SITE CHARACTERIZATION REPORT

VENUS ESTATES
90-11 31ST STREET
QUEENS, NEW YORK 11369

NYS DEC SPILL NO. 0800899
NYS DEC SITE NO. 241120

H2M Project No.
GIAM 1201

APRIL 21, 2014

Prepared For:

New York State
Department of Environmental Conservation
(NYS DEC)

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Site Characterization Report
Venus Estates
90-11 31st Street
Jackson Heights, New York
NYSDEC No. 241120

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Site Characterization Report
Venus Estates, Inc.
90-11 31st Avenue
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NYSDEC No. 241120

April 2014

1.0 Introduction

Holzmacher, Mclendon & Murrell, P.C. (H2M) has been retained by Mr. Peter Giampilis (Venus Estates, Inc.) to provide environmental consulting services for the property located at 90-11 31st Avenue in Jackson Heights, New York (the Site). Pursuant to the New York State Department of Environmental Conservation (NYSDEC) Order of Consent and Administrative Settlement Index #R2-0651-10-10 along with the NYSDEC Site Characterization Work Plan approval letter dated June 12, 2012 (**Attachment 1**), site investigative activities were conducted in November and December 2013.

Recently conducted site investigative activities included the installation of two (2) permanent monitoring wells (designated as MW-5 and MW-6) within a one city block radius, surveying of the wells for topographic and top of casing elevations and subsequent sampling for Chlorinated Volatile Organic Compounds (CVOCs) and their related breakdown products. Additionally, a permanent soil gas sampling point was installed within the annular space of permanent monitoring well MW-5 at the time of well construction.

As per the request of the NYSDEC, a video inspection of the building's sanitary line was also completed in January 2014 by City Wide Sewer & Drain Service Corp (City Wide). Results of the video inspection revealed no evidence of any breaches within the building's main sanitary line leading out form the building and connecting to the main sewer trunk line located along 31st Avenue (**Attachment 2**, City Wide letter). The sewer pipe inspection was recorded on a DVD.

Although analytical results indicated levels of CVOC's above the applicable criteria within groundwater samples collected from four (4) of six (6) Site monitoring wells, it is H2M's opinion that the identified CVOC impact to groundwater is not the result of a release emanating from 90-11 31st Street property. Please consider that H2M's soil samples collected in June 2011, in addition to the previously conducted environmental sampling performed by other consultants onsite, does not identify CVOC's within the unsaturated soil column anywhere beneath the subject property in excess of NYSDEC Soil Cleanup Objectives, specifically the area located in the basement, adjacent to the basement sump and in the rear yard. Although, it is recognized that soil contamination in the soil column can contribute to a groundwater concern, specifically for this site, there exists no correlation between CVOCs identified in the groundwater and a pathway (i.e., discharge, piping, sump, etc.) related to any site activities associated with former dry cleaning operations. Based on the findings presented herein, H2M is respectively requesting a No Further Remedial Action Determination and closure of NYSDEC No. 241120 within the NYSDEC's data base.

2.0 Background

2.1 Site History & Description

Based upon information obtained from a site walkthrough and previous reports, the subject property is a storefront located in an area developed as a small urban strip mall that was constructed in 1932 and is identified as Block 1388, Lot 36 on the tax map. The property is rectangular in shape and is predominantly covered by the existing structure, however there is a pedestrian sidewalk to the front and a small vegetated yard to the rear. The building has a basement with limited access beneath a portion of the main level which is utilized for storage and location of the building's boiler and utilities.

The leasehold space that is the subject of the investigation activities is currently occupied by New York Dry Cleaners and is bound on either side by active laundering and clothes cleaning facilities. The subject facility has not performed dry cleaning operations onsite in the past several years (estimated to have terminated in the mid to late 1990's) and operates as a drop shop where dry cleaning activities are performed offsite. When dry cleaning activities were performed onsite, the equipment was located on the first floor, not in the basement.

2.2 Geology & Hydrogeology

2.2.1 Geology

According to the United States Department of Agriculture, Soil Conservation Service - Soil Survey, New York, the Site is located in the Atlantic Coastal Plain physiographic province which is characterized by low hills of unconsolidated sands, gravel and silt. The subsurface deposits consist of the Upper Glacial deposits that are characterized by southward sloping deposits of sand, gravel and silt. The Upper Glacial deposits have a maximum thickness of 600-feet which are underlain by the Magothy, Raritan and Lloyd Formations. The Gardiners clay and the Jameco gravel separate the Upper Glacial deposits and the Magothy Formation along the south west portion of Long Island. The Borough of Queens is underlain by bedrock, although the majority of it is at several hundred feet below land surface.

During subsurface investigation activities conducted by H2M, unconsolidated sandy soils of varying size were observed throughout the entire soil column which extended from grade to the approximate depth of 40-feet bsg at the MW-6 location.

2.2.2 Hydrogeology

The Borough of Queens is characterized by Alton stony loam (As) and the Miami stony loam (Ms) and bedrock. During H2M's November and December 2013 investigative activities groundwater elevation at the Site was identified at approximately 22 to 23 feet above mean sea elevation. Groundwater has been identified to be flowing overall in an east-southeasterly direction which is a notable shift from the July 2011 which was formerly flowing in a west-northwesterly direction of which the cause is unidentified.

Groundwater is not used as a potable water supply for the Borough of Queens. Potable water is supplied to the subject site by the New York City Bureau of Water. The Bureau obtains potable water from the Croton Reservoir located in Westchester County and other fresh water reservoirs in upstate New York.

2.3 Previous Investigations

Based on the use of the property historically as a dry cleaner, there have been several investigations conducted to evaluate the environmental condition of the subject property with respect to historical operations. The following is a brief summary of these investigation activities as reported.

- Initially in June 1996, Tyree Brothers Environmental Services, Inc. advanced one (1) soil boring to a reported terminal depth of 27-feet below ground surface (bgs) within the unpaved area located at the rear of the property. One (1) soil sample was collected from a 2-foot interval (25 to 27-feet bgs) exhibiting the highest elevated photo-ionization detector (PID) reading. Laboratory analytical results for the subject soil sample reported tetrachloroethene (PCE) concentrations at 7.6 parts per billion (ppb), which is below the NYSDEC Soil Cleanup Objective of 1,300 ppb. Depth to groundwater at the time of Tyree's investigation was reported at approximately 26-feet bgs.

- Additional remedial investigative activities were implemented in November 2007 by JJ Blake Technical Services that included the installation and sampling of five (5) soil borings to a depth of four (4) feet bgs. One soil sample was collected from each soil boring and laboratory analyzed for CVOCs. PCE was the only targeted analyte detected in any of the soil samples collected above the laboratory method detection limit. PCE was detected at a concentration of 61 parts per billion (ppb), which is below the NYSDEC soil cleanup objectives. The boring from which this sample was collected was located adjacent to the sump in the basement. The sump is located in the southeast portion of the basement and discharges to the public sewer system.

- Further investigative activities were implemented by GCI in February 2008 which included the collection of a groundwater sample from the front of the subject property within the pedestrian sidewalk, along 31st Avenue. The sample was collected from a temporary well with groundwater encountered at a reported depth interval of 31 to 34 feet bgs that was laboratory analyzed for VOCs. As a result, cis-1,2-dichlorethene (1,2-DCE) and PCE were detected at concentrations above their respective NYSDEC Groundwater Quality Standard of 5 ug/l. 1,2-DCE was detected at a concentration of 73 ug/l and PCE was detected at a concentration of 67 ug/l. Based on the results of this investigation, GCI recommended that the report be submitted to the NYSDEC for a determination as to the need for further assessment and/or remedial actions.

- In November and December 2008, at the direction of the NYSDEC, GCI conducted additional investigation activities that included the collection and analysis of additional soil samples from within and adjacent to the basement sump. Soil samples were collected from two (2) feet below grade and laboratory analyzed for VOCs. The results of the soil sampling indicated compliance with the NYSDEC Soil Cleanup Objectives and Cleanup Levels. In addition, three soil vapor samples and one ambient air sample within the basement were collected at the property. The ambient air sample collected from within the basement were reported to exhibit a trichloroethene (TCE) concentration of <0.2 parts per billion by volume (ppbv) in addition to a reported PCE concentration of 0.3 ppbv. Both concentrations indicate compliance with the New York State Department of Health (NYDOH) guidance values of 0.88 ppbv and 14.01 ppbv, respectively. The three (3) soil vapor samples collected from outside the front door (15 ppbv & 170 ppbv), outside the back door (1 ppbv & 160 ppbv) and beneath the basement floor (130 ppbv & 1,700 ppbv), indicated trichloroethene and PCE concentrations reported above the NYS DOH guidelines.

A summary of all historical environmental sampling conducted by others at the Site had been previously provided to the NYSDEC via email correspondence dated September 27, 2011 and follow-up email dated October 13, 2011.

2.3.1 Previous Site Characterization Investigation Activities

In June 2011, under the direct oversight of H2M, Paragon Environmental Construction, Inc. advanced four (4) permanent monitoring wells. All permanent monitoring wells were constructed with 2-inch diameter schedule 40 PVC piping with 15-feet of 0.010-slot screen which was installed intersect the top of the static water table observed at the time of installation. Subsequent groundwater sampling of the four (4) monitoring wells performed in July 2011 yielded analytical results with elevated levels of CVOC's above the NYSDEC State Ambient Water Quality Standards and Guidance Values within two (2) of the permanent site monitoring wells (MW-3 & MW-4). However, it is important to note, that although chlorinated solvents have not been used at the property since reportedly the late 1990's, dissolved phase groundwater concentrations exhibited an increase of CVOC's at the MW-3 location when compared to the groundwater sample collected within the immediate vicinity during the February 2008 groundwater sampling event. Please note that the groundwater flow direction in July 2011 was flowing predominantly in a north-northwesterly flow direction.

Additionally, in June 2011 two (2) soil samples were collected from the soil column recovered from the MW-3 boring located to the front of the subject property in which analytical results reported all CVOC compounds at concentrations that do not exceed the NYSDEC's Soil Cleanup Objective Unrestricted Use Table 375-6.8(a).

3.0 Recent Site Characterization Activities

3.1 Installation of Monitoring Wells and Soil Gas Sampling Point

In November 2013, under the direct oversight of H2M, NYEG Drilling, LLC installed two (2) permanent monitoring wells using Hollow Stem Auger (HSA) drilling methodology at the locations previously proposed within H2M's revised April 2011 SCWP and ultimately approved by the NYSDEC via letter correspondence date May 5, 2011 (**Attachment 1)**. It is important to note that direct-push which was the proposed method within H2M's approved Site Characterization Workplan dated April 2012 (Revised May 2012) was unsuccessful in penetrating the subsurface greater than 25-feet bgs therefore HSA was the alternate approach selected while drilling on-site in November 2013.

The recovered soil columns from both monitoring well locations were logged and screened (**Attachment 3**, Soil Boring Logs) using a calibrated PID in which no elevated readings were observed within the MW-5 and MW-6 bore hole.

Both permanent monitoring wells were constructed with 2-inch diameter schedule 40 PVC piping with 15-feet of 0.010-slot screen which was installed intersecting the top of the static water table observed at the time of installation. All monitoring wells were completed at grade with flush mounted protective covers. Following installation all wells were surveyed for topographic and top-of-casing elevation by Fehringer Surveying, P.C. of Seaford, New York in order to model groundwater flow direction beneath the Site.

Additionally, considering that HSA was utilized to install monitoring well MW-5 a permanent soil gas point was installed within the annular space at the 6-inch soil interval (21.0 to 21.5 feet bgs) immediately above groundwater during monitoring well construction. The soil gas sampling point was constructed using a stainless steel point with ¼-inch tubing extending to the surface and remaining in the man-way of monitoring well MW-5. The exterior of tubing was be sealed at the surface using a bentonite material to prevent outdoor air infiltration.

3.2 December 2013 Groundwater Sampling Activities

On December 3, 2013, H2M returned to the Site to conduct groundwater sampling activities of the two (2) newly installed and four (4) existing monitoring wells. Prior to well purging, a complete round of static groundwater measurements were collected. Below is a summary table of the data generated to develop groundwater flow contours beneath the subject site. A groundwater contour map is Included as **Figure 2**.

Monitoring Well	TOC Elevation	Depth to Groundwater	Groundwater Elevation
MW-1	50.76	29.06	21.70
MW-2	48.53	25.43	23.10
MW-3	50.90	29.18	21.72
MW-4	45.83	24.21	21.62
MW-5	43.77	21.72	22.05
MW-6	51.89	29.96	21.93

Note: Groundwater elevation above mean sea level

Based on the generated contour map, it was concluded that the groundwater beneath the subject site is flowing predominately in an east-southeast flow direction.

Considering the notable shift in groundwater flow from a west-northwest direction as identified during the previous events conducted in 2011 (but utilizing only four monitoring wells), another complete round of groundwater levels was recorded on March 13, 2014, which confirmed the greater than 90-degree shift in groundwater flow direction. Based upon the two rounds of groundwater elevation data collected groundwater now appears to be flowing from MW-2 towards MW-3, representing an east-southeast direction.

Following the complete round of groundwater measurements on December 3, 2013, the six (6) permanent monitoring wells were purged and sampled using low-flow methodology. During the purging process, water quality indicator parameters (e.g. pH, conductivity, turbidity, etc.) were recorded at five (5) minute intervals until stabilization occurred (**Attachment 4**, Groundwater Sampling Field Form). Groundwater samples were collected following stabilization and submitted to H2M Labs under chain of custody and subsequently analyzed for CVOC compound analysis via EPA Method 8260B. A summary of the groundwater sample results is presented below, in **Table 1** and a copy of the analytical package is provided as **Attachment 5.**

Groundwater CVOC Concentrations (ppb)
New York Dry Cleaners
90-11 31st Avenue
December 3, 2013

Constituent	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	NYSDEC
cis-1,2-dichloroethene	< 5	< 5	**130**	**11**	< 5	< 5	5
trans-1,2-dichloroethene	1 J	< 10	< 10	< 10	< 10	< 10	5
tetrachloroethene	< 5	2 J	**260**	**74**	**290**	**16**	5
trichloroethene	< 5	< 5	**13**	4 J	< 5	< 5	5
chloroform	< 5	2 J	**9**	2 J	2 J	< 5	7

Note: ppb – parts per billion; NYSDEC – Ambient Water Quality Standards and Guidance Values; ND – non-detectable concentrations; NA – criteria not available.

Analytical results report elevated levels of CVOC's above the NYSDEC State Ambient Water Quality Standards and Guidance Values within four (4) of the site monitoring wells. However, a significant reduction in PCE in MW-3 was observed when compared to July 2011 concentration of 910 ug/l.

3.3 MW-5 Soil Gas Sampling Results

On December 3, 2013 one soil gas sample was collected form the permanent soil gas sampling point located with the annular space of monitoring well MW-5. In accordance with the New York State Department of Health October 2006 *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* document one soil gas sample (SV-1) was collected following a helium tracer test and approximate 3-volume purge and subsequently summited to H2M Labs under chain of custody for volatile organic compound analysis via EPA method TO-15.

A summary of the analytical results are provided within **Table 2** and a copy of the analytical package is provided as **Attachment 6.**

4.0 Conclusions

Based on the previous investigations soils exceeding the NYSDEC Soil Cleanup Objective have never been identified beneath the subject site in which soil sampling dates back to as early as June of 1996. Although, it is recognized that soil contamination in the soil column can contribute to a groundwater concern, specifically for this site, there exists no correlation between CVOCs identified in the groundwater and a pathway (i.e., discharge, piping, sump, etc.) related to any site activities associated with former dry cleaning operations. Since the site is mainly capped with a building there exists no physical mechanism for potential CVOC contaminant migration from the soil column to groundwater. None of the soil and/or vapor data presented above indicates that a CVOC release occurred on the subject site and the Site is bordered by cleaning facilities and is located in a region with multiple dry cleaning facilities within 0.5 miles. To date all identifiable locations in which a potential pathway where chlorinated compounds could have migrated to the subsurface from the subject site have been investigated as follows:

1. Rear (north) vegetated yard (investigated in 1996, 2007);
2. Sump pit (2007, 2008);
3. Subsurface below basement (2007, 2008);
4. Soil in vicinity of sewer line and front (south) of building (2008, 2011)
5. Sanitary line (video inspected in January 2014).

A summary of historic soil samples collected across the Site and Groundwater results are included on Figure 3. Soil samples collected from each of the areas identified above do not indicate

soils in exceedance of State Cleanup Objectives and field indicators do not identify impact throughout the approximate 20-foot unsaturated soil column. If a shallow release was to have occurred either from the immediately adjacent basement sump pit, the building's sanitary sewer line and/or the unpaved rear yard of the property, evidence of impact would be identified within the unsaturated soil column beneath the Site. No evidence of this was identified and the integrity of the sewer line is secure. Also, the former dry cleaning machine was located on the first floor with no operational history of the dry cleaning operation related to the basement (as a means of discharge). The basement remains with limited accessibility via cellar doors installed on the sidewalk and a steep staircase, limiting the potential for historical storage of dry cleaning chemicals. Additionally it is important to note that H2M's understanding of the historic use of the site has been reported to have ceased the use of chlorinated solvents at the subject site around the mid to late 1990's.

Elevated levels of dissolved phase chlorinated compounds are observed within five (5) of the six (6) site monitoring wells which suggests a more regional issue. Please note the similar concentrations of PCE observed within monitoring well MW-3 located in front (south) of the site in addition to monitoring well MW-5 located behind (north) the site which indicates the subject property is located mid-plume of a regional issue. Therefore it is H2M's opinion that the groundwater CVOC impact is most likely emanating from an off-site source located between perimeter wells MW-2 and MW-5 and the subject property.

Considering the information presented above, H2M on behalf of Venus Estates is respectively requesting a No Further Remedial Action Determination and closure of NYSDEC No. 241120 within the NYSDEC's data base and delisting of the 90-11 31st Street, Jackson Heights, New York Property from the NYSDEC's data base.

Tables

Sample ID: Date: Lab Sample ID: Screened Interval: Total Depth: Units:	New York State Ambient Water Quality Standards and Guidance Values µg/L	D BLANK /19/11 787-005A µg/L	FIELD BLANK 12/3/2013 1312282-001A µg/L	TRIP BLANK 07/19/11 1107787-006A µg/L	TRIP BLANK 12/3/2013 1312282-008A µg/L
1,1,1-Trichloroethane	5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	5	<5	<5	<5	<5
1,1,2-Trichloroethane	1	<5	<5	<5	<5
1,1-Dichloroethane	5	<5	<5	<5	<5
1,1-Dichloroethene	5	<5	<5	<5	<5
1,2-Dichloroethane	0.6	<5	<5	<5	<5
1,2-Dichloroethene (total)	--	<5	<5	<5	<5
1,2-Dichloropropane	1	<5	<5	<5	<5
Bromodichloromethane	50	<5	<5	<5	<5
Carbon tetrachloride	5	<5	<5	<5	<5
Chloroethane	5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5
Chloromethane	--	<5	<5	<5	<5
cis-1,2-Dichloroethene	5	<5	<5	<5	<5
cis-1,3-Dichloropropene	0.4	<5	<5	<5	<5
Dibromochloromethane	50	<5	<5	<5	<5
Methylene chloride	5	<5	<5	<5	<5
Tetrachloroethene	5	<5	1 J	<5	<5
trans-1,2-Dichloroethene	5	<10	<10	<10	<10
trans-1,3-Dichloropropene	0.4	<5	<5	<5	<5
Trichloroethene	5	<5	<5	<5	<5
Vinyl chloride	2	<5	<5	<5	<5

Notes:

ug/L - micrograms/Liter

<# - Compound not detected above method detection limit

Bold - Compound detected above NYS AWQS and GV

Highlighted - value may exceed NYS AMWQS and GV

D - concentration of compound after dilution

ft bgs- feet below grade surface

TABLE #2 - SOIL GAS RESULTS

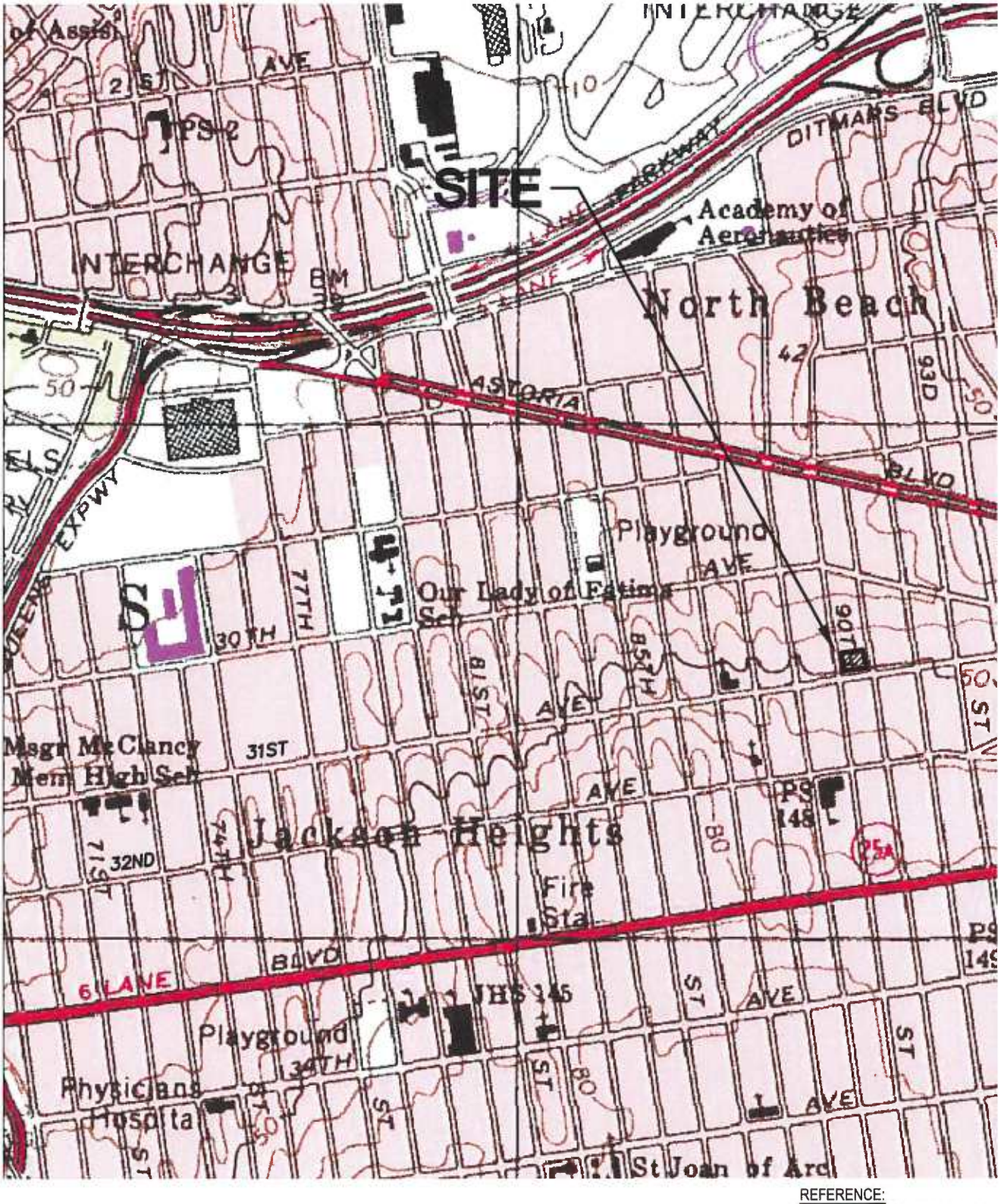
VENUS ESTATES

90-11 31st Avenue

Jackson Heights, Queen, NY

Sample ID:	SV-1
Date:	12/3/2013
Lab Sample ID:	1312347-001A
Volatile Organic Compound	Conc. (ppbv)
1,1,1-Trichloroethane	< 0.500
1,1,2,2-Tetrachloroethane	< 0.500
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.500
1,1,2-Trichloroethane	< 0.500
1,1-Dichloroethane	< 0.500
1,1-Dichloroethene	< 0.500
1,2,4-Trichlorobenzene	< 0.500
1,2,4-Trimethylbenzene	16.3
1,2-Dibromoethane	< 0.500
1,2-Dichlorobenzene	< 0.500
1,2-Dichloroethane	< 0.500
1,2-Dichloroethene (cis)	0.20 J
1,2-Dichloroethene (trans)	< 0.500
1,2-Dichloropropane	< 0.500
1,2-Dichlorotetrafluoroethane	< 0.500
1,3,5-Trimethylbenzene	4.62
1,3-Dichlorobenzene	< 0.500
1,3-Dichloropropene (cis)	< 0.500
1,3-Dichloropropene (trans)	< 0.500
1,3-Hexachlorobutadiene	< 0.500
1,4-Dichlorobenzene	< 0.500
Acetone	26.8
Benzene	0.54
Bromodichloromethane	< 0.500
Bromoform	< 0.500
Bromomethane	< 0.500
Carbon disulfide	0.24 J
Carbon tetrachloride	< 0.500
Chlorobenzene	< 0.500
Chloroethane	< 0.500
Chloroform	12.5
Chloromethane	< 0.500
Dibromochloromethane	< 0.500
Dichlorodifluoromethane	1.80
Ethylbenzene	1.62
Methyl butyl ketone	< 0.500
Methyl ethyl ketone	1.41
Methyl isobutyl ketone	< 0.500
Methyl tert-butyl ether	< 0.500
Methylene chloride	0.28 J
Styrene	< 0.500
Tetrachloroethene	3240
Toluene	522
Trichloroethene	2.79
Trichlorofluoromethane	0.29 J
Vinyl acetate	< 0.500
Vinyl chloride	< 0.500
Xylenes (m&p)	4.18
Xylenes (o)	2.32

Figures

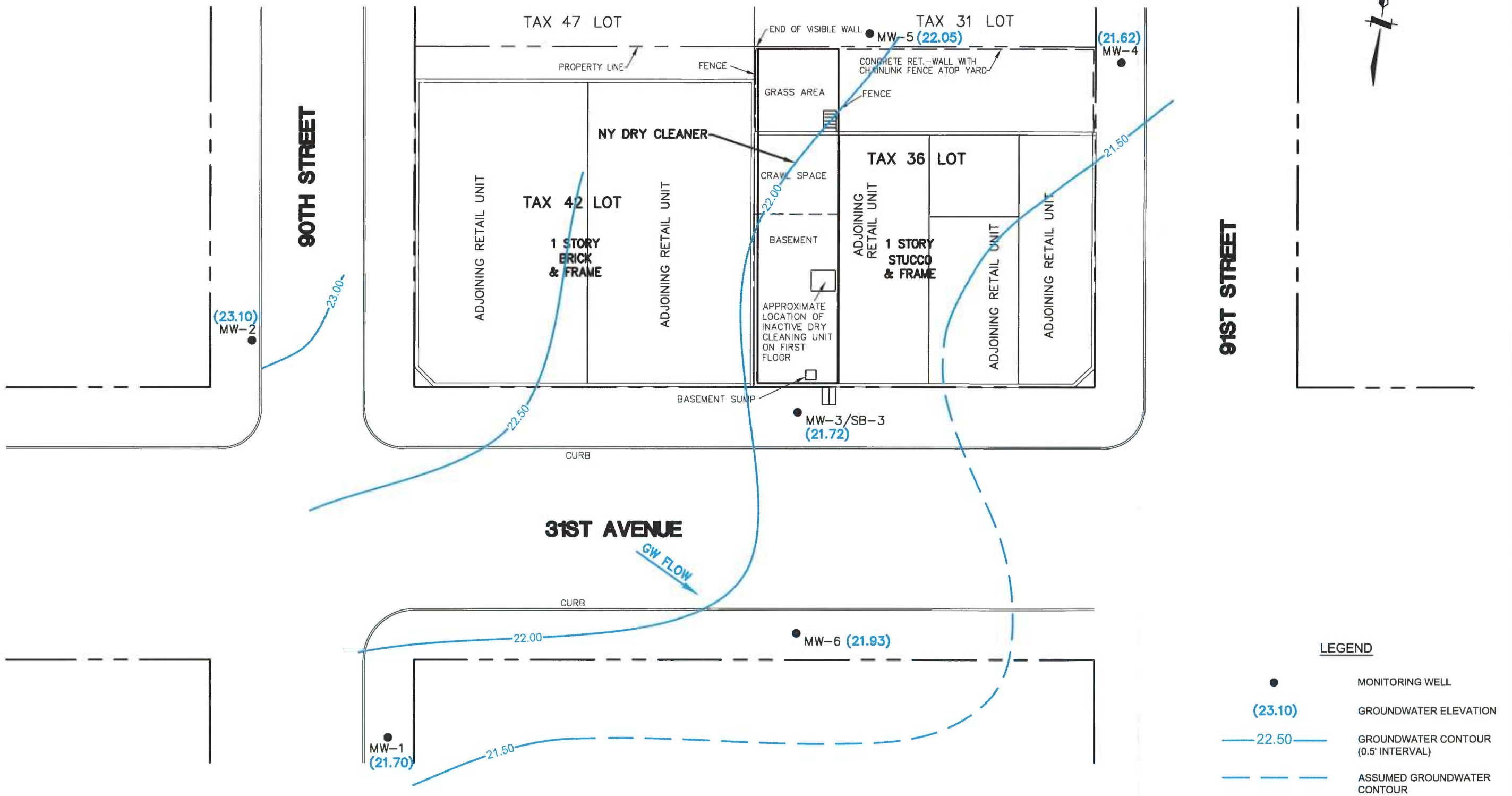


REFERENCE:
U.S.G.S (7.5 MINUTE SERIES)
CENTRAL PARK QUADRANGLE
NEW YORK-NEW JERSEY 1995

FIGURE 1
SITE LOCATION MAP
FORMER DRY CLEANERS
90-11 31st AVENUE
QUEENS, NEW YORK

H2M architects + engineers
Melville, NY
New City, NY
Albany, NY
Parsippany, NJ

I:\GIAM\1201\FIG 1 SITE LOCATION.dwg Last Modified: Feb 11, 2014 – 10:20am Plotted on: Apr 10, 2014 – 10:00am By mwirth



LEGEND

- MONITORING WELL
- (23.10) GROUNDWATER ELEVATION
- 22.50 GROUNDWATER CONTOUR (0.5' INTERVAL)
- ASSUMED GROUNDWATER CONTOUR

APPROXIMATE SCALE

0 30

(IN FEET)

FIGURE 2

DECEMBER 3, 2013 GROUNDWATER CONTOUR MAP

FORMER DRY CLEANERS

90-11 31st AVENUE

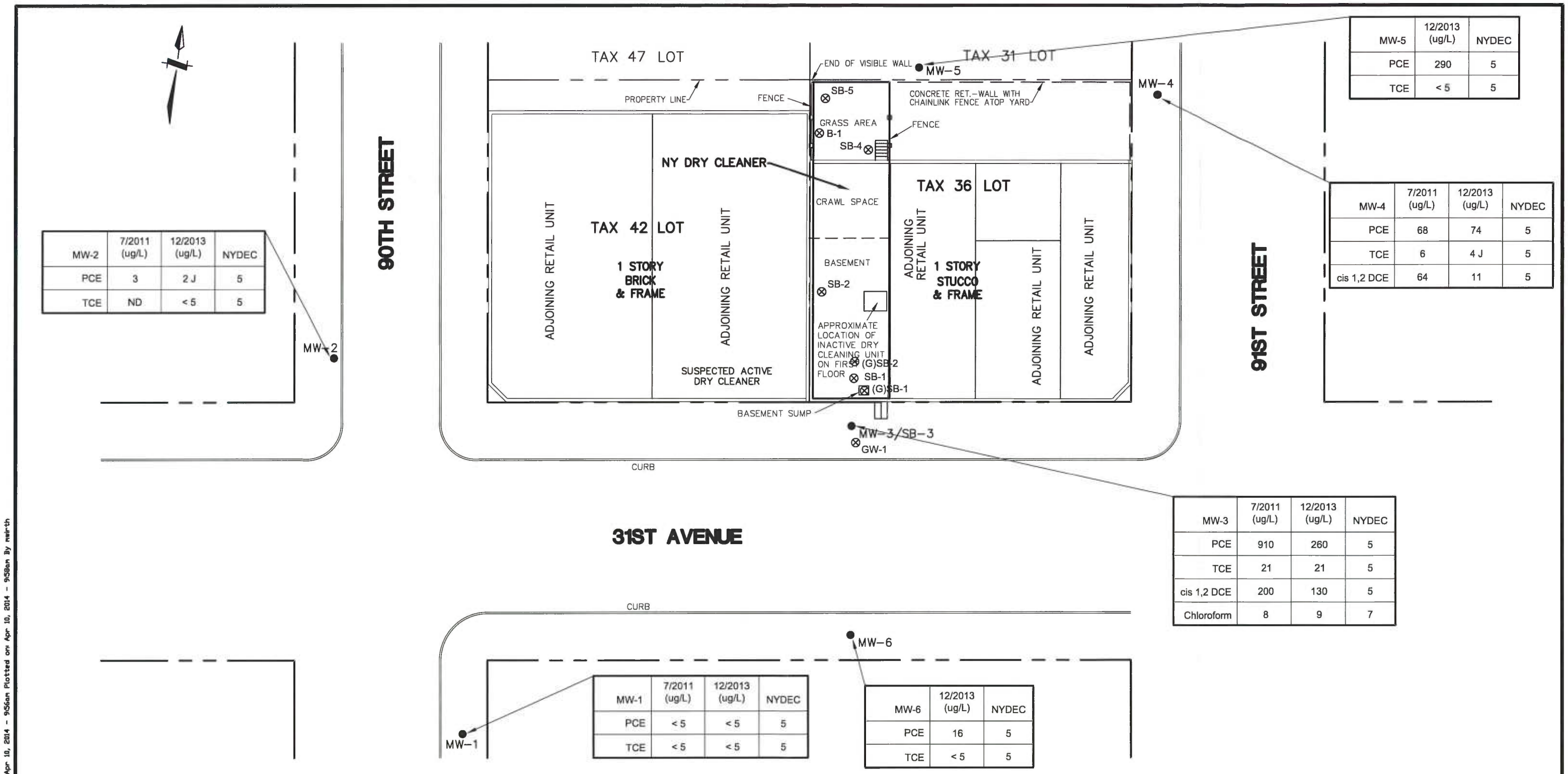
QUEENS, NEW YORK

PROJECT #:	GIAM 1201
DATE:	Feb. 11, 2014

H2M architects + engineers

Melville, NY
New City, NY
Albany, NY
Parsippany, NJ

I:\GIAM\1201\FIG 2 GW CONTOUR MAP 2013-12-03.dwg Last Modified: Feb 19, 2014 - 2:17pm Plotted on: Apr 10, 2014 - 9:38am By: mwirth



MW-2	7/2011 (ug/L)	12/2013 (ug/L)	NYDEC
PCE	3	2 J	5
TCE	ND	< 5	5

MW-5	12/2013 (ug/L)	NYDEC
PCE	290	5
TCE	< 5	5

MW-4	7/2011 (ug/L)	12/2013 (ug/L)	NYDEC
PCE	68	74	5
TCE	6	4 J	5
cis 1,2 DCE	64	11	5

MW-3	7/2011 (ug/L)	12/2013 (ug/L)	NYDEC
PCE	910	260	5
TCE	21	21	5
cis 1,2 DCE	200	130	5
Chloroform	8	9	7

MW-1	7/2011 (ug/L)	12/2013 (ug/L)	NYDEC
PCE	< 5	< 5	5
TCE	< 5	< 5	5

MW-6	12/2013 (ug/L)	NYDEC
PCE	16	5
TCE	< 5	5

SAMPLE ID:	B-1	SB-1	SB-2	SB-4	SB-5	GW-1	(G)SB-1	(G)SB-2	SB-3A	SB-3B	NYSDEC
DATE:	6/1996	11/2007	11/2007	11/2007	11/2007	2/2008	11/2008	11/2008	6/2011	6/2011	SCO
DEPTH (FT.):	~20'-25'	4'	4'	4'	4'	2'	2'	2'	27.5'-28'	39.5'-40'	(ppb)
ANALYTE	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)	
1,2 Dichloroethene (total)	–	–	–	–	–	–	–	–	4 J	13	440
cis-1,2 Dichloroethene	–	–	–	–	–	73	–	–	3 J	11	250
Methylene chloride	–	–	–	–	–	–	–	–	7 BJ	2 BJ	50
Tetrachloroethene	–	–	–	–	–	–	–	–	6 J	180	1,300
Trichloroethene	–	–	–	–	–	–	–	–	ND	3 J	470
PCE	7.6	61	< 10	< 10	< 10	67	12	< 5.09	–	–	1,300

ppb – parts per billion
SCO – Soil Cleanup Objective unrestricted use
J – estimated concentration
B – contaminent detected within laboratory blank
ND – non-detectable concentrations

APPROXIMATE SCALE
0 30
(IN FEET)

FIGURE 3
SAMPLE LOCATION & CONCENTRATION MAP
FORMER DRY CLEANERS
90-11 31st AVENUE
QUEENS, NEW YORK

PROJECT #: GIAM 0901
DATE: APRIL 23, 2012

H2M architects + engineers
Melville, NY
Parsippany, NJ

Attachment 1

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau B, 12th Floor
625 Broadway, Albany, New York 12233-7016
Phone: (518) 402-9768 • **Fax:** (518) 402-9773
Website: www.dec.ny.gov

Joe Martens
Acting Commissioner

June 12, 2012

Blair Sonzogni, PG
Holzmacher, McLendon & Murrell, P.C.
119 Cherry Hill Road, Suite 200
Parsippany, New Jersey 07054

Dear Mr. Sonzogni:

Re: Site Characterization Report Addendum (Revised)
NY Dry Cleaners, Site No. 241120

The New York State Department of Environmental Conservation (Department) and NYS Department of Health (NYSDOH) have received the revised Site Characterization Work Plan Addendum, dated April 2012 (Revised May 2012), for the above referenced site. The Department approves the document on the condition that progress reports are submitted monthly. This allows the Department and the responsible party to monitor the progress of one another and plan monthly activities accordingly so the project proceeds at more efficient pace.

Please notify the Department, in writing within 15 days of receiving this letter of your intent as per Section II, E, 2 of the Consent Order. If you agree with this condition please begin to obtain site access for the adjacent property for the installation of monitoring wells MW-5 and MW-6 and begin fieldwork in accordance with the approved schedule.

If you have any questions, please contact me in writing at the above address or by phone at (518) 402-9768.

Sincerely,

Kevin Sarnowicz
Environmental Engineer

ec: Albert DeMarco
Blair Sonzogni (bsonzogni@h2m.com)
Charles Martello (martello@h2m.com
James Quinn
Kevin Sarnowicz

Attachment 2

CITY WIDE Sewer & Drain Service Corp
PO Box 350
Carle Place NY 11514
800-310-2564

January 21, 2014

Blair,

In the beginning there is a small sag in the line where water deposits and sits. At the elbow there is a major sag. There doesn't appear to be any breaks but the sags will eventually cause problems if they are not already. There will be buildups in the sags causing back ups and eventually they will probably break. Let me know if you need anything else.

Thanks,

Steve @ City Wide Sewer & Drain

City Wide Sewer & Drain
P.O Box 350/100 Voice Rd
Carle Place, NY 11514
Cell - 516-523-4494
Office - 1-800-310-2564
Fax - 718-343-6820
Sales@citywidesewers.com
www.citywidesewers.com
www.greasewasteservices.com
www.emergencyfloodrestore.com

Attachment 3

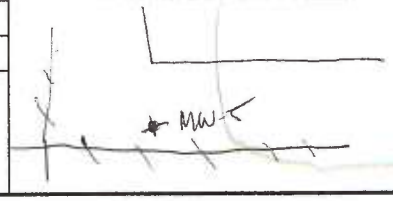
H2M Associates, Inc.
Phone: (862) 207-5900 / Fax (973) 334-0507

MONITORING WELL / SOIL BORING LOG

Project: GIAMIZOI-
Location: Queens, NY
Drilling Contractor: NVEG
Driller/Helper: Austin + Jay
H2M Representative: Lisa Marie McNulty

Boring/Well # MW-5 (pg 1 of 2)

Approximate Boring Location



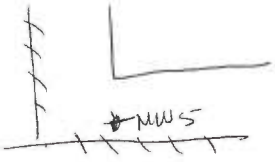
Date: 11-12-2013
Boring Dia.: 4" augers
Casing Dia.: N/A
Depth of Well: ~~35~~ bsg 33
Sample Type: none
Screened Int: 23-33' bsg
HammerWt/Fall: —
Drill Rig: 7720DT
Drill Method: Direct Push
Well Permit #: —

Depth (feet)	Sample #	Blows/6"	Recovery (in)	Moist Cont.	PID	Approx Depth of Change	Soil Identification	Remarks	Well Const.
1	NA	NA	NA		0.0		~6" concrete	Used hollow stem augers in interest of time	
2						1.5	dark tan/brown fine SAND, some silt, some cobbles/rock		
3							light tan fine SAND	no odors, no staining	
4						3.5	brown/dark tan fine SAND, cobbles (round) trace clay (chunks)		
5					0.0				
6					0.0	5	brown fine SAND, some silt cobbles and stone		
7						7	brown fine SAND, trace silt, gravel, cobbles + stone		
8									
9						8.5	multicolor fine SAND, stones and gravel		
10					0.0				
11					0.0				SAND
12									
13									
14									
15					0.0				
16					0.0				Grout bentonite
17									
18									
19									
20					0.0				
21									
22				moist					
23								soil vapor point @ ~21.5' bsg	23
24									
25									

H2M Associates, Inc.
Phone: (862) 207-5900 / Fax (973) 334-0507

WELL / SOIL BORING LOG (Pg 2 of 2)

Project: GIAM1201
Location: Queens NY
Drilling Contractor: NYEG
Driller/Helper: Austin + Jay
H2M Representative: Lisamarie McNulty
Boring Location: MW-5



Date: 11-12-2013
Boring Dia.: 4" augers
Casing Dia.: N/A
Depth of Well: 33' bsg
Sample Type: none
Screened Int: 23-33' bsg
Hammer Wt/Fall: —
Drill Rig: 7720DT
Drill Method: Direct Push
Well Permit #: —

Depth (feet)	Sample #	Blows/6"	Recovery (in)	Moist Cont.	PID	Depth of Change	Soil Identification	Remarks	Well Const.
25	1	NA	NA		0.0		brown fmc SAND, some(-) silt, gravel, rock		
26	2								
27	3								
28	4								
29	5								
30	6								
31	7								
32	8								
33	9								
34	10						well to 33' bsg - caved in during auger removal		
35	11				0.0				
	12						augered to EOB @ 35' bsg		
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
	21								
	22								
	23								
	24								
	25								

lm 11/12/13

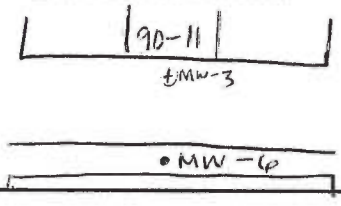
H2M Associates, Inc.
Phone: (862) 207-5900 / Fax (973) 334-0507

MONITORING WELL / SOIL BORING LOG

Project: GIAM1201
Location: Queens, NY
Drilling Contractor: NYEG, Inc
Driller/Helper: Austin + Jay
H2M Representative: Lisa Marie McNulty

Boring/Well # MW-6 (page 1 of 2)

Approximate Boring Location



Date: 11-11-2013
Boring Dia. 2" → 4" augers
Casing Dia. 2"
Depth of Well: 39.25'
Sample Type: none
Screened Int: 24.25-39.25
HammerWt/Fall: —
Drill Rig: 7720 DT
Drill Method: Direct Push
Well Permit #:

Depth (feet)	Sample #	Blows/6"	Recovery (in)	Moist Cont.	PID	Depth of Change	Soil Identification	Remarks	Well Const.
1		NA	hand augered for utility clearance		0.0		~6" concrete	No Noticeable odor or staining	
2					0.0		dark tan fmc SAND, rounded cobbles + rocks		
3	N/P				0.0	2	light tan fmc SAND		
4					0.0				
5					0.0	4	brown / dark tan fmc SAND, cobbles (rounded) + rocks, some bits of brown clay in clumps ↓		
6					0.0				
7					0.0				
8	1		51	dry					
9						8	light brown / tan fm SAND		
10					0.0	10	multicolor (tan / pink / white / brown / gray) fmc SAND gray / brown / red stones (pink) and gravel		
11					0.0				
12	2		47	dry				sand from cuttings →	
13									
14									
15					0.0				
16					0.0				
17	3		60	dry					
18									
19									
20					0.0				grout
21					0.0		very tightly packed		20
22	4			1					bentonite 3/4"
23									23
24									
25					0.0				

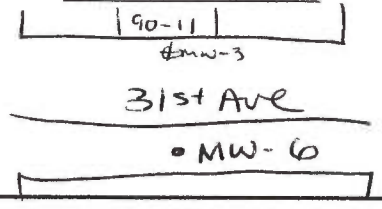
H2M Associates, Inc.
Phone: (862) 207-5900 / Fax (973) 334-0507

MONITORING WELL / SOIL BORING LOG

Project: GIAMI201
Location: Queens NY
Drilling Contractor: NYEG Drilling
Driller/Helper: Austin/Jay
H2M Representative: Lisa Marie McNulty

Boring/Well # MW-6 (pg 2 of 2)

Approximate Boring Location



Date: 11-11-2013
Boring Dia. 2" → 4" augers
Casing Dia. 2"
Depth of Well: 39.25'
Sample Type: none
Screened Int: 24.25 – 39.25
HammerWt/Fall: —
Drill Rig: 7720DT
Drill Method: Direct Push
Well Permit #: —

Depth (feet)	Sample #	Blows/6"	Recovery (in)	Moist Cont.	PID	Depth of Change	Soil Identification	Remarks	Well Const.
26		NA			0.0		multicolored (tan/pink/white/brown/gray) fmc SAND and gravel; stones		
27	5		45						
28									
29				moist		29	Pinkish-brown fmc trace silt, gravel, rock		
30					0.0			10 slot screen	
31					0.0				
32								sand	
33	6		30						
34									
35					0.0				
36					0.0				
37	7		38						
38									
39									
40					0.0				
							EOB @ 40' bsg		

Attachment 4

H2M Associates, Inc. - ~~Laboratory ID No. 14042~~ Lm 12/3/13

Field Form - Low Flow Purging and Sampling

Ground Water Sampling Measurements and Calculations

Sheet 1 of 1

WELL NUMBER	WELL INFORMATION					Date: 12/3/2013	
MW-4	Well Diameter (inches)	Total Depth[1] (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	H2M Personnel:	Lisa Marie McNulty, Jason Potosnak
PERMIT NUMBER						Site Name:	NY Dry Cleaners
	2	34.4	24.21	—	0.0	Site Location:	Queens, New York
						H2M Job Number:	GIAM1201

(1) Use a previously determined Total Depth. Confirm the total Depth of well after sampling.
TOC = top of casing

PURGING INFORMATION								Rental Meter Name: Horiba U-52
Pump Type	Tubing ID/Type	Pump Intake[2] Depth (ft)	Initial DTW TOC (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (gal)	Rental Meter Serial No.: U1NM4LLX
hurricane	teflon-lined	~ 30	24.21	1523	1655	300		

(2) Below TOC
ID = inner diameter

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 10 mv	± 3%	± 10%[3]	± 10%		Water Conditions/Comments
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (°C)	pH (su)	ORP (mv)	Cond (mS/cm)	Turbidity (NTU)	D.O. (ppm)	Initials	
1525	300	24.21	15.21	7.25	173	0.760	943	8.46	Lm	silty
1530	300	24.20	16.71	7.14	187	0.769	71000	6.17	Lm	"
1535	300	24.19	16.46	7.35	182	0.768	829	5.18	Lm	"
1540	300	24.20	17.41	7.13	202	0.776	974	5.99	Lm	"
1545	300	24.20	17.39	7.13	202	0.777	961	6.01	Lm	"
1550	300	24.20	17.38	7.19	199	0.772	886	5.10	Lm	"
1555	300	-	17.25	7.24	197	0.772	727	5.48	Lm	"
1600	300	-	17.12	7.26	197	0.779	607	5.39	Lm	"
1605	300	—	17.69	7.29	198	0.779	475	4.85	Lm	slightly silty
1610	300	—	17.51	7.29	198	0.779	400	4.92	Lm	"
1615	300	—	17.51	7.29	198	0.779	383	4.90	Lm	"
1620	300	-	17.49	7.30	196	0.784	270	5.90	JWF	mostly clear
1625	300		17.43	7.31	191	0.782	192	5.95	Lm	"
1630	300	—	17.22	7.31	186	0.782	161	5.84	Lm	"
1635	300	-	17.10	7.31	181	0.781	*182	5.76	Lm	* 128 Lm 12/3/13 - wrote ORP
1640	300	-	17.01	7.30	175	0.781	80.2	5.97	Lm	
1645	300	-	16.95	7.31	171	0.779	40.1	5.93	Lm	
1650	300	—	16.96	7.32	169	0.779	40.5	5.97	Lm	
1655	300	—	16.98	7.30	169	0.780	38.9	5.99	Lm	
			✓	✓	✓	✓	✓	✓		

Comments: Sample CVOC @ 1657

Analytical Parameters: VO+15

Sample Start Time:

Sample Finish Time:

Weather Conditions: 52°F, partly cloudy

Revised 10/09

(3) For values greater than 1.
Note: Indicator parametes have stabilized when 3 consecutive readings are within criteria above.

H2M Associates, Inc. - ~~Laboratory ID No. 14042~~ LM 12/3/13

Field Form - Low Flow Purging and Sampling

Ground Water Sampling Measurements and Calculations

Sheet 1 of 1

WELL NUMBER	WELL INFORMATION					Date: 12/3/2013	
MW-5	Well Diameter (inches)	Total Depth[1] (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	H2M Personnel:	Lisa Marie McNulty, Jason Potosnak
PERMIT NUMBER						Site Name:	NY Dry Cleaners
						Site Location:	Queens, New York
	2	33	21.72	—	4.1	H2M Job Number:	GIAM1201

(1) Use a previously determined Total Depth. Confirm the total Depth of well after sampling.
TOC = top of casing

PURGING INFORMATION								Rental Meter Name: Horiba U-52
Pump Type	Tubing ID/Type	Pump Intake[2] Depth (ft)	Initial DTW TOC (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (gal)	Rental Meter Serial No.: U1NM4LLX
hurricane	teflon-lined	~ 29	22.63	1357	1445			

(2) Below TOC
ID = inner diameter

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 10 mv	± 3%	± 10%[3]	± 10%		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (°C)	pH (su)	ORP (mv)	Cond (mS/cm)	Turbidity (NTU)	D.O. (ppm)	Initials	Water Conditions/Comments
1400	175	22.85	16.39	6.95	210	0.899	687	8.43	LM	brown turbidity no sheen
1405	175	23.02	16.91	7.10	204	0.896	849	8.00	LM	
1410	400	23.23	17.31	7.22	198	0.894	994	7.70	LM	↓ ↓
1415	375	22.93	17.26	7.31	196	0.843	861	7.57	LM	↓
1420	375	22.89	17.25	7.29	194	0.893	574	7.40	LM	very slightly turbid
1425	375	22.90	17.40	7.31	191	0.887	396	7.27	LM	" " "
1430	200*	22.75	17.35	7.31	190	0.885	347	7.25	LM	* had to turn up - bail drop?
1435	375	23.26	17.76	7.18	181	0.880	132	6.29	LM	* 23.25 LM 12/3/13 mostly clear
1440	375	23.31	17.03	7.19	173	0.873	125	6.23	LM	mostly clear
1445	375	23.19	17.54	7.24	171	0.872	123			mostly clear
		✓	✓	—	✓	✓	✓			

Comments: Sample CVOC @ 1447 -- slight sulfur-type odor

Analytical Parameters: VO+15

Sample Start Time:

Sample Finish Time:

Weather Conditions:

Revised 10/09

(3) For values greater than 1.
Note: Indicator parametes have stabilized when 3 consecutive readings are within criteria above.

H2M Associates, Inc. ~~- Laboratory ID No. 14042~~ lm 12/3/13

Field Form - Low Flow Purging and Sampling

Ground Water Sampling Measurements and Calculations

Sheet ___ of ___

WELL NUMBER	WELL INFORMATION					Date:	12/3/2013
MW-1	Well Diameter (inches)	Total Depth(1) (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	H2M Personnel:	Lisa Marie McNulty, Jason Potosnak
PERMIT NUMBER						Site Name:	NY Dry Cleaners
						Site Location:	Queens, New York
	2	~40	29.06		0.0	H2M Job Number:	GIAM1201

(1) Use a previously determined Total Depth. Confirm the total Depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							
Pump Type	Tubing ID/Type	Pump Intake(2) Depth (ft)	Initial DTW TOC (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (gal)
hurricane	teflon-lined	~ 35.5	29.00	~~1130~~ 1200	1231		

Rental Meter Name:
Horiba U-52
Rental Meter Serial No.: NR8TKAS17

(2) Below TOC
ID = inner diameter

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 10 mv	± 3%	± 10%(3)	± 10%		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (°C)	pH (su)	ORP (mv)	Cond (mS/cm)	Turbidity (NTU)	D.O. (ppm)	Initials	Water Conditions/Comments
1205	150	29.07	15.54	7.21	123	1.31	>1000	16.14	JWP	Silty
1210	150	29.07	17.36	7.21	159	1.09	542	8.46	JWP	Silty
1215	150	29.07	17.28	7.21	170	1.11	282	8.16	JWP	CLEAR
1220	150	29.07	17.33	7.26	179	1.14	227	7.40	JWP	CLEAR
1225	150	29.07	17.49	7.26	185	1.14	50.2	7.41	JWP	
1230	150	29.07	17.55	7.26	188	1.14	49.2	7.41	JWP	
1235	150	29.07	17.58	7.26	191	1.14	48.3	7.42	JWP	

Comments:

Analytical Parameters: VO+15

Sample Start Time: 1238
Sample Finish Time:

Weather Conditions:

Revised 10/09

(3) For values greater than 1.
Note: Indicator parametes have stabilized when 3 consecutive readings are within criteria above.

H2M Associates, Inc. - ~~Laboratory ID No. 14042~~ 12/3/13

Field Form - Low Flow Purging and Sampling

Ground Water Sampling Measurements and Calculations

Sheet ___ of ___

WELL NUMBER	WELL INFORMATION					Date: 12/3/2013	
MW-6	Well Diameter (inches)	Total Depth[1] (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	H2M Personnel:	Lisa Marie McNulty, Jason Potosnak
PERMIT NUMBER						Site Name:	NY Dry Cleaners
	2	39.25				Site Location:	Queens, New York
						H2M Job Number:	GIAM1201

(1) Use a previously determined Total Depth. Confirm the total Depth of well after sampling.
TOC = top of casing

PURGING INFORMATION								Rental Meter Name: Horiba U-52
Pump Type	Tubing ID/Type	Pump Intake[2] Depth (ft)	Initial DTW TOC (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (gal)	Rental Meter Serial No.: NORTKAR1T
hurricane	teflon-lined	~ 35	29.82	1340	1427			

(2) Below TOC
ID = inner diameter

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

Criteria:		<0.3 ft	± 3%	± 0.1 su	± 10 mv	± 3%	± 10%[3]	± 10%		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (°C)	pH (su)	ORP (mv)	Cond (mS/cm)	Turbidity (NTU)	D.O. (ppm)	Initials	Water Conditions/Comments
1345	200	29.87	16.26	7.36	243	.411	10.00	5.99	JWP	Slightly silty
1350	200	29.88	16.99	7.47	250	.427	10.0	7.10	JWP	↓
1355	200	29.91	17.62	7.47	251	.435	7.71	7.06	JWP	
1400	200	29.93	17.57	7.46	253	.442	7.12	7.10	JWP	CLEAR
1405	200	29.94	17.44	7.41	254	.440	11.5	7.09	JWP	
1410	200	29.94	17.47	7.43	254	.0473	3.72	7.08	JWP	
1415	200	29.95	17.45	7.43	254	.473	3.31	7.06	JWP	
1420	200	29.97	17.51	7.43	254	.473	3.20	7.07	JWP	
		—	—	—	—	—	—	—	JWP	

Comments:

Analytical Parameters: VO+15

Sample Start Time:
Sample Finish Time: 1424

Weather Conditions:

Revised 10/09

(3) For values greater than 1.
Note: Indicator parametes have stabilized when 3 consecutive readings are within criteria above.

H2M Associates, Inc. - ~~Laboratory ID No. 14042~~ 12/3/13

Field Form - Low Flow Purging and Sampling

Ground Water Sampling Measurements and Calculations

Sheet ___ of ___

WELL NUMBER	WELL INFORMATION					Date: 12/3/2013	
MW-3	Well Diameter (inches)	Total Depth[1] (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	H2M Personnel:	Lisa Marie McNulty, Jason Potosnak
PERMIT NUMBER						Site Name:	NY Dry Cleaners
	2	39.61				Site Location:	Queens, New York
						H2M Job Number:	GIAM1201

(1) Use a previously determined Total Depth. Confirm the total Depth of well after sampling.
TOC = top of casing

PURGING INFORMATION								Rental Meter Name: Horiba U-52
Pump Type	Tubing ID/Type	Pump Intake[2] Depth (ft)	Initial DTW TOC (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (gal)	Rental Meter Serial No.: MULTIPLE
hurricane	teflon-lined	~ 36	31.01	1455	1543			

(2) Below TOC
ID = inner diameter

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 10 mv	± 3%	± 10%[3]	± 10%		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (°C)	pH (su)	ORP (mv)	Cond (mS/cm)	Turbidity (NTU)	D.O. (ppm)	Initials	Water Conditions/Comments
1500	225	30.90	16.93	7.57	245	3.24	>1000	6.10	JMP	
1505	225	31.20	17.47	7.52	243	3.22	>1000	5.96	JMP	
1510	225	30.93	17.56	7.51	242	3.21	~~1000~~	5.90	JMP	
1515	225	31.02	17.63	7.51	243	3.21	879	5.90	JMP	
1520	225	30.97	17.74	7.51	244	3.18	453	5.87	JMP	
1525	225	31.07	17.75	7.51	245	3.17	354	5.87	JMP	
1530	225	31.11	17.81	7.52	244	3.17	212	5.85	JMP	
1535	225	31.02	17.81	7.51	245	3.16	215	5.85	JMP	
1540	225	31.12	17.74	7.51	244	3.16	224	5.81	JMP	

Comments:

Analytical Parameters: VO+15

Sample Start Time:
Sample Finish Time: 1543

Weather Conditions:

Revised 10/09

(3) For values greater than 1.
Note: Indicator parametes have stabilized when 3 consecutive readings are within criteria above.

TB320

H2M Associates, Inc. ~~- Laboratory ID No. 14042~~ lm 12/3/13

Field Form - Low Flow Purging and Sampling

Ground Water Sampling Measurements and Calculations

Sheet 1 of 1

WELL NUMBER	WELL INFORMATION					Date: 12/3/2013	
MW-2	Well Diameter (inches)	Total Depth[1] (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	H2M Personnel:	Lisa Marie McNulty, Jason Potosnak
PERMIT NUMBER						Site Name:	NY Dry Cleaners
						Site Location:	Queens, New York
	2	39.45	25.43		0.0	H2M Job Number:	GIAM1201

(1) Use a previously determined Total Depth. Confirm the total Depth of well after sampling.
TOC = top of casing

PURGING INFORMATION								Rental Meter Name: Horiba U-52
Pump Type	Tubing ID/Type	Pump Intake[4] Depth (ft)	Initial DTW TOC (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (gal)	Rental Meter Serial No.: 41NM4LLX
hurricane	teflon-lined	~ 35.5	25.30	1223	1310			

(2) Below TOC
ID = inner diameter

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 10 mv	± 3%	± 10%[3]	± 10%		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (°C)	pH (su)	ORP (mv)	Cond (mS/cm)	Turbidity (NTU)	D.O. (ppm)	Initials	Water Conditions/Comments
1225	100	25.61	15.40	6.57	203	2.06	312	7.07	lm	#20 lm 12/3/13 no odor, no sheen
1230	100	25.66	15.63	6.58	203	2.13	269	7.17	lm	orange/brown turb. no odor, no sheen
1235	200	25.55	15.65	6.71	198	2.12	567	9.10	lm	" "
1240	100	25.60	16.42	6.48	206	2.11	>1000	7.00	lm	brown turbidity no odor, no sheen
1245	100	25.60	16.63	6.56	202	2.13	>1000	6.48	lm	
1250	100	25.60	16.98	6.56	197	2.11	>1000	6.74	lm	
1300	100	25.60	17.32	6.65	198	1.69	>1000	6.75	lm	
1305	100	—	17.36	6.65	200	1.68	>1000	6.78	lm	
1310	100	—	17.29	6.66	200	1.67	>1000	6.82	lm	
						✓		✓		

Comments: Sample @ 1312 - slight sulfur-type odor

Analytical Parameters: VO+15

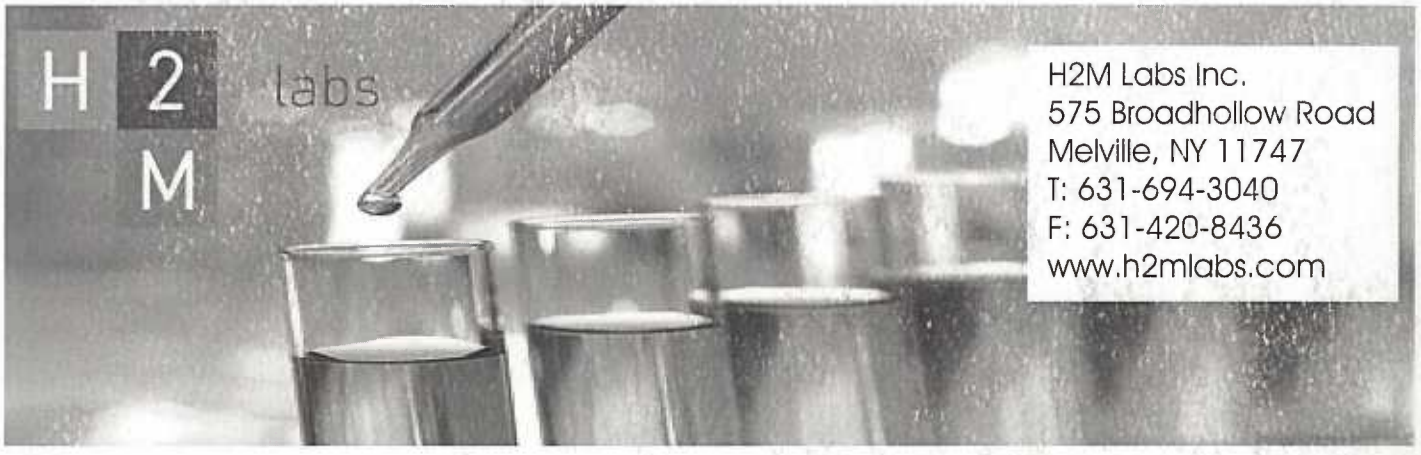
Sample Start Time:
Sample Finish Time: 1312

Weather Conditions: 50°F, partly cloudy

Revised 10/09

(3) For values greater than 1.
Note: Indicator parametes have stabilized when 3 consecutive readings are within criteria above.

Attachment 5



H2M Labs Inc.
575 Broadhollow Road
Melville, NY 11747
T: 631-694-3040
F: 631-420-8436
www.h2mlabs.com

Analytical Data Package For:

VENUS ESTATES
PROJECT: GIAM1201
SDG NO: NJGIAM003

VOLATILES DATA PACKAGE

DECEMBER 2013

Report to:

H2M Associates
119 Cherry Hill Rd. Suite 200
Parsippany, NJ 07054
ATTN: Blair Sonzogni

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

ANALYTICAL DATA PACKAGE

TABLE OF CONTENTS

VENUS ESTATES
PROJECT NO.: GIAM1201
SAMPLES RECEIVED: 12/5/13
WATER SAMPLES
SDG NO.: NJGIAM003

DATA PACKAGE FOR CLIENT INFORMATION PURPOSES ONLY

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

I. NYS DEC SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: NJGIAM003

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	MSVOA
MW-1	1312282-001	X
MW-2	1312282-002	X
MW-3	1312282-003	X
MW-4	1312282-004	X
MW-5	1312282-005	X
MW-6	1312282-006	X
FIELD BLANK	1312282-007	X
TRIP BLANK	1312282-008	X
STORAGE BLANK	1312282-009	X

CLP, ~~Non-CLP~~ (Please indicate year of protocol)
TCL/TAL, HSL, Priority Pollutant,

ASPB 2000
CG 12/27/13

NJGIAM003 A3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

SDG: NJGIAM003

Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	DateRecd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
1312282-001A	MW-1	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-002A	MW-2	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-003A	MW-3	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-003ADL	MW-3DL	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		2	LOW	
1312282-004A	MW-4	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-005A	MW-5	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-005ADL	MW-5DL	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		3	LOW	
1312282-006A	MW-6	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-007A	FIELD BLANK	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-008A	TRIP BLANK	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	
1312282-009A	STORAGE BLANK	Aqueous	ASP 8260	03-Dec-13	05-Dec-13		11-Dec-13		1	LOW	

H 2 M labs

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Melville, NY 11747

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II. SDG NARRATIVES

H 2 M labs

NARRATIVE FOR VOLATILES
SAMPLES RECEIVED: 12/5/13
SDG #: NJGIAM003

For Sample(s):

MW-1	MW-6
MW-2	FIELD BLANK
MW-3	TRIP BLANK
MW-4	STORAGE BLANK
MW-5	

The above water sample(s) and blank(s) was/were analyzed for a select list of volatile organics by EPA method 8260C in accordance with the NYSDC ASP, Rev. 6/2000, Category B.

All Q. C. data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

No matrix spike/matrix spike duplicate was submitted. A lab-fortified blank (LFB) was analyzed, and recoveries indicate good method efficiency.

Two samples were reanalyzed at dilutions due to concentration levels of a targeted analyte above the calibration range. Both sets of data are submitted.

The % RSD in the initial calibration exceeded 20.5% for two compounds, but met the limit of 40% permitted for two analytes. In the continuing calibration verification (CCV), one compound had a variability above 25% but met the limit of 40% (allowed for two analytes).

I certify that this 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 hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: December 13, 2013

****
* *
* *
****

Ursula Middel
Technical Manager

H2M labs
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III. CHAIN OF CUSTODY DOCUMENTATION

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www.h2mlabs.com

01673 NJGIAM

EXTERNAL CHAIN OF CUSTODY

CLIENT: H2M Assoc Inc | **H2M SDG NO:** NJGIAM003

PROJECT NAME/NUMBER: Venus Estates GIAM201

SAMPLERS: (Signature)/Client: Lmmchulty / H2M Associates, Inc.

DELIVERABLES: B0-70 NYDEC ASP Category B

TURNAROUND TIME: Standard

NOTES: * ASP 2000 8260 B Chlorinateds Only

Project Contact: B[illegible]S

Phone Number: X[illegible]2249

PIS/Quote #: [illegible]924

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Chlorinated VOC* (Sample Container Description: 40 mL glass vials)	LAB I.D. NO.	REMARKS:
12/3/13	1238	GW	MW-1	2	X	13122 82 - 001A - 9A	
12/3/13	1312	GW	MW-2	2	X	-002A	
12/3/13	1320	FB	Field BLANK	2	X	-007A	
12/3/13	1424	GW	MW-6	2	X	-006A	
12/3/13	1447	GW	MW-5	2	X	-005A	
12/3/13	1545	GW	MW-3	2	X	-003A	
12/3/13	1557	GW	MW-4	2	X	-004A	
12/3/13		TB	TRIP BLANK	2	X	-008A	

ANALYSIS REQUESTED

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
LmMcNulty	12/4/13	9:40		12/5/13	11:43
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

LABORATORY USE ONLY

Samples were:
1. Shipped X or Hand Delivered ___ Airbill # _____

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N

4.9°C

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

NJGIAM003-A8

H2M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.h2mlabs.com

NJGIAM003

Sample Receipt Checklist

Client Name **NJGIAM** Date and Time Received: 12/5/2013 11:43:00 AM

Work Order Number: **1312282** RcptNo: 1 Received by **Jamie Spero**

Completed by: Reviewed by:

Completed Date: 12/5/2013 11:44:49 AM Reviewed Date: 12/6/2013 5:00:02 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐				
Chain of custody signed when relinquished and received?	Yes ☑	No ☐				
Chain of custody agrees with sample labels?	Yes ☑	No ☐				
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐				
Is it clear what analyses were requested?	Yes ☑	No ☐				
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑		
Samples in proper container/bottle?	Yes ☑	No ☐				
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐		
Preservative added to bottles:						
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐				
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐				
All samples received within holding time?	Yes ☑	No ☐				
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA	☐		
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA	☐		
Response when temperature is outside of range:						
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To	4.9 °		
Water - Were bubbles absent in VOC vials?	Yes ☑	No ☐	No Vials	☐		
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑		
Water - pH acceptable upon receipt?	Yes ☑	No ☐	No Water	☐		
Are Samples considered acceptable?	Yes ☑	No ☐				
Custody Seals present?	Yes ☐	No ☑				
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐		
Airbill No:	797306384661					

Case Number: SDG: NJGIAM003 SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☑ No Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

NJGIAM003 A9

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: NJGIAM DELIVERABLES: B0-70 TURN AROUND TIME: 14 days

SDG #: NJGIAM003 CASE #: _____ MATRIX: GW pH CHECK Y or (N)

REMARKS: _____

RECEIVED BY: CS SIGNATURE: _____ DATE: 12/5/13 TIME: 11:43

	CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1	MW-1	1312282-001A	12/3/13 12:38PM	D_H	2	ASPB5-8260_W
2	MW-2	1312282-002A	12/3/13 13:12	D_H	2	ASPB5-8260_W
3	FIELD BLANK	1312282-003A	12/3/13 13:20	D_H	2	ASPB5-8260_W
4	MW-6	-004A	12/3/13 14:24	D_H	2	
5	MW-5	-005A	14:47	D_H	2	
6	MW-3	-006A	15:45	D_H	2	
7	MW-4	-007A	16:57	D_H	2	
8	TRIP BLANK	-008A		D_H	2	
9	STORAGE BLANK	-009A		D_H	2	
10		JS 12/5/13				
11						
12						
13						
14						
15		JS	12/5/13			
16						
17						
18						
19						
20						

VOLATILE

P 0163

NJGIAM003 A10

H2M LABS, INC.

CLIENT: NJGIAM

SDG #: NJGIAM003

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT
12/5/13	13:20	SIGN	SIGN	DH	Analysis	~~JS~~ TJS 12/5/13
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
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		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			

VOLATILE

H 2 M labs

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IV. ANALYTICAL DATA PACKAGE

A. VOLATILES

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VOLATILE ORGANICS

TABLE OF CONTENTS

H2M labs
575 Broad Hollow Road
Melville, NY 11747
631.694.3040
631.420.8436

I. QC SUMMARY FOR VOLATILE ORGANICS

- A. SYSTEM MONITORING COMPOUND RECOVERY FORM
- B. MS/MSD FORM
- C. MSB FORM
- D. METHOD BLANK FORM
- E. GC/MS TUNING FORM
- F. INTERNAL STANDARD AREA AND RT SUMMARY
- G. INSTRUMENT DETECTION LIMITS

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

	EPA SAMPLE NO.	SMC1 DCA #	SMC2 TOL #	SMC3 BFB #	OTHER	TOT OUT
01	VBLK121113	100	101	99		0
02	LFB121113	97	102	101		0
03	MW-1	102	102	97		0
04	MW-2	103	101	98		0
05	MW-3	101	99	100		0
06	MW-4	104	101	98		0
07	MW-5	102	100	99		0
08	MW-6	105	101	101		0
09	FIELD BLANK	103	102	101		0
10	TRIP BLANK	106	101	99		0
11	STORAGE BLANK	103	101	99		0
12	MW-3DL	101	99	96		0
13	MW-5DL	102	99	99		0

			QC Limit
SMC 1	DCA	= 1,2-Dichloroethane-d4	(76-114)
SMC 2	TOL	= Toluene-d8	(88-110)
SMC 3	BFB	= 4-Bromofluorobenzene	(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC Contract:

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM003

Sample ID LFB121113 Level: (low/med) LOW

Column ID DB-624 Column Diam 0.18

Inst. ID HP5973-1 Init. Calib. Date(s): 02/10/13 18:07

Analysis Date: 12/11/13 14:21 02/10/13 21:29

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	SPIKE CONCENTRATION (µg/L)	SPIKE % REC #	QC. LIMITS REC.
Chloromethane	50	0	45	90	70-114
Vinyl chloride	50	0	47	95	66-117
Chloroethane	50	0	45	90	71-116
Methylene chloride	50	0	51	102	80-112
1,1-Dichloroethene	50	0	53	106	67-120
1,1-Dichloroethane	50	0	49	99	77-114
1,2-Dichloroethene (total)	100	0	100	101	78-128
Chloroform	50	0	50	100	75-119
1,2-Dichloroethane	50	0	48	97	76-120
1,1,1-Trichloroethane	50	0	53	106	66-126
trans-1,2-Dichloroethene	50	0	51	101	74-115
Carbon tetrachloride	50	0	54	109	64-126
Bromodichloromethane	50	0	51	102	78-118
1,2-Dichloropropane	50	0	50	100	81-115
cis-1,2-Dichloroethene	50	0	50	101	78-116
cis-1,3-Dichloropropene	50	0	51	102	79-116
Trichloroethene	50	0	53	107	72-121
Dibromochloromethane	50	0	51	103	75-125
1,1,2-Trichloroethane	50	0	51	103	82-116
trans-1,3-Dichloropropene	50	0	50	101	77-120
Tetrachloroethene	50	0	53	106	59-133
1,1,2,2-Tetrachloroethane	50	0	52	105	77-120

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

* Values outside of QC limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS:

4A

EPA SAMPLE NO.

VBLK121113

VOLATILE METHOD BLANK SUMMARY

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Lab File ID: 3\F63316.D Lab Sample ID: VBLK121113

Date Analyzed: 12/11/13 Time Analyzed: 13:52

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: HP5973-1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LFB121113	LFB121113	3\F63317.D	14:21
02	MW-1	1312282-001A	3\F63319.D	15:26
03	MW-2	1312282-002A	3\F63320.D	15:55
04	MW-3	1312282-003A	3\F63321.D	16:24
05	MW-4	1312282-004A	3\F63322.D	16:52
06	MW-5	1312282-005A	3\F63323.D	17:21
07	MW-6	1312282-006A	3\F63324.D	17:50
08	FIELD BLANK	1312282-007A	3\F63325.D	18:20
09	TRIP BLANK	1312282-008A	3\F63326.D	18:49
10	STORAGE BLANK	1312282-009A	3\F63327.D	19:18
11	MW-3DL	1312282-003ADL	3\F63328.D	19:47
12	MW-5DL	1312282-005ADL	3\F63329.D	20:16

COMMENTS: _____

_____

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Lab File ID: 3\F59796.D BFB Injection Date: 02/10/13

Instrument ID: HP5973-1 BFB Injection Time: 17:35

GC Column: DB-624 ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.5
75	30.0 - 60.0% of mass 95	47.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	67.1
175	5.0 - 9.0% of mass 174	5.0 (7.5)1
176	95.0 - 101.0% of mass 174	65.7 (97.8)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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
01	VSTD0.5	VSTD0.5	3\F59797.D	02/10/13	18:07
02	VSTD001	VSTD001	3\F59798.D	02/10/13	18:36
03	VSTD005	VSTD005	3\F59799.D	02/10/13	19:05
04	VSTD010	VSTD010	3\F59800.D	02/10/13	19:34
05	VSTD020	VSTD020	3\F59801.D	02/10/13	20:03
06	VSTD050	VSTD050	3\F59802.D	02/10/13	20:31
07	VSTD100	VSTD100	3\F59803.D	02/10/13	21:00
08	VSTD200	VSTD200	3\F59804.D	02/10/13	21:29

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Lab File ID: 3\F63313.D BFB Injection Date: 12/11/13

Instrument ID: HP5973-1 BFB Injection Time: 12:06

GC Column: DB-624 ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.4
75	30.0 - 60.0% of mass 95	46.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	89.6
175	5.0 - 9.0% of mass 174	6.4 (7.1)1
176	95.0 - 101.0% of mass 174	87.4 (97.6)1
177	5.0 - 9.0% of mass 176	5.6 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

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
01	VSTD050	VSTD050	3\F63315.D	12/11/13	13:22
02	VBLK121113	VBLK121113	3\F63316.D	12/11/13	13:52
03	LFB121113	LFB121113	3\F63317.D	12/11/13	14:21
04	MW-1	1312282-001A	3\F63319.D	12/11/13	15:26
05	MW-2	1312282-002A	3\F63320.D	12/11/13	15:55
06	MW-3	1312282-003A	3\F63321.D	12/11/13	16:24
07	MW-4	1312282-004A	3\F63322.D	12/11/13	16:52
08	MW-5	1312282-005A	3\F63323.D	12/11/13	17:21
09	MW-6	1312282-006A	3\F63324.D	12/11/13	17:50
10	FIELD BLANK	1312282-007A	3\F63325.D	12/11/13	18:20
11	TRIP BLANK	1312282-008A	3\F63326.D	12/11/13	18:49
12	STORAGE BLANK	1312282-009A	3\F63327.D	12/11/13	19:18
13	MW-3DL	1312282-003ADL	3\F63328.D	12/11/13	19:47
14	MW-5DL	1312282-005ADL	3\F63329.D	12/11/13	20:16

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Lab File ID (Standard): 3\F63315.D Date Analyzed: 12/11/13

EPA Sample No.(VSTD050##): VSTD050 Time Analyzed: 13:22

Instrument ID: HP5973-1 Heated Purge: (Y/N) N

GC Column: DB-624 ID: 0.18 (mm)

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	74983	3.81	478084	4.69	425068	7.36
	UPPER LIMIT	149966	4.31	956168	5.19	850136	7.86
	LOWER LIMIT	37492	3.31	239042	4.19	212534	6.86
	EPA SAMPLE						
01	VBLK121113	75410	3.82	467418	4.69	409289	7.35
02	LFB121113	75215	3.81	464789	4.69	416665	7.35
03	MW-1	74030	3.81	471695	4.69	418860	7.35
04	MW-2	72847	3.81	456105	4.69	403778	7.35
05	MW-3	72714	3.81	455777	4.69	399538	7.35
06	MW-4	71152	3.81	457722	4.69	392799	7.35
07	MW-5	73698	3.81	448628	4.69	397763	7.35
08	MW-6	71055	3.81	449910	4.69	394043	7.35
09	FIELD BLANK	70562	3.82	437908	4.69	385561	7.36
10	TRIP BLANK	69592	3.82	436844	4.69	385261	7.36
11	STORAGE BLANK	69661	3.82	433954	4.69	385391	7.35
12	MW-3DL	71079	3.82	434774	4.69	390513	7.36
13	MW-5DL	71578	3.82	437420	4.69	389101	7.36

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 (CBZ) = 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.

H2M LABS INC

Date: 13-Dec-13

Test Code: ASPB5-8260_W
Test Number: SW8260
Test Name: VOCS IN WATER
Matrix: Aqueous **Units:** µg/L

METHOD DETECTION / REPORTING LIMITS

Type	Analyte	Synonym	MDL	PQL
A	Chloromethane		0.18	10
A	Bromomethane		0.22	10
A	Vinyl chloride		0.12	10
A	Chloroethane		0.20	10
A	Methylene chloride		0.17	10
A	Acetone		0.36	10
A	1,1-Dichloroethene		0.16	10
A	Carbon disulfide		0.54	10
A	1,1-Dichloroethane		0.070	10
A	1,2-Dichloroethene (total)			10
A	Chloroform		0.11	10
A	1,2-Dichloroethane		0.087	10
A	2-Butanone		0.77	10
A	1,1,1-Trichloroethane		0.060	10
A	Carbon tetrachloride		0.47	10
A	Bromodichloromethane		0.063	10
A	1,2-Dichloropropane		0.095	10
A	cis-1,3-Dichloropropene		0.11	10
A	Trichloroethene		0.080	10
A	Dibromochloromethane		0.17	10
A	1,1,2-Trichloroethane		0.10	10
A	Benzene		0.074	10
A	trans-1,3-Dichloropropene		0.14	10
A	Bromoform		0.49	10
A	4-Methyl-2-pentanone		0.16	10
A	2-Hexanone		0.44	10
A	Tetrachloroethene		0.38	10
A	1,1,2,2-Tetrachloroethane		0.12	10
A	Toluene		0.077	10
A	Chlorobenzene		0.034	10
A	Ethylbenzene		0.13	10
A	Styrene		0.12	10
A	Xylene (total)		0.065	10
I	Bromochloromethane		0.074	10
I	1,4-Difluorobenzene		0	10
I	Chlorobenzene-d5		0	10
S	1,2-Dichloroethane-d4		2.4	10
S	Toluene-d8		1.8	10
S	4-Bromofluorobenzene		1.5	10
X	1,4-Dioxane		28	130
X	Dichlorodifluoromethane		0.10	5.0
X	Trichlorofluoromethane		0.14	5.0
X	1,1,2-Trichloro-1,2,2-trifluoroethane		0.76	5.0
X	Freon-113		0.070	10
X	Methyl Acetate			5.0
X	trans-1,2-Dichloroethene		0.075	10

NJGLAM003 V9

H2M LABS INC

Date: 13-Dec-13

Test Code: ASPB5-8260_W
Test Number: SW8260
Test Name: VOCS IN WATER
Matrix: Aqueous **Units:** µg/L

METHOD DETECTION / REPORTING LIMITS

Type	Analyte	Synonym	MDL	PQL
X	Methyl tert-butyl ether		0.031	10
X	cis-1,2-Dichloroethene		0.15	5.0
X	Cyclohexane		0.087	5.0
X	Chlorodifluoromethane		0.33	10
X	Methylcyclohexane		1.3	5.0
X	tert-Butyl Alcohol		0.32	50
X	m,p-Xylene		0.15	10
X	o-Xylene		0.065	10
X	1,2-Dibromoethane		0.085	5.0
X	Isopropylbenzene		0.11	5.0
X	1,3-Dichlorobenzene		0.13	5.0
X	1,4-Dichlorobenzene		0.11	5.0
X	1,2,3-Trichlorobenzene		0.25	5.0
X	1,2-Dichlorobenzene		0.11	5.0
X	1,2-Dibromo-3-chloropropane		0.18	5.0
X	1,2,4-Trichlorobenzene		0.30	5.0

NJGIAM003 V10

H2M labs
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631.420.8436

II. SAMPLE DATA PACKAGE FOR VOLATILE ORGANICS

A. REPORTS
B. RAW DATA

H 2 M labs

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Melville, NY 11747

631.694.3040
631.420.8436

QUALIFIERS FOR REPORTING ORGANICS DATA

Value - If the result is a value greater than or equal to the quantification limit, report the value.

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(300\ U)}{D} \text{ x df where } D = \frac{100\% moisture}{100}$$

and df - dilution factor

For example, at 24% moisture, $D = \frac{100 - 24}{100} = 0.76$

$$\frac{(300\ U)}{.76} \text{ x } 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For semivolatile soil samples, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Similarly, pesticide samples subjected to GPC are concentrated to 5.0 mL. Therefore, the CRQL values in Exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume (see Exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified quantification limit but greater than zero. (e.g.: If limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3J.) The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported of Form I with a "P".

C - This flag applies to pesticide results when the identification has been confirmed by GC/MS.. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag, instead use a Laboratory defined flag, discussed below.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified target compound.

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E - This flag identified compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration ranges in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g. a diluted analysis is not required for total xylenes unless the concentration of the peak representing the single isomer exceed 200 ug/L or the peak representing the two coeluting isomers on that GC column exceed 400 ug/L. Similarly, if the two 1,2-Dichloroethene isomers coelute, a diluted analysis is not required unless the concentration exceed 400 ug/L.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG narrative. Begin by using "X". If more than one flag is required use "Y" and "Z" as needed. If more than five qualifiers are required for a sample result, used the "X" flag to combine several flags as needed. For instance, the "X" flag might combine "A", "B", and "D" flags for some samples. The laboratory defined flags limited to the letters "X", "Y" and "Z".

The combination of flags "BU" or "UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are detected in the sample.

Y Suspected secondary contamination.

X Analyte is suspected column bleed

Z Analyte had a %D greater then 20% in the daily CCV

H 2 M labs

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CODES FOR MANUAL CORRECTIONS

T: Transcription error

CE: Calculation error

CC: Changed per client request

SC: Sample cancelled

LB: Wrong spot in logbook

MP: Missed peak

MIP: Misintegrated peak

WI: Wrong isomer

TI: Total of isomers

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD BLANK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63325.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

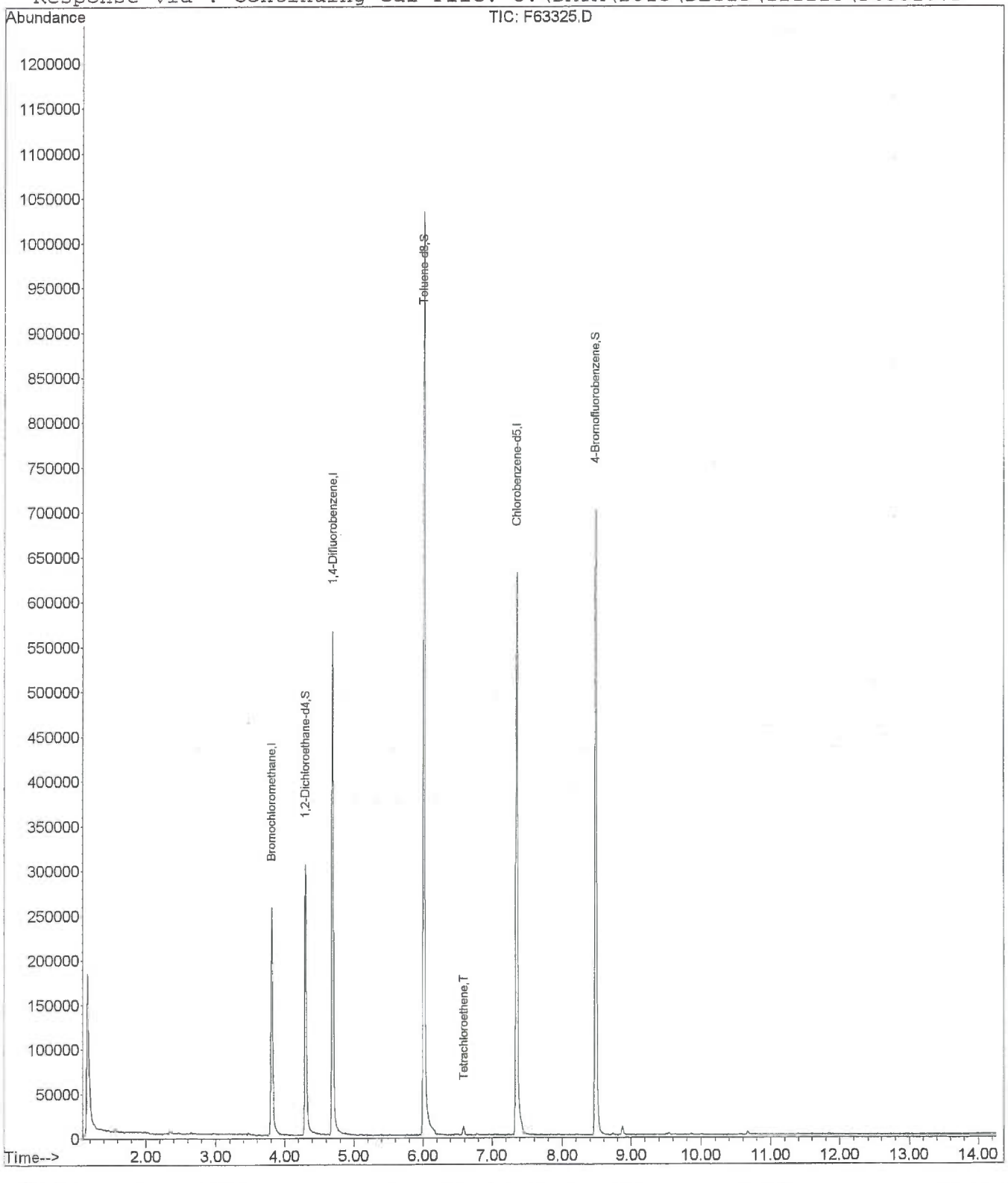
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	1	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V15

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63325.D Vial: 14
Acq On : 11 Dec 2013 18:20 Operator: BBL
Sample : 1312282-007A Inst : H5973-1
Misc : NJGIAM003,FIELD BLANK,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:50 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V16

Quantitation Report (QT Reviewed)

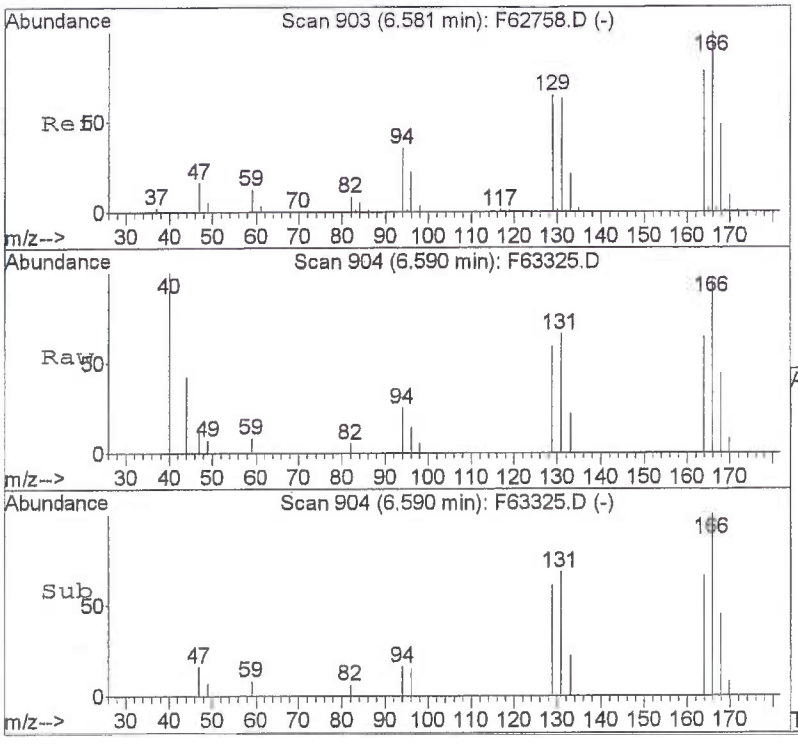
Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63325.D Vial: 14
Acq On : 11 Dec 2013 18:20 Operator: BBL
Sample : 1312282-007A Inst : H5973-1
Misc : NJGIAM003,FIELD BLANK,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:50 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	70562	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	437908	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.36	117	385561	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	198359	51.28	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 102.56%			
49) Toluene-d8	6.01	98	684099	51.13	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 102.26%			
53) 4-Bromofluorobenzene	8.48	95	239429	50.67	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 101.34%			
Target Compounds						Qvalue
47) Tetrachloroethene	6.59	164	2530	1.03	ug/l #	82

NJGIAM003 V17

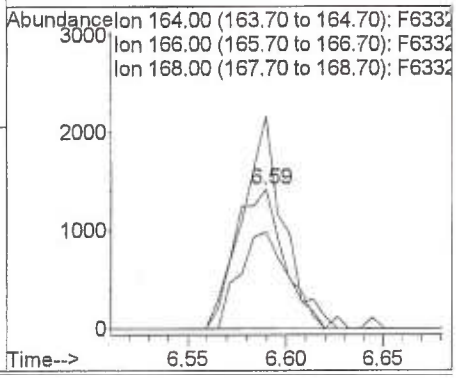
(#) = qualifier out of range (m) = manual integration



#47
Tetrachloroethene
Concen: 1.03 ug/l
RT: 6.59 min Scan# 904
Delta R.T. 0.01 min
Lab File: F63325.D
Acq: 11 Dec 2013 18:20

Tgt Ion:164 Resp: 2530

Ion	Ratio	Lower	Upper
164	100		
166	152.4	106.7	146.7#
168	69.1	41.6	81.6



NJGLAM003 V18

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63319.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

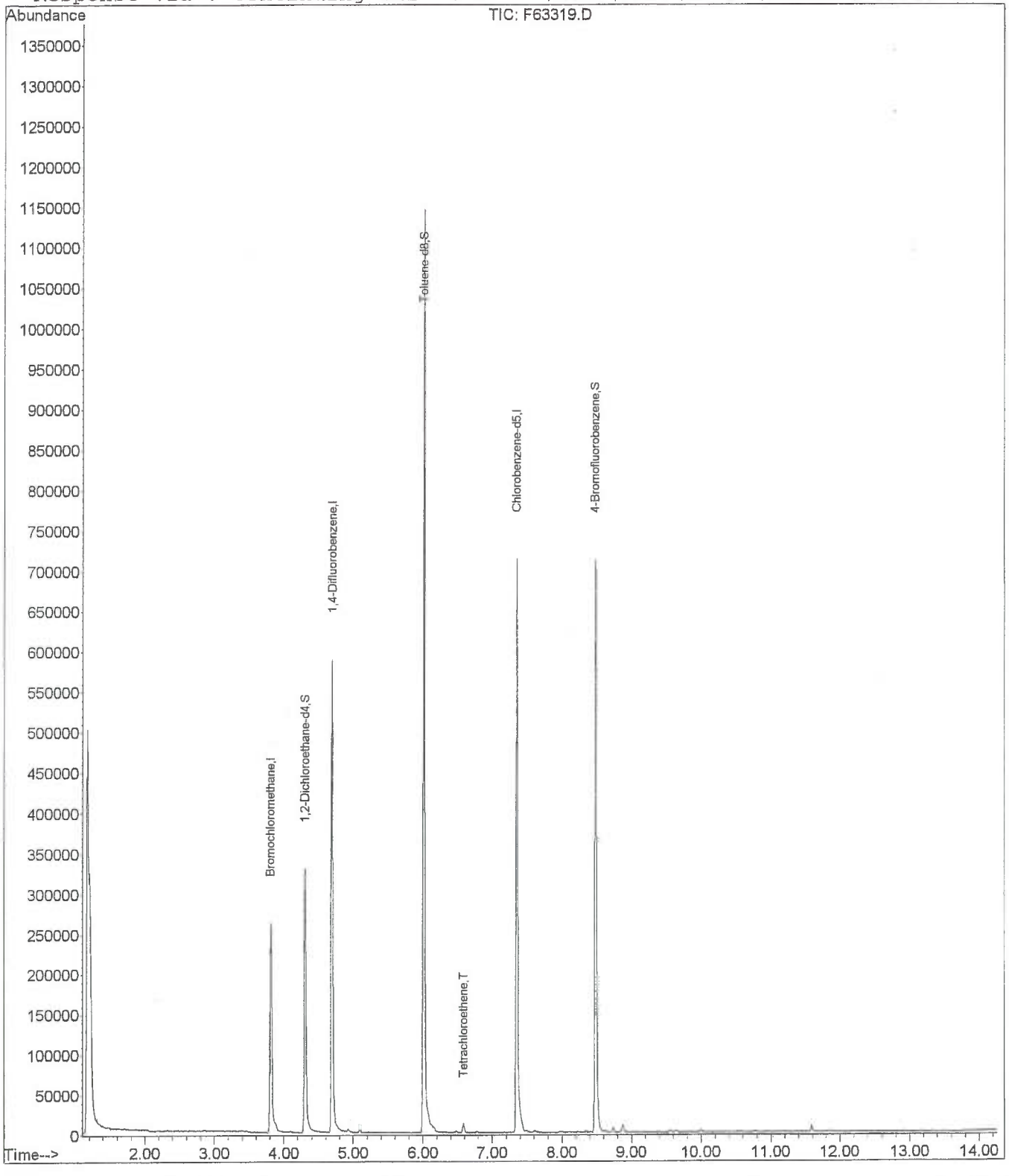
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	1	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V19

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63319.D Vial: 8
Acq On : 11 Dec 2013 15:26 Operator: BBL
Sample : 1312282-001A Inst : H5973-1
Misc : NJGIAM003,MW-1,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:41 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V20

Quantitation Report (QT Reviewed)

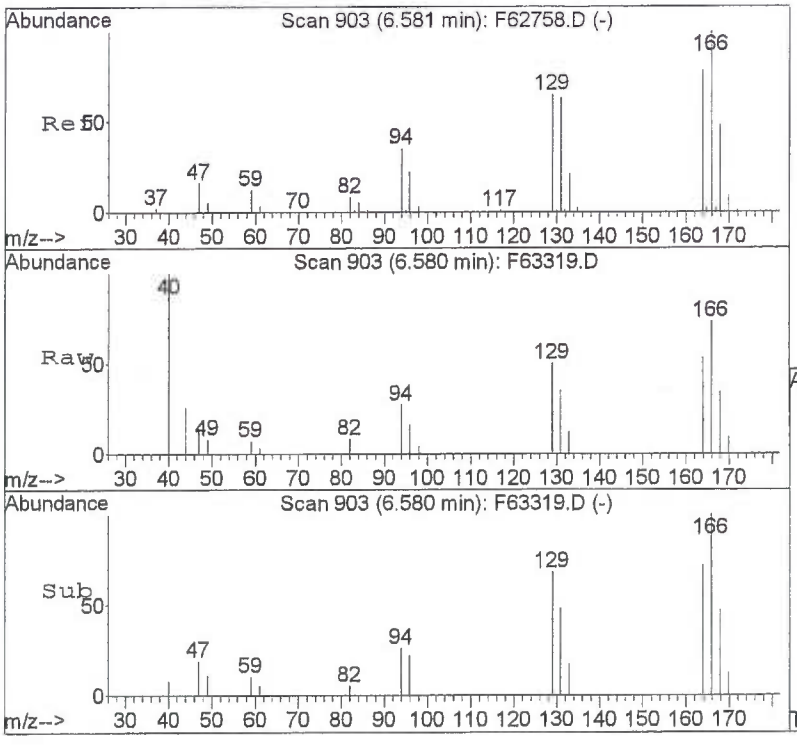
Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63319.D Vial: 8
Acq On : 11 Dec 2013 15:26 Operator: BBL
Sample : 1312282-001A Inst : H5973-1
Misc : NJGIAM003,MW-1,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:41 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	74030	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	471695	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	418860	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	207955	51.24	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 102.48%			
49) Toluene-d8	6.01	98	737754	50.75	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.50%			
53) 4-Bromofluorobenzene	8.48	95	249429	48.59	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 97.18%			
Target Compounds						Qvalue
47) Tetrachloroethene	6.58	164	2833	1.06	ug/l	92

NJGIAM003 V21

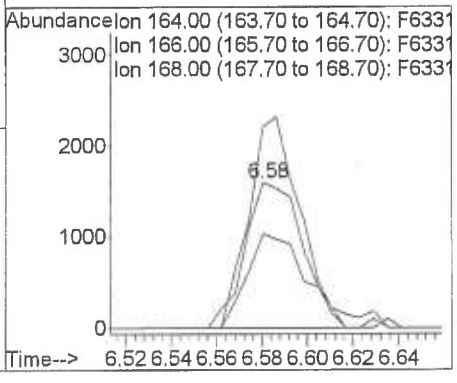
(#) = qualifier out of range (m) = manual integration
F63319.D C8W0210.M Fri Dec 13 13:11:50 2013 RPT1 Page 1



#47
Tetrachloroethene
Concen: 1.06 ug/l
RT: 6.58 min Scan# 903
Delta R.T. -0.00 min
Lab File: F63319.D
Acq: 11 Dec 2013 15:26

Tgt Ion:164 Resp: 2833

Ion	Ratio	Lower	Upper
164	100		
166	138.8	106.7	146.7
168	64.9	41.6	81.6



NJGLAM003 V22

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63320.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

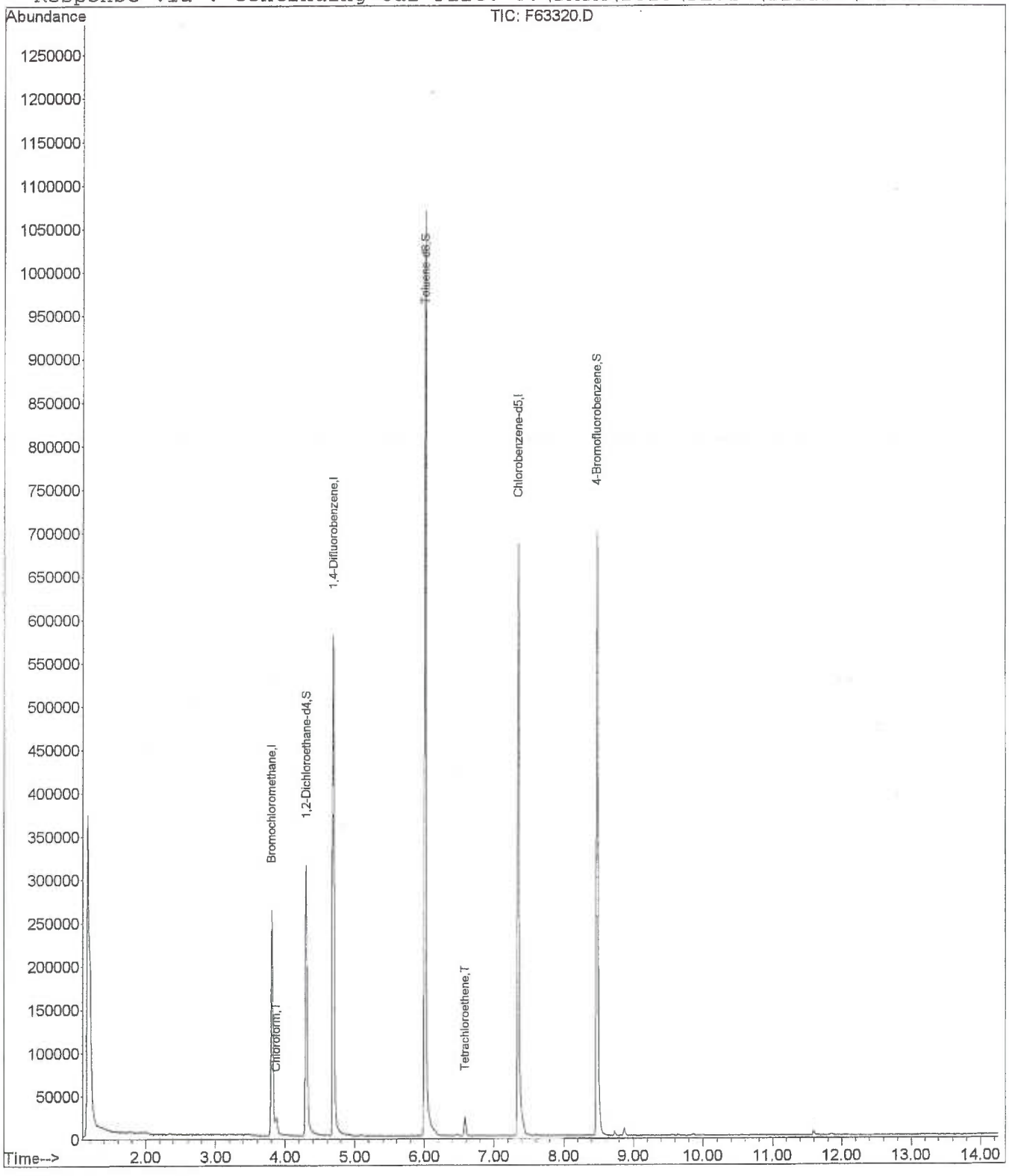
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V23

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63320.D Vial: 9
Acq On : 11 Dec 2013 15:55 Operator: BBL
Sample : 1312282-002A Inst : H5973-1
Misc : NJGIAM003,MW-2,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:43 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V24

Quantitation Report (QT Reviewed)

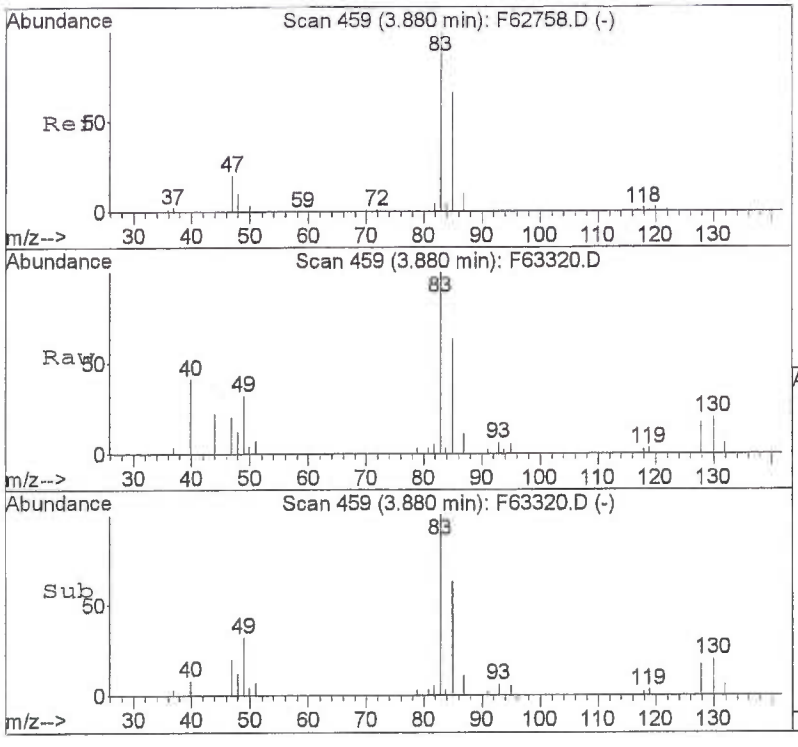
Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63320.D Vial: 9
Acq On : 11 Dec 2013 15:55 Operator: BBL
Sample : 1312282-002A Inst : H5973-1
Misc : NJGIAM003,MW-2,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:43 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	72847	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	456105	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	403778	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	204861	51.30	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 102.60%			
49) Toluene-d8	6.02	98	708903	50.59	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.18%			
53) 4-Bromofluorobenzene	8.48	95	242489	49.00	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.00%			
Target Compounds						Qvalue
25) Chloroform	3.88	83	10847	1.61	ug/l	97
47) Tetrachloroethene	6.59	164	5349	2.07	ug/l	92

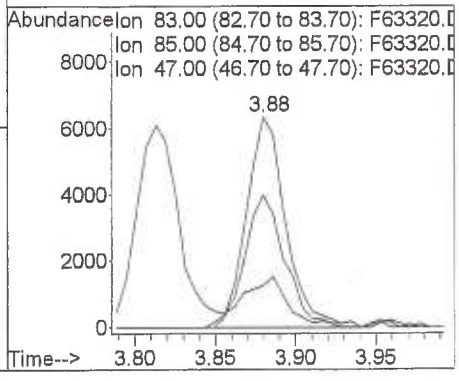
NJGIAM003 V25

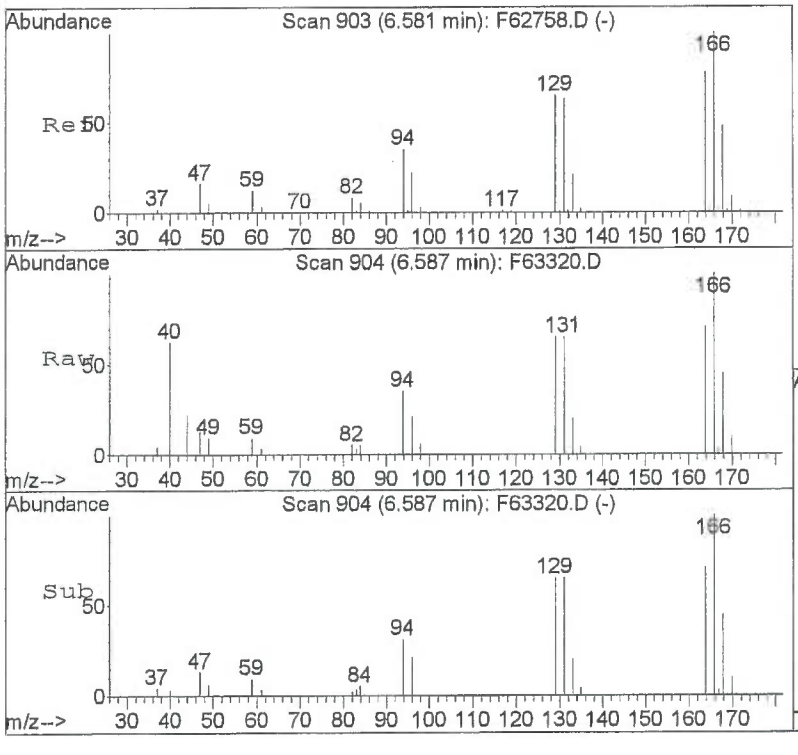
(#) = qualifier out of range (m) = manual integration



#25
Chloroform
Concen: 1.61 ug/l
RT: 3.88 min Scan# 459
Delta R.T. -0.00 min
Lab File: F63320.D
Acq: 11 Dec 2013 15:55

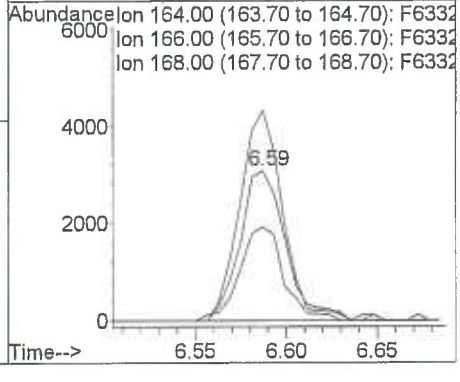
Tgt Ion: 83	Resp:	10847	
Ion	Ratio	Lower	Upper
83	100		
85	63.1	45.8	85.8
47	19.8	0.7	40.7





#47
Tetrachloroethene
Concen: 2.07 ug/l
RT: 6.59 min Scan# 904
Delta R.T. 0.00 min
Lab File: F63320.D
Acq: 11 Dec 2013 15:55

Tgt Ion:164	Resp:	5349	
Ion	Ratio	Lower	Upper
164	100		
166	140.3	106.7	146.7
168	62.5	41.6	81.6



NJGIAM003 V26

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63321.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

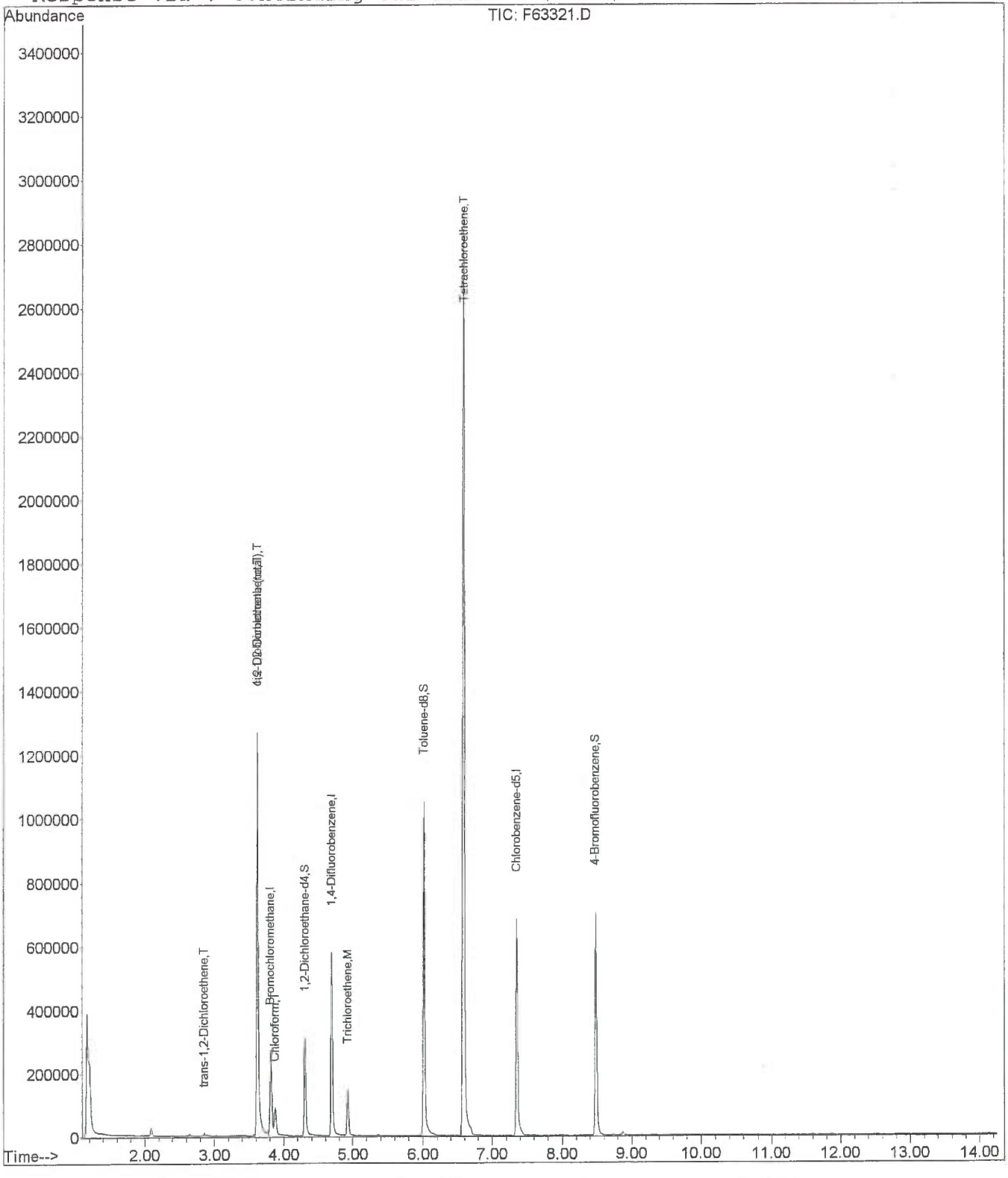
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	150	
67-66-3	Chloroform	9	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	1	J
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	130	
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	13	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	290	E
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V27

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63321.D Vial: 10
Acq On : 11 Dec 2013 16:24 Operator: BBL
Sample : 1312282-003A Inst : H5973-1
Misc : NJGIAM003,MW-3,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:44 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V28

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63321.D Vial: 10
Acq On : 11 Dec 2013 16:24 Operator: BBL
Sample : 1312282-003A Inst : H5973-1
Misc : NJGIAM003,MW-3,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:44 2013 Quant Results File: C8W0210.RES

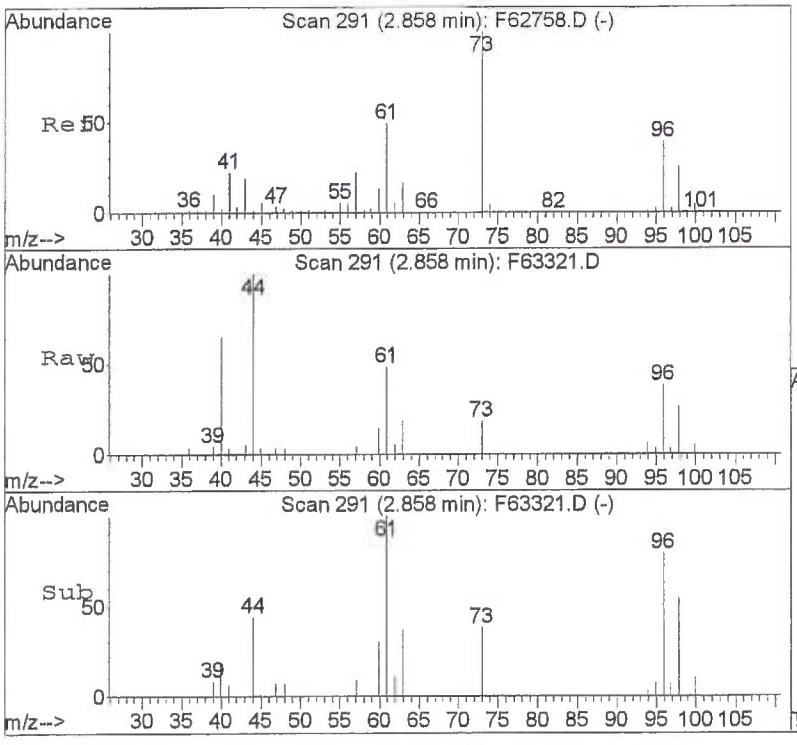
Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	72714	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	455777	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	399538	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	201306	50.50	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 101.00%			
49) Toluene-d8	6.02	98	688443	49.65	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.30%			
53) 4-Bromofluorobenzene	8.48	95	245139	50.06	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 100.12%			
Target Compounds						Qvalue
21) trans-1,2-Dichloroethene	2.86	96	3368	1.01	UG/L	94
22) cis-1,2-Dichloroethene	3.62	96	564961	130.23	UG/L	99
23) 1,2-Dichloroethene (total)	3.62	96	574632m	145.93	ug/l	
25) Chloroform	3.88	83	59878	8.90	ug/l	98
36) Trichloroethene	4.93	130	46676	12.78	ug/l	97
47) Tetrachloroethene	6.59	164	738492	288.96	ug/l	100

TI
ERB
12/13/13

NJGIAM003 V29

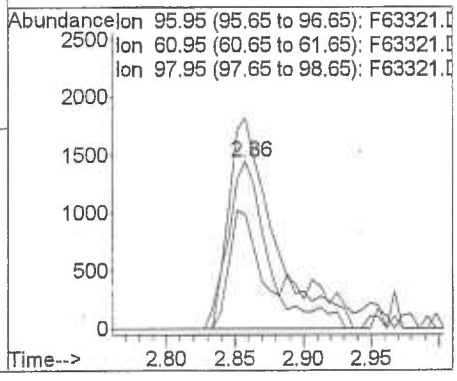
(#) = qualifier out of range (m) = manual integration
F63321.D C8W0210.M Fri Dec 13 13:12:23 2013 RPT1 Page 1

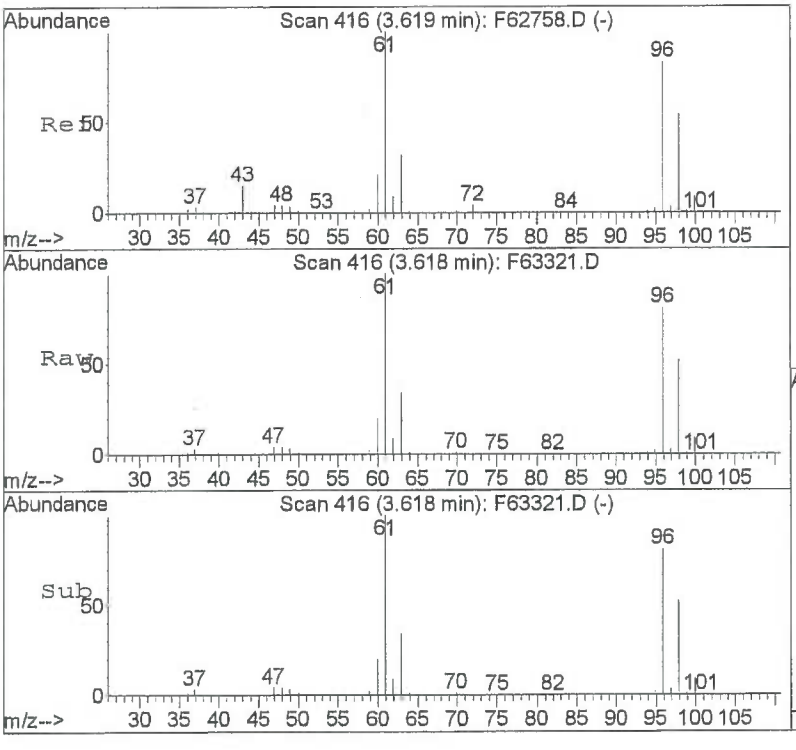


#21
trans-1,2-Dichloroethene
Concen: 1.01 UG/L
RT: 2.86 min Scan# 291
Delta R.T. 0.00 min
Lab File: F63321.D
Acq: 11 Dec 2013 16:24

Tgt Ion: 96 Resp: 3368

Ion	Ratio	Lower	Upper
96	100		
61	126.2	113.2	153.2
98	68.3	44.1	84.1

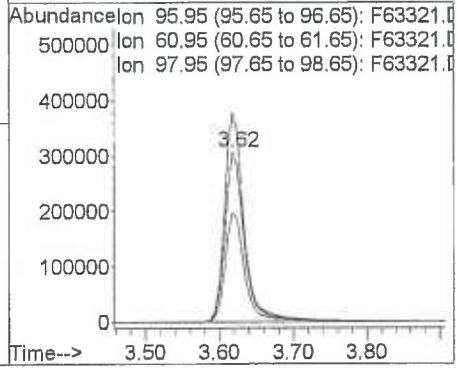




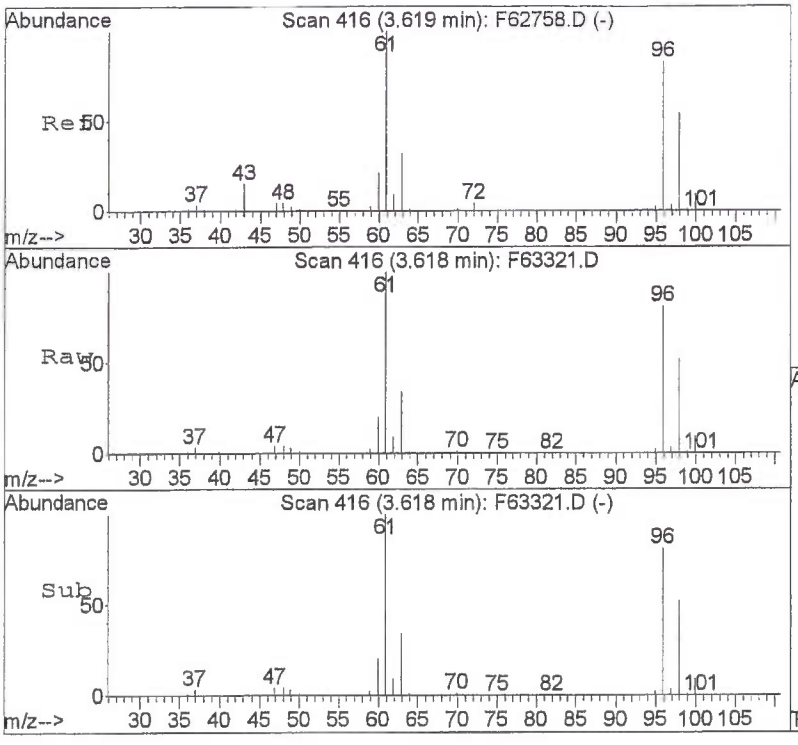
#22
cis-1,2-Dichloroethene
Concen: 130.23 UG/L
RT: 3.62 min Scan# 416
Delta R.T. -0.00 min
Lab File: F63321.D
Acq: 11 Dec 2013 16:24

Tgt Ion: 96 Resp: 564961

Ion	Ratio	Lower	Upper
96	100		
61	123.3	103.6	143.6
98	64.2	42.5	82.5



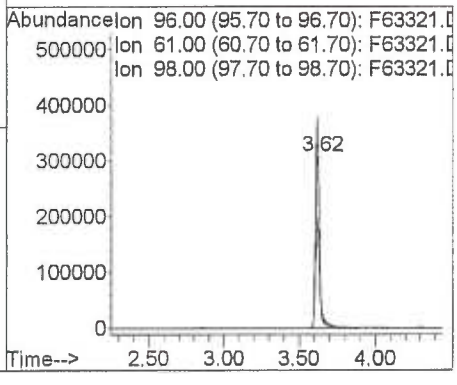
NJGIAM003 V30

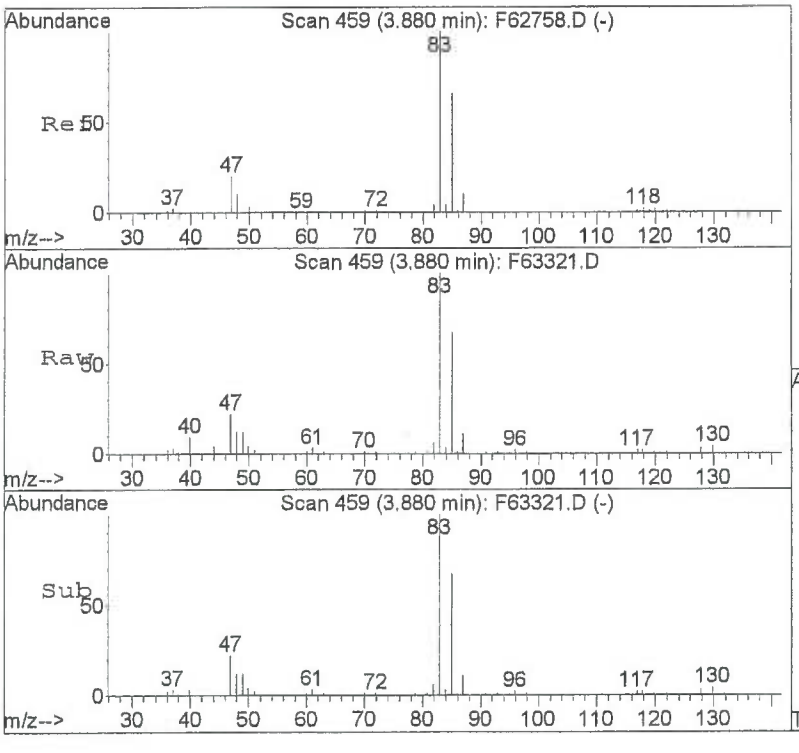


#23
1,2-Dichloroethene (total)
Concen: 145.93 ug/l m
RT: 3.62 min Scan# 416
Delta R.T. -0.00 min
Lab File: F63321.D
Acq: 11 Dec 2013 16:24

Tgt Ion: 96 Resp: 574632

Ion	Ratio	Lower	Upper
96	100		
61	123.3	103.6	143.6
98	64.2	42.5	82.5

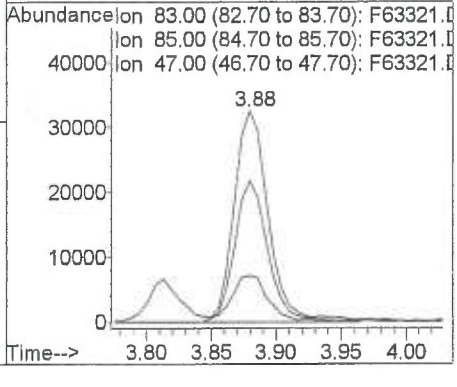




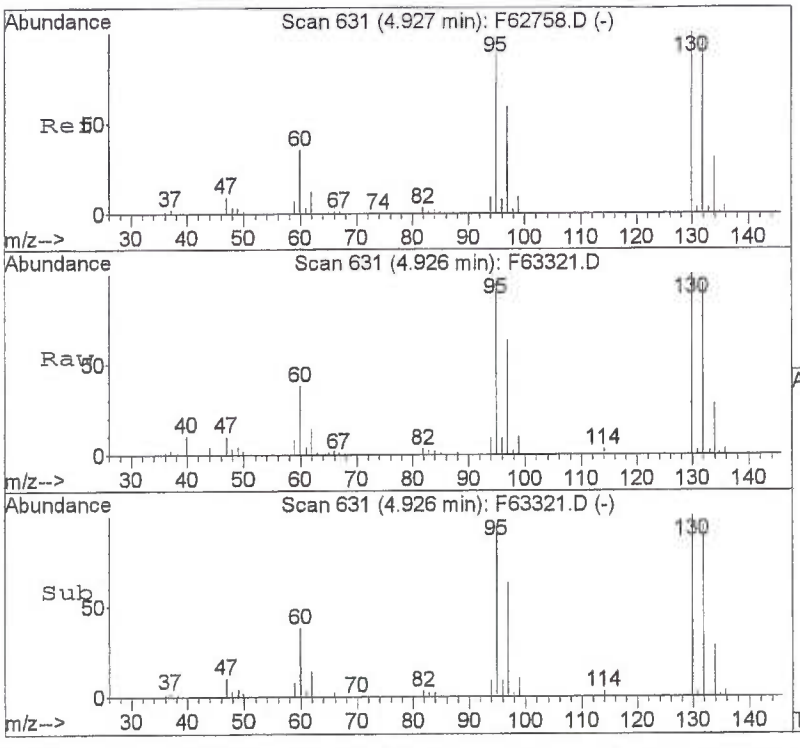
#25
Chloroform
Concen: 8.90 ug/l
RT: 3.88 min Scan# 459
Delta R.T. -0.00 min
Lab File: F63321.D
Acq: 11 Dec 2013 16:24

Tgt Ion: 83 Resp: 59878

Ion	Ratio	Lower	Upper
83	100		
85	66.9	45.8	85.8
47	21.6	0.7	40.7



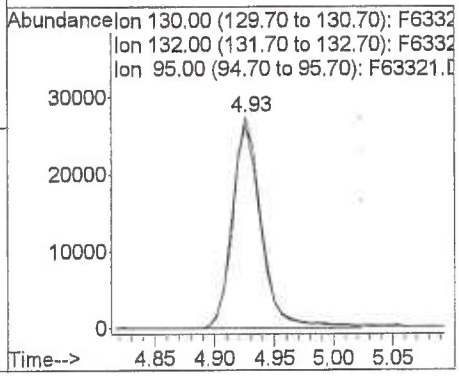
NJGIAM003 V31

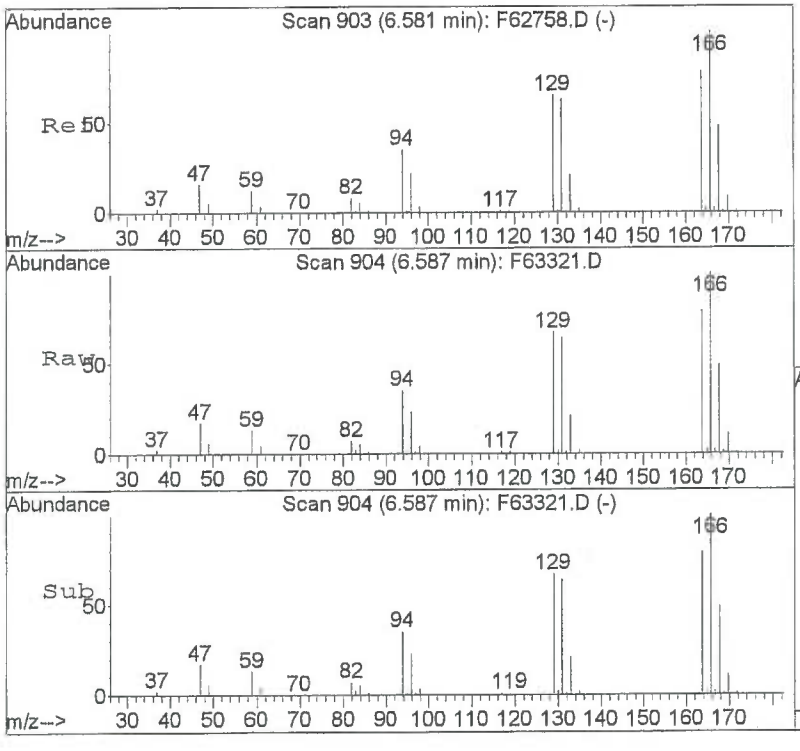


#36
Trichloroethene
Concen: 12.78 ug/l
RT: 4.93 min Scan# 631
Delta R.T. -0.00 min
Lab File: F63321.D
Acq: 11 Dec 2013 16:24

Tgt Ion:130 Resp: 46676

Ion	Ratio	Lower	Upper
130	100		
132	95.5	74.2	114.2
95	95.8	71.9	111.9

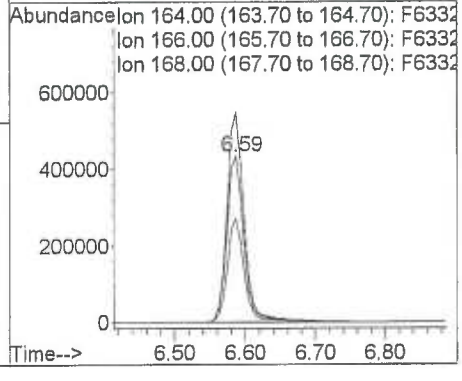




#47
Tetrachloroethene
Concen: 288.96 ug/l
RT: 6.59 min Scan# 904
Delta R.T. 0.00 min
Lab File: F63321.D
Acq: 11 Dec 2013 16:24

Tgt Ion:164 Resp: 738492

Ion	Ratio	Lower	Upper
164	100		
166	126.6	106.7	146.7
168	62.1	41.6	81.6



NJGIAM003 V32

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3DL

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-003ADL

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63328.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 2.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

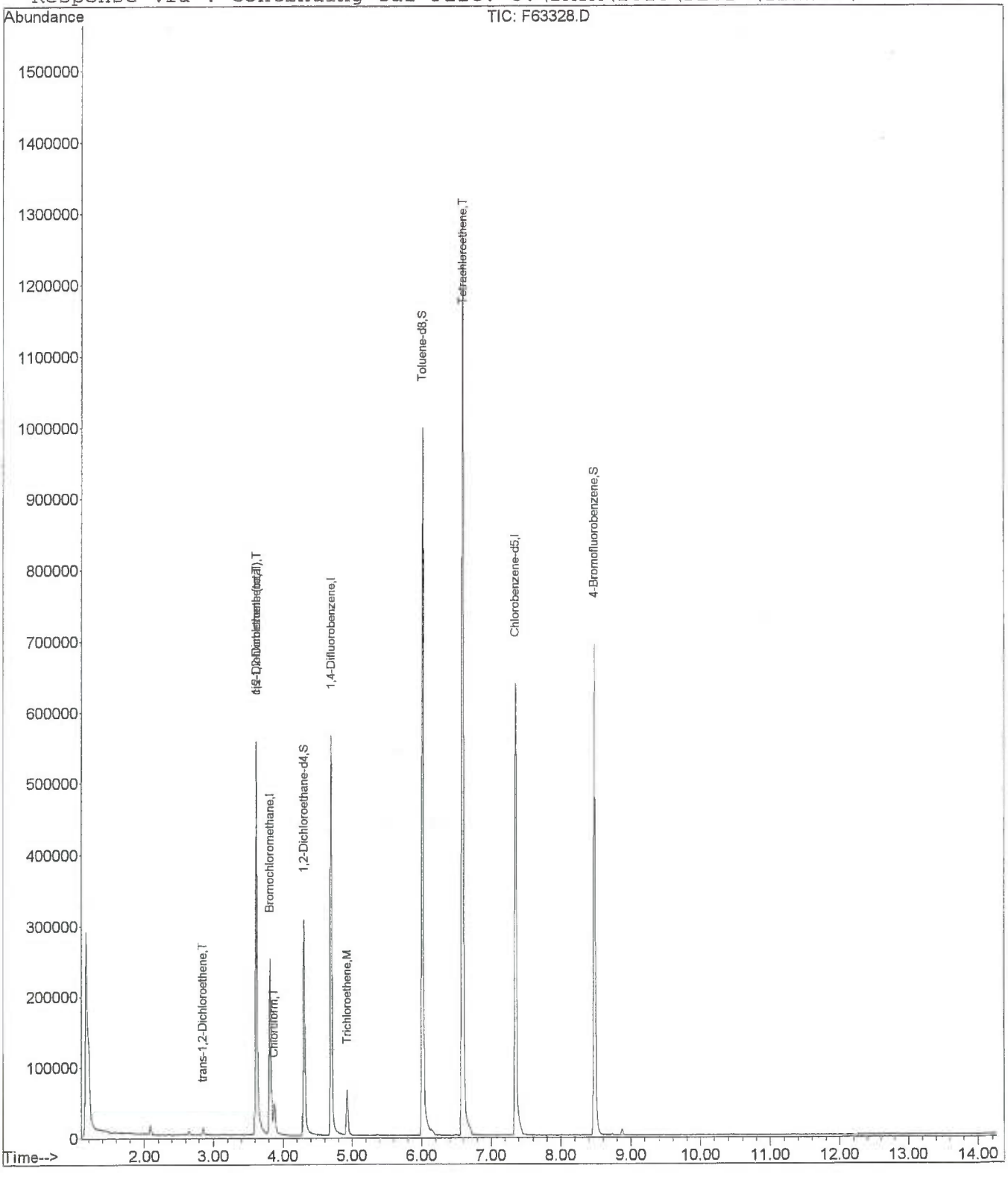
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	130	
67-66-3	Chloroform	8	DJ
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
156-60-5	trans-1,2-Dichloroethene	2	DJ
56-23-5	Carbon tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
156-59-2	cis-1,2-Dichloroethene	120	D
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	12	D
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
127-18-4	Tetrachloroethene	260	D
79-34-5	1,1,2,2-Tetrachloroethane	10	U

NJGIAM003 V33

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63328.D Vial: 17
Acq On : 11 Dec 2013 19:47 Operator: BBL
Sample : 1312282-003A Inst : H5973-1
Misc : NJGIAM003,MW-3DL,H2O,DL,, 1:2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:57 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V34

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63328.D Vial: 17
Acq On : 11 Dec 2013 19:47 Operator: BBL
Sample : 1312282-003A Inst : H5973-1
Misc : NJGIAM003,MW-3DL,H2O,DL,, 1:2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:57 2013 Quant Results File: C8W0210.RES

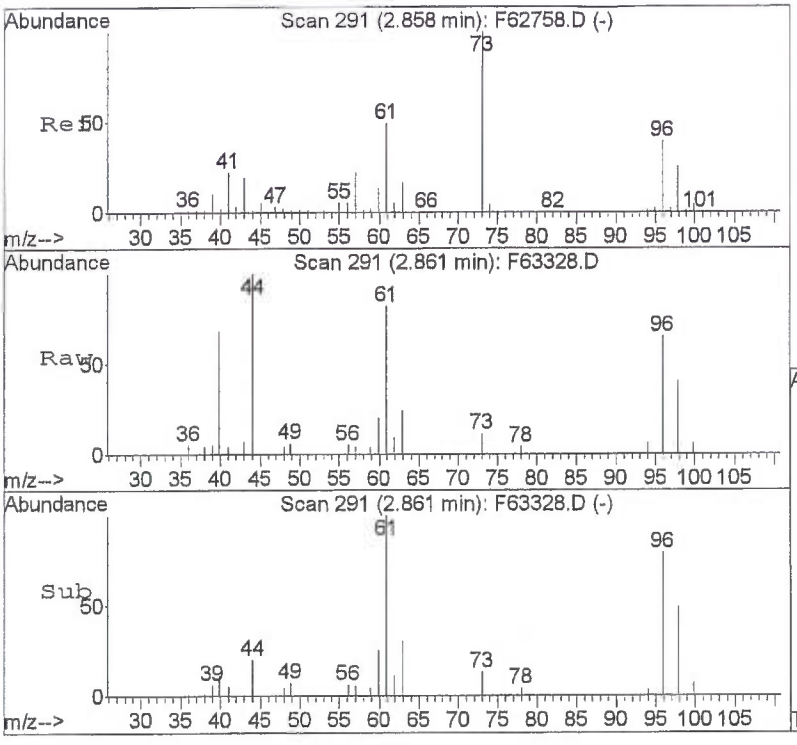
Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	71079	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	434774	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.36	117	390513	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	197109	50.59	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 101.18%			
49) Toluene-d8	6.01	98	668184	49.30	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 98.60%			
53) 4-Bromofluorobenzene	8.48	95	230691	48.20	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 96.40%			
Target Compounds						Qvalue
21) trans-1,2-Dichloroethene	2.86	96	3485	1.06	UG/L	95
22) cis-1,2-Dichloroethene	3.62	96	247981	58.48	UG/L	98
23) 1,2-Dichloroethene (total)	3.62	96	254085m	66.01	ug/l	
25) Chloroform	3.88	83	27591	4.20	ug/l	95
36) Trichloroethene	4.93	130	21196	6.08	ug/l	98
47) Tetrachloroethene	6.58	164	327065	130.93	ug/l	98

TI
GKB
12/13/13

NJGIAM003 V35

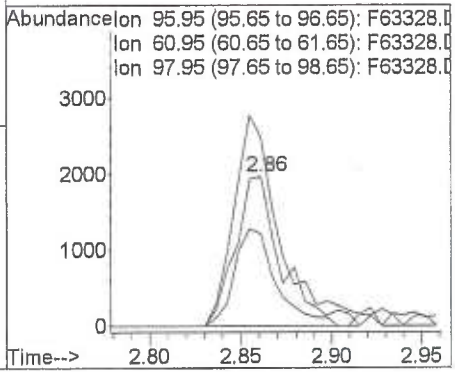
(#) = qualifier out of range (m) = manual integration

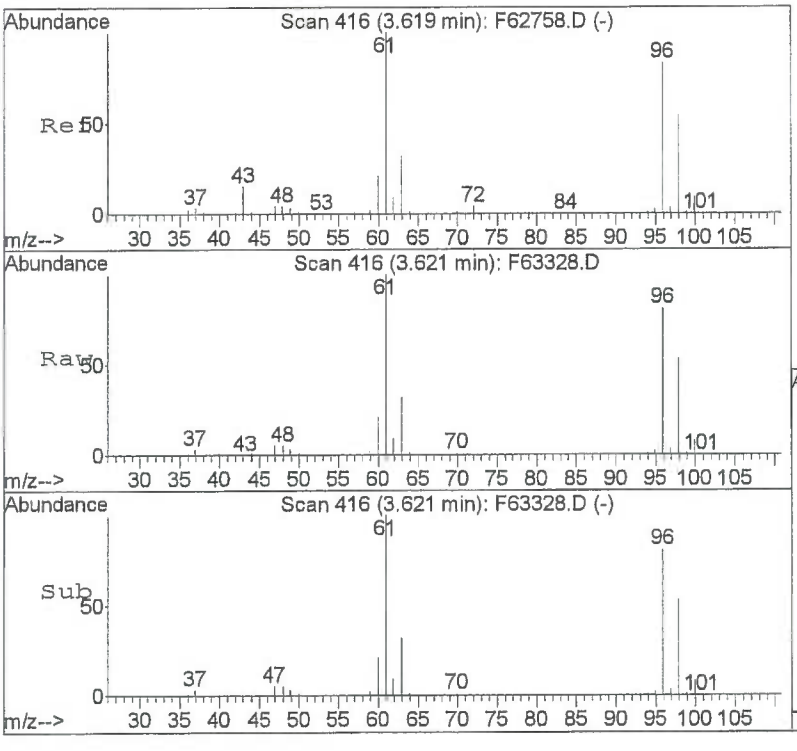


#21
trans-1,2-Dichloroethene
Concen: 1.06 UG/L
RT: 2.86 min Scan# 291
Delta R.T. 0.01 min
Lab File: F63328.D
Acq: 11 Dec 2013 19:47

Tgt Ion: 96 Resp: 3485

Ion	Ratio	Lower	Upper
96	100		
61	126.4	113.2	153.2
98	61.4	44.1	84.1

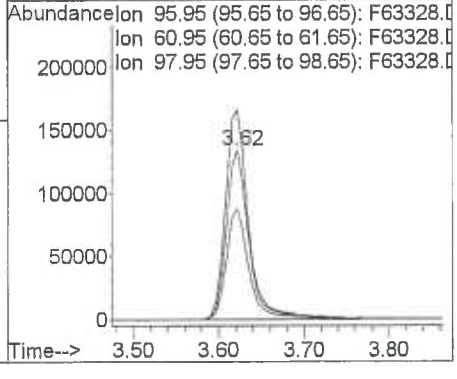




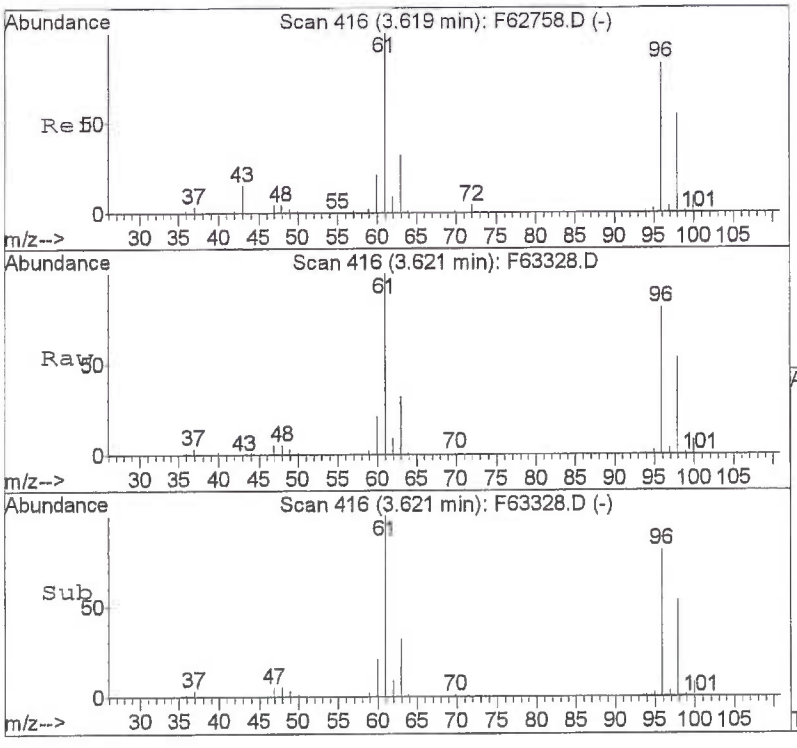
#22
cis-1,2-Dichloroethene
Concen: 58.48 UG/L
RT: 3.62 min Scan# 416
Delta R.T. 0.00 min
Lab File: F63328.D
Acq: 11 Dec 2013 19:47

Tgt Ion: 96 Resp: 247981

Ion	Ratio	Lower	Upper
96	100		
61	124.1	103.6	143.6
98	65.3	42.5	82.5



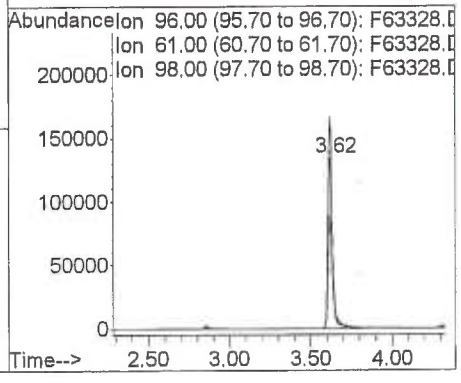
NJGIAM003 V36

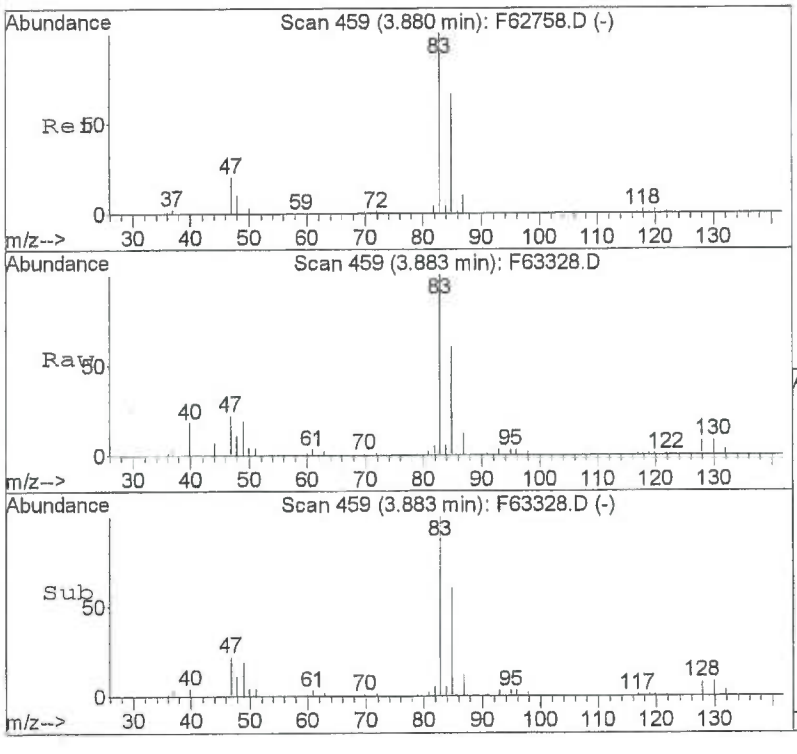


#23
1,2-Dichloroethene (total)
Concen: 66.01 ug/l m
RT: 3.62 min Scan# 416
Delta R.T. 0.00 min
Lab File: F63328.D
Acq: 11 Dec 2013 19:47

Tgt Ion: 96 Resp: 254085

Ion	Ratio	Lower	Upper
96	100		
61	124.1	103.6	143.6
98	65.3	42.5	82.5

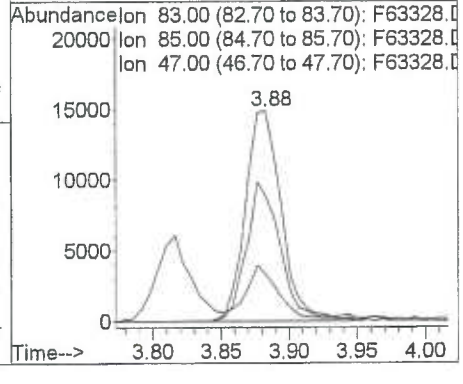




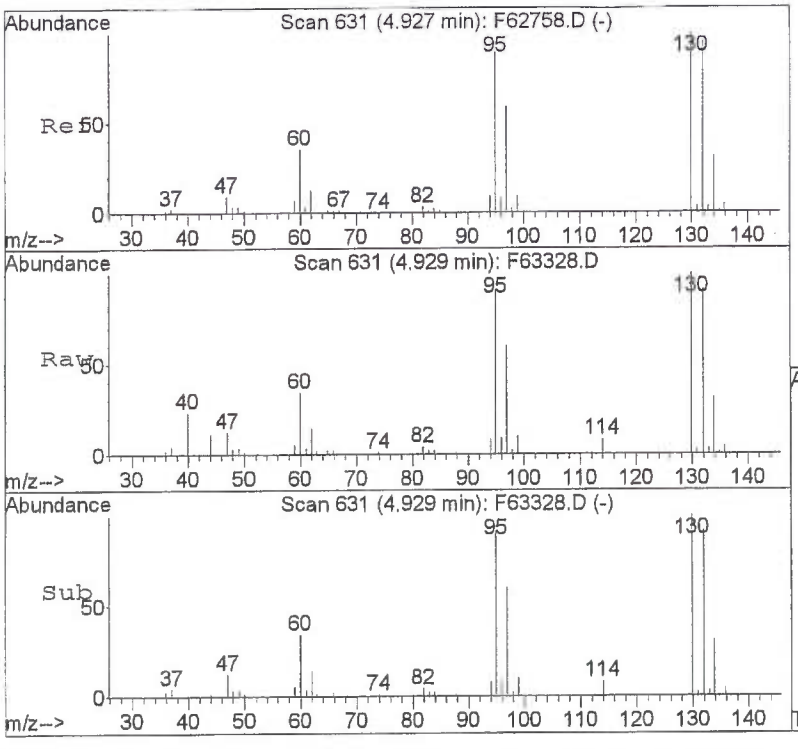
#25
Chloroform
Concen: 4.20 ug/l
RT: 3.88 min Scan# 459
Delta R.T. 0.00 min
Lab File: F63328.D
Acq: 11 Dec 2013 19:47

Tgt Ion: 83 Resp: 27591

Ion	Ratio	Lower	Upper
83	100		
85	60.8	45.8	85.8
47	21.2	0.7	40.7

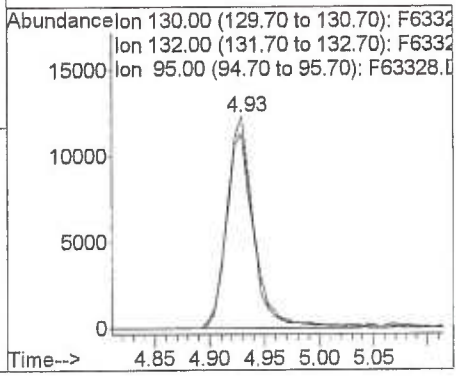


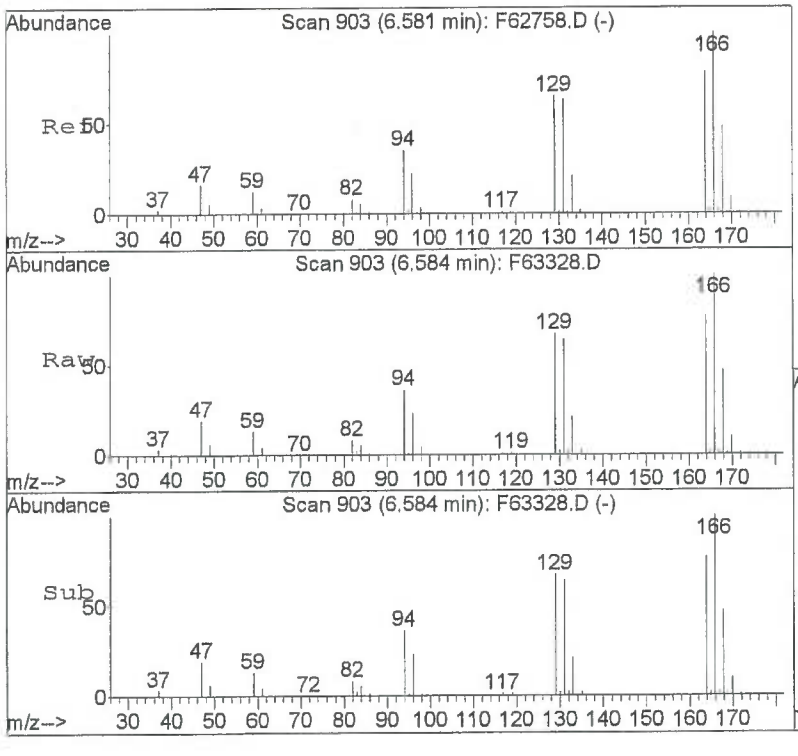
NJGIAM003 V37



#36
Trichloroethene
Concen: 6.08 ug/l
RT: 4.93 min Scan# 631
Delta R.T. 0.00 min
Lab File: F63328.D
Acq: 11 Dec 2013 19:47

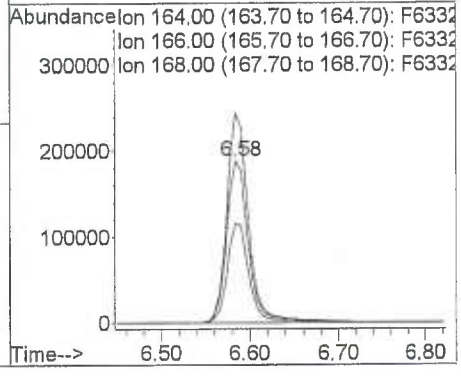
Tgt Ion:130	Resp:	21196	
Ion	Ratio	Lower	Upper
130	100		
132	91.5	74.2	114.2
95	91.3	71.9	111.9





#47
Tetrachloroethene
Concen: 130.93 ug/l
RT: 6.58 min Scan# 903
Delta R.T. 0.00 min
Lab File: F63328.D
Acq: 11 Dec 2013 19:47

Tgt Ion:164	Resp:	327065	
Ion	Ratio	Lower	Upper
164	100		
166	130.1	106.7	146.7
168	61.3	41.6	81.6



NJGIAM003 V38

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63322.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

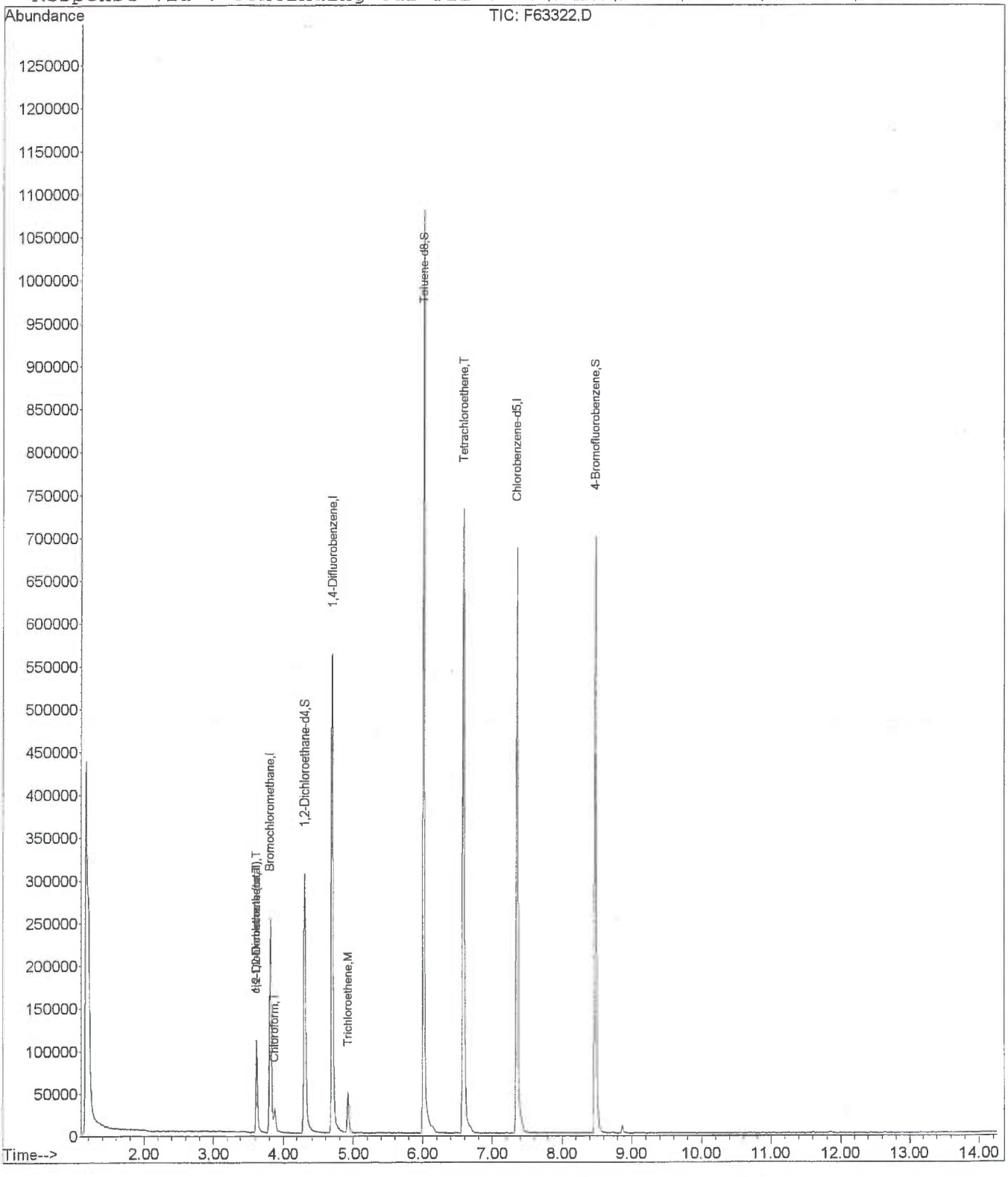
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	12	
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	11	
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	4	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	74	
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V39

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63322.D Vial: 11
Acq On : 11 Dec 2013 16:52 Operator: BBL
Sample : 1312282-004A Inst : H5973-1
Misc : NJGIAM003,MW-4,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:47 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V40

Quantitation Report (QT Reviewed)

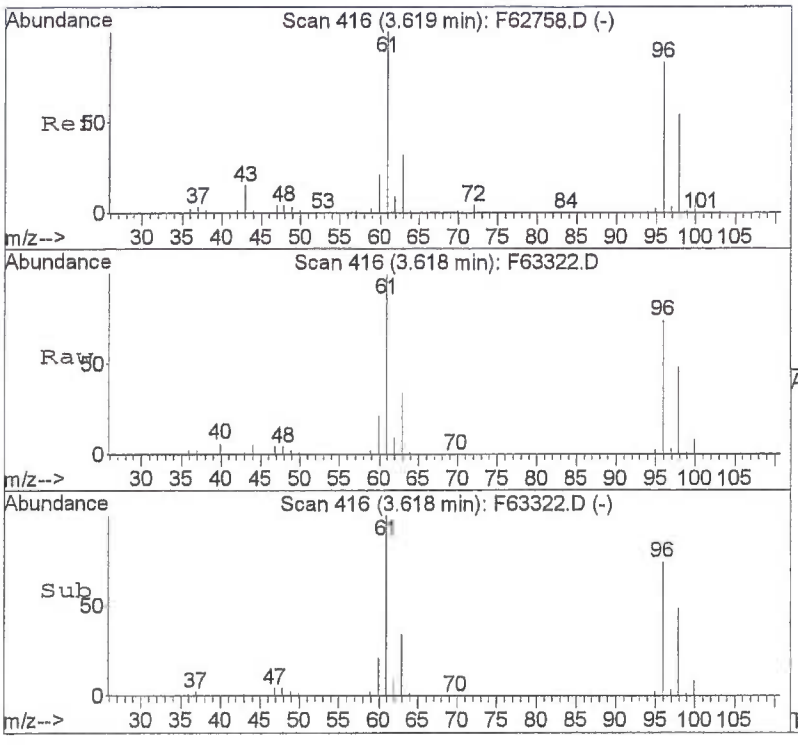
Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63322.D Vial: 11
Acq On : 11 Dec 2013 16:52 Operator: BBL
Sample : 1312282-004A Inst : H5973-1
Misc : NJGIAM003,MW-4,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:47 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	71152	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	457722	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	392799	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	202163	51.83	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 103.66%			
49) Toluene-d8	6.01	98	690393	50.65	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.30%			
53) 4-Bromofluorobenzene	8.48	95	235919	49.00	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.00%			
Target Compounds						Qvalue
22) cis-1,2-Dichloroethene	3.62	96	48002	11.31	UG/L	93
23) 1,2-Dichloroethene (total)	3.62	96	48002	12.46	ug/l	93
25) Chloroform	3.88	83	15461	2.35	ug/l	98
36) Trichloroethene	4.93	130	15449	4.21	ug/l	96
47) Tetrachloroethene	6.59	164	185859	73.97	ug/l	99

NJGIAM003 V41

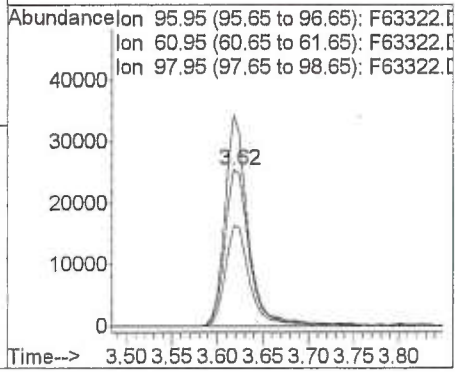
(#) = qualifier out of range (m) = manual integration

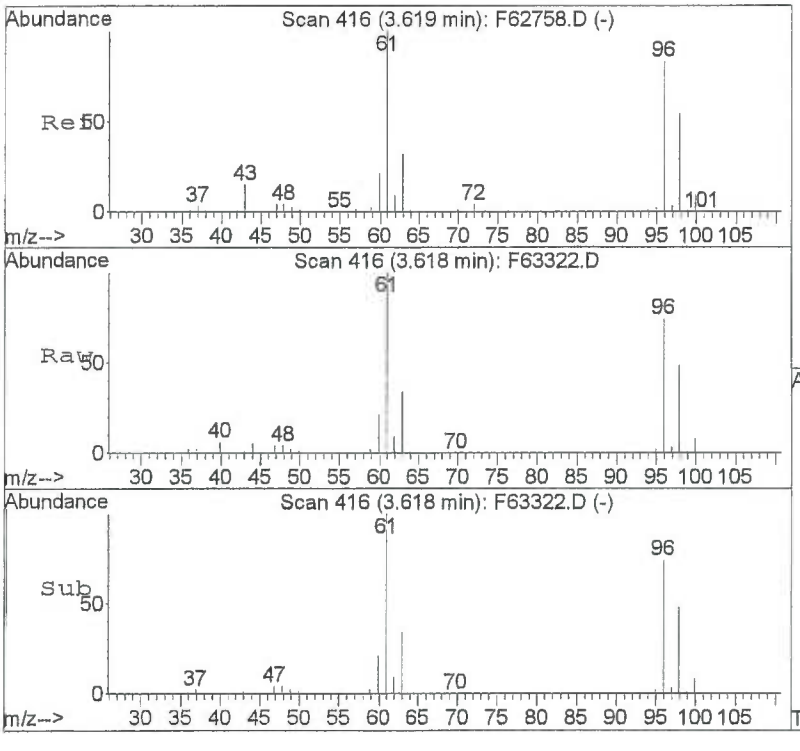


#22
cis-1,2-Dichloroethene
Concen: 11.31 UG/L
RT: 3.62 min Scan# 416
Delta R.T. -0.00 min
Lab File: F63322.D
Acq: 11 Dec 2013 16:52

Tgt Ion: 96 Resp: 48002

Ion	Ratio	Lower	Upper
96	100		
61	134.8	103.6	143.6
98	64.0	42.5	82.5

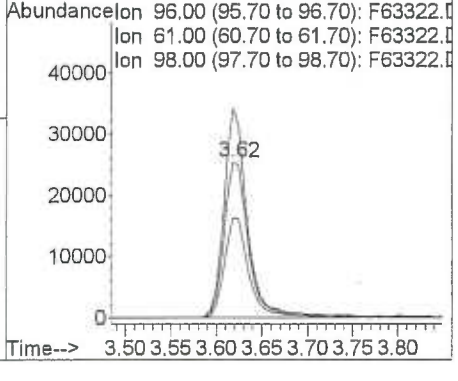




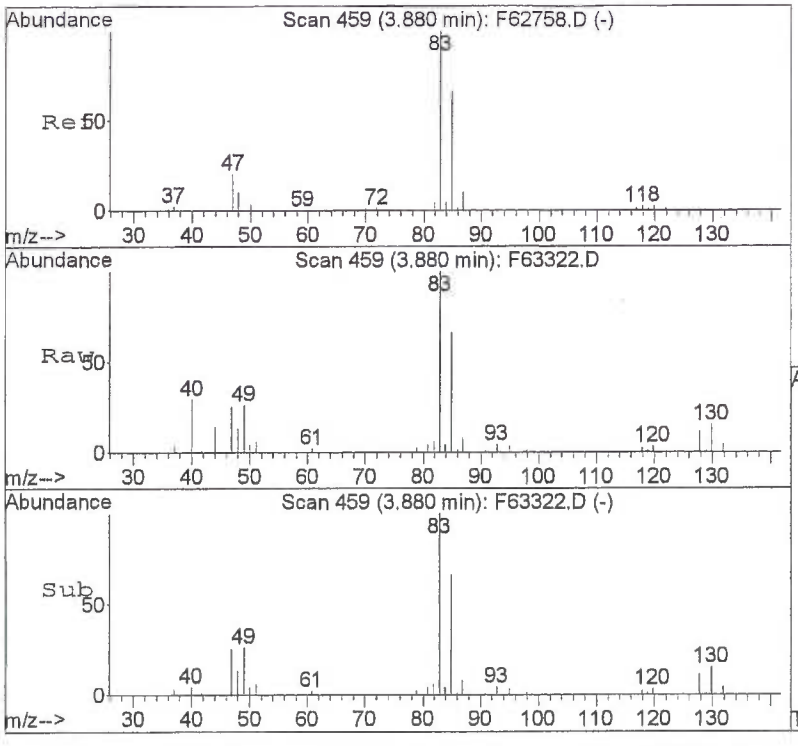
#23
1,2-Dichloroethene (total)
Concen: 12.46 ug/l
RT: 3.62 min Scan# 416
Delta R.T. -0.00 min
Lab File: F63322.D
Acq: 11 Dec 2013 16:52

Tgt Ion: 96 Resp: 48002

Ion	Ratio	Lower	Upper
96	100		
61	134.8	103.6	143.6
98	64.0	42.5	82.5



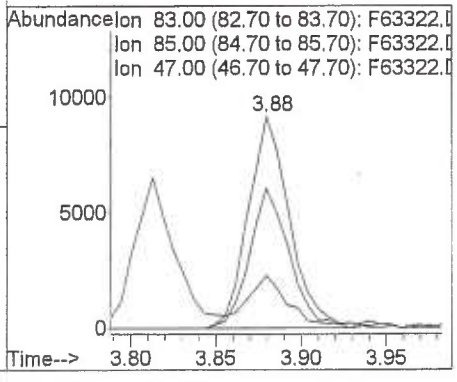
NJGIAM003 V42

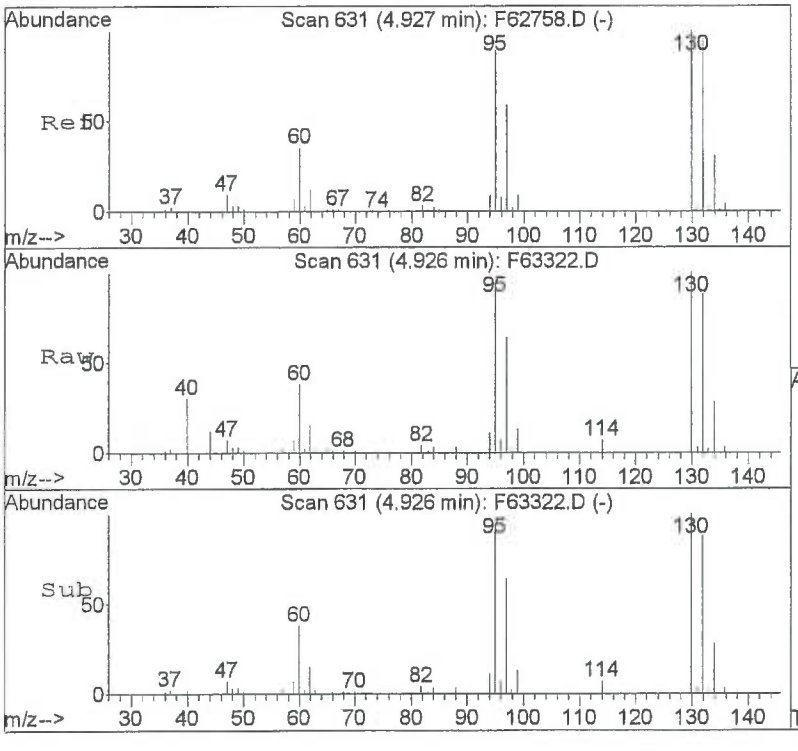


#25
Chloroform
Concen: 2.35 ug/l
RT: 3.88 min Scan# 459
Delta R.T. -0.00 min
Lab File: F63322.D
Acq: 11 Dec 2013 16:52

Tgt Ion: 83 Resp: 15461

Ion	Ratio	Lower	Upper
83	100		
85	66.1	45.8	85.8
47	23.3	0.7	40.7

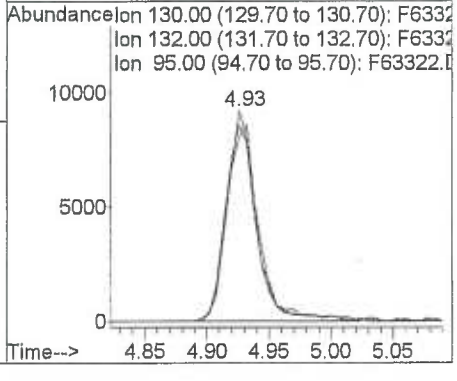




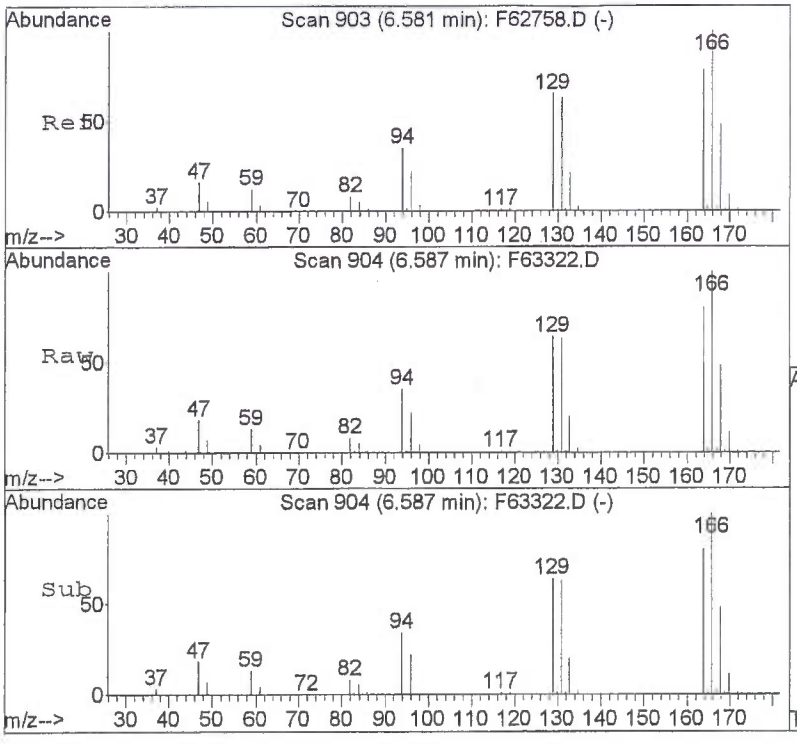
#36
Trichloroethene
Concen: 4.21 ug/l
RT: 4.93 min Scan# 631
Delta R.T. -0.00 min
Lab File: F63322.D
Acq: 11 Dec 2013 16:52

Tgt Ion:130 Resp: 15449

Ion	Ratio	Lower	Upper
130	100		
132	87.9	74.2	114.2
95	93.1	71.9	111.9



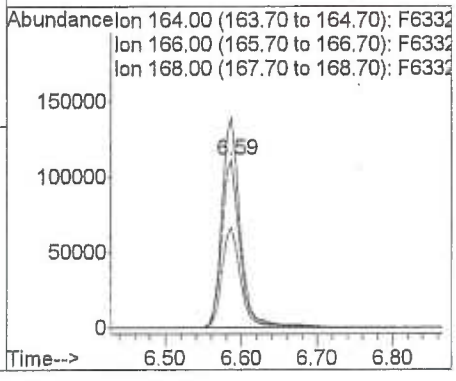
NJGIAM003 V43



#47
Tetrachloroethene
Concen: 73.97 ug/l
RT: 6.59 min Scan# 904
Delta R.T. 0.00 min
Lab File: F63322.D
Acq: 11 Dec 2013 16:52

Tgt Ion:164 Resp: 185859

Ion	Ratio	Lower	Upper
164	100		
166	125.8	106.7	146.7
168	60.1	41.6	81.6



NJGLAM003 V44

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63323.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

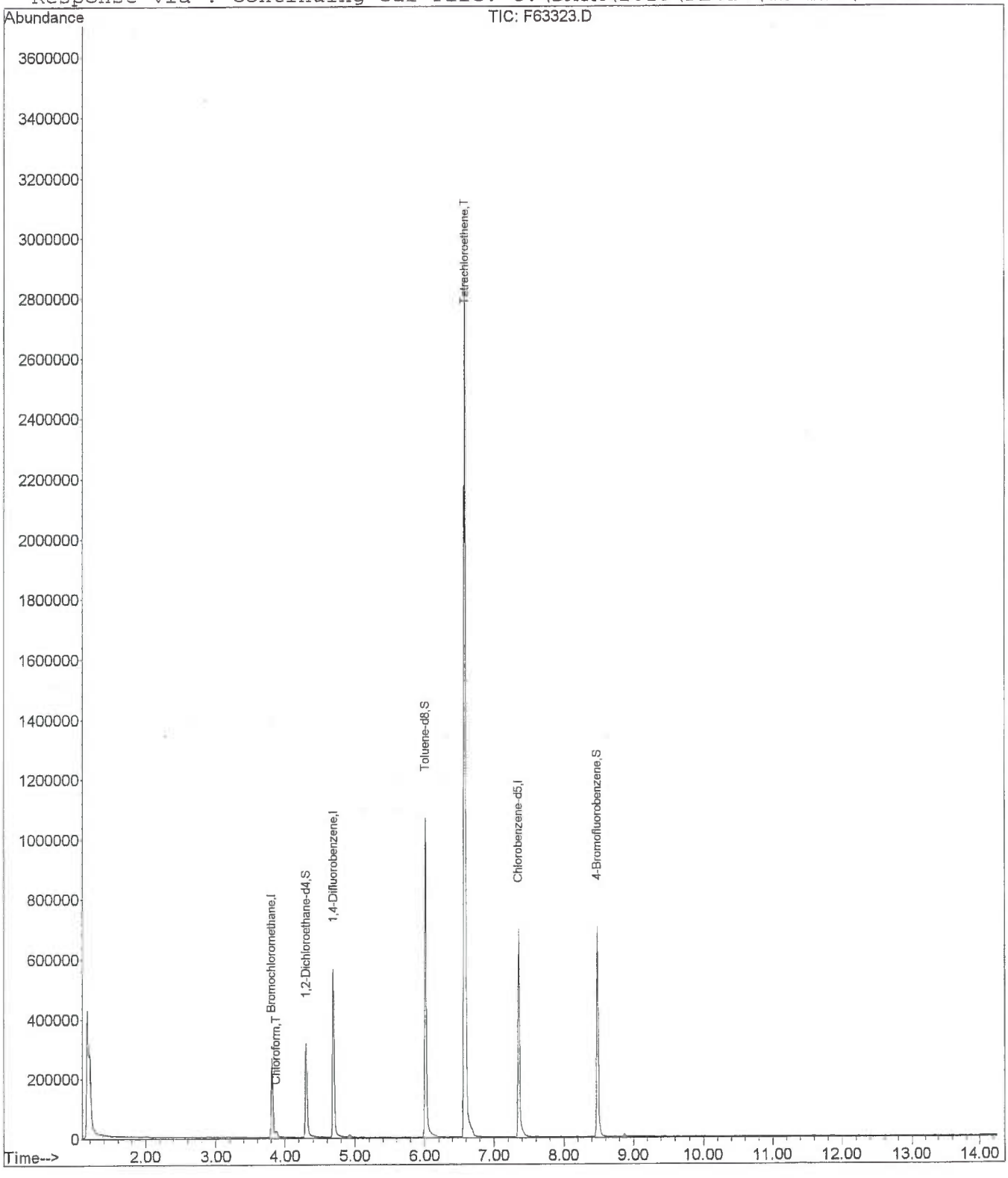
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	300	E
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V45

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63323.D Vial: 12
Acq On : 11 Dec 2013 17:21 Operator: BBL
Sample : 1312282-005A Inst : H5973-1
Misc : NJGIAM003,MW-5,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:48 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V46

Quantitation Report (QT Reviewed)

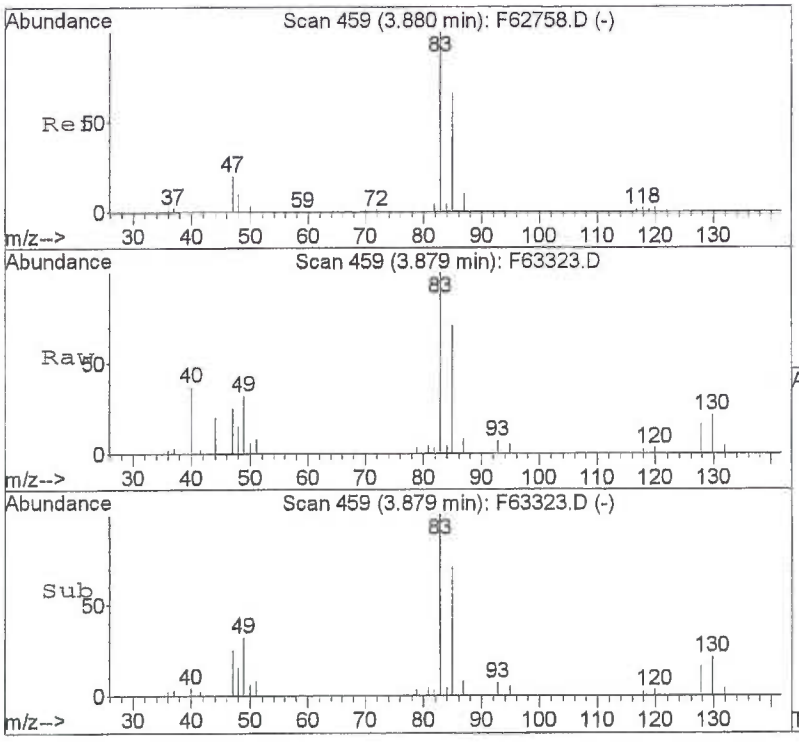
Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63323.D Vial: 12
Acq On : 11 Dec 2013 17:21 Operator: BBL
Sample : 1312282-005A Inst : H5973-1
Misc : NJGIAM003,MW-5,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:48 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	73698	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	448628	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	397763	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	205181	50.79	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 101.58%			
49) Toluene-d8	6.01	98	689465	49.95	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.90%			
53) 4-Bromofluorobenzene	8.48	95	241097	49.45	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.90%			
Target Compounds						Qvalue
25) Chloroform	3.88	83	11433	1.68	ug/l	93
47) Tetrachloroethene	6.59	164	757976	297.91	ug/l	99

NJGIAM003 V47

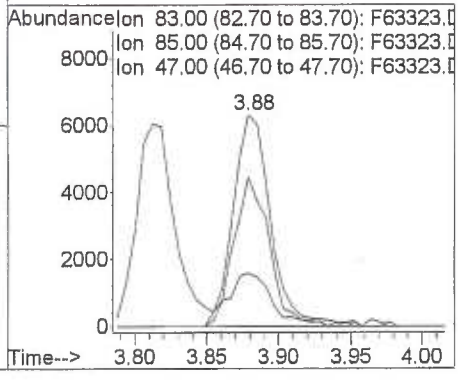
(#) = qualifier out of range (m) = manual integration

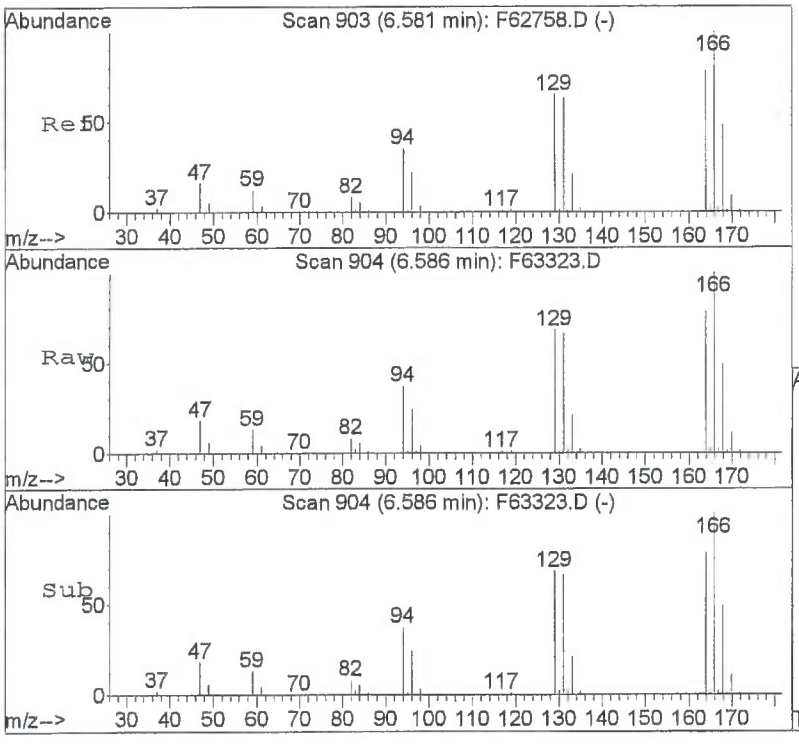


#25
Chloroform
Concen: 1.68 ug/l
RT: 3.88 min Scan# 459
Delta R.T. -0.00 min
Lab File: F63323.D
Acq: 11 Dec 2013 17:21

Tgt Ion: 83 Resp: 11433

Ion	Ratio	Lower	Upper
83	100		
85	70.7	45.8	85.8
47	25.1	0.7	40.7

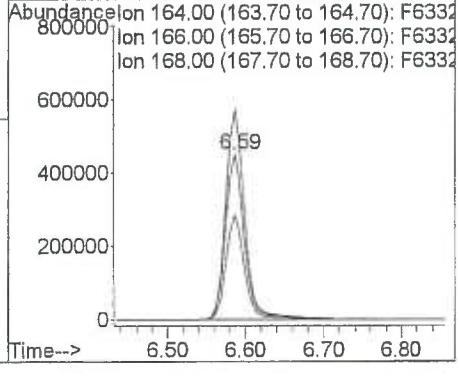




#47
Tetrachloroethene
Concen: 297.91 ug/l
RT: 6.59 min Scan# 904
Delta R.T. 0.00 min
Lab File: F63323.D
Acq: 11 Dec 2013 17:21

Tgt Ion:164 Resp: 757976

Ion	Ratio	Lower	Upper
164	100		
166	127.6	106.7	146.7
168	63.0	41.6	81.6



NJGIAM003 V48

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5DL

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-005ADL

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63329.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 3.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

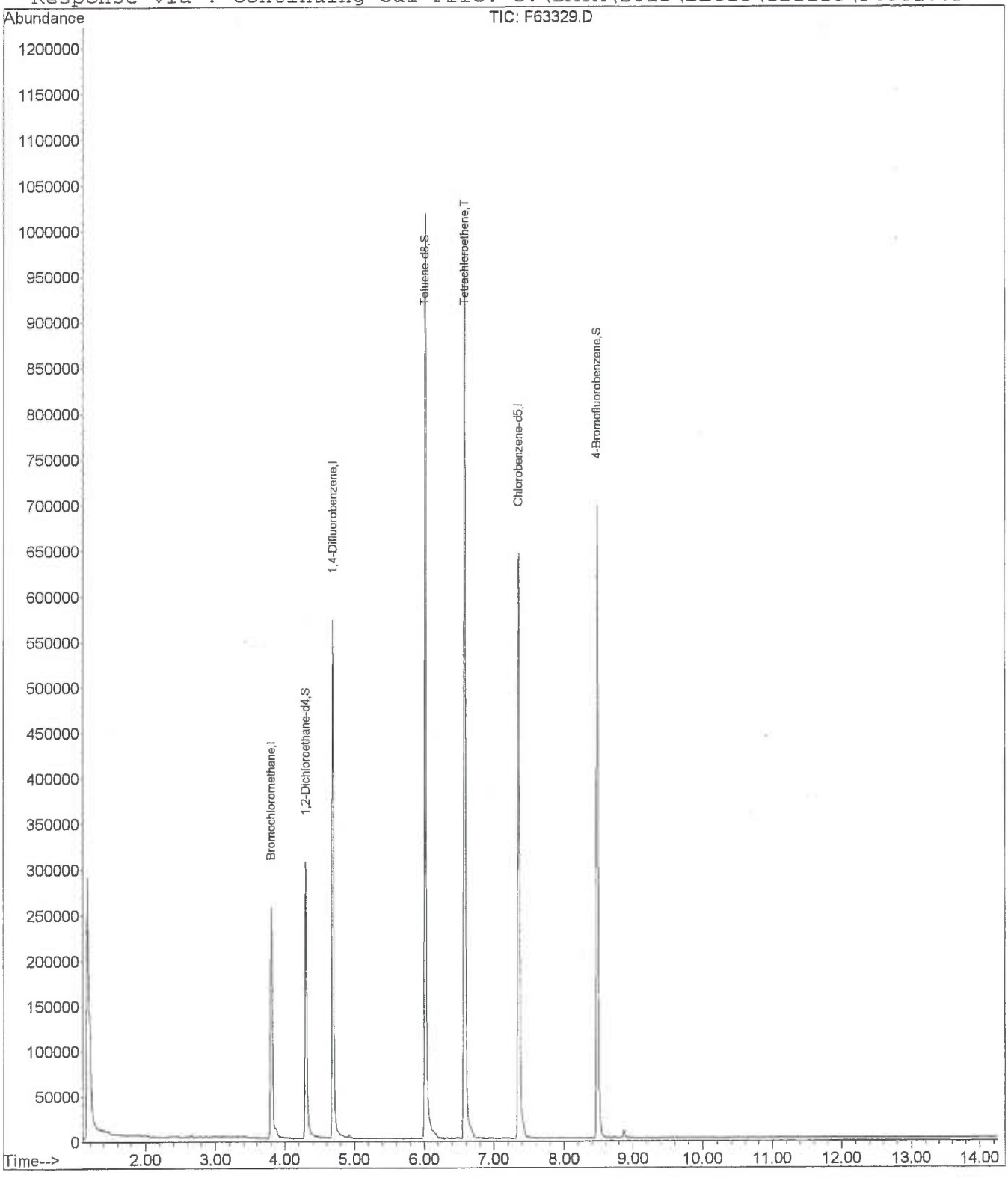
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	15	U
75-01-4	Vinyl chloride	15	U
75-00-3	Chloroethane	15	U
75-09-2	Methylene chloride	15	U
75-35-4	1,1-Dichloroethene	15	U
75-34-3	1,1-Dichloroethane	15	U
540-59-0	1,2-Dichloroethene (total)	15	U
67-66-3	Chloroform	15	U
107-06-2	1,2-Dichloroethane	15	U
71-55-6	1,1,1-Trichloroethane	15	U
156-60-5	trans-1,2-Dichloroethene	30	U
56-23-5	Carbon tetrachloride	15	U
75-27-4	Bromodichloromethane	15	U
78-87-5	1,2-Dichloropropane	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
79-01-6	Trichloroethene	15	U
124-48-1	Dibromochloromethane	15	U
79-00-5	1,1,2-Trichloroethane	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
127-18-4	Tetrachloroethene	290	D
79-34-5	1,1,2,2-Tetrachloroethane	15	U

NJGIAM003 V49

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63329.D Vial: 18
Acq On : 11 Dec 2013 20:16 Operator: BBL
Sample : 1312282-005A Inst : H5973-1
Misc : NJGIAM003,MW-5DL,H2O,DL,, 1:3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:58 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V50

Quantitation Report (QT Reviewed)

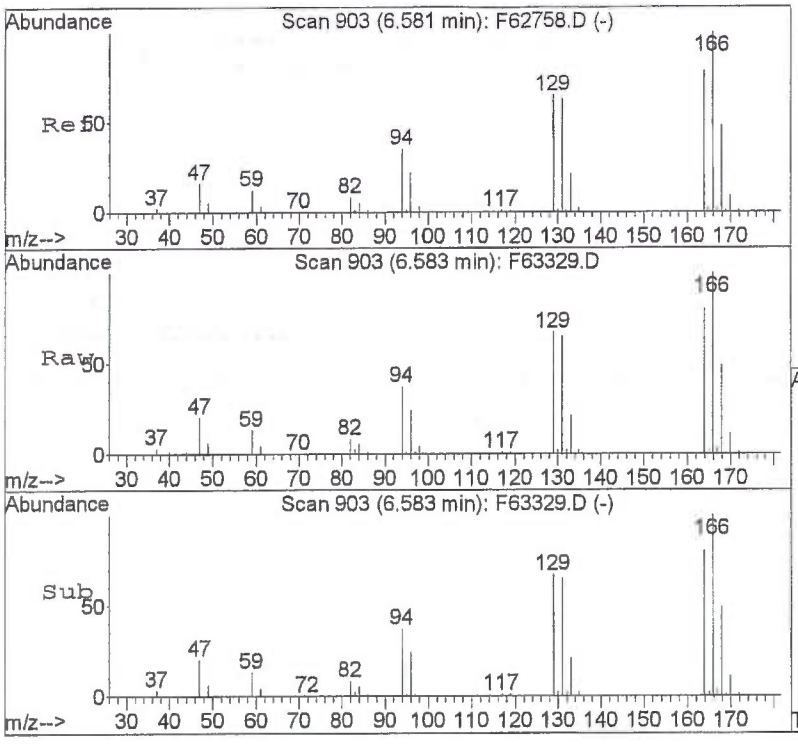
Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63329.D Vial: 18
Acq On : 11 Dec 2013 20:16 Operator: BBL
Sample : 1312282-005A Inst : H5973-1
Misc : NJGIAM003,MW-5DL,H2O,DL,, 1:3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:58 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	71578	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	437420	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.36	117	389101	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	200015	50.97	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 101.94%			
49) Toluene-d8	6.02	98	666434	49.35	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 98.70%			
53) 4-Bromofluorobenzene	8.48	95	236082	49.50	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.00%			
Target Compounds						Qvalue
47) Tetrachloroethene	6.58	164	244671	98.30	ug/l	99

NJGIAM003 V51

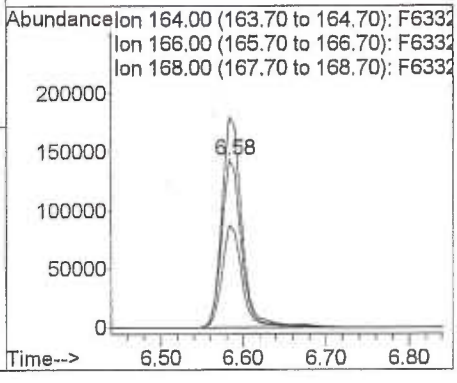
(#) = qualifier out of range (m) = manual integration



#47
Tetrachloroethene
Concen: 98.30 ug/l
RT: 6.58 min Scan# 903
Delta R.T. 0.00 min
Lab File: F63329.D
Acq: 11 Dec 2013 20:16

Tgt Ion:164 Resp: 244671

Ion	Ratio	Lower	Upper
164	100		
166	125.6	106.7	146.7
168	61.0	41.6	81.6



NJGLAM003 V52

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63324.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

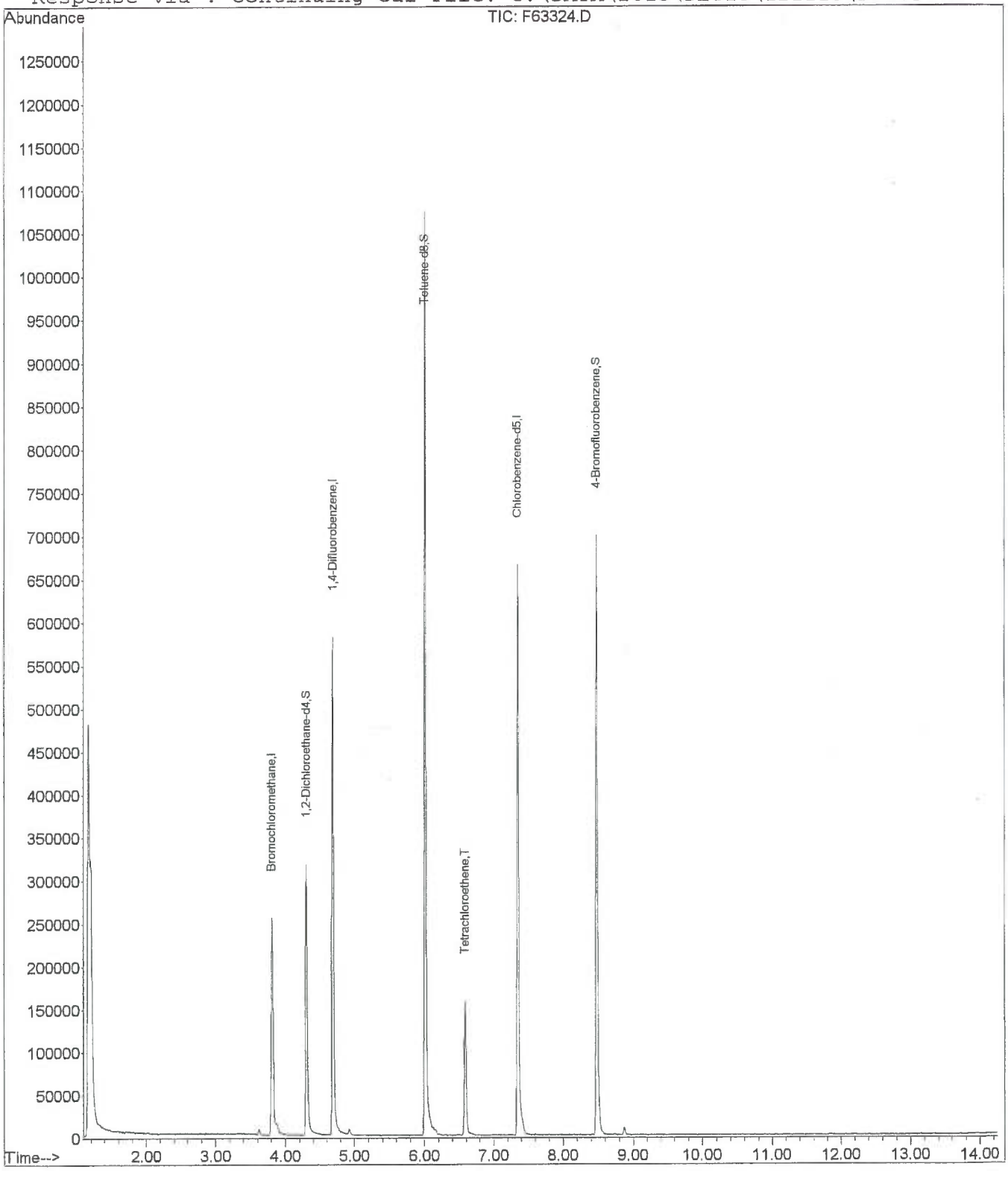
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	16	
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V53

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63324.D Vial: 13
Acq On : 11 Dec 2013 17:50 Operator: BBL
Sample : 1312282-006A Inst : H5973-1
Misc : NJGIAM003,MW-6,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:49 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V54

Quantitation Report (QT Reviewed)

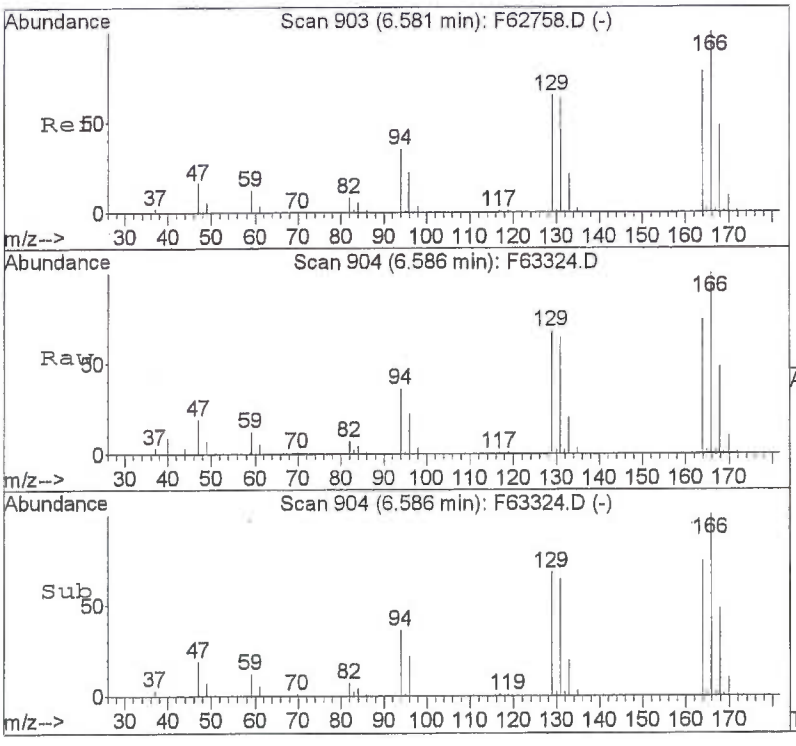
Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63324.D Vial: 13
Acq On : 11 Dec 2013 17:50 Operator: BBL
Sample : 1312282-006A Inst : H5973-1
Misc : NJGIAM003,MW-6,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:49 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	71055	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	449910	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	394043	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	205229	52.69	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 105.38%			
49) Toluene-d8	6.01	98	689441	50.42	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.84%			
53) 4-Bromofluorobenzene	8.48	95	243620	50.44	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 100.88%			
Target Compounds						Qvalue
47) Tetrachloroethene	6.59	164	39417	15.64	ug/l	93

NJGIAM003 V55

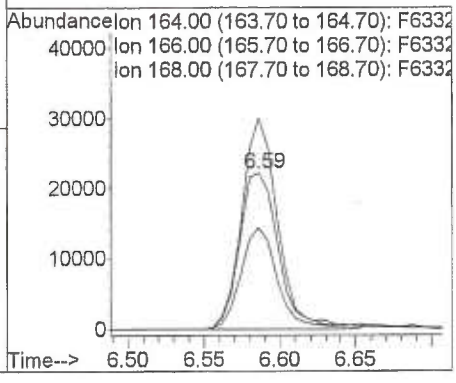
(#) = qualifier out of range (m) = manual integration



#47
Tetrachloroethene
Concen: 15.64 ug/l
RT: 6.59 min Scan# 904
Delta R.T. 0.00 min
Lab File: F63324.D
Acq: 11 Dec 2013 17:50

Tgt Ion:164 Resp: 39417

Ion	Ratio	Lower	Upper
164	100		
166	135.7	106.7	146.7
168	66.2	41.6	81.6



NJGIAM003 V56

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

STORAGE BLANK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63327.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

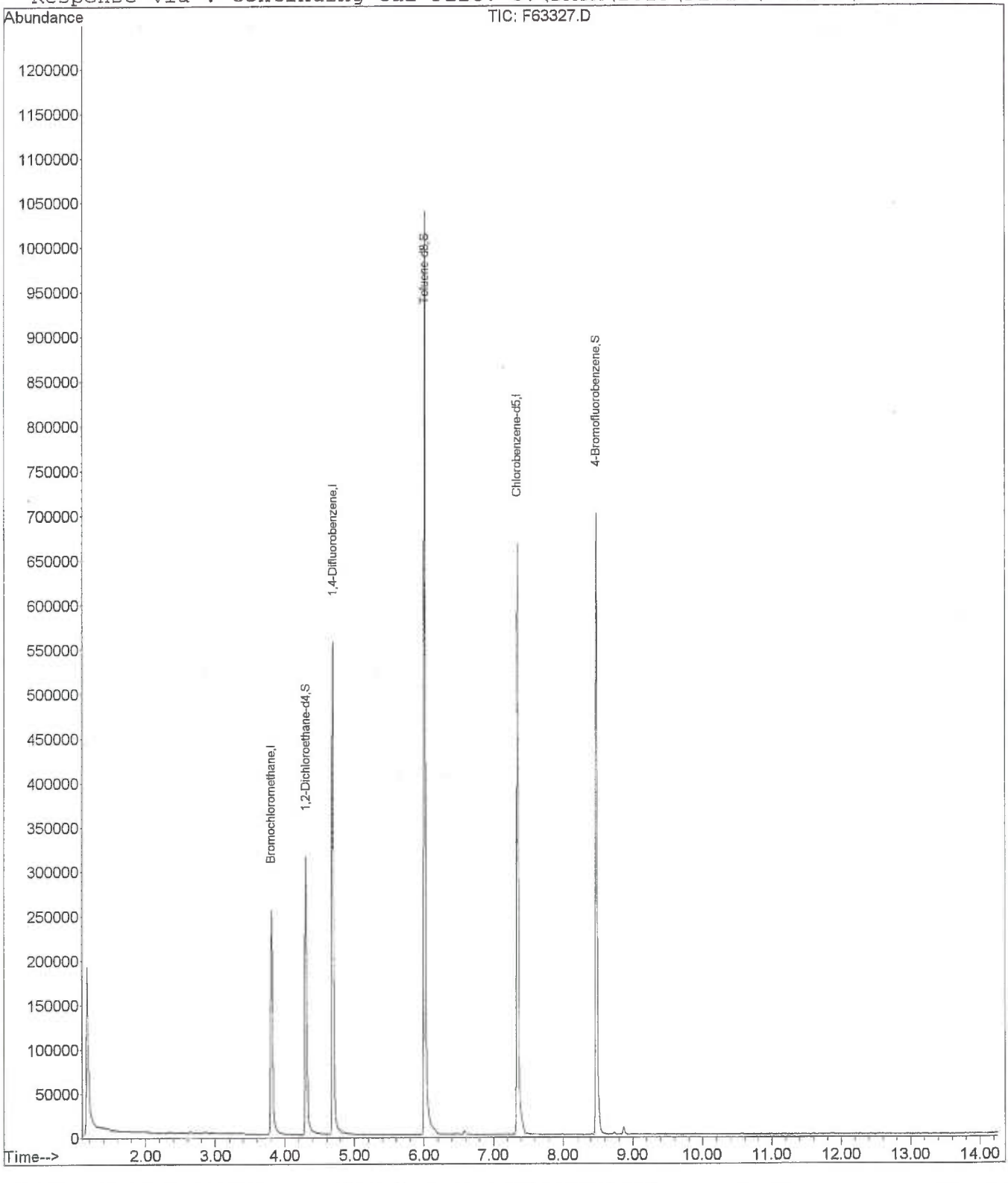
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V57

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63327.D Vial: 16
Acq On : 11 Dec 2013 19:18 Operator: BBL
Sample : 1312282-009A Inst : H5973-1
Misc : NJGIAM003,STORAGE BLANK,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:55 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V58

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63327.D Vial: 16
Acq On : 11 Dec 2013 19:18 Operator: BBL
Sample : 1312282-009A Inst : H5973-1
Misc : NJGIAM003,STORAGE BLANK,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:55 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	69661	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	433954	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	385391	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	196482	51.45	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 102.90%			
49) Toluene-d8	6.01	98	672406	50.28	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.56%			
53) 4-Bromofluorobenzene	8.48	95	234285	49.60	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.20%			

Target Compounds Qvalue

NJGIAM003 V59

(#) = qualifier out of range (m) = manual integration

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: 1312282-008A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63326.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

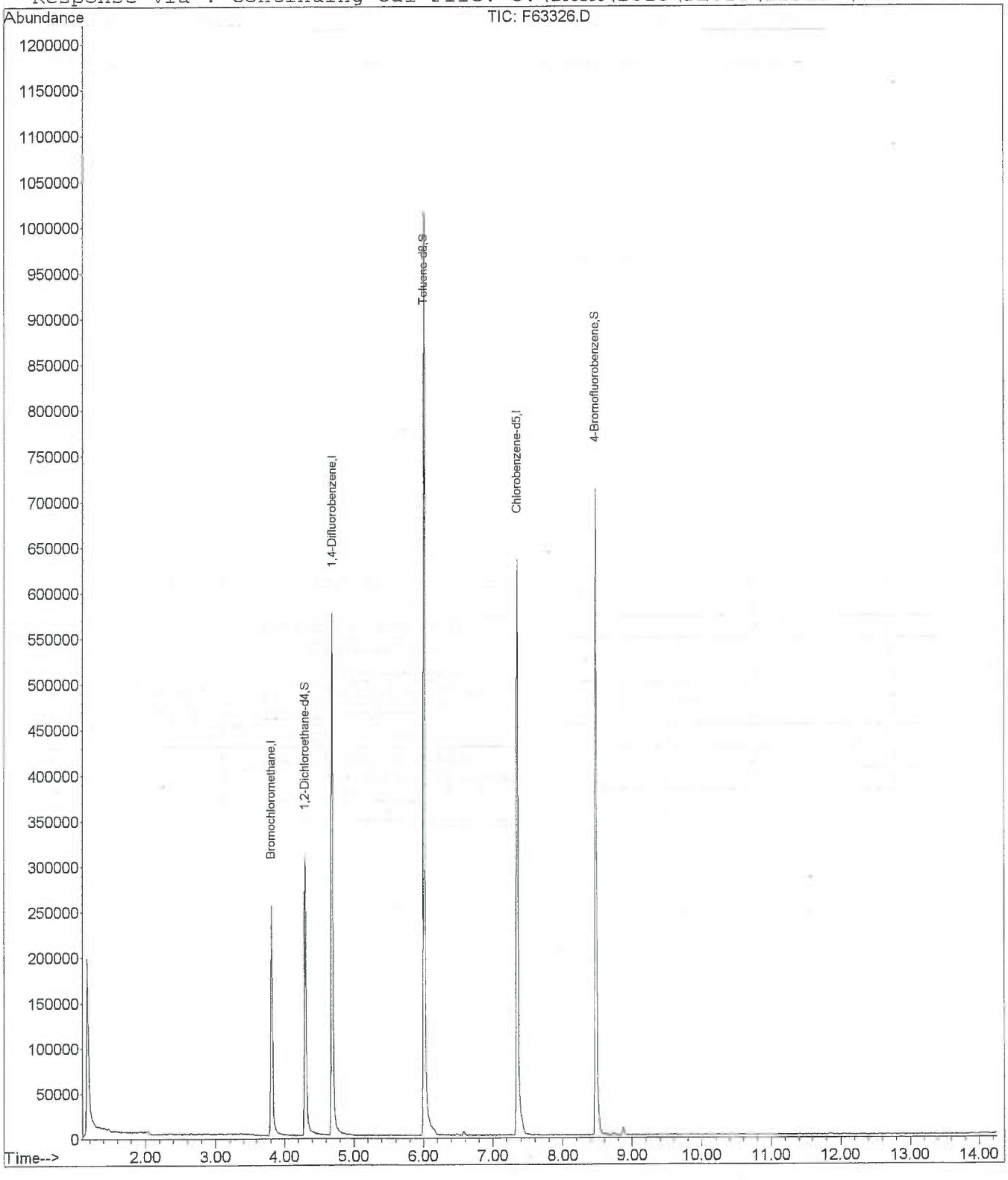
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V60

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63326.D Vial: 15
Acq On : 11 Dec 2013 18:49 Operator: BBL
Sample : 1312282-008A Inst : H5973-1
Misc : NJGIAM003,TRIP BLANK,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:54 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V61

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63326.D Vial: 15
Acq On : 11 Dec 2013 18:49 Operator: BBL
Sample : 1312282-008A Inst : H5973-1
Misc : NJGIAM003,TRIP BLANK,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:54 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	69592	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	436844	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.36	117	385261	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	202082	52.97	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 105.94%			
49) Toluene-d8	6.01	98	676199	50.58	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.16%			
53) 4-Bromofluorobenzene	8.48	95	234796	49.72	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.44%			

Target Compounds Qvalue

NJGIAM003 V62

(#) = qualifier out of range (m) = manual integration

H 2 M labs

575 Broad Hollow Road
Melville, NY 11747

631.694.3040
631.420.8436

III. STANDARD DATA PACKAGE FOR VOLATILE ORGANICS

A. INITIAL CALIBRATION FORM
B. STANDARD GC/MS CHROMATOGRAMS
C. DATA SYSTEM REPORT
D. CONTINUING CALIBRATION FORM
E. STANDARD GC/MS CHROMATOGRAMS
F. DATA SYSTEM REPORT

Form 6

VOCS IN WATER INITIAL CALIBRATION DATA

Lab Name: H2M LABS INC Contract: H2M LABS INC

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM003

Instrument ID: HP5973-1 Calibration Dates: 2/10/2013 2/10/2013

Heated Purge: (Y/N) N Calibration Times: 18:07 21:29

GC Column: DB-624 ID: 0.18 (mm)

LAB FILE ID: STD0.5= F59797.D STD001= F59798.D STD005= F59799.D STD010= F59800.D STD020= F59801.D

STD050= F59802.D STD100= F59803.D STD200= F59804.D

COMPOUND	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	RRF	% RSD	R^2
2-Chloroethylvinyl ether	0	0.0959214	0.1400147	0.1476626	0.1650872	0.2064194	0.21646878	0.1979204	0.167	25.8	
Chloromethane	0	3.1964512	3.1891868	2.7969302	2.5413345	3.2497586	3.00531175	3.0096069	2.998	8.5	
Dichlorodifluoromethane	0	3.5423856	3.6552441	3.3490598	3.2071296	3.8089504	3.42646318	3.3814859	3.482	5.8	
Bromomethane *	0	1.6238264	1.7016852	1.6784369	1.6143951	1.9114034	1.79877211	1.4973859	1.689	8.0	*
Vinyl chloride *	0	3.2411989	3.1106875	2.8786176	2.7106884	3.3347778	3.01488997	2.9744103	3.038	7.0	*
Chloroethane	0	1.9340487	1.7240393	1.6679197	1.6392599	1.8946078	1.68621419	1.6049768	1.736	7.4	
Methylene chloride	0	3.3900712	2.8407053	2.5645390	2.4425162	2.6838569	2.53354723	2.5618845	2.717	11.9	
Acetone	0	1.4495684	0.8751029	0.8489753	0.8225031	0.7461013	0.70241397	0.6829901	0.875	30.1	
Trichlorofluoromethane	0	3.2257093	3.1442187	3.3800622	3.2465202	3.9055837	3.55857005	3.6930763	3.451	8.1	
1,1-Dichloroethene *	0	1.9099538	1.8404887	1.8973965	1.8197859	2.1453573	1.96132448	2.0476047	1.946	6.0	*
Carbon disulfide	0	6.4268934	6.5453364	6.2729139	6.2199764	7.7642993	7.12372326	7.3724486	6.818	8.8	
1,1,2-Trichloro-1,2,2-trifluoroethane	0	1.8165859	1.7110428	1.8324773	1.8244213	2.1612963	1.93023474	2.0629088	1.906	8.3	
1,1-Dichloroethane *	0	4.3706489	4.0681021	4.0698018	3.9572172	4.6147348	4.30068775	4.4121947	4.256	5.5	*
1,2-Dichloroethene (total)	0	2.8655761	2.8170948	2.7832663	2.6668333	3.0261255	2.8082458	2.8326574	2.829	3.8	
Chloroform *	0	5.2273099	5.102543	5.0722685	4.9672315	5.6564802	5.32221208	5.3554088	5.243	4.4	*
1,2-Dichloroethane *	0	4.2824443	4.1018932	3.9559715	3.8882196	4.2938553	4.11672199	4.0680321	4.101	3.7	*
Methyl Acetate	0	2.1367043	1.8373695	2.0653753	2.0788367	1.9722033	1.88093572	1.9350715	1.987	5.6	
2-Butanone	0	1.8152951	1.4531040	1.3641471	1.5026317	1.4700241	1.40654305	1.3489507	1.480	10.7	
1,1,1-Trichloroethane *	0	0.6153408	0.5743399	0.5981269	0.5719034	0.7218353	0.67431483	0.7318023	0.641	10.6	*
trans-1,2-Dichloroethene	0	2.3600127	2.1926093	2.2580209	2.1601813	2.4752979	2.2522335	2.2360082	2.276	4.7	
Carbon tetrachloride *	0	0.3970939	0.3970733	0.4240000	0.4303191	0.5783180	0.53981352	0.6296928	0.485	19.7	*
Methyl tert-butyl ether	0	7.7254382	7.3058961	7.3881971	7.4720378	7.5877527	7.09932334	6.7378263	7.331	4.5	
Bromodichloromethane *	0	0.4705992	0.5077960	0.5145155	0.5093007	0.6388451	0.64033103	0.6650042	0.564	14.3	*

Form 6

VOCS IN WATER INITIAL CALIBRATION DATA

Lab Name: H2M LABS INC Contract: H2M LABS INC

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM003

Instrument ID: HP5973-1 Calibration Dates: 2/10/2013 2/10/2013

Heated Purge: (Y/N) N Calibration Times: 18:07 21:29

GC Column: DB-624 ID: 0.18 (mm)

LAB FILE ID: STD0.5= F59797.D STD001= F59798.D STD005= F59799.D STD010= F59800.D STD020= F59801.D

STD050= F59802.D STD100= F59803.D STD200= F59804.D

COMPOUND	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8			RRF	% RSD	R ²
1,2-Dichloropropane	0	0.5339967	0.5076721	0.4938375	0.4783129	0.5523500	0.5273498	0.5222593			0.517	4.9	
cis-1,2-Dichloroethene	0	3.2523858	3.2831954	3.1730136	3.0416207	3.5072263	3.305479	3.4099590			3.282	4.6	
cis-1,3-Dichloropropene *	0	0.6276490	0.6867565	0.6753386	0.6668728	0.8067220	0.79430988	0.8000426			0.723	10.4	*
Trichloroethene *	0	0.5249203	0.5006624	0.4770103	0.4463272	0.5368068	0.49951662	0.5233368			0.501	6.3	*
Dibromochloromethane *	0	0.28522	0.3244425	0.3406136	0.3601373	0.4601105	0.47991518	0.5012160			0.393	21.8	*
1,1,2-Trichloroethane *	0	0.4547842	0.4817955	0.4545331	0.4376725	0.4861830	0.47149794	0.4635547			0.464	3.7	*
Benzene *	2.0218323	2.0769901	2.0705844	1.9828879	1.871556	2.1514183	1.93147725	1.7445547			1.981	6.6	*
Cyclohexane	0	0.6237984	0.5929314	0.6101492	0.5760841	0.7357421	0.64442355	0.7125732			0.642	9.4	
trans-1,3-Dichloropropene *	0	0.5445859	0.608383	0.6366203	0.6513435	0.7685482	0.77598122	0.7822546			0.681	13.9	*
Bromoform *	0	0.1234257	0.1407033	0.1551595	0.1783475	0.2404264	0.26737306	0.2956144			0.200	33.6	*
4-Methyl-2-pentanone	0	0.5028188	0.5216542	0.5241943	0.5558177	0.5659498	0.54390915	0.5251251			0.534	4.1	
2-Hexanone	0	0.3222824	0.3588334	0.3631388	0.3838145	0.4084531	0.38997029	0.3812485			0.373	7.4	
Tetrachloroethene *	0	0.3922665	0.3757268	0.3568195	0.3439704	0.4177011	0.37931288	0.4063169			0.382	6.8	*
1,1,2,2-Tetrachloroethane *	0	0.5734494	0.5793333	0.5949391	0.6031747	0.6497395	0.64393060	0.6479924			0.613	5.4	*
Methylcyclohexane	0	0.5550376	0.5153153	0.5156332	0.4853257	0.6306024	0.55516943	0.6047241			0.552	9.4	
Toluene *	0	2.4763541	2.5390400	2.3305294	2.227517	2.5334322	2.25550137	2.0076585			2.339	8.3	*
Chlorobenzene *	0	1.6299183	1.561954	1.4717853	1.3963695	1.6037811	1.48324728	1.4285377			1.511	5.9	*
Ethylbenzene *	0	0.7628751	0.7881688	0.7442998	0.7170052	0.8715707	0.78304305	0.7900288			0.780	6.2	*
Styrene *	0	1.3571743	1.4991907	1.4762808	1.4310156	1.6344101	1.48577029	1.3376042			1.460	6.8	*
tert-Butyl Alcohol	0	0.2622045	0.2347702	0.2352633	0.2499509	0.253635	0.23630934	0.2557683			0.247	4.6	
Xylene (total) *	0	0.9674938	0.9903916	0.9356002	0.9007037	1.0279527	0.9221281	0.8700685			0.945	5.7	*
m,p-Xylene	0	0.9968289	1.0015735	0.9390838	0.8998880	1.0361101	0.90087710	0.792859			0.938	8.8	

Form 6

VOCS IN WATER INITIAL CALIBRATION DATA

Lab Name: H2M LABS INC Contract: H2M LABS INC

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM003

Instrument ID: HP5973-1 Calibration Dates: 2/10/2013 2/10/2013

Heated Purge: (Y/N) N Calibration Times: 18:07 21:29

GC Column: DB-624 ID: 0.18 (mm)

LAB FILE ID: STD0.5= F59797.D STD001= F59798.D STD005= F59799.D STD010= F59800.D STD020= F59801.D

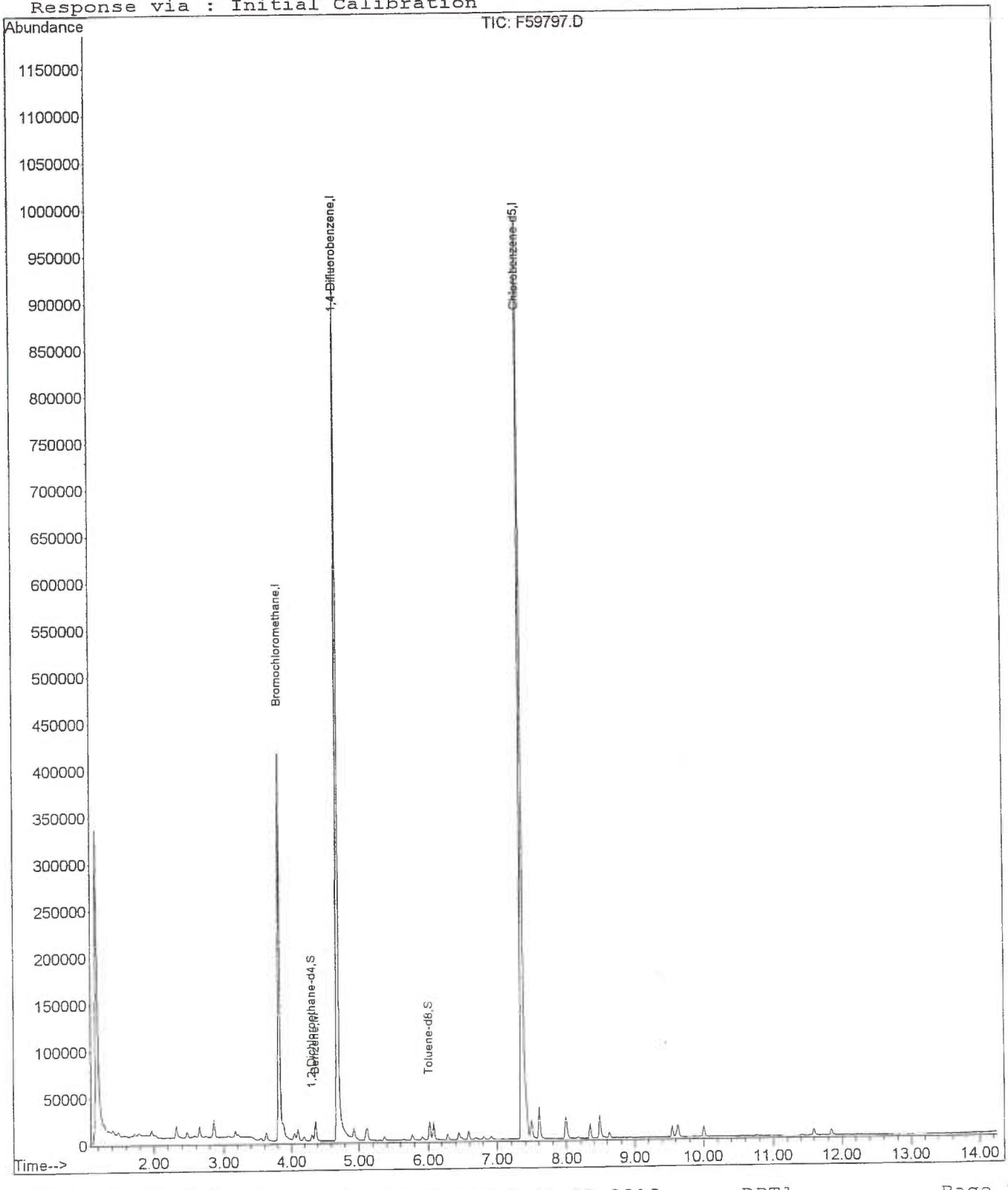
STD050= F59802.D STD100= F59803.D STD200= F59804.D

COMPOUND	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8			$\overline{RRF}$	% RSD	R^2
o-Xylene	0	0.9674938	0.9903916	0.9356002	0.9007037	1.0279527	0.9221281	0.8700685			0.945	5.7	
1,2-Dibromoethane	0	0.5287597	0.5339140	0.527674	0.5327109	0.5812807	0.57172882	0.5756119			0.550	4.5	
Isopropylbenzene	0	2.2250255	2.1989504	2.0579893	2.0149020	2.4225057	2.11227943	1.9103774			2.135	7.8	
1,3-Dichlorobenzene *	0	0.9364616	1.0013161	0.9662851	0.9227069	1.0748203	1.01729382	1.0020215			0.989	5.2	*
1,4-Dichlorobenzene *	0	1.0890366	1.0738936	1.0507644	0.9884246	1.1360036	1.07944741	1.0515364			1.067	4.2	*
1,2-Dichlorobenzene *	0	0.9463207	0.9780031	0.9424315	0.9046621	1.0255411	0.98519944	0.9636385			0.964	4.0	*
1,2-Dibromo-3-chloropropane	0	0.0562459	0.0647744	0.0679770	0.0755898	0.0909608	0.10004182	0.1126744			0.081	25.3	
1,2,4-Trichlorobenzene *	0	0.5225371	0.4644256	0.4647844	0.4321831	0.4959326	0.48760107	0.4899394			0.480	6.0	*
1,2-Dichloroethane-d4	3.6038583	3.8474446	3.5790842	3.4269036	3.3479873	3.6479396	3.55893270	3.4669733			3.560	4.3	
Toluene-d8	2.4340411	2.3215971	2.2901268	2.1502918	2.0648341	2.2772291	2.06879627	1.8007070			2.176	9.1	
4-Bromofluorobenzene *	0	1.0606712	0.8469259	0.7917269	0.7567453	0.8810180	0.83968079	0.7894368			0.852	11.8	*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59797.D Vial: 2
Acq On : 10 Feb 2013 18:07 Operator: BBL
Sample : VSTD0.5 Inst : H5973-1
Misc : ,,,ICAL_0.5,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 10 22:48 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



NJGIAM003 V67

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59797.D Vial: 2
Acq On : 10 Feb 2013 18:07 Operator: BBL
Sample : VSTD0.5 Inst : H5973-1
Misc : ,,,ICAL_0.5,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 10 22:48 2013 Quant Results File: R8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 18:17:47 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

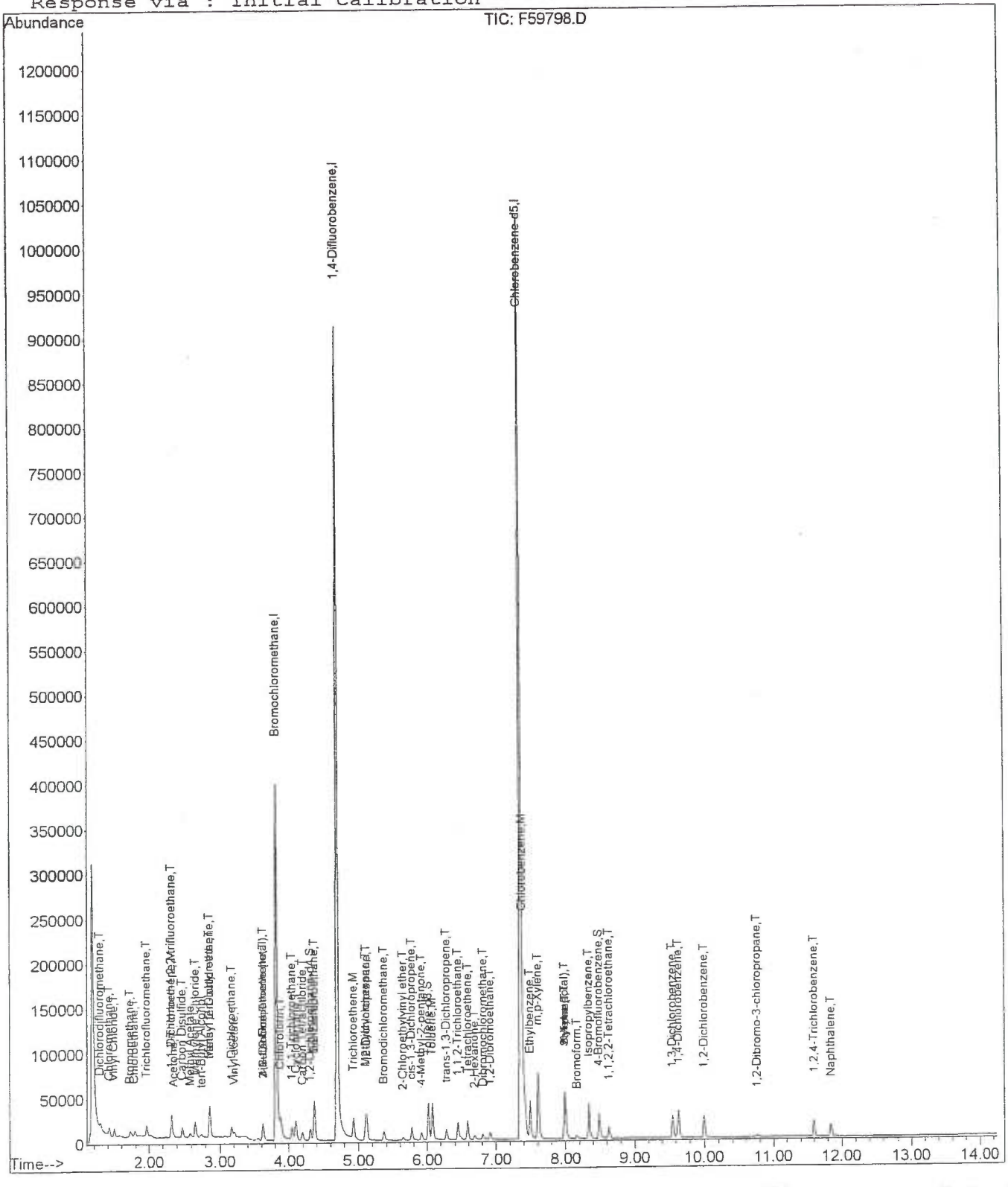
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	120260	50.00	ug/l	0.04
28) 1,4-Difluorobenzene	4.70	114	741654	50.00	ug/l	0.02
43) Chlorobenzene-d5	7.35	117	613753	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	4334	0.46	ug/l	0.03
Spiked Amount 50.000	Range 70 - 121		Recovery = 0.92%#			
49) Toluene-d8	6.02	98	14939	0.53	ug/l	0.01
Spiked Amount 50.000	Range 84 - 138		Recovery = 1.06%#			
53) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 50.000	Range 59 - 113		Recovery = 0.00%#			
Target Compounds						Qvalue
38) Benzene	4.37	78	14995	0.43	ug/l	96

NJGIAM003 V68

(#) = qualifier out of range (m) = manual integration
F59797.D R8W0210.M Tue Sep 17 15:50:06 2013 RPT1 Page 1

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59798.D Vial: 3
Acq On : 10 Feb 2013 18:36 Operator: BBL
Sample : VSTD001 Inst : H5973-1
Misc : ,,,ICAL_1.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:34 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



NJGIAM003 V69

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59798.D Vial: 3
Acq On : 10 Feb 2013 18:36 Operator: BBL
Sample : VSTD001 Inst : H5973-1
Misc : ,,,ICAL_1.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:34 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	116207	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.70	114	727158	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	618712	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	8942	1.08	ug/l	0.00
Spiked Amount 50.000	Range 70 - 121		Recovery = 2.16%#			
49) Toluene-d8	6.02	98	28728	1.07	ug/l	0.00
Spiked Amount 50.000	Range 84 - 138		Recovery = 2.14%#			
53) 4-Bromofluorobenzene	8.49	95	13125	1.24	ug/l	0.00
Spiked Amount 50.000	Range 59 - 113		Recovery = 2.48%#			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.29	85	8233	1.02	ug/l	98
4) Chloromethane	1.42	50	7429	1.07	ug/l	92
5) Bromomethane	1.72	94	3774	0.96	ug/l	92
6) Vinyl Chloride	1.49	62	7533	1.07	ug/l	98
7) Chloroethane	1.79	64	4495	1.12	ug/l	98
10) Methyl Acetate	2.58	43	4966	5.97	ug/l	93
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	4222	0.95	ug/l	95
12) Methylene Chloride	2.66	84	7879	1.25	ug/l	93
13) Acetone	2.35	43	3369	1.66	ug/l	100
14) Carbon Disulfide	2.47	76	14937	0.94	ug/l	89
15) tert-Butyl Alcohol	2.75	59	3047	9.64	ug/l	97
16) 1,1-Dichloroethene	2.32	96	4439	0.98	ug/l	91
17) 1,1-Dichloroethane	3.17	63	10158	1.03	ug/l	97
18) Trichlorofluoromethane	1.96	101	7497	0.93	UG/L	93
19) Vinyl acetate	3.20	43	7969	6.18	UG/L	95
20) Methyl tert-butyl ether	2.86	73	17955	1.05	UG/L	91
21) trans-1,2-Dichloroethene	2.86	96	5485	1.04	UG/L #	86
22) cis-1,2-Dichloroethene	3.62	96	7559	0.99	UG/L	97
23) 1,2-Dichloroethene (total)	3.62	96	13320m	4.12	ug/l	
24) 2-Butanone	3.64	43	4219 TI	1.23	UG/L	89
25) Chloroform	3.88	83	12149	1.00	ug/l	93
27) 1,2-Dichloroethane	4.37	62	9953 KL 9/14/13	1.04	ug/l	97
29) 1,1,1-Trichloroethane	4.04	97	8949	0.96	ug/l	95
30) Cyclohexane	4.10	56	9072	0.97	ug/l	89
31) Carbon Tetrachloride	4.20	117	5775	0.82	ug/l	90
32) 2-Chloroethylvinyl ether	5.64	63	1395	0.47	UG/L	88
33) Bromodichloromethane	5.36	83	6844	0.83	ug/l	99
34) 1,2-Dichloropropane	5.12	63	7766	1.03	ug/l	90
35) cis-1,3-Dichloropropene	5.77	75	9128	0.87	ug/l	94
36) Trichloroethene	4.93	130	7634	1.05	ug/l	95
37) Methylcyclohexane	5.10	83	8072	1.01	ug/l	92
38) Benzene	4.37	78	30206	1.05	ug/l	94
39) Dibromochloromethane	6.81	129	4148	0.73	ug/l	98
40) trans-1,3-Dichloropropene	6.28	75	7920	0.80	ug/l	89
41) 1,1,2-Trichloroethane	6.44	97	6614	0.98	ug/l	91
42) Bromoform	8.17	173	1795	0.62	ug/l	90
44) 4-Methyl-2-pentanone	5.92	43	6222	0.94	ug/l	92
45) 2-Hexanone	6.68	43	3988	0.87	ug/l	95
46) 1,2-Dibromoethane	6.92	107	6543	0.96	ug/l	94
47) Tetrachloroethene	6.59	164	4854	1.03	ug/l	94
48) 1,1,2,2-Tetrachloroethane	8.63	83	7096	0.94	ug/l	96
50) Toluene	6.08	91	30643	1.06	ug/l	95

(#) = qualifier out of range (m) = manual integration

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59798.D Vial: 3
Acq On : 10 Feb 2013 18:36 Operator: BBL
Sample : VSTD001 Inst : H5973-1
Misc : ,,,ICAL_1.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:34 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
51) Chlorobenzene	7.38	112	20169	1.08	ug/l		89
52) Ethylbenzene	7.49	106	9440	0.98	ug/l	#	86
54) Styrene	8.00	104	16794	0.93	ug/l		94
55) m,p-Xylene	7.61	106	24670	2.13	UG/L		97
56) o-Xylene	7.98	106	11972	1.02	UG/L		93
57) Xylene (total)	7.98	106	11972	1.02	ug/l		93
58) Isopropylbenzene	8.35	105	27533	1.04	ug/l		98
59) 1,3-Dichlorobenzene	9.55	146	11588	0.95	UG/L		94
60) 1,4-Dichlorobenzene	9.63	146	13476	1.02	UG/L		98
61) 1,2-Dichlorobenzene	9.99	146	11710	0.98	UG/L		98
62) 1,2-Dibromo-3-chloropropan	10.77	75	696	0.69	ug/l	#	77
63) 1,2,4-Trichlorobenzene	11.59	180	6466	1.09	ug/l		94
64) Naphthalene	11.84	128	14469	0.82	ug/l		99

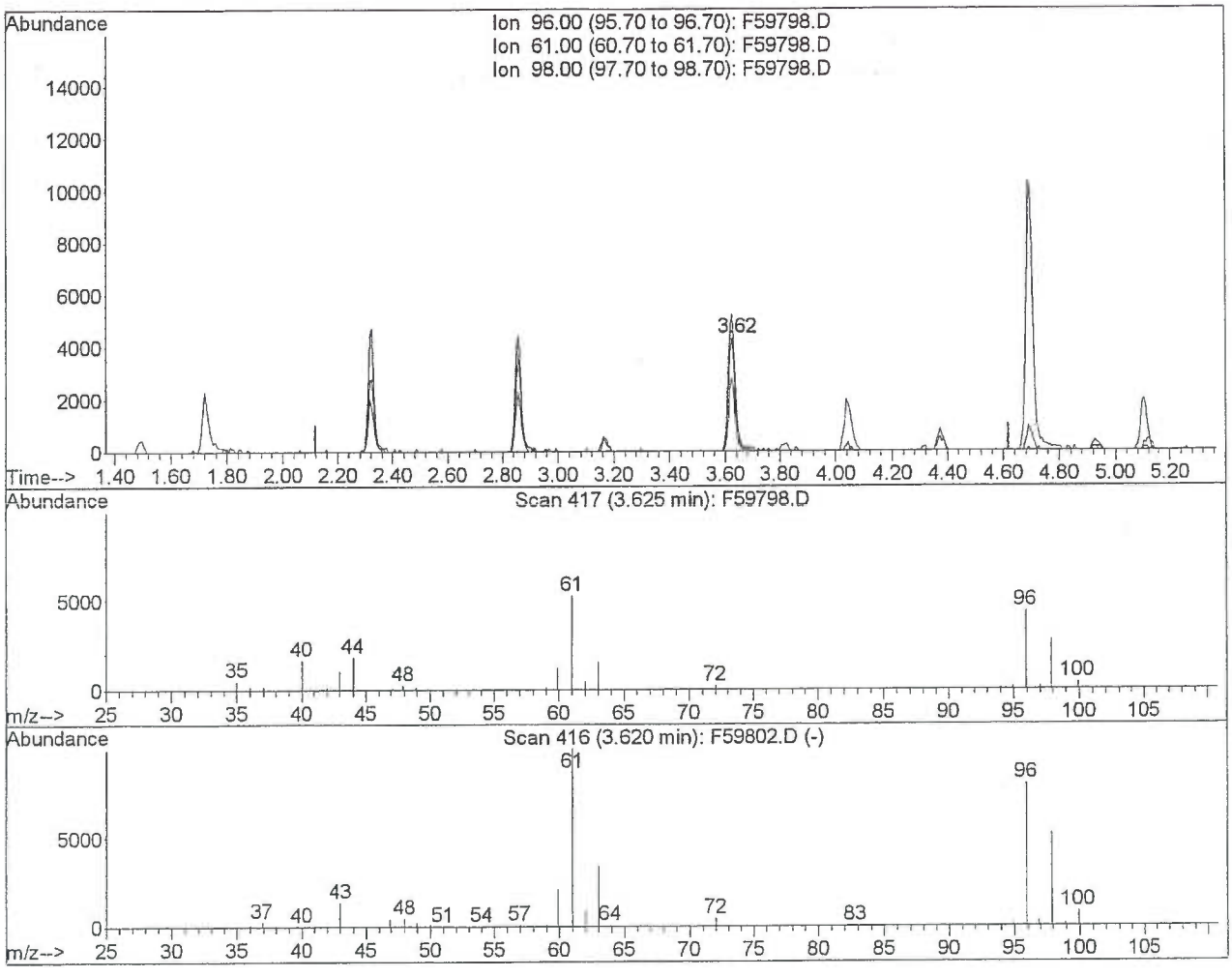
NJGIAM003 V71

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59798.D Vial: 3
Acq On : 10 Feb 2013 18:36 Operator: BBL
Sample : VSTD001 Inst : H5973-1
Misc : ,,,ICAL_1.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:34 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Multiple Level Calibration



TIC: F59798.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 4.12ug/l m

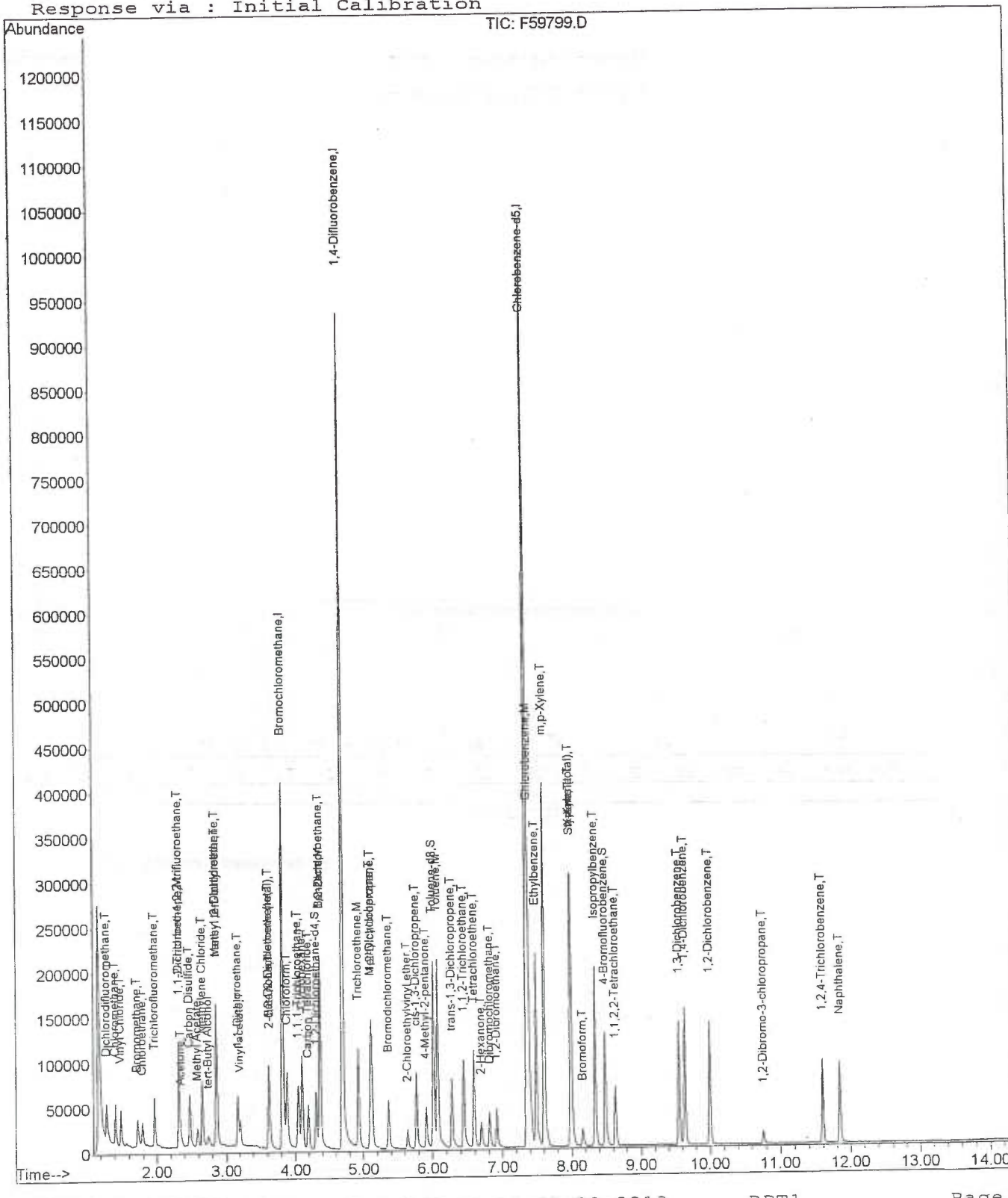
response 13320

Ion	Exp%	Act%
96.00	100	100
61.00	124.60	120.74
98.00	65.20	64.11
0.00	0.00	0.00

NJGIAM003 V72

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59799.D Vial: 4
Acq On : 10 Feb 2013 19:05 Operator: BBL
Sample : VSTD005 Inst : H5973-1
Misc : ,,,ICAL_5.0,, Multiplr: 1.00
Integration Params: RTEINT.P
Quant Time: Feb 11 0:36 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



NJGIAM003 V73

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59799.D Vial: 4
Acq On : 10 Feb 2013 19:05 Operator: BBL
Sample : VSTD005 Inst : H5973-1
Misc : ,,,ICAL_5.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:36 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	115415	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	726138	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	621542	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	41308	5.03	ug/l	0.00
Spiked Amount 50.000	Range 70 - 121		Recovery =	10.06%#		
49) Toluene-d8	6.01	98	142341	5.26	ug/l	0.00
Spiked Amount 50.000	Range 84 - 138		Recovery =	10.52%#		
53) 4-Bromofluorobenzene	8.48	95	52640	4.97	ug/l	0.00
Spiked Amount 50.000	Range 59 - 113		Recovery =	9.94%#		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.29	85	42187	5.25	ug/l	97
4) Chloromethane	1.42	50	36808	5.32	ug/l	96
5) Bromomethane	1.72	94	19640	5.04	ug/l	99
6) Vinyl Chloride	1.49	62	35902	5.12	ug/l	100
7) Chloroethane	1.79	64	19898	4.97	ug/l	97
10) Methyl Acetate	2.58	43	21206	25.65	ug/l	95
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	19748	4.49	ug/l	97
12) Methylene Chloride	2.66	84	32786	5.23	ug/l	98
13) Acetone	2.35	43	10100	5.00	ug/l	99
14) Carbon Disulfide	2.47	76	75543	4.80	ug/l	98
15) tert-Butyl Alcohol	2.74	59	13548	43.17	ug/l	97
16) 1,1-Dichloroethene	2.32	96	21242	4.73	ug/l	98
17) 1,1-Dichloroethane	3.17	63	46952	4.78	ug/l	96
18) Trichlorofluoromethane	1.97	101	36289	4.56	UG/L	99
19) Vinyl acetate	3.20	43	37079	28.95	UG/L	98
20) Methyl tert-butyl ether	2.86	73	84321	4.98	UG/L	98
21) trans-1,2-Dichloroethene	2.86	96	25306	4.82	UG/L	97
22) cis-1,2-Dichloroethene	3.62	96	37893	5.00	UG/L	97
23) 1,2-Dichloroethene (total)	3.62	96	65027m	20.23	ug/l	
24) 2-Butanone	3.64	43	16771 TI	4.91	UG/L	98
25) Chloroform	3.89	83	58891 KG 9/17/13	4.87	ug/l	99
27) 1,2-Dichloroethane	4.37	62	47342	5.00	ug/l	99
29) 1,1,1-Trichloroethane	4.04	97	41705	4.48	ug/l	99
30) Cyclohexane	4.10	56	43055	4.62	ug/l	98
31) Carbon Tetrachloride	4.19	117	28833	4.09	ug/l	99
32) 2-Chloroethylvinyl ether	5.64	63	10167	3.40	UG/L	95
33) Bromodichloromethane	5.36	83	36873	4.50	ug/l	95
34) 1,2-Dichloropropane	5.12	63	36864	4.91	ug/l	91
35) cis-1,3-Dichloropropene	5.77	75	49868	4.75	ug/l	97
36) Trichloroethene	4.93	130	36355	4.99	ug/l	95
37) Methylcyclohexane	5.10	83	37419	4.67	ug/l	98
38) Benzene	4.37	78	150353	5.23	ug/l	96
39) Dibromochloromethane	6.81	129	23559	4.13	ug/l	99
40) trans-1,3-Dichloropropene	6.28	75	44177	4.47	ug/l	97
41) 1,1,2-Trichloroethane	6.45	97	34985	5.19	ug/l	98
42) Bromoform	8.16	173	10217	3.51	ug/l	95
44) 4-Methyl-2-pentanone	5.91	43	32423	4.88	ug/l	96
45) 2-Hexanone	6.69	43	22303	4.82	ug/l	94
46) 1,2-Dibromoethane	6.91	107	33185	4.85	ug/l	99
47) Tetrachloroethene	6.59	164	23353	4.92	ug/l	88
48) 1,1,2,2-Tetrachloroethane	8.63	83	36008	4.72	ug/l	96
50) Toluene	6.08	91	157812	5.43	ug/l	99

(#) = qualifier out of range (m) = manual integration

NJGIAM003 V74

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59799.D Vial: 4
Acq On : 10 Feb 2013 19:05 Operator: BBL
Sample : VSTD005 Inst : H5973-1
Misc : ,,,ICAL_5.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:36 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

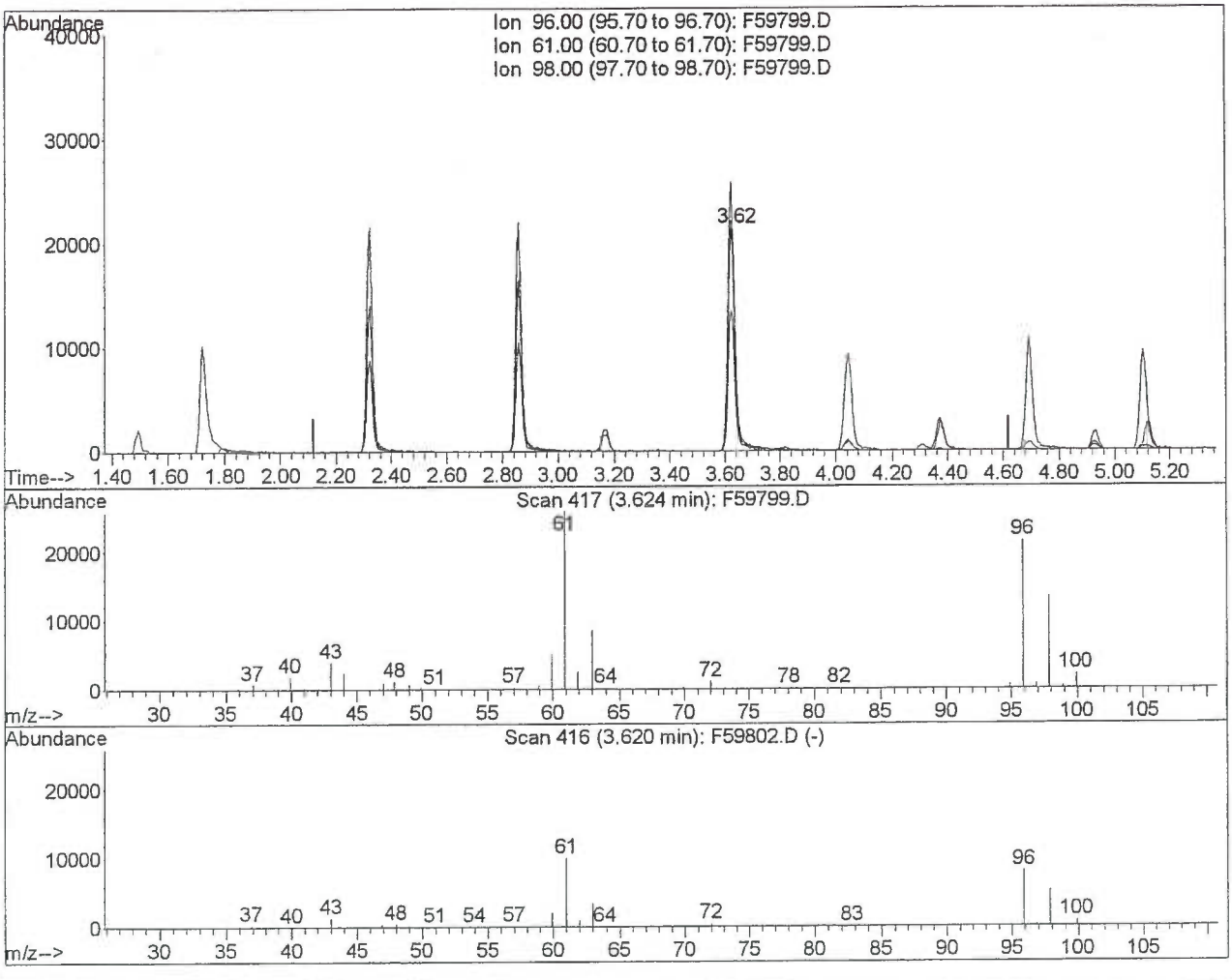
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Chlorobenzene	7.38	112	97082	5.17	ug/l	98
52) Ethylbenzene	7.49	106	48988	5.06	ug/l	96
54) Styrene	8.00	104	93181	5.13	ug/l	96
55) m,p-Xylene	7.61	106	124504	10.68	UG/L	92
56) o-Xylene	7.99	106	61557	5.24	UG/L	96
57) Xylene (total)	7.99	106	61557	5.24	ug/l	96
58) Isopropylbenzene	8.34	105	136674	5.15	ug/l	98
59) 1,3-Dichlorobenzene	9.55	146	62236	5.06	UG/L	98
60) 1,4-Dichlorobenzene	9.63	146	66747	5.03	UG/L	98
61) 1,2-Dichlorobenzene	9.99	146	60787	5.07	UG/L	98
62) 1,2-Dibromo-3-chloropropan	10.76	75	4026	3.99	ug/l	87
63) 1,2,4-Trichlorobenzene	11.59	180	28866	4.84	ug/l	99
64) Naphthalene	11.84	128	82569	4.66	ug/l	98

NJGIAM003 V75

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59799.D Vial: 4
Acq On : 10 Feb 2013 19:05 Operator: BBL
Sample : VSTD005 Inst : H5973-1
Misc : ,,,ICAL_5.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:36 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Multiple Level Calibration



TIC: F59799.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 20.23ug/l m

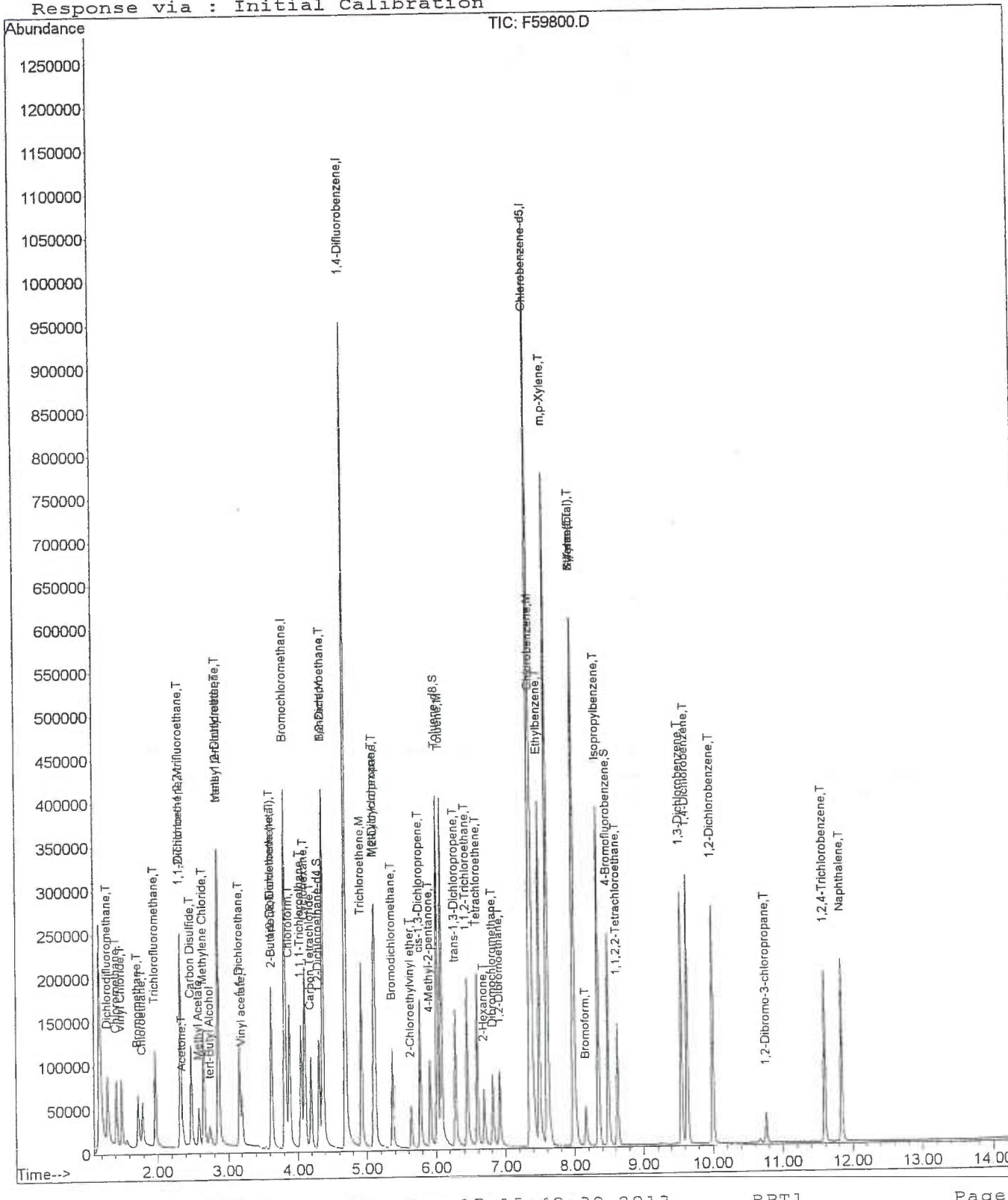
response 65027

Ion	Exp%	Act%
96.00	100	100
61.00	124.60	120.53
98.00	65.20	62.56
0.00	0.00	0.00

NJGIAM003 V76

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59800.D Vial: 5
Acq On : 10 Feb 2013 19:34 Operator: BBL
Sample : VSTD010 Inst : H5973-1
Misc : ,,,ICAL_10.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:38 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59800.D Vial: 5
Acq On : 10 Feb 2013 19:34 Operator: BBL
Sample : VSTD010 Inst : H5973-1
Misc : ,,,ICAL_10.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:38 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	118378	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.70	114	733632	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	625064	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	81134	9.63	ug/l	0.00
Spiked Amount 50.000	Range 70 - 121		Recovery = 19.26%#			
49) Toluene-d8	6.02	98	268814	9.88	ug/l	0.00
Spiked Amount 50.000	Range 84 - 138		Recovery = 19.76%#			
53) 4-Bromofluorobenzene	8.49	95	98976	9.29	ug/l	0.00
Spiked Amount 50.000	Range 59 - 113		Recovery = 18.58%#			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.29	85	79291	9.62	ug/l	99
4) Chloromethane	1.42	50	66219	9.33	ug/l	98
5) Bromomethane	1.72	94	39738	9.94	ug/l	100
6) Vinyl Chloride	1.49	62	68153	9.48	ug/l	100
7) Chloroethane	1.79	64	39489	9.62	ug/l	97
10) Methyl Acetate	2.58	43	48899	57.67	ug/l	98
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	43385	9.62	ug/l	98
12) Methylene Chloride	2.66	84	60717	9.44	ug/l	94
13) Acetone	2.35	43	20100	9.70	ug/l	96
14) Carbon Disulfide	2.48	76	148515	9.20	ug/l	100
15) tert-Butyl Alcohol	2.74	59	27850	86.52	ug/l	99
16) 1,1-Dichloroethene	2.32	96	44922	9.75	ug/l	95
17) 1,1-Dichloroethane	3.17	63	96355	9.56	ug/l	98
18) Trichlorofluoromethane	1.96	101	80025	9.80	UG/L	98
19) Vinyl acetate	3.21	43	72603	55.28	UG/L	99
20) Methyl tert-butyl ether	2.86	73	174920	10.08	UG/L	100
21) trans-1,2-Dichloroethene	2.86	96	53460	9.92	UG/L	97
22) cis-1,2-Dichloroethene	3.62	96	75123	9.67	UG/L	96
23) 1,2-Dichloroethene (total)	3.62	96	131791m	39.98	ug/l	
24) 2-Butanone	3.64	43	32297	9.21	UG/L	97
25) Chloroform	3.88	83	120089	9.67	ug/l	99
27) 1,2-Dichloroethane	4.37	62	93660	9.65	ug/l	97
29) 1,1,1-Trichloroethane	4.04	97	87761	9.33	ug/l	99
30) Cyclohexane	4.10	56	89525	9.50	ug/l	100
31) Carbon Tetrachloride	4.19	117	62212	8.74	ug/l	97
32) 2-Chloroethylvinyl ether	5.64	63	21666	7.17	UG/L	92
33) Bromodichloromethane	5.36	83	75493	9.12	ug/l	98
34) 1,2-Dichloropropane	5.12	63	72459	9.56	ug/l	94
35) cis-1,3-Dichloropropene	5.77	75	99090	9.35	ug/l	98
36) Trichloroethene	4.93	130	69990	9.52	ug/l	97
37) Methylcyclohexane	5.10	83	75657	9.35	ug/l	99
38) Benzene	4.36	78	290942	10.01	ug/l	98
39) Dibromochloromethane	6.81	129	49977	8.66	ug/l	99
40) trans-1,3-Dichloropropene	6.28	75	93409	9.35	ug/l	97
41) 1,1,2-Trichloroethane	6.44	97	66692	9.79	ug/l	98
42) Bromoform	8.16	173	22766	7.75	ug/l	97
44) 4-Methyl-2-pentanone	5.91	43	65531	9.81	ug/l	96
45) 2-Hexanone	6.68	43	45397	9.75	ug/l	99
46) 1,2-Dibromoethane	6.92	107	65966	9.59	ug/l	96
47) Tetrachloroethene	6.59	164	44607	9.35	ug/l	99
48) 1,1,2,2-Tetrachloroethane	8.63	83	74375	9.70	ug/l	96
50) Toluene	6.08	91	291346	9.97	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59800.D Vial: 5
Acq On : 10 Feb 2013 19:34 Operator: BBL
Sample : VSTD010 Inst : H5973-1
Misc : ,,,ICAL_10.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:38 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

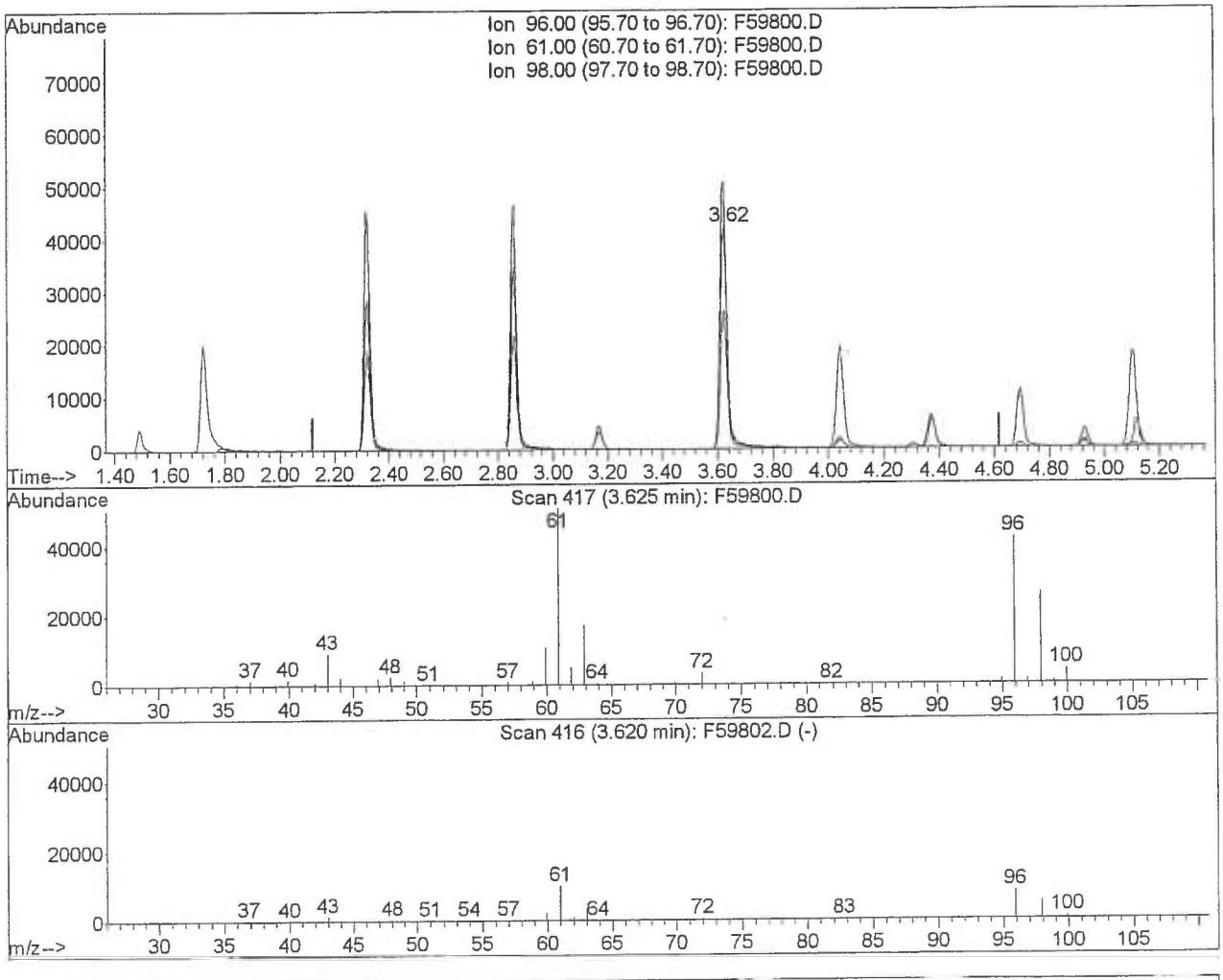
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Chlorobenzene	7.38	112	183992	9.74	ug/l	98
52) Ethylbenzene	7.49	106	93047	9.55	ug/l	95
54) Styrene	7.99	104	184554	10.11	ug/l	98
55) m,p-Xylene	7.60	106	234795	20.02	UG/L	94
56) o-Xylene	7.98	106	116962	9.90	UG/L	96
57) Xylene (total)	7.98	106	116962	9.90	ug/l	96
58) Isopropylbenzene	8.34	105	257275	9.64	ug/l	98
59) 1,3-Dichlorobenzene	9.54	146	120798	9.77	UG/L	98
60) 1,4-Dichlorobenzene	9.64	146	131359	9.85	UG/L	97
61) 1,2-Dichlorobenzene	9.99	146	117816	9.78	UG/L	97
62) 1,2-Dibromo-3-chloropropan	10.76	75	8498	8.37	ug/l	96
63) 1,2,4-Trichlorobenzene	11.59	180	58104	9.69	ug/l	99
64) Naphthalene	11.84	128	184280	10.33	ug/l	99

NJGIAM003 V79

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59800.D Vial: 5
Acq On : 10 Feb 2013 19:34 Operator: BBL
Sample : VSTD010 Inst : H5973-1
Misc : ,,,ICAL_10.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:38 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Multiple Level Calibration



TIC: F59800.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 39.98ug/l m

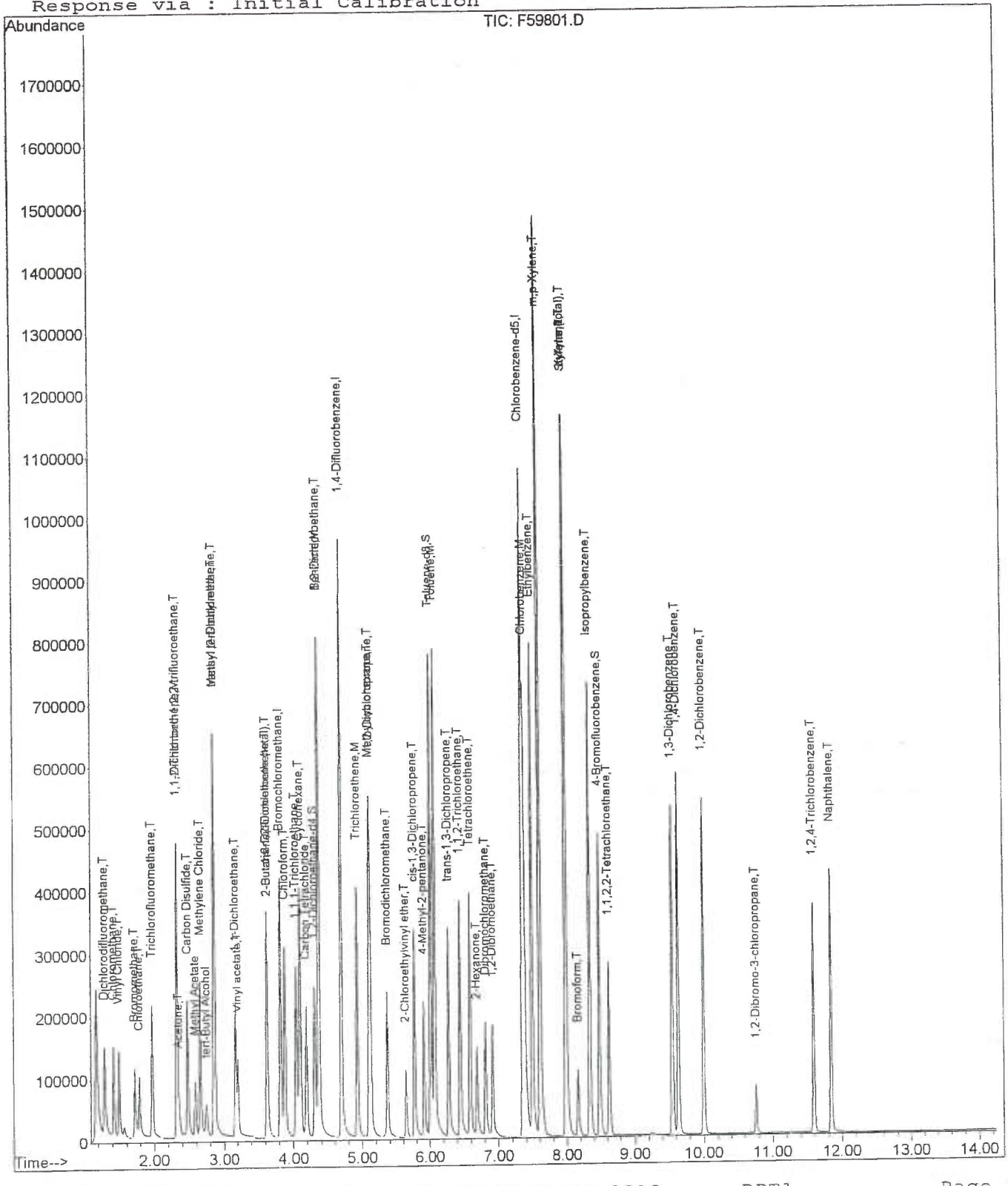
response 131791

Ion	Exp%	Act%
96.00	100	100
61.00	124.60	120.24
98.00	65.20	62.07
0.00	0.00	0.00

NJGIAM003 V80

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59801.D Vial: 6
Acq On : 10 Feb 2013 20:03 Operator: BBL
Sample : VSTD020 Inst : H5973-1
Misc : ,,,ICAL_20.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:40 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59801.D Vial: 6
Acq On : 10 Feb 2013 20:03 Operator: BBL
Sample : VSTD020 Inst : H5973-1
Misc : ,,,ICAL_20.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:40 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	117033	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	741502	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	625250	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	156730	18.81	ug/l	0.00
Spiked Amount 50.000	Range 70 - 121		Recovery = 37.62%#			
49) Toluene-d8	6.01	98	516415	18.98	ug/l	0.00
Spiked Amount 50.000	Range 84 - 138		Recovery = 37.96%#			
53) 4-Bromofluorobenzene	8.48	95	189262	17.76	ug/l	0.00
Spiked Amount 50.000	Range 59 - 113		Recovery = 35.52%#			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.29	85	150136	18.42	ug/l	98
4) Chloromethane	1.42	50	118968	16.95	ug/l	99
5) Bromomethane	1.72	94	75575	19.11	ug/l	99
6) Vinyl Chloride	1.49	62	126896	17.85	ug/l	98
7) Chloroethane	1.79	64	76739	18.92	ug/l	97
10) Methyl Acetate	2.58	43	97317	116.09	ug/l	98
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	85407	19.15	ug/l	99
12) Methylene Chloride	2.66	84	114342	17.98	ug/l	97
13) Acetone	2.35	43	38504	18.79	ug/l	97
14) Carbon Disulfide	2.48	76	291177	18.25	ug/l	98
15) tert-Butyl Alcohol	2.74	59	58505	183.84	ug/l	96
16) 1,1-Dichloroethene	2.32	96	85190	18.70	ug/l	96
17) 1,1-Dichloroethane	3.17	63	185250	18.60	ug/l	98
18) Trichlorofluoromethane	1.97	101	151980	18.82	UG/L	98
19) Vinyl acetate	3.20	43	148522	114.38	UG/L	98
20) Methyl tert-butyl ether	2.86	73	349790	20.38	UG/L	99
21) trans-1,2-Dichloroethene	2.86	96	101125	18.98	UG/L	100
22) cis-1,2-Dichloroethene	3.62	96	142388	18.54	UG/L	98
23) 1,2-Dichloroethene (total)	3.62	96	249686m	76.62	ug/l	
24) 2-Butanone	3.64	43	70343 TL	20.30	UG/L	99
25) Chloroform	3.89	83	232532	18.95	ug/l	99
27) 1,2-Dichloroethane	4.37	62	182020	18.96	ug/l	98
29) 1,1,1-Trichloroethane	4.04	97	169627	17.84	ug/l	97
30) Cyclohexane	4.10	56	170867	17.94	ug/l	98
31) Carbon Tetrachloride	4.19	117	127633	17.74	ug/l	99
32) 2-Chloroethylvinyl ether	5.64	63	48965	16.03	UG/L	99
33) Bromodichloromethane	5.36	83	151059	18.06	ug/l	99
34) 1,2-Dichloropropane	5.12	63	141868	18.52	ug/l	93
35) cis-1,3-Dichloropropene	5.77	75	197795	18.46	ug/l	98
36) Trichloroethene	4.93	130	132381	17.81	ug/l	97
37) Methylcyclohexane	5.10	83	143948	17.59	ug/l	100
38) Benzene	4.37	78	555105	18.89	ug/l	97
39) Dibromochloromethane	6.81	129	106817	18.32	ug/l	98
40) trans-1,3-Dichloropropene	6.28	75	193189	19.13	ug/l	98
41) 1,1,2-Trichloroethane	6.44	97	129814	18.85	ug/l	99
42) Bromoform	8.16	173	52898	17.82	ug/l	98
44) 4-Methyl-2-pentanone	5.91	43	139010	20.81	ug/l	96
45) 2-Hexanone	6.68	43	95992	20.61	ug/l	98
46) 1,2-Dibromoethane	6.91	107	133231	19.36	ug/l	99
47) Tetrachloroethene	6.59	164	86027	18.02	ug/l	100
48) 1,1,2,2-Tetrachloroethane	8.62	83	150854	19.67	ug/l	99
50) Toluene	6.08	91	557102	19.05	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59801.D Vial: 6
Acq On : 10 Feb 2013 20:03 Operator: BBL
Sample : VSTD020 Inst : H5973-1
Misc : ,,,ICAL_20.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:40 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

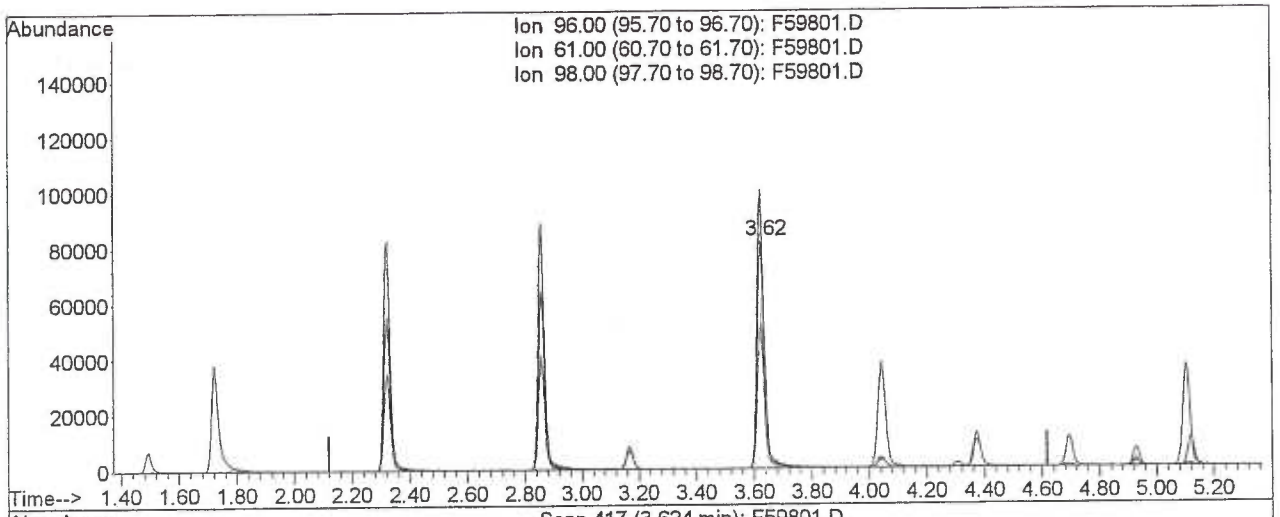
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Chlorobenzene	7.38	112	349232	18.49	ug/l	97
52) Ethylbenzene	7.49	106	179323	18.39	ug/l	97
54) Styrene	8.00	104	357897	19.60	ug/l	97
55) m,p-Xylene	7.61	106	450124	38.37	UG/L	95
56) o-Xylene	7.99	106	225266	19.06	UG/L	99
57) Xylene (total)	7.99	106	225266	19.06	ug/l	99
58) Isopropylbenzene	8.34	105	503927	18.88	ug/l	97
59) 1,3-Dichlorobenzene	9.55	146	230769	18.67	UG/L	99
60) 1,4-Dichlorobenzene	9.63	146	247205	18.53	UG/L	99
61) 1,2-Dichlorobenzene	9.99	146	226256	18.78	UG/L	99
62) 1,2-Dibromo-3-chloropropan	10.76	75	18905	18.62	ug/l	95
63) 1,2,4-Trichlorobenzene	11.59	180	108089	18.02	ug/l	97
64) Naphthalene	11.84	128	365230	20.47	ug/l	100

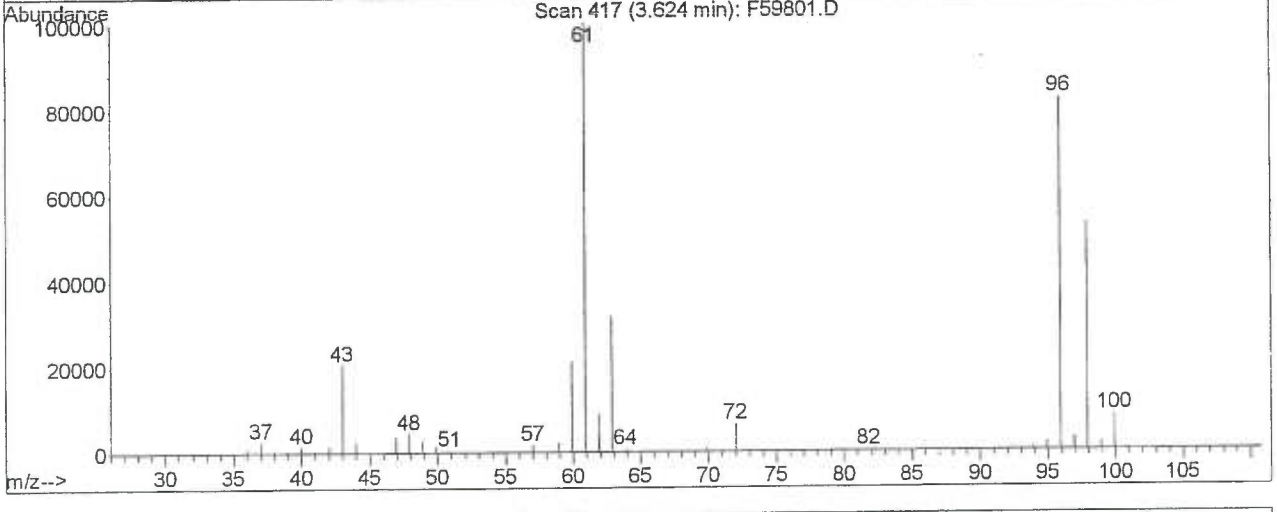
NJGIAM003 V83

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59801.D Vial: 6
Acq On : 10 Feb 2013 20:03 Operator: BBL
Sample : VSTD020 Inst : H5973-1
Misc : ,,,ICAL_20.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:40 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Multiple Level Calibration





TIC: F59801.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 76.62ug/l m

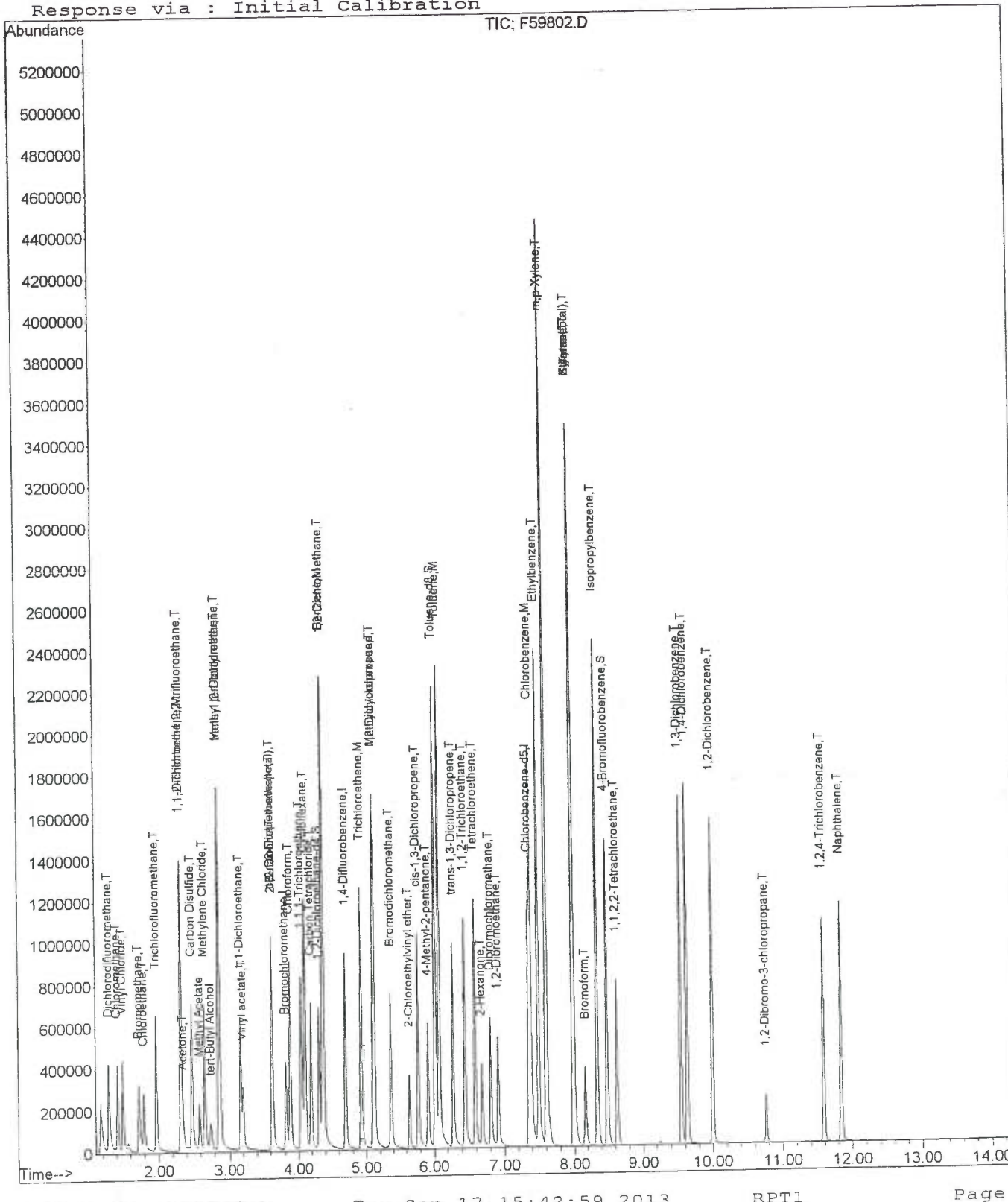
response 249686

Ion	Exp%	Act%
96.00	100	100
61.00	124.60	122.14
98.00	65.20	64.20
0.00	0.00	0.00

NJGIAM003 V84

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59802.D Vial: 7
Acq On : 10 Feb 2013 20:31 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,ICAL_50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:49 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



NJGIAM003 V85

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59802.D Vial: 7
Acq On : 10 Feb 2013 20:31 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,ICAL_50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:49 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	119079	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.70	114	746112	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.36	117	642299	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	434393	51.24	ug/l	0.00
Spiked Amount 50.000	Range 70 - 121		Recovery = 102.48%			
49) Toluene-d8	6.02	98	1462662	52.33	ug/l	0.00
Spiked Amount 50.000	Range 84 - 138		Recovery = 104.66%			
53) 4-Bromofluorobenzene	8.48	95	565877	51.68	ug/l	0.00
Spiked Amount 50.000	Range 59 - 113		Recovery = 103.36%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.29	85	453566	54.70	ug/l	100
4) Chloromethane	1.41	50	386978	54.20	ug/l	100
5) Bromomethane	1.72	94	227608	56.57	ug/l	100
6) Vinyl Chloride	1.49	62	397102	54.89	ug/l	100
7) Chloroethane	1.79	64	225608	54.66	ug/l	100
10) Methyl Acetate	2.59	43	234848	275.34	ug/l	100
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	257365	56.71	ug/l	100
12) Methylene Chloride	2.65	84	319591	49.39	ug/l	100
13) Acetone	2.35	43	88845	42.62	ug/l	100
14) Carbon Disulfide	2.48	76	924565	56.94	ug/l	100
15) tert-Butyl Alcohol	2.74	59	151013	466.37	ug/l	98
16) 1,1-Dichloroethene	2.32	96	255467	55.12	ug/l	100
17) 1,1-Dichloroethane	3.16	63	549518	54.21	ug/l	100
18) Trichlorofluoromethane	1.97	101	465073	56.59	UG/L	100
19) Vinyl acetate	3.21	43	370678	280.56	UG/L	100
20) Methyl tert-butyl ether	2.86	73	903542	51.75	UG/L	100
21) trans-1,2-Dichloroethene	2.85	96	294756	54.37	UG/L	100
22) cis-1,2-Dichloroethene	3.62	96	417637	53.43	UG/L	100
23) 1,2-Dichloroethene (total)	3.62	96	720696m	217.35	ug/l	
24) 2-Butanone	3.63	43	175049 TI	49.64	UG/L	100
25) Chloroform	3.88	83	673568	53.94	ug/l	100
27) 1,2-Dichloroethane	4.37	62	511308	52.35	ug/l	100
29) 1,1,1-Trichloroethane	4.05	97	538570	56.30	ug/l	100
30) Cyclohexane	4.09	56	548946	57.28	ug/l	100
31) Carbon Tetrachloride	4.19	117	431490	59.60	ug/l	100
32) 2-Chloroethylvinyl ether	5.64	63	154012	50.09	UG/L	100
33) Bromodichloromethane	5.37	83	476650	56.64	ug/l	100
34) 1,2-Dichloropropane	5.12	63	412115	53.47	ug/l	100
35) cis-1,3-Dichloropropene	5.77	75	601905	55.83	ug/l	100
36) Trichloroethene	4.93	130	400518	53.55	ug/l	100
37) Methylcyclohexane	5.10	83	470500	57.15	ug/l	100
38) Benzene	4.36	78	1605199	54.29	ug/l	100
39) Dibromochloromethane	6.81	129	343294	58.52	ug/l	100
40) trans-1,3-Dichloropropene	6.28	75	573423	56.42	ug/l	100
41) 1,1,2-Trichloroethane	6.44	97	362747	52.36	ug/l	100
42) Bromoform	8.16	173	179385	60.06	ug/l	100
44) 4-Methyl-2-pentanone	5.91	43	363509	52.97	ug/l	100
45) 2-Hexanone	6.68	43	262349	54.82	ug/l	100
46) 1,2-Dibromoethane	6.91	107	373356	52.82	ug/l	100
47) Tetrachloroethene	6.59	164	268289	54.71	ug/l	100
48) 1,1,2,2-Tetrachloroethane	8.63	83	417327	52.98	ug/l	100
50) Toluene	6.08	91	1627221	54.17	ug/l	100

(#) = qualifier out of range (m) = manual integration

NJGIAM003 V86

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59802.D Vial: 7
Acq On : 10 Feb 2013 20:31 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,ICAL_50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:49 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

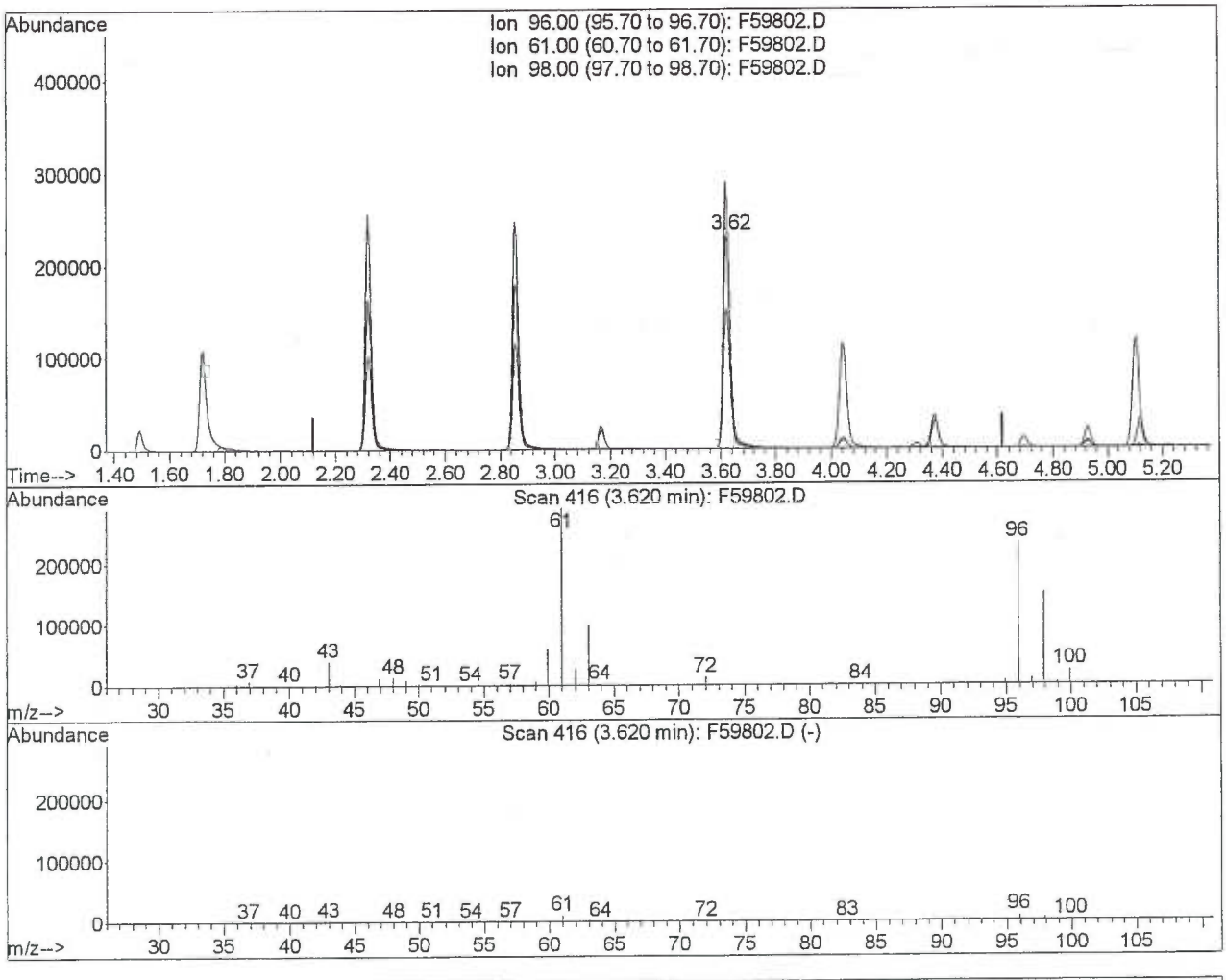
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Chlorobenzene	7.38	112	1030107	53.08	ug/l	100
52) Ethylbenzene	7.49	106	559809	55.90	ug/l	100
54) Styrene	7.99	104	1049780	55.97	ug/l	100
55) m,p-Xylene	7.60	106	1330985	110.44	UG/L	100
56) o-Xylene	7.98	106	660253	54.39	UG/L	100
57) Xylene (total)	7.98	106	660253	54.39	ug/l	100
58) Isopropylbenzene	8.34	105	1555973	56.74	ug/l	100
59) 1,3-Dichlorobenzene	9.55	146	690356	54.36	UG/L	100
60) 1,4-Dichlorobenzene	9.64	146	729654	53.23	UG/L	100
61) 1,2-Dichlorobenzene	10.00	146	658704	53.21	UG/L	100
62) 1,2-Dibromo-3-chloropropan	10.76	75	58424	56.02	ug/l	100
63) 1,2,4-Trichlorobenzene	11.59	180	318537	51.70	ug/l	100
64) Naphthalene	11.84	128	968654	52.85	ug/l	100

NJGIAM003 V87

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59802.D Vial: 7
Acq On : 10 Feb 2013 20:31 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,ICAL_50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:49 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Multiple Level Calibration



TIC: F59802.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 217.35ug/l m

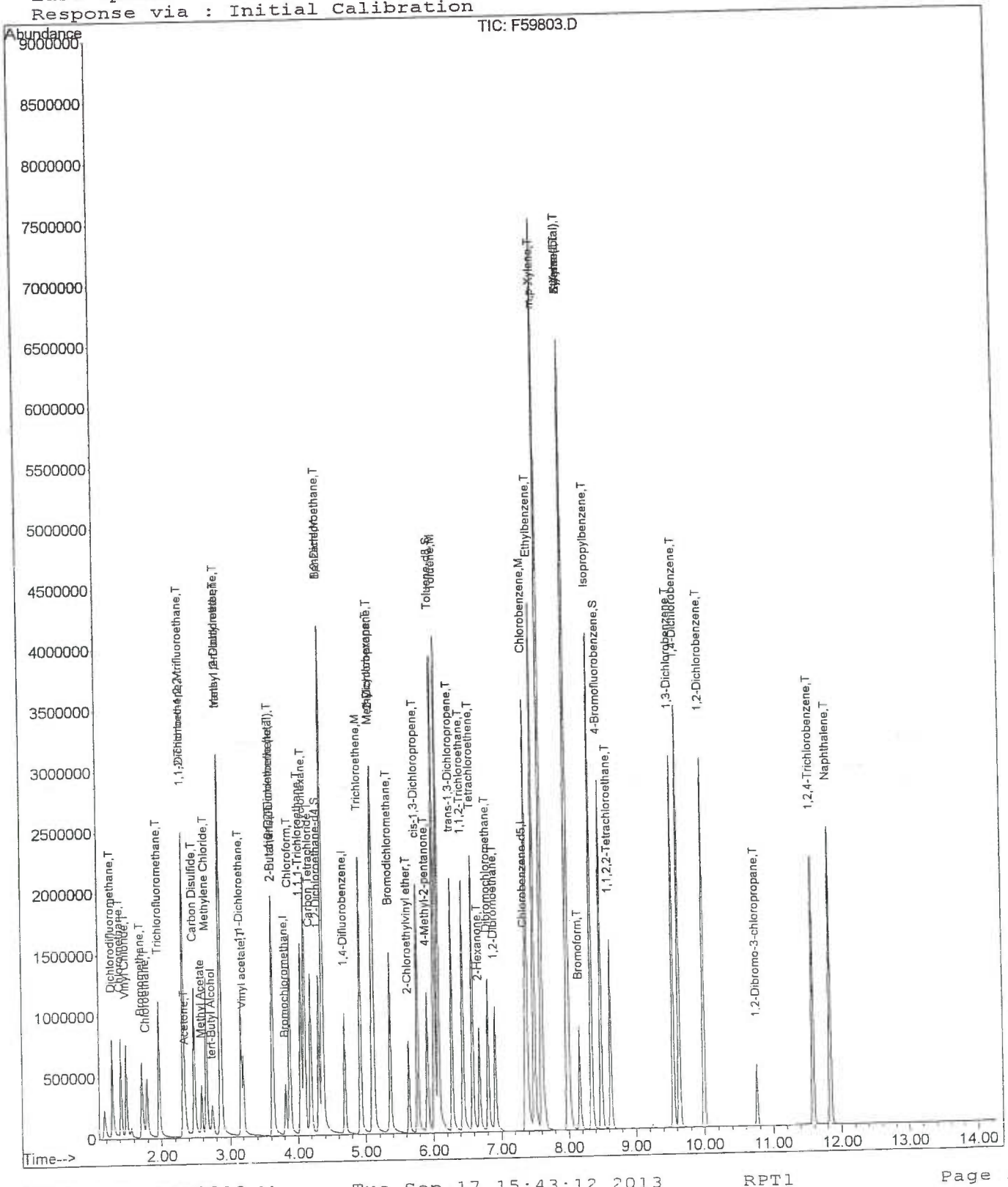
response 720696

Ion	Exp%	Act%
96.00	100	100
61.00	124.60	124.60
98.00	65.20	65.23
0.00	0.00	0.00

NJGIAM003 V88

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59803.D Vial: 8
Acq On : 10 Feb 2013 21:00 Operator: BBL
Sample : VSTD100 Inst : H5973-1
Misc : ,,,ICAL_100,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:50 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59803.D Vial: 8
Acq On : 10 Feb 2013 21:00 Operator: BBL
Sample : VSTD100 Inst : H5973-1
Misc : ,,,ICAL_100,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:50 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	117193	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	738543	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	638523	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	834164	99.97	ug/l	0.00
Spiked Amount 50.000	Range 70 - 121		Recovery =	199.94%#		
49) Toluene-d8	6.02	98	2641948	95.08	ug/l	0.00
Spiked Amount 50.000	Range 84 - 138		Recovery =	190.16%#		
53) 4-Bromofluorobenzene	8.48	95	1072311	98.52	ug/l	0.00
Spiked Amount 50.000	Range 59 - 113		Recovery =	197.04%#		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.29	85	803115	98.42	ug/l	100
4) Chloromethane	1.41	50	704403	100.24	ug/l	98
5) Bromomethane	1.72	94	421607	106.47	ug/l	98
6) Vinyl Chloride	1.49	62	706648	99.24	ug/l	99
7) Chloroethane	1.79	64	395225	97.30	ug/l	100
10) Methyl Acetate	2.58	43	440865	525.20	ug/l	100
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	452420	101.29	ug/l	98
12) Methylene Chloride	2.66	84	593828	93.26	ug/l	99
13) Acetone	2.35	43	164636	80.24	ug/l	98
14) Carbon Disulfide	2.48	76	1669701	104.48	ug/l	99
15) tert-Butyl Alcohol	2.74	59	276938	869.02	ug/l	98
16) 1,1-Dichloroethene	2.32	96	459707	100.79	ug/l	99
17) 1,1-Dichloroethane	3.17	63	1008021	101.05	ug/l	100
18) Trichlorofluoromethane	1.97	101	834079	103.13	UG/L	98
19) Vinyl acetate	3.20	43	764974	588.30	UG/L	100
20) Methyl tert-butyl ether	2.86	73	1663982	96.84	UG/L	100
21) trans-1,2-Dichloroethene	2.86	96	527892	98.94	UG/L	99
22) cis-1,2-Dichloroethene	3.62	96	774758	100.72	UG/L	98
23) 1,2-Dichloroethene (total)	3.62	96	1316427m	403.39	ug/l	
24) 2-Butanone	3.64	43	329674	95.00	UG/L	98
25) Chloroform	3.88	83	1247452	101.50	ug/l	99
27) 1,2-Dichloroethane	4.37	62	964902	100.38	ug/l	100
29) 1,1,1-Trichloroethane	4.04	97	996021	105.18	ug/l	98
30) Cyclohexane	4.10	56	951869	100.34	ug/l	98
31) Carbon Tetrachloride	4.19	117	797351	111.26	ug/l	98
32) 2-Chloroethylvinyl ether	5.64	63	319743	105.06	UG/L	98
33) Bromodichloromethane	5.36	83	945824	113.55	ug/l	99
34) 1,2-Dichloropropane	5.12	63	778941	102.09	ug/l	93
35) cis-1,3-Dichloropropene	5.77	75	1173264	109.93	ug/l	98
36) Trichloroethene	4.93	130	737829	99.66	ug/l	99
37) Methylcyclohexane	5.10	83	820033	100.63	ug/l	99
38) Benzene	4.37	78	2852958	97.48	ug/l	98
39) Dibromochloromethane	6.81	129	708876	122.09	ug/l	99
40) trans-1,3-Dichloropropene	6.28	75	1146191	113.93	ug/l	98
41) 1,1,2-Trichloroethane	6.45	97	696443	101.55	ug/l	99
42) Bromoform	8.16	173	394933	133.59	ug/l	99
44) 4-Methyl-2-pentanone	5.91	43	694597	101.82	ug/l	99
45) 2-Hexanone	6.68	43	498010	104.68	ug/l	99
46) 1,2-Dibromoethane	6.91	107	730124	103.91	ug/l	100
47) Tetrachloroethene	6.59	164	484400	99.37	ug/l	99
48) 1,1,2,2-Tetrachloroethane	8.62	83	822329	105.01	ug/l	99
50) Toluene	6.07	91	2880379	96.45	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59803.D Vial: 8
Acq On : 10 Feb 2013 21:00 Operator: BBL
Sample : VSTD100 Inst : H5973-1
Misc : ,,,ICAL_100,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:50 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

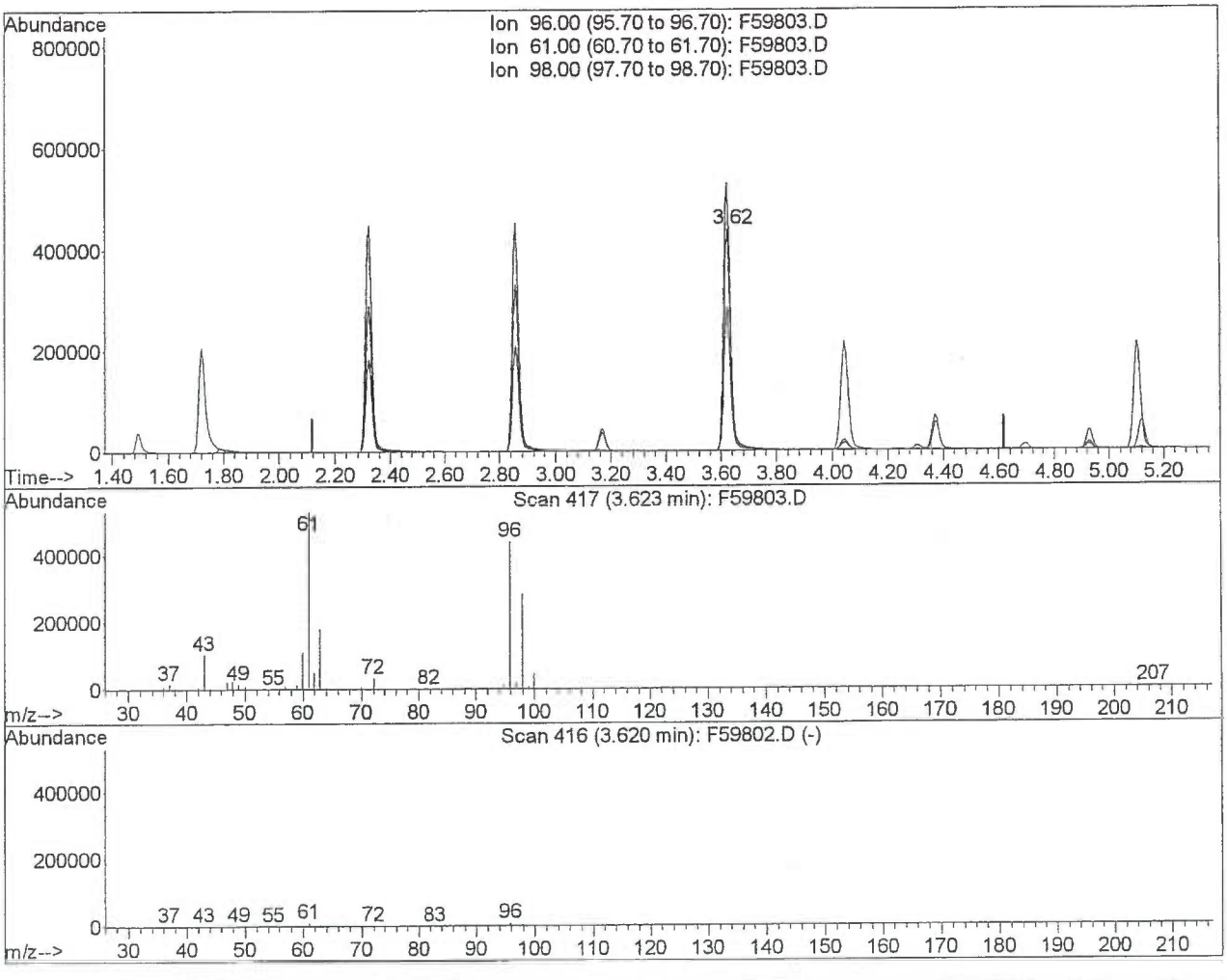
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
51) Chlorobenzene	7.38	112	1894175	98.18	ug/l		99
52) Ethylbenzene	7.49	106	999982	100.45	ug/l	#	90
54) Styrene	8.00	104	1897397	101.75	ug/l		99
55) m,p-Xylene	7.61	106	2300923	192.05	UG/L		92
56) o-Xylene	7.99	106	1177600	97.59	UG/L		96
57) Xylene (total)	7.99	106	1177600	97.59	ug/l		96
58) Isopropylbenzene	8.34	105	2697478	98.96	ug/l		97
59) 1,3-Dichlorobenzene	9.55	146	1299131	102.89	UG/L		99
60) 1,4-Dichlorobenzene	9.63	146	1378504	101.17	UG/L		98
61) 1,2-Dichlorobenzene	10.00	146	1258145	102.23	UG/L		98
62) 1,2-Dibromo-3-chloropropan	10.76	75	127758	123.23	ug/l		90
63) 1,2,4-Trichlorobenzene	11.59	180	622689	101.66	ug/l		99
64) Naphthalene	11.84	128	2065698	113.36	ug/l		99

NJGIAM003 V91

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59803.D Vial: 8
Acq On : 10 Feb 2013 21:00 Operator: BBL
Sample : VSTD100 Inst : H5973-1
Misc : ,,,ICAL_100,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:50 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Multiple Level Calibration



TIC: F59803.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 403.39ug/l m

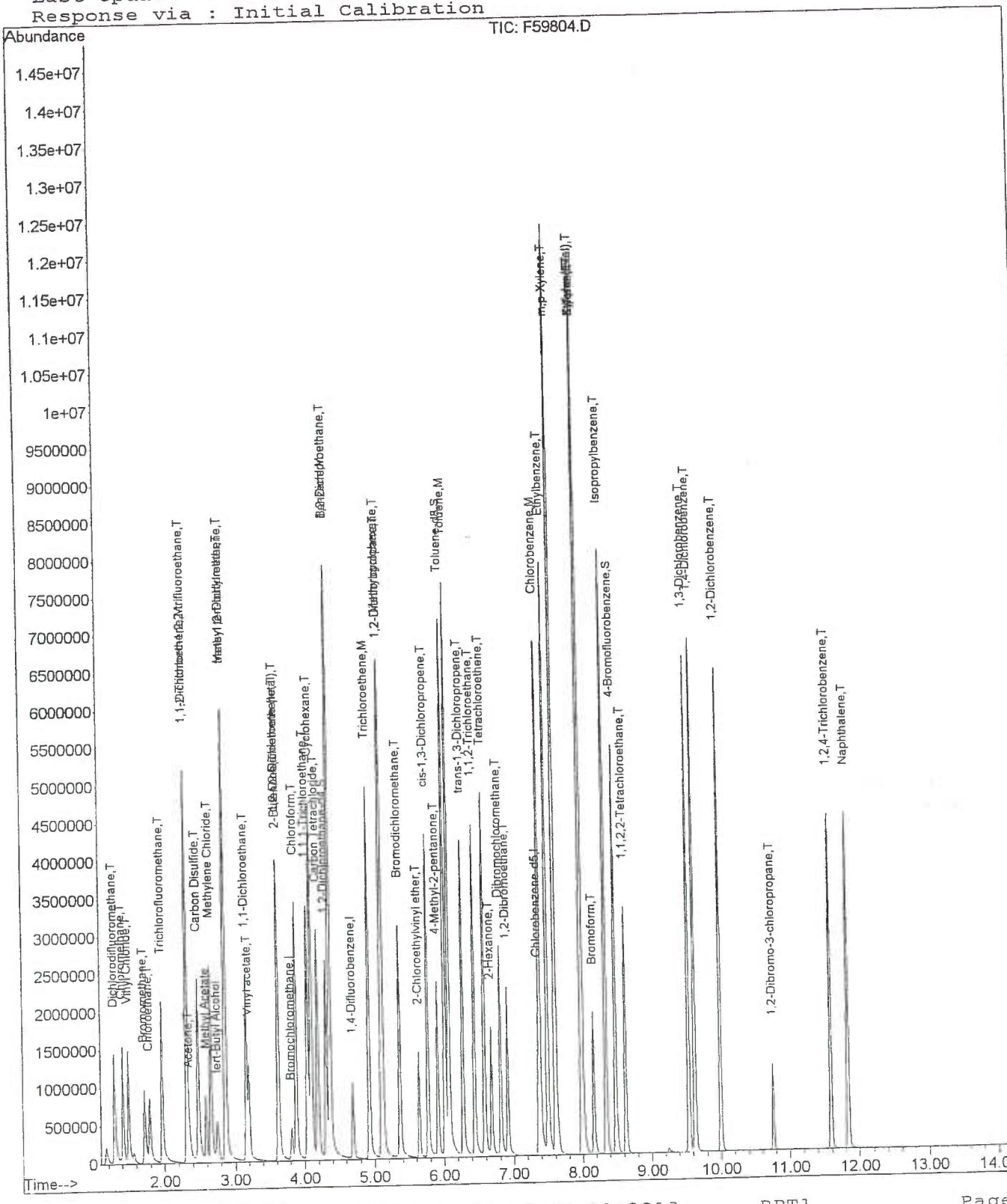
response 1316427

Ion	Exp%	Act%
96.00	100	100
61.00	124.60	120.86
98.00	65.20	64.98
0.00	0.00	0.00

NJGIAM003 V92

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59804.D Vial: 9
Acq On : 10 Feb 2013 21:29 Operator: BBL
Sample : VSTD200 Inst : H5973-1
Misc : ,,,ICAL_200,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:52 2013 Quant Results File: R8W0210.RES

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Initial Calibration



NJGIAM003 V93

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59804.D Vial: 9
Acq On : 10 Feb 2013 21:29 Operator: BBL
Sample : VSTD200 Inst : H5973-1
Misc : ,,,ICAL_200,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:52 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	121553	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	765208	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.36	117	656196	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.31	65	1685684	194.78	ug/l	0.00
Spiked Amount 50.000	Range 70 - 121		Recovery =	389.56%#		
49) Toluene-d8	6.02	98	4726467	165.51	ug/l	0.00
Spiked Amount 50.000	Range 84 - 138		Recovery =	331.02%#		
53) 4-Bromofluorobenzene	8.48	95	2072101	185.25	ug/l	0.00
Spiked Amount 50.000	Range 59 - 113		Recovery =	370.50%#		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.29	85	1644119	194.25	ug/l	99
4) Chloromethane	1.41	50	1463307	200.78	ug/l	98
5) Bromomethane	1.72	94	728047	177.27	ug/l	99
6) Vinyl Chloride	1.49	62	1446194	195.82	ug/l	97
7) Chloroethane	1.78	64	780359	185.23	ug/l	100
10) Methyl Acetate	2.59	43	940855	1080.63	ug/l	99
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	1003011	216.51	ug/l	94
12) Methylene Chloride	2.65	84	1245619	188.60	ug/l	99
13) Acetone	2.36	43	332078	156.04	ug/l	98
14) Carbon Disulfide	2.48	76	3584573	216.27	ug/l	95
15) tert-Butyl Alcohol	2.74	59	621788	1881.16	ug/l	98
16) 1,1-Dichloroethene	2.32	96	995570	210.44	ug/l	99
17) 1,1-Dichloroethane	3.16	63	2145262	207.33	ug/l	99
18) Trichlorofluoromethane	1.97	101	1795618	214.06	UG/L	98
19) Vinyl acetate	3.20	43	1569345	1163.62	UG/L	99
20) Methyl tert-butyl ether	2.86	73	3276012	183.82	UG/L	97
21) trans-1,2-Dichloroethene	2.85	96	1087174	196.46	UG/L	99
22) cis-1,2-Dichloroethene	3.62	96	1657963	207.81	UG/L	98
23) 1,2-Dichloroethene (total)	3.62	96	2754544m	813.80	ug/l	
24) 2-Butanone	3.63	43	655876 TT	182.22	UG/L	97
25) Chloroform	3.88	83	2603864 KF	204.27	ug/l	97
27) 1,2-Dichloroethane	4.38	62	1977926 9/13/13	198.39	ug/l	99
29) 1,1,1-Trichloroethane	4.05	97	2239924	228.30	ug/l	97
30) Cyclohexane	4.10	56	2181067	221.90	ug/l	94
31) Carbon Tetrachloride	4.19	117	1927384	259.57	ug/l	99
32) 2-Chloroethylvinyl ether	5.64	63	605801	192.12	UG/L	100
33) Bromodichloromethane	5.37	83	2035466	235.85	ug/l	98
34) 1,2-Dichloropropane	5.12	63	1598548	202.21	ug/l	91
35) cis-1,3-Dichloropropene	5.77	75	2448796	221.46	ug/l	98
36) Trichloroethene	4.93	130	1601846	208.82	ug/l	99
37) Methylcyclohexane	5.11	83	1850959	219.23	ug/l	98
38) Benzene	4.36	78	5339789	176.09	ug/l	89
39) Dibromochloromethane	6.81	129	1534138	255.01	ug/l	98
40) trans-1,3-Dichloropropene	6.28	75	2394350	229.70	ug/l	96
41) 1,1,2-Trichloroethane	6.44	97	1418863	199.68	ug/l	97
42) Bromoform	8.17	173	904826	295.39	ug/l	99
44) 4-Methyl-2-pentanone	5.91	43	1378340	196.60	ug/l	96
45) 2-Hexanone	6.68	43	1000695	204.68	ug/l	98
46) 1,2-Dibromoethane	6.91	107	1510857	209.22	ug/l	100
47) Tetrachloroethene	6.59	164	1066494	212.88	ug/l	99
48) 1,1,2,2-Tetrachloroethane	8.63	83	1700840	211.34	ug/l	99
50) Toluene	6.08	91	5269670	171.70	ug/l	85

(#) = qualifier out of range (m) = manual integration

NJGIAM003 V94

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59804.D Vial: 9
Acq On : 10 Feb 2013 21:29 Operator: BBL
Sample : VSTD200 Inst : H5973-1
Misc : ,,,ICAL_200,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:52 2013 Quant Results File: R8W0210.RES

Quant Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : VOA Standards for 5 point calibration
Last Update : Sun Feb 10 23:32:35 2013
Response via : Initial Calibration
DataAcq Meth : R8W0210

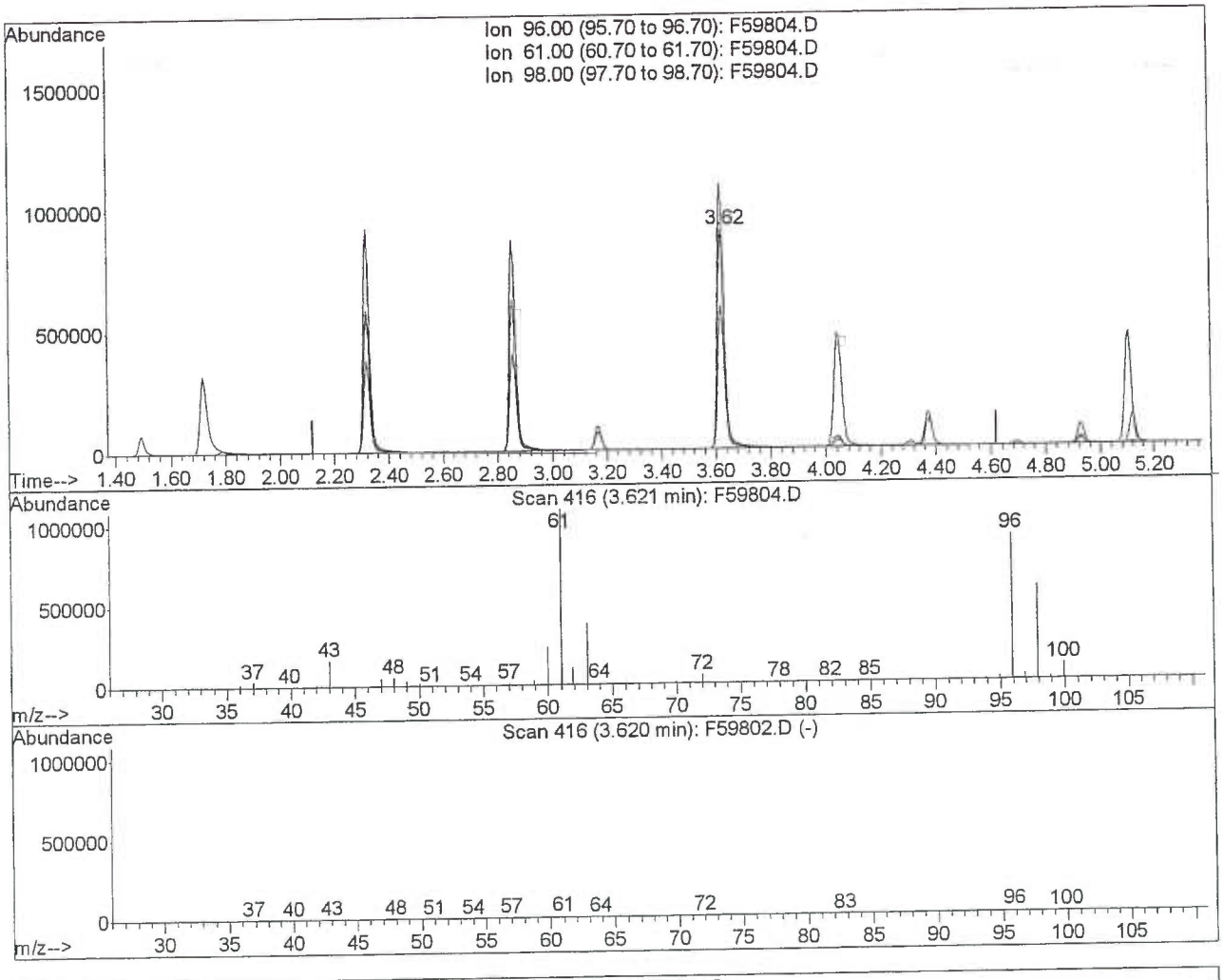
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
51) Chlorobenzene	7.39	112	3749603	189.11	ug/l		95
52) Ethylbenzene	7.50	106	2073655	202.68	ug/l	#	63
54) Styrene	8.00	104	3510922	183.21	ug/l		93
55) m,p-Xylene	7.61	106	4162167	338.04	UG/L	#	73
56) o-Xylene	7.98	106	2283742	184.16	UG/L	#	86
57) Xylene (total)	7.98	106	2283742	184.16	ug/l	#	86
58) Isopropylbenzene	8.34	105	5014328	178.99	ug/l		85
59) 1,3-Dichlorobenzene	9.55	146	2630090	202.69	UG/L		94
60) 1,4-Dichlorobenzene	9.64	146	2760056	197.10	UG/L		94
61) 1,2-Dichlorobenzene	10.00	146	2529343	199.99	UG/L		94
62) 1,2-Dibromo-3-chloropropan	10.76	75	295746	277.59	ug/l		92
63) 1,2,4-Trichlorobenzene	11.58	180	1285985	204.30	ug/l		97
64) Naphthalene	11.84	128	3753990	200.47	ug/l		95

NJGIAM003 V95

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59804.D Vial: 9
Acq On : 10 Feb 2013 21:29 Operator: BBL
Sample : VSTD200 Inst : H5973-1
Misc : ,,,ICAL_200,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 11 0:52 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Feb 11 17:52:20 2013
Response via : Multiple Level Calibration



TIC: F59804.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 813.80ug/l m

response 2754544

Ion	Exp%	Act%
96.00	100	100
61.00	124.60	121.01
98.00	65.20	65.12
0.00	0.00	0.00

NJGIAM003 V96

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Instrument ID: HP5973-1 Calibration Date: 12/11/13 Time: 13:22

Lab File ID: 3\F63315.D Init. Calib. Date(s): 02/10/13 02/10/13

EPA Sample No.(VSTD050##): VSTD050 Init. Calib. Times: 18:07 21:29

Heated Purge: (Y/N) N

GC Column: DB-624 ID: 0.18 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	2.998	2.684		-10.5	
Vinyl chloride	3.038	2.260	0.100	-25.6	25.0
Chloroethane	1.736	1.698		-2.2	
Methylene chloride	2.717	2.711		-0.2	
1,1-Dichloroethene	1.946	1.828	0.100	-6.1	25.0
1,1-Dichloroethane	4.256	4.447	0.200	4.5	25.0
1,2-Dichloroethene (total)	2.829	2.693		-4.8	
Chloroform	5.243	4.624	0.200	-11.8	25.0
1,2-Dichloroethane	4.101	3.789	0.100	-7.6	25.0
1,1,1-Trichloroethane	0.641	0.498	0.100	-22.3	25.0
trans-1,2-Dichloroethene	2.276	2.303		1.2	
Carbon tetrachloride	0.485	0.397	0.100	-18.2	25.0
Bromodichloromethane	0.564	0.616	0.200	9.3	25.0
1,2-Dichloropropane	0.517	0.499		-3.4	
cis-1,2-Dichloroethene	3.282	2.983		-9.1	
cis-1,3-Dichloropropene	0.723	0.761	0.200	5.3	25.0
Trichloroethene	0.501	0.401	0.300	-20.0	25.0
Dibromochloromethane	0.393	0.489	0.100	24.4	25.0
1,1,2-Trichloroethane	0.464	0.455	0.100	-2.0	25.0
trans-1,3-Dichloropropene	0.681	0.735	0.100	7.9	25.0
Tetrachloroethene	0.382	0.320	0.200	-16.2	25.0
1,1,2,2-Tetrachloroethane	0.613	0.644	0.300	5.0	25.0

All other compounds must meet a minimum RRF of 0.010.

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Instrument ID: HP5973-1 Calibration Date: 12/11/13 Time: 13:22

Lab File ID: 3\F63315.D Init. Calib. Date(s): 02/10/13 02/10/13

EPA Sample No.(VSTD050##): VSTD050 Init. Calib. Times: 18:07 21:29

Heated Purge: (Y/N) N

GC Column: DB-624 ID: 0.18 (mm)

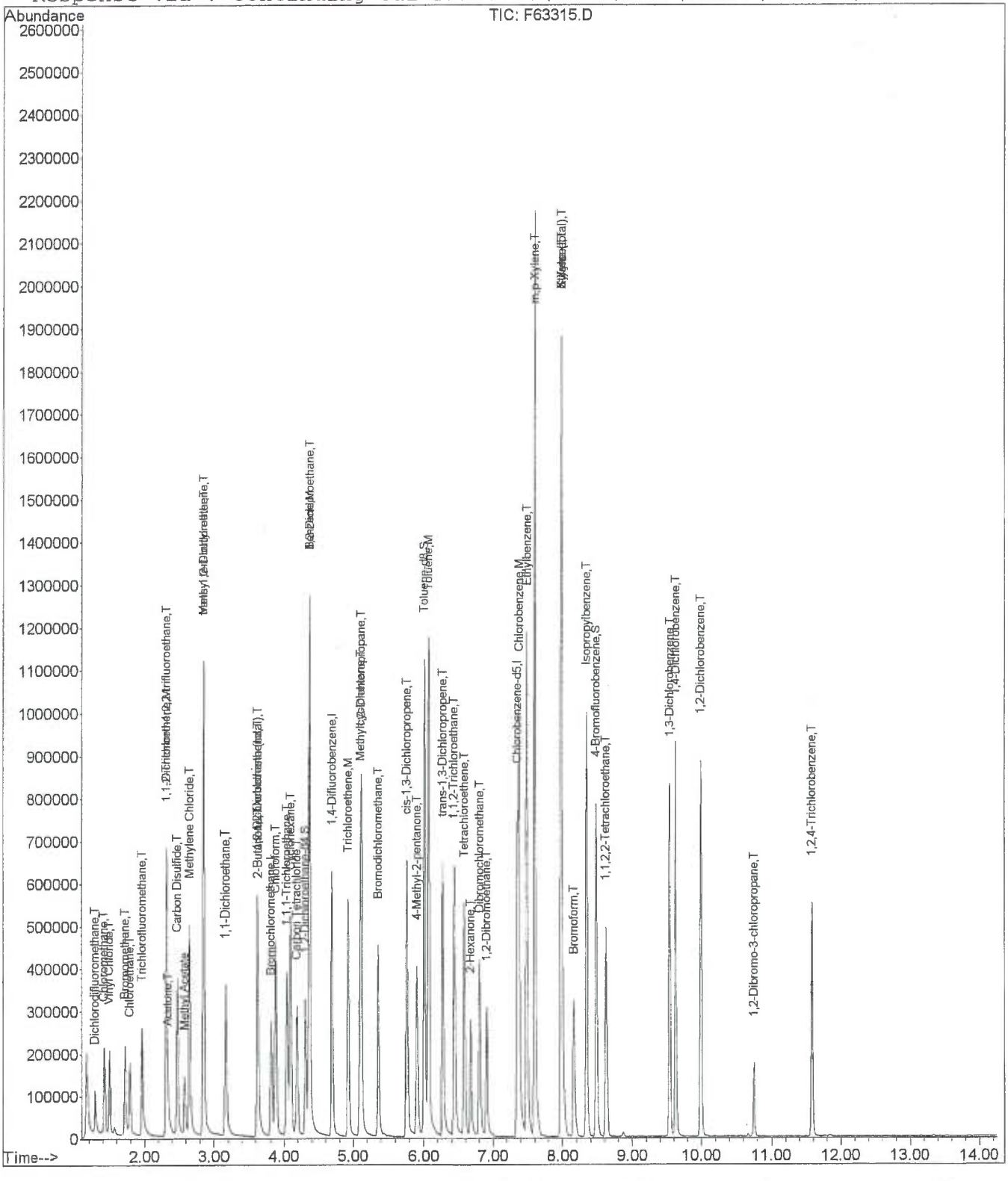
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,2-Dichloroethane-d4	3.560	2.741		-23.0	
Toluene-d8	2.176	1.735		-20.3	
4-Bromofluorobenzene	0.852	0.613	0.200	-28.1	25.0

All other compounds must meet a minimum RRF of 0.010.

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63315.D Vial: 3
Acq On : 11 Dec 2013 13:22 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,CCV,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 11 13:40 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D

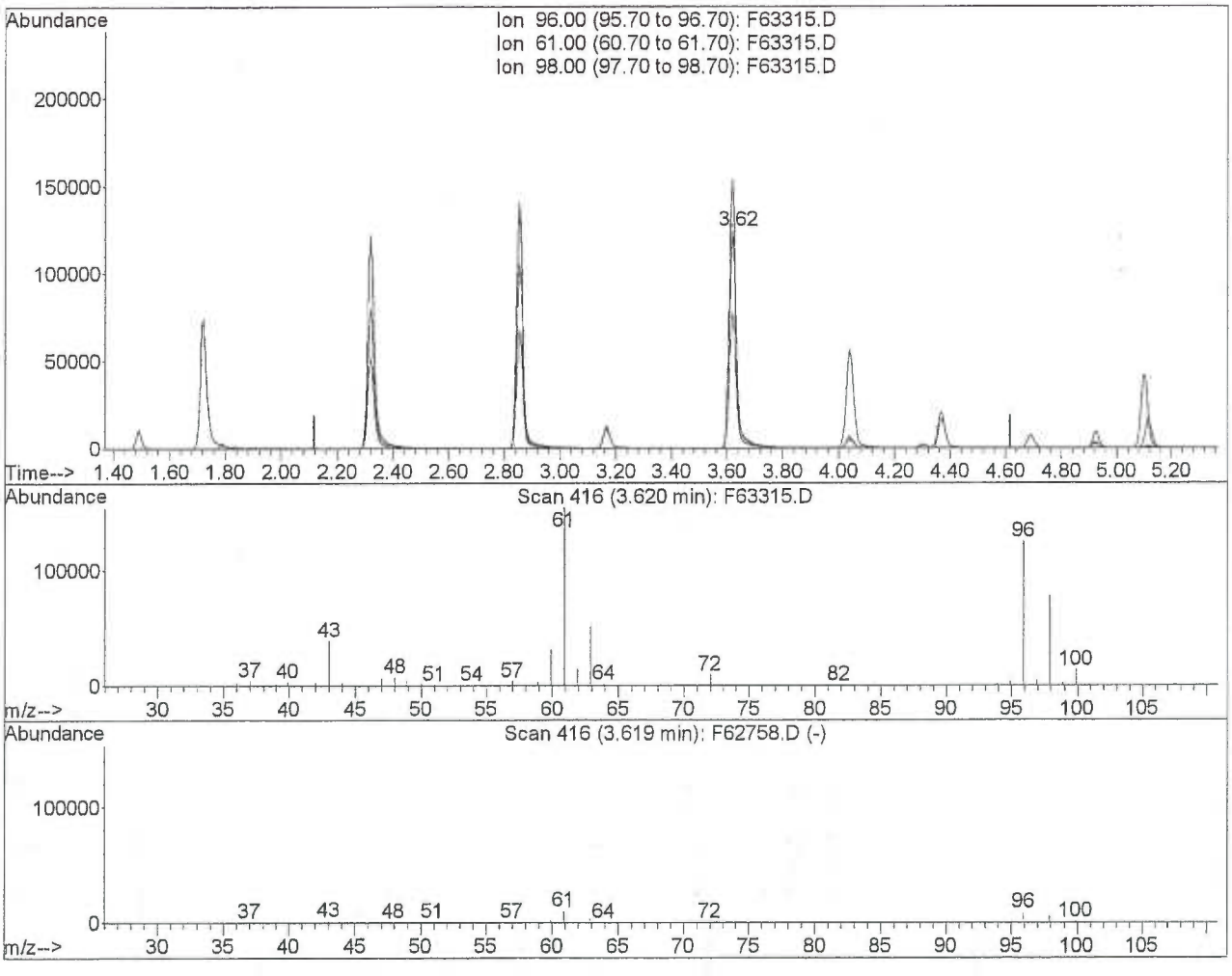


NJGIAM003 V99

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63315.D Vial: 3
Acq On : 11 Dec 2013 13:22 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,CCV,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 11 13:40 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Single Level Calibration



TIC: F63315.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 99.45ug/l m

response 403805

Ion	Exp%	Act%
96.00	100	100
61.00	123.60	123.60
98.00	62.50	62.50
0.00	0.00	0.00

NJGIAM003 V100

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63315.D Vial: 3
Acq On : 11 Dec 2013 13:22 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,CCV,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 11 13:40 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	74983	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	478084	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.36	117	425068	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	205523	50.00	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 100.00%			
49) Toluene-d8	6.01	98	737573	50.00	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.00%			
53) 4-Bromofluorobenzene	8.48	95	260496	50.00	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 100.00%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.28	85	98839	50.00	ug/l	100
4) Chloromethane	1.41	50	201248	50.00	ug/l	100
5) Bromomethane	1.72	94	136459	50.00	ug/l	100
6) Vinyl Chloride	1.49	62	169459	50.00	ug/l	100
7) Chloroethane	1.79	64	127297	50.00	ug/l	100
10) Methyl Acetate	2.58	43	172016	50.00	ug/l	100
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	125717	50.00	ug/l	100
12) Methylene Chloride	2.65	84	203298	50.00	ug/l	100
13) Acetone	2.35	43	64025	50.00	ug/l	100
14) Carbon Disulfide	2.48	76	478762	50.00	ug/l	100
16) 1,1-Dichloroethene	2.32	96	137097	50.00	ug/l	100
17) 1,1-Dichloroethane	3.16	63	333419	50.00	ug/l	100
18) Trichlorofluoromethane	1.97	101	224586	50.00	UG/L	100
20) Methyl tert-butyl ether	2.86	73	586747	50.00	UG/L	100
21) trans-1,2-Dichloroethene	2.85	96	172660	50.00	UG/L	100
22) cis-1,2-Dichloroethene	3.62	96	223671	50.00	UG/L	100
23) 1,2-Dichloroethene (total)	3.62	96	403805m	99.45	ug/l	
24) 2-Butanone	3.63	43	124886	50.00	UG/L	100
25) Chloroform	3.88	83	346720	50.00	ug/l	100
27) 1,2-Dichloroethane	4.37	62	284105	50.00	ug/l	100
29) 1,1,1-Trichloroethane	4.04	97	238095	50.00	ug/l	100
30) Cyclohexane	4.09	56	232770	50.00	ug/l	100
31) Carbon Tetrachloride	4.19	117	189993	50.00	ug/l	100
33) Bromodichloromethane	5.36	83	294281	50.00	ug/l	100
34) 1,2-Dichloropropane	5.12	63	238596	50.00	ug/l	100
35) cis-1,3-Dichloropropene	5.77	75	363883	50.00	ug/l	100
36) Trichloroethene	4.93	130	191545	50.00	ug/l	100
37) Methylcyclohexane	5.10	83	170733	50.00	ug/l	100
38) Benzene	4.36	78	826741	50.00	ug/l	100
39) Dibromochloromethane	6.81	129	233695	50.00	ug/l	100
40) trans-1,3-Dichloropropene	6.27	75	351422	50.00	ug/l	100
41) 1,1,2-Trichloroethane	6.44	97	217718	50.00	ug/l	100
42) Bromoform	8.16	173	164548	50.00	ug/l	100
44) 4-Methyl-2-pentanone	5.91	43	262926	50.00	ug/l	100
45) 2-Hexanone	6.68	43	184937	50.00	ug/l	100
46) 1,2-Dibromoethane	6.91	107	218044	50.00	ug/l	100
47) Tetrachloroethene	6.58	164	135949	50.00	ug/l	100
48) 1,1,2,2-Tetrachloroethane	8.62	83	273790	50.00	ug/l	100
50) Toluene	6.07	91	843327	50.00	ug/l	100
51) Chlorobenzene	7.38	112	552381	50.00	ug/l	100
52) Ethylbenzene	7.49	106	262430	50.00	ug/l	100
54) Styrene	7.99	104	601963	50.00	ug/l	100

TI BKB 12/13/13

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63315.D Vial: 3
Acq On : 11 Dec 2013 13:22 Operator: BBL
Sample : VSTD050 Inst : H5973-1
Misc : ,,,CCV,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 11 13:40 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55) m,p-Xylene	7.60	106	653399	100.00	UG/L	100
56) o-Xylene	7.98	106	334112	50.00	UG/L	100
57) Xylene (total)	7.98	106	334112	50.00	ug/l	100
58) Isopropylbenzene	8.34	105	670471	50.00	ug/l	100
59) 1,3-Dichlorobenzene	9.55	146	378333	50.00	UG/L	100
60) 1,4-Dichlorobenzene	9.63	146	401074	49.92	UG/L	100
61) 1,2-Dichlorobenzene	9.99	146	386603	50.00	UG/L	100
62) 1,2-Dibromo-3-chloropropan	10.76	75	42322	50.00	ug/l	100
63) 1,2,4-Trichlorobenzene	11.58	180	191657	50.00	ug/l	100

NJGIAM003 V102

(#) = qualifier out of range (m) = manual integration

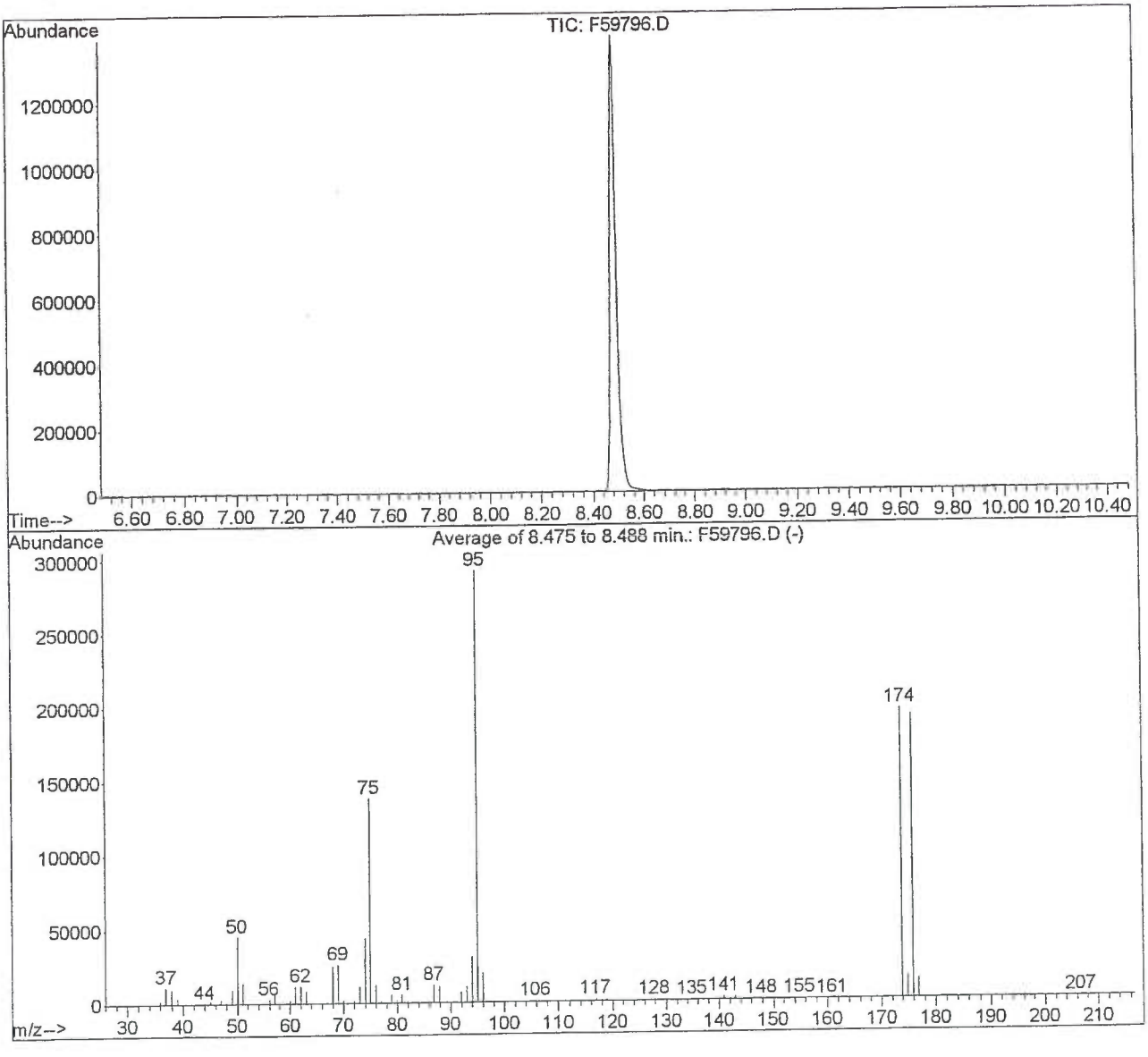
H2M labs
575 Broad Hollow Road
Melville, NY 11747
631.694.3040
631.420.8436

IV. RAW QC DATA PACKAGE FOR VOLATILE ORGANICS

A. TUNING
B. BLANK
C. MATRIX SPIKE BLANK
D. SPIKE AND SPIKE DUPLICATE
E. COPY OF CALCULATIONS

CLPBFB

Data File : O:\MS\5973\DATA\2013\FEB13\021013\F59796.D Vial: 1
Acq On : 10 Feb 2013 17:35 Operator: BBL
Sample : 50 NG BFB Inst : H5973-1
Misc : ,,,TUNE,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : O:\MS\5973\METHODS\2013\R8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A



AutoFind: Scans 1214, 1215, 1216; Background Corrected with Scan 1206

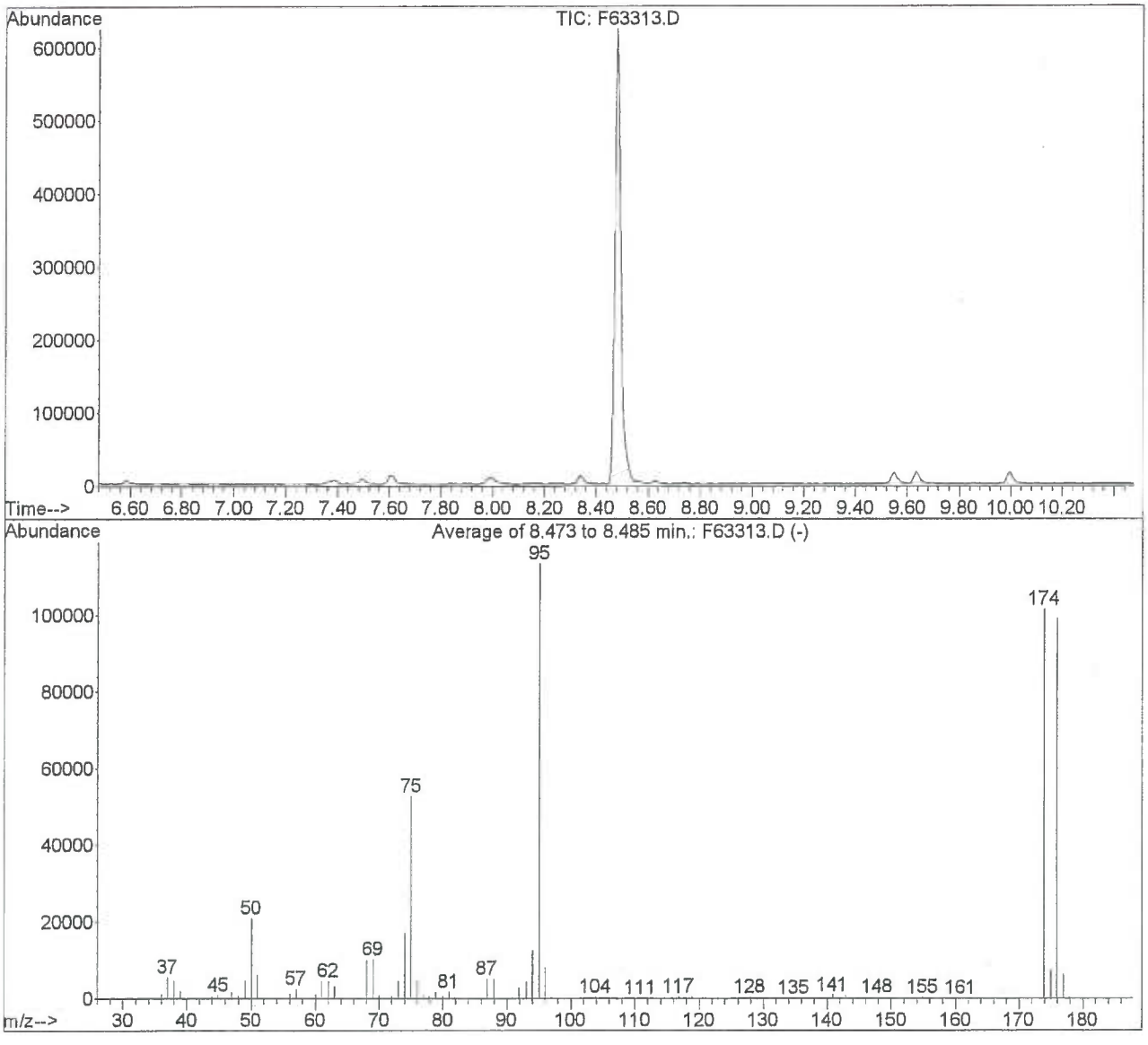
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	45360	PASS
75	95	30	60	47.4	138333	PASS
95	95	100	100	100.0	291989	PASS
96	95	5	9	6.8	19947	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	67.1	195989	PASS
175	174	5	9	7.5	14705	PASS
176	174	95	101	97.8	191765	PASS
177	176	5	9	6.7	12938	PASS

F59796.D R8W0210.M Tue Sep 17 15:40:47 2013 RPT1

NJGIAM003 V104

CLPBFB

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63313.D Vial: 1
Acq On : 11 Dec 2013 12:06 Operator: BBL
Sample : 50 NG BFB Inst : H5973-1
Misc : ,,,TUNE,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A



AutoFind: Scans 1214, 1215, 1216; Background Corrected with Scan 1207

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	20824	PASS
75	95	30	60	46.5	52717	PASS
95	95	100	100	100.0	113384	PASS
96	95	5	9	7.0	7888	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	89.6	101573	PASS
175	174	5	9	7.1	7245	PASS
176	174	95	101	97.6	99131	PASS
177	176	5	9	6.5	6402	PASS

F63313.D C8W0210.M Fri Dec 13 13:10:30 2013 RPT1

NJGIAM003 V105

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK121113

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: VBLK121113

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63316.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

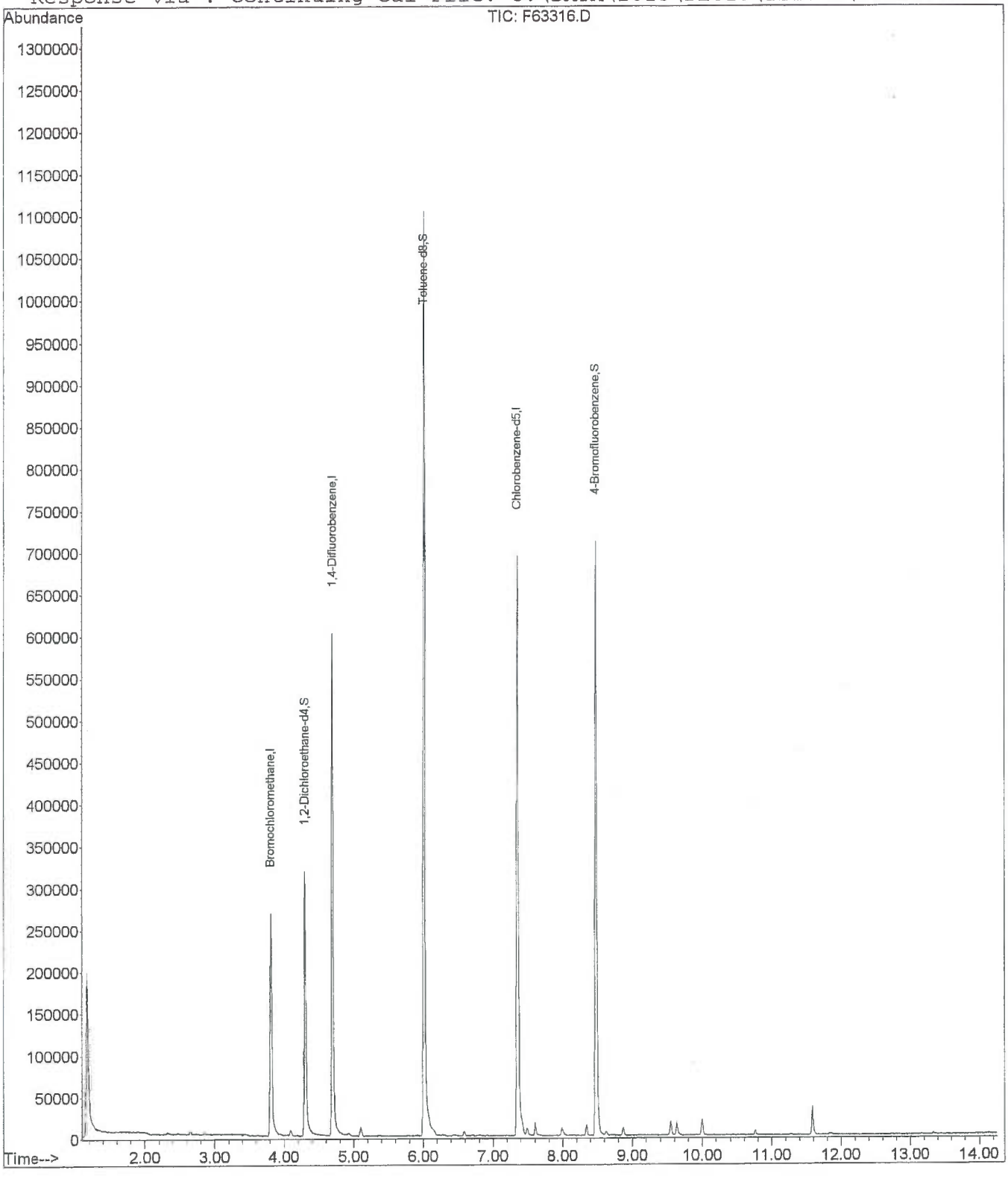
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	10	U
56-23-5	Carbon tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

NJGIAM003 V106

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63316.D Vial: 5
Acq On : 11 Dec 2013 13:52 Operator: BBL
Sample : VBLK121113 Inst : H5973-1
Misc : ,,,MBLK,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:21 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D



NJGIAM003 V107

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63316.D Vial: 5
Acq On : 11 Dec 2013 13:52 Operator: BBL
Sample : VBLK121113 Inst : H5973-1
Misc : ,,,MBLK,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:21 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.82	128	75410	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	467418	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	409289	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	207072	50.09	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 100.18%			
49) Toluene-d8	6.01	98	719397	50.65	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.30%			
53) 4-Bromofluorobenzene	8.48	95	247237	49.28	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.56%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB121113

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM003

Matrix: (soil/water) WATER Lab Sample ID: LFB121113

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3\F63317.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/11/13

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

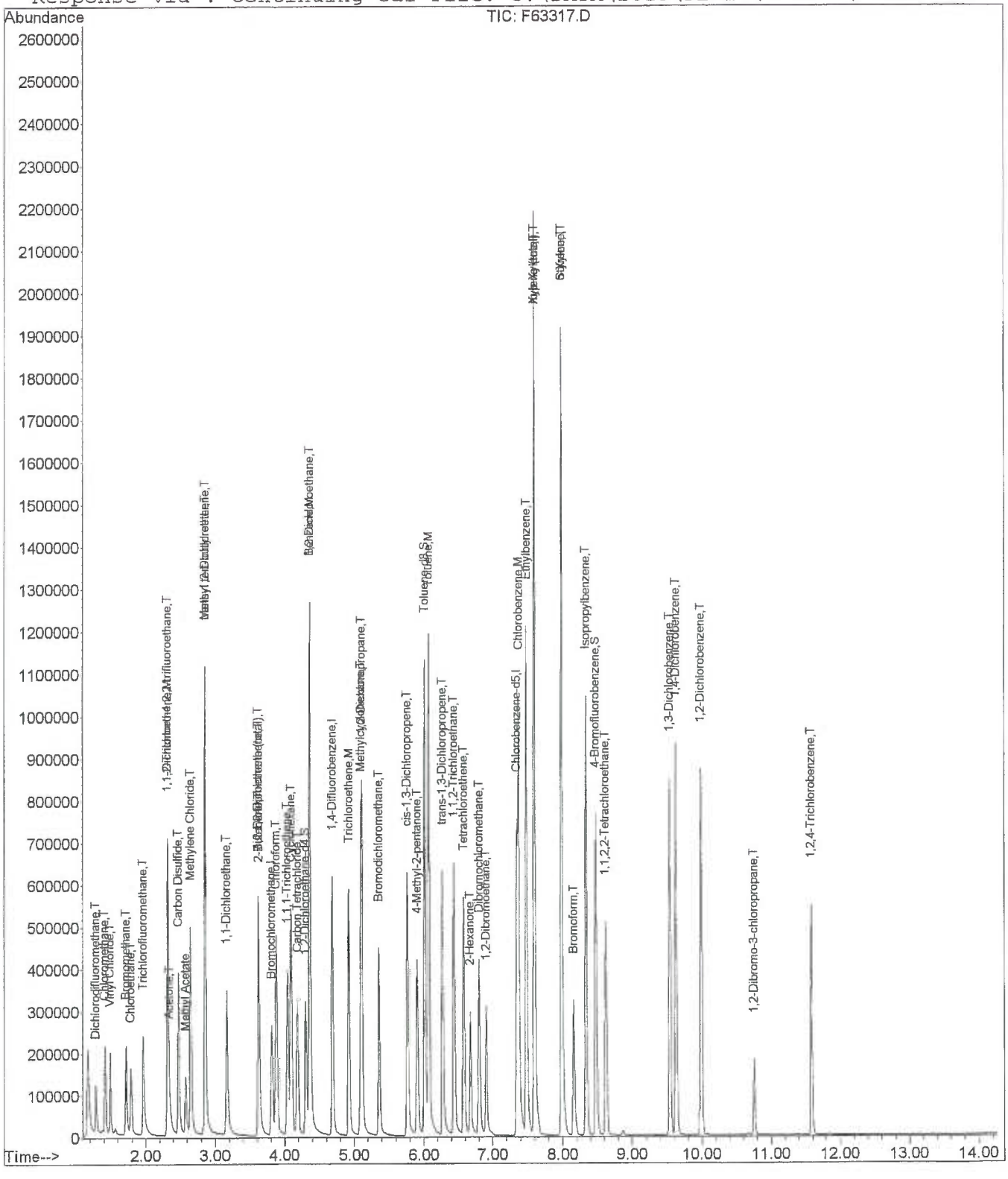
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	45	
75-01-4	Vinyl chloride	47	
75-00-3	Chloroethane	45	
75-09-2	Methylene chloride	51	
75-35-4	1,1-Dichloroethene	53	
75-34-3	1,1-Dichloroethane	49	
540-59-0	1,2-Dichloroethene (total)	100	
67-66-3	Chloroform	50	
107-06-2	1,2-Dichloroethane	48	
71-55-6	1,1,1-Trichloroethane	53	
156-60-5	trans-1,2-Dichloroethene	51	
56-23-5	Carbon tetrachloride	54	
75-27-4	Bromodichloromethane	51	
78-87-5	1,2-Dichloropropane	50	
156-59-2	cis-1,2-Dichloroethene	50	
10061-01-5	cis-1,3-Dichloropropene	51	
79-01-6	Trichloroethene	53	
124-48-1	Dibromochloromethane	51	
79-00-5	1,1,2-Trichloroethane	51	
10061-02-6	trans-1,3-Dichloropropene	50	
127-18-4	Tetrachloroethene	53	
79-34-5	1,1,2,2-Tetrachloroethane	52	

NJGIAM003 V109

Quantitation Report

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63317.D Vial: 6
Acq On : 11 Dec 2013 14:21 Operator: BBL
Sample : LFB121113 Inst : H5973-1
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:38 2013 Quant Results File: C8W0210.RES

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D

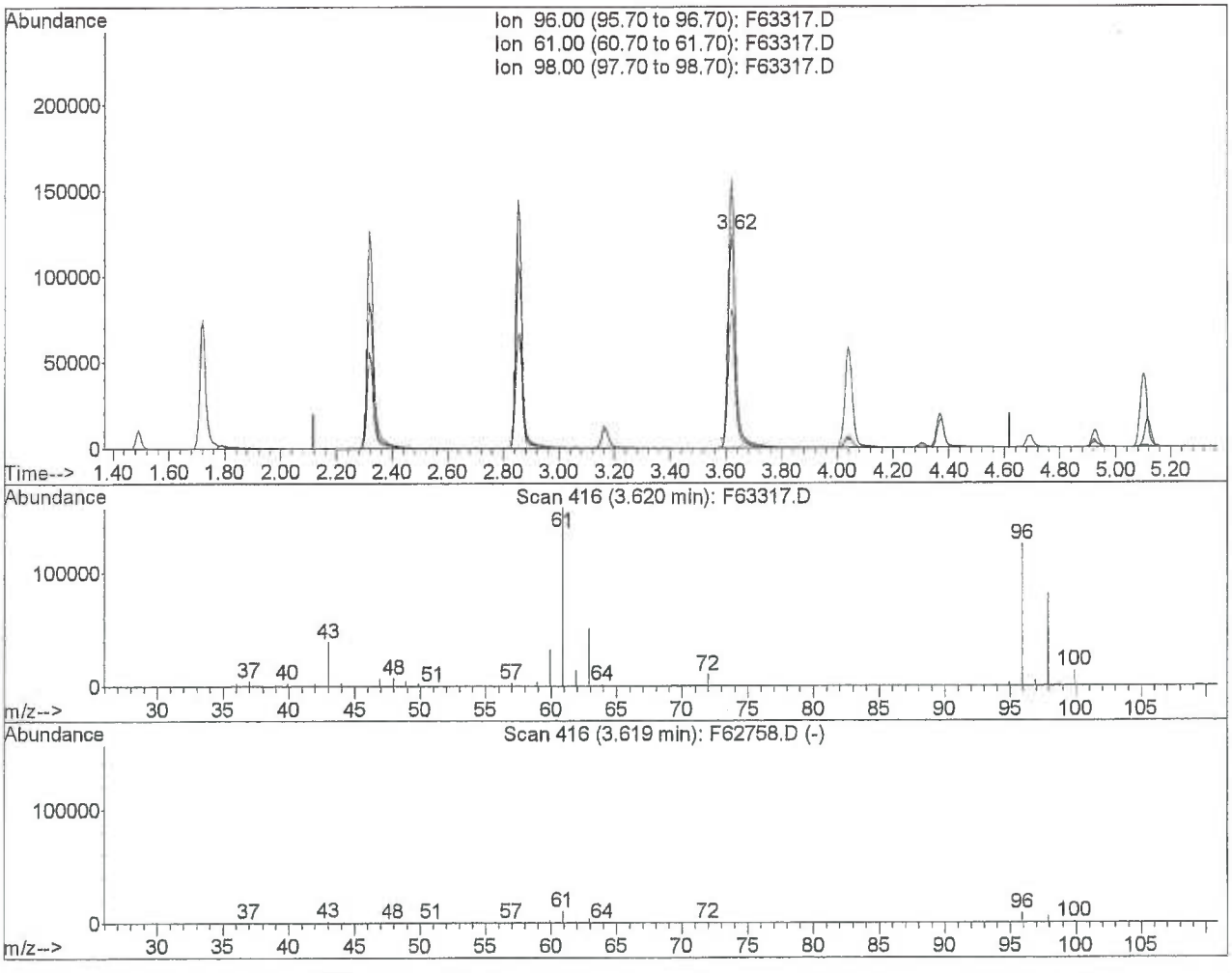


NJGIAM003 V110

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63317.D Vial: 6
Acq On : 11 Dec 2013 14:21 Operator: BBL
Sample : LFB121113 Inst : H5973-1
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:38 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Single Level Calibration



TIC: F63317.D

(23) 1,2-Dichloroethene (total) (T)

3.62min 101.02ug/l m

response 411444

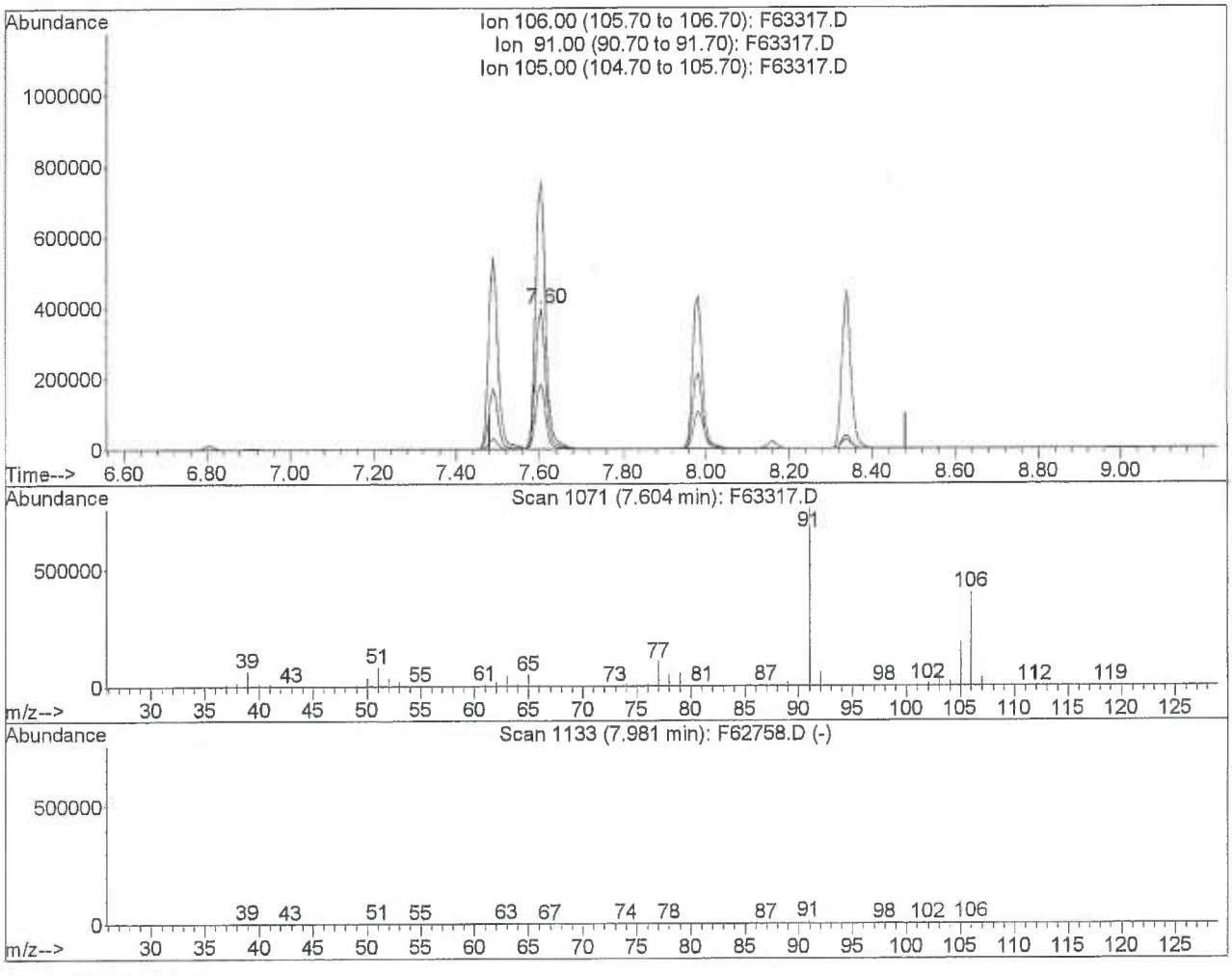
Ion	Exp%	Act%
96.00	100	100
61.00	123.60	125.77
98.00	62.50	64.81
0.00	0.00	0.00

NJGIAM003 V111

Quantitation Report (Qedit)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63317.D Vial: 6
Acq On : 11 Dec 2013 14:21 Operator: BBL
Sample : LFB121113 Inst : H5973-1
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:38 2013 Quant Results File: temp.res

Method : O:\MS\5973\METHODS\2013\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Mon Nov 18 12:19:59 2013
Response via : Single Level Calibration



TIC: F63317.D

(57) Xylene (total) (T)

7.60min 152.70ug/l m

response 1000212

Ion	Exp%	Act%
106.00	100	100
91.00	198.90	189.85
105.00	50.00	46.10
0.00	0.00	0.00

NJGIAM003 V112

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63317.D Vial: 6
Acq On : 11 Dec 2013 14:21 Operator: BBL
Sample : LFB121113 Inst : H5973-1
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:38 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.81	128	75215	50.00	ug/l	0.00
28) 1,4-Difluorobenzene	4.69	114	464789	50.00	ug/l	0.00
43) Chlorobenzene-d5	7.35	117	416665	50.00	ug/l	0.00
System Monitoring Compounds						
26) 1,2-Dichloroethane-d4	4.30	65	199659	48.42	ug/l	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 96.84%			
49) Toluene-d8	6.02	98	740586	51.22	ug/l	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 102.44%			
53) 4-Bromofluorobenzene	8.48	95	258411	50.60	ug/l	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 101.20%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.28	85	95916	48.37	ug/l	98
4) Chloromethane	1.41	50	180874	44.80	ug/l	98
5) Bromomethane	1.72	94	127004	46.39	ug/l	96
6) Vinyl Chloride	1.49	62	160621	47.25	ug/l	98
7) Chloroethane	1.79	64	115190	45.11	ug/l	95
10) Methyl Acetate	2.58	43	179745	52.09	ug/l	100
11) 1,1,2-Trichloro-1,2,2-trif	2.32	101	129962	51.53	ug/l	95
12) Methylene Chloride	2.65	84	208684	51.17	ug/l	98
13) Acetone	2.35	43	66424	51.71	ug/l	94
14) Carbon Disulfide	2.48	76	498656	51.92	ug/l	100
16) 1,1-Dichloroethene	2.32	96	146423	53.24	ug/l	98
17) 1,1-Dichloroethane	3.16	63	330167	49.36	ug/l	98
18) Trichlorofluoromethane	1.96	101	211631	46.97	UG/L	98
20) Methyl tert-butyl ether	2.86	73	571456	48.55	UG/L	100
21) trans-1,2-Dichloroethene	2.85	96	175458	50.65	UG/L	97
22) cis-1,2-Dichloroethene	3.62	96	225977	50.36	UG/L	98
23) 1,2-Dichloroethene (total)	3.62	96	411444m	101.02	ug/l	
24) 2-Butanone	3.63	43	128075	51.12	UG/L	98
25) Chloroform	3.88	83	347783	50.00	ug/l	98
27) 1,2-Dichloroethane	4.37	62	275595	48.35	ug/l	98
29) 1,1,1-Trichloroethane	4.04	97	244744	52.87	ug/l	99
30) Cyclohexane	4.09	56	242697	53.62	ug/l	96
31) Carbon Tetrachloride	4.19	117	200393	54.25	ug/l	100
33) Bromodichloromethane	5.36	83	291626	50.97	ug/l	98
34) 1,2-Dichloropropane	5.12	63	233016	50.23	ug/l	99
35) cis-1,3-Dichloropropene	5.77	75	359990	50.88	ug/l	99
36) Trichloroethene	4.93	130	198524	53.30	ug/l	99
37) Methylcyclohexane	5.10	83	171053	51.53	ug/l	98
38) Benzene	4.36	78	831642	51.74	ug/l	100
39) Dibromochloromethane	6.81	129	233301	51.34	ug/l	99
40) trans-1,3-Dichloropropene	6.27	75	343358	50.25	ug/l	99
41) 1,1,2-Trichloroethane	6.44	97	217362	51.35	ug/l	98
42) Bromoform	8.16	173	164937	51.55	ug/l	98
44) 4-Methyl-2-pentanone	5.91	43	269561	52.30	ug/l	99
45) 2-Hexanone	6.68	43	192200	53.01	ug/l	98
46) 1,2-Dibromoethane	6.91	107	217492	50.88	ug/l	97
47) Tetrachloroethene	6.58	164	140686	52.79	ug/l	98
48) 1,1,2,2-Tetrachloroethane	8.62	83	281286	52.40	ug/l	97
50) Toluene	6.08	91	844801	51.10	ug/l	98
51) Chlorobenzene	7.38	112	541854	50.04	ug/l	99
52) Ethylbenzene	7.49	106	268055	52.10	ug/l	99
54) Styrene	7.99	104	601230	50.95	ug/l	98

TI BKB 12/13/13

(#) = qualifier out of range (m) = manual integration

NJGIAM003 V113

Quantitation Report (QT Reviewed)

Data File : O:\MS\5973\DATA\2013\DEC13\121113\F63317.D Vial: 6
Acq On : 11 Dec 2013 14:21 Operator: BBL
Sample : LFB121113 Inst : H5973-1
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 12 10:38 2013 Quant Results File: C8W0210.RES

Quant Method : C:\HPCHEM\1\METHODS\C8W0210.M (RTE Integrator)
Title : A083829;A089344;A087941;CG1098;CH2969;CG0850A
Last Update : Wed Dec 11 13:39:55 2013
Response via : Continuing Cal File: C:\DATA\2013\DEC13\121113\F63315.D
DataAcq Meth : C8W0210

TI GKB 12/13/13

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	m,p-Xylene	7.60	106	656339	102.48	UG/L	99
56)	o-Xylene	7.98	106	340673	52.01	UG/L	98
57)	Xylene (total)	7.60	106	1000212m	152.70	ug/l	
58)	Isopropylbenzene	8.34	105	686051	52.19	ug/l	100
59)	1,3-Dichlorobenzene	9.54	146	374279	50.46	UG/L	98
60)	1,4-Dichlorobenzene	9.63	146	403182	51.20	UG/L	99
61)	1,2-Dichlorobenzene	9.99	146	389059	51.33	UG/L	99
62)	1,2-Dibromo-3-chloropropan	10.76	75	42443	51.15	ug/l	97
63)	1,2,4-Trichlorobenzene	11.58	180	184473	49.10	ug/l	98

NJGIAM003 V114

(#) = qualifier out of range (m) = manual integration

H 2 M labs

575 Broad Hollow Road
Melville, NY 11747

631.694.3040
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COMPUTATIONS FOR VOLATILE ORGANICS
PERFORMED BY RTE DATA SYSTEM OF HP

$$CONC = \frac{Ax}{Ais \times RRF} \quad \frac{Is}{W}$$

WHERE:

CONC = Concentration in sample (ug/L or ug/KG)

Ax = Area of characteristic ion of compound

Ais = Area of characteristic ion of internal standard

RRF = Relative response factor as area per (ng) of compound, divided by area per ng of respective internal standard

Is = Amount of internal standard injected (ng)

W = Volume of sample in (ml) or dry weight (g)

Generally the amount of each internal standard injected is 250 ng.

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V. DOCUMENTATION FOR VOLATILE ORGANICS

A. LOG BOOK PAGES
B. REPORTING ANALYST SIGNATURE PAGE

	LOT#	SOL'N ID	Prep Date	Std Log Pg
SURR.	[illegible]	SMB62	2/10/13	61
IS.	[illegible]	SMB48	2/10/13	61
MS				
QC CHECK		CLOV-453A 02720A	2/10/13	62
CALIBRATION			2/10/13	61/62

C1170213006
C1170917004

GC/MS VOLATILE ANALYSIS

SCAN: VOA INSTRUMENT: HP5973-1 COLUMN: DB-624

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	INJ TIME	VOL-WT	HEAT. PURG. Y/N	METHOD	pH	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
RBL cgmlw	2/6/13	FS9785	VBLK		1437	5mL	Y	R8W0210						
		86	1302215-001A		2020	5.0				✓	✓			
		87	-002A		2048					✓	✓			
		88	-003A		2118					✓	✓			
		89	1302213-001A		2158	↓				✓	✓			
		90	1301771-004A		2228	1.0		PROF						
		91	-004A		2308	5.0								
		92	-005A		2325	5.0								
		93	VBLK		2348			R46507004						
		94	1302161-001A		0018					✓	✓			
		95	-002A		0058	↓	↓	↓		✓	✓			Analyst error!
RBL cgmlw	2/6/13	FS9796	50 ng RFB		1125	5mL	N	R8W0210						
		97	VSM 0.5		1507					✓				
		98	VSM001		1536					✓				
		99	VSM005		1905					✓				
		FS9800	VSTD010		1934					✓				
		01	VSTD020		2002					✓				
		02	VSTD050		2031					✓				
		03	VSTD100		2100					✓				
		04	VSTD200		2129					✓				
		05	ICV 050		2201									
		06	ICV 050		2234	↓	↓	↓		✓				

H2M LABS, INC.

GC/MS VOLATILE ANALYSIS

		Std. Log Pg.	Prep Date	Sol'n ID	Lot #
	CAL	76	10/24/13	Restek Calkit	A092874, A090791, A094181
INSTRUMENT: H5973-1	ICV	74	9/4/13	Spex	C113061901A, C113021200T
SCAN: VOA	MS	72	8/11/13	CLP10ON	CH1788
COLUMN: DB-624	QC CHECK	74	9/4/13	Spex	C113061901A, C113021200T
	SURR.	77	12/3/13	STM262	CJ4239 Balance ID:
	I.S.	↓	↓	STM272	CG1098A pH paper lot #: 3213
	BFB	76	10/23/13	STS110N	CH3248 CI strip lot #:

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD	pH	CI	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
BBelmech	12/10/13	F63311	1312422-003B			2254	5ml	N	RBW0210	<2		✓	✓	8260_W_TCL		
↓	↓	12	1312226-004AMS	HIMW-10SMS		2323	↓	↓	↓	↓		✓	✓	↓	Key-URS176	
BBelmech	12/11/13	F63313	50ng BFB			1206	5ml	N	CBW0210			✓	✓			
		14	VSTD050			1250										
		15	VSTD050			1322						✓	✓	ASPBS-8260-W		
		16	VBLK121113			1352						✓	✓			
		17	LFB121113			1421						✓	✓			
		18	MSB121113			1456						✓	✓			
		19	1312282-001A	MW-1	1	1526				<2		✓	✓		NJGIAM003	
		20	-002A	-2		1555						✓	✓			
		21	-003A	-3		1624						✓	✓			Dilute 1:2
		22	-004A	-4		1652						✓	✓			
		23	-005A	-5		1721						✓	✓			Dilute 1:3
		24	-006A	-6		1750						✓	✓			
		25	-007A	Field Blank		1820						✓	✓			
		26	-008A	Trip Blank		1849						✓	✓			
		27	-009A	Storage Blank	↓	1918						✓	✓			
		28	-003ADL	MW-3DL	2	1947						✓	✓			@ 1:2
		29	-005ADL	-5DL	2	2016						✓	✓			@ 1:3
↓	↓	30	1312415-001A	BBMW-43S	1	2045	↓	↓	↓	↓		✓	✓	↓	GEI053	

H2M labs
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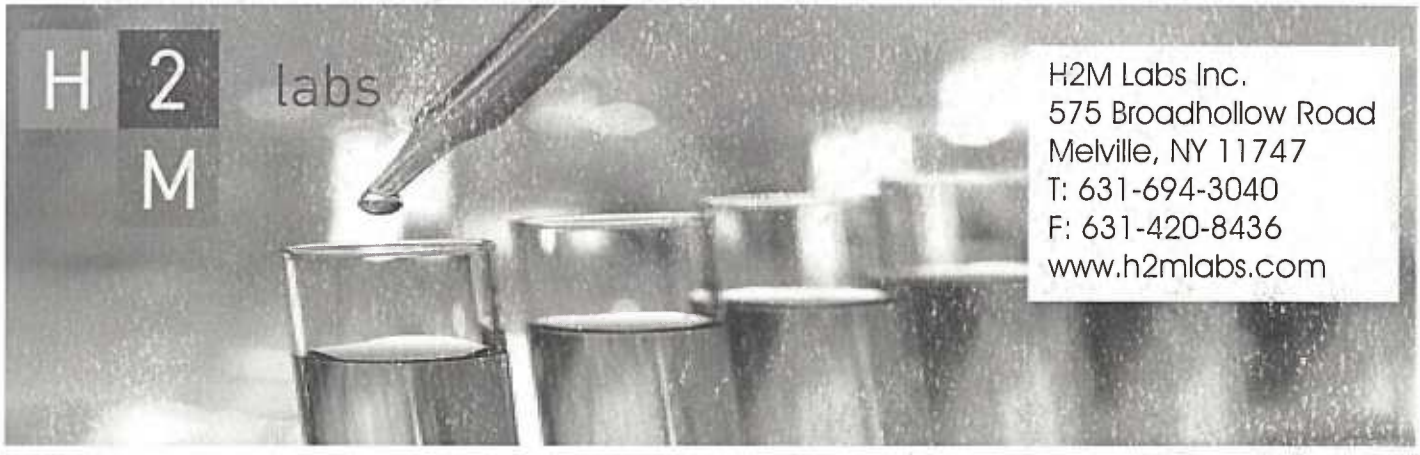
SDG:NJGIAM003
SCAN: VOA

This data package was reported by the undersigned. This reporting includes data calculations, manual edits, if necessary, and compilation of raw data. The information presented is true and correct to the best of my knowledge.

Signature: _____

Date: 12/16/13

Attachment 6



Analytical Data Package For:

VENUS ESTATES
PROJECT: GIAM1201
SDG NO: NJGIAM005

VOLATILES DATA PACKAGE

DECEMBER 2013

Report to:

H2M Associates
119 Cherry Hill Rd. Suite 200
Parsippany, NJ 07054
ATTN: Blair Sonzogni

H 2 M labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

ANALYTICAL DATA PACKAGE

TABLE OF CONTENTS

VENUS ESTATES
PROJECT NO.: GIAM1201
SAMPLES RECEIVED: 12/5/13
AIR SAMPLES
SDG NO.: NJGIAM005

DATA PACKAGE FOR CLIENT INFORMATION PURPOSES ONLY

H 2 M labs

575 Broad Hollow Road
Melville, NY 11747

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I. NYS DEC SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: NJGIAM005

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	MSVOA
SV-1	1312347-001	X

CLP, (Non-CLP) (Please indicate year of protocol)
TCL/TAL, HSL, Priority Pollutant,

ASP B 2000
CG 12/27/13

NJGIAM005 A3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

SDG: NJGIAM005

Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	DateRecd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
1312347-001A	SV-1	Air	ETO-15	03-Dec-13	05-Dec-13		10-Dec-13		1	LOW	
1312347-001ADL	SV-1DL	Air	ETO-15	03-Dec-13	05-Dec-13		10-Dec-13		200	LOW	

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II. SDG NARRATIVES

H 2 M labs

NARRATIVE FOR VOLATILES
SAMPLES RECEIVED: 12/5/13
SDG #: NJGIAM005

For Sample(s):

SV-1

The above air sample(s) was/were analyzed for a specific list of volatile organic analytes by EPA method TO-15. Data are reported according to the requirements of NYSDEC ASP Rev. 2000, Category B.

All quality control and calibration requirements were met. The following should be noted:

The sample was not analyzed as matrix spike/ matrix spike duplicate (MS/MSD, but data for the two lab fortified blanks indicates good method efficiency. One analyte of the 49 targeted compounds, 1,2,4-trichlorobenzene, had a slightly low recovery of 68% (limit 70%).

The sample had to be reanalyzed at a dilution to keep all analytes within the calibration range. The compounds that exceeded in the original analysis are reported from the dilution.

Sample results are reported in both ppbv and ug/m3 units for targeted analytes but only as ppbv for the TIC compounds.

Alkanes are listed on form 1F but are not included in the number of TICs reported.

I certify that this 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 hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: December 13, 2013

****
* *
* *
****

Ursula Middel
Technical Manager

H 2 M labs

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tel 631.694.3040
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III. CHAIN OF CUSTODY DOCUMENTATION

H2M LABS, INC.
575 Broad Hollow Rd., Melville, NY 11747
Tel: (631) 694-3040 Fax:(631) 420-8436

0619

AIR CANISTER CHAIN OF CUSTODY

Client Contact Information	**Project Manager:** Blair Sonzogni	**CLIENT:** H2M Associates Inc	**H2M SDG NO.:** NJG AM005
Company: VENUS ESTATES	Phone: 862 2075900	Samplers Name(s) Lisa Marie McNulty	
Address: 90-11 31st Ave	Site Contact: H2M Assoc Inc		
City/State/Zip Queens NY	119 Cherry Hill Rd		
Phone: (H2M) x2249	Parsippany NJ 07054		
FAX: (H2M) 973 3340501	BGS x2249		
Project Name: Venus Estates	**Analysis Turnaround Time**		
Site: NY Dry Cleaners	Standard (Specify) ✓		
PO # G1AM1201	Rush (Specify)		

Sample Identification	Date Collected	Time Collected	Temp. (F)	Canister Pressure FIELD Initial("Hg) (Start)	FIELD ("Hg) / PSI (Stop)	LAB Outgoing ("Hg) (Lab)	LAB Incoming ("Hg) (Lab)	Flow Controller ID	Canister ID	Can Size (L)	LAB ID No.	Analysis TO-15	Analysis OTHER	Matrix Indoor / Ambient Air	Matrix Soil Gas	Matrix Source Level
SV-1	12/3/13	1128	50	-29.5	-0.	-30		1620	118	1.4		X			X	
~~—~~						~~-30~~		~~1022~~	~~126~~	~~1.4~~	hm					
											1312347-001					

Pressure (in)	Ambient	Maximum	Minimum
Start	29.95		
Stop	29.95		

Temperature (Fahrenheit)	Ambient	Maximum	Minimum
Start	50	52	50
Stop	52		

Special Instructions/QC Requirements & Comments:

Samples Relinquished by:	Date/Time: 12/4/13 9:40	Received by:	Date/Time: 12-5-13 12:00
Relinquished by:	Date/Time:	Received by:	Date/Time:

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

Notify lab if equipment is damaged upon receipt. Client is responsible for damage to equipement

NJGIAM005-A8

H2M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.h2mlabs.com

NJGIAM005

Sample Receipt Checklist

Client Name NJGIAM | Date and Time Received: 12/5/2013 12:00:00 PM

Work Order Number: 1312347 | RcptNo: 1 | Received by MelissaWatson

Completed by: | Reviewed by:

Completed Date: 12/5/2013 | Reviewed Date: 12/9/2013 10:29:17 AM

Carrier name: FedEx

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Are matrices correctly identified on Chain of custody?	Yes	☑	No	☐		
Is it clear what analyses were requested?	Yes	☑	No	☐		
Custody seals intact on sample bottles?	Yes	☐	No	☐	Not Present	☑
Samples in proper container/bottle?	Yes	☑	No	☐		
Were correct preservatives used and noted?	Yes	☑	No	☐	NA	☐
Preservative added to bottles:						
Sample Condition?	Intact	☑	Broken	☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
Were container labels complete (ID, Pres, Date)?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
Was an attempt made to cool the samples?	Yes	☐	No	☐	NA	☑
All samples received at a temp. of > 0° C to 6.0° C?	Yes	☐	No	☐	NA	☑
Response when temperature is outside of range:						
Sample Temp. taken and recorded upon receipt?	Yes	☐	No	☑	To	°
Water - Were bubbles absent in VOC vials?	Yes	☐	No	☐	No Vials	☑
Water - Was there Chlorine Present?	Yes	☐	No	☐	NA	☑
Water - pH acceptable upon receipt?	Yes	☐	No	☐	No Water	☑
Are Samples considered acceptable?	Yes	☑	No	☐		
Custody Seals present?	Yes	☐	No	☑		
Airbill or Sticker?	Air Bil	☑	Sticker	☐	Not Present	☐
Airbill No:	7973 0636 9146					

Case Number: | SDG: NJGIAM005 | SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☑ No Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

NJGIAM005 A9

H2M LABS, INC.

MATERIAL CHAIN OF CUSTODY

CLIENT: NJGIAM DELIVERABLES: 60-70D TURN AROUND TIME: 14 DAYS

SDG #: NJGIAM005 CASE #: _____ MATRIX: Air pH CHECK Y or (N)

REMARKS: _____

RECEIVED BY: MCW SIGNATURE: [signature] DATE: 12-5-13 TIME: 12:00

	CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1	SV-1	1312347 001A	12-5-13	CANISTER	1	TO-15
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						

MCW 12-6-13

VOLATILE

P 0181

NJGIAM005 A10

H2M LABS, INC.

CLIENT: NJGIAM

SDG #: NJGIAM005

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT
12-5-13	1800	SIGN [signature]	SIGN [signature]	CANISTER	ANALYSIS	
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
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		SIGN	SIGN			
		SIGN	SIGN			

VOLATILE

NJGIAM005 A11

H 2 M labs

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IV. ANALYTICAL DATA PACKAGE

A. VOLATILES

H2M labs

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VOLATILE ORGANICS

TABLE OF CONTENTS

H2M labs
575 Broad Hollow Road
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I. QC SUMMARY FOR VOLATILE ORGANICS

A. SYSTEM MONITORING COMPOUND RECOVERY FORM
B. MS/MSD FORM
C. MSB FORM
D. METHOD BLANK FORM
E. GC/MS TUNING FORM
F. INTERNAL STANDARD AREA AND RT SUMMARY
G. INSTRUMENT DETECTION LIMITS

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Level: (low/med) LOW

	EPA SAMPLE NO.	1 BFB #			OTHER	TOT OUT
01	VBLK121013	80				0
02	LFB121013	91				0
03	SV-1	117				0
04	SV-1DL	86				0

QC Limit

1 BFB = 4-Bromofluorobenzene (70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC Contract:

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM005

Sample ID LFB121013 Level: (low/med) LOW

Column ID Rxi-1MS Column Diam .32

Inst. ID HP5973I Init. Calib. Date(s): 12/07/13 17:38

Analysis Date: 12/10/13 17:14 12/07/13 23:36

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ppbv)	SPIKE CONCENTRATION (ppbv)	SPIKE % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10	0	8.89	89	70-130
1,2-Dichlorotetrafluoroethane	10	0	10	100	70-130
Chloromethane	10	0	9.39	94	70-130
Bromomethane	10	0	10.5	105	70-130
Vinyl chloride	10	0	9.84	98	70-130
Chloroethane	10	0	9.93	99	70-130
Methylene chloride	10	0	7.61	76	70-130
Acetone	10	0	8.05	81	70-130
Carbon disulfide	10	0	9.02	90	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane	10	0	9.4	94	70-130
1,1-Dichloroethene	10	0	9.62	96	70-130
1,1-Dichloroethane	10	0	8.18	82	70-130
Trichlorofluoromethane	10	0	10.5	105	70-130
Vinyl acetate	10	0	7.69	77	70-130
Methyl tert-butyl ether	10	0	7.64	76	70-130
1,2-Dichloroethene (trans)	10	0	9.47	95	70-130
1,2-Dichloroethene (cis)	10	0	8.99	90	70-130
Methyl ethyl ketone	10	0	7.18	72	70-130
Chloroform	10	0	8.53	85	70-130
1,2-Dichloroethane	10	0	8.35	84	70-130
1,1,1-Trichloroethane	10	0	8.77	88	70-130
Carbon tetrachloride	10	0	9.08	91	70-130
Bromodichloromethane	10	0	8.57	86	70-130
1,2-Dichloropropane	10	0	7.74	77	70-130
1,3-Dichloropropene (cis)	10	0	8.51	85	70-130
Trichloroethene	10	0	9.32	93	70-130
Benzene	10	0	8.24	82	70-130
Dibromochloromethane	10	0	9.21	92	70-130
1,3-Dichloropropene (trans)	10	0	8.47	85	70-130
1,1,2-Trichloroethane	10	0	8.41	84	70-130

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

* Values outside of QC limits

Spike Recovery: 1 out of 49 outside limits

COMMENTS:

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC Contract:

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM005

Sample ID LFB121013 Level: (low/med) LOW

Column ID Rxi-1MS Column Diam .32

Inst. ID HP5973I Init. Calib. Date(s): 12/07/13 17:38

Analysis Date: 12/10/13 17:14 12/07/13 23:36

Bromoform	10	0	8.85	89	70-130
Methyl isobutyl ketone	10	0	8.1	81	70-130
Methyl butyl ketone	10	0	8.99	90	70-130
1,2-Dibromoethane	10	0	9.18	92	70-130
Tetrachloroethene	10	0	9.75	98	70-130
1,1,2,2-Tetrachloroethane	10	0	7.83	78	70-130
Toluene	10	0	8.82	88	70-130
Chlorobenzene	10	0	9.02	90	70-130
Ethylbenzene	10	0	8.24	82	70-130
Styrene	10	0	8.43	84	70-130
Xylenes (m&p)	20	0	16.4	82	70-130
Xylenes (o)	10	0	8.08	81	70-130
1,3,5-Trimethylbenzene	10	0	8.04	80	70-130
1,2,4-Trimethylbenzene	10	0	8.02	80	70-130
1,3-Dichlorobenzene	10	0	8.8	88	70-130
1,4-Dichlorobenzene	10	0	8.62	86	70-130
1,2-Dichlorobenzene	10	0	8.62	86	70-130
1,3-Hexachlorobutadiene	10	0	7.95	80	70-130
1,2,4-Trichlorobenzene	10	0	6.78	68*	70-130

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

* Values outside of QC limits

Spike Recovery: 1 out of 49 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK121013

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Lab File ID: 3\I11428.D Lab Sample ID: VBLK121013

Date Analyzed: 12/10/13 Time Analyzed: 16:25

GC Column: Rxi-1MS ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: HP5973I

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LFB121013	LFB121013	3\I11429.D	17:14
02	SV-1	1312347-001A	3\I11434.D	21:12
03	SV-1DL	1312347-001ADL	3\I11437.D	23:44

COMMENTS: _____

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Lab File ID: 3\I11377.D BFB Injection Date: 12/07/13

Instrument ID: HP5973I BFB Injection Time: 15:31

GC Column: Rxi-1MS ID: .32 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.2
75	30.0 - 66.0% of mass 95	50.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.9 (1.3)1
174	50.0 - 120.0% of mass 95	68.7
175	4.0 - 9.0% of mass 174	5.5 (8.0)1
176	93.0 - 101.0% of mass 174	68.6 (99.8)1
177	5.0 - 9.0% of mass 176	4.6 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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
01	VSTD040	VSTD040	3\I11380.D	12/07/13	17:38
02	VSTD020	VSTD020	3\I11381.D	12/07/13	18:21
03	VSTD010	VSTD010	3\I11382.D	12/07/13	19:04
04	VSTD005	VSTD005	3\I11383.D	12/07/13	19:49
05	VSTD002	VSTD002	3\I11384.D	12/07/13	20:32
06	VSTD0.2	VSTD0.2	3\I11388.D	12/07/13	23:36

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Lab File ID: 3\I11423.D BFB Injection Date: 12/10/13

Instrument ID: HP5973I BFB Injection Time: 12:00

GC Column: Rxi-1MS ID: .32 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.3
75	30.0 - 66.0% of mass 95	47.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	1.0 (1.2)1
174	50.0 - 120.0% of mass 95	88.3
175	4.0 - 9.0% of mass 174	6.8 (7.7)1
176	93.0 - 101.0% of mass 174	87.7 (99.3)1
177	5.0 - 9.0% of mass 176	5.7 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

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
01	VSTD010	VSTD010	3\I11426.D	12/10/13	14:58
02	VBLK121013	VBLK121013	3\I11428.D	12/10/13	16:25
03	LFB121013	LFB121013	3\I11429.D	12/10/13	17:14
04	SV-1	1312347-001A	3\I11434.D	12/10/13	21:12
05	SV-1DL	1312347-001ADL	3\I11437.D	12/10/13	23:44

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Lab File ID (Standard): 3\I11426.D Date Analyzed: 12/10/13

EPA Sample No.(VSTD050##): VSTD010 Time Analyzed: 14:58

Instrument ID: HP5973I Heated Purge: (Y/N) N

GC Column: Rxi-1MS ID: .32 (mm)

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	505257	8.031	2136189	10.019	1506573	14.664
	UPPER LIMIT	707359.8	8.361	2990664.6	10.349	2109202.2	14.994
	LOWER LIMIT	303154	7.701	1281713	9.689	903944	14.334
	EPA SAMPLE						
01	VBLK121013	492954	8.03	1938926	10.01	1331724	14.66
02	LFB121013	502054	8.03	2015787	10.02	1474236	14.66
03	SV-1	419362	8.04	1880677	10.02	1404191	14.69
04	SV-1DL	452398	8.03	1728810	10.02	1235937	14.66

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

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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

H2M LABS INC

Date: 12-Dec-13

Test Code: TO-15
Test Number: ETO-15
Test Name: VOCS IN AIR
Matrix: Air **Units:** ppbv

METHOD DETECTION / REPORTING LIMITS

Type	Analyte	Synonym	MDL	PQL
A	Dichlorodifluoromethane		0.04	0.50
A	1,2-Dichlorotetrafluoroethane		0.04	0.50
A	Chloromethane		0.07	0.50
A	Bromomethane		0.05	0.50
A	Vinyl chloride		0.05	0.50
A	Chloroethane		0.05	0.50
A	Methylene chloride		0.04	0.50
A	Acetone		0.03	0.50
A	Carbon disulfide		0.05	0.50
A	1,1,2-Trichloro-1,2,2-trifluoroethane		0.05	0.50
A	1,1-Dichloroethene		0.04	0.50
A	1,1-Dichloroethane		0.04	0.50
A	Trichlorofluoromethane		0.04	0.50
A	Vinyl acetate		0.03	0.50
A	Methyl tert-butyl ether		0.04	0.50
A	1,2-Dichloroethene (trans)		0.04	0.50
A	1,2-Dichloroethene (cis)		0.04	0.50
A	Methyl ethyl ketone		0.05	0.50
A	Chloroform		0.04	0.50
A	1,2-Dichloroethane		0.12	0.50
A	1,1,1-Trichloroethane		0.05	0.50
A	Carbon tetrachloride		0.05	0.50
A	Bromodichloromethane		0.04	0.50
A	1,2-Dichloropropane		0.02	0.50
A	1,3-Dichloropropene (cis)		0.03	0.50
A	Trichloroethene		0.04	0.50
A	Benzene		0.04	0.50
A	Dibromochloromethane		0.05	0.50
A	1,3-Dichloropropene (trans)		0.03	0.50
A	1,1,2-Trichloroethane		0.04	0.50
A	Bromoform		0.02	0.50
A	Methyl isobutyl ketone		0.04	0.50
A	Methyl butyl ketone		0.04	0.50
A	1,2-Dibromoethane		0.03	0.50
A	Tetrachloroethene		0.05	0.50
A	1,1,2,2-Tetrachloroethane		0.04	0.50
A	Toluene		0.04	0.50
A	Chlorobenzene		0.04	0.50
A	Ethylbenzene		0.04	0.50
A	Styrene		0.03	0.50
A	Xylenes (m&p)		0.05	0.50
A	Xylenes (o)		0.03	0.50
A	1,3,5-Trimethylbenzene		0.11	0.50
A	1,2,4-Trimethylbenzene		0.02	0.50
A	1,3-Dichlorobenzene		0.03	0.50
A	1,4-Dichlorobenzene		0.03	0.50

NJGIAM005 V10

H2M LABS INC

Date: 12-Dec-13

Test Code: TO-15
Test Number: ETO-15
Test Name: VOCS IN AIR
Matrix: Air **Units:** ppbv

METHOD DETECTION / REPORTING LIMITS

Type	Analyte	Synonym	MDL	PQL
A	1,2-Dichlorobenzene		0.03	0.50
A	1,3-Hexachlorobutadiene		0.11	0.50
A	1,2,4-Trichlorobenzene		0.04	0.50
I	Bromochloromethane		0	0.50
I	1,4-Difluorobenzene		0	0.50
I	Chlorobenzene-d5		0	0.50
S	4-Bromofluorobenzene		1.00	0.50
X	2,3-Dimethylpentane		0	0.20
X	2-Methylpentane		0	0.20
X	Freon-114		0	0.50
X	Isopentane		0	0.20
X	Chlorodifluoromethane		0.04	0.50
X	Propylene		0.03	0.50
X	Isobutene		0.03	0.50
X	1,3-Butadiene		0.05	0.50
X	Acetaldehyde		0.10	0.50
X	Pentane		0.04	0.50
X	Isoprene		0.04	0.50
X	Ethanol		0.12	0.50
X	Iodomethane		0.04	0.50
X	Propanal		0.04	0.50
X	Isopropanol		0.04	0.50
X	Allyl Chloride		0.04	0.50
X	tert-Butyl Alcohol		0.08	0.50
X	Vinyl bromide		0.03	0.50
X	Acrolein		0.05	0.50
X	Cyclopentane		0.04	0.50
X	Ethyl acetate		0	0.50
X	n-Hexane		0.03	0.50
X	Acetonitrile		0.04	0.50
X	Methacrolein		0.07	0.50
X	1-Propanol		0.15	0.50
X	Acrylonitrile		0.06	0.50
X	1,2-Dichloroethene (total)		0.09	0.50
X	Butanal		0.08	0.50
X	Tetrahydrofuran		0.07	0.50
X	Methyl vinyl ketone		0.07	0.50
X	Cyclohexane		0.09	0.50
X	Thiophene		0	0.50
X	1-Butanol		0.08	0.50
X	1,4-Dioxane		0.04	0.50
X	2,2,4-Trimethylpentane		0.06	0.50
X	Methyl methacrylate		0.04	0.50
X	2-Pentanone		0.04	0.50
X	3-Pentanone		0.04	0.50
X	Pentanal		0	0.50

NJGIAM005 V11

H2M LABS INC

Date: 12-Dec-13

Test Code: TO-15
Test Number: ETO-15
Test Name: VOCS IN AIR
Matrix: Air **Units:** ppbv

METHOD DETECTION / REPORTING LIMITS

Type	Analyte	Synonym	MDL	PQL
X	n-Heptane		0.06	0.50
X	3-Hexanone		0.04	0.50
X	Hexanal		0.16	0.50
X	Xylene (total)		0.03	0.50
X	2-Chlorotoluene		0.06	0.50
X	n-Propylbenzene		0.05	0.50
X	4-Ethyltoluene		0.06	0.50
X	tert-Butylbenzene		0	0.50
X	sec-Butylbenzene		0	0.50
X	4-Isopropyltoluene		0	0.50
X	Isopropylbenzene		0.06	0.50
X	n-Butylbenzene		0	0.50
X	1,2,3-Trimethylbenzene		0	0.50
X	Benzyl chloride		0.03	0.50
X	Indan		0	0.50
X	Indene		0	0.50
X	1,2,4,5-Tetramethylbenzene		0	0.50
X	Naphthalene		0	0.50
X	2-Methylnaphthalene		0	0.50
X	1-Methylnaphthalene		0	0.50

NJGIAM005 V12

H 2 M labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

II. SAMPLE DATA PACKAGE FOR VOLATILE ORGANICS

A. REPORTS
B. RAW DATA

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

QUALIFIERS FOR REPORTING ORGANICS DATA

Value - If the result is a value greater than or equal to the quantification limit, report the value.

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(300\ U)}{D} \times df \text{ where } D = \frac{100\% moisture}{100}$$

and df - dilution factor

For example, at 24% moisture, $D = \frac{100 - 24}{100} = 0.76$

$$\frac{(300\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For semivolatile soil samples, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Similarly, pesticide samples subjected to GPC are concentrated to 5.0 mL. Therefore, the CRQL values in Exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume (see Exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified quantification limit but greater than zero. (e.g.: If limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3J.) The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported of Form I with a "P".

C - This flag applies to pesticide results when the identification has been confirmed by GC/MS.. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag, instead use a Laboratory defined flag, discussed below.

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575 Broad Hollow Road tel 631.694.3040
Melville, NY 11747 fax 631.420.8436

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified target compound.

E - This flag identified compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration ranges in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g. a diluted analysis is not required for total xylenes unless the concentration of the peak representing the single isomer exceed 200 ug/L or the peak representing the two coeluting isomers on that GC column exceed 400 ug/L. Similarly, if the two 1,2-Dichloroethene isomers coelute, a diluted analysis is not required unless the concentration exceed 400 ug/L.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG narrative. Begin by using "X". If more than one flag is required use "Y" and "Z" as needed. If more than five qualifiers are required for a sample result, used the "X" flag to combine several flags as needed. For instance, the "X" flag might combine "A", "B", and "D" flags for some samples. The laboratory defined flags limited to the letters "X", "Y" and "Z".

The combination of flags "BU' or "UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are detected in the sample.

Y Suspected secondary contamination.

X Analyte is suspected column bleed

Z Analyte had a %D greater then 20% in the daily CCV

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

CODES FOR MANUAL CORRECTIONS

T: Transcription error

CE: Calculation error

CC: Changed per client request

SC: Sample cancelled

LB: Wrong spot in logbook

MP: Missed peak

MIP: Misintegrated peak

WI: Wrong isomer

TI: Total of isomers

H2M labs
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Venus Estates

Lab No. : **1312347-001**

Client Sample ID: **SV-1**

Sample Information:
Type : Air

Origin:

Attn To : Blair Sonzogni
Collected : 12/3/2013 11:28:00 AM
Received : 12/5/2013 12:00:00 PM
Collected By : LMM99

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.50	ppbv		1	< 2.73	µg/m³	12/10/2013 9:12 PM
1,1,2,2-Tetrachloroethane	< 0.50	ppbv		1	< 3.43	µg/m³	12/10/2013 9:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.50	ppbv		1	< 3.83	µg/m³	12/10/2013 9:12 PM
1,1,2-Trichloroethane	< 0.50	ppbv		1	< 2.73	µg/m³	12/10/2013 9:12 PM
1,1-Dichloroethane	< 0.50	ppbv		1	< 2.02	µg/m³	12/10/2013 9:12 PM
1,1-Dichloroethene	< 0.50	ppbv		1	< 1.98	µg/m³	12/10/2013 9:12 PM
1,2,4-Trichlorobenzene	< 0.50	ppbv	S	1	< 3.71	µg/m³	12/10/2013 9:12 PM
1,2,4-Trimethylbenzene	16.3	ppbv		1	80.2	µg/m³	12/10/2013 9:12 PM
1,2-Dibromoethane	< 0.50	ppbv		1	< 3.84	µg/m³	12/10/2013 9:12 PM
1,2-Dichlorobenzene	< 0.50	ppbv		1	< 3.01	µg/m³	12/10/2013 9:12 PM
1,2-Dichloroethane	< 0.50	ppbv		1	< 2.02	µg/m³	12/10/2013 9:12 PM
1,2-Dichloroethene (cis)	0.20	ppbv	J	1	0.79	µg/m³	12/10/2013 9:12 PM
1,2-Dichloroethene (trans)	< 0.50	ppbv		1	< 1.98	µg/m³	12/10/2013 9:12 PM
1,2-Dichloropropane	< 0.50	ppbv		1	< 2.31	µg/m³	12/10/2013 9:12 PM
1,2-Dichlorotetrafluoroethane	< 0.50	ppbv		1	< 3.50	µg/m³	12/10/2013 9:12 PM
1,3,5-Trimethylbenzene	4.62	ppbv		1	22.7	µg/m³	12/10/2013 9:12 PM
1,3-Dichlorobenzene	< 0.50	ppbv		1	< 3.01	µg/m³	12/10/2013 9:12 PM
1,3-Dichloropropene (cis)	< 0.50	ppbv		1	< 2.27	µg/m³	12/10/2013 9:12 PM
1,3-Dichloropropene (trans)	< 0.50	ppbv		1	< 2.27	µg/m³	12/10/2013 9:12 PM
1,3-Hexachlorobutadiene	< 0.50	ppbv		1	< 5.33	µg/m³	12/10/2013 9:12 PM
1,4-Dichlorobenzene	< 0.50	ppbv		1	< 3.01	µg/m³	12/10/2013 9:12 PM
Acetone	26.8	ppbv		1	63.7	µg/m³	12/10/2013 9:12 PM
Benzene	0.54	ppbv		1	1.73	µg/m³	12/10/2013 9:12 PM
Bromodichloromethane	< 0.50	ppbv		1	< 3.35	µg/m³	12/10/2013 9:12 PM
Bromoform	< 0.50	ppbv		1	< 5.17	µg/m³	12/10/2013 9:12 PM
Bromomethane	< 0.50	ppbv		1	< 1.94	µg/m³	12/10/2013 9:12 PM
Carbon disulfide	0.24	ppbv	J	1	0.75	µg/m³	12/10/2013 9:12 PM
Carbon tetrachloride	< 0.50	ppbv		1	< 3.15	µg/m³	12/10/2013 9:12 PM
Chlorobenzene	< 0.50	ppbv		1	< 2.30	µg/m³	12/10/2013 9:12 PM
Chloroethane	< 0.50	ppbv		1	< 1.32	µg/m³	12/10/2013 9:12 PM
Chloroform	12.5	ppbv		1	60.8	µg/m³	12/10/2013 9:12 PM
Chloromethane	0.47	ppbv	J	1	0.97	µg/m³	12/10/2013 9:12 PM
Dibromochloromethane	< 0.50	ppbv		1	< 4.26	µg/m³	12/10/2013 9:12 PM
Dichlorodifluoromethane	1.80	ppbv		1	8.90	µg/m³	12/10/2013 9:12 PM
Ethylbenzene	1.62	ppbv		1	7.04	µg/m³	12/10/2013 9:12 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
H = Received/analyzed outside of analytical holding time
+ = ELAP / NELAC does not offer certification for this analyte
c = Calibration acceptability criteria exceeded for this analyte
r = Reporting limit > MDL and < LOQ, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

H2M labs
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Venus Estates

Lab No. : **1312347-001**

Client Sample ID: **SV-1**

Sample Information:
Type : Air

Origin:

Attn To : Blair Sonzogni
Collected : 12/3/2013 11:28:00 AM
Received : 12/5/2013 12:00:00 PM
Collected By : LMM99

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
Methyl butylk etone	< 0.50	ppbv	+	1	< 2.05	µg/m³	12/10/2013 9:12 PM
Methyl ethyl ketone	1.41	ppbv		1	4.16	µg/m³	12/10/2013 9:12 PM
Methyl isobutyl ketone	< 0.50	ppbv		1	< 2.05	µg/m³	12/10/2013 9:12 PM
Methyl tert-butyl ether	< 0.50	ppbv		1	< 1.80	µg/m³	12/10/2013 9:12 PM
Methylene chloride	0.28	ppbv	J	1	1.09	µg/m³	12/10/2013 9:12 PM
Styrene	< 0.50	ppbv		1	< 2.13	µg/m³	12/10/2013 9:12 PM
Tetrachloroethene	3,240	ppbv	D	200	22000	µg/m³	12/10/2013 11:44 PM
Toluene	522	ppbv	D	200	1970	µg/m³	12/10/2013 11:44 PM
Trichloroethene	2.79	ppbv		1	15.0	µg/m³	12/10/2013 9:12 PM
Trichlorofluoromethane	0.29	ppbv	J	1	1.63	µg/m³	12/10/2013 9:12 PM
Vinyla cetate	< 0.50	ppbv		1	< 1.76	µg/m³	12/10/2013 9:12 PM
Vinylc hloride	< 0.50	ppbv		1	< 1.28	µg/m³	12/10/2013 9:12 PM
Xylenes (m&p)	4.18	ppbv		1	18.2	µg/m³	12/10/2013 9:12 PM
Xylenes (o)	2.32	ppbv		1	10.1	µg/m³	12/10/2013 9:12 PM
Surr:4 -Bromofluorobenzene	117	%REC	Limit: 70-130		No M.W. Data		12/10/2013 9:12 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
H = Received/analyzed outside of analytical holding time
+ = ELAP / NELAC does not offer certification for this analyte
c = Calibration acceptability criteria exceeded for this analyte
r = Reporting limit > MDL and < LOQ, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Joann M. Slavin
Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

1F

EPA SAMPLE NO.

SV-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Matrix: (soil/water) AIR Lab Sample ID: 1312347-001A

Sample wt/vol: 400 (g/mL) ML Lab File ID: 3\I11434.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/10/13

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

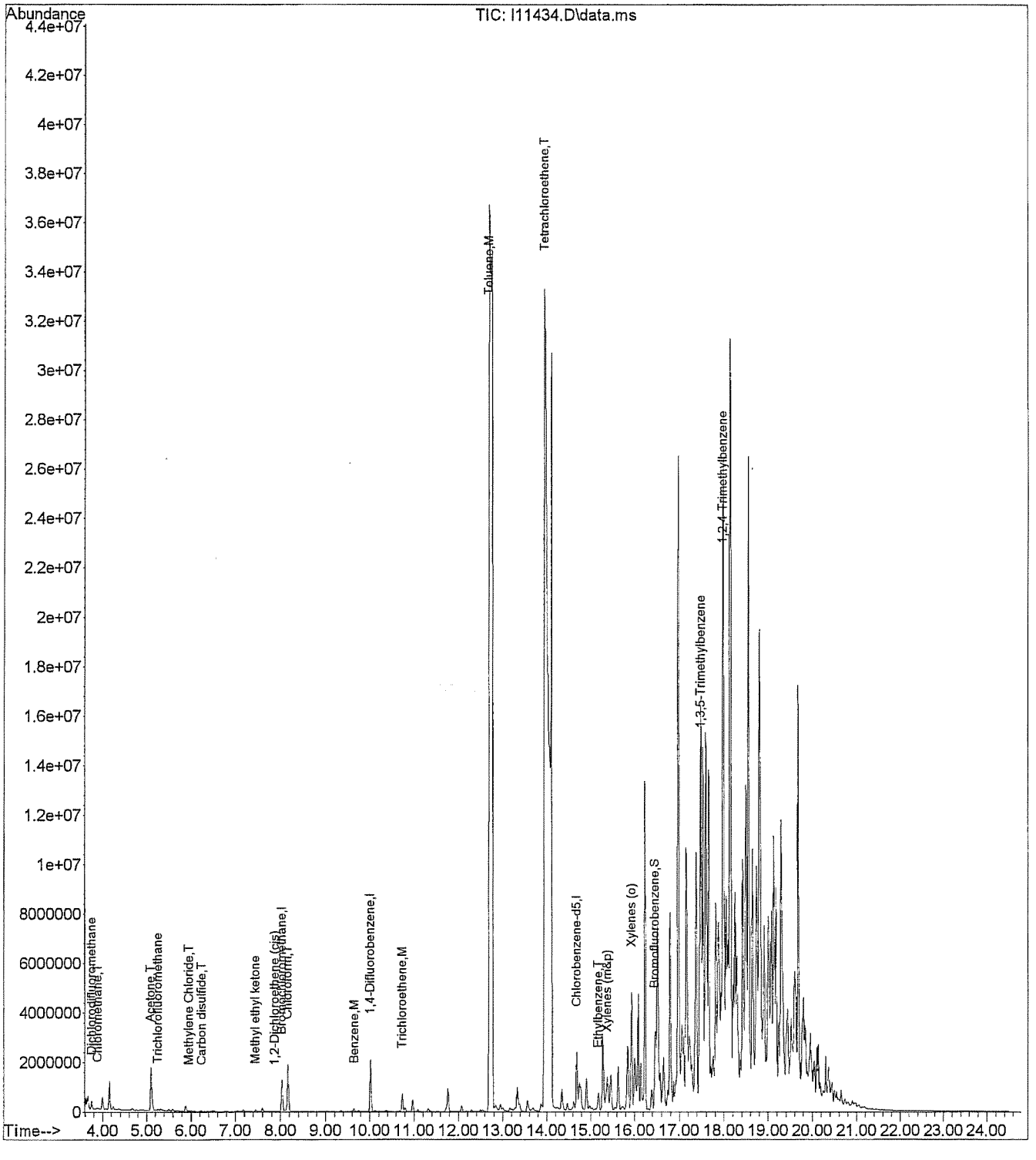
Number TICs found: 45 (µg/L or µg/Kg) ppbv

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	(DEL) Alkane: Straight-Chain (16.23)	16.23	49	J
2.	(DEL) Alkane: Cyclic (16.98)	16.98	110	J
3.	(DEL) Alkane: Branched (17.16)	17.16	48	J
4.	(DEL) Alkane: Branched+Unknown	17.38	46	J
5.	(DEL) Alkane: Cyclic (17.59)	17.59	79	J
6.	(DEL) Alkane: Branched (17.66)	17.66	45	J
7.	(DEL) Alkane: Cyclic (17.88)	17.88	43	J
8.	(DEL) Alkane: Cyclic (18.05)	18.05	37	J
9.	(DEL) Alkane: Straight-Chain (18.14)	18.14	160	J
10. MH 12-13-13	~~(DEL) Alkane: Straight-Chain~~+ Unknown	18.42	39	J
11.	Unknown(18.5)	18.50	72	J
12.	(DEL) Alkane: Branched (18.56)	18.56	98	J
13.	unknown	18.65	45	J
14.	(DEL) Alkane: Branched+Unknown (18.74)	18.74	48	J
15.	(DEL) Alkane: Cyclic (18.81)	18.81	110	J
16.	c4-subs.benzene +Unknown	19.00	38	J
17.	(DEL) Alkane: Branched (19.13)	19.13	47	J
18.	Naphthalene, decahydro- isomer	19.29	63	J
19.	(DEL) Alkane: Straight-Chain (19.68)	19.68	56	J

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D Vial: 12
Acq On : 10 Dec 2013 21:12 Operator: BBL
Sample : 1312347-001A Inst : h5973i
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118 Multiplr: 1.00
Quant Time: Dec 10 22:05:11 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M



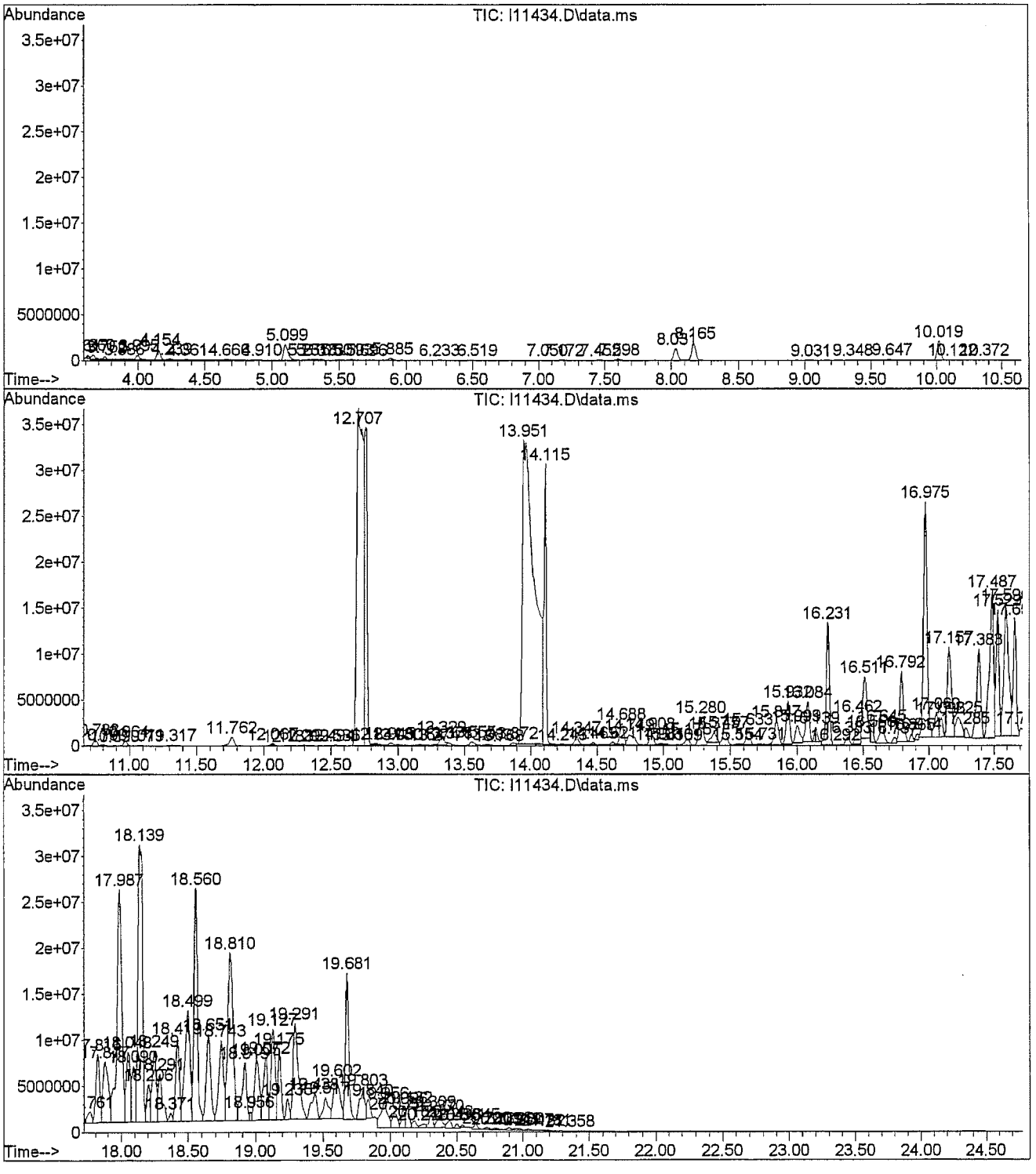
NJGIAM005 V20

LSC Report - Integrated Chromatogram

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



NJGIAM005 V21

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D Vial: 12
Acq On : 10 Dec 2013 21:12 Operator: BBL
Sample : 1312347-001A Inst : h5973i
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118 Multiplr: 1.00
Quant Time: Dec 10 22:05:11 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.037	128	419362	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	10.019	114	1880677	10.00	ppbv	0.00
55) Chlorobenzene-d5	14.688	117	1404191	10.00	ppbv	0.02
System Monitoring Compounds						
66) Bromofluorobenzene	16.456	95	1031296	11.69	ppbv	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	3.752	85	294947	1.80	ppbv	99
5) Chloromethane	3.886	50	22894	0.47	ppbv	99
12) Methylene Chloride	5.952	49	19195	0.28	ppbv	99
17) Acetone	5.099	43	2286835	26.83	ppbv	100
20) Carbon disulfide	6.239	76	40853	0.24	ppbv	98
24) Trichlorofluoromethane	5.257	101	55021	0.29	ppbv	98
31) 1,2-Dichloroethene (cis)	7.879	96	11910	0.20	ppbv	98
34) Methyl ethyl ketone	7.452	43	114250	1.41	ppbv	99
35) Chloroform	8.165	83	1605066	12.45	ppbv	99
48) Trichloroethene	10.738	130	255391	2.79	ppbv	97
49) Benzene	9.647	78	110617	0.54	ppbv	97
61) Tetrachloroethene	13.969	166	42104694m	381.40	ppbv	
63) Toluene	12.701	92	43458563	325.35	ppbv #	46
65) Ethylbenzene	15.182	91	453928	1.62	ppbv	100
68) Xylenes (m&p)	15.377	91	977298	4.18	ppbv	99
69) Xylenes (o)	15.932	91	496555	2.32	ppbv	98
74) 1,3,5-Trimethylbenzene	17.493	105	1040404	4.62	ppbv	98
75) 1,2,4-Trimethylbenzene	17.974	105	3363965	16.31	ppbv	97

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

12/17/13

NJGIAM005 V22

Tentatively Identified Compound (LSC) summary

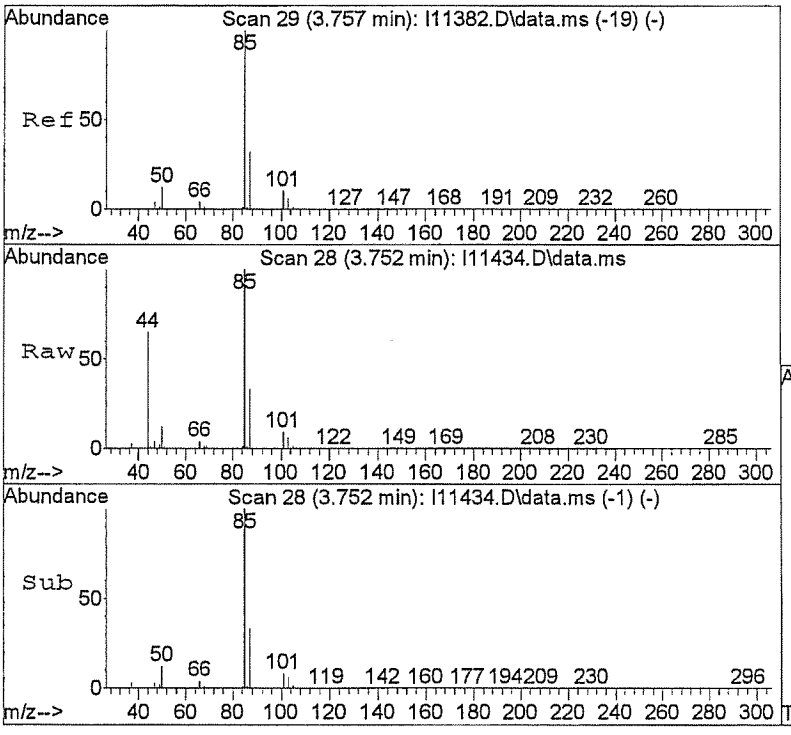
Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Tetrachloroethy...	14.115	76.6	ppbv	35452900	3	14.688	4630760	10.0
Nonane	16.231	49.3	ppbv	22806700	3	14.688	4630760	10.0
Cyclohexane, pr...	16.975	109.1	ppbv	50498600	3	14.688	4630760	10.0
Heptane, 3-ethy...	17.157	47.8	ppbv	22156100	3	14.688	4630760	10.0
Heptane, 2,3-di...	17.383	46.1	ppbv	21329900	3	14.688	4630760	10.0
Cyclohexane, 1,...	17.590	78.8	ppbv	36488200	3	14.688	4630760	10.0
Nonane, 3-methyl-	17.657	45.1	ppbv	20889500	3	14.688	4630760	10.0
Cyclohexane, 1-...	17.877	43.4	ppbv	20089400	3	14.688	4630760	10.0
Cyclohexane, 1-...	18.047	36.9	ppbv	17075100	3	14.688	4630760	10.0
Decane	18.139	161.3	ppbv	74679900	3	14.688	4630760	10.0
Octane	18.419	39.3	ppbv	18191300	3	14.688	4630760	10.0
E-1,6-Undecadiene	18.499	72.4	ppbv	33547300	3	14.688	4630760	10.0
Nonane, 2,6-dim...	18.560	98.4	ppbv	45565400	3	14.688	4630760	10.0
Oxalic acid, cy...	18.651	45.1	ppbv	20889300	3	14.688	4630760	10.0
Decane, 3-methyl-	18.743	48.2	ppbv	22322100	3	14.688	4630760	10.0
Cyclohexane, bu...	18.810	108.7	ppbv	50353300	3	14.688	4630760	10.0
Benzene, 1-meth...	19.005	37.7	ppbv	17450500	3	14.688	4630760	10.0
Decane, 4-methyl-	19.127	47.4	ppbv	21935400	3	14.688	4630760	10.0
Naphthalene, de...	19.291	63.3	ppbv	29311900	3	14.688	4630760	10.0
Undecane	19.681	56.3	ppbv	26089500	3	14.688	4630760	10.0

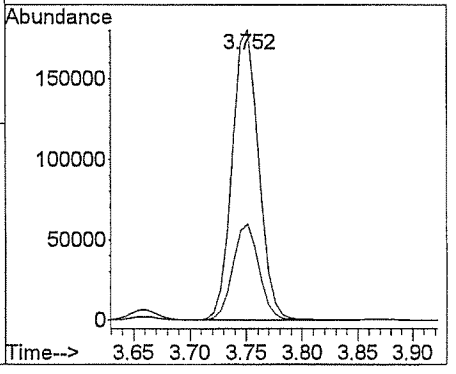
NJGIAM005 V23

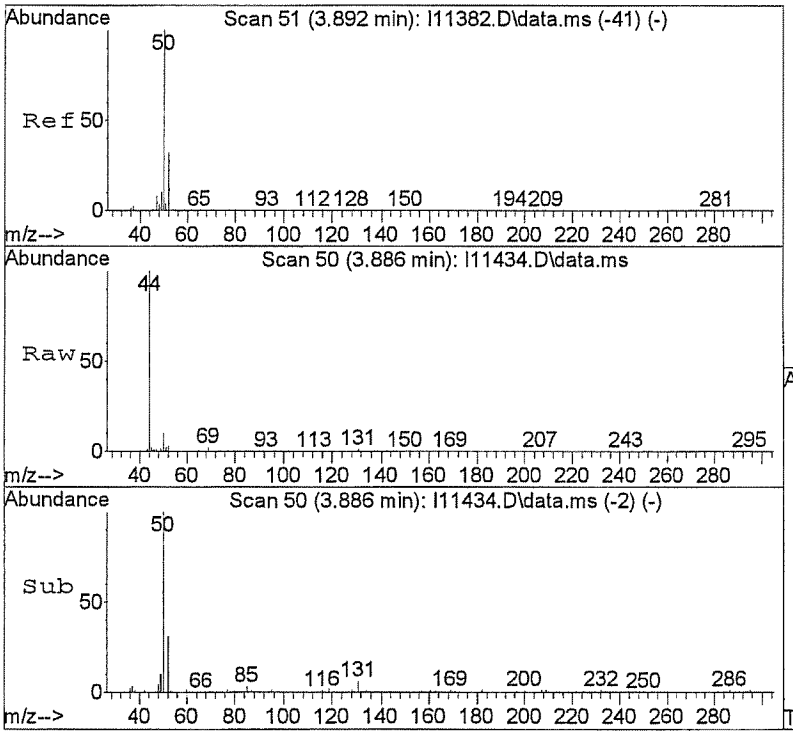


#3
Dichlorodifluoromethane
Concen: 1.80 ppbv
RT: 3.752 min Scan# 28
Delta R.T. -0.006 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 85 Resp: 294947

Ion	Ratio	Lower	Upper
85	100		
87	33.1	12.5	52.5

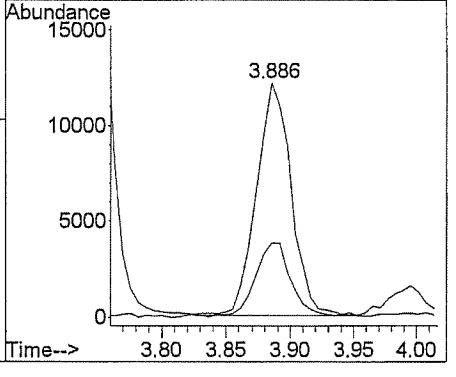




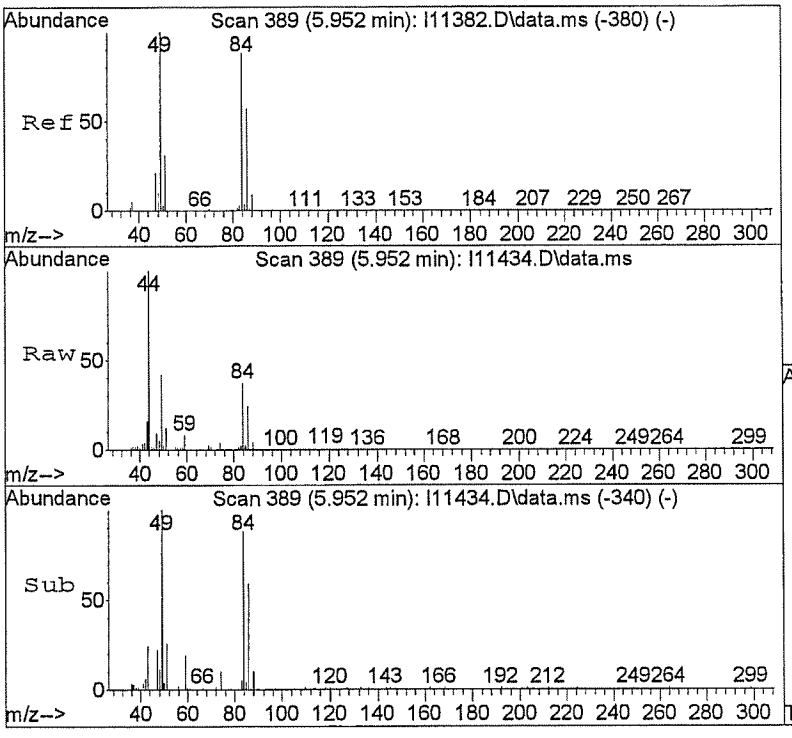
#5
Chloromethane
Concen: 0.47 ppbv
RT: 3.886 min Scan# 50
Delta R.T. -0.006 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 50 Resp: 22894

Ion	Ratio	Lower	Upper
50	100		
52	31.5	12.3	52.3



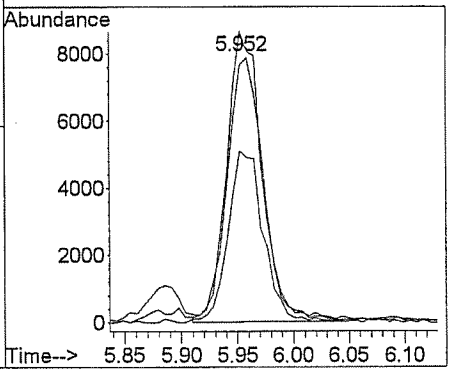
NJGIAM005 V24

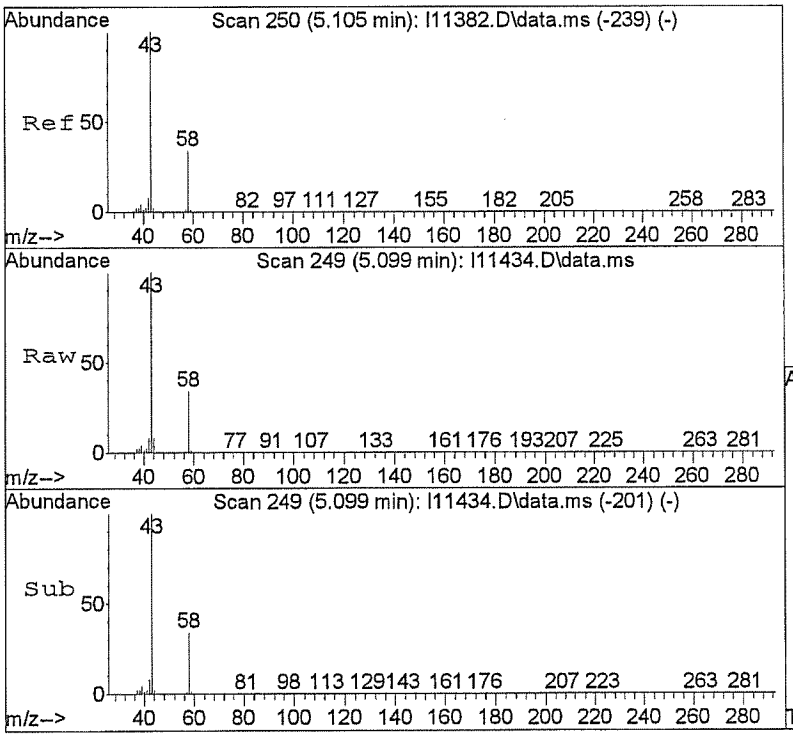


#12
Methylene Chloride
Concen: 0.28 ppbv
RT: 5.952 min Scan# 389
Delta R.T. 0.000 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 49 Resp: 19195

Ion	Ratio	Lower	Upper
49	100		
84	87.8	68.5	108.5
86	58.5	37.0	77.0

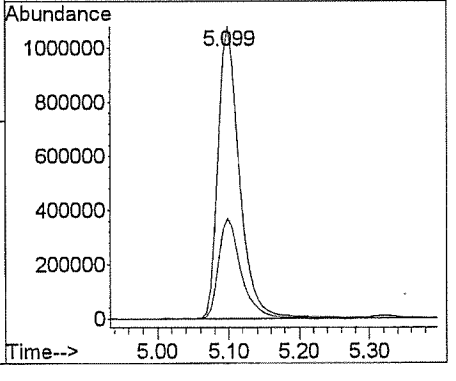




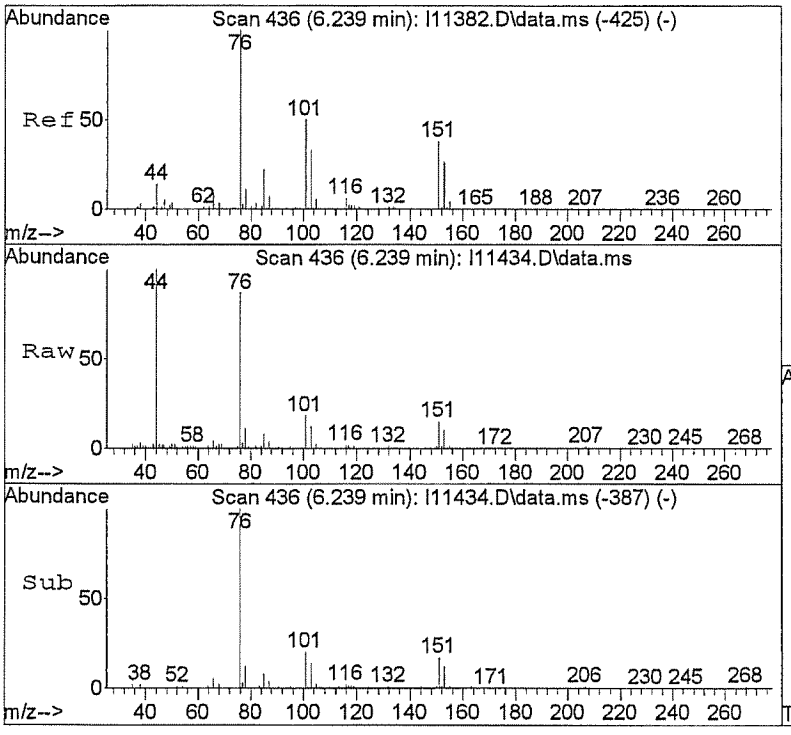
#17
Acetone
Concen: 26.83 ppbv
RT: 5.099 min Scan# 249
Delta R.T. -0.006 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 43 Resp: 2286835

Ion	Ratio	Lower	Upper
43	100		
58	34.4	14.1	54.1



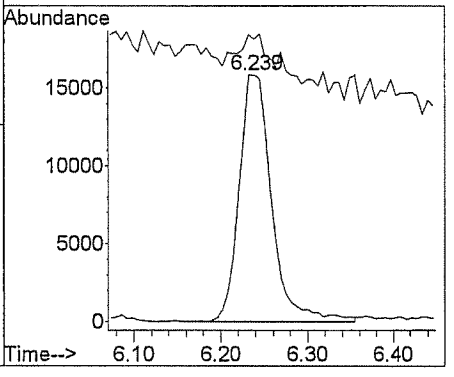
NJGIAM005 V25

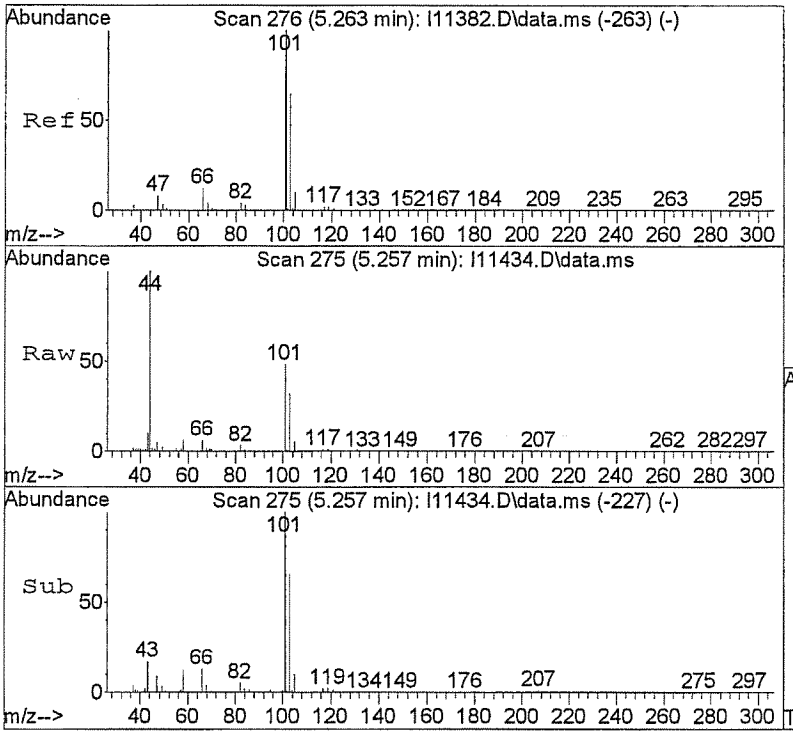


#20
Carbon disulfide
Concen: 0.24 ppbv
RT: 6.239 min Scan# 436
Delta R.T. 0.000 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 76 Resp: 40853

Ion	Ratio	Lower	Upper
76	100		
44	14.6	0.0	33.6

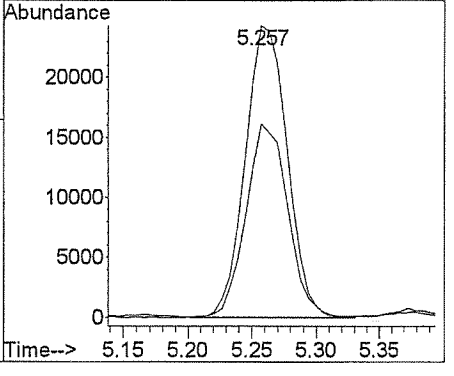




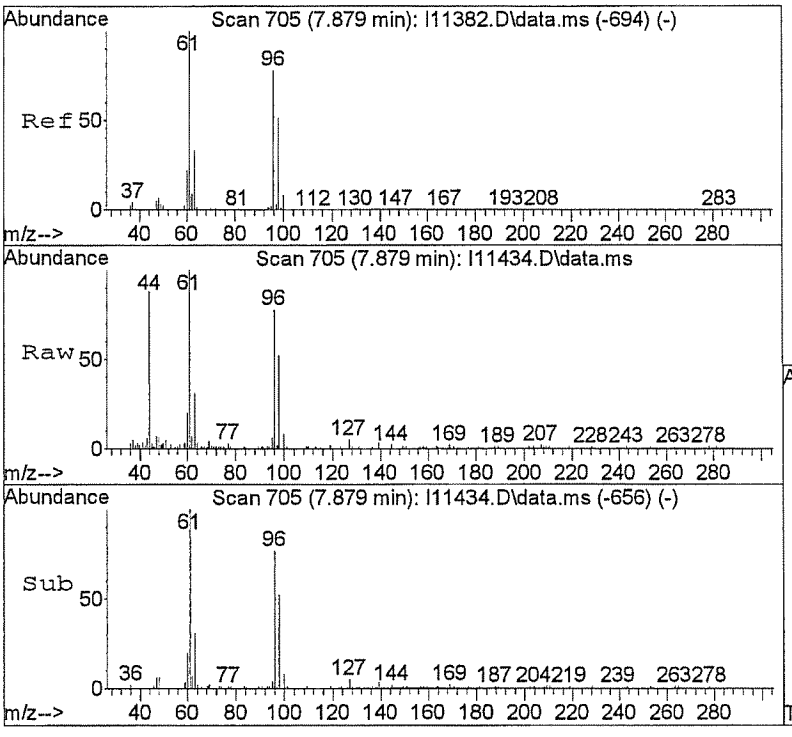
#24
Trichlorofluoromethane
Concen: 0.29 ppbv
RT: 5.257 min Scan# 275
Delta R.T. -0.006 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion:101 Resp: 55021

Ion	Ratio	Lower	Upper
101	100		
103	66.0	44.7	84.7



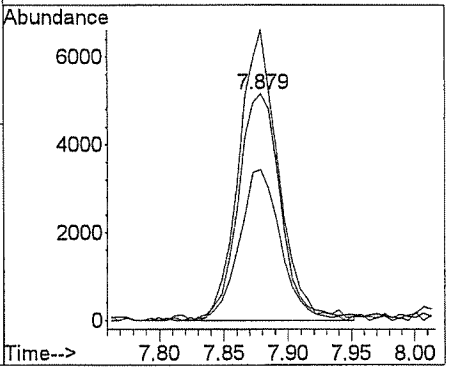
NJGIAM005 V26

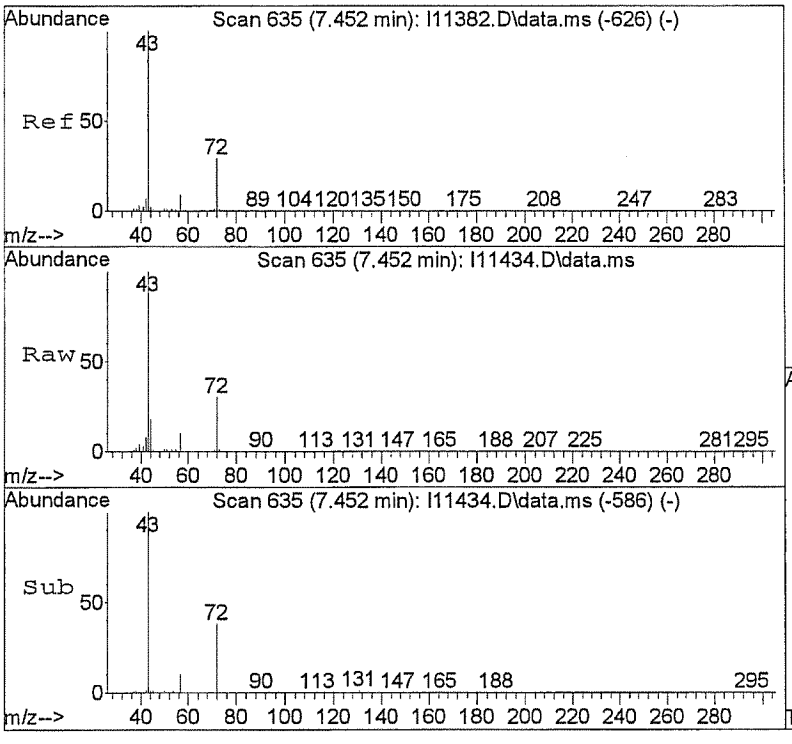


#31
1,2-Dichloroethene (cis)
Concen: 0.20 ppbv
RT: 7.879 min Scan# 705
Delta R.T. 0.000 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 96 Resp: 11910

Ion	Ratio	Lower	Upper
96	100		
61	126.9	108.9	148.9
98	66.7	45.3	85.3

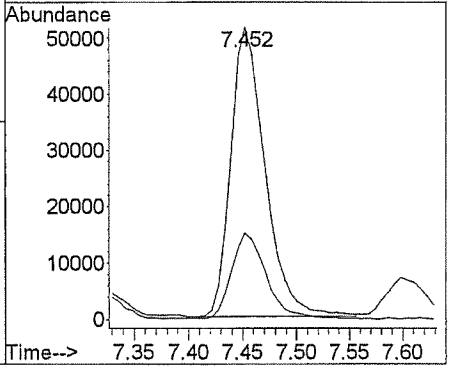




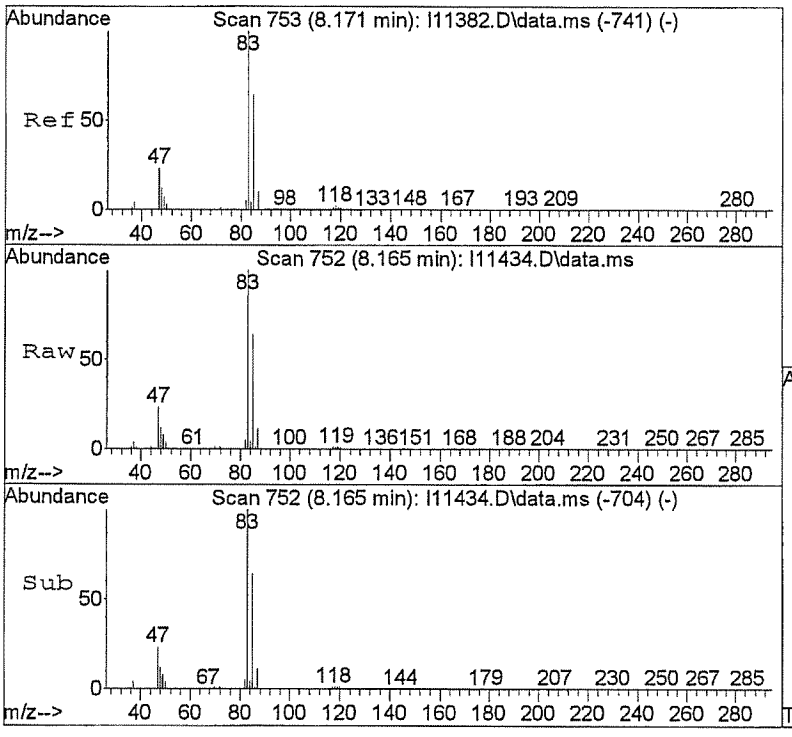
#34
Methyl ethyl ketone
Concen: 1.41 ppbv
RT: 7.452 min Scan# 635
Delta R.T. 0.000 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 43 Resp: 114250

Ion	Ratio	Lower	Upper
43	100		
72	29.7	9.2	49.2



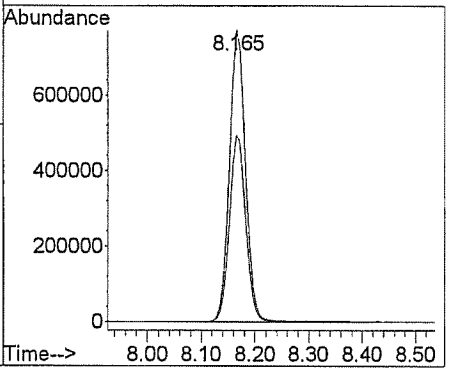
NJGIAM005 V27

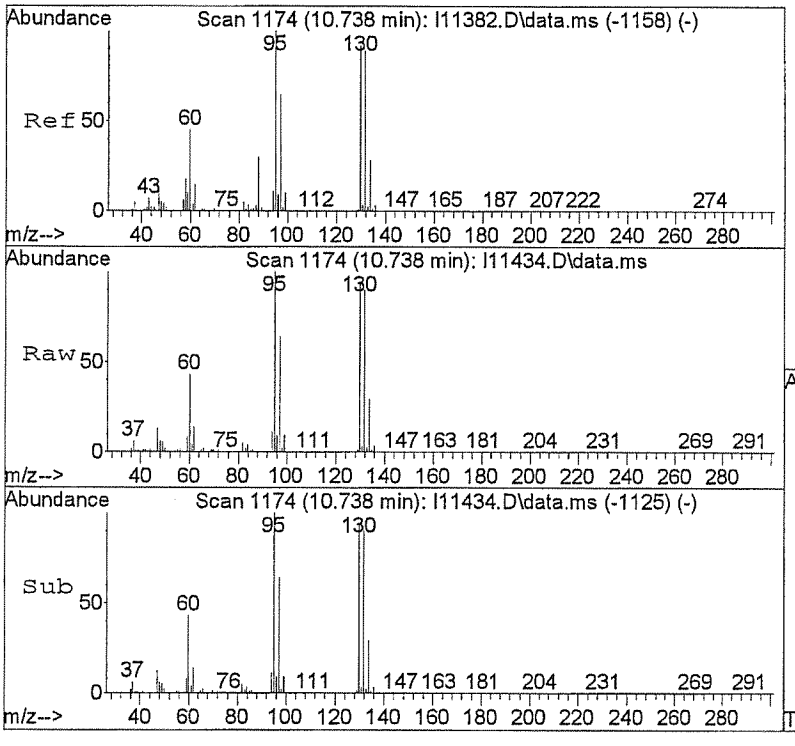


#35
Chloroform
Concen: 12.45 ppbv
RT: 8.165 min Scan# 752
Delta R.T. -0.006 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 83 Resp: 1605066

Ion	Ratio	Lower	Upper
83	100		
85	63.9	44.3	84.3

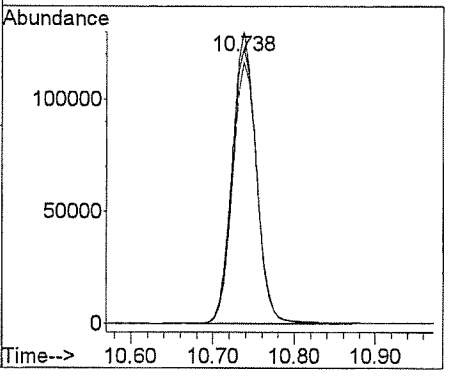




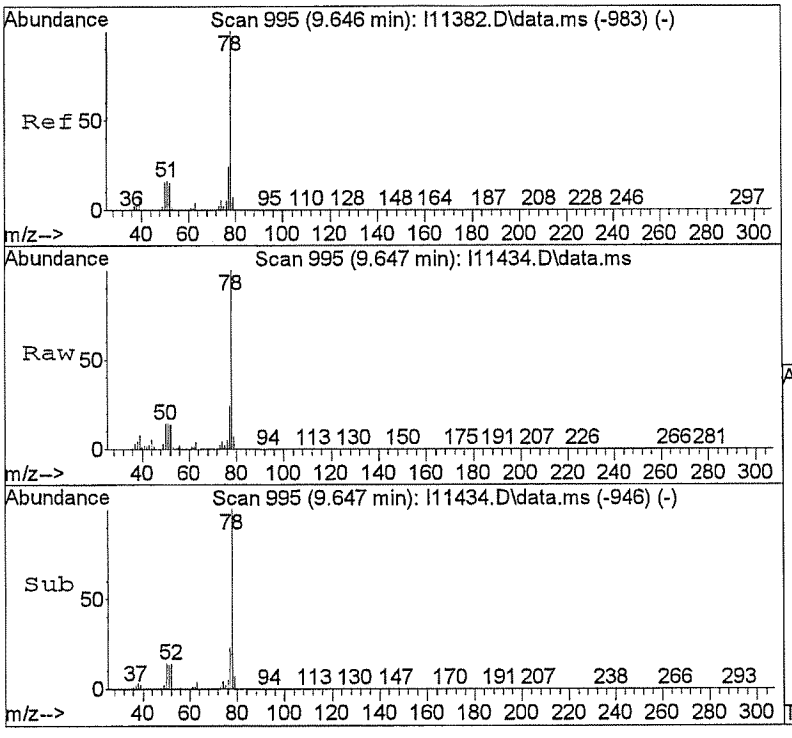
#48
Trichloroethene
Concen: 2.79 ppbv
RT: 10.738 min Scan# 1174
Delta R.T. 0.000 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion:130 Resp: 255391

Ion	Ratio	Lower	Upper
130	100		
132	94.8	77.2	117.2
95	105.9	89.3	129.3



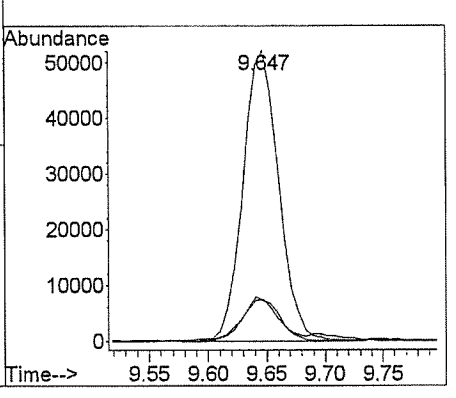
NJGIAM005 V28

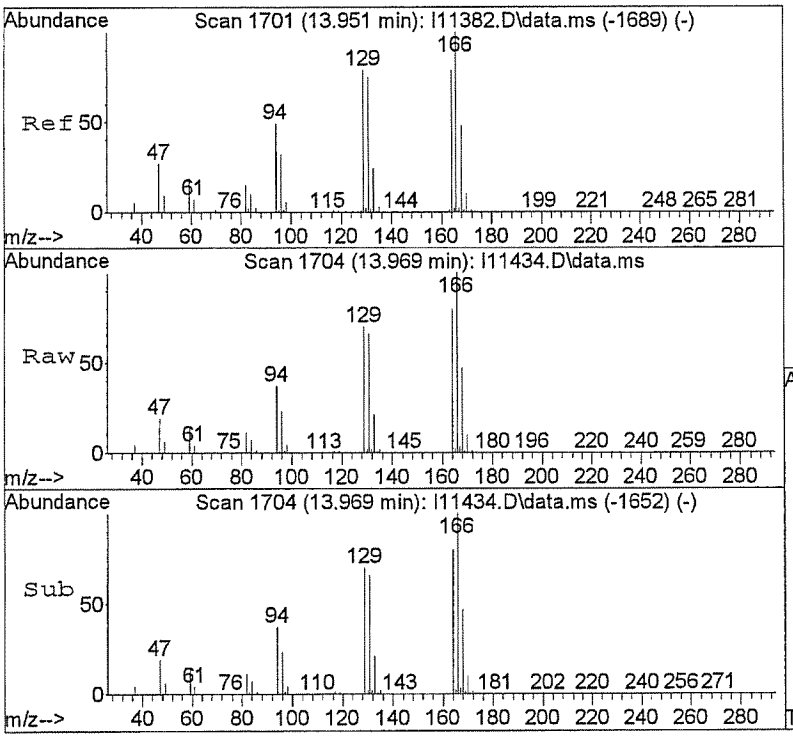


#49
Benzene
Concen: 0.54 ppbv
RT: 9.647 min Scan# 995
Delta R.T. 0.000 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 78 Resp: 110617

Ion	Ratio	Lower	Upper
78	100		
51	13.5	0.0	35.5
52	14.3	0.0	34.5

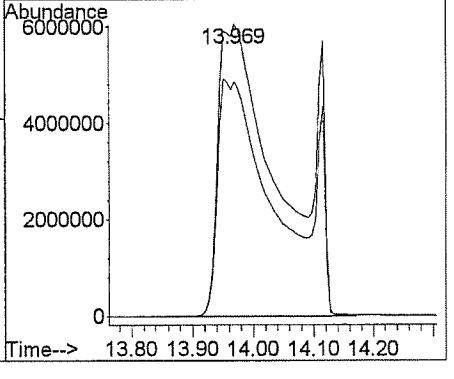




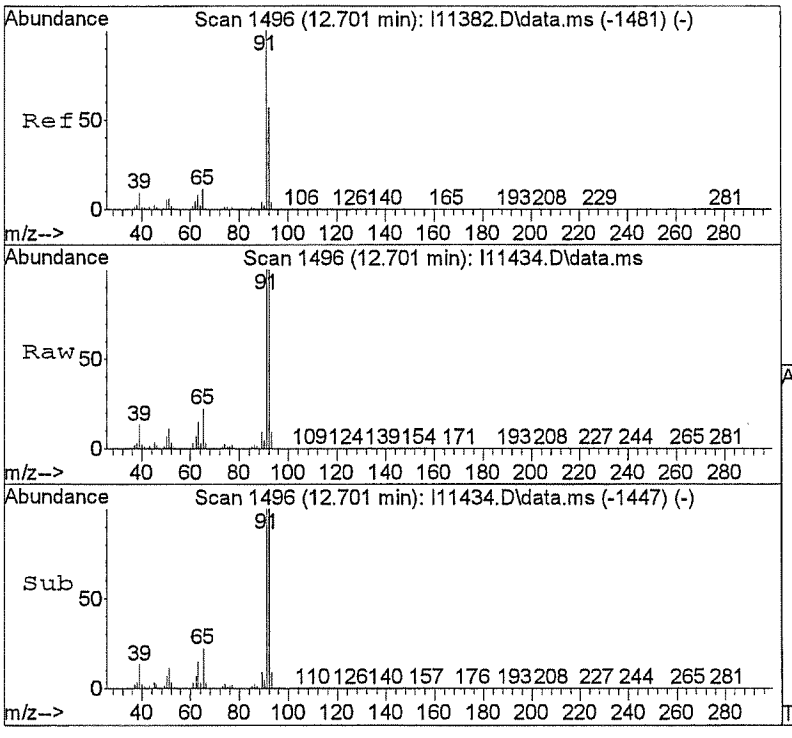
#61
Tetrachloroethene
Concen: 381.40 ppbv m
RT: 13.969 min Scan# 1704
Delta R.T. 0.019 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion:166 Resp:42104694

Ion	Ratio	Lower	Upper
166	100		
164	80.2	58.5	98.5



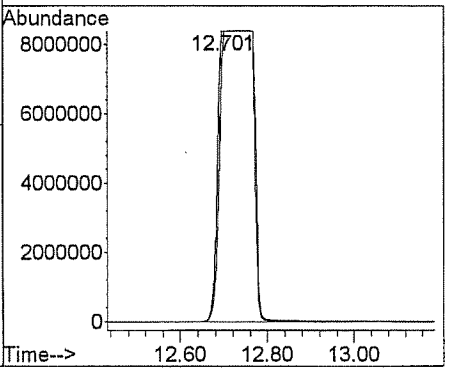
NJGIAM005 V29

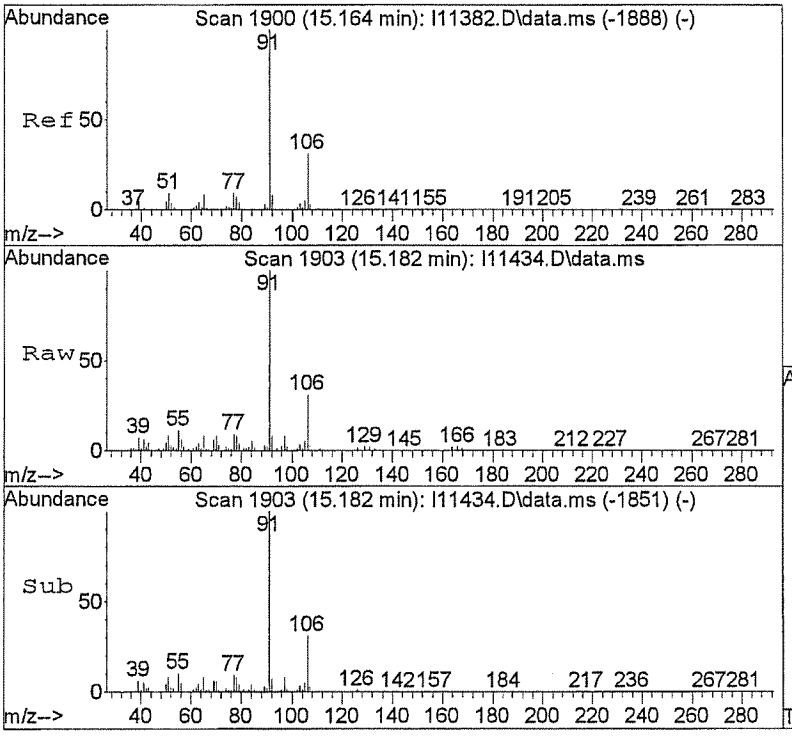


#63
Toluene
Concen: 325.35 ppbv
RT: 12.701 min Scan# 1496
Delta R.T. 0.000 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 92 Resp:43458563

Ion	Ratio	Lower	Upper
92	100		
91	100.0	155.1	195.1#

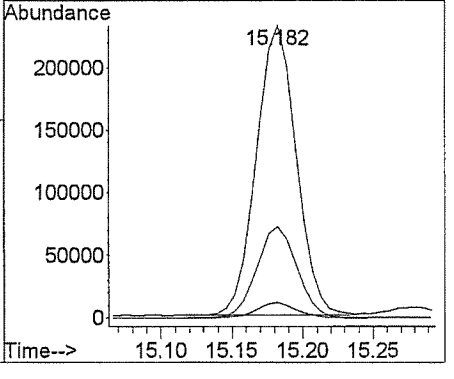




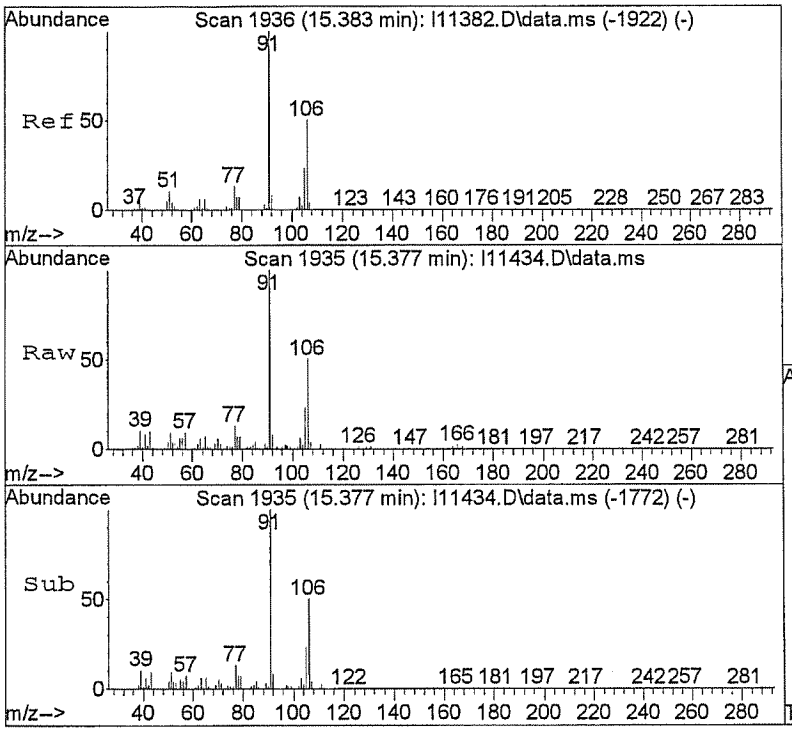
#65
Ethylbenzene
Concen: 1.62 ppbv
RT: 15.182 min Scan# 1903
Delta R.T. 0.019 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 91 Resp: 453928

Ion	Ratio	Lower	Upper
91	100		
106	31.4	11.4	51.4
105	5.3	0.0	25.0



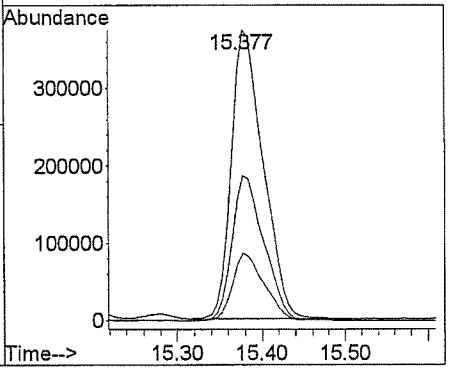
NJGIAM005 V30

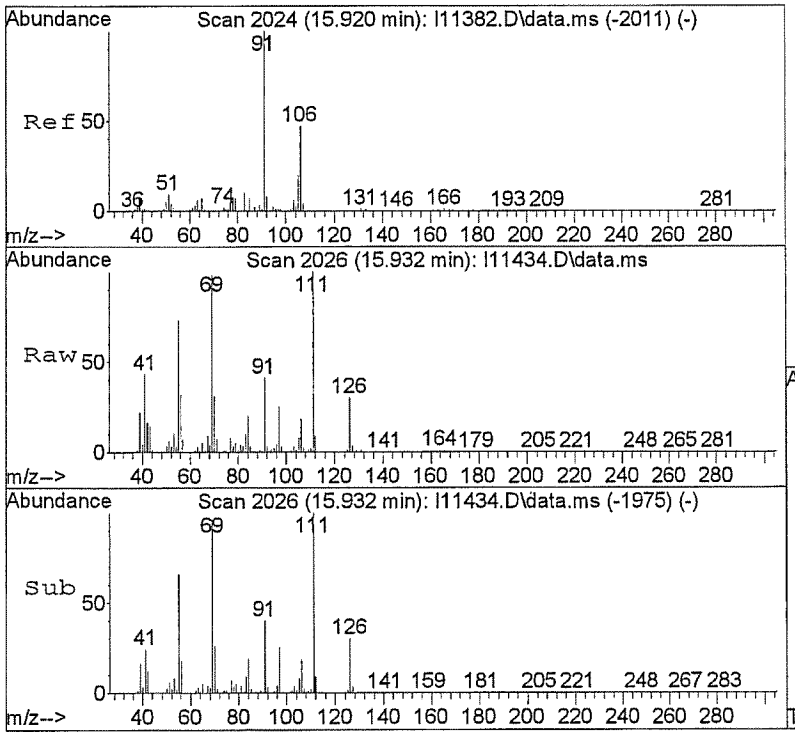


#68
Xylenes (m&p)
Concen: 4.18 ppbv
RT: 15.377 min Scan# 1935
Delta R.T. -0.006 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 91 Resp: 977298

Ion	Ratio	Lower	Upper
91	100		
106	50.2	29.5	69.5
105	23.2	3.4	43.4

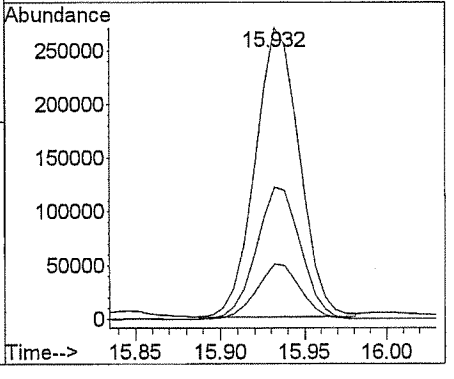




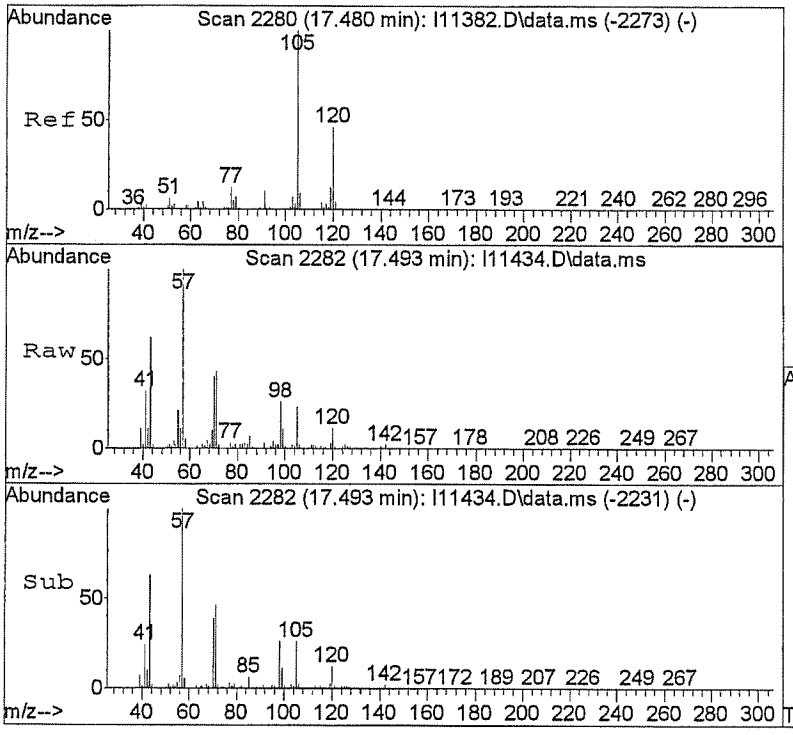
#69
Xylenes (o)
Concen: 2.32 ppbv
RT: 15.932 min Scan# 2026
Delta R.T. 0.012 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion: 91 Resp: 496555

Ion	Ratio	Lower	Upper
91	100		
106	45.7	26.9	66.9
105	19.0	0.0	39.8



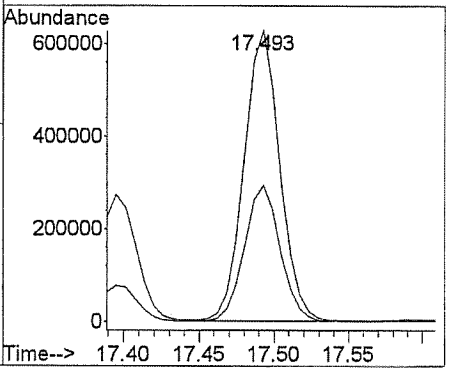
NJGIAM005 V31

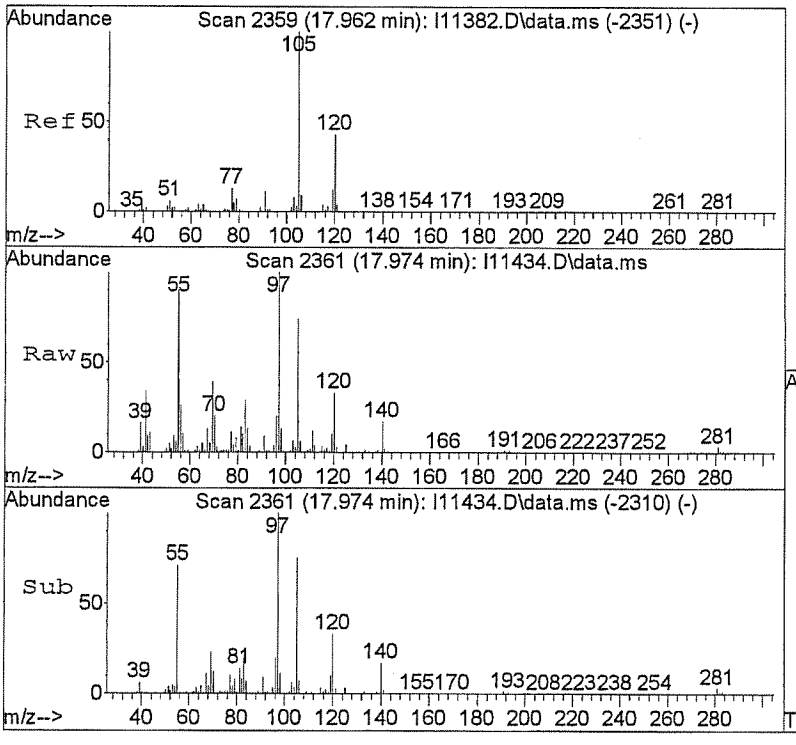


#74
1,3,5-Trimethylbenzene
Concen: 4.62 ppbv
RT: 17.493 min Scan# 2282
Delta R.T. 0.012 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion:105 Resp: 1040404

Ion	Ratio	Lower	Upper
105	100		
120	46.7	25.5	65.5

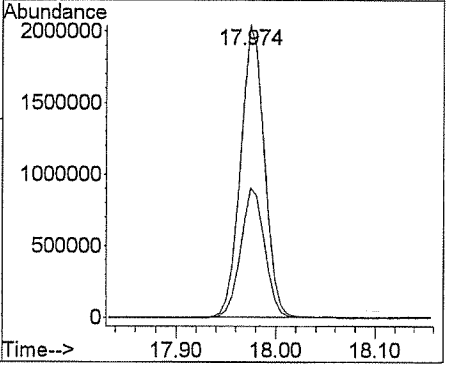




#75
1,2,4-Trimethylbenzene
Concen: 16.31 ppbv
RT: 17.974 min Scan# 2361
Delta R.T. 0.012 min
Lab File: I11434.D
Acq: 10 Dec 2013 21:12

Tgt Ion:105 Resp: 3363965

Ion	Ratio	Lower	Upper
105	100		
120	44.4	22.7	62.7



NJGIAM005 V32

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

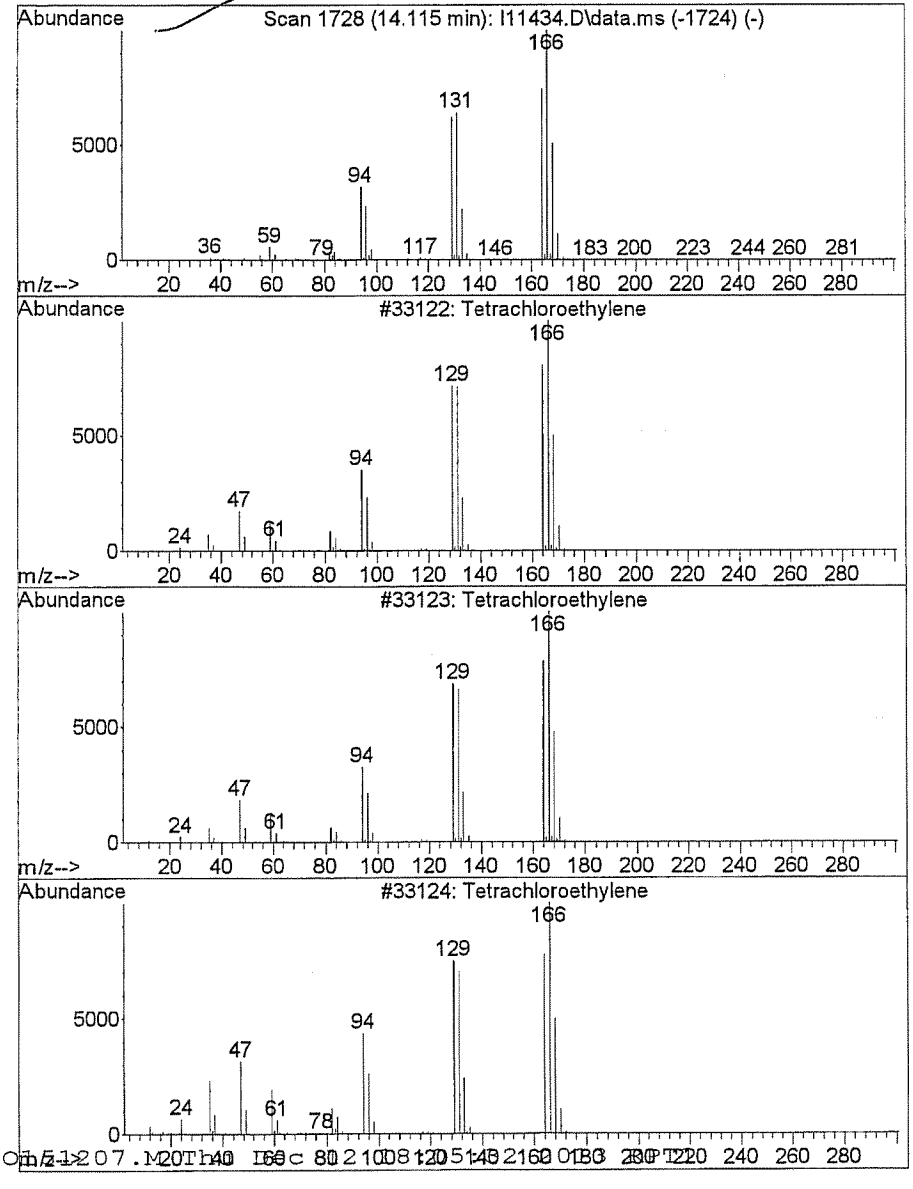
****

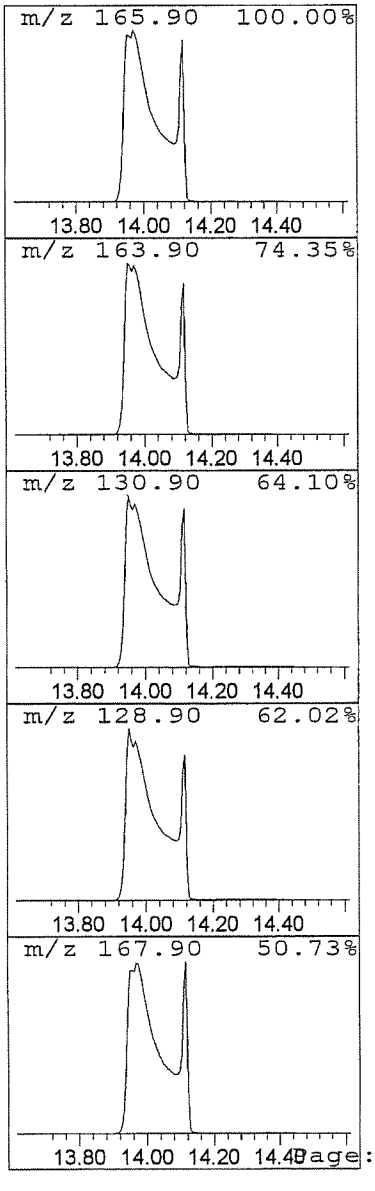
Peak Number 1 Tetrachloroethylene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.115	76.56 ppbv	35452900	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetrachloroethylene	164	C2Cl4	000127-18-4	94
2	Tetrachloroethylene	164	C2Cl4	000127-18-4	94
3	Tetrachloroethylene	164	C2Cl4	000127-18-4	94
4	Tetrachloroethylene	164	C2Cl4	000127-18-4	94
5	Pyrimidine, 5-fluoro-2,4-dichloro-	166	C4HCl2FN2	002927-71-1	38

Target
JR 12/12/13





NJGIAM005 V33

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

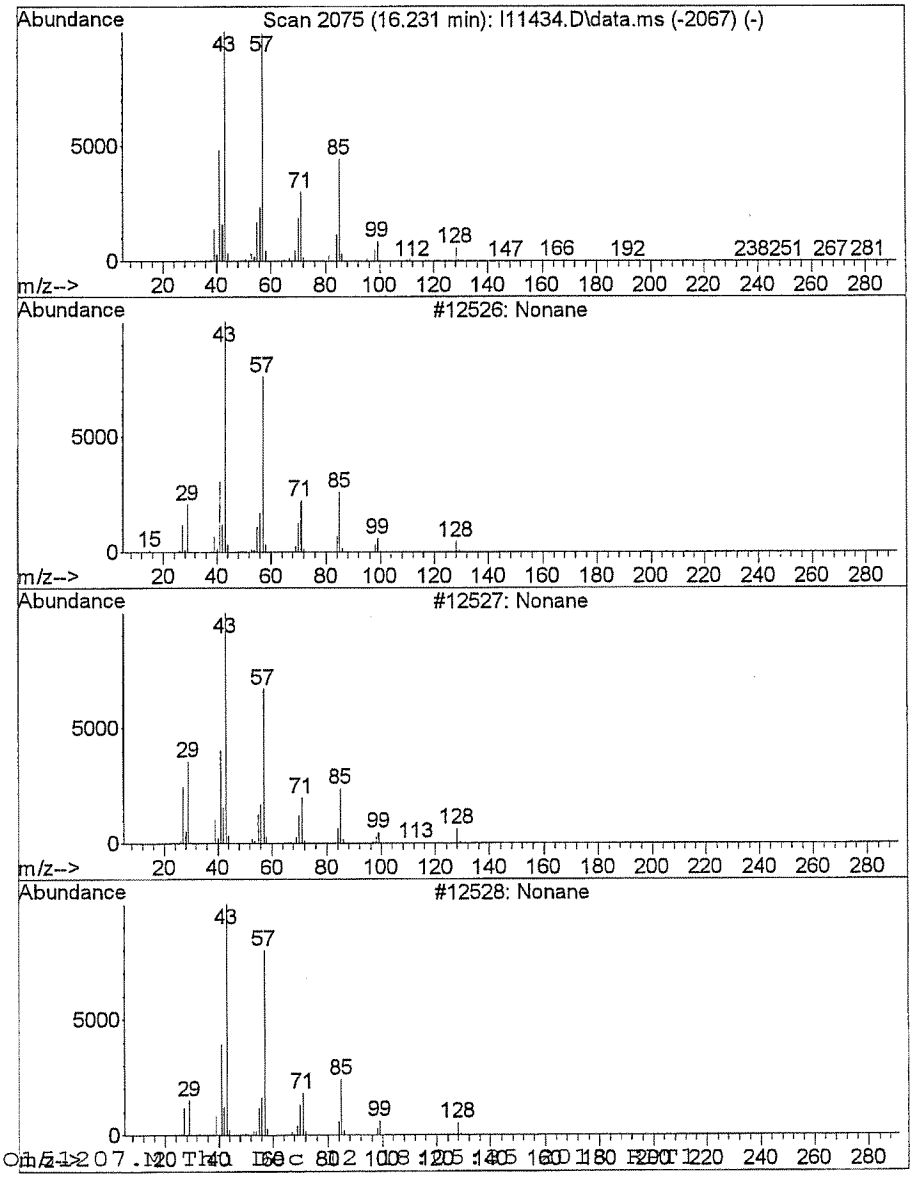
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

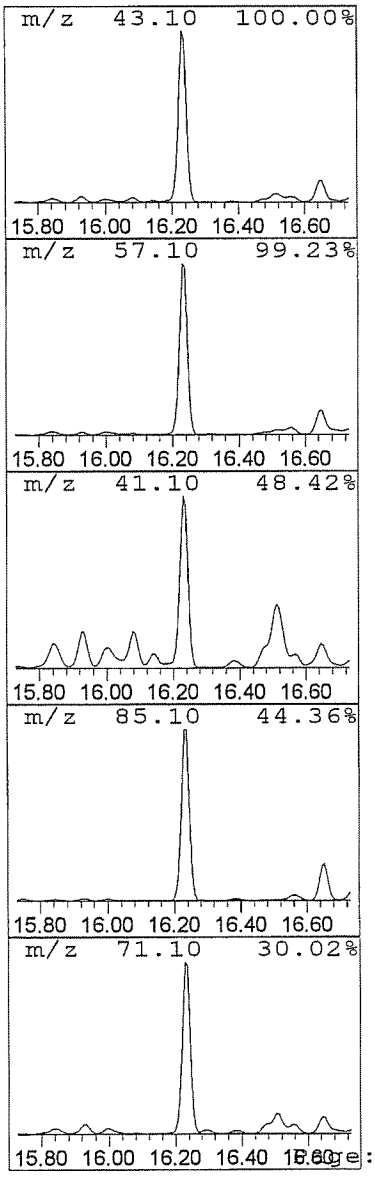
****

Peak Number 2 Nonane Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.231	49.25 ppbv	22806700	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane	128	C9H20	000111-84-2	94
2	Nonane	128	C9H20	000111-84-2	94
3	Nonane	128	C9H20	000111-84-2	81
4	Octane	114	C8H18	000111-65-9	72
5	Oxalic acid, isohexyl pentyl ester	244	C13H24O4	1000309-32-8	64





NJGIAM005 V34

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

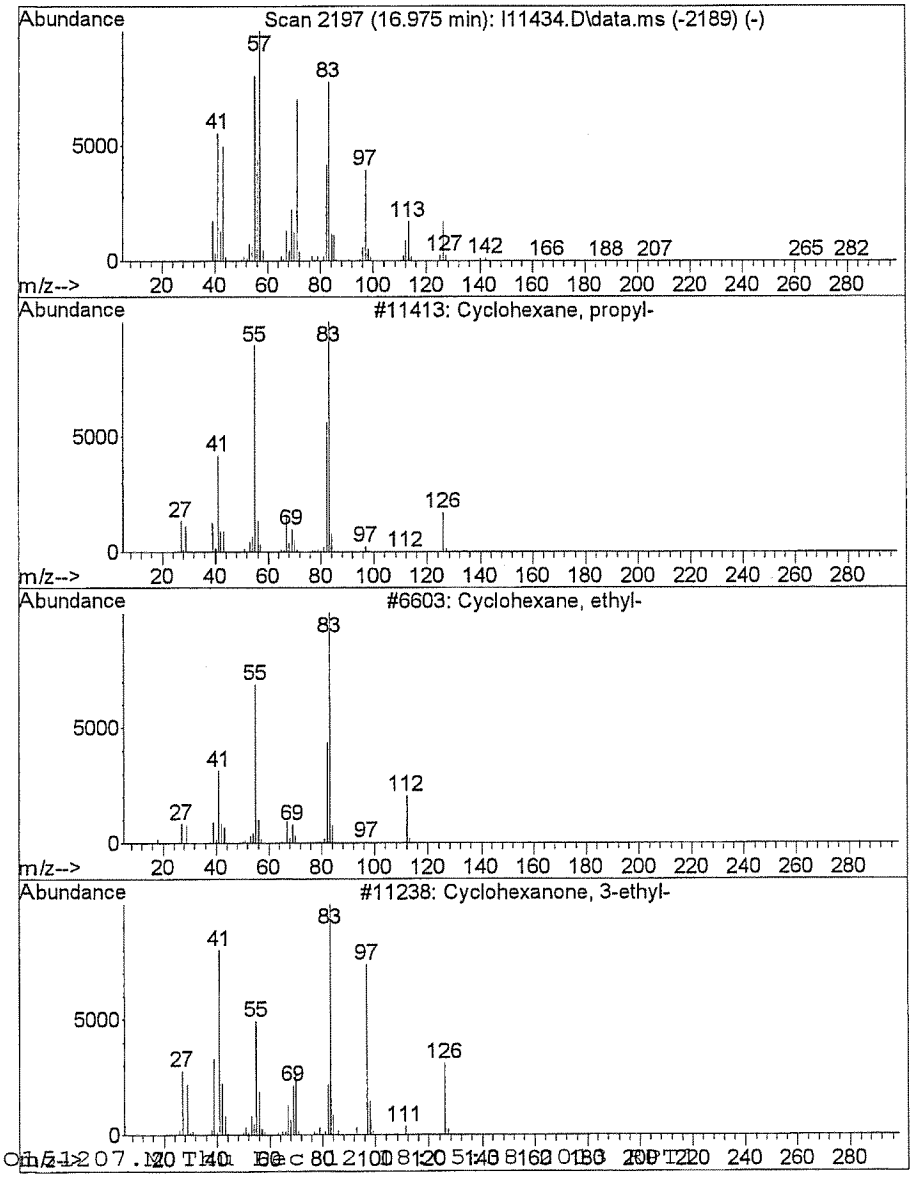
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

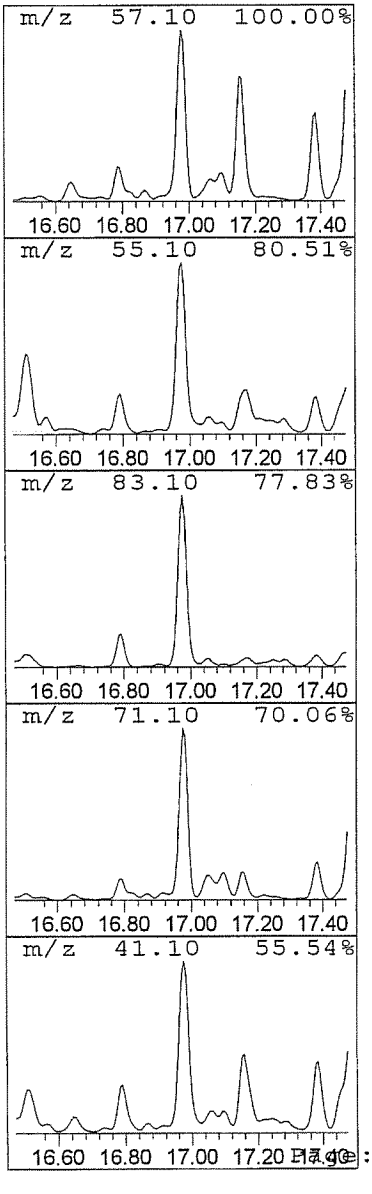
****

Peak Number 3 Cyclohexane, propyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.975	109.05 ppbv	50498600	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	45
2	Cyclohexane, ethyl-	112	C8H16	001678-91-7	45
3	Cyclohexanone, 3-ethyl-	126	C8H14O	022461-89-8	45
4	Cyclohexane, ethyl-	112	C8H16	001678-91-7	43
5	Cyclopentane, 1-ethyl-2-methyl-,...	112	C8H16	000930-89-2	43





NJGIAM005 V35

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

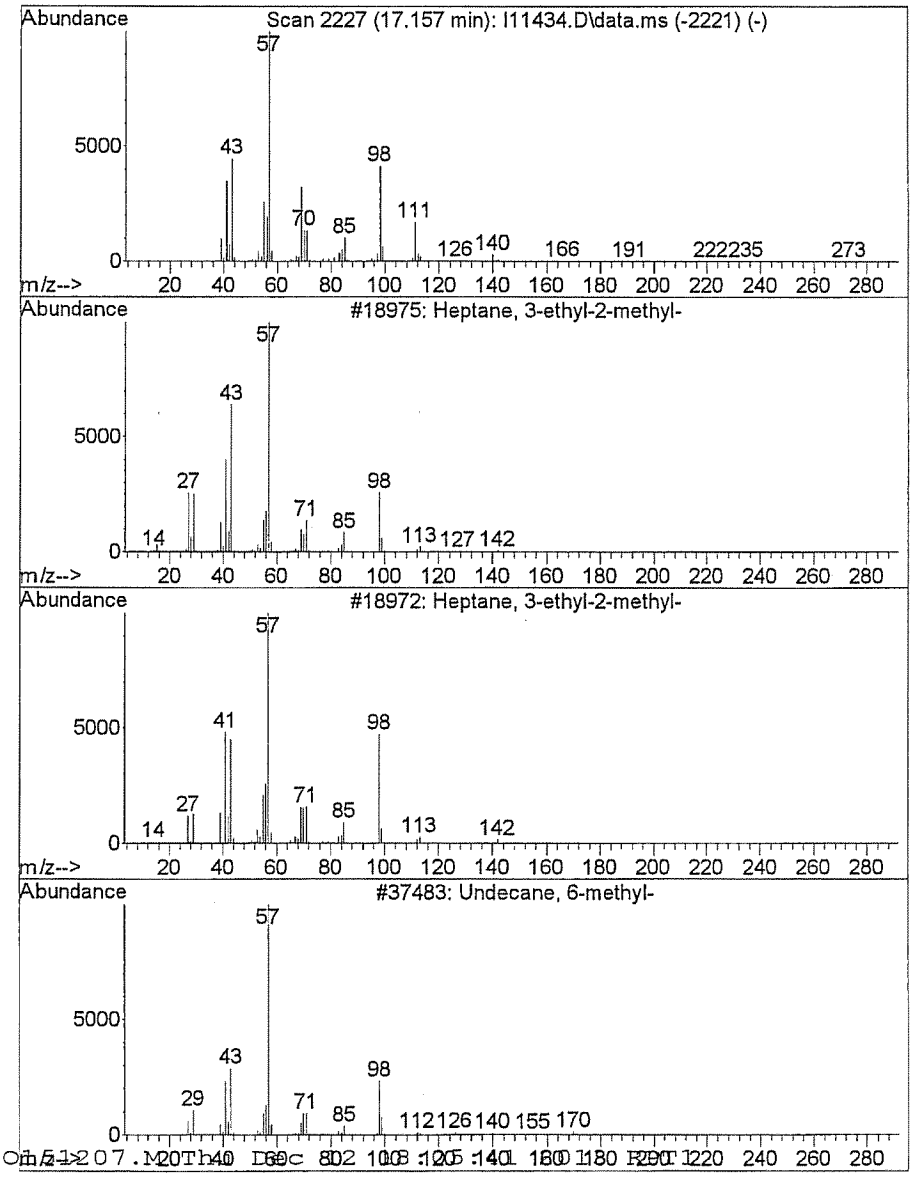
Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

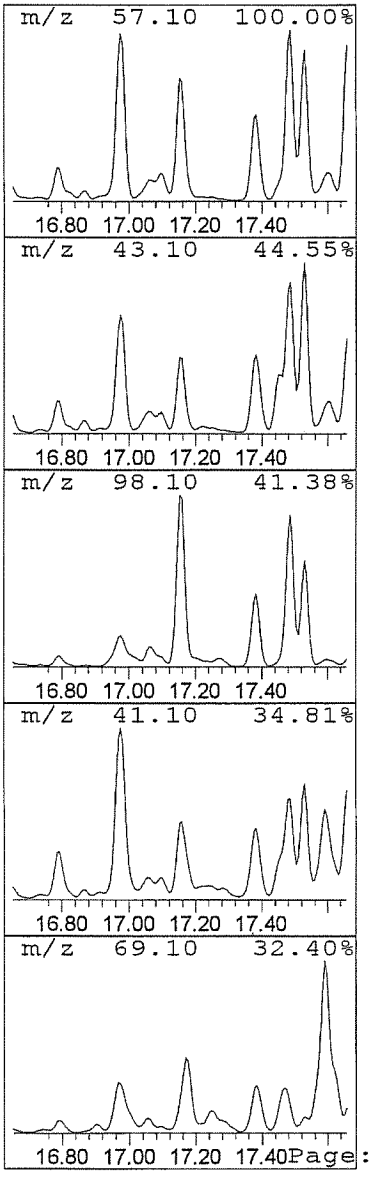
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

****
Peak Number 4 Heptane, 3-ethyl-2-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.157	47.85 ppbv	22156100	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	64
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	64
3	Undecane, 6-methyl-	170	C12H26	017302-33-9	59
4	Heptane, 4-propyl-	142	C10H22	003178-29-8	53
5	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	50





NJGIAM005 V36

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

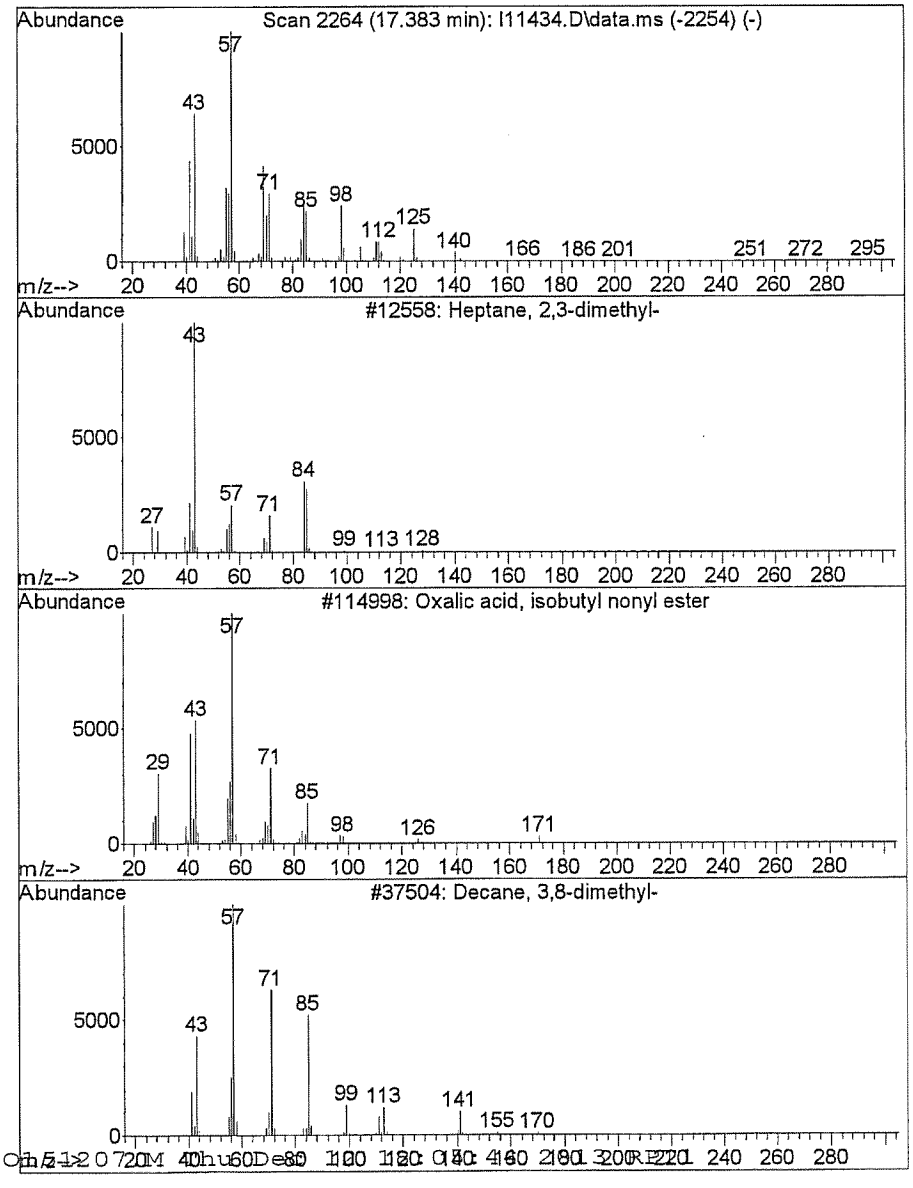
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

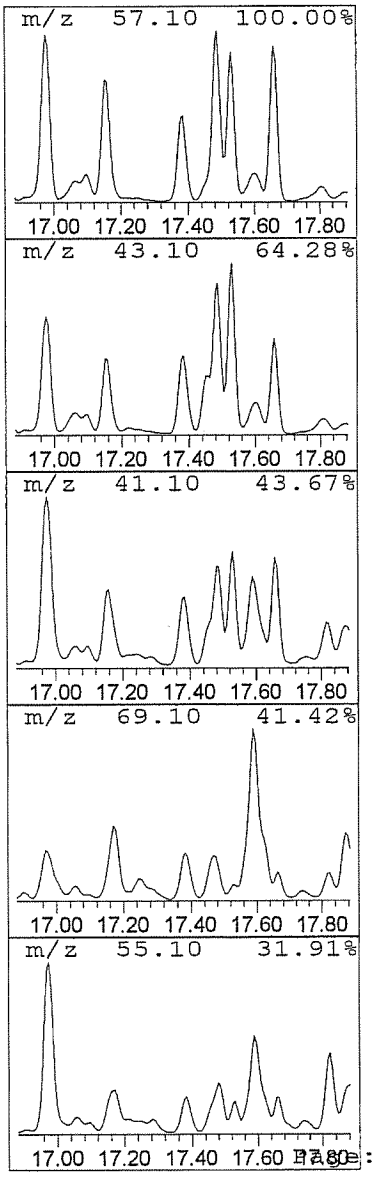
****

Peak Number 5 Heptane, 2,3-dimethyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.383	46.06 ppbv	21329900	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,3-dimethyl-	128	C9H20	003074-71-3	46
2	Oxalic acid, isobutyl nonyl ester	272	C15H28O4	1000309-37-4	43
3	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	43
4	Heptane, 3-ethyl-	128	C9H20	015869-80-4	38
5	Nonane, 4-methyl-	142	C10H22	017301-94-9	38





NJGIAM005 V37

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

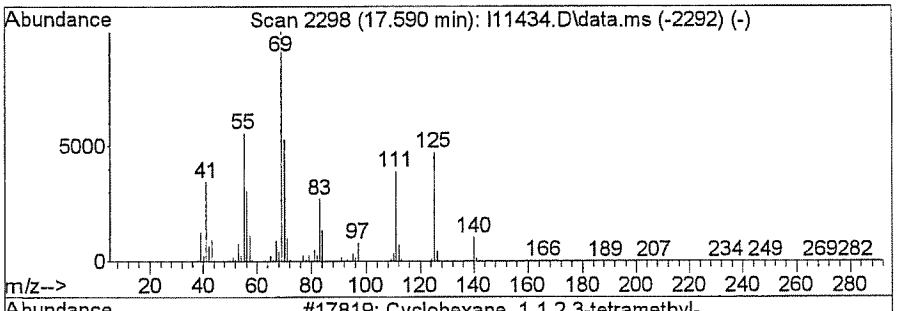
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

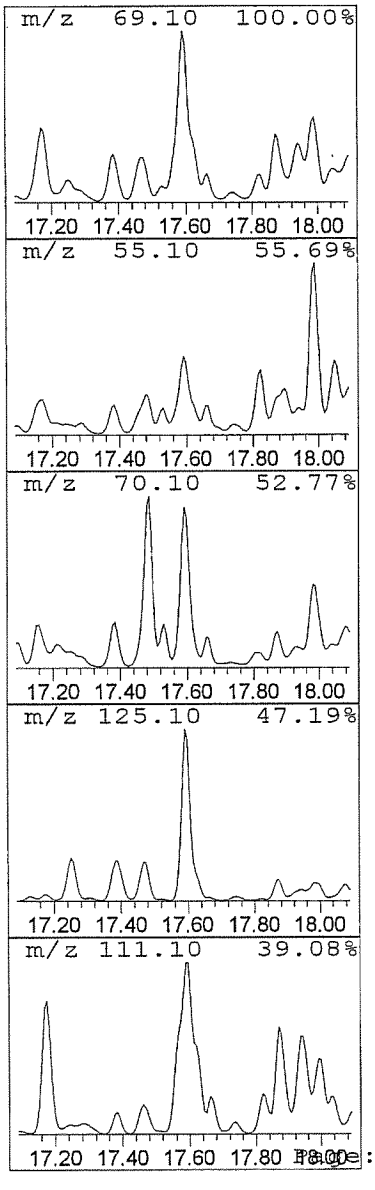
****

Peak Number 6 Cyclohexane, 1,1,2,3-tetram... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.590	78.80 ppbv	36488200	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,2,3-tetramethyl-	140	C10H20	006783-92-2	60
2	1-Hexene, 3,3-dimethyl-	112	C8H16	003404-77-1	45
3	6-Methyl-hept-2-yn-4-ol	126	C8H14O	060018-69-1	43
4	Cyclohexane, 1-ethyl-2,4-dimethyl-	140	C10H20	061142-69-6	38
5	trans-1-Butyl-2-methylcyclopropane	112	C8H16	038851-70-6	38





NJGIAM005 V38

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

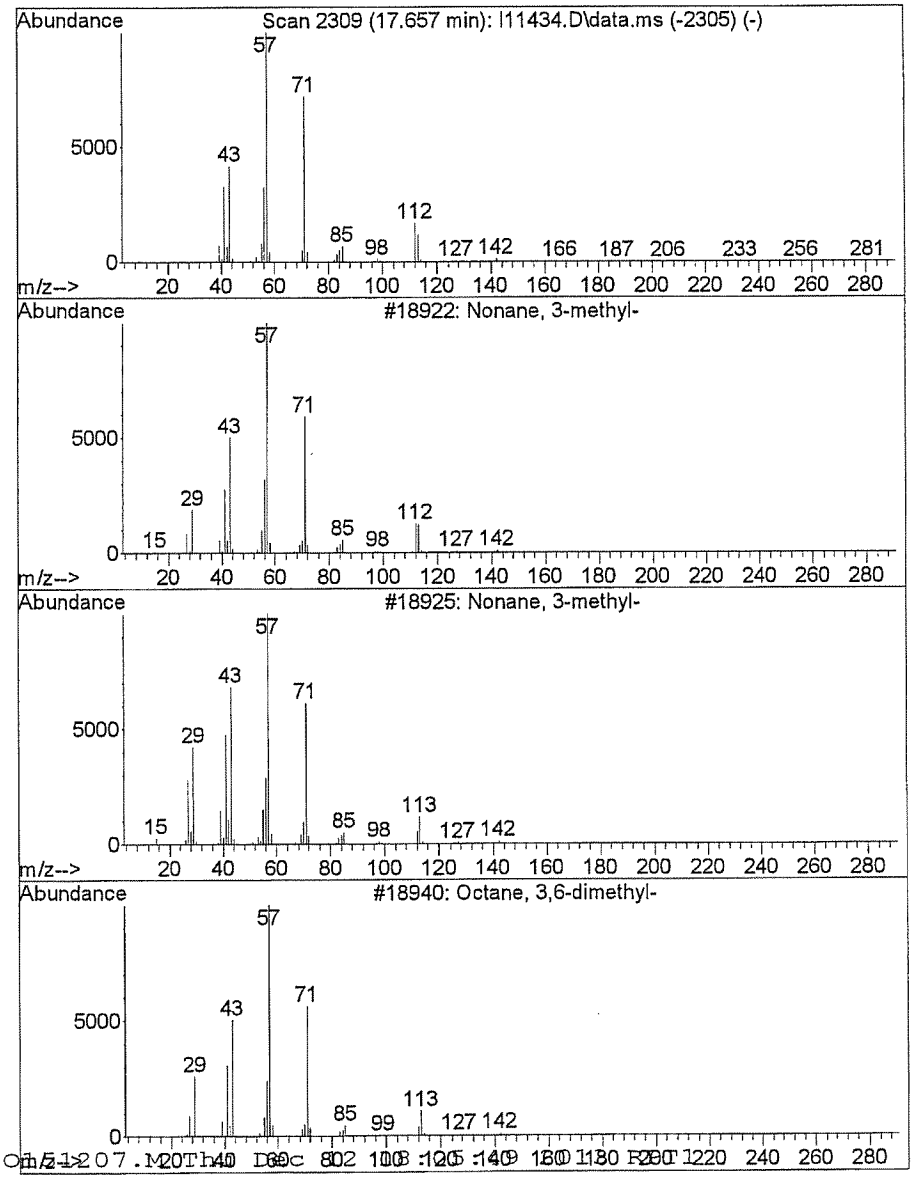
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

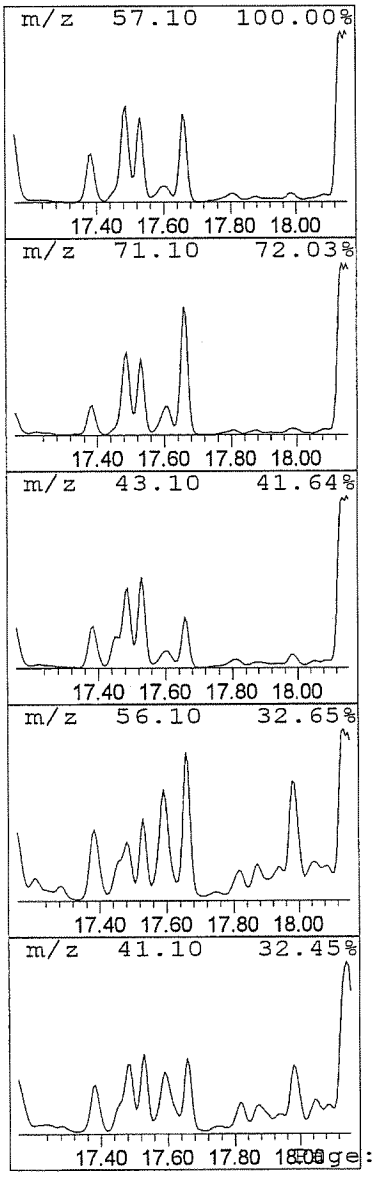
****

Peak Number 7 Nonane, 3-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.657	45.11 ppbv	20889500	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 3-methyl-	142	C10H22	005911-04-6	91
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	90
3	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	86
4	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	86
5	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	78





NJGIAM005 V39

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

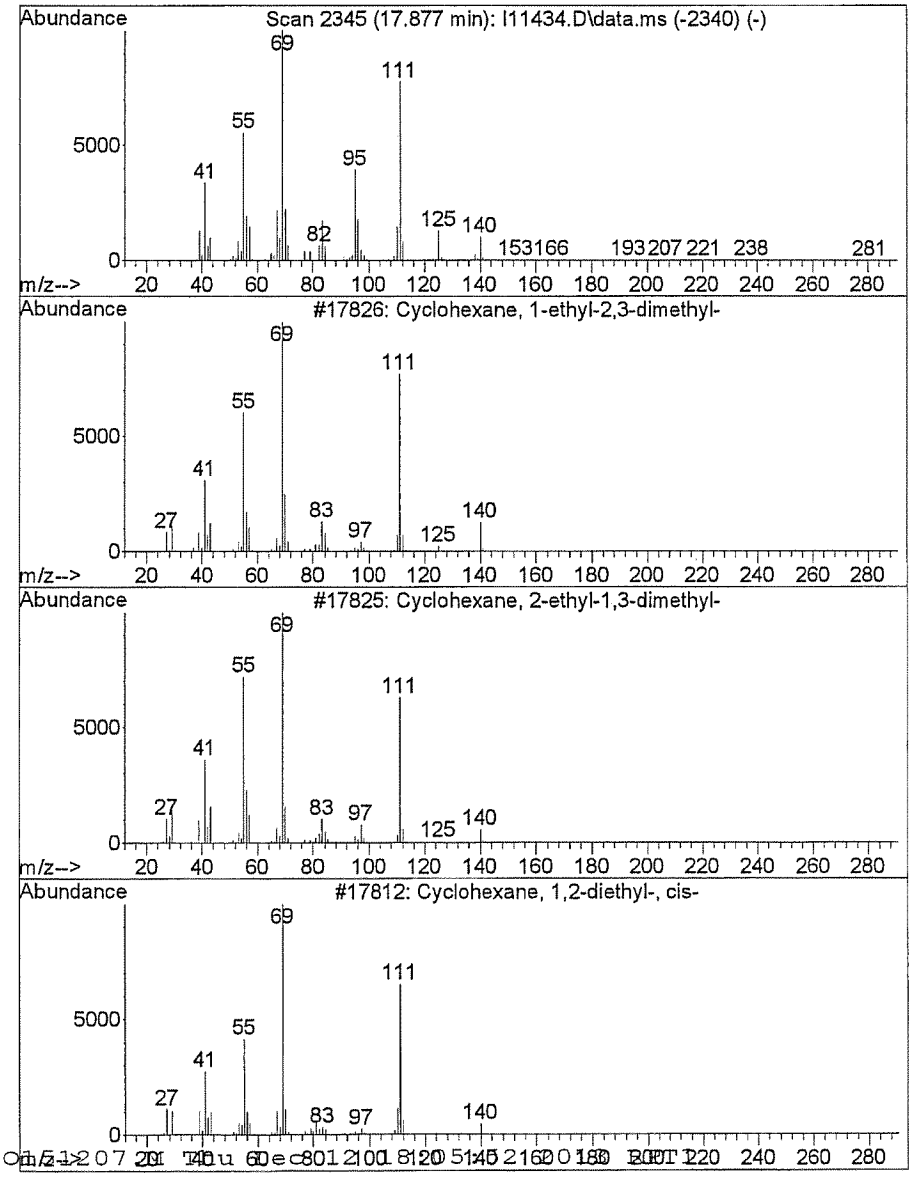
Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

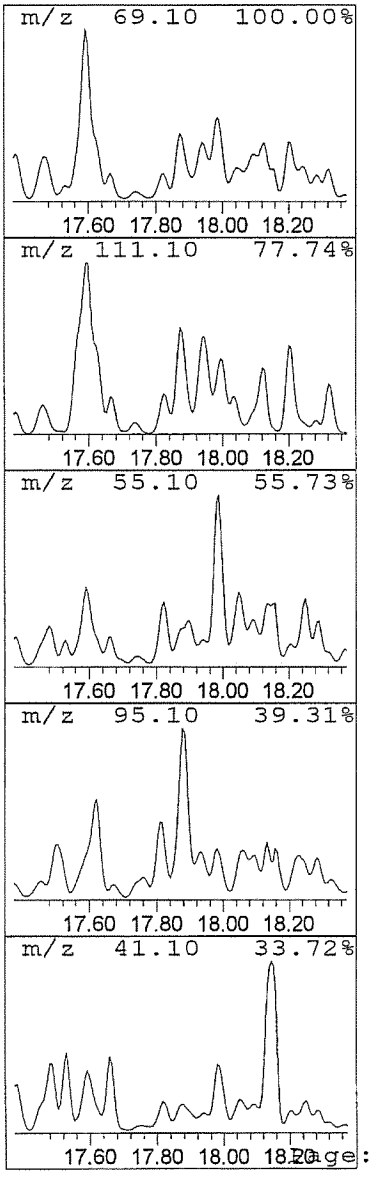
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

****
Peak Number 8 Cyclohexane, 1-ethyl-2,3-di... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.877	43.38 ppbv	20089400	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2,3-dimethyl-	140	C10H20	007058-05-1	92
2	Cyclohexane, 2-ethyl-1,3-dimethyl-	140	C10H20	007045-67-2	62
3	Cyclohexane, 1,2-diethyl-, cis-	140	C10H20	000824-43-1	58
4	Cyclooctane, butyl-	168	C12H24	016538-93-5	53
5	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	52





NJGIAM005 V40

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

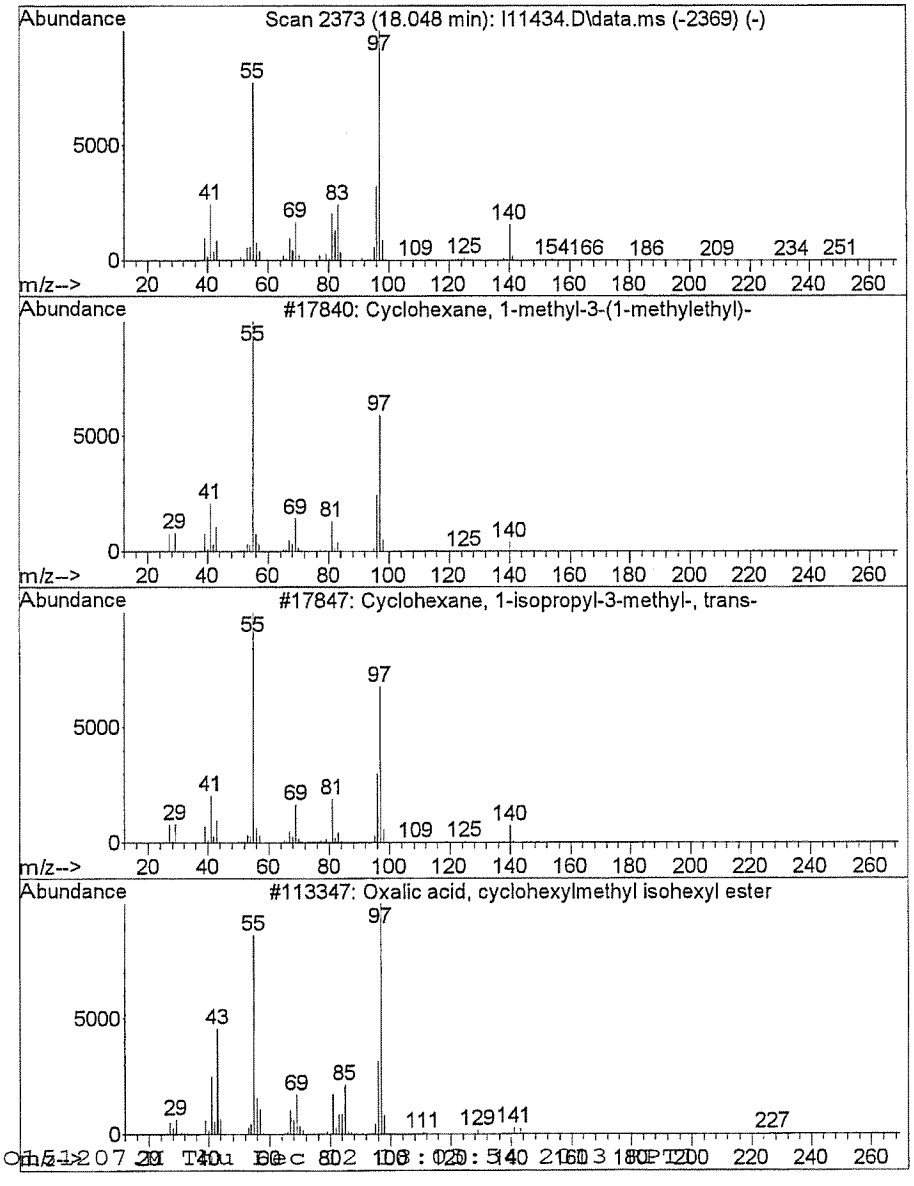
Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

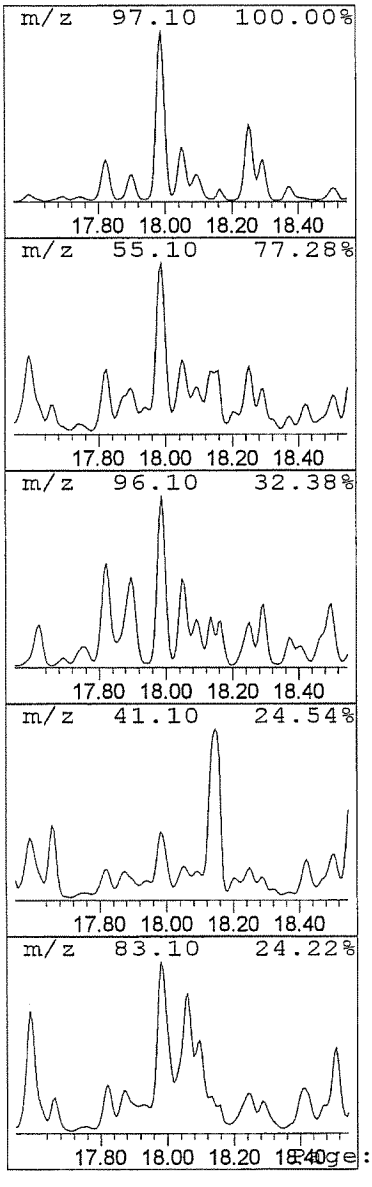
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

****
Peak Number 9 Cyclohexane, 1-methyl-3-(1-... Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.047	36.87 ppbv	17075100	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-3-(1-methy...	140	C10H20	016580-24-8	80
2	Cyclohexane, 1-isopropyl-3-methy...	140	C10H20	1000158-54-3	76
3	Oxalic acid, cyclohexylmethyl is...	270	C15H26O4	1000309-68-3	72
4	Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	64
5	m-Menthane, (1S,3S)-(+)-	140	C10H20	013837-67-7	64





NJGIAM005 V41

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

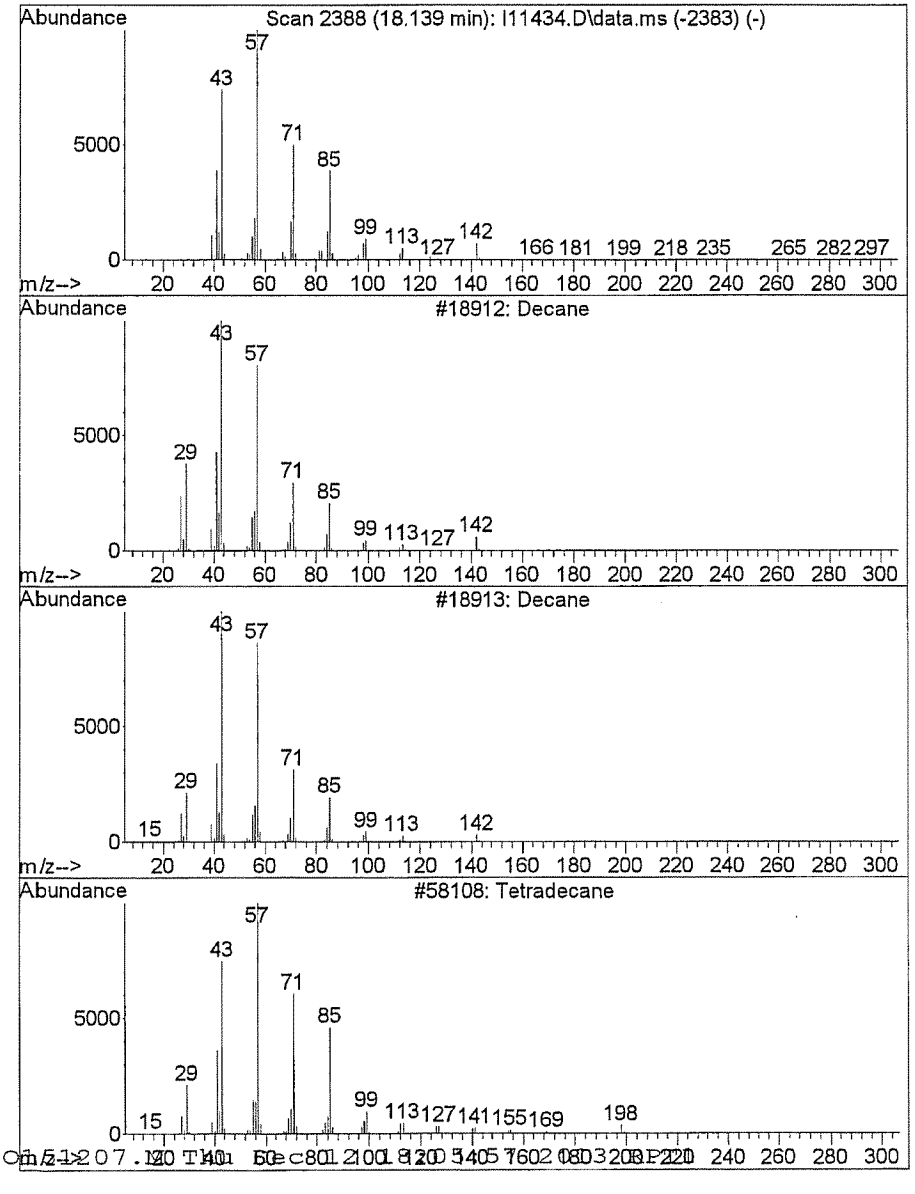
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

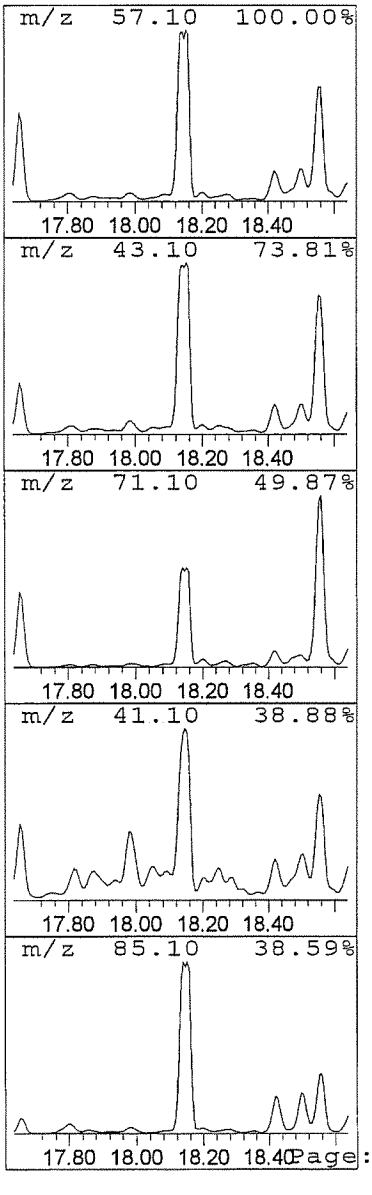
****

Peak Number 10 Decane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.139	161.27 ppbv	74679900	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane	142	C10H22	000124-18-5	95
2	Decane	142	C10H22	000124-18-5	91
3	Tetradecane	198	C14H30	000629-59-4	90
4	Hexadecane	226	C16H34	000544-76-3	90
5	Decane	142	C10H22	000124-18-5	87





NJGIAM005 V42

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

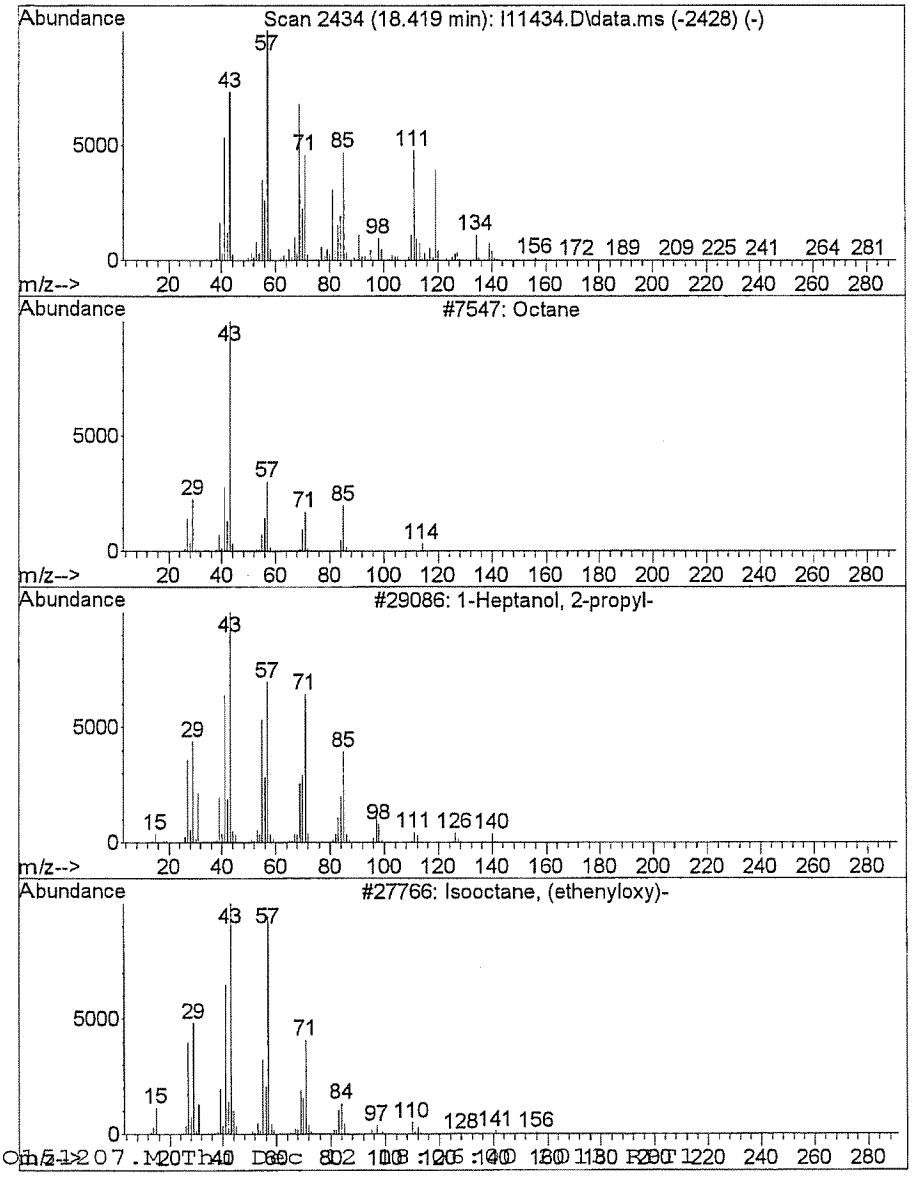
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

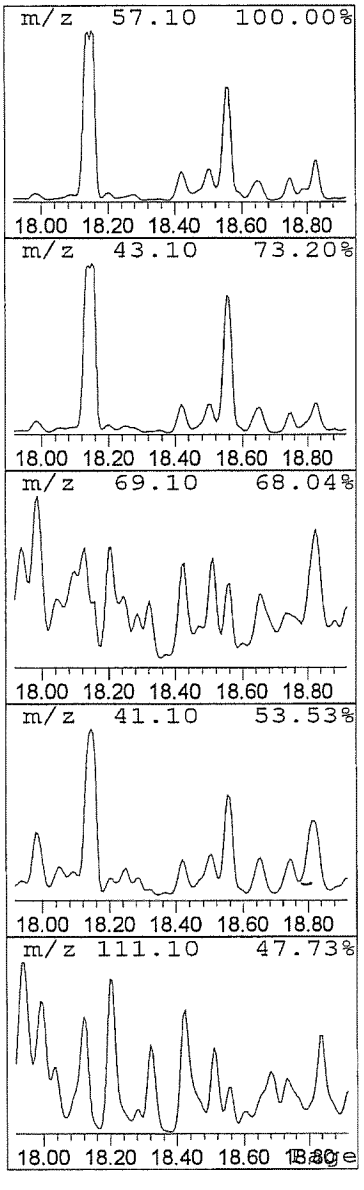
****

Peak Number 11 Octane Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.419	39.28 ppbv	18191300	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane	114	C8H18	000111-65-9	38
2	1-Heptanol, 2-propyl-	158	C10H22O	010042-59-8	35
3	Isooctane, (ethenyloxy)-	156	C10H20O	037769-62-3	30
4	1-Octanol, 2-butyl-	186	C12H26O	003913-02-8	27
5	Octane, 3,4,5,6-tetramethyl-	170	C12H26	062185-21-1	22





NJGIAM005 V43

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

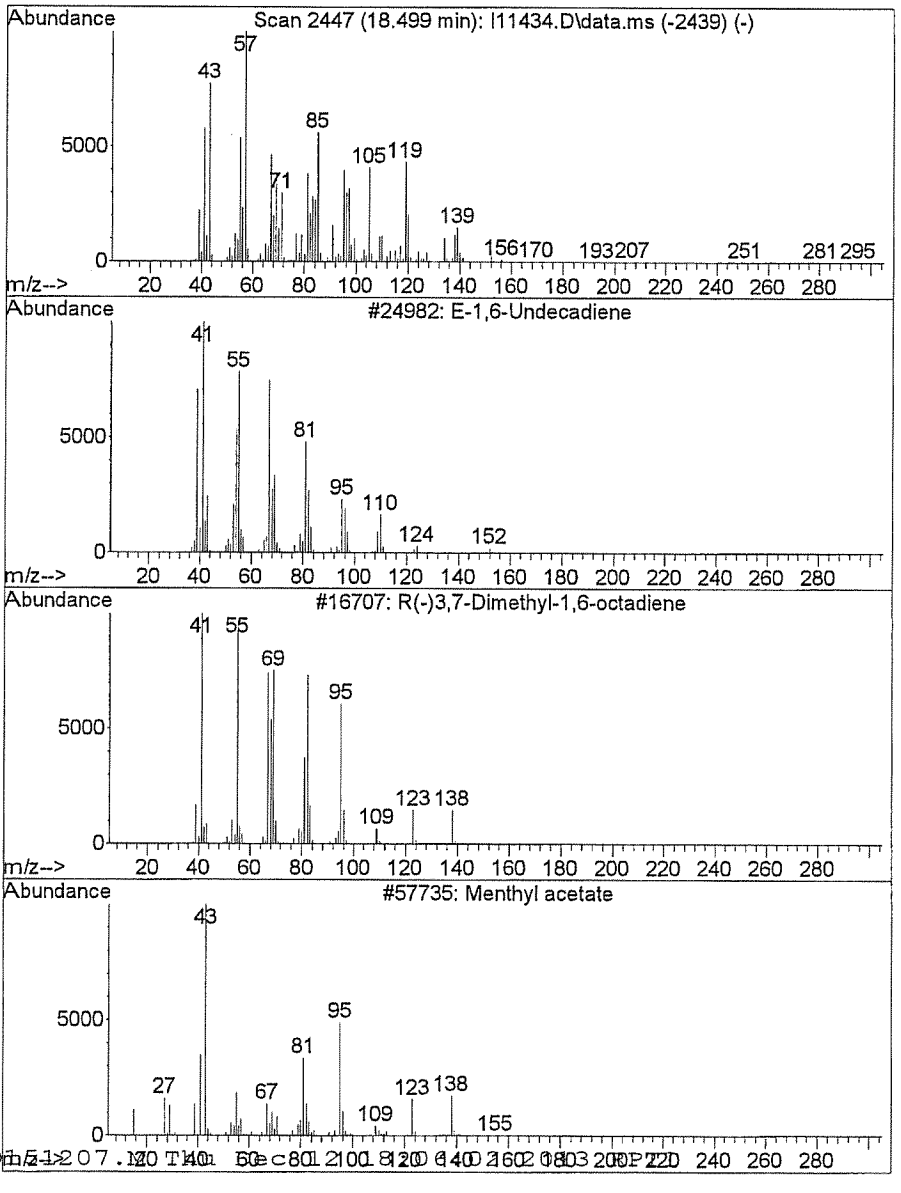
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

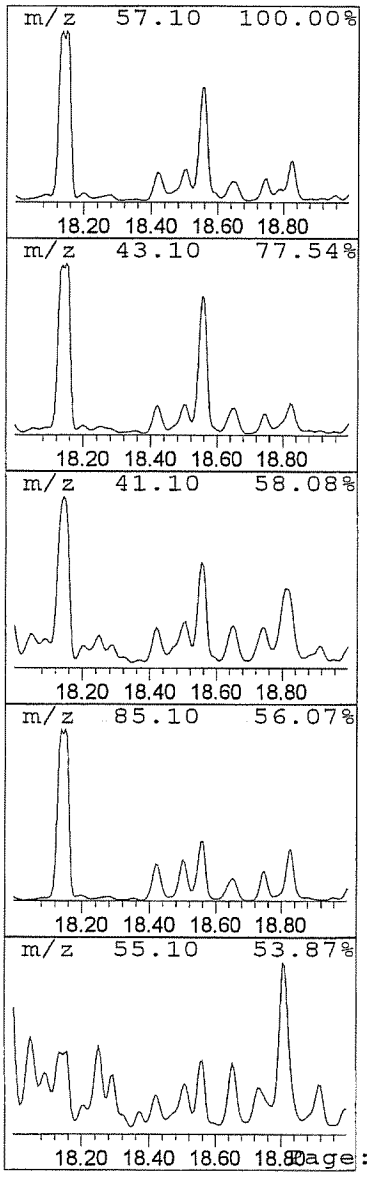
****

Peak Number 12 E-1,6-Undecadiene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.499	72.44 ppbv	33547300	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	E-1,6-Undecadiene	152	C11H20	1000245-71-2	25
2	R(-)3,7-Dimethyl-1,6-octadiene	138	C10H18	010281-56-8	22
3	Menthyl acetate	198	C12H22O2	000089-48-5	14
4	Furan, 2,3,5-trimethyl-	110	C7H10O	010504-04-8	14
5	3-Octyne, 6-methyl-	124	C9H16	062108-34-3	11





NJGIAM005 V44

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

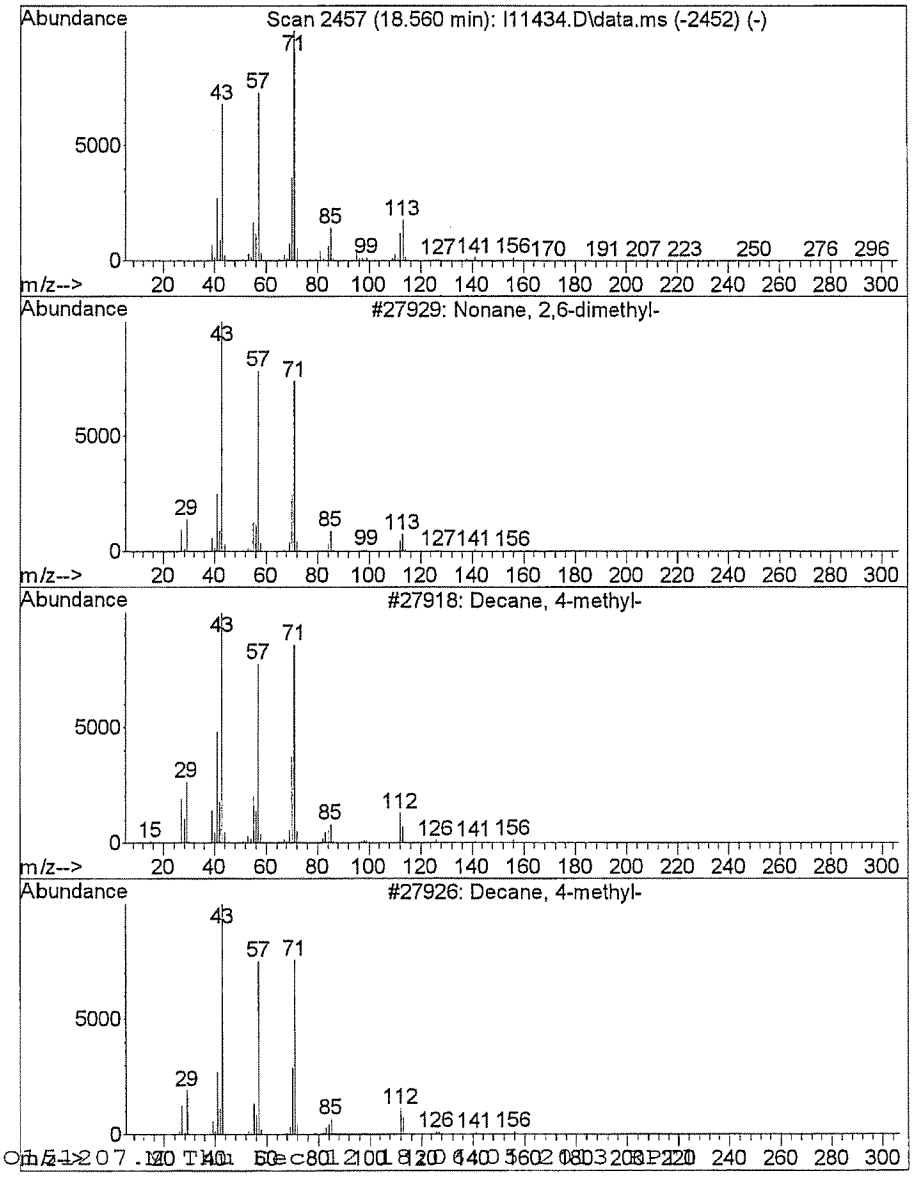
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

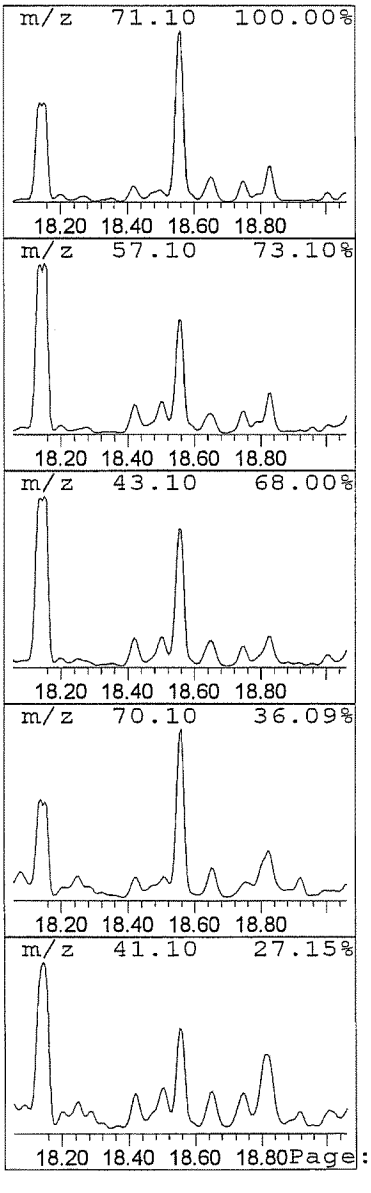
****

Peak Number 13 Nonane, 2,6-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.560	98.40 ppbv	45565400	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 2,6-dimethyl-	156	C11H24	017302-28-2	95
2	Decane, 4-methyl-	156	C11H24	002847-72-5	91
3	Decane, 4-methyl-	156	C11H24	002847-72-5	91
4	Octane, 3,3-dimethyl-	142	C10H22	004110-44-5	78
5	Octane, 3,3-dimethyl-	142	C10H22	004110-44-5	78





NJGIAM005 V45

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

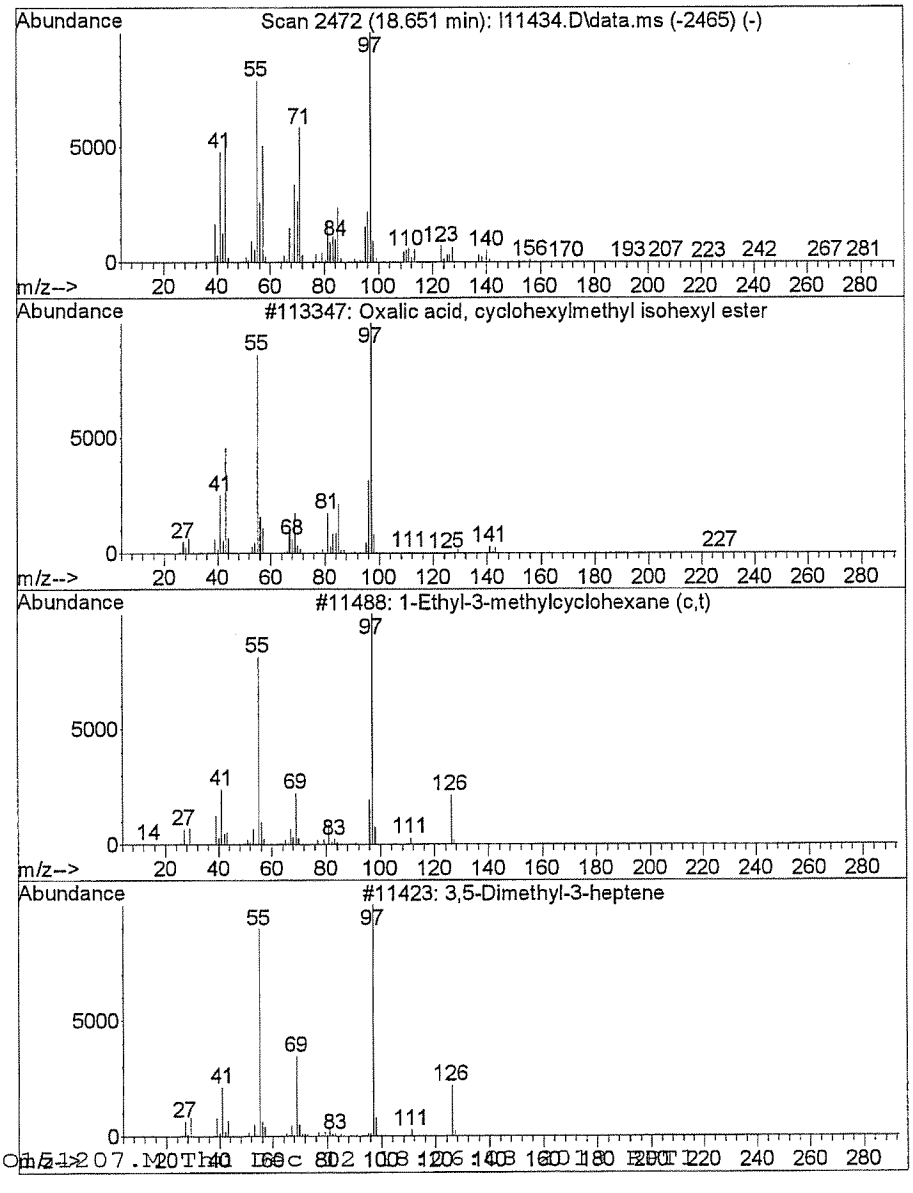
Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

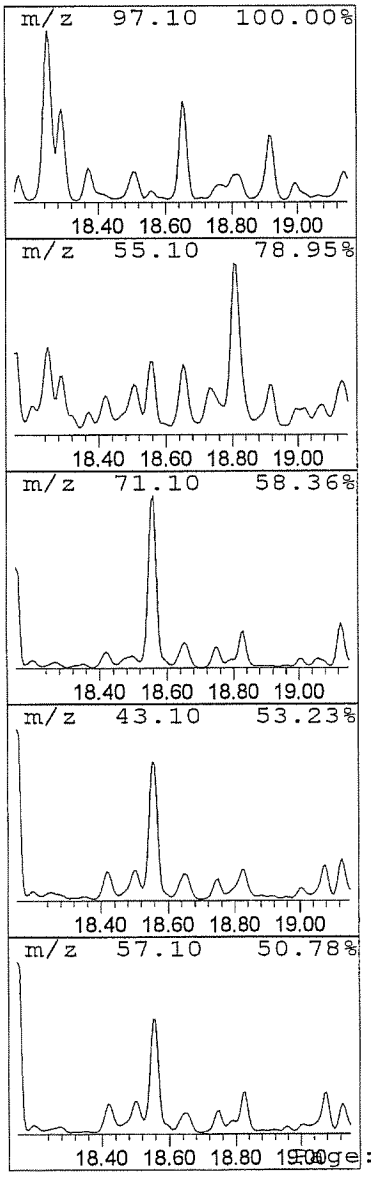
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

****
Peak Number 14 Oxalic acid, cyclohexylmeth... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.651	45.11 ppbv	20889300	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxalic acid, cyclohexylmethyl is...	270	C15H26O4	1000309-68-3	50
2	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	43
3	3,5-Dimethyl-3-heptene	126	C9H18	059643-68-4	38
4	Cyclopropane, 3-chloro-1,1,2,2-t...	132	C7H13Cl	014123-41-2	35
5	1H-Pyrazol-4-amine, 3-methyl-	97	C4H7N3	1000338-28-2	27





NJGIAM005 V46

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

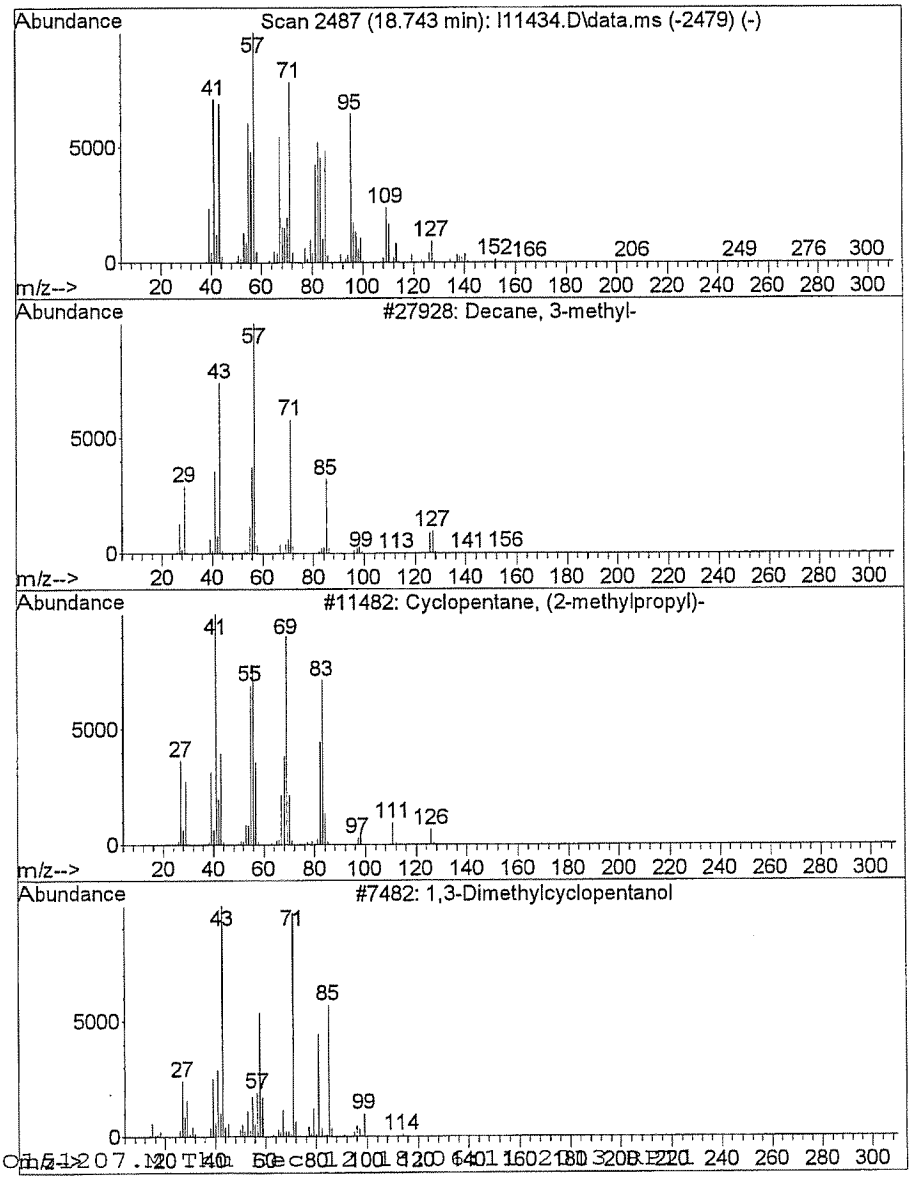
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

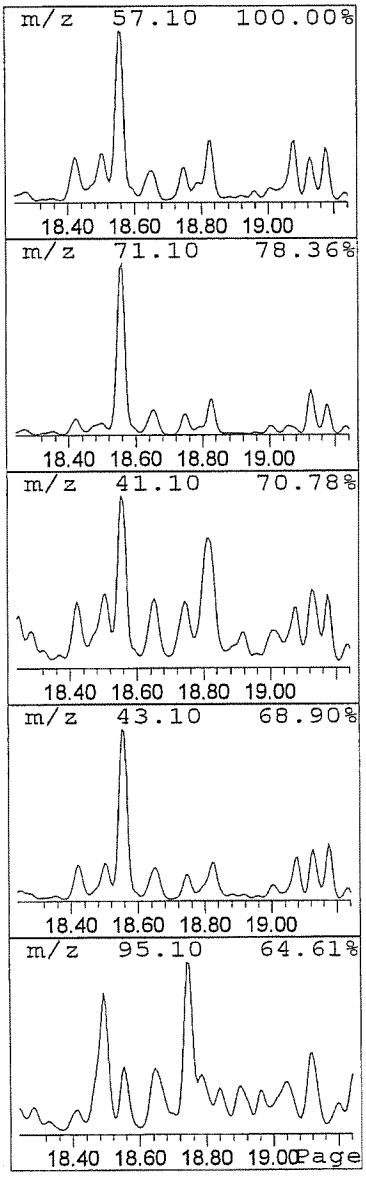
****

Peak Number 15 Decane, 3-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.743	48.20 ppbv	22322100	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3-methyl-	156	C11H24	013151-34-3	38
2	Cyclopentane, (2-methylpropyl)-	126	C9H18	003788-32-7	35
3	1,3-Dimethylcyclopentanol	114	C7H14O	019550-46-0	30
4	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	25
5	Hexadecane	226	C16H34	000544-76-3	25





NJGIAM005 V47

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

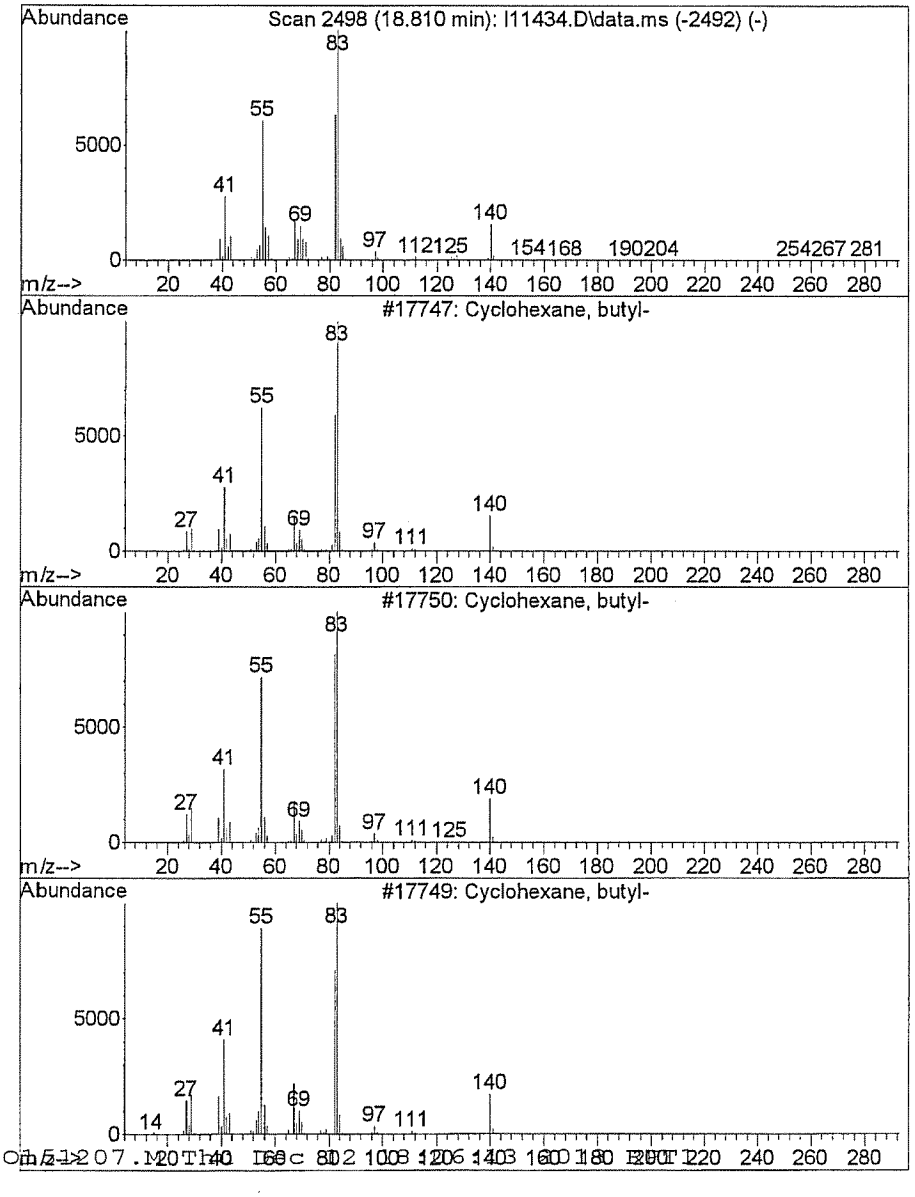
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

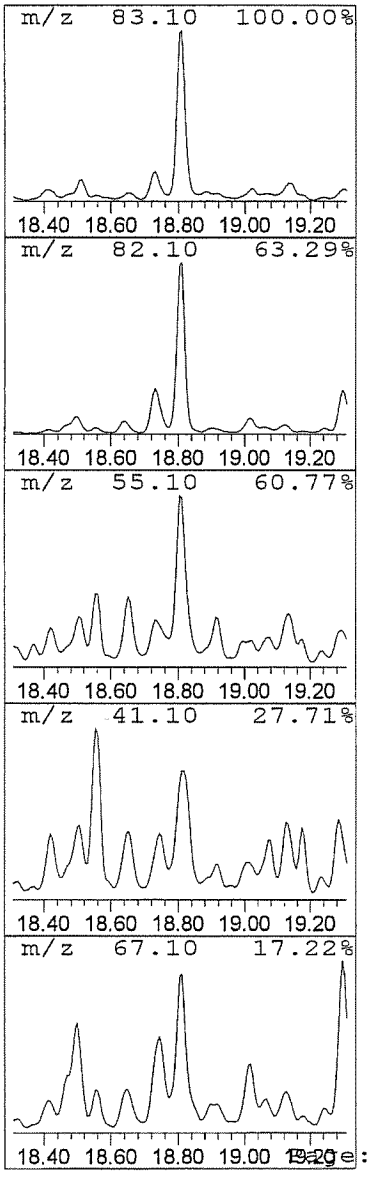
****

Peak Number 16 Cyclohexane, butyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.810	108.74 ppbv	50353300	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	94
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	94
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	87
4	Cyclohexane, octyl-	196	C14H28	001795-15-9	80
5	Cyclohexane, (2-methylpropyl)-	140	C10H20	001678-98-4	80





NJGIAM005 V48

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

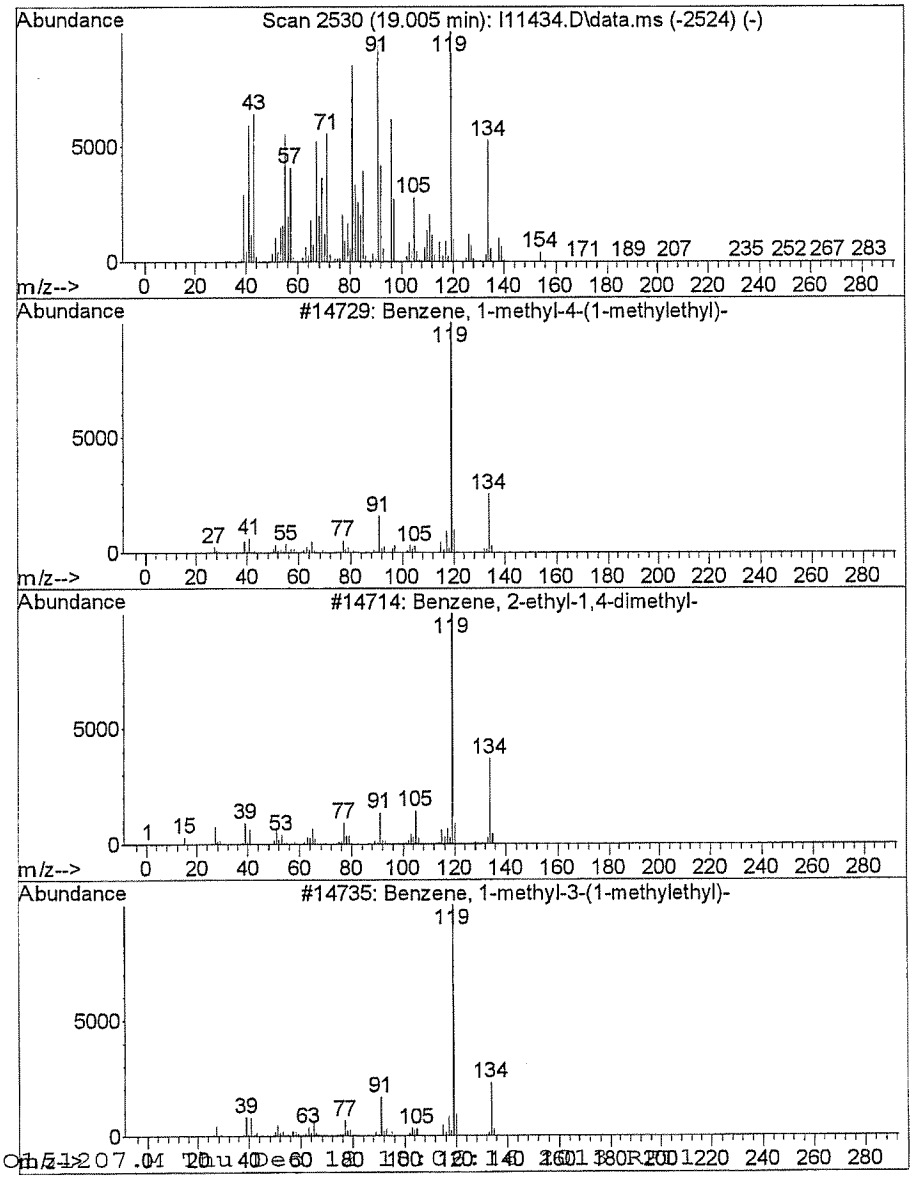
Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

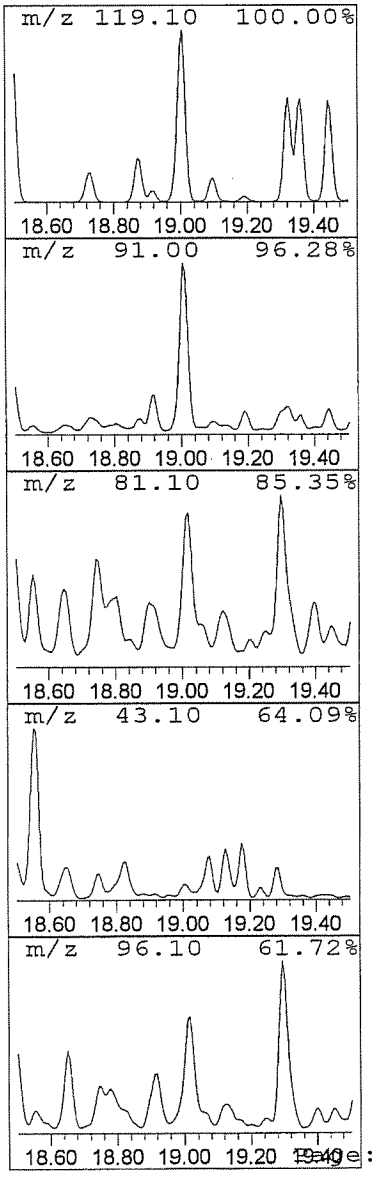
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

****
Peak Number 17 Benzene, 1-methyl-4-(1-meth... Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.005	37.68 ppbv	17450500	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	60
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	53
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	47
4	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	40
5	1,3-Cyclopentadiene, 1,2,3,4-tet...	134	C10H14	076089-59-3	35





NJGIAM005 V49

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

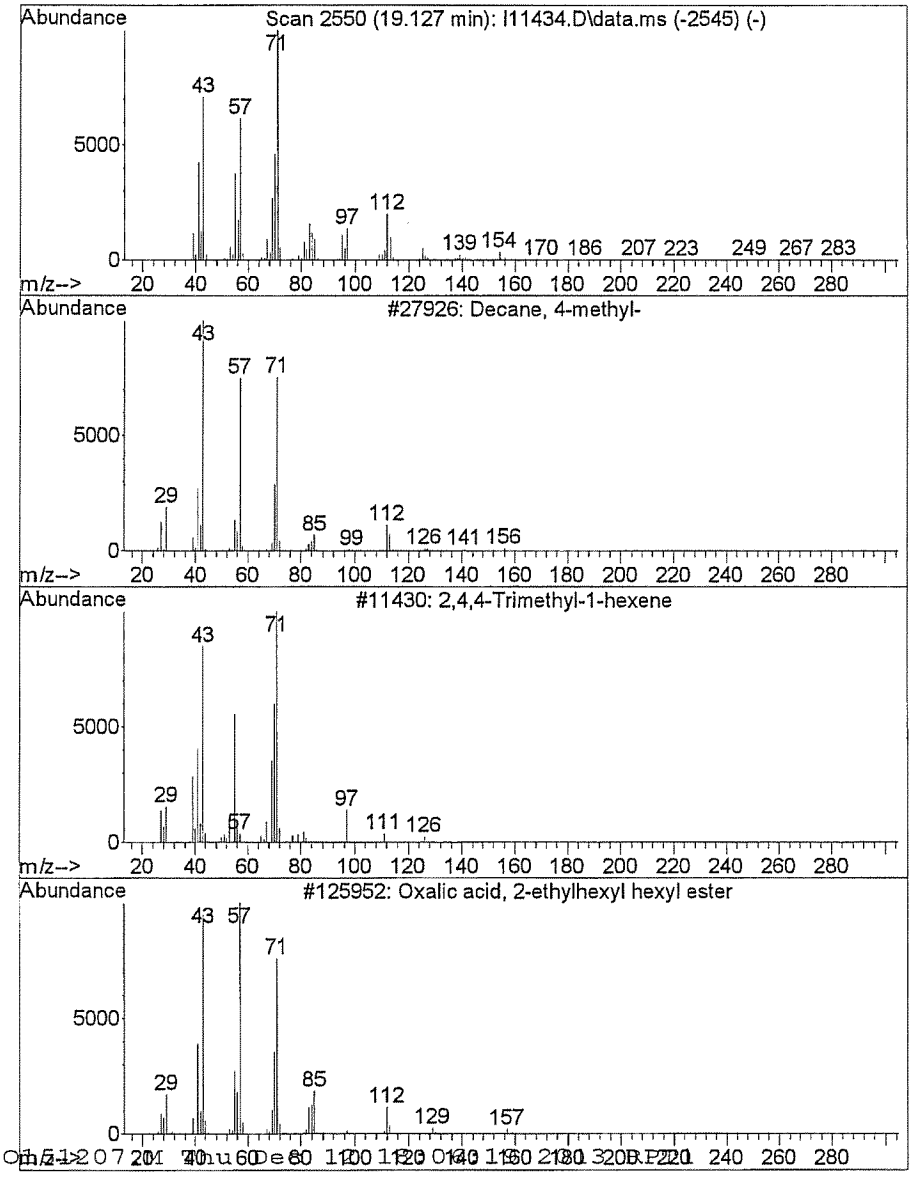
Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

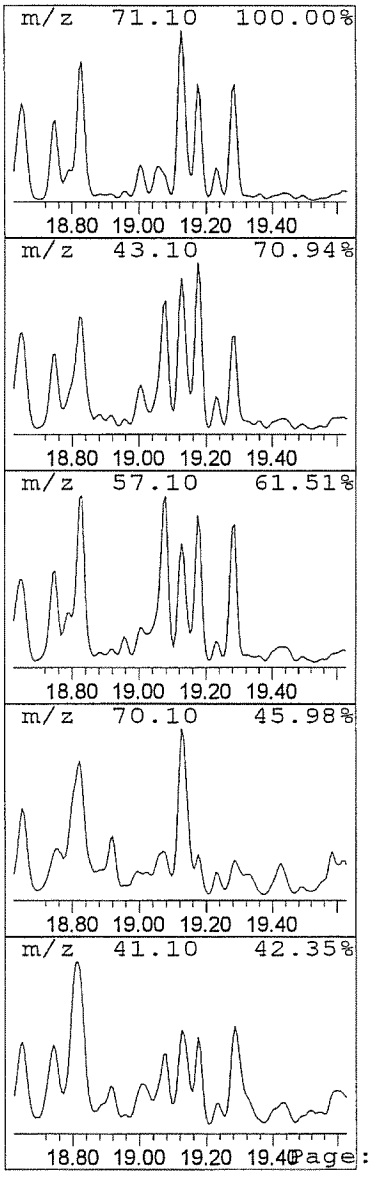
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

****
Peak Number 18 Decane, 4-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.127	47.37 ppbv	21935400	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 4-methyl-	156	C11H24	002847-72-5	64
2	2,4,4-Trimethyl-1-hexene	126	C9H18	051174-12-0	58
3	Oxalic acid, 2-ethylhexyl hexyl ...	286	C16H30O4	1000309-38-9	53
4	Methoxyacetic acid, 2-octyl ester	202	C11H22O3	1000282-69-6	50
5	1-Decene, 4-methyl-	154	C11H22	013151-29-6	47





NJGIAM005 V50

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

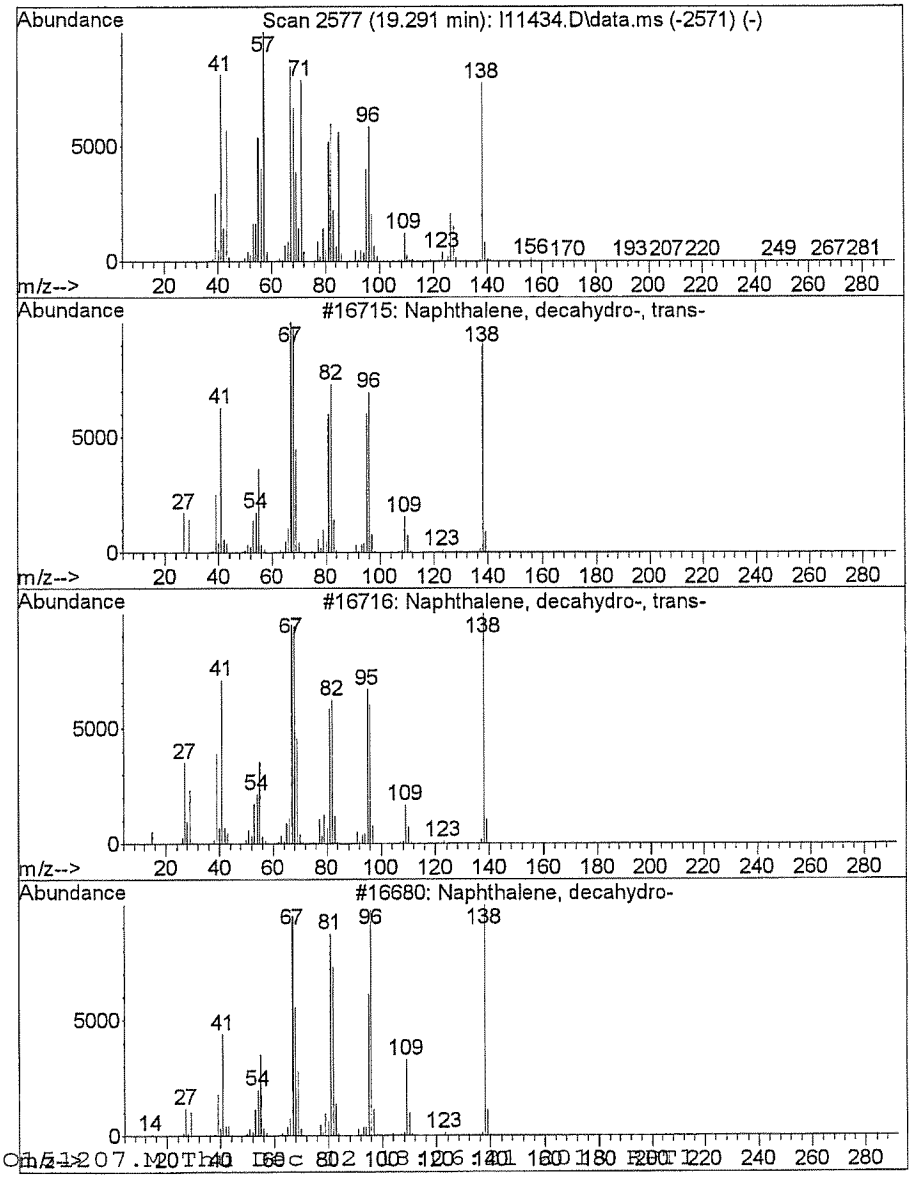
Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

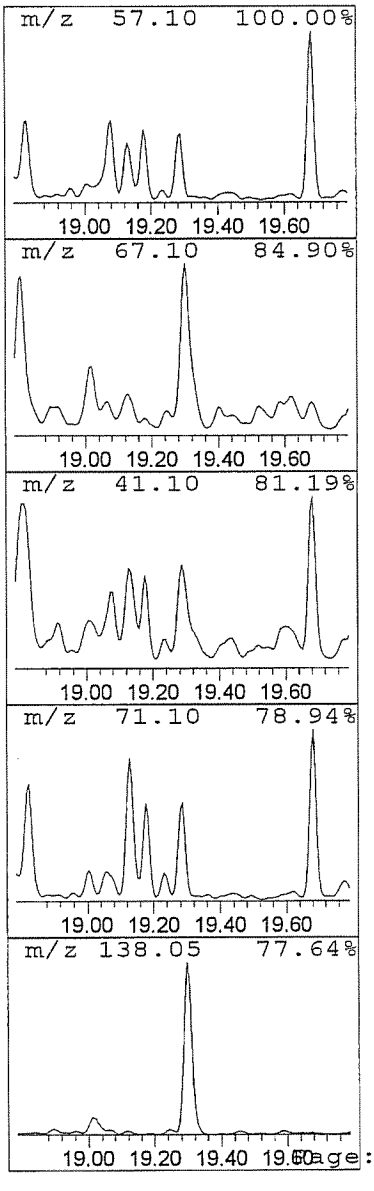
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

****
Peak Number 19 Naphthalene, decahydro-, tr... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.291	63.30 ppbv	29311900	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	91
2	Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	78
3	Naphthalene, decahydro-	138	C10H18	000091-17-8	78
4	Naphthalene, decahydro-	138	C10H18	000091-17-8	64
5	Naphthalene, decahydro-	138	C10H18	000091-17-8	60





NJGIAM005 V51

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11434.D
Acq On : 10 Dec 2013 21:12
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,SAMP,,400ML;SN118
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

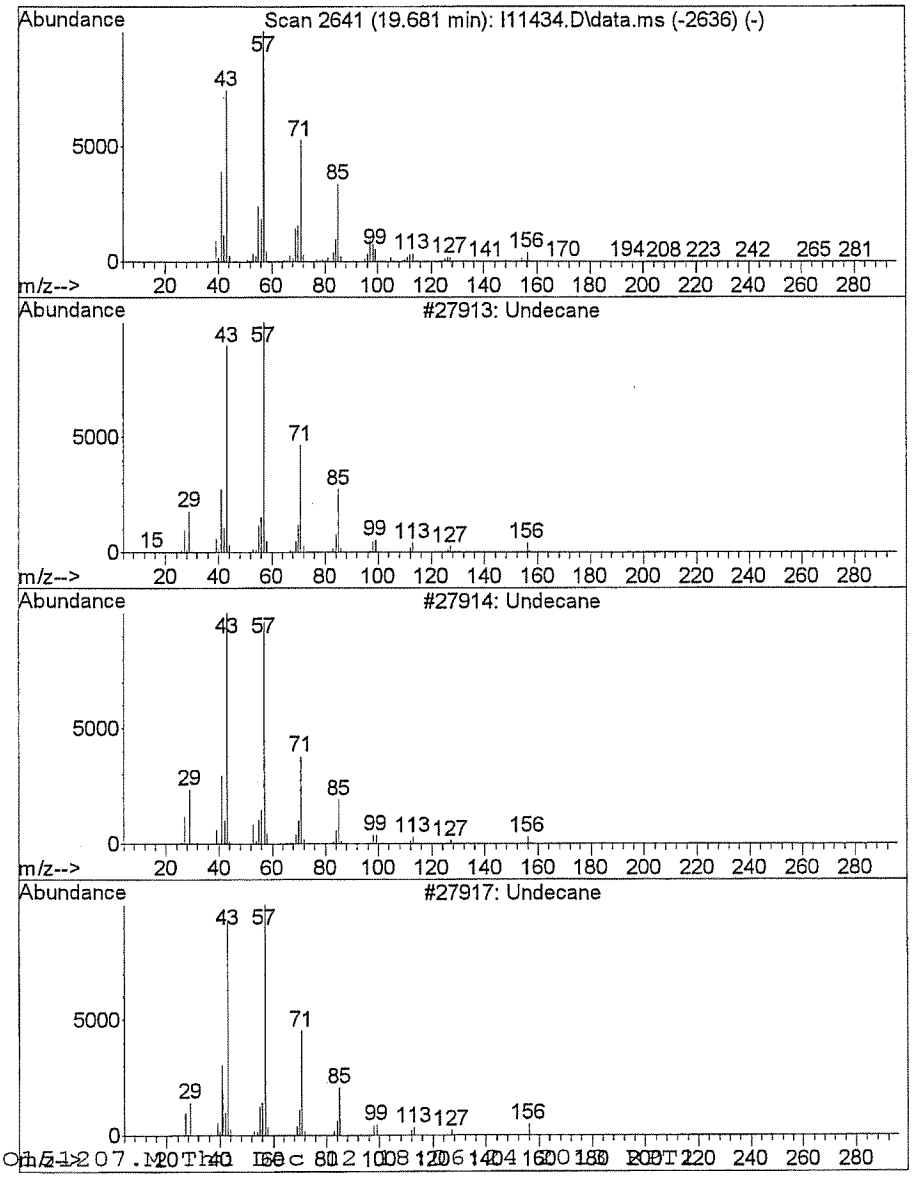
TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

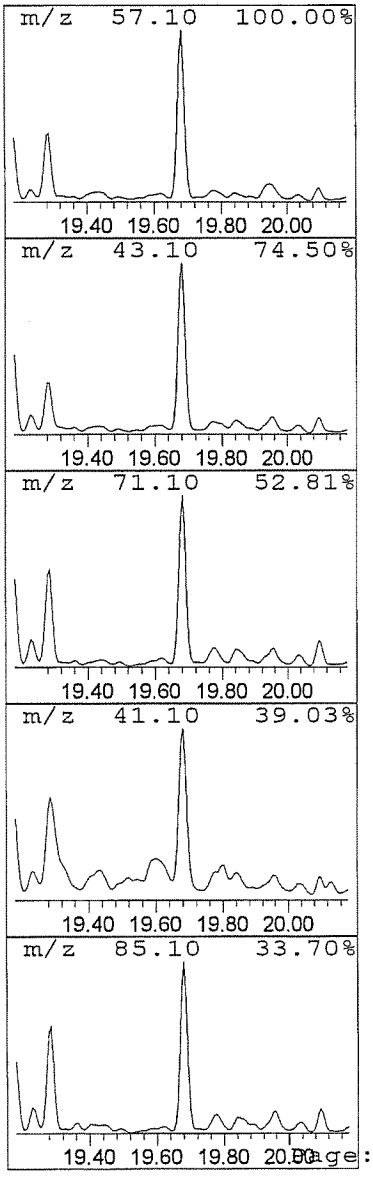
****

Peak Number 20 Undecane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.681	56.34 ppbv	26089500	Chlorobenzene-d5	14.688

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	87
2	Undecane	156	C11H24	001120-21-4	83
3	Undecane	156	C11H24	001120-21-4	76
4	Tridecane	184	C13H28	000629-50-5	72
5	Hexadecane	226	C16H34	000544-76-3	72





NJGIAM005 V52

1F

EPA SAMPLE NO.

SV-1DL

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Matrix: (soil/water) AIR Lab Sample ID: 1312347-001ADL

Sample wt/vol: 20 (g/mL) ML Lab File ID: 3\I11437.D

Level: (low/med) LOW Date Received: 12/05/13

% Moisture: not dec. Date Analyzed: 12/10/13

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 200.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

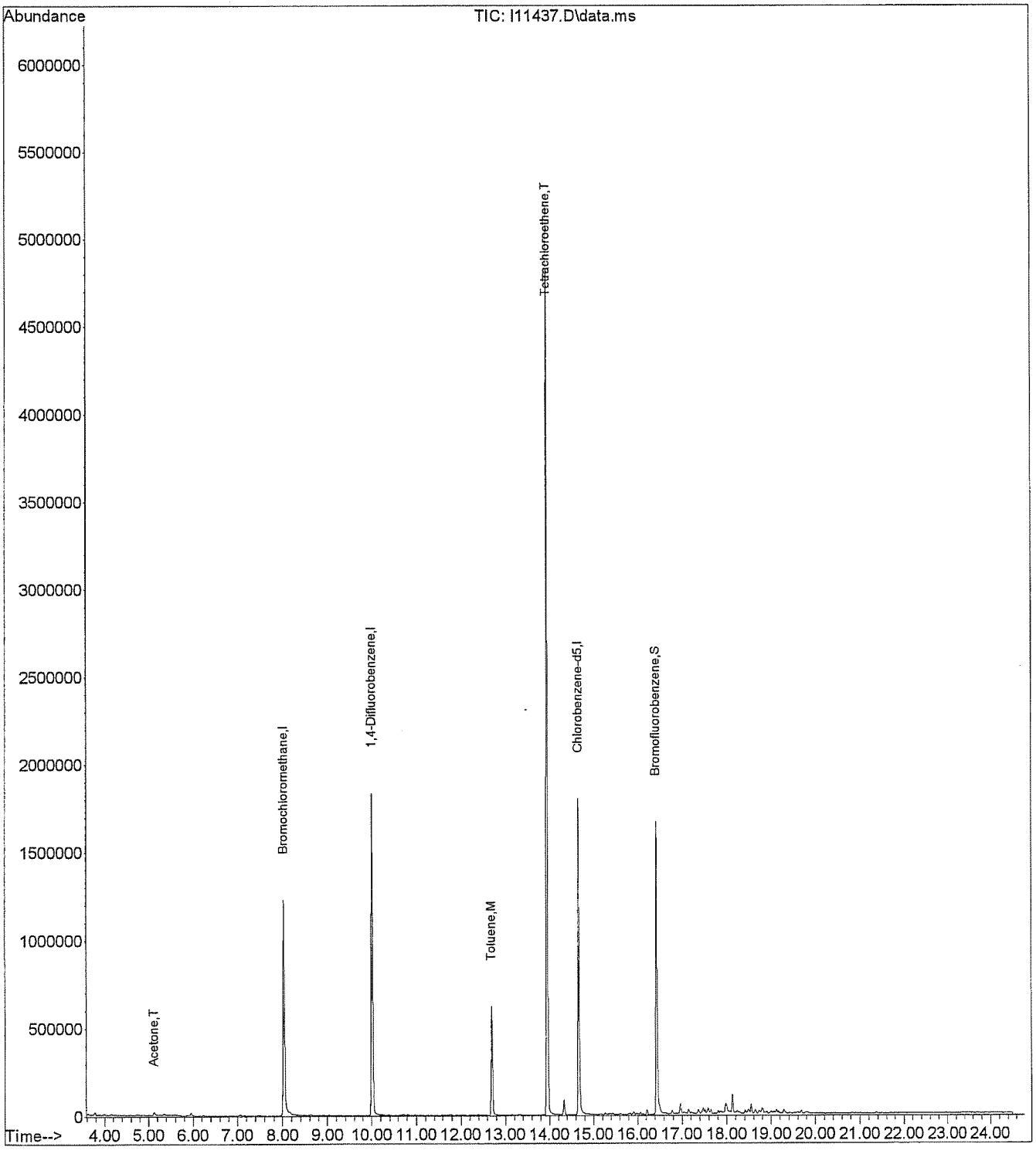
Number TICs found: 0 (µg/L or µg/Kg) ppbv

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11437.D Vial: 15
Acq On : 10 Dec 2013 23:44 Operator: BBL
Sample : 1312347-001A Inst : h5973i
Misc : NJGIAM005,SV-1,,DL,,20ML;SN118 1:200 Multiplr: 1.00
Quant Time: Dec 12 18:17:31 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M



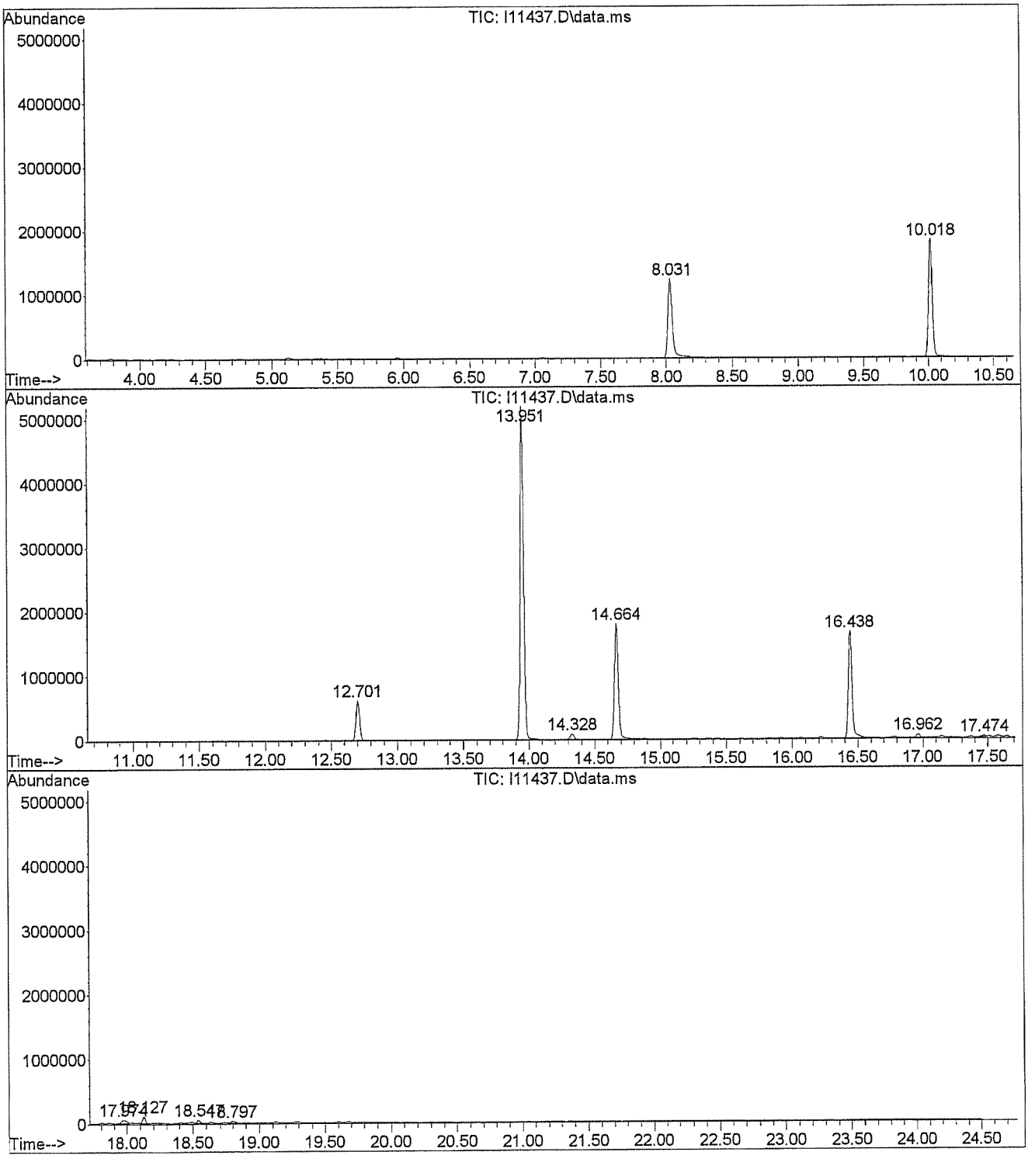
NJGIAM005 V54

LSC Report - Integrated Chromatogram

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11437.D
Acq On : 10 Dec 2013 23:44
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,DL,,20ML;SN118 1:200
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



NJGIAM005 V55

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11437.D Vial: 15
Acq On : 10 Dec 2013 23:44 Operator: BBL
Sample : 1312347-001A Inst : h5973i
Misc : NJGIAM005,SV-1,,DL,,20ML;SN118 1:200 Multiplr: 1.00
Quant Time: Dec 12 18:17:31 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.031	128	452398	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	10.018	114	1728810	10.00	ppbv	0.00
55) Chlorobenzene-d5	14.664	117	1235937	10.00	ppbv	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	16.438	95	667940	8.60	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	86.00%		
Target Compounds						Qvalue
17) Acetone	5.123	43	23548	0.26	ppbv	93
61) Tetrachloroethene	13.951	166	1573990	16.20	ppbv	99
63) Toluene	12.701	92	306847	2.61	ppbv	98

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

NJGIAM005 V56

Library Search Compound Report

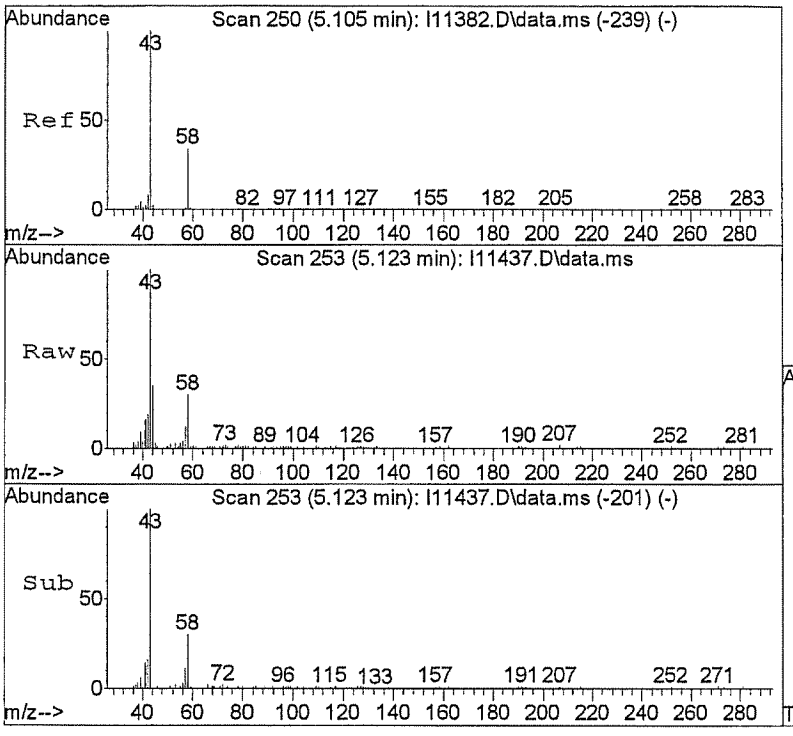
Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11437.D
Acq On : 10 Dec 2013 23:44
Operator : BBL
Sample : 1312347-001A
Misc : NJGIAM005,SV-1,,DL,,20ML;SN118 1:200
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

No Library Search Compounds Detected
****

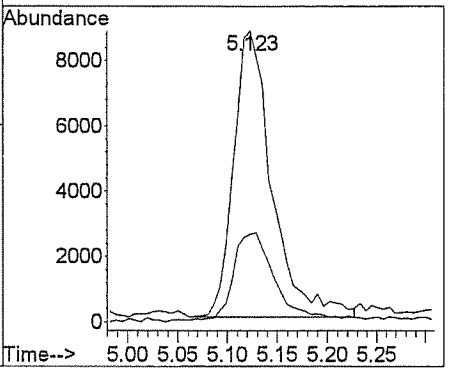
NJGIAM005 V57

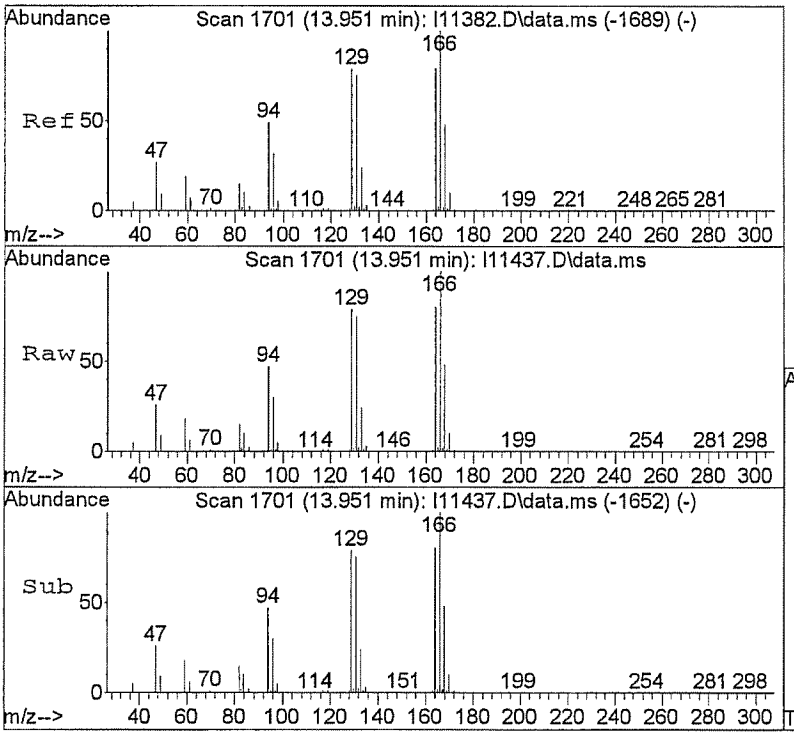


#17
Acetone
Concen: 0.26 ppbv
RT: 5.123 min Scan# 253
Delta R.T. 0.018 min
Lab File: I11437.D
Acq: 10 Dec 2013 23:44

Tgt Ion: 43 Resp: 23548

Ion	Ratio	Lower	Upper
43	100		
58	29.9	14.1	54.1

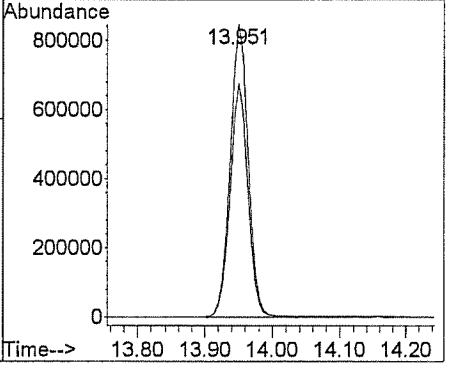




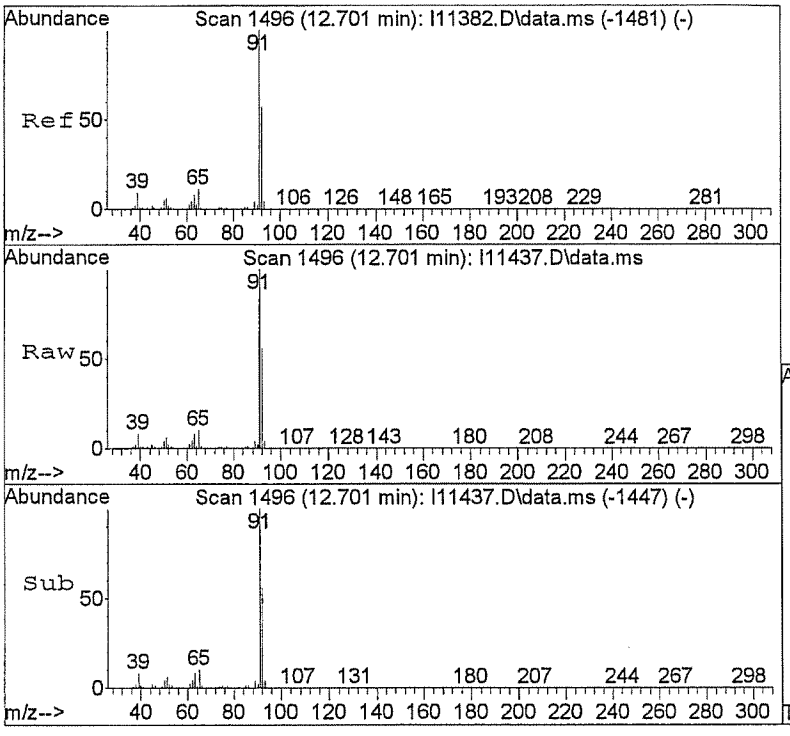
#61
Tetrachloroethene
Concen: 16.20 ppbv
RT: 13.951 min Scan# 1701
Delta R.T. 0.000 min
Lab File: I11437.D
Acq: 10 Dec 2013 23:44

Tgt Ion:166 Resp: 1573990

Ion	Ratio	Lower	Upper
166	100		
164	79.7	58.5	98.5



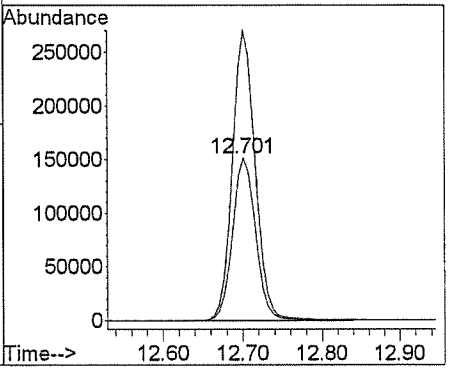
NJGIAM005 V58



#63
Toluene
Concen: 2.61 ppbv
RT: 12.701 min Scan# 1496
Delta R.T. -0.000 min
Lab File: I11437.D
Acq: 10 Dec 2013 23:44

Tgt Ion: 92 Resp: 306847

Ion	Ratio	Lower	Upper
92	100		
91	178.4	155.1	195.1



NJGIAM005 V59

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

III. STANDARD DATA PACKAGE FOR VOLATILE ORGANICS

A. INITIAL CALIBRATION FORM
B. STANDARD GC/MS CHROMATOGRAMS
C. DATA SYSTEM REPORT
D. CONTINUING CALIBRATION FORM
E. STANDARD GC/MS CHROMATOGRAMS
F. DATA SYSTEM REPORT

Form 6

VOCS IN AIR INITIAL CALIBRATION DATA

Lab Name: H2M LABS INC Contract: H2M LABS INC

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM005

Instrument ID: HP5973I Calibration Dates: 12/7/2013 12/7/2013

Heated Purge: (Y/N) N Calibration Times: 17:38 23:36

GC Column: Rxi-1MS ID: .32 (mm)

LAB FILE ID: STD040= I11380.D STD020= I11381.D STD010= I11382.D STD005= I11383.D STD002= I11384.D
STD0.2= I11388.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					$\overline{RRF}$	%RSD	R^2	
Freon-114	*	3.9009644	3.8996977	3.6034265	3.6973514	3.3232946	4.4813286					3.818	10.2	*	
Dichlorodifluoromethane	*	4.1493874	3.9018378	3.5908129	3.7221544	3.3502138	4.6912873					3.901	12.1	*	
1,2-Dichlorotetrafluoroethane	*	3.9009644	3.8996977	3.6034265	3.6973514	3.3232946	4.4813286					3.818	10.2	*	
Chloromethane	*	1.1990711	1.1660164	1.0701647	1.0953926	0.9609339	1.4421347					1.156	14.1	*	
1,3-Butadiene	*	1.1039836	1.0772928	0.9980094	1.0205241	0.8972890	1.4564555					1.092	17.6	*	
Bromomethane	*	1.5684175	1.5497705	1.4533042	1.5149124	1.3841707	1.8428789					1.552	10.2	*	
Vinyl chloride	*	1.6252888	1.5900922	1.4543974	1.4889912	1.3199212	1.8310436					1.552	11.2	*	
Chloroethane	*	0.8405690	0.8258874	0.7621694	0.7852284	0.6955437	1.0116838					0.820	13.0	*	
Ethanol	*	0.2917102	0.1732042	0.1546470	0.1793640	0.1901456	0.2274750					0.203	24.6	*	
Isopropanol	*	2.1628886	1.9300671	1.7084472	2.1240433	2.1332146	2.5404532					2.100	13.2	*	
Methylene chloride	*	1.4928032	1.4365237	1.3470698	1.4297729	1.4626124	2.5227002					1.615	27.7	*	
Allyl Chloride	*	0.6682324	0.6288802	0.5805061	0.5999461	0.5215681	0.7049121					0.617	10.6	*	
Vinyl bromide	*	1.6248638	1.6050126	1.4948496	1.563652	1.406991	1.9675049					1.610	11.9	*	
Acrolein	*	0.509998	0.4572088	0.405886	0.4526132	0.4056527	0.4519912					0.447	8.7	*	
Acetone	*	1.8432054	1.8240555	1.6783216	1.8512774	2.0052588	2.9937462					2.033	23.7	*	
Carbon disulfide	*	4.5599715	4.2701488	3.8455427	3.9057315	3.4571424	4.6344777					4.112	11.1	*	
1,1,2-Trichloro-1,2,2-trifluoroethane	*	3.4973714	3.3038709	2.9377620	2.9693366	2.6555000	3.6049225					3.161	11.6	*	
Ethyl acetate	*	0.433522	0.3967942	0.3375517	0.3477143	0.350431	0.3853583					0.375	9.8	*	
1,1-Dichloroethene	*	1.4917219	1.4034461	1.2958265	1.3360595	1.1850794	1.6983696					1.402	12.7	*	
1,1-Dichloroethane	*	2.7152992	2.5617984	2.3590113	2.4584955	2.2496629	2.9493637					2.549	10.0	*	
Trichlorofluoromethane	*	4.5740409	4.5842329	4.2997325	4.4840693	4.0842047	5.2394997					4.544	8.6	*	
n-Hexane	*	2.4264936	2.1962660	1.9514688	1.9769420	1.8018535	2.5106281					2.144	13.2	*	

Form 6

VOCS IN AIR INITIAL CALIBRATION DATA

Lab Name: H2M LABS INC Contract: H2M LABS INC

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM005

Instrument ID: HP5973I Calibration Dates: 12/7/2013 12/7/2013

Heated Purge: (Y/N) N Calibration Times: 17:38 23:36

GC Column: Rxi-1MS ID: .32 (mm)

LAB FILE ID: STD040= I11380.D STD020= I11381.D STD010= I11382.D STD005= I11383.D STD002= I11384.D
STD0.2= I11388.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					RRF	% RSD	R^2
Vinyl acetate	*	2.6756949	2.4678641	2.1817384	2.1765766	2.2498473	2.3918014					2.357	8.3	*
Methyl tert-butyl ether	*	3.6230339	3.5460774	3.2124492	3.3021674	3.5103352	4.1700595					3.561	9.5	*
1,2-Dichloroethene (trans)	*	1.4612769	1.3628404	1.2351442	1.2785304	1.1309848	1.3891124					1.310	9.1	*
Acrylonitrile	*	0.8509187	0.6856944	0.5785372	0.7519353	0.7059855	0.7302397					0.717	12.4	*
1,2-Dichloroethene (cis)	*	1.5186673	1.4331388	1.3076554	1.3641332	1.2157797	1.6503181					1.415	11.0	*
1,2-Dichloroethene (total)	*	1.4965823	1.4119729	1.2996861	1.3568572	1.2348343	1.8174921					1.436	14.4	*
Tetrahydrofuran	*	1.1905027	1.143438	1.0337075	1.0726381	1.1586316	1.3846150					1.164	10.5	*
Methyl ethyl ketone	*	2.0466362	1.9435977	1.7515167	1.8901652	1.9429563	2.005378					1.930	5.3	*
Chloroform	*	3.2597384	3.0502851	2.7978695	2.8620097	2.770442	3.7070614					3.075	11.7	*
1,2-Dichloroethane	*	2.0586648	1.9439512	1.7685859	1.7060131	1.7196921	2.3091908					1.918	12.3	*
1,1,1-Trichloroethane	*	0.8049629	0.7497308	0.6664434	0.7596872	0.7010944	0.9934158					0.779	14.8	*
Cyclohexane	*	0.5467006	0.5084410	0.4529119	0.519388	0.4582651	0.6690601					0.526	15.0	*
Carbon tetrachloride	*	0.9405837	0.8738143	0.7575969	0.8444013	0.7562954	1.057194					0.872	13.2	*
Bromodichloromethane	*	0.8951971	0.8296405	0.7254562	0.7680654	0.7588255	1.0648126					0.840	14.9	*
1,2-Dichloropropane	*	0.3936761	0.3663647	0.3226805	0.3309179	0.3547101	0.5003244					0.378	17.2	*
1,4-Dioxane	*	0.2136781	0.1780982	0.1453241	0.1856676	0.1872138	0.1090723					0.170	21.8	*
2,2,4-Trimethylpentane	*	1.7031651	1.601253	1.3916252	1.5398472	1.5165582	2.1727334					1.654	16.6	*
Methyl methacrylate	*	0.3727559	0.3452239	0.2927644	0.3408161	0.3492744	0.4107649					0.352	11.1	*
1,3-Dichloropropene (cis)	*	0.6650721	0.6038042	0.5191621	0.535695	0.5540797	0.681565					0.593	11.5	*
Trichloroethene	*	0.5362005	0.4819560	0.4122127	0.4663863	0.4239134	0.6048961					0.488	14.9	*
Benzene	*	1.0974758	1.0282575	0.9167286	1.0136623	1.0018646	1.4527858					1.085	17.4	*
Dibromochloromethane	*	0.8850405	0.8087770	0.6788297	0.6868582	0.6933073	0.8895512					0.774	12.9	*

Form 6

VOCS IN AIR INITIAL CALIBRATION DATA

Lab Name: H2M LABS INC Contract: H2M LABS INC

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM005

Instrument ID: HP5973I Calibration Dates: 12/7/2013 12/7/2013

Heated Purge: (Y/N) N Calibration Times: 17:38 23:36

GC Column: Rxi-1MS ID: .32 (mm)

LAB FILE ID: STD040= I11380.D STD020= I11381.D STD010= I11382.D STD005= I11383.D STD002= I11384.D
STD0.2= I11388.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					RRF	% RSD	R^2	
1,3-Dichloropropene (trans)	*	0.5724818	0.5116354	0.4329173	0.45463	0.4612795	0.5473222					0.497	11.3	*	
1,1,2-Trichloroethane	*	0.442558	0.4127636	0.3588451	0.3690351	0.3989025	0.5598914					0.424	17.3	*	
Bromoform	*	0.8002007	0.7058962	0.5796504	0.5959117	0.6059505	0.7642773					0.675	14.0	*	
n-Heptane	*	0.7389524	0.6838834	0.6141960	0.6606144	0.6523360	0.9161441					0.711	15.3	*	
Methyl isobutyl ketone	*	0.7404733	0.6825753	0.6058197	0.8248421	0.8498260	0.6291947					0.722	14.0	*	
3-Hexanone	*	0.3916075	0.3415606	0.2943567	0.3949596	0.3933708	0.297718					0.352	13.6	*	
Methyl butyl ketone	*	0.7077625	0.6146646	0.5378236	0.7304439	0.7434046	0.3294683					0.611	26.0	*	
1,2-Dibromoethane	*	0.8671185	0.8041881	0.719191	0.7400521	0.8194018	0.998148					0.825	12.2	*	
Tetrachloroethene	*	0.8459222	0.7663448	0.6776141	0.7133507	0.7053954	1.0084465					0.786	15.8	*	
1,1,2,2-Tetrachloroethane	*	1.0648068	0.9904653	0.8976425	0.9932776	1.0669721	1.3673149					1.063	15.2	*	
Toluene	*	0.9814711	0.9053133	0.8235618	0.8261462	0.9257881	1.2452706					0.951	16.4	*	
Chlorobenzene	*	1.2328652	1.1177651	1.0108618	1.0243749	1.1481703	1.5790976					1.186	17.7	*	
Ethylbenzene	*	2.0363063	1.8695394	1.6780069	1.7420927	1.9676285	2.6723256					1.994	18.0	*	
Xylenes (m&p)	*	1.7569753	1.5993326	1.4068869	1.4533677	1.6128109	2.166799					1.666	16.5	*	
Xylenes (o)	*	1.5810991	1.4249608	1.2727964	1.3389170	1.5026093	2.0201835					1.523	17.5	*	
Xylene (total)	*	1.5810991	1.4249608	1.2727964	1.3389170	1.5026093	2.0201835					1.523	17.5	*	
2-Chlorotoluene	*	1.4923155	1.2757517	1.1512079	1.20397	1.3324413	1.7180213					1.362	15.4	*	
n-Propylbenzene	*	2.2418357	2.1349702	1.8906704	2.0377291	2.2593702	2.9029962					2.245	15.6	*	
4-Ethyltoluene	*	2.035563	1.8021201	1.5950746	1.7338038	1.8632951	2.1609874					1.865	11.0	*	
1,3,5-Trimethylbenzene	*	1.7233138	1.5256421	1.3565084	1.4705523	1.6109182	1.9252316					1.602	12.6	*	
1,2,4-Trimethylbenzene	*	1.6441946	1.4147692	1.2559607	1.3865662	1.4780199	1.6311459					1.468	10.2	*	
Isopropylbenzene	*	2.0834116	1.8969206	1.6893603	1.7878483	1.9712977	2.7024948					2.022	17.8	*	

Form 6

VOCS IN AIR INITIAL CALIBRATION DATA

Lab Name: H2M LABS INC Contract: H2M LABS INC

Lab Code: 10478 Case No.: NJGIAM SAS No.: SDG No.: NJGIAM005

Instrument ID: HP5973I Calibration Dates: 12/7/2013 12/7/2013

Heated Purge: (Y/N) N Calibration Times: 17:38 23:36

GC Column: Rxi-1MS ID: .32 (mm)

LAB FILE ID: STD040= I11380.D STD020= I11381.D STD010= I11382.D STD005= I11383.D STD002= I11384.D
STD0.2= I11388.D

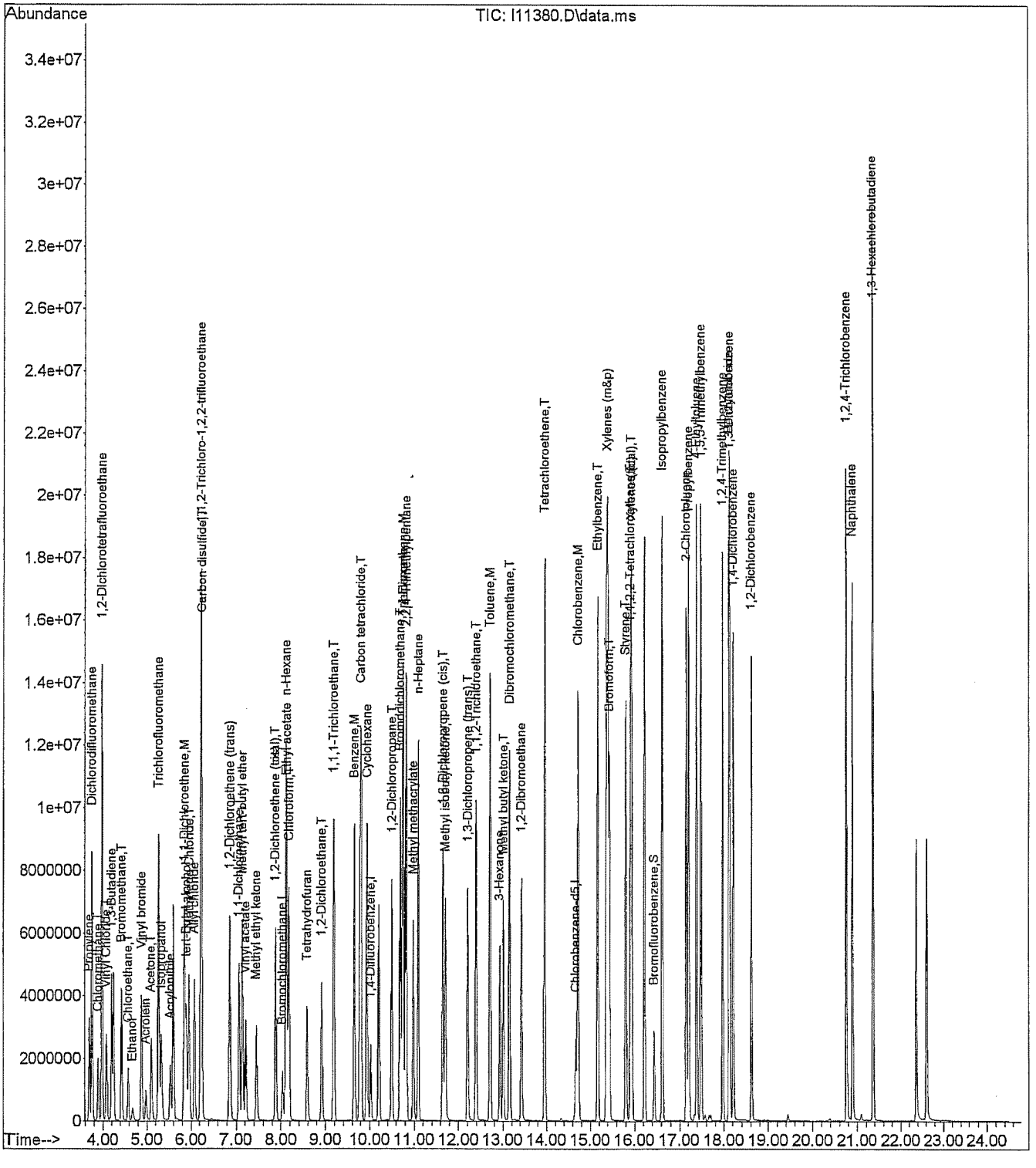
COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					$\overline{RRF}$	%RSD	R^2
1,3-Dichlorobenzene	*	1.0356347	0.8274831	0.7209427	0.8012051	0.8614042	0.9266136					0.862	12.6	*
1,4-Dichlorobenzene	*	0.9647451	0.7588709	0.6761316	0.7830332	0.8542594	0.9395188					0.829	13.4	*
1,2-Dichlorobenzene	*	0.9073611	0.7148343	0.6611585	0.7425613	0.7736633	0.8781548					0.780	12.3	*
Benzyl chloride	*	0.3087004	0.2385925	0.2027526	0.2425400	0.2419186	0.1550766					0.232	21.9	*
1,3-Hexachlorobutadiene	*	0.9837081	0.8822607	0.7735812	0.8297465	0.6660094	0.7777332					0.819	13.2	*
1,2,4-Trichlorobenzene	*	0.9916667	0.5998204	0.4627066	0.7112523	0.6240739	0.7163692					0.684	25.8	*
4-Bromofluorobenzene	*	0.6423035	0.6345166	0.6221027	0.6214699	0.6126704	0.6365644					0.628	1.8	*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11380.D Vial: 4
Acq On : 7 Dec 2013 17:38 Operator: BBL
Sample : VSTD040 Inst : h5973i
Misc : ,,,ICAL_40,,400ML;SN385 Multiplr: 1.00
Quant Time: Dec 07 23:33:00 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 22:3
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M



NJGIAM005 V65

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11380.D Vial: 4
Acq On : 7 Dec 2013 17:38 Operator: BBL
Sample : VSTD040 Inst : h5973i
Misc : ,,,ICAL_40,,400ML;SN385 Multiplr: 1.00
Quant Time: Dec 07 23:33:00 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 22:35:02 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	8.037	128	488274	10.00	ppbv		0.00
37) 1,4-Difluorobenzene	10.025	114	2081181	10.00	ppbv		0.00
55) Chlorobenzene-d5	14.670	117	1686424	10.00	ppbv		0.00
System Monitoring Compounds							
66) Bromofluorobenzene	16.444	95	1083196	10.36	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.60%				
Target Compounds							Qvalue
2) Propylene	3.690	41	1859916	38.89	ppbv		100
3) Dichlorodifluoromethane	3.751	85	8104152	42.69	ppbv		99
4) 1,2-DIchlorotetrafluoroeth	3.977	85	7618958	40.42	ppbv		100
5) Chloromethane	3.892	50	2341901	41.64	ppbv		99
6) 1,3-Butadiene	4.196	39	2156186	38.85	ppbv		98
7) Bromomethane	4.422	94	3063270	40.57	ppbv		99
8) Vinyl Chloride	4.075	62	3174345	39.24	ppbv		99
9) Chloroethane	4.574	64	1641712	41.43	ppbv		99
10) Ethanol	4.672	45	569738	47.16	ppbv		97
11) Isopropanol	5.324	45	4224329	39.78	ppbv		98
12) Methylene Chloride	5.952	49	2915588	32.36	ppbv		97
13) Allyl chloride	6.074	76	1305122	42.46	ppbv		95
14) tert-Butyl alcohol	5.891	59	5102566	41.09	ppbv		99
15) Vinyl bromide	4.879	106	3173515	40.38	ppbv		100
16) Acrolein	4.977	56	996075	40.17	ppbv		100
17) Acetone	5.099	43	3599957	33.88	ppbv		100
19) Acrylonitrile	5.525	53	1661926	47.87	ppbv		99
20) Carbon disulfide	6.239	76	8906062	44.33	ppbv		97
21) 1,1,2-Trichloro-1,2,2-trif	6.227	101	6830702	45.00	ppbv		94
22) 1,1-Dichloroethene	5.849	96	2913476	43.25	ppbv		98
23) 1,1-Dichloroethane	7.056	63	5303240	42.92	ppbv		100
24) Trichlorofluoromethane	5.263	101	8933541	40.21	ppbv		100
25) n-Hexane	8.116	57	4739175	45.64	ppbv		95
26) Vinyl acetate	7.214	43	5225889	45.28	ppbv		99
27) Ethyl acetate	8.129	61	846710	46.12	ppbv	#	87
29) Methyl tert-butyl ether	7.135	73	7076133	40.99	ppbv		99
30) 1,2-Dichloroethene (trans)	6.861	96	2854014	43.89	ppbv		98
31) 1,2-Dichloroethene (cis)	7.879	96	2966103	43.08	ppbv		97
32) 1,2-Dichloroethene (total)	7.879	96	5845938m	80.08	ppbv		
33) Tetrahydrofuran	8.586	42	2325166	38.84	ppbv		98
34) Methyl ethyl ketone	7.452	43	3997277	42.31	ppbv		99
35) Chloroform	8.177	83	6366582	42.86	ppbv		99
36) 1,2-Dichloroethane	8.921	62	4020770	43.70	ppbv		100
38) 1,1,1-Trichloroethane	9.183	97	6701094	42.28	ppbv		100
39) Cyclohexane	9.939	56	4551132	43.09	ppbv		98
42) Carbon tetrachloride	9.805	117	7830100	44.49	ppbv		99
43) 2,2,4-Trimethylpentane	10.811	57	14178379	42.41	ppbv		99
44) Bromodichloromethane	10.689	83	7452269	43.71	ppbv		99
45) 1,2-Dichloropropane	10.500	63	3277245	42.93	ppbv		100
46) 1,4-Dioxane	10.744	88	1778811	48.46	ppbv		98
47) 1,3-Dichloropropene (cis)	11.652	75	5536542	45.77	ppbv		99
48) Trichloroethene	10.744	130	4463721	42.54	ppbv		97
49) Benzene	9.653	78	9136183	41.32	ppbv		100
50) Methyl methacrylate	10.970	41	3103090	42.73	ppbv		97

JRL 12/12/13

NJGIAM005 V66

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11380.D Vial: 4
Acq On : 7 Dec 2013 17:38 Operator: BBL
Sample : VSTD040 Inst : h5973i
Misc : ,,,ICAL_40,,400ML;SN385 Multiplr: 1.00
Quant Time: Dec 07 23:33:00 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 22:35:02 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) Dibromochloromethane	13.152	129	7367718	46.72	ppbv		99
52) 1,3-Dichloropropene (trans	12.213	75	4765753	47.60	ppbv		99
53) 1,1,2-Trichloroethane	12.396	97	3684173	42.73	ppbv		99
54) Bromoform	15.438	173	6661450	48.99	ppbv		99
56) n-Heptane	11.091	43	4984748	40.91	ppbv		99
57) Methyl isobutyl ketone	11.707	43	4995008	38.74	ppbv		98
58) 3-Hexanone	12.926	43	2641665	43.49	ppbv		97
59) Methyl butyl ketone	13.012	43	4774351	43.38	ppbv		100
60) 1,2-Dibromoethane	13.426	107	5849318	41.83	ppbv		99
61) Tetrachloroethene	13.957	166	5706334	41.22	ppbv		99
62) 1,1,2,2-Tetrachloroethane	15.901	83	7182863	40.23	ppbv		100
63) Toluene	12.707	92	6620706	40.88	ppbv		97
64) Chlorobenzene	14.719	112	8316534	41.66	ppbv		100
65) Ethylbenzene	15.170	91	13736303	41.17	ppbv		98
67) Styrene	15.798	104	7356982	42.81	ppbv		100
68) Xylenes (m&p)	15.396	91	23704043	85.02	ppbv		99
69) Xylenes (o)	15.926	91	10665614	41.65	ppbv		100
70) Xylene (total)	15.926	91	10665614	41.65	ppbv		100
71) 2-Chlorotoluene	17.157	91	10066707	43.92	ppbv		99
72) Propylbenzene	17.212	91	15122742	39.86	ppbv		94
73) 4-Ethyltoluene	17.389	105	13731289	43.70	ppbv		98
74) 1,3,5-Trimethylbenzene	17.487	105	11624951	43.04	ppbv		98
75) 1,2,4-Trimethylbenzene	17.968	105	11091237	44.64	ppbv		98
76) Isopropylbenzene	16.621	105	14054061	41.43	ppbv		96
77) 1,3-Dichlorobenzene	18.133	146	6986077	48.08	ppbv		98
78) 1,4-Dichlorobenzene	18.218	146	6507877	46.31	ppbv		99
79) 1,2-Dichlorobenzene	18.620	146	6120782	45.64	ppbv		99
80) Benzylchloride	18.121	126	2082399	52.73	ppbv	#	86
83) 1,3-Hexachlorobutadiene	21.370	225	6635796	46.57	ppbv		99
84) 1,2,4-Trichlorobenzene	20.754	180	6689482	52.92	ppbv		98
85) Naphthalene	20.888	128	12859561	71.14	ppbv		99

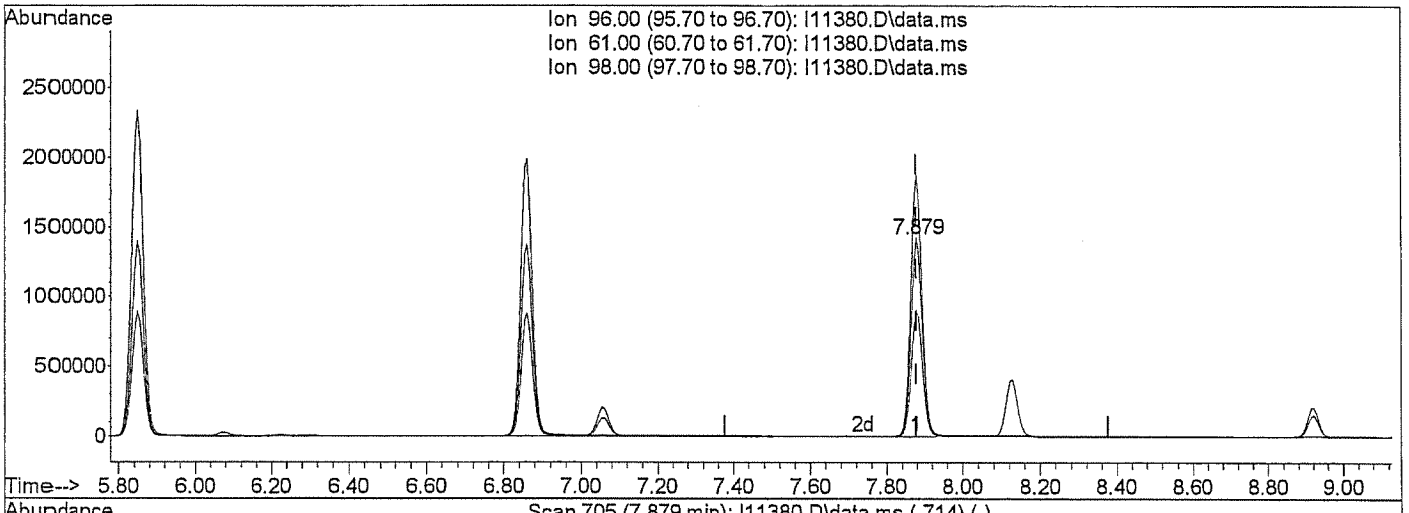
(#) = qualifier out of range (m) = manual integration (+) = signals summed

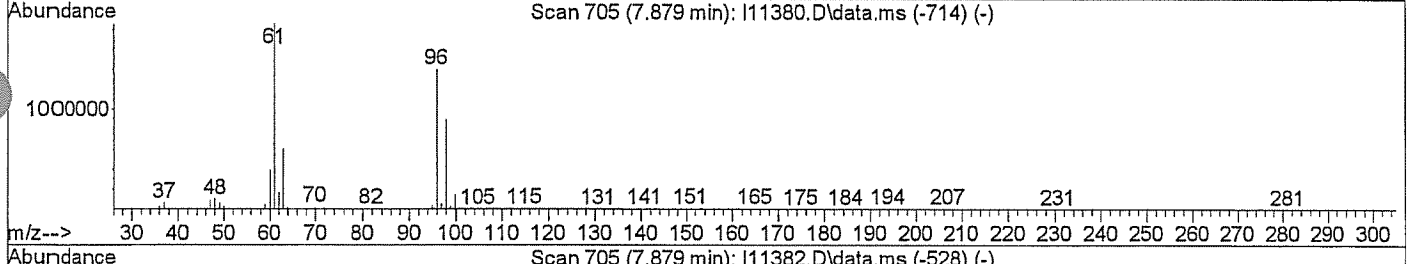
NJGIAM005 V67

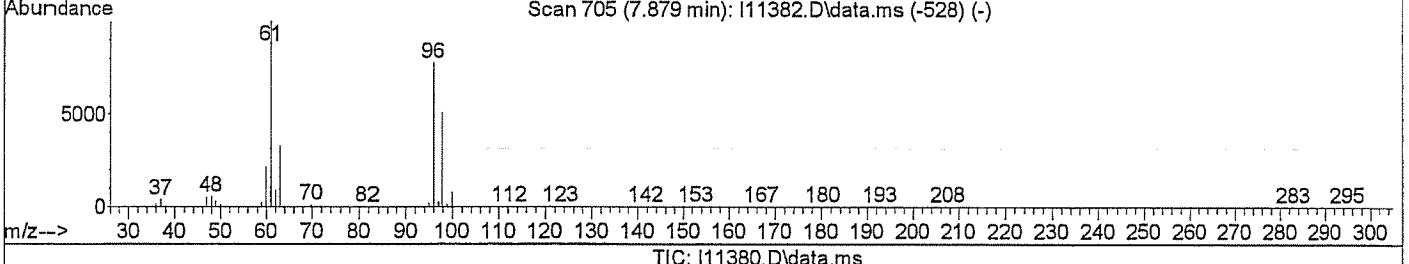
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11380.D Vial: 4
Acq On : 7 Dec 2013 17:38 Operator: BBL
Sample : VSTD040 Inst : h5973i
Misc : ,,,ICAL_40,,400ML;SN385 Multiplr: 1.00
Quant Time: Dec 07 23:33:00 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 22:3
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11380.D\data.ms

(32) 1,2-Dichloroethene (total) (T)

7.879min (+0.000) 80.08 ppbv m

response 5845938

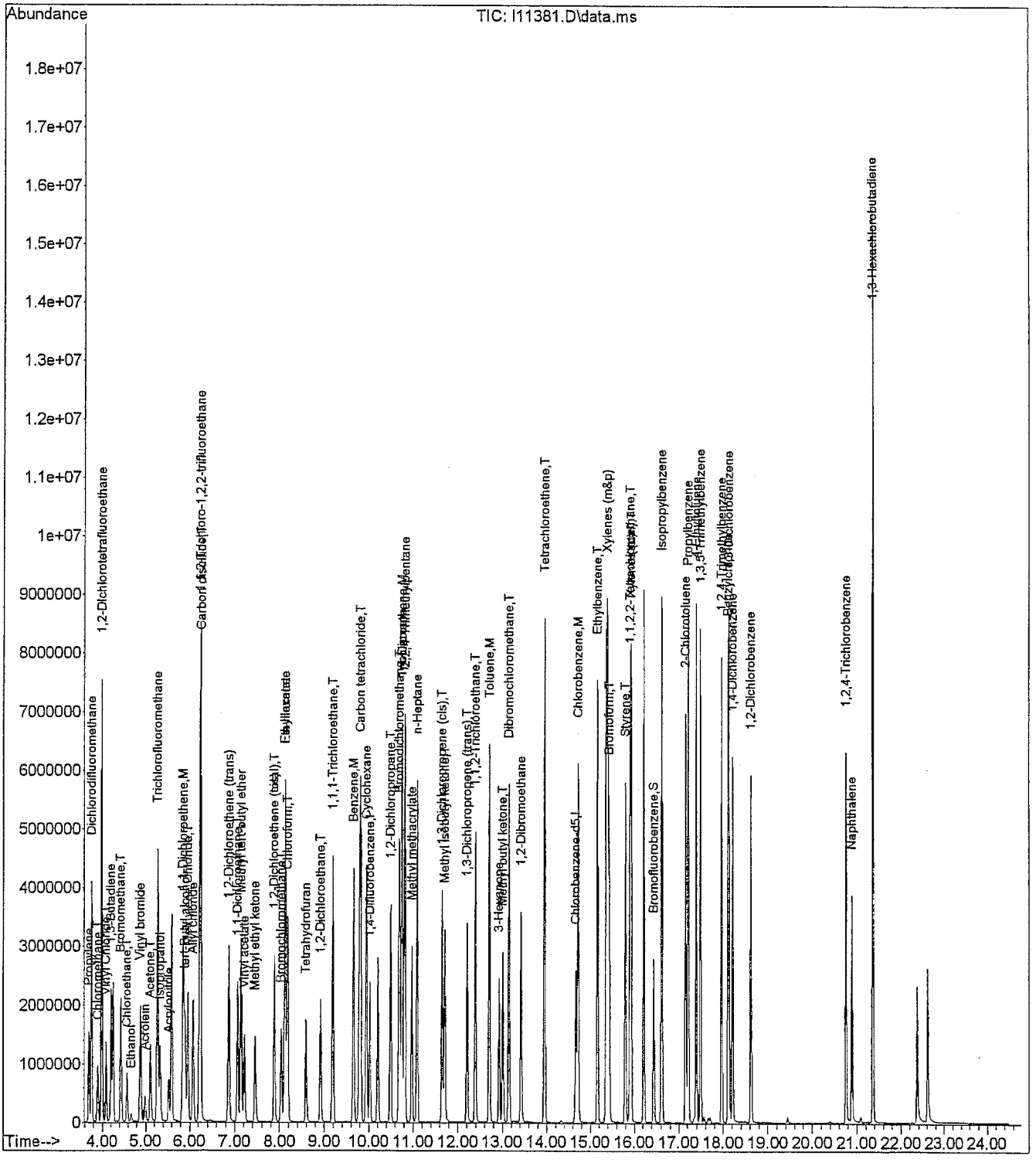
Ion	Exp%	Act%
96.00	100	100
61.00	128.90	132.38
98.00	65.20	63.82
0.00	0.00	0.00

NJGIAM005 V68

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11381.D Vial: 5
Acq On : 7 Dec 2013 18:21 Operator: BBL
Sample : VSTD020 Inst : h5973i
Misc : ,,,ICAL_20.0,,400ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:20 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M



NJGIAM005 V69

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11381.D Vial: 5
Acq On : 7 Dec 2013 18:21 Operator: BBL
Sample : VSTD020 Inst : h5973i
Misc : ,,,ICAL_20.0,,400ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:20 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	8.037	128	496469	10.00	ppbv		0.00
37) 1,4-Difluorobenzene	10.025	114	2102472	10.00	ppbv		0.00
55) Chlorobenzene-d5	14.670	117	1670746	10.00	ppbv		0.00
System Monitoring Compounds							
66) Bromofluorobenzene	16.444	95	1060116	10.24	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.40%				
Target Compounds							Qvalue
2) Propylene	3.697	41	892286	18.35	ppbv		100
3) Dichlorodifluoromethane	3.758	85	3874283	20.07	ppbv		100
4) 1,2-DIchlorotetrafluoroeth	3.983	85	3872158	20.20	ppbv		97
5) Chloromethane	3.898	50	1157782	20.25	ppbv		100
6) 1,3-Butadiene	4.197	39	1069685	18.96	ppbv		99
7) Bromomethane	4.428	94	1538826	20.04	ppbv		99
8) Vinyl Chloride	4.081	62	1578863	19.19	ppbv		99
9) Chloroethane	4.574	64	820055	20.35	ppbv		99
10) Ethanol	4.678	45	171981	14.00	ppbv		98
11) Isopropanol	5.324	45	1916437	17.75	ppbv		99
12) Methylene Chloride	5.958	49	1426379	15.57	ppbv		98
13) Allyl chloride	6.074	76	624439	19.98	ppbv		98
14) tert-Butyl alcohol	5.891	59	2425453	19.21	ppbv		99
15) Vinyl bromide	4.885	106	1593678	19.94	ppbv		100
16) Acrolein	4.983	56	453980	18.01	ppbv		100
17) Acetone	5.105	43	1811174	16.76	ppbv		99
19) Acrylonitrile	5.526	53	680852	19.29	ppbv		100
20) Carbon disulfide	6.239	76	4239993	20.76	ppbv		100
21) 1,1,2-Trichloro-1,2,2-trif	6.227	101	3280539	21.26	ppbv		100
22) 1,1-Dichloroethene	5.855	96	1393535	20.34	ppbv		99
23) 1,1-Dichloroethane	7.056	63	2543707	20.24	ppbv		99
24) Trichlorofluoromethane	5.263	101	4551859	20.15	ppbv		100
25) n-Hexane	8.117	57	2180756	20.65	ppbv		91
26) Vinyl acetate	7.214	43	2450436	20.88	ppbv		99
27) Ethyl acetate	8.123	61	393992	21.11	ppbv	#	88
29) Methyl tert-butyl ether	7.135	73	3521035	20.06	ppbv		99
30) 1,2-Dichloroethene (trans)	6.861	96	1353216	20.47	ppbv		98
31) 1,2-Dichloroethene (cis)	7.879	96	1423018	20.33	ppbv		98
32) 1,2-Dichloroethene (total)	7.879	96	2804003m	37.78	ppbv		
33) Tetrahydrofuran	8.586	42	1135363	18.65	ppbv		99
34) Methyl ethyl ketone	7.452	43	1929872	20.09	ppbv		100
35) Chloroform	8.171	83	3028744	20.05	ppbv		99
36) 1,2-Dichloroethane	8.915	62	1930223	20.63	ppbv		100
38) 1,1,1-Trichloroethane	9.183	97	3152576	19.69	ppbv		100
39) Cyclohexane	9.939	56	2137966	20.04	ppbv		99
42) Carbon tetrachloride	9.805	117	3674340	20.67	ppbv		99
43) 2,2,4-Trimethylpentane	10.811	57	6733179	19.94	ppbv		100
44) Bromodichloromethane	10.683	83	3488592	20.25	ppbv		100
45) 1,2-Dichloropropane	10.494	63	1540543	19.97	ppbv		100
46) 1,4-Dioxane	10.744	88	748893	20.19	ppbv		99
47) 1,3-Dichloropropene (cis)	11.646	75	2538963	20.78	ppbv		99
48) Trichloroethene	10.744	130	2026598	19.12	ppbv		97
49) Benzene	9.653	78	4323765	19.35	ppbv		100
50) Methyl methacrylate	10.970	41	1451647	19.79	ppbv		100

JH 12/12/13

NJGIAM005 V70

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11381.D Vial: 5
Acq On : 7 Dec 2013 18:21 Operator: BBL
Sample : VSTD020 Inst : h5973i
Misc : ,,,ICAL_20.0,,400ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:20 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) Dibromochloromethane	13.146	129	3400862	21.35	ppbv	100
52) 1,3-Dichloropropene (trans	12.207	75	2151398	21.27	ppbv	100
53) 1,1,2-Trichloroethane	12.390	97	1735648	19.93	ppbv	100
54) Bromoform	15.432	173	2968254	21.61	ppbv	100
56) n-Heptane	11.085	43	2285191	18.93	ppbv	99
57) Methyl isobutyl ketone	11.707	43	2280820	17.86	ppbv	99
58) 3-Hexanone	12.927	43	1141322	18.96	ppbv	98
59) Methyl butyl ketone	13.006	43	2053897	18.84	ppbv	99
60) 1,2-Dibromoethane	13.420	107	2687188	19.40	ppbv	99
61) Tetrachloroethene	13.951	166	2560735	18.67	ppbv	99
62) 1,1,2,2-Tetrachloroethane	15.902	83	3309632	18.71	ppbv	99
63) Toluene	12.707	92	3025097	18.85	ppbv	99
64) Chlorobenzene	14.719	112	3735003	18.89	ppbv	100
65) Ethylbenzene	15.164	91	6247051	18.90	ppbv	100
67) Styrene	15.792	104	3206653	18.83	ppbv	99
68) Xylenes (m&p)	15.389	91	10688314	38.70	ppbv	100
69) Xylenes (o)	15.920	91	4761495	18.77	ppbv	99
70) Xylene (total)	15.920	91	4761495	18.77	ppbv	99
71) 2-Chlorotoluene	17.157	91	4262914	18.77	ppbv	98
72) Propylbenzene	17.212	91	7133986	18.98	ppbv	99
73) 4-Ethyltoluene	17.389	105	6021770	19.34	ppbv	100
74) 1,3,5-Trimethylbenzene	17.487	105	5097921	19.05	ppbv	99
75) 1,2,4-Trimethylbenzene	17.968	105	4727440	19.20	ppbv	100
76) Isopropylbenzene	16.615	105	6338545	18.86	ppbv	99
77) 1,3-Dichlorobenzene	18.127	146	2765028	19.21	ppbv	98
78) 1,4-Dichlorobenzene	18.212	146	2535761	18.21	ppbv	99
79) 1,2-Dichlorobenzene	18.621	146	2388613	17.98	ppbv	100
80) Benzylchloride	18.115	126	797255	20.38	ppbv	97
83) 1,3-Hexachlorobutadiene	21.364	225	2948067	20.88	ppbv	99
84) 1,2,4-Trichlorobenzene	20.754	180	2004295	16.01	ppbv	100
85) Naphthalene	20.882	128	3112807	17.38	ppbv	100

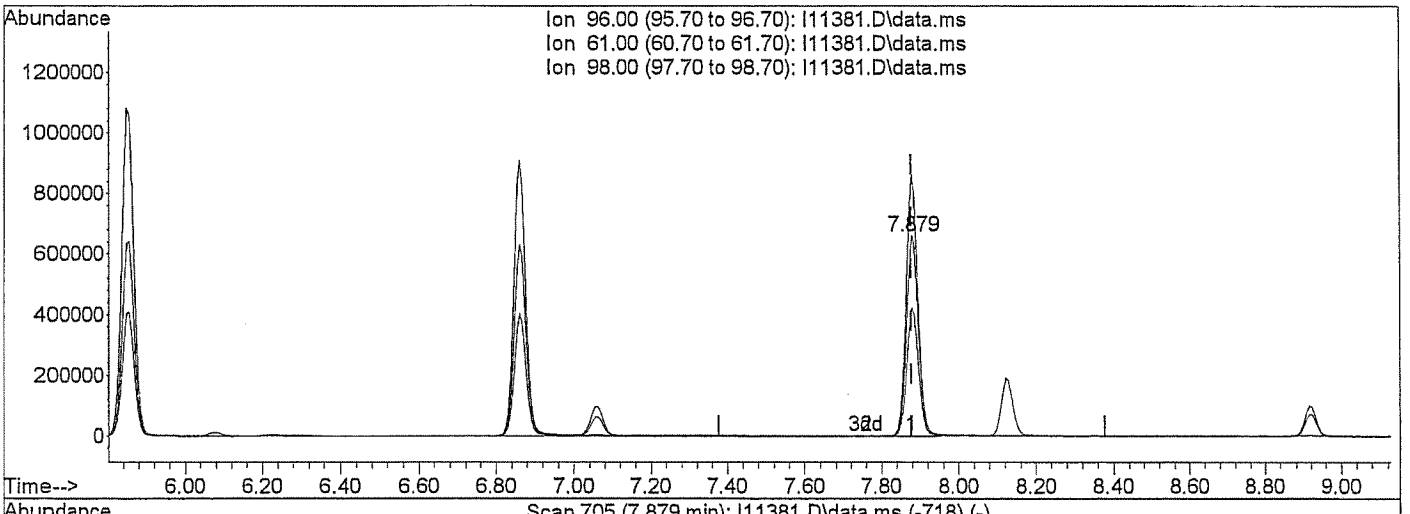
(#) = qualifier out of range (m) = manual integration (+) = signals summed

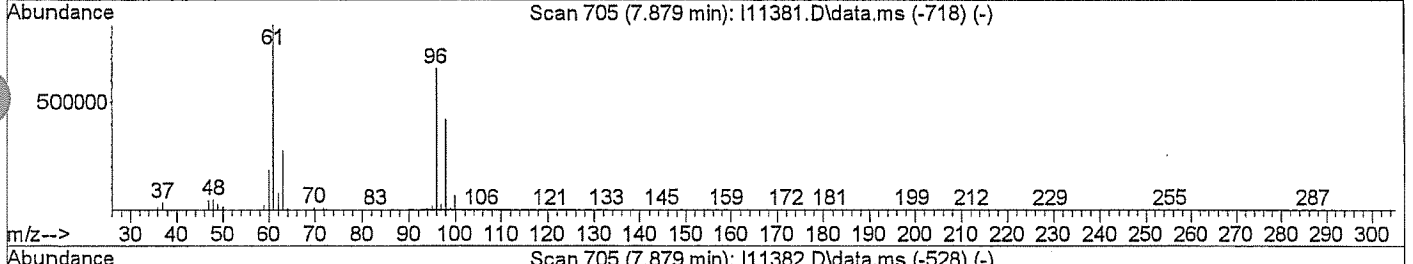
NJGIAM005 V71

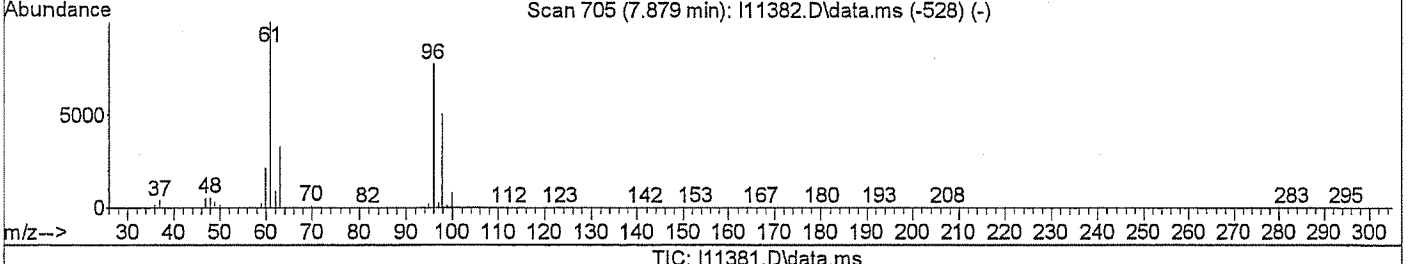
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11381.D Vial: 5
Acq On : 7 Dec 2013 18:21 Operator: BBL
Sample : VSTD020 Inst : h5973i
Misc : ,,,ICAL_20.0,,400ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:20 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11381.D\data.ms

(32) 1,2-Dichloroethene (total) (T)

7.879min (+0.000) 37.78 ppbv m

response 2804003

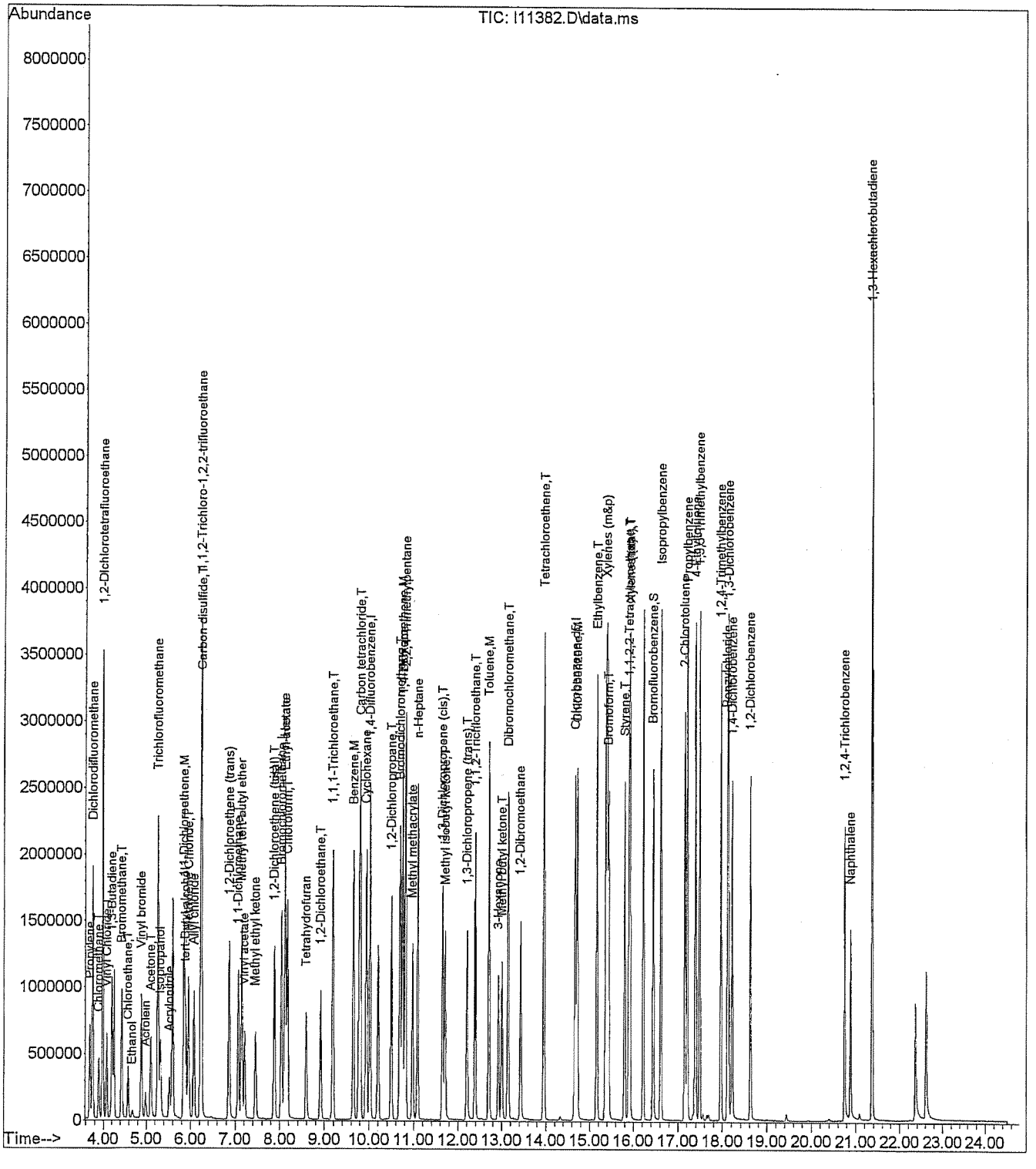
Ion	Exp%	Act%
96.00	100	100
61.00	128.90	130.71
98.00	65.20	63.85
0.00	0.00	0.00

NJGIAM005 V72

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11382.D Vial: 6
Acq On : 7 Dec 2013 19:04 Operator: BBL
Sample : VSTD010 Inst : h5973i
Misc : ,,,ICAL_10.0,,200ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:32 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M



NJGIAM005 V73

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11382.D Vial: 6
Acq On : 7 Dec 2013 19:04 Operator: BBL
Sample : VSTD010 Inst : h5973i
Misc : ,,,ICAL_10.0,,200ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:32 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.037	128	505881	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	10.018	114	2194440	10.00	ppbv	0.00
55) Chlorobenzene-d5	14.664	117	1652023	10.00	ppbv	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	16.438	95	1027728	10.04	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.40%			
Target Compounds						Qvalue
2) Propylene	3.696	41	421714	8.51	ppbv	100
3) Dichlorodifluoromethane	3.757	85	1816524	9.23	ppbv	100
4) 1,2-DIchlorotetrafluoroeth	3.983	85	1822905	9.33	ppbv	100
5) Chloromethane	3.892	50	541376	9.29	ppbv	100
6) 1,3-Butadiene	4.196	39	504874	8.78	ppbv	100
7) Bromomethane	4.428	94	735199	9.40	ppbv	100
8) Vinyl Chloride	4.080	62	735752	8.78	ppbv	100
9) Chloroethane	4.574	64	385567	9.39	ppbv	100
10) Ethanol	4.672	45	78233	6.25	ppbv	100
11) Isopropanol	5.318	45	864271	7.85	ppbv	100
12) Methylene Chloride	5.952	49	681457	7.30	ppbv	100
13) Allyl chloride	6.074	76	293667	9.22	ppbv	100
14) tert-Butyl alcohol	5.885	59	1084182	8.43	ppbv	100
15) Vinyl bromide	4.879	106	756216	9.29	ppbv	100
16) Acrolein	4.983	56	205330	7.99	ppbv	100
17) Acetone	5.105	43	849031	7.71	ppbv	100
19) Acrylonitrile	5.525	53	292671	8.14	ppbv	100
20) Carbon disulfide	6.239	76	1945387	9.35	ppbv	100
21) 1,1,2-Trichloro-1,2,2-trif	6.226	101	1486158	9.45	ppbv	100
22) 1,1-Dichloroethene	5.848	96	655534	9.39	ppbv	100
23) 1,1-Dichloroethane	7.056	63	1193379	9.32	ppbv	100
24) Trichlorofluoromethane	5.263	101	2175153	9.45	ppbv	100
25) n-Hexane	8.110	57	987211	9.18	ppbv	100
26) Vinyl acetate	7.208	43	1103700	9.23	ppbv	100
27) Ethyl acetate	8.122	61	170761	8.98	ppbv	100
29) Methyl tert-butyl ether	7.135	73	1625117	9.09	ppbv	100
30) 1,2-Dichloroethene (trans)	6.860	96	624836	9.28	ppbv	100
31) 1,2-Dichloroethene (cis)	7.879	96	661518	9.27	ppbv	100
32) 1,2-Dichloroethene (total)	7.879	96	1314973m	17.39	ppbv	
33) Tetrahydrofuran	8.586	42	522933	8.43	ppbv	100
34) Methyl ethyl ketone	7.452	43	886059	9.05	ppbv	100
35) Chloroform	8.171	83	1415389	9.20	ppbv	100
36) 1,2-Dichloroethane	8.915	62	894694	9.39	ppbv	100
38) 1,1,1-Trichloroethane	9.183	97	1462470	8.75	ppbv	100
39) Cyclohexane	9.933	56	993888	8.92	ppbv	100
42) Carbon tetrachloride	9.799	117	1662501	8.96	ppbv	100
43) 2,2,4-Trimethylpentane	10.805	57	3053838	8.66	ppbv	100
44) Bromodichloromethane	10.683	83	1591970	8.85	ppbv	100
45) 1,2-Dichloropropane	10.494	63	708103	8.80	ppbv	100
46) 1,4-Dioxane	10.744	88	318905	8.24	ppbv	100
47) 1,3-Dichloropropene (cis)	11.646	75	1139270	8.93	ppbv	100
48) Trichloroethene	10.738	130	904576	8.18	ppbv	100
49) Benzene	9.646	78	2011706	8.63	ppbv	100
50) Methyl methacrylate	10.963	41	642454	8.39	ppbv	100

12/12/13

NJGIAM005 V74

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11382.D Vial: 6
Acq On : 7 Dec 2013 19:04 Operator: BBL
Sample : VSTD010 Inst : h5973i
Misc : ,,,ICAL_10.0,,200ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:32 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) Dibromochloromethane	13.140	129	1489651	8.96	ppbv	100
52) 1,3-Dichloropropene (trans	12.207	75	950011	9.00	ppbv	100
53) 1,1,2-Trichloroethane	12.390	97	787464	8.66	ppbv	100
54) Bromoform	15.426	173	1272008	8.87	ppbv	100
56) n-Heptane	11.085	43	1014666	8.50	ppbv	100
57) Methyl isobutyl ketone	11.701	43	1000828	7.92	ppbv	100
58) 3-Hexanone	12.920	43	486284	8.17	ppbv	100
59) Methyl butyl ketone	13.006	43	888497	8.24	ppbv	100
60) 1,2-Dibromoethane	13.414	107	1188120	8.67	ppbv	100
61) Tetrachloroethene	13.951	166	1119434	8.26	ppbv	100
62) 1,1,2,2-Tetrachloroethane	15.895	83	1482926	8.48	ppbv	100
63) Toluene	12.701	92	1360543	8.58	ppbv	100
64) Chlorobenzene	14.713	112	1669967	8.54	ppbv	100
65) Ethylbenzene	15.164	91	2772106	8.48	ppbv	100
67) Styrene	15.792	104	1416863	8.42	ppbv	100
68) Xylenes (m&p)	15.383	91	4648419	17.02	ppbv	100
69) Xylenes (o)	15.920	91	2102689	8.38	ppbv	100
70) Xylene (total)	15.920	91	2102689	8.38	ppbv	100
71) 2-Chlorotoluene	17.151	91	1901822	8.47	ppbv	100
72) Propylbenzene	17.212	91	3123431	8.40	ppbv	100
73) 4-Ethyltoluene	17.389	105	2635100	8.56	ppbv	100
74) 1,3,5-Trimethylbenzene	17.480	105	2240983	8.47	ppbv	100
75) 1,2,4-Trimethylbenzene	17.962	105	2074876	8.52	ppbv	100
76) Isopropylbenzene	16.615	105	2790862	8.40	ppbv	100
77) 1,3-Dichlorobenzene	18.127	146	1191014	8.37	ppbv	100
78) 1,4-Dichlorobenzene	18.212	146	1116985	8.11	ppbv	100
79) 1,2-Dichlorobenzene	18.620	146	1092249	8.31	ppbv	100
80) Benzylchloride	18.108	126	334952	8.66	ppbv	100
83) 1,3-Hexachlorobutadiene	21.364	225	1277974	9.16	ppbv	100
84) 1,2,4-Trichlorobenzene	20.754	180	764402	6.17	ppbv	100
85) Naphthalene	20.882	128	1221166	6.90	ppbv	100

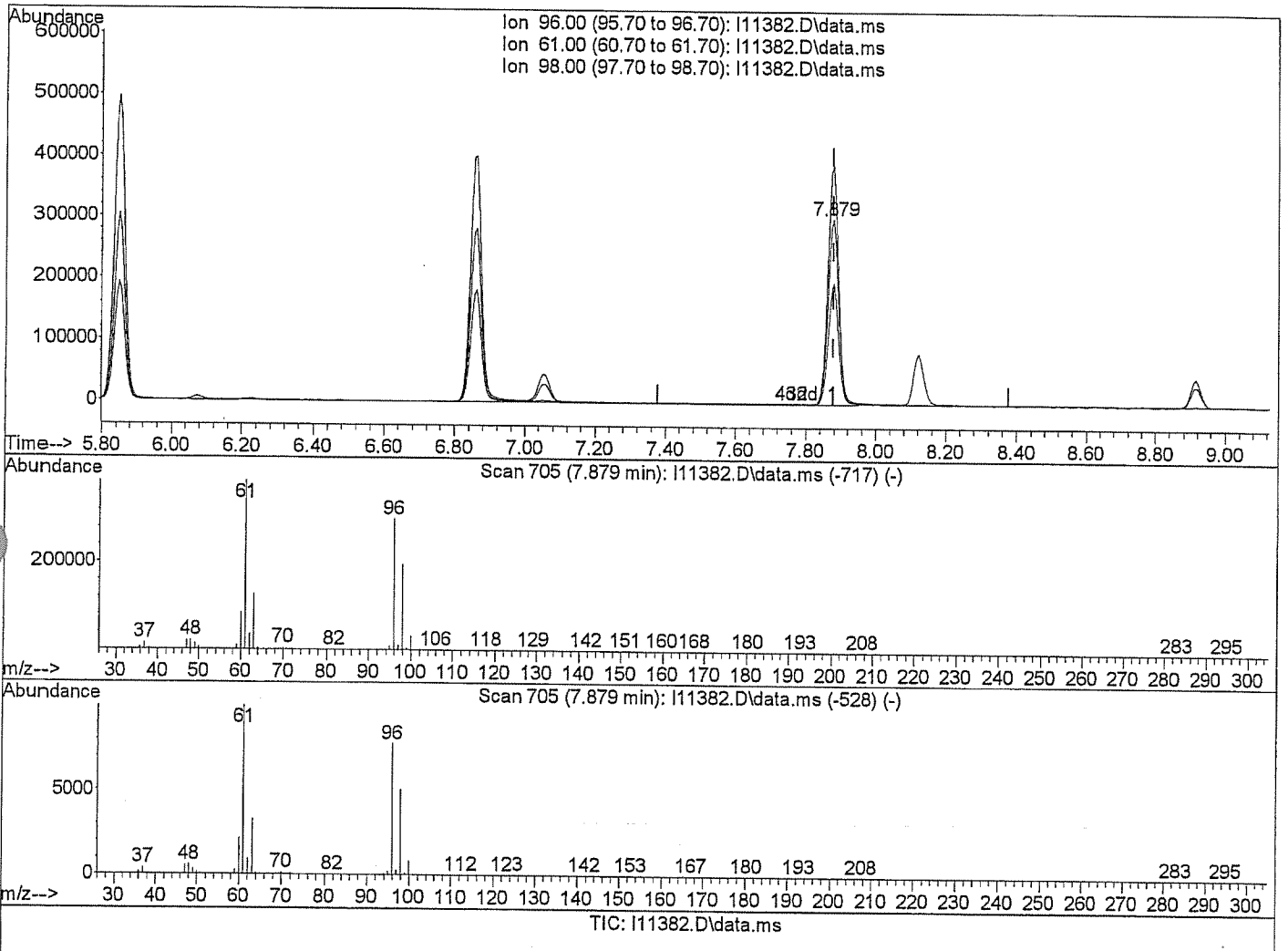
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NJGIAM005 V75

Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11382.D Vial: 6
Acq On : 7 Dec 2013 19:04 Operator: BBL
Sample : VSTD010 Inst : h5973i
Misc : ,,,ICAL_10.0,,200ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:32 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M



(32) 1,2-Dichloroethene (total) (T)

7.879min (0.000) 17.39 ppbv m

response 1314973

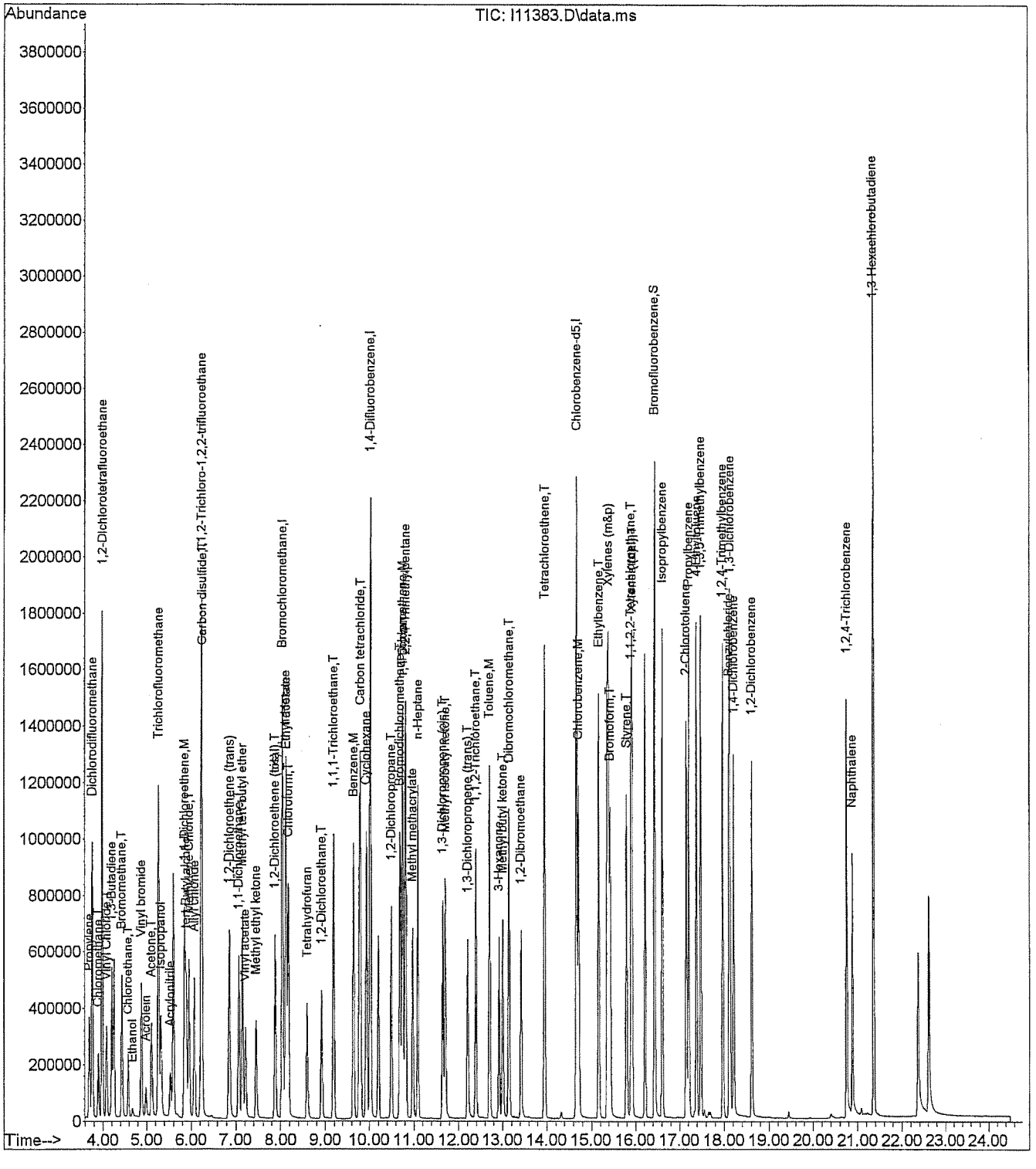
Ion	Exp%	Act%
96.00	100	100
61.00	128.90	128.88
98.00	65.20	65.25
0.00	0.00	0.00

NJGIAM005 V76

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11383.D Vial: 7
Acq On : 7 Dec 2013 19:49 Operator: BBL
Sample : VSTD005 Inst : h5973i
Misc : ,,,ICAL_5.0,,100ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:43 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M



NJGIAM005 V77

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11383.D Vial: 7
Acq On : 7 Dec 2013 19:49 Operator: BBL
Sample : VSTD005 Inst : h5973i
Misc : ,,,ICAL_5.0,,100ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:43 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.037	128	500825	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	10.019	114	1927638	10.00	ppbv	0.00
55) Chlorobenzene-d5	14.664	117	1455430	10.00	ppbv	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	16.438	95	904506	10.03	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.30%			
Target Compounds						Qvalue
2) Propylene	3.697	41	213398	4.35	ppbv	99
3) Dichlorodifluoromethane	3.758	85	932074	4.79	ppbv	100
4) 1,2-DIchlorotetrafluoroeth	3.983	85	925863	4.79	ppbv	99
5) Chloromethane	3.892	50	274300	4.76	ppbv	98
6) 1,3-Butadiene	4.197	39	255552	4.49	ppbv	98
7) Bromomethane	4.428	94	379353	4.90	ppbv	100
8) Vinyl Chloride	4.081	62	372862	4.49	ppbv	98
9) Chloroethane	4.575	64	196631	4.84	ppbv	100
10) Ethanol	4.678	45	44915	3.62	ppbv	94
11) Isopropanol	5.318	45	531887	4.88	ppbv	99
12) Methylene Chloride	5.952	49	358033	3.87	ppbv	99
13) Allyl chloride	6.074	76	150234	4.76	ppbv	97
14) tert-Butyl alcohol	5.885	59	655624	5.15	ppbv	99
15) Vinyl bromide	4.879	106	391558	4.86	ppbv	98
16) Acrolein	4.983	56	113340	4.46	ppbv	99
17) Acetone	5.105	43	463583	4.25	ppbv	98
19) Acrylonitrile	5.526	53	188294	5.29	ppbv	99
20) Carbon disulfide	6.239	76	978044	4.75	ppbv	99
21) 1,1,2-Trichloro-1,2,2-trif	6.227	101	743559	4.78	ppbv	99
22) 1,1-Dichloroethene	5.849	96	334566	4.84	ppbv	99
23) 1,1-Dichloroethane	7.056	63	615638	4.86	ppbv	98
24) Trichlorofluoromethane	5.263	101	1122867	4.93	ppbv	100
25) n-Hexane	8.110	57	495051	4.65	ppbv	100
26) Vinyl acetate	7.208	43	545042	4.60	ppbv	99
27) Ethyl acetate	8.123	61	87072	4.62	ppbv	95
29) Methyl tert-butyl ether	7.135	73	826904	4.67	ppbv	99
30) 1,2-Dichloroethene (trans)	6.861	96	320160	4.80	ppbv	99
31) 1,2-Dichloroethene (cis)	7.879	96	341596	4.84	ppbv	95
32) 1,2-Dichloroethene (total)	7.879	96	679548m	9.08	ppbv	
33) Tetrahydrofuran	8.592	42	268602	4.37	ppbv	99
34) Methyl ethyl ketone	7.452	43	473321	4.88	ppbv	100
35) Chloroform	8.171	83	716683	4.70	ppbv	99
36) 1,2-Dichloroethane	8.915	62	427207	4.53	ppbv	99
38) 1,1,1-Trichloroethane	9.183	97	732201	4.99	ppbv	99
39) Cyclohexane	9.933	56	500596	5.12	ppbv	99
42) Carbon tetrachloride	9.799	117	813850	4.99	ppbv	100
43) 2,2,4-Trimethylpentane	10.805	57	1484134	4.79	ppbv	99
44) Bromodichloromethane	10.683	83	740276	4.69	ppbv	99
45) 1,2-Dichloropropane	10.494	63	318945	4.51	ppbv	99
46) 1,4-Dioxane	10.744	88	178950	5.26	ppbv	98
47) 1,3-Dichloropropene (cis)	11.646	75	516313	4.61	ppbv	100
48) Trichloroethene	10.738	130	449512	4.63	ppbv	100
49) Benzene	9.647	78	976987	4.77	ppbv	99
50) Methyl methacrylate	10.964	41	328485	4.88	ppbv	98

12/12/12

NJGIAM005 V78

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11383.D Vial: 7
Acq On : 7 Dec 2013 19:49 Operator: BBL
Sample : VSTD005 Inst : h5973i
Misc : ,,,ICAL_5.0,,100ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:43 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) Dibromochloromethane	13.140	129	662007	4.53	ppbv	100
52) 1,3-Dichloropropene (trans	12.207	75	438181	4.73	ppbv	100
53) 1,1,2-Trichloroethane	12.390	97	355683	4.45	ppbv	99
54) Bromoform	15.426	173	574351	4.56	ppbv	100
56) n-Heptane	11.085	43	480739	4.57	ppbv	98
57) Methyl isobutyl ketone	11.701	43	600250	5.39	ppbv	98
58) 3-Hexanone	12.920	43	287418	5.48	ppbv	100
59) Methyl butyl ketone	13.006	43	531555	5.60	ppbv	100
60) 1,2-Dibromoethane	13.414	107	538547	4.46	ppbv	99
61) Tetrachloroethene	13.951	166	519116	4.35	ppbv	100
62) 1,1,2,2-Tetrachloroethane	15.896	83	722823	4.69	ppbv	100
63) Toluene	12.701	92	601199	4.30	ppbv	100
64) Chlorobenzene	14.713	112	745453	4.33	ppbv	100
65) Ethylbenzene	15.164	91	1267747	4.40	ppbv	99
67) Styrene	15.792	104	664872	4.48	ppbv	99
68) Xylenes (m&p)	15.383	91	2115275	8.79	ppbv	99
69) Xylenes (o)	15.920	91	974350	4.41	ppbv	100
70) Xylene (total)	15.920	91	974350	4.41	ppbv	100
71) 2-Chlorotoluene	17.151	91	876147	4.43	ppbv	99
72) Propylbenzene	17.212	91	1482886	4.53	ppbv	99
73) 4-Ethyltoluene	17.389	105	1261715	4.65	ppbv	100
74) 1,3,5-Trimethylbenzene	17.481	105	1070143	4.59	ppbv	100
75) 1,2,4-Trimethylbenzene	17.962	105	1009025	4.71	ppbv	98
76) Isopropylbenzene	16.615	105	1301044	4.44	ppbv	98
77) 1,3-Dichlorobenzene	18.127	146	583049	4.65	ppbv	100
78) 1,4-Dichlorobenzene	18.212	146	569825	4.70	ppbv	100
79) 1,2-Dichlorobenzene	18.621	146	540373	4.67	ppbv	99
80) Benzylchloride	18.108	126	176500	5.18	ppbv	100
83) 1,3-Hexachlorobutadiene	21.364	225	603819	4.91	ppbv	99
84) 1,2,4-Trichlorobenzene	20.754	180	517589	4.74	ppbv	99
85) Naphthalene	20.882	128	819437	5.25	ppbv	99

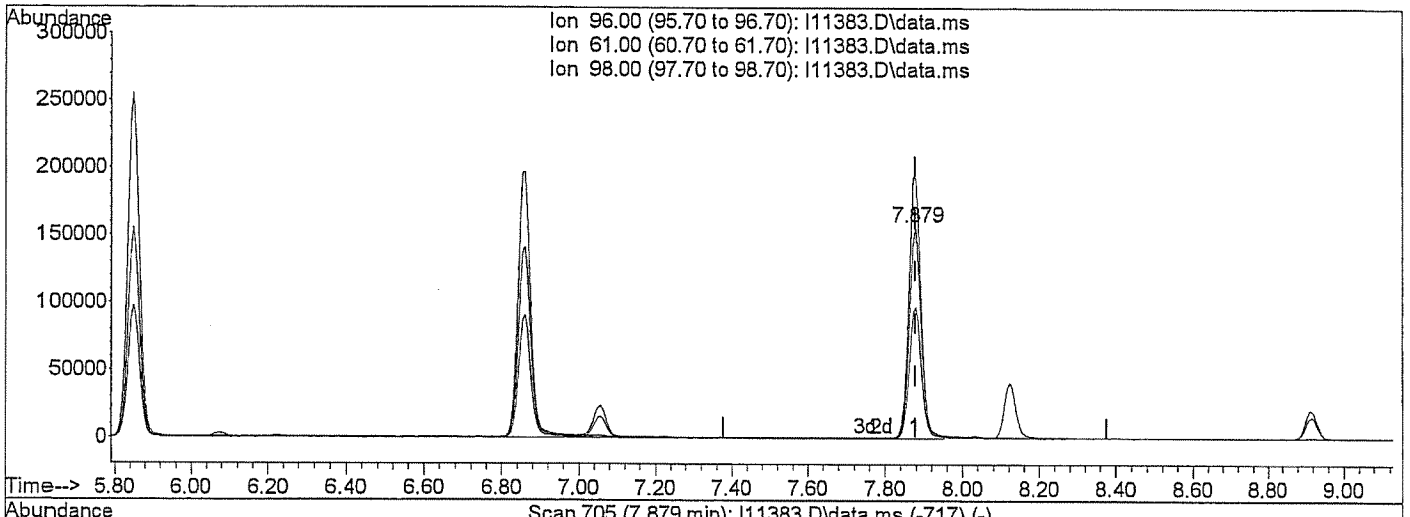
(#) = qualifier out of range (m) = manual integration (+) = signals summed

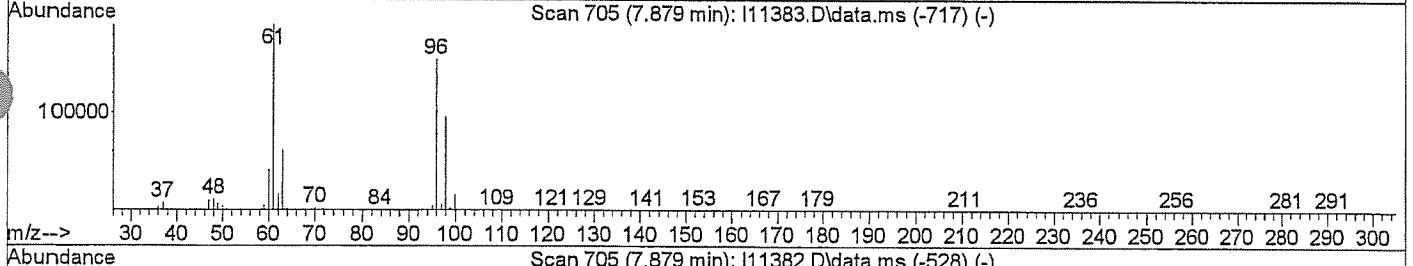
NJGIAM005 V79

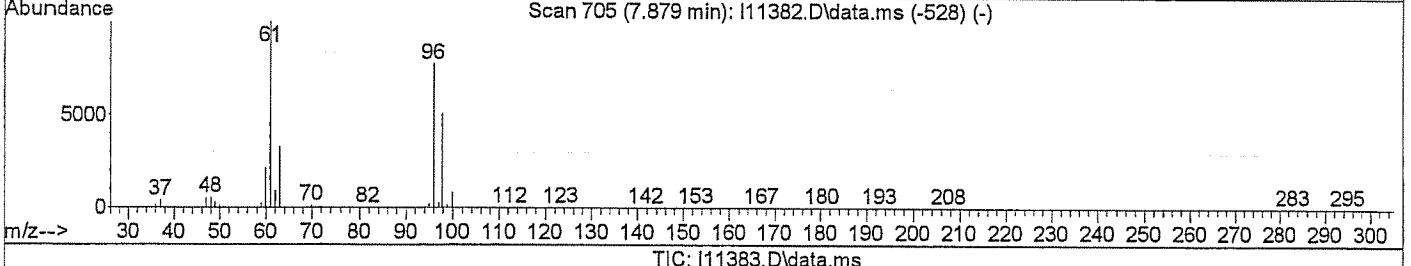
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11383.D Vial: 7
Acq On : 7 Dec 2013 19:49 Operator: BBL
Sample : VSTD005 Inst : h5973i
Misc : ,,,ICAL_5.0,,100ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:43 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11383.D\data.ms

(32) 1,2-Dichloroethene (total) (T)

7.879min (+0.000) 9.08 ppbv m

response 679548

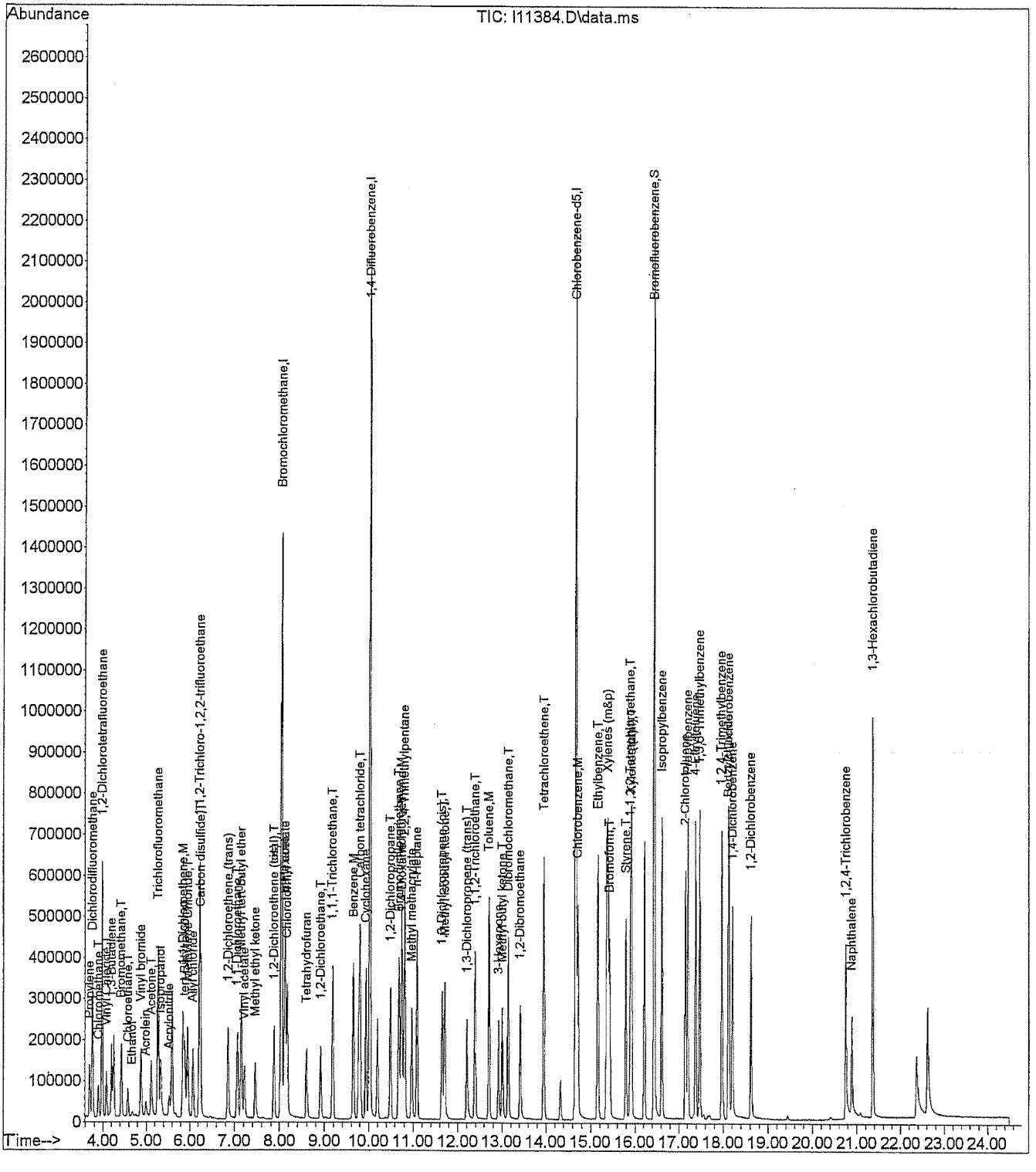
Ion	Exp%	Act%
96.00	100	100
61.00	128.90	122.83
98.00	65.20	61.80
0.00	0.00	0.00

NJGIAM005 V80

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11384.D Vial: 8
Acq On : 7 Dec 2013 20:32 Operator: BBL
Sample : VSTD002 Inst : h5973i
Misc : ,,,ICAL_2.0,,40ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:55 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M



NJGIAM005 V81

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11384.D Vial: 8
Acq On : 7 Dec 2013 20:32 Operator: BBL
Sample : VSTD002 Inst : h5973i
Misc : ,,,ICAL_2.0,,40ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:55 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.037	128	487942	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	10.018	114	1930760	10.00	ppbv	0.00
55) Chlorobenzene-d5	14.664	117	1419920	10.00	ppbv	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	16.438	95	869943	9.89	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.90%		
Target Compounds						Qvalue
2) Propylene	3.696	41	75998	1.59	ppbv	99
3) Dichlorodifluoromethane	3.757	85	326942	1.72	ppbv	99
4) 1,2-DIchlorotetrafluoroeth	3.983	85	324315	1.72	ppbv	97
5) Chloromethane	3.898	50	93776	1.67	ppbv	97
6) 1,3-Butadiene	4.202	39	87565	1.58	ppbv	98
7) Bromomethane	4.428	94	135079	1.79	ppbv	98
8) Vinyl Chloride	4.081	62	128809	1.59	ppbv	96
9) Chloroethane	4.580	64	67877	1.71	ppbv	97
10) Ethanol	4.684	45	18556	1.54	ppbv	94
11) Isopropanol	5.324	45	208177	1.96	ppbv	99
12) Methylene Chloride	5.952	49	142734	1.59	ppbv	98
13) Allyl chloride	6.074	76	50899	1.66	ppbv	94
14) tert-Butyl alcohol	5.891	59	245936	1.98	ppbv	99
15) Vinyl bromide	4.885	106	137306	1.75	ppbv	97
16) Acrolein	4.989	56	39587	1.60	ppbv	96
17) Acetone	5.111	43	195690	1.84	ppbv	96
19) Acrylonitrile	5.531	53	68896	1.99	ppbv	100
20) Carbon disulfide	6.245	76	337377	1.68	ppbv	98
21) 1,1,2-Trichloro-1,2,2-trif	6.226	101	259146	1.71	ppbv	99
22) 1,1-Dichloroethene	5.848	96	115650	1.72	ppbv	98
23) 1,1-Dichloroethane	7.056	63	219541	1.78	ppbv	98
24) Trichlorofluoromethane	5.263	101	398571	1.80	ppbv	99
25) n-Hexane	8.110	57	175840	1.69	ppbv	99
26) Vinyl acetate	7.214	43	219559	1.90	ppbv	99
27) Ethyl acetate	8.122	61	34198	1.86	ppbv	96
29) Methyl tert-butyl ether	7.141	73	342568	1.99	ppbv	99
30) 1,2-Dichloroethene (trans)	6.860	96	110371	1.70	ppbv	99
31) 1,2-Dichloroethene (cis)	7.879	96	118646	1.72	ppbv	99
32) 1,2-Dichloroethene (total)	7.879	96	241011m	3.30	ppbv	
33) Tetrahydrofuran	8.598	42	113069	1.89	ppbv	98
34) Methyl ethyl ketone	7.458	43	189610	2.01	ppbv	100
35) Chloroform	8.165	83	270363	1.82	ppbv	99
36) 1,2-Dichloroethane	8.915	62	167822	1.83	ppbv	100
38) 1,1,1-Trichloroethane	9.177	97	270729	1.84	ppbv	99
39) Cyclohexane	9.933	56	176960	1.81	ppbv	95
42) Carbon tetrachloride	9.799	117	292045	1.79	ppbv	100
43) 2,2,4-Trimethylpentane	10.805	57	585622	1.89	ppbv	99
44) Bromodichloromethane	10.683	83	293022	1.85	ppbv	99
45) 1,2-Dichloropropane	10.494	63	136972	1.93	ppbv	100
46) 1,4-Dioxane	10.750	88	72293	2.12	ppbv	97
47) 1,3-Dichloropropene (cis)	11.646	75	213959	1.91	ppbv	99
48) Trichloroethene	10.738	130	163695	1.68	ppbv	98
49) Benzene	9.647	78	386872	1.89	ppbv	98
50) Methyl methacrylate	10.963	41	134873	2.00	ppbv	97

AK 12/12/13 (f1)

NJGIAM005 V82

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11384.D Vial: 8
Acq On : 7 Dec 2013 20:32 Operator: BBL
Sample : VSTD002 Inst : h5973i
Misc : ,,,ICAL_2.0,,40ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:55 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51)	Dibromochloromethane	13.140	129	267722	1.83	ppbv	100
52)	1,3-Dichloropropene (trans	12.207	75	178124	1.92	ppbv	98
53)	1,1,2-Trichloroethane	12.384	97	154037	1.93	ppbv	100
54)	Bromoform	15.426	173	233989	1.85	ppbv	99
56)	n-Heptane	11.079	43	185253	1.81	ppbv	99
57)	Methyl isobutyl ketone	11.707	43	241337	2.22	ppbv	100
58)	3-Hexanone	12.920	43	111711	2.18	ppbv	99
59)	Methyl butyl ketone	13.006	43	211115	2.28	ppbv	98
60)	1,2-Dibromoethane	13.414	107	232697	1.98	ppbv	98
61)	Tetrachloroethene	13.951	166	200321	1.72	ppbv	100
62)	1,1,2,2-Tetrachloroethane	15.895	83	303003	2.02	ppbv	100
63)	Toluene	12.701	92	262909	1.93	ppbv	100
64)	Chlorobenzene	14.713	112	326062	1.94	ppbv	99
65)	Ethylbenzene	15.164	91	558775	1.99	ppbv	99
67)	Styrene	15.792	104	288455	1.99	ppbv	98
68)	Xylenes (m&p)	15.383	91	916025	3.90	ppbv	100
69)	Xylenes (o)	15.920	91	426717	1.98	ppbv	99
70)	Xylene (total)	15.920	91	426717	1.98	ppbv	99
71)	2-Chlorotoluene	17.151	91	378392	1.96	ppbv	99
72)	Propylbenzene	17.212	91	641625	2.01	ppbv	99
73)	4-Ethyltoluene	17.383	105	529146	2.00	ppbv	100
74)	1,3,5-Trimethylbenzene	17.480	105	457475	2.01	ppbv	100
75)	1,2,4-Trimethylbenzene	17.962	105	419734	2.01	ppbv	99
76)	Isopropylbenzene	16.615	105	559817	1.96	ppbv	100
77)	1,3-Dichlorobenzene	18.127	146	244625	2.00	ppbv	99
78)	1,4-Dichlorobenzene	18.212	146	242596	2.05	ppbv	99
79)	1,2-Dichlorobenzene	18.620	146	219708	1.95	ppbv	98
80)	Benzylchloride	18.114	126	68701	2.07	ppbv	96
83)	1,3-Hexachlorobutadiene	21.364	225	189136	1.58	ppbv	99
84)	1,2,4-Trichlorobenzene	20.754	180	177227	1.67	ppbv	99
85)	Naphthalene	20.888	128	245831	1.62	ppbv	100

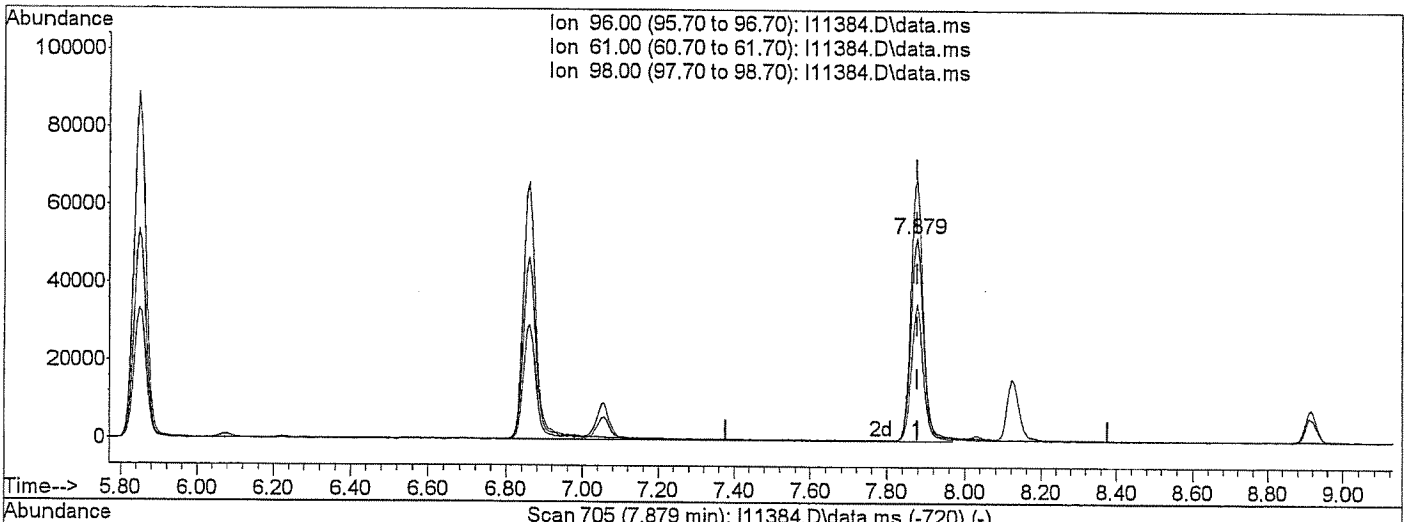
(#) = qualifier out of range (m) = manual integration (+) = signals summed

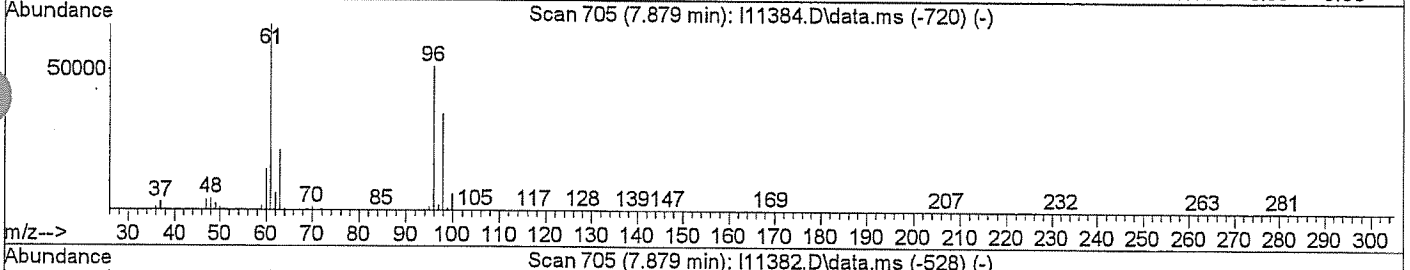
NJGIAM005 V83

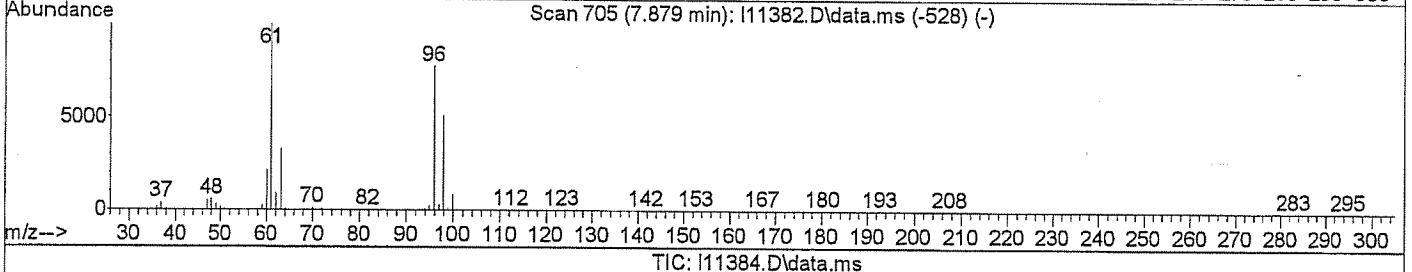
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11384.D Vial: 8
Acq On : 7 Dec 2013 20:32 Operator: BBL
Sample : VSTD002 Inst : h5973i
Misc : ,,,ICAL_2.0,,40ML;SN3397 Multiplr: 1.00
Quant Time: Dec 07 23:33:55 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11384.D\data.ms

(32) 1,2-Dichloroethene (total) (T)

7.879min (+0.000) 3.30 ppbv m

response 241011

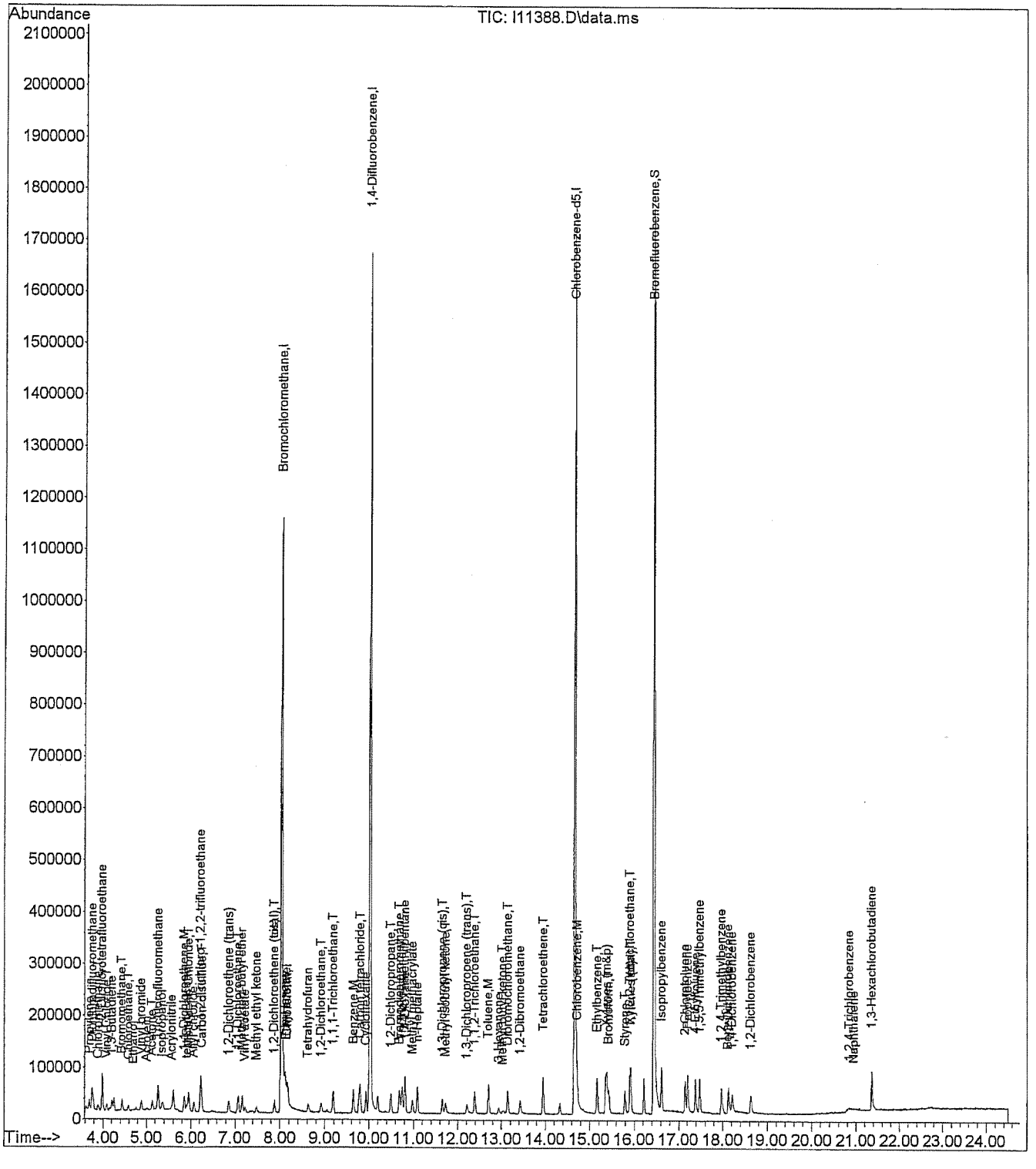
Ion	Exp%	Act%
96.00	100	100
61.00	128.90	129.02
98.00	65.20	67.29
0.00	0.00	0.00

NJGIAM005 V84

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M



NJGIAM005 V85

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	8.037	128	422464	10.00	ppbv		0.00
37) 1,4-Difluorobenzene	10.018	114	1555391	10.00	ppbv		0.00
55) Chlorobenzene-d5	14.664	117	1170067	10.00	ppbv		0.00
System Monitoring Compounds							
66) Bromofluorobenzene	16.438	95	744823	10.27	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.70%				
Target Compounds							Qvalue
2) Propylene	3.696	41	12157	0.29	ppbv		98
3) Dichlorodifluoromethane	3.757	85	39638	0.24	ppbv		96
4) 1,2-DIchlorotetrafluoroeth	3.977	85	37864	0.23	ppbv		86
5) Chloromethane	3.892	50	12185	0.25	ppbv		91
6) 1,3-Butadiene	4.196	39	12306	0.26	ppbv		91
7) Bromomethane	4.428	94	15571	0.24	ppbv		99
8) Vinyl Chloride	4.081	62	15471	0.22	ppbv		92
9) Chloroethane	4.580	64	8548	0.25	ppbv		93
10) Ethanol	4.702	45	1922m	0.18	ppbv		
11) Isopropanol	5.349	45	21465	0.23	ppbv		97
12) Methylene Chloride	5.958	49	21315m	0.27	ppbv		
13) Allyl chloride	6.068	76	5956	0.22	ppbv	#	81
14) tert-Butyl alcohol	5.916	59	20069m	0.19	ppbv		
15) Vinyl bromide	4.885	106	16624	0.24	ppbv		94
16) Acrolein	5.007	56	3819	0.18	ppbv		86
17) Acetone	5.129	43	25295	0.28	ppbv		93
19) Acrylonitrile	5.562	53	6170	0.21	ppbv		84
20) Carbon disulfide	6.251	76	39158	0.23	ppbv		99
21) 1,1,2-Trichloro-1,2,2-trif	6.226	101	30459	0.23	ppbv		100
22) 1,1-Dichloroethene	5.855	96	14350	0.25	ppbv		95
23) 1,1-Dichloroethane	7.056	63	24920	0.23	ppbv		95
24) Trichlorofluoromethane	5.263	101	44270	0.23	ppbv		99
25) n-Hexane	8.110	57	21213	0.24	ppbv	#	57
26) Vinyl acetate	7.226	43	20209	0.20	ppbv		95
27) Ethyl acetate	8.141	61	3256	0.20	ppbv	#	41
29) Methyl tert-butyl ether	7.153	73	35234	0.24	ppbv		93
30) 1,2-Dichloroethene (trans)	6.867	96	11737	0.21	ppbv		93
31) 1,2-Dichloroethene (cis)	7.879	96	13944	0.23	ppbv		89
32) 1,2-Dichloroethene (total)	7.879	96	30713m	0.49	ppbv		
33) Tetrahydrofuran	8.622	42	11699	0.23	ppbv		95
34) Methyl ethyl ketone	7.482	43	16944	0.21	ppbv		91
35) Chloroform	8.165	83	31322	0.24	ppbv		99
36) 1,2-Dichloroethane	8.915	62	19511	0.25	ppbv		98
38) 1,1,1-Trichloroethane	9.183	97	30903	0.26	ppbv		94
39) Cyclohexane	9.933	56	20813	0.26	ppbv		90
42) Carbon tetrachloride	9.799	117	32887	0.25	ppbv		93
43) 2,2,4-Trimethylpentane	10.805	57	67589	0.27	ppbv		95
44) Bromodichloromethane	10.683	83	33124	0.26	ppbv		95
45) 1,2-Dichloropropane	10.494	63	15564	0.27	ppbv		96
46) 1,4-Dioxane	10.817	88	3393m	0.12	ppbv		
47) 1,3-Dichloropropene (cis)	11.652	75	21202	0.23	ppbv		93
48) Trichloroethene	10.738	130	18817	0.24	ppbv		97
49) Benzene	9.647	78	45193	0.27	ppbv		99
50) Methyl methacrylate	10.969	41	12778	0.24	ppbv		91

12/12/13

NJGIAM005 V86

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:26:34 2013
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) Dibromochloromethane	13.146	129	27672	0.23	ppbv		95
52) 1,3-Dichloropropene (trans	12.207	75	17026	0.23	ppbv		99
53) 1,1,2-Trichloroethane	12.390	97	17417	0.27	ppbv		96
54) Bromoform	15.420	173	23775	0.23	ppbv		95
56) n-Heptane	11.085	43	21439	0.25	ppbv		93
57) Methyl isobutyl ketone	11.719	43	14724	0.16	ppbv		90
58) 3-Hexanone	12.939	43	6967	0.17	ppbv		97
59) Methyl butyl ketone	13.030	43	7710	0.10	ppbv		87
60) 1,2-Dibromoethane	13.420	107	23358	0.24	ppbv		95
61) Tetrachloroethene	13.951	166	23599	0.25	ppbv		98
62) 1,1,2,2-Tetrachloroethane	15.901	83	31997	0.26	ppbv		100
63) Toluene	12.701	92	29141	0.26	ppbv		100
64) Chlorobenzene	14.719	112	36953	0.27	ppbv		94
65) Ethylbenzene	15.164	91	62536	0.27	ppbv		100
67) Styrene	15.798	104	30170	0.25	ppbv		85
68) Xylenes (m&p)	15.383	91	101412	0.52	ppbv		96
69) Xylenes (o)	15.920	91	47275	0.27	ppbv		98
70) Xylene (total)	15.920	91	47275	0.27	ppbv		98
71) 2-Chlorotoluene	17.151	91	40204	0.25	ppbv		97
72) Propylbenzene	17.212	91	67934	0.26	ppbv		95
73) 4-Ethyltoluene	17.389	105	50570	0.23	ppbv		93
74) 1,3,5-Trimethylbenzene	17.480	105	45053	0.24	ppbv		99
75) 1,2,4-Trimethylbenzene	17.968	105	38171	0.22	ppbv		96
76) Isopropylbenzene	16.615	105	63242	0.27	ppbv		94
77) 1,3-Dichlorobenzene	18.133	146	21684	0.22	ppbv		97
78) 1,4-Dichlorobenzene	18.218	146	21986	0.23	ppbv		93
79) 1,2-Dichlorobenzene	18.627	146	20550	0.22	ppbv		93
80) Benzylchloride	18.121	126	3629	0.13	ppbv	#	49
83) 1,3-Hexachlorobutadiene	21.370	225	18200	0.18	ppbv		97
84) 1,2,4-Trichlorobenzene	20.840	180	16764m	0.19	ppbv		
85) Naphthalene	20.949	128	26769m	0.21	ppbv		

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

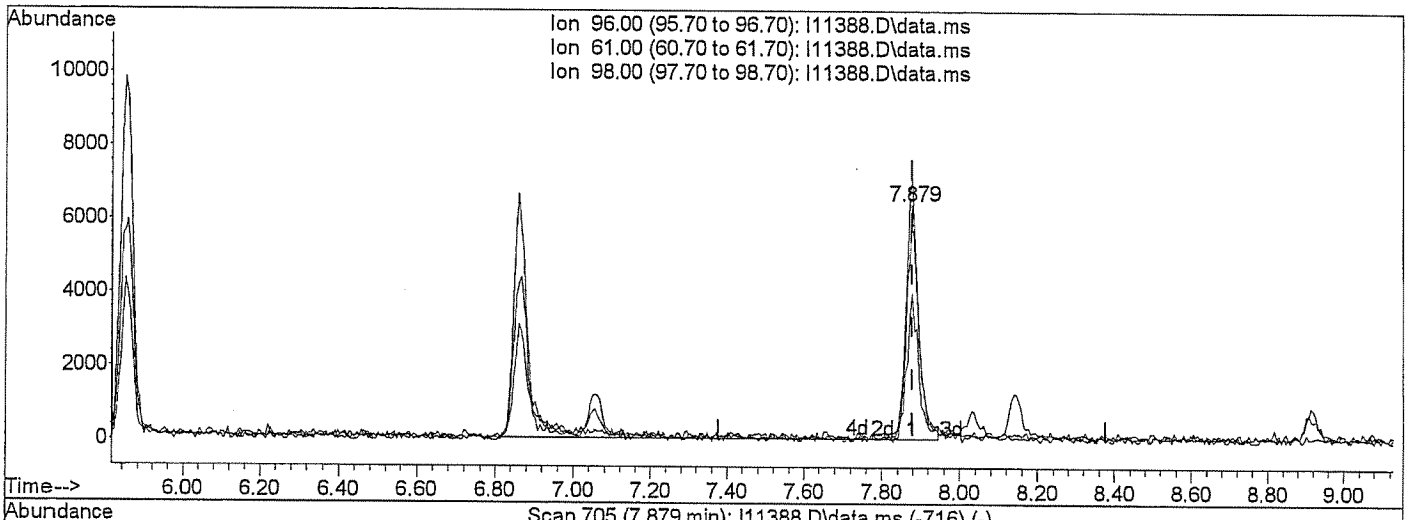
AP 12/12/13 MP

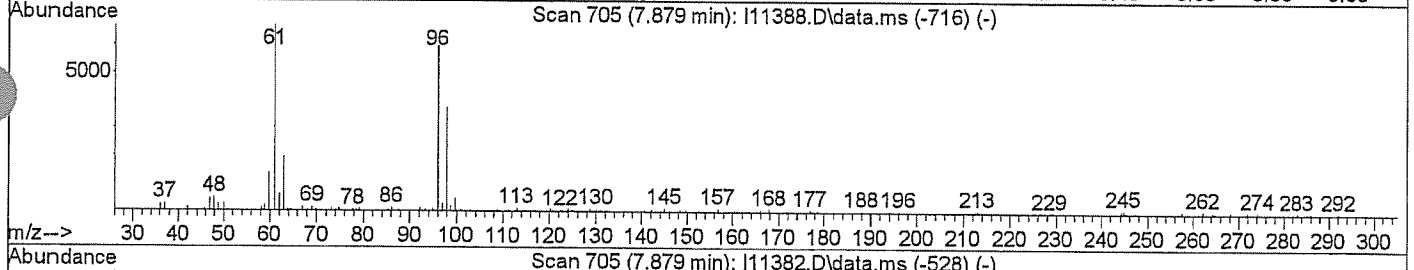
NJGIAM005 V87

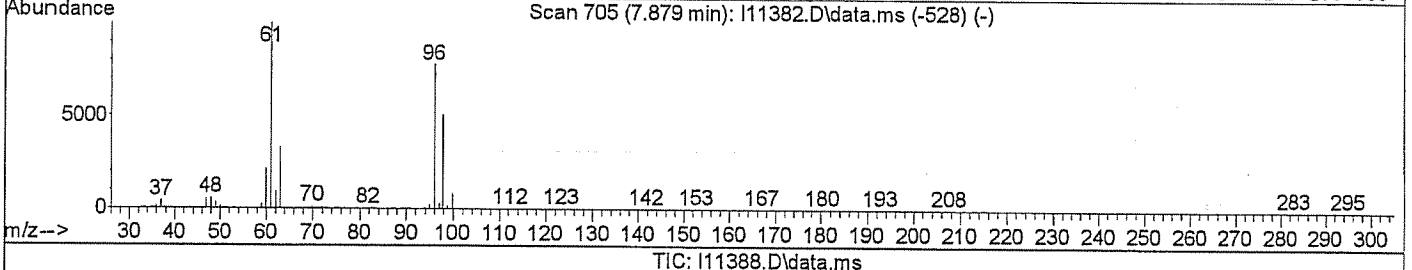
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11388.D\data.ms

(32) 1,2-Dichloroethene (total) (T)

7.879min (+0.000) 0.49 ppbv m

response 30713

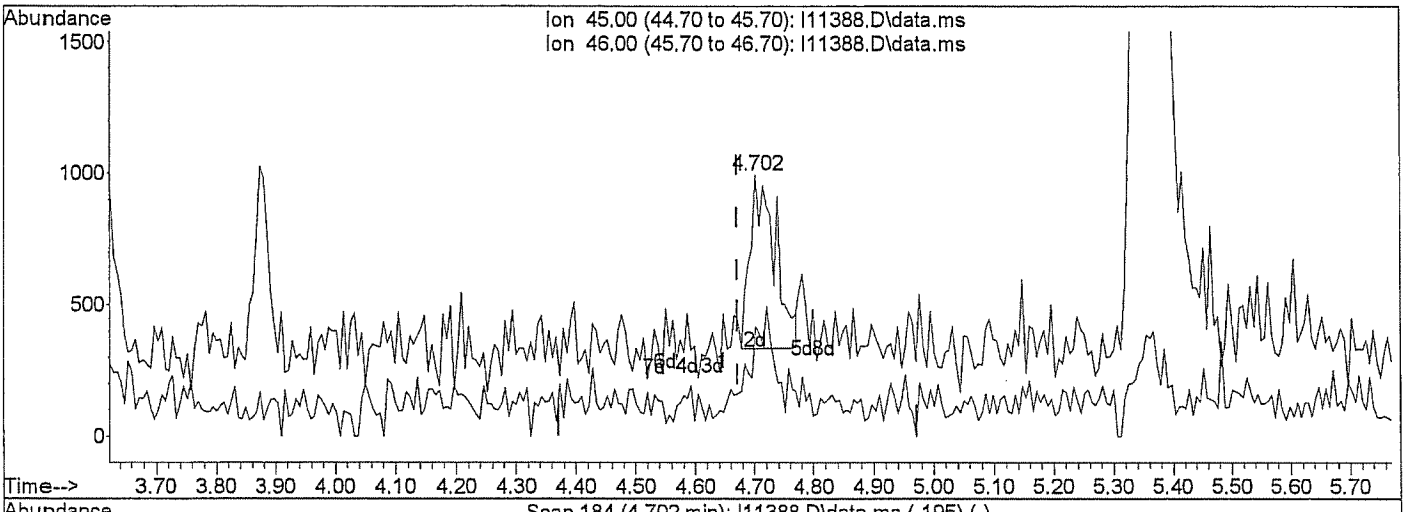
Ion	Exp%	Act%
96.00	100	100
61.00	128.90	110.75
98.00	65.20	62.59
0.00	0.00	0.00

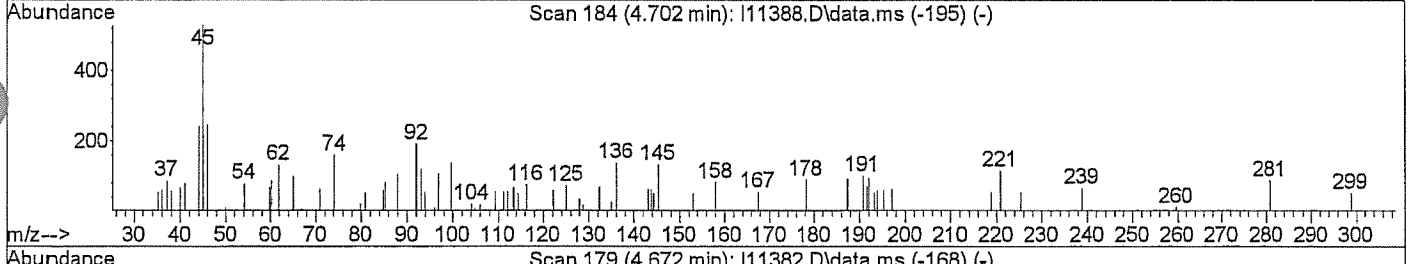
NJGIAM005 V88

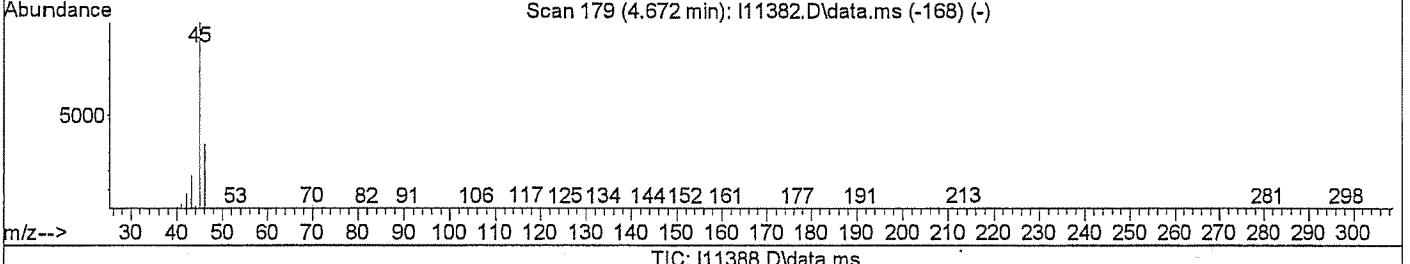
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11388.D\data.ms

(10) Ethanol

4.702min (+0.031) 0.18 ppbv m

response 1922

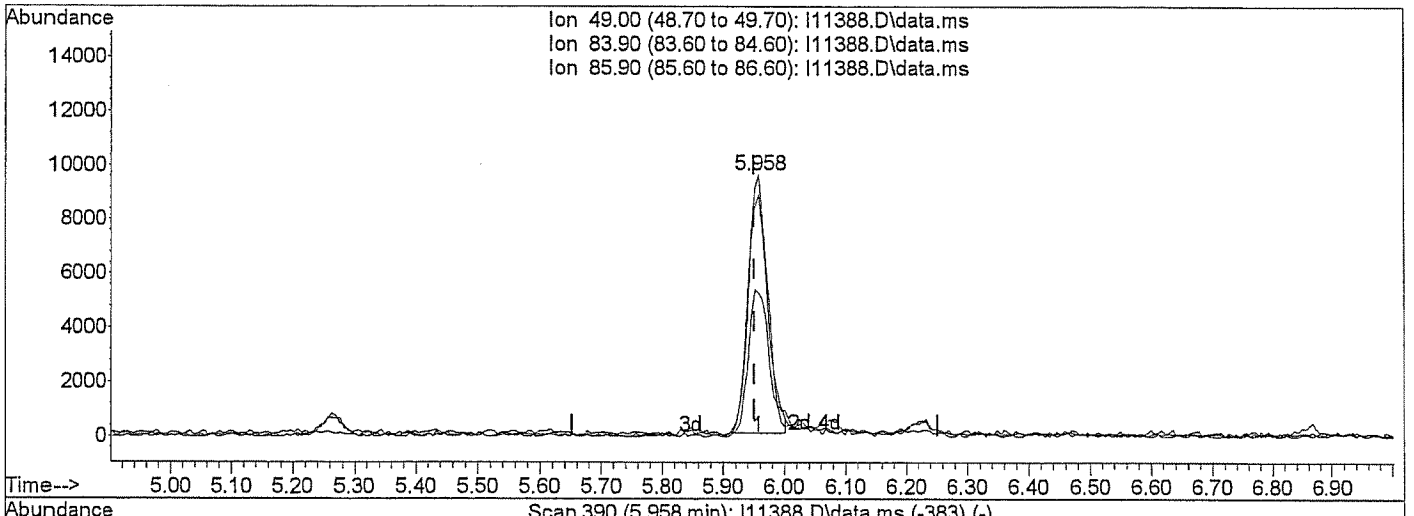
Ion	Exp%	Act%
45.00	100	100
46.00	34.60	41.95
0.00	0.00	0.00
0.00	0.00	0.00

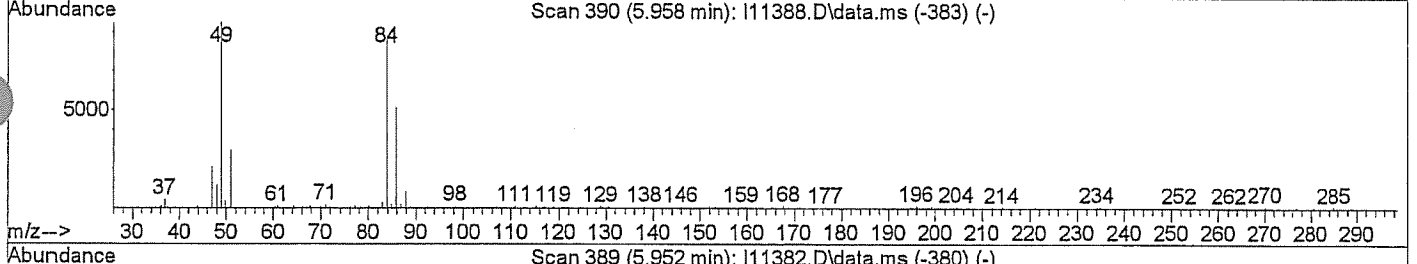
NJGIAM005 V89

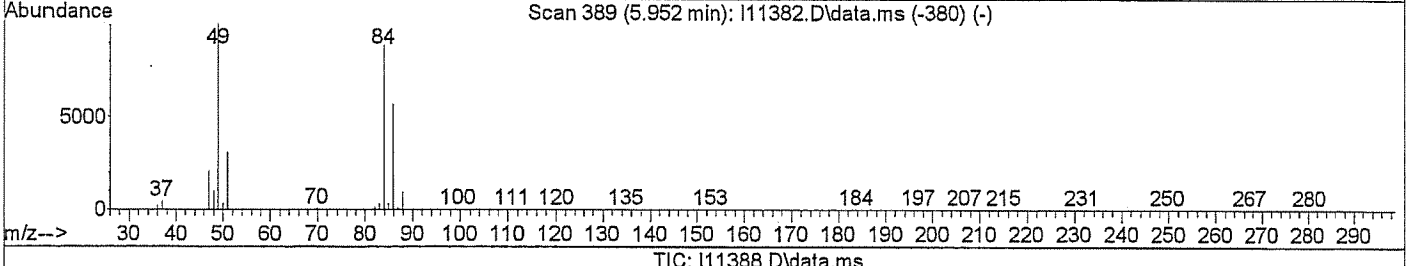
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11388.D\data.ms

(12) Methylene Chloride (T)

5.958min (+0.006) 0.27 ppbv m

response 21315

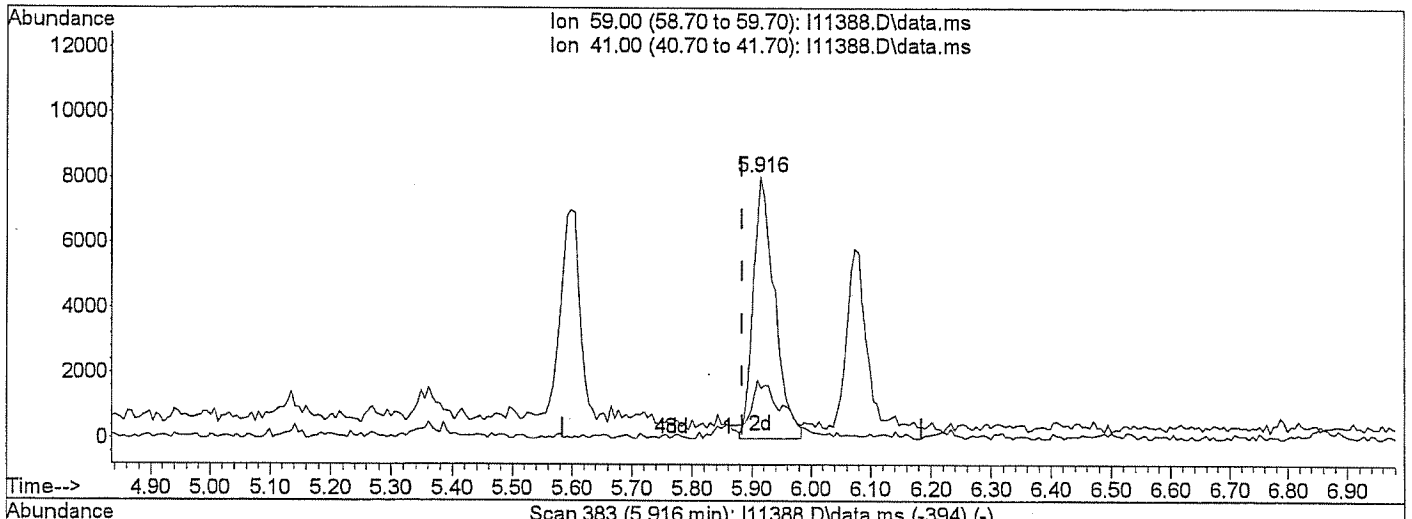
Ion	Exp%	Act%
49.00	100	100
83.90	88.50	92.41
85.90	57.00	54.55
0.00	0.00	0.00

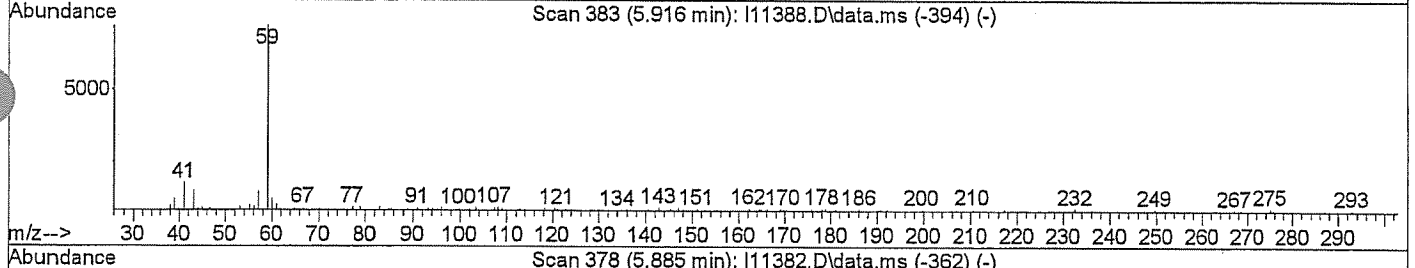
NJGIAM005 V90

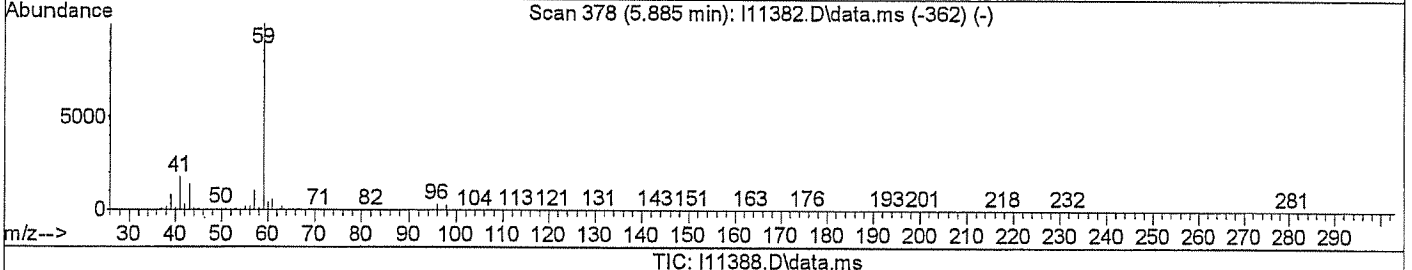
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11388.D\data.ms

(14) tert-Butyl alcohol

5.916min (+0.031) 0.19 ppbv m

response 20069

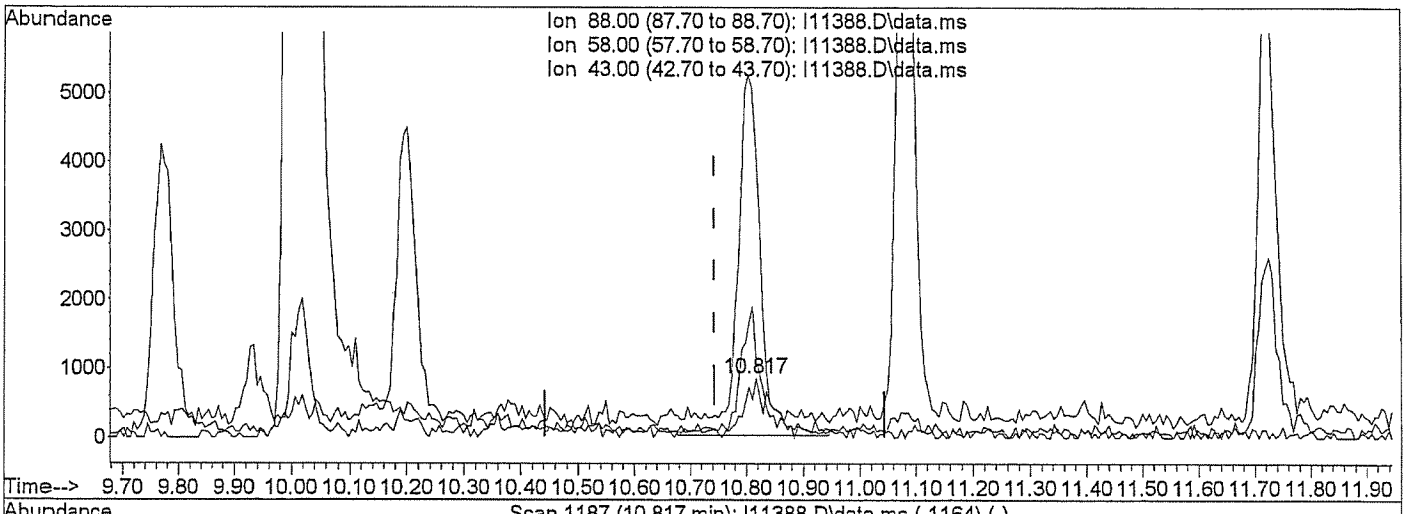
Ion	Exp%	Act%
59.00	100	100
41.00	17.90	18.98
0.00	0.00	0.00
0.00	0.00	0.00

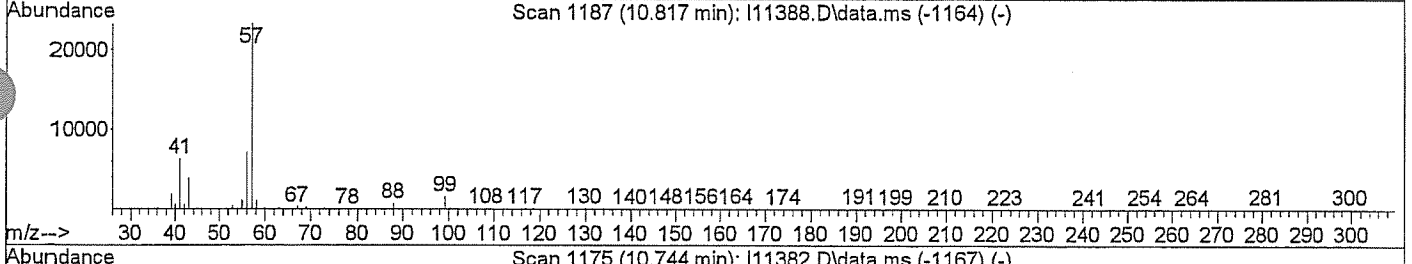
NJGIAM005 V91

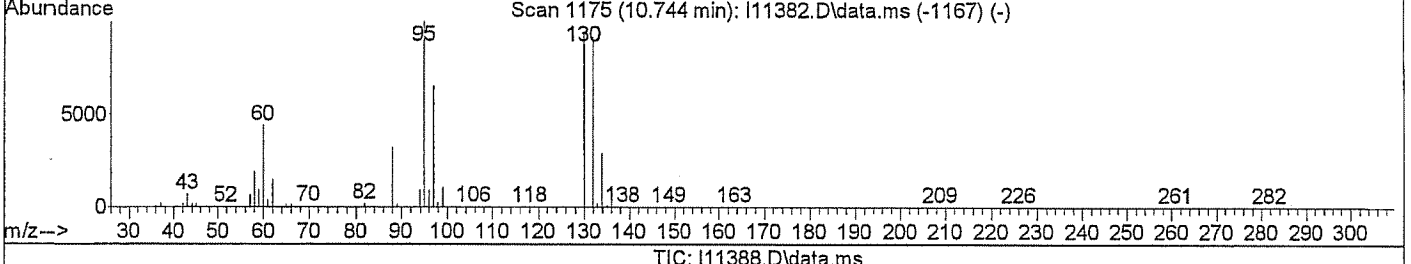
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11388.D\data.ms

(46) 1,4-Dioxane

10.817min (+0.073) 0.12 ppbv m

response 3393

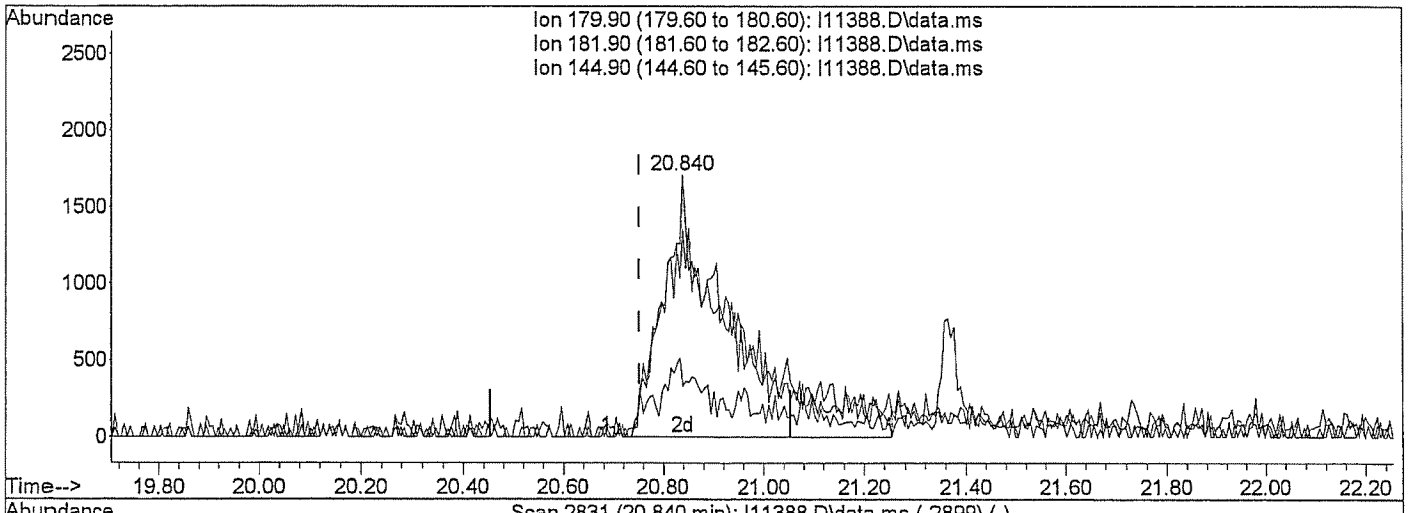
Ion	Exp%	Act%
88.00	100	100
58.00	59.00	132.75#
43.00	21.60	493.71#
0.00	0.00	0.00

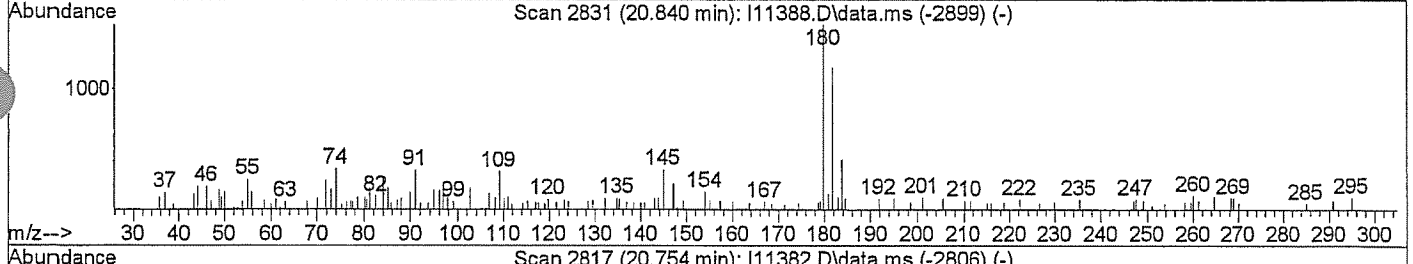
NJGIAM005 V92

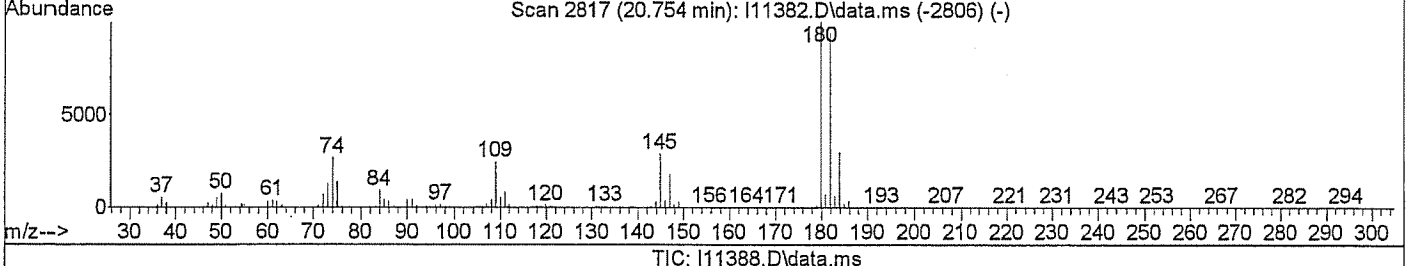
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11388.D\data.ms

(84) 1,2,4-Trichlorobenzene

20.840min (+0.085) 0.19 ppbv m

response 16764

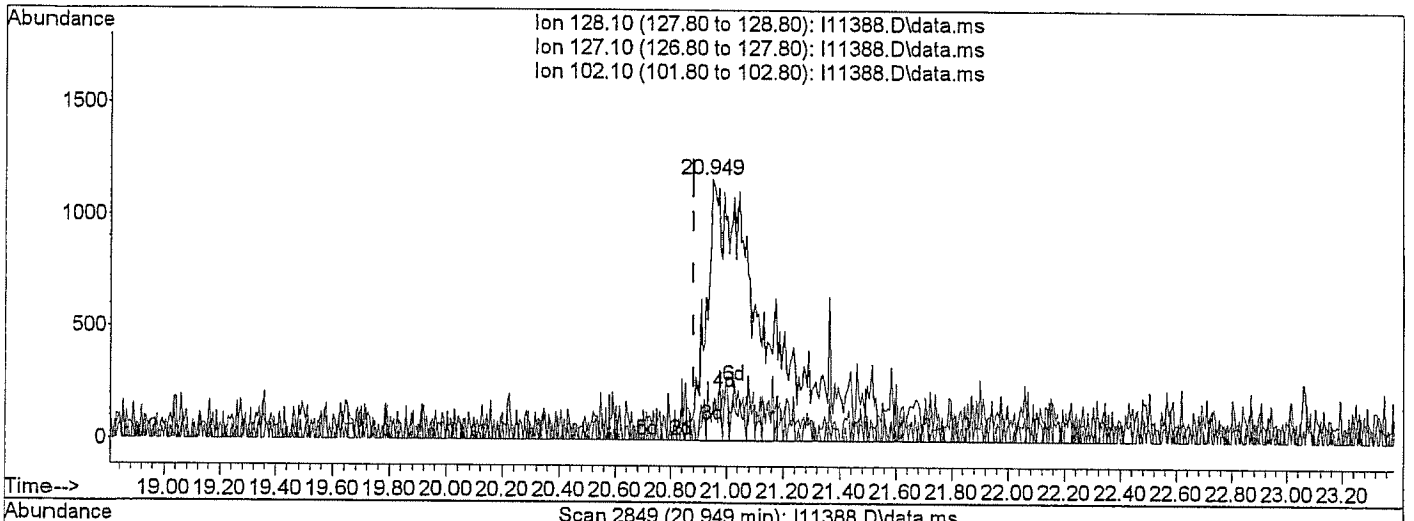
Ion	Exp%	Act%
179.90	100	100
181.90	94.00	78.96
144.90	29.00	19.28
0.00	0.00	0.00

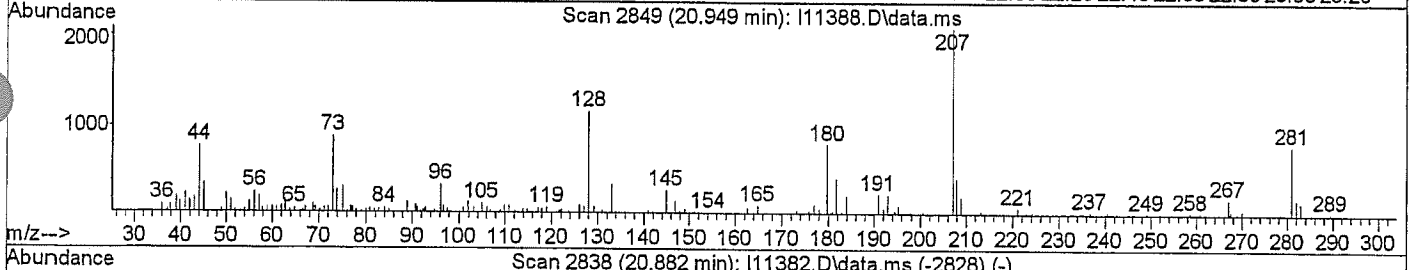
NJGIAM005 V93

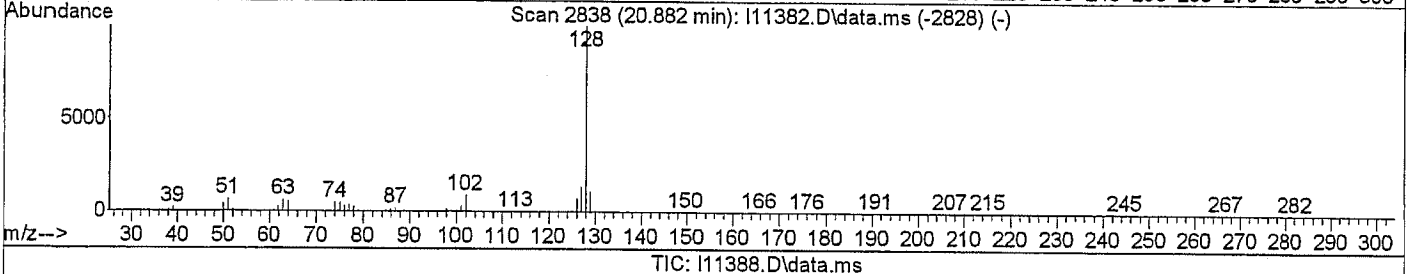
Quantitation Report (Qedit)

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11388.D Vial: 12
Acq On : 7 Dec 2013 23:36 Operator: BBL
Sample : VSTD0.2 Inst : h5973i
Misc : ,,,ICAL_0.2,,80ML;SN3431 Multiplr: 1.00
Quant Time: Dec 08 00:17:12 2013
Quant Results File: TO151207LOW.RES
Integrator: RTE

Quant Method : C:\msdchem\1\METHODS\TO151207LOW.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSat Dec 07 23:2
QLast Update : Sat Dec 07 23:26:34 2013
Response via : Initial Calibration
DataAcq Meth:TO151207LOW.M







TIC: I11388.D\data.ms

(85) Naphthalene

20.949min (+0.067) 0.21 ppbv m

response 26769

Ion	Exp%	Act%
128.10	100	100
127.10	13.30	0.74#
102.10	8.80	0.00#
0.00	0.00	0.00

NJGIAM005 V94

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Instrument ID: HP5973I Calibration Date: 12/10/13 Time: 14:58

Lab File ID: 3\I11426.D Init. Calib. Date(s): 12/07/13 12/07/13

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 17:38 23:36

Heated Purge: (Y/N) N

GC Column: Rxi-1MS ID: .32 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	3.901	4.034		3.4	30.0
1,2-Dichlorotetrafluoroethane	3.818	4.179		9.5	30.0
Chloromethane	1.156	1.184		2.5	30.0
Bromomethane	1.552	1.766		13.8	30.0
Vinyl chloride	1.552	1.612		3.9	30.0
Chloroethane	0.820	0.834		1.7	30.0
Methylene chloride	1.615	1.275		-21.1	30.0
Acetone	2.033	1.648		-18.9	30.0
Carbon disulfide	4.112	3.708		-9.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	3.161	3.140		-0.7	30.0
1,1-Dichloroethene	1.402	1.397		-0.3	30.0
1,1-Dichloroethane	2.549	2.078		-18.5	30.0
Trichlorofluoromethane	4.544	5.242		15.4	30.0
Vinyl acetate	2.357	1.803		-23.5	30.0
Methyl tert-butyl ether	3.561	2.756		-22.6	30.0
1,2-Dichloroethene (trans)	1.310	1.292		-1.3	30.0
1,2-Dichloroethene (cis)	1.415	1.315		-7.1	30.0
Methyl ethyl ketone	1.930	1.424		-26.2	30.0
Chloroform	3.075	2.693		-12.4	30.0
1,2-Dichloroethane	1.918	1.601		-16.5	30.0
1,1,1-Trichloroethane	0.779	0.682		-12.5	30.0
Carbon tetrachloride	0.872	0.812		-6.8	30.0
Bromodichloromethane	0.840	0.711		-15.4	30.0
1,2-Dichloropropane	0.378	0.267		-29.4	30.0
1,3-Dichloropropene (cis)	0.593	0.475		-19.9	30.0
Trichloroethene	0.488	0.460		-5.7	30.0
Benzene	1.085	0.828		-23.7	30.0
Dibromochloromethane	0.774	0.723		-6.6	30.0
1,3-Dichloropropene (trans)	0.497	0.399		-19.7	30.0
1,1,2-Trichloroethane	0.424	0.349		-17.6	30.0
Bromoform	0.675	0.635		-6.0	30.0
Methyl isobutyl ketone	0.722	0.594		-17.7	30.0
Methyl butyl ketone	0.611	0.556		-8.9	30.0
1,2-Dibromoethane	0.825	0.770		-6.6	30.0
Tetrachloroethene	0.786	0.820		4.3	30.0

All other compounds must meet a minimum RRF of 0.010.

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Instrument ID: HP5973I Calibration Date: 12/10/13 Time: 14:58

Lab File ID: 3\I11426.D Init. Calib. Date(s): 12/07/13 12/07/13

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 17:38 23:36

Heated Purge: (Y/N) N

GC Column: Rxi-1MS ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,1,2,2-Tetrachloroethane	1.063	0.878		-17.4	30.0
Toluene	0.951	0.827		-13.1	30.0
Chlorobenzene	1.186	1.101		-7.1	30.0
Ethylbenzene	1.994	1.654		-17.1	30.0
Xylenes (m&p)	1.666	1.408		-15.5	30.0
Xylenes (o)	1.523	1.283		-15.8	30.0
1,3,5-Trimethylbenzene	1.602	1.394		-13.0	30.0
1,2,4-Trimethylbenzene	1.468	1.294		-11.9	30.0
1,3-Dichlorobenzene	0.862	0.840		-2.6	30.0
1,4-Dichlorobenzene	0.829	0.789		-4.9	30.0
1,2-Dichlorobenzene	0.780	0.761		-2.4	30.0
1,3-Hexachlorobutadiene	0.819	0.933		13.9	30.0
1,2,4-Trichlorobenzene	0.684	0.569		-16.9	30.0

All other compounds must meet a minimum RRF of 0.010.

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Instrument ID: HP5973I Calibration Date: 12/10/13 Time: 14:58

Lab File ID: 3\I11426.D Init. Calib. Date(s): 12/07/13 12/07/13

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 17:38 23:36

Heated Purge: (Y/N) N

GC Column: Rxi-1MS ID: .32 (mm)

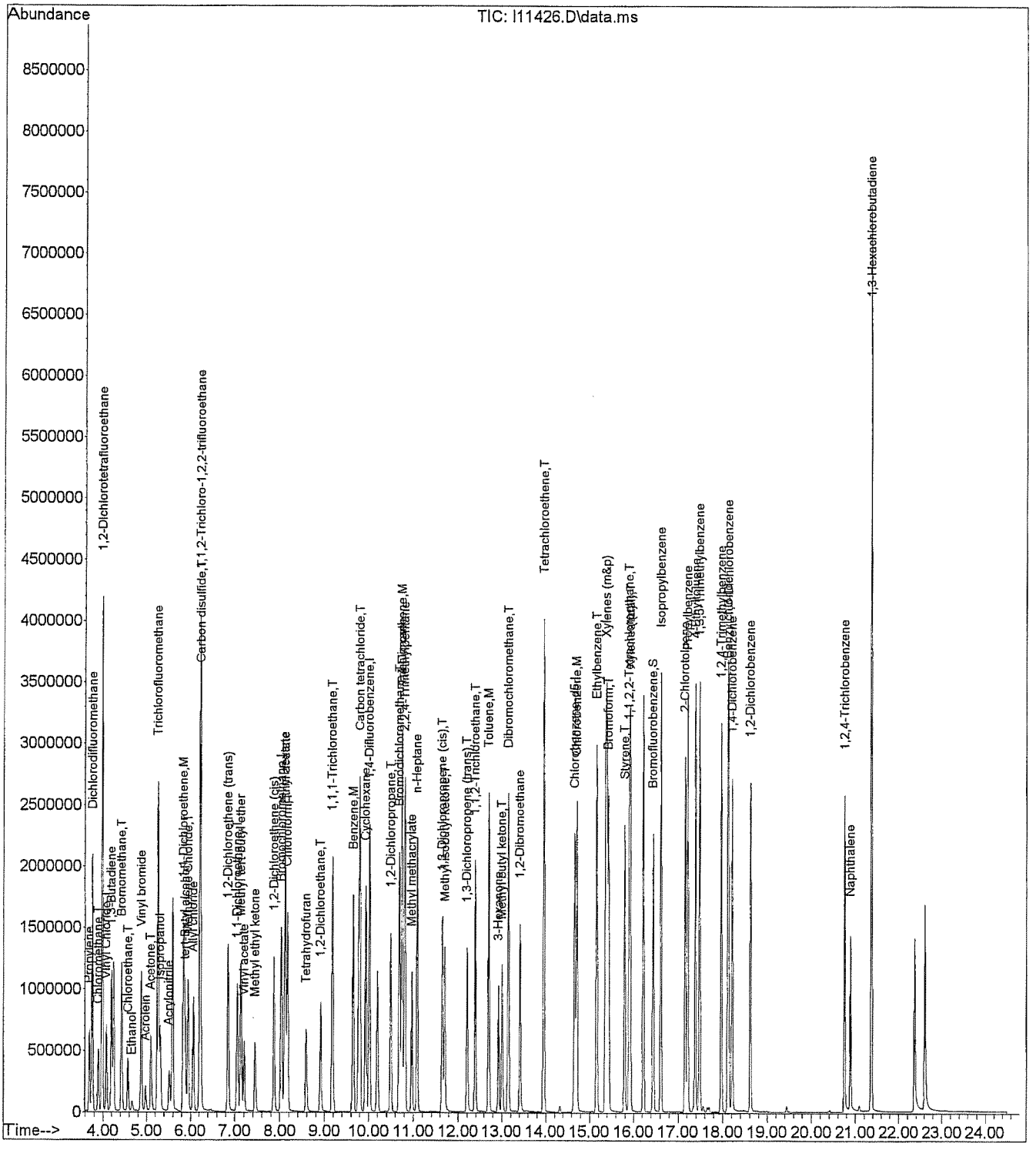
COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
4-Bromofluorobenzene	0.628	0.554		-11.8	30.0

All other compounds must meet a minimum RRF of 0.010.

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11426.D Vial: 4
Acq On : 10 Dec 2013 14:58 Operator: BBL
Sample : VSTD010 Inst : h5973i
Misc : ,,,CCV,,200ML;SN3812 Multiplr: 1.00
Quant Time: Dec 10 21:02:13 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M



NJGIAM005 V98

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11426.D Vial: 4
Acq On : 10 Dec 2013 14:58 Operator: BBL
Sample : VSTD010 Inst : h5973i
Misc : ,,,CCV,,200ML;SN3812 Multiplr: 1.00
Quant Time: Dec 10 21:02:13 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	8.031	128	505257	10.00	ppbv	#	0.00
37) 1,4-Difluorobenzene	10.019	114	2136189	10.00	ppbv		0.00
55) Chlorobenzene-d5	14.664	117	1506573	10.00	ppbv		0.00
System Monitoring Compounds							
66) Bromofluorobenzene	16.438	95	835364	8.83	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	88.30%			
Target Compounds							Qvalue
2) Propylene	3.691	41	389872	8.05	ppbv		100
3) Dichlorodifluoromethane	3.758	85	2038292	10.34	ppbv		99
4) 1,2-DIchlorotetrafluoroeth	3.977	85	2111441	10.95	ppbv		96
5) Chloromethane	3.892	50	598078	10.24	ppbv		99
6) 1,3-Butadiene	4.190	39	537896	9.75	ppbv		97
7) Bromomethane	4.422	94	892233	11.38	ppbv		99
8) Vinyl Chloride	4.075	62	814493	10.39	ppbv		98
9) Chloroethane	4.568	64	421557	10.17	ppbv		99
10) Ethanol	4.660	45	109019	10.64	ppbv		95
11) Isopropanol	5.312	45	1015362	9.57	ppbv		96
12) Methylene Chloride	5.946	49	644280	7.89	ppbv		97
13) Allyl chloride	6.068	76	278729	8.94	ppbv		93
14) tert-Butyl alcohol	5.879	59	1076609	8.69	ppbv		98
15) Vinyl bromide	4.879	106	939569	11.55	ppbv		99
16) Acrolein	4.977	56	210673	9.32	ppbv		100
17) Acetone	5.093	43	832576	8.11	ppbv		99
19) Acrylonitrile	5.513	53	307759	8.49	ppbv		98
20) Carbon disulfide	6.233	76	1873648	9.02	ppbv		98
21) 1,1,2-Trichloro-1,2,2-trif	6.221	101	1586708	9.93	ppbv		92
22) 1,1-Dichloroethene	5.843	96	705901	9.97	ppbv		92
23) 1,1-Dichloroethane	7.050	63	1049886	8.15	ppbv		100
24) Trichlorofluoromethane	5.257	101	2648505	11.54	ppbv		100
25) n-Hexane	8.110	57	848883	7.84	ppbv		93
26) Vinyl acetate	7.202	43	910886	7.65	ppbv		99
27) Ethyl acetate	8.116	61	134209	7.08	ppbv	#	80
29) Methyl tert-butyl ether	7.129	73	1392637	7.74	ppbv		98
30) 1,2-Dichloroethene (trans)	6.855	96	652581	9.86	ppbv		90
31) 1,2-Dichloroethene (cis)	7.873	96	664407	9.29	ppbv		91
33) Tetrahydrofuran	8.586	42	421816	7.17	ppbv		94
34) Methyl ethyl ketone	7.446	43	719244	7.38	ppbv		99
35) Chloroform	8.165	83	1360749	8.76	ppbv		99
36) 1,2-Dichloroethane	8.909	62	808877	8.35	ppbv		99
38) 1,1,1-Trichloroethane	9.177	97	1456393	8.75	ppbv		100
39) Cyclohexane	9.933	56	849903	7.57	ppbv		93
42) Carbon tetrachloride	9.799	117	1735084	9.32	ppbv		98
43) 2,2,4-Trimethylpentane	10.805	57	2581160	7.30	ppbv		98
44) Bromodichloromethane	10.683	83	1517989	8.46	ppbv		100
45) 1,2-Dichloropropane	10.488	63	569942	7.06	ppbv		100
46) 1,4-Dioxane	10.738	88	325664	8.98	ppbv		96
47) 1,3-Dichloropropene (cis)	11.646	75	1015753	8.02	ppbv		99
48) Trichloroethene	10.738	130	982505	9.43	ppbv		94
49) Benzene	9.647	78	1769329	7.63	ppbv		98
50) Methyl methacrylate	10.963	41	513372	6.83	ppbv		97
51) Dibromochloromethane	13.140	129	1545501	9.35	ppbv		100

NJGIAM005 V99

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11426.D Vial: 4
Acq On : 10 Dec 2013 14:58 Operator: BBL
Sample : VSTD010 Inst : h5973i
Misc : ,,,CCV,,200ML;SN3812 Multiplr: 1.00
Quant Time: Dec 10 21:02:13 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,3-Dichloropropene (trans	12.201	75	852450	8.03	ppbv		100
53) 1,1,2-Trichloroethane	12.384	97	746383	8.25	ppbv		100
54) Bromoform	15.426	173	1356498	9.40	ppbv		99
56) n-Heptane	11.079	43	861226	8.04	ppbv		100
57) Methyl isobutyl ketone	11.701	43	894497	8.22	ppbv		98
58) 3-Hexanone	12.920	43	432675	8.15	ppbv		97
59) Methyl butyl ketone	13.000	43	837898	9.11	ppbv		98
60) 1,2-Dibromoethane	13.414	107	1159980	9.34	ppbv		99
61) Tetrachloroethene	13.951	166	1234830	10.43	ppbv		100
62) 1,1,2,2-Tetrachloroethane	15.895	83	1322130	8.25	ppbv		98
63) Toluene	12.701	92	1245230	8.69	ppbv		99
64) Chlorobenzene	14.713	112	1658502	9.29	ppbv		100
65) Ethylbenzene	15.164	91	2491415	8.29	ppbv		97
67) Styrene	15.792	104	1340495	8.71	ppbv		95
68) Xylenes (m&p)	15.383	91	4241661	16.90	ppbv		98
69) Xylenes (o)	15.920	91	1932338	8.42	ppbv		98
70) Xylene (total)	15.920	91	1932338	8.42	ppbv		98
71) 2-Chlorotoluene	17.151	91	1761050	8.58	ppbv		96
72) Propylbenzene	17.212	91	2848224	8.42	ppbv		96
73) 4-Ethyltoluene	17.389	105	2477206	8.82	ppbv		97
74) 1,3,5-Trimethylbenzene	17.480	105	2099506	8.70	ppbv		97
75) 1,2,4-Trimethylbenzene	17.968	105	1949793	8.81	ppbv		96
76) Isopropylbenzene	16.615	105	2615649	8.59	ppbv		97
77) 1,3-Dichlorobenzene	18.127	146	1266055	9.75	ppbv		98
78) 1,4-Dichlorobenzene	18.212	146	1188212	9.51	ppbv		99
79) 1,2-Dichlorobenzene	18.621	146	1146791	9.76	ppbv		98
80) Benzylchloride	18.115	126	350032	10.03	ppbv	#	84
83) 1,3-Hexachlorobutadiene	21.364	225	1405157	11.39	ppbv		100
84) 1,2,4-Trichlorobenzene	20.754	180	857544	8.32	ppbv		99
85) Naphthalene	20.888	128	1242501	7.37	ppbv		99

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

NJGIAM005 V100

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

IV. RAW QC DATA PACKAGE FOR VOLATILE ORGANICS

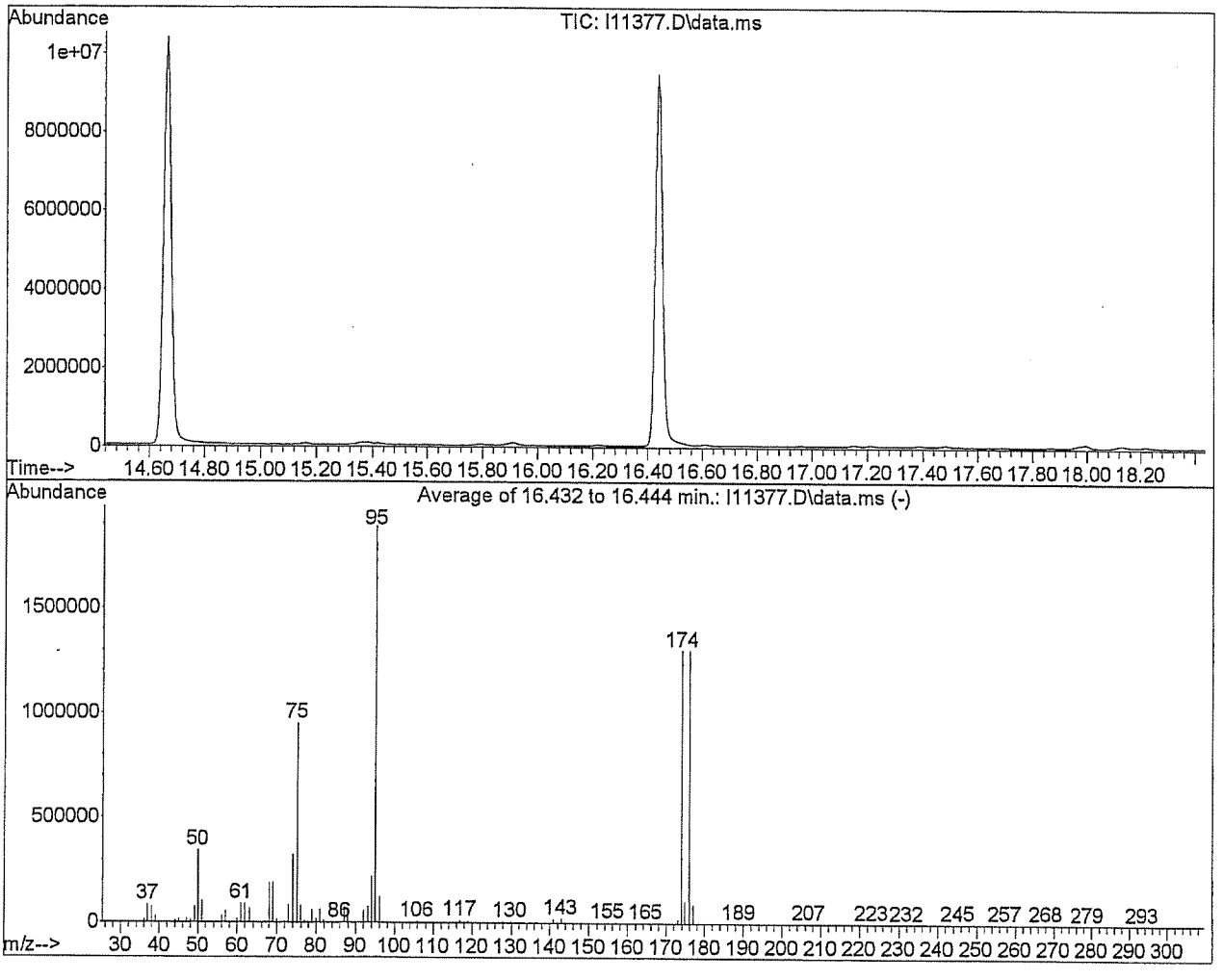
A. TUNING
B. BLANK
C. MATRIX SPIKE BLANK
D. SPIKE AND SPIKE DUPLICATE
E. COPY OF CALCULATIONS

CLPBFB

Data File : O:\ms\5973i\DATA\2013\DEC13\120713\I11377.D Vial: 1
Acq On : 7 Dec 2013 15:31
Operator : BBL
Sample : 50 NG BFB
Misc : ,,,TUNE,,138ML;SN1032
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\TO151207LOW.M
Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:18:C
Last Update : Tue Dec 10 16:49:06 2013



AutoFind: Scans 2108, 2109, 2110; Background Corrected with Scan 2096

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.2	343645	PASS
75	95	30	66	50.1	947861	PASS
95	95	100	100	100.0	1891520	PASS
96	95	5	9	6.5	123551	PASS
173	174	0.00	2	1.3	16701	PASS
174	95	50	120	68.7	1299627	PASS
175	174	4	9	8.0	103726	PASS
176	174	93	101	99.8	1296725	PASS
177	176	5	9	6.7	86912	PASS

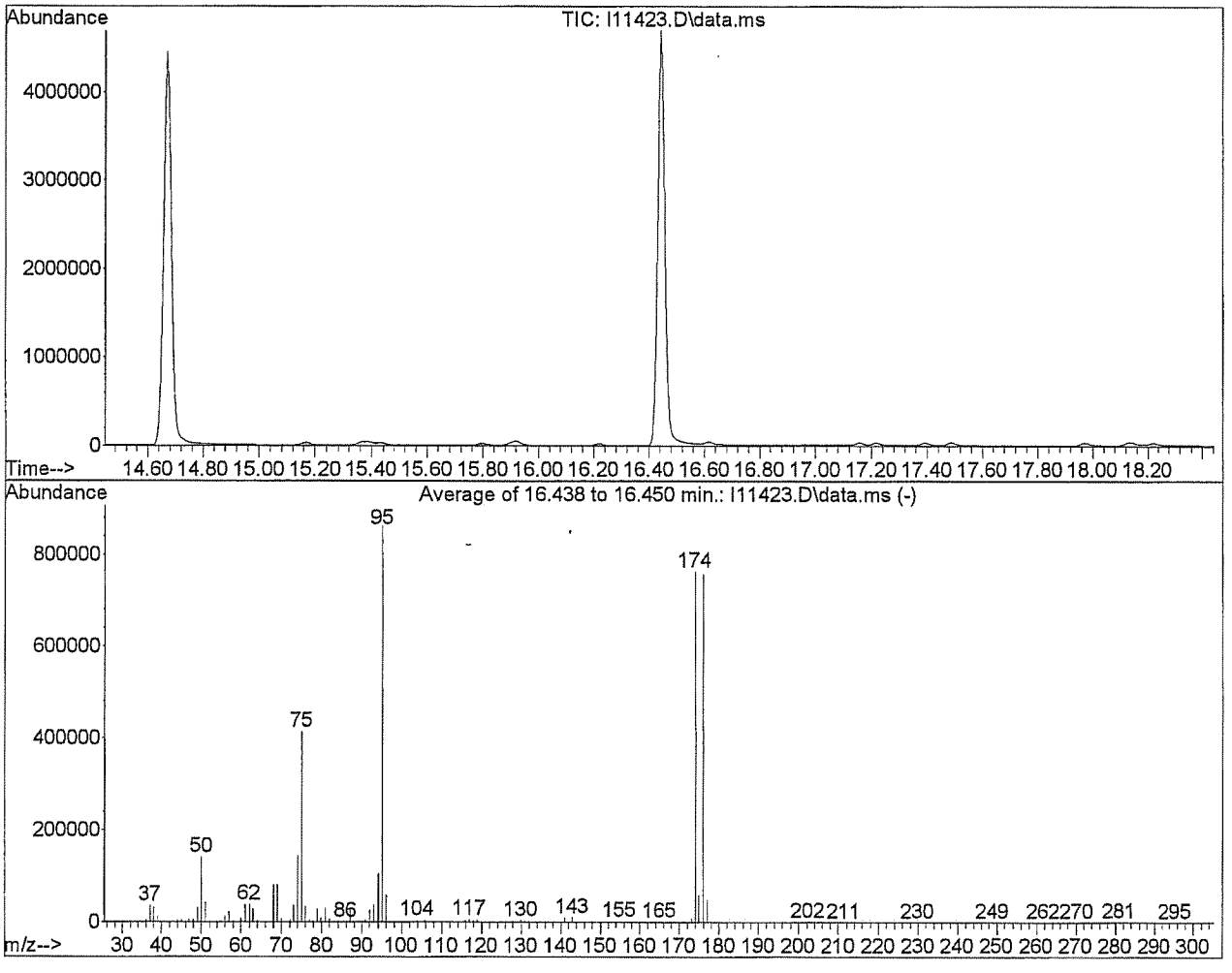
NJGIAM005 V102

CLPBFB

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11423.D Vial: 1
Acq On : 10 Dec 2013 12:00
Operator : BBL
Sample : 50 NG BFB
Misc : ,,,TUNE,,138ML;SN1032
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\TO151207.M
Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:1
Last Update : Sun Dec 08 00:17:54 2013



AutoFind: Scans 2109, 2110, 2111; Background Corrected with Scan 2096

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.3	140605	PASS
75	95	30	66	47.9	413504	PASS
95	95	100	100	100.0	862923	PASS
96	95	5	9	6.8	58507	PASS
173	174	0.00	2	1.2	8875	PASS
174	95	50	120	88.3	762048	PASS
175	174	4	9	7.7	58832	PASS
176	174	93	101	99.3	756693	PASS
177	176	5	9	6.5	48909	PASS

NJGIAM005 V103

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK121013

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Matrix: (soil/water) AIR Lab Sample ID: VBLK121013

Sample wt/vol: 400 (g/mL) ML Lab File ID: 3\I11428.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/10/13

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ppbv	Q
75-71-8	Dichlorodifluoromethane	0.5	U
76-14-2	1,2-Dichlorotetrafluoroethane	0.5	U
74-87-3	Chloromethane	0.5	U
74-83-9	Bromomethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
75-00-3	Chloroethane	0.5	U
75-09-2	Methylene chloride	0.5	U
67-64-1	Acetone	0.5	U
75-15-0	Carbon disulfide	0.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
108-05-4	Vinyl acetate	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
156-60-5	1,2-Dichloroethene (trans)	0.5	U
156-59-2	1,2-Dichloroethene (cis)	0.5	U
78-93-3	Methyl ethyl ketone	0.5	U
67-66-3	Chloroform	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
75-27-4	Bromodichloromethane	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
10061-01-5	1,3-Dichloropropene (cis)	0.5	U
79-01-6	Trichloroethene	0.5	U
71-43-2	Benzene	0.5	U
124-48-1	Dibromochloromethane	0.5	U
10061-02-6	1,3-Dichloropropene (trans)	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
75-25-2	Bromoform	0.5	U
108-10-1	Methyl isobutyl ketone	0.5	U
591-78-6	Methyl butyl ketone	0.5	U
106-93-4	1,2-Dibromoethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK121013

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Matrix: (soil/water) AIR Lab Sample ID: VBLK121013

Sample wt/vol: 400 (g/mL) ML Lab File ID: 3\I11428.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/10/13

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ppbv	Q
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
108-88-3	Toluene	0.5	U
108-90-7	Chlorobenzene	0.5	U
100-41-4	Ethylbenzene	0.5	U
100-42-5	Styrene	0.5	U
108-38-3/106-42-3	Xylenes (m&p)	0.5	U
95-47-6	Xylenes (o)	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
87-68-3	1,3-Hexachlorobutadiene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U

1F

EPA SAMPLE NO.

VBLK121013

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Matrix: (soil/water) AIR Lab Sample ID: VBLK121013

Sample wt/vol: 400 (g/mL) ML Lab File ID: 3\I11428.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/10/13

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

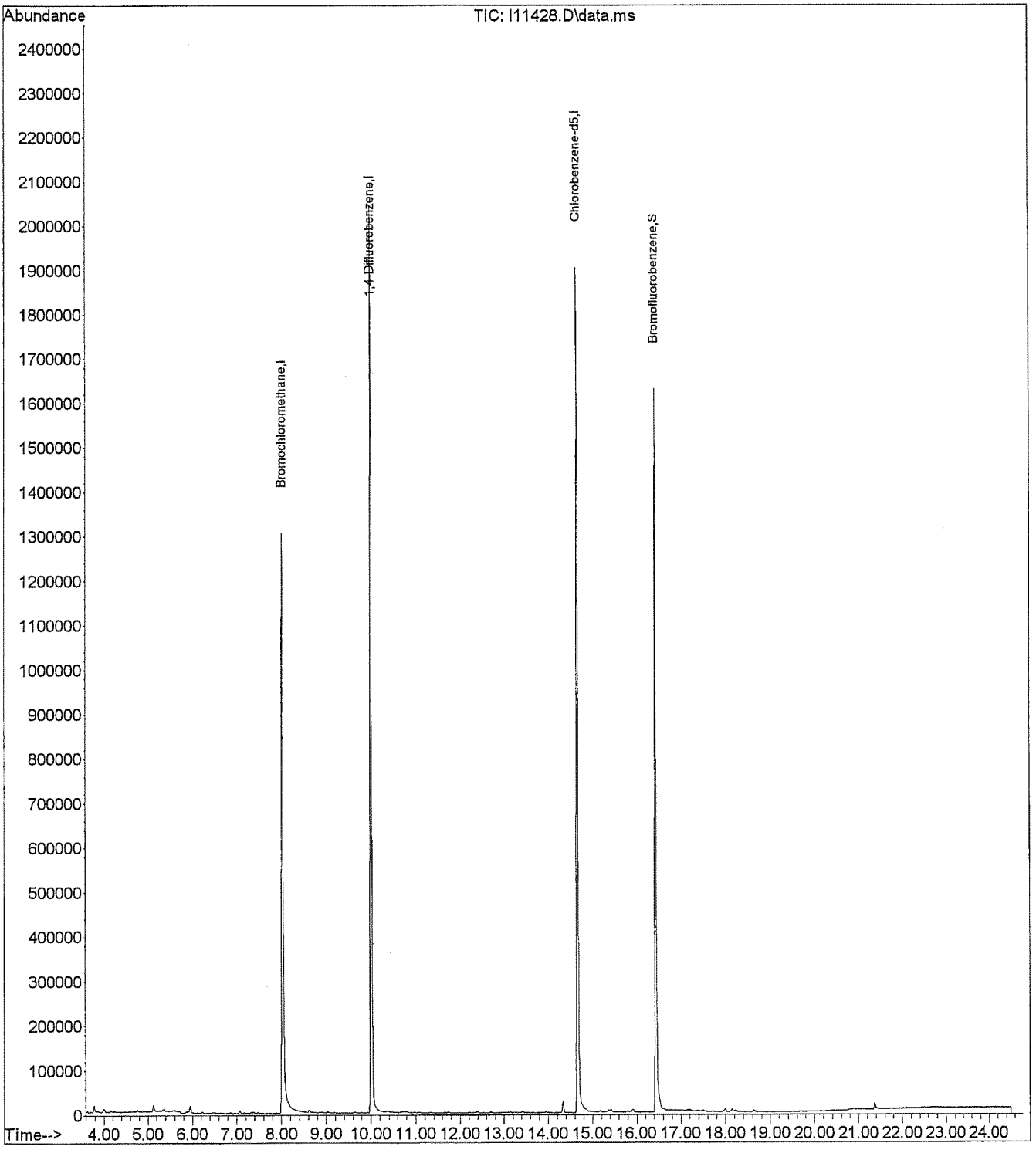
Number TICs found: 0 (µg/L or µg/Kg) ppbv

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11428.D Vial: 6
Acq On : 10 Dec 2013 16:25 Operator: BBL
Sample : VBLK121013 Inst : h5973i
Misc : ,,,MBLK,,400ML;SN3430 Multiplr: 1.00
Quant Time: Dec 10 16:53:13 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M



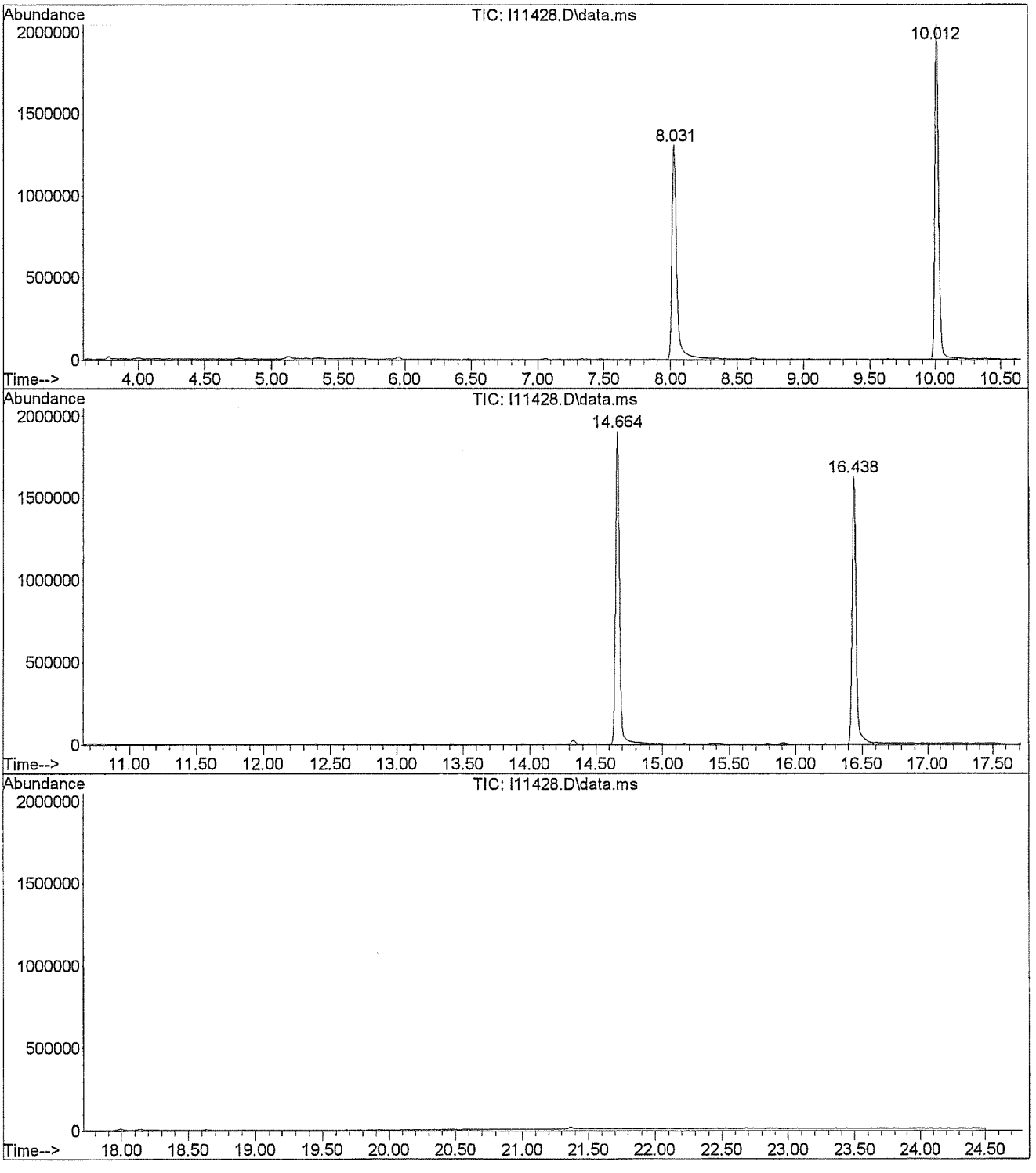
NJGIAM005 V107

LSC Report - Integrated Chromatogram

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11428.D
Acq On : 10 Dec 2013 16:25
Operator : BBL
Sample : VBLK121013
Misc : ,,,MBLK,,400ML;SN3430
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



NJGIAM005 V108

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11428.D Vial: 6
Acq On : 10 Dec 2013 16:25 Operator: BBL
Sample : VBLK121013 Inst : h5973i
Misc : ,,,MBLK,,400ML;SN3430 Multiplr: 1.00
Quant Time: Dec 10 16:53:13 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.031	128	492954	10.00	ppbv	# 0.00
37) 1,4-Difluorobenzene	10.012	114	1938926	10.00	ppbv	0.00
55) Chlorobenzene-d5	14.664	117	1331724	10.00	ppbv	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	16.438	95	672238	8.03	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 80.30%			
Target Compounds						Qvalue

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

NJGIAM005 V109

Library Search Compound Report

Data File: O:\ms\5973i\DATA\2013\DEC13\121013\I11428.D
Acq On : 10 Dec 2013 16:25
Operator : BBL
Sample : VBLK121013
Misc : ,,,MBLK,,400ML;SN3430
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

No Library Search Compounds Detected
****

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB121013

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Matrix: (soil/water) AIR Lab Sample ID: LFB121013

Sample wt/vol: 200 (g/mL) ML Lab File ID: 3\I11429.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/10/13

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ppbv	Q
75-71-8	Dichlorodifluoromethane	9	
76-14-2	1,2-Dichlorotetrafluoroethane	10	
74-87-3	Chloromethane	9	
74-83-9	Bromomethane	11	
75-01-4	Vinyl chloride	10	
75-00-3	Chloroethane	10	
75-09-2	Methylene chloride	8	
67-64-1	Acetone	8	
75-15-0	Carbon disulfide	9	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9	
75-35-4	1,1-Dichloroethene	10	
75-34-3	1,1-Dichloroethane	8	
75-69-4	Trichlorofluoromethane	11	
108-05-4	Vinyl acetate	8	
1634-04-4	Methyl tert-butyl ether	8	
156-60-5	1,2-Dichloroethene (trans)	9	
156-59-2	1,2-Dichloroethene (cis)	9	
78-93-3	Methyl ethyl ketone	7	
67-66-3	Chloroform	9	
107-06-2	1,2-Dichloroethane	8	
71-55-6	1,1,1-Trichloroethane	9	
56-23-5	Carbon tetrachloride	9	
75-27-4	Bromodichloromethane	9	
78-87-5	1,2-Dichloropropane	8	
10061-01-5	1,3-Dichloropropene (cis)	9	
79-01-6	Trichloroethene	9	
71-43-2	Benzene	8	
124-48-1	Dibromochloromethane	9	
10061-02-6	1,3-Dichloropropene (trans)	8	
79-00-5	1,1,2-Trichloroethane	8	
75-25-2	Bromoform	9	
108-10-1	Methyl isobutyl ketone	8	
591-78-6	Methyl butyl ketone	9	
106-93-4	1,2-Dibromoethane	9	
127-18-4	Tetrachloroethene	10	

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB121013

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: NJGIAM SAS No.: _____ SDG No.: NJGIAM005

Matrix: (soil/water) AIR Lab Sample ID: LFB121013

Sample wt/vol: 200 (g/mL) ML Lab File ID: 3\I11429.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/10/13

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

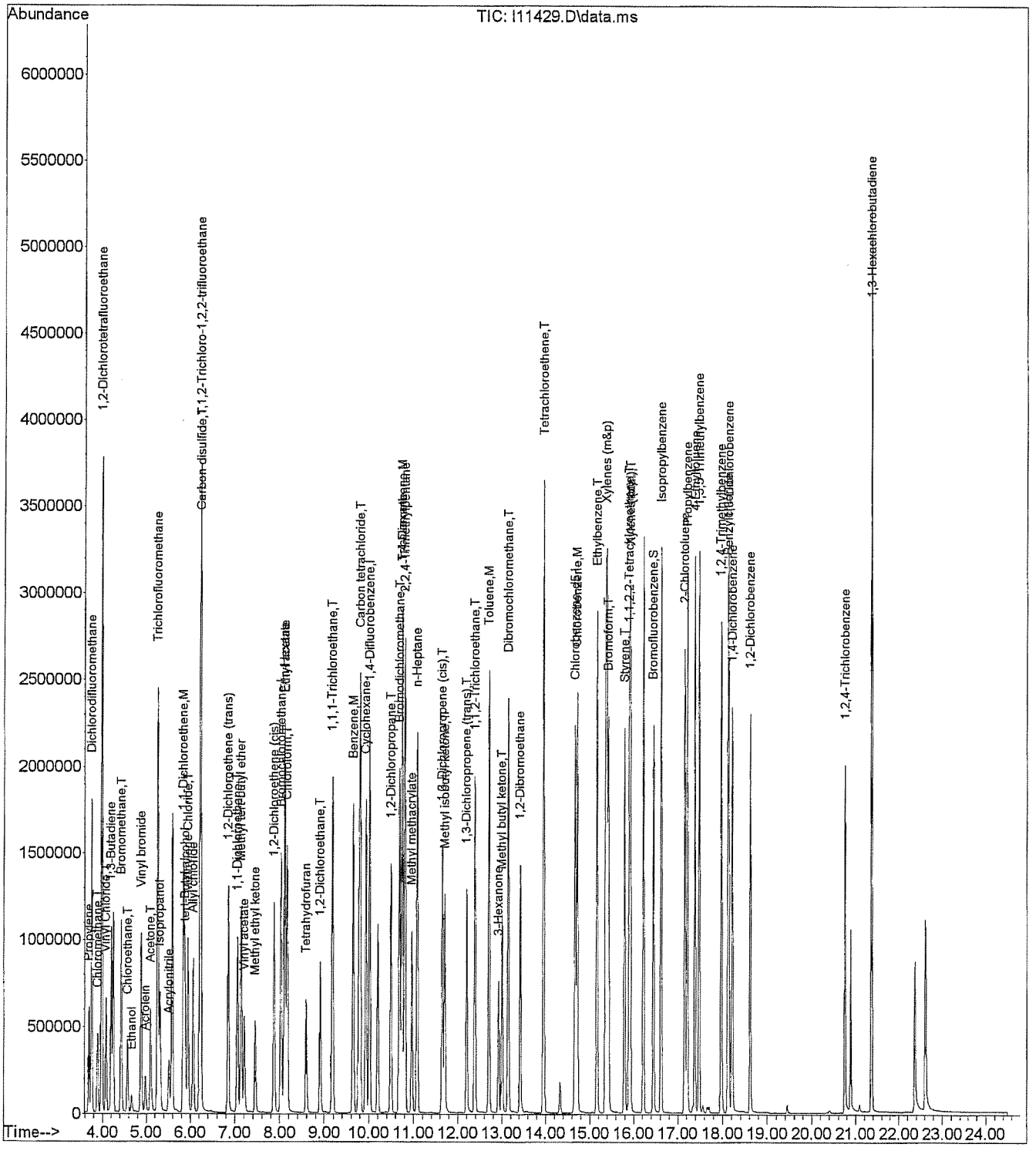
CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ppbv	Q
79-34-5	1,1,2,2-Tetrachloroethane	8	
108-88-3	Toluene	9	
108-90-7	Chlorobenzene	9	
100-41-4	Ethylbenzene	8	
100-42-5	Styrene	8	
108-38-3/106-42-3	Xylenes (m&p)	16	
95-47-6	Xylenes (o)	8	
108-67-8	1,3,5-Trimethylbenzene	8	
95-63-6	1,2,4-Trimethylbenzene	8	
541-73-1	1,3-Dichlorobenzene	9	
106-46-7	1,4-Dichlorobenzene	9	
95-50-1	1,2-Dichlorobenzene	9	
87-68-3	1,3-Hexachlorobutadiene	8	
120-82-1	1,2,4-Trichlorobenzene	7	

NJGIAM005 V112

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11429.D Vial: 7
Acq On : 10 Dec 2013 17:14 Operator: BBL
Sample : LFB121013 Inst : h5973i
Misc : ,,,LFB,,200ML;SN3816 Multiplr: 1.00
Quant Time: Dec 10 21:01:07 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:2
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M



NJGIAM005 V113

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11429.D Vial: 7
Acq On : 10 Dec 2013 17:14 Operator: BBL
Sample : LFB121013 Inst : h5973i
Misc : ,,,LFB,,200ML;SN3816 Multiplr: 1.00
Quant Time: Dec 10 21:01:07 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.031	128	502054	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	10.018	114	2015787	10.00	ppbv	0.00
55) Chlorobenzene-d5	14.664	117	1474236	10.00	ppbv	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	16.438	95	845838	9.13	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	91.30%		
Target Compounds						Qvalue
2) Propylene	3.690	41	348402	7.24	ppbv	99
3) Dichlorodifluoromethane	3.751	85	1740668	8.89	ppbv	99
4) 1,2-DIchlorotetrafluoroeth	3.977	85	1924012	10.04	ppbv	99
5) Chloromethane	3.892	50	544587	9.39	ppbv	100
6) 1,3-Butadiene	4.190	39	500260	9.12	ppbv	98
7) Bromomethane	4.422	94	821343	10.54	ppbv	99
8) Vinyl Chloride	4.075	62	766923	9.84	ppbv	100
9) Chloroethane	4.568	64	409053	9.93	ppbv	99
10) Ethanol	4.666	45	133435	13.11	ppbv	99
11) Isopropanol	5.312	45	996335	9.45	ppbv	98
12) Methylene Chloride	5.946	49	617389	7.61	ppbv	95
13) Allyl chloride	6.068	76	274089	8.84	ppbv	92
14) tert-Butyl alcohol	5.879	59	1054709	8.57	ppbv	99
15) Vinyl bromide	4.879	106	857934	10.61	ppbv	100
16) Acrolein	4.977	56	215777	9.61	ppbv	99
17) Acetone	5.093	43	821699	8.05	ppbv	98
19) Acrylonitrile	5.519	53	290012	8.05	ppbv	100
20) Carbon disulfide	6.233	76	1861986	9.02	ppbv	99
21) 1,1,2-Trichloro-1,2,2-trif	6.220	101	1492229	9.40	ppbv	95
22) 1,1-Dichloroethene	5.842	96	677052	9.62	ppbv	94
23) 1,1-Dichloroethane	7.050	63	1047136	8.18	ppbv	100
24) Trichlorofluoromethane	5.257	101	2397604	10.51	ppbv	100
25) n-Hexane	8.110	57	860237	7.99	ppbv	96
26) Vinyl acetate	7.202	43	909587	7.69	ppbv	98
27) Ethyl acetate	8.116	61	135503	7.19	ppbv #	78
29) Methyl tert-butyl ether	7.129	73	1365256	7.64	ppbv	98
30) 1,2-Dichloroethene (trans)	6.854	96	622670	9.47	ppbv	93
31) 1,2-Dichloroethene (cis)	7.873	96	638755	8.99	ppbv	92
33) Tetrahydrofuran	8.586	42	418466	7.16	ppbv	96
34) Methyl ethyl ketone	7.446	43	695968	7.18	ppbv	98
35) Chloroform	8.165	83	1316131	8.53	ppbv	99
36) 1,2-Dichloroethane	8.909	62	803542	8.35	ppbv	100
38) 1,1,1-Trichloroethane	9.177	97	1377765	8.77	ppbv	99
39) Cyclohexane	9.933	56	846574	7.99	ppbv	94
42) Carbon tetrachloride	9.799	117	1595696	9.08	ppbv	100
43) 2,2,4-Trimethylpentane	10.805	57	2626394	7.88	ppbv	100
44) Bromodichloromethane	10.683	83	1451090	8.57	ppbv	98
45) 1,2-Dichloropropane	10.488	63	589800	7.74	ppbv	100
46) 1,4-Dioxane	10.738	88	306122	8.94	ppbv	96
47) 1,3-Dichloropropene (cis)	11.646	75	1017144	8.51	ppbv	98
48) Trichloroethene	10.738	130	915705	9.32	ppbv	96
49) Benzene	9.647	78	1802540	8.24	ppbv	98
50) Methyl methacrylate	10.963	41	487085	6.87	ppbv	94
51) Dibromochloromethane	13.140	129	1436211	9.21	ppbv	99

NJGIAM005 V114

Quantitation Report (QT Reviewed)

Data File : O:\ms\5973i\DATA\2013\DEC13\121013\I11429.D Vial: 7
Acq On : 10 Dec 2013 17:14 Operator: BBL
Sample : LFB121013 Inst : h5973i
Misc : ,,,LFB,,200ML;SN3816 Multiplr: 1.00
Quant Time: Dec 10 21:01:07 2013
Quant Results File: TO151207.RES
Integrator: RTE

Quant Method : C:\MSDCHEM\1\METHODS\TO151207.M
Quant Title : TO-15 AIR CAL-032PLU3SPC04J; QC-189PLU3SPC01J MonSun Dec 08 00:20:10 2013
QLast Update : Sun Dec 08 00:20:10 2013
Response via : Initial Calibration
DataAcq Meth:TO151207.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,3-Dichloropropene (trans	12.201	75	848188	8.47	ppbv		100
53) 1,1,2-Trichloroethane	12.384	97	718290	8.41	ppbv		99
54) Bromoform	15.426	173	1204097	8.85	ppbv		99
56) n-Heptane	11.079	43	863790	8.24	ppbv		99
57) Methyl isobutyl ketone	11.701	43	862564	8.10	ppbv		98
58) 3-Hexanone	12.920	43	326263	6.28	ppbv		96
59) Methyl butyl ketone	13.000	43	809205	8.99	ppbv		99
60) 1,2-Dibromoethane	13.414	107	1115583	9.18	ppbv		99
61) Tetrachloroethene	13.951	166	1130237	9.75	ppbv		100
62) 1,1,2,2-Tetrachloroethane	15.895	83	1228156	7.83	ppbv		100
63) Toluene	12.701	92	1236931	8.82	ppbv		99
64) Chlorobenzene	14.713	112	1575835	9.02	ppbv		100
65) Ethylbenzene	15.164	91	2422294	8.24	ppbv		99
67) Styrene	15.792	104	1269439	8.43	ppbv		96
68) Xylenes (m&p)	15.383	91	4034232	16.43	ppbv		99
69) Xylenes (o)	15.920	91	1815631	8.08	ppbv		100
70) Xylene (total)	15.920	91	1815631	8.08	ppbv		100
71) 2-Chlorotoluene	17.151	91	1673726	8.33	ppbv		96
72) Propylbenzene	17.212	91	2671316	8.07	ppbv		97
73) 4-Ethyltoluene	17.389	105	2267363	8.25	ppbv		99
74) 1,3,5-Trimethylbenzene	17.480	105	1897894	8.04	ppbv		98
75) 1,2,4-Trimethylbenzene	17.962	105	1737224	8.02	ppbv		97
76) Isopropylbenzene	16.615	105	2436245	8.17	ppbv		98
77) 1,3-Dichlorobenzene	18.127	146	1118410	8.80	ppbv		98
78) 1,4-Dichlorobenzene	18.212	146	1053528	8.62	ppbv		98
79) 1,2-Dichlorobenzene	18.620	146	990493	8.62	ppbv		98
80) Benzylchloride	18.114	126	297679	8.72	ppbv	#	81
83) 1,3-Hexachlorobutadiene	21.364	225	959778	7.95	ppbv		99
84) 1,2,4-Trichlorobenzene	20.754	180	683937	6.78	ppbv		99

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

NJGIAM005 V115

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

COMPUTATIONS FOR VOLATILE ORGANICS PERFORMED BY RTE DATA SYSTEM OF HP

$$CONC = \frac{Ax}{Ais \times RRF} \cdot \frac{Is}{W}$$

WHERE:

CONC = Concentration in sample (ug/L or ug/KG)

Ax = Area of characteristic ion of compound

Ais = Area of characteristic ion of internal standard

RRF = Relative response factor as area per (ng) of compound, divided by area per ng of respective internal standard

Is = Amount of internal standard injected (ng)

W = Volume of sample in (ml) or dry weight (g)

Generally the amount of each internal standard injected is 250 ng.

H2M labs
575 Broad Hollow Road
Melville, NY 11747
tel 631.694.3040
fax 631.420.8436

V. DOCUMENTATION FOR VOLATILE ORGANICS

A. LOG BOOK PAGES
B. REPORTING ANALYST SIGNATURE PAGE

H2M LABS, INC.

GC/MS AIR RUN LOG (TO-14/TO-15)

Instrument ID:H5973I Column: RTX-1

Date(s) of analyses: 12/2/13, 12/7/13
SDG. No.: EAR040
Initial Calib.Date: 9/25/13
Injection Volume: 400ml

Analyst Name: Bobby Laguna Signature: BLaguna
Supervisor Name: Signature
Target directory :o\ms\h5973i\data

IS LOT# 099PLU3SPC.D45

Run#	Lab ID	Client ID	INJ Time	vol. (ml)	Can S/N	Vac. ("Hg)	press. (psia)	Dil. F.	Prep Batch	Seq.Name/ Batch	Q.C CK.	Method/Comments	Analyst Initials
I11362	1311907-001A	SVE BLOWER EFF	2047	20	180			T0150925		S120213	✓	1:60 PRES 3X 14.5→43.6	BBL
63	-002A	SVE INFLUENT 1-4	2132	20	189						✓	1:60 PRES 3X 12.7→38.1	
64	-003A	SVE INFLUENT 8-10	2214	20	193						✓	1:60 PRES 3X 12.8→38.6	
65	-004A	SVE INFLUENT 5-7, 11	2257	20	194						RE	1:60 PRES 3X 12.4→37.2	
66	-004A	SVE INFLUENT 5-7, 11	2340	80	194						✓	1:15 PRES 3X 12.4→37.2	
67	VBLK		0022	400	195								KGG
68	VBLK		0105	400	195								
69	138		0725	400	138								
70	VBLK		0807	400	3430								
71	VBLK		0920	400	195								
72	VBLK		1014	400	195								
73	138		1102	400	138						✓		
74	190		1150	400	190						RE		
75	1032		1252	400	1032								
76	1032		1337	400	1032								
I11377	50 ng DFB		1531	138	1032			T0150701LW		S120713	✓		BBL
78	VSTD0.025		1612	40	3391								
79	VSTD0.025 *	T0150701LW.M	1655	40	3397						✓		

H2M LABS, INC.

GC/MS AIR RUN LOG (TO-14/TO-15)

Instrument ID:H5973I Column: RTX-1

Date(s) of analyses: 12/7/13
SDG. No.:
Initial Calib.Date: 12/7/13
Injection Volume: 400ml

Analyst Name: Bobby Laguka Signature: BBLaguka
Supervisor Name: Signature
Target directory :o\ms\h5973i\data

Run#	Lab ID	Client ID	INJ Time	vol. (ml)	Can S/N	Vac. ("Hg)	press. (psia)	Dil. F.	Prep Batch	Seq.Name/ Batch	Q.C CK.	Method/Comments	Analyst Initials
ICIB80	VSTD040 X		1138	400	385			1/215	207106W	S120713	✓		BBL
81	VSTD020 X	TM51201.M	1821	400	3391						✓		
82	VSTD010 X		1904	200	3391						✓		
83	VSTD005 X		1949	100	3391						✓		
84	VSTD002 X		2032	40	3391						✓		
85	VSTD0.1		2117	40	3831								
86	VSTD0.1		2200	40	3831								
87	VSTD0.1 X		2253	40	3831						✓		
88	VSTD0.2 X		2336	80	3831						✓		
89	ICV010		0033	200	1629								
90	ICV010		0113	200	1629								
91	VBLK120713		0155	400	3430								
92	VBLK120713		0238	400	5430								
93	3405		1001	400	3405								KGG
94	ICV010		1105	200	3816								
95	ICV010		1225	200	1629								
96	ICV010		1332	200	3816								
97	ICV010		1429	200	3816						✓		

H2M LABS, INC.

GC/MS AIR RUN LOG (TO-14/TO-15)

Instrument ID:H5973I Column: RTX-1

Date(s) of analyses: 12/9/13 ; 12/10/13
SDG. No.:
Initial Calib.Date: 12/7/13
Injection Volume: 400ml

Analyst Name: Bethany Laguk Signature: BLaguk
Supervisor Name: Signature
Target directory :o\ms\h5973i\data

Run#	Lab ID	Client ID	INJ Time	vol. (ml)	Can S/N	Vac. ("Hg)	press. (psia)	Dil. F.	Prep Batch	Seq.Name/ Batch	Q,C CK.	Method/Comments	Analyst Initials
I11416	1159		2158	400	1159			T015207		S120913	✓		BBL
17	131221-003A		2241	400	TEDLAR						✓	TCE ONLY!	
18	-001A		2324	20	TEDLAR						✓	1:20 DL → 1:1000	
19	-002A		0007	40	TEDLAR						CATPYLOVER? ✓	1:10 DL →	
20	115		0049	400	115						RE	CATPYLOVER?	
21	131221-001A	SVE-1	0133	400	192						RE	Internal	
22	-002A	SVE-2	0215	400	196						RE	stds OUT.	
I11423	50 ng BFB		1200	138	1032			T015207		S121013	✓		KGG
24	VSTD010		1244	200	3812								
25	VSTD040		1402	50	386								
26	VSTD010		1458	200	3812						✓		
27	VBLK121013		1512	400	3430								✓
28	VBLK121013		1625	400	3430						✓		BBL
29	LCS121013		1714	200	3816						✓		
30	115		1757	400	115						✓		
31	131221-002A		1840	20	125							1:50 6.7→168 X2.5 DIL	
32	-002A		1946	20	TEDLAR						✓	1:20	
33	-001A		2029	40	190						✓	1:1000 7.4→18.5 DIL X2.5 60psc mkpT	

H2M LABS, INC.

GC/MS AIR RUN LOG (TO-14/TO-15)

Instrument ID:H5973I Column: RTX-1

Date(s) of analyses: 12/10/12
SDG. No.: NJGIAM005, EATR041
Initial Calib.Date: 12/7/12
Injection Volume: 400ml

Analyst Name: Bobby Laguna Signature: BBLaguna
Supervisor Name: Signature
Target directory :o\ms\h5973i\data

Run#	Lab ID	Client ID	INJ Time	vol. (ml)	Can S/N	Vac. ("Hg)	press. (psia)	Dil. F.	Prep Batch	Seq.Name/ Batch	Q,C CK.	Method/Comments	Analyst Initials
I11431	1312347-001A	SV-1	2112	400	118			T0151	207	S121013	✓	DL 1:200	BBL
35	VBLK		2155	400									
36	1312347-001A	SV-1	2238	40	118						RE	1:1000 ⇒ 1:200	
37	-001A	SV-1	2344	20	118						✓	1:200 pres low	
38	1312379-003A		0027	400	138						✓		
39	-005A		0110	400	182						✓	DL 1:20	
40	-001A		0153	400	134						✓	DL 1:1000 1 ISOUT SURR OUT	
41	-002A		0236	400	137						RE	DL 1:10 /Re x1	
42	-004A		0319	400	139						✓	DL 1:10	
43	-006A		0402	400	185						✓	DL 1:10	
44	1312421-001A	SVE-1	0445	40	192						✓	@1:10	
45	-002A	SVE-2	0528	40	196						✓	@1:10	
46	1312379-005A		0834	20	182						·	@1:20 [9×36×4] DL 1:200	KGG
47	-006A		0917	40	185						✓	@1:10	
48	-004A		1000	40	139						✓	@1:10	
49	-002A		1043	40	137						✓	@1:10	
50	-002A		1125	400	137						✓		

12/11/12

H2M labs
575 Broad Hollow Road
Melville, NY 11747
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fax 631.420.8436

SDG: NJGIAM005
SCAN: VOA

This data package was reported by the undersigned. This reporting includes data calculations, manual edits, if necessary, and compilation of raw data. The information presented is true and correct to the best of my knowledge.

Signature: _____

Date: ___12/12/13_____

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