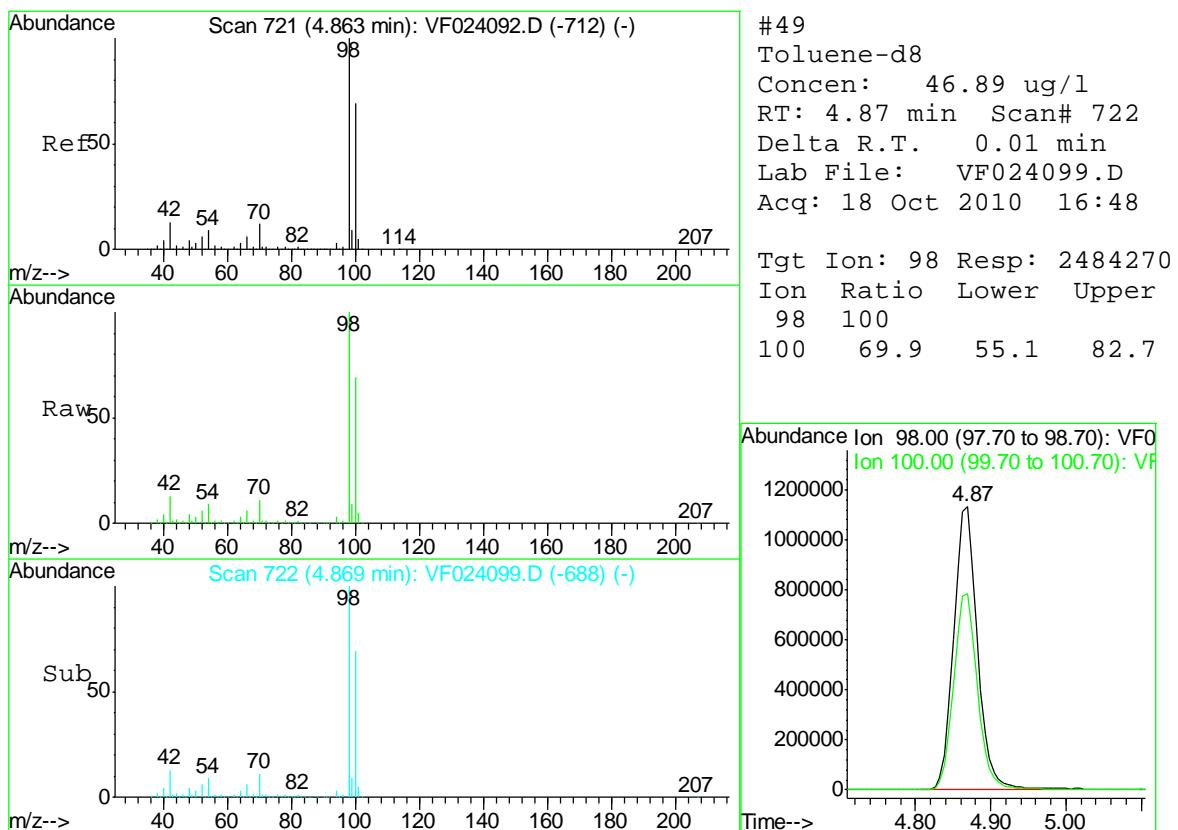
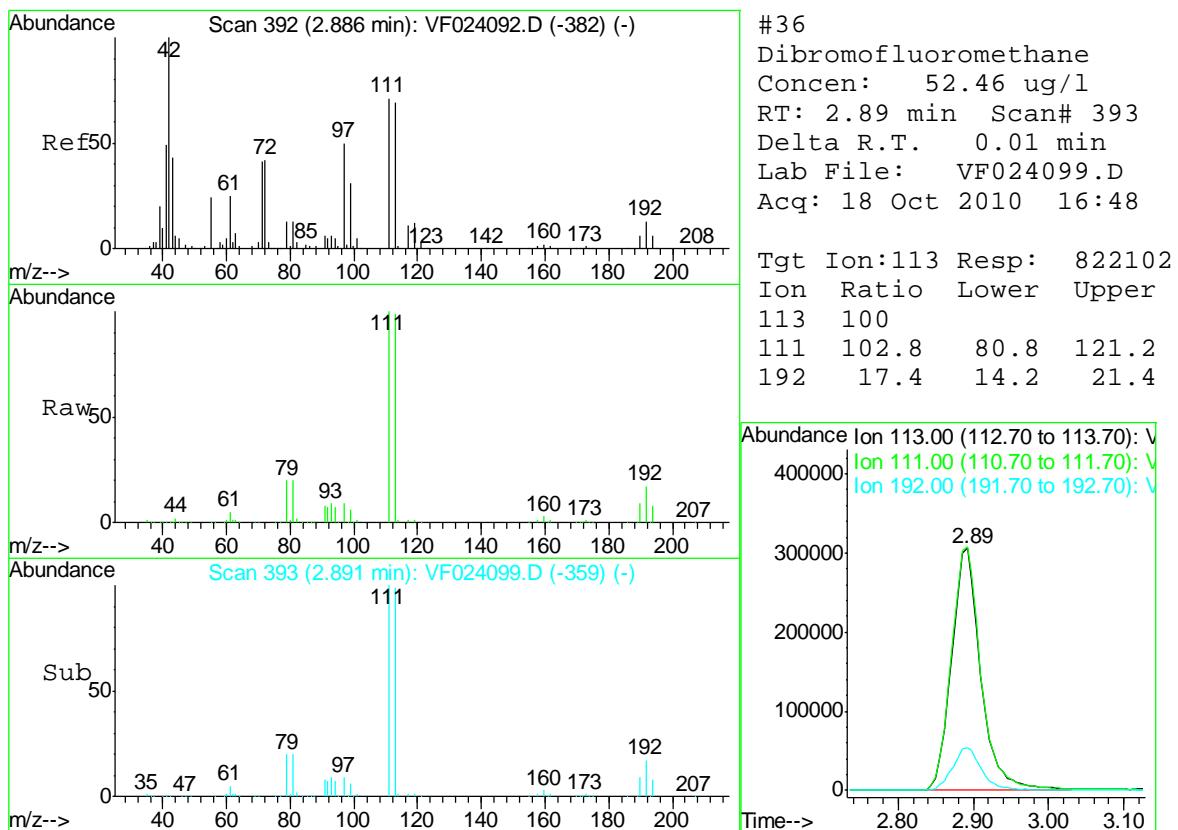
Quant Time: Oct 18 17:03:42 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration

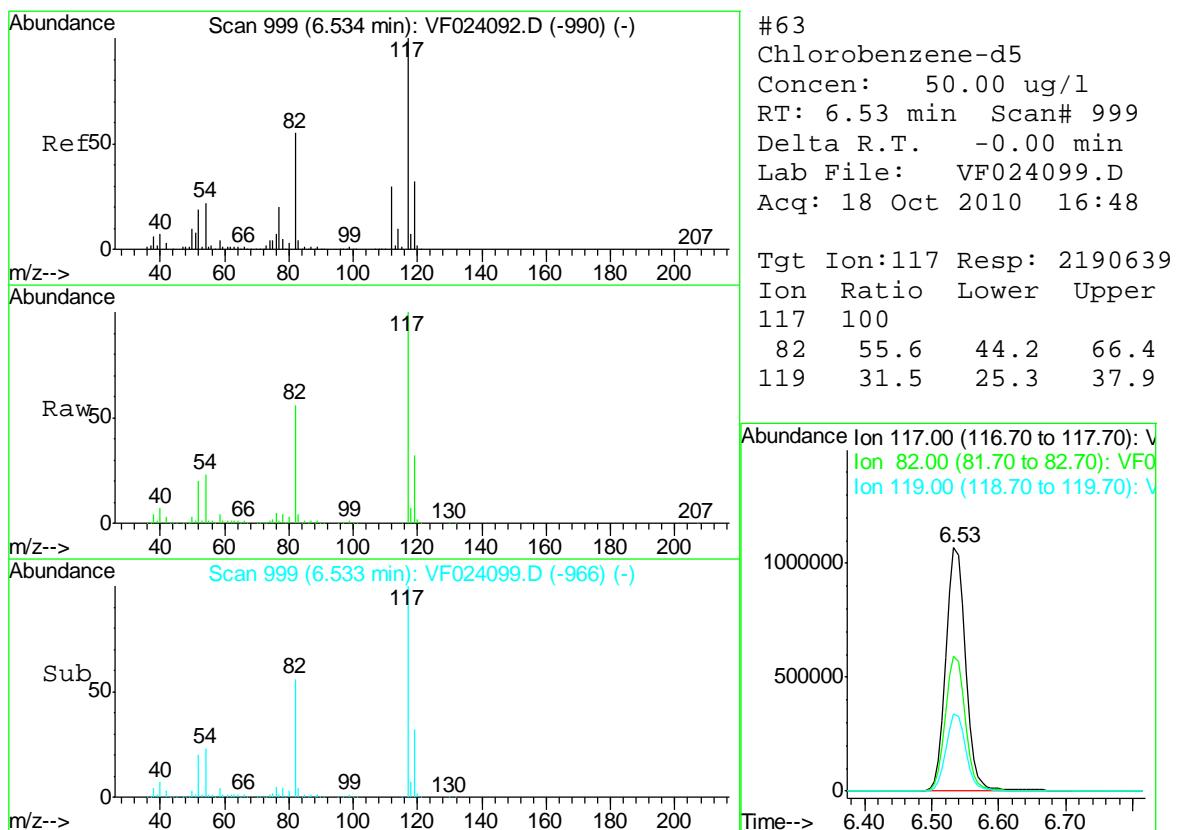
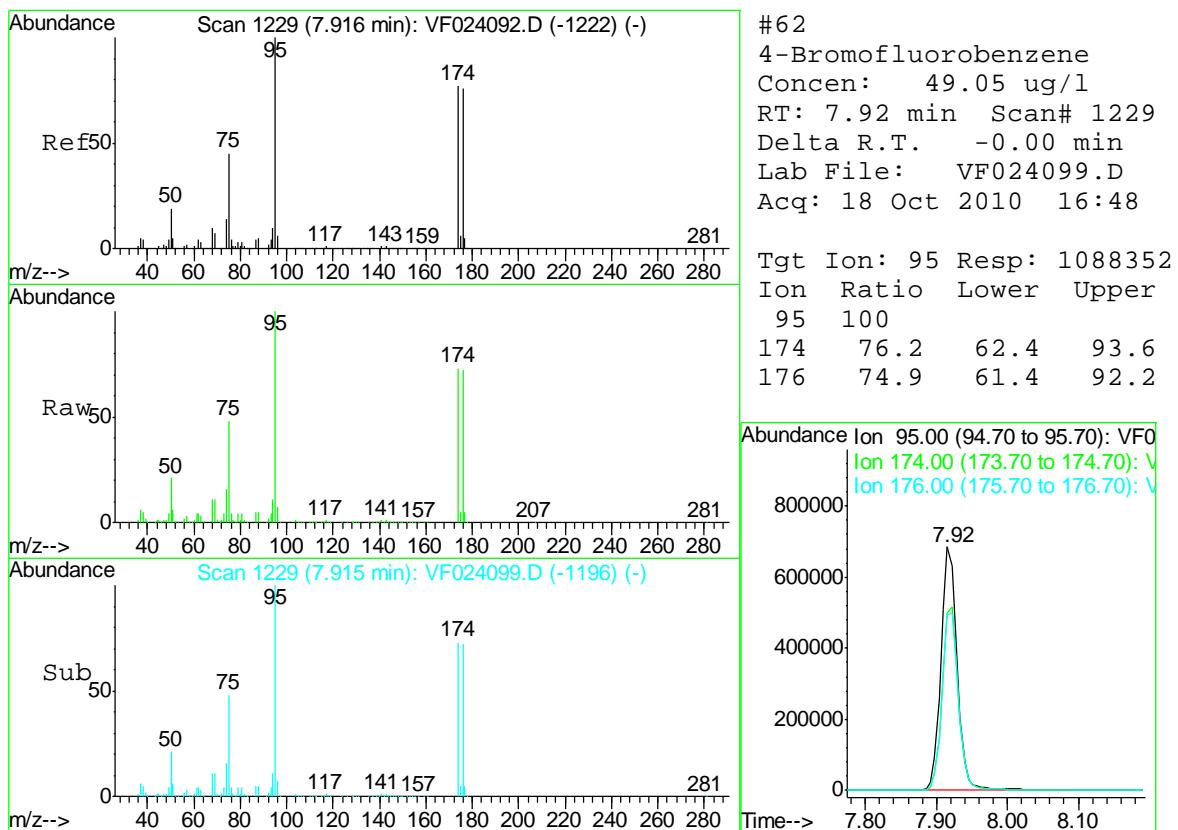


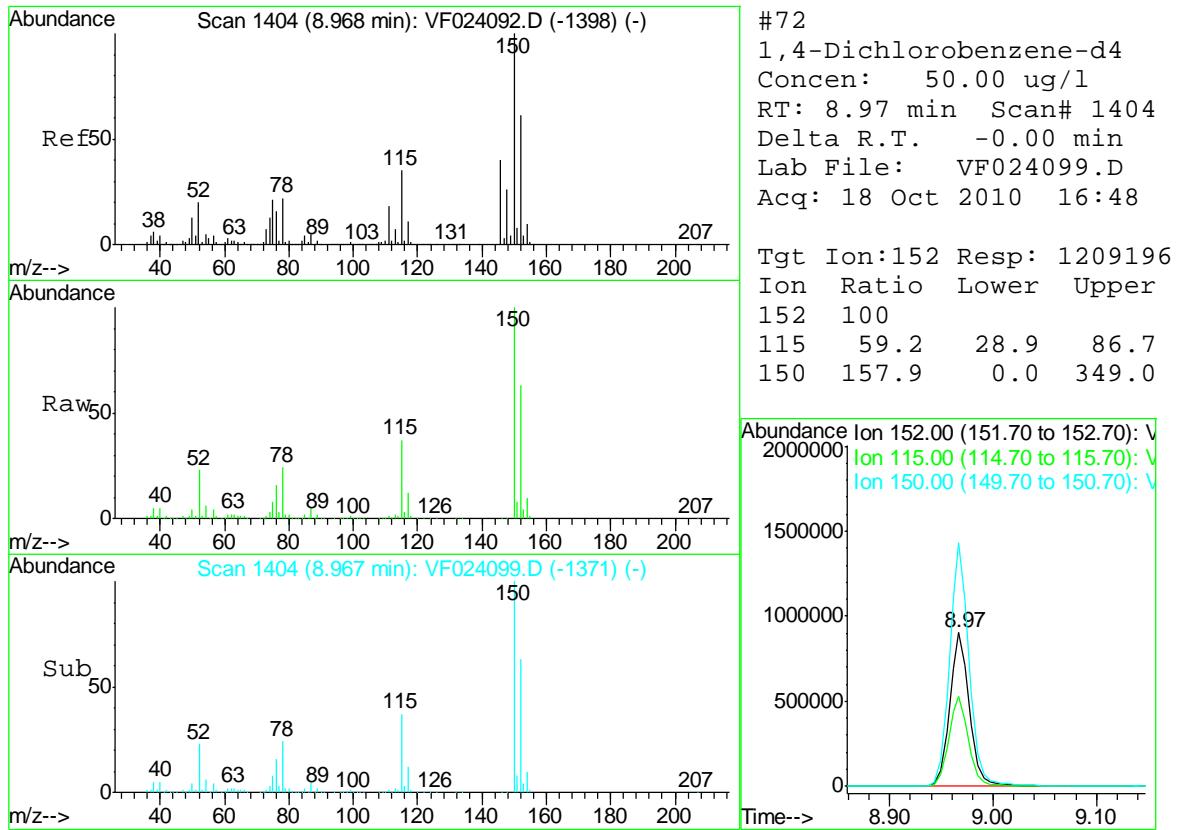












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024099.D  
 Acq On : 18 Oct 2010 16:48  
 Operator : MS  
 Sample : B3902-05  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 18 17:03:42 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1179946	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2299081	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.53	117	2190639	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1209196	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	908662	51.19	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	102.38%	
36) Dibromofluoromethane	2.89	113	822102	52.46	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	104.92%	
49) Toluene-d8	4.87	98	2484270	46.89	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	93.78%	
62) 4-Bromofluorobenzene	7.92	95	1088352	49.05	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	98.10%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.26	63	119506	5.78	ug/l
28) cis-1,2-Dichloroethene	2.59	96	27735	1.72	ug/l
33) 1,1,1-Trichloroethane	2.90	97	105125	5.38	ug/l

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024099.D  
 Acq On : 18 Oct 2010 16:48  
 Operator : MS  
 Sample : B3902-05  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 10 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

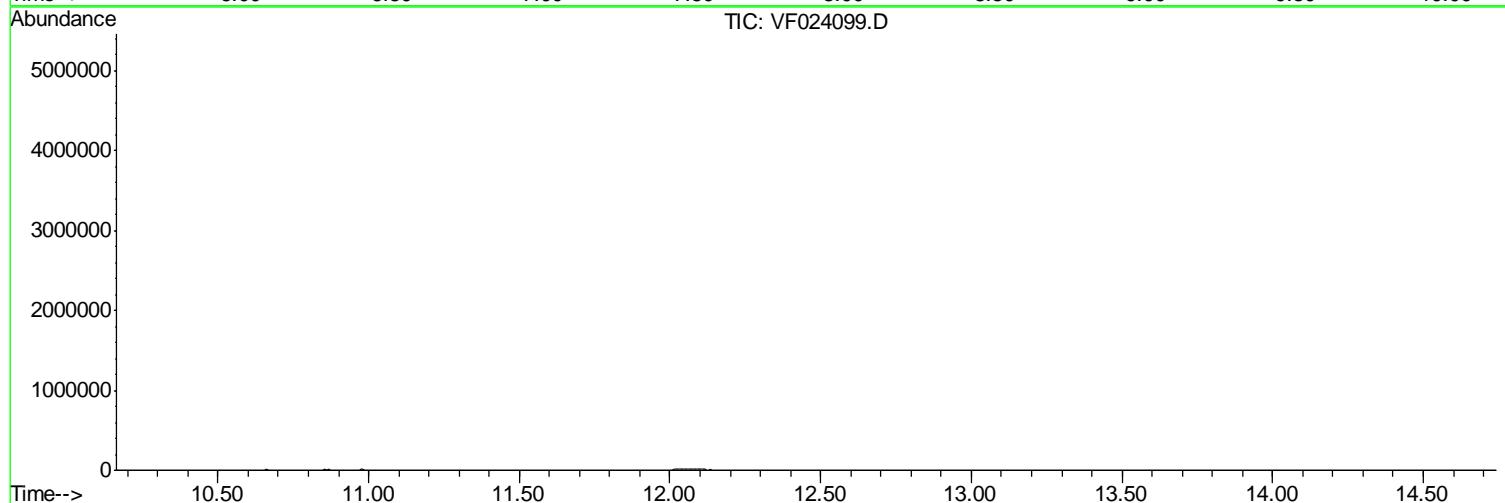
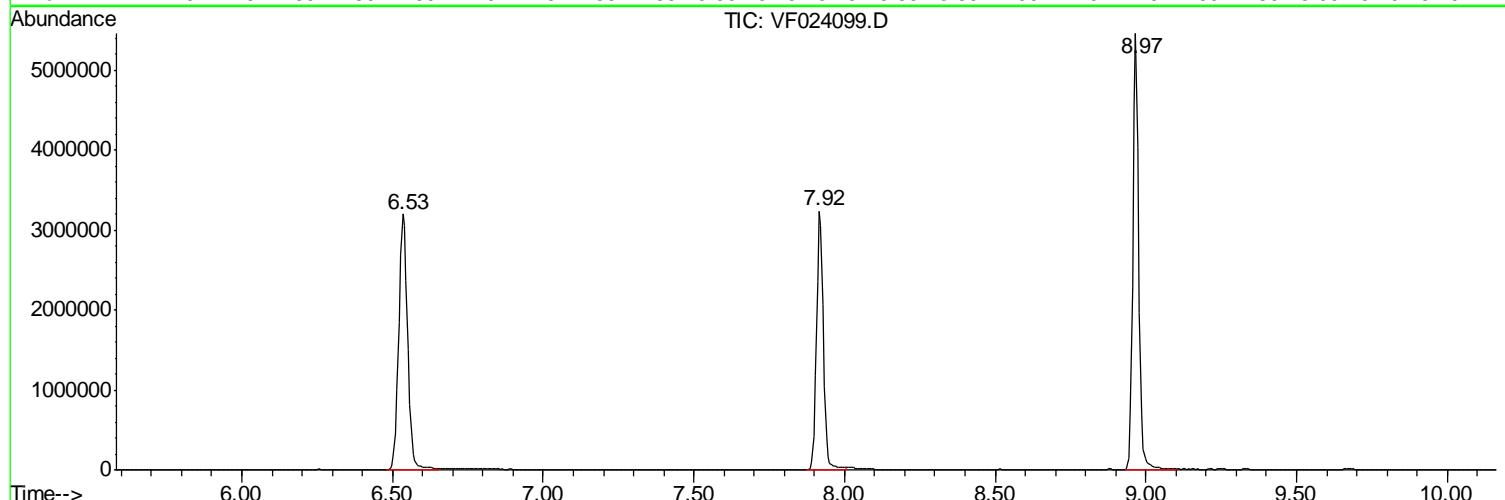
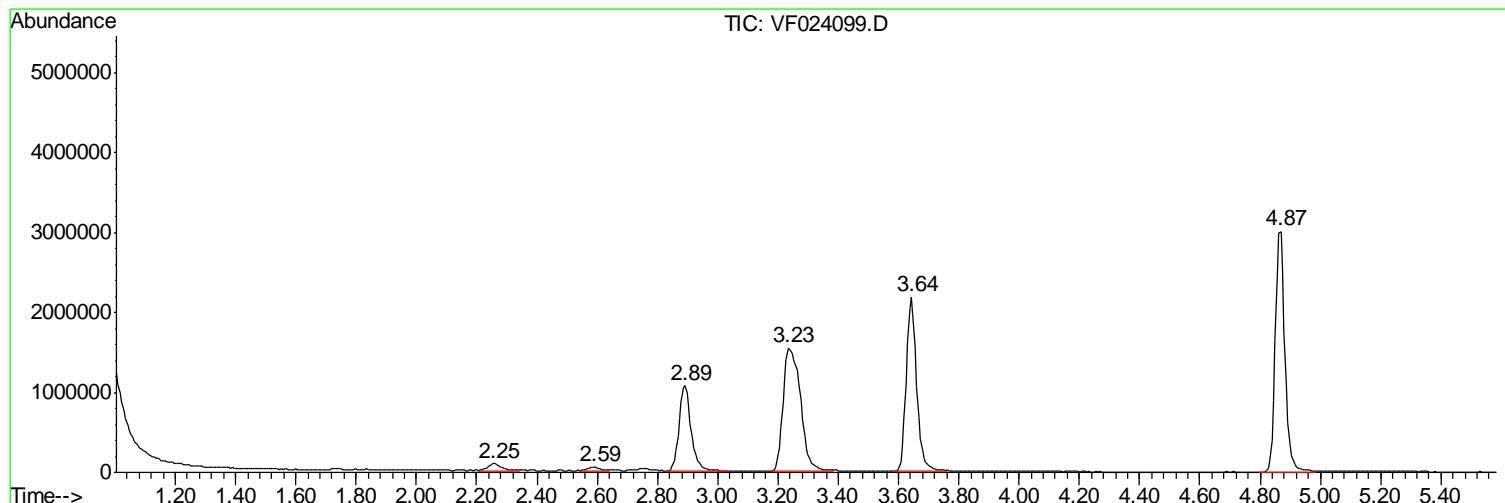
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.254	279	287	302	rBV	84540	270004	3.62%	0.663%
2	2.591	335	343	351	rBV	43935	112768	1.51%	0.277%
3	2.891	383	393	416	rVB	1066711	2937243	39.40%	7.215%
4	3.234	440	450	475	rBV2	1538305	6182186	82.94%	15.186%
5	3.643	507	518	537	rBV	2185969	5283859	70.89%	12.980%
6	4.869	710	722	741	rBV	3006258	6742311	90.45%	16.562%
7	6.533	990	999	1019	rBV	3196201	6555427	87.94%	16.103%
8	7.915	1222	1229	1244	rBV	3229510	5170672	69.37%	12.702%
9	8.967	1398	1404	1426	rBV	5452969	7454036	100.00%	18.311%

Sum of corrected areas: 40708506

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024099.D  
Acq On : 18 Oct 2010 16:48  
Operator : MS  
Sample : B3902-05  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024099.D  
Acq On : 18 Oct 2010 16:48  
Operator : MS  
Sample : B3902-05  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024099.D  
Acq On : 18 Oct 2010 16:48  
Operator : MS  
Sample : B3902-05  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc	--Internal Standard---

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-13DD	SDG No.:	B3902
Lab Sample ID:	B3902-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024100.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-13DD	SDG No.:	B3902
Lab Sample ID:	B3902-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024100.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	52		66 - 150		104%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		76 - 130		103%	SPK: 50
2037-26-5	Toluene-d8	49.3		78 - 121		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.2		70 - 131		100%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1089900	3.23				
540-36-3	1,4-Difluorobenzene	2137940	3.64				
3114-55-4	Chlorobenzene-d5	2088410	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1137470	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

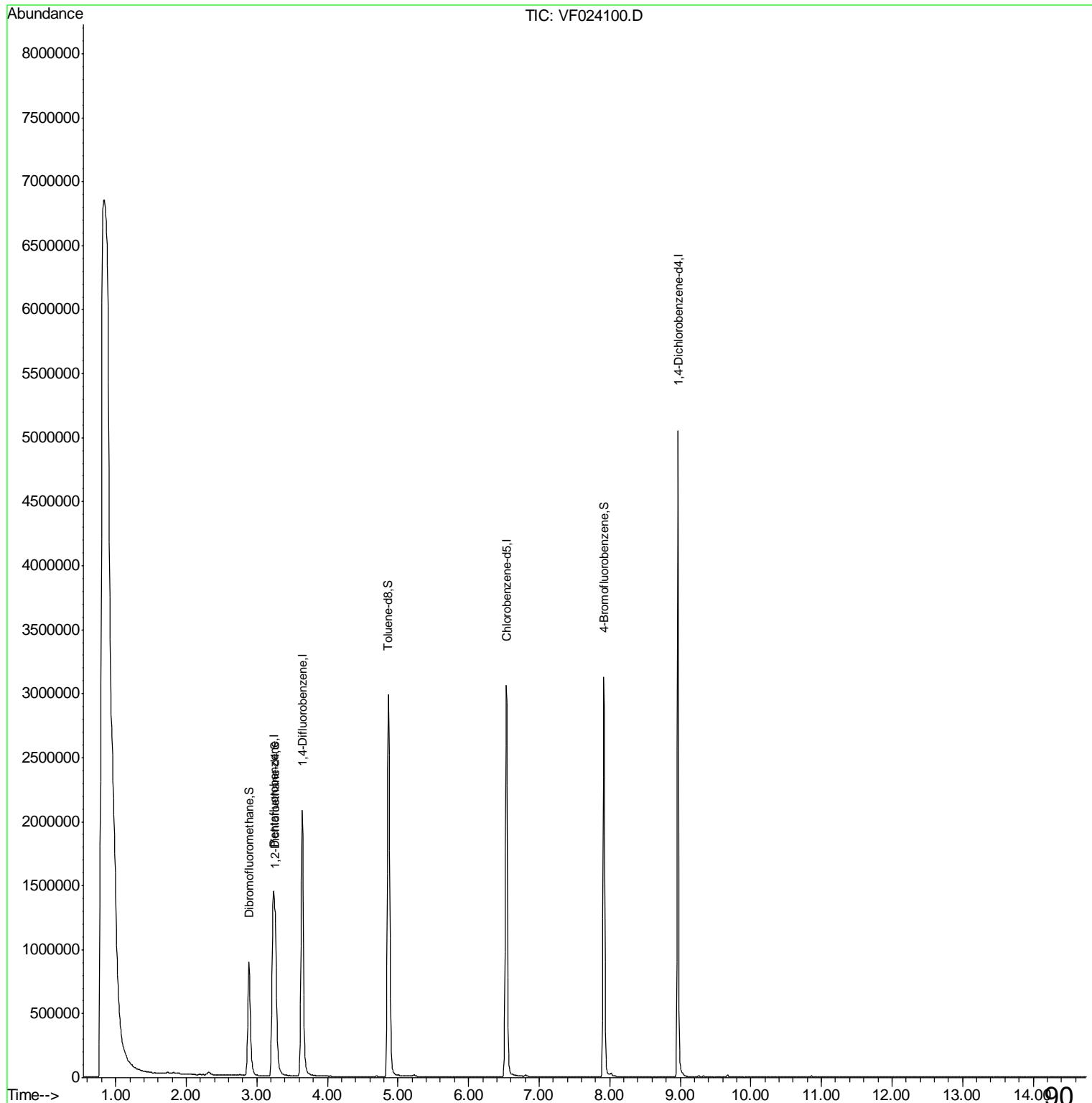
N = Presumptive Evidence of a Compound

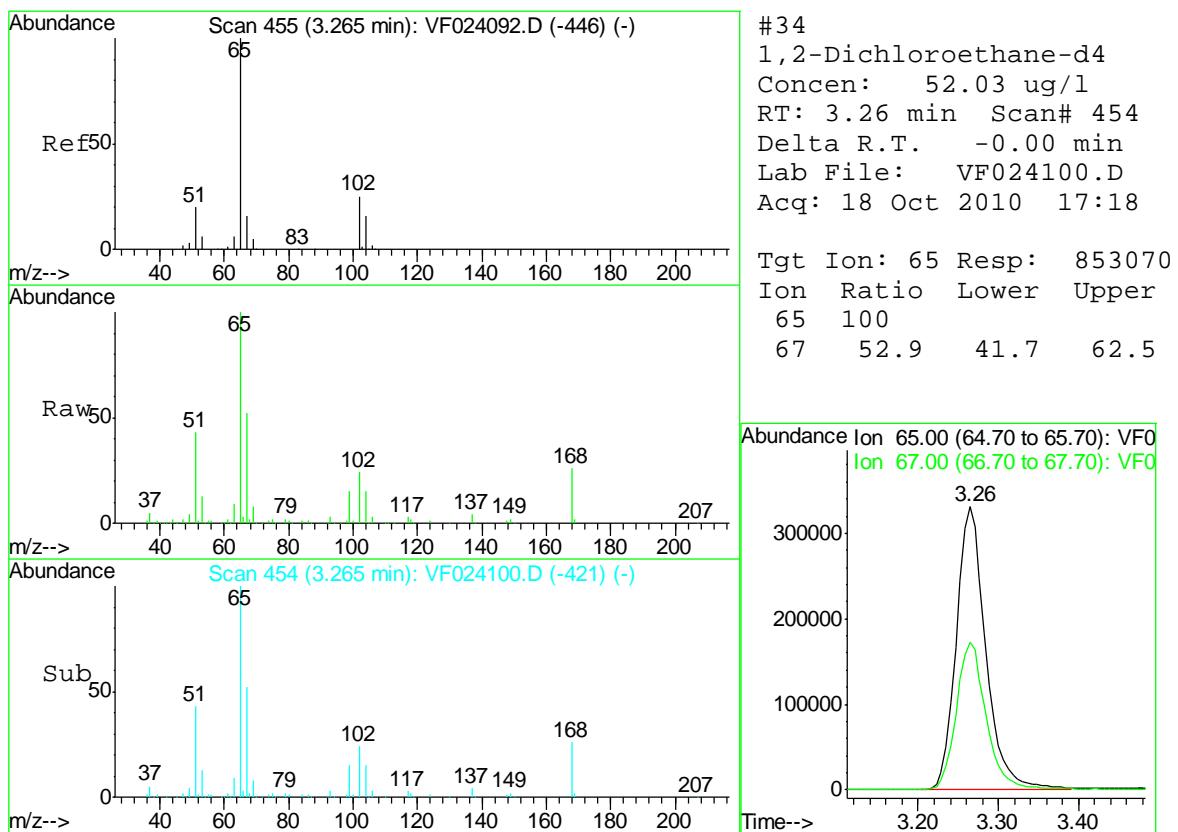
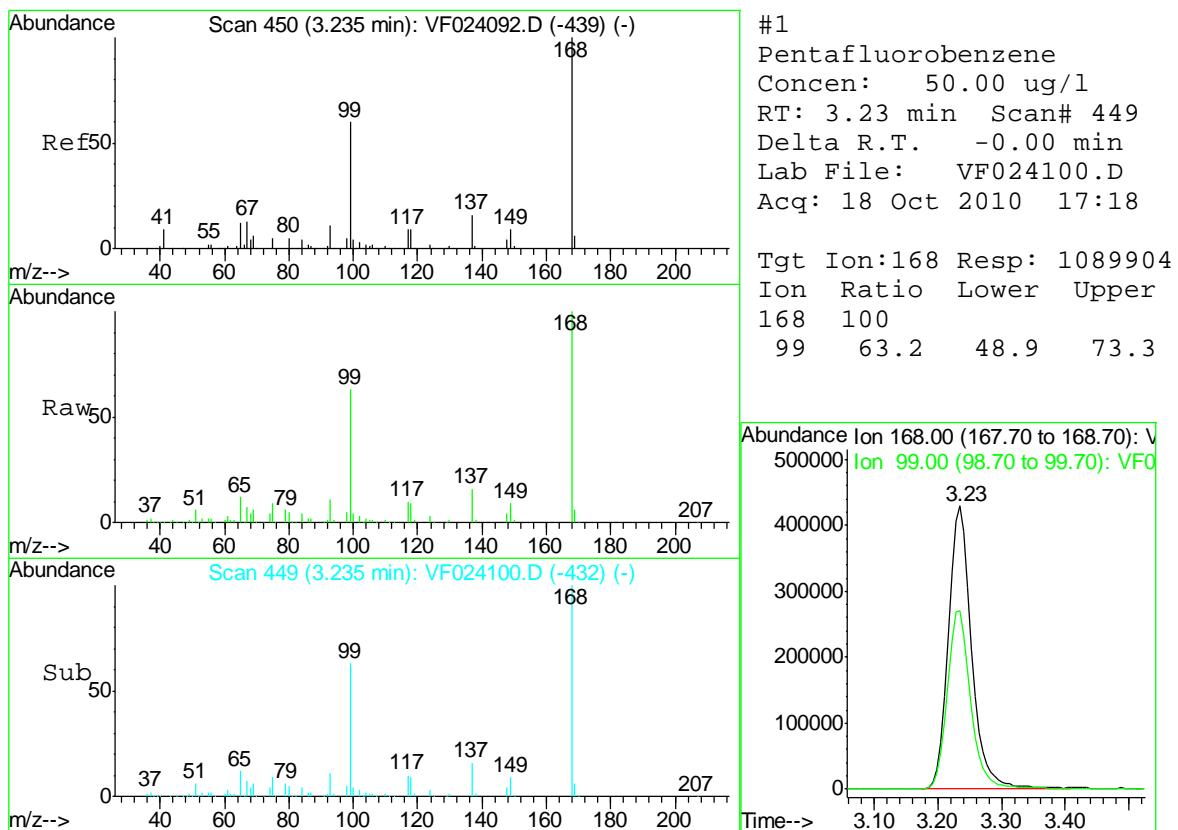
\* = Values outside of QC limits

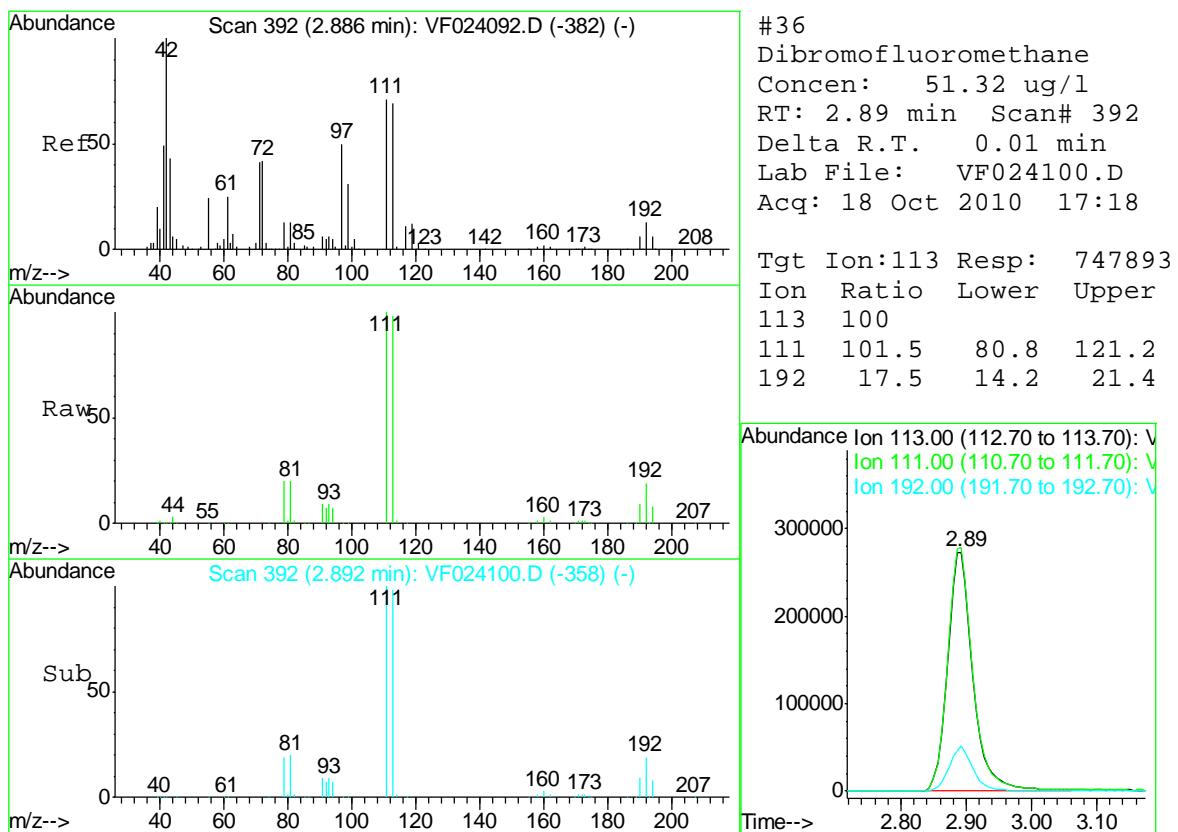
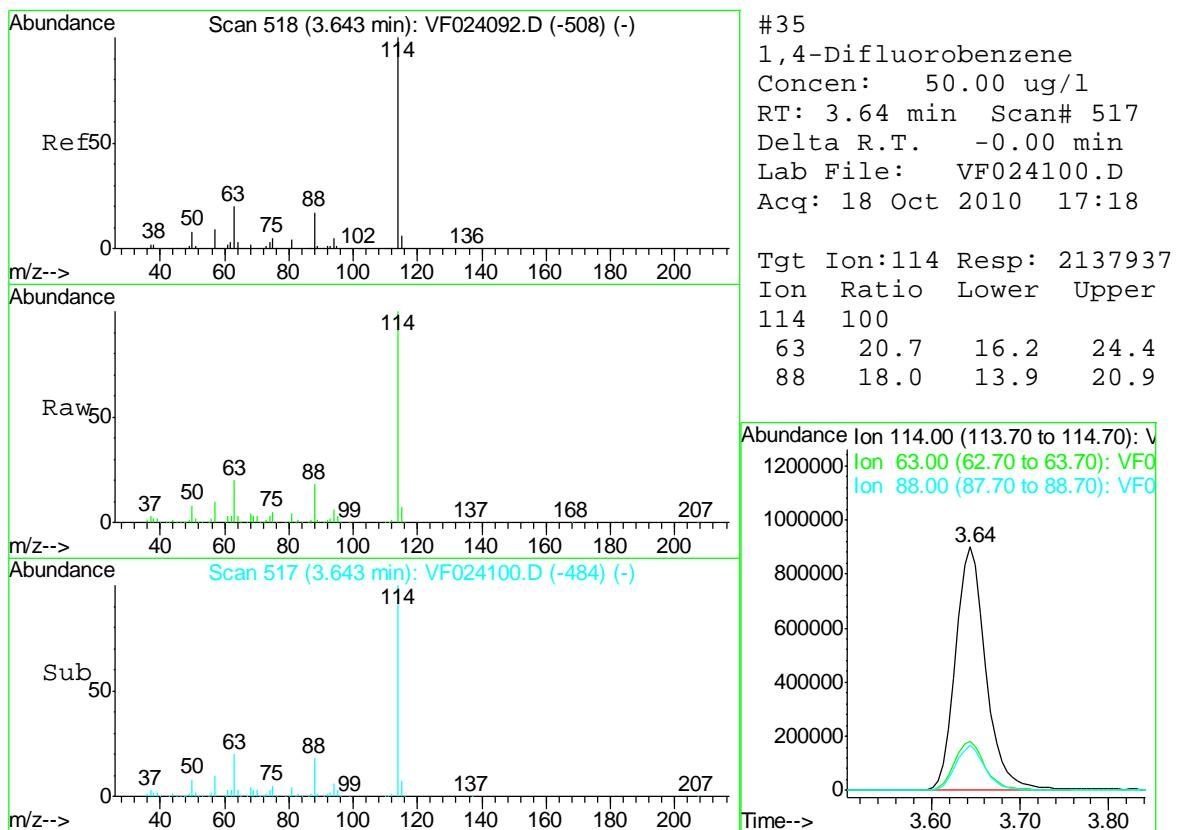
D = Dilution

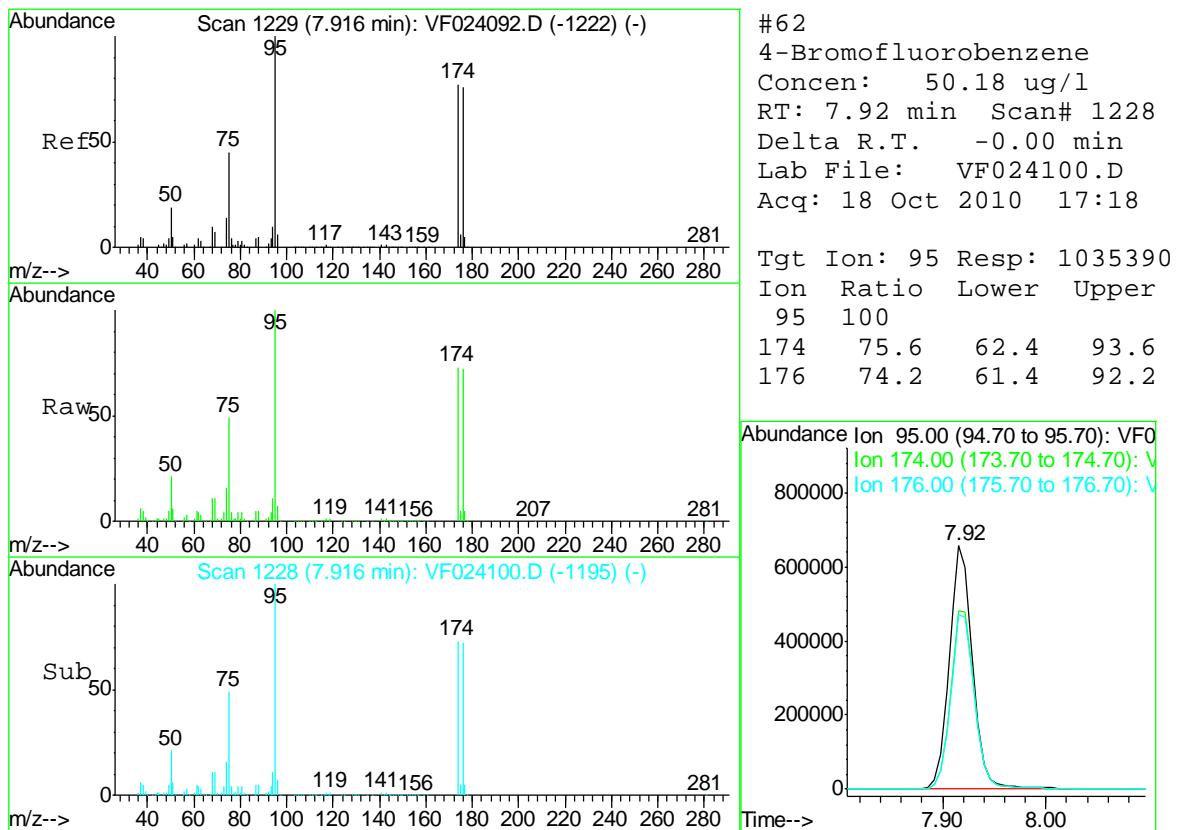
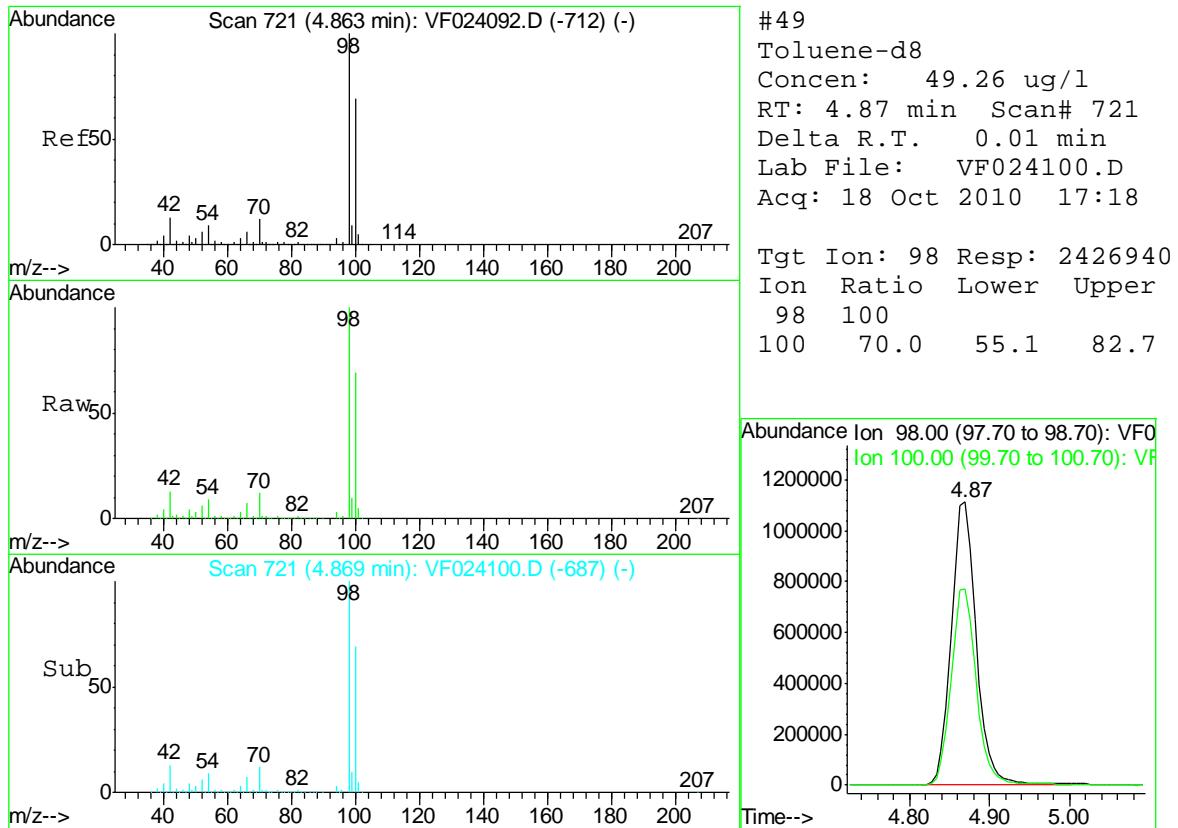
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024100.D  
Acq On : 18 Oct 2010 17:18  
Operator : MS  
Sample : B3902-06  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

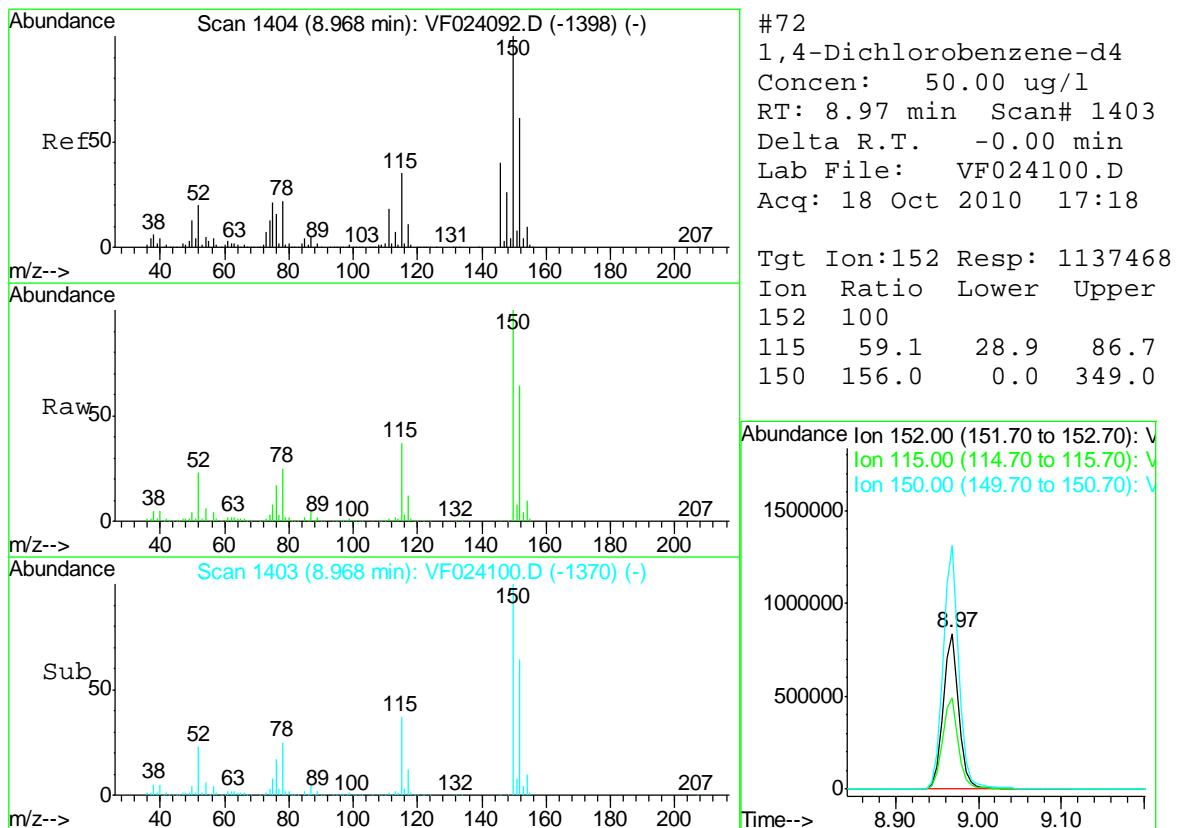
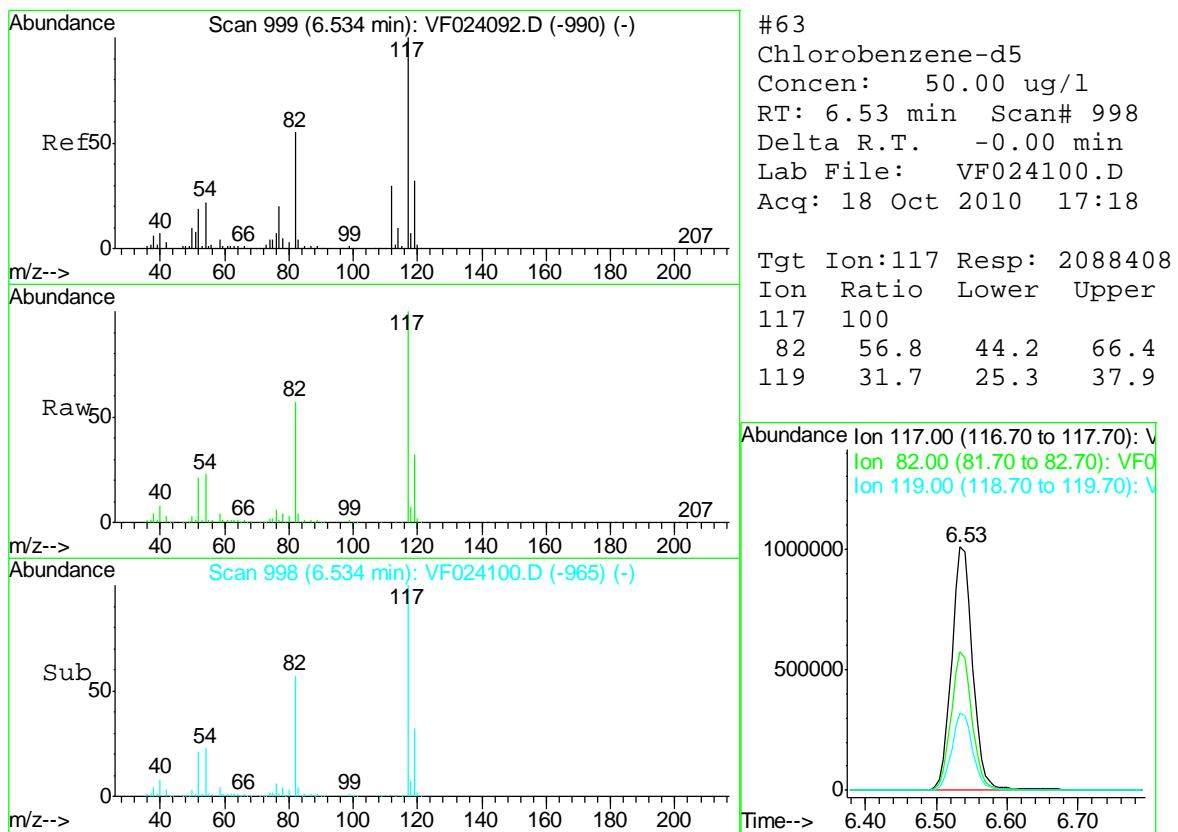
Quant Time: Oct 19 02:09:49 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024100.D  
 Acq On : 18 Oct 2010 17:18  
 Operator : MS  
 Sample : B3902-06  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 19 02:09:49 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1089904	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2137937	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.53	117	2088408	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1137468	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	853070	52.03	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	104.06%	
36) Dibromofluoromethane	2.89	113	747893	51.32	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	102.64%	
49) Toluene-d8	4.87	98	2426940	49.26	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	98.52%	
62) 4-Bromofluorobenzene	7.92	95	1035390	50.18	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	100.36%	

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024100.D  
 Acq On : 18 Oct 2010 17:18  
 Operator : MS  
 Sample : B3902-06  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 11 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

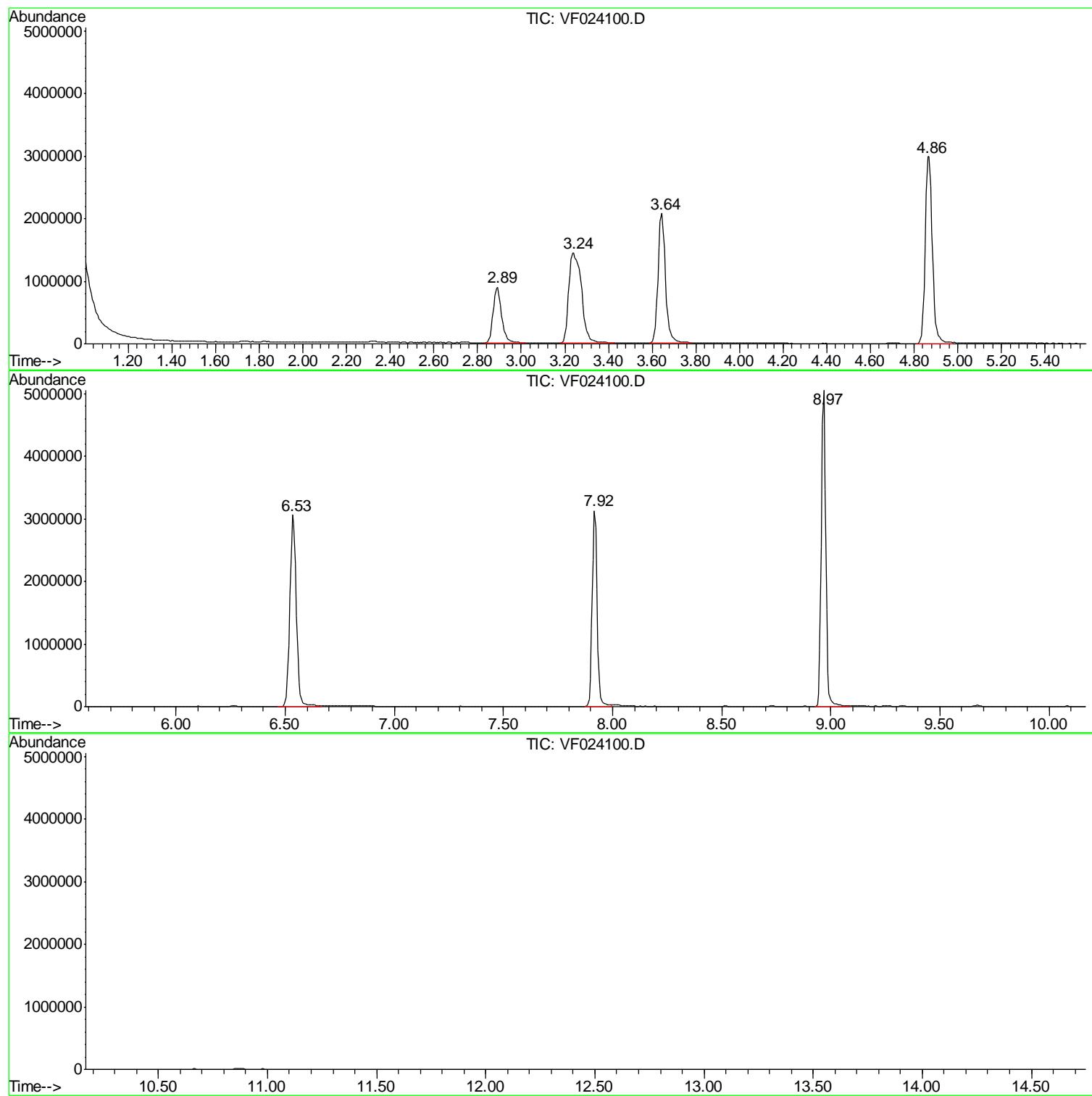
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.892	382	392	413	rVB	890206	2401924	34.10%	6.303%
2	3.241	439	450	481	rBV2	1445847	5831177	82.78%	15.302%
3	3.643	508	517	540	rBV	2071077	4932598	70.03%	12.944%
4	4.863	711	720	739	rBV	2989520	6641940	94.29%	17.430%
5	6.534	987	998	1020	rBV	3060935	6313331	89.63%	16.567%
6	7.916	1221	1228	1241	rBV	3125484	4941966	70.16%	12.969%
7	8.968	1396	1403	1423	rBV	5053223	7043923	100.00%	18.485%

Sum of corrected areas: 38106859

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024100.D  
Acq On : 18 Oct 2010 17:18  
Operator : MS  
Sample : B3902-06  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024100.D  
Acq On : 18 Oct 2010 17:18  
Operator : MS  
Sample : B3902-06  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024100.D  
Acq On : 18 Oct 2010 17:18  
Operator : MS  
Sample : B3902-06  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-13D	SDG No.:	B3902
Lab Sample ID:	B3902-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024101.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-13D	SDG No.:	B3902
Lab Sample ID:	B3902-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024101.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.6		66 - 150		107%	SPK: 50
1868-53-7	Dibromofluoromethane	52.1		76 - 130		104%	SPK: 50
2037-26-5	Toluene-d8	49.1		78 - 121		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		70 - 131		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1108970	3.23				
540-36-3	1,4-Difluorobenzene	2212000	3.64				
3114-55-4	Chlorobenzene-d5	2141970	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1161710	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

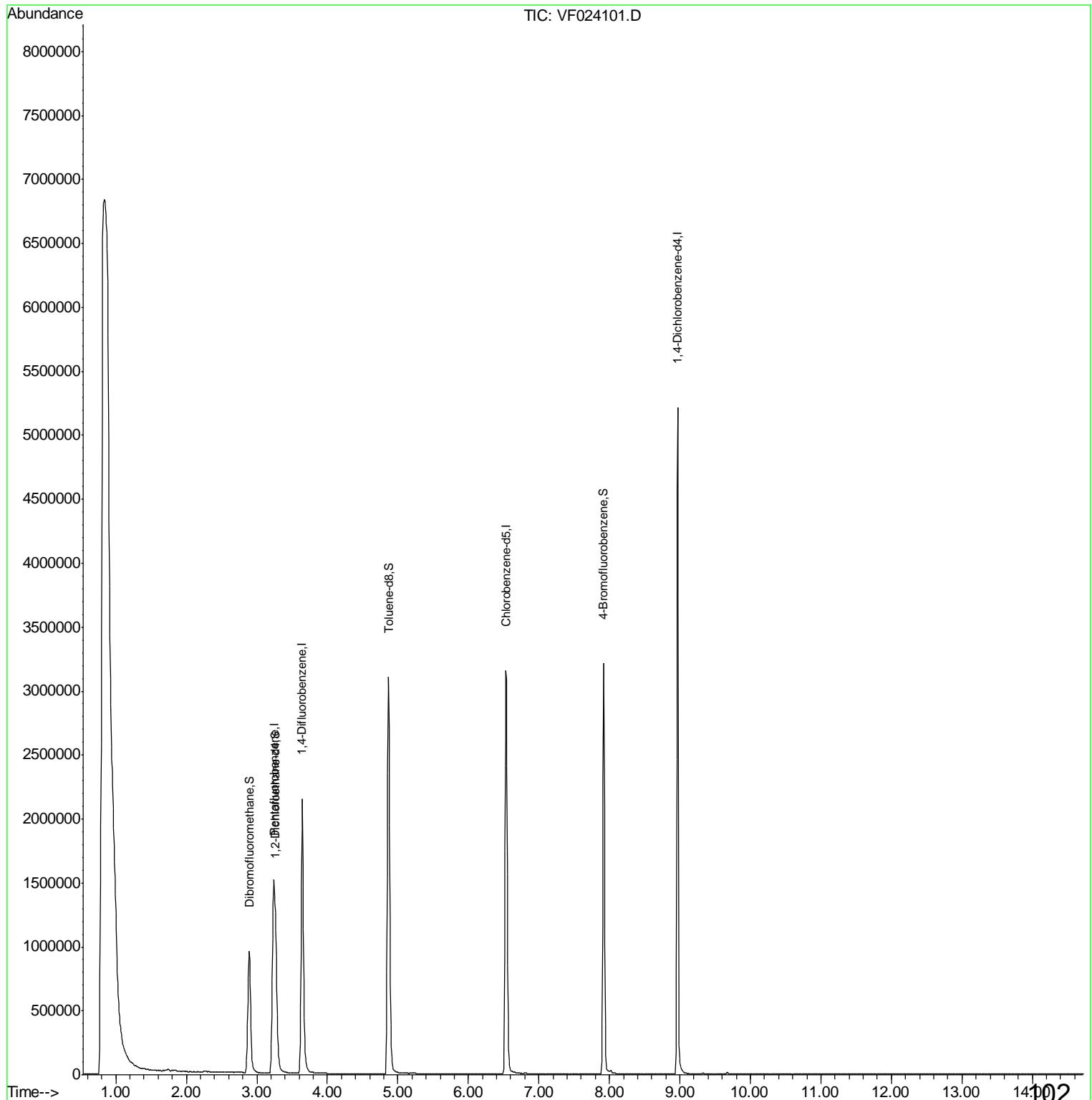
N = Presumptive Evidence of a Compound

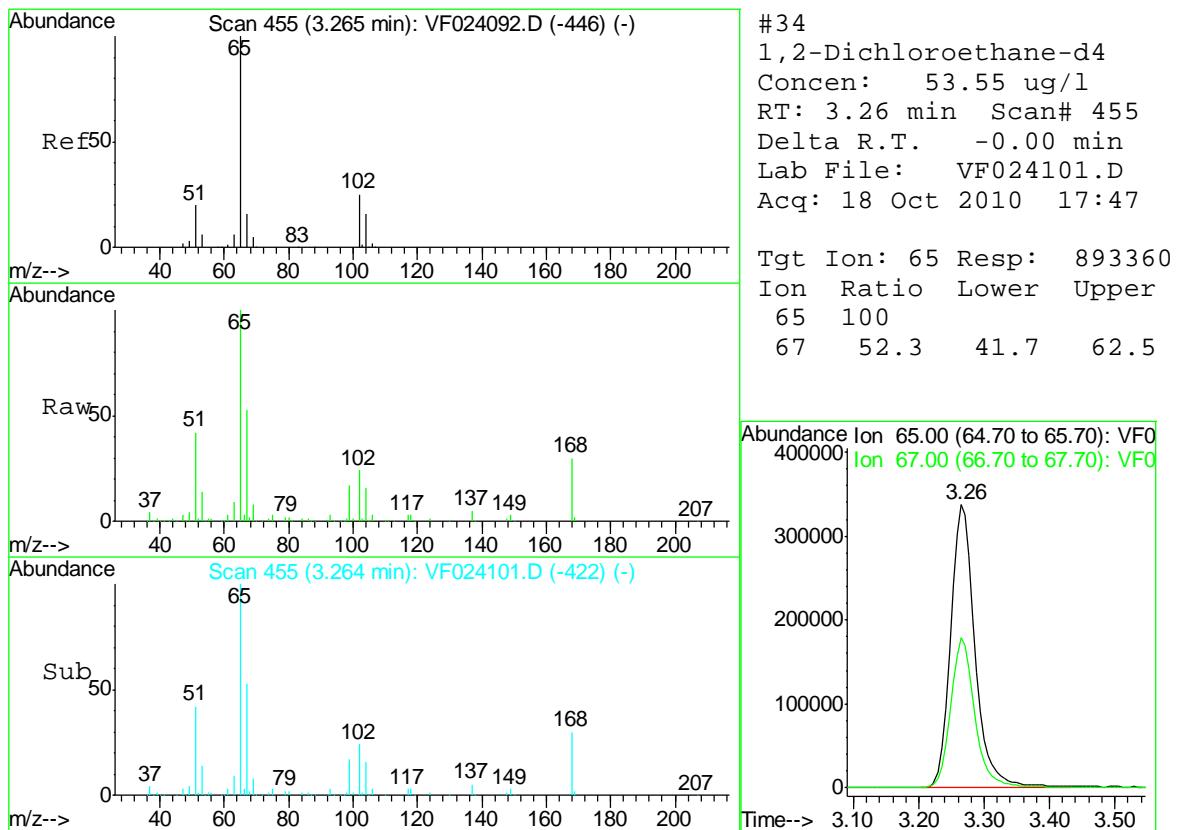
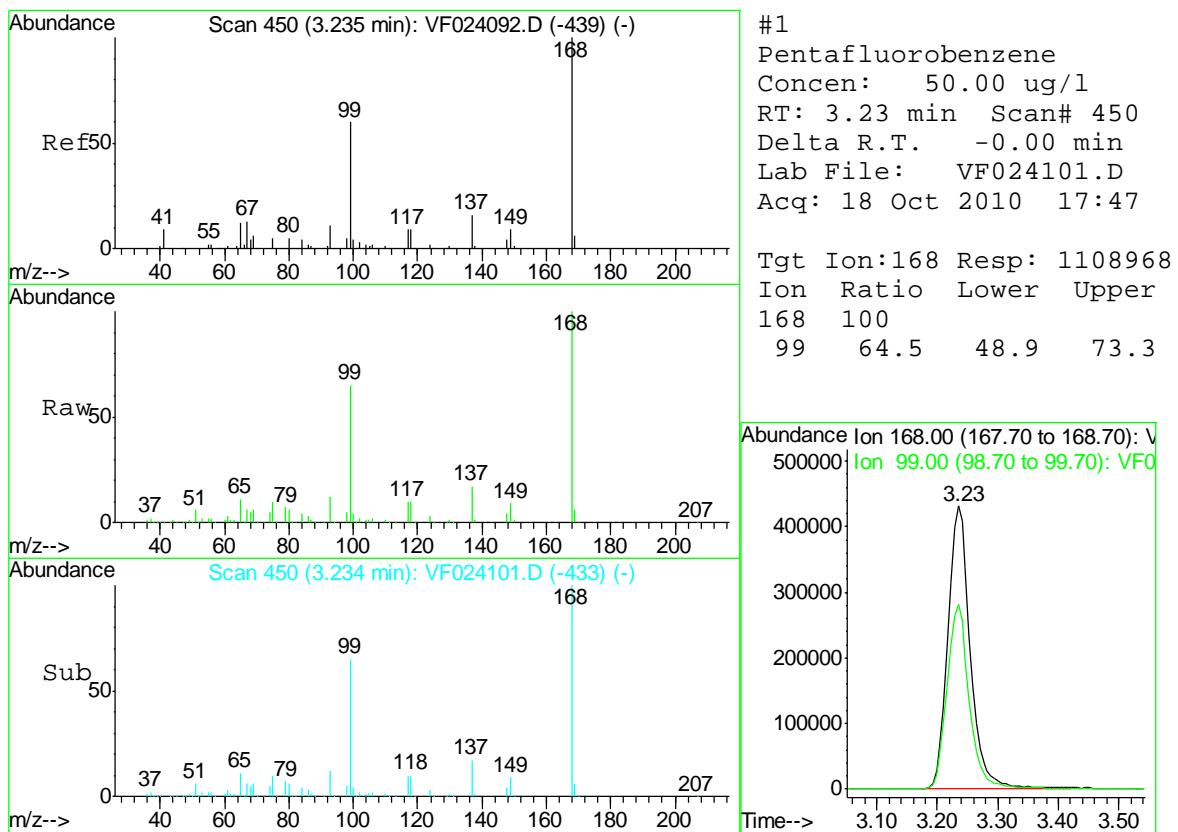
\* = Values outside of QC limits

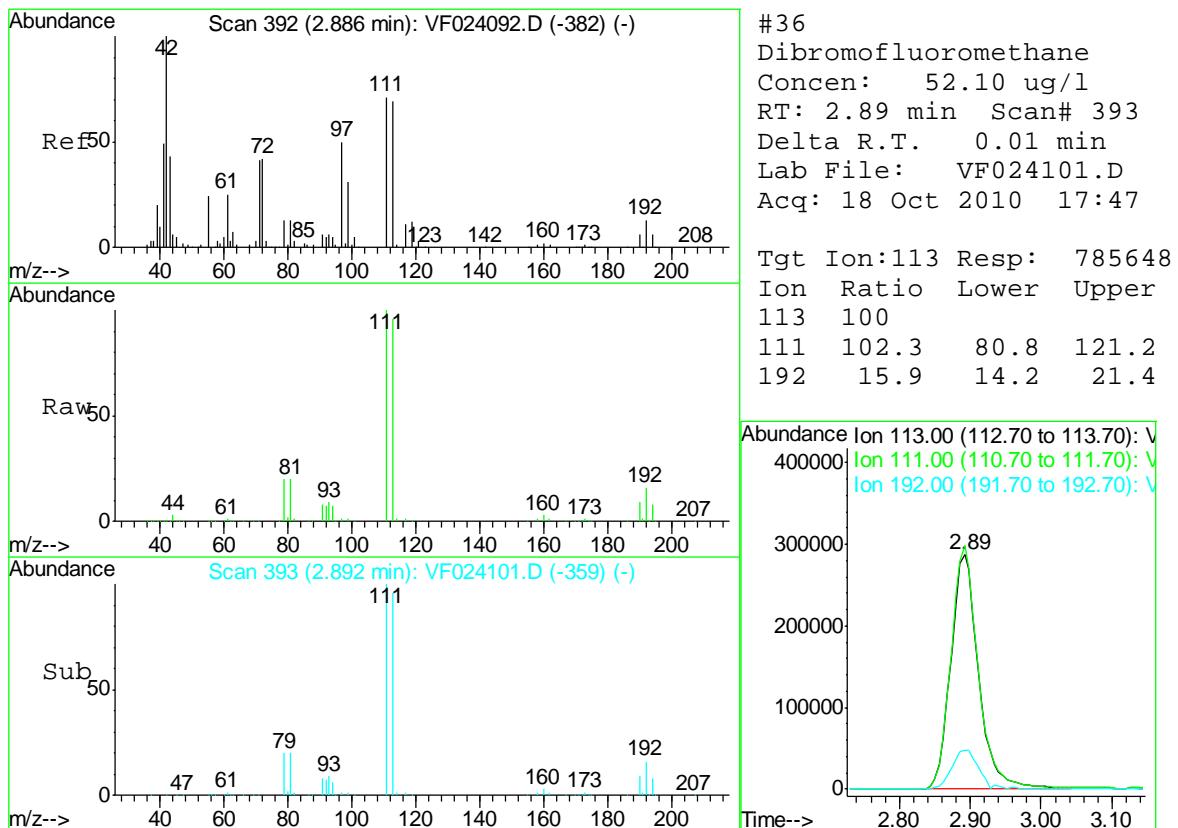
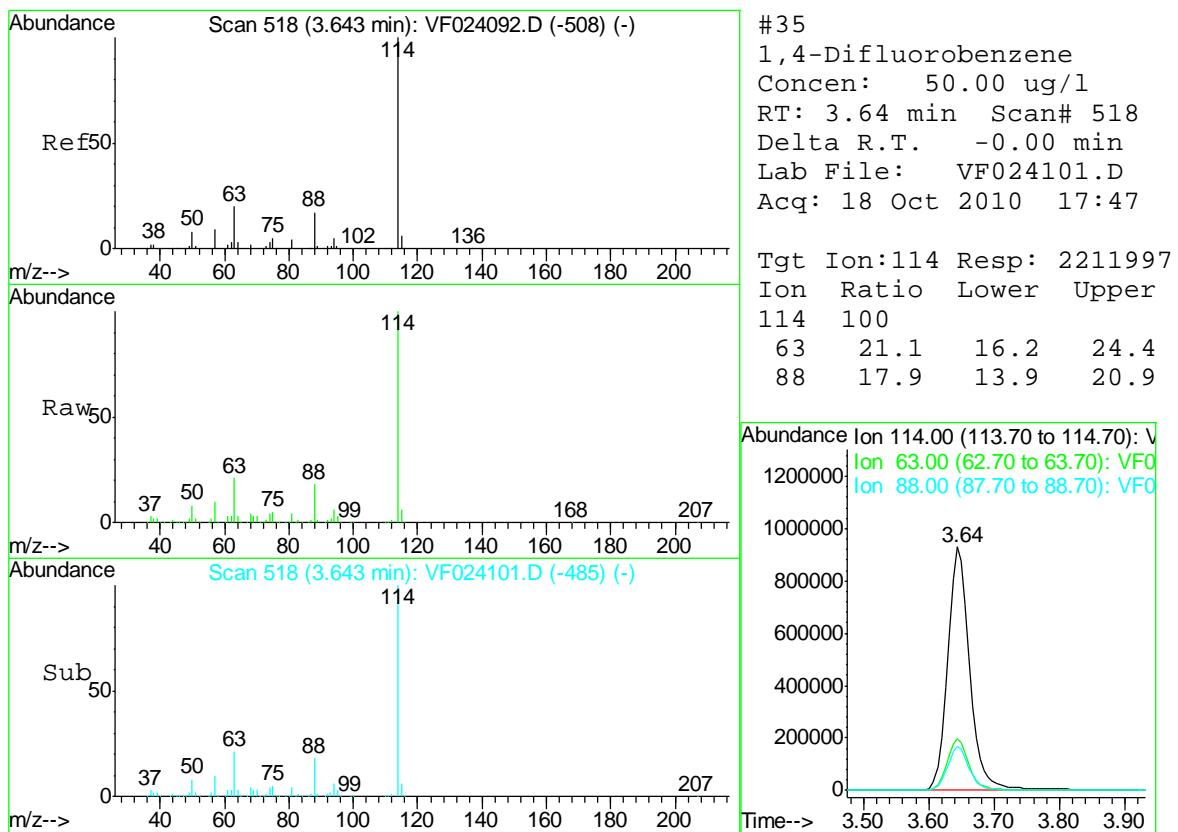
D = Dilution

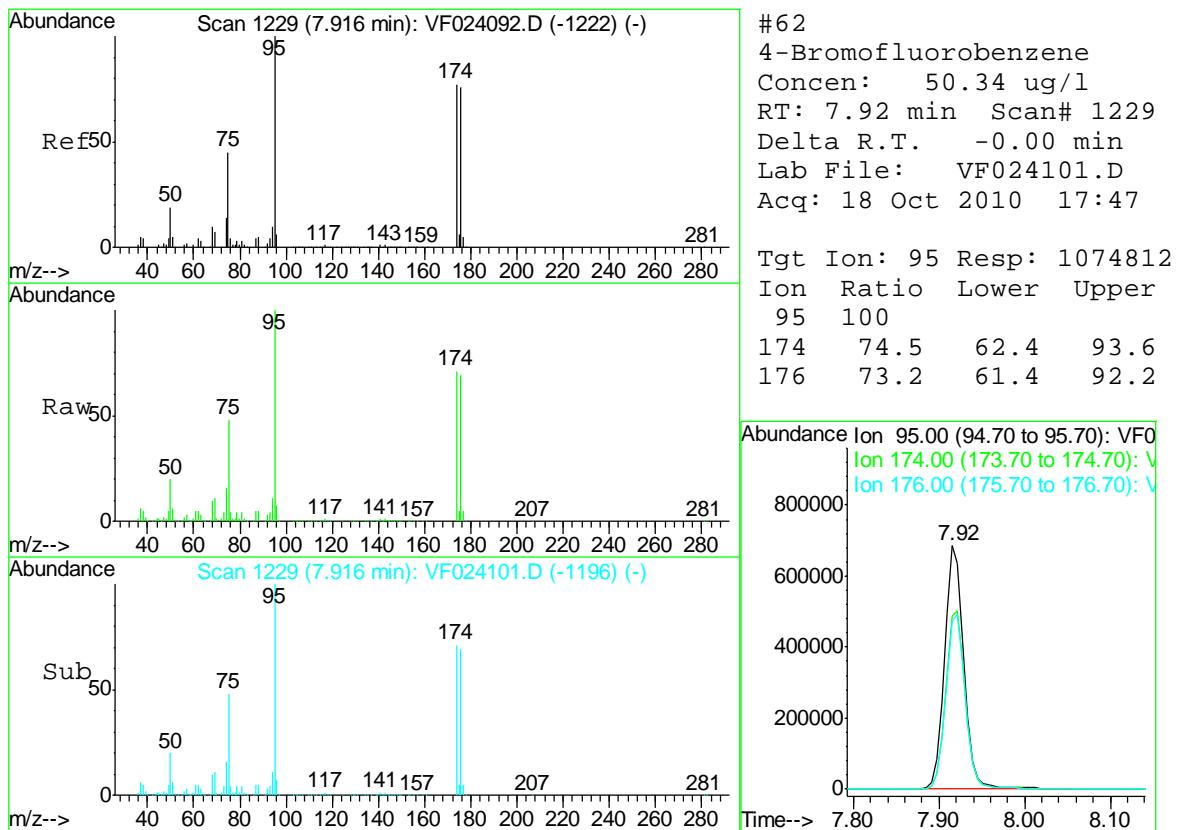
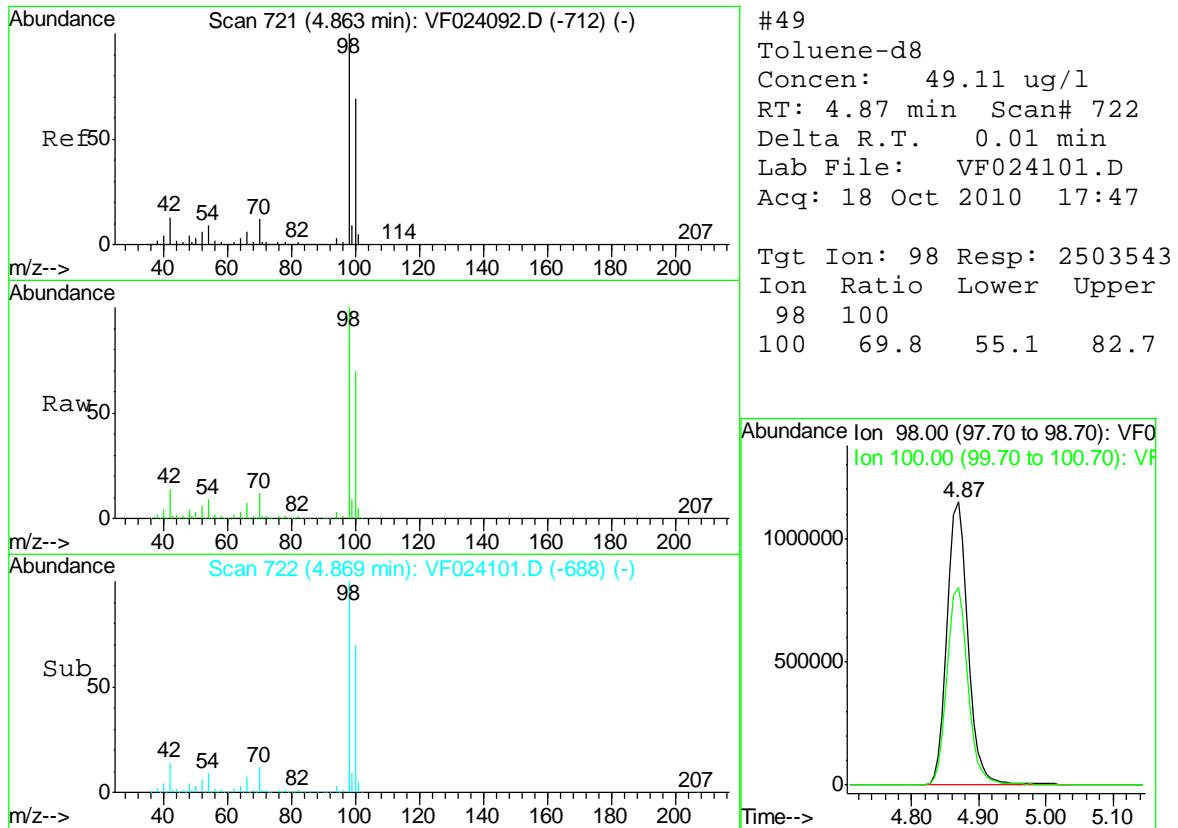
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Data File : VF024101.D  
Acq On : 18 Oct 2010 17:47  
Operator : MS  
Sample : B3902-07  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

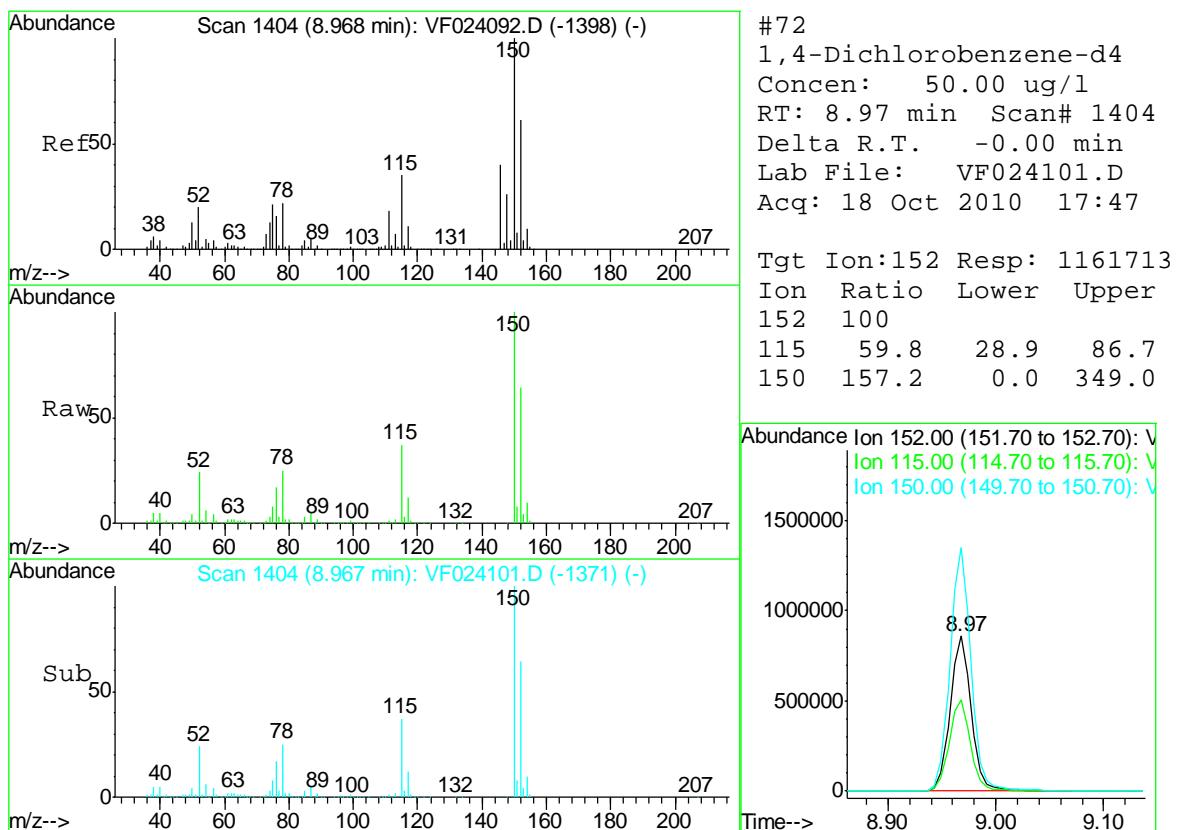
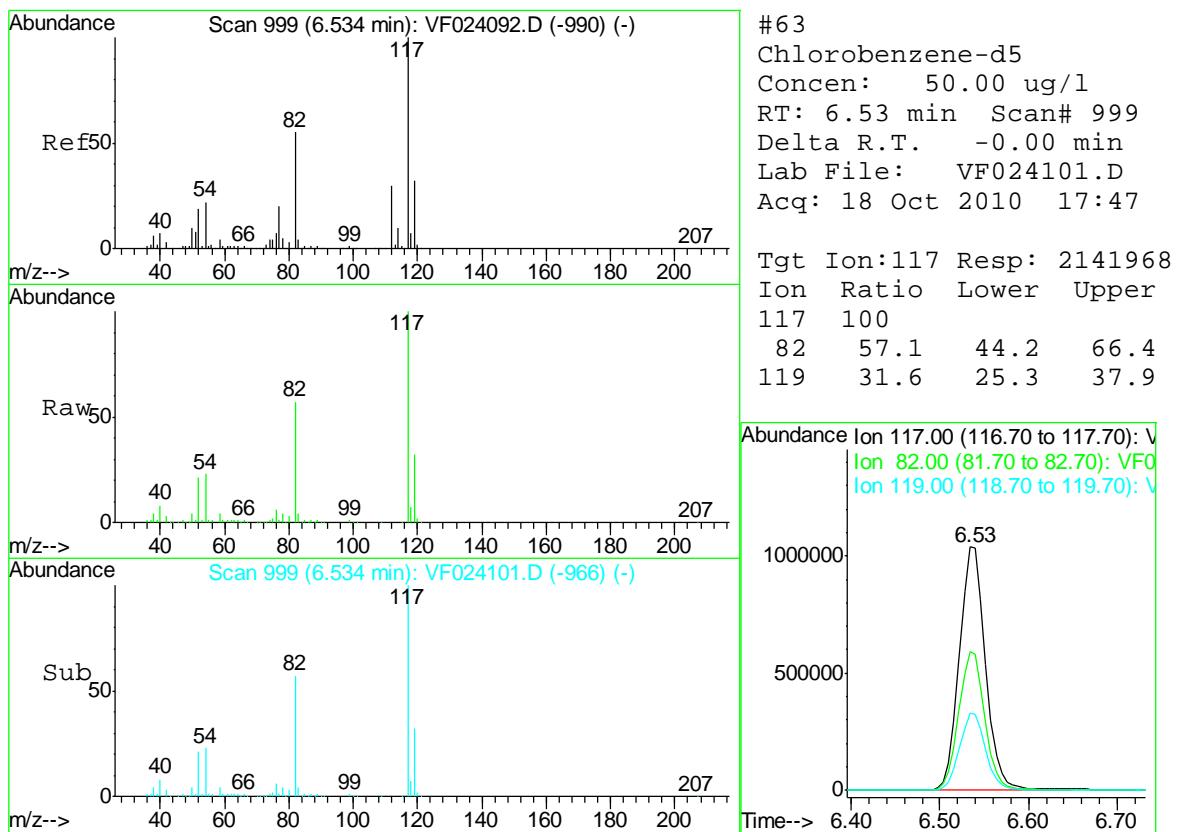
Quant Time: Oct 19 02:11:26 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024101.D  
 Acq On : 18 Oct 2010 17:47  
 Operator : MS  
 Sample : B3902-07  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 19 02:11:26 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1108968	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2211997	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.53	117	2141968	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1161713	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	893360	53.55	ug/l	0.00
Spiked Amount 50.000	Range 66 - 150		Recovery	=	107.10%	
36) Dibromofluoromethane	2.89	113	785648	52.10	ug/l	0.00
Spiked Amount 50.000	Range 76 - 130		Recovery	=	104.20%	
49) Toluene-d8	4.87	98	2503543	49.11	ug/l	0.00
Spiked Amount 50.000	Range 78 - 121		Recovery	=	98.22%	
62) 4-Bromofluorobenzene	7.92	95	1074812	50.34	ug/l	0.00
Spiked Amount 50.000	Range 70 - 131		Recovery	=	100.68%	

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

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024101.D  
 Acq On : 18 Oct 2010 17:47  
 Operator : MS  
 Sample : B3902-07  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

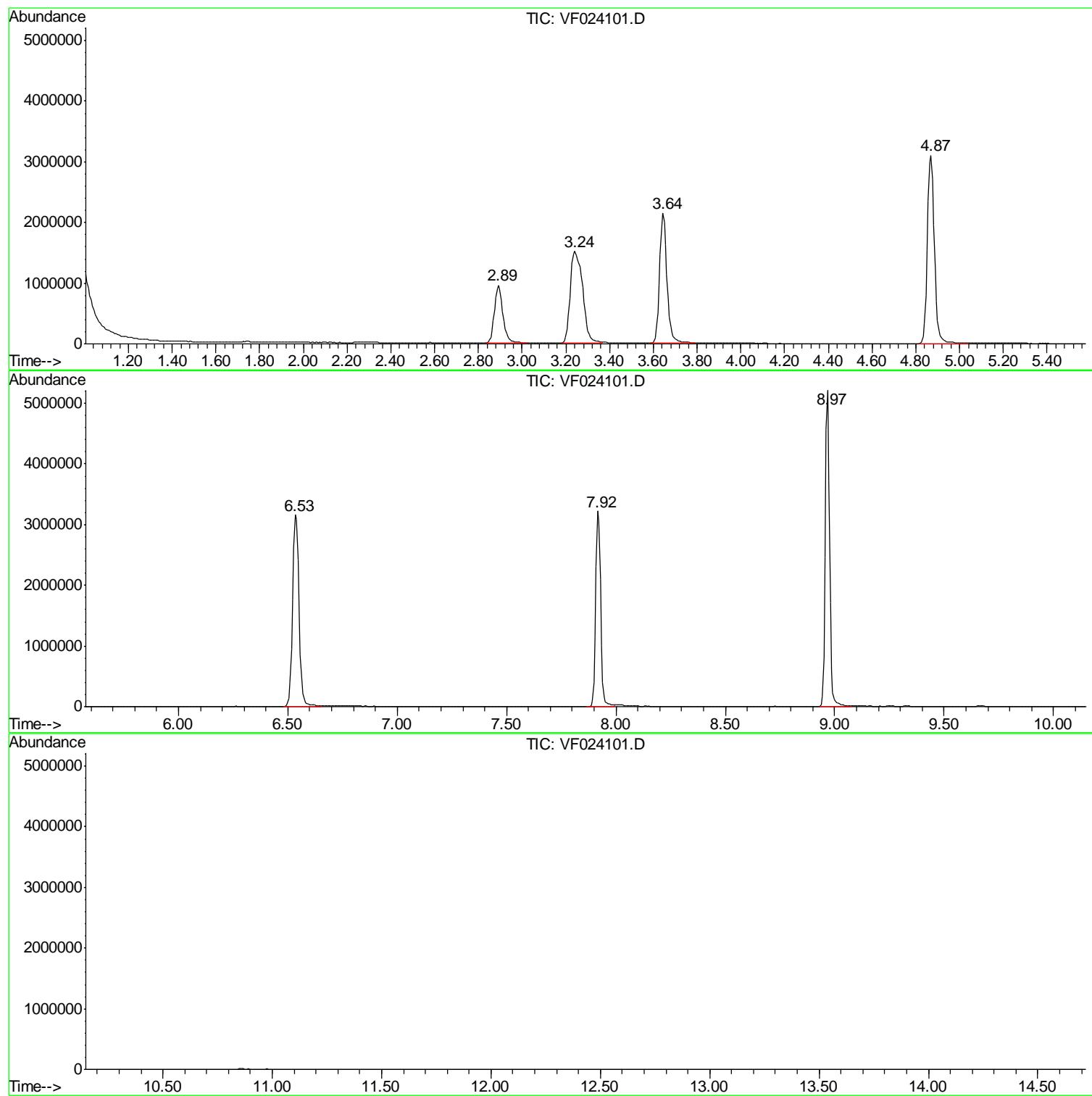
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.892	383	393	415	rVB	952343	2552717	35.47%	6.495%
2	3.240	441	451	472	rBV2	1513992	5978169	83.06%	15.209%
3	3.643	509	518	542	rBV	2144719	5096378	70.81%	12.966%
4	4.869	713	722	750	rBV	3102418	6875280	95.52%	17.492%
5	6.534	990	999	1019	rBV	3156040	6500666	90.32%	16.539%
6	7.916	1221	1229	1242	rBV	3215011	5104903	70.93%	12.988%
7	8.967	1398	1404	1422	rBV	5210055	7197534	100.00%	18.312%

Sum of corrected areas: 39305647

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024101.D  
Acq On : 18 Oct 2010 17:47  
Operator : MS  
Sample : B3902-07  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



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Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024101.D  
Acq On : 18 Oct 2010 17:47  
Operator : MS  
Sample : B3902-07  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024101.D  
Acq On : 18 Oct 2010 17:47  
Operator : MS  
Sample : B3902-07  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-13S	SDG No.:	B3902
Lab Sample ID:	B3902-08	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024102.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	3.1		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.68	J	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	112 ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-13S	SDG No.:	B3902
Lab Sample ID:	B3902-08	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024102.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	54.4		66 - 150		109%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		76 - 130		105%	SPK: 50
2037-26-5	Toluene-d8	48.6		78 - 121		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.4		70 - 131		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1065080	3.23				
540-36-3	1,4-Difluorobenzene	2148490	3.64				
3114-55-4	Chlorobenzene-d5	2099430	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1123960	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

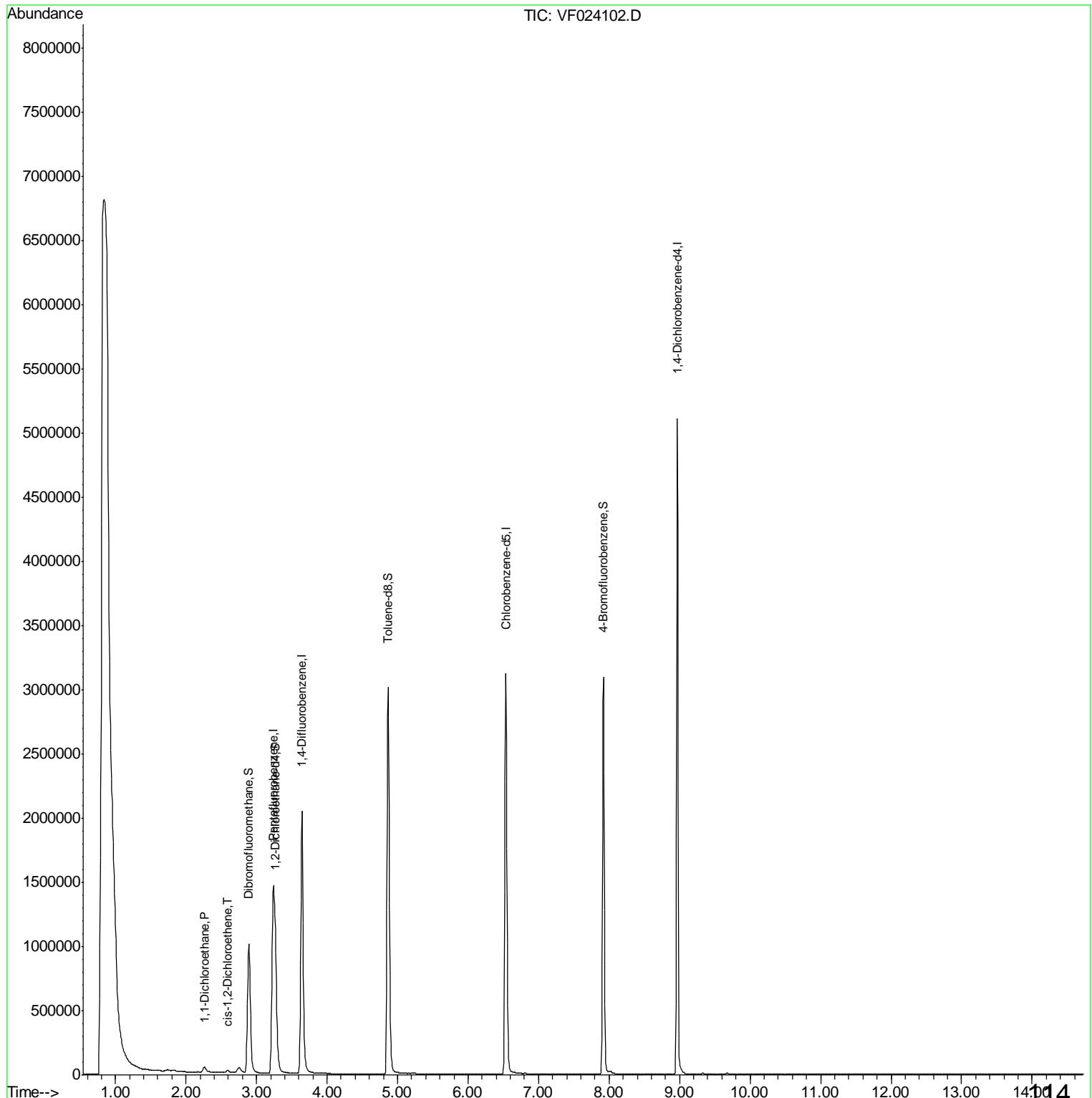
N = Presumptive Evidence of a Compound

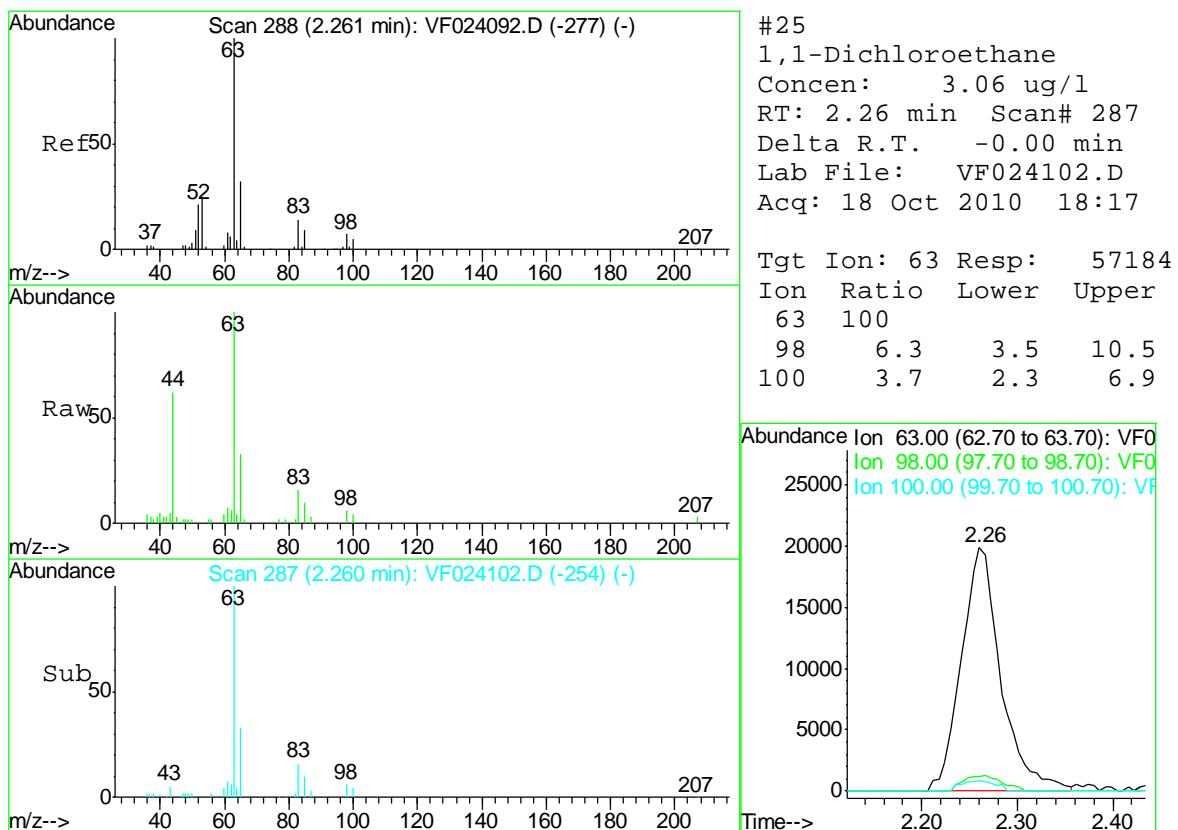
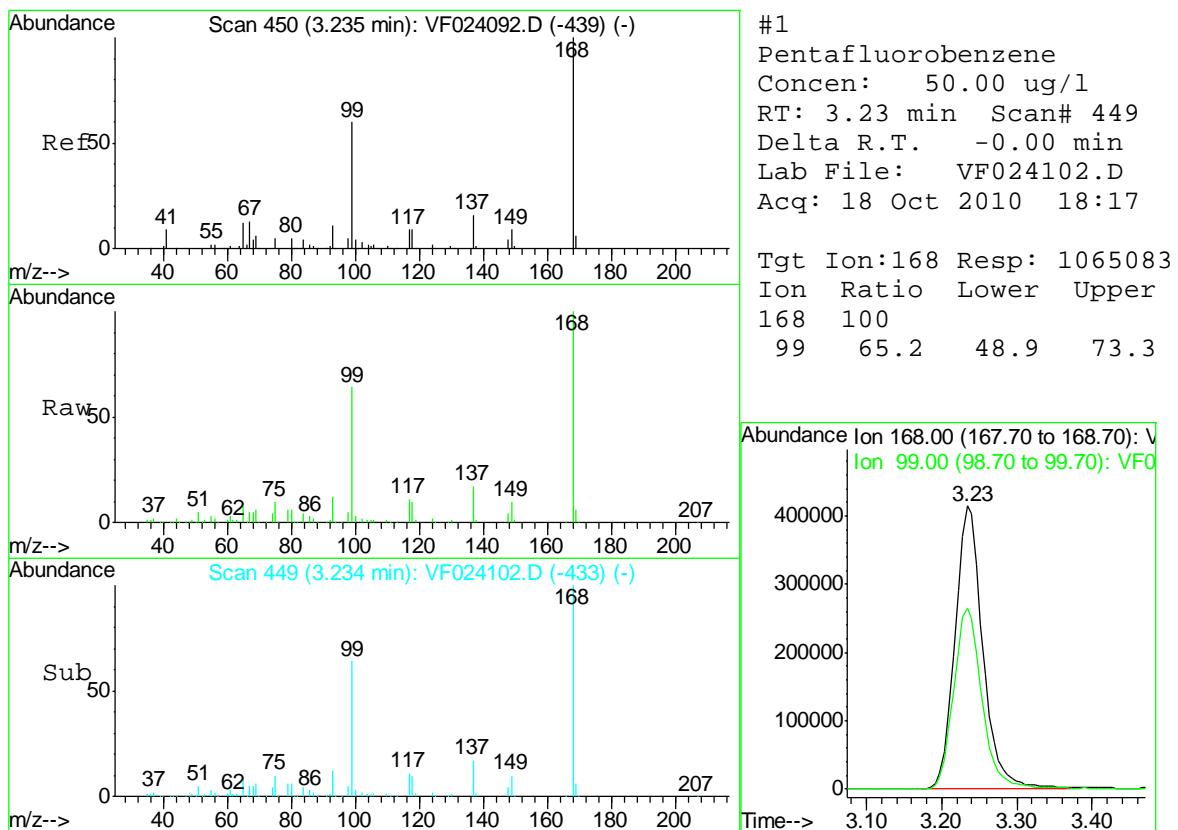
\* = Values outside of QC limits

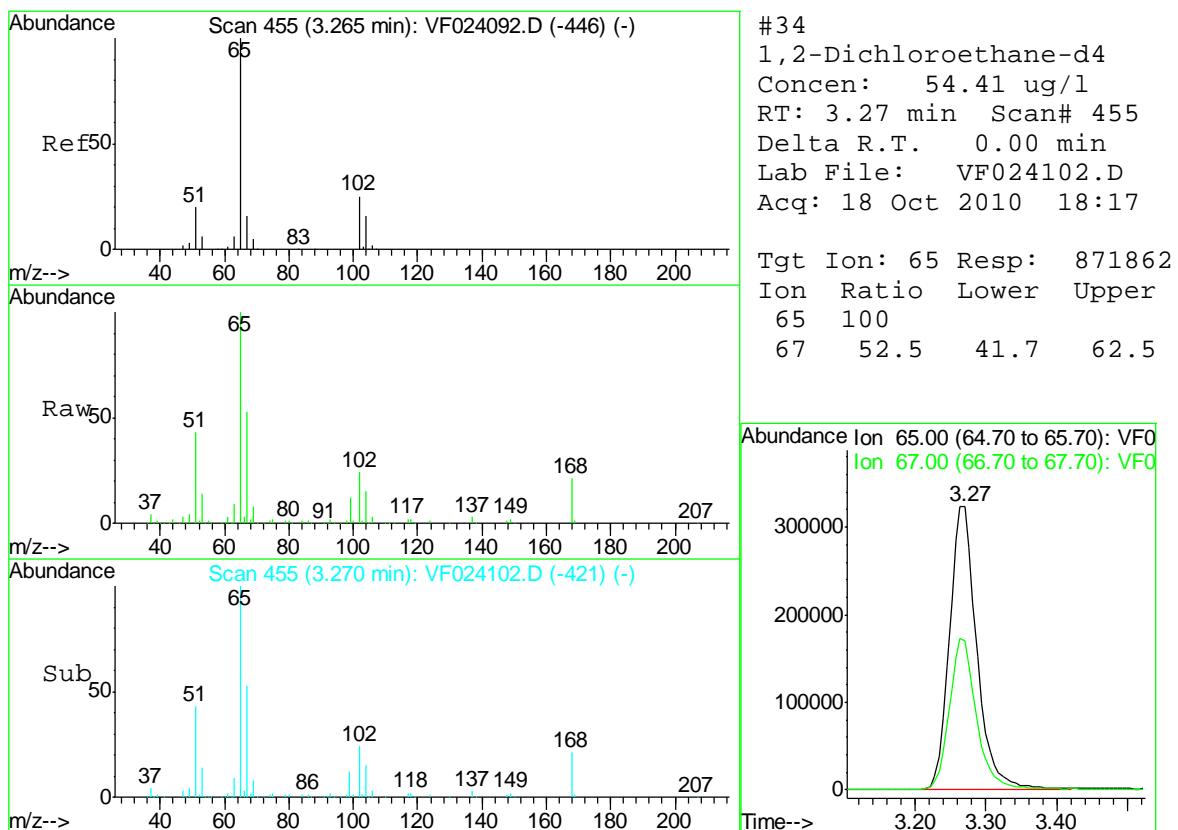
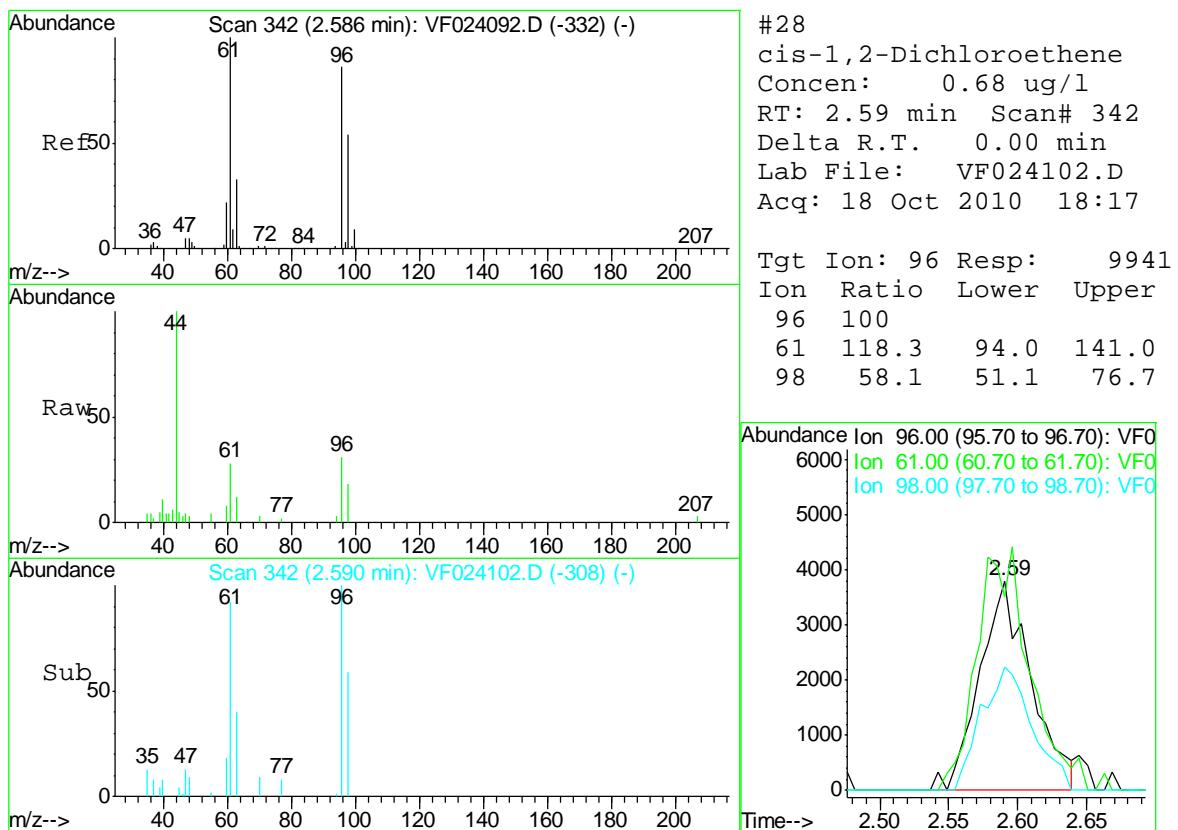
D = Dilution

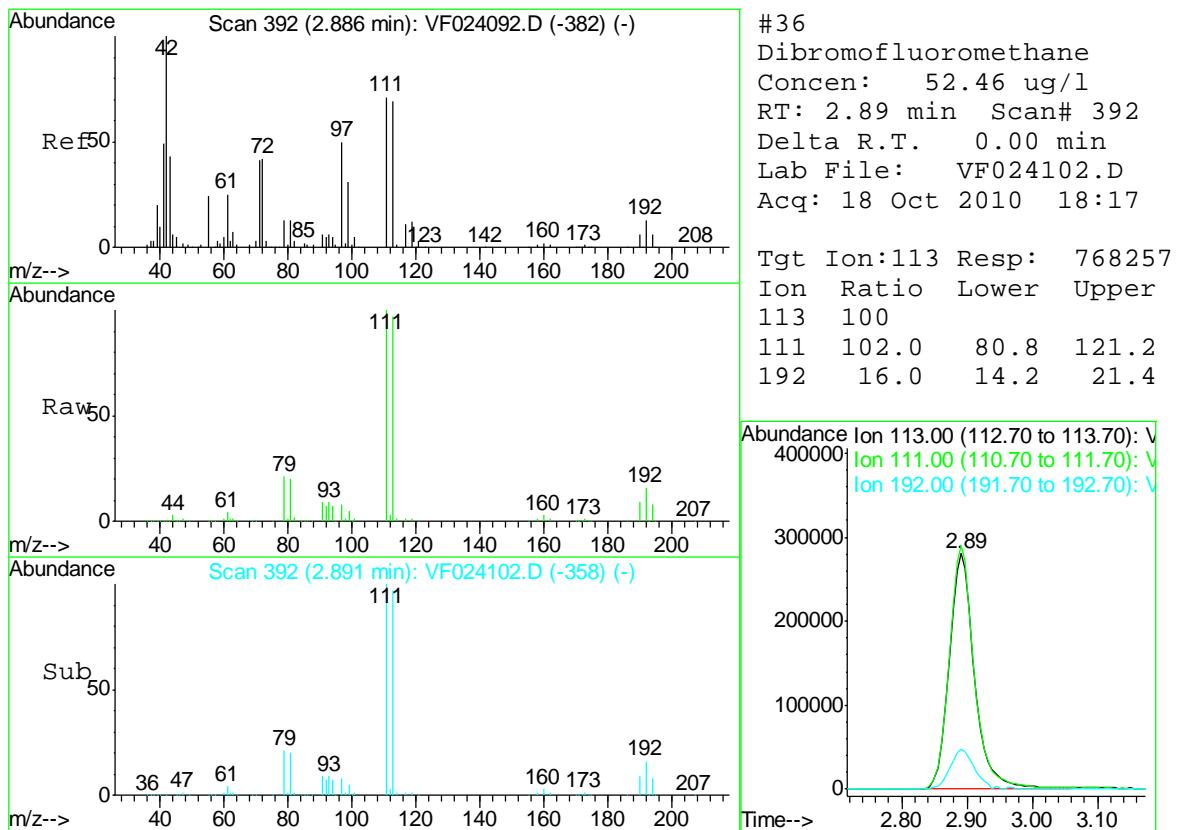
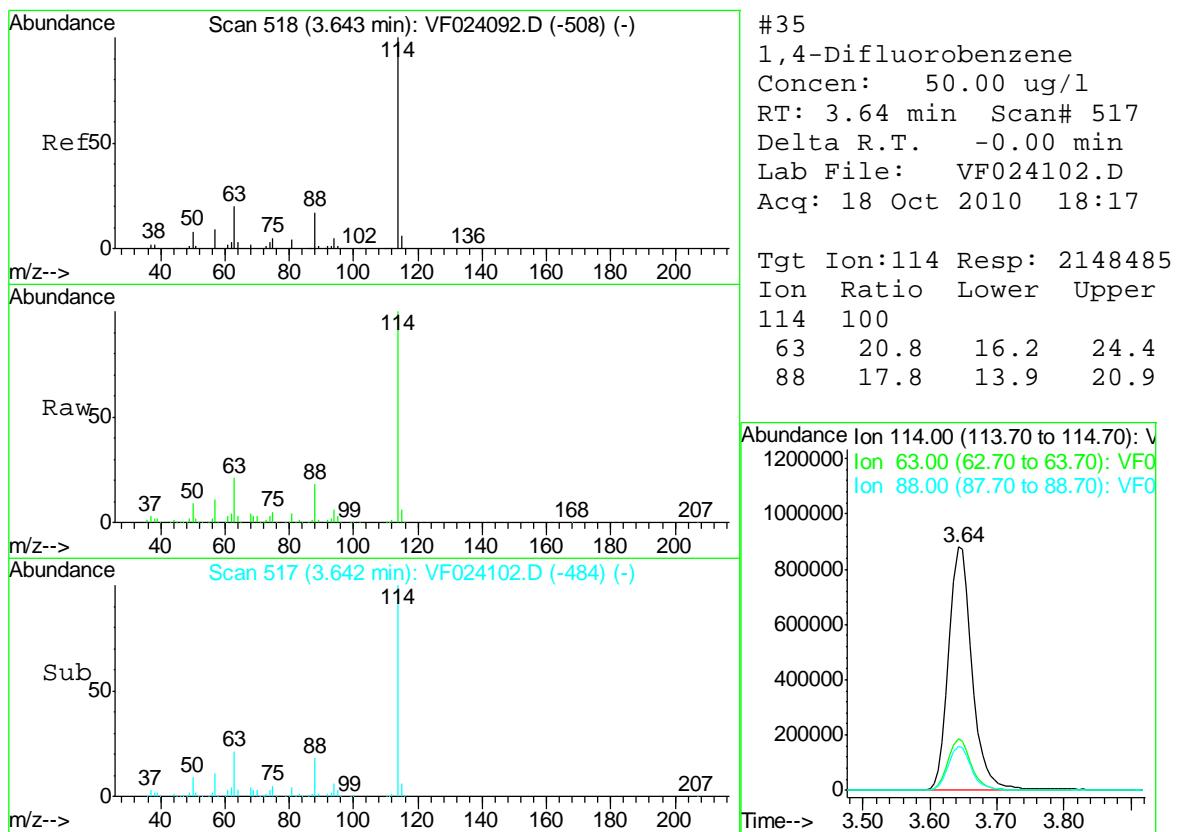
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Acq On : 18 Oct 2010 18:17  
Operator : MS  
Sample : B3902-08  
Misc : 5.0mL,MSVOAF  
ALS Vial : 13 Sample Multiplier: 1

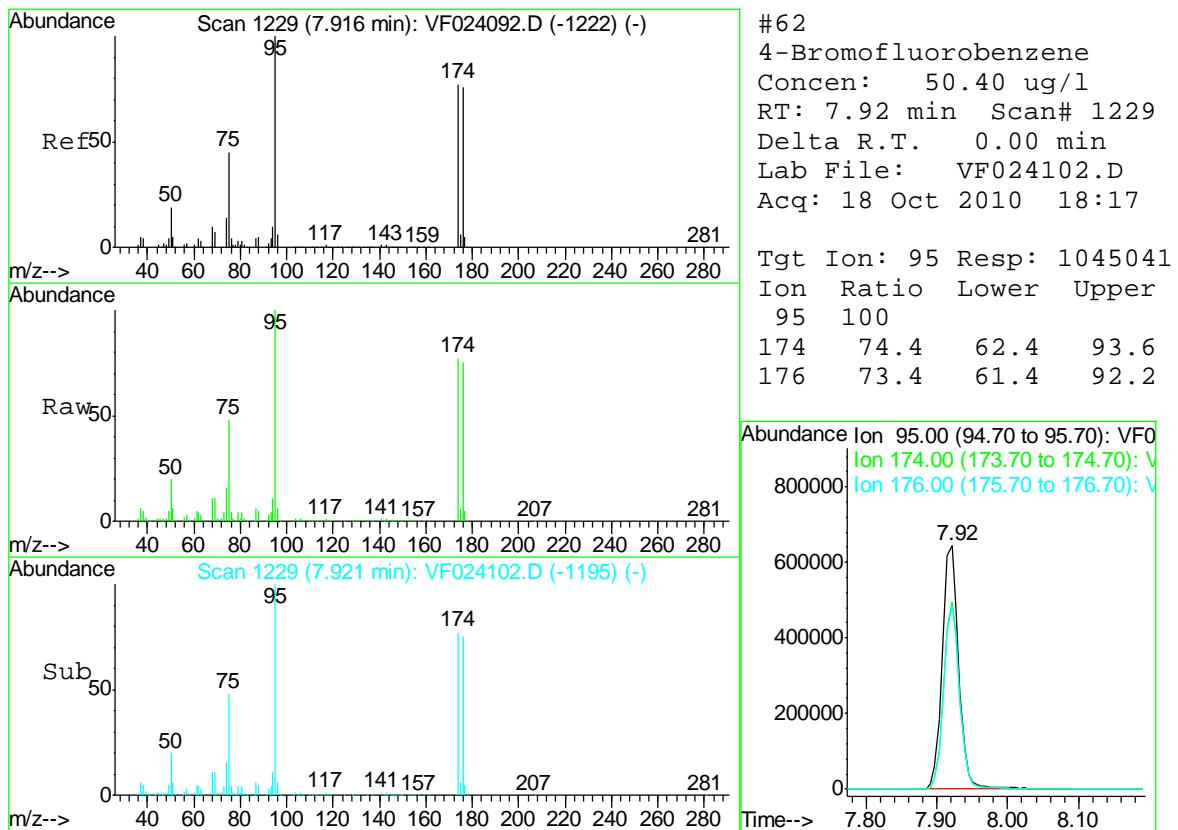
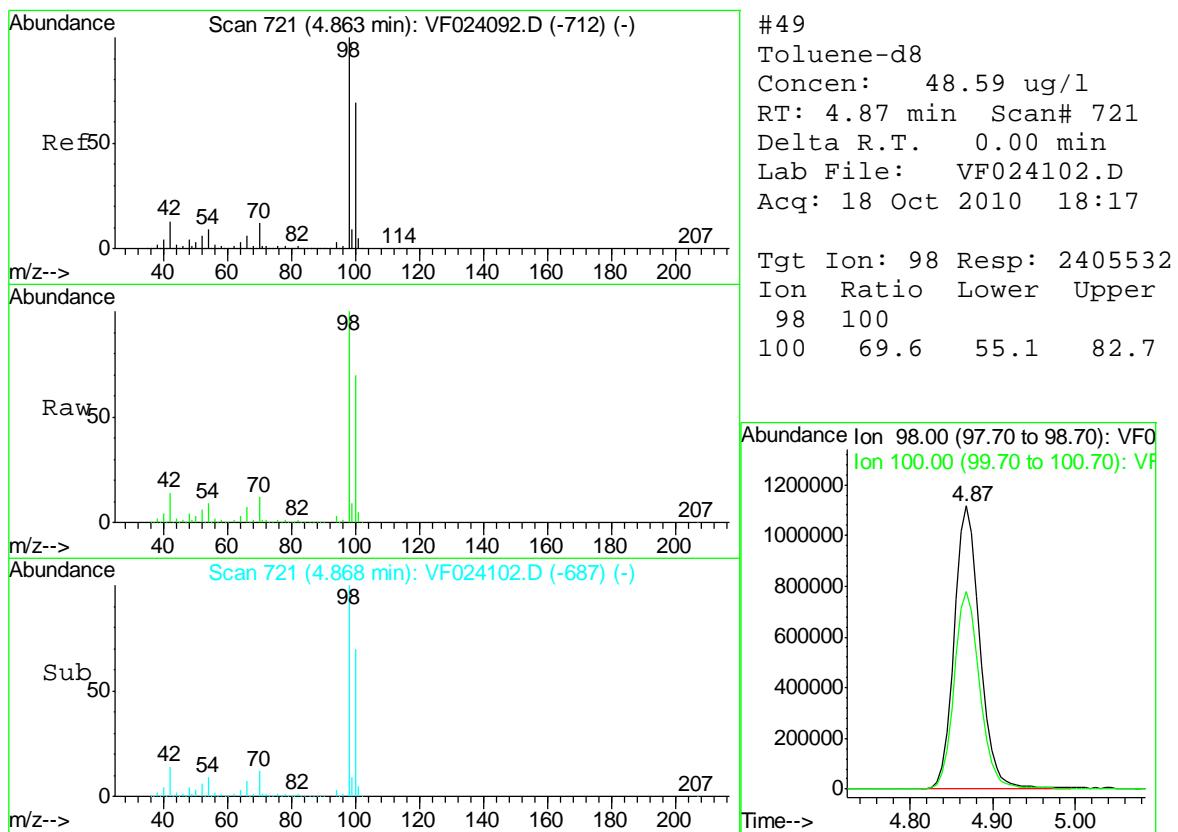
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Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration

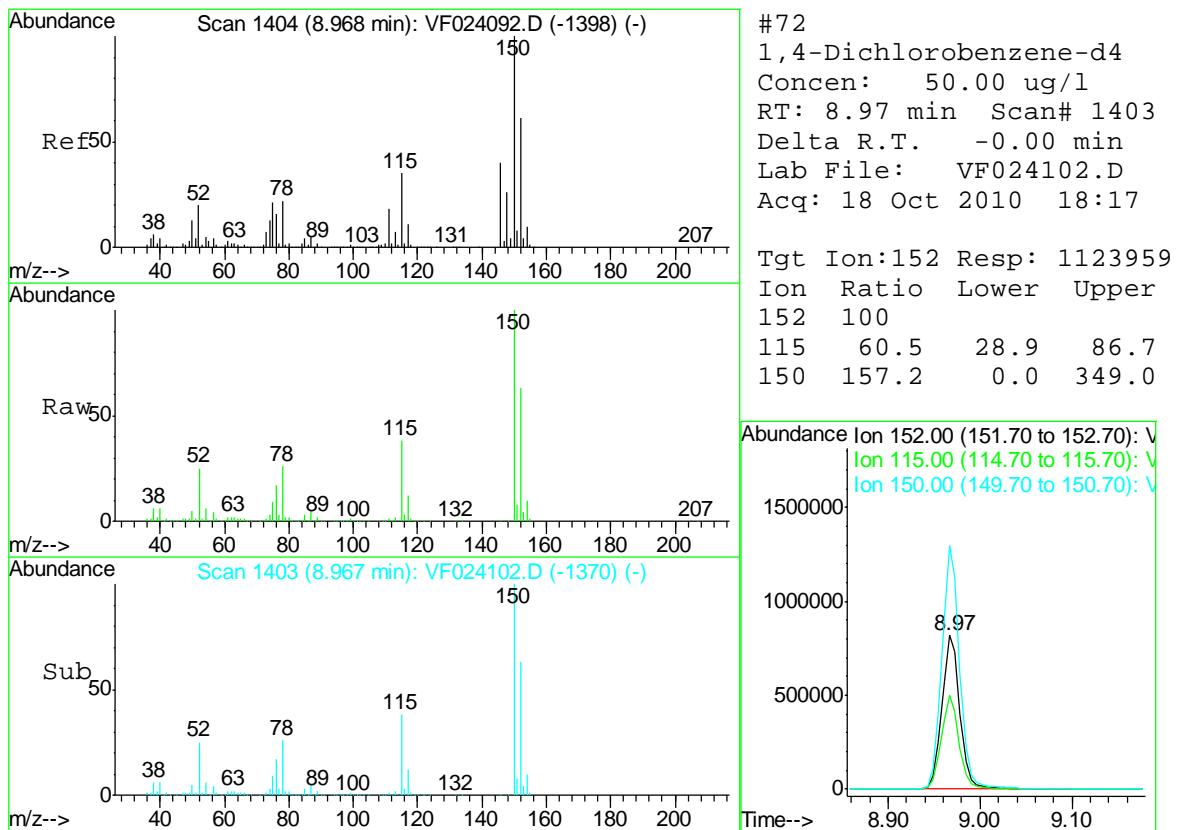
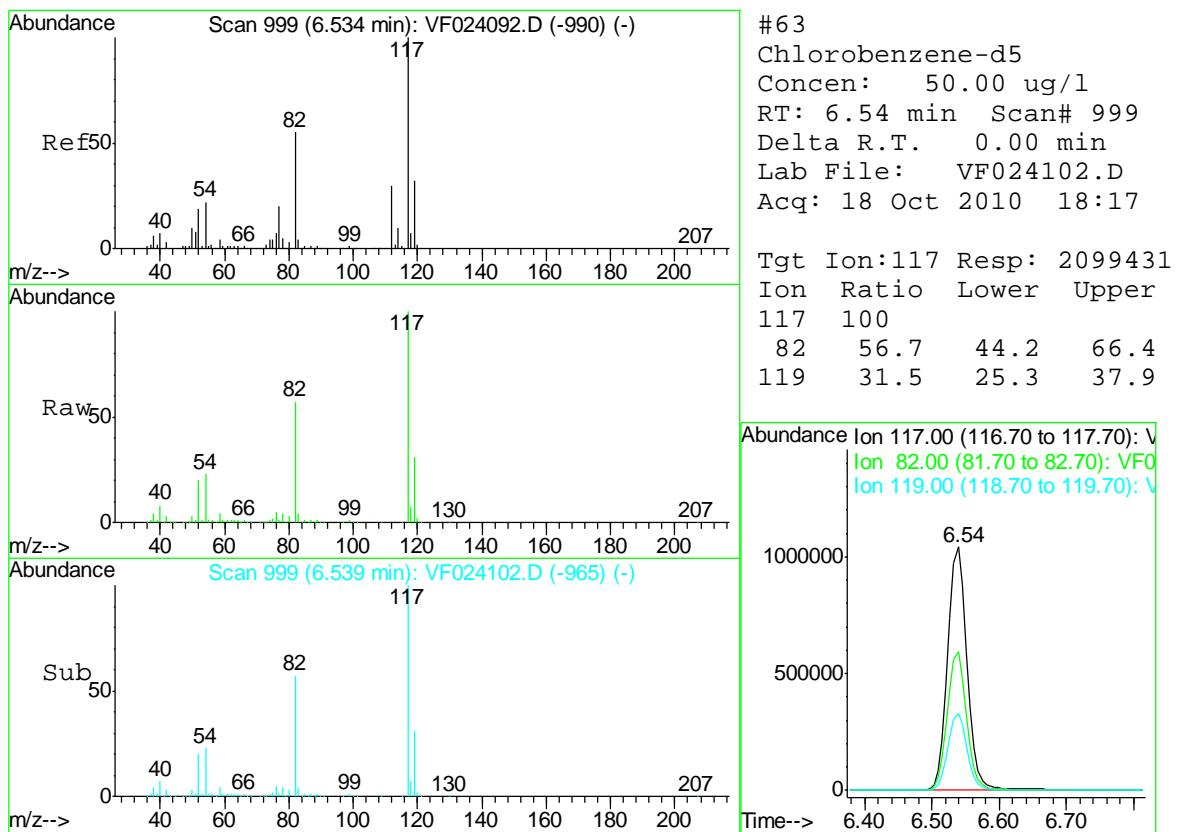












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024102.D  
 Acq On : 18 Oct 2010 18:17  
 Operator : MS  
 Sample : B3902-08  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 19 02:13:13 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1065083	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2148485	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2099431	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1123959	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	871862	54.41	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	108.82%	
36) Dibromofluoromethane	2.89	113	768257	52.46	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	104.92%	
49) Toluene-d8	4.87	98	2405532	48.59	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	97.18%	
62) 4-Bromofluorobenzene	7.92	95	1045041	50.40	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	100.80%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.26	63	57184	3.06	ug/l 98
28) cis-1,2-Dichloroethene	2.59	96	9941	0.68	ug/l 97

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024102.D  
 Acq On : 18 Oct 2010 18:17  
 Operator : MS  
 Sample : B3902-08  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

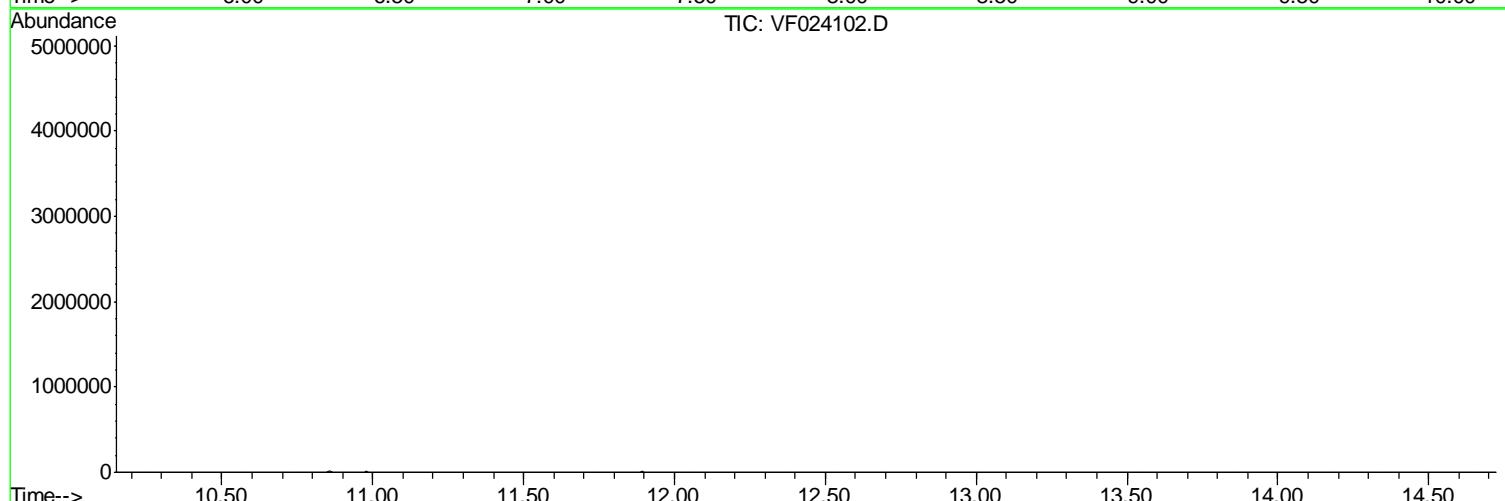
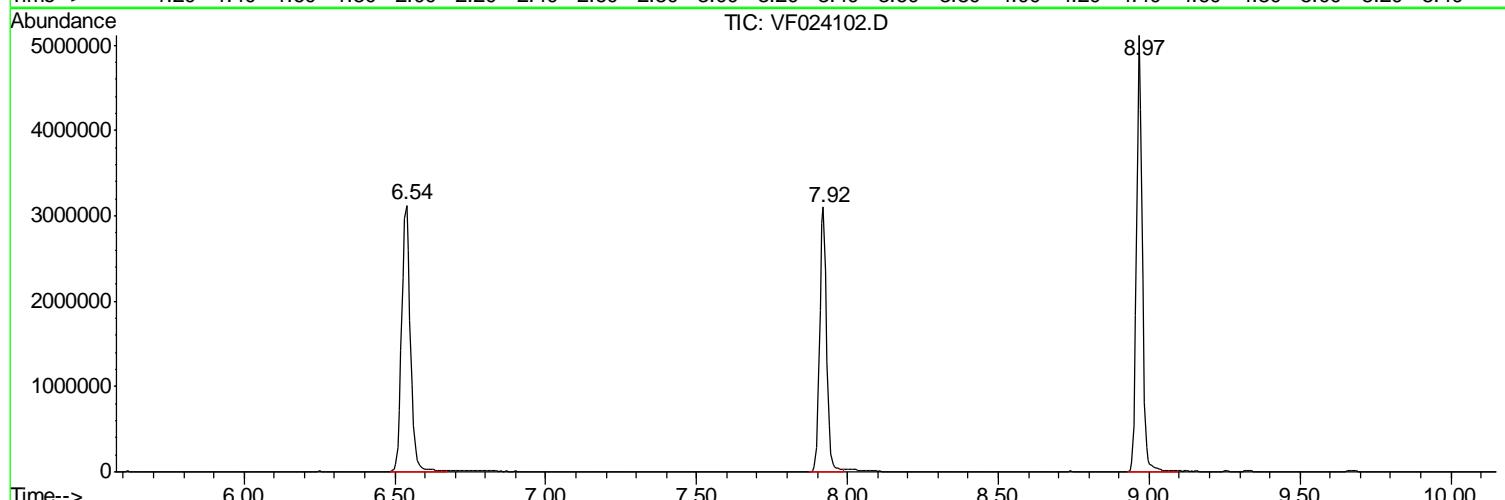
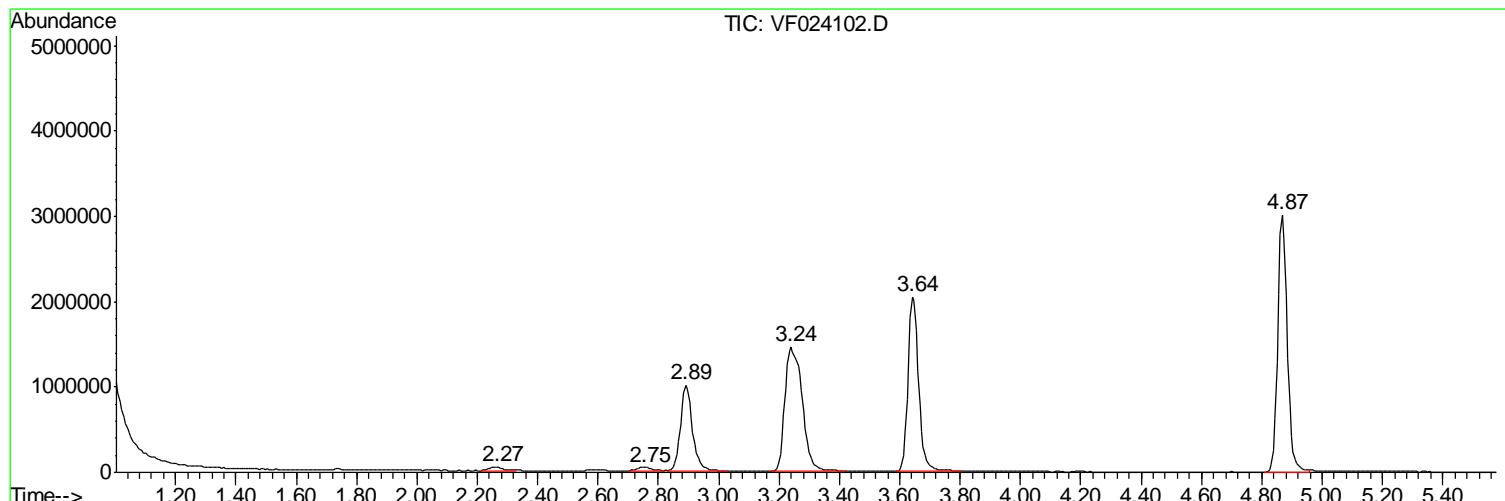
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.266	279	288	298	rBV	40798	120065	1.70%	0.309%
2	2.753	360	369	380	rBV2	39637	146346	2.07%	0.377%
3	2.891	382	392	415	rVB	1007106	2774361	39.32%	7.141%
4	3.240	439	450	480	rBV2	1466903	5869337	83.18%	15.107%
5	3.642	508	517	544	rBV	2044815	5003410	70.91%	12.878%
6	4.868	711	721	736	rBV	3016268	6564717	93.03%	16.897%
7	6.539	990	999	1021	rBV	3121191	6354186	90.05%	16.355%
8	7.921	1221	1229	1240	rBV	3097032	4962512	70.33%	12.773%
9	8.967	1397	1403	1424	rBV	5110959	7056201	100.00%	18.162%

Sum of corrected areas: 38851135

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024102.D  
Acq On : 18 Oct 2010 18:17  
Operator : MS  
Sample : B3902-08  
Misc : 5.0mL,MSVOAF  
ALS Vial : 13 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024102.D  
Acq On : 18 Oct 2010 18:17  
Operator : MS  
Sample : B3902-08  
Misc : 5.0mL,MSVOAF  
ALS Vial : 13 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024102.D  
Acq On : 18 Oct 2010 18:17  
Operator : MS  
Sample : B3902-08  
Misc : 5.0mL,MSVOAF  
ALS Vial : 13 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-10D	SDG No.:	B3902
Lab Sample ID:	B3902-09	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031014.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1.5		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-10D	SDG No.:	B3902
Lab Sample ID:	B3902-09	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031014.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.4		66 - 150		93%	SPK: 50
1868-53-7	Dibromofluoromethane	43.7		76 - 130		87%	SPK: 50
2037-26-5	Toluene-d8	46.7		78 - 121		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.4		70 - 131		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	528698	3.9				
540-36-3	1,4-Difluorobenzene	846787	4.7				
3114-55-4	Chlorobenzene-d5	721879	9.65				
3855-82-1	1,4-Dichlorobenzene-d4	380232	13.36				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

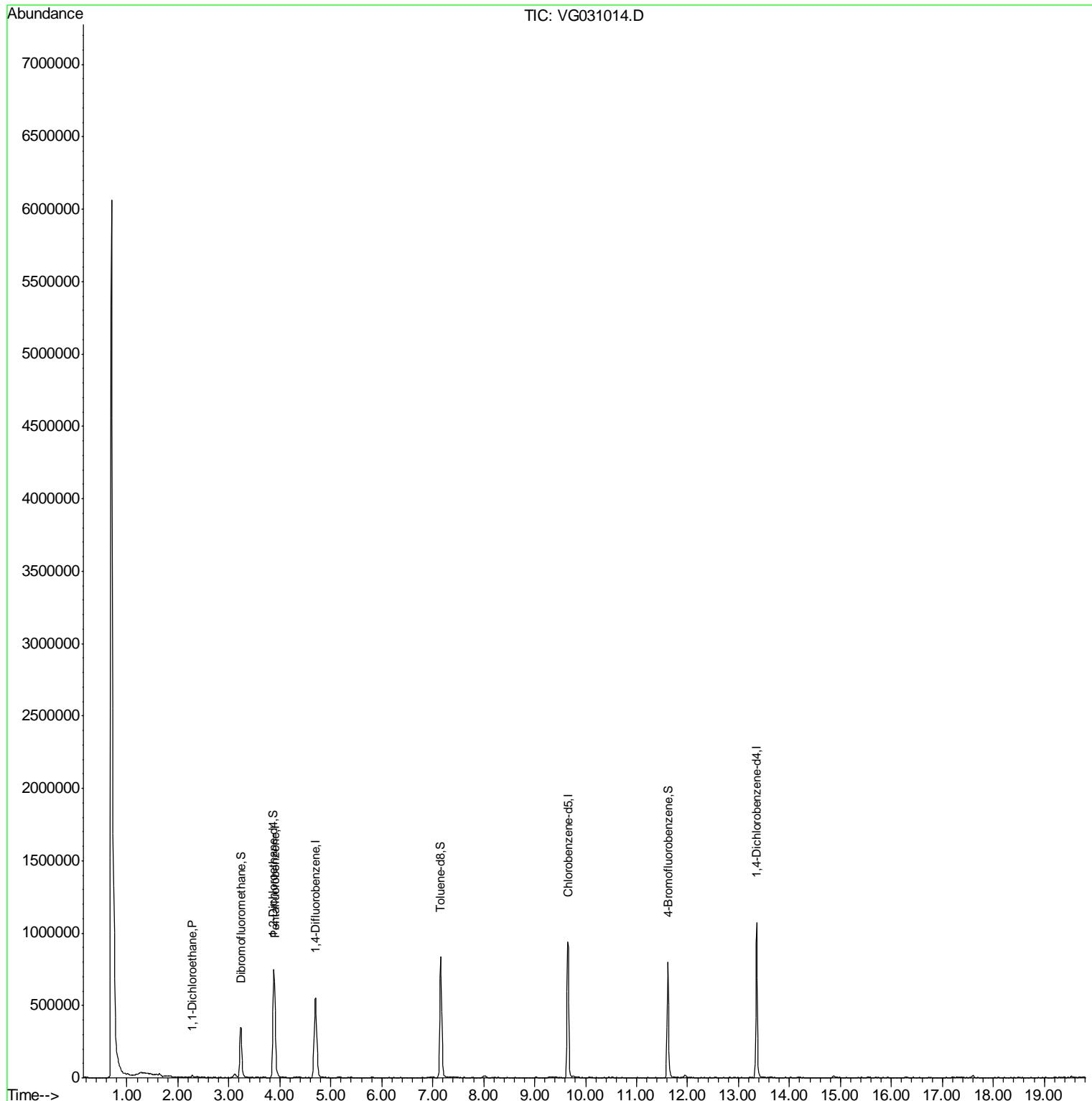
N = Presumptive Evidence of a Compound

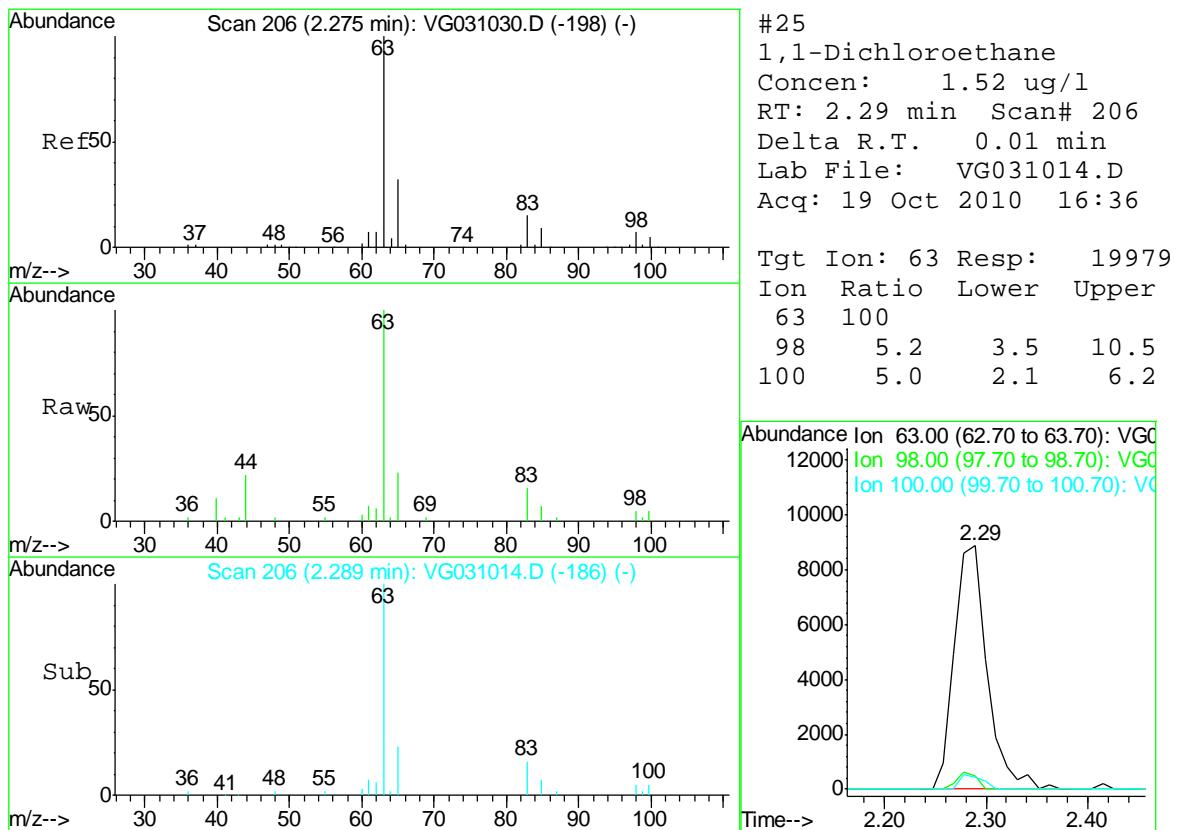
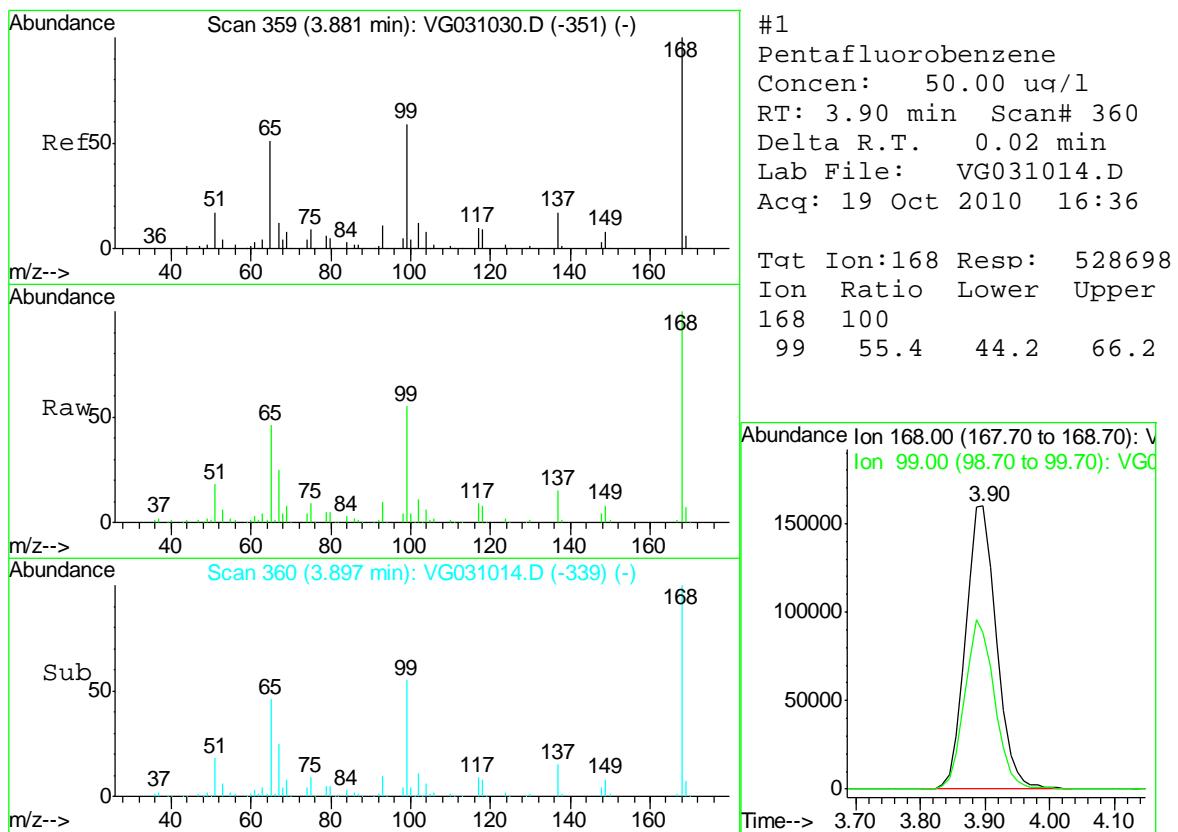
\* = Values outside of QC limits

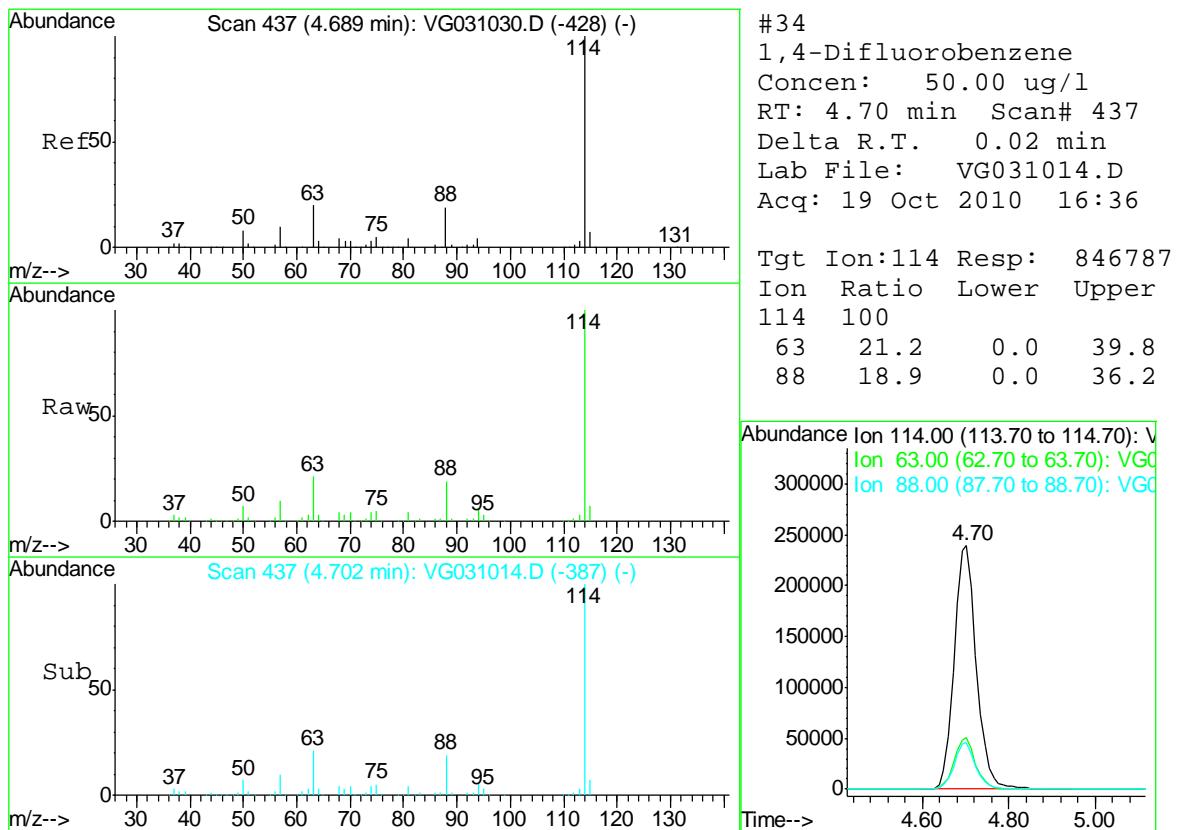
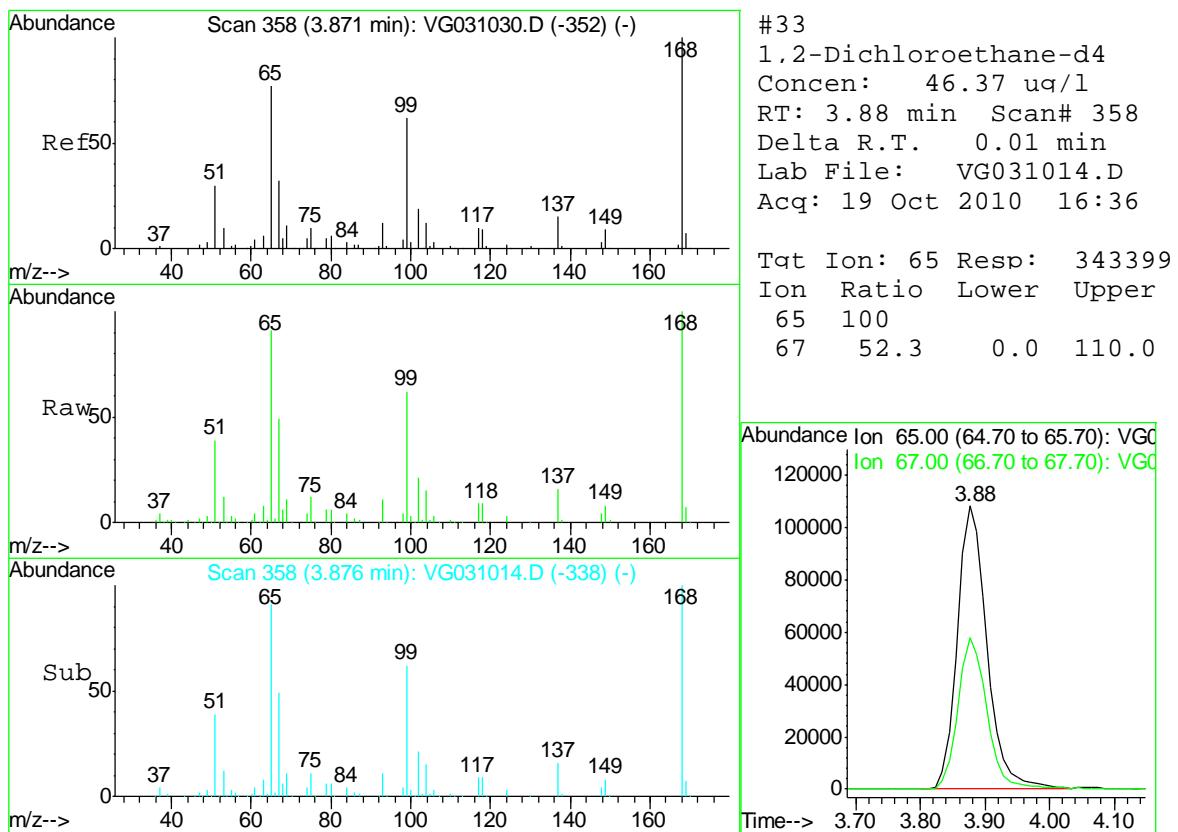
D = Dilution

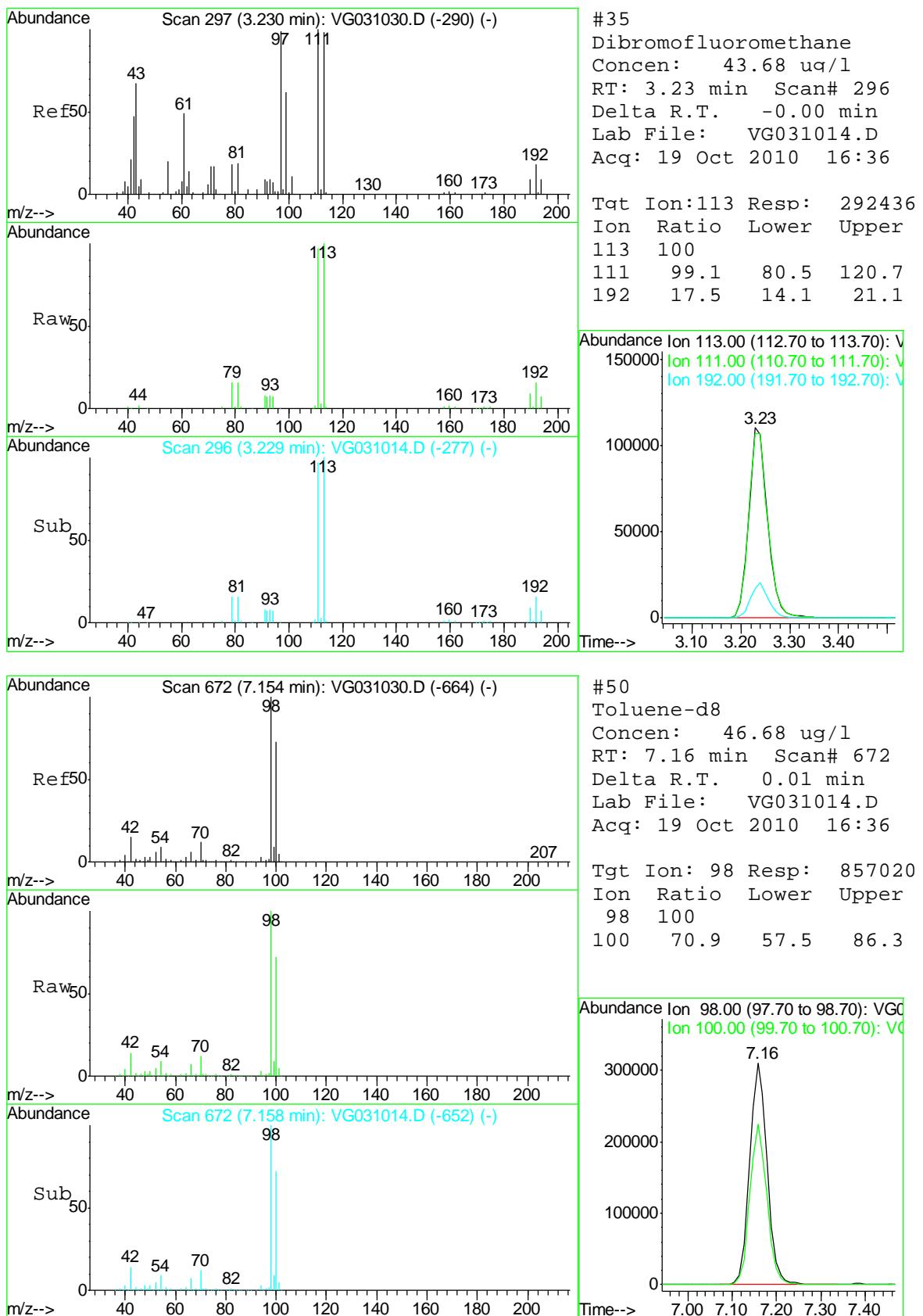
Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031014.D  
Acq On : 19 Oct 2010 16:36  
Operator : PS  
Sample : B3902-09  
Misc : 5mL MSVOA G  
ALS Vial : 12 Sample Multiplier: 1

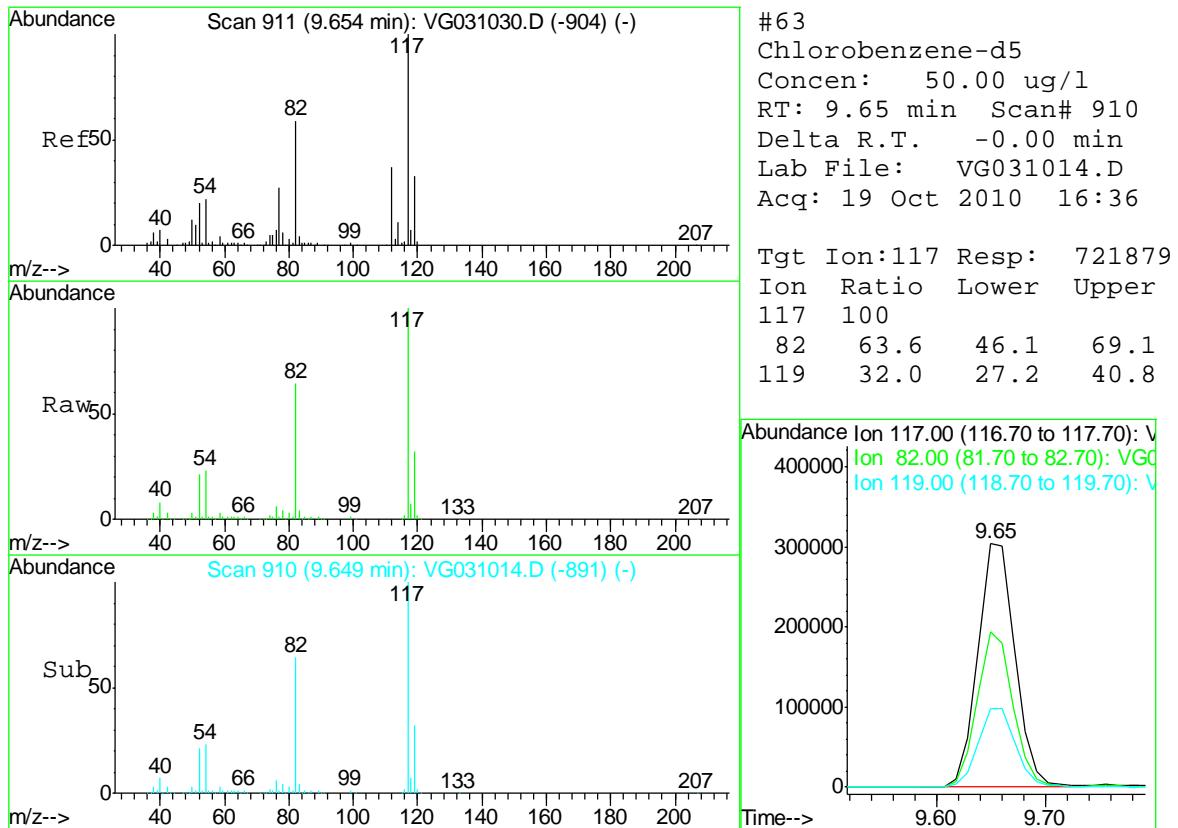
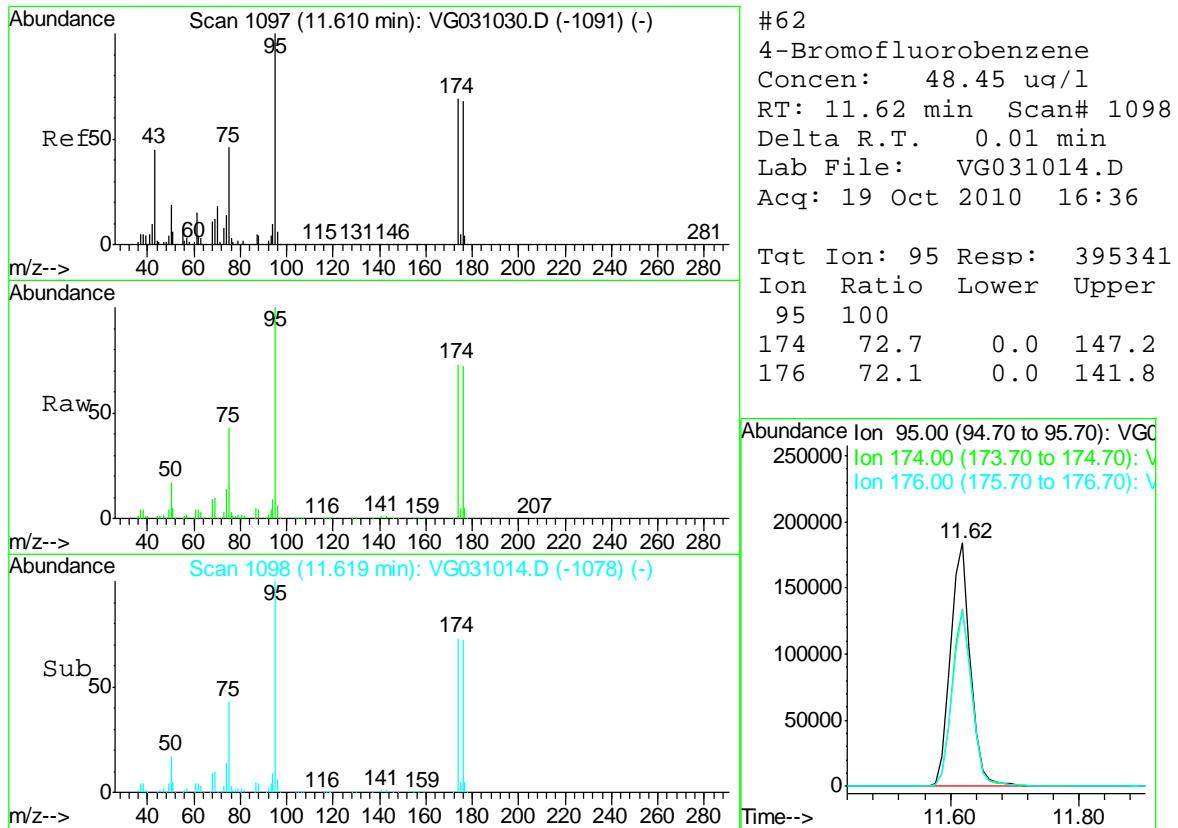
Ouant Time: Oct 20 03:00:23 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

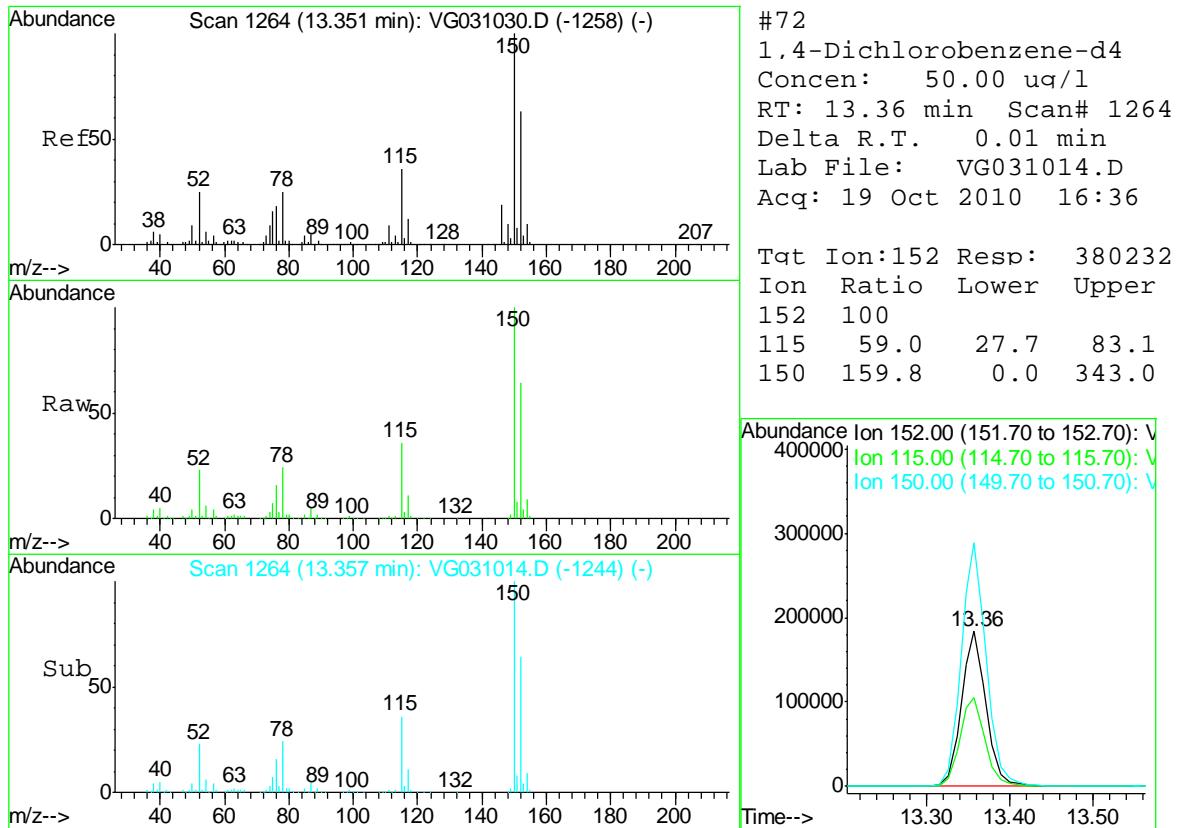












Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031014.D  
 Acq On : 19 Oct 2010 16:36  
 Operator : PS  
 Sample : B3902-09  
 Misc : 5mL MSVOA G  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 20 03:00:23 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.90	168	528698	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	4.70	114	846787	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.65	117	721879	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	380232	50.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	3.88	65	343399	46.37	ug/l	0.00
Spiked Amount	50.000		Recovery	=	92.74%	
35) Dibromofluoromethane	3.23	113	292436	43.68	ug/l	0.00
Spiked Amount	50.000		Recovery	=	87.36%	
50) Toluene-d8	7.16	98	857020	46.68	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.36%	
62) 4-Bromofluorobenzene	11.62	95	395341	48.45	ug/l	0.01
Spiked Amount	50.000		Recovery	=	96.90%	
<hr/>						
Target Compounds						
25) 1,1-Dichloroethane	2.29	63	19979	1.52	ug/l	96
<hr/>						

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031014.D  
 Acq On : 19 Oct 2010 16:36  
 Operator : PS  
 Sample : B3902-09  
 Misc : 5mL MSVOA G  
 ALS Vial : 12 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

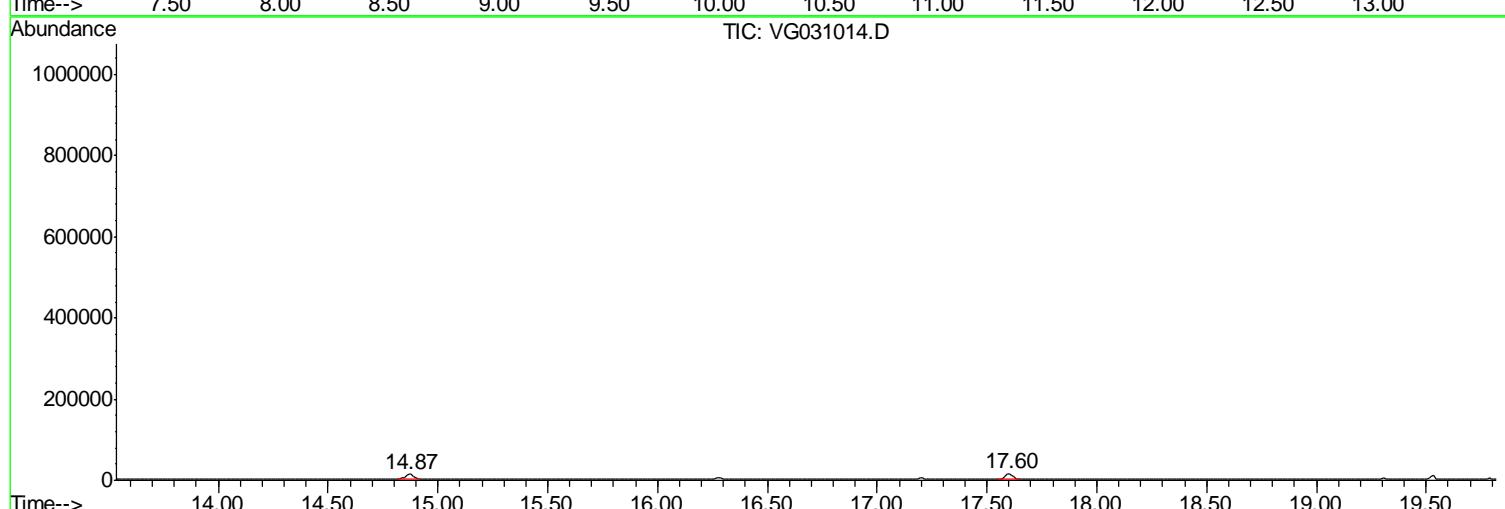
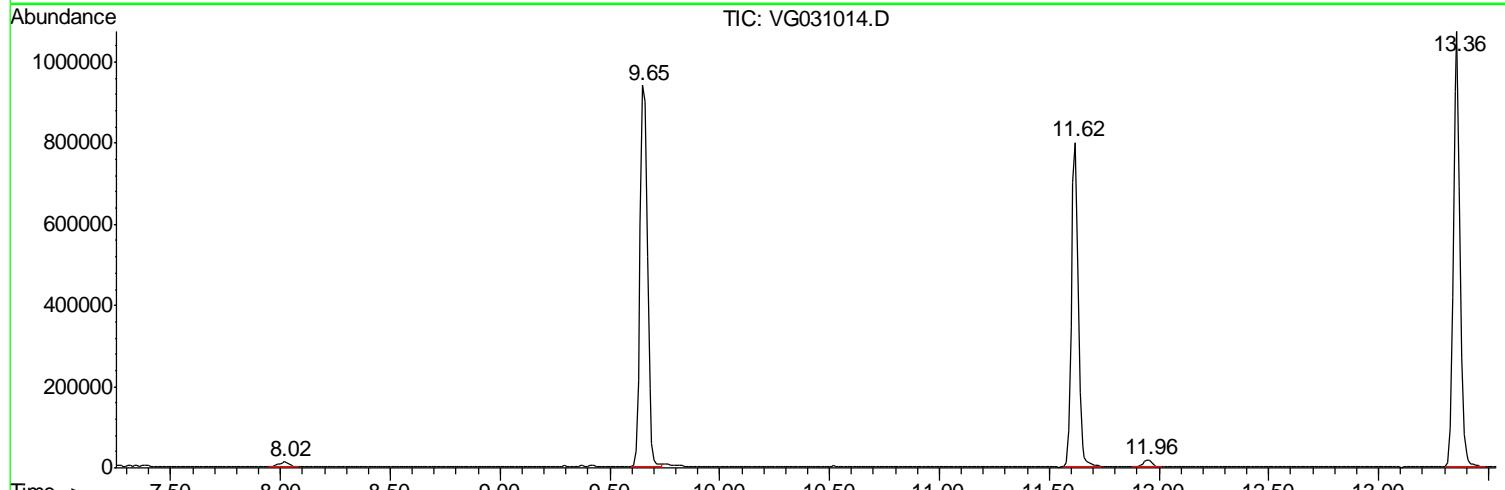
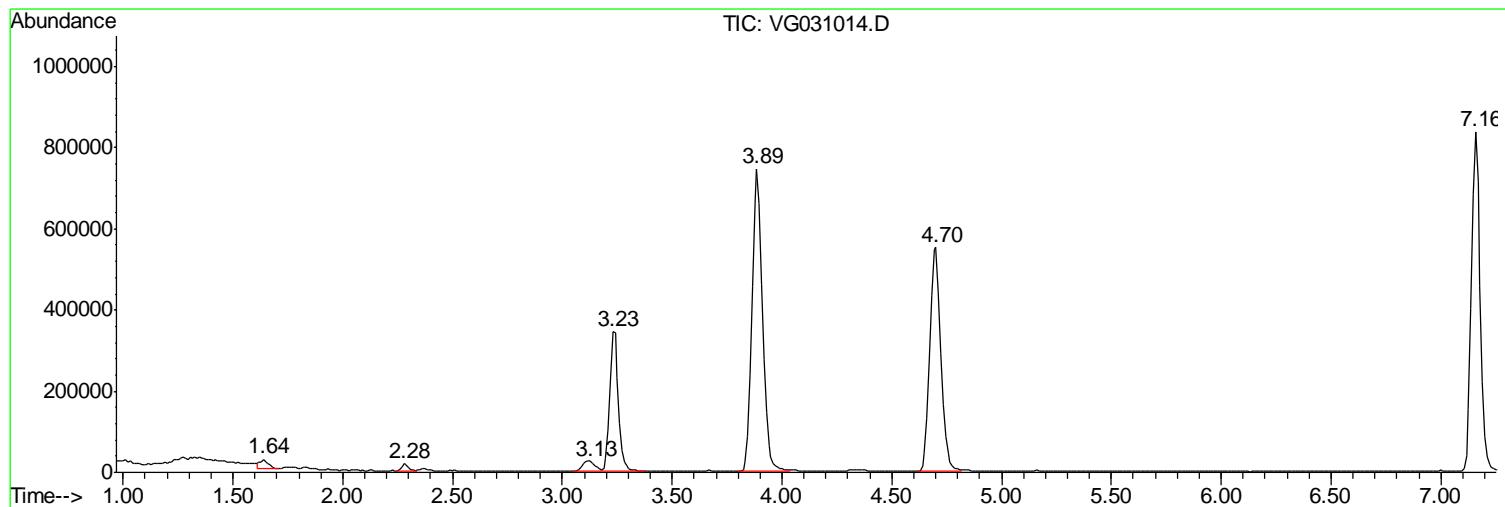
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.639	141	144	150	rVB	22529	60814	2.45%	0.427%
2	2.278	202	205	210	rBV2	16947	36733	1.48%	0.258%
3	3.126	279	286	291	rBV2	25547	99337	4.01%	0.697%
4	3.229	291	296	310	rVB	343198	939074	37.88%	6.587%
5	3.886	351	359	373	rBV2	746306	2478952	100.00%	17.387%
6	4.702	429	437	448	rBV	551764	1934579	78.04%	13.569%
7	7.158	665	672	685	rBV	836916	2323751	93.74%	16.299%
8	8.017	747	754	760	rBV3	12218	42003	1.69%	0.295%
9	9.649	905	910	918	rBV	938953	2203232	88.88%	15.454%
10	11.619	1093	1098	1109	rBV	798486	1733471	69.93%	12.159%
11	11.956	1123	1130	1135	rVB2	16741	46607	1.88%	0.327%
12	13.357	1259	1264	1276	rBV	1072128	2291329	92.43%	16.071%
13	14.868	1403	1408	1412	rBV	12626	33523	1.35%	0.235%
14	17.602	1665	1670	1674	rBV	13974	33747	1.36%	0.237%

Sum of corrected areas: 14257152

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031014.D  
Acq On : 19 Oct 2010 16:36  
Operator : PS  
Sample : B3902-09  
Misc : 5mL MSVOA G  
ALS Vial : 12 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031014.D  
Acq On : 19 Oct 2010 16:36  
Operator : PS  
Sample : B3902-09  
Misc : 5mL MSVOA\_G  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031014.D  
Acq On : 19 Oct 2010 16:36  
Operator : PS  
Sample : B3902-09  
Misc : 5mL MSVOA\_G  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-12S	SDG No.:	B3902
Lab Sample ID:	B3902-12	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024103.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	5.4		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	2.2		0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-12S	SDG No.:	B3902
Lab Sample ID:	B3902-12	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024103.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	54.9		66 - 150		110%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		76 - 130		103%	SPK: 50
2037-26-5	Toluene-d8	49.3		78 - 121		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.1		70 - 131		100%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1025220	3.23				
540-36-3	1,4-Difluorobenzene	2072770	3.64				
3114-55-4	Chlorobenzene-d5	2013110	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1088720	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

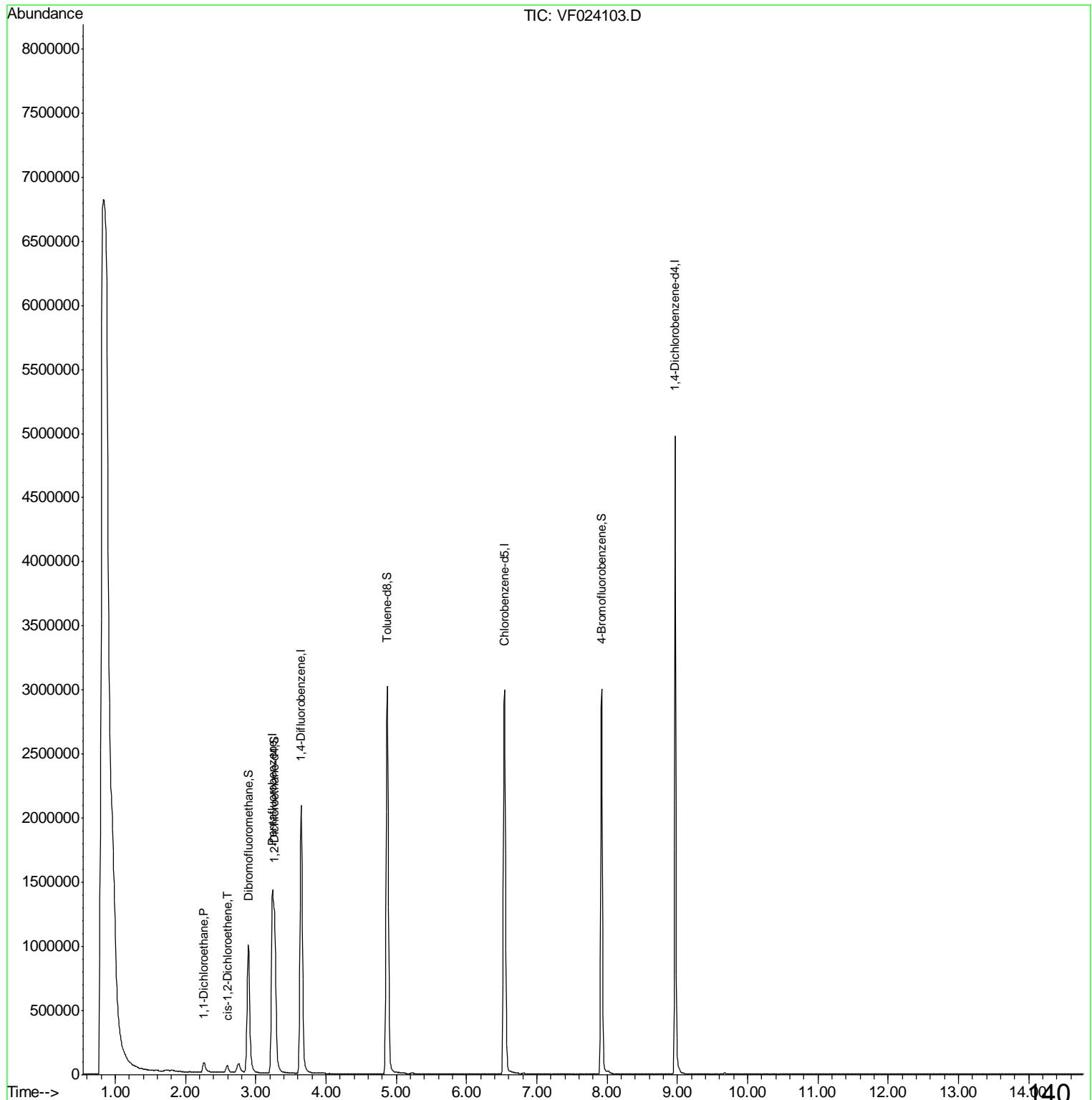
N = Presumptive Evidence of a Compound

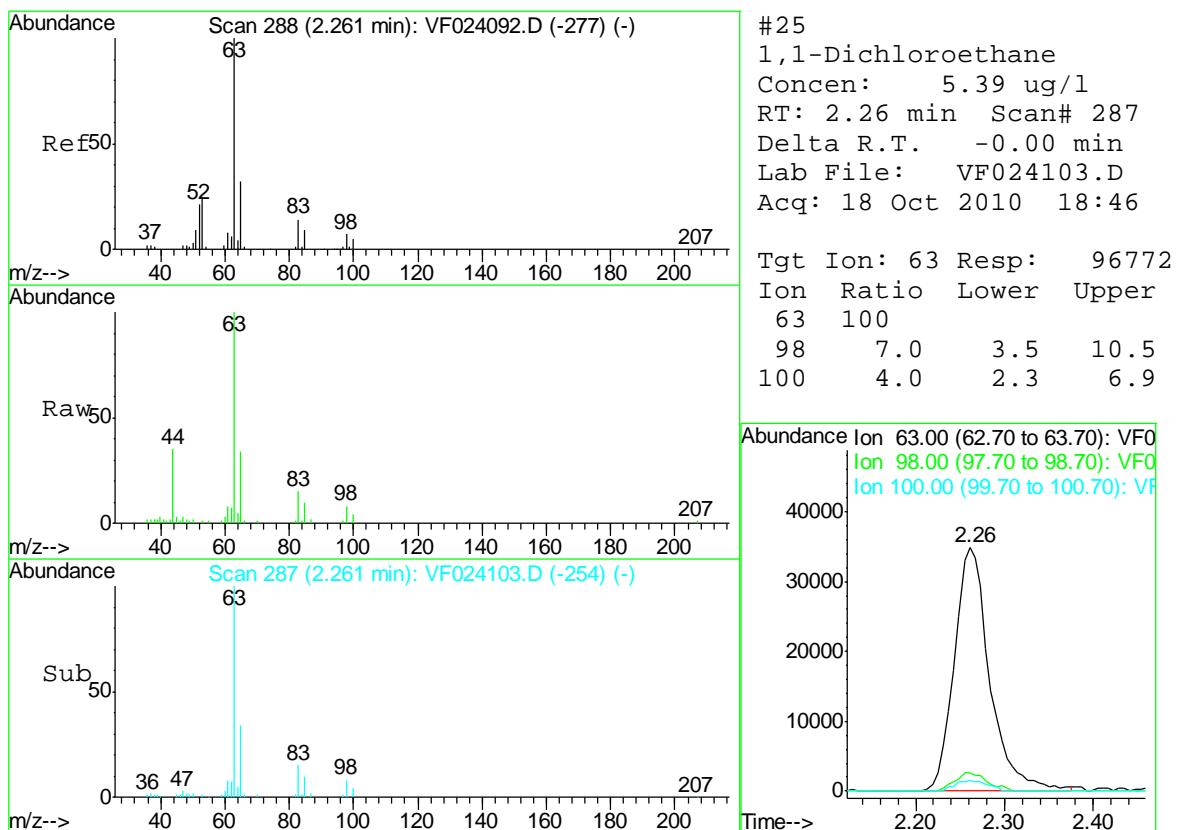
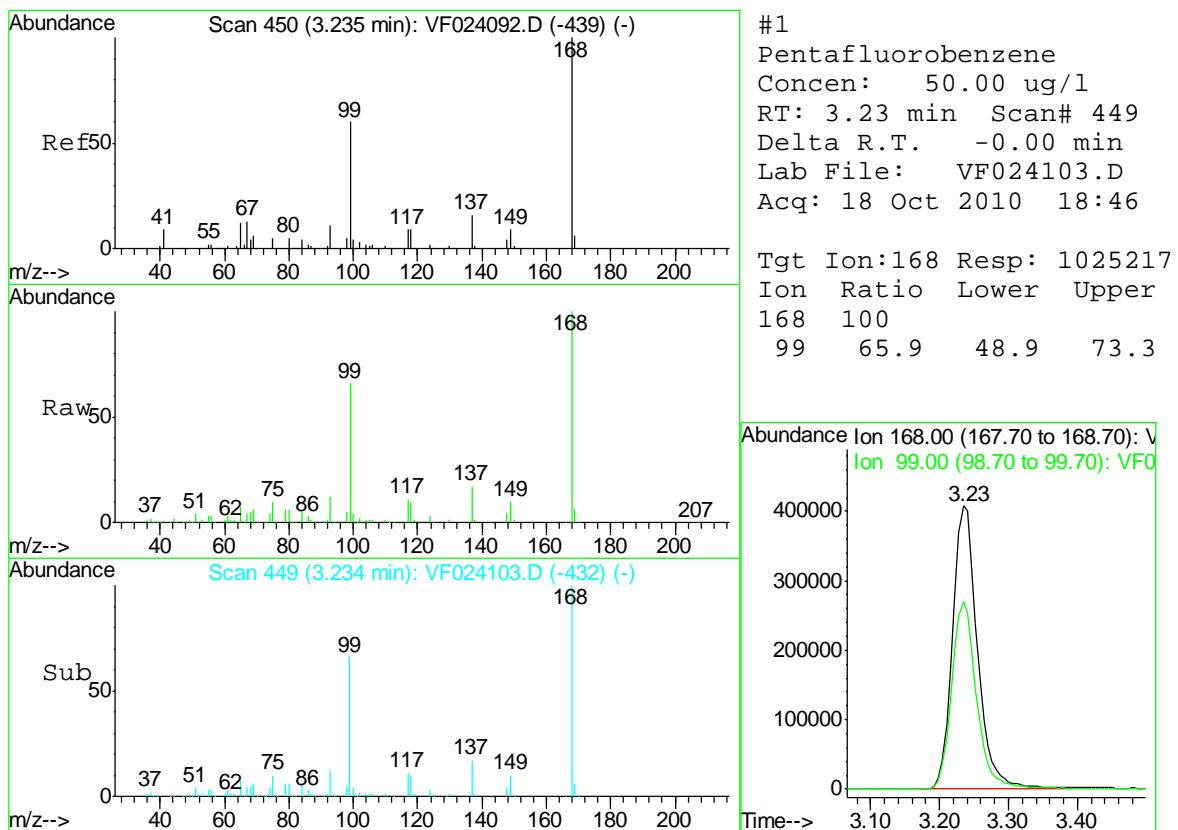
\* = Values outside of QC limits

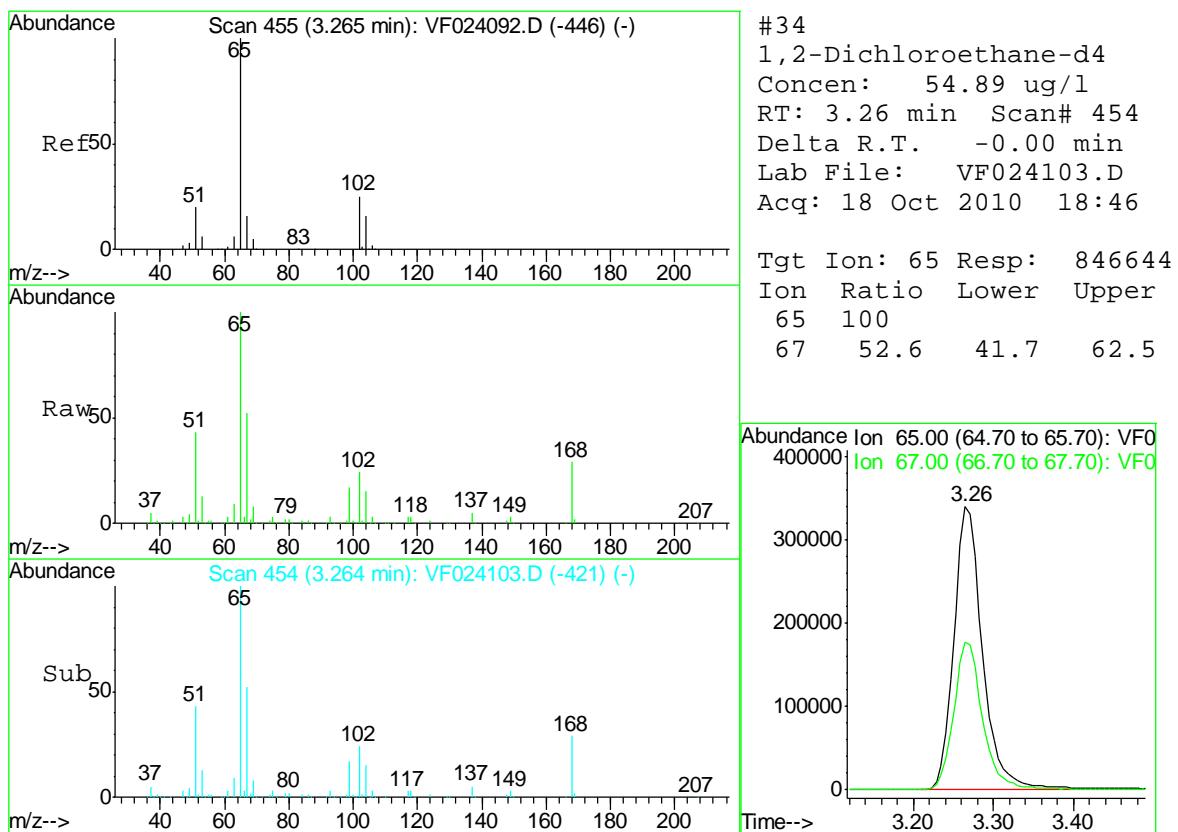
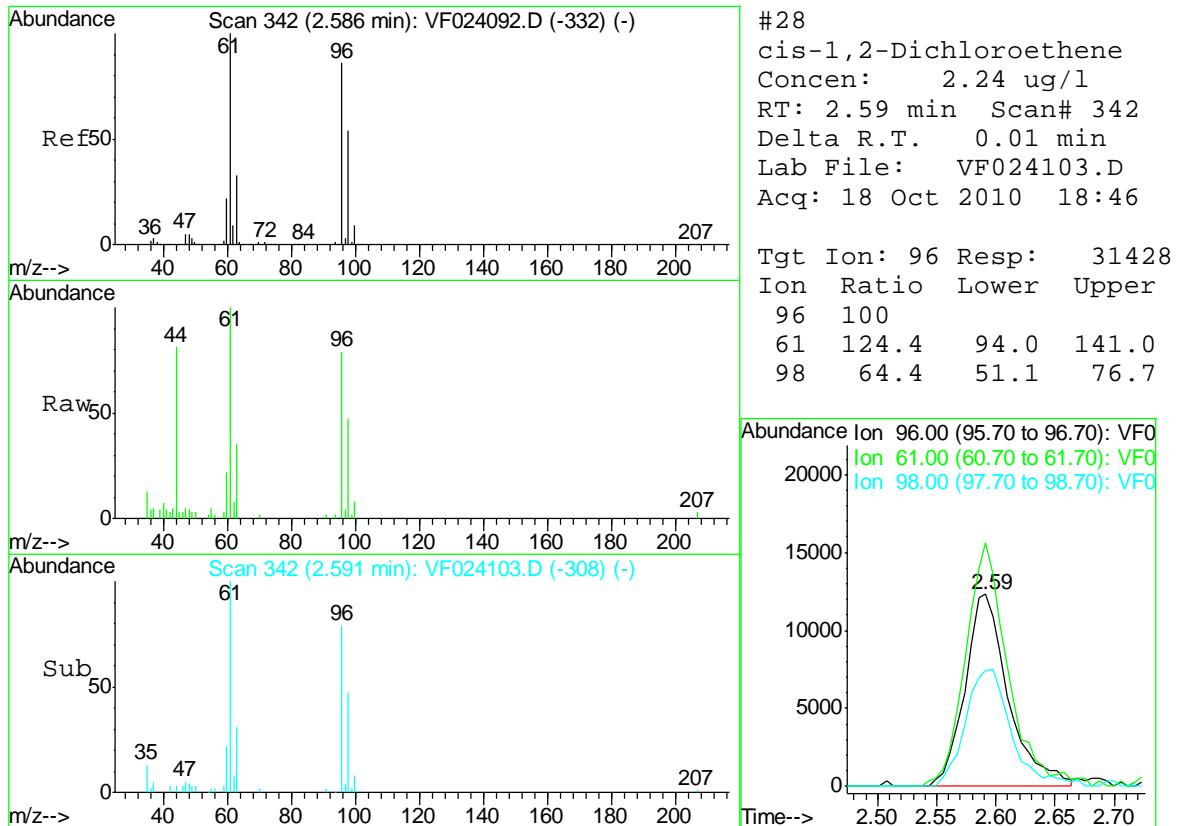
D = Dilution

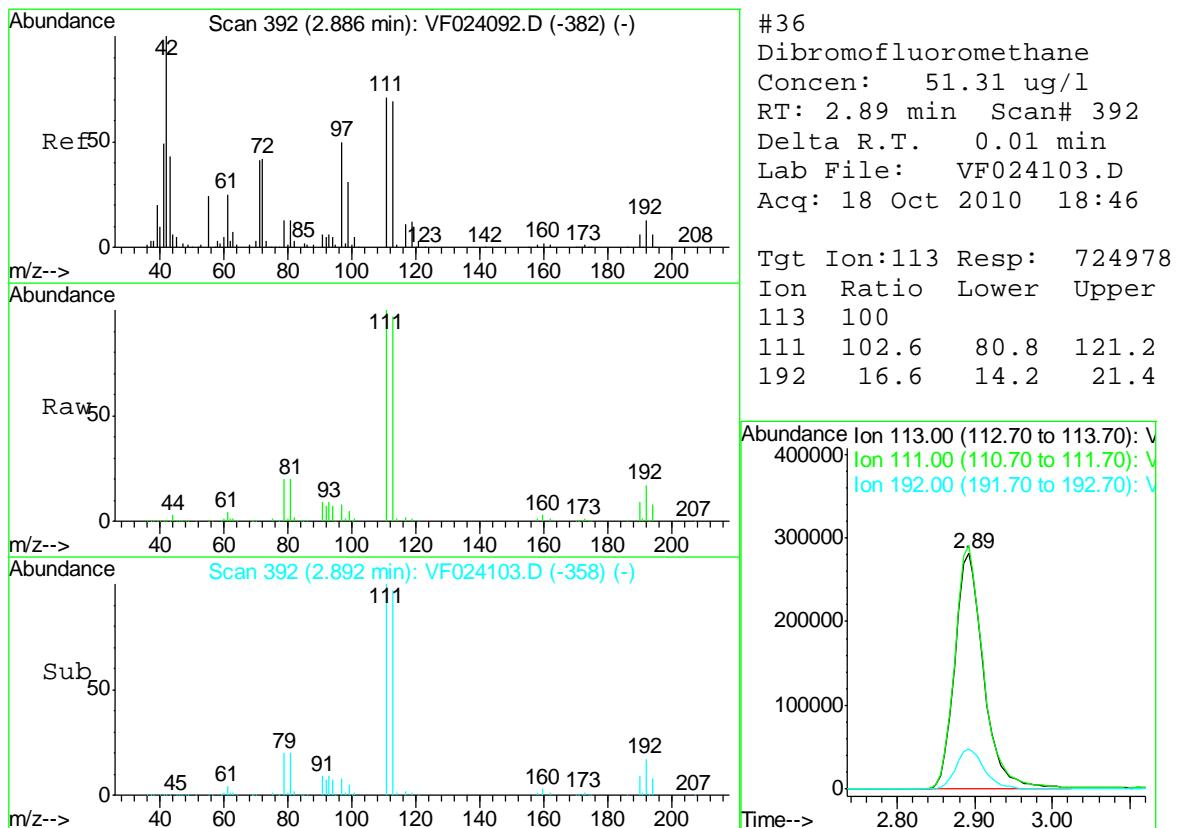
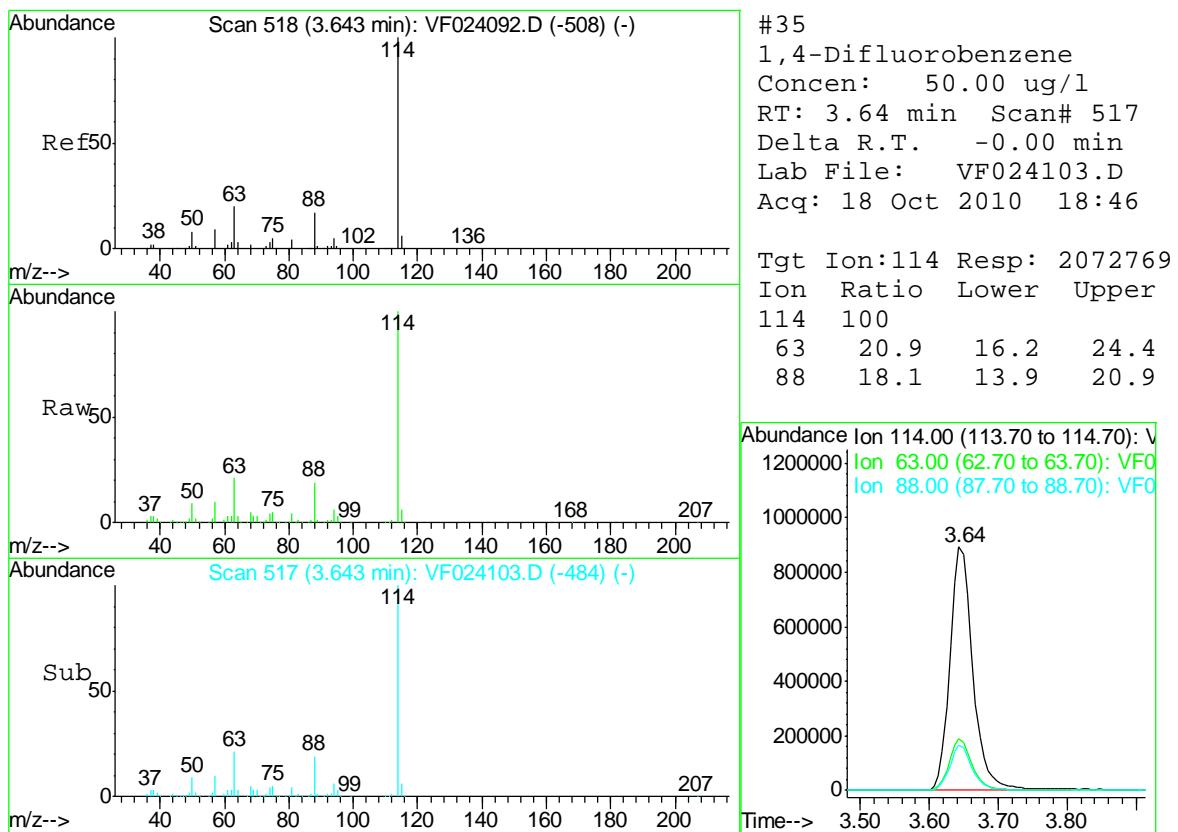
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024103.D  
Acq On : 18 Oct 2010 18:46  
Operator : MS  
Sample : B3902-12  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

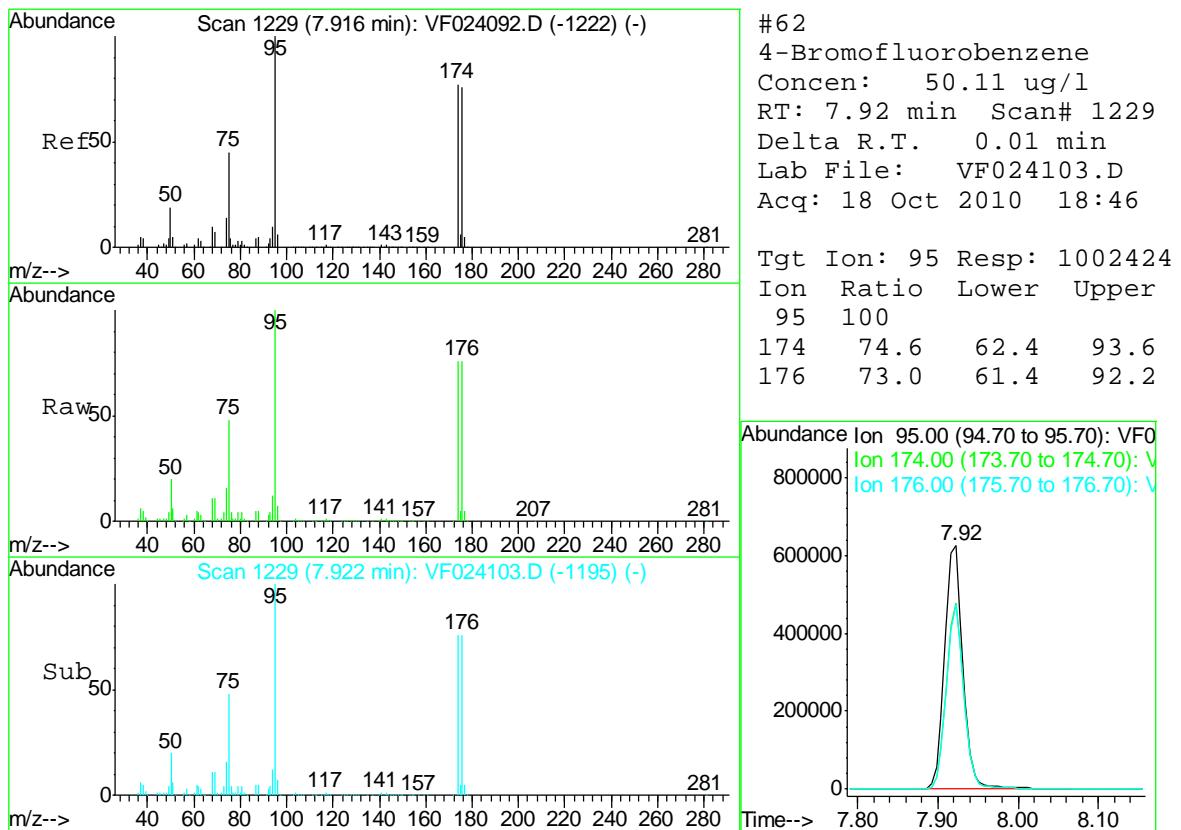
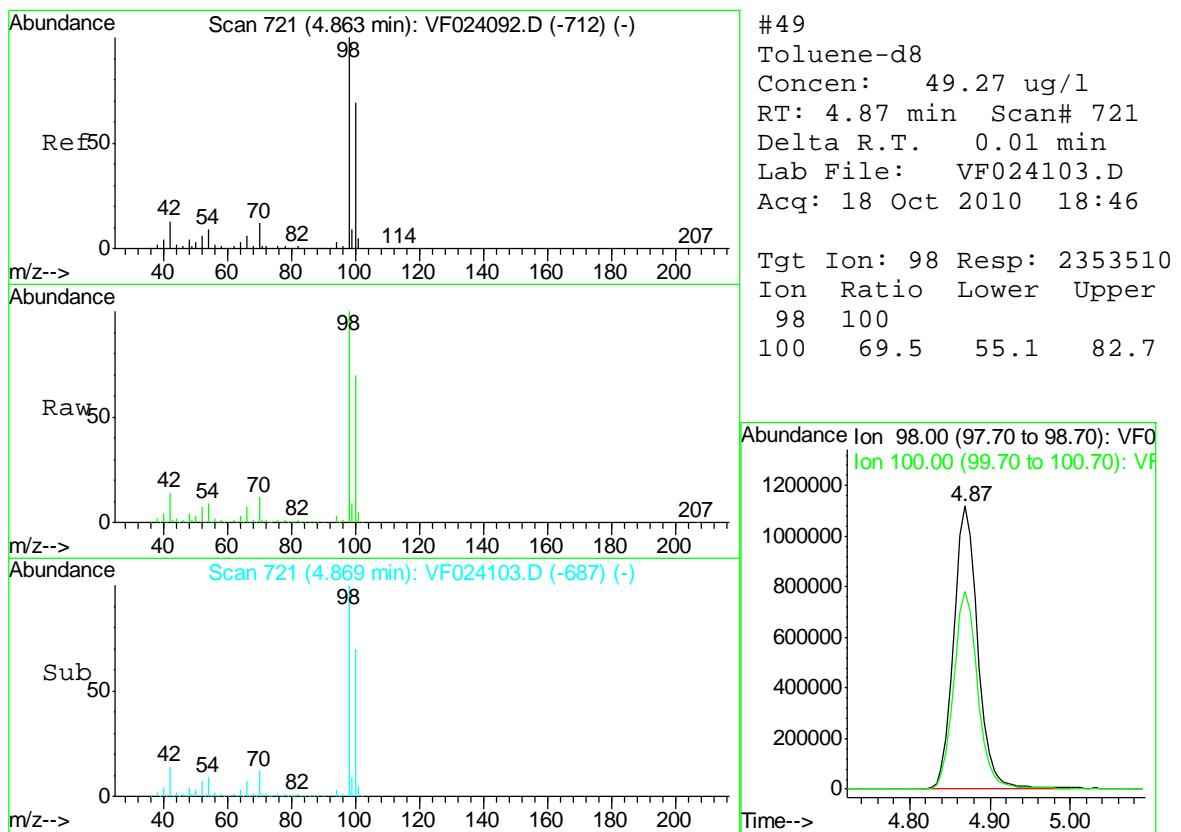
Quant Time: Oct 19 02:14:43 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration

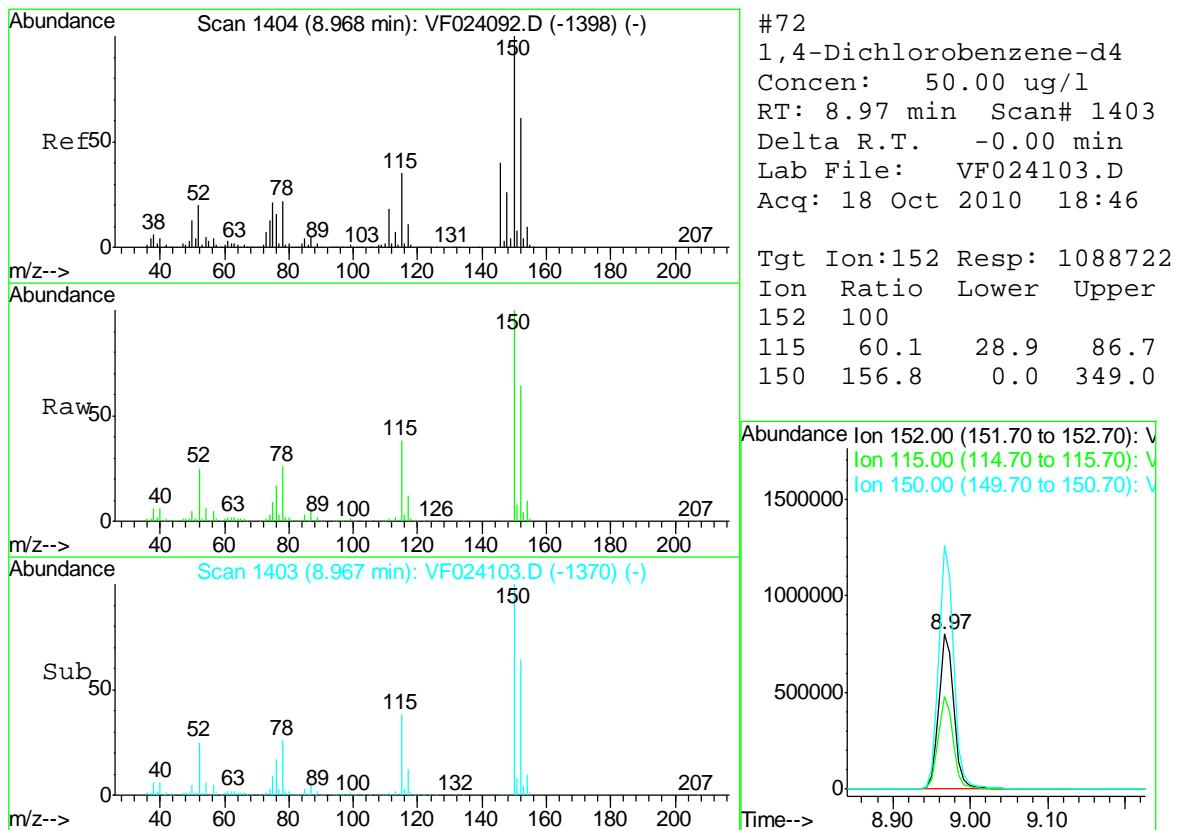
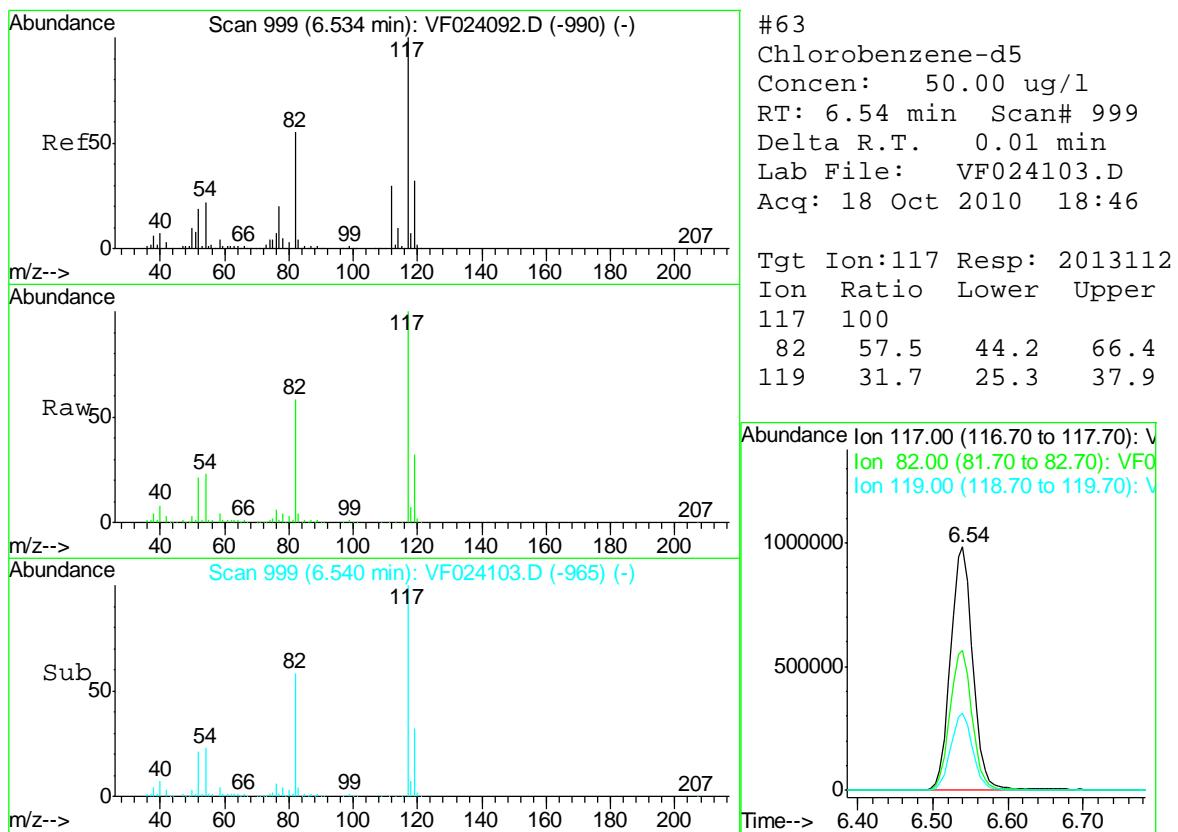












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024103.D  
 Acq On : 18 Oct 2010 18:46  
 Operator : MS  
 Sample : B3902-12  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 19 02:14:43 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1025217	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2072769	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2013112	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1088722	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	846644	54.89	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	109.78%	
36) Dibromofluoromethane	2.89	113	724978	51.31	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	102.62%	
49) Toluene-d8	4.87	98	2353510	49.27	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	98.54%	
62) 4-Bromofluorobenzene	7.92	95	1002424	50.11	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	100.22%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.26	63	96772	5.39	ug/l 99
28) cis-1,2-Dichloroethene	2.59	96	31428	2.24	ug/l 96

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024103.D  
 Acq On : 18 Oct 2010 18:46  
 Operator : MS  
 Sample : B3902-12  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 14 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

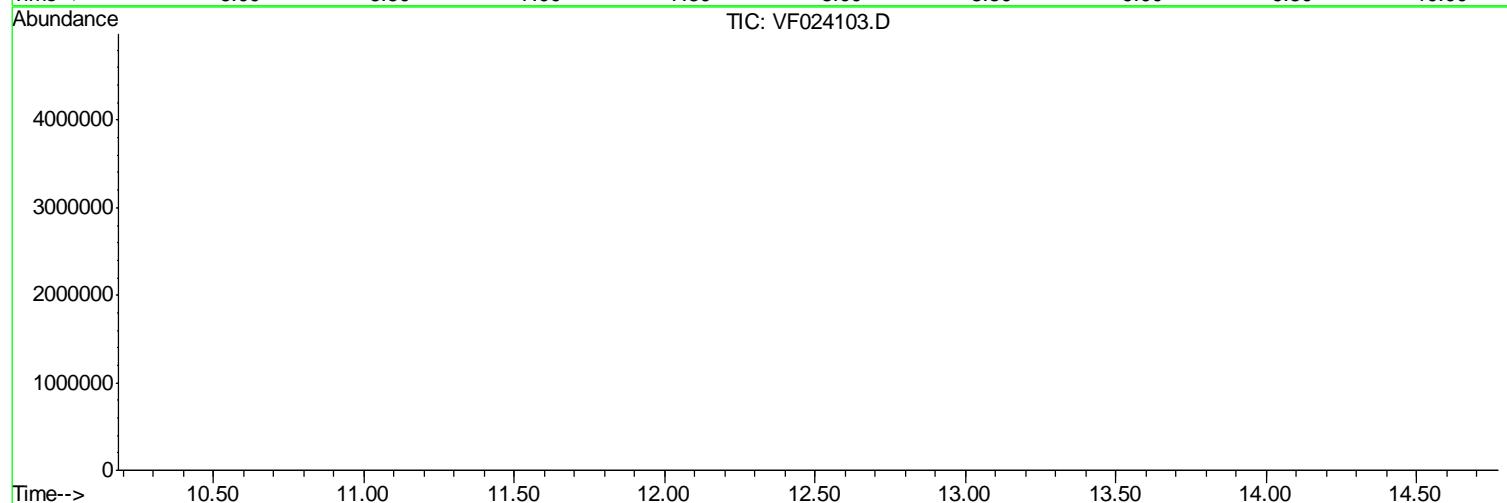
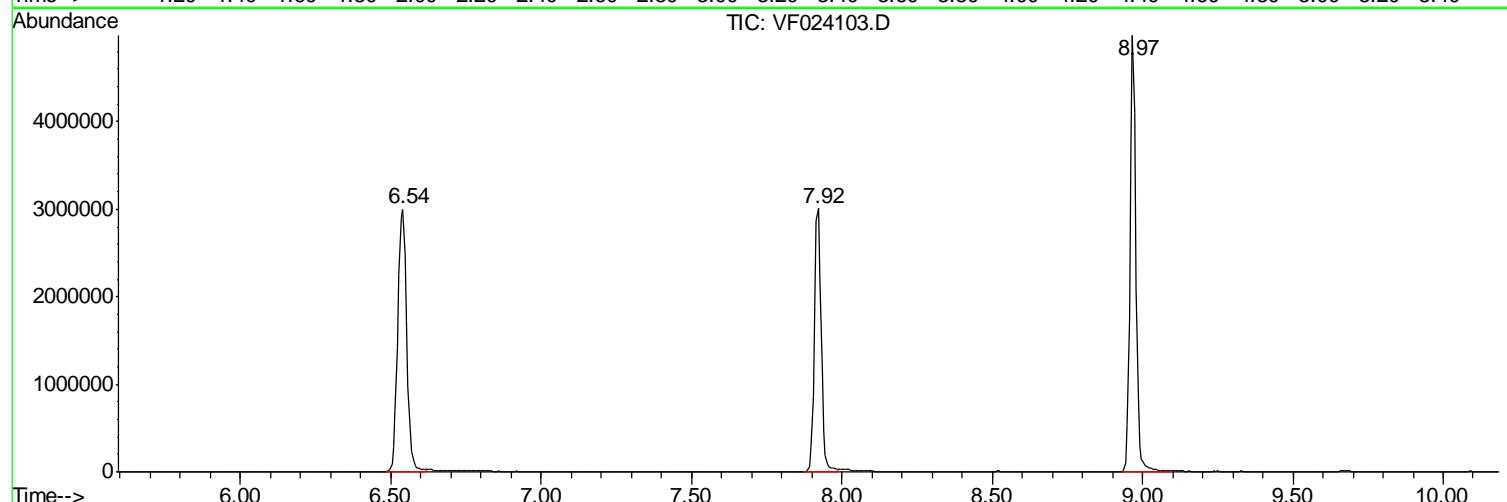
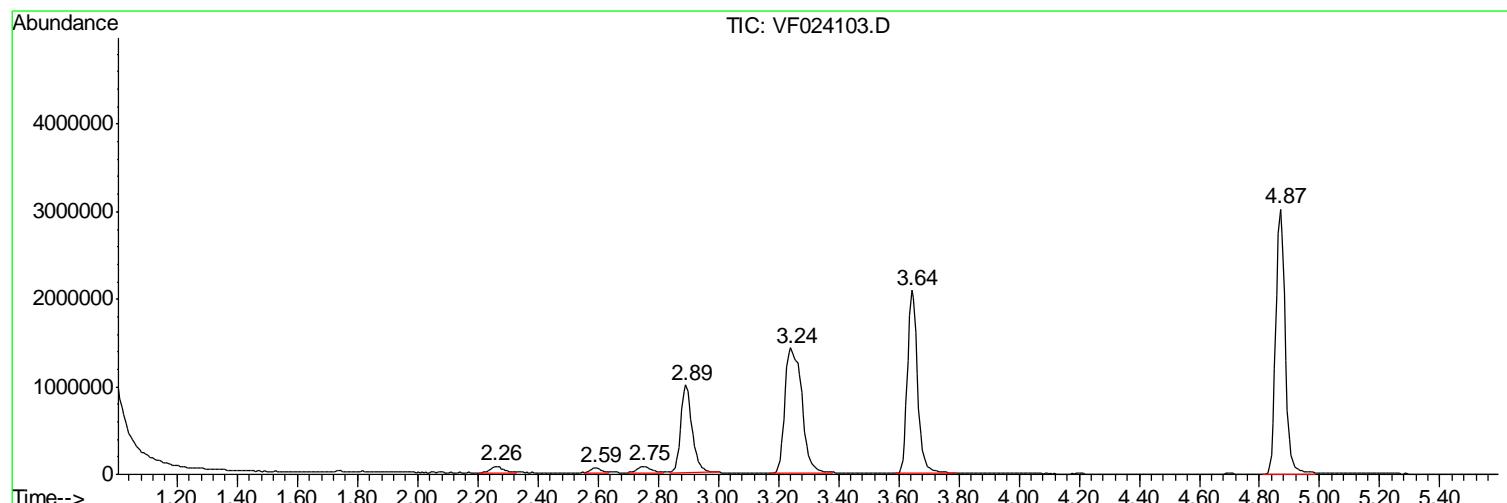
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.261	278	287	298	rBV	74202	219837	3.22%	0.581%
2	2.591	336	342	349	rBV2	51753	118261	1.73%	0.313%
3	2.754	360	369	380	rBV2	67598	216835	3.18%	0.573%
4	2.892	383	392	410	rVV2	994616	2621927	38.41%	6.934%
5	3.240	439	450	473	rBV2	1429348	5663283	82.97%	14.977%
6	3.643	508	517	541	rBV	2089782	4833733	70.81%	12.783%
7	4.869	711	721	740	rBV	3024689	6457357	94.60%	17.077%
8	6.540	990	999	1012	rBV	2998199	6089195	89.20%	16.103%
9	7.922	1221	1229	1240	rBV	3006628	4766636	69.83%	12.606%
10	8.967	1397	1403	1425	rBV	4981074	6826074	100.00%	18.052%

Sum of corrected areas: 37813138

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024103.D  
Acq On : 18 Oct 2010 18:46  
Operator : MS  
Sample : B3902-12  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024103.D  
Acq On : 18 Oct 2010 18:46  
Operator : MS  
Sample : B3902-12  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024103.D  
Acq On : 18 Oct 2010 18:46  
Operator : MS  
Sample : B3902-12  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-14S	SDG No.:	B3902
Lab Sample ID:	B3902-13	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024104.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-14S	SDG No.:	B3902
Lab Sample ID:	B3902-13	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024104.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	56.8		66 - 150		114%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		76 - 130		107%	SPK: 50
2037-26-5	Toluene-d8	49.6		78 - 121		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		70 - 131		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	964751	3.23				
540-36-3	1,4-Difluorobenzene	1974140	3.65				
3114-55-4	Chlorobenzene-d5	1928640	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1032860	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

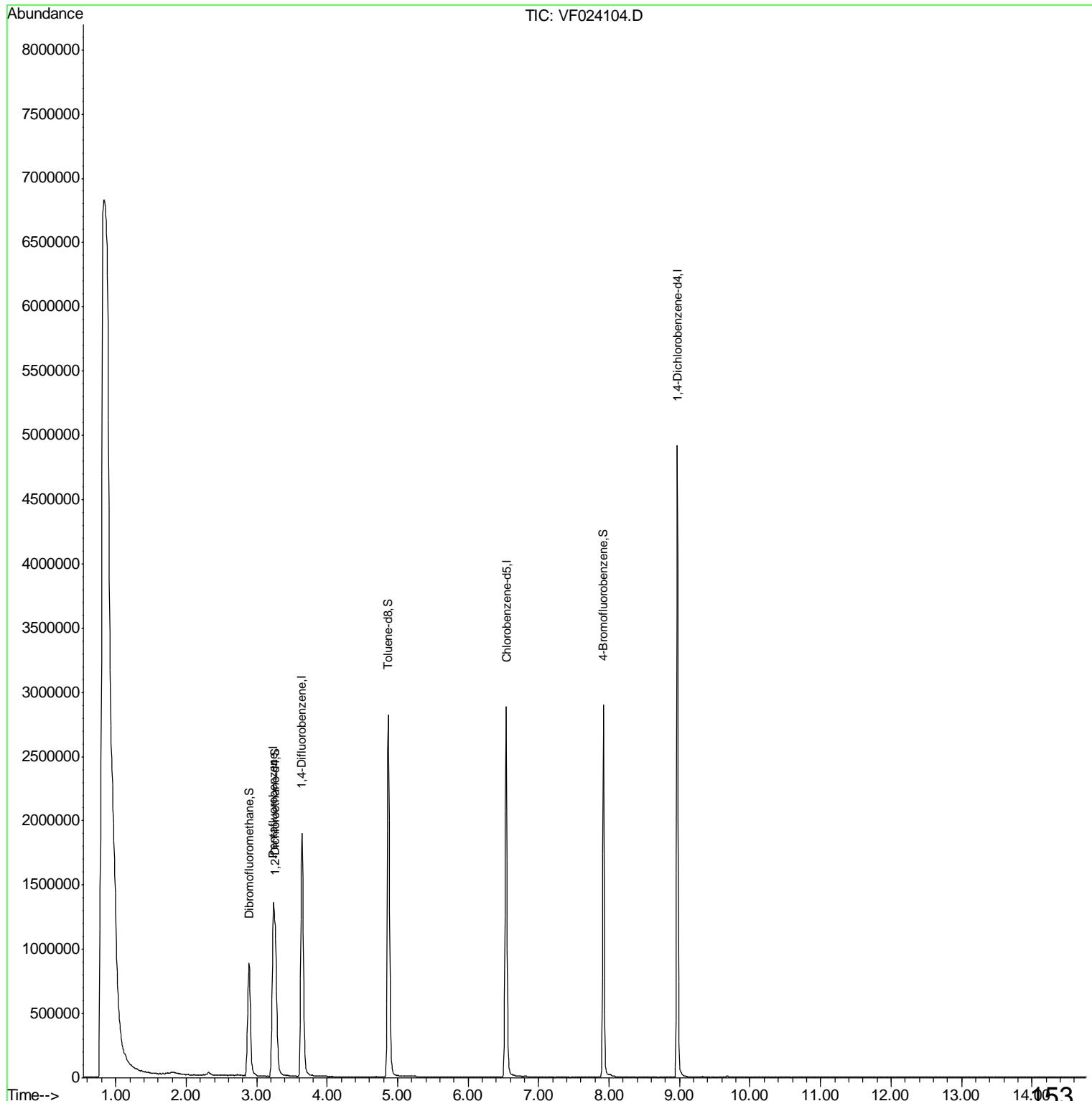
N = Presumptive Evidence of a Compound

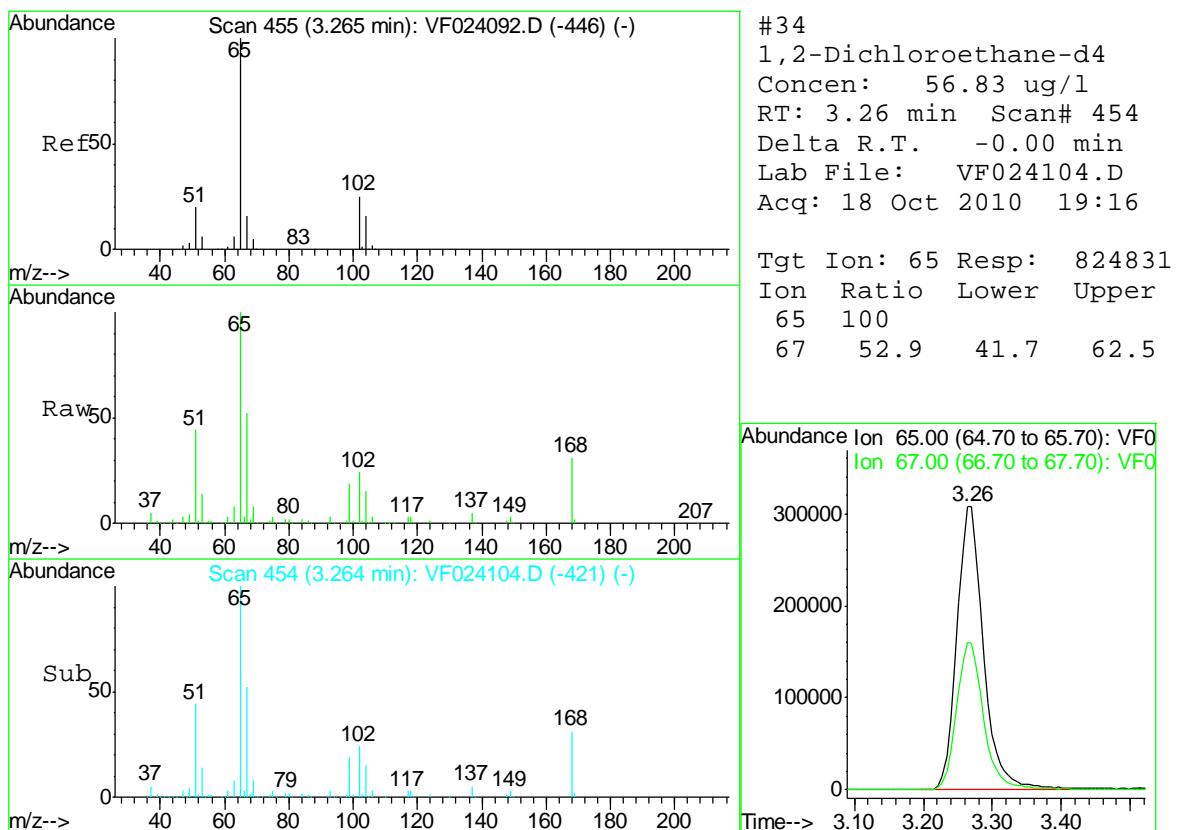
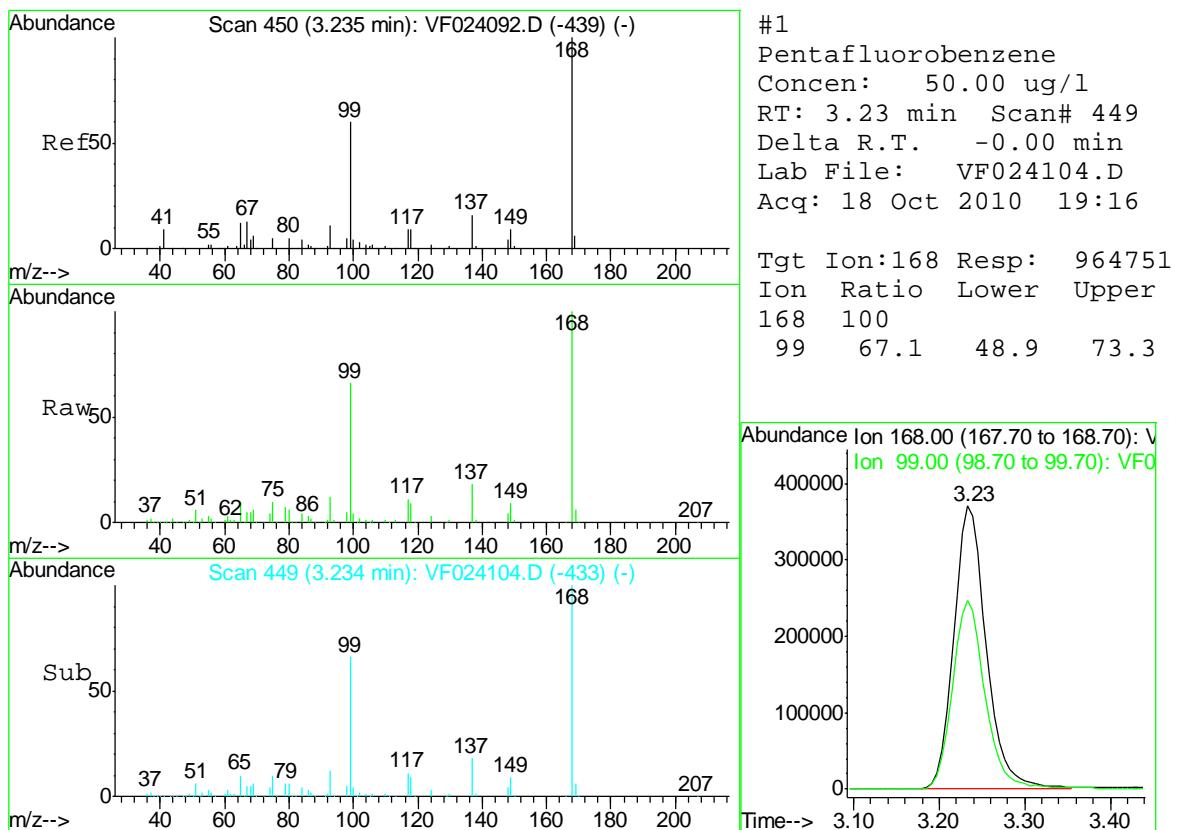
\* = Values outside of QC limits

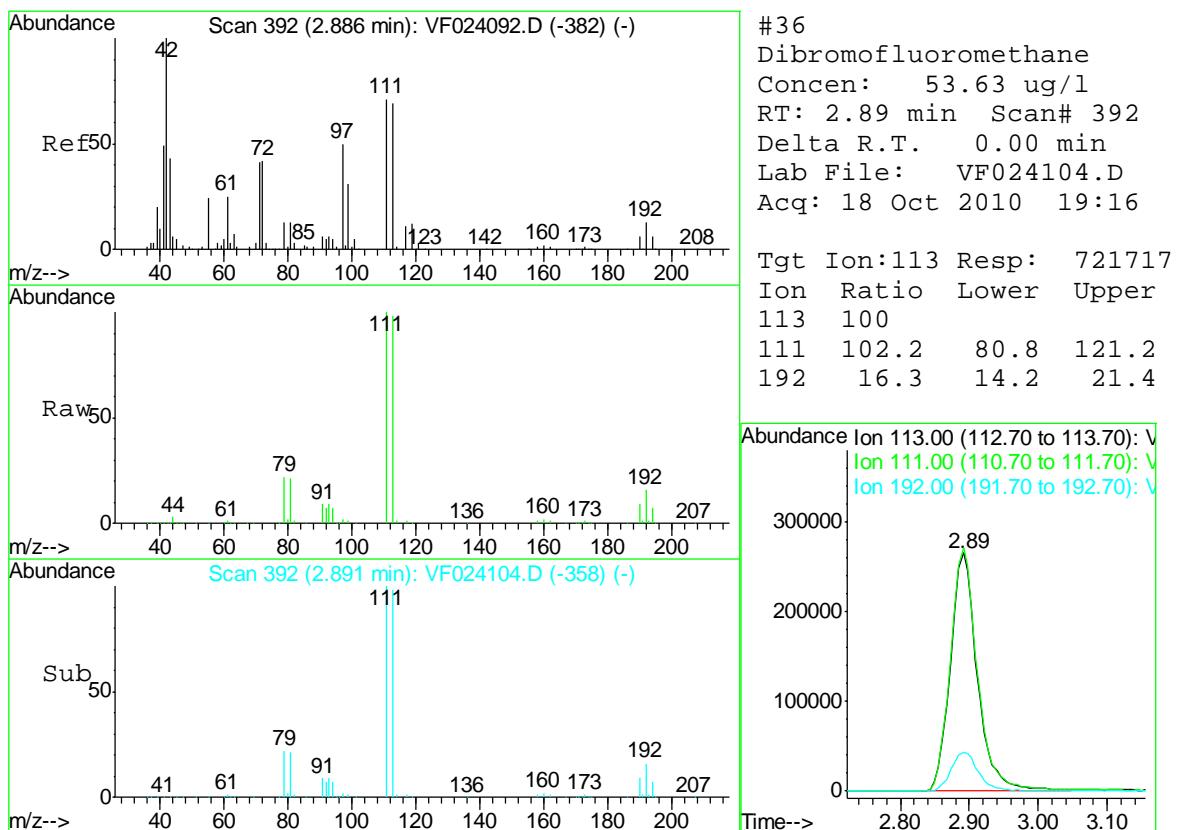
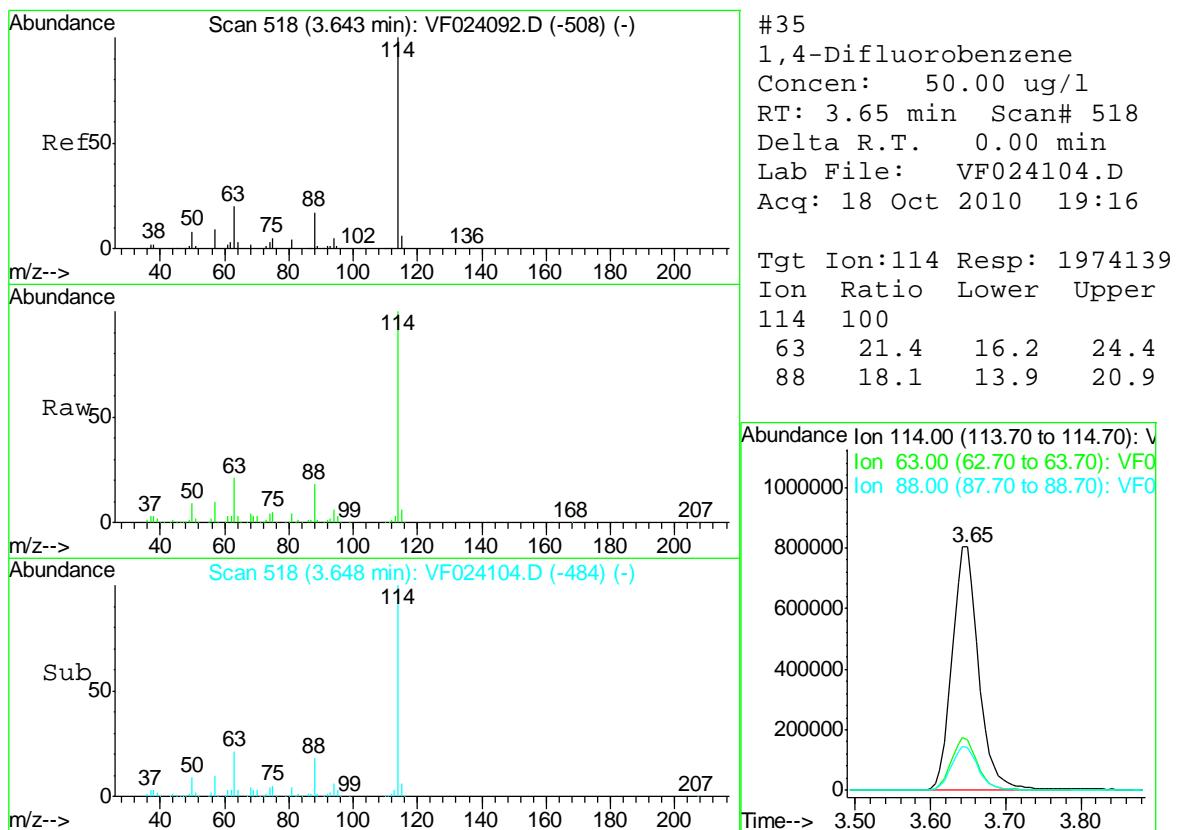
D = Dilution

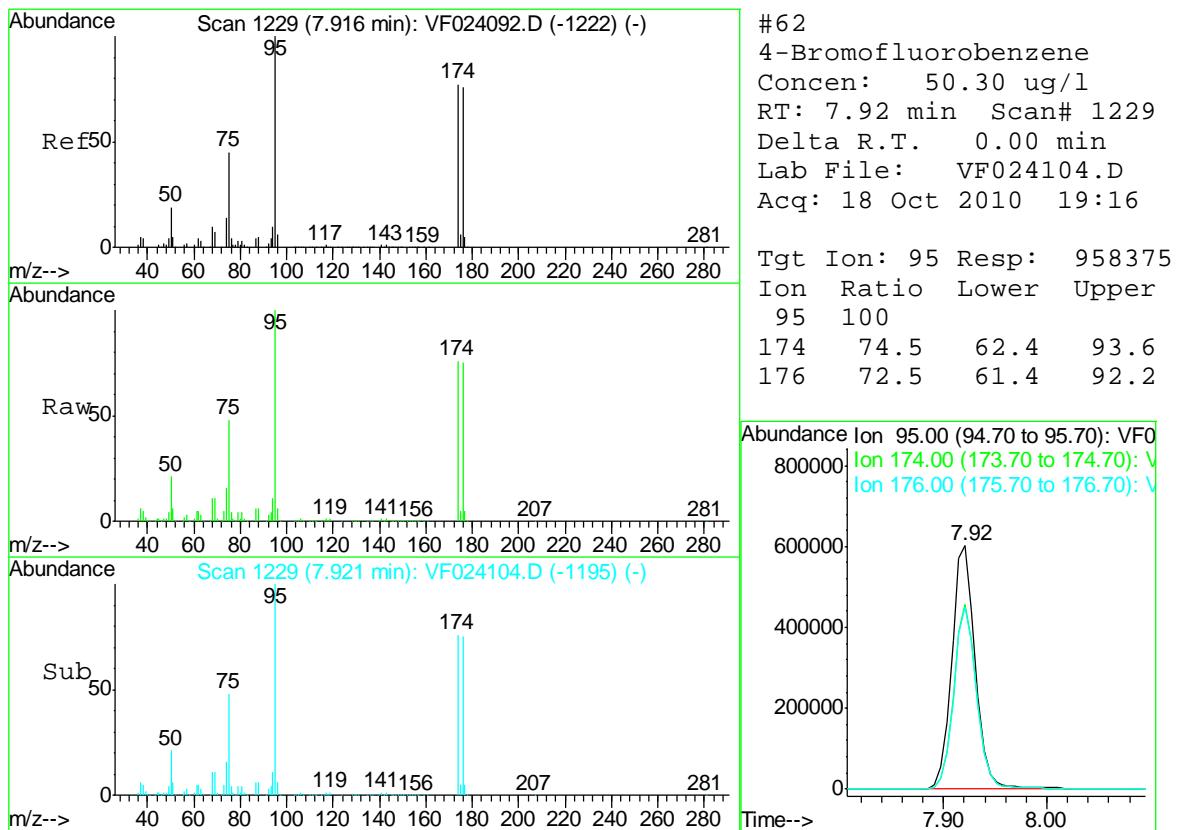
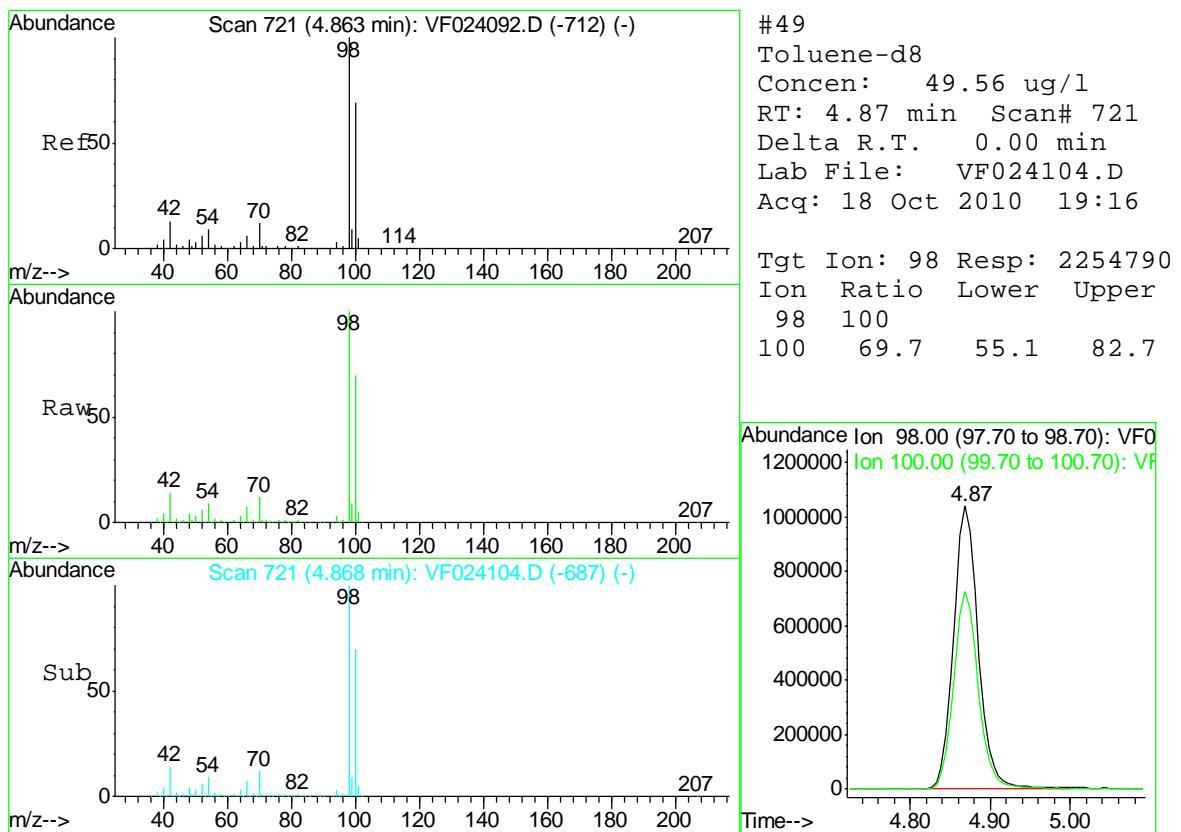
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024104.D  
Acq On : 18 Oct 2010 19:16  
Operator : MS  
Sample : B3902-13  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

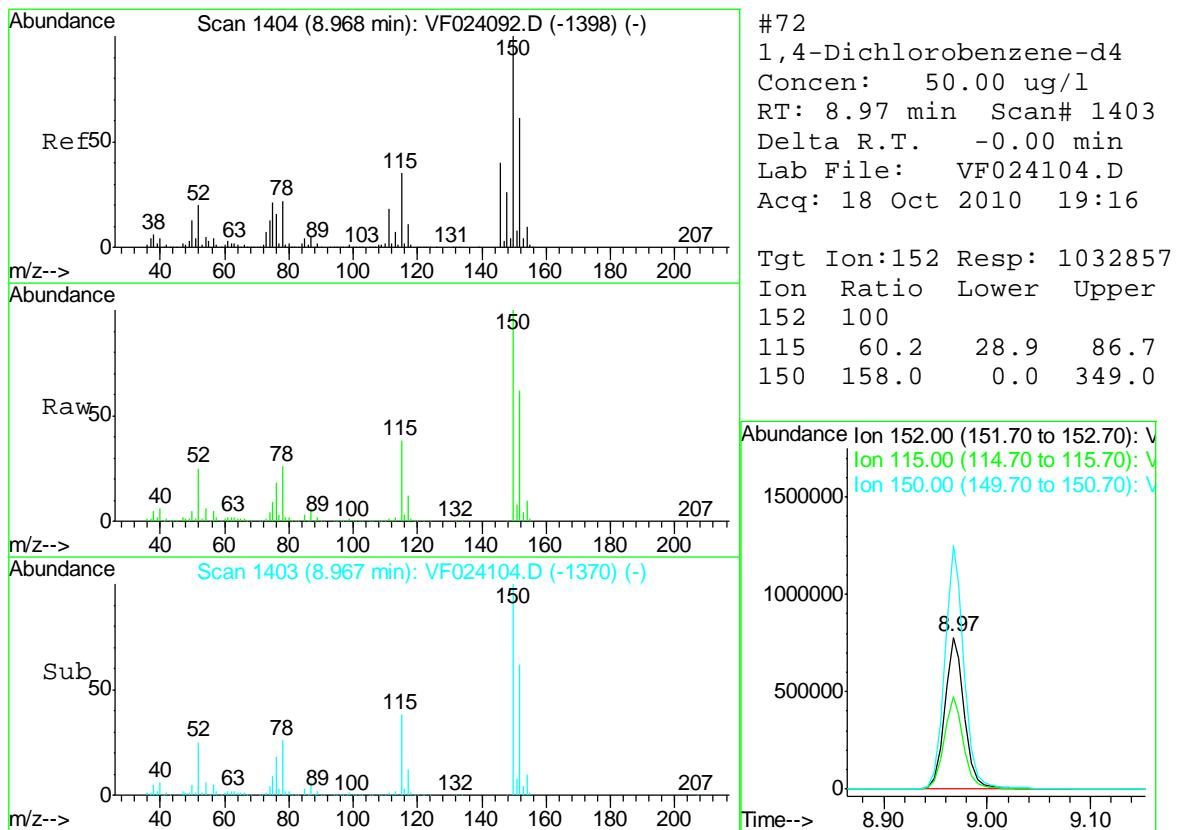
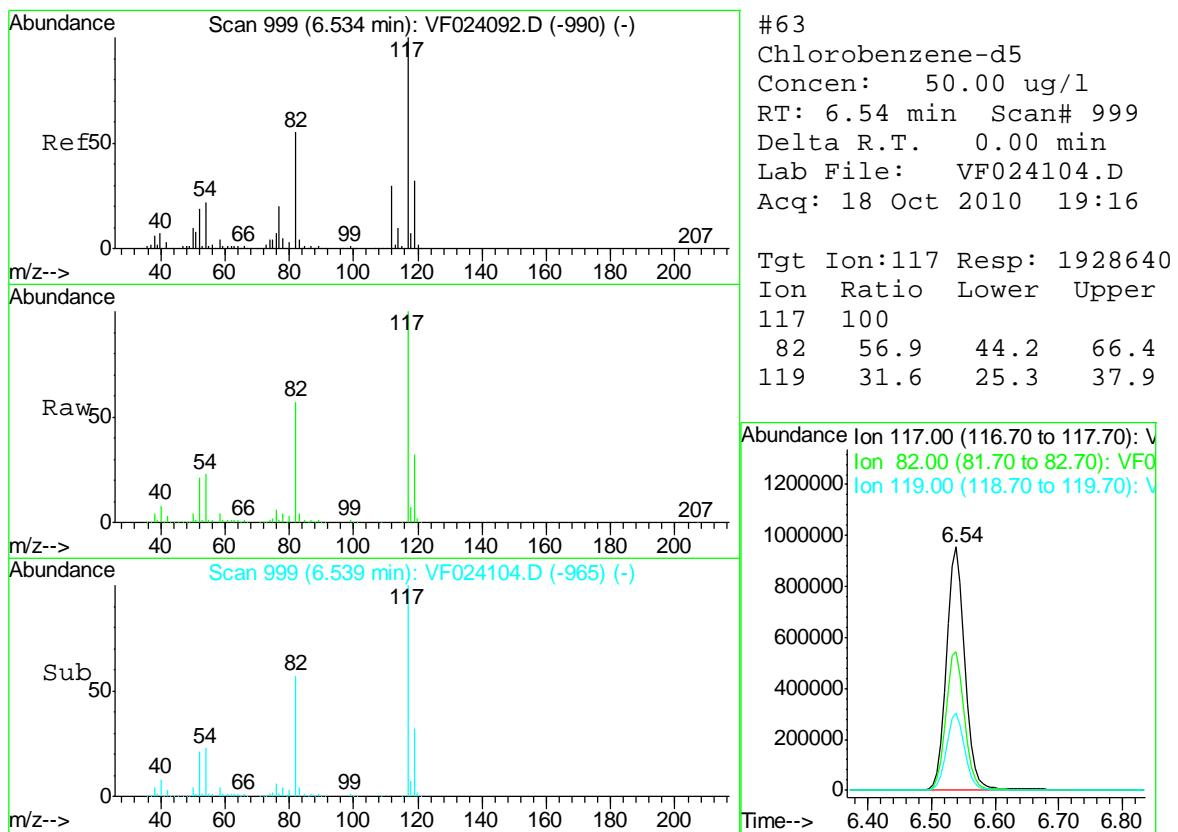
Quant Time: Oct 19 02:16:16 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024104.D  
 Acq On : 18 Oct 2010 19:16  
 Operator : MS  
 Sample : B3902-13  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 19 02:16:16 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	964751	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	1974139	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	1928640	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1032857	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	824831	56.83	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	113.66%	
36) Dibromofluoromethane	2.89	113	721717	53.63	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	107.26%	
49) Toluene-d8	4.87	98	2254790	49.56	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	99.12%	
62) 4-Bromofluorobenzene	7.92	95	958375	50.30	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	100.60%	

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024104.D  
 Acq On : 18 Oct 2010 19:16  
 Operator : MS  
 Sample : B3902-13  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

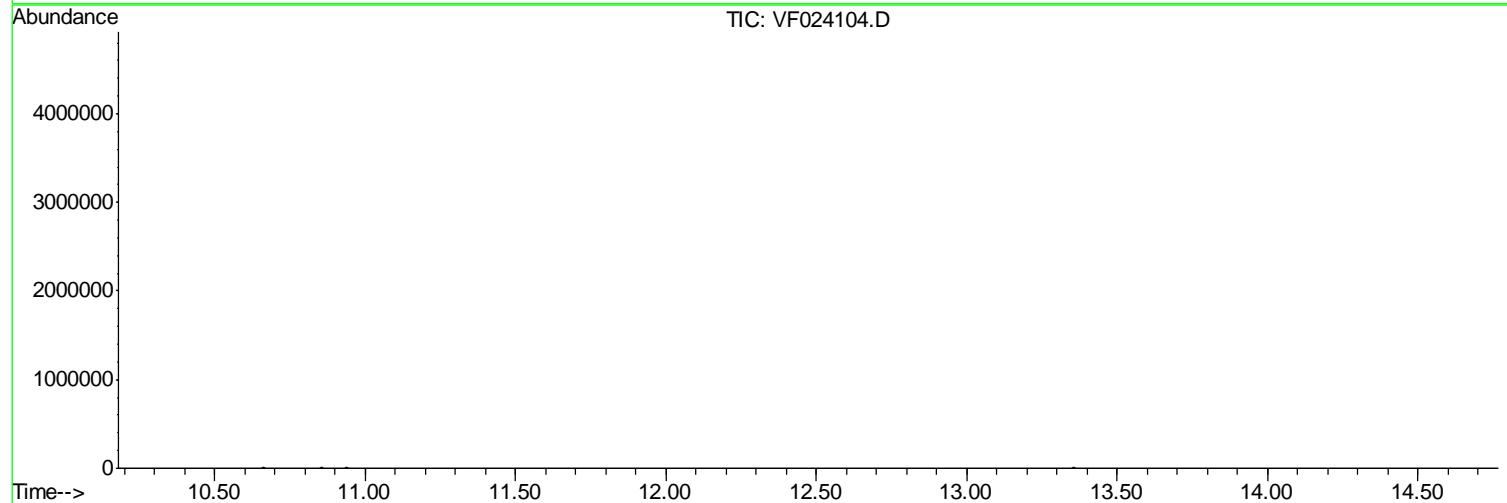
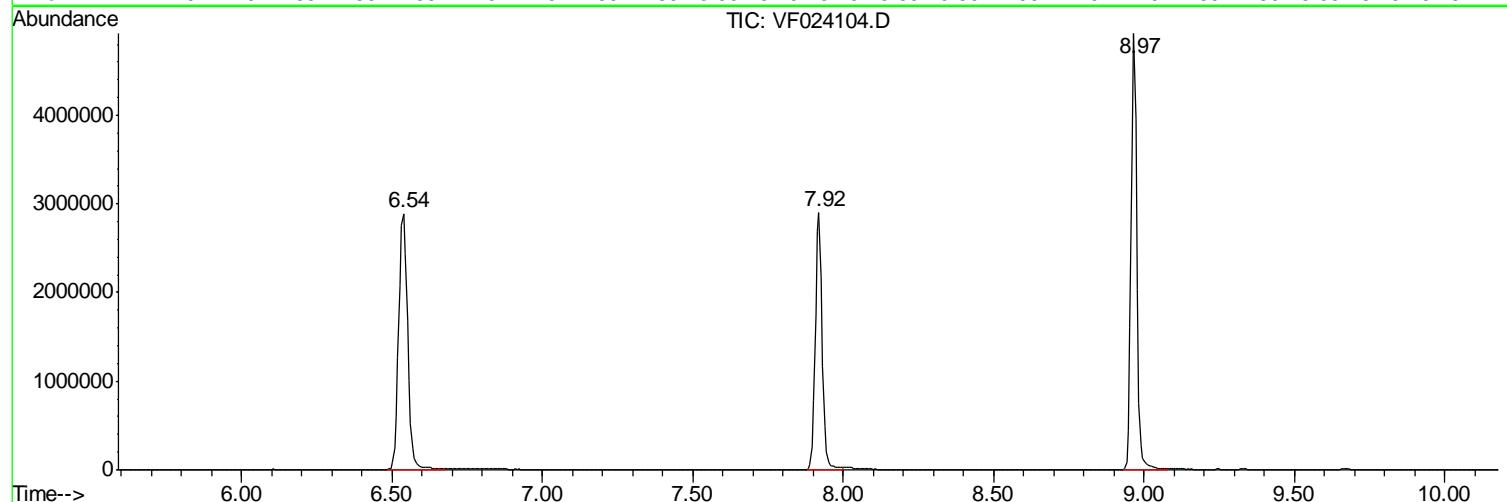
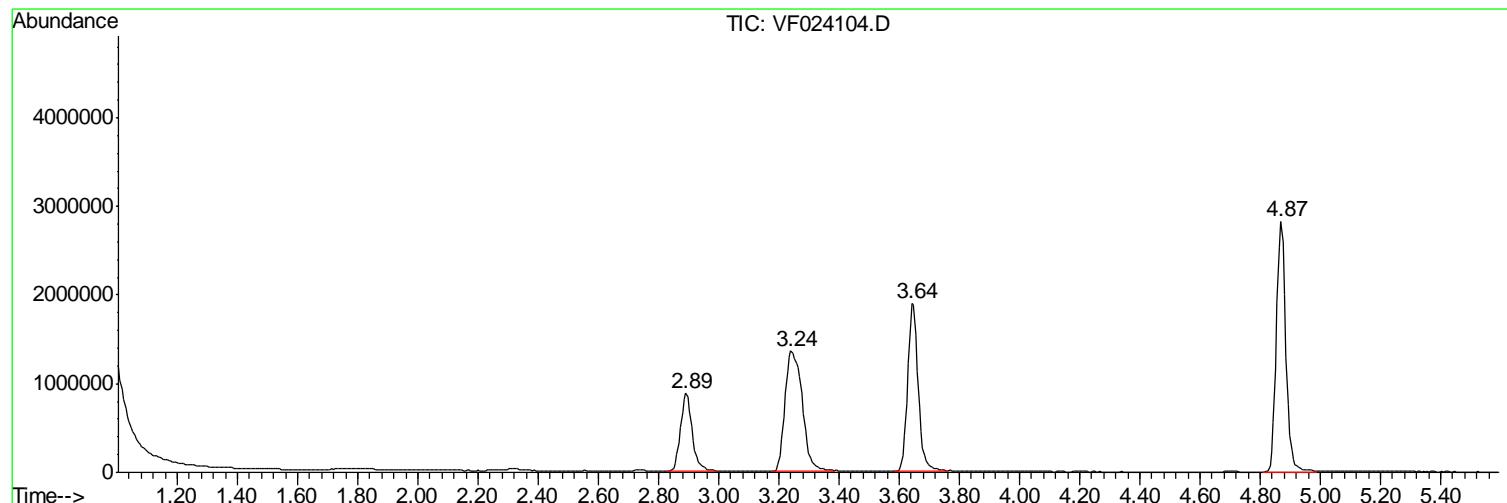
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.891	382	392	409	rBV	877295	2353340	35.85%	6.596%
2	3.240	440	450	474	rBV2	1355626	5450465	83.03%	15.277%
3	3.642	507	517	536	rBV	1894011	4639773	70.68%	13.005%
4	4.868	711	721	741	rBV	2822032	6188492	94.27%	17.346%
5	6.539	990	999	1022	rBV	2884596	5893460	89.77%	16.519%
6	7.921	1222	1229	1242	rBV	2897330	4587389	69.88%	12.858%
7	8.967	1397	1403	1422	rBV	4917633	6564714	100.00%	18.400%

Sum of corrected areas: 35677633

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024104.D  
Acq On : 18 Oct 2010 19:16  
Operator : MS  
Sample : B3902-13  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



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Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024104.D  
Acq On : 18 Oct 2010 19:16  
Operator : MS  
Sample : B3902-13  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024104.D  
Acq On : 18 Oct 2010 19:16  
Operator : MS  
Sample : B3902-13  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-14D	SDG No.:	B3902
Lab Sample ID:	B3902-14	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024105.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-14D	SDG No.:	B3902
Lab Sample ID:	B3902-14	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024105.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	56.3		66 - 150		113%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		76 - 130		107%	SPK: 50
2037-26-5	Toluene-d8	49.9		78 - 121		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.6		70 - 131		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	983012	3.23				
540-36-3	1,4-Difluorobenzene	1991050	3.64				
3114-55-4	Chlorobenzene-d5	1944810	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1036790	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

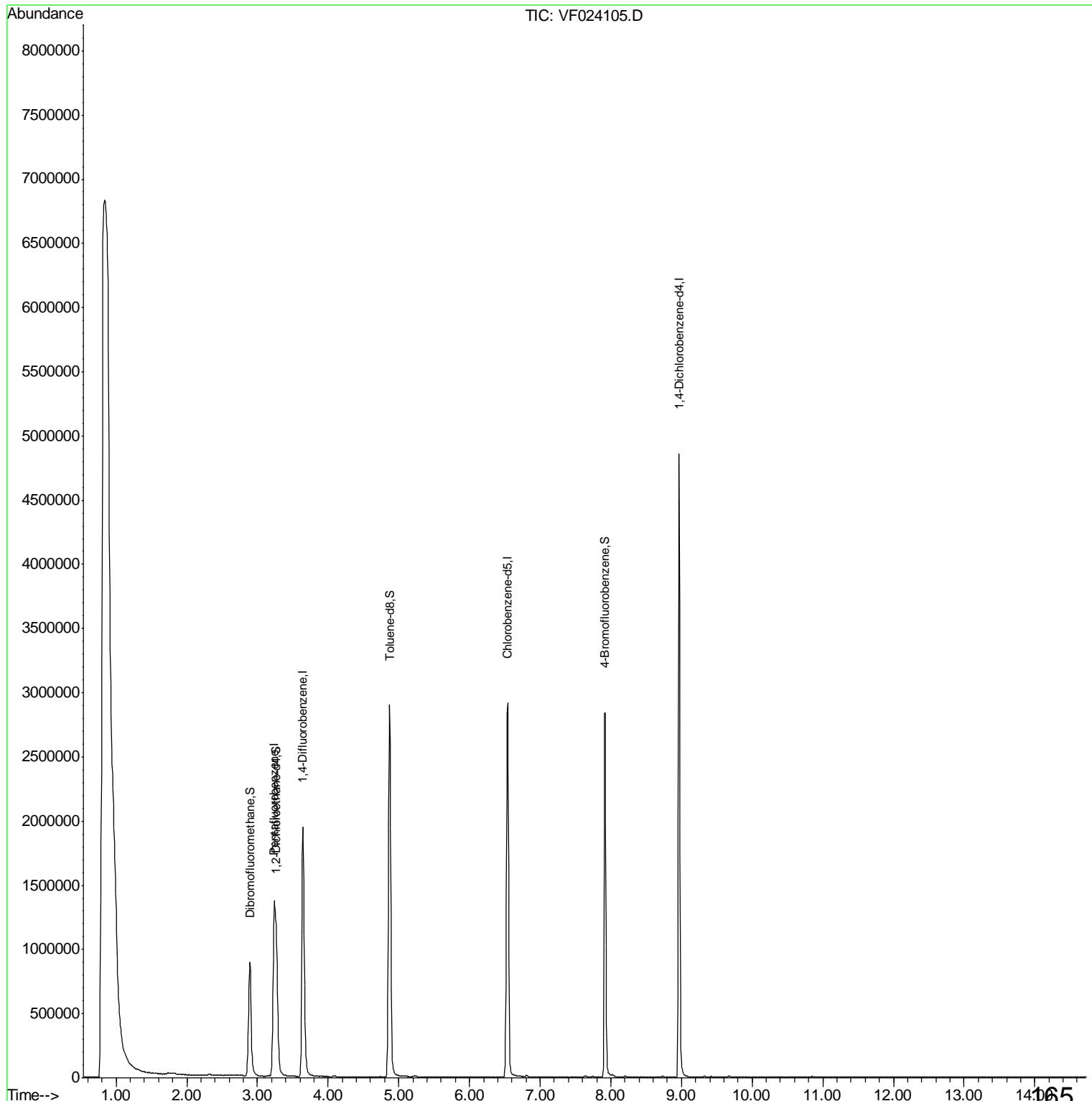
N = Presumptive Evidence of a Compound

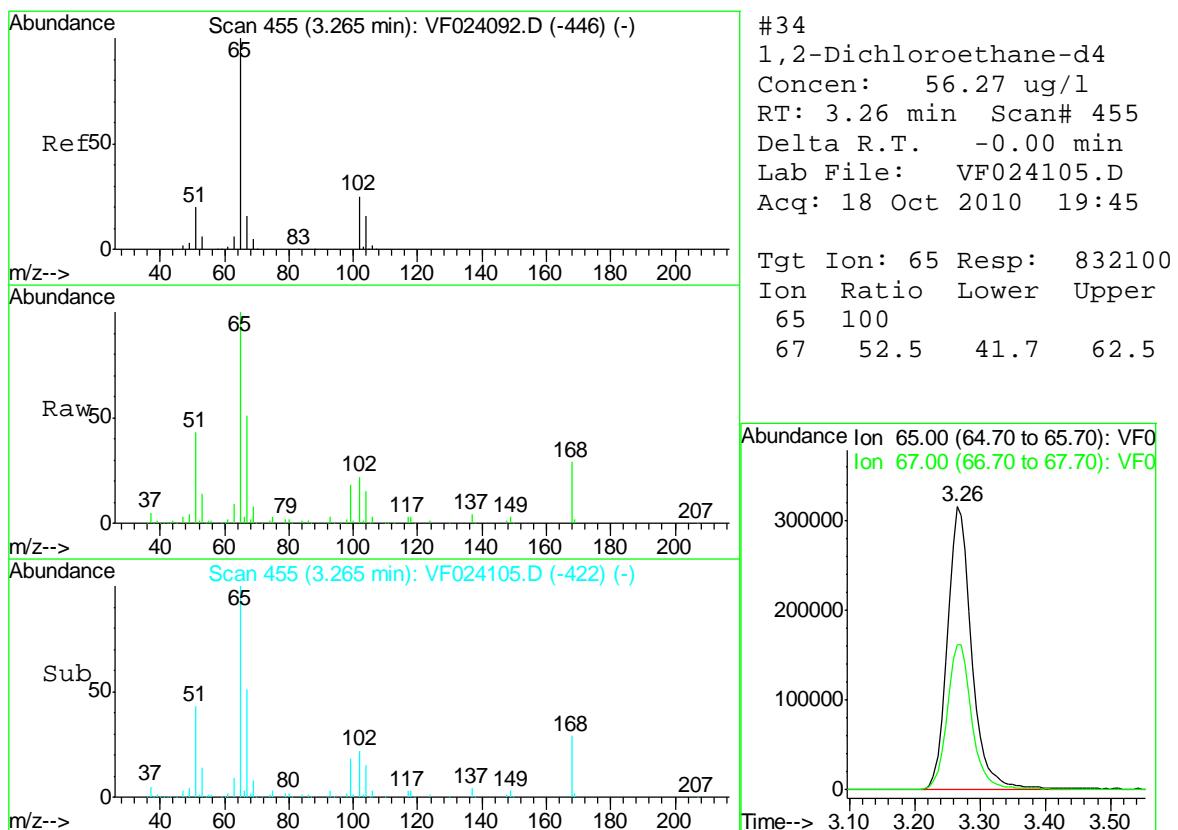
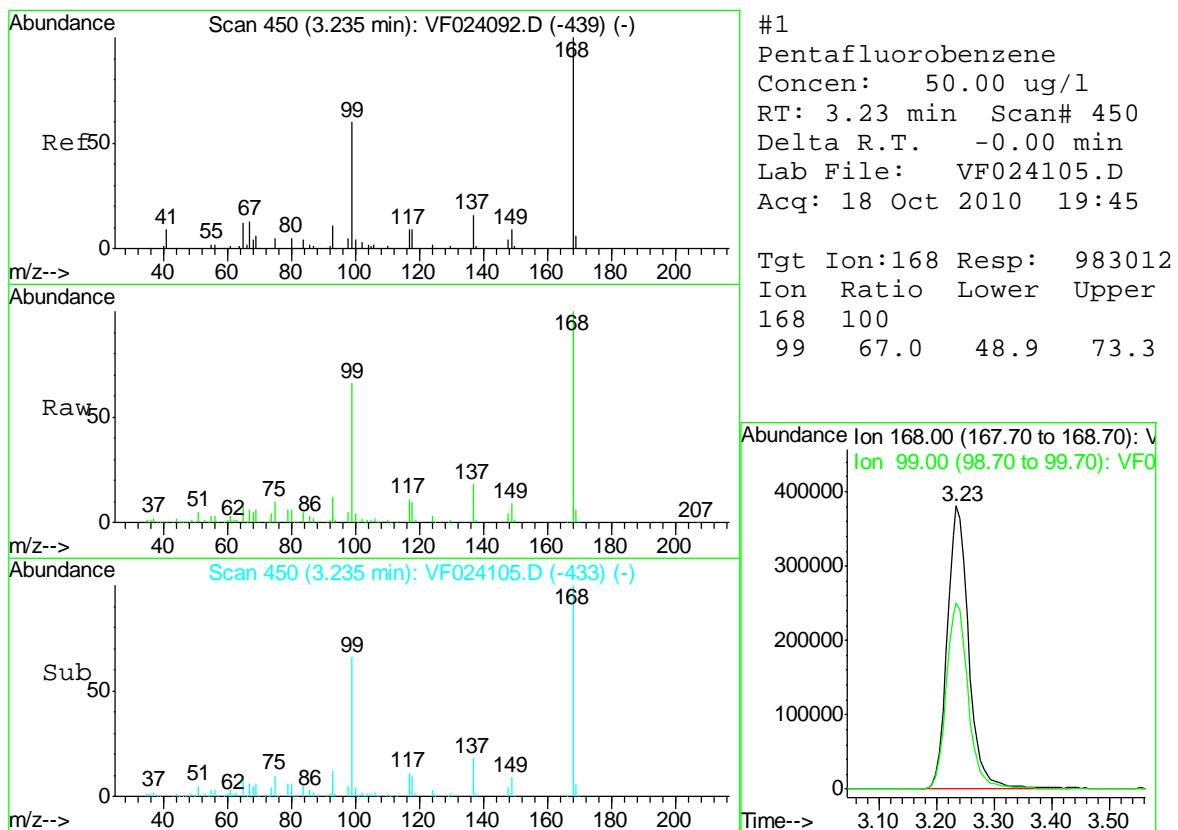
\* = Values outside of QC limits

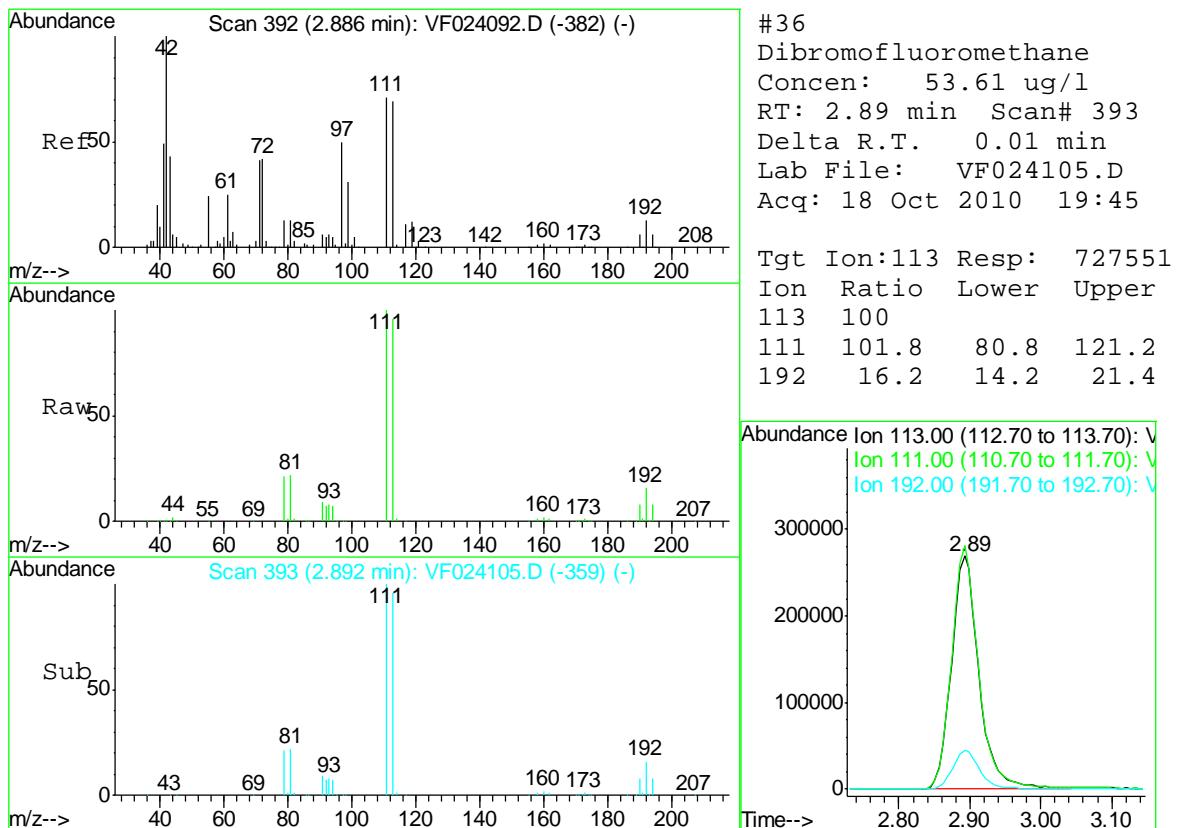
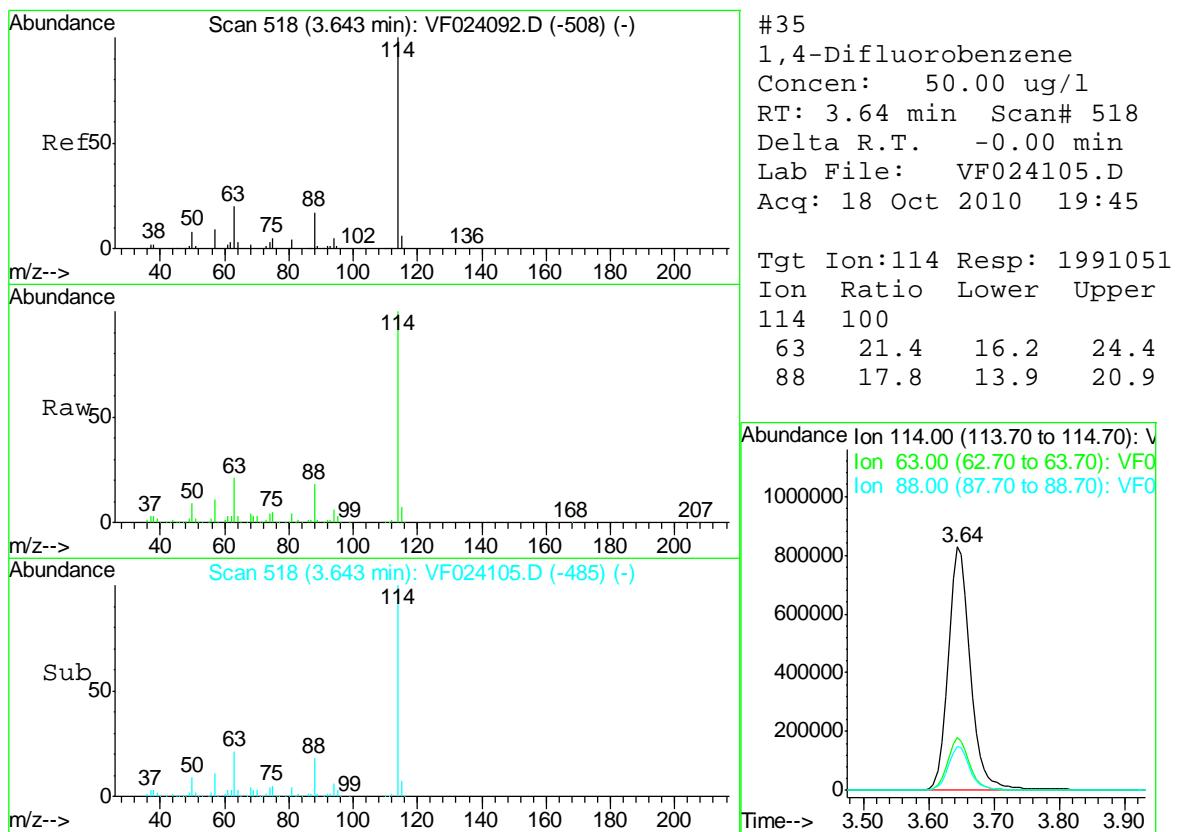
D = Dilution

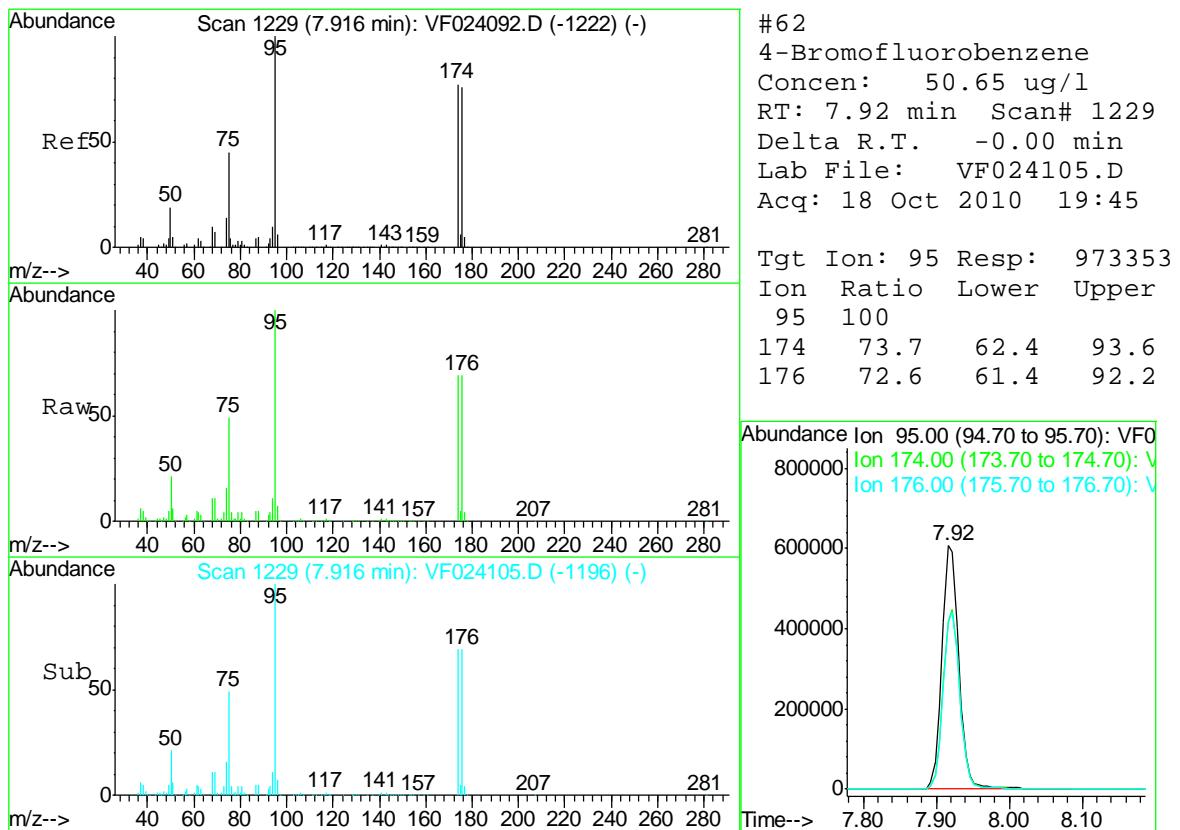
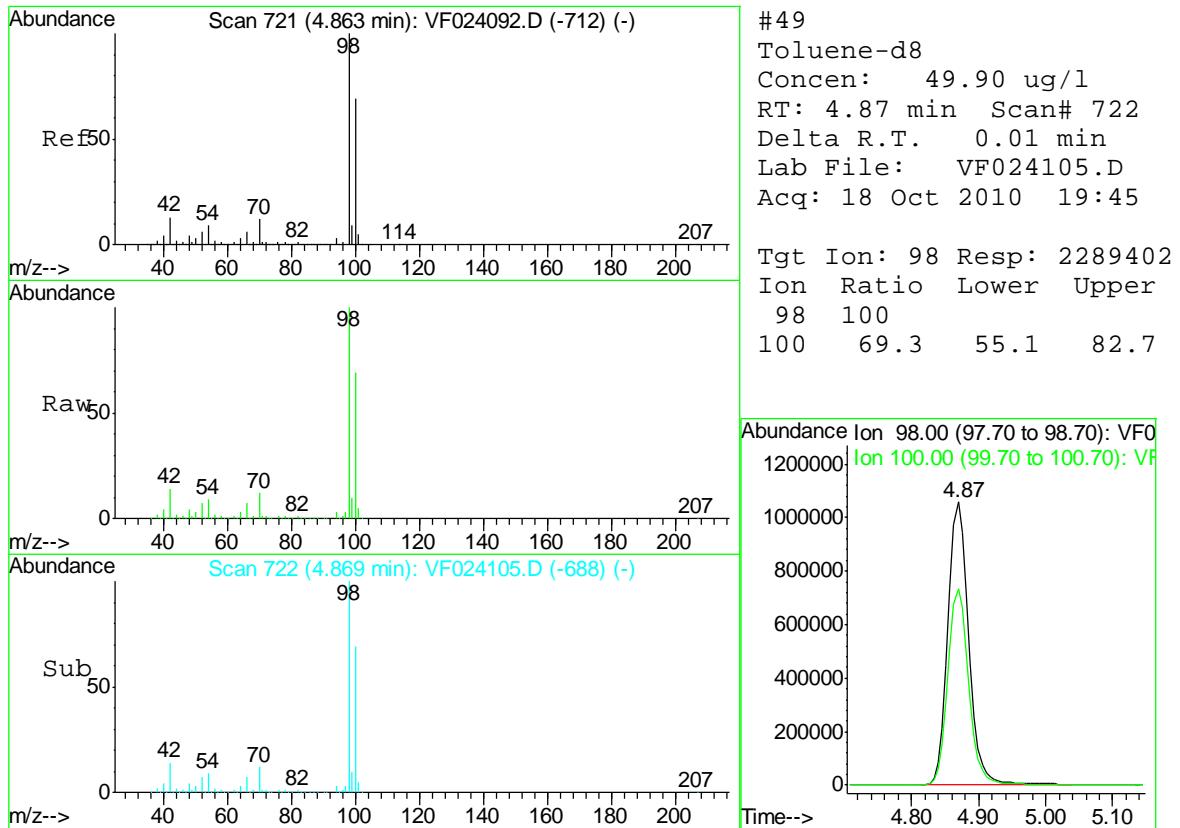
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024105.D  
Acq On : 18 Oct 2010 19:45  
Operator : MS  
Sample : B3902-14  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

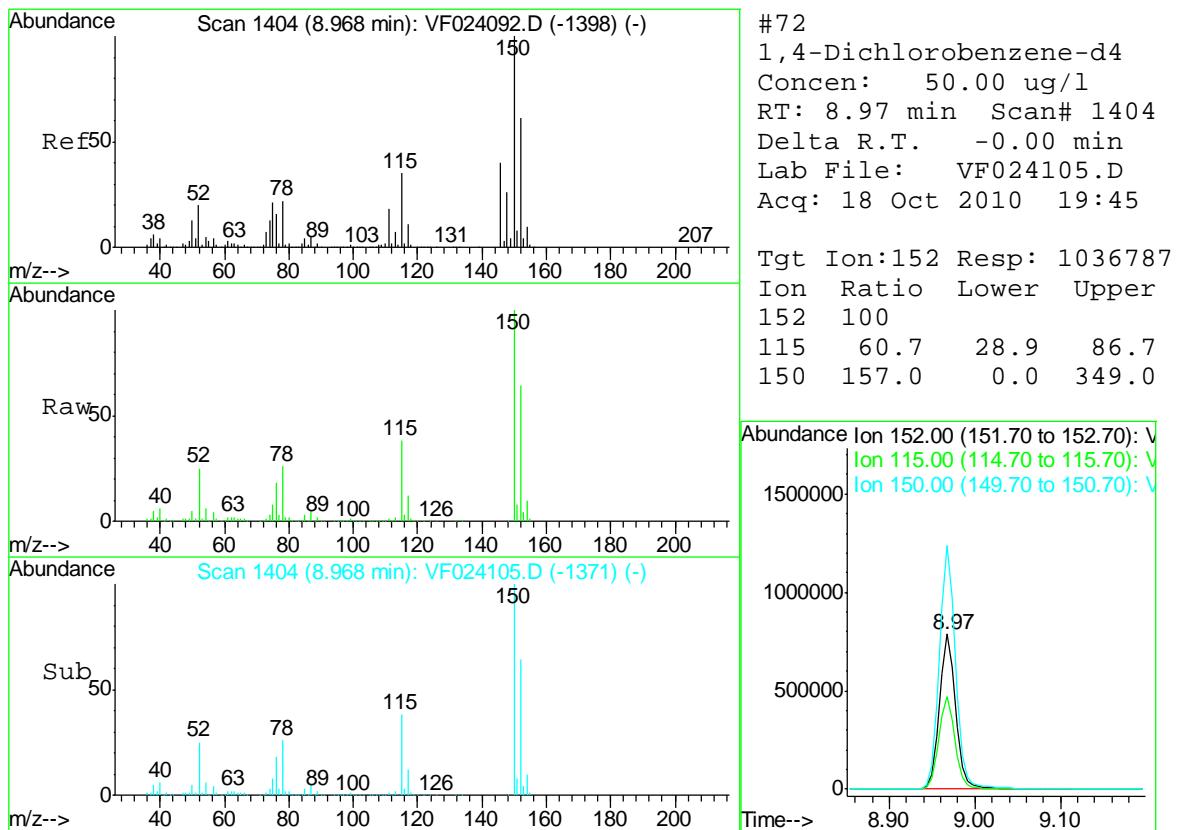
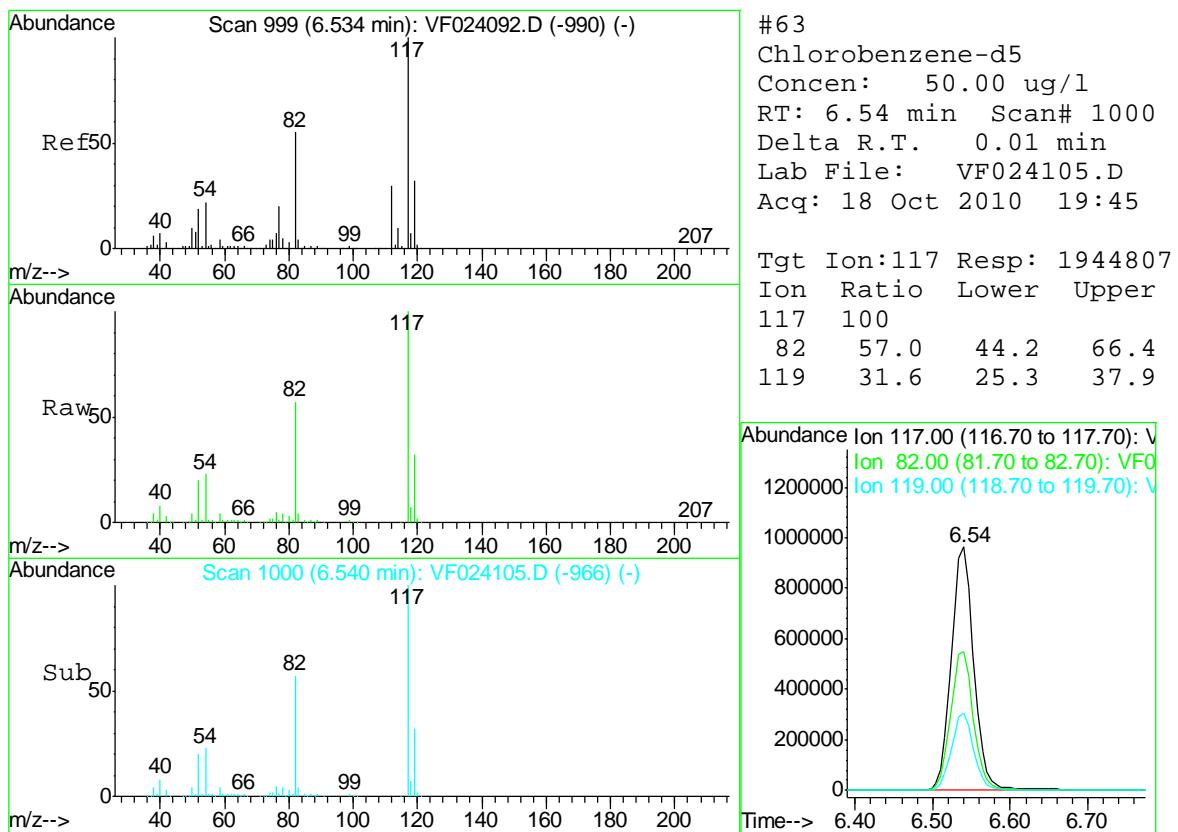
Quant Time: Oct 19 02:17:17 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024105.D  
 Acq On : 18 Oct 2010 19:45  
 Operator : MS  
 Sample : B3902-14  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 19 02:17:17 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	983012	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	1991051	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	1944807	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1036787	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	832100	56.27	ug/l	0.00
Spiked Amount 50.000	Range 66 - 150		Recovery =	112.54%		
36) Dibromofluoromethane	2.89	113	727551	53.61	ug/l	0.00
Spiked Amount 50.000	Range 76 - 130		Recovery =	107.22%		
49) Toluene-d8	4.87	98	2289402	49.90	ug/l	0.00
Spiked Amount 50.000	Range 78 - 121		Recovery =	99.80%		
62) 4-Bromofluorobenzene	7.92	95	973353	50.65	ug/l	0.00
Spiked Amount 50.000	Range 70 - 131		Recovery =	101.30%		

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024105.D  
 Acq On : 18 Oct 2010 19:45  
 Operator : MS  
 Sample : B3902-14  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 16 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

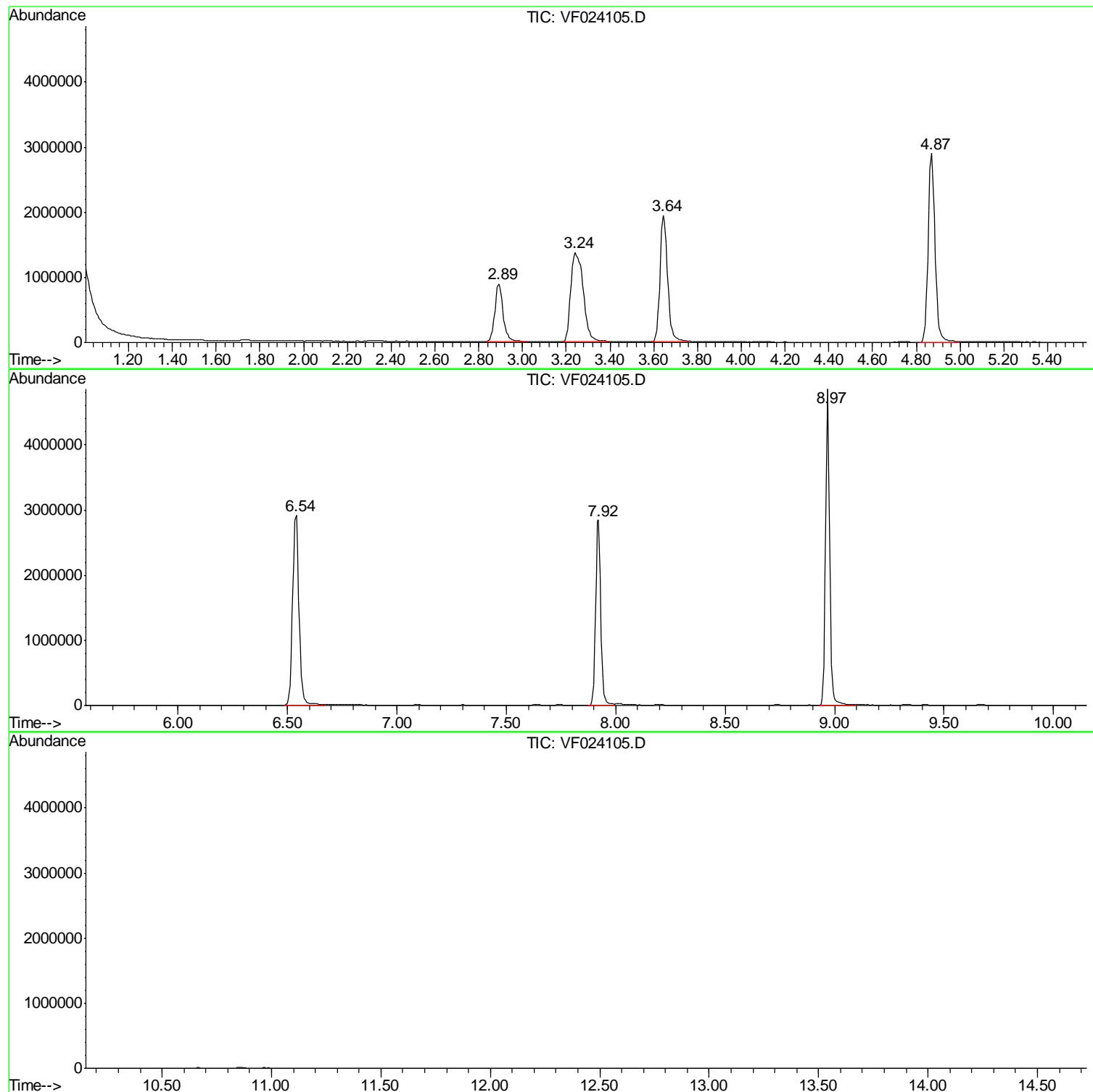
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.892	383	393	414	rVB	887296	2342131	35.63%	6.522%
2	3.241	441	451	477	rBV2	1368288	5426250	82.55%	15.110%
3	3.643	509	518	537	rBV	1945967	4653957	70.80%	12.959%
4	4.869	713	722	743	rBV	2899910	6298418	95.81%	17.538%
5	6.540	990	1000	1022	rBV	2917407	5974374	90.89%	16.636%
6	7.922	1222	1230	1242	rBV	2840938	4643403	70.64%	12.930%
7	8.968	1398	1404	1426	rBV	4857751	6573545	100.00%	18.305%

Sum of corrected areas: 35912078

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024105.D  
Acq On : 18 Oct 2010 19:45  
Operator : MS  
Sample : B3902-14  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024105.D  
Acq On : 18 Oct 2010 19:45  
Operator : MS  
Sample : B3902-14  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024105.D  
Acq On : 18 Oct 2010 19:45  
Operator : MS  
Sample : B3902-14  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

---

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-UK-3	SDG No.:	B3902
Lab Sample ID:	B3902-15	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024114.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	2.8		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1		0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	3		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	2.1		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-UK-3	SDG No.:	B3902
Lab Sample ID:	B3902-15	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024114.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1.2		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	44.7		66 - 150		89%	SPK: 50
1868-53-7	Dibromofluoromethane	47.4		76 - 130		95%	SPK: 50
2037-26-5	Toluene-d8	48.3		78 - 121		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.3		70 - 131		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1471970		3.24			
540-36-3	1,4-Difluorobenzene	2788660		3.65			
3114-55-4	Chlorobenzene-d5	2675960		6.54			
3855-82-1	1,4-Dichlorobenzene-d4	1480590		8.97			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

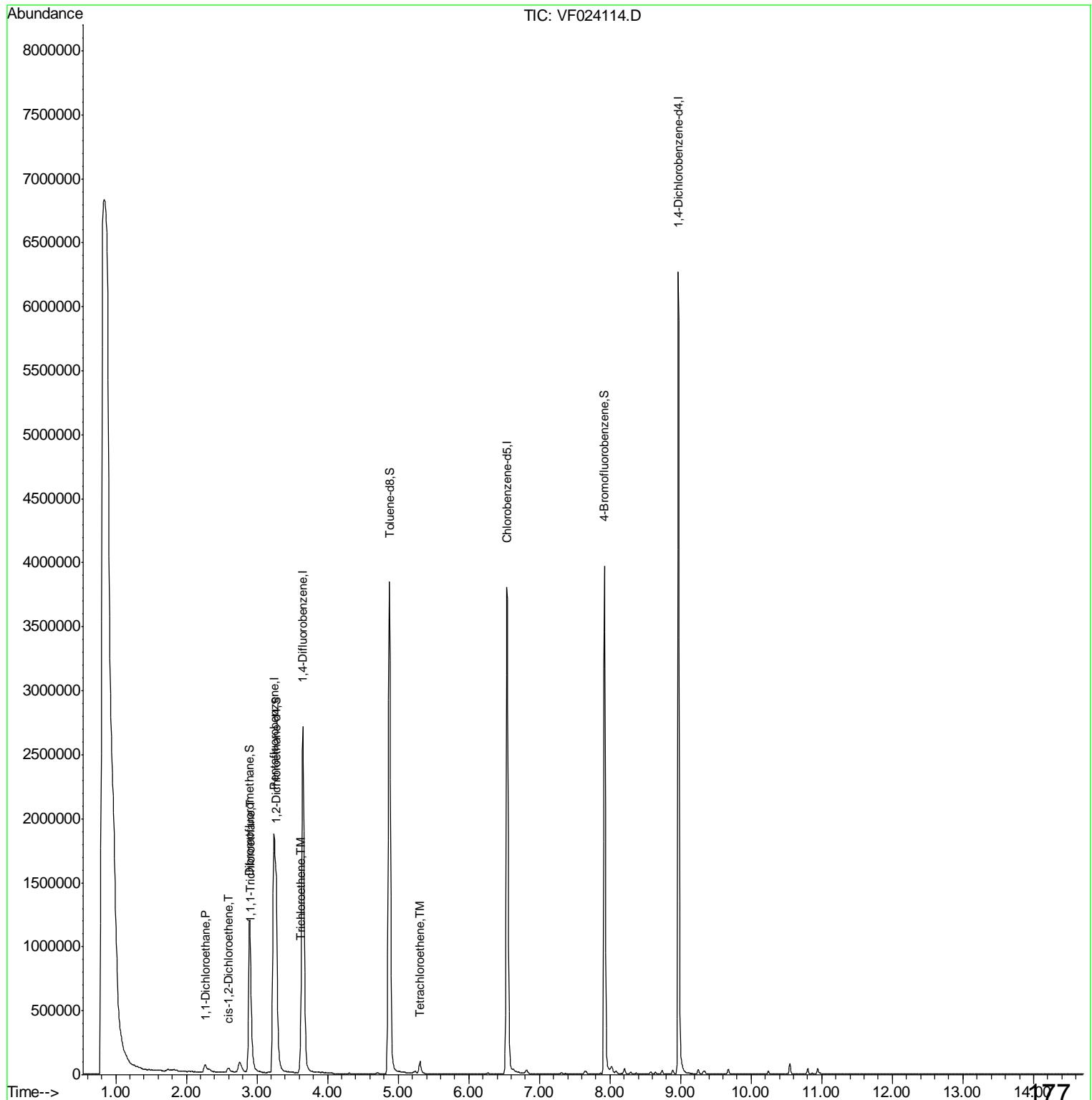
N = Presumptive Evidence of a Compound

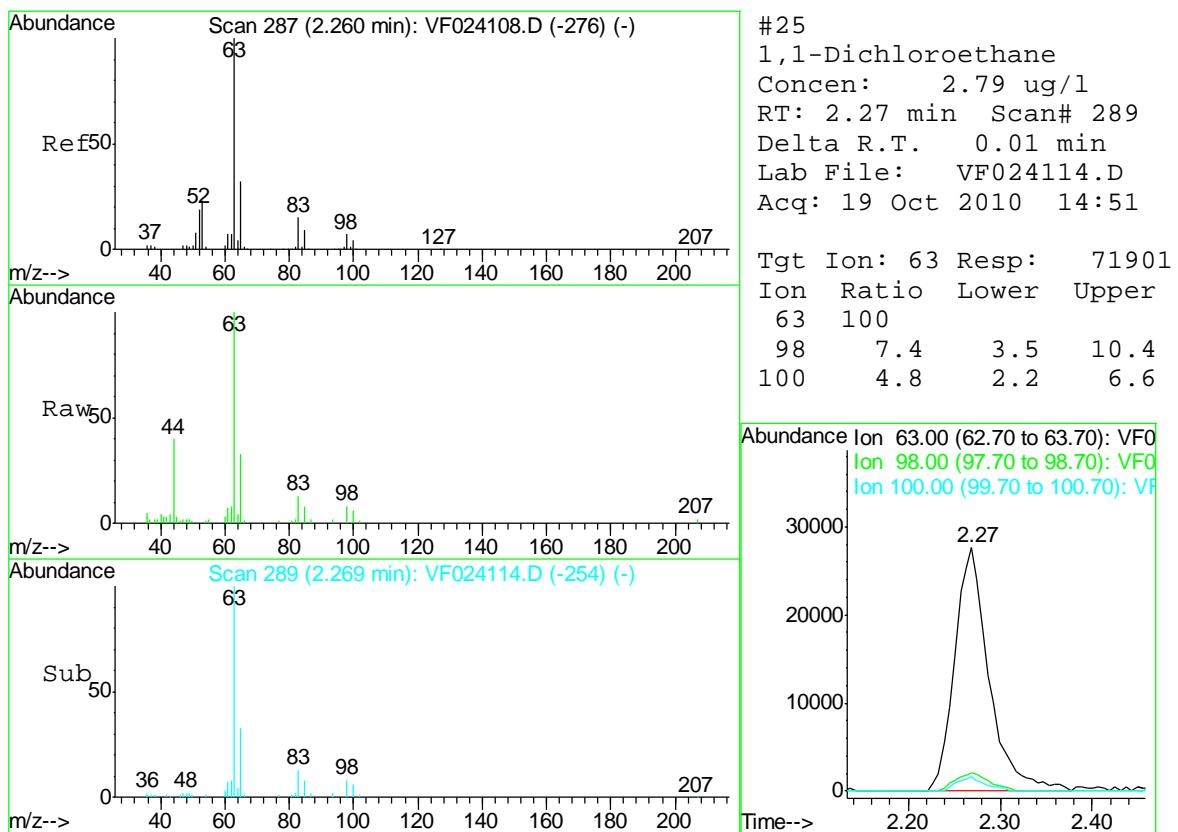
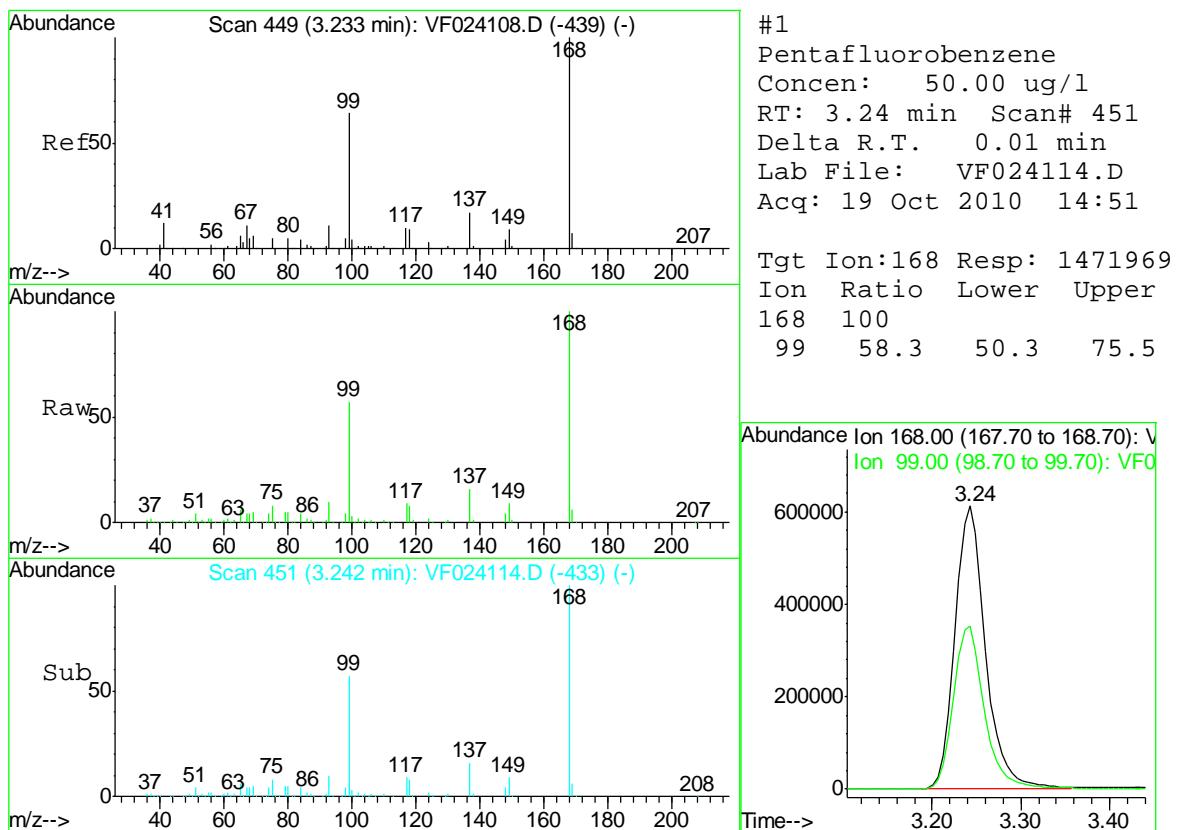
\* = Values outside of QC limits

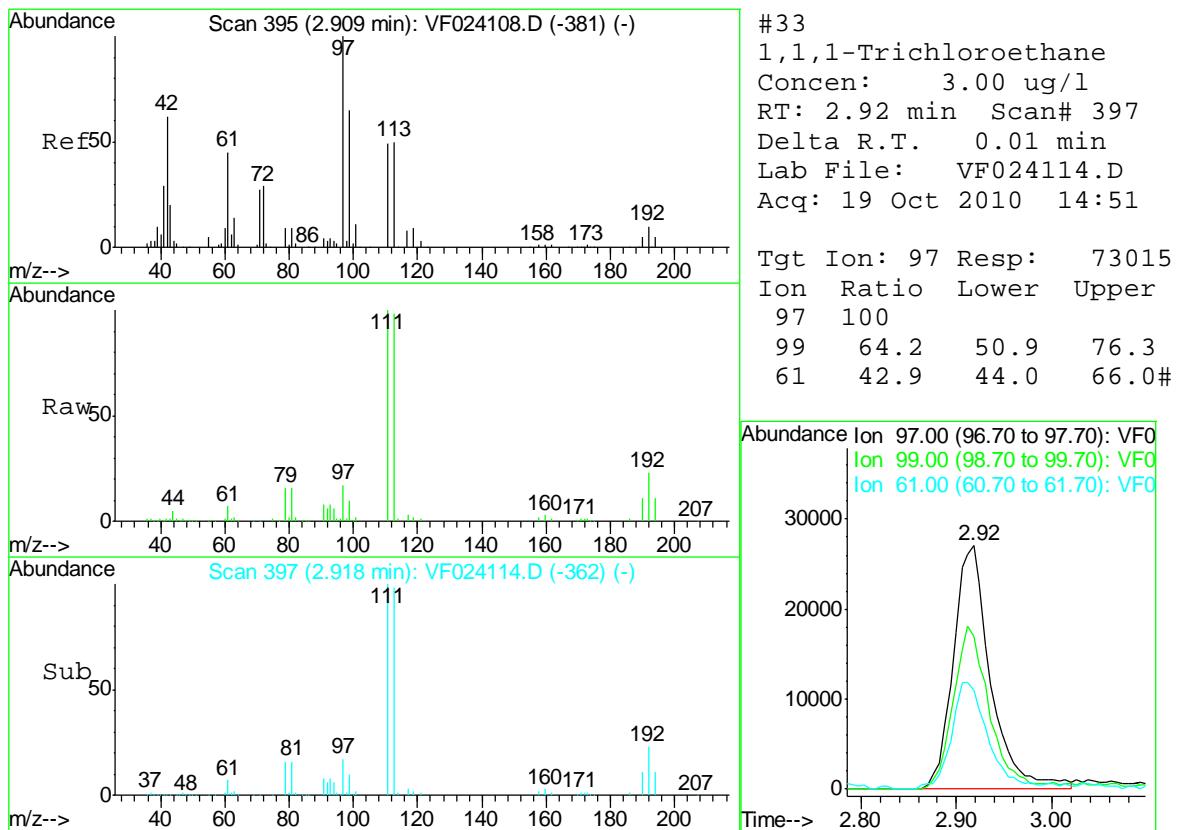
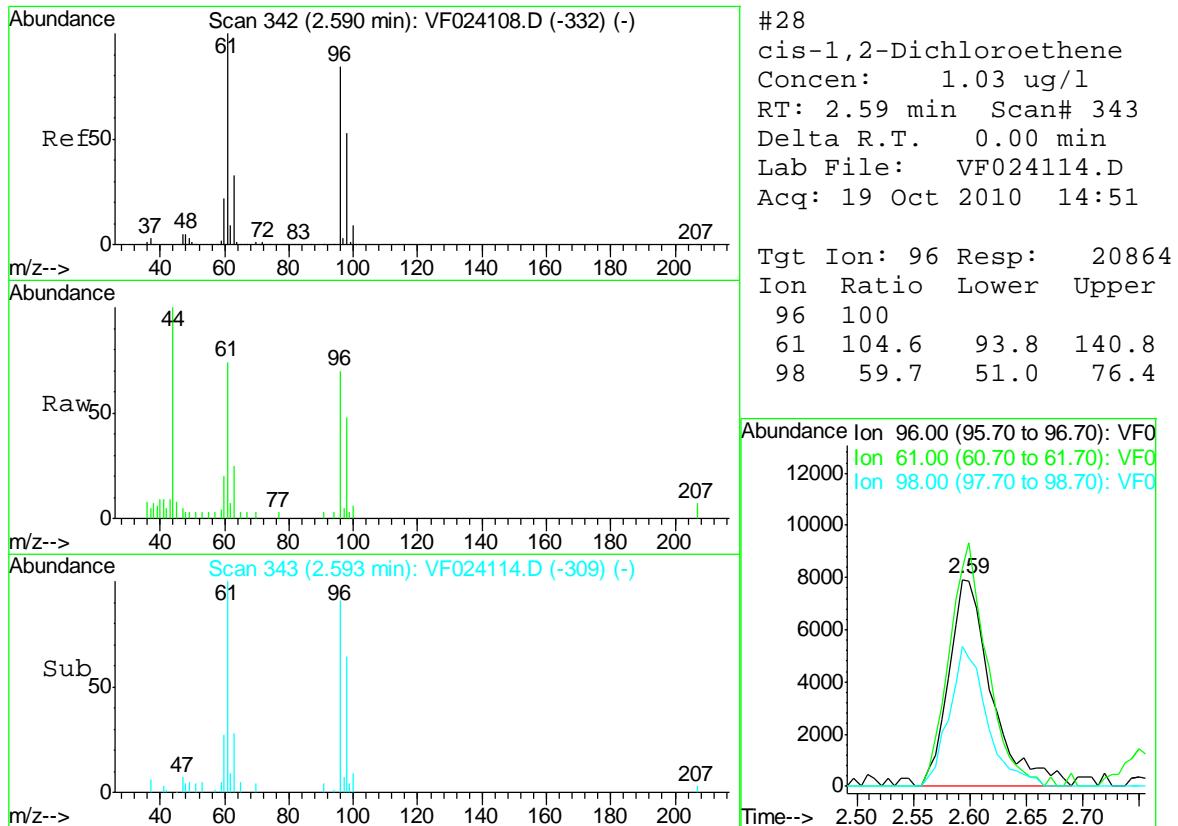
D = Dilution

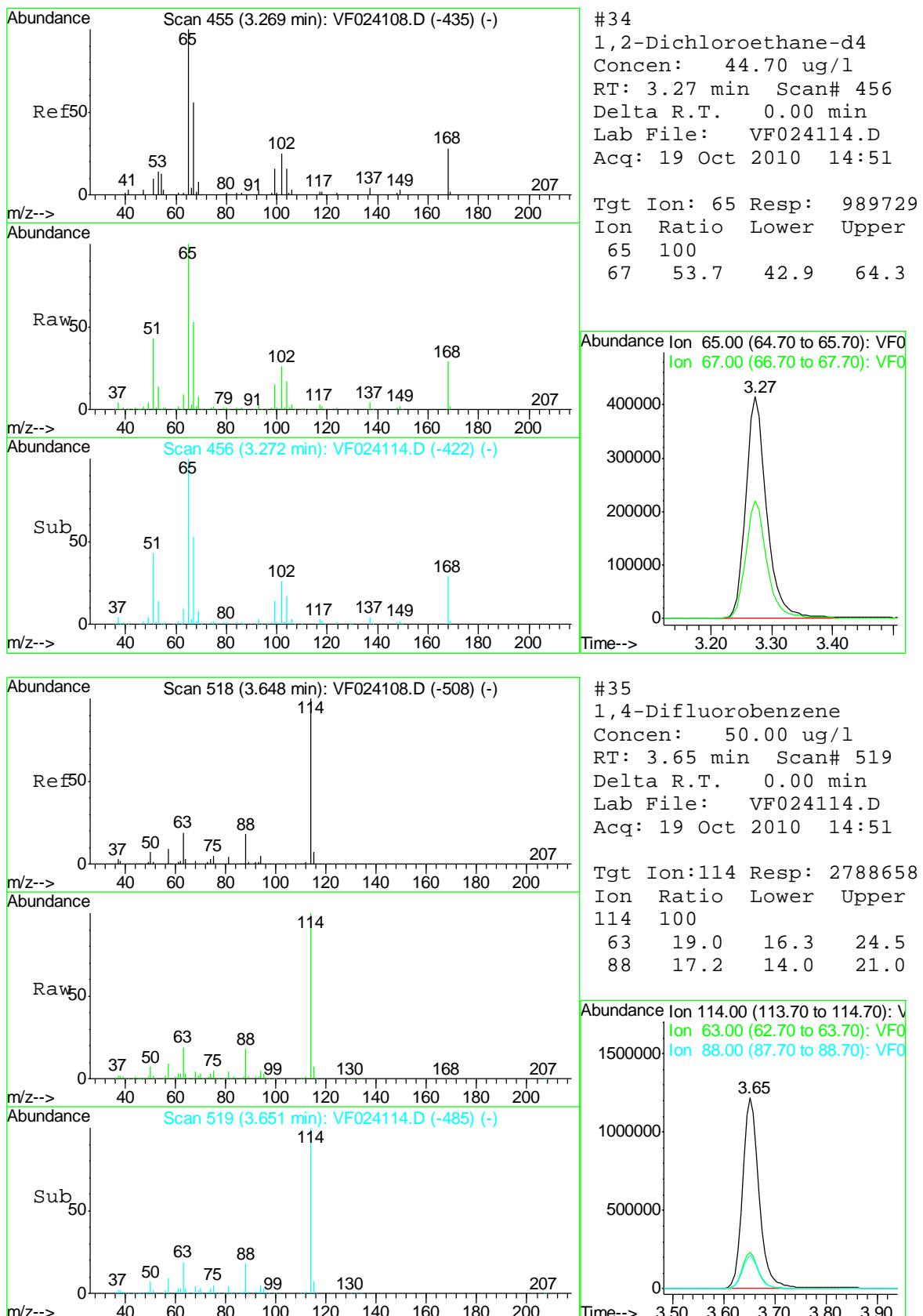
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Data File : VF024114.D  
Acq On : 19 Oct 2010 14:51  
Operator : MS  
Sample : B3902-15  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

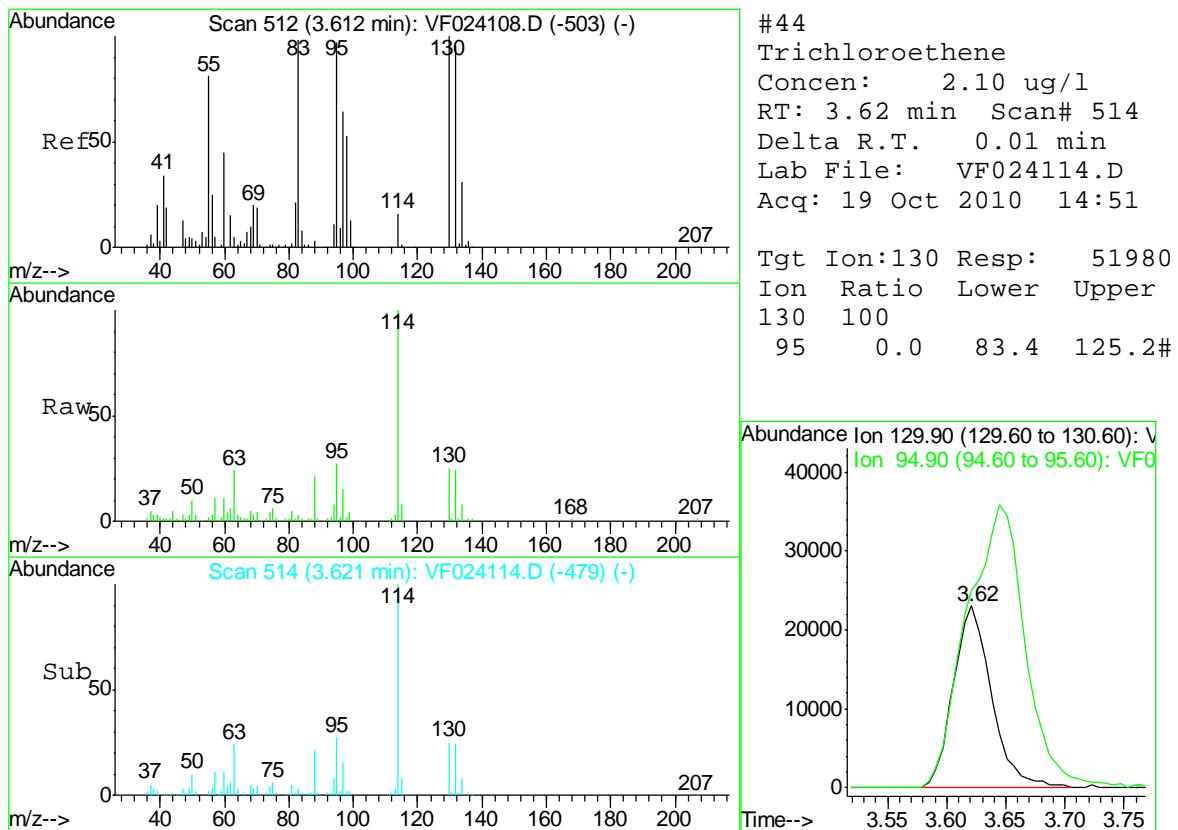
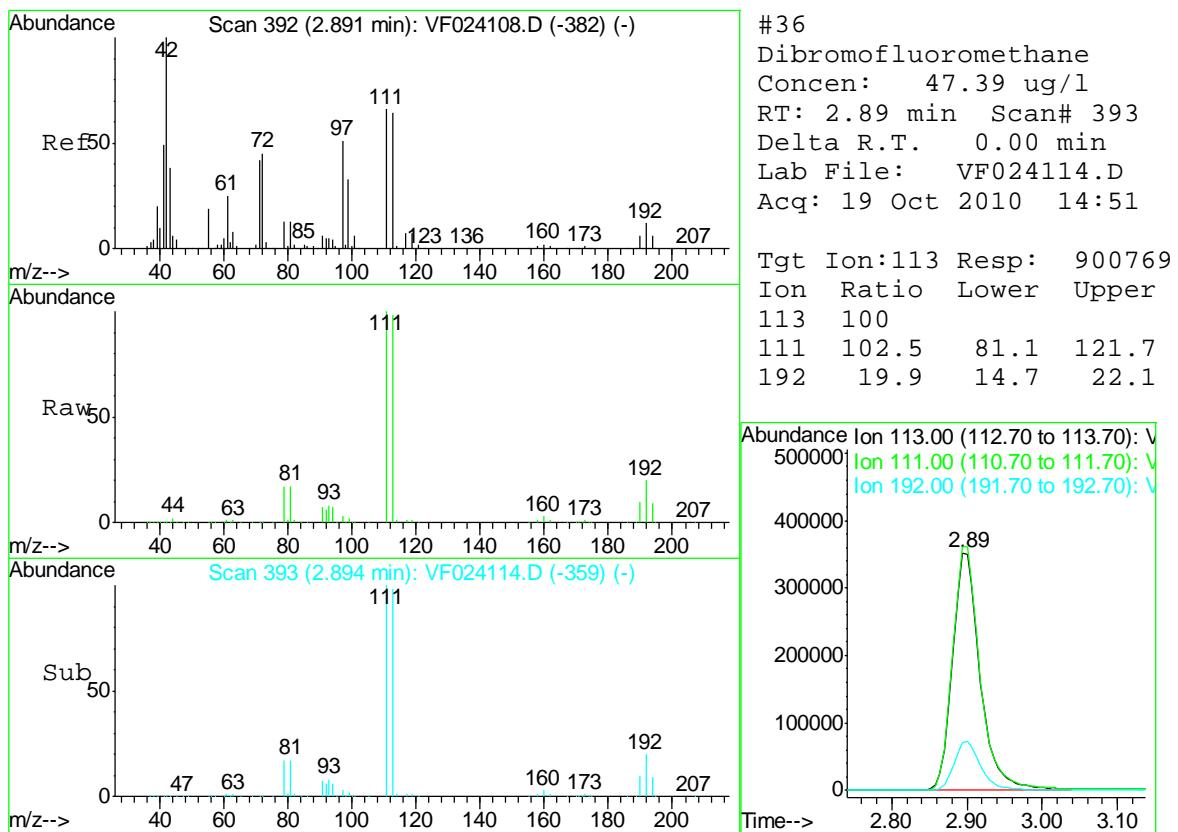
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Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

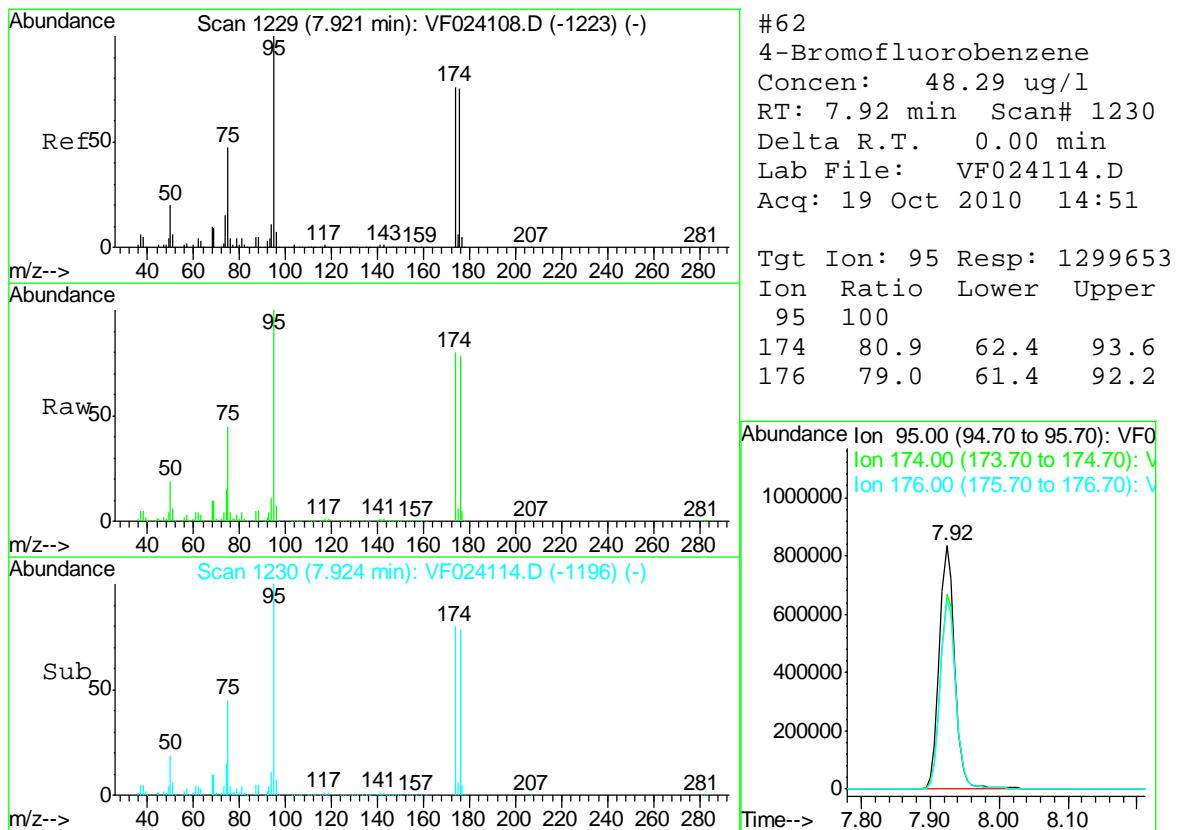
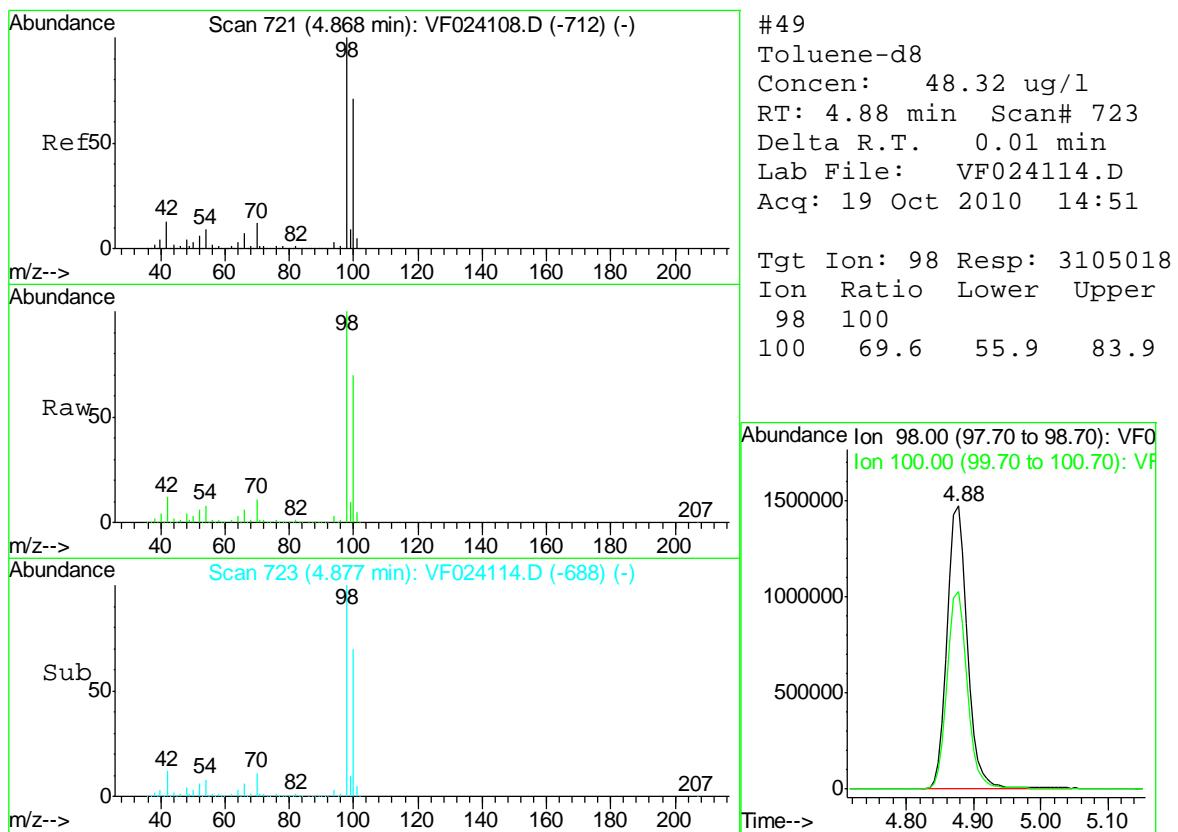


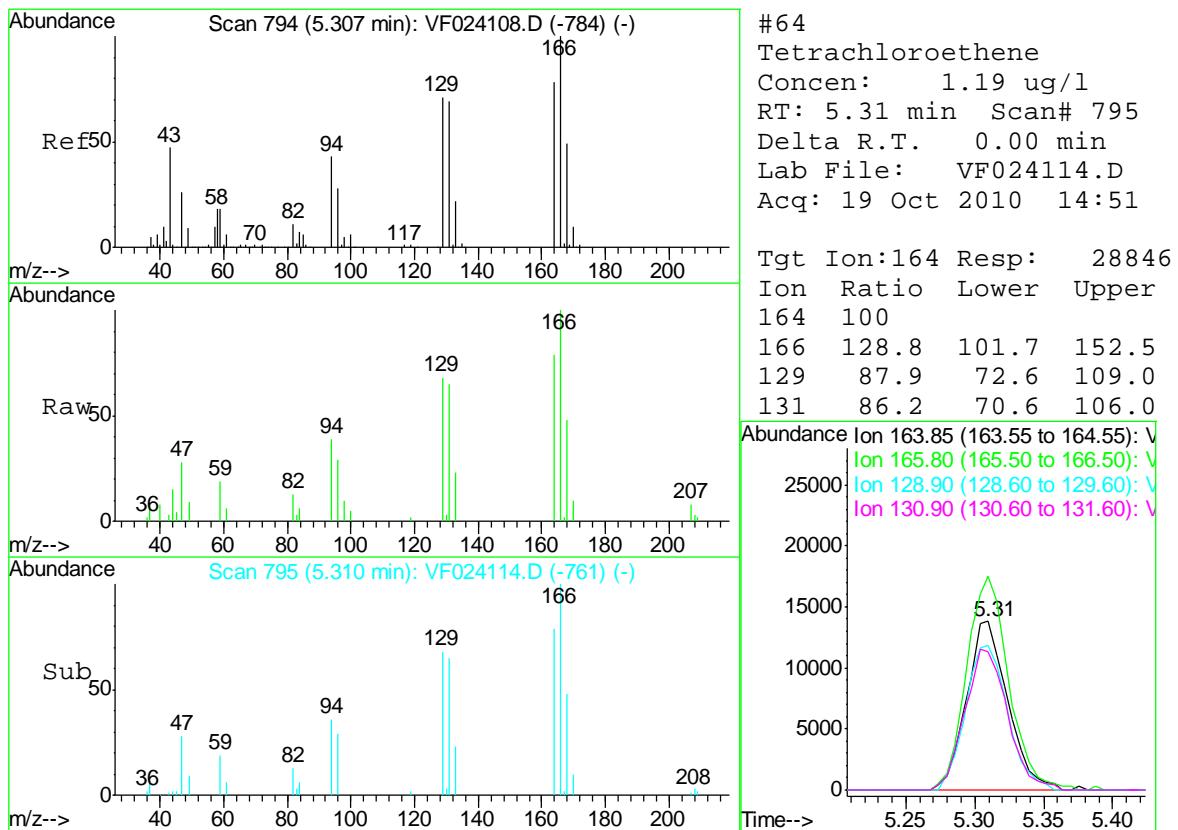
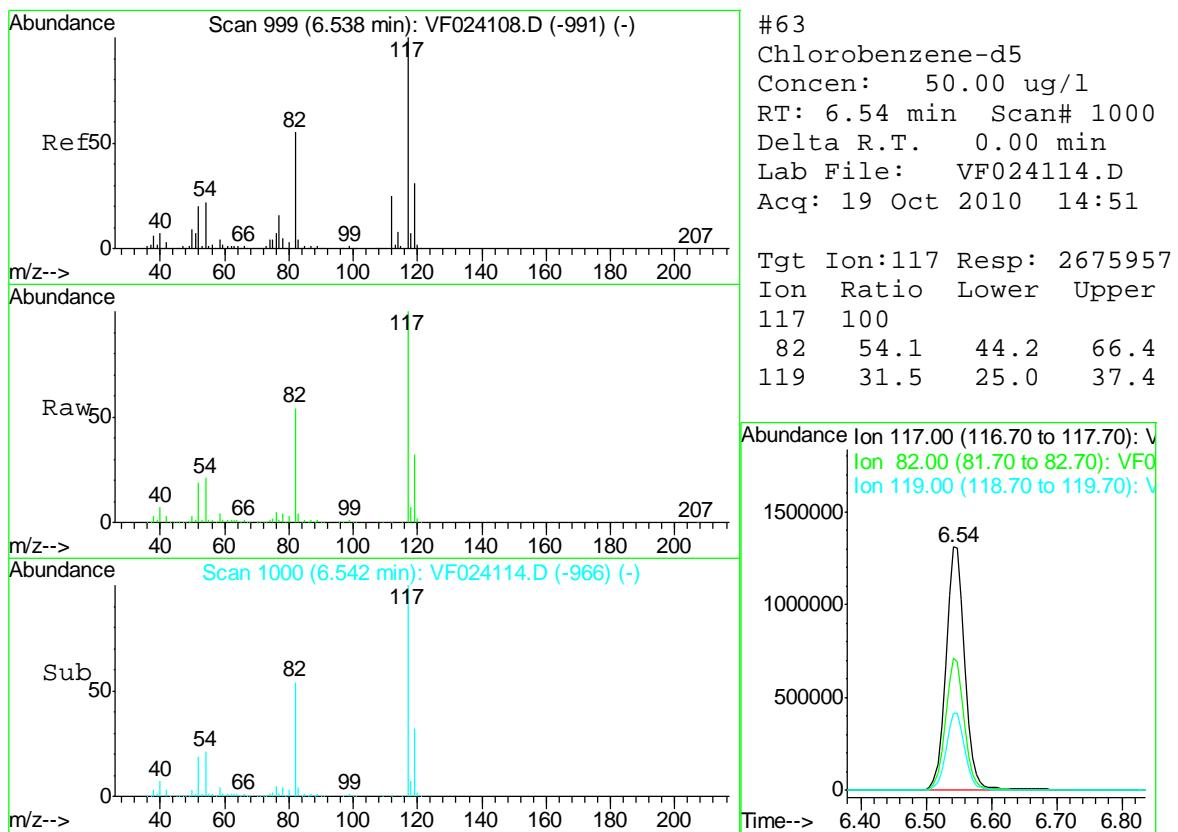


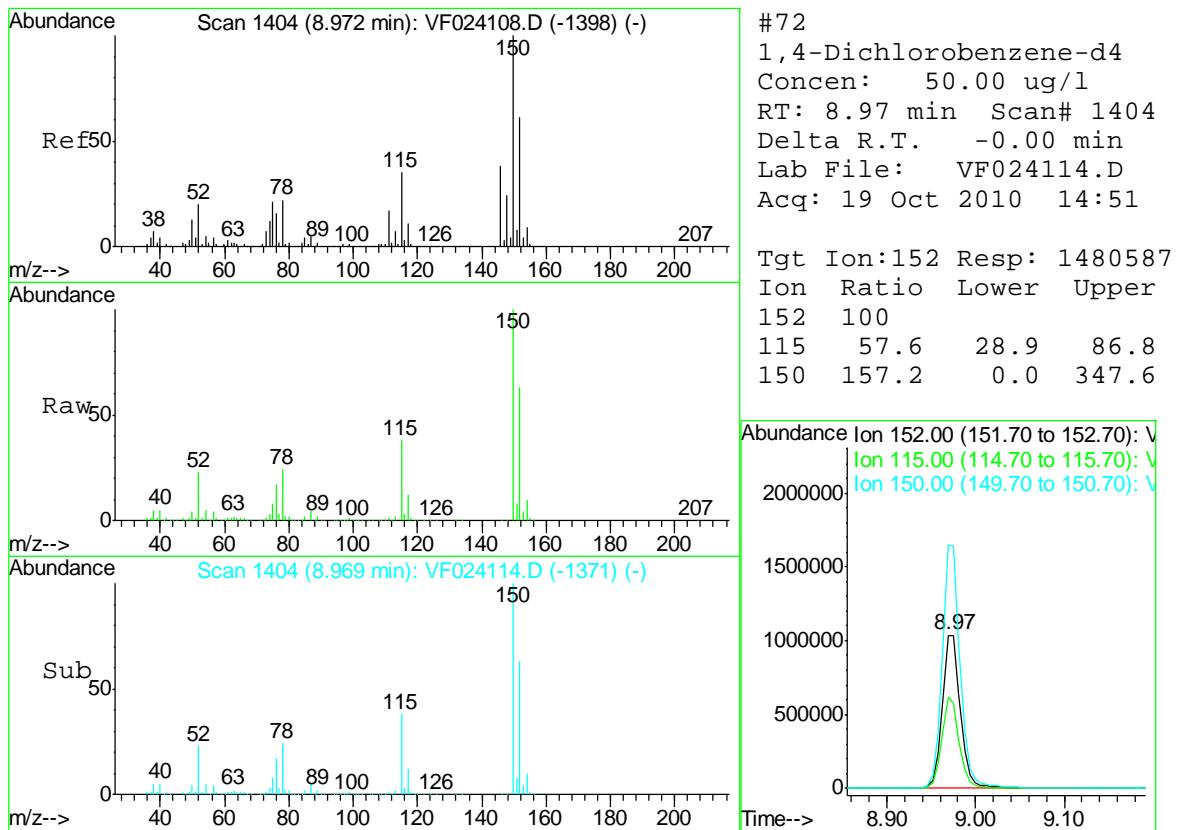












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024114.D  
 Acq On : 19 Oct 2010 14:51  
 Operator : MS  
 Sample : B3902-15  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 19 15:09:18 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1471969	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2788658	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2675957	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1480587	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	989729	44.70	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	89.40%	
36) Dibromofluoromethane	2.89	113	900769	47.39	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	94.78%	
49) Toluene-d8	4.88	98	3105018	48.32	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	96.64%	
62) 4-Bromofluorobenzene	7.92	95	1299653	48.29	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	96.58%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.27	63	71901	2.79	ug/l 99
28) cis-1,2-Dichloroethene	2.59	96	20864	1.03	ug/l 91
33) 1,1,1-Trichloroethane	2.92	97	73015	3.00	ug/l # 92
44) Trichloroethene	3.62	130	51980	2.10	ug/l # 1
64) Tetrachloroethene	5.31	164	28846	1.19	ug/l 98

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024114.D  
 Acq On : 19 Oct 2010 14:51  
 Operator : MS  
 Sample : B3902-15  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

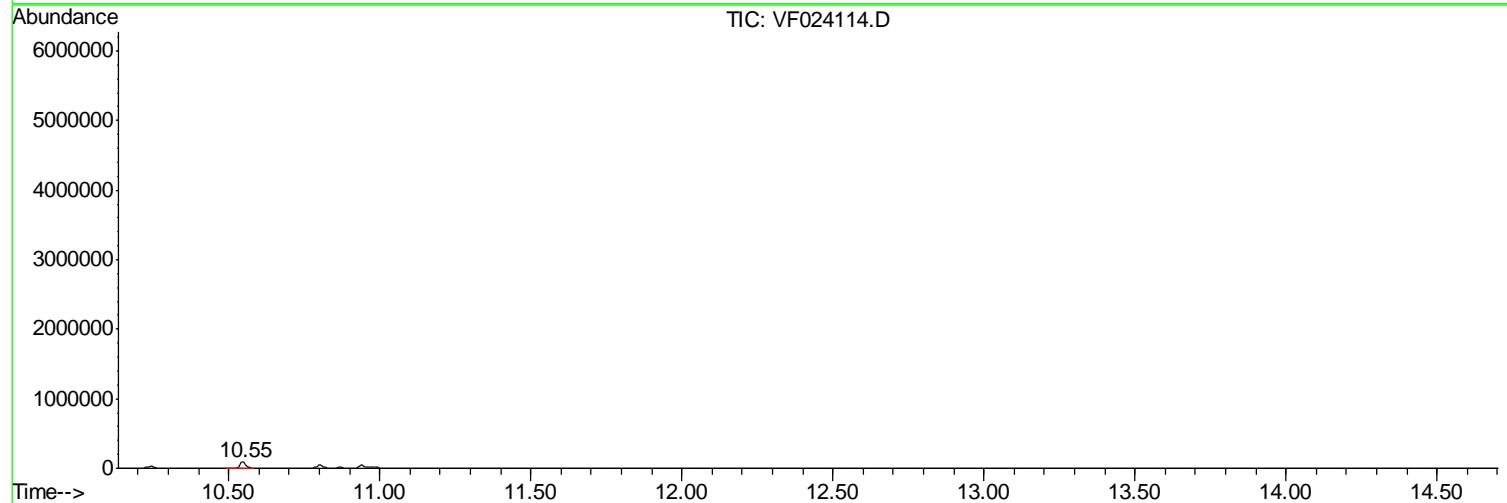
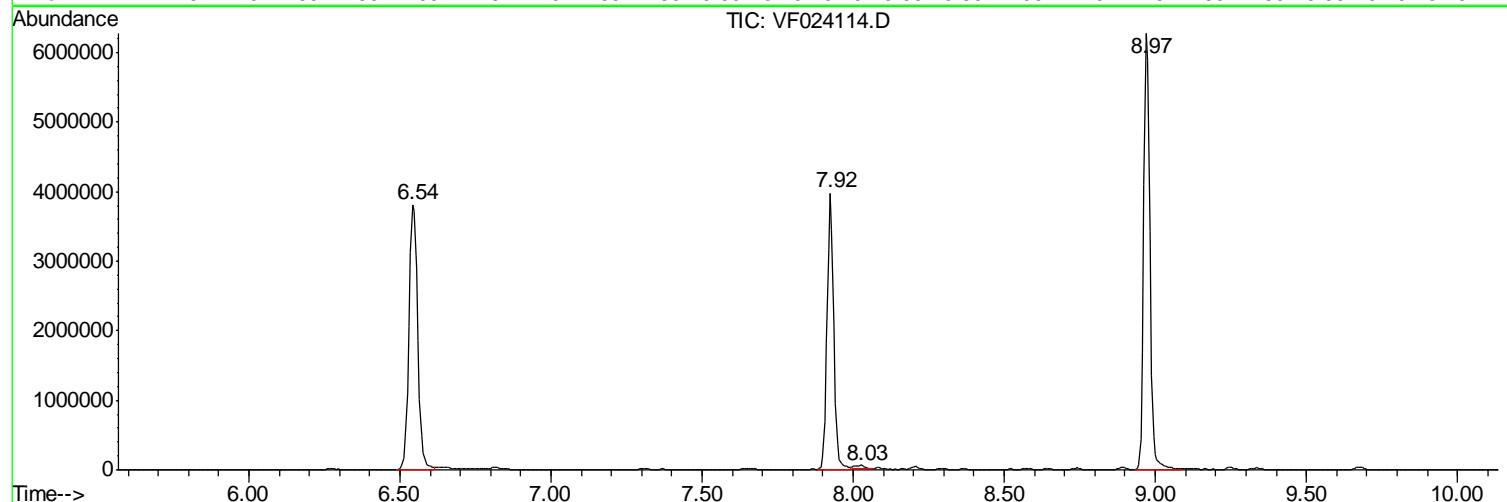
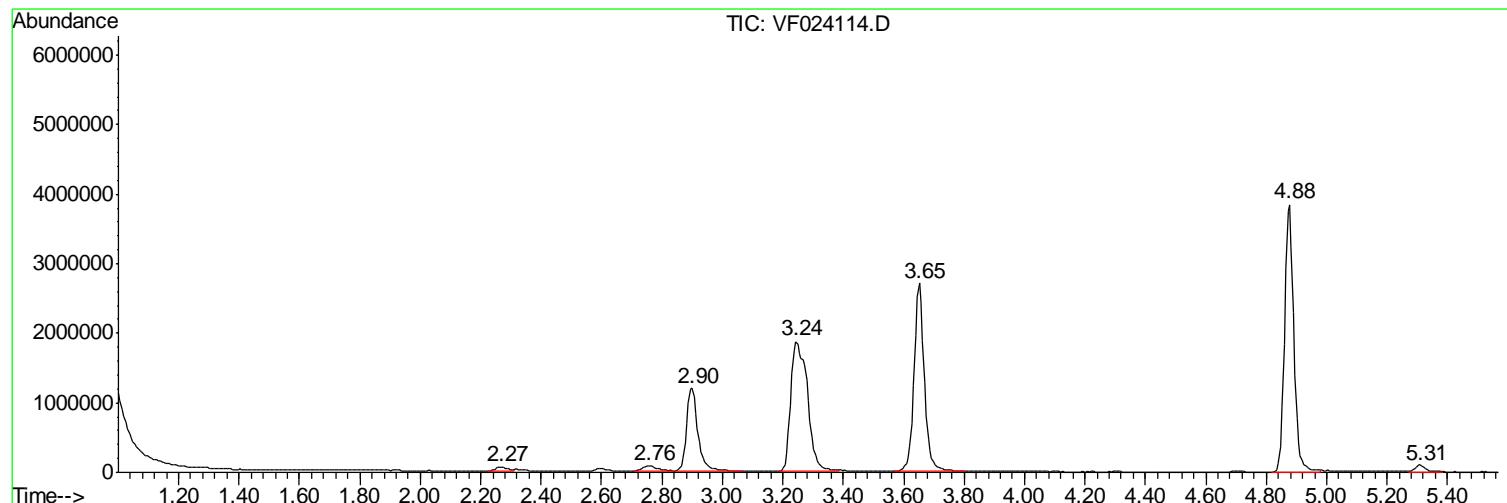
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.269	282	289	296	rBV2	56118	156638	1.77%	0.323%
2	2.756	362	370	383	rVV	78264	242755	2.74%	0.501%
3	2.900	385	394	421	rVB	1191193	3128084	35.33%	6.453%
4	3.242	442	451	475	rBV2	1864729	7124095	80.46%	14.696%
5	3.651	505	519	544	rBV	2702643	6431281	72.63%	13.267%
6	4.877	713	723	740	rBV	3845504	8221260	92.85%	16.959%
7	5.310	789	795	807	rVB2	100338	232273	2.62%	0.479%
8	6.542	991	1000	1012	rBV	3804828	7676179	86.69%	15.835%
9	7.924	1223	1230	1241	rBV	3969956	6178919	69.78%	12.746%
10	8.026	1242	1247	1253	rVB	48616	109676	1.24%	0.226%
11	8.969	1398	1404	1423	rBV	6269637	8854697	100.00%	18.266%
12	10.550	1657	1667	1672	rBV3	82069	120569	1.36%	0.249%

Sum of corrected areas: 48476426

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024114.D  
Acq On : 19 Oct 2010 14:51  
Operator : MS  
Sample : B3902-15  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024114.D  
Acq On : 19 Oct 2010 14:51  
Operator : MS  
Sample : B3902-15  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024114.D  
Acq On : 19 Oct 2010 14:51  
Operator : MS  
Sample : B3902-15  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-UK-1	SDG No.:	B3902
Lab Sample ID:	B3902-16	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024115.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	4.2		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1.3		0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	4.9		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-UK-1	SDG No.:	B3902
Lab Sample ID:	B3902-16	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024115.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	45		66 - 150		90%	SPK: 50
1868-53-7	Dibromofluoromethane	48.9		76 - 130		98%	SPK: 50
2037-26-5	Toluene-d8	47.3		78 - 121		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.6		70 - 131		95%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1365840		3.24			
540-36-3	1,4-Difluorobenzene	2563370		3.65			
3114-55-4	Chlorobenzene-d5	2453880		6.55			
3855-82-1	1,4-Dichlorobenzene-d4	1351730		8.97			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

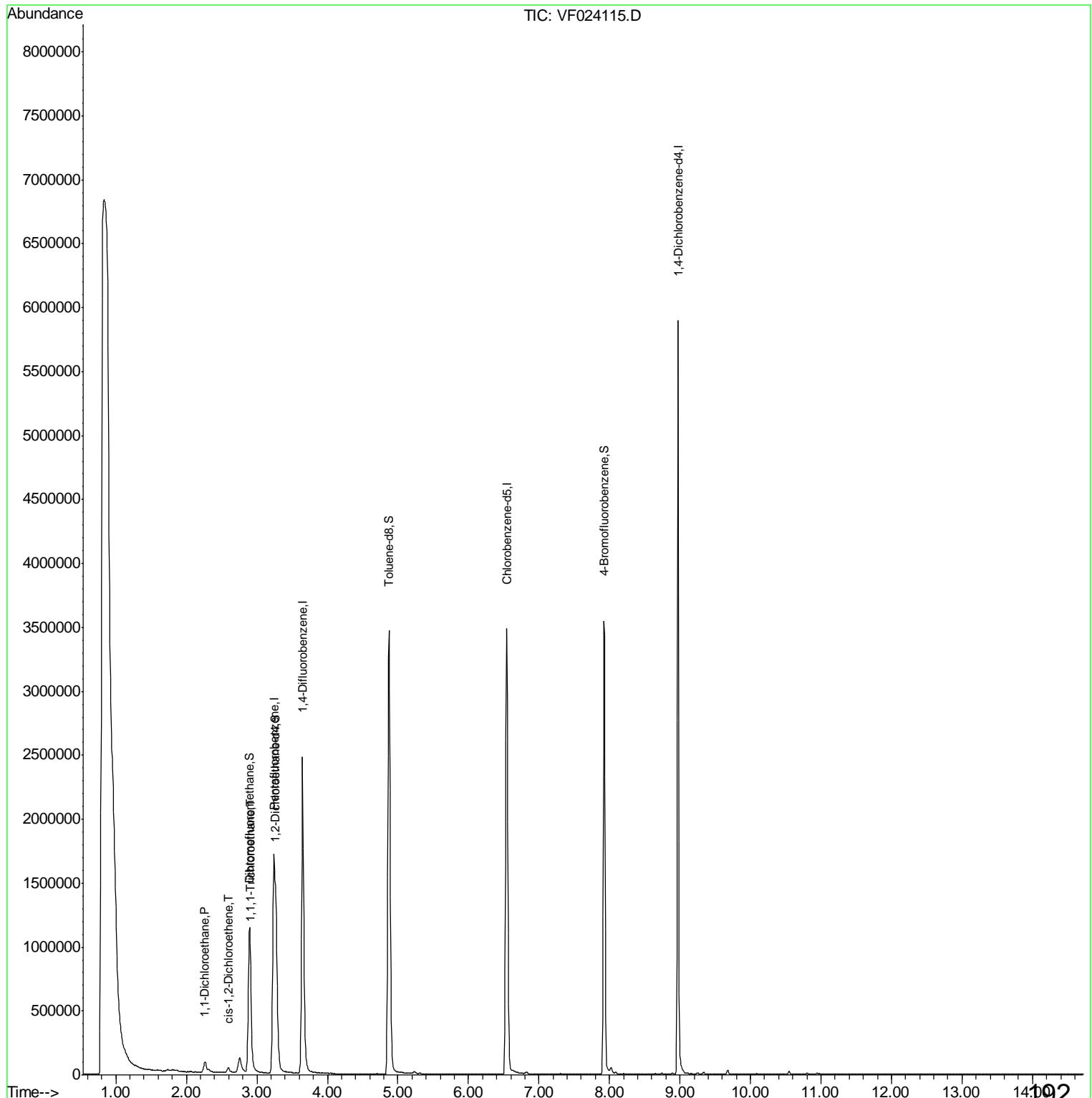
N = Presumptive Evidence of a Compound

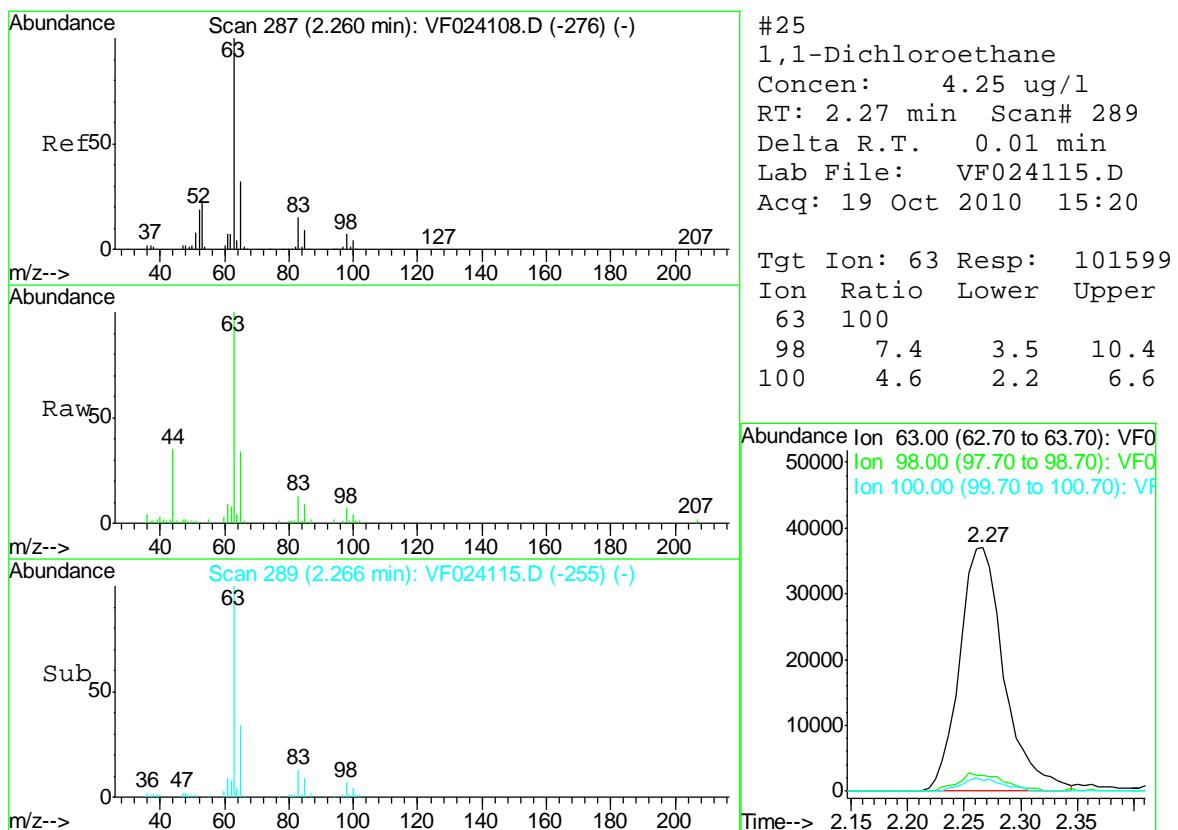
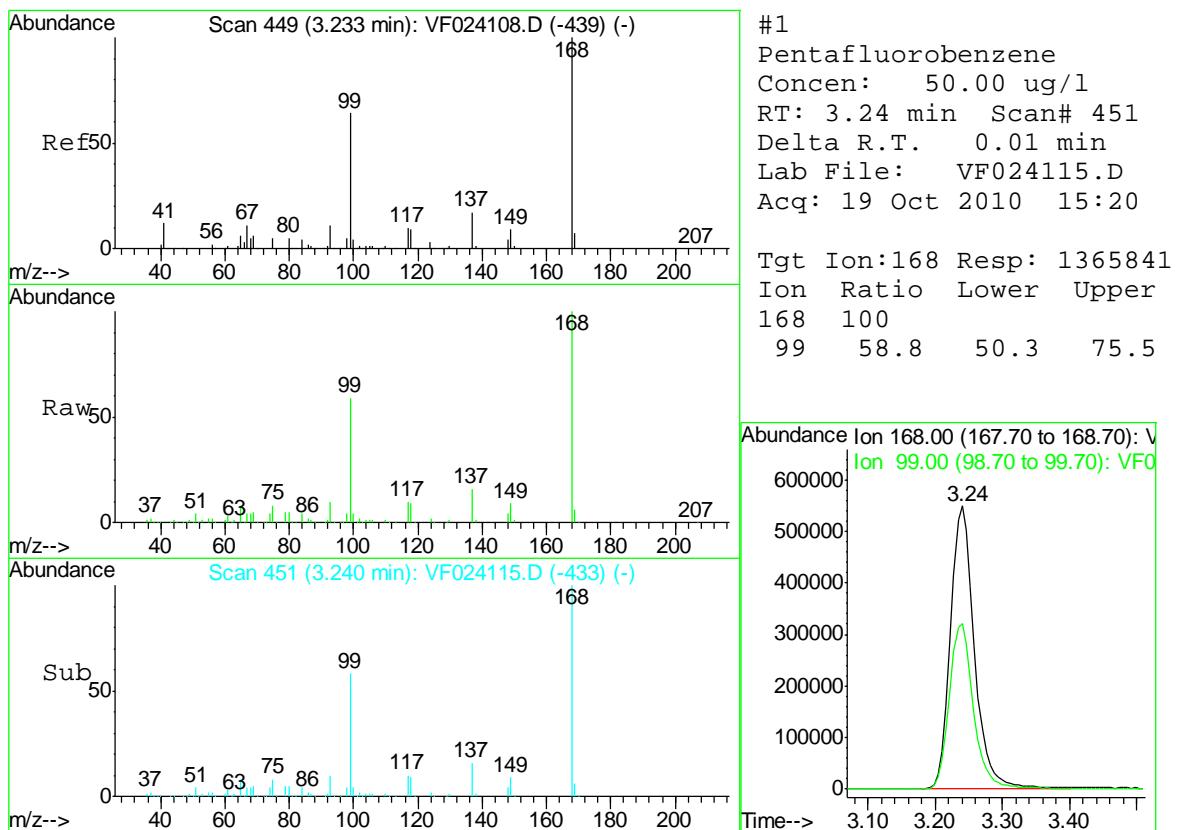
\* = Values outside of QC limits

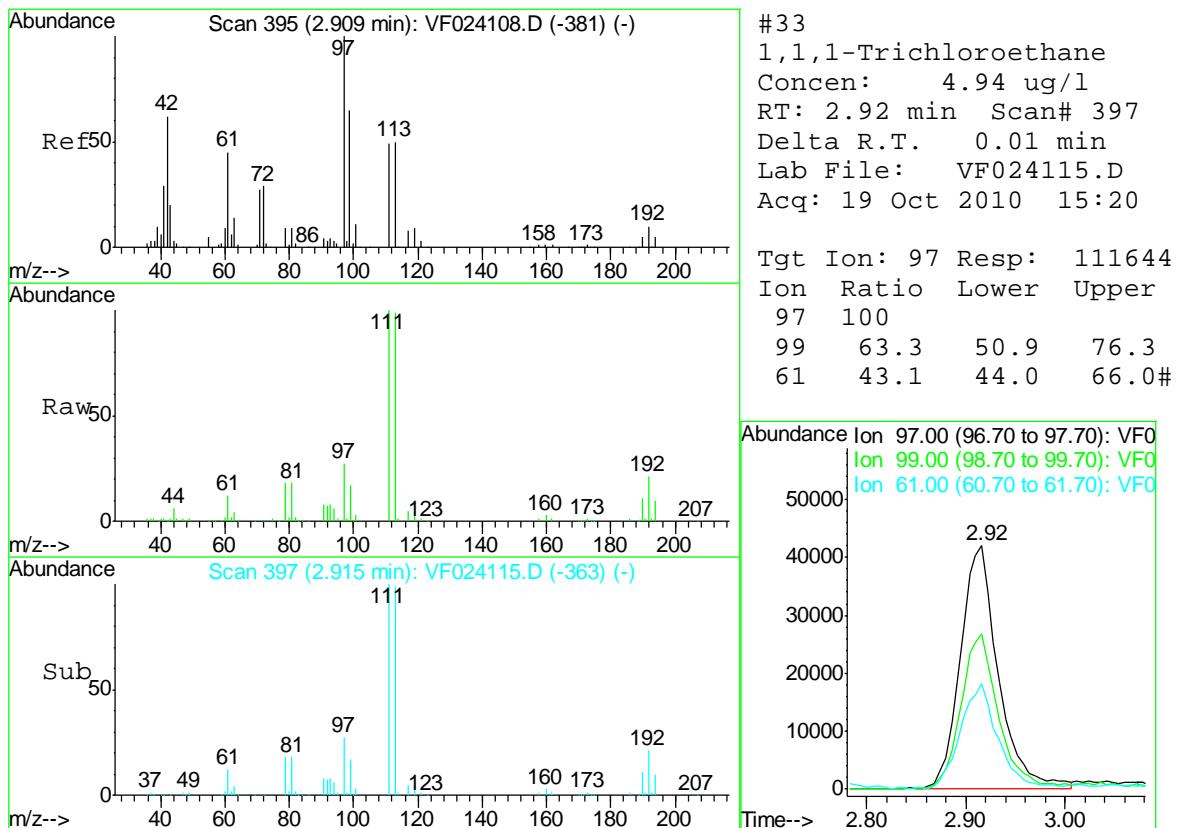
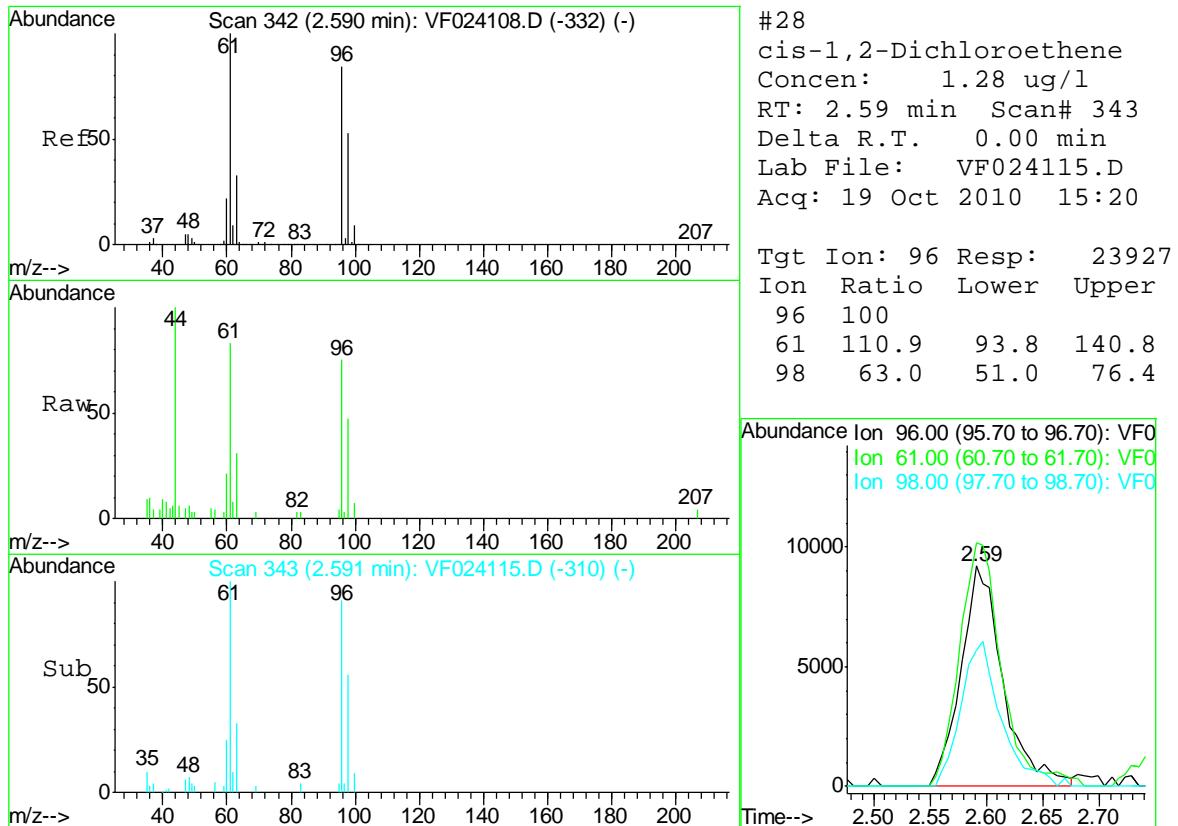
D = Dilution

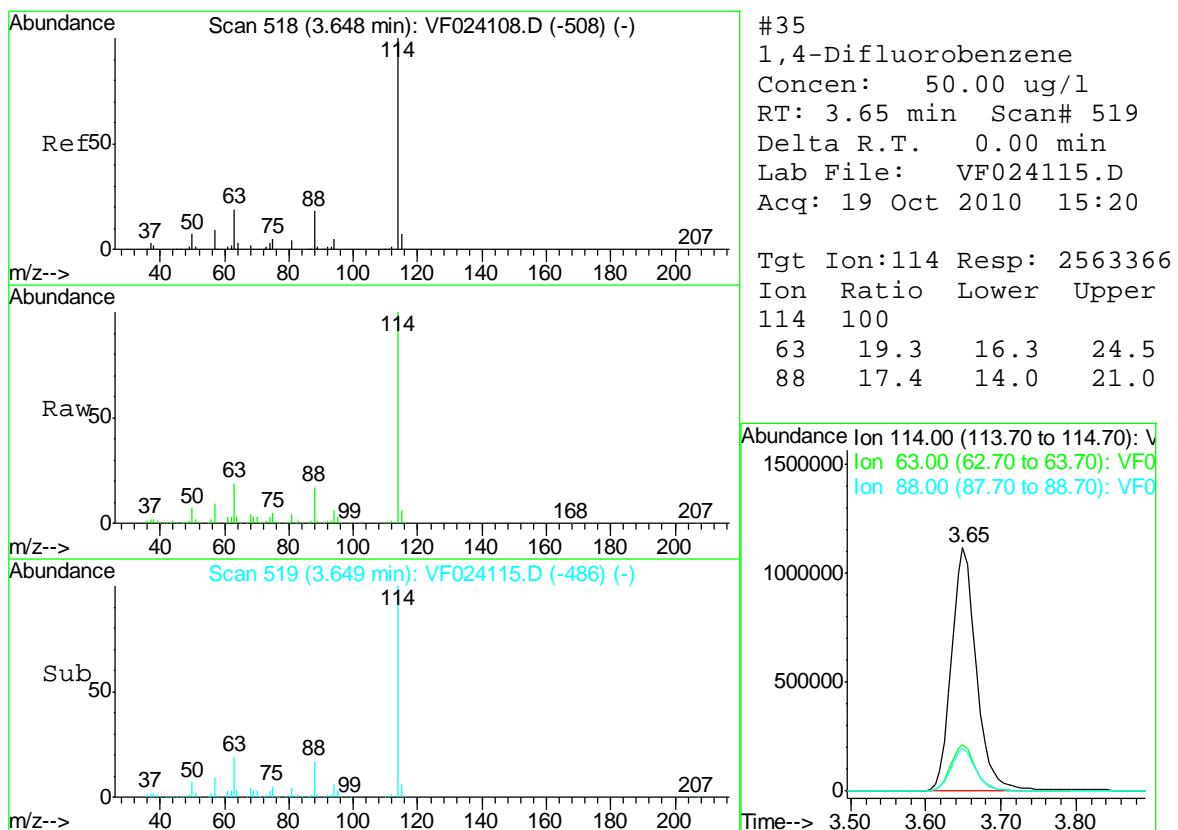
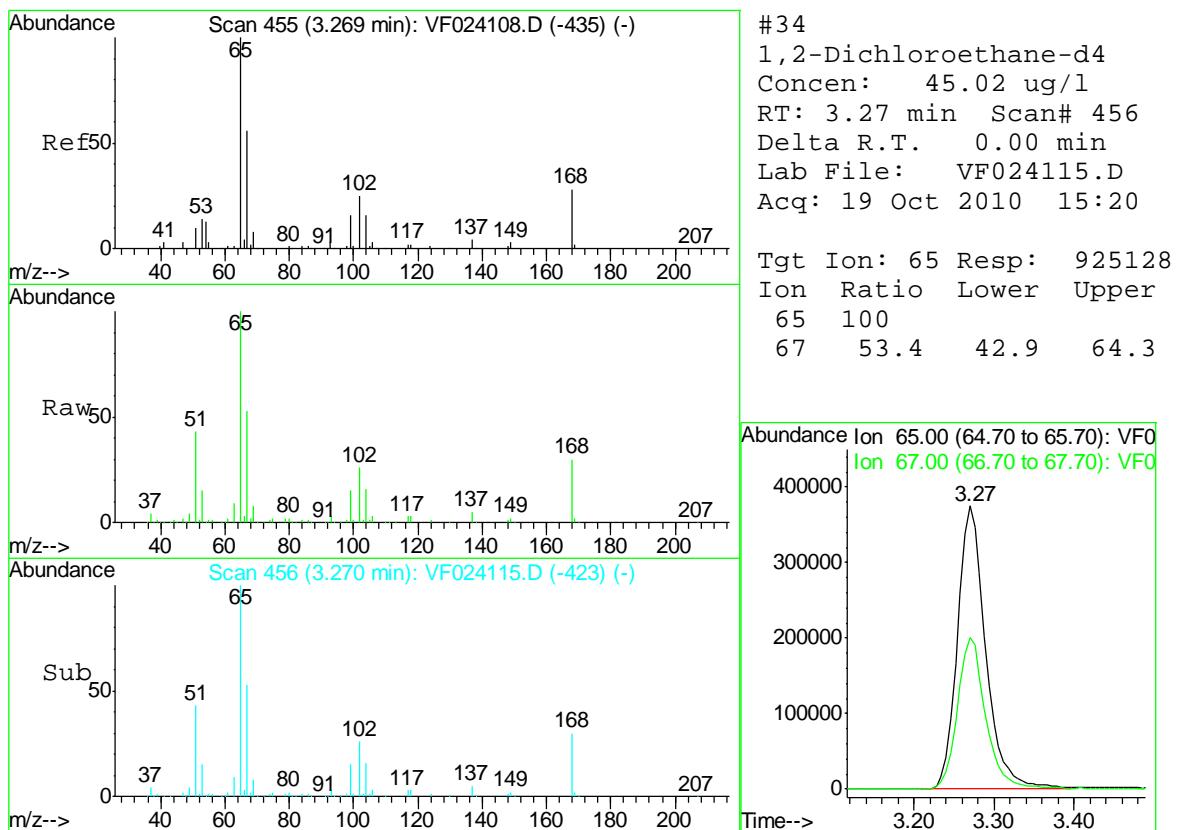
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Data File : VF024115.D  
Acq On : 19 Oct 2010 15:20  
Operator : MS  
Sample : B3902-16  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

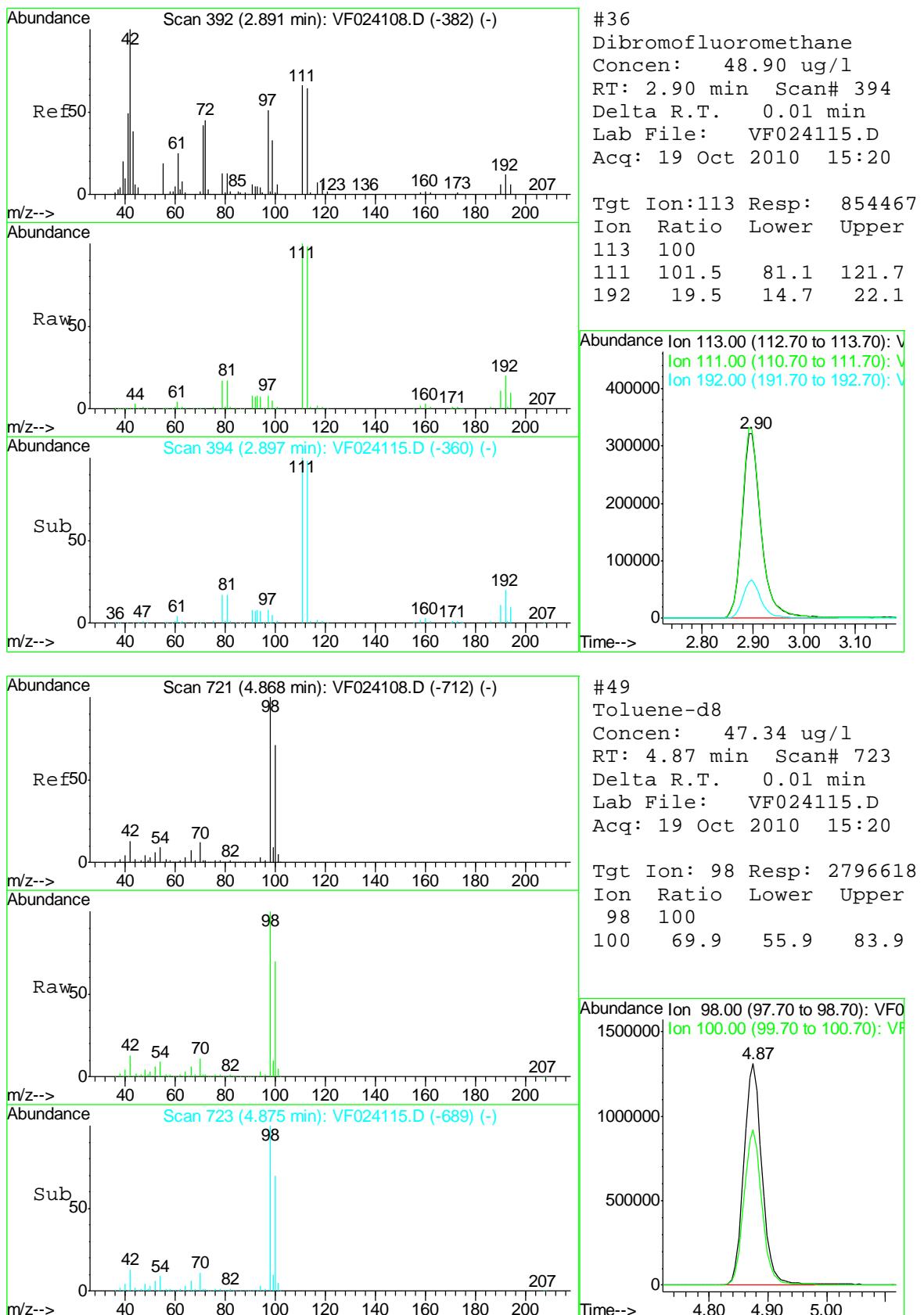
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Response via : Initial Calibration

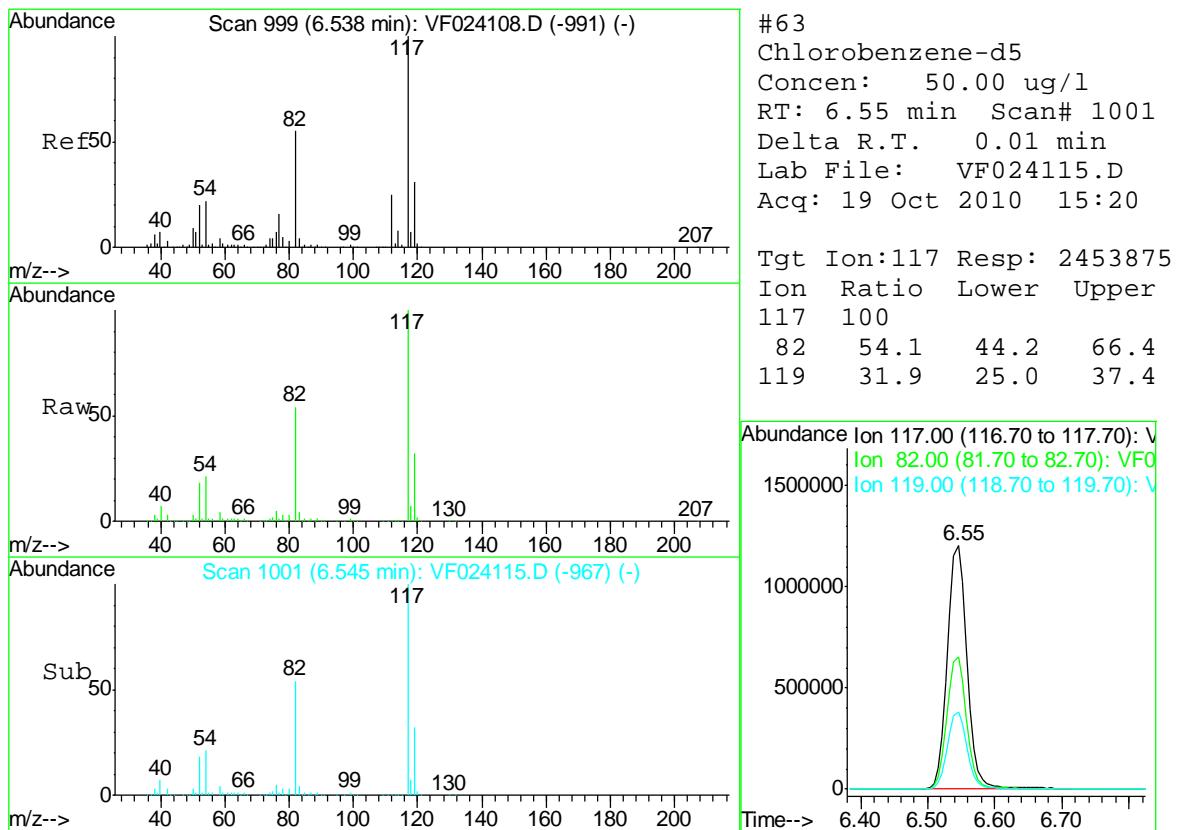
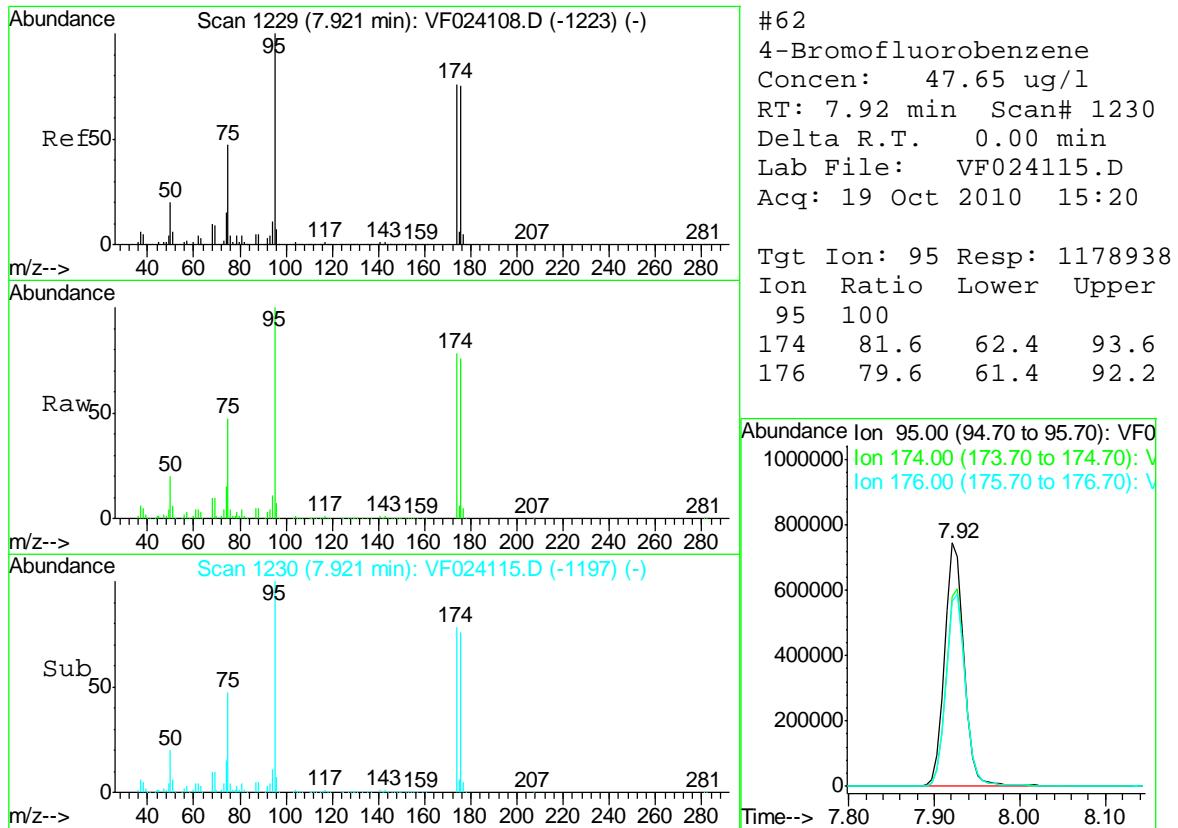


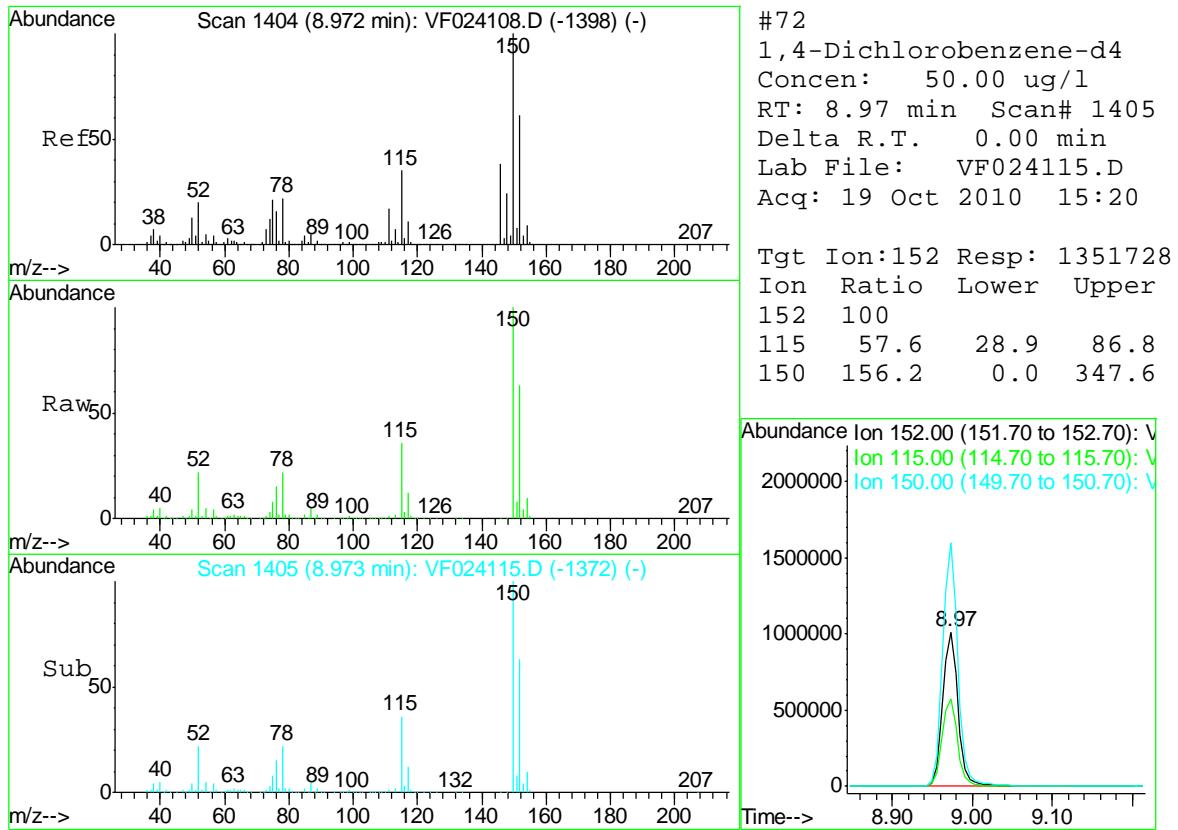












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024115.D  
 Acq On : 19 Oct 2010 15:20  
 Operator : MS  
 Sample : B3902-16  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 19 15:43:24 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1365841	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2563366	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.55	117	2453875	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1351728	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	925128	45.02	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	90.04%	
36) Dibromofluoromethane	2.90	113	854467	48.90	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	97.80%	
49) Toluene-d8	4.87	98	2796618	47.34	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	94.68%	
62) 4-Bromofluorobenzene	7.92	95	1178938	47.65	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	95.30%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.27	63	101599	4.25	ug/l 99
28) cis-1,2-Dichloroethene	2.59	96	23927	1.28	ug/l 96
33) 1,1,1-Trichloroethane	2.92	97	111644	4.94	ug/l # 92

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024115.D  
 Acq On : 19 Oct 2010 15:20  
 Operator : MS  
 Sample : B3902-16  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

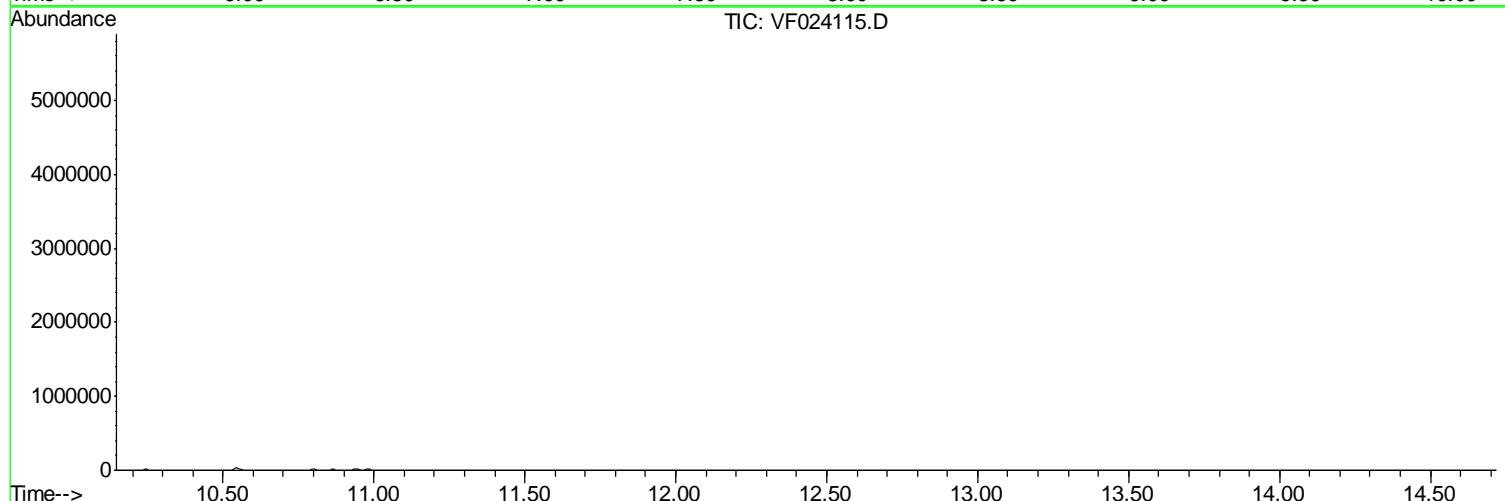
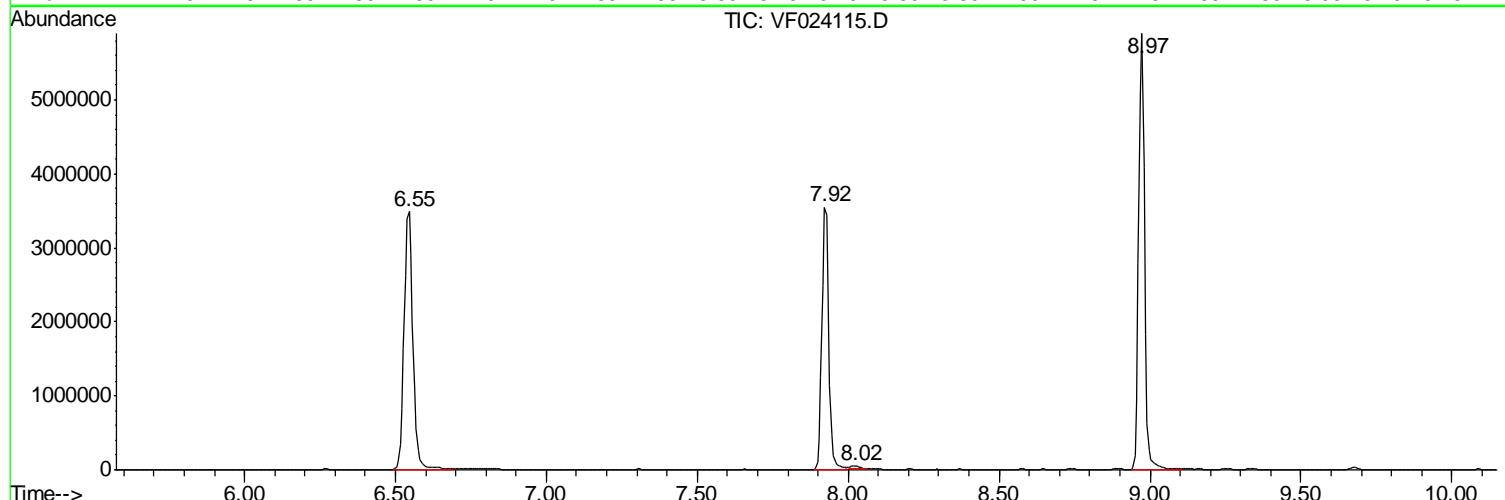
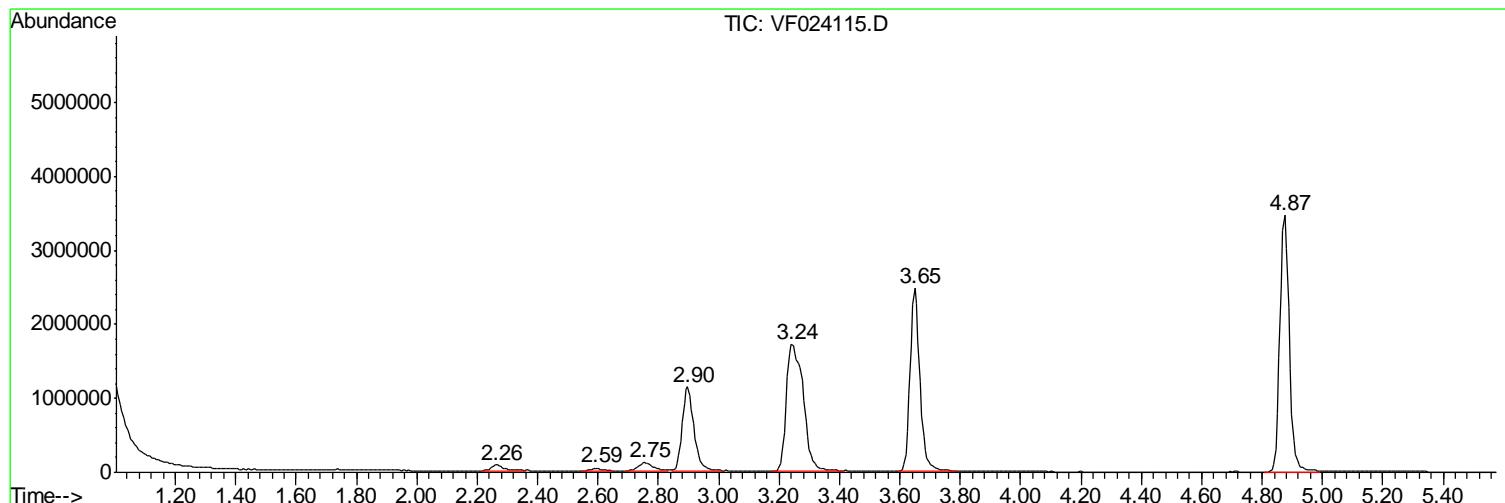
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.260	281	288	304	rBV	80033	249076	3.10%	0.559%
2	2.591	335	343	352	rBV2	38022	96536	1.20%	0.217%
3	2.753	360	370	383	rBV	116078	383160	4.77%	0.860%
4	2.897	385	394	413	rVB	1127263	3015770	37.53%	6.773%
5	3.240	440	451	480	rBV2	1710942	6698895	83.36%	15.044%
6	3.649	510	519	542	rBV	2471369	5664125	70.48%	12.720%
7	4.875	712	723	742	rBV	3468922	7457908	92.80%	16.748%
8	6.545	992	1001	1025	rBV	3484705	7177659	89.31%	16.119%
9	7.921	1224	1230	1242	rBV	3545310	5661174	70.44%	12.713%
10	8.024	1243	1247	1253	rVB	42796	88246	1.10%	0.198%
11	8.973	1399	1405	1427	rBV	5891554	8036456	100.00%	18.048%

Sum of corrected areas: 44529005

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024115.D  
Acq On : 19 Oct 2010 15:20  
Operator : MS  
Sample : B3902-16  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024115.D  
Acq On : 19 Oct 2010 15:20  
Operator : MS  
Sample : B3902-16  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024115.D  
Acq On : 19 Oct 2010 15:20  
Operator : MS  
Sample : B3902-16  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-UK-2	SDG No.:	B3902
Lab Sample ID:	B3902-17	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024116.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	3.4		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1		0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	4		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	2.2		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-UK-2	SDG No.:	B3902
Lab Sample ID:	B3902-17	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024116.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1.2		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.3		66 - 150		93%	SPK: 50
1868-53-7	Dibromofluoromethane	53.4		76 - 130		107%	SPK: 50
2037-26-5	Toluene-d8	48.6		78 - 121		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		70 - 131		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1385800	3.24				
540-36-3	1,4-Difluorobenzene	2591550	3.65				
3114-55-4	Chlorobenzene-d5	2514950	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1363360	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

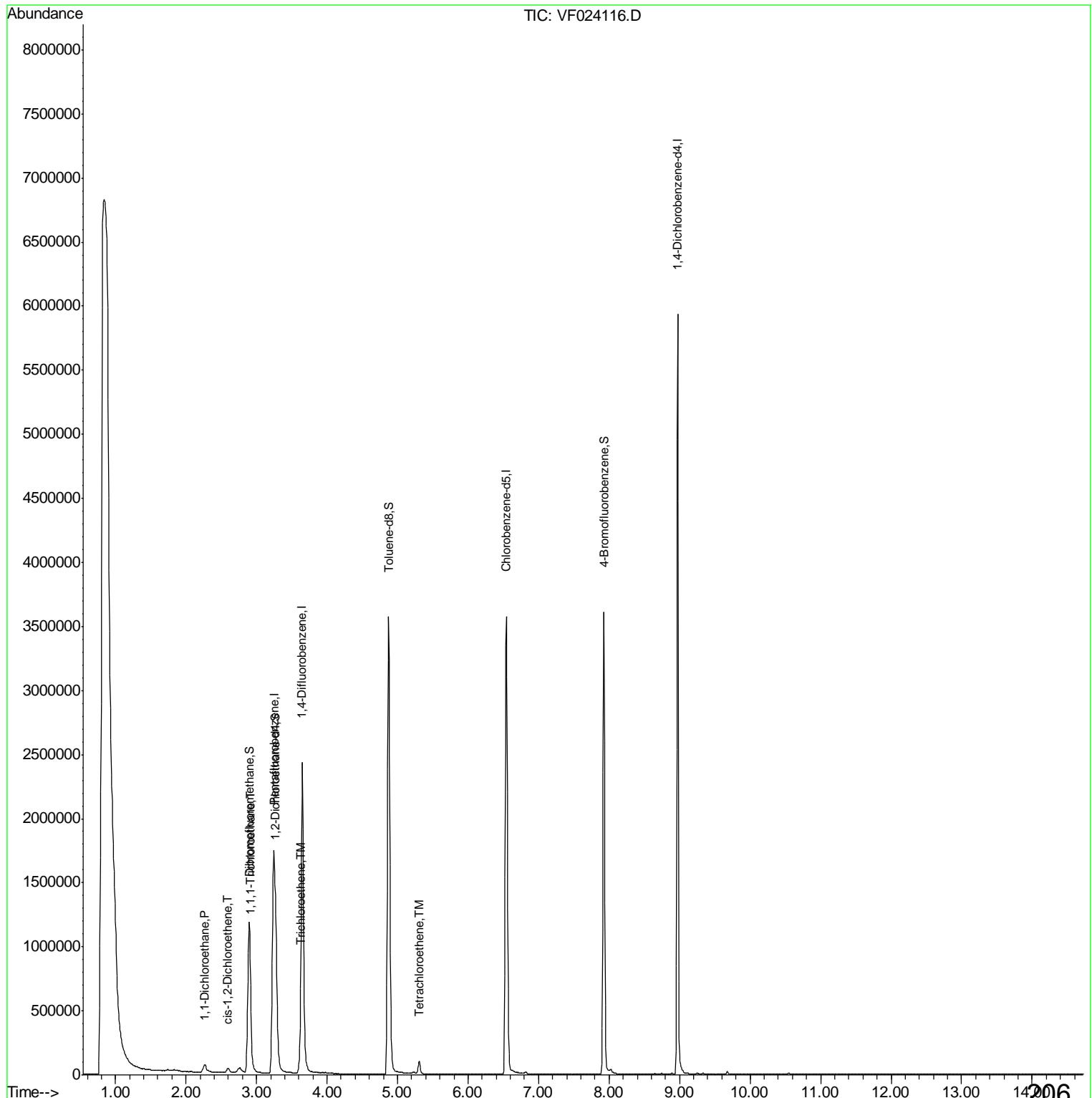
N = Presumptive Evidence of a Compound

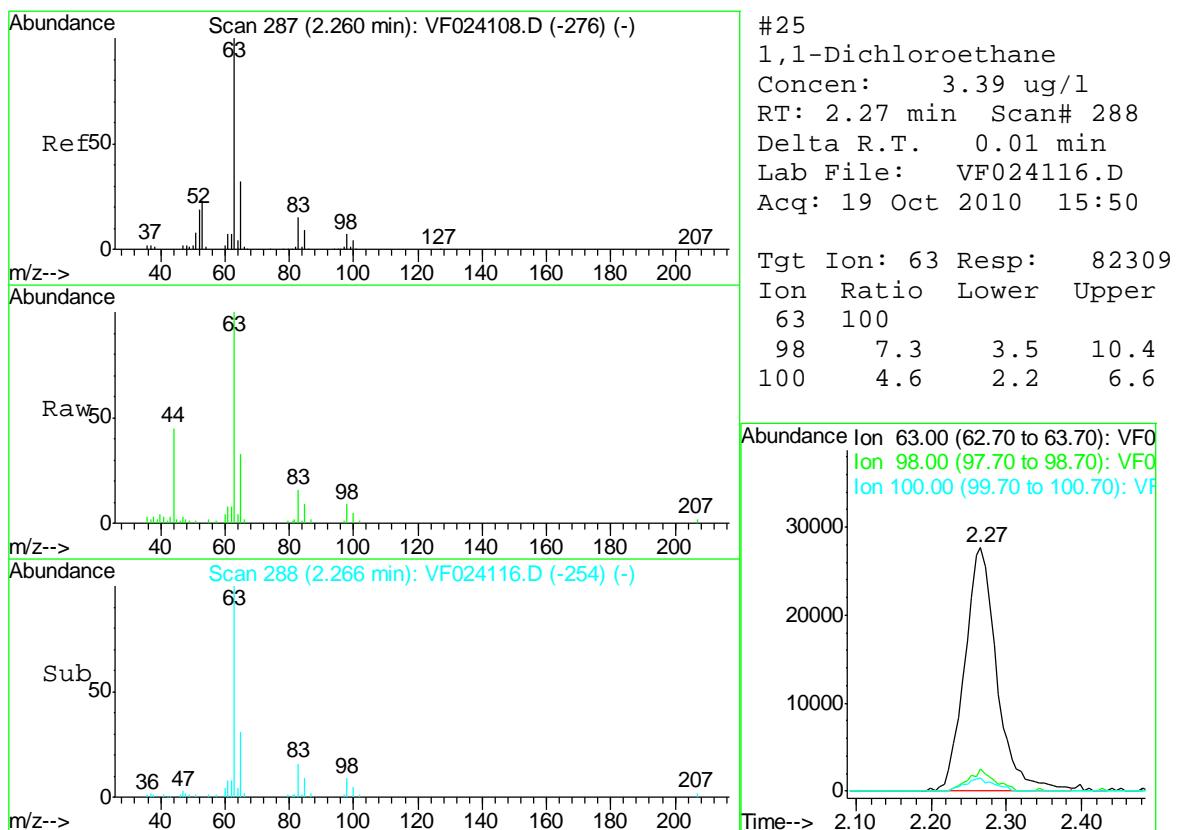
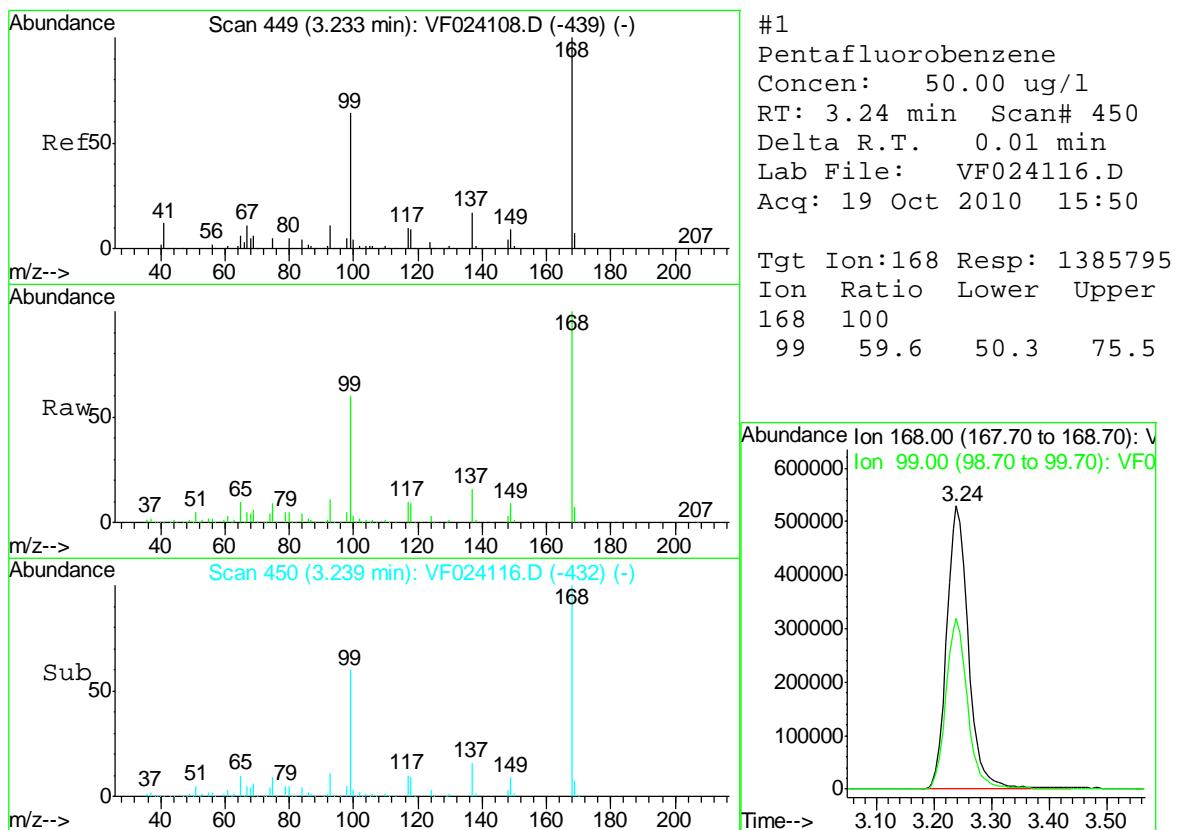
\* = Values outside of QC limits

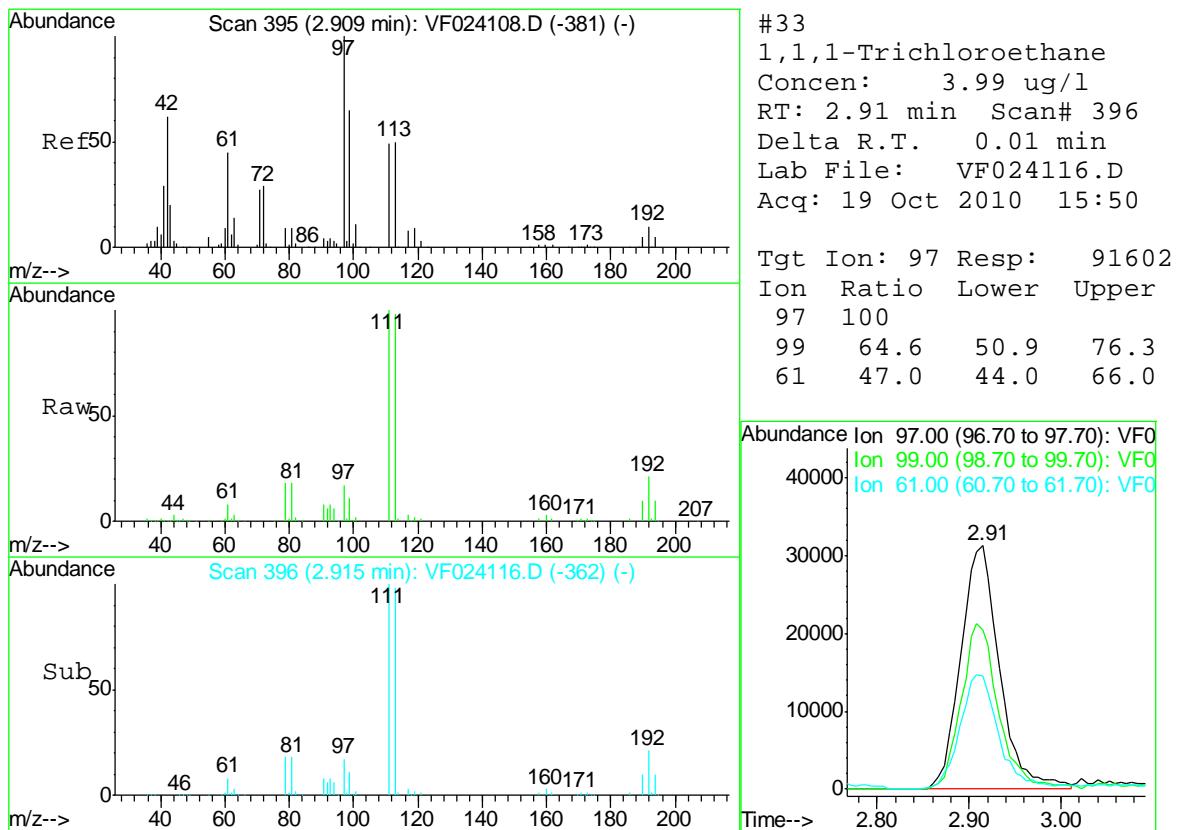
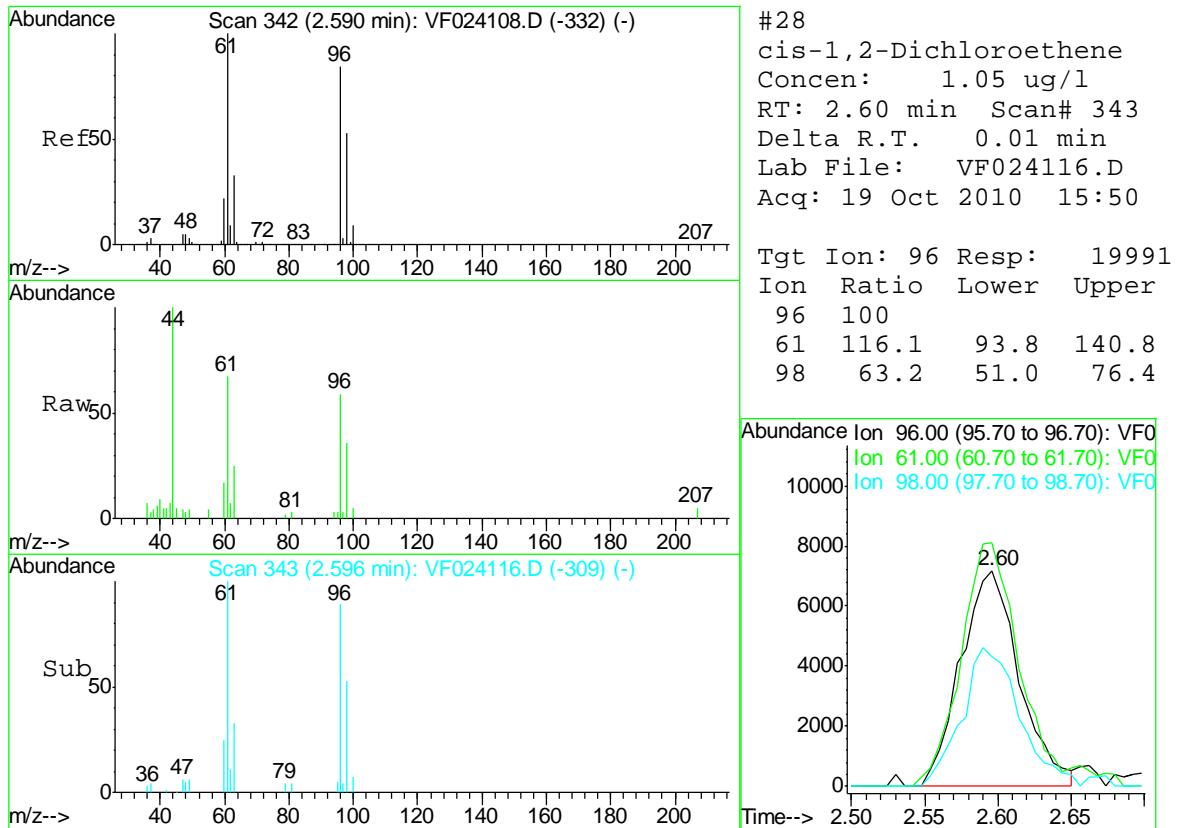
D = Dilution

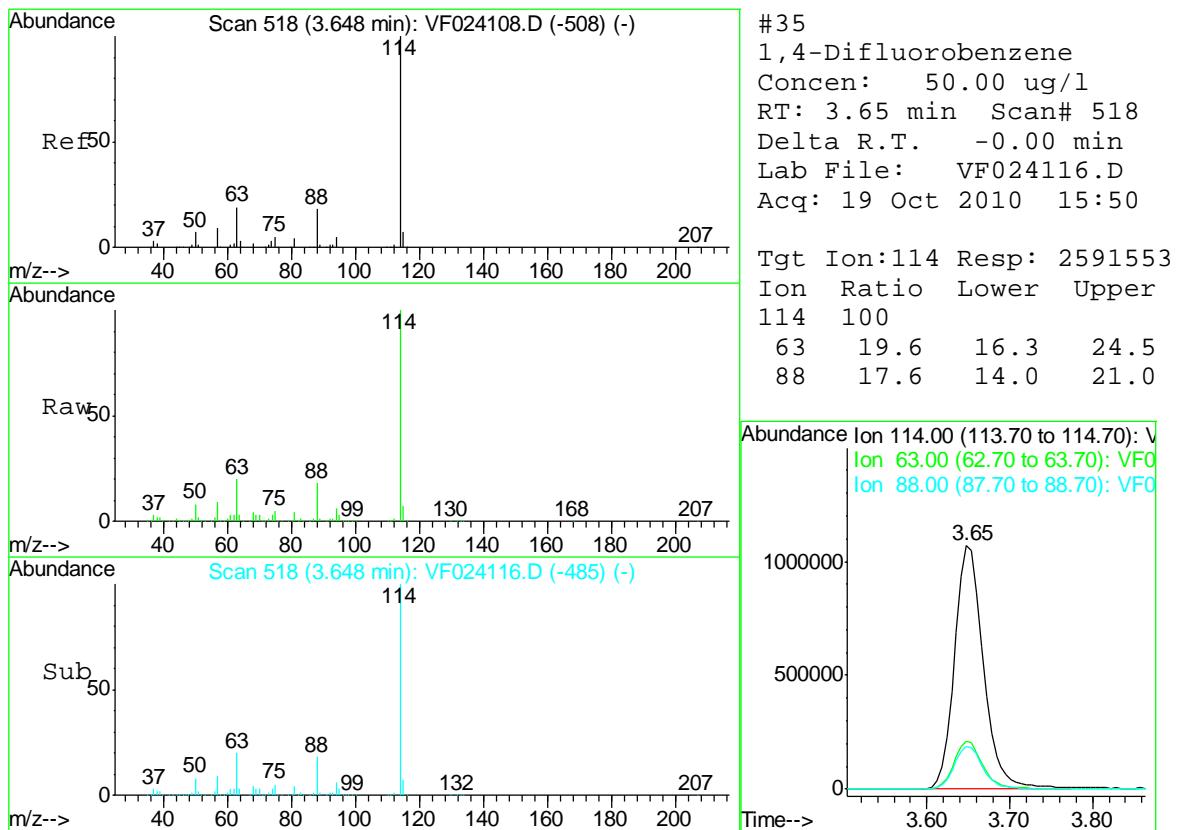
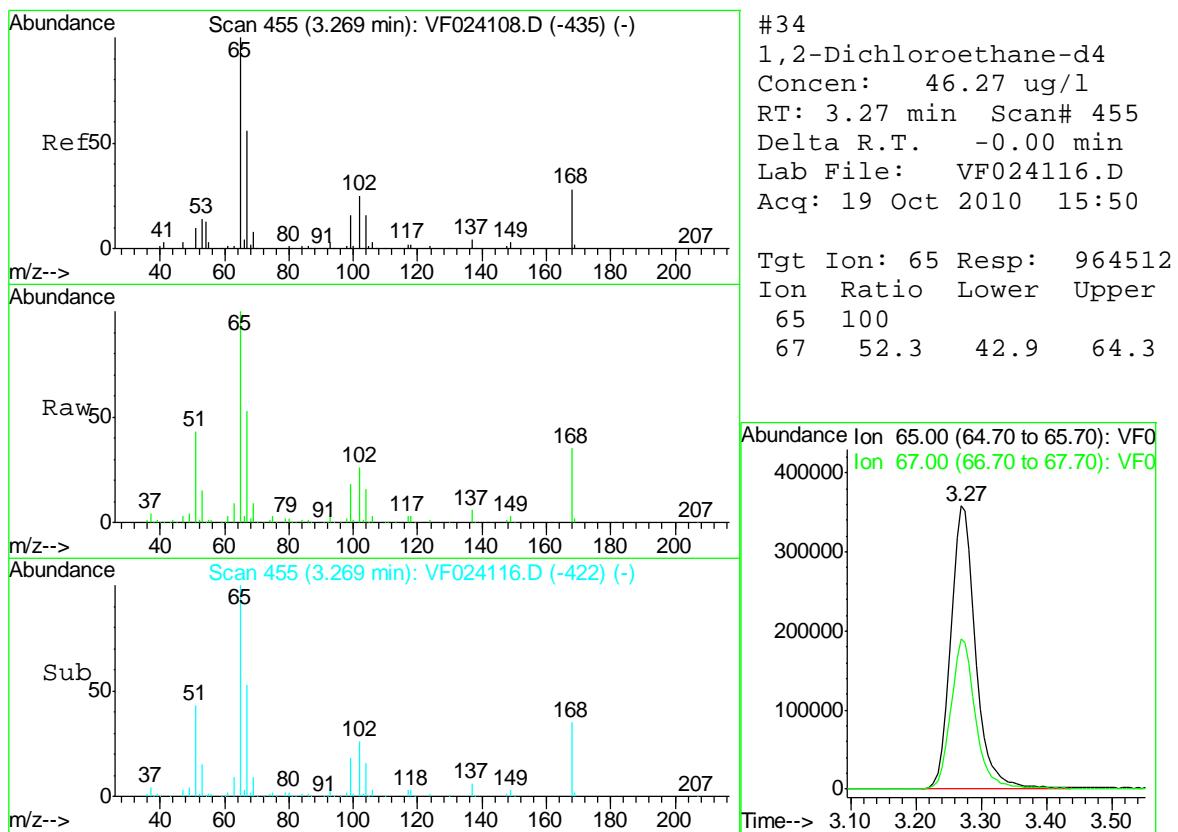
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Data File : VF024116.D  
Acq On : 19 Oct 2010 15:50  
Operator : MS  
Sample : B3902-17  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

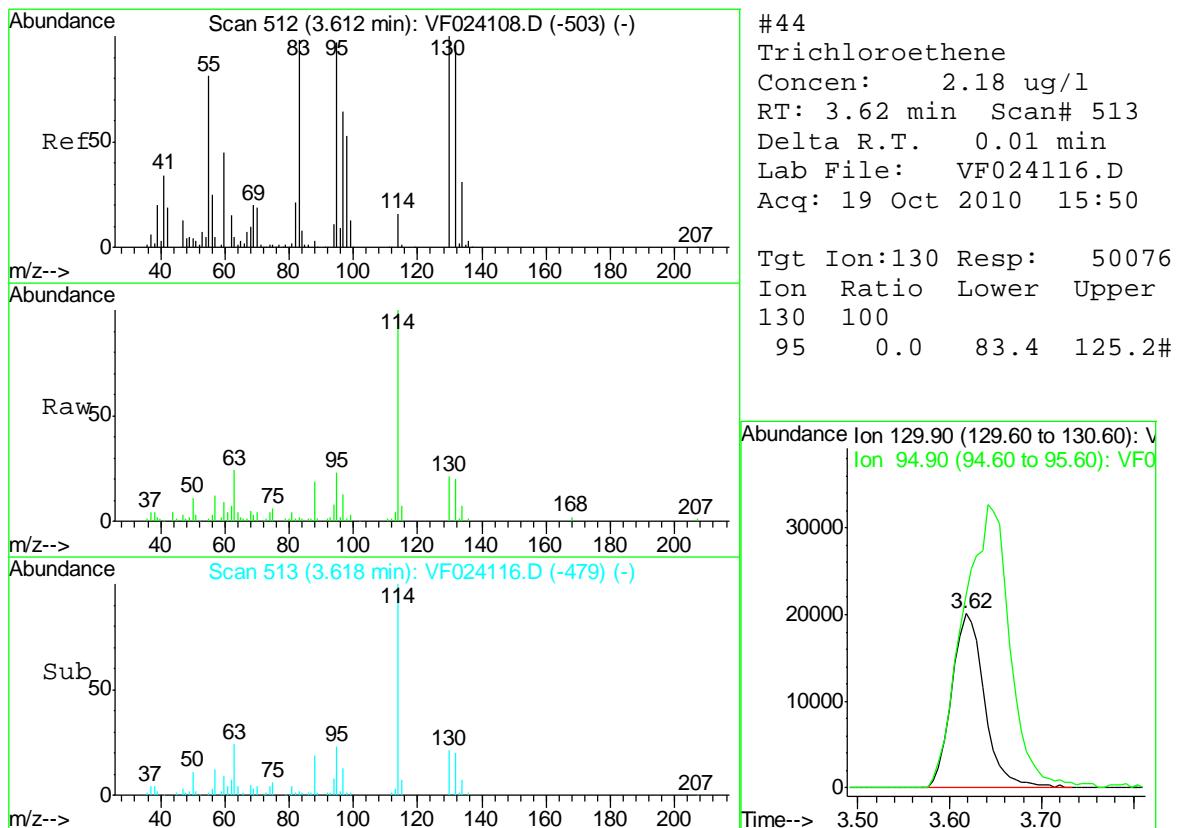
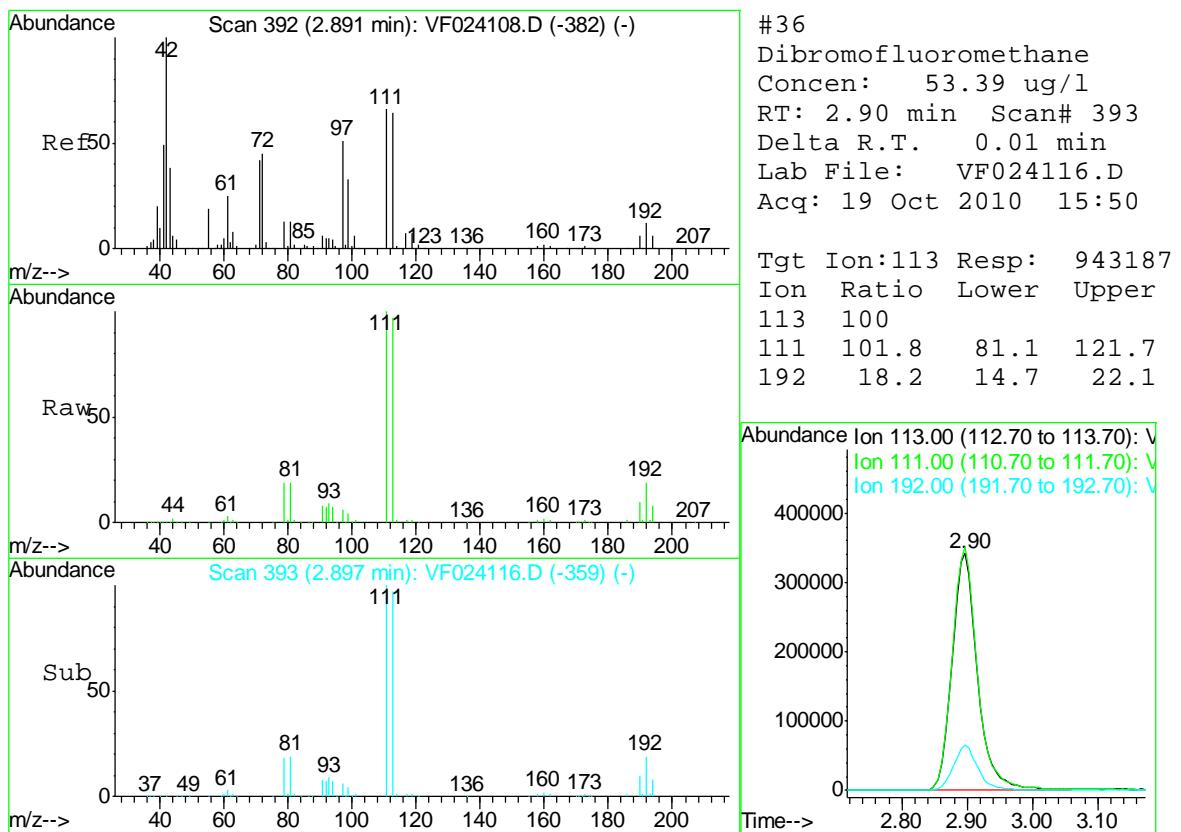
Quant Time: Oct 19 16:27:38 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

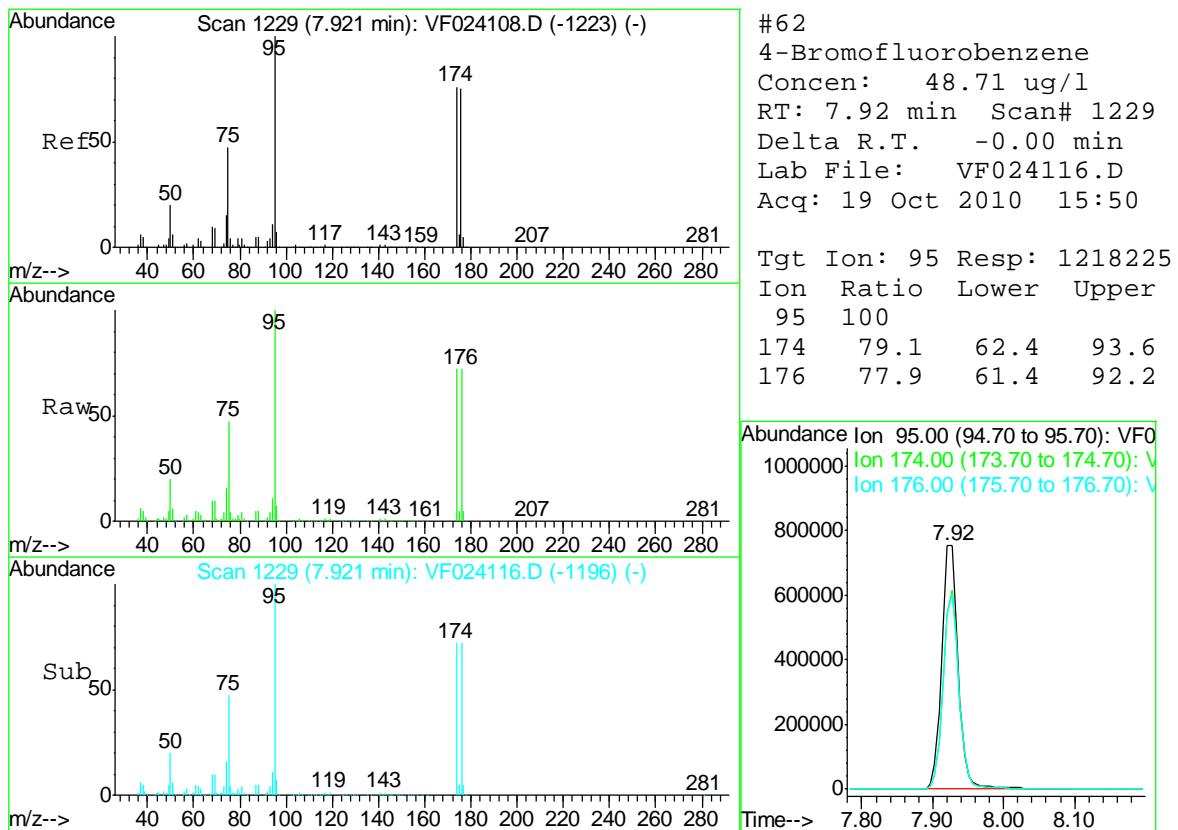
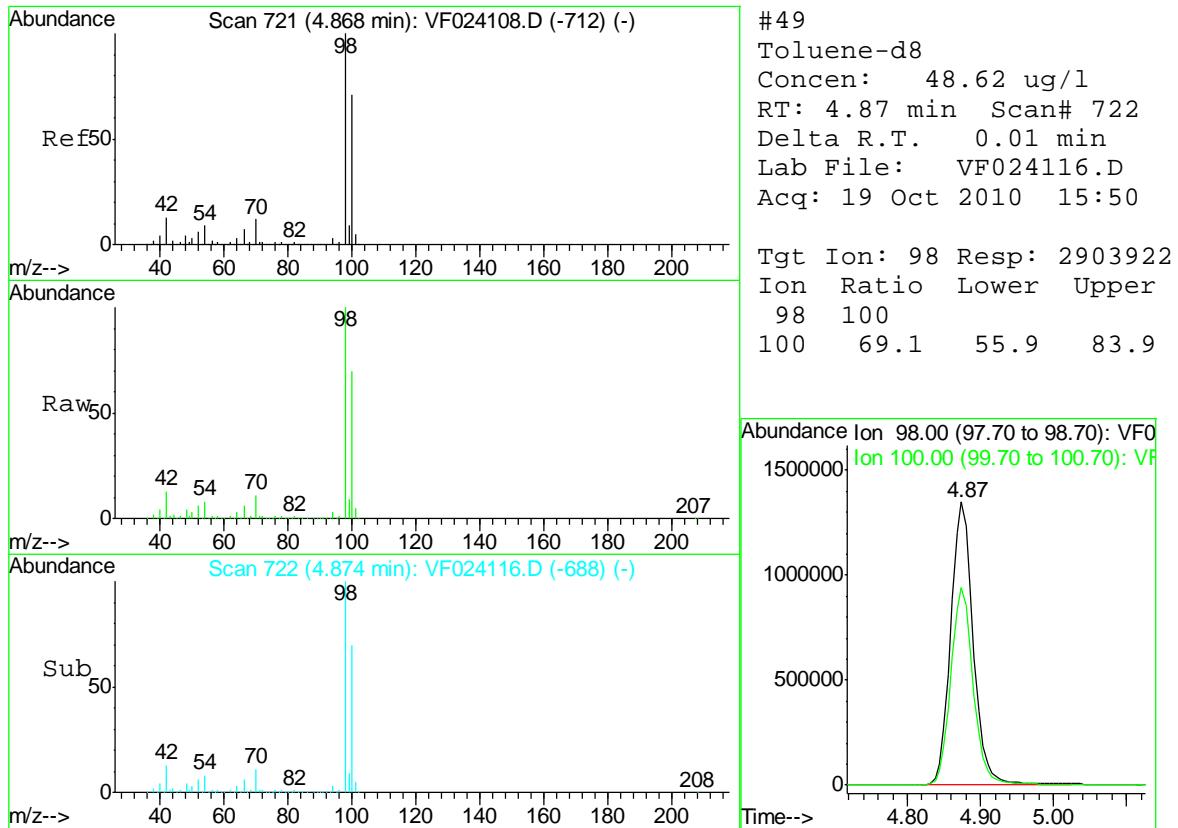


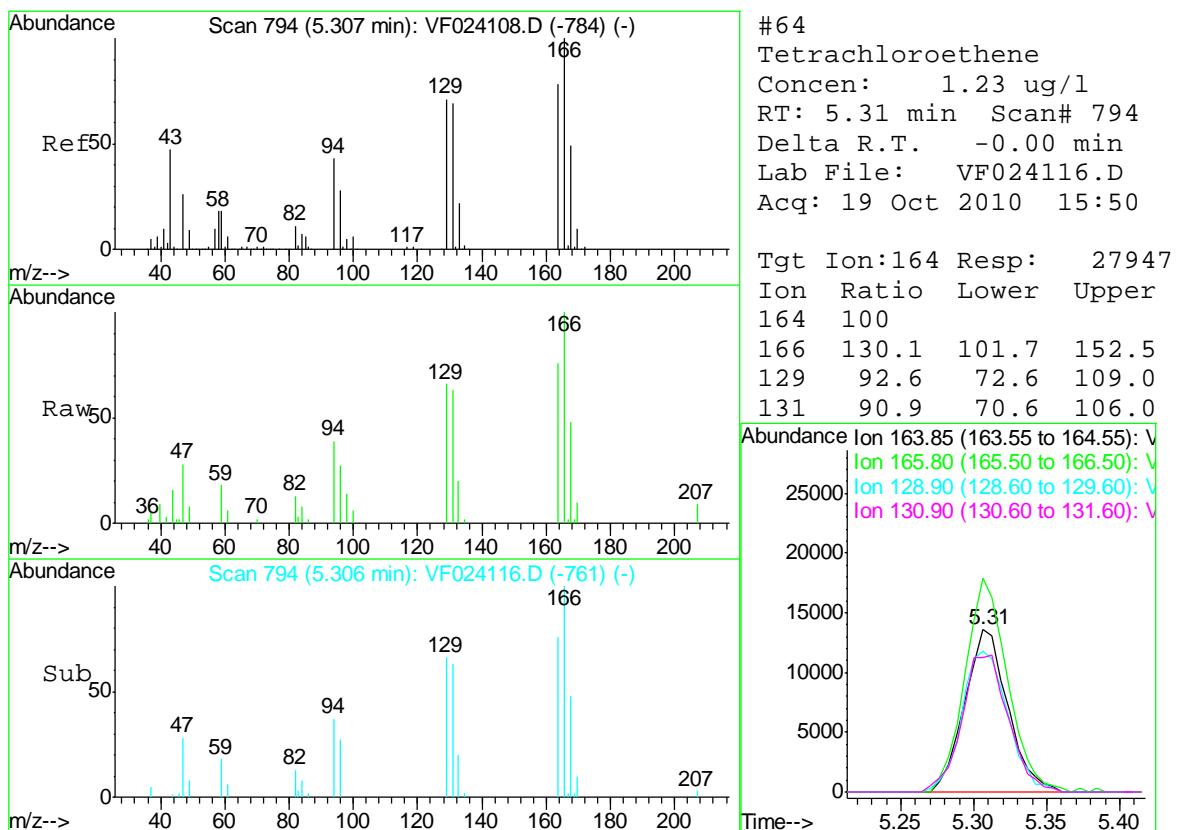
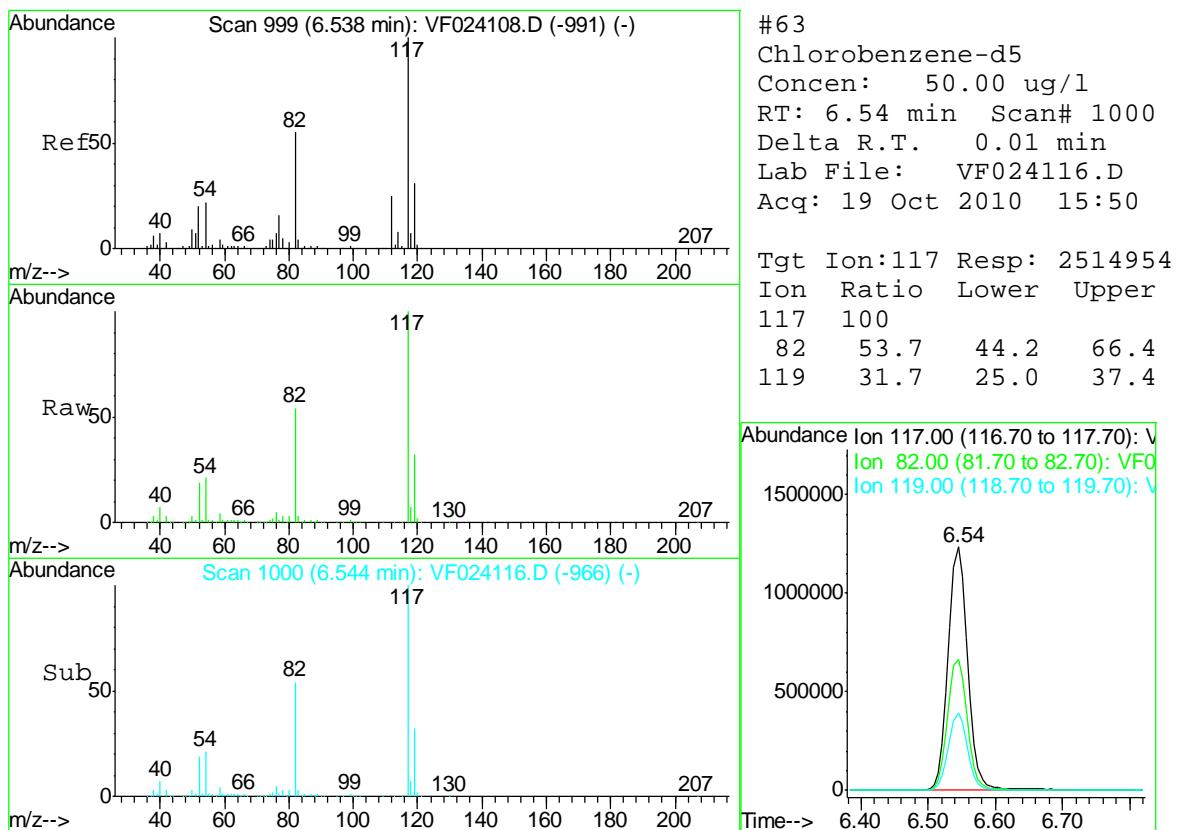


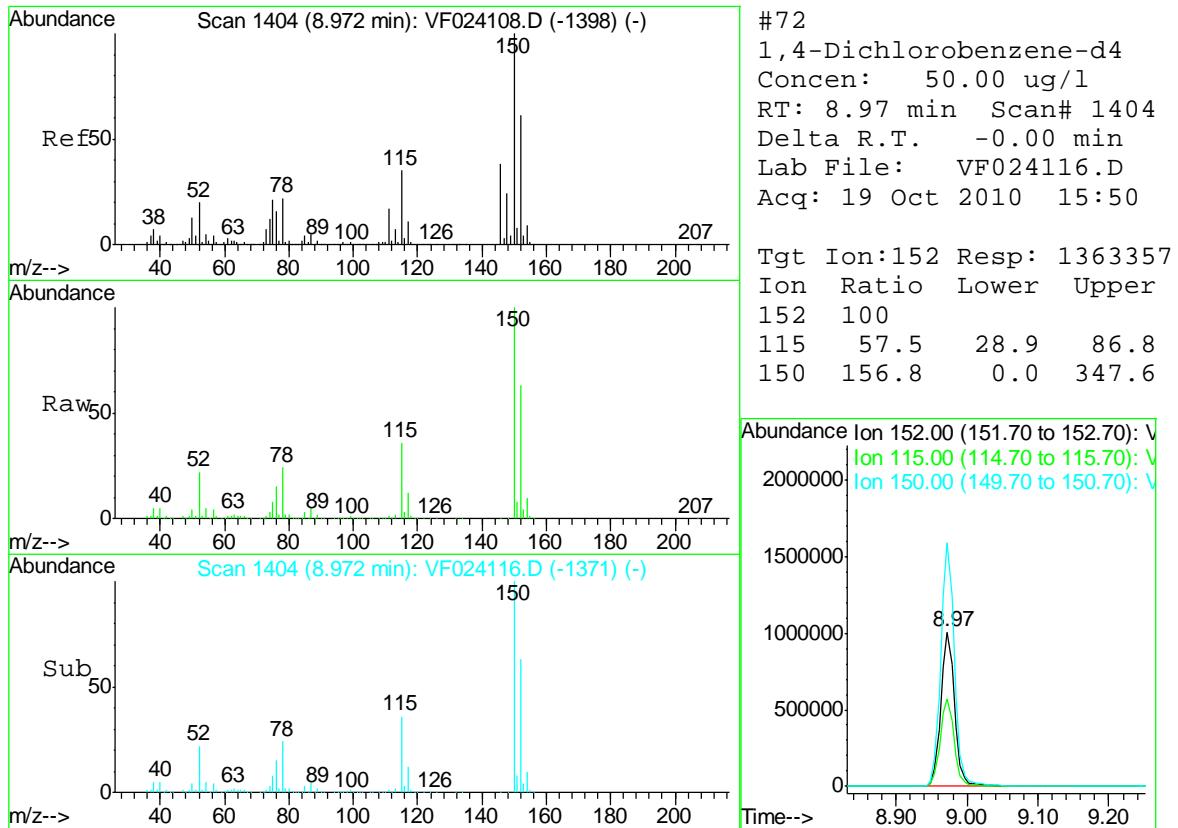












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024116.D  
 Acq On : 19 Oct 2010 15:50  
 Operator : MS  
 Sample : B3902-17  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 19 16:27:38 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1385795	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2591553	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2514954	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1363357	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	964512	46.27	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	92.54%	
36) Dibromofluoromethane	2.90	113	943187	53.39	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	106.78%	
49) Toluene-d8	4.87	98	2903922	48.62	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	97.24%	
62) 4-Bromofluorobenzene	7.92	95	1218225	48.71	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	97.42%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.27	63	82309	3.39	ug/l 99
28) cis-1,2-Dichloroethene	2.60	96	19991	1.05	ug/l 99
33) 1,1,1-Trichloroethane	2.91	97	91602	3.99	ug/l 94
44) Trichloroethene	3.62	130	50076	2.18	ug/l # 1
64) Tetrachloroethene	5.31	164	27947	1.23	ug/l 98

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024116.D  
 Acq On : 19 Oct 2010 15:50  
 Operator : MS  
 Sample : B3902-17  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 11 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

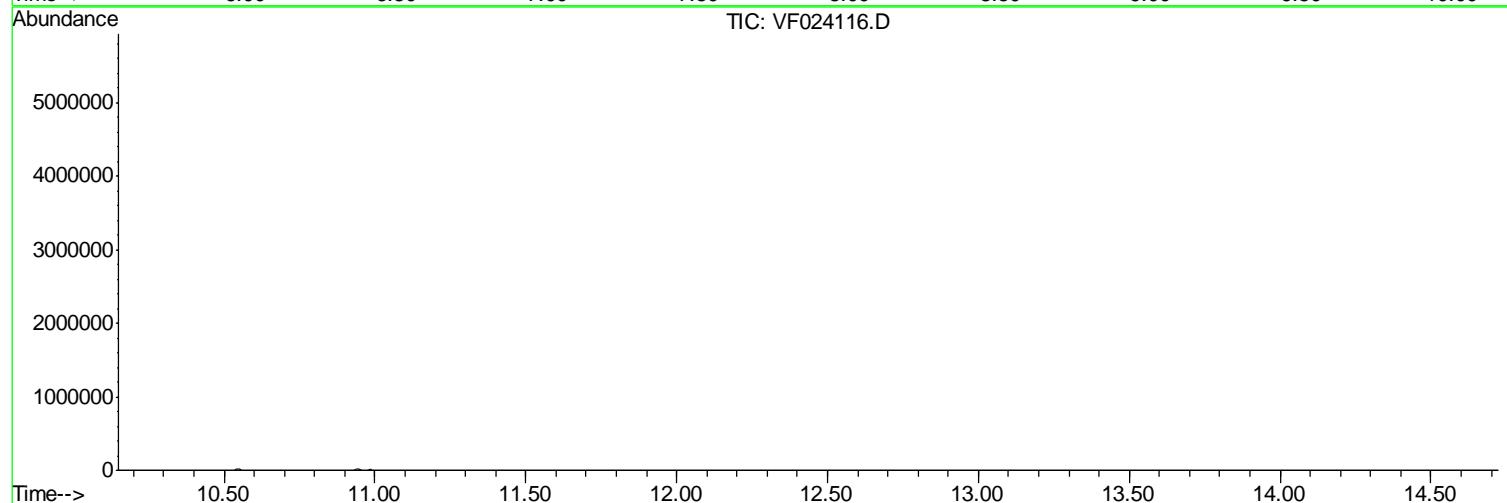
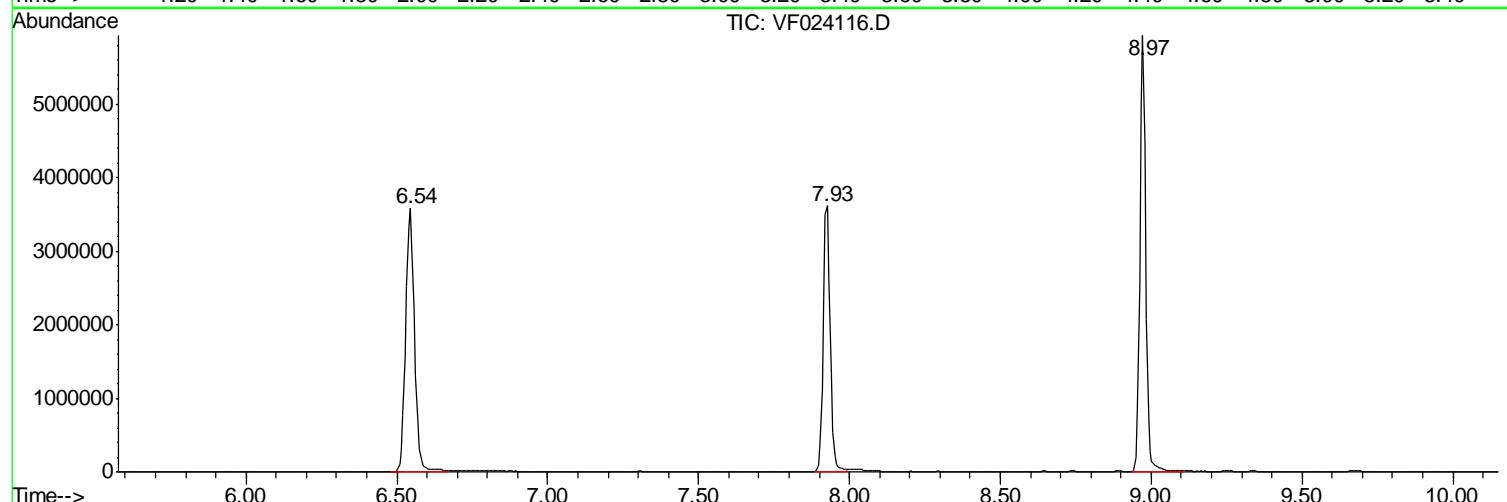
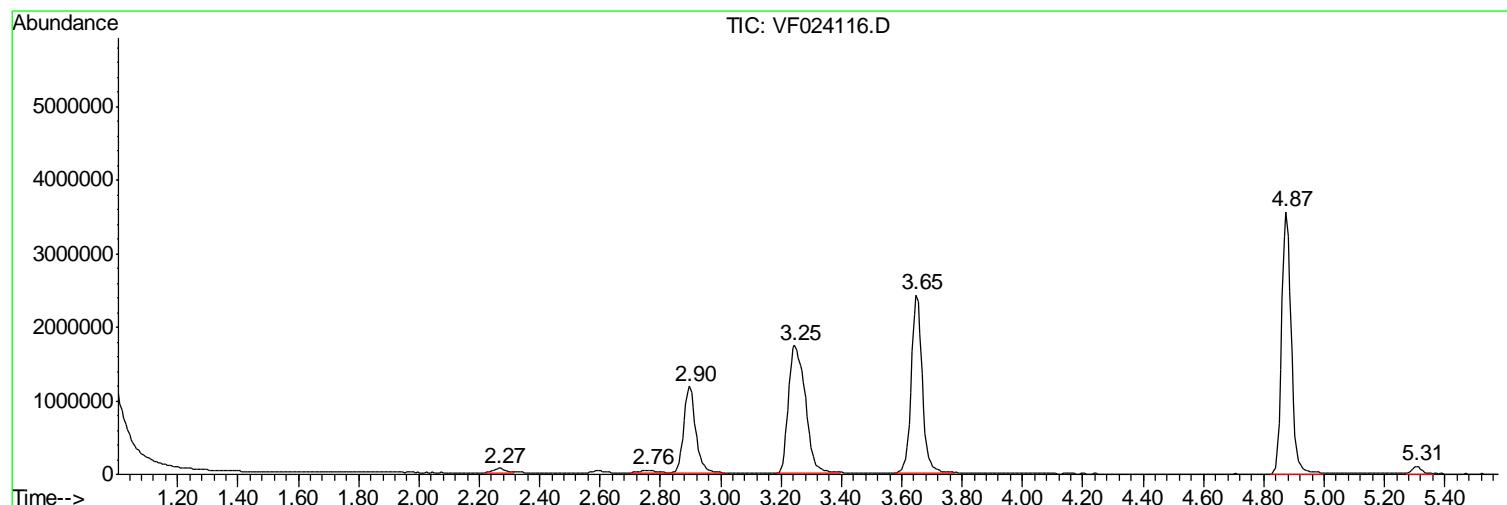
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.266	280	288	296	rBV	57084	167824	2.05%	0.367%
2	2.758	360	370	382	rBV2	36619	128497	1.57%	0.281%
3	2.897	382	393	412	rVV	1175118	3234339	39.57%	7.067%
4	3.245	441	451	476	rBV2	1741850	6844688	83.74%	14.955%
5	3.648	506	518	539	rBV	2426726	6107726	74.72%	13.345%
6	4.874	713	722	742	rBV	3568206	7748015	94.79%	16.929%
7	5.306	788	794	803	rVB2	99935	215539	2.64%	0.471%
8	6.544	989	1000	1021	rBV	3574904	7357805	90.01%	16.076%
9	7.927	1223	1230	1241	rBV	3609445	5789547	70.83%	12.650%
10	8.972	1398	1404	1427	rBV	5930335	8174084	100.00%	17.860%

Sum of corrected areas: 45768064

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024116.D  
Acq On : 19 Oct 2010 15:50  
Operator : MS  
Sample : B3902-17  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024116.D  
Acq On : 19 Oct 2010 15:50  
Operator : MS  
Sample : B3902-17  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024116.D  
Acq On : 19 Oct 2010 15:50  
Operator : MS  
Sample : B3902-17  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc	--Internal Standard---

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-8S	SDG No.:	B3902
Lab Sample ID:	B3902-18	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024117.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	2.5		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.64	J	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	2.5		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1.3		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-8S	SDG No.:	B3902
Lab Sample ID:	B3902-18	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024117.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	48.4		66 - 150		97%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		76 - 130		101%	SPK: 50
2037-26-5	Toluene-d8	47.8		78 - 121		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.3		70 - 131		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1243930	3.24				
540-36-3	1,4-Difluorobenzene	2388390	3.65				
3114-55-4	Chlorobenzene-d5	2290310	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1245660	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

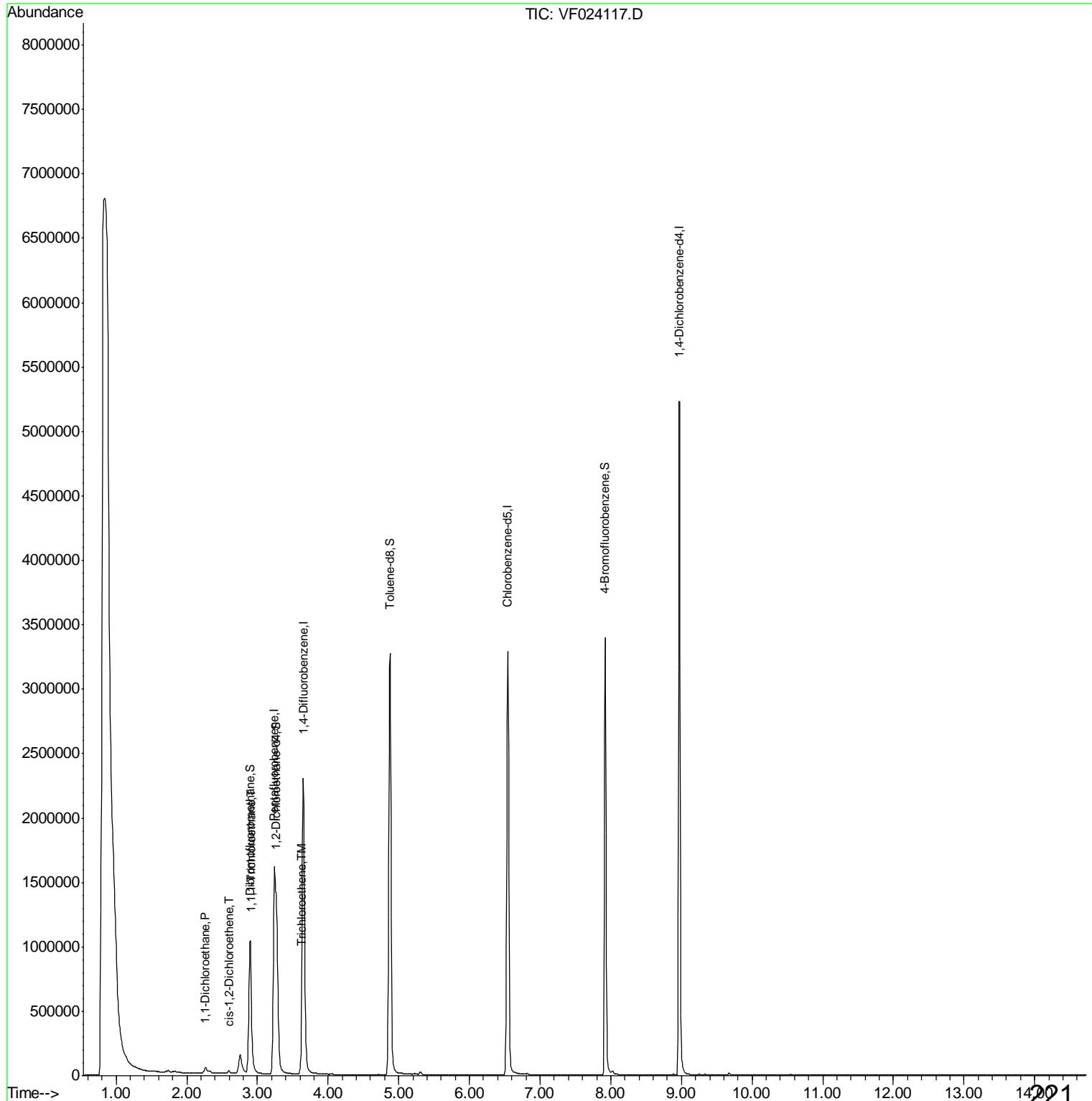
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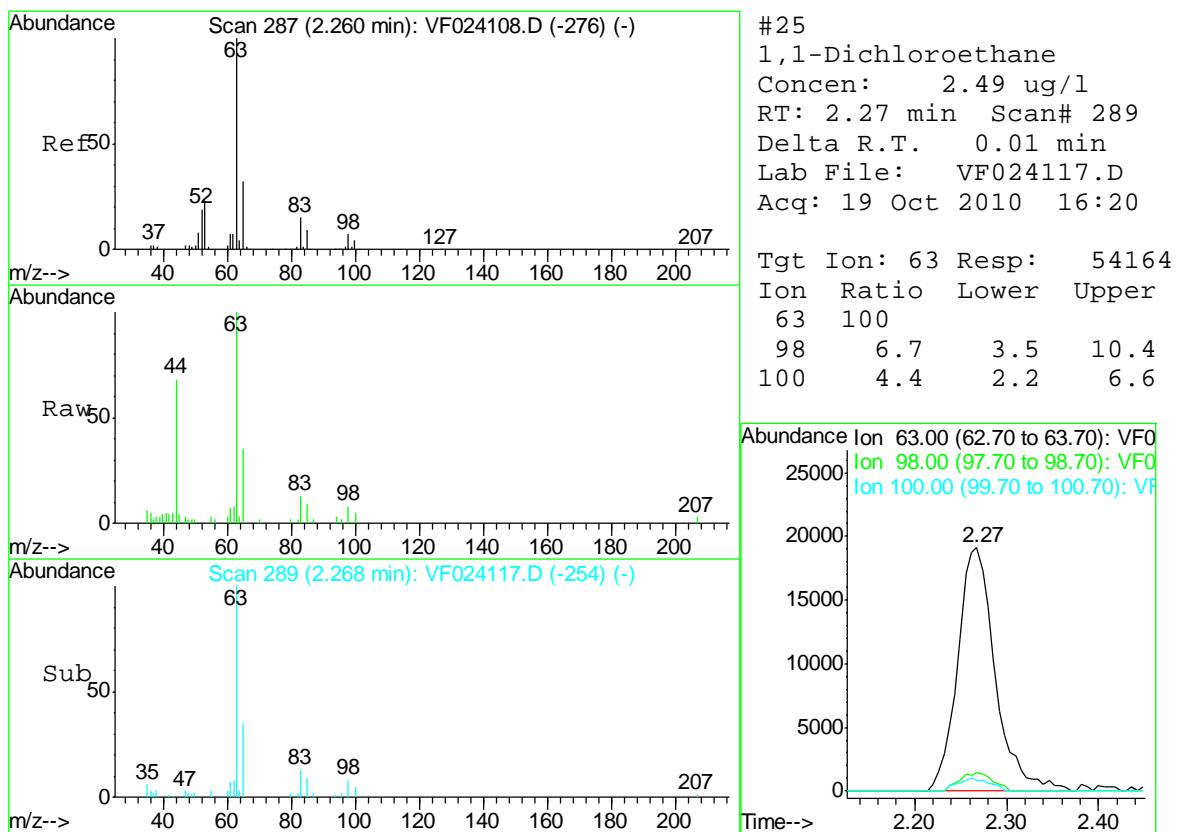
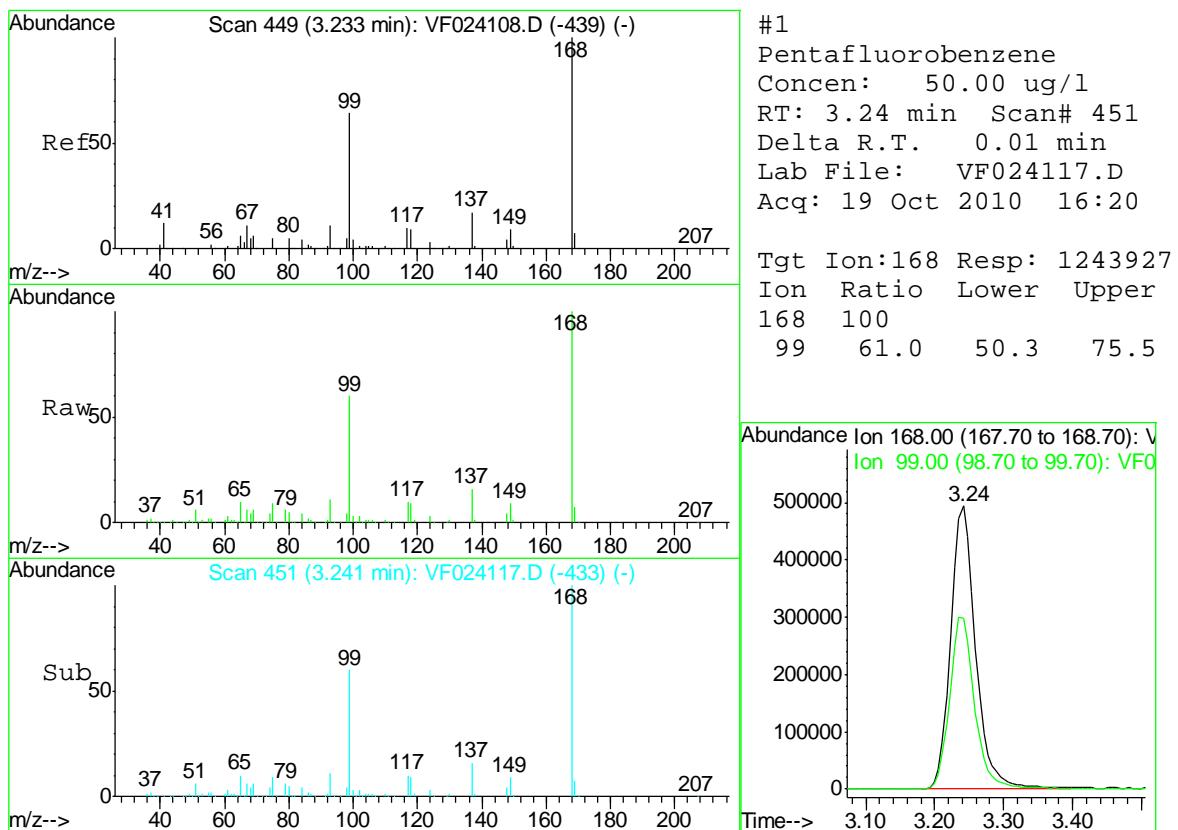
\* = Values outside of QC limits

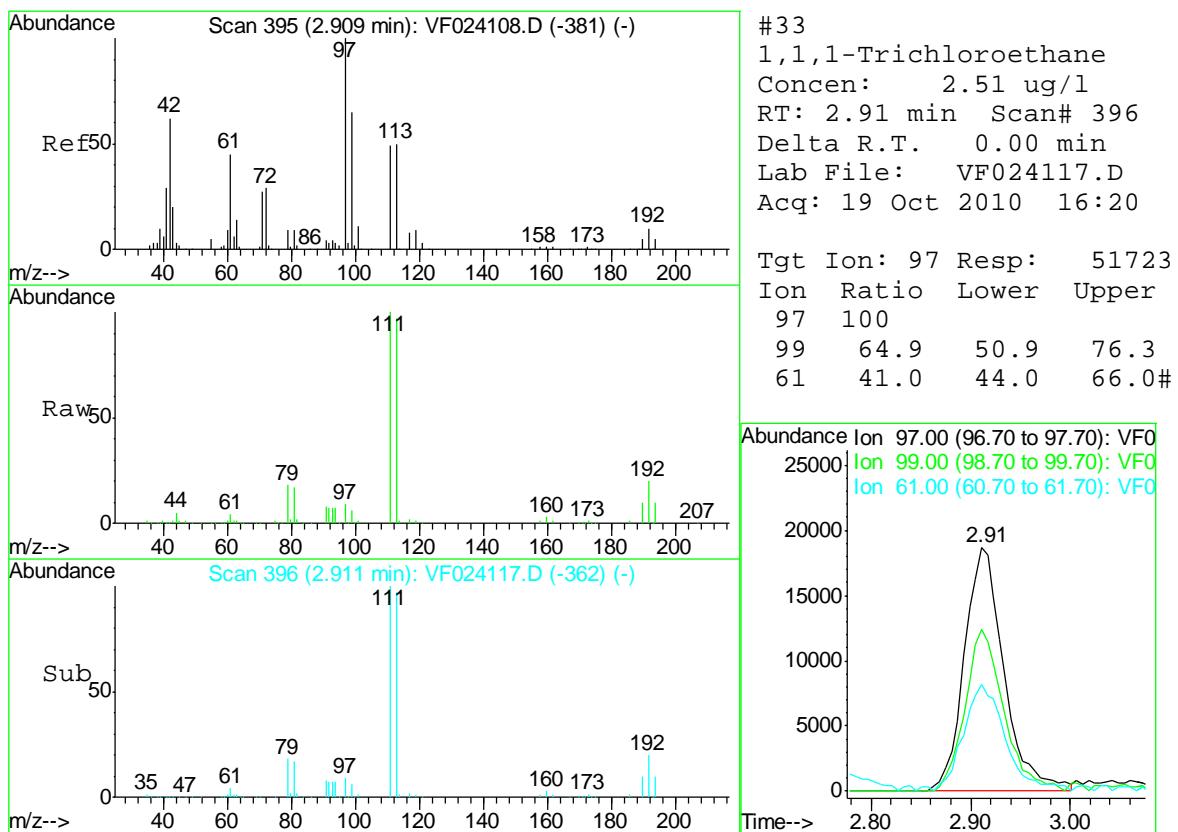
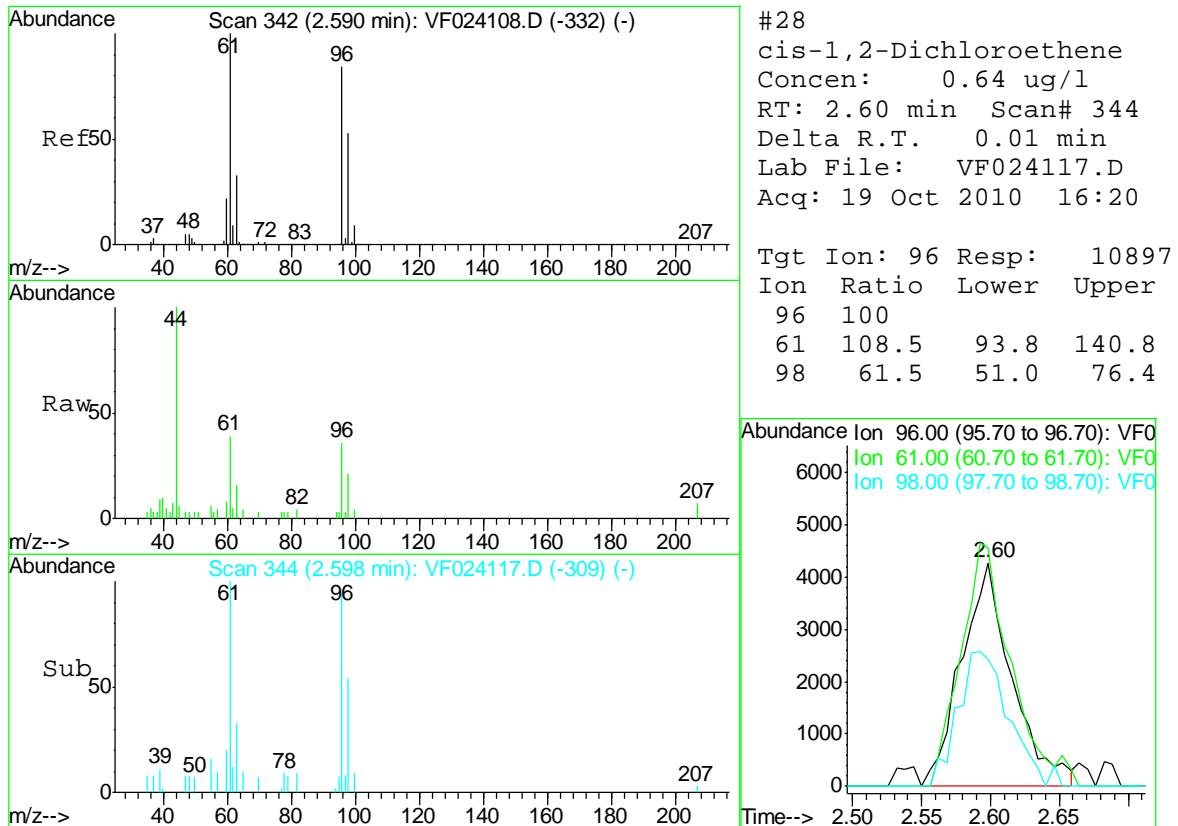
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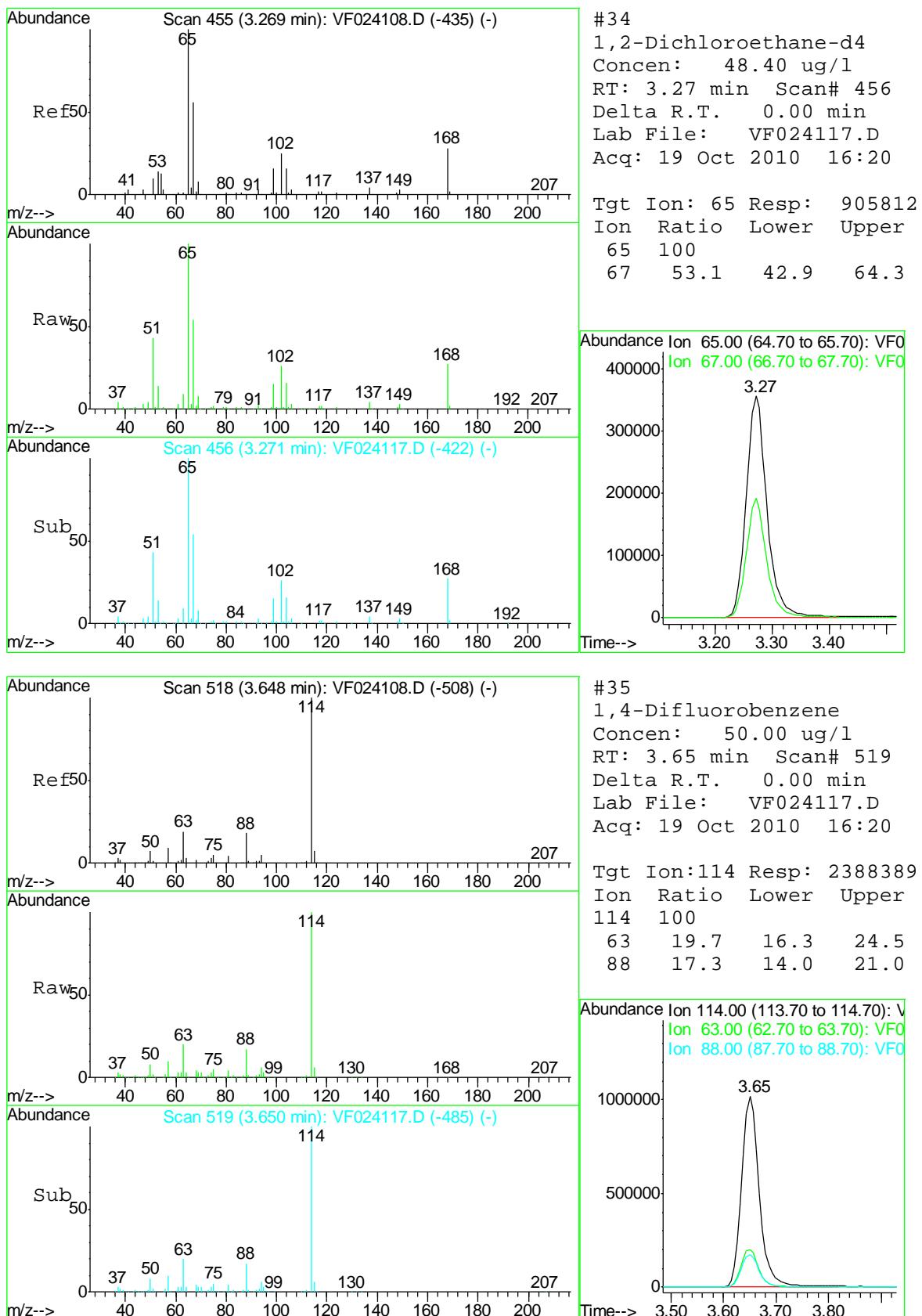
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Data File : VF024117.D  
Acq On : 19 Oct 2010 16:20  
Operator : MS  
Sample : B3902-18  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

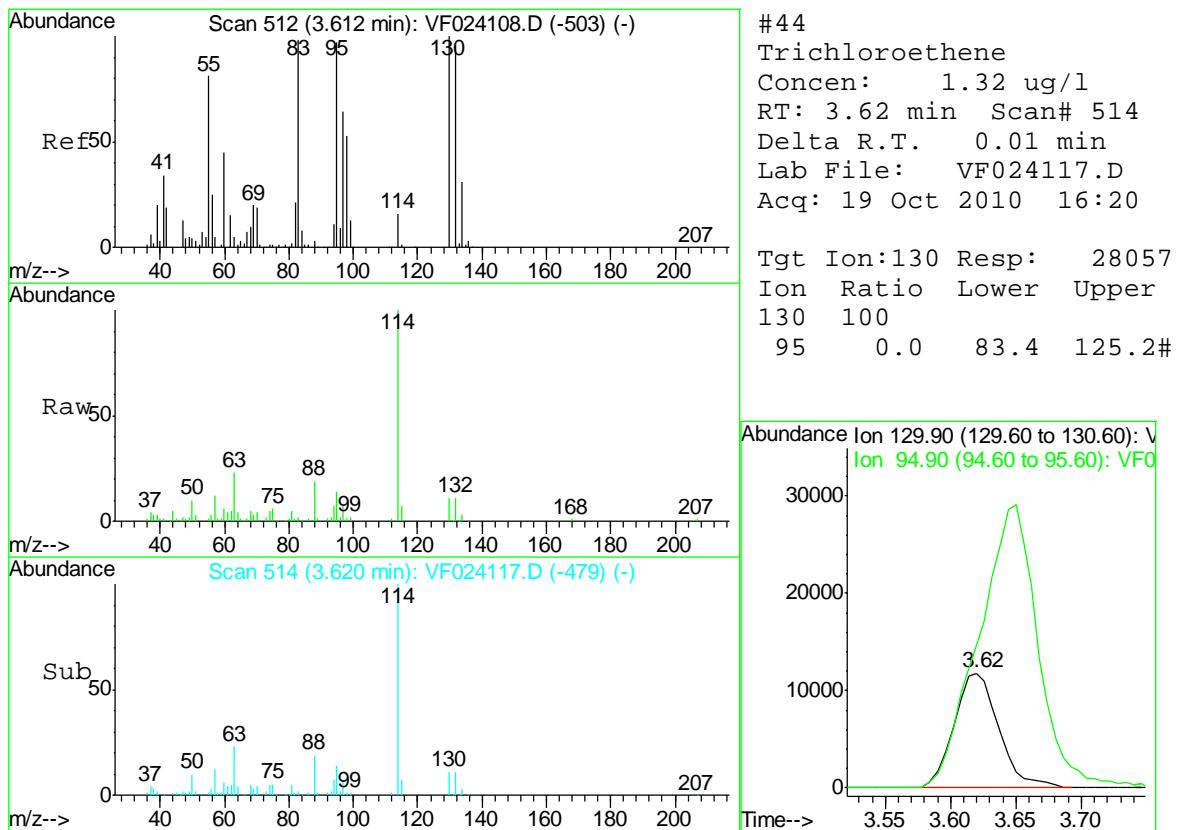
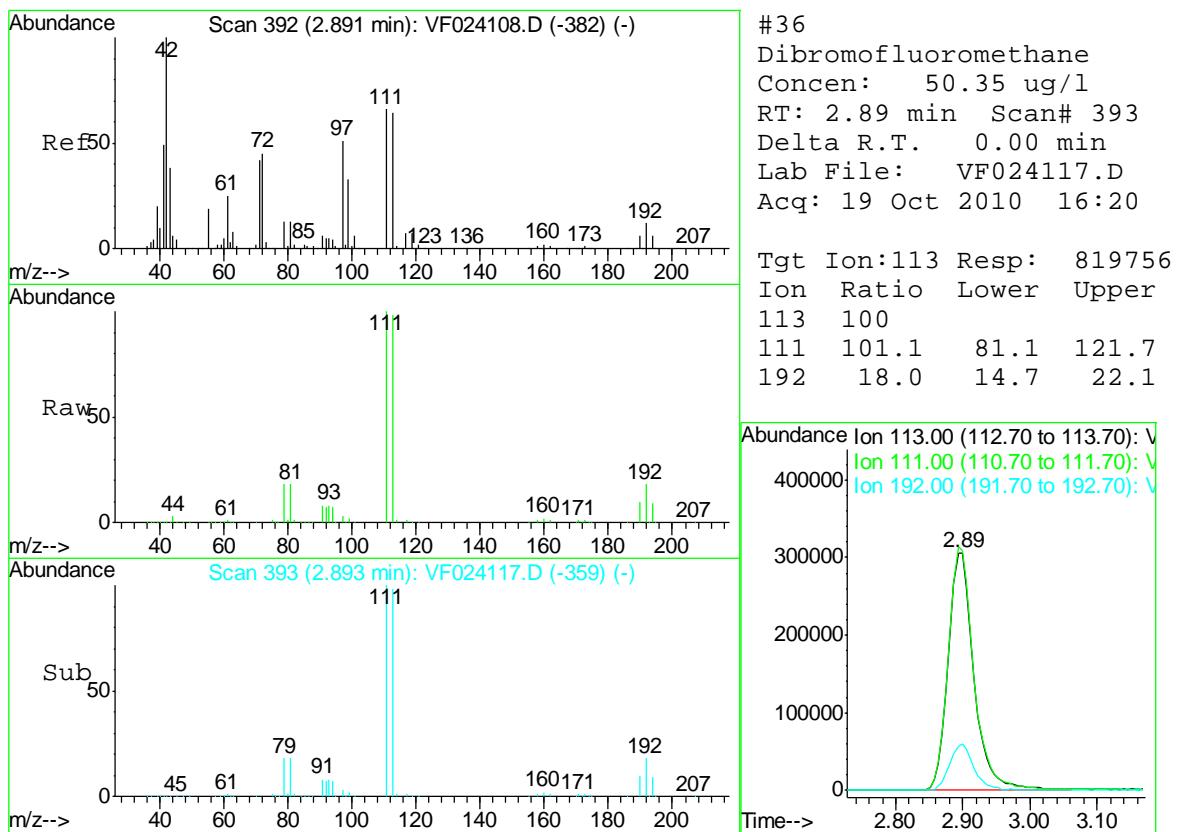
Quant Time: Oct 19 16:51:37 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

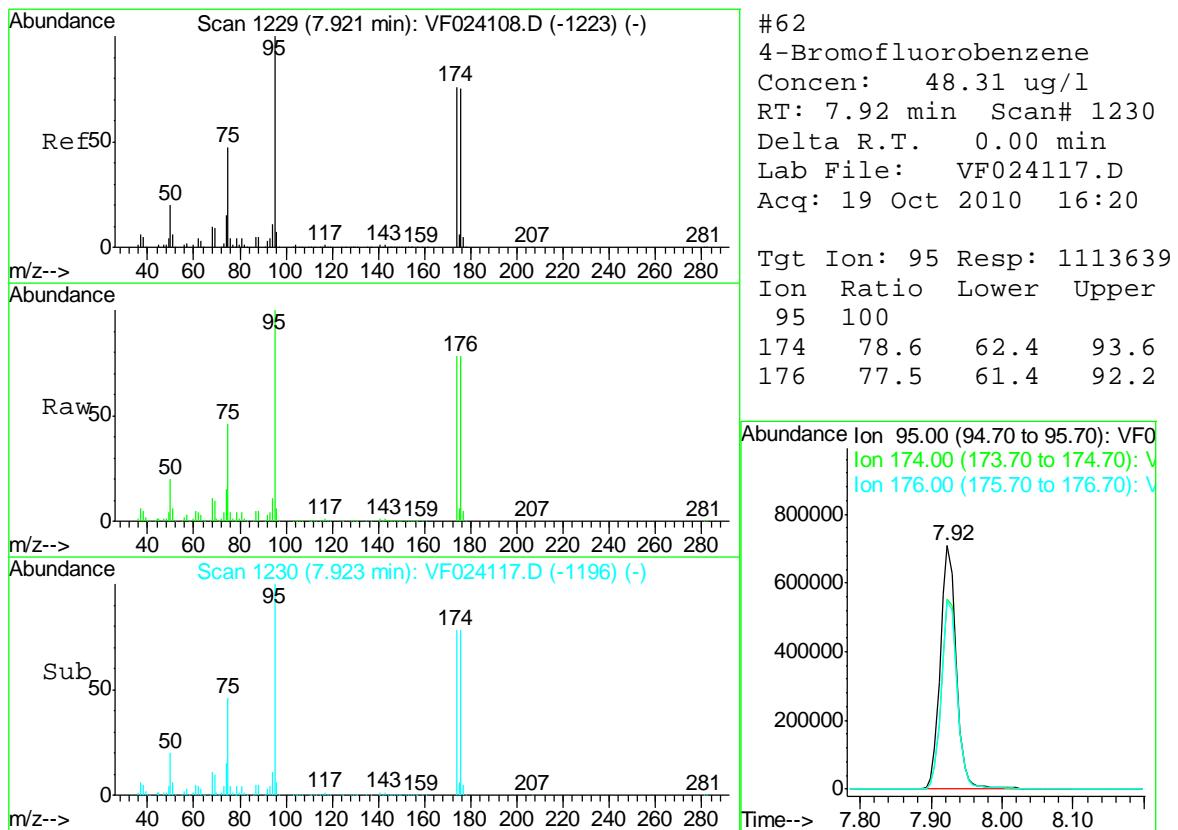
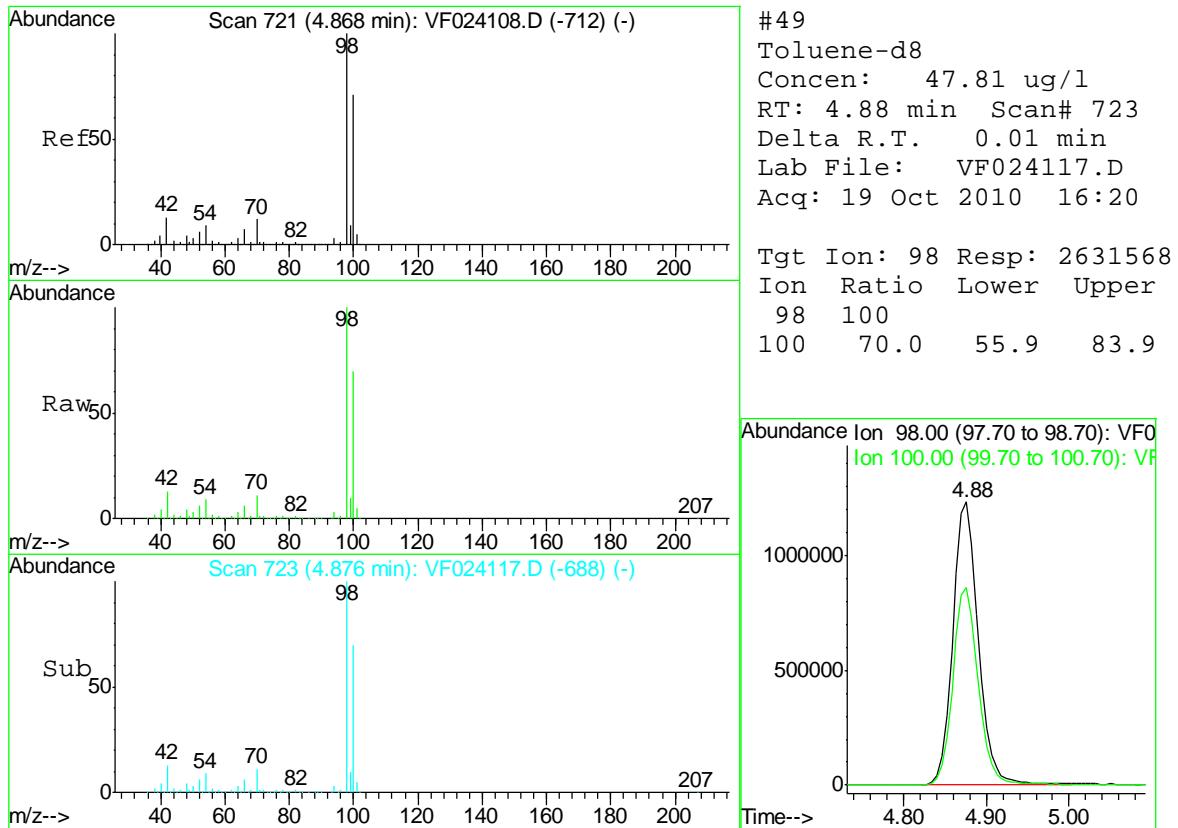


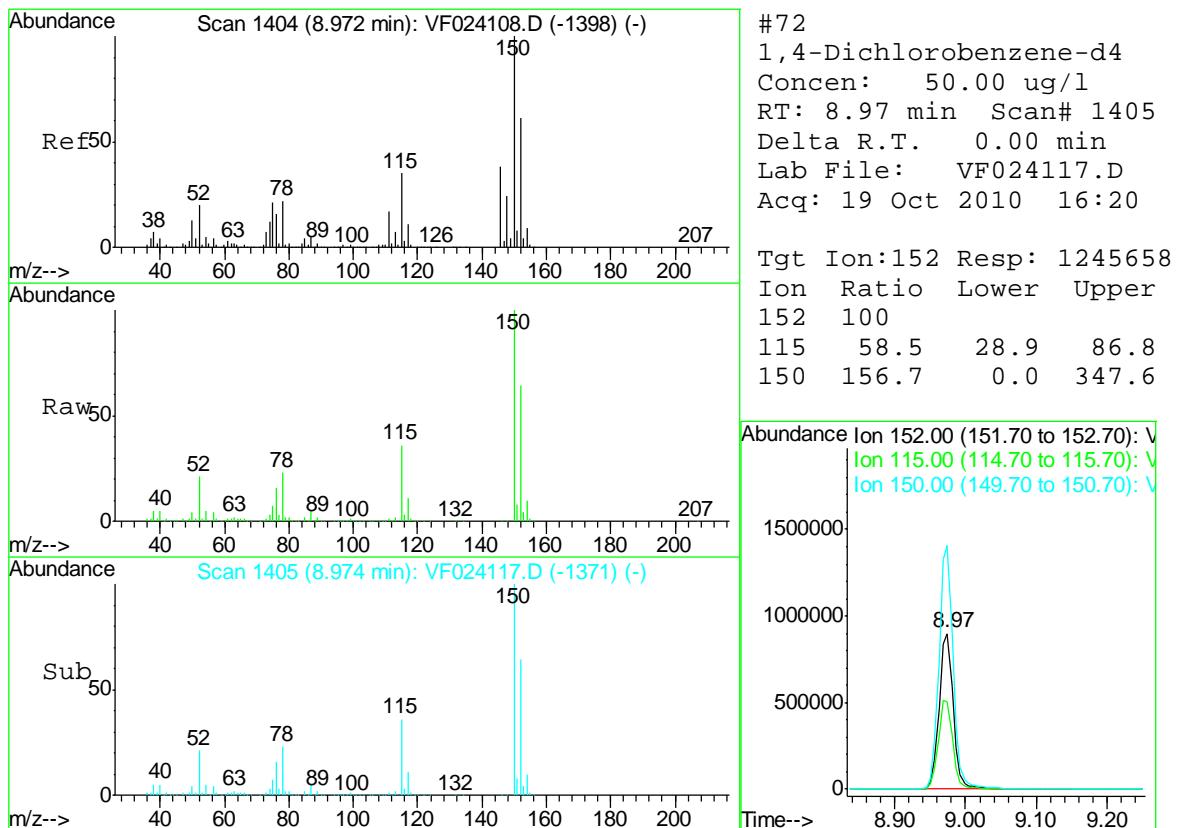
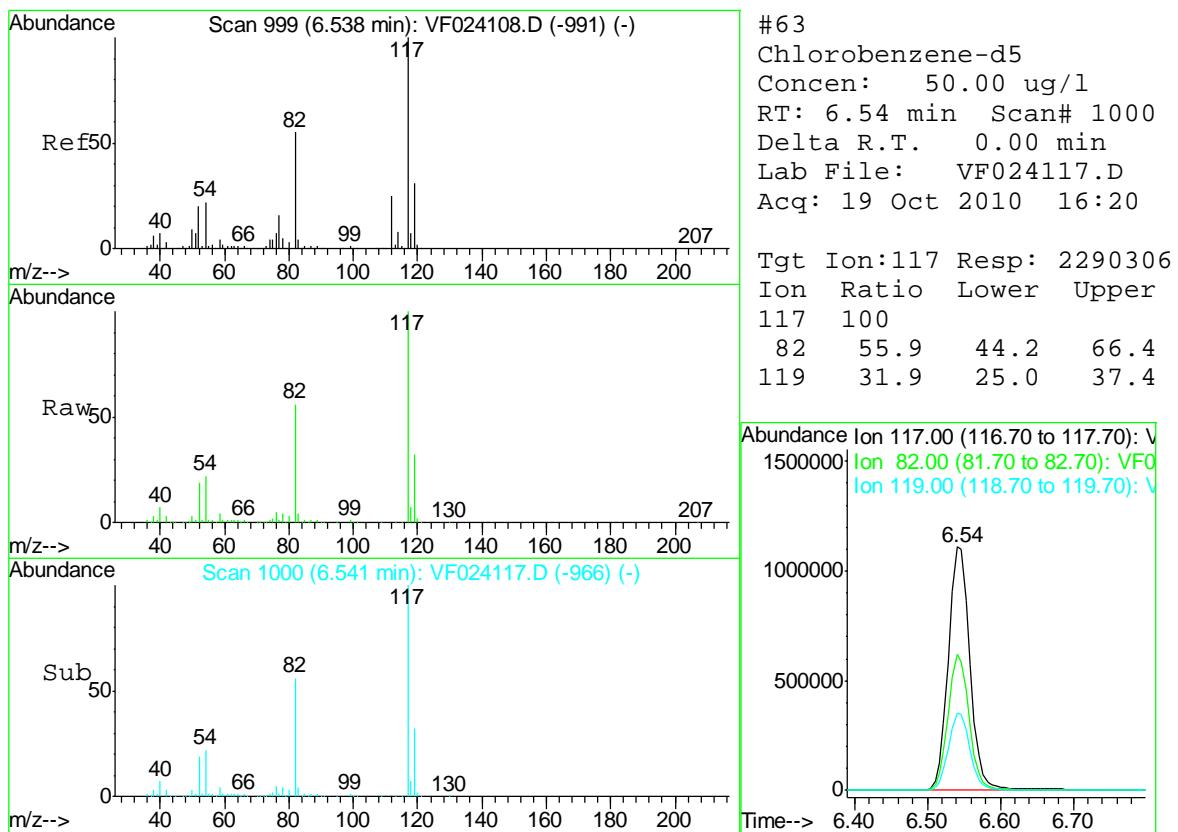












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024117.D  
 Acq On : 19 Oct 2010 16:20  
 Operator : MS  
 Sample : B3902-18  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 19 16:51:37 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1243927	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2388389	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2290306	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1245658	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	905812	48.40	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	96.80%	
36) Dibromofluoromethane	2.89	113	819756	50.35	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	100.70%	
49) Toluene-d8	4.88	98	2631568	47.81	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	95.62%	
62) 4-Bromofluorobenzene	7.92	95	1113639	48.31	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	96.62%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.27	63	54164	2.49	ug/l 100
28) cis-1,2-Dichloroethene	2.60	96	10897	0.64	ug/l 94
33) 1,1,1-Trichloroethane	2.91	97	51723	2.51	ug/l # 90
44) Trichloroethene	3.62	130	28057	1.32	ug/l # 1

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024117.D  
 Acq On : 19 Oct 2010 16:20  
 Operator : MS  
 Sample : B3902-18  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

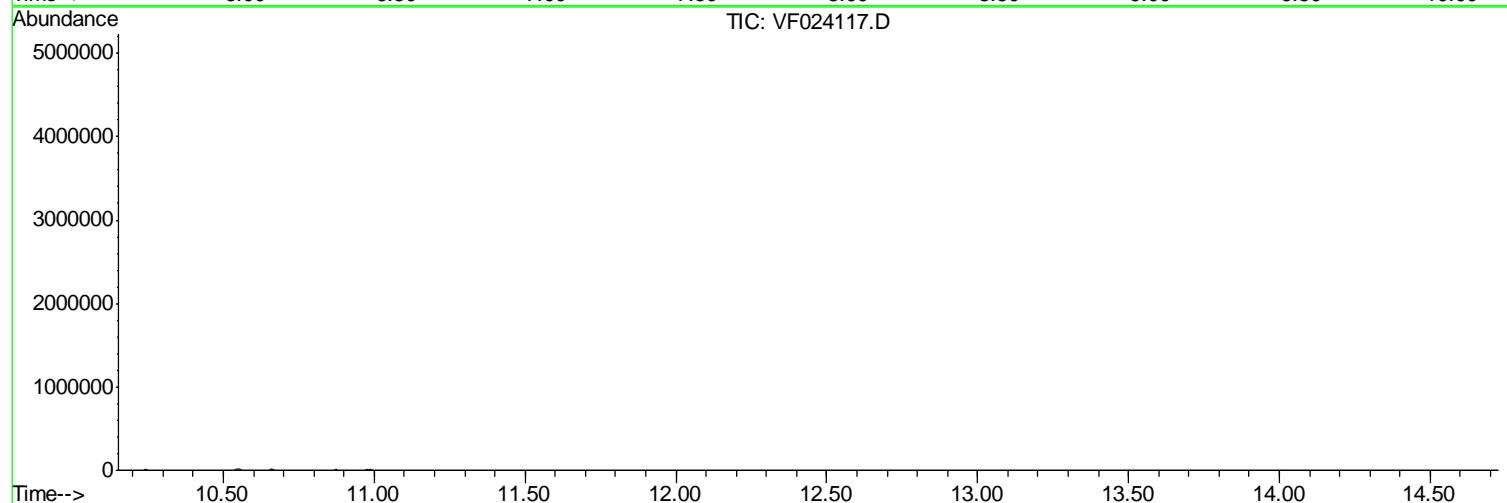
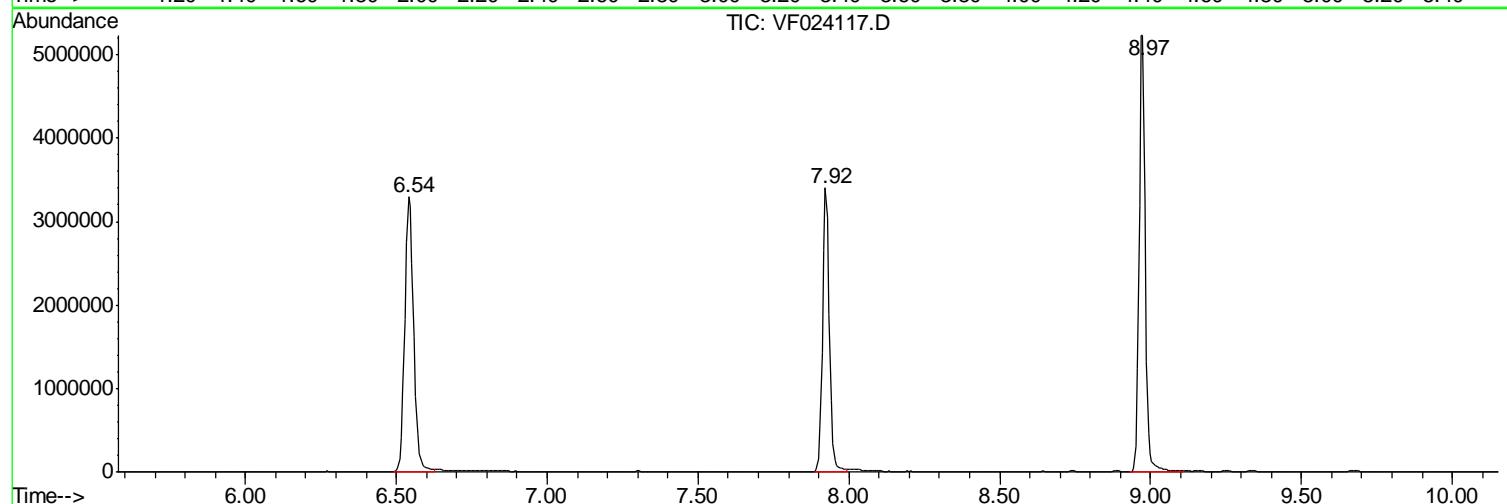
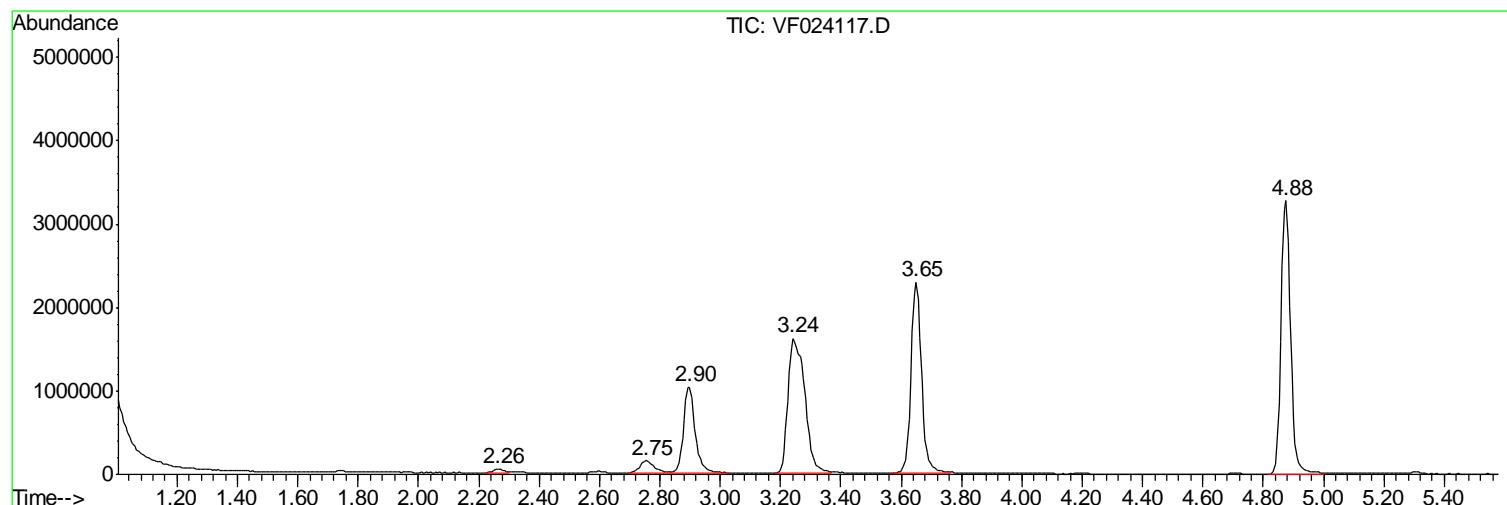
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.262	281	288	294	rBV2	41212	104419	1.38%	0.249%
2	2.755	360	370	384	rBV	145500	488001	6.43%	1.164%
3	2.899	384	394	415	rVB	1030320	2770449	36.51%	6.607%
4	3.241	441	451	472	rBV2	1615802	6306191	83.10%	15.040%
5	3.650	506	519	538	rBV	2296423	5526510	72.83%	13.181%
6	4.876	713	723	744	rBV	3275499	7108994	93.68%	16.955%
7	6.541	992	1000	1014	rBV	3291086	6731560	88.71%	16.055%
8	7.923	1224	1230	1242	rBV	3393769	5304245	69.90%	12.651%
9	8.974	1398	1405	1427	rBV	5226652	7588609	100.00%	18.099%

Sum of corrected areas: 41928978

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024117.D  
Acq On : 19 Oct 2010 16:20  
Operator : MS  
Sample : B3902-18  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



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Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024117.D  
Acq On : 19 Oct 2010 16:20  
Operator : MS  
Sample : B3902-18  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024117.D  
Acq On : 19 Oct 2010 16:20  
Operator : MS  
Sample : B3902-18  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc	--Internal Standard---

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-8DD	SDG No.:	B3902
Lab Sample ID:	B3902-19	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031034.D	1		10/20/10	VG102010

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-8DD	SDG No.:	B3902
Lab Sample ID:	B3902-19	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		Final Vol:	5000 uL
	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031034.D	1		10/20/10	VG102010

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	41.3		66 - 150		83%	SPK: 50
1868-53-7	Dibromofluoromethane	42		76 - 130		84%	SPK: 50
2037-26-5	Toluene-d8	39.4		78 - 121		79%	SPK: 50
460-00-4	4-Bromofluorobenzene	41.6		70 - 131		83%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	572481		3.89			
540-36-3	1,4-Difluorobenzene	895847		4.69			
3114-55-4	Chlorobenzene-d5	729627		9.67			
3855-82-1	1,4-Dichlorobenzene-d4	393514		13.38			

**TENTITIVE IDENTIFIED COMPOUNDS**

000110-93-0	5-Hepten-2-one, 6-methyl-	17	J	13.65	ug/L
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

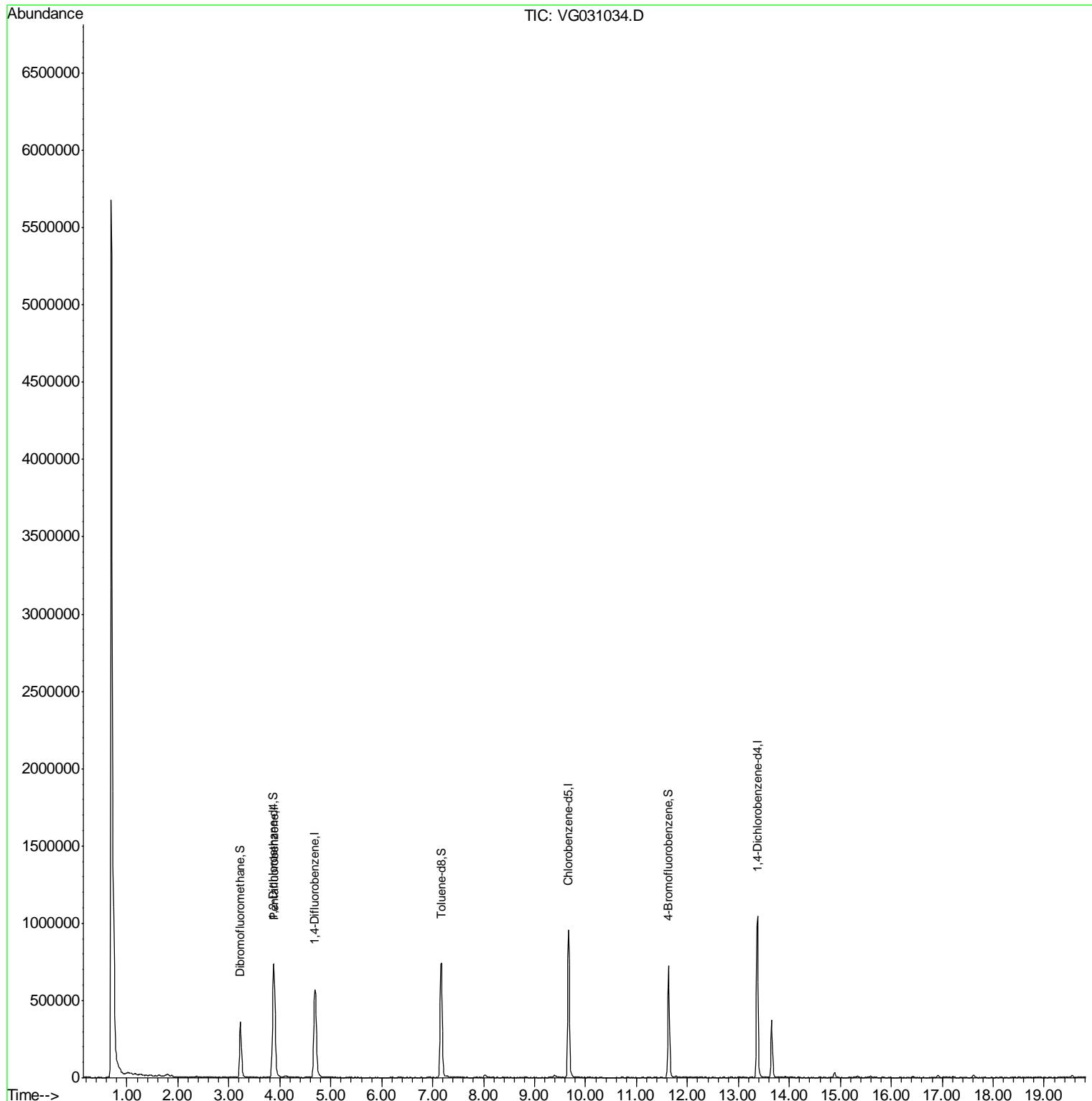
N = Presumptive Evidence of a Compound

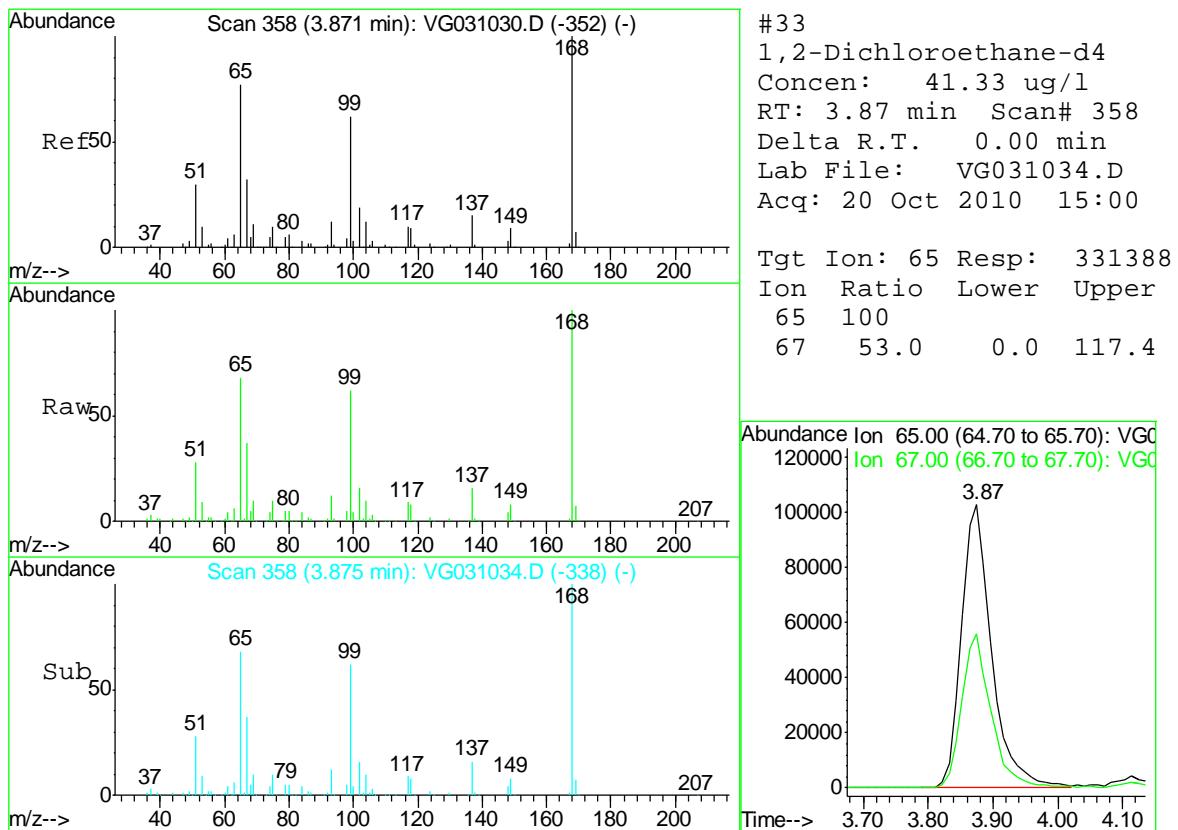
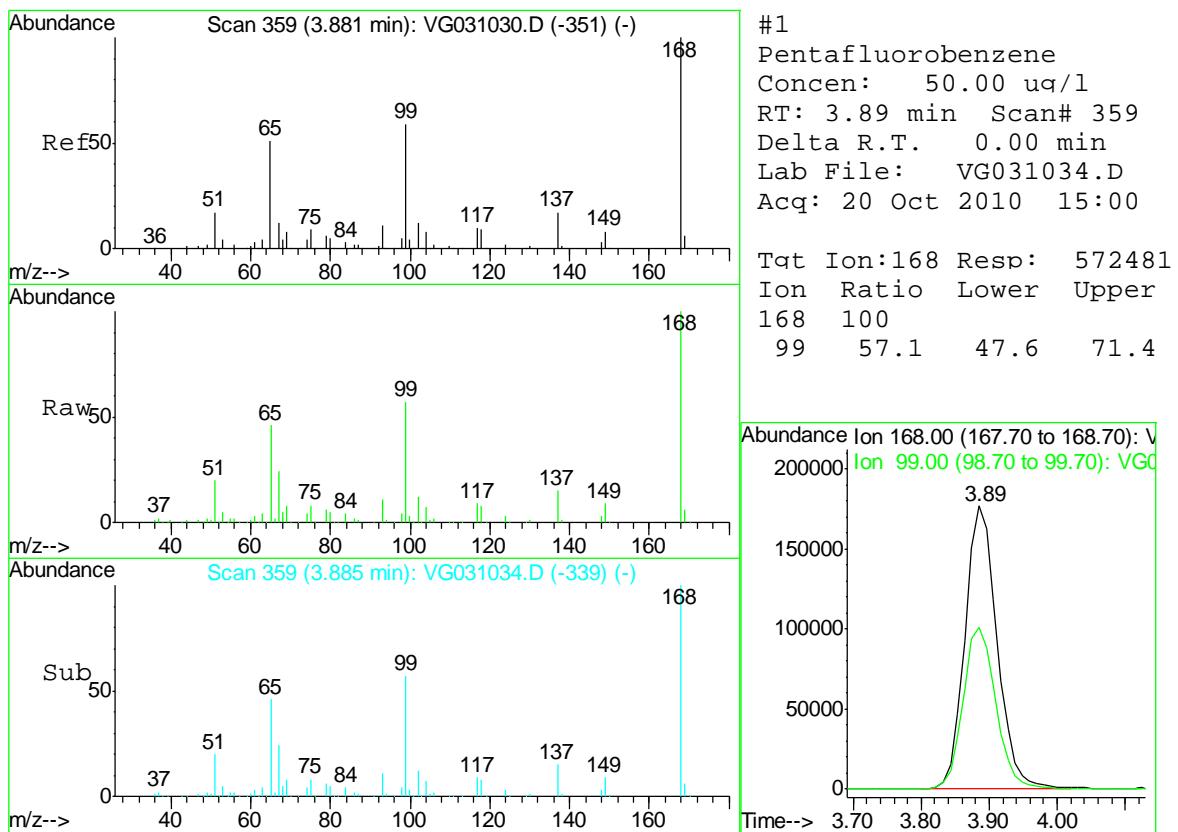
\* = Values outside of QC limits

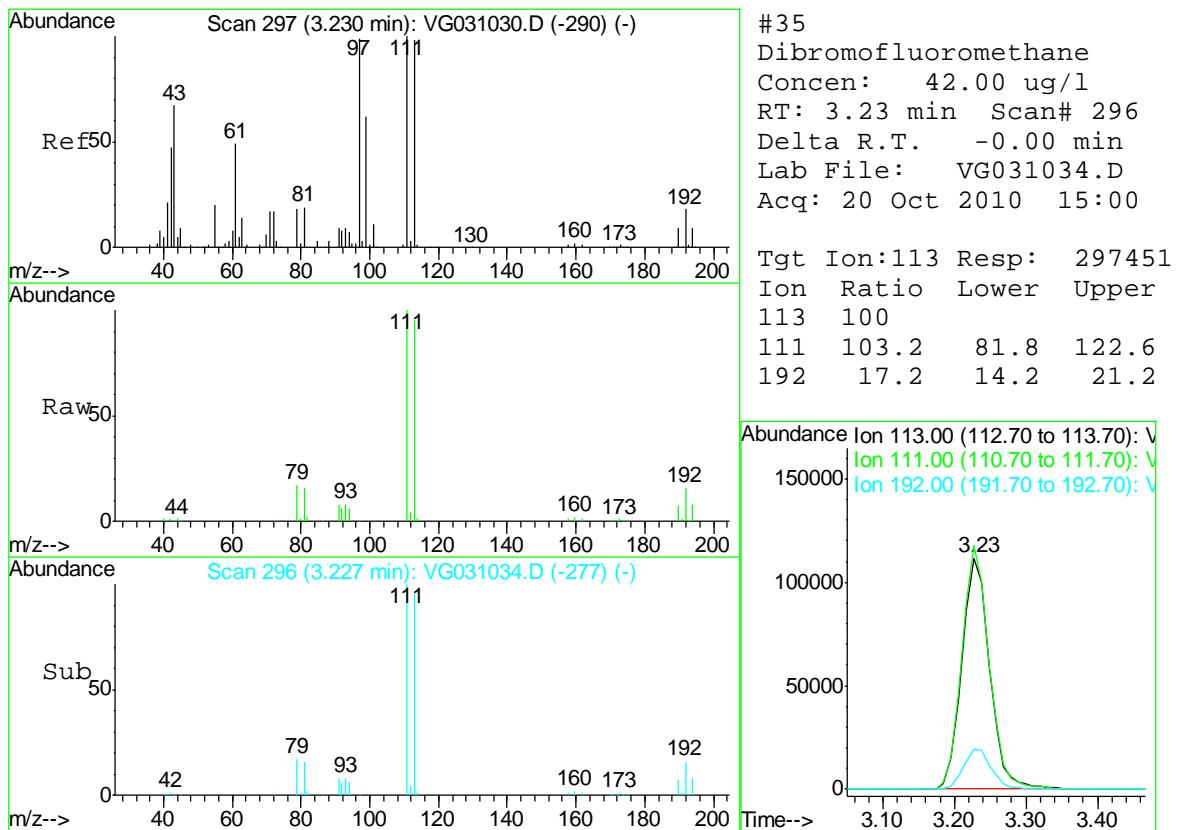
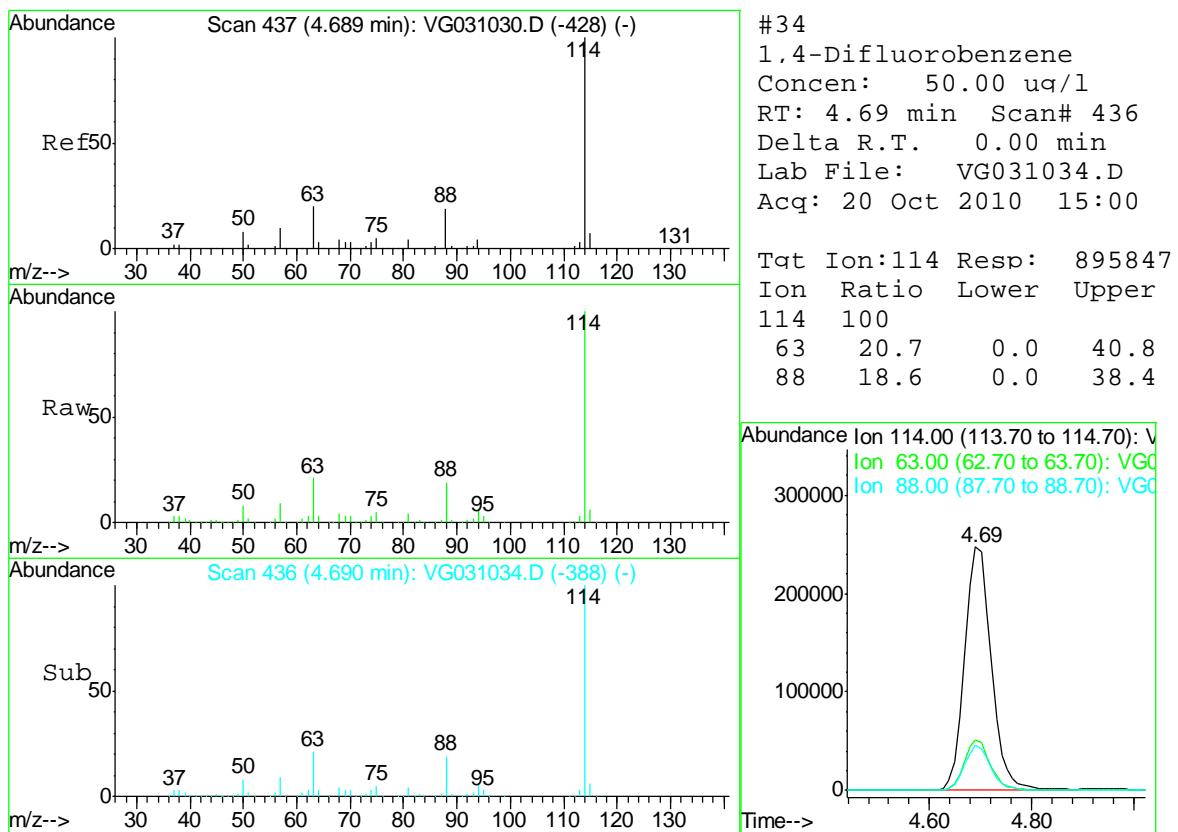
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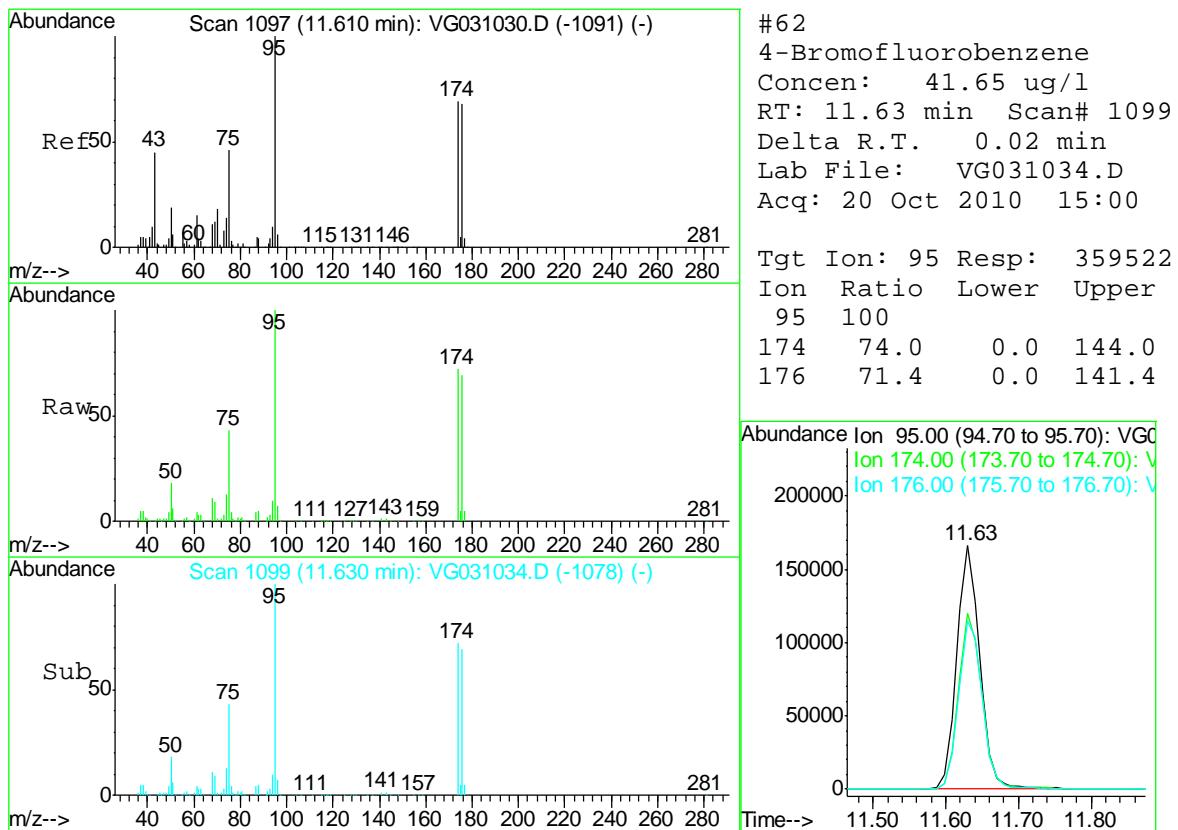
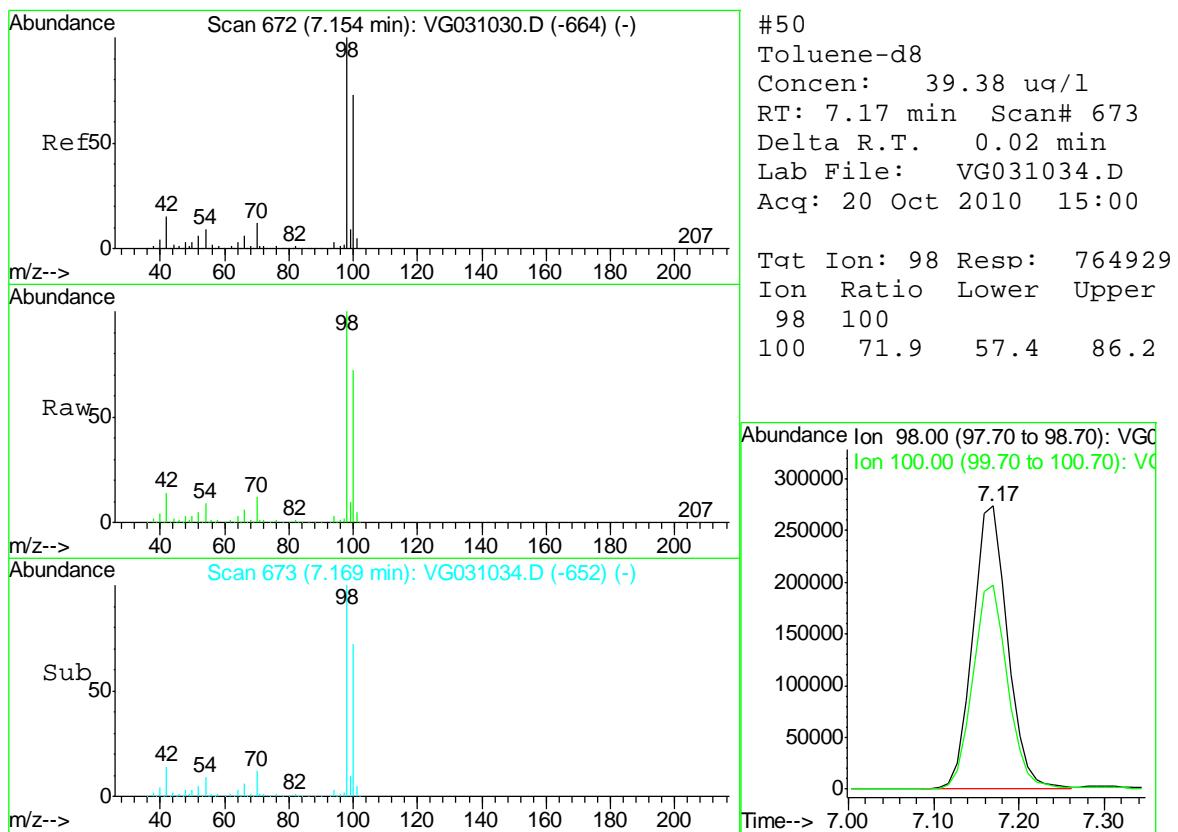
Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG102010\  
Data File : VG031034.D  
Acq On : 20 Oct 2010 15:00  
Operator : PS  
Sample : B3902-19  
Misc : 5mL MSVOA G  
ALS Vial : 6 Sample Multiplier: 1

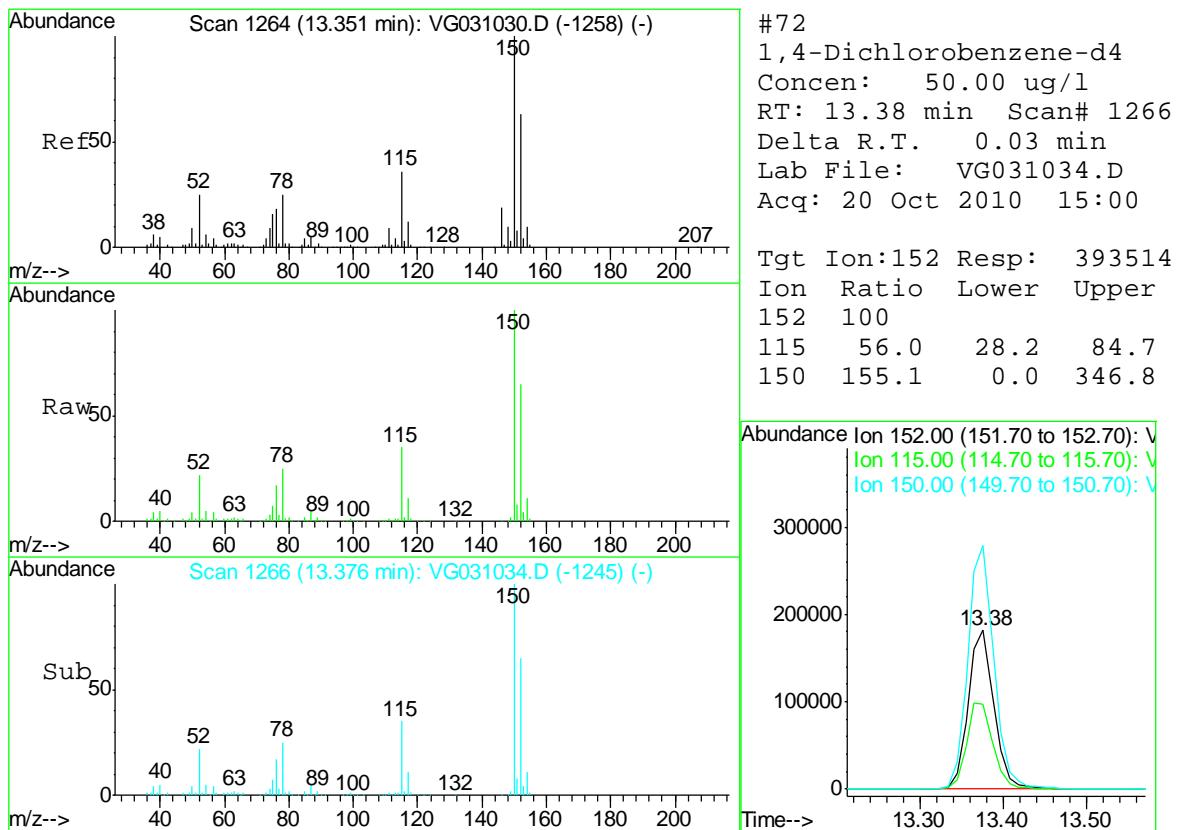
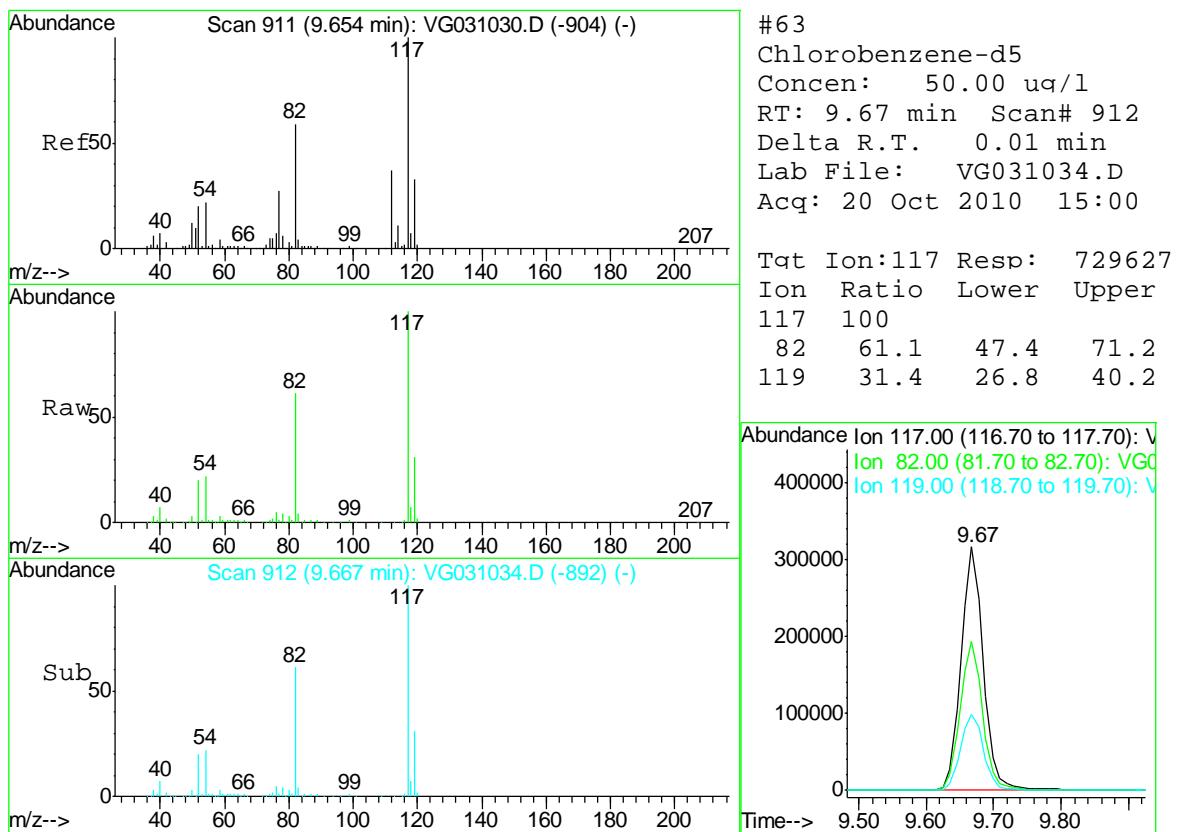
Ouant Time: Oct 21 00:38:53 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 20 11:05:07 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG102010\  
 Data File : VG031034.D  
 Acq On : 20 Oct 2010 15:00  
 Operator : PS  
 Sample : B3902-19  
 Misc : 5mL MSVOA G  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 21 00:38:53 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 20 11:05:07 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	572481	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.69	114	895847	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	729627	50.00	ug/l	0.01
72) 1,4-Dichlorobenzene-d4	13.38	152	393514	50.00	ug/l	0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	3.87	65	331388	41.33	ug/l	0.00
Spiked Amount 50.000			Recovery =	82.66%		
35) Dibromofluoromethane	3.23	113	297451	42.00	ug/l	0.00
Spiked Amount 50.000			Recovery =	84.00%		
50) Toluene-d8	7.17	98	764929	39.38	ug/l	0.02
Spiked Amount 50.000			Recovery =	78.76%		
62) 4-Bromofluorobenzene	11.63	95	359522	41.65	ug/l	0.02
Spiked Amount 50.000			Recovery =	83.30%		

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

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG102010\  
 Data File : VG031034.D  
 Acq On : 20 Oct 2010 15:00  
 Operator : PS  
 Sample : B3902-19  
 Misc : 5mL MSVOA G  
 ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

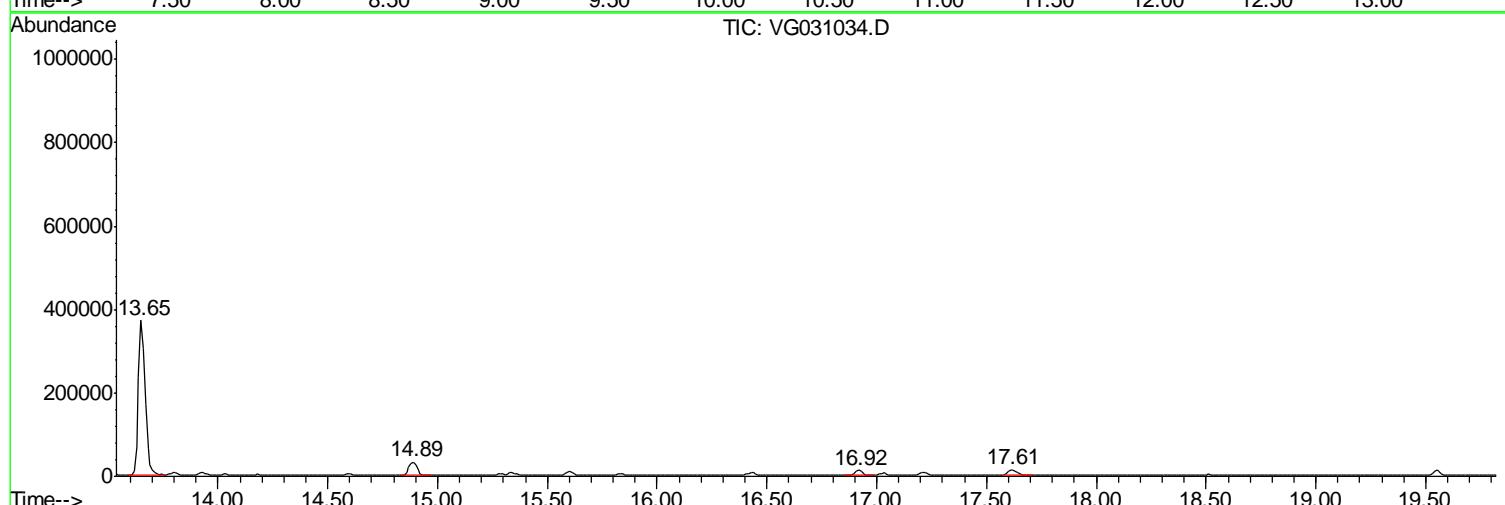
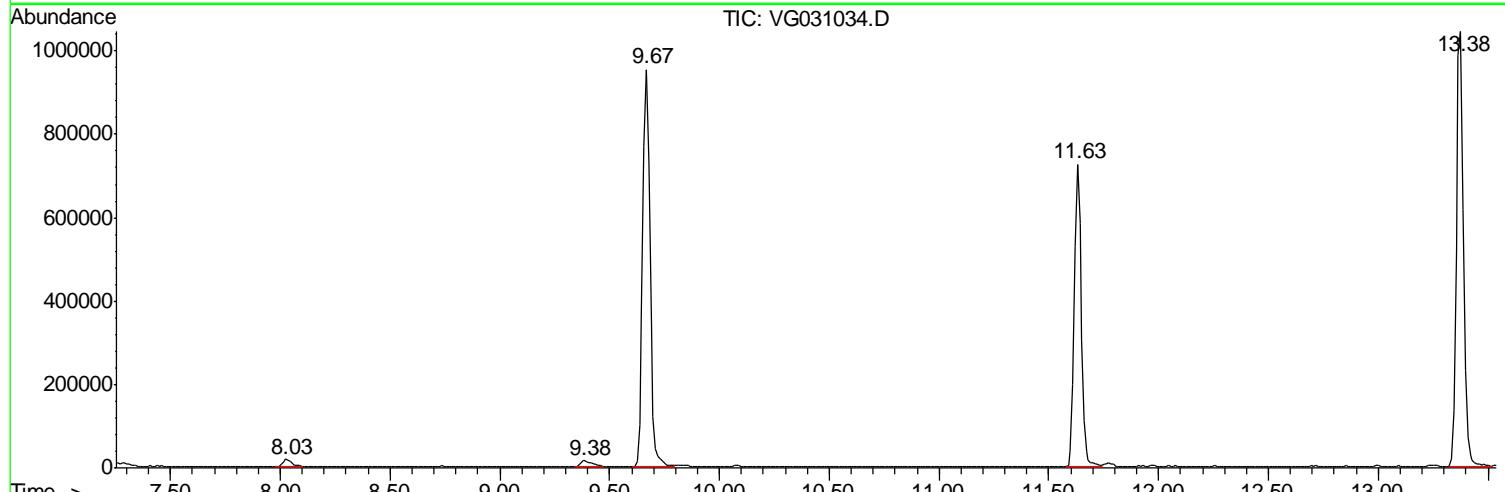
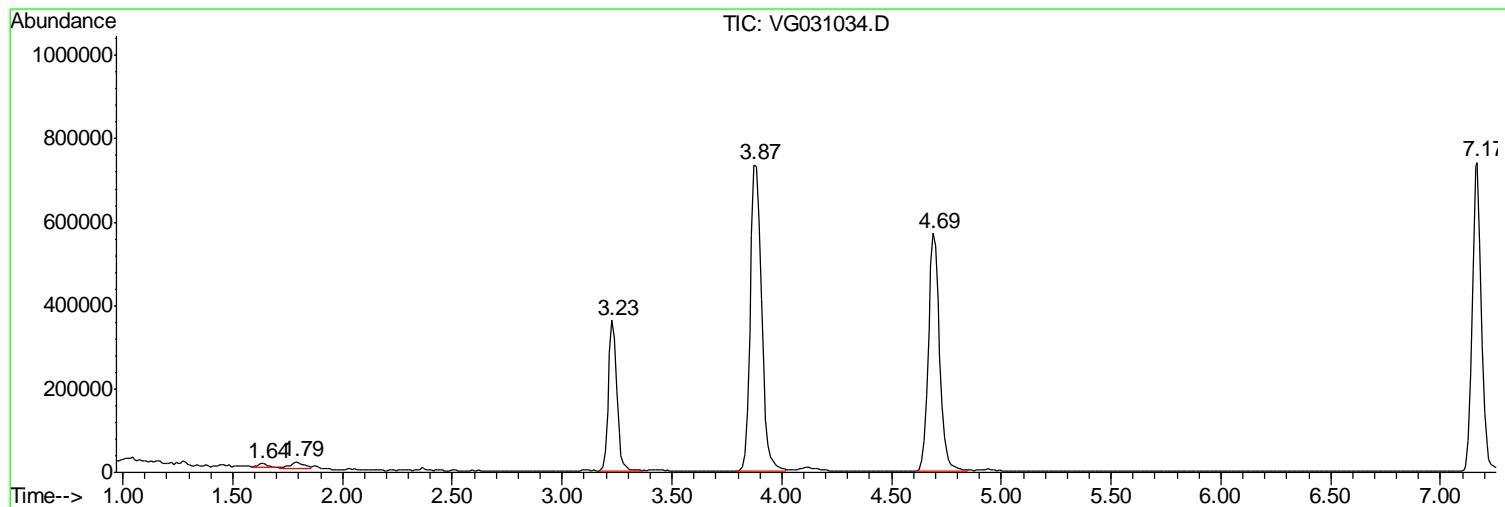
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.640	139	144	149	rVB5	9580	30274	1.18%	0.202%
2	1.794	151	159	165	rVV3	16309	70362	2.75%	0.471%
3	3.227	290	296	309	rBV	361836	970903	37.90%	6.493%
4	3.875	350	358	372	rBV2	734273	2561458	100.00%	17.130%
5	4.690	429	436	451	rBV	569963	2040454	79.66%	13.646%
6	7.169	665	673	683	rBV	740642	2099267	81.96%	14.039%
7	8.025	750	755	762	rBV	18656	55278	2.16%	0.370%
8	9.383	881	885	893	rBV5	14411	48571	1.90%	0.325%
9	9.667	906	912	924	rBV	952295	2219524	86.65%	14.844%
10	11.630	1094	1099	1110	rBV	725146	1576711	61.56%	10.545%
11	13.376	1261	1266	1279	rVB	1042915	2334862	91.15%	15.615%
12	13.650	1287	1292	1302	rBV	370136	796035	31.08%	5.324%
13	14.890	1406	1411	1418	rVB	32405	80821	3.16%	0.541%
14	16.918	1599	1605	1611	rBV2	12627	30966	1.21%	0.207%
15	17.610	1668	1671	1680	rVB	13563	37347	1.46%	0.250%

Sum of corrected areas: 14952833

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG102010\  
Data File : VG031034.D  
Acq On : 20 Oct 2010 15:00  
Operator : PS  
Sample : B3902-19  
Misc : 5mL MSVOA G  
ALS Vial : 6 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG102010\  
 Data File : VG031034.D  
 Acq On : 20 Oct 2010 15:00  
 Operator : PS  
 Sample : B3902-19  
 Misc : 5mL MSVOA G  
 ALS Vial : 6 Sample Multiplier: 1

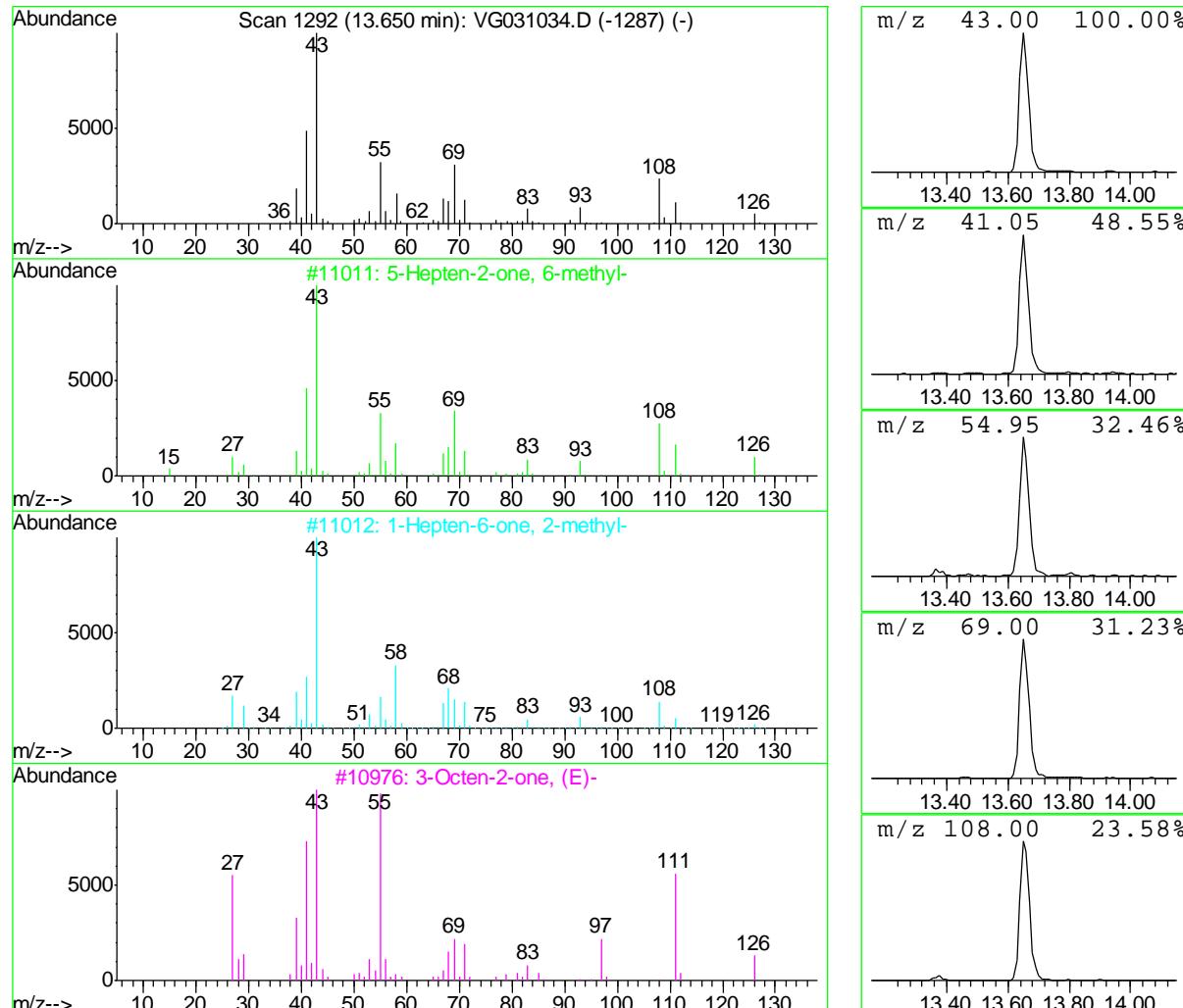
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
 TIC Integration Parameters: LSCINT.P

\*\*\*\*\*

Peak Number 1 5-Hepten-2-one, 6-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.65	17.05 ug/l	796035	1,4-Dichlorobenzene-d4	13.38
<hr/>				
Hit# of 5	Tentative ID	MW	MolForm	CAS# Qual
1	5-Hepten-2-one, 6-methyl-	126	C8H14O	000110-93-0 91
2	1-Hepten-6-one, 2-methyl-	126	C8H14O	010408-15-8 22
3	3-Octen-2-one, (E)-	126	C8H14O	018402-82-9 12
4	2,7-Octadiene-1,6-diol, 2,6-dime...	170	C10H18O2	075991-61-6 10
5	3-Hexen-2-one, 3,4-dimethyl-, (E)-	126	C8H14O	020685-46-5 10



## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG102010\  
Data File : VG031034.D  
Acq On : 20 Oct 2010 15:00  
Operator : PS  
Sample : B3902-19  
Misc : 5mL MSVOA\_G  
ALS Vial : 6 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---			
					#	RT	Resp	Conc
5-Hepten-2-one, 6...	13.65	17.1	ug/l	796035	4	13.38	2334860	50.0

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-8D	SDG No.:	B3902
Lab Sample ID:	B3902-20	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024119.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1.7		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1.7		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-8D	SDG No.:	B3902
Lab Sample ID:	B3902-20	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024119.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	52.4		66 - 150		105%	SPK: 50
1868-53-7	Dibromofluoromethane	51.2		76 - 130		103%	SPK: 50
2037-26-5	Toluene-d8	49.3		78 - 121		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	49		70 - 131		98%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1063250	3.23				
540-36-3	1,4-Difluorobenzene	2106830	3.65				
3114-55-4	Chlorobenzene-d5	2023350	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1104070	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

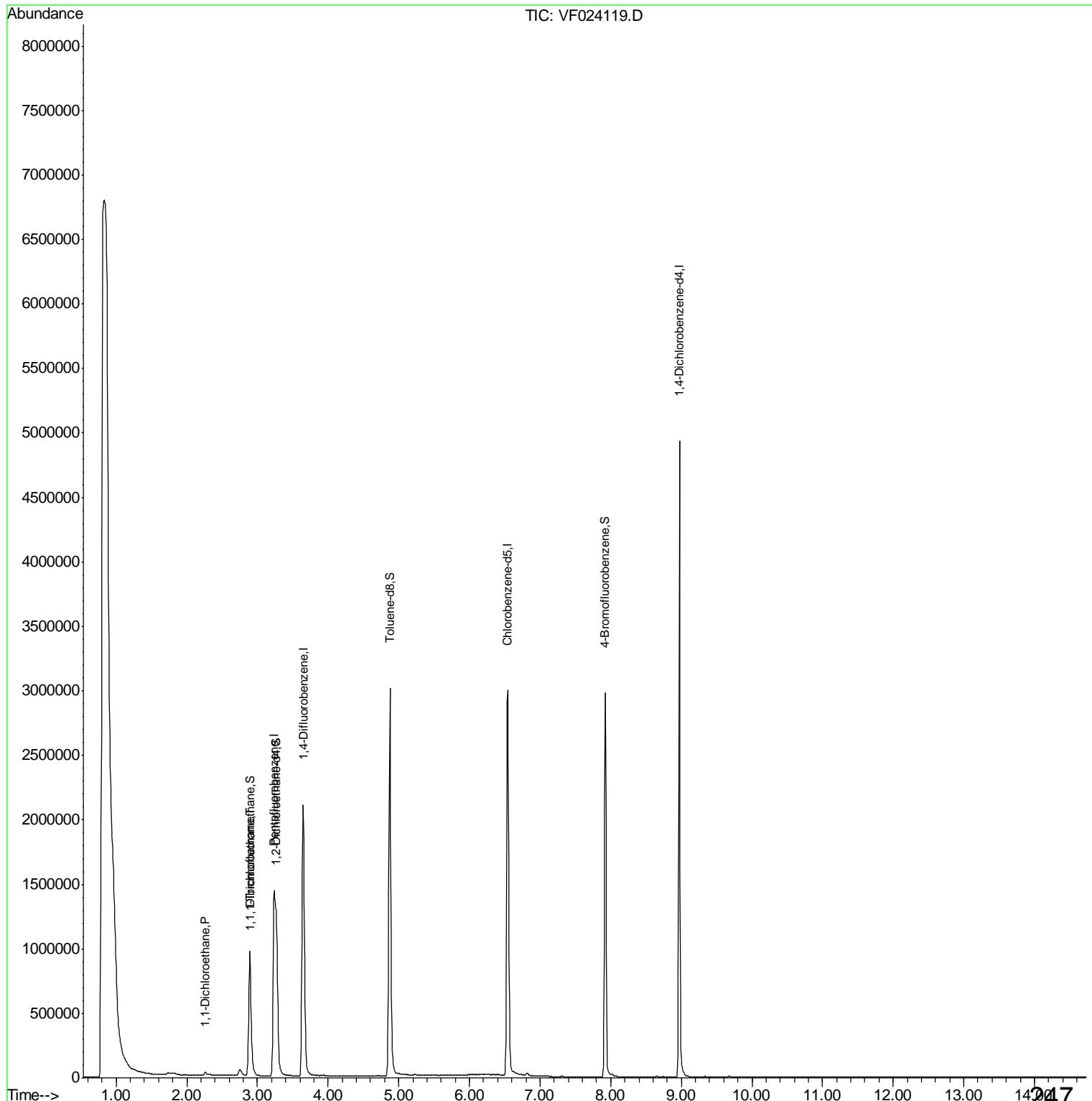
N = Presumptive Evidence of a Compound

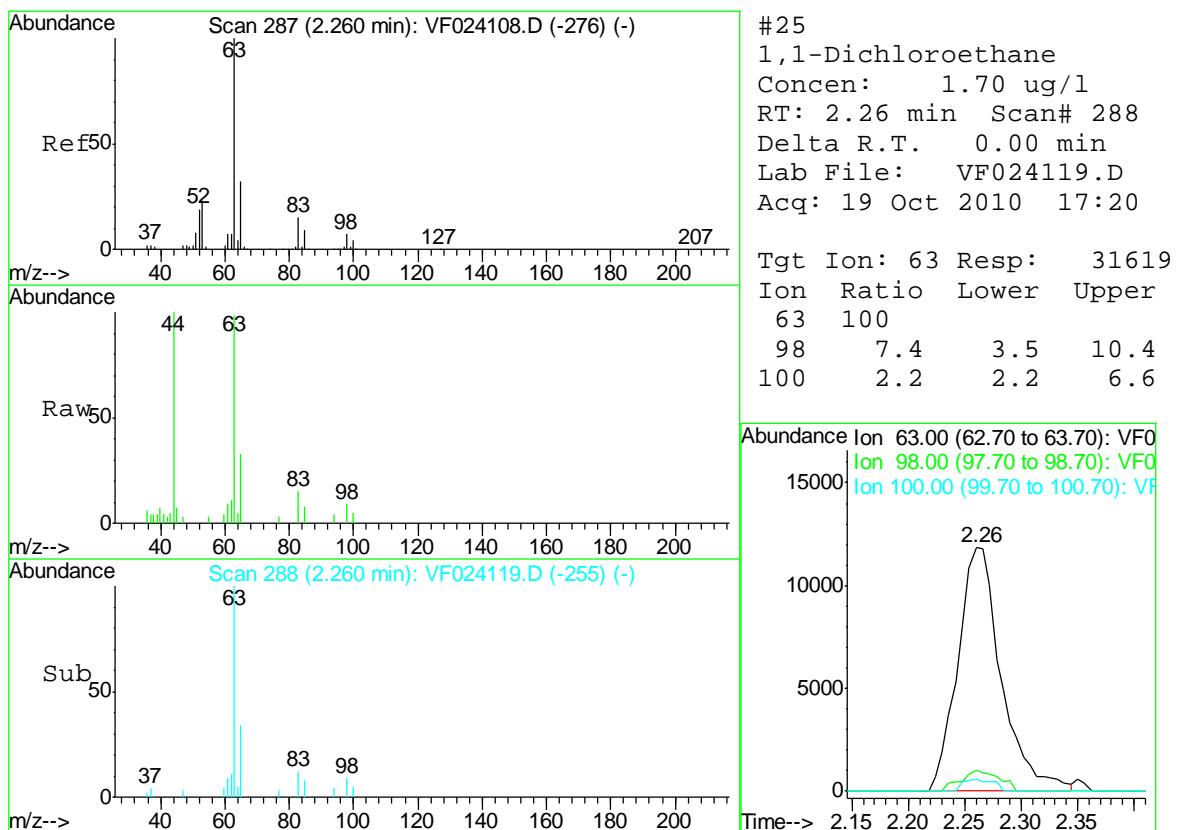
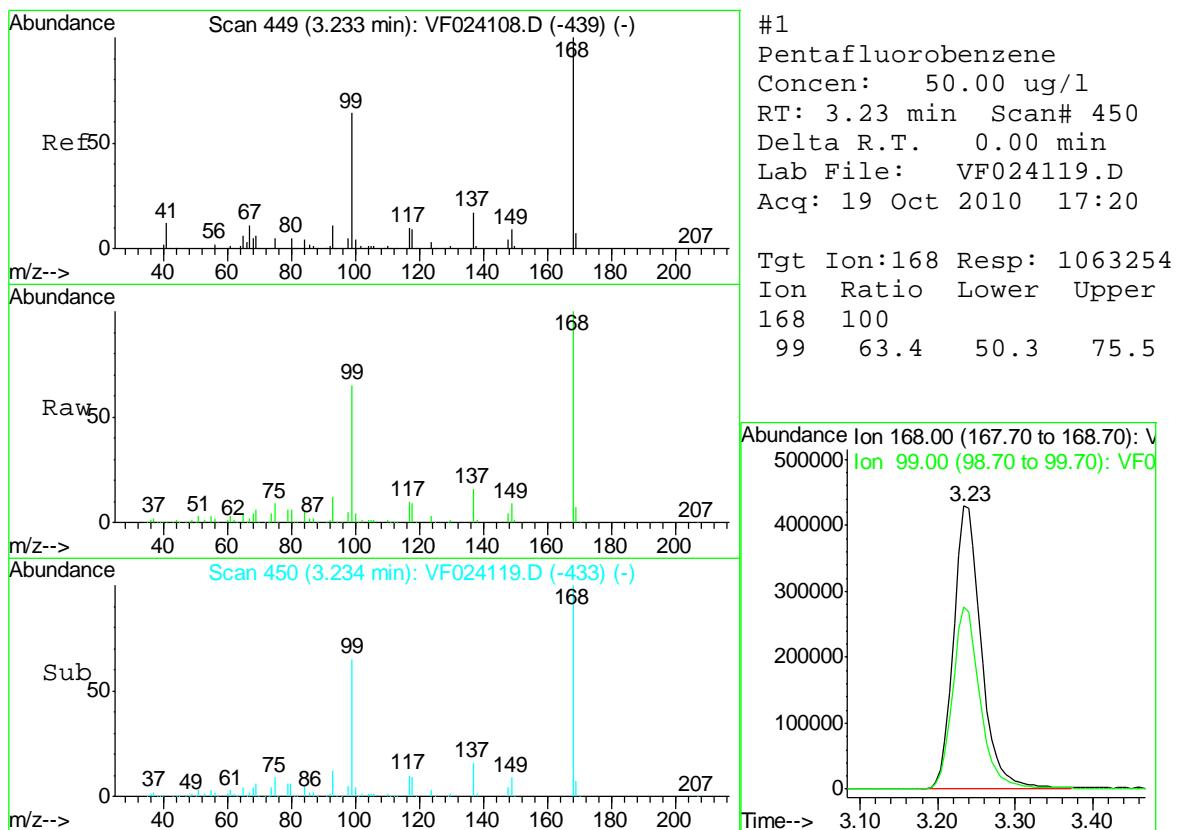
\* = Values outside of QC limits

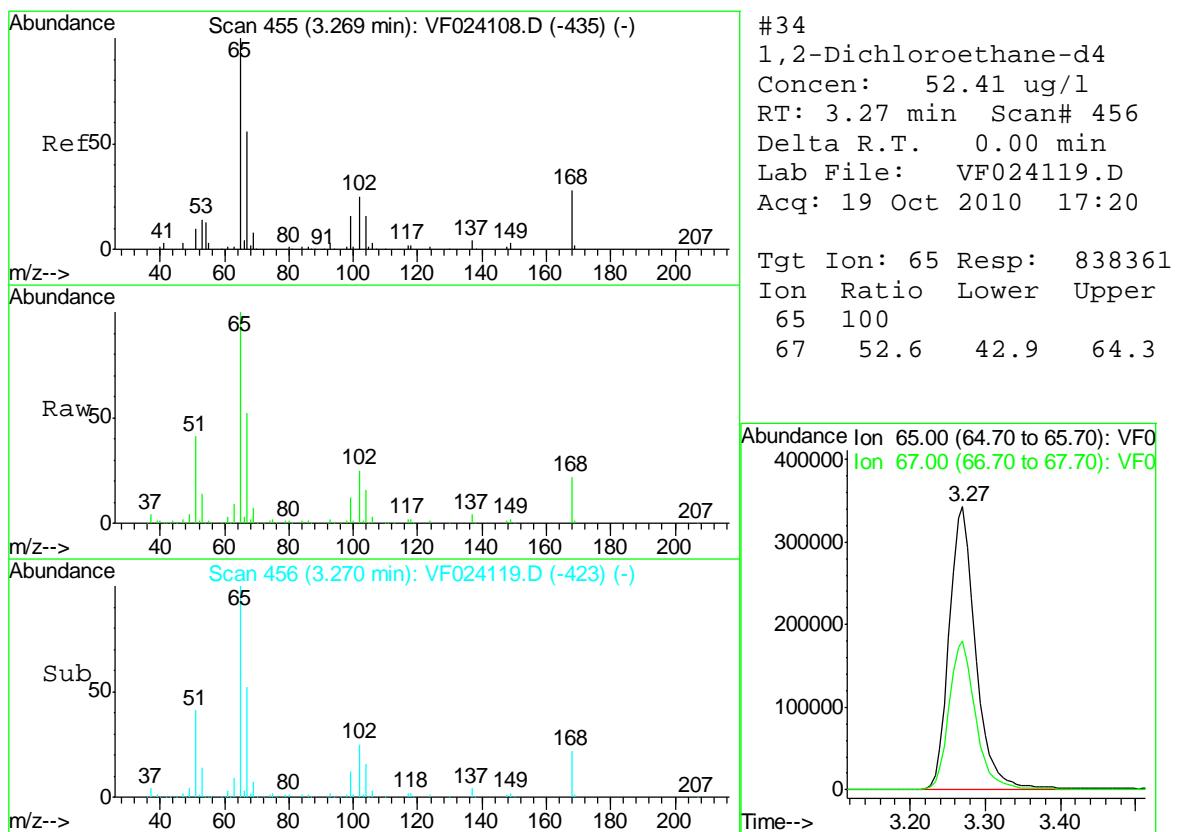
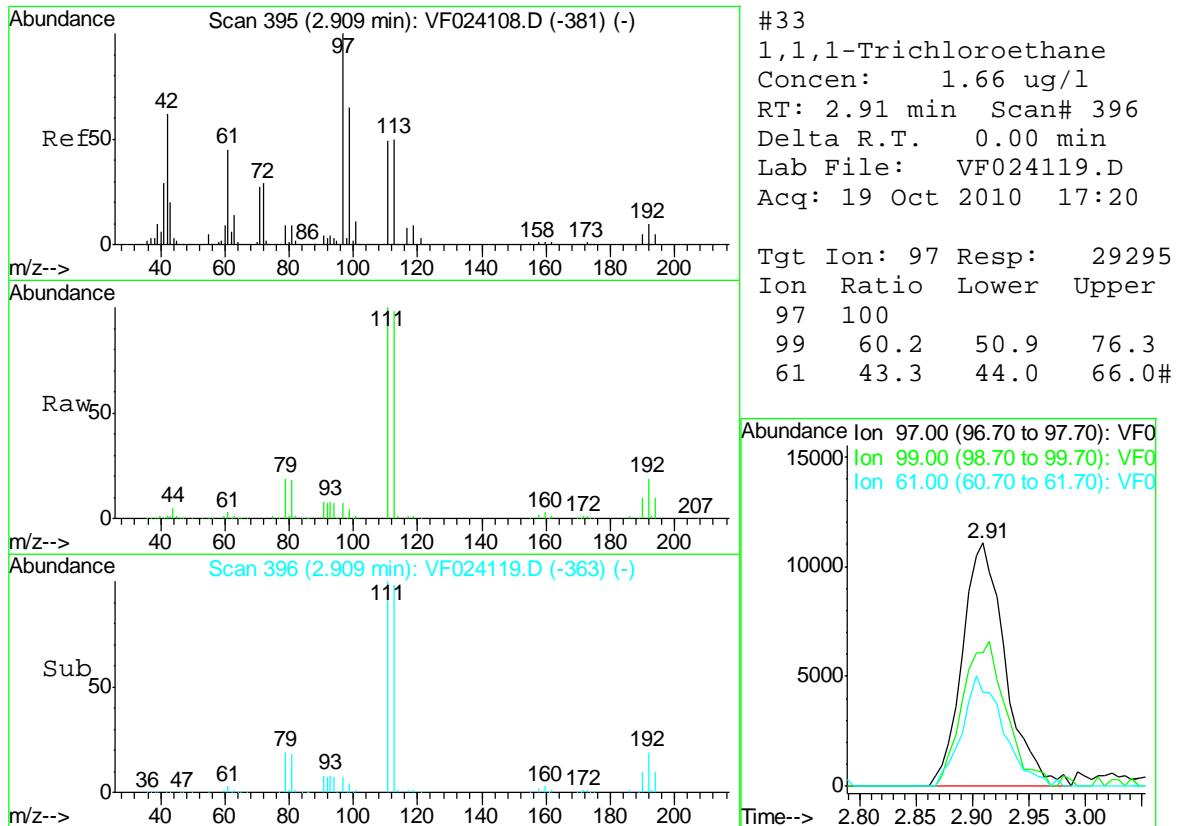
D = Dilution

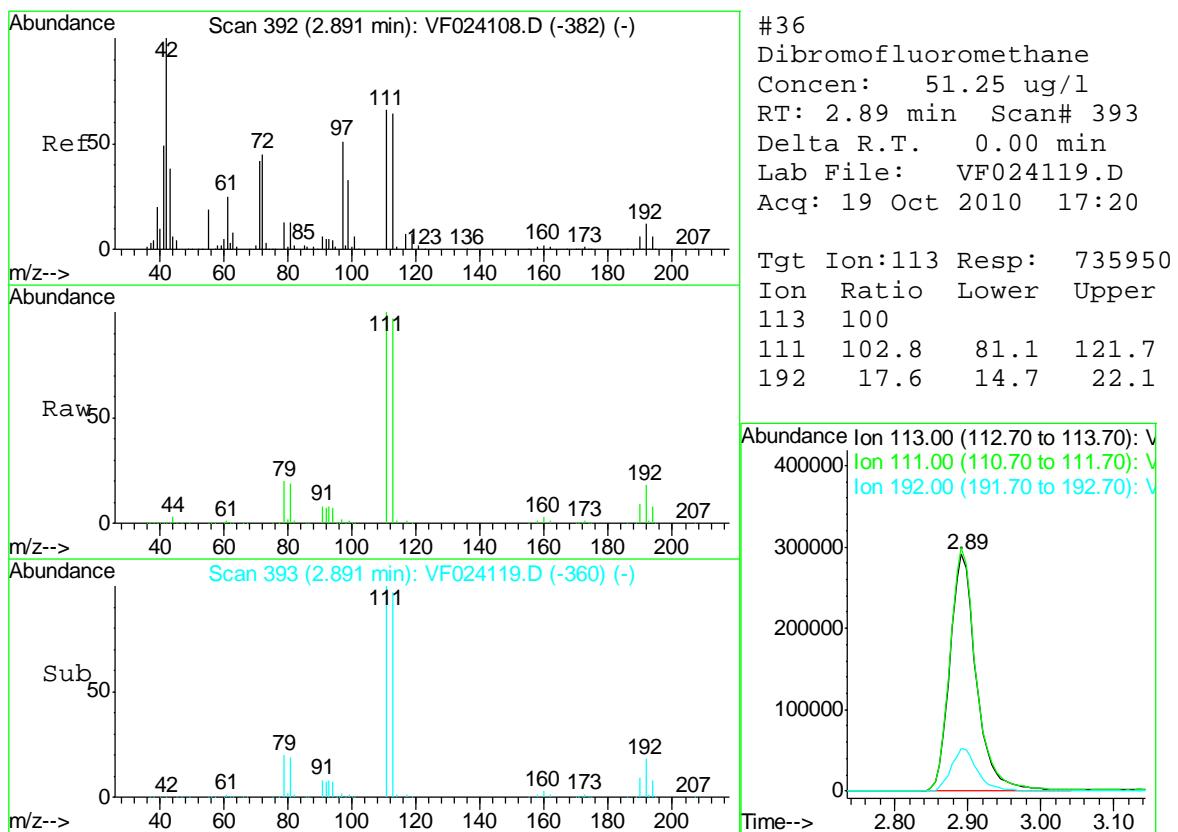
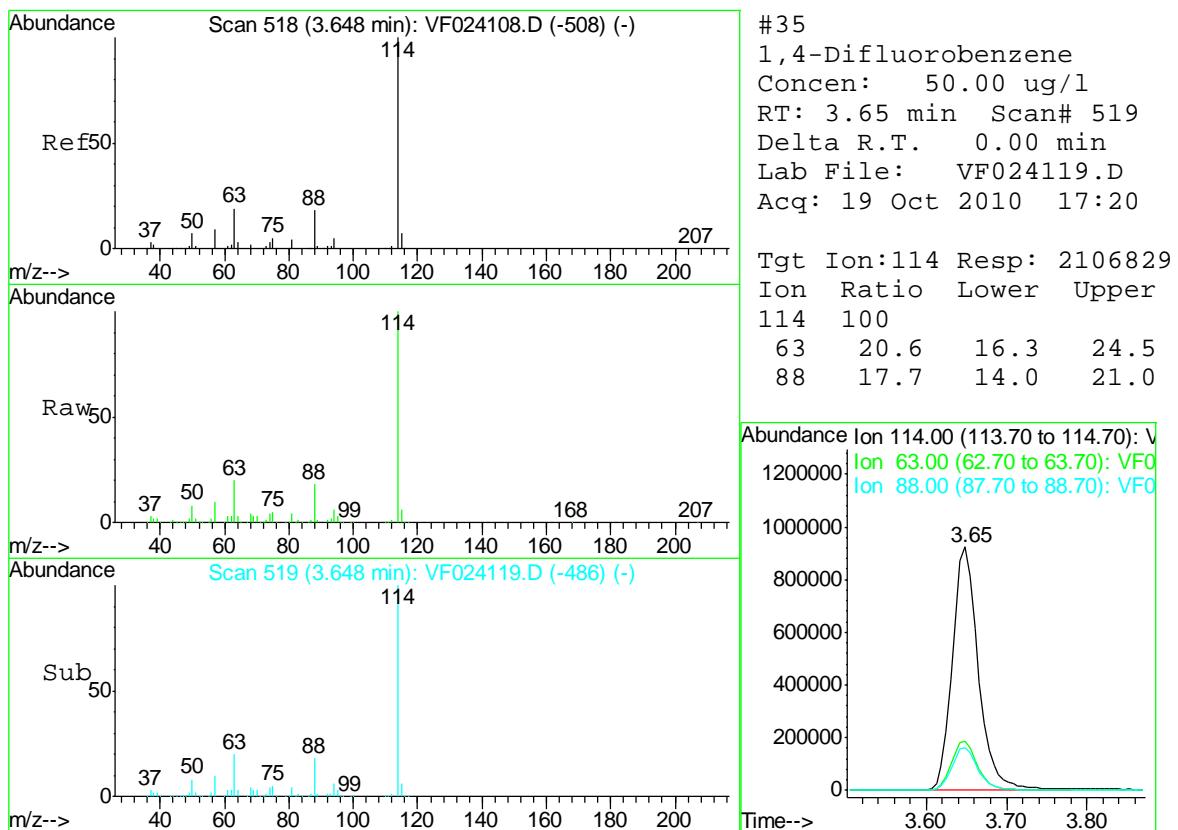
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Data File : VF024119.D  
Acq On : 19 Oct 2010 17:20  
Operator : MS  
Sample : B3902-20  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

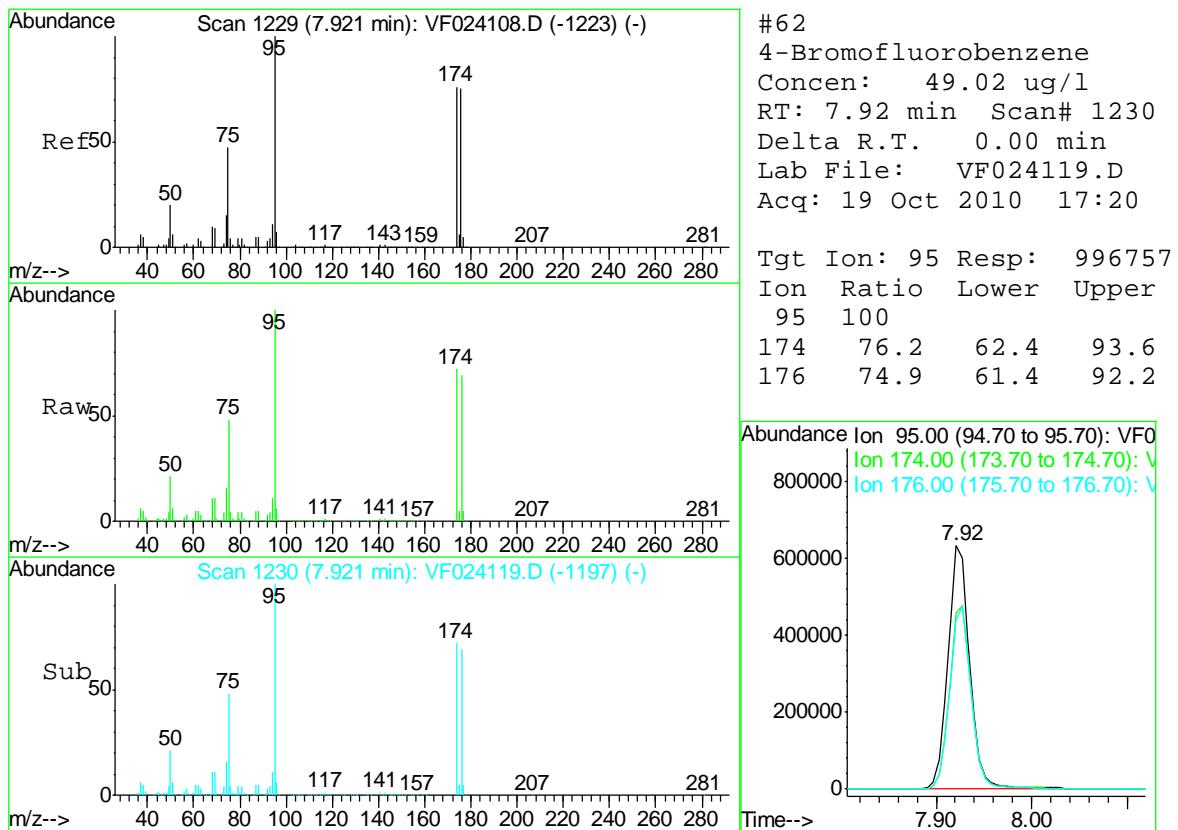
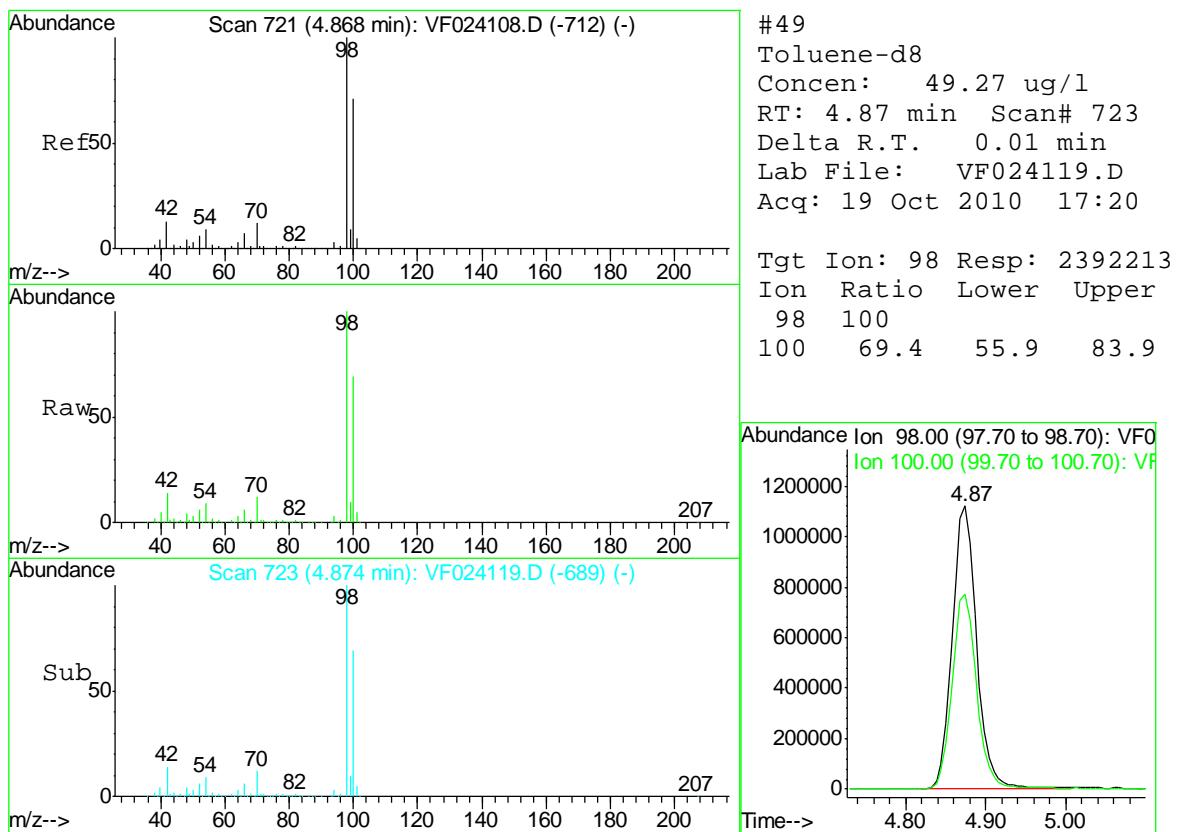
Quant Time: Oct 20 02:13:32 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
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Response via : Initial Calibration

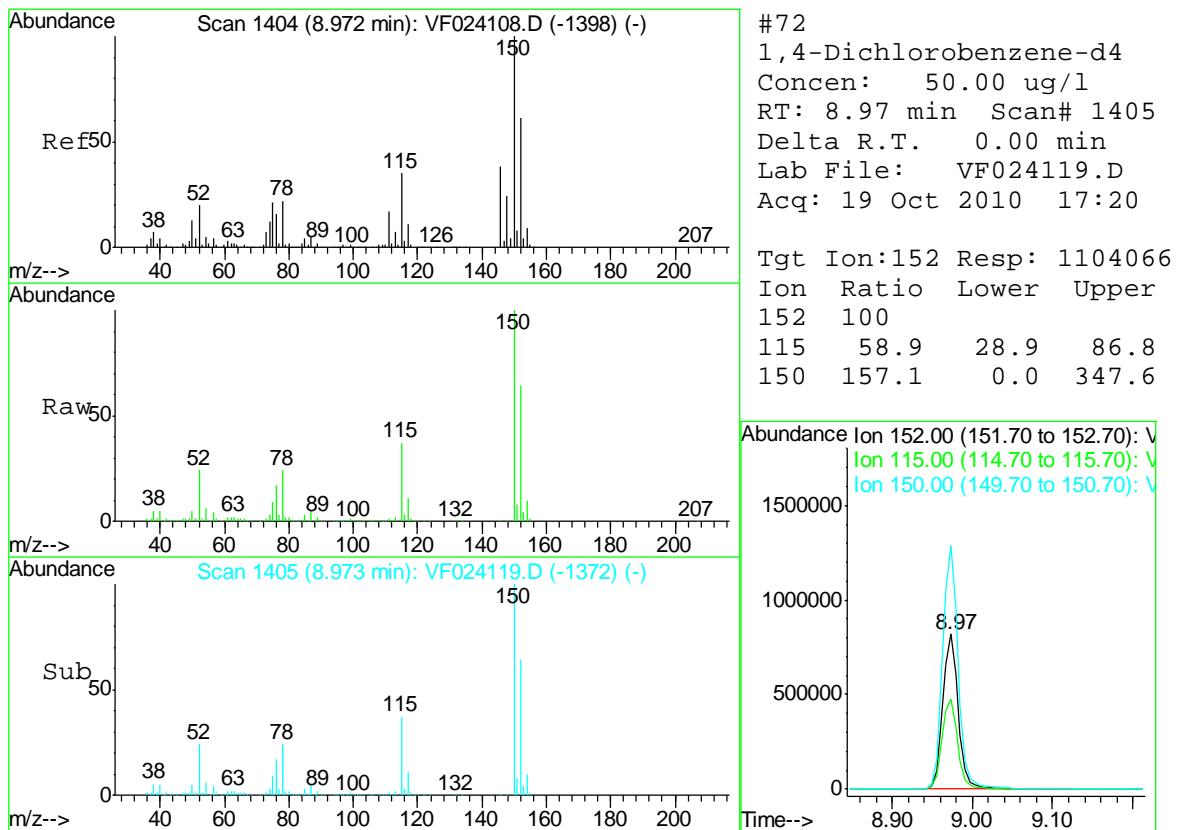
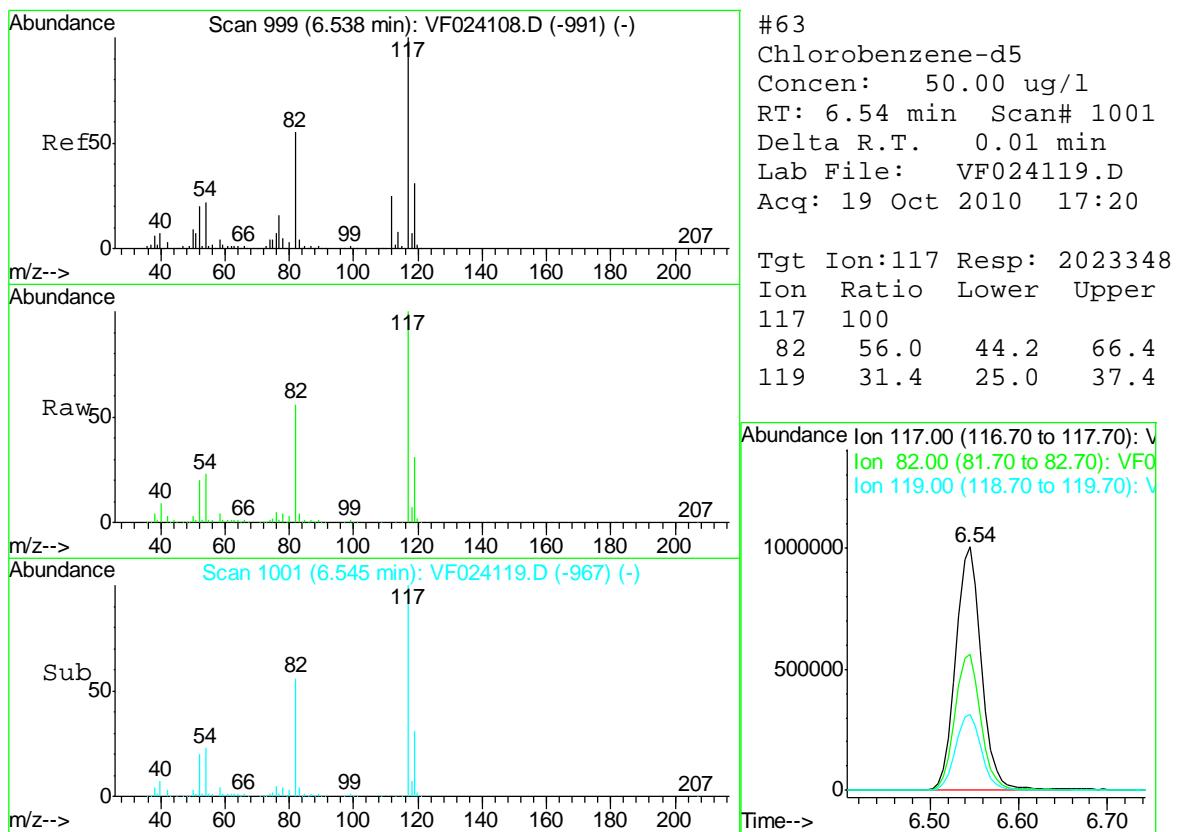












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024119.D  
 Acq On : 19 Oct 2010 17:20  
 Operator : MS  
 Sample : B3902-20  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 20 02:13:32 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1063254	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2106829	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2023348	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1104066	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	838361	52.41	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	104.82%	
36) Dibromofluoromethane	2.89	113	735950	51.25	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	102.50%	
49) Toluene-d8	4.87	98	2392213	49.27	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	98.54%	
62) 4-Bromofluorobenzene	7.92	95	996757	49.02	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	98.04%	

Target Compounds					Qvalue
25) 1,1-Dichloroethane	2.26	63	31619	1.70	ug/l 97
33) 1,1,1-Trichloroethane	2.91	97	29295	1.66	ug/l # 90

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024119.D  
 Acq On : 19 Oct 2010 17:20  
 Operator : MS  
 Sample : B3902-20  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

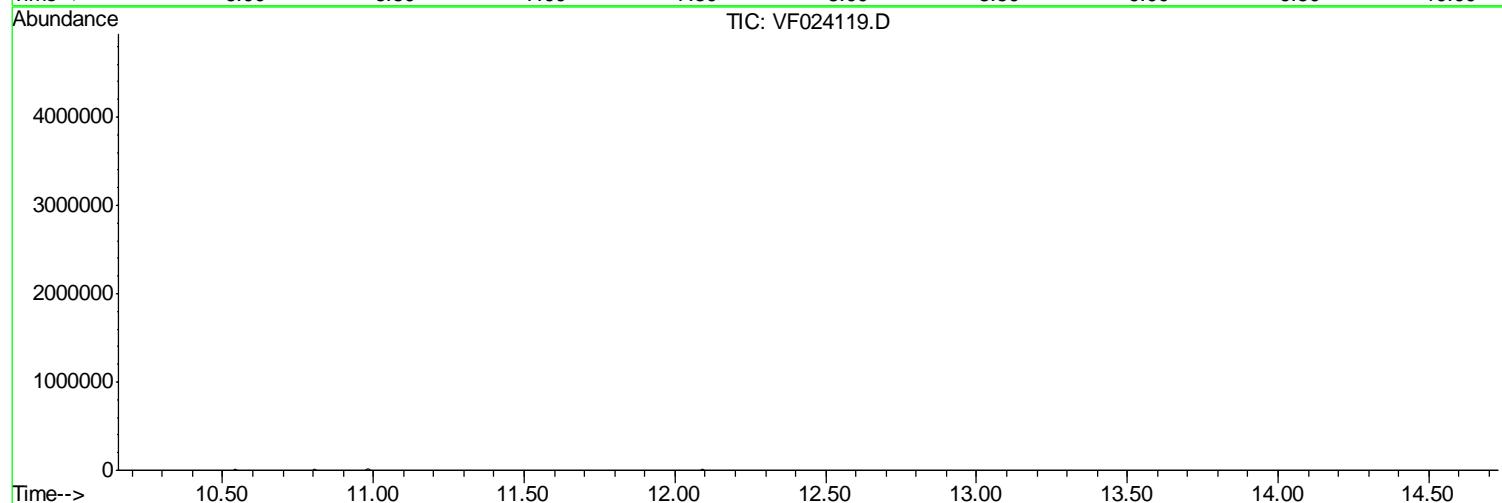
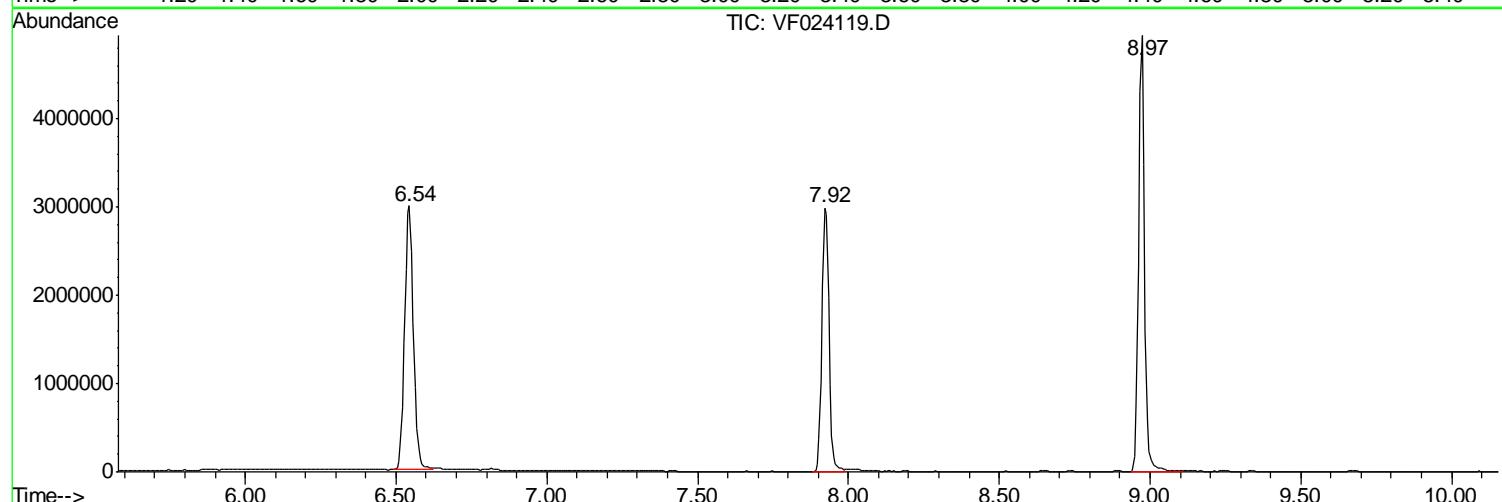
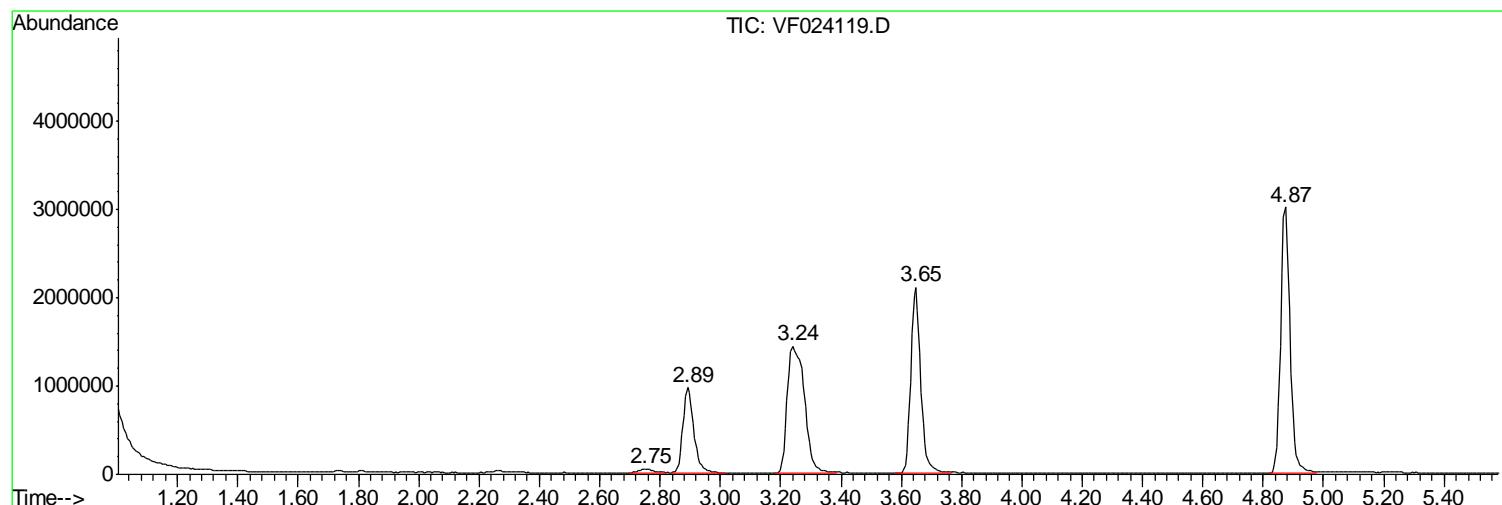
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.753	361	370	381	rBV	45038	146244	2.14%	0.392%
2	2.891	384	393	413	rVB	963115	2440391	35.75%	6.548%
3	3.240	441	451	475	rBV2	1440284	5677233	83.17%	15.233%
4	3.648	508	519	539	rBV	2108158	4855486	71.13%	13.028%
5	4.874	714	723	740	rBV	3008019	6495163	95.15%	17.427%
6	6.545	992	1001	1014	rBV	2985343	6065135	88.85%	16.273%
7	7.921	1223	1230	1241	rBV	2982994	4764145	69.79%	12.783%
8	8.973	1399	1405	1427	rBV	4934763	6826350	100.00%	18.316%

Sum of corrected areas: 37270147

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024119.D  
Acq On : 19 Oct 2010 17:20  
Operator : MS  
Sample : B3902-20  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024119.D  
Acq On : 19 Oct 2010 17:20  
Operator : MS  
Sample : B3902-20  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024119.D  
Acq On : 19 Oct 2010 17:20  
Operator : MS  
Sample : B3902-20  
Misc : 5.0mL,MSVOAF  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-15S	SDG No.:	B3902
Lab Sample ID:	B3902-21	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024120.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1.6		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-15S	SDG No.:	B3902
Lab Sample ID:	B3902-21	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024120.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.4		66 - 150		107%	SPK: 50
1868-53-7	Dibromofluoromethane	53.8		76 - 130		108%	SPK: 50
2037-26-5	Toluene-d8	49.3		78 - 121		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		70 - 131		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1079850	3.24				
540-36-3	1,4-Difluorobenzene	2136840	3.65				
3114-55-4	Chlorobenzene-d5	2098500	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1133680	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

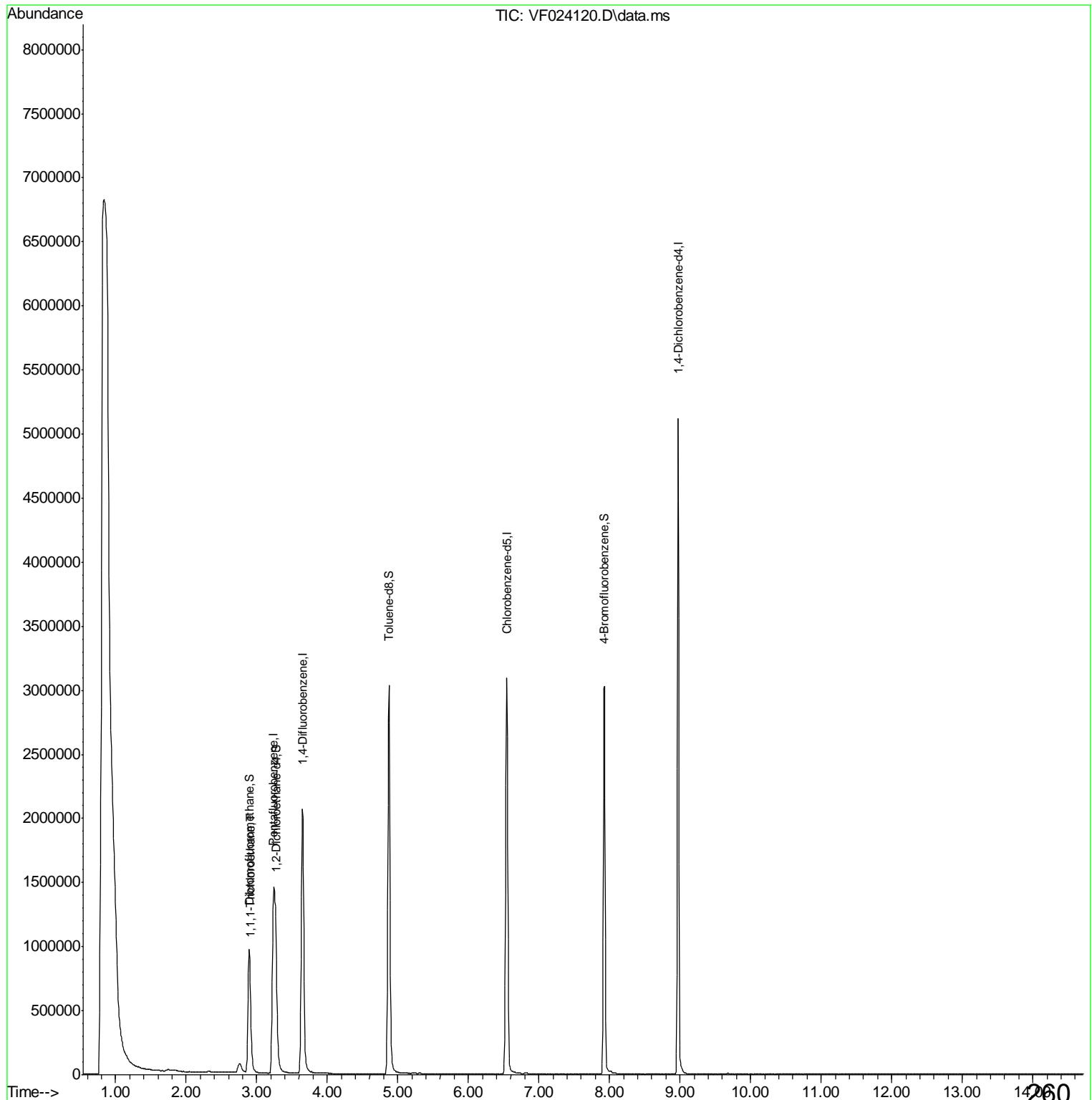
N = Presumptive Evidence of a Compound

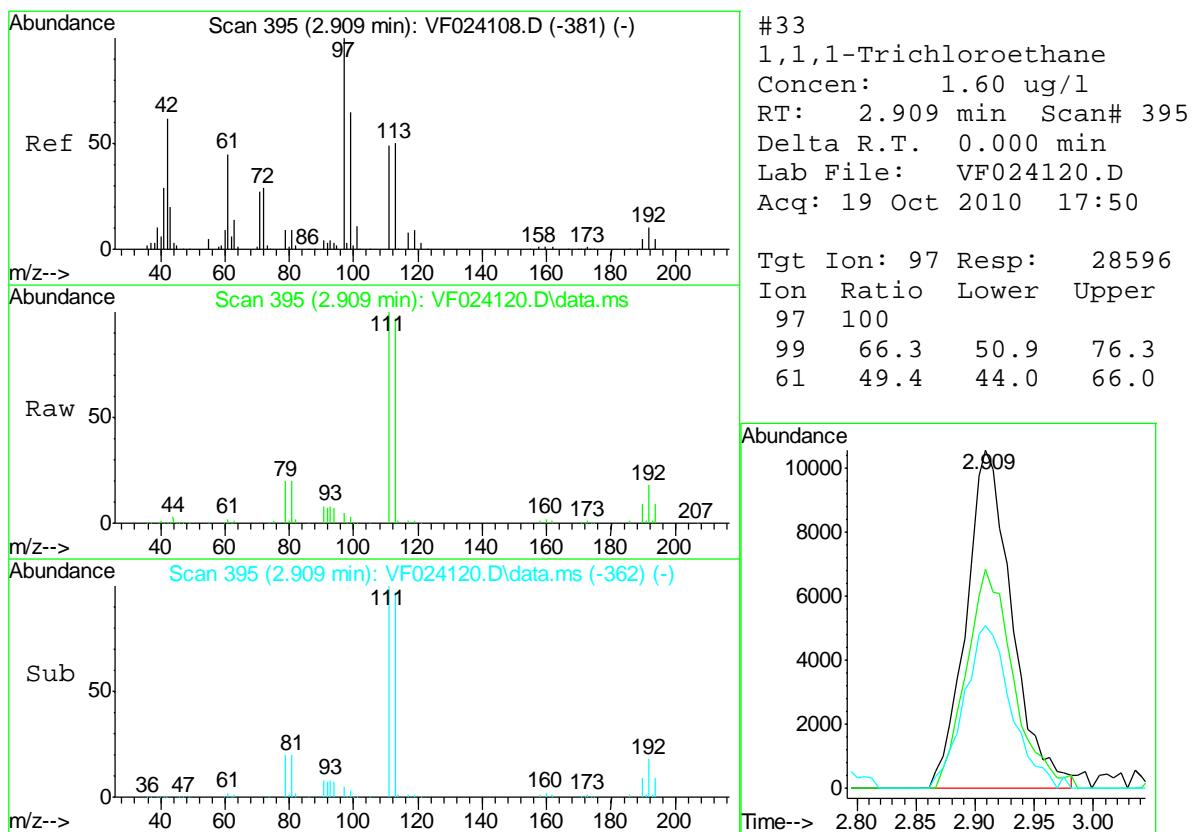
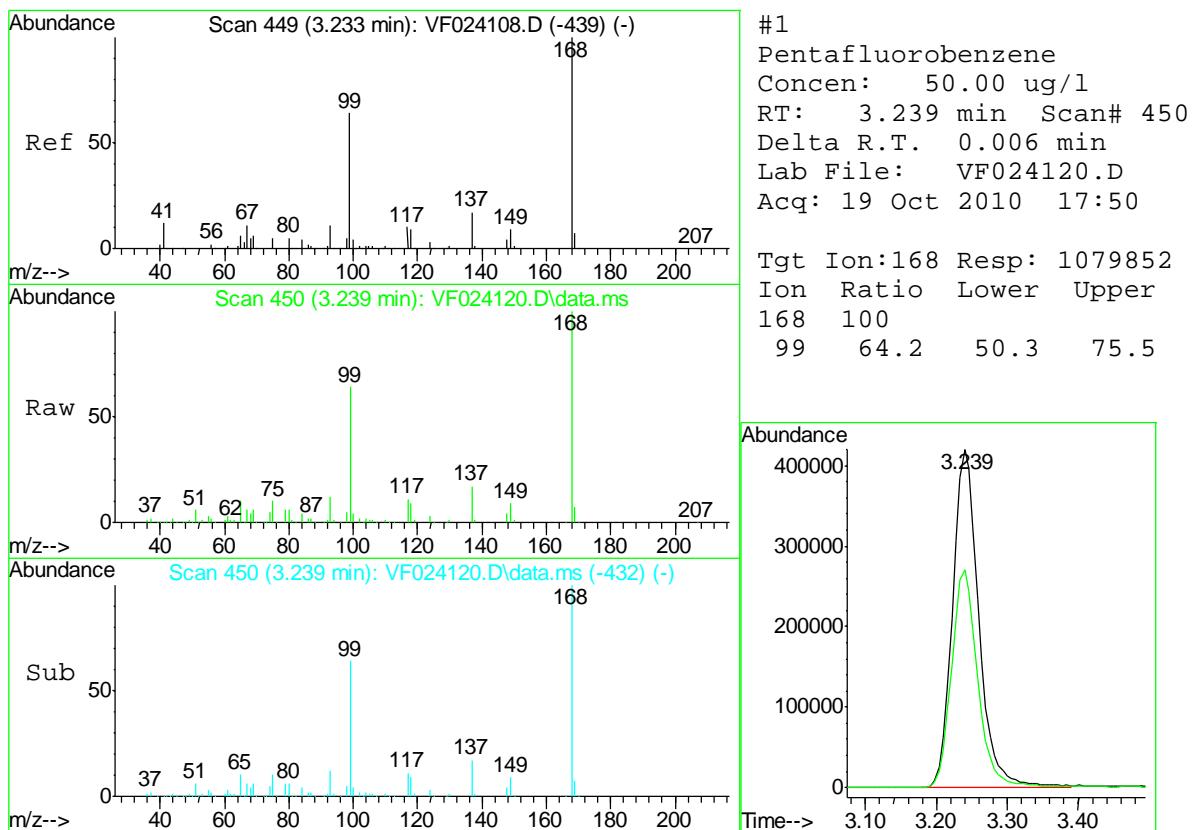
\* = Values outside of QC limits

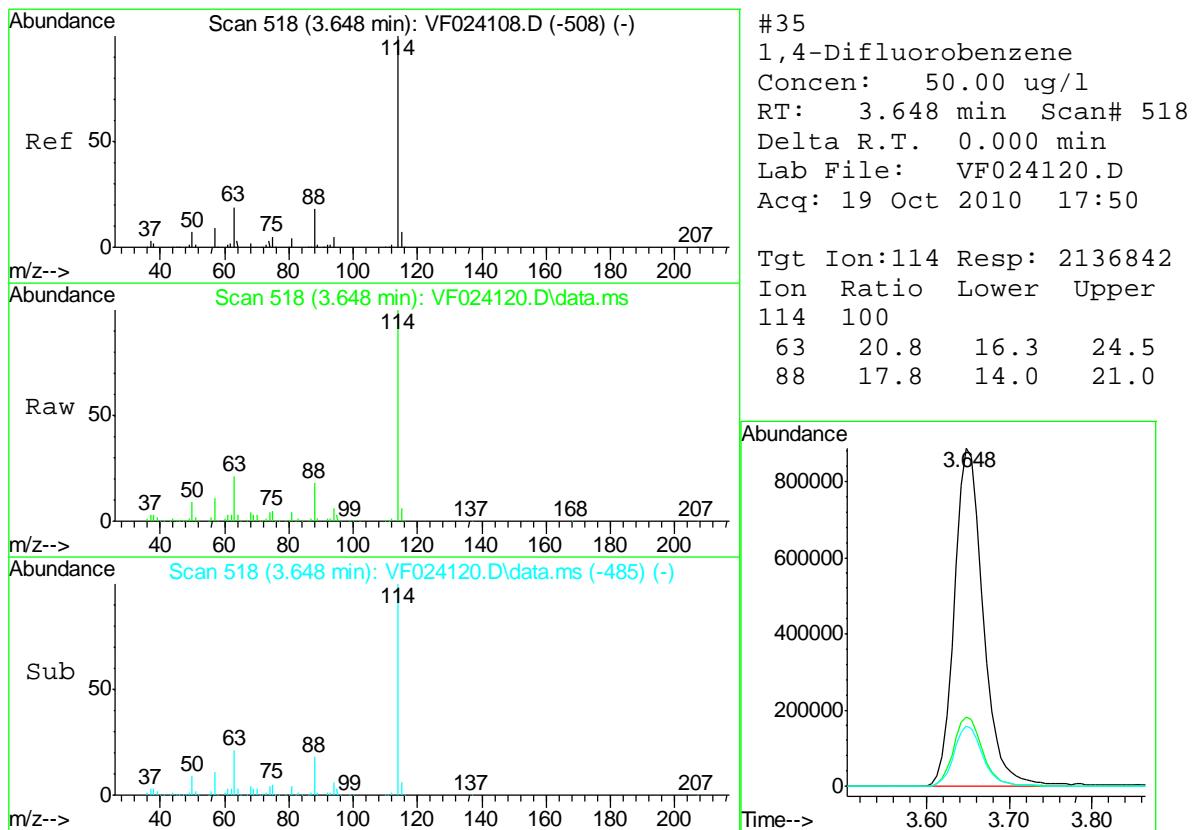
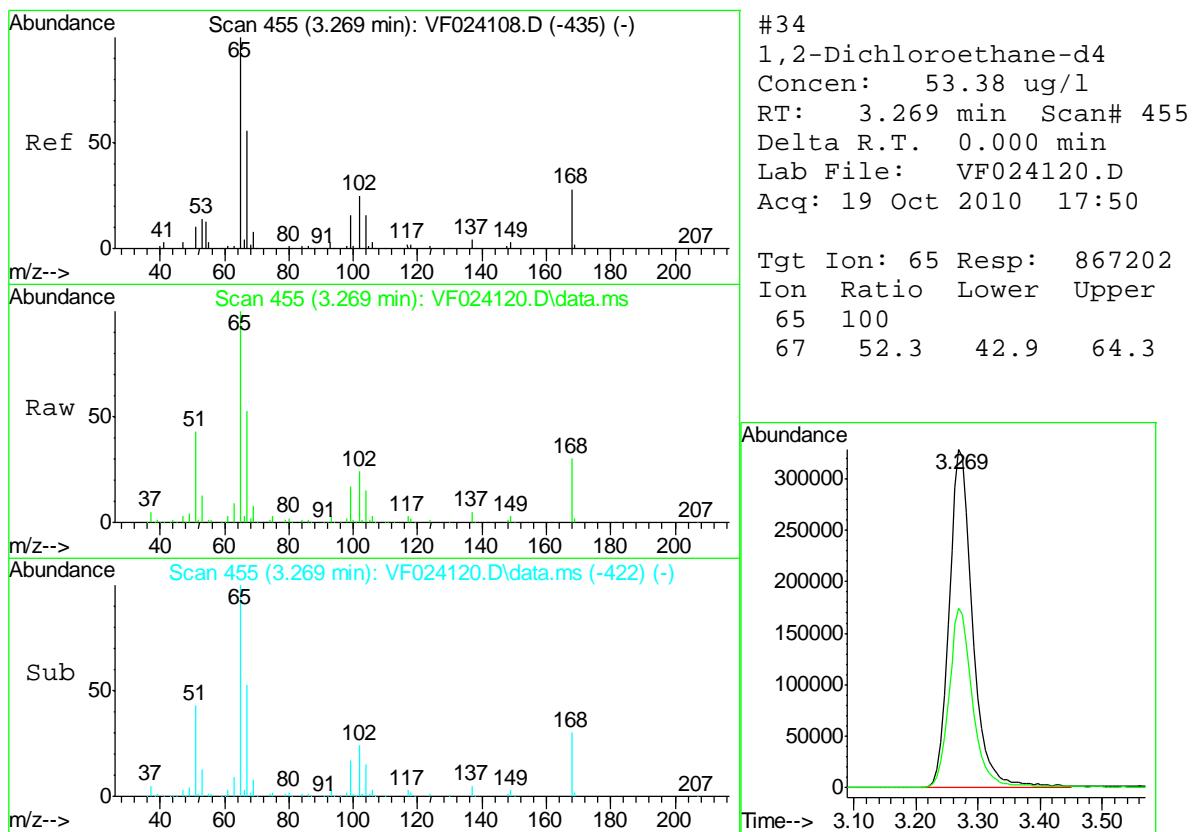
D = Dilution

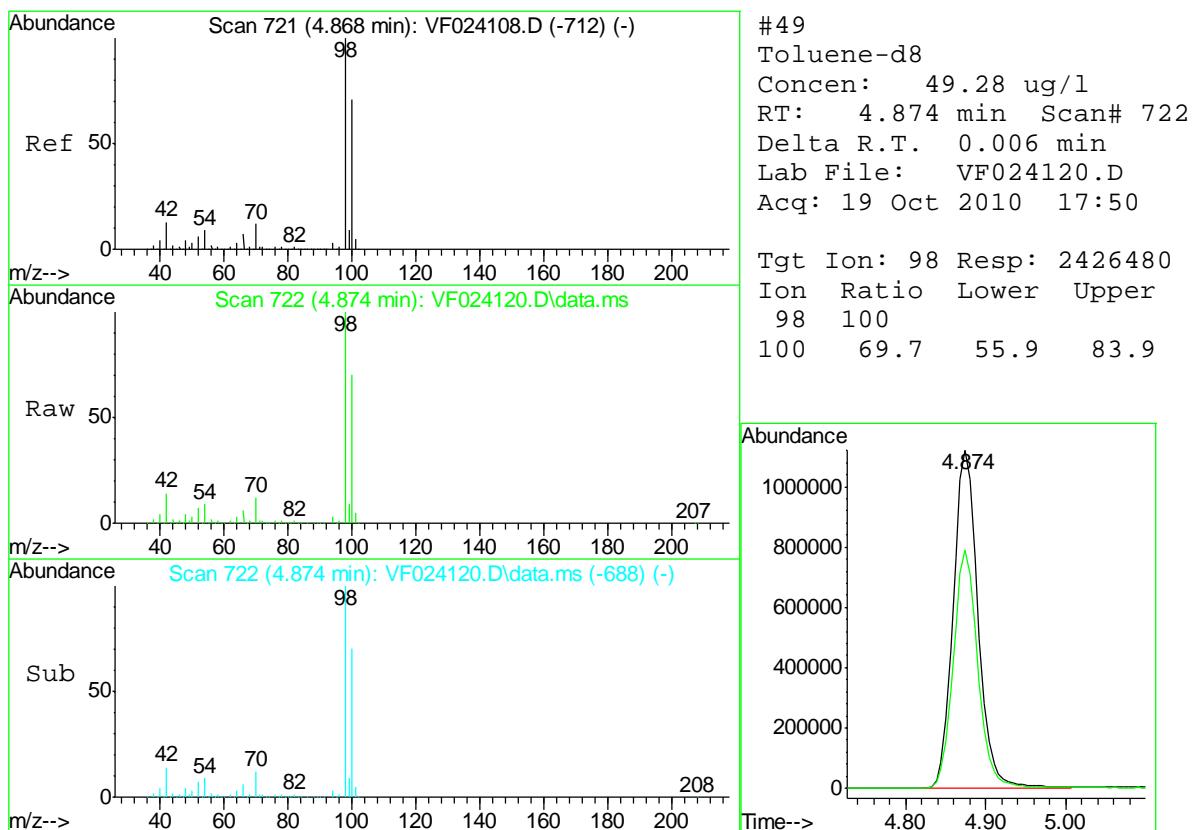
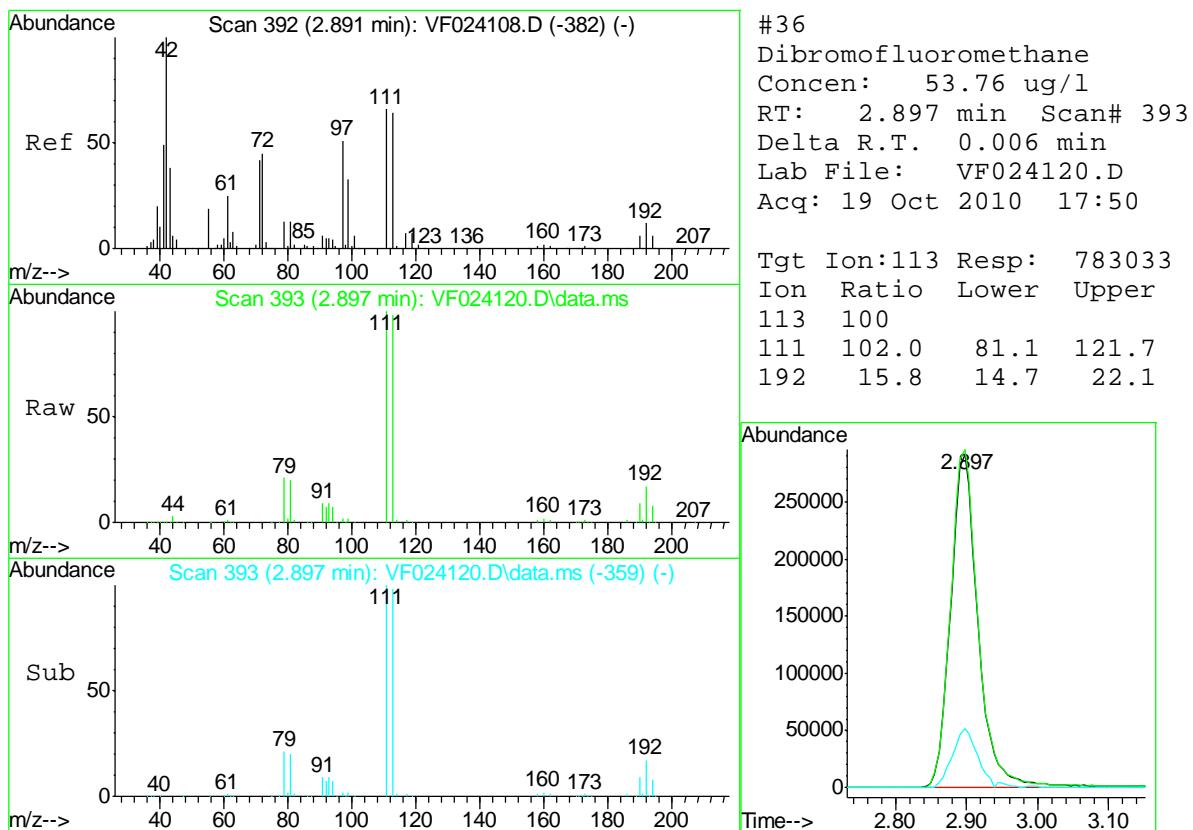
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Data File : VF024120.D  
Acq On : 19 Oct 2010 17:50  
Operator : MS  
Sample : B3902-21  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

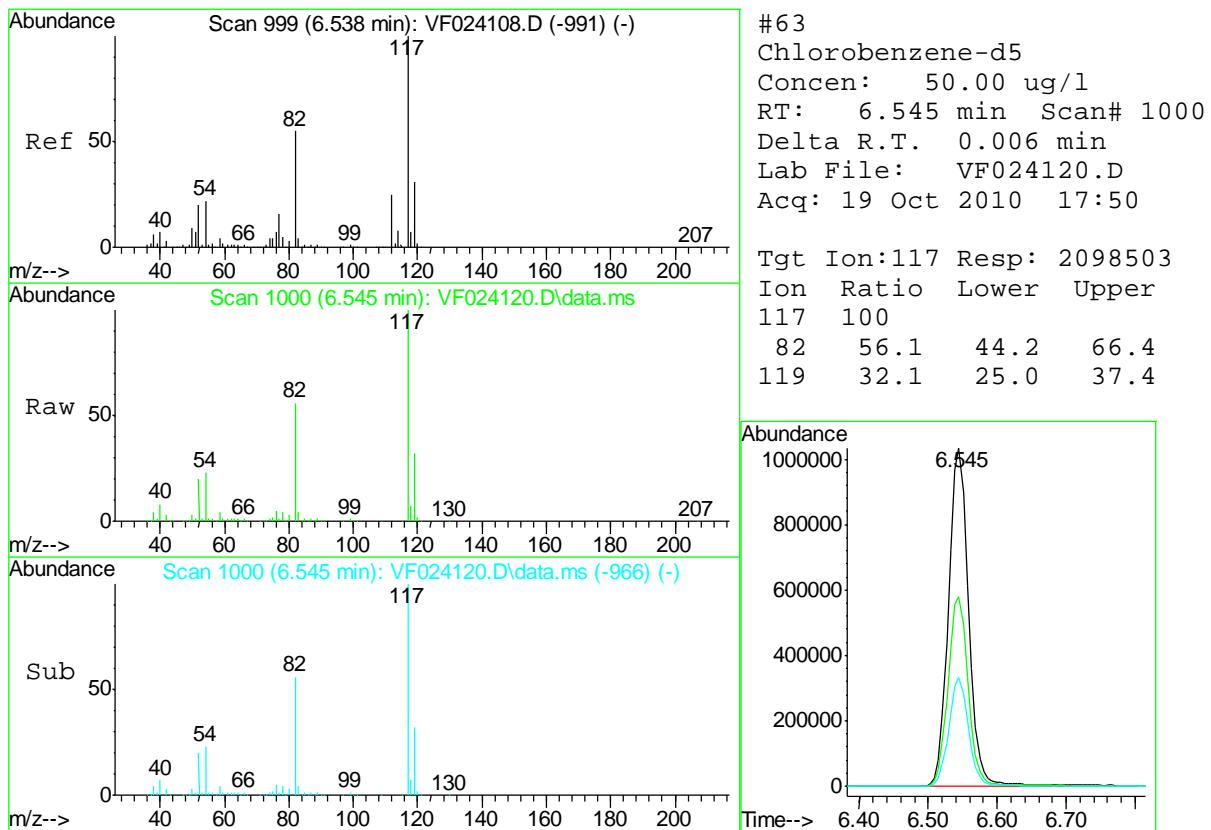
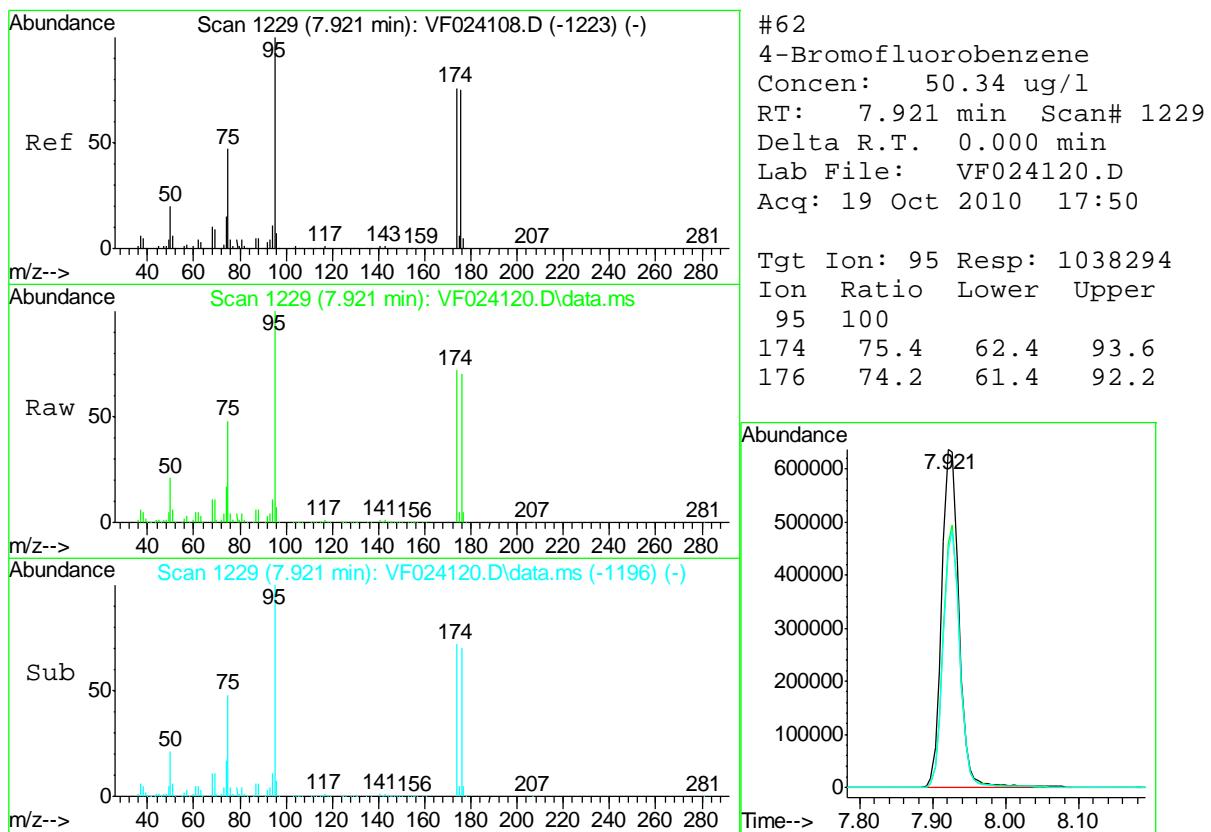
Quant Time: Oct 20 02:15:06 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

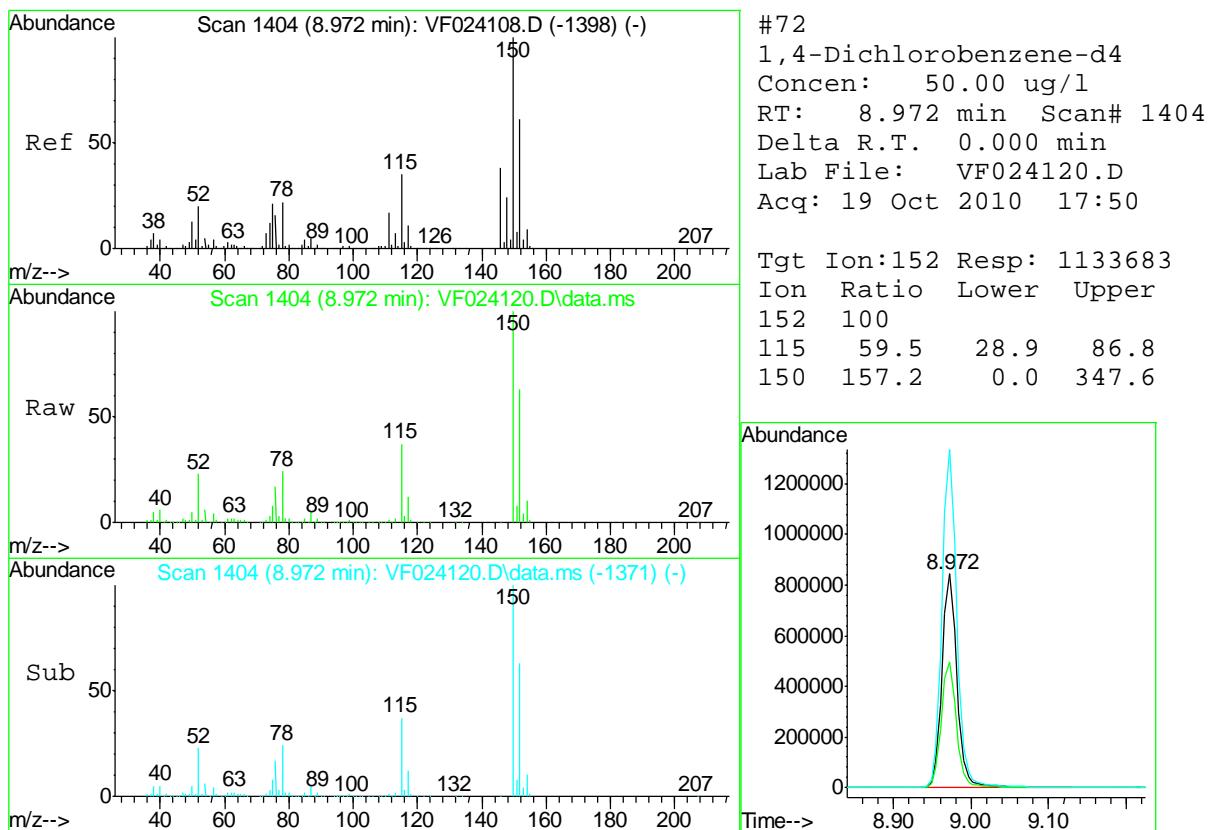












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Data Path : \\Terastorage\VOASRV\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024120.D  
 Acq On : 19 Oct 2010 17:50  
 Operator : MS  
 Sample : B3902-21  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 20 02:15:06 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Pentafluorobenzene	3.239	168	1079852	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.648	114	2136842	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.545	117	2098503	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.972	152	1133683	50.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.269	65	867202	53.38	ug/l	0.00
Spiked Amount 50.000	Range 66 - 150		Recovery	=	106.76%	
36) Dibromofluoromethane	2.897	113	783033	53.76	ug/l	0.00
Spiked Amount 50.000	Range 76 - 130		Recovery	=	107.52%	
49) Toluene-d8	4.874	98	2426480	49.28	ug/l	0.00
Spiked Amount 50.000	Range 78 - 121		Recovery	=	98.56%	
62) 4-Bromofluorobenzene	7.921	95	1038294	50.34	ug/l	0.00
Spiked Amount 50.000	Range 70 - 131		Recovery	=	100.68%	
<hr/>						
Target Compounds						
33) 1,1,1-Trichloroethane	2.909	97	28596	1.60	ug/l	95
<hr/>						

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024120.D  
 Acq On : 19 Oct 2010 17:50  
 Operator : MS  
 Sample : B3902-21  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

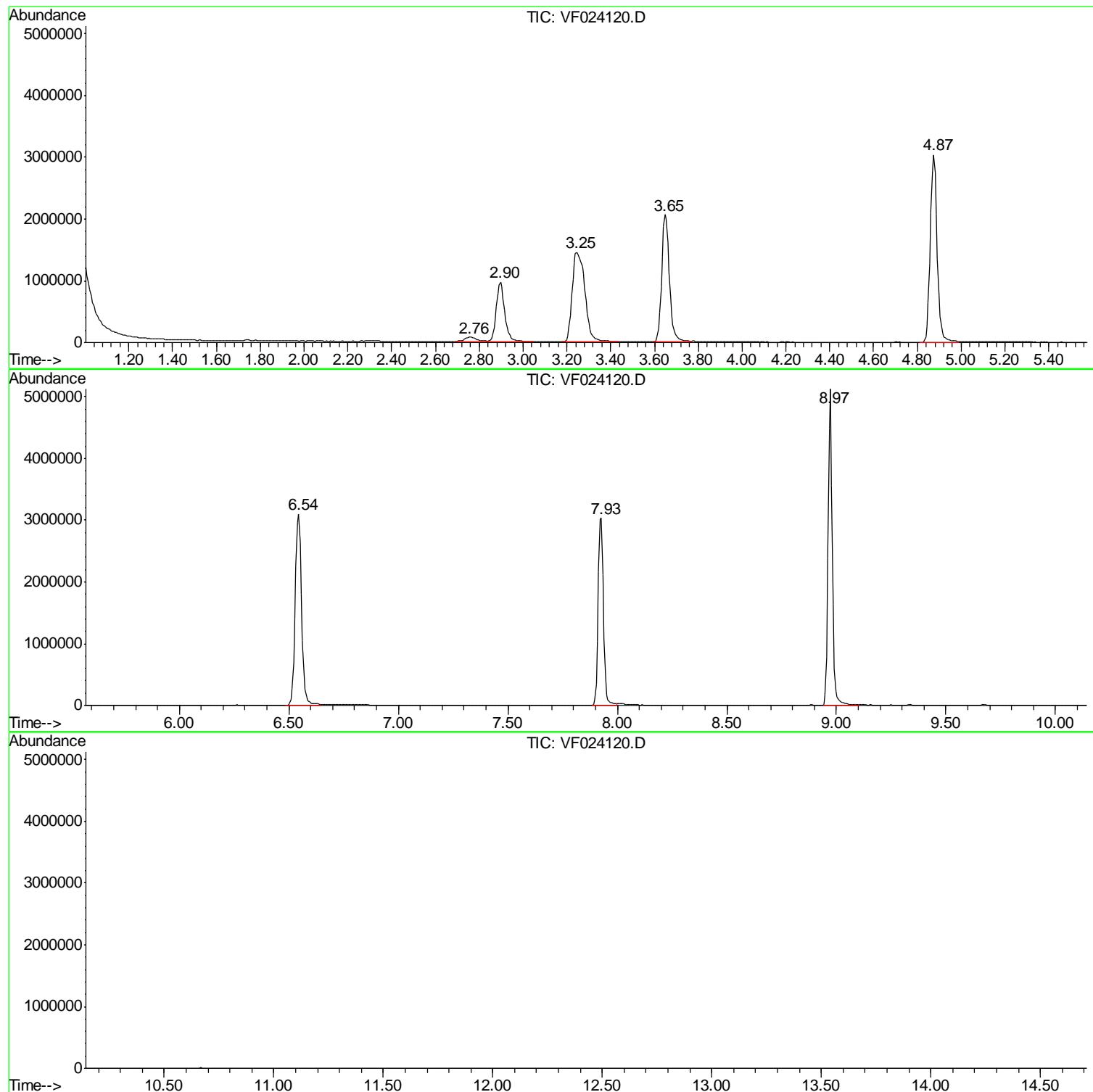
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.759	359	370	383	rBV2	70103	264143	3.76%	0.684%
2	2.897	383	393	418	rVB	966495	2623006	37.32%	6.789%
3	3.245	440	451	482	rBV2	1454562	5866539	83.47%	15.184%
4	3.648	509	518	538	rBV	2059363	4962131	70.60%	12.843%
5	4.874	711	722	741	rBV	3037806	6624036	94.24%	17.144%
6	6.545	990	1000	1017	rBV	3092818	6316237	89.86%	16.348%
7	7.927	1223	1230	1242	rBV	3028078	4951909	70.45%	12.817%
8	8.972	1398	1404	1426	rBV	5120510	7028715	100.00%	18.192%

Sum of corrected areas: 38636716

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024120.D  
Acq On : 19 Oct 2010 17:50  
Operator : MS  
Sample : B3902-21  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024120.D  
Acq On : 19 Oct 2010 17:50  
Operator : MS  
Sample : B3902-21  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024120.D  
Acq On : 19 Oct 2010 17:50  
Operator : MS  
Sample : B3902-21  
Misc : 5.0mL,MSVOAF  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-9S	SDG No.:	B3902
Lab Sample ID:	B3902-22	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024121.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	2.3		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	2		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-9S	SDG No.:	B3902
Lab Sample ID:	B3902-22	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024121.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	2		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	54.1		66 - 150		108%	SPK: 50
1868-53-7	Dibromofluoromethane	52		76 - 130		104%	SPK: 50
2037-26-5	Toluene-d8	49.2		78 - 121		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.8		70 - 131		100%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1024390		3.24			
540-36-3	1,4-Difluorobenzene	2056200		3.65			
3114-55-4	Chlorobenzene-d5	1990430		6.54			
3855-82-1	1,4-Dichlorobenzene-d4	1080300		8.97			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

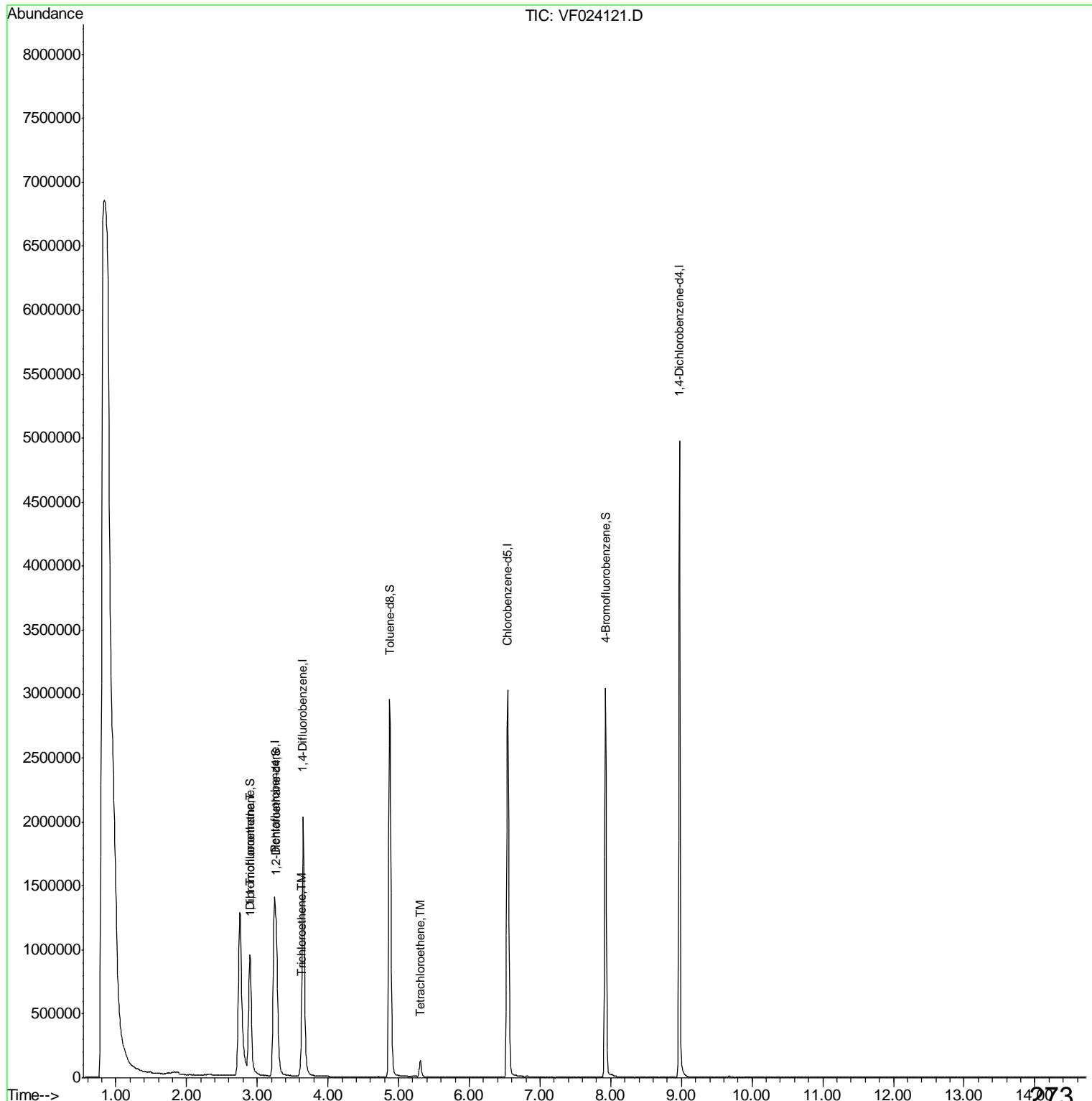
N = Presumptive Evidence of a Compound

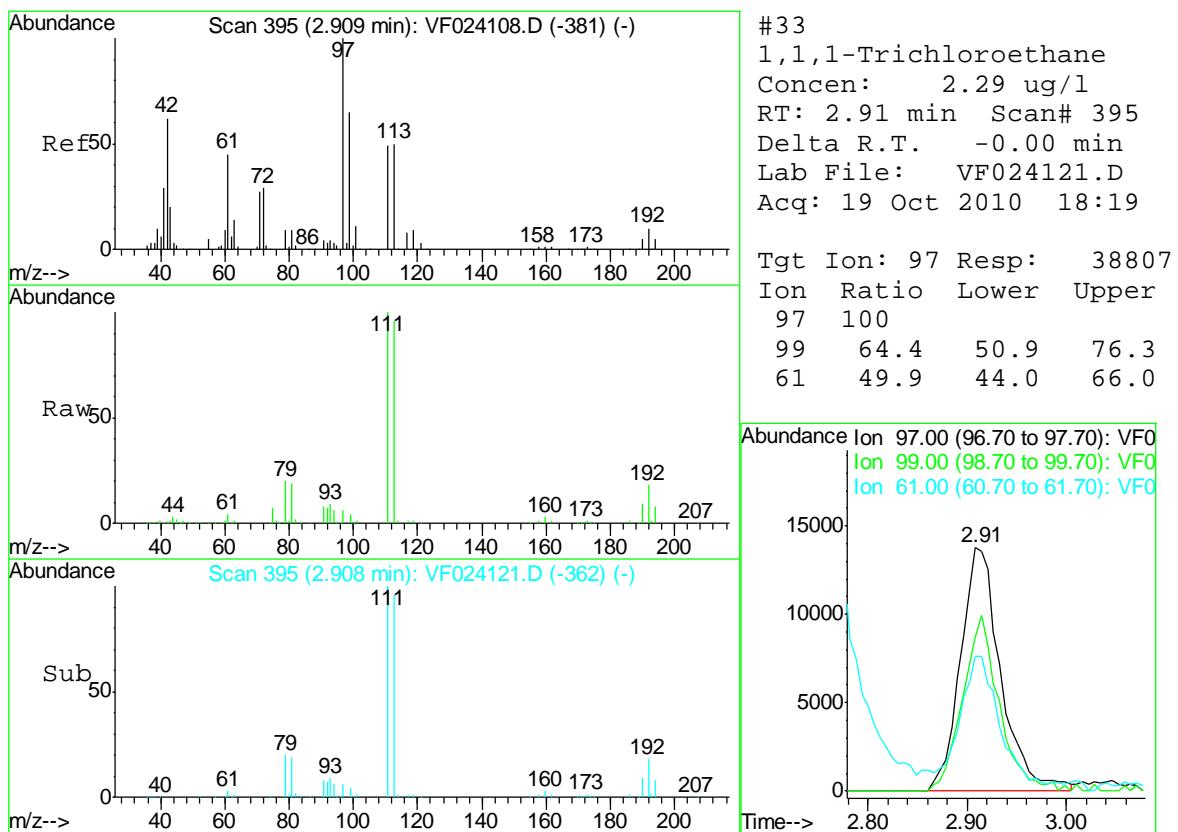
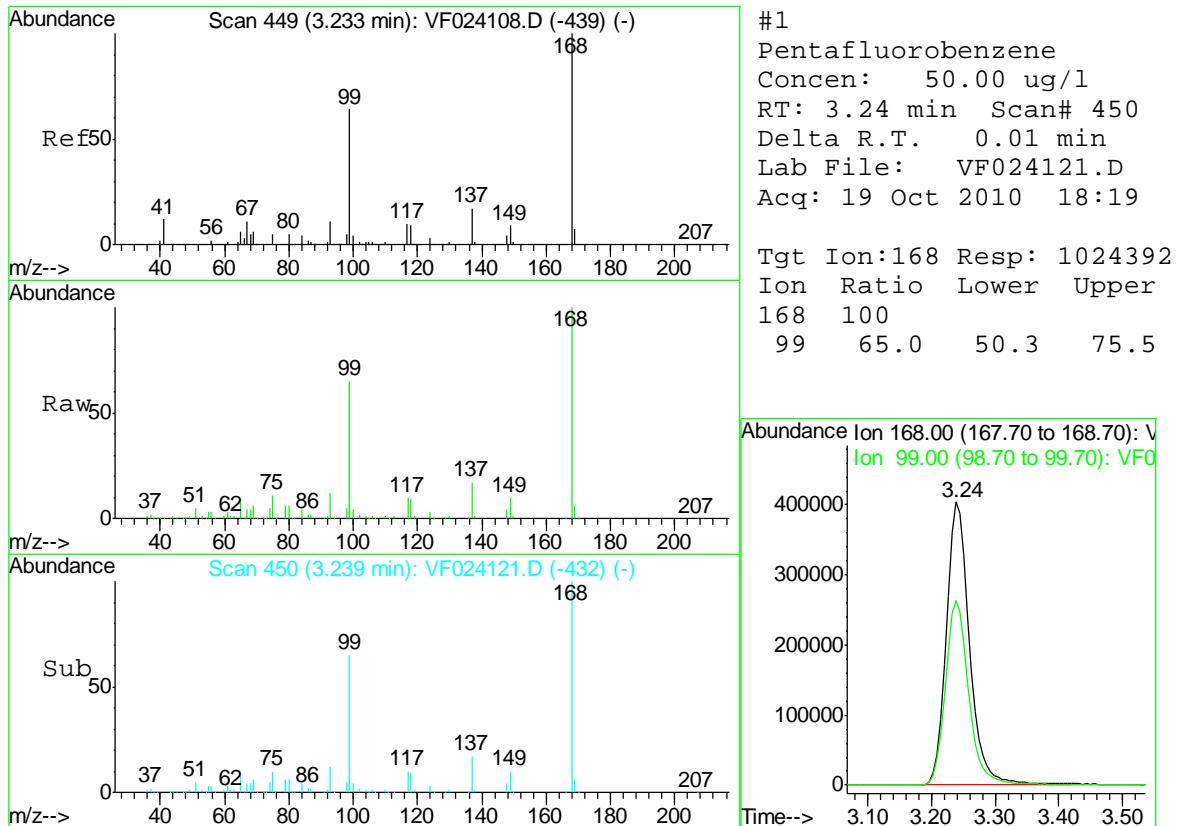
\* = Values outside of QC limits

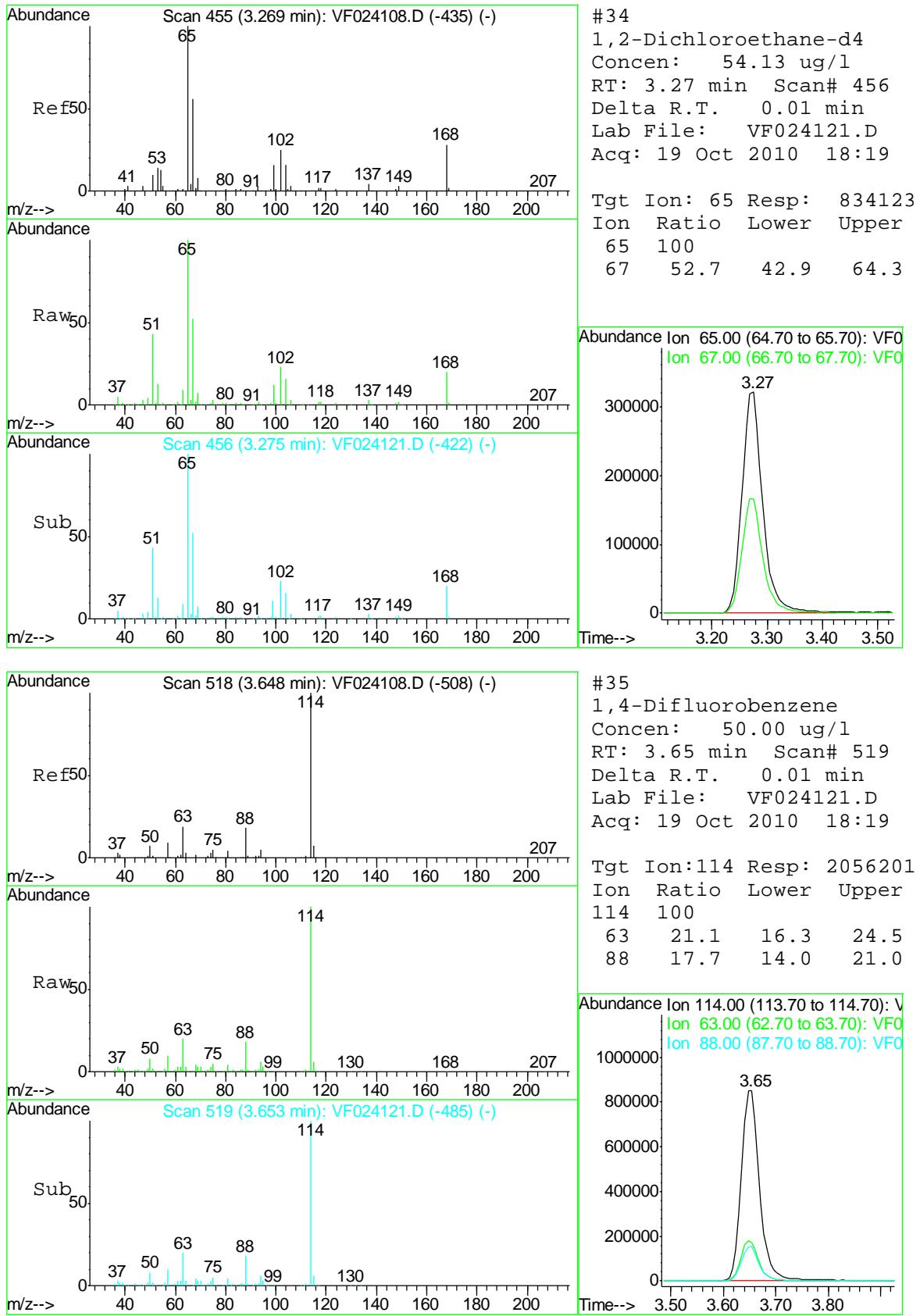
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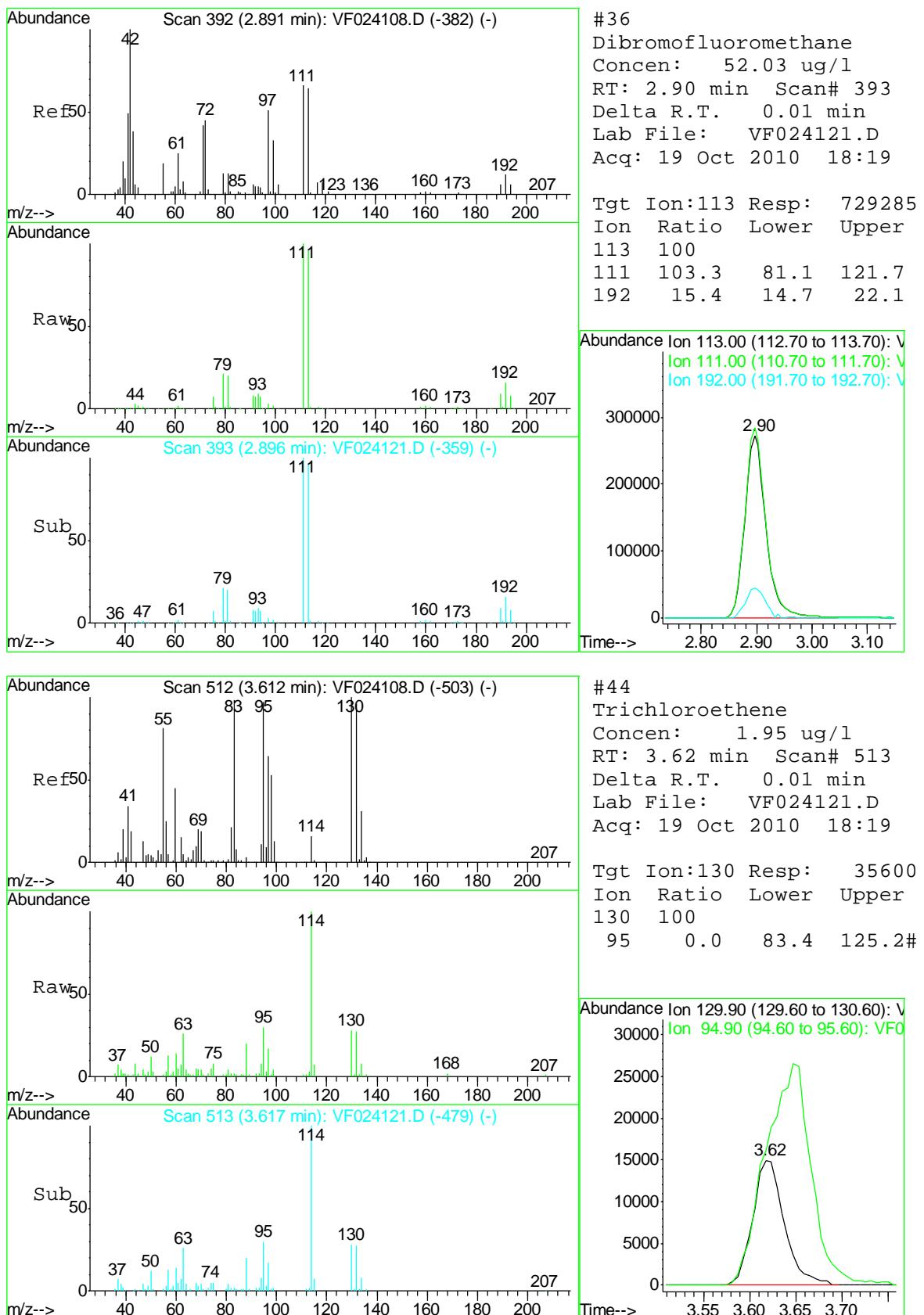
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Acq On : 19 Oct 2010 18:19  
Operator : MS  
Sample : B3902-22  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

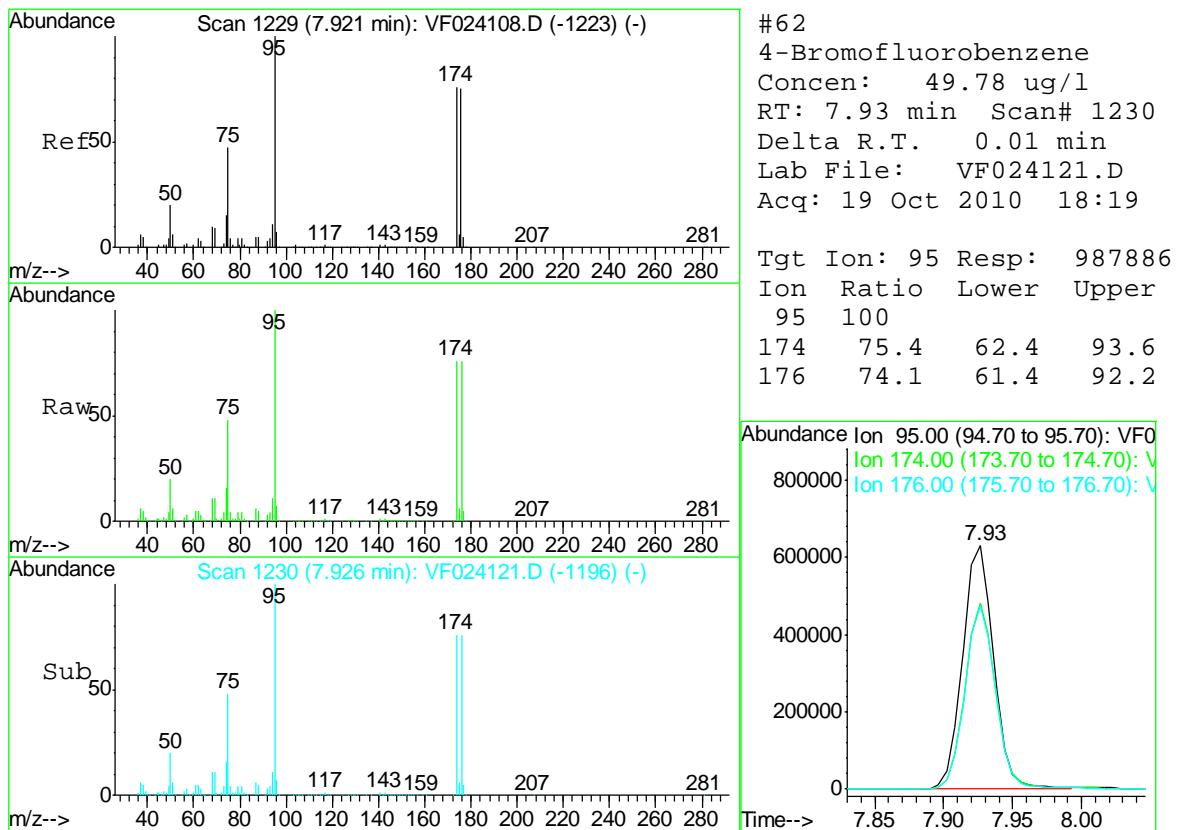
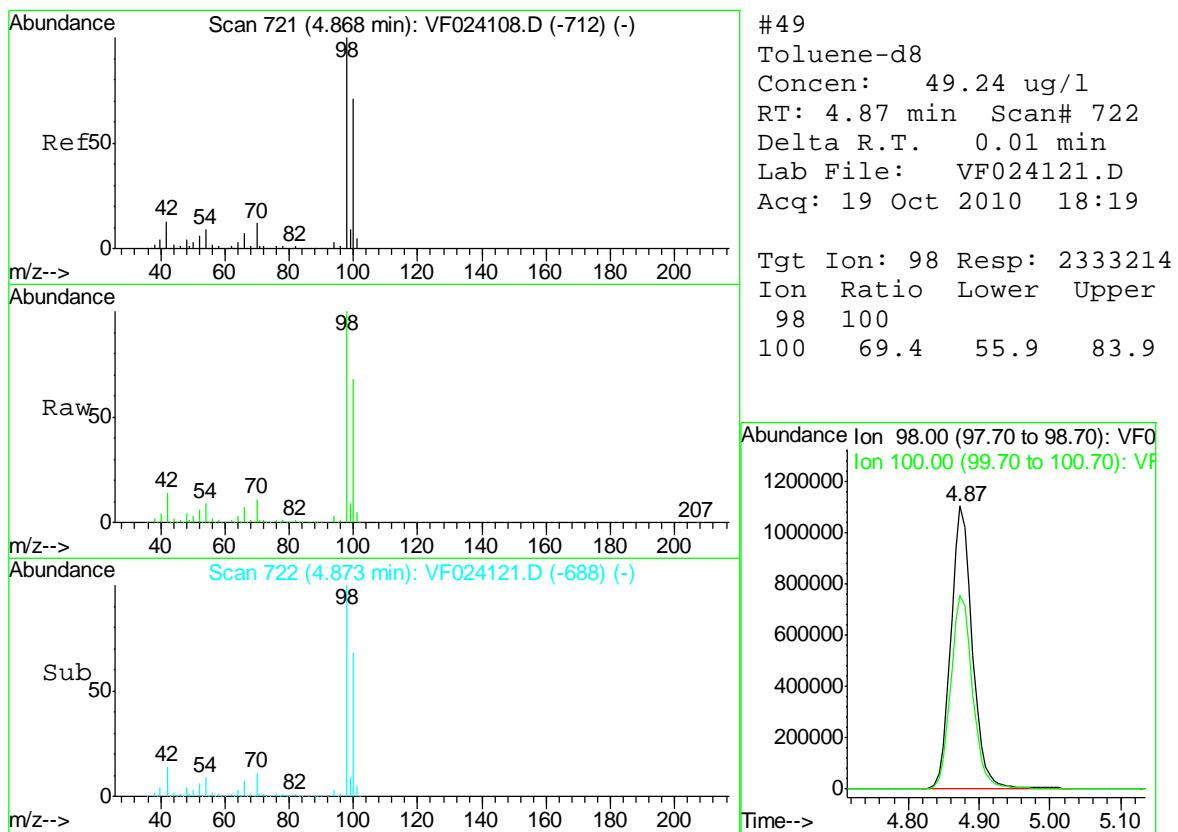
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Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

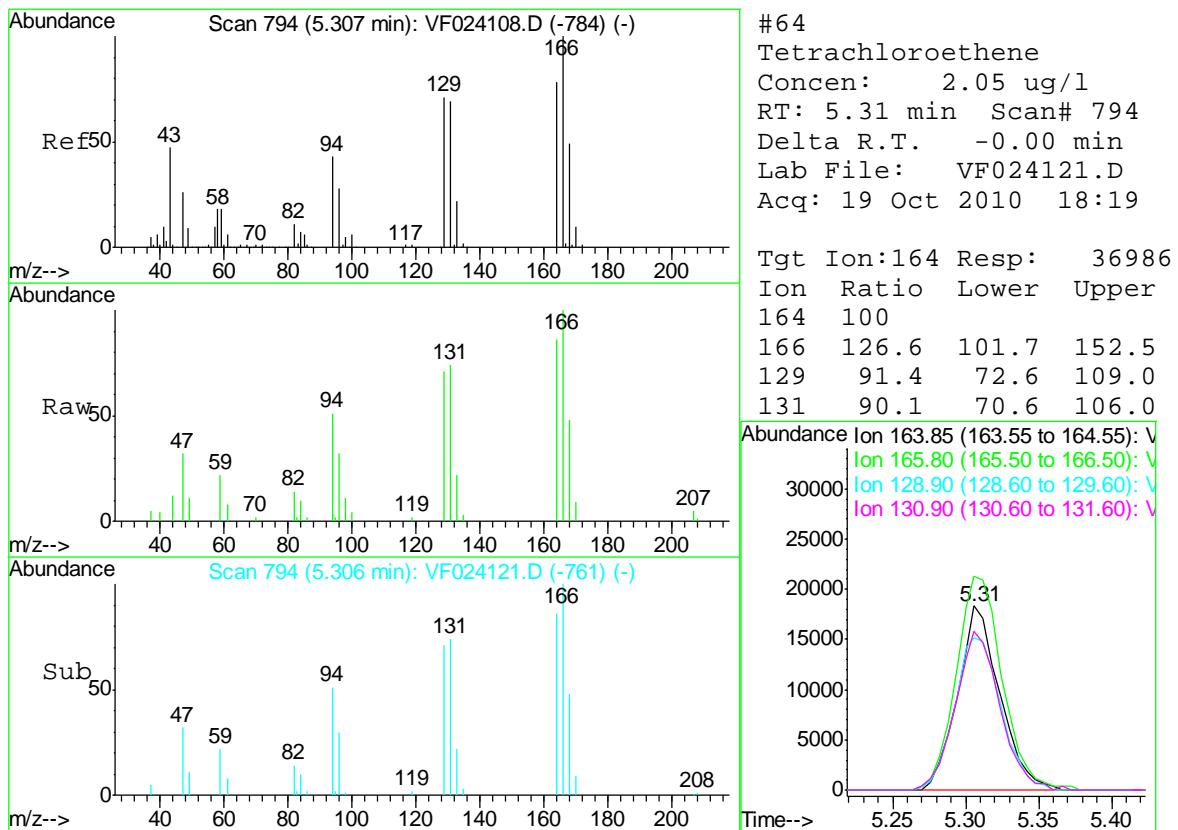
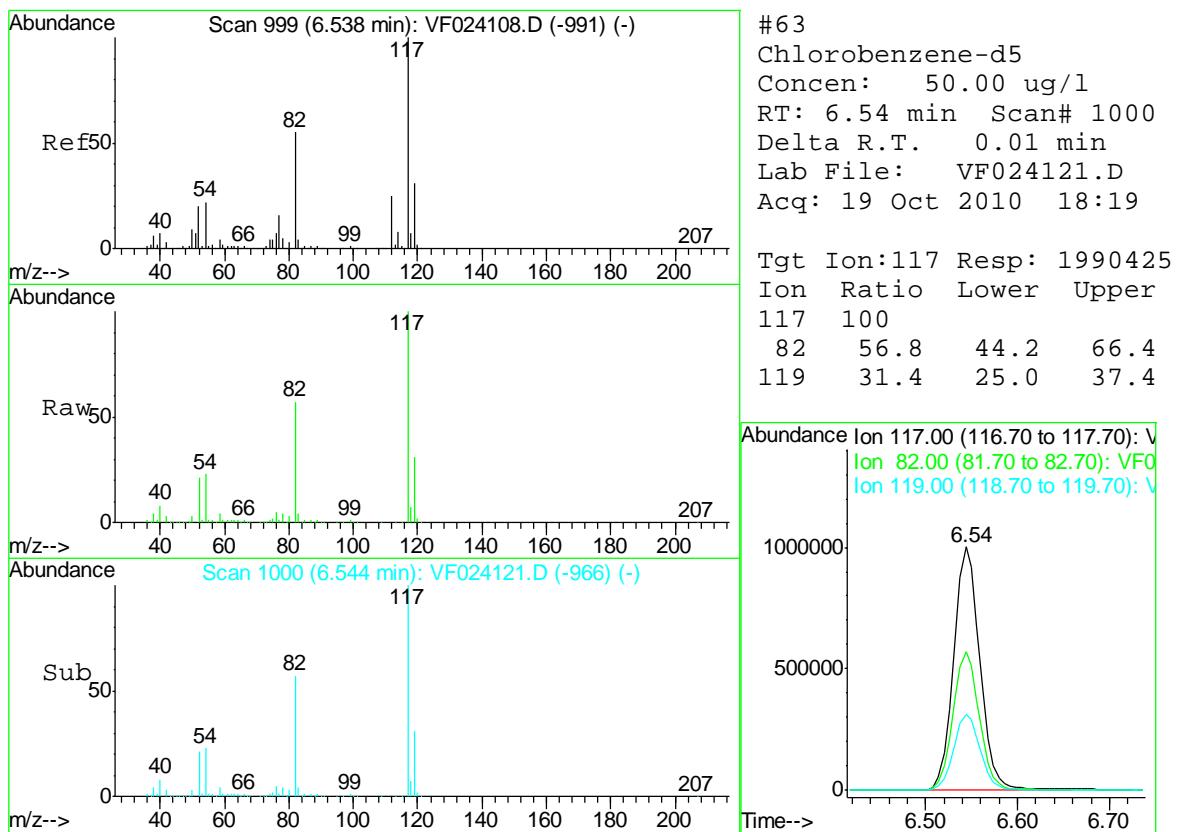


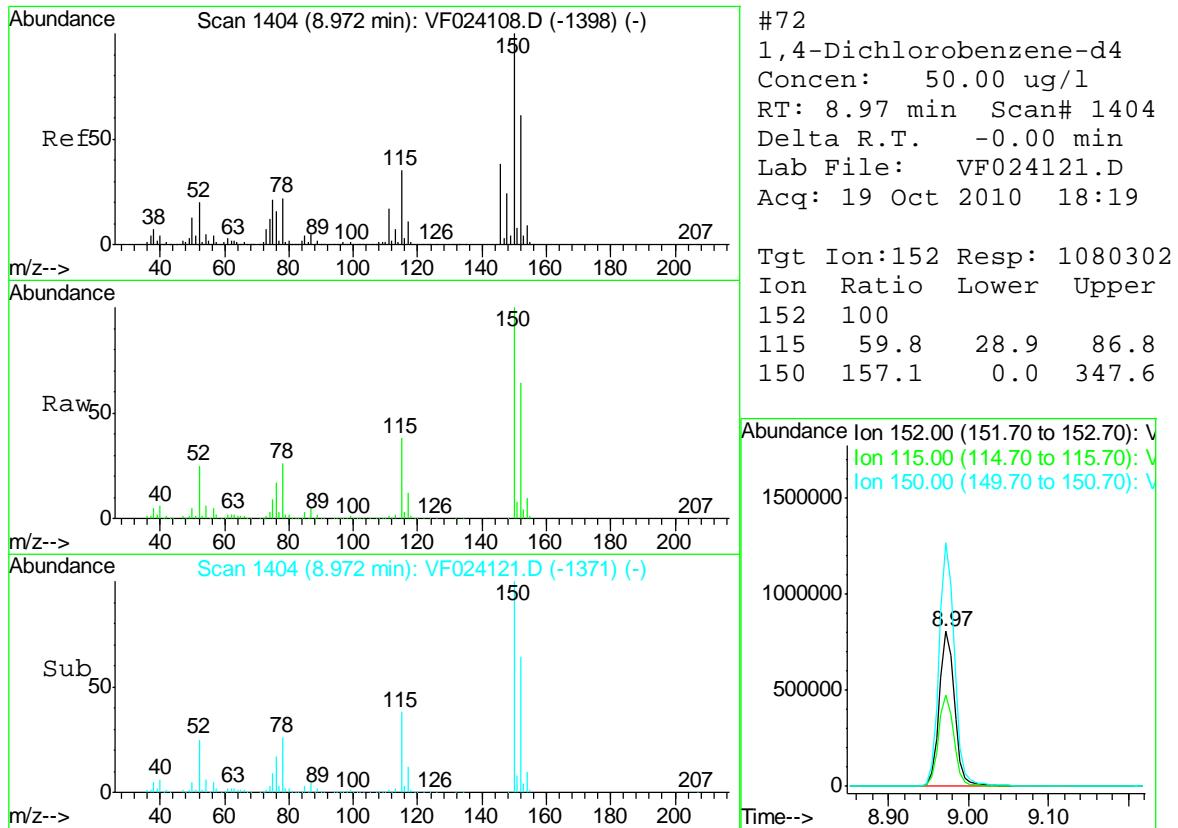












Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024121.D  
 Acq On : 19 Oct 2010 18:19  
 Operator : MS  
 Sample : B3902-22  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 20 02:18:03 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1024392	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2056201	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	1990425	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1080302	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	834123	54.13	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	108.26%	
36) Dibromofluoromethane	2.90	113	729285	52.03	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	104.06%	
49) Toluene-d8	4.87	98	2333214	49.24	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	98.48%	
62) 4-Bromofluorobenzene	7.93	95	987886	49.78	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	99.56%	

Target Compounds					Qvalue
33) 1,1,1-Trichloroethane	2.91	97	38807	2.29	ug/l 96
44) Trichloroethene	3.62	130	35600	1.95	ug/l # 1
64) Tetrachloroethene	5.31	164	36986	2.05	ug/l 99

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024121.D  
 Acq On : 19 Oct 2010 18:19  
 Operator : MS  
 Sample : B3902-22  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

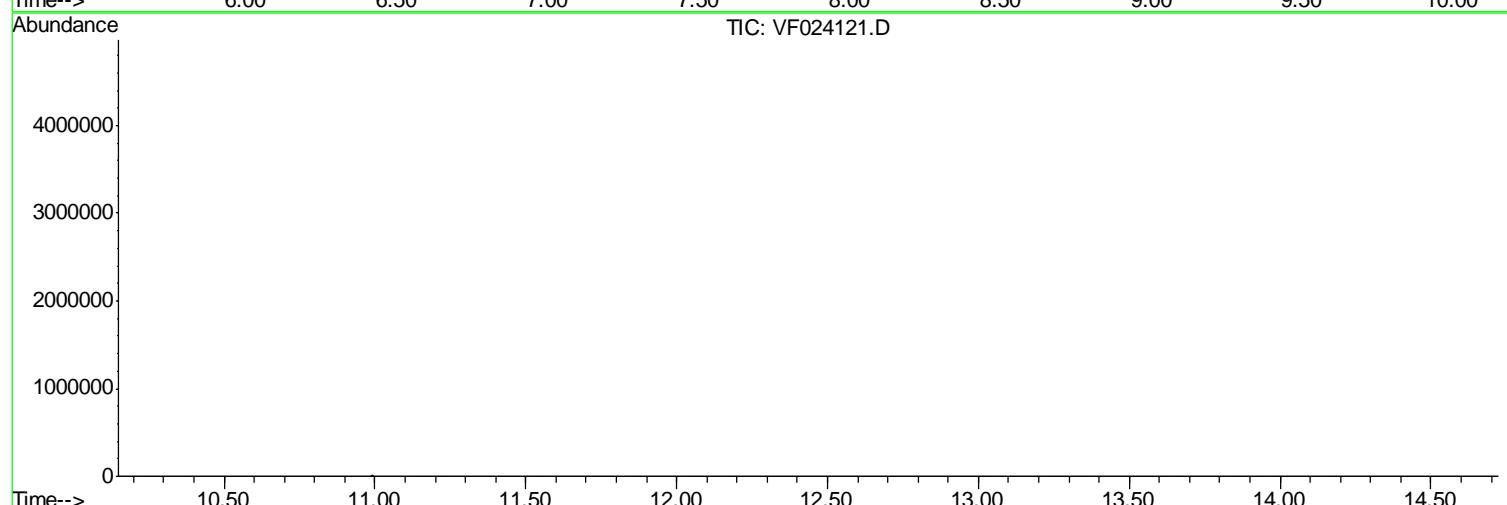
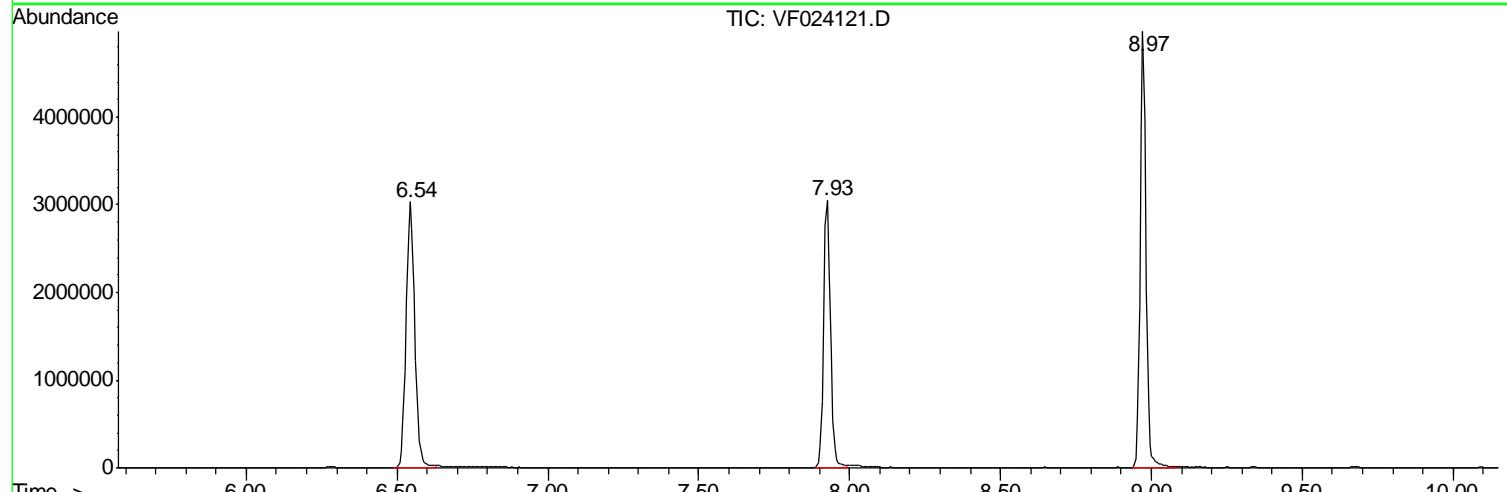
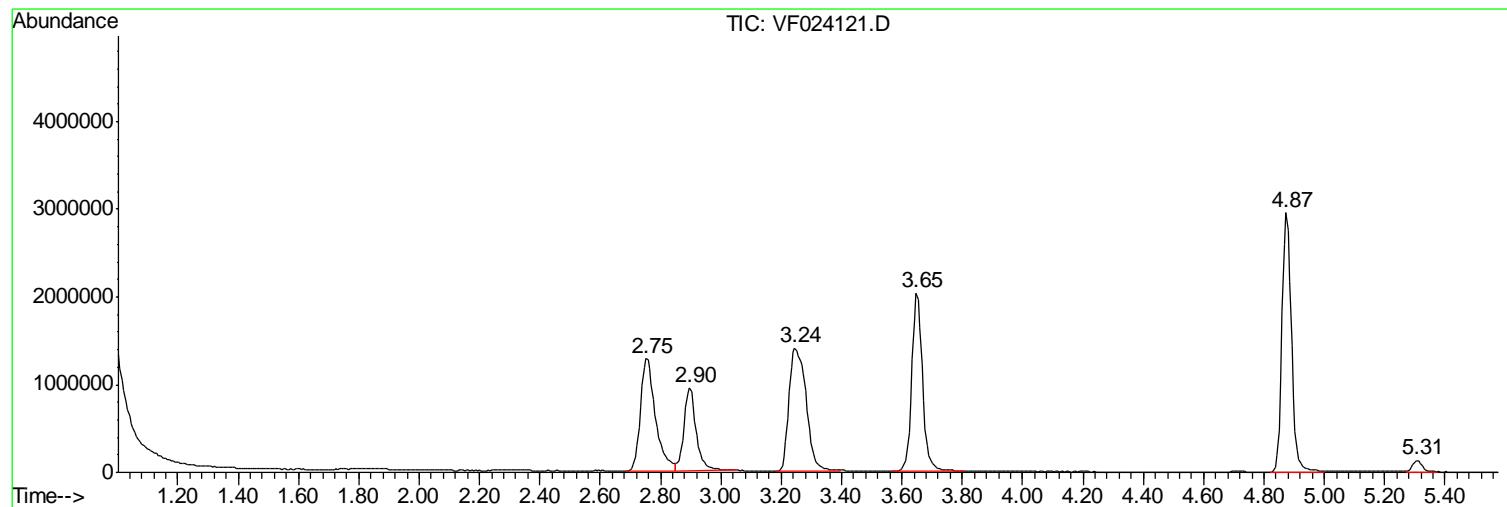
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.752	358	369	385	rBV	1275961	4429864	65.20%	10.555%
2	2.896	385	393	419	rVB	942972	2645368	38.94%	6.303%
3	3.245	441	451	476	rBV2	1402052	5600388	82.43%	13.344%
4	3.647	505	518	544	rBV	2031358	4995175	73.52%	11.902%
5	4.873	713	722	743	rBV	2955463	6357541	93.58%	15.148%
6	5.306	788	794	805	rVB2	130492	286662	4.22%	0.683%
7	6.544	991	1000	1014	rBV	3026571	6070234	89.35%	14.464%
8	7.926	1223	1230	1241	rBV	3044724	4789603	70.50%	11.412%
9	8.972	1398	1404	1423	rBV	4972768	6794058	100.00%	16.188%

Sum of corrected areas: 41968893

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024121.D  
Acq On : 19 Oct 2010 18:19  
Operator : MS  
Sample : B3902-22  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024121.D  
Acq On : 19 Oct 2010 18:19  
Operator : MS  
Sample : B3902-22  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024121.D  
Acq On : 19 Oct 2010 18:19  
Operator : MS  
Sample : B3902-22  
Misc : 5.0mL,MSVOAF  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-5D	SDG No.:	B3902
Lab Sample ID:	B3902-23	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024122.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-5D	SDG No.:	B3902
Lab Sample ID:	B3902-23	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024122.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	55.8		66 - 150		112%	SPK: 50
1868-53-7	Dibromofluoromethane	52.4		76 - 130		105%	SPK: 50
2037-26-5	Toluene-d8	50.4		78 - 121		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		70 - 131		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	963401		3.24			
540-36-3	1,4-Difluorobenzene	1942720		3.65			
3114-55-4	Chlorobenzene-d5	1905260		6.54			
3855-82-1	1,4-Dichlorobenzene-d4	1030140		8.97			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

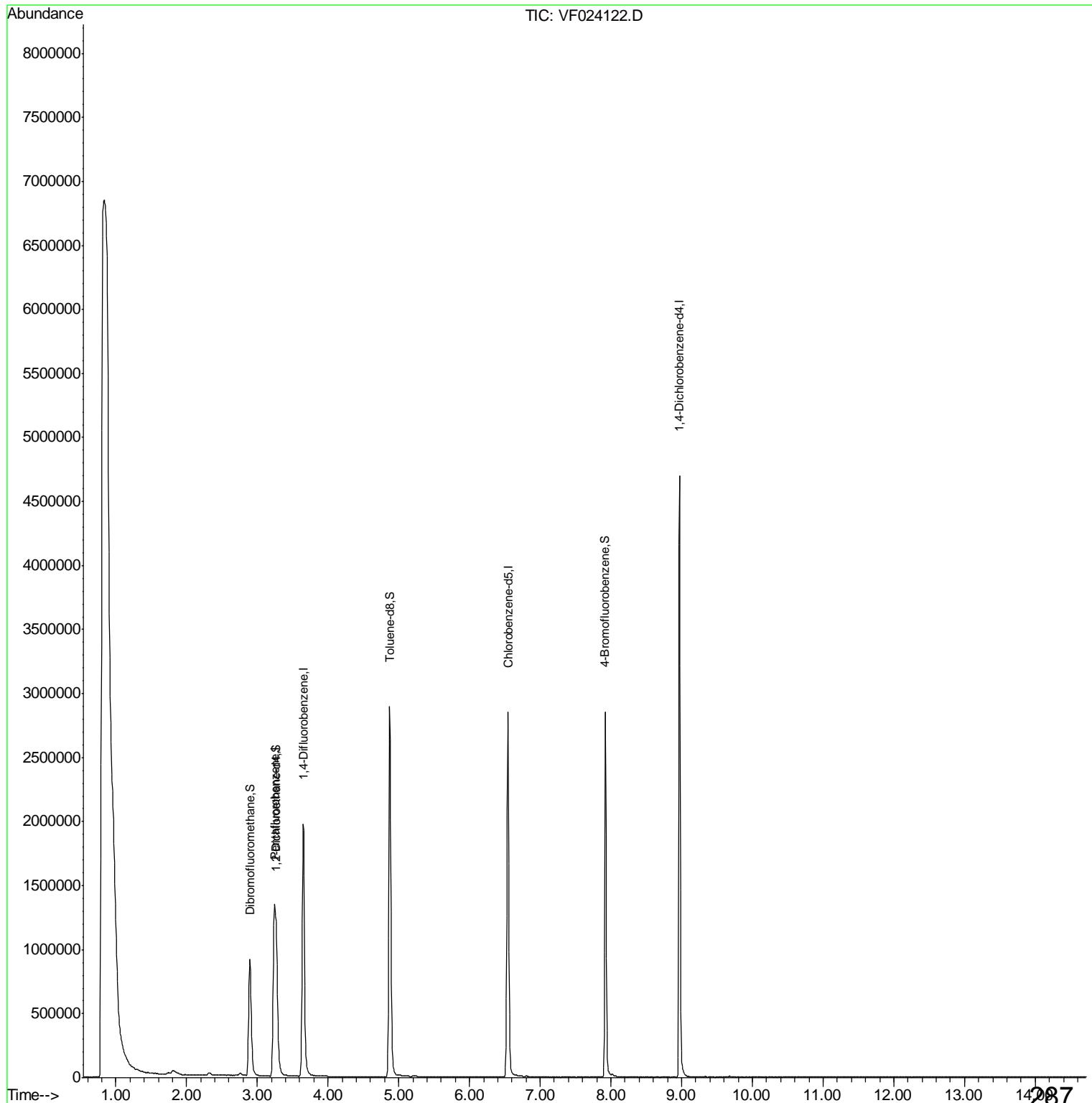
N = Presumptive Evidence of a Compound

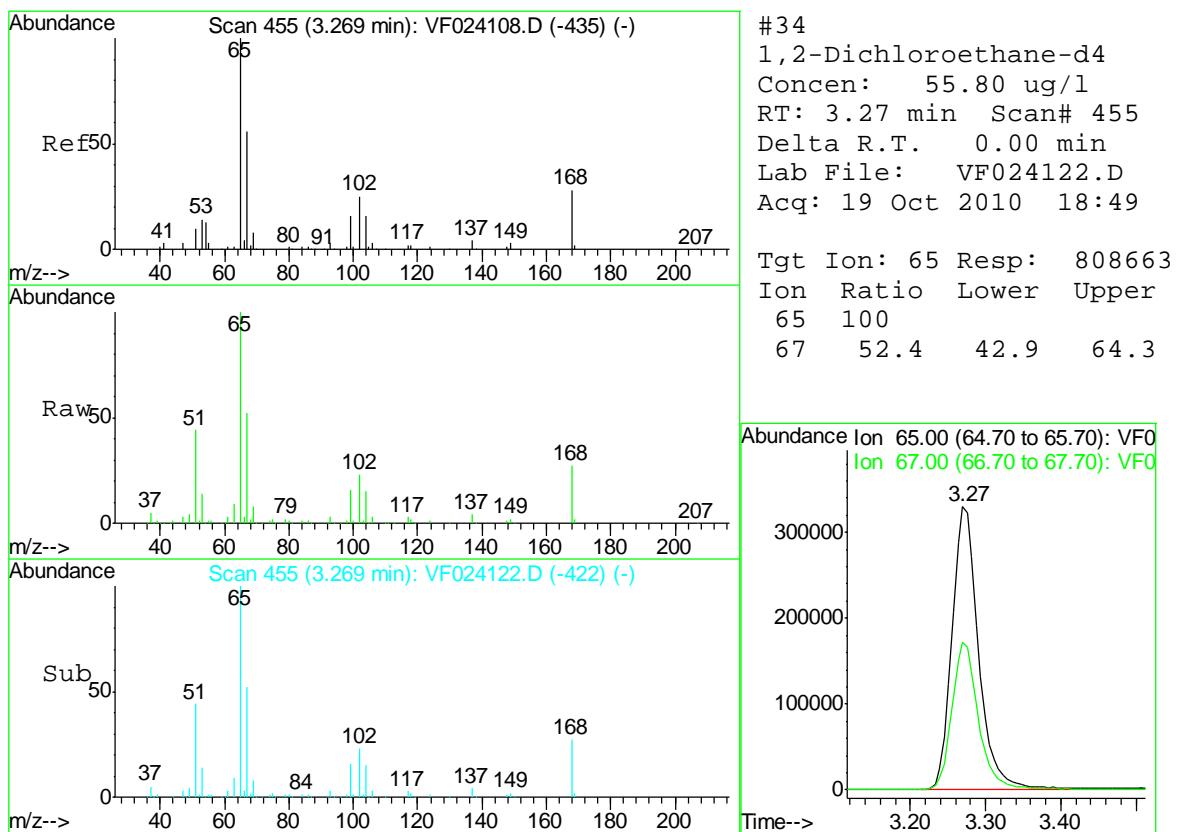
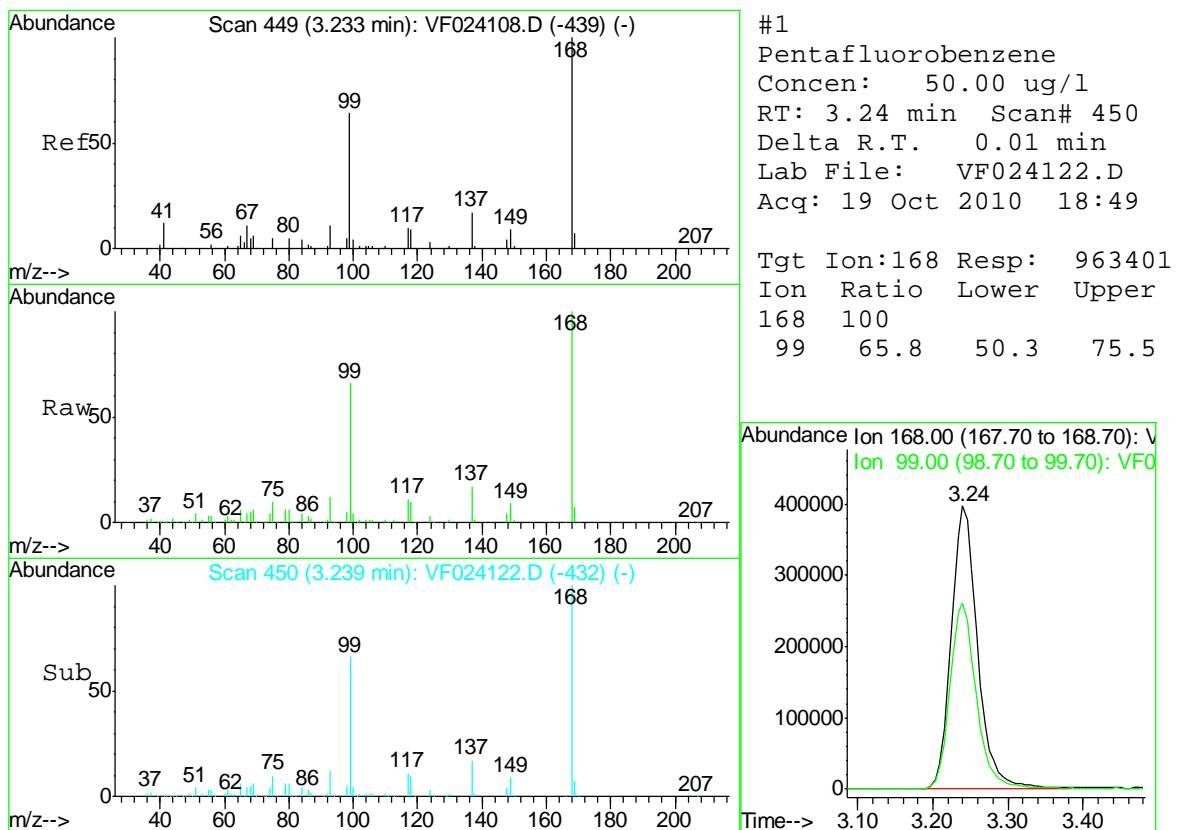
\* = Values outside of QC limits

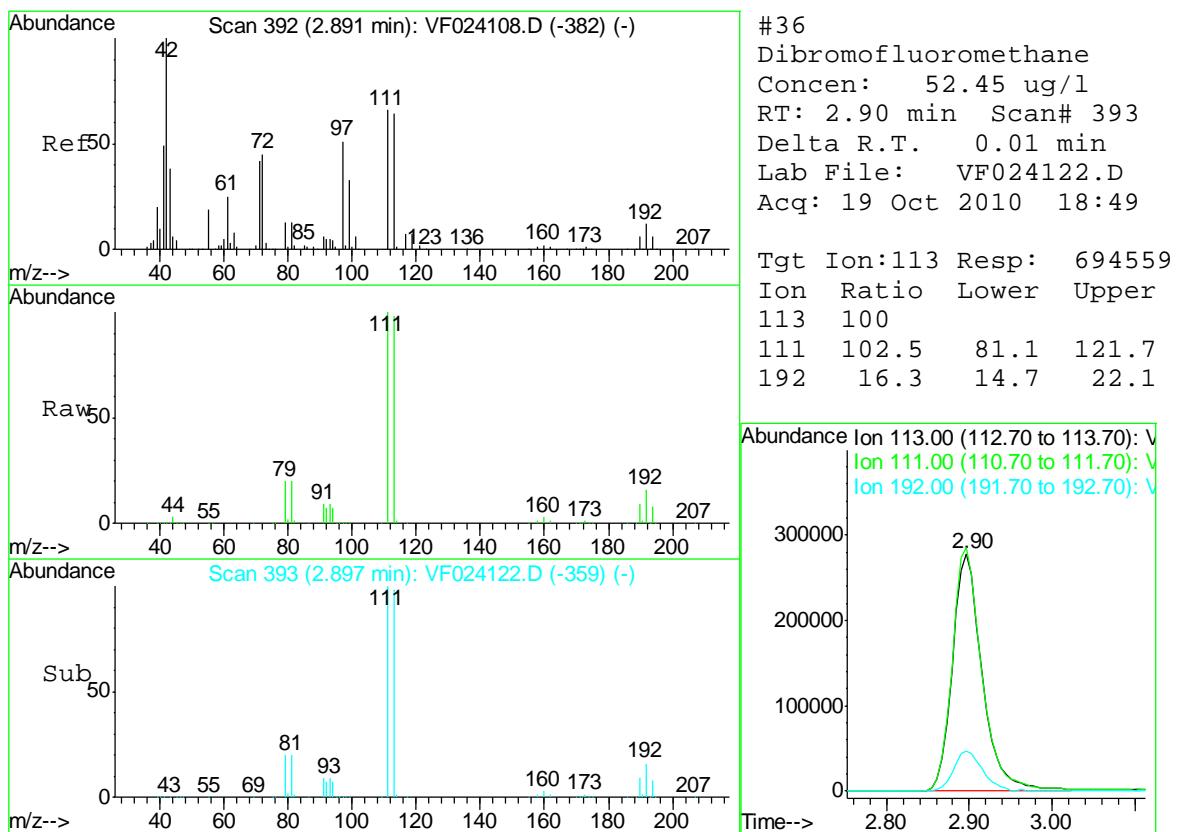
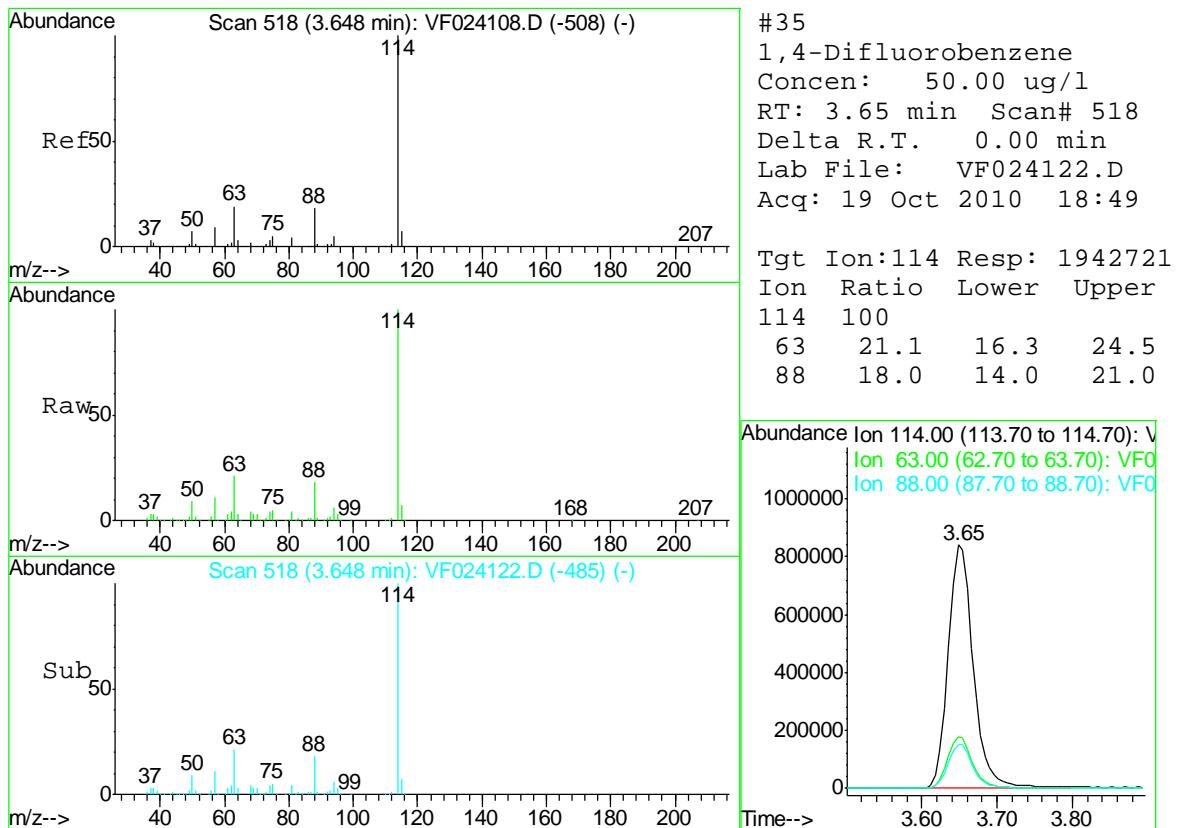
D = Dilution

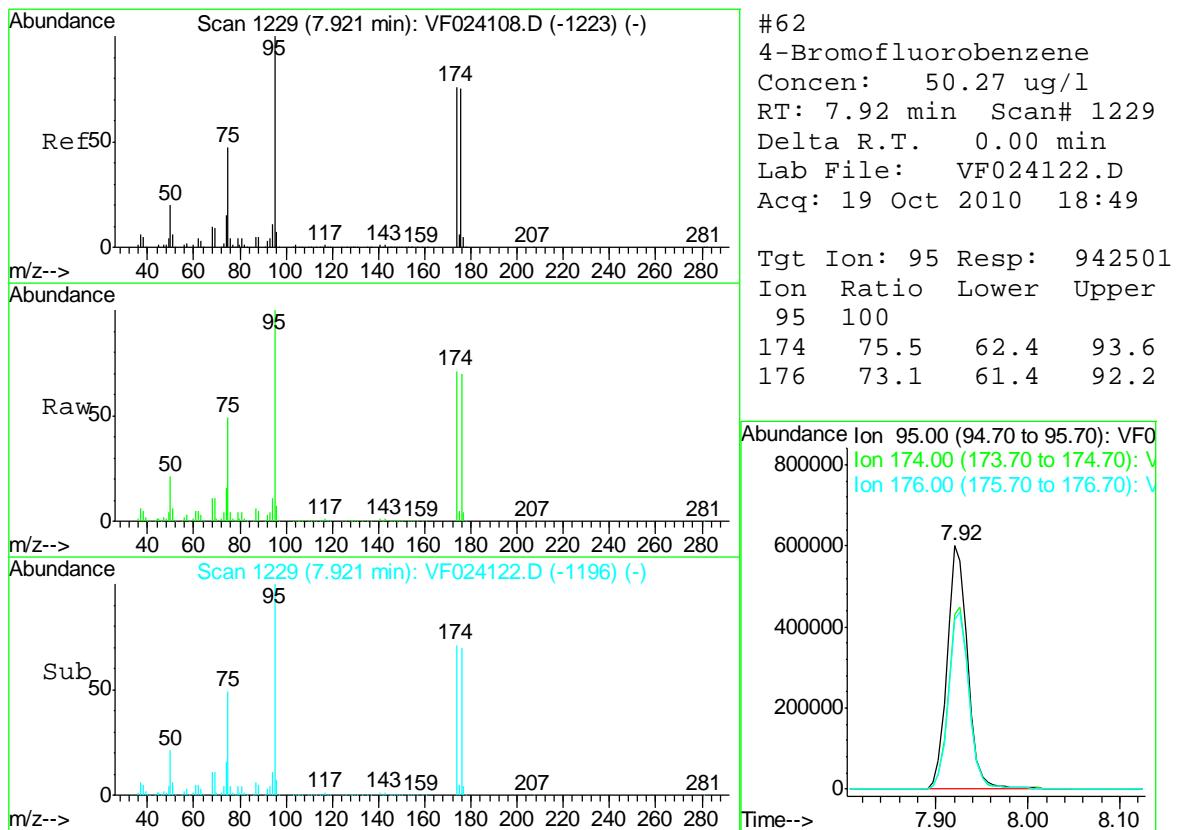
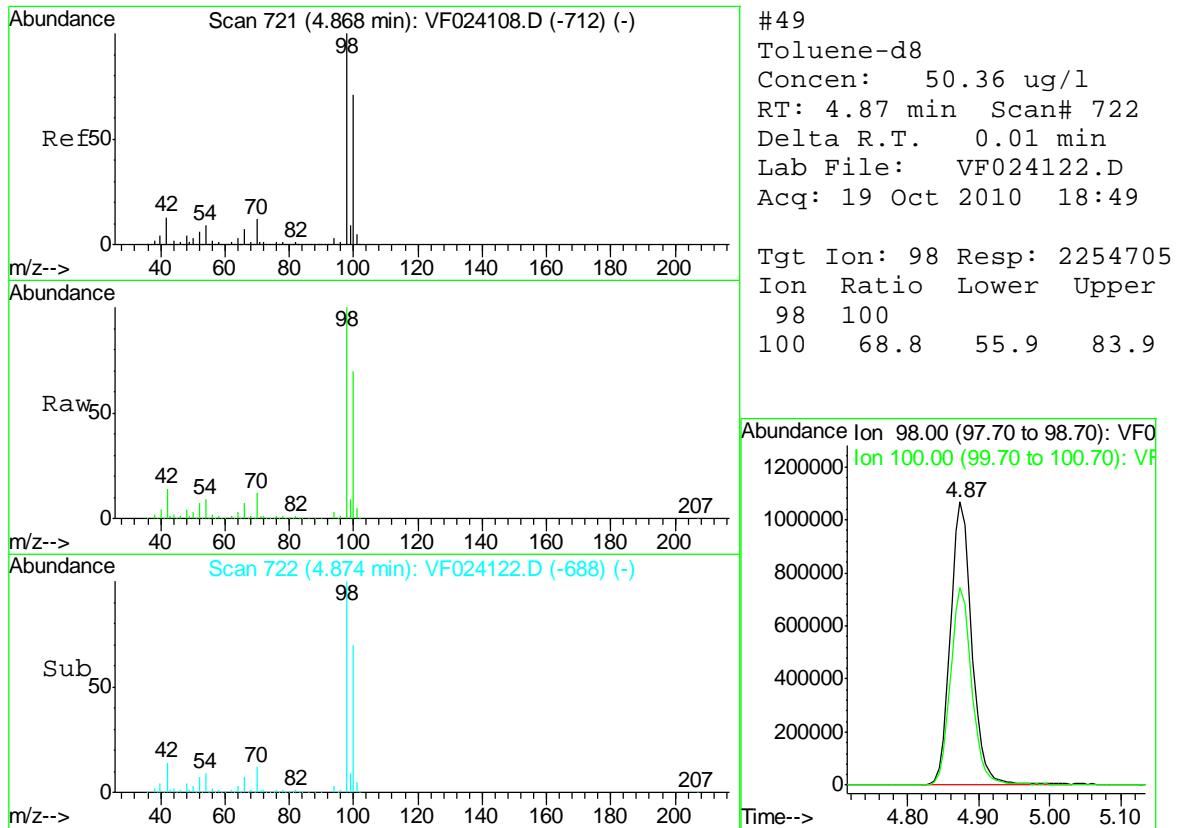
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Data File : VF024122.D  
Acq On : 19 Oct 2010 18:49  
Operator : MS  
Sample : B3902-23  
Misc : 5.0mL,MSVOAF  
ALS Vial : 17 Sample Multiplier: 1

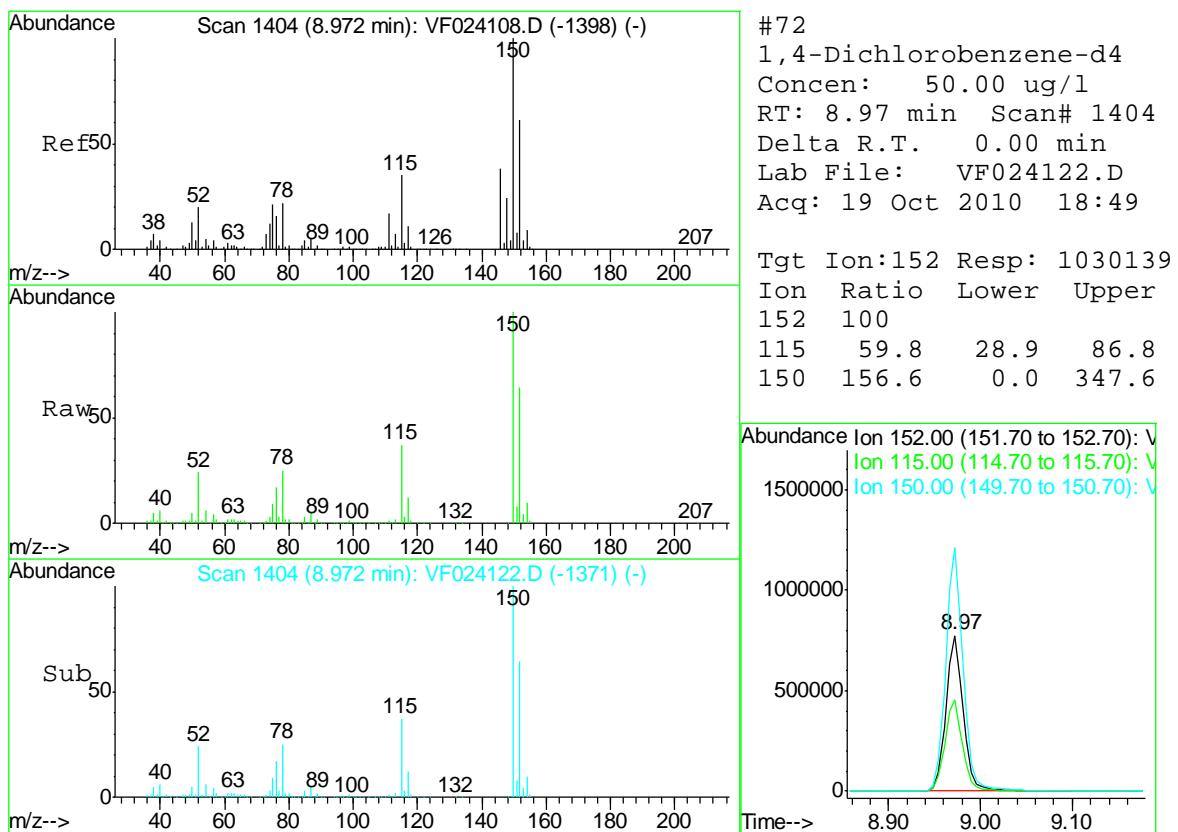
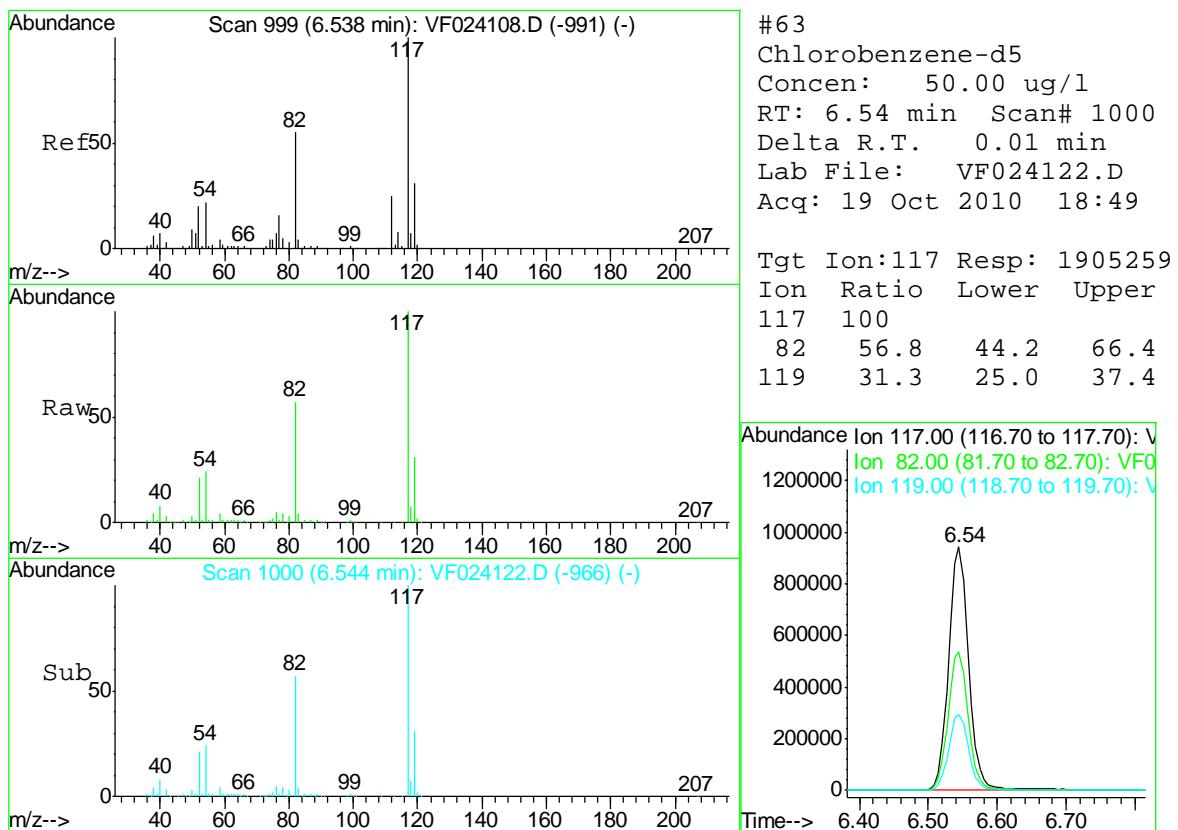
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Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024122.D  
 Acq On : 19 Oct 2010 18:49  
 Operator : MS  
 Sample : B3902-23  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 20 02:19:25 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	963401	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	1942721	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	1905259	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1030139	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	808663	55.80	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	111.60%	
36) Dibromofluoromethane	2.90	113	694559	52.45	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	104.90%	
49) Toluene-d8	4.87	98	2254705	50.36	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	100.72%	
62) 4-Bromofluorobenzene	7.92	95	942501	50.27	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	100.54%	

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

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024122.D  
 Acq On : 19 Oct 2010 18:49  
 Operator : MS  
 Sample : B3902-23  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 17 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

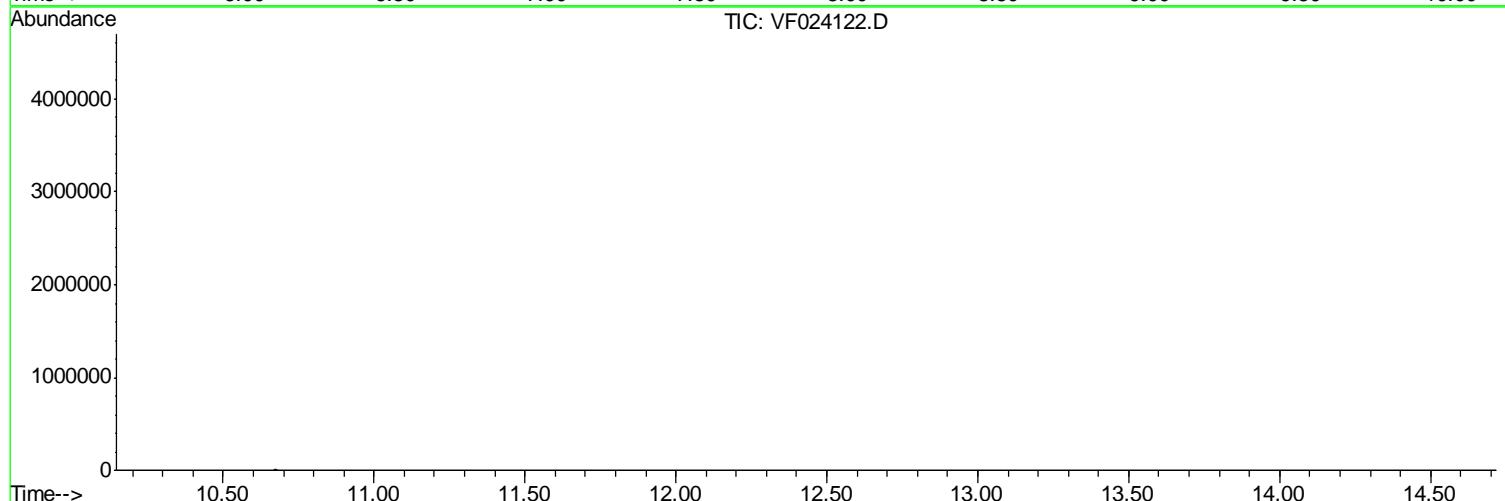
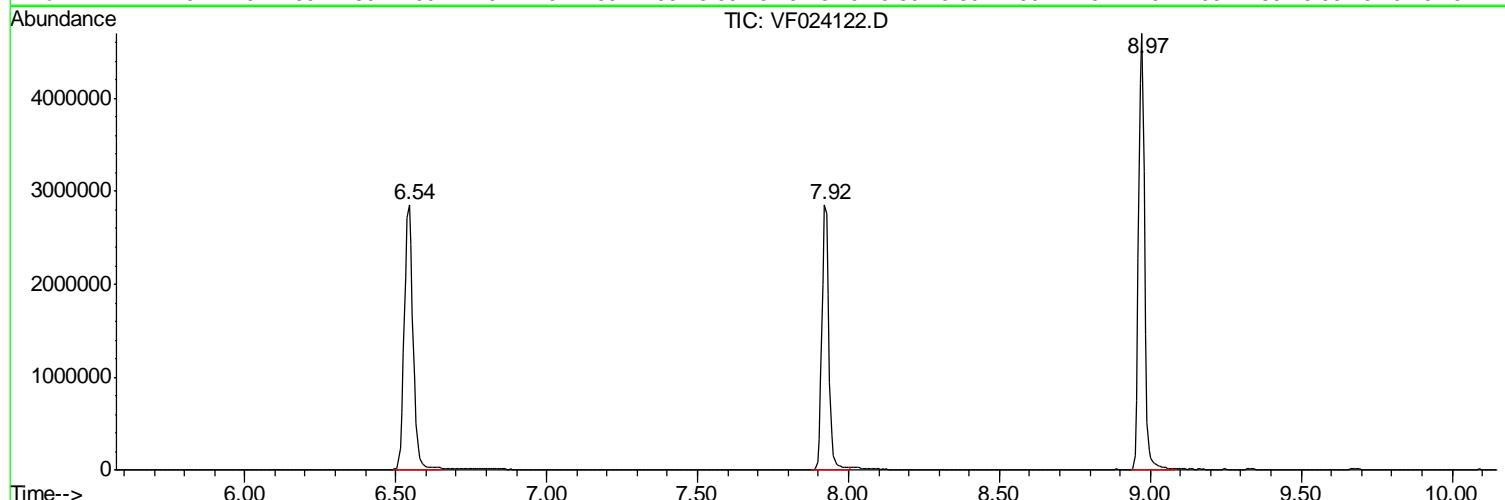
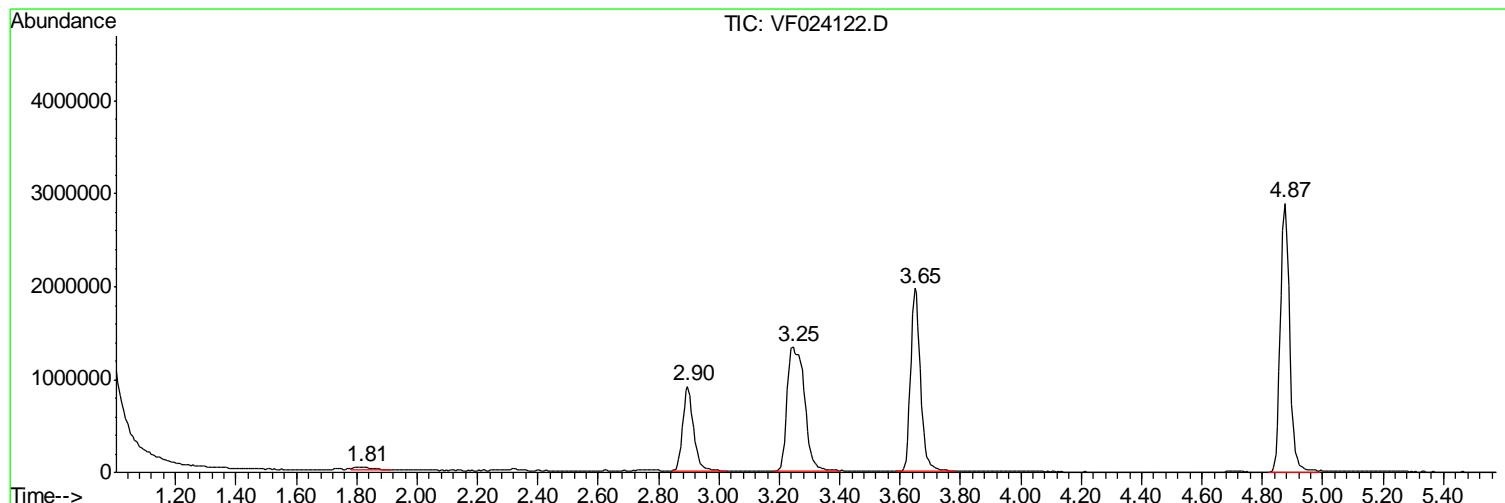
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.815	207	213	229	rVB3	29146	128753	2.00%	0.365%
2	2.897	384	393	414	rVB	910686	2248879	34.85%	6.376%
3	3.245	441	451	477	rBV2	1344376	5377535	83.34%	15.246%
4	3.648	508	518	540	rBV	1971929	4574910	70.90%	12.971%
5	4.874	713	722	741	rBV	2893897	6135318	95.08%	17.395%
6	6.544	991	1000	1018	rBV	2853519	5796718	89.83%	16.435%
7	7.921	1222	1229	1243	rBV	2854186	4556500	70.61%	12.918%
8	8.972	1398	1404	1422	rBV	4697024	6452740	100.00%	18.295%

Sum of corrected areas: 35271353

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024122.D  
Acq On : 19 Oct 2010 18:49  
Operator : MS  
Sample : B3902-23  
Misc : 5.0mL,MSVOAF  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024122.D  
Acq On : 19 Oct 2010 18:49  
Operator : MS  
Sample : B3902-23  
Misc : 5.0mL,MSVOAF  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024122.D  
Acq On : 19 Oct 2010 18:49  
Operator : MS  
Sample : B3902-23  
Misc : 5.0mL,MSVOAF  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-4D	SDG No.:	B3902
Lab Sample ID:	B3902-24	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024123.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-4D	SDG No.:	B3902
Lab Sample ID:	B3902-24	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024123.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	55.8		66 - 150		112%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		76 - 130		105%	SPK: 50
2037-26-5	Toluene-d8	49.6		78 - 121		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.5		70 - 131		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1000180	3.24				
540-36-3	1,4-Difluorobenzene	2026220	3.65				
3114-55-4	Chlorobenzene-d5	1994580	6.55				
3855-82-1	1,4-Dichlorobenzene-d4	1072220	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

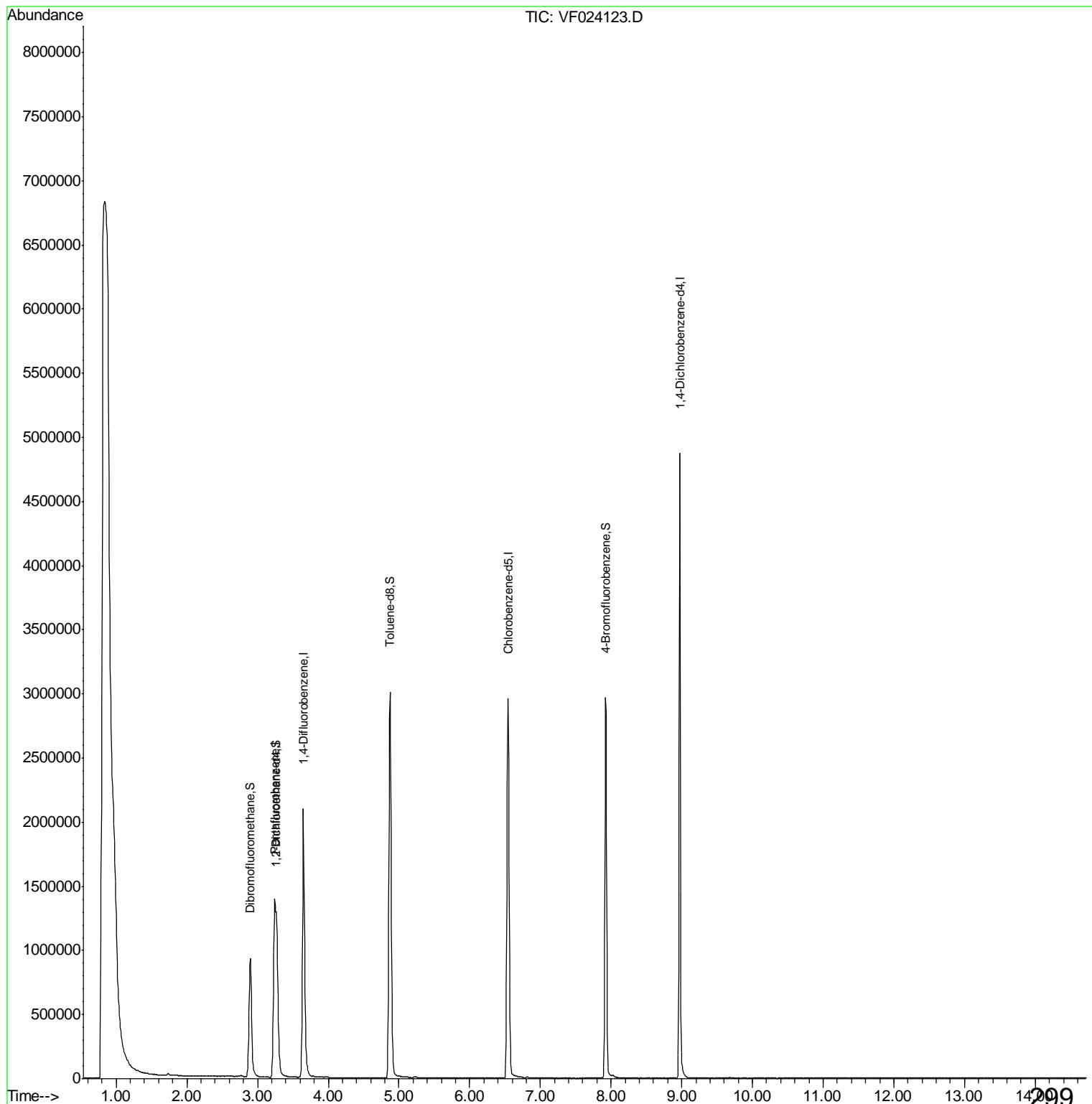
N = Presumptive Evidence of a Compound

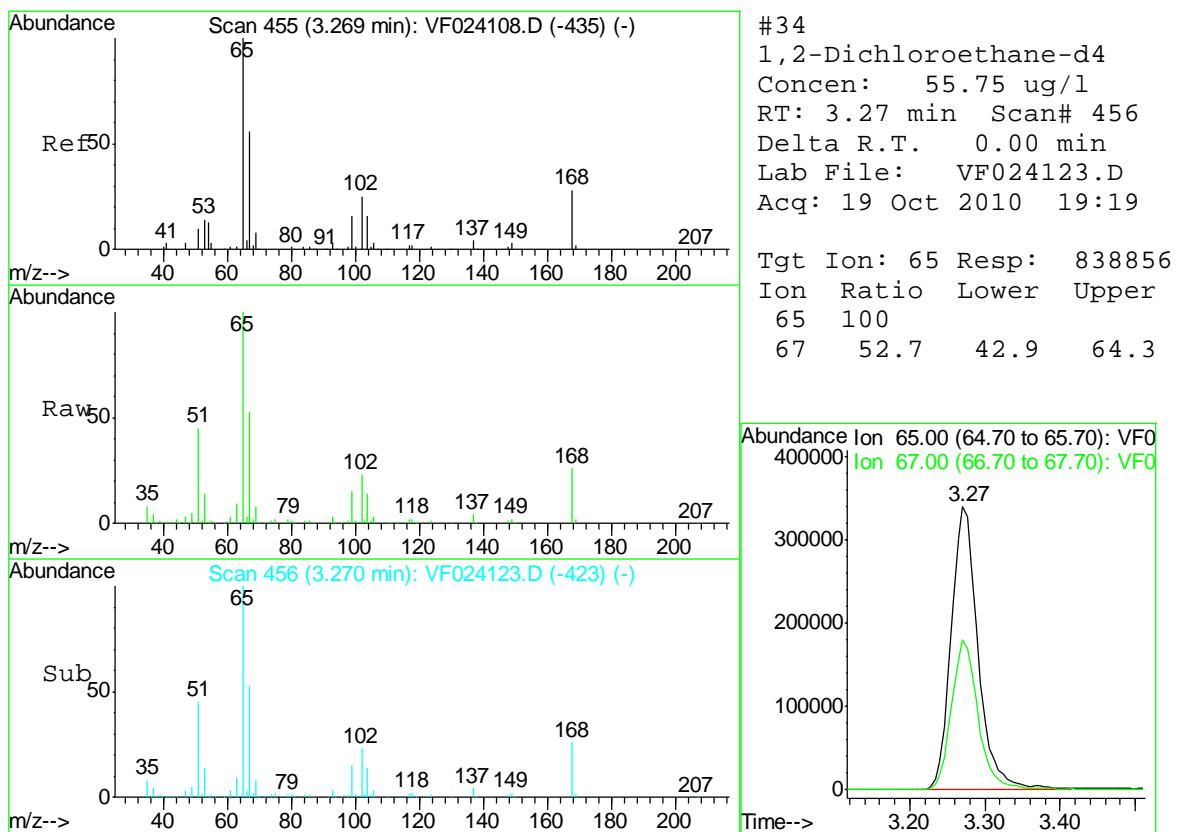
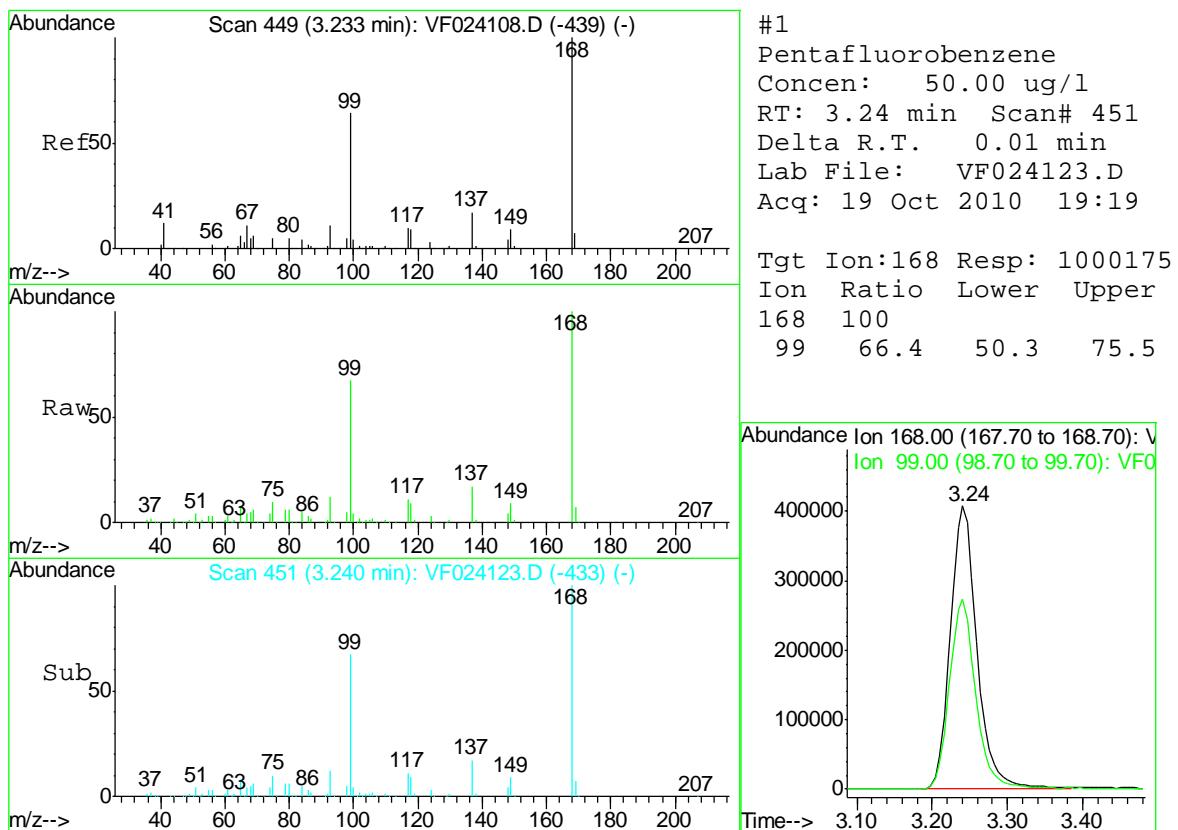
\* = Values outside of QC limits

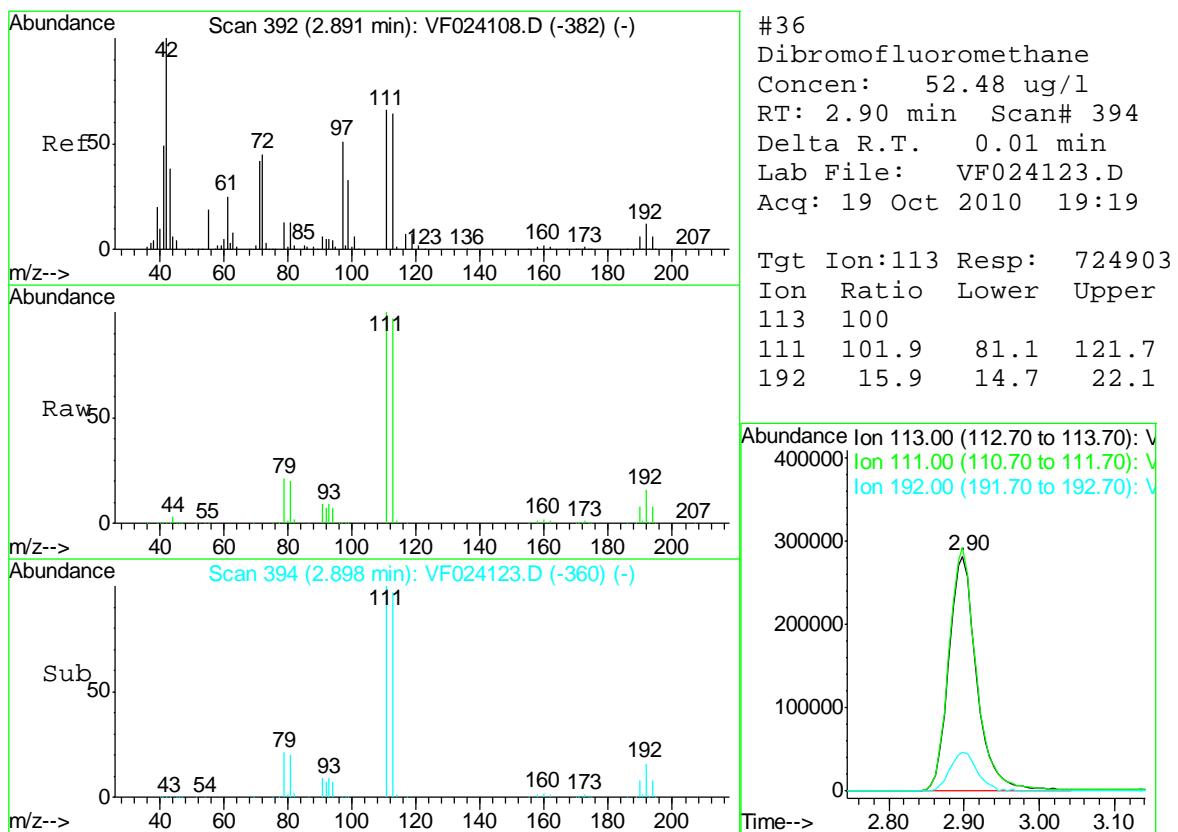
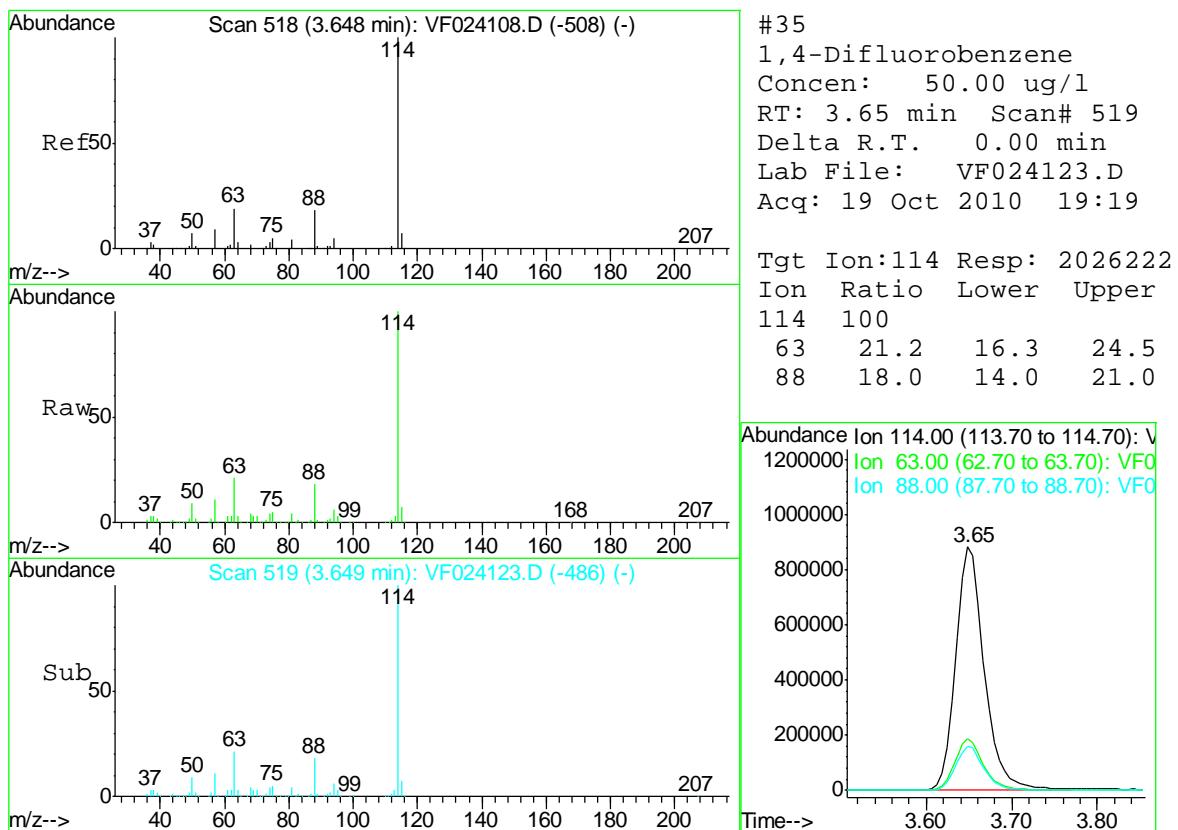
D = Dilution

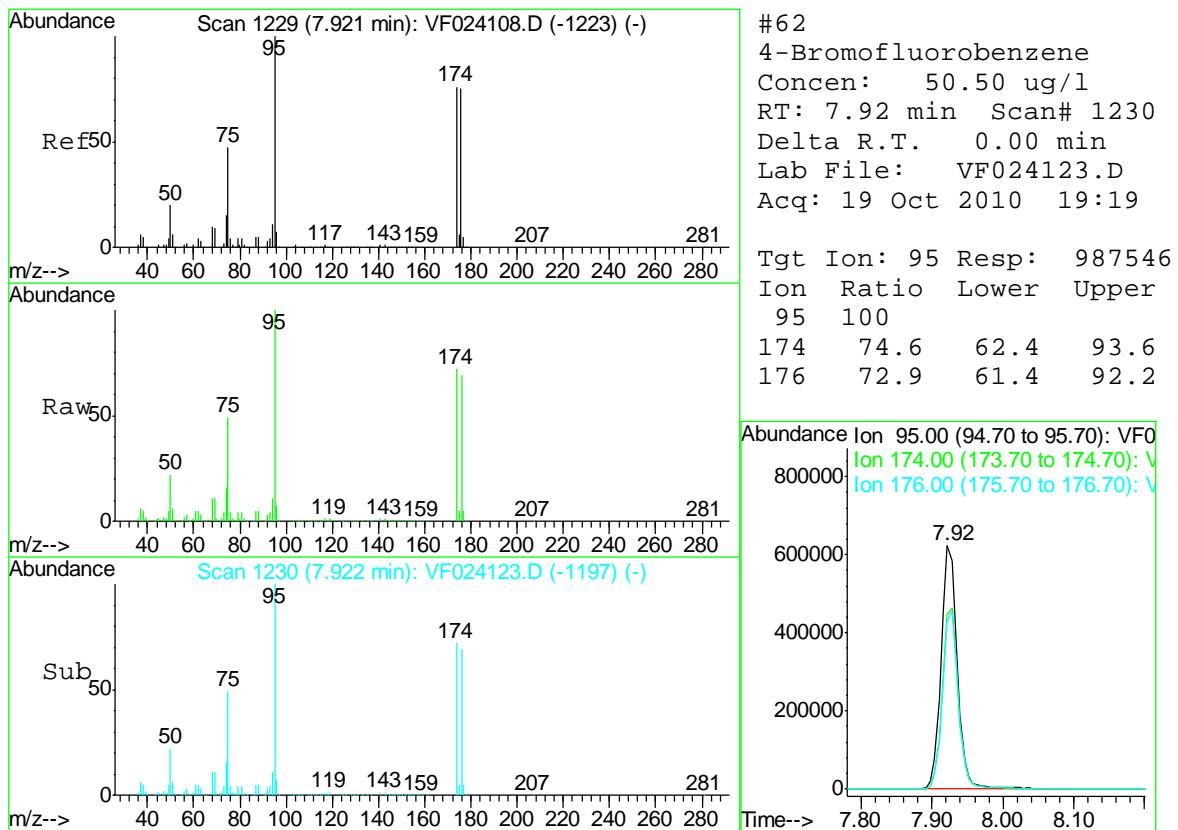
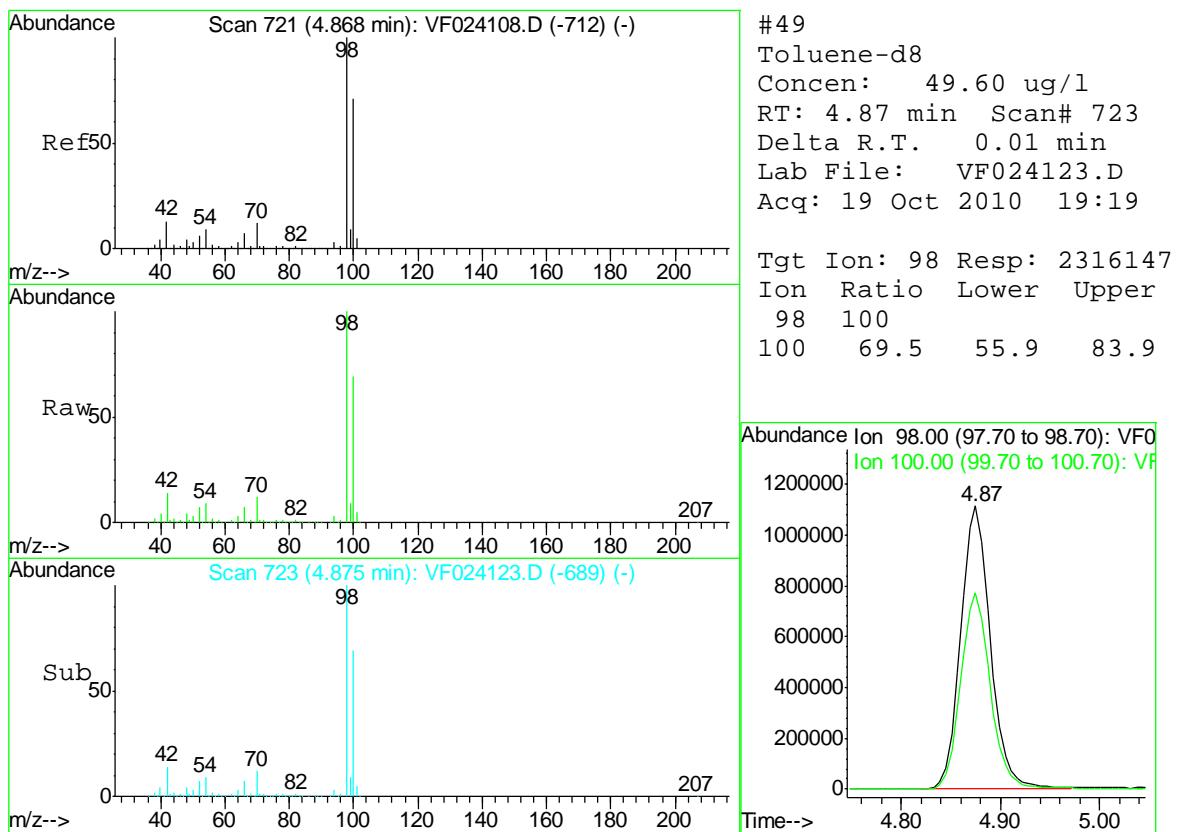
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024123.D  
Acq On : 19 Oct 2010 19:19  
Operator : MS  
Sample : B3902-24  
Misc : 5.0mL,MSVOAF  
ALS Vial : 18 Sample Multiplier: 1

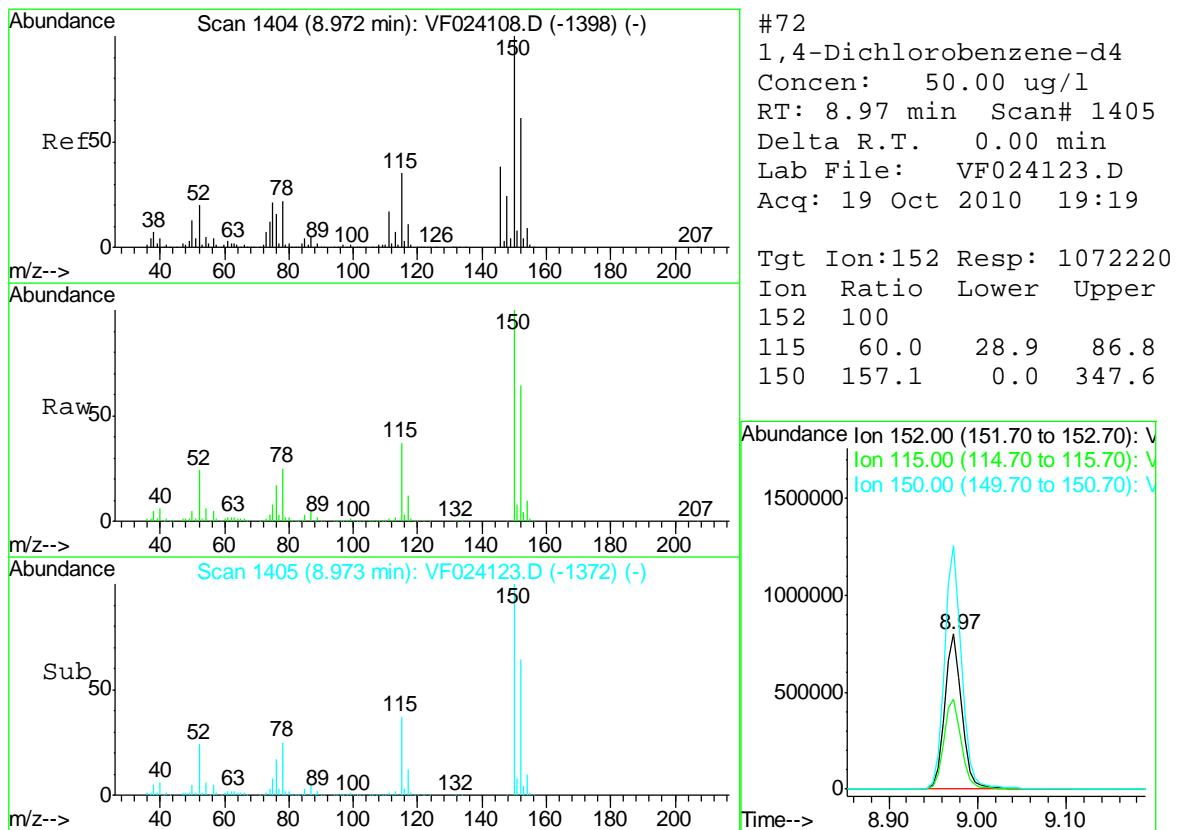
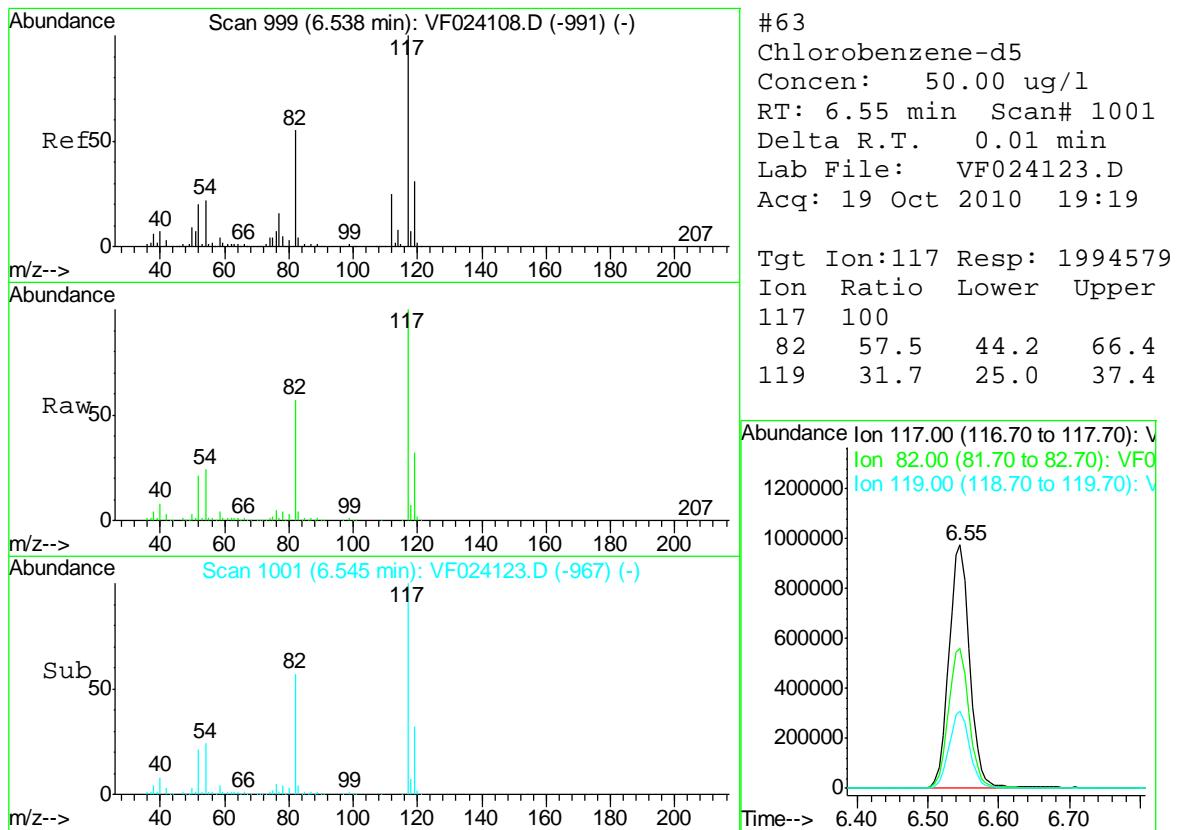
Quant Time: Oct 20 02:20:51 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024123.D  
 Acq On : 19 Oct 2010 19:19  
 Operator : MS  
 Sample : B3902-24  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 20 02:20:51 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1000175	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2026222	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.55	117	1994579	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1072220	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	838856	55.75	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	111.50%	
36) Dibromofluoromethane	2.90	113	724903	52.48	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	104.96%	
49) Toluene-d8	4.87	98	2316147	49.60	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	99.20%	
62) 4-Bromofluorobenzene	7.92	95	987546	50.50	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	101.00%	

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024123.D  
 Acq On : 19 Oct 2010 19:19  
 Operator : MS  
 Sample : B3902-24  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

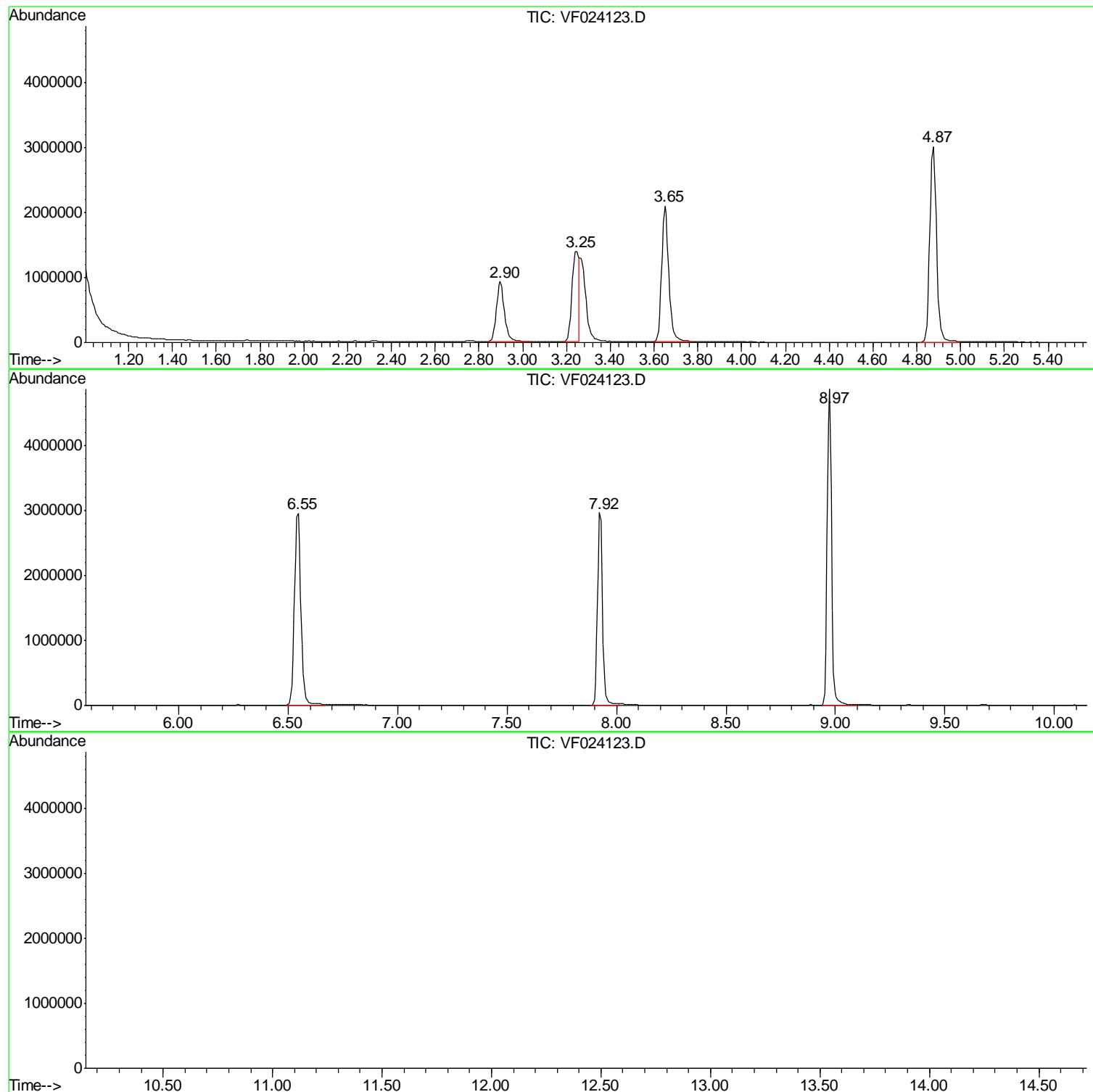
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.898	385	394	417	rVB	928202	2353299	34.84%	6.847%
2	3.246	442	452	454	rBV	1392654	3216574	47.62%	9.359%
3	3.649	510	519	539	rBV	2092114	4764578	70.53%	13.863%
4	4.875	713	723	743	rBV	3014673	6401485	94.76%	18.626%
5	6.545	992	1001	1022	rBV	2963593	6124177	90.66%	17.819%
6	7.922	1223	1230	1245	rBV	2969169	4752559	70.35%	13.828%
7	8.973	1399	1405	1425	rBV	4871701	6755295	100.00%	19.656%

Sum of corrected areas: 34367967

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024123.D  
Acq On : 19 Oct 2010 19:19  
Operator : MS  
Sample : B3902-24  
Misc : 5.0mL,MSVOAF  
ALS Vial : 18 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024123.D  
Acq On : 19 Oct 2010 19:19  
Operator : MS  
Sample : B3902-24  
Misc : 5.0mL,MSVOAF  
ALS Vial : 18 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024123.D  
Acq On : 19 Oct 2010 19:19  
Operator : MS  
Sample : B3902-24  
Misc : 5.0mL,MSVOAF  
ALS Vial : 18 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-7S	SDG No.:	B3902
Lab Sample ID:	B3902-25	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031008.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1.2		0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	2.1		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	11		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-7S	SDG No.:	B3902
Lab Sample ID:	B3902-25	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031008.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	40.6		66 - 150		81%	SPK: 50
1868-53-7	Dibromofluoromethane	41.6		76 - 130		83%	SPK: 50
2037-26-5	Toluene-d8	42.3		78 - 121		85%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.1		70 - 131		86%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	589254		3.89			
540-36-3	1,4-Difluorobenzene	961426		4.69			
3114-55-4	Chlorobenzene-d5	832540		9.65			
3855-82-1	1,4-Dichlorobenzene-d4	430771		13.36			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

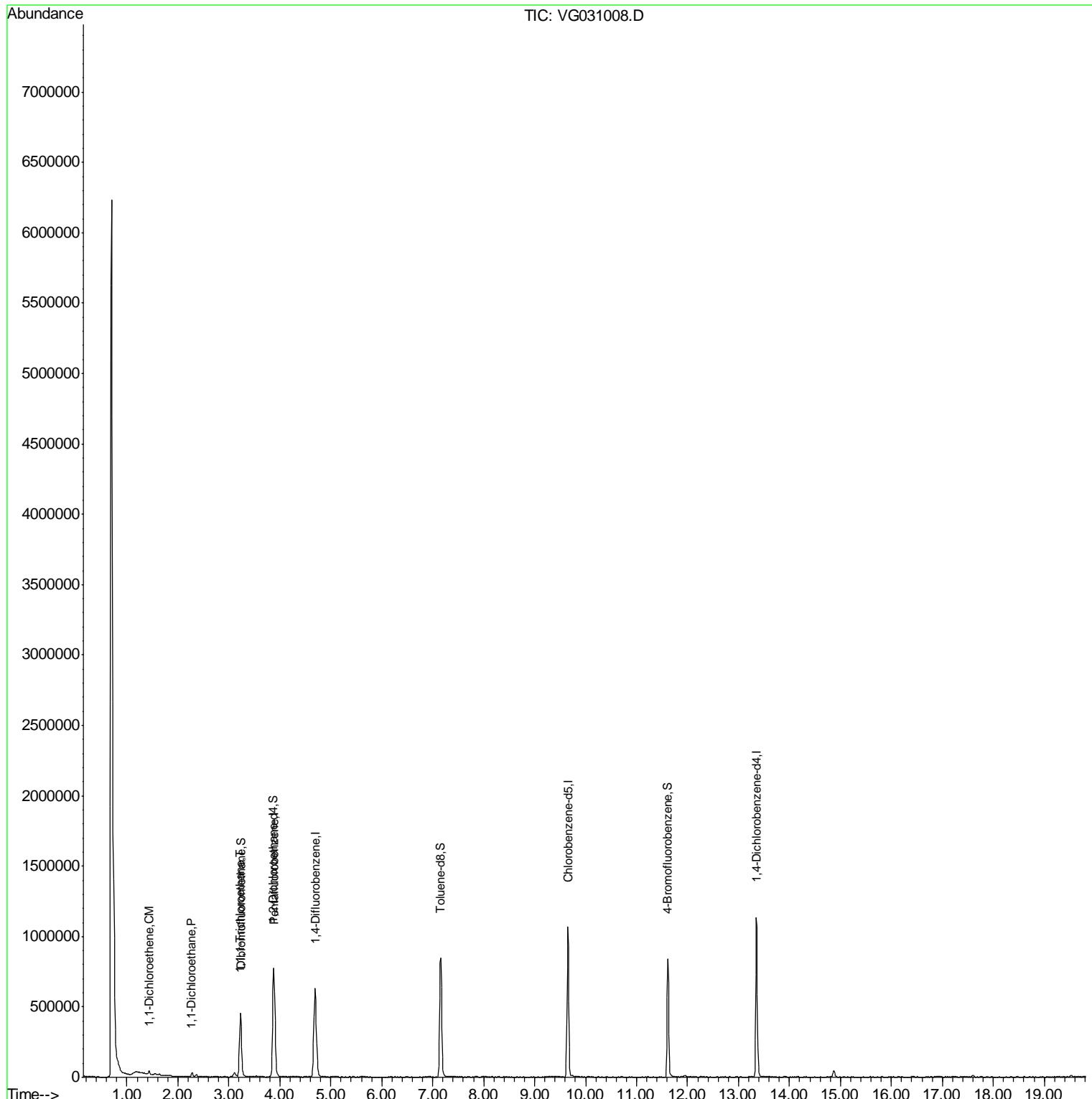
N = Presumptive Evidence of a Compound

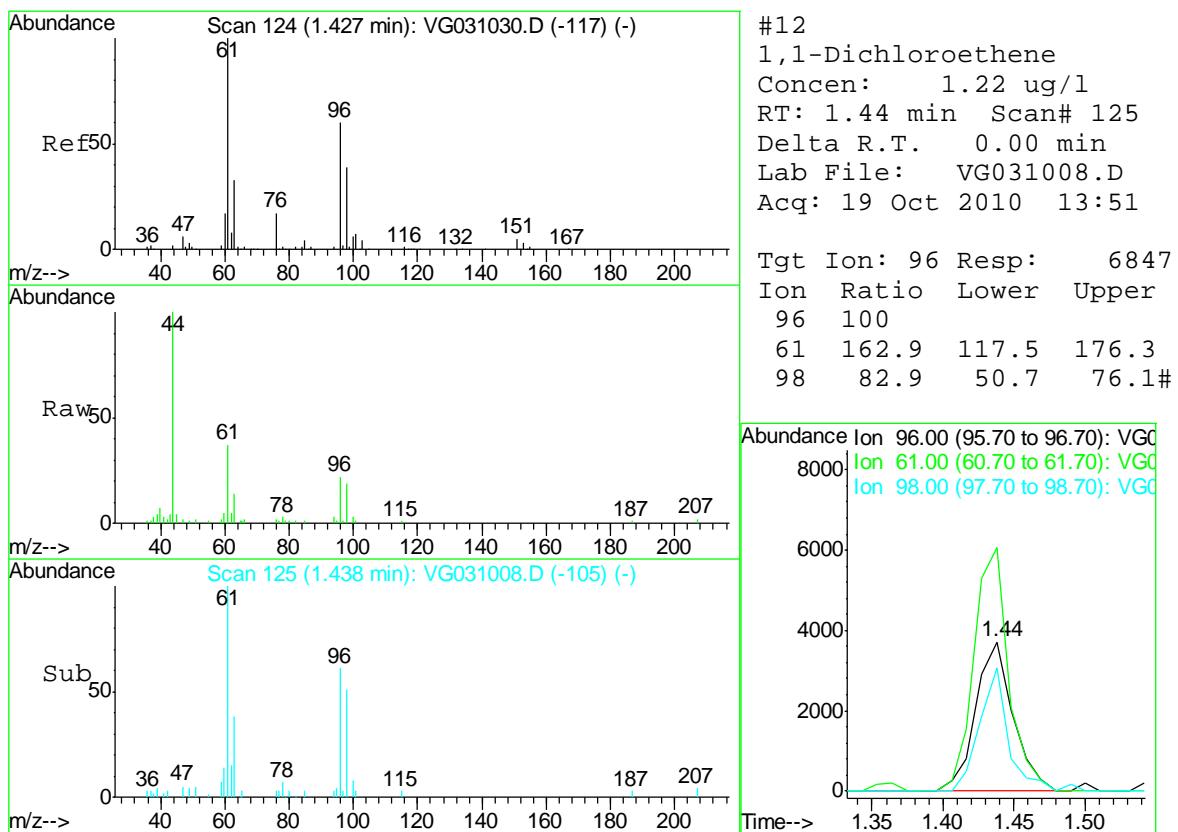
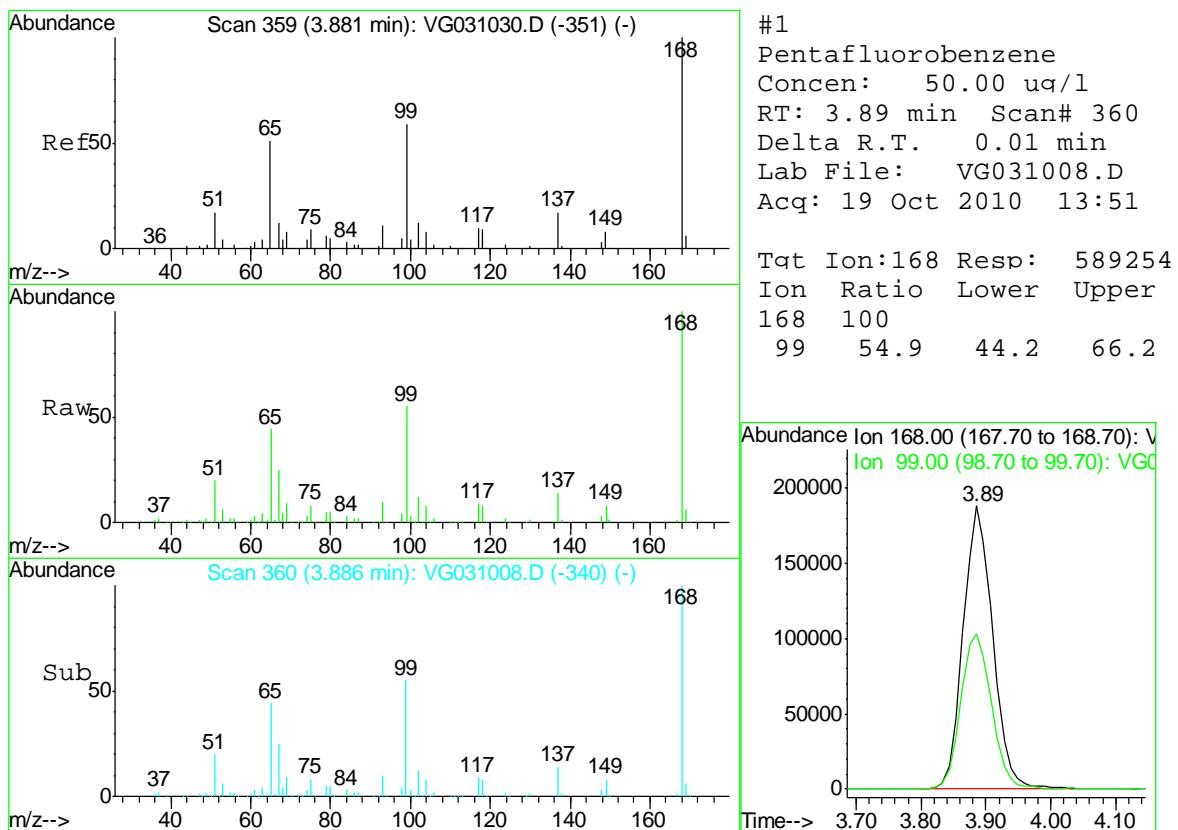
\* = Values outside of QC limits

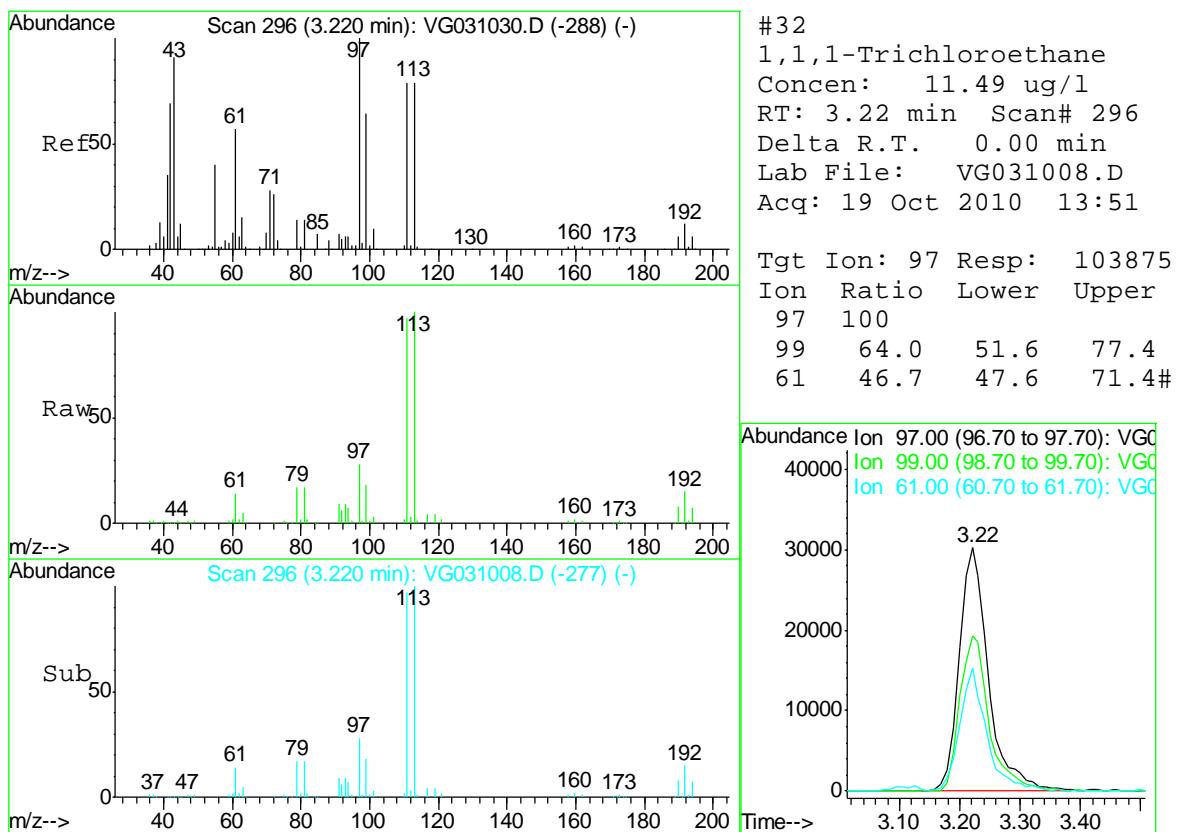
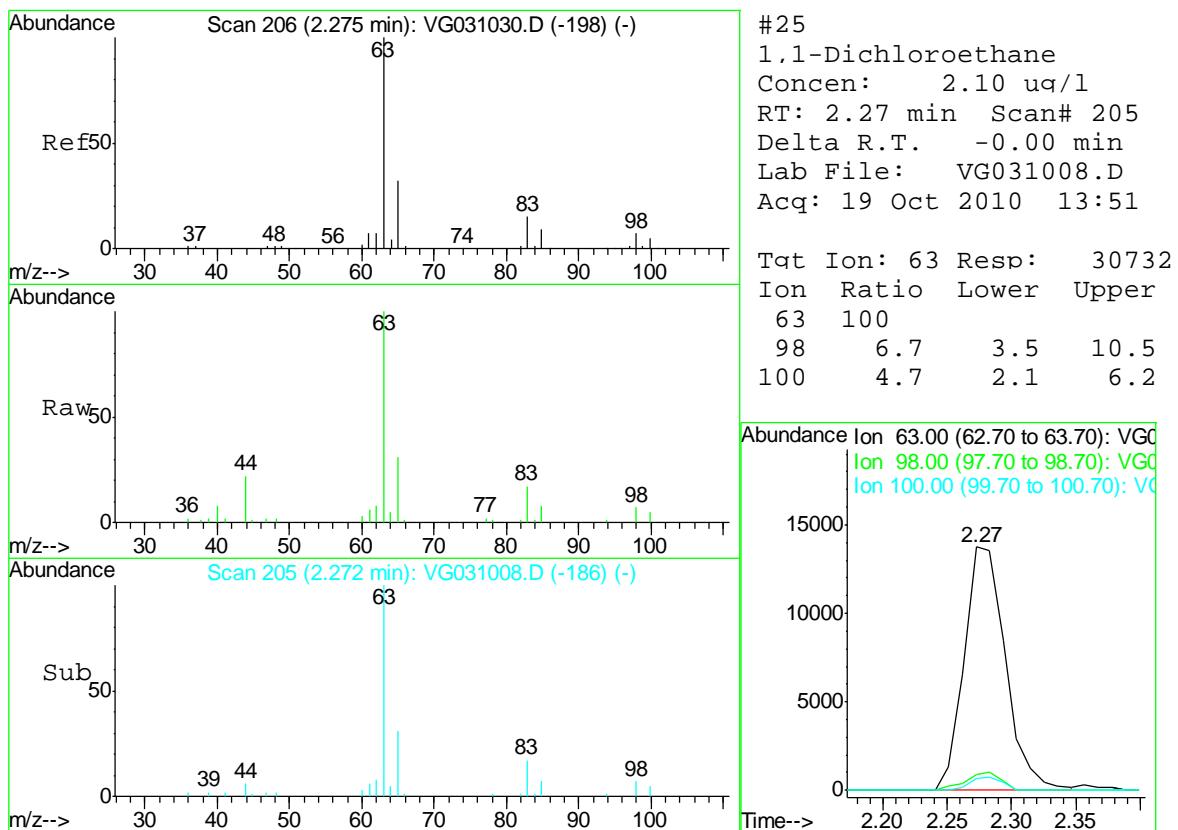
D = Dilution

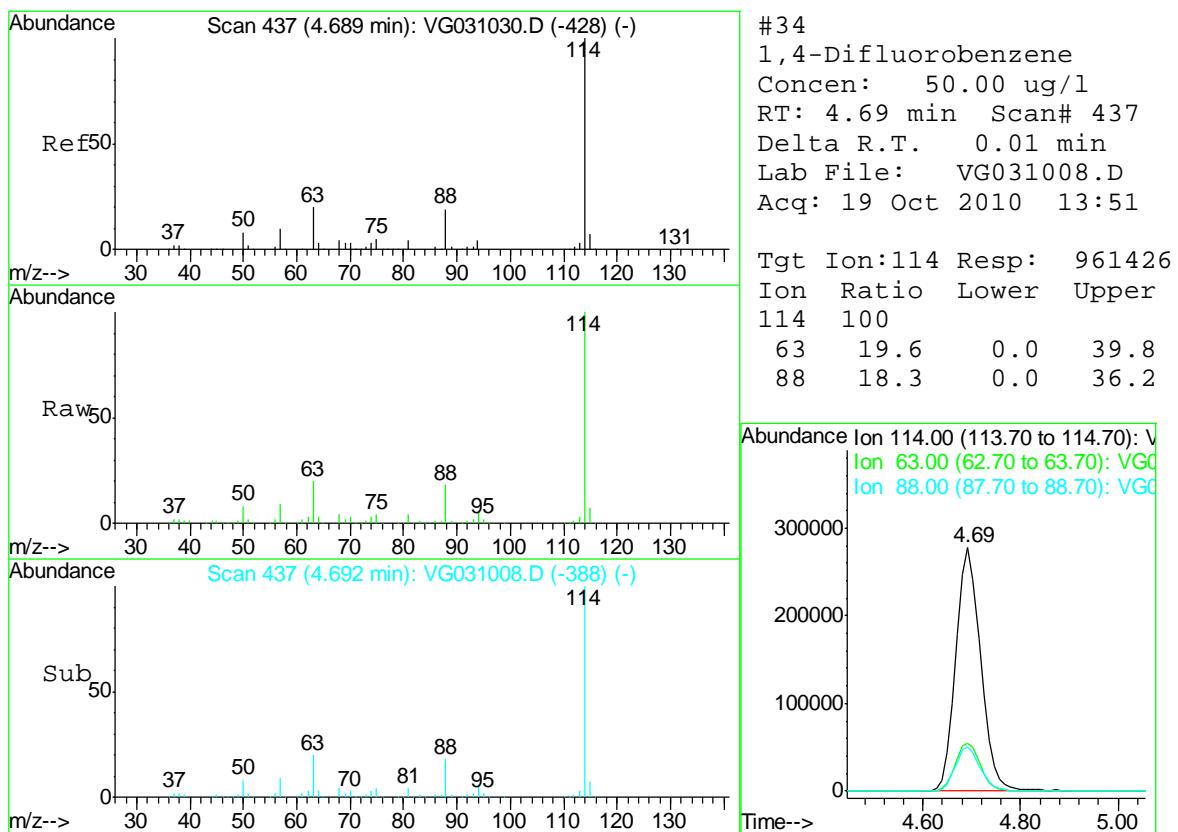
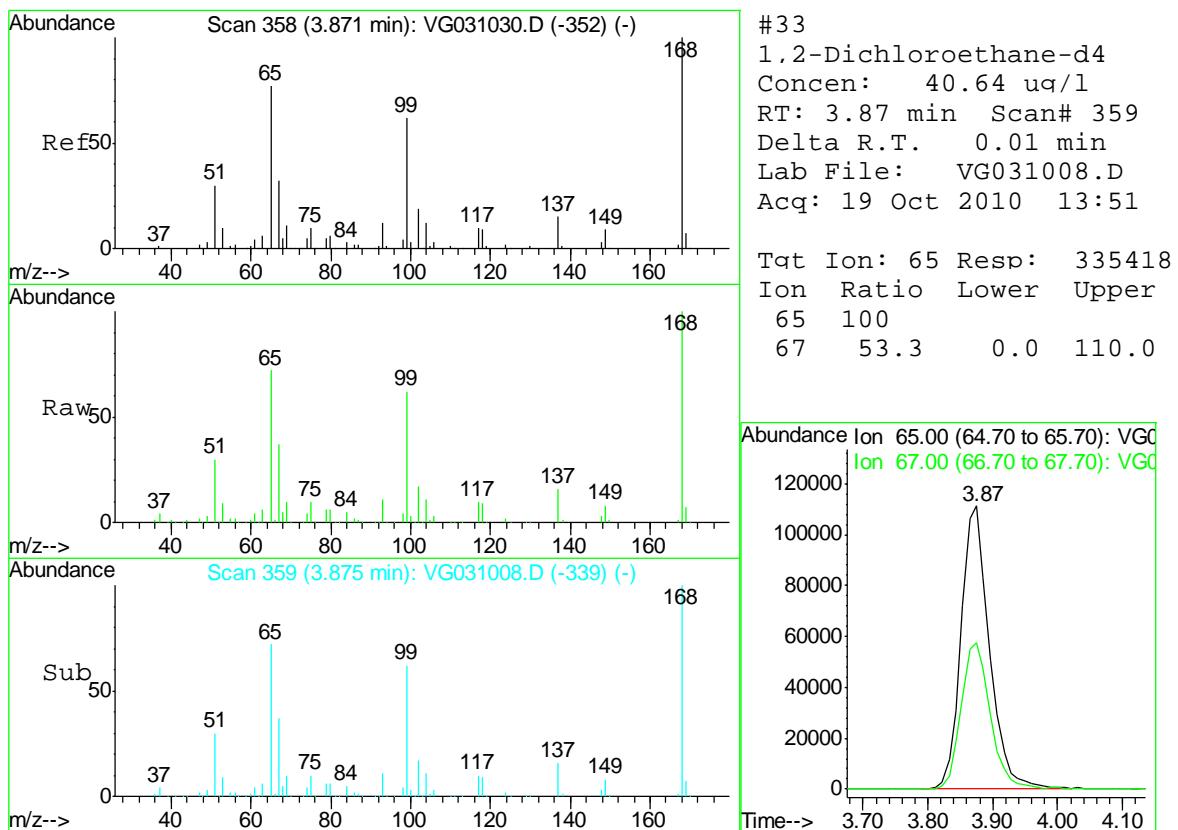
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Data File : VG031008.D  
Acq On : 19 Oct 2010 13:51  
Operator : PS  
Sample : B3902-25  
Misc : 5mL MSVOA G  
ALS Vial : 6 Sample Multiplier: 1

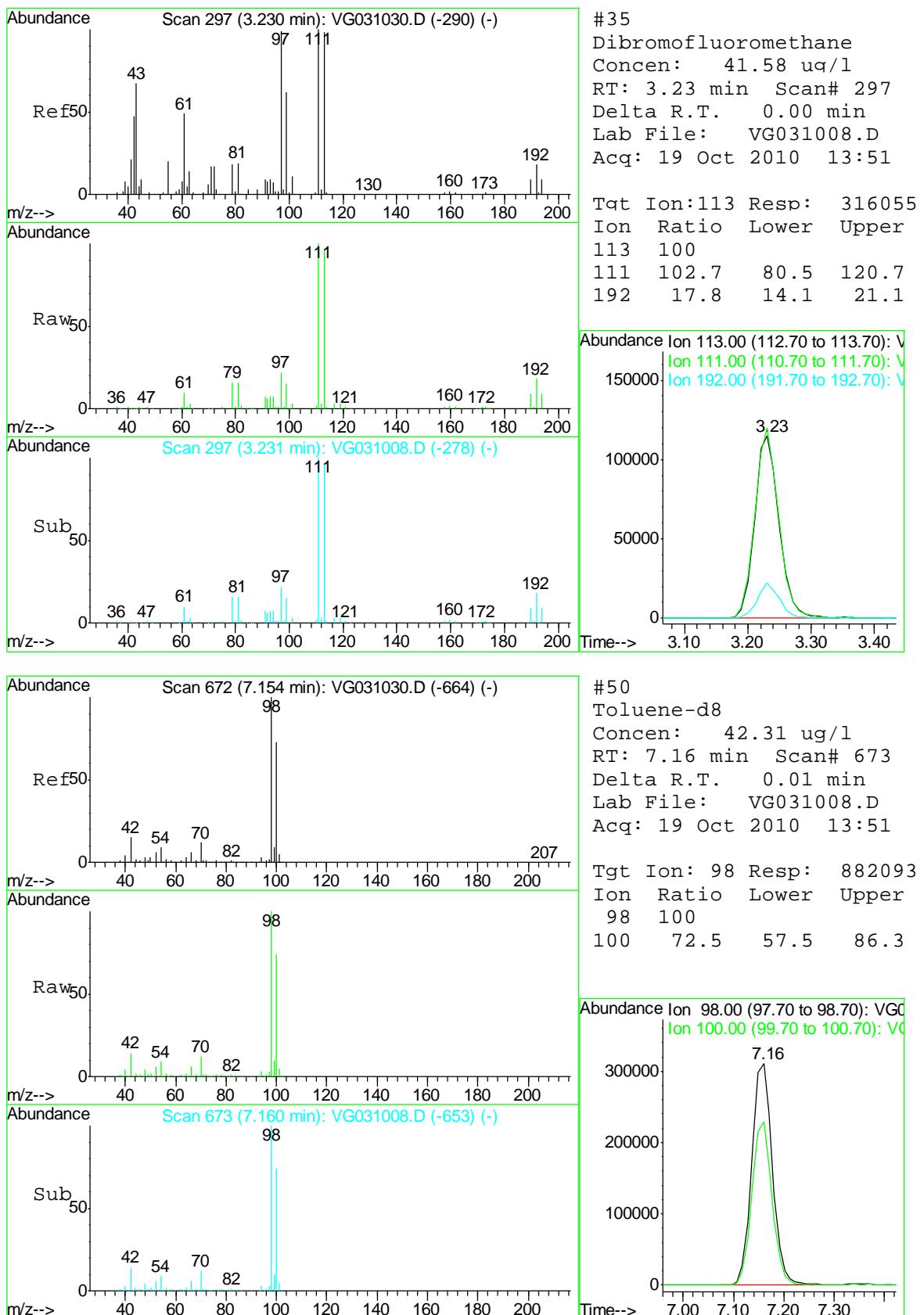
Ouant Time: Oct 20 02:34:09 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

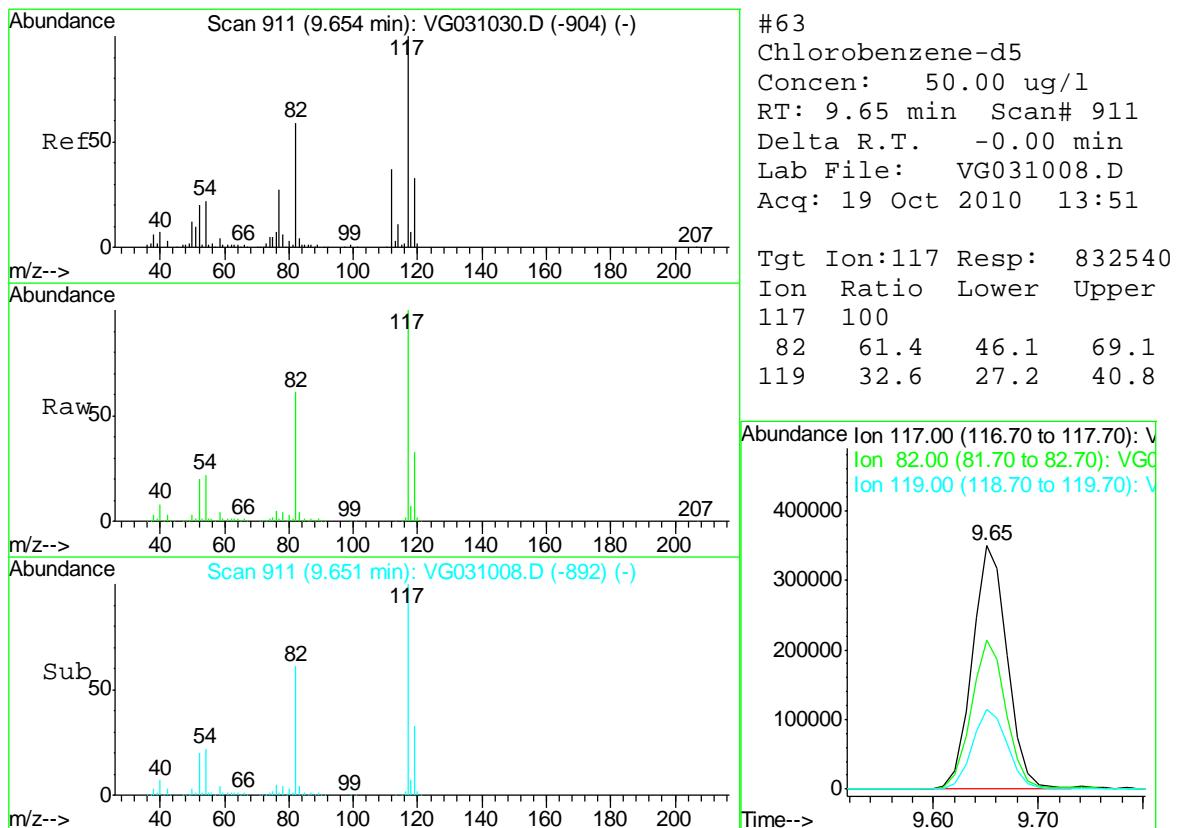
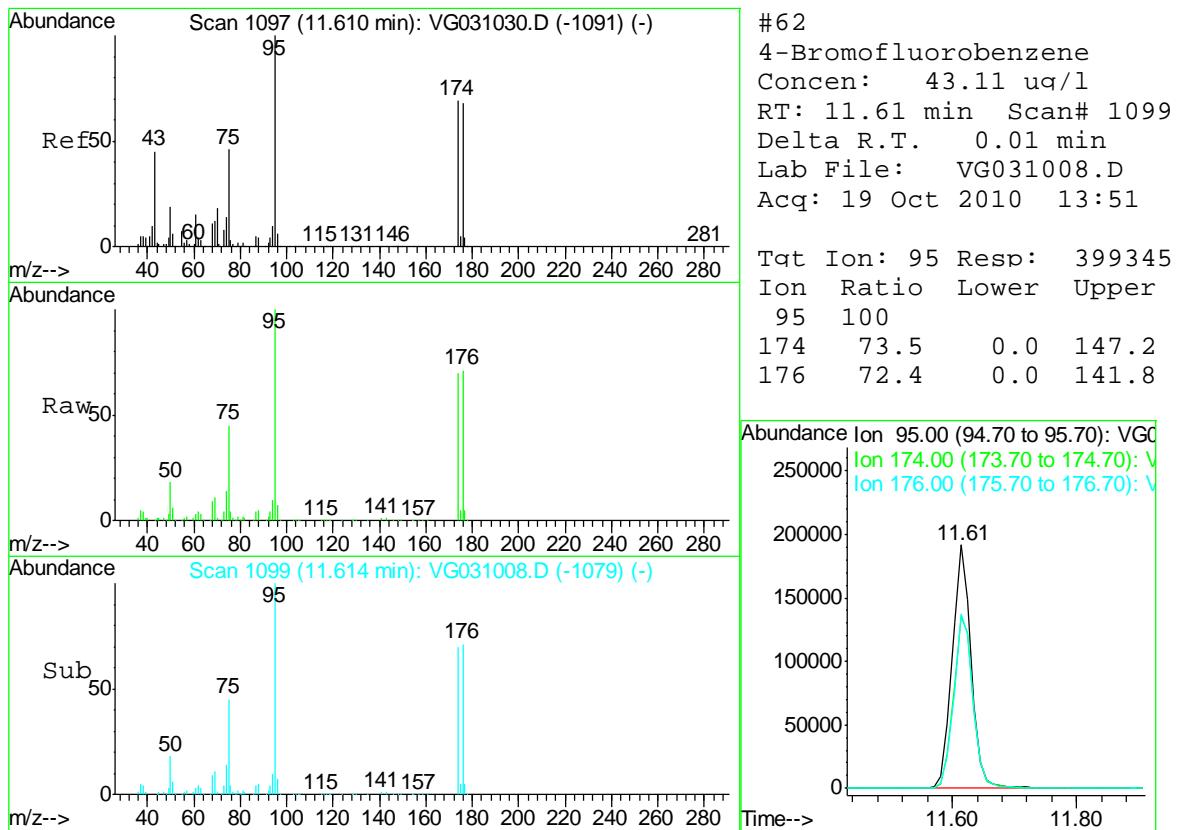


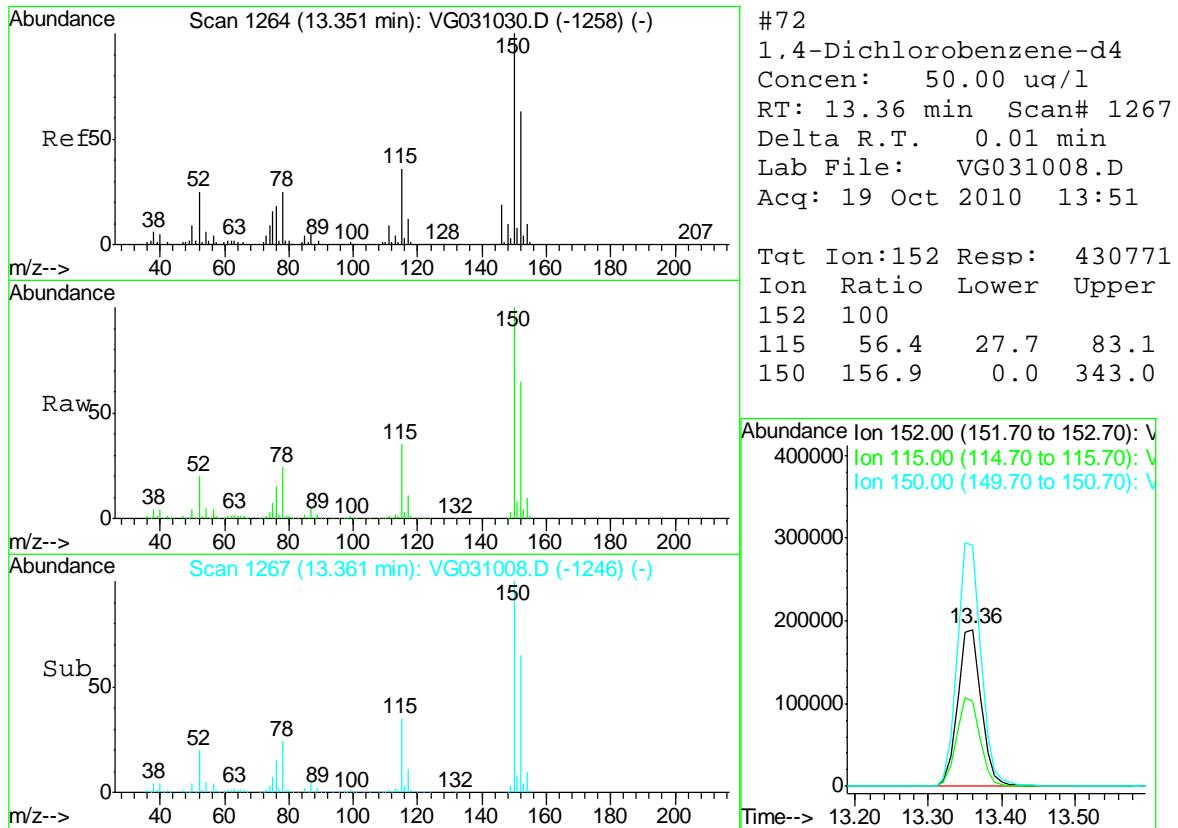












Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031008.D  
 Acq On : 19 Oct 2010 13:51  
 Operator : PS  
 Sample : B3902-25  
 Misc : 5mL MSVOA G  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 20 02:34:09 2010  
 Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	589254	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.69	114	961426	50.00	ug/l	0.01
63) Chlorobenzene-d5	9.65	117	832540	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	430771	50.00	ug/l	0.01
<hr/>						
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	3.87	65	335418	40.64	ug/l	0.00
Spiked Amount	50.000		Recovery	=	81.28%	
35) Dibromofluoromethane	3.23	113	316055	41.58	ug/l	0.00
Spiked Amount	50.000		Recovery	=	83.16%	
50) Toluene-d8	7.16	98	882093	42.31	ug/l	0.01
Spiked Amount	50.000		Recovery	=	84.62%	
62) 4-Bromofluorobenzene	11.61	95	399345	43.11	ug/l	0.00
Spiked Amount	50.000		Recovery	=	86.22%	
<hr/>						
Target Compounds						
12) 1,1-Dichloroethene	1.44	96	6847	1.22	ug/l	# 84
25) 1,1-Dichloroethane	2.27	63	30732	2.10	ug/l	99
32) 1,1,1-Trichloroethane	3.22	97	103875	11.49	ug/l	# 91

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031008.D  
 Acq On : 19 Oct 2010 13:51  
 Operator : PS  
 Sample : B3902-25  
 Misc : 5mL MSVOA G  
 ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

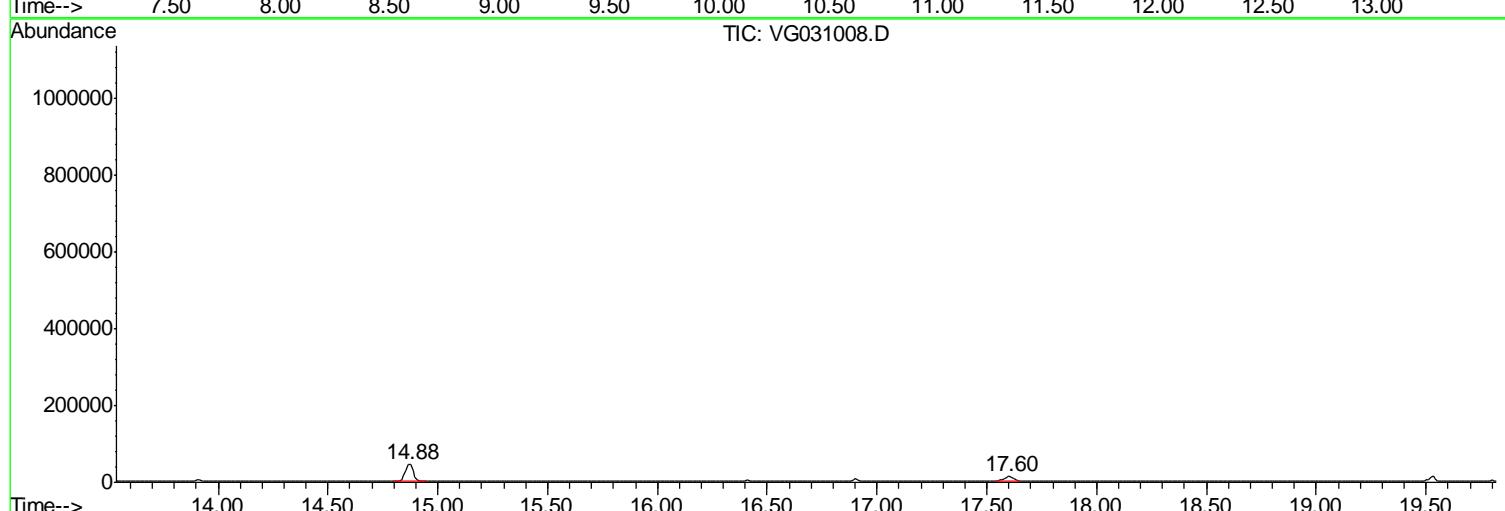
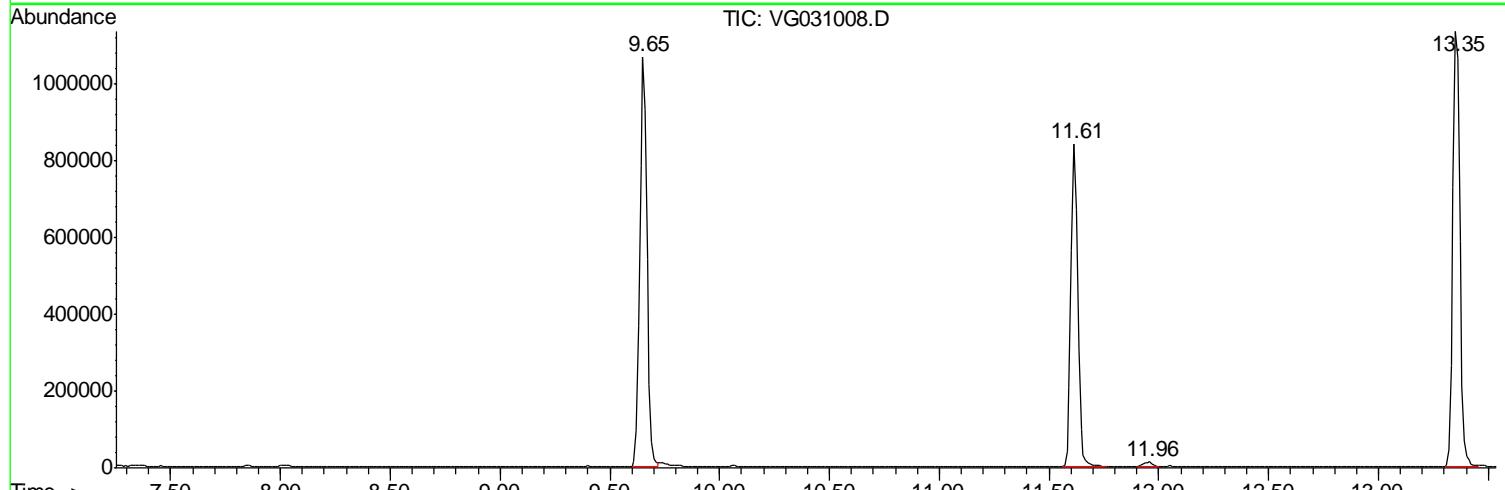
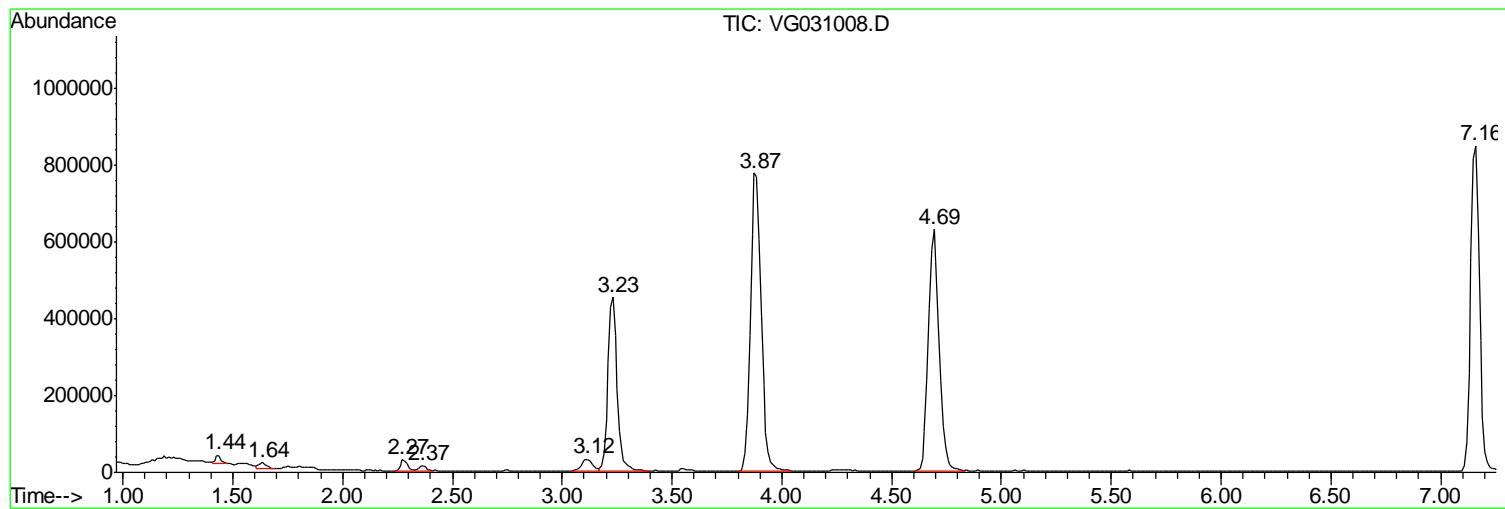
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.438	122	125	128	rVB2	22375	41310	1.58%	0.262%
2	1.636	141	144	149	rVB4	15958	37960	1.45%	0.241%
3	2.272	202	205	210	rBV	28184	59448	2.28%	0.377%
4	2.367	210	214	218	rVB	13084	29828	1.14%	0.189%
5	3.116	279	286	291	rBV	30813	106953	4.10%	0.678%
6	3.231	291	297	313	rVB2	453260	1335299	51.14%	8.463%
7	3.875	352	359	375	rBV2	775500	2611184	100.00%	16.550%
8	4.692	429	437	450	rBV	629138	2166800	82.98%	13.733%
9	7.160	666	673	685	rBV	847960	2400776	91.94%	15.216%
10	9.651	906	911	918	rBV	1068329	2499783	95.73%	15.844%
11	11.614	1094	1099	1113	rVB	841859	1770180	67.79%	11.220%
12	11.958	1127	1132	1136	rVB2	12676	32073	1.23%	0.203%
13	13.351	1261	1266	1276	rBV	1134820	2535483	97.10%	16.070%
14	14.876	1405	1412	1418	rVB2	43186	115716	4.43%	0.733%
15	17.601	1667	1673	1677	rBV	13536	34899	1.34%	0.221%

Sum of corrected areas: 15777692

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031008.D  
Acq On : 19 Oct 2010 13:51  
Operator : PS  
Sample : B3902-25  
Misc : 5mL MSVOA G  
ALS Vial : 6 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031008.D  
Acq On : 19 Oct 2010 13:51  
Operator : PS  
Sample : B3902-25  
Misc : 5mL MSVOA\_G  
ALS Vial : 6 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031008.D  
Acq On : 19 Oct 2010 13:51  
Operator : PS  
Sample : B3902-25  
Misc : 5mL MSVOA\_G  
ALS Vial : 6 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/15/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-6DD	SDG No.:	B3902
Lab Sample ID:	B3902-26	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031009.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/15/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-6DD	SDG No.:	B3902
Lab Sample ID:	B3902-26	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031009.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	42.8		66 - 150		86%	SPK: 50
1868-53-7	Dibromofluoromethane	40.8		76 - 130		82%	SPK: 50
2037-26-5	Toluene-d8	46.8		78 - 121		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.2		70 - 131		96%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	600859	3.9				
540-36-3	1,4-Difluorobenzene	953284	4.7				
3114-55-4	Chlorobenzene-d5	816371	9.66				
3855-82-1	1,4-Dichlorobenzene-d4	424369	13.36				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

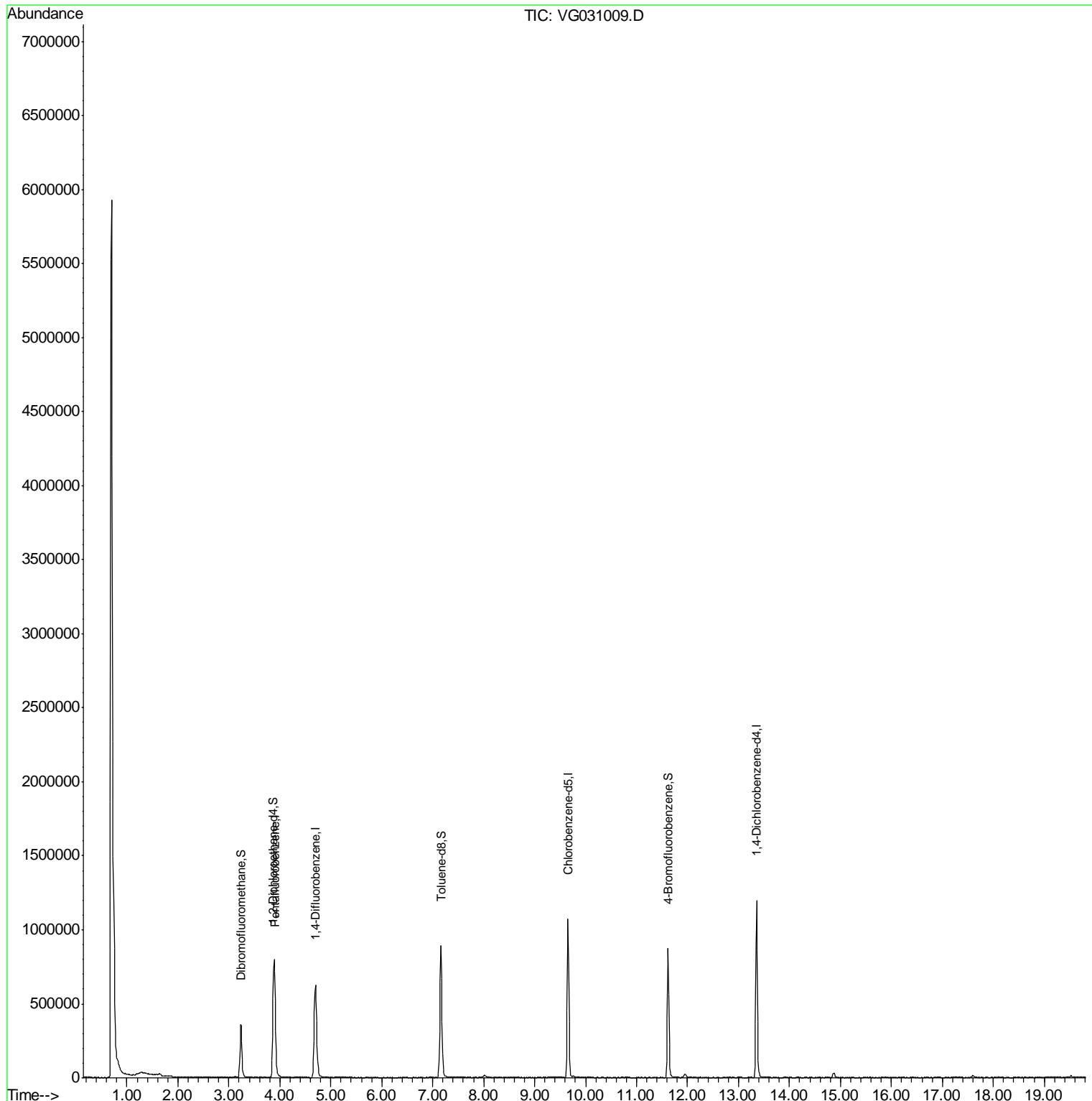
N = Presumptive Evidence of a Compound

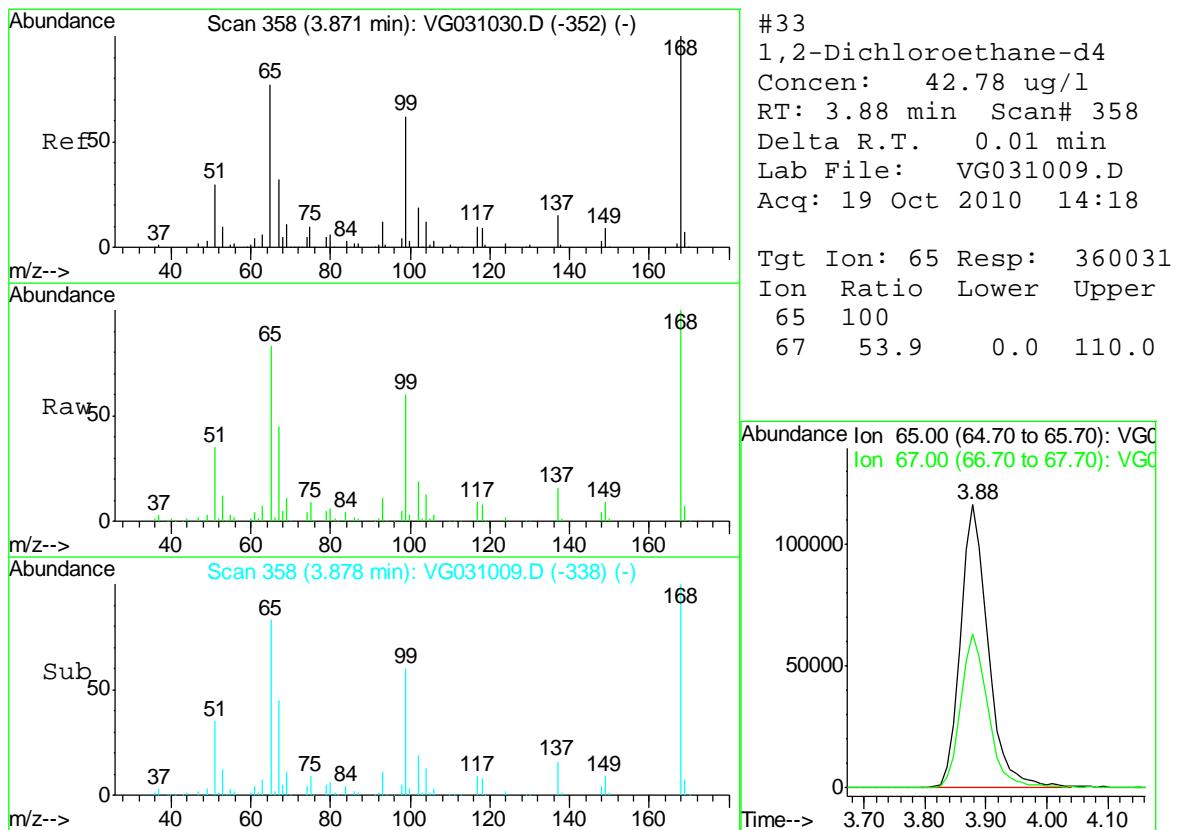
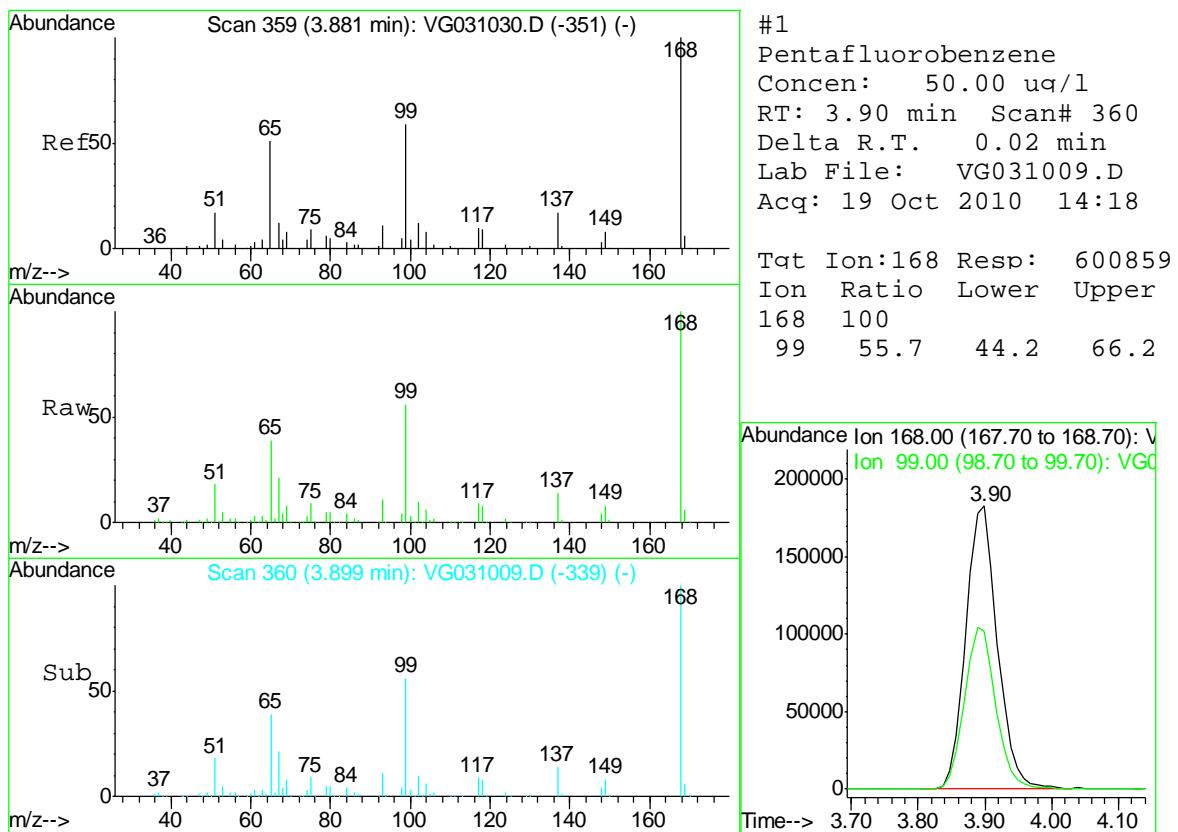
\* = Values outside of QC limits

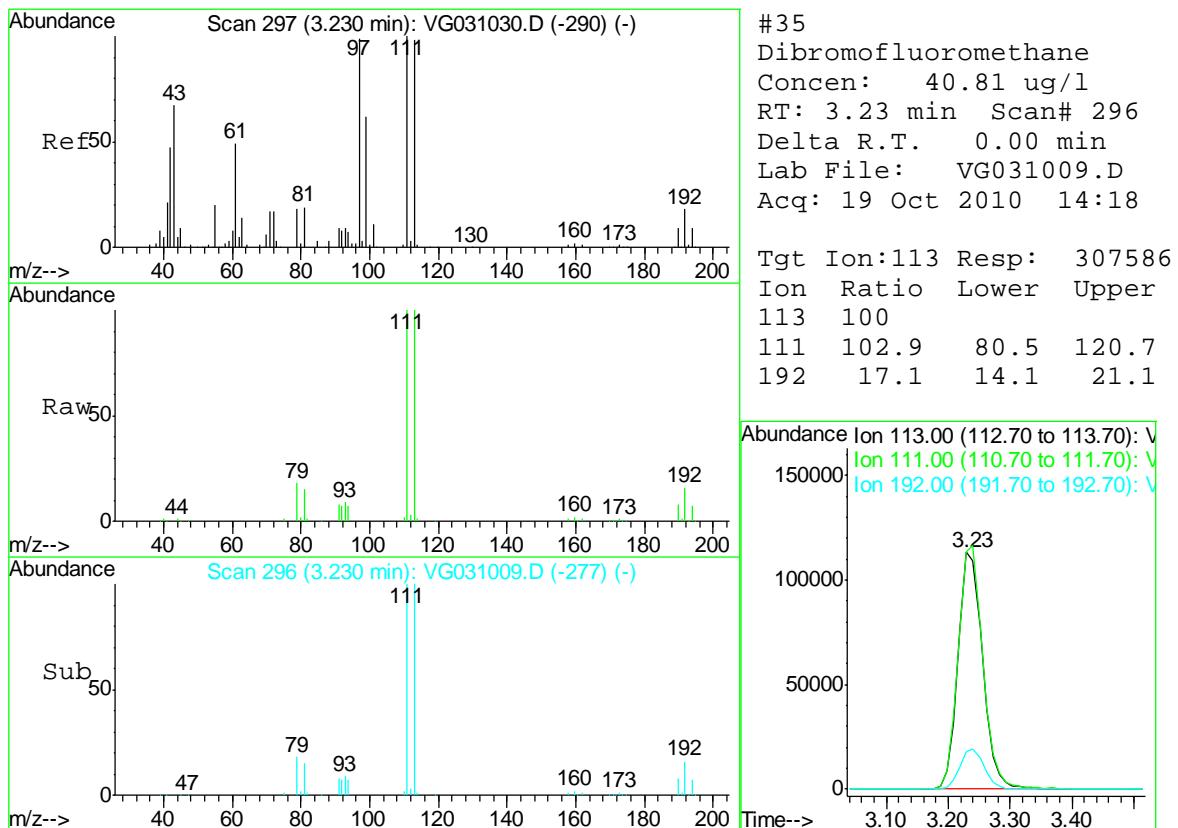
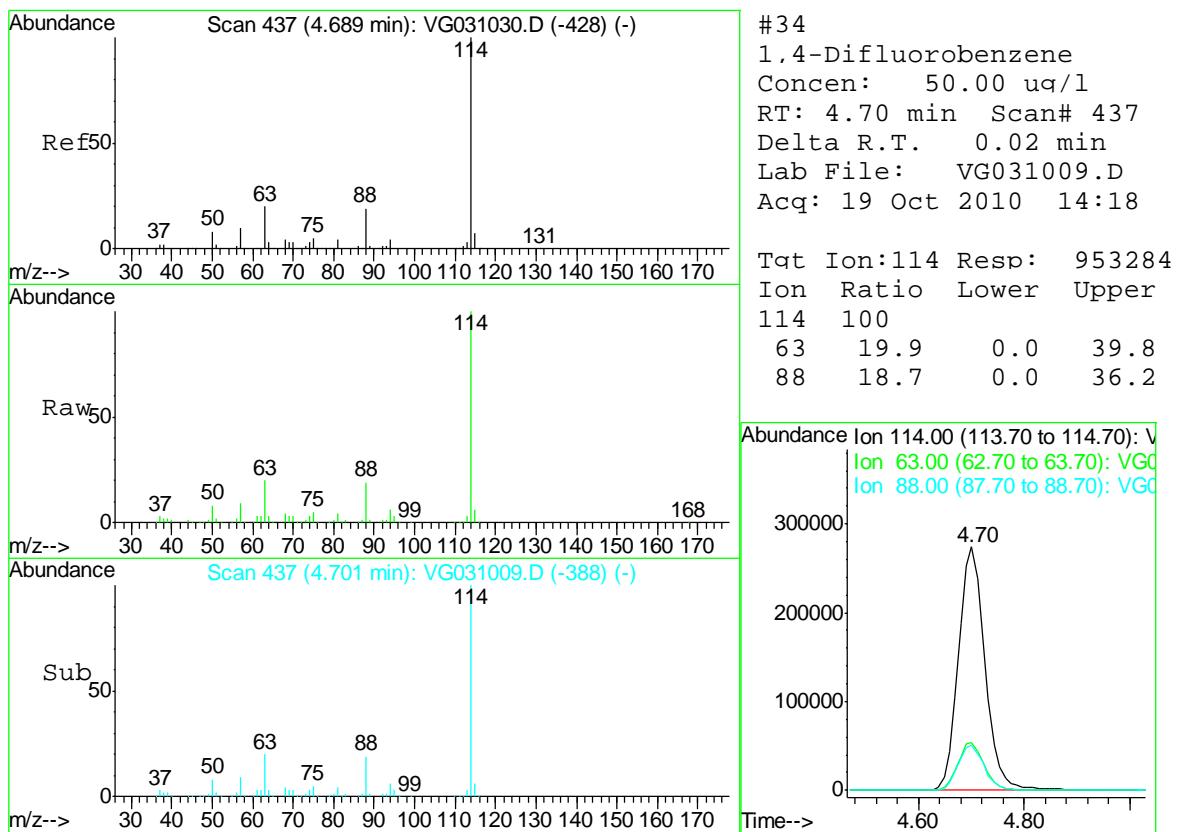
D = Dilution

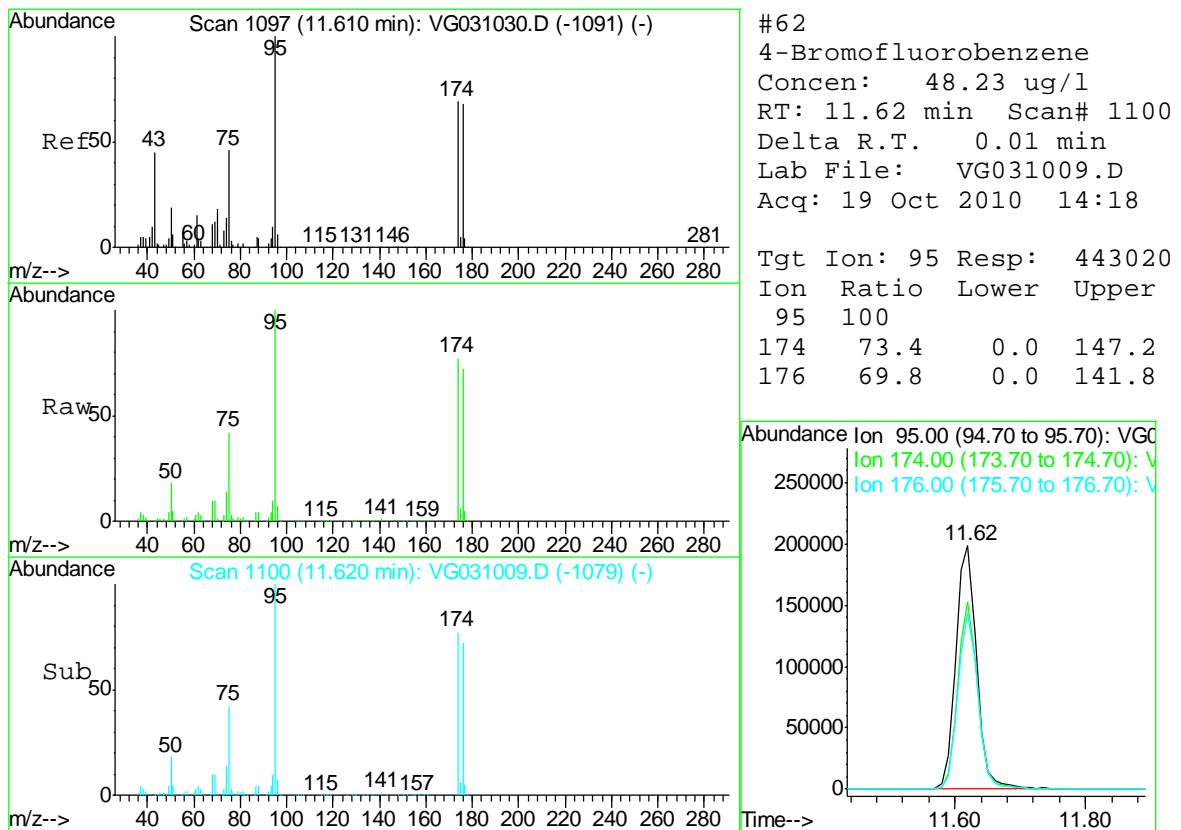
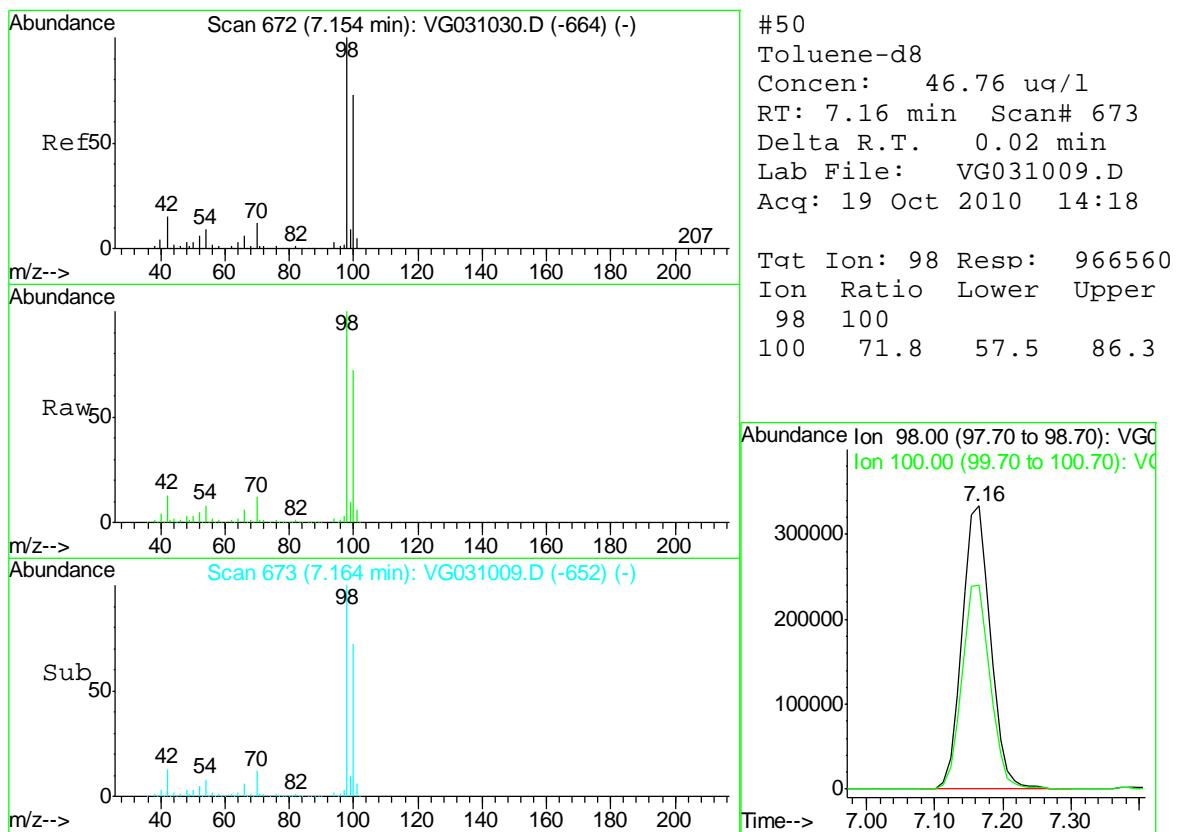
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Data File : VG031009.D  
Acq On : 19 Oct 2010 14:18  
Operator : PS  
Sample : B3902-26  
Misc : 5mL MSVOA G  
ALS Vial : 7 Sample Multiplier: 1

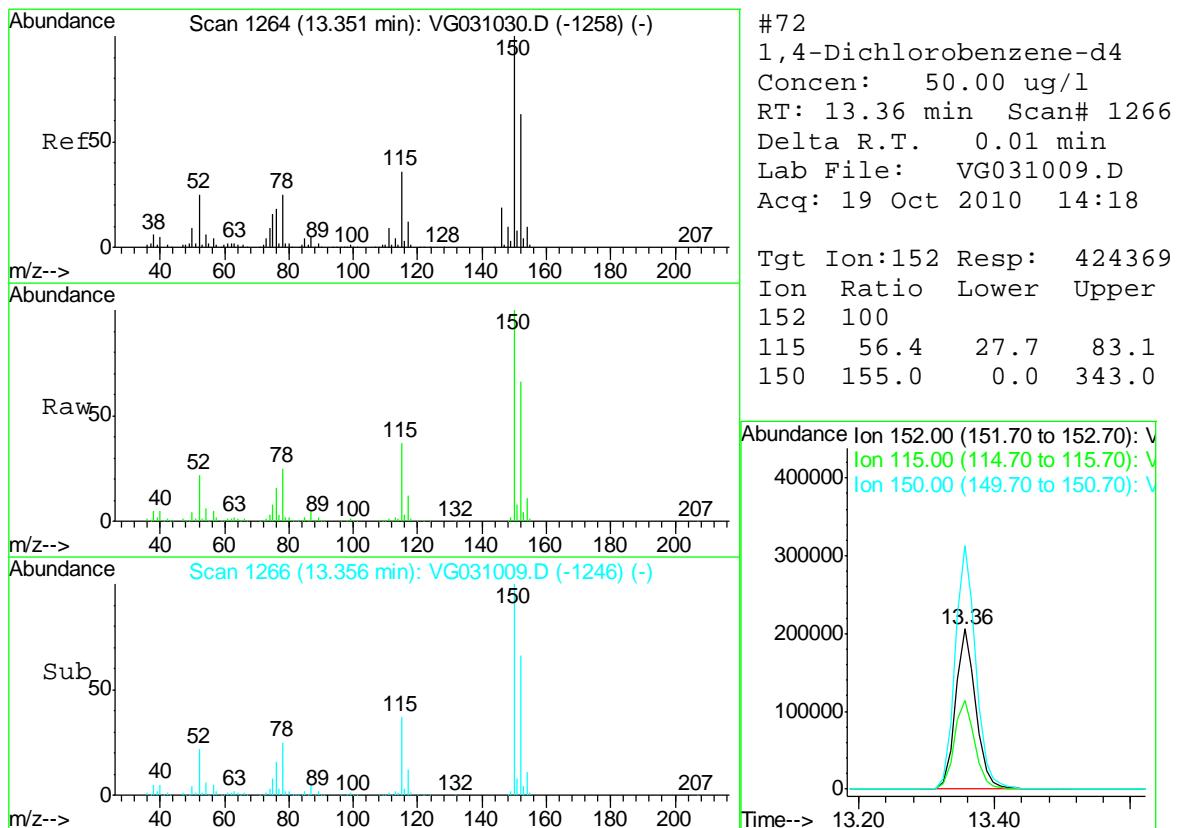
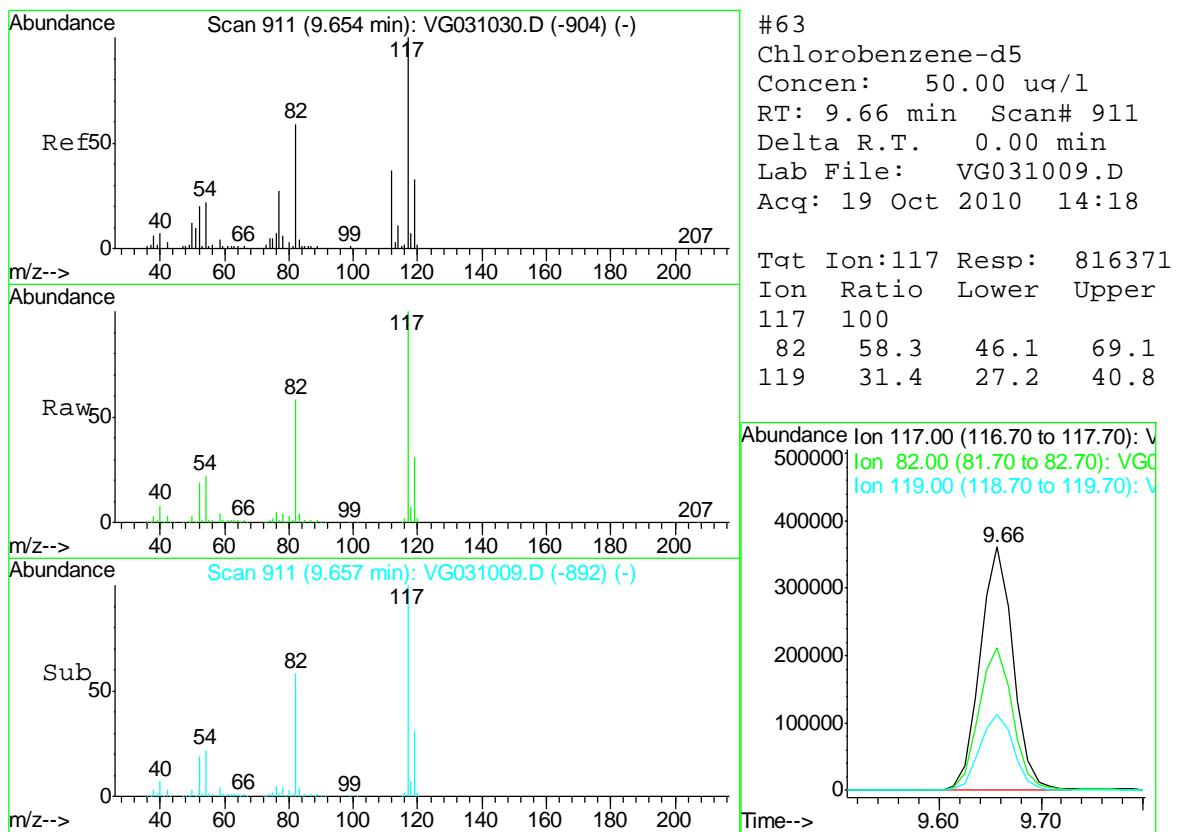
Ouant Time: Oct 20 02:37:12 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031009.D  
 Acq On : 19 Oct 2010 14:18  
 Operator : PS  
 Sample : B3902-26  
 Misc : 5mL MSVOA G  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 20 02:37:12 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.90	168	600859	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	4.70	114	953284	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.66	117	816371	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	424369	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	3.88	65	360031	42.78	ug/l	0.01
Spiked Amount 50.000			Recovery =	85.56%		
35) Dibromofluoromethane	3.23	113	307586	40.81	ug/l	0.00
Spiked Amount 50.000			Recovery =	81.62%		
50) Toluene-d8	7.16	98	966560	46.76	ug/l	0.02
Spiked Amount 50.000			Recovery =	93.52%		
62) 4-Bromofluorobenzene	11.62	95	443020	48.23	ug/l	0.01
Spiked Amount 50.000			Recovery =	96.46%		

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

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031009.D  
 Acq On : 19 Oct 2010 14:18  
 Operator : PS  
 Sample : B3902-26  
 Misc : 5mL MSVOA G  
 ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

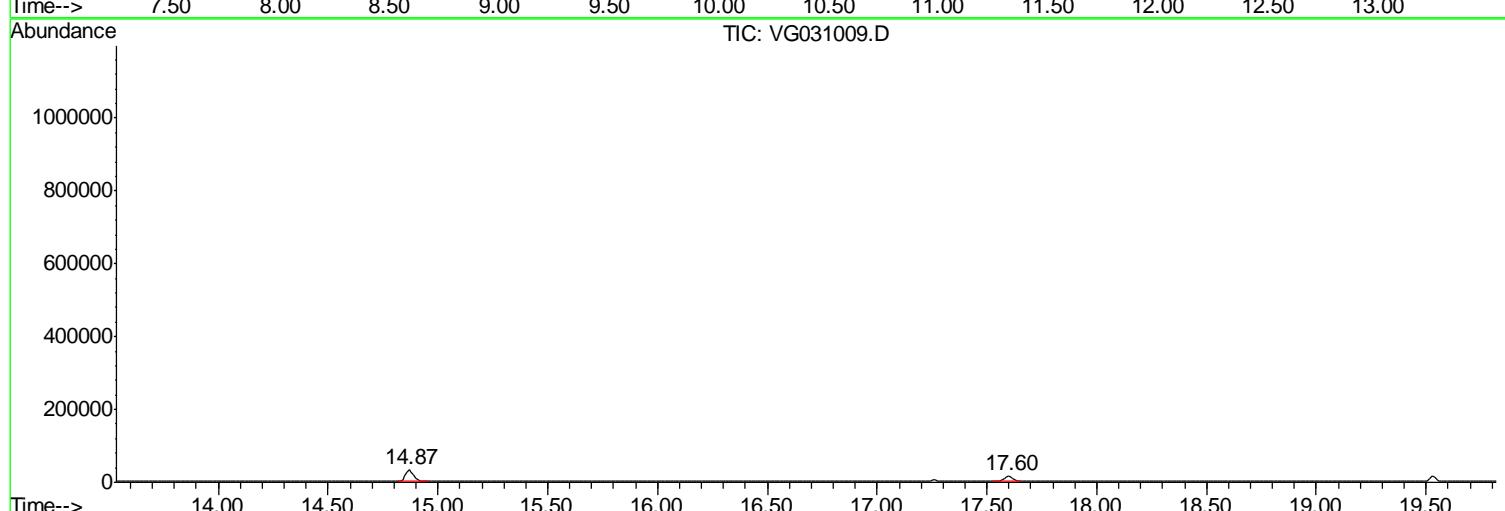
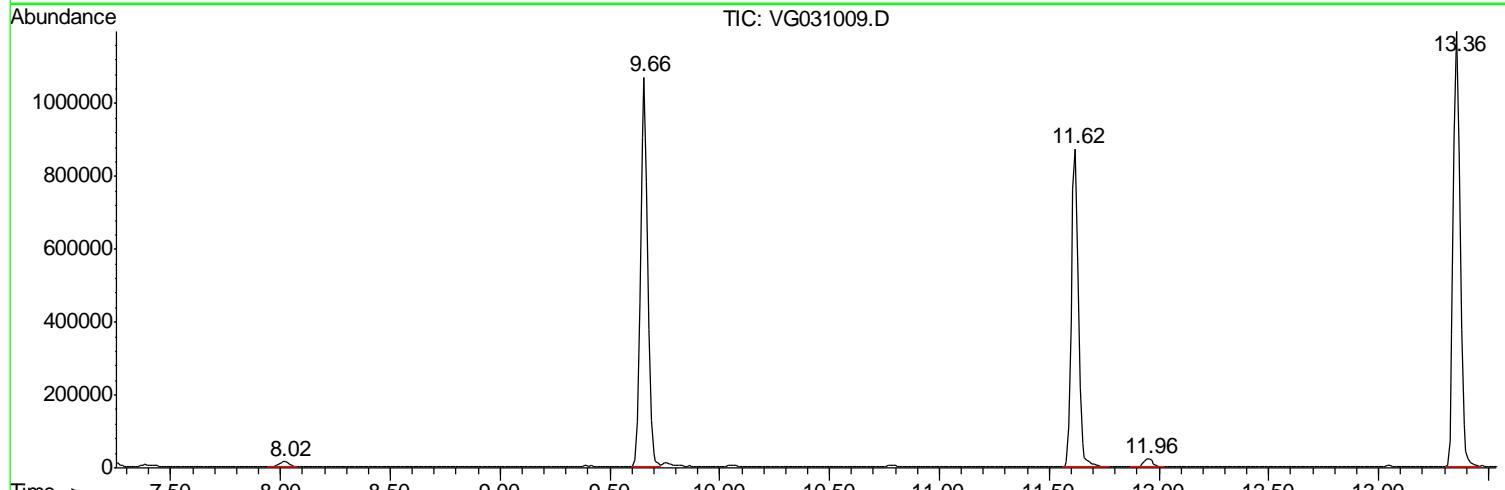
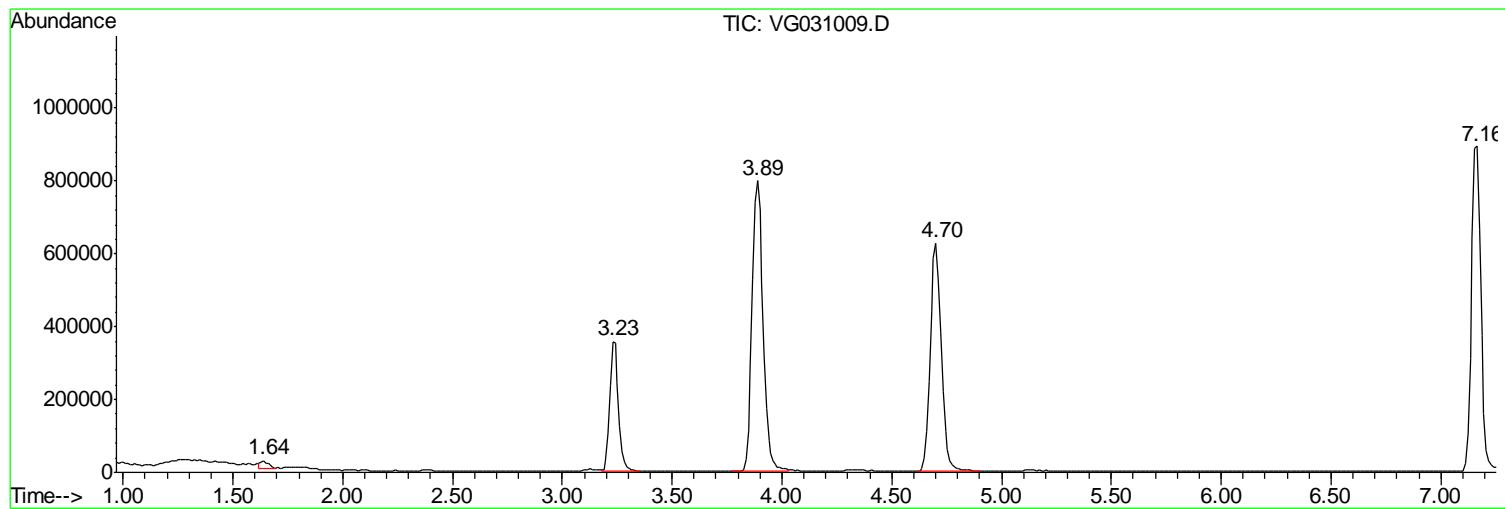
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.639	142	144	149	rVB2	20096	46836	1.71%	0.299%
2	3.230	291	296	307	rVB	356138	974134	35.67%	6.218%
3	3.889	348	359	373	rBV2	798208	2731183	100.00%	17.432%
4	4.701	429	437	456	rBV	625901	2159904	79.08%	13.786%
5	7.164	666	673	686	rBV	892235	2621518	95.98%	16.732%
6	8.021	747	755	760	rBV2	14280	49491	1.81%	0.316%
7	9.657	905	911	918	rBV	1069437	2458095	90.00%	15.689%
8	11.620	1094	1100	1114	rBV	873928	1930546	70.69%	12.322%
9	11.955	1124	1132	1138	rBV2	23529	66880	2.45%	0.427%
10	13.356	1261	1266	1276	rBV	1194552	2504710	91.71%	15.987%
11	14.870	1406	1411	1419	rVB2	31359	83692	3.06%	0.534%
12	17.599	1665	1672	1677	rBV	15361	40393	1.48%	0.258%

Sum of corrected areas: 15667382

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031009.D  
Acq On : 19 Oct 2010 14:18  
Operator : PS  
Sample : B3902-26  
Misc : 5mL MSVOA G  
ALS Vial : 7 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031009.D  
Acq On : 19 Oct 2010 14:18  
Operator : PS  
Sample : B3902-26  
Misc : 5mL MSVOA\_G  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031009.D  
Acq On : 19 Oct 2010 14:18  
Operator : PS  
Sample : B3902-26  
Misc : 5mL MSVOA\_G  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc	--Internal Standard---

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/15/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-6D	SDG No.:	B3902
Lab Sample ID:	B3902-27	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031010.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	0.81	J	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/15/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-6D	SDG No.:	B3902
Lab Sample ID:	B3902-27	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031010.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	44		66 - 150		88%	SPK: 50
1868-53-7	Dibromofluoromethane	44.8		76 - 130		90%	SPK: 50
2037-26-5	Toluene-d8	44.5		78 - 121		89%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.2		70 - 131		90%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	581566		3.9			
540-36-3	1,4-Difluorobenzene	955359		4.71			
3114-55-4	Chlorobenzene-d5	801131		9.66			
3855-82-1	1,4-Dichlorobenzene-d4	422409		13.36			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

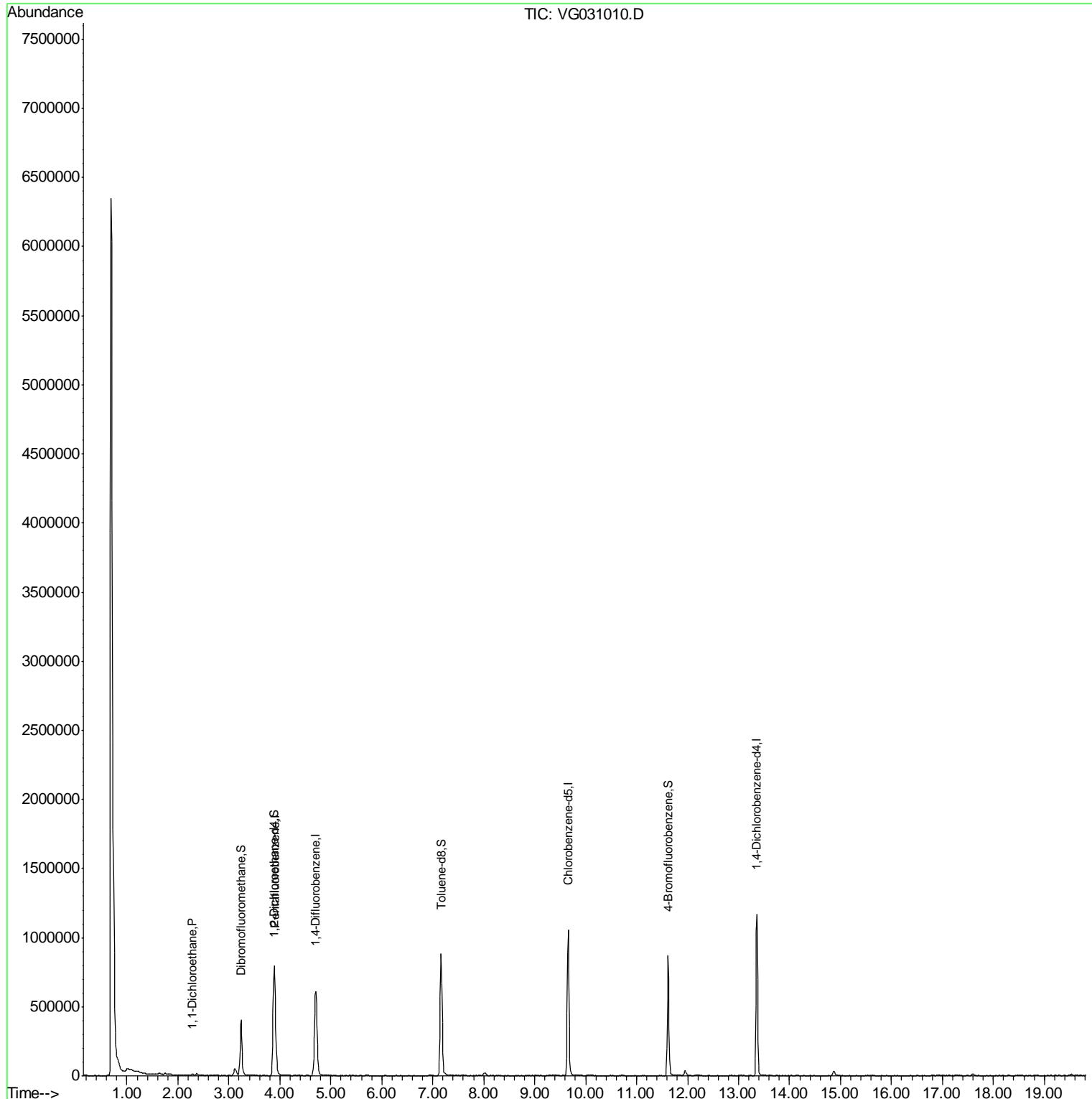
N = Presumptive Evidence of a Compound

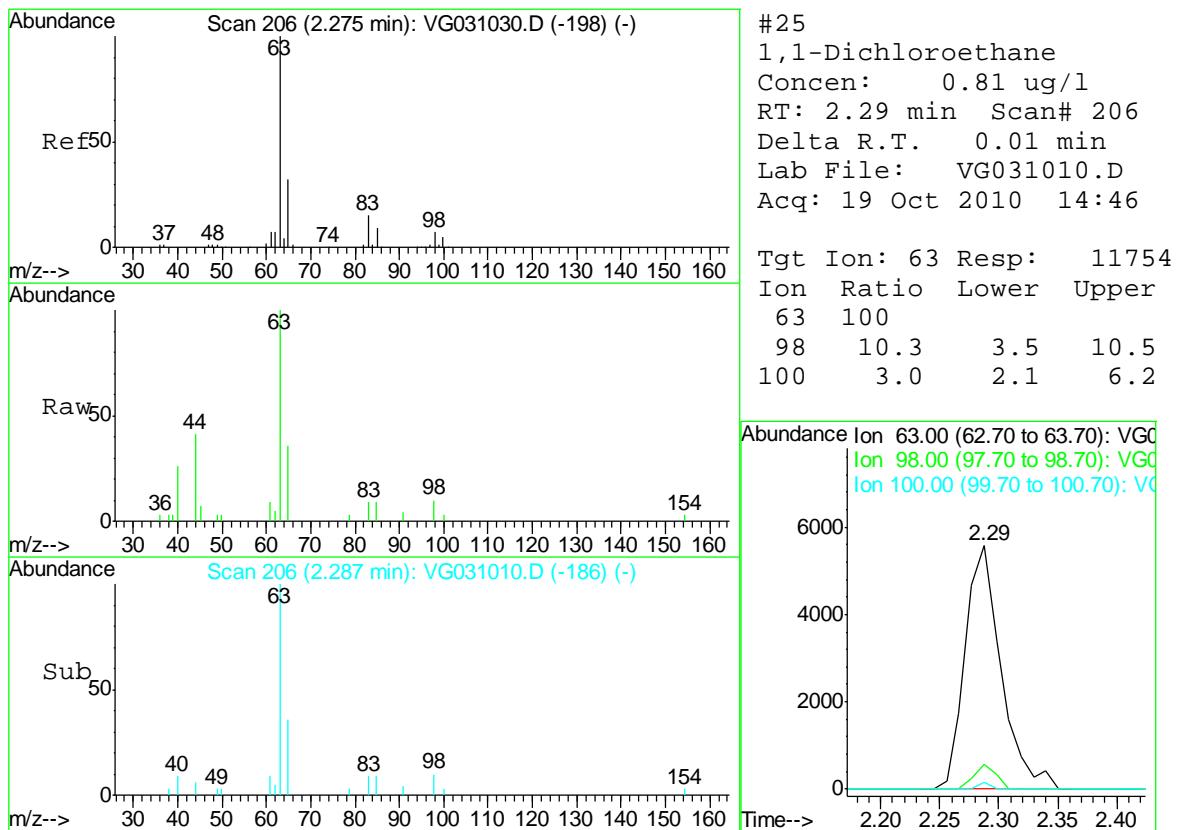
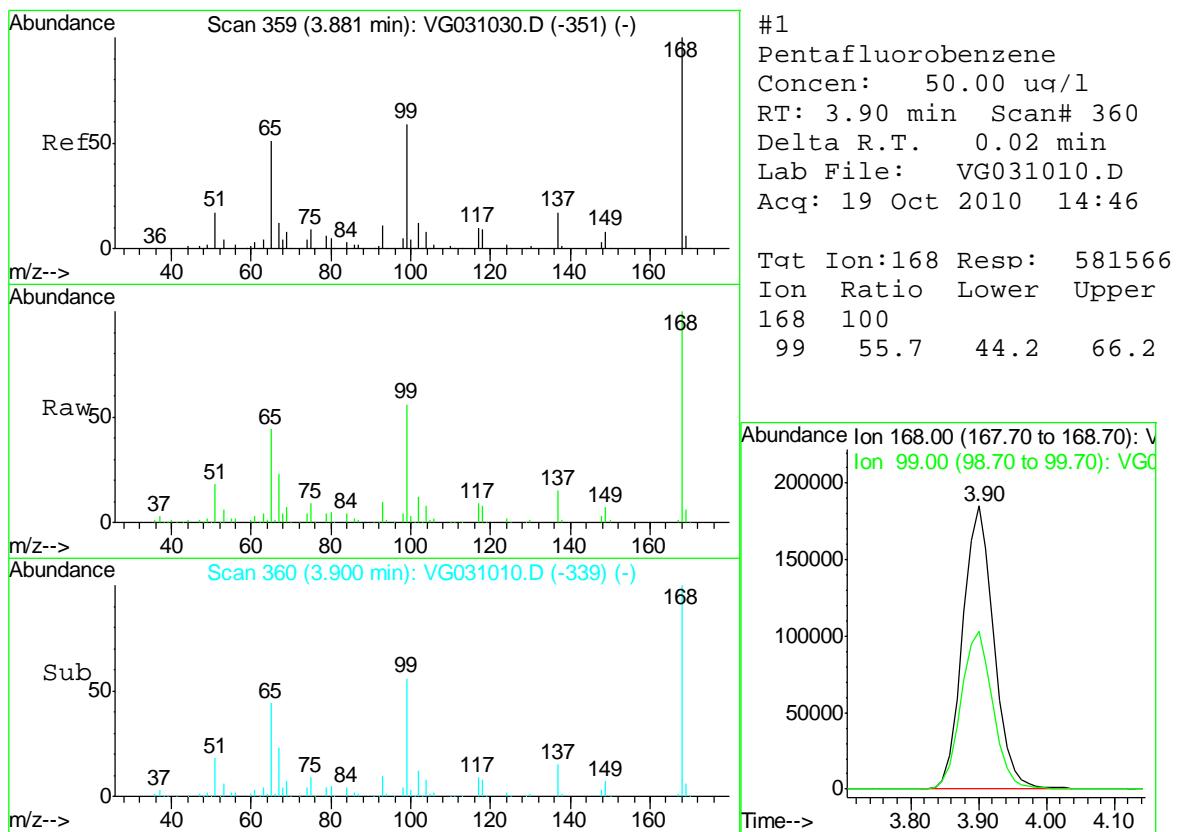
\* = Values outside of QC limits

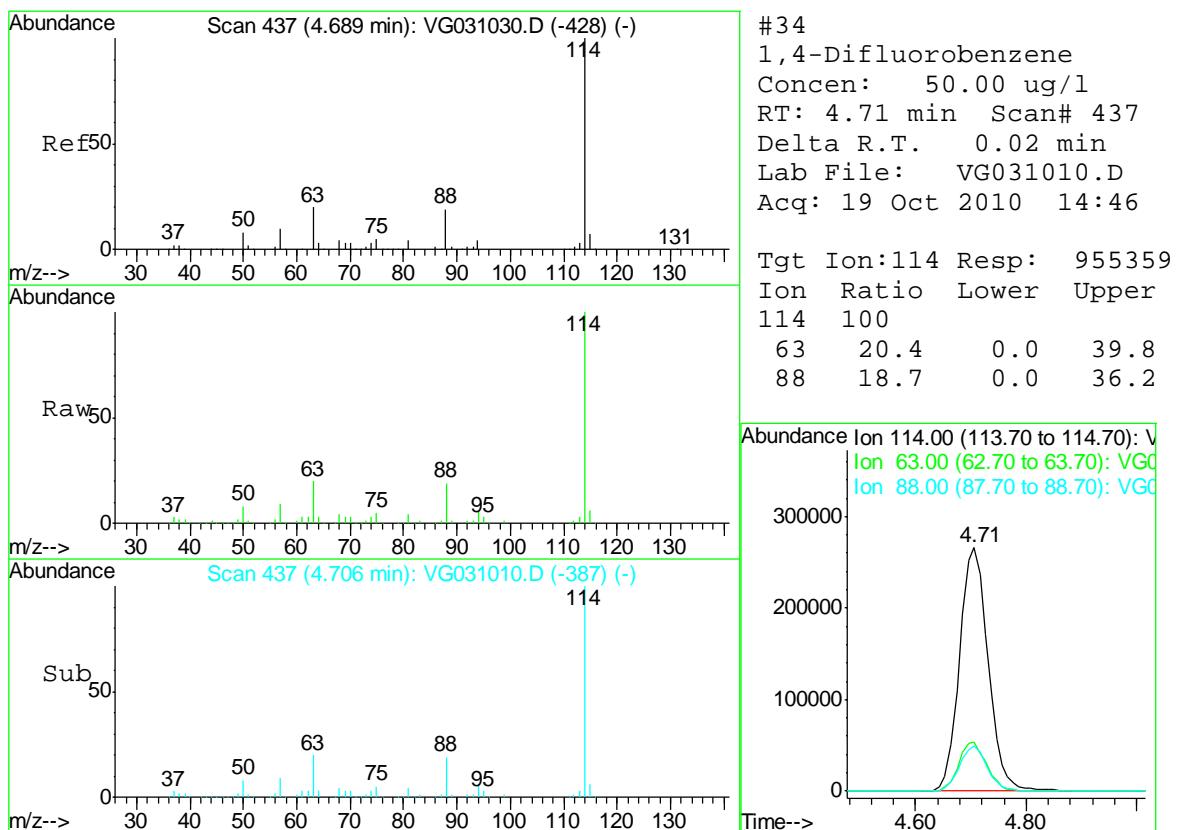
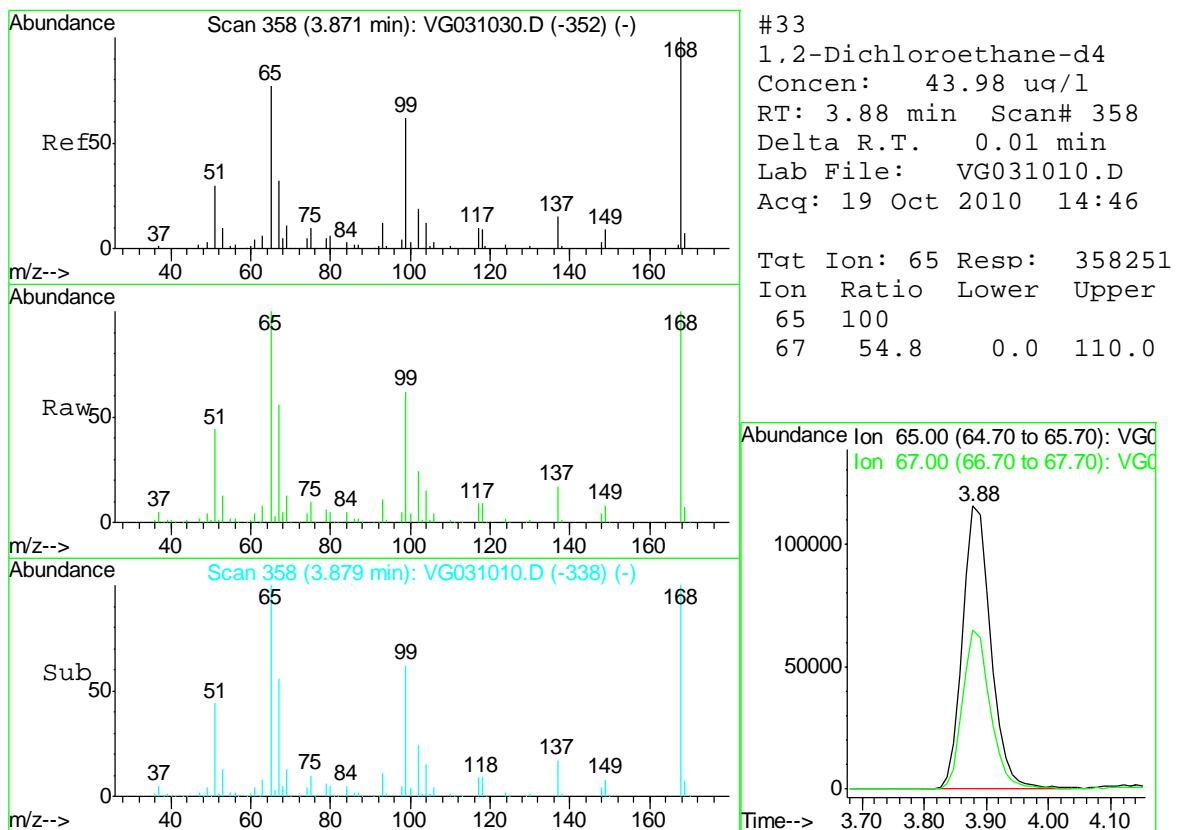
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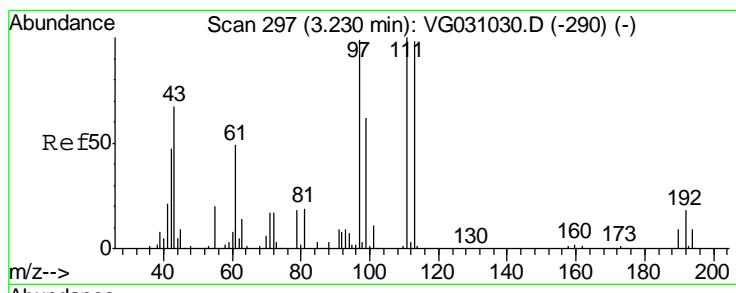
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Data File : VG031010.D  
Acq On : 19 Oct 2010 14:46  
Operator : PS  
Sample : B3902-27  
Misc : 5mL MSVOA G  
ALS Vial : 8 Sample Multiplier: 1

Ouant Time: Oct 20 02:41:52 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

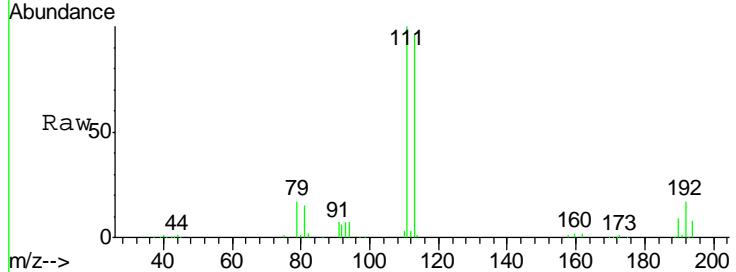




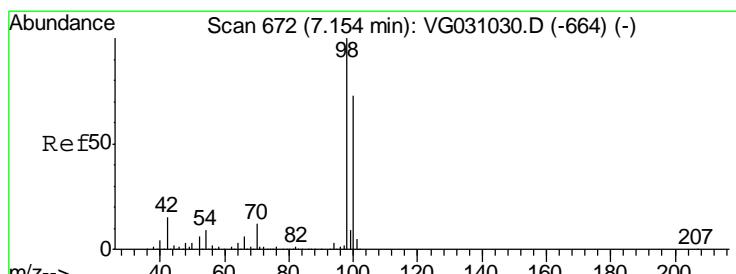
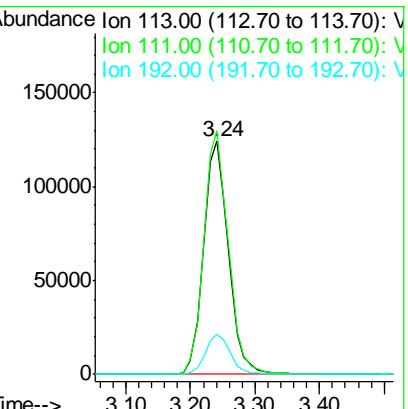
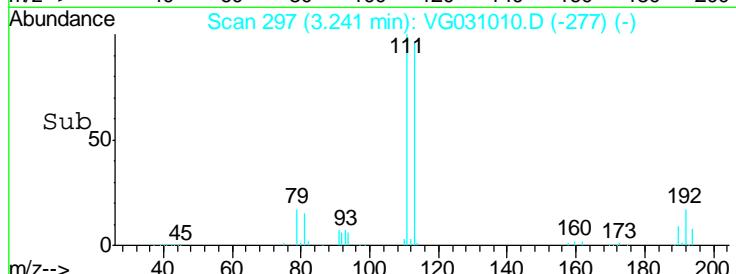




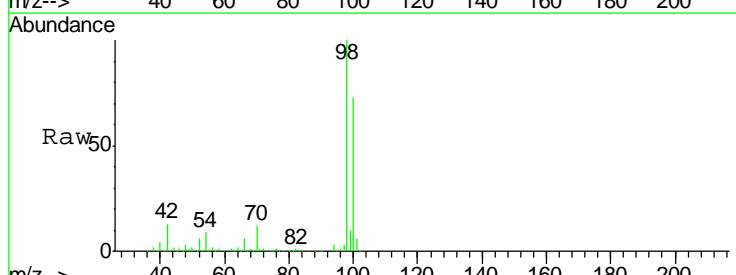
#35  
Dibromofluoromethane  
Concen: 44.76 ug/l  
RT: 3.24 min Scan# 297  
Delta R.T. 0.01 min  
Lab File: VG031010.D  
Acq: 19 Oct 2010 14:46



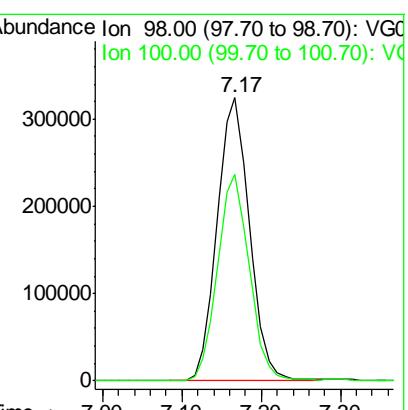
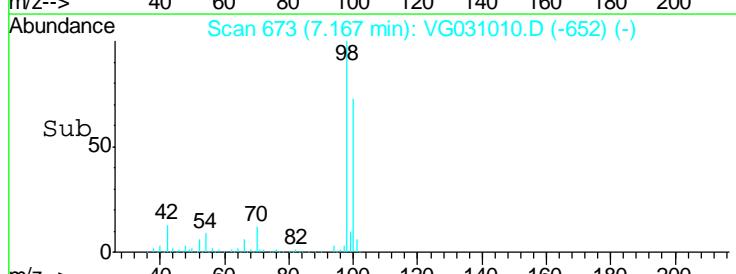
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Ion Ratio Lower Upper  
113 100  
111 103.3 80.5 120.7  
192 17.2 14.1 21.1

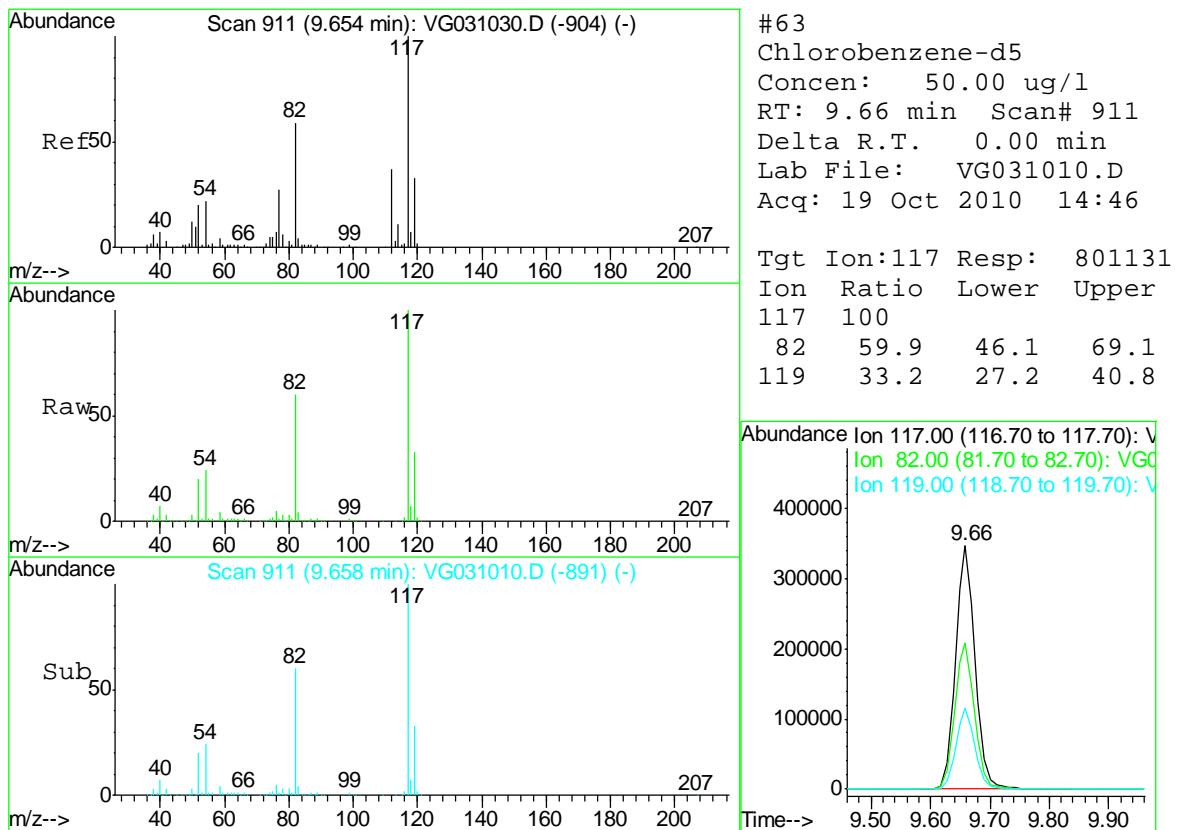
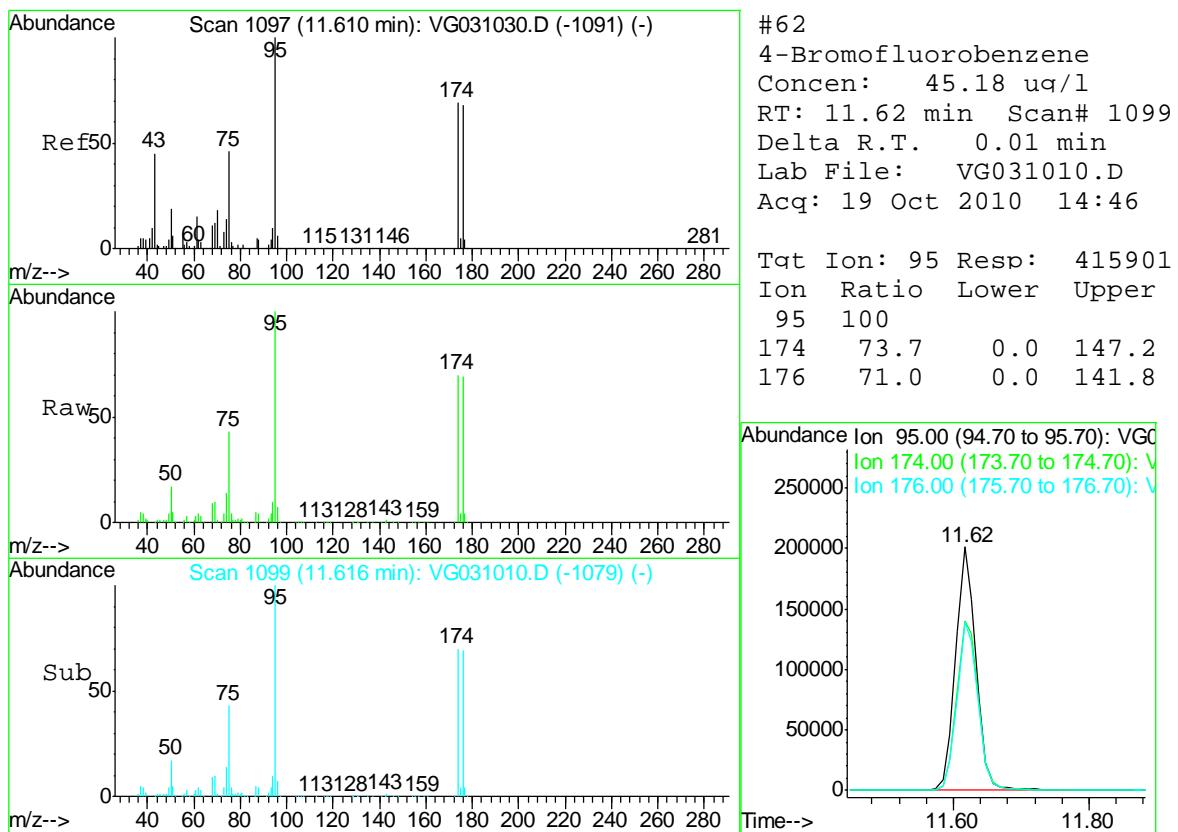


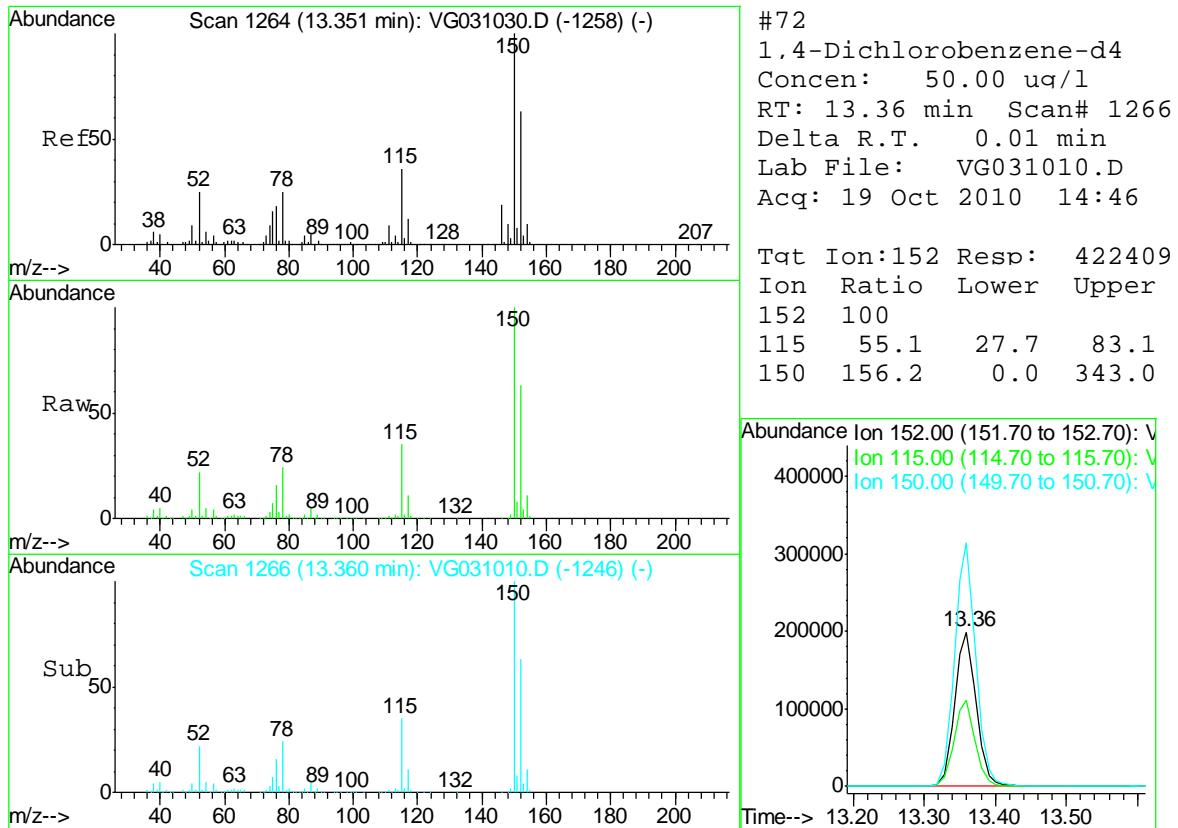
#50  
Toluene-d8  
Concen: 44.49 ug/l  
RT: 7.17 min Scan# 673  
Delta R.T. 0.02 min  
Lab File: VG031010.D  
Acq: 19 Oct 2010 14:46



Tgt Ion: 98 Resp: 921543  
Ion Ratio Lower Upper  
98 100  
100 72.4 57.5 86.3







Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031010.D  
 Acq On : 19 Oct 2010 14:46  
 Operator : PS  
 Sample : B3902-27  
 Misc : 5mL MSVOA G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 20 02:41:52 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.90	168	581566	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	4.71	114	955359	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.66	117	801131	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	422409	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.88	65	358251	43.98	ug/l	0.01
Spiked Amount	50.000		Recovery	=	87.96%	
35) Dibromofluoromethane	3.24	113	338101	44.76	ug/l	0.01
Spiked Amount	50.000		Recovery	=	89.52%	
50) Toluene-d8	7.17	98	921543	44.49	ug/l	0.02
Spiked Amount	50.000		Recovery	=	88.98%	
62) 4-Bromofluorobenzene	11.62	95	415901	45.18	ug/l	0.00
Spiked Amount	50.000		Recovery	=	90.36%	
<b>Target Compounds</b>						
25) 1,1-Dichloroethane	2.29	63	11754	0.81	ug/l	93

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031010.D  
 Acq On : 19 Oct 2010 14:46  
 Operator : PS  
 Sample : B3902-27  
 Misc : 5mL MSVOA G  
 ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

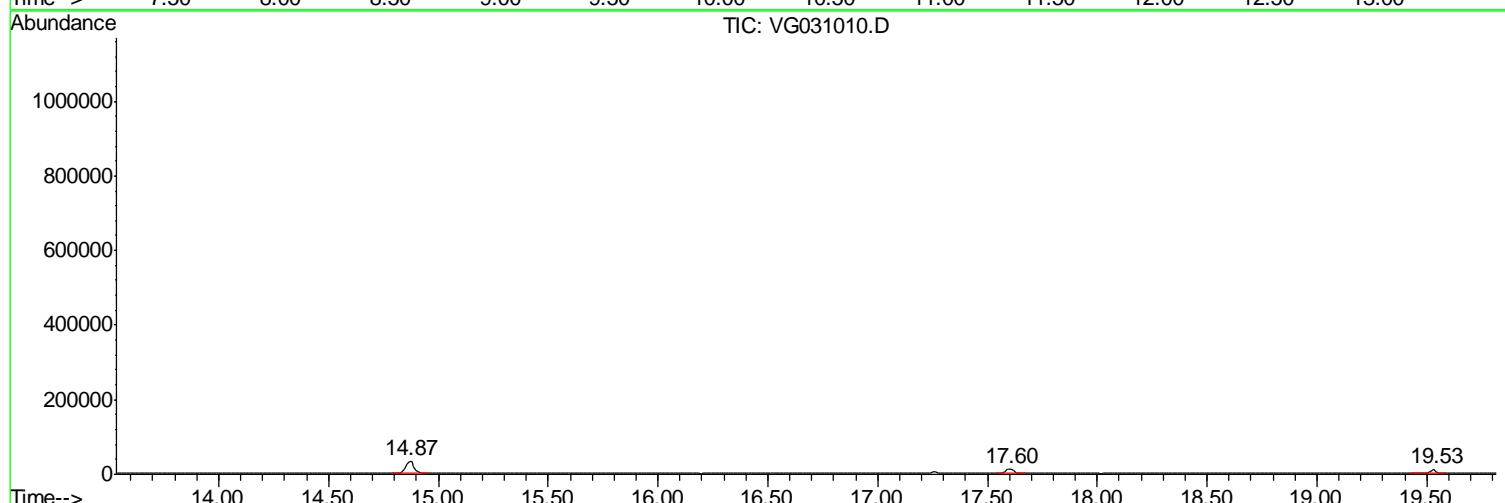
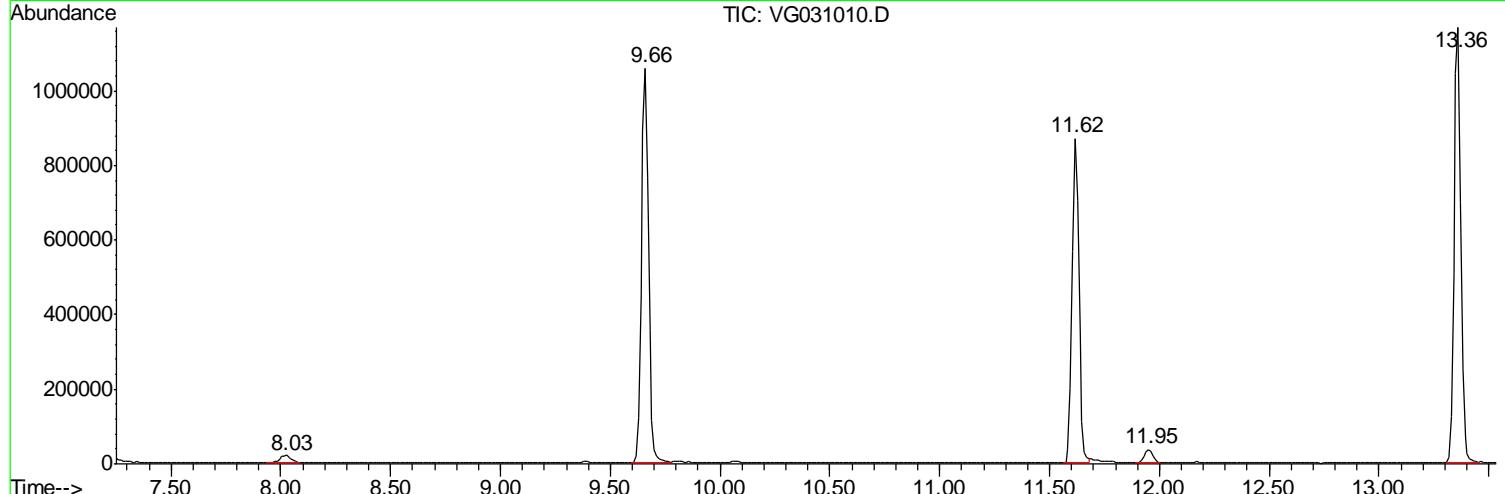
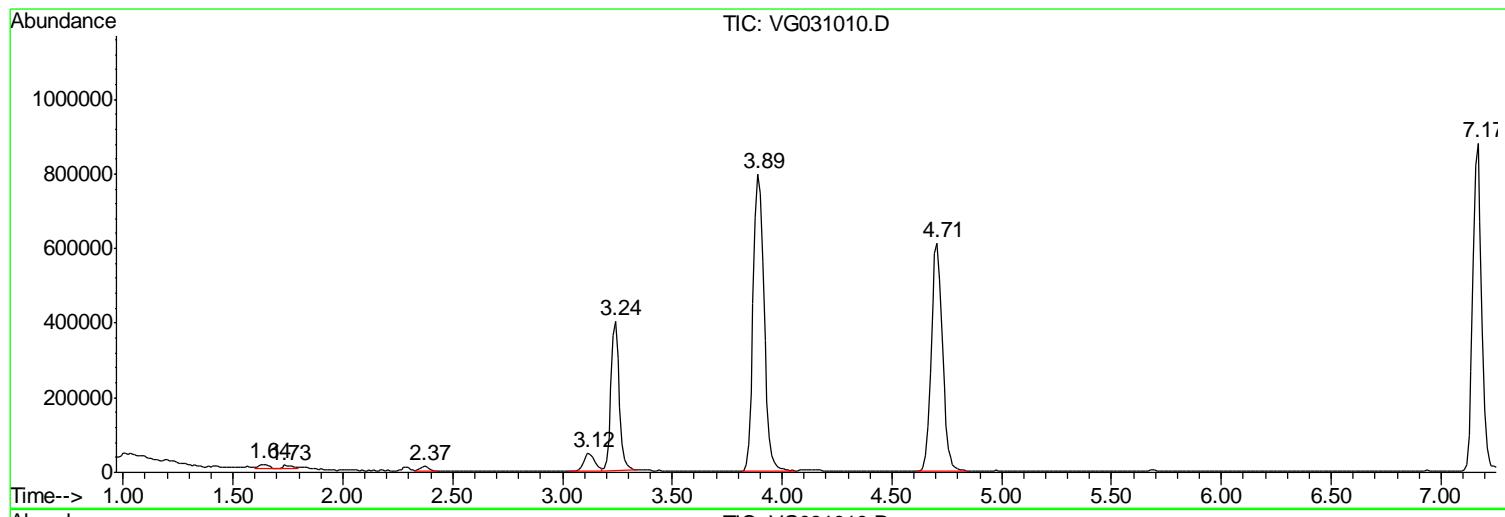
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.639	140	144	151	rVB5	12467	37001	1.38%	0.235%
2	1.734	151	153	159	rBV2	9123	27572	1.03%	0.175%
3	2.372	210	214	219	rVB	14444	32818	1.23%	0.209%
4	3.115	277	285	291	rBV2	49274	170728	6.39%	1.085%
5	3.241	291	297	306	rVB	399599	1068116	39.97%	6.787%
6	3.889	352	359	375	rBV2	796151	2672620	100.00%	16.983%
7	4.706	428	437	450	rBV	612656	2156824	80.70%	13.705%
8	7.167	665	673	689	rBV	880341	2542236	95.12%	16.154%
9	8.026	746	755	761	rBV2	20273	75775	2.84%	0.481%
10	9.658	905	911	922	rBV	1056736	2425376	90.75%	15.411%
11	11.616	1094	1099	1105	rBV	868923	1820003	68.10%	11.565%
12	11.950	1125	1131	1136	rBV2	36322	95610	3.58%	0.608%
13	13.360	1261	1266	1275	rBV	1166484	2462754	92.15%	15.649%
14	14.867	1402	1410	1418	rBV2	31618	85077	3.18%	0.541%
15	17.599	1666	1671	1678	rBV	12148	33150	1.24%	0.211%
16	19.533	1846	1856	1861	rBV2	12019	31833	1.19%	0.202%

Sum of corrected areas: 15737493

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031010.D  
Acq On : 19 Oct 2010 14:46  
Operator : PS  
Sample : B3902-27  
Misc : 5mL MSVOA G  
ALS Vial : 8 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031010.D  
Acq On : 19 Oct 2010 14:46  
Operator : PS  
Sample : B3902-27  
Misc : 5mL MSVOA\_G  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031010.D  
Acq On : 19 Oct 2010 14:46  
Operator : PS  
Sample : B3902-27  
Misc : 5mL MSVOA\_G  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/15/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-6S	SDG No.:	B3902
Lab Sample ID:	B3902-28	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031011.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1.1		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.56	J	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	3.1		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

348  
ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/15/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-6S	SDG No.:	B3902
Lab Sample ID:	B3902-28	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031011.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	2.6		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.2		66 - 150		92%	SPK: 50
1868-53-7	Dibromofluoromethane	48.3		76 - 130		97%	SPK: 50
2037-26-5	Toluene-d8	46		78 - 121		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.6		70 - 131		95%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	584861		3.89			
540-36-3	1,4-Difluorobenzene	945507		4.7			
3114-55-4	Chlorobenzene-d5	800268		9.65			
3855-82-1	1,4-Dichlorobenzene-d4	424722		13.36			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

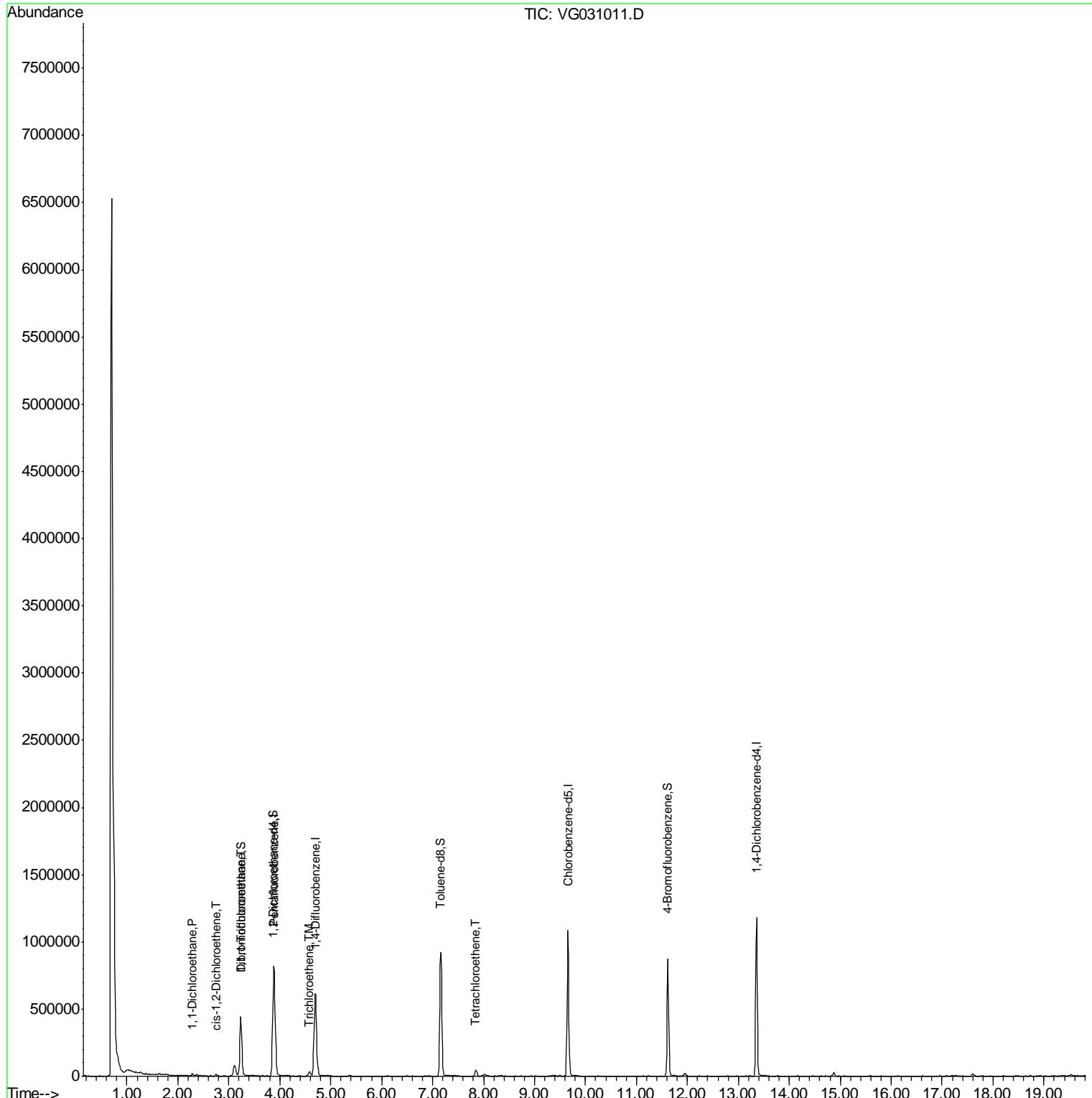
N = Presumptive Evidence of a Compound

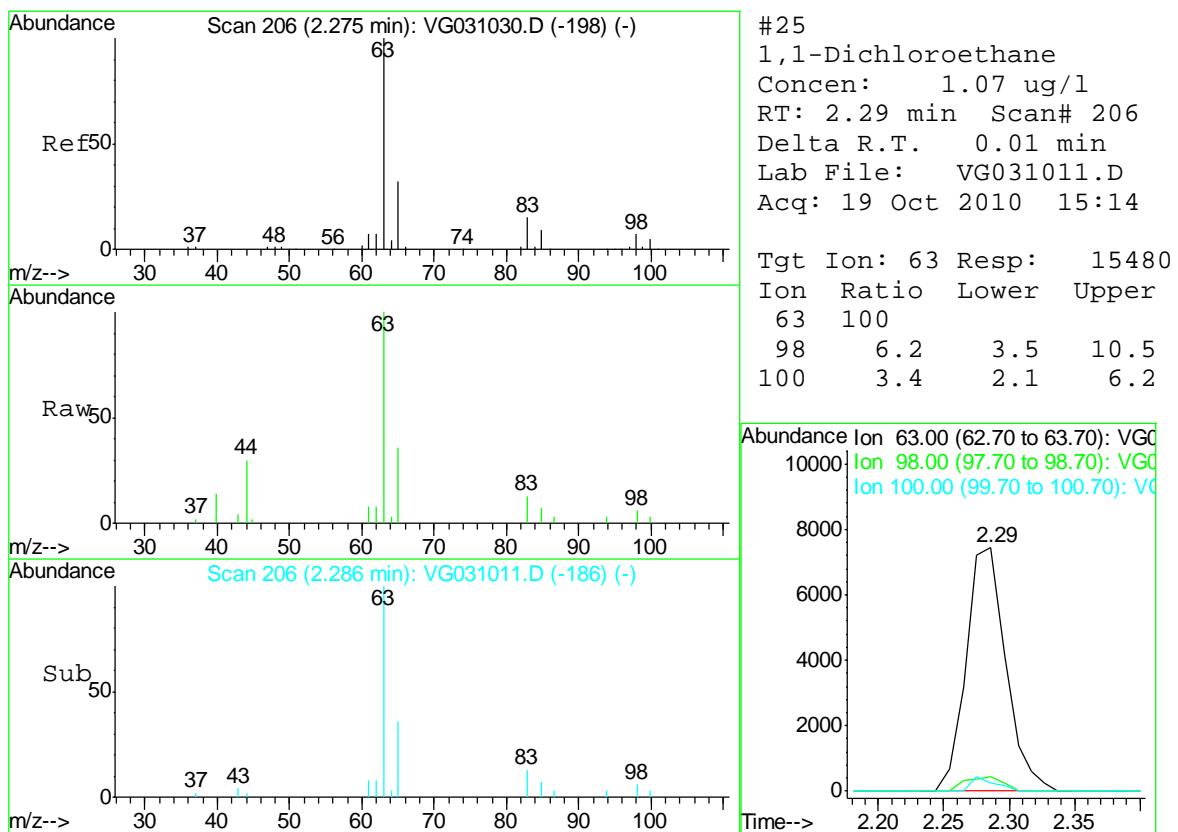
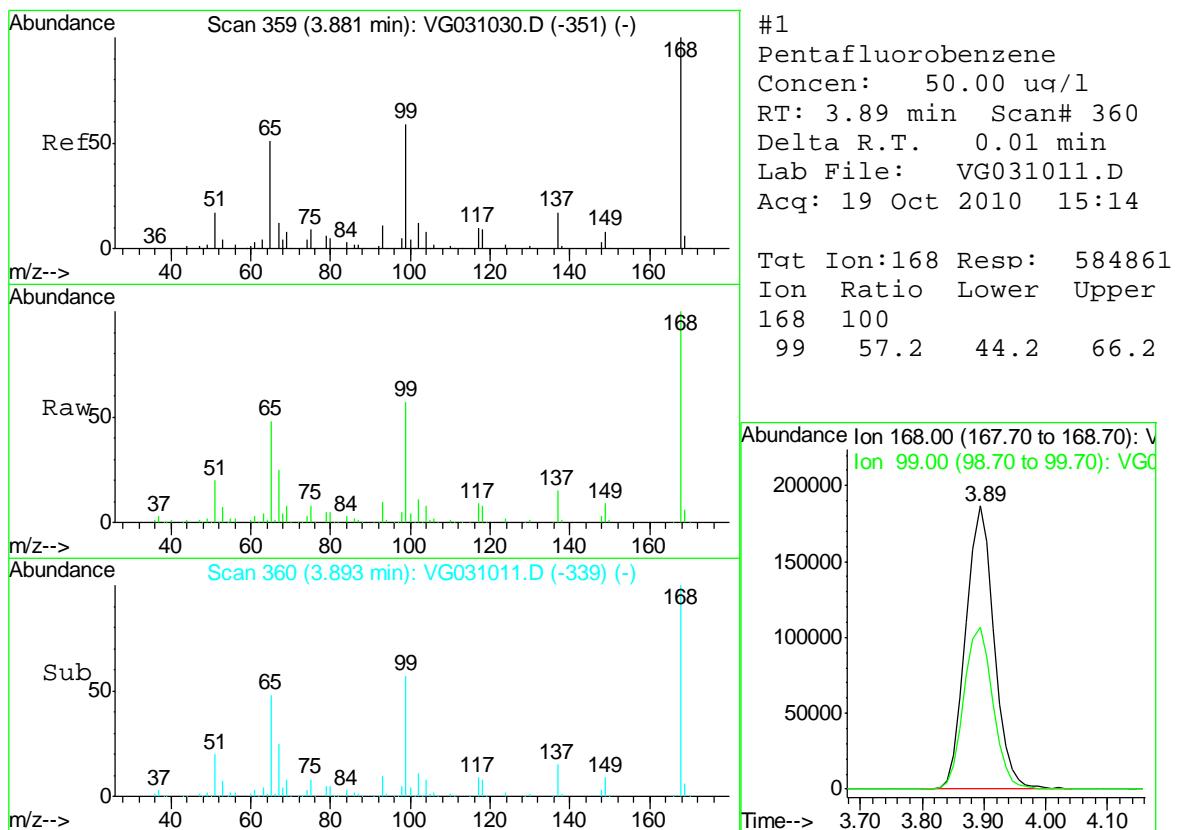
\* = Values outside of QC limits

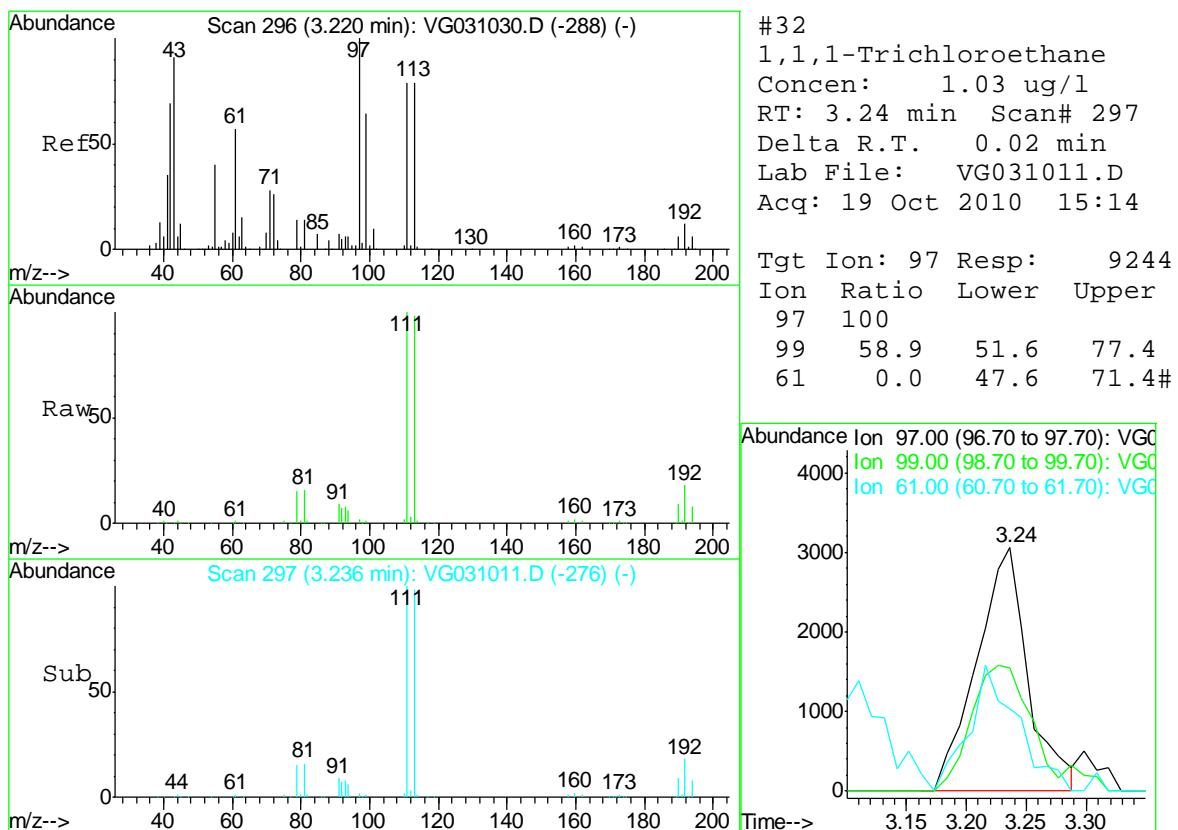
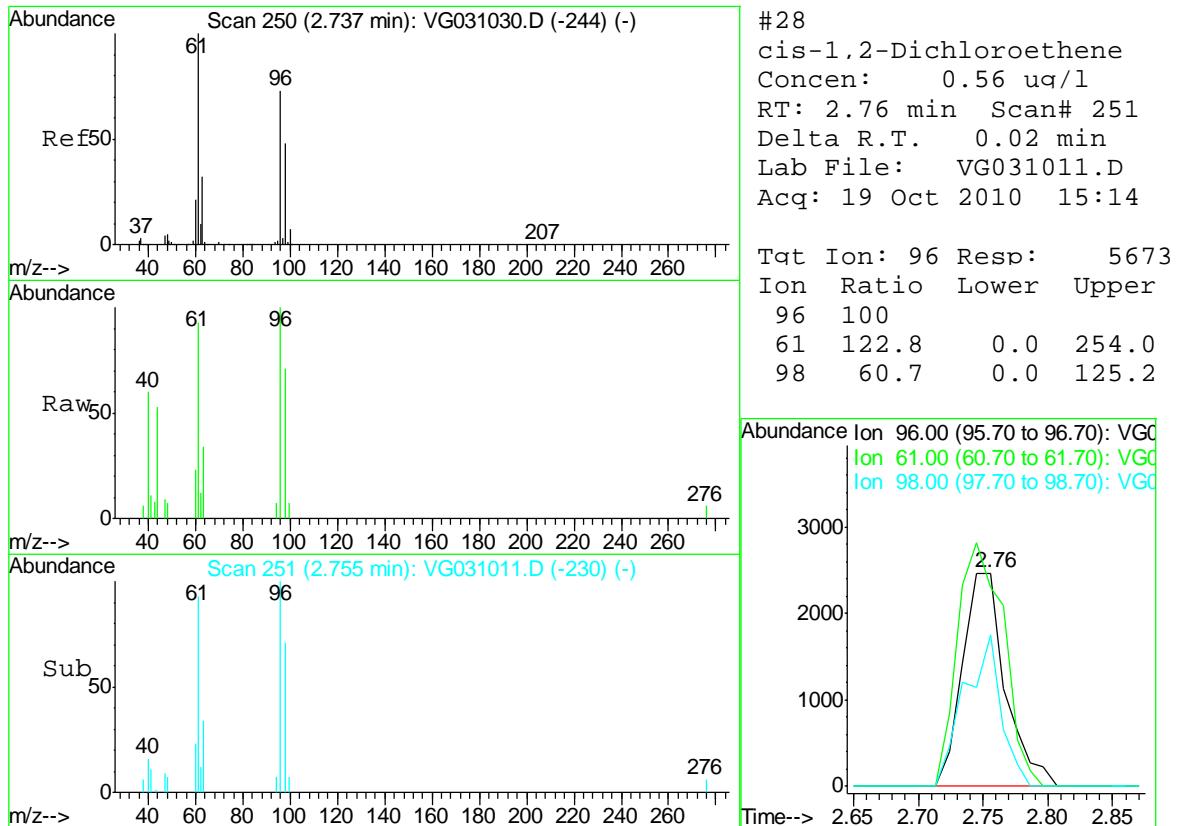
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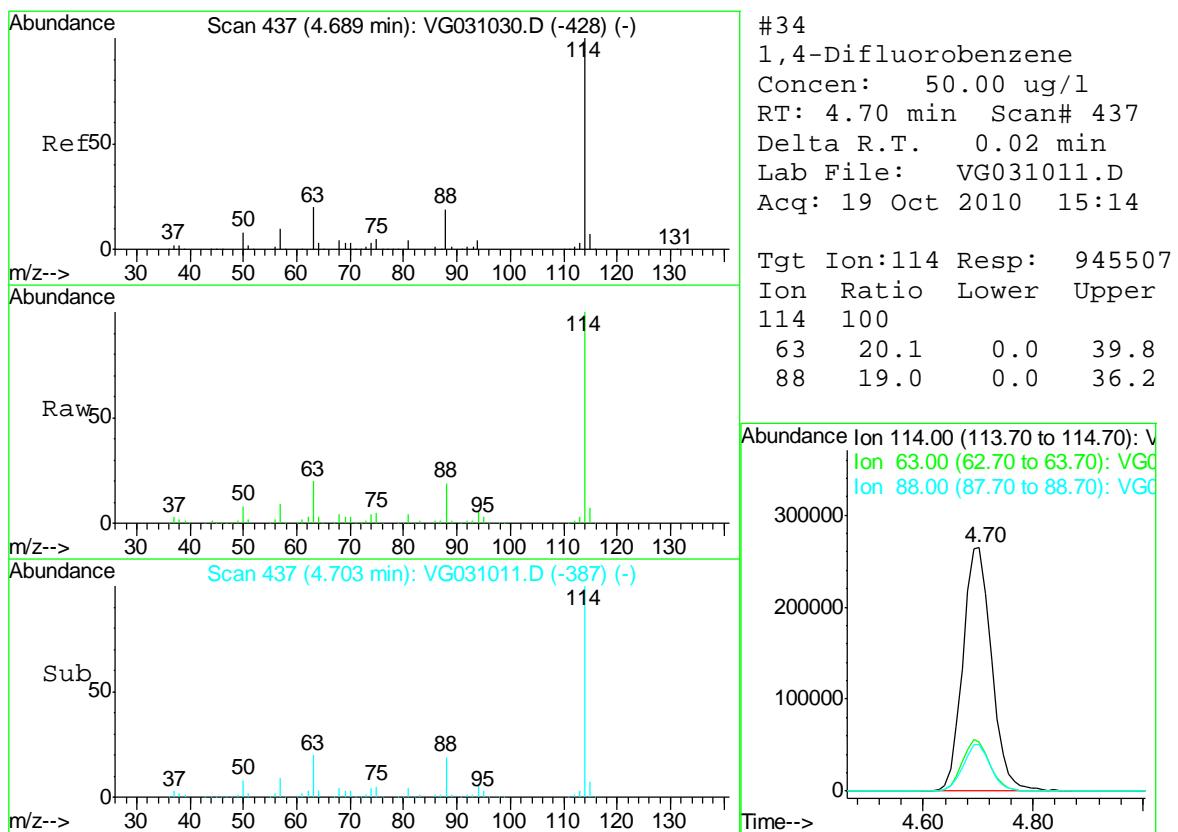
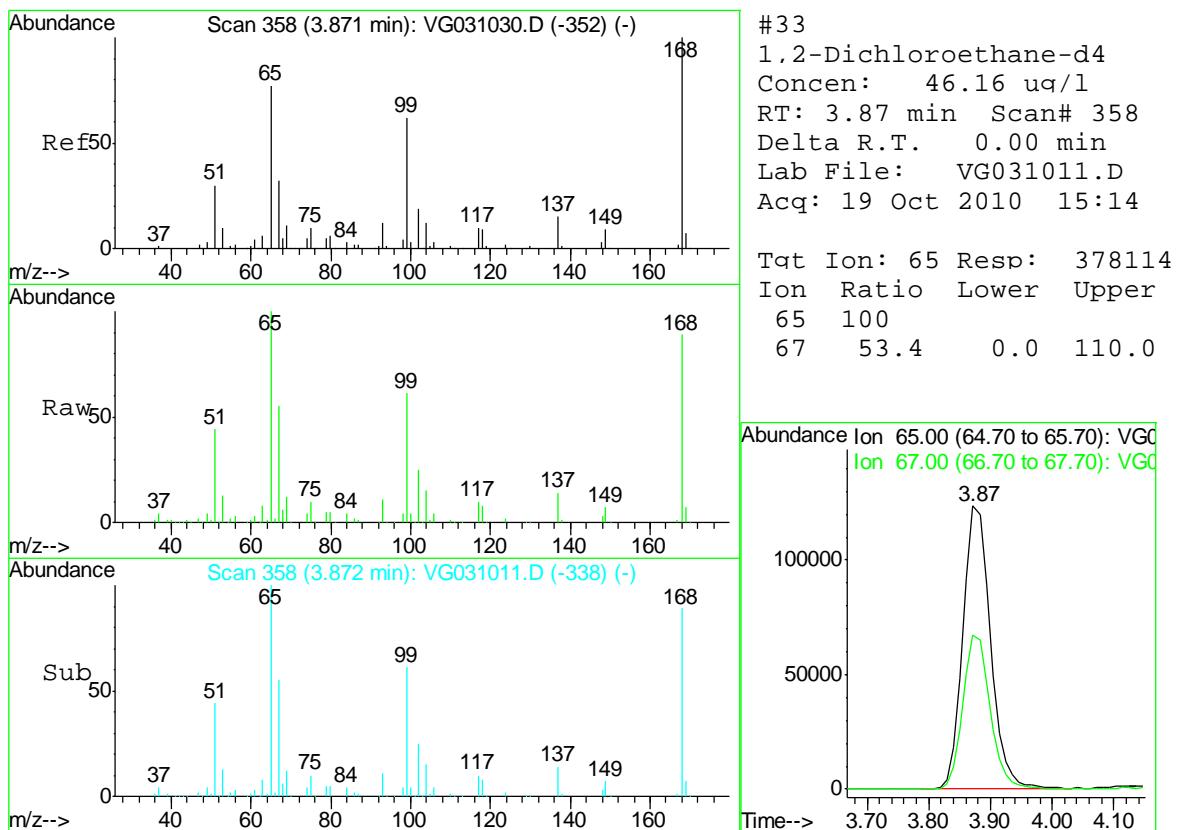
Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031011.D  
Acq On : 19 Oct 2010 15:14  
Operator : PS  
Sample : B3902-28  
Misc : 5mL MSVOA G  
ALS Vial : 9 Sample Multiplier: 1

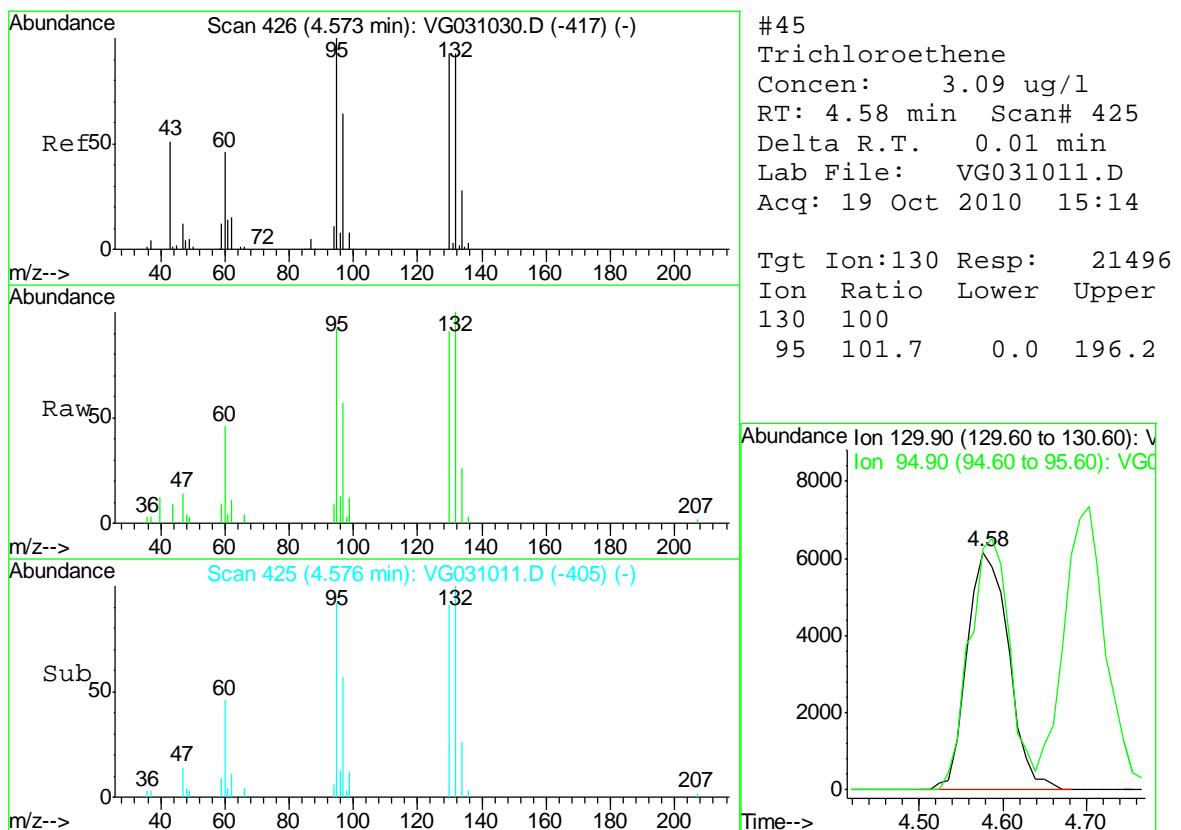
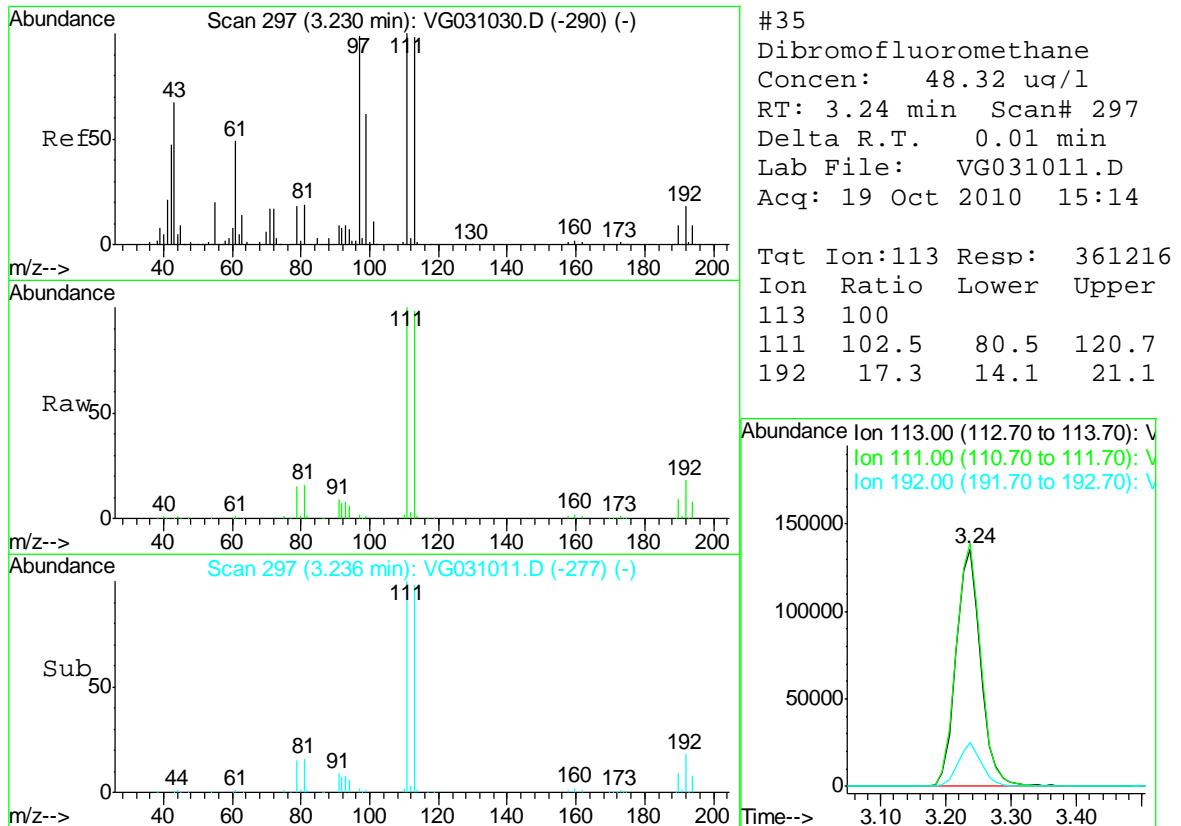
Ouant Time: Oct 20 02:47:07 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

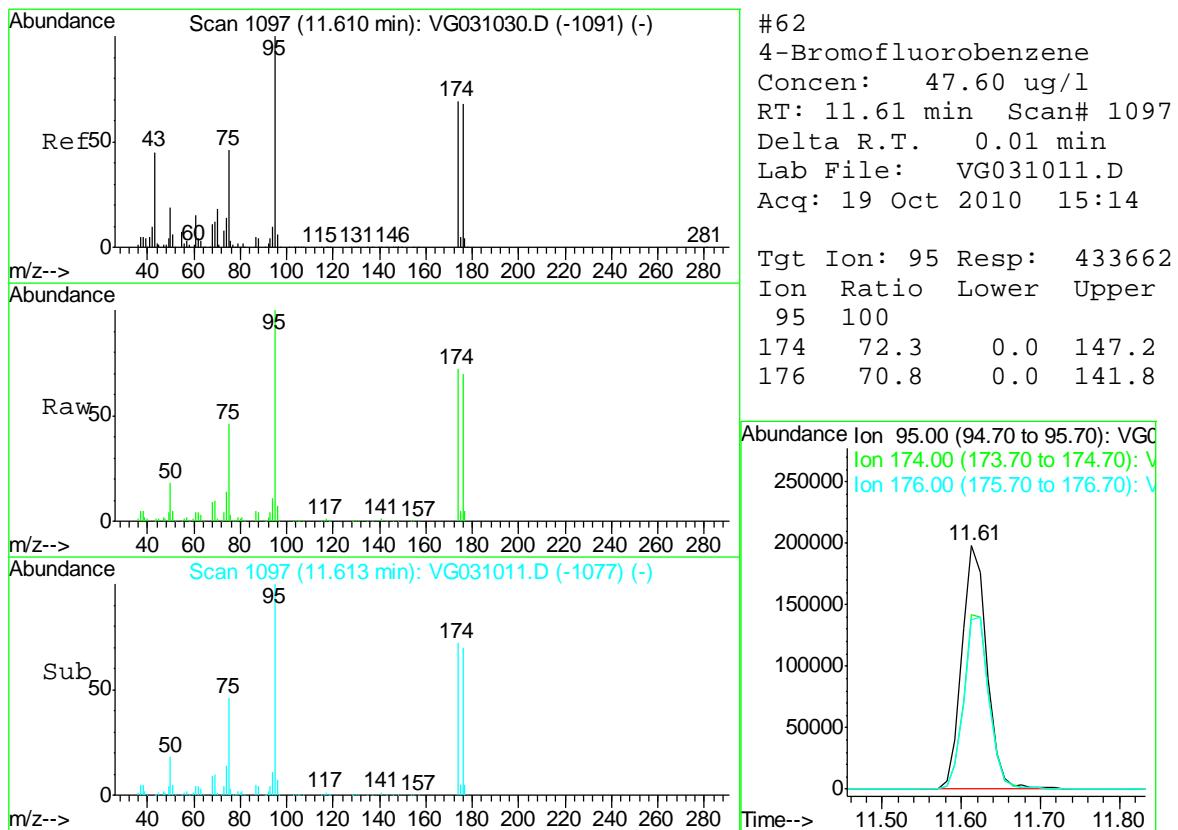
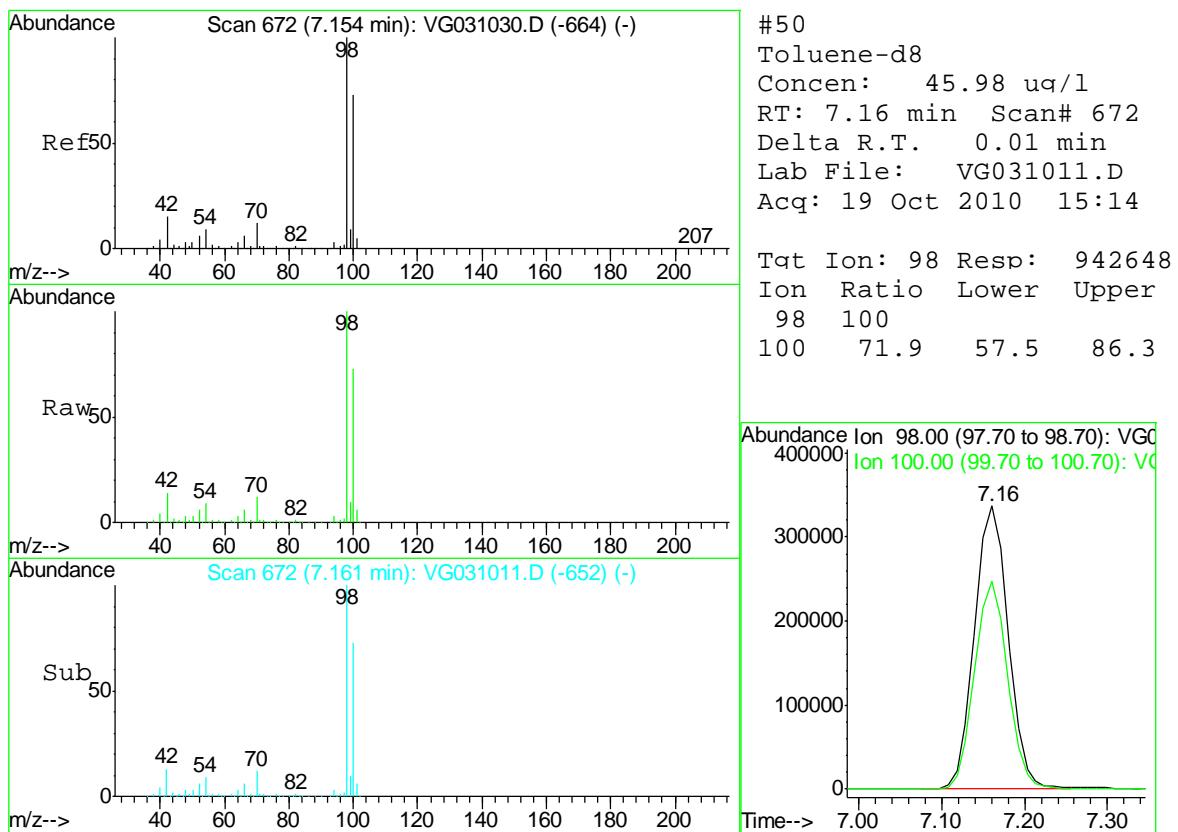


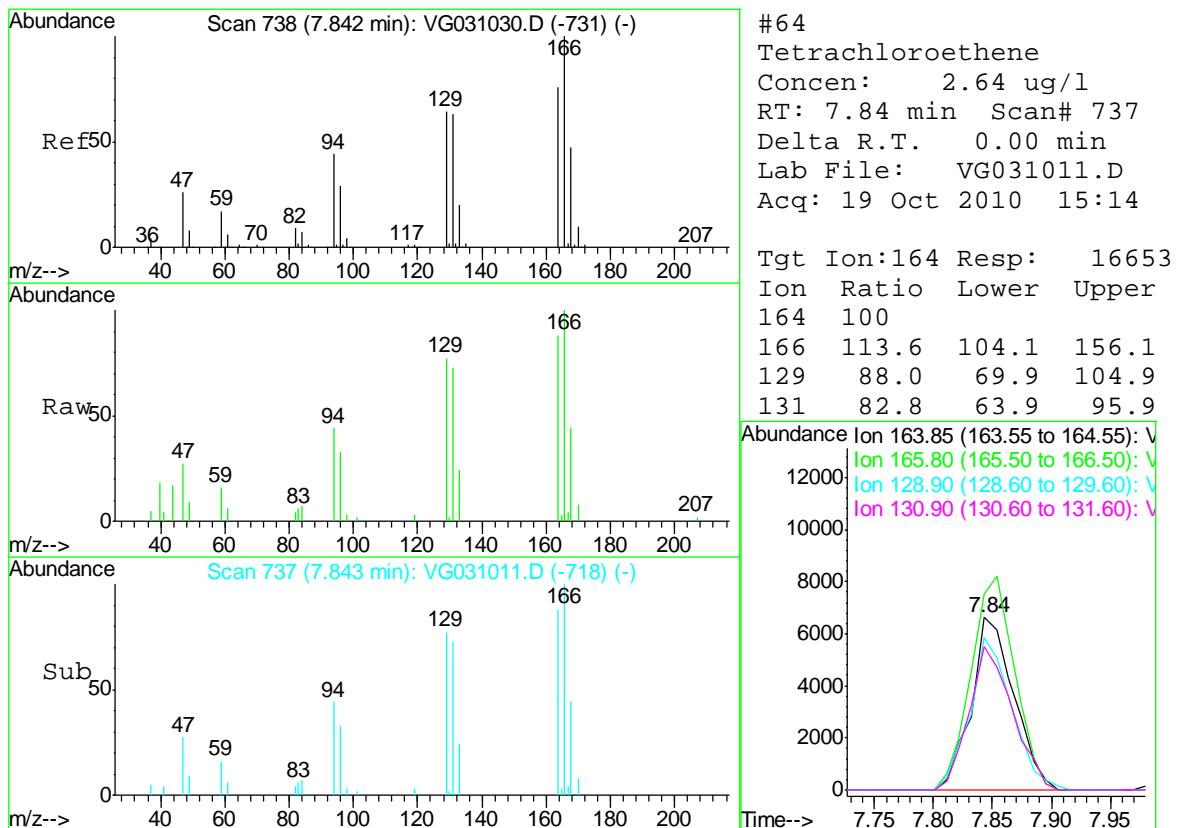
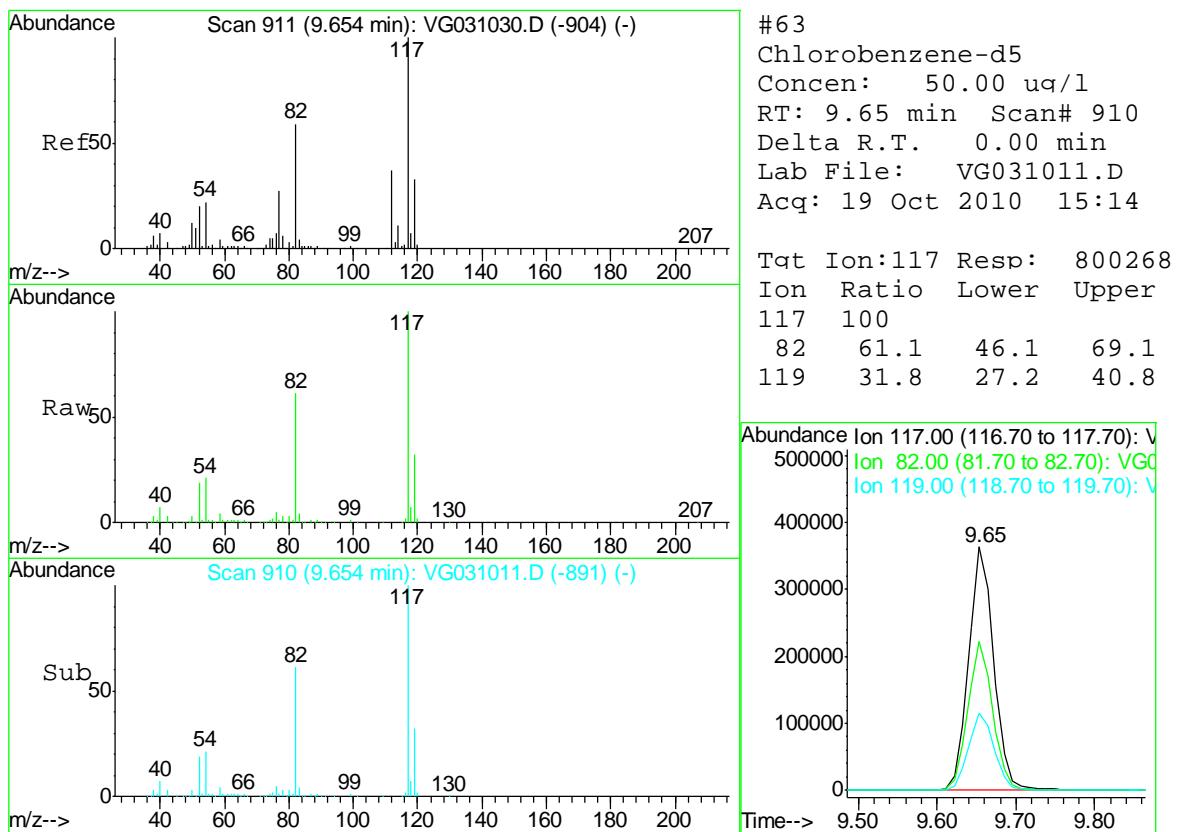


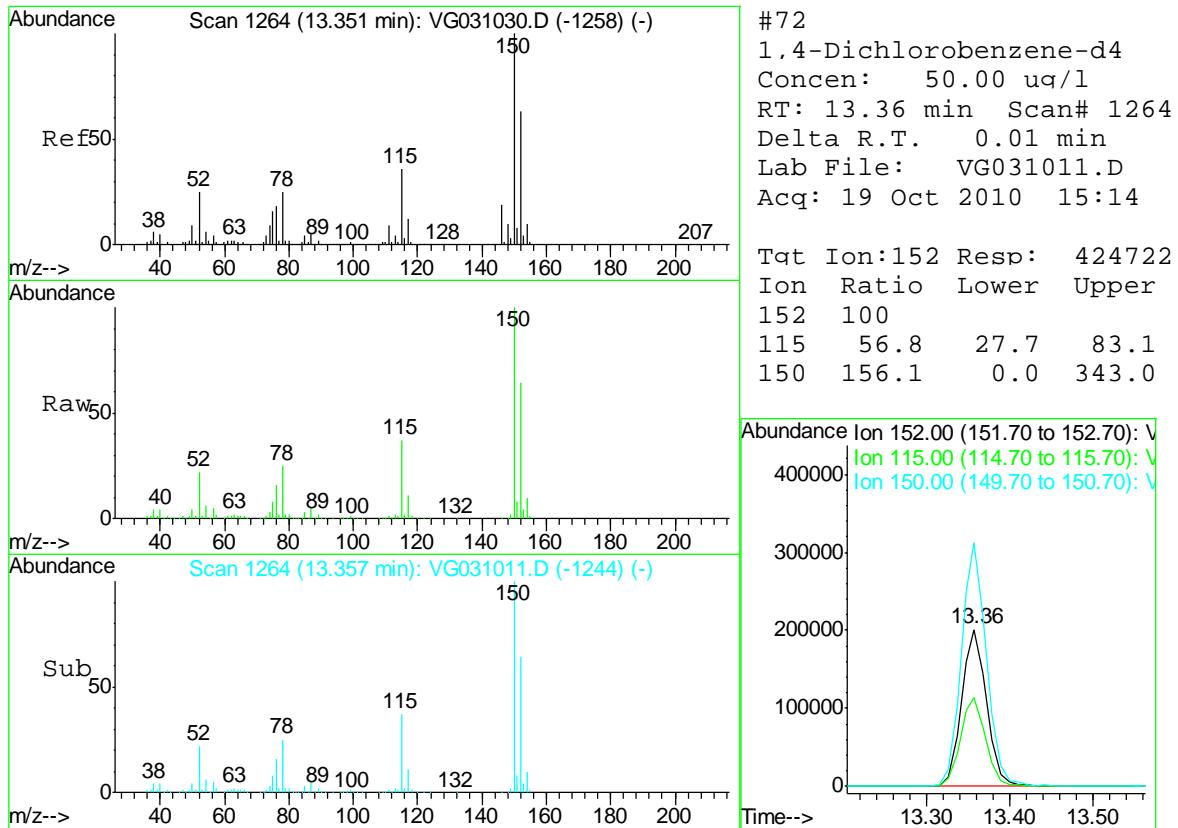












Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031011.D  
 Acq On : 19 Oct 2010 15:14  
 Operator : PS  
 Sample : B3902-28  
 Misc : 5mL MSVOA G  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 20 02:47:07 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	584861	50.00	ug/l	0.01
34) 1,4-Difluorobenzene	4.70	114	945507	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.65	117	800268	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	424722	50.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	3.87	65	378114	46.16	ug/l	0.00
Spiked Amount	50.000		Recovery	=	92.32%	
35) Dibromofluoromethane	3.24	113	361216	48.32	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.64%	
50) Toluene-d8	7.16	98	942648	45.98	ug/l	0.01
Spiked Amount	50.000		Recovery	=	91.96%	
62) 4-Bromofluorobenzene	11.61	95	433662	47.60	ug/l	0.00
Spiked Amount	50.000		Recovery	=	95.20%	
<hr/>						
Target Compounds						
25) 1,1-Dichloroethane	2.29	63	15480	1.07	ug/l	98
28) cis-1,2-Dichloroethene	2.76	96	5673	0.56	ug/l	97
32) 1,1,1-Trichloroethane	3.24	97	9244	1.03	ug/l	# 58
45) Trichloroethene	4.58	130	21496	3.09	ug/l	96
64) Tetrachloroethene	7.84	164	16653	2.64	ug/l	93

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031011.D  
 Acq On : 19 Oct 2010 15:14  
 Operator : PS  
 Sample : B3902-28  
 Misc : 5mL MSVOA G  
 ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

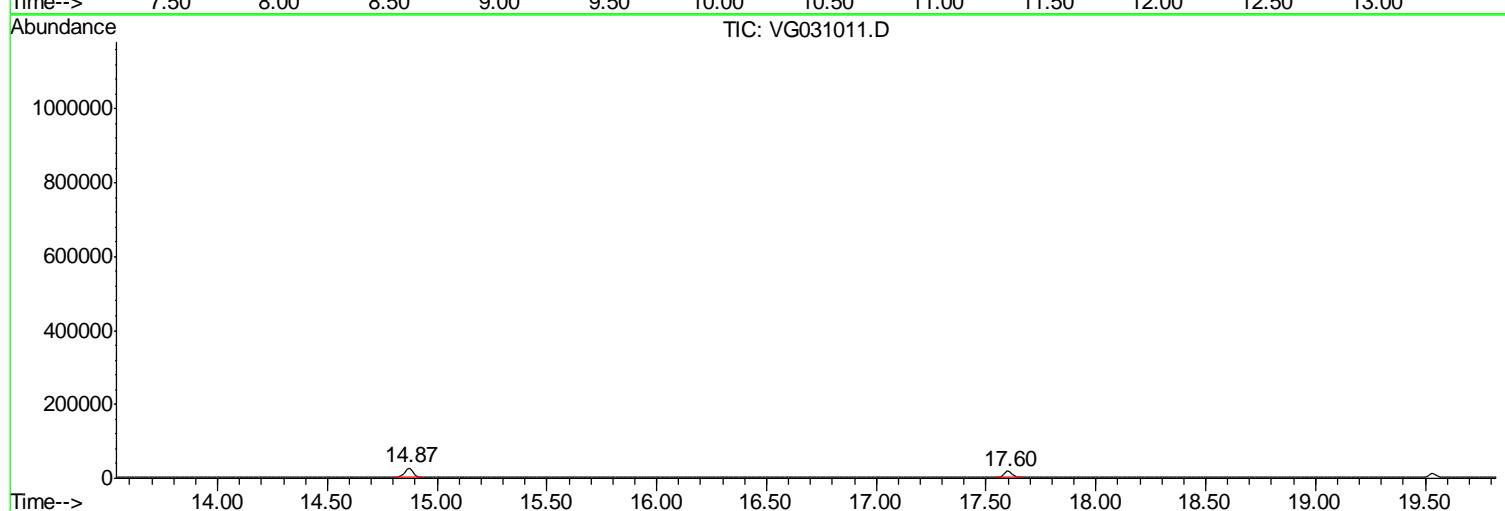
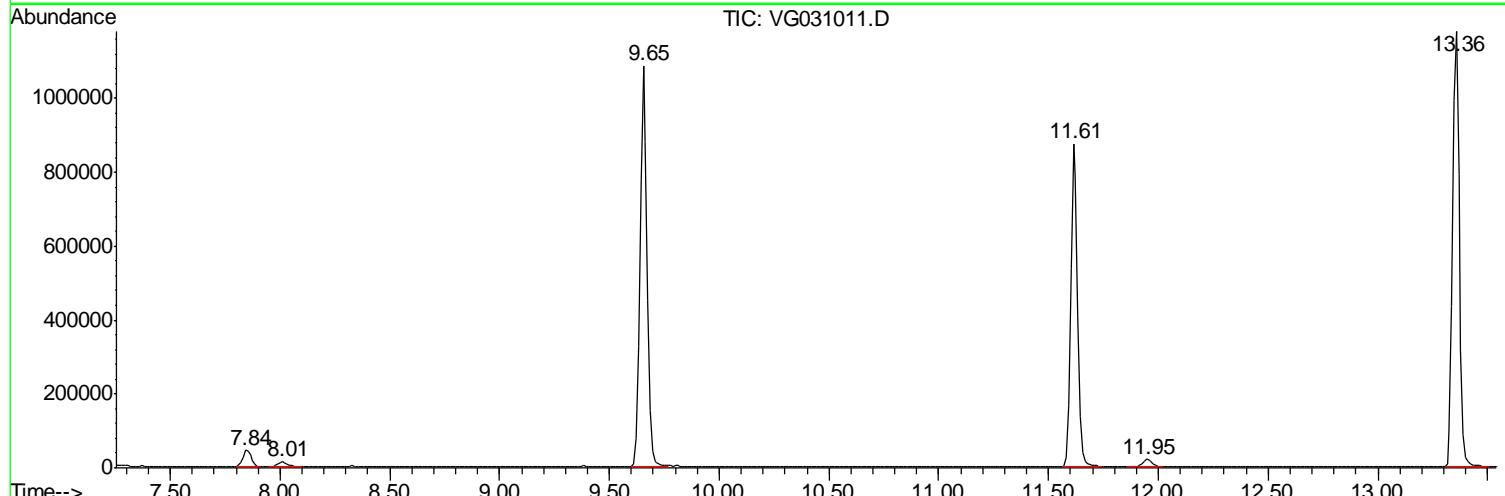
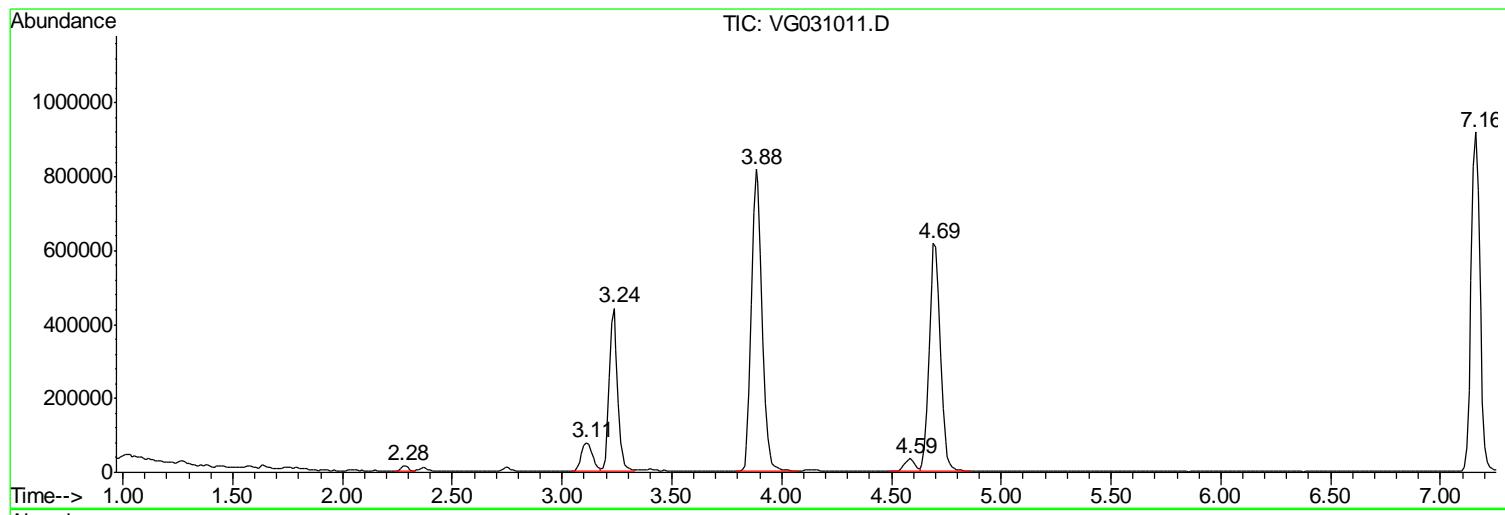
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.275	202	205	210	rBV	14330	29514	1.07%	0.182%
2	3.110	279	285	291	rBV	76989	262203	9.50%	1.614%
3	3.236	291	297	306	rVV	440812	1185415	42.97%	7.298%
4	3.883	350	359	377	rBV2	817569	2758953	100.00%	16.986%
5	4.587	417	426	430	rBV	34776	119087	4.32%	0.733%
6	4.692	430	436	452	rVB	615426	2152217	78.01%	13.250%
7	7.161	665	672	683	rBV	918126	2572454	93.24%	15.838%
8	7.843	733	737	743	rBV2	44314	116502	4.22%	0.717%
9	8.011	747	753	761	rBV2	14414	48631	1.76%	0.299%
10	9.654	905	910	921	rBV	1084562	2432284	88.16%	14.975%
11	11.613	1092	1097	1109	rBV	874370	1897185	68.76%	11.680%
12	11.946	1121	1129	1136	rBV3	20681	61732	2.24%	0.380%
13	13.357	1259	1264	1278	rVB	1177737	2501192	90.66%	15.399%
14	14.874	1403	1409	1414	rVB2	26327	63297	2.29%	0.390%
15	17.597	1664	1669	1675	rBV	16939	42038	1.52%	0.259%

Sum of corrected areas: 16242704

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031011.D  
Acq On : 19 Oct 2010 15:14  
Operator : PS  
Sample : B3902-28  
Misc : 5mL MSVOA G  
ALS Vial : 9 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031011.D  
Acq On : 19 Oct 2010 15:14  
Operator : PS  
Sample : B3902-28  
Misc : 5mL MSVOA\_G  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031011.D  
Acq On : 19 Oct 2010 15:14  
Operator : PS  
Sample : B3902-28  
Misc : 5mL MSVOA\_G  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-DUPLICATE-01	SDG No.:	B3902
Lab Sample ID:	B3902-29	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031012.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	2.7		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.81	J	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	3.6		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	2.4		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-DUPLICATE-01	SDG No.:	B3902
Lab Sample ID:	B3902-29	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031012.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1.6		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	44.8		66 - 150		90%	SPK: 50
1868-53-7	Dibromofluoromethane	45.5		76 - 130		91%	SPK: 50
2037-26-5	Toluene-d8	45.1		78 - 121		90%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		70 - 131		96%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	583245	3.9				
540-36-3	1,4-Difluorobenzene	929053	4.7				
3114-55-4	Chlorobenzene-d5	784569	9.66				
3855-82-1	1,4-Dichlorobenzene-d4	405357	13.36				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

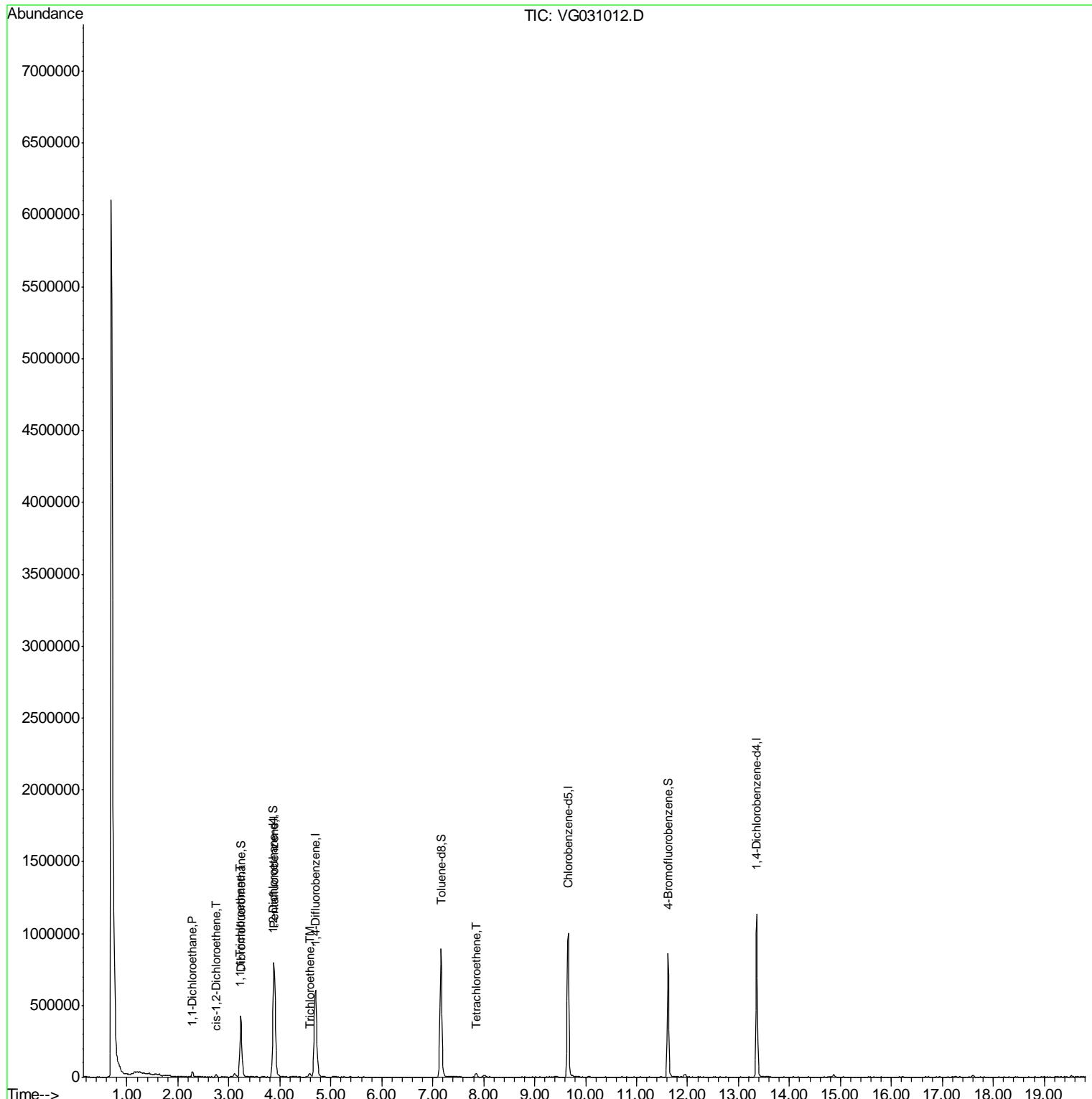
N = Presumptive Evidence of a Compound

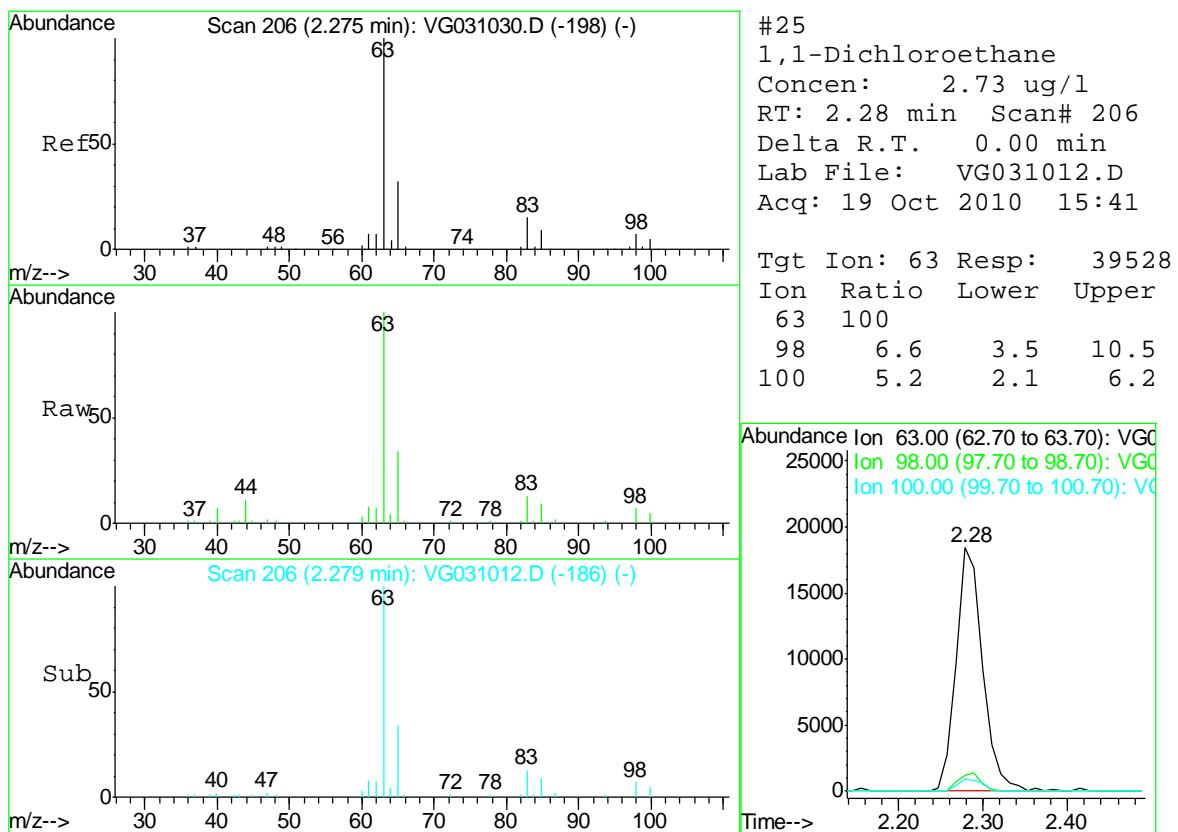
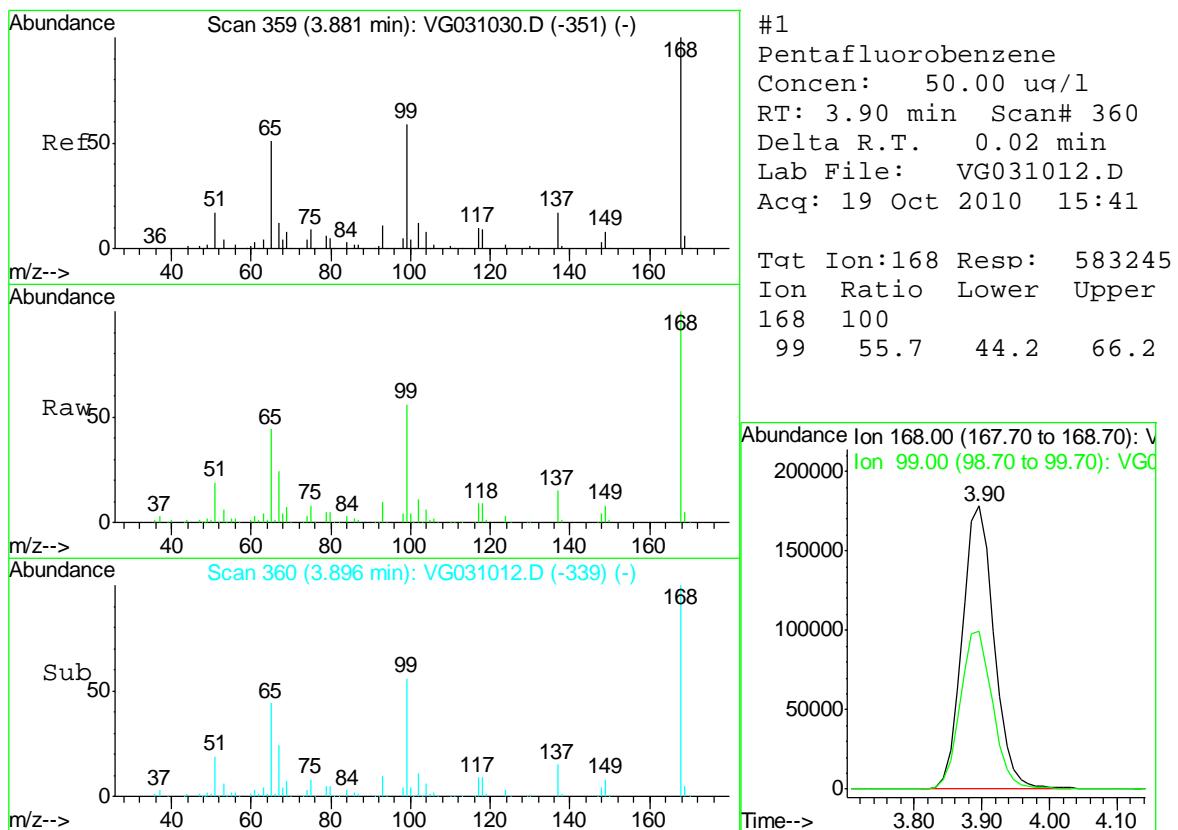
\* = Values outside of QC limits

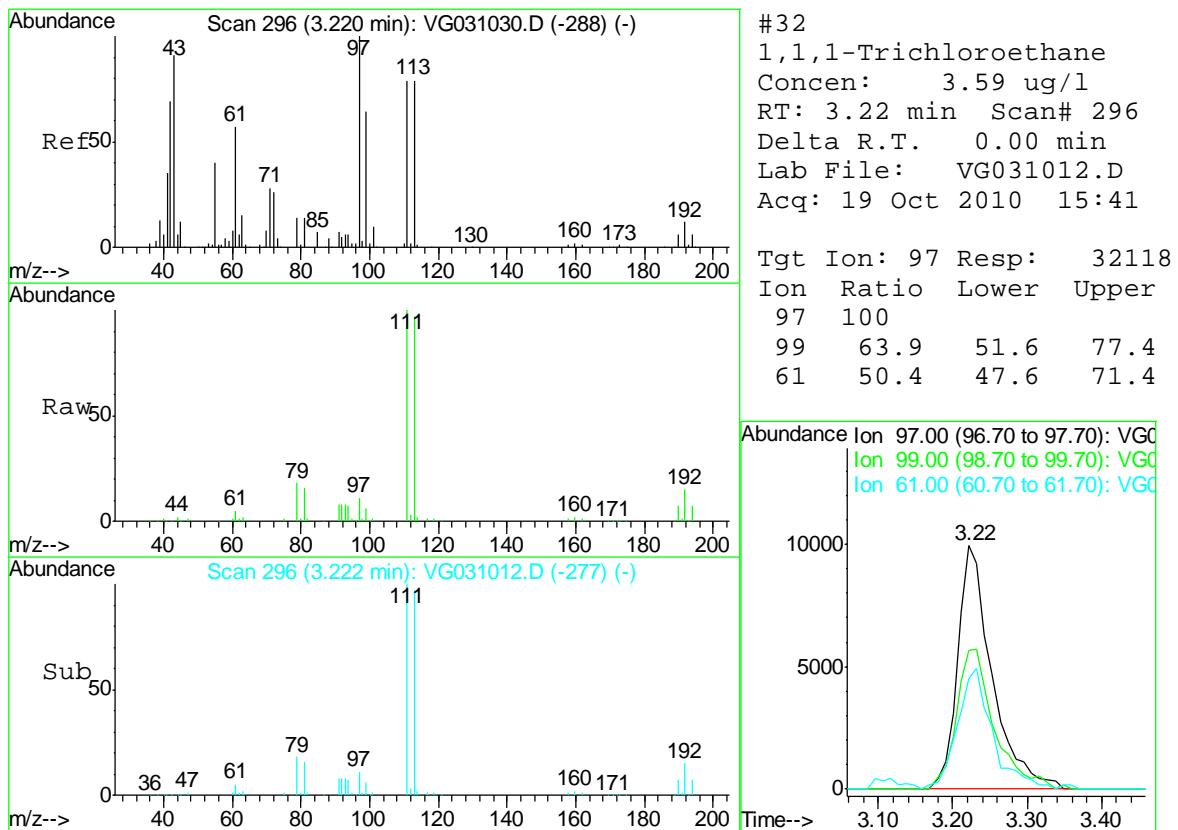
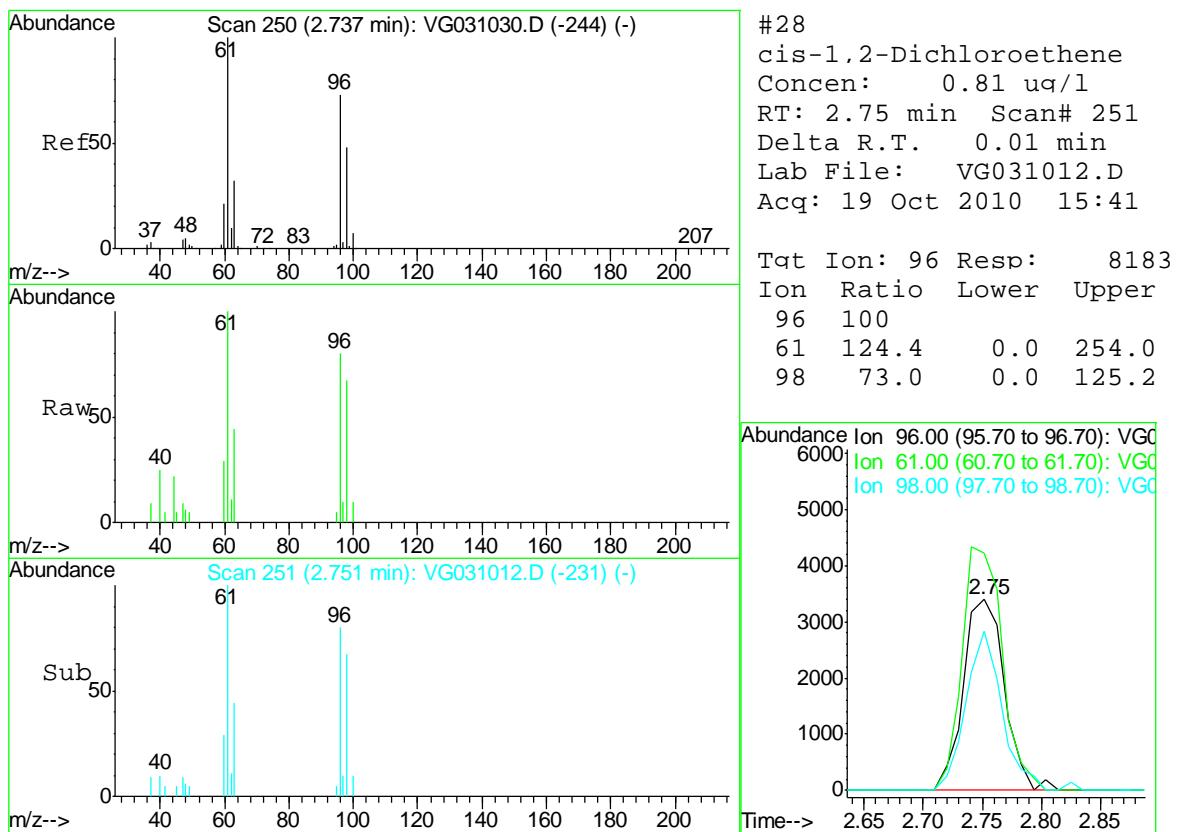
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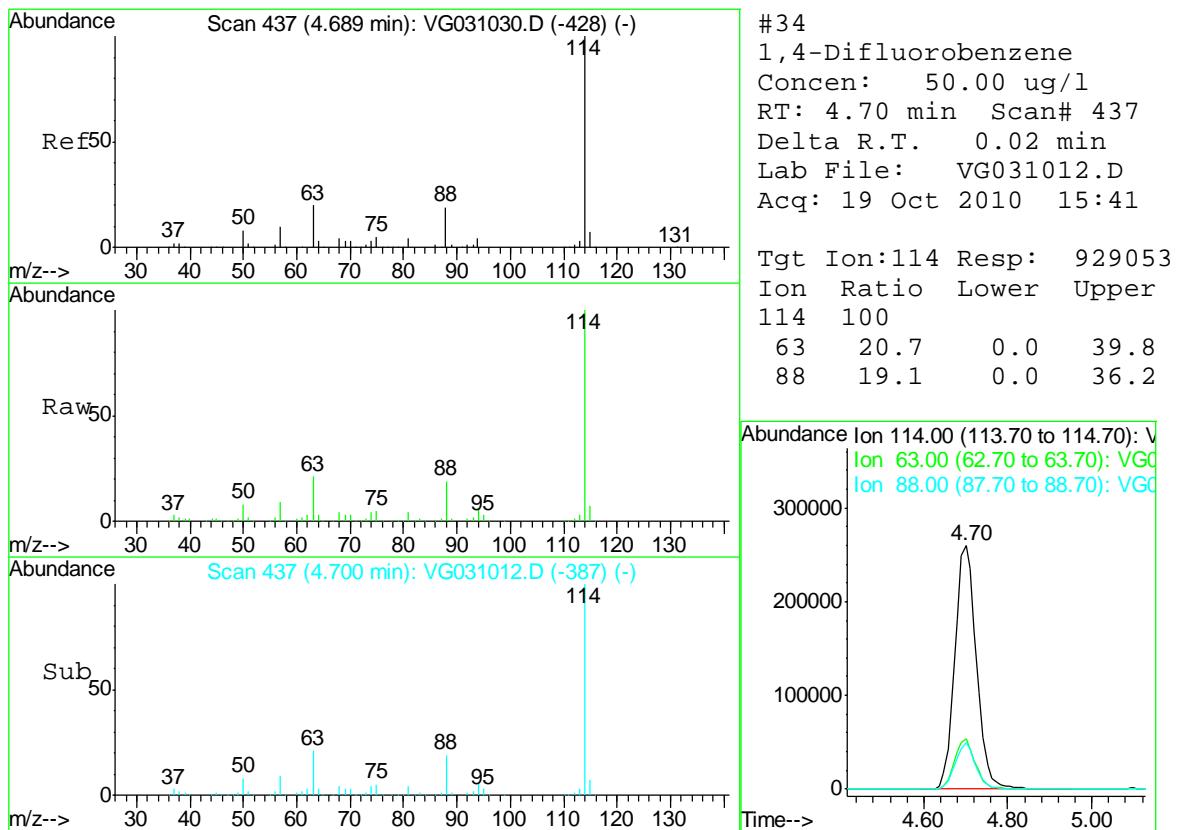
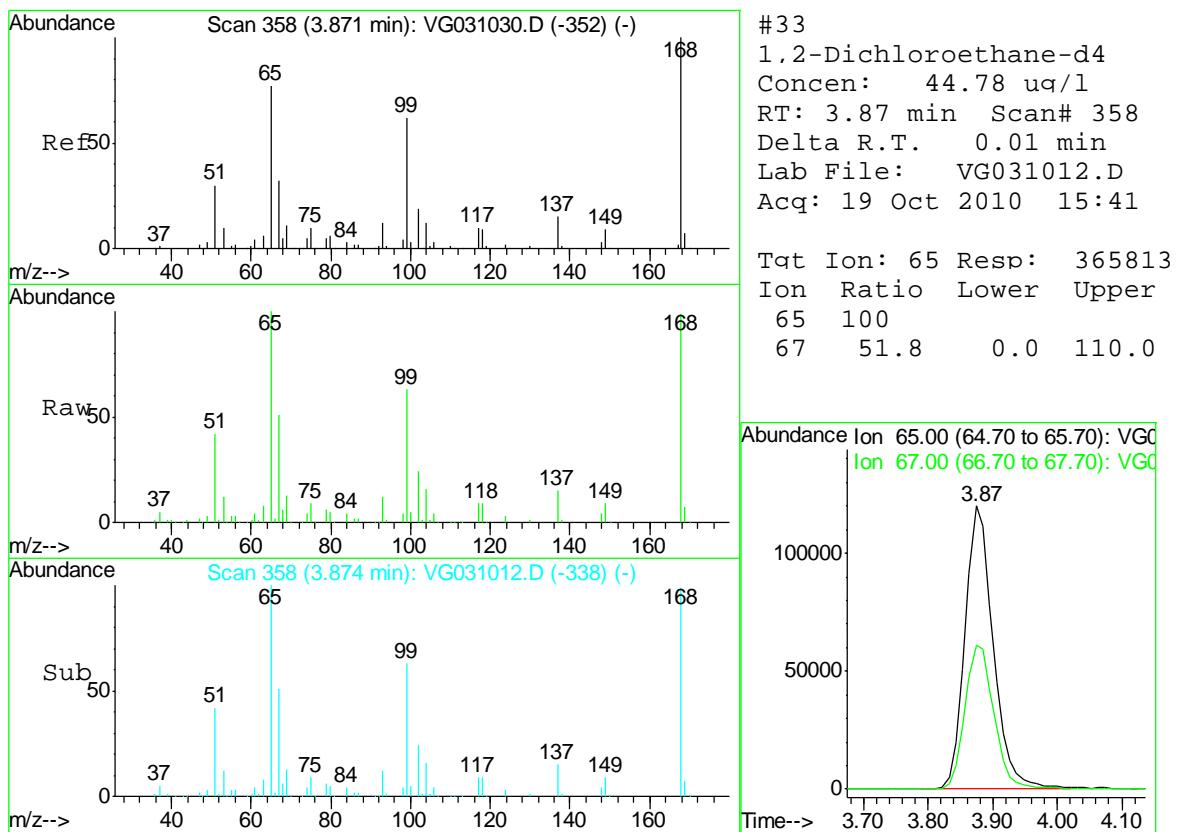
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Data File : VG031012.D  
Acq On : 19 Oct 2010 15:41  
Operator : PS  
Sample : B3902-29  
Misc : 5mL MSVOA G  
ALS Vial : 10 Sample Multiplier: 1

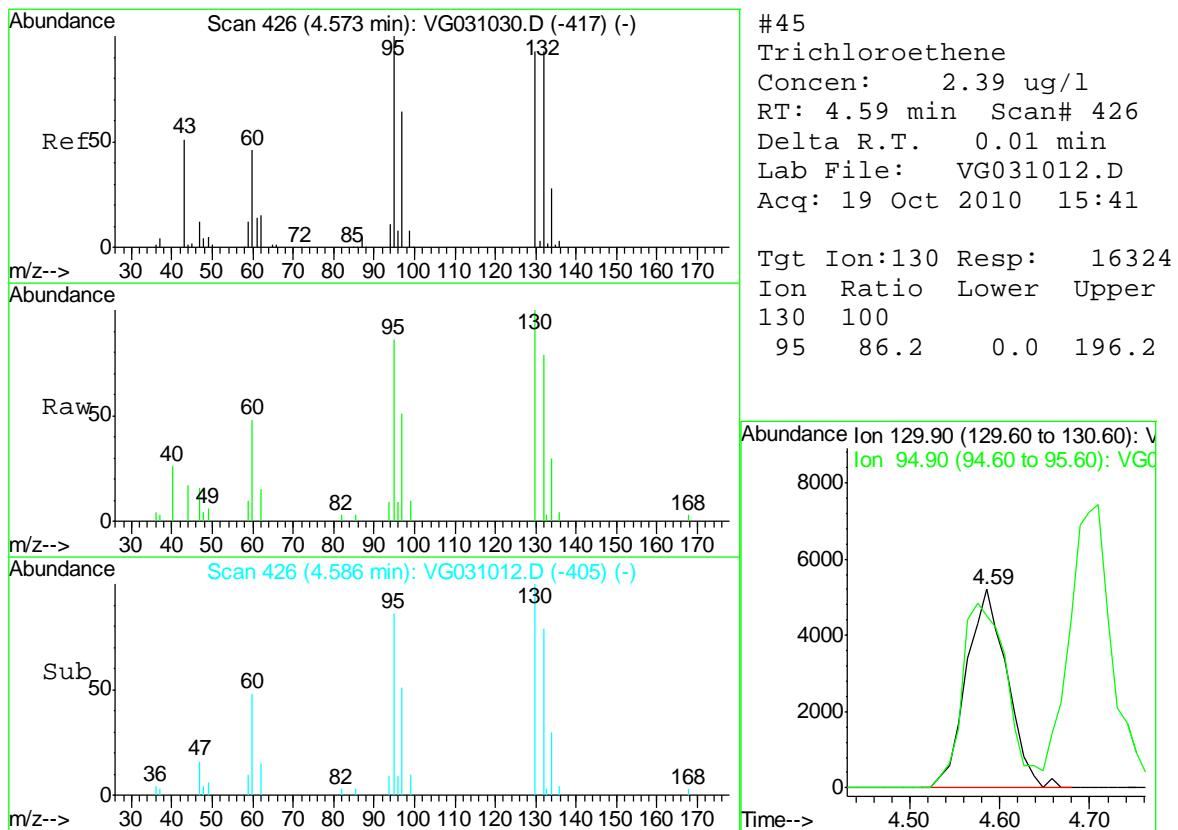
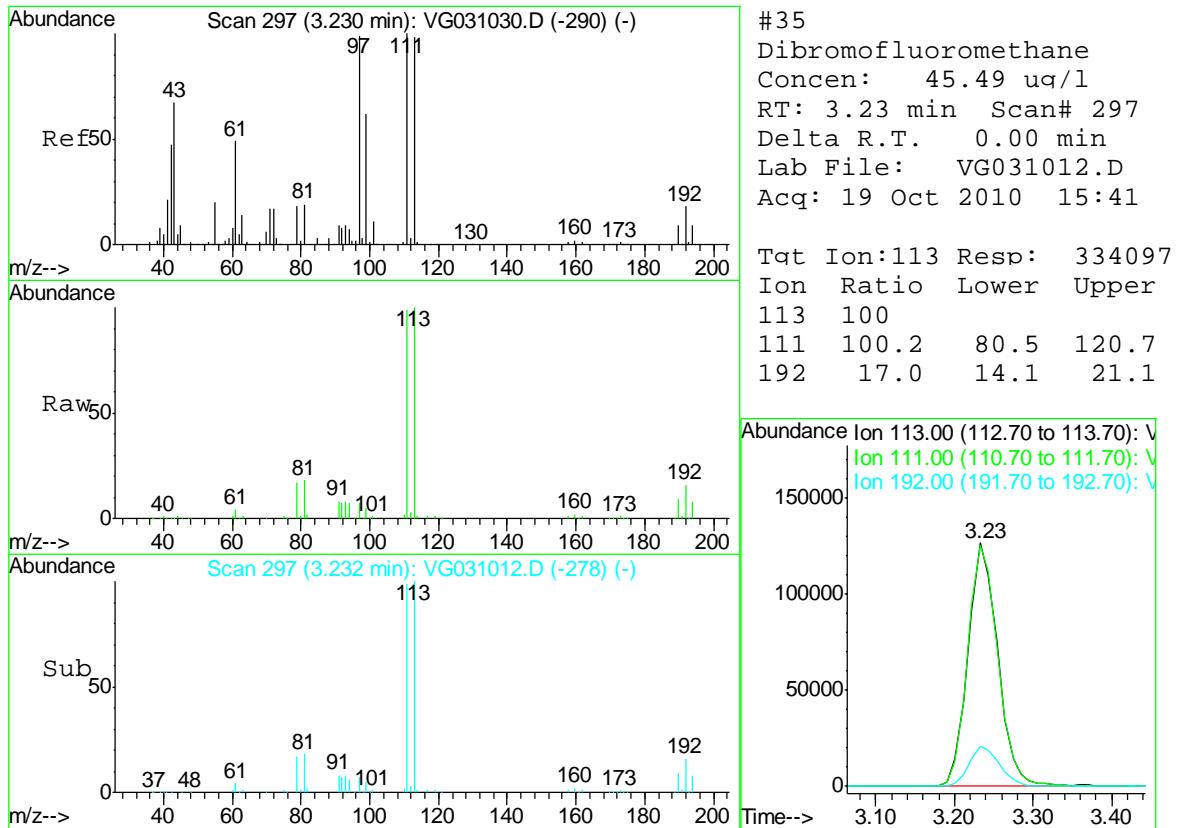
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Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

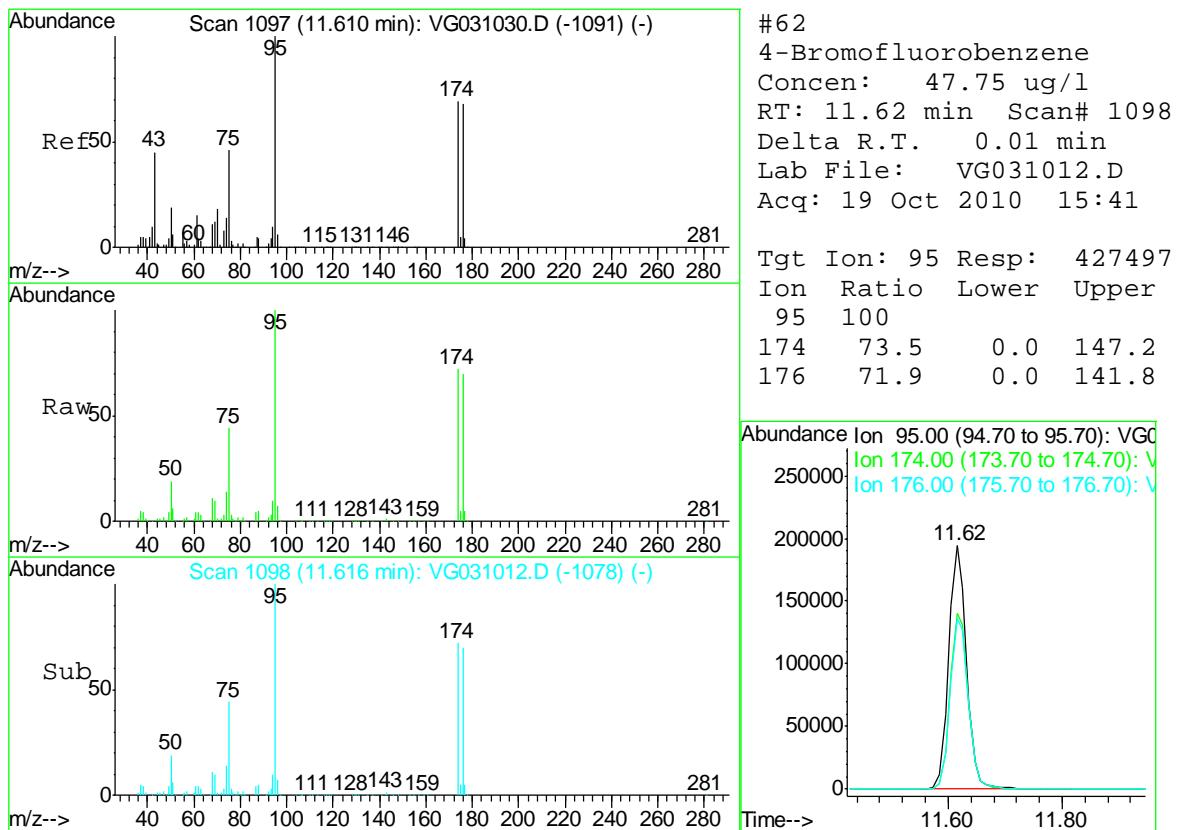
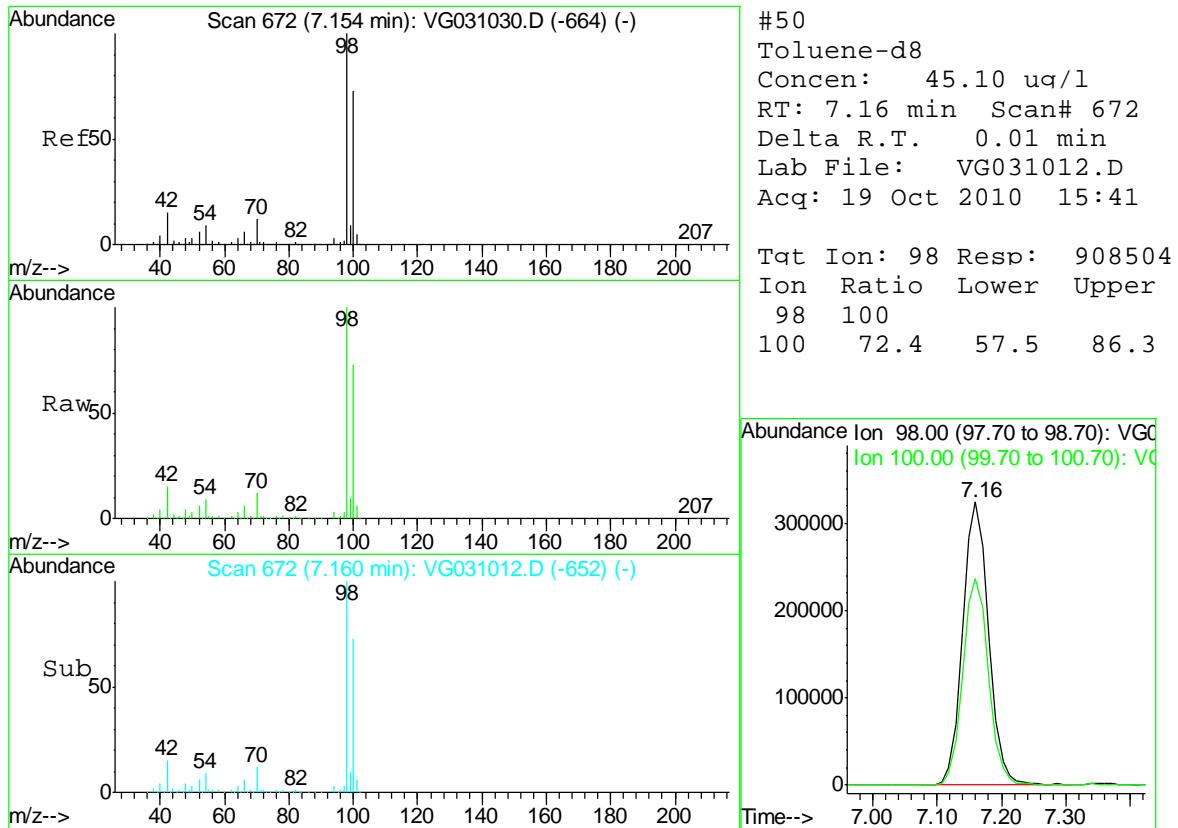


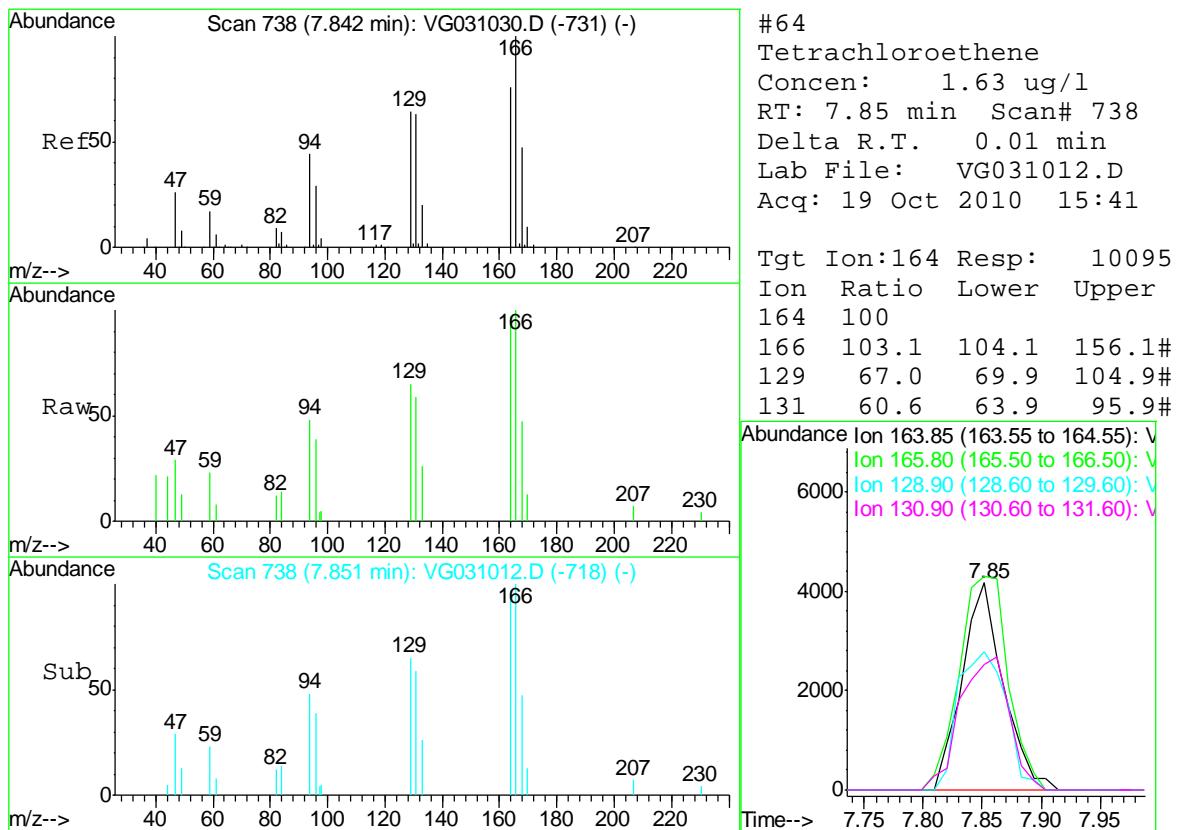
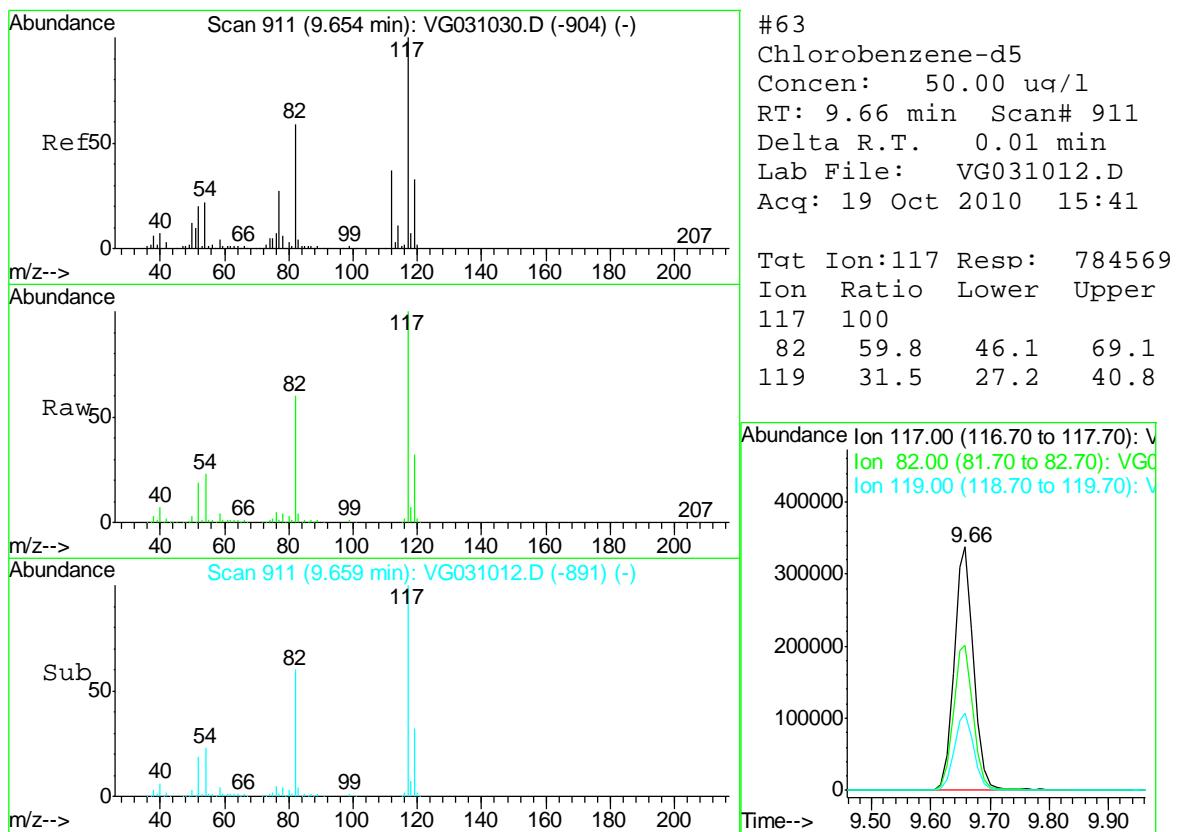


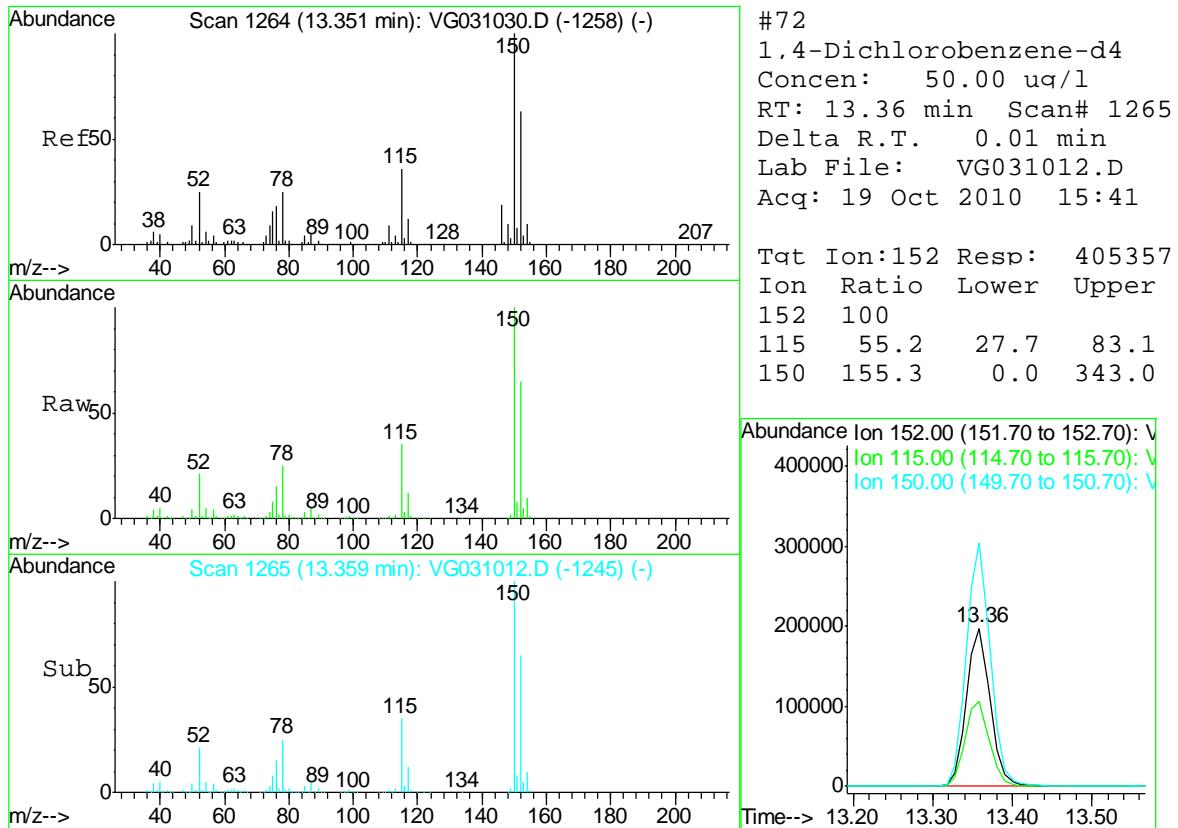












Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031012.D  
 Acq On : 19 Oct 2010 15:41  
 Operator : PS  
 Sample : B3902-29  
 Misc : 5mL MSVOA G  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 20 02:50:35 2010  
 Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.90	168	583245	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	4.70	114	929053	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.66	117	784569	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	405357	50.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	3.87	65	365813	44.78	ug/l	0.00
Spiked Amount	50.000		Recovery	=	89.56%	
35) Dibromofluoromethane	3.23	113	334097	45.49	ug/l	0.00
Spiked Amount	50.000		Recovery	=	90.98%	
50) Toluene-d8	7.16	98	908504	45.10	ug/l	0.01
Spiked Amount	50.000		Recovery	=	90.20%	
62) 4-Bromofluorobenzene	11.62	95	427497	47.75	ug/l	0.00
Spiked Amount	50.000		Recovery	=	95.50%	
<hr/>						
Target Compounds						
25) 1,1-Dichloroethane	2.28	63	39528	2.73	ug/l	98
28) cis-1,2-Dichloroethene	2.75	96	8183	0.81	ug/l	94
32) 1,1,1-Trichloroethane	3.22	97	32118	3.59	ug/l	94
45) Trichloroethene	4.59	130	16324	2.39	ug/l	88
64) Tetrachloroethene	7.85	164	10095	1.63	ug/l	# 78

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031012.D  
 Acq On : 19 Oct 2010 15:41  
 Operator : PS  
 Sample : B3902-29  
 Misc : 5mL MSVOA G  
 ALS Vial : 10 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

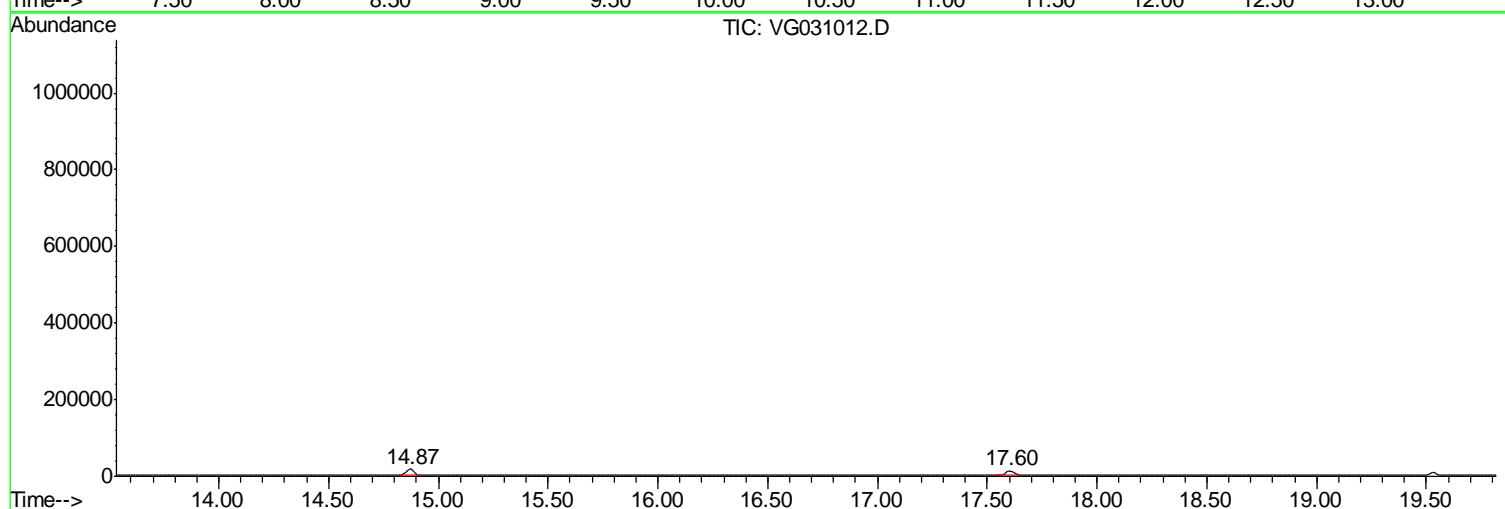
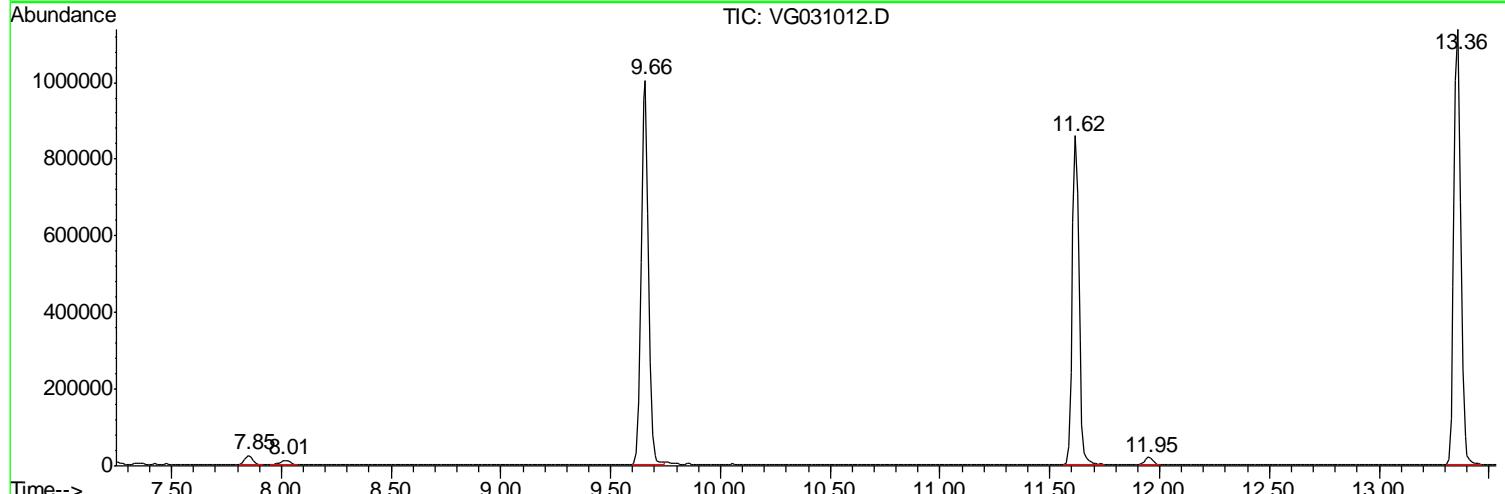
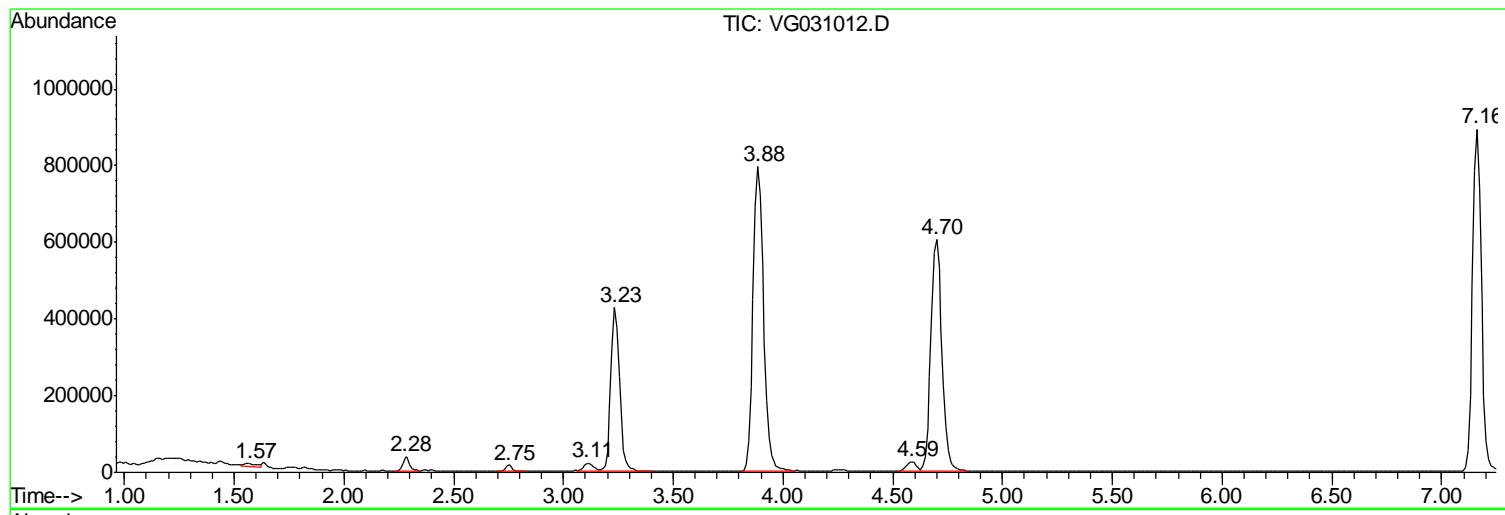
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.572	134	138	143	rVV3	7718	29625	1.11%	0.190%
2	2.279	202	206	212	rVB	37440	78240	2.93%	0.503%
3	2.751	246	251	258	rVB2	16061	37948	1.42%	0.244%
4	3.107	281	285	291	rBV	19213	60785	2.28%	0.391%
5	3.232	291	297	313	rVB	425714	1155909	43.33%	7.433%
6	3.885	352	359	375	rBV2	794940	2667602	100.00%	17.153%
7	4.586	420	426	430	rBV3	25257	85580	3.21%	0.550%
8	4.700	430	437	450	rVB	602340	2095294	78.55%	13.473%
9	7.160	664	672	684	rBV	893037	2500872	93.75%	16.081%
10	7.851	734	738	744	rVB3	25236	66138	2.48%	0.425%
11	8.008	747	753	759	rBV2	12003	41630	1.56%	0.268%
12	9.659	905	911	919	rBV	1003639	2365961	88.69%	15.213%
13	11.616	1093	1098	1110	rBV	856932	1877602	70.39%	12.073%
14	11.949	1126	1130	1135	rVB2	18976	50660	1.90%	0.326%
15	13.359	1260	1265	1275	rBV	1134377	2365713	88.68%	15.212%
16	14.873	1405	1410	1414	rVB	17277	40802	1.53%	0.262%
17	17.599	1665	1671	1675	rBV2	11442	31613	1.19%	0.203%

Sum of corrected areas: 15551974

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031012.D  
Acq On : 19 Oct 2010 15:41  
Operator : PS  
Sample : B3902-29  
Misc : 5mL MSVOA G  
ALS Vial : 10 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031012.D  
Acq On : 19 Oct 2010 15:41  
Operator : PS  
Sample : B3902-29  
Misc : 5mL MSVOA\_G  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031012.D  
Acq On : 19 Oct 2010 15:41  
Operator : PS  
Sample : B3902-29  
Misc : 5mL MSVOA\_G  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-DUPLICATE-02	SDG No.:	B3902
Lab Sample ID:	B3902-30	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031013.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	0.98	J	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	2.1		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	11		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-DUPLICATE-02	SDG No.:	B3902
Lab Sample ID:	B3902-30	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031013.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	44.2		66 - 150		88%	SPK: 50
1868-53-7	Dibromofluoromethane	44.2		76 - 130		88%	SPK: 50
2037-26-5	Toluene-d8	45.9		78 - 121		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.1		70 - 131		96%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	552899		3.89			
540-36-3	1,4-Difluorobenzene	862403		4.7			
3114-55-4	Chlorobenzene-d5	741525		9.66			
3855-82-1	1,4-Dichlorobenzene-d4	393822		13.35			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

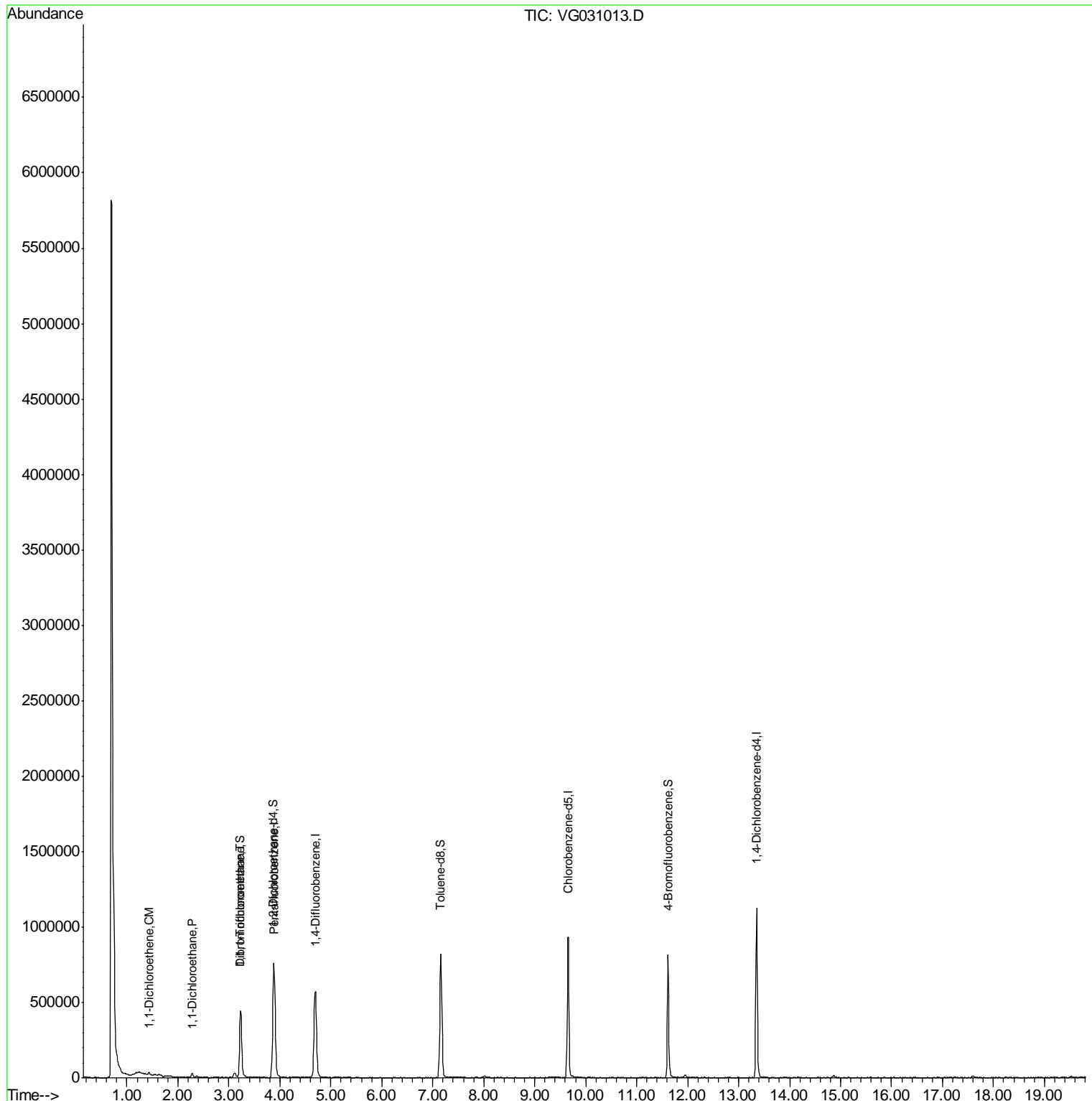
N = Presumptive Evidence of a Compound

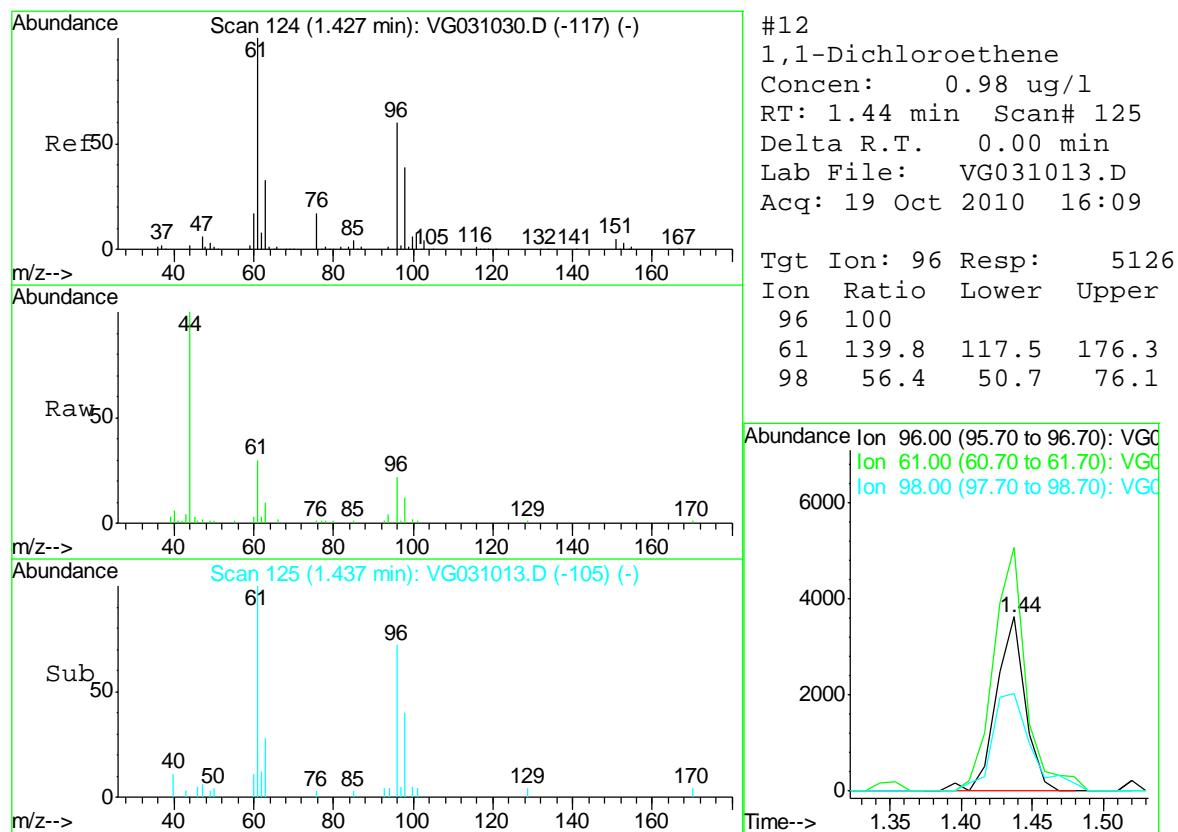
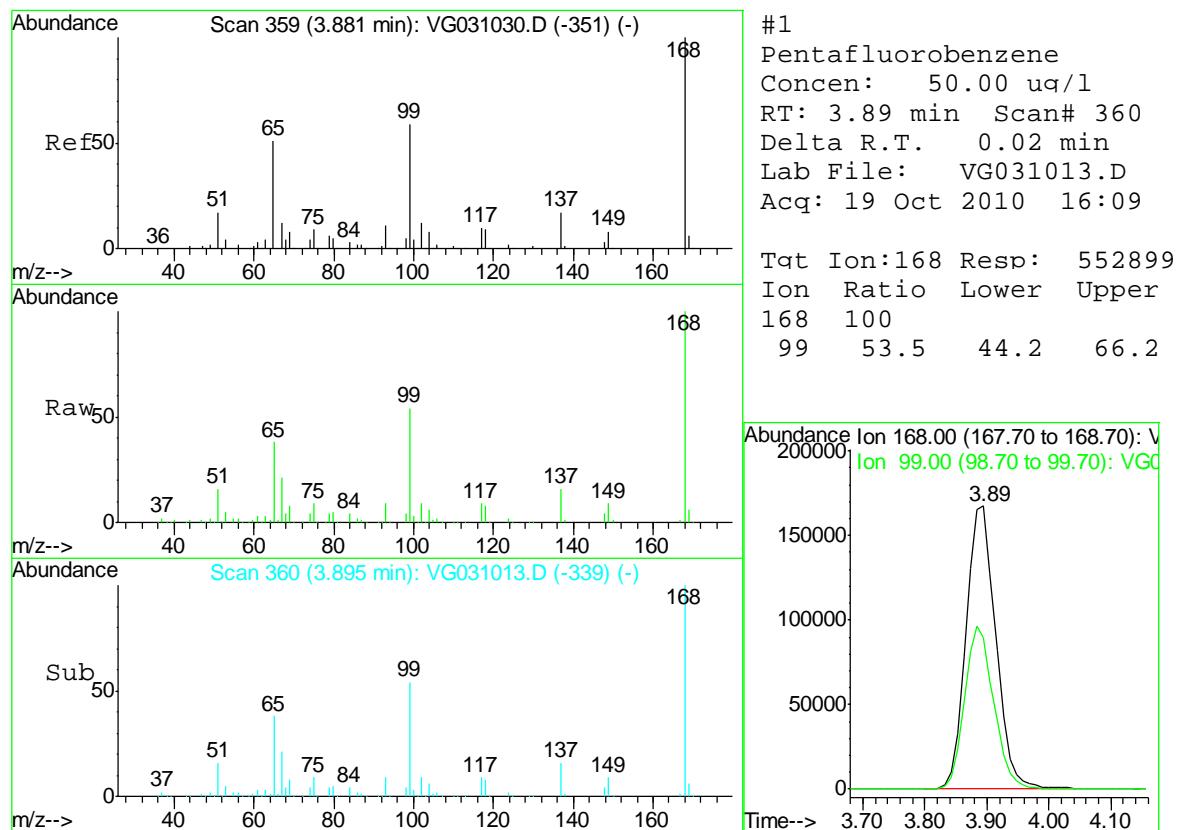
\* = Values outside of QC limits

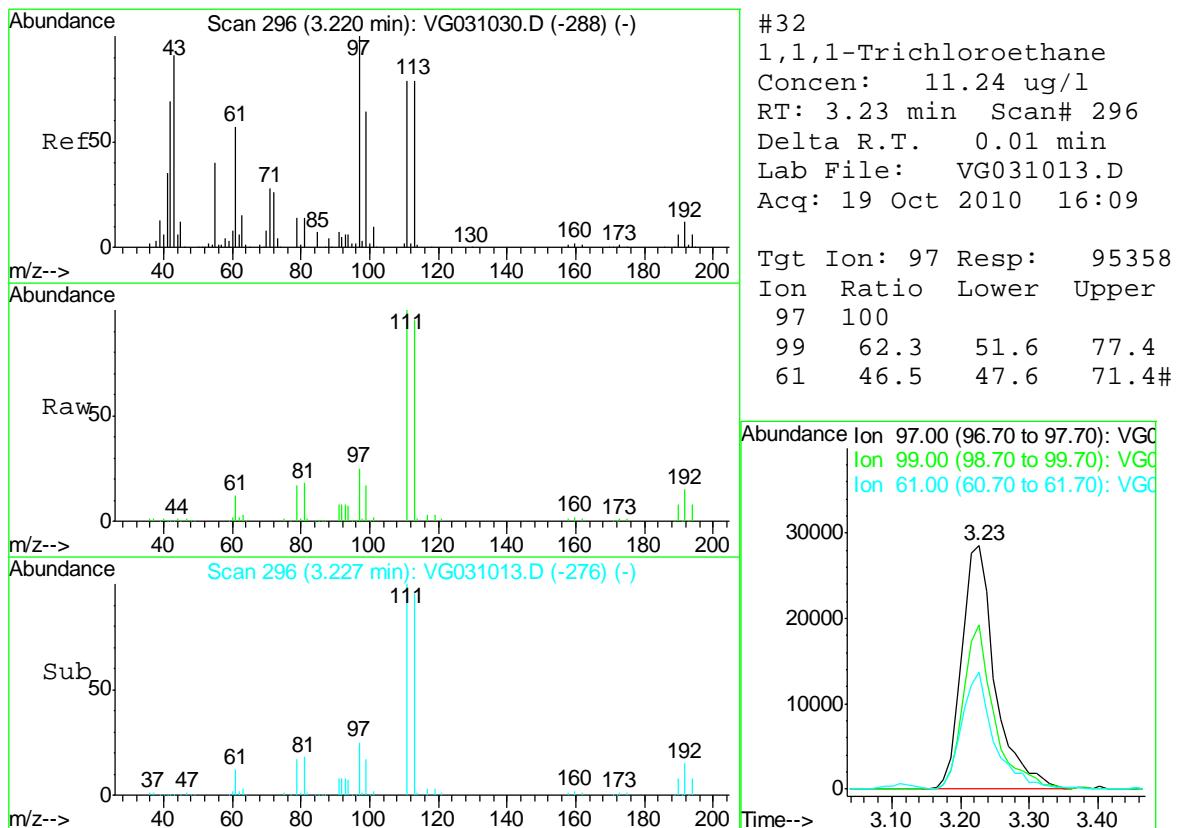
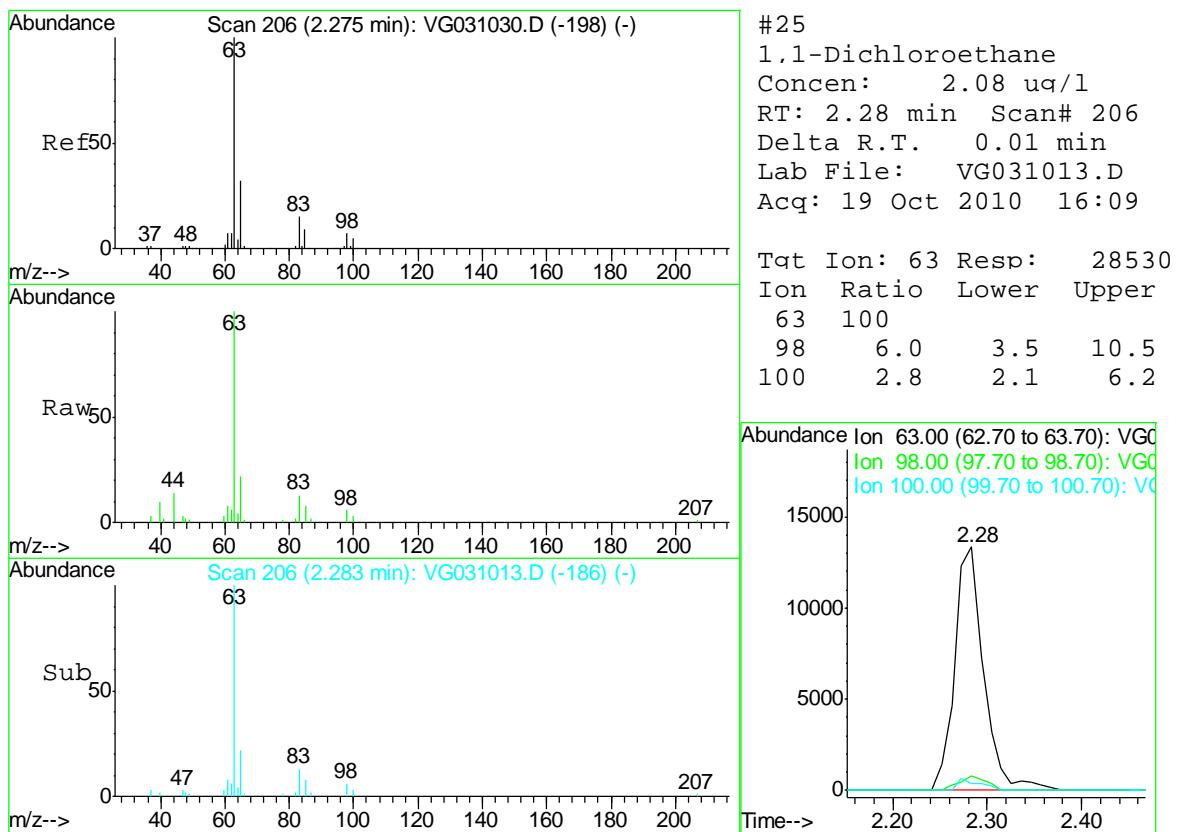
D = Dilution

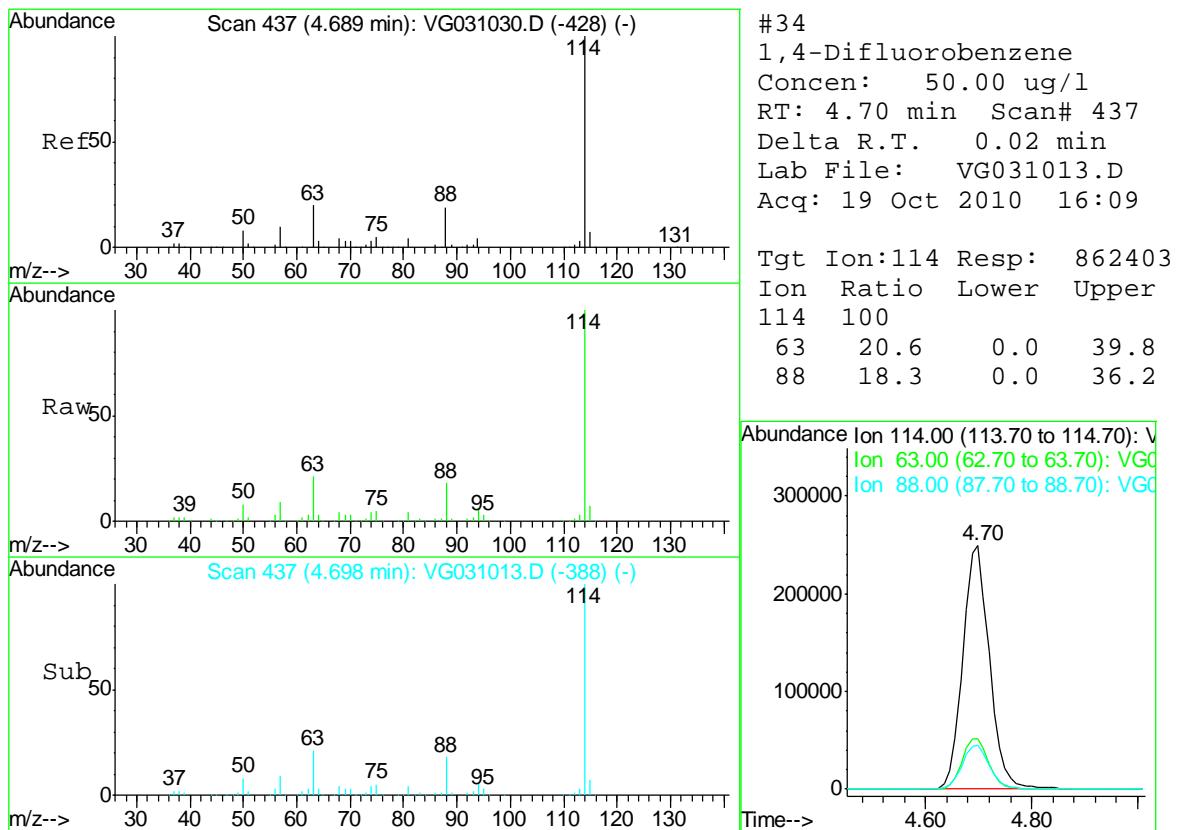
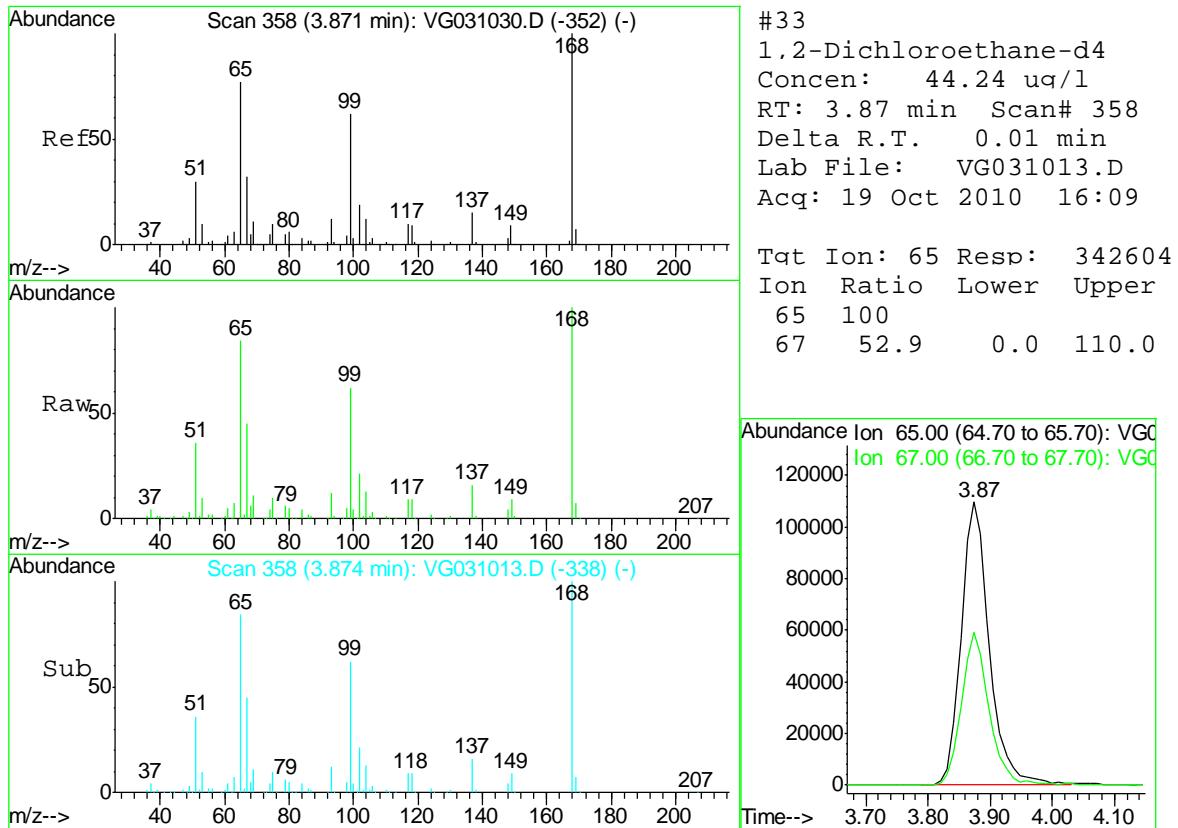
Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031013.D  
Acq On : 19 Oct 2010 16:09  
Operator : PS  
Sample : B3902-30  
Misc : 5mL MSVOA G  
ALS Vial : 11 Sample Multiplier: 1

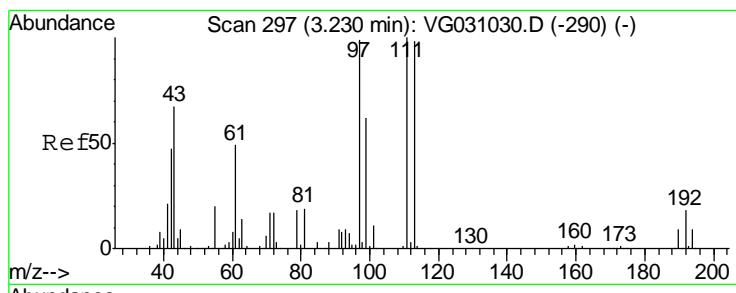
Ouant Time: Oct 20 02:52:47 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration





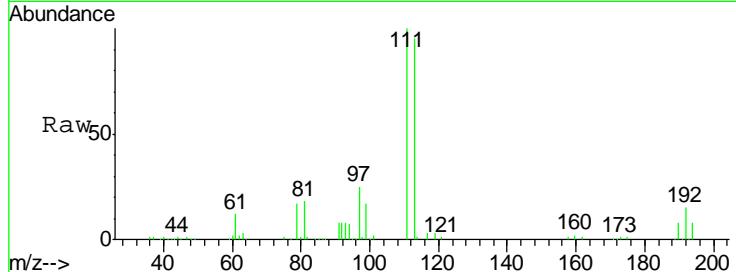




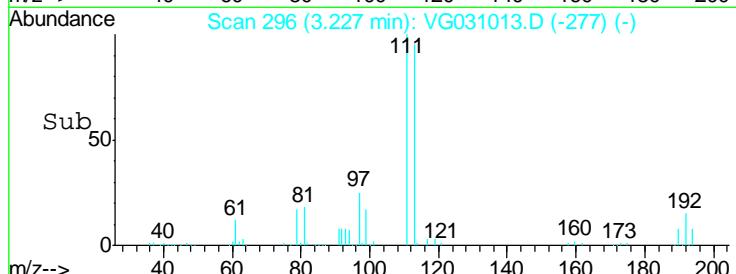


#35  
Dibromofluoromethane  
Concen: 44.24 ug/l  
RT: 3.23 min Scan# 296  
Delta R.T. -0.00 min  
Lab File: VG031013.D  
Acq: 19 Oct 2010 16:09

Tgt Ion: 113 Resp: 301618  
Ion Ratio Lower Upper  
113 100  
111 101.9 80.5 120.7  
192 17.2 14.1 21.1

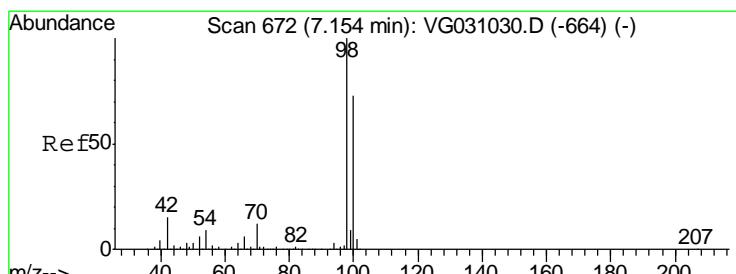


Abundance Ion 113.00 (112.70 to 113.70): ✓  
Ion 111.00 (110.70 to 111.70): ✓  
Ion 192.00 (191.70 to 192.70): ✓

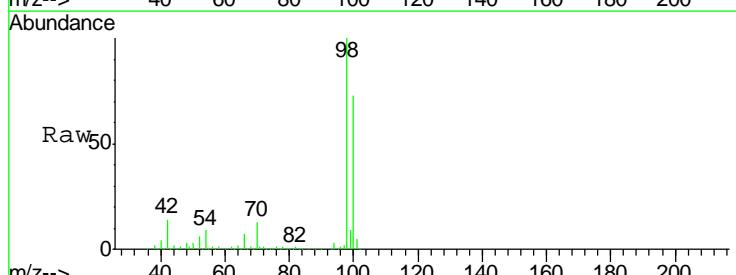


#50  
Toluene-d8  
Concen: 45.86 ug/l  
RT: 7.15 min Scan# 672  
Delta R.T. 0.01 min  
Lab File: VG031013.D  
Acq: 19 Oct 2010 16:09

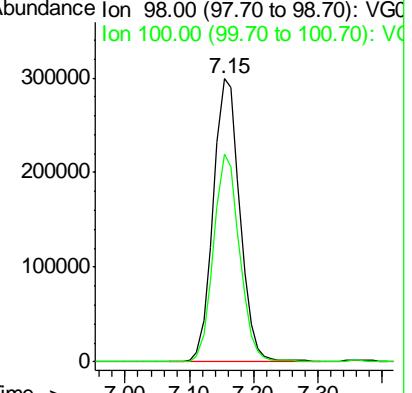
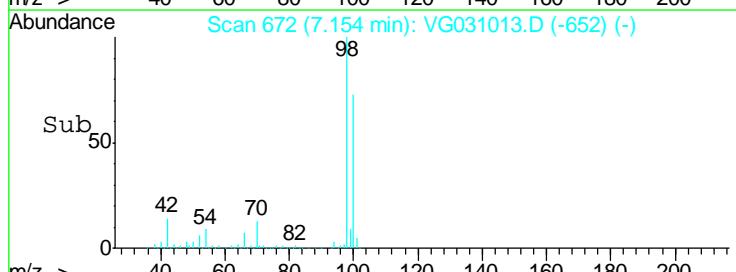
Tgt Ion: 98 Resp: 857515  
Ion Ratio Lower Upper  
98 100  
100 71.7 57.5 86.3

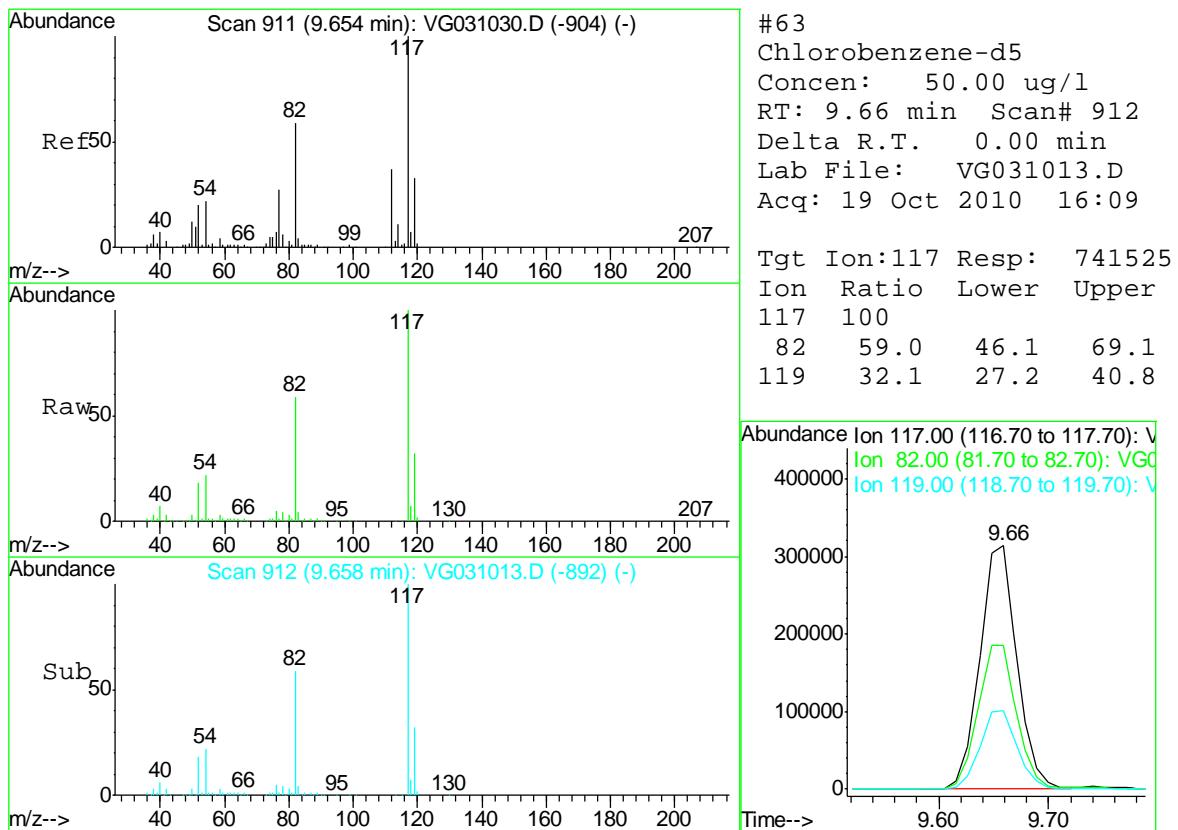
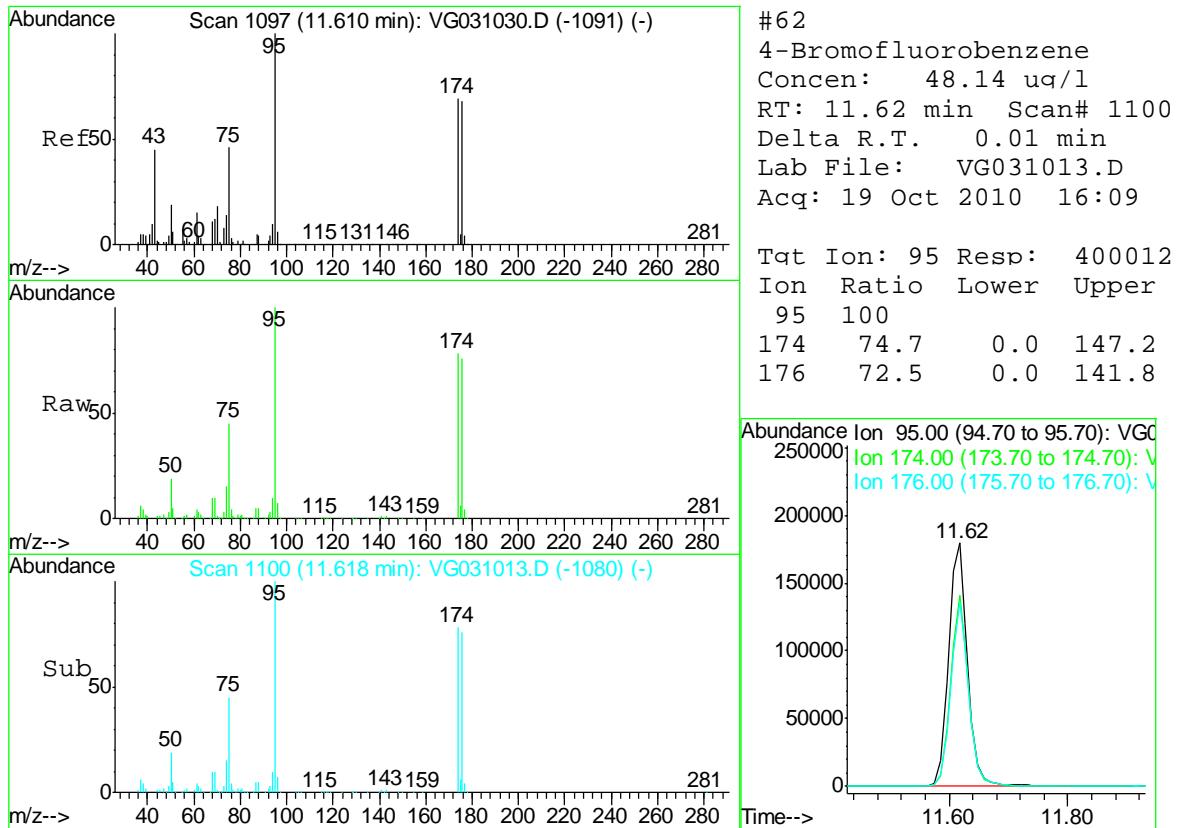


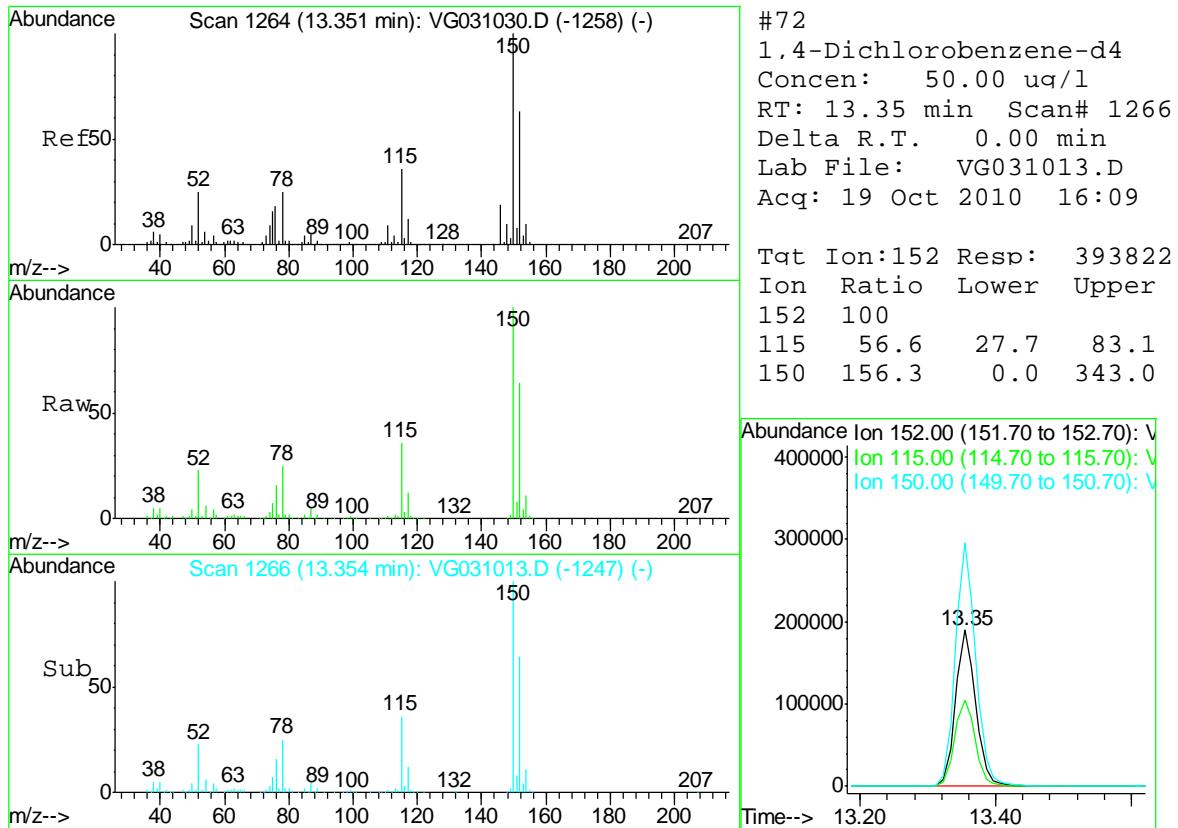
Abundance Ion 98.00 (97.70 to 98.70): VG031013.D  
Ion 100.00 (99.70 to 100.70): VG031013.D



Abundance Ion 98.00 (97.70 to 98.70): VG031013.D  
Ion 100.00 (99.70 to 100.70): VG031013.D







Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031013.D  
 Acq On : 19 Oct 2010 16:09  
 Operator : PS  
 Sample : B3902-30  
 Misc : 5mL MSVOA G  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 20 02:52:47 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	552899	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	4.70	114	862403	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.66	117	741525	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	393822	50.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	3.87	65	342604	44.24	ug/l	0.00
Spiked Amount	50.000		Recovery	=	88.48%	
35) Dibromofluoromethane	3.23	113	301618	44.24	ug/l	0.00
Spiked Amount	50.000		Recovery	=	88.48%	
50) Toluene-d8	7.15	98	857515	45.86	ug/l	0.00
Spiked Amount	50.000		Recovery	=	91.72%	
62) 4-Bromofluorobenzene	11.62	95	400012	48.14	ug/l	0.01
Spiked Amount	50.000		Recovery	=	96.28%	
<hr/>						
Target Compounds						
12) 1,1-Dichloroethene	1.44	96	5126	0.98	ug/l	93
25) 1,1-Dichloroethane	2.28	63	28530	2.08	ug/l	97
32) 1,1,1-Trichloroethane	3.23	97	95358	11.24	ug/l	# 90

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031013.D  
 Acq On : 19 Oct 2010 16:09  
 Operator : PS  
 Sample : B3902-30  
 Misc : 5mL MSVOA G  
 ALS Vial : 11 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

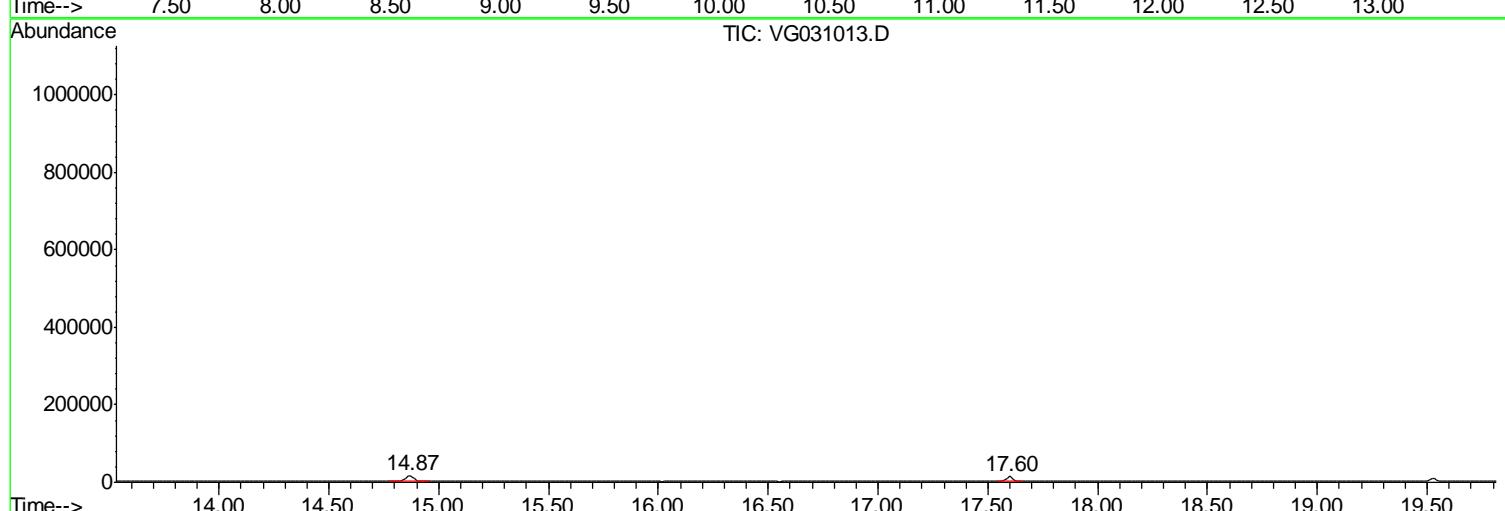
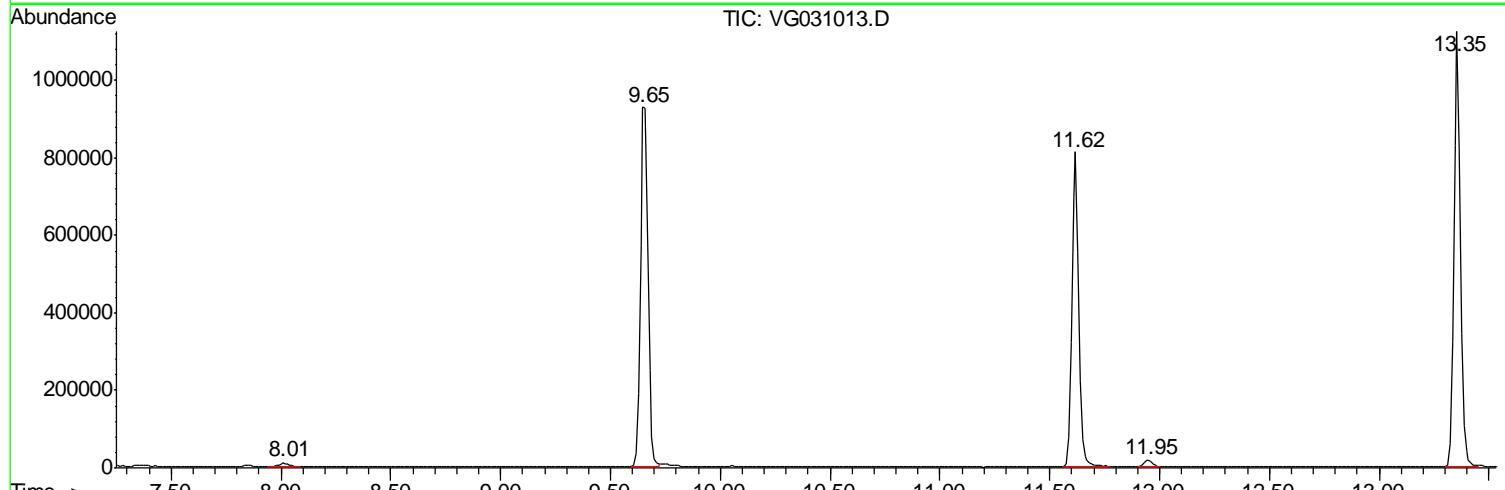
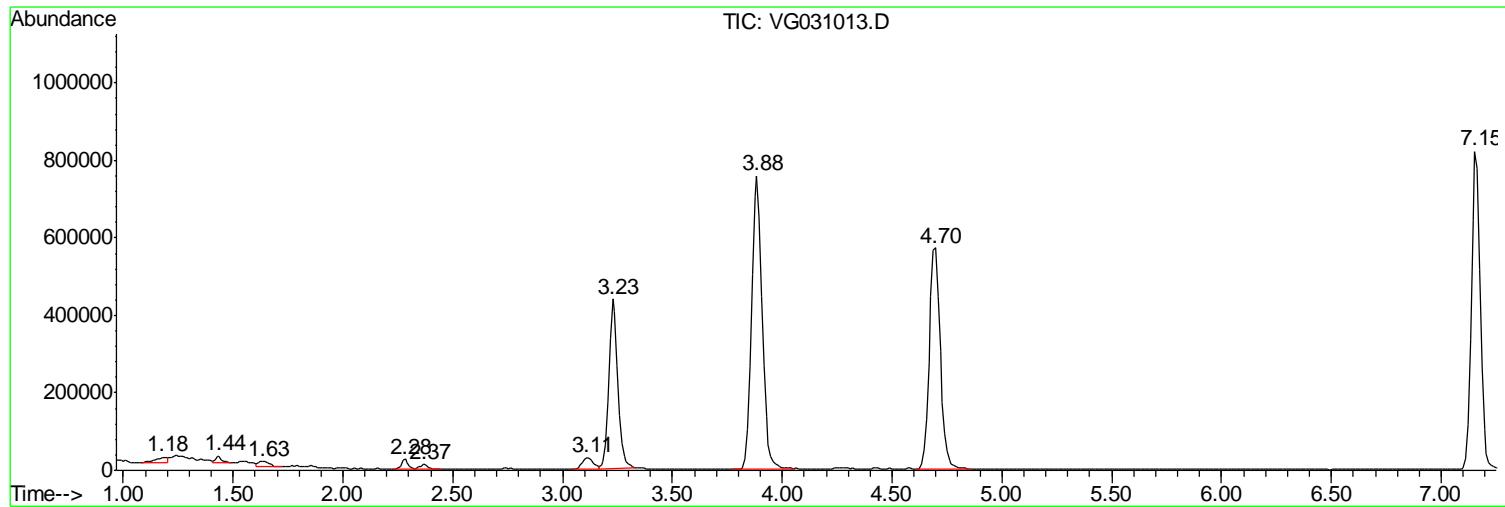
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.178	91	100	102	rBV7	14981	59276	2.35%	0.396%
2	1.437	122	125	130	rVB2	19010	40964	1.62%	0.274%
3	1.634	141	144	152	rVB6	13792	46863	1.85%	0.313%
4	2.283	201	206	210	rBV	24913	55208	2.18%	0.369%
5	2.368	210	214	221	rVB	11864	29672	1.17%	0.198%
6	3.112	279	285	290	rBV2	29380	100497	3.98%	0.672%
7	3.227	290	296	306	rVB2	436429	1225011	48.47%	8.193%
8	3.884	349	359	375	rBV2	758436	2527245	100.00%	16.903%
9	4.698	429	437	452	rBV	571825	1987885	78.66%	13.296%
10	7.154	665	672	685	rBV	820754	2341268	92.64%	15.659%
11	8.010	747	754	761	rVB3	11744	43027	1.70%	0.288%
12	9.648	906	911	918	rBV	927758	2254313	89.20%	15.078%
13	11.618	1095	1100	1115	rBV	812827	1774045	70.20%	11.865%
14	11.950	1127	1132	1137	rVB2	17711	45340	1.79%	0.303%
15	13.354	1261	1266	1275	rBV	1123994	2342464	92.69%	15.667%
16	14.870	1402	1411	1419	rVB	14991	46128	1.83%	0.309%
17	17.598	1667	1672	1677	rVB	13254	32281	1.28%	0.216%

Sum of corrected areas: 14951487

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031013.D  
Acq On : 19 Oct 2010 16:09  
Operator : PS  
Sample : B3902-30  
Misc : 5mL MSVOA G  
ALS Vial : 11 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031013.D  
Acq On : 19 Oct 2010 16:09  
Operator : PS  
Sample : B3902-30  
Misc : 5mL MSVOA\_G  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031013.D  
Acq On : 19 Oct 2010 16:09  
Operator : PS  
Sample : B3902-30  
Misc : 5mL MSVOA\_G  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/07/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-TRIPBLANK	SDG No.:	B3902
Lab Sample ID:	B3902-31	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	Final Vol: 5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024096.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorodifluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/07/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-TRIPBLANK	SDG No.:	B3902
Lab Sample ID:	B3902-31	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024096.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.4		66 - 150		93%	SPK: 50
1868-53-7	Dibromofluoromethane	48.1		76 - 130		96%	SPK: 50
2037-26-5	Toluene-d8	49.3		78 - 121		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.8		70 - 131		102%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1396590	3.24				
540-36-3	1,4-Difluorobenzene	2624420	3.65				
3114-55-4	Chlorobenzene-d5	2599890	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1399060	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

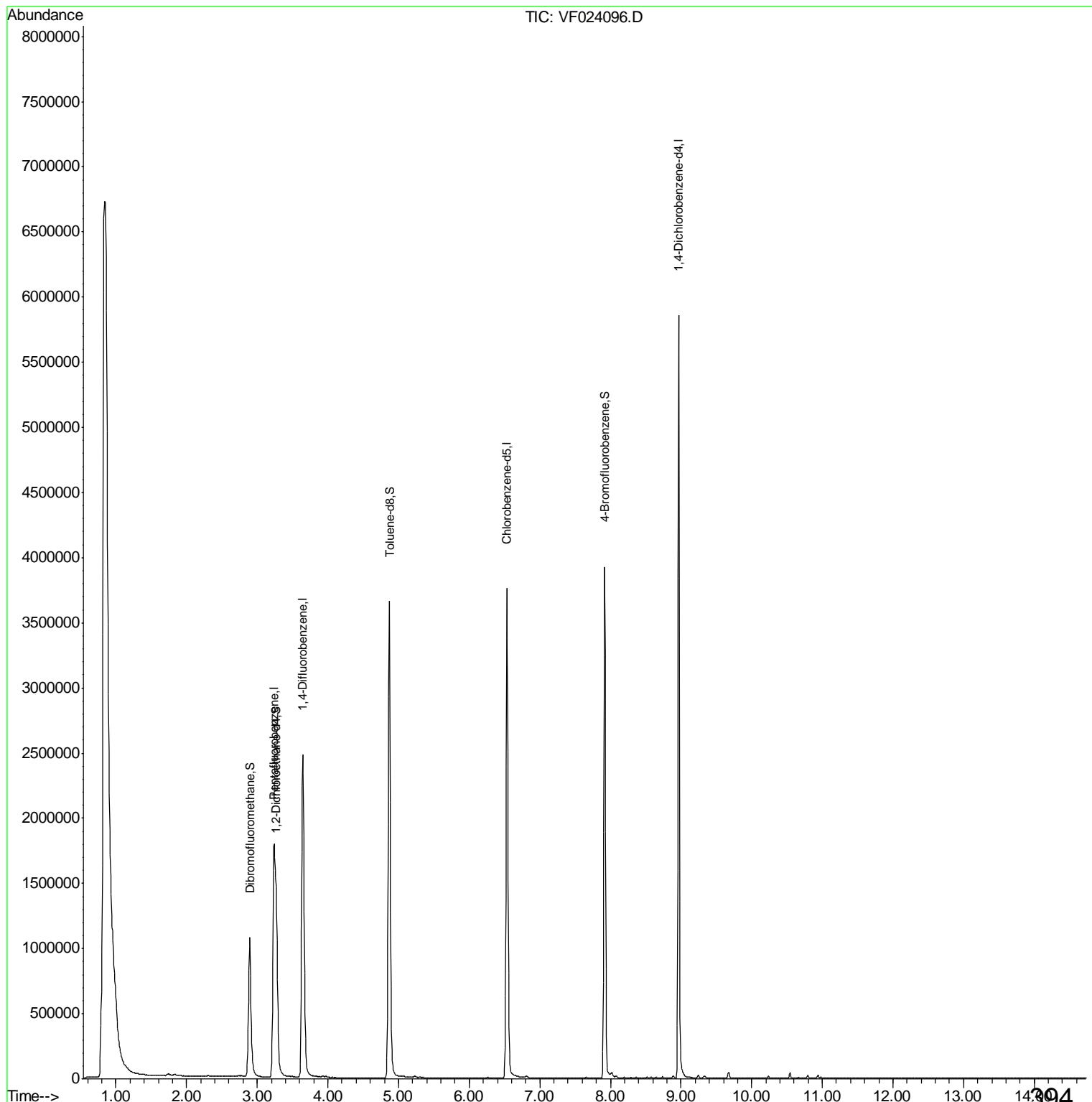
N = Presumptive Evidence of a Compound

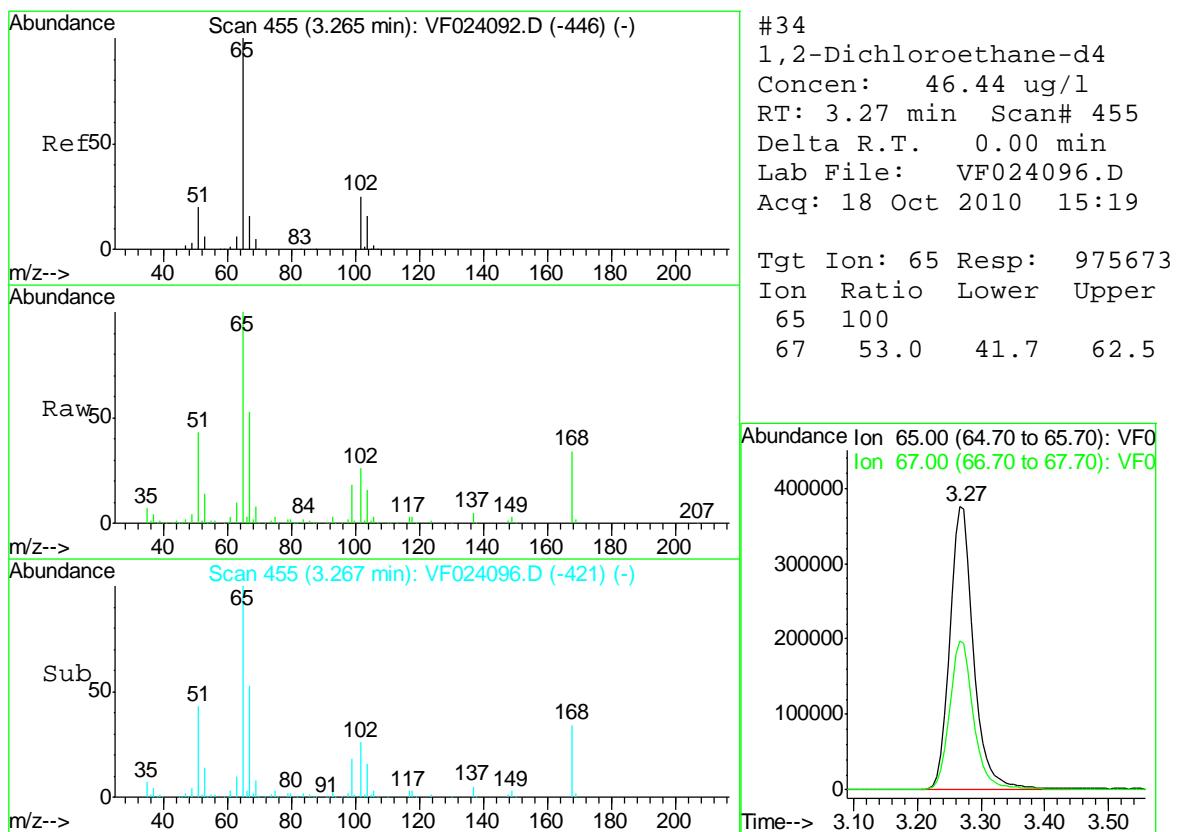
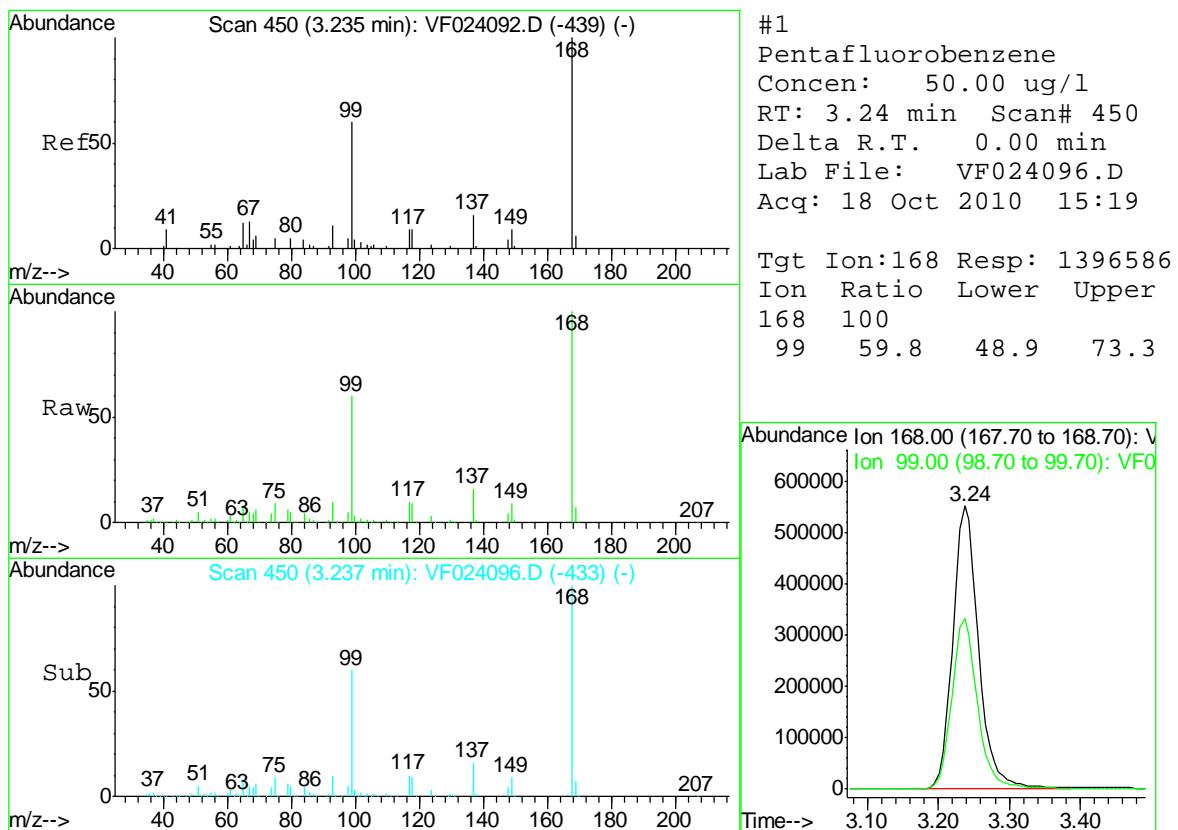
\* = Values outside of QC limits

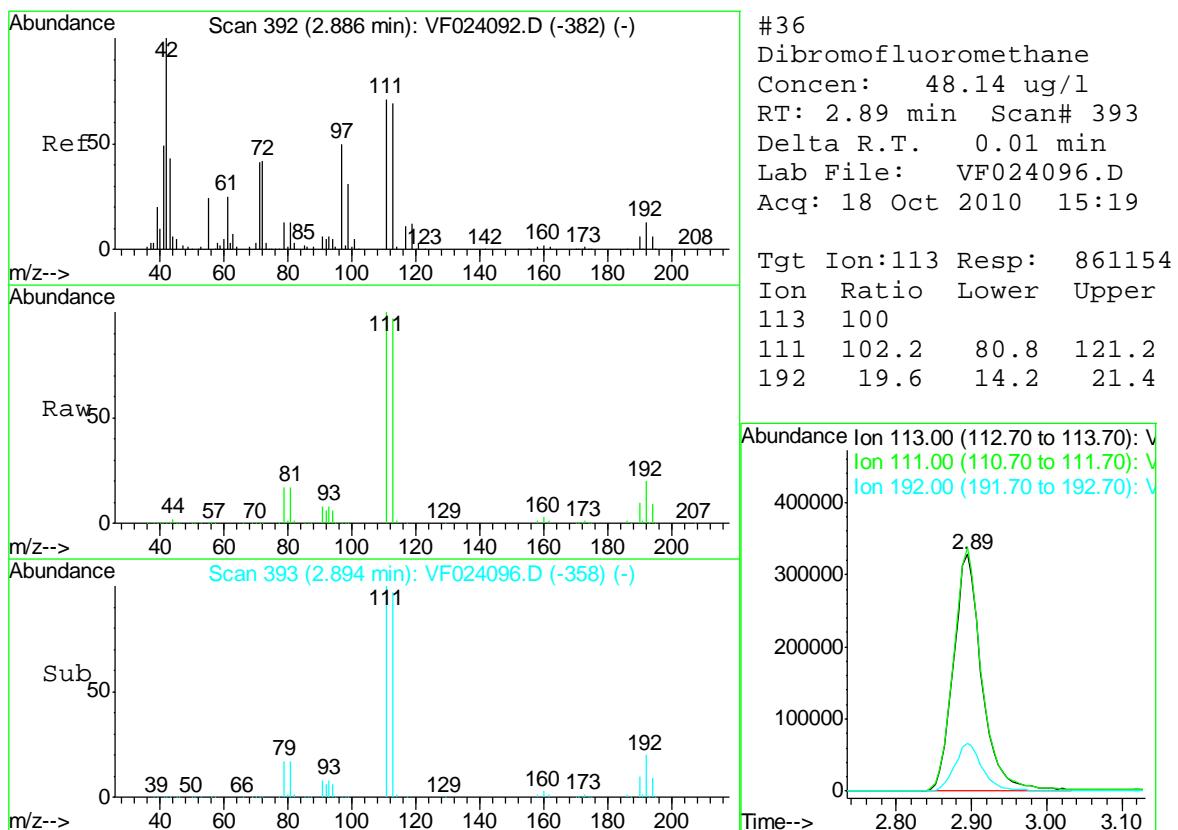
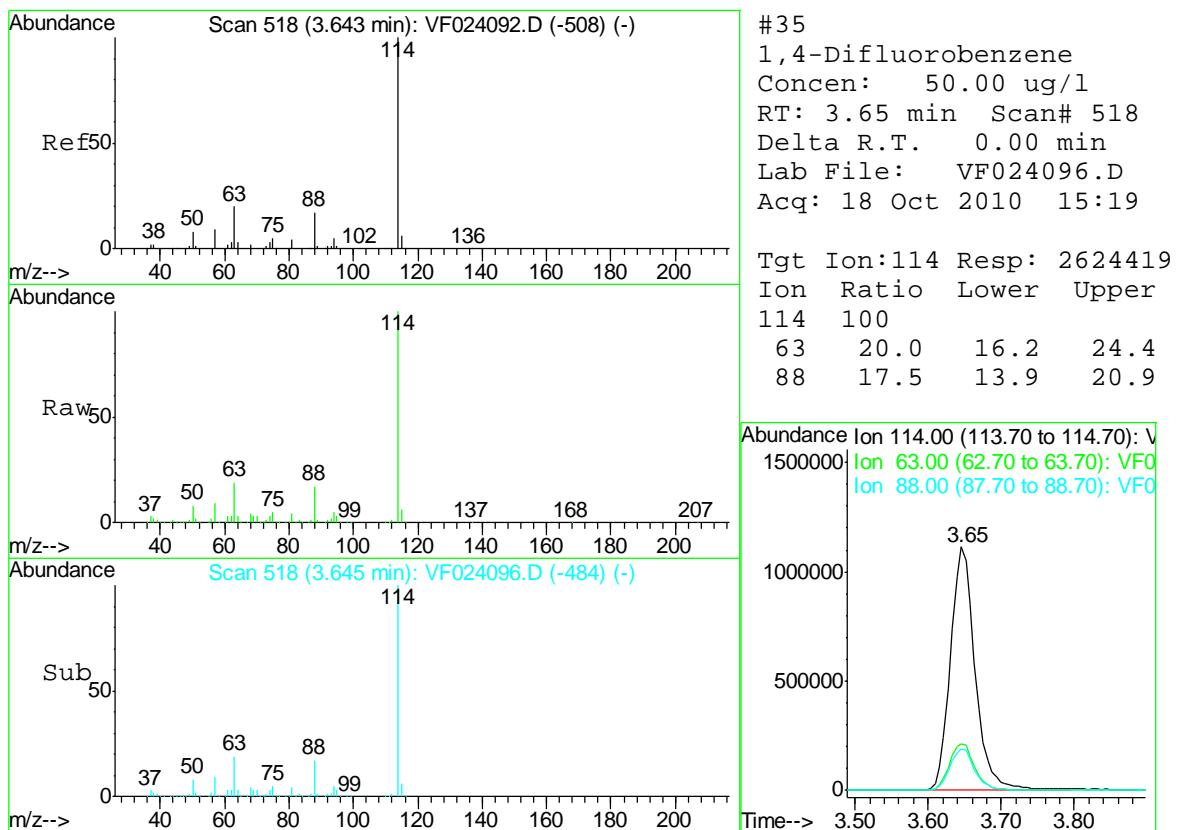
D = Dilution

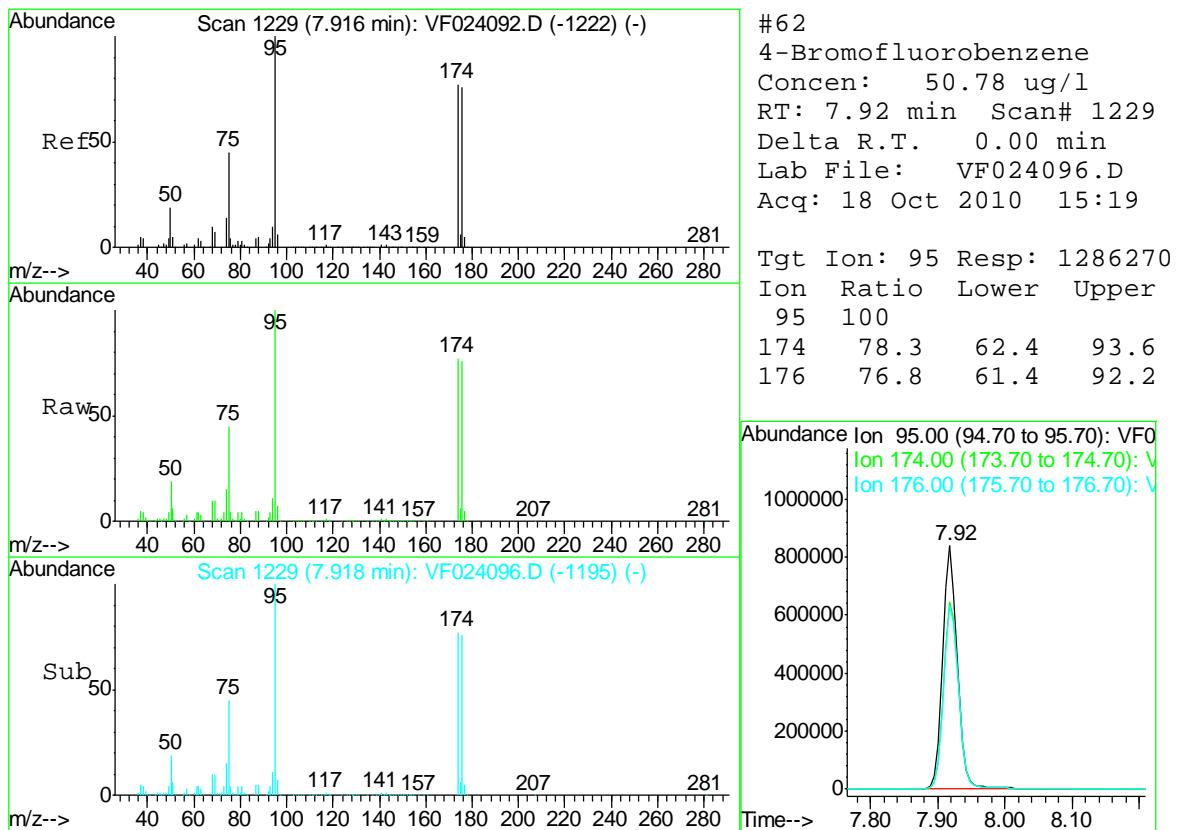
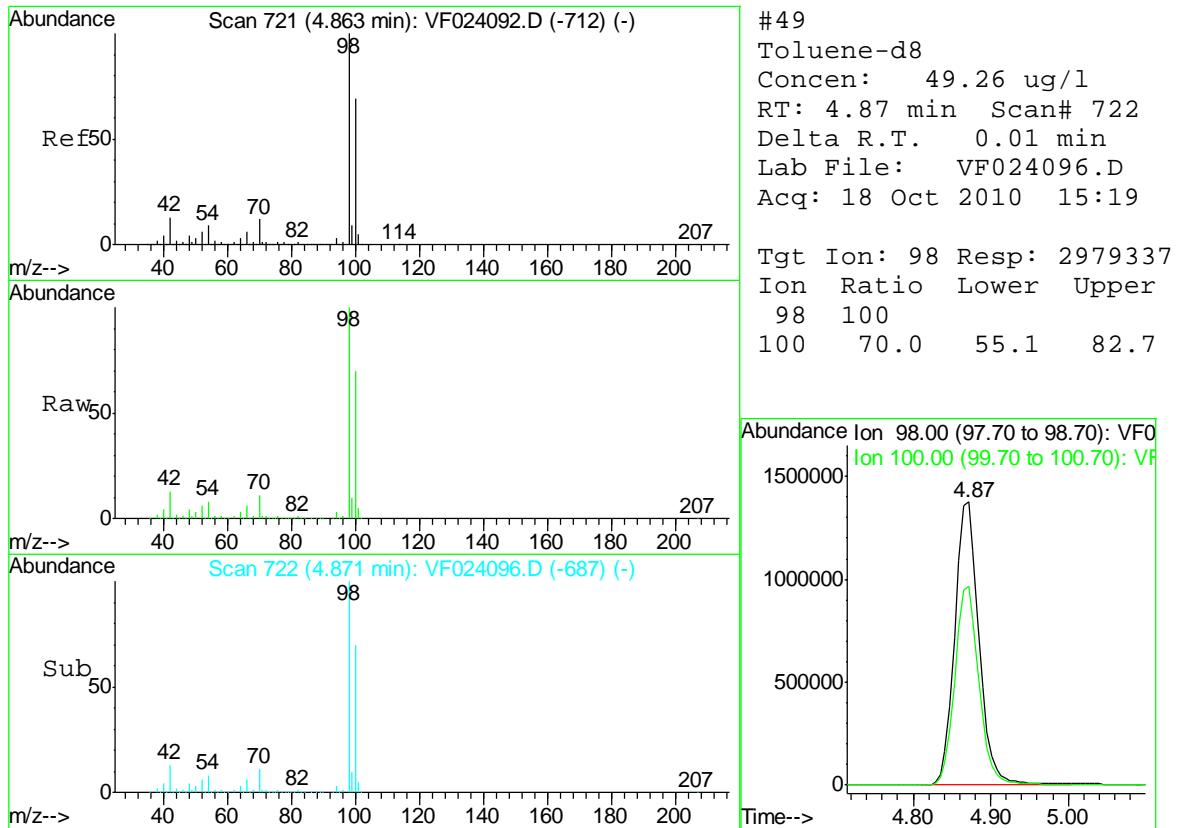
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024096.D  
Acq On : 18 Oct 2010 15:19  
Operator : MS  
Sample : B3902-31  
Misc : 5.0mL,MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

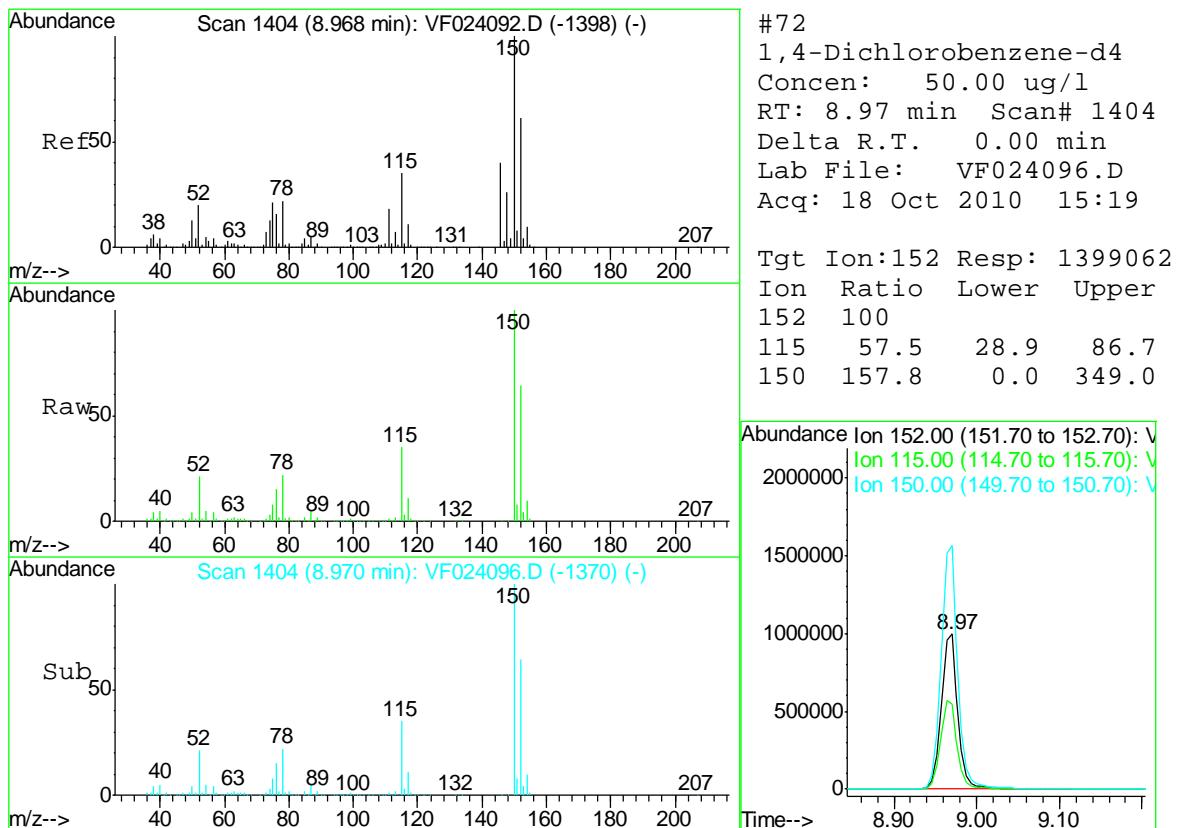
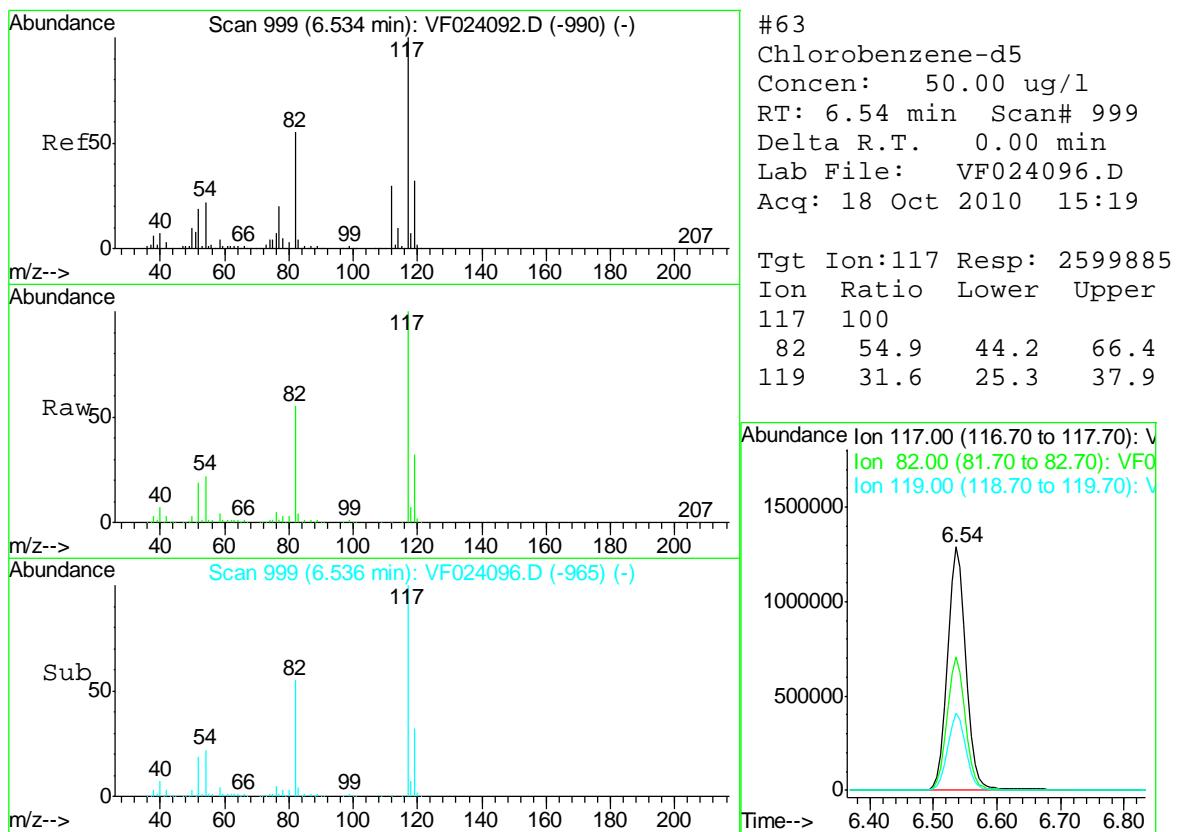
Quant Time: Oct 18 15:39:09 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024096.D  
 Acq On : 18 Oct 2010 15:19  
 Operator : MS  
 Sample : B3902-31  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 18 15:39:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1396586	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2624419	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2599885	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1399062	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	975673	46.44	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	92.88%	
36) Dibromofluoromethane	2.89	113	861154	48.14	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	96.28%	
49) Toluene-d8	4.87	98	2979337	49.26	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	98.52%	
62) 4-Bromofluorobenzene	7.92	95	1286270	50.78	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	101.56%	

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024096.D  
 Acq On : 18 Oct 2010 15:19  
 Operator : MS  
 Sample : B3902-31  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

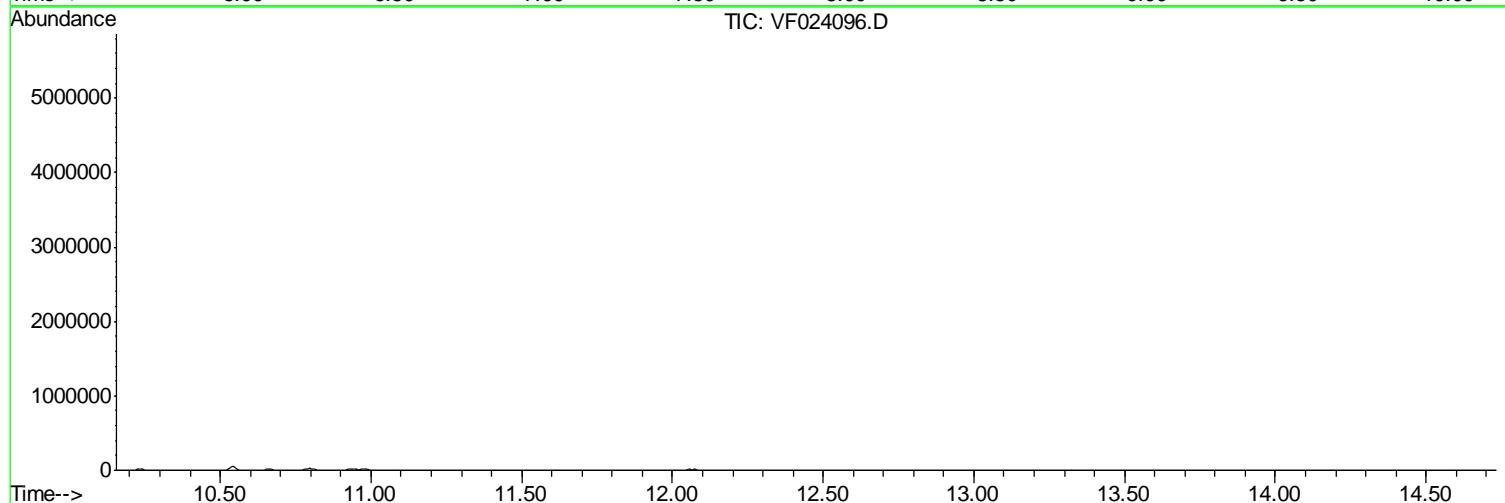
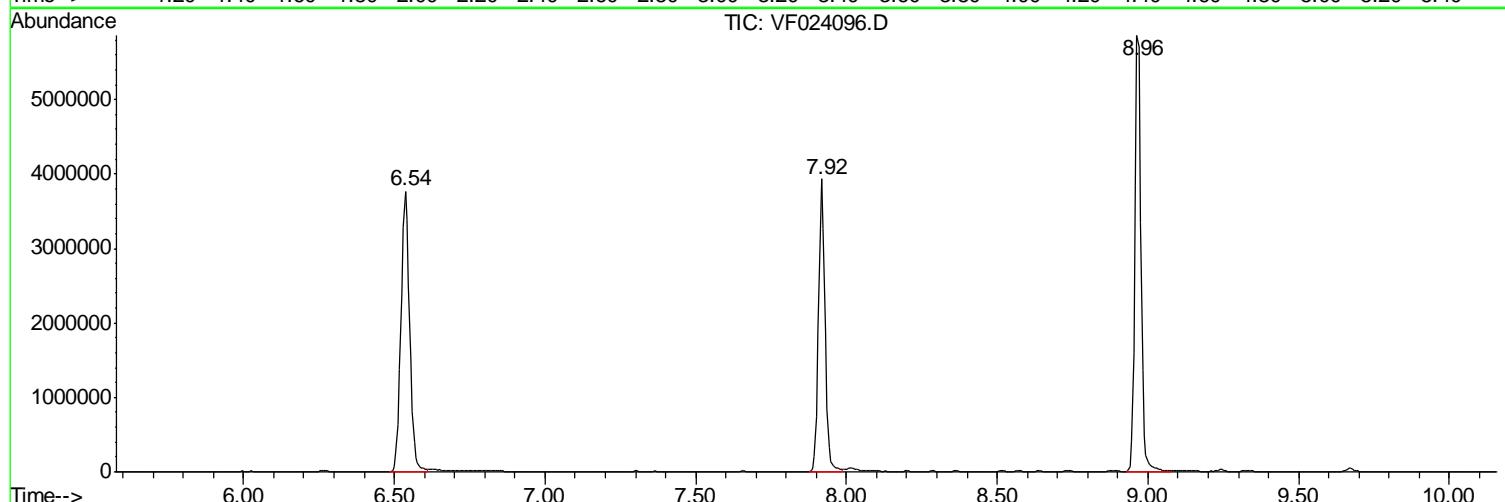
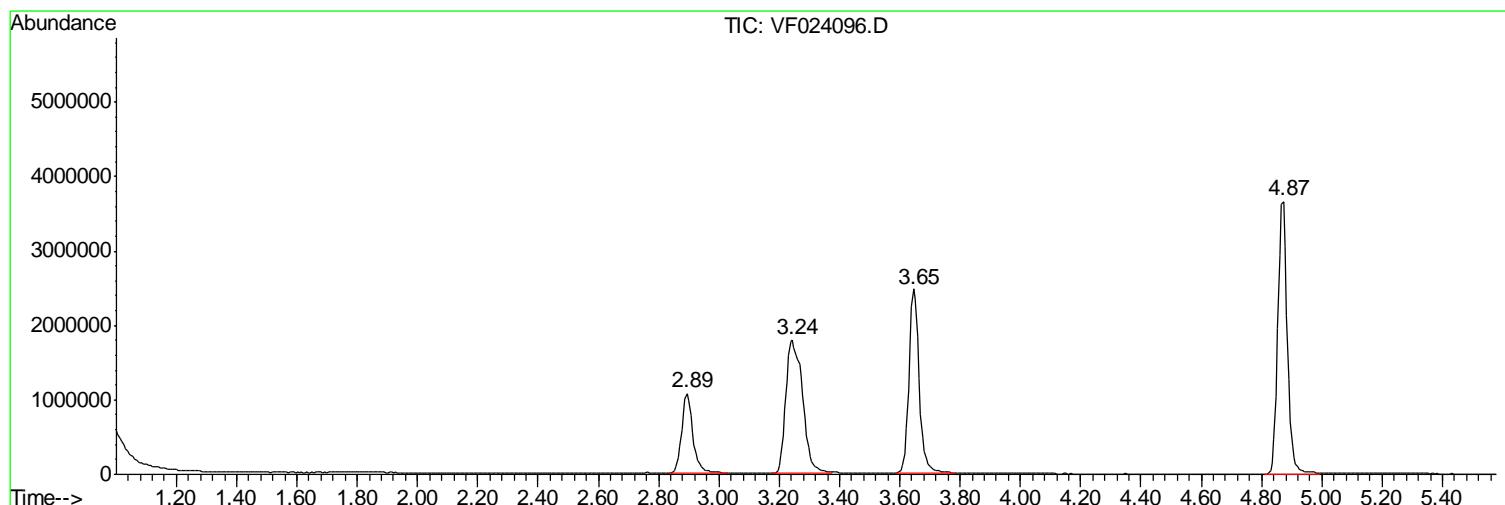
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.894	383	393	415	rVB	1063910	2766317	32.76%	6.063%
2	3.243	440	451	473	rBV2	1791967	6944480	82.24%	15.222%
3	3.645	508	518	541	rBV	2475413	5891284	69.77%	12.913%
4	4.871	712	722	742	rBV	3657002	7996723	94.71%	17.528%
5	6.536	990	999	1011	rBV	3760308	7531500	89.20%	16.508%
6	7.918	1222	1229	1240	rBV	3924393	6048717	71.64%	13.258%
7	8.964	1397	1403	1422	rBV	5855294	8443729	100.00%	18.508%

Sum of corrected areas: 45622750

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024096.D  
Acq On : 18 Oct 2010 15:19  
Operator : MS  
Sample : B3902-31  
Misc : 5.0mL,MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



401

Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024096.D  
Acq On : 18 Oct 2010 15:19  
Operator : MS  
Sample : B3902-31  
Misc : 5.0mL,MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024096.D  
Acq On : 18 Oct 2010 15:19  
Operator : MS  
Sample : B3902-31  
Misc : 5.0mL,MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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VOLATILES  
CALIBRATION  
DATA

Method Path : W:\HPCHEM1\MSVOA\_F\METHOD\

Method File : 82F101210W.M

Title : SW846 8260

Last Update : Wed Oct 13 05:38:06 2010

Response Via : Initial Calibration

## Calibration Files

1	=VF024035.D	5	=VF024036.D	20	=VF024038.D
50	=VF024039.D	100	=VF024040.D	10	=VF024037.D

	Compound	1	5	20	50	100	10	Avg	%RSD
<hr/>									
1) I	Pentafluorobenzene			-----ISTD-----					
2) T	Dichlorodifluorom	0.578	0.653	0.711	0.692	0.672	0.722	0.671	7.79
3) P	Chloromethane	0.809	0.731	0.730	0.709	0.702	0.717	0.733	5.31
4) CM	Vinyl Chloride	0.680	0.640	0.633	0.632	0.617	0.665	0.644	3.64#
5) T	Bromomethane	0.477	0.285	0.343	0.298	0.279	0.370	0.342	21.95
6) T	Chloroethane	0.307	0.183	0.217	0.223	0.159	0.276	0.227	24.58
7) T	Trichlorofluorome	0.545	0.481	0.538	0.559	0.419	0.634	0.529	13.82
8) T	Tert butyl alcoho	0.081	0.070	0.071	0.066	0.060	0.056	0.067	12.79
9) T	Diethyl Ether	0.305	0.221	0.237	0.260	0.174	0.292	0.248	19.48
10) CM	1,1-Dichloroethen	0.627	0.427	0.454	0.465	0.354	0.520	0.475	19.44#
11) T	Methyl Iodide	1.105	0.987	1.047	1.034	0.863	1.101	1.023	8.77
12) T	Acrolein	0.104	0.055	0.054	0.049	0.041	0.058	0.060	36.88
13) T	1,1,2-Trichlorotr	0.543	0.388	0.441	0.437	0.355	0.464	0.438	14.83
14) T	Acrylonitrile	0.226	0.211	0.214	0.198	0.188	0.197	0.206	6.79
15) T	Allyl Chloride	1.253	0.720	0.761	0.717	0.606	0.824	0.813	27.86
16) T	Acetone	0.227	0.127	0.139	0.142	0.117	0.164	0.153	26.10
17) T	Carbon Disulfide	1.745	1.372	1.464	1.494	1.135	1.654	1.477	14.56
18) T	Methyl Acetate	0.809	0.710	0.735	0.622	0.520	0.488	0.648	19.52
19) T	Methyl tert-butyl	1.393	1.308	1.307	1.249	1.162	1.357	1.296	6.31
20) T	Methylene Chlorid	0.665	0.530	0.535	0.512	0.435	0.560	0.539	13.86
21) T	trans-1,2-Dichlor	0.550	0.460	0.476	0.457	0.399	0.504	0.474	10.66
22) T	Acetonitrile					0.000			-1.00
23) T	Diisopropyl ether	1.705	1.567	1.565	1.490	1.373	1.597	1.550	7.16
24) T	Vinyl Acetate	1.244	1.197	1.105	1.010	0.918	1.160	1.106	11.08
25) P	1,1-Dichloroethan	0.953	0.895	0.884	0.838	0.777	0.907	0.876	6.95
26) TM	2-Butanone	0.612	0.577	0.515	0.486	0.454	0.466	0.519	12.24
27) T	2,2-Dichloropropa	0.548	0.582	0.549	0.510	0.475	0.592	0.543	8.12
28) T	cis-1,2-Dichloroe	0.761	0.701	0.670	0.653	0.628	0.696	0.685	6.78
29) T	Bromochloromethan	0.356	0.335	0.325	0.313	0.299	0.373	0.333	8.25
30) CM	Chloroform	1.122	1.045	1.016	0.973	0.930	1.060	1.024	6.60#
31) T	Ethyl Acetate	1.299	1.199	1.211	1.231	1.258	1.208	1.234	3.10
32) T	Cyclohexane	0.566	0.538	0.510	0.477	0.434	0.575	0.517	10.50
33) T	1,1,1-Trichloroet	0.925	0.908	0.813	0.806	0.719	0.797	0.828	9.24
34) S	1,2-Dichloroethan	0.904	0.779	0.770	0.666	0.645	0.749	0.752	12.33
35) I	1,4-Difluorobenzene			-----ISTD-----					
36) S	Dibromofluorometh	0.383	0.391	0.342	0.313	0.287	0.329	0.341	11.83
37) T	1,1-Dichloroprope	0.587	0.539	0.514	0.501	0.474	0.523	0.523	7.37
38) TM	Carbon Tetrachlor	0.564	0.534	0.455	0.444	0.431	0.476	0.484	11.06
39) TM	Benzene	1.511	1.456	1.393	1.363	1.350	1.445	1.420	4.35
40) T	Methacrylonitrile	0.339	0.308	0.291	0.279	0.269	0.290	0.296	8.43
41) TM	1,2-Dichloroethan	0.557	0.482	0.482	0.476	0.470	0.497	0.494	6.48
42) T	Isobutyl Alcohol					0.000			-1.00
43) T	Isopropyl Acetate	0.724	0.661	0.658	0.666	0.693	0.662	0.677	3.85
44) TM	Trichloroethene	0.476	0.449	0.434	0.427	0.427	0.447	0.443	4.22
45) T	Methylcyclohexane	0.484	0.600	0.497	0.473	0.454	0.558	0.511	10.98
46) C	1,2-Dichloropropa	0.422	0.383	0.385	0.382	0.386	0.400	0.393	4.00#
47) T	Dibromomethane	0.341	0.329	0.321	0.316	0.320	0.324	0.325	2.68
48) T	Bromodichlorometh	0.616	0.562	0.560	0.566	0.566	0.575	0.574	3.71
49) S	Toluene-d8	1.316	1.173	1.131	1.065	1.084	1.144	1.152	7.77
50) T	4-Methyl-2-Pentan	0.553	0.507	0.493	0.470	0.435	0.500	0.493	8.01
51) CM	Toluene	1.000	0.910	0.878	0.876	0.872	0.901	0.906	5.35#
52) T	t-1,3-Dichloropro	0.660	0.605	0.600	0.592	0.558	0.615	0.605	5.45

Method Path : W:\HPCHEM1\MSVOA\_F\METHOD\

Method File : 82F101210W.M

Title : SW846 8260

Last Update : Wed Oct 13 05:38:06 2010

Response Via : Initial Calibration

## Calibration Files

1	=VF024035.D	5	=VF024036.D	20	=VF024038.D
50	=VF024039.D	100	=VF024040.D	10	=VF024037.D

	Compound	1	5	20	50	100	10	Avg	%RSD
<hr/>									
53)	T Methyl Methacryla	0.364	0.317	0.317	0.322	0.330	0.322	0.329	5.52
54)	T cis-1,3-Dichlorop	0.742	0.687	0.673	0.655	0.646	0.691	0.683	5.00
55)	T 1,1,2-Trichloroet	0.412	0.386	0.372	0.375	0.377	0.377	0.383	3.83
56)	T Ethyl Methacrylat	0.591	0.557	0.537	0.541	0.543	0.545	0.552	3.64
57)	T 1,3-Dichloropropo	0.744	0.660	0.652	0.658	0.667	0.671	0.675	5.05
58)	T 2-Chloroethyl Vin	0.300	0.278	0.226	0.225	0.224	0.232	0.247	13.32
59)	T 2-Hexanone	0.391	0.362	0.356	0.353	0.349	0.357	0.361	4.17
60)	T Dibromochlorometh	0.484	0.455	0.458	0.467	0.474	0.460	0.466	2.41
61)	T 1,2-Dibromoethane	0.487	0.451	0.446	0.452	0.465	0.448	0.458	3.39
62)	S 4-Bromofluorobenz	0.596	0.486	0.468	0.427	0.447	0.472	0.483	12.26
<hr/>									
63)	I Chlorobenzene-d5	-----ISTD-----							
64)	TM Tetrachloroethene	0.433	0.423	0.454	0.476	0.496	0.436	0.453	6.23
65)	PM Chlorobenzene	1.250	1.163	1.116	1.122	1.133	1.152	1.156	4.27
66)	T 1,1,1,2-Tetrachlo	0.466	0.419	0.413	0.401	0.405	0.424	0.421	5.52
67)	C Ethyl Benzene	0.589	0.551	0.537	0.527	0.520	0.554	0.546	4.50#
68)	T m/p-Xylenes	0.774	0.700	0.676	0.670	0.636	0.709	0.694	6.72
69)	T o-Xylene	0.761	0.705	0.685	0.676	0.677	0.711	0.703	4.57
70)	T Styrene	1.220	1.166	1.153	1.146	1.128	1.202	1.169	2.99
71)	P Bromoform	0.375	0.349	0.358	0.357	0.367	0.357	0.360	2.52
<hr/>									
72)	I 1,4-Dichlorobenzene-d	-----ISTD-----							
73)	T Isopropylbenzene	3.706	3.474	3.431	3.414	3.565	3.468	3.510	3.12
74)	T n-Amyl Acetate	1.864	1.849	1.797	1.736	1.747	1.820	1.802	2.92
75)	P 1,1,2,2-Tetrachlo	1.373	1.233	1.219	1.190	1.201	1.244	1.244	5.35
76)	T 1,2,3-Trichloropr	1.060	0.905	0.900	0.859	0.856	0.889	0.911	8.29
77)	T Bromobenzene	0.975	0.932	0.913	0.915	0.948	0.911	0.932	2.72
78)	T n-propylbenzene	4.449	4.016	3.976	3.926	3.838	4.021	4.038	5.27
79)	T 2-Chlorotoluene	2.643	2.488	2.467	2.416	2.423	2.488	2.488	3.31
80)	T 1,3,5-Trimethylbe	2.837	2.699	2.679	2.641	2.646	2.720	2.704	2.66
81)	T trans-1,4-Dichlor	0.553	0.489	0.485	0.476	0.476	0.481	0.493	5.99
82)	T p-ethyltoluene						0.000	-1.00	
83)	T 4-Chlorotoluene	2.731	2.559	2.563	2.513	2.420	2.527	2.552	3.99
84)	T tert-Butylbenzene	2.807	2.626	2.605	2.542	2.580	2.655	2.636	3.51
85)	T 1,2,4-Trimethylbe	2.971	2.781	2.773	2.737	2.748	2.788	2.800	3.08
86)	T sec-Butylbenzene	3.730	3.464	3.465	3.445	3.437	3.476	3.503	3.20
87)	T p-Isopropyltoluen	2.931	2.761	2.819	2.781	2.840	2.854	2.831	2.13
88)	T 1,3-Dichlorobenze	1.877	1.723	1.675	1.655	1.650	1.699	1.713	4.94
89)	T 1,4-Dichlorobenze	1.976	1.771	1.742	1.644	1.648	1.761	1.757	6.88
90)	T p-diethylbenzene						0.000	-1.00	
91)	T n-Butylbenzene	2.916	2.690	2.678	2.650	2.665	2.689	2.715	3.68
92)	T Hexachloroethane	0.746	0.696	0.714	0.713	0.740	0.707	0.719	2.71
93)	T 1,2-Dichlorobenze	1.785	1.645	1.652	1.642	1.668	1.665	1.676	3.24
94)	T 1,2,4,5-tetrameth						0.000	-1.00	
95)	T 1,2-Dibromo-3-Chl	0.257	0.230	0.234	0.230	0.242	0.228	0.237	4.57
96)	T 1,2,4-Trichlorobe	1.090	1.040	1.067	1.072	1.147	1.033	1.075	3.81
97)	T Hexachlorobutadie	0.286	0.329	0.335	0.337	0.354	0.309	0.325	7.31
98)	T Naphthalene	3.091	2.896	3.031	3.080	3.186	2.951	3.039	3.43
99)	T 1,2,3-Trichlorobe	1.026	0.955	0.975	0.979	1.043	0.921	0.983	4.60

(#= Out of Range

## CHEMTECH

Instrument: F

Initial Calibration File ID:

Date:10/12/10

VF024035.D, VF024036.D, VF024037.D, VF024038.D, VF024039.D, VF024040.D

Parameter	CAS No.	Initial Calibration Pass 15% Criteria <sup>1</sup>	Regressions Acceptable <sup>2</sup>	Comment in Case Narrative <sup>23</sup>
1,1,1,2-Tetrachloroethane	630-20-6	Pass		
1,1,1-Trichloroethane	71-55-6	Pass		
1,1,2,2-Tetrachloroethane	79-34-5	Pass		
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	Pass		
1,1,2-Trichloroethane	79-00-5	Pass		
1,1-Dichloroethane	75-34-3	Pass		
1,1-Dichloroethene	75-35-4	Fail	QR,r^2=0.998	
1,1-Dichloropropene	563-58-6	Pass		
1,2,3-Trichlorobenzene	87-61-6	Pass		
1,2,3-Trichloropropane	96-18-4	Pass		
1,2,4,5-tetramethylbenzene	67-56-1	N/A	not reported	
1,2,4-Trichlorobenzene	120-82-1	Pass		
1,2,4-Trimethylbenzene	95-63-6	Pass		
1,2-Dibromo-3-chloropropane	96-12-8	Pass		
1,2-Dibromoethane	106-93-4	Pass		
1,2-Dichlorobenzene	95-50-1	Pass		
1,2-Dichloroethane	107-06-2	Pass		
1,2-Dichloropropane	78-87-5	Pass		
1,3,5-Trimethylbenzene	108-67-8	Pass		
1,3-Dichlorobenzene	541-73-1	Pass		
1,3-Dichloropropane	142-28-9	Pass		
1,4-Dichlorobenzene	106-46-7	Pass		
2,2-Dichloropropane	594-20-7	Pass		
2-Butanone	78-93-3	Pass		
2-Chloroethyl vinyl ether	110-75-8	Pass		
2-Chlorotoluene	95-49-8	Pass		
2-Hexanone	591-78-6	Pass		
4-Chlorotoluene	106-43-4	Pass		
4-Methyl-2-Pentanone	108-10-1	Pass		
Acetone	67-64-1	Fail	QR,r^2=0.999	
Acetonitrile	75-05-8	N/A	not reported	
Acrolein	107-02-8	Fail	LR,r^2=0.991	
Acrylonitrile	107-13-1	Pass		
Benzene	71-43-2	Pass		
Bromobenzene	108-86-1	Pass		
Bromochloromethane	74-97-5	Pass		
Bromodichloromethane	75-27-4	Pass		
Bromoform	75-25-2	Pass		
Bromomethane	74-83-9	Fail	LR,r^2=0.997	
Carbon Disulfide	75-15-0	Pass		
Carbon Tetrachloride	56-23-5	Pass		
Chlorobenzene	108-90-7	Pass		
Chloroethane	75-00-3	Fail	QR,r^2=0.997	
Chloroform	67-66-3	Pass		
Chloromethane	74-87-3	Pass		
cis-1,2-dichloroethene	156-59-2	Pass		
cis-1,3-dichloropropene	10061-01-5	Pass		
Cyclohexane	110-82-7	Pass		
Dibromochloromethane	124-48-1	Pass		
Dibromomethane	74-95-3	Pass		

## CHEMTECH

Instrument: F

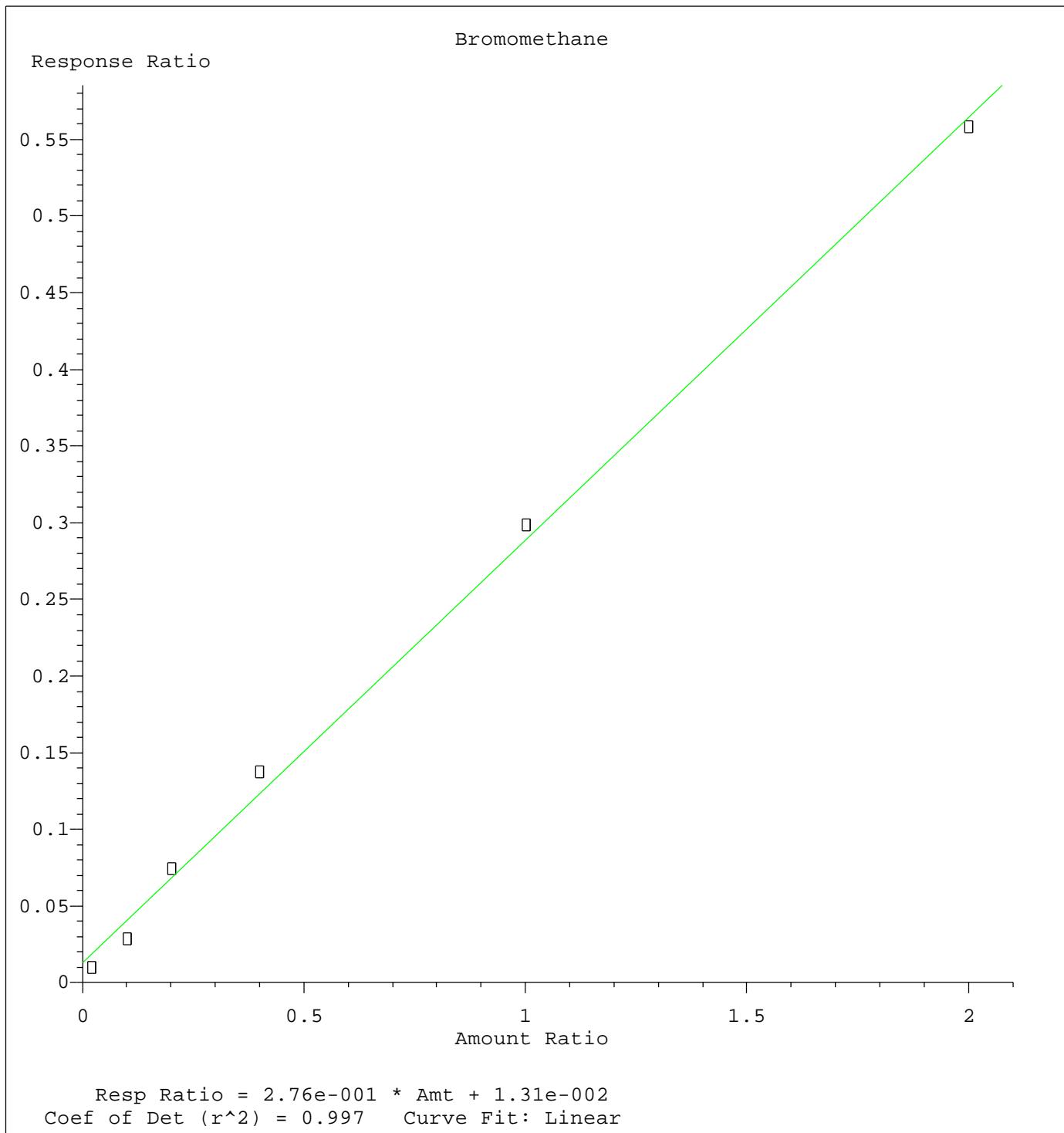
Date:10/12/10

Initial Calibration File ID:

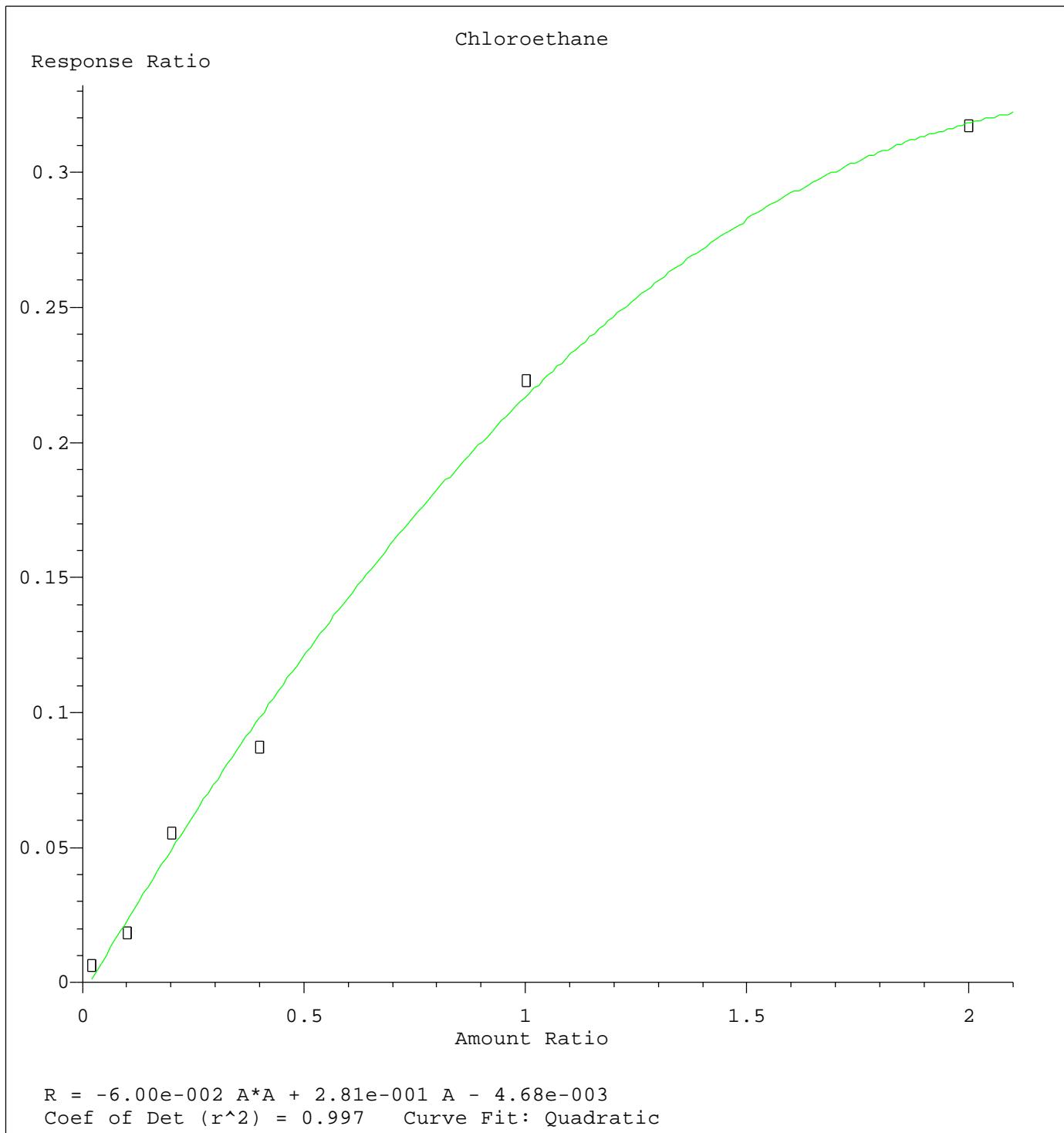
VF024035.D, VF024036.D, VF024037.D, VF024038.D, VF024039.D, VF024040.D

Parameter	CAS No.	Initial Calibration Pass 15% Criteria <sup>1</sup>	Regressions Acceptable <sup>2</sup>	Comment in Case Narrative <sup>23</sup>
Dichlorodifluoromethane	75-71-8	Pass		
Diethyl Ether	60-29-7	Fail	QR,r^2=0.994	
Diisopropyl ether	108-20-3	Pass		
Ethyl Acetate	141-78-6	Pass		
Ethyl Methacrylate	97-63-2	Pass		
Ethylbenzene	100-41-4	Pass		
Hexachlorobutadiene	87-68-3	Pass		
Hexachloroethane	67-72-1	Pass		
Hexachloroethane	67-72-1	Pass		
Isobutyl Alcohol	78-83-1	N/A	not reported	
Isopropyl Acetate	108-21-4	Pass		
isopropylbenzene	98-82-8	Pass		
m&p-Xylene	1330-20-7	Pass		
Methacrylonitrile	126-98-7	Pass		
Methyl Acetate	79-20-9	Fail	QR,r^2=0.997	
Methyl Iodide	74-88-4	Pass		
Methyl Methacrylate	80-62-6	Pass		
Methyl Tert-butyl Ether	1634-04-4	Pass		
Methylcyclohexane	108-87-2	Pass		
Methylene Chloride	75-09-2	Pass		
n-Amyl Acetate	628-63-7	Pass		
Naphthalene	91-20-3	Pass		
n-Butylbenzene	104-51-8	Pass		
N-propylbenzene	103-65-1	Pass		
o-Xylene	95-47-6	Pass		
p-diethylbenzene	105-05-5	N/A	not reported	
p-ethyltoluene	622-96-8	N/A	not reported	
p-Isopropyltoluene	99-87-6	Pass		
Sec-butylbenzene	135-98-8	Pass		
Styrene	100-42-5	Pass		
t-1,3-Dichloropropene	10061-02-6	Pass		
Tert butyl alcohol	75-65-0	Pass		
tert-Butylbenzene	98-06-6	Pass		
Tetrachloroethene	127-18-4	Pass		
Toluene	108-88-3	Pass		
trans-1,2-Dichloroethene	156-60-5	Pass		
trans-1,4-Dichloro-2-Butene	110-57-6	Pass		
Trichloroethene	79-01-6	Pass		
Trichlorofluoromethane	75-69-4	Pass		
Vinyl Acetate	108-05-4	Pass		
Vinyl Chloride	75-01-4	Pass		
Allyl Chloride		Fail	LR,r^2=0.992	

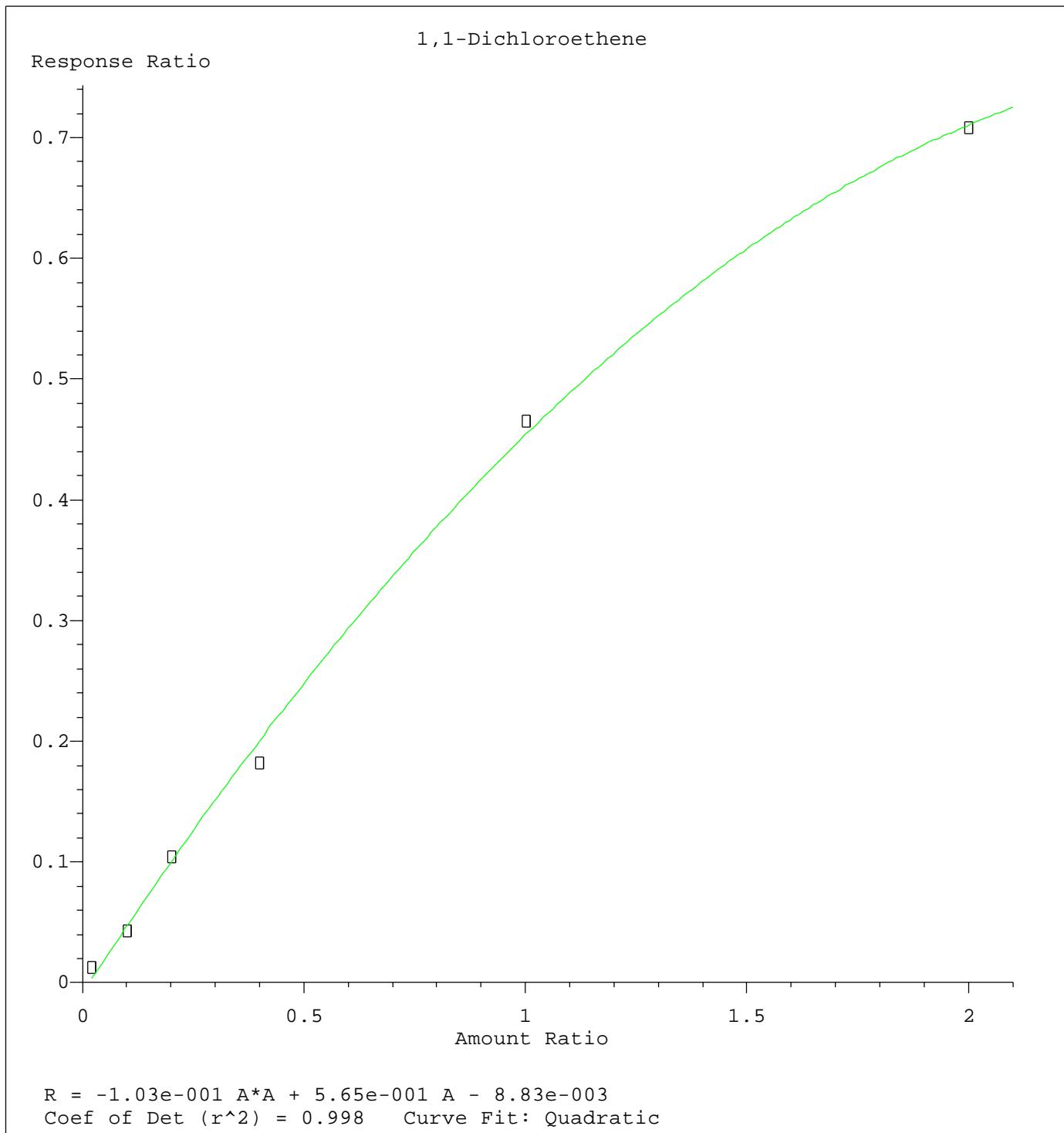
<sup>1</sup> Indicate a response for each compound using a Pass/Fail or Yes/No system<sup>2</sup> Only mark response in the affirmative for those compounds that qualify<sup>3</sup> At a minimum, this column must indicate a response for compound that did not pass the 15% and regression



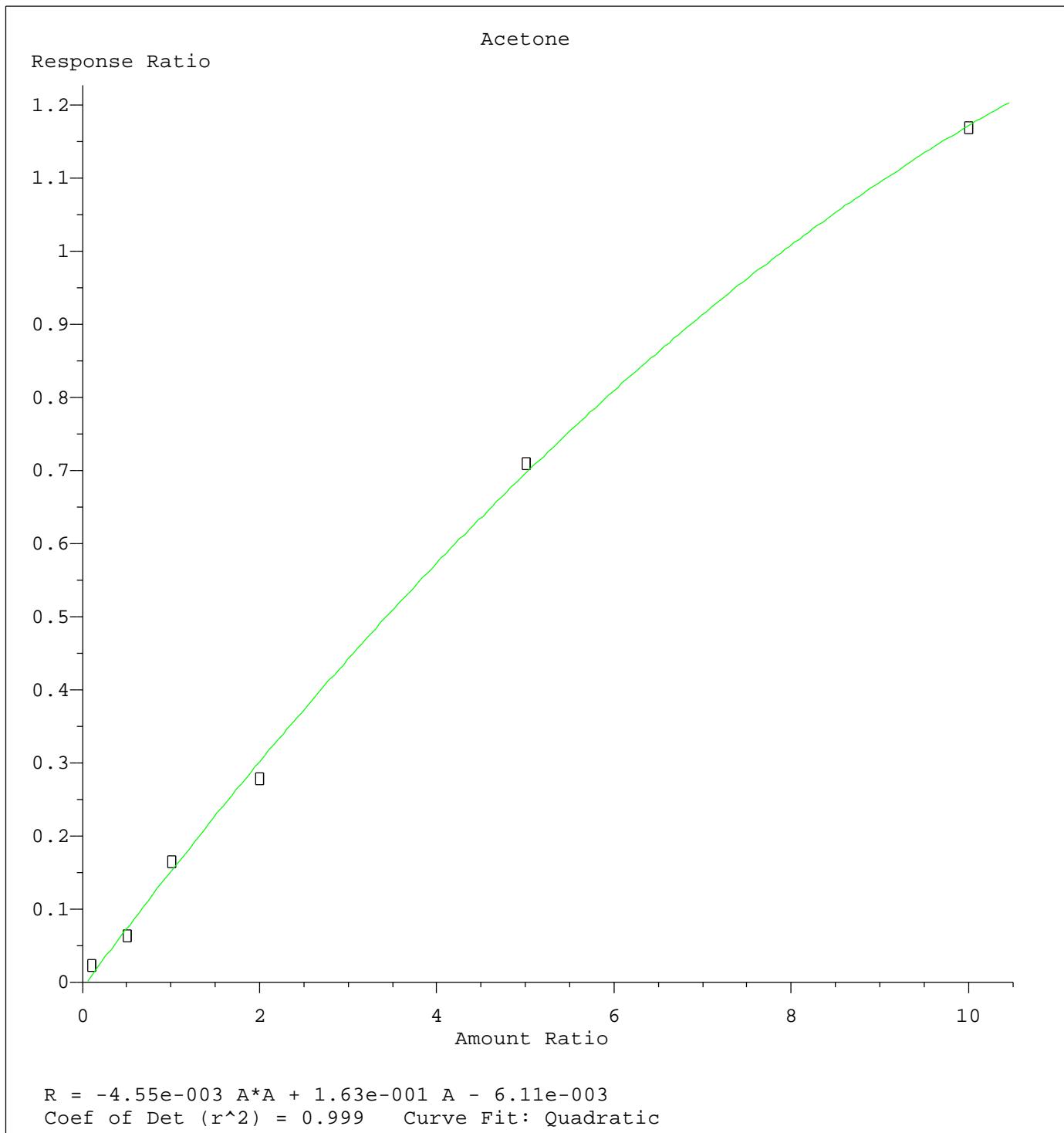
Method Name: W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Calibration Table Last Updated: Wed Oct 13 05:29:23 2010



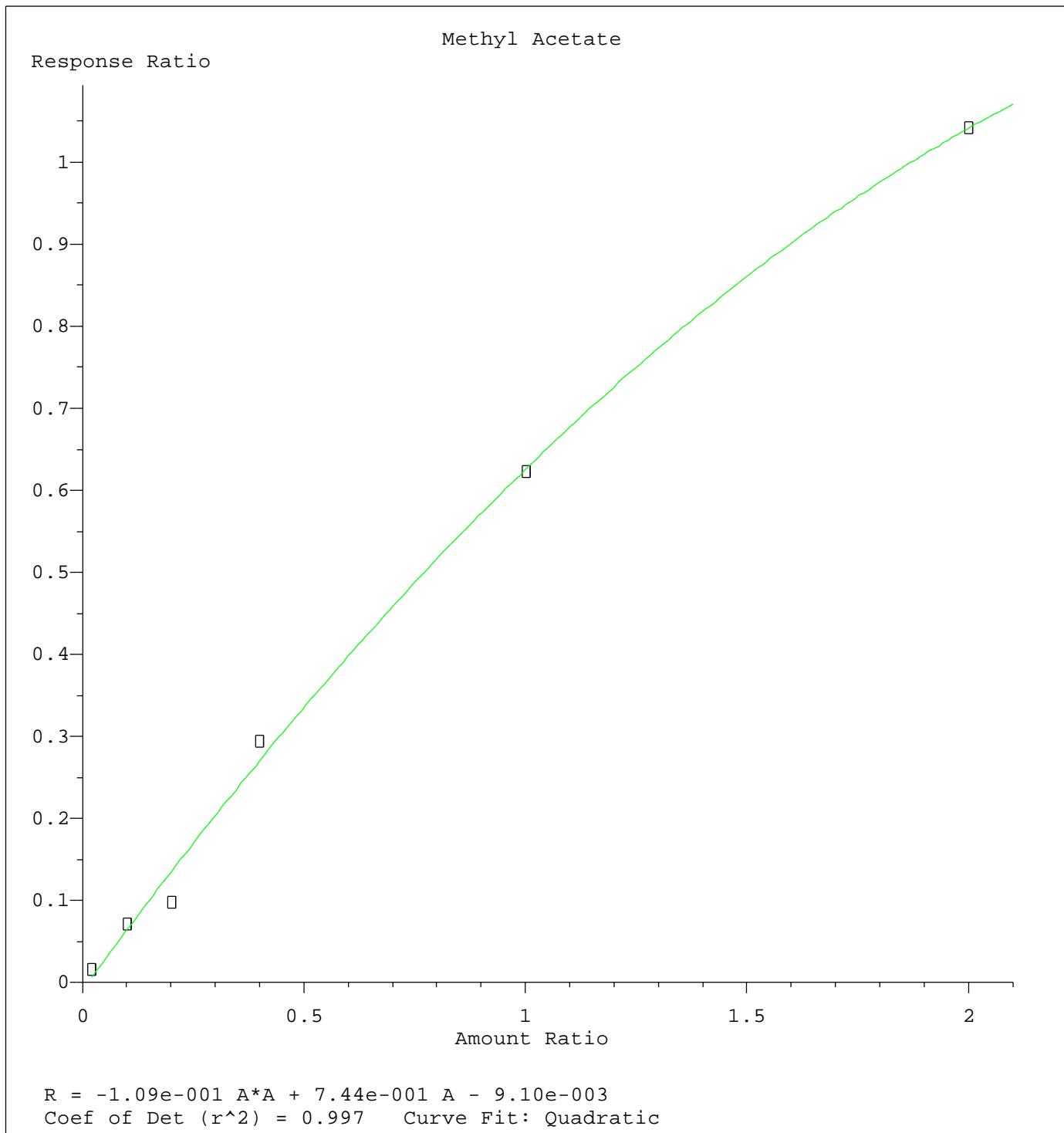
Method Name: W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Calibration Table Last Updated: Wed Oct 13 05:36:35 2010



Method Name: W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Calibration Table Last Updated: Wed Oct 13 05:36:58 2010



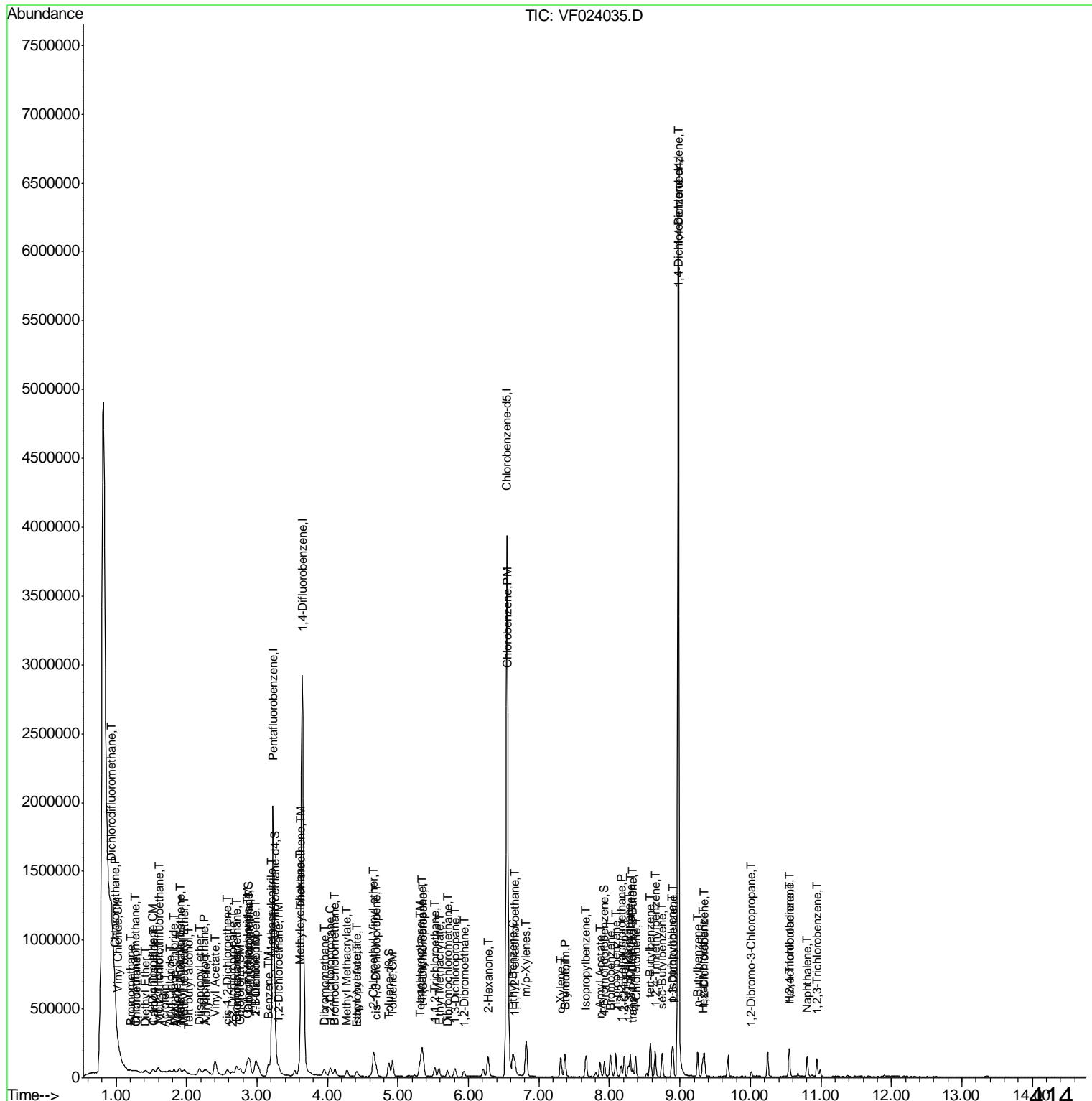
Method Name: W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Calibration Table Last Updated: Wed Oct 13 05:37:38 2010



Method Name: W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Calibration Table Last Updated: Wed Oct 13 05:37:49 2010

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024035.D  
Acq On : 12 Oct 2010 17:17  
Operator : SY  
Sample : 1 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 13 04:33:34 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024035.D  
 Acq On : 12 Oct 2010 17:17  
 Operator : SY  
 Sample : 1 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 13 04:33:34 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1730305	50.00	ug/l	-0.01
35) 1,4-Difluorobenzene	3.64	114	3106593	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.55	117	2782382	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1483640	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.26	65	31282	1.34	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	2.68%#	
36) Dibromofluoromethane	2.89	113	23827	1.29	ug/l	-0.01
Spiked Amount 50.000	Range	76 - 130	Recovery	=	2.58%#	
49) Toluene-d8	4.87	98	81769	1.13	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	2.26%#	
62) 4-Bromofluorobenzene	7.93	95	37003	1.17	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	2.34%#	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.94	85	20002m	1.23	ug/l
3) Chloromethane	0.99	50	28001m	1.57	ug/l
4) Vinyl Chloride	1.03	62	23518	1.45	ug/l
5) Bromomethane	1.22	94	16517m	1.93	ug/l
6) Chloroethane	1.29	64	10632m	1.72	ug/l
7) Trichlorofluoromethane	1.27	101	18875m	1.22	ug/l
8) Tert butyl alcohol	2.04	59	13967m	7.35	ug/l
9) Diethyl Ether	1.43	74	10557	1.46	ug/l
10) 1,1-Dichloroethene	1.52	96	21697m	1.62	ug/l
11) Methyl Iodide	1.59	142	38245m	1.33	ug/l
12) Acrolein	1.69	56	17910	9.83	ug/l
13) 1,1,2-Trichlorotrifluoroet	1.62	101	18799	1.59	ug/l #
14) Acrylonitrile	2.28	53	39074	6.96	ug/l
15) Allyl Chloride	1.76	41	43350m	2.19	ug/l
16) Acetone	1.86	43	39343m	8.15	ug/l
17) Carbon Disulfide	1.54	76	60387m	1.56	ug/l
18) Methyl Acetate	1.91	43	27994	0.92	ug/l
19) Methyl tert-butyl Ether	1.97	73	48210	1.29	ug/l
20) Methylene Chloride	1.81	84	23023m	1.58	ug/l
21) trans-1,2-Dichloroethene	1.90	96	19029	1.49	ug/l
23) Diisopropyl ether	2.19	45	59009	1.40	ug/l
24) Vinyl Acetate	2.41	43	215231	9.29	ug/l
25) 1,1-Dichloroethane	2.25	63	32984	1.38	ug/l #
26) 2-Butanone	2.98	43	105954	6.09	ug/l
27) 2,2-Dichloropropane	2.65	77	18967	1.24	ug/l
28) cis-1,2-Dichloroethene	2.58	96	26348	1.40	ug/l
29) Bromochloromethane	2.71	128	12312	1.32	ug/l
30) Chloroform	2.76	83	38826	1.36	ug/l
31) Ethyl Acetate	4.41	43	44968	1.10	ug/l #
32) Cyclohexane	2.71	56	19596	1.20	ug/l
33) 1,1,1-Trichloroethane	2.90	97	31996	1.37	ug/l
37) 1,1-Dichloropropene	2.98	75	36497	1.32	ug/l
38) Carbon Tetrachloride	2.86	117	35065	1.39	ug/l
39) Benzene	3.16	78	93882	1.20	ug/l

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024035.D  
 Acq On : 12 Oct 2010 17:17  
 Operator : SY  
 Sample : 1 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 13 04:33:34 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.20	41	21085	1.24	ug/l	# 76
41) 1,2-Dichloroethane	3.32	62	34597	1.29	ug/l	# 86
43) Isopropyl Acetate	4.41	43	44968	1.10	ug/l	# 97
44) Trichloroethene	3.61	130	29598	1.19	ug/l	# 1
45) Methylcyclohexane	3.61	83	30089	0.99	ug/l	64
46) 1,2-Dichloropropane	4.04	63	26214	1.16	ug/l	97
47) Dibromomethane	3.96	93	21163	1.15	ug/l	96
48) Bromodichloromethane	4.11	83	38301	1.18	ug/l	98
50) 4-Methyl-2-Pentanone	5.34	43	171923	5.36	ug/l	99
51) Toluene	4.92	92	62159	1.19	ug/l	99
52) t-1,3-Dichloropropene	5.36	75	40977	1.16	ug/l	95
53) Methyl Methacrylate	4.27	69	22637	1.18	ug/l	92
54) cis-1,3-Dichloropropene	4.69	75	46126	1.17	ug/l	100
55) 1,1,2-Trichloroethane	5.52	97	25582	1.15	ug/l	98
56) Ethyl Methacrylate	5.58	69	36723	1.10	ug/l	92
57) 1,3-Dichloropropene	5.81	76	46212	1.18	ug/l	99
58) 2-Chloroethyl Vinyl ether	4.65	63	93170	6.96	ug/l	97
59) 2-Hexanone	6.28	43	121467	5.15	ug/l	98
60) Dibromochloromethane	5.70	129	30086	1.07	ug/l	97
61) 1,2-Dibromoethane	5.93	107	30241	1.11	ug/l	99
64) Tetrachloroethene	5.31	164	24105	1.11	ug/l	98
65) Chlorobenzene	6.56	112	69570	1.17	ug/l	99
66) 1,1,1,2-Tetrachloroethane	6.66	131	25913	1.18	ug/l	# 62
67) Ethyl Benzene	6.63	106	32755	1.15	ug/l	95
68) m/p-Xylenes	6.82	106	86115	2.44	ug/l	99
69) o-Xylene	7.31	106	42333	1.14	ug/l	98
70) Styrene	7.37	104	67891	1.10	ug/l	97
71) Bromoform	7.36	173	20866	1.07	ug/l	# 100
73) Isopropylbenzene	7.66	105	109972	1.16	ug/l	99
74) n-Amyl Acetate	7.87	43	55307	1.09	ug/l	98
75) 1,1,2,2-Tetrachloroethane	8.17	83	40751	1.19	ug/l	99
76) 1,2,3-Trichloropropane	8.26	75	31446	1.28	ug/l	93
77) Bromobenzene	8.01	156	28935	1.13	ug/l	95
78) n-propylbenzene	8.09	91	132029	1.21	ug/l	98
79) 2-Chlorotoluene	8.21	91	78425	1.15	ug/l	99
80) 1,3,5-Trimethylbenzene	8.29	105	84183	1.14	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.33	75	16396	1.17	ug/l	94
83) 4-Chlorotoluene	8.37	91	81033	1.15	ug/l	99
84) tert-Butylbenzene	8.58	119	83297	1.13	ug/l	98
85) 1,2,4-Trimethylbenzene	8.65	105	88156	1.15	ug/l	99
86) sec-Butylbenzene	8.75	105	110680	1.15	ug/l	100
87) p-Isopropyltoluene	8.89	119	86976	1.12	ug/l	97
88) 1,3-Dichlorobenzene	8.91	146	55683	1.18	ug/l	99
89) 1,4-Dichlorobenzene	8.99	146	58639m	1.22	ug/l	
91) n-Butylbenzene	9.25	91	86526	1.17	ug/l	100
92) Hexachloroethane	9.32	117	22133	1.08	ug/l	99
93) 1,2-Dichlorobenzene	9.35	146	52968	1.13	ug/l	99
95) 1,2-Dibromo-3-Chloropropan	10.01	75	7619	1.13	ug/l	89
96) 1,2,4-Trichlorobenzene	10.55	180	32355	1.05	ug/l	100
97) Hexachlorobutadiene	10.55	225	8498	0.86	ug/l	65

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024035.D  
Acq On : 12 Oct 2010 17:17  
Operator : SY  
Sample : 1 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 6 Sample Multiplier: 1

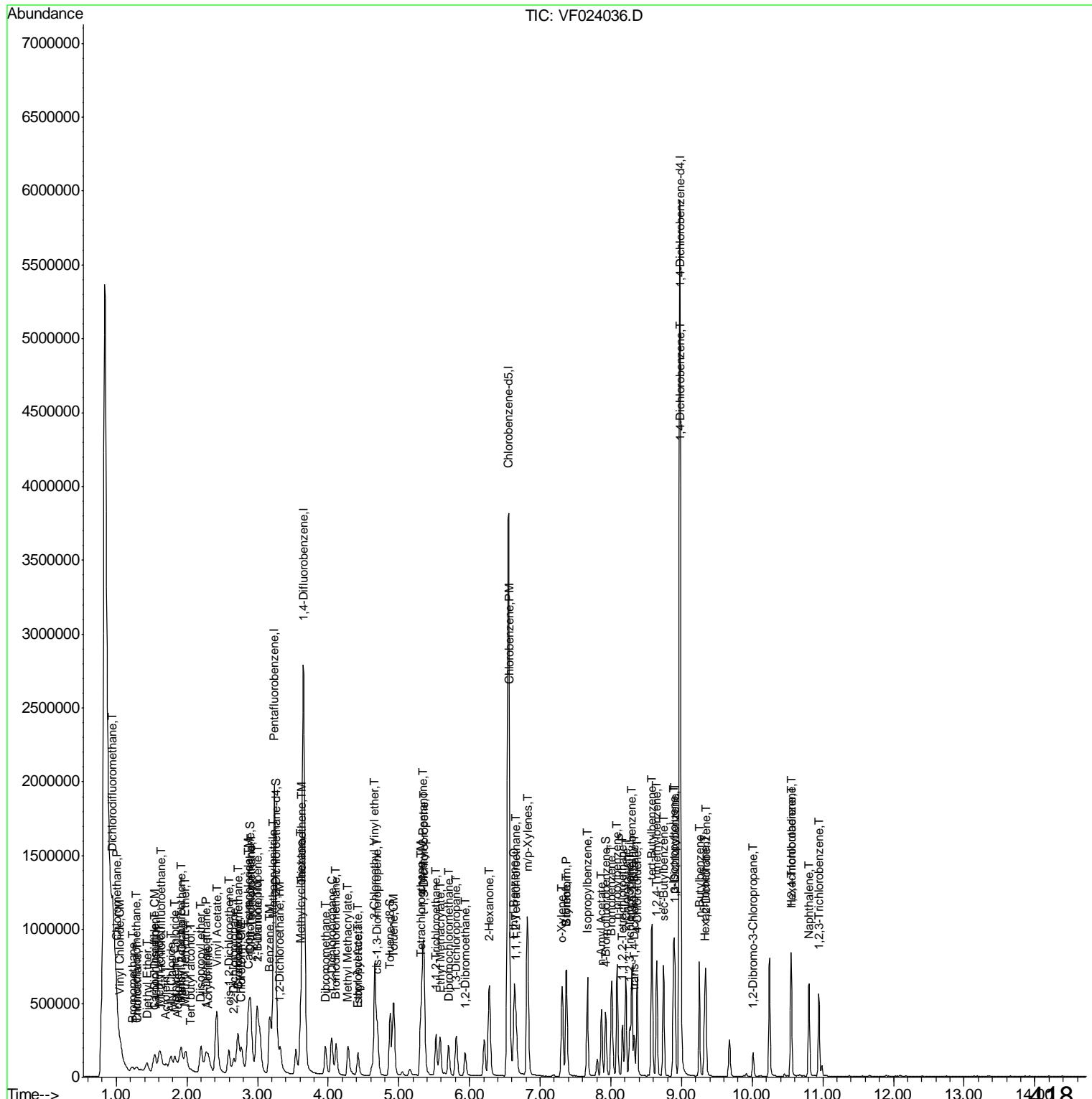
Quant Time: Oct 13 04:33:34 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.81	128	91706	1.03	ug/l	98
99) 1,2,3-Trichlorobenzene	10.94	180	30450	1.07	ug/l	97

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024036.D  
Acq On : 12 Oct 2010 17:47  
Operator : SY  
Sample : 5 PPB ICC  
Misc : 5.0mL, MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 13 04:52:56 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024036.D  
 Acq On : 12 Oct 2010 17:47  
 Operator : SY  
 Sample : 5 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 13 04:52:56 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1624094	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2946004	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.55	117	2616866	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.98	152	1393793	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.27	65	126568	5.76	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	11.52%#	
36) Dibromofluoromethane	2.90	113	115170	6.55	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	13.10%#	
49) Toluene-d8	4.87	98	345659	5.04	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	10.08%#	
62) 4-Bromofluorobenzene	7.93	95	143309	4.79	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	9.58%#	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.95	85	106130	6.98	ug/l 97
3) Chloromethane	1.01	50	118770	7.10	ug/l 99
4) Vinyl Chloride	1.06	62	103927	6.82	ug/l 99
5) Bromomethane	1.23	94	46362	5.77	ug/l 92
6) Chloroethane	1.30	64	29650	5.10	ug/l 97
7) Trichlorofluoromethane	1.29	101	78170m	5.37	ug/l
8) Tert butyl alcohol	2.05	59	56710m	31.78	ug/l
9) Diethyl Ether	1.44	74	35884	5.30	ug/l 97
10) 1,1-Dichloroethene	1.53	96	69430m	5.54	ug/l
11) Methyl Iodide	1.60	142	160353m	5.95	ug/l
12) Acrolein	1.70	56	44360	25.95	ug/l 91
13) 1,1,2-Trichlorotrifluoroet	1.63	101	62986	5.67	ug/l 90
14) Acrylonitrile	2.30	53	171382	32.53	ug/l 96
15) Allyl Chloride	1.77	41	116876	6.28	ug/l 92
16) Acetone	1.87	43	103251	22.79	ug/l # 81
17) Carbon Disulfide	1.55	76	222838m	6.13	ug/l
18) Methyl Acetate	1.92	43	115346m	4.04	ug/l
19) Methyl tert-butyl Ether	1.98	73	212405	6.06	ug/l 99
20) Methylene Chloride	1.83	84	86090m	6.31	ug/l
21) trans-1,2-Dichloroethene	1.92	96	74778	6.23	ug/l 99
23) Diisopropyl ether	2.19	45	254574	6.42	ug/l 99
24) Vinyl Acetate	2.42	43	972281	44.72	ug/l 100
25) 1,1-Dichloroethane	2.27	63	145436	6.46	ug/l 98
26) 2-Butanone	3.00	43	468601	28.71	ug/l 100
27) 2,2-Dichloropropane	2.66	77	94549	6.59	ug/l 98
28) cis-1,2-Dichloroethene	2.60	96	113856	6.44	ug/l 98
29) Bromochloromethane	2.72	128	54395	6.21	ug/l 98
30) Chloroform	2.77	83	169759	6.34	ug/l 100
31) Ethyl Acetate	4.42	43	194712	5.05	ug/l # 98
32) Cyclohexane	2.72	56	87361	5.68	ug/l 90
33) 1,1,1-Trichloroethane	2.91	97	147528	6.74	ug/l 98
37) 1,1-Dichloropropene	2.99	75	158789	6.05	ug/l 99
38) Carbon Tetrachloride	2.86	117	157387	6.59	ug/l 97
39) Benzene	3.17	78	428836	5.77	ug/l 99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024036.D  
 Acq On : 12 Oct 2010 17:47  
 Operator : SY  
 Sample : 5 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 13 04:52:56 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.21	41	90735	5.62	ug/l	# 99
41) 1,2-Dichloroethane	3.32	62	142111	5.57	ug/l	97
43) Isopropyl Acetate	4.42	43	194712	5.02	ug/l	# 98
44) Trichloroethene	3.62	130	132140	5.62	ug/l	# 47
45) Methylcyclohexane	3.61	83	176692	6.13	ug/l	92
46) 1,2-Dichloropropane	4.05	63	112795	5.26	ug/l	97
47) Dibromomethane	3.96	93	96861	5.53	ug/l	97
48) Bromodichloromethane	4.11	83	165611	5.39	ug/l	98
50) 4-Methyl-2-Pentanone	5.34	43	746383	24.54	ug/l	99
51) Toluene	4.93	92	268154	5.40	ug/l	97
52) t-1,3-Dichloropropene	5.36	75	178152	5.33	ug/l	100
53) Methyl Methacrylate	4.28	69	93285	5.12	ug/l	96
54) cis-1,3-Dichloropropene	4.69	75	202426	5.41	ug/l	99
55) 1,1,2-Trichloroethane	5.52	97	113620	5.38	ug/l	99
56) Ethyl Methacrylate	5.58	69	164037	5.20	ug/l	99
57) 1,3-Dichloropropane	5.81	76	194560	5.23	ug/l	99
58) 2-Chloroethyl Vinyl ether	4.66	63	409128	32.22	ug/l	98
59) 2-Hexanone	6.28	43	533161	23.82	ug/l	99
60) Dibromochloromethane	5.70	129	134111	5.02	ug/l	100
61) 1,2-Dibromoethane	5.94	107	132743	5.15	ug/l	100
64) Tetrachloroethene	5.31	164	110645	5.42	ug/l	97
65) Chlorobenzene	6.57	112	304346	5.46	ug/l	100
66) 1,1,1,2-Tetrachloroethane	6.66	131	109532	5.32	ug/l	97
67) Ethyl Benzene	6.63	106	144145	5.39	ug/l	100
68) m/p-Xylenes	6.82	106	366557	11.07	ug/l	99
69) o-Xylene	7.31	106	184520	5.30	ug/l	98
70) Styrene	7.37	104	305222	5.25	ug/l	99
71) Bromoform	7.36	173	91317	4.96	ug/l	# 100
73) Isopropylbenzene	7.67	105	484161	5.44	ug/l	100
74) n-Amyl Acetate	7.87	43	257712	5.43	ug/l	99
75) 1,1,2,2-Tetrachloroethane	8.17	83	171890	5.35	ug/l	100
76) 1,2,3-Trichloropropane	8.27	75	126136	5.47	ug/l	90
77) Bromobenzene	8.01	156	129959	5.41	ug/l	97
78) n-propylbenzene	8.09	91	559739	5.48	ug/l	99
79) 2-Chlorotoluene	8.21	91	346762	5.42	ug/l	99
80) 1,3,5-Trimethylbenzene	8.29	105	376152	5.41	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.33	75	68130	5.18	ug/l	96
83) 4-Chlorotoluene	8.37	91	356633	5.40	ug/l	99
84) tert-Butylbenzene	8.58	119	366048	5.31	ug/l	99
85) 1,2,4-Trimethylbenzene	8.65	105	387584	5.38	ug/l	100
86) sec-Butylbenzene	8.74	105	482878	5.34	ug/l	99
87) p-Isopropyltoluene	8.89	119	384809	5.27	ug/l	99
88) 1,3-Dichlorobenzene	8.91	146	240220	5.42	ug/l	99
89) 1,4-Dichlorobenzene	8.99	146	246864	5.46	ug/l	96
91) n-Butylbenzene	9.25	91	374963	5.41	ug/l	100
92) Hexachloroethane	9.33	117	96969	5.04	ug/l	99
93) 1,2-Dichlorobenzene	9.35	146	229285	5.21	ug/l	98
95) 1,2-Dibromo-3-Chloropropan	10.01	75	32116	5.05	ug/l	93
96) 1,2,4-Trichlorobenzene	10.55	180	144956	5.02	ug/l	98
97) Hexachlorobutadiene	10.55	225	45805	4.96	ug/l	100

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024036.D  
Acq On : 12 Oct 2010 17:47  
Operator : SY  
Sample : 5 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

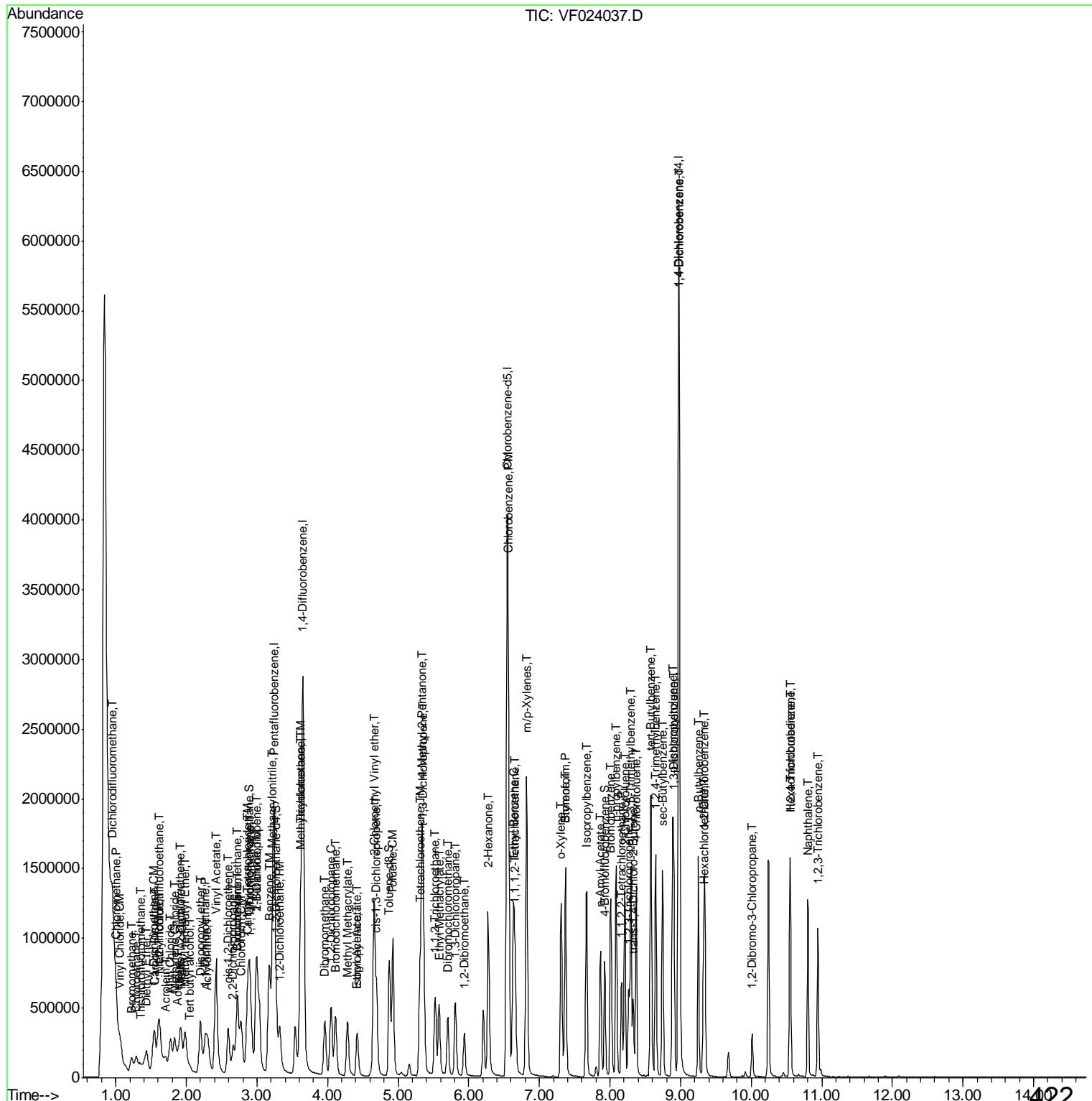
Quant Time: Oct 13 04:52:56 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.81	128	403599	4.82	ug/l	99
99) 1,2,3-Trichlorobenzene	10.94	180	133052	4.99	ug/l	98

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024037.D  
Acq On : 12 Oct 2010 18:16  
Operator : SY  
Sample : 10 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 13 04:56:09 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024037.D  
 Acq On : 12 Oct 2010 18:16  
 Operator : SY  
 Sample : 10 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 13 04:56:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1606597	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2930458	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2618561	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1400279	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.28	65	240730	11.07	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	22.14%#	
36) Dibromofluoromethane	2.90	113	192545	11.01	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	22.02%#	
49) Toluene-d8	4.87	98	670655	9.82	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	19.64%#	
62) 4-Bromofluorobenzene	7.93	95	276434	9.29	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	18.58%#	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	0.96	85	232150	15.44 ug/l 99
3) Chloromethane	1.01	50	230321	13.92 ug/l 96
4) Vinyl Chloride	1.06	62	213815	14.18 ug/l 98
5) Bromomethane	1.22	94	118845	14.95 ug/l 97
6) Chloroethane	1.29	64	88694	15.41 ug/l 100
7) Trichlorofluoromethane	1.36	101	203719m	14.15 ug/l
8) Tert butyl alcohol	2.05	59	90493m	51.26 ug/l
9) Diethyl Ether	1.44	74	93922	14.03 ug/l 98
10) 1,1-Dichloroethene	1.53	96	167221m	13.48 ug/l
11) Methyl Iodide	1.61	142	353737m	13.27 ug/l
12) Acrolein	1.71	56	92656	54.79 ug/l 95
13) 1,1,2-Trichlorotrifluoroet	1.62	101	149035	13.56 ug/l 96
14) Acrylonitrile	2.30	53	315792	60.59 ug/l 99
15) Allyl Chloride	1.78	41	264619	14.38 ug/l 96
16) Acetone	1.87	43	263867	58.87 ug/l # 84
17) Carbon Disulfide	1.55	76	531440m	14.78 ug/l
18) Methyl Acetate	1.94	43	156853m	5.55 ug/l
19) Methyl tert-butyl Ether	1.98	73	435966	12.57 ug/l 98
20) Methylene Chloride	1.83	84	179789m	13.32 ug/l
21) trans-1,2-Dichloroethene	1.92	96	161874	13.63 ug/l 99
23) Diisopropyl ether	2.20	45	513197	13.09 ug/l 99
24) Vinyl Acetate	2.42	43	1863778	86.66 ug/l 99
25) 1,1-Dichloroethane	2.27	63	291461	13.10 ug/l 98
26) 2-Butanone	2.99	43	749445	46.42 ug/l 97
27) 2,2-Dichloropropane	2.67	77	190331	13.40 ug/l 100
28) cis-1,2-Dichloroethene	2.60	96	223627	12.80 ug/l 99
29) Bromochloromethane	2.72	128	119909	13.84 ug/l 98
30) Chloroform	2.77	83	340596	12.86 ug/l 99
31) Ethyl Acetate	4.42	43	388092	10.18 ug/l # 100
32) Cyclohexane	2.73	56	184820	12.16 ug/l 87
33) 1,1,1-Trichloroethane	2.92	97	256114	11.84 ug/l 99
37) 1,1-Dichloropropene	2.99	75	306256	11.73 ug/l 100
38) Carbon Tetrachloride	2.86	117	278852	11.74 ug/l 98
39) Benzene	3.17	78	846886	11.46 ug/l 99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024037.D  
 Acq On : 12 Oct 2010 18:16  
 Operator : SY  
 Sample : 10 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 13 04:56:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.22	41	169798	10.57	ug/l	# 97
41) 1,2-Dichloroethane	3.32	62	291225	11.47	ug/l	97
43) Isopropyl Acetate	4.42	43	388092	10.07	ug/l	# 100
44) Trichloroethene	3.62	130	261957	11.21	ug/l	# 75
45) Methylcyclohexane	3.61	83	327158	11.41	ug/l	96
46) 1,2-Dichloropropane	4.05	63	234689	11.01	ug/l	99
47) Dibromomethane	3.96	93	189962	10.90	ug/l	98
48) Bromodichloromethane	4.11	83	337047	11.02	ug/l	100
50) 4-Methyl-2-Pentanone	5.34	43	1466517	48.48	ug/l	100
51) Toluene	4.93	92	528072	10.70	ug/l	100
52) t-1,3-Dichloropropene	5.36	75	360297	10.83	ug/l	99
53) Methyl Methacrylate	4.28	69	188992	10.42	ug/l	99
54) cis-1,3-Dichloropropene	4.69	75	404927	10.88	ug/l	99
55) 1,1,2-Trichloroethane	5.52	97	220884	10.51	ug/l	99
56) Ethyl Methacrylate	5.58	69	319456	10.18	ug/l	99
57) 1,3-Dichloropropane	5.81	76	393139	10.63	ug/l	100
58) 2-Chloroethyl Vinyl ether	4.66	63	679797	53.83	ug/l	98
59) 2-Hexanone	6.27	43	1046671	47.01	ug/l	99
60) Dibromochloromethane	5.70	129	269332	10.14	ug/l	100
61) 1,2-Dibromoethane	5.94	107	262686	10.25	ug/l	99
64) Tetrachloroethene	5.31	164	228096	11.18	ug/l	99
65) Chlorobenzene	6.56	112	603325	10.82	ug/l	99
66) 1,1,1,2-Tetrachloroethane	6.66	131	222141	10.79	ug/l	99
67) Ethyl Benzene	6.64	106	290287	10.85	ug/l	97
68) m/p-Xylenes	6.82	106	742689	22.41	ug/l	99
69) o-Xylene	7.31	106	372586	10.70	ug/l	100
70) Styrene	7.37	104	629276	10.81	ug/l	98
71) Bromoform	7.36	173	186723	10.13	ug/l	# 100
73) Isopropylbenzene	7.67	105	971335	10.87	ug/l	100
74) n-Amyl Acetate	7.87	43	509676	10.69	ug/l	99
75) 1,1,2,2-Tetrachloroethane	8.17	83	348291	10.79	ug/l	99
76) 1,2,3-Trichloropropane	8.27	75	248947	10.75	ug/l	100
77) Bromobenzene	8.01	156	255168	10.58	ug/l	97
78) n-propylbenzene	8.09	91	1126146	10.97	ug/l	99
79) 2-Chlorotoluene	8.21	91	696867	10.85	ug/l	100
80) 1,3,5-Trimethylbenzene	8.29	105	761718	10.91	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.33	75	134659	10.18	ug/l	93
83) 4-Chlorotoluene	8.37	91	707818	10.66	ug/l	99
84) tert-Butylbenzene	8.58	119	743471	10.73	ug/l	98
85) 1,2,4-Trimethylbenzene	8.65	105	780859	10.79	ug/l	99
86) sec-Butylbenzene	8.74	105	973383	10.71	ug/l	99
87) p-Isopropyltoluene	8.89	119	799296	10.89	ug/l	99
88) 1,3-Dichlorobenzene	8.91	146	475942	10.68	ug/l	99
89) 1,4-Dichlorobenzene	8.98	146	493168	10.85	ug/l	97
91) n-Butylbenzene	9.25	91	753078	10.82	ug/l	100
92) Hexachloroethane	9.32	117	198046	10.24	ug/l	100
93) 1,2-Dichlorobenzene	9.35	146	466372	10.55	ug/l	99
95) 1,2-Dibromo-3-Chloropropan	10.01	75	63985	10.02	ug/l	94
96) 1,2,4-Trichlorobenzene	10.55	180	289408	9.98	ug/l	99
97) Hexachlorobutadiene	10.55	225	86607	9.34	ug/l	99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024037.D  
Acq On : 12 Oct 2010 18:16  
Operator : SY  
Sample : 10 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

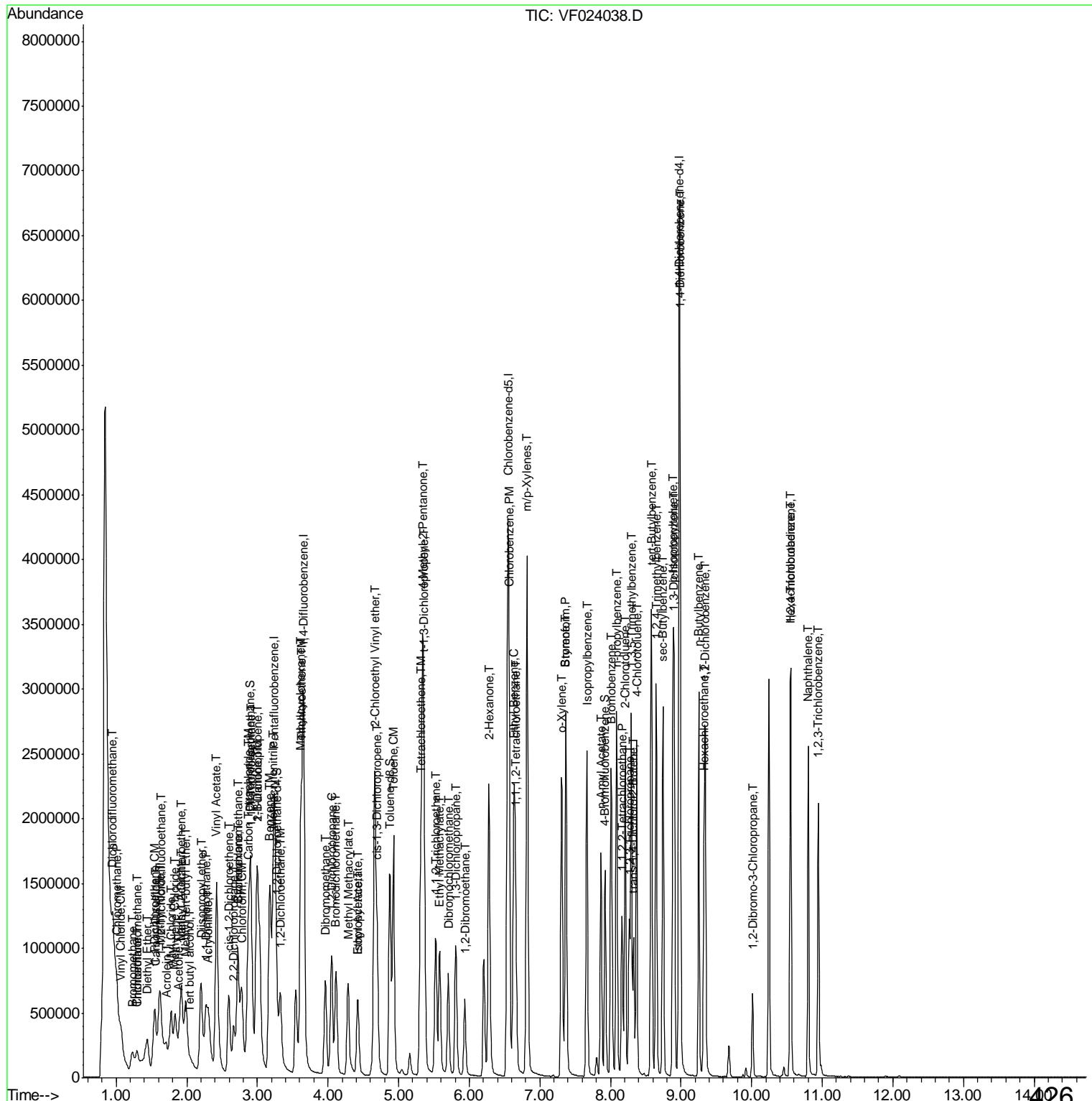
Quant Time: Oct 13 04:56:09 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.80	128	826496	9.82	ug/l	100
99) 1,2,3-Trichlorobenzene	10.94	180	257845	9.62	ug/l	98

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024038.D  
Acq On : 12 Oct 2010 18:45  
Operator : SY  
Sample : 20 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 13 05:03:39 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024038.D  
 Acq On : 12 Oct 2010 18:45  
 Operator : SY  
 Sample : 20 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 13 05:03:39 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1530474	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2817429	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2535227	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1319977	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.28	65	471156	22.74	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	45.48%#	
36) Dibromofluoromethane	2.90	113	384953	22.90	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	45.80%#	
49) Toluene-d8	4.87	98	1274078	19.41	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	38.82%#	
62) 4-Bromofluorobenzene	7.93	95	527735	18.44	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	36.88%#	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.96	85	435490	30.40	ug/l 99
3) Chloromethane	1.02	50	446694	28.34	ug/l 99
4) Vinyl Chloride	1.07	62	387579	26.99	ug/l 97
5) Bromomethane	1.23	94	209808	27.71	ug/l 93
6) Chloroethane	1.30	64	133015	24.26	ug/l 99
7) Trichlorofluoromethane	1.29	101	329166m	23.99	ug/l
8) Tert butyl alcohol	2.05	59	216678m	128.85	ug/l
9) Diethyl Ether	1.44	74	144852	22.71	ug/l 98
10) 1,1-Dichloroethene	1.54	96	277930m	23.53	ug/l
11) Methyl Iodide	1.61	142	641140m	25.24	ug/l
12) Acrolein	1.71	56	166755	103.51	ug/l 95
13) 1,1,2-Trichlorotrifluoroet	1.63	101	269796	25.78	ug/l 99
14) Acrylonitrile	2.30	53	656299	132.19	ug/l 99
15) Allyl Chloride	1.78	41	465589	26.55	ug/l 98
16) Acetone	1.88	43	426074	99.79	ug/l 97
17) Carbon Disulfide	1.56	76	895996m	26.16	ug/l
18) Methyl Acetate	1.93	43	450131m	16.72	ug/l
19) Methyl tert-butyl Ether	1.99	73	800366	24.22	ug/l 99
20) Methylene Chloride	1.83	84	327293m	25.45	ug/l
21) trans-1,2-Dichloroethene	1.92	96	291434	25.76	ug/l 99
23) Diisopropyl ether	2.21	45	958285	25.66	ug/l 98
24) Vinyl Acetate	2.42	43	3381149	165.03	ug/l 99
25) 1,1-Dichloroethane	2.27	63	541194	25.53	ug/l 99
26) 2-Butanone	3.00	43	1577489	102.56	ug/l 100
27) 2,2-Dichloropropane	2.67	77	336177	24.85	ug/l 99
28) cis-1,2-Dichloroethene	2.60	96	410059	24.63	ug/l 99
29) Bromochloromethane	2.72	128	198656	24.07	ug/l 98
30) Chloroform	2.78	83	622058	24.65	ug/l 100
31) Ethyl Acetate	4.42	43	741104	20.41	ug/l # 100
32) Cyclohexane	2.73	56	312015	21.55	ug/l 97
33) 1,1,1-Trichloroethane	2.91	97	497946	24.16	ug/l 100
37) 1,1-Dichloropropene	3.00	75	578766	23.06	ug/l 100
38) Carbon Tetrachloride	2.87	117	512718	22.45	ug/l 99
39) Benzene	3.17	78	1569347	22.09	ug/l 99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024038.D  
 Acq On : 12 Oct 2010 18:45  
 Operator : SY  
 Sample : 20 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 13 05:03:39 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.22	41	328239	21.25	ug/l	# 97
41) 1,2-Dichloroethane	3.32	62	543473	22.27	ug/l	99
43) Isopropyl Acetate	4.42	43	741104	20.00	ug/l	100
44) Trichloroethene	3.62	130	488711	21.74	ug/l	90
45) Methylcyclohexane	3.61	83	560361	20.33	ug/l	99
46) 1,2-Dichloropropane	4.05	63	433365	21.15	ug/l	100
47) Dibromomethane	3.96	93	361201	21.56	ug/l	98
48) Bromodichloromethane	4.11	83	631116	21.46	ug/l	100
50) 4-Methyl-2-Pentanone	5.34	43	2779497	95.57	ug/l	100
51) Toluene	4.93	92	989960	20.86	ug/l	98
52) t-1,3-Dichloropropene	5.36	75	676698	21.16	ug/l	100
53) Methyl Methacrylate	4.28	69	357225	20.49	ug/l	99
54) cis-1,3-Dichloropropene	4.69	75	758533	21.21	ug/l	99
55) 1,1,2-Trichloroethane	5.52	97	419434	20.77	ug/l	99
56) Ethyl Methacrylate	5.58	69	605000	20.06	ug/l	98
57) 1,3-Dichloropropane	5.81	76	735264	20.67	ug/l	99
58) 2-Chloroethyl Vinyl ether	4.66	63	1274579	104.97	ug/l	99
59) 2-Hexanone	6.28	43	2006772	93.75	ug/l	100
60) Dibromochloromethane	5.70	129	515752	20.19	ug/l	100
61) 1,2-Dibromoethane	5.94	107	502844	20.41	ug/l	99
64) Tetrachloroethene	5.31	164	460000	23.28	ug/l	99
65) Chlorobenzene	6.57	112	1131665	20.95	ug/l	100
66) 1,1,1,2-Tetrachloroethane	6.66	131	419045	21.03	ug/l	99
67) Ethyl Benzene	6.63	106	544143	21.01	ug/l	99
68) m/p-Xylenes	6.82	106	1371415	42.73	ug/l	98
69) o-Xylene	7.31	106	695050	20.61	ug/l	99
70) Styrene	7.37	104	1168797	20.74	ug/l	98
71) Bromoform	7.36	173	363337	20.37	ug/l	# 99
73) Isopropylbenzene	7.67	105	1811658	21.51	ug/l	100
74) n-Amyl Acetate	7.87	43	948653	21.10	ug/l	100
75) 1,1,2,2-Tetrachloroethane	8.17	83	643684	21.15	ug/l	100
76) 1,2,3-Trichloropropane	8.26	75	475355	21.77	ug/l	99
77) Bromobenzene	8.01	156	482034	21.20	ug/l	98
78) n-propylbenzene	8.09	91	2099200	21.70	ug/l	100
79) 2-Chlorotoluene	8.21	91	1302744	21.51	ug/l	99
80) 1,3,5-Trimethylbenzene	8.29	105	1414345	21.48	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.33	75	256054	20.54	ug/l	98
83) 4-Chlorotoluene	8.37	91	1353056	21.62	ug/l	99
84) tert-Butylbenzene	8.58	119	1375248	21.06	ug/l	100
85) 1,2,4-Trimethylbenzene	8.65	105	1463950	21.46	ug/l	100
86) sec-Butylbenzene	8.74	105	1829240	21.35	ug/l	100
87) p-Isopropyltoluene	8.89	119	1488219	21.51	ug/l	99
88) 1,3-Dichlorobenzene	8.91	146	884494	21.06	ug/l	100
89) 1,4-Dichlorobenzene	8.99	146	919968	21.48	ug/l	98
91) n-Butylbenzene	9.25	91	1414188	21.55	ug/l	100
92) Hexachloroethane	9.32	117	377144	20.69	ug/l	99
93) 1,2-Dichlorobenzene	9.34	146	872256	20.93	ug/l	100
95) 1,2-Dibromo-3-Chloropropan	10.01	75	123752	20.56	ug/l	97
96) 1,2,4-Trichlorobenzene	10.55	180	563310	20.62	ug/l	99
97) Hexachlorobutadiene	10.55	225	176809	20.22	ug/l	99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024038.D  
Acq On : 12 Oct 2010 18:45  
Operator : SY  
Sample : 20 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 9 Sample Multiplier: 1

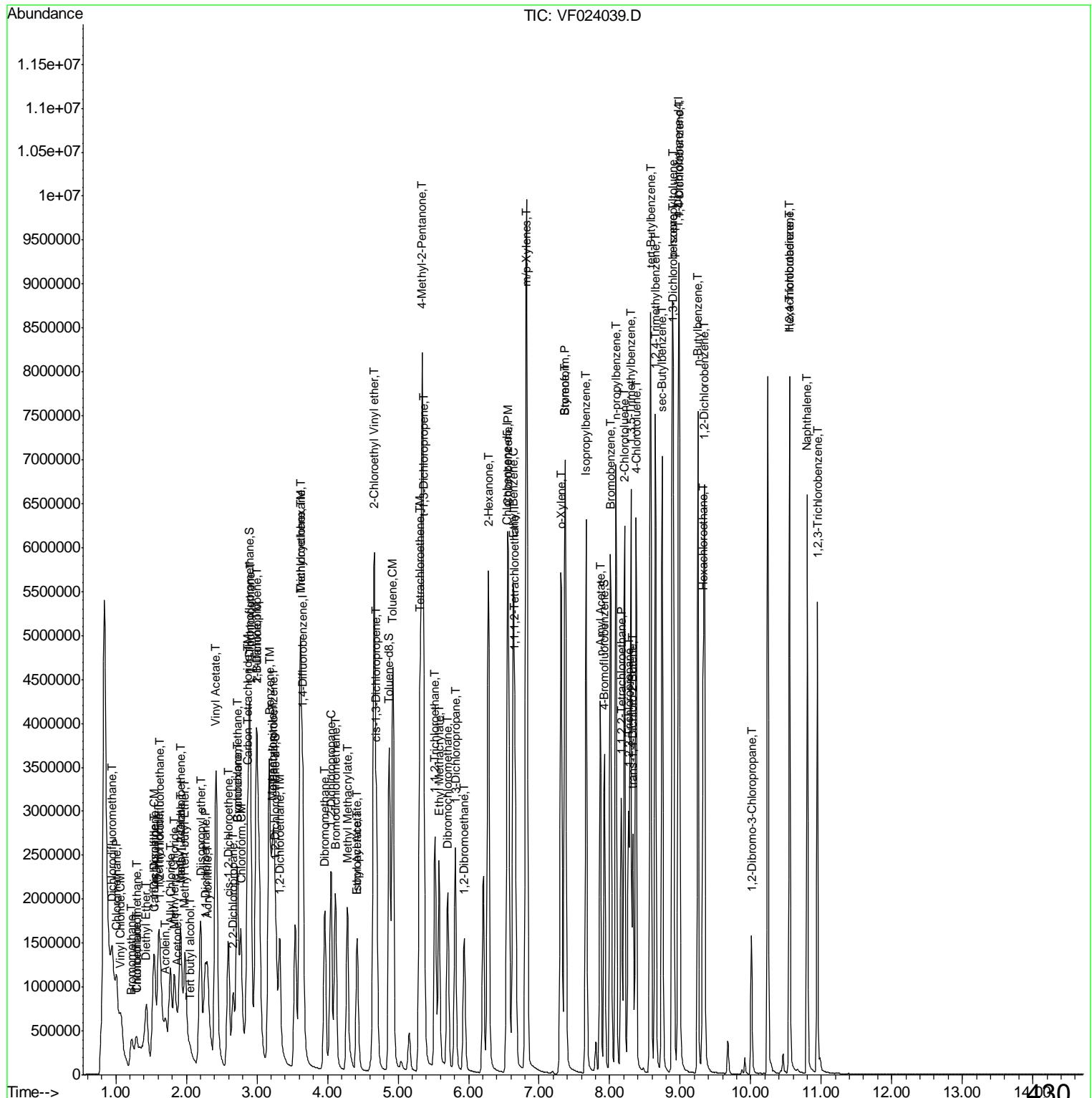
Quant Time: Oct 13 05:03:39 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.80	128	1600197	20.18	ug/l	99
99) 1,2,3-Trichlorobenzene	10.94	180	514795	20.38	ug/l	100

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024039.D  
Acq On : 12 Oct 2010 19:15  
Operator : SY  
Sample : 50 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 13 05:13:22 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024039.D  
 Acq On : 12 Oct 2010 19:15  
 Operator : SY  
 Sample : 50 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 13 05:13:22 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1535129	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2836552	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.55	117	2595901	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1349134	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.27	65	1022958	49.22	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	98.44%	
36) Dibromofluoromethane	2.90	113	889196	52.54	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	105.08%	
49) Toluene-d8	4.87	98	3021229	45.71	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	91.42%	
62) 4-Bromofluorobenzene	7.93	95	1210284	42.01	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	84.02%	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	0.96	85	1061896	73.89 ug/l 100
3) Chloromethane	1.01	50	1088676	68.85 ug/l 100
4) Vinyl Chloride	1.07	62	969760	67.32 ug/l 100
5) Bromomethane	1.23	94	457583	60.25 ug/l 100
6) Chloroethane	1.30	64	341568	62.10 ug/l 100
7) Trichlorofluoromethane	1.29	101	858243m	62.37 ug/l
8) Tert butyl alcohol	2.05	59	507592m	300.94 ug/l
9) Diethyl Ether	1.44	74	398766	62.34 ug/l 100
10) 1,1-Dichloroethene	1.53	96	713753m	60.24 ug/l
11) Methyl Iodide	1.61	142	1587772m	62.32 ug/l
12) Acrolein	1.71	56	373625	231.22 ug/l 100
13) 1,1,2-Trichlorotrifluoroet	1.63	101	670476	63.86 ug/l 100
14) Acrylonitrile	2.30	53	1518487	304.92 ug/l 100
15) Allyl Chloride	1.77	41	1101424	62.62 ug/l 100
16) Acetone	1.87	43	1087942	254.04 ug/l 100
17) Carbon Disulfide	1.55	76	2292906m	66.73 ug/l
18) Methyl Acetate	1.92	43	955319m	35.37 ug/l
19) Methyl tert-butyl Ether	1.98	73	1917851	57.86 ug/l 100
20) Methylene Chloride	1.83	84	785571m	60.90 ug/l
21) trans-1,2-Dichloroethene	1.92	96	701831	61.84 ug/l 100
23) Diisopropyl ether	2.20	45	2287442	61.07 ug/l 100
24) Vinyl Acetate	2.42	43	7751301	377.18 ug/l 100
25) 1,1-Dichloroethane	2.26	63	1287096	60.53 ug/l 100
26) 2-Butanone	2.99	43	3728739	241.69 ug/l 100
27) 2,2-Dichloropropane	2.66	77	783079	57.70 ug/l 100
28) cis-1,2-Dichloroethene	2.59	96	1002128	60.01 ug/l 100
29) Bromochloromethane	2.72	128	480601	58.05 ug/l 100
30) Chloroform	2.77	83	1494295	59.03 ug/l 100
31) Ethyl Acetate	4.42	43	1889892	51.89 ug/l # 100
32) Cyclohexane	2.72	56	732646	50.44 ug/l 100
33) 1,1,1-Trichloroethane	2.91	97	1237299	59.84 ug/l 100
37) 1,1-Dichloropropene	2.99	75	1421099	56.23 ug/l 100
38) Carbon Tetrachloride	2.86	117	1259577	54.78 ug/l 100
39) Benzene	3.17	78	3865597	54.05 ug/l 100

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024039.D  
 Acq On : 12 Oct 2010 19:15  
 Operator : SY  
 Sample : 50 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 13 05:13:22 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.21	41	791110	50.87	ug/l	# 100
41) 1,2-Dichloroethane	3.32	62	1350892	54.98	ug/l	100
43) Isopropyl Acetate	4.42	43	1889892	50.65	ug/l	100
44) Trichloroethene	3.62	130	1210907	53.51	ug/l	100
45) Methylcyclohexane	3.61	83	1341781	48.35	ug/l	100
46) 1,2-Dichloropropane	4.05	63	1083533	52.52	ug/l	100
47) Dibromomethane	3.96	93	897169	53.18	ug/l	100
48) Bromodichloromethane	4.11	83	1604244	54.18	ug/l	100
50) 4-Methyl-2-Pentanone	5.34	43	6662726	227.55	ug/l	100
51) Toluene	4.93	92	2485534	52.02	ug/l	100
52) t-1,3-Dichloropropene	5.37	75	1678062	52.12	ug/l	100
53) Methyl Methacrylate	4.28	69	912122	51.96	ug/l	100
54) cis-1,3-Dichloropropene	4.69	75	1858971	51.62	ug/l	100
55) 1,1,2-Trichloroethane	5.52	97	1065036	52.37	ug/l	100
56) Ethyl Methacrylate	5.58	69	1535416	50.57	ug/l	100
57) 1,3-Dichloropropene	5.81	76	1867592	52.15	ug/l	100
58) 2-Chloroethyl Vinyl ether	4.66	63	3190128	260.95	ug/l	100
59) 2-Hexanone	6.28	43	5007227	232.35	ug/l	100
60) Dibromochloromethane	5.70	129	1324789	51.52	ug/l	100
61) 1,2-Dibromoethane	5.94	107	1282037	51.70	ug/l	100
64) Tetrachloroethene	5.31	164	1235345	61.06	ug/l	100
65) Chlorobenzene	6.57	112	2913266	52.68	ug/l	100
66) 1,1,1,2-Tetrachloroethane	6.66	131	1041841	51.05	ug/l	100
67) Ethyl Benzene	6.64	106	1368833	51.62	ug/l	100
68) m/p-Xylenes	6.82	106	3478729	105.86	ug/l	100
69) o-Xylene	7.31	106	1754441	50.80	ug/l	100
70) Styrene	7.37	104	2976024	51.59	ug/l	100
71) Bromoform	7.36	173	927143	50.76	ug/l	# 100
73) Isopropylbenzene	7.67	105	4605760	53.51	ug/l	100
74) n-Amyl Acetate	7.87	43	2341567	50.96	ug/l	100
75) 1,1,2,2-Tetrachloroethane	8.17	83	1606113	51.63	ug/l	100
76) 1,2,3-Trichloropropane	8.26	75	1158520	51.91	ug/l	100
77) Bromobenzene	8.01	156	1233977	53.11	ug/l	100
78) n-propylbenzene	8.09	91	5296372	53.56	ug/l	100
79) 2-Chlorotoluene	8.21	91	3259458	52.65	ug/l	100
80) 1,3,5-Trimethylbenzene	8.30	105	3563071	52.95	ug/l	100
81) trans-1,4-Dichloro-2-Buten	8.33	75	642425	50.42	ug/l	100
83) 4-Chlorotoluene	8.37	91	3390391	53.00	ug/l	100
84) tert-Butylbenzene	8.58	119	3429341	51.38	ug/l	100
85) 1,2,4-Trimethylbenzene	8.65	105	3692290	52.95	ug/l	100
86) sec-Butylbenzene	8.75	105	4647599	53.06	ug/l	100
87) p-Isopropyltoluene	8.89	119	3751801	53.05	ug/l	100
88) 1,3-Dichlorobenzene	8.91	146	2232625	52.00	ug/l	100
89) 1,4-Dichlorobenzene	8.99	146	2217554	50.66	ug/l	100
91) n-Butylbenzene	9.25	91	3574665	53.29	ug/l	100
92) Hexachloroethane	9.32	117	961361	51.60	ug/l	100
93) 1,2-Dichlorobenzene	9.35	146	2214821	52.00	ug/l	100
95) 1,2-Dibromo-3-Chloropropan	10.01	75	310028	50.40	ug/l	100
96) 1,2,4-Trichlorobenzene	10.55	180	1446609	51.80	ug/l	100
97) Hexachlorobutadiene	10.55	225	455246	50.94	ug/l	100

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024039.D  
Acq On : 12 Oct 2010 19:15  
Operator : SY  
Sample : 50 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 10 Sample Multiplier: 1

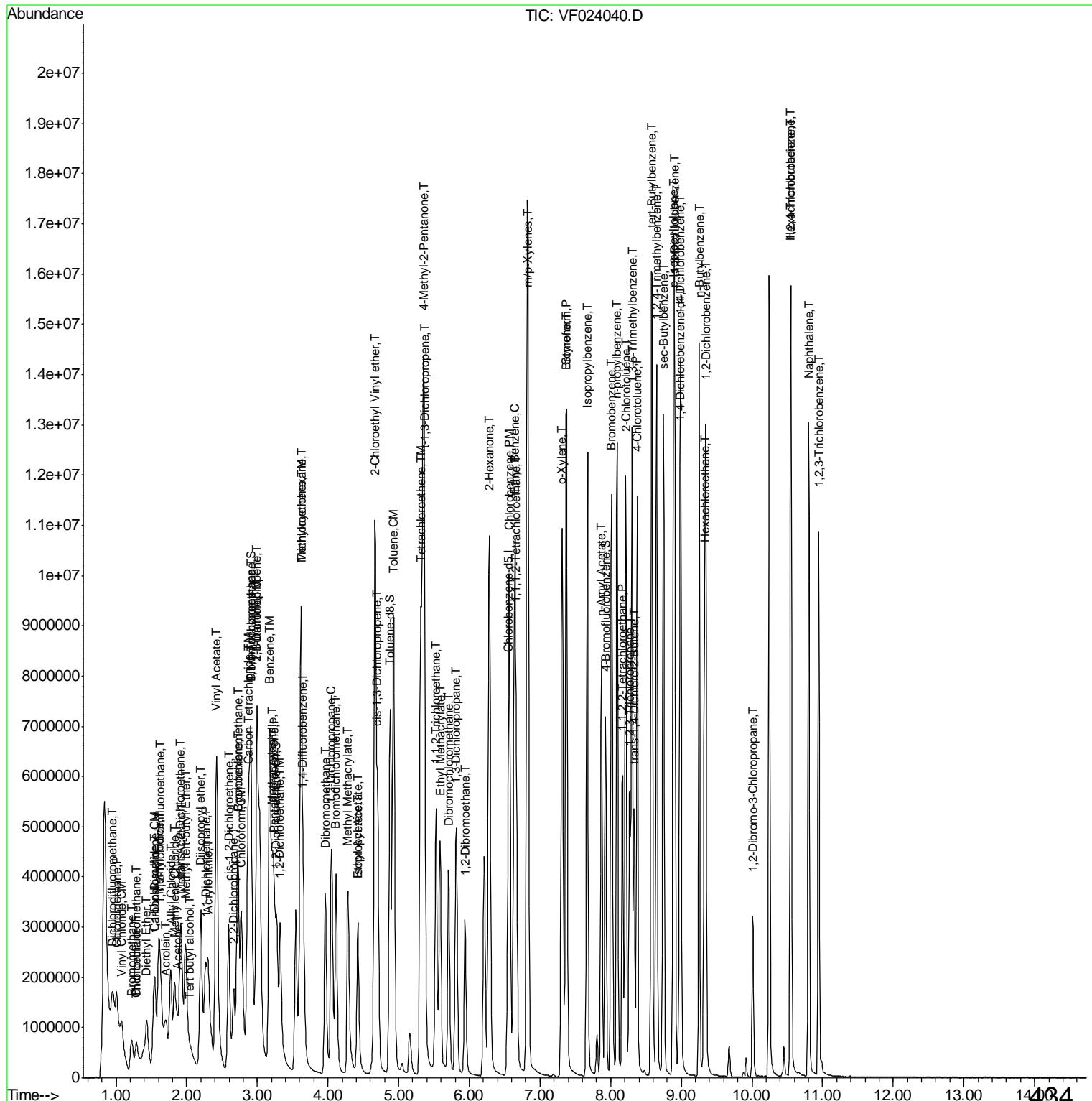
Quant Time: Oct 13 05:13:22 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.80	128	4155286	51.27	ug/l	100
99) 1,2,3-Trichlorobenzene	10.94	180	1321426	51.19	ug/l	100

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024040.D  
Acq On : 12 Oct 2010 19:44  
Operator : SY  
Sample : 100 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 13 05:26:01 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024040.D  
 Acq On : 12 Oct 2010 19:44  
 Operator : SY  
 Sample : 100 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 13 05:26:01 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1534050	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2785646	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.55	117	2599852	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.98	152	1309198	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.27	65	1977903	95.24	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	= 190.48%#		
36) Dibromofluoromethane	2.90	113	1598734	96.20	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	= 192.40%#		
49) Toluene-d8	4.88	98	6039959	93.06	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	= 186.12%#		
62) 4-Bromofluorobenzene	7.93	95	2489380	87.99	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	= 175.98%#		

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	0.96	85	2061212	143.53 ug/l 98
3) Chloromethane	1.01	50	2154440	136.35 ug/l 99
4) Vinyl Chloride	1.08	62	1892149	131.44 ug/l 99
5) Bromomethane	1.22	94	855598	112.74 ug/l 89
6) Chloroethane	1.30	64	486344	88.49 ug/l # 82
7) Trichlorofluoromethane	1.29	101	1284096m	93.38 ug/l
8) Tert butyl alcohol	2.05	59	923798m	548.08 ug/l
9) Diethyl Ether	1.44	74	534190	83.57 ug/l 98
10) 1,1-Dichloroethene	1.54	96	1086288m	91.74 ug/l
11) Methyl Iodide	1.61	142	2649176m	104.06 ug/l
12) Acrolein	1.71	56	628834	389.43 ug/l 98
13) 1,1,2-Trichlorotrifluoroet	1.63	101	1090229	103.91 ug/l 100
14) Acrylonitrile	2.31	53	2881456	579.03 ug/l 100
15) Allyl Chloride	1.78	41	1860653	105.86 ug/l 98
16) Acetone	1.87	43	1792542	418.85 ug/l 94
17) Carbon Disulfide	1.55	76	3483155m	101.44 ug/l
18) Methyl Acetate	1.93	43	1596944	59.16 ug/l 97
19) Methyl tert-butyl Ether	1.99	73	3566132	107.67 ug/l 97
20) Methylene Chloride	1.83	84	1335663m	103.62 ug/l
21) trans-1,2-Dichloroethene	1.91	96	1223494	107.89 ug/l 99
23) Diisopropyl ether	2.20	45	4213790	112.58 ug/l 98
24) Vinyl Acetate	2.42	43	14075314	685.40 ug/l 100
25) 1,1-Dichloroethane	2.26	63	2384775	112.23 ug/l 100
26) 2-Butanone	3.00	43	6967850	451.97 ug/l 100
27) 2,2-Dichloropropane	2.67	77	1458037	107.51 ug/l 100
28) cis-1,2-Dichloroethene	2.59	96	1925716	115.40 ug/l 97
29) Bromochloromethane	2.72	128	916312	110.75 ug/l 97
30) Chloroform	2.77	83	2851984	112.74 ug/l 99
31) Ethyl Acetate	4.42	43	3858351	106.01 ug/l # 100
32) Cyclohexane	2.73	56	1332256	91.78 ug/l 95
33) 1,1,1-Trichloroethane	2.91	97	2206506	106.80 ug/l 99
37) 1,1-Dichloropropene	3.00	75	2638534	106.31 ug/l 99
38) Carbon Tetrachloride	2.86	117	2399636	106.27 ug/l 99
39) Benzene	3.17	78	7523401	107.11 ug/l 99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024040.D  
 Acq On : 12 Oct 2010 19:44  
 Operator : SY  
 Sample : 100 PPB ICC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 13 05:26:01 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 04:11:46 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.22	41	1498321	98.11	ug/l	# 97
41) 1,2-Dichloroethane	3.33	62	2617987	108.50	ug/l	100
43) Isopropyl Acetate	4.42	43	3858351	105.30	ug/l	100
44) Trichloroethene	3.62	130	2381331	107.15	ug/l	96
45) Methylcyclohexane	3.62	83	2527388	92.74	ug/l	99
46) 1,2-Dichloropropane	4.05	63	2150192	106.13	ug/l	100
47) Dibromomethane	3.96	93	1783238	107.64	ug/l	98
48) Bromodichloromethane	4.11	83	3155417	108.51	ug/l	99
50) 4-Methyl-2-Pentanone	5.35	43	12118846	421.46	ug/l	99
51) Toluene	4.93	92	4857336	103.51	ug/l	99
52) t-1,3-Dichloropropene	5.37	75	3111225	98.40	ug/l	99
53) Methyl Methacrylate	4.28	69	1839061	106.69	ug/l	98
54) cis-1,3-Dichloropropene	4.70	75	3600540	101.81	ug/l	98
55) 1,1,2-Trichloroethane	5.53	97	2102738	105.29	ug/l	100
56) Ethyl Methacrylate	5.59	69	3026549	101.50	ug/l	99
57) 1,3-Dichloropropene	5.81	76	3715492	105.65	ug/l	100
58) 2-Chloroethyl Vinyl ether	4.67	63	6232692	519.15	ug/l	99
59) 2-Hexanone	6.28	43	9733189	459.91	ug/l	100
60) Dibromochloromethane	5.71	129	2643196	104.68	ug/l	99
61) 1,2-Dibromoethane	5.94	107	2592112	106.44	ug/l	99
64) Tetrachloroethene	5.31	164	2579122	127.28	ug/l	100
65) Chlorobenzene	6.57	112	5893795	106.42	ug/l	99
66) 1,1,1,2-Tetrachloroethane	6.66	131	2107293	103.10	ug/l	99
67) Ethyl Benzene	6.64	106	2703403	101.80	ug/l	100
68) m/p-Xylenes	6.82	106	6613496	200.95	ug/l	97
69) o-Xylene	7.32	106	3518237	101.72	ug/l	100
70) Styrene	7.38	104	5865621	101.52	ug/l	100
71) Bromoform	7.37	173	1906781	104.24	ug/l	# 100
73) Isopropylbenzene	7.67	105	9333350	111.74	ug/l	100
74) n-Amyl Acetate	7.87	43	4573318	102.56	ug/l	99
75) 1,1,2,2-Tetrachloroethane	8.17	83	3145465	104.20	ug/l	99
76) 1,2,3-Trichloropropane	8.27	75	2240481	103.45	ug/l	100
77) Bromobenzene	8.01	156	2483078	110.12	ug/l	97
78) n-propylbenzene	8.09	91	10050577	104.73	ug/l	98
79) 2-Chlorotoluene	8.21	91	6344423	105.61	ug/l	99
80) 1,3,5-Trimethylbenzene	8.30	105	6929228	106.11	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.33	75	1245659	100.75	ug/l	97
83) 4-Chlorotoluene	8.37	91	6336333	102.06	ug/l	100
84) tert-Butylbenzene	8.59	119	6756533	104.31	ug/l	99
85) 1,2,4-Trimethylbenzene	8.65	105	7195299	106.33	ug/l	100
86) sec-Butylbenzene	8.75	105	9000170	105.89	ug/l	98
87) p-Isopropyltoluene	8.89	119	7437282	108.36	ug/l	98
88) 1,3-Dichlorobenzene	8.91	146	4320308	103.70	ug/l	99
89) 1,4-Dichlorobenzene	8.99	146	4316257	101.61	ug/l	96
91) n-Butylbenzene	9.25	91	6977163	107.19	ug/l	99
92) Hexachloroethane	9.32	117	1937118	107.15	ug/l	98
93) 1,2-Dichlorobenzene	9.35	146	4367531	105.66	ug/l	99
95) 1,2-Dibromo-3-Chloropropan	10.01	75	632452	105.94	ug/l	98
96) 1,2,4-Trichlorobenzene	10.56	180	3002095	110.78	ug/l	98
97) Hexachlorobutadiene	10.55	225	925986	106.78	ug/l	98

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024040.D  
Acq On : 12 Oct 2010 19:44  
Operator : SY  
Sample : 100 PPB ICC  
Misc : 5.0mL,MSVOAF  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 13 05:26:01 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 04:11:46 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.80	128	8342606	106.07	ug/l	99
99) 1,2,3-Trichlorobenzene	10.95	180	2730529	109.01	ug/l	100

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	106	0.00
2 T	Dichlorodifluoromethane	0.671	0.642	4.3	98	0.00
3 P	Chloromethane	0.733	0.706	3.7	105	0.00
4 CM	Vinyl Chloride	0.644	0.602	6.5#	101	0.00
5 T	Bromomethane	0.342	0.301	12.0	106	0.00
6 T	Chloroethane	0.227	0.185	18.5	88	0.00
7 T	Trichlorofluoromethane	0.529	0.471	11.0	89	0.00
8 T	Tert butyl alcohol	0.067	0.064	4.5	103	0.00
9 T	Diethyl Ether	0.248	0.203	18.1	82	0.00
10 CM	1,1-Dichloroethene	0.475	0.393	17.3#	89	0.00
11 T	Methyl Iodide	1.023	0.950	7.1	97	0.00
12 T	Acrolein	0.060	0.043	28.3	94	0.00
13 T	1,1,2-Trichlorotrifluoroeth	0.438	0.371	15.3	90	0.00
14 T	Acrylonitrile	0.206	0.198	3.9	106	0.00
15 T	Allyl Chloride	0.813	0.683	16.0	101	0.00
16 T	Acetone	0.153	0.129	15.7	96	0.00
17 T	Carbon Disulfide	1.477	1.277	13.5	90	0.00
18 T	Methyl Acetate	0.648	0.649	-0.2	110	0.00
19 T	Methyl tert-butyl Ether	1.296	1.221	5.8	103	0.00
20 T	Methylene Chloride	0.539	0.491	8.9	101	0.00
21 T	trans-1,2-Dichloroethene	0.474	0.445	6.1	103	0.00
22 T	Acetonitrile	0.000	0.000	0.0	0#	-1.78#
23 T	Diisopropyl ether	1.550	1.438	7.2	102	0.00
24 T	Vinyl Acetate	1.106	0.912	17.5	95	0.00
25 P	1,1-Dichloroethane	0.876	0.811	7.4	102	0.00
26 TM	2-Butanone	0.519	0.479	7.7	104	0.00
27 T	2,2-Dichloropropane	0.543	0.480	11.6	99	0.00
28 T	cis-1,2-Dichloroethene	0.685	0.636	7.2	103	0.00
29 T	Bromochloromethane	0.333	0.315	5.4	106	0.00
30 CM	Chloroform	1.024	0.947	7.5#	103	0.00
31 T	Ethyl Acetate	1.234	1.186	3.9	102	0.00
32 T	Cyclohexane	0.517	0.454	12.2	100	0.00
33 T	1,1,1-Trichloroethane	0.828	0.769	7.1	101	0.00
34 S	1,2-Dichloroethane-d4	0.752	0.649	13.7	103	0.00
35 I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
36 S	Dibromofluoromethane	0.341	0.322	5.6	107	0.00
37 T	1,1-Dichloropropene	0.523	0.488	6.7	102	0.00
38 TM	Carbon Tetrachloride	0.484	0.431	11.0	102	0.00
39 TM	Benzene	1.420	1.353	4.7	104	0.00
40 T	Methacrylonitrile	0.296	0.276	6.8	104	0.00
41 TM	1,2-Dichloroethane	0.494	0.458	7.3	100	0.00
42 T	Isobutyl Alcohol	0.000	0.000	0.0	0#	-3.54#
43 T	Isopropyl Acetate	0.677	0.648	4.3	102	0.00
44 TM	Trichloroethene	0.443	0.428	3.4	105	0.00
45 T	Methylcyclohexane	0.511	0.452	11.5	100	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 C	1,2-Dichloropropane	0.393	0.378	3.8#	104	0.00
47 T	Dibromomethane	0.325	0.312	4.0	103	0.00
48 T	Bromodichloromethane	0.574	0.548	4.5	101	0.00
49 S	Toluene-d8	1.152	1.074	6.8	105	0.00
50 T	4-Methyl-2-Pentanone	0.493	0.459	6.9	102	0.00
51 CM	Toluene	0.906	0.859	5.2#	102	0.00
52 T	t-1,3-Dichloropropene	0.605	0.569	6.0	101	0.00
53 T	Methyl Methacrylate	0.329	0.311	5.5	101	0.00
54 T	cis-1,3-Dichloropropene	0.683	0.642	6.0	102	0.00
55 T	1,1,2-Trichloroethane	0.383	0.367	4.2	102	0.00
56 T	Ethyl Methacrylate	0.552	0.526	4.7	102	0.00
57 T	1,3-Dichloropropane	0.675	0.644	4.6	102	0.00
58 T	2-Chloroethyl Vinyl ether	0.247	0.222	10.1	103	0.00
59 T	2-Hexanone	0.361	0.338	6.4	100	0.00
60 T	Dibromochloromethane	0.466	0.456	2.1	102	0.00
61 T	1,2-Dibromoethane	0.458	0.442	3.5	102	0.00
62 S	4-Bromofluorobenzene	0.483	0.439	9.1	108	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
64 TM	Tetrachloroethene	0.453	0.528	-16.6	115	0.00
65 PM	Chlorobenzene	1.156	1.119	3.2	103	0.00
66 T	1,1,1,2-Tetrachloroethane	0.421	0.404	4.0	104	0.00
67 C	Ethyl Benzene	0.546	0.521	4.6#	102	0.00
68 T	m/p-Xylenes	0.694	0.662	4.6	102	0.00
69 T	o-Xylene	0.703	0.684	2.7	105	0.00
70 T	Styrene	1.169	1.137	2.7	103	0.00
71 P	Bromoform	0.360	0.360	0.0	104	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
73 T	Isopropylbenzene	3.510	3.373	3.9	102	0.00
74 T	n-Amyl Acetate	1.802	1.686	6.4	101	0.00
75 P	1,1,2,2-Tetrachloroethane	1.244	1.159	6.8	101	0.00
76 T	1,2,3-Trichloropropene	0.911	0.847	7.0	102	0.00
77 T	Bromobenzene	0.932	0.912	2.1	103	0.00
78 T	n-propylbenzene	4.038	3.866	4.3	102	0.00
79 T	2-Chlorotoluene	2.488	2.384	4.2	102	0.00
80 T	1,3,5-Trimethylbenzene	2.704	2.581	4.5	101	0.00
81 T	trans-1,4-Dichloro-2-Butene	0.493	0.458	7.1	100	0.00
82 T	p-ethyltoluene	0.000	0.000	0.0	0#	-8.30#
83 T	4-Chlorotoluene	2.552	2.461	3.6	102	0.00
84 T	tert-Butylbenzene	2.636	2.424	8.0	99	0.00
85 T	1,2,4-Trimethylbenzene	2.800	2.704	3.4	102	0.00
86 T	sec-Butylbenzene	3.503	3.387	3.3	102	0.00
87 T	p-Isopropyltoluene	2.831	2.758	2.6	103	0.00
88 T	1,3-Dichlorobenzene	1.713	1.646	3.9	103	0.00
89 T	1,4-Dichlorobenzene	1.757	1.701	3.2	107	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

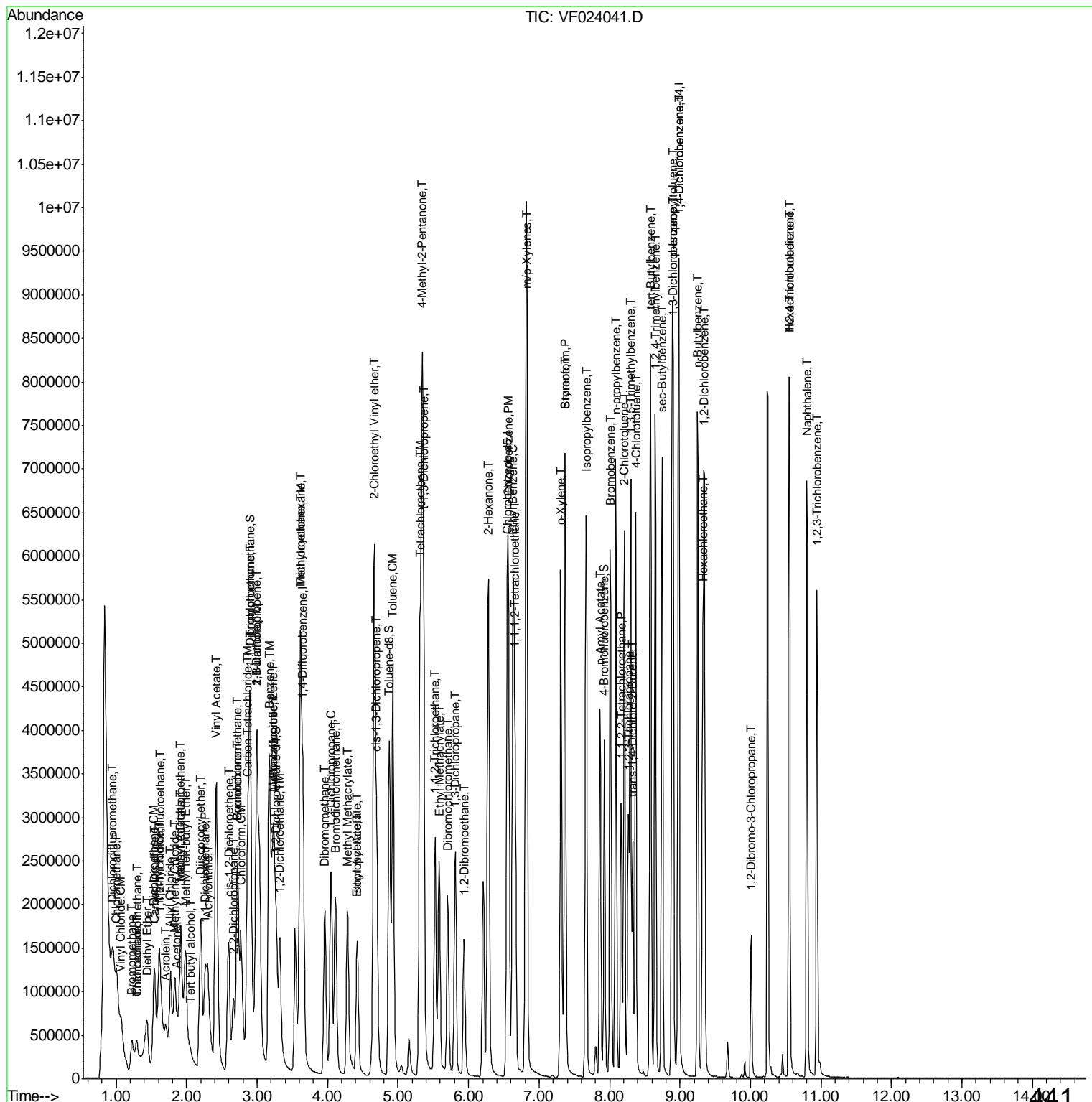
	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	p-diethylbenzene	0.000	0.000	0.0	0#	-9.25#
91 T	n-Butylbenzene	2.715	2.576	5.1	101	0.00
92 T	Hexachloroethane	0.719	0.701	2.5	102	0.00
93 T	1,2-Dichlorobenzene	1.676	1.637	2.3	103	0.00
94 T	1,2,4,5-tetramethylbenzene	0.000	0.000	0.0	0#	-9.92#
95 T	1,2-Dibromo-3-Chloropropane	0.237	0.232	2.1	105	0.00
96 T	1,2,4-Trichlorobenzene	1.075	1.068	0.7	103	0.00
97 T	Hexachlorobutadiene	0.325	0.339	-4.3	104	0.00
98 T	Naphthalene	3.039	3.055	-0.5	103	0.00
99 T	1,2,3-Trichlorobenzene	0.983	0.977	0.6	103	0.00

( # ) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1620618	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2967169	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2686037	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.98	152	1398621	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.27	65	1051467	43.13	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	86.26%	
36) Dibromofluoromethane	2.90	113	954301	47.18	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	94.36%	
49) Toluene-d8	4.87	98	3185262	46.58	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	93.16%	
62) 4-Bromofluorobenzene	7.93	95	1302016	45.47	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	90.94%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.96	85	1039868	47.78	ug/l 99
3) Chloromethane	1.01	50	1144035	48.15	ug/l 99
4) Vinyl Chloride	1.08	62	975571	46.71	ug/l 99
5) Bromomethane	1.23	94	487300	52.12	ug/l 100
6) Chloroethane	1.30	64	300081	40.85	ug/l 98
7) Trichlorofluoromethane	1.29	101	762691m	44.45	ug/l
8) Tert butyl alcohol	2.06	59	521820m	239.09	ug/l
9) Diethyl Ether	1.44	74	328770	38.32	ug/l 99
10) 1,1-Dichloroethene	1.53	96	636622m	41.91	ug/l
11) Methyl Iodide	1.61	142	1539829m	46.44	ug/l
12) Acrolein	1.71	56	350932	245.64	ug/l 99
13) 1,1,2-Trichlorotrifluoroet	1.63	101	600909	42.33	ug/l 99
14) Acrylonitrile	2.30	53	1602376	240.47	ug/l 100
15) Allyl Chloride	1.77	41	1107584	53.09	ug/l 95
16) Acetone	1.87	43	1045344	228.63	ug/l 98
17) Carbon Disulfide	1.55	76	2068831m	43.21	ug/l
18) Methyl Acetate	1.92	43	1052524	52.32	ug/l 98
19) Methyl tert-butyl Ether	1.98	73	1979193	47.11	ug/l
20) Methylene Chloride	1.83	84	795525m	45.50	ug/l
21) trans-1,2-Dichloroethene	1.92	96	721091	46.90	ug/l 100
23) Diisopropyl ether	2.20	45	2330265	46.39	ug/l 98
24) Vinyl Acetate	2.42	43	7390130	206.24	ug/l 100
25) 1,1-Dichloroethane	2.26	63	1314633	46.31	ug/l 100
26) 2-Butanone	2.99	43	3878280	230.75	ug/l 100
27) 2,2-Dichloropropane	2.66	77	777385	44.18	ug/l 100
28) cis-1,2-Dichloroethene	2.60	96	1030882	46.45	ug/l 97
29) Bromochloromethane	2.72	128	510951	47.29	ug/l 97
30) Chloroform	2.77	83	1534038	46.20	ug/l 99
31) Ethyl Acetate	4.42	43	1922802	48.06	ug/l # 100
32) Cyclohexane	2.72	56	736109	43.95	ug/l 98
33) 1,1,1-Trichloroethane	2.91	97	1245842	46.42	ug/l 99
37) 1,1-Dichloropropene	2.99	75	1448336	46.68	ug/l 99
38) Carbon Tetrachloride	2.86	117	1279927	44.56	ug/l 100
39) Benzene	3.17	78	4013850	47.65	ug/l 100

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.22	41	820334	46.70	ug/l	# 97
41) 1,2-Dichloroethane	3.32	62	1357516	46.30	ug/l	98
43) Isopropyl Acetate	4.42	43	1922802	47.85	ug/l	# 100
44) Trichloroethene	3.62	130	1269960	48.27	ug/l	99
45) Methylcyclohexane	3.61	83	1342216	44.26	ug/l	100
46) 1,2-Dichloropropane	4.04	63	1121466	48.09	ug/l	100
47) Dibromomethane	3.96	93	925053	47.95	ug/l	98
48) Bromodichloromethane	4.11	83	1627043	47.74	ug/l	99
50) 4-Methyl-2-Pentanone	5.34	43	6813370	232.83	ug/l	100
51) Toluene	4.93	92	2547631	47.37	ug/l	99
52) t-1,3-Dichloropropene	5.37	75	1688051	47.02	ug/l	98
53) Methyl Methacrylate	4.28	69	922053	47.27	ug/l	100
54) cis-1,3-Dichloropropene	4.70	75	1904961	47.03	ug/l	98
55) 1,1,2-Trichloroethane	5.52	97	1089408	47.90	ug/l	100
56) Ethyl Methacrylate	5.58	69	1560679	47.61	ug/l	99
57) 1,3-Dichloropropane	5.81	76	1909911	47.65	ug/l	100
58) 2-Chloroethyl Vinyl ether	4.66	63	3287740	223.92	ug/l	99
59) 2-Hexanone	6.28	43	5011867	233.66	ug/l	99
60) Dibromochloromethane	5.70	129	1353940	48.92	ug/l	100
61) 1,2-Dibromoethane	5.94	107	1311611	48.24	ug/l	99
64) Tetrachloroethene	5.31	164	1418781	58.32	ug/l	100
65) Chlorobenzene	6.57	112	3006655	48.41	ug/l	100
66) 1,1,1,2-Tetrachloroethane	6.66	131	1085445	47.95	ug/l	99
67) Ethyl Benzene	6.63	106	1398602	47.66	ug/l	100
68) m/p-Xylenes	6.82	106	3558292	95.41	ug/l	100
69) o-Xylene	7.31	106	1837541	48.69	ug/l	97
70) Styrene	7.37	104	3052954	48.61	ug/l	100
71) Bromoform	7.36	173	966725	49.93	ug/l	# 99
73) Isopropylbenzene	7.67	105	4717190	48.05	ug/l	100
74) n-Amyl Acetate	7.87	43	2358299	46.79	ug/l	100
75) 1,1,2,2-Tetrachloroethane	8.17	83	1620615	46.59	ug/l	100
76) 1,2,3-Trichloropropane	8.27	75	1184242	46.45	ug/l	99
77) Bromobenzene	8.01	156	1276152	48.93	ug/l	99
78) n-propylbenzene	8.09	91	5407232	47.87	ug/l	99
79) 2-Chlorotoluene	8.21	91	3334745	47.92	ug/l	99
80) 1,3,5-Trimethylbenzene	8.30	105	3609489	47.73	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.33	75	639985	46.39	ug/l	99
83) 4-Chlorotoluene	8.37	91	3442673	48.22	ug/l	99
84) tert-Butylbenzene	8.58	119	3390861	45.99	ug/l	98
85) 1,2,4-Trimethylbenzene	8.65	105	3782039	48.30	ug/l	100
86) sec-Butylbenzene	8.74	105	4737805	48.35	ug/l	100
87) p-Isopropyltoluene	8.89	119	3857143	48.71	ug/l	100
88) 1,3-Dichlorobenzene	8.91	146	2301443	48.02	ug/l	100
89) 1,4-Dichlorobenzene	8.99	146	2378472	48.39	ug/l	96
91) n-Butylbenzene	9.25	91	3603402	47.45	ug/l	99
92) Hexachloroethane	9.32	117	981059	48.76	ug/l	100
93) 1,2-Dichlorobenzene	9.35	146	2289235	48.82	ug/l	99
95) 1,2-Dibromo-3-Chloropropan	10.01	75	324923	49.03	ug/l	99
96) 1,2,4-Trichlorobenzene	10.55	180	1493609	49.67	ug/l	98
97) Hexachlorobutadiene	10.55	225	473772	52.11	ug/l	97

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
Data File : VF024041.D  
Acq On : 12 Oct 2010 20:14  
Operator : SY  
Sample : 50 PPB ICV  
Misc : 5.0mL,MSVOAF  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 13 05:38:06 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.80	128	4272429	50.26	ug/l	100
99) 1,2,3-Trichlorobenzene	10.94	180	1366009	49.67	ug/l	100

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
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Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	106	0.00
2 T	Dichlorodifluoromethane	50.000	47.779	4.4	98	0.00
3 P	Chloromethane	50.000	48.150	3.7	105	0.00
4 CM	Vinyl Chloride	50.000	46.707	6.6#	101	0.00
5 T	Bromomethane	50.000	52.119	-4.2	106	0.00
6 T	Chloroethane	50.000	40.847	18.3	88	0.00
7 T	Trichlorofluoromethane	50.000	44.453	11.1	89	0.00
8 T	Tert butyl alcohol	250.000	239.089	4.4	103	0.00
9 T	Diethyl Ether	50.000	38.320	23.4	82	0.00
10 CM	1,1-Dichloroethene	50.000	41.913	16.2#	89	0.00
11 T	Methyl Iodide	50.000	46.436	7.1	97	0.00
12 T	Acrolein	250.000	245.644	1.7	94	0.00
13 T	1,1,2-Trichlorotrifluoroeth	50.000	42.333	15.3	90	0.00
14 T	Acrylonitrile	250.000	240.472	3.8	106	0.00
15 T	Allyl Chloride	50.000	53.085	-6.2	101	0.00
16 T	Acetone	250.000	228.627	8.5	96	0.00
17 T	Carbon Disulfide	50.000	43.208	13.6	90	0.00
18 T	Methyl Acetate	50.000	52.323	-4.6	110	0.00
19 T	Methyl tert-butyl Ether	50.000	47.112	5.8	103	0.00
20 T	Methylene Chloride	50.000	45.499	9.0	101	0.00
21 T	trans-1,2-Dichloroethene	50.000	46.901	6.2	103	0.00
22 T	Acetonitrile	50.000	0.000	100.0#	0	-1.78#
23 T	Diisopropyl ether	50.000	46.390	7.2	102	0.00
24 T	Vinyl Acetate	250.000	206.236	17.5	95	0.00
25 P	1,1-Dichloroethane	50.000	46.306	7.4	102	0.00
26 TM	2-Butanone	250.000	230.752	7.7	104	0.00
27 T	2,2-Dichloropropane	50.000	44.183	11.6	99	0.00
28 T	cis-1,2-Dichloroethene	50.000	46.446	7.1	103	0.00
29 T	Bromochloromethane	50.000	47.290	5.4	106	0.00
30 CM	Chloroform	50.000	46.202	7.6#	103	0.00
31 T	Ethyl Acetate	50.000	48.065	3.9	102	0.00
32 T	Cyclohexane	50.000	43.949	12.1	100	0.00
33 T	1,1,1-Trichloroethane	50.000	46.416	7.2	101	0.00
34 S	1,2-Dichloroethane-d4	50.000	43.128	13.7	103	0.00
35 I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00
36 S	Dibromofluoromethane	50.000	47.182	5.6	107	0.00
37 T	1,1-Dichloropropene	50.000	46.679	6.6	102	0.00
38 TM	Carbon Tetrachloride	50.000	44.561	10.9	102	0.00
39 TM	Benzene	50.000	47.647	4.7	104	0.00
40 T	Methacrylonitrile	50.000	46.697	6.6	104	0.00
41 TM	1,2-Dichloroethane	50.000	46.299	7.4	100	0.00
42 T	Isobutyl Alcohol	50.000	0.000	100.0#	0	-3.54#
43 T	Isopropyl Acetate	50.000	47.845	4.3	102	0.00
44 TM	Trichloroethene	50.000	48.274	3.5	105	0.00
45 T	Methylcyclohexane	50.000	44.260	11.5	100	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
46 C	1,2-Dichloropropane	50.000	48.093	3.8#	104	0.00
47 T	Dibromomethane	50.000	47.954	4.1	103	0.00
48 T	Bromodichloromethane	50.000	47.743	4.5	101	0.00
49 S	Toluene-d8	50.000	46.583	6.8	105	0.00
50 T	4-Methyl-2-Pentanone	250.000	232.834	6.9	102	0.00
51 CM	Toluene	50.000	47.365	5.3#	102	0.00
52 T	t-1,3-Dichloropropene	50.000	47.024	6.0	101	0.00
53 T	Methyl Methacrylate	50.000	47.273	5.5	101	0.00
54 T	cis-1,3-Dichloropropene	50.000	47.033	5.9	102	0.00
55 T	1,1,2-Trichloroethane	50.000	47.903	4.2	102	0.00
56 T	Ethyl Methacrylate	50.000	47.610	4.8	102	0.00
57 T	1,3-Dichloropropane	50.000	47.648	4.7	102	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	223.921	10.4	103	0.00
59 T	2-Hexanone	250.000	233.656	6.5	100	0.00
60 T	Dibromochloromethane	50.000	48.923	2.2	102	0.00
61 T	1,2-Dibromoethane	50.000	48.241	3.5	102	0.00
62 S	4-Bromofluorobenzene	50.000	45.465	9.1	108	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	103	0.00
64 TM	Tetrachloroethene	50.000	58.322	-16.6	115	0.00
65 PM	Chlorobenzene	50.000	48.409	3.2	103	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	47.951	4.1	104	0.00
67 C	Ethyl Benzene	50.000	47.660	4.7#	102	0.00
68 T	m/p-Xylenes	100.000	95.411	4.6	102	0.00
69 T	o-Xylene	50.000	48.689	2.6	105	0.00
70 T	Styrene	50.000	48.607	2.8	103	0.00
71 P	Bromoform	50.000	49.927	0.1	104	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	104	0.00
73 T	Isopropylbenzene	50.000	48.050	3.9	102	0.00
74 T	n-Amyl Acetate	50.000	46.787	6.4	101	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	46.590	6.8	101	0.00
76 T	1,2,3-Trichloropropene	50.000	46.452	7.1	102	0.00
77 T	Bromobenzene	50.000	48.928	2.1	103	0.00
78 T	n-propylbenzene	50.000	47.874	4.3	102	0.00
79 T	2-Chlorotoluene	50.000	47.924	4.2	102	0.00
80 T	1,3,5-Trimethylbenzene	50.000	47.727	4.5	101	0.00
81 T	trans-1,4-Dichloro-2-Butene	50.000	46.391	7.2	100	0.00
82 T	p-ethyltoluene	50.000	0.000	100.0#	0	-8.30#
83 T	4-Chlorotoluene	50.000	48.224	3.6	102	0.00
84 T	tert-Butylbenzene	50.000	45.989	8.0	99	0.00
85 T	1,2,4-Trimethylbenzene	50.000	48.295	3.4	102	0.00
86 T	sec-Butylbenzene	50.000	48.354	3.3	102	0.00
87 T	p-Isopropyltoluene	50.000	48.707	2.6	103	0.00
88 T	1,3-Dichlorobenzene	50.000	48.023	4.0	103	0.00
89 T	1,4-Dichlorobenzene	50.000	48.391	3.2	107	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024041.D  
 Acq On : 12 Oct 2010 20:14  
 Operator : SY  
 Sample : 50 PPB ICV  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 13 05:50:46 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 13 05:38:06 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
90 T	p-diethylbenzene	50.000	0.000	100.0#	0	-9.25#
91 T	n-Butylbenzene	50.000	47.453	5.1	101	0.00
92 T	Hexachloroethane	50.000	48.763	2.5	102	0.00
93 T	1,2-Dichlorobenzene	50.000	48.825	2.3	103	0.00
94 T	1,2,4,5-tetramethylbenzene	50.000	0.000	100.0#	0	-9.92#
95 T	1,2-Dibromo-3-Chloropropane	50.000	49.033	1.9	105	0.00
96 T	1,2,4-Trichlorobenzene	50.000	49.674	0.7	103	0.00
97 T	Hexachlorobutadiene	50.000	52.108	-4.2	104	0.00
98 T	Naphthalene	50.000	50.258	-0.5	103	0.00
99 T	1,2,3-Trichlorobenzene	50.000	49.672	0.7	103	0.00

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024092.D  
 Acq On : 18 Oct 2010 11:16  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:23:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 10:17:59 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	103	-0.02
2 T	Dichlorodifluoromethane	0.671	0.708	-5.5	105	0.00
3 P	Chloromethane	0.733	0.773	-5.5	112	0.00
4 CM	Vinyl Chloride	0.644	0.670	-4.0#	109	-0.01
5 T	Bromomethane	0.342	0.299	12.6	103	-0.01
6 T	Chloroethane	0.227	0.202	11.0	94	-0.02
7 T	Trichlorofluoromethane	0.529	0.582	-10.0	107	0.07
8 T	Tert butyl alcohol	0.067	0.071	-6.0	110	-0.02
9 T	Diethyl Ether	0.248	0.285	-14.9	113	-0.01
10 CM	1,1-Dichloroethene	0.475	0.497	-4.6#	110	-0.01
11 T	Methyl Iodide	1.023	1.102	-7.7	110	-0.01
12 T	Acrolein	0.060	0.052	13.3	110	-0.01
13 T	1,1,2-Trichlorotrifluoroeth	0.438	0.486	-11.0	115	0.00
14 T	Acrylonitrile	0.206	0.232	-12.6	121	-0.02
15 T	Allyl Chloride	0.813	0.811	0.2	116	-0.01
16 T	Acetone	0.153	0.165	-7.8	120	-0.01
17 T	Carbon Disulfide	1.477	1.611	-9.1	111	-0.01
18 T	Methyl Acetate	0.648	0.707	-9.1	117	-0.01
19 T	Methyl tert-butyl Ether	1.296	1.380	-6.5	114	-0.02
20 T	Methylene Chloride	0.539	0.548	-1.7	110	-0.01
21 T	trans-1,2-Dichloroethene	0.474	0.490	-3.4	110	-0.01
22 T	Acetonitrile	0.000	0.000	0.0	0#	-1.78#
23 T	Diisopropyl ether	1.550	1.663	-7.3	115	-0.01
24 T	Vinyl Acetate	1.106	1.243	-12.4	127	-0.02
25 P	1,1-Dichloroethane	0.876	0.923	-5.4	113	-0.01
26 TM	2-Butanone	0.519	0.546	-5.2	116	-0.02
27 T	2,2-Dichloropropane	0.543	0.554	-2.0	112	-0.02
28 T	cis-1,2-Dichloroethene	0.685	0.696	-1.6	110	-0.02
29 T	Bromochloromethane	0.333	0.310	6.9	102	-0.02
30 CM	Chloroform	1.024	1.052	-2.7#	111	-0.02
31 T	Ethyl Acetate	1.234	1.307	-5.9	109	-0.02
32 T	Cyclohexane	0.517	0.520	-0.6	112	-0.02
33 T	1,1,1-Trichloroethane	0.828	0.808	2.4	103	-0.02
34 S	1,2-Dichloroethane-d4	0.752	0.729	3.1	113	-0.02
35 I	1,4-Difluorobenzene	1.000	1.000	0.0	105	-0.02
36 S	Dibromofluoromethane	0.341	0.348	-2.1	116	-0.02
37 T	1,1-Dichloropropene	0.523	0.495	5.4	103	-0.02
38 TM	Carbon Tetrachloride	0.484	0.456	5.8	108	-0.02
39 TM	Benzene	1.420	1.325	6.7	102	-0.02
40 T	Methacrylonitrile	0.296	0.298	-0.7	112	-0.02
41 TM	1,2-Dichloroethane	0.494	0.477	3.4	105	-0.02
42 T	Isobutyl Alcohol	0.000	0.000	0.0	0#	-3.54#
43 T	Isopropyl Acetate	0.677	0.696	-2.8	109	-0.02
44 TM	Trichloroethene	0.443	0.395	10.8	97	-0.02
45 T	Methylcyclohexane	0.511	0.471	7.8	104	-0.02

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024092.D  
 Acq On : 18 Oct 2010 11:16  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:23:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 10:17:59 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 C	1,2-Dichloropropane	0.393	0.382	2.8#	105	-0.02
47 T	Dibromomethane	0.325	0.304	6.5	101	-0.02
48 T	Bromodichloromethane	0.574	0.555	3.3	103	-0.02
49 S	Toluene-d8	1.152	1.083	6.0	107	-0.02
50 T	4-Methyl-2-Pentanone	0.493	0.502	-1.8	112	-0.02
51 CM	Toluene	0.906	0.839	7.4#	100	-0.02
52 T	t-1,3-Dichloropropene	0.605	0.596	1.5	106	-0.03
53 T	Methyl Methacrylate	0.329	0.319	3.0	104	-0.02
54 T	cis-1,3-Dichloropropene	0.683	0.658	3.7	105	-0.02
55 T	1,1,2-Trichloroethane	0.383	0.363	5.2	101	-0.02
56 T	Ethyl Methacrylate	0.552	0.541	2.0	105	-0.02
57 T	1,3-Dichloropropane	0.675	0.647	4.1	103	-0.02
58 T	2-Chloroethyl Vinyl ether	0.247	0.176	28.7	82	-0.02
59 T	2-Hexanone	0.361	0.372	-3.0	110	-0.02
60 T	Dibromochloromethane	0.466	0.450	3.4	101	-0.02
61 T	1,2-Dibromoethane	0.458	0.435	5.0	101	-0.02
62 S	4-Bromofluorobenzene	0.483	0.438	9.3	107	-0.02
63 I	Chlorobenzene-d5	1.000	1.000	0.0	105	-0.03
64 TM	Tetrachloroethene	0.453	0.494	-9.1	109	-0.02
65 PM	Chlorobenzene	1.156	1.062	8.1	100	-0.03
66 T	1,1,1,2-Tetrachloroethane	0.421	0.383	9.0	100	-0.02
67 C	Ethyl Benzene	0.546	0.503	7.9#	100	-0.02
68 T	m/p-Xylenes	0.694	0.642	7.5	101	-0.02
69 T	o-Xylene	0.703	0.638	9.2	99	-0.02
70 T	Styrene	1.169	1.097	6.2	101	-0.02
71 P	Bromoform	0.360	0.354	1.7	104	-0.02
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	-0.02
73 T	Isopropylbenzene	3.510	3.236	7.8	100	-0.02
74 T	n-Amyl Acetate	1.802	1.766	2.0	108	-0.02
75 P	1,1,2,2-Tetrachloroethane	1.244	1.188	4.5	106	-0.02
76 T	1,2,3-Trichloropropene	0.911	0.858	5.8	106	-0.02
77 T	Bromobenzene	0.932	0.860	7.7	100	-0.02
78 T	n-propylbenzene	4.038	3.785	6.3	102	-0.02
79 T	2-Chlorotoluene	2.488	2.309	7.2	101	-0.02
80 T	1,3,5-Trimethylbenzene	2.704	2.510	7.2	101	-0.02
81 T	trans-1,4-Dichloro-2-Butene	0.493	0.506	-2.6	113	-0.02
82 T	p-ethyltoluene	0.000	0.000	0.0	0#	-8.30#
83 T	4-Chlorotoluene	2.552	2.367	7.2	100	-0.02
84 T	tert-Butylbenzene	2.636	2.585	1.9	108	-0.02
85 T	1,2,4-Trimethylbenzene	2.800	2.621	6.4	101	-0.02
86 T	sec-Butylbenzene	3.503	3.305	5.7	102	-0.02
87 T	p-Isopropyltoluene	2.831	2.665	5.9	102	-0.02
88 T	1,3-Dichlorobenzene	1.713	1.575	8.1	101	-0.02
89 T	1,4-Dichlorobenzene	1.757	1.633	7.1	105	-0.02

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024092.D  
 Acq On : 18 Oct 2010 11:16  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:23:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 10:17:59 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	p-diethylbenzene	0.000	0.000	0.0	0#	-9.25#
91 T	n-Butylbenzene	2.715	2.628	3.2	105	-0.02
92 T	Hexachloroethane	0.719	0.681	5.3	101	-0.02
93 T	1,2-Dichlorobenzene	1.676	1.539	8.2	99	-0.02
94 T	1,2,4,5-tetramethylbenzene	0.000	0.000	0.0	0#	-9.92#
95 T	1,2-Dibromo-3-Chloropropane	0.237	0.232	2.1	107	-0.02
96 T	1,2,4-Trichlorobenzene	1.075	1.027	4.5	101	-0.02
97 T	Hexachlorobutadiene	0.325	0.321	1.2	101	-0.02
98 T	Naphthalene	3.039	2.923	3.8	101	-0.02
99 T	1,2,3-Trichlorobenzene	0.983	0.910	7.4	98	-0.02

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024092.D  
 Acq On : 18 Oct 2010 11:16  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:23:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 10:17:59 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	103	-0.02
2 T	Dichlorodifluoromethane	50.000	52.688	-5.4	105	0.00
3 P	Chloromethane	50.000	52.692	-5.4	112	0.00
4 CM	Vinyl Chloride	50.000	51.999	-4.0#	109	-0.01
5 T	Bromomethane	50.000	51.758	-3.5	103	-0.01
6 T	Chloroethane	50.000	45.613	8.8	94	-0.02
7 T	Trichlorofluoromethane	50.000	55.010	-10.0	107	0.07
8 T	Tert butyl alcohol	250.000	262.541	-5.0	110	-0.02
9 T	Diethyl Ether	50.000	60.912	-21.8	113	-0.01
10 CM	1,1-Dichloroethene	50.000	56.275	-12.5#	110	-0.01
11 T	Methyl Iodide	50.000	53.836	-7.7	110	-0.01
12 T	Acrolein	250.000	297.873	-19.1	110	-0.01
13 T	1,1,2-Trichlorotrifluoroeth	50.000	55.460	-10.9	115	0.00
14 T	Acrylonitrile	250.000	282.601	-13.0	121	-0.02
15 T	Allyl Chloride	50.000	63.585	-27.2	116	-0.01
16 T	Acetone	250.000	308.142	-23.3	120	-0.01
17 T	Carbon Disulfide	50.000	54.529	-9.1	111	-0.01
18 T	Methyl Acetate	50.000	58.086	-16.2	117	-0.01
19 T	Methyl tert-butyl Ether	50.000	53.237	-6.5	114	-0.02
20 T	Methylene Chloride	50.000	50.805	-1.6	110	-0.01
21 T	trans-1,2-Dichloroethene	50.000	51.619	-3.2	110	-0.01
22 T	Acetonitrile	50.000	0.000	100.0#	0	-1.78#
23 T	Diisopropyl ether	50.000	53.659	-7.3	115	-0.01
24 T	Vinyl Acetate	250.000	281.023	-12.4	127	-0.02
25 P	1,1-Dichloroethane	50.000	52.667	-5.3	113	-0.01
26 TM	2-Butanone	250.000	263.155	-5.3	116	-0.02
27 T	2,2-Dichloropropane	50.000	51.045	-2.1	112	-0.02
28 T	cis-1,2-Dichloroethene	50.000	50.834	-1.7	110	-0.02
29 T	Bromochloromethane	50.000	46.452	7.1	102	-0.02
30 CM	Chloroform	50.000	51.330	-2.7#	111	-0.02
31 T	Ethyl Acetate	50.000	52.960	-5.9	109	-0.02
32 T	Cyclohexane	50.000	50.305	-0.6	112	-0.02
33 T	1,1,1-Trichloroethane	50.000	48.801	2.4	103	-0.02
34 S	1,2-Dichloroethane-d4	50.000	48.448	3.1	113	-0.02
35 I	1,4-Difluorobenzene	50.000	50.000	0.0	105	-0.02
36 S	Dibromofluoromethane	50.000	51.072	-2.1	116	-0.02
37 T	1,1-Dichloropropene	50.000	47.345	5.3	103	-0.02
38 TM	Carbon Tetrachloride	50.000	47.138	5.7	108	-0.02
39 TM	Benzene	50.000	46.670	6.7	102	-0.02
40 T	Methacrylonitrile	50.000	50.267	-0.5	112	-0.02
41 TM	1,2-Dichloroethane	50.000	48.222	3.6	105	-0.02
42 T	Isobutyl Alcohol	50.000	0.000	100.0#	0	-3.54#
43 T	Isopropyl Acetate	50.000	51.355	-2.7	109	-0.02
44 TM	Trichloroethene	50.000	44.520	11.0	97	-0.02
45 T	Methylcyclohexane	50.000	46.089	7.8	104	-0.02

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024092.D  
 Acq On : 18 Oct 2010 11:16  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:23:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 10:17:59 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
46 C	1,2-Dichloropropane	50.000	48.600	2.8#	105	-0.02
47 T	Dibromomethane	50.000	46.737	6.5	101	-0.02
48 T	Bromodichloromethane	50.000	48.358	3.3	103	-0.02
49 S	Toluene-d8	50.000	47.015	6.0	107	-0.02
50 T	4-Methyl-2-Pentanone	250.000	254.669	-1.9	112	-0.02
51 CM	Toluene	50.000	46.292	7.4#	100	-0.02
52 T	t-1,3-Dichloropropene	50.000	49.279	1.4	106	-0.03
53 T	Methyl Methacrylate	50.000	48.590	2.8	104	-0.02
54 T	cis-1,3-Dichloropropene	50.000	48.220	3.6	105	-0.02
55 T	1,1,2-Trichloroethane	50.000	47.362	5.3	101	-0.02
56 T	Ethyl Methacrylate	50.000	48.958	2.1	105	-0.02
57 T	1,3-Dichloropropane	50.000	47.917	4.2	103	-0.02
58 T	2-Chloroethyl Vinyl ether	250.000	177.556	29.0	82	-0.02
59 T	2-Hexanone	250.000	257.272	-2.9	110	-0.02
60 T	Dibromochloromethane	50.000	48.267	3.5	101	-0.02
61 T	1,2-Dibromoethane	50.000	47.523	5.0	101	-0.02
62 S	4-Bromofluorobenzene	50.000	45.378	9.2	107	-0.02
63 I	Chlorobenzene-d5	50.000	50.000	0.0	105	-0.03
64 TM	Tetrachloroethene	50.000	54.502	-9.0	109	-0.02
65 PM	Chlorobenzene	50.000	45.949	8.1	100	-0.03
66 T	1,1,1,2-Tetrachloroethane	50.000	45.482	9.0	100	-0.02
67 C	Ethyl Benzene	50.000	46.083	7.8#	100	-0.02
68 T	m/p-Xylenes	100.000	92.419	7.6	101	-0.02
69 T	o-Xylene	50.000	45.421	9.2	99	-0.02
70 T	Styrene	50.000	46.899	6.2	101	-0.02
71 P	Bromoform	50.000	49.050	1.9	104	-0.02
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	106	-0.02
73 T	Isopropylbenzene	50.000	46.102	7.8	100	-0.02
74 T	n-Amyl Acetate	50.000	48.992	2.0	108	-0.02
75 P	1,1,2,2-Tetrachloroethane	50.000	47.768	4.5	106	-0.02
76 T	1,2,3-Trichloropropene	50.000	47.079	5.8	106	-0.02
77 T	Bromobenzene	50.000	46.130	7.7	100	-0.02
78 T	n-propylbenzene	50.000	46.873	6.3	102	-0.02
79 T	2-Chlorotoluene	50.000	46.417	7.2	101	-0.02
80 T	1,3,5-Trimethylbenzene	50.000	46.416	7.2	101	-0.02
81 T	trans-1,4-Dichloro-2-Butene	50.000	51.256	-2.5	113	-0.02
82 T	p-ethyltoluene	50.000	0.000	100.0#	0	-8.30#
83 T	4-Chlorotoluene	50.000	46.376	7.2	100	-0.02
84 T	tert-Butylbenzene	50.000	49.031	1.9	108	-0.02
85 T	1,2,4-Trimethylbenzene	50.000	46.814	6.4	101	-0.02
86 T	sec-Butylbenzene	50.000	47.182	5.6	102	-0.02
87 T	p-Isopropyltoluene	50.000	47.072	5.9	102	-0.02
88 T	1,3-Dichlorobenzene	50.000	45.970	8.1	101	-0.02
89 T	1,4-Dichlorobenzene	50.000	46.476	7.0	105	-0.02

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024092.D  
 Acq On : 18 Oct 2010 11:16  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:23:09 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 10:17:59 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
90 T	p-diethylbenzene	50.000	0.000	100.0#	0	-9.25#
91 T	n-Butylbenzene	50.000	48.398	3.2	105	-0.02
92 T	Hexachloroethane	50.000	47.349	5.3	101	-0.02
93 T	1,2-Dichlorobenzene	50.000	45.895	8.2	99	-0.02
94 T	1,2,4,5-tetramethylbenzene	50.000	0.000	100.0#	0	-9.92#
95 T	1,2-Dibromo-3-Chloropropane	50.000	49.047	1.9	107	-0.02
96 T	1,2,4-Trichlorobenzene	50.000	47.754	4.5	101	-0.02
97 T	Hexachlorobutadiene	50.000	49.349	1.3	101	-0.02
98 T	Naphthalene	50.000	48.095	3.8	101	-0.02
99 T	1,2,3-Trichlorobenzene	50.000	46.279	7.4	98	-0.02

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024108.D  
 Acq On : 19 Oct 2010 11:14  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 19 11:47:49 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2 T	Dichlorodifluoromethane	0.671	0.730	-8.8	103	0.00
3 P	Chloromethane	0.733	0.849	-15.8	117	0.00
4 CM	Vinyl Chloride	0.644	0.734	-14.0#	113	0.00
5 T	Bromomethane	0.342	0.278	18.7	91	0.00
6 T	Chloroethane	0.227	0.186	18.1	81	0.00
7 T	Trichlorofluoromethane	0.529	0.524	0.9	91	-0.08
8 T	Tert butyl alcohol	0.067	0.076	-13.4	112	0.00
9 T	Diethyl Ether	0.248	0.227	8.5	85	0.00
10 CM	1,1-Dichloroethene	0.475	0.462	2.7#	97	0.00
11 T	Methyl Iodide	1.023	1.037	-1.4	98	0.00
12 T	Acrolein	0.060	0.050	16.7	100	0.00
13 T	1,1,2-Trichlorotrifluoroeth	0.438	0.478	-9.1	107	0.00
14 T	Acrylonitrile	0.206	0.250	-21.4	123	0.00
15 T	Allyl Chloride	0.813	0.807	0.7	110	0.00
16 T	Acetone	0.153	0.222	-45.1#	152#	0.00
17 T	Carbon Disulfide	1.477	1.425	3.5	93	0.00
18 T	Methyl Acetate	0.648	0.649	-0.2	102	0.00
19 T	Methyl tert-butyl Ether	1.296	1.418	-9.4	111	0.00
20 T	Methylene Chloride	0.539	0.556	-3.2	106	0.00
21 T	trans-1,2-Dichloroethene	0.474	0.493	-4.0	105	0.00
22 T	Acetonitrile	0.000	0.000	0.0	0#	-1.78#
23 T	Diisopropyl ether	1.550	1.778	-14.7	116	0.00
24 T	Vinyl Acetate	1.106	1.313	-18.7	127	0.00
25 P	1,1-Dichloroethane	0.876	0.967	-10.4	112	0.00
26 TM	2-Butanone	0.519	0.547	-5.4	110	0.00
27 T	2,2-Dichloropropane	0.543	0.582	-7.2	111	0.00
28 T	cis-1,2-Dichloroethene	0.685	0.738	-7.7	110	0.00
29 T	Bromochloromethane	0.333	0.329	1.2	102	0.00
30 CM	Chloroform	1.024	1.125	-9.9#	113	0.00
31 T	Ethyl Acetate	1.234	1.330	-7.8	105	0.00
32 T	Cyclohexane	0.517	0.549	-6.2	112	0.00
33 T	1,1,1-Trichloroethane	0.828	0.801	3.3	97	0.00
34 S	1,2-Dichloroethane-d4	0.752	0.706	6.1	103	0.00
35 I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
36 S	Dibromofluoromethane	0.341	0.318	6.7	101	0.00
37 T	1,1-Dichloropropene	0.523	0.500	4.4	99	0.00
38 TM	Carbon Tetrachloride	0.484	0.464	4.1	104	0.00
39 TM	Benzene	1.420	1.316	7.3	96	0.00
40 T	Methacrylonitrile	0.296	0.291	1.7	104	0.00
41 TM	1,2-Dichloroethane	0.494	0.476	3.6	99	0.00
42 T	Isobutyl Alcohol	0.000	0.000	0.0	0#	-3.54#
43 T	Isopropyl Acetate	0.677	0.706	-4.3	105	0.00
44 TM	Trichloroethene	0.443	0.392	11.5	91	0.00
45 T	Methylcyclohexane	0.511	0.469	8.2	98	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024108.D  
 Acq On : 19 Oct 2010 11:14  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 19 11:47:49 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 C	1,2-Dichloropropane	0.393	0.382	2.8#	99	0.00
47 T	Dibromomethane	0.325	0.304	6.5	96	0.00
48 T	Bromodichloromethane	0.574	0.553	3.7	97	0.00
49 S	Toluene-d8	1.152	1.013	12.1	94	0.00
50 T	4-Methyl-2-Pentanone	0.493	0.505	-2.4	107	0.00
51 CM	Toluene	0.906	0.842	7.1#	95	0.00
52 T	t-1,3-Dichloropropene	0.605	0.598	1.2	100	0.01
53 T	Methyl Methacrylate	0.329	0.326	0.9	101	0.00
54 T	cis-1,3-Dichloropropene	0.683	0.655	4.1	99	0.01
55 T	1,1,2-Trichloroethane	0.383	0.364	5.0	96	0.00
56 T	Ethyl Methacrylate	0.552	0.551	0.2	101	0.00
57 T	1,3-Dichloropropane	0.675	0.647	4.1	98	0.00
58 T	2-Chloroethyl Vinyl ether	0.247	0.160	35.2#	71	0.00
59 T	2-Hexanone	0.361	0.383	-6.1	108	0.00
60 T	Dibromochloromethane	0.466	0.447	4.1	95	0.00
61 T	1,2-Dibromoethane	0.458	0.431	5.9	95	0.00
62 S	4-Bromofluorobenzene	0.483	0.406	15.9	94	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
64 TM	Tetrachloroethene	0.453	0.468	-3.3	98	0.00
65 PM	Chlorobenzene	1.156	1.058	8.5	94	0.01
66 T	1,1,1,2-Tetrachloroethane	0.421	0.392	6.9	98	0.00
67 C	Ethyl Benzene	0.546	0.505	7.5#	96	0.00
68 T	m/p-Xylenes	0.694	0.645	7.1	96	0.00
69 T	o-Xylene	0.703	0.636	9.5	94	0.01
70 T	Styrene	1.169	1.091	6.7	95	0.00
71 P	Bromoform	0.360	0.346	3.9	97	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	101	0.00
73 T	Isopropylbenzene	3.510	3.243	7.6	96	0.00
74 T	n-Amyl Acetate	1.802	1.768	1.9	103	0.00
75 P	1,1,2,2-Tetrachloroethane	1.244	1.189	4.4	101	0.00
76 T	1,2,3-Trichloropropene	0.911	0.859	5.7	101	0.00
77 T	Bromobenzene	0.932	0.842	9.7	93	0.00
78 T	n-propylbenzene	4.038	3.771	6.6	97	0.00
79 T	2-Chlorotoluene	2.488	2.307	7.3	97	0.00
80 T	1,3,5-Trimethylbenzene	2.704	2.512	7.1	96	0.00
81 T	trans-1,4-Dichloro-2-Butene	0.493	0.505	-2.4	107	0.00
82 T	p-ethyltoluene	0.000	0.000	0.0	0#	-8.30#
83 T	4-Chlorotoluene	2.552	2.350	7.9	95	0.00
84 T	tert-Butylbenzene	2.636	2.610	1.0	104	0.00
85 T	1,2,4-Trimethylbenzene	2.800	2.595	7.3	96	0.00
86 T	sec-Butylbenzene	3.503	3.321	5.2	98	0.00
87 T	p-Isopropyltoluene	2.831	2.704	4.5	98	0.00
88 T	1,3-Dichlorobenzene	1.713	1.563	8.8	96	0.00
89 T	1,4-Dichlorobenzene	1.757	1.612	8.3	99	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024108.D  
 Acq On : 19 Oct 2010 11:14  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 19 11:47:49 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	p-diethylbenzene	0.000	0.000	0.0	0#	-9.25#
91 T	n-Butylbenzene	2.715	2.581	4.9	99	0.00
92 T	Hexachloroethane	0.719	0.674	6.3	96	0.00
93 T	1,2-Dichlorobenzene	1.676	1.523	9.1	94	0.00
94 T	1,2,4,5-tetramethylbenzene	0.000	0.000	0.0	0#	-9.92#
95 T	1,2-Dibromo-3-Chloropropane	0.237	0.232	2.1	102	0.00
96 T	1,2,4-Trichlorobenzene	1.075	1.011	6.0	95	0.00
97 T	Hexachlorobutadiene	0.325	0.329	-1.2	99	0.00
98 T	Naphthalene	3.039	2.945	3.1	97	0.00
99 T	1,2,3-Trichlorobenzene	0.983	0.917	6.7	95	0.00

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024108.D  
 Acq On : 19 Oct 2010 11:14  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 19 11:47:49 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	97	0.00
2 T	Dichlorodifluoromethane	50.000	54.392	-8.8	103	0.00
3 P	Chloromethane	50.000	57.901	-15.8	117	0.00
4 CM	Vinyl Chloride	50.000	56.947	-13.9#	113	0.00
5 T	Bromomethane	50.000	48.024	4.0	91	0.00
6 T	Chloroethane	50.000	41.055	17.9	81	0.00
7 T	Trichlorofluoromethane	50.000	49.450	1.1	91	-0.08
8 T	Tert butyl alcohol	250.000	283.484	-13.4	112	0.00
9 T	Diethyl Ether	50.000	44.146	11.7	85	0.00
10 CM	1,1-Dichloroethene	50.000	51.138	-2.3#	97	0.00
11 T	Methyl Iodide	50.000	50.700	-1.4	98	0.00
12 T	Acrolein	250.000	286.626	-14.7	100	0.00
13 T	1,1,2-Trichlorotrifluoroeth	50.000	54.540	-9.1	107	0.00
14 T	Acrylonitrile	250.000	304.007	-21.6	123	0.00
15 T	Allyl Chloride	50.000	63.307	-26.6	110	0.00
16 T	Acetone	250.000	458.659	-83.5#	152	0.00
17 T	Carbon Disulfide	50.000	48.232	3.5	93	0.00
18 T	Methyl Acetate	50.000	52.255	-4.5	102	0.00
19 T	Methyl tert-butyl Ether	50.000	54.694	-9.4	111	0.00
20 T	Methylene Chloride	50.000	51.550	-3.1	106	0.00
21 T	trans-1,2-Dichloroethene	50.000	51.992	-4.0	105	0.00
22 T	Acetonitrile	50.000	0.000	100.0#	0	-1.78#
23 T	Diisopropyl ether	50.000	57.365	-14.7	116	0.00
24 T	Vinyl Acetate	250.000	296.847	-18.7	127	0.00
25 P	1,1-Dichloroethane	50.000	55.205	-10.4	112	0.00
26 TM	2-Butanone	250.000	263.668	-5.5	110	0.00
27 T	2,2-Dichloropropane	50.000	53.572	-7.1	111	0.00
28 T	cis-1,2-Dichloroethene	50.000	53.863	-7.7	110	0.00
29 T	Bromochloromethane	50.000	49.372	1.3	102	0.00
30 CM	Chloroform	50.000	54.912	-9.8#	113	0.00
31 T	Ethyl Acetate	50.000	53.891	-7.8	105	0.00
32 T	Cyclohexane	50.000	53.118	-6.2	112	0.00
33 T	1,1,1-Trichloroethane	50.000	48.376	3.2	97	0.00
34 S	1,2-Dichloroethane-d4	50.000	46.924	6.2	103	0.00
35 I	1,4-Difluorobenzene	50.000	50.000	0.0	99	0.00
36 S	Dibromofluoromethane	50.000	46.639	6.7	101	0.00
37 T	1,1-Dichloropropene	50.000	47.835	4.3	99	0.00
38 TM	Carbon Tetrachloride	50.000	47.930	4.1	104	0.00
39 TM	Benzene	50.000	46.339	7.3	96	0.00
40 T	Methacrylonitrile	50.000	49.177	1.6	104	0.00
41 TM	1,2-Dichloroethane	50.000	48.216	3.6	99	0.00
42 T	Isobutyl Alcohol	50.000	0.000	100.0#	0	-3.54#
43 T	Isopropyl Acetate	50.000	52.151	-4.3	105	0.00
44 TM	Trichloroethene	50.000	44.177	11.6	91	0.00
45 T	Methylcyclohexane	50.000	45.846	8.3	98	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024108.D  
 Acq On : 19 Oct 2010 11:14  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 19 11:47:49 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
46 C	1,2-Dichloropropane	50.000	48.564	2.9#	99	0.00
47 T	Dibromomethane	50.000	46.836	6.3	96	0.00
48 T	Bromodichloromethane	50.000	48.166	3.7	97	0.00
49 S	Toluene-d8	50.000	43.979	12.0	94	0.00
50 T	4-Methyl-2-Pentanone	250.000	255.917	-2.4	107	0.00
51 CM	Toluene	50.000	46.423	7.2#	95	0.00
52 T	t-1,3-Dichloropropene	50.000	49.460	1.1	100	0.01
53 T	Methyl Methacrylate	50.000	49.630	0.7	101	0.00
54 T	cis-1,3-Dichloropropene	50.000	48.011	4.0	99	0.01
55 T	1,1,2-Trichloroethane	50.000	47.512	5.0	96	0.00
56 T	Ethyl Methacrylate	50.000	49.913	0.2	101	0.00
57 T	1,3-Dichloropropane	50.000	47.880	4.2	98	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	161.480	35.4#	71	0.00
59 T	2-Hexanone	250.000	264.729	-5.9	108	0.00
60 T	Dibromochloromethane	50.000	47.965	4.1	95	0.00
61 T	1,2-Dibromoethane	50.000	47.054	5.9	95	0.00
62 S	4-Bromofluorobenzene	50.000	42.026	15.9	94	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	100	0.00
64 TM	Tetrachloroethene	50.000	51.705	-3.4	98	0.00
65 PM	Chlorobenzene	50.000	45.769	8.5	94	0.01
66 T	1,1,1,2-Tetrachloroethane	50.000	46.548	6.9	98	0.00
67 C	Ethyl Benzene	50.000	46.260	7.5#	96	0.00
68 T	m/p-Xylenes	100.000	92.924	7.1	96	0.00
69 T	o-Xylene	50.000	45.284	9.4	94	0.01
70 T	Styrene	50.000	46.678	6.6	95	0.00
71 P	Bromoform	50.000	47.955	4.1	97	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	101	0.00
73 T	Isopropylbenzene	50.000	46.205	7.6	96	0.00
74 T	n-Amyl Acetate	50.000	49.070	1.9	103	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	47.804	4.4	101	0.00
76 T	1,2,3-Trichloropropene	50.000	47.132	5.7	101	0.00
77 T	Bromobenzene	50.000	45.141	9.7	93	0.00
78 T	n-propylbenzene	50.000	46.700	6.6	97	0.00
79 T	2-Chlorotoluene	50.000	46.370	7.3	97	0.00
80 T	1,3,5-Trimethylbenzene	50.000	46.451	7.1	96	0.00
81 T	trans-1,4-Dichloro-2-Butene	50.000	51.186	-2.4	107	0.00
82 T	p-ethyltoluene	50.000	0.000	100.0#	0	-8.30#
83 T	4-Chlorotoluene	50.000	46.042	7.9	95	0.00
84 T	tert-Butylbenzene	50.000	49.501	1.0	104	0.00
85 T	1,2,4-Trimethylbenzene	50.000	46.341	7.3	96	0.00
86 T	sec-Butylbenzene	50.000	47.407	5.2	98	0.00
87 T	p-Isopropyltoluene	50.000	47.758	4.5	98	0.00
88 T	1,3-Dichlorobenzene	50.000	45.609	8.8	96	0.00
89 T	1,4-Dichlorobenzene	50.000	45.879	8.2	99	0.00

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024108.D  
 Acq On : 19 Oct 2010 11:14  
 Operator : MS  
 Sample : 50 PPB CCC  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 19 11:47:49 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
90 T	p-diethylbenzene	50.000	0.000	100.0#	0	-9.25#
91 T	n-Butylbenzene	50.000	47.547	4.9	99	0.00
92 T	Hexachloroethane	50.000	46.856	6.3	96	0.00
93 T	1,2-Dichlorobenzene	50.000	45.430	9.1	94	0.00
94 T	1,2,4,5-tetramethylbenzene	50.000	0.000	100.0#	0	-9.92#
95 T	1,2-Dibromo-3-Chloropropane	50.000	48.949	2.1	102	0.00
96 T	1,2,4-Trichlorobenzene	50.000	47.009	6.0	95	0.00
97 T	Hexachlorobutadiene	50.000	50.644	-1.3	99	0.00
98 T	Naphthalene	50.000	48.460	3.1	97	0.00
99 T	1,2,3-Trichlorobenzene	50.000	46.662	6.7	95	0.00

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Method Path : \\TERASTORAGE\\VOASRV\\HPCHEM1\\MSVOA\_G\\METHOD\\

Method File : 82G100710W.M

Title : SW846 8260

Last Update : Thu Oct 07 14:45:00 2010

Response Via : Initial Calibration

## Calibration Files

1 =VG030802.D	5 =VG030801.D	10 =VG030800.D
20 =VG030799.D	50 =VG030798.D	100 =VG030797.D

	Compound	1	5	10	20	50	100	Avg	%RSD
<hr/>									
1) I	Pentafluorobenzene			-----ISTD-----					
2) T	Dichlorodifluorom	0.524	0.585	0.504	0.509	0.482	0.470	0.512	7.91
3) P	Chloromethane	0.889	0.876	0.798	0.770	0.693	0.677	0.784	11.35
4) C	Vinyl Chloride	0.619	0.649	0.587	0.555	0.504	0.504	0.570	10.53#
5) T	Bromomethane	0.683	0.438	0.453	0.418	0.342	0.342	0.446	28.15
6) T	Chloroethane	0.330	0.311	0.308	0.293	0.257	0.267	0.294	9.46
7) T	Trichlorofluorome	0.599	0.595	0.600	0.594	0.547	0.563	0.583	3.86
8) T	Diethyl Ether	0.393	0.385	0.325	0.346	0.308	0.325	0.347	9.99
9) T	1,1,2-Trichlorotr	0.501	0.501	0.465	0.468	0.401	0.388	0.454	10.76
10) T	Methyl Iodide	0.876	0.894	0.871	0.797	0.697	0.732	0.811	10.20
11) T	Tert butyl alcoho	0.091	0.102	0.106	0.080	0.080	0.070	0.088	15.91
12) CM	1,1-Dichloroethen	0.540	0.506	0.491	0.471	0.413	0.425	0.474	10.27#
13) T	Acrolein	0.071	0.034	0.018	0.023	0.025	0.030	0.033	57.64
14) T	Allyl chloride	0.910	0.880	0.826	0.802	0.713	0.749	0.813	9.23
15) T	Acrylonitrile	0.302	0.323	0.296	0.259	0.279	0.265	0.287	8.42
16) T	Acetone	0.334	0.285	0.260	0.227	0.218	0.206	0.255	18.96
17) T	Carbon Disulfide	1.388	1.356	1.246	1.171	1.004	1.030	1.199	13.46
18) T	Methyl Acetate	1.580	1.861	1.353	1.284	1.109	1.269	1.409	19.10
19) T	Methyl tert-butyl	2.135	2.035	1.943	1.867	1.694	1.819	1.915	8.22
20) T	Methylene Chlorid	0.629	0.538	0.523	0.504	0.428	0.448	0.512	14.06
21) T	trans-1,2-Dichlor	0.558	0.629	0.550	0.519	0.474	0.557	0.548	9.38
22) T	Acetonitrile						0.000		-1.00
23) T	Diisopropyl ether	2.904	2.669	2.535	2.480	2.297	2.415	2.550	8.35
24) T	Vinyl Acetate	1.091	1.199	1.208	1.196	1.105	1.125	1.154	4.56
25) P	1,1-Dichloroethan	1.236	1.322	1.272	1.258	1.152	1.204	1.241	4.71
26) T	2-Butanone	0.722	0.677	0.633	0.609	0.539	0.503	0.614	13.42
27) T	2,2-Dichloropropa	0.537	0.582	0.532	0.549	0.496	0.504	0.533	5.89
28) T	cis-1,2-Dichloroe	0.912	0.904	0.866	0.866	0.798	0.822	0.861	5.21
29) T	Bromochloromethan	0.630	0.721	0.594	0.609	0.620	0.663	0.640	7.22
30) C	Chloroform	1.323	1.342	1.263	1.239	1.160	1.239	1.261	5.22#
31) T	Cyclohexane	1.015	0.985	0.937	0.882	0.800	0.820	0.906	9.67
32) T	1,1,1-Trichloroet	0.882	0.811	0.779	0.730	0.702	0.699	0.767	9.30
33) S	1,2-Dichloroethan	0.723	0.737	0.747	0.680	0.657	0.659	0.700	5.75
34) I	1,4-Difluorobenzene			-----ISTD-----					
35) S	Dibromofluorometh	0.368	0.437	0.398	0.400	0.396	0.373	0.395	6.18
36) T	1,1-Dichloroprope	0.626	0.623	0.564	0.569	0.532	0.524	0.573	7.62
37) T	Ethyl Acetate	0.831	0.778	0.681	0.646	0.620	0.581	0.690	13.98
38) T	Carbon Tetrachlor	0.579	0.510	0.476	0.464	0.433	0.438	0.483	11.30
39) T	Methylcyclohexane	0.558	0.581	0.510	0.512	0.478	0.461	0.517	8.89
40) TM	Benzene	1.676	1.578	1.429	1.413	1.380	1.375	1.475	8.36
41) T	Methacrylonitrile	0.373	0.390	0.345	0.307	0.305	0.311	0.339	10.81
42) TM	1,2-Dichloroethan	0.536	0.550	0.512	0.509	0.487	0.499	0.516	4.55
43) T	Isopropyl Acetate	1.106	1.029	0.940	0.905	0.857	0.831	0.945	11.15
44) T	Isobutyl alcohol					0.000			-1.00
45) TM	Trichloroethene	0.410	0.401	0.370	0.346	0.337	0.343	0.368	8.50
46) C	1,2-Dichloropropa	0.371	0.397	0.360	0.358	0.347	0.351	0.364	4.96#
47) T	Dibromomethane	0.294	0.298	0.286	0.284	0.284	0.276	0.287	2.77
48) T	Bromodichlorometh	0.543	0.536	0.507	0.512	0.515	0.525	0.523	2.73
49) T	Methyl methacryla	0.400	0.423	0.415	0.386	0.380	0.359	0.394	6.06
50) S	Toluene-d8	1.175	1.159	1.080	1.068	1.035	0.987	1.084	6.67
51) T	4-Methyl-2-Pentan	0.677	0.681	0.614	0.584	0.532	0.470	0.593	13.91
52) CM	Toluene	0.918	0.912	0.829	0.799	0.763	0.761	0.830	8.46#

Method Path : \\TERASTORAGE\\VOASRV\\HPCHEM1\\MSVOA\_G\\METHOD\\

Method File : 82G100710W.M

Title : SW846 8260

Last Update : Thu Oct 07 14:45:00 2010

Response Via : Initial Calibration

## Calibration Files

1	=VG030802.D	5	=VG030801.D	10	=VG030800.D
20	=VG030799.D	50	=VG030798.D	100	=VG030797.D

	Compound	1	5	10	20	50	100	Avg	%RSD
<hr/>									
53)	T t-1,3-Dichloropro	0.491	0.530	0.518	0.510	0.497	0.479	0.504	3.71
54)	T cis-1,3-Dichlorop	0.664	0.646	0.587	0.587	0.588	0.588	0.610	5.76
55)	T 1,1,2-Trichloroet	0.359	0.343	0.332	0.322	0.314	0.298	0.328	6.61
56)	T Ethyl methacrylat	0.573	0.597	0.560	0.533	0.516	0.465	0.541	8.70
57)	T 1,3-Dichloropropa	0.644	0.660	0.627	0.608	0.578	0.571	0.615	5.81
58)	T 2-Chloroethyl Vin	0.227	0.230	0.165	0.155	0.116	0.108	0.167	31.44
59)	T 2-Hexanone	0.500	0.517	0.484	0.450	0.371	0.337	0.443	16.57
60)	T Dibromochlorometh	0.318	0.345	0.340	0.340	0.350	0.337	0.338	3.28
61)	T 1,2-Dibromoethane	0.363	0.398	0.371	0.361	0.349	0.336	0.363	5.86
62)	S 4-Bromofluorobenz	0.495	0.529	0.509	0.486	0.453	0.419	0.482	8.29
<hr/>									
63)	I Chlorobenzene-d5	-----ISTD-----							
64)	T Tetrachloroethene	0.474	0.436	0.403	0.381	0.342	0.332	0.395	13.87
65)	PM Chlorobenzene	1.037	1.029	0.979	0.985	0.939	0.921	0.982	4.72
66)	T 1,1,1,2-Tetrachlo	0.337	0.381	0.358	0.360	0.349	0.354	0.357	4.09
67)	C Ethyl Benzene	2.026	2.003	1.819	1.819	1.717	1.627	1.835	8.54#
68)	T m/p-Xylenes	0.734	0.730	0.668	0.669	0.620	0.593	0.669	8.48
69)	T o-Xylene	0.729	0.749	0.722	0.721	0.660	0.643	0.704	5.98
70)	T Styrene	1.127	1.210	1.116	1.108	1.058	1.010	1.105	6.14
71)	P Bromoform	0.226	0.273	0.276	0.289	0.287	0.289	0.273	8.84
<hr/>									
72)	I 1,4-Dichlorobenzene-d	-----ISTD-----							
73)	T Isopropylbenzene	3.862	3.605	3.255	3.442	3.112	3.154	3.405	8.52
74)	T N-amyl acetate	2.392	2.256	2.187	2.059	1.926	1.758	2.096	11.01
75)	P 1,1,2,2-Tetrachlo	1.426	1.294	1.216	1.231	1.162	1.132	1.243	8.51
76)	T 1,2,3-Trichloropr	1.121	1.093	0.977	0.987	0.932	0.929	1.006	8.13
77)	T Bromobenzene	0.948	0.925	0.845	0.859	0.804	0.801	0.864	7.08
78)	T n-propylbenzene	4.774	4.374	4.085	4.016	3.694	3.658	4.100	10.33
79)	T 2-Chlorotoluene	2.849	2.882	2.632	2.467	2.377	2.366	2.595	8.87
80)	T 1,3,5-Trimethylbe	2.809	2.691	2.618	2.501	2.322	2.321	2.544	7.83
81)	T trans-1,4-Dichlor	0.288	0.337	0.328	0.366	0.377	0.383	0.347	10.41
82)	T 4-Chlorotoluene	2.988	2.813	2.636	2.546	2.404	2.372	2.626	9.12
83)	T tert-Butylbenzene	2.602	2.485	2.490	2.466	2.298	2.405	2.458	4.11
84)	T 1,2,4-Trimethylbe	3.111	2.872	2.712	2.642	2.433	2.430	2.700	9.74
85)	T sec-Butylbenzene	4.140	3.585	3.527	3.493	3.139	3.157	3.507	10.40
86)	T p-Isopropyltoluen	2.928	2.637	2.816	2.612	2.386	2.360	2.623	8.62
87)	T 1,3-Dichlorobenze	1.816	1.731	1.747	1.627	1.538	1.467	1.654	8.11
88)	T 1,4-Dichlorobenze	1.774	1.728	1.613	1.589	1.471	1.462	1.606	7.99
89)	T n-Butylbenzene	3.120	2.949	2.975	2.773	2.661	2.499	2.830	8.07
90)	T Hexachloroethane	0.593	0.616	0.641	0.614	0.589	0.644	0.616	3.75
91)	T 1,2-Dichlorobenze	1.685	1.649	1.652	1.550	1.467	1.416	1.570	7.03
92)	T 1,2,4,5-Tetrameth							0.000	-1.00
93)	T 1,2-Dibromo-3-Chl	0.202	0.225	0.235	0.225	0.234	0.229	0.225	5.32
94)	T 1,2,4-Trichlorobe	1.019	0.996	1.072	0.887	0.862	0.786	0.937	11.60
95)	T Hexachlorobutadi	0.336	0.317	0.329	0.279	0.257	0.238	0.293	13.80
96)	T Naphthalene	4.009	3.177	3.458	2.880	2.736	2.513	3.129	17.39
97)	T 1,2,3-Trichlorobe	1.015	0.897	1.032	0.789	0.764	0.729	0.871	15.02
98)	T p-ethyltoluene						0.000	-1.00	
99)	T p-diethylbenzene						0.000	-1.00	

(#= Out of Range)

## CHEMTECH

Instrument: G

10/7/2010

Initial Calibration File ID:VG030797.D, VG030798.D, VG030799.D, VG030800.D, VG030801.D, VG030802.D

Parameter	CAS No.	Initial Calibration Pass 15% Criteria <sup>1</sup>	Regressions Acceptable <sup>2</sup>	Comment in Case Narrative <sup>23</sup>
1,1,1,2-Tetrachloroethane	630-20-6	pass		
1,1,1-Trichloroethane	71-55-6	pass		
1,1,2,2-Tetrachloroethane	79-34-5	pass		
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	pass		
1,1,2-Trichloroethane	79-00-5	pass		
1,1-Dichloroethane	75-34-3	pass		
1,1-Dichloroethene	75-35-4	pass		
1,1-Dichloropropene	563-58-6	pass		
1,2,3-Trichlorobenzene	87-61-6	fail	LR,r^2=0.999	
1,2,3-Trichloropropane	96-18-4	pass		
1,2,4-Trichlorobenzene	120-82-1	pass		
1,2,4-Trimethylbenzene	95-63-6	pass		
1,2,4,5-Tetramethylbenzene	95-93-2	N/A		
1,2-Dibromo-3-chloropropane	96-12-8	pass		
1,2-Dibromoethane	106-93-4	pass		
1,2-Dichlorobenzene	95-50-1	pass		
1,2-Dichloroethane	107-06-2	pass		
1,2-Dichloropropane	78-87-5	pass		
1,3,5-Trimethylbenzene	108-67-8	pass		
1,3-Dichlorobenzene	541-73-1	pass		
1,3-Dichloropropane	142-28-9	pass		
1,4-Dichlorobenzene	106-46-7	pass		
2,2-Dichloropropane	594-20-7	pass		
2-Butanone	78-93-3	pass		
2-Chloroethyl vinyl ether	110-75-8	fail	LR,r^2=0.994	
2-Chlorotoluene	95-49-8	pass		
2-Hexanone	591-78-6	fail	LR,r^2=0.995	
4-Chlorotoluene	106-43-4	pass		
4-Methyl-2-Pentanone	108-10-1	pass		
Acetone	67-64-1	fail	LR,r^2=0.999	
Acrolein	107-02-8	fail	LR,r^2=0.991	
Acrylonitrile	107-13-1	pass		
Benzene	71-43-2	pass		
Bromobenzene	108-86-1	pass		
Bromochloromethane	74-97-5	pass		
Bromodichloromethane	75-27-4	pass		
Bromoform	75-25-2	pass		
Bromomethane	74-83-9	fail	LR,r^2=0.998	
Carbon Disulfide	75-15-0	pass		
Carbon Tetrachloride	56-23-5	pass	.	
Chlorobenzene	108-90-7	pass		
Chloroethane	75-00-3	pass		
Chloroform	67-66-3	pass		
Chloromethane	74-87-3	pass		
cis-1,2-dichloroethene	156-59-2	pass		
cis-1,3-dichloropropene	10061-01-5	pass		
Cyclohexane	110-82-7	pass		
Dibromochloromethane	124-48-1	pass		
Dibromomethane	74-95-3	pass		
Dichlorodifluoromethane	75-71-8	pass		
Diethyl Ether	60-29-7	pass		

## CHEMTECH

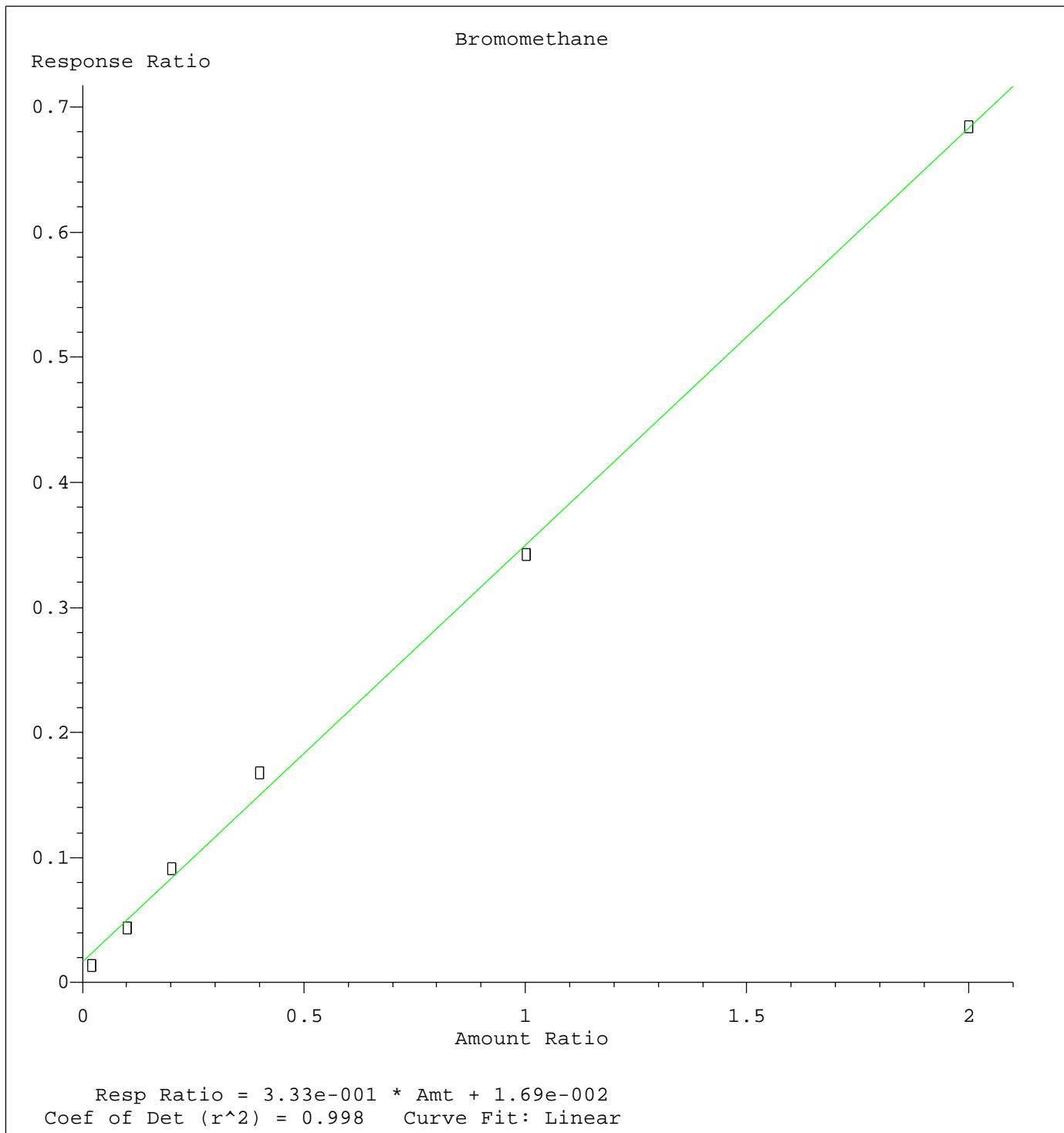
Instrument: G

10/7/2010

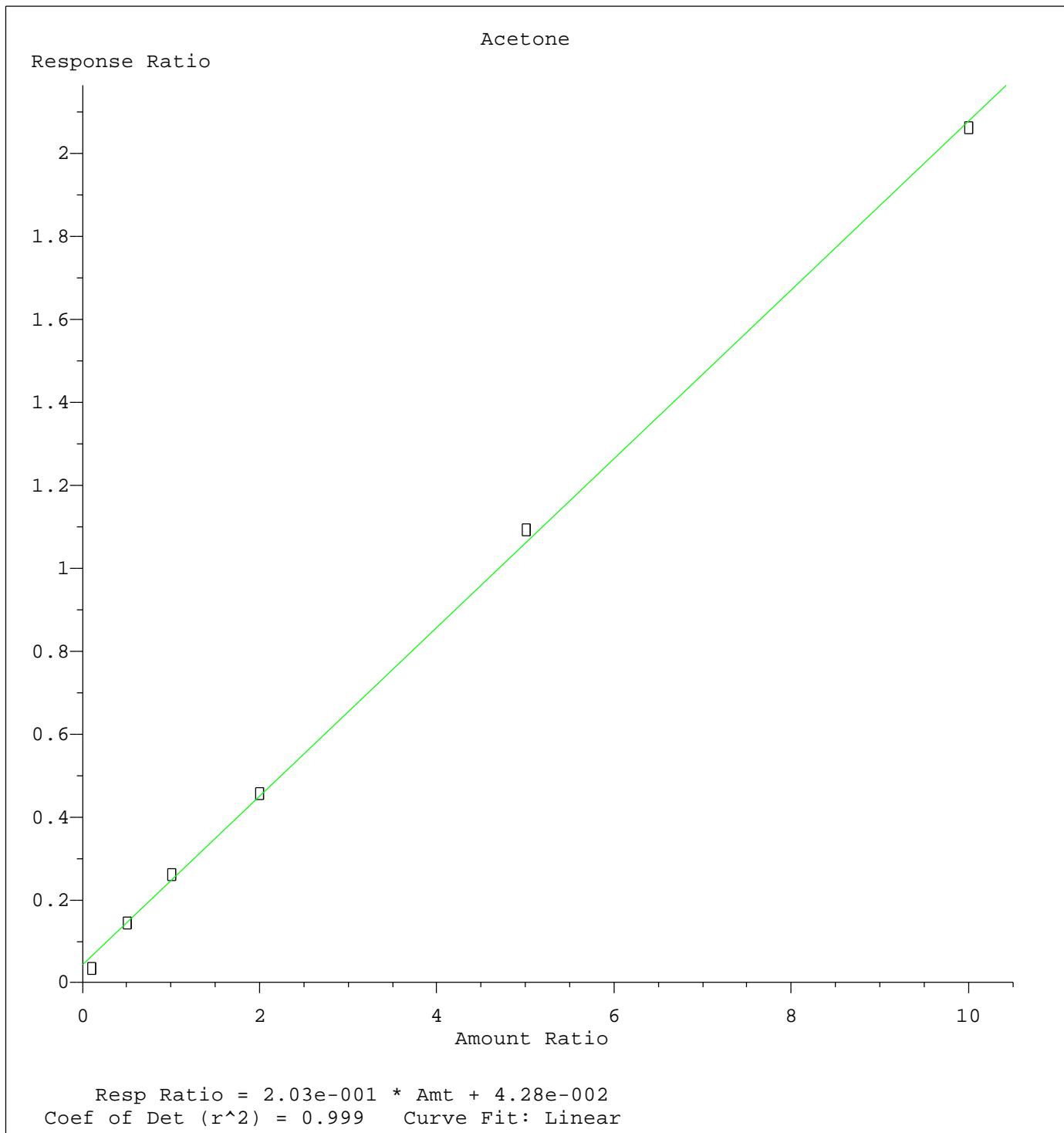
Initial Calibration File ID:VG030797.D, VG030798.D, VG030799.D, VG030800.D, VG030801.D, VG030802.D

Parameter	CAS No.	Initial Calibration Pass 15% Criteria <sup>1</sup>	Regressions Acceptable <sup>2</sup>	Comment in Case Narrative <sup>23</sup>
Ethyl Acetate	141-78-6	pass		
Ethylbenzene	100-41-4	pass		
Hexachlorobutadiene	87-68-3	pass		
Hexachloroethane	67-72-1	pass		
Isopropyl Acetate	108-21-4	pass		
isopropylbenzene	98-82-8	pass		
m&p-Xylene	1330-20-7	pass		
Methyl Acetate	79-20-9	fail	LR,r^2=0.994	
Methyl Tert-butyl Ether	1634-04-4	pass		
Methylcyclohexane	108-87-2	pass		
Methylene Chloride	75-09-2	pass		
Naphthalene	91-20-3	fail	LR,r^2=0.998	
n-Butylbenzene	104-51-8	pass		
N-propylbenzene	103-65-1	pass		
o-Xylene	95-47-6	pass		
p-Isopropyltoluene	99-87-6	pass		
Sec-butylbenzene	135-98-8	pass		
Styrene	100-42-5	pass		
t-1,3-Dichloropropene	10061-02-6	pass		
Tert butyl alcohol	75-65-0	fail	LR,r^2=0.995	
tert-Butylbenzene	98-06-6	pass		
Tetrachloroethene	127-18-4	pass		
Toluene	108-88-3	pass		
trans-1,2-Dichloroethene	156-60-5	pass		
Trichloroethene	79-01-6	pass		
Trichlorofluoromethane	75-69-4	pass		
Vinyl Acetate	108-05-4	pass		
Vinyl Chloride	75-01-4	pass		
n-amyl Acetate	628-63-7	pass		
P-ethyltoluene	622-96-8	N/A		
P-diethylbenzene	105-05-5	N/A		
Acetonitrile	75-05-8	N/A		
Allyl Chloride	107-05-1	pass		
Ethyl Methacrylate	97-63-2	pass		
Isobutyl Alcohol	78-83-1	N/A		
Methacrylonitrile	126-98-7	pass		
Methyl Iodide	74-88-4	pass		
trans-1,4-dichloro-2-butene	110-57-6	pass		
Methyl Methacrylate	80-62-6	pass		
Diisopropyl ether	108-20-3	pass		

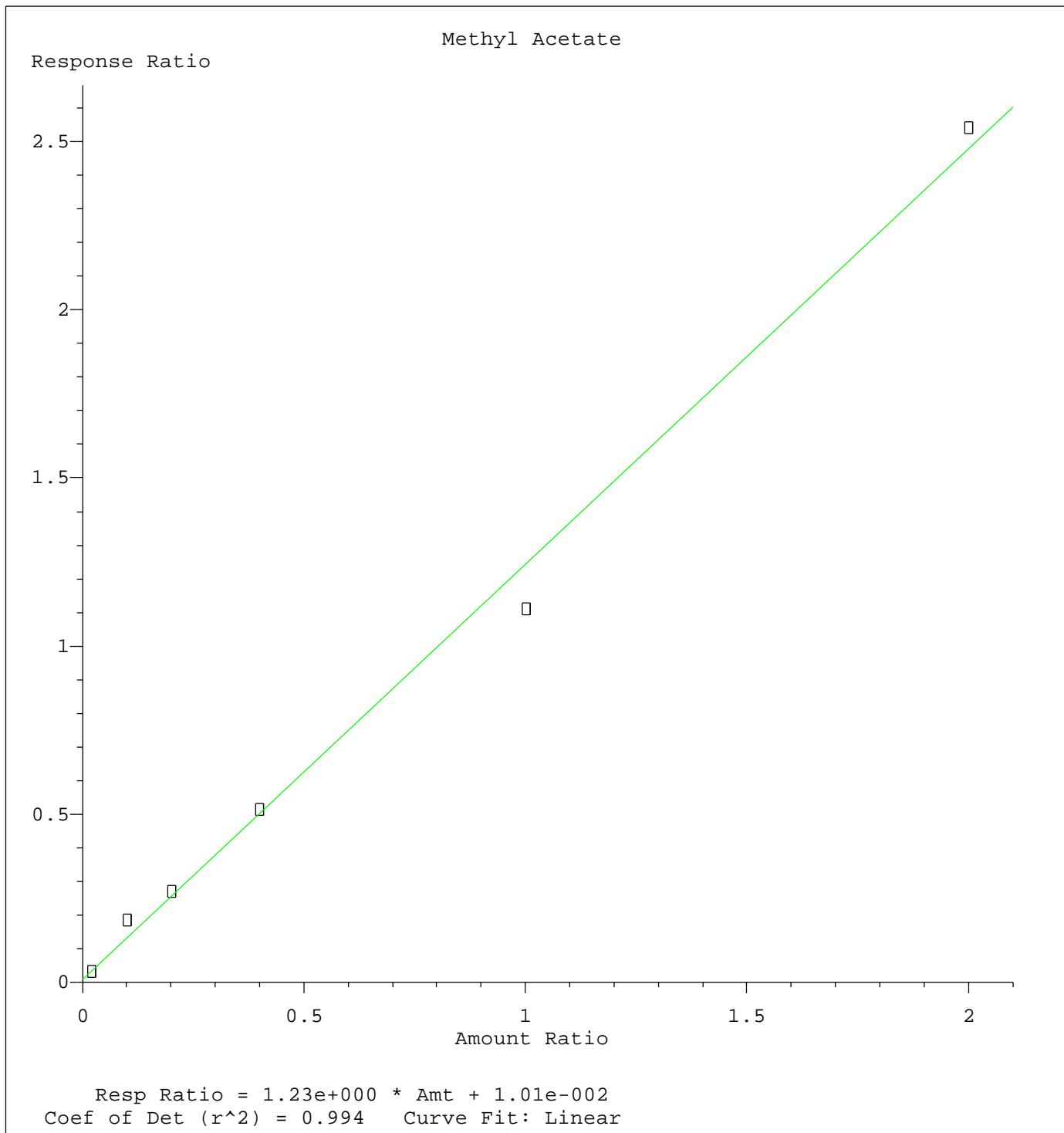
<sup>1</sup> Indicate a response for each compound using a Pass/Fail or Yes/No system<sup>2</sup> Only mark response in the affirmative for those compounds that qualify<sup>3</sup> At a minimum, this column must indicate a response for compound that did not pass the 15% and regression



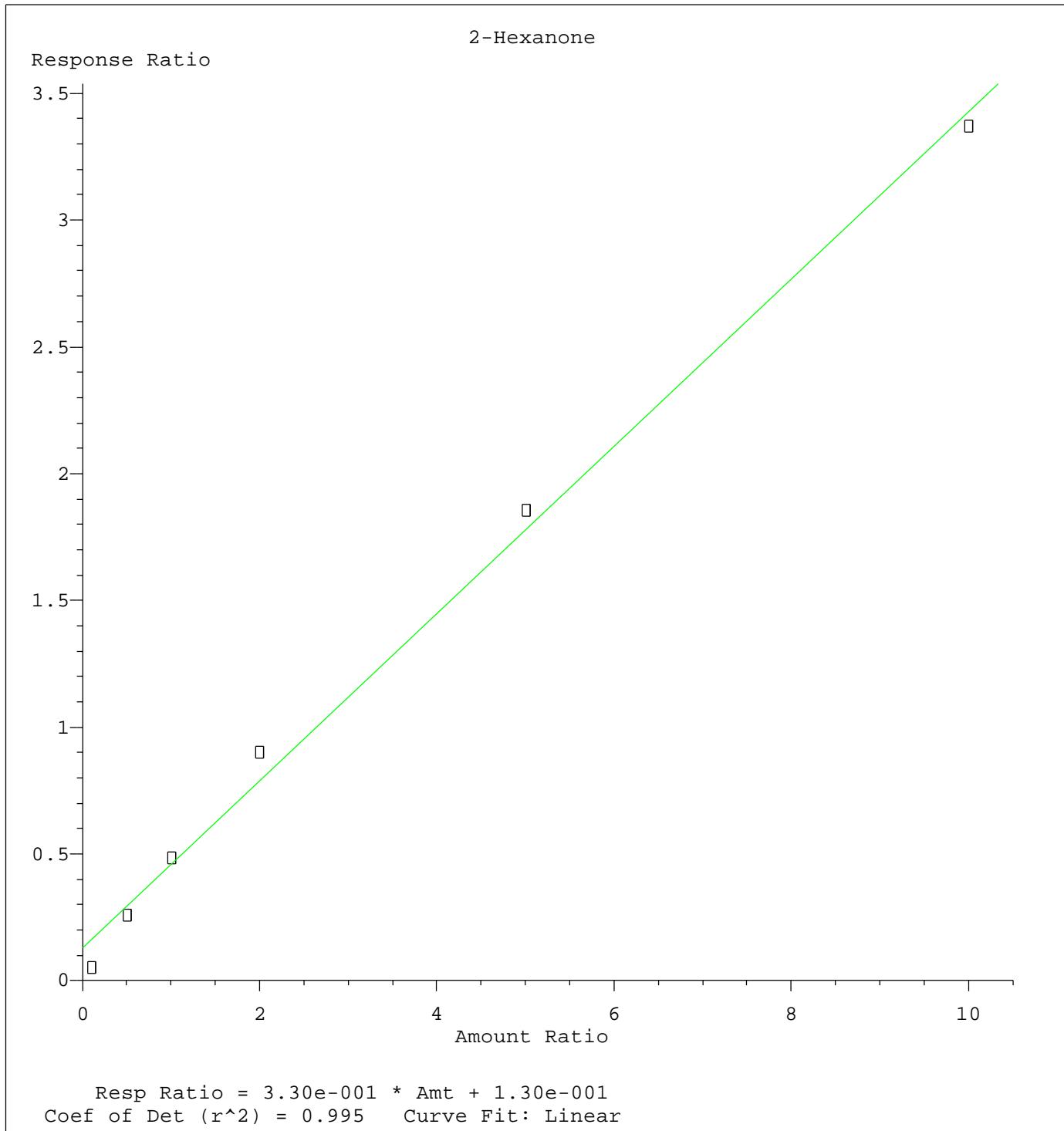
Method Name: \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Calibration Table Last Updated: Thu Oct 07 14:45:00 2010



Method Name: \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Calibration Table Last Updated: Thu Oct 07 14:45:00 2010



Method Name: \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Calibration Table Last Updated: Thu Oct 07 14:45:00 2010



Method Name: \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Calibration Table Last Updated: Thu Oct 07 14:45:00 2010

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030802.D  
Acq On : 7 Oct 2010 14:08  
Operator : PS  
Sample : 1 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 7 Sample Multiplier: 1

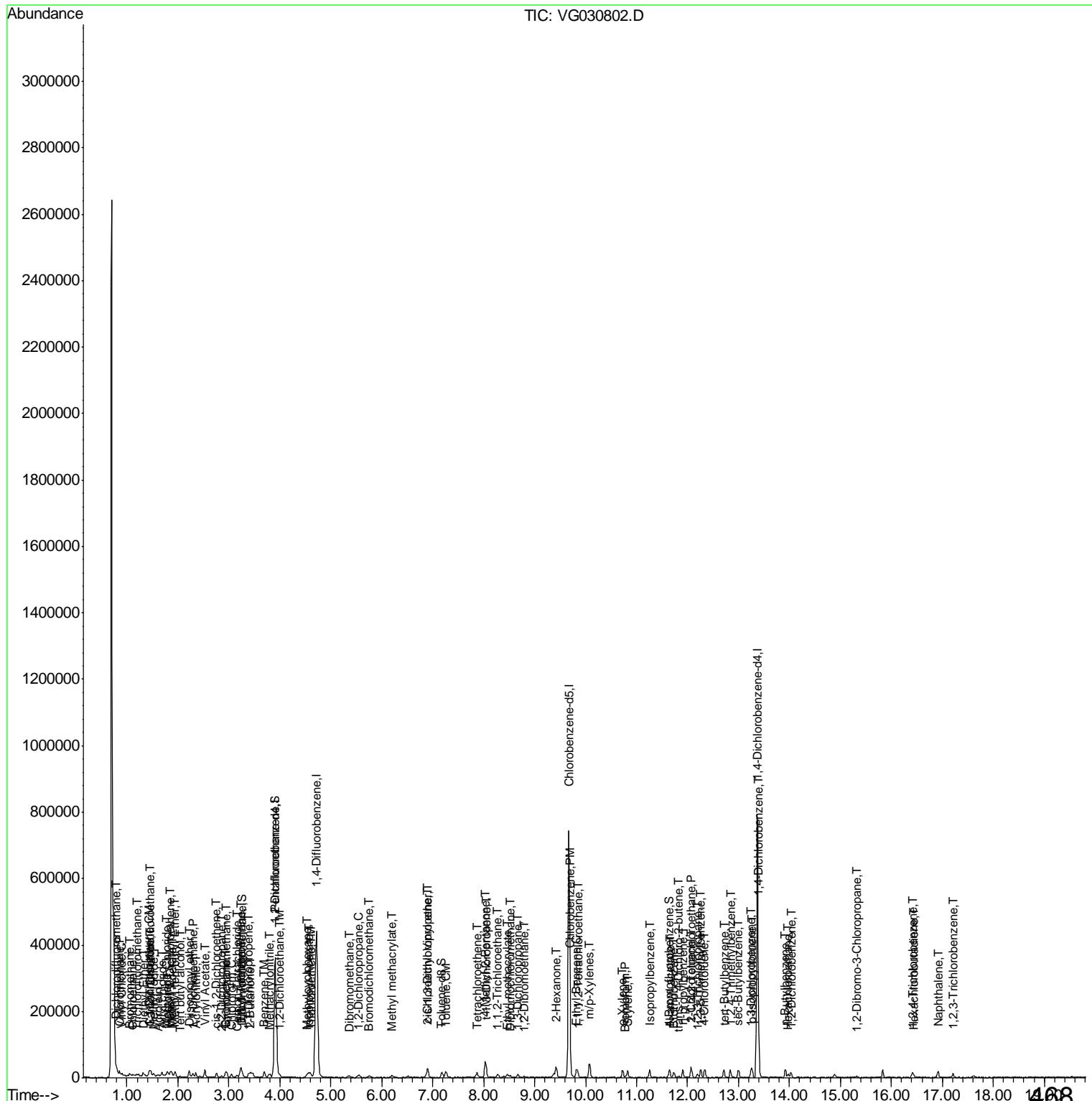
Quant Time: Oct 07 14:38:00 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710.W.M

Quant Title : SW846 8260

Last Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030802.D  
 Acq On : 7 Oct 2010 14:08  
 Operator : PS  
 Sample : 1 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 07 14:38:00 2010

Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.91	168	405006	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.72	114	669744	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	559290	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.38	152	288366	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.90	65	5853	1.27	ug/l	0.00
Spiked Amount 50.000			Recovery	=	2.54%	
35) Dibromofluoromethane	3.25	113	4936	0.99	ug/l	0.00
Spiked Amount 50.000			Recovery	=	1.98%	
50) Toluene-d8	7.17	98	15744	1.22	ug/l	0.00
Spiked Amount 50.000			Recovery	=	2.44%	
62) 4-Bromofluorobenzene	11.63	95	6628	1.33	ug/l	0.00
Spiked Amount 50.000			Recovery	=	2.66%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	4241	1.04	ug/l	92
3) Chloromethane	0.86	50	7202	0.84	ug/l	91
4) Vinyl Chloride	0.90	62	5015	0.65	ug/l	89
5) Bromomethane	1.05	94	5531	1.14	ug/l	# 79
6) Chloroethane	1.12	64	2670	0.61	ug/l	100
7) Trichlorofluoromethane	1.20	101	4855	0.73	ug/l	87
8) Diethyl Ether	1.33	74	3185	0.73	ug/l	55
9) 1,1,2-Trichlorotrifluoroet	1.46	101	4059	0.72	ug/l	99
10) Methyl Iodide	1.52	142	7094	0.67	ug/l	100
11) Tert butyl alcohol	2.05	59	3681	5.91	ug/l	97
12) 1,1-Dichloroethene	1.44	96	4378	0.72	ug/l	95
13) Acrolein	1.62	56	2887	2.77	ug/l	98
14) Allyl chloride	1.68	41	7369	0.69	ug/l	98
15) Acrylonitrile	2.35	53	12250	4.75	ug/l	94
16) Acetone	1.79	43	13517	6.51	ug/l	# 84
17) Carbon Disulfide	1.46	76	11245	0.69	ug/l	# 91
18) Methyl Acetate	1.88	43	12800	1.03	ug/l	98
19) Methyl tert-butyl Ether	1.94	73	17293	1.19	ug/l	97
20) Methylene Chloride	1.78	84	5098	0.80	ug/l	# 87
21) trans-1,2-Dichloroethene	1.86	96	4517	0.71	ug/l	95
23) Diisopropyl ether	2.22	45	23524	1.00	ug/l	# 95
24) Vinyl Acetate	2.53	43	44186	4.33	ug/l	97
25) 1,1-Dichloroethane	2.30	63	10012	0.88	ug/l	# 88
26) 2-Butanone	3.42	43	29251	6.07	ug/l	97
27) 2,2-Dichloropropane	2.86	77	4350	1.07	ug/l	99
28) cis-1,2-Dichloroethene	2.76	96	7391	1.00	ug/l	96
29) Bromochloromethane	2.95	49	5106	0.89	ug/l	93
30) Chloroform	3.05	83	10715	1.13	ug/l	91
31) Cyclohexane	2.94	56	8224	0.85	ug/l	98
32) 1,1,1-Trichloroethane	3.24	97	7142	1.25	ug/l	93
36) 1,1-Dichloropropene	3.38	75	8388	1.17	ug/l	98
37) Ethyl Acetate	3.24	43	11137	1.36	ug/l	95
38) Carbon Tetrachloride	3.16	117	7757m	1.38	ug/l	
39) Methylcyclohexane	4.53	83	7479	1.08	ug/l	95

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030802.D  
 Acq On : 7 Oct 2010 14:08  
 Operator : PS  
 Sample : 1 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 07 14:38:00 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.69	78	22451	1.21	ug/l	# 94
41) Methacrylonitrile	3.80	41	4999	1.28	ug/l	# 87
42) 1,2-Dichloroethane	3.99	62	7173	1.36	ug/l	# 72
43) Isopropyl Acetate	4.57	43	14817	1.29	ug/l	93
45) Trichloroethene	4.60	130	5491	1.07	ug/l	85
46) 1,2-Dichloropropane	5.54	63	4967	0.96	ug/l	# 86
47) Dibromomethane	5.36	93	3935	1.18	ug/l	92
48) Bromodichloromethane	5.75	83	7279	1.29	ug/l	# 79
49) Methyl methacrylate	6.19	41	5360	1.10	ug/l	93
51) 4-Methyl-2-Pentanone	8.03	43	45312	6.39	ug/l	95
52) Toluene	7.26	92	12300	1.26	ug/l	93
53) t-1,3-Dichloropropene	8.04	75	6582	1.10	ug/l	# 77
54) cis-1,3-Dichloropropene	6.89	75	8888	1.23	ug/l	94
55) 1,1,2-Trichloroethane	8.27	97	4813	1.28	ug/l	# 89
56) Ethyl methacrylate	8.46	69	7678	1.21	ug/l	95
57) 1,3-Dichloropropene	8.67	76	8627	1.21	ug/l	94
58) 2-Chloroethyl Vinyl ether	6.90	63	15181	6.06	ug/l	93
59) 2-Hexanone	9.42	43	33483m	6.58	ug/l	
60) Dibromochloromethane	8.52	129	4259	1.02	ug/l	95
61) 1,2-Dibromoethane	8.80	107	4868	1.09	ug/l	96
64) Tetrachloroethene	7.88	164	5307	1.39	ug/l	90
65) Chlorobenzene	9.69	112	11598	1.05	ug/l	98
66) 1,1,1,2-Tetrachloroethane	9.85	131	3773	1.01	ug/l	84
67) Ethyl Benzene	9.82	91	22664	1.26	ug/l	98
68) m/p-Xylenes	10.08	106	16423	2.28	ug/l	92
69) o-Xylene	10.73	106	8160	1.13	ug/l	89
70) Styrene	10.82	104	12603	1.10	ug/l	95
71) Bromoform	10.78	173	2526	0.94	ug/l	# 50
73) Isopropylbenzene	11.26	105	22271	1.09	ug/l	95
74) N-amyl acetate	11.66	43	13793	1.05	ug/l	96
75) 1,1,2,2-Tetrachloroethane	12.07	83	8225	1.26	ug/l	90
76) 1,2,3-Trichloropropane	12.20	75	6465	1.20	ug/l	88
77) Bromobenzene	11.73	156	5467	1.11	ug/l	92
78) n-propylbenzene	11.91	91	27531	1.17	ug/l	94
79) 2-Chlorotoluene	12.07	91	16433	1.16	ug/l	98
80) 1,3,5-Trimethylbenzene	12.26	105	16198	1.09	ug/l	97
81) trans-1,4-Dichloro-2-butene	11.82	75	1661	0.70	ug/l	# 82
82) 4-Chlorotoluene	12.33	91	17235	1.16	ug/l	91
83) tert-Butylbenzene	12.72	119	15008	0.99	ug/l	92
84) 1,2,4-Trimethylbenzene	12.85	105	17942	1.16	ug/l	97
85) sec-Butylbenzene	12.99	105	23876	1.17	ug/l	100
86) p-Isopropyltoluene	13.26	119	16889	1.03	ug/l	98
87) 1,3-Dichlorobenzene	13.24	146	10474	1.10	ug/l	96
88) 1,4-Dichlorobenzene	13.39	146	10231m	1.13	ug/l	
89) n-Butylbenzene	13.92	91	17994	1.17	ug/l	98
90) Hexachloroethane	13.97	117	3422	0.91	ug/l	96
91) 1,2-Dichlorobenzene	14.03	146	9717	1.13	ug/l	98
93) 1,2-Dibromo-3-Chloropropan	15.32	75	1166	1.17	ug/l	89
94) 1,2,4-Trichlorobenzene	16.41	180	5876	1.20	ug/l	93
95) Hexachlorobutadiene	16.44	225	1937	1.04	ug/l	97

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030802.D  
Acq On : 7 Oct 2010 14:08  
Operator : PS  
Sample : 1 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 07 14:38:00 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 12:48:42 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.92	128	23121	1.42	ug/l	98
97) 1,2,3-Trichlorobenzene	17.22	180	5855	1.33	ug/l	96

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030801.D  
Acq On : 7 Oct 2010 13:40  
Operator : PS  
Sample : 5 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 6 Sample Multiplier: 1

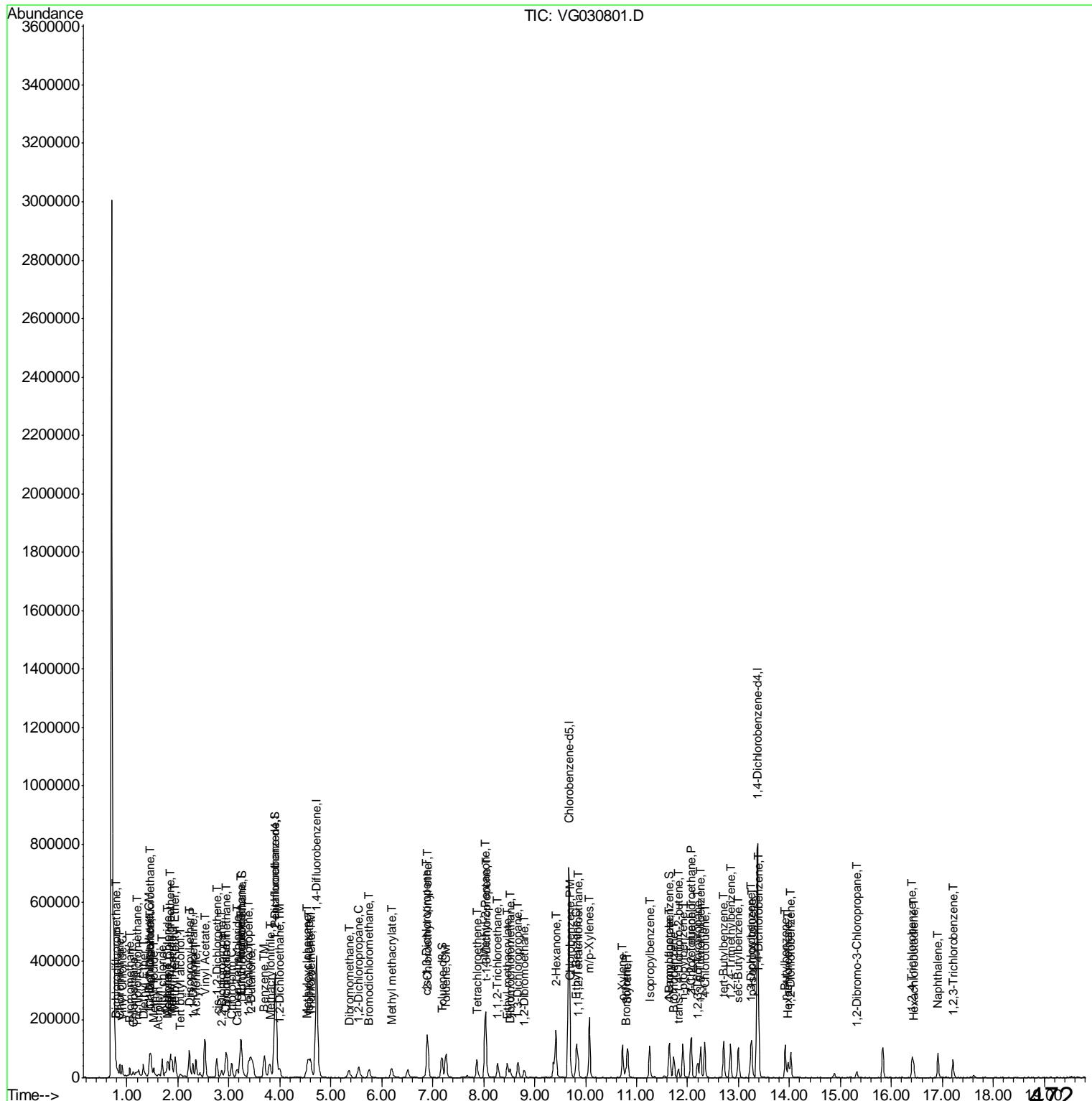
Quant Time: Oct 07 14:10:46 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710.W.M

Quant Title : SW846 8260

Last Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030801.D  
 Acq On : 7 Oct 2010 13:40  
 Operator : PS  
 Sample : 5 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 07 14:10:46 2010

Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.91	168	385811	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.72	114	628914	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	527507	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.38	152	284627	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.90	65	284449	6.50	ug/l	0.00
Spiked Amount 50.000			Recovery	=	13.00%	
35) Dibromofluoromethane	3.25	113	27469	5.84	ug/l	0.00
Spiked Amount 50.000			Recovery	=	11.68%	
50) Toluene-d8	7.18	98	72916	5.99	ug/l	0.00
Spiked Amount 50.000			Recovery	=	11.98%	
62) 4-Bromofluorobenzene	11.64	95	33268	7.10	ug/l	0.00
Spiked Amount 50.000			Recovery	=	14.20%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.79	85	22569	5.79	ug/l	97
3) Chloromethane	0.86	50	33785	4.12	ug/l	92
4) Vinyl Chloride	0.91	62	25055	3.43	ug/l	97
5) Bromomethane	1.05	94	16891	3.65	ug/l	93
6) Chloroethane	1.13	64	12008	2.89	ug/l	96
7) Trichlorofluoromethane	1.20	101	22957	3.64	ug/l	84
8) Diethyl Ether	1.32	74	14836	3.55	ug/l	91
9) 1,1,2-Trichlorotrifluoroet	1.47	101	19329	3.59	ug/l	96
10) Methyl Iodide	1.53	142	34497	3.44	ug/l	99
11) Tert butyl alcohol	2.05	59	19751	33.28	ug/l	98
12) 1,1-Dichloroethene	1.44	96	19509	3.35	ug/l	90
13) Acrolein	1.62	56	6467	6.52	ug/l	91
14) Allyl chloride	1.69	41	33956	3.32	ug/l	96
15) Acrylonitrile	2.36	53	62218	25.32	ug/l	97
16) Acetone	1.80	43	55068	27.83	ug/l	100
17) Carbon Disulfide	1.46	76	52328	3.37	ug/l	96
18) Methyl Acetate	1.89	43	71811m	6.06	ug/l	
19) Methyl tert-butyl Ether	1.94	73	78521	5.67	ug/l	97
20) Methylene Chloride	1.79	84	20750	3.40	ug/l	# 92
21) trans-1,2-Dichloroethene	1.86	96	24286	4.03	ug/l	92
23) Diisopropyl ether	2.22	45	102971	4.57	ug/l	94
24) Vinyl Acetate	2.53	43	231291	23.78	ug/l	98
25) 1,1-Dichloroethane	2.30	63	51008	4.70	ug/l	98
26) 2-Butanone	3.43	43	130511	28.44	ug/l	97
27) 2,2-Dichloropropane	2.85	77	22471	5.78	ug/l	94
28) cis-1,2-Dichloroethene	2.77	96	34866	4.97	ug/l	95
29) Bromochloromethane	2.95	49	27804	5.10	ug/l	98
30) Chloroform	3.05	83	51779	5.73	ug/l	99
31) Cyclohexane	2.94	56	37996	4.10	ug/l	97
32) 1,1,1-Trichloroethane	3.24	97	31305	5.74	ug/l	99
36) 1,1-Dichloropropene	3.39	75	39159	5.81	ug/l	99
37) Ethyl Acetate	3.23	43	48905	6.37	ug/l	97
38) Carbon Tetrachloride	3.16	117	32101	6.08	ug/l	# 94
39) Methylcyclohexane	4.54	83	36550	5.64	ug/l	94

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030801.D  
 Acq On : 7 Oct 2010 13:40  
 Operator : PS  
 Sample : 5 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 07 14:10:46 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.69	78	99262	5.72	ug/l	97
41) Methacrylonitrile	3.81	41	24513	6.68	ug/l #	93
42) 1,2-Dichloroethane	4.00	62	34615	7.01	ug/l	97
43) Isopropyl Acetate	4.57	43	64728	5.99	ug/l	97
45) Trichloroethene	4.60	130	25202	5.22	ug/l	97
46) 1,2-Dichloropropane	5.55	63	24953	5.14	ug/l	89
47) Dibromomethane	5.36	93	18743	6.00	ug/l	98
48) Bromodichloromethane	5.75	83	33709	6.36	ug/l	99
49) Methyl methacrylate	6.19	41	26612	5.81	ug/l	96
51) 4-Methyl-2-Pentanone	8.03	43	214231	32.17	ug/l	97
52) Toluene	7.26	92	57333	6.25	ug/l	99
53) t-1,3-Dichloropropene	8.05	75	33313	5.95	ug/l	100
54) cis-1,3-Dichloropropene	6.89	75	40627	5.98	ug/l	95
55) 1,1,2-Trichloroethane	8.27	97	21574	6.10	ug/l	95
56) Ethyl methacrylate	8.46	69	37544	6.31	ug/l	94
57) 1,3-Dichloropropane	8.67	76	41535	6.22	ug/l	97
58) 2-Chloroethyl Vinyl ether	6.90	63	72233	30.69	ug/l	99
59) 2-Hexanone	9.42	43	162501m	34.01	ug/l	
60) Dibromochloromethane	8.52	129	21704	5.56	ug/l	99
61) 1,2-Dibromoethane	8.79	107	25047	6.00	ug/l	98
64) Tetrachloroethene	7.87	164	22994	6.40	ug/l	94
65) Chlorobenzene	9.70	112	54255	5.23	ug/l	94
66) 1,1,1,2-Tetrachloroethane	9.86	131	20109	5.73	ug/l	93
67) Ethyl Benzene	9.83	91	105664	6.21	ug/l	98
68) m/p-Xylenes	10.08	106	77025	11.33	ug/l	98
69) o-Xylene	10.73	106	39522	5.80	ug/l	97
70) Styrene	10.82	104	63852	5.94	ug/l	99
71) Bromoform	10.79	173	14421	5.66	ug/l #	98
73) Isopropylbenzene	11.26	105	102614	5.09	ug/l	97
74) N-amyl acetate	11.65	43	64217	4.94	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.08	83	36821	5.69	ug/l	98
76) 1,2,3-Trichloropropane	12.20	75	31101	5.83	ug/l	96
77) Bromobenzene	11.73	156	26325	5.43	ug/l	99
78) n-propylbenzene	11.91	91	124503	5.35	ug/l	97
79) 2-Chlorotoluene	12.06	91	82033	5.85	ug/l	94
80) 1,3,5-Trimethylbenzene	12.25	105	76605	5.20	ug/l	96
81) trans-1,4-Dichloro-2-butene	11.82	75	9598	4.13	ug/l	93
82) 4-Chlorotoluene	12.34	91	80071	5.48	ug/l	97
83) tert-Butylbenzene	12.71	119	70721	4.74	ug/l	96
84) 1,2,4-Trimethylbenzene	12.84	105	81748	5.37	ug/l	99
85) sec-Butylbenzene	13.00	105	102027	5.06	ug/l	99
86) p-Isopropyltoluene	13.26	119	75052	4.66	ug/l	97
87) 1,3-Dichlorobenzene	13.24	146	49256	5.25	ug/l	98
88) 1,4-Dichlorobenzene	13.40	146	49189	5.52	ug/l	97
89) n-Butylbenzene	13.92	91	83932	5.53	ug/l	98
90) Hexachloroethane	13.97	117	17537	4.73	ug/l	95
91) 1,2-Dichlorobenzene	14.02	146	46929	5.51	ug/l	99
93) 1,2-Dibromo-3-Chloropropan	15.32	75	6397	6.49	ug/l	92
94) 1,2,4-Trichlorobenzene	16.41	180	28337	5.84	ug/l	97
95) Hexachlorobutadiene	16.44	225	9017	4.92	ug/l	92

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030801.D  
Acq On : 7 Oct 2010 13:40  
Operator : PS  
Sample : 5 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 07 14:10:46 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 12:48:42 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.91	128	90417	5.62	ug/l	98
97) 1,2,3-Trichlorobenzene	17.21	180	25526	5.86	ug/l	94

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030800.D  
 Acq On : 7 Oct 2010 13:12  
 Operator : PS  
 Sample : 10 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 5 Sample Multiplier: 1

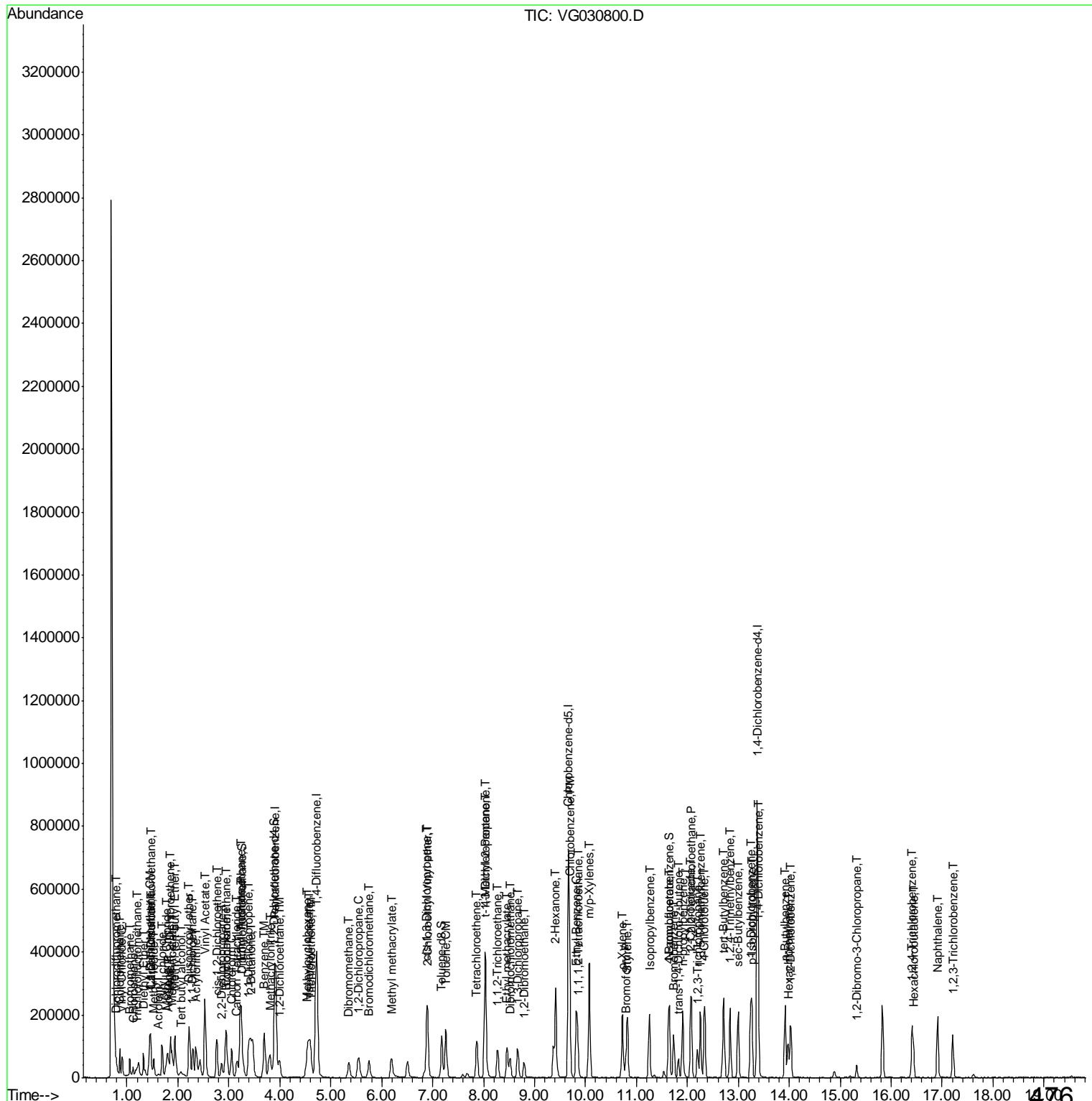
Quant Time: Oct 07 14:03:38 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030800.D  
 Acq On : 7 Oct 2010 13:12  
 Operator : PS  
 Sample : 10 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 07 14:03:38 2010

Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.91	168	376938	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.72	114	634776	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	538069	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.37	152	288505	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.89	65	56301	13.17	ug/l	0.00
Spiked Amount 50.000			Recovery	=	26.34%	
35) Dibromofluoromethane	3.25	113	50491	10.63	ug/l	0.00
Spiked Amount 50.000			Recovery	=	21.26%	
50) Toluene-d8	7.17	98	137064	11.16	ug/l	0.00
Spiked Amount 50.000			Recovery	=	22.32%	
62) 4-Bromofluorobenzene	11.64	95	64614	13.66	ug/l	0.00
Spiked Amount 50.000			Recovery	=	27.32%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.79	85	38033	10.00	ug/l	98
3) Chloromethane	0.86	50	60135	7.51	ug/l	93
4) Vinyl Chloride	0.90	62	44282	6.21	ug/l	94
5) Bromomethane	1.05	94	34187	7.56	ug/l	95
6) Chloroethane	1.12	64	23256	5.73	ug/l	96
7) Trichlorofluoromethane	1.20	101	45222	7.34	ug/l	98
8) Diethyl Ether	1.32	74	24526	6.00	ug/l	90
9) 1,1,2-Trichlorotrifluoroet	1.47	101	35089	6.67	ug/l	100
10) Methyl Iodide	1.53	142	65644	6.70	ug/l	99
11) Tert butyl alcohol	2.06	59	39805	68.66	ug/l	# 92
12) 1,1-Dichloroethene	1.45	96	37026	6.50	ug/l	88
13) Acrolein	1.62	56	6727	6.94	ug/l	89
14) Allyl chloride	1.69	41	62271	6.24	ug/l	98
15) Acrylonitrile	2.35	53	111585	46.47	ug/l	99
16) Acetone	1.81	43	98058	50.72	ug/l	98
17) Carbon Disulfide	1.47	76	93917	6.19	ug/l	98
18) Methyl Acetate	1.89	43	102036m	8.81	ug/l	
19) Methyl tert-butyl Ether	1.95	73	146445	10.81	ug/l	98
20) Methylene Chloride	1.78	84	39410	6.61	ug/l	# 86
21) trans-1,2-Dichloroethene	1.85	96	41497	7.05	ug/l	95
23) Diisopropyl ether	2.22	45	191076	8.69	ug/l	100
24) Vinyl Acetate	2.53	43	455174	47.91	ug/l	99
25) 1,1-Dichloroethane	2.29	63	95877	9.05	ug/l	98
26) 2-Butanone	3.43	43	238540	53.20	ug/l	98
27) 2,2-Dichloropropane	2.86	77	40143	10.57	ug/l	100
28) cis-1,2-Dichloroethene	2.76	96	65317	9.54	ug/l	99
29) Bromochloromethane	2.96	49	44746	8.40	ug/l	100
30) Chloroform	3.05	83	95249	10.79	ug/l	94
31) Cyclohexane	2.94	56	70656	7.81	ug/l	97
32) 1,1,1-Trichloroethane	3.24	97	58732	11.03	ug/l	99
36) 1,1-Dichloropropene	3.39	75	71555	10.51	ug/l	97
37) Ethyl Acetate	3.23	43	86512	11.16	ug/l	99
38) Carbon Tetrachloride	3.16	117	60417	11.34	ug/l	94
39) Methylcyclohexane	4.54	83	64788	9.91	ug/l	93

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030800.D  
 Acq On : 7 Oct 2010 13:12  
 Operator : PS  
 Sample : 10 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 07 14:03:38 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.69	78	181386	10.35	ug/l	97
41) Methacrylonitrile	3.81	41	43809	11.82	ug/l	# 96
42) 1,2-Dichloroethane	4.00	62	64988	13.05	ug/l	99
43) Isopropyl Acetate	4.57	43	119343	10.94	ug/l	97
45) Trichloroethene	4.61	130	46927	9.63	ug/l	98
46) 1,2-Dichloropropane	5.54	63	45740	9.34	ug/l	93
47) Dibromomethane	5.35	93	36250	11.49	ug/l	99
48) Bromodichloromethane	5.75	83	64358	12.03	ug/l	96
49) Methyl methacrylate	6.19	41	52728	11.42	ug/l	99
51) 4-Methyl-2-Pentanone	8.03	43	389717	57.99	ug/l	97
52) Toluene	7.26	92	105201	11.36	ug/l	99
53) t-1,3-Dichloropropene	8.04	75	65799	11.65	ug/l	100
54) cis-1,3-Dichloropropene	6.89	75	74567	10.87	ug/l	97
55) 1,1,2-Trichloroethane	8.27	97	42131	11.80	ug/l	98
56) Ethyl methacrylate	8.46	69	71080	11.84	ug/l	94
57) 1,3-Dichloropropene	8.67	76	79654	11.83	ug/l	99
58) 2-Chloroethyl Vinyl ether	6.90	63	105029	44.21	ug/l	100
59) 2-Hexanone	9.41	43	307403m	63.73	ug/l	
60) Dibromochloromethane	8.52	129	43184	10.96	ug/l	99
61) 1,2-Dibromoethane	8.79	107	47067	11.16	ug/l	99
64) Tetrachloroethene	7.86	164	43409	11.85	ug/l	97
65) Chlorobenzene	9.70	112	105381	9.96	ug/l	99
66) 1,1,1,2-Tetrachloroethane	9.85	131	38576	10.77	ug/l	99
67) Ethyl Benzene	9.82	91	195730	11.28	ug/l	97
68) m/p-Xylenes	10.08	106	143862	20.74	ug/l	98
69) o-Xylene	10.73	106	77721	11.19	ug/l	99
70) Styrene	10.82	104	120068	10.94	ug/l	97
71) Bromoform	10.79	173	29677	11.42	ug/l	# 94
73) Isopropylbenzene	11.26	105	187827	9.19	ug/l	100
74) N-amyl acetate	11.65	43	126193	9.58	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.08	83	70172	10.70	ug/l	99
76) 1,2,3-Trichloropropane	12.20	75	56347	10.43	ug/l	98
77) Bromobenzene	11.73	156	48768	9.93	ug/l	99
78) n-propylbenzene	11.91	91	235711	9.99	ug/l	99
79) 2-Chlorotoluene	12.07	91	151849	10.68	ug/l	100
80) 1,3,5-Trimethylbenzene	12.25	105	151040	10.12	ug/l	100
81) trans-1,4-Dichloro-2-butene	11.82	75	18927	8.03	ug/l	97
82) 4-Chlorotoluene	12.34	91	152107	10.26	ug/l	99
83) tert-Butylbenzene	12.71	119	143691	9.50	ug/l	96
84) 1,2,4-Trimethylbenzene	12.84	105	156484	10.14	ug/l	99
85) sec-Butylbenzene	13.00	105	203501	9.96	ug/l	99
86) p-Isopropyltoluene	13.27	119	162461	9.95	ug/l	97
87) 1,3-Dichlorobenzene	13.24	146	100787	10.59	ug/l	99
88) 1,4-Dichlorobenzene	13.39	146	93043	10.31	ug/l	98
89) n-Butylbenzene	13.92	91	171679	11.16	ug/l	97
90) Hexachloroethane	13.98	117	37000	9.85	ug/l	96
91) 1,2-Dichlorobenzene	14.03	146	95309	11.04	ug/l	97
93) 1,2-Dibromo-3-Chloropropan	15.32	75	13570	13.58	ug/l	99
94) 1,2,4-Trichlorobenzene	16.41	180	61844	12.57	ug/l	100
95) Hexachlorobutadiene	16.44	225	18990	10.22	ug/l	99

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030800.D  
Acq On : 7 Oct 2010 13:12  
Operator : PS  
Sample : 10 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 07 14:03:38 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 12:48:42 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.91	128	199503	12.23	ug/l	99
97) 1,2,3-Trichlorobenzene	17.22	180	59560	13.49	ug/l	99

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030799.D  
Acq On : 7 Oct 2010 12:43  
Operator : PS  
Sample : 20 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 4 Sample Multiplier: 1

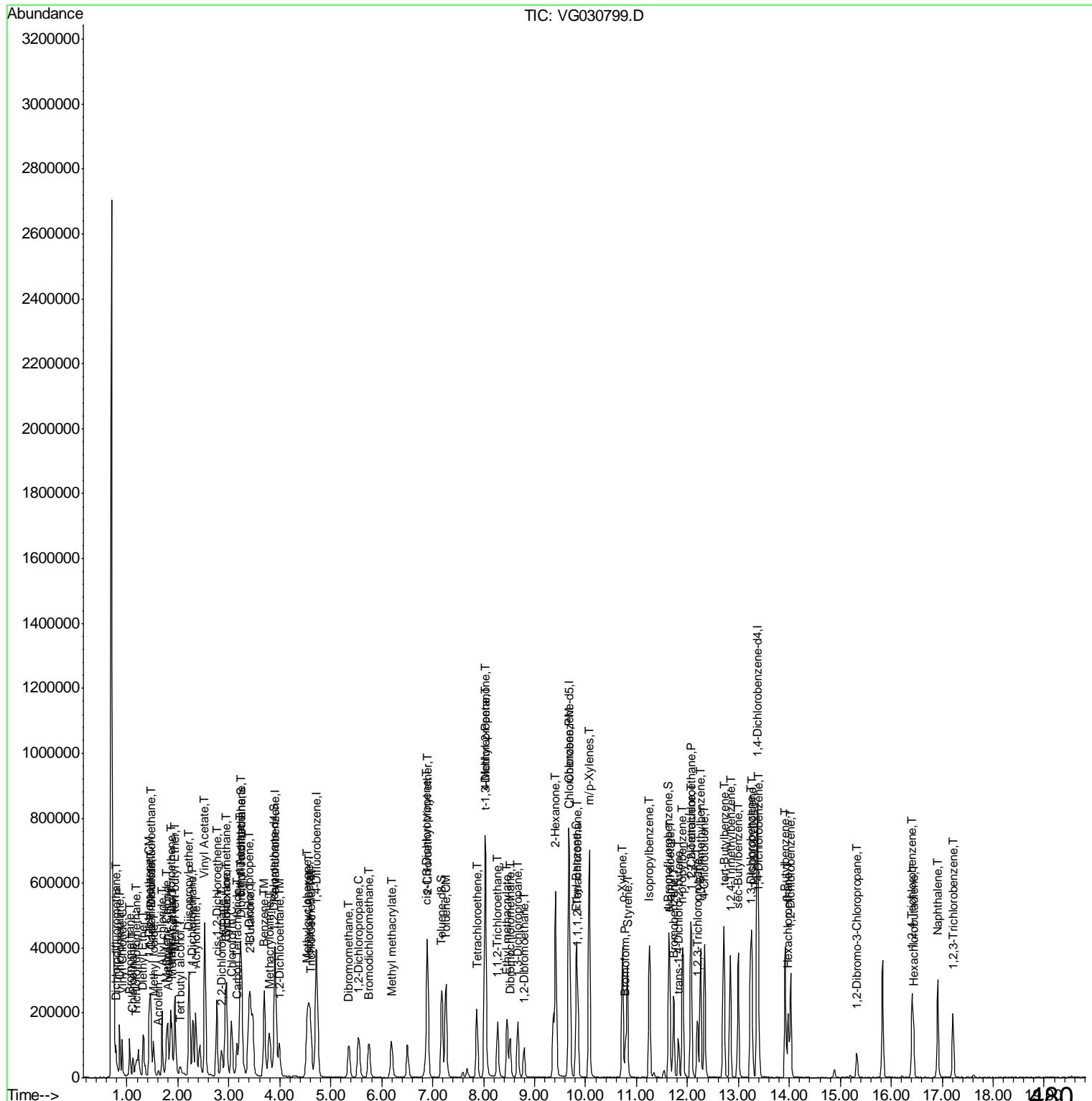
Quant Time: Oct 07 13:20:19 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

Last Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030799.D  
 Acq On : 7 Oct 2010 12:43  
 Operator : PS  
 Sample : 20 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 07 13:20:19 2010

Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.91	168	366198	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.72	114	621573	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	511945	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.38	152	275415	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.89	65	99618	23.99	ug/l	0.00
Spiked Amount 50.000			Recovery	=	47.98%	
35) Dibromofluoromethane	3.25	113	99545	21.40	ug/l	0.00
Spiked Amount 50.000			Recovery	=	42.80%	
50) Toluene-d8	7.18	98	265657	22.10	ug/l	0.00
Spiked Amount 50.000			Recovery	=	44.20%	
62) 4-Bromofluorobenzene	11.63	95	120922	26.10	ug/l	0.00
Spiked Amount 50.000			Recovery	=	52.20%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	74518	20.16	ug/l	92
3) Chloromethane	0.85	50	112838	14.51	ug/l	96
4) Vinyl Chloride	0.91	62	81301	11.73	ug/l	98
5) Bromomethane	1.05	94	61181	13.93	ug/l	94
6) Chloroethane	1.12	64	42943	10.89	ug/l	98
7) Trichlorofluoromethane	1.19	101	87002	14.54	ug/l	96
8) Diethyl Ether	1.32	74	50745	12.78	ug/l	99
9) 1,1,2-Trichlorotrifluoroet	1.46	101	68537	13.42	ug/l	99
10) Methyl Iodide	1.52	142	116806	12.27	ug/l	98
11) Tert butyl alcohol	2.04	59	58730	104.27	ug/l	# 91
12) 1,1-Dichloroethene	1.44	96	68990	12.46	ug/l	95
13) Acrolein	1.62	56	16992	18.04	ug/l	95
14) Allyl chloride	1.69	41	117512	12.12	ug/l	97
15) Acrylonitrile	2.35	53	189368	81.18	ug/l	95
16) Acetone	1.81	43	166348	88.56	ug/l	99
17) Carbon Disulfide	1.46	76	171579	11.65	ug/l	99
18) Methyl Acetate	1.88	43	188016	16.72	ug/l	92
19) Methyl tert-butyl Ether	1.94	73	273543	20.79	ug/l	97
20) Methylene Chloride	1.79	84	73792	12.74	ug/l	99
21) trans-1,2-Dichloroethene	1.86	96	75956	13.29	ug/l	93
23) Diisopropyl ether	2.22	45	363297	17.00	ug/l	98
24) Vinyl Acetate	2.52	43	876249	94.93	ug/l	97
25) 1,1-Dichloroethane	2.29	63	184227	17.89	ug/l	99
26) 2-Butanone	3.42	43	445801	102.33	ug/l	100
27) 2,2-Dichloropropane	2.86	77	80373	21.79	ug/l	100
28) cis-1,2-Dichloroethene	2.76	96	126847	19.07	ug/l	99
29) Bromochloromethane	2.95	49	89194	17.23	ug/l	100
30) Chloroform	3.06	83	181438	21.16	ug/l	98
31) Cyclohexane	2.94	56	129204	14.69	ug/l	99
32) 1,1,1-Trichloroethane	3.24	97	106888	20.66	ug/l	97
36) 1,1-Dichloropropene	3.39	75	141536	21.24	ug/l	100
37) Ethyl Acetate	3.23	43	160733	21.17	ug/l	99
38) Carbon Tetrachloride	3.16	117	115267	22.10	ug/l	97
39) Methylcyclohexane	4.54	83	127368	19.89	ug/l	97

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030799.D  
 Acq On : 7 Oct 2010 12:43  
 Operator : PS  
 Sample : 20 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 07 13:20:19 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.69	78	351424	20.48	ug/l	99
41) Methacrylonitrile	3.80	41	76383	21.05	ug/l	# 97
42) 1,2-Dichloroethane	3.99	62	126659	25.97	ug/l	99
43) Isopropyl Acetate	4.57	43	224993	21.05	ug/l	98
45) Trichloroethene	4.61	130	86107	18.04	ug/l	98
46) 1,2-Dichloropropane	5.54	63	89120	18.58	ug/l	94
47) Dibromomethane	5.36	93	70699	22.88	ug/l	99
48) Bromodichloromethane	5.75	83	127402	24.32	ug/l	98
49) Methyl methacrylate	6.19	41	95919	21.21	ug/l	98
51) 4-Methyl-2-Pentanone	8.03	43	725427	110.24	ug/l	98
52) Toluene	7.26	92	198684	21.91	ug/l	99
53) t-1,3-Dichloropropene	8.04	75	126749	22.92	ug/l	99
54) cis-1,3-Dichloropropene	6.89	75	145888	21.71	ug/l	97
55) 1,1,2-Trichloroethane	8.27	97	80066	22.90	ug/l	99
56) Ethyl methacrylate	8.46	69	132536	22.54	ug/l	97
57) 1,3-Dichloropropene	8.67	76	151138	22.91	ug/l	97
58) 2-Chloroethyl Vinyl ether	6.90	63	192419	82.72	ug/l	99
59) 2-Hexanone	9.41	43	559715m	118.51	ug/l	
60) Dibromochloromethane	8.52	129	84584	21.93	ug/l	99
61) 1,2-Dibromoethane	8.79	107	89827	21.76	ug/l	100
64) Tetrachloroethene	7.87	164	78052	22.40	ug/l	97
65) Chlorobenzene	9.69	112	201675	20.04	ug/l	100
66) 1,1,1,2-Tetrachloroethane	9.85	131	73751	21.64	ug/l	98
67) Ethyl Benzene	9.82	91	372495	22.57	ug/l	99
68) m/p-Xylenes	10.08	106	274171	41.54	ug/l	99
69) o-Xylene	10.72	106	147582	22.33	ug/l	99
70) Styrene	10.83	104	226900	21.73	ug/l	99
71) Bromoform	10.79	173	59117	23.91	ug/l	# 100
73) Isopropylbenzene	11.25	105	379246	19.43	ug/l	99
74) N-amyl acetate	11.65	43	226834	18.03	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.08	83	135601	21.66	ug/l	100
76) 1,2,3-Trichloropropane	12.19	75	108683	21.07	ug/l	96
77) Bromobenzene	11.74	156	94662	20.19	ug/l	99
78) n-propylbenzene	11.90	91	442478	19.64	ug/l	100
79) 2-Chlorotoluene	12.07	91	271800	20.02	ug/l	100
80) 1,3,5-Trimethylbenzene	12.26	105	275492	19.33	ug/l	98
81) trans-1,4-Dichloro-2-butene	11.82	75	40334	17.92	ug/l	98
82) 4-Chlorotoluene	12.34	91	280475	19.83	ug/l	98
83) tert-Butylbenzene	12.72	119	271717	18.82	ug/l	98
84) 1,2,4-Trimethylbenzene	12.84	105	291010	19.75	ug/l	100
85) sec-Butylbenzene	13.00	105	384847	19.73	ug/l	98
86) p-Isopropyltoluene	13.26	119	287724	18.45	ug/l	99
87) 1,3-Dichlorobenzene	13.24	146	179187	19.73	ug/l	98
88) 1,4-Dichlorobenzene	13.40	146	175062	20.32	ug/l	99
89) n-Butylbenzene	13.92	91	305471	20.80	ug/l	99
90) Hexachloroethane	13.97	117	67612	18.85	ug/l	99
91) 1,2-Dichlorobenzene	14.03	146	170740	20.73	ug/l	99
93) 1,2-Dibromo-3-Chloropropan	15.32	75	24771	25.97	ug/l	99
94) 1,2,4-Trichlorobenzene	16.41	180	97722	20.81	ug/l	97
95) Hexachlorobutadiene	16.44	225	30780	17.35	ug/l	99

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030799.D  
Acq On : 7 Oct 2010 12:43  
Operator : PS  
Sample : 20 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 4 Sample Multiplier: 1

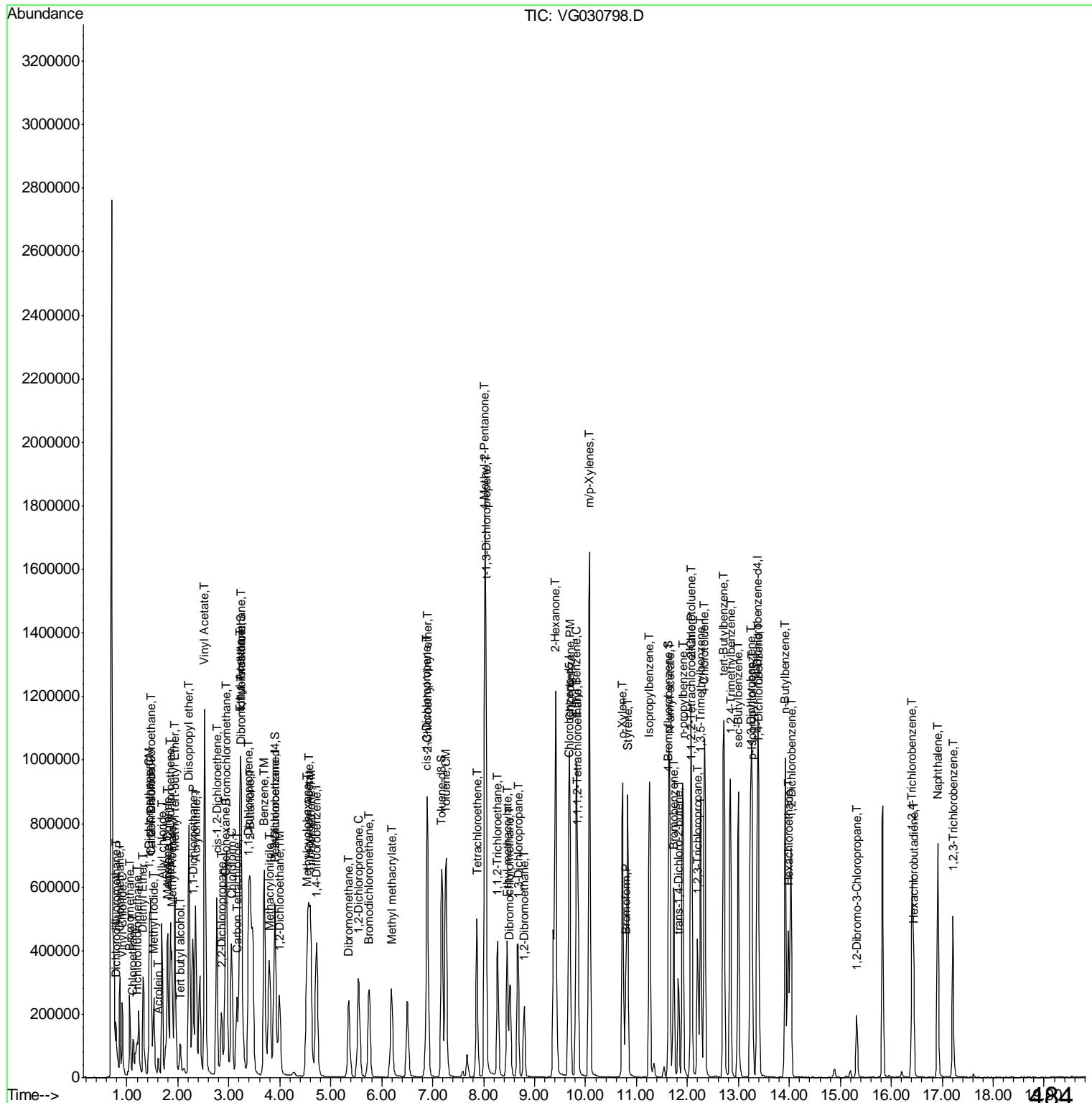
Quant Time: Oct 07 13:20:19 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 12:48:42 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.91	128	317297	20.37	ug/l	100
97) 1,2,3-Trichlorobenzene	17.21	180	86966	20.64	ug/l	99

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030798.D  
Acq On : 7 Oct 2010 12:15  
Operator : PS  
Sample : 50 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 07 13:17:25 2010  
Quant Method : \\\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710.W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 12:48:42 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030798.D  
 Acq On : 7 Oct 2010 12:15  
 Operator : PS  
 Sample : 50 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 07 13:17:25 2010

Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.91	168	385441	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.72	114	638622	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	524957	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.37	152	277817	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.90	65	253063	57.89	ug/l	0.00
Spiked Amount 50.000			Recovery	= 115.78%		
35) Dibromofluoromethane	3.25	113	252830	52.91	ug/l	0.00
Spiked Amount 50.000			Recovery	= 105.82%		
50) Toluene-d8	7.18	98	660950	53.50	ug/l	0.00
Spiked Amount 50.000			Recovery	= 107.00%		
62) 4-Bromofluorobenzene	11.63	95	289319	60.79	ug/l	0.00
Spiked Amount 50.000			Recovery	= 121.58%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	185803	47.75	ug/l	100
3) Chloromethane	0.86	50	267230	32.65	ug/l	100
4) Vinyl Chloride	0.91	62	194127	26.61	ug/l	100
5) Bromomethane	1.05	94	131696	28.49	ug/l	100
6) Chloroethane	1.12	64	98966	23.83	ug/l	100
7) Trichlorofluoromethane	1.20	101	210724	33.45	ug/l	100
8) Diethyl Ether	1.32	74	118698	28.40	ug/l	100
9) 1,1,2-Trichlorotrifluoroet	1.46	101	154696	28.77	ug/l	100
10) Methyl Iodide	1.53	142	268632	26.81	ug/l	100
11) Tert butyl alcohol	2.04	59	153362	258.68	ug/l	100
12) 1,1-Dichloroethene	1.44	96	159138	27.31	ug/l	100
13) Acrolein	1.62	56	48512	48.94	ug/l	100
14) Allyl chloride	1.68	41	274800	26.93	ug/l	100
15) Acrylonitrile	2.35	53	538039	219.13	ug/l	100
16) Acetone	1.80	43	420290	212.58	ug/l	100
17) Carbon Disulfide	1.46	76	386923	24.96	ug/l	100
18) Methyl Acetate	1.88	43	427343	36.10	ug/l	100
19) Methyl tert-butyl Ether	1.94	73	652840	47.15	ug/l	100
20) Methylene Chloride	1.79	84	164832	27.04	ug/l	100
21) trans-1,2-Dichloroethene	1.85	96	182623	30.35	ug/l	100
23) Diisopropyl ether	2.22	45	885540	39.37	ug/l	100
24) Vinyl Acetate	2.52	43	2129731	219.22	ug/l	100
25) 1,1-Dichloroethane	2.29	63	444043	40.97	ug/l	100
26) 2-Butanone	3.42	43	1038664	226.52	ug/l	100
27) 2,2-Dichloropropane	2.86	77	191139	49.24	ug/l	100
28) cis-1,2-Dichloroethene	2.76	96	307442	43.91	ug/l	100
29) Bromochloromethane	2.95	49	239148	43.89	ug/l	100
30) Chloroform	3.06	83	446971	49.52	ug/l	100
31) Cyclohexane	2.93	56	308329	33.31	ug/l	100
32) 1,1,1-Trichloroethane	3.24	97	270628	49.69	ug/l	100
36) 1,1-Dichloropropene	3.39	75	339607	49.60	ug/l	100
37) Ethyl Acetate	3.22	43	395664	50.71	ug/l	100
38) Carbon Tetrachloride	3.16	117	276683	51.63	ug/l	100
39) Methylcyclohexane	4.54	83	305183	46.39	ug/l	100

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030798.D  
 Acq On : 7 Oct 2010 12:15  
 Operator : PS  
 Sample : 50 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 07 13:17:25 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.69	78	881193	49.99	ug/l	100
41) Methacrylonitrile	3.80	41	195004	52.31	ug/l #	100
42) 1,2-Dichloroethane	3.99	62	311260	62.11	ug/l	100
43) Isopropyl Acetate	4.57	43	547234	49.84	ug/l	100
45) Trichloroethene	4.60	130	215179	43.89	ug/l	100
46) 1,2-Dichloropropane	5.54	63	221525	44.95	ug/l	100
47) Dibromomethane	5.35	93	181464	57.16	ug/l	100
48) Bromodichloromethane	5.75	83	329088	61.15	ug/l	100
49) Methyl methacrylate	6.19	41	242941	52.28	ug/l	100
51) 4-Methyl-2-Pentanone	8.02	43	1699431	251.35	ug/l	100
52) Toluene	7.26	92	487022	52.28	ug/l	100
53) t-1,3-Dichloropropene	8.05	75	317465	55.87	ug/l	100
54) cis-1,3-Dichloropropene	6.89	75	375507	54.40	ug/l	100
55) 1,1,2-Trichloroethane	8.28	97	200545	55.84	ug/l	100
56) Ethyl methacrylate	8.46	69	329464	54.53	ug/l	100
57) 1,3-Dichloropropene	8.68	76	369084	54.46	ug/l	100
58) 2-Chloroethyl Vinyl ether	6.90	63	371241	155.33	ug/l	100
59) 2-Hexanone	9.41	43	1183318m	243.86	ug/l	
60) Dibromochloromethane	8.51	129	223749	56.46	ug/l	100
61) 1,2-Dibromoethane	8.79	107	222690	52.51	ug/l	100
64) Tetrachloroethene	7.87	164	179435	50.21	ug/l	100
65) Chlorobenzene	9.69	112	493056	47.77	ug/l	100
66) 1,1,1,2-Tetrachloroethane	9.85	131	183071	52.38	ug/l	100
67) Ethyl Benzene	9.83	91	901275	53.25	ug/l	100
68) m/p-Xylenes	10.08	106	651054	96.20	ug/l	100
69) o-Xylene	10.73	106	346643	51.16	ug/l	100
70) Styrene	10.82	104	555269	51.86	ug/l	99
71) Bromoform	10.79	173	150690	59.43	ug/l #	100
73) Isopropylbenzene	11.25	105	864556	43.91	ug/l	100
74) N-amyl acetate	11.65	43	534995	42.16	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.08	83	322780	51.12	ug/l	100
76) 1,2,3-Trichloropropane	12.20	75	258938	49.76	ug/l	100
77) Bromobenzene	11.74	156	223282	47.21	ug/l	100
78) n-propylbenzene	11.90	91	1026170	45.17	ug/l	100
79) 2-Chlorotoluene	12.07	91	660308	48.22	ug/l	100
80) 1,3,5-Trimethylbenzene	12.26	105	644968	44.86	ug/l	100
81) trans-1,4-Dichloro-2-butene	11.82	75	104870	46.19	ug/l	100
82) 4-Chlorotoluene	12.34	91	667746	46.79	ug/l	100
83) tert-Butylbenzene	12.72	119	638521	43.84	ug/l	100
84) 1,2,4-Trimethylbenzene	12.84	105	676029	45.47	ug/l	100
85) sec-Butylbenzene	13.00	105	872026	44.31	ug/l	100
86) p-Isopropyltoluene	13.27	119	662986	42.16	ug/l	100
87) 1,3-Dichlorobenzene	13.24	146	427182	46.63	ug/l	100
88) 1,4-Dichlorobenzene	13.40	146	408791	47.03	ug/l	100
89) n-Butylbenzene	13.92	91	739373	49.92	ug/l	100
90) Hexachloroethane	13.98	117	163535	45.19	ug/l	100
91) 1,2-Dichlorobenzene	14.03	146	407693	49.06	ug/l	100
93) 1,2-Dibromo-3-Chloropropan	15.32	75	64943	67.50	ug/l	100
94) 1,2,4-Trichlorobenzene	16.41	180	239605	50.58	ug/l	100
95) Hexachlorobutadiene	16.44	225	71398	39.90	ug/l	100

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030798.D  
Acq On : 7 Oct 2010 12:15  
Operator : PS  
Sample : 50 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 07 13:17:25 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 12:48:42 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.91	128	760102	48.37	ug/l	100
97) 1,2,3-Trichlorobenzene	17.21	180	212294	49.94	ug/l	100

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030797.D  
Acq On : 7 Oct 2010 11:47  
Operator : PS  
Sample : 100 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 2 Sample Multiplier: 1

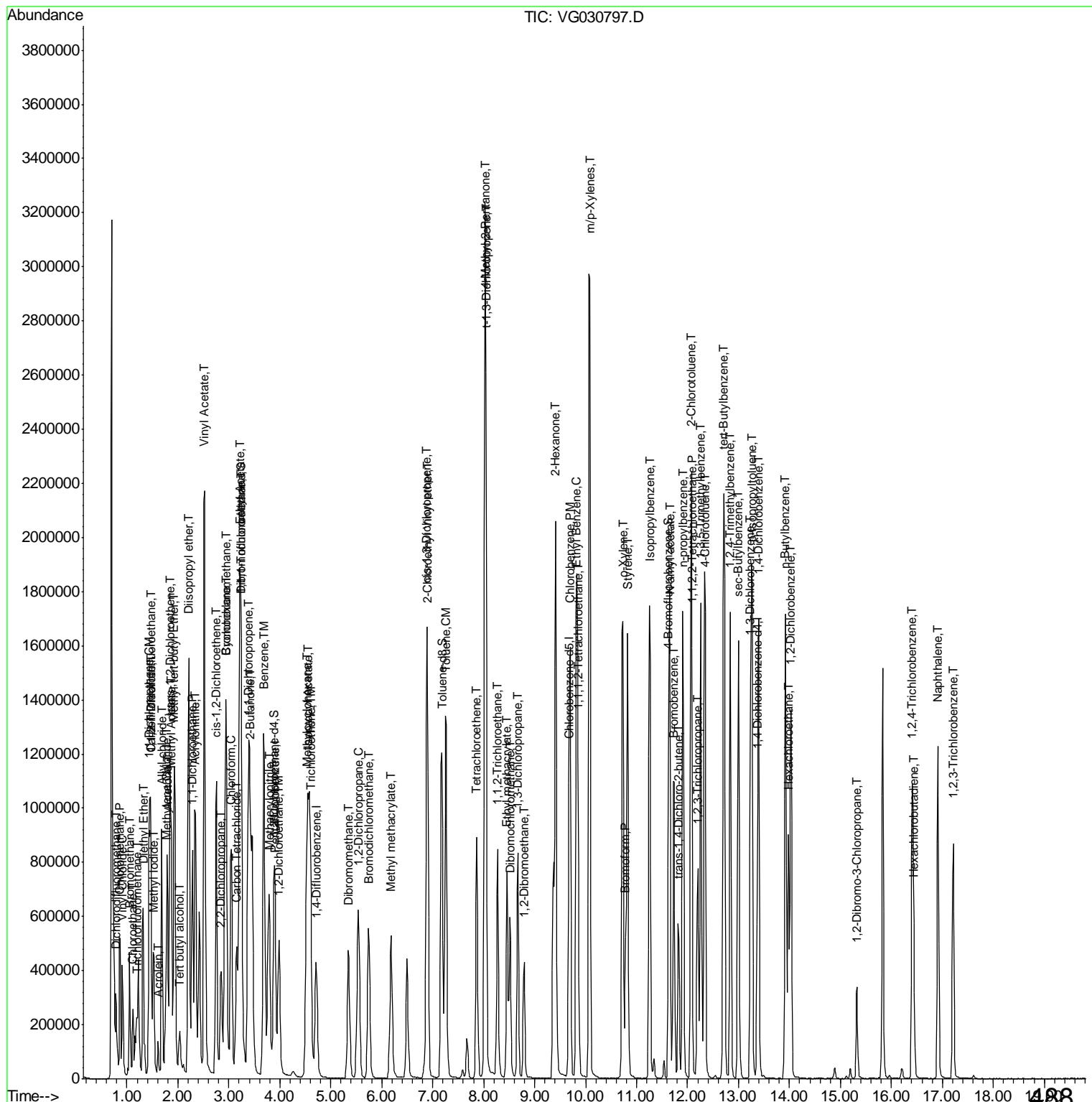
Quant Time: Oct 07 12:53:30 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

Last Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030797.D  
 Acq On : 7 Oct 2010 11:47  
 Operator : PS  
 Sample : 100 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 07 12:53:30 2010

Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.91	168	369676	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.72	114	634245	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	511823	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.37	152	257733	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.88	65	486952	116.14	ug/l	-0.02
Spiked Amount 50.000			Recovery	= 232.28%		
35) Dibromofluoromethane	3.24	113	472618	99.60	ug/l	-0.02
Spiked Amount 50.000			Recovery	= 199.20%		
50) Toluene-d8	7.18	98	1251969	102.05	ug/l	0.00
Spiked Amount 50.000			Recovery	= 204.10%		
62) 4-Bromofluorobenzene	11.63	95	530924	112.32	ug/l	0.00
Spiked Amount 50.000			Recovery	= 224.64%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	347346	93.08	ug/l	98
3) Chloromethane	0.87	50	500202	63.73	ug/l	97
4) Vinyl Chloride	0.91	62	372663	53.27	ug/l	99
5) Bromomethane	1.05	94	252693	57.00	ug/l	99
6) Chloroethane	1.12	64	197549	49.60	ug/l	99
7) Trichlorofluoromethane	1.19	101	416231	68.90	ug/l	97
8) Diethyl Ether	1.32	74	240521	60.00	ug/l	97
9) 1,1,2-Trichlorotrifluoroet	1.46	101	286522	55.56	ug/l	97
10) Methyl Iodide	1.53	142	540844	56.27	ug/l	100
11) Tert butyl alcohol	2.03	59	258660	454.90	ug/l	99
12) 1,1-Dichloroethene	1.44	96	314246	56.24	ug/l	94
13) Acrolein	1.61	56	110279	115.98	ug/l	96
14) Allyl chloride	1.68	41	554073	56.62	ug/l	98
15) Acrylonitrile	2.34	53	980478	416.36	ug/l	99
16) Acetone	1.79	43	761625	401.66	ug/l	98
17) Carbon Disulfide	1.46	76	761463	51.21	ug/l	100
18) Methyl Acetate	1.87	43	938419	82.66	ug/l	99
19) Methyl tert-butyl Ether	1.93	73	1344829	101.26	ug/l	100
20) Methylene Chloride	1.78	84	331139	56.63	ug/l	98
21) trans-1,2-Dichloroethene	1.85	96	412092	71.40	ug/l	98
23) Diisopropyl ether	2.21	45	1785391	82.77	ug/l	99
24) Vinyl Acetate	2.52	43	4160291	446.49	ug/l	96
25) 1,1-Dichloroethane	2.28	63	890391	85.65	ug/l	99
26) 2-Butanone	3.42	43	1860167	422.98	ug/l	99
27) 2,2-Dichloropropane	2.85	77	372392	100.02	ug/l	99
28) cis-1,2-Dichloroethene	2.75	96	607664	90.49	ug/l	97
29) Bromochloromethane	2.94	49	490458	93.85	ug/l	100
30) Chloroform	3.05	83	915801	105.78	ug/l	100
31) Cyclohexane	2.93	56	605977	68.27	ug/l	98
32) 1,1,1-Trichloroethane	3.24	97	516943	98.97	ug/l	99
36) 1,1-Dichloropropene	3.38	75	664433	97.70	ug/l	99
37) Ethyl Acetate	3.22	43	737158	95.14	ug/l	98
38) Carbon Tetrachloride	3.15	117	555444	104.36	ug/l	98
39) Methylcyclohexane	4.54	83	584756	89.50	ug/l	98

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
 Data File : VG030797.D  
 Acq On : 7 Oct 2010 11:47  
 Operator : PS  
 Sample : 100 PPB ICC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 07 12:53:30 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 12:48:42 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.68	78	1744616	99.66	ug/l	99
41) Methacrylonitrile	3.79	41	394714	106.61	ug/l	# 98
42) 1,2-Dichloroethane	3.98	62	632398	127.06	ug/l	100
43) Isopropyl Acetate	4.56	43	1053972	96.66	ug/l	100
45) Trichloroethene	4.60	130	435208	89.37	ug/l	95
46) 1,2-Dichloropropane	5.54	63	444935	90.91	ug/l	99
47) Dibromomethane	5.34	93	349488	110.85	ug/l	98
48) Bromodichloromethane	5.74	83	666184	124.64	ug/l	98
49) Methyl methacrylate	6.18	41	454769	98.54	ug/l	99
51) 4-Methyl-2-Pentanone	8.03	43	2983119	444.26	ug/l	100
52) Toluene	7.25	92	965898	104.41	ug/l	98
53) t-1,3-Dichloropropene	8.04	75	607192	107.61	ug/l	100
54) cis-1,3-Dichloropropene	6.89	75	746316	108.86	ug/l	97
55) 1,1,2-Trichloroethane	8.27	97	378095	106.00	ug/l	97
56) Ethyl methacrylate	8.45	69	589390	98.22	ug/l	97
57) 1,3-Dichloropropene	8.67	76	724932	107.71	ug/l	99
58) 2-Chloroethyl Vinyl ether	6.90	63	682758	287.65	ug/l	99
59) 2-Hexanone	9.41	43	2136433m	443.31	ug/l	
60) Dibromochloromethane	8.51	129	426894	108.47	ug/l	99
61) 1,2-Dibromoethane	8.79	107	425619	101.05	ug/l	99
64) Tetrachloroethene	7.86	164	340191	97.64	ug/l	97
65) Chlorobenzene	9.69	112	942939	93.71	ug/l	98
66) 1,1,1,2-Tetrachloroethane	9.85	131	362268	106.31	ug/l	99
67) Ethyl Benzene	9.82	91	1665002	100.89	ug/l	99
68) m/p-Xylenes	10.08	106	1214564	184.07	ug/l	97
69) o-Xylene	10.73	106	658712	99.71	ug/l	98
70) Styrene	10.83	104	1033878	99.05	ug/l	98
71) Bromoform	10.78	173	295390	119.50	ug/l	# 100
73) Isopropylbenzene	11.25	105	1625902	89.01	ug/l	100
74) N-amyl acetate	11.65	43	905938	76.95	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.09	83	583383	99.60	ug/l	100
76) 1,2,3-Trichloropropane	12.20	75	478672	99.14	ug/l	100
77) Bromobenzene	11.74	156	412939	94.11	ug/l	99
78) n-propylbenzene	11.91	91	1885625	89.46	ug/l	99
79) 2-Chlorotoluene	12.07	91	1219432	96.00	ug/l	100
80) 1,3,5-Trimethylbenzene	12.26	105	1196456	89.70	ug/l	100
81) trans-1,4-Dichloro-2-butene	11.82	75	197312	93.68	ug/l	99
82) 4-Chlorotoluene	12.35	91	1222553	92.35	ug/l	100
83) tert-Butylbenzene	12.71	119	1239797	91.75	ug/l	99
84) 1,2,4-Trimethylbenzene	12.84	105	1252523	90.82	ug/l	98
85) sec-Butylbenzene	13.00	105	1627421	89.14	ug/l	99
86) p-Isopropyltoluene	13.27	119	1216749	83.40	ug/l	99
87) 1,3-Dichlorobenzene	13.24	146	756229	88.98	ug/l	99
88) 1,4-Dichlorobenzene	13.39	146	753620	93.46	ug/l	99
89) n-Butylbenzene	13.92	91	1288178	93.75	ug/l	99
90) Hexachloroethane	13.98	117	331791	98.83	ug/l	100
91) 1,2-Dichlorobenzene	14.03	146	729643	94.65	ug/l	99
93) 1,2-Dibromo-3-Chloropropan	15.33	75	117943	132.15	ug/l	97
94) 1,2,4-Trichlorobenzene	16.41	180	405275	92.22	ug/l	100
95) Hexachlorobutadiene	16.44	225	122911	74.03	ug/l	99

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG100710\  
Data File : VG030797.D  
Acq On : 7 Oct 2010 11:47  
Operator : PS  
Sample : 100 PPB ICC  
Misc : 5mL MSVOA\_G  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 07 12:53:30 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 12:48:42 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.91	128	1295191	88.84	ug/l	99
97) 1,2,3-Trichlorobenzene	17.21	180	375845	95.31	ug/l	99

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

Data Path : \\Terastorage\voasrv\HPCHEM1\Msvoa\_G\Data\VG100710\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

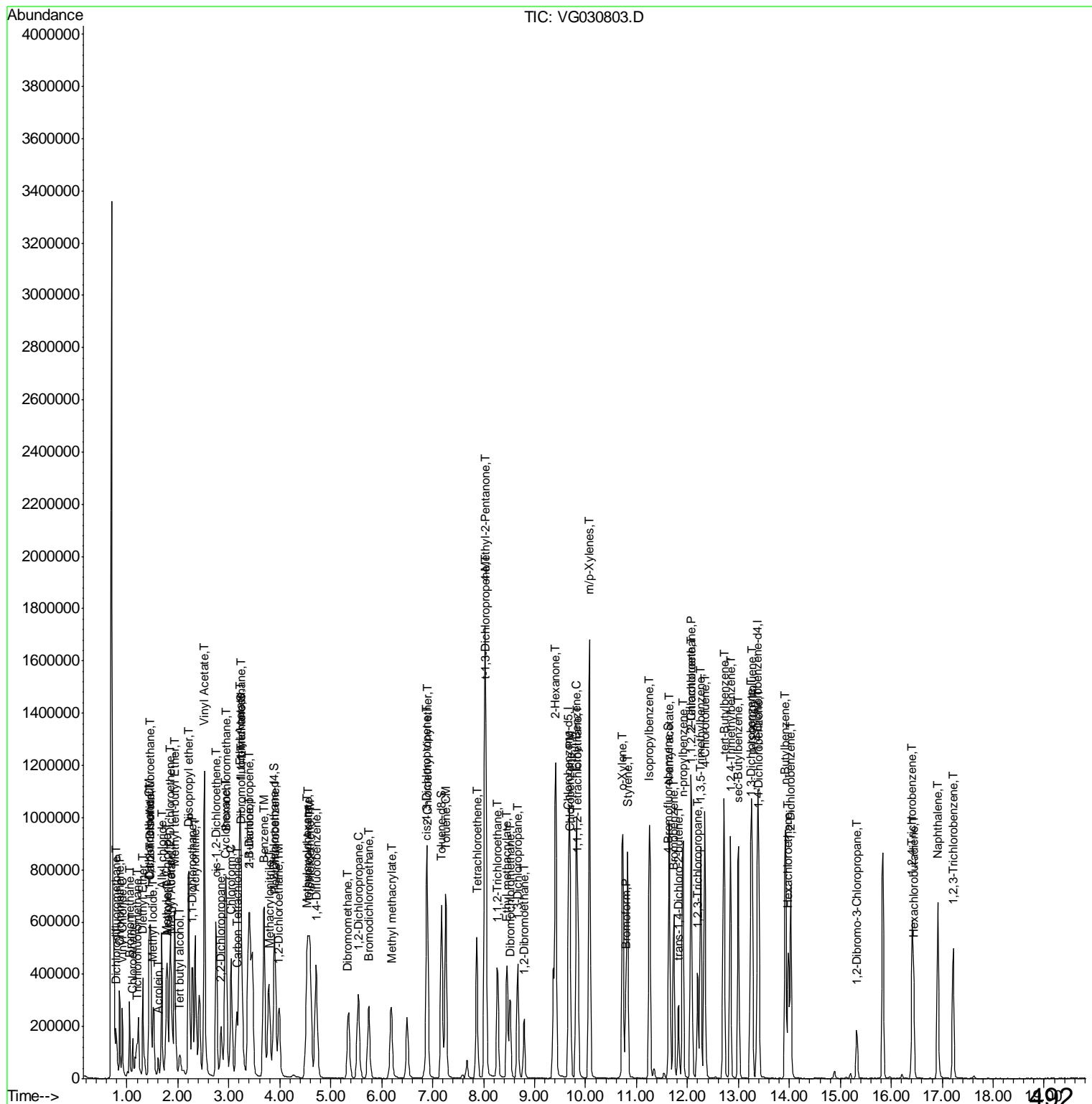
Quant Time: Oct 07 15:28:20 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 14:45:00 2010

Response via : Initial Calibration



Data Path : \\Terastorage\voasrv\HPCHEM1\Msvoa\_G\Data\VG100710\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 14:45:00 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.90	168	374287	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.71	114	638135	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.67	117	542217	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.38	152	275724	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.89	65	255394	48.72	ug/l	0.00
Spiked Amount 50.000			Recovery	=	97.44%	
35) Dibromofluoromethane	3.24	113	248223	49.20	ug/l	0.00
Spiked Amount 50.000			Recovery	=	98.40%	
50) Toluene-d8	7.17	98	654439	47.30	ug/l	0.00
Spiked Amount 50.000			Recovery	=	94.60%	
62) 4-Bromofluorobenzene	11.63	95	283133	46.05	ug/l	0.00
Spiked Amount 50.000			Recovery	=	92.10%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	174118	45.41	ug/l	95
3) Chloromethane	0.85	50	286001	48.75	ug/l	100
4) Vinyl Chloride	0.91	62	207286	48.60	ug/l	97
5) Bromomethane	1.05	94	147771	56.73	ug/l	98
6) Chloroethane	1.12	64	111649	50.66	ug/l	100
7) Trichlorofluoromethane	1.20	101	217214	49.77	ug/l	98
8) Diethyl Ether	1.32	74	133398	51.34	ug/l	96
9) 1,1,2-Trichlorotrifluoroet	1.46	101	159722	46.99	ug/l	97
10) Methyl Iodide	1.51	142	301019	49.58	ug/l	99
11) Tert butyl alcohol	2.04	59	147629	268.49	ug/l	96
12) 1,1-Dichloroethene	1.43	96	173873	48.97	ug/l	91
13) Acrolein	1.61	56	67659	316.49	ug/l	99
14) Allyl chloride	1.68	41	313826	51.54	ug/l	98
15) Acrylonitrile	2.34	53	543017	252.46	ug/l	99
16) Acetone	1.80	43	415477	262.28	ug/l	99
17) Carbon Disulfide	1.46	76	432745	48.20	ug/l	99
18) Methyl Acetate	1.87	43	447597	48.07	ug/l	98
19) Methyl tert-butyl Ether	1.93	73	736356	51.35	ug/l	97
20) Methylene Chloride	1.78	84	189813	49.57	ug/l	97
21) trans-1,2-Dichloroethene	1.85	96	196232	47.85	ug/l	96
23) Diisopropyl ether	2.22	45	938818	49.18	ug/l	99
24) Vinyl Acetate	2.52	43	2093365	242.31	ug/l	98
25) 1,1-Dichloroethane	2.29	63	471415	50.76	ug/l	99
26) 2-Butanone	3.41	43	1028285	223.82	ug/l	100
27) 2,2-Dichloropropane	2.85	77	181800	45.53	ug/l	98
28) cis-1,2-Dichloroethene	2.75	96	323666	50.20	ug/l	100
29) Bromochloromethane	2.94	49	254532	53.17	ug/l	99
30) Chloroform	3.04	83	471031	49.90	ug/l	99
31) Cyclohexane	2.93	56	305527	45.02	ug/l	100
32) 1,1,1-Trichloroethane	3.23	97	272960	47.53	ug/l	99
36) 1,1-Dichloropropene	3.38	75	355796	48.66	ug/l	99
37) Ethyl Acetate	3.22	43	379217	43.09	ug/l	99
38) Carbon Tetrachloride	3.16	117	285888	46.34	ug/l	98
39) Methylcyclohexane	4.53	83	309788	46.97	ug/l	99

Data Path : \\Terastorage\voasrv\HPCHEM1\Msvoa\_G\Data\VG100710\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Thu Oct 07 14:45:00 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.69	78	919146	48.82	ug/l	99
41) Methacrylonitrile	3.80	41	203046	46.98	ug/l	97
42) 1,2-Dichloroethane	3.99	62	325451	49.46	ug/l	99
43) Isopropyl Acetate	4.55	43	541891	44.94	ug/l	100
45) Trichloroethene	4.60	130	224903	47.91	ug/l	99
46) 1,2-Dichloropropane	5.54	63	227013	48.87	ug/l	100
47) Dibromomethane	5.34	93	184376	50.36	ug/l	98
48) Bromodichloromethane	5.75	83	334700	50.12	ug/l	95
49) Methyl methacrylate	6.19	41	237626	47.27	ug/l	99
51) 4-Methyl-2-Pentanone	8.02	43	1688356	223.09	ug/l	99
52) Toluene	7.25	92	509239	48.06	ug/l	99
53) t-1,3-Dichloropropene	8.04	75	325738	50.62	ug/l	97
54) cis-1,3-Dichloropropene	6.88	75	386138	49.60	ug/l	97
55) 1,1,2-Trichloroethane	8.27	97	198697	47.46	ug/l	97
56) Ethyl methacrylate	8.46	69	317562	46.03	ug/l	98
57) 1,3-Dichloropropene	8.67	76	378111	48.18	ug/l	99
58) 2-Chloroethyl Vinyl ether	6.90	63	362657	247.19	ug/l	99
59) 2-Hexanone	9.41	43	1145792m	252.54	ug/l	
60) Dibromochloromethane	8.52	129	224461	51.97	ug/l	99
61) 1,2-Dibromoethane	8.80	107	226840	48.96	ug/l	100
64) Tetrachloroethene	7.87	164	207454	48.45	ug/l	98
65) Chlorobenzene	9.70	112	502333	47.19	ug/l	97
66) 1,1,1,2-Tetrachloroethane	9.85	131	195321	50.50	ug/l	99
67) Ethyl Benzene	9.83	91	918421	46.15	ug/l	99
68) m/p-Xylenes	10.08	106	652075	89.85	ug/l	97
69) o-Xylene	10.73	106	359410	47.06	ug/l	99
70) Styrene	10.82	104	551820	46.06	ug/l	100
71) Bromoform	10.79	173	151105	51.00	ug/l	# 100
73) Isopropylbenzene	11.25	105	907009	48.30	ug/l	98
74) N-amyl acetate	11.65	43	495234	42.84	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.08	83	314297	45.84	ug/l	99
76) 1,2,3-Trichloropropane	12.19	75	255518	46.05	ug/l	97
77) Bromobenzene	11.73	156	223792	46.99	ug/l	100
78) n-propylbenzene	11.91	91	1012650	44.79	ug/l	99
79) 2-Chlorotoluene	12.07	91	662072	46.26	ug/l	99
80) 1,3,5-Trimethylbenzene	12.26	105	643939	45.91	ug/l	99
81) trans-1,4-Dichloro-2-butene	11.83	75	98833	51.71	ug/l	98
82) 4-Chlorotoluene	12.34	91	651917	45.01	ug/l	100
83) tert-Butylbenzene	12.72	119	627001	46.26	ug/l	97
84) 1,2,4-Trimethylbenzene	12.84	105	687931	46.20	ug/l	98
85) sec-Butylbenzene	13.00	105	886620	45.85	ug/l	100
86) p-Isopropyltoluene	13.26	119	662300	45.78	ug/l	99
87) 1,3-Dichlorobenzene	13.24	146	407343	44.66	ug/l	100
88) 1,4-Dichlorobenzene	13.40	146	397999	44.93	ug/l	98
89) n-Butylbenzene	13.92	91	720115	46.15	ug/l	98
90) Hexachloroethane	13.98	117	167799	49.39	ug/l	98
91) 1,2-Dichlorobenzene	14.03	146	407097	47.03	ug/l	99
93) 1,2-Dibromo-3-Chloropropan	15.32	75	63667	51.33	ug/l	98
94) 1,2,4-Trichlorobenzene	16.41	180	229742	44.46	ug/l	100
95) Hexachlorobutadiene	16.44	225	70417	43.62	ug/l	99

Data Path : \\Terastorage\voasrv\HPCHEM1\Msvoa\_G\Data\VG100710\  
Data File : VG030803.D  
Acq On : 7 Oct 2010 15:03  
Operator : PS  
Sample : 50 PPB ICV  
Misc : 5mL MSVOA\_G  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 07 14:45:00 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.91	128	723995	50.29	ug/l	99
97) 1,2,3-Trichlorobenzene	17.22	180	212671	51.55	ug/l	99

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

Data Path : \\Terastorage\\voasrv\\HPCHEM1\\Msvoa\_G\\Data\\VG100710\\  
 Data File : VG030803.D  
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 Quant Method : \\TERASTORAGE\\VOASRV\\HPCHEM1\\MSVOA\_G\\METHOD\\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 07 14:45:00 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	97	0.02
2 T	Dichlorodifluoromethane	50.000	45.406	9.2	94	0.00
3 P	Chloromethane	50.000	48.746	2.5	107	0.00
4 C	Vinyl Chloride	50.000	48.599	2.8#	107	0.00
5 T	Bromomethane	50.000	56.728	-13.5	112	0.01
6 T	Chloroethane	50.000	50.660	-1.3	113	0.00
7 T	Trichlorofluoromethane	50.000	49.773	0.5	103	0.00
8 T	Diethyl Ether	50.000	51.336	-2.7	112	0.01
9 T	1,1,2-Trichlorotrifluoroeth	50.000	46.992	6.0	103	0.01
10 T	Methyl Iodide	50.000	49.578	0.8	112	0.00
11 T	Tert butyl alcohol	250.000	268.494	-7.4	96	0.01
12 CM	1,1-Dichloroethene	50.000	48.965	2.1#	109	0.00
13 T	Acrolein	250.000	316.491	-26.6#	139	0.00
14 T	Allyl chloride	50.000	51.540	-3.1	114	0.00
15 T	Acrylonitrile	250.000	252.461	-1.0	101	0.00
16 T	Acetone	250.000	262.281	-4.9	99	0.00
17 T	Carbon Disulfide	50.000	48.205	3.6	112	0.01
18 T	Methyl Acetate	50.000	48.066	3.9	105	0.01
19 T	Methyl tert-butyl Ether	50.000	51.354	-2.7	113	0.01
20 T	Methylene Chloride	50.000	49.569	0.9	115	0.00
21 T	trans-1,2-Dichloroethene	50.000	47.846	4.3	107	0.00
22 T	Acetonitrile	50.000	0.000	100.0#	0	-2.11#
23 T	Diisopropyl ether	50.000	49.182	1.6	106	0.02
24 T	Vinyl Acetate	250.000	242.313	3.1	98	0.02
25 P	1,1-Dichloroethane	50.000	50.759	-1.5	106	0.02
26 T	2-Butanone	250.000	223.817	10.5	99	0.02
27 T	2,2-Dichloropropane	50.000	45.533	8.9	95	0.02
28 T	cis-1,2-Dichloroethene	50.000	50.198	-0.4	105	0.02
29 T	Bromochloromethane	50.000	53.166	-6.3	106	0.02
30 C	Chloroform	50.000	49.904	0.2#	105	0.02
31 T	Cyclohexane	50.000	45.025	10.0	99	0.02
32 T	1,1,1-Trichloroethane	50.000	47.529	4.9	101	0.02
33 S	1,2-Dichloroethane-d4	50.000	48.715	2.6	101	0.03
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	100	0.03
35 S	Dibromofluoromethane	50.000	49.200	1.6	98	0.02
36 T	1,1-Dichloropropene	50.000	48.662	2.7	105	0.02
37 T	Ethyl Acetate	50.000	43.087	13.8	96	0.02
38 T	Carbon Tetrachloride	50.000	46.343	7.3	103	0.03
39 T	Methylcyclohexane	50.000	46.965	6.1	102	0.03
40 TM	Benzene	50.000	48.816	2.4	104	0.02
41 T	Methacrylonitrile	50.000	46.981	6.0	104	0.03
42 TM	1,2-Dichloroethane	50.000	49.464	1.1	105	0.02
43 T	Isopropyl Acetate	50.000	44.945	10.1	99	0.03
44 T	Isobutyl alcohol	50.000	0.000	100.0#	0	-4.27#
45 TM	Trichloroethene	50.000	47.915	4.2	105	0.03

Data Path : \\Terastorage\\voasrv\\HPCHEM1\\Msvoa\_G\\Data\\VG100710\\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010  
 Quant Method : \\TERASTORAGE\\VOASRV\\HPCHEM1\\MSVOA\_G\\METHOD\\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 07 14:45:00 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
46 C	1,2-Dichloropropane	50.000	48.867	2.3#	102	0.03
47 T	Dibromomethane	50.000	50.355	-0.7	102	0.03
48 T	Bromodichloromethane	50.000	50.123	-0.2	102	0.03
49 T	Methyl methacrylate	50.000	47.269	5.5	98	0.03
50 S	Toluene-d8	50.000	47.298	5.4	99	0.02
51 T	4-Methyl-2-Pentanone	250.000	223.091	10.8	99	0.02
52 CM	Toluene	50.000	48.056	3.9#	105	0.02
53 T	t-1,3-Dichloropropene	50.000	50.625	-1.3	103	0.03
54 T	cis-1,3-Dichloropropene	50.000	49.599	0.8	103	0.02
55 T	1,1,2-Trichloroethane	50.000	47.457	5.1	99	0.02
56 T	Ethyl methacrylate	50.000	46.026	7.9	96	0.02
57 T	1,3-Dichloropropane	50.000	48.183	3.6	102	0.02
58 T	2-Chloroethyl Vinyl ether	250.000	247.194	1.1	98	0.03
59 T	2-Hexanone	250.000	252.540	-1.0	97	0.02
60 T	Dibromochloromethane	50.000	51.974	-3.9	100	0.03
61 T	1,2-Dibromoethane	50.000	48.965	2.1	102	0.02
62 S	4-Bromofluorobenzene	50.000	46.047	7.9	98	0.02
63 I	Chlorobenzene-d5	50.000	50.000	0.0	103	0.02
64 T	Tetrachloroethene	50.000	48.451	3.1	116	0.03
65 PM	Chlorobenzene	50.000	47.188	5.6	102	0.03
66 T	1,1,1,2-Tetrachloroethane	50.000	50.505	-1.0	107	0.02
67 C	Ethyl Benzene	50.000	46.151	7.7#	102	0.03
68 T	m/p-Xylenes	100.000	89.850	10.2	100	0.03
69 T	o-Xylene	50.000	47.061	5.9	104	0.03
70 T	Styrene	50.000	46.060	7.9	99	0.02
71 P	Bromoform	50.000	51.000	-2.0	100	0.03
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	99	0.03
73 T	Isopropylbenzene	50.000	48.303	3.4	105	0.02
74 T	N-amyl acetate	50.000	42.843	14.3	93	0.02
75 P	1,1,2,2-Tetrachloroethane	50.000	45.838	8.3	97	0.02
76 T	1,2,3-Trichloropropane	50.000	46.049	7.9	99	0.02
77 T	Bromobenzene	50.000	46.988	6.0	100	0.02
78 T	n-propylbenzene	50.000	44.787	10.4	99	0.03
79 T	2-Chlorotoluene	50.000	46.258	7.5	100	0.02
80 T	1,3,5-Trimethylbenzene	50.000	45.910	8.2	100	0.01
81 T	trans-1,4-Dichloro-2-butene	50.000	51.709	-3.4	94	0.03
82 T	4-Chlorotoluene	50.000	45.010	10.0	98	0.02
83 T	tert-Butylbenzene	50.000	46.260	7.5	98	0.02
84 T	1,2,4-Trimethylbenzene	50.000	46.204	7.6	102	0.02
85 T	sec-Butylbenzene	50.000	45.848	8.3	102	0.02
86 T	p-Isopropyltoluene	50.000	45.784	8.4	100	0.02
87 T	1,3-Dichlorobenzene	50.000	44.658	10.7	95	0.02
88 T	1,4-Dichlorobenzene	50.000	44.934	10.1	97	0.03
89 T	n-Butylbenzene	50.000	46.151	7.7	97	0.03

Data Path : \\Terastorage\voasrv\HPCHEM1\Msvoa\_G\Data\VG100710\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 07 14:45:00 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
90 T	Hexachloroethane	50.000	49.387	1.2	103	0.02
91 T	1,2-Dichlorobenzene	50.000	47.030	5.9	100	0.02
92 T	1,2,4,5-Tetramethylbenzene	50.000	0.000	100.0#	0	-15.20#
93 T	1,2-Dibromo-3-Chloropropane	50.000	51.331	-2.7	98	0.02
94 T	1,2,4-Trichlorobenzene	50.000	44.463	11.1	96	0.02
95 T	Hexachlorobutadiene	50.000	43.616	12.8	99	0.02
96 T	Naphthalene	50.000	50.287	-0.6	95	0.01
97 T	1,2,3-Trichlorobenzene	50.000	51.554	-3.1	100	0.03
98 T	p-ethyltoluene	50.000	0.000	100.0#	0	-11.87#
99 T	p-diethylbenzene	50.000	0.000	100.0#	0	-13.92#

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : \\Terastorage\\voasrv\\HPCHEM1\\Msvoa\_G\\Data\\VG100710\\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010  
 Quant Method : \\TERASTORAGE\\VOASRV\\HPCHEM1\\MSVOA\_G\\METHOD\\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 07 14:45:00 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	97	0.02
2 T	Dichlorodifluoromethane	0.512	0.465	9.2	94	0.00
3 P	Chloromethane	0.784	0.764	2.6	107	0.00
4 C	Vinyl Chloride	0.570	0.554	2.8#	107	0.00
5 T	Bromomethane	0.446	0.395	11.4	112	0.01
6 T	Chloroethane	0.294	0.298	-1.4	113	0.00
7 T	Trichlorofluoromethane	0.583	0.580	0.5	103	0.00
8 T	Diethyl Ether	0.347	0.356	-2.6	112	0.01
9 T	1,1,2-Trichlorotrifluoroeth	0.454	0.427	5.9	103	0.01
10 T	Methyl Iodide	0.811	0.804	0.9	112	0.00
11 T	Tert butyl alcohol	0.088	0.079	10.2	96	0.01
12 CM	1,1-Dichloroethene	0.474	0.465	1.9#	109	0.00
13 T	Acrolein	0.033	0.036	-9.1	139	0.00
14 T	Allyl chloride	0.813	0.838	-3.1	114	0.00
15 T	Acrylonitrile	0.287	0.290	-1.0	101	0.00
16 T	Acetone	0.255	0.222	12.9	99	0.00
17 T	Carbon Disulfide	1.199	1.156	3.6	112	0.01
18 T	Methyl Acetate	1.409	1.196	15.1	105	0.01
19 T	Methyl tert-butyl Ether	1.915	1.967	-2.7	113	0.01
20 T	Methylene Chloride	0.512	0.507	1.0	115	0.00
21 T	trans-1,2-Dichloroethene	0.548	0.524	4.4	107	0.00
22 T	Acetonitrile	0.000	0.000	0.0	0#	-2.11#
23 T	Diisopropyl ether	2.550	2.508	1.6	106	0.02
24 T	Vinyl Acetate	1.154	1.119	3.0	98	0.02
25 P	1,1-Dichloroethane	1.241	1.260	-1.5	106	0.02
26 T	2-Butanone	0.614	0.549	10.6	99	0.02
27 T	2,2-Dichloropropane	0.533	0.486	8.8	95	0.02
28 T	cis-1,2-Dichloroethene	0.861	0.865	-0.5	105	0.02
29 T	Bromochloromethane	0.640	0.680	-6.3	106	0.02
30 C	Chloroform	1.261	1.258	0.2#	105	0.02
31 T	Cyclohexane	0.906	0.816	9.9	99	0.02
32 T	1,1,1-Trichloroethane	0.767	0.729	5.0	101	0.02
33 S	1,2-Dichloroethane-d4	0.700	0.682	2.6	101	0.03
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.03
35 S	Dibromofluoromethane	0.395	0.389	1.5	98	0.02
36 T	1,1-Dichloropropene	0.573	0.558	2.6	105	0.02
37 T	Ethyl Acetate	0.690	0.594	13.9	96	0.02
38 T	Carbon Tetrachloride	0.483	0.448	7.2	103	0.03
39 T	Methylcyclohexane	0.517	0.485	6.2	102	0.03
40 TM	Benzene	1.475	1.440	2.4	104	0.02
41 T	Methacrylonitrile	0.339	0.318	6.2	104	0.03
42 TM	1,2-Dichloroethane	0.516	0.510	1.2	105	0.02
43 T	Isopropyl Acetate	0.945	0.849	10.2	99	0.03
44 T	Isobutyl alcohol	0.000	0.000	0.0	0#	-4.27#
45 TM	Trichloroethene	0.368	0.352	4.3	105	0.03

Data Path : \\Terastorage\\voasrv\\HPCHEM1\\Msvoa\_G\\Data\\VG100710\\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010  
 Quant Method : \\TERASTORAGE\\VOASRV\\HPCHEM1\\MSVOA\_G\\METHOD\\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 07 14:45:00 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 C	1,2-Dichloropropane	0.364	0.356	2.2#	102	0.03
47 T	Dibromomethane	0.287	0.289	-0.7	102	0.03
48 T	Bromodichloromethane	0.523	0.524	-0.2	102	0.03
49 T	Methyl methacrylate	0.394	0.372	5.6	98	0.03
50 S	Toluene-d8	1.084	1.026	5.4	99	0.02
51 T	4-Methyl-2-Pentanone	0.593	0.529	10.8	99	0.02
52 CM	Toluene	0.830	0.798	3.9#	105	0.02
53 T	t-1,3-Dichloropropene	0.504	0.510	-1.2	103	0.03
54 T	cis-1,3-Dichloropropene	0.610	0.605	0.8	103	0.02
55 T	1,1,2-Trichloroethane	0.328	0.311	5.2	99	0.02
56 T	Ethyl methacrylate	0.541	0.498	7.9	96	0.02
57 T	1,3-Dichloropropane	0.615	0.593	3.6	102	0.02
58 T	2-Chloroethyl Vinyl ether	0.167	0.114	31.7#	98	0.03
59 T	2-Hexanone	0.443	0.359	19.0	97	0.02
60 T	Dibromochloromethane	0.338	0.352	-4.1	100	0.03
61 T	1,2-Dibromoethane	0.363	0.355	2.2	102	0.02
62 S	4-Bromofluorobenzene	0.482	0.444	7.9	98	0.02
63 I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.02
64 T	Tetrachloroethene	0.395	0.383	3.0	116	0.03
65 PM	Chlorobenzene	0.982	0.926	5.7	102	0.03
66 T	1,1,1,2-Tetrachloroethane	0.357	0.360	-0.8	107	0.02
67 C	Ethyl Benzene	1.835	1.694	7.7#	102	0.03
68 T	m/p-Xylenes	0.669	0.601	10.2	100	0.03
69 T	o-Xylene	0.704	0.663	5.8	104	0.03
70 T	Styrene	1.105	1.018	7.9	99	0.02
71 P	Bromoform	0.273	0.279	-2.2	100	0.03
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.03
73 T	Isopropylbenzene	3.405	3.290	3.4	105	0.02
74 T	N-amyl acetate	2.096	1.796	14.3	93	0.02
75 P	1,1,2,2-Tetrachloroethane	1.243	1.140	8.3	97	0.02
76 T	1,2,3-Trichloropropane	1.006	0.927	7.9	99	0.02
77 T	Bromobenzene	0.864	0.812	6.0	100	0.02
78 T	n-propylbenzene	4.100	3.673	10.4	99	0.03
79 T	2-Chlorotoluene	2.595	2.401	7.5	100	0.02
80 T	1,3,5-Trimethylbenzene	2.544	2.335	8.2	100	0.01
81 T	trans-1,4-Dichloro-2-butene	0.347	0.358	-3.2	94	0.03
82 T	4-Chlorotoluene	2.626	2.364	10.0	98	0.02
83 T	tert-Butylbenzene	2.458	2.274	7.5	98	0.02
84 T	1,2,4-Trimethylbenzene	2.700	2.495	7.6	102	0.02
85 T	sec-Butylbenzene	3.507	3.216	8.3	102	0.02
86 T	p-Isopropyltoluene	2.623	2.402	8.4	100	0.02
87 T	1,3-Dichlorobenzene	1.654	1.477	10.7	95	0.02
88 T	1,4-Dichlorobenzene	1.606	1.443	10.1	97	0.03
89 T	n-Butylbenzene	2.830	2.612	7.7	97	0.03

500

Data Path : \\Terastorage\voasrv\HPCHEM1\Msvoa\_G\Data\VG100710\  
 Data File : VG030803.D  
 Acq On : 7 Oct 2010 15:03  
 Operator : PS  
 Sample : 50 PPB ICV  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 15:28:20 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 07 14:45:00 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	Hexachloroethane	0.616	0.609	1.1	103	0.02
91 T	1,2-Dichlorobenzene	1.570	1.476	6.0	100	0.02
92 T	1,2,4,5-Tetramethylbenzene	0.000	0.000	0.0	0#	-15.20#
93 T	1,2-Dibromo-3-Chloropropane	0.225	0.231	-2.7	98	0.02
94 T	1,2,4-Trichlorobenzene	0.937	0.833	11.1	96	0.02
95 T	Hexachlorobutadiene	0.293	0.255	13.0	99	0.02
96 T	Naphthalene	3.129	2.626	16.1	95	0.01
97 T	1,2,3-Trichlorobenzene	0.871	0.771	11.5	100	0.03
98 T	p-ethyltoluene	0.000	0.000	0.0	0#	-11.87#
99 T	p-diethylbenzene	0.000	0.000	0.0	0#	-13.92#

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG101910\  
 Data File : VG031004.D  
 Acq On : 19 Oct 2010 11:07  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 19 11:40:12 2010  
 Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 15:48:32 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	167#	0.00
2 T	Dichlorodifluoromethane	0.512	0.688	-34.4#	238#	0.00
3 P	Chloromethane	0.784	0.866	-10.5	208#	0.00
4 C	Vinyl Chloride	0.570	0.635	-11.4#	210#	0.00
5 T	Bromomethane	0.446	0.494	-10.8	241#	0.00
6 T	Chloroethane	0.294	0.341	-16.0	222#	0.00
7 T	Trichlorofluoromethane	0.583	0.686	-17.7	209#	0.00
8 T	Diethyl Ether	0.347	0.382	-10.1	207#	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.454	0.483	-6.4	201#	0.00
10 T	Methyl Iodide	0.811	0.915	-12.8	219#	0.00
11 T	Tert butyl alcohol	0.088	0.070	20.5#	148	0.00
12 CM	1,1-Dichloroethene	0.474	0.521	-9.9#	210#	0.00
13 T	Acrolein	0.033	0.030	9.1	202#	0.00
14 T	Allyl chloride	0.813	0.873	-7.4	204#	0.00
15 T	Acrylonitrile	0.287	0.284	1.0	170#	0.00
16 T	Acetone	0.255	0.214	16.1	164#	0.00
17 T	Carbon Disulfide	1.199	1.341	-11.8	223#	0.00
18 T	Methyl Acetate	1.409	1.090	22.6#	164#	0.00
19 T	Methyl tert-butyl Ether	1.915	1.977	-3.2	195#	0.00
20 T	Methylene Chloride	0.512	0.538	-5.1	210#	0.00
21 T	trans-1,2-Dichloroethene	0.548	0.564	-2.9	199#	0.00
22 T	Acetonitrile	0.000	0.000	0.0	0#	-2.11#
23 T	Diisopropyl ether	2.550	2.518	1.3	183#	0.00
24 T	Vinyl Acetate	1.154	1.157	-0.3	175#	0.00
25 P	1,1-Dichloroethane	1.241	1.334	-7.5	193#	0.00
26 T	2-Butanone	0.614	0.541	11.9	168#	0.00
27 T	2,2-Dichloropropane	0.533	0.583	-9.4	196#	0.00
28 T	cis-1,2-Dichloroethene	0.861	0.910	-5.7	190#	0.00
29 T	Bromochloromethane	0.640	0.608	5.0	164#	0.00
30 C	Chloroform	1.261	1.346	-6.7#	194#	0.00
31 T	Cyclohexane	0.906	0.941	-3.9	196#	0.00
32 T	1,1,1-Trichloroethane	0.767	0.809	-5.5	192#	0.00
33 S	1,2-Dichloroethane-d4	0.700	0.657	6.1	167#	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	166#	0.00
35 S	Dibromofluoromethane	0.395	0.387	2.0	163#	0.00
36 T	1,1-Dichloropropene	0.573	0.623	-8.7	195#	0.00
37 T	Ethyl Acetate	0.690	0.655	5.1	176#	0.00
38 T	Carbon Tetrachloride	0.483	0.506	-4.8	194#	0.00
39 T	Methylcyclohexane	0.517	0.537	-3.9	187#	0.00
40 TM	Benzene	1.475	1.565	-6.1	189#	0.00
41 T	Methacrylonitrile	0.339	0.340	-0.3	185#	0.00
42 TM	1,2-Dichloroethane	0.516	0.568	-10.1	194#	0.00
43 T	Isopropyl Acetate	0.945	0.913	3.4	177#	0.00
44 T	Isobutyl alcohol	0.000	0.000	0.0	0#	-4.27#
45 TM	Trichloroethene	0.368	0.418	-13.6	206#	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG101910\  
 Data File : VG031004.D  
 Acq On : 19 Oct 2010 11:07  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 19 11:40:12 2010  
 Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 15:48:32 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 C	1,2-Dichloropropane	0.364	0.399	-9.6#	191#	0.00
47 T	Dibromomethane	0.287	0.319	-11.1	187#	0.01
48 T	Bromodichloromethane	0.523	0.580	-10.9	187#	0.00
49 T	Methyl methacrylate	0.394	0.416	-5.6	182#	0.00
50 S	Toluene-d8	1.084	1.021	5.8	164#	0.00
51 T	4-Methyl-2-Pentanone	0.593	0.554	6.6	173#	0.00
52 CM	Toluene	0.830	0.872	-5.1#	190#	0.00
53 T	t-1,3-Dichloropropene	0.504	0.572	-13.5	191#	0.00
54 T	cis-1,3-Dichloropropene	0.610	0.672	-10.2	190#	0.00
55 T	1,1,2-Trichloroethane	0.328	0.340	-3.7	180#	0.00
56 T	Ethyl methacrylate	0.541	0.559	-3.3	180#	0.00
57 T	1,3-Dichloropropane	0.615	0.657	-6.8	189#	0.00
58 T	2-Chloroethyl Vinyl ether	0.167	0.171	-2.4	244#	0.00
59 T	2-Hexanone	0.443	0.402	9.3	180#	0.00
60 T	Dibromochloromethane	0.338	0.376	-11.2	178#	0.00
61 T	1,2-Dibromoethane	0.363	0.391	-7.7	186#	0.00
62 S	4-Bromofluorobenzene	0.482	0.442	8.3	162#	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	165#	0.00
64 T	Tetrachloroethene	0.395	0.412	-4.3	199#	0.00
65 PM	Chlorobenzene	0.982	1.067	-8.7	188#	0.00
66 T	1,1,1,2-Tetrachloroethane	0.357	0.401	-12.3	190#	0.00
67 C	Ethyl Benzene	1.835	1.904	-3.8#	183#	0.00
68 T	m/p-Xylenes	0.669	0.700	-4.6	187#	0.00
69 T	o-Xylene	0.704	0.747	-6.1	187#	0.00
70 T	Styrene	1.105	1.192	-7.9	186#	0.00
71 P	Bromoform	0.273	0.318	-16.5	183#	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	165#	0.00
73 T	Isopropylbenzene	3.405	3.521	-3.4	186#	0.00
74 T	N-amyl acetate	2.096	1.965	6.3	168#	0.00
75 P	1,1,2,2-Tetrachloroethane	1.243	1.130	9.1	160#	0.00
76 T	1,2,3-Trichloropropane	1.006	0.990	1.6	175#	0.00
77 T	Bromobenzene	0.864	0.907	-5.0	186#	0.00
78 T	n-propylbenzene	4.100	4.004	2.3	179#	0.00
79 T	2-Chlorotoluene	2.595	2.619	-0.9	182#	0.00
80 T	1,3,5-Trimethylbenzene	2.544	2.541	0.1	180#	0.00
81 T	trans-1,4-Dichloro-2-butene	0.347	0.409	-17.9	179#	0.00
82 T	4-Chlorotoluene	2.626	2.603	0.9	178#	0.00
83 T	tert-Butylbenzene	2.458	2.475	-0.7	177#	0.00
84 T	1,2,4-Trimethylbenzene	2.700	2.666	1.3	181#	0.00
85 T	sec-Butylbenzene	3.507	3.356	4.3	176#	0.00
86 T	p-Isopropyltoluene	2.623	2.565	2.2	177#	0.00
87 T	1,3-Dichlorobenzene	1.654	1.639	0.9	176#	0.00
88 T	1,4-Dichlorobenzene	1.606	1.623	-1.1	182#	0.00
89 T	n-Butylbenzene	2.830	2.664	5.9	165#	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG101910\  
 Data File : VG031004.D  
 Acq On : 19 Oct 2010 11:07  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 19 11:40:12 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 15:48:32 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	Hexachloroethane	0.616	0.653	-6.0	183#	0.00
91 T	1,2-Dichlorobenzene	1.570	1.601	-2.0	180#	0.00
92 T	1,2,4,5-Tetramethylbenzene	0.000	0.000	0.0	0#	-15.20#
93 T	1,2-Dibromo-3-Chloropropane	0.225	0.243	-8.0	172#	0.00
94 T	1,2,4-Trichlorobenzene	0.937	0.898	4.2	172#	0.00
95 T	Hexachlorobutadiene	0.293	0.259	11.6	166#	0.00
96 T	Naphthalene	3.129	2.841	9.2	171#	0.00
97 T	1,2,3-Trichlorobenzene	0.871	0.840	3.6	181#	0.00
98 T	p-ethyltoluene	0.000	0.000	0.0	0#	-11.87#
99 T	p-diethylbenzene	0.000	0.000	0.0	0#	-13.92#

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG101910\  
 Data File : VG031004.D  
 Acq On : 19 Oct 2010 11:07  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 19 11:40:12 2010  
 Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 15:48:32 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	167	0.00
2 T	Dichlorodifluoromethane	50.000	67.195	-34.4#	238	0.00
3 P	Chloromethane	50.000	55.234	-10.5	208	0.00
4 C	Vinyl Chloride	50.000	55.719	-11.4#	210	0.00
5 T	Bromomethane	50.000	71.611	-43.2#	241	0.00
6 T	Chloroethane	50.000	57.946	-15.9	222	0.00
7 T	Trichlorofluoromethane	50.000	58.834	-17.7	209	0.00
8 T	Diethyl Ether	50.000	54.966	-9.9	207	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	53.182	-6.4	201	0.00
10 T	Methyl Iodide	50.000	56.411	-12.8	219	0.00
11 T	Tert butyl alcohol	250.000	238.049	4.8	148	0.00
12 CM	1,1-Dichloroethene	50.000	54.897	-9.8#	210	0.00
13 T	Acrolein	250.000	267.970	-7.2	202	0.00
14 T	Allyl chloride	50.000	53.684	-7.4	204	0.00
15 T	Acrylonitrile	250.000	247.084	1.2	170	0.00
16 T	Acetone	250.000	252.952	-1.2	164	0.00
17 T	Carbon Disulfide	50.000	55.915	-11.8	223	0.00
18 T	Methyl Acetate	50.000	43.773	12.5	164	0.00
19 T	Methyl tert-butyl Ether	50.000	51.619	-3.2	195	0.00
20 T	Methylene Chloride	50.000	52.607	-5.2	210	0.00
21 T	trans-1,2-Dichloroethene	50.000	51.511	-3.0	199	0.00
22 T	Acetonitrile	50.000	0.000	100.0#	0	-2.11#
23 T	Diisopropyl ether	50.000	49.377	1.2	183	0.00
24 T	Vinyl Acetate	250.000	250.580	-0.2	175	0.00
25 P	1,1-Dichloroethane	50.000	53.752	-7.5	193	0.00
26 T	2-Butanone	250.000	220.448	11.8	168	0.00
27 T	2,2-Dichloropropane	50.000	54.691	-9.4	196	0.00
28 T	cis-1,2-Dichloroethene	50.000	52.795	-5.6	190	0.00
29 T	Bromochloromethane	50.000	47.540	4.9	164	0.00
30 C	Chloroform	50.000	53.389	-6.8#	194	0.00
31 T	Cyclohexane	50.000	51.920	-3.8	196	0.00
32 T	1,1,1-Trichloroethane	50.000	52.700	-5.4	192	0.00
33 S	1,2-Dichloroethane-d4	50.000	46.885	6.2	167	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	166	0.00
35 S	Dibromofluoromethane	50.000	48.979	2.0	163	0.00
36 T	1,1-Dichloropropene	50.000	54.352	-8.7	195	0.00
37 T	Ethyl Acetate	50.000	47.469	5.1	176	0.00
38 T	Carbon Tetrachloride	50.000	52.327	-4.7	194	0.00
39 T	Methylcyclohexane	50.000	51.992	-4.0	187	0.00
40 TM	Benzene	50.000	53.052	-6.1	189	0.00
41 T	Methacrylonitrile	50.000	50.131	-0.3	185	0.00
42 TM	1,2-Dichloroethane	50.000	55.100	-10.2	194	0.00
43 T	Isopropyl Acetate	50.000	48.319	3.4	177	0.00
44 T	Isobutyl alcohol	50.000	0.000	100.0#	0	-4.27#
45 TM	Trichloroethene	50.000	56.824	-13.6	206	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG101910\  
 Data File : VG031004.D  
 Acq On : 19 Oct 2010 11:07  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 19 11:40:12 2010  
 Quant Method : \TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 15:48:32 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
46 C	1,2-Dichloropropane	50.000	54.806	-9.6#	191	0.00
47 T	Dibromomethane	50.000	55.550	-11.1	187	0.01
48 T	Bromodichloromethane	50.000	55.413	-10.8	187	0.00
49 T	Methyl methacrylate	50.000	52.746	-5.5	182	0.00
50 S	Toluene-d8	50.000	47.109	5.8	164	0.00
51 T	4-Methyl-2-Pentanone	250.000	233.412	6.6	173	0.00
52 CM	Toluene	50.000	52.526	-5.1#	190	0.00
53 T	t-1,3-Dichloropropene	50.000	56.689	-13.4	191	0.00
54 T	cis-1,3-Dichloropropene	50.000	55.110	-10.2	190	0.00
55 T	1,1,2-Trichloroethane	50.000	51.816	-3.6	180	0.00
56 T	Ethyl methacrylate	50.000	51.697	-3.4	180	0.00
57 T	1,3-Dichloropropane	50.000	53.462	-6.9	189	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	385.467	-54.2#	244	0.00
59 T	2-Hexanone	250.000	284.712	-13.9	180	0.00
60 T	Dibromochloromethane	50.000	55.546	-11.1	178	0.00
61 T	1,2-Dibromoethane	50.000	53.829	-7.7	186	0.00
62 S	4-Bromofluorobenzene	50.000	45.840	8.3	162	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	165	0.00
64 T	Tetrachloroethene	50.000	52.144	-4.3	199	0.00
65 PM	Chlorobenzene	50.000	54.351	-8.7	188	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	56.169	-12.3	190	0.00
67 C	Ethyl Benzene	50.000	51.884	-3.8#	183	0.00
68 T	m/p-Xylenes	100.000	104.644	-4.6	187	0.00
69 T	o-Xylene	50.000	53.049	-6.1	187	0.00
70 T	Styrene	50.000	53.963	-7.9	186	0.00
71 P	Bromoform	50.000	58.238	-16.5	183	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	165	0.00
73 T	Isopropylbenzene	50.000	51.709	-3.4	186	0.00
74 T	N-amyl acetate	50.000	46.863	6.3	168	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	45.449	9.1	160	0.00
76 T	1,2,3-Trichloropropane	50.000	49.169	1.7	175	0.00
77 T	Bromobenzene	50.000	52.508	-5.0	186	0.00
78 T	n-propylbenzene	50.000	48.829	2.3	179	0.00
79 T	2-Chlorotoluene	50.000	50.444	-0.9	182	0.00
80 T	1,3,5-Trimethylbenzene	50.000	49.951	0.1	180	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	59.000	-18.0	179	0.00
82 T	4-Chlorotoluene	50.000	49.552	0.9	178	0.00
83 T	tert-Butylbenzene	50.000	50.339	-0.7	177	0.00
84 T	1,2,4-Trimethylbenzene	50.000	49.374	1.3	181	0.00
85 T	sec-Butylbenzene	50.000	47.845	4.3	176	0.00
86 T	p-Isopropyltoluene	50.000	48.896	2.2	177	0.00
87 T	1,3-Dichlorobenzene	50.000	49.539	0.9	176	0.00
88 T	1,4-Dichlorobenzene	50.000	50.516	-1.0	182	0.00
89 T	n-Butylbenzene	50.000	47.083	5.8	165	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG101910\  
 Data File : VG031004.D  
 Acq On : 19 Oct 2010 11:07  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 19 11:40:12 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 15:48:32 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
90 T	Hexachloroethane	50.000	52.954	-5.9	183	0.00
91 T	1,2-Dichlorobenzene	50.000	51.004	-2.0	180	0.00
92 T	1,2,4,5-Tetramethylbenzene	50.000	0.000	100.0#	0	-15.20#
93 T	1,2-Dibromo-3-Chloropropane	50.000	54.098	-8.2	172	0.00
94 T	1,2,4-Trichlorobenzene	50.000	47.900	4.2	172	0.00
95 T	Hexachlorobutadiene	50.000	44.182	11.6	166	0.00
96 T	Naphthalene	50.000	54.613	-9.2	171	0.00
97 T	1,2,3-Trichlorobenzene	50.000	56.331	-12.7	181	0.00
98 T	p-ethyltoluene	50.000	0.000	100.0#	0	-11.87#
99 T	p-diethylbenzene	50.000	0.000	100.0#	0	-13.92#

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031030.D  
 Acq On : 20 Oct 2010 10:28  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 10:55:27 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	156#	0.00
2 T	Dichlorodifluoromethane	0.512	0.725	-41.6#	234#	0.00
3 P	Chloromethane	0.784	0.811	-3.4	182#	0.00
4 C	Vinyl Chloride	0.570	0.605	-6.1#	187#	0.00
5 T	Bromomethane	0.446	0.441	1.1	201#	0.00
6 T	Chloroethane	0.294	0.315	-7.1	191#	0.00
7 T	Trichlorofluoromethane	0.583	0.732	-25.6#	208#	0.00
8 T	Diethyl Ether	0.347	0.351	-1.2	177#	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.454	0.497	-9.5	193#	0.00
10 T	Methyl Iodide	0.811	0.895	-10.4	200#	0.00
11 T	Tert butyl alcohol	0.088	0.065	26.1#	127	0.00
12 CM	1,1-Dichloroethene	0.474	0.514	-8.4#	194#	0.00
13 T	Acrolein	0.033	0.013	60.6#	81	0.00
14 T	Allyl chloride	0.813	0.829	-2.0	181#	0.00
15 T	Acrylonitrile	0.287	0.240	16.4	134	0.00
16 T	Acetone	0.255	0.212	16.9	151#	0.00
17 T	Carbon Disulfide	1.199	1.361	-13.5	211#	0.00
18 T	Methyl Acetate	1.409	1.263	10.4	177#	0.00
19 T	Methyl tert-butyl Ether	1.915	1.900	0.8	175#	0.00
20 T	Methylene Chloride	0.512	0.517	-1.0	188#	0.00
21 T	trans-1,2-Dichloroethene	0.548	0.591	-7.8	194#	0.00
22 T	Acetonitrile	0.000	0.000	0.0	0#	-2.11#
23 T	Diisopropyl ether	2.550	2.368	7.1	160#	0.00
24 T	Vinyl Acetate	1.154	1.006	12.8	142	0.00
25 P	1,1-Dichloroethane	1.241	1.262	-1.7	170#	0.00
26 T	2-Butanone	0.614	0.527	14.2	152#	0.00
27 T	2,2-Dichloropropane	0.533	0.607	-13.9	190#	0.00
28 T	cis-1,2-Dichloroethene	0.861	0.835	3.0	163#	0.00
29 T	Bromochloromethane	0.640	0.555	13.3	139	0.00
30 C	Chloroform	1.261	1.273	-1.0#	171#	0.00
31 T	Cyclohexane	0.906	0.896	1.1	174#	0.00
32 T	1,1,1-Trichloroethane	0.767	0.823	-7.3	182#	0.00
33 S	1,2-Dichloroethane-d4	0.700	0.578	17.4	137	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	153#	0.00
35 S	Dibromofluoromethane	0.395	0.321	18.7	124	0.00
36 T	1,1-Dichloropropene	0.573	0.618	-7.9	178#	0.00
37 T	Ethyl Acetate	0.690	0.580	15.9	144	0.00
38 T	Carbon Tetrachloride	0.483	0.539	-11.6	191#	0.00
39 T	Methylcyclohexane	0.517	0.546	-5.6	175#	0.00
40 TM	Benzene	1.475	1.456	1.3	162#	0.00
41 T	Methacrylonitrile	0.339	0.305	10.0	153#	0.00
42 TM	1,2-Dichloroethane	0.516	0.575	-11.4	181#	0.00
43 T	Isopropyl Acetate	0.945	0.846	10.5	151#	0.00
44 T	Isobutyl alcohol	0.000	0.000	0.0	0#	-4.27#
45 TM	Trichloroethene	0.368	0.393	-6.8	179#	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031030.D  
 Acq On : 20 Oct 2010 10:28  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 10:55:27 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 C	1,2-Dichloropropane	0.364	0.365	-0.3#	161#	0.00
47 T	Dibromomethane	0.287	0.302	-5.2	163#	0.00
48 T	Bromodichloromethane	0.523	0.559	-6.9	166#	0.00
49 T	Methyl methacrylate	0.394	0.376	4.6	151#	0.00
50 S	Toluene-d8	1.084	0.880	18.8	130	0.00
51 T	4-Methyl-2-Pentanone	0.593	0.515	13.2	148	0.01
52 CM	Toluene	0.830	0.808	2.7#	162#	0.00
53 T	t-1,3-Dichloropropene	0.504	0.536	-6.3	165#	0.00
54 T	cis-1,3-Dichloropropene	0.610	0.619	-1.5	161#	0.00
55 T	1,1,2-Trichloroethane	0.328	0.304	7.3	148	0.00
56 T	Ethyl methacrylate	0.541	0.506	6.5	150#	0.00
57 T	1,3-Dichloropropane	0.615	0.602	2.1	160#	0.00
58 T	2-Chloroethyl Vinyl ether	0.167	0.145	13.2	192#	0.00
59 T	2-Hexanone	0.443	0.363	18.1	150#	0.00
60 T	Dibromochloromethane	0.338	0.352	-4.1	154#	0.01
61 T	1,2-Dibromoethane	0.363	0.358	1.4	157#	0.00
62 S	4-Bromofluorobenzene	0.482	0.388	19.5	131	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	153#	0.00
64 T	Tetrachloroethene	0.395	0.380	3.8	170#	0.00
65 PM	Chlorobenzene	0.982	0.984	-0.2	160#	0.00
66 T	1,1,1,2-Tetrachloroethane	0.357	0.385	-7.8	169#	0.01
67 C	Ethyl Benzene	1.835	1.804	1.7#	161#	0.00
68 T	m/p-Xylenes	0.669	0.658	1.6	162#	0.00
69 T	o-Xylene	0.704	0.692	1.7	160#	0.00
70 T	Styrene	1.105	1.070	3.2	155#	0.00
71 P	Bromoform	0.273	0.307	-12.5	163#	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	151#	0.00
73 T	Isopropylbenzene	3.405	3.388	0.5	165#	0.01
74 T	N-amyl acetate	2.096	1.847	11.9	145	0.00
75 P	1,1,2,2-Tetrachloroethane	1.243	1.030	17.1	134	0.00
76 T	1,2,3-Trichloropropane	1.006	0.953	5.3	155#	0.00
77 T	Bromobenzene	0.864	0.852	1.4	160#	0.00
78 T	n-propylbenzene	4.100	3.913	4.6	160#	0.00
79 T	2-Chlorotoluene	2.595	2.551	1.7	162#	0.00
80 T	1,3,5-Trimethylbenzene	2.544	2.410	5.3	157#	0.00
81 T	trans-1,4-Dichloro-2-butene	0.347	0.375	-8.1	150#	0.00
82 T	4-Chlorotoluene	2.626	2.557	2.6	161#	0.00
83 T	tert-Butylbenzene	2.458	2.579	-4.9	170#	0.00
84 T	1,2,4-Trimethylbenzene	2.700	2.603	3.6	162#	0.00
85 T	sec-Butylbenzene	3.507	3.295	6.0	159#	0.00
86 T	p-Isopropyltoluene	2.623	2.550	2.8	162#	0.00
87 T	1,3-Dichlorobenzene	1.654	1.565	5.4	154#	0.01
88 T	1,4-Dichlorobenzene	1.606	1.592	0.9	164#	0.00
89 T	n-Butylbenzene	2.830	2.681	5.3	152#	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031030.D  
 Acq On : 20 Oct 2010 10:28  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 10:55:27 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 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 : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	Hexachloroethane	0.616	0.680	-10.4	174#	0.00
91 T	1,2-Dichlorobenzene	1.570	1.551	1.2	160#	0.00
92 T	1,2,4,5-Tetramethylbenzene	0.000	0.000	0.0	0#	-15.20#
93 T	1,2-Dibromo-3-Chloropropane	0.225	0.249	-10.7	161#	0.01
94 T	1,2,4-Trichlorobenzene	0.937	0.966	-3.1	169#	0.00
95 T	Hexachlorobutadiene	0.293	0.278	5.1	164#	0.00
96 T	Naphthalene	3.129	2.966	5.2	164#	0.01
97 T	1,2,3-Trichlorobenzene	0.871	0.848	2.6	168#	0.00
98 T	p-ethyltoluene	0.000	0.000	0.0	0#	-11.87#
99 T	p-diethylbenzene	0.000	0.000	0.0	0#	-13.92#

(#= Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031030.D  
 Acq On : 20 Oct 2010 10:28  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 10:55:27 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	156	0.00
2 T	Dichlorodifluoromethane	50.000	70.781	-41.6#	234	0.00
3 P	Chloromethane	50.000	51.710	-3.4	182	0.00
4 C	Vinyl Chloride	50.000	53.054	-6.1#	187	0.00
5 T	Bromomethane	50.000	63.686	-27.4#	201	0.00
6 T	Chloroethane	50.000	53.526	-7.1	191	0.00
7 T	Trichlorofluoromethane	50.000	62.811	-25.6#	208	0.00
8 T	Diethyl Ether	50.000	50.534	-1.1	177	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	54.777	-9.6	193	0.00
10 T	Methyl Iodide	50.000	55.197	-10.4	200	0.00
11 T	Tert butyl alcohol	250.000	218.476	12.6	127	0.00
12 CM	1,1-Dichloroethene	50.000	54.143	-8.3#	194	0.00
13 T	Acrolein	250.000	121.728	51.3#	81	0.00
14 T	Allyl chloride	50.000	50.974	-1.9	181	0.00
15 T	Acrylonitrile	250.000	209.227	16.3	134	0.00
16 T	Acetone	250.000	249.480	0.2	151	0.00
17 T	Carbon Disulfide	50.000	56.725	-13.5	211	0.00
18 T	Methyl Acetate	50.000	50.804	-1.6	177	0.00
19 T	Methyl tert-butyl Ether	50.000	49.600	0.8	175	0.00
20 T	Methylene Chloride	50.000	50.582	-1.2	188	0.00
21 T	trans-1,2-Dichloroethene	50.000	53.903	-7.8	194	0.00
22 T	Acetonitrile	50.000	0.000	100.0#	0	-2.11#
23 T	Diisopropyl ether	50.000	46.440	7.1	160	0.00
24 T	Vinyl Acetate	250.000	218.021	12.8	142	0.00
25 P	1,1-Dichloroethane	50.000	50.843	-1.7	170	0.00
26 T	2-Butanone	250.000	214.530	14.2	152	0.00
27 T	2,2-Dichloropropane	50.000	56.907	-13.8	190	0.00
28 T	cis-1,2-Dichloroethene	50.000	48.460	3.1	163	0.00
29 T	Bromochloromethane	50.000	43.424	13.2	139	0.00
30 C	Chloroform	50.000	50.463	-0.9#	171	0.00
31 T	Cyclohexane	50.000	49.437	1.1	174	0.00
32 T	1,1,1-Trichloroethane	50.000	53.651	-7.3	182	0.00
33 S	1,2-Dichloroethane-d4	50.000	41.252	17.5	137	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	153	0.00
35 S	Dibromofluoromethane	50.000	40.553	18.9	124	0.00
36 T	1,1-Dichloropropene	50.000	53.960	-7.9	178	0.00
37 T	Ethyl Acetate	50.000	42.067	15.9	144	0.00
38 T	Carbon Tetrachloride	50.000	55.708	-11.4	191	0.00
39 T	Methylcyclohexane	50.000	52.866	-5.7	175	0.00
40 TM	Benzene	50.000	49.363	1.3	162	0.00
41 T	Methacrylonitrile	50.000	44.983	10.0	153	0.00
42 TM	1,2-Dichloroethane	50.000	55.799	-11.6	181	0.00
43 T	Isopropyl Acetate	50.000	44.789	10.4	151	0.00
44 T	Isobutyl alcohol	50.000	0.000	100.0#	0	-4.27#
45 TM	Trichloroethene	50.000	53.364	-6.7	179	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031030.D  
 Acq On : 20 Oct 2010 10:28  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 10:55:27 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
46 C	1,2-Dichloropropane	50.000	50.179	-0.4#	161	0.00
47 T	Dibromomethane	50.000	52.651	-5.3	163	0.00
48 T	Bromodichloromethane	50.000	53.399	-6.8	166	0.00
49 T	Methyl methacrylate	50.000	47.700	4.6	151	0.00
50 S	Toluene-d8	50.000	40.579	18.8	130	0.00
51 T	4-Methyl-2-Pentanone	250.000	216.938	13.2	148	0.01
52 CM	Toluene	50.000	48.635	2.7#	162	0.00
53 T	t-1,3-Dichloropropene	50.000	53.159	-6.3	165	0.00
54 T	cis-1,3-Dichloropropene	50.000	50.752	-1.5	161	0.00
55 T	1,1,2-Trichloroethane	50.000	46.272	7.5	148	0.00
56 T	Ethyl methacrylate	50.000	46.767	6.5	150	0.00
57 T	1,3-Dichloropropane	50.000	48.974	2.1	160	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	323.882	-29.6#	192	0.00
59 T	2-Hexanone	250.000	255.697	-2.3	150	0.00
60 T	Dibromochloromethane	50.000	52.080	-4.2	154	0.01
61 T	1,2-Dibromoethane	50.000	49.303	1.4	157	0.00
62 S	4-Bromofluorobenzene	50.000	40.257	19.5	131	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	153	0.00
64 T	Tetrachloroethene	50.000	48.175	3.7	170	0.00
65 PM	Chlorobenzene	50.000	50.099	-0.2	160	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	53.942	-7.9	169	0.01
67 C	Ethyl Benzene	50.000	49.149	1.7#	161	0.00
68 T	m/p-Xylenes	100.000	98.326	1.7	162	0.00
69 T	o-Xylene	50.000	49.131	1.7	160	0.00
70 T	Styrene	50.000	48.410	3.2	155	0.00
71 P	Bromoform	50.000	56.113	-12.2	163	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	151	0.00
73 T	Isopropylbenzene	50.000	49.742	0.5	165	0.01
74 T	N-amyl acetate	50.000	44.061	11.9	145	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	41.409	17.2	134	0.00
76 T	1,2,3-Trichloropropane	50.000	47.365	5.3	155	0.00
77 T	Bromobenzene	50.000	49.297	1.4	160	0.00
78 T	n-propylbenzene	50.000	47.720	4.6	160	0.00
79 T	2-Chlorotoluene	50.000	49.136	1.7	162	0.00
80 T	1,3,5-Trimethylbenzene	50.000	47.375	5.3	157	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	54.068	-8.1	150	0.00
82 T	4-Chlorotoluene	50.000	48.669	2.7	161	0.00
83 T	tert-Butylbenzene	50.000	52.468	-4.9	170	0.00
84 T	1,2,4-Trimethylbenzene	50.000	48.197	3.6	162	0.00
85 T	sec-Butylbenzene	50.000	46.975	6.0	159	0.00
86 T	p-Isopropyltoluene	50.000	48.613	2.8	162	0.00
87 T	1,3-Dichlorobenzene	50.000	47.310	5.4	154	0.01
88 T	1,4-Dichlorobenzene	50.000	49.573	0.9	164	0.00
89 T	n-Butylbenzene	50.000	47.370	5.3	152	0.00

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031030.D  
 Acq On : 20 Oct 2010 10:28  
 Operator : PS  
 Sample : 50 PPB CCC  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 10:55:27 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 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 : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
90 T	Hexachloroethane	50.000	55.151	-10.3	174	0.00
91 T	1,2-Dichlorobenzene	50.000	49.419	1.2	160	0.00
92 T	1,2,4,5-Tetramethylbenzene	50.000	0.000	100.0#	0	-15.20#
93 T	1,2-Dibromo-3-Chloropropane	50.000	55.401	-10.8	161	0.01
94 T	1,2,4-Trichlorobenzene	50.000	51.535	-3.1	169	0.00
95 T	Hexachlorobutadiene	50.000	47.506	5.0	164	0.00
96 T	Naphthalene	50.000	57.134	-14.3	164	0.01
97 T	1,2,3-Trichlorobenzene	50.000	56.902	-13.8	168	0.00
98 T	p-ethyltoluene	50.000	0.000	100.0#	0	-11.87#
99 T	p-diethylbenzene	50.000	0.000	100.0#	0	-13.92#

(#= Out of Range

SPCC's out = 0 CCC's out = 6

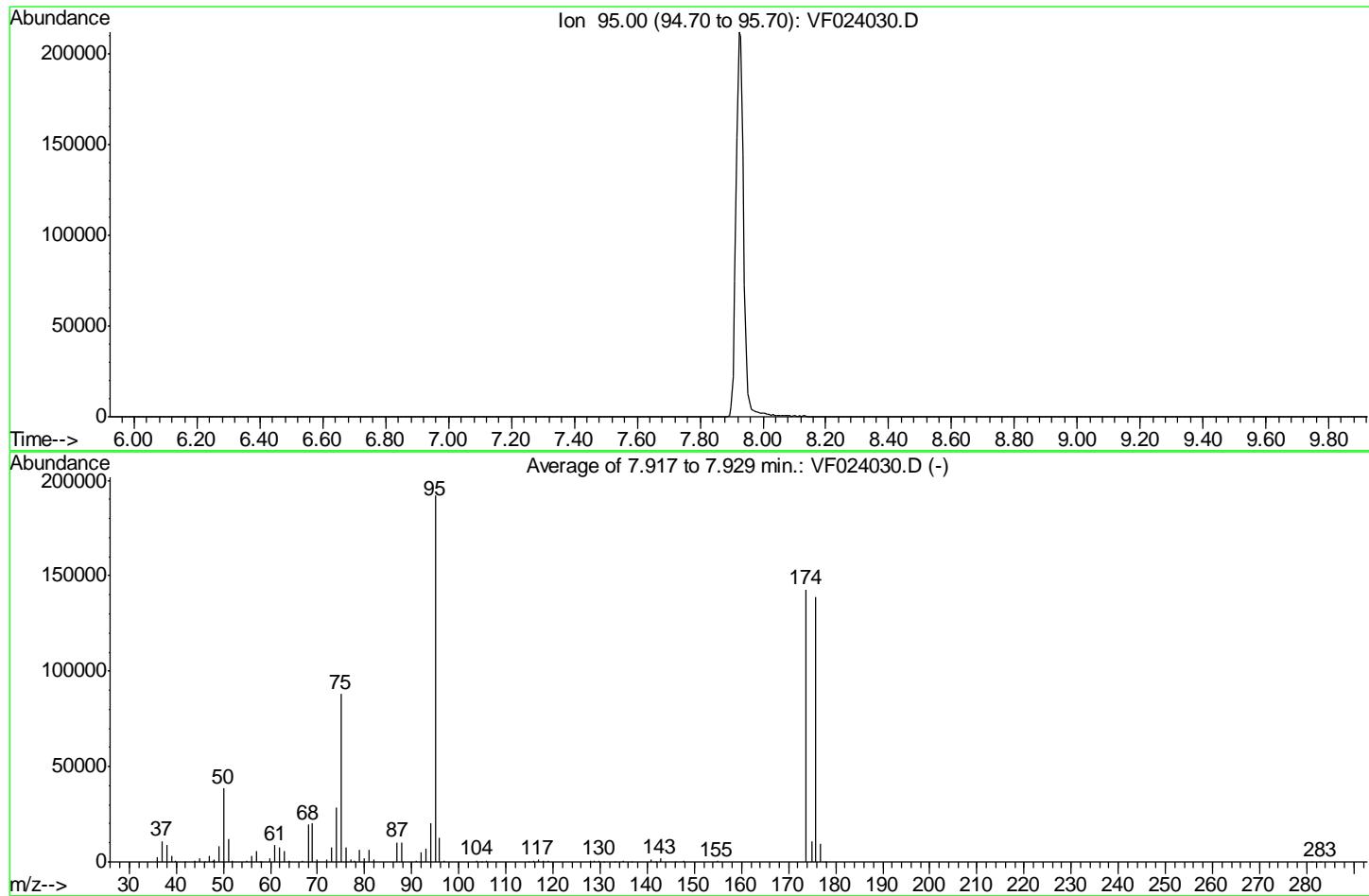
**CHEMTECH**

VOLATILES  
RAW QC  
DATA

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101210\  
 Data File : VF024030.D  
 Acq On : 12 Oct 2010 10:11  
 Operator : SY  
 Sample : BFB TUNE CHECK  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F100710W.M  
 Title : SW846 8260  
 Last Update : Mon Oct 11 11:46:57 2010



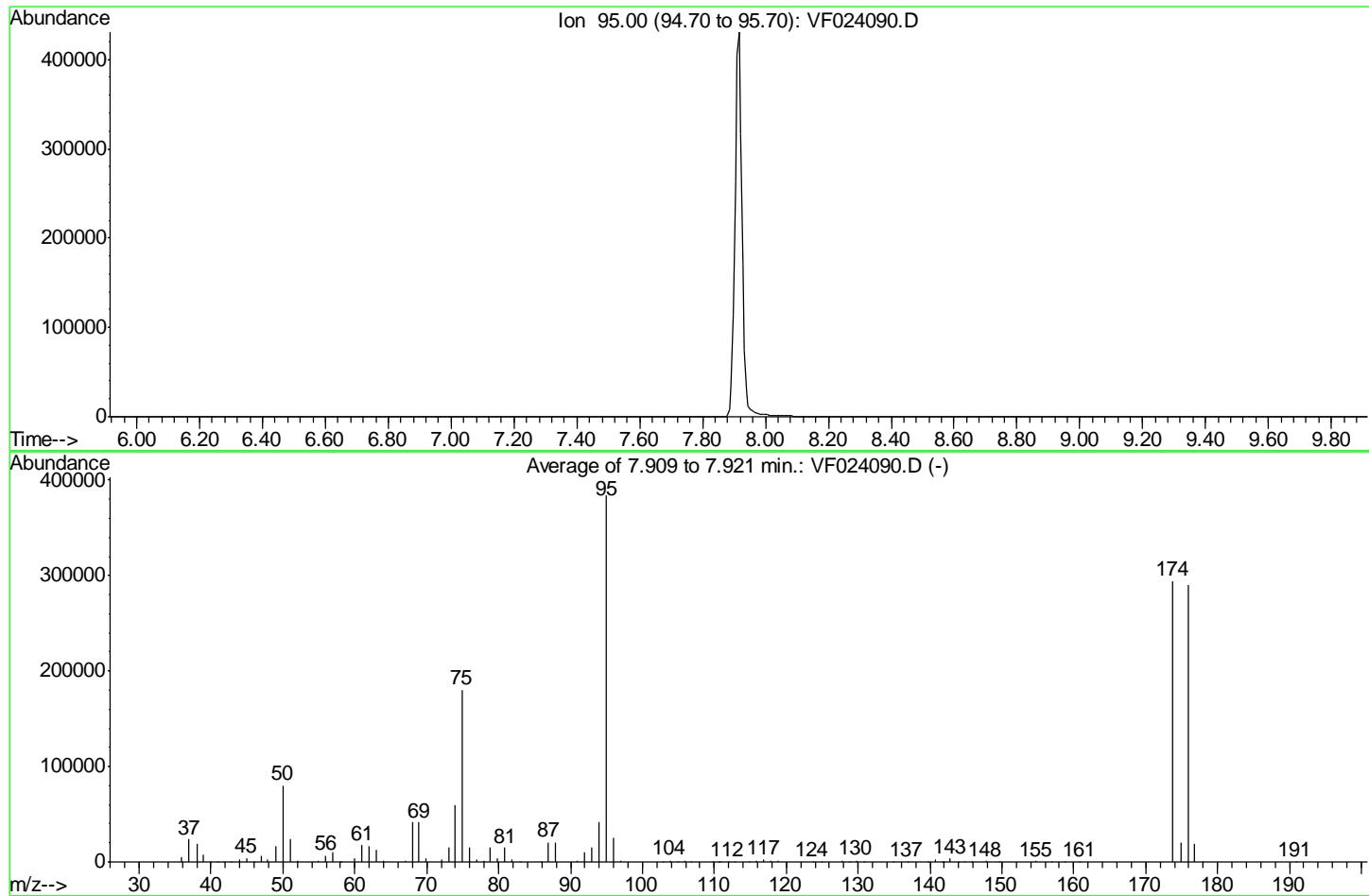
AutoFind: Scans 1229, 1230, 1231; Background Corrected with Scan 1223

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	38557	PASS
75	95	30	60	45.8	88016	PASS
95	95	100	100	100.0	192000	PASS
96	95	5	9	6.7	12784	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	74.3	142656	PASS
175	174	5	9	7.6	10877	PASS
176	174	95	101	97.4	138965	PASS
177	176	5	9	6.9	9627	PASS

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024090.D  
 Acq On : 18 Oct 2010 9:36  
 Operator : MS  
 Sample : BFB TUNE CHECK  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260  
 Last Update : Mon Oct 18 12:24:30 2010



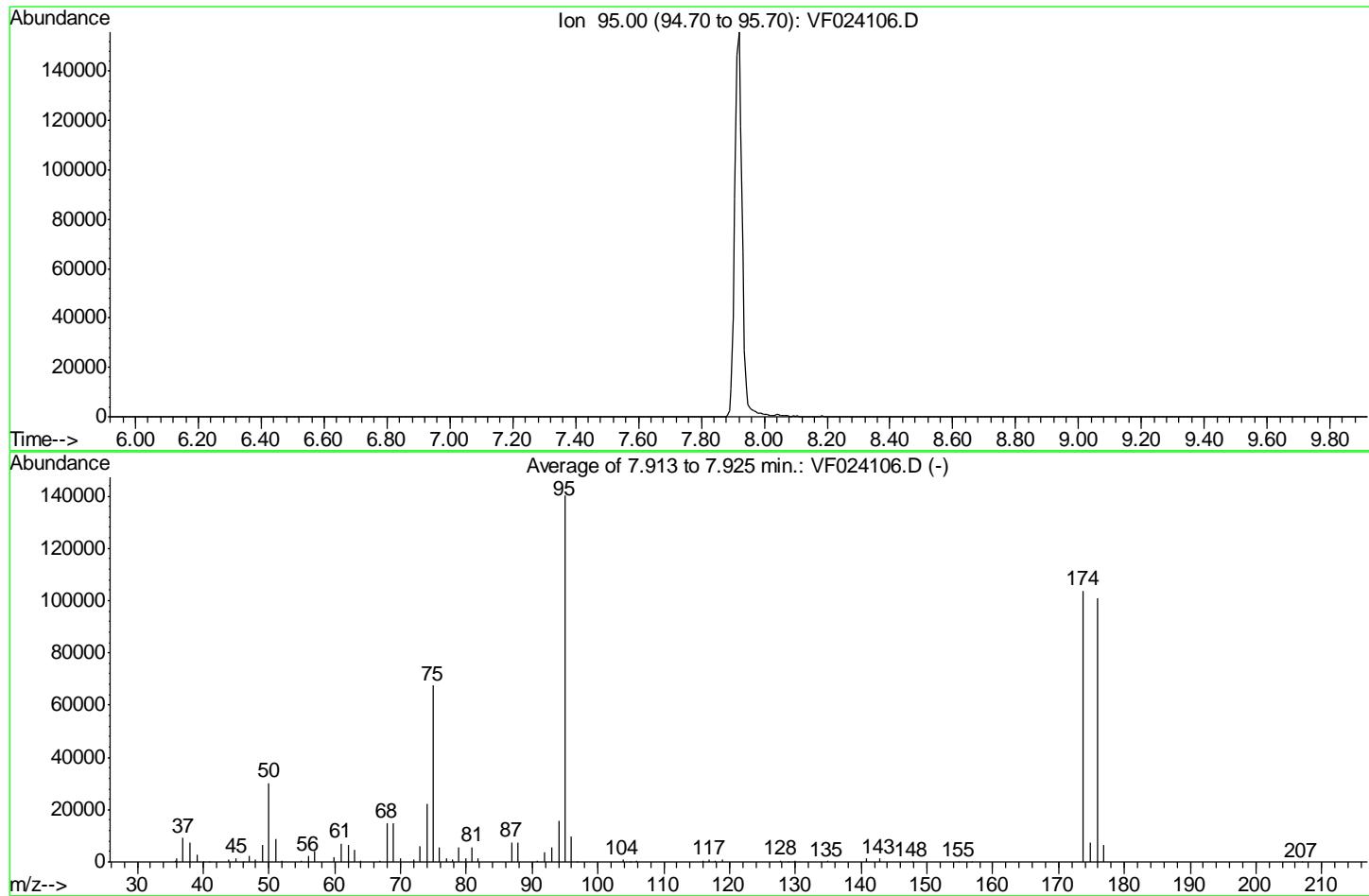
AutoFind: Scans 1227, 1228, 1229; Background Corrected with Scan 1220

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	80000	PASS
75	95	30	60	47.0	180458	PASS
95	95	100	100	100.0	383872	PASS
96	95	5	9	6.5	25066	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.8	294634	PASS
175	174	5	9	7.0	20741	PASS
176	174	95	101	98.5	290346	PASS
177	176	5	9	6.5	18940	PASS

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024106.D  
 Acq On : 19 Oct 2010 9:33  
 Operator : MS  
 Sample : BFB TUNE CHECK  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260  
 Last Update : Mon Oct 18 12:24:30 2010



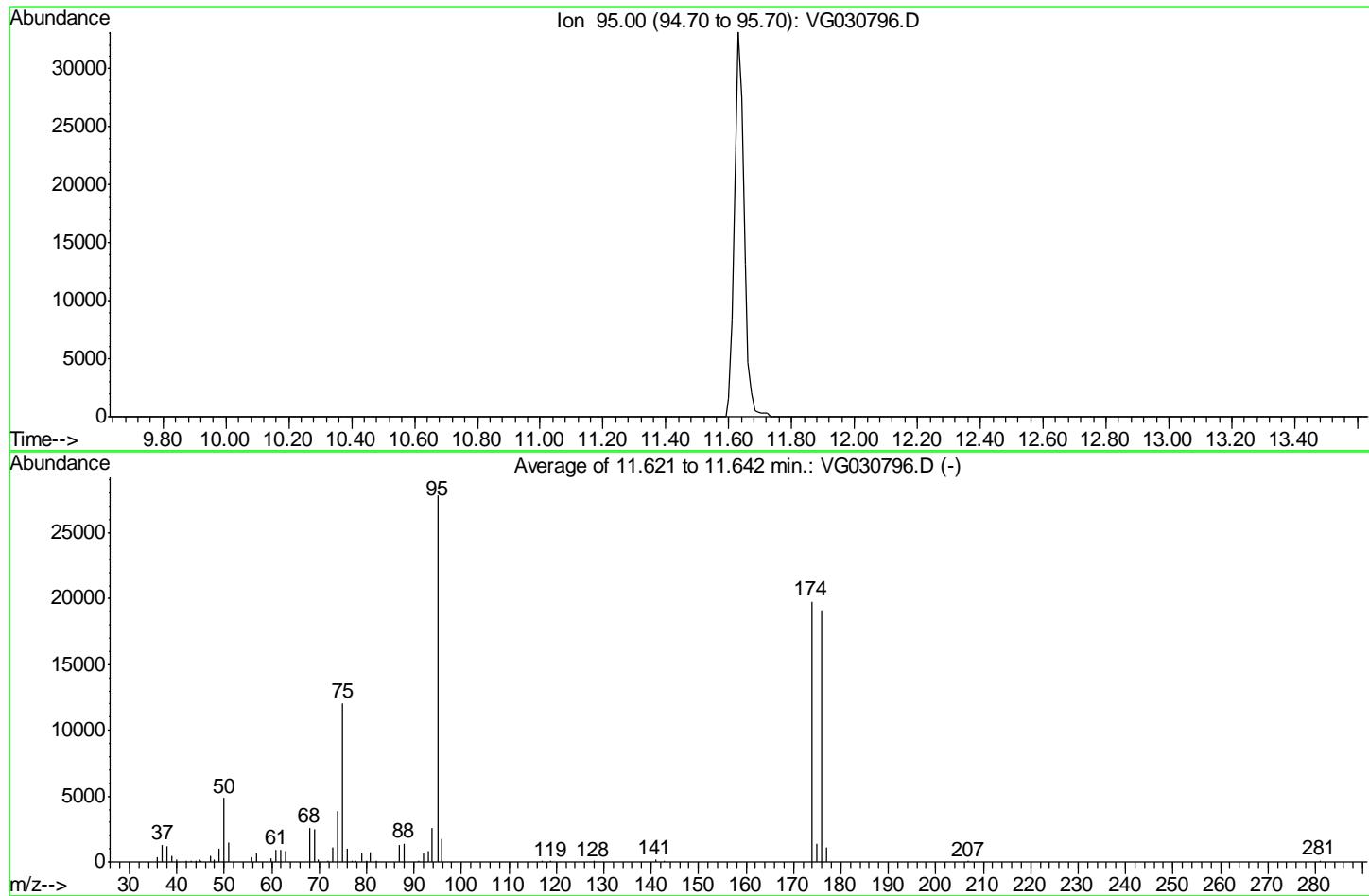
AutoFind: Scans 1228, 1229, 1230; Background Corrected with Scan 1221

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	30173	PASS
75	95	30	60	48.1	67370	PASS
95	95	100	100	100.0	140168	PASS
96	95	5	9	6.9	9684	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	74.1	103861	PASS
175	174	5	9	7.3	7603	PASS
176	174	95	101	97.1	100861	PASS
177	176	5	9	6.4	6452	PASS

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG100710\  
 Data File : VG030796.D  
 Acq On : 7 Oct 2010 11:02  
 Operator : PS  
 Sample : BFB TUNE CHECK  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260  
 Last Update : Thu Oct 07 11:31:32 2010



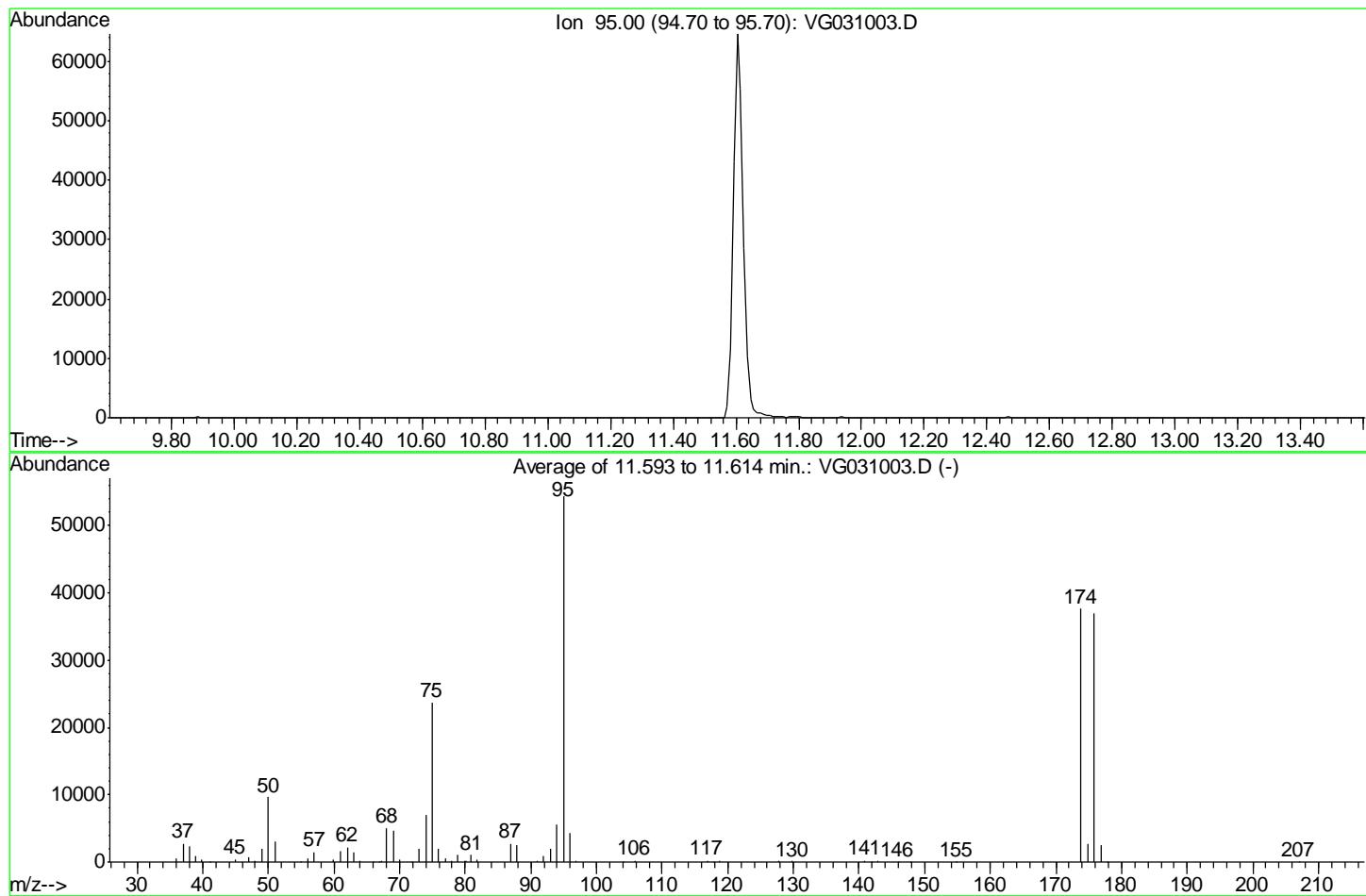
AutoFind: Scans 1099, 1100, 1101; Background Corrected with Scan 1094

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	4867	PASS
75	95	30	60	43.3	12061	PASS
95	95	100	100	100.0	27832	PASS
96	95	5	9	6.4	1781	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.0	19762	PASS
175	174	5	9	7.2	1422	PASS
176	174	95	101	96.7	19106	PASS
177	176	5	9	6.0	1147	PASS

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG101910\  
 Data File : VG031003.D  
 Acq On : 19 Oct 2010 10:35  
 Operator : PS  
 Sample : BFB TUNE CHECK  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260  
 Last Update : Mon Oct 18 15:48:32 2010



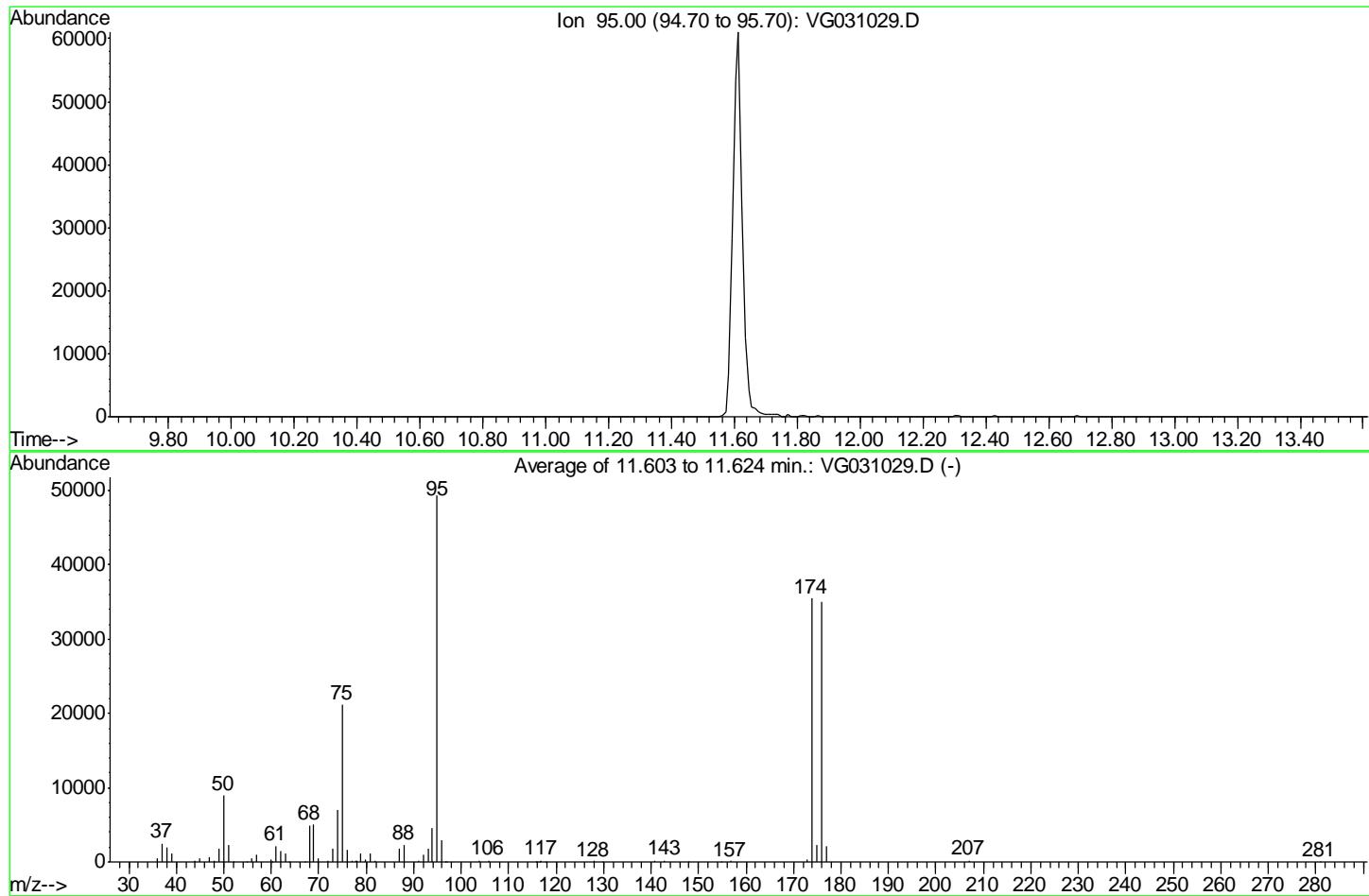
AutoFind: Scans 1098, 1099, 1100; Background Corrected with Scan 1093

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	9652	PASS
75	95	30	60	43.7	23749	PASS
95	95	100	100	100.0	54320	PASS
96	95	5	9	7.9	4288	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	69.3	37626	PASS
175	174	5	9	7.1	2670	PASS
176	174	95	101	98.3	36970	PASS
177	176	5	9	6.7	2460	PASS

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031029.D  
 Acq On : 20 Oct 2010 9:56  
 Operator : PS  
 Sample : BFB TUNE CHECK  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260  
 Last Update : Tue Oct 19 11:41:02 2010



AutoFind: Scans 1098, 1099, 1100; Background Corrected with Scan 1091

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	8922	PASS
75	95	30	60	42.8	21112	PASS
95	95	100	100	100.0	49336	PASS
96	95	5	9	5.9	2923	PASS
173	174	0.00	2	0.7	254	PASS
174	95	50	100	71.9	35474	PASS
175	174	5	9	6.3	2232	PASS
176	174	95	101	98.7	35024	PASS
177	176	5	9	6.2	2160	PASS

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBF1018W1			SDG No.:	B3902		
Lab Sample ID:	VBF1018W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024093.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBF1018W1			SDG No.:	B3902		
Lab Sample ID:	VBF1018W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024093.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.4		66 - 150		93%	SPK: 50
1868-53-7	Dibromofluoromethane	49		76 - 130		98%	SPK: 50
2037-26-5	Toluene-d8	48.4		78 - 121		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.2		70 - 131		96%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1363370	3.23				
540-36-3	1,4-Difluorobenzene	2546100	3.64				
3114-55-4	Chlorobenzene-d5	2432440	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1338560	8.96				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

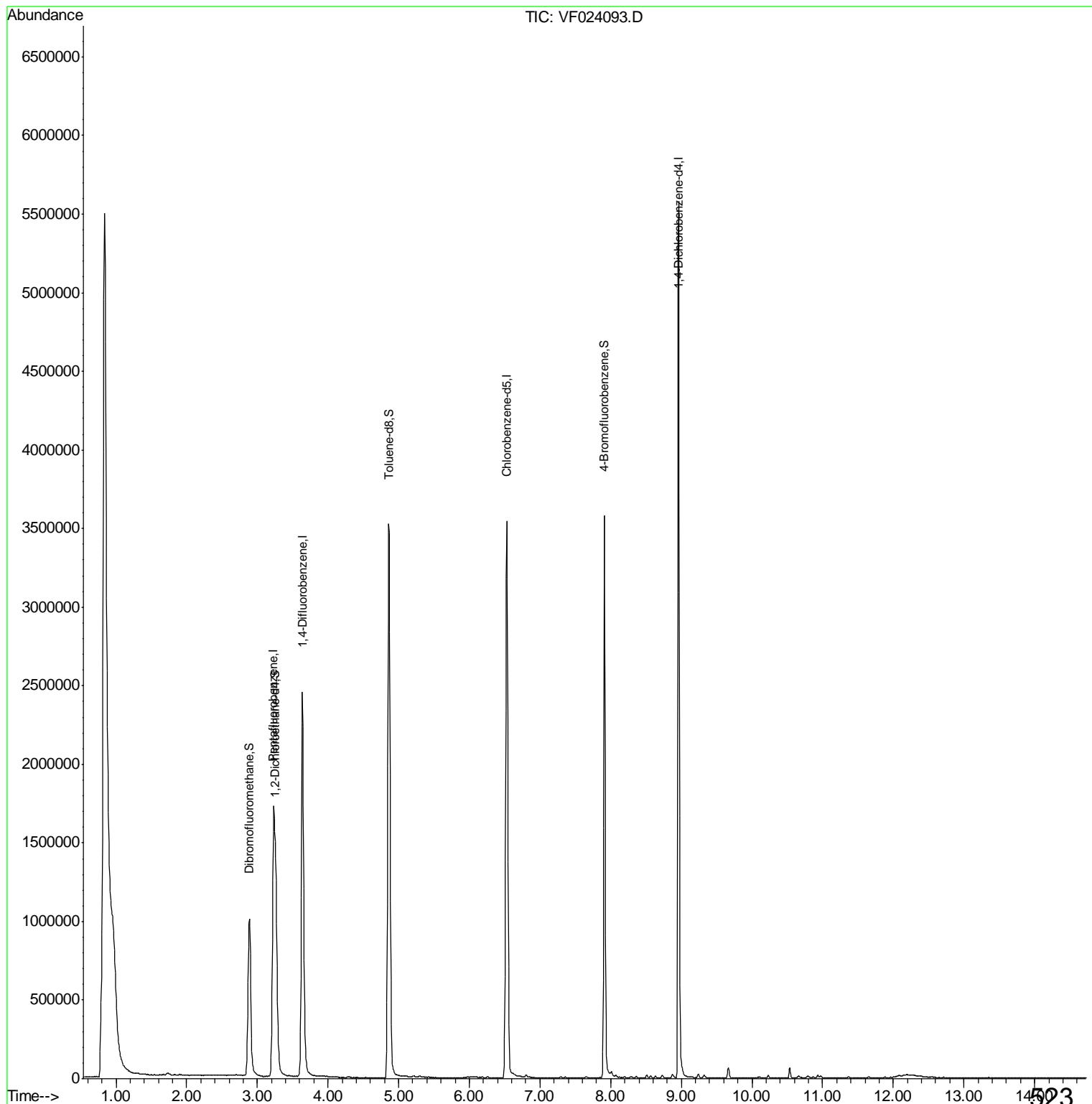
N = Presumptive Evidence of a Compound

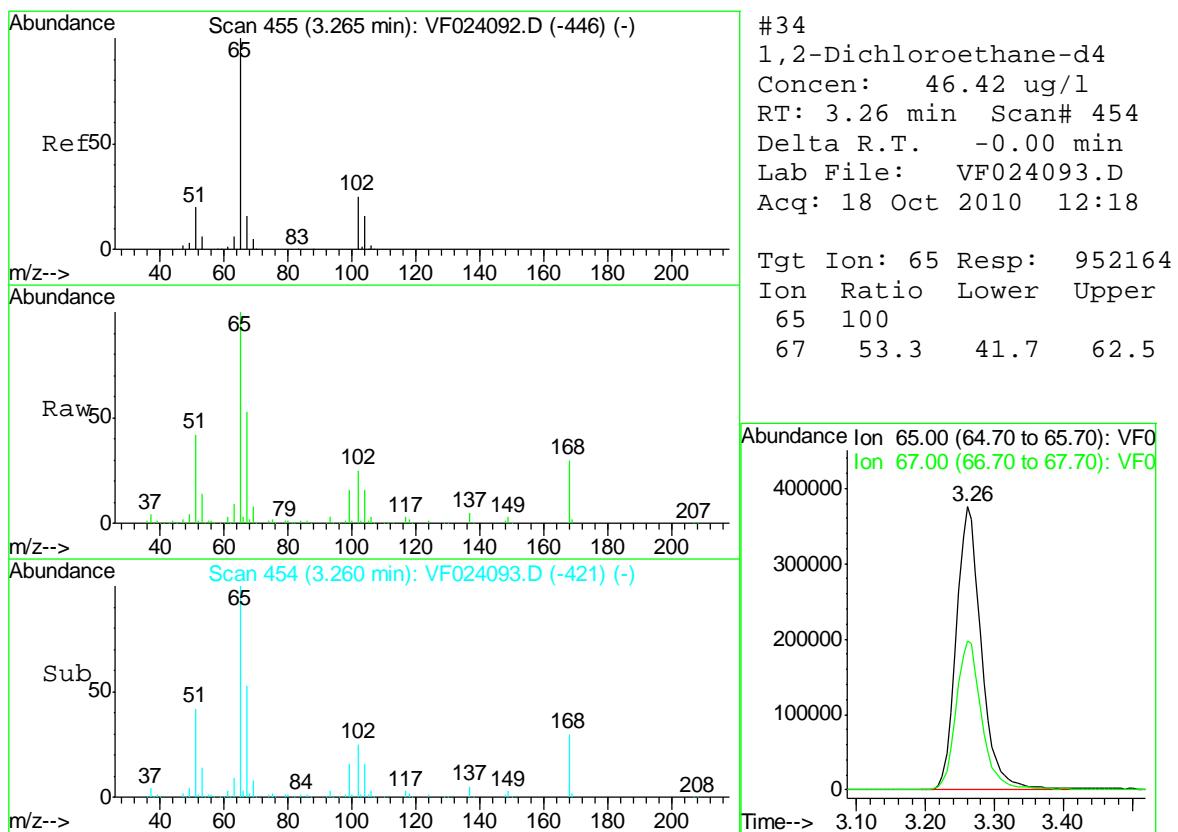
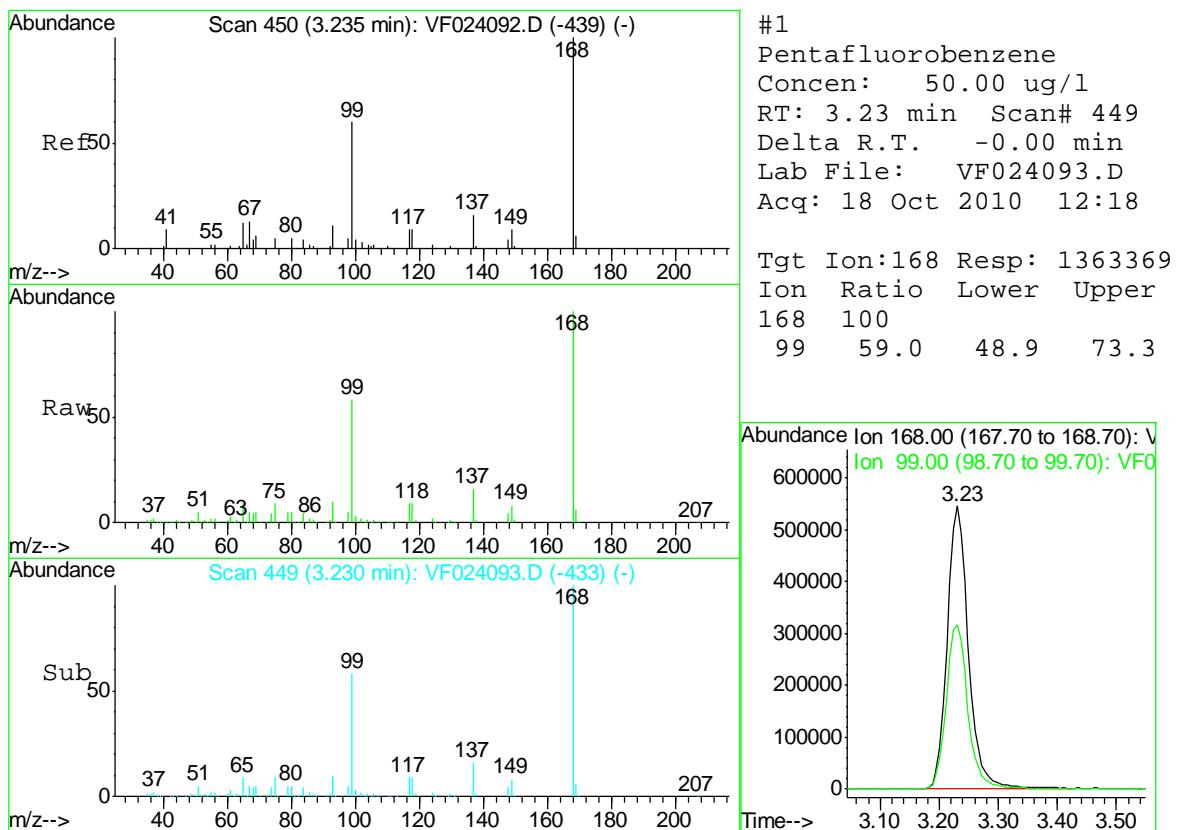
\* = Values outside of QC limits

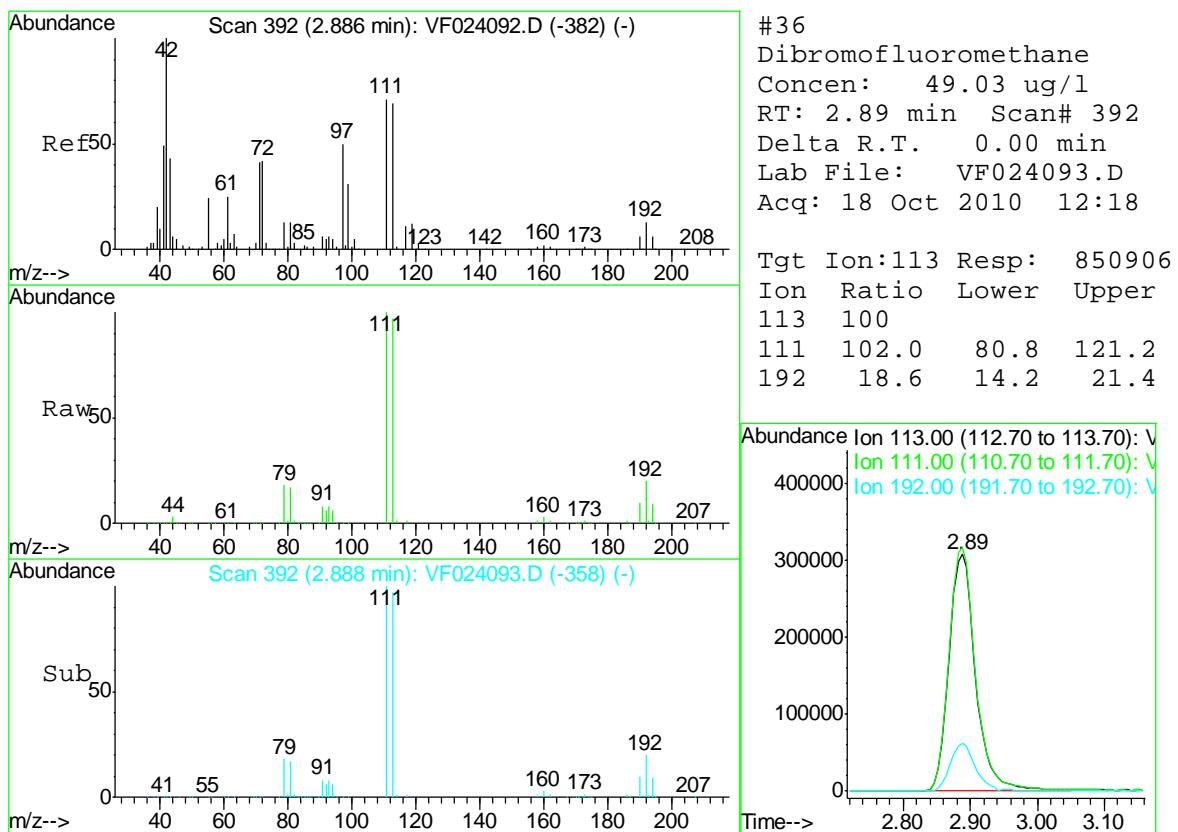
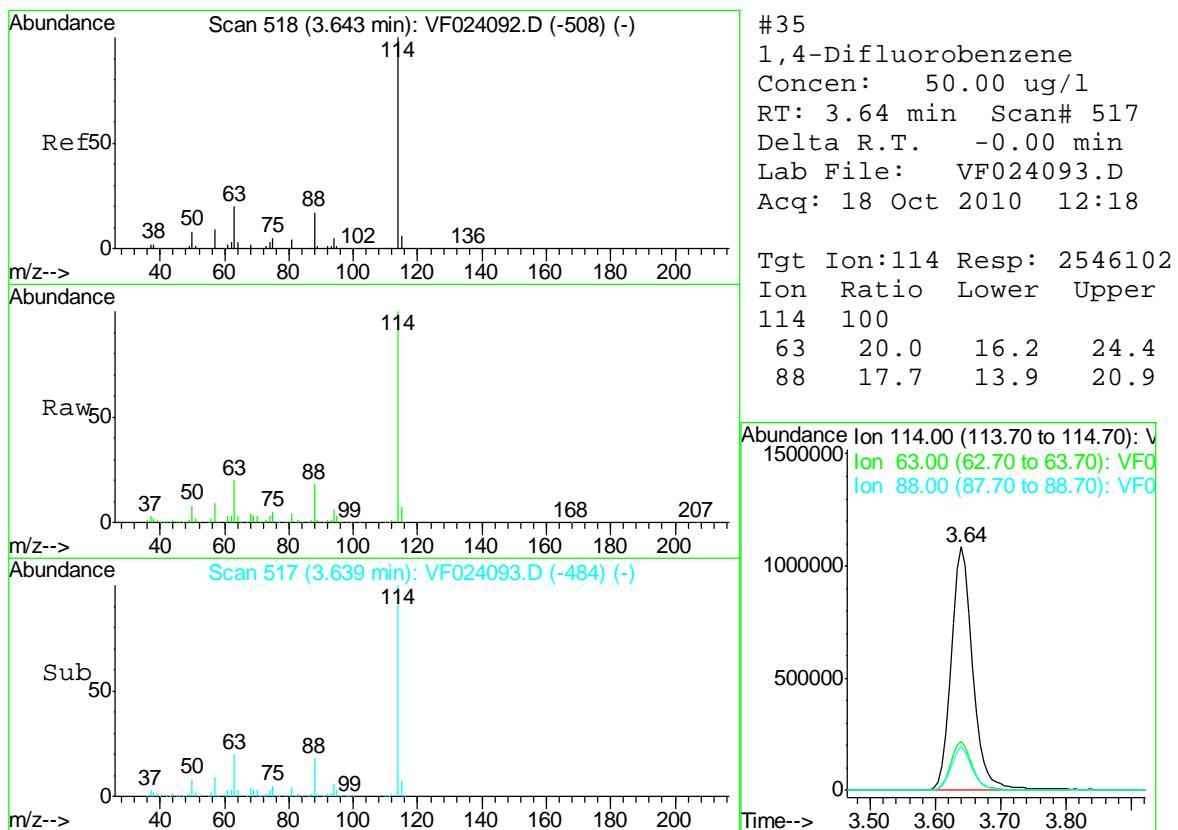
D = Dilution

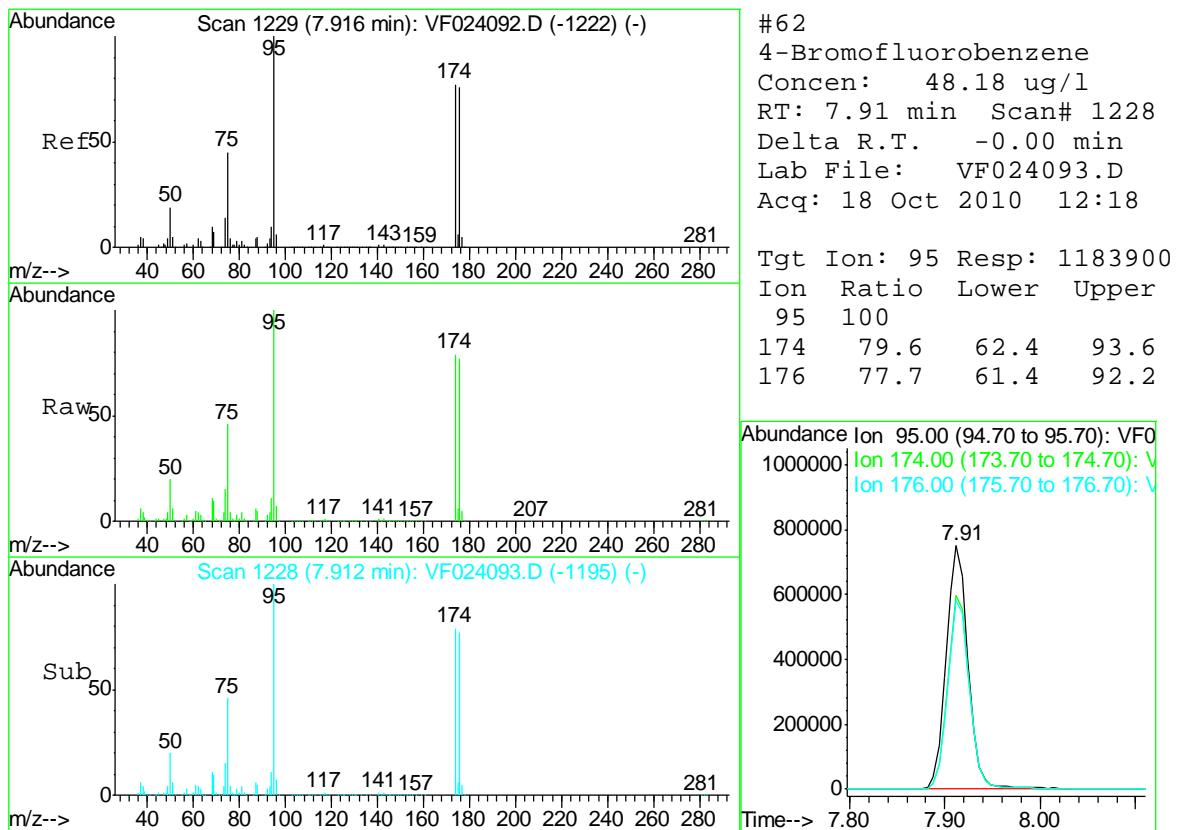
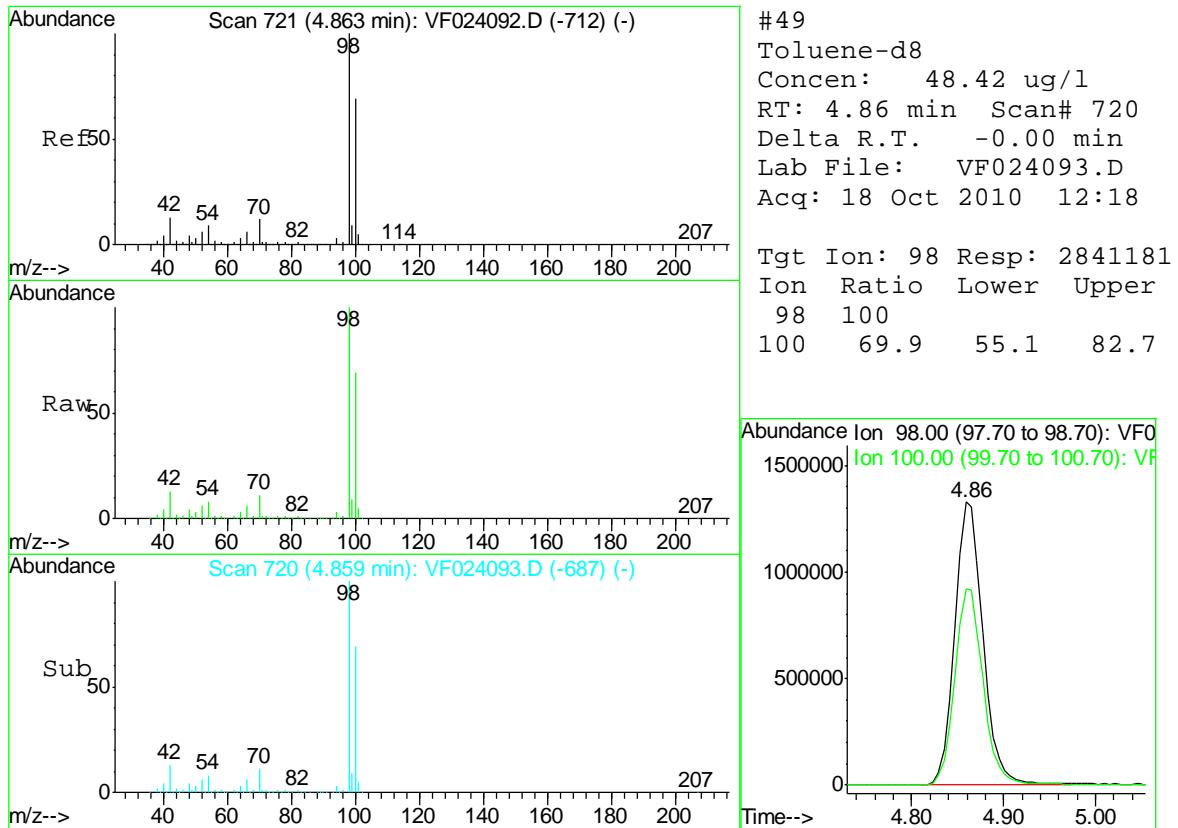
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024093.D  
Acq On : 18 Oct 2010 12:18  
Operator : MS  
Sample : VBF1018W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

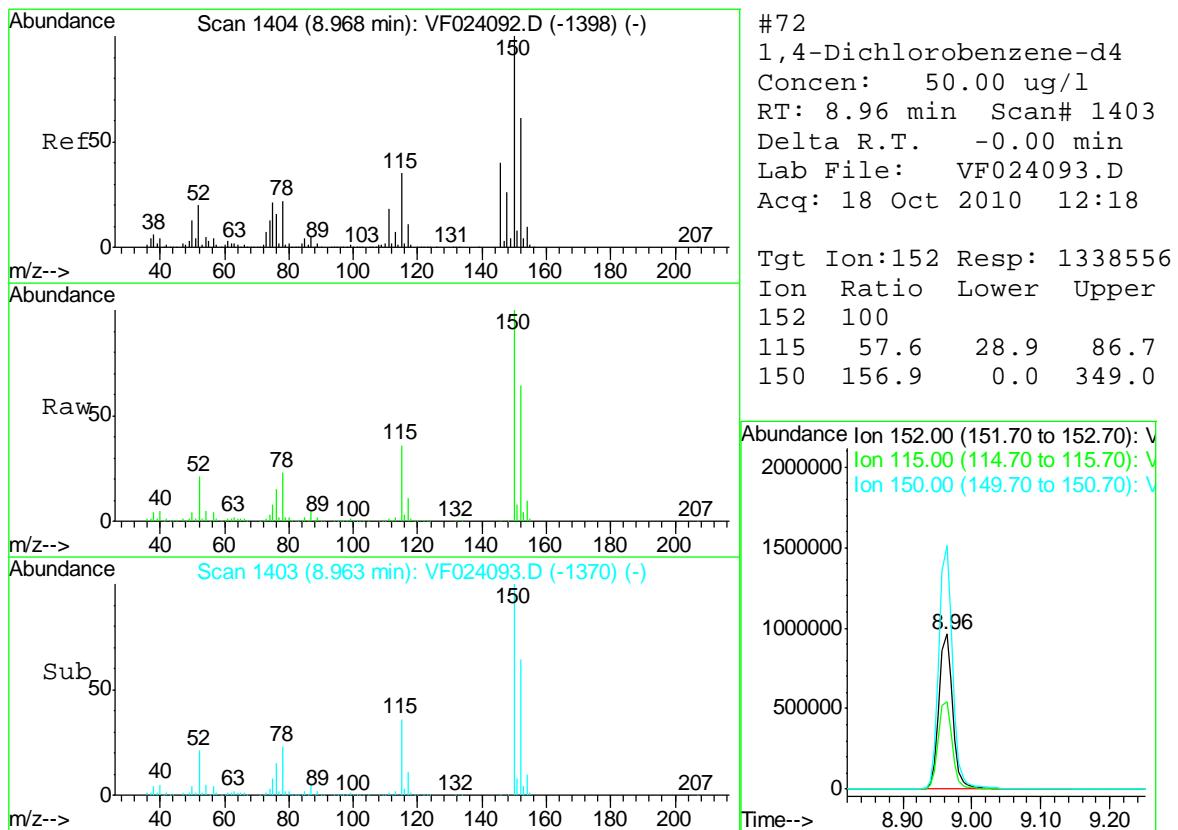
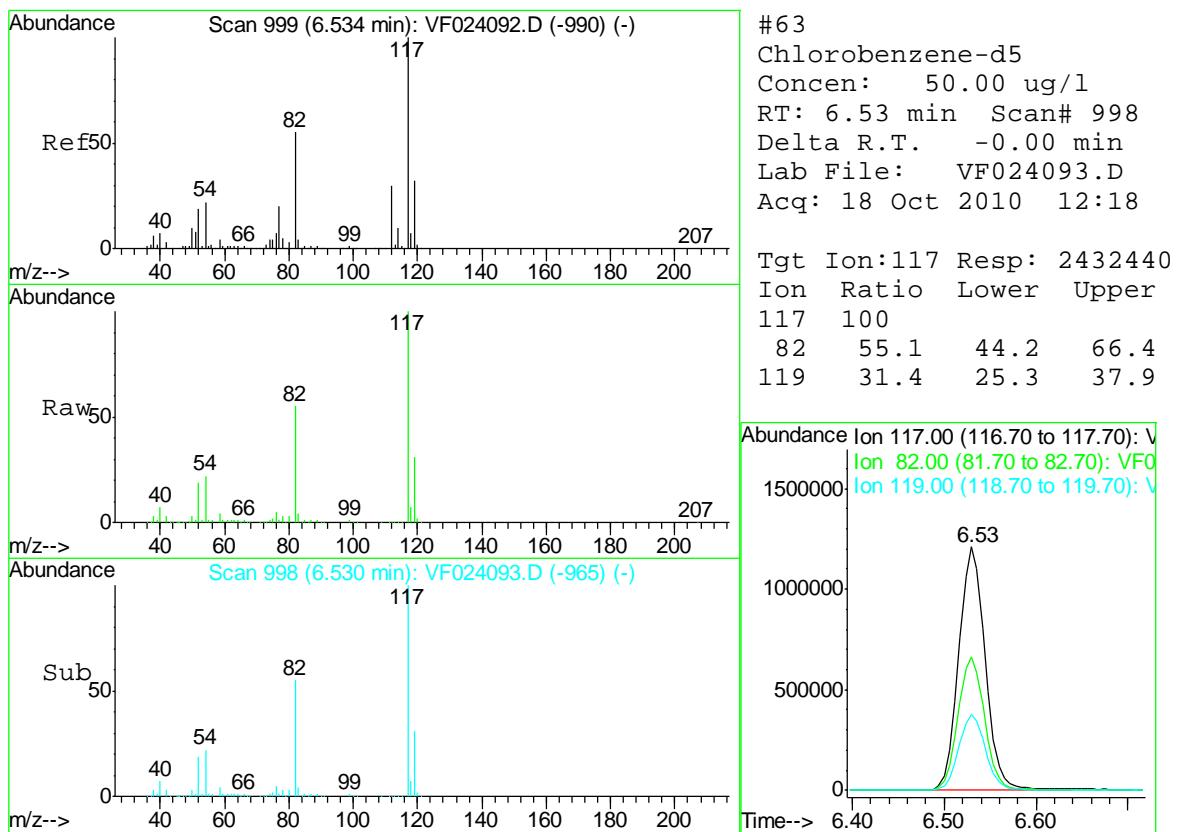
Quant Time: Oct 18 12:42:21 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024093.D  
 Acq On : 18 Oct 2010 12:18  
 Operator : MS  
 Sample : VBF1018W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 18 12:42:21 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1363369	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2546102	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.53	117	2432440	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.96	152	1338556	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.26	65	952164	46.42	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	92.84%	
36) Dibromofluoromethane	2.89	113	850906	49.03	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	98.06%	
49) Toluene-d8	4.86	98	2841181	48.42	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	96.84%	
62) 4-Bromofluorobenzene	7.91	95	1183900	48.18	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	96.36%	

Target Compounds	Qvalue
(#)	

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024093.D  
 Acq On : 18 Oct 2010 12:18  
 Operator : MS  
 Sample : VBF1018W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 4 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

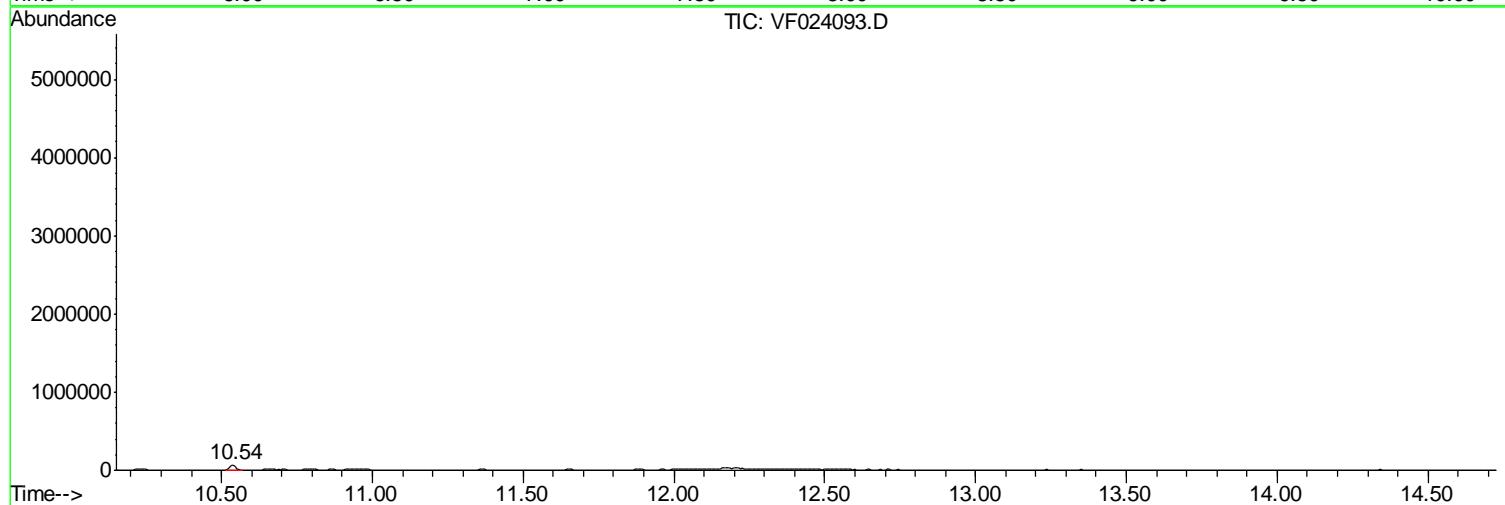
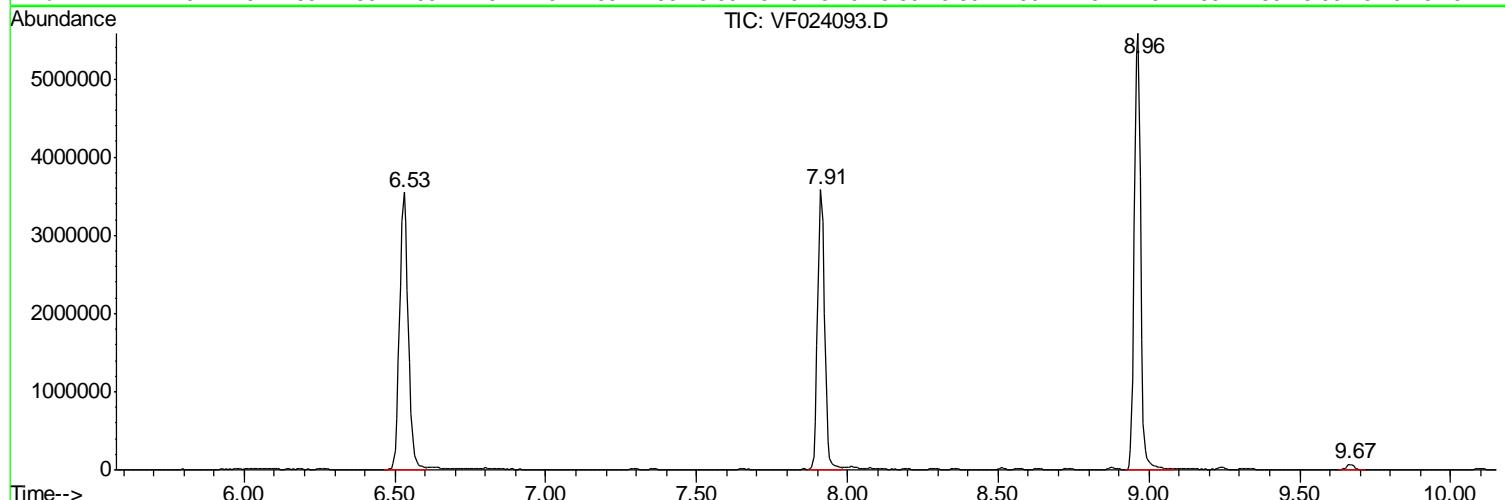
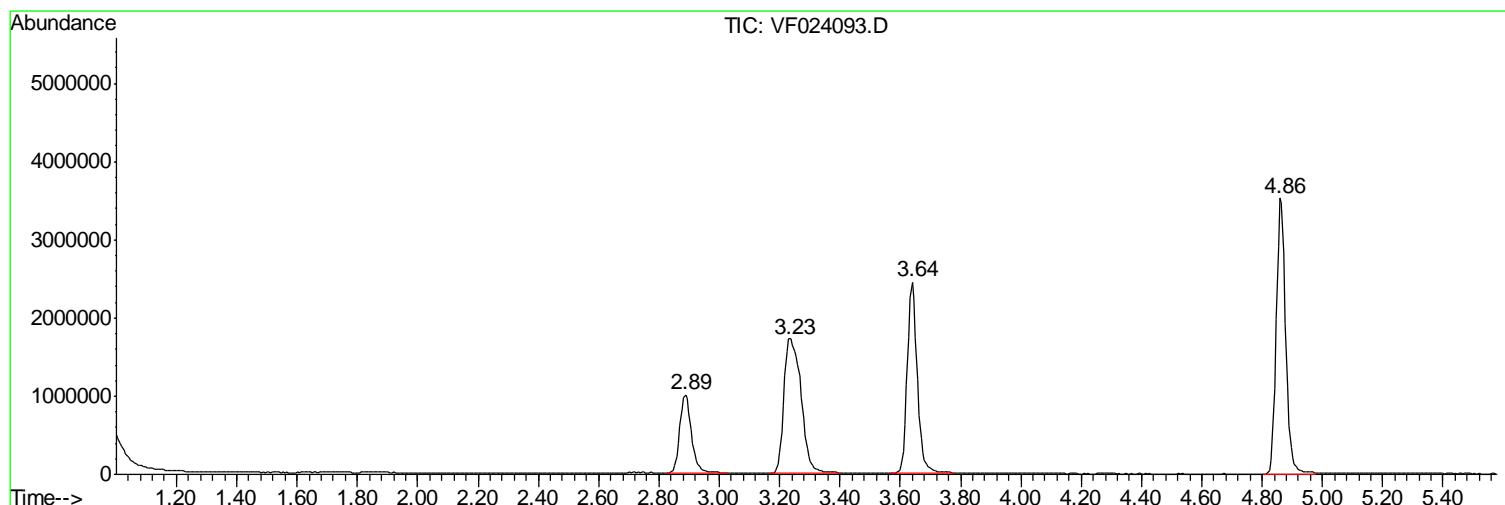
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.888	382	392	415	rVB	999436	2717430	33.87%	6.192%
2	3.230	439	449	477	rBV2	1719776	6755229	84.19%	15.392%
3	3.639	505	517	540	rBV	2446437	5758753	71.77%	13.121%
4	4.859	711	720	740	rBV	3522681	7673359	95.63%	17.484%
5	6.530	987	998	1010	rBV	3543130	7128893	88.84%	16.243%
6	7.912	1221	1228	1240	rBV	3575353	5645528	70.36%	12.863%
7	8.963	1396	1403	1423	rBV	5575291	8024191	100.00%	18.283%
8	9.667	1514	1520	1528	rBV2	65910	102874	1.28%	0.234%
9	10.538	1661	1665	1670	rVB3	64532	82197	1.02%	0.187%

Sum of corrected areas: 43888454

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024093.D  
Acq On : 18 Oct 2010 12:18  
Operator : MS  
Sample : VBF1018W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



530

Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024093.D  
Acq On : 18 Oct 2010 12:18  
Operator : MS  
Sample : VBF1018W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024093.D  
Acq On : 18 Oct 2010 12:18  
Operator : MS  
Sample : VBF1018W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

---

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBF1019W1			SDG No.:	B3902		
Lab Sample ID:	VBF1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024109.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBF1019W1			SDG No.:	B3902		
Lab Sample ID:	VBF1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024109.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	47.3		66 - 150		95%	SPK: 50
1868-53-7	Dibromofluoromethane	52.1		76 - 130		104%	SPK: 50
2037-26-5	Toluene-d8	48.8		78 - 121		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	49		70 - 131		98%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1354650	3.23				
540-36-3	1,4-Difluorobenzene	2559870	3.65				
3114-55-4	Chlorobenzene-d5	2461340	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1342460	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

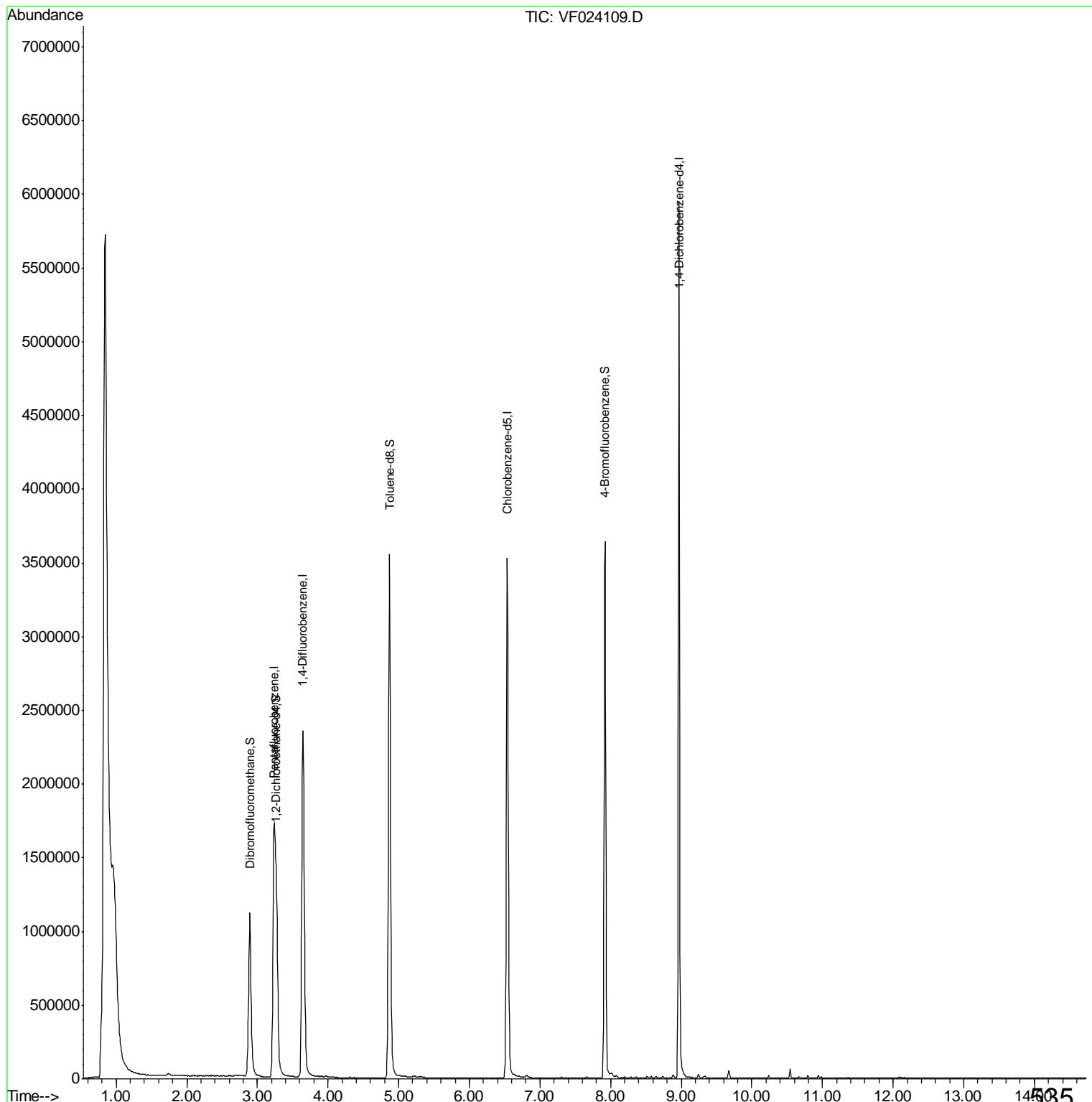
N = Presumptive Evidence of a Compound

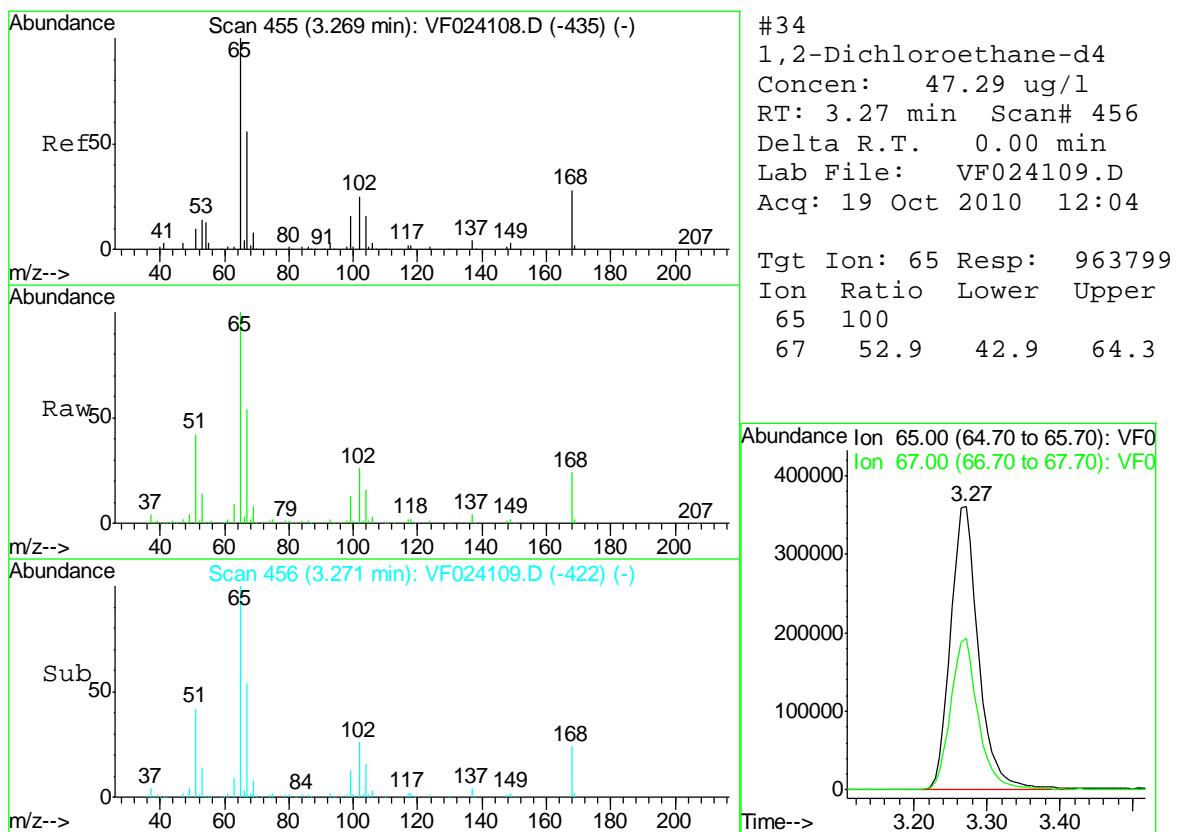
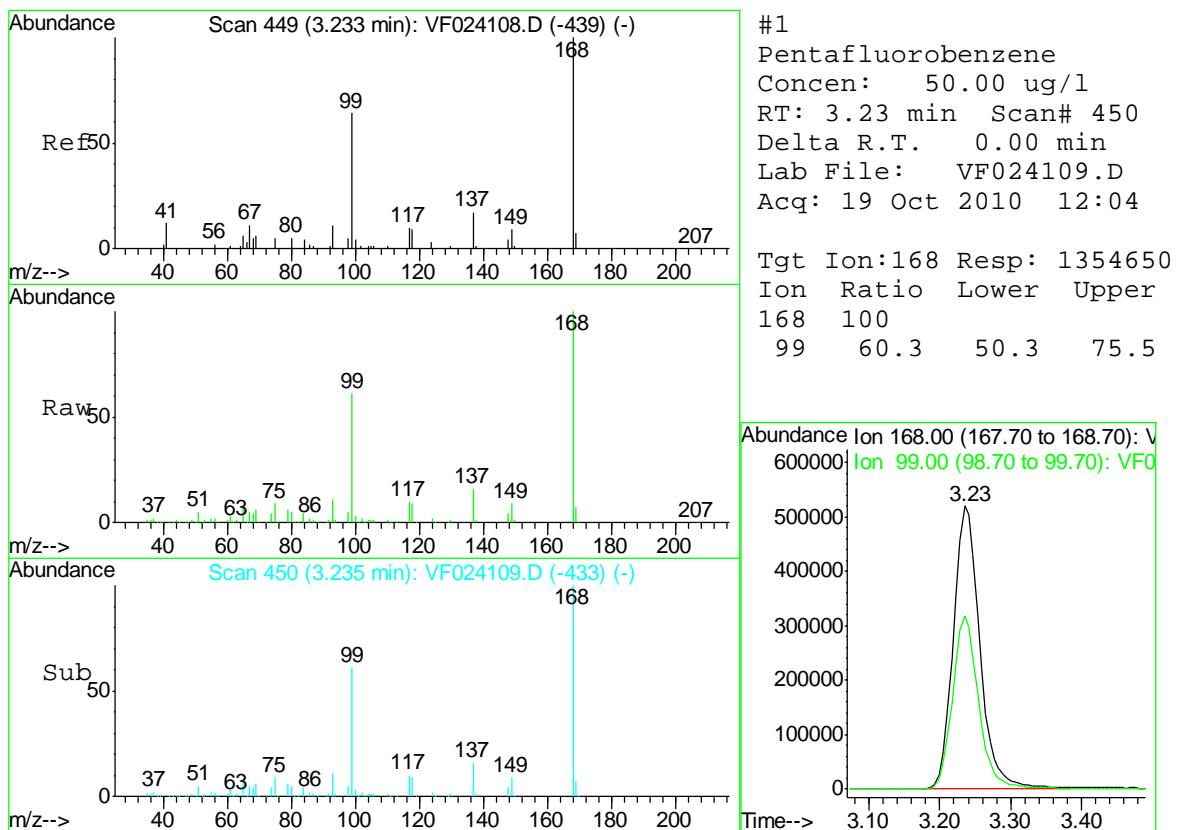
\* = Values outside of QC limits

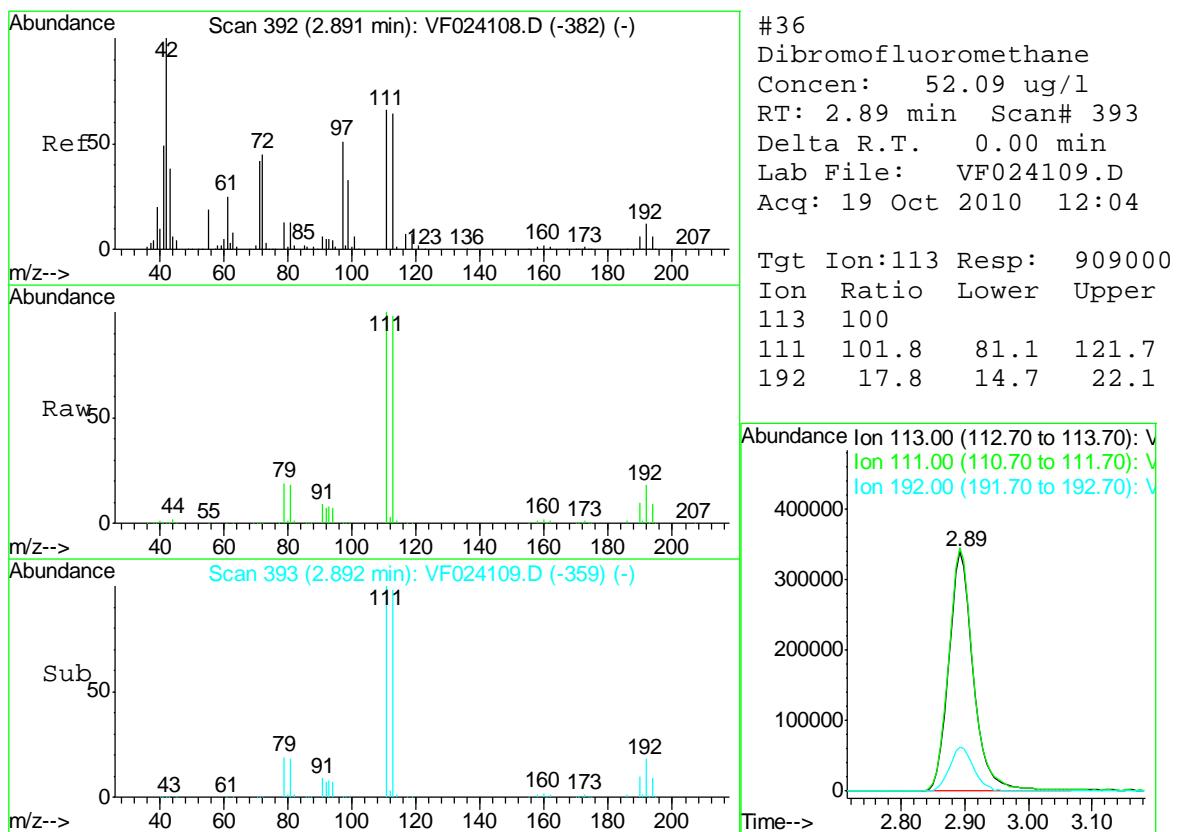
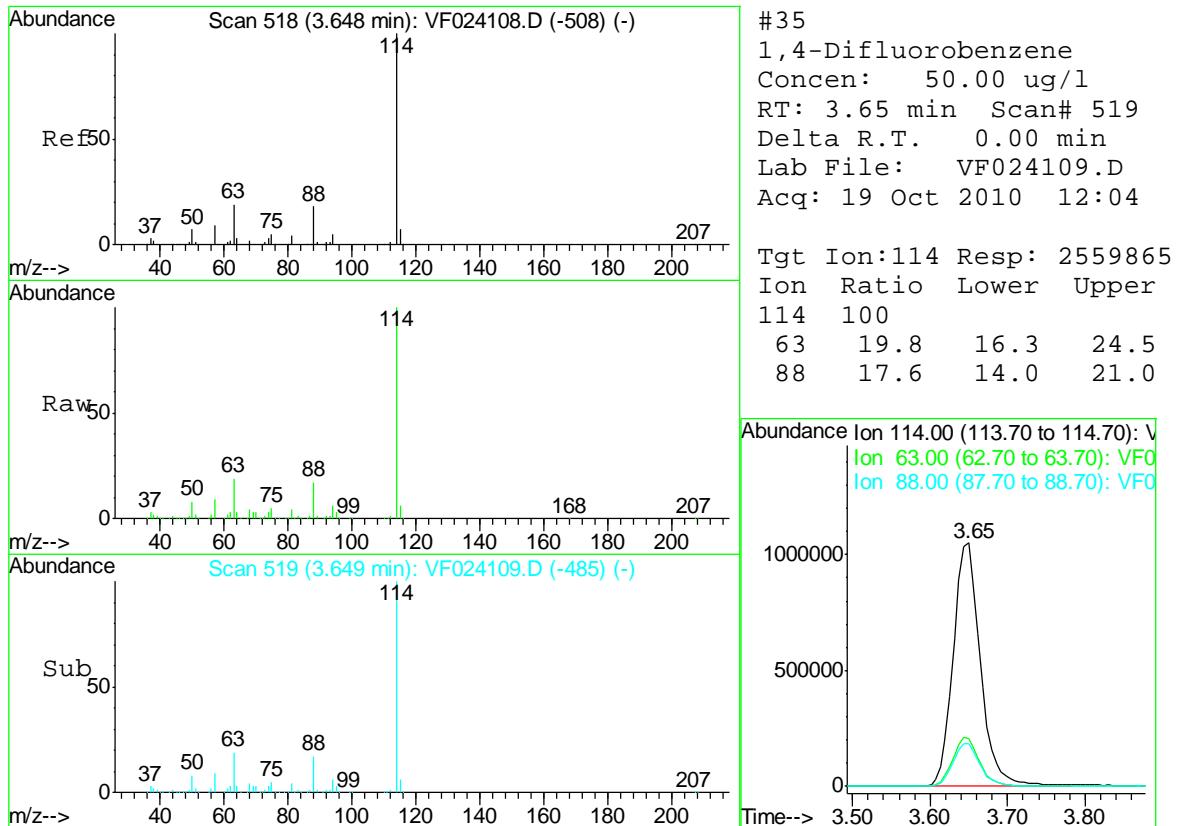
D = Dilution

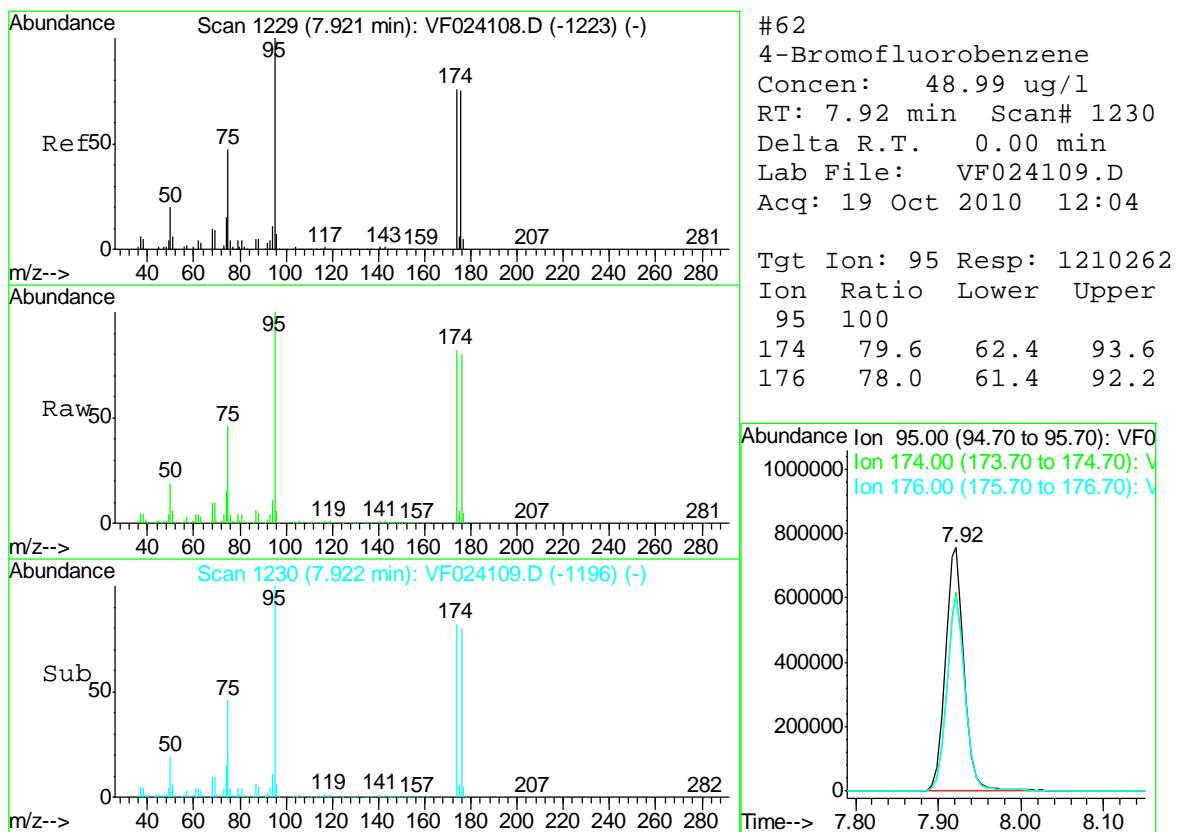
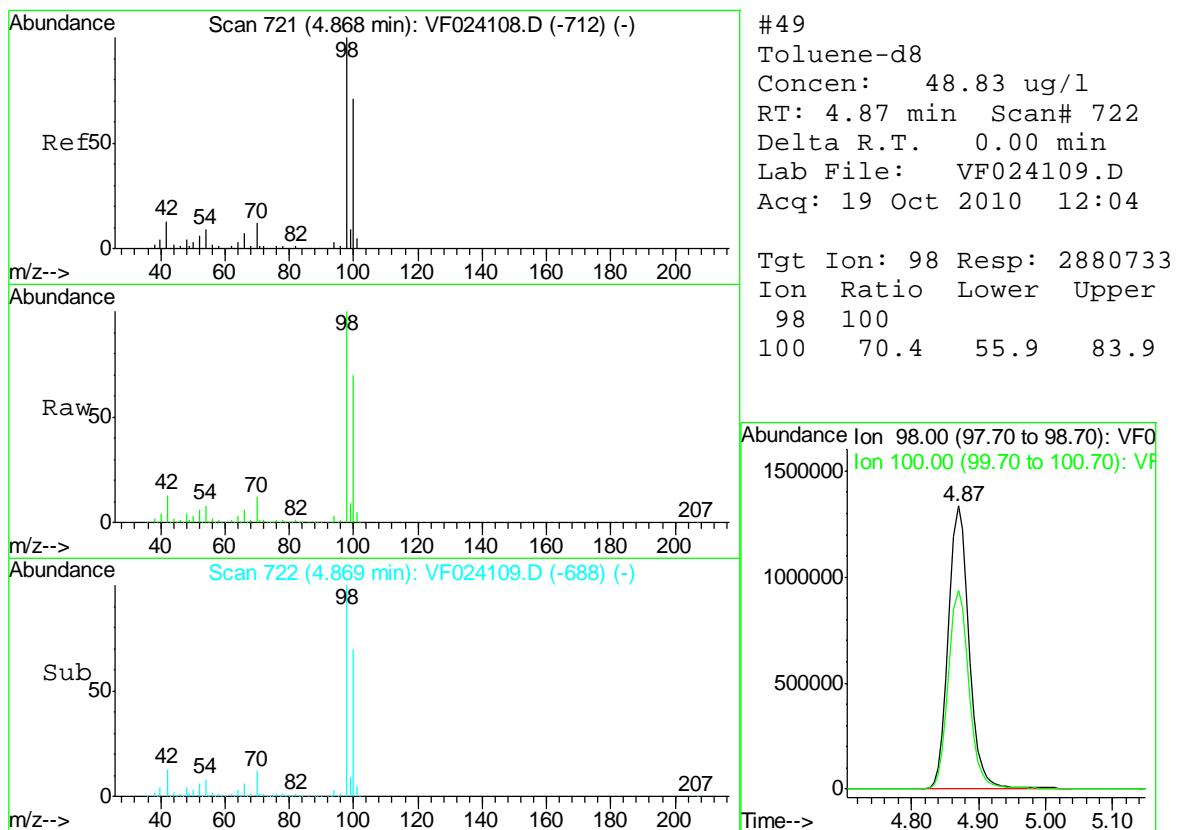
Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024109.D  
Acq On : 19 Oct 2010 12:04  
Operator : MS  
Sample : VBF1019W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

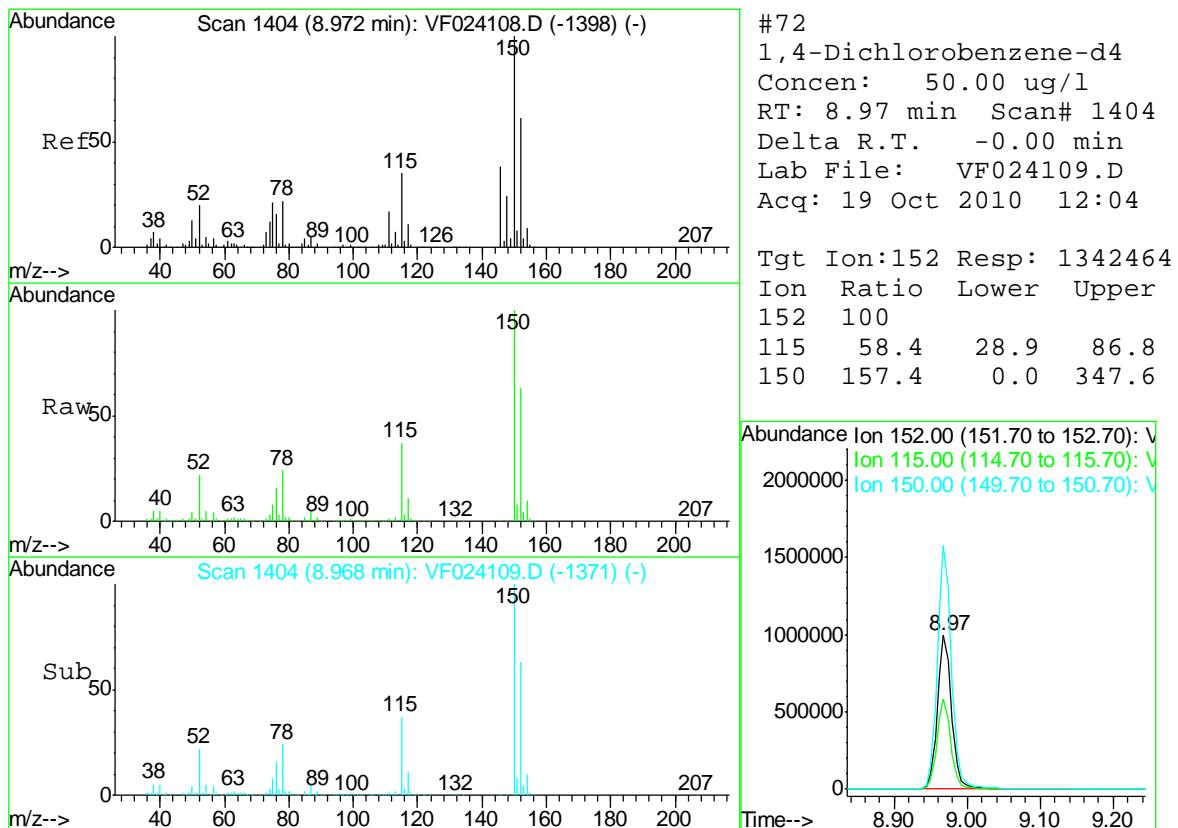
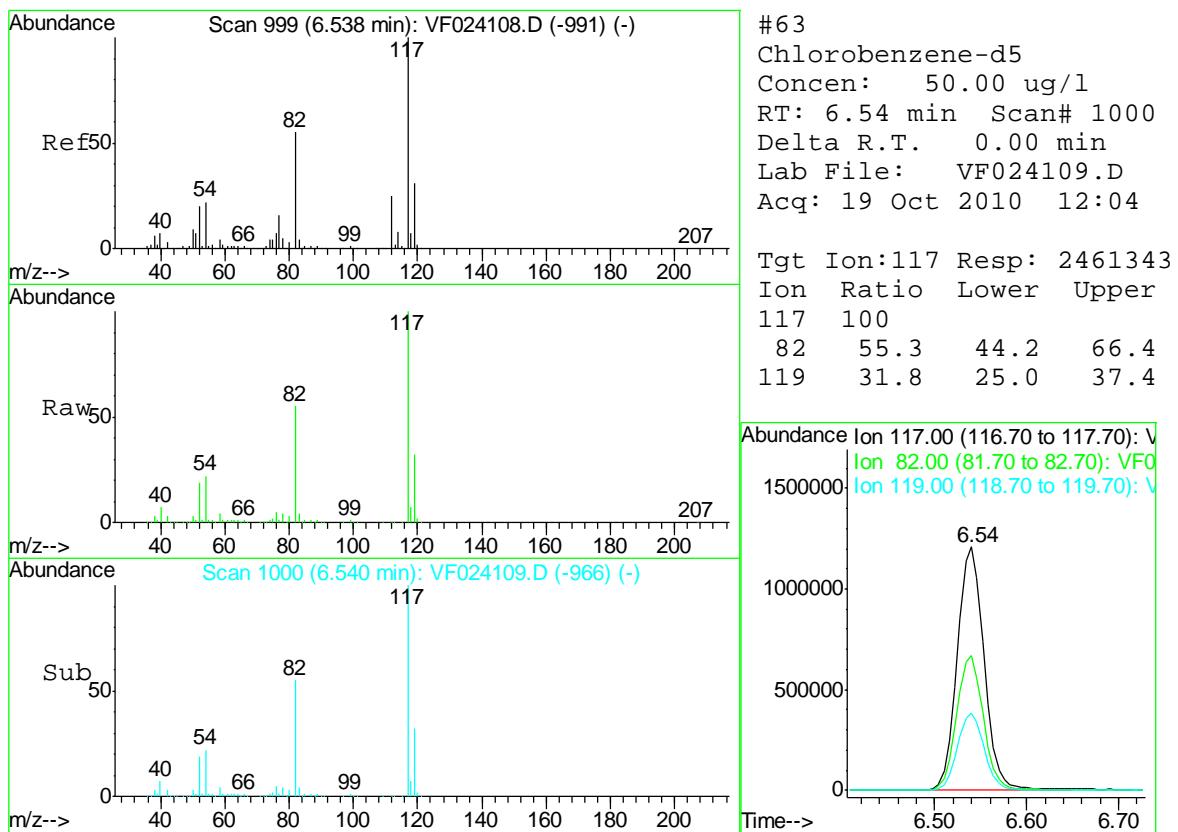
Quant Time: Oct 19 12:29:06 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024109.D  
 Acq On : 19 Oct 2010 12:04  
 Operator : MS  
 Sample : VBF1019W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 19 12:29:06 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1354650	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2559865	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2461343	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1342464	50.00	ug/l	0.00

System Monitoring Compounds						
34) 1,2-Dichloroethane-d4	3.27	65	963799	47.29	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	94.58%	
36) Dibromofluoromethane	2.89	113	909000	52.09	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	104.18%	
49) Toluene-d8	4.87	98	2880733	48.83	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	97.66%	
62) 4-Bromofluorobenzene	7.92	95	1210262	48.99	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	97.98%	

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

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024109.D  
 Acq On : 19 Oct 2010 12:04  
 Operator : MS  
 Sample : VBF1019W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 4 Sample Multiplier: 1

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : OFF Filtering: 9  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.001 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 1

Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Title : SW846 8260

Signal : TIC

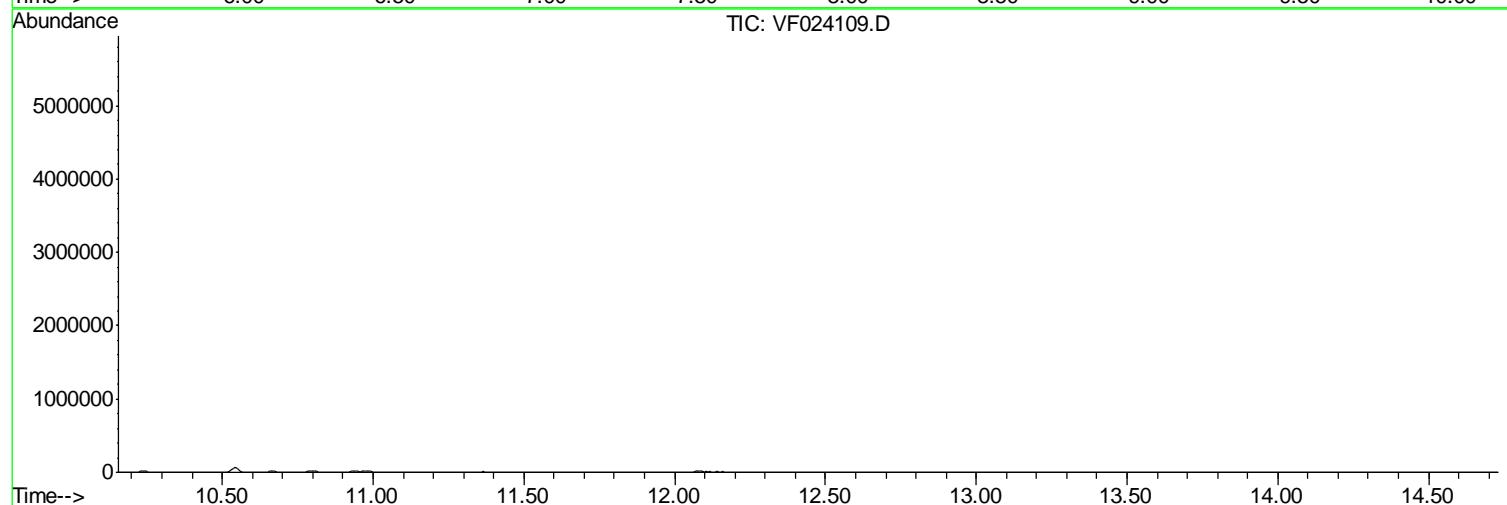
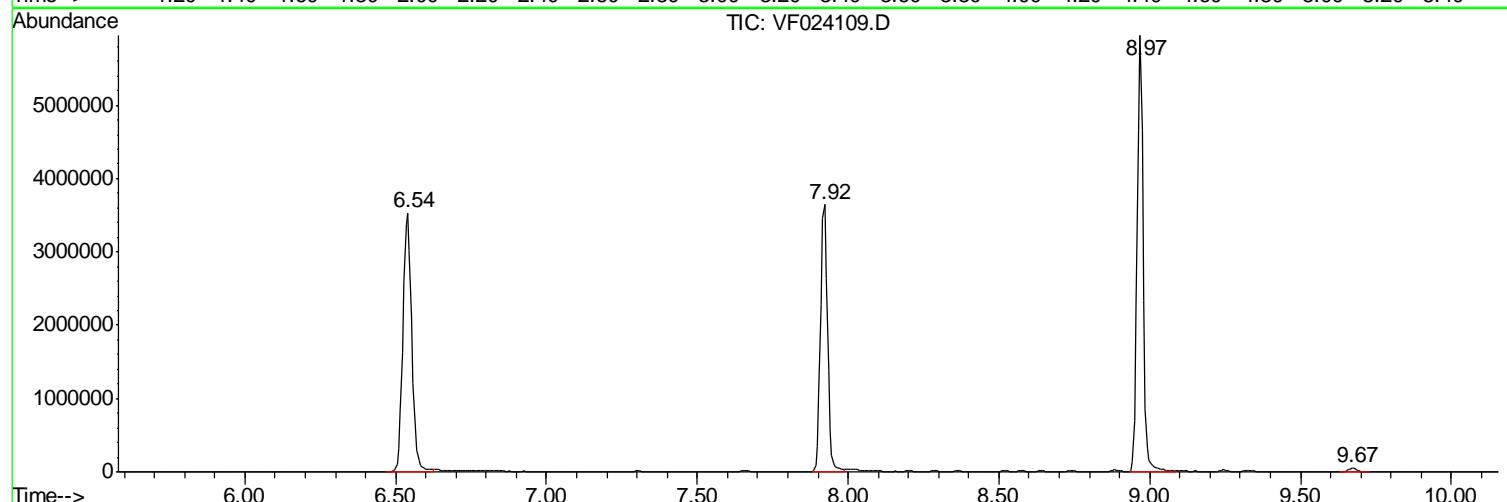
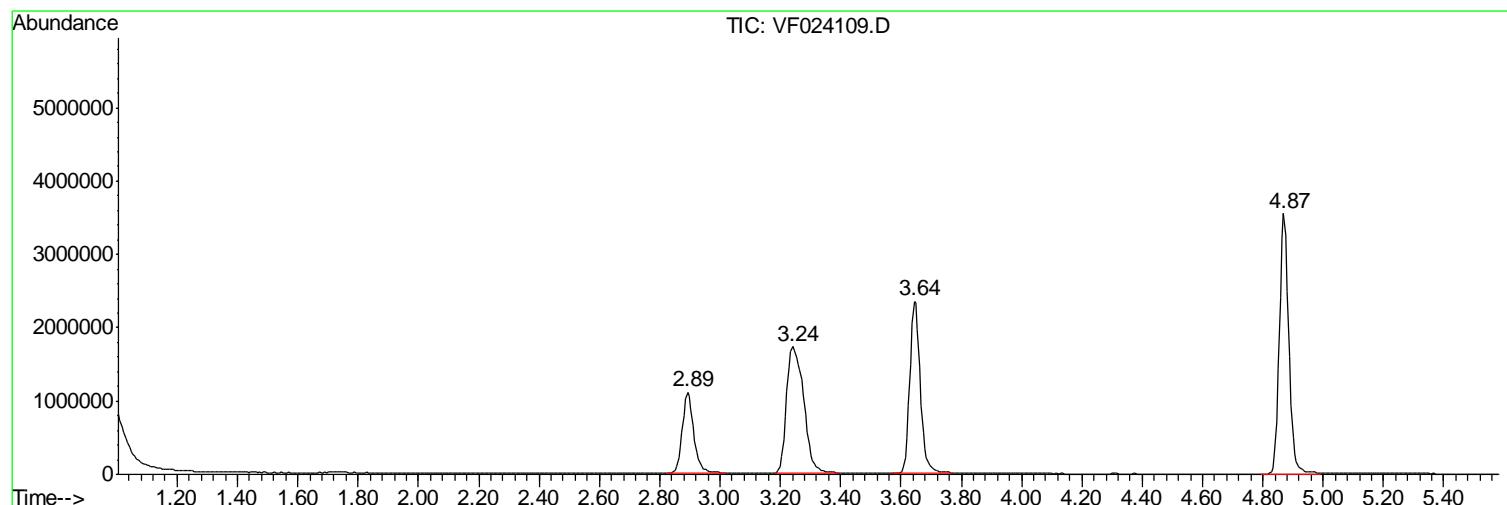
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.892	382	393	414	rBV	1106719	2901005	35.68%	6.526%
2	3.241	441	451	476	rBV2	1723972	6782990	83.42%	15.258%
3	3.643	506	518	539	rBV	2345561	5780571	71.09%	13.003%
4	4.869	710	722	742	rBV	3551980	7746076	95.27%	17.424%
5	6.540	988	1000	1014	rBV	3531020	7259500	89.28%	16.329%
6	7.922	1223	1230	1241	rBV	3637504	5770272	70.97%	12.980%
7	8.968	1398	1404	1424	rBV	5947178	8130867	100.00%	18.290%
8	9.671	1514	1521	1530	rBV	51732	85130	1.05%	0.191%

Sum of corrected areas: 44456411

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024109.D  
Acq On : 19 Oct 2010 12:04  
Operator : MS  
Sample : VBF1019W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024109.D  
Acq On : 19 Oct 2010 12:04  
Operator : MS  
Sample : VBF1019W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024109.D  
Acq On : 19 Oct 2010 12:04  
Operator : MS  
Sample : VBF1019W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 4 Sample Multiplier: 1

Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBG1019W1			SDG No.:	B3902		
Lab Sample ID:	VBG1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031005.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

545  
ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBG1019W1			SDG No.:	B3902		
Lab Sample ID:	VBG1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031005.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	47.5		66 - 150		95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.2		76 - 130		100%	SPK: 50
2037-26-5	Toluene-d8	45.6		78 - 121		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	45		70 - 131		90%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	657630	3.89				
540-36-3	1,4-Difluorobenzene	1095980	4.68				
3114-55-4	Chlorobenzene-d5	882374	9.65				
3855-82-1	1,4-Dichlorobenzene-d4	481576	13.36				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

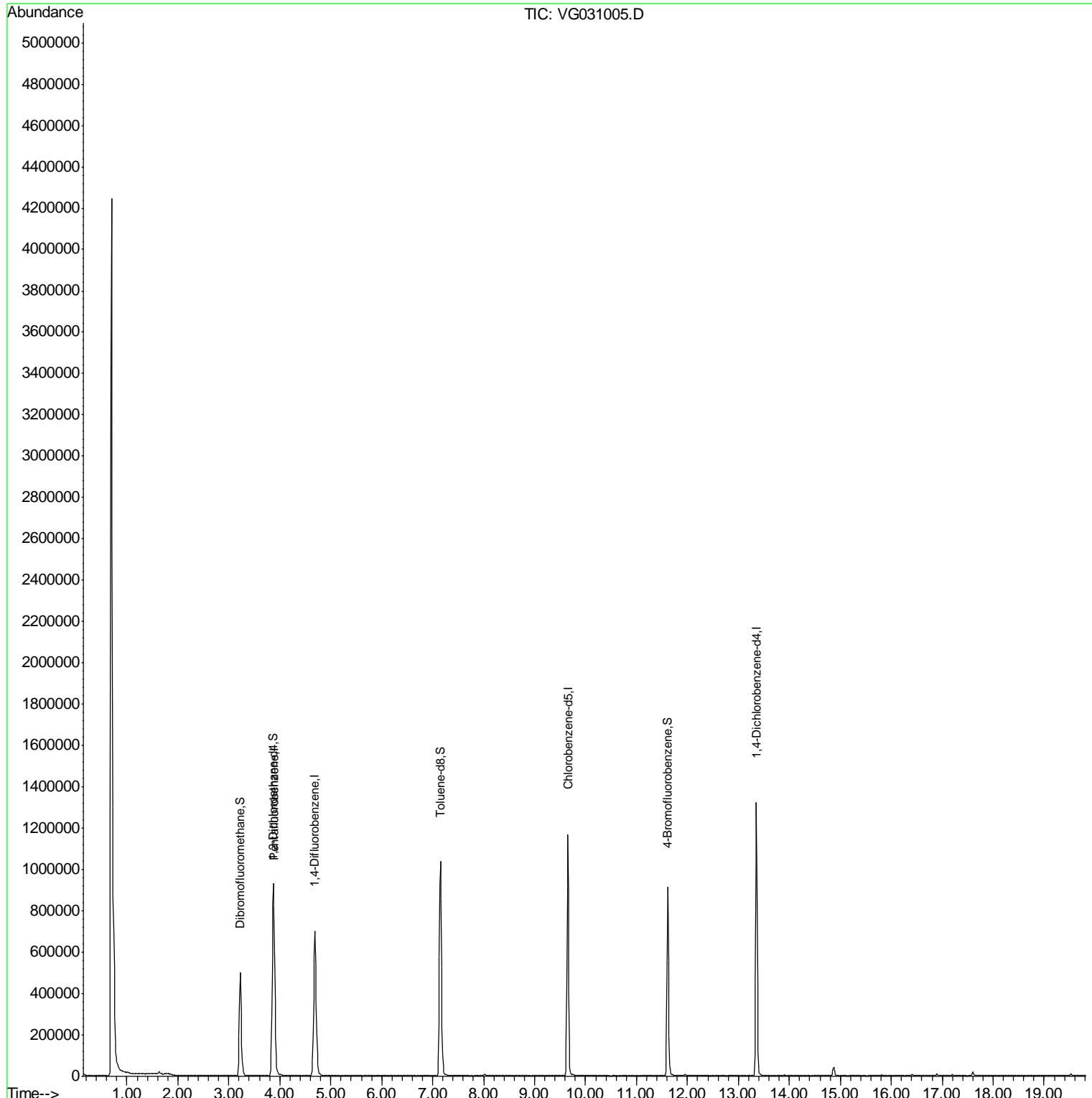
N = Presumptive Evidence of a Compound

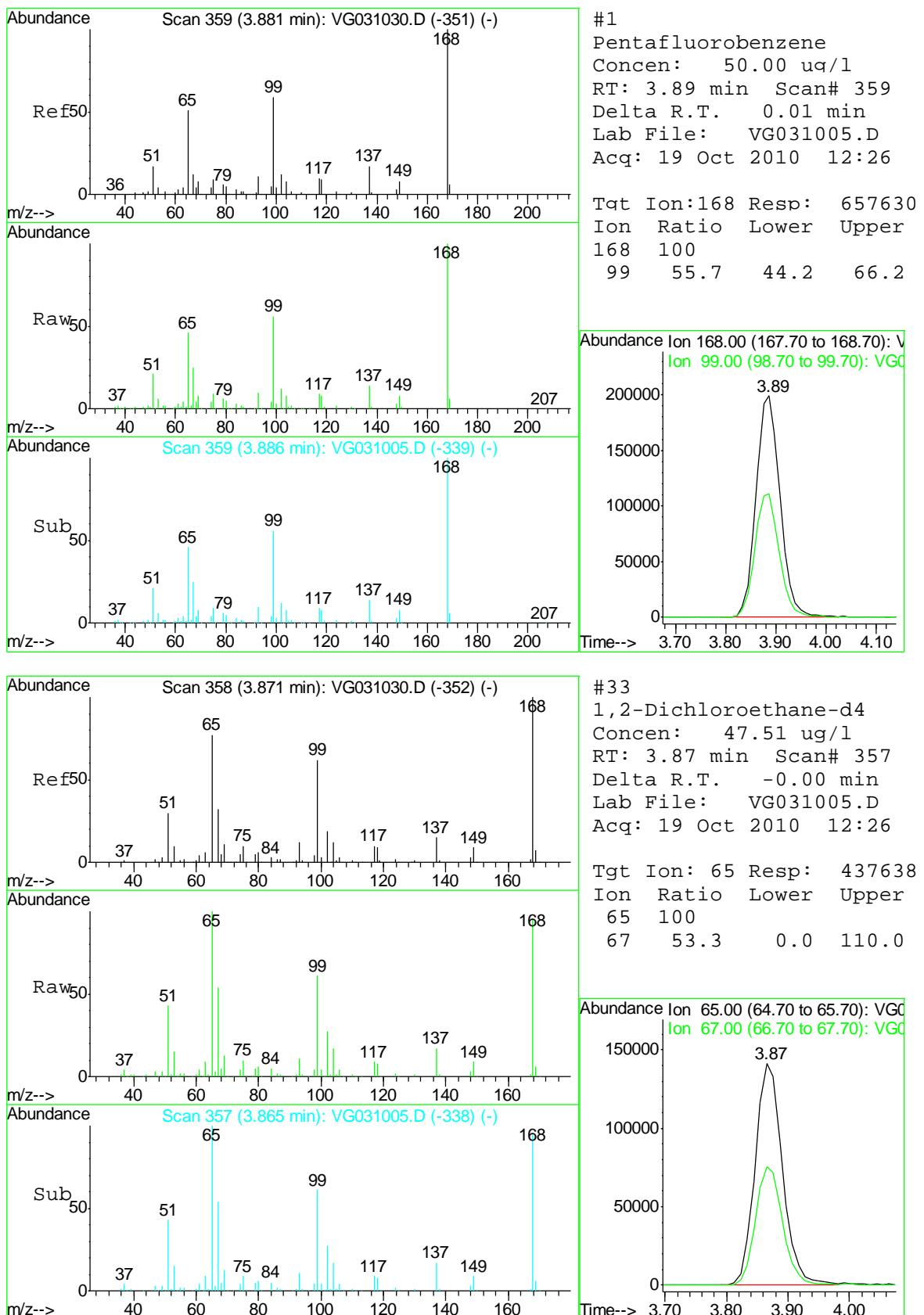
\* = Values outside of QC limits

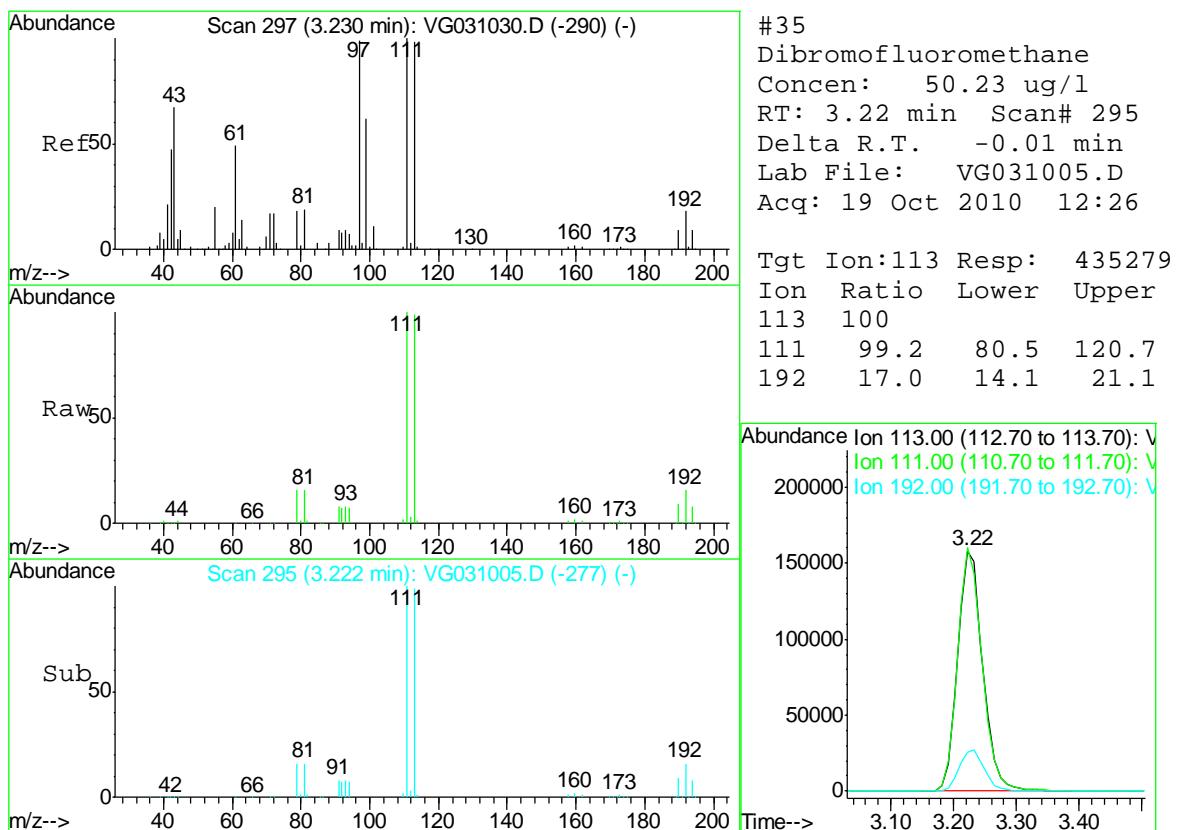
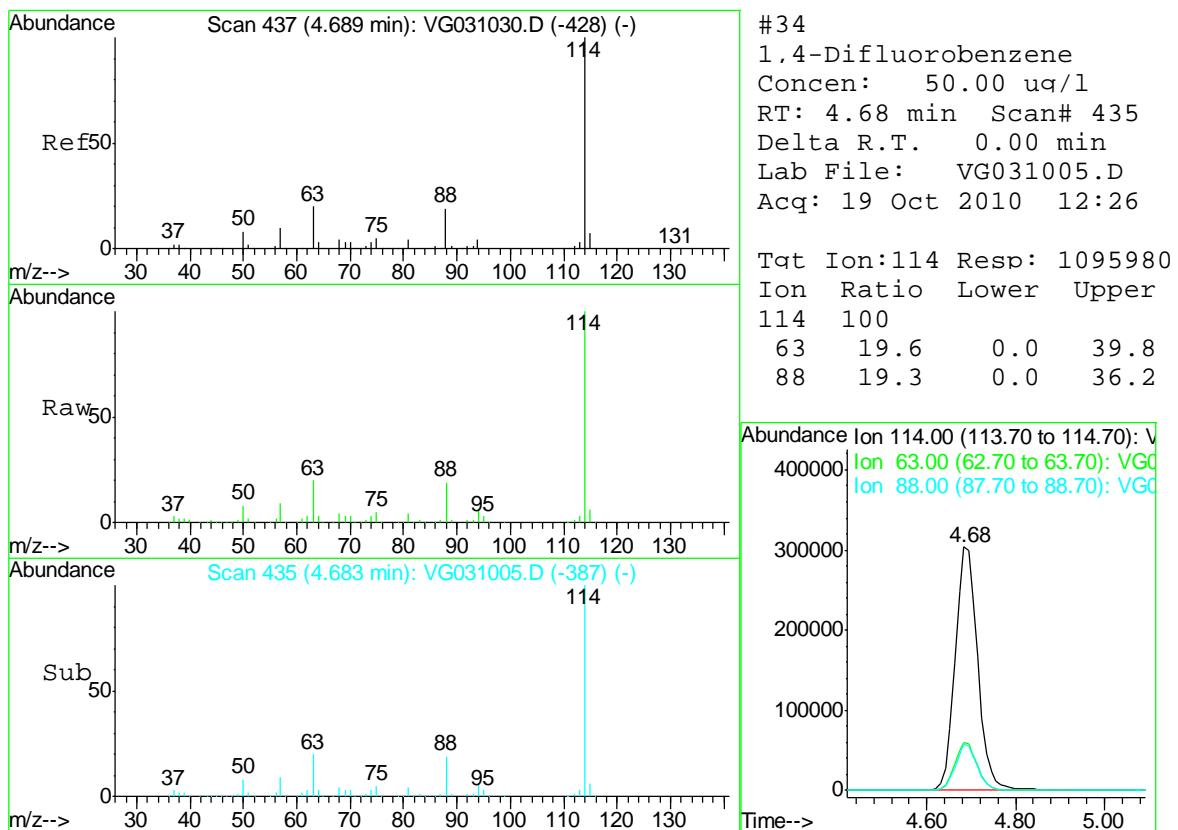
D = Dilution

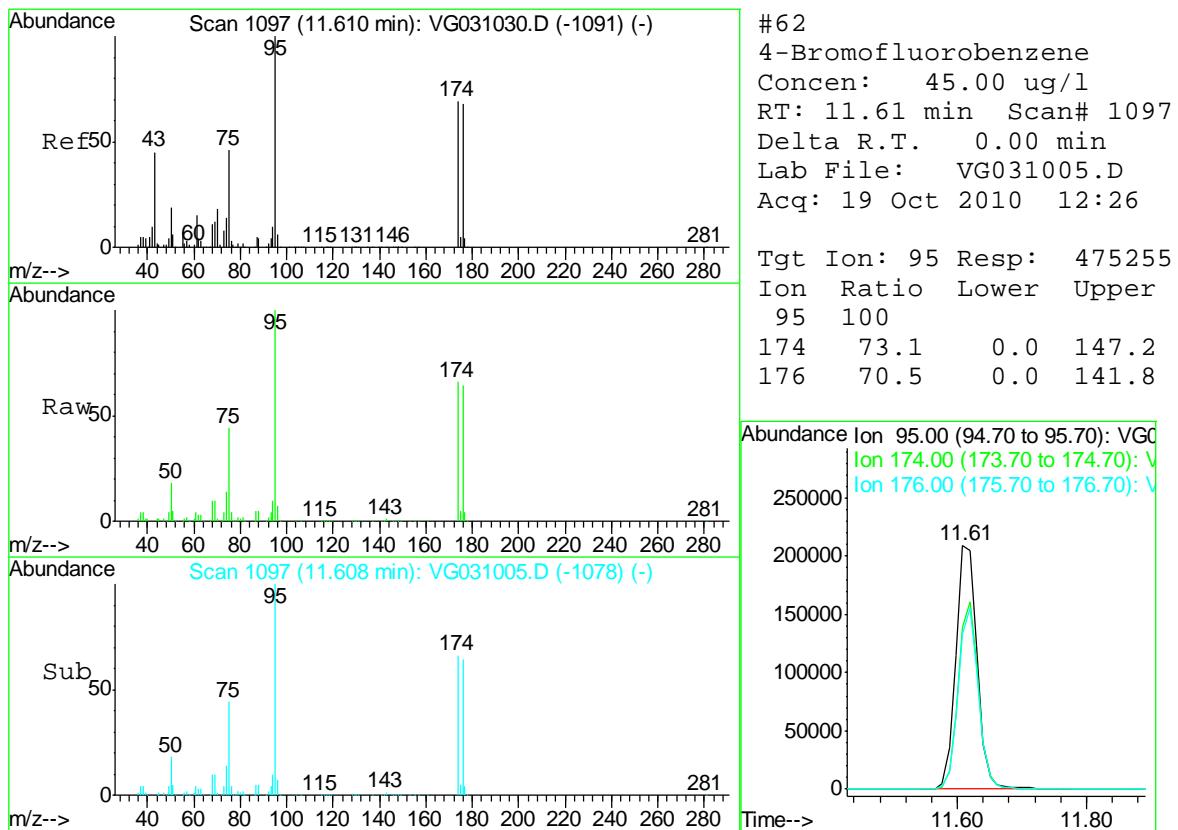
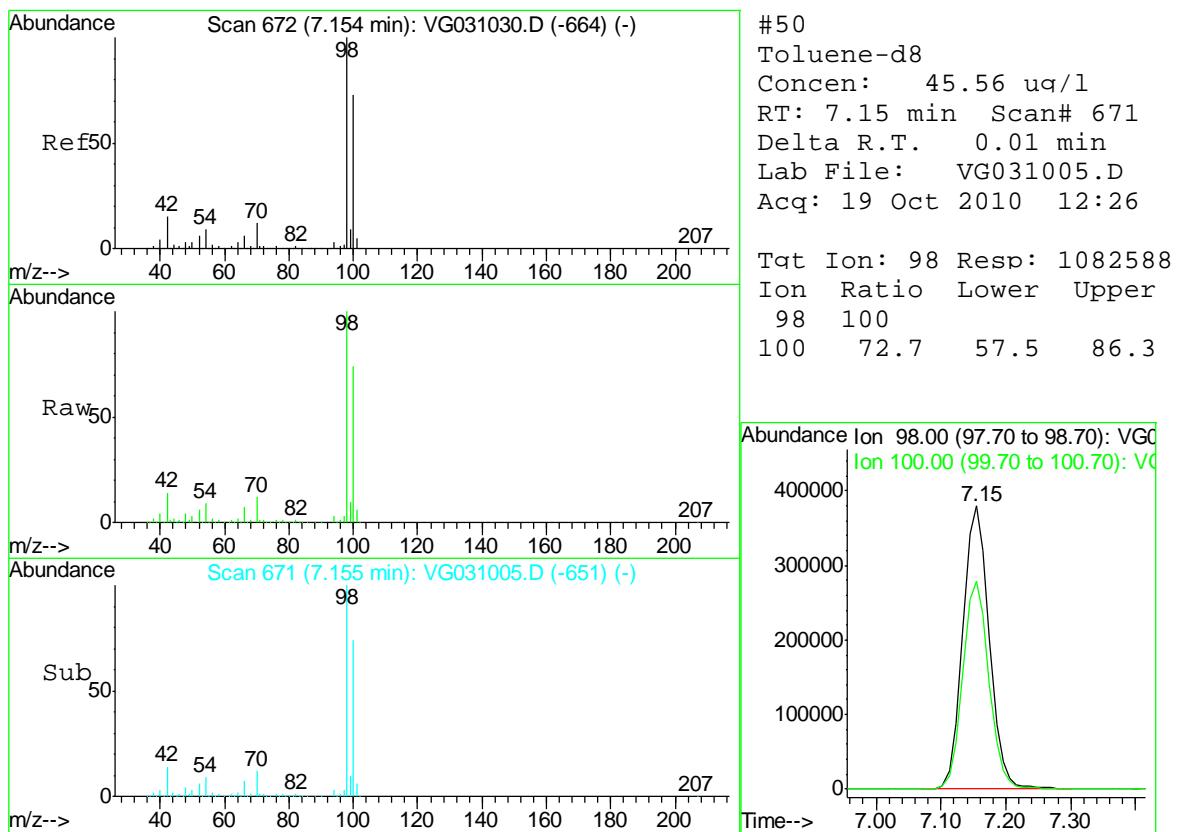
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Data File : VG031005.D  
Acq On : 19 Oct 2010 12:26  
Operator : PS  
Sample : VBG1019W1  
Misc : 5mL MSVOA G  
ALS Vial : 3 Sample Multiplier: 1

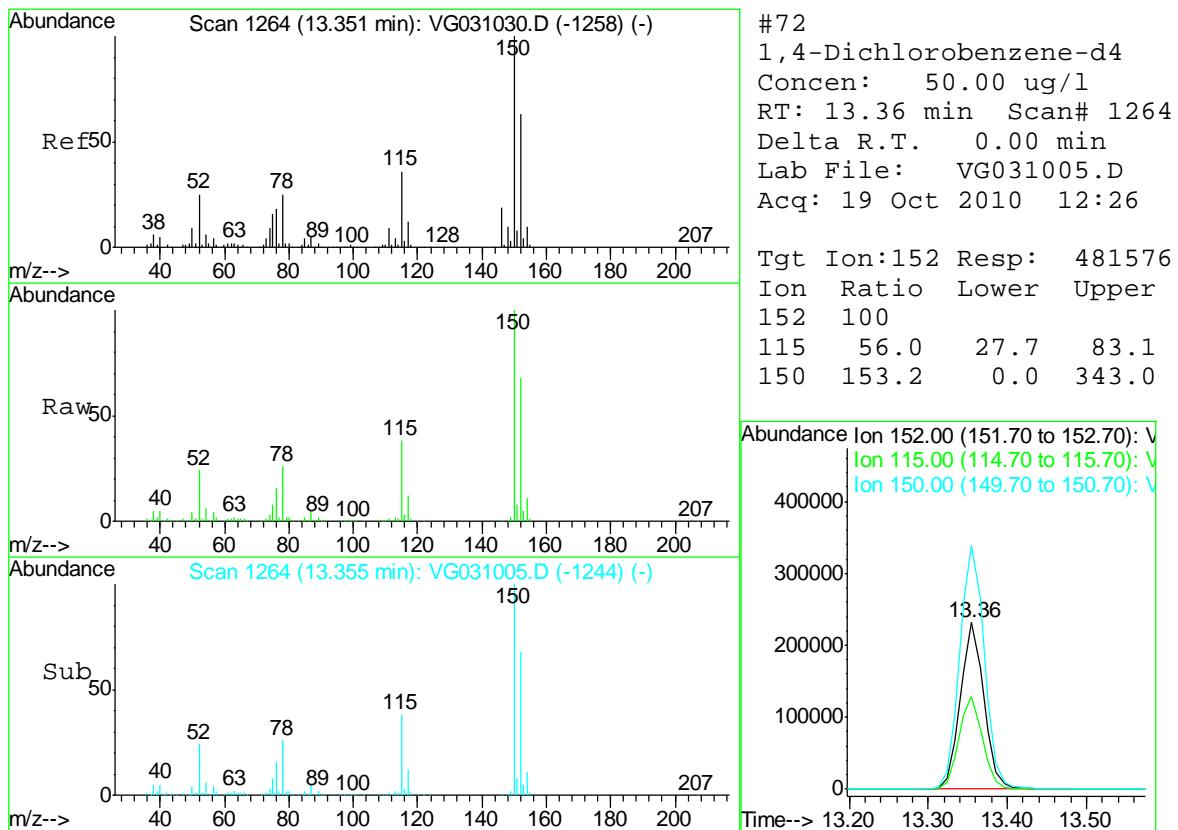
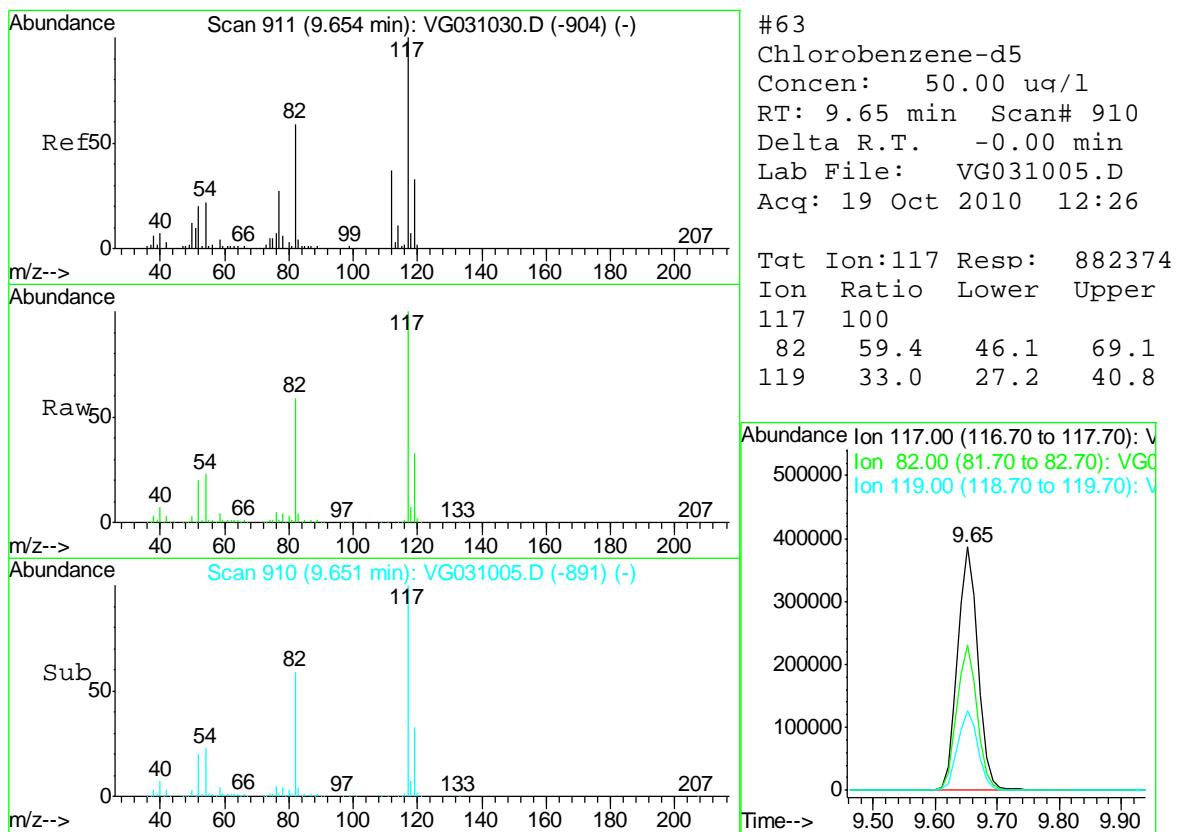
Ouant Time: Oct 19 12:03:11 2010  
Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031005.D  
 Acq On : 19 Oct 2010 12:26  
 Operator : PS  
 Sample : VBG1019W1  
 Misc : 5mL MSVOA G  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 19 12:03:11 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	657630	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.68	114	1095980	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.65	117	882374	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	481576	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	3.87	65	437638	47.51	ug/l	0.00
Spiked Amount	50.000		Recovery	=	95.02%	
35) Dibromofluoromethane	3.22	113	435279	50.23	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.46%	
50) Toluene-d8	7.15	98	1082588	45.56	ug/l	0.00
Spiked Amount	50.000		Recovery	=	91.12%	
62) 4-Bromofluorobenzene	11.61	95	475255	45.00	ug/l	0.00
Spiked Amount	50.000		Recovery	=	90.00%	

Target Compounds	Qvalue
(#)	

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

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031005.D  
 Acq On : 19 Oct 2010 12:26  
 Operator : PS  
 Sample : VBG1019W1  
 Misc : 5mL MSVOA G  
 ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

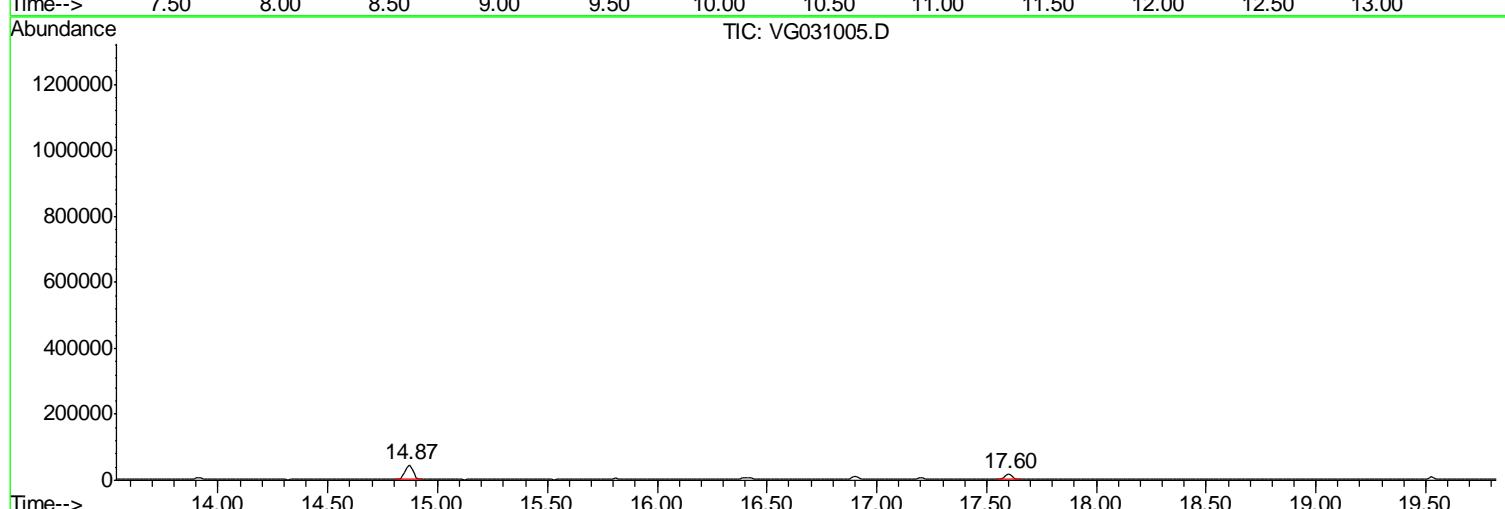
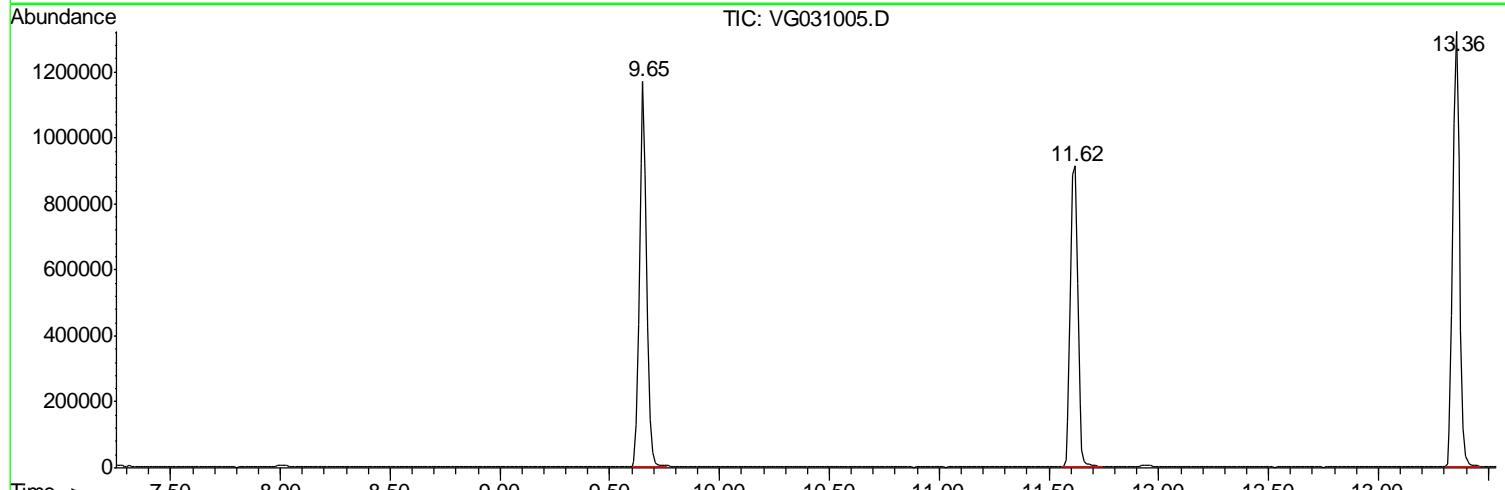
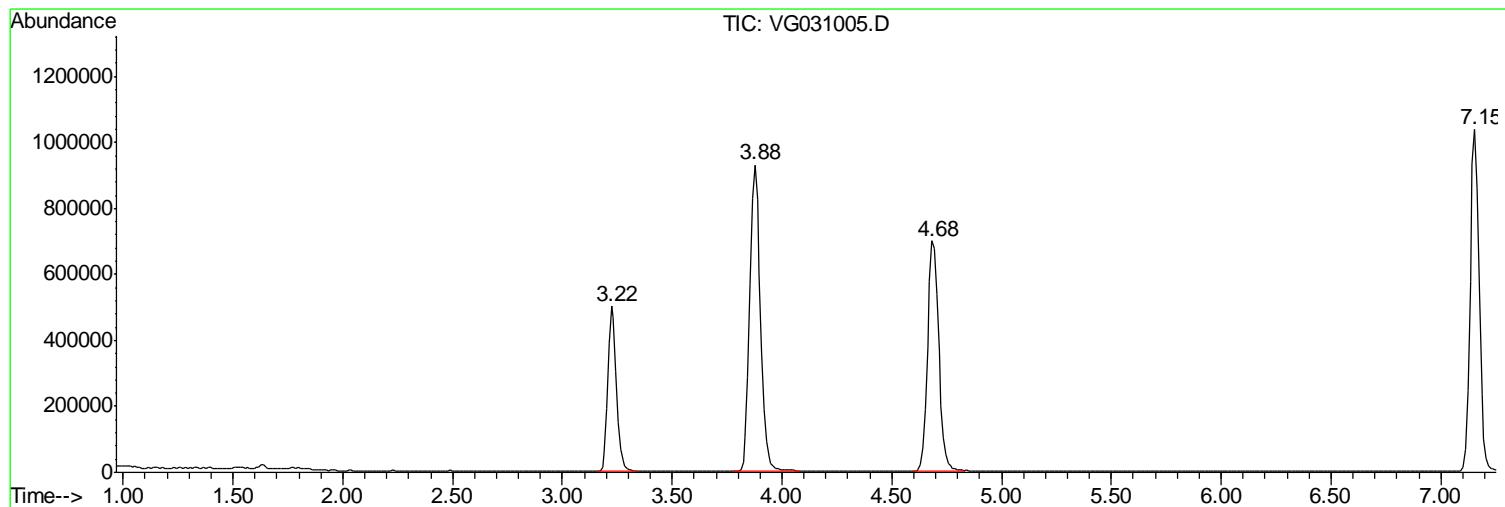
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.222	289	295	306	rBV	499440	1350719	43.17%	7.694%
2	3.876	349	358	377	rBV2	930646	3128748	100.00%	17.822%
3	4.683	427	435	449	rBV	698168	2469397	78.93%	14.066%
4	7.155	663	671	685	rBV	1037070	2941443	94.01%	16.755%
5	9.651	905	910	920	rBV	1167740	2645546	84.56%	15.070%
6	11.619	1092	1098	1110	rVB	911788	2059971	65.84%	11.734%
7	13.355	1259	1264	1274	rBV	1319923	2808215	89.76%	15.996%
8	14.871	1403	1409	1414	rBV	44123	110684	3.54%	0.630%
9	17.599	1665	1670	1675	rVB	18174	40743	1.30%	0.232%

Sum of corrected areas: 17555466

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031005.D  
Acq On : 19 Oct 2010 12:26  
Operator : PS  
Sample : VBG1019W1  
Misc : 5mL MSVOA G  
ALS Vial : 3 Sample Multiplier: 1

Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031005.D  
Acq On : 19 Oct 2010 12:26  
Operator : PS  
Sample : VBG1019W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031005.D  
Acq On : 19 Oct 2010 12:26  
Operator : PS  
Sample : VBG1019W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBG1020W1			SDG No.:	B3902		
Lab Sample ID:	VBG1020W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031031.D	1		10/20/10	VG102010

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.47	0.5	1	ug/L
67-64-1	Acetone	5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.35	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.5	1	ug/L
71-43-2	Benzene	1	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	1	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	1	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	VBG1020W1			SDG No.:	B3902		
Lab Sample ID:	VBG1020W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031031.D	1		10/20/10	VG102010

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	1	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.95	1	2	ug/L
95-47-6	o-Xylene	1	U	0.43	0.5	1	ug/L
100-42-5	Styrene	1	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	1	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	50.1		66 - 150		100%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		76 - 130		107%	SPK: 50
2037-26-5	Toluene-d8	44.5		78 - 121		89%	SPK: 50
460-00-4	4-Bromofluorobenzene	46		70 - 131		92%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	610030	3.89				
540-36-3	1,4-Difluorobenzene	990083	4.7				
3114-55-4	Chlorobenzene-d5	783598	9.65				
3855-82-1	1,4-Dichlorobenzene-d4	435417	13.36				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

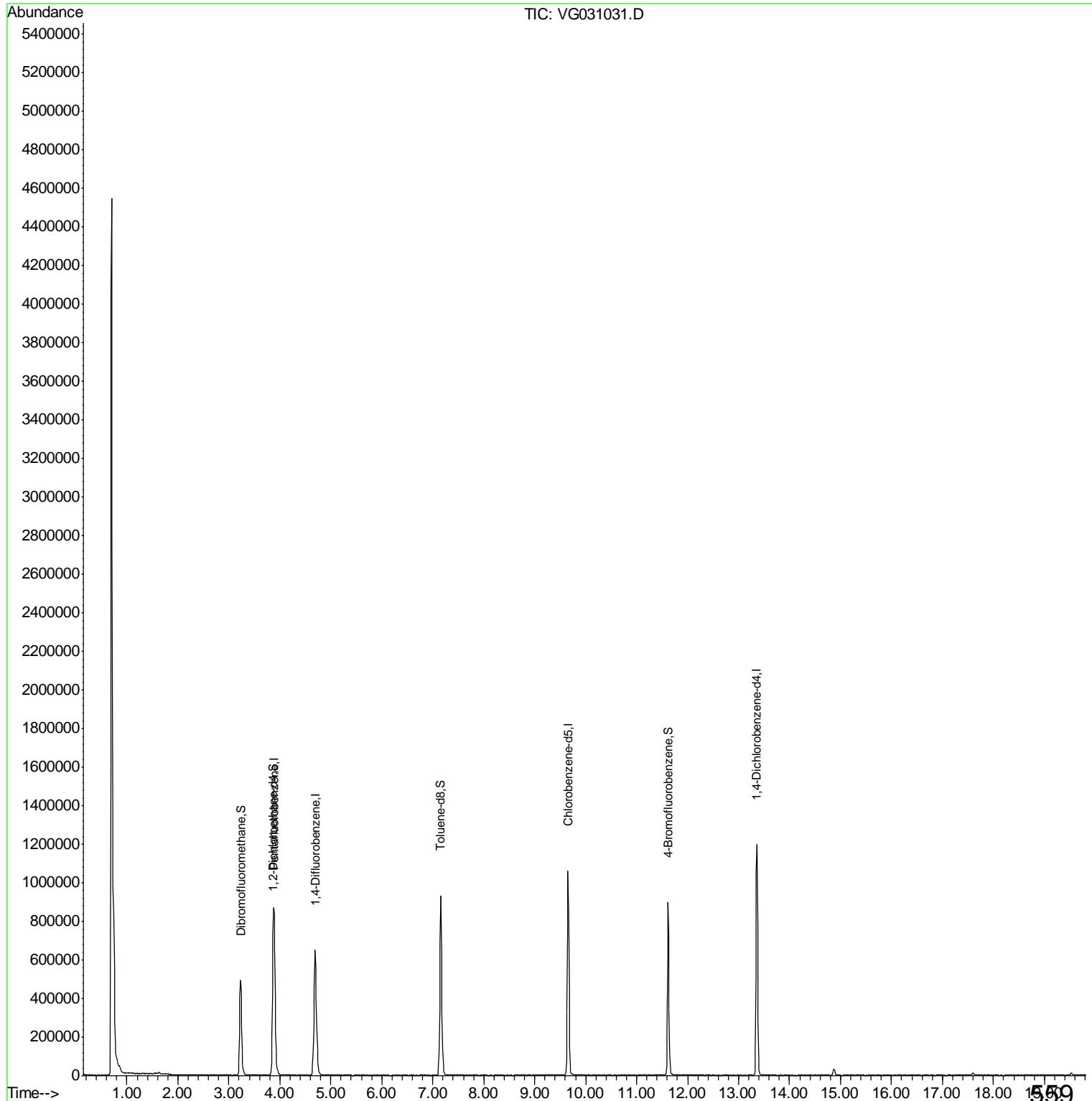
N = Presumptive Evidence of a Compound

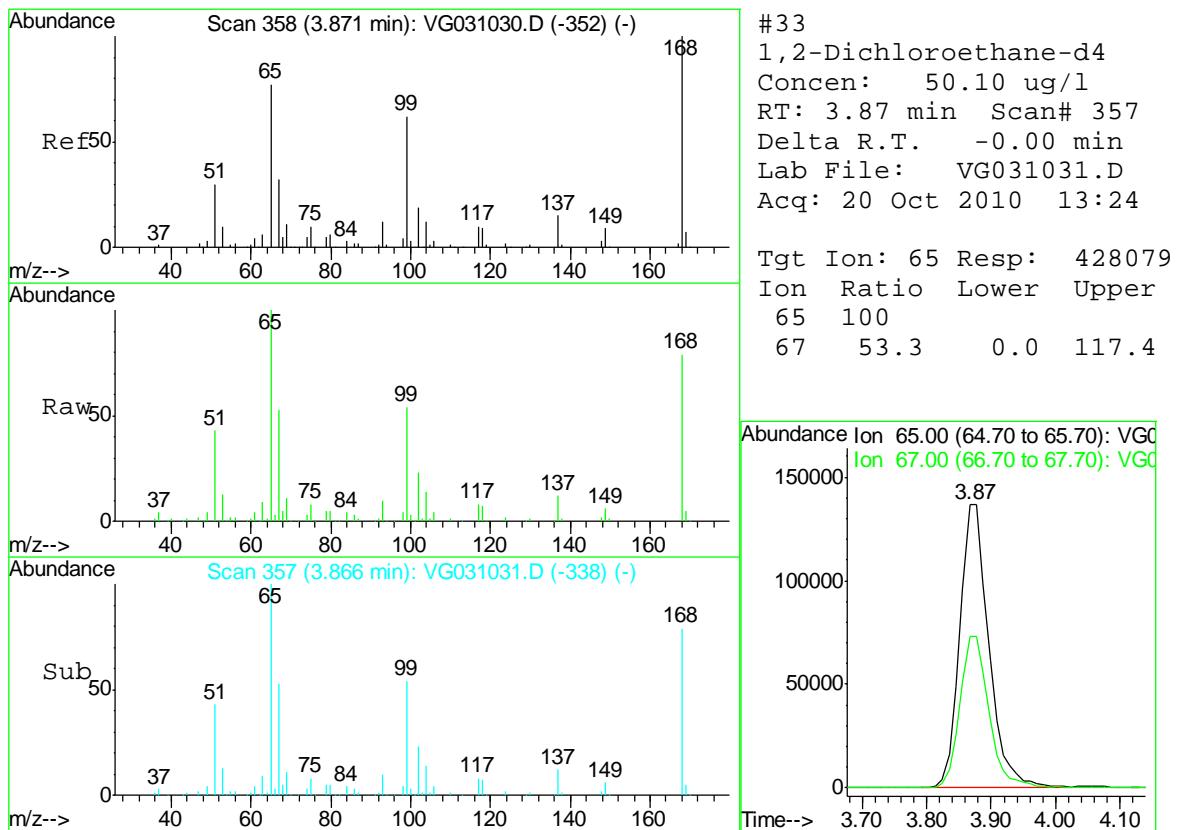
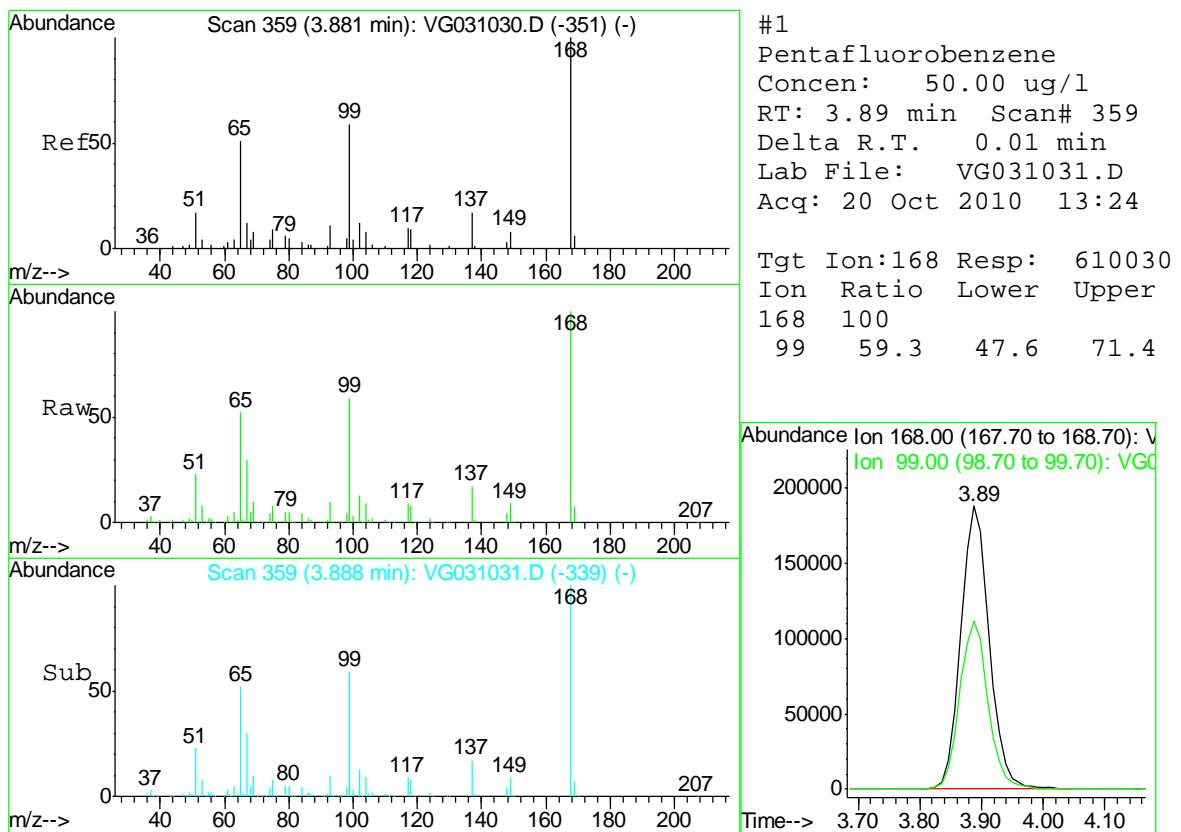
\* = Values outside of QC limits

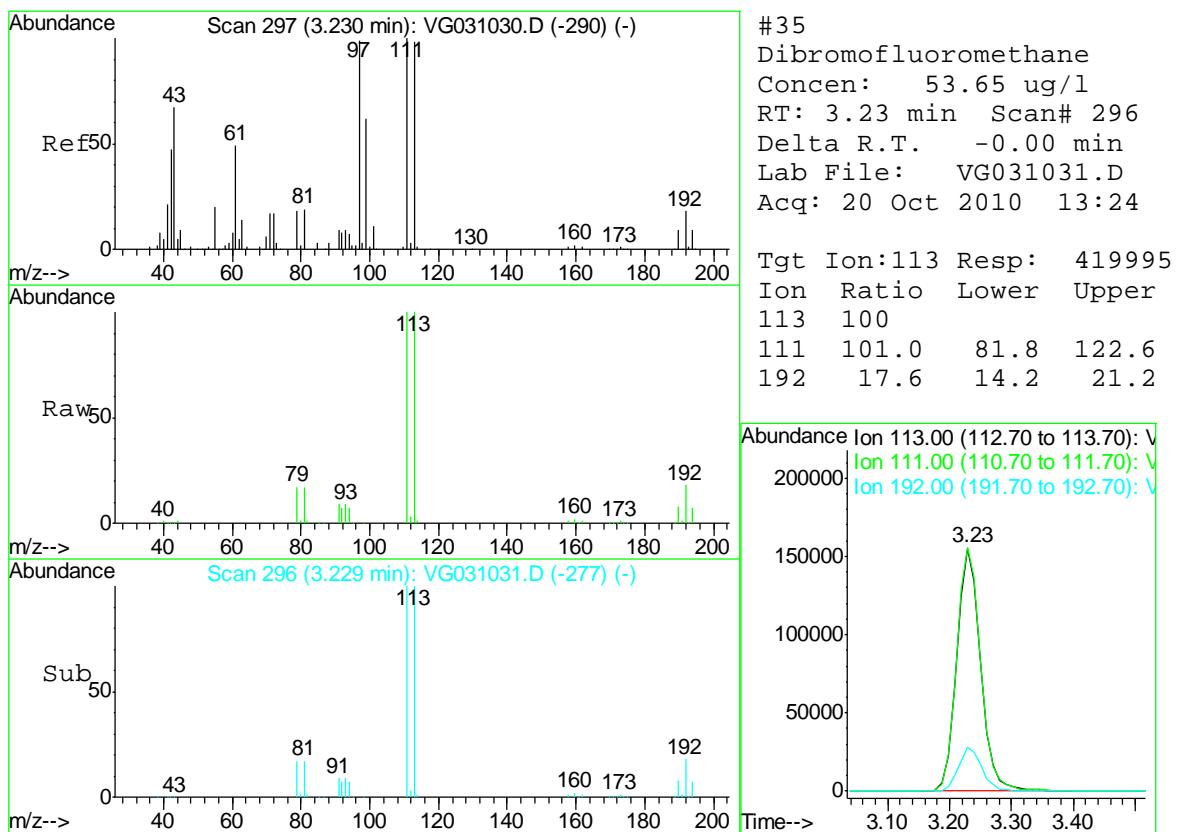
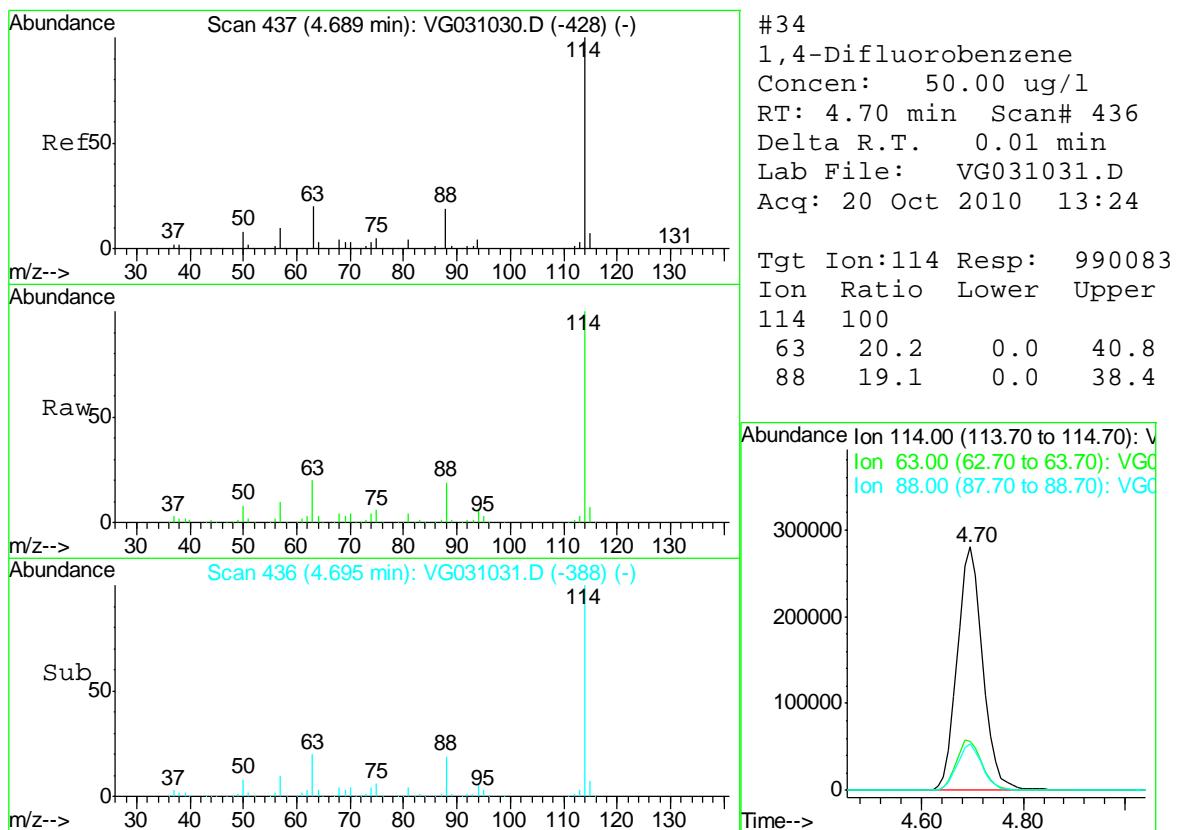
D = Dilution

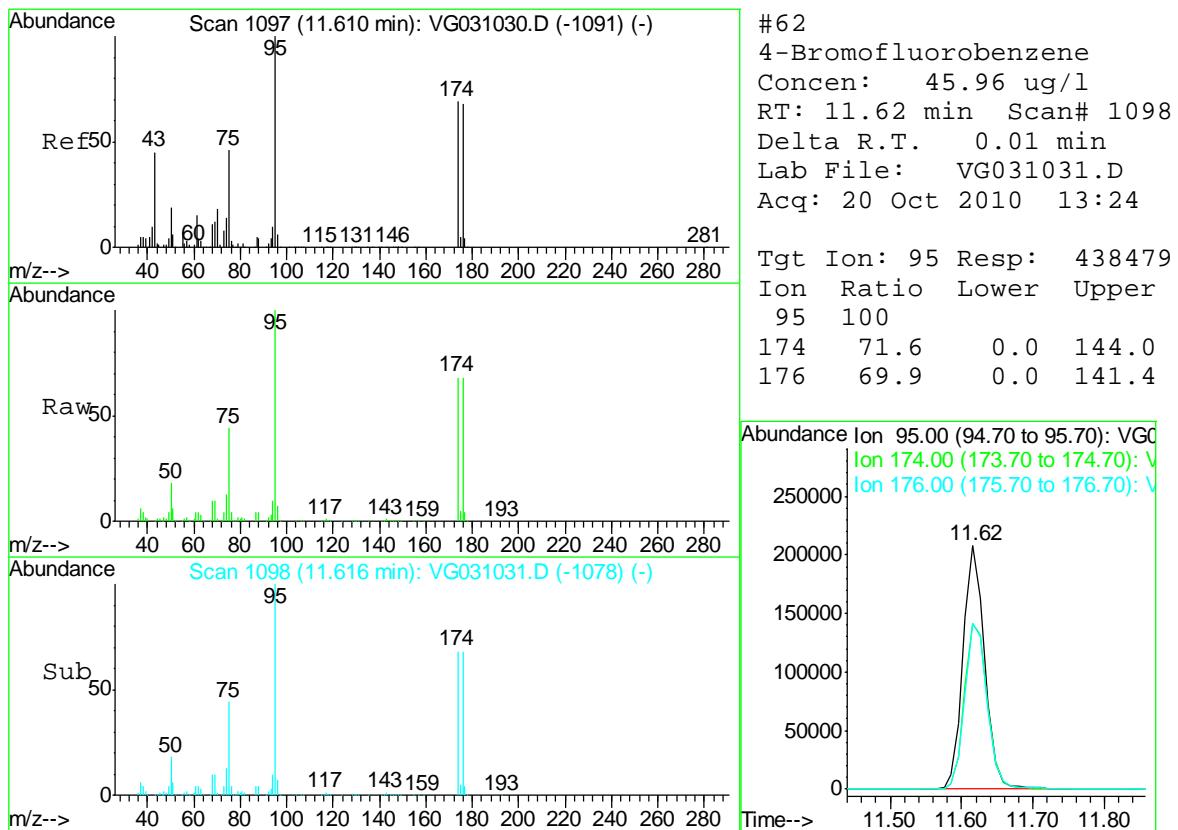
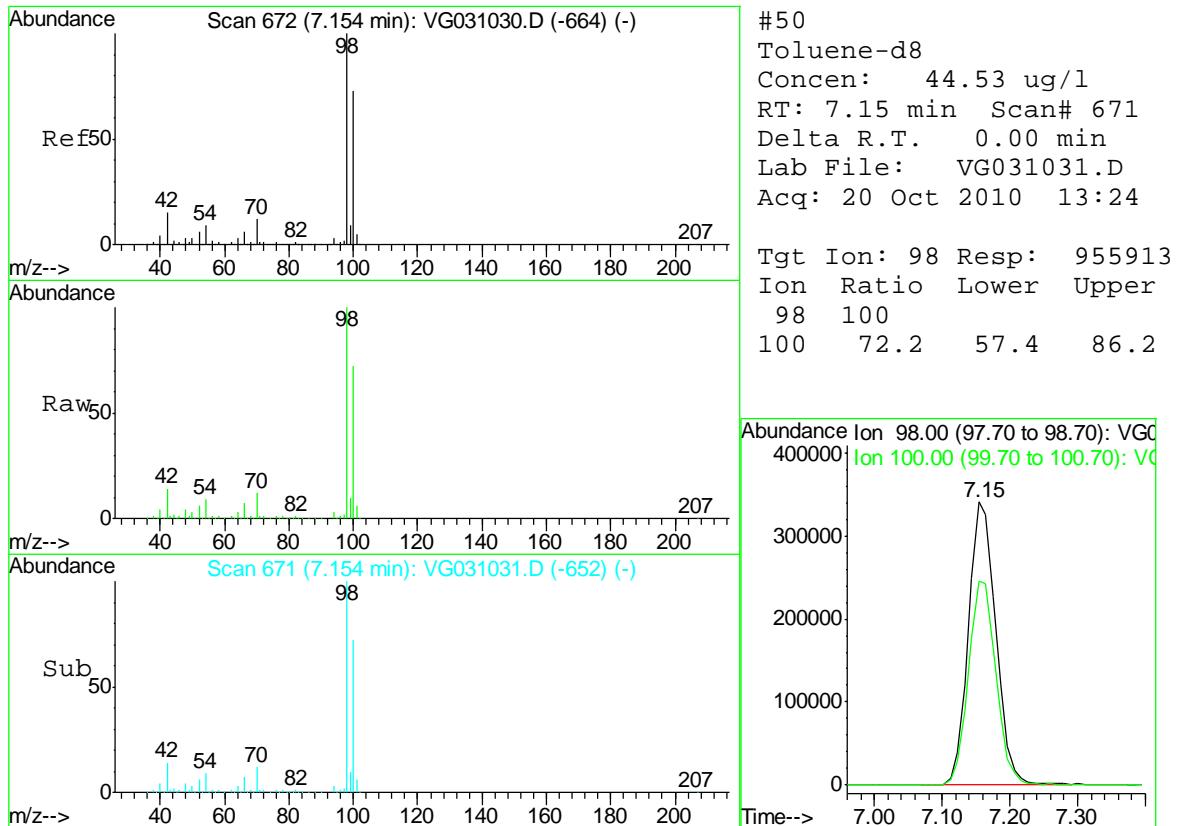
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Data File : VG031031.D  
Acq On : 20 Oct 2010 13:24  
Operator : PS  
Sample : VBG1020W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

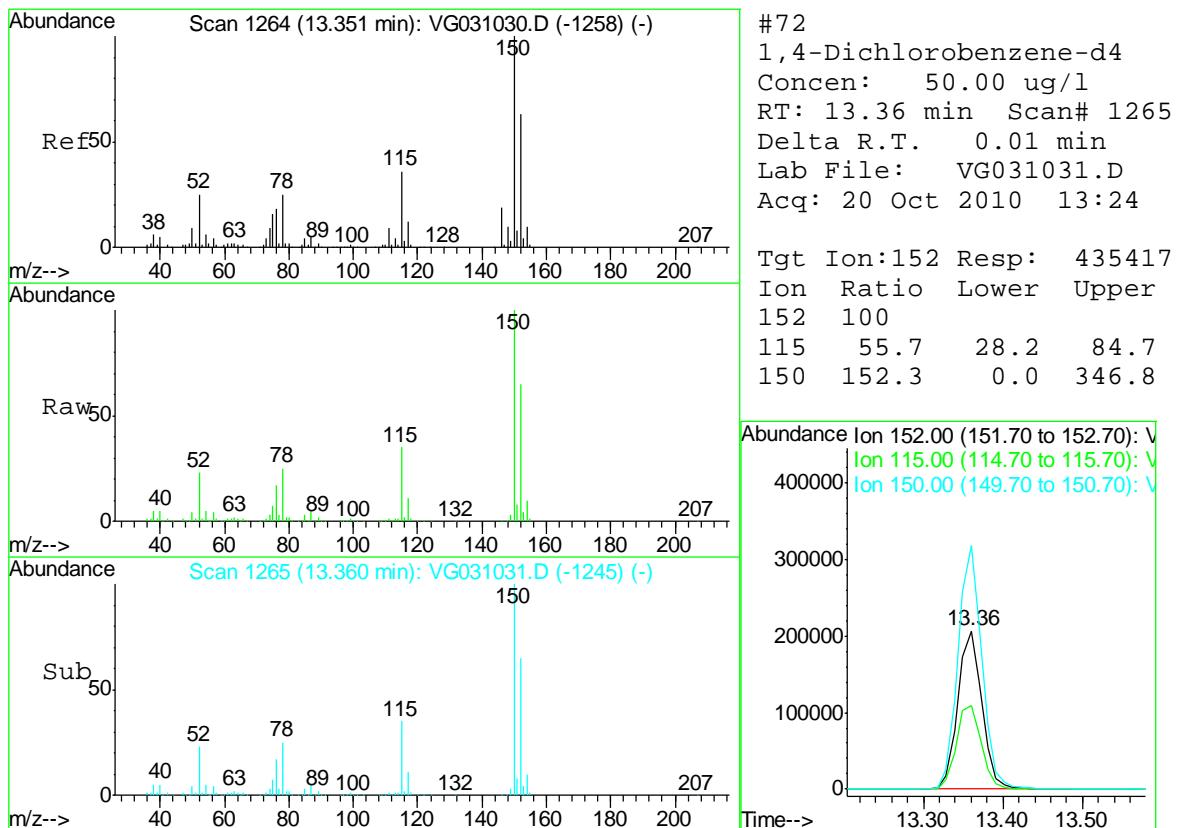
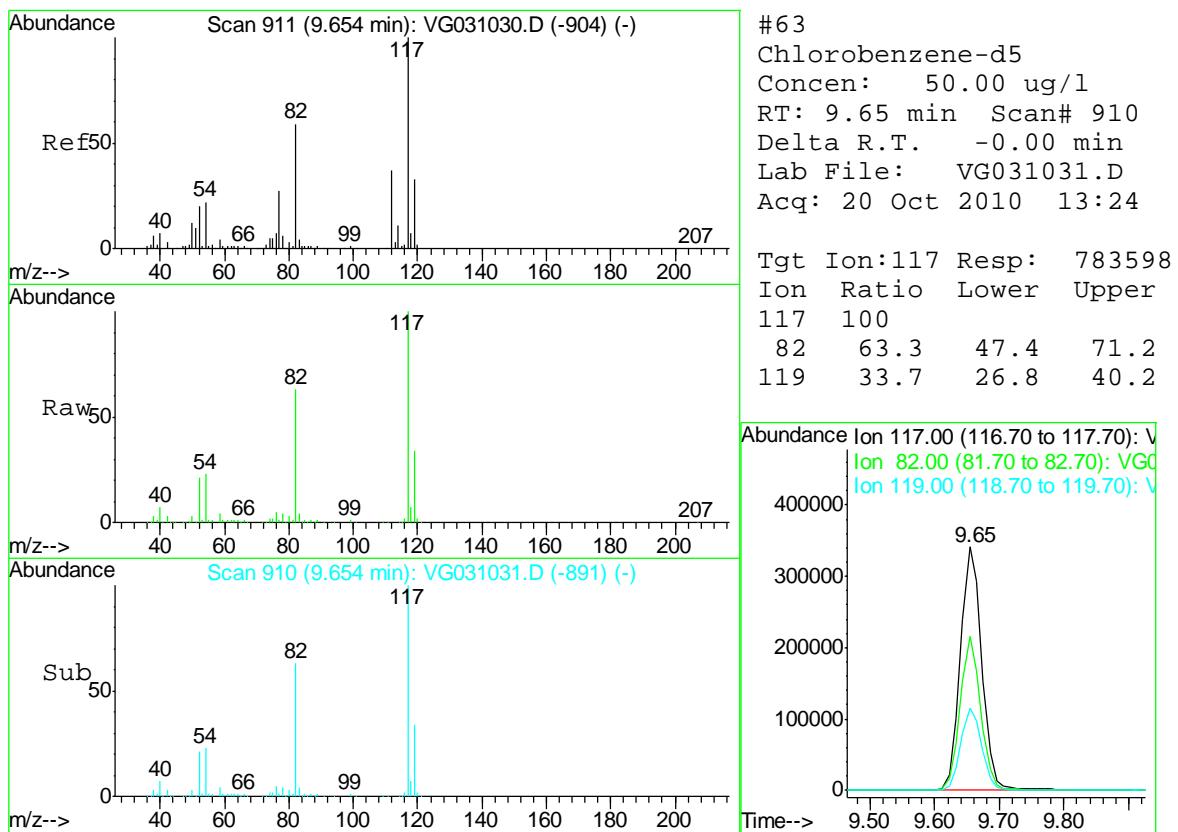
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Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 20 11:05:07 2010  
Response via : Initial Calibration











Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031031.D  
 Acq On : 20 Oct 2010 13:24  
 Operator : PS  
 Sample : VBG1020W1  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 20 13:48:08 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 20 11:05:07 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	610030	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.70	114	990083	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.65	117	783598	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	435417	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.87	65	428079	50.10	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.20%	
35) Dibromofluoromethane	3.23	113	419995	53.65	ug/l	0.00
Spiked Amount	50.000		Recovery	=	107.30%	
50) Toluene-d8	7.15	98	955913	44.53	ug/l	0.00
Spiked Amount	50.000		Recovery	=	89.06%	
62) 4-Bromofluorobenzene	11.62	95	438479	45.96	ug/l	0.00
Spiked Amount	50.000		Recovery	=	91.92%	

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

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

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031031.D  
 Acq On : 20 Oct 2010 13:24  
 Operator : PS  
 Sample : VBG1020W1  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Title : SW846 8260

Signal : TIC

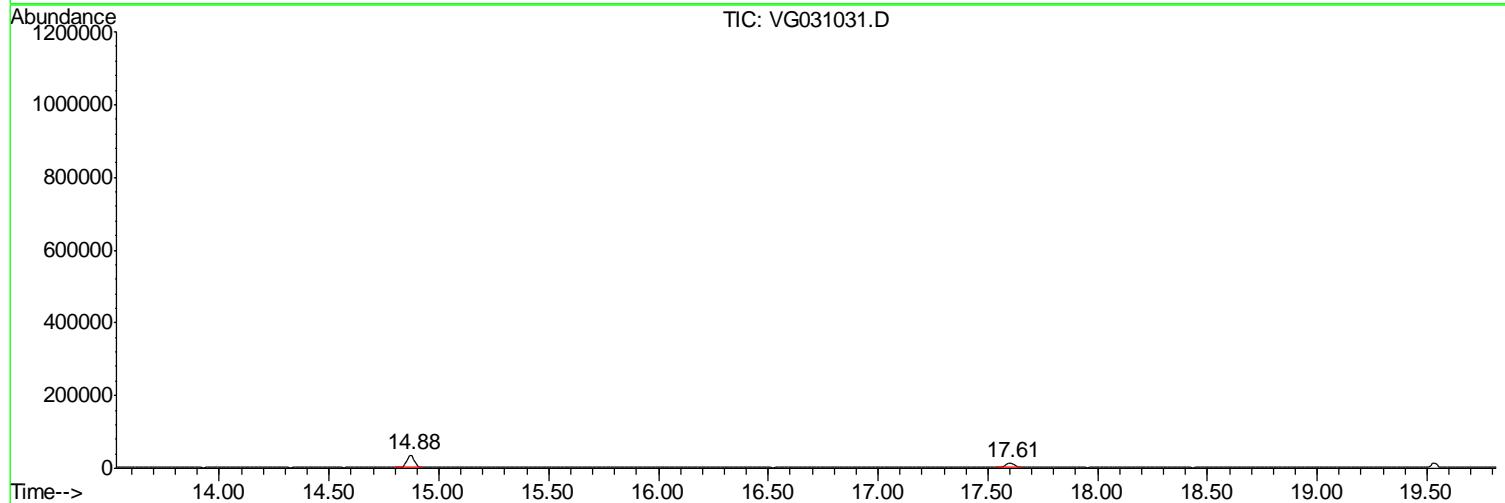
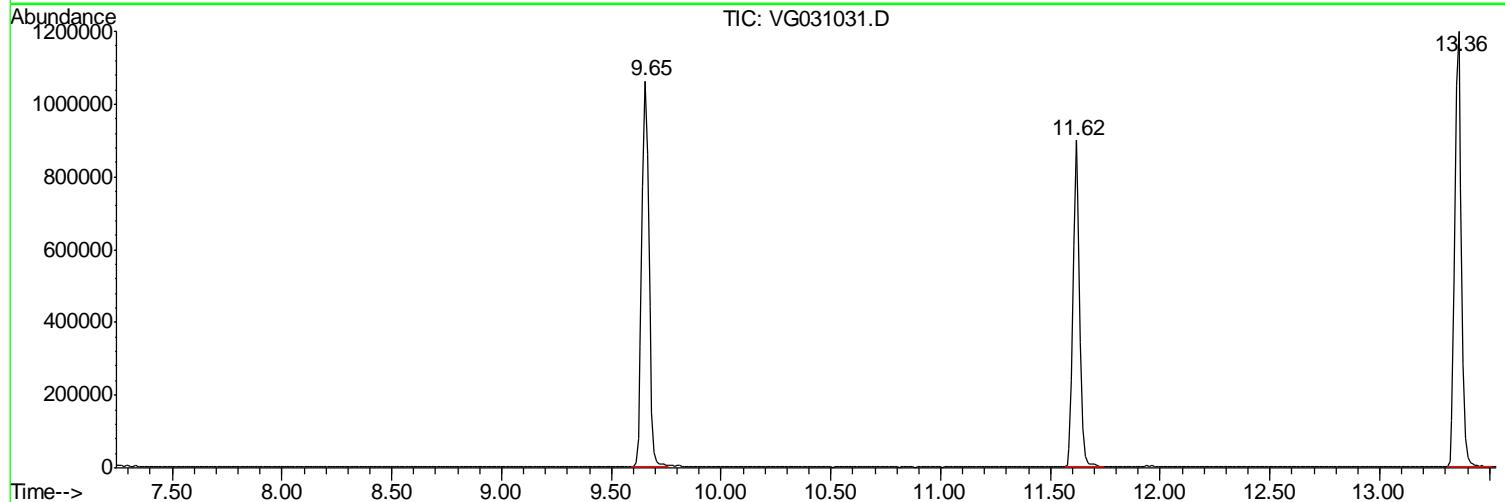
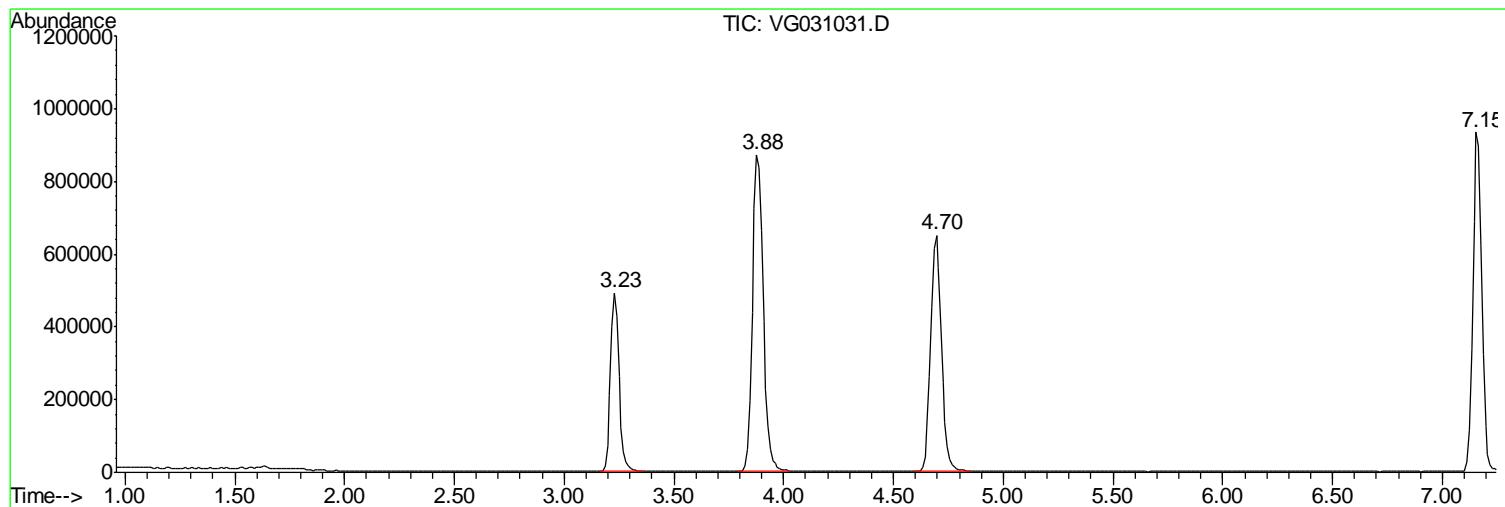
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.229	290	296	308	rBV	490987	1336716	45.04%	8.269%
2	3.877	350	358	372	rBV2	870440	2967547	100.00%	18.357%
3	4.695	427	436	451	rBV	650575	2293155	77.27%	14.186%
4	7.154	665	671	683	rBV	932570	2615775	88.15%	16.181%
5	9.654	904	910	920	rBV	1062178	2385336	80.38%	14.756%
6	11.616	1093	1098	1110	rVB	895539	1899352	64.00%	11.749%
7	13.360	1260	1265	1279	rVB	1196302	2550216	85.94%	15.776%
8	14.876	1403	1410	1414	rBV	33458	84380	2.84%	0.522%
9	17.606	1666	1672	1676	rBV	12111	32931	1.11%	0.204%

Sum of corrected areas: 16165408

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
Data File : VG031031.D  
Acq On : 20 Oct 2010 13:24  
Operator : PS  
Sample : VBG1020W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
Data File : VG031031.D  
Acq On : 20 Oct 2010 13:24  
Operator : PS  
Sample : VBG1020W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

## Tentatively Identified Compound (LSC) summary

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
Data File : VG031031.D  
Acq On : 20 Oct 2010 13:24  
Operator : PS  
Sample : VBG1020W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 3 Sample Multiplier: 1

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---		
					#	RT	Resp

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**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSF1018W1			SDG No.:	B3902		
Lab Sample ID:	BSF1018W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024094.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	22		0.2	0.5	1	ug/L
74-87-3	Chloromethane	23		0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	23		0.34	0.5	1	ug/L
74-83-9	Bromomethane	24		0.2	0.5	1	ug/L
75-00-3	Chloroethane	19		0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	22		0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	24		0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	22		0.47	0.5	1	ug/L
67-64-1	Acetone	100		0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	24		0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	23		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	22		0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	23		0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	23		0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	23		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	22		0.2	0.5	1	ug/L
78-93-3	2-Butanone	110		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	20		0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	22		0.35	0.5	1	ug/L
67-66-3	Chloroform	22		0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	21		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	20		0.2	0.5	1	ug/L
71-43-2	Benzene	20		0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	20		0.48	0.5	1	ug/L
79-01-6	Trichloroethene	19		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	20		0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	20		0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	110		2.1	2.5	5	ug/L
108-88-3	Toluene	19		0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	21		0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	20		0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	20		0.38	0.5	1	ug/L
591-78-6	2-Hexanone	110		1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	20		0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	20		0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSF1018W1			SDG No.:	B3902		
Lab Sample ID:	BSF1018W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024094.D	1		10/18/10	VF101810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	17		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	19		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	20		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	39		0.95	1	2	ug/L
95-47-6	o-Xylene	19		0.43	0.5	1	ug/L
100-42-5	Styrene	20		0.36	0.5	1	ug/L
75-25-2	Bromoform	20		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	19		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	20		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	19		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	20		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	19		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	20		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	19		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.1		66 - 150		92%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		76 - 130		100%	SPK: 50
2037-26-5	Toluene-d8	46.1		78 - 121		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	45		70 - 131		90%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1503710	3.23				
540-36-3	1,4-Difluorobenzene	2831100	3.64				
3114-55-4	Chlorobenzene-d5	2561780	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1355730	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

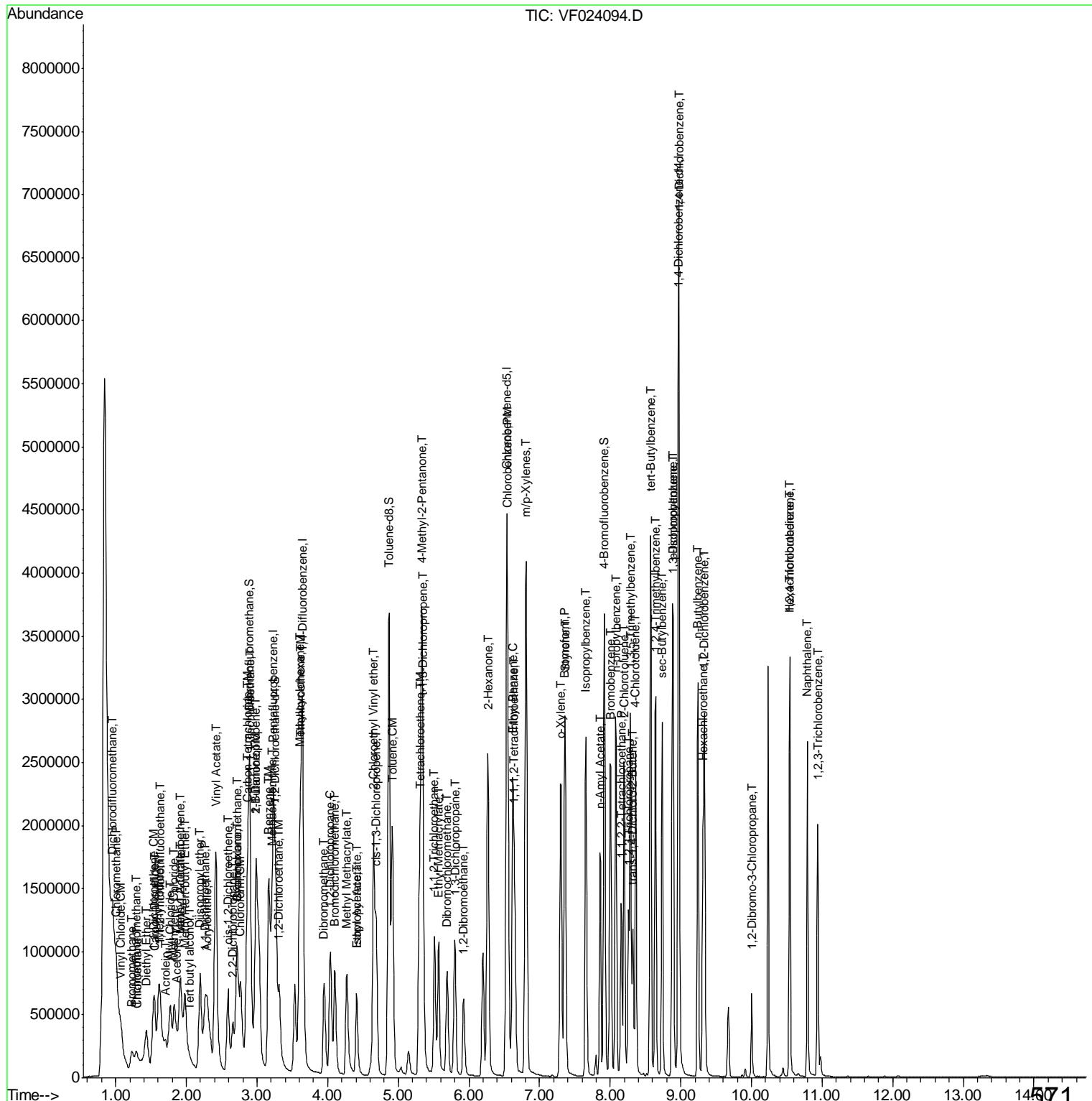
N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024094.D  
Acq On : 18 Oct 2010 13:26  
Operator : MS  
Sample : BSF1018W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 13:57:04 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024094.D  
 Acq On : 18 Oct 2010 13:26  
 Operator : MS  
 Sample : BSF1018W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 13:57:04 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.23	168	1503706	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.64	114	2831104	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.53	117	2561783	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1355730	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.26	65	1043841	46.14	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	92.28%	
36) Dibromofluoromethane	2.89	113	967389	50.13	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	100.26%	
49) Toluene-d8	4.87	98	3007792	46.10	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	92.20%	
62) 4-Bromofluorobenzene	7.92	95	1230121	45.02	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	90.04%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.96	85	442761	21.93	ug/l 97
3) Chloromethane	1.02	50	503725	22.85	ug/l 99
4) Vinyl Chloride	1.08	62	442997	22.86	ug/l 99
5) Bromomethane	1.23	94	217843	23.88	ug/l 95
6) Chloroethane	1.30	64	137246	18.51	ug/l 89
7) Trichlorofluoromethane	1.29	101	350414m	22.01	ug/l
8) Tert butyl alcohol	2.05	59	226931	112.06	ug/l # 100
9) Diethyl Ether	1.44	74	170886	20.10	ug/l 100
10) 1,1-Dichloroethene	1.53	96	327484m	21.76	ug/l
11) Methyl Iodide	1.61	142	712299m	23.15	ug/l
12) Acrolein	1.71	56	174098	121.56	ug/l 97
13) 1,1,2-Trichlorotrifluoroet	1.63	101	318547	24.19	ug/l 99
14) Acrylonitrile	2.30	53	771631	124.80	ug/l 99
15) Allyl Chloride	1.77	41	543969	26.51	ug/l 98
16) Acetone	1.86	43	466226	102.74	ug/l 99
17) Carbon Disulfide	1.55	76	1052914m	23.70	ug/l
18) Methyl Acetate	1.92	43	441516m	21.74	ug/l
19) Methyl tert-butyl Ether	1.98	73	896219	22.99	ug/l 98
20) Methylene Chloride	1.83	84	368703m	22.73	ug/l
21) trans-1,2-Dichloroethene	1.92	96	321457	22.53	ug/l 100
23) Diisopropyl ether	2.19	45	1097521	23.55	ug/l 100
24) Vinyl Acetate	2.42	43	3998457	120.26	ug/l 99
25) 1,1-Dichloroethane	2.26	63	612997	23.27	ug/l 99
26) 2-Butanone	2.99	43	1747224	112.04	ug/l 100
27) 2,2-Dichloropropane	2.66	77	361744	22.16	ug/l 97
28) cis-1,2-Dichloroethene	2.59	96	451282	21.91	ug/l 99
29) Bromochloromethane	2.72	128	188313	18.78	ug/l 96
30) Chloroform	2.77	83	685145	22.24	ug/l 99
31) Ethyl Acetate	4.41	43	825057	22.23	ug/l # 99
32) Cyclohexane	2.72	56	340316	21.90	ug/l 98
33) 1,1,1-Trichloroethane	2.91	97	510830	20.51	ug/l 99
37) 1,1-Dichloropropene	2.99	75	597536	20.18	ug/l 99
38) Carbon Tetrachloride	2.86	117	539857	19.70	ug/l 100
39) Benzene	3.17	78	1597635	19.88	ug/l 99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
 Data File : VF024094.D  
 Acq On : 18 Oct 2010 13:26  
 Operator : MS  
 Sample : BSF1018W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 13:57:04 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 18 12:24:30 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.20	41	362118	21.60	ug/l	# 95
41) 1,2-Dichloroethane	3.32	62	569715	20.36	ug/l	100
43) Isopropyl Acetate	4.41	43	825057	21.52	ug/l	# 99
44) Trichloroethene	3.61	130	478098	19.05	ug/l	91
45) Methylcyclohexane	3.61	83	580037	20.05	ug/l	98
46) 1,2-Dichloropropane	4.04	63	452700	20.35	ug/l	100
47) Dibromomethane	3.95	93	369283	20.06	ug/l	98
48) Bromodichloromethane	4.11	83	657057	20.21	ug/l	99
50) 4-Methyl-2-Pentanone	5.33	43	3095602	110.87	ug/l	100
51) Toluene	4.92	92	989781	19.29	ug/l	100
52) t-1,3-Dichloropropene	5.36	75	724507	21.15	ug/l	99
53) Methyl Methacrylate	4.27	69	384031	20.64	ug/l	100
54) cis-1,3-Dichloropropene	4.69	75	787082	20.37	ug/l	100
55) 1,1,2-Trichloroethane	5.51	97	433924	20.00	ug/l	99
56) Ethyl Methacrylate	5.57	69	655895	20.97	ug/l	99
57) 1,3-Dichloropropene	5.80	76	774452	20.25	ug/l	100
58) 2-Chloroethyl Vinyl ether	4.65	63	1027188	73.32	ug/l	100
59) 2-Hexanone	6.27	43	2215385	108.25	ug/l	100
60) Dibromochloromethane	5.69	129	535793	20.29	ug/l	98
61) 1,2-Dibromoethane	5.93	107	511069	19.70	ug/l	100
64) Tetrachloroethene	5.30	164	395600	17.05	ug/l	99
65) Chlorobenzene	6.55	112	1147897	19.38	ug/l	100
66) 1,1,1,2-Tetrachloroethane	6.65	131	421513	19.52	ug/l	99
67) Ethyl Benzene	6.62	106	548381	19.59	ug/l	99
68) m/p-Xylenes	6.81	106	1393637	39.18	ug/l	99
69) o-Xylene	7.30	106	699158	19.42	ug/l	99
70) Styrene	7.36	104	1193261	19.92	ug/l	99
71) Bromoform	7.35	173	373043	20.20	ug/l	# 100
73) Isopropylbenzene	7.66	105	1847400	19.41	ug/l	100
74) n-Amyl Acetate	7.86	43	1017018	20.82	ug/l	99
75) 1,1,2,2-Tetrachloroethane	8.16	83	679871	20.16	ug/l	99
76) 1,2,3-Trichloropropane	8.26	75	498472	20.17	ug/l	99
77) Bromobenzene	8.00	156	482125	19.07	ug/l	99
78) n-propylbenzene	8.08	91	2159270	19.72	ug/l	100
79) 2-Chlorotoluene	8.20	91	1330305	19.72	ug/l	99
80) 1,3,5-Trimethylbenzene	8.29	105	1430433	19.51	ug/l	100
81) trans-1,4-Dichloro-2-Buten	8.32	75	289319	21.64	ug/l	95
83) 4-Chlorotoluene	8.36	91	1359118	19.64	ug/l	99
84) tert-Butylbenzene	8.57	119	1449726	20.28	ug/l	98
85) 1,2,4-Trimethylbenzene	8.64	105	1496047	19.71	ug/l	100
86) sec-Butylbenzene	8.73	105	1884089	19.84	ug/l	99
87) p-Isopropyltoluene	8.88	119	1501543	19.56	ug/l	100
88) 1,3-Dichlorobenzene	8.89	146	894768	19.26	ug/l	100
89) 1,4-Dichlorobenzene	8.98	146	929717	19.51	ug/l	99
91) n-Butylbenzene	9.24	91	1462758	19.87	ug/l	99
92) Hexachloroethane	9.32	117	385311	19.76	ug/l	98
93) 1,2-Dichlorobenzene	9.33	146	872164	19.19	ug/l	100
95) 1,2-Dibromo-3-Chloropropan	10.00	75	127627	19.87	ug/l	98
96) 1,2,4-Trichlorobenzene	10.54	180	561478	19.26	ug/l	99
97) Hexachlorobutadiene	10.54	225	178913	20.30	ug/l	100

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101810\  
Data File : VF024094.D  
Acq On : 18 Oct 2010 13:26  
Operator : MS  
Sample : BSF1018W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 13:57:04 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 18 12:24:30 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.79	128	1595833	19.37	ug/l	99
99) 1,2,3-Trichlorobenzene	10.94	180	501665	18.82	ug/l	99

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

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSF1019W1			SDG No.:	B3902		
Lab Sample ID:	BSF1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024110.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	22		0.2	0.5	1	ug/L
74-87-3	Chloromethane	25		0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	25		0.34	0.5	1	ug/L
74-83-9	Bromomethane	31		0.2	0.5	1	ug/L
75-00-3	Chloroethane	29		0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	27		0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	24		0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	23		0.47	0.5	1	ug/L
67-64-1	Acetone	160		0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	25		0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	25		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	21		0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	24		0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	24		0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	24		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	23		0.2	0.5	1	ug/L
78-93-3	2-Butanone	110		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	20		0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	23		0.35	0.5	1	ug/L
67-66-3	Chloroform	23		0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	20		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	19		0.2	0.5	1	ug/L
71-43-2	Benzene	19		0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	20		0.48	0.5	1	ug/L
79-01-6	Trichloroethene	19		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	20		0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	20		0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	100		2.1	2.5	5	ug/L
108-88-3	Toluene	19		0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	20		0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	20		0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	20		0.38	0.5	1	ug/L
591-78-6	2-Hexanone	100		1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	19		0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	19		0.41	0.5	1	ug/L

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**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSF1019W1			SDG No.:	B3902		
Lab Sample ID:	BSF1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024110.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	22		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	19		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	20		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	39		0.95	1	2	ug/L
95-47-6	o-Xylene	19		0.43	0.5	1	ug/L
100-42-5	Styrene	20		0.36	0.5	1	ug/L
75-25-2	Bromoform	20		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	19		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	19		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	19		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	19		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	20		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	19		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.4		66 - 150		93%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		76 - 130		96%	SPK: 50
2037-26-5	Toluene-d8	45.7		78 - 121		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.2		70 - 131		88%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1395920	3.24				
540-36-3	1,4-Difluorobenzene	2650890	3.65				
3114-55-4	Chlorobenzene-d5	2367760	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	1275260	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

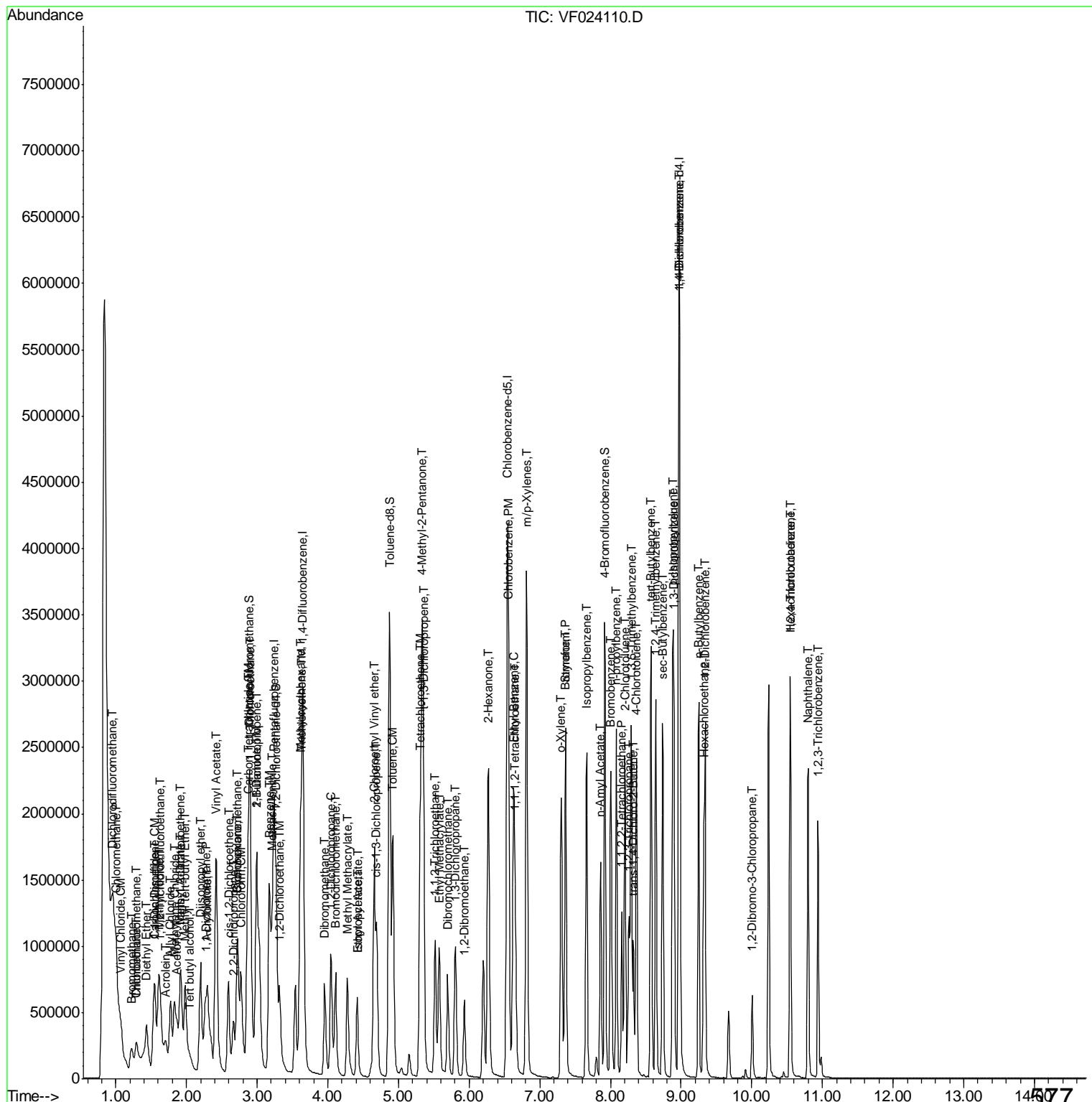
N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024110.D  
 Acq On : 19 Oct 2010 12:42  
 Operator : MS  
 Sample : BSF1019W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 19 12:58:47 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024110.D  
 Acq On : 19 Oct 2010 12:42  
 Operator : MS  
 Sample : BSF1019W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 19 12:58:47 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1395916	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2650894	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2367755	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1275255	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.27	65	974509	46.41	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	92.82%	
36) Dibromofluoromethane	2.90	113	870163	48.16	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	96.32%	
49) Toluene-d8	4.87	98	2791680	45.70	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	91.40%	
62) 4-Bromofluorobenzene	7.92	95	1131033	44.21	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	88.42%	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	0.96	85	417641	22.28 ug/l 100
3) Chloromethane	1.01	50	506448	24.75 ug/l 99
4) Vinyl Chloride	1.07	62	452018	25.12 ug/l 99
5) Bromomethane	1.22	94	258997	31.25 ug/l 96
6) Chloroethane	1.30	64	191351	28.70 ug/l 95
7) Trichlorofluoromethane	1.29	101	403997m	27.34 ug/l
8) Tert butyl alcohol	2.05	59	205474	109.30 ug/l # 100
9) Diethyl Ether	1.44	74	185680	23.72 ug/l 96
10) 1,1-Dichloroethene	1.54	96	318338m	22.85 ug/l
11) Methyl Iodide	1.61	142	705170m	24.69 ug/l
12) Acrolein	1.71	56	158038	118.41 ug/l 96
13) 1,1,2-Trichlorotrifluoroet	1.63	101	292953	23.96 ug/l 98
14) Acrylonitrile	2.30	53	726447	126.57 ug/l 100
15) Allyl Chloride	1.77	41	521832	27.51 ug/l 97
16) Acetone	1.87	43	646217	157.53 ug/l 99
17) Carbon Disulfide	1.55	76	1041550m	25.25 ug/l
18) Methyl Acetate	1.92	43	387519	20.51 ug/l 98
19) Methyl tert-butyl Ether	1.98	73	892254	24.66 ug/l 97
20) Methylene Chloride	1.83	84	358421m	23.80 ug/l
21) trans-1,2-Dichloroethene	1.92	96	315858	23.85 ug/l 97
23) Diisopropyl ether	2.20	45	1068686	24.70 ug/l 99
24) Vinyl Acetate	2.42	43	3415469	110.66 ug/l 100
25) 1,1-Dichloroethane	2.27	63	584564	23.90 ug/l 99
26) 2-Butanone	2.99	43	1524261	105.29 ug/l 100
27) 2,2-Dichloropropane	2.66	77	337653	22.28 ug/l 98
28) cis-1,2-Dichloroethene	2.60	96	434725	22.74 ug/l 99
29) Bromochloromethane	2.72	128	178093	19.14 ug/l 84
30) Chloroform	2.77	83	659418	23.06 ug/l 100
31) Ethyl Acetate	4.42	43	732538	21.26 ug/l # 99
32) Cyclohexane	2.72	56	331609	22.99 ug/l 79
33) 1,1,1-Trichloroethane	2.91	97	472749	20.45 ug/l 99
37) 1,1-Dichloropropene	2.99	75	552898	19.95 ug/l 99
38) Carbon Tetrachloride	2.87	117	516135	20.11 ug/l 99
39) Benzene	3.17	78	1466069	19.48 ug/l 99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024110.D  
 Acq On : 19 Oct 2010 12:42  
 Operator : MS  
 Sample : BSF1019W1  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 19 12:58:47 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.21	41	323201	20.59	ug/l	# 92
41) 1,2-Dichloroethane	3.32	62	530537	20.25	ug/l	98
43) Isopropyl Acetate	4.42	43	732538	20.40	ug/l	99
44) Trichloroethene	3.62	130	448443	19.08	ug/l	91
45) Methylcyclohexane	3.61	83	518930	19.15	ug/l	97
46) 1,2-Dichloropropane	4.04	63	418659	20.10	ug/l	100
47) Dibromomethane	3.95	93	341743	19.83	ug/l	99
48) Bromodichloromethane	4.11	83	603211	19.81	ug/l	100
50) 4-Methyl-2-Pentanone	5.34	43	2731448	104.48	ug/l	99
51) Toluene	4.92	92	920971	19.17	ug/l	100
52) t-1,3-Dichloropropene	5.36	75	642799	20.04	ug/l	99
53) Methyl Methacrylate	4.28	69	341064	19.57	ug/l	99
54) cis-1,3-Dichloropropene	4.69	75	711085	19.65	ug/l	99
55) 1,1,2-Trichloroethane	5.52	97	397394	19.56	ug/l	99
56) Ethyl Methacrylate	5.58	69	586099	20.01	ug/l	99
57) 1,3-Dichloropropene	5.81	76	708640	19.79	ug/l	99
58) 2-Chloroethyl Vinyl ether	4.66	63	898750	68.52	ug/l	100
59) 2-Hexanone	6.27	43	2005825	104.67	ug/l	100
60) Dibromochloromethane	5.70	129	479369	19.39	ug/l	100
61) 1,2-Dibromoethane	5.93	107	473539	19.49	ug/l	99
64) Tetrachloroethene	5.31	164	478928	22.33	ug/l	99
65) Chlorobenzene	6.56	112	1049457	19.17	ug/l	99
66) 1,1,1,2-Tetrachloroethane	6.65	131	394013	19.75	ug/l	96
67) Ethyl Benzene	6.63	106	508131	19.64	ug/l	99
68) m/p-Xylenes	6.82	106	1279376	38.92	ug/l	99
69) o-Xylene	7.31	106	644554	19.37	ug/l	99
70) Styrene	7.37	104	1098419	19.84	ug/l	99
71) Bromoform	7.36	173	339312	19.88	ug/l	# 99
73) Isopropylbenzene	7.66	105	1706011	19.06	ug/l	100
74) n-Amyl Acetate	7.86	43	915152	19.91	ug/l	99
75) 1,1,2,2-Tetrachloroethane	8.16	83	616442	19.44	ug/l	100
76) 1,2,3-Trichloropropane	8.26	75	460913	19.83	ug/l	99
77) Bromobenzene	8.01	156	442183	18.59	ug/l	99
78) n-propylbenzene	8.08	91	1985568	19.28	ug/l	99
79) 2-Chlorotoluene	8.20	91	1232866	19.43	ug/l	100
80) 1,3,5-Trimethylbenzene	8.29	105	1330585	19.30	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.32	75	254375	20.22	ug/l	96
83) 4-Chlorotoluene	8.37	91	1282749	19.71	ug/l	98
84) tert-Butylbenzene	8.58	119	1236306	18.39	ug/l	92
85) 1,2,4-Trimethylbenzene	8.64	105	1372307	19.22	ug/l	100
86) sec-Butylbenzene	8.74	105	1750576	19.59	ug/l	100
87) p-Isopropyltoluene	8.88	119	1407415	19.49	ug/l	100
88) 1,3-Dichlorobenzene	8.90	146	826327	18.91	ug/l	99
89) 1,4-Dichlorobenzene	8.98	146	867001	19.35	ug/l	99
91) n-Butylbenzene	9.25	91	1350657	19.51	ug/l	99
92) Hexachloroethane	9.32	117	354099	19.30	ug/l	99
93) 1,2-Dichlorobenzene	9.34	146	811781	18.99	ug/l	100
95) 1,2-Dibromo-3-Chloropropan	10.01	75	122208	20.23	ug/l	98
96) 1,2,4-Trichlorobenzene	10.55	180	520166	18.97	ug/l	99
97) Hexachlorobutadiene	10.54	225	159187	19.20	ug/l	99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024110.D  
Acq On : 19 Oct 2010 12:42  
Operator : MS  
Sample : BSF1019W1  
Misc : 5.0mL,MSVOAF  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 19 12:58:47 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.80	128	1526991	19.70	ug/l	100
99) 1,2,3-Trichlorobenzene	10.94	180	465748	18.57	ug/l	100

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

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSG1019W1			SDG No.:	B3902		
Lab Sample ID:	BSG1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031006.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	27		0.2	0.5	1	ug/L
74-87-3	Chloromethane	24		0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	24		0.34	0.5	1	ug/L
74-83-9	Bromomethane	29		0.2	0.5	1	ug/L
75-00-3	Chloroethane	25		0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	24		0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	23		0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	23		0.47	0.5	1	ug/L
67-64-1	Acetone	100		0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	25		0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	21		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	18		0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	22		0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	21		0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	22		0.36	0.5	1	ug/L
110-82-7	Cyclohexane	22		0.2	0.5	1	ug/L
78-93-3	2-Butanone	89		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	21		0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	21		0.35	0.5	1	ug/L
67-66-3	Chloroform	22		0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	22		0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	22		0.2	0.5	1	ug/L
71-43-2	Benzene	22		0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	21		0.48	0.5	1	ug/L
79-01-6	Trichloroethene	24		0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	21		0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	21		0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	93		2.1	2.5	5	ug/L
108-88-3	Toluene	20		0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	21		0.29	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	21		0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	20		0.38	0.5	1	ug/L
591-78-6	2-Hexanone	110		1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	20		0.2	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	20		0.41	0.5	1	ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSG1019W1			SDG No.:	B3902		
Lab Sample ID:	BSG1019W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031006.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	22		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	21		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	21		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	42		0.95	1	2	ug/L
95-47-6	o-Xylene	21		0.43	0.5	1	ug/L
100-42-5	Styrene	20		0.36	0.5	1	ug/L
75-25-2	Bromoform	22		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	20		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	16		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	20		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	20		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	20		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	21		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	21		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	45.4		66 - 150		91%	SPK: 50
1868-53-7	Dibromofluoromethane	45.4		76 - 130		91%	SPK: 50
2037-26-5	Toluene-d8	44.2		78 - 121		88%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.7		70 - 131		89%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	594953	3.89				
540-36-3	1,4-Difluorobenzene	973217	4.7				
3114-55-4	Chlorobenzene-d5	775395	9.65				
3855-82-1	1,4-Dichlorobenzene-d4	411555	13.35				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

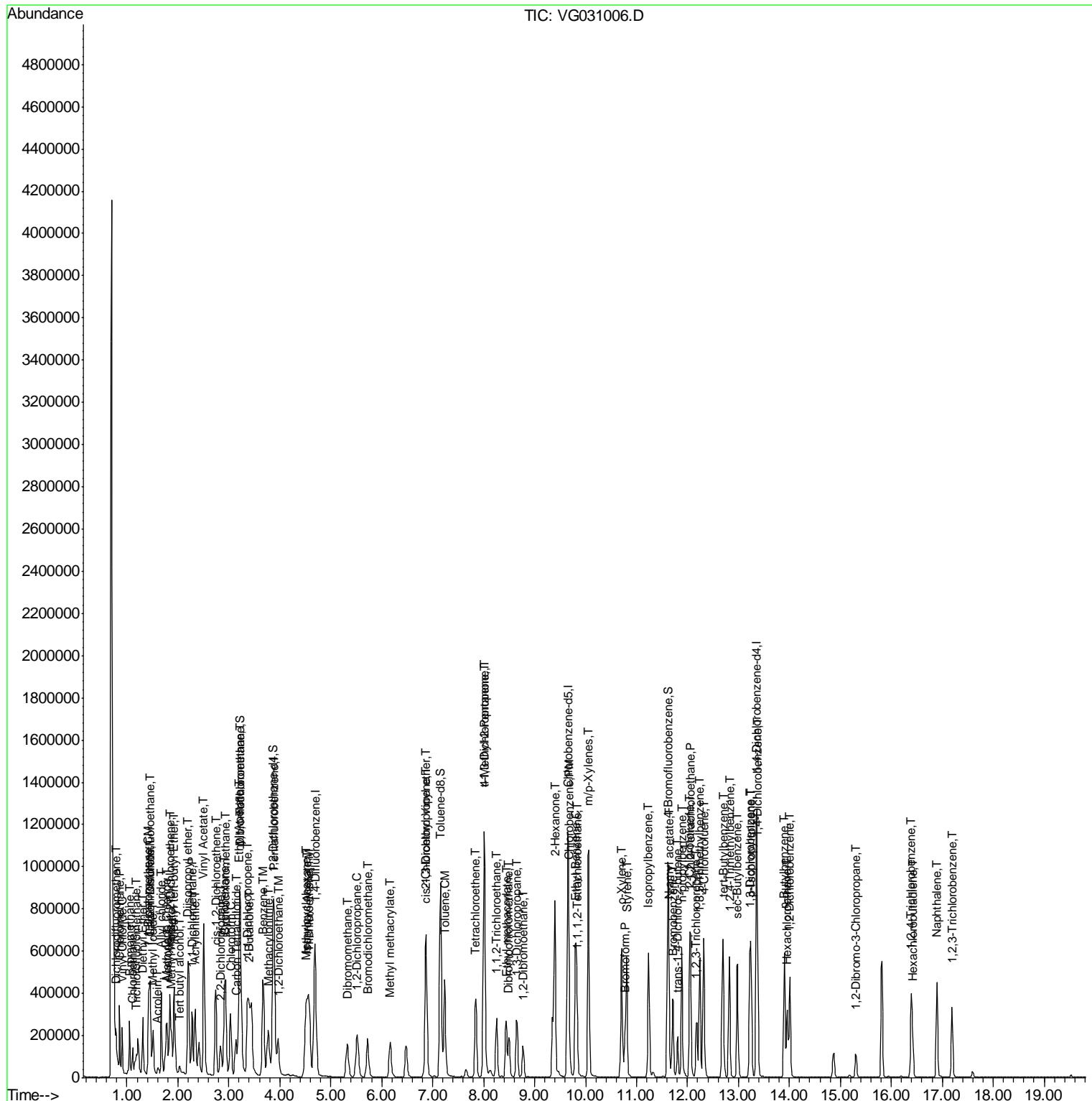
N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031006.D  
 Acq On : 19 Oct 2010 12:57  
 Operator : PS  
 Sample : BSG1019W1  
 Misc : 5mL MSVOA G  
 ALS Vial : 4 Sample Multiplier: 1

Ouant Time: Oct 19 12:52:40 2010  
 Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031006.D  
 Acq On : 19 Oct 2010 12:57  
 Operator : PS  
 Sample : BSG1019W1  
 Misc : 5mL MSVOA G  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 19 12:52:40 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	594953	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.70	114	973217	50.00	ug/l	0.01
63) Chlorobenzene-d5	9.65	117	775395	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	411555	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.87	65	378766	45.45	ug/l	0.00
Spiked Amount 50.000				Recovery	=	90.90%
35) Dibromofluoromethane	3.23	113	349485	45.42	ug/l	0.00
Spiked Amount 50.000				Recovery	=	90.84%
50) Toluene-d8	7.15	98	932178	44.17	ug/l	0.00
Spiked Amount 50.000				Recovery	=	88.34%
62) 4-Bromofluorobenzene	11.62	95	419119	44.69	ug/l	0.00
Spiked Amount 50.000				Recovery	=	89.38%
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	167550	27.49	ug/l	99
3) Chloromethane	0.85	50	222432	23.85	ug/l	99
4) Vinyl Chloride	0.91	62	160054	23.61	ug/l	96
5) Bromomethane	1.05	94	125654	29.17	ug/l	98
6) Chloroethane	1.11	64	88217	25.18	ug/l	93
7) Trichlorofluoromethane	1.19	101	166102	23.94	ug/l	95
8) Diethyl Ether	1.31	74	92202	22.32	ug/l	98
9) 1,1,2-Trichlorotrifluoroet	1.46	101	122616	22.69	ug/l	97
10) Methyl Iodide	1.51	142	234217	24.27	ug/l	99
11) Tert butyl alcohol	2.03	59	83826	85.36	ug/l	96
12) 1,1-Dichloroethene	1.43	96	132287	23.44	ug/l	90
13) Acrolein	1.60	56	30512	97.26	ug/l	96
14) Allyl chloride	1.68	41	216036	22.32	ug/l	96
15) Acrylonitrile	2.34	53	328447	96.07	ug/l	100
16) Acetone	1.79	43	267996	100.18	ug/l	99
17) Carbon Disulfide	1.46	76	351572	24.64	ug/l	95
18) Methyl Acetate	1.88	43	264419	17.61	ug/l	99
19) Methyl tert-butyl Ether	1.93	73	469391	20.59	ug/l	99
20) Methylene Chloride	1.77	84	133889	22.00	ug/l	96
21) trans-1,2-Dichloroethene	1.84	96	138967	21.32	ug/l	95
23) Diisopropyl ether	2.20	45	618916	20.40	ug/l	98
24) Vinyl Acetate	2.50	43	1294219	94.25	ug/l	96
25) 1,1-Dichloroethane	2.27	63	324494	21.98	ug/l	99
26) 2-Butanone	3.40	43	651953	89.27	ug/l	97
27) 2,2-Dichloropropane	2.84	77	138426	21.81	ug/l	100
28) cis-1,2-Dichloroethene	2.74	96	220162	21.48	ug/l	98
29) Bromochloromethane	2.93	49	127117	16.70	ug/l	99
30) Chloroform	3.04	83	323901	21.59	ug/l	92
31) Cyclohexane	2.92	56	233317	21.63	ug/l	98
32) 1,1,1-Trichloroethane	3.22	97	198126	21.70	ug/l	98
36) 1,1-Dichloropropene	3.36	75	249777	22.40	ug/l	99
37) Ethyl Acetate	3.21	43	255814	19.06	ug/l	100
38) Carbon Tetrachloride	3.14	117	201636	21.43	ug/l	96
39) Methylcyclohexane	4.52	83	218623	21.73	ug/l	100

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031006.D  
 Acq On : 19 Oct 2010 12:57  
 Operator : PS  
 Sample : BSG1019W1  
 Misc : 5mL MSVOA G  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 19 12:52:40 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.67	78	617508	21.50	ug/l	99
41) Methacrylonitrile	3.77	41	128200	19.45	ug/l	95
42) 1,2-Dichloroethane	3.97	62	210853	21.01	ug/l	100
43) Isopropyl Acetate	4.54	43	347376	18.89	ug/l	99
45) Trichloroethene	4.57	130	169293	23.65	ug/l	90
46) 1,2-Dichloropropane	5.51	63	146774	20.72	ug/l	95
47) Dibromomethane	5.32	93	118873	21.29	ug/l	99
48) Bromodichloromethane	5.72	83	216807	21.29	ug/l	94
49) Methyl methacrylate	6.16	41	153622	20.04	ug/l	99
51) 4-Methyl-2-Pentanone	8.01	43	1076645	93.28	ug/l	99
52) Toluene	7.24	92	318996	19.74	ug/l	98
53) t-1,3-Dichloropropene	8.02	75	205700	20.96	ug/l	100
54) cis-1,3-Dichloropropene	6.86	75	249142	20.98	ug/l	94
55) 1,1,2-Trichloroethane	8.25	97	125261	19.62	ug/l	94
56) Ethyl methacrylate	8.44	69	204135	19.40	ug/l	98
57) 1,3-Dichloropropane	8.66	76	243732	20.37	ug/l	99
58) 2-Chloroethyl Vinyl ether	6.87	63	324802	133.32	ug/l	98
59) 2-Hexanone	9.40	43	846104m	112.07	ug/l	
60) Dibromochloromethane	8.49	129	134588	20.43	ug/l	99
61) 1,2-Dibromoethane	8.77	107	143995	20.38	ug/l	98
64) Tetrachloroethene	7.84	164	135987	22.21	ug/l	97
65) Chlorobenzene	9.67	112	322367	21.18	ug/l	97
66) 1,1,1,2-Tetrachloroethane	9.83	131	125968	22.78	ug/l	98
67) Ethyl Benzene	9.80	91	599166	21.05	ug/l	97
68) m/p-Xylenes	10.06	106	434281	41.84	ug/l	96
69) o-Xylene	10.71	106	230670	21.12	ug/l	100
70) Styrene	10.80	104	350506	20.46	ug/l	99
71) Bromoform	10.77	173	91326	21.55	ug/l	# 98
73) Isopropylbenzene	11.23	105	564370	20.14	ug/l	99
74) N-amyl acetate	11.64	43	337724	19.57	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.06	83	165634	16.18	ug/l	99
76) 1,2,3-Trichloropropane	12.17	75	167842	20.26	ug/l	99
77) Bromobenzene	11.72	156	143725	20.22	ug/l	97
78) n-propylbenzene	11.89	91	664229	19.68	ug/l	98
79) 2-Chlorotoluene	12.05	91	442005	20.69	ug/l	97
80) 1,3,5-Trimethylbenzene	12.24	105	419787	20.05	ug/l	99
81) trans-1,4-Dichloro-2-butene	11.81	75	64384	22.57	ug/l	97
82) 4-Chlorotoluene	12.32	91	431430	19.96	ug/l	98
83) tert-Butylbenzene	12.70	119	391480	19.35	ug/l	97
84) 1,2,4-Trimethylbenzene	12.83	105	443028	19.93	ug/l	98
85) sec-Butylbenzene	12.98	105	546389	18.93	ug/l	100
86) p-Isopropyltoluene	13.25	119	424815	19.67	ug/l	99
87) 1,3-Dichlorobenzene	13.22	146	267851	19.67	ug/l	99
88) 1,4-Dichlorobenzene	13.37	146	258030	19.52	ug/l	98
89) n-Butylbenzene	13.90	91	443128	19.03	ug/l	99
90) Hexachloroethane	13.96	117	111478	21.98	ug/l	97
91) 1,2-Dichlorobenzene	14.01	146	262514	20.32	ug/l	100
93) 1,2-Dibromo-3-Chloropropan	15.30	75	38194	20.63	ug/l	98
94) 1,2,4-Trichlorobenzene	16.39	180	158309	20.53	ug/l	99
95) Hexachlorobutadiene	16.42	225	41866	17.37	ug/l	99

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031006.D  
Acq On : 19 Oct 2010 12:57  
Operator : PS  
Sample : BSG1019W1  
Misc : 5mL MSVOA G  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 19 12:52:40 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.89	128	487729	21.30	ug/l	99
97) 1,2,3-Trichlorobenzene	17.20	180	142298	21.96	ug/l	99

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

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSG1020W1			SDG No.:	B3902		
Lab Sample ID:	BSG1020W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031032.D	1		10/20/10	VG102010

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	25	0.2	0.5	1		ug/L
74-87-3	Chloromethane	21	0.2	0.5	1		ug/L
75-01-4	Vinyl Chloride	21	0.34	0.5	1		ug/L
74-83-9	Bromomethane	23	0.2	0.5	1		ug/L
75-00-3	Chloroethane	20	0.2	0.5	1		ug/L
75-69-4	Trichlorofluoromethane	21	0.35	0.5	1		ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20	0.45	0.5	1		ug/L
75-35-4	1,1-Dichloroethene	20	0.47	0.5	1		ug/L
67-64-1	Acetone	78	0.5	2.5	5		ug/L
75-15-0	Carbon Disulfide	20	0.2	0.5	1		ug/L
1634-04-4	Methyl tert-butyl Ether	20	0.35	0.5	1		ug/L
79-20-9	Methyl Acetate	19	0.2	0.5	1		ug/L
75-09-2	Methylene Chloride	20	0.41	0.5	1		ug/L
156-60-5	trans-1,2-Dichloroethene	20	0.41	0.5	1		ug/L
75-34-3	1,1-Dichloroethane	20	0.36	0.5	1		ug/L
110-82-7	Cyclohexane	20	0.2	0.5	1		ug/L
78-93-3	2-Butanone	80	1.3	2.5	5		ug/L
56-23-5	Carbon Tetrachloride	22	0.2	0.5	1		ug/L
156-59-2	cis-1,2-Dichloroethene	19	0.35	0.5	1		ug/L
67-66-3	Chloroform	21	0.34	0.5	1		ug/L
71-55-6	1,1,1-Trichloroethane	21	0.4	0.5	1		ug/L
108-87-2	Methylcyclohexane	21	0.2	0.5	1		ug/L
71-43-2	Benzene	22	0.32	0.5	1		ug/L
107-06-2	1,2-Dichloroethane	22	0.48	0.5	1		ug/L
79-01-6	Trichloroethene	23	0.28	0.5	1		ug/L
78-87-5	1,2-Dichloropropane	21	0.46	0.5	1		ug/L
75-27-4	Bromodichloromethane	22	0.36	0.5	1		ug/L
108-10-1	4-Methyl-2-Pentanone	93	2.1	2.5	5		ug/L
108-88-3	Toluene	20	0.37	0.5	1		ug/L
10061-02-6	t-1,3-Dichloropropene	22	0.29	0.5	1		ug/L
10061-01-5	cis-1,3-Dichloropropene	21	0.31	0.5	1		ug/L
79-00-5	1,1,2-Trichloroethane	20	0.38	0.5	1		ug/L
591-78-6	2-Hexanone	100	1.9	2.5	5		ug/L
124-48-1	Dibromochloromethane	22	0.2	0.5	1		ug/L
106-93-4	1,2-Dibromoethane	21	0.41	0.5	1		ug/L

**Report of Analysis**

Client:	EA Engineering Science & Technology			Date Collected:			
Project:	Storonske Cooperage Site NYSDEC EA#14474.22			Date Received:			
Client Sample ID:	BSG1020W1			SDG No.:	B3902		
Lab Sample ID:	BSG1020W1			Matrix:	WATER		
Analytical Method:	SW8260B			% Moisture:	100		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031032.D	1		10/20/10	VG102010

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	27		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	21		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	21		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	42		0.95	1	2	ug/L
95-47-6	o-Xylene	21		0.43	0.5	1	ug/L
100-42-5	Styrene	21		0.36	0.5	1	ug/L
75-25-2	Bromoform	22		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	20		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	19		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	20		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	20		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	20		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	20		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	42		66 - 150		84%	SPK: 50
1868-53-7	Dibromofluoromethane	46.3		76 - 130		93%	SPK: 50
2037-26-5	Toluene-d8	42		78 - 121		84%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.1		70 - 131		86%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	627152		3.88			
540-36-3	1,4-Difluorobenzene	997128		4.7			
3114-55-4	Chlorobenzene-d5	824259		9.66			
3855-82-1	1,4-Dichlorobenzene-d4	446262		13.36			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
Data File : VG031032.D  
Acq On : 20 Oct 2010 13:58  
Operator : PS  
Sample : BSG1020W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 4 Sample Multiplier: 1

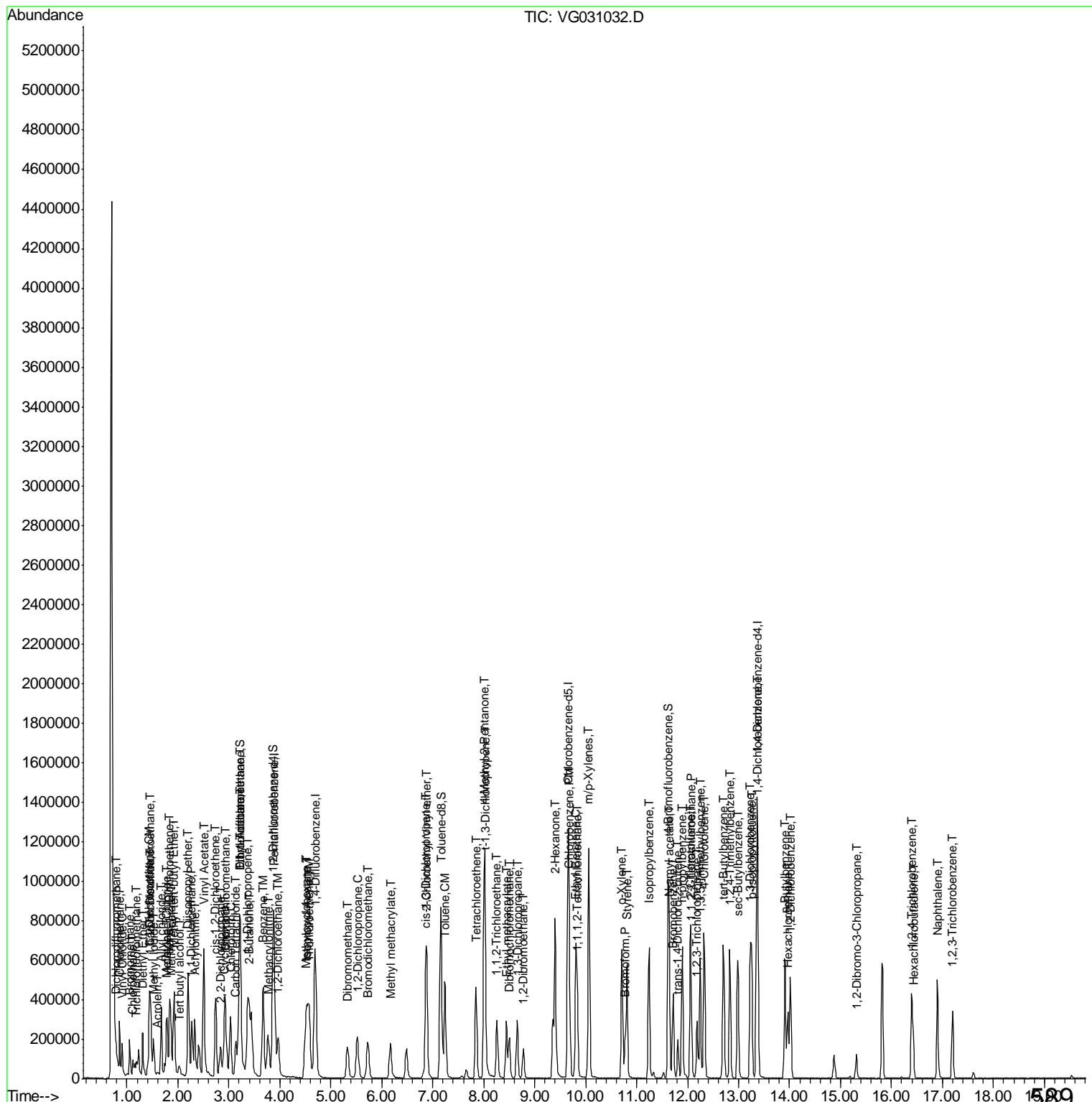
Quant Time: Oct 20 14:24:27 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

Last Update : Wed Oct 20 11:05:07 2010

Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031032.D  
 Acq On : 20 Oct 2010 13:58  
 Operator : PS  
 Sample : BSG1020W1  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 14:24:27 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Wed Oct 20 11:05:07 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.88	168	627152	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	4.70	114	997128	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.66	117	824259	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	446262	50.00	ug/l	0.01
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.87	65	368466	41.95	ug/l	0.00
Spiked Amount 50.000			Recovery	=	83.90%	
35) Dibromofluoromethane	3.22	113	365174	46.32	ug/l	0.00
Spiked Amount 50.000			Recovery	=	92.64%	
50) Toluene-d8	7.16	98	909168	42.05	ug/l	0.00
Spiked Amount 50.000			Recovery	=	84.10%	
62) 4-Bromofluorobenzene	11.62	95	414214	43.11	ug/l	0.00
Spiked Amount 50.000			Recovery	=	86.22%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	161424	25.12	ug/l	97
3) Chloromethane	0.85	50	202483	20.60	ug/l	94
4) Vinyl Chloride	0.91	62	148398	20.76	ug/l	97
5) Bromomethane	1.05	94	104951	22.59	ug/l	94
6) Chloroethane	1.11	64	72827	19.72	ug/l	95
7) Trichlorofluoromethane	1.19	101	157117	21.49	ug/l	96
8) Diethyl Ether	1.31	74	88542	20.34	ug/l	99
9) 1,1,2-Trichlorotrifluoroet	1.46	101	112420	19.74	ug/l	99
10) Methyl Iodide	1.52	142	211342	20.77	ug/l	100
11) Tert butyl alcohol	2.03	59	79767	75.46	ug/l	99
12) 1,1-Dichloroethene	1.44	96	121550	20.43	ug/l	95
13) Acrolein	1.60	56	15504	52.29	ug/l	95
14) Allyl chloride	1.67	41	208528	20.44	ug/l	99
15) Acrylonitrile	2.33	53	272426	75.59	ug/l	99
16) Acetone	1.79	43	226237	78.13	ug/l	98
17) Carbon Disulfide	1.45	76	300148	19.95	ug/l	97
18) Methyl Acetate	1.86	43	298203	18.87	ug/l	97
19) Methyl tert-butyl Ether	1.92	73	479024	19.94	ug/l	97
20) Methylene Chloride	1.78	84	128232	19.99	ug/l	89
21) trans-1,2-Dichloroethene	1.84	96	139558	20.31	ug/l	95
23) Diisopropyl ether	2.20	45	611818	19.13	ug/l	98
24) Vinyl Acetate	2.51	43	1182348	81.68	ug/l	96
25) 1,1-Dichloroethane	2.27	63	318526	20.47	ug/l	98
26) 2-Butanone	3.40	43	612656	79.58	ug/l	99
27) 2,2-Dichloropropane	2.83	77	148305	22.17	ug/l	100
28) cis-1,2-Dichloroethene	2.74	96	210615	19.49	ug/l	97
29) Bromochloromethane	2.93	49	121940	15.20	ug/l	96
30) Chloroform	3.03	83	324603	20.52	ug/l	92
31) Cyclohexane	2.91	56	225728	19.85	ug/l	97
32) 1,1,1-Trichloroethane	3.21	97	199375	20.72	ug/l	97
36) 1,1-Dichloropropene	3.37	75	252087	22.06	ug/l	99
37) Ethyl Acetate	3.20	43	250099	18.19	ug/l	96
38) Carbon Tetrachloride	3.13	117	212306	22.02	ug/l	97
39) Methylcyclohexane	4.51	83	215499	20.91	ug/l	98

590

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
 Data File : VG031032.D  
 Acq On : 20 Oct 2010 13:58  
 Operator : PS  
 Sample : BSG1020W1  
 Misc : 5mL MSVOA\_G  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 14:24:27 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Wed Oct 20 11:05:07 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.67	78	637728	21.68	ug/l	98
41) Methacrylonitrile	3.78	41	126801	18.78	ug/l	# 88
42) 1,2-Dichloroethane	3.97	62	228182	22.19	ug/l	98
43) Isopropyl Acetate	4.53	43	366034	19.43	ug/l	99
45) Trichloroethene	4.57	130	166506	22.70	ug/l	92
46) 1,2-Dichloropropane	5.52	63	155291	21.39	ug/l	98
47) Dibromomethane	5.33	93	121208	21.19	ug/l	99
48) Bromodichloromethane	5.72	83	232102	22.24	ug/l	99
49) Methyl methacrylate	6.17	41	157114	20.00	ug/l	96
51) 4-Methyl-2-Pentanone	8.02	43	1098520	92.89	ug/l	100
52) Toluene	7.23	92	338513	20.44	ug/l	98
53) t-1,3-Dichloropropene	8.03	75	220204	21.90	ug/l	99
54) cis-1,3-Dichloropropene	6.86	75	256196	21.06	ug/l	98
55) 1,1,2-Trichloroethane	8.26	97	132919	20.32	ug/l	96
56) Ethyl methacrylate	8.44	69	216272	20.06	ug/l	99
57) 1,3-Dichloropropene	8.66	76	260243	21.22	ug/l	99
58) 2-Chloroethyl Vinyl ether	6.88	63	313703	124.04	ug/l	99
59) 2-Hexanone	9.40	43	818744m	104.75	ug/l	
60) Dibromochloromethane	8.50	129	150509	22.30	ug/l	99
61) 1,2-Dibromoethane	8.77	107	152204	21.03	ug/l	99
64) Tetrachloroethene	7.85	164	174530	26.81	ug/l	95
65) Chlorobenzene	9.68	112	341327	21.09	ug/l	99
66) 1,1,1,2-Tetrachloroethane	9.84	131	128122	21.79	ug/l	97
67) Ethyl Benzene	9.80	91	629784	20.82	ug/l	97
68) m/p-Xylenes	10.06	106	461059	41.79	ug/l	96
69) o-Xylene	10.71	106	245793	21.17	ug/l	97
70) Styrene	10.81	104	381459	20.95	ug/l	97
71) Bromoform	10.77	173	99439	22.08	ug/l	# 98
73) Isopropylbenzene	11.24	105	611895	20.13	ug/l	100
74) N-amyl acetate	11.64	43	343406	18.36	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.07	83	196278	17.69	ug/l	98
76) 1,2,3-Trichloropropane	12.19	75	174953	19.48	ug/l	100
77) Bromobenzene	11.71	156	157306	20.41	ug/l	98
78) n-propylbenzene	11.89	91	727725	19.89	ug/l	100
79) 2-Chlorotoluene	12.05	91	468899	20.24	ug/l	99
80) 1,3,5-Trimethylbenzene	12.25	105	459730	20.25	ug/l	98
81) trans-1,4-Dichloro-2-butene	11.81	75	66104	21.37	ug/l	99
82) 4-Chlorotoluene	12.32	91	468590	19.99	ug/l	99
83) tert-Butylbenzene	12.70	119	399185	18.20	ug/l	91
84) 1,2,4-Trimethylbenzene	12.83	105	463069	19.22	ug/l	99
85) sec-Butylbenzene	12.98	105	588059	18.79	ug/l	100
86) p-Isopropyltoluene	13.25	119	457955	19.56	ug/l	99
87) 1,3-Dichlorobenzene	13.23	146	286026	19.37	ug/l	99
88) 1,4-Dichlorobenzene	13.38	146	284153	19.82	ug/l	98
89) n-Butylbenzene	13.90	91	481457	19.06	ug/l	97
90) Hexachloroethane	13.97	117	113241	20.59	ug/l	97
91) 1,2-Dichlorobenzene	14.02	146	282556	20.17	ug/l	98
93) 1,2-Dibromo-3-Chloropropan	15.31	75	40691	20.27	ug/l	96
94) 1,2,4-Trichlorobenzene	16.40	180	166874	19.95	ug/l	98
95) Hexachlorobutadiene	16.43	225	46269	17.71	ug/l	98

Data Path : W:\HPCHEM1\Msvoa\_G\Data\VG102010\  
Data File : VG031032.D  
Acq On : 20 Oct 2010 13:58  
Operator : PS  
Sample : BSG1020W1  
Misc : 5mL MSVOA\_G  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 14:24:27 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 20 11:05:07 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Naphthalene	16.90	128	511730	20.53	ug/l	100
97) 1,2,3-Trichlorobenzene	17.20	180	148420	21.04	ug/l	99

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

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16DMS	SDG No.:	B3902
Lab Sample ID:	B3902-02MS	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024112.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	61	0.2	0.5	1	ug/L	
74-87-3	Chloromethane	64	0.2	0.5	1	ug/L	
75-01-4	Vinyl Chloride	64	0.34	0.5	1	ug/L	
74-83-9	Bromomethane	74	0.2	0.5	1	ug/L	
75-00-3	Chloroethane	70	0.2	0.5	1	ug/L	
75-69-4	Trichlorodifluoromethane	66	0.35	0.5	1	ug/L	
76-13-1	1,1,2-Trichlorotrifluoroethane	63	0.45	0.5	1	ug/L	
75-35-4	1,1-Dichloroethene	67	0.47	0.5	1	ug/L	
67-64-1	Acetone	350	0.5	2.5	5	ug/L	
75-15-0	Carbon Disulfide	49	0.2	0.5	1	ug/L	
1634-04-4	Methyl tert-butyl Ether	65	0.35	0.5	1	ug/L	
79-20-9	Methyl Acetate	61	0.2	0.5	1	ug/L	
75-09-2	Methylene Chloride	62	0.41	0.5	1	ug/L	
156-60-5	trans-1,2-Dichloroethene	63	0.41	0.5	1	ug/L	
75-34-3	1,1-Dichloroethane	66	0.36	0.5	1	ug/L	
110-82-7	Cyclohexane	64	0.2	0.5	1	ug/L	
78-93-3	2-Butanone	280	1.3	2.5	5	ug/L	
56-23-5	Carbon Tetrachloride	56	0.2	0.5	1	ug/L	
156-59-2	cis-1,2-Dichloroethene	65	0.35	0.5	1	ug/L	
67-66-3	Chloroform	65	0.34	0.5	1	ug/L	
71-55-6	1,1,1-Trichloroethane	62	0.4	0.5	1	ug/L	
108-87-2	Methylcyclohexane	51	0.2	0.5	1	ug/L	
71-43-2	Benzene	54	0.32	0.5	1	ug/L	
107-06-2	1,2-Dichloroethane	55	0.48	0.5	1	ug/L	
79-01-6	Trichloroethene	52	0.28	0.5	1	ug/L	
78-87-5	1,2-Dichloropropane	56	0.46	0.5	1	ug/L	
75-27-4	Bromodichloromethane	55	0.36	0.5	1	ug/L	
108-10-1	4-Methyl-2-Pentanone	290	2.1	2.5	5	ug/L	
108-88-3	Toluene	53	0.37	0.5	1	ug/L	
10061-02-6	t-1,3-Dichloropropene	50	0.29	0.5	1	ug/L	
10061-01-5	cis-1,3-Dichloropropene	52	0.31	0.5	1	ug/L	
79-00-5	1,1,2-Trichloroethane	56	0.38	0.5	1	ug/L	
591-78-6	2-Hexanone	290	1.9	2.5	5	ug/L	
124-48-1	Dibromochloromethane	55	0.2	0.5	1	ug/L	
106-93-4	1,2-Dibromoethane	55	0.41	0.5	1	ug/L	

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16DMS	SDG No.:	B3902
Lab Sample ID:	B3902-02MS	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024112.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	38		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	50		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	50		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	98		0.95	1	2	ug/L
95-47-6	o-Xylene	49		0.43	0.5	1	ug/L
100-42-5	Styrene	39		0.36	0.5	1	ug/L
75-25-2	Bromoform	50		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	48		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	49		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	47		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	47		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	47		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	48		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	47		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	50.9		66 - 150		102%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		76 - 130		103%	SPK: 50
2037-26-5	Toluene-d8	50.2		78 - 121		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.4		70 - 131		99%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1283260		3.24			
540-36-3	1,4-Difluorobenzene	2497470		3.65			
3114-55-4	Chlorobenzene-d5	2459030		6.54			
3855-82-1	1,4-Dichlorobenzene-d4	1347140		8.97			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

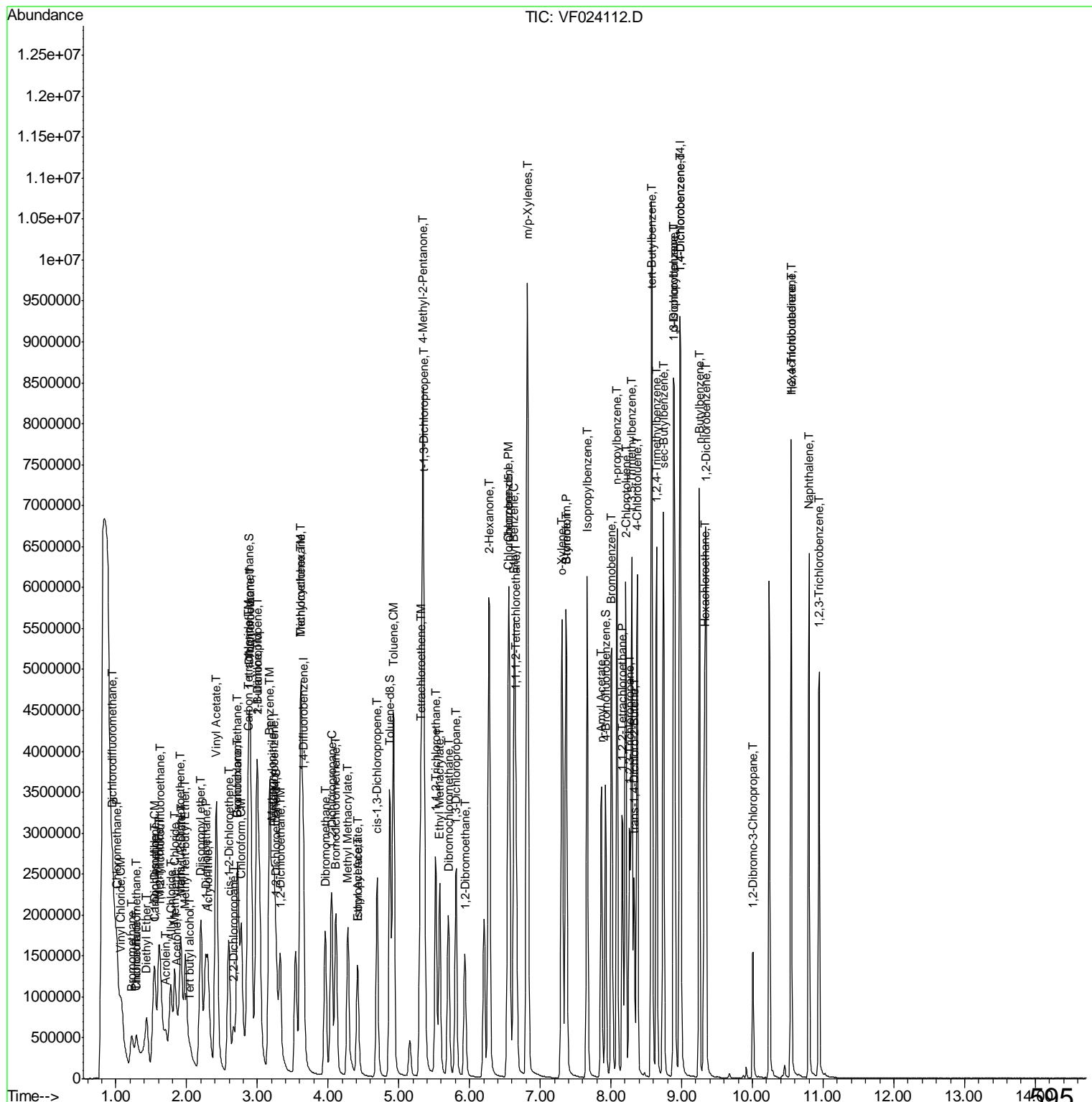
N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024112.D  
Acq On : 19 Oct 2010 13:52  
Operator : MS  
Sample : B3902-02MS  
Misc : 5.0mL, MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 19 14:20:50 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024112.D  
 Acq On : 19 Oct 2010 13:52  
 Operator : MS  
 Sample : B3902-02MS  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 19 14:20:50 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1283259	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2497471	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.54	117	2459027	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1347143	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.28	65	982697	50.90	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	101.80%	
36) Dibromofluoromethane	2.90	113	873500	51.31	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	102.62%	
49) Toluene-d8	4.87	98	2890045	50.21	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	100.42%	
62) 4-Bromofluorobenzene	7.93	95	1192036	49.45	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	98.90%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.96	85	1058283	61.41	ug/l 99
3) Chloromethane	1.02	50	1209578	64.29	ug/l 100
4) Vinyl Chloride	1.08	62	1060943	64.15	ug/l 99
5) Bromomethane	1.23	94	542277	74.21	ug/l 100
6) Chloroethane	1.30	64	348427	69.93	ug/l 99
7) Trichlorofluoromethane	1.29	101	891006m	65.58	ug/l
8) Tert butyl alcohol	2.05	59	542008	313.62	ug/l # 100
9) Diethyl Ether	1.44	74	386318	66.99	ug/l 96
10) 1,1-Dichloroethene	1.54	96	722700m	66.86	ug/l
11) Methyl Iodide	1.61	142	1693631m	64.50	ug/l
12) Acrolein	1.71	56	342528	307.68	ug/l 99
13) 1,1,2-Trichlorotrifluoroet	1.63	101	703959	62.63	ug/l 98
14) Acrylonitrile	2.31	53	1811635	343.35	ug/l 100
15) Allyl Chloride	1.78	41	1102864	67.62	ug/l 99
16) Acetone	1.87	43	1174331	350.90	ug/l # 88
17) Carbon Disulfide	1.55	76	1871969m	49.37	ug/l
18) Methyl Acetate	1.93	43	946139	61.19	ug/l 94
19) Methyl tert-butyl Ether	1.99	73	2147752	64.56	ug/l 97
20) Methylene Chloride	1.83	84	864664m	62.45	ug/l
21) trans-1,2-Dichloroethene	1.92	96	769325	63.19	ug/l 98
23) Diisopropyl ether	2.20	45	2623999	65.97	ug/l 99
24) Vinyl Acetate	2.42	43	7709134	271.70	ug/l 100
25) 1,1-Dichloroethane	2.27	63	1474813	65.60	ug/l 99
26) 2-Butanone	2.99	43	3765567	282.95	ug/l 98
27) 2,2-Dichloropropane	2.66	77	526303	37.78	ug/l 99
28) cis-1,2-Dichloroethene	2.60	96	1145027	65.15	ug/l 98
29) Bromochloromethane	2.72	128	526745	61.57	ug/l 95
30) Chloroform	2.77	83	1716343	65.28	ug/l 99
31) Ethyl Acetate	4.42	43	1647613	52.01	ug/l # 99
32) Cyclohexane	2.72	56	847221	63.88	ug/l 96
33) 1,1,1-Trichloroethane	2.91	97	1308249	61.56	ug/l 98
37) 1,1-Dichloropropene	3.00	75	1429737	54.75	ug/l 99
38) Carbon Tetrachloride	2.87	117	1353563	55.99	ug/l 98
39) Benzene	3.17	78	3850902	54.31	ug/l 99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024112.D  
 Acq On : 19 Oct 2010 13:52  
 Operator : MS  
 Sample : B3902-02MS  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 19 14:20:50 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.22	41	805508	54.48	ug/l	# 91
41) 1,2-Dichloroethane	3.32	62	1354240	54.87	ug/l	99
43) Isopropyl Acetate	4.42	43	1647613	48.71	ug/l	99
44) Trichloroethene	3.62	130	1159816	52.38	ug/l	98
45) Methylcyclohexane	3.61	83	1293538	50.68	ug/l	98
46) 1,2-Dichloropropane	4.04	63	1095796	55.83	ug/l	100
47) Dibromomethane	3.96	93	893935	55.06	ug/l	98
48) Bromodichloromethane	4.11	83	1580366	55.09	ug/l	100
50) 4-Methyl-2-Pentanone	5.34	43	7079354	287.42	ug/l	100
51) Toluene	4.92	92	2419185	53.44	ug/l	100
52) t-1,3-Dichloropropene	5.36	75	1517648	50.23	ug/l	100
53) Methyl Methacrylate	4.28	69	886300	53.99	ug/l	98
54) cis-1,3-Dichloropropene	4.69	75	1765812	51.80	ug/l	97
55) 1,1,2-Trichloroethane	5.52	97	1062689	55.52	ug/l	99
56) Ethyl Methacrylate	5.58	69	1493881	54.14	ug/l	99
57) 1,3-Dichloropropane	5.81	76	1870540	55.44	ug/l	99
59) 2-Hexanone	6.27	43	5164169	286.03	ug/l	100
60) Dibromochloromethane	5.70	129	1273665	54.68	ug/l	100
61) 1,2-Dibromoethane	5.94	107	1268995	55.45	ug/l	99
64) Tetrachloroethene	5.31	164	856534	38.46	ug/l	100
65) Chlorobenzene	6.56	112	2829251	49.76	ug/l	100
66) 1,1,1,2-Tetrachloroethane	6.66	131	1046443	50.50	ug/l	100
67) Ethyl Benzene	6.63	106	1329693	49.50	ug/l	100
68) m/p-Xylenes	6.82	106	3330243	97.54	ug/l	99
69) o-Xylene	7.31	106	1680415	48.64	ug/l	99
70) Styrene	7.37	104	2221839	38.64	ug/l	99
71) Bromoform	7.36	173	879709	49.63	ug/l	# 100
73) Isopropylbenzene	7.66	105	4502160	47.61	ug/l	100
74) n-Amyl Acetate	7.87	43	2021493	41.64	ug/l	100
75) 1,1,2,2-Tetrachloroethane	8.16	83	1654600	49.39	ug/l	99
76) 1,2,3-Trichloropropane	8.26	75	1184622	48.24	ug/l	94
77) Bromobenzene	8.00	156	1186792	47.24	ug/l	95
78) n-propylbenzene	8.09	91	5143383	47.28	ug/l	100
79) 2-Chlorotoluene	8.21	91	3156365	47.09	ug/l	99
80) 1,3,5-Trimethylbenzene	8.29	105	3268826	44.87	ug/l	100
81) trans-1,4-Dichloro-2-Buten	8.33	75	572445	43.08	ug/l	95
83) 4-Chlorotoluene	8.37	91	3269497	47.55	ug/l	100
84) tert-Butylbenzene	8.58	119	3659812	51.53	ug/l	99
85) 1,2,4-Trimethylbenzene	8.65	105	3177924	42.13	ug/l	100
86) sec-Butylbenzene	8.74	105	4499952	47.68	ug/l	100
87) p-Isopropyltoluene	8.89	119	3540044	46.41	ug/l	99
88) 1,3-Dichlorobenzene	8.90	146	2158057	46.75	ug/l	99
89) 1,4-Dichlorobenzene	8.98	146	2219647	46.89	ug/l	100
91) n-Butylbenzene	9.25	91	3340626	45.67	ug/l	99
92) Hexachloroethane	9.32	117	917125	47.33	ug/l	99
93) 1,2-Dichlorobenzene	9.34	146	2121903	46.99	ug/l	100
95) 1,2-Dibromo-3-Chloropropan	10.01	75	308263	48.30	ug/l	97
96) 1,2,4-Trichlorobenzene	10.55	180	1350460	46.63	ug/l	99
97) Hexachlorobutadiene	10.55	225	403935	46.12	ug/l	99
98) Naphthalene	10.80	128	3907545	47.72	ug/l	100

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024112.D  
Acq On : 19 Oct 2010 13:52  
Operator : MS  
Sample : B3902-02MS  
Misc : 5.0mL,MSVOAF  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 19 14:20:50 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) 1,2,3-Trichlorobenzene	10.94	180	1229199	46.41	ug/l	100

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

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16DMSD	SDG No.:	B3902
Lab Sample ID:	B3902-03MSD	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024113.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	57	0.2	0.5	1	ug/L	
74-87-3	Chloromethane	62	0.2	0.5	1	ug/L	
75-01-4	Vinyl Chloride	60	0.34	0.5	1	ug/L	
74-83-9	Bromomethane	68	0.2	0.5	1	ug/L	
75-00-3	Chloroethane	72	0.2	0.5	1	ug/L	
75-69-4	Trichlorodifluoromethane	63	0.35	0.5	1	ug/L	
76-13-1	1,1,2-Trichlorotrifluoroethane	63	0.45	0.5	1	ug/L	
75-35-4	1,1-Dichloroethene	70	0.47	0.5	1	ug/L	
67-64-1	Acetone	280	0.5	2.5	5	ug/L	
75-15-0	Carbon Disulfide	38	0.2	0.5	1	ug/L	
1634-04-4	Methyl tert-butyl Ether	60	0.35	0.5	1	ug/L	
79-20-9	Methyl Acetate	53	0.2	0.5	1	ug/L	
75-09-2	Methylene Chloride	60	0.41	0.5	1	ug/L	
156-60-5	trans-1,2-Dichloroethene	60	0.41	0.5	1	ug/L	
75-34-3	1,1-Dichloroethane	60	0.36	0.5	1	ug/L	
110-82-7	Cyclohexane	59	0.2	0.5	1	ug/L	
78-93-3	2-Butanone	260	1.3	2.5	5	ug/L	
56-23-5	Carbon Tetrachloride	49	0.2	0.5	1	ug/L	
156-59-2	cis-1,2-Dichloroethene	60	0.35	0.5	1	ug/L	
67-66-3	Chloroform	59	0.34	0.5	1	ug/L	
71-55-6	1,1,1-Trichloroethane	57	0.4	0.5	1	ug/L	
108-87-2	Methylcyclohexane	48	0.2	0.5	1	ug/L	
71-43-2	Benzene	51	0.32	0.5	1	ug/L	
107-06-2	1,2-Dichloroethane	51	0.48	0.5	1	ug/L	
79-01-6	Trichloroethene	51	0.28	0.5	1	ug/L	
78-87-5	1,2-Dichloropropane	52	0.46	0.5	1	ug/L	
75-27-4	Bromodichloromethane	49	0.36	0.5	1	ug/L	
108-10-1	4-Methyl-2-Pentanone	260	2.1	2.5	5	ug/L	
108-88-3	Toluene	51	0.37	0.5	1	ug/L	
10061-02-6	t-1,3-Dichloropropene	43	0.29	0.5	1	ug/L	
10061-01-5	cis-1,3-Dichloropropene	44	0.31	0.5	1	ug/L	
79-00-5	1,1,2-Trichloroethane	52	0.38	0.5	1	ug/L	
591-78-6	2-Hexanone	260	1.9	2.5	5	ug/L	
124-48-1	Dibromochloromethane	47	0.2	0.5	1	ug/L	
106-93-4	1,2-Dibromoethane	51	0.41	0.5	1	ug/L	

599

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/13/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-16DMSD	SDG No.:	B3902
Lab Sample ID:	B3902-03MSD	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024113.D	1		10/19/10	VF101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	40		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	47		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	47		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	91		0.95	1	2	ug/L
95-47-6	o-Xylene	46		0.43	0.5	1	ug/L
100-42-5	Styrene	37		0.36	0.5	1	ug/L
75-25-2	Bromoform	39		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	45		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	46		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	44		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	44		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	44		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	44		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	43		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	48.2		66 - 150		96%	SPK: 50
1868-53-7	Dibromofluoromethane	50.6		76 - 130		101%	SPK: 50
2037-26-5	Toluene-d8	50		78 - 121		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.5		70 - 131		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	1388100	3.24				
540-36-3	1,4-Difluorobenzene	2695660	3.65				
3114-55-4	Chlorobenzene-d5	2637550	6.55				
3855-82-1	1,4-Dichlorobenzene-d4	1441030	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

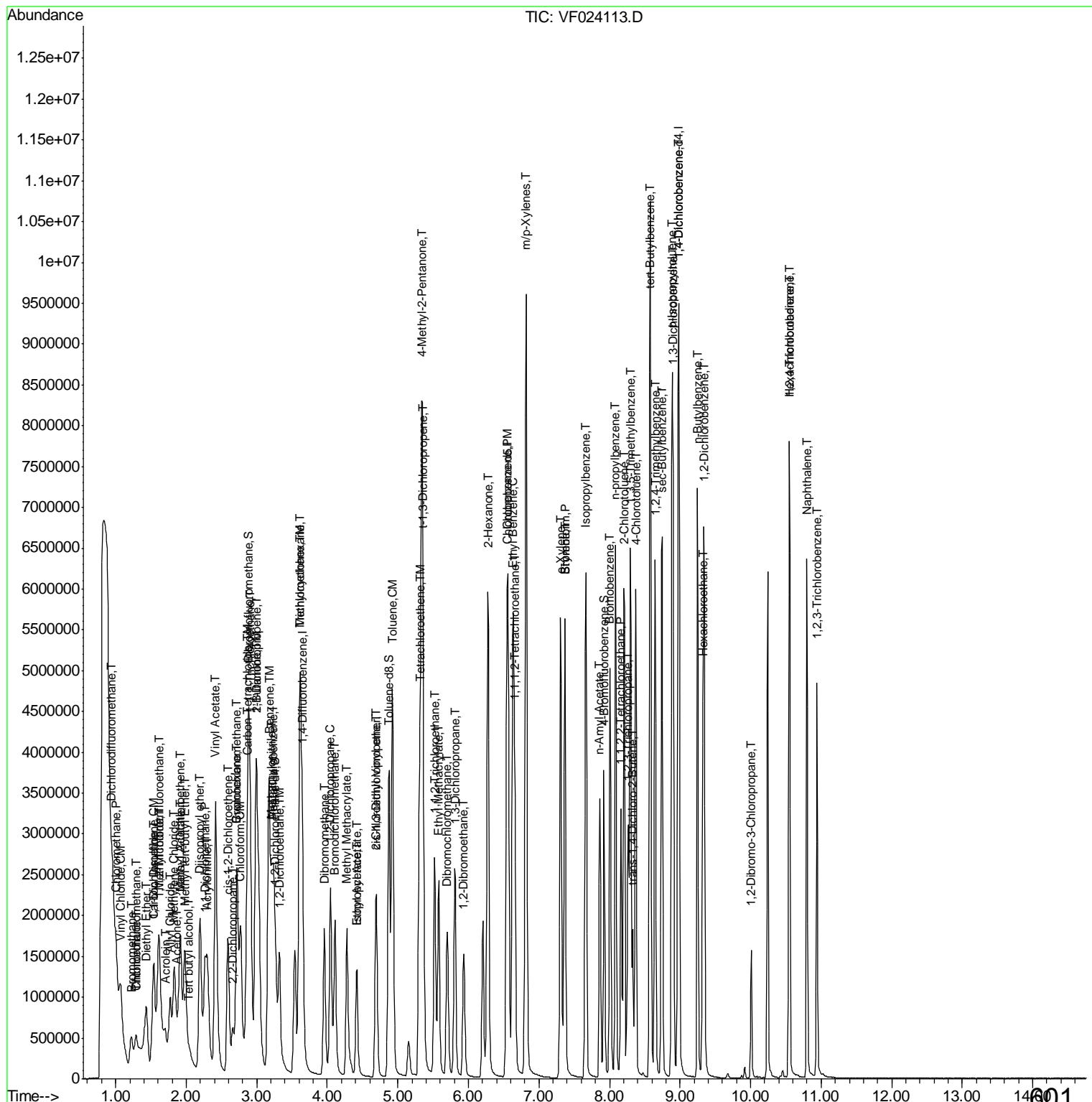
\* = Values outside of QC limits

D = Dilution

600

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024113.D  
Acq On : 19 Oct 2010 14:21  
Operator : MS  
Sample : B3902-03MSD  
Misc : 5.0mL, MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 19 14:40:05 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration



Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024113.D  
 Acq On : 19 Oct 2010 14:21  
 Operator : MS  
 Sample : B3902-03MSD  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 19 14:40:05 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.24	168	1388101	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	3.65	114	2695661	50.00	ug/l	0.00
63) Chlorobenzene-d5	6.55	117	2637547	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	8.97	152	1441030	50.00	ug/l	0.00

## System Monitoring Compounds

34) 1,2-Dichloroethane-d4	3.27	65	1005562	48.15	ug/l	0.00
Spiked Amount 50.000	Range	66 - 150	Recovery	=	96.30%	
36) Dibromofluoromethane	2.89	113	929266	50.57	ug/l	0.00
Spiked Amount 50.000	Range	76 - 130	Recovery	=	101.14%	
49) Toluene-d8	4.87	98	3104523	49.98	ug/l	0.00
Spiked Amount 50.000	Range	78 - 121	Recovery	=	99.96%	
62) 4-Bromofluorobenzene	7.92	95	1261938	48.50	ug/l	0.00
Spiked Amount 50.000	Range	70 - 131	Recovery	=	97.00%	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	0.95	85	1070635	57.43 ug/l 100
3) Chloromethane	1.01	50	1268456	62.33 ug/l 100
4) Vinyl Chloride	1.08	62	1072263	59.94 ug/l 99
5) Bromomethane	1.22	94	540139	68.15 ug/l 93
6) Chloroethane	1.30	64	382093	71.61 ug/l 99
7) Trichlorofluoromethane	1.29	101	918642m	62.51 ug/l
8) Tert butyl alcohol	2.04	59	536179	286.82 ug/l # 100
9) Diethyl Ether	1.44	74	458676	81.11 ug/l 95
10) 1,1-Dichloroethene	1.53	96	804974m	69.80 ug/l
11) Methyl Iodide	1.61	142	1810577m	63.75 ug/l
12) Acrolein	1.71	56	356832	295.54 ug/l 99
13) 1,1,2-Trichlorotrifluoroet	1.62	101	762020	62.68 ug/l 99
14) Acrylonitrile	2.30	53	1776036	311.18 ug/l 100
15) Allyl Chloride	1.77	41	939636	52.55 ug/l 97
16) Acetone	1.86	43	1060328	279.43 ug/l # 79
17) Carbon Disulfide	1.55	76	1565953m	38.18 ug/l
18) Methyl Acetate	1.92	43	915765	53.32 ug/l 91
19) Methyl tert-butyl Ether	1.98	73	2154374	59.87 ug/l 100
20) Methylene Chloride	1.83	84	891027m	59.50 ug/l
21) trans-1,2-Dichloroethene	1.92	96	787755	59.82 ug/l 96
23) Diisopropyl ether	2.19	45	2603105	60.50 ug/l 98
24) Vinyl Acetate	2.42	43	7632480	248.68 ug/l 100
25) 1,1-Dichloroethane	2.26	63	1468101	60.37 ug/l 99
26) 2-Butanone	2.99	43	3728862	259.03 ug/l 98
27) 2,2-Dichloropropane	2.66	77	507572	33.68 ug/l 99
28) cis-1,2-Dichloroethene	2.59	96	1136124	59.76 ug/l 98
29) Bromochloromethane	2.72	128	520580	56.25 ug/l 92
30) Chloroform	2.77	83	1674219	58.87 ug/l 99
31) Ethyl Acetate	4.42	43	1617352	47.20 ug/l # 99
32) Cyclohexane	2.72	56	844568	58.87 ug/l 97
33) 1,1,1-Trichloroethane	2.91	97	1304354	56.74 ug/l 97
37) 1,1-Dichloropropene	2.99	75	1426187	50.59 ug/l 98
38) Carbon Tetrachloride	2.86	117	1286356	49.30 ug/l 99
39) Benzene	3.17	78	3912098	51.12 ug/l 98

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
 Data File : VF024113.D  
 Acq On : 19 Oct 2010 14:21  
 Operator : MS  
 Sample : B3902-03MSD  
 Misc : 5.0mL,MSVOAF  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 19 14:40:05 2010  
 Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:49:11 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	3.21	41	803849	50.37	ug/l	# 96
41) 1,2-Dichloroethane	3.32	62	1361417	51.11	ug/l	99
43) Isopropyl Acetate	4.42	43	1617352	44.30	ug/l	# 99
44) Trichloroethene	3.62	130	1207355	50.52	ug/l	97
45) Methylcyclohexane	3.61	83	1310259	47.56	ug/l	98
46) 1,2-Dichloropropane	4.05	63	1100204	51.93	ug/l	99
47) Dibromomethane	3.96	93	903342	51.55	ug/l	98
48) Bromodichloromethane	4.11	83	1525746	49.28	ug/l	100
50) 4-Methyl-2-Pentanone	5.34	43	7007133	263.57	ug/l	99
51) Toluene	4.92	92	2485850	50.87	ug/l	100
52) t-1,3-Dichloropropene	5.36	75	1417227	43.46	ug/l	100
53) Methyl Methacrylate	4.28	69	892347	50.36	ug/l	97
54) cis-1,3-Dichloropropene	4.69	75	1631253	44.33	ug/l	96
55) 1,1,2-Trichloroethane	5.52	97	1070140	51.80	ug/l	99
56) Ethyl Methacrylate	5.58	69	1503497	50.49	ug/l	98
57) 1,3-Dichloropropene	5.81	76	1871676	51.40	ug/l	100
58) 2-Chloroethyl Vinyl ether	4.69	63	8127	0.61	ug/l	# 47
59) 2-Hexanone	6.27	43	5089504	261.17	ug/l	99
60) Dibromochloromethane	5.70	129	1172730	46.64	ug/l	98
61) 1,2-Dibromoethane	5.93	107	1267085	51.30	ug/l	100
64) Tetrachloroethene	5.31	164	958662	40.13	ug/l	99
65) Chlorobenzene	6.56	112	2873837	47.12	ug/l	100
66) 1,1,1,2-Tetrachloroethane	6.66	131	1043540	46.95	ug/l	99
67) Ethyl Benzene	6.63	106	1347045	46.75	ug/l	99
68) m/p-Xylenes	6.82	106	3333344	91.02	ug/l	99
69) o-Xylene	7.31	106	1722231	46.47	ug/l	96
70) Styrene	7.37	104	2283940	37.03	ug/l	99
71) Bromoform	7.36	173	743180	39.09	ug/l	# 99
73) Isopropylbenzene	7.66	105	4529047	44.78	ug/l	100
74) n-Amyl Acetate	7.86	43	2019811	38.89	ug/l	100
75) 1,1,2,2-Tetrachloroethane	8.16	83	1649830	46.03	ug/l	99
76) 1,2,3-Trichloropropane	8.26	75	1178140	44.85	ug/l	98
77) Bromobenzene	8.01	156	1199319	44.63	ug/l	93
78) n-propylbenzene	8.08	91	5148356	44.24	ug/l	100
79) 2-Chlorotoluene	8.20	91	3182567	44.39	ug/l	99
80) 1,3,5-Trimethylbenzene	8.29	105	3262721	41.87	ug/l	99
81) trans-1,4-Dichloro-2-Buten	8.33	75	432940	30.46	ug/l	99
83) 4-Chlorotoluene	8.37	91	3222354	43.81	ug/l	99
84) tert-Butylbenzene	8.58	119	3634496	47.84	ug/l	99
85) 1,2,4-Trimethylbenzene	8.65	105	3185034	39.47	ug/l	100
86) sec-Butylbenzene	8.74	105	4494011	44.52	ug/l	100
87) p-Isopropyltoluene	8.88	119	3560535	43.64	ug/l	99
88) 1,3-Dichlorobenzene	8.90	146	2160692	43.76	ug/l	99
89) 1,4-Dichlorobenzene	8.99	146	2253661	44.50	ug/l	99
91) n-Butylbenzene	9.25	91	3364800	43.01	ug/l	99
92) Hexachloroethane	9.32	117	806047	38.88	ug/l	98
93) 1,2-Dichlorobenzene	9.34	146	2138266	44.26	ug/l	100
95) 1,2-Dibromo-3-Chloropropan	10.01	75	303465	44.45	ug/l	96
96) 1,2,4-Trichlorobenzene	10.55	180	1339941	43.25	ug/l	100
97) Hexachlorobutadiene	10.55	225	412150	44.00	ug/l	99

Data Path : W:\HPCHEM1\Msvoa\_F\Data\VF101910\  
Data File : VF024113.D  
Acq On : 19 Oct 2010 14:21  
Operator : MS  
Sample : B3902-03MSD  
Misc : 5.0mL,MSVOAF  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 19 14:40:05 2010  
Quant Method : W:\HPCHEM1\MSVOA\_F\METHOD\82F101210W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:49:11 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Naphthalene	10.80	128	3902371	44.55	ug/l	100
99) 1,2,3-Trichlorobenzene	10.94	180	1237313	43.67	ug/l	100

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

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-10DMS	SDG No.:	B3902
Lab Sample ID:	B3902-10MS	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031015.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	73	0.2	0.5	1	ug/L	
74-87-3	Chloromethane	48	0.2	0.5	1	ug/L	
75-01-4	Vinyl Chloride	51	0.34	0.5	1	ug/L	
74-83-9	Bromomethane	58	0.2	0.5	1	ug/L	
75-00-3	Chloroethane	53	0.2	0.5	1	ug/L	
75-69-4	Trichlorodifluoromethane	61	0.35	0.5	1	ug/L	
76-13-1	1,1,2-Trichlorotrifluoroethane	56	0.45	0.5	1	ug/L	
75-35-4	1,1-Dichloroethene	54	0.47	0.5	1	ug/L	
67-64-1	Acetone	210	0.5	2.5	5	ug/L	
75-15-0	Carbon Disulfide	40	0.2	0.5	1	ug/L	
1634-04-4	Methyl tert-butyl Ether	48	0.35	0.5	1	ug/L	
79-20-9	Methyl Acetate	50	0.2	0.5	1	ug/L	
75-09-2	Methylene Chloride	51	0.41	0.5	1	ug/L	
156-60-5	trans-1,2-Dichloroethene	55	0.41	0.5	1	ug/L	
75-34-3	1,1-Dichloroethane	52	0.36	0.5	1	ug/L	
110-82-7	Cyclohexane	51	0.2	0.5	1	ug/L	
78-93-3	2-Butanone	200	1.3	2.5	5	ug/L	
56-23-5	Carbon Tetrachloride	50	0.2	0.5	1	ug/L	
156-59-2	cis-1,2-Dichloroethene	50	0.35	0.5	1	ug/L	
67-66-3	Chloroform	52	0.34	0.5	1	ug/L	
71-55-6	1,1,1-Trichloroethane	52	0.4	0.5	1	ug/L	
108-87-2	Methylcyclohexane	54	0.2	0.5	1	ug/L	
71-43-2	Benzene	52	0.32	0.5	1	ug/L	
107-06-2	1,2-Dichloroethane	56	0.48	0.5	1	ug/L	
79-01-6	Trichloroethene	59	0.28	0.5	1	ug/L	
78-87-5	1,2-Dichloropropane	53	0.46	0.5	1	ug/L	
75-27-4	Bromodichloromethane	56	0.36	0.5	1	ug/L	
108-10-1	4-Methyl-2-Pentanone	240	2.1	2.5	5	ug/L	
108-88-3	Toluene	52	0.37	0.5	1	ug/L	
10061-02-6	t-1,3-Dichloropropene	43	0.29	0.5	1	ug/L	
10061-01-5	cis-1,3-Dichloropropene	40	0.31	0.5	1	ug/L	
79-00-5	1,1,2-Trichloroethane	54	0.38	0.5	1	ug/L	
591-78-6	2-Hexanone	370	1.9	2.5	5	ug/L	
124-48-1	Dibromochloromethane	57	0.2	0.5	1	ug/L	
106-93-4	1,2-Dibromoethane	58	0.41	0.5	1	ug/L	

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-10DMS	SDG No.:	B3902
Lab Sample ID:	B3902-10MS	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031015.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	56		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	54		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	51		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	100		0.95	1	2	ug/L
95-47-6	o-Xylene	51		0.43	0.5	1	ug/L
100-42-5	Styrene	51		0.36	0.5	1	ug/L
75-25-2	Bromoform	55		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	50		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	43		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	50		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	52		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	51		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	56		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	47		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	47.4		66 - 150		95%	SPK: 50
1868-53-7	Dibromofluoromethane	43		76 - 130		86%	SPK: 50
2037-26-5	Toluene-d8	46.6		78 - 121		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		70 - 131		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	536052		3.89			
540-36-3	1,4-Difluorobenzene	862053		4.7			
3114-55-4	Chlorobenzene-d5	761810		9.65			
3855-82-1	1,4-Dichlorobenzene-d4	403324		13.36			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

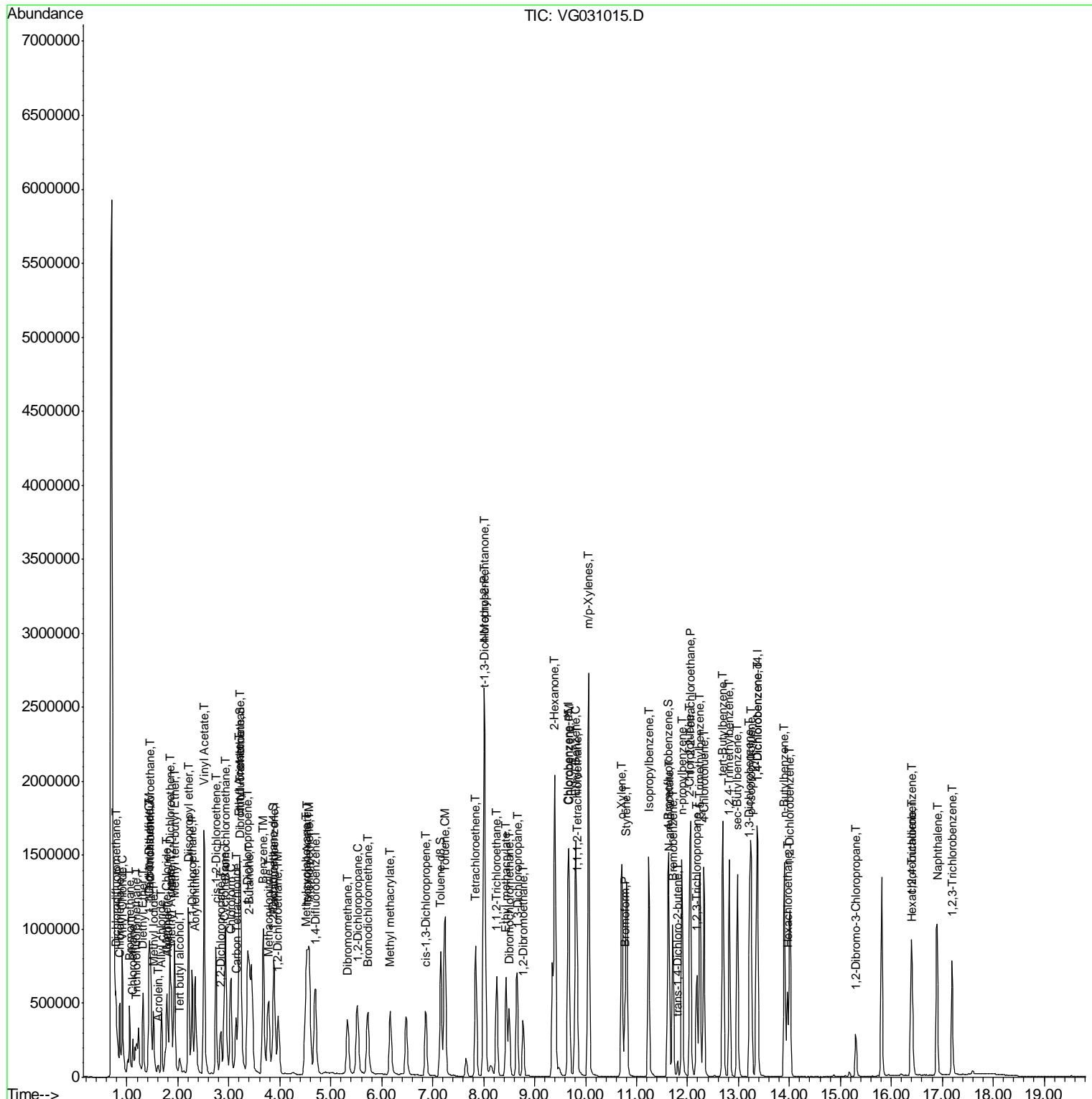
N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031015.D  
 Acq On : 19 Oct 2010 17:03  
 Operator : PS  
 Sample : B3902-10MS  
 Misc : 5mL MSVOA G  
 ALS Vial : 13 Sample Multiplier: 1

Ouant Time: Oct 20 03:02:32 2010  
 Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031015.D  
 Acq On : 19 Oct 2010 17:03  
 Operator : PS  
 Sample : B3902-10MS  
 Misc : 5mL MSVOA G  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 20 03:02:32 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.89	168	536052	50.00	ug/l	0.01
34) 1,4-Difluorobenzene	4.70	114	862053	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.65	117	761810	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.36	152	403324	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.87	65	356049	47.42	ug/l	0.00
Spiked Amount 50.000			Recovery	=	94.84%	
35) Dibromofluoromethane	3.23	113	293025	42.99	ug/l	0.00
Spiked Amount 50.000			Recovery	=	85.98%	
50) Toluene-d8	7.15	98	871351	46.62	ug/l	0.00
Spiked Amount 50.000			Recovery	=	93.24%	
62) 4-Bromofluorobenzene	11.62	95	404795	48.73	ug/l	0.00
Spiked Amount 50.000			Recovery	=	97.46%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.78	85	398330	72.53	ug/l	98
3) Chloromethane	0.86	50	399534	47.55	ug/l	99
4) Vinyl Chloride	0.92	62	309039	50.59	ug/l	99
5) Bromomethane	1.05	94	217686	58.42	ug/l	100
6) Chloroethane	1.12	64	166149	52.64	ug/l	99
7) Trichlorofluoromethane	1.19	101	380576	60.89	ug/l	99
8) Diethyl Ether	1.32	74	186299	50.06	ug/l	97
9) 1,1,2-Trichlorotrifluoroet	1.46	101	270619	55.59	ug/l	97
10) Methyl Iodide	1.52	142	494620	56.88	ug/l	98
11) Tert butyl alcohol	2.04	59	200783	254.14	ug/l	97
12) 1,1-Dichloroethene	1.43	96	274835	54.04	ug/l	91
13) Acrolein	1.62	56	52706	176.90	ug/l	100
14) Allyl chloride	1.68	41	224661	25.76	ug/l	96
15) Acrylonitrile	2.34	53	682918	221.69	ug/l	99
16) Acetone	1.79	43	475163	207.32	ug/l	95
17) Carbon Disulfide	1.45	76	511188	39.76	ug/l	100
18) Methyl Acetate	1.87	43	667521	50.07	ug/l	98
19) Methyl tert-butyl Ether	1.93	73	995763	48.49	ug/l	98
20) Methylene Chloride	1.78	84	278004	50.69	ug/l	98
21) trans-1,2-Dichloroethene	1.85	96	323516	55.08	ug/l	94
23) Diisopropyl ether	2.20	45	1276026	46.67	ug/l	98
24) Vinyl Acetate	2.51	43	2950340	238.45	ug/l	99
25) 1,1-Dichloroethane	2.28	63	690843	51.94	ug/l	100
26) 2-Butanone	3.40	43	1337086	203.21	ug/l	97
27) 2,2-Dichloropropane	2.84	77	281718	49.27	ug/l	100
28) cis-1,2-Dichloroethene	2.75	96	459033	49.71	ug/l	99
29) Bromochloromethane	2.93	49	293367	42.79	ug/l	99
30) Chloroform	3.04	83	707843	52.36	ug/l	97
31) Cyclohexane	2.91	56	495295	50.96	ug/l	97
32) 1,1,1-Trichloroethane	3.22	97	425816	51.77	ug/l	99
36) 1,1-Dichloropropene	3.37	75	561812	56.88	ug/l	98
37) Ethyl Acetate	3.21	43	569829	47.93	ug/l	99
38) Carbon Tetrachloride	3.14	117	416824	50.02	ug/l	97
39) Methylcyclohexane	4.51	83	478126	53.66	ug/l	98

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031015.D  
 Acq On : 19 Oct 2010 17:03  
 Operator : PS  
 Sample : B3902-10MS  
 Misc : 5mL MSVOA G  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 20 03:02:32 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Tue Oct 19 11:41:02 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.67	78	1310879	51.54	ug/l	99
41) Methacrylonitrile	3.78	41	2666777	45.68	ug/l	93
42) 1,2-Dichloroethane	3.97	62	493979	55.58	ug/l	99
43) Isopropyl Acetate	4.54	43	810274	49.75	ug/l	99
45) Trichloroethene	4.58	130	375958	59.29	ug/l	94
46) 1,2-Dichloropropane	5.53	63	330235	52.62	ug/l	96
47) Dibromomethane	5.33	93	264120	53.40	ug/l	99
48) Bromodichloromethane	5.73	83	503427	55.81	ug/l	98
49) Methyl methacrylate	6.16	41	376051	55.37	ug/l	98
51) 4-Methyl-2-Pentanone	8.01	43	2495745	244.12	ug/l	99
52) Toluene	7.24	92	749924	52.39	ug/l	97
53) t-1,3-Dichloropropene	8.02	75	372769	42.89	ug/l	98
54) cis-1,3-Dichloropropene	6.86	75	425335	40.44	ug/l	98
55) 1,1,2-Trichloroethane	8.25	97	308229	54.50	ug/l	97
56) Ethyl methacrylate	8.44	69	522309	56.04	ug/l	99
57) 1,3-Dichloropropane	8.66	76	615674	58.08	ug/l	100
59) 2-Hexanone	9.39	43	2205367m	368.22	ug/l	
60) Dibromochloromethane	8.50	129	335065	57.43	ug/l	100
61) 1,2-Dibromoethane	8.77	107	365033	58.33	ug/l	99
64) Tetrachloroethene	7.85	164	334723	55.64	ug/l	95
65) Chlorobenzene	9.67	112	813172	54.37	ug/l	98
66) 1,1,1,2-Tetrachloroethane	9.83	131	293928	54.09	ug/l	99
67) Ethyl Benzene	9.81	91	1432039	51.22	ug/l	100
68) m/p-Xylenes	10.06	106	1052600	103.23	ug/l	98
69) o-Xylene	10.71	106	545145	50.81	ug/l	100
70) Styrene	10.80	104	851602	50.59	ug/l	99
71) Bromoform	10.77	173	230949	55.48	ug/l	# 98
73) Isopropylbenzene	11.24	105	1374638	50.05	ug/l	100
74) N-amyl acetate	11.64	43	845342	49.99	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.06	83	433815	43.25	ug/l	99
76) 1,2,3-Trichloropropane	12.18	75	436445	53.77	ug/l	100
77) Bromobenzene	11.71	156	374037	53.69	ug/l	99
78) n-propylbenzene	11.89	91	1607092	48.59	ug/l	99
79) 2-Chlorotoluene	12.05	91	1036590	49.51	ug/l	100
80) 1,3,5-Trimethylbenzene	12.25	105	1017403	49.59	ug/l	98
81) trans-1,4-Dichloro-2-butene	11.81	75	31873	11.40	ug/l	96
82) 4-Chlorotoluene	12.32	91	1052997	49.70	ug/l	97
83) tert-Butylbenzene	12.69	119	985049	49.68	ug/l	99
84) 1,2,4-Trimethylbenzene	12.82	105	1062752	48.80	ug/l	100
85) sec-Butylbenzene	12.98	105	1322404	46.75	ug/l	100
86) p-Isopropyltoluene	13.25	119	1016754	48.05	ug/l	100
87) 1,3-Dichlorobenzene	13.22	146	670232	50.23	ug/l	99
88) 1,4-Dichlorobenzene	13.38	146	669580	51.68	ug/l	100
89) n-Butylbenzene	13.90	91	1065404	46.68	ug/l	99
90) Hexachloroethane	13.96	117	208392	41.93	ug/l	97
91) 1,2-Dichlorobenzene	14.01	146	647355	51.13	ug/l	100
93) 1,2-Dibromo-3-Chloropropan	15.30	75	101416	55.90	ug/l	98
94) 1,2,4-Trichlorobenzene	16.40	180	355968	47.10	ug/l	99
95) Hexachlorobutadiene	16.42	225	100075	42.38	ug/l	99
96) Naphthalene	16.90	128	1111480	52.90	ug/l	99

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031015.D  
Acq On : 19 Oct 2010 17:03  
Operator : PS  
Sample : B3902-10MS  
Misc : 5mL MSVOA G  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 20 03:02:32 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 1,2,3-Trichlorobenzene	17.19	180	318917	52.90	uq/l	99

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

**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-10DMSD	SDG No.:	B3902
Lab Sample ID:	B3902-11MSD	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031016.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	72	0.2	0.5	1	ug/L	
74-87-3	Chloromethane	50	0.2	0.5	1	ug/L	
75-01-4	Vinyl Chloride	51	0.34	0.5	1	ug/L	
74-83-9	Bromomethane	64	0.2	0.5	1	ug/L	
75-00-3	Chloroethane	53	0.2	0.5	1	ug/L	
75-69-4	Trichlorodifluoromethane	62	0.35	0.5	1	ug/L	
76-13-1	1,1,2-Trichlorotrifluoroethane	54	0.45	0.5	1	ug/L	
75-35-4	1,1-Dichloroethene	53	0.47	0.5	1	ug/L	
67-64-1	Acetone	220	0.5	2.5	5	ug/L	
75-15-0	Carbon Disulfide	41	0.2	0.5	1	ug/L	
1634-04-4	Methyl tert-butyl Ether	48	0.35	0.5	1	ug/L	
79-20-9	Methyl Acetate	53	0.2	0.5	1	ug/L	
75-09-2	Methylene Chloride	52	0.41	0.5	1	ug/L	
156-60-5	trans-1,2-Dichloroethene	52	0.41	0.5	1	ug/L	
75-34-3	1,1-Dichloroethane	51	0.36	0.5	1	ug/L	
110-82-7	Cyclohexane	50	0.2	0.5	1	ug/L	
78-93-3	2-Butanone	210	1.3	2.5	5	ug/L	
56-23-5	Carbon Tetrachloride	50	0.2	0.5	1	ug/L	
156-59-2	cis-1,2-Dichloroethene	49	0.35	0.5	1	ug/L	
67-66-3	Chloroform	50	0.34	0.5	1	ug/L	
71-55-6	1,1,1-Trichloroethane	52	0.4	0.5	1	ug/L	
108-87-2	Methylcyclohexane	54	0.2	0.5	1	ug/L	
71-43-2	Benzene	52	0.32	0.5	1	ug/L	
107-06-2	1,2-Dichloroethane	55	0.48	0.5	1	ug/L	
79-01-6	Trichloroethene	61	0.28	0.5	1	ug/L	
78-87-5	1,2-Dichloropropane	54	0.46	0.5	1	ug/L	
75-27-4	Bromodichloromethane	54	0.36	0.5	1	ug/L	
108-10-1	4-Methyl-2-Pentanone	260	2.1	2.5	5	ug/L	
108-88-3	Toluene	54	0.37	0.5	1	ug/L	
10061-02-6	t-1,3-Dichloropropene	45	0.29	0.5	1	ug/L	
10061-01-5	cis-1,3-Dichloropropene	41	0.31	0.5	1	ug/L	
79-00-5	1,1,2-Trichloroethane	57	0.38	0.5	1	ug/L	
591-78-6	2-Hexanone	380	1.9	2.5	5	ug/L	
124-48-1	Dibromochloromethane	57	0.2	0.5	1	ug/L	
106-93-4	1,2-Dibromoethane	60	0.41	0.5	1	ug/L	

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**Report of Analysis**

Client:	EA Engineering Science & Technology	Date Collected:	10/14/10
Project:	Storonske Cooperage Site NYSDEC EA#14474.22	Date Received:	10/16/10
Client Sample ID:	4-42-021-MW-10DMSD	SDG No.:	B3902
Lab Sample ID:	B3902-11MSD	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG031016.D	1		10/19/10	VG101910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	58		0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	54		0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	51		0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	100		0.95	1	2	ug/L
95-47-6	o-Xylene	51		0.43	0.5	1	ug/L
100-42-5	Styrene	52		0.36	0.5	1	ug/L
75-25-2	Bromoform	54		0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	50		0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	41		0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	53		0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	52		0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	53		0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	57		0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	50		0.2	0.5	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	43.4		66 - 150		87%	SPK: 50
1868-53-7	Dibromofluoromethane	39.5		76 - 130		79%	SPK: 50
2037-26-5	Toluene-d8	46.6		78 - 121		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		70 - 131		96%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	560822	3.9				
540-36-3	1,4-Difluorobenzene	887421	4.7				
3114-55-4	Chlorobenzene-d5	779387	9.65				
3855-82-1	1,4-Dichlorobenzene-d4	405850	13.35				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

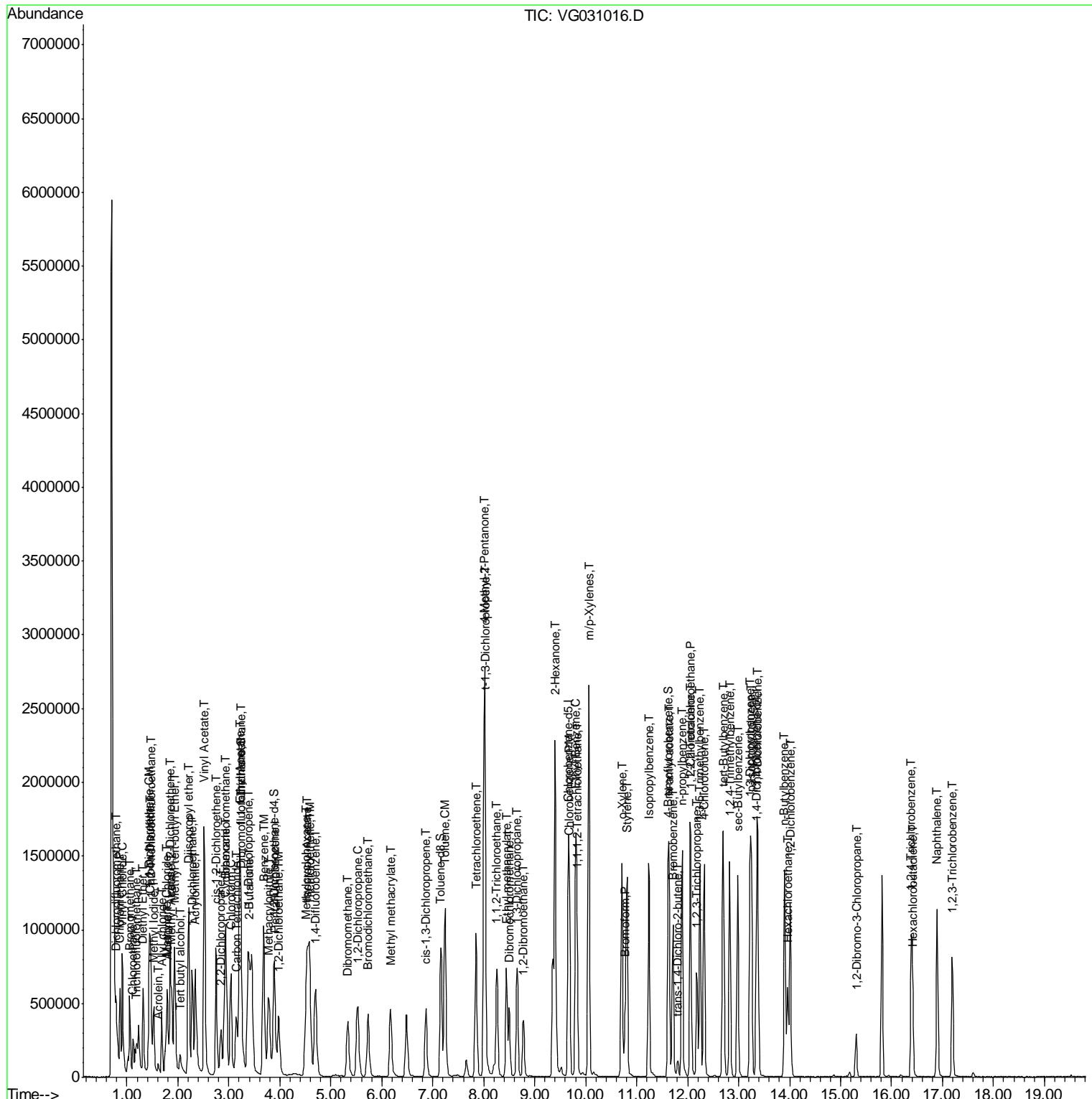
N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031016.D  
 Acq On : 19 Oct 2010 17:31  
 Operator : PS  
 Sample : B3902-11MSD  
 Misc : 5mL MSVOA G  
 ALS Vial : 14 Sample Multiplier: 1

Ouant Time: Oct 20 03:04:44 2010  
 Ouant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration



Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031016.D  
 Acq On : 19 Oct 2010 17:31  
 Operator : PS  
 Sample : B3902-11MSD  
 Misc : 5mL MSVOA G  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 20 03:04:44 2010  
 Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 19 11:41:02 2010  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	3.90	168	560822	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	4.70	114	887421	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.65	117	779387	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	405850	50.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
33) 1,2-Dichloroethane-d4	3.88	65	341264	43.44	ug/l	0.01
Spiked Amount 50.000			Recovery	=	86.88%	
35) Dibromofluoromethane	3.24	113	277170	39.51	ug/l	0.00
Spiked Amount 50.000			Recovery	=	79.02%	
50) Toluene-d8	7.16	98	896733	46.60	ug/l	0.00
Spiked Amount 50.000			Recovery	=	93.20%	
62) 4-Bromofluorobenzene	11.62	95	408453	47.77	ug/l	0.01
Spiked Amount 50.000			Recovery	=	95.54%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.79	85	416468	72.48	ug/l	99
3) Chloromethane	0.86	50	440153	50.07	ug/l	100
4) Vinyl Chloride	0.92	62	327265	51.21	ug/l	98
5) Bromomethane	1.05	94	247691	63.76	ug/l	99
6) Chloroethane	1.12	64	176147	53.34	ug/l	100
7) Trichlorofluoromethane	1.19	101	403685	61.74	ug/l	94
8) Diethyl Ether	1.32	74	199034	51.12	ug/l	96
9) 1,1,2-Trichlorotrifluoroet	1.46	101	276534	54.30	ug/l	95
10) Methyl Iodide	1.53	142	502960	55.28	ug/l	99
11) Tert butyl alcohol	2.04	59	256655	314.16	ug/l	99
12) 1,1-Dichloroethene	1.44	96	283724	53.32	ug/l	96
13) Acrolein	1.61	56	54679	175.51	ug/l	97
14) Allyl chloride	1.68	41	245464	26.90	ug/l	98
15) Acrylonitrile	2.34	53	744306	230.95	ug/l	99
16) Acetone	1.80	43	528494	221.07	ug/l	98
17) Carbon Disulfide	1.45	76	555402	41.29	ug/l	97
18) Methyl Acetate	1.87	43	732417m	52.53	ug/l	
19) Methyl tert-butyl Ether	1.94	73	1027192	47.81	ug/l	98
20) Methylene Chloride	1.78	84	299125	52.13	ug/l	94
21) trans-1,2-Dichloroethene	1.85	96	320050	52.08	ug/l	94
23) Diisopropyl ether	2.21	45	1307558	45.72	ug/l	99
24) Vinyl Acetate	2.51	43	3018333	233.17	ug/l	98
25) 1,1-Dichloroethane	2.28	63	710827	51.08	ug/l	99
26) 2-Butanone	3.41	43	1451028	210.78	ug/l	96
27) 2,2-Dichloropropane	2.84	77	287453	48.05	ug/l	96
28) cis-1,2-Dichloroethene	2.75	96	473431	49.00	ug/l	99
29) Bromochloromethane	2.94	49	288404	40.20	ug/l	100
30) Chloroform	3.04	83	711749	50.33	ug/l	96
31) Cyclohexane	2.93	56	513046	50.46	ug/l	100
32) 1,1,1-Trichloroethane	3.23	97	443579	51.55	ug/l	99
36) 1,1-Dichloropropene	3.38	75	575048	56.56	ug/l	98
37) Ethyl Acetate	3.22	43	604657	49.40	ug/l	100
38) Carbon Tetrachloride	3.15	117	430546	50.19	ug/l	96
39) Methylcyclohexane	4.52	83	494635	53.92	ug/l	98

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
 Data File : VG031016.D  
 Acq On : 19 Oct 2010 17:31  
 Operator : PS  
 Sample : B3902-11MSD  
 Misc : 5mL MSVOA G  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 20 03:04:44 2010

Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M

Quant Title : SW846 8260

QLast Update : Tue Oct 19 11:41:02 2010

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	3.68	78	1356251	51.80	ug/l	100
41) Methacrylonitrile	3.79	41	295196	49.12	ug/l	# 93
42) 1,2-Dichloroethane	3.97	62	499981	54.64	ug/l	98
43) Isopropyl Acetate	4.54	43	856771	51.10	ug/l	100
45) Trichloroethene	4.58	130	398636	61.07	ug/l	99
46) 1,2-Dichloropropane	5.52	63	349439	54.09	ug/l	93
47) Dibromomethane	5.33	93	277987	54.59	ug/l	99
48) Bromodichloromethane	5.73	83	499815	53.82	ug/l	99
49) Methyl methacrylate	6.17	41	410514	58.72	ug/l	99
51) 4-Methyl-2-Pentanone	8.02	43	2772629	263.45	ug/l	99
52) Toluene	7.24	92	797931	54.15	ug/l	99
53) t-1,3-Dichloropropene	8.03	75	400482	44.76	ug/l	98
54) cis-1,3-Dichloropropene	6.86	75	445253	41.13	ug/l	97
55) 1,1,2-Trichloroethane	8.26	97	329725	56.63	ug/l	97
56) Ethyl methacrylate	8.44	69	556153	57.96	ug/l	98
57) 1,3-Dichloropropane	8.65	76	638247	58.49	ug/l	100
59) 2-Hexanone	9.40	43	2347943m	381.50	ug/l	
60) Dibromochloromethane	8.50	129	343602	57.21	ug/l	100
61) 1,2-Dibromoethane	8.78	107	385763	59.88	ug/l	99
64) Tetrachloroethene	7.85	164	356950	58.00	ug/l	97
65) Chlorobenzene	9.68	112	827952	54.11	ug/l	99
66) 1,1,1,2-Tetrachloroethane	9.83	131	290485	52.25	ug/l	99
67) Ethyl Benzene	9.81	91	1457356	50.95	ug/l	100
68) m/p-Xylenes	10.06	106	1048857	100.54	ug/l	98
69) o-Xylene	10.71	106	558572	50.88	ug/l	99
70) Styrene	10.81	104	898136	52.15	ug/l	99
71) Bromoform	10.78	173	228775	53.72	ug/l	# 98
73) Isopropylbenzene	11.24	105	1379444	49.91	ug/l	99
74) N-amyl acetate	11.63	43	908378	53.39	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.06	83	417954	41.41	ug/l	99
76) 1,2,3-Trichloropropane	12.18	75	437675	53.59	ug/l	100
77) Bromobenzene	11.71	156	376308	53.68	ug/l	97
78) n-propylbenzene	11.89	91	1689924	50.78	ug/l	99
79) 2-Chlorotoluene	12.05	91	1055600	50.11	ug/l	100
80) 1,3,5-Trimethylbenzene	12.24	105	1051209	50.92	ug/l	97
81) trans-1,4-Dichloro-2-butene	11.81	75	33059	11.75	ug/l	98
82) 4-Chlorotoluene	12.32	91	1091664	51.21	ug/l	98
83) tert-Butylbenzene	12.70	119	1005285	50.39	ug/l	98
84) 1,2,4-Trimethylbenzene	12.83	105	1076327	49.11	ug/l	100
85) sec-Butylbenzene	12.98	105	1352986	47.53	ug/l	99
86) p-Isopropyltoluene	13.25	119	1076789	50.57	ug/l	99
87) 1,3-Dichlorobenzene	13.22	146	707375	52.69	ug/l	99
88) 1,4-Dichlorobenzene	13.37	146	679500	52.12	ug/l	99
89) n-Butylbenzene	13.90	91	1094102	47.64	ug/l	100
90) Hexachloroethane	13.96	117	211376	42.27	ug/l	99
91) 1,2-Dichlorobenzene	14.01	146	679285	53.31	ug/l	100
93) 1,2-Dibromo-3-Chloropropan	15.31	75	104840	57.43	ug/l	99
94) 1,2,4-Trichlorobenzene	16.39	180	376755	49.54	ug/l	100
95) Hexachlorobutadiene	16.42	225	106369	44.76	ug/l	97
96) Naphthalene	16.89	128	1194964	56.70	ug/l	99

Data Path : W:\HPCHEM1\MSVOA\_G\DATA\VG101910\  
Data File : VG031016.D  
Acq On : 19 Oct 2010 17:31  
Operator : PS  
Sample : B3902-11MSD  
Misc : 5mL MSVOA G  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 20 03:04:44 2010  
Quant Method : \\TERASTORAGE\VOASRV\HPCHEM1\MSVOA\_G\METHOD\82G100710W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 19 11:41:02 2010  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 1,2,3-Trichlorobenzene	17.19	180	339551	56.10	uq/l	97

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

**VOLATILES**  
**MISCELLANEOUS DATA**

**LAB CHRONICLE**

OrderID:	B3902	OrderDate:	10/18/2010 9:46:00 AM
Client:	EA Engineering Science & Technology	Project:	Storonske Cooperage Site NYSDEC EA#14474.22
Contact:	Jim Hayward	Location:	VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
B3902-01	4-42-021-MW-16D	WATER	VOC-TCLVOA-10	8260B	10/13/10			10/16/10
B3902-04	4-42-021-MW-16S	WATER	VOC-TCLVOA-10	8260B	10/13/10			10/16/10
B3902-05	4-42-021-MW-20D	WATER	VOC-TCLVOA-10	8260B	10/13/10			10/16/10
B3902-06	4-42-021-MW-13DD	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-07	4-42-021-MW-13D	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-08	4-42-021-MW-13S	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-09	4-42-021-MW-10D	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-12	4-42-021-MW-12S	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-13	4-42-021-MW-14S	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-14	4-42-021-MW-14D	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-15	4-42-021-UK-3	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10
B3902-16	4-42-021-UK-1	WATER	VOC-TCLVOA-10	8260B	10/14/10			10/16/10

**LAB CHRONICLE**

B3902-17	4-42-021-UK-2	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-18	4-42-021-MW-8S	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-19	4-42-021-MW-8DD	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/20/10	<b>10/16/10</b>
B3902-20	4-42-021-MW-8D	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-21	4-42-021-MW-15S	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-22	4-42-021-MW-9S	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-23	4-42-021-MW-5D	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-24	4-42-021-MW-4D	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-25	4-42-021-MW-7S	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-26	4-42-021-MW-6DD	WATER	VOC-TCLVOA-10	8260B	<b>10/15/10</b>	10/19/10	<b>10/16/10</b>
B3902-27	4-42-021-MW-6D	WATER	VOC-TCLVOA-10	8260B	<b>10/15/10</b>	10/19/10	<b>10/16/10</b>
B3902-28	4-42-021-MW-6S	WATER	VOC-TCLVOA-10	8260B	<b>10/15/10</b>	10/19/10	<b>10/16/10</b>
B3902-29	4-42-021-DUPLICATE-01	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>
B3902-30	4-42-021-DUPLICATE-02	WATER	VOC-TCLVOA-10	8260B	<b>10/14/10</b>	10/19/10	<b>10/16/10</b>



284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

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## LAB CHRONICLE

B3902-31	4-42-021-TRIPBLANK	WATER	10/07/10	10/16/10
	VOC-TCLVOA-10		8260B	10/18/10

**CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092**

NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

**GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY**

CHEMTECH PROJECT NUMBER: B3902

MATRIX: Water

METHOD: 8260B

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2. GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
The Tuning criteria met requirements.			
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5. GC/MS Calibration Requirements.  The Continuous Calibration Data file ID VF024092.D and VF024108.D met the requirements except for Acetone. This compound was biased high and not present in any of the samples. The Continuous Calibration Data file ID VG031004.D met the requirements except for Dichlorodifluoromethane and Bromomethane. These compounds were biased high and not present in any of the samples. The Continuous Calibration Data file ID VG031004.D met the requirements except for Dichlorodifluoromethane and Bromomethane. Trichlorofluoromethane These compounds were biased high and not present in any of the samples			✓
6. Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
7. Surrogate Recoveries Meet Criteria  If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓

**CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092**

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

**GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)**

NA      NO      YES

8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria

✓

If not met, list those compounds and their recoveries which fall outside the acceptable range.

The Blank Spike for VF024110.D{BSF1019W1} met requirements for all samples except for Acetone[160%], Bromomethane[155%].

The Blank Spike for VG031006.D{BSG1019W1} met requirements for all samples except for Dichlorodifluoromethane[135%].

The Blank Spike for VG031032.D{BSG1020W1} met requirements for all samples except for Dichlorodifluoromethane[125%].

The Blank Spike Duplicate met requirements for all samples .

The RPD for VF024113.D{B3902-03MSD} recoveries met criteria except for Acetone[22%], Bromoform[25%] and Carbon disulfide[25%].

9. Internal Standard Area/Retention Time Shift Meet Criteria

✓

Comments:

10. Analysis Holding Time Met

✓

If not met, list number of days exceeded for each sample:

**ADDITIONAL COMMENTS:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

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QA REVIEW

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Date

**APPENDIX A****QA REVIEW GENERAL DOCUMENTATION**Project #: B3902

Completed

For thorough review, the report must have the following:

**GENERAL:**

- Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page)       ✓
- Check chain-of-custody for proper relinquish/return of samples       ✓
- Is the chain of custody signed and complete       ✓
- Check internal chain-of-custody for proper relinquish/return of samples /sample extracts       ✓
- Collect information for each project id from server. Were all requirements followed       ✓

**COVER PAGE:**

- Do numbers of samples correspond to the number of samples in the Chain of Custody and on login page       ✓
- Do lab numbers and client Ids on cover page agree with the Chain of Custody       ✓

**CHAIN OF CUSTODY:**

- Do requested analyses on Chain of Custody agree with form I results       ✓
- Do requested analyses on Chain of Custody agree with the log-in page       ✓
- Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody       ✓
- Were the samples received within hold time       ✓
- Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle       ✓

**ANALYTICAL:**

- Was method requirement followed?       ✓
- Was client requirement followed?       ✓
- Does the case narrative summarize all QC failure?       ✓
- All runlogs reviewed for manual integration requirements       ✓
- All manual calculations and /or hand notations verified       ✓

1<sup>st</sup> Level QA Review Signature: \_\_\_\_\_ Date: \_\_\_\_\_2<sup>nd</sup> Level QA Review Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Manual Integration Report

Sequence		VF101210	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
50 PPB CCC	VF024032.D	1,1-Dichloroethene	margret	10/12/2010 1:00:49 PM	prashant	10/14/2010 3:25:14 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024032.D	Carbon Disulfide	margret	10/12/2010 1:00:49 PM	prashant	10/14/2010 3:25:14 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024032.D	Cyclohexane	margret	10/12/2010 1:00:49 PM	prashant	10/14/2010 3:25:14 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024032.D	Methyl Iodide	margret	10/12/2010 1:00:49 PM	prashant	10/14/2010 3:25:14 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024032.D	Methylene Chloride	margret	10/12/2010 1:00:49 PM	prashant	10/14/2010 3:25:14 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024032.D	Trichlorofluoromethane	margret	10/12/2010 1:00:49 PM	prashant	10/14/2010 3:25:14 PM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	1,1-Dichloroethene	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	1,4-Dichlorobenzene	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Acetone	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Allyl Chloride	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Bromomethane	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly



## Manual Integration Report

Sequence		VF101210	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
1 PPB ICC	VF024035.D	Carbon Disulfide	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Chloroethane	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Chloromethane	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Dichlorodifluoromethane	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Methyl Iodide	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Methylene Chloride	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Tert butyl alcohol	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
1 PPB ICC	VF024035.D	Trichlorofluoromethane	VISHAL	10/13/2010 5:54:16 AM	margret	10/13/2010 11:16:49 AM	Peak Integrated by Software incorrectly
5 PPB ICC	VF024036.D	1,1-Dichloroethene	VISHAL	10/13/2010 5:54:18 AM	margret	10/13/2010 11:16:55 AM	Peak Integrated by Software incorrectly
5 PPB ICC	VF024036.D	Carbon Disulfide	VISHAL	10/13/2010 5:54:18 AM	margret	10/13/2010 11:16:55 AM	Peak Integrated by Software incorrectly
5 PPB ICC	VF024036.D	Methyl Acetate	VISHAL	10/13/2010 5:54:18 AM	margret	10/13/2010 11:16:55 AM	Peak Integrated by Software incorrectly
5 PPB ICC	VF024036.D	Methyl Iodide	VISHAL	10/13/2010 5:54:18 AM	margret	10/13/2010 11:16:55 AM	Peak Integrated by Software incorrectly



## Manual Integration Report

Sequence		VF101210	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
5 PPB ICC	VF024036.D	Methylene Chloride	VISHAL	10/13/2010 5:54:18 AM	margret	10/13/2010 11:16:55 AM	Peak Integrated by Software incorrectly
5 PPB ICC	VF024036.D	Tert butyl alcohol	VISHAL	10/13/2010 5:54:18 AM	margret	10/13/2010 11:16:55 AM	Peak Integrated by Software incorrectly
5 PPB ICC	VF024036.D	Trichlorofluoromethane	VISHAL	10/13/2010 5:54:18 AM	margret	10/13/2010 11:16:55 AM	Peak Integrated by Software incorrectly
10 PPB ICC	VF024037.D	1,1-Dichloroethene	VISHAL	10/13/2010 5:54:20 AM	margret	10/13/2010 11:17:00 AM	Peak Integrated by Software incorrectly
10 PPB ICC	VF024037.D	Carbon Disulfide	VISHAL	10/13/2010 5:54:20 AM	margret	10/13/2010 11:17:00 AM	Peak Integrated by Software incorrectly
10 PPB ICC	VF024037.D	Methyl Acetate	VISHAL	10/13/2010 5:54:20 AM	margret	10/13/2010 11:17:00 AM	Peak Integrated by Software incorrectly
10 PPB ICC	VF024037.D	Methyl Iodide	VISHAL	10/13/2010 5:54:20 AM	margret	10/13/2010 11:17:00 AM	Peak Integrated by Software incorrectly
10 PPB ICC	VF024037.D	Methylene Chloride	VISHAL	10/13/2010 5:54:20 AM	margret	10/13/2010 11:17:00 AM	Peak Integrated by Software incorrectly
10 PPB ICC	VF024037.D	Tert butyl alcohol	VISHAL	10/13/2010 5:54:20 AM	margret	10/13/2010 11:17:00 AM	Peak Integrated by Software incorrectly
10 PPB ICC	VF024037.D	Trichlorofluoromethane	VISHAL	10/13/2010 5:54:20 AM	margret	10/13/2010 11:17:00 AM	Peak Integrated by Software incorrectly
20 PPB ICC	VF024038.D	1,1-Dichloroethene	VISHAL	10/13/2010 5:54:22 AM	margret	10/13/2010 11:17:04 AM	Peak Integrated by Software incorrectly
20 PPB ICC	VF024038.D	Carbon Disulfide	VISHAL	10/13/2010 5:54:22 AM	margret	10/13/2010 11:17:04 AM	Peak Integrated by Software incorrectly



## Manual Integration Report

Sequence		VF101210	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPB ICC	VF024038.D	Methyl Acetate	VISHAL	10/13/2010 5:54:22 AM	margret	10/13/2010 11:17:04 AM	Peak Integrated by Software incorrectly
20 PPB ICC	VF024038.D	Methyl Iodide	VISHAL	10/13/2010 5:54:22 AM	margret	10/13/2010 11:17:04 AM	Peak Integrated by Software incorrectly
20 PPB ICC	VF024038.D	Methylene Chloride	VISHAL	10/13/2010 5:54:22 AM	margret	10/13/2010 11:17:04 AM	Peak Integrated by Software incorrectly
20 PPB ICC	VF024038.D	Tert butyl alcohol	VISHAL	10/13/2010 5:54:22 AM	margret	10/13/2010 11:17:04 AM	Peak Integrated by Software incorrectly
20 PPB ICC	VF024038.D	Trichlorofluoromethane	VISHAL	10/13/2010 5:54:22 AM	margret	10/13/2010 11:17:04 AM	Peak Integrated by Software incorrectly
50 PPB ICC	VF024039.D	1,1-Dichloroethene	VISHAL	10/13/2010 5:54:41 AM	margret	10/13/2010 11:17:08 AM	Peak Integrated by Software incorrectly
50 PPB ICC	VF024039.D	Carbon Disulfide	VISHAL	10/13/2010 5:54:41 AM	margret	10/13/2010 11:17:08 AM	Peak Integrated by Software incorrectly
50 PPB ICC	VF024039.D	Methyl Acetate	VISHAL	10/13/2010 5:54:41 AM	margret	10/13/2010 11:17:08 AM	Peak Integrated by Software incorrectly
50 PPB ICC	VF024039.D	Methyl Iodide	VISHAL	10/13/2010 5:54:41 AM	margret	10/13/2010 11:17:08 AM	Peak Integrated by Software incorrectly
50 PPB ICC	VF024039.D	Methylene Chloride	VISHAL	10/13/2010 5:54:41 AM	margret	10/13/2010 11:17:08 AM	Peak Integrated by Software incorrectly
50 PPB ICC	VF024039.D	Tert butyl alcohol	VISHAL	10/13/2010 5:54:41 AM	margret	10/13/2010 11:17:08 AM	Peak Integrated by Software incorrectly
50 PPB ICC	VF024039.D	Trichlorofluoromethane	VISHAL	10/13/2010 5:54:41 AM	margret	10/13/2010 11:17:08 AM	Peak Integrated by Software incorrectly



### Manual Integration Report

Sequence		VF101210	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
100 PPB ICC	VF024040.D	1,1-Dichloroethene	VISHAL	10/13/2010 5:54:24 AM	margret	10/13/2010 11:17:11 AM	Peak Integrated by Software incorrectly
100 PPB ICC	VF024040.D	Carbon Disulfide	VISHAL	10/13/2010 5:54:24 AM	margret	10/13/2010 11:17:11 AM	Peak Integrated by Software incorrectly
100 PPB ICC	VF024040.D	Methyl Iodide	VISHAL	10/13/2010 5:54:24 AM	margret	10/13/2010 11:17:11 AM	Peak Integrated by Software incorrectly
100 PPB ICC	VF024040.D	Methylene Chloride	VISHAL	10/13/2010 5:54:24 AM	margret	10/13/2010 11:17:11 AM	Peak Integrated by Software incorrectly
100 PPB ICC	VF024040.D	Tert butyl alcohol	VISHAL	10/13/2010 5:54:24 AM	margret	10/13/2010 11:17:11 AM	Peak Integrated by Software incorrectly
100 PPB ICC	VF024040.D	Trichlorofluoromethane	VISHAL	10/13/2010 5:54:24 AM	margret	10/13/2010 11:17:11 AM	Peak Integrated by Software incorrectly
50 PPB ICV	VF024041.D	1,1-Dichloroethene	VISHAL	10/13/2010 5:54:25 AM	margret	10/13/2010 11:17:16 AM	Peak Integrated by Software incorrectly
50 PPB ICV	VF024041.D	Carbon Disulfide	VISHAL	10/13/2010 5:54:25 AM	margret	10/13/2010 11:17:16 AM	Peak Integrated by Software incorrectly
50 PPB ICV	VF024041.D	Methyl Iodide	VISHAL	10/13/2010 5:54:25 AM	margret	10/13/2010 11:17:16 AM	Peak Integrated by Software incorrectly
50 PPB ICV	VF024041.D	Methylene Chloride	VISHAL	10/13/2010 5:54:25 AM	margret	10/13/2010 11:17:16 AM	Peak Integrated by Software incorrectly
50 PPB ICV	VF024041.D	Tert butyl alcohol	VISHAL	10/13/2010 5:54:25 AM	margret	10/13/2010 11:17:16 AM	Peak Integrated by Software incorrectly
50 PPB ICV	VF024041.D	Trichlorofluoromethane	VISHAL	10/13/2010 5:54:25 AM	margret	10/13/2010 11:17:16 AM	Peak Integrated by Software incorrectly



**Instrument ID: MSVOA\_F**

**284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900**

**Daily Analysis Runlog For Sequence/QCBatch ID #VF101210**

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	margret	Review On	10/13/2010 12:00:00 AM

Tune/Reschk	VP4562	Initial Calibration Stds	VP4570 to VP4575		
CCC	N/A	SubDirectory	VF101210		
Internal Standard/PEM	VP3011	HP Acquire Method	moon		
ICV/I.BLK	VP4576	HP Processing Method	82f101210w.m		
Sr#	Sampled	Data File Name	Date-Time	Operator	Status
1	BFB TUNE CHECK	VF024030.D	12 Oct 2010 10:11	SY	Ok
2	50 PPB CCC	VF024031.D	12 Oct 2010 11:08	SY	Not Ok
3	50 PPB CCC	VF024032.D	12 Oct 2010 12:05	SY	Ok,M
4	VBF1012W1	VF024033.D	12 Oct 2010 13:07	SY	Not Ok
5	VBF1012W2	VF024034.D	12 Oct 2010 13:56	SY	Not Ok
6	1 PPB ICC	VF024035.D	12 Oct 2010 17:17	SY	Ok,M
7	5 PPB ICC	VF024036.D	12 Oct 2010 17:47	SY	Ok,M
8	10 PPB ICC	VF024037.D	12 Oct 2010 18:16	SY	Ok,M
9	20 PPB ICC	VF024038.D	12 Oct 2010 18:45	SY	Ok,M
10	50 PPB ICC	VF024039.D	12 Oct 2010 19:15	SY	Ok,M
11	100 PPB ICC	VF024040.D	12 Oct 2010 19:44	SY	Ok,M
12	50 PPB ICV	VF024041.D	12 Oct 2010 20:14	SY	Ok,M



Instrument ID: MSVOA\_F

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VF101210

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	margret	Review On	10/13/2010 12:00:00 AM
Tune/Reschk	VP4562	Initial Calibration Stds	VP4570 to VP4575
CCC	N/A	SubDirectory	VF101210
Internal Standard/PEM	VP3011	HP Acquire Method	moon
ICV/I.BLK	VP4576	HP Processing Method	82f101210w.m

Sr#	SampleId	Data File Name	Comment	Status
1	BFB TUNE CHECK	VF024030.D		Ok
2	50 PPB CCC	VF024031.D	VP4568, CCC fail	Not Ok
3	50 PPB CCC	VF024032.D	VP4569, #3,5,6,9,12,14,16,23,32,64-over 20%Dev(all high side)	Ok,M
4	VBF1012W1	VF024033.D	Surrogate(DBFM) fail	Not Ok
5	VBF1012W2	VF024034.D	Surrogate(DBFM) fail,rerun Initial Calibration	Not Ok
6	1 PPB ICC	VF024035.D		Ok,M
7	5 PPB ICC	VF024036.D	Compounds #5, 12 & 15 are passing on LR.	Ok,M
8	10 PPB ICC	VF024037.D	Compounds #6, 9, 10, 16 & 18 are passing on QR.	Ok,M
9	20 PPB ICC	VF024038.D		Ok,M
10	50 PPB ICC	VF024039.D		Ok,M
11	100 PPB ICC	VF024040.D		Ok,M
12	50 PPB ICV	VF024041.D	Diethyl Ether-over 20%Dev	Ok,M



## Manual Integration Report

Sequence VF101810 Instrument MSVOA\_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
50 PPB CCC	VF024092.D	1,1-Dichloroethene	margret	10/18/2010 3:23:57 PM	prashant	10/19/2010 2:13:36 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024092.D	Carbon Disulfide	margret	10/18/2010 3:23:57 PM	prashant	10/19/2010 2:13:36 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024092.D	Methyl Iodide	margret	10/18/2010 3:23:57 PM	prashant	10/19/2010 2:13:36 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024092.D	Methylene Chloride	margret	10/18/2010 3:23:57 PM	prashant	10/19/2010 2:13:36 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024092.D	Trichlorofluoromethane	margret	10/18/2010 3:23:57 PM	prashant	10/19/2010 2:13:36 PM	Peak Integrated by Software incorrectly
BSF1018W1	VF024094.D	1,1-Dichloroethene	margret	10/18/2010 3:24:01 PM	prashant	10/19/2010 2:13:44 PM	Peak Integrated by Software incorrectly
BSF1018W1	VF024094.D	Carbon Disulfide	margret	10/18/2010 3:24:01 PM	prashant	10/19/2010 2:13:44 PM	Peak Integrated by Software incorrectly
BSF1018W1	VF024094.D	Methyl Acetate	margret	10/18/2010 3:24:01 PM	prashant	10/19/2010 2:13:44 PM	Peak Integrated by Software incorrectly
BSF1018W1	VF024094.D	Methyl Iodide	margret	10/18/2010 3:24:01 PM	prashant	10/19/2010 2:13:44 PM	Peak Integrated by Software incorrectly
BSF1018W1	VF024094.D	Methylene Chloride	margret	10/18/2010 3:24:01 PM	prashant	10/19/2010 2:13:44 PM	Peak Integrated by Software incorrectly
BSF1018W1	VF024094.D	Trichlorofluoromethane	margret	10/18/2010 3:24:01 PM	prashant	10/19/2010 2:13:44 PM	Peak Integrated by Software incorrectly



### Manual Integration Report

Sequence		VF101810	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
BSF1018W2	VF024095.D	1,1-Dichloroethene	margret	10/18/2010 3:24:14 PM	prashant	10/19/2010 2:13:51 PM	Peak Integrated by Software incorrectly
BSF1018W2	VF024095.D	Carbon Disulfide	margret	10/18/2010 3:24:14 PM	prashant	10/19/2010 2:13:51 PM	Peak Integrated by Software incorrectly
BSF1018W2	VF024095.D	Methyl Iodide	margret	10/18/2010 3:24:14 PM	prashant	10/19/2010 2:13:51 PM	Peak Integrated by Software incorrectly
BSF1018W2	VF024095.D	Methylene Chloride	margret	10/18/2010 3:24:14 PM	prashant	10/19/2010 2:13:51 PM	Peak Integrated by Software incorrectly
BSF1018W2	VF024095.D	Trichlorofluoromethane	margret	10/18/2010 3:24:14 PM	prashant	10/19/2010 2:13:51 PM	Peak Integrated by Software incorrectly



### Instrument ID: MSVOA\_F

**284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900**

#### **Daily Analysis Runlog For Sequence/QCBatch ID #VF101810**

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	AHPatel	Review On	10/22/2010 12:00:00 AM
Tune/Reschk	VP4651	Initial Calibration Stds	N/A
CCC	VP4655	SubDirectory	VF101810
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82F101210W.M

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB TUNE CHECK	VF024090.D	18 Oct 2010 9:36	MS	Ok
2	50 PPB CCC	VF024091.D	18 Oct 2010 10:31	MS	Not Ok
3	50 PPB CCC	VF024092.D	18 Oct 2010 11:16	MS	Ok,M
4	VBF1018W1	VF024093.D	18 Oct 2010 12:18	MS	Ok
5	BSF1018W1	VF024094.D	18 Oct 2010 13:26	MS	Ok,M
6	BSF1018W2	VF024095.D	18 Oct 2010 13:56	MS	Ok,M
7	B3902-31	VF024096.D	18 Oct 2010 15:19	MS	Ok
8	B3902-01	VF024097.D	18 Oct 2010 15:49	MS	Ok
9	B3902-04	VF024098.D	18 Oct 2010 16:18	MS	Ok
10	B3902-05	VF024099.D	18 Oct 2010 16:48	MS	Ok

11	B3902-06	VF024100.D	18 Oct 2010 17:18	MS	Ok
12	B3902-07	VF024101.D	18 Oct 2010 17:47	MS	Ok
13	B3902-08	VF024102.D	18 Oct 2010 18:17	MS	Ok
14	B3902-12	VF024103.D	18 Oct 2010 18:46	MS	Ok
15	B3902-13	VF024104.D	18 Oct 2010 19:16	MS	Ok
16	B3902-14	VF024105.D	18 Oct 2010 19:45	MS	Ok



Instrument ID: MSVOA\_F

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VF101810

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	AHPatel	Review On	10/22/2010 12:00:00 AM
Tune/Reschk	VP4651	Initial Calibration Stds	N/A
CCC	VP4655	SubDirectory	VF101810
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82F101210W.M

Sr#	SampleId	Data File Name	Comment	Status
1	BFB TUNE CHECK	VF024090.D	VP4651	Ok
2	50 PPB CCC	VF024091.D	VP4653,CCC fail	Not Ok
3	50 PPB CCC	VF024092.D	VP4655,#9,15,16,58-over 20% Dev	Ok,M
4	VBF1018W1	VF024093.D		Ok
5	BSF1018W1	VF024094.D		Ok,M
6	BSF1018W2	VF024095.D		Ok,M
7	B3902-31	VF024096.D	pH<2 A	Ok
8	B3902-01	VF024097.D	pH<2 A	Ok
9	B3902-04	VF024098.D	pH<2 A	Ok
10	B3902-05	VF024099.D	pH<2 A	Ok
11	B3902-06	VF024100.D	pH<2 A	Ok
12	B3902-07	VF024101.D	pH<2 A	Ok
13	B3902-08	VF024102.D	pH<2 A	Ok
14	B3902-12	VF024103.D	pH<2 A	Ok
15	B3902-13	VF024104.D	pH<2 A	Ok
16	B3902-14	VF024105.D	pH<2 A	Ok



## Manual Integration Report

Sequence		VF101910	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
50 PPB CCC	VF024108.D	1,1-Dichloroethene	margret	10/19/2010 11:55:02 AM	prashant	10/19/2010 2:14:06 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024108.D	Carbon Disulfide	margret	10/19/2010 11:55:02 AM	prashant	10/19/2010 2:14:06 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024108.D	Methyl Iodide	margret	10/19/2010 11:55:02 AM	prashant	10/19/2010 2:14:06 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024108.D	Methylene Chloride	margret	10/19/2010 11:55:02 AM	prashant	10/19/2010 2:14:06 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VF024108.D	Trichlorofluoromethane	margret	10/19/2010 11:55:02 AM	prashant	10/19/2010 2:14:06 PM	Peak Integrated by Software incorrectly
BSF1019W1	VF024110.D	1,1-Dichloroethene	margret	10/19/2010 2:12:29 PM	prashant	10/19/2010 2:14:13 PM	Peak Integrated by Software incorrectly
BSF1019W1	VF024110.D	Carbon Disulfide	margret	10/19/2010 2:12:29 PM	prashant	10/19/2010 2:14:13 PM	Peak Integrated by Software incorrectly
BSF1019W1	VF024110.D	Methyl Iodide	margret	10/19/2010 2:12:29 PM	prashant	10/19/2010 2:14:13 PM	Peak Integrated by Software incorrectly
BSF1019W1	VF024110.D	Methylene Chloride	margret	10/19/2010 2:12:29 PM	prashant	10/19/2010 2:14:13 PM	Peak Integrated by Software incorrectly
BSF1019W1	VF024110.D	Trichlorofluoromethane	margret	10/19/2010 2:12:29 PM	prashant	10/19/2010 2:14:13 PM	Peak Integrated by Software incorrectly
BSF1019W2	VF024111.D	1,1-Dichloroethene	margret	10/19/2010 2:12:33 PM	prashant	10/19/2010 2:14:20 PM	Peak Integrated by Software incorrectly



## Manual Integration Report

Sequence		VF101910	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
BSF1019W2	VF024111.D	Carbon Disulfide	margret	10/19/2010 2:12:33 PM	prashant	10/19/2010 2:14:20 PM	Peak Integrated by Software incorrectly
BSF1019W2	VF024111.D	Methyl Iodide	margret	10/19/2010 2:12:33 PM	prashant	10/19/2010 2:14:20 PM	Peak Integrated by Software incorrectly
BSF1019W2	VF024111.D	Methylene Chloride	margret	10/19/2010 2:12:33 PM	prashant	10/19/2010 2:14:20 PM	Peak Integrated by Software incorrectly
BSF1019W2	VF024111.D	Trichlorofluoromethane	margret	10/19/2010 2:12:33 PM	prashant	10/19/2010 2:14:20 PM	Peak Integrated by Software incorrectly
B3902-02MS	VF024112.D	1,1-Dichloroethene	margret	10/19/2010 2:41:30 PM	AHPatel	10/22/2010 6:44:39 AM	Peak Integrated by Software incorrectly
B3902-02MS	VF024112.D	Carbon Disulfide	margret	10/19/2010 2:41:30 PM	AHPatel	10/22/2010 6:44:39 AM	Peak Integrated by Software incorrectly
B3902-02MS	VF024112.D	Methyl Iodide	margret	10/19/2010 2:41:30 PM	AHPatel	10/22/2010 6:44:39 AM	Peak Integrated by Software incorrectly
B3902-02MS	VF024112.D	Methylene Chloride	margret	10/19/2010 2:41:30 PM	AHPatel	10/22/2010 6:44:39 AM	Peak Integrated by Software incorrectly
B3902-02MS	VF024112.D	Trichlorofluoromethane	margret	10/19/2010 2:41:30 PM	AHPatel	10/22/2010 6:44:39 AM	Peak Integrated by Software incorrectly
B3902-03MSD	VF024113.D	1,1-Dichloroethene	margret	10/19/2010 2:41:34 PM	AHPatel	10/22/2010 6:44:42 AM	Peak Integrated by Software incorrectly
B3902-03MSD	VF024113.D	Carbon Disulfide	margret	10/19/2010 2:41:34 PM	AHPatel	10/22/2010 6:44:42 AM	Peak Integrated by Software incorrectly
B3902-03MSD	VF024113.D	Methyl Iodide	margret	10/19/2010 2:41:34 PM	AHPatel	10/22/2010 6:44:42 AM	Peak Integrated by Software incorrectly



### Manual Integration Report

Sequence		VF101910	Instrument			MSVOA_f	
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
B3902-03MSD	VF024113.D	Methylene Chloride	margret	10/19/2010 2:41:34 PM	AHPatel	10/22/2010 6:44:42 AM	Peak Integrated by Software incorrectly
B3902-03MSD	VF024113.D	Trichlorofluoromethane	margret	10/19/2010 2:41:34 PM	AHPatel	10/22/2010 6:44:42 AM	Peak Integrated by Software incorrectly



### Instrument ID: MSVOA\_F

**284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900**

#### **Daily Analysis Runlog For Sequence/QCBatch ID #VF101910**

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	AHPatel	Review On	10/22/2010 12:00:00 AM
Tune/Reschk	VP4671	Initial Calibration Stds	N/A
CCC	VP4675	SubDirectory	VF101910
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82F101210W.M

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB TUNE CHECK	VF024106.D	19 Oct 2010 9:33	MS	Ok
2	50 PPB CCC	VF024107.D	19 Oct 2010 10:11	MS	Not Ok
3	50 PPB CCC	VF024108.D	19 Oct 2010 11:14	MS	Ok,M
4	VBF1019W1	VF024109.D	19 Oct 2010 12:04	MS	Ok
5	BSF1019W1	VF024110.D	19 Oct 2010 12:42	MS	Ok,M
6	BSF1019W2	VF024111.D	19 Oct 2010 13:22	MS	Ok,M
7	B3902-02MS	VF024112.D	19 Oct 2010 13:52	MS	Ok,M
8	B3902-03MSD	VF024113.D	19 Oct 2010 14:21	MS	Ok,M
9	B3902-15	VF024114.D	19 Oct 2010 14:51	MS	Ok
10	B3902-16	VF024115.D	19 Oct 2010 15:20	MS	Ok
11	B3902-17	VF024116.D	19 Oct 2010 15:50	MS	Ok
12	B3902-18	VF024117.D	19 Oct 2010 16:20	MS	Ok
13	B3902-19	VF024118.D	19 Oct 2010 16:50	MS	ReRun
14	B3902-20	VF024119.D	19 Oct 2010 17:20	MS	Ok
15	B3902-21	VF024120.D	19 Oct 2010 17:50	MS	Ok
16	B3902-22	VF024121.D	19 Oct 2010 18:19	MS	Ok
17	B3902-23	VF024122.D	19 Oct 2010 18:49	MS	Ok
18	B3902-24	VF024123.D	19 Oct 2010 19:19	MS	Ok



Instrument ID: MSVOA\_F

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

## Daily Analysis Runlog For Sequence/QCBatch ID #VF101910

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	AHPatel	Review On	10/22/2010 12:00:00 AM
Tune/Reschk	VP4671	Initial Calibration Stds	N/A
CCC	VP4675	SubDirectory	VF101910
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82F101210W.M

Sr#	SampleId	Data File Name	Comment	Status
1	BFB TUNE CHECK	VF024106.D	VP4671	Ok
2	50 PPB CCC	VF024107.D	VP4673,CCC fail	Not Ok
3	50 PPB CCC	VF024108.D	VP4675,#14,15,16(high side) and #58 (low side)-over 20%Dev	Ok,M
4	VBF1019W1	VF024109.D		Ok
5	BSF1019W1	VF024110.D	#5,15,16-failing high	Ok,M
6	BSF1019W2	VF024111.D	#16-failing high	Ok,M
7	B3902-02MS	VF024112.D	pH<2 A,#9,15,23-failing	Ok,M
8	B3902-03MSD	VF024113.D	pH<2 A,#9,81-failing	Ok,M
9	B3902-15	VF024114.D	pH<2 A	Ok
10	B3902-16	VF024115.D	pH<2 A	Ok
11	B3902-17	VF024116.D	pH<2 A	Ok
12	B3902-18	VF024117.D	pH<2 A	Ok
13	B3902-19	VF024118.D	pH<2 A; #16(Acetone) detected	ReRun
14	B3902-20	VF024119.D	pH<2 A	Ok
15	B3902-21	VF024120.D	pH<2 A	Ok
16	B3902-22	VF024121.D	pH<2 A	Ok
17	B3902-23	VF024122.D	pH<2 A	Ok
18	B3902-24	VF024123.D	pH<2 A	Ok



## Manual Integration Report

Sequence

VG100710

Instrument

MSVOA\_g

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
100 PPB ICC	VG030797.D	2-Hexanone	prashant	10/7/2010 5:43:25 PM	margret	10/8/2010 12:17:40 PM	Peak Integrated by Software incorrectly
50 PPB ICC	VG030798.D	2-Hexanone	prashant	10/7/2010 5:43:31 PM	margret	10/8/2010 12:17:45 PM	Peak Integrated by Software incorrectly
20 PPB ICC	VG030799.D	2-Hexanone	prashant	10/7/2010 5:43:40 PM	margret	10/8/2010 12:17:50 PM	Peak Integrated by Software incorrectly
10 PPB ICC	VG030800.D	2-Hexanone	prashant	10/7/2010 5:43:45 PM	margret	10/8/2010 12:17:54 PM	Peak Integrated by Software incorrectly
10 PPB ICC	VG030800.D	Methyl Acetate	prashant	10/7/2010 5:43:45 PM	margret	10/8/2010 12:17:54 PM	Peak Integrated by Software incorrectly
5 PPB ICC	VG030801.D	2-Hexanone	prashant	10/7/2010 5:43:49 PM	margret	10/8/2010 12:17:59 PM	Peak Integrated by Software incorrectly
5 PPB ICC	VG030801.D	Methyl Acetate	prashant	10/7/2010 5:43:49 PM	margret	10/8/2010 12:17:59 PM	Peak Integrated by Software incorrectly
1 PPB ICC	VG030802.D	1,4-Dichlorobenzene	prashant	10/7/2010 5:43:54 PM	margret	10/8/2010 12:18:03 PM	Peak Integrated by Software incorrectly
1 PPB ICC	VG030802.D	2-Hexanone	prashant	10/7/2010 5:43:54 PM	margret	10/8/2010 12:18:03 PM	Peak Integrated by Software incorrectly
1 PPB ICC	VG030802.D	Carbon Tetrachloride	prashant	10/7/2010 5:43:54 PM	margret	10/8/2010 12:18:03 PM	Peak Integrated by Software incorrectly
50 PPB ICV	VG030803.D	2-Hexanone	prashant	10/7/2010 5:43:59 PM	margret	10/8/2010 12:18:07 PM	Peak Integrated by Software incorrectly



### Manual Integration Report

Sequence		VG100710		Instrument			MSVOA_g
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
BSG1007W1	VG030806.D	2-Hexanone	prashant	10/8/2010 8:24:21 AM	margret	10/8/2010 12:18:12 PM	Peak Integrated by Software incorrectly
BSG1007W2	VG030807.D	2-Hexanone	prashant	10/8/2010 8:24:12 AM	margret	10/8/2010 12:18:16 PM	Peak Integrated by Software incorrectly
50 PPB CCC	VG030820.D	2-Hexanone	Shreena	10/8/2010 1:55:47 AM	prashant	10/8/2010 8:24:04 AM	Peak Integrated by Software incorrectly



### Instrument ID: MSVOA\_G

**284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900**

#### **Daily Analysis Runlog For Sequence/QCBatch ID #VG100710**

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/7/2010 12:00:00 AM
Tune/Reschk	VP4423, VP4450	Initial Calibration Stds	VP4424 to VP4429
CCC	VP4451	SubDirectory	VG100710
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	VP4430	HP Processing Method	82G100710W.M

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB TUNE CHECK	VG030796.D	7 Oct 2010 11:02	PS	Ok
2	100 PPB ICC	VG030797.D	7 Oct 2010 11:47	PS	Ok,M
3	50 PPB ICC	VG030798.D	7 Oct 2010 12:15	PS	Ok,M
4	20 PPB ICC	VG030799.D	7 Oct 2010 12:43	PS	Ok,M
5	10 PPB ICC	VG030800.D	7 Oct 2010 13:12	PS	Ok,M
6	5 PPB ICC	VG030801.D	7 Oct 2010 13:40	PS	Ok,M
7	1 PPB ICC	VG030802.D	7 Oct 2010 14:08	PS	Ok,M
8	50 PPB ICV	VG030803.D	7 Oct 2010 15:03	PS	Ok,M
9	VBG1007M1	VG030804.D	7 Oct 2010 15:49	PS	Not Ok
10	VBG1007W1	VG030805.D	7 Oct 2010 16:17	PS	Ok
11	BSG1007W1	VG030806.D	7 Oct 2010 16:46	PS	Ok,M
12	BSG1007W2	VG030807.D	7 Oct 2010 17:15	PS	Ok,M
13	B3672-01	VG030808.D	7 Oct 2010 17:43	PS	Ok
14	B3676-01	VG030809.D	7 Oct 2010 18:11	PS	Ok

15	B3704-01	VG030810.D	7 Oct 2010 18:40	PS	Ok
16	B3672-02	VG030811.D	7 Oct 2010 19:08	PS	Dilution
17	B3676-02	VG030812.D	7 Oct 2010 19:37	PS	Ok
18	B3704-02	VG030813.D	7 Oct 2010 20:05	PS	Ok
19	B3779-02DL 10X	VG030814.D	7 Oct 2010 20:33	PS	Ok
20	B3779-03DL 10X	VG030815.D	7 Oct 2010 21:01	PS	Ok
21	B3711-01	VG030816.D	7 Oct 2010 21:30	PS	Ok



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VG100710

STD. NAME	STD REF.#	STD. NAME	STD REF.#		
Review By	prashant	Review On	10/7/2010 12:00:00 AM		
Tune/Reschk	VP4423, VP4450	Initial Calibration Stds	VP4424 to VP4429		
CCC	VP4451	SubDirectory	VG100710		
Internal Standard/PEM	VP3011	HP Acquire Method	MOON		
ICV/I.BLK	VP4430	HP Processing Method	82G100710W.M		
Sr#	SampleId	Data File Name	Date-Time	Operator	Status
22	B3711-02	VG030817.D	7 Oct 2010 21:58	PS	Ok
23	BLANK	VG030818.D	7 Oct 2010 22:26	PS	Ok
24	BFB TUNE CHECK	VG030819.D	7 Oct 2010 22:54	PS	Ok
25	50 PPB CCC	VG030820.D	7 Oct 2010 23:22	PS	Not Ok
26	VBG1007M2	VG030821.D	7 Oct 2010 23:51	PS	Not Ok
27	VBG1007W2	VG030822.D	8 Oct 2010 00:20	PS	Not Ok
28	BSG1007W3	VG030823.D	8 Oct 2010 8:39	PS	Not Ok



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VG100710

STD. NAME	STD REF.#	STD. NAME	STD REF.#	
Review By	prashant	Review On	10/7/2010 12:00:00 AM	
Tune/Reschk	VP4423, VP4450	Initial Calibration Stds	VP4424 to VP4429	
CCC	VP4451	SubDirectory	VG100710	
Internal Standard/PEM	VP3011	HP Acquire Method	MOON	
ICV/I.BLK	VP4430	HP Processing Method	82G100710W.M	
Sr#	SampleId	Data File Name	Comment	Status
1	BFB TUNE CHECK	VG030796.D		Ok
2	100 PPB ICC	VG030797.D	Compound # 5,11,13,16,18,58,59,96 & 97 kept on LRF	Ok,M
3	50 PPB ICC	VG030798.D		Ok,M
4	20 PPB ICC	VG030799.D		Ok,M
5	10 PPB ICC	VG030800.D		Ok,M
6	5 PPB ICC	VG030801.D		Ok,M
7	1 PPB ICC	VG030802.D		Ok,M
8	50 PPB ICV	VG030803.D	Acrolein %Dev = -26.6	Ok,M
9	VBG1007M1	VG030804.D	Not used	Not Ok
10	VBG1007W1	VG030805.D		Ok
11	BSG1007W1	VG030806.D		Ok,M
12	BSG1007W2	VG030807.D		Ok,M
13	B3672-01	VG030808.D	pH<2 A	Ok
14	B3676-01	VG030809.D	pH<2 A	Ok
15	B3704-01	VG030810.D	pH<2 A	Ok
16	B3672-02	VG030811.D	pH<2 A, Need 10X	Dilution
17	B3676-02	VG030812.D	pH<2 A	Ok
18	B3704-02	VG030813.D	pH<2 A	Ok
19	B3779-02DL 10X	VG030814.D		Ok
20	B3779-03DL 10X	VG030815.D		Ok
21	B3711-01	VG030816.D	pH<2 A	Ok



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VG100710

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/7/2010 12:00:00 AM
Tune/Reschk	VP4423, VP4450	Initial Calibration Stds	VP4424 to VP4429
CCC	VP4451	SubDirectory	VG100710
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	VP4430	HP Processing Method	82G100710W.M

Sr#	SampleId	Data File Name	Comment	Status
22	B3711-02	VG030817.D	pH<2 A	Ok
23	BLANK	VG030818.D	Clean up	Ok
24	BFB TUNE CHECK	VG030819.D		Ok
25	50 PPB CCC	VG030820.D	Compounds # 3,5,11,13,15,16,18,26,58,96 & 97 failing low	Not Ok
26	VBG1007M2	VG030821.D	CCC fail	Not Ok
27	VBG1007W2	VG030822.D	CCC fail	Not Ok
28	BSG1007W3	VG030823.D	CCC fail	Not Ok



## Manual Integration Report

Sequence      VG101910      Instrument      MSVOA\_g

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
50 PPB CCC	VG031004.D	2-Hexanone	prashant	10/19/2010 12:30:21 PM	namrata	10/20/2010 11:11:55 AM	Peak Integrated by Software incorrectly
BSG1019W1	VG031006.D	2-Hexanone	Shreena	10/20/2010 3:33:10 AM	prashant	10/20/2010 9:03:53 AM	Peak Integrated by Software incorrectly
B3902-10MS	VG031015.D	2-Hexanone	Shreena	10/20/2010 4:49:21 AM	prashant	10/20/2010 9:03:42 AM	Peak Integrated by Software incorrectly
B3902-11MSD	VG031016.D	2-Hexanone	Shreena	10/20/2010 4:49:24 AM	prashant	10/20/2010 9:03:37 AM	Peak Integrated by Software incorrectly
B3902-11MSD	VG031016.D	Methyl Acetate	Shreena	10/20/2010 4:49:24 AM	prashant	10/20/2010 9:03:37 AM	Peak Integrated by Software incorrectly
20 PPB CCC	VG031020.D	Carbon Tetrachloride	Shreena	10/20/2010 4:49:27 AM	prashant	10/20/2010 9:03:32 AM	Peak Integrated by Software incorrectly
20 PPB CCC	VG031020.D	Trichlorofluoromethane	Shreena	10/20/2010 4:49:27 AM	prashant	10/20/2010 9:03:32 AM	Peak Integrated by Software incorrectly
BSG1019W3	VG031022.D	Allyl chloride	Shreena	10/20/2010 4:49:29 AM	prashant	10/20/2010 9:03:26 AM	Peak Integrated by Software incorrectly
BSG1019W3	VG031022.D	Methylene Chloride	Shreena	10/20/2010 4:49:29 AM	prashant	10/20/2010 9:03:26 AM	Peak Integrated by Software incorrectly
BSG1019W3	VG031022.D	Trichlorofluoromethane	Shreena	10/20/2010 4:49:29 AM	prashant	10/20/2010 9:03:26 AM	Peak Integrated by Software incorrectly
BSG1019W4	VG031023.D	Carbon Tetrachloride	Shreena	10/20/2010 4:49:31 AM	prashant	10/20/2010 9:03:20 AM	Peak Integrated by Software incorrectly



### Manual Integration Report

Sequence		VG101910	Instrument		MSVOA_g		
Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
BSG1019W4	VG031023.D	Trichlorofluoromethane	Shreena	10/20/2010 4:49:31 AM	prashant	10/20/2010 9:03:20 AM	Peak Integrated by Software incorrectly



### Instrument ID: MSVOA\_G

**284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900**

#### **Daily Analysis Runlog For Sequence/QCBatch ID #VG101910**

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/19/2010 12:00:00 AM
Tune/Reschk	VP4668	Initial Calibration Stds	N/A
CCC	VP4669, VP4680	SubDirectory	VG101910
Internal Standard/PEM	VP3011, VP1325	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M, 624G101810W.M

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB TUNE CHECK	VG031003.D	19 Oct 2010 10:35	PS	Ok
2	50 PPB CCC	VG031004.D	19 Oct 2010 11:07	PS	Ok,M
3	VBG1019W1	VG031005.D	19 Oct 2010 12:26	PS	Ok
4	BSG1019W1	VG031006.D	19 Oct 2010 12:57	PS	Ok,M
5	BSG1019W2	VG031007.D	19 Oct 2010 13:24	PS	Not Ok
6	B3902-25	VG031008.D	19 Oct 2010 13:51	PS	Ok
7	B3902-26	VG031009.D	19 Oct 2010 14:18	PS	Ok
8	B3902-27	VG031010.D	19 Oct 2010 14:46	PS	Ok
9	B3902-28	VG031011.D	19 Oct 2010 15:14	PS	Ok
10	B3902-29	VG031012.D	19 Oct 2010 15:41	PS	Ok
11	B3902-30	VG031013.D	19 Oct 2010 16:09	PS	Ok
12	B3902-09	VG031014.D	19 Oct 2010 16:36	PS	Ok
13	B3902-10MS	VG031015.D	19 Oct 2010 17:03	PS	Ok,M
14	B3902-11MSD	VG031016.D	19 Oct 2010 17:31	PS	Ok,M
15	BLANK	VG031017.D	19 Oct 2010 17:58	PS	Ok
16	B3913-06	VG031018.D	19 Oct 2010 18:25	PS	Ok
17	B3913-07	VG031019.D	19 Oct 2010 18:52	PS	Ok
18	20 PPB CCC	VG031020.D	19 Oct 2010 19:22	PS	Ok,M
19	VBG1019W2	VG031021.D	19 Oct 2010 19:49	PS	Ok

20	BSG1019W3	VG031022.D	19 Oct 2010 20:16	PS	Ok,M
21	BSG1019W4	VG031023.D	19 Oct 2010 20:43	PS	Ok,M



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VG101910

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/19/2010 12:00:00 AM
Tune/Reschk	VP4668	Initial Calibration Stds	N/A
CCC	VP4669, VP4680	SubDirectory	VG101910
Internal Standard/PEM	VP3011, VP1325	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M, 624G101810W.M

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
22	B3917-01	VG031024.D	19 Oct 2010 21:11	PS	Ok
23	B3917-01DL 10X	VG031025.D	19 Oct 2010 21:38	PS	Not Ok
24	BLANK	VG031026.D	19 Oct 2010 22:05	PS	Ok
25	BLANK	VG031027.D	19 Oct 2010 22:32	PS	Ok
26	BLANK	VG031028.D	19 Oct 2010 22:59	PS	Ok



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

## Daily Analysis Runlog For Sequence/QCBatch ID #VG101910

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/19/2010 12:00:00 AM
Tune/Reschk	VP4668	Initial Calibration Stds	N/A
CCC	VP4669, VP4680	SubDirectory	VG101910
Internal Standard/PEM	VP3011, VP1325	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M, 624G101810W.M

Sr#	SampleId	Data File Name	Comment	Status
1	BFB TUNE CHECK	VG031003.D		Ok
2	50 PPB CCC	VG031004.D	Compound # 2,5,58 failing high	Ok,M
3	VBG1019W1	VG031005.D		Ok
4	BSG1019W1	VG031006.D	Compound # 2 failing high	Ok,M
5	BSG1019W2	VG031007.D	Not spiked, not needed	Not Ok
6	B3902-25	VG031008.D	pH<2 A	Ok
7	B3902-26	VG031009.D	pH<2 A	Ok
8	B3902-27	VG031010.D	pH<2 A	Ok
9	B3902-28	VG031011.D	pH<2 A	Ok
10	B3902-29	VG031012.D	pH<2 A	Ok
11	B3902-30	VG031013.D	pH<2 A	Ok
12	B3902-09	VG031014.D	pH<2 A	Ok
13	B3902-10MS	VG031015.D	pH<2 A. Few comp have failing recovery.	Ok,M
14	B3902-11MSD	VG031016.D	pH<2 A. RPD of few comp are failing.	Ok,M
15	BLANK	VG031017.D	Clean up	Ok
16	B3913-06	VG031018.D	pH<2 A	Ok
17	B3913-07	VG031019.D	pH<2 A	Ok
18	20 PPB CCC	VG031020.D	624	Ok,M
19	VBG1019W2	VG031021.D	624	Ok
20	BSG1019W3	VG031022.D	624	Ok,M
21	BSG1019W4	VG031023.D	624	Ok,M



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VG101910

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/19/2010 12:00:00 AM
Tune/Reschk	VP4668	Initial Calibration Stds	N/A
CCC	VP4669, VP4680	SubDirectory	VG101910
Internal Standard/PEM	VP3011, VP1325	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M, 624G101810W.M

Sr#	SampleId	Data File Name	Comment	Status
22	B3917-01	VG031024.D	624, pH<2 A	Ok
23	B3917-01DL 10X	VG031025.D	624, Not required	Not Ok
24	BLANK	VG031026.D	624, Clean up	Ok
25	BLANK	VG031027.D	624, Clean up	Ok
26	BLANK	VG031028.D	624,Clean up	Ok



### Manual Integration Report

Sequence	VG102010	Instrument	MSVOA_g
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
50 PPB CCC	VG031030.D	2-Hexanone	Shreena	10/21/2010 2:07:46 AM	prashant	10/21/2010 8:52:54 AM	Peak Integrated by Software incorrectly
BSG1020W1	VG031032.D	2-Hexanone	Shreena	10/21/2010 2:07:48 AM	prashant	10/21/2010 8:52:49 AM	Peak Integrated by Software incorrectly
BSG1020W2	VG031033.D	2-Hexanone	Shreena	10/21/2010 2:07:50 AM	prashant	10/21/2010 8:52:43 AM	Peak Integrated by Software incorrectly
BSG1020W2	VG031033.D	Methyl Acetate	Shreena	10/21/2010 2:07:50 AM	prashant	10/21/2010 8:52:43 AM	Peak Integrated by Software incorrectly
BSG1020W2	VG031033.D	Tert butyl alcohol	Shreena	10/21/2010 2:07:50 AM	prashant	10/21/2010 8:52:43 AM	Peak Integrated by Software incorrectly
BSG1020W3	VG031038.D	2-Hexanone	Shreena	10/21/2010 2:07:52 AM	prashant	10/21/2010 8:52:37 AM	Peak Integrated by Software incorrectly



### Instrument ID: MSVOA\_G

**284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900**

#### **Daily Analysis Runlog For Sequence/QCBatch ID #VG102010**

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/20/2010 12:00:00 AM
Tune/Reschk	VP4681	Initial Calibration Stds	N/A
CCC	VP4682	SubDirectory	VG102010
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB TUNE CHECK	VG031029.D	20 Oct 2010 9:56	PS	Ok
2	50 PPB CCC	VG031030.D	20 Oct 2010 10:28	PS	Ok,M
3	VBG1020W1	VG031031.D	20 Oct 2010 13:24	PS	Ok
4	BSG1020W1	VG031032.D	20 Oct 2010 13:58	PS	Ok,M
5	BSG1020W2	VG031033.D	20 Oct 2010 14:26	PS	Not Ok
6	B3902-19	VG031034.D	20 Oct 2010 15:00	PS	Ok
7	B3901-15	VG031035.D	20 Oct 2010 15:27	PS	Ok
8	B3901-14	VG031036.D	20 Oct 2010 15:54	PS	Ok
9	B3901-06	VG031037.D	20 Oct 2010 16:21	PS	Ok
10	BSG1020W3	VG031038.D	20 Oct 2010 16:49	PS	Ok,M
11	B3901-01	VG031039.D	20 Oct 2010 17:16	PS	Ok
12	B3901-02	VG031040.D	20 Oct 2010 17:43	PS	Ok

13	B3901-03	VG031041.D	20 Oct 2010 18:11	PS	Ok
14	B3901-04	VG031042.D	20 Oct 2010 18:38	PS	Ok
15	B3901-07	VG031043.D	20 Oct 2010 19:06	PS	Ok
16	B3901-08	VG031044.D	20 Oct 2010 19:33	PS	Ok
17	B3901-09	VG031045.D	20 Oct 2010 20:00	PS	Ok
18	B3901-10	VG031046.D	20 Oct 2010 20:27	PS	Ok
19	B3901-05	VG031047.D	20 Oct 2010 20:55	PS	Ok
20	BLANK	VG031048.D	20 Oct 2010 21:22	PS	Ok
21	BLANK	VG031049.D	20 Oct 2010 21:49	PS	Ok



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

Daily Analysis Runlog For Sequence/QCBatch ID #VG102010

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/20/2010 12:00:00 AM
Tune/Reschk	VP4681	Initial Calibration Stds	N/A
CCC	VP4682	SubDirectory	VG102010
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
22	BLANK	VG031050.D	20 Oct 2010 22:15	PS	Ok
23	BLANK	VG031051.D	20 Oct 2010 22:42	PS	Ok



Instrument ID: MSVOA\_G

284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900

## Daily Analysis Runlog For Sequence/QCBatch ID #VG102010

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/20/2010 12:00:00 AM
Tune/Reschk	VP4681	Initial Calibration Stds	N/A
CCC	VP4682	SubDirectory	VG102010
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M

Sr#	SampleId	Data File Name	Comment	Status
1	BFB TUNE CHECK	VG031029.D		Ok
2	50 PPB CCC	VG031030.D	Compound # 13 failing low # 2,5,7,58 failing high	Ok,M
3	VBG1020W1	VG031031.D		Ok
4	BSG1020W1	VG031032.D	Comp#2 having high recovery.	Ok,M
5	BSG1020W2	VG031033.D	Surrogate(DBFM) failed	Not Ok
6	B3902-19	VG031034.D	pH<2 B	Ok
7	B3901-15	VG031035.D	pH<2 A	Ok
8	B3901-14	VG031036.D	pH<2 A	Ok
9	B3901-06	VG031037.D	pH<2 A	Ok
10	BSG1020W3	VG031038.D	Dichlorodifluoromethane fail for recovery	Ok,M
11	B3901-01	VG031039.D	pH<2 A	Ok
12	B3901-02	VG031040.D	pH<2 A	Ok
13	B3901-03	VG031041.D	pH<2 A	Ok
14	B3901-04	VG031042.D	pH<2 A	Ok
15	B3901-07	VG031043.D	pH<2 A	Ok
16	B3901-08	VG031044.D	pH<2 A	Ok
17	B3901-09	VG031045.D	pH<2 A	Ok
18	B3901-10	VG031046.D	pH<2 A	Ok
19	B3901-05	VG031047.D	pH<2 A	Ok
20	BLANK	VG031048.D	Clean up	Ok
21	BLANK	VG031049.D	Clean up	Ok



Instrument ID: MSVOA\_G

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Daily Analysis Runlog For Sequence/QCBatch ID #VG102010

STD. NAME	STD REF.#	STD. NAME	STD REF.#
Review By	prashant	Review On	10/20/2010 12:00:00 AM
Tune/Reschk	VP4681	Initial Calibration Stds	N/A
CCC	VP4682	SubDirectory	VG102010
Internal Standard/PEM	VP3011	HP Acquire Method	MOON
ICV/I.BLK	N/A	HP Processing Method	82G100710W.M

Sr#	SampleId	Data File Name	Comment	Status
22	BLANK	VG031050.D	Out of tune, Clean up	Ok
23	BLANK	VG031051.D	Out of tune, Clean up	Ok



284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

# SHIPPING AND RECEIVING DOCUMENTATION

## CLIENT INFORMATION

## CLIENT PROJECT INFORMATION

## CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:

COMPANY: EA Engineering

ADDRESS: 6712 Brooklawn Pkwy Ste 101

CITY: Syracuse STATE: NY ZIP: 13211

ATTENTION: Joe Von Uderitz

PHONE: 315-431-4610 FAX:

PROJECT NAME: NYSDEC Storonske Loop

PROJECT NO.: 1447422 LOCATION: Schodack, NY

PROJECT MANAGER: Jim Hayward

e-mail: jhoward@east.com

PHONE: 315-431-4610 FAX:

BILL TO: Same as client

PO#:

ADDRESS:

CITY: STATE: ZIP:

ATTENTION:

PHONE:

## ANALYSIS

## DATA TURNAROUND INFORMATION

## DATA DELIVERABLE INFORMATION

FAX: DAYS \*

HARD COPY: Standard (Form 1's) DAYS \*

EDD: Standard DAYS \*

PREAPPROVED TAT:  YES  NO

STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

- RESULTS ONLY  USEPA CLP  
 RESULTS + QC  New York State ASP "B"  
 New Jersey REDUCED  New York State ASP "A"  
 New Jersey CLP  Other \_\_\_\_\_  
 EDD FORMAT  Excel

1 VOL 5260B 2 3 4 5 6 7 8 9

## COMMENTS

← Specify Preservatives  
 A - HCl      B - HNO<sub>3</sub>  
 C - H<sub>2</sub>SO<sub>4</sub>      D - NaOH  
 E - ICE      F - Other

CHEMTECH SAMPLE 10/18/10	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9		
1. 2. 3.	4-42-021- MW-16D (MS/MSD)	CW	X		10/13/10	1527	6	X										
4.	" - MW-16S				10/13/10	1600	2											
5.	" - MW-20D				10/13/10	1635	2											
6.	" - MW-13DD				10/14/10	0715	2											
7.	" - MW-13D				10/14/10	0745	2											
8.	" - MW-13S				10/14/10	0810	2											
9. 10. 11.	" - MW-10D (MS/MSD)				10/14/10	0852	6											
12.	" - MW-12S				10/14/10	0935	2											
13.	" - MW-14S				10/14/10	1005	2											
14.	" - MW-14D				10/14/10	1033	2											

## SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:  
1. James Piter

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

Revision 8/2007

DATE/TIME: 10/15/10 0700

DATE/TIME:

DATE/TIME:

DATE/TIME: 10/16/10

DATE/TIME: 10/16/10

DATE/TIME: 10/16/10

RECEIVED BY:  
1. FED EX

RECEIVED BY:

RECEIVED BY:

RECEIVED FOR LAB BY:  
3. Swati MehtaConditions of bottles or coolers at receipt:  Compliant  Non Compliant  
MeOH extraction requires an additional 4 oz jar for percent solid.

Comments:

Cooler Temp. 50°C  
Ice in Cooler? YES

Page 1 of 3

SHIPPED VIA: CLIENT  HAND DELIVERED  OVERNIGHT  
CHEMTECH:  PICKED UP  OVERNIGHTShipment Complete:  
 YES  NO

CLIENT INFORMATION			CLIENT PROJECT INFORMATION			CLIENT BILLING INFORMATION								
<small>REPORT TO BE SENT TO</small> <b>COMPANY:</b> EA Engineering <b>ADDRESS:</b> 6712 Brooklawn Pkwy Ste 104 <b>CITY:</b> Syracuse <b>STATE:</b> NY <b>ZIP:</b> 13211 <b>ATTENTION:</b> Joe Van Uderitz <b>PHONE:</b> 315-431-4610 <b>FAX:</b>			<b>PROJECT NAME:</b> NYSDEC Standards Loop <b>PROJECT NO.:</b> 1447422 <b>LOCATION:</b> Schodack, NY <b>PROJECT MANAGER:</b> Jim Hayward <b>e-mail:</b> jhayward@caest.com <b>PHONE:</b> 315-431-4610 <b>FAX:</b>			<b>BILL TO:</b> Same as client <b>PO#:</b> <b>ADDRESS:</b> <b>CITY:</b> <b>STATE:</b> <b>ZIP:</b> <b>ATTENTION:</b> <b>PHONE:</b>								
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			ANALYSIS								
FAX: HARD COPY: Standard (Form 1's) EDD: Standard PREAPPROVED TAT: <input type="checkbox"/> YES <input type="checkbox"/> NO STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS			<input type="checkbox"/> RESULTS ONLY <input type="checkbox"/> USEPA CLP <input type="checkbox"/> RESULTS + QC <input checked="" type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> New Jersey CLP <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> EDD FORMAT Excel			1 <b>Joe S. Scholten</b> 2 3 4 5 6 7 8 9								
CHEMTECH SAMPLE ID KR 10/18/10	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE	SAMPLE COLLECTION		# OF BOTTLES A	PRESERVATIVES			COMMENTS ← Specify Preservatives A - HCl      B - HNO <sub>3</sub> C - H <sub>2</sub> SO <sub>4</sub> D - NaOH E - ICE      F - Other				
			COMP	GRAB	DATE		TIME	1	2		3	4	5	6
1. 15.	4-42-021- UK-3	GW	X	10/14/10	1107	2	X							
2. 16.	" -UK-1			10/14/10	1150	2								
3. 17.	" -UK-2			10/14/10	1213	2								
4. 18.	" -MW-85			10/14/10	1300	2								
5. 19.	" -MW-8DD			10/14/10	1340	2								
6. 20.	" -MW-8D			10/14/10	1338	2								
7. 21.	" -MW-15S			10/14/10	1420	2								
8. 22.	" -MW-9S			10/14/10	1455	2								
9. 23.	" -MW-5D			10/14/10	1524	2								
10. 24.	" -MW-4D			10/14/10	1552	2								
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY														
RELINQUISHED BY SAMPLER: 1. <i>James Peter</i>		DATE/TIME: 10/15/10 0900		RECEIVED BY: 1. <i>FED EX</i>		Conditions of bottles or coolers at receipt: <input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant MeOH extraction requires an additional 4 oz jar for percent solid. Comments:							Cooler Temp. <b>5°C</b> Ice in Cooler?: <b>YES</b>	
RELINQUISHED BY: 2.		DATE/TIME:		RECEIVED BY: 2.										
RELINQUISHED BY: 3. <i>FED-EX</i>		DATE/TIME: 10/16/10		RECEIVED FOR LAB BY: 3. <i>Juehui McHale</i>		Page <b>2</b> of <b>3</b>			SHIPPED VIA: <input checked="" type="checkbox"/> CLIENT <input type="checkbox"/> HAND DELIVERED <input checked="" type="checkbox"/> OVERNIGHT <input type="checkbox"/> PICKED UP <input type="checkbox"/> OVERNIGHT				Shipment Complete?: <b>658</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

**CHEMTECH**  
CHAIN OF CUSTODY RECORD

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CHEMTECH PROJECT NO.

B3902

QUOTE NO.

COC Number

088915

CLIENT INFORMATION			CLIENT PROJECT INFORMATION			CLIENT BILLING INFORMATION												
REPORT TO BE SENT TO:																		
COMPANY: E4 Engineering			PROJECT NAME: NYSDEC Storonske Coop			BILL TO: Same as client PO#:												
ADDRESS: 4712 Brooklawn Pkwy Ste 104			PROJECT NO.: 1447422 LOCATION: Schodack, NY			ADDRESS:												
CITY: Syracuse STATE: NY ZIP: 13211			PROJECT MANAGER: Jim Hayward			CITY: STATE: ZIP:												
ATTENTION: Joe Von Oderitz			e-mail: <a href="mailto:jhayward@east.com">jhayward@east.com</a>			ATTENTION: PHONE:												
PHONE: 315-431-4610 FAX:			PHONE: 315-431-4610 FAX:			ANALYSIS												
DATA TURNAROUND INFORMATION																		
FAX: _____ DAYS •			RESULTS ONLY <input type="checkbox"/> USEPA CLP <input type="checkbox"/>															
HARD COPY: Standard (Form 1's) DAYS •			RESULTS + QC <input checked="" type="checkbox"/> New York State ASP "B" <input type="checkbox"/>															
EDD: Standard DAYS •			New Jersey REDUCED <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/>															
PREAPPROVED TAT: <input type="checkbox"/> YES <input type="checkbox"/> NO			New Jersey CLP <input type="checkbox"/> Other _____															
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS			<input checked="" type="checkbox"/> EDD FORMAT <i>Excel</i>															
DATA DELIVERABLE INFORMATION																		
JOC 82603																		
CHEMTECH SAMPLE ID KR 10/18/10	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl      B-HNO <sub>3</sub> C-H <sub>2</sub> SO <sub>4</sub> D-NaOH E-ICE      F-Other	
1. 25.	4-42-021- MW-75	GW	X	10/14/10	1618	2	X											
2. 26.	" - MW-6DD			10/15/10	0703	2												
3. 27.	" - MW-6D			10/15/10	0742	2												
4. 28.	" - MW-6S			10/15/10	0801	2												
5. 29.	" - Duplicate -01			10/14/10	-	2												
6. 30.	" - Duplicate -02			10/14/10	-	2												
7. 31.	" - Trip Blank			10/7/10	1630	2												
8.																		
9.																		
10.																		

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: <i>Joe Peter</i>	DATE/TIME: 10/15/10 0900	RECEIVED BY: 1. FedEx	Conditions of bottles or coolers at receipt: <input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant MeOH extraction requires an additional 4 oz jar for percent solid. Comments:	Cooler Temp. 5°C Ice in Cooler? Yes
RELINQUISHED BY: 2.	DATE/TIME:	RECEIVED BY:		
RELINQUISHED BY: 3. FedEx	DATE/TIME: 10/16/10	RECEIVED FOR LAB BY: 3. Snehil Motala	SHIPPED VIA: CLIENT: <input type="checkbox"/> HAND DELIVERED <input checked="" type="checkbox"/> OVERNIGHT CHEMTECH: <input type="checkbox"/> PICKED UP <input type="checkbox"/> OVERNIGHT	Shipment Complete: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO



**From:** Hayward, Jim [jhayward@eaest.com]  
**Sent:** October 18, 2010 13:01  
**To:** MARIA LUISA CRUZ  
**Cc:** Vonuderitz, Joe  
**Subject:** RE: B3902 bubbles

Hello Maria,

Go ahead and run all of these samples - thanks for the heads up though.

Jim

James C. Hayward, P.E.  
 Project Manager/Senior Engineer  
 EA Engineering, P.C.  
 6712 Brooklawn Parkway, Suite 104  
 Syracuse, New York 13211-2158  
 Phone: 315-431-4610  
 Fax: 315-431-4280  
 Cell: 315-345-0063

**From:** MARIA LUISA CRUZ [mailto:L.CRUZ@chemtech.net]  
**Sent:** Monday, October 18, 2010 12:47 PM  
**To:** Hayward, Jim  
**Cc:** Vonuderitz, Joe  
**Subject:** B3902 bubbles

Hi Joe/Jim,

Please advise lab to proceed in spite of presence of air bubbles or headspace. See below field IDs from Sample Management:

4-42-021-UK-2 - 2 of 2 VOC Vials received w/bubbles.  
 4-42-021-MW-15S - 2 of 2 VOC Vials received w/bubbles.  
 4-42-021-MW-5D - 2 of 2 VOC Vials received w/bubbles.  
 4-42-021-MW-20D - 1 of 2 VOC Vials received w/bubbles.  
 4-42-021-MW-13DD - 1 of 2 VOC Vials received w/bubbles.  
 4-42-021-DUPLICATE-01 - 1 of 2 VOC Vials received w/bubbles.  
 4-42-021-DUPLICATE-02 - 1 of 2 VOC Vials received w/bubbles.

**Thanks,**  
 Luisa Cruz  
 Project Manager  
[l.cruz@chemtech.net](mailto:l.cruz@chemtech.net)  
 Tel. 908 728 3147  
 Fax: 908-789-8514

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Florida	E87935
Maryland	296
Massachusetts	M-NJ503
Oklahoma	9705
Rhode Island	LAO00259
Connecticut	PH-0649
Maine	NJ0503
Pennsylvania	68-548



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# END OF ANALYTICAL RESULTS