



Ecosystems Strategies, Inc.

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May 28, 2013

Mr. Jonathan Greco
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7016

via e-mail: jxgreco@gw.dec.state.ny.us

RE: Corrective Measures Work Plan for the
Water Street Site, located at 220 Water Street
Borough of Brooklyn, New York
BCP ID: C224098
ESI File: GB12019.70

Dear Mr. Greco:

Ecosystems Strategies Inc. (ESI) has prepared this Corrective Measures Work Plan (CMWP) on behalf of the 220 Water Tenant, LLC to detail proposed corrective measures at the Water Street Site (hereafter referred to as the "Site"). Corrective measures have been developed to address areas of non-compliance in the Engineering Controls (ECs) at the Site as specified in the Site Management Plan (SMP).

Certification of the ECs at the Site, as described in the SMP and the Reminder Notice provided by NYSDEC on February 28, 2013, could not be provided at this time as the following areas of non-compliance exist:

- Omitted warning alarm for the blower of the sub-slab depressurization system (SSDS) to indicate that the system is not working properly
- Failure to complete monthly manometer testing readings for the SSDS in the six months following installation

The completed Institutional and Engineering Controls Certification Form is provided with this CMWP as Attachment A per the certification's instructions. Excerpts from the SMP and Final Engineering Report describing the ECs requirements are provided as Attachment B.

Monitoring Activities on the SSDS

Monitoring Activities by Environmental Resources Management (February 2012)

Start-up & testing activities of the SSDS were conducted by Environmental Resources Management (ERM) on February 2012. Measurements collected by ERM at each of the sub-slab measuring points (SSMP 1, SSMP 2, SSMP 3, and SSMP 4) were documented as -0.151, -0.028,



J. Greco
May 28, 2013
NYSDEC BCP Site ID: C224098
ESI File: GB12019.70
Page 2 of 4

-0.310, and - 0.093 inches water column (inches of w.c.), respectively. A letter documenting these activities, including a map depicting the location of the SSMPs, is provided in Appendix C.

In addition, an air emission analysis was conducted on the air system effluent by ERM on February 2012. The total emission rate of total VOCs was documented as 0.05 pounds per day. No treatment or permit for air emission is anticipated at this time as the total VOCs emission is less than 1 pound per day. Laboratory data for the air emission analysis is provided within the letter located in Appendix C.

Monitoring Activities by ESI (December 2012 to May 2013)

Inspections of the SSDS by ESI were conducted on December 10, 2012, February 11, March 11, and May 3, 2013 by ESI personnel.

Table 1 (below) reports vacuum measurements collected at each of the sub-slab monitoring points during the March and April 2013 inspections.

Table 1: Sub-Slab Monitoring Points Vacuum Measurements

Monitoring Points	3/11/2013	5/3/2013
SSMP 1	-0.11	-0.127
SSMP 2	-0.22	-0.035
SSMP 3	-0.29	-0.324
SSMP 4	-0.18	-0.024

Note: All measurements are indicated in inches water column.

Vacuum measurements collected by ERM in February 2012 and ESI in March and April 2013 meet the target of -0.002 inches of w.c. identified in the SMP, and are indicative of active depressurization. Based on this information all the critical components of the SSDS appear to be working properly.

In addition, a blower influent vacuum measurement of -2 inches of mercury (-27.2 inches of w.c.) was observed in the magnehelic gauge located on the influent suction pipe at the roof top level during the May 3, 2013 site inspection. This blower influent vacuum generates sufficient vacuum response at the SSMPs, as indicated in Table 1.

Proposed Corrective Measures

Four corrective measures are proposed to address areas of non-compliance: installation of a U-manometer, additional record keeping associated with the U-manometer, installation of a warning alarm for the blower of the SSDS and supplemental monthly vacuum monitoring.



J. Greco
May 28, 2013
NYSDEC BCP Site ID: C224098
ESI File: GB12019.70
Page 3 of 4

Installation of a U-manometer

The installation of one U-manometer is proposed in the garage level of the building to provide a visual warning sign of insufficient vacuum underneath the building. The U-manometer will be placed on the riser pipe located in the corridor connecting a secondary entrance to the building along Water Street and the lobby of the garage level. A Suncourt PI1004 Air Pressure Indicator or comparable U-manometer is recommended.

Prior to installation, the roof top blower unit will be turned off and the riser pipe will be visually inspected to ensure that the proposed work does not compromise the integrity of the pipe. In addition, any paint or general debris will be removed from the riser pipe surface. Installation procedures outlined by the manufacture will be followed (installation instructions for the Suncourt PI1004 Air Pressure Indicator are provided as Attachment D).

After the installation of the U-manometer and while the roof top blower unit is off, the manometer will be set to zero to represent the no vacuum condition. After the installation is complete, the roof top blower unit will be then turned on and the vacuum measurement will be recorded.

Additional record keeping associated with the U-manometer

Site management personnel and ESI will continue to conduct routine recordkeeping as outlined in the SMP. Additional record keeping by Site management personnel will be required to ensure that the U-manometer serves as a warning device to alert to insufficient vacuum and documentation will be provided to the NYSDEC with the first PRR following the approval of this CMWP.

Instructions on how to correctly read the U-manometer will be communicated to Site management personnel by ESI. In addition, clear instructions will be located adjacent to the U-manometer to assist Site management personnel. If adequate vacuum is not documented at a single event Site management personnel will contact ESI within 48 hours to evaluate the SSDS.

Installation of a warning alarm for the blower of the SSDS

A warning alarm that sounds when the blower is deactivated will be installed. The alarm will be installed in the garage level and will be connected to a sensor to be installed in the SSDS piping. Loss of vacuum in the piping will be evidence of system failure, which will result in the alarm sounding. Documentation of installation will be provided in a separate letter with photographs and an as-built drawing. The alarm will be installed within one month of NYSDEC approval of this CMWP.

Supplemental monthly vacuum monitoring

Vacuum measurements from all sub-slab monitoring points (SSMPs) were recorded on February 2012, March and May 2013. In addition, vacuum measurements from the magnehelic gauge were recorded in February 2012 and March 2013. Vacuum measurements are provided in the *Monitoring Activities on the SSDS* section, above. Supplemental monthly vacuum



J. Greco
May 28, 2013
NYSDEC BCP Site ID: C224098
ESI File: GB12019.70
Page 4 of 4

monitoring is proposed for four additional months (June, July, August, and September 2013) to complete a six month period and meet the requirements set in the SMP. This supplemental monthly vacuum monitoring will consist of the documentation of vacuum measurements at the magnehelic gauge and all SSMPs. Manometer testing, measurement evaluations, and reporting will be conducted in a manner consistent with the SMP.

Schedule of Implementation

ESI will start implementing the work outlined in this CMWP within 15 days of receiving approval from NYSDEC. The work is anticipated to be completed by September 2013. A letter report documenting the implementation of the activities outlined in this CMWP will be prepared within two weeks of the completion of the work. Subsequent to receiving approval from NYSDEC on the work performed, the Periodic Review Report, incorporating all activities in regard to this CMWP, will be submitted to NYSDEC within 14 days.

Should you have any questions please do not hesitate to contact us.

Sincerely,

ECOSYSTEMS STRATEGIES, INC.

A handwritten signature in black ink that reads "Paul H. Ciminello".

Paul H. Ciminello
President

PHC/RAM:ndc

Attachments

- A Institutional and Engineering Controls Certification Form
- B Site Management Plan and Final Engineering Report Excerpts
- C Start-Up & Testing of Sub-Slab Depressurization System Letter
- D Suncourt PI1004 Air Pressure Indicator Installation instructions

cc: Rosaura Andújar-McNeil (ESI)
Adam Ginsburg (GDC)
Maribeth McCauley (GDC)



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details	Box 1
Site No. C224098		
Site Name 220 Water Street		
Site Address: 220 Water Street	Zip Code: 11201	
City/Town: Brooklyn		
County: Kings		
Site Acreage: 1.0		
Reporting Period: November 22, 2011 to April 07, 2013 May 13, 2013		
		YES NO
1. Is the information above correct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
<i>Paul H. Gatto</i>		5/13/13
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date

startup, an air sample of the exhaust will be collected for EPA TO-15 VOC analysis. If initial screening indicates greater than 1 pound (lb) of VOC's is being emitted to the atmosphere, the NYSDEC will be consulted to determine if an air discharge permit and/or treatment are required.

4.8.1.5 Shutdown and Alarms

The SSD system will have a warning device that measures if there is a loss in vacuum while the system is running. It is capable of electronically sensing the pressure and triggering an audible alarm and warning light alarm. This will be accomplished through the use of a flow switch capable of sensing air flow through the system piping. When no air flow is detected, the system alarm will sound/light up.

The alarm/warning device will be placed where it can easily be heard and seen on the garage level of the building. The device will be tested to confirm that it is operational upon installation. As discussed in the SMP, the building management and/or garage operators will be made aware of its purpose, location, and what to do if the system is not working properly.

4.9 INSTITUTIONAL CONTROLS

The site remedy requires that an environmental easement be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii)[including condominium forms of ownership]; Commercial as described in 6 NYCRR Part 375-t.8(g)(2)(iii) and/or Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv).

The environmental easement for the site was executed by the Department on 28 June 2011, and recorded with the Kings County Clerk on 29 September 2011. The County Recording Identifier number for this recording is CFRN 2011000346037. A copy of the easement and proof of recording is provided in Appendix A.

- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.
- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

3.6 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-Site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. The report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);

- Any observations, conclusions, or recommendations; and
- A determination as to whether conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 3-2 below.

Table 3-2: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Visual Cap Inspection and SSD System Operations	Annual
SSD System Effluent (untreated)	1-time event
SSD System Operation Verification [<i>System Balancing</i>] (confirmation of depressurization beneath slab)	1-time event
Manometer Testing** – SSD System Operations Verification (Monthly for the 1 st 6 months, then annually)	Report results in Periodic Review Reports

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC

** During the 1st six months following system start-up, the magnehelic gauge installed on the influent suction pipe will be monitored to ensure the target system vacuum of approx. 55-85 inches w.c. is maintained along with valve positions for each vacuum point. Following the 1st six months, this activity will become part of the annual inspection. Should area specific vacuum data be needed, manometers can be applied to any/all of the five (5) permanent monitoring points.

4.2.2 System Start-Up and Testing

This subsection outlines the procedures for confirming the effectiveness and proper installation of the SSD System prior to building occupancy, and complies with the post mitigation/confirmation testing requirements of the NYSDOH guidance document. A plan drawing and detail of the SSD system with sampling locations is shown in Figure 3-1. The goal for operation of the SSD System will be to achieve a uniform minimum sub-slab pressure of -0.002 inches of water. With this goal in mind, the following actions will be performed during the initial start of the SSD System:

1. Following Start-up of the SSD System, a representative sub-slab vapor sample will be collected from the SSD System effluent. The testing will be performed utilizing SUMMA[®] canisters and analyzing the samples for VOCs via the EPA TO-15 method. The results from the TO-15 analyses of the air from the effluent stack, will be used to confirm that emissions controls are not required prior to discharge through the stack. Calculations will be performed using the New York State Department of Environmental Conservation (NYSDEC) Division of Air Resources 1 (DAR-1) Ambient Air Quality Impact Screening Analysis. This model will use concentrations of all VOCs measured during testing, and the discharge flow rate to calculate annual and short-term impacts, which will be compared to the DAR-1 Annual Guideline Concentrations, and Short-Term Guideline Concentrations, respectively. If the results indicate a total VOC discharge of less than one pound a day it is assumed that no treatment or permit will be required by the NYSDEC.
2. Shortly after start up of the SSD System, the sub-slab pressure at each monitoring point will be measured utilizing an appropriate hand-held manometer. If necessary, the sub-slab pressure will be adjusted to -0.002 inches of water at each monitoring point. The valve box controlling the vacuum to each suction pit/point will be utilized to balance the sub-slab pressure.
3. After achieving as uniform as possible sub-slab pressure of -0.002 inches of water, smoke tests will be performed to identify any leaks through cracks in the concrete floor, floor joints, and suction pits/points. Identified leaks will be

resealed until smoke tests indicate that an appropriate seal of the floor slab has been achieved.

4. Appliances relying upon natural draft for exhaust of carbon monoxide and other combustion gases will be tested for back draft caused by the operation of the SSD System. Back draft poses a potential health concern because of carbon monoxide. Testing for back draft will entail utilizing a carbon monoxide meter to detect the presence of this compound in the air near exhausts for appliances. If necessary, any back draft caused by the SSD System will be corrected by sealing any leaks in the floor slab, as indicated above.
5. The operation of the warning device for the exhaust fan will be confirmed.

The system testing described above will be conducted if, in the course of the SSD system lifetime, significant changes are made to the system, and the system must be restarted.

4.2.3 SSDS Sampling Protocol

A grab sample of untreated SSD System exhaust air will be collected with an individually-certified clean Summa® canister. All the pertinent data will be recorded in the field notebook and/or data collection forms. This information will include the following items:

- Sampler's name;
- Date, time and PID reading;
- Date and time of sample start and stop;
- Summa® canister serial number;
- Initial and final Summa® canister vacuum;
- Sample identification, and descriptive location of the sampling area;
- Weather conditions including ambient temperature inside and outside the building;
- SSDS system operating conditions;

**Environmental
Resources
Management**

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Melville, NY 11747
(631) 756-8900
(631) 756-8901 (fax)

XX May 2012

Mr. Jonathan Greco
NYSDEC - Division of Environmental Remediation
12th Floor
625 Broadway
Albany, NY 12233-7016



Re: Start-Up & Testing of Sub-Slab Depressurization System
BCP Site #C224098
220 Water Street, Brooklyn, New York

Dear Mr. Greco:

On 08 February 2012 & 09 February 2012, Environmental Resources Management (ERM) performed an inspection of the sub-slab depressurization (SSD) system, and collected a vapor sample from the system exhaust for laboratory analysis. These visits were performed following the start-up testing requirements identified in Section 4.2.2 of the Site Management Plan.

SSD System Operations

Upon arrival, the blower for the SSD system was turned on and operated at maximum capacity (60 Hz / 30 ampere) with no dilution air. In addition, Sub-Slab Monitoring Points (SSMPs) were constructed with a 1/2-inch hole to 15 inches below grade surface (bgs) and counter-bored with a 1-inch bit to approximately 3 inches bgs to accommodate the fitting. A stainless compression coupler with 1/4-inch plastic tubing was placed in the hole and the space of the tubing section was filled with glass beads, and the 1-inch body of the fitting up to the cap was set with hydraulic cement. A green box was painted around the monitor points and a plastic cap covers the bore hole. Following these activities on the following day, the operator reduced the motor speed to 30 Hz / 22 ampere with no dilution air. Measurements of sub-slab vacuum were then collected at the newly installed monitoring points as follows:

SSMP 1 = 0.151 inches water column (in. w.c.)

SSMP 2 = 0.028 in. w.c.

SSMP 3 = 0.310 in. w.c.

SSMP 4 = 0.093 in. w.c.

(see Figure 1 for locations)

These measurements meet the target of 0.002 inches w.c. vacuum identified in the SMP, and are indicative of active depressurization; see Table 1 for complete set of data. Below is a photograph of the blower system on the building roof.



Blower System Mounted on Roof

Vapor Sampling

A vapor sample was collected from the outlet of the blower for laboratory analysis (via EPA Method TO-15) of volatile organic compounds (VOCs). The sample represents the combined vapor coming from the SSD extraction points, as well as what is being discharged to the atmosphere. The primary contaminant detected in the vapor sample was trichloroethene (TCE) at a concentration of $293 \mu\text{g}/\text{m}^3$. A copy of the laboratory report is attached to this letter, and a summary of the detected compounds is provided in Table 2 and Table 3. Sampling conditions (ambient air temperature, sampling start/stop time, etc.) are provided in the chain-of-custody form provided in this report.

Air Emissions Analysis

In order to evaluate emissions from the SSD system, the New York State Department of Environmental Conservation (NYSDEC) Division of Air Resources 1 (DAR-1) screening calculations for New York County Source Impacts were performed. In addition, the emissions were also evaluated using the Point Source Method – Conservative Approach. The calculations are presented in Tables 2 & 3, and no Guideline Concentrations were exceeded. The calculations indicate that at these “start-up” conditions, the hourly emissions of TCE were approximately 1% of the guideline value for TCE using the Point Source Method, and 26% of the guideline value for TCE using the New York County Source Impacts method. The total emission rate of total

VOCs was 0.05 pounds per day (day), which is less than the target of 1 lb/day identified in Section 4.2.2 of the SMP. Below 1 lb/day, it was anticipated that no emission controls would be needed.

Proposed Variation to Site Management Plan

Table 3-2 in the Site Management Plan notes that the target blower influent vacuum shall be 55 to 85 inches water column. Based on the start-up testing, a vacuum of 10 inches water column at the blower influent generated sufficient vacuum response at the SSMPs. Therefore, the target vacuum at the blower influent (as noted in Table 3-2 of the Site Management Plan) shall be 8 to 12 inches water column (0.6 to 0.9 inches of mercury).

Additional Start-Up Testing Requirements

The SMP also indicates the performance of smoke testing during start-up to identify leaks in the floor slab. Given the placement of a new slab, along with adequate sub-slab vacuum response, this testing was not warranted.

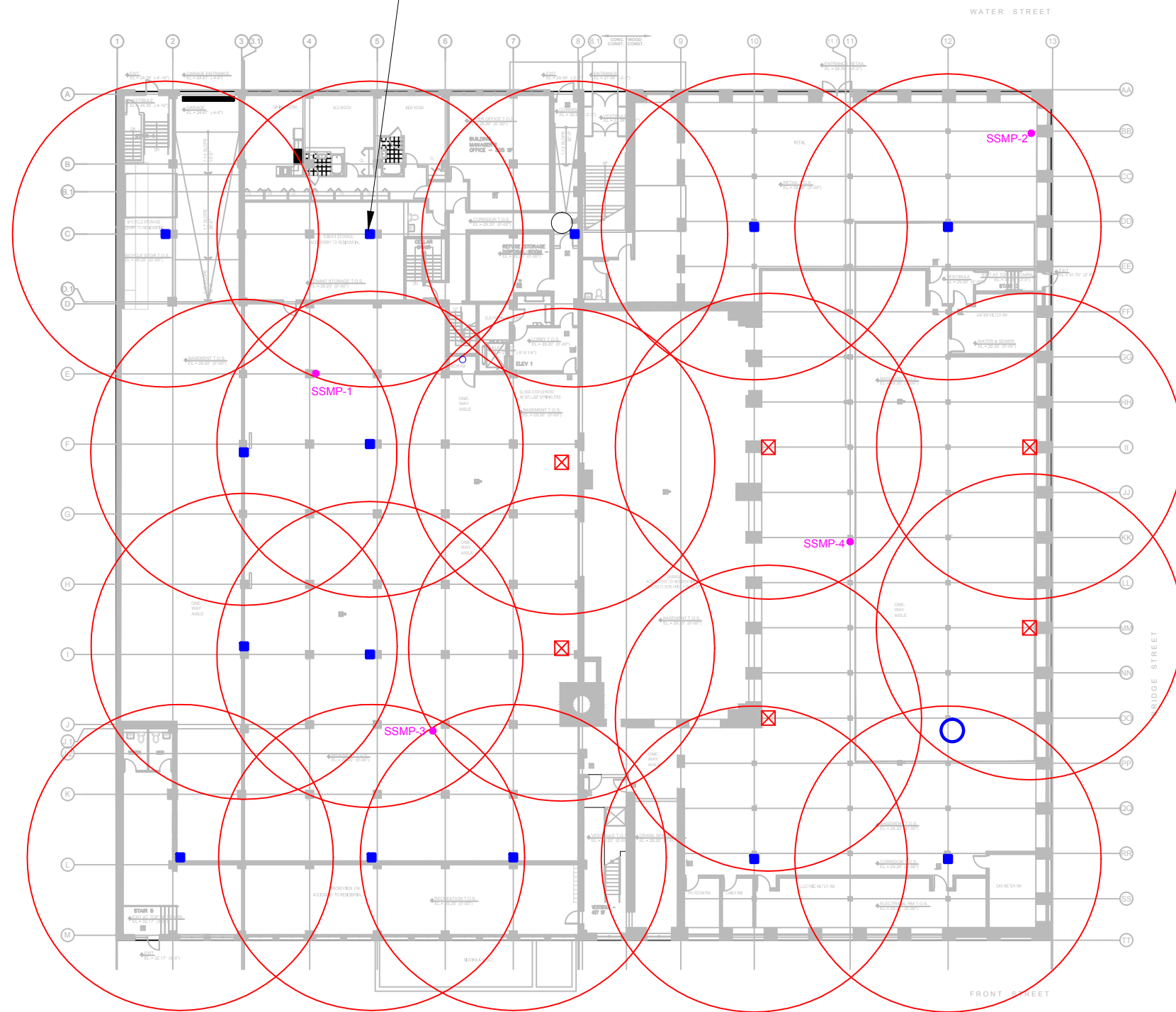
If you have any additional questions, please feel free to contact me at 631-756-8900 or via e-mail at john.mohlin@erm.com.

Sincerely,

John Mohlin, P.E.
Senior Consultant

Cc: Mr. Adam Ginsburg, Hawthorne Village LLC
Mr. Jim Perazzo, ERM

INSTALLED IN CELLAR SLAB



LEGEND

- ☒ SUB-SLAB SUCTION PIT (6)
(CIRCLE IS EST. RADIUS OF INFLUENCE)
- SUB-SLAB SUCTION POINT (14)
(CIRCLE IS EST. RADIUS OF INFLUENCE)
VERTICAL ROUTES OF PVC SCH 40 PIPES RUN UPWARE ABOVE POINTS
- 6-INCH MANIFOLD SCH. 40 PVC
PIPE, VERTICAL 5 FLOORS, SUPPORTS
EACH FLOOR, TEE EACH 4-INCH LEG
AT CEILING
- SUB-SLAB MONITORING POINT (SSMP)

Note:

This drawing has been updated from the original "Sub-Slab Depressurization System As-Built" dated 11/7/11 to reflect the following:
 1) Location of new sub-slab monitoring points
 2) Adjustment of location of suction pit from Column MM-10 to Column OO-10
 3) Notation that only one suction point was installed in the Cellar Slab

TITLE			
LOCATION OF SUB-SLAB SUCTION PITS, SUCTION POINTS AND MONITORING POINTS			
PREPARED FOR			
220 WATER STREET			
DRAWN BY EW/EMF			SCALE 1/32" = 1'-0"
DATE 03-19-12		JOB NO. 0022103.08	
Environmental Resources Management			FIGURE 1

TABLE 1
220 Water St. Brroklyn
SSDS performance

022103.08

Date	2/8/2012		2/9/2012			2/9/2012			
Suction Point/Pit	Vacuum "WC (1)	Vacuum "WC (2)	Velocity, fpm	Flow, cfm	Valve % open	Vacuum "WC (2)	Velocity, fpm	Flow, cfm	Valve % open
1	2.4	1.0	35	3	100	1.3	60	5	100
2	2.4	1.0	110	10	100	1.4	150	13	100
3	3.4	1.5	100	9	100	1.9	160	14	100
4	2.6	4.0	40	3	100	4.6	80	7	100
5	6.5	4.0	285	25	100	4.4	480	42	100
6	2.4	1.1	365	32	100	1.4	530	46	100
7	2.4	1.0	165	14	100	1.35	240	21	100
8	2.9	1.1	270	24	100	1.65	450	39	100
9	2.47	0.3	1290	113	100	0.4	580	51	25
10	6.0	1.4	960	84	100	1.7	740	65	25
11	1.75	0.5	180	16	100	1.0	140	12	100
12	1.7	0.5	700	61	100	0.7	730	64	50
13	1.3	0.5	570	50	100	0.9	830	72	100
14	3.8	1.6	1080	94	100	0.6	650	57	20
15	7.5		970	85	100	2.0	800	70	25
16	1.3	1.0	100	9	100	1.0	160	14	100
17	1.8	1.0	240	21	100	0.85	340	30	100
18	1.9	0.5	10	1	100	1.0	10	1	100
19	5.9	2.2	10	1	100	6.0	10	1	100
20	8.5	3.0	270	24	100	6.3	450	39	100
Total				676				662	
Blower		10	2992	587		10	3020	593	
SSMP-1	0.225	0.092				0.151			
SSMP-2	0.041	0.010				0.028			
SSMP-3	0.486	0.234				0.310			
SSMP-4	0.264	0.151				0.093			
<u>Notes:</u>									
(1) Blower at maximum 60 Hz / 30 ampere, no dilution.									
(2) Noise and vibration issues. Reduced motor speed to 30Hz / 22 ampere, no dilution.									
SSMP-1: 0.5' from east side of Column E4, between parking slots 34 and 38.									
SSMP-2: 5' East of door at corner of Water and Bridge Sts. (Column BB13) and 0.5' South of wall.									
SSMP-3: 1.5' Southwest of Column J6 between parking slots 47 and 48.									
SSMP-4: 1' South of Column KK11 on east edge of parking slot 54.									
Sub-Slab Monitor Points (SSMPs) were constructed with a 1/2" hole to 15" bgs and counterbored with a 1" bit to ~3" bgs to accommodate the fitting. A stainless compression coupler with 1/4" o.d. plastic tubing on the down hole side and the top side capped was placed in the bore hole. The annular space of the tubing section was filled with glass beads, and the 1" body of the fitting up to the cap was set with hydro cement. A green box 5" square was painted around the monitor points and a 1" plastic cap covers the bore hole.									
Effluent grab sample EFFL020912 for TO-15 analysis taken 2/9/12 at 10:08.									
JMx 2/9/12									

Table 2 - Air Emissions Analysis (NYSDEC DAR-1 - Point Source Method - Conservative Approach)

BCP Site #C224098

220 Water Street, Brooklyn, New York

Use this method only if the stack height to building height ratio is less than 1.5 (no credit given for plume rise due to buoyancy or momentum).

Emission Point Sub-slab depressurization system exhaust
 h_e - stack height (ft) 50 (estimated based on five-story building)

AGC = Annual Guideline Concentration
 SGC = Short-term Guideline Concentration

Contaminant	CAS Number	Q (lb/hr)	Q _a (lb/yr)	C _a (µg/m ³)	C _p (µg/m ³)	C _{st} (µg/m ³)	AGC (µg/m ³)	SGC (µg/m ³)	AGC exceeded?	SGC exceeded?
Benzene	00071-43-2	4.22E-06	0.04	0.0000	0.0000	0.0022	0.13	1300	no	no
1,3,5-Trimethylbenzene	00095-63-6	1.82E-04	1.60	0.0014	0.0014	0.0936	6	--	no	no
o-Xylene	00095-47-6	6.66E-05	0.58	0.0005	0.0005	0.0342	100	4300	no	no
Ethylbenzene	00100-41-4	3.78E-05	0.33	0.0003	0.0003	0.0194	1000	54000	no	no
Dichlorodifluoromethane	00075-43-4	5.77E-06	0.05	0.0000	0.0000	0.0030	100	--	no	no
Tetrahydrofuran	00109-99-9	2.89E-05	0.25	0.0002	0.0002	0.0148	350	30000	no	no
Toluene	00108-88-3	2.09E-05	0.18	0.0002	0.0002	0.0107	5000	37000	no	no
1,2,4-Trimethylbenzene	00095-63-6	3.53E-04	3.09	0.0028	0.0028	0.1813	6	--	no	no
m,p-Xylene	00108-38-3, 00106-42-3	1.63E-04	1.43	0.0013	0.0013	0.0837	100	4300	no	no
Xylenes (total)	1330-20-7	2.31E-04	2.02	0.0018	0.0018	0.1186	100	4300	no	no
Acetone	00067-64-1	4.00E-05	0.35	0.0003	0.0003	0.0205	30000	180000	no	no
Methyl ethyl ketone	00078-93-3	2.89E-05	0.25	0.0002	0.0002	0.0148	5000	13000	no	no
Hexane	00110-54-3	4.22E-05	0.37	0.0003	0.0003	0.0217	700	--	no	no
Ethanol	00064-17-5	2.66E-05	0.23	0.0002	0.0002	0.0137	45000	--	no	no
Chloroform	00067-66-3	3.11E-05	0.27	0.0002	0.0002	0.0160	0.043	150	no	no
Trichloroethylene	00079-01-6	6.51E-04	5.70	0.0051	0.0051	0.3340	0.5	14000	no	no
cis-1,2-Dichloroethylene	00156-59-2	2.22E-05	0.19	0.0002	0.0002	0.0114	63	--	no	no
Tetrachloroethylene	00127-18-4	1.15E-04	1.01	0.0009	0.0009	0.0593	1	1000	no	no
4-Ethyltoluene	622-96-8	1.67E-04	1.46	0.0013	0.0013	0.0857	--	--	no	no
1,1,1-Trichloroethane	00071-55-6	8.66E-06	0.08	0.0001	0.0001	0.0044	5000	9000	no	no
Isopropyl Alcohol	00067-63-0	2.22E-05	0.19	0.0002	0.0002	0.0114	7000	98000	no	no
Tertiary Butyl Alcohol	00075-65-0	5.55E-06	0.05	0.0000	0.0000	0.0028	720	--	no	no

Analytical Results from 2/9/12 sub-slab depressurization system exhaust sample

Equations Used For DAR-1 Calculations

Maximum Actual Annual Impact
 $C_a (\mu\text{g}/\text{m}^3) = (6.0 \cdot Q_a) / (h_e^{2.25})$
 where Q_a is in lbs/yr and h_e is in feet

Maximum Potential Annual Impact
 $C_p (\mu\text{g}/\text{m}^3) = (52500 \cdot Q) / (h_e^{2.25})$
 where Q is lbs/hr and h_e is in feet

Maximum Short Term Impact
 $C_{st} (\mu\text{g}/\text{m}^3) = C_p \cdot 65$

	ug/m3	ug/m3 to ug/ft3	ug/ft3 to lbs/ft3	cfm	lb/min	min/hr	lb/hr
Benzene	1.9	0.0283127	2.20E-09	593	7.03261E-08	60	4.22E-06
1,3,5-Trimethylbenzene	82.1	2.3244728	5.1245E-09		3.03883E-06		0.0001823
o-Xylene	30	0.849381	1.8725E-09		1.11041E-06		6.662E-05
Ethylbenzene	17	0.4813159	1.0611E-09		6.29234E-07		3.775E-05
Dichlorodifluoromethane	2.6	0.073613	1.6229E-10		9.62357E-08		5.774E-06
Tetrahydrofuran	13	0.3680651	8.1143E-10		4.81179E-07		2.887E-05
Toluene	9.4	0.2661394	5.8673E-10		3.47929E-07		2.088E-05
1,2,4-Trimethylbenzene	159	4.5017195	9.9244E-09		5.88518E-06		0.0003531
m,p-Xylene	73.4	2.0781523	4.5815E-09		2.71681E-06		0.000163
Xylenes (total)	104	2.9445209	6.4914E-09		3.84943E-06		0.000231
Acetone	18	0.5096286	1.1235E-09		6.66247E-07		3.997E-05
Methyl ethyl ketone	13	0.3680651	8.1143E-10		4.81179E-07		2.887E-05
Hexane	19	0.5379413	1.1859E-09		7.03261E-07		4.22E-05
Ethanol	12	0.3397524	7.4901E-10		4.44165E-07		2.665E-05
Chloroform	14	0.3963778	8.7385E-10		5.18192E-07		3.109E-05
Trichloroethylene	293	8.2956215	1.8288E-08		1.0845E-05		0.0006507
cis-1,2-Dichloroethylene	10	0.283127	6.2418E-10		3.70137E-07		2.221E-05
Tetrachloroethylene	52	1.4722605	3.2457E-09		1.92471E-06		0.0001155
4-Ethyltoluene	75.2	2.1291151	4.6938E-09		2.78343E-06		0.000167
1,1,1-Trichloroethane	3.9	0.1104195	2.4343E-10		1.44354E-07		8.661E-06
Isopropyl Alcohol	10	0.283127	6.2418E-10		3.70137E-07		2.221E-05
Tertiary Butyl Alcohol	2.5	0.0707818	1.5604E-10		9.25343E-08		5.552E-06

**Table 3 - Air Emissions Analysis (NYSDEC DAR-1 - New York County Source Impacts)
BCP Site #C224098
220 Water Street, Brooklyn, New York**

Qc = AGC/200

If Q (in lb/hr) is less than Qc, then the impact of the source is acceptable.

AGC = Annual Guideline Concentration

SGC = Short-term Guideline Concentration

Contaminant	CAS Number	Q (lb/hr)	AGC (µg/m ³)	SGC (µg/m ³)	Qc	Qc exceeded?
Benzene	00071-43-2	4.22E-06	0.13	1300	6.50E-04	no
1,3,5-Trimethylbenzene	00095-63-6	1.82E-04	6	--	3.00E-02	no
o-Xylene	00095-47-6	6.66E-05	100	4300	5.00E-01	no
Ethylbenzene	00100-41-4	3.78E-05	1000	54000	5.00E+00	no
Dichlorodifluoromethane	00075-43-4	5.77E-06	100	--	5.00E-01	no
Tetrahydrofuran	00109-99-9	2.89E-05	350	30000	1.75E+00	no
Toluene	00108-88-3	2.09E-05	5000	37000	2.50E+01	no
1,2,4-Trimethylbenzene	00095-63-6	3.53E-04	6	--	3.00E-02	no
m,p-Xylene	00108-38-3, 00106-42-3	1.63E-04	100	4300	5.00E-01	no
Xylenes (total)	1330-20-7	2.31E-04	100	4300	5.00E-01	no
Acetone	00067-64-1	4.00E-05	30000	180000	1.50E+02	no
Methyl ethyl ketone	00078-93-3	2.89E-05	5000	13000	2.50E+01	no
Hexane	00110-54-3	4.22E-05	700	--	3.50E+00	no
Ethanol	00064-17-5	2.66E-05	45000	--	2.25E+02	no
Chloroform	00067-66-3	3.11E-05	0.043	150	2.15E-04	no
Trichloroethylene	00079-01-6	6.51E-04	0.5	14000	2.50E-03	no
cis-1,2-Dichloroethylene	00156-59-2	2.22E-05	63	--	3.15E-01	no
Tetrachloroethylene	00127-18-4	1.15E-04	1	1000	5.00E-03	no
4-Ethyltoluene	622-96-8	1.67E-04	--	--	--	no
1,1,1-Trichloroethane	00071-55-6	8.66E-06	5000	9000	2.50E+01	no
Isopropyl Alcohol	00067-63-0	2.22E-05	7000	98000	3.50E+01	no
Tertiary Butyl Alcohol	00075-65-0	5.55E-06	720	--	3.60E+00	no

Analytical Results from 2/9/12 sub-slab depressurization system exhaust sample

	ug/m3	ug/ft3	lbs/ft3	Air flow cfm	ug/m3 to lb/min	ug/ft3 to min/hr	lb/hr
		0.0283	2.20E-09	593		60	
Benzene	1.9	0.0538	1.19E-10		7.03E-08		4.22E-06
1,3,5-Trimethylbenzene	82.1	2.3245	5.12E-09		3.04E-06		1.82E-04
o-Xylene	30	0.8494	1.87E-09		1.11E-06		6.66E-05
Ethylbenzene	17	0.4813	1.06E-09		6.29E-07		3.78E-05
Dichlorodifluoromethane	2.6	0.0736	1.62E-10		9.62E-08		5.77E-06
Tetrahydrofuran	13	0.3681	8.11E-10		4.81E-07		2.89E-05
Toluene	9.4	0.2661	5.87E-10		3.48E-07		2.09E-05
1,2,4-Trimethylbenzene	159	4.5017	9.92E-09		5.89E-06		3.53E-04
m,p-Xylene	73.4	2.0782	4.58E-09		2.72E-06		1.63E-04
Xylenes (total)	104	2.9445	6.49E-09		3.85E-06		2.31E-04
Acetone	18	0.5096	1.12E-09		6.66E-07		4.00E-05
Methyl ethyl ketone	13	0.3681	8.11E-10		4.81E-07		2.89E-05
Hexane	19	0.5379	1.19E-09		7.03E-07		4.22E-05
Ethanol	12	0.3398	7.49E-10		4.44E-07		2.66E-05
Chloroform	14	0.3964	8.74E-10		5.18E-07		3.11E-05
Trichloroethylene	293	8.2956	1.83E-08		1.08E-05		6.51E-04
cis-1,2-Dichloroethylene	10	0.2831	6.24E-10		3.70E-07		2.22E-05
Tetrachloroethylene	52	1.4723	3.25E-09		1.92E-06		1.15E-04
4-Ethyltoluene	75.2	2.1291	4.69E-09		2.78E-06		1.67E-04
1,1,1-Trichloroethane	3.9	0.1104	2.43E-10		1.44E-07		8.66E-06
Isopropyl Alcohol	10	0.2831	6.24E-10		3.70E-07		2.22E-05
Tertiary Butyl Alcohol	2.5	0.0708	1.56E-10		9.25E-08		5.55E-06

Technical Report for

ERM, Inc.

220 Water Street, Brooklyn, NY

022108.06

Accutest Job Number: JA99139

Sampling Date: 02/09/12

Report to:

ERM, Inc.
40 Marcus Drive Suite 200
Melville, NY 11747
nicole.repetti@erm.com; john.maddox@erm.com

ATTN: Nicole Repetti

Total number of pages in report: 374



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	5
3.1: JA99139-1: EFFL020912	6
Section 4: Misc. Forms	8
4.1: Chain of Custody	9
4.2: Summa Canister and Flow Controller Log	12
4.3: Sample Tracking Chronicle	13
4.4: Internal Chain of Custody	14
4.5: 2011 MDL Study - Method: TO-15	15
Section 5: GC/MS Volatiles - QC Data Summaries	18
5.1: Method Blank Summary	19
5.2: Blank Spike/Blank Spike Duplicate Summary	25
5.3: Duplicate Summary	31
5.4: Summa Cleaning Certification	34
5.5: Instrument Performance Checks (BFB)	37
5.6: Internal Standard Area Summaries	41
5.7: Initial Calibration RT/ISTD Area Summaries	43
5.8: Surrogate Recovery Summaries	93
5.9: Initial and Continuing Calibration Summaries	94
Section 6: GC/MS Volatiles - Raw Data	113
6.1: Samples	114
6.2: Method Blanks	128
6.3: Blank Spike/Blank Spike Duplicates	132
6.4: Duplicates	160
6.5: Summa Cleaning Certifications	169
6.6: Instrument Performance Checks (BFB)	171
6.7: Initial and Continuing Calibrations	179
6.8: Instrument Run Logs	365



Sample Summary

ERM, Inc.

Job No: JA99139

220 Water Street, Brooklyn, NY
Project No: 022108.06

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JA99139-1	02/09/12	10:08 JM	02/10/12	AIR	Soil Vapor Comp.	EFFL020912

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: ERM, Inc.

Job No JA99139

Site: 220 Water Street, Brooklyn, NY

Report Date 2/24/2012 5:11:40 PM

On 02/10/2012, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories . Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JA99139 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method TO-15

Matrix: AIR

Batch ID: V2W1442

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA99237-1DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Ethylbenzene are outside control limits for sample JA99237-1DUP. High RPD due to low concentration of hit

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID: EFFL020912	Date Sampled: 02/09/12
Lab Sample ID: JA99139-1	Date Received: 02/10/12
Matrix: AIR - Soil Vapor Comp. Summa ID: A823	Percent Solids: n/a
Method: TO-15	
Project: 220 Water Street, Brooklyn, NY	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2W34272.D	1	02/15/12	YMH	n/a	n/a	V2W1442

Run #1	Initial Volume
Run #2	100 ml

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	7.6	0.80	0.15	ppbv		18	1.9	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.097	ppbv		ND	1.8	ug/m3
71-43-2	78.11	Benzene	0.61	0.80	0.18	ppbv	J	1.9	2.6	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.15	ppbv		ND	3.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.15	ppbv		ND	3.5	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.16	ppbv		ND	4.1	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	0.13	ppbv		ND	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.11	ppbv		ND	3.7	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.16	ppbv		ND	2.1	ug/m3
67-66-3	119.4	Chloroform	2.8	0.80	0.11	ppbv		14	3.9	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.15	ppbv		ND	1.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.17	ppbv		ND	2.5	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.12	ppbv		ND	4.1	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.13	ppbv		ND	2.8	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.11	ppbv		ND	3.2	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.18	ppbv		ND	3.2	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.11	ppbv		ND	6.1	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.17	ppbv		ND	3.2	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.15	ppbv		ND	3.7	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.22	ppbv		ND	2.9	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.53	0.80	0.15	ppbv	J	2.6	4.0	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.11	ppbv		ND	6.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.13	ppbv		ND	3.2	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	2.6	0.80	0.15	ppbv		10	3.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.17	ppbv		ND	3.6	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.15	ppbv		ND	4.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.11	ppbv		ND	4.8	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.10	ppbv		ND	4.8	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.16	ppbv		ND	3.6	ug/m3

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL020912	Date Sampled:	02/09/12
Lab Sample ID:	JA99139-1	Date Received:	02/10/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A823	Percent Solids:	n/a
Method:	TO-15		
Project:	220 Water Street, Brooklyn, NY		

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
64-17-5	46.07	Ethanol	6.3	2.0	0.38	ppbv		12	3.8	ug/m3
100-41-4	106.2	Ethylbenzene	3.8	0.80	0.12	ppbv		17	3.5	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	0.24	ppbv		ND	2.9	ug/m3
622-96-8	120.2	4-Ethyltoluene	15.3	0.80	0.096	ppbv		75.2	3.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.14	ppbv		ND	6.1	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.12	ppbv		ND	5.6	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.13	ppbv		ND	3.3	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	ug/m3
110-54-3	86.17	Hexane	5.3	0.80	0.18	ppbv		19	2.8	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.17	ppbv		ND	3.3	ug/m3
67-63-0	60.1	Isopropyl Alcohol	4.2	0.80	0.23	ppbv		10	2.0	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.11	ppbv		ND	2.8	ug/m3
78-93-3	72.11	Methyl ethyl ketone	4.3	0.80	0.19	ppbv		13	2.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.11	ppbv		ND	2.9	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.17	ppbv		ND	3.3	ug/m3
115-07-1	42	Propylene	ND	2.0	0.28	ppbv		ND	3.4	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.11	ppbv		ND	3.4	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.71	0.80	0.088	ppbv	J	3.9	4.4	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.12	ppbv		ND	5.5	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.20	ppbv		ND	5.9	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	32.4	0.80	0.096	ppbv		159	3.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	16.7	0.80	0.11	ppbv		82.1	3.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.11	ppbv		ND	3.7	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.81	0.80	0.13	ppbv		2.5	2.4	ug/m3
127-18-4	165.8	Tetrachloroethylene	7.6	0.16	0.11	ppbv		52	1.1	ug/m3
109-99-9	72.11	Tetrahydrofuran	4.5	0.80	0.19	ppbv		13	2.4	ug/m3
108-88-3	92.14	Toluene	2.5	0.80	0.16	ppbv		9.4	3.0	ug/m3
79-01-6	131.4	Trichloroethylene	54.6	0.16	0.13	ppbv		293	0.86	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.17	ppbv		ND	4.5	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.13	ppbv		ND	2.0	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.23	ppbv		ND	2.8	ug/m3
	106.2	m,p-Xylene	16.9	0.80	0.12	ppbv		73.4	3.5	ug/m3
95-47-6	106.2	o-Xylene	7.0	0.80	0.12	ppbv		30	3.5	ug/m3
1330-20-7	106.2	Xylenes (total)	24.0	0.80	0.12	ppbv		104	3.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		65-128%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log
- Sample Tracking Chronicle
- Internal Chain of Custody
- 2011 MDL Study - Method: TO-15

CHAIN OF CUSTODY

Air Sampling Field Data Sheet

2235 US Highway 130, Dayton, NJ 08810
Tel: 732.329.0200 Fax: 732.329.3499

FED-EX Tracking # _____ Bottle Order Control # **TM-2/2/12-8**
Lab Quote # _____ Lab Job # **JA99139**

Client / Reporting Information: Company Name **ERM**, Project Name **220 WATER ST**, Weather Parameters: Temperature (Fahrenheit) Start: _____, Stop: **-43°**, Atmospheric Pressure (Inches of Hg) Start: _____, Stop: **-30.14**

Address: **40 MERRIS DR STE 200**, Street: **220 WATER ST**, City: **MELVILLE NY**, Zip: **11747**, State: **NY**, City: **BROOKLYN NY**, State: **NY**

Project Contact: **JOHN.MADDOX@ERM.COM / NICOLE.REPETTI@ERM.COM**, Project #: _____, Client Purchase Order #: **022108.06**

Phone #: **631.756.8900**, Fax #: _____, Sampler(s) Name(s): **J.MADDOX**

Lab Sample #	Field ID / Point of Collection	Air Type				Sampling Equipment Info					Start Sampling Information					Stop Sampling Information				
		Indoor (I) Soil Vap Ambient(A)	Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Date	Time (24 hr clock)	Canister Pressure ("Hg)	EXT Ambient Temp (F)	Sampler Init.	Date	Time (24 hr clock)	Canister Pressure ("Hg)	EXT Ambient Temp (F)	Sampler Init.					
-	EFFL020912	SV	ARB3	6L	FC005	2/9/12	10:00	30"	43°	Jmx	2/9/12	10:00	31"	43°	Jmx					

Turnaround Time (Business-Days): Standard - 15 Days, 10 Day, 5 Day, 3 Day, 2 Day, 1 Day, Other

Approved By: _____ Date: _____

Data Deliverable Information: All NJDEP TO-15 is mandatory Full T1

Comments / Remarks: **Summa**

Other: **MASS B AND NY DOEC E00 + GISKEY**

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: John Maddox	Date Time: 2/2/12	Received by: Chris Law	Date Time: 2/10/12
Relinquished by: Chris Law	Date Time: 2/10/12	Received by: M. Madhus	Date Time: _____
Relinquished by: _____	Date Time: _____	Received by: _____	Date Time: _____

Custody Seal # **100** INTACT

4.1
4

TO-15



Sample Log-In Summary

JA99139 - Probes

COC

Lab Name: ACCUTEST Page 1 of 1

Received by (Print Name): M. BREDA Log-in Date: 2/10/12

Received by (Signature): *M. Breda*

Case Number: SDG Number: SAS Number:	REMARKS:	CORRESPONDING			REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
		NYSDEC SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	
	1. Custody Seal(s) Present/Absent* Intact/Broken COC	N/A		JA99139-1	
	2. Custody Seal Numbers: Chain-of-Custody Records	N/A			
	3. Contract Lab Sample Inform. Sheet (CLISIS)	N/A			
	4. Airbill	N/A			
	5. Airbill No.:	N/A			
	6. Sample Tags Sample Tag Nos.	N/A			
	7. Sample Condition	N/A			
	8. Does Information on custody rec., CLISIS, & sample tags agree	N/A			
	9. Date received at Lab:	N/A			
	10. Time Received:	N/A			
	11. Do aqueous VOC vials have headspace?	N/A			
	12. Are preserved voc soil samples fully im- mersed in preservative?	N/A			
	Sample Transfer	N/A			
	Fraction: Area #: By: On:				

See Internal
Chain of Custody

* Contract BTRSR and attach record of resolution
Reviewed By: _____
Date: _____

Logbook No.: N/A
Logbook Page No.: N/A

Form: SM10-02
Rev. Date: 8/21/03

Accutest Job Number: JA99139 Client: _____

Date / Time Received: 2/10/2012 Project: _____

No. Coolers: 0 Airbill #'s: _____ Delivery Method: _____

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smp'l Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | _____ | |
| 3. Cooler media: | _____ | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

4.1
4

Summa Canister and Flow Controller Log

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY
Received: 02/10/12

SUMMA CANISTERS													
Shipping							Receiving						
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact

A823	6	29.4	02/02/12	YMH	CP5220	W35028.D	JA99139-1	02/10/12	HT	1			1
------	---	------	----------	-----	--------	----------	-----------	----------	----	---	--	--	---

Accutest Bottle Order(s):

TM-2/2/2012-8

Prep Date	Room Temp(F)	Bar Pres "Hg
02/02/12	70	29.92

4.2
4

Internal Sample Tracking Chronicle

ERM, Inc.

Job No: JA99139

220 Water Street, Brooklyn, NY
Project No: 022108.06

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA99139-1 EFFL020912	Collected: 09-FEB-12	10:08	By: JM	Received: 10-FEB-12	By: MPC	
JA99139-1	TO-15	15-FEB-12	19:50	YMH		VTO15STD

4.3
4

Accutest Internal Chain of Custody

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY
Received: 02/10/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA99139-1.1	Todd Shoemaker	Air Storage	02/10/12 16:07	Return to Storage
JA99139-1.1	Air Storage	Youmin Hu	02/15/12 17:25	Retrieve from Storage
JA99139-1.1	Youmin Hu	GCMS2W	02/15/12 17:25	Load on Instrument
JA99139-1.1	GCMS2W	Youmin Hu	02/16/12 15:54	Unload from Instrument
JA99139-1.1	Youmin Hu	Air Storage	02/16/12 15:55	Return to Storage

4.4
4

Accutest Laboratories Annual Method Detection Limit Determination
Dayton, NJ Facility

Method: TO-15 (VTO14/15)
Instrument(s): GCMS2W, GCMS3W, GCMSW
Analyst: Pooled

Matrix: AIR
Quant Factor: 1.00
Study Period: April, 2011

Cmpd./Element/Par. Name	Analysis Date	Spike ppbv	Replicate Spikes										X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv	MDL	Spike/MDL Ratio
			R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv								
Acetone	26-Apr-11	0.2	0.21	0.19	0.17	0.20	0.19	0.20	0.19	0.19	0.20	0.19	0.19	96.84	0.012	0.036	5.50
Acrolein	30-Mar-11	0.1	0.09	0.11	0.10	0.10	0.10	0.10	0.09	0.10	0.09	0.09	0.09	94.00	0.009	0.029	3.50
Acrylonitrile	8-Apr-11	0.2	0.16	0.18	0.15	0.15	0.15	0.18	0.18	0.18	0.18	0.18	0.18	81.40	0.017	0.054	3.73
Acetonitrile	8-Apr-11	0.2	0.18	0.15	0.16	0.16	0.17	0.11	0.18	0.16	0.16	0.16	0.16	79.48	0.024	0.077	2.61
1,3-Butadiene	8-Apr-11	0.1	0.10	0.10	0.12	0.11	0.11	0.10	0.11	0.10	0.11	0.11	0.11	105.69	0.008	0.024	4.11
Benzene	30-Mar-11	0.1	0.11	0.14	0.12	0.13	0.13	0.11	0.10	0.11	0.10	0.11	0.11	117.81	0.015	0.046	2.17
Bromodichloromethane	19-Mar-11	0.1	0.10	0.10	0.10	0.10	0.10	0.11	0.12	0.10	0.11	0.11	0.11	105.36	0.010	0.030	3.35
Bromoform	30-Mar-11	0.1	0.09	0.12	0.10	0.10	0.11	0.10	0.08	0.10	0.08	0.10	0.10	98.18	0.012	0.037	2.69
Bromomethane	26-Apr-11	0.2	0.24	0.22	0.21	0.22	0.21	0.22	0.21	0.22	0.21	0.20	0.22	108.08	0.012	0.037	5.44
Bromoethane	26-Apr-11	0.2	0.24	0.21	0.20	0.23	0.23	0.22	0.21	0.22	0.21	0.21	0.22	107.98	0.012	0.037	5.45
n-Butane	30-Mar-11	0.1	0.12	0.15	0.13	0.14	0.13	0.11	0.12	0.13	0.11	0.12	0.12	128.52	0.014	0.043	2.35
Benzyl Chloride	8-Apr-11	0.2	0.14	0.11	0.12	0.11	0.11	0.11	0.12	0.11	0.12	0.11	0.12	59.31	0.013	0.041	4.92
n-Butylbenzene	8-Apr-11	0.2	0.12	0.08	0.10	0.07	0.08	0.09	0.09	0.08	0.09	0.07	0.09	43.75	0.017	0.052	3.82
sec-Butylbenzene	26-Apr-11	0.2	0.18	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.17	82.83	0.009	0.027	7.49
tert-Butylbenzene	26-Apr-11	0.2	0.17	0.16	0.17	0.16	0.17	0.16	0.16	0.16	0.16	0.17	0.17	82.85	0.009	0.028	7.05
Carbon disulfide	26-Apr-11	0.2	0.23	0.20	0.20	0.22	0.20	0.20	0.20	0.20	0.20	0.20	0.21	103.61	0.010	0.032	6.17
Chlorobenzene	26-Apr-11	0.2	0.22	0.19	0.20	0.20	0.20	0.19	0.20	0.19	0.20	0.19	0.20	99.78	0.009	0.027	7.44
Chlorodifluoromethane	19-Mar-11	0.1	0.10	0.12	0.14	0.12	0.14	0.13	0.14	0.14	0.14	0.10	0.12	121.74	0.014	0.045	2.24
Chloroethane	26-Apr-11	0.2	0.22	0.21	0.19	0.20	0.19	0.20	0.19	0.21	0.21	0.19	0.20	100.57	0.013	0.039	5.11
Chloroform	26-Apr-11	0.2	0.23	0.21	0.21	0.22	0.21	0.22	0.21	0.22	0.22	0.21	0.22	107.49	0.009	0.028	7.16
Chloromethane	26-Apr-11	0.2	0.22	0.20	0.19	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.21	103.37	0.012	0.037	5.42
3-Chloropropene	26-Apr-11	0.2	0.21	0.17	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.19	93.38	0.013	0.041	4.85
2-Chlorotoluene	26-Apr-11	0.2	0.20	0.18	0.17	0.17	0.19	0.18	0.18	0.18	0.19	0.18	0.18	92.14	0.010	0.031	6.42
Carbon tetrachloride	26-Apr-11	0.2	0.24	0.20	0.21	0.22	0.21	0.22	0.21	0.22	0.21	0.22	0.21	107.53	0.013	0.040	5.07
Cyclohexane	26-Apr-11	0.2	0.23	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.21	105.14	0.011	0.034	5.98
1,1-Dichloroethane	26-Apr-11	0.2	0.22	0.20	0.20	0.22	0.20	0.20	0.20	0.20	0.21	0.20	0.21	103.88	0.009	0.028	7.14
1,1-Dichloroethylene	26-Apr-11	0.2	0.25	0.24	0.23	0.22	0.22	0.22	0.22	0.22	0.21	0.23	0.23	114.94	0.015	0.046	4.33
1,2-Dibromoethane	26-Apr-11	0.2	0.20	0.18	0.18	0.20	0.18	0.20	0.18	0.18	0.18	0.18	0.18	92.19	0.009	0.027	7.36
1,2-Dichloroethane	30-Mar-11	0.1	0.11	0.13	0.12	0.12	0.12	0.11	0.09	0.10	0.10	0.10	0.11	112.02	0.014	0.043	2.31
1,2-Dichloropropane	8-Apr-11	0.2	0.23	0.23	0.20	0.22	0.24	0.24	0.24	0.24	0.22	0.23	0.23	112.51	0.012	0.038	5.21
1,4-Dioxane	8-Apr-11	0.2	0.23	0.18	0.19	0.19	0.19	0.18	0.19	0.18	0.19	0.20	0.19	97.28	0.018	0.056	3.56
Dichlorodifluoromethane	26-Apr-11	0.2	0.26	0.23	0.23	0.26	0.24	0.24	0.25	0.24	0.25	0.23	0.24	121.94	0.012	0.038	5.31
Dibromochloromethane	26-Apr-11	0.2	0.21	0.19	0.18	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19	96.93	0.009	0.027	7.42
trans-1,2-Dichloroethylene	8-Apr-11	0.2	0.22	0.21	0.21	0.19	0.19	0.22	0.22	0.22	0.21	0.21	0.21	106.29	0.011	0.033	6.07
cis-1,2-Dichloroethylene	26-Apr-11	0.2	0.21	0.19	0.19	0.20	0.17	0.19	0.19	0.19	0.19	0.19	0.19	96.41	0.012	0.038	5.29
cis-1,3-Dichloropropane	30-Mar-11	0.1	0.10	0.13	0.11	0.12	0.11	0.11	0.09	0.10	0.11	0.09	0.10	108.98	0.014	0.043	2.35
m-Dichlorobenzene	8-Apr-11	0.2	0.18	0.16	0.16	0.16	0.15	0.16	0.16	0.16	0.16	0.14	0.16	78.96	0.012	0.037	5.35

Detection limits derived using the method described in 40 CFR Part 136, Appendix B

Method: TO-15 (VTO14/15)
 Instrument(s): GCMS2W, GCMS3W, GCMSW
 Analyst: Pooled

Matrix: AIR
 Quant Factor: 1.00
 Study Period: April,2011

Cmpd./Element/Param. Name	Analysis Date	Spike ppbv	Replicate Spikes										MDL	Spike/MDL Ratio	
			R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv	X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv			
o-Dichlorobenzene	19-Mar-11	0.1	0.11	0.10	0.10	0.10	0.11	0.12	0.10	0.10	0.10	104.52	0.009	0.027	3.76
p-Dichlorobenzene	19-Mar-11	0.1	0.11	0.09	0.10	0.10	0.10	0.11	0.12	0.10	0.10	102.56	0.008	0.025	4.02
trans-1,3-Dichloropropene	8-Apr-11	0.2	0.22	0.19	0.19	0.19	0.20	0.22	0.20	0.20	0.21	103.35	0.012	0.039	5.13
Diisopropyl ether	26-Apr-11	0.2	0.19	0.17	0.16	0.16	0.18	0.17	0.17	0.17	0.17	86.86	0.010	0.032	6.25
2,3-Dimethylpentane	19-Mar-11	0.2	0.28	0.25	0.25	0.25	0.32	0.26	0.30	0.25	0.27	136.99	0.028	0.088	2.27
2,4-Dimethylpentane	26-Apr-11	0.2	0.21	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	91.44	0.011	0.036	5.58
Ethanol	19-Mar-11	0.2	0.42	0.34	0.35	0.35	0.41	0.35	0.40	0.39	0.38	189.62	0.030	0.095	2.11
Ethylbenzene	26-Apr-11	0.2	0.21	0.18	0.18	0.18	0.19	0.18	0.18	0.18	0.19	93.63	0.010	0.031	6.53
Ethyl Acetate	8-Apr-11	0.2	0.19	0.15	0.15	0.14	0.16	0.14	0.16	0.17	0.17	82.73	0.019	0.061	3.28
4-Ethyltoluene	19-Mar-11	0.1	0.09	0.09	0.09	0.09	0.08	0.10	0.10	0.08	0.09	91.03	0.008	0.024	4.14
Freon 113	8-Apr-11	0.2	0.22	0.21	0.20	0.20	0.21	0.23	0.23	0.23	0.21	107.47	0.011	0.034	5.88
Freon 114	26-Apr-11	0.2	0.24	0.22	0.21	0.22	0.22	0.22	0.22	0.22	0.22	110.03	0.010	0.031	6.49
Freon 115	8-Apr-11	0.1	0.09	0.09	0.09	0.10	0.09	0.11	0.09	0.09	0.09	93.33	0.007	0.021	4.71
Freon 123	26-Apr-11	0.2	0.22	0.20	0.19	0.20	0.22	0.20	0.20	0.20	0.20	102.35	0.012	0.036	5.54
Freon 123A	26-Apr-11	0.2	0.24	0.20	0.20	0.20	0.22	0.21	0.21	0.21	0.21	107.18	0.011	0.034	5.88
Freon 152A	19-Mar-11	0.2	0.29	0.27	0.27	0.27	0.34	0.27	0.31	0.28	0.29	145.07	0.027	0.085	2.36
Heptane	26-Apr-11	0.2	0.20	0.17	0.18	0.18	0.19	0.18	0.17	0.17	0.18	90.97	0.011	0.033	5.99
Hexachlorobutadiene	19-Mar-11	0.1	0.11	0.10	0.10	0.10	0.11	0.14	0.14	0.14	0.12	116.17	0.015	0.046	2.18
Hexachloroethane	19-Mar-11	0.1	0.09	0.09	0.09	0.09	0.09	0.10	0.11	0.09	0.10	97.22	0.008	0.026	3.85
Hexane	26-Apr-11	0.2	0.23	0.20	0.20	0.20	0.20	0.20	0.19	0.20	0.20	101.87	0.014	0.044	4.53
2-Hexanone	8-Apr-11	0.2	0.06	0.02	0.04	0.04	0.04	0.03	0.05	0.05	0.04	21.17	0.014	0.043	4.69
Iodomethane	26-Apr-11	0.2	0.22	0.20	0.19	0.20	0.21	0.20	0.20	0.20	0.20	101.70	0.011	0.033	6.00
Isopropylbenzene	19-Mar-11	0.1	0.10	0.10	0.10	0.10	0.09	0.11	0.11	0.09	0.10	99.87	0.010	0.031	3.23
Isopropyl Alcohol	8-Apr-11	0.2	0.20	0.20	0.20	0.20	0.17	0.20	0.23	0.22	0.20	100.86	0.019	0.059	3.42
p-Isopropyltoluene	8-Apr-11	0.1	0.06	0.06	0.06	0.06	0.06	0.04	0.04	0.06	0.05	54.40	0.012	0.037	2.72
Methylene chloride	19-Mar-11	0.1	0.16	0.16	0.16	0.16	0.16	0.17	0.18	0.16	0.16	163.90	0.009	0.027	3.68
Methyl ethyl ketone	19-Mar-11	0.1	0.08	0.09	0.09	0.09	0.08	0.10	0.12	0.10	0.09	93.27	0.015	0.048	2.10
Methyl Isobutyl Ketone	8-Apr-11	0.2	0.19	0.16	0.15	0.15	0.16	0.17	0.17	0.17	0.16	82.42	0.012	0.036	5.53
Methyl Tert Butyl Ether	26-Apr-11	0.2	0.21	0.20	0.20	0.20	0.20	0.18	0.19	0.20	0.20	98.76	0.009	0.027	7.32
Methylmethacrylate	8-Apr-11	0.2	0.20	0.18	0.17	0.17	0.17	0.18	0.21	0.18	0.18	92.17	0.014	0.043	4.67
Naphthalene	8-Apr-11	0.2	0.10	0.09	0.08	0.08	0.08	0.09	0.08	0.07	0.09	42.89	0.010	0.031	6.42
Nonane	19-Mar-11	0.1	0.10	0.10	0.10	0.09	0.09	0.11	0.11	0.09	0.10	100.00	0.008	0.026	3.83
Octane	8-Apr-11	0.2	0.22	0.21	0.21	0.21	0.20	0.22	0.22	0.21	0.21	106.25	0.009	0.027	7.42
Pentane	26-Apr-11	0.2	0.21	0.19	0.18	0.18	0.20	0.19	0.21	0.18	0.20	97.52	0.012	0.037	5.34
n-Propylbenzene	26-Apr-11	0.2	0.19	0.16	0.17	0.17	0.18	0.16	0.17	0.18	0.17	85.87	0.010	0.030	6.68
Propylene	19-Mar-11	0.2	0.27	0.25	0.26	0.31	0.29	0.30	0.30	0.30	0.28	141.98	0.022	0.070	2.87
Styrene	19-Mar-11	0.1	0.09	0.09	0.08	0.08	0.09	0.10	0.08	0.08	0.09	86.67	0.009	0.027	3.67
1,1,1-Trichloroethane	26-Apr-11	0.2	0.23	0.22	0.22	0.23	0.22	0.23	0.22	0.22	0.22	112.18	0.007	0.022	9.06
1,1,1,2-Tetrachloroethane	26-Apr-11	0.2	0.22	0.20	0.19	0.20	0.20	0.20	0.20	0.19	0.20	99.50	0.010	0.031	6.38
1,1,1,2,2-Tetrachloroethane	26-Apr-11	0.2	0.19	0.17	0.17	0.18	0.18	0.16	0.18	0.17	0.17	87.43	0.010	0.030	6.68

Detection limits derived using the method described in 40 CFR Part 136, Appendix B

Method: TO-15 (VTO14/15)
 Instrument(s): GCMS2W, GCMS3W, GCMSW
 Analyst: Pooled

Matrix: AIR
 Quant Factor: 1.00
 Study Period: April,2011

Cmpd./Element/Par. Name	Analysis Date	Spike ppbv	Replicate Spikes										MDL	Spike/MDL Ratio			
			R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv	X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv					
1,1,2-Trichloroethane	8-Apr-11	0.2	0.21	0.21	0.20	0.20	0.23	0.22	0.21	0.21	0.21	0.21	0.21	105.64	0.010	0.030	6.67
1,2,4-Trichlorobenzene	30-Mar-11	0.1	0.10	0.08	0.09	0.05	0.10	0.09	0.07	0.09	0.09	0.07	0.08	82.29	0.016	0.051	1.95
1,2,3-Trichloropropane	19-Mar-11	0.1	0.10	0.10	0.09	0.09	0.09	0.11	0.12	0.09	0.10	0.09	0.10	99.59	0.011	0.033	3.00
1,2,4-Trimethylbenzene	19-Mar-11	0.1	0.10	0.09	0.08	0.09	0.08	0.10	0.10	0.10	0.08	0.09	0.09	91.56	0.008	0.024	4.16
1,3,5-Trimethylbenzene	19-Mar-11	0.1	0.09	0.10	0.08	0.09	0.09	0.10	0.11	0.08	0.09	0.09	0.09	93.61	0.009	0.028	3.57
2,2,4-Trimethylpentane	26-Apr-11	0.2	0.20	0.18	0.17	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	92.02	0.009	0.028	7.08
Tertiary Butyl Alcohol	8-Apr-11	0.2	0.22	0.20	0.20	0.20	0.20	0.21	0.20	0.20	0.19	0.20	0.20	102.18	0.010	0.032	6.28
Tetrachloroethylene	26-Apr-11	0.2	0.22	0.20	0.20	0.21	0.20	0.20	0.22	0.21	0.21	0.21	0.21	104.63	0.009	0.028	7.07
Tetrahydrofuran	26-Apr-11	0.2	0.20	0.17	0.17	0.18	0.17	0.17	0.16	0.16	0.16	0.16	0.17	86.53	0.015	0.047	4.28
Toluene	26-Apr-11	0.2	0.21	0.18	0.18	0.19	0.18	0.18	0.17	0.17	0.17	0.18	0.18	91.60	0.013	0.040	4.98
Trichloroethylene	19-Mar-11	0.1	0.11	0.10	0.10	0.10	0.10	0.11	0.13	0.10	0.10	0.10	0.11	107.16	0.010	0.033	3.07
Trichlorofluoromethane	30-Mar-11	0.1	0.11	0.14	0.13	0.14	0.13	0.14	0.12	0.11	0.11	0.12	0.12	121.71	0.014	0.042	2.36
Vinyl chloride	26-Apr-11	0.2	0.23	0.20	0.21	0.23	0.22	0.22	0.22	0.22	0.21	0.22	0.22	108.07	0.010	0.032	6.24
Vinyl Acetate	8-Apr-11	0.2	0.14	0.13	0.09	0.12	0.10	0.10	0.12	0.13	0.13	0.12	0.12	59.21	0.018	0.057	3.54
m,p-Xylene	30-Mar-11	0.1	0.20	0.25	0.21	0.24	0.21	0.21	0.18	0.19	0.19	0.21	0.21	209.80	0.025	0.079	1.27
o-Xylene	26-Apr-11	0.2	0.20	0.17	0.17	0.19	0.17	0.18	0.17	0.17	0.17	0.18	0.18	89.89	0.010	0.031	6.43
TVHC As Equiv Pentane	19-Mar-11	0.2	0.20	0.13	0.24	0.32	0.20	0.20	0.20	0.20	0.16	0.21	0.21	103.69	0.058	0.182	1.10
TVHC As Equiv Heptane	19-Mar-11	0.2	0.19	0.13	0.15	0.19	0.15	0.13	0.20	0.15	0.15	0.16	0.16	81.58	0.029	0.091	2.20

Detection limits derived using the method described in 40 CFR Part 136, Appendix B

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Initial Calibration RT/ISTD Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2W1442-MB	2W34269.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.036	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.046	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.037	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.037	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.031	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.027	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.038	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.027	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.037	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.025	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.095	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.061	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2W1442-MB	2W34269.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.059	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.027	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.048	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.070	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.051	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.032	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.028	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.040	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.042	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.057	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.031	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2W1442-MB	2W34269.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	84% 65-128%

Method Blank Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-MB	W34944.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here applies to the following samples:

Method: TO-15

VW1423-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.036	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.046	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.037	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.037	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.031	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.027	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.038	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.027	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.037	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.025	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.095	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.061	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-MB	W34944.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here applies to the following samples:

Method: TO-15

VW1423-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.059	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.027	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.048	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.070	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.051	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.032	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.028	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.040	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.042	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.057	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.031	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-MB	W34944.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here applies to the following samples:

Method: TO-15

VW1423-SCC

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	103% 65-128%

5.1.2
5

Blank Spike/Blank Spike Duplicate Summary**Job Number:** JA99139**Account:** ERMNYW ERM, Inc.**Project:** 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2W1442-BS	2W34265.D	1	02/15/12	YMH	n/a	n/a	V2W1442
V2W1442-BSD	2W34266.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:**Method:** TO-15

JA99139-1

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	9.5	95	8.6	86	10	70-130/30
106-99-0	1,3-Butadiene	10	9.0	90	8.6	86	5	70-130/30
71-43-2	Benzene	10	9.0	90	8.4	84	7	70-130/30
75-27-4	Bromodichloromethane	10	8.6	86	8.0	80	7	70-130/30
75-25-2	Bromoform	10	9.1	91	8.6	86	6	70-130/30
74-83-9	Bromomethane	10	9.4	94	9.2	92	2	70-130/30
593-60-2	Bromoethene	10	10.7	107	10.3	103	4	70-130/30
100-44-7	Benzyl Chloride	10	10.2	102	8.8	88	15	70-130/30
75-15-0	Carbon disulfide	10	7.5	75	7.2	72	4	70-130/30
108-90-7	Chlorobenzene	10	9.7	97	9.2	92	5	70-130/30
75-00-3	Chloroethane	10	8.9	89	8.5	85	5	70-130/30
67-66-3	Chloroform	10	8.7	87	8.4	84	4	70-130/30
74-87-3	Chloromethane	10	8.2	82	8.2	82	0	70-130/30
107-05-1	3-Chloropropene	10	8.5	85	8.4	84	1	70-130/30
95-49-8	2-Chlorotoluene	10	9.7	97	8.8	88	10	70-130/30
56-23-5	Carbon tetrachloride	10	8.8	88	8.5	85	3	70-130/30
110-82-7	Cyclohexane	10	8.6	86	8.1	81	6	70-130/30
75-34-3	1,1-Dichloroethane	10	8.2	82	7.7	77	6	70-130/30
75-35-4	1,1-Dichloroethylene	10	9.1	91	8.8	88	3	70-130/30
106-93-4	1,2-Dibromoethane	10	9.6	96	9.0	90	6	70-130/30
107-06-2	1,2-Dichloroethane	10	9.1	91	8.7	87	4	70-130/30
78-87-5	1,2-Dichloropropane	10	8.0	80	7.4	74	8	70-130/30
123-91-1	1,4-Dioxane	10	9.7	97	8.5	85	13	70-130/30
75-71-8	Dichlorodifluoromethane	10	8.9	89	8.9	89	0	70-130/30
124-48-1	Dibromochloromethane	10	9.5	95	9.1	91	4	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	8.5	85	8.2	82	4	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	8.7	87	8.5	85	2	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	9.1	91	8.4	84	8	70-130/30
541-73-1	m-Dichlorobenzene	10	11.3	113	10.3	103	9	70-130/30
95-50-1	o-Dichlorobenzene	10	10.8	108	9.7	97	11	70-130/30
106-46-7	p-Dichlorobenzene	10	11.4	114	10.3	103	10	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	9.1	91	8.4	84	8	70-130/30
64-17-5	Ethanol	10	9.0	90	8.8	88	2	70-130/30
100-41-4	Ethylbenzene	10	8.9	89	8.2	82	8	70-130/30
141-78-6	Ethyl Acetate	10	8.7	87	7.0	70	22	70-130/30
622-96-8	4-Ethyltoluene	10	10.4	104	9.3	93	11	70-130/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2W1442-BS	2W34265.D	1	02/15/12	YMH	n/a	n/a	V2W1442
V2W1442-BSD	2W34266.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	9.2	92	8.9	89	3	70-130/30
76-14-2	Freon 114	10	7.5	75	7.4	74	1	70-130/30
142-82-5	Heptane	10	8.3	83	7.9	79	5	70-130/30
87-68-3	Hexachlorobutadiene	10	10.4	104	8.9	89	16	70-130/30
110-54-3	Hexane	10	7.8	78	7.3	73	7	70-130/30
591-78-6	2-Hexanone	10	9.9	99	8.6	86	14	70-130/30
67-63-0	Isopropyl Alcohol	10	10.2	102	9.6	96	6	70-130/30
75-09-2	Methylene chloride	10	9.0	90	8.4	84	7	70-130/30
78-93-3	Methyl ethyl ketone	10	8.8	88	8.3	83	6	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	9.2	92	8.0	80	14	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	8.3	83	7.8	78	6	70-130/30
80-62-6	Methylmethacrylate	10	8.7	87	7.6	76	13	70-130/30
115-07-1	Propylene	10	7.4	74	7.5	75	1	70-130/30
100-42-5	Styrene	10	9.6	96	8.6	86	11	70-130/30
71-55-6	1,1,1-Trichloroethane	10	9.0	90	8.7	87	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	8.2	82	7.4	74	10	70-130/30
79-00-5	1,1,2-Trichloroethane	10	8.7	87	8.2	82	6	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	10.2	102	8.8	88	15	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.8	108	9.6	96	12	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	10.5	105	9.5	95	10	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	8.2	82	7.7	77	6	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	9.6	96	9.1	91	5	70-130/30
127-18-4	Tetrachloroethylene	10	9.9	99	9.3	93	6	70-130/30
109-99-9	Tetrahydrofuran	10	8.6	86	8.0	80	7	70-130/30
108-88-3	Toluene	10	9.1	91	8.5	85	7	70-130/30
79-01-6	Trichloroethylene	10	8.6	86	8.0	80	7	70-130/30
75-69-4	Trichlorofluoromethane	10	9.8	98	9.5	95	3	70-130/30
75-01-4	Vinyl chloride	10	8.8	88	8.6	86	2	70-130/30
108-05-4	Vinyl Acetate	10	9.7	97	8.6	86	12	70-130/30
	m,p-Xylene	20	19.4	97	17.9	90	8	70-130/30
95-47-6	o-Xylene	10	9.5	95	8.6	86	10	70-130/30
1330-20-7	Xylenes (total)	30	28.9	96	26.5	88	9	70-130/30

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2W1442-BS	2W34265.D	1	02/15/12	YMH	n/a	n/a	V2W1442
V2W1442-BSD	2W34266.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	99%	100%	65-128%

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-BS	W34942.D	1	01/30/12	YMH	n/a	n/a	VW1423
VW1423-BSD	W34943.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here applies to the following samples:

Method: TO-15

VW1423-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	9.0	90	8.3	83	8	70-130/30
106-99-0	1,3-Butadiene	10	10.3	103	9.8	98	5	70-130/30
71-43-2	Benzene	10	9.3	93	8.5	85	9	70-130/30
75-27-4	Bromodichloromethane	10	10.5	105	9.5	95	10	70-130/30
75-25-2	Bromoform	10	12.1	121	11.1	111	9	70-130/30
74-83-9	Bromomethane	10	11.5	115	11.0	110	4	70-130/30
593-60-2	Bromoethene	10	11.7	117	11.0	110	6	70-130/30
100-44-7	Benzyl Chloride	10	11.3	113	10.5	105	7	70-130/30
75-15-0	Carbon disulfide	10	8.3	83	8.0	80	4	70-130/30
108-90-7	Chlorobenzene	10	10.7	107	9.9	99	8	70-130/30
75-00-3	Chloroethane	10	10.6	106	9.9	99	7	70-130/30
67-66-3	Chloroform	10	10.6	106	10.0	100	6	70-130/30
74-87-3	Chloromethane	10	11.3	113	10.5	105	7	70-130/30
107-05-1	3-Chloropropene	10	10.2	102	9.7	97	5	70-130/30
95-49-8	2-Chlorotoluene	10	12.2	122	11.2	112	9	70-130/30
56-23-5	Carbon tetrachloride	10	12.0	120	11.4	114	5	70-130/30
110-82-7	Cyclohexane	10	9.5	95	8.9	89	7	70-130/30
75-34-3	1,1-Dichloroethane	10	9.7	97	9.1	91	6	70-130/30
75-35-4	1,1-Dichloroethylene	10	10.9	109	10.3	103	6	70-130/30
106-93-4	1,2-Dibromoethane	10	11.2	112	10.2	102	9	70-130/30
107-06-2	1,2-Dichloroethane	10	10.8	108	10	100	8	70-130/30
78-87-5	1,2-Dichloropropane	10	8.9	89	7.9	79	12	70-130/30
123-91-1	1,4-Dioxane	10	9.3	93	8.7	87	7	70-130/30
75-71-8	Dichlorodifluoromethane	10	12.9	129	12.2	122	6	70-130/30
124-48-1	Dibromochloromethane	10	11.4	114	10.5	105	8	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	9.0	90	8.6	86	5	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.1	101	9.4	94	7	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	9.9	99	8.9	89	11	70-130/30
541-73-1	m-Dichlorobenzene	10	12.8	128	11.8	118	8	70-130/30
95-50-1	o-Dichlorobenzene	10	12.9	129	12.0	120	7	70-130/30
106-46-7	p-Dichlorobenzene	10	13.3	133* a	12.3	123	8	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.5	105	9.6	96	9	70-130/30
64-17-5	Ethanol	10	8.4	84	7.6	76	10	70-130/30
100-41-4	Ethylbenzene	10	10.1	101	9.3	93	8	70-130/30
141-78-6	Ethyl Acetate	10	7.8	78	7.2	72	8	70-130/30
622-96-8	4-Ethyltoluene	10	12.5	125	11.6	116	7	70-130/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-BS	W34942.D	1	01/30/12	YMH	n/a	n/a	VW1423
VW1423-BSD	W34943.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here applies to the following samples:

Method: TO-15

VW1423-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	11.4	114	10.8	108	5	70-130/30
76-14-2	Freon 114	10	10.5	105	9.9	99	6	70-130/30
142-82-5	Heptane	10	8.8	88	7.9	79	11	70-130/30
87-68-3	Hexachlorobutadiene	10	14.0	140* a	12.6	126	11	70-130/30
110-54-3	Hexane	10	8.6	86	8.1	81	6	70-130/30
591-78-6	2-Hexanone	10	8.6	86	7.8	78	10	70-130/30
67-63-0	Isopropyl Alcohol	10	8.7	87	8.1	81	7	70-130/30
75-09-2	Methylene chloride	10	10.1	101	9.6	96	5	70-130/30
78-93-3	Methyl ethyl ketone	10	9.0	90	8.4	84	7	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	8.7	87	7.9	79	10	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	9.3	93	8.8	88	6	70-130/30
80-62-6	Methylmethacrylate	10	8.5	85	8.0	80	6	70-130/30
115-07-1	Propylene	10	10.8	108	10.2	102	6	70-130/30
100-42-5	Styrene	10	11.6	116	10.6	106	9	70-130/30
71-55-6	1,1,1-Trichloroethane	10	11.7	117	11.0	110	6	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10	100	9.2	92	8	70-130/30
79-00-5	1,1,2-Trichloroethane	10	9.9	99	9.0	90	10	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	12.1	121	11.8	118	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	12.6	126	11.8	118	7	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	12.4	124	11.6	116	7	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	9.0	90	8.2	82	9	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	10.4	104	9.9	99	5	70-130/30
127-18-4	Tetrachloroethylene	10	11.6	116	10.7	107	8	70-130/30
109-99-9	Tetrahydrofuran	10	8.9	89	8.4	84	6	70-130/30
108-88-3	Toluene	10	10	100	9.0	90	11	70-130/30
79-01-6	Trichloroethylene	10	9.6	96	8.9	89	8	70-130/30
75-69-4	Trichlorofluoromethane	10	12.4	124	11.9	119	4	70-130/30
75-01-4	Vinyl chloride	10	10.8	108	10.0	100	8	70-130/30
108-05-4	Vinyl Acetate	10	10.3	103	9.3	93	10	70-130/30
	m,p-Xylene	20	21.0	105	19.2	96	9	70-130/30
95-47-6	o-Xylene	10	10.5	105	9.7	97	8	70-130/30
1330-20-7	Xylenes (total)	30	31.4	105	28.9	96	8	70-130/30

5.2.2
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-BS	W34942.D	1	01/30/12	YMH	n/a	n/a	VW1423
VW1423-BSD	W34943.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here applies to the following samples:

Method: TO-15

VW1423-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	114%	113%	65-128%

(a) High percent recoveries and no associated positive found in the QC batch.

5.2.2
5

Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA99237-1DUP	2W34274.D	1	02/15/12	YMH	n/a	n/a	V2W1442
JA99237-1	2W34273.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Compound	JA99237-1 ppbv	DUP Q	ppbv	Q	RPD	Limits
67-64-1	Acetone	2.4		2.5		4	27
106-99-0	1,3-Butadiene	ND		ND		nc	20
71-43-2	Benzene	0.90		0.97		7	17
75-27-4	Bromodichloromethane	ND		ND		nc	20
75-25-2	Bromoform	ND		ND		nc	20
74-83-9	Bromomethane	ND		ND		nc	20
593-60-2	Bromoethene	ND		ND		nc	30
100-44-7	Benzyl Chloride	ND		ND		nc	20
75-15-0	Carbon disulfide	ND		ND		nc	11
108-90-7	Chlorobenzene	ND		ND		nc	20
75-00-3	Chloroethane	ND		ND		nc	20
67-66-3	Chloroform	1.3		1.3		0	12
74-87-3	Chloromethane	ND		ND		nc	22
107-05-1	3-Chloropropene	ND		ND		nc	10
95-49-8	2-Chlorotoluene	ND		ND		nc	20
56-23-5	Carbon tetrachloride	ND		ND		nc	10
110-82-7	Cyclohexane	ND		ND		nc	12
75-34-3	1,1-Dichloroethane	ND		ND		nc	20
75-35-4	1,1-Dichloroethylene	ND		ND		nc	20
106-93-4	1,2-Dibromoethane	ND		ND		nc	20
107-06-2	1,2-Dichloroethane	ND		ND		nc	20
78-87-5	1,2-Dichloropropane	ND		ND		nc	20
123-91-1	1,4-Dioxane	ND		ND		nc	20
75-71-8	Dichlorodifluoromethane	0.50	J	0.49	J	2	22
124-48-1	Dibromochloromethane	ND		ND		nc	20
156-60-5	trans-1,2-Dichloroethylene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethylene	ND		ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	20
541-73-1	m-Dichlorobenzene	ND		ND		nc	20
95-50-1	o-Dichlorobenzene	ND		ND		nc	10
106-46-7	p-Dichlorobenzene	ND		ND		nc	20
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	20
64-17-5	Ethanol	5.5		6.3		14	33
100-41-4	Ethylbenzene	1.1		1.3		17* a	15
141-78-6	Ethyl Acetate	3.0		3.5		15	20
622-96-8	4-Ethyltoluene	ND		ND		nc	13

Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA99237-1DUP	2W34274.D	1	02/15/12	YMH	n/a	n/a	V2W1442
JA99237-1	2W34273.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Compound	JA99237-1 ppbv	DUP Q	ppbv	Q	RPD	Limits
76-13-1	Freon 113	ND		ND		nc	10
76-14-2	Freon 114	ND		ND		nc	20
142-82-5	Heptane	ND		ND		nc	20
87-68-3	Hexachlorobutadiene	ND		ND		nc	20
110-54-3	Hexane	ND		ND		nc	17
591-78-6	2-Hexanone	ND		ND		nc	20
67-63-0	Isopropyl Alcohol	ND		ND		nc	26
75-09-2	Methylene chloride	ND		ND		nc	26
78-93-3	Methyl ethyl ketone	ND		ND		nc	21
108-10-1	Methyl Isobutyl Ketone	ND		ND		nc	20
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	20
80-62-6	Methylmethacrylate	ND		ND		nc	20
115-07-1	Propylene	ND		ND		nc	16
100-42-5	Styrene	ND		ND		nc	11
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	20
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	20
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	20
95-63-6	1,2,4-Trimethylbenzene	2.4		2.7		12	19
108-67-8	1,3,5-Trimethylbenzene	0.62	J	0.66	J	6	13
540-84-1	2,2,4-Trimethylpentane	ND		ND		nc	18
75-65-0	Tertiary Butyl Alcohol	ND		ND		nc	21
127-18-4	Tetrachloroethylene	1.8		1.9		5	17
109-99-9	Tetrahydrofuran	ND		ND		nc	20
108-88-3	Toluene	1.6		1.7		6	20
79-01-6	Trichloroethylene	0.18		0.19		5	13
75-69-4	Trichlorofluoromethane	ND		ND		nc	21
75-01-4	Vinyl chloride	ND		ND		nc	20
108-05-4	Vinyl Acetate	ND		ND		nc	20
	m,p-Xylene	3.2		3.5		9	26
95-47-6	o-Xylene	1.0		1.1		10	20
1330-20-7	Xylenes (total)	4.2		4.6		9	26

5.3.1
5

Duplicate Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA99237-1DUP	2W34274.D	1	02/15/12	YMH	n/a	n/a	V2W1442
JA99237-1	2W34273.D	1	02/15/12	YMH	n/a	n/a	V2W1442

The QC reported here applies to the following samples:

Method: TO-15

JA99139-1

CAS No.	Surrogate Recoveries	DUP	JA99237-1	Limits
460-00-4	4-Bromofluorobenzene	89%	91%	65-128%

(a) High RPD due to low concentration of hit

5.3.1
5

Summa Cleaning Certification

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-SCC	W34949.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here (Summa A441) applies to the following samples:

Method: TO-15

Batch CP5220 cleaned 01/18/12: JA99139-1(A823)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.036	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.046	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.037	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.037	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.031	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.027	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.038	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.027	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.037	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.025	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.095	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.061	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-SCC	W34949.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here (Summa A441) applies to the following samples: Method: TO-15

Batch CP5220 cleaned 01/18/12: JA99139-1(A823)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.059	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.027	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.048	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.070	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.051	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.032	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.028	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.040	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.042	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.057	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.031	ppbv		ND	0.87	ug/m3

5.4.1
5

Summa Cleaning Certification

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW1423-SCC	W34949.D	1	01/30/12	YMH	n/a	n/a	VW1423

The QC reported here (Summa A441) applies to the following samples: Method: TO-15

Batch CP5220 cleaned 01/18/12: JA99139-1(A823)

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	94% 65-128%

5.4.1
5

Instrument Performance Check (BFB)

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1426-BFB	Injection Date: 01/16/12
Lab File ID: 2W33862.D	Injection Time: 18:07
Instrument ID: GCMS2W	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	14916	14.8	Pass
75	30.0 - 66.0% of mass 95	45544	45.1	Pass
95	Base peak, 100% relative abundance	100957	100.0	Pass
96	5.0 - 9.0% of mass 95	6582	6.52	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	94645	93.7	Pass
175	4.0 - 9.01% of mass 174	6944	6.88 (7.34) ^a	Pass
176	93.0 - 101.0% of mass 174	91640	90.8 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	5991	5.93 (6.54) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2W1426-IC1426	2W33863.D	01/16/12	18:33	00:26	Initial cal 15
V2W1426-IC1426	2W33865.D	01/16/12	19:53	01:46	Initial cal 0.2
V2W1426-ICC1426	2W33866.D	01/16/12	20:32	02:25	Initial cal 10
V2W1426-IC1426	2W33867.D	01/16/12	21:12	03:05	Initial cal 0.5
V2W1426-IC1426	2W33868.D	01/16/12	21:52	03:45	Initial cal 20
V2W1426-IC1426	2W33869.D	01/16/12	22:31	04:24	Initial cal 5.0
V2W1426-IC1426	2W33870.D	01/16/12	23:11	05:04	Initial cal 0.1
V2W1426-IC1426	2W33871.D	01/16/12	23:50	05:43	Initial cal 0.04
V2W1426-IC1426	2W33872.D	01/17/12	00:32	06:25	Initial cal 40
V2W1426-ICV1426	2W33875.D	01/17/12	02:30	08:23	Initial cal verification 10

Instrument Performance Check (BFB)

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1441-BFB	Injection Date: 02/15/12
Lab File ID: 2W34262.D	Injection Time: 09:23
Instrument ID: GCMS2W	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	17362	15.8	Pass
75	30.0 - 66.0% of mass 95	52629	47.8	Pass
95	Base peak, 100% relative abundance	110024	100.0	Pass
96	5.0 - 9.0% of mass 95	7343	6.67	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	115893	105.3	Pass
175	4.0 - 9.01% of mass 174	9401	8.54 (8.11) ^a	Pass
176	93.0 - 101.0% of mass 174	112168	101.9 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	7343	6.67 (6.55) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2W1441-CC1426	2W34264.D	02/15/12	10:38	01:15	Continuing cal 10
V2W1442-BS	2W34265.D	02/15/12	13:37	04:14	Blank Spike
V2W1441-BS2	2W34265.D	02/15/12	13:37	04:14	Blank Spike
V2W1442-BSD	2W34266.D	02/15/12	14:17	04:54	Blank Spike Duplicate
V2W1441-BSD2	2W34266.D	02/15/12	14:17	04:54	Blank Spike Duplicate
V2W1441-MB2	2W34267.D	02/15/12	15:42	06:19	Method Blank
JA99253-2DUP	2W34268.D	02/15/12	16:27	07:04	Duplicate
V2W1442-MB	2W34269.D	02/15/12	17:52	08:29	Method Blank
ZZZZZZ	2W34270.D	02/15/12	18:32	09:09	(unrelated sample)
ZZZZZZ	2W34271.D	02/15/12	19:11	09:48	(unrelated sample)
JA99139-1	2W34272.D	02/15/12	19:50	10:27	EFFL020912
JA99237-1	2W34273.D	02/15/12	20:30	11:07	(used for QC only; not part of job JA99139)
JA99237-1DUP	2W34274.D	02/15/12	21:10	11:47	Duplicate
ZZZZZZ	2W34275.D	02/15/12	21:49	12:26	(unrelated sample)
ZZZZZZ	2W34276.D	02/15/12	22:30	13:07	(unrelated sample)
ZZZZZZ	2W34277.D	02/15/12	23:10	13:47	(unrelated sample)
ZZZZZZ	2W34281.D	02/16/12	01:56	16:33	(unrelated sample)
ZZZZZZ	2W34282.D	02/16/12	02:35	17:12	(unrelated sample)
ZZZZZZ	2W34283.D	02/16/12	03:17	17:54	(unrelated sample)
ZZZZZZ	2W34284.D	02/16/12	04:00	18:37	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-BFB	Injection Date: 01/18/12
Lab File ID: W34783.D	Injection Time: 18:37
Instrument ID: GCMSW	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	8518	14.4	Pass
75	30.0 - 66.0% of mass 95	25266	42.7	Pass
95	Base peak, 100% relative abundance	59112	100.0	Pass
96	5.0 - 9.0% of mass 95	3999	6.77	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	53893	91.2	Pass
175	4.0 - 9.01% of mass 174	4357	7.37 (8.08) ^a	Pass
176	93.0 - 101.0% of mass 174	52509	88.8 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	3440	5.82 (6.55) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VW1417-ICC1417	W34784.D	01/18/12	19:17	00:40	Initial cal 10
VW1417-IC1417	W34785.D	01/18/12	19:57	01:20	Initial cal 0.5
VW1417-IC1417	W34786.D	01/18/12	20:37	02:00	Initial cal 15
VW1417-IC1417	W34787.D	01/18/12	21:17	02:40	Initial cal 5.0
VW1417-IC1417	W34789.D	01/18/12	22:37	04:00	Initial cal 20
VW1417-IC1417	W34793.D	01/19/12	01:17	06:40	Initial cal 40
VW1417-IC1417	W34796.D	01/19/12	11:38	17:01	Initial cal 0.2
VW1417-IC1417	W34797.D	01/19/12	12:19	17:42	Initial cal 0.1
VW1417-IC1417	W34798.D	01/19/12	12:59	18:22	Initial cal 0.04

Instrument Performance Check (BFB)

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1423-BFB	Injection Date: 01/30/12
Lab File ID: W34939.D	Injection Time: 10:21
Instrument ID: GCMSW	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	7659	12.5	Pass
75	30.0 - 66.0% of mass 95	24669	40.2	Pass
95	Base peak, 100% relative abundance	61392	100.0	Pass
96	5.0 - 9.0% of mass 95	4063	6.62	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	60768	99.0	Pass
175	4.0 - 9.01% of mass 174	4743	7.73 (7.81) ^a	Pass
176	93.0 - 101.0% of mass 174	60069	97.8 (98.8) ^a	Pass
177	5.0 - 9.0% of mass 176	3939	6.42 (6.56) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VW1423-CC1417	W34941.D	01/30/12	11:42	01:21	Continuing cal 10
VW1423-BS	W34942.D	01/30/12	12:22	02:01	Blank Spike
VW1423-BSD	W34943.D	01/30/12	13:02	02:41	Blank Spike Duplicate
VW1423-MB	W34944.D	01/30/12	15:54	05:33	Method Blank
ZZZZZZ	W34945.D	01/30/12	16:34	06:13	(unrelated sample)
ZZZZZZ	W34946.D	01/30/12	17:13	06:52	(unrelated sample)
ZZZZZZ	W34947.D	01/30/12	17:53	07:32	(unrelated sample)
ZZZZZZ	W34948.D	01/30/12	18:33	08:12	(unrelated sample)
VW1423-SCC	W34949.D	01/30/12	19:12	08:51	Summa Cleaning Certification
ZZZZZZ	W34950.D	01/30/12	19:52	09:31	(unrelated sample)
ZZZZZZ	W34951.D	01/30/12	20:31	10:10	(unrelated sample)
JA98042-1	W34952.D	01/30/12	21:11	10:50	(used for QC only; not part of job JA99139)
JA98042-1DUP	W34953.D	01/30/12	21:51	11:30	Duplicate
ZZZZZZ	W34954.D	01/30/12	22:30	12:09	(unrelated sample)
ZZZZZZ	W34957.D	01/31/12	00:29	14:08	(unrelated sample)
ZZZZZZ	W34959.D	01/31/12	01:48	15:27	(unrelated sample)
ZZZZZZ	W34960.D	01/31/12	02:27	16:06	(unrelated sample)
ZZZZZZ	W34961.D	01/31/12	03:07	16:46	(unrelated sample)
VW1423-SCC	W34962.D	01/31/12	04:26	18:05	Summa Cleaning Certification

Volatile Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Check Std: V2W1441-CC1426	Injection Date: 02/15/12
Lab File ID: 2W34264.D	Injection Time: 10:38
Instrument ID: GCMS2W	Method: TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	161548	7.76	644445	9.85	315022	13.83
Upper Limit ^a	226167	8.09	902223	10.18	441031	14.16
Lower Limit ^b	96929	7.43	386667	9.52	189013	13.50

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V2W1442-BS	180024	7.76	731140	9.85	352968	13.83
V2W1441-BS2	180024	7.76	731140	9.85	352968	13.83
V2W1442-BSD	179467	7.76	751377	9.85	360131	13.83
V2W1441-BSD2	179467	7.76	751377	9.85	360131	13.83
V2W1441-MB2	176142	7.76	627225	9.86	267652	13.83
JA99253-2DUP	151267	7.76	623583	9.85	265480	13.83
V2W1442-MB	172842	7.76	623100	9.86	263846	13.83
ZZZZZZ	176587	7.76	700895	9.85	304382	13.83
ZZZZZZ	164330	7.76	567967	9.86	233144	13.83
JA99139-1	153490	7.76	604029	9.85	265633	13.83
JA99237-1	159712	7.76	615235	9.85	263358	13.83
JA99237-1DUP	147497	7.77	578869	9.85	242669	13.83
ZZZZZZ	158889	7.77	617976	9.86	258215	13.83
ZZZZZZ	163166	7.76	660096	9.85	300322	13.83
ZZZZZZ	158357	7.76	606992	9.85	275635	13.83
ZZZZZZ	149289	7.76	620880	9.85	278975	13.83
ZZZZZZ	157642	7.76	639271	9.85	271824	13.83
ZZZZZZ	156777	7.75	634599	9.85	274908	13.83
ZZZZZZ	149686	7.76	628836	9.85	273181	13.83

IS 1 = Bromochloromethane
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.
(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

5.6.1
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Volatile Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Check Std: VW1423-CC1417	Injection Date: 01/30/12
Lab File ID: W34941.D	Injection Time: 11:42
Instrument ID: GCMSW	Method: TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	53643	8.35	232745	10.05	111908	14.33
Upper Limit ^a	75100	8.68	325843	10.38	156671	14.66
Lower Limit ^b	32186	8.02	139647	9.72	67145	14.00

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VW1423-BS	54004	8.35	241972	10.05	116940	14.33
VW1423-BSD	56230	8.35	256357	10.05	122826	14.33
VW1423-MB	59078	8.34	287457	10.04	125147	14.33
ZZZZZZ	57807	8.35	280873	10.05	124669	14.33
ZZZZZZ	56345	8.35	268757	10.05	120283	14.33
ZZZZZZ	56498	8.35	258237	10.05	113930	14.33
ZZZZZZ	57106	8.36	261817	10.05	121422	14.33
VW1423-SCC	51402	8.35	213684	10.05	86810	14.33
ZZZZZZ	51726	8.35	222818	10.05	95933	14.33
ZZZZZZ	62521	8.35	275304	10.05	122520	14.33
JA98042-1	56391	8.35	256704	10.05	113434	14.33
JA98042-1DUP	56270	8.35	251582	10.05	111409	14.33
ZZZZZZ	53057	8.35	239330	10.05	105026	14.33
ZZZZZZ	51216	8.36	230356	10.05	102094	14.33
ZZZZZZ	51163	8.37	238749	10.05	101580	14.33
ZZZZZZ	52226	8.36	232344	10.05	100243	14.33
ZZZZZZ	54030	8.36	251889	10.05	109157	14.33
VW1423-SCC	49806	8.35	214925	10.05	88330	14.33

IS 1 = Bromochloromethane
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.

(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

5.6.2
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Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15	Reporting this level
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15	
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15	
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15	
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15	
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15	
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15	
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15	
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	3.73	7.78	0.479 ok	0.482	0.422-0.542
Acrolein	3.60	7.78	0.463 ok	0.465	0.405-0.525
Acrylonitrile	4.26	7.78	0.548 ok	0.550	0.490-0.610
Acetonitrile	3.45	7.78	0.443 ok	0.448	0.388-0.508
1,3-Butadiene	2.64	7.78	0.339 ok	0.340	0.280-0.400
Benzene	9.52	9.87	0.965 ok	0.964	0.904-1.024
Bromodichloromethane	10.52	9.87	1.066 ok	1.065	1.005-1.125
Bromoform	14.48	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.92	7.78	0.375 ok	0.376	0.316-0.436
Bromoethene	3.47	7.78	0.446 ok	0.446	0.386-0.506
n-Butane	2.70	7.78	0.347 ok	0.346	0.286-0.406
Benzyl Chloride	16.62	13.85	1.200 ok	1.200	1.140-1.260
n-Butylbenzene	17.25	13.85	1.245 ok	1.246	1.186-1.306
sec-Butylbenzene	16.73	13.85	1.208 ok	1.208	1.148-1.268
tert-Butylbenzene	16.47	13.85	1.189 ok	1.190	1.130-1.250
Carbon disulfide	5.23	7.78	0.672 ok	0.672	0.612-0.732
Chlorobenzene	13.89	13.85	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.00	7.78	0.257 ok	0.257	0.197-0.317
Chloroethane	3.10	7.78	0.398 ok	0.398	0.338-0.458
Chloroform	7.94	7.78	1.021 ok	1.020	0.960-1.080
Chloromethane	2.28	7.78	0.293 ok	0.293	0.233-0.353
3-Chloropropene	4.98	7.78	0.640 ok	0.640	0.580-0.700
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.67	7.78	1.243 ok	1.242	1.182-1.302
Cyclohexane	9.79	9.87	0.992 ok	0.992	0.932-1.052
1,1-Dichloroethane	6.46	7.78	0.830 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.78	0.602 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.86	13.85	0.929 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.77	7.78	1.127 ok	1.127	1.067-1.187
1,2-Dichloropropane	10.32	9.87	1.046 ok	1.046	0.986-1.106
1,4-Dioxane	10.55	9.87	1.069 ok	1.072	1.012-1.132
Dichlorodifluoromethane	2.11	7.78	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.64	13.85	0.913 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.17	7.78	0.793 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.58	7.78	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.35	9.87	1.150 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.64	13.85	1.201 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.02	13.85	1.229 ok	1.229	1.169-1.289
p-Dichlorobenzene	16.70	13.85	1.206 ok	1.206	1.146-1.266

5.7.1
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Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15	Reporting this level
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15	
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15	
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15	
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15	
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15	
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15	
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15	
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	11.82	9.87	1.198 ok	1.198	1.138-1.258
2,3-Dimethylpentane	10.03	9.87	1.016 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.84	7.78	1.136 ok	1.136	1.076-1.196
Ethanol	3.23	7.78	0.415 ok	0.416	0.356-0.476
Ethylbenzene	14.22	13.85	1.027 ok	1.026	0.966-1.086
Ethyl Acetate	7.87	7.78	1.012 ok	1.013	0.953-1.073
4-Ethyltoluene	16.02	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.18	7.78	0.666 ok	0.666	0.606-0.726
Freon 114	2.37	7.78	0.305 ok	0.305	0.245-0.365
Freon 123	3.63	7.78	0.467 ok	0.466	0.406-0.526
Freon 123A	3.69	7.78	0.474 ok	0.474	0.414-0.534
Freon 152A	1.95	7.78	0.251 ok	0.251	0.191-0.311
Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156
Hexachlorobutadiene	18.91	13.85	1.365 ok	1.365	1.305-1.425
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.84	7.78	1.008 ok	1.008	0.948-1.068
2-Hexanone	12.46	13.85	0.900 ok	0.901	0.841-0.961
Iodomethane	4.59	7.78	0.590 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Isopropyl Alcohol	4.00	7.78	0.514 ok	0.517	0.457-0.577
p-Isopropyltoluene	16.86	13.85	1.217 ok	1.218	1.158-1.278
Methylene chloride	4.83	7.78	0.621 ok	0.621	0.561-0.681
Methyl ethyl ketone	7.01	7.78	0.901 ok	0.903	0.843-0.963
Methyl Isobutyl Ketone	11.38	9.87	1.153 ok	1.154	1.094-1.214
Methyl Tert Butyl Ether	6.55	7.78	0.842 ok	0.845	0.785-0.905
Methylmethacrylate	10.73	9.87	1.087 ok	1.087	1.027-1.147
Naphthalene	18.64	13.85	1.346 ok	1.348	1.288-1.408
Nonane	14.98	13.85	1.082 ok	1.081	1.021-1.141
Octane	13.10	13.85	0.946 ok	0.946	0.886-1.006
Pentane	4.34	7.78	0.558 ok	0.557	0.497-0.617
n-Propylbenzene	15.88	13.85	1.147 ok	1.147	1.087-1.207
Propylene	2.03	7.78	0.261 ok	0.261	0.201-0.321
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.04	7.78	1.162 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.86	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.82	13.85	1.070 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trichlorobenzene	18.53	13.85	1.338 ok	1.340	1.280-1.400
1,2,4-Trimethylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250

5.7.1
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Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15	Reporting this level
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15	
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15	
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15	
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15	
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15	
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15	
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15	
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	16.09	13.85	1.162 ok	1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.87	1.072 ok	1.072	1.012-1.132
Tertiary Butyl Alcohol	4.73	7.78	0.608 ok	0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958 ok	0.958	0.898-1.018
Tetrahydrofuran	8.40	7.78	1.080 ok	1.082	1.022-1.142
Toluene	12.24	9.87	1.240 ok	1.240	1.180-1.300
Trichloroethylene	10.55	9.87	1.069 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.78	0.505 ok	0.505	0.445-0.565
Vinyl chloride	2.50	7.78	0.321 ok	0.322	0.262-0.382
Vinyl Acetate	6.69	7.78	0.860 ok	0.861	0.801-0.921
m,p-Xylene	14.38	13.85	1.038 ok	1.038	0.978-1.098
o-Xylene	14.82	13.85	1.070 ok	1.070	1.010-1.130
TVHC As Equiv Pentane	4.51	7.78	0.580 ok	0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.78 ok	7.78	7.45-8.11	149374	ok 129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	609064	ok 537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	340055	ok 270921	162553-379289

5.7.1
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Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15 Reporting this level
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	3.82	7.79	0.490 ok	0.482	0.422-0.542
Acrolein	3.66	7.79	0.470 ok	0.465	0.405-0.525
Acrylonitrile	4.33	7.79	0.556 ok	0.550	0.490-0.610
Acetonitrile	3.58	7.79	0.460 ok	0.448	0.388-0.508
1,3-Butadiene	2.64	7.79	0.339 ok	0.340	0.280-0.400
Benzene	9.52	9.87	0.965 ok	0.964	0.904-1.024
Bromodichloromethane	10.52	9.87	1.066 ok	1.065	1.005-1.125
Bromoform	14.47	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.93	7.79	0.376 ok	0.376	0.316-0.436
Bromoethene	3.48	7.79	0.447 ok	0.446	0.386-0.506
n-Butane	2.70	7.79	0.347 ok	0.346	0.286-0.406
Benzyl Chloride	16.63	13.85	1.201 ok	1.200	1.140-1.260
n-Butylbenzene	17.27	13.85	1.247 ok	1.246	1.186-1.306
sec-Butylbenzene	16.73	13.85	1.208 ok	1.208	1.148-1.268
tert-Butylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250
Carbon disulfide	5.23	7.79	0.671 ok	0.672	0.612-0.732
Chlorobenzene	13.89	13.85	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.01	7.79	0.258 ok	0.257	0.197-0.317
Chloroethane	3.10	7.79	0.398 ok	0.398	0.338-0.458
Chloroform	7.94	7.79	1.019 ok	1.020	0.960-1.080
Chloromethane	2.28	7.79	0.293 ok	0.293	0.233-0.353
3-Chloropropene	4.98	7.79	0.639 ok	0.640	0.580-0.700
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.67	7.79	1.241 ok	1.242	1.182-1.302
Cyclohexane	9.78	9.87	0.991 ok	0.992	0.932-1.052
1,1-Dichloroethane	6.46	7.79	0.829 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.79	0.601 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.85	13.85	0.928 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.77	7.79	1.126 ok	1.127	1.067-1.187
1,2-Dichloropropane	10.33	9.87	1.047 ok	1.046	0.986-1.106
1,4-Dioxane	10.67	9.87	1.081 ok	1.072	1.012-1.132
Dichlorodifluoromethane	2.11	7.79	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.63	13.85	0.912 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.18	7.79	0.793 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.59	7.79	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.36	9.87	1.151 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.64	13.85	1.201 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.03	13.85	1.230 ok	1.229	1.169-1.289
p-Dichlorobenzene	16.71	13.85	1.206 ok	1.206	1.146-1.266

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15 Reporting this level
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	11.84	9.87	1.200 ok	1.198	1.138-1.258
2,3-Dimethylpentane	10.03	9.87	1.016 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.84	7.79	1.135 ok	1.136	1.076-1.196
Ethylbenzene	14.21	13.85	1.026 ok	1.026	0.966-1.086
Ethyl Acetate	7.94	7.79	1.019 ok	1.013	0.953-1.073
4-Ethyltoluene	16.02	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.18	7.79	0.665 ok	0.666	0.606-0.726
Freon 114	2.38	7.79	0.306 ok	0.305	0.245-0.365
Freon 123	3.63	7.79	0.466 ok	0.466	0.406-0.526
Freon 123A	3.68	7.79	0.472 ok	0.474	0.414-0.534
Freon 152A	1.96	7.79	0.252 ok	0.251	0.191-0.311
Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156
Hexachlorobutadiene	18.92	13.85	1.366 ok	1.365	1.305-1.425
Hexachloroethane	17.62	13.85	1.272 ok	1.273	1.213-1.333
Hexane	7.84	7.79	1.006 ok	1.008	0.948-1.068
2-Hexanone	12.57	13.85	0.908 ok	0.901	0.841-0.961
Iodomethane	4.59	7.79	0.589 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Isopropyl Alcohol	4.08	7.79	0.524 ok	0.517	0.457-0.577
p-Isopropyltoluene	16.86	13.85	1.217 ok	1.218	1.158-1.278
Methylene chloride	4.84	7.79	0.621 ok	0.621	0.561-0.681
Methyl ethyl ketone	7.08	7.79	0.909 ok	0.903	0.843-0.963
Methyl Isobutyl Ketone	11.43	9.87	1.158 ok	1.154	1.094-1.214
Methyl Tert Butyl Ether	6.62	7.79	0.850 ok	0.845	0.785-0.905
Methylmethacrylate	10.74	9.87	1.088 ok	1.087	1.027-1.147
Naphthalene	18.80	13.85	1.357 ok	1.348	1.288-1.408
Nonane	14.98	13.85	1.082 ok	1.081	1.021-1.141
Octane	13.09	13.85	0.945 ok	0.946	0.886-1.006
Pentane	4.34	7.79	0.557 ok	0.557	0.497-0.617
n-Propylbenzene	15.88	13.85	1.147 ok	1.147	1.087-1.207
Propylene	2.04	7.79	0.262 ok	0.261	0.201-0.321
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.04	7.79	1.160 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.86	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.82	13.85	1.070 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trichlorobenzene	18.63	13.85	1.345 ok	1.340	1.280-1.400
1,2,4-Trimethylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250
1,3,5-Trimethylbenzene	16.09	13.85	1.162 ok	1.162	1.102-1.222

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15 Reporting this level
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
2,2,4-Trimethylpentane	10.59	9.87	1.073 ok	1.072	1.012-1.132
Tertiary Butyl Alcohol	4.84	7.79	0.621 ok	0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958 ok	0.958	0.898-1.018
Tetrahydrofuran	8.48	7.79	1.089 ok	1.082	1.022-1.142
Toluene	12.25	9.87	1.241 ok	1.240	1.180-1.300
Trichloroethylene	10.55	9.87	1.069 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.79	0.504 ok	0.505	0.445-0.565
Vinyl chloride	2.51	7.79	0.322 ok	0.322	0.262-0.382
Vinyl Acetate	6.74	7.79	0.865 ok	0.861	0.801-0.921
m,p-Xylene	14.38	13.85	1.038 ok	1.038	0.978-1.098
o-Xylene	14.83	13.85	1.071 ok	1.070	1.010-1.130
TVHC As Equiv Pentane	4.51	7.79	0.579 ok	0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.79 ok	7.78	7.45-8.11	121954 ok	129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	486398 ok	537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	217641 ok	270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15	
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15	
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15	Reporting this level
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15	
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15	
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15	
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15	
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15	
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	3.74	7.78	0.481 ok	0.482	0.422-0.542
Acrolein	3.60	7.78	0.463 ok	0.465	0.405-0.525
Acrylonitrile	4.26	7.78	0.548 ok	0.550	0.490-0.610
Acetonitrile	3.46	7.78	0.445 ok	0.448	0.388-0.508
1,3-Butadiene	2.64	7.78	0.339 ok	0.340	0.280-0.400
Benzene	9.52	9.87	0.965 ok	0.964	0.904-1.024
Bromodichloromethane	10.51	9.87	1.065 ok	1.065	1.005-1.125
Bromoform	14.48	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.92	7.78	0.375 ok	0.376	0.316-0.436
Bromoethene	3.47	7.78	0.446 ok	0.446	0.386-0.506
n-Butane	2.69	7.78	0.346 ok	0.346	0.286-0.406
Benzyl Chloride	16.61	13.85	1.199 ok	1.200	1.140-1.260
n-Butylbenzene	17.25	13.85	1.245 ok	1.246	1.186-1.306
sec-Butylbenzene	16.73	13.85	1.208 ok	1.208	1.148-1.268
tert-Butylbenzene	16.47	13.85	1.189 ok	1.190	1.130-1.250
Carbon disulfide	5.22	7.78	0.671 ok	0.672	0.612-0.732
Chlorobenzene	13.89	13.85	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.00	7.78	0.257 ok	0.257	0.197-0.317
Chloroethane	3.10	7.78	0.398 ok	0.398	0.338-0.458
Chloroform	7.93	7.78	1.019 ok	1.020	0.960-1.080
Chloromethane	2.28	7.78	0.293 ok	0.293	0.233-0.353
3-Chloropropene	4.99	7.78	0.641 ok	0.640	0.580-0.700
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.66	7.78	1.242 ok	1.242	1.182-1.302
Cyclohexane	9.80	9.87	0.993 ok	0.992	0.932-1.052
1,1-Dichloroethane	6.45	7.78	0.829 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.78	0.602 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.86	13.85	0.929 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.76	7.78	1.126 ok	1.127	1.067-1.187
1,2-Dichloropropane	10.32	9.87	1.046 ok	1.046	0.986-1.106
1,4-Dioxane	10.55	9.87	1.069 ok	1.072	1.012-1.132
Dichlorodifluoromethane	2.11	7.78	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.63	13.85	0.912 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.16	7.78	0.792 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.58	7.78	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.35	9.87	1.150 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.64	13.85	1.201 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.02	13.85	1.229 ok	1.229	1.169-1.289
p-Dichlorobenzene	16.70	13.85	1.206 ok	1.206	1.146-1.266

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	11.82	9.87	1.198 ok	1.198	1.138-1.258
2,3-Dimethylpentane	10.02	9.87	1.015 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.84	7.78	1.136 ok	1.136	1.076-1.196
Ethanol	3.23	7.78	0.415 ok	0.416	0.356-0.476
Ethylbenzene	14.22	13.85	1.027 ok	1.026	0.966-1.086
Ethyl Acetate	7.86	7.78	1.010 ok	1.013	0.953-1.073
4-Ethyltoluene	16.02	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.18	7.78	0.666 ok	0.666	0.606-0.726
Freon 114	2.37	7.78	0.305 ok	0.305	0.245-0.365
Freon 123	3.63	7.78	0.467 ok	0.466	0.406-0.526
Freon 123A	3.69	7.78	0.474 ok	0.474	0.414-0.534
Freon 152A	1.95	7.78	0.251 ok	0.251	0.191-0.311
Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156
Hexachlorobutadiene	18.91	13.85	1.365 ok	1.365	1.305-1.425
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.84	7.78	1.008 ok	1.008	0.948-1.068
2-Hexanone	12.46	13.85	0.900 ok	0.901	0.841-0.961
Iodomethane	4.59	7.78	0.590 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Isopropyl Alcohol	4.00	7.78	0.514 ok	0.517	0.457-0.577
p-Isopropyltoluene	16.86	13.85	1.217 ok	1.218	1.158-1.278
Methylene chloride	4.83	7.78	0.621 ok	0.621	0.561-0.681
Methyl ethyl ketone	7.01	7.78	0.901 ok	0.903	0.843-0.963
Methyl Isobutyl Ketone	11.37	9.87	1.152 ok	1.154	1.094-1.214
Methyl Tert Butyl Ether	6.55	7.78	0.842 ok	0.845	0.785-0.905
Methylmethacrylate	10.73	9.87	1.087 ok	1.087	1.027-1.147
Naphthalene	18.64	13.85	1.346 ok	1.348	1.288-1.408
Nonane	14.98	13.85	1.082 ok	1.081	1.021-1.141
Octane	13.10	13.85	0.946 ok	0.946	0.886-1.006
Pentane	4.34	7.78	0.558 ok	0.557	0.497-0.617
n-Propylbenzene	15.88	13.85	1.147 ok	1.147	1.087-1.207
Propylene	2.03	7.78	0.261 ok	0.261	0.201-0.321
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.04	7.78	1.162 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.86	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.81	13.85	1.069 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trichlorobenzene	18.53	13.85	1.338 ok	1.340	1.280-1.400
1,2,4-Trimethylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	16.09	13.85	1.162 ok	1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.87	1.072 ok	1.072	1.012-1.132
Tertiary Butyl Alcohol	4.72	7.78	0.607 ok	0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958 ok	0.958	0.898-1.018
Tetrahydrofuran	8.40	7.78	1.080 ok	1.082	1.022-1.142
Toluene	12.24	9.87	1.240 ok	1.240	1.180-1.300
Trichloroethylene	10.55	9.87	1.069 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.78	0.505 ok	0.505	0.445-0.565
Vinyl chloride	2.50	7.78	0.321 ok	0.322	0.262-0.382
Vinyl Acetate	6.68	7.78	0.859 ok	0.861	0.801-0.921
m,p-Xylene	14.38	13.85	1.038 ok	1.038	0.978-1.098
o-Xylene	14.82	13.85	1.070 ok	1.070	1.010-1.130
TVHC As Equiv Pentane	4.51	7.78	0.580 ok	0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.78 ok	7.78	7.45-8.11	122976	ok 129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	537780	ok 537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	282007	ok 270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	3.79	7.78	0.487 ok	0.482	0.422-0.542
Acrolein	3.66	7.78	0.470 ok	0.465	0.405-0.525
Acrylonitrile	4.32	7.78	0.555 ok	0.550	0.490-0.610
Acetonitrile	3.52	7.78	0.452 ok	0.448	0.388-0.508
1,3-Butadiene	2.64	7.78	0.339 ok	0.340	0.280-0.400
Benzene	9.52	9.87	0.965 ok	0.964	0.904-1.024
Bromodichloromethane	10.51	9.87	1.065 ok	1.065	1.005-1.125
Bromoform	14.48	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.92	7.78	0.375 ok	0.376	0.316-0.436
Bromoethene	3.48	7.78	0.447 ok	0.446	0.386-0.506
n-Butane	2.69	7.78	0.346 ok	0.346	0.286-0.406
Benzyl Chloride	16.63	13.85	1.201 ok	1.200	1.140-1.260
n-Butylbenzene	17.25	13.85	1.245 ok	1.246	1.186-1.306
sec-Butylbenzene	16.73	13.85	1.208 ok	1.208	1.148-1.268
tert-Butylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250
Carbon disulfide	5.23	7.78	0.672 ok	0.672	0.612-0.732
Chlorobenzene	13.89	13.85	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.00	7.78	0.257 ok	0.257	0.197-0.317
Chloroethane	3.10	7.78	0.398 ok	0.398	0.338-0.458
Chloroform	7.93	7.78	1.019 ok	1.020	0.960-1.080
Chloromethane	2.28	7.78	0.293 ok	0.293	0.233-0.353
3-Chloropropene	4.97	7.78	0.639 ok	0.640	0.580-0.700
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.67	7.78	1.243 ok	1.242	1.182-1.302
Cyclohexane	9.79	9.87	0.992 ok	0.992	0.932-1.052
1,1-Dichloroethane	6.46	7.78	0.830 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.78	0.602 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.86	13.85	0.929 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.77	7.78	1.127 ok	1.127	1.067-1.187
1,2-Dichloropropane	10.32	9.87	1.046 ok	1.046	0.986-1.106
1,4-Dioxane	10.63	9.87	1.077 ok	1.072	1.012-1.132
Dichlorodifluoromethane	2.11	7.78	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.63	13.85	0.912 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.17	7.78	0.793 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.58	7.78	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.35	9.87	1.150 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.64	13.85	1.201 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.02	13.85	1.229 ok	1.229	1.169-1.289
p-Dichlorobenzene	16.71	13.85	1.206 ok	1.206	1.146-1.266

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	11.83	9.87	1.199 ok	1.198	1.138-1.258
2,3-Dimethylpentane	10.03	9.87	1.016 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.84	7.78	1.136 ok	1.136	1.076-1.196
Ethanol	3.28	7.78	0.422 ok	0.416	0.356-0.476
Ethylbenzene	14.21	13.85	1.026 ok	1.026	0.966-1.086
Ethyl Acetate	7.92	7.78	1.018 ok	1.013	0.953-1.073
4-Ethyltoluene	16.02	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.18	7.78	0.666 ok	0.666	0.606-0.726
Freon 114	2.37	7.78	0.305 ok	0.305	0.245-0.365
Freon 123	3.62	7.78	0.465 ok	0.466	0.406-0.526
Freon 123A	3.70	7.78	0.476 ok	0.474	0.414-0.534
Freon 152A	1.95	7.78	0.251 ok	0.251	0.191-0.311
Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156
Hexachlorobutadiene	18.91	13.85	1.365 ok	1.365	1.305-1.425
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.85	7.78	1.009 ok	1.008	0.948-1.068
2-Hexanone	12.52	13.85	0.904 ok	0.901	0.841-0.961
Iodomethane	4.58	7.78	0.589 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Isopropyl Alcohol	4.06	7.78	0.522 ok	0.517	0.457-0.577
p-Isopropyltoluene	16.87	13.85	1.218 ok	1.218	1.158-1.278
Methylene chloride	4.84	7.78	0.622 ok	0.621	0.561-0.681
Methyl ethyl ketone	7.05	7.78	0.906 ok	0.903	0.843-0.963
Methyl Isobutyl Ketone	11.41	9.87	1.156 ok	1.154	1.094-1.214
Methyl Tert Butyl Ether	6.59	7.78	0.847 ok	0.845	0.785-0.905
Methylmethacrylate	10.74	9.87	1.088 ok	1.087	1.027-1.147
Naphthalene	18.72	13.85	1.352 ok	1.348	1.288-1.408
Nonane	14.98	13.85	1.082 ok	1.081	1.021-1.141
Octane	13.10	13.85	0.946 ok	0.946	0.886-1.006
Pentane	4.32	7.78	0.555 ok	0.557	0.497-0.617
n-Propylbenzene	15.88	13.85	1.147 ok	1.147	1.087-1.207
Propylene	2.03	7.78	0.261 ok	0.261	0.201-0.321
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.04	7.78	1.162 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.86	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.82	13.85	1.070 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trichlorobenzene	18.60	13.85	1.343 ok	1.340	1.280-1.400
1,2,4-Trimethylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	16.08	13.85	1.161 ok	1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.87	1.072 ok	1.072	1.012-1.132
Tertiary Butyl Alcohol	4.78	7.78	0.614 ok	0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958 ok	0.958	0.898-1.018
Tetrahydrofuran	8.45	7.78	1.086 ok	1.082	1.022-1.142
Toluene	12.24	9.87	1.240 ok	1.240	1.180-1.300
Trichloroethylene	10.55	9.87	1.069 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.78	0.505 ok	0.505	0.445-0.565
Vinyl chloride	2.50	7.78	0.321 ok	0.322	0.262-0.382
Vinyl Acetate	6.72	7.78	0.864 ok	0.861	0.801-0.921
m,p-Xylene	14.38	13.85	1.038 ok	1.038	0.978-1.098
o-Xylene	14.82	13.85	1.070 ok	1.070	1.010-1.130
TVHC As Equiv Pentane	4.51	7.78	0.580 ok	0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.78 ok	7.78	7.45-8.11	124164	ok 129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	484423	ok 537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	218149	ok 270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	3.73	7.78	0.479 ok	0.482	0.422-0.542
Acrolein	3.59	7.78	0.461 ok	0.465	0.405-0.525
Acrylonitrile	4.26	7.78	0.548 ok	0.550	0.490-0.610
Acetonitrile	3.45	7.78	0.443 ok	0.448	0.388-0.508
1,3-Butadiene	2.64	7.78	0.339 ok	0.340	0.280-0.400
Benzene	9.52	9.87	0.965 ok	0.964	0.904-1.024
Bromodichloromethane	10.52	9.87	1.066 ok	1.065	1.005-1.125
Bromoform	14.48	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.92	7.78	0.375 ok	0.376	0.316-0.436
Bromoethene	3.47	7.78	0.446 ok	0.446	0.386-0.506
n-Butane	2.69	7.78	0.346 ok	0.346	0.286-0.406
Benzyl Chloride	16.62	13.85	1.200 ok	1.200	1.140-1.260
n-Butylbenzene	17.25	13.85	1.245 ok	1.246	1.186-1.306
sec-Butylbenzene	16.73	13.85	1.208 ok	1.208	1.148-1.268
tert-Butylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250
Carbon disulfide	5.22	7.78	0.671 ok	0.672	0.612-0.732
Chlorobenzene	13.89	13.85	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.00	7.78	0.257 ok	0.257	0.197-0.317
Chloroethane	3.10	7.78	0.398 ok	0.398	0.338-0.458
Chloroform	7.94	7.78	1.021 ok	1.020	0.960-1.080
Chloromethane	2.28	7.78	0.293 ok	0.293	0.233-0.353
3-Chloropropene	4.98	7.78	0.640 ok	0.640	0.580-0.700
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.67	7.78	1.243 ok	1.242	1.182-1.302
Cyclohexane	9.79	9.87	0.992 ok	0.992	0.932-1.052
1,1-Dichloroethane	6.46	7.78	0.830 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.78	0.602 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.86	13.85	0.929 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.77	7.78	1.127 ok	1.127	1.067-1.187
1,2-Dichloropropane	10.32	9.87	1.046 ok	1.046	0.986-1.106
1,4-Dioxane	10.55	9.87	1.069 ok	1.072	1.012-1.132
Dichlorodifluoromethane	2.11	7.78	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.64	13.85	0.913 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.17	7.78	0.793 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.58	7.78	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.35	9.87	1.150 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.64	13.85	1.201 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.02	13.85	1.229 ok	1.229	1.169-1.289
p-Dichlorobenzene	16.71	13.85	1.206 ok	1.206	1.146-1.266

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	11.82	9.87	1.198 ok	1.198	1.138-1.258
2,3-Dimethylpentane	10.03	9.87	1.016 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.84	7.78	1.136 ok	1.136	1.076-1.196
Ethanol	3.22	7.78	0.414 ok	0.416	0.356-0.476
Ethylbenzene	14.22	13.85	1.027 ok	1.026	0.966-1.086
Ethyl Acetate	7.87	7.78	1.012 ok	1.013	0.953-1.073
4-Ethyltoluene	16.02	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.18	7.78	0.666 ok	0.666	0.606-0.726
Freon 114	2.37	7.78	0.305 ok	0.305	0.245-0.365
Freon 123	3.62	7.78	0.465 ok	0.466	0.406-0.526
Freon 123A	3.69	7.78	0.474 ok	0.474	0.414-0.534
Freon 152A	1.95	7.78	0.251 ok	0.251	0.191-0.311
Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156
Hexachlorobutadiene	18.91	13.85	1.365 ok	1.365	1.305-1.425
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.84	7.78	1.008 ok	1.008	0.948-1.068
2-Hexanone	12.46	13.85	0.900 ok	0.901	0.841-0.961
Iodomethane	4.59	7.78	0.590 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Isopropyl Alcohol	4.00	7.78	0.514 ok	0.517	0.457-0.577
p-Isopropyltoluene	16.86	13.85	1.217 ok	1.218	1.158-1.278
Methylene chloride	4.83	7.78	0.621 ok	0.621	0.561-0.681
Methyl ethyl ketone	7.01	7.78	0.901 ok	0.903	0.843-0.963
Methyl Isobutyl Ketone	11.38	9.87	1.153 ok	1.154	1.094-1.214
Methyl Tert Butyl Ether	6.55	7.78	0.842 ok	0.845	0.785-0.905
Methylmethacrylate	10.73	9.87	1.087 ok	1.087	1.027-1.147
Naphthalene	18.64	13.85	1.346 ok	1.348	1.288-1.408
Nonane	14.98	13.85	1.082 ok	1.081	1.021-1.141
Octane	13.10	13.85	0.946 ok	0.946	0.886-1.006
Pentane	4.33	7.78	0.557 ok	0.557	0.497-0.617
n-Propylbenzene	15.88	13.85	1.147 ok	1.147	1.087-1.207
Propylene	2.03	7.78	0.261 ok	0.261	0.201-0.321
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.04	7.78	1.162 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.86	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.82	13.85	1.070 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trichlorobenzene	18.53	13.85	1.338 ok	1.340	1.280-1.400
1,2,4-Trimethylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	16.09	13.85	1.162 ok	1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.87	1.072 ok	1.072	1.012-1.132
Tertiary Butyl Alcohol	4.73	7.78	0.608 ok	0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958 ok	0.958	0.898-1.018
Tetrahydrofuran	8.40	7.78	1.080 ok	1.082	1.022-1.142
Toluene	12.25	9.87	1.241 ok	1.240	1.180-1.300
Trichloroethylene	10.55	9.87	1.069 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.78	0.505 ok	0.505	0.445-0.565
Vinyl chloride	2.50	7.78	0.321 ok	0.322	0.262-0.382
Vinyl Acetate	6.69	7.78	0.860 ok	0.861	0.801-0.921
m,p-Xylene	14.38	13.85	1.038 ok	1.038	0.978-1.098
o-Xylene	14.82	13.85	1.070 ok	1.070	1.010-1.130
TVHC As Equiv Pentane	4.51	7.78	0.580 ok	0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.78 ok	7.78	7.45-8.11	131019	ok 129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	569834	ok 537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	317437	ok 270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	3.74	7.78	0.481 ok	0.482	0.422-0.542
Acrolein	3.60	7.78	0.463 ok	0.465	0.405-0.525
Acrylonitrile	4.26	7.78	0.548 ok	0.550	0.490-0.610
Acetonitrile	3.48	7.78	0.447 ok	0.448	0.388-0.508
1,3-Butadiene	2.64	7.78	0.339 ok	0.340	0.280-0.400
Benzene	9.52	9.87	0.965 ok	0.964	0.904-1.024
Bromodichloromethane	10.51	9.87	1.065 ok	1.065	1.005-1.125
Bromoform	14.48	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.92	7.78	0.375 ok	0.376	0.316-0.436
Bromoethene	3.47	7.78	0.446 ok	0.446	0.386-0.506
n-Butane	2.69	7.78	0.346 ok	0.346	0.286-0.406
Benzyl Chloride	16.62	13.85	1.200 ok	1.200	1.140-1.260
n-Butylbenzene	17.25	13.85	1.245 ok	1.246	1.186-1.306
sec-Butylbenzene	16.72	13.85	1.207 ok	1.208	1.148-1.268
tert-Butylbenzene	16.47	13.85	1.189 ok	1.190	1.130-1.250
Carbon disulfide	5.22	7.78	0.671 ok	0.672	0.612-0.732
Chlorobenzene	13.88	13.85	1.002 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.00	7.78	0.257 ok	0.257	0.197-0.317
Chloroethane	3.10	7.78	0.398 ok	0.398	0.338-0.458
Chloroform	7.93	7.78	1.019 ok	1.020	0.960-1.080
Chloromethane	2.28	7.78	0.293 ok	0.293	0.233-0.353
3-Chloropropene	4.98	7.78	0.640 ok	0.640	0.580-0.700
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.66	7.78	1.242 ok	1.242	1.182-1.302
Cyclohexane	9.79	9.87	0.992 ok	0.992	0.932-1.052
1,1-Dichloroethane	6.45	7.78	0.829 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.78	0.602 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.86	13.85	0.929 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.76	7.78	1.126 ok	1.127	1.067-1.187
1,2-Dichloropropane	10.32	9.87	1.046 ok	1.046	0.986-1.106
1,4-Dioxane	10.57	9.87	1.071 ok	1.072	1.012-1.132
Dichlorodifluoromethane	2.11	7.78	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.63	13.85	0.912 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.16	7.78	0.792 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.58	7.78	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.35	9.87	1.150 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.64	13.85	1.201 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.02	13.85	1.229 ok	1.229	1.169-1.289
p-Dichlorobenzene	16.70	13.85	1.206 ok	1.206	1.146-1.266

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	11.82	9.87	1.198 ok	1.198	1.138-1.258
2,3-Dimethylpentane	10.02	9.87	1.015 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.84	7.78	1.136 ok	1.136	1.076-1.196
Ethanol	3.25	7.78	0.418 ok	0.416	0.356-0.476
Ethylbenzene	14.21	13.85	1.026 ok	1.026	0.966-1.086
Ethyl Acetate	7.87	7.78	1.012 ok	1.013	0.953-1.073
4-Ethyltoluene	16.02	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.18	7.78	0.666 ok	0.666	0.606-0.726
Freon 114	2.37	7.78	0.305 ok	0.305	0.245-0.365
Freon 123	3.62	7.78	0.465 ok	0.466	0.406-0.526
Freon 123A	3.69	7.78	0.474 ok	0.474	0.414-0.534
Freon 152A	1.95	7.78	0.251 ok	0.251	0.191-0.311
Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156
Hexachlorobutadiene	18.91	13.85	1.365 ok	1.365	1.305-1.425
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.84	7.78	1.008 ok	1.008	0.948-1.068
2-Hexanone	12.46	13.85	0.900 ok	0.901	0.841-0.961
Iodomethane	4.58	7.78	0.589 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Isopropyl Alcohol	4.01	7.78	0.515 ok	0.517	0.457-0.577
p-Isopropyltoluene	16.86	13.85	1.217 ok	1.218	1.158-1.278
Methylene chloride	4.83	7.78	0.621 ok	0.621	0.561-0.681
Methyl ethyl ketone	7.01	7.78	0.901 ok	0.903	0.843-0.963
Methyl Isobutyl Ketone	11.38	9.87	1.153 ok	1.154	1.094-1.214
Methyl Tert Butyl Ether	6.55	7.78	0.842 ok	0.845	0.785-0.905
Methylmethacrylate	10.73	9.87	1.087 ok	1.087	1.027-1.147
Naphthalene	18.64	13.85	1.346 ok	1.348	1.288-1.408
Nonane	14.98	13.85	1.082 ok	1.081	1.021-1.141
Octane	13.10	13.85	0.946 ok	0.946	0.886-1.006
Pentane	4.33	7.78	0.557 ok	0.557	0.497-0.617
n-Propylbenzene	15.88	13.85	1.147 ok	1.147	1.087-1.207
Propylene	2.03	7.78	0.261 ok	0.261	0.201-0.321
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.04	7.78	1.162 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.86	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.81	13.85	1.069 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trichlorobenzene	18.53	13.85	1.338 ok	1.340	1.280-1.400
1,2,4-Trimethylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	16.09	13.85	1.162 ok	1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.87	1.072 ok	1.072	1.012-1.132
Tertiary Butyl Alcohol	4.73	7.78	0.608 ok	0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958 ok	0.958	0.898-1.018
Tetrahydrofuran	8.40	7.78	1.080 ok	1.082	1.022-1.142
Toluene	12.24	9.87	1.240 ok	1.240	1.180-1.300
Trichloroethylene	10.55	9.87	1.069 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.78	0.505 ok	0.505	0.445-0.565
Vinyl chloride	2.50	7.78	0.321 ok	0.322	0.262-0.382
Vinyl Acetate	6.69	7.78	0.860 ok	0.861	0.801-0.921
m,p-Xylene	14.38	13.85	1.038 ok	1.038	0.978-1.098
o-Xylene	14.82	13.85	1.070 ok	1.070	1.010-1.130
TVHC As Equiv Pentane	4.51	7.78	0.580 ok	0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.78 ok	7.78	7.45-8.11	144184	ok 129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	601288	ok 537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	287009	ok 270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,3-Butadiene	2.66	7.78	0.342 ok	0.340	0.280-0.400
Benzene	9.52	9.87	0.965 ok	0.964	0.904-1.024
Bromodichloromethane	10.51	9.87	1.065 ok	1.065	1.005-1.125
Bromoform	14.48	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.93	7.78	0.377 ok	0.376	0.316-0.436
Bromoethene	3.48	7.78	0.447 ok	0.446	0.386-0.506
tert-Butylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250
Carbon disulfide	5.23	7.78	0.672 ok	0.672	0.612-0.732
Chlorobenzene	13.89	13.85	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.00	7.78	0.257 ok	0.257	0.197-0.317
Chloroethane	3.11	7.78	0.400 ok	0.398	0.338-0.458
Chloroform	7.93	7.78	1.019 ok	1.020	0.960-1.080
Chloromethane	2.29	7.78	0.294 ok	0.293	0.233-0.353
2-Chlorotoluene	15.87	13.85	1.146 ok	1.145	1.085-1.205
Carbon tetrachloride	9.66	7.78	1.242 ok	1.242	1.182-1.302
1,1-Dichloroethane	6.47	7.78	0.832 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.78	0.602 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.86	13.85	0.929 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.77	7.78	1.127 ok	1.127	1.067-1.187
Dichlorodifluoromethane	2.11	7.78	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.63	13.85	0.912 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.18	7.78	0.794 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.60	7.78	0.977 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.36	9.87	1.151 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.65	13.85	1.202 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.03	13.85	1.230 ok	1.229	1.169-1.289
2,3-Dimethylpentane	10.01	9.87	1.014 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.85	7.78	1.138 ok	1.136	1.076-1.196
4-Ethyltoluene	16.03	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.19	7.78	0.667 ok	0.666	0.606-0.726
Freon 114	2.38	7.78	0.306 ok	0.305	0.245-0.365
Freon 123	3.64	7.78	0.468 ok	0.466	0.406-0.526
Freon 123A	3.69	7.78	0.474 ok	0.474	0.414-0.534
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.85	7.78	1.009 ok	1.008	0.948-1.068
Iodomethane	4.59	7.78	0.590 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Methyl Tert Butyl Ether	6.63	7.78	0.852 ok	0.845	0.785-0.905
Nonane	14.97	13.85	1.081 ok	1.081	1.021-1.141

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
n-Propylbenzene	15.89	13.85	1.147 ok	1.147	1.087-1.207
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.03	7.78	1.161 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.87	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.82	13.85	1.070 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trimethylbenzene	16.49	13.85	1.191 ok	1.190	1.130-1.250
1,3,5-Trimethylbenzene	16.10	13.85	1.162 ok	1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.87	1.072 ok	1.072	1.012-1.132
Tertiary Butyl Alcohol	4.89	7.78	0.629 ok	0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958 ok	0.958	0.898-1.018
Toluene	12.25	9.87	1.241 ok	1.240	1.180-1.300
Trichloroethylene	10.57	9.87	1.071 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.78	0.505 ok	0.505	0.445-0.565
Vinyl chloride	2.51	7.78	0.323 ok	0.322	0.262-0.382
TVHC As Equiv Pentane	4.51	7.78	0.580 ok	0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.87	1.096 ok	1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.78 ok	7.78	7.45-8.11	125525 ok	129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	508839 ok	537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	215320 ok	270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acrolein	3.67	7.79	0.471 ok	0.465	0.405-0.525
1,3-Butadiene	2.65	7.79	0.340 ok	0.340	0.280-0.400
Bromodichloromethane	10.51	9.87	1.065 ok	1.065	1.005-1.125
Bromoform	14.47	13.85	1.045 ok	1.045	0.985-1.105
Bromomethane	2.93	7.79	0.376 ok	0.376	0.316-0.436
Bromoethene	3.48	7.79	0.447 ok	0.446	0.386-0.506
Carbon disulfide	5.24	7.79	0.673 ok	0.672	0.612-0.732
Chloroform	7.94	7.79	1.019 ok	1.020	0.960-1.080
Chloromethane	2.28	7.79	0.293 ok	0.293	0.233-0.353
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.68	7.79	1.243 ok	1.242	1.182-1.302
Cyclohexane	9.79	9.87	0.992 ok	0.992	0.932-1.052
1,1-Dichloroethylene	4.69	7.79	0.602 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.87	13.85	0.929 ok	0.929	0.869-0.989
Dichlorodifluoromethane	2.11	7.79	0.271 ok	0.271	0.211-0.331
cis-1,2-Dichloroethylene	7.59	7.79	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.35	9.87	1.150 ok	1.150	1.090-1.210
o-Dichlorobenzene	17.03	13.85	1.230 ok	1.229	1.169-1.289
2,4-Dimethylpentane	8.84	7.79	1.135 ok	1.136	1.076-1.196
Freon 114	2.37	7.79	0.304 ok	0.305	0.245-0.365
Freon 123	3.63	7.79	0.466 ok	0.466	0.406-0.526
Freon 123A	3.70	7.79	0.475 ok	0.474	0.414-0.534
Freon 152A	1.96	7.79	0.252 ok	0.251	0.191-0.311
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.84	7.79	1.006 ok	1.008	0.948-1.068
Iodomethane	4.60	7.79	0.591 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Methylene chloride	4.85	7.79	0.623 ok	0.621	0.561-0.681
1,1,1-Trichloroethane	9.04	7.79	1.160 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.87	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.83	13.85	1.071 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.87	1.215 ok	1.215	1.155-1.275
1,2,4-Trimethylbenzene	16.49	13.85	1.191 ok	1.190	1.130-1.250
1,3,5-Trimethylbenzene	16.10	13.85	1.162 ok	1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.87	1.072 ok	1.072	1.012-1.132
Tetrachloroethylene	13.28	13.85	0.959 ok	0.958	0.898-1.018
Trichloroethylene	10.57	9.87	1.071 ok	1.069	1.009-1.129
Trichlorofluoromethane	3.94	7.79	0.506 ok	0.505	0.445-0.565
Vinyl chloride	2.51	7.79	0.322 ok	0.322	0.262-0.382

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15 Reporting this level
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.79 ok	7.78	7.45-8.11	114786 ok	129817	77890-181744
1,4-Difluorobenzene	9.87 ok	9.87	9.54-10.20	441060 ok	537431	322459-752403
Chlorobenzene-D5	13.85 ok	13.85	13.52-14.18	186186 ok	270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	3.73	7.79	0.479 ok	0.482	0.422-0.542
Acrolein	3.59	7.79	0.461 ok	0.465	0.405-0.525
Acrylonitrile	4.26	7.79	0.547 ok	0.550	0.490-0.610
Acetonitrile	3.45	7.79	0.443 ok	0.448	0.388-0.508
1,3-Butadiene	2.64	7.79	0.339 ok	0.340	0.280-0.400
Benzene	9.52	9.88	0.964 ok	0.964	0.904-1.024
Bromodichloromethane	10.52	9.88	1.065 ok	1.065	1.005-1.125
Bromoform	14.49	13.85	1.046 ok	1.045	0.985-1.105
Bromomethane	2.92	7.79	0.375 ok	0.376	0.316-0.436
Bromoethene	3.47	7.79	0.445 ok	0.446	0.386-0.506
n-Butane	2.69	7.79	0.345 ok	0.346	0.286-0.406
Benzyl Chloride	16.62	13.85	1.200 ok	1.200	1.140-1.260
n-Butylbenzene	17.25	13.85	1.245 ok	1.246	1.186-1.306
sec-Butylbenzene	16.73	13.85	1.208 ok	1.208	1.148-1.268
tert-Butylbenzene	16.48	13.85	1.190 ok	1.190	1.130-1.250
Carbon disulfide	5.23	7.79	0.671 ok	0.672	0.612-0.732
Chlorobenzene	13.89	13.85	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	2.00	7.79	0.257 ok	0.257	0.197-0.317
Chloroethane	3.10	7.79	0.398 ok	0.398	0.338-0.458
Chloroform	7.95	7.79	1.021 ok	1.020	0.960-1.080
Chloromethane	2.28	7.79	0.293 ok	0.293	0.233-0.353
3-Chloropropene	4.99	7.79	0.641 ok	0.640	0.580-0.700
2-Chlorotoluene	15.86	13.85	1.145 ok	1.145	1.085-1.205
Carbon tetrachloride	9.67	7.79	1.241 ok	1.242	1.182-1.302
Cyclohexane	9.80	9.88	0.992 ok	0.992	0.932-1.052
1,1-Dichloroethane	6.46	7.79	0.829 ok	0.830	0.770-0.890
1,1-Dichloroethylene	4.68	7.79	0.601 ok	0.601	0.541-0.661
1,2-Dibromoethane	12.87	13.85	0.929 ok	0.929	0.869-0.989
1,2-Dichloroethane	8.77	7.79	1.126 ok	1.127	1.067-1.187
1,2-Dichloropropane	10.33	9.88	1.046 ok	1.046	0.986-1.106
1,4-Dioxane	10.55	9.88	1.068 ok	1.072	1.012-1.132
Dichlorodifluoromethane	2.11	7.79	0.271 ok	0.271	0.211-0.331
Dibromochloromethane	12.64	13.85	0.913 ok	0.912	0.852-0.972
trans-1,2-Dichloroethylene	6.17	7.79	0.792 ok	0.793	0.733-0.853
cis-1,2-Dichloroethylene	7.59	7.79	0.974 ok	0.975	0.915-1.035
cis-1,3-Dichloropropene	11.35	9.88	1.149 ok	1.150	1.090-1.210
m-Dichlorobenzene	16.64	13.85	1.201 ok	1.202	1.142-1.262
o-Dichlorobenzene	17.02	13.85	1.229 ok	1.229	1.169-1.289
p-Dichlorobenzene	16.71	13.85	1.206 ok	1.206	1.146-1.266

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	11.83	9.88	1.197 ok	1.198	1.138-1.258
2,3-Dimethylpentane	10.03	9.88	1.015 ok	1.016	0.956-1.076
2,4-Dimethylpentane	8.84	7.79	1.135 ok	1.136	1.076-1.196
Ethanol	3.23	7.79	0.415 ok	0.416	0.356-0.476
Ethylbenzene	14.22	13.85	1.027 ok	1.026	0.966-1.086
Ethyl Acetate	7.87	7.79	1.010 ok	1.013	0.953-1.073
4-Ethyltoluene	16.02	13.85	1.157 ok	1.157	1.097-1.217
Freon 113	5.19	7.79	0.666 ok	0.666	0.606-0.726
Freon 114	2.37	7.79	0.304 ok	0.305	0.245-0.365
Freon 123	3.63	7.79	0.466 ok	0.466	0.406-0.526
Freon 123A	3.69	7.79	0.474 ok	0.474	0.414-0.534
Freon 152A	1.95	7.79	0.250 ok	0.251	0.191-0.311
Heptane	10.82	9.88	1.095 ok	1.096	1.036-1.156
Hexachlorobutadiene	18.91	13.85	1.365 ok	1.365	1.305-1.425
Hexachloroethane	17.63	13.85	1.273 ok	1.273	1.213-1.333
Hexane	7.84	7.79	1.006 ok	1.008	0.948-1.068
2-Hexanone	12.46	13.85	0.900 ok	0.901	0.841-0.961
Iodomethane	4.59	7.79	0.589 ok	0.590	0.530-0.650
Isopropylbenzene	15.38	13.85	1.110 ok	1.110	1.050-1.170
Isopropyl Alcohol	4.01	7.79	0.515 ok	0.517	0.457-0.577
p-Isopropyltoluene	16.87	13.85	1.218 ok	1.218	1.158-1.278
Methylene chloride	4.84	7.79	0.621 ok	0.621	0.561-0.681
Methyl ethyl ketone	7.01	7.79	0.900 ok	0.903	0.843-0.963
Methyl Isobutyl Ketone	11.38	9.88	1.152 ok	1.154	1.094-1.214
Methyl Tert Butyl Ether	6.55	7.79	0.841 ok	0.845	0.785-0.905
Methylmethacrylate	10.73	9.88	1.086 ok	1.087	1.027-1.147
Naphthalene	18.64	13.85	1.346 ok	1.348	1.288-1.408
Nonane	14.98	13.85	1.082 ok	1.081	1.021-1.141
Octane	13.10	13.85	0.946 ok	0.946	0.886-1.006
Pentane	4.34	7.79	0.557 ok	0.557	0.497-0.617
n-Propylbenzene	15.88	13.85	1.147 ok	1.147	1.087-1.207
Propylene	2.03	7.79	0.261 ok	0.261	0.201-0.321
Styrene	14.72	13.85	1.063 ok	1.063	1.003-1.123
1,1,1-Trichloroethane	9.04	7.79	1.160 ok	1.161	1.101-1.221
1,1,1,2-Tetrachloroethane	13.87	13.85	1.001 ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	14.82	13.85	1.070 ok	1.070	1.010-1.130
1,1,2-Trichloroethane	11.99	9.88	1.214 ok	1.215	1.155-1.275
1,2,4-Trichlorobenzene	18.53	13.85	1.338 ok	1.340	1.280-1.400
1,2,4-Trimethylbenzene	16.49	13.85	1.191 ok	1.190	1.130-1.250

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V2W1426-IC1426	2W33863.D	01/16/12 18:33	YMH	15	GCMS2W	TO-15
V2W1426-IC1426	2W33865.D	01/16/12 19:53	YMH	0.2	GCMS2W	TO-15
V2W1426-ICC1426	2W33866.D	01/16/12 20:32	YMH	10	GCMS2W	TO-15
V2W1426-IC1426	2W33867.D	01/16/12 21:12	YMH	0.5	GCMS2W	TO-15
V2W1426-IC1426	2W33868.D	01/16/12 21:52	YMH	20	GCMS2W	TO-15
V2W1426-IC1426	2W33869.D	01/16/12 22:31	YMH	5.0	GCMS2W	TO-15
V2W1426-IC1426	2W33870.D	01/16/12 23:11	YMH	0.1	GCMS2W	TO-15
V2W1426-IC1426	2W33871.D	01/16/12 23:50	YMH	0.04	GCMS2W	TO-15
V2W1426-IC1426	2W33872.D	01/17/12 00:32	YMH	40	GCMS2W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	16.09	13.85	1.162	ok 1.162	1.102-1.222
2,2,4-Trimethylpentane	10.58	9.88	1.071	ok 1.072	1.012-1.132
Tertiary Butyl Alcohol	4.74	7.79	0.608	ok 0.613	0.553-0.673
Tetrachloroethylene	13.27	13.85	0.958	ok 0.958	0.898-1.018
Tetrahydrofuran	8.40	7.79	1.078	ok 1.082	1.022-1.142
Toluene	12.25	9.88	1.240	ok 1.240	1.180-1.300
Trichloroethylene	10.55	9.88	1.068	ok 1.069	1.009-1.129
Trichlorofluoromethane	3.93	7.79	0.504	ok 0.505	0.445-0.565
Vinyl chloride	2.50	7.79	0.321	ok 0.322	0.262-0.382
Vinyl Acetate	6.70	7.79	0.860	ok 0.861	0.801-0.921
m,p-Xylene	14.38	13.85	1.038	ok 1.038	0.978-1.098
o-Xylene	14.83	13.85	1.071	ok 1.070	1.010-1.130
TVHC As Equiv Pentane	4.51	7.79	0.579	ok 0.580	0.520-0.640
TVHC As Equiv Heptane	10.82	9.88	1.095	ok 1.096	1.036-1.156

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	7.79	ok 7.78	7.45-8.11	134373	ok 129817	77890-181744
1,4-Difluorobenzene	9.88	ok 9.87	9.54-10.20	598189	ok 537431	322459-752403
Chlorobenzene-D5	13.85	ok 13.85	13.52-14.18	374489	ok 270921	162553-379289

5.7.1
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.95	8.37	0.711 ok	0.713	0.653-0.773
Acrolein	5.85	8.37	0.699 ok	0.700	0.640-0.760
Acrylonitrile	6.29	8.37	0.751 ok	0.753	0.693-0.813
Acetonitrile	5.76	8.37	0.688 ok	0.690	0.630-0.750
1,3-Butadiene	5.18	8.37	0.619 ok	0.620	0.560-0.680
Benzene	9.76	10.07	0.969 ok	0.970	0.910-1.030
Bromodichloromethane	10.70	10.07	1.063 ok	1.063	1.003-1.123
Bromoform	15.07	14.35	1.050 ok	1.051	0.991-1.111
Bromomethane	5.39	8.37	0.644 ok	0.645	0.585-0.705
Bromoethene	5.77	8.37	0.689 ok	0.690	0.630-0.750
n-Butane	5.22	8.37	0.624 ok	0.624	0.564-0.684
Benzyl Chloride	17.61	14.35	1.227 ok	1.228	1.168-1.288
n-Butylbenzene	18.44	14.35	1.285 ok	1.285	1.225-1.345
sec-Butylbenzene	17.76	14.35	1.238 ok	1.238	1.178-1.298
tert-Butylbenzene	17.45	14.35	1.216 ok	1.216	1.156-1.276
Carbon disulfide	6.90	8.37	0.824 ok	0.825	0.765-0.885
Chlorobenzene	14.39	14.35	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	4.70	8.37	0.562 ok	0.563	0.503-0.623
Chloroethane	5.51	8.37	0.658 ok	0.659	0.599-0.719
Chloroform	8.48	8.37	1.013 ok	1.013	0.953-1.073
Chloromethane	4.92	8.37	0.588 ok	0.588	0.528-0.648
3-Chloropropene	6.73	8.37	0.804 ok	0.804	0.744-0.864
2-Chlorotoluene	16.69	14.35	1.163 ok	1.163	1.103-1.223
Carbon tetrachloride	9.90	8.37	1.183 ok	1.182	1.122-1.242
Cyclohexane	10.01	10.07	0.994 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.53	8.37	0.900 ok	0.900	0.840-0.960
1,1-Dichloroethylene	6.55	8.37	0.783 ok	0.783	0.723-0.843
1,2-Dibromoethane	13.21	14.35	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.12	8.37	1.090 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.51	10.07	1.044 ok	1.045	0.985-1.105
1,4-Dioxane	10.76	10.07	1.069 ok	1.071	1.011-1.131
Dichlorodifluoromethane	4.79	8.37	0.572 ok	0.573	0.513-0.633
Dibromochloromethane	12.96	14.35	0.903 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.37	8.37	0.881 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.22	8.37	0.982 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.55	10.07	1.147 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.63	14.35	1.229 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.10	14.35	1.261 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.71	14.35	1.234 ok	1.234	1.174-1.294

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15	Reporting this level
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15	
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15	
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15	
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15	
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15	
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15	
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15	
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.07	10.07	1.199 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.37	8.37	1.000 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.21	10.07	1.014 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.14	8.37	1.092 ok	1.092	1.032-1.152
Ethanol	5.60	8.37	0.669 ok	0.672	0.612-0.732
Ethylbenzene	14.79	14.35	1.031 ok	1.031	0.971-1.091
Ethyl Acetate	8.39	8.37	1.002 ok	1.003	0.943-1.063
4-Ethyltoluene	16.89	14.35	1.177 ok	1.178	1.118-1.238
Freon 113	6.82	8.37	0.815 ok	0.816	0.756-0.876
Freon 114	4.98	8.37	0.595 ok	0.596	0.536-0.656
Freon 123	5.86	8.37	0.700 ok	0.701	0.641-0.761
Freon 123A	5.90	8.37	0.705 ok	0.706	0.646-0.766
Freon 152A	4.67	8.37	0.558 ok	0.559	0.499-0.619
Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.35	1.436 ok	1.436	1.376-1.496
Hexachloroethane	18.88	14.35	1.316 ok	1.316	1.256-1.376
Hexane	8.37	8.37	1.000 ok	1.000	0.940-1.060
2-Hexanone	12.79	14.35	0.891 ok	0.893	0.833-0.953
Iodomethane	6.51	8.37	0.778 ok	0.778	0.718-0.838
Isopropylbenzene	16.15	14.35	1.125 ok	1.126	1.066-1.186
Isopropyl Alcohol	6.13	8.37	0.732 ok	0.736	0.676-0.796
p-Isopropyltoluene	17.94	14.35	1.250 ok	1.251	1.191-1.311
Methylene chloride	6.63	8.37	0.792 ok	0.793	0.733-0.853
Methyl ethyl ketone	7.85	8.37	0.938 ok	0.939	0.879-0.999
Methyl Isobutyl Ketone	11.59	10.07	1.151 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.57	8.37	0.904 ok	0.906	0.846-0.966
Methylmethacrylate	10.91	10.07	1.083 ok	1.084	1.024-1.144
Naphthalene	20.21	14.35	1.408 ok	1.408	1.348-1.468
Nonane	15.72	14.35	1.095 ok	1.096	1.036-1.156
Octane	13.50	14.35	0.941 ok	0.941	0.881-1.001
Pentane	6.32	8.37	0.755 ok	0.756	0.696-0.816
n-Propylbenzene	16.73	14.35	1.166 ok	1.166	1.106-1.226
Propylene	4.73	8.37	0.565 ok	0.566	0.506-0.626
Styrene	15.37	14.35	1.071 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.34	8.37	1.116 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.37	14.35	1.001 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.49	14.35	1.079 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.25	10.07	1.216 ok	1.216	1.156-1.276
1,2,4-Trichlorobenzene	20.08	14.35	1.399 ok	1.400	1.340-1.460

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,2,3-Trichloropropane	15.63	14.35	1.089 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.46	14.35	1.217 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	16.99	14.35	1.184 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.74	10.07	1.067 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.58	8.37	0.786 ok	0.791	0.731-0.851
Tetrachloroethylene	13.68	14.35	0.953 ok	0.954	0.894-1.014
Tetrahydrofuran	8.85	8.37	1.057 ok	1.059	0.999-1.119
Toluene	12.52	10.07	1.243 ok	1.243	1.183-1.303
Trichloroethylene	10.73	10.07	1.066 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.07	8.37	0.725 ok	0.726	0.666-0.786
Vinyl chloride	5.08	8.37	0.607 ok	0.608	0.548-0.668
Vinyl Acetate	7.63	8.37	0.912 ok	0.912	0.852-0.972
m,p-Xylene	14.97	14.35	1.043 ok	1.044	0.984-1.104
o-Xylene	15.49	14.35	1.079 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.32	8.37	0.755 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.37 ok	8.38	8.05-8.71	59980 ok	59710	35826-83594
1,4-Difluorobenzene	10.07 ok	10.07	9.74-10.40	268264 ok	265483	159290-371676
Chlorobenzene-D5	14.35 ok	14.35	14.02-14.68	134230 ok	128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.96	8.36	0.713 ok	0.713	0.653-0.773
Acrolein	5.85	8.36	0.700 ok	0.700	0.640-0.760
Acrylonitrile	6.29	8.36	0.752 ok	0.753	0.693-0.813
Acetonitrile	5.77	8.36	0.690 ok	0.690	0.630-0.750
1,3-Butadiene	5.18	8.36	0.620 ok	0.620	0.560-0.680
Benzene	9.76	10.06	0.970 ok	0.970	0.910-1.030
Bromodichloromethane	10.69	10.06	1.063 ok	1.063	1.003-1.123
Bromoform	15.07	14.34	1.051 ok	1.051	0.991-1.111
Bromomethane	5.39	8.36	0.645 ok	0.645	0.585-0.705
Bromoethene	5.77	8.36	0.690 ok	0.690	0.630-0.750
n-Butane	5.22	8.36	0.624 ok	0.624	0.564-0.684
Benzyl Chloride	17.61	14.34	1.228 ok	1.228	1.168-1.288
n-Butylbenzene	18.43	14.34	1.285 ok	1.285	1.225-1.345
sec-Butylbenzene	17.76	14.34	1.238 ok	1.238	1.178-1.298
tert-Butylbenzene	17.44	14.34	1.216 ok	1.216	1.156-1.276
Carbon disulfide	6.90	8.36	0.825 ok	0.825	0.765-0.885
Chlorobenzene	14.38	14.34	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	4.71	8.36	0.563 ok	0.563	0.503-0.623
Chloroethane	5.51	8.36	0.659 ok	0.659	0.599-0.719
Chloroform	8.46	8.36	1.012 ok	1.013	0.953-1.073
Chloromethane	4.91	8.36	0.587 ok	0.588	0.528-0.648
3-Chloropropene	6.72	8.36	0.804 ok	0.804	0.744-0.864
2-Chlorotoluene	16.69	14.34	1.164 ok	1.163	1.103-1.223
Carbon tetrachloride	9.89	8.36	1.183 ok	1.182	1.122-1.242
Cyclohexane	10.01	10.06	0.995 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.52	8.36	0.900 ok	0.900	0.840-0.960
1,1-Dichloroethylene	6.54	8.36	0.782 ok	0.783	0.723-0.843
1,2-Dibromoethane	13.20	14.34	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.12	8.36	1.091 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.51	10.06	1.045 ok	1.045	0.985-1.105
1,4-Dioxane	10.79	10.06	1.073 ok	1.071	1.011-1.131
Dichlorodifluoromethane	4.79	8.36	0.573 ok	0.573	0.513-0.633
Dibromochloromethane	12.96	14.34	0.904 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.36	8.36	0.880 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.21	8.36	0.982 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.55	10.06	1.148 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.63	14.34	1.229 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.10	14.34	1.262 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.71	14.34	1.235 ok	1.234	1.174-1.294

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.06	10.06	1.199 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.37	8.36	1.001 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.19	10.06	1.013 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.14	8.36	1.093 ok	1.092	1.032-1.152
Ethanol	5.61	8.36	0.671 ok	0.672	0.612-0.732
Ethylbenzene	14.78	14.34	1.031 ok	1.031	0.971-1.091
Ethyl Acetate	8.38	8.36	1.002 ok	1.003	0.943-1.063
4-Ethyltoluene	16.89	14.34	1.178 ok	1.178	1.118-1.238
Freon 113	6.82	8.36	0.816 ok	0.816	0.756-0.876
Freon 114	4.98	8.36	0.596 ok	0.596	0.536-0.656
Freon 123	5.85	8.36	0.700 ok	0.701	0.641-0.761
Freon 123A	5.90	8.36	0.706 ok	0.706	0.646-0.766
Freon 152A	4.67	8.36	0.559 ok	0.559	0.499-0.619
Heptane	10.98	10.06	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.34	1.437 ok	1.436	1.376-1.496
Hexachloroethane	18.88	14.34	1.317 ok	1.316	1.256-1.376
Hexane	8.37	8.36	1.001 ok	1.000	0.940-1.060
2-Hexanone	12.80	14.34	0.893 ok	0.893	0.833-0.953
Iodomethane	6.51	8.36	0.779 ok	0.778	0.718-0.838
Isopropylbenzene	16.14	14.34	1.126 ok	1.126	1.066-1.186
Isopropyl Alcohol	6.15	8.36	0.736 ok	0.736	0.676-0.796
p-Isopropyltoluene	17.95	14.34	1.252 ok	1.251	1.191-1.311
Methylene chloride	6.63	8.36	0.793 ok	0.793	0.733-0.853
Methyl ethyl ketone	7.85	8.36	0.939 ok	0.939	0.879-0.999
Methyl Isobutyl Ketone	11.60	10.06	1.153 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.58	8.36	0.907 ok	0.906	0.846-0.966
Methylmethacrylate	10.91	10.06	1.084 ok	1.084	1.024-1.144
Naphthalene	20.21	14.34	1.409 ok	1.408	1.348-1.468
Nonane	15.72	14.34	1.096 ok	1.096	1.036-1.156
Octane	13.50	14.34	0.941 ok	0.941	0.881-1.001
Pentane	6.31	8.36	0.755 ok	0.756	0.696-0.816
n-Propylbenzene	16.72	14.34	1.166 ok	1.166	1.106-1.226
Propylene	4.73	8.36	0.566 ok	0.566	0.506-0.626
Styrene	15.37	14.34	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.33	8.36	1.116 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.36	14.34	1.001 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.49	14.34	1.080 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.24	10.06	1.217 ok	1.216	1.156-1.276
1,2,4-Trichlorobenzene	20.09	14.34	1.401 ok	1.400	1.340-1.460

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,2,3-Trichloropropane	15.63	14.34	1.090 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.45	14.34	1.217 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	16.99	14.34	1.185 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.74	10.06	1.068 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.60	8.36	0.789 ok	0.791	0.731-0.851
Tetrachloroethylene	13.67	14.34	0.953 ok	0.954	0.894-1.014
Tetrahydrofuran	8.87	8.36	1.061 ok	1.059	0.999-1.119
Toluene	12.51	10.06	1.244 ok	1.243	1.183-1.303
Trichloroethylene	10.72	10.06	1.066 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.07	8.36	0.726 ok	0.726	0.666-0.786
Vinyl chloride	5.07	8.36	0.606 ok	0.608	0.548-0.668
Vinyl Acetate	7.62	8.36	0.911 ok	0.912	0.852-0.972
m,p-Xylene	14.97	14.34	1.044 ok	1.044	0.984-1.104
o-Xylene	15.49	14.34	1.080 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.32	8.36	0.756 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	10.98	10.06	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.36 ok	8.38	8.05-8.71	58241 ok	59710	35826-83594
1,4-Difluorobenzene	10.06 ok	10.07	9.74-10.40	266217 ok	265483	159290-371676
Chlorobenzene-D5	14.34 ok	14.35	14.02-14.68	118084 ok	128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.96	8.37	0.712 ok	0.713	0.653-0.773
Acrolein	5.86	8.37	0.700 ok	0.700	0.640-0.760
Acrylonitrile	6.29	8.37	0.751 ok	0.753	0.693-0.813
Acetonitrile	5.77	8.37	0.689 ok	0.690	0.630-0.750
1,3-Butadiene	5.18	8.37	0.619 ok	0.620	0.560-0.680
Benzene	9.76	10.07	0.969 ok	0.970	0.910-1.030
Bromodichloromethane	10.70	10.07	1.063 ok	1.063	1.003-1.123
Bromoform	15.08	14.35	1.051 ok	1.051	0.991-1.111
Bromomethane	5.39	8.37	0.644 ok	0.645	0.585-0.705
Bromoethene	5.77	8.37	0.689 ok	0.690	0.630-0.750
n-Butane	5.22	8.37	0.624 ok	0.624	0.564-0.684
Benzyl Chloride	17.61	14.35	1.227 ok	1.228	1.168-1.288
n-Butylbenzene	18.44	14.35	1.285 ok	1.285	1.225-1.345
sec-Butylbenzene	17.76	14.35	1.238 ok	1.238	1.178-1.298
tert-Butylbenzene	17.45	14.35	1.216 ok	1.216	1.156-1.276
Carbon disulfide	6.90	8.37	0.824 ok	0.825	0.765-0.885
Chlorobenzene	14.39	14.35	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	4.71	8.37	0.563 ok	0.563	0.503-0.623
Chloroethane	5.51	8.37	0.658 ok	0.659	0.599-0.719
Chloroform	8.48	8.37	1.013 ok	1.013	0.953-1.073
Chloromethane	4.92	8.37	0.588 ok	0.588	0.528-0.648
3-Chloropropene	6.73	8.37	0.804 ok	0.804	0.744-0.864
2-Chlorotoluene	16.69	14.35	1.163 ok	1.163	1.103-1.223
Carbon tetrachloride	9.90	8.37	1.183 ok	1.182	1.122-1.242
Cyclohexane	10.01	10.07	0.994 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.54	8.37	0.901 ok	0.900	0.840-0.960
1,1-Dichloroethylene	6.55	8.37	0.783 ok	0.783	0.723-0.843
1,2-Dibromoethane	13.21	14.35	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.12	8.37	1.090 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.52	10.07	1.045 ok	1.045	0.985-1.105
1,4-Dioxane	10.76	10.07	1.069 ok	1.071	1.011-1.131
Dichlorodifluoromethane	4.79	8.37	0.572 ok	0.573	0.513-0.633
Dibromochloromethane	12.96	14.35	0.903 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.37	8.37	0.881 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.23	8.37	0.983 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.55	10.07	1.147 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.63	14.35	1.229 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.11	14.35	1.262 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.71	14.35	1.234 ok	1.234	1.174-1.294

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.07	10.07	1.199 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.37	8.37	1.000 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.21	10.07	1.014 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.15	8.37	1.093 ok	1.092	1.032-1.152
Ethanol	5.61	8.37	0.670 ok	0.672	0.612-0.732
Ethylbenzene	14.79	14.35	1.031 ok	1.031	0.971-1.091
Ethyl Acetate	8.40	8.37	1.004 ok	1.003	0.943-1.063
4-Ethyltoluene	16.90	14.35	1.178 ok	1.178	1.118-1.238
Freon 113	6.83	8.37	0.816 ok	0.816	0.756-0.876
Freon 114	4.99	8.37	0.596 ok	0.596	0.536-0.656
Freon 123	5.87	8.37	0.701 ok	0.701	0.641-0.761
Freon 123A	5.90	8.37	0.705 ok	0.706	0.646-0.766
Freon 152A	4.67	8.37	0.558 ok	0.559	0.499-0.619
Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.35	1.436 ok	1.436	1.376-1.496
Hexachloroethane	18.88	14.35	1.316 ok	1.316	1.256-1.376
Hexane	8.38	8.37	1.001 ok	1.000	0.940-1.060
2-Hexanone	12.79	14.35	0.891 ok	0.893	0.833-0.953
Iodomethane	6.51	8.37	0.778 ok	0.778	0.718-0.838
Isopropylbenzene	16.15	14.35	1.125 ok	1.126	1.066-1.186
Isopropyl Alcohol	6.13	8.37	0.732 ok	0.736	0.676-0.796
p-Isopropyltoluene	17.95	14.35	1.251 ok	1.251	1.191-1.311
Methylene chloride	6.64	8.37	0.793 ok	0.793	0.733-0.853
Methyl ethyl ketone	7.86	8.37	0.939 ok	0.939	0.879-0.999
Methyl Isobutyl Ketone	11.59	10.07	1.151 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.58	8.37	0.906 ok	0.906	0.846-0.966
Methylmethacrylate	10.91	10.07	1.083 ok	1.084	1.024-1.144
Naphthalene	20.21	14.35	1.408 ok	1.408	1.348-1.468
Nonane	15.72	14.35	1.095 ok	1.096	1.036-1.156
Octane	13.51	14.35	0.941 ok	0.941	0.881-1.001
Pentane	6.33	8.37	0.756 ok	0.756	0.696-0.816
n-Propylbenzene	16.73	14.35	1.166 ok	1.166	1.106-1.226
Propylene	4.73	8.37	0.565 ok	0.566	0.506-0.626
Styrene	15.38	14.35	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.35	8.37	1.117 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.38	14.35	1.002 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.49	14.35	1.079 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.25	10.07	1.216 ok	1.216	1.156-1.276
1,2,4-Trichlorobenzene	20.08	14.35	1.399 ok	1.400	1.340-1.460

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,2,3-Trichloropropane	15.64	14.35	1.090 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.46	14.35	1.217 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	16.99	14.35	1.184 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.74	10.07	1.067 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.59	8.37	0.787 ok	0.791	0.731-0.851
Tetrachloroethylene	13.68	14.35	0.953 ok	0.954	0.894-1.014
Tetrahydrofuran	8.85	8.37	1.057 ok	1.059	0.999-1.119
Toluene	12.52	10.07	1.243 ok	1.243	1.183-1.303
Trichloroethylene	10.73	10.07	1.066 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.07	8.37	0.725 ok	0.726	0.666-0.786
Vinyl chloride	5.08	8.37	0.607 ok	0.608	0.548-0.668
Vinyl Acetate	7.63	8.37	0.912 ok	0.912	0.852-0.972
m,p-Xylene	14.98	14.35	1.044 ok	1.044	0.984-1.104
o-Xylene	15.49	14.35	1.079 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.32	8.37	0.755 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.37 ok	8.38	8.05-8.71	61447 ok	59710	35826-83594
1,4-Difluorobenzene	10.07 ok	10.07	9.74-10.40	278836 ok	265483	159290-371676
Chlorobenzene-D5	14.35 ok	14.35	14.02-14.68	144717 ok	128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.98	8.38	0.714 ok	0.713	0.653-0.773
Acrolein	5.87	8.38	0.700 ok	0.700	0.640-0.760
Acrylonitrile	6.31	8.38	0.753 ok	0.753	0.693-0.813
Acetonitrile	5.79	8.38	0.691 ok	0.690	0.630-0.750
1,3-Butadiene	5.20	8.38	0.621 ok	0.620	0.560-0.680
Benzene	9.77	10.07	0.970 ok	0.970	0.910-1.030
Bromodichloromethane	10.71	10.07	1.064 ok	1.063	1.003-1.123
Bromoform	15.08	14.35	1.051 ok	1.051	0.991-1.111
Bromomethane	5.41	8.38	0.646 ok	0.645	0.585-0.705
Bromoethene	5.79	8.38	0.691 ok	0.690	0.630-0.750
n-Butane	5.23	8.38	0.624 ok	0.624	0.564-0.684
Benzyl Chloride	17.61	14.35	1.227 ok	1.228	1.168-1.288
n-Butylbenzene	18.44	14.35	1.285 ok	1.285	1.225-1.345
sec-Butylbenzene	17.76	14.35	1.238 ok	1.238	1.178-1.298
tert-Butylbenzene	17.45	14.35	1.216 ok	1.216	1.156-1.276
Carbon disulfide	6.91	8.38	0.825 ok	0.825	0.765-0.885
Chlorobenzene	14.39	14.35	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	4.72	8.38	0.563 ok	0.563	0.503-0.623
Chloroethane	5.53	8.38	0.660 ok	0.659	0.599-0.719
Chloroform	8.48	8.38	1.012 ok	1.013	0.953-1.073
Chloromethane	4.93	8.38	0.588 ok	0.588	0.528-0.648
3-Chloropropene	6.74	8.38	0.804 ok	0.804	0.744-0.864
2-Chlorotoluene	16.69	14.35	1.163 ok	1.163	1.103-1.223
Carbon tetrachloride	9.90	8.38	1.181 ok	1.182	1.122-1.242
Cyclohexane	10.01	10.07	0.994 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.54	8.38	0.900 ok	0.900	0.840-0.960
1,1-Dichloroethylene	6.56	8.38	0.783 ok	0.783	0.723-0.843
1,2-Dibromoethane	13.21	14.35	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.13	8.38	1.089 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.52	10.07	1.045 ok	1.045	0.985-1.105
1,4-Dioxane	10.78	10.07	1.071 ok	1.071	1.011-1.131
Dichlorodifluoromethane	4.80	8.38	0.573 ok	0.573	0.513-0.633
Dibromochloromethane	12.96	14.35	0.903 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.38	8.38	0.881 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.23	8.38	0.982 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.56	10.07	1.148 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.63	14.35	1.229 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.11	14.35	1.262 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.71	14.35	1.234 ok	1.234	1.174-1.294

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.07	10.07	1.199 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.38	8.38	1.000 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.21	10.07	1.014 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.15	8.38	1.092 ok	1.092	1.032-1.152
Ethanol	5.64	8.38	0.673 ok	0.672	0.612-0.732
Ethylbenzene	14.79	14.35	1.031 ok	1.031	0.971-1.091
Ethyl Acetate	8.40	8.38	1.002 ok	1.003	0.943-1.063
4-Ethyltoluene	16.90	14.35	1.178 ok	1.178	1.118-1.238
Freon 113	6.84	8.38	0.816 ok	0.816	0.756-0.876
Freon 114	5.00	8.38	0.597 ok	0.596	0.536-0.656
Freon 123	5.87	8.38	0.700 ok	0.701	0.641-0.761
Freon 123A	5.91	8.38	0.705 ok	0.706	0.646-0.766
Freon 152A	4.69	8.38	0.560 ok	0.559	0.499-0.619
Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.35	1.436 ok	1.436	1.376-1.496
Hexachloroethane	18.88	14.35	1.316 ok	1.316	1.256-1.376
Hexane	8.38	8.38	1.000 ok	1.000	0.940-1.060
2-Hexanone	12.80	14.35	0.892 ok	0.893	0.833-0.953
Iodomethane	6.52	8.38	0.778 ok	0.778	0.718-0.838
Isopropylbenzene	16.15	14.35	1.125 ok	1.126	1.066-1.186
Isopropyl Alcohol	6.16	8.38	0.735 ok	0.736	0.676-0.796
p-Isopropyltoluene	17.95	14.35	1.251 ok	1.251	1.191-1.311
Methylene chloride	6.65	8.38	0.794 ok	0.793	0.733-0.853
Methyl ethyl ketone	7.87	8.38	0.939 ok	0.939	0.879-0.999
Methyl Isobutyl Ketone	11.60	10.07	1.152 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.59	8.38	0.906 ok	0.906	0.846-0.966
Methylmethacrylate	10.92	10.07	1.084 ok	1.084	1.024-1.144
Naphthalene	20.21	14.35	1.408 ok	1.408	1.348-1.468
Nonane	15.72	14.35	1.095 ok	1.096	1.036-1.156
Octane	13.51	14.35	0.941 ok	0.941	0.881-1.001
Pentane	6.34	8.38	0.757 ok	0.756	0.696-0.816
n-Propylbenzene	16.73	14.35	1.166 ok	1.166	1.106-1.226
Propylene	4.74	8.38	0.566 ok	0.566	0.506-0.626
Styrene	15.38	14.35	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.35	8.38	1.116 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.38	14.35	1.002 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.50	14.35	1.080 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.26	10.07	1.217 ok	1.216	1.156-1.276
1,2,4-Trichlorobenzene	20.09	14.35	1.400 ok	1.400	1.340-1.460

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,2,3-Trichloropropane	15.64	14.35	1.090 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.46	14.35	1.217 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	16.99	14.35	1.184 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.75	10.07	1.068 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.62	8.38	0.790 ok	0.791	0.731-0.851
Tetrachloroethylene	13.68	14.35	0.953 ok	0.954	0.894-1.014
Tetrahydrofuran	8.87	8.38	1.058 ok	1.059	0.999-1.119
Toluene	12.52	10.07	1.243 ok	1.243	1.183-1.303
Trichloroethylene	10.74	10.07	1.067 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.09	8.38	0.727 ok	0.726	0.666-0.786
Vinyl chloride	5.10	8.38	0.609 ok	0.608	0.548-0.668
Vinyl Acetate	7.64	8.38	0.912 ok	0.912	0.852-0.972
m,p-Xylene	14.98	14.35	1.044 ok	1.044	0.984-1.104
o-Xylene	15.49	14.35	1.079 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.34	8.38	0.757 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.38 ok	8.38	8.05-8.71	60663 ok	59710	35826-83594
1,4-Difluorobenzene	10.07 ok	10.07	9.74-10.40	278661 ok	265483	159290-371676
Chlorobenzene-D5	14.35 ok	14.35	14.02-14.68	135019 ok	128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.98	8.39	0.713 ok	0.713	0.653-0.773
Acrolein	5.88	8.39	0.701 ok	0.700	0.640-0.760
Acrylonitrile	6.32	8.39	0.753 ok	0.753	0.693-0.813
Acetonitrile	5.79	8.39	0.690 ok	0.690	0.630-0.750
1,3-Butadiene	5.21	8.39	0.621 ok	0.620	0.560-0.680
Benzene	9.78	10.09	0.969 ok	0.970	0.910-1.030
Bromodichloromethane	10.72	10.09	1.062 ok	1.063	1.003-1.123
Bromoform	15.10	14.36	1.052 ok	1.051	0.991-1.111
Bromomethane	5.42	8.39	0.646 ok	0.645	0.585-0.705
Bromoethene	5.79	8.39	0.690 ok	0.690	0.630-0.750
n-Butane	5.24	8.39	0.625 ok	0.624	0.564-0.684
Benzyl Chloride	17.63	14.36	1.228 ok	1.228	1.168-1.288
n-Butylbenzene	18.44	14.36	1.284 ok	1.285	1.225-1.345
sec-Butylbenzene	17.77	14.36	1.237 ok	1.238	1.178-1.298
tert-Butylbenzene	17.46	14.36	1.216 ok	1.216	1.156-1.276
Carbon disulfide	6.92	8.39	0.825 ok	0.825	0.765-0.885
Chlorobenzene	14.41	14.36	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	4.73	8.39	0.564 ok	0.563	0.503-0.623
Chloroethane	5.54	8.39	0.660 ok	0.659	0.599-0.719
Chloroform	8.50	8.39	1.013 ok	1.013	0.953-1.073
Chloromethane	4.94	8.39	0.589 ok	0.588	0.528-0.648
3-Chloropropene	6.75	8.39	0.805 ok	0.804	0.744-0.864
2-Chlorotoluene	16.71	14.36	1.164 ok	1.163	1.103-1.223
Carbon tetrachloride	9.91	8.39	1.181 ok	1.182	1.122-1.242
Cyclohexane	10.02	10.09	0.993 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.55	8.39	0.900 ok	0.900	0.840-0.960
1,1-Dichloroethylene	6.57	8.39	0.783 ok	0.783	0.723-0.843
1,2-Dibromoethane	13.22	14.36	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.15	8.39	1.091 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.54	10.09	1.045 ok	1.045	0.985-1.105
1,4-Dioxane	10.79	10.09	1.069 ok	1.071	1.011-1.131
Dichlorodifluoromethane	4.81	8.39	0.573 ok	0.573	0.513-0.633
Dibromochloromethane	12.98	14.36	0.904 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.38	8.39	0.880 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.24	8.39	0.982 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.57	10.09	1.147 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.64	14.36	1.228 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.11	14.36	1.261 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.72	14.36	1.234 ok	1.234	1.174-1.294

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.09	10.09	1.198 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.40	8.39	1.001 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.23	10.09	1.014 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.16	8.39	1.092 ok	1.092	1.032-1.152
Ethanol	5.66	8.39	0.675 ok	0.672	0.612-0.732
Ethylbenzene	14.80	14.36	1.031 ok	1.031	0.971-1.091
Ethyl Acetate	8.42	8.39	1.004 ok	1.003	0.943-1.063
4-Ethyltoluene	16.91	14.36	1.178 ok	1.178	1.118-1.238
Freon 113	6.85	8.39	0.816 ok	0.816	0.756-0.876
Freon 114	5.01	8.39	0.597 ok	0.596	0.536-0.656
Freon 123	5.88	8.39	0.701 ok	0.701	0.641-0.761
Freon 123A	5.93	8.39	0.707 ok	0.706	0.646-0.766
Freon 152A	4.70	8.39	0.560 ok	0.559	0.499-0.619
Heptane	11.01	10.09	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.36	1.435 ok	1.436	1.376-1.496
Hexachloroethane	18.88	14.36	1.315 ok	1.316	1.256-1.376
Hexane	8.39	8.39	1.000 ok	1.000	0.940-1.060
2-Hexanone	12.82	14.36	0.893 ok	0.893	0.833-0.953
Iodomethane	6.53	8.39	0.778 ok	0.778	0.718-0.838
Isopropylbenzene	16.16	14.36	1.125 ok	1.126	1.066-1.186
Isopropyl Alcohol	6.19	8.39	0.738 ok	0.736	0.676-0.796
p-Isopropyltoluene	17.96	14.36	1.251 ok	1.251	1.191-1.311
Methylene chloride	6.66	8.39	0.794 ok	0.793	0.733-0.853
Methyl ethyl ketone	7.89	8.39	0.940 ok	0.939	0.879-0.999
Methyl Isobutyl Ketone	11.62	10.09	1.152 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.60	8.39	0.906 ok	0.906	0.846-0.966
Methylmethacrylate	10.93	10.09	1.083 ok	1.084	1.024-1.144
Naphthalene	20.21	14.36	1.407 ok	1.408	1.348-1.468
Nonane	15.74	14.36	1.096 ok	1.096	1.036-1.156
Octane	13.52	14.36	0.942 ok	0.941	0.881-1.001
Pentane	6.35	8.39	0.757 ok	0.756	0.696-0.816
n-Propylbenzene	16.74	14.36	1.166 ok	1.166	1.106-1.226
Propylene	4.76	8.39	0.567 ok	0.566	0.506-0.626
Styrene	15.39	14.36	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.36	8.39	1.116 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.39	14.36	1.002 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.51	14.36	1.080 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.27	10.09	1.216 ok	1.216	1.156-1.276
1,2,4-Trichlorobenzene	20.09	14.36	1.399 ok	1.400	1.340-1.460

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,2,3-Trichloropropane	15.65	14.36	1.090 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.47	14.36	1.217 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	17.00	14.36	1.184 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.76	10.09	1.066 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.64	8.39	0.791 ok	0.791	0.731-0.851
Tetrachloroethylene	13.69	14.36	0.953 ok	0.954	0.894-1.014
Tetrahydrofuran	8.87	8.39	1.057 ok	1.059	0.999-1.119
Toluene	12.54	10.09	1.243 ok	1.243	1.183-1.303
Trichloroethylene	10.75	10.09	1.065 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.10	8.39	0.727 ok	0.726	0.666-0.786
Vinyl chloride	5.10	8.39	0.608 ok	0.608	0.548-0.668
Vinyl Acetate	7.66	8.39	0.913 ok	0.912	0.852-0.972
m,p-Xylene	14.99	14.36	1.044 ok	1.044	0.984-1.104
o-Xylene	15.50	14.36	1.079 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.35	8.39	0.757 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	11.01	10.09	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.39 ok	8.38	8.05-8.71	61174 ok	59710	35826-83594
1,4-Difluorobenzene	10.09 ok	10.07	9.74-10.40	279042 ok	265483	159290-371676
Chlorobenzene-D5	14.36 ok	14.35	14.02-14.68	148927 ok	128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15	
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15	
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15	
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15	
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15	
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15	Reporting this level
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15	
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15	
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.98	8.40	0.712 ok	0.713	0.653-0.773
Acrolein	5.88	8.40	0.700 ok	0.700	0.640-0.760
Acrylonitrile	6.32	8.40	0.752 ok	0.753	0.693-0.813
Acetonitrile	5.79	8.40	0.689 ok	0.690	0.630-0.750
1,3-Butadiene	5.21	8.40	0.620 ok	0.620	0.560-0.680
Benzene	9.79	10.09	0.970 ok	0.970	0.910-1.030
Bromodichloromethane	10.73	10.09	1.063 ok	1.063	1.003-1.123
Bromoform	15.10	14.36	1.052 ok	1.051	0.991-1.111
Bromomethane	5.41	8.40	0.644 ok	0.645	0.585-0.705
Bromoethene	5.80	8.40	0.690 ok	0.690	0.630-0.750
n-Butane	5.24	8.40	0.624 ok	0.624	0.564-0.684
Benzyl Chloride	17.63	14.36	1.228 ok	1.228	1.168-1.288
n-Butylbenzene	18.44	14.36	1.284 ok	1.285	1.225-1.345
sec-Butylbenzene	17.77	14.36	1.237 ok	1.238	1.178-1.298
tert-Butylbenzene	17.46	14.36	1.216 ok	1.216	1.156-1.276
Carbon disulfide	6.92	8.40	0.824 ok	0.825	0.765-0.885
Chlorobenzene	14.41	14.36	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	4.73	8.40	0.563 ok	0.563	0.503-0.623
Chloroethane	5.54	8.40	0.660 ok	0.659	0.599-0.719
Chloroform	8.51	8.40	1.013 ok	1.013	0.953-1.073
Chloromethane	4.94	8.40	0.588 ok	0.588	0.528-0.648
3-Chloropropene	6.75	8.40	0.804 ok	0.804	0.744-0.864
2-Chlorotoluene	16.71	14.36	1.164 ok	1.163	1.103-1.223
Carbon tetrachloride	9.91	8.40	1.180 ok	1.182	1.122-1.242
Cyclohexane	10.02	10.09	0.993 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.56	8.40	0.900 ok	0.900	0.840-0.960
1,1-Dichloroethylene	6.57	8.40	0.782 ok	0.783	0.723-0.843
1,2-Dibromoethane	13.23	14.36	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.15	8.40	1.089 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.54	10.09	1.045 ok	1.045	0.985-1.105
1,4-Dioxane	10.79	10.09	1.069 ok	1.071	1.011-1.131
Dichlorodifluoromethane	4.81	8.40	0.573 ok	0.573	0.513-0.633
Dibromochloromethane	12.99	14.36	0.905 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.39	8.40	0.880 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.25	8.40	0.982 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.58	10.09	1.148 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.64	14.36	1.228 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.11	14.36	1.261 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.72	14.36	1.234 ok	1.234	1.174-1.294

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.10	10.09	1.199 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.40	8.40	1.000 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.23	10.09	1.014 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.16	8.40	1.090 ok	1.092	1.032-1.152
Ethanol	5.65	8.40	0.673 ok	0.672	0.612-0.732
Ethylbenzene	14.80	14.36	1.031 ok	1.031	0.971-1.091
Ethyl Acetate	8.43	8.40	1.004 ok	1.003	0.943-1.063
4-Ethyltoluene	16.91	14.36	1.178 ok	1.178	1.118-1.238
Freon 113	6.85	8.40	0.815 ok	0.816	0.756-0.876
Freon 114	5.01	8.40	0.596 ok	0.596	0.536-0.656
Freon 123	5.88	8.40	0.700 ok	0.701	0.641-0.761
Freon 123A	5.93	8.40	0.706 ok	0.706	0.646-0.766
Freon 152A	4.70	8.40	0.560 ok	0.559	0.499-0.619
Heptane	11.01	10.09	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.36	1.435 ok	1.436	1.376-1.496
Hexachloroethane	18.89	14.36	1.315 ok	1.316	1.256-1.376
Hexane	8.40	8.40	1.000 ok	1.000	0.940-1.060
2-Hexanone	12.82	14.36	0.893 ok	0.893	0.833-0.953
Iodomethane	6.53	8.40	0.777 ok	0.778	0.718-0.838
Isopropylbenzene	16.17	14.36	1.126 ok	1.126	1.066-1.186
Isopropyl Alcohol	6.19	8.40	0.737 ok	0.736	0.676-0.796
p-Isopropyltoluene	17.96	14.36	1.251 ok	1.251	1.191-1.311
Methylene chloride	6.66	8.40	0.793 ok	0.793	0.733-0.853
Methyl ethyl ketone	7.89	8.40	0.939 ok	0.939	0.879-0.999
Methyl Isobutyl Ketone	11.62	10.09	1.152 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.60	8.40	0.905 ok	0.906	0.846-0.966
Methylmethacrylate	10.94	10.09	1.084 ok	1.084	1.024-1.144
Naphthalene	20.21	14.36	1.407 ok	1.408	1.348-1.468
Nonane	15.74	14.36	1.096 ok	1.096	1.036-1.156
Octane	13.52	14.36	0.942 ok	0.941	0.881-1.001
Pentane	6.35	8.40	0.756 ok	0.756	0.696-0.816
n-Propylbenzene	16.75	14.36	1.166 ok	1.166	1.106-1.226
Propylene	4.76	8.40	0.567 ok	0.566	0.506-0.626
Styrene	15.39	14.36	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.37	8.40	1.115 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.39	14.36	1.002 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.52	14.36	1.081 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.27	10.09	1.216 ok	1.216	1.156-1.276
1,2,4-Trichlorobenzene	20.09	14.36	1.399 ok	1.400	1.340-1.460

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,2,3-Trichloropropane	15.66	14.36	1.091 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.47	14.36	1.217 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	17.00	14.36	1.184 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.76	10.09	1.066 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.64	8.40	0.790 ok	0.791	0.731-0.851
Tetrachloroethylene	13.69	14.36	0.953 ok	0.954	0.894-1.014
Tetrahydrofuran	8.87	8.40	1.056 ok	1.059	0.999-1.119
Toluene	12.54	10.09	1.243 ok	1.243	1.183-1.303
Trichloroethylene	10.76	10.09	1.066 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.10	8.40	0.726 ok	0.726	0.666-0.786
Vinyl chloride	5.10	8.40	0.607 ok	0.608	0.548-0.668
Vinyl Acetate	7.66	8.40	0.912 ok	0.912	0.852-0.972
m,p-Xylene	15.00	14.36	1.045 ok	1.044	0.984-1.104
o-Xylene	15.51	14.36	1.080 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.35	8.40	0.756 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	11.01	10.09	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.40 ok	8.38	8.05-8.71	61826 ok	59710	35826-83594
1,4-Difluorobenzene	10.09 ok	10.07	9.74-10.40	267216 ok	265483	159290-371676
Chlorobenzene-D5	14.36 ok	14.35	14.02-14.68	155963 ok	128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.98	8.37	0.714 ok	0.713	0.653-0.773
Acrolein	5.88	8.37	0.703 ok	0.700	0.640-0.760
Acrylonitrile	6.31	8.37	0.754 ok	0.753	0.693-0.813
Acetonitrile	5.79	8.37	0.692 ok	0.690	0.630-0.750
1,3-Butadiene	5.19	8.37	0.620 ok	0.620	0.560-0.680
Benzene	9.76	10.07	0.969 ok	0.970	0.910-1.030
Bromodichloromethane	10.70	10.07	1.063 ok	1.063	1.003-1.123
Bromoform	15.07	14.34	1.051 ok	1.051	0.991-1.111
Bromomethane	5.40	8.37	0.645 ok	0.645	0.585-0.705
Bromoethene	5.77	8.37	0.689 ok	0.690	0.630-0.750
n-Butane	5.23	8.37	0.625 ok	0.624	0.564-0.684
Benzyl Chloride	17.62	14.34	1.229 ok	1.228	1.168-1.288
n-Butylbenzene	18.44	14.34	1.286 ok	1.285	1.225-1.345
sec-Butylbenzene	17.76	14.34	1.238 ok	1.238	1.178-1.298
tert-Butylbenzene	17.45	14.34	1.217 ok	1.216	1.156-1.276
Carbon disulfide	6.91	8.37	0.826 ok	0.825	0.765-0.885
Chlorobenzene	14.38	14.34	1.003 ok	1.003	0.943-1.063
Chlorodifluoromethane	4.71	8.37	0.563 ok	0.563	0.503-0.623
Chloroethane	5.53	8.37	0.661 ok	0.659	0.599-0.719
Chloroform	8.48	8.37	1.013 ok	1.013	0.953-1.073
Chloromethane	4.92	8.37	0.588 ok	0.588	0.528-0.648
3-Chloropropene	6.74	8.37	0.805 ok	0.804	0.744-0.864
2-Chlorotoluene	16.69	14.34	1.164 ok	1.163	1.103-1.223
Carbon tetrachloride	9.89	8.37	1.182 ok	1.182	1.122-1.242
Cyclohexane	10.01	10.07	0.994 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.54	8.37	0.901 ok	0.900	0.840-0.960
1,1-Dichloroethylene	6.55	8.37	0.783 ok	0.783	0.723-0.843
1,2-Dibromoethane	13.21	14.34	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.12	8.37	1.090 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.52	10.07	1.045 ok	1.045	0.985-1.105
1,4-Dioxane	10.85	10.07	1.077 ok	1.071	1.011-1.131
Dichlorodifluoromethane	4.79	8.37	0.572 ok	0.573	0.513-0.633
Dibromochloromethane	12.96	14.34	0.904 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.37	8.37	0.881 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.23	8.37	0.983 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.56	10.07	1.148 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.63	14.34	1.229 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.10	14.34	1.262 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.71	14.34	1.235 ok	1.234	1.174-1.294

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.07	10.07	1.199 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.38	8.37	1.001 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.21	10.07	1.014 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.14	8.37	1.092 ok	1.092	1.032-1.152
Ethanol	5.65	8.37	0.675 ok	0.672	0.612-0.732
Ethylbenzene	14.78	14.34	1.031 ok	1.031	0.971-1.091
Ethyl Acetate	8.40	8.37	1.004 ok	1.003	0.943-1.063
4-Ethyltoluene	16.89	14.34	1.178 ok	1.178	1.118-1.238
Freon 113	6.84	8.37	0.817 ok	0.816	0.756-0.876
Freon 114	4.99	8.37	0.596 ok	0.596	0.536-0.656
Freon 123	5.87	8.37	0.701 ok	0.701	0.641-0.761
Freon 123A	5.91	8.37	0.706 ok	0.706	0.646-0.766
Freon 152A	4.68	8.37	0.559 ok	0.559	0.499-0.619
Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.34	1.437 ok	1.436	1.376-1.496
Hexachloroethane	18.88	14.34	1.317 ok	1.316	1.256-1.376
Hexane	8.37	8.37	1.000 ok	1.000	0.940-1.060
2-Hexanone	12.83	14.34	0.895 ok	0.893	0.833-0.953
Iodomethane	6.52	8.37	0.779 ok	0.778	0.718-0.838
Isopropylbenzene	16.15	14.34	1.126 ok	1.126	1.066-1.186
Isopropyl Alcohol	6.21	8.37	0.742 ok	0.736	0.676-0.796
p-Isopropyltoluene	17.95	14.34	1.252 ok	1.251	1.191-1.311
Methylene chloride	6.65	8.37	0.795 ok	0.793	0.733-0.853
Methyl ethyl ketone	7.88	8.37	0.941 ok	0.939	0.879-0.999
Methyl Isobutyl Ketone	11.63	10.07	1.155 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.60	8.37	0.908 ok	0.906	0.846-0.966
Methylmethacrylate	10.91	10.07	1.083 ok	1.084	1.024-1.144
Naphthalene	20.21	14.34	1.409 ok	1.408	1.348-1.468
Nonane	15.72	14.34	1.096 ok	1.096	1.036-1.156
Octane	13.50	14.34	0.941 ok	0.941	0.881-1.001
Pentane	6.33	8.37	0.756 ok	0.756	0.696-0.816
n-Propylbenzene	16.73	14.34	1.167 ok	1.166	1.106-1.226
Propylene	4.74	8.37	0.566 ok	0.566	0.506-0.626
Styrene	15.37	14.34	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.35	8.37	1.117 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.38	14.34	1.003 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.50	14.34	1.081 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.24	10.07	1.215 ok	1.216	1.156-1.276
1,2,4-Trichlorobenzene	20.09	14.34	1.401 ok	1.400	1.340-1.460

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,2,3-Trichloropropane	15.64	14.34	1.091 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.45	14.34	1.217 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	16.99	14.34	1.185 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.74	10.07	1.067 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.67	8.37	0.797 ok	0.791	0.731-0.851
Tetrachloroethylene	13.68	14.34	0.954 ok	0.954	0.894-1.014
Tetrahydrofuran	8.90	8.37	1.063 ok	1.059	0.999-1.119
Toluene	12.52	10.07	1.243 ok	1.243	1.183-1.303
Trichloroethylene	10.73	10.07	1.066 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.09	8.37	0.728 ok	0.726	0.666-0.786
Vinyl chloride	5.09	8.37	0.608 ok	0.608	0.548-0.668
Vinyl Acetate	7.64	8.37	0.913 ok	0.912	0.852-0.972
m,p-Xylene	14.97	14.34	1.044 ok	1.044	0.984-1.104
o-Xylene	15.49	14.34	1.080 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.33	8.37	0.756 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	10.99	10.07	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.37 ok	8.38	8.05-8.71	58908 ok	59710	35826-83594
1,4-Difluorobenzene	10.07 ok	10.07	9.74-10.40	248733 ok	265483	159290-371676
Chlorobenzene-D5	14.34 ok	14.35	14.02-14.68	105749 ok	128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15 Reporting this level
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acrylonitrile	6.30	8.37	0.753 ok	0.753	0.693-0.813
1,3-Butadiene	5.18	8.37	0.619 ok	0.620	0.560-0.680
Benzene	9.76	10.06	0.970 ok	0.970	0.910-1.030
Bromodichloromethane	10.71	10.06	1.065 ok	1.063	1.003-1.123
Bromoforn	15.07	14.34	1.051 ok	1.051	0.991-1.111
Bromomethane	5.40	8.37	0.645 ok	0.645	0.585-0.705
Bromoethene	5.78	8.37	0.691 ok	0.690	0.630-0.750
n-Butane	5.23	8.37	0.625 ok	0.624	0.564-0.684
Benzyl Chloride	17.61	14.34	1.228 ok	1.228	1.168-1.288
Carbon disulfide	6.90	8.37	0.824 ok	0.825	0.765-0.885
Chlorobenzene	14.39	14.34	1.003 ok	1.003	0.943-1.063
Chloroethane	5.52	8.37	0.659 ok	0.659	0.599-0.719
Chloroform	8.47	8.37	1.012 ok	1.013	0.953-1.073
Carbon tetrachloride	9.88	8.37	1.180 ok	1.182	1.122-1.242
Cyclohexane	10.00	10.06	0.994 ok	0.994	0.934-1.054
1,1-Dichloroethane	7.52	8.37	0.898 ok	0.900	0.840-0.960
1,2-Dibromoethane	13.21	14.34	0.921 ok	0.921	0.861-0.981
1,2-Dichloroethane	9.12	8.37	1.090 ok	1.090	1.030-1.150
1,2-Dichloropropane	10.51	10.06	1.045 ok	1.045	0.985-1.105
Dichlorodifluoromethane	4.79	8.37	0.572 ok	0.573	0.513-0.633
Dibromochloromethane	12.96	14.34	0.904 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.37	8.37	0.881 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.23	8.37	0.983 ok	0.982	0.922-1.042
cis-1,3-Dichloropropene	11.55	10.06	1.148 ok	1.148	1.088-1.208
m-Dichlorobenzene	17.63	14.34	1.229 ok	1.229	1.169-1.289
o-Dichlorobenzene	18.10	14.34	1.262 ok	1.262	1.202-1.322
p-Dichlorobenzene	17.71	14.34	1.235 ok	1.234	1.174-1.294
trans-1,3-Dichloropropene	12.06	10.06	1.199 ok	1.199	1.139-1.259
Di-Isopropyl ether	8.37	8.37	1.000 ok	1.000	0.940-1.060
2,3-Dimethylpentane	10.21	10.06	1.015 ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.13	8.37	1.091 ok	1.092	1.032-1.152
Ethylbenzene	14.78	14.34	1.031 ok	1.031	0.971-1.091
4-Ethyltoluene	16.89	14.34	1.178 ok	1.178	1.118-1.238
Freon 113	6.82	8.37	0.815 ok	0.816	0.756-0.876
Freon 114	4.99	8.37	0.596 ok	0.596	0.536-0.656
Freon 123	5.86	8.37	0.700 ok	0.701	0.641-0.761
Freon 123A	5.91	8.37	0.706 ok	0.706	0.646-0.766
Heptane	10.98	10.06	1.091 ok	1.091	1.031-1.151
Hexachlorobutadiene	20.61	14.34	1.437 ok	1.436	1.376-1.496

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
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Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Hexachloroethane	18.88	14.34	1.317 ok	1.316	1.256-1.376
Hexane	8.37	8.37	1.000 ok	1.000	0.940-1.060
2-Hexanone	12.82	14.34	0.894 ok	0.893	0.833-0.953
Iodomethane	6.51	8.37	0.778 ok	0.778	0.718-0.838
Isopropylbenzene	16.15	14.34	1.126 ok	1.126	1.066-1.186
p-Isopropyltoluene	17.94	14.34	1.251 ok	1.251	1.191-1.311
Methyl Isobutyl Ketone	11.63	10.06	1.156 ok	1.153	1.093-1.213
Methyl Tert Butyl Ether	7.60	8.37	0.908 ok	0.906	0.846-0.966
Methylmethacrylate	10.92	10.06	1.085 ok	1.084	1.024-1.144
Octane	13.50	14.34	0.941 ok	0.941	0.881-1.001
Propylene	4.74	8.37	0.566 ok	0.566	0.506-0.626
Styrene	15.37	14.34	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.33	8.37	1.115 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.37	14.34	1.002 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.49	14.34	1.080 ok	1.080	1.020-1.140
1,1,2-Trichloroethane	12.24	10.06	1.217 ok	1.216	1.156-1.276
1,2,3-Trichloropropane	15.63	14.34	1.090 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.46	14.34	1.218 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	16.99	14.34	1.185 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.74	10.06	1.068 ok	1.067	1.007-1.127
Tertiary Butyl Alcohol	6.66	8.37	0.796 ok	0.791	0.731-0.851
Tetrachloroethylene	13.68	14.34	0.954 ok	0.954	0.894-1.014
Toluene	12.52	10.06	1.245 ok	1.243	1.183-1.303
Trichloroethylene	10.72	10.06	1.066 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.07	8.37	0.725 ok	0.726	0.666-0.786
Vinyl chloride	5.09	8.37	0.608 ok	0.608	0.548-0.668
m,p-Xylene	14.97	14.34	1.044 ok	1.044	0.984-1.104
o-Xylene	15.49	14.34	1.080 ok	1.080	1.020-1.140
TVHC As Equiv Pentane	6.32	8.37	0.755 ok	0.756	0.696-0.816
TVHC As Equiv Heptane	10.98	10.06	1.091 ok	1.091	1.031-1.151

Internal Standard	RT (min.)	Mean RT (min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.37 ok	8.38	8.05-8.71	56871	ok 59710	35826-83594
1,4-Difluorobenzene	10.06 ok	10.07	9.74-10.40	245716	ok 265483	159290-371676
Chlorobenzene-D5	14.34 ok	14.35	14.02-14.68	104700	ok 128650	77190-180110

5.7.2
5

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JA99139
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Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Benzene	9.74	10.06	0.968 ok	0.970	0.910-1.030
Bromodichloromethane	10.69	10.06	1.063 ok	1.063	1.003-1.123
n-Butane	5.22	8.37	0.624 ok	0.624	0.564-0.684
Chlorobenzene	14.38	14.34	1.003 ok	1.003	0.943-1.063
Chloroform	8.48	8.37	1.013 ok	1.013	0.953-1.073
Carbon tetrachloride	9.89	8.37	1.182 ok	1.182	1.122-1.242
1,1-Dichloroethane	7.54	8.37	0.901 ok	0.900	0.840-0.960
1,2-Dibromoethane	13.20	14.34	0.921 ok	0.921	0.861-0.981
Dichlorodifluoromethane	4.79	8.37	0.572 ok	0.573	0.513-0.633
Dibromochloromethane	12.96	14.34	0.904 ok	0.904	0.844-0.964
trans-1,2-Dichloroethylene	7.36	8.37	0.879 ok	0.880	0.820-0.940
cis-1,2-Dichloroethylene	8.21	8.37	0.981 ok	0.982	0.922-1.042
Ethylbenzene	14.78	14.34	1.031 ok	1.031	0.971-1.091
4-Ethyltoluene	16.89	14.34	1.178 ok	1.178	1.118-1.238
Freon 113	6.82	8.37	0.815 ok	0.816	0.756-0.876
Freon 114	4.99	8.37	0.596 ok	0.596	0.536-0.656
Freon 123	5.87	8.37	0.701 ok	0.701	0.641-0.761
Freon 123A	5.91	8.37	0.706 ok	0.706	0.646-0.766
Heptane	10.98	10.06	1.091 ok	1.091	1.031-1.151
Hexane	8.38	8.37	1.001 ok	1.000	0.940-1.060
2-Hexanone	12.83	14.34	0.895 ok	0.893	0.833-0.953
Iodomethane	6.51	8.37	0.778 ok	0.778	0.718-0.838
Isopropylbenzene	16.15	14.34	1.126 ok	1.126	1.066-1.186
Methyl Tert Butyl Ether	7.59	8.37	0.907 ok	0.906	0.846-0.966
Octane	13.50	14.34	0.941 ok	0.941	0.881-1.001
Propylene	4.74	8.37	0.566 ok	0.566	0.506-0.626
Styrene	15.37	14.34	1.072 ok	1.072	1.012-1.132
1,1,1-Trichloroethane	9.33	8.37	1.115 ok	1.116	1.056-1.176
1,1,1,2-Tetrachloroethane	14.36	14.34	1.001 ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	15.50	14.34	1.081 ok	1.080	1.020-1.140
1,2,3-Trichloropropane	15.64	14.34	1.091 ok	1.090	1.030-1.150
1,2,4-Trimethylbenzene	17.46	14.34	1.218 ok	1.217	1.157-1.277
1,3,5-Trimethylbenzene	16.99	14.34	1.185 ok	1.184	1.124-1.244
2,2,4-Trimethylpentane	10.74	10.06	1.068 ok	1.067	1.007-1.127
Tetrachloroethylene	13.68	14.34	0.954 ok	0.954	0.894-1.014
Toluene	12.52	10.06	1.245 ok	1.243	1.183-1.303
Trichloroethylene	10.73	10.06	1.067 ok	1.066	1.006-1.126
Trichlorofluoromethane	6.07	8.37	0.725 ok	0.726	0.666-0.786
m,p-Xylene	14.99	14.34	1.045 ok	1.044	0.984-1.104

5.7.2
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Initial Calibration Retention Time/Internal Standard Area Summary

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Project: 220 Water Street, Brooklyn, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
VW1417-ICC1417	W34784.D	01/18/12 19:17	YMH	10	GCMSW	TO-15
VW1417-IC1417	W34785.D	01/18/12 19:57	YMH	0.5	GCMSW	TO-15
VW1417-IC1417	W34786.D	01/18/12 20:37	YMH	15	GCMSW	TO-15
VW1417-IC1417	W34787.D	01/18/12 21:17	YMH	5.0	GCMSW	TO-15
VW1417-IC1417	W34789.D	01/18/12 22:37	YMH	20	GCMSW	TO-15
VW1417-IC1417	W34793.D	01/19/12 01:17	YMH	40	GCMSW	TO-15
VW1417-IC1417	W34796.D	01/19/12 11:38	YMH	0.2	GCMSW	TO-15
VW1417-IC1417	W34797.D	01/19/12 12:19	YMH	0.1	GCMSW	TO-15
VW1417-IC1417	W34798.D	01/19/12 12:59	YMH	0.04	GCMSW	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
o-Xylene	15.49	14.34	1.080 ok	1.080	1.020-1.140

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.37 ok	8.38	8.05-8.71	58276 ok	59710	35826-83594
1,4-Difluorobenzene	10.06 ok	10.07	9.74-10.40	256661 ok	265483	159290-371676
Chlorobenzene-D5	14.34 ok	14.35	14.02-14.68	110462 ok	128650	77190-180110

5.7.2
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Volatile Surrogate Recovery Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Method: TO-15	Matrix: AIR
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JA99139-1	2W34272.D	96.0
JA99237-1DUP	2W34274.D	89.0
V2W1442-BS	2W34265.D	99.0
V2W1442-BSD	2W34266.D	100.0
V2W1442-MB	2W34269.D	84.0
VW1423-SCC	W34949.D	94.0
VW1423-BS	W34942.D	114.0
VW1423-BSD	W34943.D	113.0
VW1423-MB	W34944.D	103.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	65-128%

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Initial Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1426-ICC1426
Lab FileID: 2W33866.D

Response Factor Report MS2W

Method Path : C:\msdchem\1\METHODS\
 Method File : M2W1426.M
 Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 Last Update : Tue Jan 17 10:35:27 2012
 Response Via : Initial Calibration

Calibration Files

0.04=2W33871.D 0.1 =2W33870.D 0.2 =2W33865.D 0.5 =2W33867.D 5.0 =2W33869.D 10. =2W33866.D 20. =2W33868.D
 40 =2W33872.D 15 =2W33863.D

Compound	0.04	0.1	0.2	0.5	5.0	10.	20.	40	15	Avg	%RSD
1) I BROMOCHLOROMETHANE	-----ISTD-----										
2) FREON 115										0.000	-1.00
3) DICHLORODIFLUORO...	5.022	5.201	5.914	5.455	4.909	4.857	4.602	4.178	4.242	4.931	11.28
4) FREON 152A			1.052	0.928	0.969	0.951	0.906	0.821	0.870	0.928	7.97
5) CHLORODIFLUORO...	0.488	0.516	0.462	0.445	0.462	0.429	0.398	0.394	0.449	9.36	
6) PROPYLENE		1.420	1.185	1.021	0.933	0.883	0.800	0.824	1.009	22.13	
7) FREON 114	5.436	5.557	5.942	5.384	5.101	4.721	4.598	4.208	4.406	5.039	11.63
8) CHLOROMETHANE	0.277	0.403	0.427	0.423	0.402	0.362	0.355	0.303	0.330	0.365	14.71
9) VINYL CHLORIDE	1.355	1.613	1.623	1.643	1.664	1.480	1.452	1.273	1.397	1.500	9.46
10) 1,3-BUTADIENE	1.002	1.119	1.146	1.085	1.060	1.038	0.978	0.859	0.960	1.027	8.62
11) n-BUTANE			2.702	2.364	2.016	1.934	1.777	1.555	1.756	2.015	19.60
12) BROMOMETHANE	1.451	1.611	1.929	1.800	1.724	1.603	1.503	1.353	1.625	1.622	10.96
13) CHLOROETHANE		0.885	0.932	0.813	0.796	0.758	0.711	0.632	0.812	0.792	11.92
14) DICHLOROFLUORO...	3.648	3.593	3.847	3.447	3.074	3.114	2.948	2.696	3.202	3.285	11.34
15) ACRROLEIN			0.289	0.348	0.296	0.345	0.368	0.360	0.398	0.344	11.26
16) FREON 123	4.212	3.877	4.367	3.687	3.280	3.376	3.264	2.965	3.580	3.623	12.77
17) FREON 123A	2.627	2.515	2.876	2.482	2.094	2.271	2.183	2.021	2.308	2.375	11.55
18) TRICHLOROFLUORO...	5.454	5.234	5.415	4.967	4.721	4.777	4.521	4.232	4.442	4.863	8.97
19) ISOPROPYL ALCOHOL			1.863	1.646	1.692	1.764	1.741	1.389	1.825	1.703	9.22
20) ACETONE			0.481	0.449	0.355	0.419	0.429	0.421	0.458	0.430	9.31
21) PENTANE			1.510	1.186	1.084	0.963	0.987	0.854	1.042	1.089	19.50
22) ACRYLONITRILE			0.532	0.560	0.476	0.608	0.673	0.649	0.693	0.599	13.33
23) H TVHC as EQUIV ...	5.531	7.342	5.709	5.393	5.259	5.302	4.584	5.507	5.578	14.11	
24) IODOMETHANE	4.399	4.508	4.869	4.495	4.347	4.342	4.188	3.886	4.364	4.378	6.01
25) 1,1-DICHLOROET...	1.869	1.649	1.813	1.562	1.505	1.480	1.443	1.315	1.501	1.571	11.32
26) CARBON DISULFIDE	3.811	3.626	3.935	3.509	3.372	3.160	3.099	2.860	3.258	3.403	10.28
27) ETHANOL			0.326	0.364	0.340	0.359	0.278	0.390	0.343	11.28	
28) BROMOETHENE	1.455	1.718	1.708	1.676	1.684	1.571	1.504	1.381	1.644	1.594	7.66
29) ACETONITRILE			0.866	0.513	0.407	0.510	0.545	0.496	0.617	0.565	26.01
30) METHYLENE CHLO...			1.599	1.285	1.139	1.159	1.149	1.047	1.216	1.228	14.59
31) 3-CHLOROPROPENE			0.760	0.586	0.585	0.611	0.609	0.557	0.647	0.622	10.78
32) FREON 113		2.932	3.387	3.039	2.775	2.954	2.851	2.652	2.960	2.944	7.35
33) TRANS-1,2-DICH...	1.346	1.319	1.249	1.221	1.333	1.301	1.217	1.387	1.296	4.77	
34) TERTIARY BUTYL...	2.106	3.205	2.660	2.585	2.732	2.698	2.241	2.673	2.612	12.73	
35) METHYL TERTIAR...	3.309	4.493	3.642	2.756	3.420	3.503	3.418	3.449	3.499	13.71	
36) TETRAHYDROFURAN			0.542	0.442	0.418	0.479	0.531	0.532	0.489	0.491	9.77
37) HEXANE	2.169	2.009	2.058	1.752	1.695	1.685	1.794	1.681	1.783	1.847	9.90
38) VINYL ACETATE			0.106	0.163	0.208	0.268	0.306	0.310	0.298	0.237	33.67
39) 1,1-DICHLOROET...	2.392	2.803	2.344	2.190	2.325	2.335	2.140	2.422	2.369	8.44	
40) METHYL ETHYL K...			0.383	0.400	0.387	0.467	0.493	0.499	0.486	0.445	11.81
41) cis-1,2-DICHLLO...	1.651	1.698	1.741	1.371	1.348	1.431	1.460	1.367	1.489	1.506	10.05
42) ETHYL ACETATE			0.204	0.278	0.224	0.243	0.281	0.290	0.276	0.257	12.86
43) METHYL ACRYLATE			1.364	1.258	1.240	1.490	1.755	1.827	1.634	1.510	15.62
44) CHLOROFORM	3.398	3.326	3.562	2.935	2.787	3.021	3.039	2.907	2.936	3.101	8.48
45) 2,4-DIMETHYLPE...	2.677	2.426	2.628	2.088	2.044	2.059	2.232	2.091	2.110	2.262	11.11

5.91
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Initial Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1426-ICC1426
Lab FileID: 2W33866.D

46)	1,1,1-TRICHLOR...	3.683	3.894	4.246	3.421	3.141	3.564	3.507	3.352	3.321	3.570	9.36
47)	CARBON TETRACH...	4.301	4.196	4.521	3.931	3.530	4.064	3.929	3.802	3.724	4.000	7.66
48)	1,2-DICHLOROET...		1.529	1.897	1.478	1.559	1.842	1.880	1.837	1.739	1.720	9.99
49) I	1,4-DIFLUOROBENZENE	-----ISTD-----										
50)	BENZENE	1.113	1.147	0.914	0.860	0.902	0.937	0.877	0.977	0.966		11.17
51)	CYCLOHEXANE		0.616	0.528	0.427	0.433	0.433	0.403	0.445	0.469		16.08
52)	2,3-DIMETHYLPE...	0.257	0.280	0.240	0.204	0.207	0.212	0.198	0.204	0.225		13.49
53)	DIBROMOMETHANE	0.549	0.481	0.501	0.438	0.409	0.440	0.450	0.440	0.446	0.462	9.15
54)	TRICHLOROETHYLENE	0.589	0.566	0.553	0.508	0.406	0.433	0.443	0.435	0.430	0.485	14.36
55)	1,2-DICHLOROPR...		0.491	0.293	0.279	0.296	0.319	0.310	0.299	0.327		22.52
56)	ETHYL ACRYLATE		0.393	0.393	0.357	0.426	0.475	0.503	0.430	0.425		11.91
57)	BROMODICHLOROM...	0.969	0.831	0.978	0.815	0.718	0.770	0.774	0.747	0.745	0.816	11.72
58)	2,2,4-TRIMETHY...	1.881	1.581	1.730	1.500	1.333	1.376	1.419	1.343	1.318	1.498	13.19
59)	1,4-DIOXANE		0.258	0.193	0.172	0.190	0.195	0.170	0.183	0.194		15.22
60)	METHYL METHACR...		0.286	0.264	0.217	0.248	0.263	0.276	0.241	0.256		9.04
61)	HEPTANE		0.541	0.450	0.409	0.423	0.443	0.423	0.399	0.441		10.75
62)	TVHC as EQUIV ...	2.777	3.089	2.398	2.061	2.253	2.263	2.161	2.084	2.386		15.25
63)	METHYL ISOBUTY...		0.223	0.183	0.169	0.196	0.200	0.205	0.189	0.195		8.64
64)	cis-1,3-DICHLOR...	0.484	0.426	0.520	0.421	0.431	0.493	0.511	0.508	0.503	0.477	8.42
65)	TOLUENE		0.714	0.789	0.609	0.536	0.654	0.682	0.688	0.675	0.668	11.12
66)	trans-1,3-DICH...		0.425	0.379	0.382	0.473	0.502	0.512	0.487	0.452		12.36
67)	1,1,2-TRICHLOR...	0.313	0.288	0.374	0.305	0.263	0.303	0.317	0.317	0.311	0.310	9.57
68) I	CHLOROBENZENE-D5	-----ISTD-----										
69)	2-HEXANONE		0.417	0.393	0.420	0.501	0.481	0.440	0.451	0.443		8.54
70)	ETHYL METHACRY...		0.816	0.828	0.717	0.787	0.769	0.724	0.724	0.767		6.03
71)	TETRACHLOROETH...	1.490	1.415	1.414	1.225	1.000	1.005	0.957	0.853	0.968	1.147	20.96
72)	DIBROMOCHLOROM...		1.893	2.151	1.767	1.499	1.590	1.514	1.330	1.519	1.658	15.92
73)	1,2-DIBROMOETHANE	1.270	1.177	1.247	1.077	0.986	1.081	1.045	0.953	1.040	1.097	10.12
74)	OCTANE		1.480	1.234	1.098	1.089	1.062	0.946	0.985	1.128		15.99
75)	1,1,1,2-TETRAC...	1.528	1.304	1.467	1.172	0.997	1.119	1.081	0.967	1.088	1.191	16.76
76)	CHLOROBENZENE		1.899	2.158	1.788	1.483	1.644	1.618	1.469	1.640	1.712	13.43
77)	ETHYLBENZENE		3.561	2.667	1.995	2.372	2.469	2.231	2.433	2.532		19.71
78)	m,p-XYLENE		1.365	1.043	0.755	0.910	0.952	0.875	0.925	0.975		19.73
79)	o-XYLENE		1.335	1.039	0.732	0.876	0.937	0.861	0.905	0.955		20.03
80)	STYRENE		1.429	1.595	1.249	1.040	1.288	1.371	1.262	1.335	1.321	12.08
81)	NONANE		1.153	1.080	0.911	0.911	0.974	1.054	0.921	1.026	1.004	8.91
82)	BROMOFORM	1.845	1.682	1.843	1.510	1.274	1.442	1.417	1.272	1.403	1.521	14.49
83) S	4-BROMOFLUOROB...	1.090	1.042	1.152	1.185	1.260	1.200	1.262	1.137	1.243	1.174	6.53
84)	1,1,2,2-TETRAC...	1.386	1.308	1.452	1.172	0.940	1.074	1.165	1.072	1.129	1.189	13.81
85)	ISOPROPYLBENZENE	3.400	2.781	3.517	2.772	2.173	2.624	2.792	2.528	2.738	2.814	14.74
86)	BROMOBENZENE	0.863	0.822	0.919	0.747	0.676	0.805	0.832	0.750	0.831	0.805	8.91
87)	2-CHLOROTOLUENE	0.717	0.659	0.756	0.605	0.525	0.633	0.675	0.609	0.671	0.650	10.38
88)	n-PROPYLBENZENE		0.494	0.655	0.561	0.512	0.620	0.692	0.650	0.674	0.607	12.41
89)	4-ETHYLTOLUENE		1.591	2.031	1.682	1.706	2.050	2.312	2.139	2.244	1.969	13.93
90)	1,3,5-TRIMETHY...	1.925	1.310	1.817	1.590	1.405	1.646	1.855	1.740	1.790	1.675	12.43
91)	ALPHA-METHYLST...		0.557	0.503	0.612	0.767	0.864	0.805	0.831	0.705		20.56
92)	TERT-BUTYLBENZENE		0.409	0.509	0.426	0.381	0.460	0.502	0.473	0.482	0.455	10.03
93)	1,2,4-TRIMETHY...	1.331	1.496	1.564	1.273	1.294	1.597	1.768	1.691	1.683	1.522	12.15
94)	m-DICHLOROBENZENE		0.708	0.855	0.731	0.806	1.064	1.192	1.095	1.111	0.945	20.15
95)	BENZYL CHLORIDE		0.581	0.608	0.837	1.147	1.337	1.330	1.261	1.015		32.84
96)	p-DICHLOROBENZENE		0.659	0.624	0.723	1.031	1.098	1.045	1.088	0.895		24.06
97)	SEC-BUTYLBENZENE		0.478	0.432	0.420	0.530	0.576	0.540	0.550	0.504		12.04
98)	p-ISOPROPYLTOL...		0.393	0.373	0.392	0.498	0.542	0.524	0.515	0.462		15.76
99)	o-DICHLOROBENZENE	0.704	0.845	0.793	0.688	0.682	0.934	1.016	0.946	0.968	0.842	15.49
100)	n-BUTYLBENZENE		0.068	0.126	0.245	0.365	0.411	0.406	0.393	0.288		49.60
101)	HEXACHLOROBETHANE	0.710	0.593	0.701	0.571	0.622	0.758	0.770	0.691	0.759	0.686	10.88
102)	HEXACHLOROBUTA...		0.439	0.367	0.260	0.313	0.348	0.325	0.337	0.341		16.06
103)	1,2,4-TRICHLOR...		0.121	0.189	0.160	0.218	0.256	0.264	0.241	0.207		25.59

5.91

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Initial Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1426-ICC1426
Lab FileID: 2W33866.D

104)	CHLOROBENZENE-D5 (A)	-----ISTD-----												
105)	NAPHTHALENE		0.279	0.251	0.291	0.393	0.444	0.458	0.429	0.364		24.00		

(#) = Out of Range

M2W1426.M Tue Jan 17 14:26:15 2012 BUTT

5.9.1

5

Initial Calibration Verification

Job Number: JA99139
 Account: ERMNYW ERM, Inc.
 Project: 220 Water Street, Brooklyn, NY

Sample: V2W1426-ICV1426
 Lab FileID: 2W33875.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 20 08:23:52 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	BROMOCHLOROMETHANE	1.000	1.000	0.0	104	0.00
2	FREON 115	0.000	0.000	0.0	0#	-2.07#
3	DICHLORODIFLUOROMETHANE	4.931	4.789	2.9	102	0.00
4	FREON 152A	0.928	0.929	-0.1	101	0.00
5	CHLORODIFLUOROMETHANE	0.449	0.444	1.1	100	0.00
6	PROPYLENE	1.009	0.904	10.4	101	0.00
7	FREON 114	5.039	4.243	15.8	93	0.00
8	CHLOROMETHANE	0.365	0.380	-4.1	109	0.00
9	VINYL CHLORIDE	1.500	1.549	-3.3	109	0.00
10	1,3-BUTADIENE	1.027	1.047	-1.9	105	0.00
11	n-BUTANE	2.015	1.940	3.7	104	0.00
12	BROMOMETHANE	1.622	1.669	-2.9	108	0.00
13	CHLOROETHANE	0.792	0.778	1.8	106	0.00
14	DICHLOROFLUOROMETHANE	3.285	0.000	100.0#	0#	-3.19#
15	ACROLEIN	0.344	0.352	-2.3	106	0.00
16	FREON 123	3.623	3.443	5.0	106	0.00
17	FREON 123A	2.375	2.311	2.7	106	0.00
18	TRICHLOROFLUOROMETHANE	4.863	4.766	2.0	103	0.00
19	ISOPROPYL ALCOHOL	1.703	1.759	-3.3	103	0.00
20	ACETONE	0.430	0.393	8.6	97	0.00
21	PENTANE	1.089	1.015	6.8	109	0.00
22	ACRYLONITRILE	0.599	0.000	100.0#	0#	-4.26#
23 H	TVHC as EQUIV PENTANE	5.578	5.266	5.6	104	0.00
24	IODOMETHANE	4.378	4.410	-0.7	105	0.00
25	1,1-DICHLOROETHYLENE	1.571	1.504	4.3	105	0.00
26	CARBON DISULFIDE	3.403	2.845	16.4	93	0.00
27	ETHANOL	0.343	0.336	2.0	103	0.00
28	BROMOETHENE	1.594	1.676	-5.1	111	0.00
29	ACETONITRILE	0.565	0.000	100.0#	0#	-3.46#
30	METHYLENE CHLORIDE	1.228	1.176	4.2	105	0.00
31	3-CHLOROPROPENE	0.622	0.611	1.8	104	0.00
32	FREON 113	2.944	2.912	1.1	102	0.00
33	TRANS-1,2-DICHLOROETHYLENE	1.296	1.221	5.8	95	0.00
34	TERTIARY BUTYL ALCOHOL	2.612	2.726	-4.4	104	0.00
35	METHYL TERTIARY BUTYL ETHER	3.499	3.200	8.5	97	0.00
36	TETRAHYDROFURAN	0.491	0.411	16.3	89	0.00
37	HEXANE	1.847	1.469	20.5	90	0.00
38	VINYL ACETATE	0.237	0.252	-6.3	98	0.00

Initial Calibration Verification

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1426-ICV1426
Lab FileID: 2W33875.D

39		1,1-DICHLOROETHANE	2.369	2.311	2.4	103	0.00
40		METHYL ETHYL KETONE	0.445	0.431	3.1	96	0.00
41		cis-1,2-DICHLOROETHYLENE	1.506	1.369	9.1	99	0.00
42		ETHYL ACETATE	0.257	0.187	27.2	80	0.00
43		METHYL ACRYLATE	1.510	0.000	100.0#	0#	-7.85#
44		CHLOROFORM	3.101	2.789	10.1	96	0.00
45		2,4-DIMETHYLPENTANE	2.262	1.940	14.2	98	0.00
46		1,1,1-TRICHLOROETHANE	3.570	3.379	5.4	98	0.00
47		CARBON TETRACHLORIDE	4.000	3.783	5.4	97	0.00
48		1,2-DICHLOROETHANE	1.720	1.708	0.7	96	0.00
49	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	103	0.00
50		BENZENE	0.966	0.840	13.0	96	0.00
51		CYCLOHEXANE	0.469	0.400	14.7	95	0.00
52		2,3-DIMETHYLPENTANE	0.225	0.191	15.1	95	0.00
53		DIBROMOMETHANE	0.462	0.000	100.0#	0#	-10.31#
54		TRICHLOROETHYLENE	0.485	0.411	15.3	98	0.00
55		1,2-DICHLOROPROPANE	0.327	0.275	15.9	95	0.00
56		ETHYL ACRYLATE	0.425	0.000	100.0#	0#	-10.32#
57		BROMODICHLOROMETHANE	0.816	0.705	13.6	94	0.00
58		2,2,4-TRIMETHYLPENTANE	1.498	1.230	17.9	92	0.00
59		1,4-DIOXANE	0.194	0.173	10.8	93	0.00
60		METHYL METHACRYLATE	0.256	0.212	17.2	88	0.00
61		HEPTANE	0.441	0.003	99.3#	1#	-0.09
62		TVHC as EQUIV HEPTANE	2.386	1.990	16.6	91	0.00
63		METHYL ISOBUTYL KETONE	0.195	0.175	10.3	92	0.00
64		cis-1,3-DICHLOROPROPENE	0.477	0.466	2.3	97	0.00
65		TOLUENE	0.668	0.580	13.2	91	0.00
66		trans-1,3-DICHLOROPROPENE	0.452	0.434	4.0	94	0.00
67		1,1,2-TRICHLOROETHANE	0.310	0.280	9.7	95	0.00
68	I	CHLOROBENZENE-D5	1.000	1.000	0.0	100	0.00
69		2-HEXANONE	0.443	0.403	9.0	80	0.00
70		ETHYL METHACRYLATE	0.767	0.000	100.0#	0#	-12.45#
71		TETRACHLOROETHYLENE	1.147	0.983	14.3	98	0.00
72		DIBROMOCHLOROMETHANE	1.658	1.534	7.5	97	0.00
73		1,2-DIBROMOETHANE	1.097	1.042	5.0	96	0.00
74		OCTANE	1.128	1.016	9.9	93	0.00
75		1,1,1,2-TETRACHLOROETHANE	1.191	1.118	6.1	100	0.00
76		CHLOROBENZENE	1.712	1.630	4.8	99	0.00
77		ETHYLBENZENE	2.532	2.361	6.8	100	0.00
78		m,p-XYLENE	0.975	0.888	8.9	98	0.00
79		o-XYLENE	0.955	0.869	9.0	99	0.00
80		STYRENE	1.321	1.251	5.3	97	0.00
81		NONANE	1.004	0.941	6.3	97	0.00
82		BROMOFORM	1.521	1.421	6.6	99	0.00
83	S	4-BROMOFLUOROBENZENE	1.174	1.187	-1.1	99	0.00
84		1,1,2,2-TETRACHLOROETHANE	1.189	1.074	9.7	100	0.00
85		ISOPROPYLBENZENE	2.814	2.511	10.8	96	0.00
86		BROMOBENZENE	0.805	0.000	100.0#	0#	-15.49#
87		2-CHLOROTOLUENE	0.650	0.636	2.2	101	0.00
88		n-PROPYLBENZENE	0.607	0.616	-1.5	99	0.00
89		4-ETHYLTOLUENE	1.969	2.039	-3.6	100	0.00
90		1,3,5-TRIMETHYLBENZENE	1.675	1.677	-0.1	102	0.00
91		ALPHA-METHYLSTYRENE	0.705	0.000	100.0#	0#	-16.24#
92		TERT-BUTYLBENZENE	0.455	0.450	1.1	98	0.00
93		1,2,4-TRIMETHYLBENZENE	1.522	1.556	-2.2	98	0.00
94		m-DICHLOROBENZENE	0.945	1.039	-9.9	98	0.00
95		BENZYL CHLORIDE	1.015	1.067	-5.1	93	0.00
96		p-DICHLOROBENZENE	0.895	1.006	-12.4	98	0.00

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Initial Calibration Verification

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1426-ICV1426
Lab FileID: 2W33875.D

97	SEC-BUTYLBENZENE	0.504	0.516	-2.4	97	0.00
98	p-ISOPROPYLTOLUENE	0.462	0.489	-5.8	98	0.00
99	o-DICHLOROBENZENE	0.842	0.904	-7.4	97	0.00
100	n-BUTYLBENZENE	0.288	0.345	-19.8	95	0.00
101	HEXACHLOROETHANE	0.686	0.000	100.0#	0#	-17.63#
102	HEXACHLOROBUTADIENE	0.341	0.332	2.6	106	0.00
103	1,2,4-TRICHLOROBENZENE	0.207	0.209	-1.0	96	0.00
104	CHLOROBENZENE-D5(A)	1.000	1.000	0.0	0#	0.24
105	NAPHTHALENE	0.364	0.000	100.0#	0#	-18.64#

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

M2W1426.M Fri Jan 20 09:13:58 2012 BUTT

5.9.2
5

Continuing Calibration Summary

Job Number: JA99139
 Account: ERMNYW ERM, Inc.
 Project: 220 Water Street, Brooklyn, NY

Sample: V2W1441-CC1426
 Lab FileID: 2W34264.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34264.D
 Acq On : 15 Feb 2012 10:38 am
 Operator : YOUMINH
 Sample : CC1426-10
 Misc : MS25531,V2W1441,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 16 08:38:10 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	BROMOCHLOROMETHANE	1.000	1.000	0.0	131	-0.02
2	FREON 115	0.000	0.000	0.0	0#	-2.07#
3	DICHLORODIFLUOROMETHANE	4.931	4.801	2.6	130	0.00
4	FREON 152A	0.928	0.853	8.1	118	0.00
5	CHLORODIFLUOROMETHANE	0.449	0.453	-0.9	129	0.00
6	PROPYLENE	1.009	0.804	20.3	113	0.00
7	FREON 114	5.039	4.859	3.6	135	0.00
8	CHLOROMETHANE	0.365	0.324	11.2	117	0.00
9	VINYL CHLORIDE	1.500	1.469	2.1	130	0.00
10	1,3-BUTADIENE	1.027	1.041	-1.4	132	0.00
11	n-BUTANE	2.015	1.924	4.5	131	0.00
12	BROMOMETHANE	1.622	1.744	-7.5	143	0.00
13	CHLOROETHANE	0.792	0.778	1.8	135	-0.01
14	DICHLOROFLUOROMETHANE	3.285	3.375	-2.7	142	-0.01
15	ACROLEIN	0.344	0.383	-11.3	146	-0.02
16	FREON 123	3.623	3.812	-5.2	148	-0.02
17	FREON 123A	2.375	2.640	-11.2	153	-0.01
18	TRICHLOROFLUOROMETHANE	4.863	5.337	-9.7	147	-0.02
19	ISOPROPYL ALCOHOL	1.703	1.921	-12.8	143	-0.02
20	ACETONE	0.430	0.455	-5.8	143	-0.02
21	PENTANE	1.089	1.094	-0.5	149	-0.02
22	ACRYLONITRILE	0.599	0.639	-6.7	138	-0.01
23 H	TVHC as EQUIV PENTANE	5.578	5.769	-3.4	144	0.00
24	IODOMETHANE	4.378	4.822	-10.1	146	-0.02
25	1,1-DICHLOROETHYLENE	1.571	1.660	-5.7	147	-0.02
26	CARBON DISULFIDE	3.403	3.257	4.3	135	-0.02
27	ETHANOL	0.343	0.365	-6.4	141	-0.02
28	BROMOETHENE	1.594	1.871	-17.4	156	-0.01
29	ACETONITRILE	0.565	0.531	6.0	137	-0.01
30	METHYLENE CHLORIDE	1.228	1.240	-1.0	141	-0.02
31	3-CHLOROPROPENE	0.622	0.612	1.6	132	-0.03
32	FREON 113	2.944	3.159	-7.3	140	-0.02
33	TRANS-1,2-DICHLOROETHYLENE	1.296	1.361	-5.0	134	-0.02
34	TERTIARY BUTYL ALCOHOL	2.612	2.754	-5.4	132	-0.02
35	METHYL TERTIARY BUTYL ETHER	3.499	3.316	5.2	127	-0.02
36	TETRAHYDROFURAN	0.491	0.460	6.3	126	-0.02
37	HEXANE	1.847	1.702	7.9	133	-0.02
38	VINYL ACETATE	0.237	0.264	-11.4	129	-0.02

Continuing Calibration Summary

Job Number: JA99139
 Account: ERMNYW ERM, Inc.
 Project: 220 Water Street, Brooklyn, NY

Sample: V2W1441-CC1426
 Lab FileID: 2W34264.D

39		1,1-DICHLOROETHANE	2.369	2.182	7.9	123	-0.03
40		METHYL ETHYL KETONE	0.445	0.436	2.0	123	-0.02
41		cis-1,2-DICHLOROETHYLENE	1.506	1.494	0.8	137	-0.02
42		ETHYL ACETATE	0.257	0.226	12.1	122	-0.02
43		METHYL ACRYLATE	1.510	1.398	7.4	123	-0.02
44		CHLOROFORM	3.101	3.003	3.2	131	-0.02
45		2,4-DIMETHYLPENTANE	2.262	2.162	4.4	138	-0.02
46		1,1,1-TRICHLOROETHANE	3.570	3.584	-0.4	132	-0.02
47		CARBON TETRACHLORIDE	4.000	4.014	-0.4	130	-0.01
48		1,2-DICHLOROETHANE	1.720	1.725	-0.3	123	-0.01
49	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	120	-0.02
50		BENZENE	0.966	0.976	-1.0	130	-0.02
51		CYCLOHEXANE	0.469	0.464	1.1	128	-0.02
52		2,3-DIMETHYLPENTANE	0.225	0.226	-0.4	131	-0.01
53		DIBROMOMETHANE	0.462	0.519	-12.3	142	-0.02
54		TRICHLOROETHYLENE	0.485	0.464	4.3	128	-0.02
55		1,2-DICHLOROPROPANE	0.327	0.305	6.7	123	-0.02
56		ETHYL ACRYLATE	0.425	0.394	7.3	111	-0.01
57		BROMODICHLOROMETHANE	0.816	0.800	2.0	124	-0.02
58		2,2,4-TRIMETHYLPENTANE	1.498	1.455	2.9	127	-0.02
59		1,4-DIOXANE	0.194	0.203	-4.6	128	-0.01
60		METHYL METHACRYLATE	0.256	0.246	3.9	119	-0.02
61		HEPTANE	0.441	0.433	1.8	123	-0.01
62		TVHC as EQUIV HEPTANE	2.386	2.292	3.9	122	-0.02
63		METHYL ISOBUTYL KETONE	0.195	0.180	7.7	110	-0.01
64		cis-1,3-DICHLOROPROPENE	0.477	0.469	1.7	114	-0.01
65		TOLUENE	0.668	0.693	-3.7	127	-0.01
66		trans-1,3-DICHLOROPROPENE	0.452	0.450	0.4	114	-0.02
67		1,1,2-TRICHLOROETHANE	0.310	0.304	1.9	120	-0.02
68	I	CHLOROBENZENE-D5	1.000	1.000	0.0	112	-0.02
69		2-HEXANONE	0.443	0.477	-7.7	106	-0.01
70		ETHYL METHACRYLATE	0.767	0.770	-0.4	109	-0.01
71		TETRACHLOROETHYLENE	1.147	1.237	-7.8	138	-0.02
72		DIBROMOCHLOROMETHANE	1.658	1.742	-5.1	122	-0.02
73		1,2-DIBROMOETHANE	1.097	1.136	-3.6	117	-0.02
74		OCTANE	1.128	1.143	-1.3	117	-0.02
75		1,1,1,2-TETRACHLOROETHANE	1.191	1.195	-0.3	119	-0.02
76		CHLOROBENZENE	1.712	1.804	-5.4	123	-0.02
77		ETHYLBENZENE	2.532	2.522	0.4	119	-0.02
78		m,p-XYLENE	0.975	1.049	-7.6	129	-0.02
79		o-XYLENE	0.955	0.985	-3.1	126	-0.02
80		STYRENE	1.321	1.359	-2.9	118	-0.02
81		NONANE	1.004	0.972	3.2	111	-0.02
82		BROMOFORM	1.521	1.500	1.4	116	-0.02
83	S	4-BROMOFLUOROBENZENE	1.174	1.120	4.6	104	-0.01
84		1,1,2,2-TETRACHLOROETHANE	1.189	1.028	13.5	107	-0.01
85		ISOPROPYLBENZENE	2.814	2.721	3.3	116	-0.02
86		BROMOBENZENE	0.805	0.900	-11.8	125	-0.02
87		2-CHLOROTOLUENE	0.650	0.685	-5.4	121	-0.02
88		n-PROPYLBENZENE	0.607	0.686	-13.0	124	-0.01
89		4-ETHYLTOLUENE	1.969	2.091	-6.2	114	-0.01
90		1,3,5-TRIMETHYLBENZENE	1.675	1.788	-6.7	121	-0.02
91		ALPHA-METHYLSTYRENE	0.705	0.812	-15.2	118	-0.02
92		TERT-BUTYLBENZENE	0.455	0.487	-7.0	118	-0.01
93		1,2,4-TRIMETHYLBENZENE	1.522	1.636	-7.5	114	-0.02
94		m-DICHLOROBENZENE	0.945	1.132	-19.8	119	-0.01
95		BENZYL CHLORIDE	1.015	1.026	-1.1	100	-0.01
96		p-DICHLOROBENZENE	0.895	1.060	-18.4	115	-0.01

5.9.3
5

Continuing Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: V2W1441-CC1426
Lab FileID: 2W34264.D

97	SEC-BUTYLBENZENE	0.504	0.552	-9.5	117	-0.02
98	p-ISOPROPYLTOLUENE	0.462	0.519	-12.3	116	-0.01
99	o-DICHLOROBENZENE	0.842	0.935	-11.0	112	-0.02
100	n-BUTYLBENZENE	0.288	0.362	-25.7	111	-0.01
101	HEXACHLOROETHANE	0.686	0.802	-16.9	118	-0.01
102	HEXACHLOROBUTADIENE	0.341	0.325	4.7	116	-0.01
103	1,2,4-TRICHLOROBENZENE	0.207	0.185	10.6	95	-0.01
104	CHLOROBEZENE-D5 (A)	1.000	1.000	0.0	112	-0.02
105	NAPHTHALENE	0.364	0.301	17.3	86	-0.01

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

M2W1426.M Thu Feb 16 09:54:12 2012 BUTT

5.9.3
5

Initial Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-ICC1417
Lab FileID: W34784.D

Response Factor Report MSW

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration

Calibration Files

0.04=W34798.D 0.1 =W34797.D 0.2 =W34796.D 0.5 =W34785.D
 5 =W34787.D 10 =W34784.D 20 =W34789.D 40 =W34793.D
 15 =W34786.D =

Compound	0.04	0.1	0.2	0.5	5	10	20	40	15	Avg	%RSD		
1) I BROMOCHLOROMETHANE	-----ISTD-----												
2) FREON 115										0.000	-1.00		
3) FREON 152A			1.080	0.855	0.925	0.821	0.868	0.835	0.740	0.875	12.12		
4) CHLORODIFLUOROMETHANE			0.230	0.311	0.326	0.326	0.303	0.286	0.282	0.295	11.30		
5) DICHLORODIFLUOROMETHANE			3.685	3.506	3.833	4.010	3.715	3.606	3.422	3.232	3.172	3.576	7.64
6) PROPYLENE			1.300	1.329	1.311	1.284	1.216	1.172	1.151	1.102	1.036	1.211	8.49
7) FREON 114			3.981	4.721	4.476	4.887	4.549	4.518	4.215	4.024	3.954	4.369	7.78
8) CHLOROMETHANE			0.388	0.474	0.472	0.469	0.434	0.413	0.406	0.437	8.12		
9) VINYL CHLORIDE			1.748	1.817	1.913	1.817	1.787	1.664	1.560	1.567	1.734	7.29	
10) 1,3-BUTADIENE			1.445	1.262	1.512	1.439	1.436	1.332	1.270	1.271	1.371	7.18	
11) n-BUTANE			2.926	3.014	2.879	3.108	2.809	2.801	2.589	2.452	2.450	2.781	8.50
12) BROMOMETHANE			1.380	1.540	1.710	1.578	1.538	1.416	1.322	1.350	1.479	9.05	
13) CHLOROETHANE			0.775	0.994	1.091	1.037	1.026	0.937	0.883	0.894	0.955	10.71	
14) DICHLOROFLUOROMETHANE			3.020	3.745	3.497	3.993	3.658	3.686	3.342	3.172	3.216	3.481	9.11
15) ACROLEIN			0.546	0.741	0.639	0.709	0.658	0.667	0.646	0.658	9.33		
16) FREON 123			3.393	3.800	3.818	4.238	3.871	3.989	3.593	3.465	3.458	3.736	7.53
17) FREON 123A			1.935	2.154	2.316	2.483	2.269	2.335	2.108	2.017	2.013	2.181	8.31
18) TRICHLOROFLUOROMETHANE			3.496	3.809	3.646	4.112	3.766	3.816	3.465	3.265	3.321	3.633	7.49
19) ISOPROPYL ALCOHOL			2.772	3.406	2.636	2.954	2.572	2.695	2.566	2.800	10.68		
20) ACETONE			0.703	0.910	0.664	0.768	0.702	0.728	0.695	0.738	11.12		
21) ACRYLONITRILE			1.111	1.055	1.434	1.220	1.391	1.273	1.259	1.248	1.249	10.15	
22) PENTANE			0.358	0.519	0.528	0.534	0.482	0.457	0.463	0.477	12.79		
23) TVHC as EQUIV PENTANE													

5.94
5

Initial Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-ICC1417
Lab FileID: W34784.D

	0.976	0.923	1.037	0.928	1.006	0.953	0.854	0.849	0.941	E1	7.10
24)	Iodomethane										
	3.604	4.023	4.366	4.614	4.198	4.204	3.813	3.627	3.649	4.011	9.01
25)	1,1-Dichloroethylene										
	1.732	1.964	1.735	1.755	1.593	1.504	1.521	1.686	9.54		
26)	Carbon disulfide										
	4.401	4.371	4.821	4.285	4.267	3.925	3.676	3.705	4.182	9.30	
27)	Ethanol										
	0.664	0.787	0.625	0.684	0.606	0.647	0.608	0.660	9.56		
28)	Acetonitrile										
	1.161	1.524	1.205	1.366	1.257	1.263	1.219	1.285	9.59		
29)	Bromoethene										
	1.525	1.662	1.810	1.644	1.617	1.480	1.397	1.414	1.569	8.97	
30)	Methylene chloride										
	1.754	1.775	1.563	1.616	1.432	1.353	1.368	1.552	11.24		
31)	3-Chloropropene										
	0.657	0.855	0.851	0.892	0.798	0.760	0.750	0.795	10.08		
32)	Freon 113										
	2.497	2.787	2.965	3.062	2.783	2.859	2.593	2.499	2.475	2.724	7.99
33)	Trans-1,2-Dichloroethylene										
	1.797	1.792	1.582	1.975	1.651	1.660	1.533	1.452	1.439	1.653	10.68
34)	Tertiary butyl alcohol										
	3.536	3.190	4.309	3.336	3.761	3.121	1.846	3.226	3.291	21.34	
35)	Methyl tertiary butyl ether										
	3.861	4.088	3.493	4.625	3.523	4.087	3.836	4.059	3.673	3.916	8.96
36)	Tetrahydrofuran										
	0.538	0.812	0.659	0.758	0.710	0.750	0.676	0.701	12.65		
37)	Hexane										
	2.475	2.548	2.503	3.063	2.906	3.056	2.873	2.749	2.647	2.758	8.29
38)	Vinyl acetate										
	0.260	0.411	0.391	0.455	0.422	0.426	0.410	0.396	15.97		
39)	1,1-Dichloroethane										
	2.312	2.857	2.696	3.283	2.986	3.144	2.899	2.770	2.752	2.856	9.78
40)	Methyl ethyl ketone										
	0.515	0.821	0.662	0.747	0.699	0.747	0.663	0.693	13.89		
41)	Cis-1,2-Dichloroethylene										
	1.583	1.950	1.609	1.974	1.752	1.836	1.684	1.607	1.587	1.731	8.98
42)	Di-isopropyl ether										
	5.131	4.514	6.023	4.683	5.417	5.171	5.472	4.868	5.160	9.38	
43)	Ethyl acetate										
	0.339	0.544	0.422	0.480	0.456	0.484	0.433	0.451	14.14		
44)	Methyl acrylate										
	2.485	2.252	3.113	2.512	2.965	2.859	2.970	2.700	2.732	10.83	
45)	Chloroform										
	2.797	2.944	2.908	3.430	3.121	3.288	2.991	2.830	2.811	3.013	7.40
46)	2,4-Dimethylpentane										
	2.928	2.830	3.505	3.478	3.629	3.387	3.255	3.147	3.270	8.71	
47)	1,1,1-Trichloroethane										
	2.484	2.893	2.770	3.239	3.006	3.169	2.915	2.799	2.739	2.890	7.97
48)	Carbon tetrachloride										
	2.613	2.831	3.051	3.449	3.192	3.316	3.060	2.928	2.854	3.033	8.57
49)	1,2-Dichloroethane										
	1.607	1.553	1.889	1.748	1.855	1.747	1.686	1.634	1.715	6.87	
50) I	1,4-Difluorobenzene -----ISTD-----										
51)	Benzene										
	1.300	1.284	1.130	1.258	1.128	1.218	1.119	1.131	1.063	1.181	7.20
52)	Cyclohexane										
	0.595	0.538	0.575	0.546	0.576	0.526	0.526	0.494	0.547	6.07	
53)	2,3-Dimethylpentane										

5.94

5

Initial Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-ICC1417
Lab FileID: W34784.D

	0.243	0.256	0.292	0.285	0.307	0.278	0.281	0.262	0.276	7.51
54)	TRICHLOROETHYLENE									
	0.709	0.453	0.433	0.500	0.451	0.497	0.459	0.470	0.427	17.66
55)	DIBROMOMETHANE									
	0.406	0.446	0.431	0.465	0.418	0.462	0.413	0.426	0.394	5.75
56)	1,2-DICHLOROPROPANE									
	0.383	0.370	0.451	0.408	0.448	0.419	0.436	0.395	0.414	7.25
57)	ETHYL ACRYLATE									
	0.512	0.706	0.591	0.718	0.680	0.773	0.630	0.659	13.32	
58)	BROMODICHLOROMETHANE									
	0.577	0.726	0.671	0.776	0.699	0.770	0.706	0.729	0.663	8.67
59)	2,2,4-TRIMETHYLPENTANE									
	1.695	1.799	1.716	2.038	1.998	2.202	2.021	2.078	1.897	8.92
60)	1,4-DIOXANE									
	0.166	0.267	0.207	0.239	0.215	0.239	0.201	0.219	14.90	
61)	METHYL METHACRYLATE									
	0.317	0.282	0.387	0.301	0.366	0.351	0.395	0.326	0.341	11.97
62)	HEPTANE									
	0.528	0.606	0.568	0.673	0.669	0.736	0.682	0.689	0.635	10.14
63)	TVHC as EQUIV HEPTANE									
	2.705	2.503	2.901	2.916	3.185	2.886	2.967	2.707	2.846	7.22
64)	METHYL ISOBUTYL KETONE									
	0.546	0.475	0.697	0.592	0.689	0.637	0.695	0.592	0.615	12.97
65)	cis-1,3-DICHLOROPROPENE									
	0.499	0.484	0.583	0.548	0.614	0.566	0.584	0.540	0.552	7.98
66)	TOLUENE									
	0.777	0.799	0.711	0.810	0.738	0.825	0.762	0.792	0.728	5.09
67)	trans-1,3-DICHLOROPROPENE									
	0.443	0.397	0.524	0.504	0.573	0.532	0.555	0.506	0.504	11.54
68)	1,1,2-TRICHLOROETHANE									
	0.319	0.307	0.363	0.336	0.365	0.338	0.352	0.325	0.338	6.17
69)	I CHLOROBENZENE-D5 -----ISTD-----									
70)	ETHYL METHACRYLATE									
	0.809	1.175	0.962	1.136	0.976	0.997	0.942	1.000	12.31	
71)	2-HEXANONE									
	1.055	1.046	0.924	1.547	1.162	1.300	1.095	1.090	1.063	15.94
72)	TETRACHLOROETHYLENE									
	0.894	1.132	1.115	1.175	0.996	1.066	0.900	0.854	0.876	12.42
73)	DIBROMOCHLOROMETHANE									
	1.175	1.562	1.395	1.570	1.387	1.487	1.265	1.207	1.244	11.07
74)	1,2-DIBROMOETHANE									
	0.946	1.161	1.095	1.291	1.138	1.231	1.061	1.009	1.041	9.84
75)	OCTANE									
	1.478	1.553	1.442	1.763	1.699	1.820	1.602	1.497	1.545	8.28
76)	1,1,1,2-TETRACHLOROETHANE									
	0.683	1.045	1.008	1.129	0.992	1.072	0.922	0.892	0.913	13.58
77)	CHLOROBENZENE									
	1.654	2.063	1.889	2.152	1.851	2.005	1.740	1.683	1.708	9.68
78)	ETHYLBENZENE									
	3.497	3.362	2.820	3.250	2.791	3.127	2.724	2.628	2.669	10.94
79)	m,p-XYLENE									
	1.356	1.220	1.116	1.277	1.087	1.245	1.080	1.058	1.068	9.34
80)	o-XYLENE									
	1.358	1.219	1.022	1.192	1.035	1.189	1.035	1.017	1.016	11.01
81)	STYRENE									
	1.435	1.412	1.249	1.654	1.511	1.767	1.547	1.506	1.513	9.69
82)	1,2,3-TRICHLOROPROPANE									
	0.871	0.939	0.883	1.137	0.939	1.107	0.972	0.953	0.957	9.35
83)	NONANE									

5.94
5

Initial Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-ICC1417
Lab FileID: W34784.D

	0.948	1.410	1.470	1.631	1.458	1.383	1.406	1.387	15.17		
84) BROMOFORM	1.230	1.172	1.318	1.227	1.348	1.152	1.117	1.142	1.213	6.93	
85) 4-BROMOFLUOROBENZENE	1.012	1.012	1.031	1.070	1.174	1.172	1.126	1.029	1.159	1.087	6.47
86) 1,1,2,2-TETRACHLOROETHANE	1.206	1.377	1.210	1.366	1.226	1.435	1.262	1.271	1.245	1.289	6.44
87) ISOPROPYLBENZENE	2.546	2.837	2.479	3.104	2.797	3.248	2.826	2.766	2.803	2.823	8.49
88) BROMOBENZENE	0.785	0.731	0.865	0.811	0.924	0.784	0.755	0.777	0.804	7.80	
89) 2-CHLOROTOLUENE	0.508	0.670	0.656	0.751	0.644	0.626	0.639	0.642	11.23		
90) n-PROPYLBENZENE	0.511	0.714	0.691	0.840	0.732	0.729	0.725	0.706	13.93		
91) 4-ETHYLTOLUENE	1.410	1.672	1.587	2.356	2.250	2.741	2.394	2.392	2.379	2.131	21.39
92) 1,3,5-TRIMETHYLBENZENE	1.179	1.482	1.303	1.951	1.763	2.124	1.861	1.863	1.848	1.708	18.47
93) ALPHA-METHYLSTYRENE	0.513	0.780	0.801	1.016	0.894	0.904	0.889	0.828	19.16		
94) TERT-BUTYLBENZENE	0.298	0.472	0.467	0.565	0.495	0.510	0.485	0.470	17.60		
95) 1,2,4-TRIMETHYLBENZENE	1.012	1.160	1.110	1.635	1.612	1.996	1.769	1.839	1.739	1.541	23.08
96) m-DICHLOROBENZENE	0.885	0.813	1.071	1.036	1.266	1.101	1.111	1.099	1.048	13.46	
97) BENZYL CHLORIDE	0.947	0.862	1.215	1.142	1.517	1.328	1.430	1.307	1.219	18.61	
98) p-DICHLOROBENZENE	0.728	0.750	1.002	0.985	1.232	1.041	1.048	1.041	0.978	16.96	
99) SEC-BUTYLBENZENE	0.316	0.517	0.513	0.632	0.556	0.566	0.556	0.522	18.95		
100) p-ISOPROPYLTOLUENE	0.360	0.306	0.464	0.477	0.606	0.527	0.557	0.521	0.477	21.03	
101) o-DICHLOROBENZENE	0.738	0.670	0.914	0.869	1.078	0.924	0.930	0.924	0.881	14.30	
102) n-BUTYLBENZENE	0.207	0.302	0.333	0.453	0.385	0.410	0.386	0.354	22.99		
103) HEXACHLOROETHANE	0.521	0.507	0.565	0.609	0.706	0.602	0.598	0.602	0.589	10.42	
104) HEXACHLOROBUTADIENE	0.215	0.271	0.290	0.237	0.323	0.183	0.149	0.246	0.239	23.83	
105) 1,2,4-TRICHLOROBENZENE	0.168	0.266	0.159	0.229	0.143	0.126	0.157	0.178	28.12		
106) I Chlorobenzene-d5(a)	-----ISTD-----										
107) NAPHTHALENE	0.387	0.722	0.346	0.449	0.292	0.249	0.310	0.393	40.41		

(#) = Out of Range ### Number of calibration levels exceeded format ###

MW1417.M Fri Jan 20 14:09:36 2012 MSW

5.94
5

Initial Calibration Verification

Job Number: JA99139
 Account: ERMNYW ERM, Inc.
 Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-ICV1417
 Lab FileID: W34801.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\W34801.D Vial: 3
 Acq On : 19 Jan 2012 4:06 pm Operator: YOUMINH
 Sample : ICV1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I BROMOCHLOROMETHANE	1.000	1.000	0.0	100	0.00
2	FREON 115	0.000	0.000	0.0	0#	-4.82#
3	FREON 152A	0.875	0.665	24.0	81	0.00
4	CHLORODIFLUOROMETHANE	0.295	0.255	13.6	78	0.00
5	DICHLORODIFLUOROMETHANE	3.576	2.971	16.9	82	0.00
6	PROPYLENE	1.211	0.913	24.6	78	0.00
7	FREON 114	4.369	3.446	21.1	76	0.00
8	CHLOROMETHANE	0.437	0.388	11.2	83	0.00
9	VINYL CHLORIDE	1.734	1.531	11.7	86	0.00
10	1,3-BUTADIENE	1.371	1.206	12.0	84	0.00
11	n-BUTANE	2.781	2.311	16.9	83	0.00
12	BROMOMETHANE	1.479	1.317	11.0	86	0.00
13	CHLOROETHANE	0.955	0.883	7.5	86	0.00
14	DICHLOROFLUOROMETHANE	3.481	0.000	100.0#	0#	-5.57#
15	ACROLEIN	0.658	0.585	11.1	83	0.00
16	FREON 123	3.736	3.462	7.3	87	0.00
17	FREON 123A	2.181	2.056	5.7	88	0.00
18	TRICHLOROFLUOROMETHANE	3.633	3.230	11.1	85	0.00
19	ISOPROPYL ALCOHOL	2.800	2.417	13.7	82	0.00
20	ACETONE	0.738	0.606	17.9	79	0.00
21	ACRYLONITRILE	1.249	0.000	100.0#	0#	-6.29#
22	PENTANE	0.477	0.457	4.2	86	0.00
23	H TVHC as EQUIV PENTANE	9.409	7.795	17.2	78	0.00
24	IODOMETHANE	4.011	3.666	8.6	87	0.00
25	1,1-DICHLOROETHYLENE	1.686	1.499	11.1	85	0.00
26	CARBON DISULFIDE	4.182	3.095	26.0	73	0.00
27	ETHANOL	0.660	0.515	22.0	75	0.00
28	ACETONITRILE	1.285	0.000	100.0#	0#	-5.76#
29	BROMOETHENE	1.569	1.416	9.8	88	0.00
30	METHYLENE CHLORIDE	1.552	1.363	12.2	84	0.00
31	3-CHLOROPROPENE	0.795	0.727	8.6	82	0.00
32	FREON 113	2.724	2.430	10.8	85	0.00
33	TRANS-1,2-DICHLOROETHYLENE	1.653	1.307	20.9	79	0.00
34	TERTIARY BUTYL ALCOHOL	3.291	3.189	3.1	85	0.00
35	METHYL TERTIARY BUTYL ETHER	3.916	3.280	16.2	80	0.00
36	TETRAHYDROFURAN	0.701	0.603	14.0	80	0.00
37	HEXANE	2.758	2.459	10.8	81	0.00
38	VINYL ACETATE	0.396	0.355	10.4	78	0.00
39	1,1-DICHLOROETHANE	2.856	2.589	9.3	82	0.00
40	METHYL ETHYL KETONE	0.693	0.607	12.4	81	0.00
41	cis-1,2-DICHLOROETHYLENE	1.731	1.541	11.0	84	0.00
42	DI-ISOPROPYL ETHER	5.160	4.247	17.7	78	0.00

Initial Calibration Verification

Job Number: JA99139
 Account: ERMNYW ERM, Inc.
 Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-ICV1417
 Lab FileID: W34801.D

43		ETHYL ACETATE	0.451	0.367	18.6	76	0.00
44		METHYL ACRYLATE	2.732	0.000	100.0#	0#	-8.39#
45		CHLOROFORM	3.013	2.713	10.0	83	0.00
46		2,4-DIMETHYLPENTANE	3.270	3.039	7.1	84	0.00
47		1,1,1-TRICHLOROETHANE	2.890	2.638	8.7	83	0.00
48		CARBON TETRACHLORIDE	3.033	2.791	8.0	84	0.00
49		1,2-DICHLOROETHANE	1.715	1.528	10.9	82	0.00
50	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	101	0.00
51		BENZENE	1.181	1.011	14.4	84	0.00
52		CYCLOHEXANE	0.547	0.487	11.0	86	0.00
53		2,3-DIMETHYLPENTANE	0.276	0.254	8.0	84	0.00
54		TRICHLOROETHYLENE	0.489	0.412	15.7	84	0.00
55		DIBROMOMETHANE	0.429	0.000	100.0#	0#	-10.49#
56		1,2-DICHLOROPROPANE	0.414	0.361	12.8	82	0.00
57		ETHYL ACRYLATE	0.659	0.000	100.0#	0#	-10.49#
58		BROMODICHLOROMETHANE	0.702	0.619	11.8	81	0.00
59		2,2,4-TRIMETHYLPENTANE	1.938	1.775	8.4	82	0.00
60		1,4-DIOXANE	0.219	0.197	10.0	84	0.00
61		METHYL METHACRYLATE	0.341	0.290	15.0	80	0.00
62		HEPTANE	0.643	0.578	10.1	80	0.00
63	H	TVHC as EQUIV HEPTANE	2.846	2.524	11.3	80	0.00
64		METHYL ISOBUTYL KETONE	0.615	0.567	7.8	83	0.00
65		cis-1,3-DICHLOROPROPENE	0.552	0.498	9.8	82	0.00
66		TOLUENE	0.771	0.677	12.2	83	0.00
67		trans-1,3-DICHLOROPROPENE	0.504	0.460	8.7	81	0.00
68		1,1,2-TRICHLOROETHANE	0.338	0.304	10.1	84	0.00
69	I	CHLOROBENZENE-D5	1.000	1.000	0.0	99	0.00
70		ETHYL METHACRYLATE	1.000	0.000	100.0#	0#	-12.79#
71		2-HEXANONE	1.143	1.010	11.6	77	0.00
72		TETRACHLOROETHYLENE	1.001	0.910	9.1	85	0.00
73		DIBROMOCHLOROMETHANE	1.366	1.236	9.5	83	0.00
74		1,2-DIBROMOETHANE	1.108	1.038	6.3	84	0.00
75		OCTANE	1.600	1.491	6.8	81	0.00
76		1,1,1,2-TETRACHLOROETHANE	0.962	0.899	6.5	83	0.00
77		CHLOROBENZENE	1.861	1.700	8.7	84	0.00
78		ETHYLBENZENE	2.985	2.577	13.7	82	0.00
79		m,p-XYLENE	1.167	1.030	11.7	82	0.00
80		o-XYLENE	1.120	0.982	12.3	82	0.00
81		STYRENE	1.510	1.457	3.5	82	0.00
82		1,2,3-TRICHLOROPROPANE	0.973	0.893	8.2	80	0.00
83		NONANE	1.387	1.325	4.5	81	0.00
84		BROMOFORM	1.213	1.132	6.7	83	0.00
85	S	4-BROMOFLUOROBENZENE	1.087	1.190	-9.5	101	0.00
86		1,1,2,2-TETRACHLOROETHANE	1.289	1.188	7.8	82	0.00
87		ISOPROPYLBENZENE	2.823	2.641	6.4	81	0.00
88		BROMOBENZENE	0.804	0.000	100.0#	0#	-16.26#
89		2-CHLOROTOLUENE	0.642	0.618	3.7	82	0.00
90		n-PROPYLBENZENE	0.706	0.680	3.7	80	0.00
91		4-ETHYLTOLUENE	2.131	2.198	-3.1	80	0.00
92		1,3,5-TRIMETHYLBENZENE	1.708	1.739	-1.8	81	0.00
93		ALPHA-METHYLSTYRENE	0.828	0.000	100.0#	0#	-17.17#
94		TERT-BUTYLBENZENE	0.470	0.463	1.5	81	0.00
95		1,2,4-TRIMETHYLBENZENE	1.541	1.625	-5.5	81	0.00
96		m-DICHLOROBENZENE	1.048	1.044	0.4	82	0.00
97		BENZYL CHLORIDE	1.219	1.176	3.5	77	0.00
98		p-DICHLOROBENZENE	0.978	1.004	-2.7	81	0.00
99		SEC-BUTYLBENZENE	0.522	0.517	1.0	81	0.00
100		p-ISOPROPYLTOLUENE	0.477	0.492	-3.1	81	0.00

5.9.5

5

Initial Calibration Verification

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1417-ICV1417
Lab FileID: W34801.D

101	o-DICHLOROBENZENE	0.881	0.877	0.5	81	0.00
102	n-BUTYLBENZENE	0.354	0.352	0.6	77	0.00
103	HEXACHLOROETHANE	0.589	0.000	100.0#	0#	-18.88#
104	HEXACHLOROBUTADIENE	0.239	0.256	-7.1	78	0.00
105	1,2,4-TRICHLOROBENZENE	0.178	0.175	1.7	76	0.00
106 I	Chlorobenzene-d5(a)	1.000	1.000	0.0	99	0.00
107	NAPHTHALENE	0.393	0.000	100.0#	0#	-20.21#

(#) = Out of Range
W34784.D MW1417.M

SPCC's out = 0 CCC's out = 0
Fri Jan 20 14:09:35 2012 MSW

5.9.5
5

Continuing Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1423-CC1417
Lab FileID: W34941.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\W34941.D Vial: 2
 Acq On : 30 Jan 2012 11:42 am Operator: YOUMINH
 Sample : CC1417-10 Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I BROMOCHLOROMETHANE	1.000	1.000	0.0	89	-0.02
2	FREON 115	0.000	0.000	0.0	0#	-4.82#
3	FREON 152A	0.875	0.000	100.0#	0#	-4.67#
4	CHLORODIFLUOROMETHANE	0.295	0.411	-39.3#	113	-0.02
5	DICHLORODIFLUOROMETHANE	3.576	4.538	-26.9	113	-0.02
6	PROPYLENE	1.211	1.316	-8.7	100	-0.02
7	FREON 114	4.369	5.074	-16.1	100	-0.02
8	CHLOROMETHANE	0.437	0.475	-8.7	91	-0.02
9	VINYL CHLORIDE	1.734	1.823	-5.1	91	-0.02
10	1,3-BUTADIENE	1.371	1.413	-3.1	88	-0.02
11	n-BUTANE	2.781	2.611	6.1	83	-0.02
12	BROMOMETHANE	1.479	1.712	-15.8	100	-0.02
13	CHLOROETHANE	0.955	0.998	-4.5	87	-0.02
14	DICHLOROFLUOROMETHANE	3.481	3.719	-6.8	90	-0.02
15	ACROLEIN	0.658	0.612	7.0	77	-0.02
16	FREON 123	3.736	4.065	-8.8	91	-0.02
17	FREON 123A	2.181	2.632	-20.7	101	-0.02
18	TRICHLOROFLUOROMETHANE	3.633	4.480	-23.3	105	-0.02
19	ISOPROPYL ALCOHOL	2.800	2.482	11.4	75	-0.02
20	ACETONE	0.738	0.680	7.9	79	-0.02
21	ACRYLONITRILE	1.249	1.161	7.0	75	-0.02
22	PENTANE	0.477	0.490	-2.7	82	-0.02
23	H TVHC as EQUIV PENTANE	9.409	9.114	3.1	81	-0.02
24	IODOMETHANE	4.011	4.854	-21.0	103	-0.02
25	1,1-DICHLOROETHYLENE	1.686	1.839	-9.1	94	-0.02
26	CARBON DISULFIDE	4.182	4.110	1.7	86	-0.02
27	ETHANOL	0.660	0.592	10.3	77	-0.02
28	ACETONITRILE	1.285	1.100	14.4	72	-0.02
29	BROMOETHENE	1.569	1.787	-13.9	99	-0.02
30	METHYLENE CHLORIDE	1.552	1.593	-2.6	88	-0.02
31	3-CHLOROPROPENE	0.795	0.805	-1.3	81	-0.02
32	FREON 113	2.724	3.114	-14.3	97	-0.02
33	TRANS-1,2-DICHLOROETHYLENE	1.653	1.634	1.1	88	-0.02
34	TERTIARY BUTYL ALCOHOL	3.291	3.437	-4.4	82	-0.02
35	METHYL TERTIARY BUTYL ETHER	3.916	3.571	8.8	78	-0.02
36	TETRAHYDROFURAN	0.701	0.613	12.6	72	-0.02
37	HEXANE	2.758	2.455	11.0	72	-0.02
38	VINYL ACETATE	0.396	0.386	2.5	76	-0.02
39	1,1-DICHLOROETHANE	2.856	2.790	2.3	79	-0.02
40	METHYL ETHYL KETONE	0.693	0.614	11.4	73	-0.02
41	cis-1,2-DICHLOROETHYLENE	1.731	1.723	0.5	84	-0.02
42	DI-ISOPROPYL ETHER	5.160	3.937	23.7	65	-0.02

Continuing Calibration Summary

Job Number: JA99139
 Account: ERMNYW ERM, Inc.
 Project: 220 Water Street, Brooklyn, NY

Sample: VW1423-CC1417
 Lab FileID: W34941.D

43		ETHYL ACETATE	0.451	0.374	17.1	70	-0.02
44		METHYL ACRYLATE	2.732	2.228	18.4	67	-0.02
45		CHLOROFORM	3.013	3.179	-5.5	86	-0.02
46		2,4-DIMETHYLPENTANE	3.270	2.956	9.6	73	-0.02
47		1,1,1-TRICHLOROETHANE	2.890	3.315	-14.7	94	-0.02
48		CARBON TETRACHLORIDE	3.033	3.590	-18.4	97	-0.02
49		1,2-DICHLOROETHANE	1.715	1.806	-5.3	87	-0.02
50	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	87	-0.02
51		BENZENE	1.181	1.092	7.5	78	-0.02
52		CYCLOHEXANE	0.547	0.535	2.2	81	-0.02
53		2,3-DIMETHYLPENTANE	0.276	0.265	4.0	75	-0.02
54		TRICHLOROETHYLENE	0.489	0.475	2.9	83	-0.02
55		DIBROMOMETHANE	0.429	0.473	-10.3	89	-0.02
56		1,2-DICHLOROPROPANE	0.414	0.369	10.9	71	-0.02
57		ETHYL ACRYLATE	0.659	0.552	16.2	67	-0.02
58		BROMODICHLOROMETHANE	0.702	0.757	-7.8	85	-0.02
59		2,2,4-TRIMETHYLPENTANE	1.938	1.801	7.1	71	-0.02
60		1,4-DIOXANE	0.219	0.209	4.6	76	-0.02
61		METHYL METHACRYLATE	0.341	0.299	12.3	71	-0.01
62		HEPTANE	0.643	0.598	7.0	70	-0.02
63	H	TVHC as EQUIV HEPTANE	2.846	2.742	3.7	75	-0.02
64		METHYL ISOBUTYL KETONE	0.615	0.543	11.7	68	-0.02
65		cis-1,3-DICHLOROPROPENE	0.552	0.540	2.2	76	-0.02
66		TOLUENE	0.771	0.748	3.0	79	-0.02
67		trans-1,3-DICHLOROPROPENE	0.504	0.518	-2.8	78	-0.01
68		1,1,2-TRICHLOROETHANE	0.338	0.329	2.7	78	-0.02
69	I	CHLOROBENZENE-D5	1.000	1.000	0.0	83	-0.02
70		ETHYL METHACRYLATE	1.000	0.965	3.5	71	-0.01
71		2-HEXANONE	1.143	1.051	8.0	67	-0.01
72		TETRACHLOROETHYLENE	1.001	1.141	-14.0	89	-0.02
73		DIBROMOCHLOROMETHANE	1.366	1.563	-14.4	88	-0.01
74		1,2-DIBROMOETHANE	1.108	1.211	-9.3	82	-0.01
75		OCTANE	1.600	1.499	6.3	69	-0.01
76		1,1,1,2-TETRACHLOROETHANE	0.962	1.096	-13.9	85	-0.01
77		CHLOROBENZENE	1.861	1.944	-4.5	81	-0.01
78		ETHYLBENZENE	2.985	2.945	1.3	79	-0.01
79		m,p-XYLENE	1.167	1.188	-1.8	80	-0.01
80		o-XYLENE	1.120	1.141	-1.9	80	-0.02
81		STYRENE	1.510	1.688	-11.8	80	-0.01
82		1,2,3-TRICHLOROPROPANE	0.973	1.020	-4.8	77	-0.01
83		NONANE	1.387	1.339	3.5	68	-0.01
84		BROMOFORM	1.213	1.434	-18.2	89	-0.01
85	S	4-BROMOFLUOROBENZENE	1.087	1.226	-12.8	87	-0.01
86		1,1,2,2-TETRACHLOROETHANE	1.289	1.267	1.7	74	-0.01
87		ISOPROPYLBENZENE	2.823	3.143	-11.3	81	-0.01
88		BROMOBENZENE	0.804	0.972	-20.9	88	-0.02
89		2-CHLOROTOLUENE	0.642	0.755	-17.6	84	-0.01
90		n-PROPYLBENZENE	0.706	0.820	-16.1	81	-0.01
91		4-ETHYLTOLUENE	2.131	2.602	-22.1	79	0.00
92		1,3,5-TRIMETHYLBENZENE	1.708	2.052	-20.1	81	-0.01
93		ALPHA-METHYLSTYRENE	0.828	0.972	-17.4	80	-0.01
94		TERT-BUTYLBENZENE	0.470	0.540	-14.9	80	-0.01
95		1,2,4-TRIMETHYLBENZENE	1.541	1.887	-22.5	79	-0.01
96		m-DICHLOROBENZENE	1.048	1.301	-24.1	86	-0.01
97		BENZYL CHLORIDE	1.219	1.380	-13.2	76	-0.01
98		p-DICHLOROBENZENE	0.978	1.236	-26.4	84	-0.01
99		SEC-BUTYLBENZENE	0.522	0.623	-19.3	82	-0.01
100		p-ISOPROPYLTOLUENE	0.477	0.589	-23.5	81	0.00

5.9.6

5

Continuing Calibration Summary

Job Number: JA99139
Account: ERMNYW ERM, Inc.
Project: 220 Water Street, Brooklyn, NY

Sample: VW1423-CC1417
Lab FileID: W34941.D

101	o-DICHLOROBENZENE	0.881	1.098	-24.6	85	-0.01
102	n-BUTYLBENZENE	0.354	0.434	-22.6	80	-0.01
103	HEXACHLOROETHANE	0.589	0.779	-32.3#	92	0.00
104	HEXACHLOROBUTADIENE	0.239	0.327	-36.8#	84	0.00
105	1,2,4-TRICHLOROBENZENE	0.178	0.225	-26.4	82	0.00
106 I	Chlorobenzene-d5(a)	1.000	1.000	0.0	83	-0.02
107	NAPHTHALENE	0.393	0.414	-5.3	77	-0.01

(#) = Out of Range
W34784.D MW1417.M

SPCC's out = 0 CCC's out = 0
Tue Jan 31 12:26:47 2012 MSW

5.9.6

5

GC/MS Volatiles

Raw Data

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34272.D
 Acq On : 15 Feb 2012 7:50 pm
 Operator : YOUMINH
 Sample : JA99139-1
 Misc : MS25531,V2W1442,100,,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 16 08:54:05 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

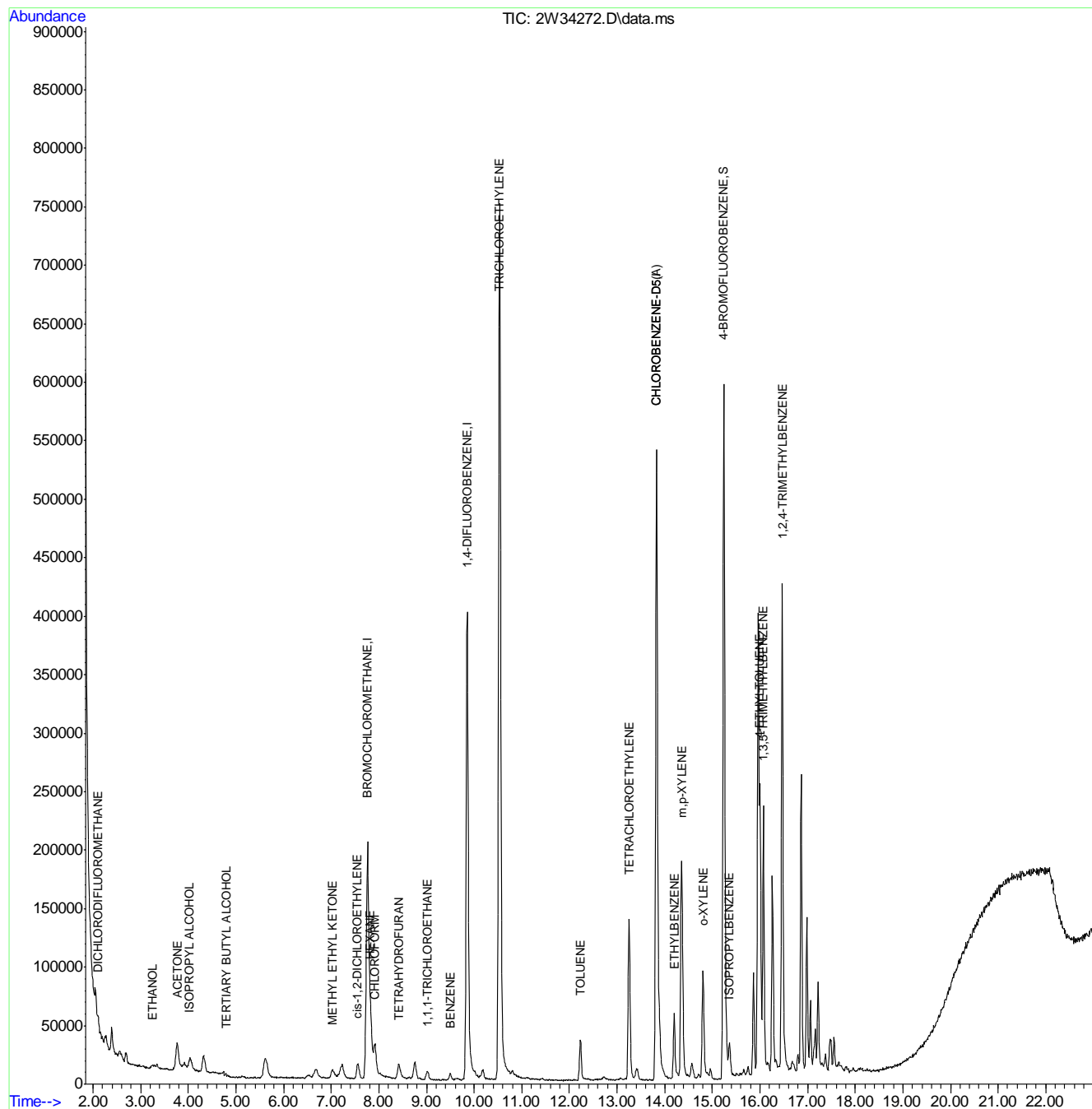
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) BROMOCHLOROMETHANE	7.756	128	153490	10.00	PPBV	#-0.02	
49) 1,4-DIFLUOROBENZENE	9.854	114	604029	10.00	PPBV	-0.02	
68) CHLOROBENZENE-D5	13.828	82	265633	10.00	PPBV	#-0.02	
104) CHLOROBENZENE-D5(A)	13.828	82	270915	10.00	PPBV	#-0.02	
System Monitoring Compounds							
83) 4-BROMOFLUOROBENZENE	15.243	95	300270	9.62	PPBV	-0.01	
Spiked Amount	10.000	Range	65 - 128	Recovery	=	96.20%	
Target Compounds							
							Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	9941	0.13	PPBV		96
19) ISOPROPYL ALCOHOL	4.032	45	27444	1.05	PPBV		71
20) ACETONE	3.763	58	12500	1.89	PPBV	#	47
27) ETHANOL	3.251	45	8315	1.58	PPBV		88
34) TERTIARY BUTYL ALCOHOL	4.787	59	8141	0.20	PPBV	#	63
36) TETRAHYDROFURAN	8.427	72	8384	1.11	PPBV	#	76
37) HEXANE	7.823	57	37738	1.33	PPBV	#	84
40) METHYL ETHYL KETONE	7.025	72	7298	1.07	PPBV	#	48
41) cis-1,2-DICHLOROETHYLENE	7.555	96	14878	0.64	PPBV	#	84
44) CHLOROFORM	7.909	83	33366	0.70	PPBV		96
46) 1,1,1-TRICHLOROETHANE	9.018	97	9730	0.18	PPBV		94
50) BENZENE	9.500	78	8873	0.15	PPBV		96
54) TRICHLOROETHYLENE	10.536	95	399700	13.65	PPBV		89
65) TOLUENE	12.231	92	24946	0.62	PPBV		96
71) TETRACHLOROETHYLENE	13.255	164	58037	1.90	PPBV		91
77) ETHYLBENZENE	14.200	91	64217	0.95	PPBV		95
78) m,p-XYLENE	14.359	106	109524	4.23	PPBV		88
79) o-XYLENE	14.804	106	44632	1.76	PPBV	#	87
85) ISOPROPYLBENZENE	15.352	105	26568	0.36	PPBV		99
89) 4-ETHYLTOLUENE	15.999	105	199697m	3.82	PPBV		
90) 1,3,5-TRIMETHYLBENZENE	16.072	105	185292	4.16	PPBV		99
93) 1,2,4-TRIMETHYLBENZENE	16.468	105	327607	8.10	PPBV	#	32

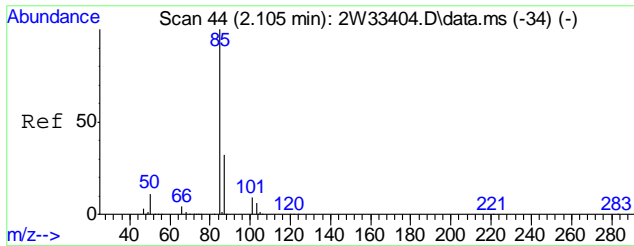
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2W34272.D
Acq On : 15 Feb 2012 7:50 pm
Operator : YOUMINH
Sample : JA99139-1
Misc : MS25531,V2W1442,100,,,,,1
ALS Vial : 8 Sample Multiplier: 1

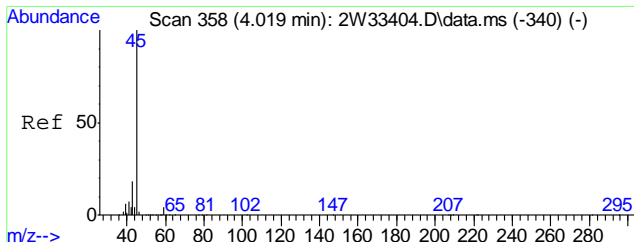
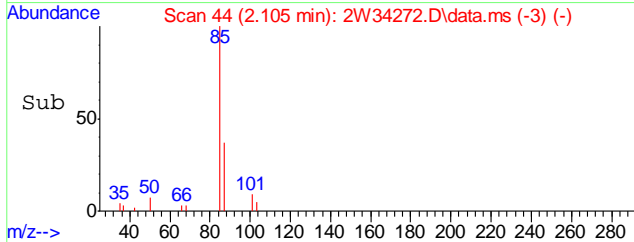
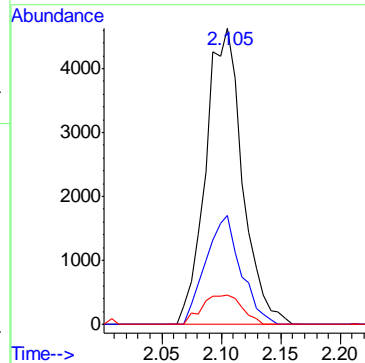
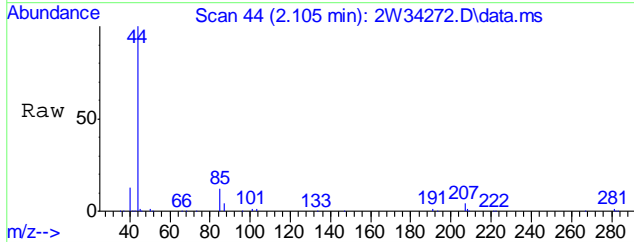
Quant Time: Feb 16 08:54:05 2012
Quant Method : C:\msdchem\1\METHODS\M2W1426.M
Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
QLast Update : Tue Jan 17 10:35:27 2012
Response via : Initial Calibration





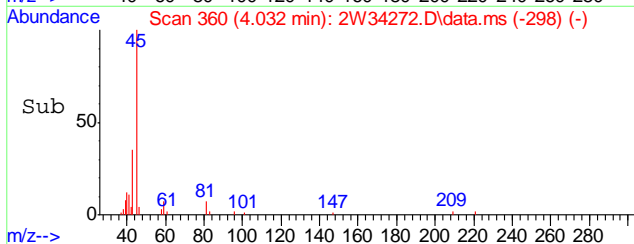
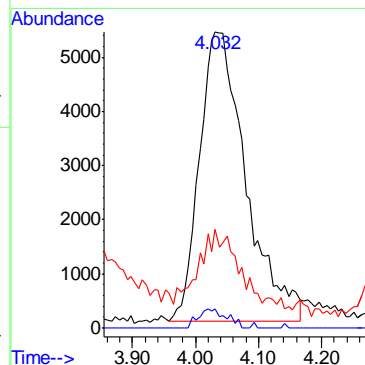
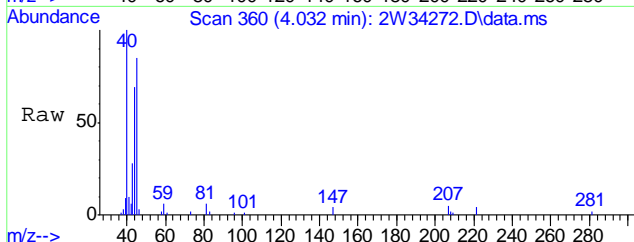
#3
 DICHLORODIFLUOROMETHANE
 Concen: 0.13 PPBV
 RT: 2.105 min Scan# 44
 Delta R.T. 0.000 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

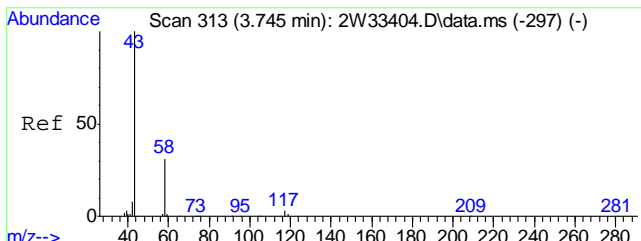
Tgt Ion	Resp	Lower	Upper
85	9941		
85	100		
87	35.2	12.4	52.4
50	10.9	0.0	30.4



#19
 ISOPROPYL ALCOHOL
 Concen: 1.05 PPBV
 RT: 4.032 min Scan# 360
 Delta R.T. 0.031 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

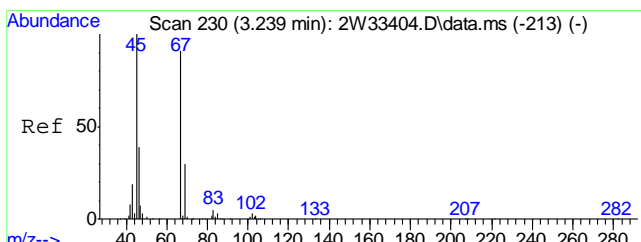
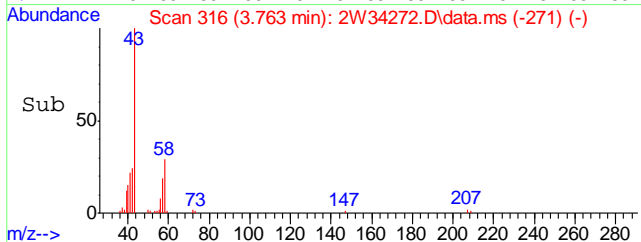
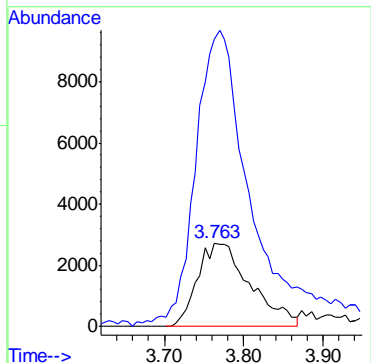
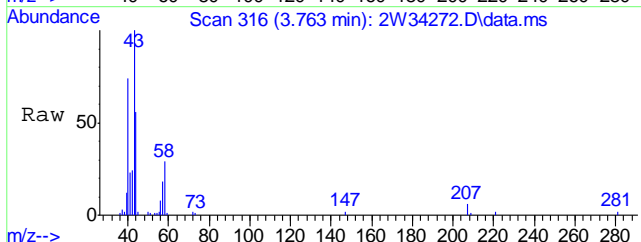
Tgt Ion	Resp	Lower	Upper
45	27444		
45	100		
59	6.5	0.0	23.9
43	33.3	0.0	38.2





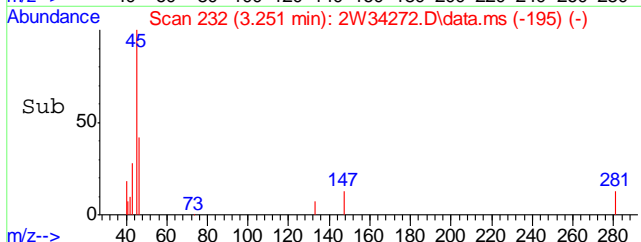
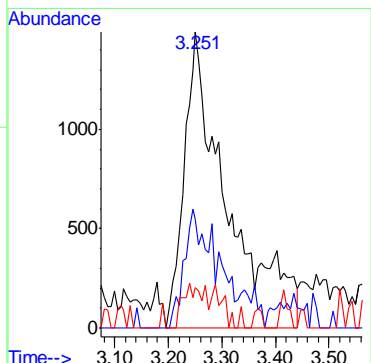
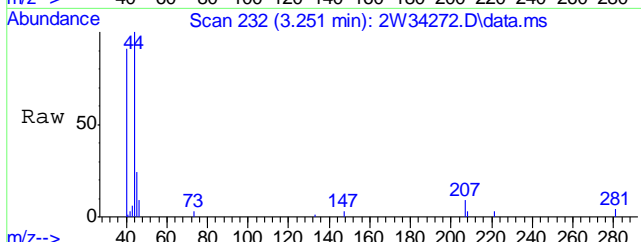
#20
 ACETONE
 Concen: 1.89 PPBV
 RT: 3.763 min Scan# 316
 Delta R.T. 0.024 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

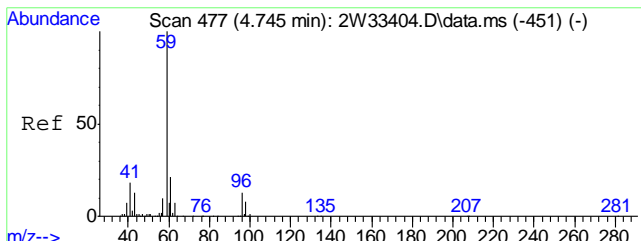
Tgt Ion	Resp	Lower	Upper
58	12500		
43	382.9	262.1	302.1#



#27
 ETHANOL
 Concen: 1.58 PPBV
 RT: 3.251 min Scan# 232
 Delta R.T. 0.024 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

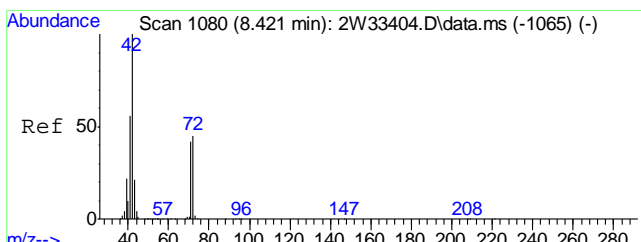
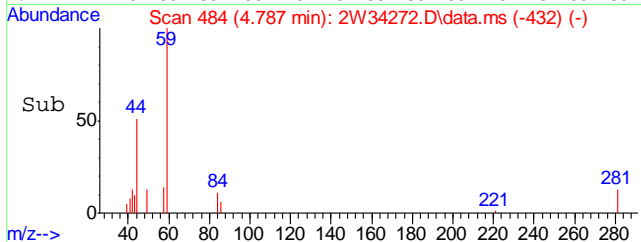
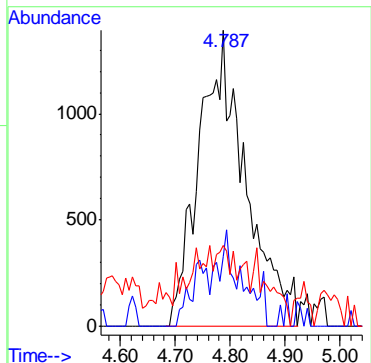
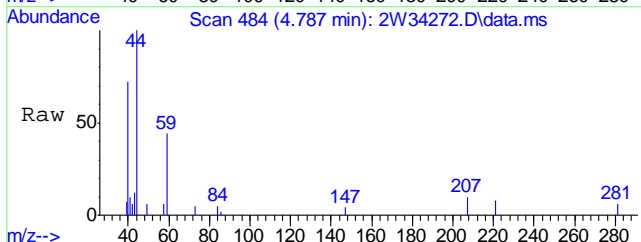
Tgt Ion	Resp	Lower	Upper
45	8315		
46	34.8	11.9	71.9
42	11.2	0.0	35.5





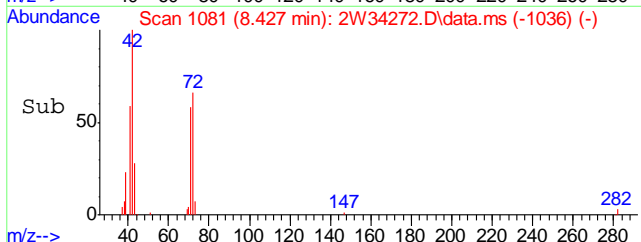
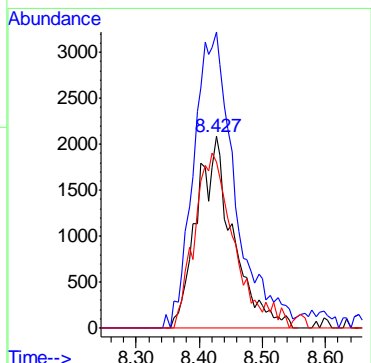
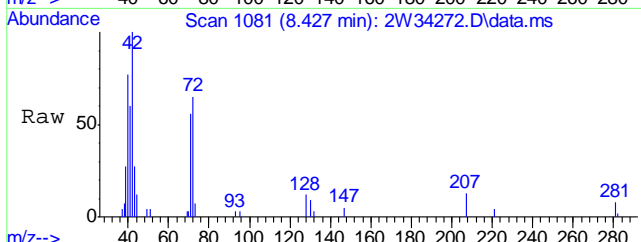
#34
 TERTIARY BUTYL ALCOHOL
 Concen: 0.20 PPBV
 RT: 4.787 min Scan# 484
 Delta R.T. 0.067 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

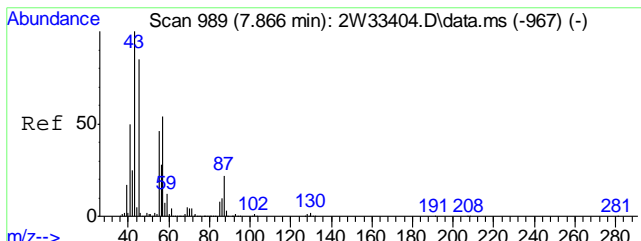
Tgt Ion	Resp	Lower	Upper
59	100		
41	0.0	0.0	38.5
43	0.0	0.0	31.6



#36
 TETRAHYDROFURAN
 Concen: 1.11 PPBV
 RT: 8.427 min Scan# 1081
 Delta R.T. 0.024 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

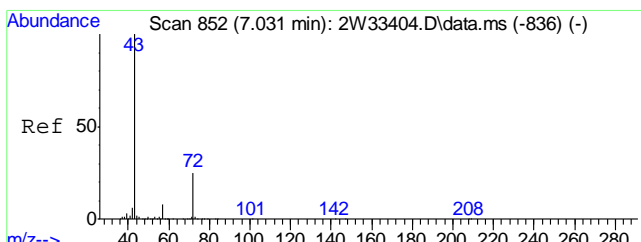
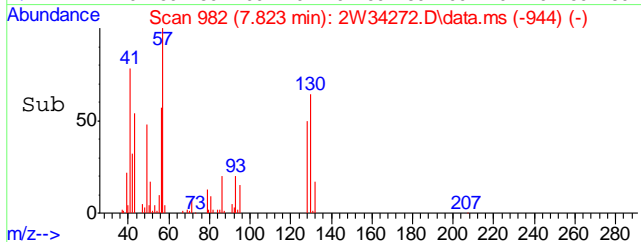
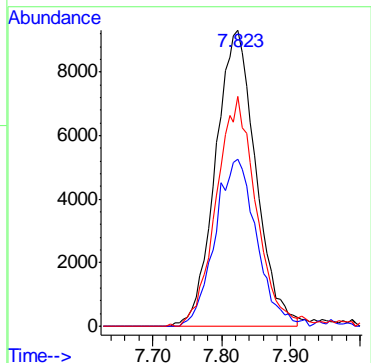
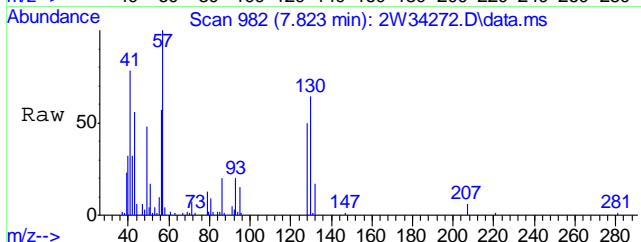
Tgt Ion	Resp	Lower	Upper
72	100		
42	182.5	214.4	254.4#
71	99.4	74.2	114.2





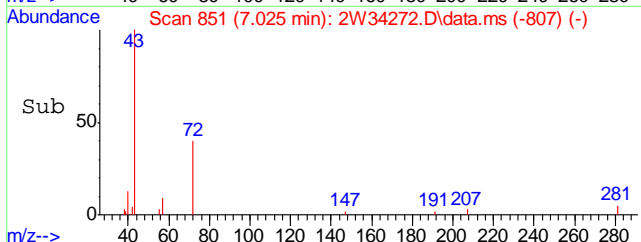
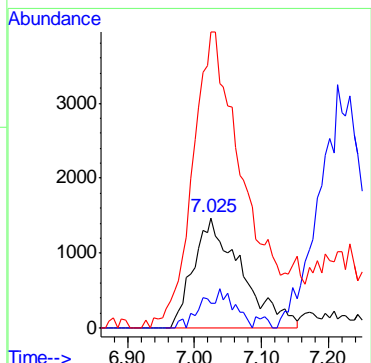
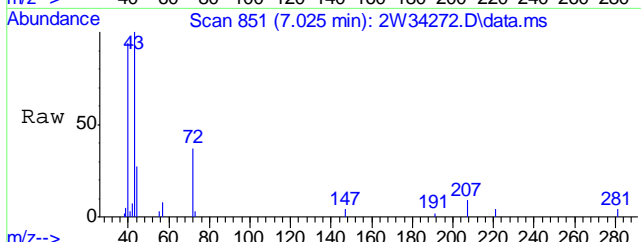
#37
 HEXANE
 Concen: 1.33 PPBV
 RT: 7.823 min Scan# 982
 Delta R.T. -0.013 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

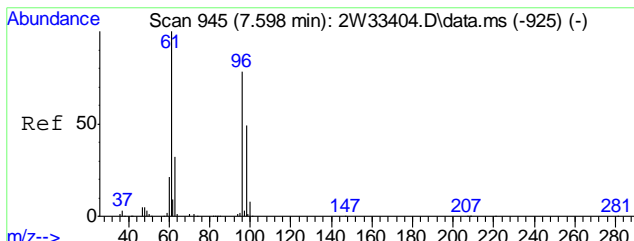
Tgt Ion	Resp	Lower	Upper
57	37738		
57	100		
56	57.9	32.9	72.9
41	76.0	77.1	117.1#



#40
 METHYL ETHYL KETONE
 Concen: 1.07 PPBV
 RT: 7.025 min Scan# 851
 Delta R.T. 0.019 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

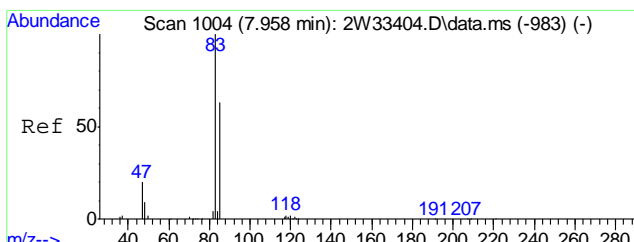
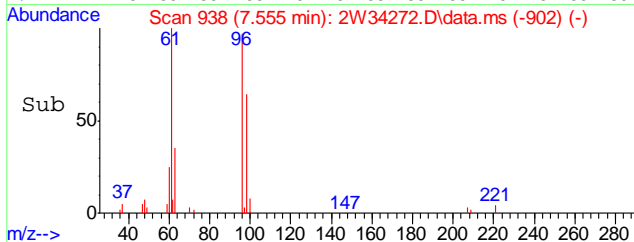
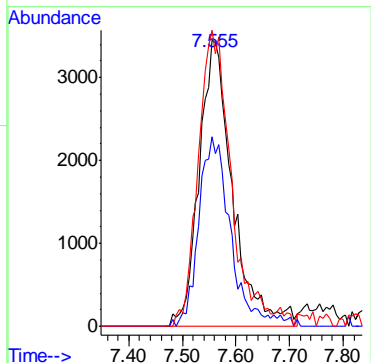
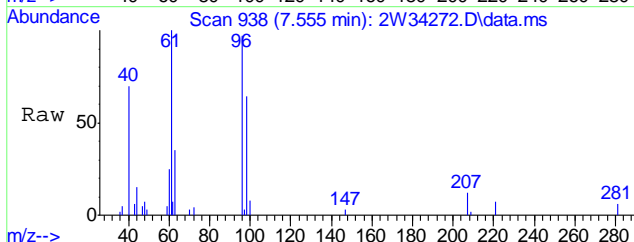
Tgt Ion	Resp	Lower	Upper
72	7298		
72	100		
57	22.7	11.4	51.4
43	269.0	377.6	417.6#





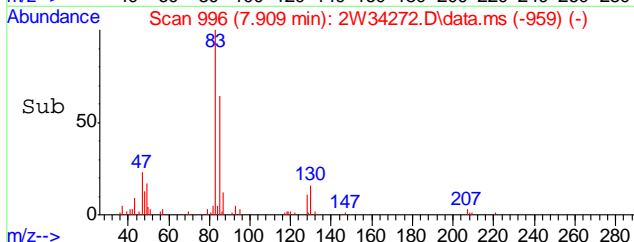
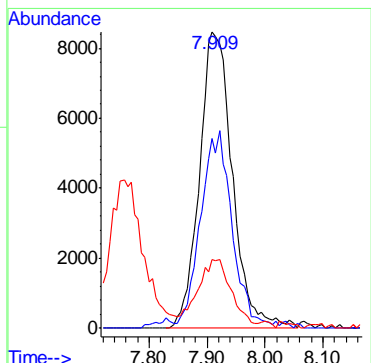
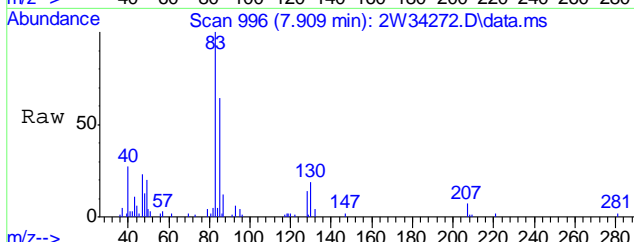
#41
 cis-1,2-DICHLOROETHYLENE
 Concen: 0.64 PPBV
 RT: 7.555 min Scan# 938
 Delta R.T. -0.025 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

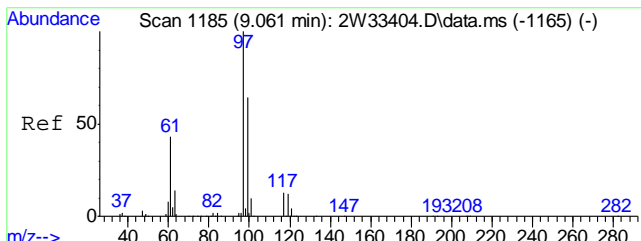
Tgt Ion	Resp	Lower	Upper
96	14878		
96	100		
98	63.2	43.5	83.5
61	103.3	111.4	151.4#



#44
 CHLOROFORM
 Concen: 0.70 PPBV
 RT: 7.909 min Scan# 996
 Delta R.T. -0.024 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

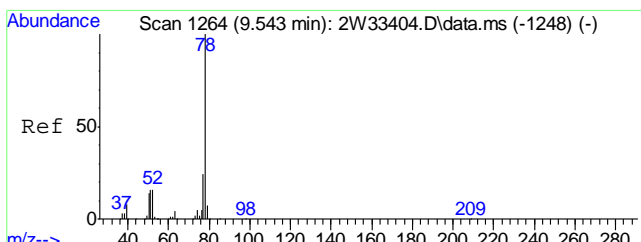
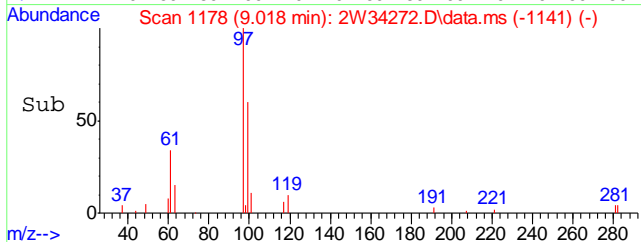
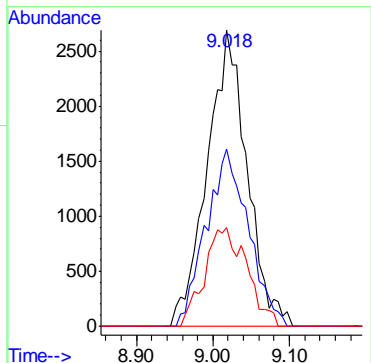
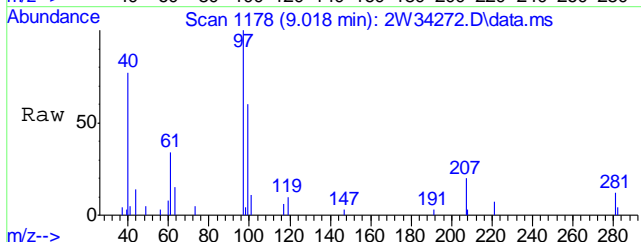
Tgt Ion	Resp	Lower	Upper
83	33366		
83	100		
85	62.2	45.7	85.7
47	23.4	2.5	42.5





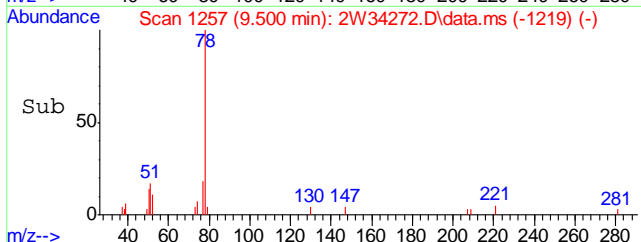
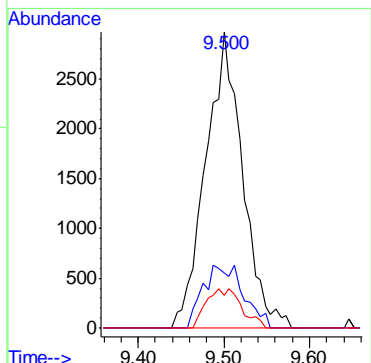
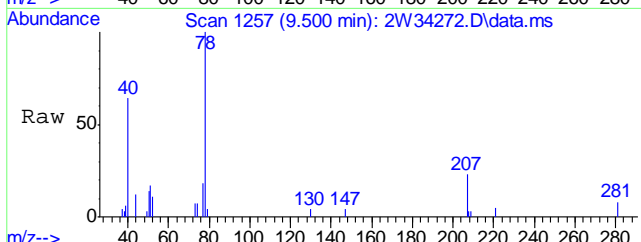
#46
 1,1,1-TRICHLOROETHANE
 Concen: 0.18 PPBV
 RT: 9.018 min Scan# 1178
 Delta R.T. -0.019 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

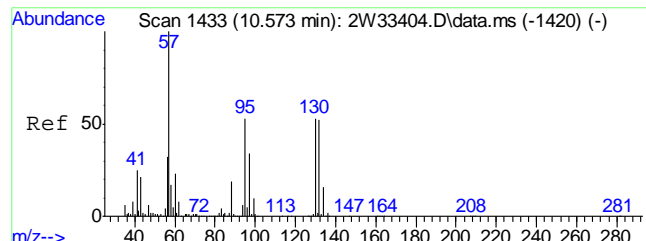
Tgt Ion	Resp	Lower	Upper
97	9730		
99	63.4	44.1	84.1
61	35.5	23.6	63.6



#50
 BENZENE
 Concen: 0.15 PPBV
 RT: 9.500 min Scan# 1257
 Delta R.T. -0.018 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

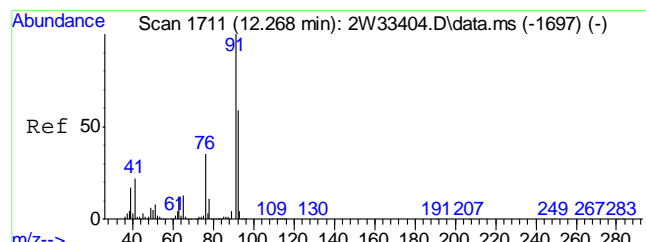
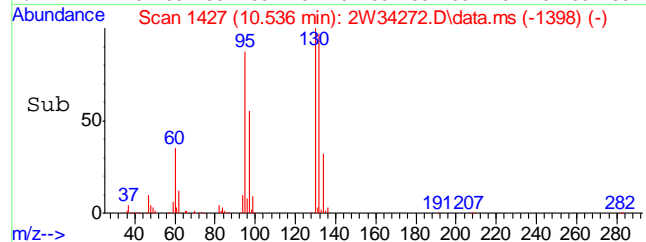
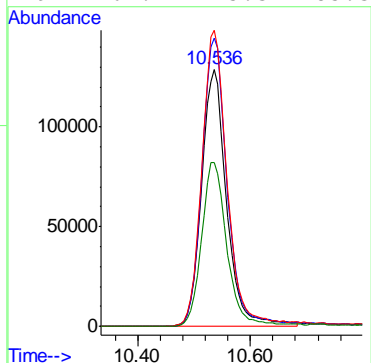
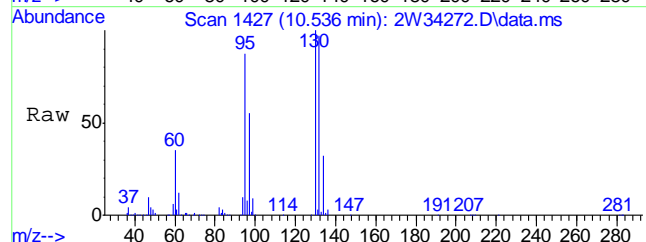
Tgt Ion	Resp	Lower	Upper
78	8873		
77	23.1	3.5	43.5
52	12.7	0.0	36.3





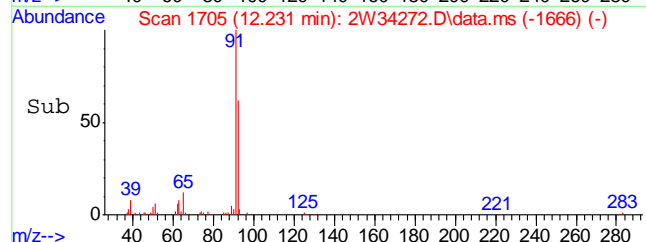
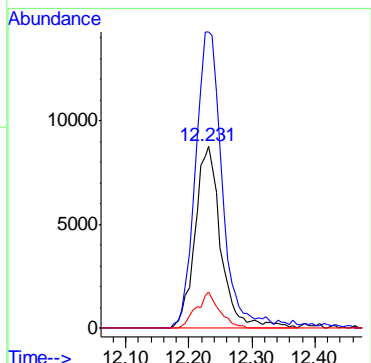
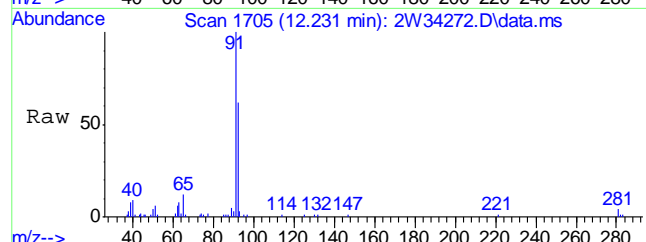
#54
 TRICHLOROETHYLENE
 Concen: 13.65 PPBV
 RT: 10.536 min Scan# 1427
 Delta R.T. -0.012 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

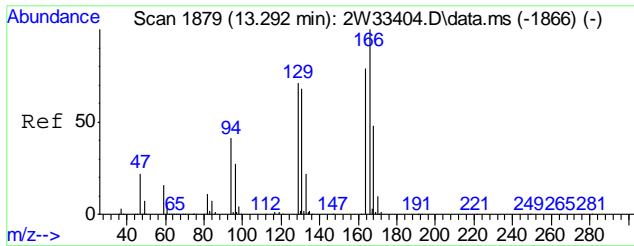
Tgt Ion	Resp	Lower	Upper
95	399700		
95	100		
132	112.9	77.7	117.7
130	116.0	82.3	122.3
97	64.7	45.3	85.3



#65
 TOLUENE
 Concen: 0.62 PPBV
 RT: 12.231 min Scan# 1705
 Delta R.T. -0.012 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

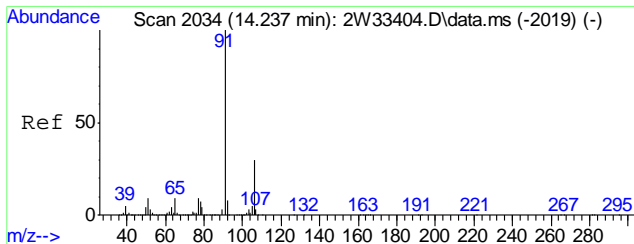
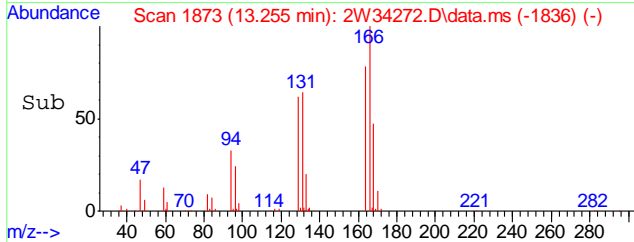
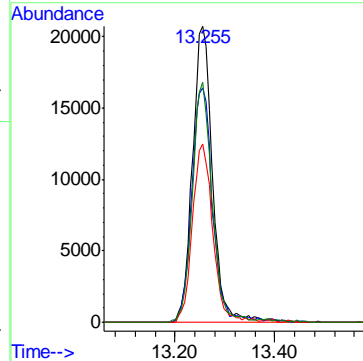
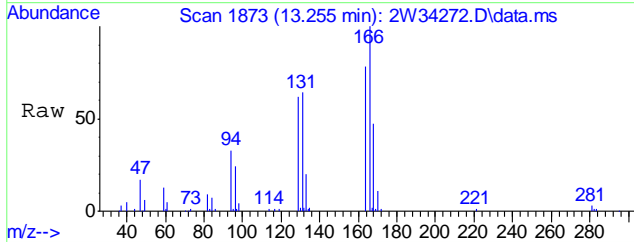
Tgt Ion	Resp	Lower	Upper
92	24946		
92	100		
91	173.3	148.1	188.1
65	17.6	1.9	41.9





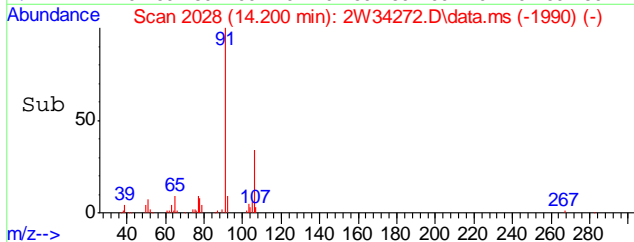
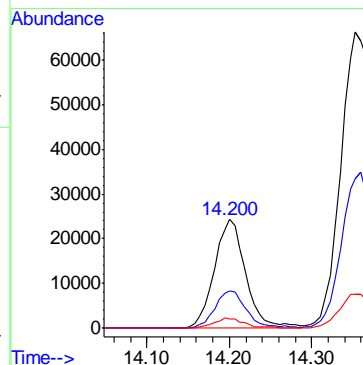
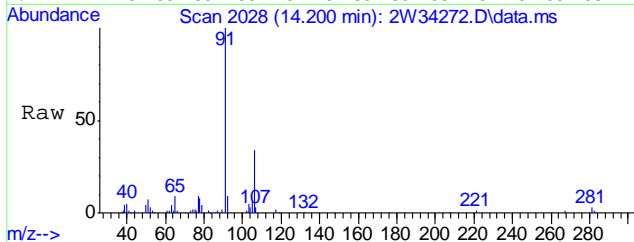
#71
TETRACHLOROETHYLENE
Concen: 1.90 PPBV
RT: 13.255 min Scan# 1873
Delta R.T. -0.019 min
Lab File: 2W34272.D
Acq: 15 Feb 2012 7:50 pm

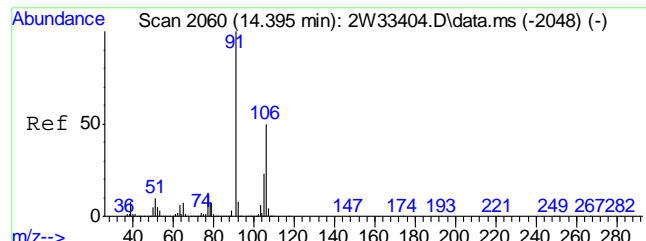
Tgt Ion	Resp	Lower	Upper
164	100		
129	82.3	73.1	113.1
168	60.8	41.1	81.1
131	79.1	70.5	110.5



#77
ETHYLBENZENE
Concen: 0.95 PPBV
RT: 14.200 min Scan# 2028
Delta R.T. -0.018 min
Lab File: 2W34272.D
Acq: 15 Feb 2012 7:50 pm

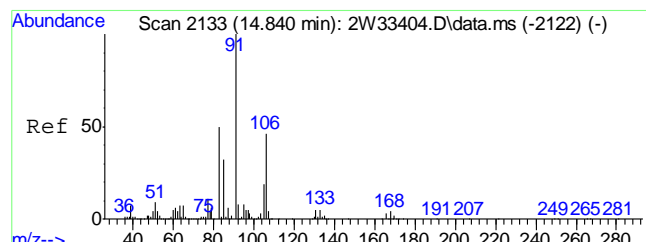
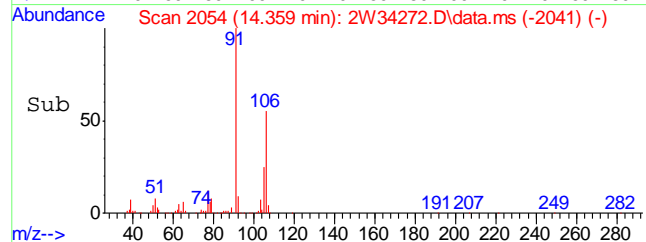
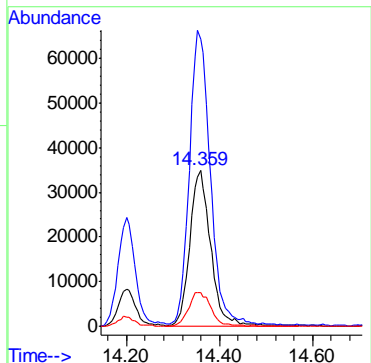
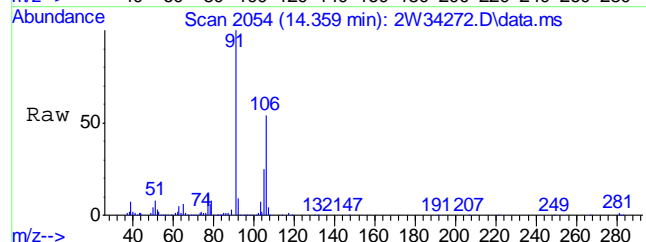
Tgt Ion	Resp	Lower	Upper
91	100		
106	34.5	11.0	51.0
77	8.9	0.0	28.4





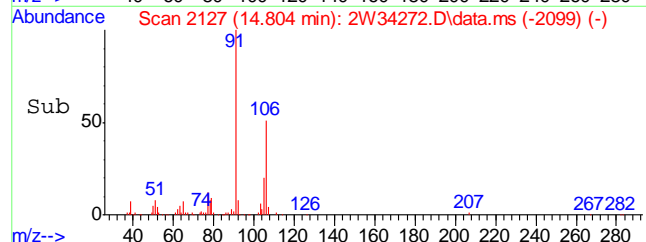
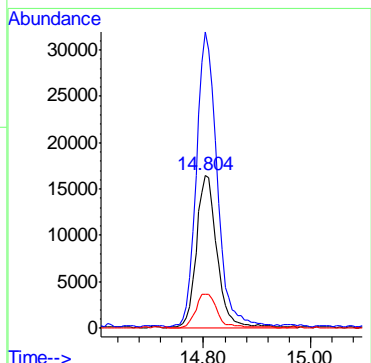
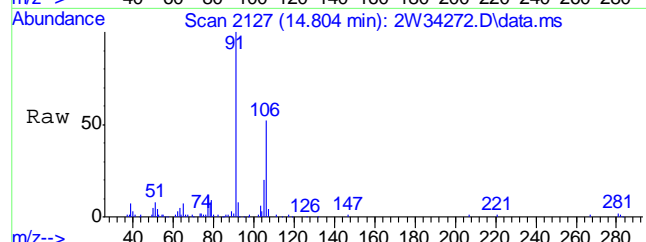
#78
 m,p-XYLENE
 Concen: 4.23 PPBV
 RT: 14.359 min Scan# 2054
 Delta R.T. -0.018 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

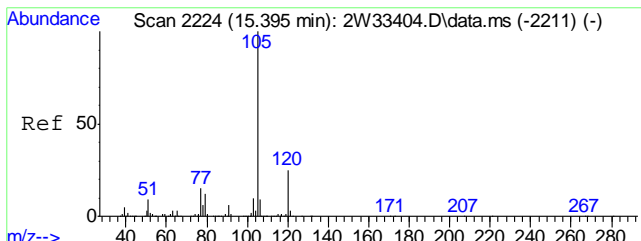
Tgt Ion	Resp	Lower	Upper
106	109524		
91	183.7	162.3	243.5
77	21.8	20.7	31.1



#79
 o-XYLENE
 Concen: 1.76 PPBV
 RT: 14.804 min Scan# 2127
 Delta R.T. -0.018 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

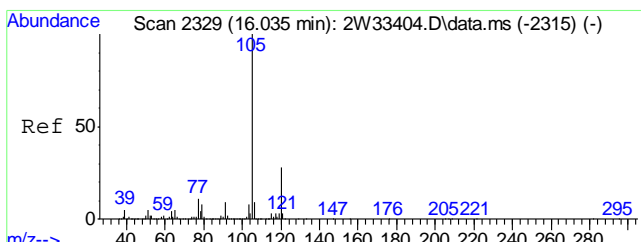
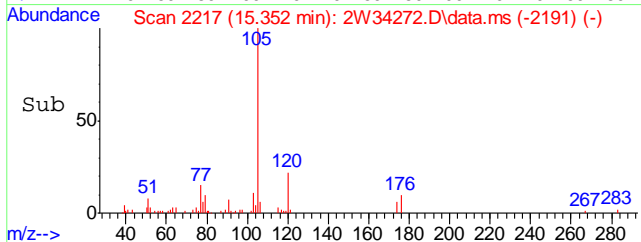
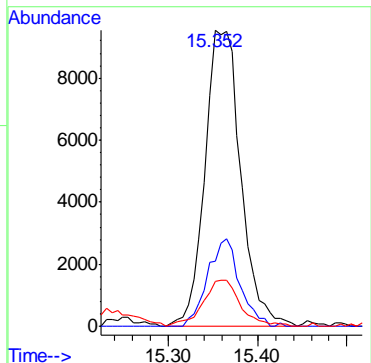
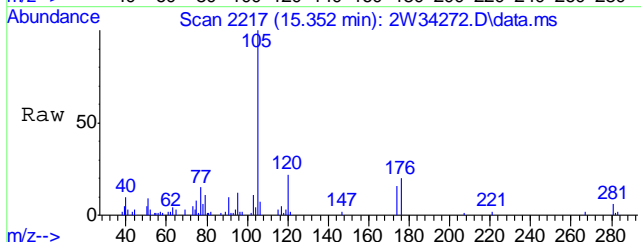
Tgt Ion	Resp	Lower	Upper
106	44632		
91	191.2	193.6	233.6#
77	23.7	6.3	46.3





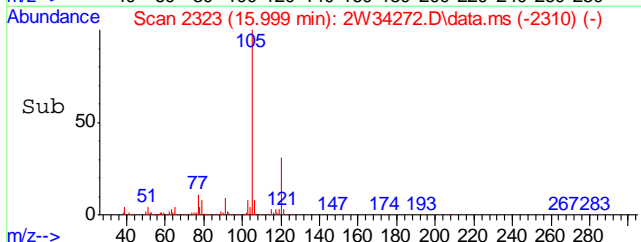
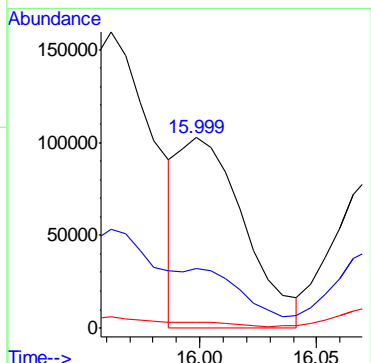
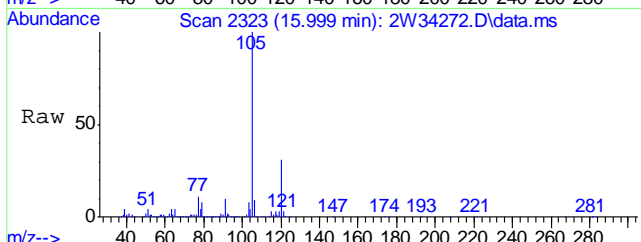
#85
ISOPROPYLBENZENE
Concen: 0.36 PPBV
RT: 15.352 min Scan# 2217
Delta R.T. -0.025 min
Lab File: 2W34272.D
Acq: 15 Feb 2012 7:50 pm

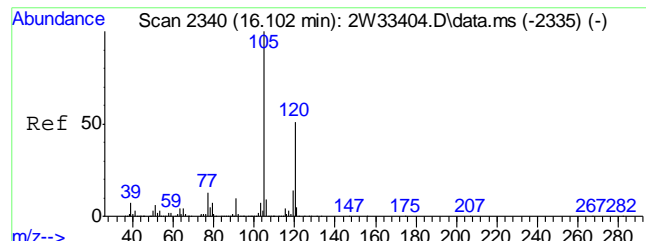
Tgt Ion	Resp	Lower	Upper
105	26568		
105	100		
120	26.4	6.3	46.3
77	16.3	0.0	34.8



#89
4-ETHYLTOLUENE
Concen: 3.82 PPBV m
RT: 15.999 min Scan# 2323
Delta R.T. -0.018 min
Lab File: 2W34272.D
Acq: 15 Feb 2012 7:50 pm

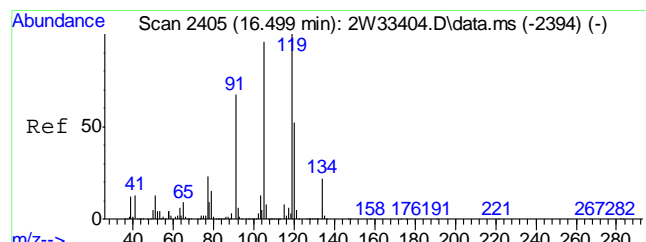
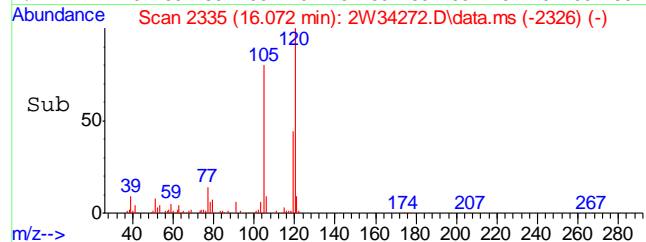
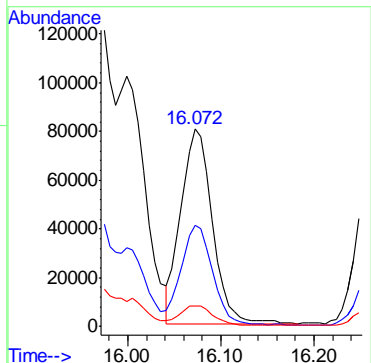
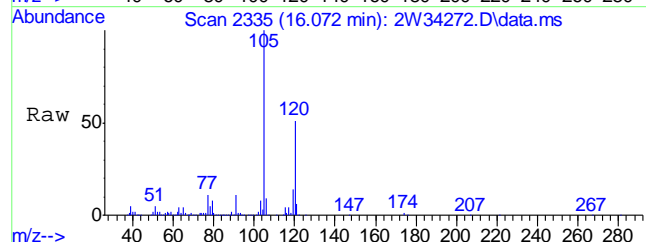
Tgt Ion	Resp	Lower	Upper
105	199697		
105	100		
120	92.0	7.6	47.6#
119	9.2	0.0	22.4





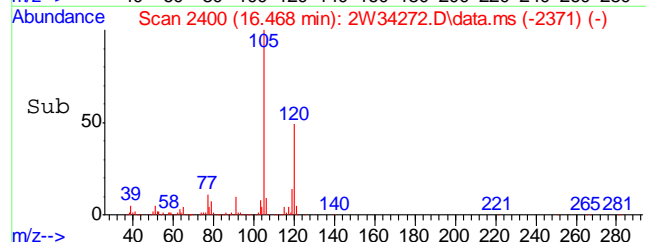
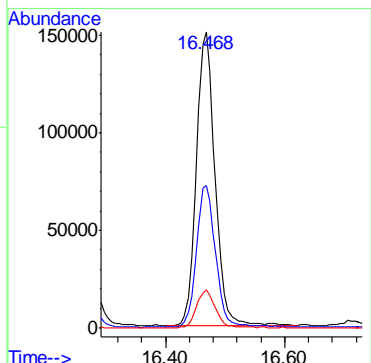
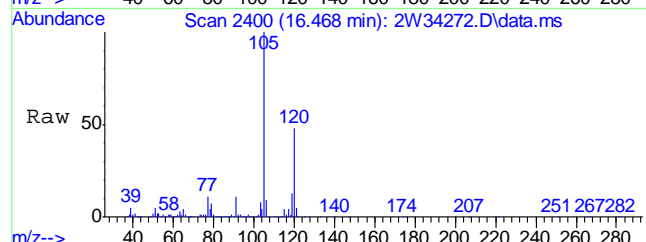
#90
 1,3,5-TRIMETHYLBENZENE
 Concen: 4.16 PPBV
 RT: 16.072 min Scan# 2335
 Delta R.T. -0.018 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

Tgt Ion	Resp	Lower	Upper
105	185292		
120	51.9	31.3	71.3
91	10.6	0.0	30.0



#93
 1,2,4-TRIMETHYLBENZENE
 Concen: 8.10 PPBV
 RT: 16.468 min Scan# 2400
 Delta R.T. -0.012 min
 Lab File: 2W34272.D
 Acq: 15 Feb 2012 7:50 pm

Tgt Ion	Resp	Lower	Upper
105	327607		
120	49.2	36.5	76.5
119	13.2	98.5	138.5#



Manual Integration Approval Summary

Sample Number: JA99139-1 **Method:** TO-15
Lab FileID: 2W34272.D **Analyst approved:** 02/16/12 11:49 Youmin Hu
Injection Time: 02/15/12 19:50 **Supervisor approved:** 02/24/12 14:21 Jessica Reitan-Chu

Parameter	CAS	Sig#	R.T. (min.)	Reason
4-Ethyltoluene	622-96-8		16.00	Overlapping peak

6.1.1.1

6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34269.D
 Acq On : 15 Feb 2012 5:52 pm
 Operator : YOUMINH
 Sample : MB
 Misc : MS25550,V2W1442,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 16 08:46:54 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.762	128	172842	10.00	PPBV	#-0.02
49) 1,4-DIFLUOROBENZENE	9.860	114	623100	10.00	PPBV	-0.01
68) CHLOROBENZENE-D5	13.828	82	263846	10.00	PPBV	#-0.02
104) CHLOROBENZENE-D5(A)	13.828	82	269914	10.00	PPBV	#-0.02
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.243	95	259058	8.36	PPBV	-0.01
Spiked Amount	10.000	Range 65 - 128	Recovery	=	83.60%	

Target Compounds Qvalue

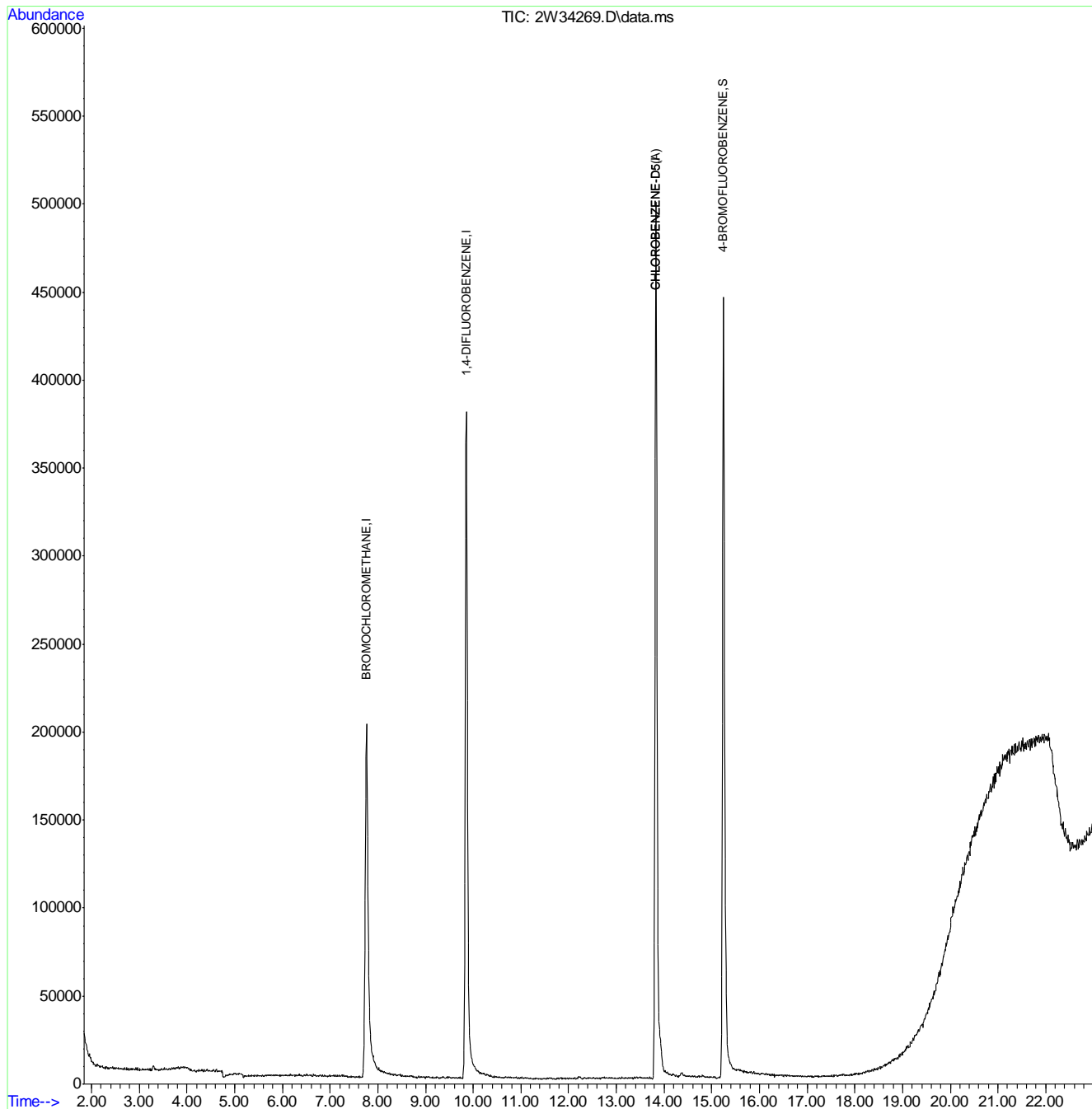
 (#) = qualifier out of range (m) = manual integration (+) = signals summed

6.2.1
6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2W34269.D
Acq On : 15 Feb 2012 5:52 pm
Operator : YOUMINH
Sample : MB
Misc : MS25550,V2W1442,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 16 08:46:54 2012
Quant Method : C:\msdchem\1\METHODS\M2W1426.M
Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
QLast Update : Tue Jan 17 10:35:27 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34944.D Vial: 5
 Acq On : 30 Jan 2012 3:54 pm Operator: YOUMINH
 Sample : MB Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:49 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.34	128	59078	10.00	PPBV	-0.02
50) 1,4-DIFLUOROBENZENE	10.04	114	287457	10.00	PPBV	-0.02
69) CHLOROBENZENE-D5	14.33	82	125147	10.00	PPBV	-0.02
106) Chlorobenzene-d5(a)	14.33	82	124211	10.00	PPBV	-0.02

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 15.99 95 139739 10.27 PPBV -0.02
 Spiked Amount 10.000 Range 65 - 128 Recovery = 102.70%

Target Compounds Qvalue

6.2.2
6

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34944.D MW1417.M Tue Jan 31 12:28:17 2012 MSW

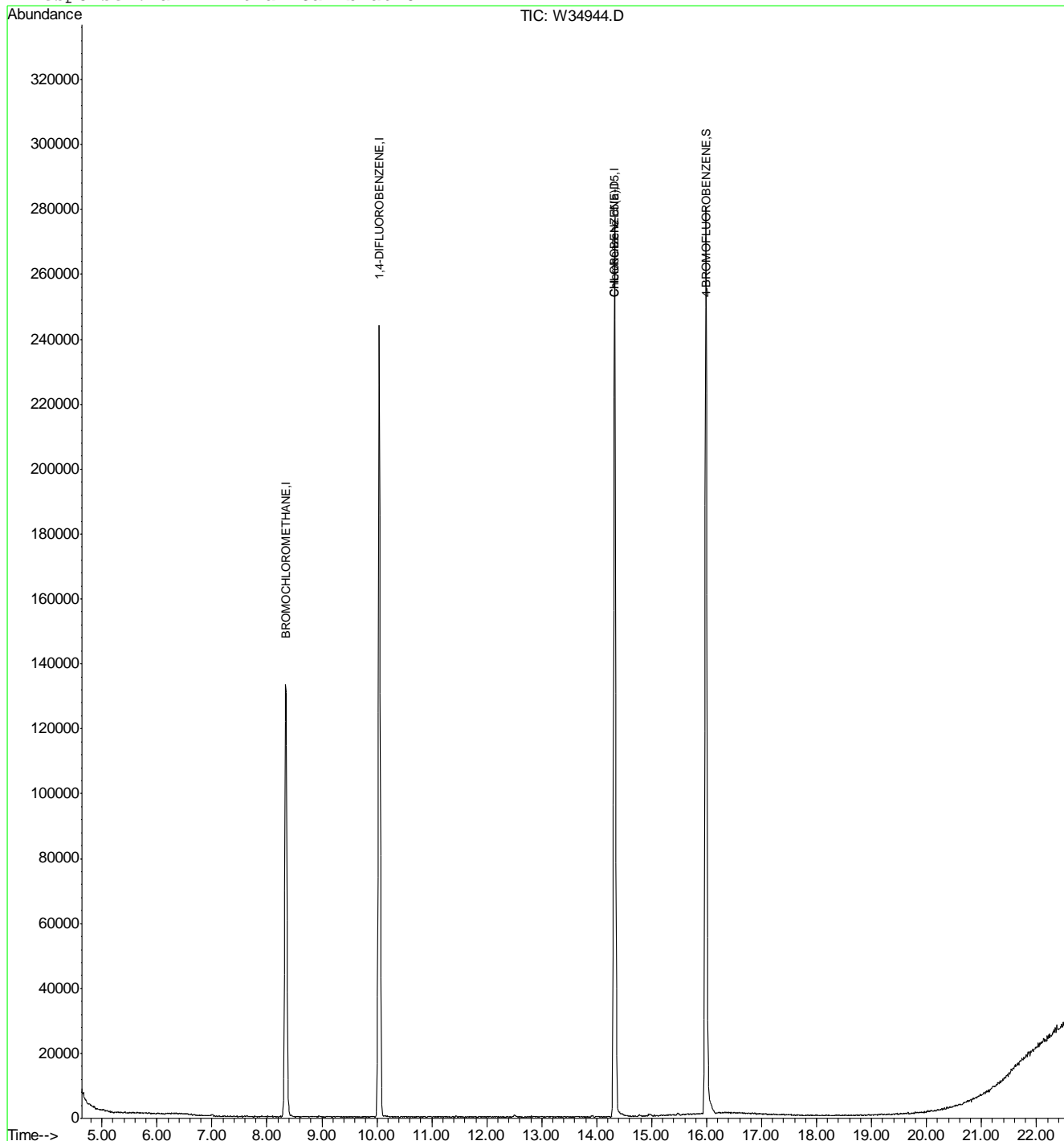
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34944.D
 Acq On : 30 Jan 2012 3:54 pm
 Sample : MB
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:53 2012

Vial: 5
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34265.D
 Acq On : 15 Feb 2012 1:37 pm
 Operator : YOUMINH
 Sample : BS
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:39:17 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.756	128	180024	10.00	PPBV	#-0.02
49) 1,4-DIFLUOROBENZENE	9.854	114	731140	10.00	PPBV	-0.02
68) CHLOROENZENE-D5	13.828	82	352968	10.00	PPBV	#-0.02
104) CHLOROENZENE-D5(A)	13.828	82	356156	10.00	PPBV	-0.02
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.243	95	410026	9.89	PPBV	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	98.90%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	788640	8.88	PPBV	99
4) FREON 152A	1.953	65	139334	8.34	PPBV	91
5) CHLORODIFLUOROMETHANE	1.995	67	73848	9.13	PPBV	100
6) PROPYLENE	2.032	41	134938	7.43	PPBV	95
7) FREON 114	2.367	85	676744	7.46	PPBV #	74
8) CHLOROMETHANE	2.270	52	54120	8.24	PPBV #	84
9) VINYL CHLORIDE	2.495	62	236805	8.77	PPBV	99
10) 1,3-BUTADIENE	2.636	54	166624	9.01	PPBV	95
11) n-BUTANE	2.690	43	301976	8.33	PPBV #	97
12) BROMOMETHANE	2.916	94	275413	9.43	PPBV	99
13) CHLOROETHANE	3.093	64	127385	8.93	PPBV	98
15) ACROLEIN	3.593	56	60139	9.72	PPBV	97
16) FREON 123	3.617	83	613772	9.41	PPBV #	95
17) FREON 123A	3.684	117	420493	9.83	PPBV #	62
18) TRICHLOROFLUOROMETHANE	3.916	101	856357	9.78	PPBV	100
19) ISOPROPYL ALCOHOL	3.995	45	312521	10.19	PPBV	96
20) ACETONE	3.727	58	73263	9.46	PPBV	99
21) PENTANE	4.324	42	169494	8.64	PPBV	85
23) TVHC as EQUIV PENTANE	4.508	TIC	859150m	8.56	PPBV	
24) IODOMETHANE	4.568	142	774071	9.82	PPBV	100
25) 1,1-DICHLOROETHYLENE	4.660	96	257464	9.10	PPBV #	80
26) CARBON DISULFIDE	5.208	76	462377	7.55	PPBV	96
27) ETHANOL	3.227	45	55324	8.97	PPBV	94
28) BROMOETHENE	3.465	106	306746	10.69	PPBV	99
30) METHYLENE CHLORIDE	4.818	84	198159	8.97	PPBV	84
31) 3-CHLOROPROPENE	4.970	76	95643	8.54	PPBV #	75
32) FREON 113	5.159	151	489230	9.23	PPBV #	79
33) TRANS-1,2-DICHLOROETHY...	6.147	96	197938	8.48	PPBV #	84
34) TERTIARY BUTYL ALCOHOL	4.702	59	450445	9.58	PPBV	97
35) METHYL TERTIARY BUTYL ...	6.537	73	525116	8.34	PPBV	91
36) TETRAHYDROFURAN	8.391	72	76307	8.64	PPBV #	69
37) HEXANE	7.824	57	258010	7.76	PPBV	96
38) VINYL ACETATE	6.677	86	41454	9.71	PPBV #	1
39) 1,1-DICHLOROETHANE	6.427	63	348183	8.17	PPBV	98
40) METHYL ETHYL KETONE	6.988	72	70894	8.85	PPBV #	66
41) cis-1,2-DICHLOROETHYLENE	7.555	96	236250	8.71	PPBV #	84
42) ETHYL ACETATE	7.848	61	40111	8.69	PPBV #	86
44) CHLOROFORM	7.921	83	487970	8.74	PPBV	98
45) 2,4-DIMETHYLPENTANE	8.823	57	340561	8.36	PPBV #	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34265.D
 Acq On : 15 Feb 2012 1:37 pm
 Operator : YOUMINH
 Sample : BS
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:39:17 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) 1,1,1-TRICHLOROETHANE	9.018	97	576453	8.97	PPBV	95
47) CARBON TETRACHLORIDE	9.646	117	636765	8.84	PPBV	99
48) 1,2-DICHLOROETHANE	8.744	62	281366	9.09	PPBV	99
50) BENZENE	9.500	78	635528	9.00	PPBV	97
51) CYCLOHEXANE	9.774	84	294675	8.59	PPBV #	81
52) 2,3-DIMETHYLPENTANE	10.006	71	136823	8.31	PPBV	86
54) TRICHLOROETHYLENE	10.536	95	305603	8.62	PPBV	89
55) 1,2-DICHLOROPROPANE	10.305	63	190872	7.99	PPBV	82
57) BROMODICHLOROMETHANE	10.494	83	513600	8.61	PPBV	98
58) 2,2,4-TRIMETHYLPENTANE	10.561	57	894187	8.16	PPBV	97
59) 1,4-DIOXANE	10.543	88	138003	9.71	PPBV #	1
60) METHYL METHACRYLATE	10.713	69	163748	8.73	PPBV #	83
61) HEPTANE	10.805	43	269009	8.34	PPBV	84
62) TVHC as EQUIV HEPTANE	10.805	TIC	1409728m	8.08	PPBV	
63) METHYL ISOBUTYL KETONE	11.359	58	131234	9.20	PPBV #	82
64) cis-1,3-DICHLOROPROPENE	11.335	75	316227	9.06	PPBV	99
65) TOLUENE	12.231	92	443634	9.08	PPBV	97
66) trans-1,3-DICHLOROPROPENE	11.804	75	299789	9.08	PPBV	99
67) 1,1,2-TRICHLOROETHANE	11.975	83	198375	8.75	PPBV	90
69) 2-HEXANONE	12.445	58	154196	9.85	PPBV	91
71) TETRACHLOROETHYLENE	13.255	164	400839	9.90	PPBV	91
72) DIBROMOCHLOROMETHANE	12.621	129	557291	9.52	PPBV	99
73) 1,2-DIBROMOETHANE	12.841	107	371800	9.60	PPBV	100
74) OCTANE	13.079	43	352223	8.85	PPBV #	73
75) 1,1,1,2-TETRACHLOROETHANE	13.847	131	378481	9.00	PPBV	99
76) CHLOROBENZENE	13.871	112	586771	9.71	PPBV	93
77) ETHYLBENZENE	14.200	91	799594	8.95	PPBV	95
78) m,p-XYLENE	14.359	106	666709	19.37	PPBV	92
79) o-XYLENE	14.804	106	321511	9.54	PPBV	91
80) STYRENE	14.700	104	446592	9.58	PPBV	99
81) NONANE	14.962	43	306743	8.66	PPBV	86
82) BROMOFORM	14.463	173	486108	9.06	PPBV	98
84) 1,1,2,2-TETRACHLOROETHANE	14.792	83	344431	8.21	PPBV	97
85) ISOPROPYLBENZENE	15.359	105	893562	9.00	PPBV	96
87) 2-CHLOROTOLUENE	15.846	126	222037	9.68	PPBV #	58
88) n-PROPYLBENZENE	15.865	120	231263	10.79	PPBV	73
89) 4-ETHYLTOLUENE	15.999	105	723751	10.41	PPBV	93
90) 1,3,5-TRIMETHYLBENZENE	16.072	105	622124	10.52	PPBV	97
92) TERT-BUTYLBENZENE	16.462	134	168786	10.50	PPBV	93
93) 1,2,4-TRIMETHYLBENZENE	16.468	105	581458	10.83	PPBV	94
94) m-DICHLOROBENZENE	16.627	146	377081	11.30	PPBV	97
95) BENZYL CHLORIDE	16.602	91	366662	10.24	PPBV	95
96) p-DICHLOROBENZENE	16.688	146	359134	11.37	PPBV	97
97) SEC-BUTYLBENZENE	16.712	134	190876	10.74	PPBV	79
98) p-ISOPROPYLTOLUENE	16.852	134	186060	11.40	PPBV	91
99) o-DICHLOROBENZENE	17.005	146	321755	10.83	PPBV	97
100) n-BUTYLBENZENE	17.236	134	130659	12.86	PPBV #	65
102) HEXACHLOROBUTADIENE	18.901	225	124800	10.36	PPBV	100
103) 1,2,4-TRICHLOROBENZENE	18.523	180	74509	10.20	PPBV	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2W34265.D
Acq On : 15 Feb 2012 1:37 pm
Operator : YOUMINH
Sample : BS
Misc : MS25531,V2W1442,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:39:17 2012
Quant Method : C:\msdchem\1\METHODS\M2W1426.M
Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
QLast Update : Tue Jan 17 10:35:27 2012
Response via : Initial Calibration

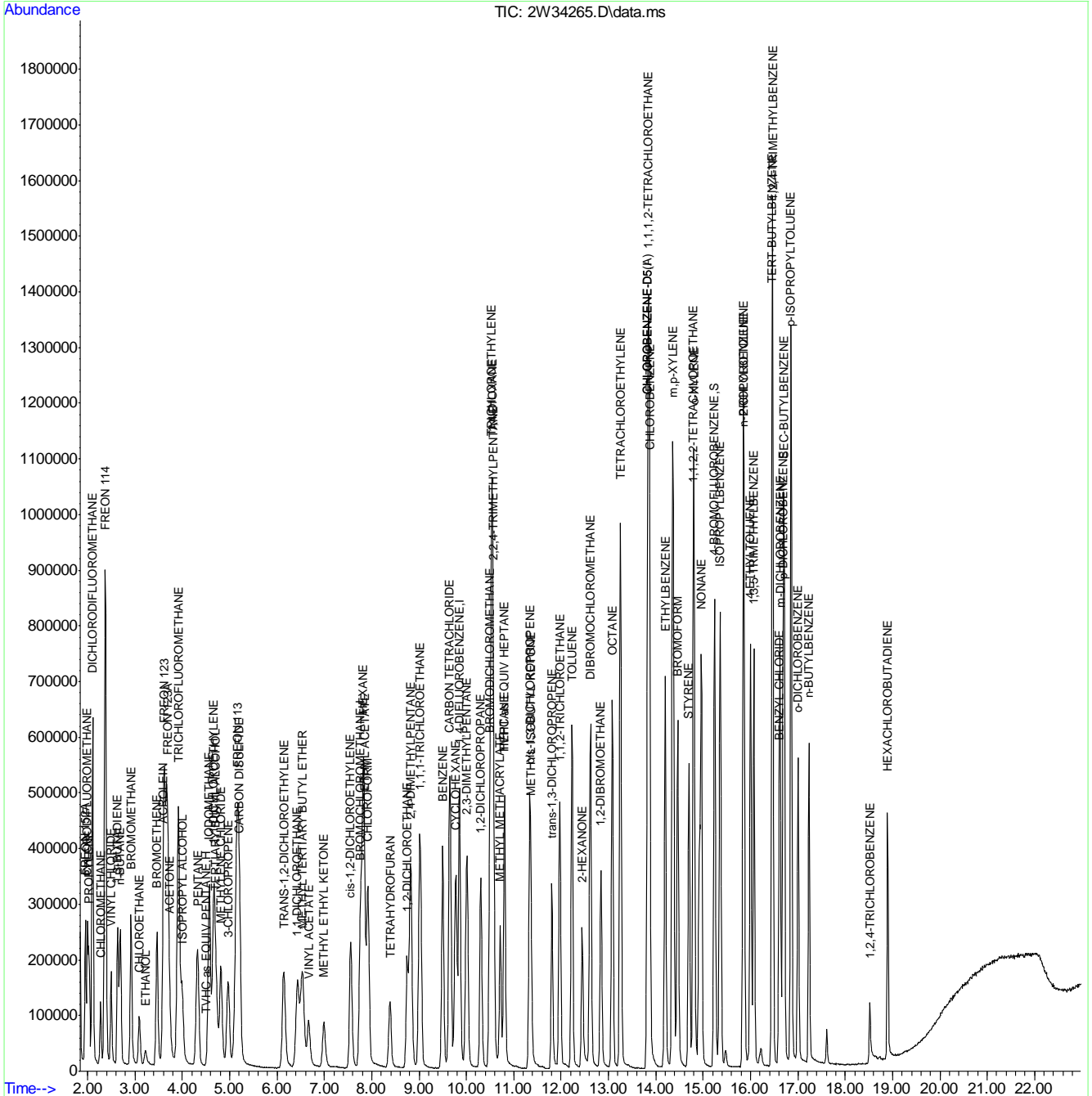
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34265.D
 Acq On : 15 Feb 2012 1:37 pm
 Operator : YOU MINH
 Sample : BS
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:39:17 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1442-BS **Method:** TO-15
Lab FileID: 2W34265.D **Analyst approved:** 02/16/12 11:49 Youmin Hu
Injection Time: 02/15/12 13:37 **Supervisor approved:** 02/16/12 14:32 Mei Chen

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.80	Poor instrument integration

6.3.1.1

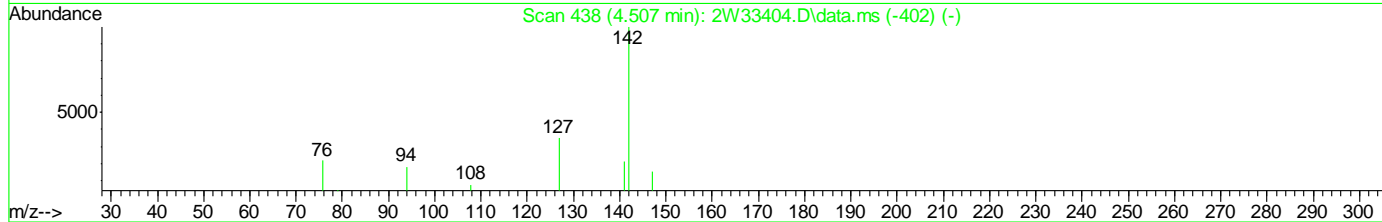
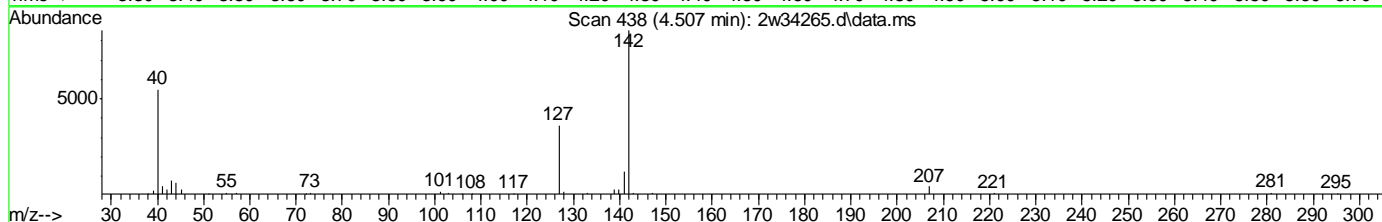
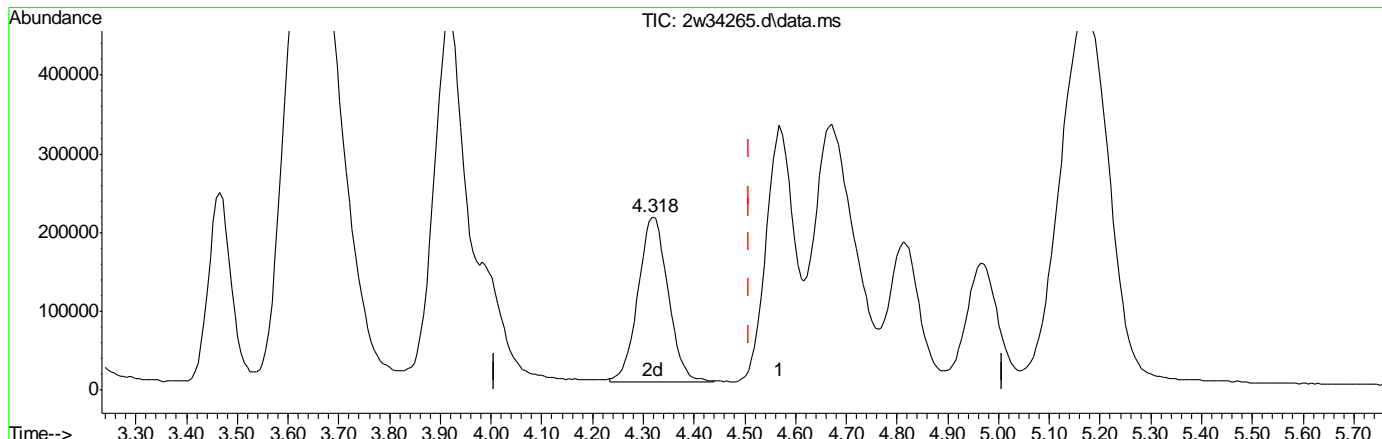
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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\v2w1442\
 Data File : 2w34265.d
 Acq On : 15 Feb 2012 1:37 pm
 Operator : YOUMINH
 Sample : BS
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:39:17 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.3.1.2
 6



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 8.56PPBV m

response 859150

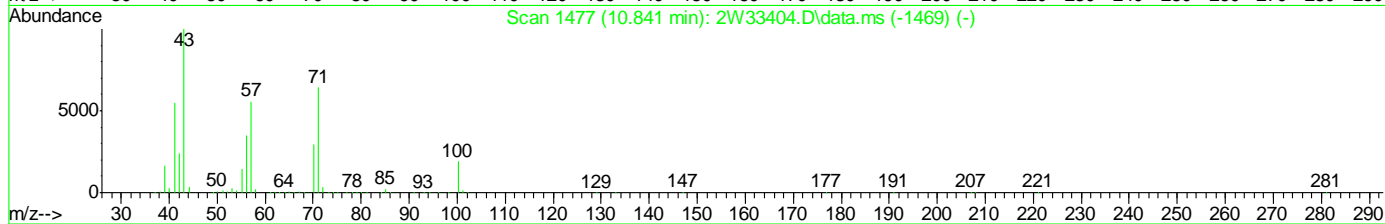
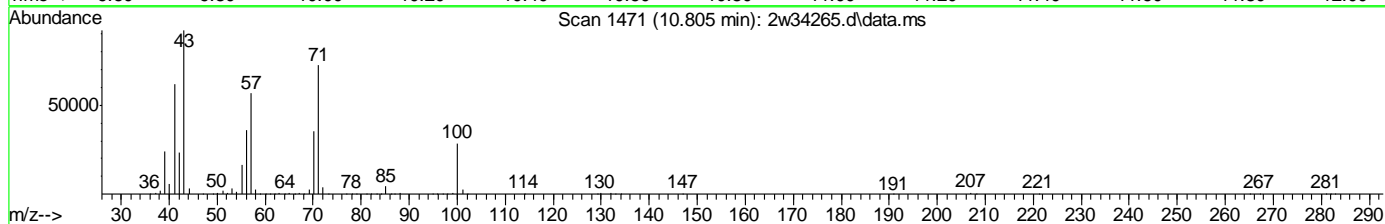
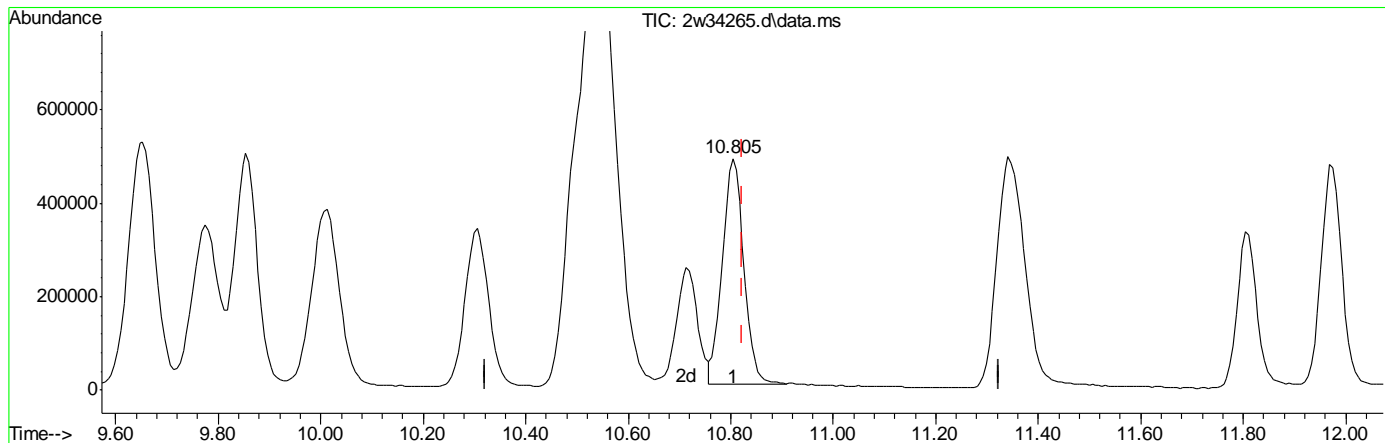
Signal	Exp%	Act%
TIC	100	100
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0.00	1.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\v2w1442\
 Data File : 2w34265.d
 Acq On : 15 Feb 2012 1:37 pm
 Operator : YOUMINH
 Sample : BS
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:39:17 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.3.1.3
 6



(62) TVHC as EQUIV HEPTANE

10.805min (-0.018) 8.08PPBV m

response 1409728

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34266.D
 Acq On : 15 Feb 2012 2:17 pm
 Operator : YOUMINH
 Sample : BSD
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:40:11 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.756	128	179467	10.00	PPBV	#-0.02
49) 1,4-DIFLUOROBENZENE	9.854	114	751377	10.00	PPBV	-0.02
68) CHLOROBENZENE-D5	13.828	82	360131	10.00	PPBV	#-0.02
104) CHLOROBENZENE-D5(A)	13.828	82	363424	10.00	PPBV	-0.02
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.243	95	420945	9.95	PPBV	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	99.50%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	786577	8.89	PPBV	100
4) FREON 152A	1.946	65	133526	8.02	PPBV	91
5) CHLORODIFLUOROMETHANE	1.995	67	72527	8.99	PPBV	99
6) PROPYLENE	2.032	41	136539	7.54	PPBV	95
7) FREON 114	2.367	85	668212	7.39	PPBV	# 75
8) CHLOROMETHANE	2.270	52	53845	8.23	PPBV	# 89
9) VINYL CHLORIDE	2.495	62	230447	8.56	PPBV	98
10) 1,3-BUTADIENE	2.635	54	159400	8.65	PPBV	95
11) n-BUTANE	2.684	43	300148	8.30	PPBV	97
12) BROMOMETHANE	2.916	94	267285	9.18	PPBV	98
13) CHLOROETHANE	3.093	64	120350	8.46	PPBV	99
15) ACROLEIN	3.593	56	55207	8.96	PPBV	99
16) FREON 123	3.611	83	594699	9.15	PPBV	# 96
17) FREON 123A	3.672	117	404419	9.49	PPBV	# 1
18) TRICHLOROFLUOROMETHANE	3.916	101	827818	9.49	PPBV	100
19) ISOPROPYL ALCOHOL	3.989	45	294636	9.64	PPBV	94
20) ACETONE	3.727	58	66369	8.59	PPBV	99
21) PENTANE	4.312	42	163062	8.34	PPBV	86
23) TVHC as EQUIV PENTANE	4.508	TIC	809855m	8.09	PPBV	
24) IODOMETHANE	4.568	142	736621	9.38	PPBV	100
25) 1,1-DICHLOROETHYLENE	4.659	96	246961	8.76	PPBV	# 80
26) CARBON DISULFIDE	5.202	76	440417	7.21	PPBV	95
27) ETHANOL	3.215	45	53866	8.76	PPBV	93
28) BROMOETHENE	3.465	106	294825	10.31	PPBV	99
30) METHYLENE CHLORIDE	4.818	84	185665	8.43	PPBV	85
31) 3-CHLOROPROPENE	4.964	76	93306	8.36	PPBV	# 75
32) FREON 113	5.153	151	470311	8.90	PPBV	# 79
33) TRANS-1,2-DICHLOROETHY...	6.141	96	189950	8.16	PPBV	# 85
34) TERTIARY BUTYL ALCOHOL	4.702	59	424841	9.06	PPBV	97
35) METHYL TERTIARY BUTYL ...	6.543	73	487313	7.76	PPBV	90
36) TETRAHYDROFURAN	8.384	72	70580	8.02	PPBV	# 70
37) HEXANE	7.817	57	243636	7.35	PPBV	98
38) VINYL ACETATE	6.659	86	36625	8.60	PPBV	# 1
39) 1,1-DICHLOROETHANE	6.433	63	329111	7.74	PPBV	97
40) METHYL ETHYL KETONE	6.988	72	66335	8.30	PPBV	# 61
41) cis-1,2-DICHLOROETHYLENE	7.555	96	230078	8.51	PPBV	# 84
42) ETHYL ACETATE	7.854	61	32240	7.00	PPBV	# 90
44) CHLOROFORM	7.915	83	466572	8.38	PPBV	98
45) 2,4-DIMETHYLPENTANE	8.823	57	319805	7.88	PPBV	# 94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34266.D
 Acq On : 15 Feb 2012 2:17 pm
 Operator : YOUMINH
 Sample : BSD
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:40:11 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) 1,1,1-TRICHLOROETHANE	9.018	97	555128	8.66	PPBV	95
47) CARBON TETRACHLORIDE	9.652	117	613047	8.54	PPBV	99
48) 1,2-DICHLOROETHANE	8.744	62	268975	8.71	PPBV	99
50) BENZENE	9.500	78	612982	8.45	PPBV	97
51) CYCLOHEXANE	9.774	84	287022	8.14	PPBV #	82
52) 2,3-DIMETHYLPENTANE	10.006	71	132245	7.82	PPBV	87
54) TRICHLOROETHYLENE	10.536	95	292227	8.02	PPBV	88
55) 1,2-DICHLOROPROPANE	10.305	63	182451	7.43	PPBV	82
57) BROMODICHLOROMETHANE	10.494	83	490227	7.99	PPBV	98
58) 2,2,4-TRIMETHYLPENTANE	10.561	57	862335	7.66	PPBV	97
59) 1,4-DIOXANE	10.542	88	124321	8.51	PPBV #	4
60) METHYL METHACRYLATE	10.713	69	146901	7.62	PPBV #	81
61) HEPTANE	10.805	43	261140	7.88	PPBV	85
62) TVHC as EQUIV HEPTANE	10.805	TIC	1393278m	7.77	PPBV	
63) METHYL ISOBUTYL KETONE	11.359	58	116678	7.96	PPBV #	81
64) cis-1,3-DICHLOROPROPENE	11.335	75	299716	8.35	PPBV	99
65) TOLUENE	12.231	92	427427	8.51	PPBV	97
66) trans-1,3-DICHLOROPROPENE	11.804	75	283922	8.37	PPBV	99
67) 1,1,2-TRICHLOROETHANE	11.969	83	192047	8.24	PPBV	90
69) 2-HEXANONE	12.451	58	137024	8.58	PPBV	92
71) TETRACHLOROETHYLENE	13.255	164	384658	9.31	PPBV	92
72) DIBROMOCHLOROMETHANE	12.615	129	540648	9.05	PPBV	99
73) 1,2-DIBROMOETHANE	12.841	107	353954	8.96	PPBV	100
74) OCTANE	13.078	43	346349	8.53	PPBV #	75
75) 1,1,1,2-TETRACHLOROETHANE	13.847	131	371259	8.65	PPBV	99
76) CHLOROBENZENE	13.871	112	568142	9.21	PPBV	93
77) ETHYLBENZENE	14.200	91	743525	8.15	PPBV	95
78) m,p-XYLENE	14.365	106	627869	17.88	PPBV	89
79) o-XYLENE	14.804	106	297336	8.65	PPBV	90
80) STYRENE	14.700	104	410167	8.62	PPBV	99
81) NONANE	14.962	43	298203	8.25	PPBV	84
82) BROMOFORM	14.462	173	471834	8.61	PPBV	98
84) 1,1,2,2-TETRACHLOROETHANE	14.798	83	316084	7.38	PPBV	96
85) ISOPROPYLBENZENE	15.359	105	834349	8.23	PPBV	97
87) 2-CHLOROTOLUENE	15.846	126	207142	8.85	PPBV #	58
88) n-PROPYLBENZENE	15.865	120	212996	9.74	PPBV	75
89) 4-ETHYLTOLUENE	15.999	105	659221	9.29	PPBV	93
90) 1,3,5-TRIMETHYLBENZENE	16.072	105	572704	9.49	PPBV	99
92) TERT-BUTYLBENZENE	16.462	134	155340	9.47	PPBV	91
93) 1,2,4-TRIMETHYLBENZENE	16.462	105	526624	9.61	PPBV	93
94) m-DICHLOROBENZENE	16.627	146	349501	10.27	PPBV	97
95) BENZYL CHLORIDE	16.602	91	320986	8.79	PPBV	96
96) p-DICHLOROBENZENE	16.688	146	332876	10.32	PPBV	96
97) SEC-BUTYLBENZENE	16.712	134	173342	9.56	PPBV	79
98) p-ISOPROPYLTOLUENE	16.852	134	168401	10.11	PPBV	90
99) o-DICHLOROBENZENE	17.005	146	293824	9.69	PPBV	97
100) n-BUTYLBENZENE	17.236	134	116106	11.20	PPBV #	67
102) HEXACHLOROBUTADIENE	18.901	225	109274	8.89	PPBV	98
103) 1,2,4-TRICHLOROBENZENE	18.523	180	65838	8.83	PPBV	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2W34266.D
Acq On : 15 Feb 2012 2:17 pm
Operator : YOUMINH
Sample : BSD
Misc : MS25531,V2W1442,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:40:11 2012
Quant Method : C:\msdchem\1\METHODS\M2W1426.M
Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
QLast Update : Tue Jan 17 10:35:27 2012
Response via : Initial Calibration

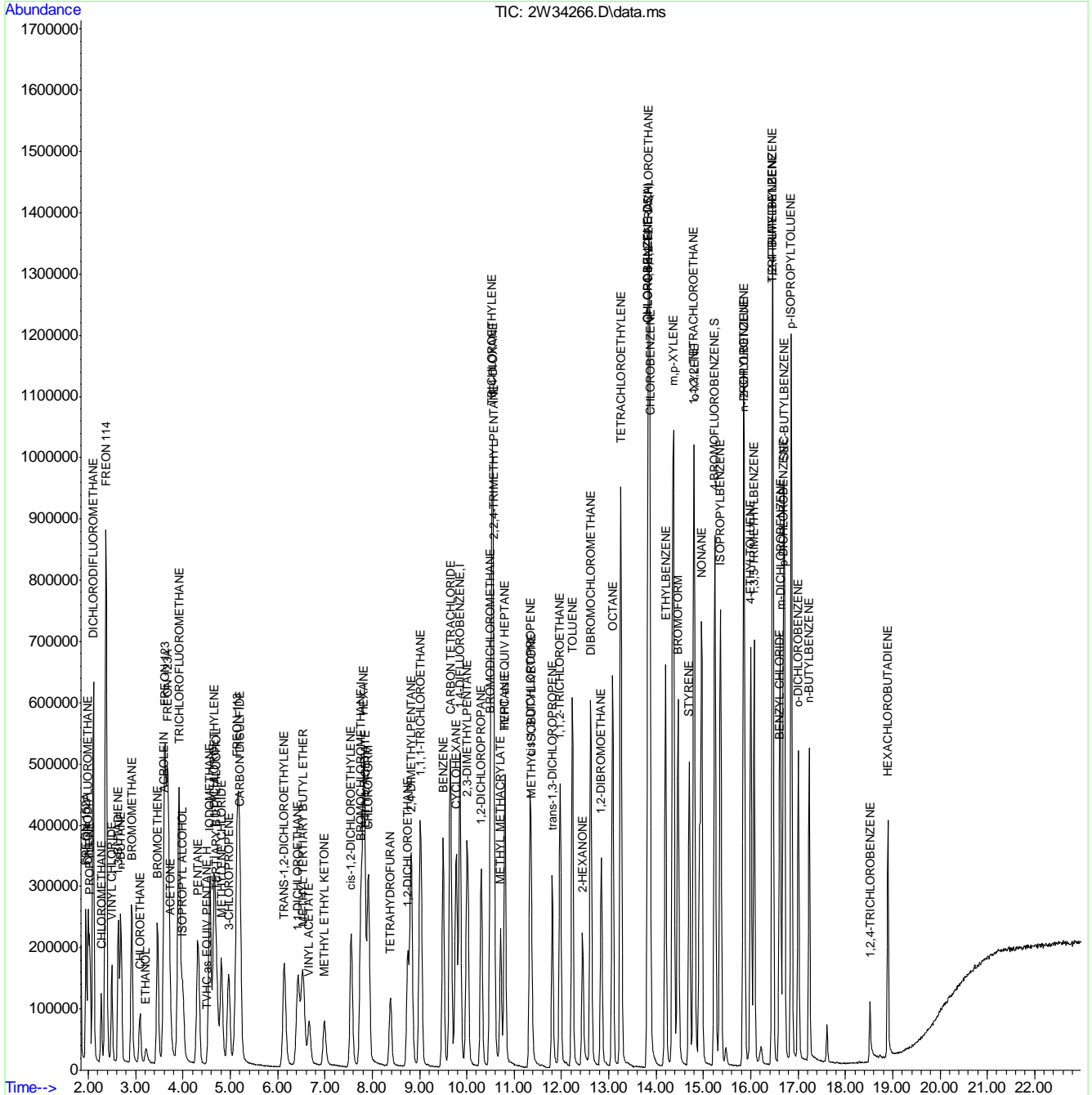
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2W34266.D
Acq On : 15 Feb 2012 2:17 pm
Operator : YOUMINH
Sample : BSD
Misc : MS25531,V2W1442,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:40:11 2012
Quant Method : C:\msdchem\1\METHODS\M2W1426.M
Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
QLast Update : Tue Jan 17 10:35:27 2012
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1442-BSD **Method:** TO-15
Lab FileID: 2W34266.D **Analyst approved:** 02/16/12 11:49 Youmin Hu
Injection Time: 02/15/12 14:17 **Supervisor approved:** 02/16/12 14:32 Mei Chen

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.80	Poor instrument integration

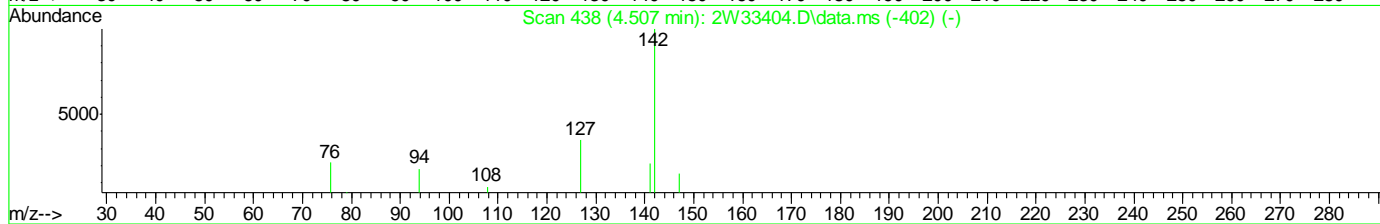
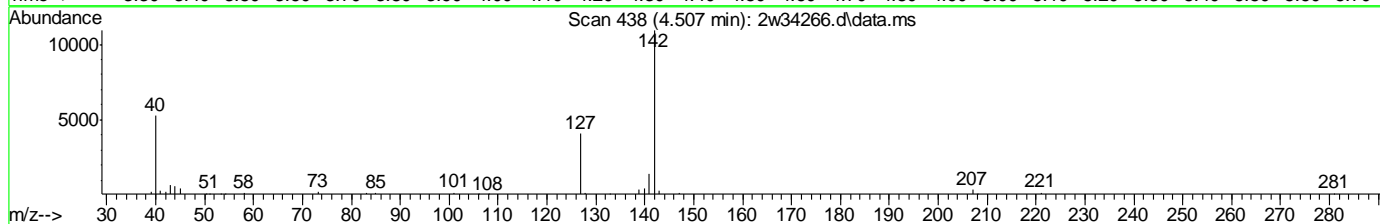
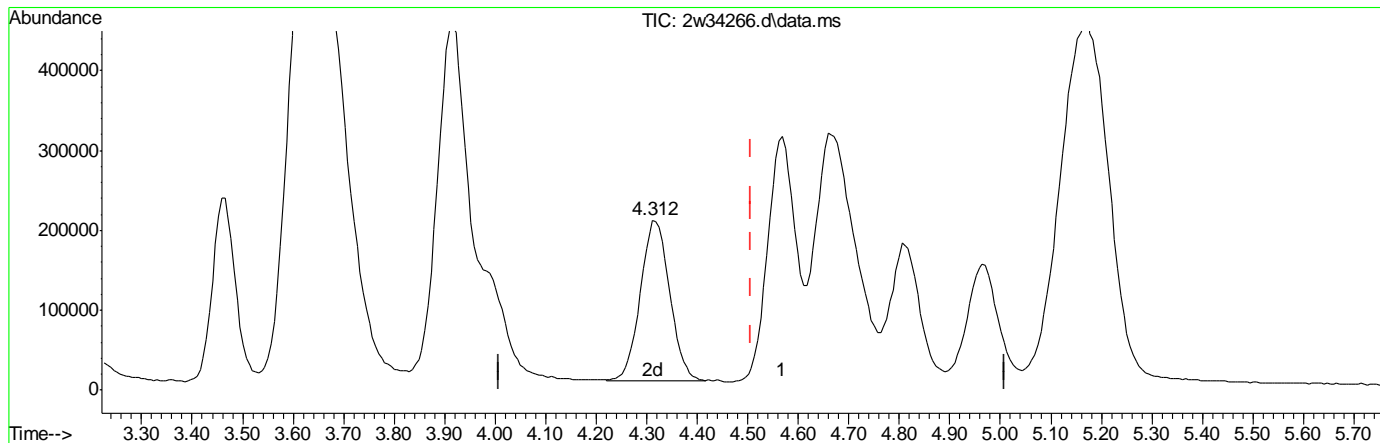
6.3.2.1

6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\v2w1442\
 Data File : 2w34266.d
 Acq On : 15 Feb 2012 2:17 pm
 Operator : YOUMINH
 Sample : BSD
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:40:12 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 8.09PPBV m

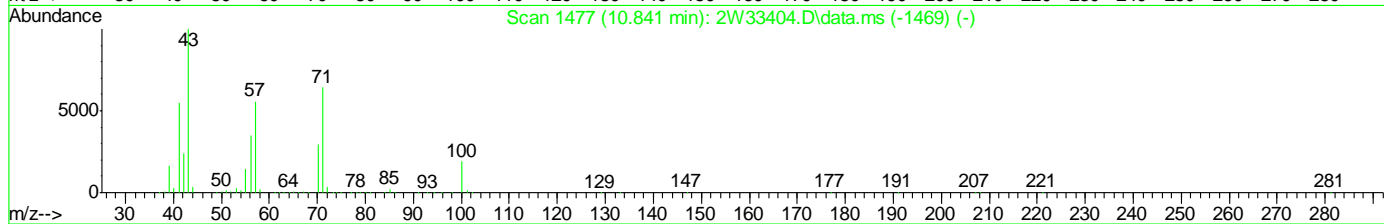
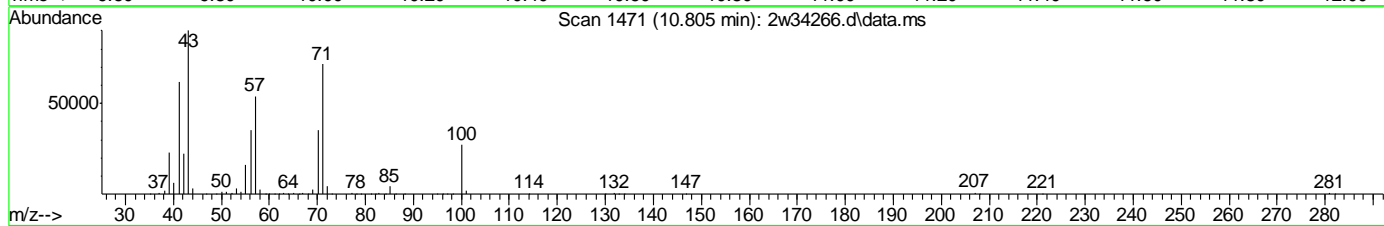
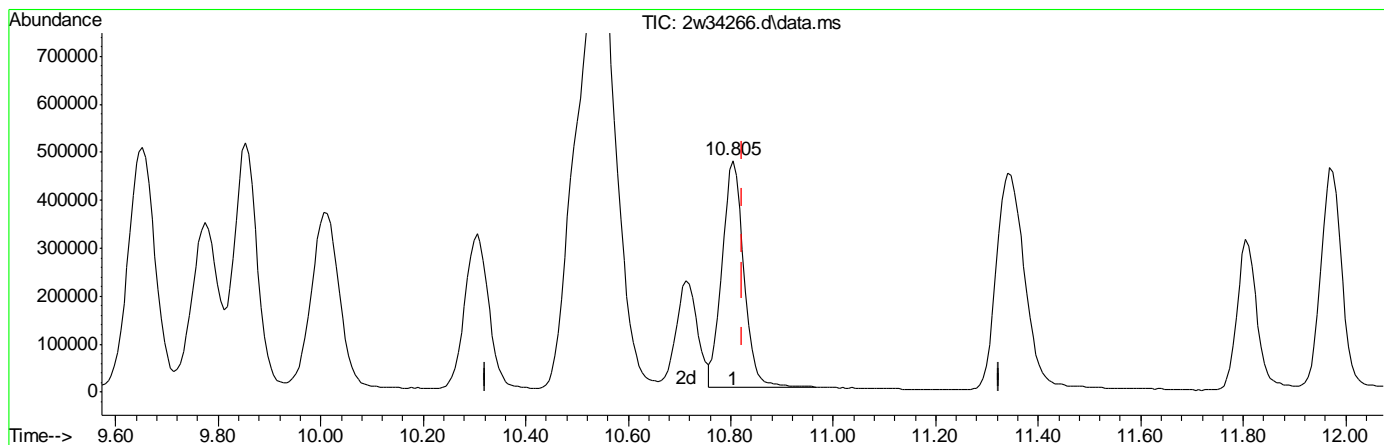
response 809855

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\v2w1442\
 Data File : 2w34266.d
 Acq On : 15 Feb 2012 2:17 pm
 Operator : YOUMINH
 Sample : BSD
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 08:40:12 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration



(62) TVHC as EQUIV HEPTANE

10.805min (-0.018) 7.77PPBV m

response 1393278

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34942.D
 Acq On : 30 Jan 2012 12:22 pm
 Sample : BS
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:42 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.35	128	54004	10.00	PPBV	-0.02
50) 1,4-DIFLUOROBENZENE	10.05	114	241972	10.00	PPBV	-0.02
69) CHLOROBENZENE-D5	14.33	82	116940	10.00	PPBV	-0.02
106) Chlorobenzene-d5(a)	14.33	82	116934	10.00	PPBV	-0.02

System Monitoring Compounds

85) 4-BROMOFLUOROBENZENE	15.99	95	144763	11.39	PPBV	-0.02
Spiked Amount	10.000	Range	65 - 128	Recovery	=	113.90%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) CHLORODIFLUOROMETHANE	4.68	67	22700	14.26	PPBV	98
5) DICHLORODIFLUOROMETHANE	4.76	85	248492	12.87	PPBV	100
6) PROPYLENE	4.71	41	70928	10.84	PPBV	99
7) FREON 114	4.96	85	247115	10.47	PPBV	86
8) CHLOROMETHANE	4.89	52	26697	11.33	PPBV	96
9) VINYL CHLORIDE	5.06	62	100705	10.75	PPBV	100
10) 1,3-BUTADIENE	5.16	54	76474	10.33	PPBV	99
11) n-BUTANE	5.20	43	141665	9.43	PPBV	98
12) BROMOMETHANE	5.37	94	91743	11.48	PPBV	99
13) CHLOROETHANE	5.49	64	54445	10.56	PPBV	98
15) ACROLEIN	5.84	56	34680	9.76	PPBV	97
16) FREON 123	5.84	83	222097	11.01	PPBV #	100
17) FREON 123A	5.88	117	145812	12.38	PPBV	82
18) TRICHLOROFLUOROMETHANE	6.05	101	242922	12.38	PPBV	99
19) ISOPROPYL ALCOHOL	6.10	45	132121	8.74	PPBV	99
20) ACETONE	5.93	58	35785	8.97	PPBV	99
22) PENTANE	6.30	57	26426	10.25	PPBV #	91
23) TVHC as EQUIV PENTANE	6.30	TIC	439909m	8.66	PPBV	
24) IODOMETHANE	6.48	142	263414	12.16	PPBV	99
25) 1,1-DICHLOROETHYLENE	6.52	96	99451	10.92	PPBV	91
26) CARBON DISULFIDE	6.87	76	187904	8.32	PPBV	99
27) ETHANOL	5.59	45	29955	8.40	PPBV	99
29) BROMOETHENE	5.75	106	99001	11.69	PPBV	99
30) METHYLENE CHLORIDE	6.62	84	84631	10.10	PPBV	93
31) 3-CHLOROPROPENE	6.70	76	43559	10.15	PPBV #	91
32) FREON 113	6.80	151	167538	11.39	PPBV	92
33) TRANS-1,2-DICHLOROETHYLENE	7.34	96	80439	9.01	PPBV	94
34) TERTIARY BUTYL ALCOHOL	6.56	59	184505	10.38	PPBV	99
35) METHYL TERTIARY BUTYL ETHE	7.55	73	197197	9.32	PPBV	96
36) TETRAHYDROFURAN	8.83	72	33580	8.88	PPBV #	88
37) HEXANE	8.35	57	128550	8.63	PPBV	97
38) VINYL ACETATE	7.61	86	22057	10.31	PPBV #	47
39) 1,1-DICHLOROETHANE	7.51	63	150211	9.74	PPBV	98
40) METHYL ETHYL KETONE	7.84	72	33769	9.02	PPBV #	85
41) cis-1,2-DICHLOROETHYLENE	8.20	96	94252	10.08	PPBV	94
42) DI-ISOPROPYL ETHER	8.35	45	212712	7.63	PPBV	96
43) ETHYL ACETATE	8.37	61	19016	7.81	PPBV	98
45) CHLOROFORM	8.45	83	172499	10.60	PPBV	99
46) 2,4-DIMETHYLPENTANE	9.12	57	160006	9.06	PPBV	98
47) 1,1,1-TRICHLOROETHANE	9.32	97	182499	11.69	PPBV	97

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

W34942.D MW1417.M Tue Jan 31 12:27:46 2012 MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34942.D
 Acq On : 30 Jan 2012 12:22 pm
 Sample : BS
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:42 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) CARBON TETRACHLORIDE	9.88	117	197171	12.04	PPBV	100
49) 1,2-DICHLOROETHANE	9.10	62	100334	10.83	PPBV	99
51) BENZENE	9.74	78	265062	9.27	PPBV	98
52) CYCLOHEXANE	9.99	84	126099	9.53	PPBV	92
53) 2,3-DIMETHYLPENTANE	10.19	71	62599	9.39	PPBV	95
54) TRICHLOROETHYLENE	10.71	95	113981	9.64	PPBV	97
56) 1,2-DICHLOROPROPANE	10.49	63	88771	8.87	PPBV	93
58) BROMODICHLOROMETHANE	10.68	83	177658	10.46	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.72	57	420922	8.97	PPBV	99
60) 1,4-DIOXANE	10.74	88	49390	9.32	PPBV #	92
61) METHYL METHACRYLATE	10.89	69	70015	8.49	PPBV	95
62) HEPTANE	10.97	43	137218	8.82	PPBV	96
63) TVHC as EQUIV HEPTANE	10.97	TIC	630831m	9.16	PPBV	
64) METHYL ISOBUTYL KETONE	11.57	43	129198	8.68	PPBV	96
65) cis-1,3-DICHLOROPROPENE	11.54	75	132867	9.94	PPBV	98
66) TOLUENE	12.51	92	186514	9.99	PPBV	97
67) trans-1,3-DICHLOROPROPENE	12.05	75	128539	10.54	PPBV	99
68) 1,1,2-TRICHLOROETHANE	12.23	83	80894	9.89	PPBV	98
71) 2-HEXANONE	12.77	43	114800	8.59	PPBV	98
72) TETRACHLOROETHYLENE	13.66	164	135294	11.56	PPBV	98
73) DIBROMOCHLOROMETHANE	12.94	129	181591	11.37	PPBV	100
74) 1,2-DIBROMOETHANE	13.19	107	144552	11.16	PPBV	100
75) OCTANE	13.49	43	172613	9.23	PPBV	93
76) 1,1,1,2-TETRACHLOROETHANE	14.36	131	130238	11.58	PPBV #	100
77) CHLOROBENZENE	14.38	112	232619	10.69	PPBV	98
78) ETHYLBENZENE	14.77	91	354073	10.14	PPBV	99
79) m,p-XYLENE	14.96	106	286145	20.96	PPBV	99
80) o-XYLENE	15.47	106	137209	10.47	PPBV	100
81) STYRENE	15.36	104	204354	11.57	PPBV	99
82) 1,2,3-TRICHLOROPROPANE	15.62	75	119315	10.48	PPBV	96
83) NONANE	15.71	43	156916	9.68	PPBV	95
84) BROMOFORM	15.06	173	171241	12.07	PPBV	100
86) 1,1,2,2-TETRACHLOROETHANE	15.48	83	150557	9.99	PPBV	98
87) ISOPROPYLBENZENE	16.14	105	375110	11.36	PPBV	99
89) 2-CHLOROTOLUENE	16.68	126	91375	12.17	PPBV #	98
90) n-PROPYLBENZENE	16.72	120	98808	11.97	PPBV #	21
91) 4-ETHYLTOLUENE	16.88	105	312111	12.52	PPBV	99
92) 1,3,5-TRIMETHYLBENZENE	16.97	105	247613	12.40	PPBV	99
94) TERT-BUTYLBENZENE	17.44	134	65654	11.94	PPBV	99
95) 1,2,4-TRIMETHYLBENZENE	17.44	105	227284	12.61	PPBV	99
96) m-DICHLOROBENZENE	17.62	146	156493	12.77	PPBV	99
97) BENZYL CHLORIDE	17.60	91	160422	11.26	PPBV	99
98) p-DICHLOROBENZENE	17.70	146	151662	13.25	PPBV	99
99) SEC-BUTYLBENZENE	17.75	134	76030	12.45	PPBV	89
100) p-ISOPROPYLTOLUENE	17.94	134	70152	12.57	PPBV	98
101) o-DICHLOROBENZENE	18.09	146	133060	12.92	PPBV	99
102) n-BUTYLBENZENE	18.42	134	50969	12.32	PPBV	90
104) HEXACHLOROBUTADIENE	20.60	225	39086	13.97	PPBV	99
105) 1,2,4-TRICHLOROBENZENE	20.08	180	25339	12.15	PPBV	97

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

W34942.D MW1417.M

Tue Jan 31 12:27:46 2012

MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34942.D Vial: 3
 Acq On : 30 Jan 2012 12:22 pm Operator: YOUMINH
 Sample : BS Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:42 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
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 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34942.D MW1417.M Tue Jan 31 12:27:46 2012 MSW

6.3.3
 6

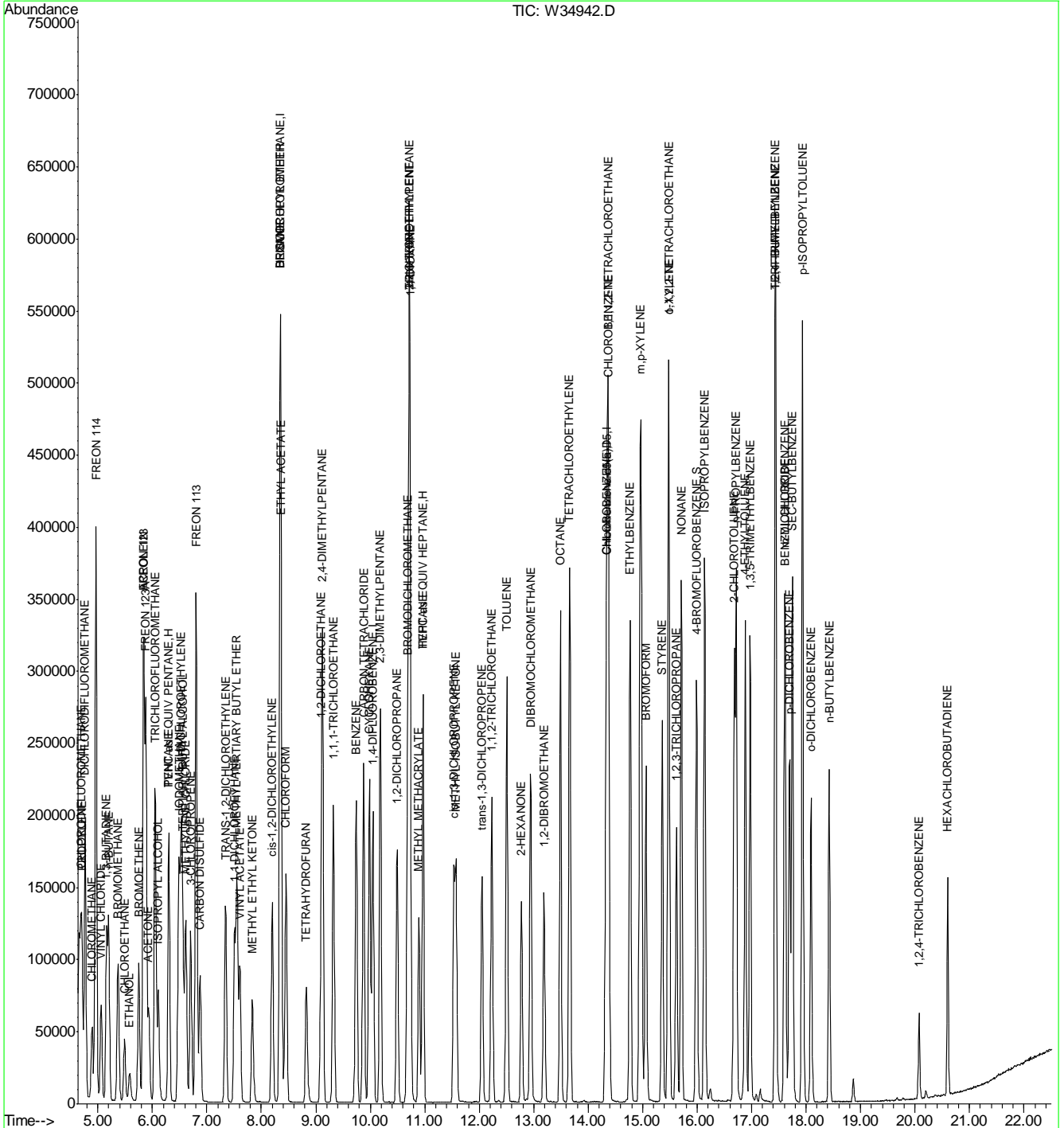
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34942.D
Acq On : 30 Jan 2012 12:22 pm
Sample : BS
Misc : MS24617,VW1423,,,,,1
MS Integration Params: rteint.p
Quant Time: Jan 31 11:52 2012

Vial: 3
Operator: YOUMINH
Inst : MSW
Multiplr: 1.00

Quant Results File: MW1417.RES

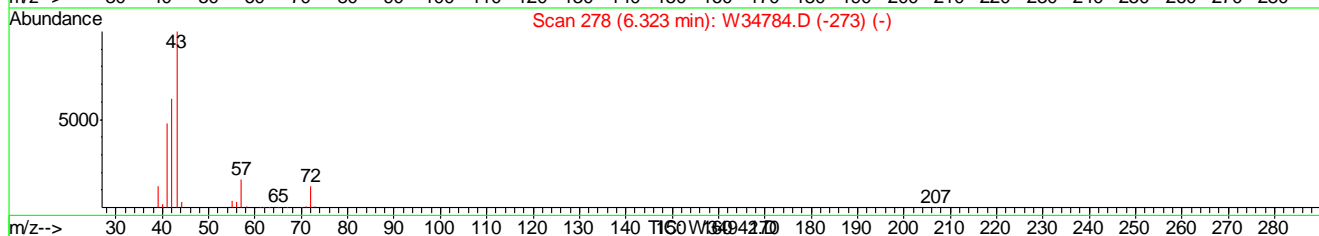
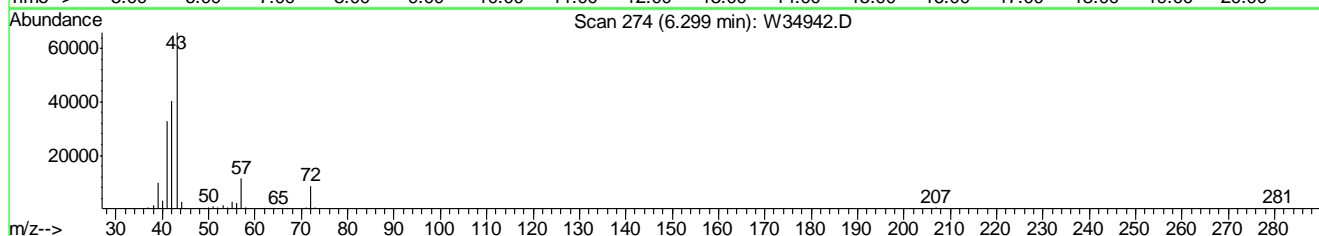
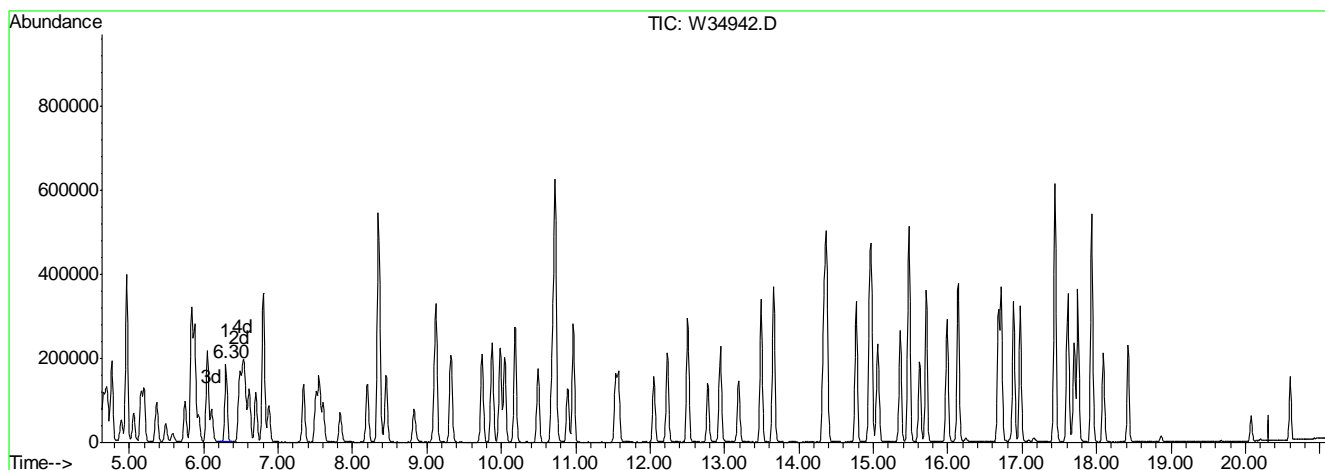
Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Jan 20 14:06:03 2012
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34942.D Vial: 3
 Acq On : 30 Jan 2012 12:22 pm Operator: YOUMINH
 Sample : BS Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:52 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(23) TVHC as EQUIV PENTANE (H)

6.30min 8.66PPBV m

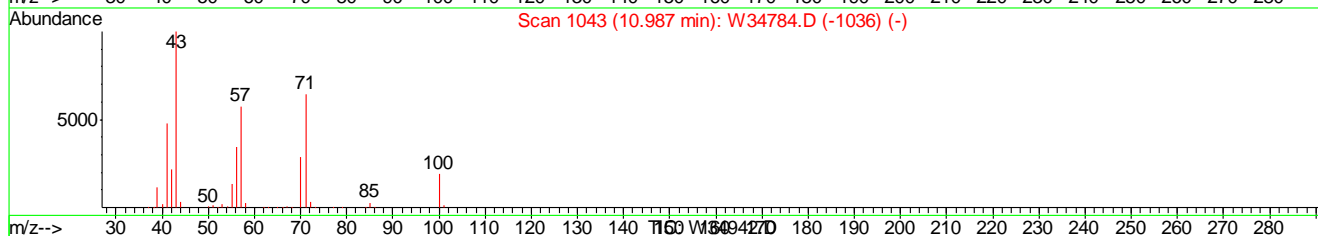
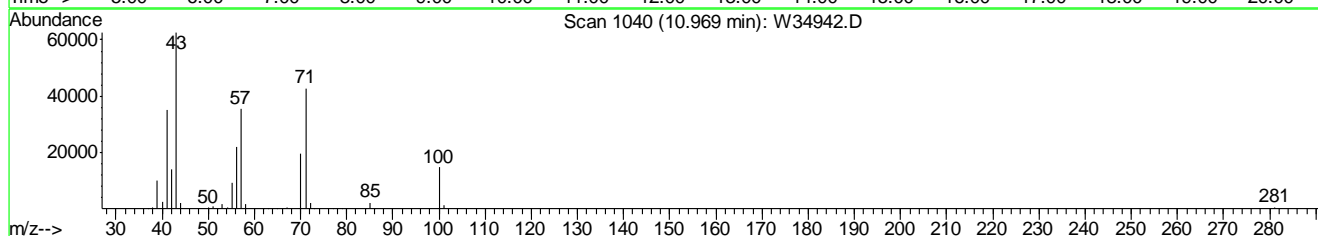
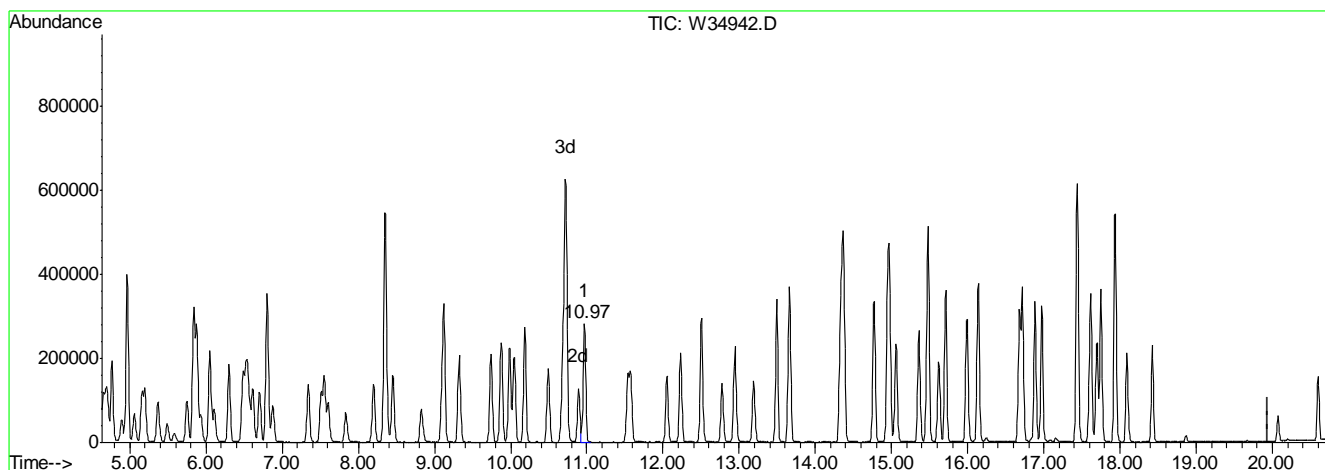
response 439909

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.13#
0.00	1.10	0.11#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34942.D Vial: 3
 Acq On : 30 Jan 2012 12:22 pm Operator: YOUMINH
 Sample : BS Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:52 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(63) TVHC as EQUIV HEPTANE (H)

10.97min 9.16PPBV m

response 630831

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.09#
0.00	0.80	0.08#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34943.D
 Acq On : 30 Jan 2012 1:02 pm
 Sample : BSD
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:45 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.35	128	56230	10.00	PPBV	-0.02
50) 1,4-DIFLUOROBENZENE	10.05	114	256357	10.00	PPBV	-0.02
69) CHLOROBENZENE-D5	14.33	82	122826	10.00	PPBV	-0.02
106) Chlorobenzene-d5(a)	14.33	82	122829	10.00	PPBV	-0.02

System Monitoring Compounds

85) 4-BROMOFLUOROBENZENE	15.99	95	151234	11.32	PPBV	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	113.20%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) CHLORODIFLUOROMETHANE	4.68	67	22132	13.35	PPBV	100
5) DICHLORODIFLUOROMETHANE	4.76	85	245150	12.19	PPBV	100
6) PROPYLENE	4.71	41	69149	10.15	PPBV	99
7) FREON 114	4.96	85	243327	9.90	PPBV	86
8) CHLOROMETHANE	4.90	52	25742	10.49	PPBV	98
9) VINYL CHLORIDE	5.06	62	97886	10.04	PPBV	99
10) 1,3-BUTADIENE	5.16	54	75434	9.79	PPBV	99
11) n-BUTANE	5.20	43	138461	8.85	PPBV	99
12) BROMOMETHANE	5.37	94	91484	11.00	PPBV	99
13) CHLOROETHANE	5.49	64	52959	9.87	PPBV	97
15) ACROLEIN	5.84	56	32764	8.86	PPBV	99
16) FREON 123	5.84	83	217796	10.37	PPBV #	99
17) FREON 123A	5.88	117	142998	11.66	PPBV	82
18) TRICHLOROFLUOROMETHANE	6.05	101	242519	11.87	PPBV	100
19) ISOPROPYL ALCOHOL	6.10	45	127897	8.12	PPBV	98
20) ACETONE	5.93	58	34621	8.34	PPBV	97
22) PENTANE	6.30	57	25861	9.63	PPBV #	90
23) TVHC as EQUIV PENTANE	6.30	TIC	429565m	8.12	PPBV	
24) IODOMETHANE	6.48	142	260283	11.54	PPBV	99
25) 1,1-DICHLOROETHYLENE	6.52	96	97984	10.33	PPBV	91
26) CARBON DISULFIDE	6.87	76	187432	7.97	PPBV	99
27) ETHANOL	5.59	45	28329	7.63	PPBV	99
29) BROMOETHENE	5.75	106	97177	11.02	PPBV	99
30) METHYLENE CHLORIDE	6.62	84	83505	9.57	PPBV	92
31) 3-CHLOROPROPENE	6.70	76	43209	9.67	PPBV #	89
32) FREON 113	6.80	151	166048	10.84	PPBV	91
33) TRANS-1,2-DICHLOROETHYLENE	7.34	96	80219	8.63	PPBV	92
34) TERTIARY BUTYL ALCOHOL	6.56	59	183610	9.92	PPBV	98
35) METHYL TERTIARY BUTYL ETHER	7.55	73	194032	8.81	PPBV	96
36) TETRAHYDROFURAN	8.82	72	33024	8.38	PPBV #	88
37) HEXANE	8.35	57	125208	8.07	PPBV	98
38) VINYL ACETATE	7.60	86	20711	9.30	PPBV #	55
39) 1,1-DICHLOROETHANE	7.51	63	145580	9.07	PPBV	98
40) METHYL ETHYL KETONE	7.84	72	32936	8.45	PPBV #	89
41) cis-1,2-DICHLOROETHYLENE	8.20	96	91949	9.44	PPBV	94
42) DI-ISOPROPYL ETHER	8.35	45	207862	7.16	PPBV	95
43) ETHYL ACETATE	8.37	61	18375	7.24	PPBV	98
45) CHLOROFORM	8.45	83	169937	10.03	PPBV	99
46) 2,4-DIMETHYLPENTANE	9.12	57	156067	8.49	PPBV	98
47) 1,1,1-TRICHLOROETHANE	9.32	97	178839	11.00	PPBV	97

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

W34943.D MW1417.M

Tue Jan 31 12:28:10 2012

MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34943.D
 Acq On : 30 Jan 2012 1:02 pm
 Sample : BSD
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:45 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) CARBON TETRACHLORIDE	9.88	117	194945	11.43	PPBV	100
49) 1,2-DICHLOROETHANE	9.10	62	96289	9.99	PPBV	99
51) BENZENE	9.74	78	256352	8.46	PPBV	98
52) CYCLOHEXANE	9.99	84	124965	8.92	PPBV	91
53) 2,3-DIMETHYLPENTANE	10.18	71	60929	8.62	PPBV	94
54) TRICHLOROETHYLENE	10.71	95	112129	8.95	PPBV	97
56) 1,2-DICHLOROPROPANE	10.49	63	83871	7.91	PPBV	92
58) BROMODICHLOROMETHANE	10.68	83	170629	9.49	PPBV	99
59) 2,2,4-TRIMETHYLPENTANE	10.72	57	406294	8.18	PPBV	99
60) 1,4-DIOXANE	10.74	88	48576	8.65	PPBV #	81
61) METHYL METHACRYLATE	10.89	69	69593	7.97	PPBV	94
62) HEPTANE	10.97	43	130808	7.93	PPBV	95
63) TVHC as EQUIV HEPTANE	10.97	TIC	609370m	8.35	PPBV	
64) METHYL ISOBUTYL KETONE	11.57	43	124799	7.91	PPBV	96
65) cis-1,3-DICHLOROPROPENE	11.54	75	126641	8.95	PPBV	97
66) TOLUENE	12.51	92	178217	9.01	PPBV	98
67) trans-1,3-DICHLOROPROPENE	12.05	75	123630	9.56	PPBV	100
68) 1,1,2-TRICHLOROETHANE	12.23	83	77915	8.99	PPBV	97
71) 2-HEXANONE	12.77	43	109707	7.82	PPBV	98
72) TETRACHLOROETHYLENE	13.66	164	131308	10.68	PPBV	98
73) DIBROMOCHLOROMETHANE	12.94	129	176953	10.55	PPBV	99
74) 1,2-DIBROMOETHANE	13.19	107	139118	10.22	PPBV	98
75) OCTANE	13.49	43	163325	8.31	PPBV	92
76) 1,1,1,2-TETRACHLOROETHANE	14.36	131	125330	10.61	PPBV #	100
77) CHLOROBENZENE	14.38	112	225229	9.86	PPBV	98
78) ETHYLBENZENE	14.77	91	340078	9.27	PPBV	99
79) m,p-XYLENE	14.96	106	275539	19.22	PPBV	98
80) o-XYLENE	15.47	106	133325	9.69	PPBV	99
81) STYRENE	15.36	104	196083	10.57	PPBV	99
82) 1,2,3-TRICHLOROPROPANE	15.62	75	117045	9.79	PPBV	95
83) NONANE	15.71	43	147471	8.66	PPBV	95
84) BROMOFORM	15.06	173	165081	11.08	PPBV	100
86) 1,1,2,2-TETRACHLOROETHANE	15.48	83	146389	9.25	PPBV	98
87) ISOPROPYLBENZENE	16.14	105	364464	10.51	PPBV	99
89) 2-CHLOROTOLUENE	16.68	126	88465	11.22	PPBV #	97
90) n-PROPYLBENZENE	16.72	120	95833	11.05	PPBV	92
91) 4-ETHYLTOLUENE	16.88	105	304129	11.62	PPBV	99
92) 1,3,5-TRIMETHYLBENZENE	16.97	105	243312	11.60	PPBV	99
94) TERT-BUTYLBENZENE	17.44	134	63505	10.99	PPBV	98
95) 1,2,4-TRIMETHYLBENZENE	17.44	105	223767	11.82	PPBV	99
96) m-DICHLOROBENZENE	17.62	146	151722	11.79	PPBV	99
97) BENZYL CHLORIDE	17.60	91	156635	10.47	PPBV	99
98) p-DICHLOROBENZENE	17.70	146	148193	12.33	PPBV	99
99) SEC-BUTYLBENZENE	17.75	134	73242	11.42	PPBV	91
100) p-ISOPROPYLTOLUENE	17.94	134	69047	11.78	PPBV	97
101) o-DICHLOROBENZENE	18.09	146	129276	11.95	PPBV	99
102) n-BUTYLBENZENE	18.42	134	49646	11.42	PPBV	88
104) HEXACHLOROBUTADIENE	20.60	225	37082	12.62	PPBV	100
105) 1,2,4-TRICHLOROBENZENE	20.08	180	25849	11.80	PPBV	99

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

W34943.D MW1417.M

Tue Jan 31 12:28:10 2012

MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34943.D Vial: 3
 Acq On : 30 Jan 2012 1:02 pm Operator: YOUMINH
 Sample : BSD Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:45 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
----------	------	------	----------	------	------	--------

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34943.D MW1417.M Tue Jan 31 12:28:10 2012 MSW

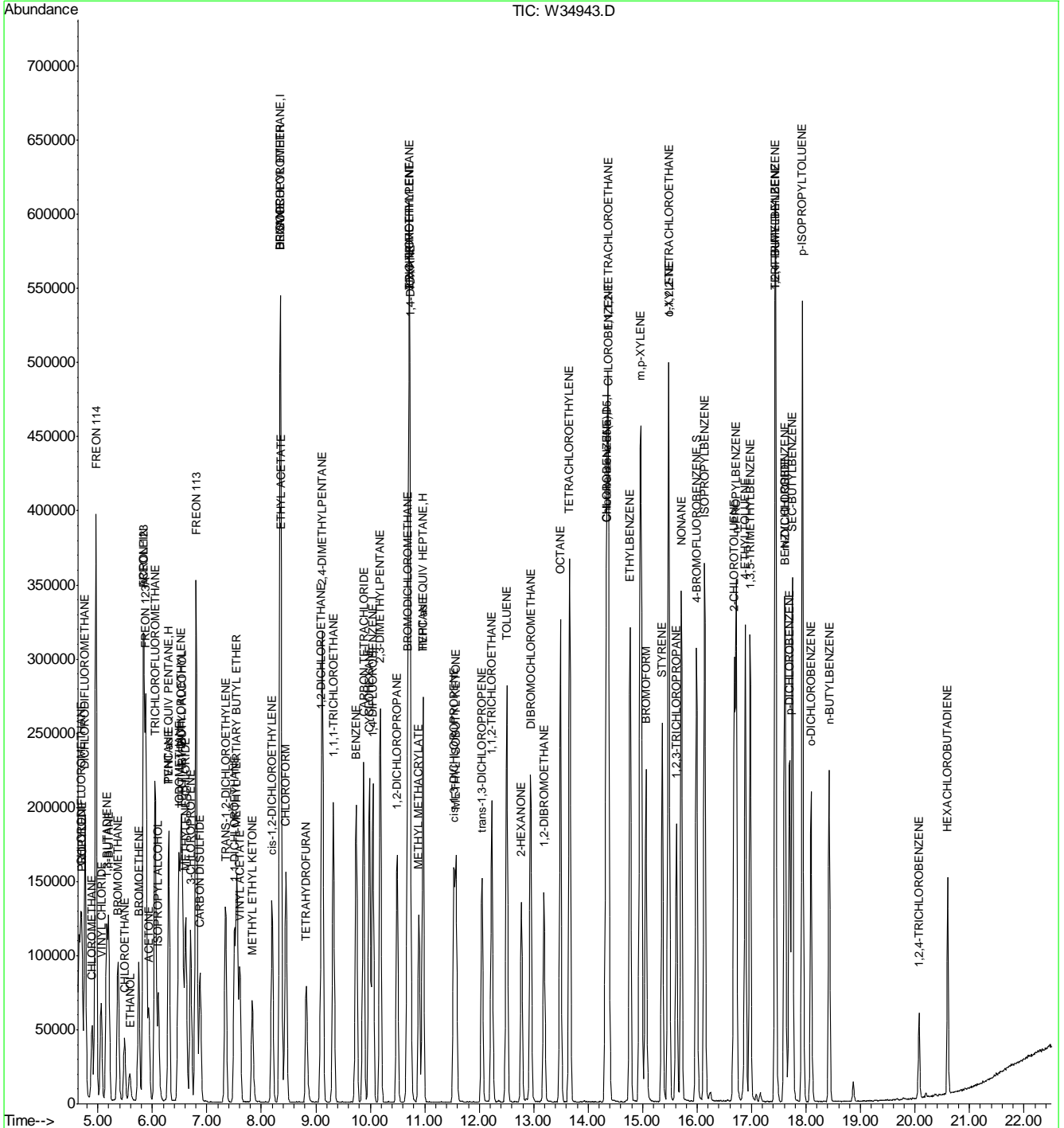
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34943.D
Acq On : 30 Jan 2012 1:02 pm
Sample : BSD
Misc : MS24617,VW1423,,,,,1
MS Integration Params: rteint.p
Quant Time: Jan 31 11:53 2012

Vial: 3
Operator: YOUMINH
Inst : MSW
Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
Title : T015 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Jan 20 14:06:03 2012
Response via : Initial Calibration



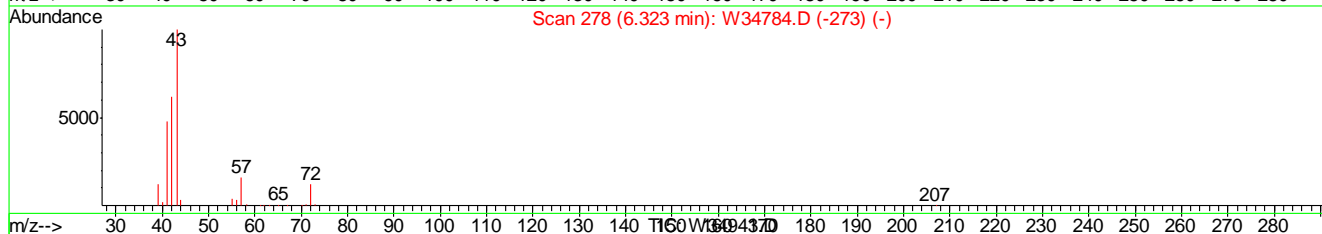
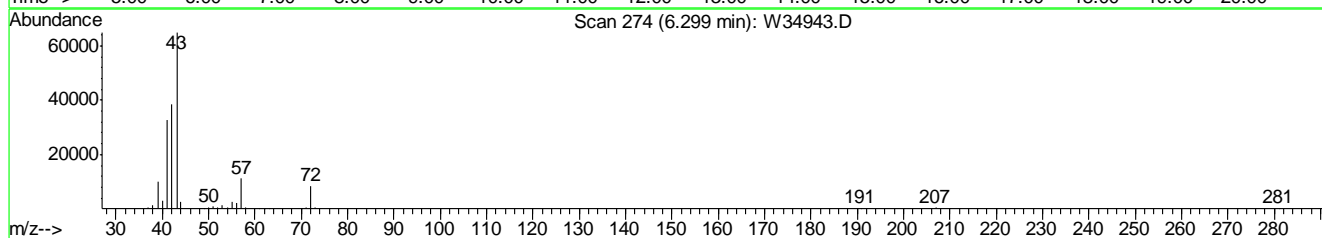
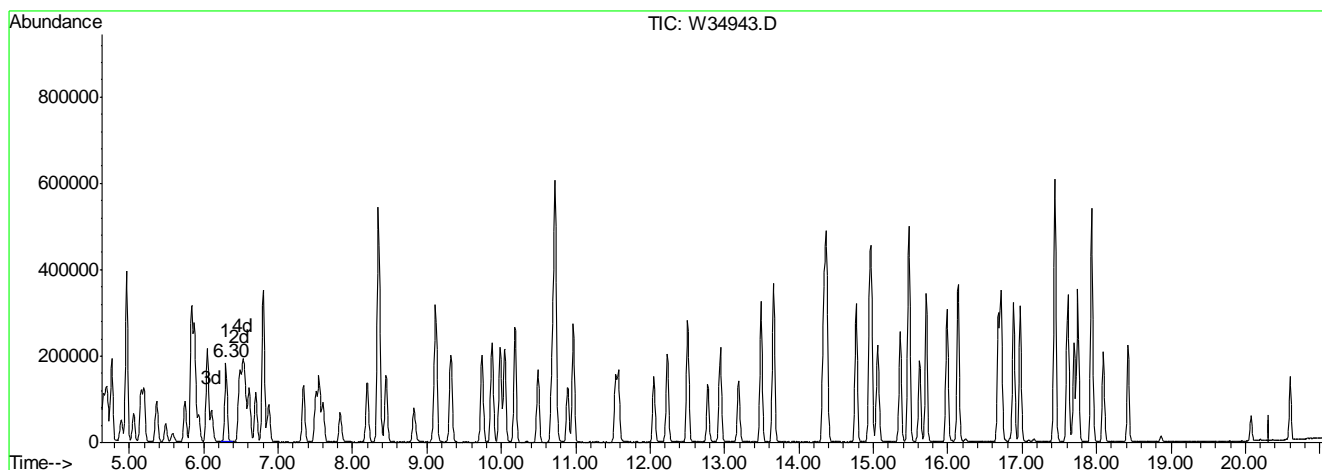
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34943.D
 Acq On : 30 Jan 2012 1:02 pm
 Sample : BSD
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:53 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(23) TVHC as EQUIV PENTANE (H)

6.30min 8.12PPBV m

response 429565

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.06#
0.00	1.10	0.06#
0.00	0.00	0.00

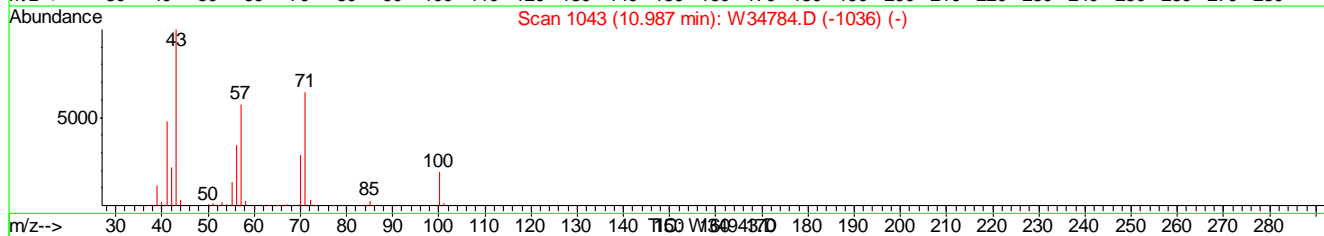
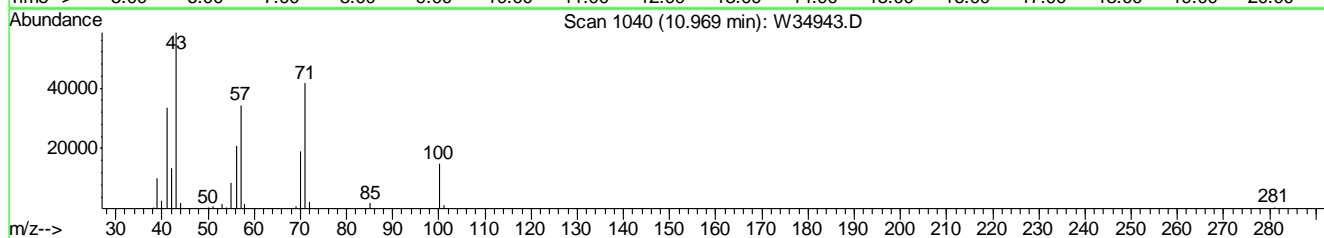
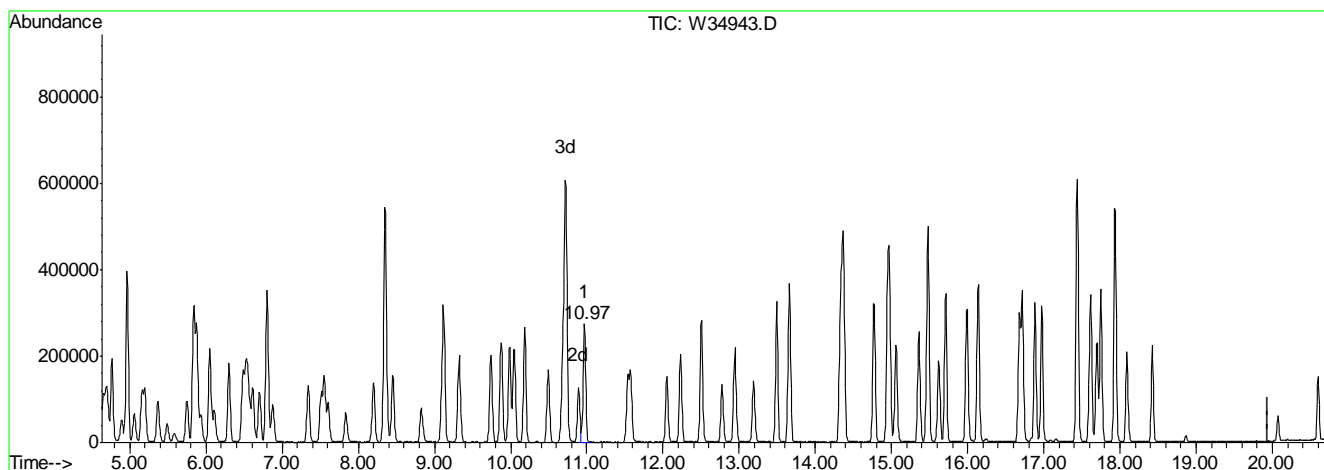
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34943.D
 Acq On : 30 Jan 2012 1:02 pm
 Sample : BSD
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:53 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(63) TVHC as EQUIV HEPTANE (H)

10.97min 8.35PPBV m

response 609370

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.04#
0.00	0.80	0.04#
0.00	0.00	0.00

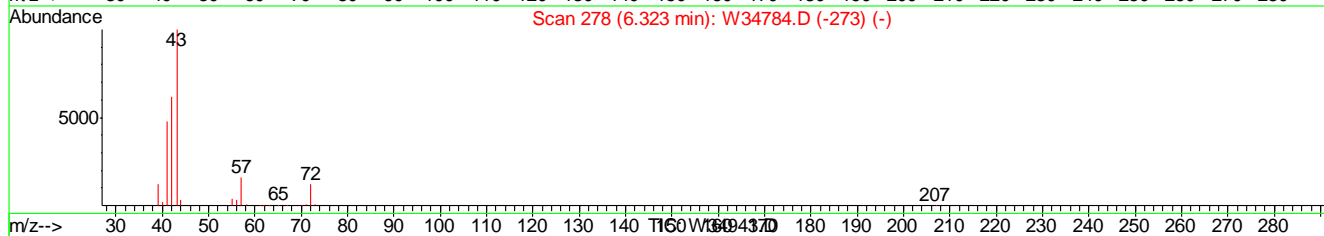
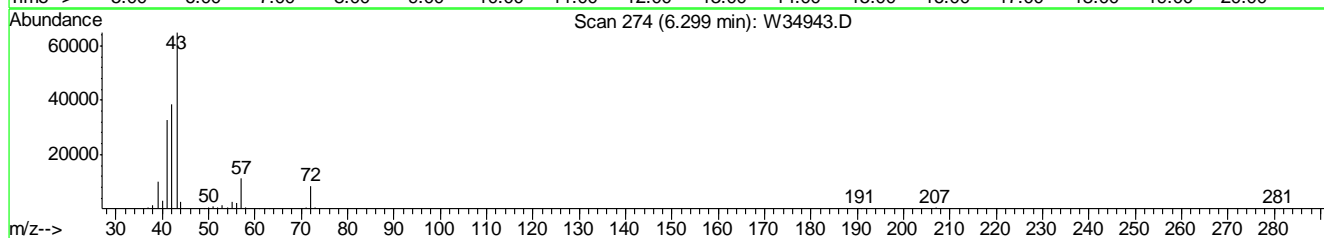
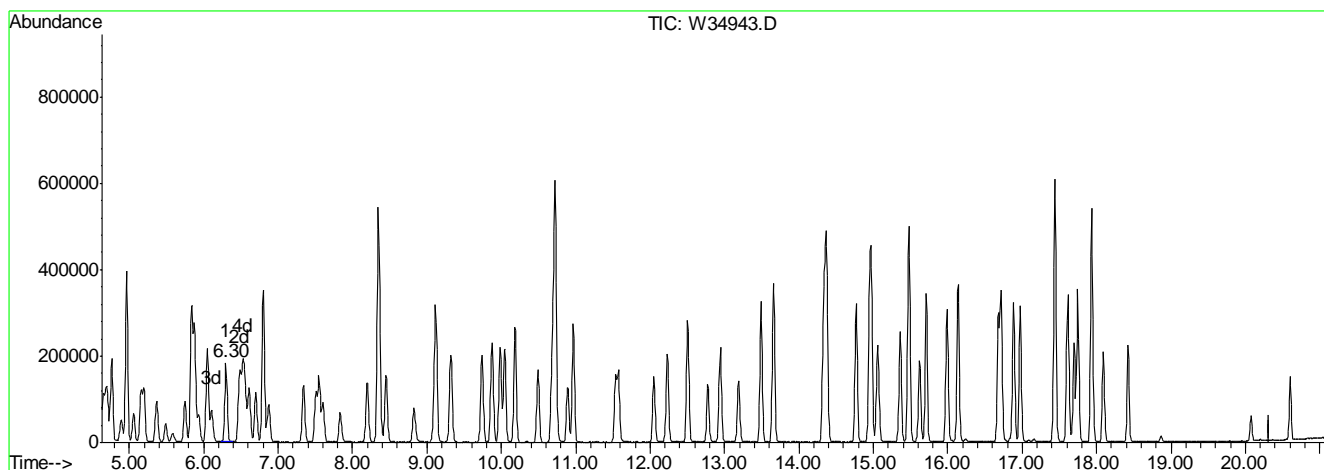
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34943.D
 Acq On : 30 Jan 2012 1:02 pm
 Sample : BSD
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:53 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(23) TVHC as EQUIV PENTANE (H)

6.30min 8.12PPBV m

response 429565

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.06#
0.00	1.10	0.06#
0.00	0.00	0.00

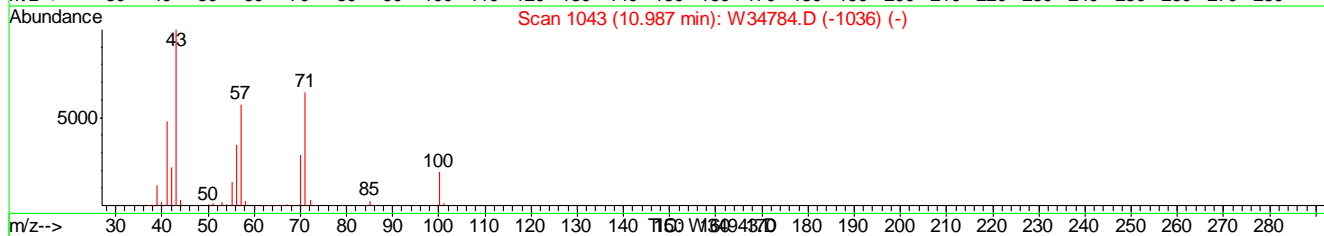
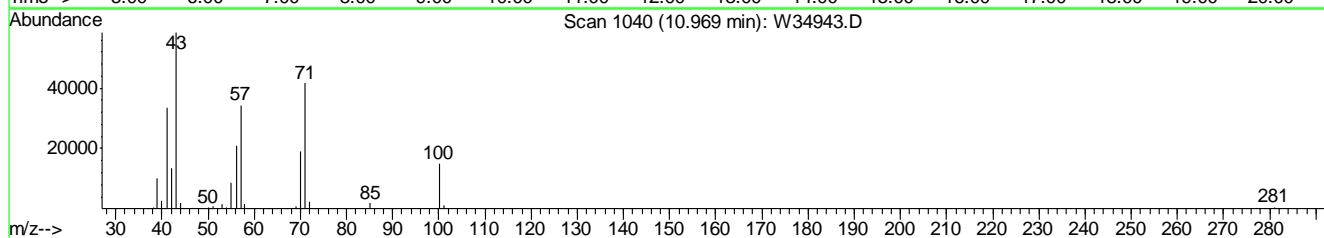
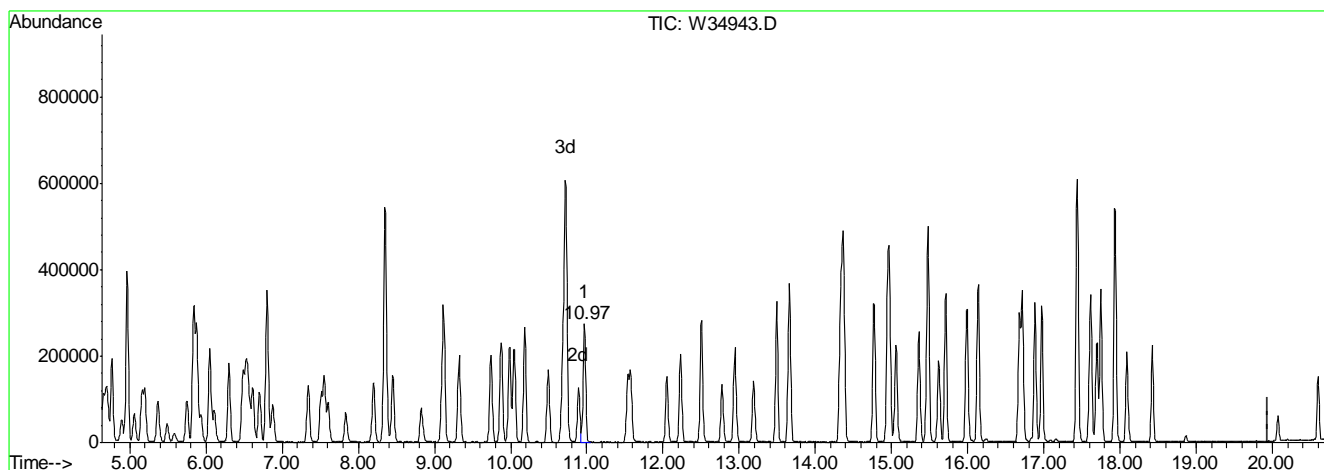
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34943.D
 Acq On : 30 Jan 2012 1:02 pm
 Sample : BSD
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:53 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(63) TVHC as EQUIV HEPTANE (H)

10.97min 8.35PPBV m

response 609370

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.04#
0.00	0.80	0.04#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34274.D
 Acq On : 15 Feb 2012 9:10 pm
 Operator : YOUMINH
 Sample : JA99237-1DUP
 Misc : MS25531,V2W1442,100,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 16 08:59:17 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

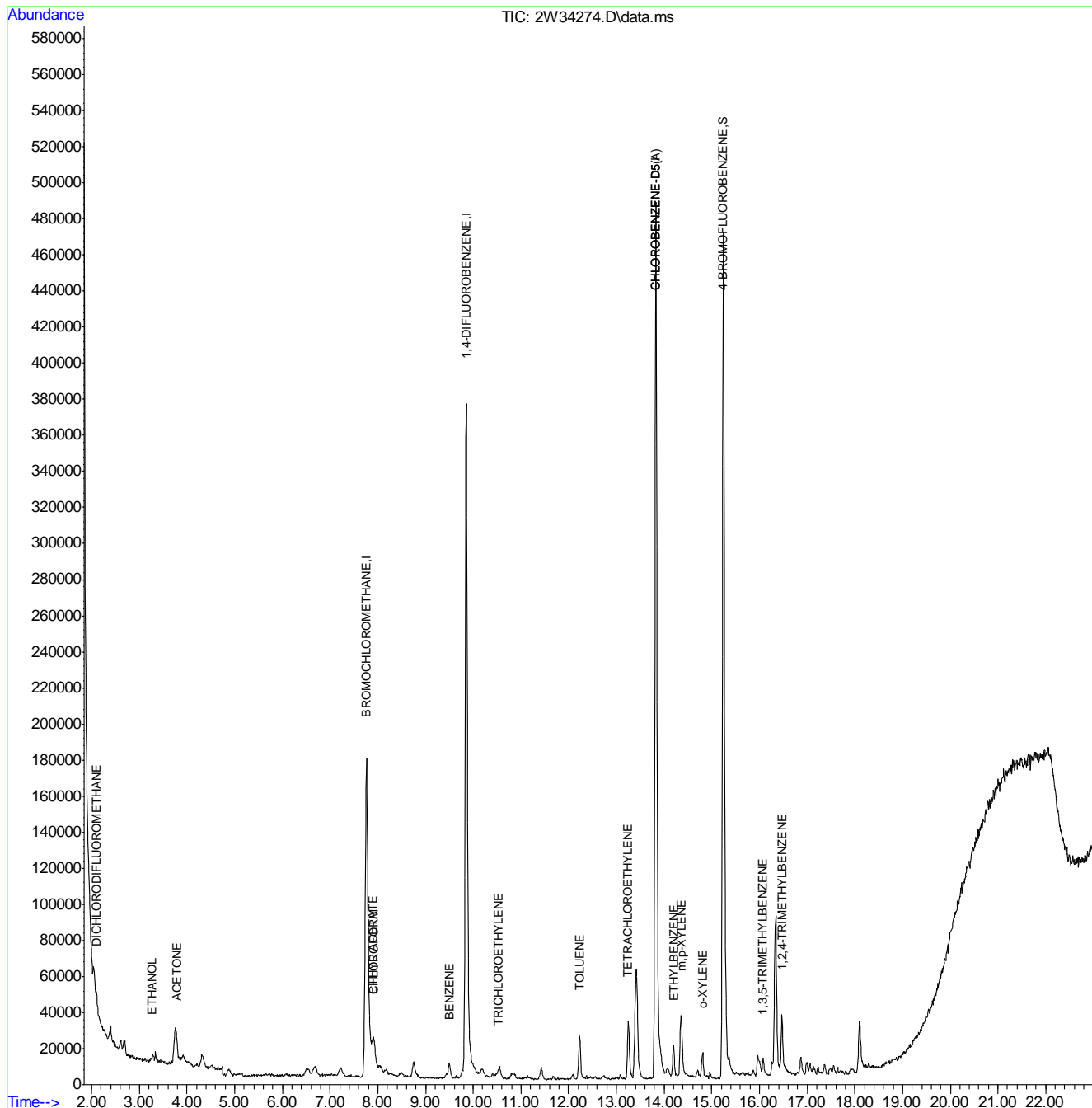
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.769	128	147497	10.00	PPBV	#-0.01
49) 1,4-DIFLUOROBENZENE	9.854	114	578869	10.00	PPBV	-0.02
68) CHLOROBENZENE-D5	13.828	82	242669	10.00	PPBV	#-0.02
104) CHLOROBENZENE-D5(A)	13.828	82	247252	10.00	PPBV	#-0.02
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.243	95	254713	8.94	PPBV	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	89.40%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.099	85	8963	0.12	PPBV	98
20) ACETONE	3.794	58	3934	0.62	PPBV #	1
27) ETHANOL	3.263	45	7974	1.58	PPBV #	39
42) ETHYL ACETATE	7.903	61	3308	0.87	PPBV #	1
44) CHLOROFORM	7.915	83	15389	0.34	PPBV	96
50) BENZENE	9.506	78	13577	0.24	PPBV	96
54) TRICHLOROETHYLENE	10.530	95	1357	0.05	PPBV #	87
65) TOLUENE	12.231	92	16674	0.43	PPBV	97
71) TETRACHLOROETHYLENE	13.249	164	13495	0.48	PPBV	90
77) ETHYLBENZENE	14.200	91	19525	0.32	PPBV	97
78) m,p-XYLENE	14.359	106	20434	0.86	PPBV	90
79) o-XYLENE	14.810	106	6345	0.27	PPBV	99
90) 1,3,5-TRIMETHYLBENZENE	16.072	105	6684	0.16	PPBV	85
93) 1,2,4-TRIMETHYLBENZENE	16.468	105	24928	0.68	PPBV #	37

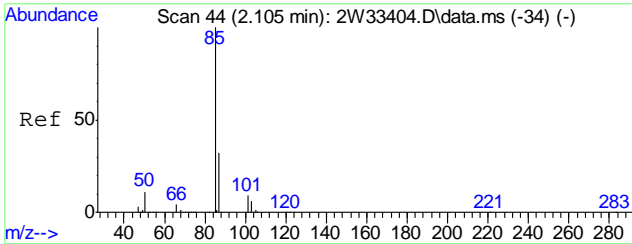
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34274.D
 Acq On : 15 Feb 2012 9:10 pm
 Operator : YOUMINH
 Sample : JA99237-1DUP
 Misc : MS25531,V2W1442,100,,,1
 ALS Vial : 9 Sample Multiplier: 1

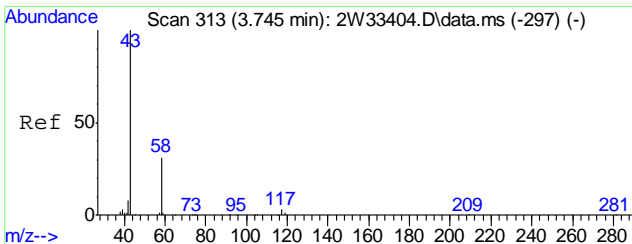
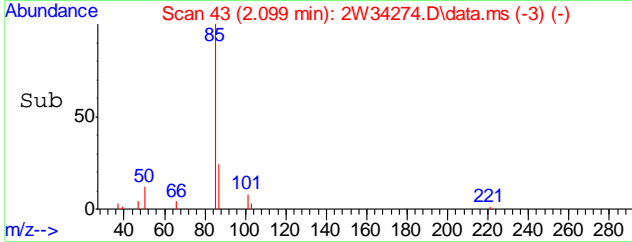
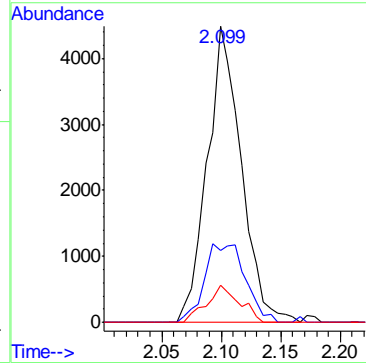
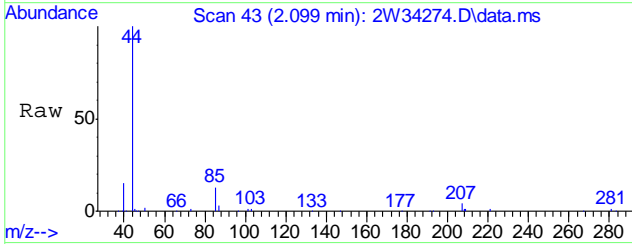
Quant Time: Feb 16 08:59:17 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration





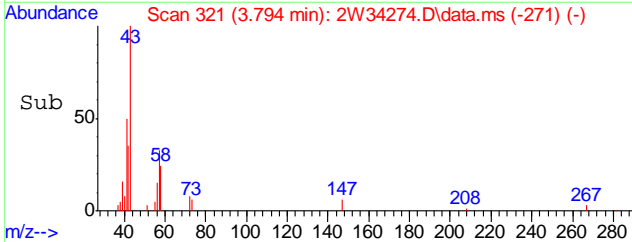
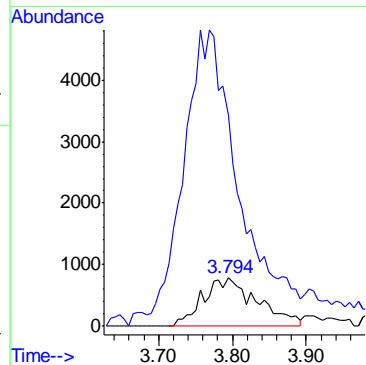
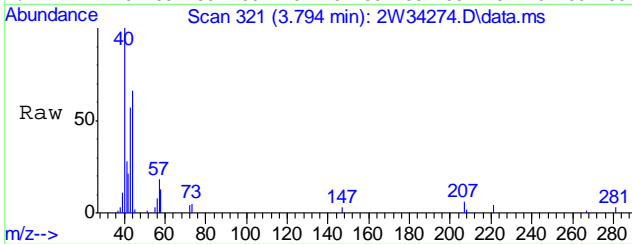
#3
 DICHLORODIFLUOROMETHANE
 Concen: 0.12 PPBV
 RT: 2.099 min Scan# 43
 Delta R.T. -0.006 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

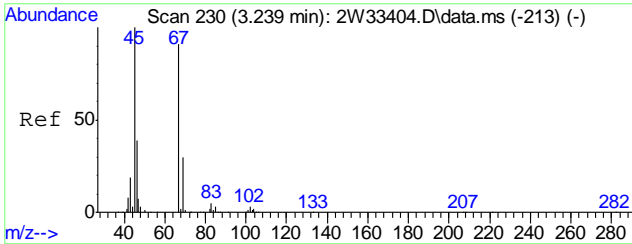
Tgt Ion	Resp	Lower	Upper
85	8963		
85	100		
87	31.8	12.4	52.4
50	11.9	0.0	30.4



#20
 ACETONE
 Concen: 0.62 PPBV
 RT: 3.794 min Scan# 321
 Delta R.T. 0.055 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

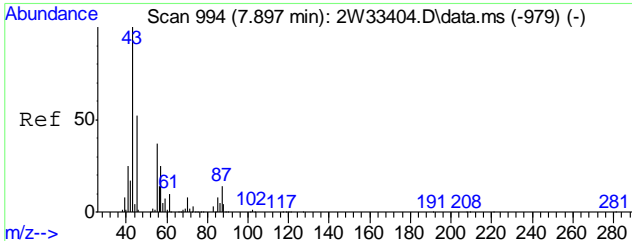
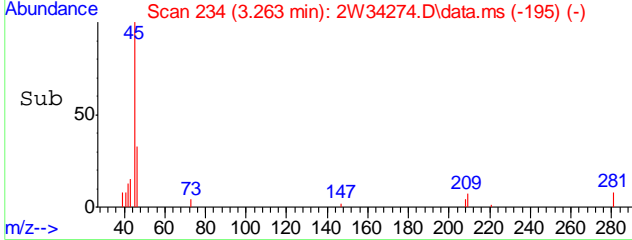
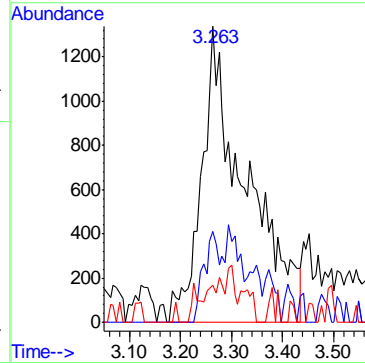
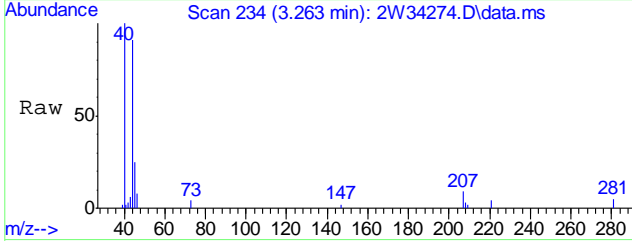
Tgt Ion	Resp	Lower	Upper
58	3934		
58	100		
43	0.0	262.1	302.1#





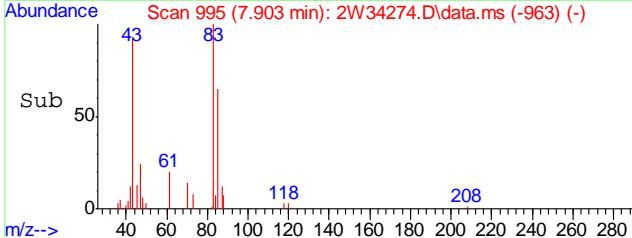
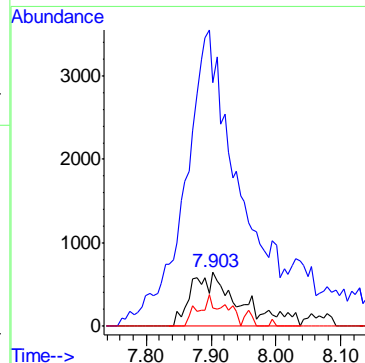
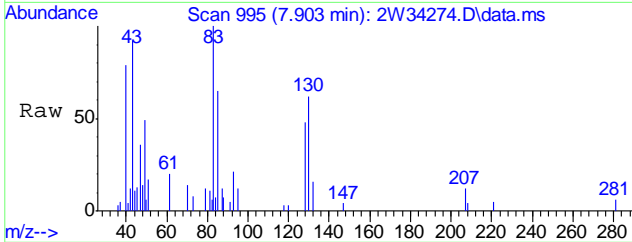
#27
 ETHANOL
 Concen: 1.58 PPBV
 RT: 3.263 min Scan# 234
 Delta R.T. 0.036 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

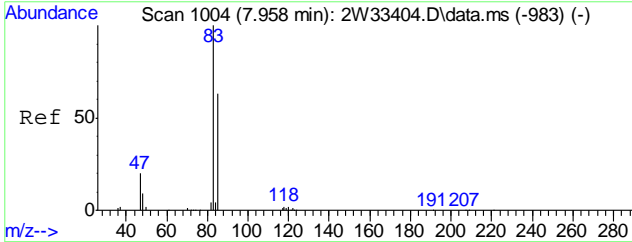
Tgt Ion	Resp	Lower	Upper
45	7974	100	
46	0.0	11.9	71.9#
42	0.0	0.0	35.5



#42
 ETHYL ACETATE
 Concen: 0.87 PPBV
 RT: 7.903 min Scan# 995
 Delta R.T. 0.043 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

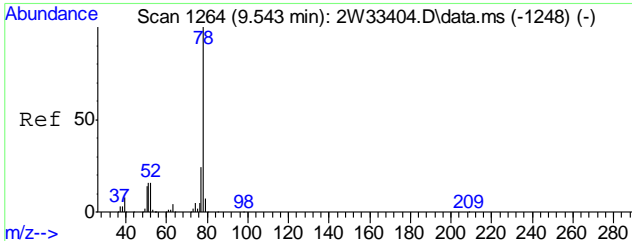
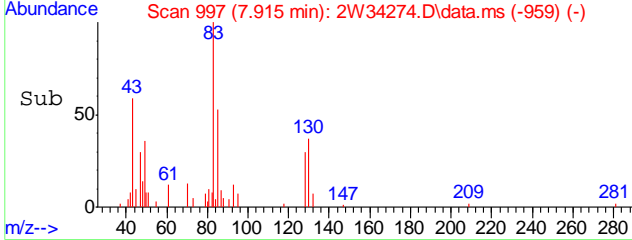
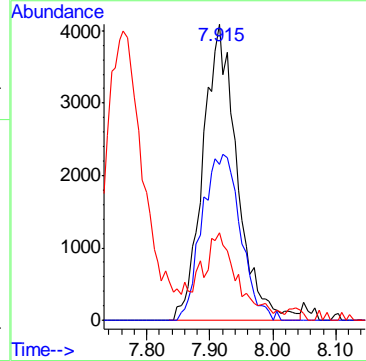
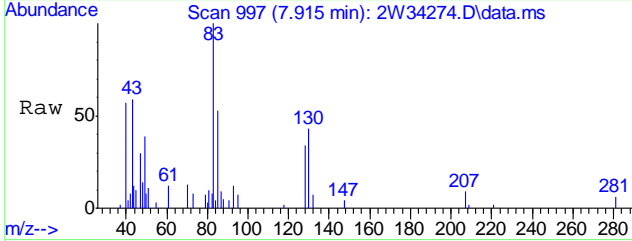
Tgt Ion	Resp	Lower	Upper
61	3308	100	
43	723.0	1482.4	1522.4#
88	22.6	26.7	66.7#





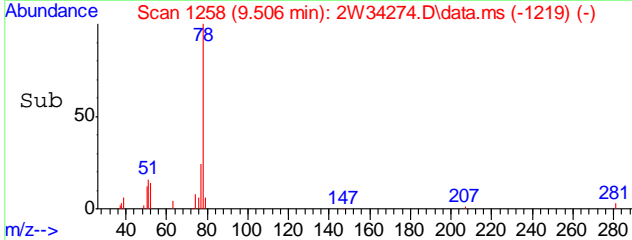
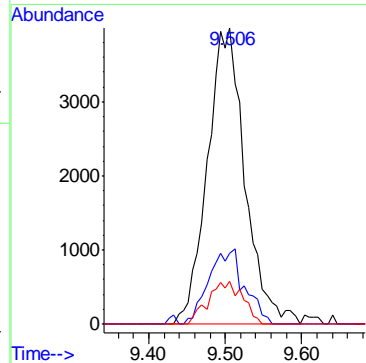
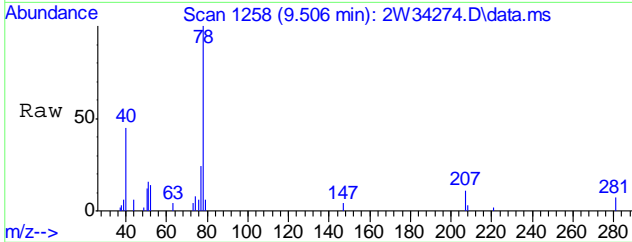
#44
 CHLOROFORM
 Concen: 0.34 PPBV
 RT: 7.915 min Scan# 997
 Delta R.T. -0.018 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

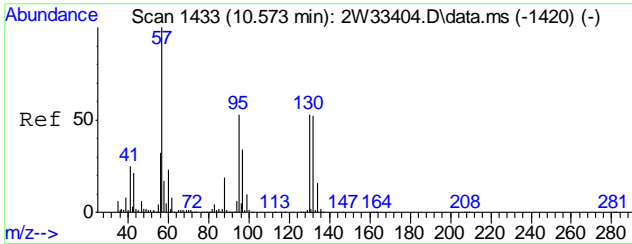
Tgt Ion	Resp	Lower	Upper
83	15389		
83	100		
85	63.3	45.7	85.7
47	26.6	2.5	42.5



#50
 BENZENE
 Concen: 0.24 PPBV
 RT: 9.506 min Scan# 1258
 Delta R.T. -0.012 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

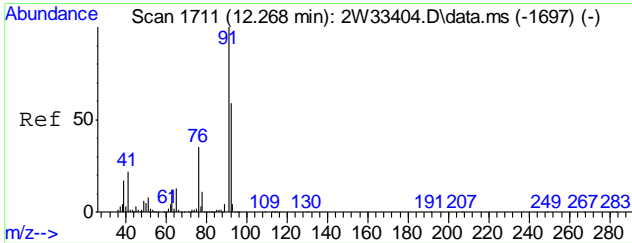
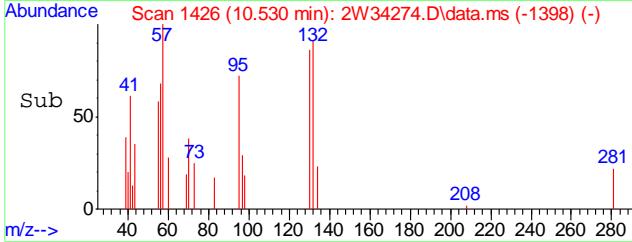
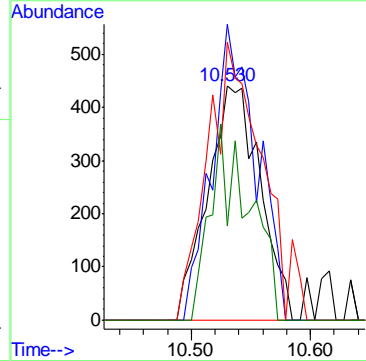
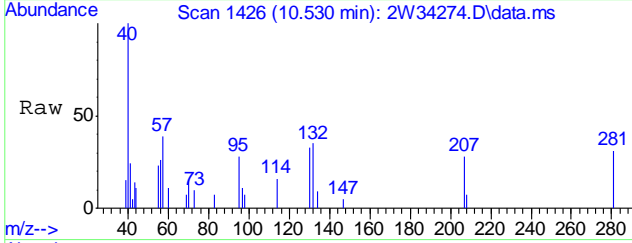
Tgt Ion	Resp	Lower	Upper
78	13577		
78	100		
77	24.1	3.5	43.5
52	13.3	0.0	36.3





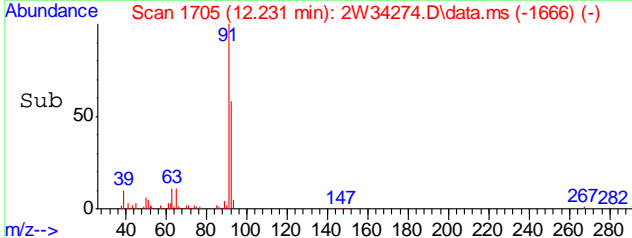
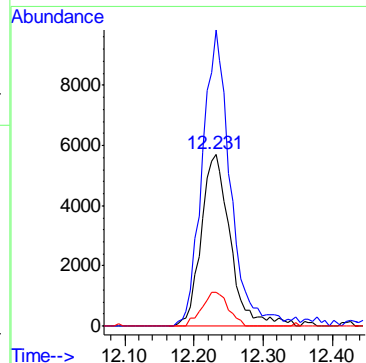
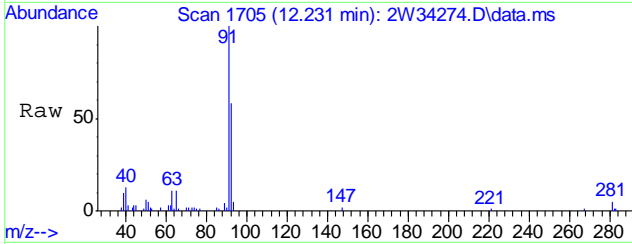
#54
TRICHLOROETHYLENE
Concen: 0.05 PPBV
RT: 10.530 min Scan# 1426
Delta R.T. -0.018 min
Lab File: 2W34274.D
Acq: 15 Feb 2012 9:10 pm

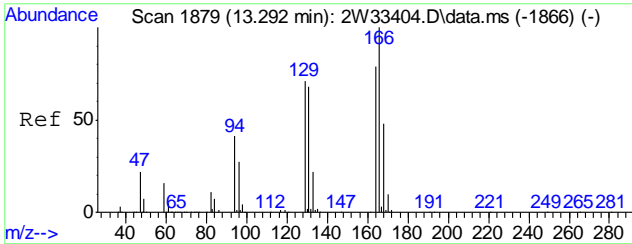
Tgt Ion	Resp	Lower	Upper
95	1357		
95	100		
132	107.5	77.7	117.7
130	123.1	82.3	122.3#
97	62.2	45.3	85.3



#65
TOLUENE
Concen: 0.43 PPBV
RT: 12.231 min Scan# 1705
Delta R.T. -0.012 min
Lab File: 2W34274.D
Acq: 15 Feb 2012 9:10 pm

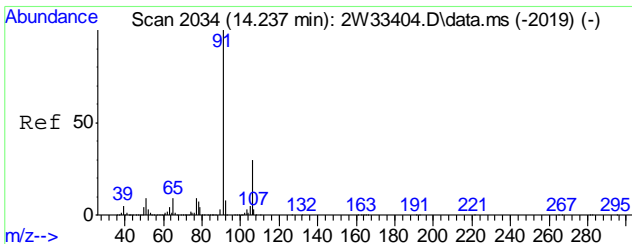
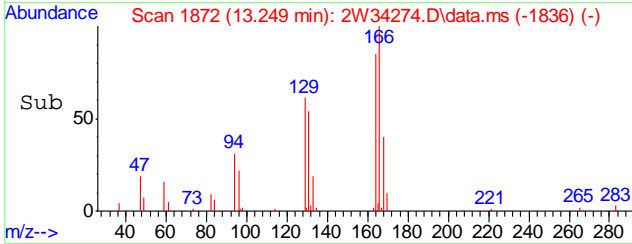
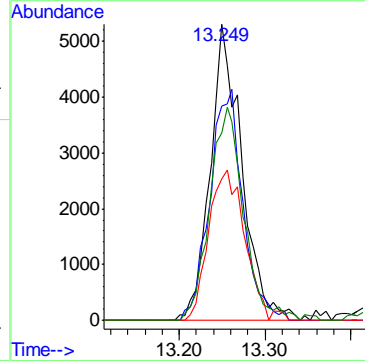
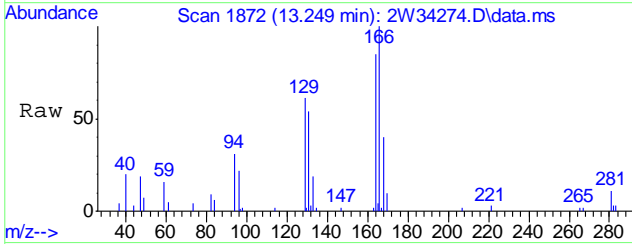
Tgt Ion	Resp	Lower	Upper
92	16674		
92	100		
91	170.5	148.1	188.1
65	17.9	1.9	41.9





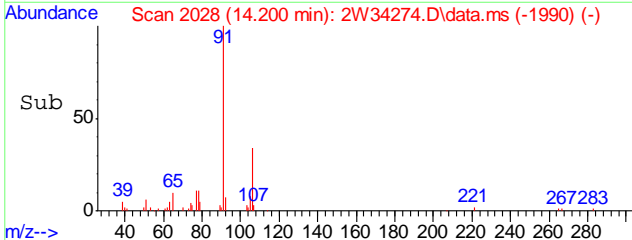
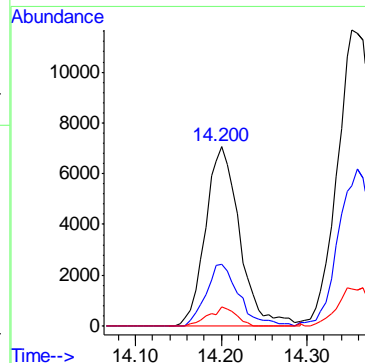
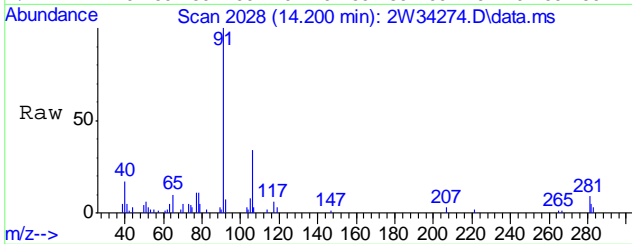
#71
TETRACHLOROETHYLENE
Concen: 0.48 PPBV
RT: 13.249 min Scan# 1872
Delta R.T. -0.025 min
Lab File: 2W34274.D
Acq: 15 Feb 2012 9:10 pm

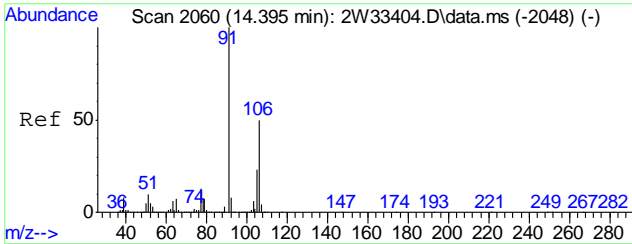
Tgt Ion	Resp	Lower	Upper
164	13495	100	
129	82.1	73.1	113.1
168	58.8	41.1	81.1
131	77.4	70.5	110.5



#77
ETHYLBENZENE
Concen: 0.32 PPBV
RT: 14.200 min Scan# 2028
Delta R.T. -0.018 min
Lab File: 2W34274.D
Acq: 15 Feb 2012 9:10 pm

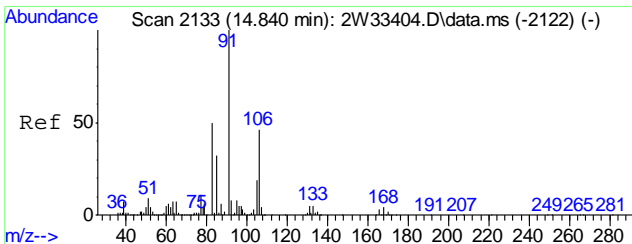
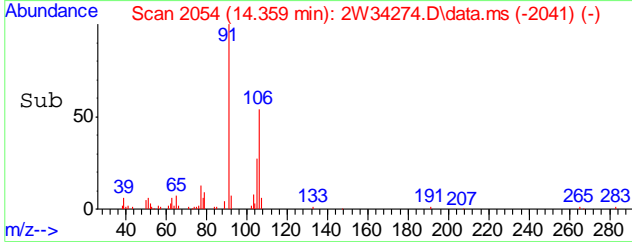
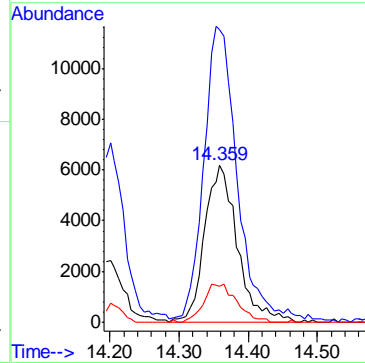
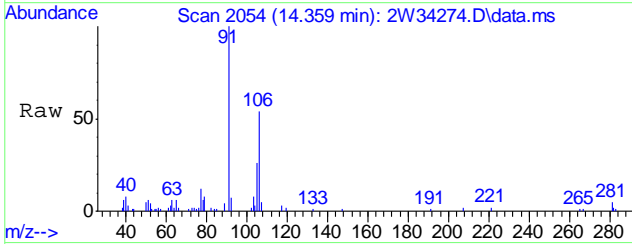
Tgt Ion	Resp	Lower	Upper
91	19525	100	
106	33.3	11.0	51.0
77	8.3	0.0	28.4





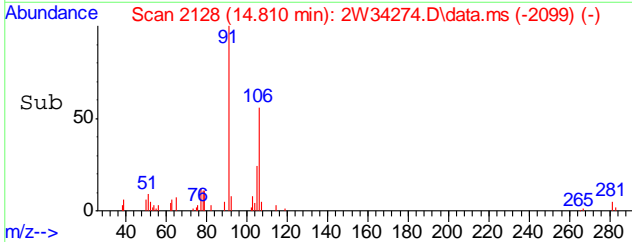
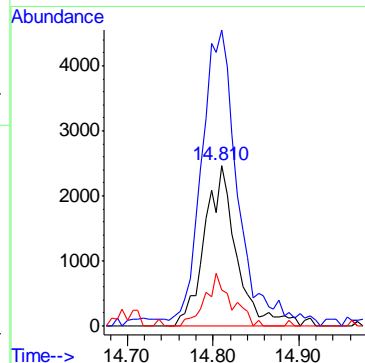
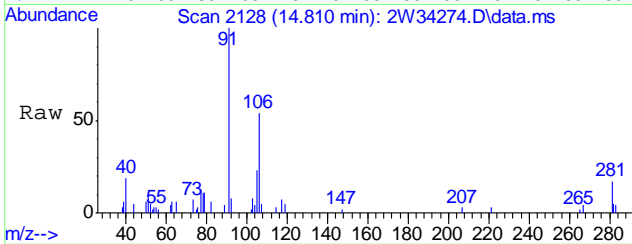
#78
 m,p-XYLENE
 Concen: 0.86 PPBV
 RT: 14.359 min Scan# 2054
 Delta R.T. -0.018 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

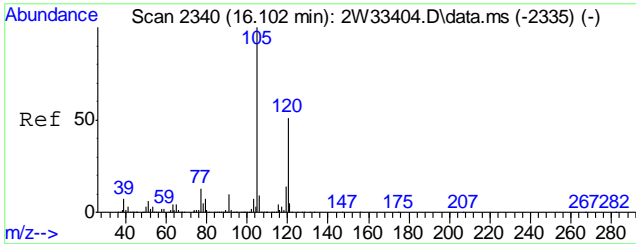
Tgt Ion	Resp	Lower	Upper
106	100		
91	186.3	162.3	243.5
77	22.8	20.7	31.1



#79
 o-XYLENE
 Concen: 0.27 PPBV
 RT: 14.810 min Scan# 2128
 Delta R.T. -0.012 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

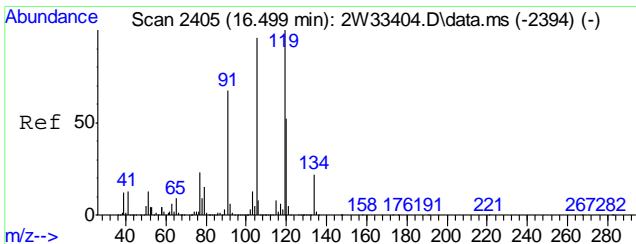
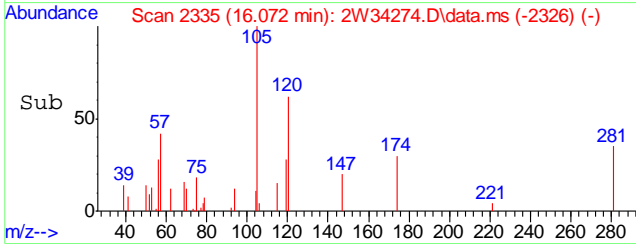
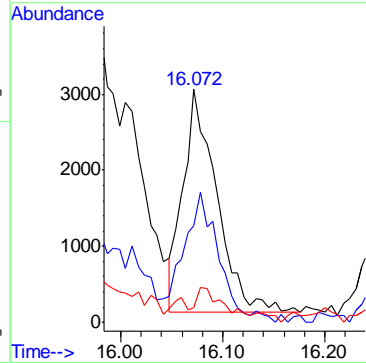
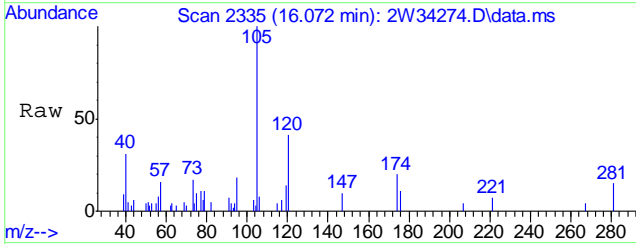
Tgt Ion	Resp	Lower	Upper
106	100		
91	212.1	193.6	233.6
77	26.8	6.3	46.3





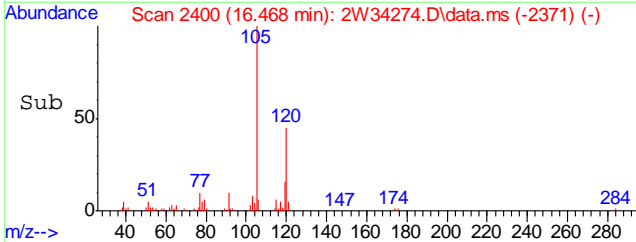
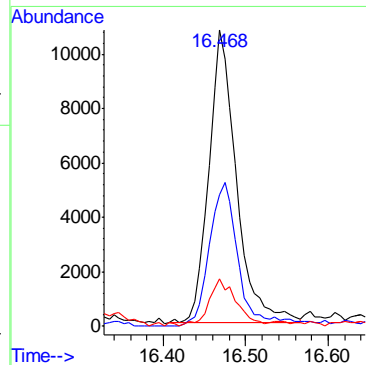
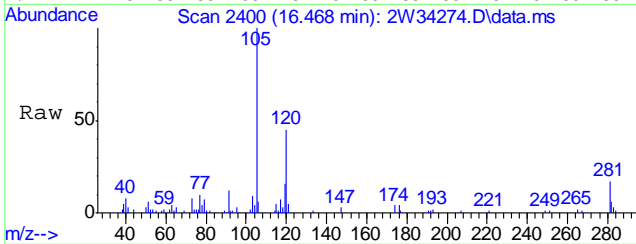
#90
 1,3,5-TRIMETHYLBENZENE
 Concen: 0.16 PPBV
 RT: 16.072 min Scan# 2335
 Delta R.T. -0.018 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

Tgt Ion	Resp	Lower	Upper
105	6684		
105	100		
120	61.4	31.3	71.3
91	15.6	0.0	30.0



#93
 1,2,4-TRIMETHYLBENZENE
 Concen: 0.68 PPBV
 RT: 16.468 min Scan# 2400
 Delta R.T. -0.012 min
 Lab File: 2W34274.D
 Acq: 15 Feb 2012 9:10 pm

Tgt Ion	Resp	Lower	Upper
105	24928		
105	100		
120	53.1	36.5	76.5
119	18.0	98.5	138.5#



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34949.D Vial: 10
 Acq On : 30 Jan 2012 7:12 pm Operator: YOUMINH
 Sample : SCC(A441) Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:35:02 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.35	128	51402	10.00	PPBV	-0.01
50) 1,4-DIFLUOROBENZENE	10.05	114	213684	10.00	PPBV	-0.02
69) CHLOROBENZENE-D5	14.33	82	86810	10.00	PPBV	-0.02
106) Chlorobenzene-d5(a)	14.33	82	86178	10.00	PPBV	-0.02

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 15.99 95 88928 9.42 PPBV -0.02
 Spiked Amount 10.000 Range 65 - 128 Recovery = 94.20%

Target Compounds Qvalue

6.5.1
6

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34949.D MW1417.M Tue Jan 31 12:24:17 2012 MSW

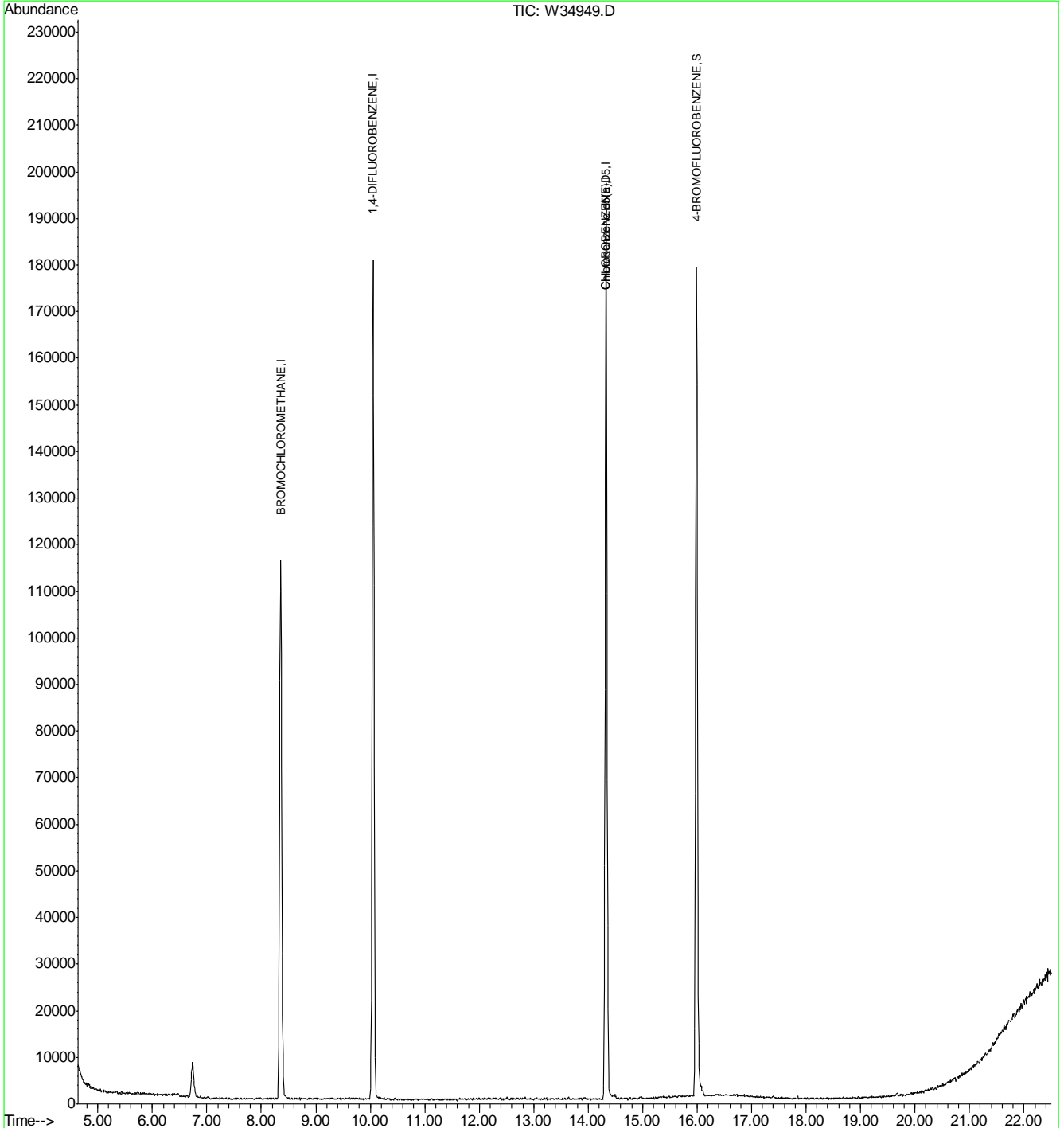
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34949.D
 Acq On : 30 Jan 2012 7:12 pm
 Sample : SCC(A441)
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:57 2012

Vial: 10
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

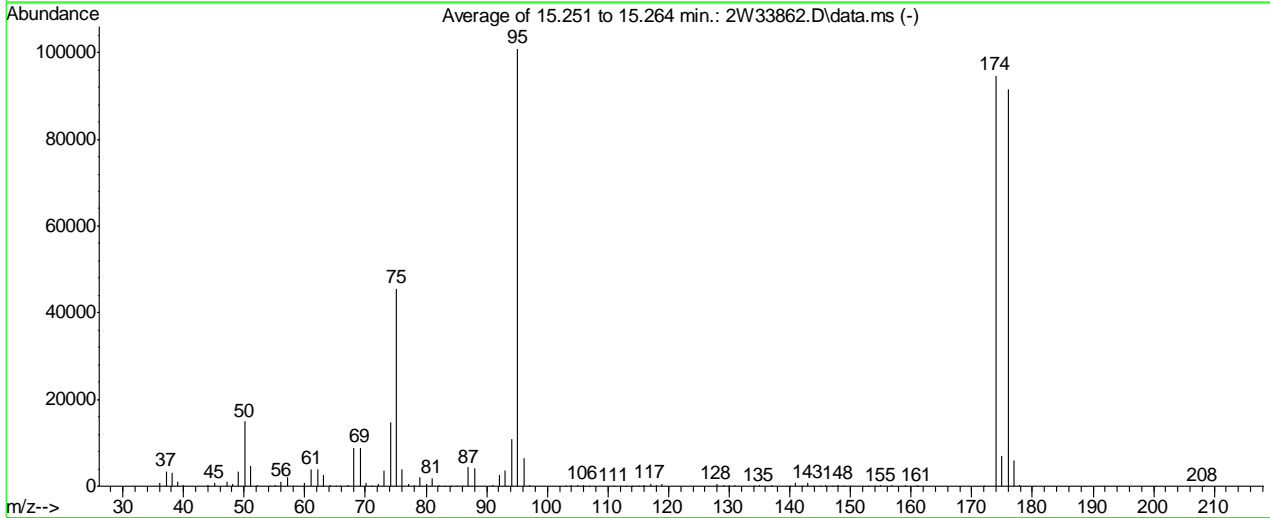
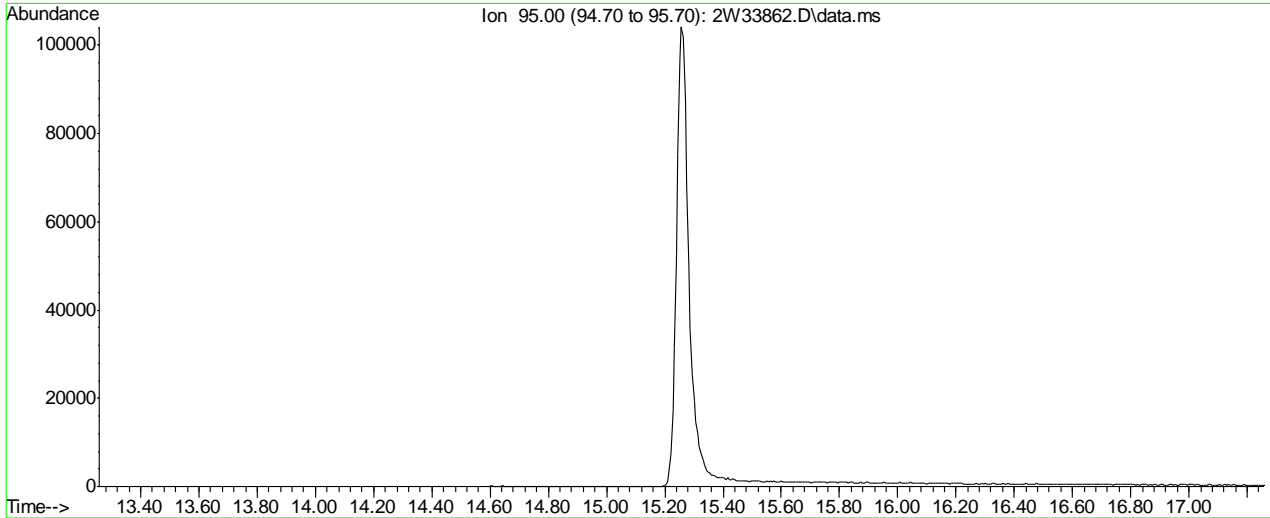
Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration



BFB

Data File : C:\msdchem\1\DATA\V2W-CORE\V2W1426\2W33862.D Vial: 5
 Acq On : 16 Jan 2012 6:07 pm Operator: YOUMINH
 Sample : BFB Inst : MS2W
 Misc : MS23893,V2W1426,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2W1426.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um



AutoFind: Scans 109, 110, 111; Background Corrected with Scan 96

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.8	14915	PASS
75	95	30	66	45.1	45544	PASS
95	95	100	100	100.0	100957	PASS
96	95	5	9	6.5	6581	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	93.7	94645	PASS
175	174	4	9	7.3	6944	PASS
176	174	93	101	96.8	91640	PASS
177	176	5	9	6.5	5990	PASS

Average of 15.251 to 15.264 min.: 2W33862.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	669	51.10	4565	64.10	284	75.10	45544
37.10	3404	52.10	185	65.10	36	76.10	3875
38.05	2985	54.15	19	65.90	15	77.05	458
39.10	1056	55.10	215	67.15	293	78.05	387
40.05	142	56.10	1142	68.10	8672	79.00	1957
44.10	242	57.10	2014	69.10	8859	80.00	576
45.10	662	58.10	116	70.10	701	81.00	1936
47.10	919	60.00	788	71.05	77	82.05	322
48.05	471	61.10	3881	72.05	457	83.10	19
49.10	3378	62.10	3781	73.10	3657	84.10	36
50.05	14915	63.10	2718	74.10	14863	85.10	5

Average of 15.251 to 15.264 min.: 2W33862.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.95	133	104.00	342	117.95	327	141.00	750
87.00	4294	105.00	176	119.00	450	141.95	96
88.00	4018	105.95	383	124.00	18	143.00	767
91.00	378	106.95	89	127.95	398	143.90	31
92.10	2624	111.00	68	129.00	181	145.00	91
93.10	3717	112.05	60	129.95	390	145.95	154
94.10	10785	113.05	58	130.95	148	147.05	65
95.10	100957	114.00	7	134.00	13	147.95	292
96.10	6581	114.95	115	134.95	164	148.95	46
97.05	232	115.95	338	136.95	155	149.95	95
102.95	65	117.00	557	140.00	65	151.95	58

Average of 15.251 to 15.264 min.: 2W33862.D\data.ms

BFB

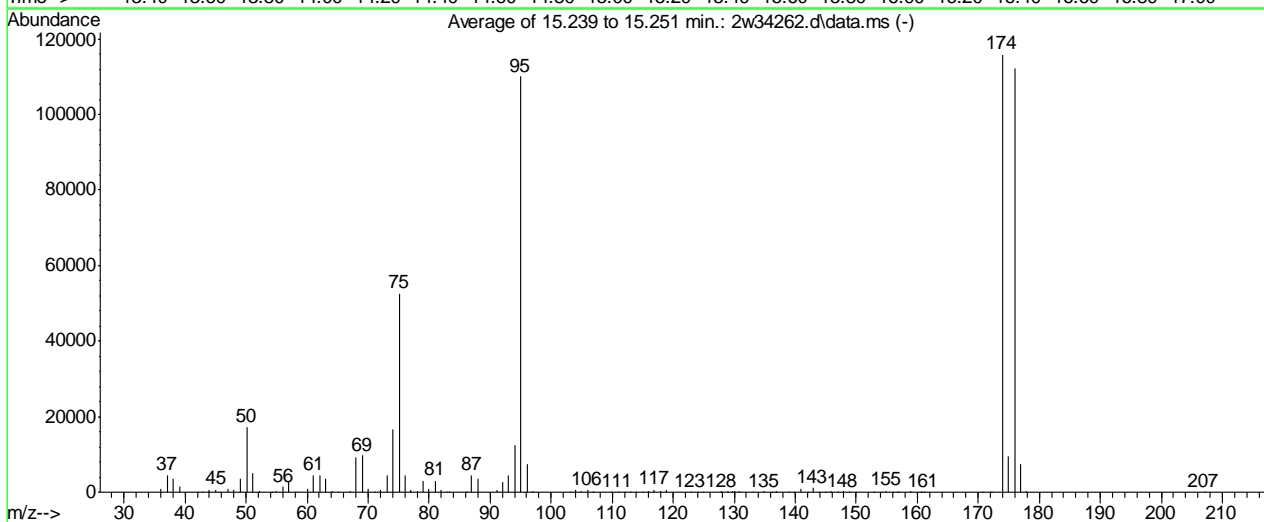
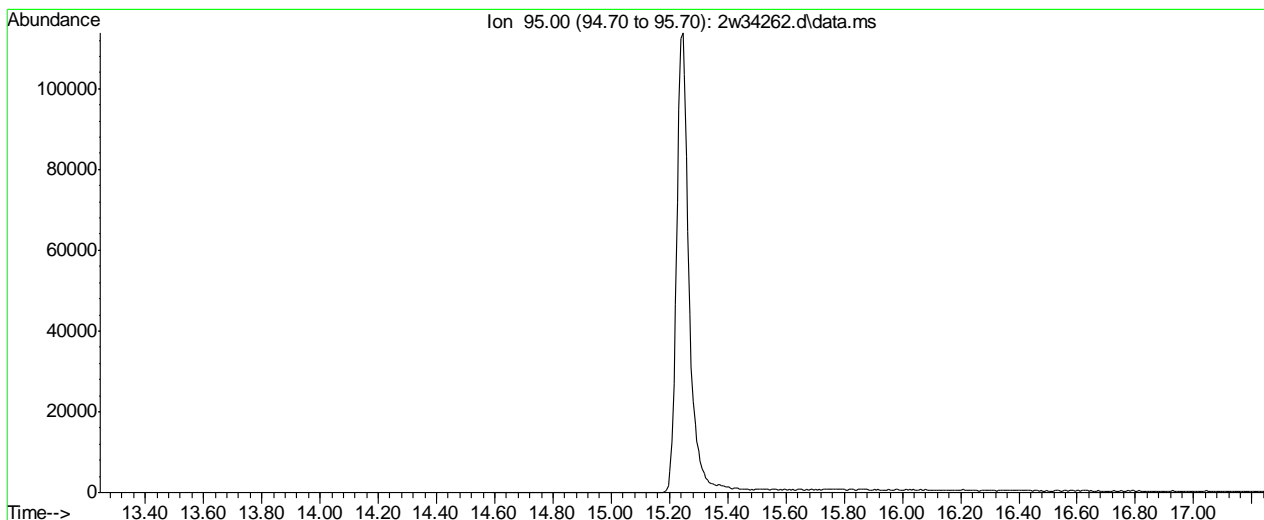
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.95	89	177.00	5990				
153.95	30	177.95	156				
155.00	224	208.20	46				
156.90	200						
158.95	143						
160.90	75						
161.10	46						
171.90	18						
174.00	94645						
175.00	6944						
176.00	91640						

BFB

Data File : C:\msdchem\1\DATA\V2W-CORE\v2w1442\2w34262.d Vial: 5
 Acq On : 15 Feb 2012 9:23 am Operator: YOUMINH
 Sample : BFB Inst : MS2W
 Misc : MS25531,V2W1442,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2W1426.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um



AutoFind: Scans 107, 108, 109; Background Corrected with Scan 95

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.8	17361	PASS
75	95	30	66	47.8	52629	PASS
95	95	100	100	100.0	110024	PASS
96	95	5	9	6.7	7343	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	105.3	115893	PASS
175	174	4	9	8.1	9401	PASS
176	174	93	101	96.8	112168	PASS
177	176	5	9	6.5	7343	PASS

2w34262.d M2W1426.M Thu Feb 16 11:15:51 2012 VOA-CLN-04

Average of 15.239 to 15.251 min.: 2w34262.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	858	49.05	3631	62.05	4473	74.05	16739
37.05	4458	50.10	17361	63.05	3493	75.10	52629
38.05	3474	51.10	5100	64.10	379	76.10	4551
39.10	1447	52.10	279	65.05	81	76.95	683
42.15	32	54.15	4	67.05	335	78.00	443
42.85	85	55.00	325	68.00	9101	78.95	3070
44.00	475	56.05	1391	69.00	9699	79.95	936
45.05	750	57.05	2569	70.00	854	80.95	3125
45.80	39	58.05	69	71.05	79	81.95	744
47.00	912	60.00	875	71.95	614	82.90	50
48.05	566	61.05	4588	73.05	4484	83.15	72

Average of 15.239 to 15.251 min.: 2w34262.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.90	40	103.00	18	114.95	123	129.80	231
86.10	138	103.95	463	115.95	381	130.00	161
87.00	4477	104.95	178	116.95	733	130.75	171
88.00	3672	105.95	475	117.95	379	133.00	48
91.05	472	106.80	26	118.90	625	134.90	169
92.05	2770	106.95	80	122.90	40	136.10	16
93.00	4416	109.90	53	123.95	54	136.80	71
94.05	12516	110.90	58	125.00	13	136.95	169
95.00	110024	112.00	27	127.80	139	138.95	40
96.05	7343	112.95	73	127.95	245	139.90	56
97.00	317	113.90	8	128.95	214	141.00	952

Average of 15.239 to 15.251 min.: 2w34262.d\data.ms

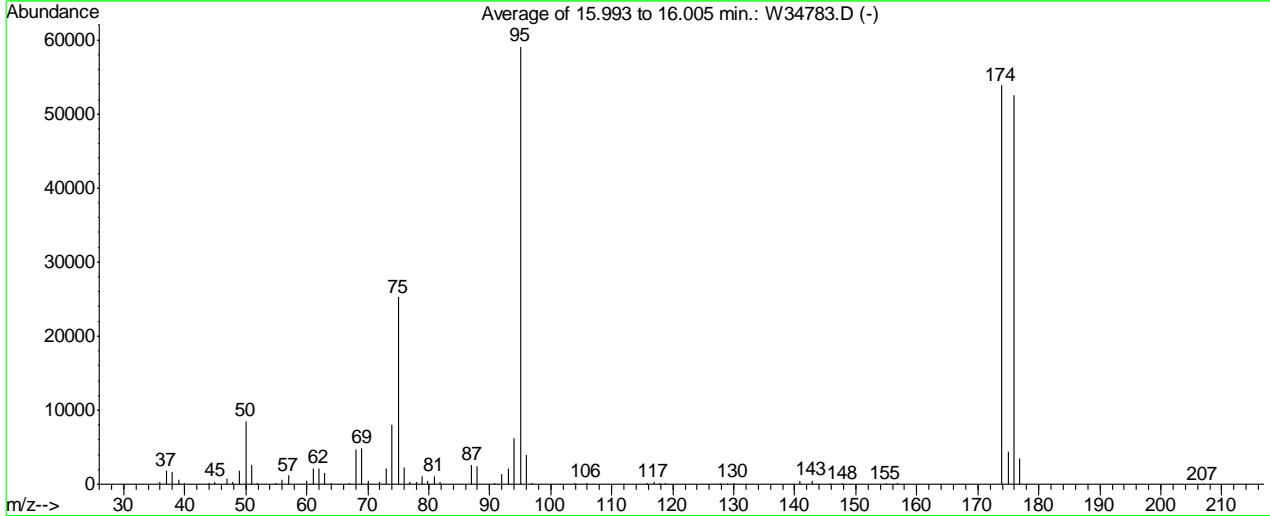
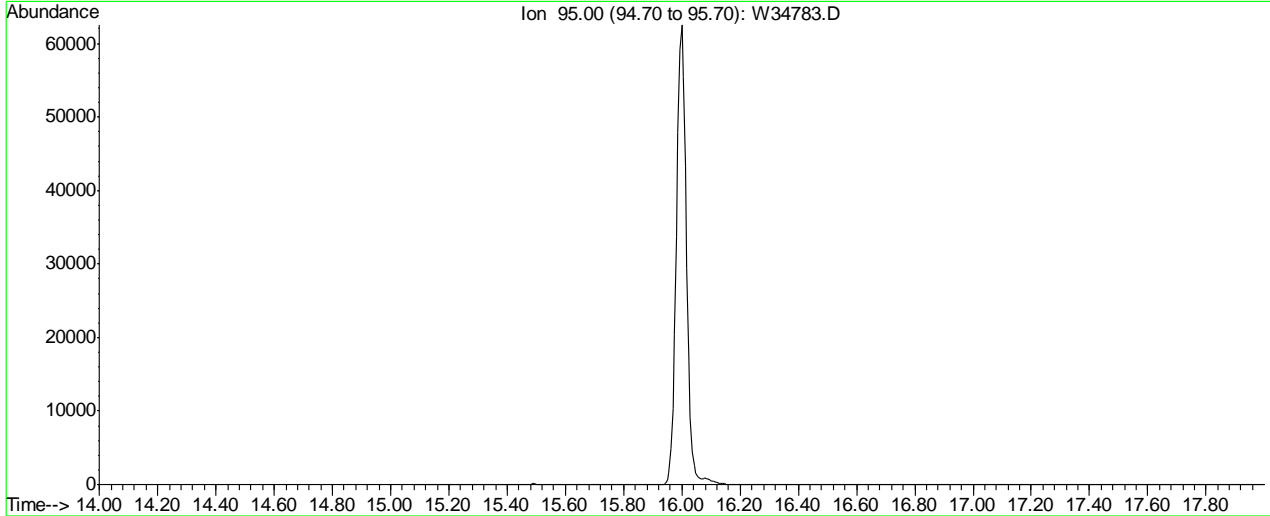
BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.10	45	154.95	338	174.00	115893		
142.95	1185	155.95	81	175.00	9401		
143.80	82	156.80	80	176.00	112168		
144.95	114	157.00	146	176.95	7343		
145.90	188	158.95	165	177.95	205		
146.90	157	160.60	31	207.00	27		
147.90	290	160.80	51				
148.90	96	161.05	74				
149.95	144	170.70	34				
152.80	59	171.90	84				
154.10	46	172.20	97				

BFB

Data File : C:\MSDCHEM\1\DATA\W34783.D Vial: 5
 Acq On : 18 Jan 2012 6:37 pm Operator: YOUMINH
 Sample : BFB Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um



AutoFind: Scans 150, 151, 152; Background Corrected with Scan 139

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.4	8518	PASS
75	95	30	66	42.7	25266	PASS
95	95	100	100	100.0	59112	PASS
96	95	5	9	6.8	3999	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.2	53893	PASS
175	174	4	9	8.1	4357	PASS
176	174	93	101	97.4	52509	PASS
177	176	5	9	6.6	3440	PASS

Average of 15.993 to 16.005 min.: W34783.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	355	51.00	2602	68.00	4663	79.90	386
37.00	1779	51.95	89	69.00	4853	80.90	1099
38.00	1658	55.00	95	70.00	422	81.90	279
39.00	682	55.95	621	71.95	276	87.00	2644
39.95	209	57.00	1208	72.95	2097	87.95	2455
44.00	177	59.90	447	74.00	8098	90.90	183
45.00	370	61.00	2099	75.00	25266	91.95	1308
47.00	702	62.00	2125	76.00	2233	93.00	2081
47.95	294	63.00	1536	76.95	341	94.00	6271
49.00	1768	64.00	160	77.95	237	95.00	59112
50.00	8518	67.00	146	78.85	1131	96.00	3999

Average of 15.993 to 16.005 min.: W34783.D

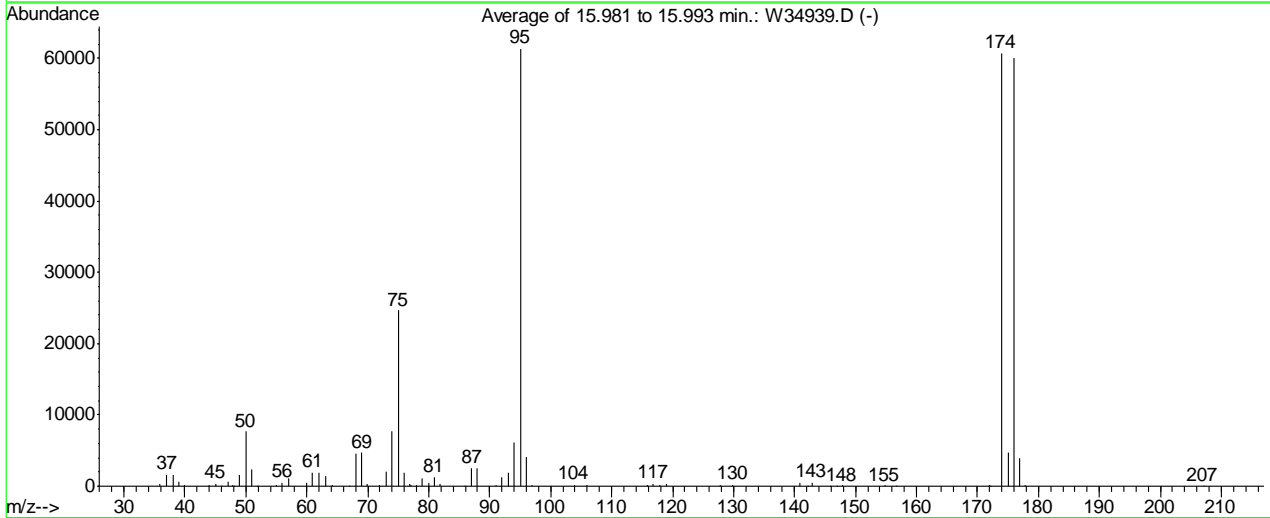
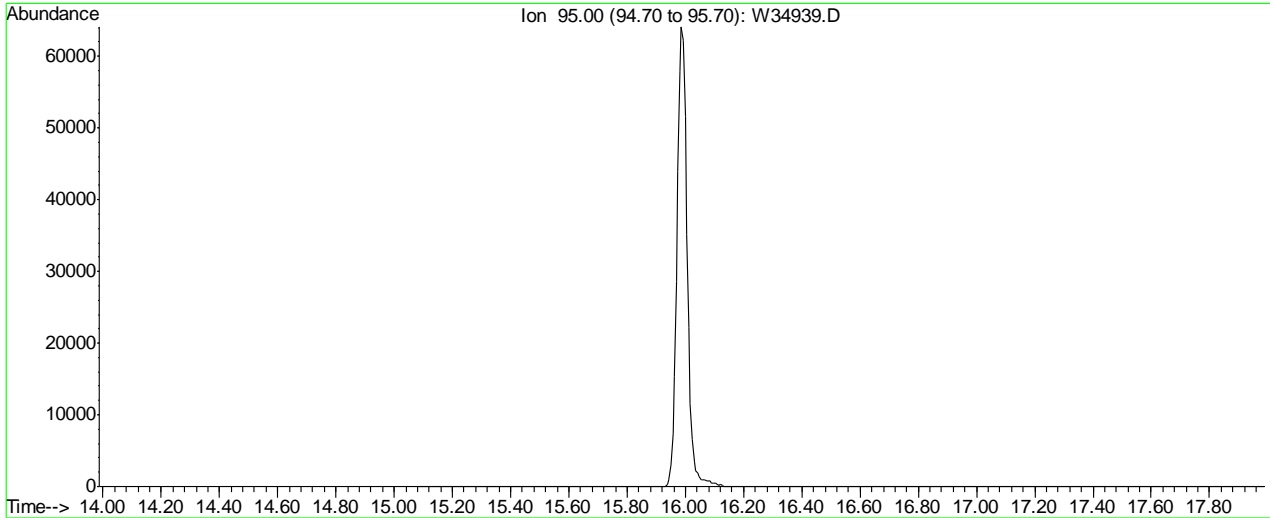
BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.95	97	142.85	499				
103.85	178	145.80	36				
105.85	191	147.85	101				
115.85	147	154.90	129				
116.90	282	156.90	104				
117.85	182	173.90	53893				
118.85	228	175.00	4357				
127.85	161	175.90	52509				
128.85	72	176.90	3440				
129.90	176	177.90	80				
140.85	403	206.90	1				

BFB

Data File : C:\MSDCHEM\1\DATA\W34939.D Vial: 5
 Acq On : 30 Jan 2012 10:21 am Operator: YOUMINH
 Sample : BFB Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um



AutoFind: Scans 148, 149, 150; Background Corrected with Scan 138

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	12.5	7659	PASS
75	95	30	66	40.2	24669	PASS
95	95	100	100	100.0	61392	PASS
96	95	5	9	6.6	4063	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	99.0	60768	PASS
175	174	4	9	7.8	4743	PASS
176	174	93	101	98.8	60069	PASS
177	176	5	9	6.6	3939	PASS

W34939.D MW1417.M Tue Jan 31 12:26:20 2012 MSW

Average of 15.981 to 15.993 min.: W34939.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	262	49.00	1526	64.10	130	77.10	90
37.00	1587	50.00	7659	66.90	40	78.00	129
38.00	1513	51.00	2398	68.00	4520	78.85	1107
39.05	631	51.95	80	69.00	4694	79.95	431
40.00	107	55.00	88	69.95	371	80.85	1304
43.90	198	55.95	547	71.95	240	81.85	334
45.00	358	56.95	1129	73.00	2014	85.90	38
46.00	35	59.95	418	74.00	7706	87.00	2584
47.05	702	60.95	1965	75.00	24669	88.00	2495
47.90	176	62.00	1836	76.00	1933	90.95	163
48.10	59	63.00	1448	76.90	247	91.95	1268

Average of 15.981 to 15.993 min.: W34939.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	1968	127.90	173	172.20	52		
94.00	6069	129.90	205	173.90	60768		
95.00	61392	140.90	408	175.05	4743		
96.00	4063	142.10	35	175.90	60069		
97.00	98	142.85	508	176.90	3939		
103.85	179	145.90	43	177.85	135		
105.85	168	146.90	38	207.00	39		
115.95	181	147.85	154				
116.85	346	154.80	112				
117.85	176	156.60	33				
118.95	287	171.95	135				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33863.D
 Acq On : 16 Jan 2012 6:33 pm
 Operator : YOUMINH
 Sample : IC1426-15
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 09:46:47 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.781	128	149374	10.00	PPBV	# 0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	609064	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	13.847	82	340055	10.00	PPBV	# 0.00
104) CHLOROBENZENE-D5(A)	13.847	82	340834	10.00	PPBV	# 0.00
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.261	95	422633	10.36	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	103.60%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	950561	13.10	PPBV	99
4) FREON 152A	1.953	65	194831	13.71	PPBV	94
5) CHLORODIFLUOROMETHANE	2.001	67	88386	12.80	PPBV	98
6) PROPYLENE	2.032	41	184619	13.25	PPBV	95
7) FREON 114	2.373	85	987207	14.00	PPBV	87
8) CHLOROMETHANE	2.276	52	73916	13.67	PPBV	98
9) VINYL CHLORIDE	2.501	62	312956	14.16	PPBV	99
10) 1,3-BUTADIENE	2.642	54	215195	13.88	PPBV	# 83
11) n-BUTANE	2.696	43	393360	13.61	PPBV	96
12) BROMOMETHANE	2.922	94	364000	15.20	PPBV	99
13) CHLOROETHANE	3.099	64	181958	16.07	PPBV	98
14) DICHLOROFLUOROMETHANE	3.190	67	717496	15.43	PPBV	100
15) ACROLEIN	3.599	56	89204	17.30	PPBV	99
16) FREON 123	3.629	83	802093	15.91	PPBV	# 96
17) FREON 123A	3.690	117	517059	15.24	PPBV	# 73
18) TRICHLOROFLUOROMETHANE	3.928	101	995356	13.95	PPBV	99
19) ISOPROPYL ALCOHOL	4.001	45	408909	15.52	PPBV	96
20) ACETONE	3.733	58	102724	16.42	PPBV	91
21) PENTANE	4.336	42	233365	16.22	PPBV	85
22) ACRYLONITRILE	4.257	53	155362	17.12	PPBV	98
23) TVHC as EQUIV PENTANE	4.508	TIC	1233976m	15.62	PPBV	
24) IODOMETHANE	4.586	142	977908	15.08	PPBV	99
25) 1,1-DICHLOROETHYLENE	4.678	96	336404	15.22	PPBV	87
26) CARBON DISULFIDE	5.226	76	729960	15.47	PPBV	97
27) ETHANOL	3.227	45	87424	17.23	PPBV	96
28) BROMOETHENE	3.471	106	368304	15.70	PPBV	100
29) ACETONITRILE	3.452	41	138356	18.28	PPBV	# 83
30) METHYLENE CHLORIDE	4.830	84	272357	15.74	PPBV	85
31) 3-CHLOROPROPENE	4.982	76	145022	15.90	PPBV	# 74
32) FREON 113	5.178	151	663320	15.03	PPBV	# 84
33) TRANS-1,2-DICHLOROETHY...	6.165	96	310679	15.61	PPBV	89
34) TERTIARY BUTYL ALCOHOL	4.726	59	599015	14.68	PPBV	97
35) METHYL TERTIARY BUTYL ...	6.549	73	772696	15.13	PPBV	91
36) TETRAHYDROFURAN	8.396	72	109523	15.29	PPBV	# 71
37) HEXANE	7.842	57	399525	15.87	PPBV	98
38) VINYL ACETATE	6.689	86	66684	16.63	PPBV	# 11
39) 1,1-DICHLOROETHANE	6.458	63	542568	15.62	PPBV	98
40) METHYL ETHYL KETONE	7.007	72	108867	15.61	PPBV	# 70
41) cis-1,2-DICHLOROETHYLENE	7.580	96	333633	15.60	PPBV	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33863.D
 Acq On : 16 Jan 2012 6:33 pm
 Operator : YOUMINH
 Sample : IC1426-15
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 09:46:47 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) ETHYL ACETATE	7.866	61	61814	17.01	PPBV #	88
43) METHYL ACRYLATE	7.848	55	366030	16.44	PPBV #	94
44) CHLOROFORM	7.939	83	657761	14.58	PPBV	98
45) 2,4-DIMETHYLPENTANE	8.841	57	472737	15.37	PPBV #	93
46) 1,1,1-TRICHLOROETHANE	9.037	97	744204	13.98	PPBV	96
47) CARBON TETRACHLORIDE	9.671	117	834353	13.74	PPBV	100
48) 1,2-DICHLOROETHANE	8.768	62	389622	14.16	PPBV	99
50) BENZENE	9.518	78	892252	16.24	PPBV	98
51) CYCLOHEXANE	9.793	84	406596	15.40	PPBV #	78
52) 2,3-DIMETHYLPENTANE	10.030	71	185962	14.78	PPBV	84
53) DIBROMOMETHANE	10.305	174	407154	15.20	PPBV	90
54) TRICHLOROETHYLENE	10.555	95	392884	14.90	PPBV	92
55) 1,2-DICHLOROPROPANE	10.323	63	273352	15.15	PPBV	86
56) ETHYL ACRYLATE	10.317	55	393260	15.17	PPBV #	93
57) BROMODICHLOROMETHANE	10.518	83	681067	14.53	PPBV	97
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	1203789	14.36	PPBV	96
59) 1,4-DIOXANE	10.555	88	167584	14.45	PPBV #	1
60) METHYL METHACRYLATE	10.731	69	220068	14.59	PPBV #	88
61) HEPTANE	10.823	43	364734	14.15	PPBV	80
62) TVHC as EQUIV HEPTANE	10.823	TIC	1904074m	13.90	PPBV	
63) METHYL ISOBUTYL KETONE	11.378	58	172867	14.45	PPBV #	86
64) cis-1,3-DICHLOROPROPENE	11.353	75	459913	15.32	PPBV	95
65) TOLUENE	12.243	92	616907	15.49	PPBV	99
66) trans-1,3-DICHLOROPROPENE	11.823	75	444497	15.44	PPBV	96
67) 1,1,2-TRICHLOROETHANE	11.987	83	284233	15.39	PPBV	94
69) 2-HEXANONE	12.463	58	229949	13.49	PPBV	91
70) ETHYL METHACRYLATE	12.457	69	369439	13.80	PPBV #	94
71) TETRACHLOROETHYLENE	13.274	164	493764	14.45	PPBV	95
72) DIBROMOCHLOROMETHANE	12.640	129	775053	14.33	PPBV	100
73) 1,2-DIBROMOETHANE	12.859	107	530712	14.43	PPBV	99
74) OCTANE	13.097	43	502638	13.57	PPBV #	78
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	554819	14.58	PPBV	99
76) CHLOROBENZENE	13.889	112	836394	14.96	PPBV	94
77) ETHYLBENZENE	14.219	91	1240815	15.39	PPBV	99
78) m,p-XYLENE	14.377	106	943711	30.48	PPBV	97
79) o-XYLENE	14.822	106	461585	15.50	PPBV	98
80) STYRENE	14.718	104	681146	15.55	PPBV	99
81) NONANE	14.981	43	523486	15.81	PPBV	87
82) BROMOFORM	14.481	173	715577	14.60	PPBV	99
84) 1,1,2,2-TETRACHLOROETHANE	14.816	83	576074	15.78	PPBV	98
85) ISOPROPYLBENZENE	15.377	105	1396483	15.65	PPBV	99
86) BROMOBENZENE	15.493	156	423857	15.48	PPBV #	83
87) 2-CHLOROTOLUENE	15.865	126	342023	15.90	PPBV #	68
88) n-PROPYLBENZENE	15.877	120	343686	16.30	PPBV	92
89) 4-ETHYLTOLUENE	16.017	105	1144477	16.42	PPBV	96
90) 1,3,5-TRIMETHYLBENZENE	16.090	105	912820	16.31	PPBV	99
91) ALPHA-METHYLSTYRENE	16.243	118	423848	16.25	PPBV	98
92) TERT-BUTYLBENZENE	16.474	134	245901	15.72	PPBV	94
93) 1,2,4-TRIMETHYLBENZENE	16.480	105	858258	15.81	PPBV	95
94) m-DICHLOROBENZENE	16.639	146	566474	15.66	PPBV	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33863.D
 Acq On : 16 Jan 2012 6:33 pm
 Operator : YOUMINH
 Sample : IC1426-15
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 09:46:47 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

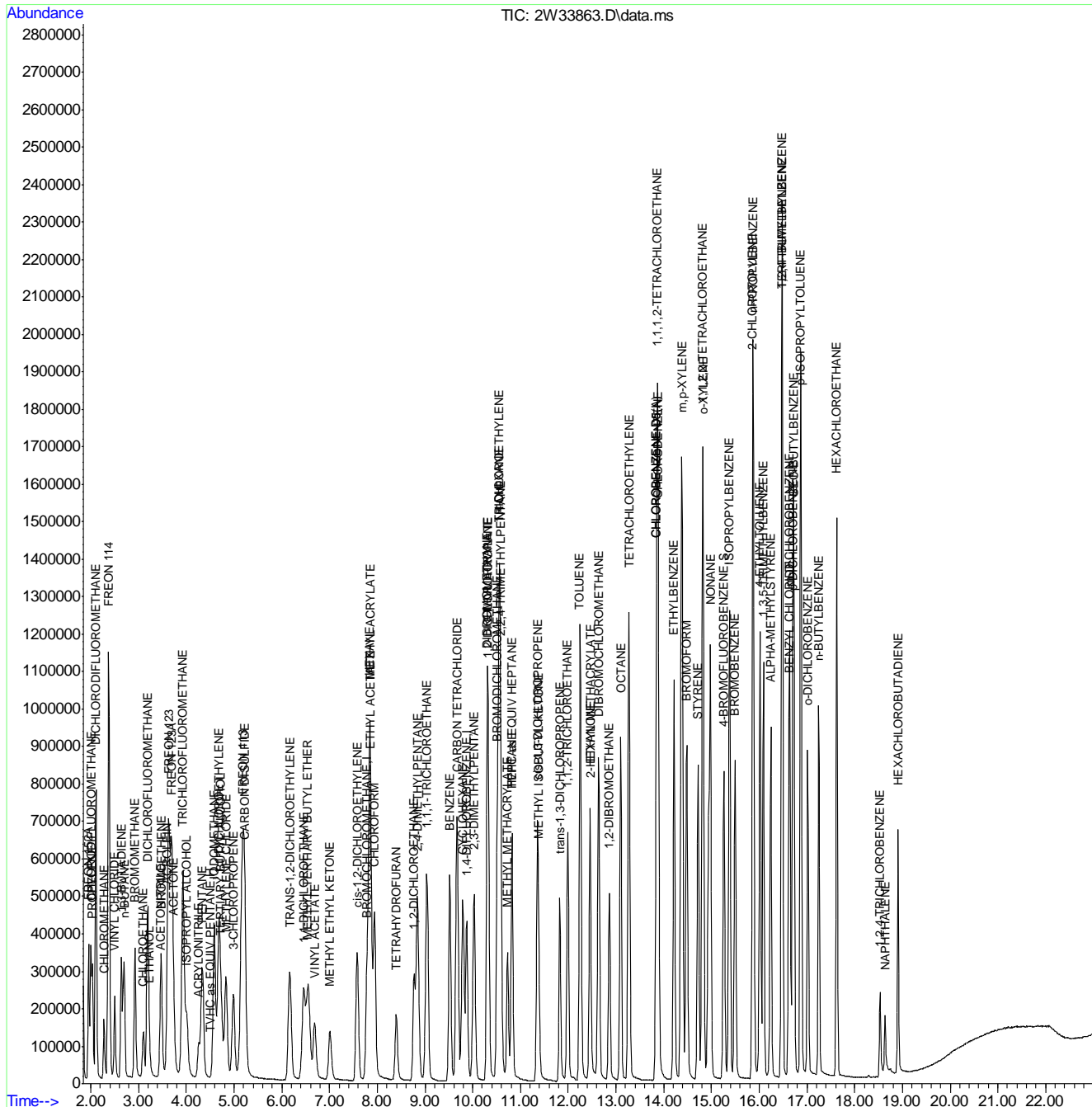
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) BENZYL CHLORIDE	16.620	91	643174	16.49	PPBV	97
96) p-DICHLOROBENZENE	16.700	146	554818	15.83	PPBV	97
97) SEC-BUTYLBENZENE	16.730	134	280338	15.57	PPBV	86
98) p-ISOPROPYLTOLUENE	16.864	134	262632	15.52	PPBV	94
99) o-DICHLOROBENZENE	17.017	146	493666	15.55	PPBV	98
100) n-BUTYLBENZENE	17.248	134	200630	16.17	PPBV	82
101) HEXACHLOROETHANE	17.626	201	387034	15.01	PPBV	82
102) HEXACHLOROBUTADIENE	18.907	225	171938	16.17	PPBV	98
103) 1,2,4-TRICHLOROBENZENE	18.529	180	122825	16.58	PPBV	93
105) NAPHTHALENE	18.638	128	219565	16.41	PPBV	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33863.D
 Acq On : 16 Jan 2012 6:33 pm
 Operator : YOUMINH
 Sample : IC1426-15
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 09:46:47 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-IC1426 **Method:** TO-15
Lab FileID: 2W33863.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/16/12 18:33 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.82	Poor instrument integration

6.7.1.1

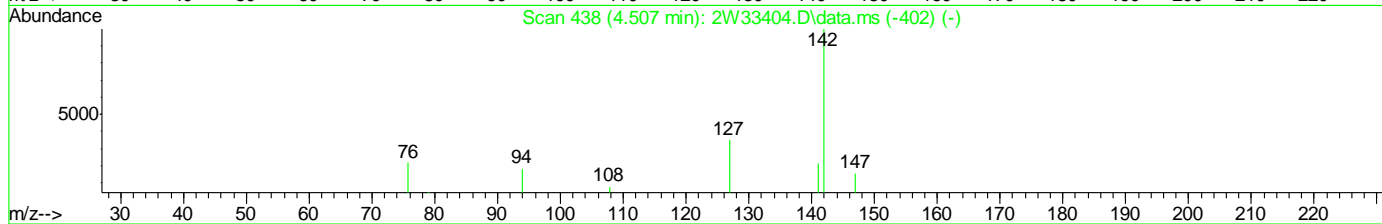
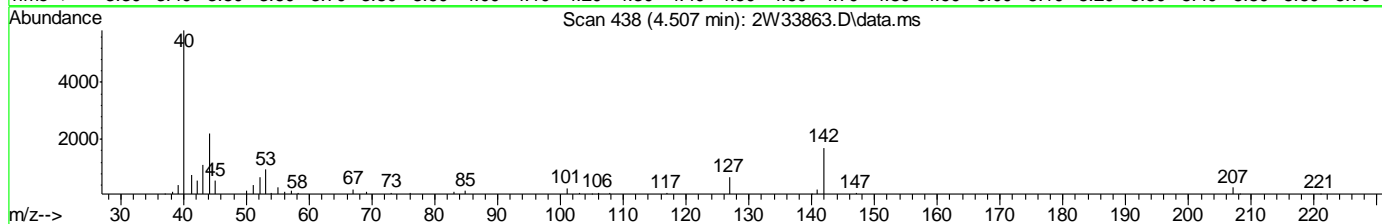
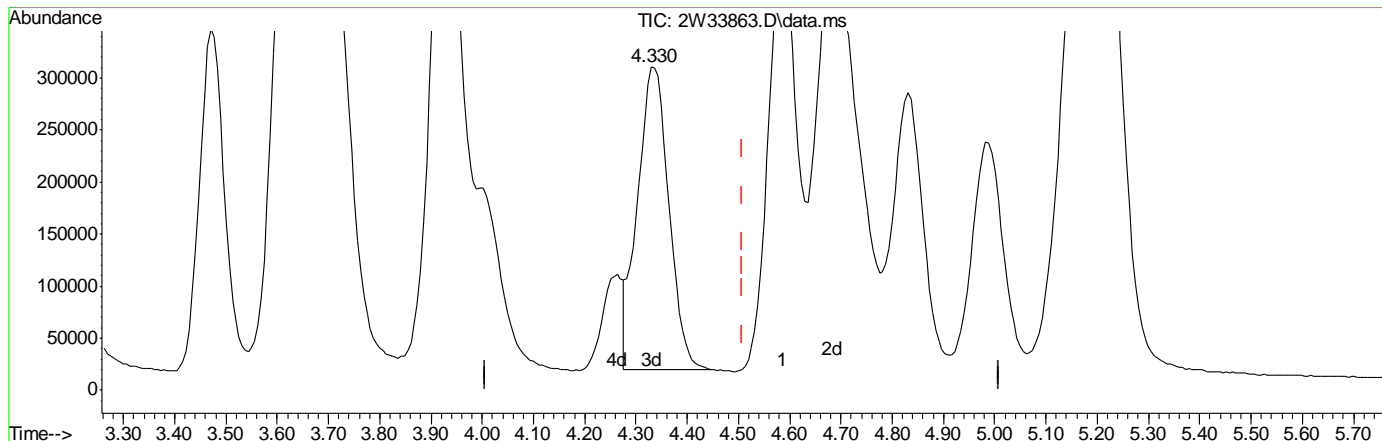
6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33863.D
 Acq On : 16 Jan 2012 6:33 pm
 Operator : YOUMINH
 Sample : IC1426-15
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 09:46:47 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.1.2
 6



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 15.62PPBV m

response 1233976

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	2.01#
0.00	1.60	1.77#
0.00	0.00	0.00

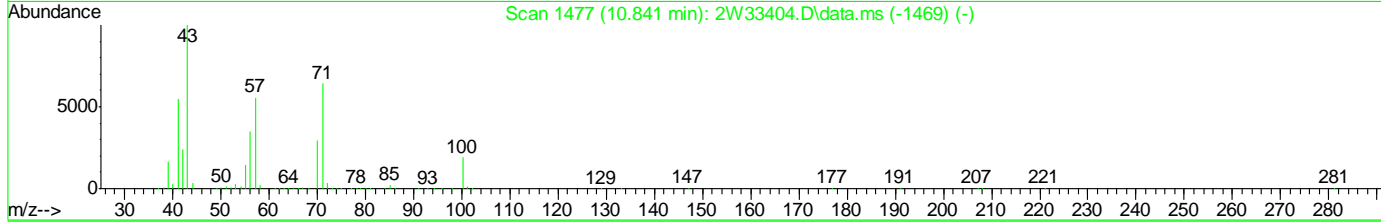
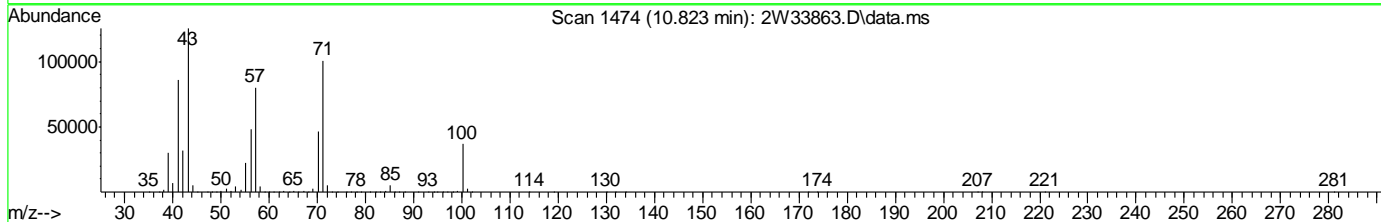
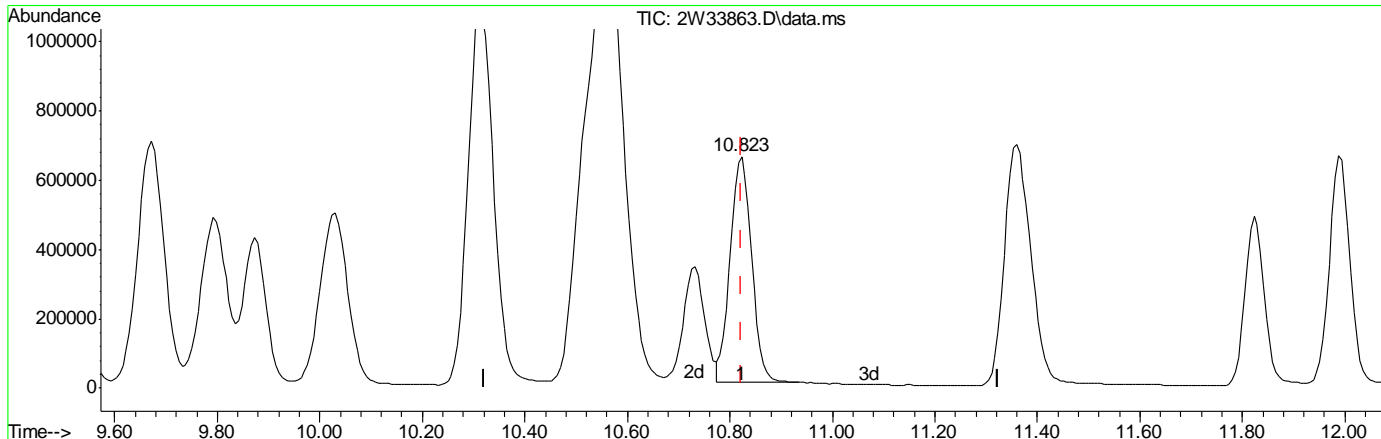
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33863.D
 Acq On : 16 Jan 2012 6:33 pm
 Operator : YOUMINH
 Sample : IC1426-15
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 09:46:47 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.1.3

6



TIC: 2W33863.D\data.ms

(62) TVHC as EQUIV HEPTANE

10.823min (+0.000) 13.90PPBV m

response 1904074

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.787	128	121954	10.00	PPBV	# 0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	486398	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	13.847	82	217641	10.00	PPBV	# 0.00
104) CHLOROBENZENE-D5(A)	13.847	82	220312	10.00	PPBV	# 0.00
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.261	95	250725	9.60	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	96.00%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.111	85	14424	0.24	PPBV	99
4) FREON 152A	1.959	65	2565	0.22	PPBV #	38
5) CHLORODIFLUOROMETHANE	2.007	67	1259	0.22	PPBV #	57
6) PROPYLENE	2.044	41	3463	0.30	PPBV	96
7) FREON 114	2.379	85	14492	0.25	PPBV	88
8) CHLOROMETHANE	2.282	52	1041	0.24	PPBV #	74
9) VINYL CHLORIDE	2.507	62	3958	0.22	PPBV	92
10) 1,3-BUTADIENE	2.642	54	2794	0.22	PPBV	92
11) n-BUTANE	2.696	43	6591	0.28	PPBV #	97
12) BROMOMETHANE	2.928	94	4705	0.24	PPBV	91
13) CHLOROETHANE	3.105	64	2273	0.25	PPBV	94
14) DICHLOROFLUOROMETHANE	3.196	67	9383	0.25	PPBV #	90
15) ACROLEIN	3.660	56	706	0.17	PPBV	99
16) FREON 123	3.629	83	10652	0.26	PPBV #	96
17) FREON 123A	3.684	117	7016	0.25	PPBV #	60
18) TRICHLOROFLUOROMETHANE	3.934	101	13208	0.23	PPBV	97
19) ISOPROPYL ALCOHOL	4.080	45	4545	0.21	PPBV #	56
20) ACETONE	3.818	58	1174m	0.23	PPBV	
21) PENTANE	4.342	42	3683	0.31	PPBV	91
22) ACRYLONITRILE	4.330	53	1298m	0.18	PPBV	
23) TVHC as EQUIV PENTANE	4.508	TIC	17908m	0.28	PPBV	
24) IODOMETHANE	4.586	142	11876	0.22	PPBV	99
25) 1,1-DICHLOROETHYLENE	4.678	96	4423	0.25	PPBV #	74
26) CARBON DISULFIDE	5.232	76	9598	0.25	PPBV	80
28) BROMOETHENE	3.483	106	4166	0.22	PPBV #	95
29) ACETONITRILE	3.580	41	2113m	0.34	PPBV	
30) METHYLENE CHLORIDE	4.836	84	3899	0.28	PPBV	83
31) 3-CHLOROPROPENE	4.983	76	1854	0.25	PPBV #	62
32) FREON 113	5.184	151	8260m	0.23	PPBV	
33) TRANS-1,2-DICHLOROETHY...	6.177	96	3217	0.20	PPBV #	77
34) TERTIARY BUTYL ALCOHOL	4.842	59	7817m	0.23	PPBV	
35) METHYL TERTIARY BUTYL ...	6.616	73	10959	0.26	PPBV	72
36) TETRAHYDROFURAN	8.482	72	1322	0.23	PPBV #	1
37) HEXANE	7.842	57	5020	0.24	PPBV	94
38) VINYL ACETATE	6.744	86	258m	0.08	PPBV	
39) 1,1-DICHLOROETHANE	6.458	63	6836	0.24	PPBV	76
40) METHYL ETHYL KETONE	7.080	72	935m	0.16	PPBV	
41) cis-1,2-DICHLOROETHYLENE	7.592	96	4246	0.24	PPBV #	80
42) ETHYL ACETATE	7.939	61	497m	0.17	PPBV	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) METHYL ACRYLATE	7.897	55	3327	0.18	PPBV #	66
44) CHLOROFORM	7.939	83	8688	0.24	PPBV	92
45) 2,4-DIMETHYLPENTANE	8.835	57	6411	0.26	PPBV #	96
46) 1,1,1-TRICHLOROETHANE	9.037	97	10357	0.24	PPBV	95
47) CARBON TETRACHLORIDE	9.671	117	11027	0.22	PPBV	97
48) 1,2-DICHLOROETHANE	8.774	62	4626	0.21	PPBV	97
50) BENZENE	9.524	78	11157	0.25	PPBV	94
51) CYCLOHEXANE	9.780	84	5988	0.28	PPBV #	73
52) 2,3-DIMETHYLPENTANE	10.030	71	2726	0.27	PPBV #	91
53) DIBROMOMETHANE	10.299	174	4876	0.23	PPBV	94
54) TRICHLOROETHYLENE	10.555	95	5384	0.26	PPBV	93
55) 1,2-DICHLOROPROPANE	10.329	63	4780	0.33	PPBV #	47
56) ETHYL ACRYLATE	10.347	55	3823	0.18	PPBV #	79
57) BROMODICHLOROMETHANE	10.518	83	9513	0.25	PPBV	100
58) 2,2,4-TRIMETHYLPENTANE	10.585	57	16831	0.25	PPBV #	94
59) 1,4-DIOXANE	10.670	88	2507m	0.27	PPBV	
60) METHYL METHACRYLATE	10.744	69	2783	0.23	PPBV	91
61) HEPTANE	10.823	43	5264	0.26	PPBV	85
62) TVHC as EQUIV HEPTANE	10.817	TIC	30046	0.27	PPBV	100
63) METHYL ISOBUTYL KETONE	11.432	58	2165	0.23	PPBV #	77
64) cis-1,3-DICHLOROPROPENE	11.359	75	5061	0.21	PPBV	84
65) TOLUENE	12.249	92	7676	0.24	PPBV	99
66) trans-1,3-DICHLOROPROPENE	11.841	75	4136	0.18	PPBV	94
67) 1,1,2-TRICHLOROETHANE	11.987	83	3643	0.25	PPBV	98
69) 2-HEXANONE	12.566	58	1813m	0.17	PPBV	
70) ETHYL METHACRYLATE	12.487	69	3552	0.21	PPBV	99
71) TETRACHLOROETHYLENE	13.274	164	6153	0.28	PPBV	95
72) DIBROMOCHLOROMETHANE	12.633	129	9364	0.27	PPBV	97
73) 1,2-DIBROMOETHANE	12.853	107	5430	0.23	PPBV	94
74) OCTANE	13.091	43	6440	0.27	PPBV #	81
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	6386	0.26	PPBV	94
76) CHLOROBENZENE	13.889	112	9394	0.26	PPBV #	65
77) ETHYLBENZENE	14.212	91	15499	0.30	PPBV	99
78) m,p-XYLENE	14.377	106	11880	0.60	PPBV	92
79) o-XYLENE	14.828	106	5813	0.31	PPBV	98
80) STYRENE	14.725	104	6942	0.25	PPBV	99
81) NONANE	14.981	43	4700	0.22	PPBV	93
82) BROMOFORM	14.475	173	8023	0.26	PPBV	99
84) 1,1,2,2-TETRACHLOROETHANE	14.816	83	6322	0.27	PPBV	96
85) ISOPROPYLBENZENE	15.377	105	15310	0.27	PPBV	97
86) BROMOBENZENE	15.493	156	4000	0.23	PPBV	86
87) 2-CHLOROTOLUENE	15.865	126	3289	0.24	PPBV #	64
88) n-PROPYLBENZENE	15.883	120	2852	0.21	PPBV	84
89) 4-ETHYLTOLUENE	16.023	105	8841	0.20	PPBV	97
90) 1,3,5-TRIMETHYLBENZENE	16.090	105	7908	0.22	PPBV	93
91) ALPHA-METHYLSTYRENE	16.255	118	2424	0.15	PPBV	93
92) TERT-BUTYLBENZENE	16.480	134	2216	0.22	PPBV	90
93) 1,2,4-TRIMETHYLBENZENE	16.480	105	6808	0.20	PPBV #	75
94) m-DICHLOROBENZENE	16.639	146	3721	0.16	PPBV	97
95) BENZYL CHLORIDE	16.633	91	2530	0.10	PPBV	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

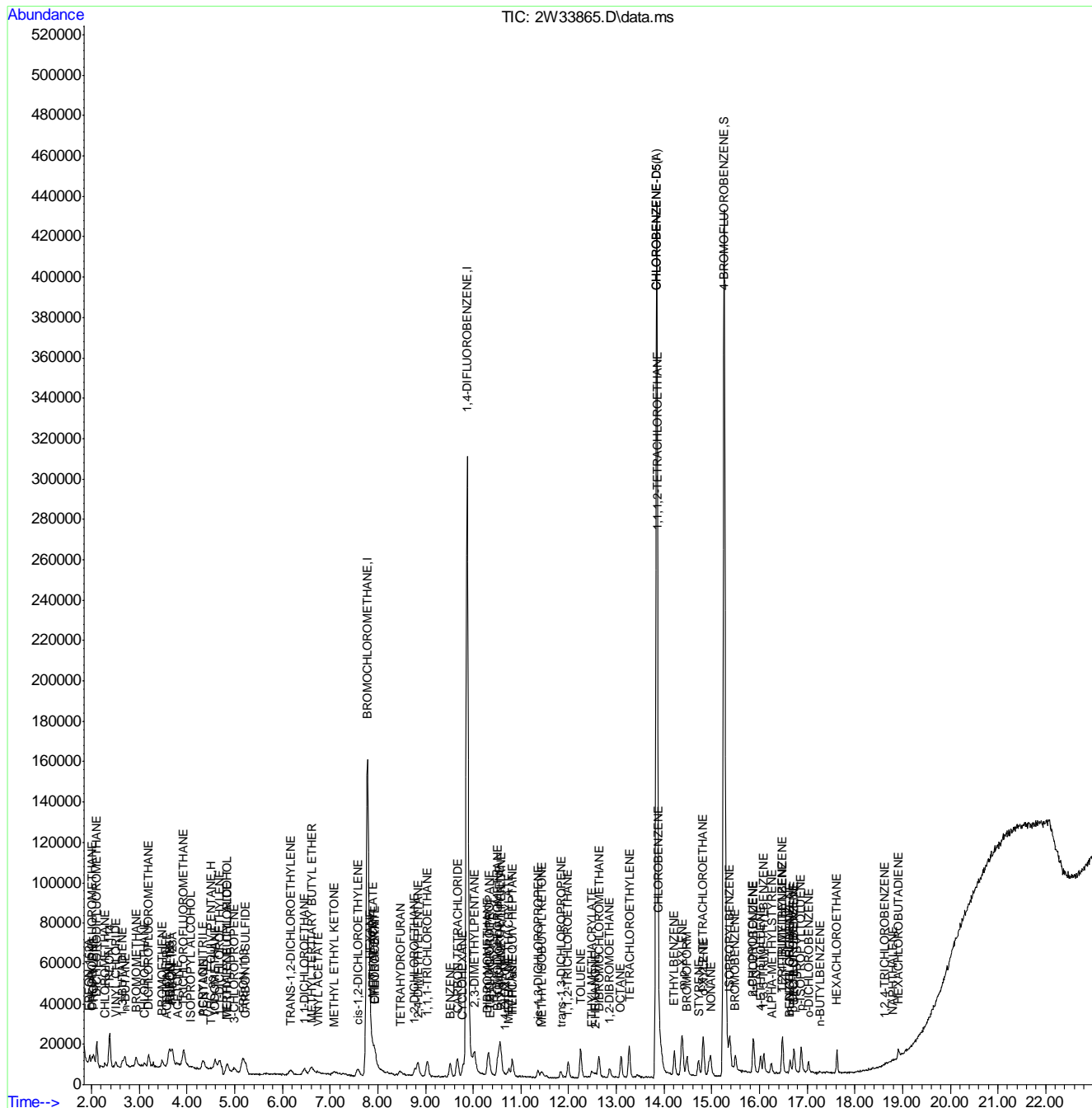
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) p-DICHLOROBENZENE	16.706	146	2868	0.13	PPBV	82
97) SEC-BUTYLBENZENE	16.730	134	2082	0.18	PPBV #	91
98) p-ISOPROPYLTOLUENE	16.864	134	1709	0.16	PPBV	93
99) o-DICHLOROBENZENE	17.029	146	3453	0.17	PPBV	95
100) n-BUTYLBENZENE	17.273	134	298	0.04	PPBV #	63
101) HEXACHLOROETHANE	17.620	201	3051	0.18	PPBV	94
102) HEXACHLOROBUTADIENE	18.919	225	1913	0.28	PPBV	87
103) 1,2,4-TRICHLOROBENZENE	18.632	180	526	0.11	PPBV #	33
105) NAPHTHALENE	18.797	128	1230m	0.14	PPBV	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-IC1426 **Method:** TO-15
Lab FileID: 2W33865.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/16/12 19:53 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetonitrile	75-05-8		3.58	Poor instrument integration
Acetone	67-64-1		3.82	Poor instrument integration
Acrylonitrile	107-13-1		4.33	Poor instrument integration
Tertiary Butyl Alcohol	75-65-0		4.84	Poor instrument integration
Freon 113	76-13-1		5.18	Poor instrument integration
Vinyl Acetate	108-05-4		6.74	Poor instrument integration
Methyl ethyl ketone	78-93-3		7.08	Poor instrument integration
Ethyl Acetate	141-78-6		7.94	Poor instrument integration
1,4-Dioxane	123-91-1		10.67	Poor instrument integration
2-Hexanone	591-78-6		12.57	Poor instrument integration
Naphthalene	91-20-3		18.80	Poor instrument integration

6.7.2.1
6

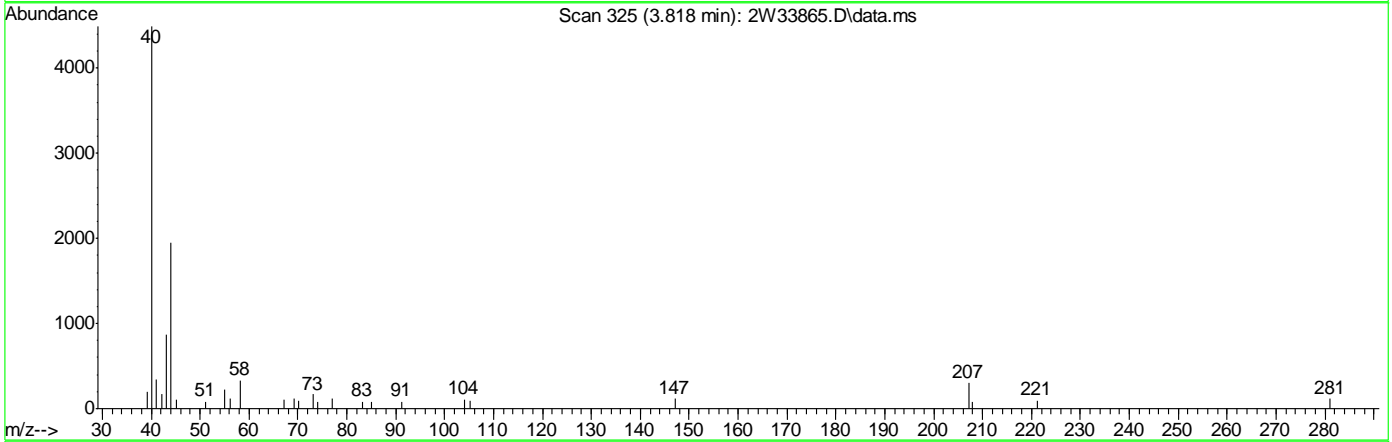
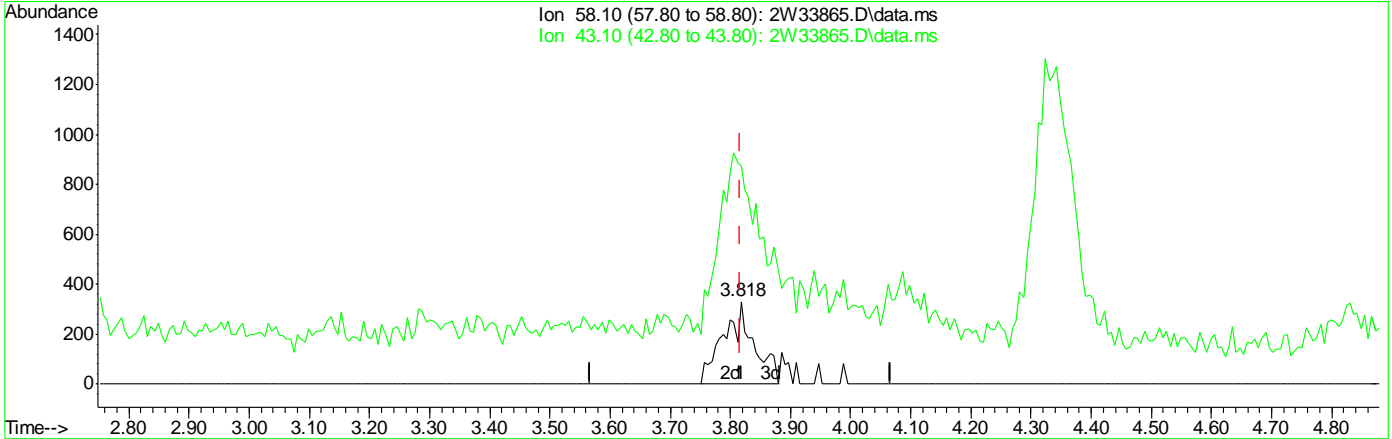
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.2

6



TIC: 2W33865.D\data.ms

(20) ACETONE		
3.818min (+0.000) 0.23PPBV m		
response 1174		
Ion	Exp%	Act%
58.10	100	100
43.10	282.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

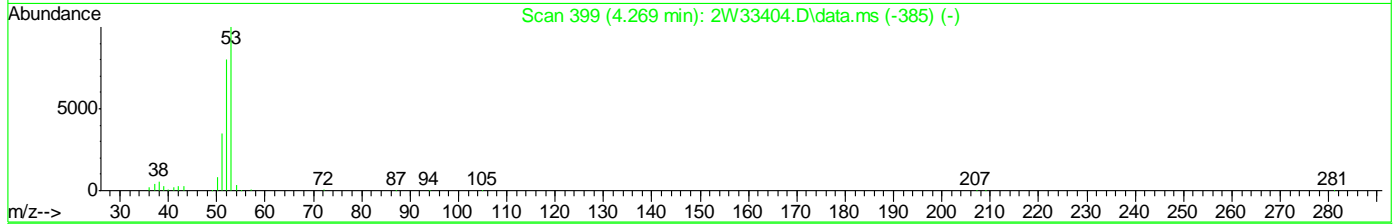
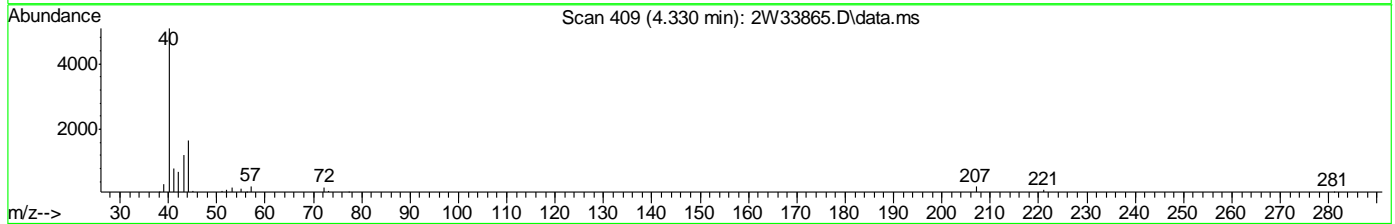
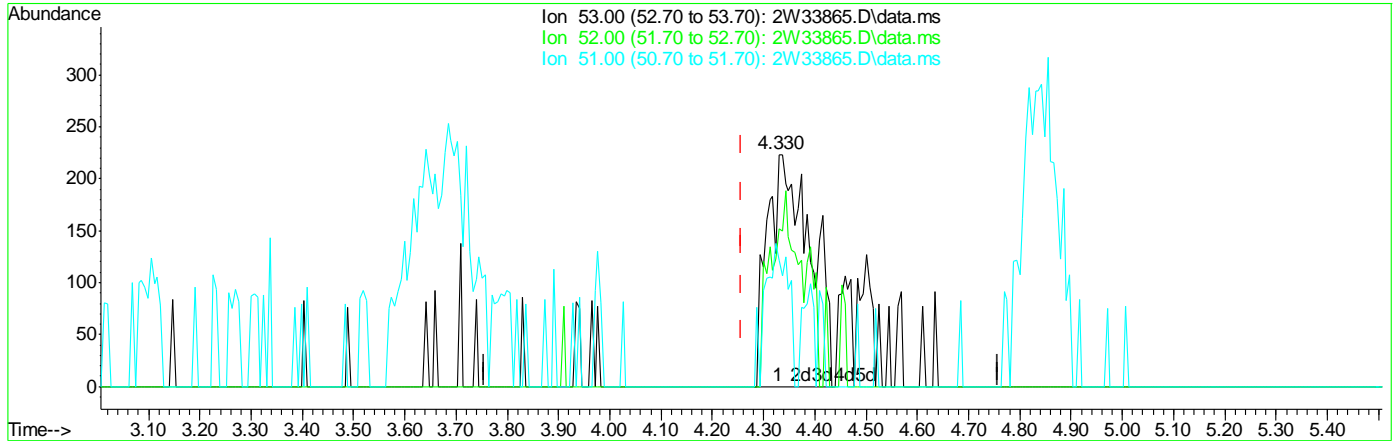
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.3

6



TIC: 2W33865.D\data.ms

(22) ACRYLONITRILE

4.330min (+0.073) 0.18PPBV m

response 1298

Ion	Exp%	Act%
53.00	100	100
52.00	80.20	51.08#
51.00	34.30	32.90
0.00	0.00	0.00

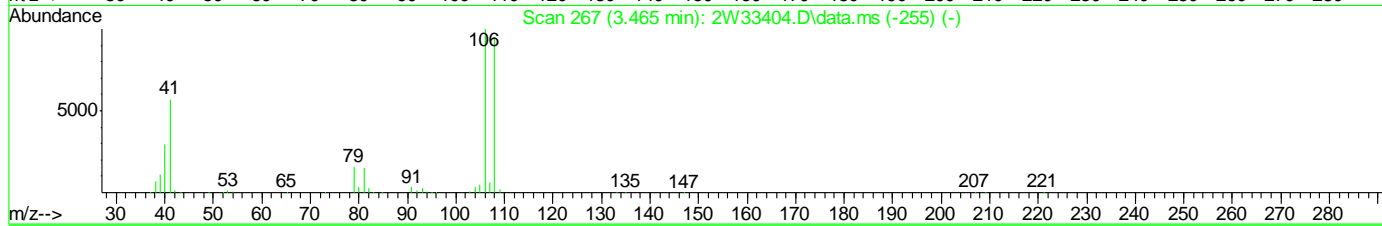
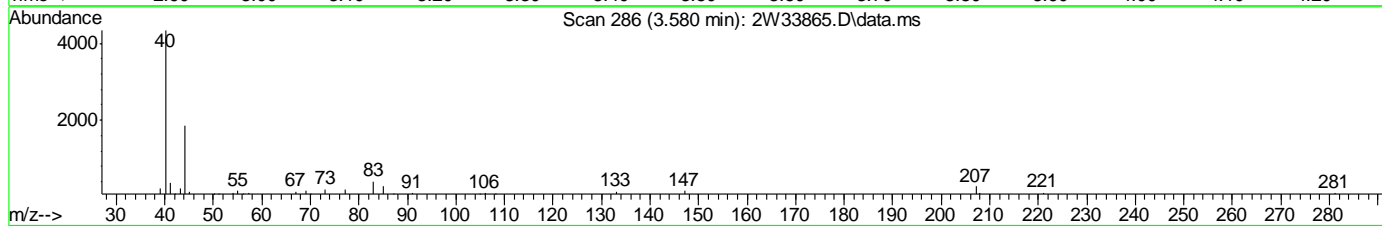
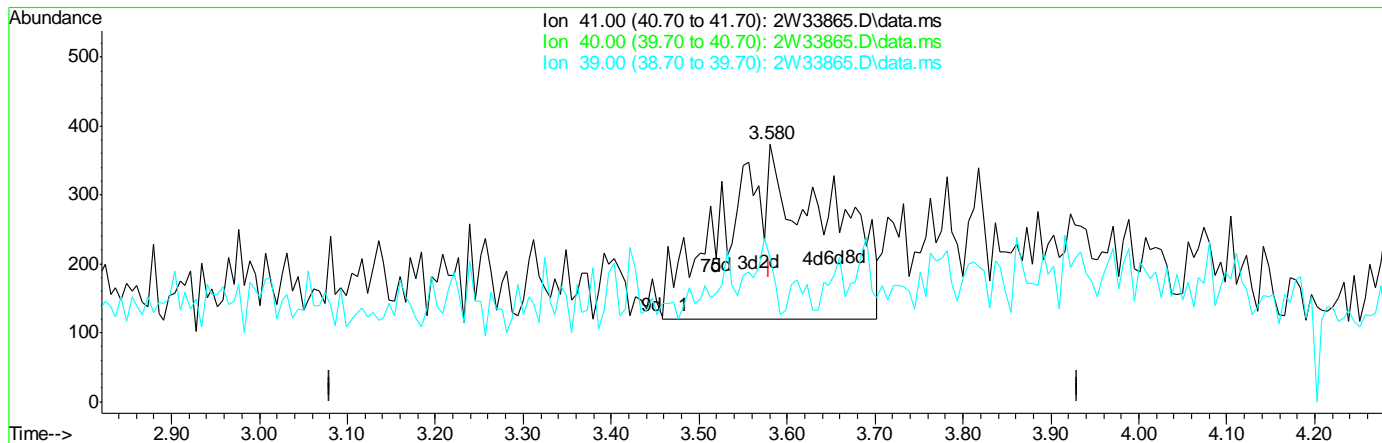
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.4

6



TIC: 2W33865.D\data.ms

(29) ACETONITRILE

3.580min (+0.000) 0.34PPBV m

response 2113

Ion	Exp%	Act%
41.00	100	100
40.00	65.70	3.83#
39.00	20.10	1.51#
0.00	0.00	0.00

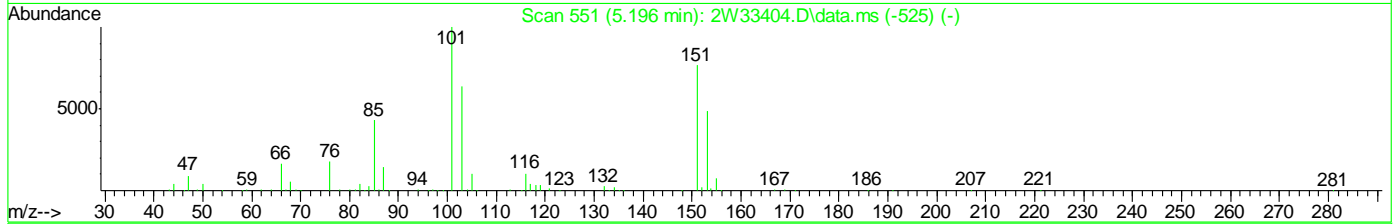
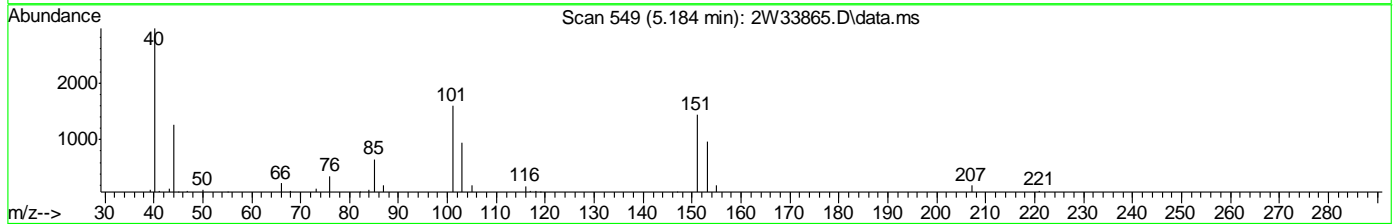
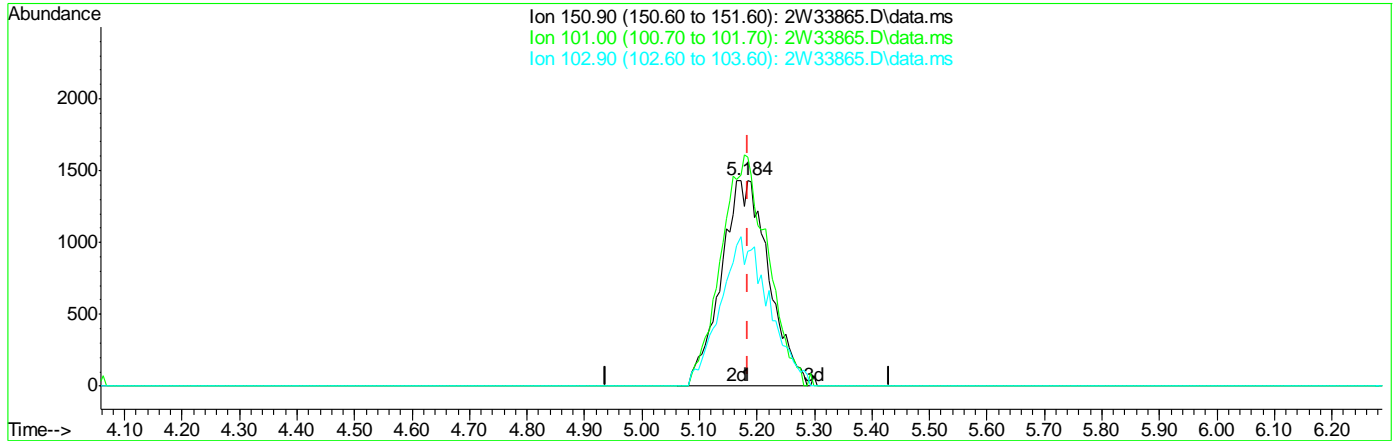
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.5

6



TIC: 2W33865.D\data.ms

(32) FREON 113

5.184min (-0.000) 0.23PPBV m

response 8260

Ion	Exp%	Act%
150.90	100	100
101.00	131.90	109.70#
102.90	84.40	36.56#
0.00	0.00	0.00

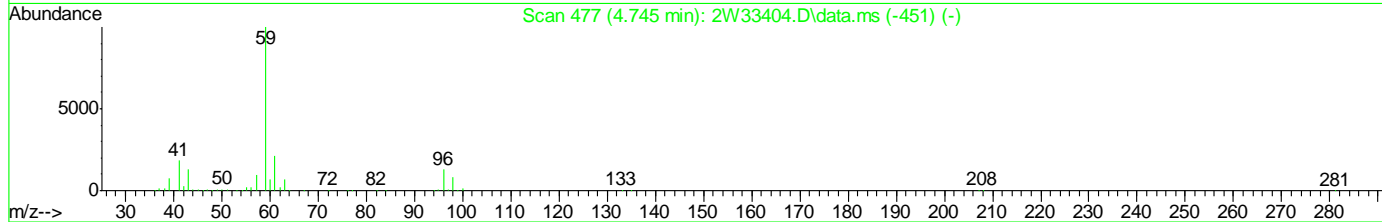
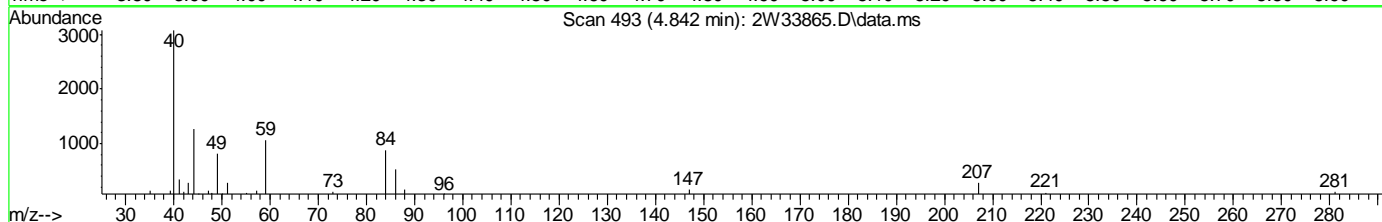
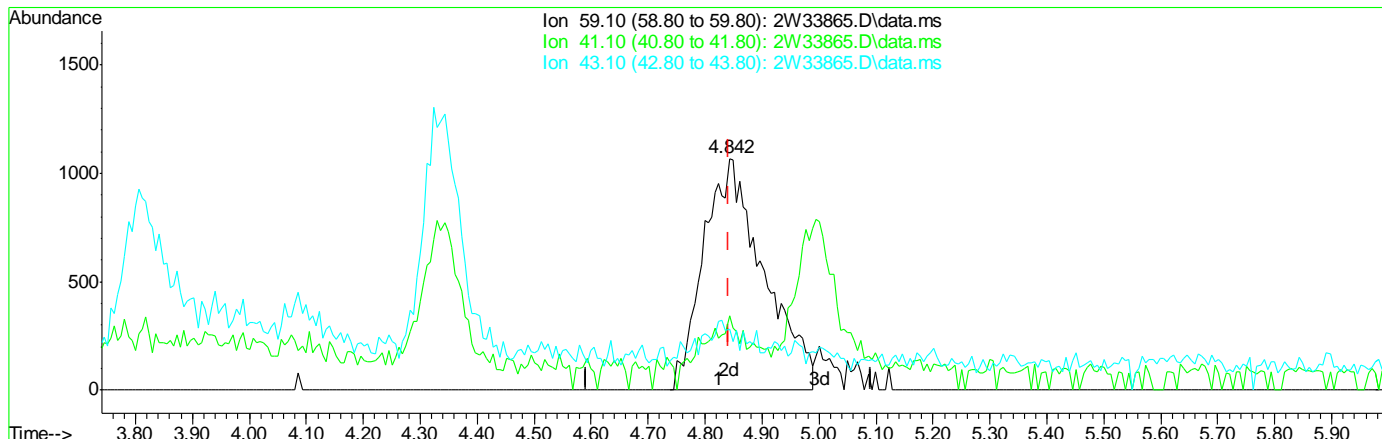
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.6

6



(34) TERTIARY BUTYL ALCOHOL

4.842min (+0.000) 0.23PPBV m

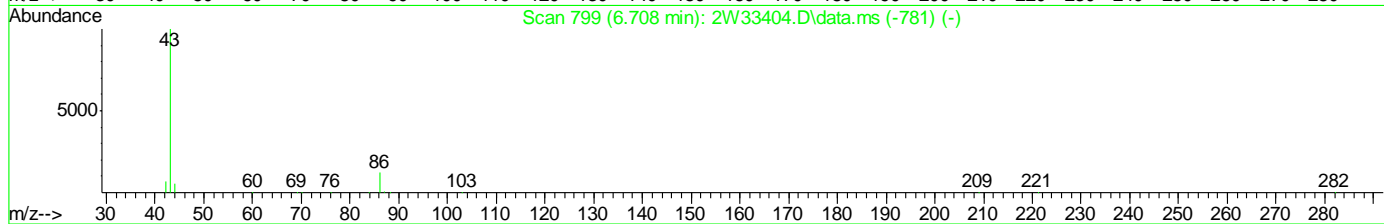
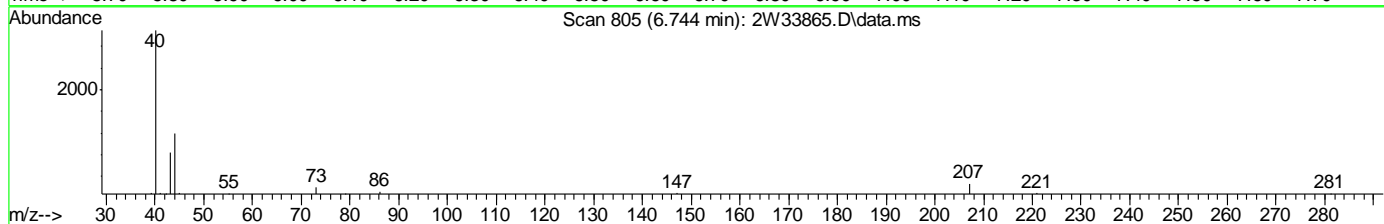
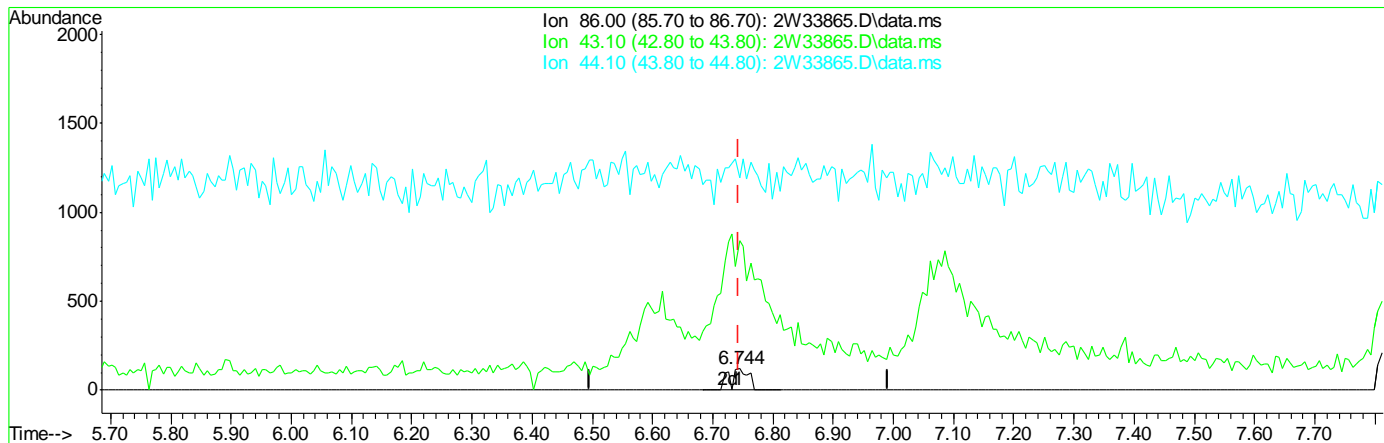
response 7817

Ion	Exp%	Act%
59.10	100	100
41.10	18.50	3.12
43.10	11.60	6.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



TIC: 2W33865.D\data.ms

(38) VINYL ACETATE

6.744min (+0.000) 0.08PPBV m

response 258

Ion	Exp%	Act%
86.00	100	100
43.10	1215.50	0.00#
44.10	48.40	29.84
0.00	0.00	0.00

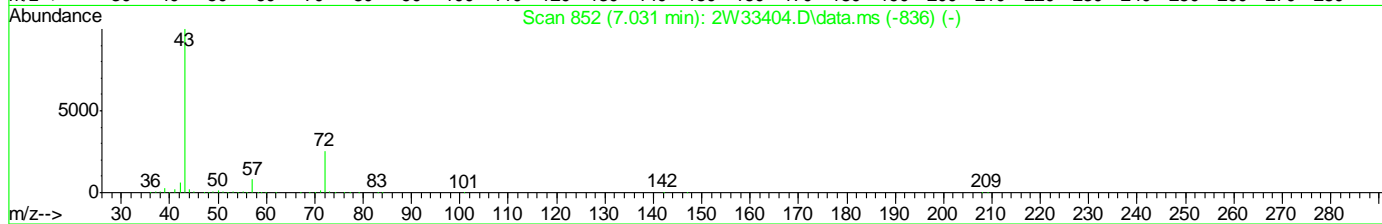
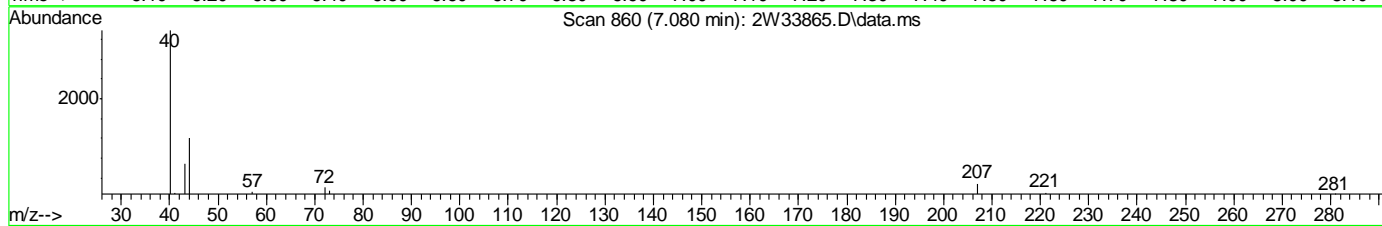
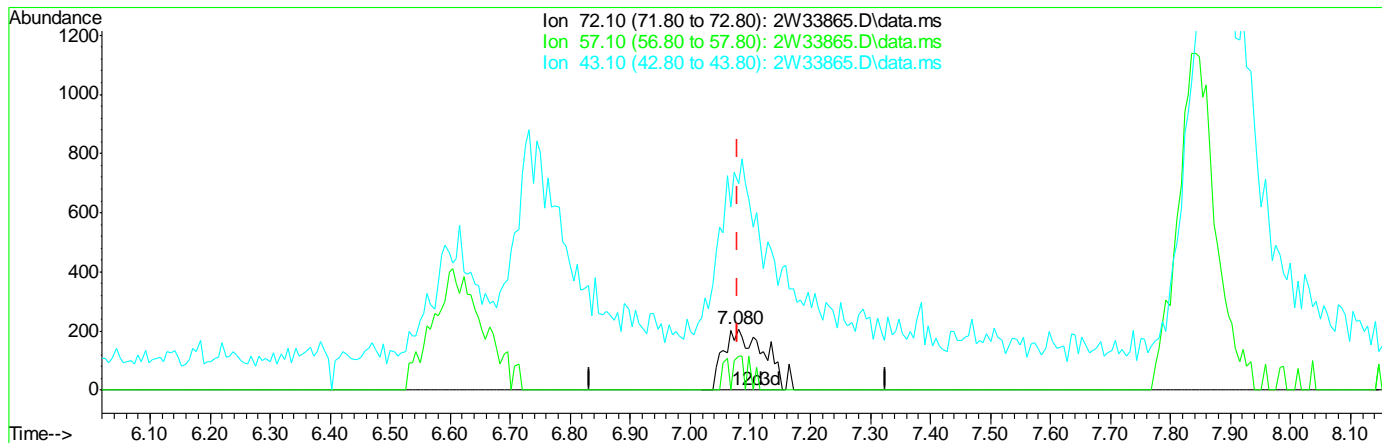
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.8

6



TIC: 2W33865.D\data.ms

(40) METHYL ETHYL KETONE

7.080min (-0.000) 0.16PPBV m

response 935

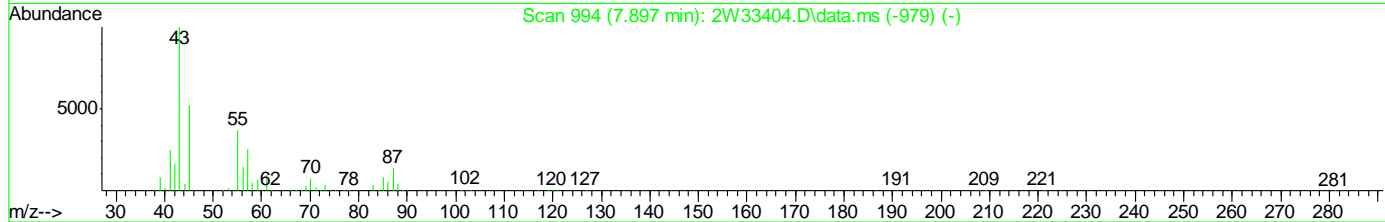
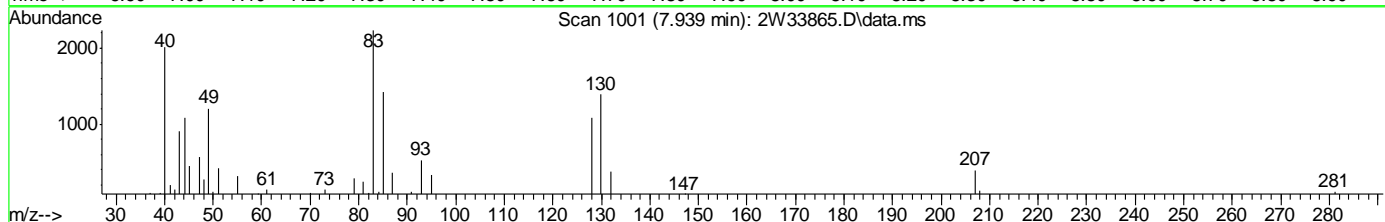
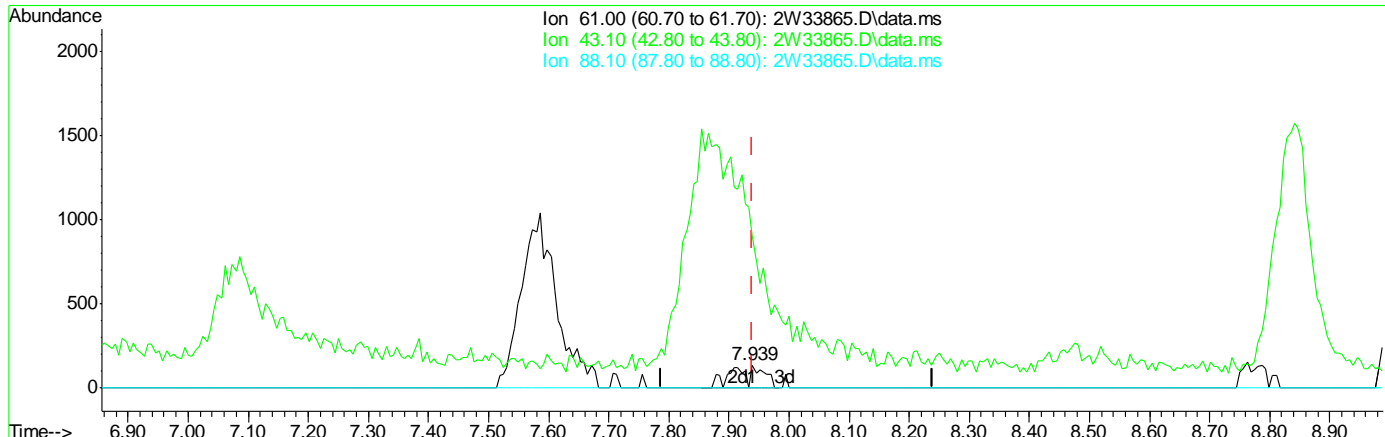
Ion	Exp%	Act%
72.10	100	100
57.10	31.40	55.07#
43.10	397.60	337.20#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.9
 6



TIC: 2W33865.D\data.ms

(42) ETHYL ACETATE

7.939min (+0.000) 0.17PPBV m

response 497

Ion	Exp%	Act%
61.00	100	100
43.10	1502.40	0.00#
88.10	46.70	0.00#
0.00	0.00	0.00

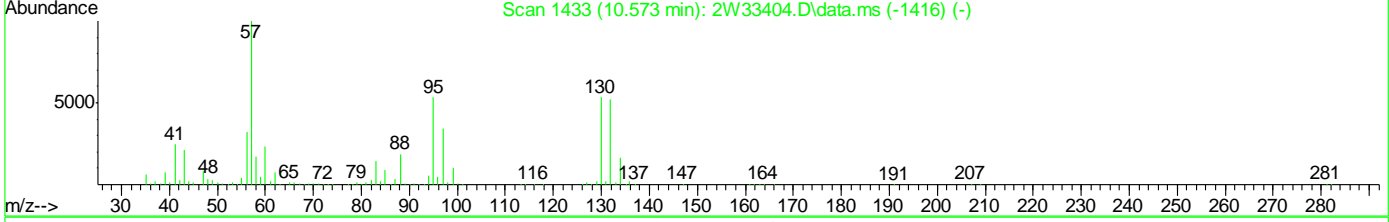
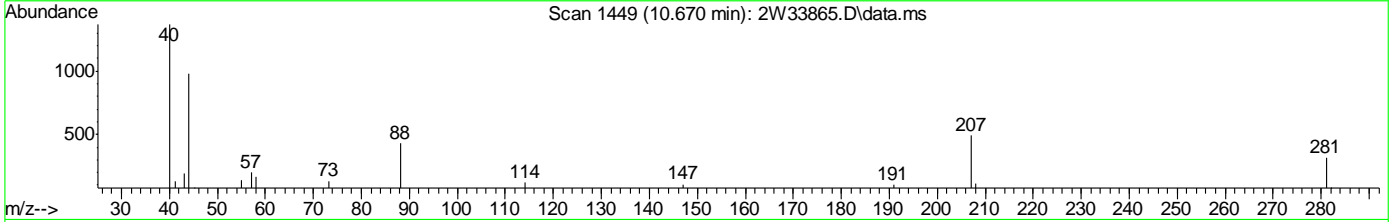
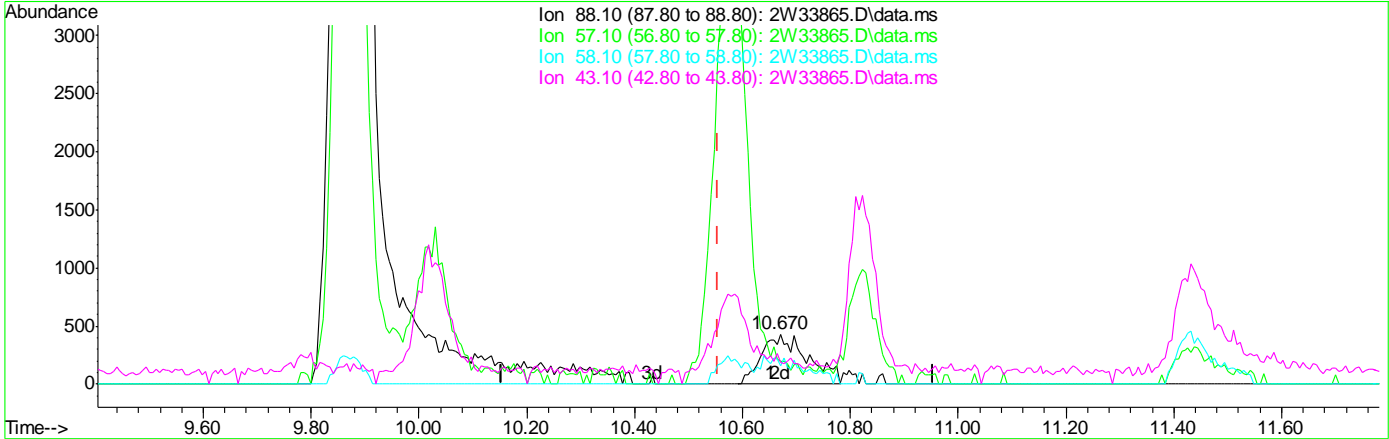
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.10

6



TIC: 2W33865.D\data.ms

(59) 1,4-DIOXANE
 10.670min (+0.116) 0.27PPBV m
 response 2507

Ion	Exp%	Act%
88.10	100	100
57.10	1000.60	46.05#
58.10	112.90	37.67#
43.10	188.30	44.19#

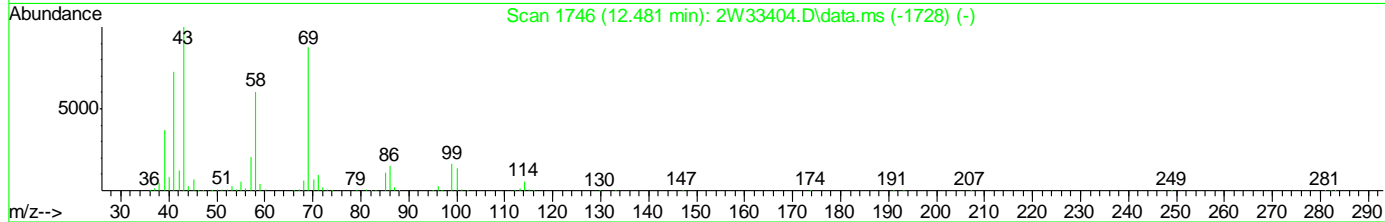
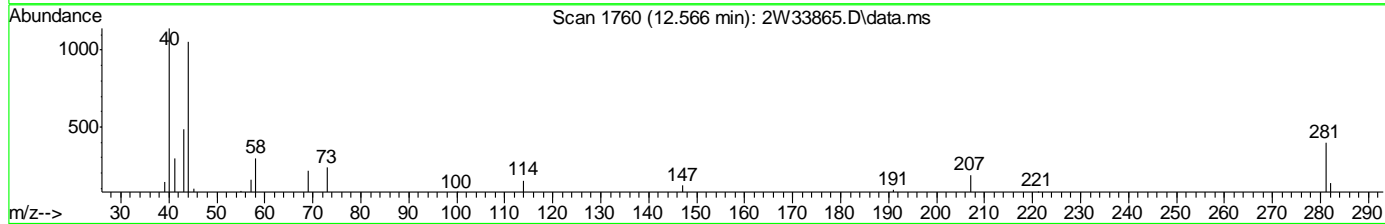
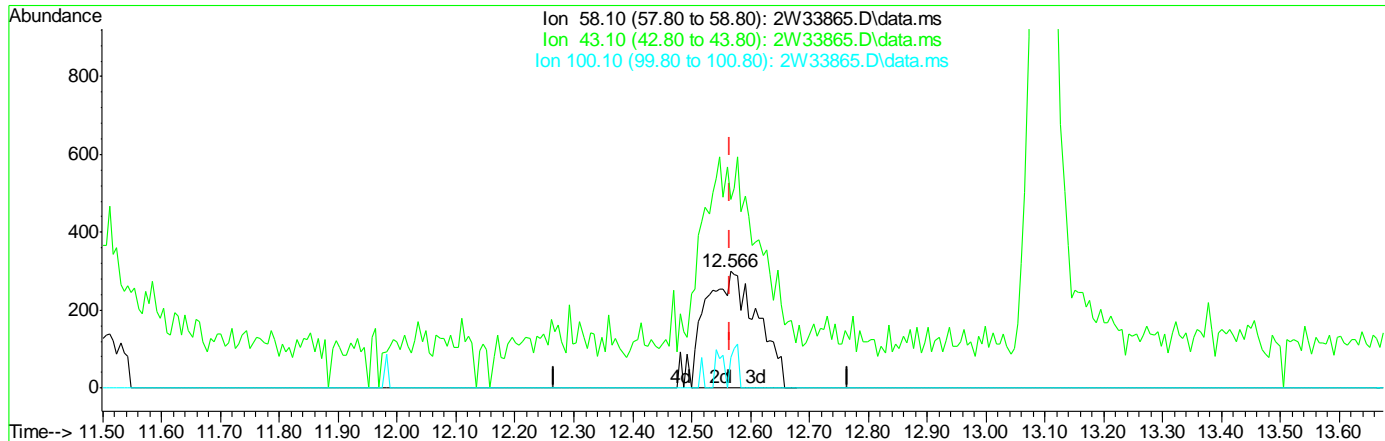
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.11

6



TIC: 2W33865.D\data.ms

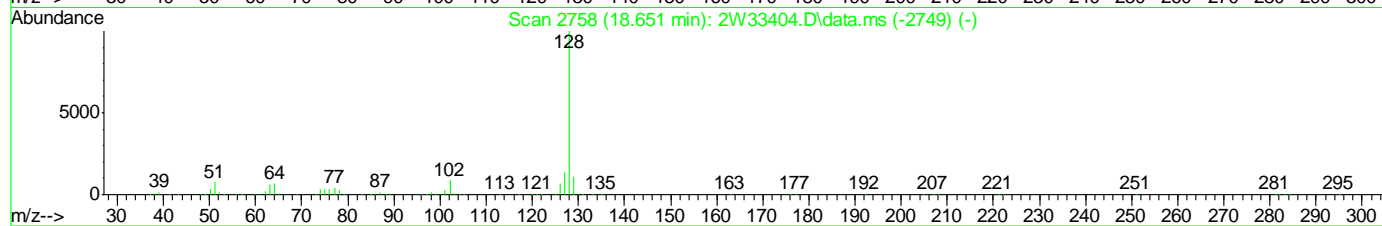
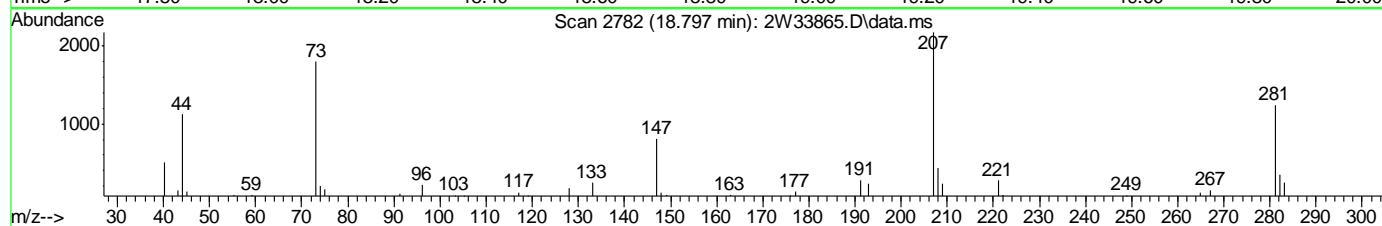
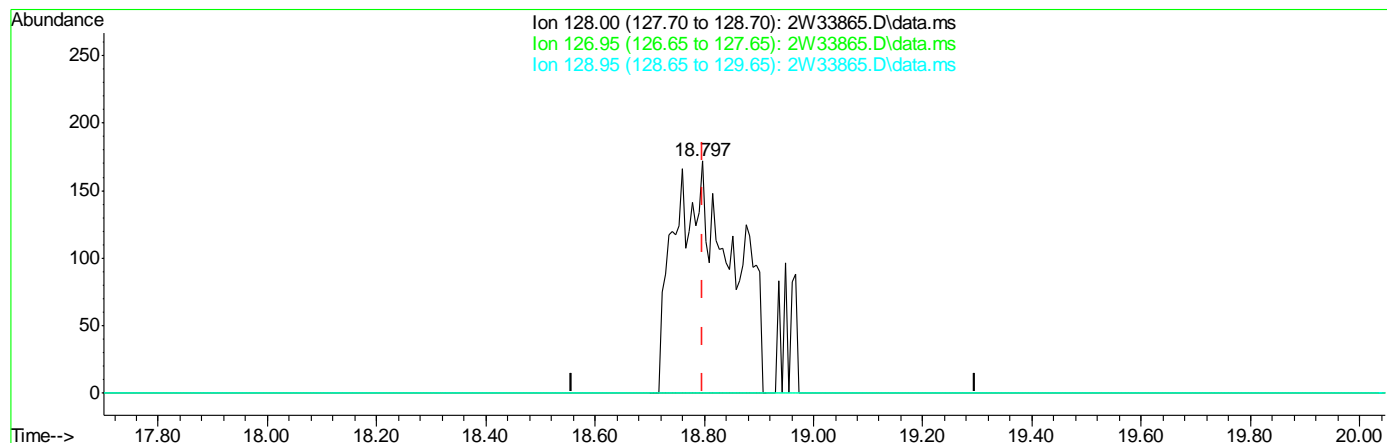
(69) 2-HEXANONE
 12.566min (+0.000) 0.17PPBV m
 response 1813

Ion	Exp%	Act%
58.10	100	100
43.10	170.30	83.01#
100.10	21.40	5.90
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



TIC: 2W33865.D\data.ms

(105) NAPHTHALENE

18.797min (-0.000) 0.14PPBV m

response 1230

Ion	Exp%	Act%
128.00	100	100
126.95	12.90	0.00
128.95	11.20	0.00
0.00	0.00	0.00

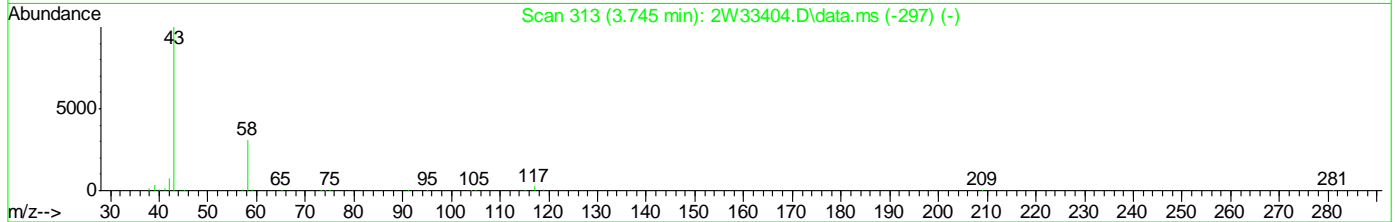
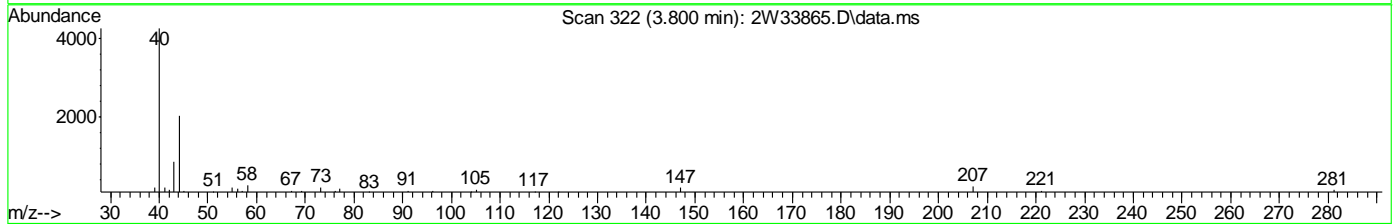
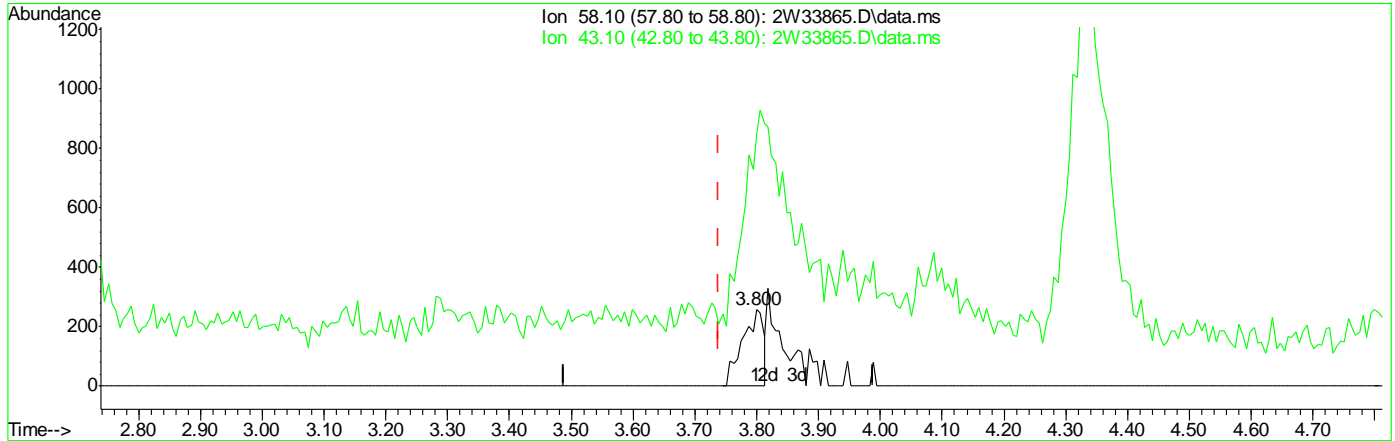
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.13

6



TIC: 2W33865.D\data.ms

(20) ACETONE
 3.800min (+0.061) 0.11PPBV
 response 600

Ion	Exp%	Act%
58.10	100	100
43.10	282.10	559.17#
0.00	0.00	0.00
0.00	0.00	0.00

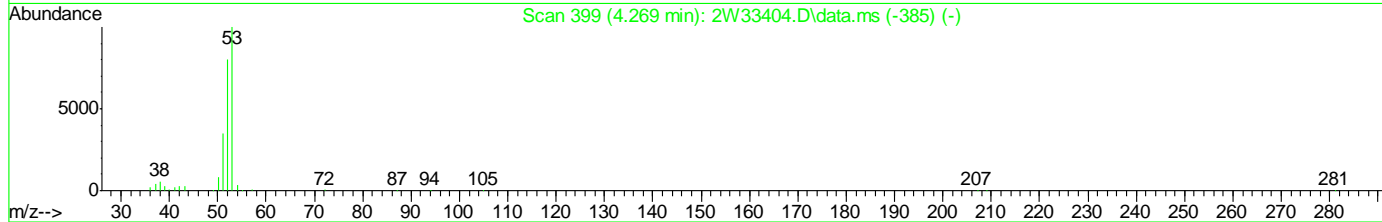
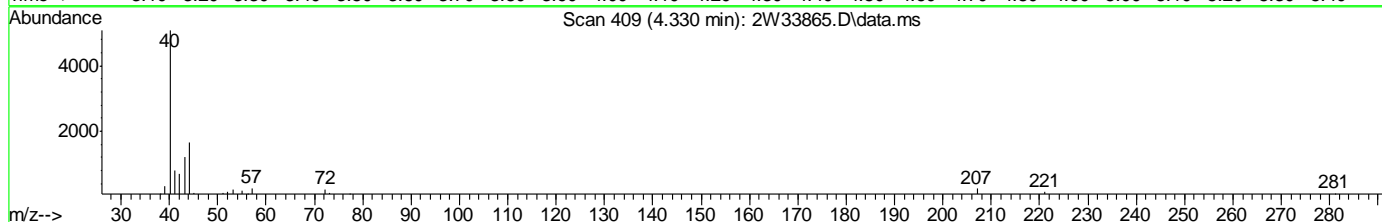
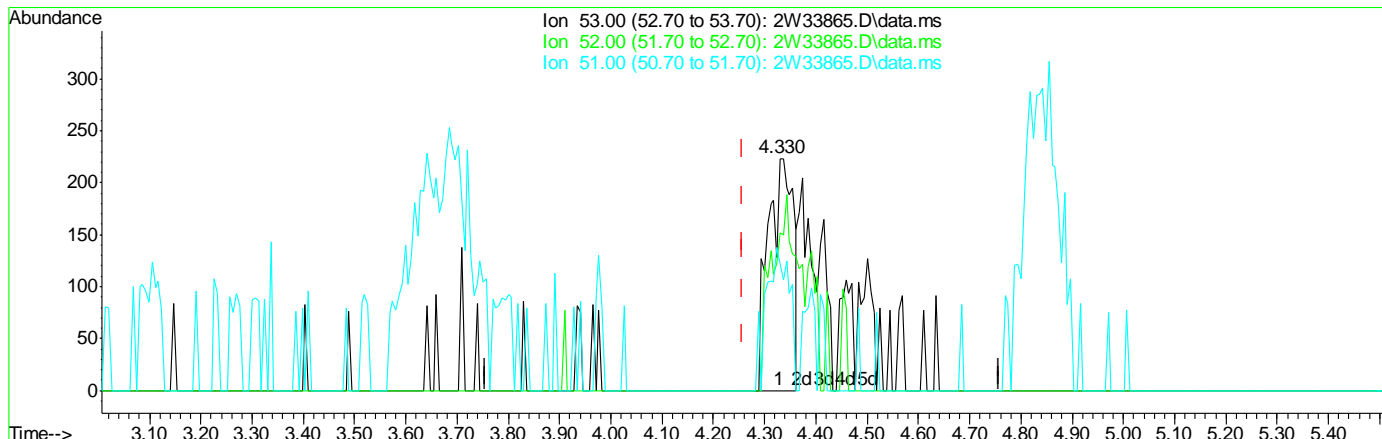
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.14

6



TIC: 2W33865.D\data.ms

(22) ACRYLONITRILE

4.330min (+0.073) 0.10PPBV

response 758

Ion	Exp%	Act%
53.00	100	100
52.00	80.20	87.47
51.00	34.30	56.33#
0.00	0.00	0.00

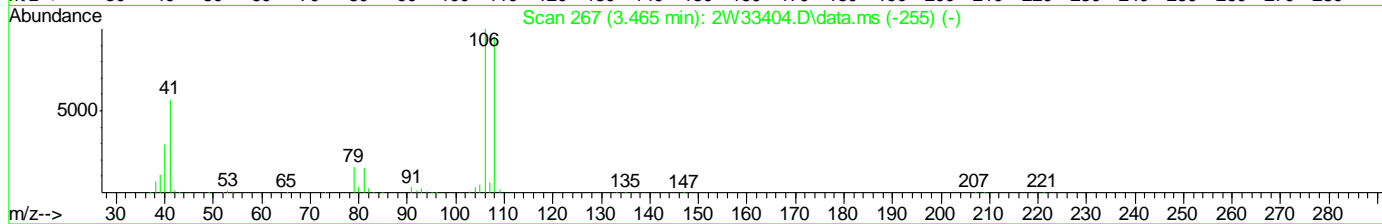
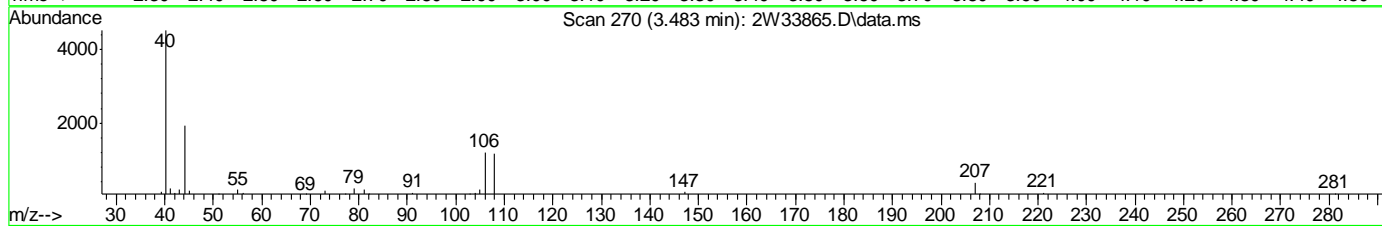
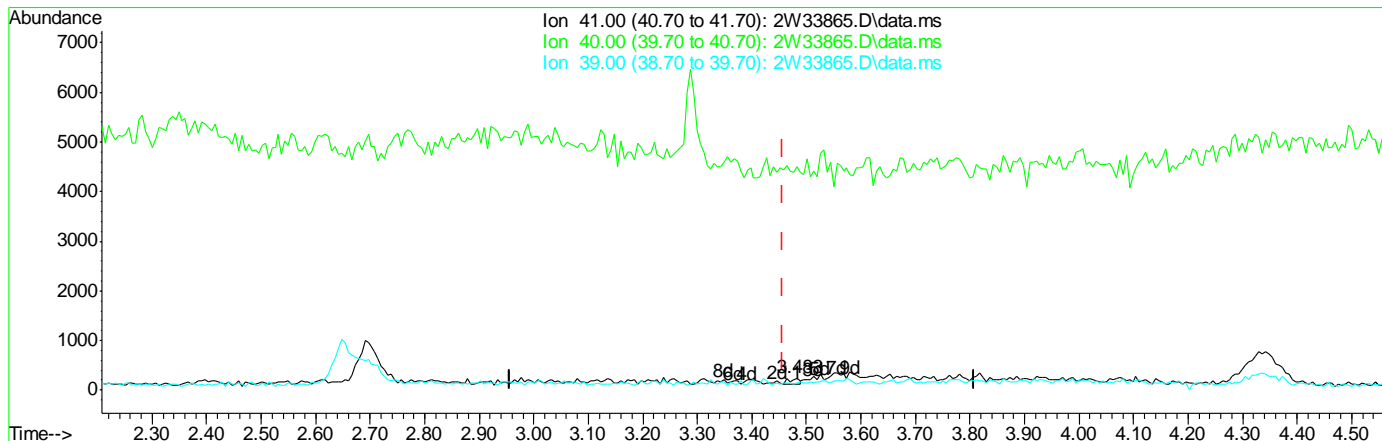
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.15

6



TIC: 2W33865.D\data.ms

(29) ACETONITRILE
 3.483min (+0.025) 0.02PPBV
 response 146

Ion	Exp%	Act%
41.00	100	100
40.00	65.70	55.48
39.00	20.10	21.92
0.00	0.00	0.00

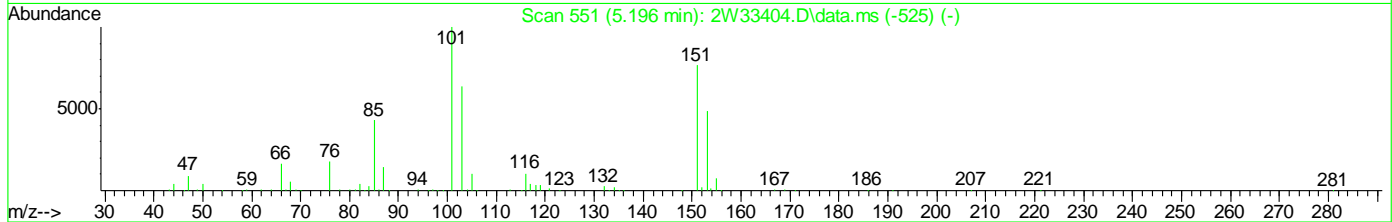
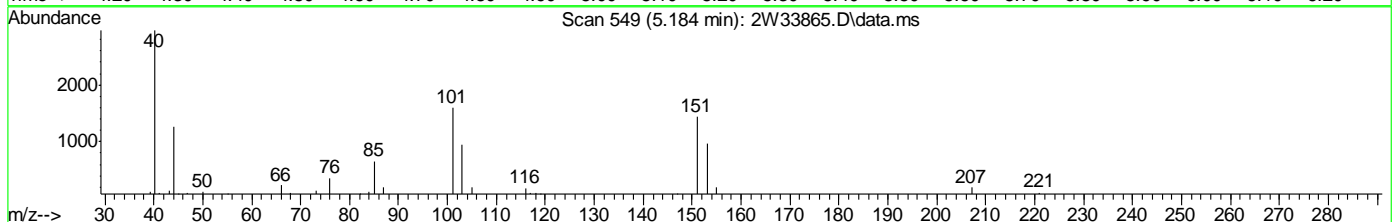
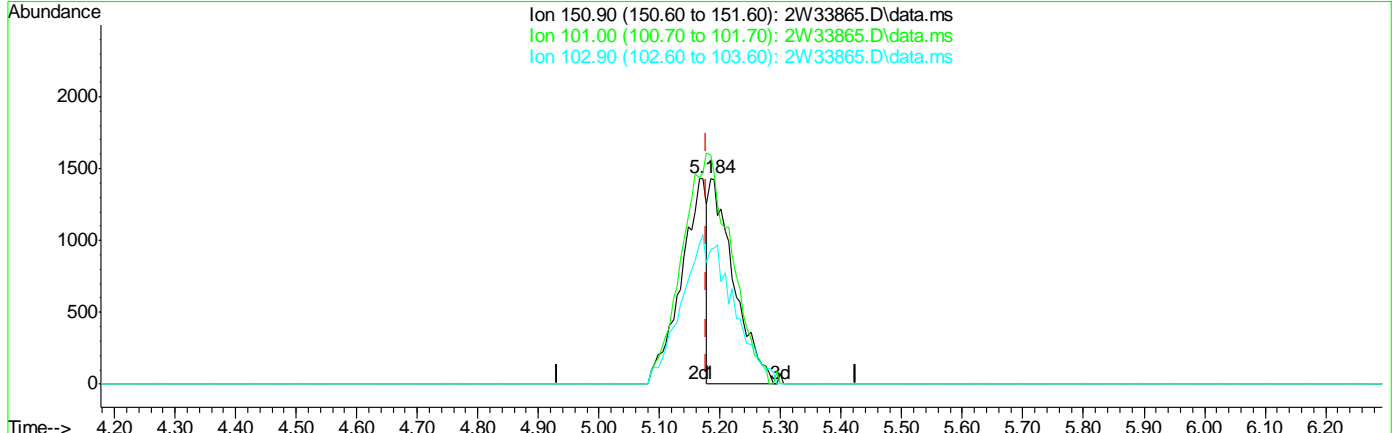
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.16

6



TIC: 2W33865.D\data.ms

(32) FREON 113

5.184min (+0.006) 0.11PPBV

response 4075

Ion	Exp%	Act%
150.90	100	100
101.00	131.90	222.36#
102.90	84.40	74.11
0.00	0.00	0.00

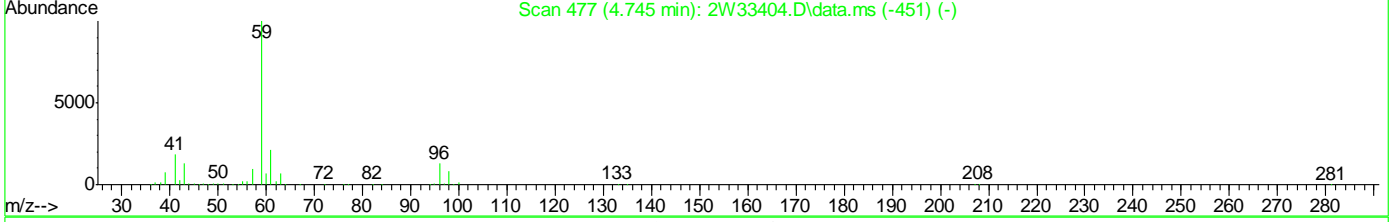
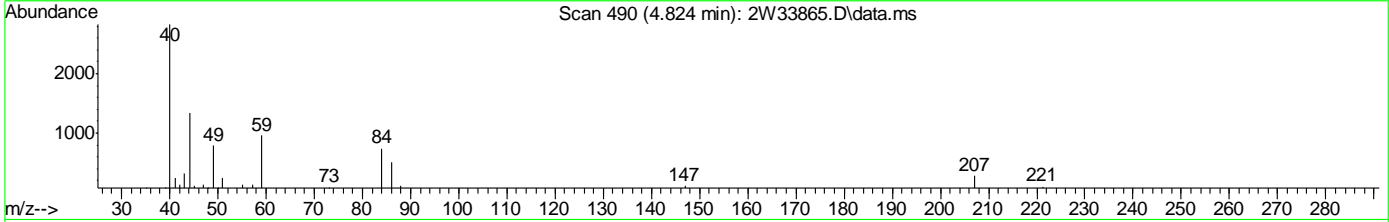
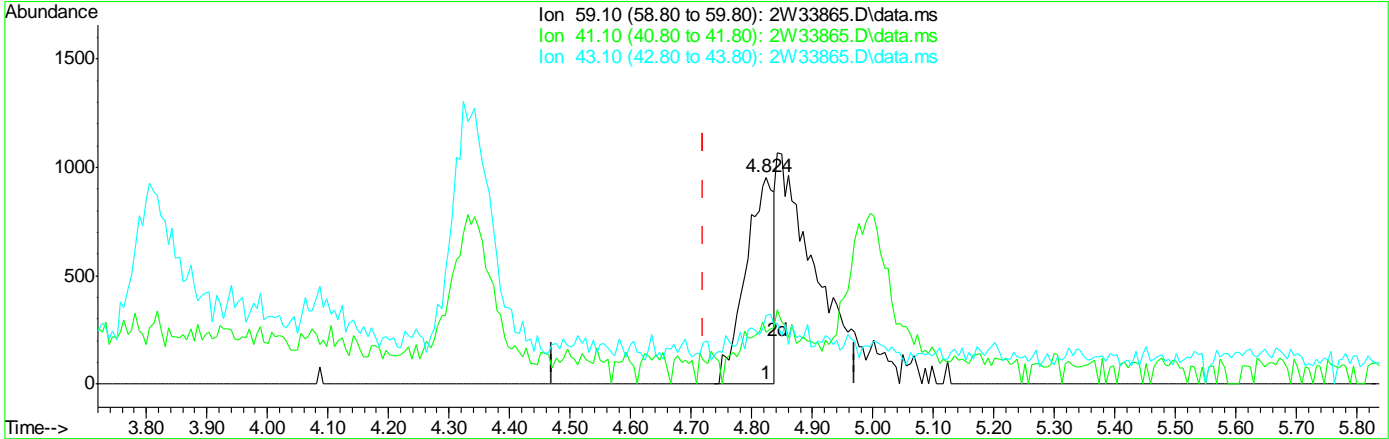
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.17

6



TIC: 2W33865.D\data.ms

(34) TERTIARY BUTYL ALCOHOL

4.824min (+0.104) 0.10PPBV

response 3074

Ion	Exp%	Act%
59.10	100	100
41.10	18.50	5.14
43.10	11.60	10.47
0.00	0.00	0.00

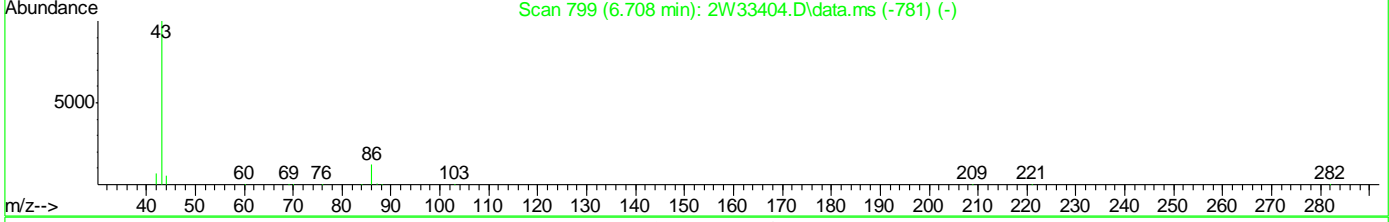
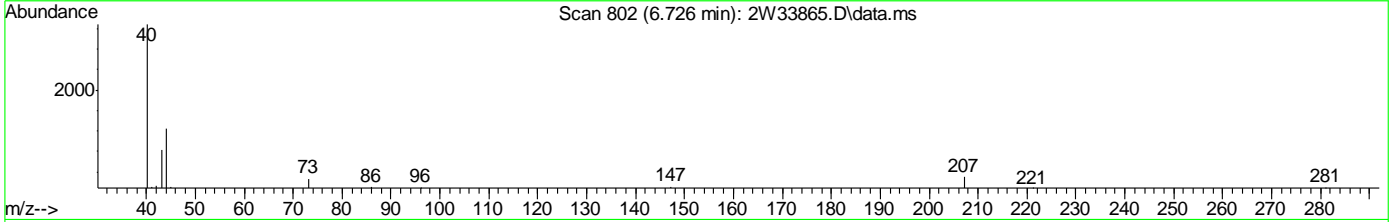
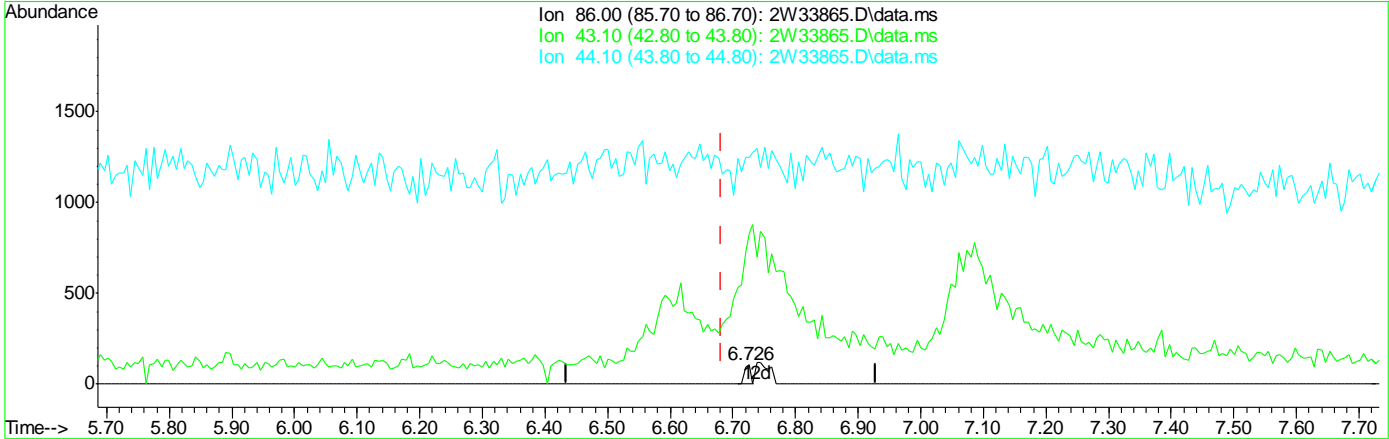
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.18

6



TIC: 2W33865.D\data.ms

(38) VINYL ACETATE

6.726min (+0.043) 0.03PPBV

response 74

Ion	Exp%	Act%
86.00	100	100
43.10	1215.50	4652.70#
44.10	48.40	681.08#
0.00	0.00	0.00

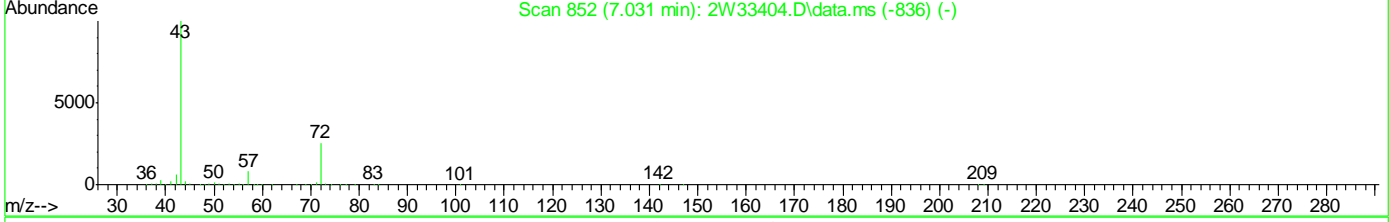
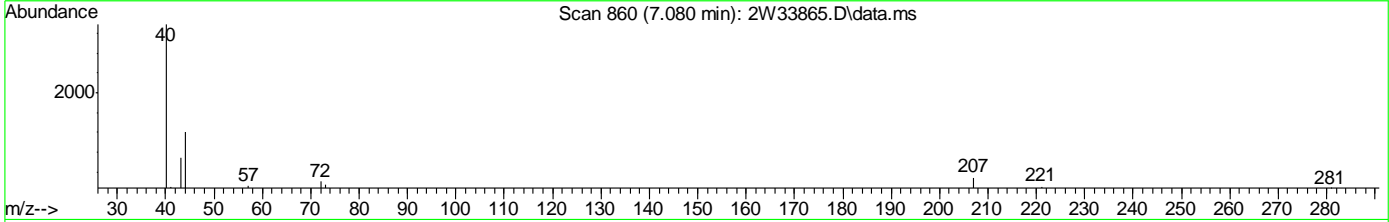
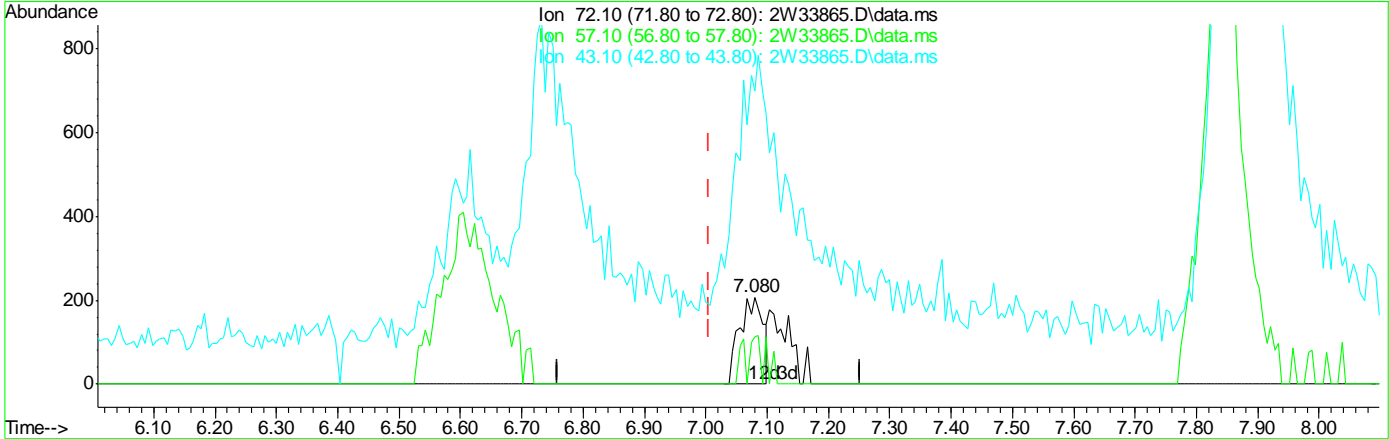
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.19

6



TIC: 2W33865.D\data.ms

(40) METHYL ETHYL KETONE
 7.080min (+0.074) 0.10PPBV
 response 551

Ion	Exp%	Act%
72.10	100	100
57.10	31.40	55.07#
43.10	397.60	337.20#
0.00	0.00	0.00

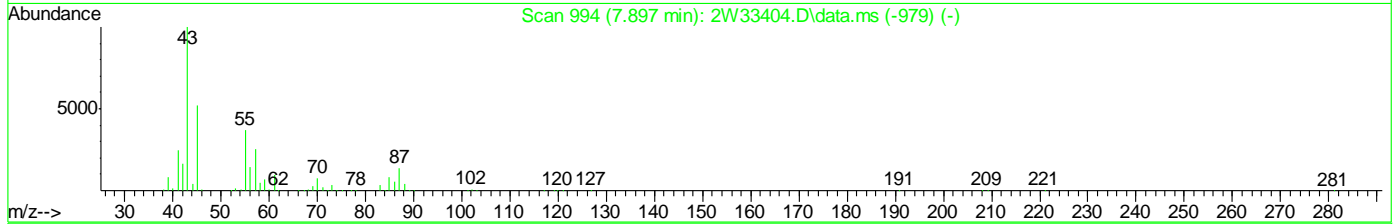
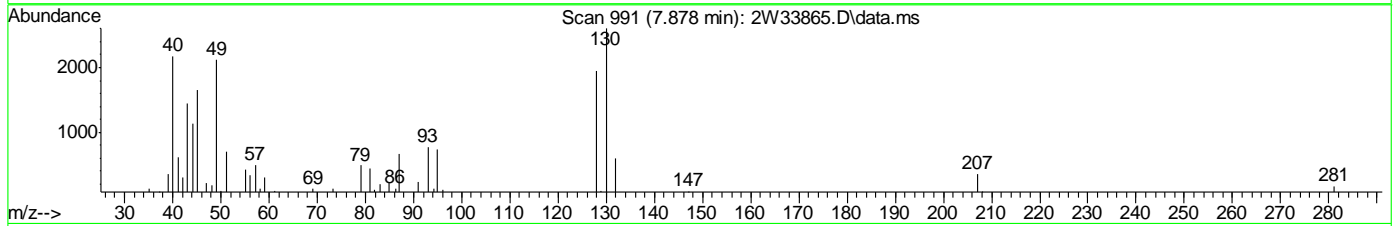
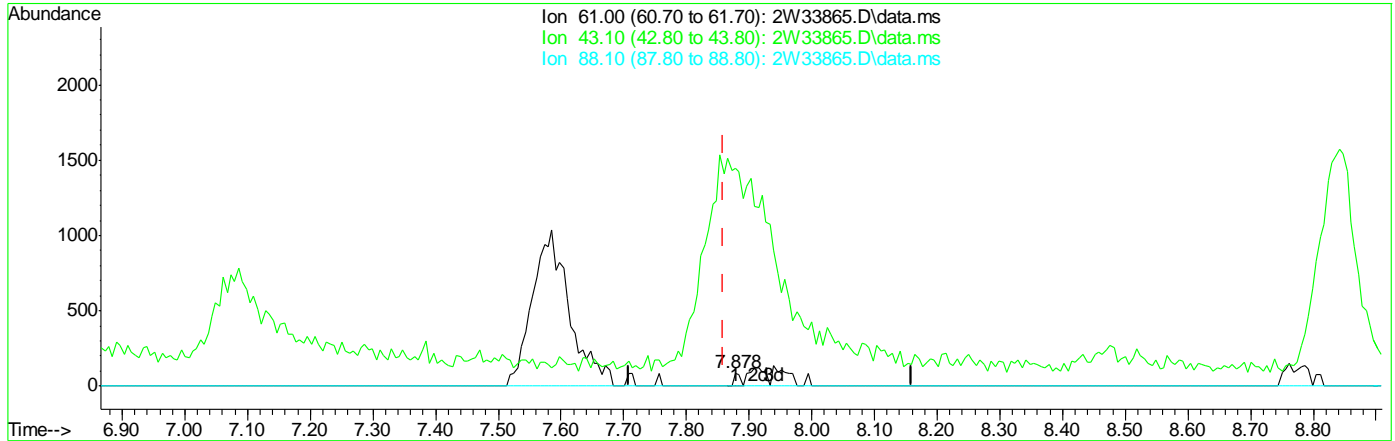
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.20

6



TIC: 2W33865.D\data.ms

Retention Time (min)	Identification	Response
7.878min (+0.018)	(42) ETHYL ACETATE	59

Ion	Exp%	Act%
61.00	100	100
43.10	1502.40	0.00#
88.10	46.70	0.00#
0.00	0.00	0.00

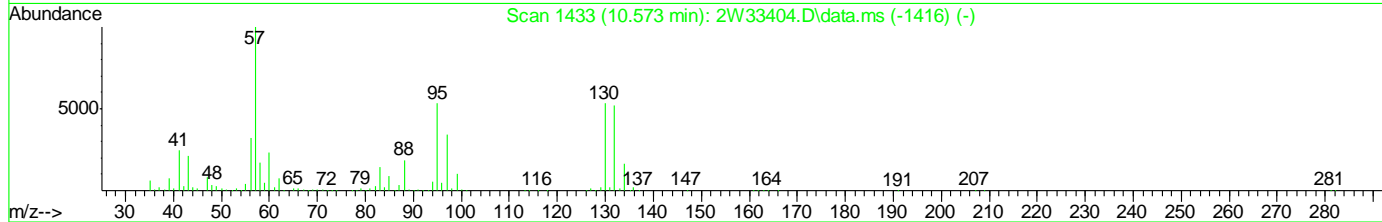
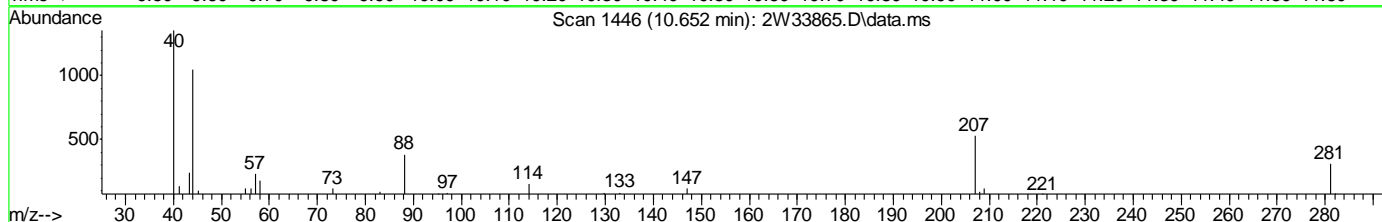
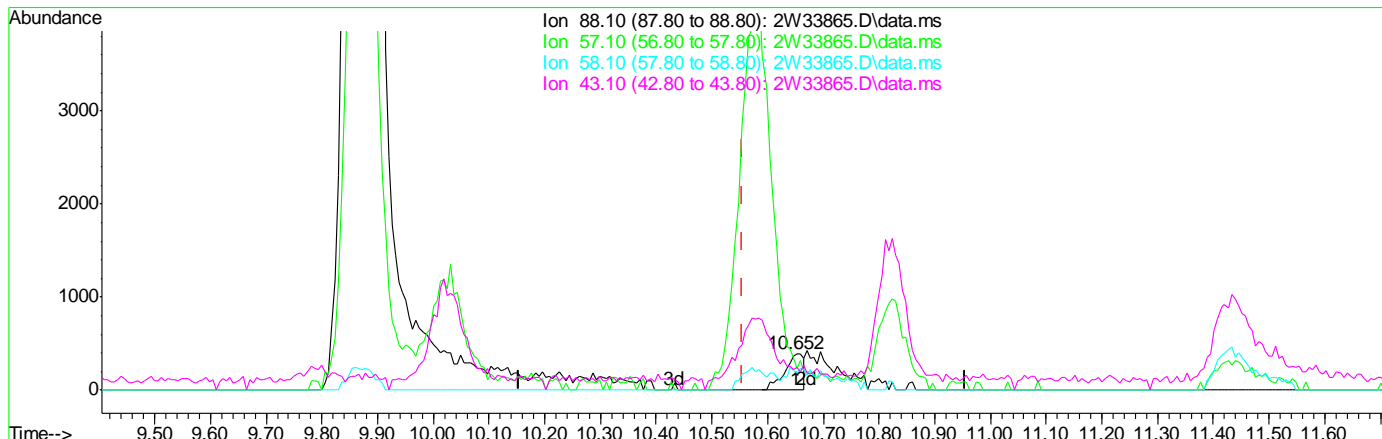
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.21

6



TIC: 2W33865.D\data.ms

(59) 1,4-DIOXANE

10.652min (+0.097) 0.10PPBV

response 941

Ion	Exp%	Act%
88.10	100	100
57.10	1000.60	60.00#
58.10	112.90	47.01#
43.10	188.30	63.64#

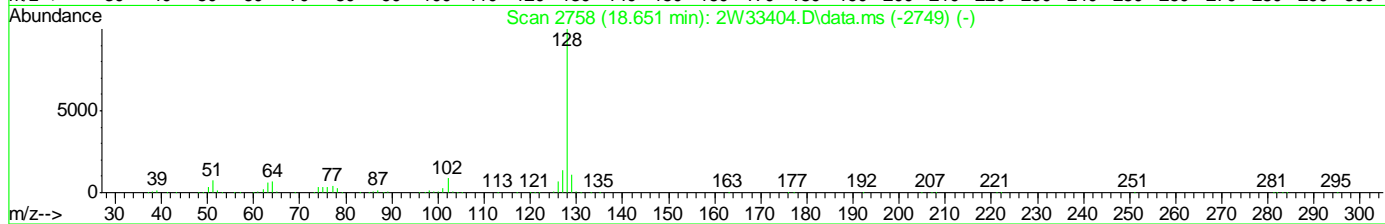
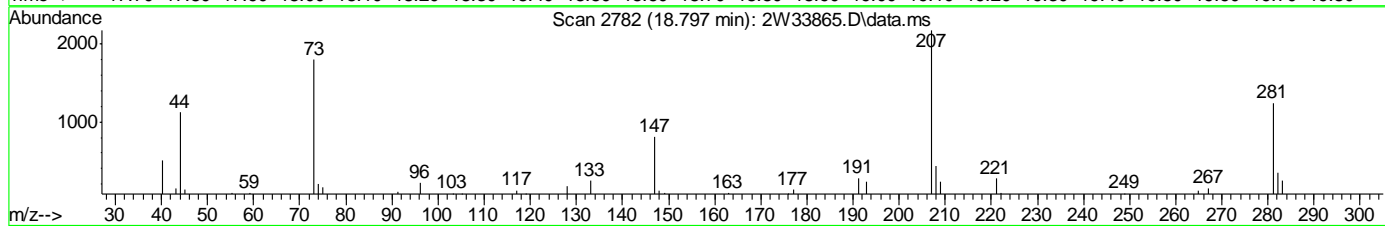
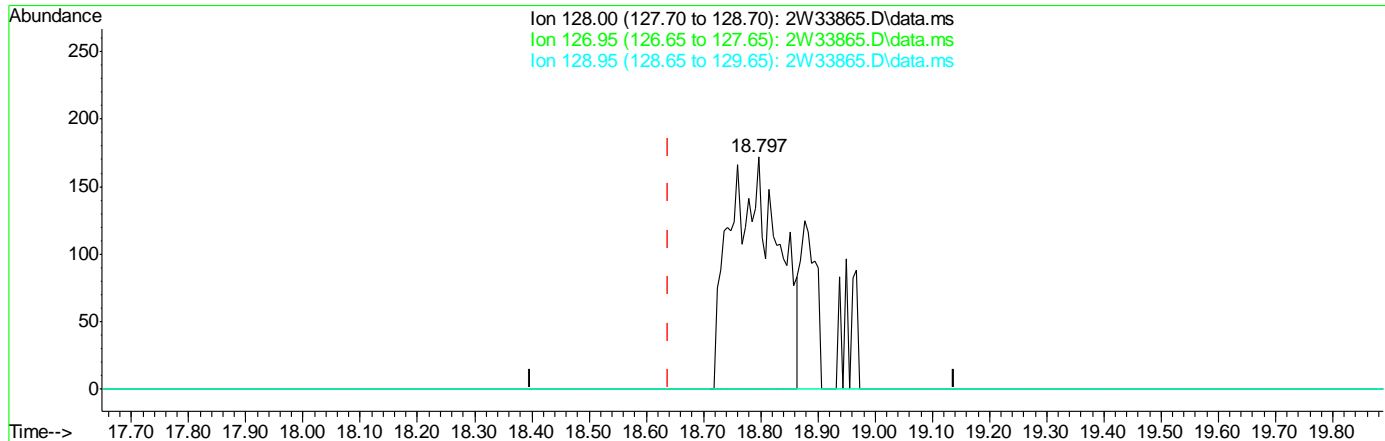
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:05:40 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.2.22

6



TIC: 2W33865.D\data.ms

(105) NAPHTHALENE

18.797min (+0.159) 0.13PPBV

response 1005

Ion	Exp%	Act%
128.00	100	100
126.95	12.90	0.00
128.95	11.20	0.00
0.00	0.00	0.00

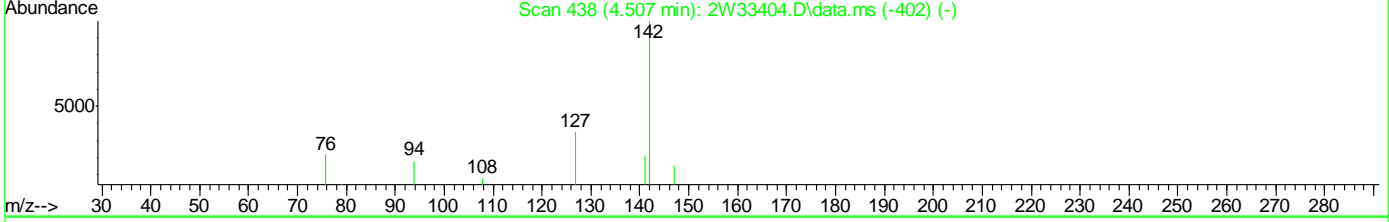
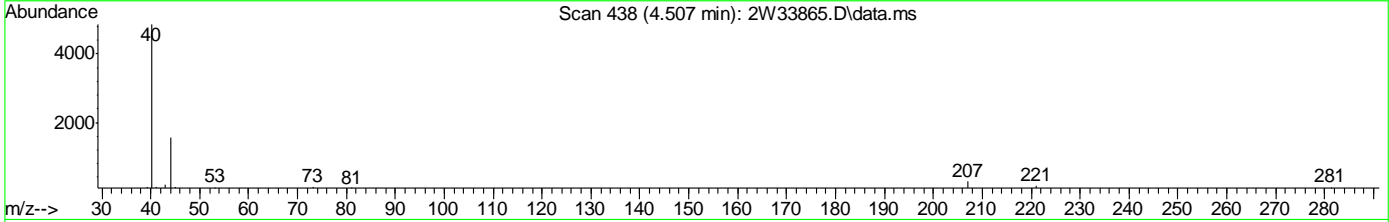
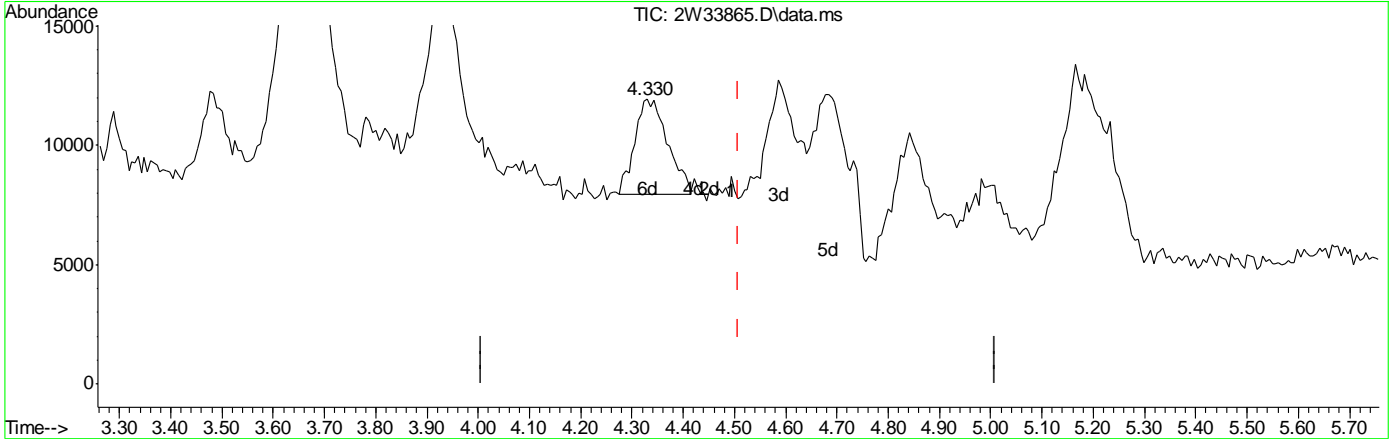
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33865.D
 Acq On : 16 Jan 2012 7:53 pm
 Operator : YOUMINH
 Sample : IC1426-0.2
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:03:41 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.2.23

6



TIC: 2W33865.D\data.ms

(23) TVHC as EQUIV PENTANE (H)		
4.508min (0.000) 0.28PPBV m		
response 17908		
Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33866.D
 Acq On : 16 Jan 2012 8:32 pm
 Operator : YOUMINH
 Sample : ICC1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:31:54 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.781	128	122976	10.00	PPBV	# 0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	537780	10.00	PPBV	0.00
68) CHLOROENZENE-D5	13.847	82	282007	10.00	PPBV	# 0.00
104) CHLOROENZENE-D5(A)	13.847	82	283121	10.00	PPBV	# 0.00
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.255	95	338297	10.00	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.00%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	597343	10.00	PPBV	100
4) FREON 152A	1.953	65	116971	10.00	PPBV	92
5) CHLORODIFLUOROMETHANE	2.001	67	56834	10.00	PPBV	98
6) PROPYLENE	2.032	41	114732	10.00	PPBV	93
7) FREON 114	2.373	85	580602	10.00	PPBV	87
8) CHLOROMETHANE	2.276	52	44501	10.00	PPBV	95
9) VINYL CHLORIDE	2.501	62	181986	10.00	PPBV	99
10) 1,3-BUTADIENE	2.641	54	127624	10.00	PPBV	# 83
11) n-BUTANE	2.690	43	237873	10.00	PPBV	# 96
12) BROMOMETHANE	2.922	94	197114	10.00	PPBV	99
13) CHLOROETHANE	3.099	64	93196	10.00	PPBV	98
14) DICHLOROFLUOROMETHANE	3.190	67	382911	10.00	PPBV	99
15) ACROLEIN	3.599	56	42456	10.00	PPBV	99
16) FREON 123	3.629	83	415127	10.00	PPBV	# 95
17) FREON 123A	3.690	117	279295	10.00	PPBV	# 69
18) TRICHLOROFLUOROMETHANE	3.928	101	587492	10.00	PPBV	100
19) ISOPROPYL ALCOHOL	4.001	45	216967	10.00	PPBV	93
20) ACETONE	3.739	58	51510	10.00	PPBV	# 84
21) PENTANE	4.336	42	118462	10.00	PPBV	80
22) ACRYLONITRILE	4.257	53	74719	10.00	PPBV	96
23) TVHC as EQUIV PENTANE	4.508	TIC	646739m	9.95	PPBV	
24) IODOMETHANE	4.586	142	533984	10.00	PPBV	96
25) 1,1-DICHLOROETHYLENE	4.678	96	181952	10.00	PPBV	89
26) CARBON DISULFIDE	5.220	76	388581	10.00	PPBV	96
27) ETHANOL	3.227	45	41769	10.00	PPBV	94
28) BROMOETHENE	3.471	106	193191	10.00	PPBV	98
29) ACETONITRILE	3.458	41	62718	10.06	PPBV	# 77
30) METHYLENE CHLORIDE	4.830	84	142494	10.00	PPBV	83
31) 3-CHLOROPROPENE	4.989	76	75111	10.00	PPBV	# 74
32) FREON 113	5.178	151	363275	10.00	PPBV	# 83
33) TRANS-1,2-DICHLOROETHY...	6.159	96	163874	10.00	PPBV	89
34) TERTIARY BUTYL ALCOHOL	4.720	59	335931	10.00	PPBV	97
35) METHYL TERTIARY BUTYL ...	6.549	73	420575	10.00	PPBV	90
36) TETRAHYDROFURAN	8.403	72	58957	10.00	PPBV	# 71
37) HEXANE	7.836	57	207217	10.00	PPBV	99
38) VINYL ACETATE	6.683	86	33011	10.00	PPBV	# 8
39) 1,1-DICHLOROETHANE	6.452	63	285891	10.00	PPBV	98
40) METHYL ETHYL KETONE	7.006	72	57421	10.00	PPBV	# 69
41) cis-1,2-DICHLOROETHYLENE	7.580	96	176016	10.00	PPBV	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33866.D
 Acq On : 16 Jan 2012 8:32 pm
 Operator : YOUMINH
 Sample : ICC1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:31:54 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) ETHYL ACETATE	7.860	61	29913	10.00	PPBV #	93
43) METHYL ACRYLATE	7.848	55	183256	10.00	PPBV #	95
44) CHLOROFORM	7.933	83	371512	10.00	PPBV	98
45) 2,4-DIMETHYLPENTANE	8.841	57	253239	10.00	PPBV #	94
46) 1,1,1-TRICHLOROETHANE	9.037	97	438288	10.00	PPBV	96
47) CARBON TETRACHLORIDE	9.665	117	499770	10.00	PPBV	100
48) 1,2-DICHLOROETHANE	8.762	62	226557	10.00	PPBV	99
50) BENZENE	9.518	78	485214	10.00	PPBV	98
51) CYCLOHEXANE	9.799	84	233125	10.00	PPBV #	78
52) 2,3-DIMETHYLPENTANE	10.024	71	111117	10.00	PPBV	86
53) DIBROMOMETHANE	10.305	174	236544	10.00	PPBV	91
54) TRICHLOROETHYLENE	10.548	95	232832	10.00	PPBV	92
55) 1,2-DICHLOROPROPANE	10.323	63	159303	10.00	PPBV	85
56) ETHYL ACRYLATE	10.317	55	228849	10.00	PPBV #	93
57) BROMODICHLOROMETHANE	10.512	83	414001	10.00	PPBV	98
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	740202	10.00	PPBV	96
59) 1,4-DIOXANE	10.555	88	102404	10.00	PPBV #	1
60) METHYL METHACRYLATE	10.725	69	133200	10.00	PPBV #	89
61) HEPTANE	10.817	43	227545	10.00	PPBV	83
62) TVHC as EQUIV HEPTANE	10.823	TIC	1211589m	10.02	PPBV	
63) METHYL ISOBUTYL KETONE	11.371	58	105621	10.00	PPBV #	86
64) cis-1,3-DICHLOROPROPENE	11.347	75	264990	10.00	PPBV	97
65) TOLUENE	12.243	92	351628	10.00	PPBV	100
66) trans-1,3-DICHLOROPROPENE	11.823	75	254189	10.00	PPBV	97
67) 1,1,2-TRICHLOROETHANE	11.987	83	163106	10.00	PPBV	92
69) 2-HEXANONE	12.457	58	141347	10.00	PPBV	94
70) ETHYL METHACRYLATE	12.451	69	222061	10.00	PPBV #	93
71) TETRACHLOROETHYLENE	13.274	164	283362	10.00	PPBV	96
72) DIBROMOCHLOROMETHANE	12.633	129	448467	10.00	PPBV	100
73) 1,2-DIBROMOETHANE	12.859	107	304918	10.00	PPBV	99
74) OCTANE	13.097	43	307079	10.00	PPBV #	79
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	315579	10.00	PPBV	99
76) CHLOROBENZENE	13.889	112	463624	10.00	PPBV	95
77) ETHYLBENZENE	14.218	91	668801	10.00	PPBV	99
78) m,p-XYLENE	14.377	106	513451	20.00	PPBV	98
79) o-XYLENE	14.822	106	246906	10.00	PPBV	99
80) STYRENE	14.718	104	363357	10.00	PPBV	99
81) NONANE	14.981	43	274615	10.00	PPBV	86
82) BROMOFORM	14.481	173	406521	10.00	PPBV	100
84) 1,1,2,2-TETRACHLOROETHANE	14.810	83	302767	10.00	PPBV	97
85) ISOPROPYLBENZENE	15.377	105	740010	10.00	PPBV	99
86) BROMOBENZENE	15.493	156	227078	10.00	PPBV #	81
87) 2-CHLOROTOLUENE	15.865	126	178389	10.00	PPBV #	65
88) n-PROPYLBENZENE	15.877	120	174813	10.00	PPBV	92
89) 4-ETHYLTOLUENE	16.017	105	578099	10.00	PPBV	96
90) 1,3,5-TRIMETHYLBENZENE	16.090	105	464151	10.00	PPBV	98
91) ALPHA-METHYLSTYRENE	16.242	118	216248	10.00	PPBV	98
92) TERT-BUTYLBENZENE	16.474	134	129740	10.00	PPBV	95
93) 1,2,4-TRIMETHYLBENZENE	16.480	105	450256	10.00	PPBV	94
94) m-DICHLOROBENZENE	16.639	146	300044	10.00	PPBV	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33866.D
 Acq On : 16 Jan 2012 8:32 pm
 Operator : YOUMINH
 Sample : ICC1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:31:54 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

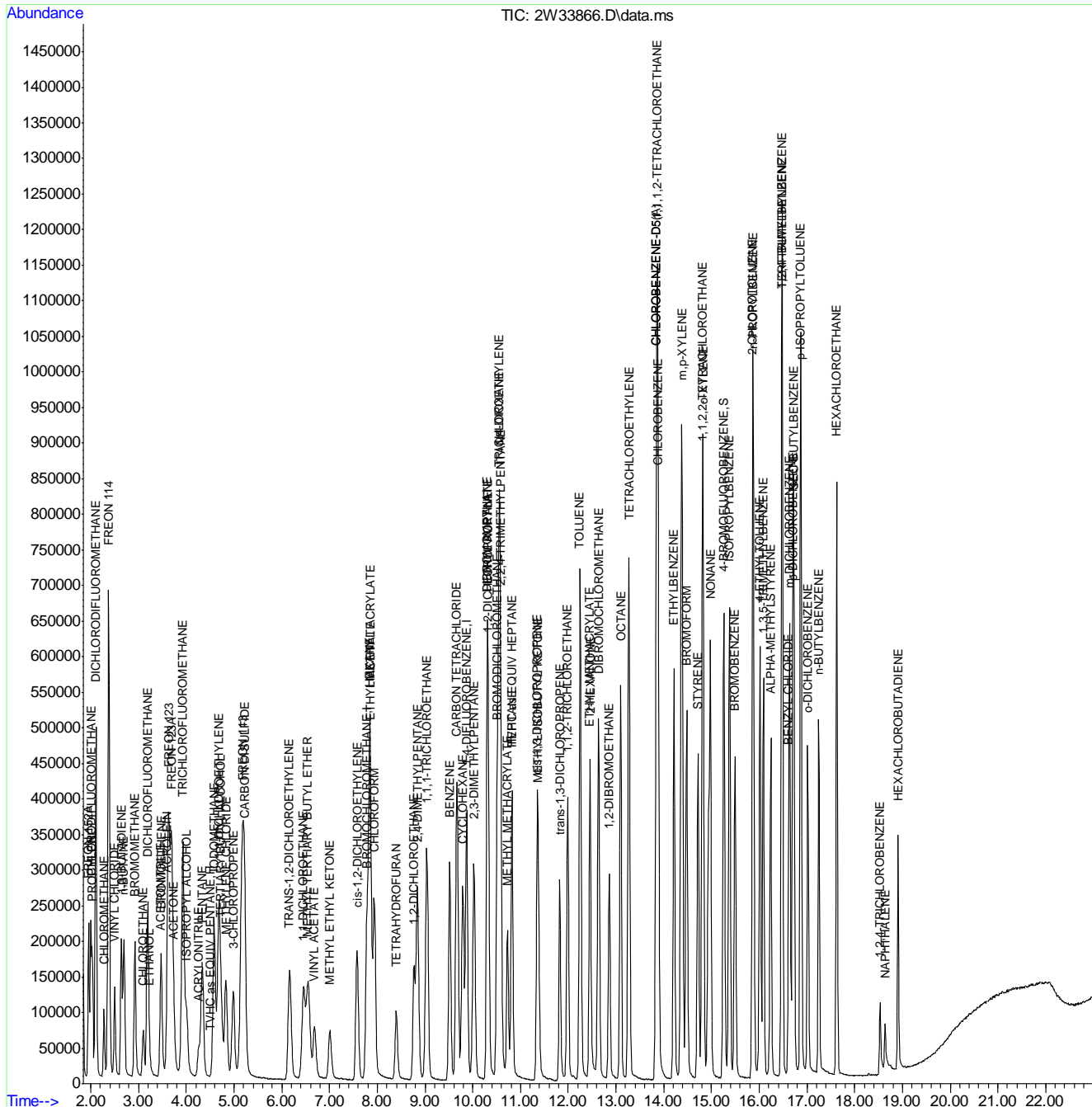
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) BENZYL CHLORIDE	16.614	91	323411	10.00	PPBV	97
96) p-DICHLOROBENZENE	16.700	146	290704	10.00	PPBV	98
97) SEC-BUTYLBENZENE	16.730	134	149337	10.00	PPBV	87
98) p-ISOPROPYLTOLUENE	16.864	134	140314	10.00	PPBV	96
99) o-DICHLOROBENZENE	17.023	146	263265	10.00	PPBV	97
100) n-BUTYLBENZENE	17.248	134	102895	10.00	PPBV	81
101) HEXACHLOROETHANE	17.626	201	213796	10.00	PPBV	81
102) HEXACHLOROBUTADIENE	18.913	225	88158	10.00	PPBV	97
103) 1,2,4-TRICHLOROBENZENE	18.535	180	61428	10.00	PPBV	83
105) NAPHTHALENE	18.638	128	111152	10.00	PPBV	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33866.D
 Acq On : 16 Jan 2012 8:32 pm
 Operator : YOUMINH
 Sample : ICC1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:31:54 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-ICC1426 **Method:** TO-15
Lab FileID: 2W33866.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/16/12 20:32 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.82	Poor instrument integration

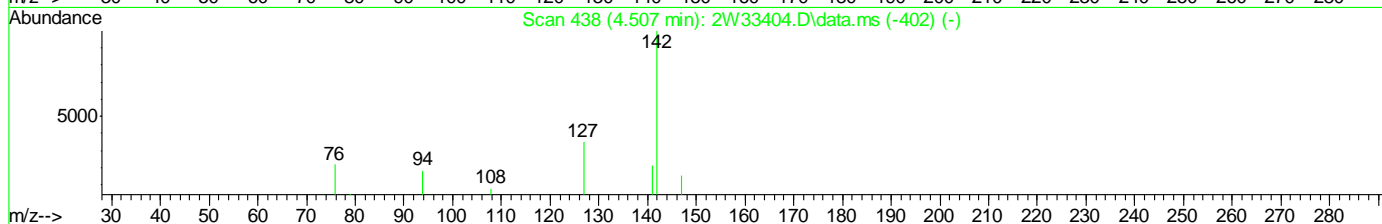
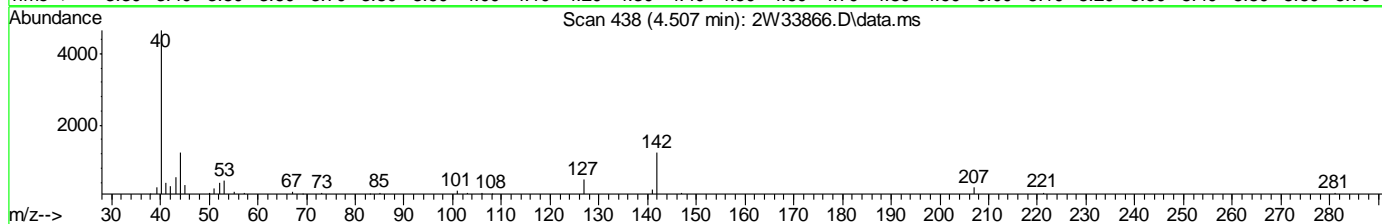
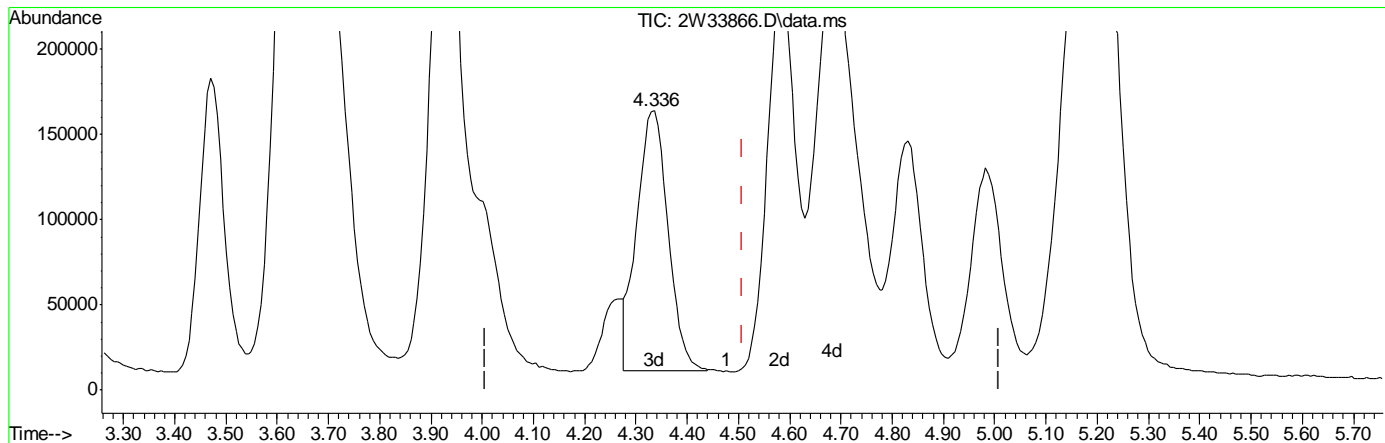
6.7.3.1

6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33866.D
 Acq On : 16 Jan 2012 8:32 pm
 Operator : YOUMINH
 Sample : ICC1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:31:54 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 9.95PPBV m

response 646739

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

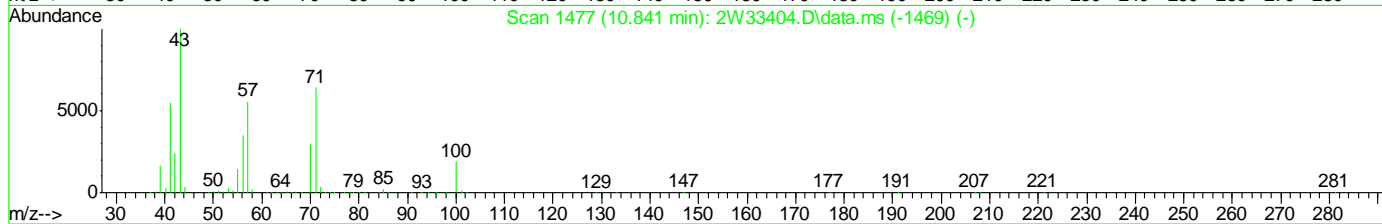
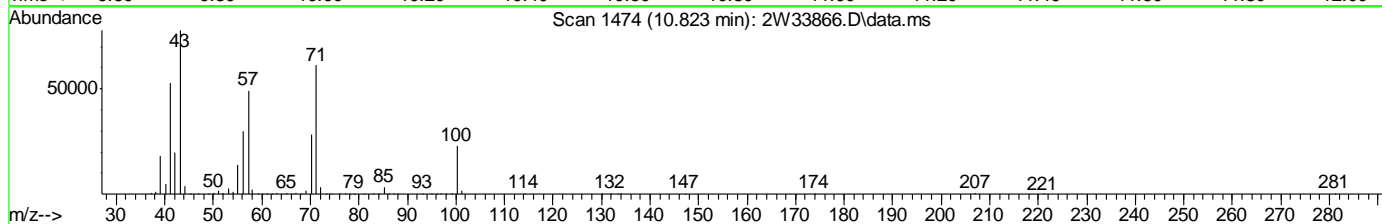
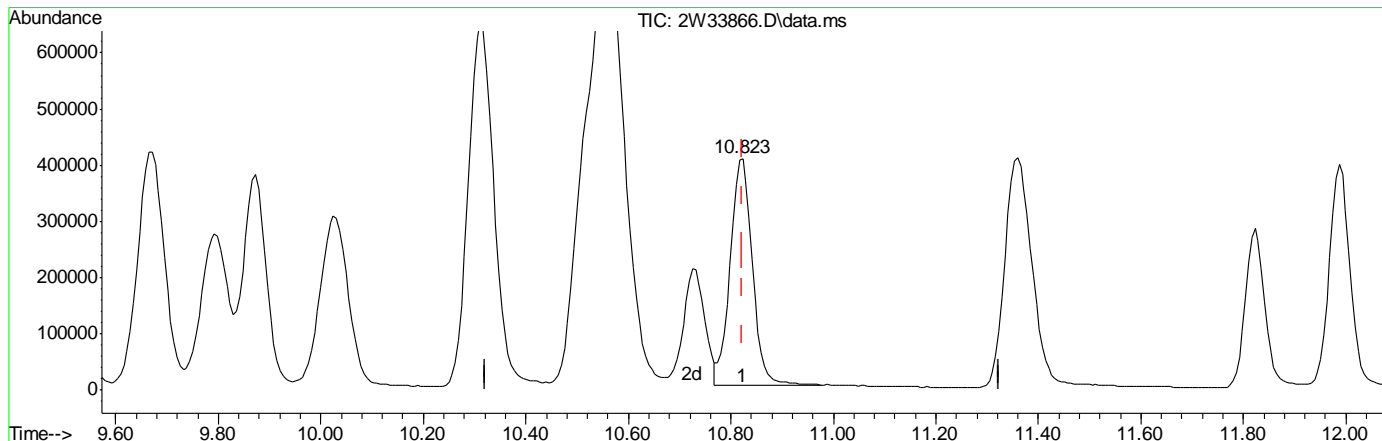
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33866.D
 Acq On : 16 Jan 2012 8:32 pm
 Operator : YOUMINH
 Sample : ICC1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:31:54 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.3.3

6



(62) TVHC as EQUIV HEPTANE

10.823min (0.000) 10.02PPBV m

response 1211589

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.781	128	124164	10.00	PPBV	# 0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	484423	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	13.847	82	218149	10.00	PPBV	# 0.00
104) CHLOROBENZENE-D5(A)	13.847	82	220528	10.00	PPBV	# 0.00
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.255	95	258411	9.87	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	98.70%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	33863	0.56	PPBV	100
4) FREON 152A	1.953	65	5763	0.49	PPBV	75
5) CHLORODIFLUOROMETHANE	2.001	67	2866	0.50	PPBV	85
6) PROPYLENE	2.032	41	7359	0.64	PPBV	95
7) FREON 114	2.373	85	33424	0.57	PPBV	89
8) CHLOROMETHANE	2.282	52	2629	0.59	PPBV	# 89
9) VINYL CHLORIDE	2.501	62	10203	0.56	PPBV	99
10) 1,3-BUTADIENE	2.641	54	6735	0.52	PPBV	97
11) n-BUTANE	2.690	43	14674	0.61	PPBV	98
12) BROMOMETHANE	2.922	94	11177	0.56	PPBV	97
13) CHLOROETHANE	3.105	64	5045	0.54	PPBV	97
14) DICHLOROFLUOROMETHANE	3.190	67	21400	0.55	PPBV	97
15) ACROLEIN	3.660	56	2160m	0.50	PPBV	
16) FREON 123	3.623	83	22888	0.55	PPBV	# 95
17) FREON 123A	3.696	117	15408	0.55	PPBV	# 67
18) TRICHLOROFLUOROMETHANE	3.928	101	30834	0.52	PPBV	97
19) ISOPROPYL ALCOHOL	4.056	45	10220	0.47	PPBV	76
20) ACETONE	3.794	58	2785m	0.54	PPBV	
21) PENTANE	4.324	42	7365	0.62	PPBV	87
22) ACRYLONITRILE	4.318	53	3475m	0.46	PPBV	
23) TVHC as EQUIV PENTANE	4.508	TIC	35441m	0.54	PPBV	
24) IODOMETHANE	4.580	142	27903	0.52	PPBV	99
25) 1,1-DICHLOROETHYLENE	4.684	96	9695	0.53	PPBV	# 86
26) CARBON DISULFIDE	5.232	76	21783	0.56	PPBV	90
27) ETHANOL	3.282	45	2022m	0.48	PPBV	
28) BROMOETHENE	3.477	106	10408	0.53	PPBV	# 98
29) ACETONITRILE	3.519	41	3184m	0.51	PPBV	
30) METHYLENE CHLORIDE	4.836	84	7980	0.55	PPBV	83
31) 3-CHLOROPROPENE	4.970	76	3639	0.48	PPBV	# 1
32) FREON 113	5.178	151	18867	0.51	PPBV	# 83
33) TRANS-1,2-DICHLOROETHY...	6.165	96	7752	0.47	PPBV	# 87
34) TERTIARY BUTYL ALCOHOL	4.781	59	16513m	0.49	PPBV	
35) METHYL TERTIARY BUTYL ...	6.592	73	22608	0.53	PPBV	92
36) TETRAHYDROFURAN	8.445	72	2742	0.46	PPBV	# 81
37) HEXANE	7.848	57	10879	0.52	PPBV	98
38) VINYL ACETATE	6.720	86	1015m	0.30	PPBV	
39) 1,1-DICHLOROETHANE	6.458	63	14550	0.50	PPBV	95
40) METHYL ETHYL KETONE	7.049	72	2483m	0.43	PPBV	
41) cis-1,2-DICHLOROETHYLENE	7.580	96	8511	0.48	PPBV	# 87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) ETHYL ACETATE	7.921	61	1726m	0.57	PPBV	
43) METHYL ACRYLATE	7.884	55	7813	0.42	PPBV #	66
44) CHLOROFORM	7.933	83	18218	0.49	PPBV	90
45) 2,4-DIMETHYLPENTANE	8.835	57	12960	0.51	PPBV #	96
46) 1,1,1-TRICHLOROETHANE	9.043	97	21237	0.48	PPBV	95
47) CARBON TETRACHLORIDE	9.671	117	24407	0.48	PPBV	100
48) 1,2-DICHLOROETHANE	8.768	62	9178	0.40	PPBV	98
50) BENZENE	9.518	78	22141	0.51	PPBV	98
51) CYCLOHEXANE	9.786	84	12787	0.61	PPBV #	72
52) 2,3-DIMETHYLPENTANE	10.030	71	5801	0.58	PPBV	87
53) DIBROMOMETHANE	10.305	174	10608	0.50	PPBV	92
54) TRICHLOROETHYLENE	10.548	95	12309	0.59	PPBV	97
55) 1,2-DICHLOROPROPANE	10.323	63	7091	0.49	PPBV	89
56) ETHYL ACRYLATE	10.341	55	9507	0.46	PPBV	97
57) BROMODICHLOROMETHANE	10.512	83	19736	0.53	PPBV	96
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	36342	0.55	PPBV	96
59) 1,4-DIOXANE	10.634	88	4676	0.51	PPBV #	1
60) METHYL METHACRYLATE	10.744	69	6396	0.53	PPBV	86
61) HEPTANE	10.823	43	10904	0.53	PPBV	83
62) TVHC as EQUIV HEPTANE	10.823	TIC	58075m	0.53	PPBV	
63) METHYL ISOBUTYL KETONE	11.414	58	4439	0.47	PPBV	93
64) cis-1,3-DICHLOROPROPENE	11.353	75	10187	0.43	PPBV	96
65) TOLUENE	12.243	92	14743	0.47	PPBV	98
66) trans-1,3-DICHLOROPROPENE	11.829	75	9180	0.40	PPBV	97
67) 1,1,2-TRICHLOROETHANE	11.987	83	7384	0.50	PPBV	97
69) 2-HEXANONE	12.524	58	4291m	0.39	PPBV	
70) ETHYL METHACRYLATE	12.475	69	9034	0.53	PPBV #	95
71) TETRACHLOROETHYLENE	13.267	164	13361	0.61	PPBV	94
72) DIBROMOCHLOROMETHANE	12.633	129	19278	0.56	PPBV	97
73) 1,2-DIBROMOETHANE	12.859	107	11750	0.50	PPBV	95
74) OCTANE	13.097	43	13465	0.57	PPBV #	77
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	12783	0.52	PPBV	97
76) CHLOROBENZENE	13.889	112	19507	0.54	PPBV	86
77) ETHYLBENZENE	14.212	91	29085	0.56	PPBV	99
78) m,p-XYLENE	14.377	106	22752	1.15	PPBV	98
79) o-XYLENE	14.822	106	11328	0.59	PPBV	100
80) STYRENE	14.718	104	13618	0.48	PPBV	99
81) NONANE	14.981	43	9937	0.47	PPBV	89
82) BROMOFORM	14.481	173	16474	0.52	PPBV	99
84) 1,1,2,2-TETRACHLOROETHANE	14.816	83	12781	0.55	PPBV	99
85) ISOPROPYLBENZENE	15.377	105	30236	0.53	PPBV	99
86) BROMOBENZENE	15.493	156	8148	0.46	PPBV	86
87) 2-CHLOROTOLUENE	15.865	126	6604	0.48	PPBV #	64
88) n-PROPYLBENZENE	15.877	120	6124	0.45	PPBV	99
89) 4-ETHYLTOLUENE	16.017	105	18344	0.41	PPBV	95
90) 1,3,5-TRIMETHYLBENZENE	16.084	105	17341	0.48	PPBV	99
91) ALPHA-METHYLSTYRENE	16.236	118	5489	0.33	PPBV	94
92) TERT-BUTYLBENZENE	16.480	134	4647	0.46	PPBV	96
93) 1,2,4-TRIMETHYLBENZENE	16.480	105	13880	0.40	PPBV #	80
94) m-DICHLOROBENZENE	16.645	146	7978	0.34	PPBV	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

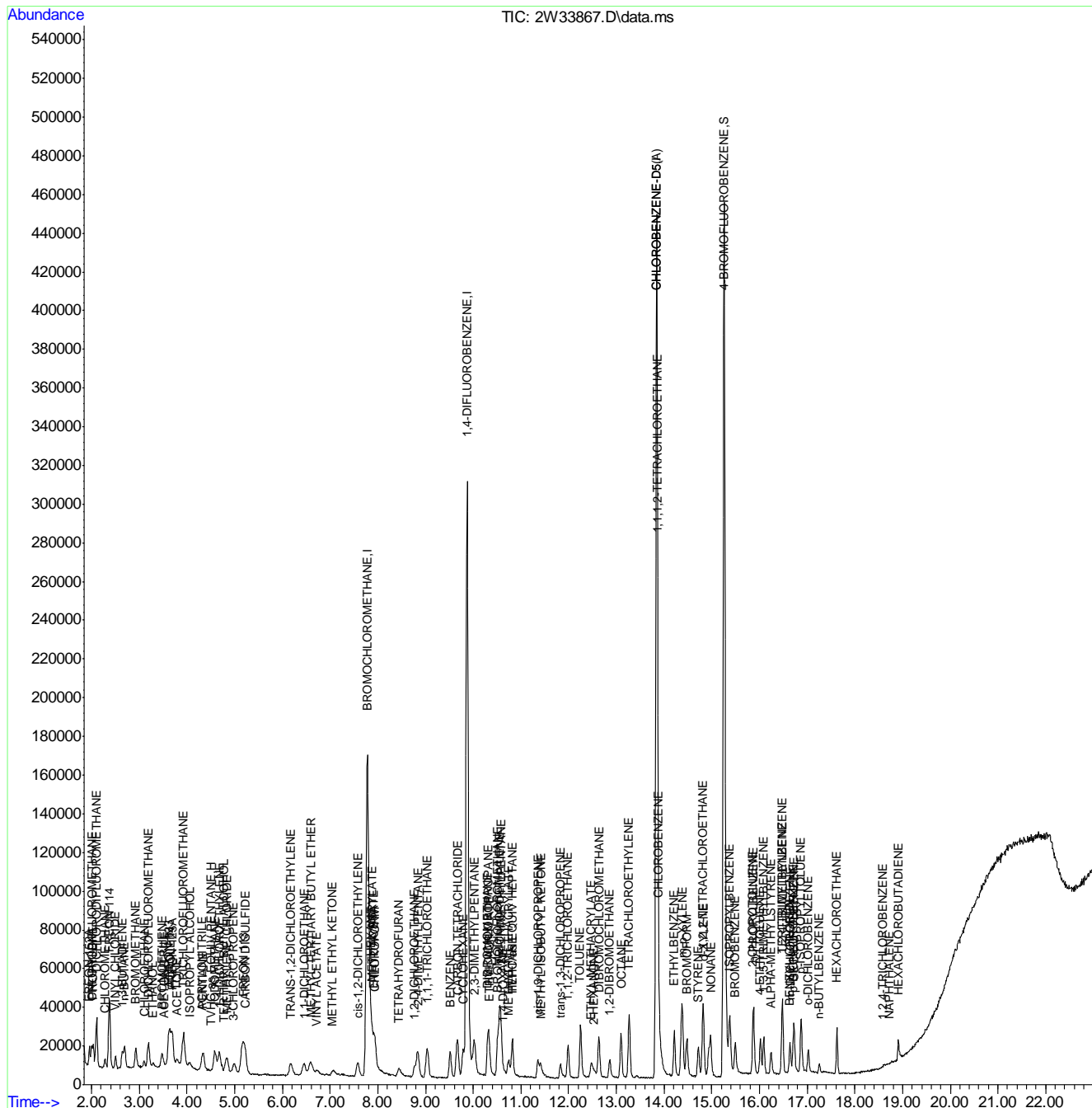
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) BENZYL CHLORIDE	16.627	91	6636	0.27	PPBV	97
96) p-DICHLOROBENZENE	16.706	146	6803	0.30	PPBV	96
97) SEC-BUTYLBENZENE	16.730	134	4712	0.41	PPBV	82
98) p-ISOPROPYLTOLUENE	16.870	134	4068	0.37	PPBV	83
99) o-DICHLOROBENZENE	17.023	146	7504	0.37	PPBV	96
100) n-BUTYLBENZENE	17.248	134	1377	0.17	PPBV #	56
101) HEXACHLOROETHANE	17.626	201	6227	0.38	PPBV	85
102) HEXACHLOROBUTADIENE	18.913	225	3998	0.59	PPBV	94
103) 1,2,4-TRICHLOROBENZENE	18.596	180	2063	0.43	PPBV #	39
105) NAPHTHALENE	18.718	128	2765m	0.32	PPBV	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-IC1426 **Method:** TO-15
Lab FileID: 2W33867.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/16/12 21:12 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethanol	64-17-5		3.28	Poor instrument integration
Acetonitrile	75-05-8		3.52	Poor instrument integration
Acrolein	107-02-8		3.66	Poor instrument integration
Acetone	67-64-1		3.79	Poor instrument integration
Acrylonitrile	107-13-1		4.32	Poor instrument integration
Tertiary Butyl Alcohol	75-65-0		4.78	Poor instrument integration
Vinyl Acetate	108-05-4		6.72	Poor instrument integration
Methyl ethyl ketone	78-93-3		7.05	Poor instrument integration
Ethyl Acetate	141-78-6		7.92	Poor instrument integration
TVHC As Equiv Heptane			10.82	Poor instrument integration
2-Hexanone	591-78-6		12.52	Poor instrument integration
Naphthalene	91-20-3		18.72	Poor instrument integration

6.7.4.1

6

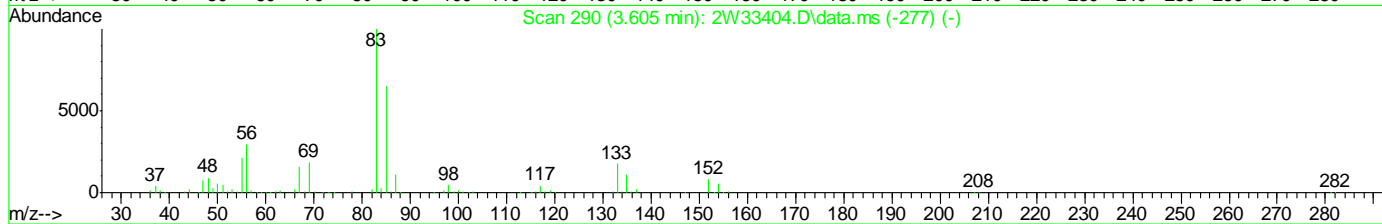
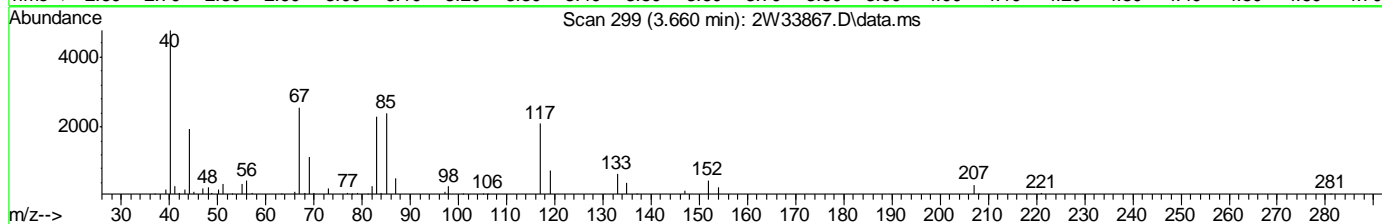
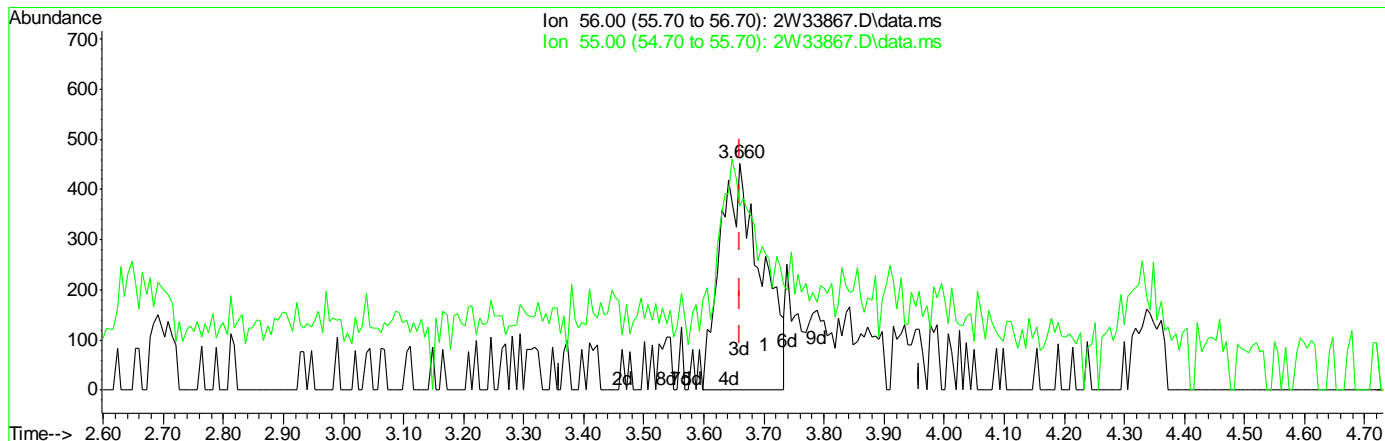
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.2

6



TIC: 2W33867.D\data.ms

(15) ACROLEIN
 3.660min (-0.000) 0.50PPBV m
 response 2160

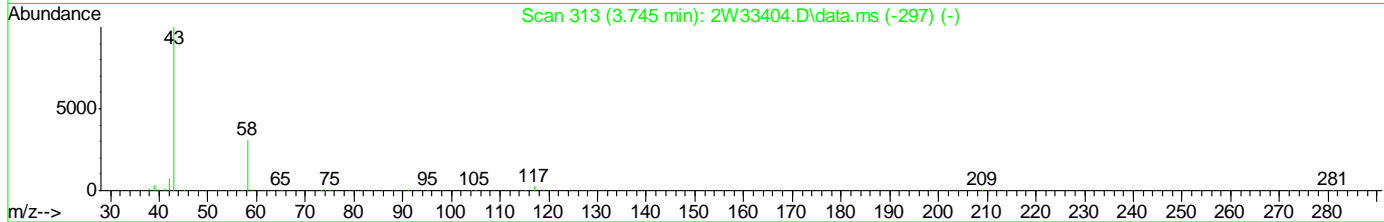
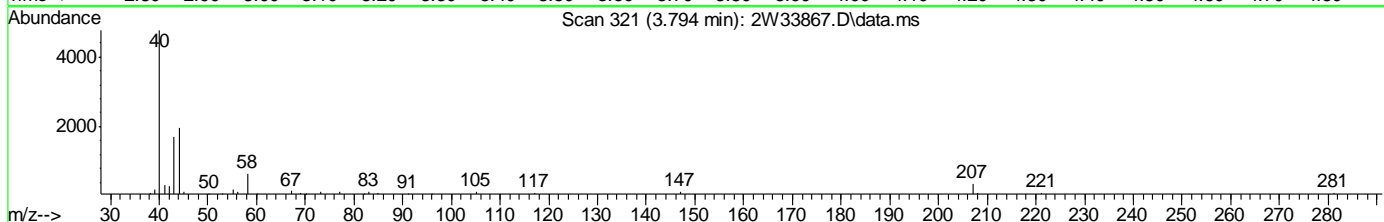
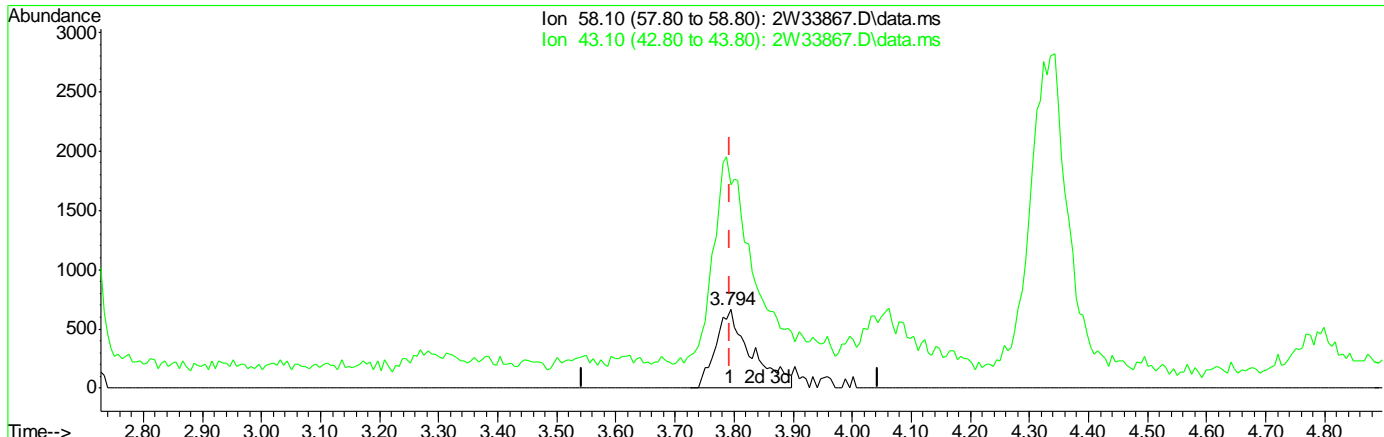
Ion	Exp%	Act%
56.00	100	100
55.00	70.00	8.06#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.3
 6



TIC: 2W33867.D\data.ms

(20) ACETONE		
3.794min (-0.000)	0.54PPBV	m
response	2785	
Ion	Exp%	Act%
58.10	100	100
43.10	282.10	290.23
0.00	0.00	0.00
0.00	0.00	0.00

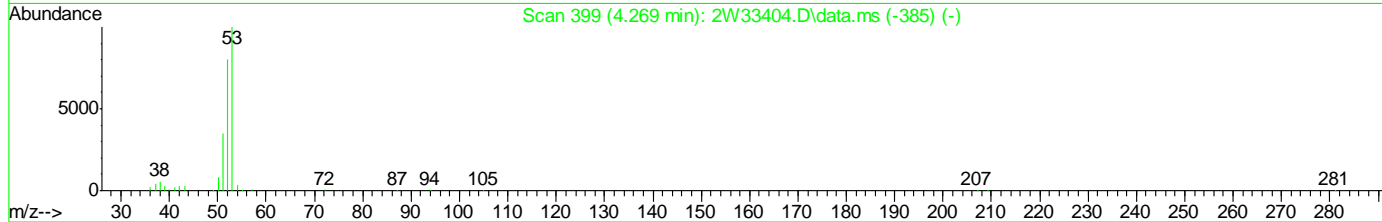
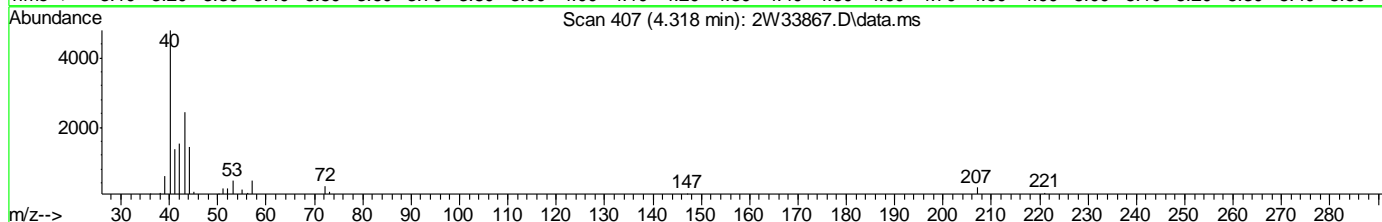
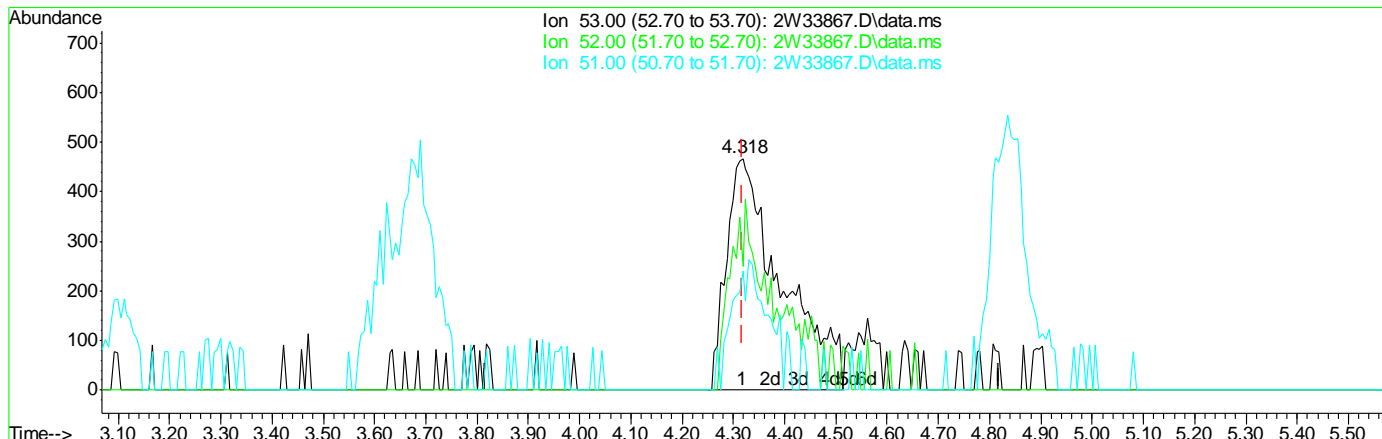
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.4

6



TIC: 2W33867.D\data.ms

(22) ACRYLONITRILE

4.318min (-0.000) 0.46PPBV m

response 3475

Ion	Exp%	Act%
53.00	100	100
52.00	80.20	17.12#
51.00	34.30	35.28
0.00	0.00	0.00

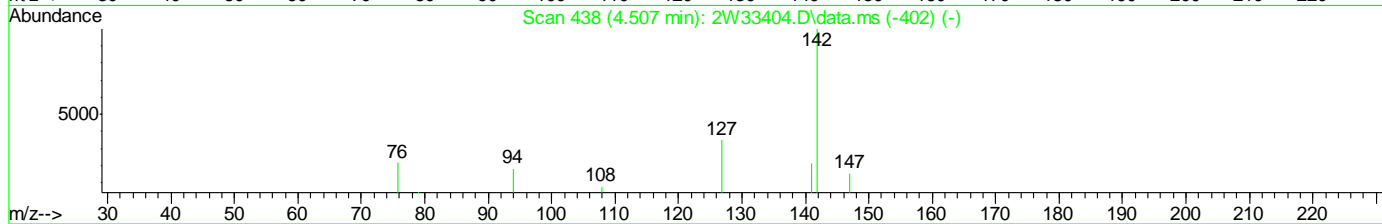
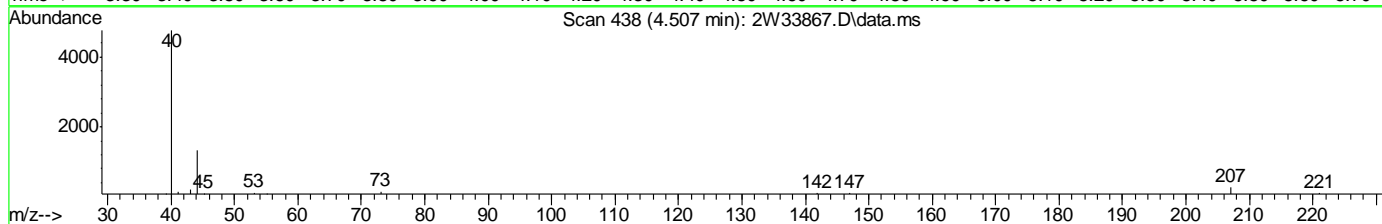
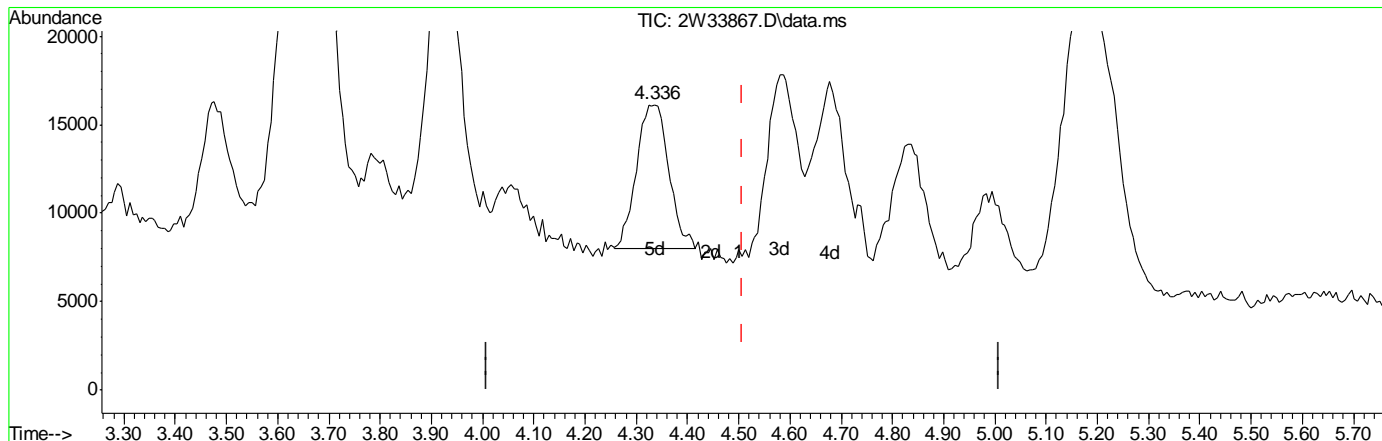
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.5

6



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 0.54PPBV m

response 35441

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

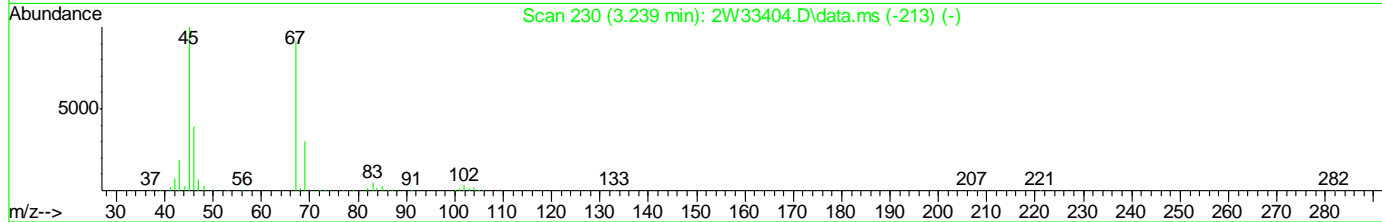
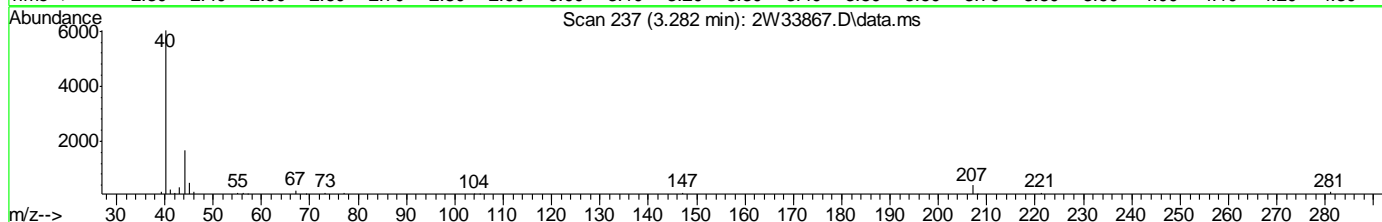
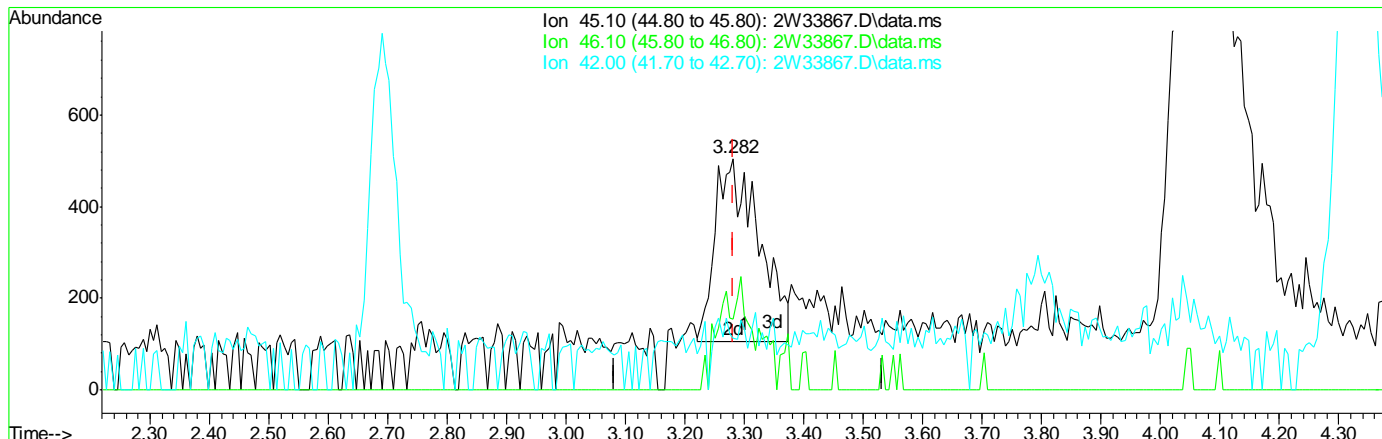
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.6

6



TIC: 2W33867.D\data.ms

(27) ETHANOL

3.282min (-0.000) 0.48PPBV m

response 2022

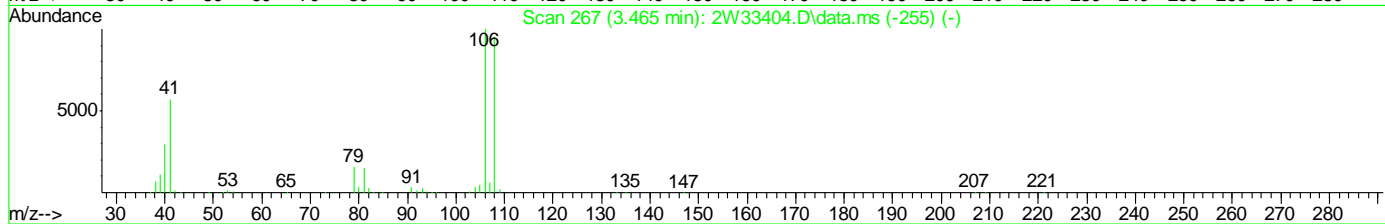
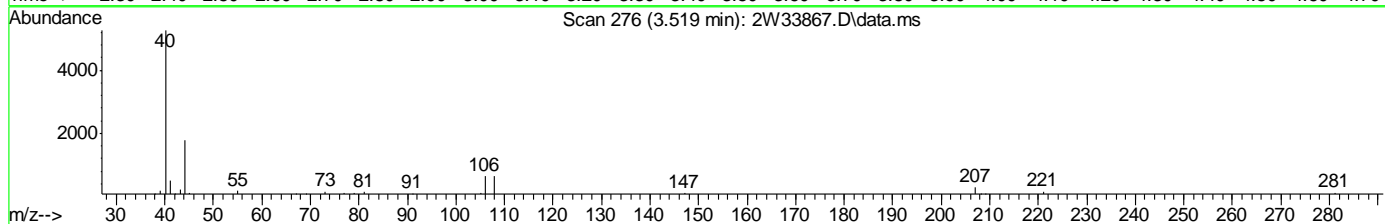
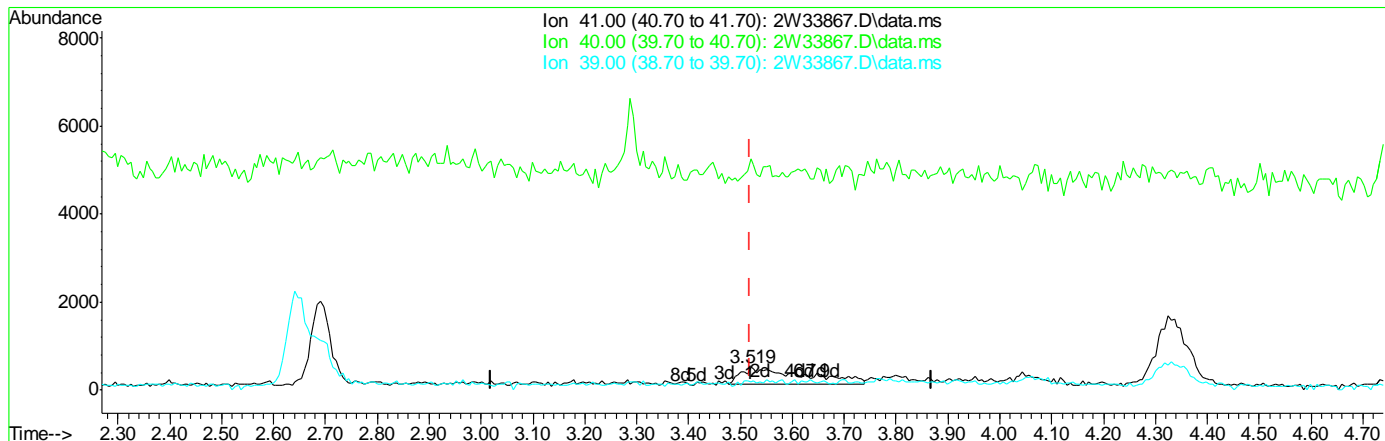
Ion	Exp%	Act%
45.10	100	100
46.10	41.90	17.61
42.00	5.50	4.45
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.7
 6



TIC: 2W33867.D\data.ms

(29) ACETONITRILE

3.519min (+0.000) 0.51PPBV m

response 3184

Ion	Exp%	Act%
41.00	100	100
40.00	65.70	19.57#
39.00	20.10	8.61#
0.00	0.00	0.00

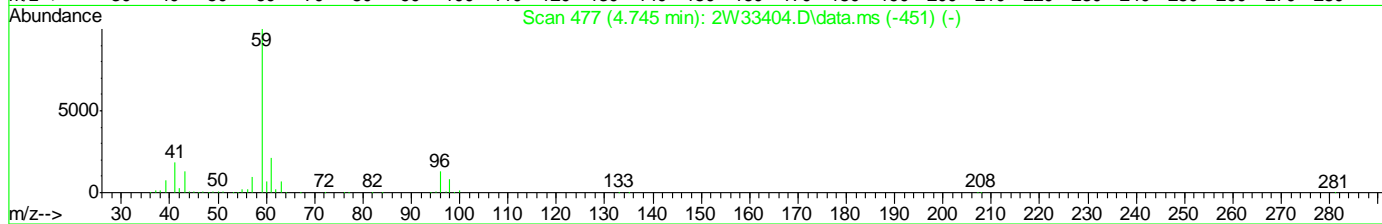
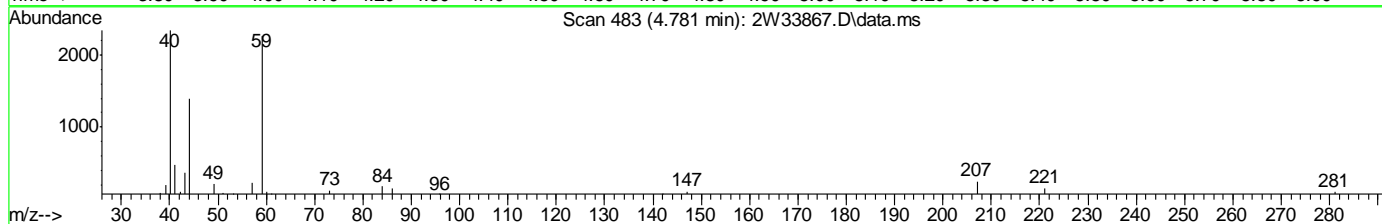
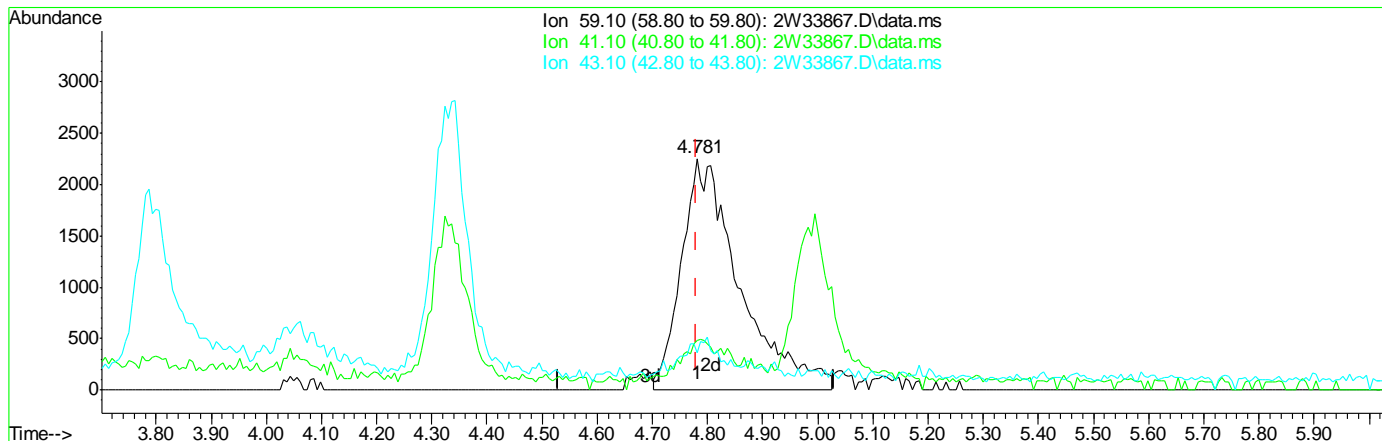
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.8

6



TIC: 2W33867.D\data.ms

(34) TERTIARY BUTYL ALCOHOL

4.781min (+0.000) 0.49PPBV m

response 16513

Ion	Exp%	Act%
59.10	100	100
41.10	18.50	8.01
43.10	11.60	4.54
0.00	0.00	0.00

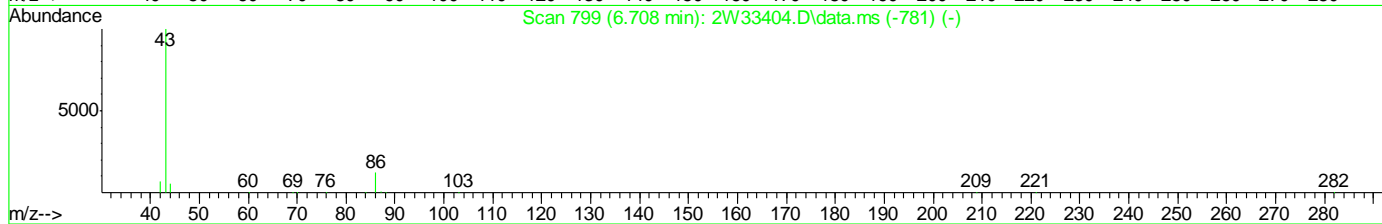
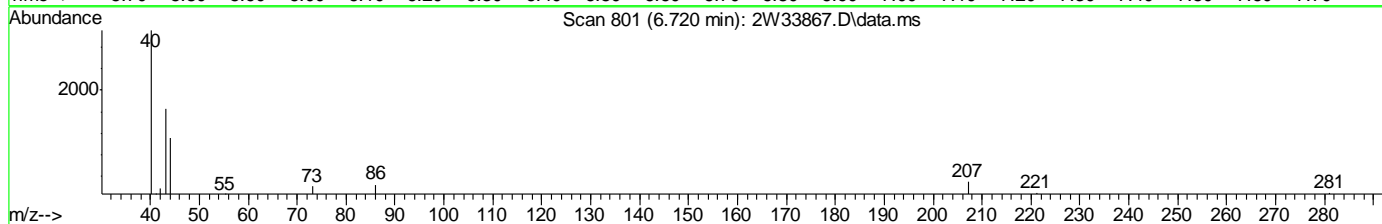
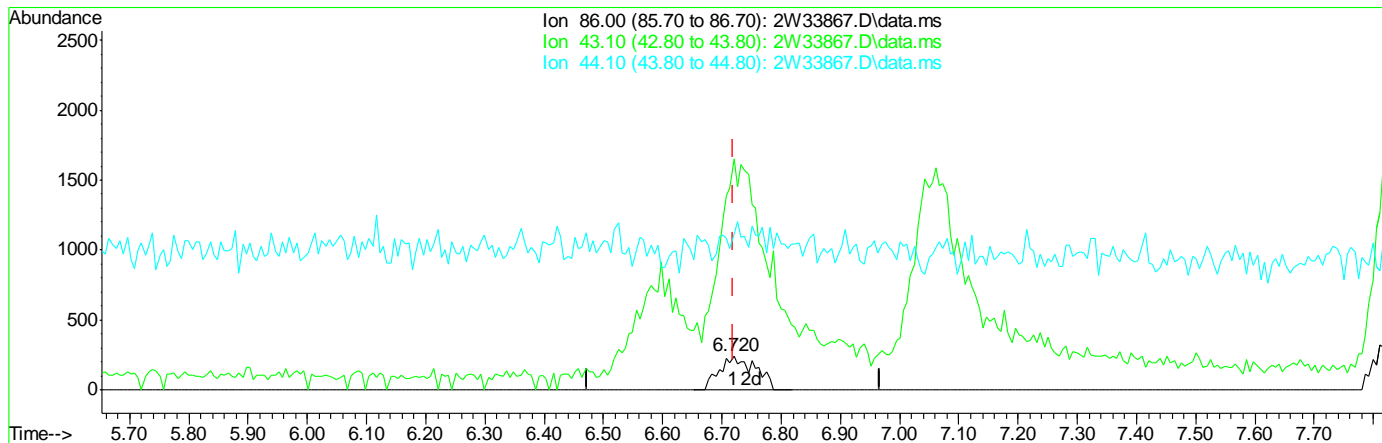
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.9

6



TIC: 2W33867.D\data.ms

(38) VINYL ACETATE

6.720min (-0.000) 0.30PPBV m

response 1015

Ion	Exp%	Act%
86.00	100	100
43.10	1215.50	352.22#
44.10	48.40	29.26
0.00	0.00	0.00

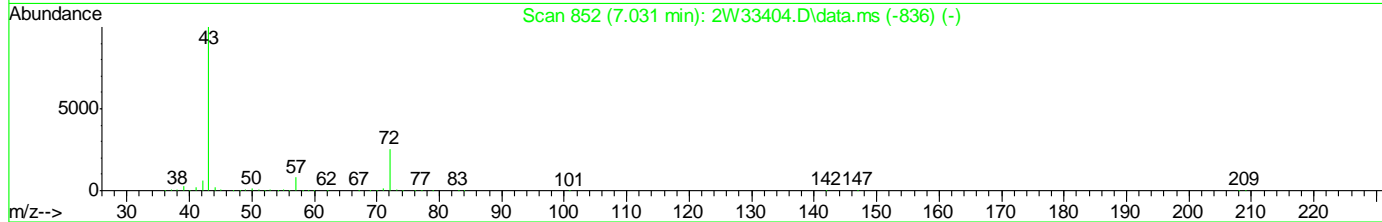
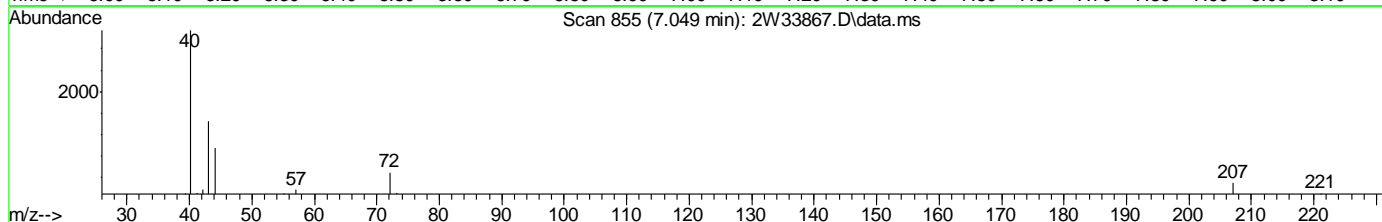
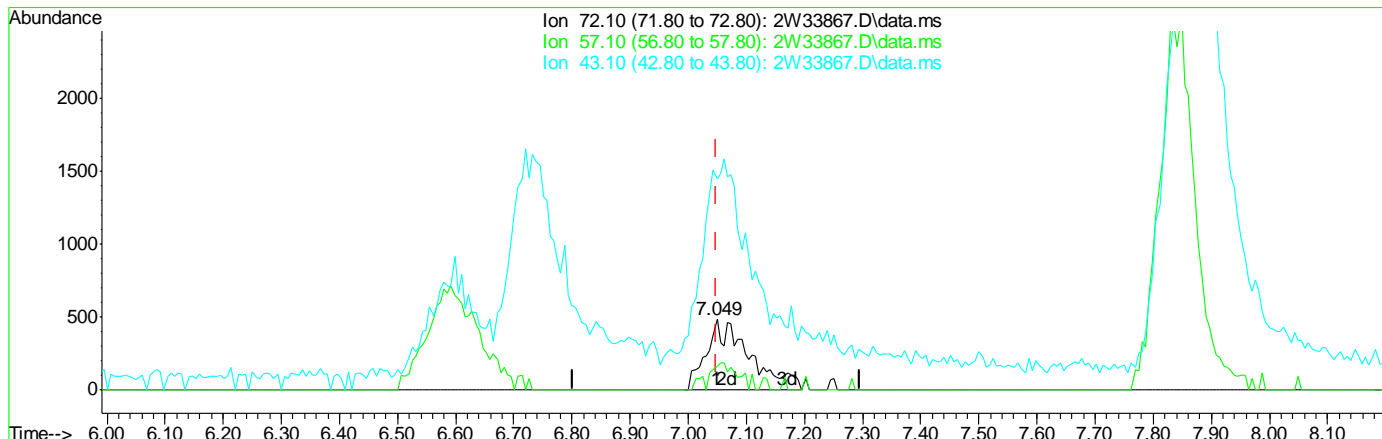
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.10

6



TIC: 2W33867.D\data.ms

(40) METHYL ETHYL KETONE

7.049min (+0.000) 0.43PPBV m

response 2483

Ion	Exp%	Act%
72.10	100	100
57.10	31.40	33.95
43.10	397.60	299.79#
0.00	0.00	0.00

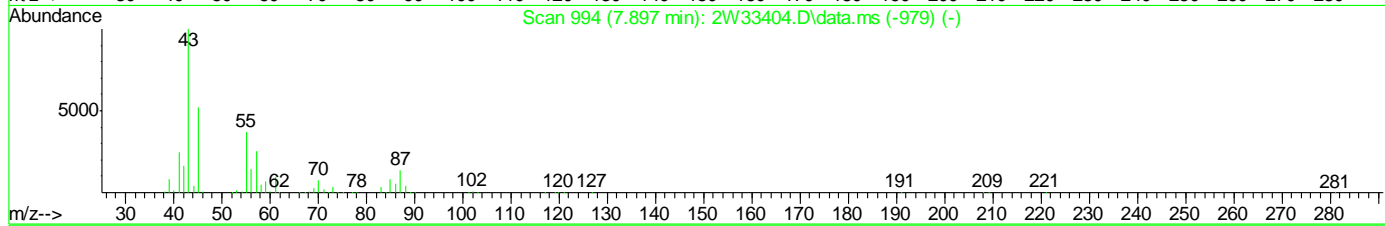
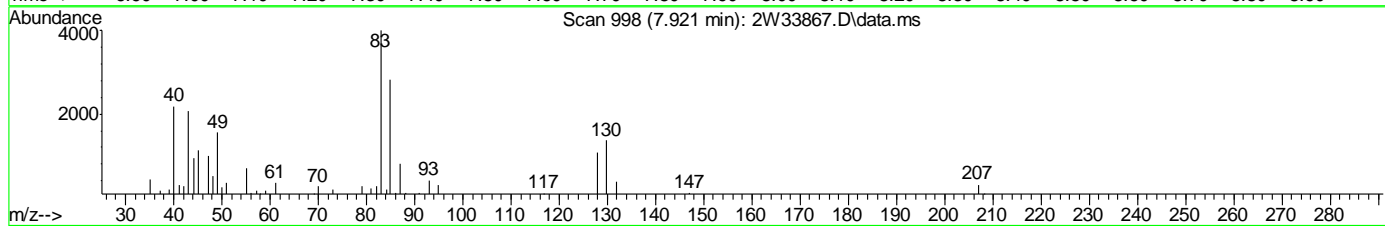
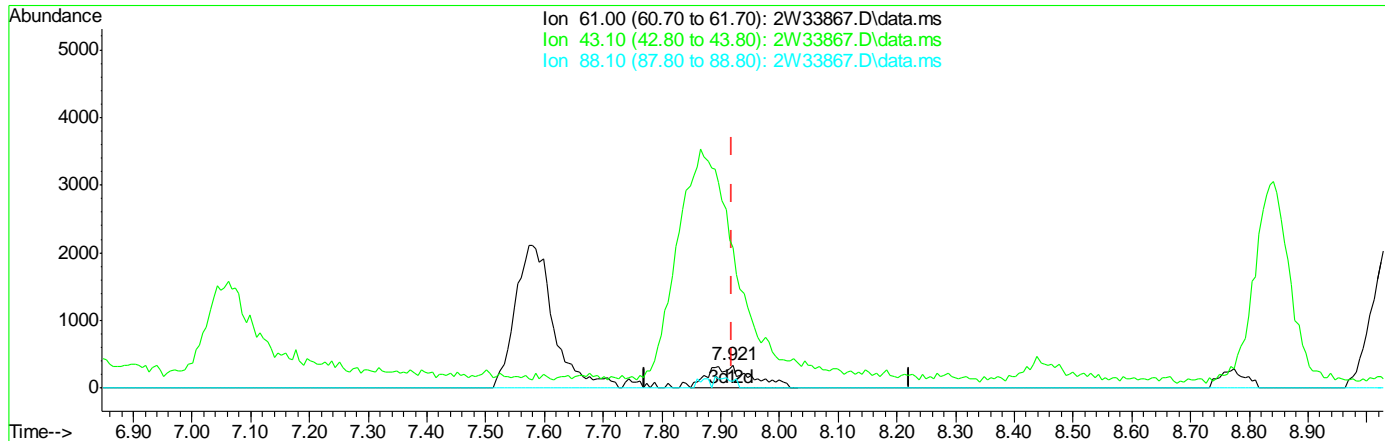
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.11

6



TIC: 2W33867.D\data.ms

(42) ETHYL ACETATE

7.921min (-0.000) 0.57PPBV m

response 1726

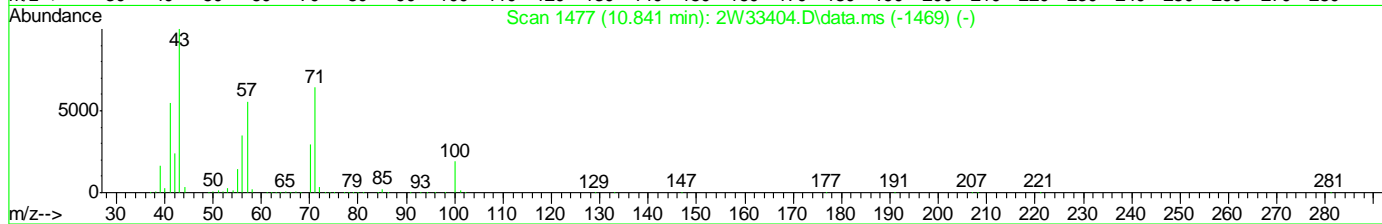
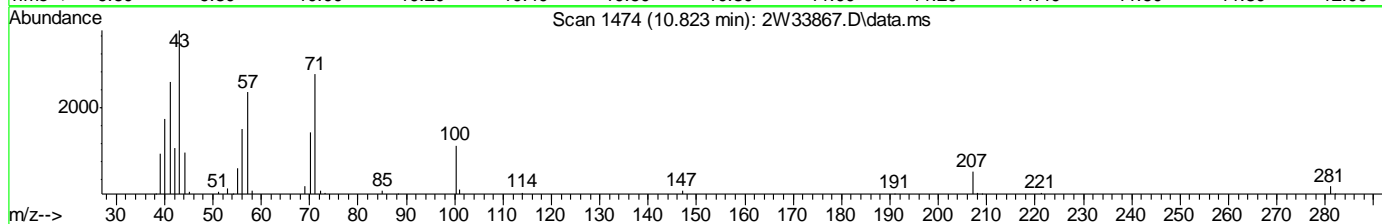
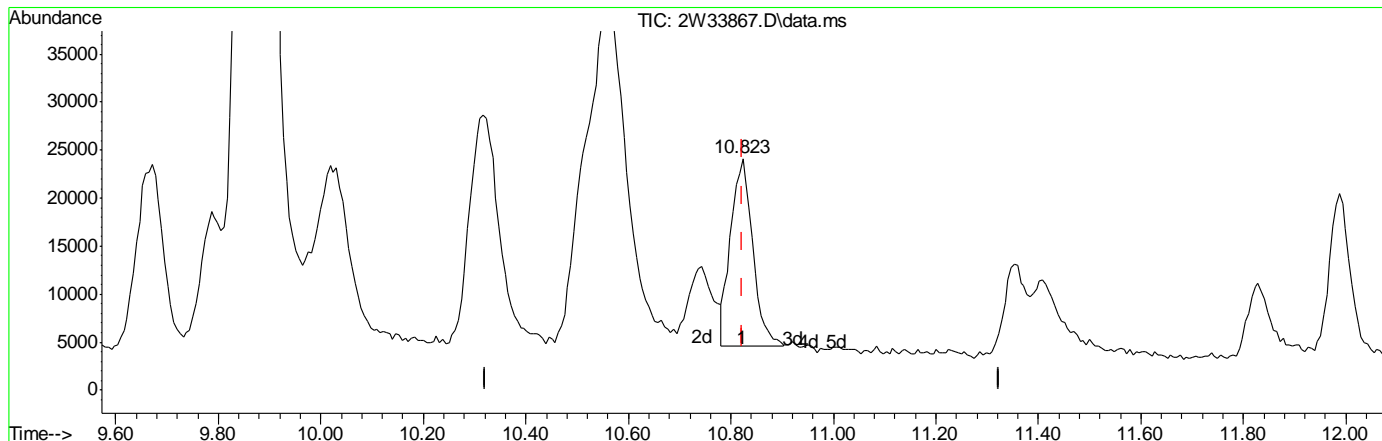
Ion	Exp%	Act%
61.00	100	100
43.10	1502.40	0.00#
88.10	46.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.12
 6



(62) TVHC as EQUIV HEPTANE

10.823min (0.000) 0.53PPBV m

response 58075

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

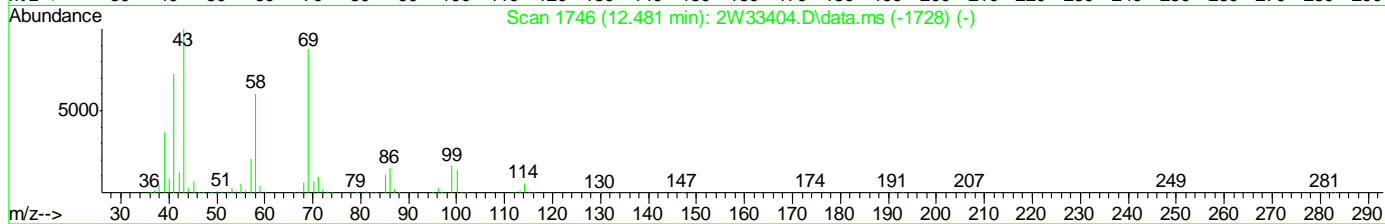
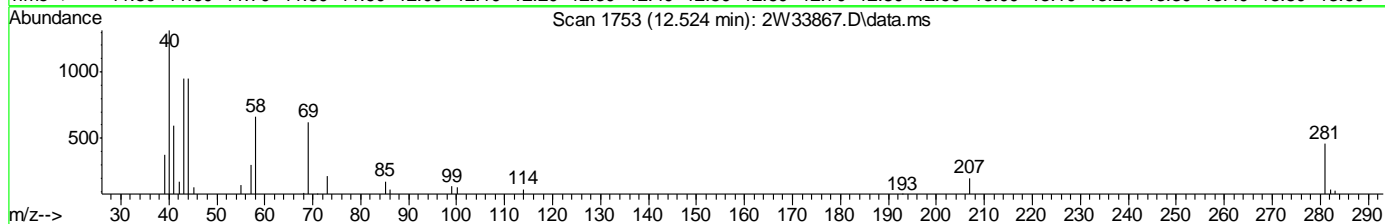
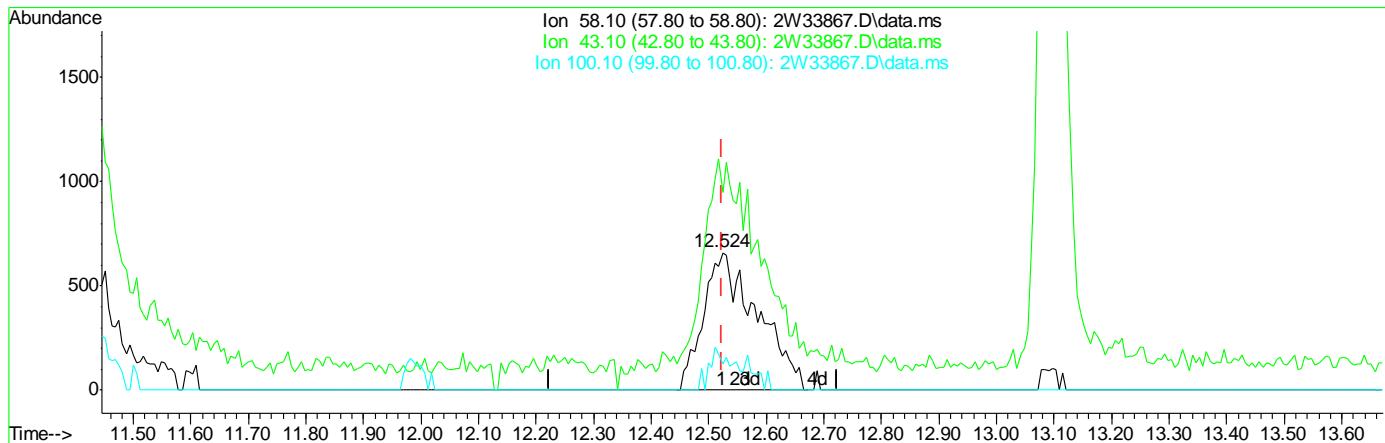
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.13

6



TIC: 2W33867.D\data.ms

(69) 2-HEXANONE
 12.524min (-0.000) 0.39PPBV m
 response 4291

Ion	Exp%	Act%
58.10	100	100
43.10	170.30	147.94#
100.10	21.40	13.38
0.00	0.00	0.00

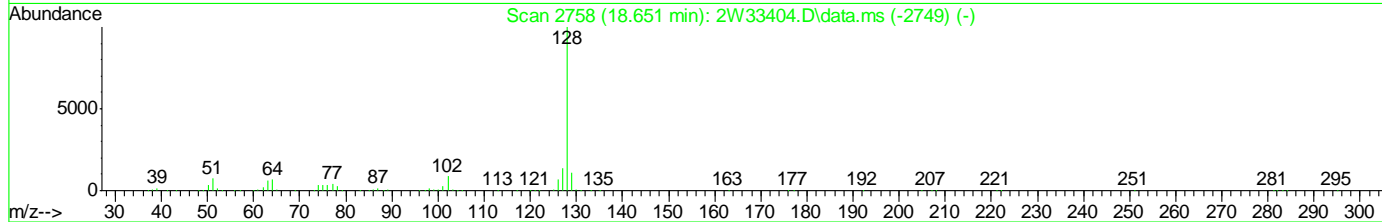
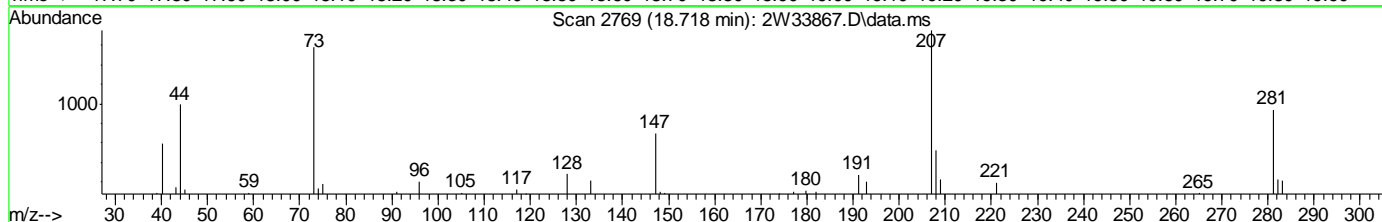
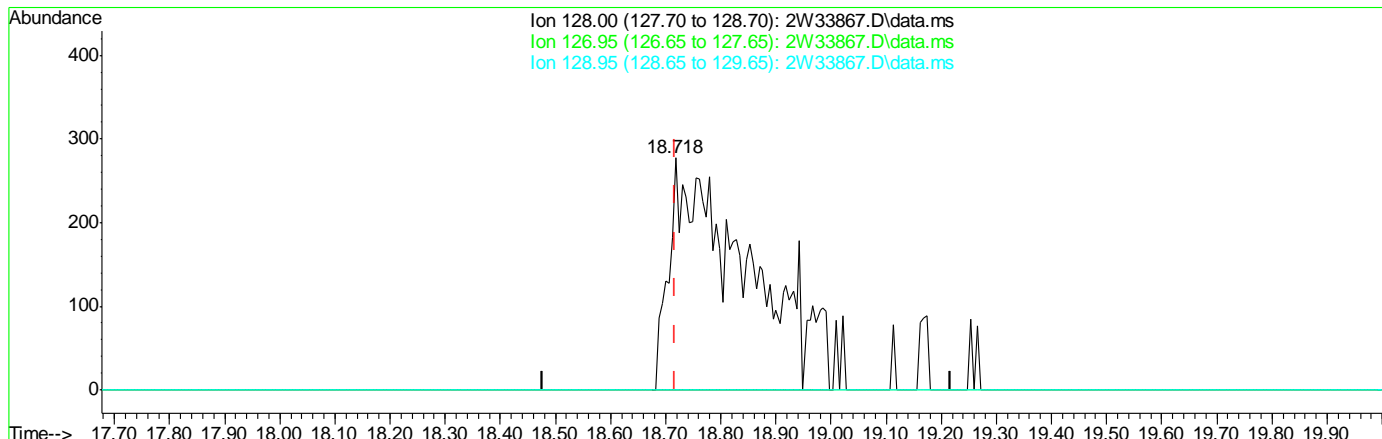
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 10:14:36 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.4.14

6



TIC: 2W33867.D\data.ms

(105) NAPHTHALENE

18.718min (-0.000) 0.32PPBV m

response 2765

Ion	Exp%	Act%
128.00	100	100
126.95	12.90	0.00
128.95	11.20	0.00
0.00	0.00	0.00

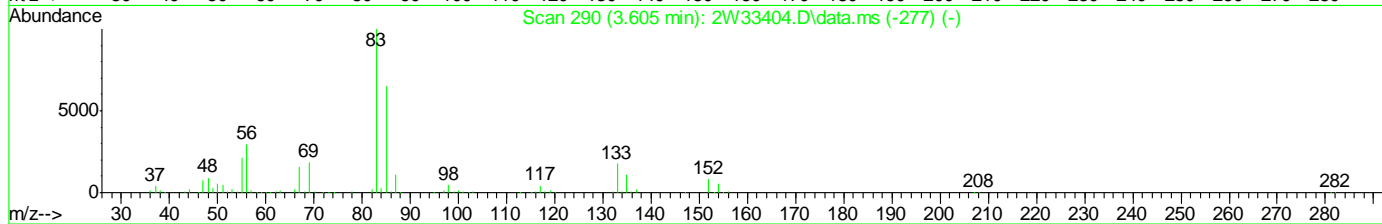
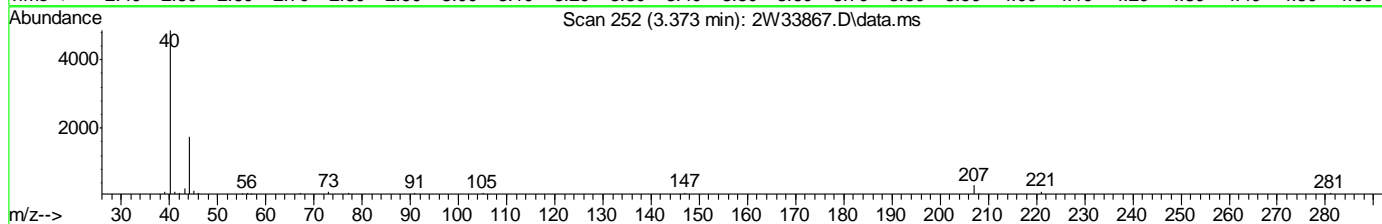
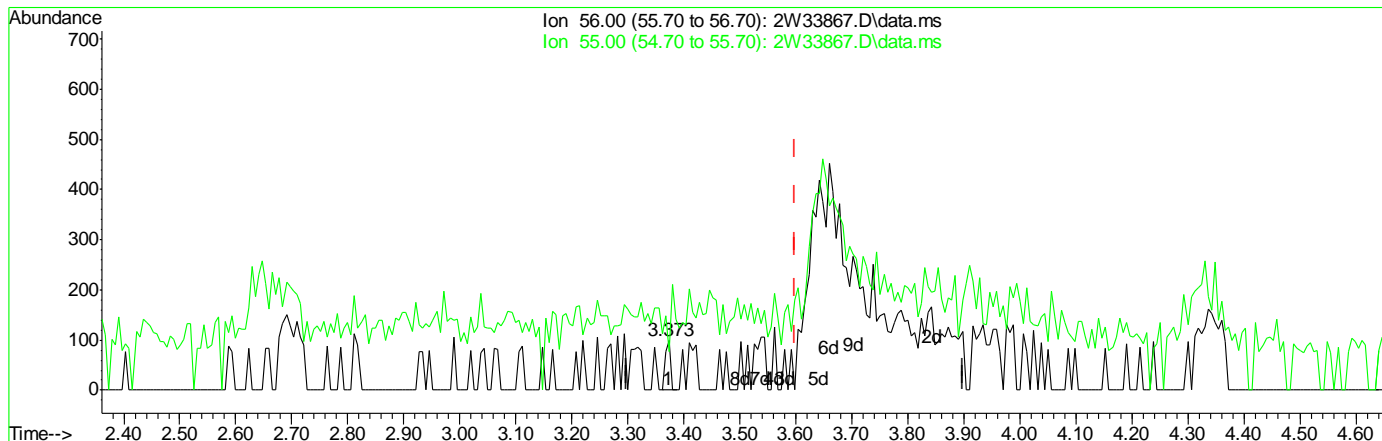
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.15

6



TIC: 2W33867.D\data.ms

(15) ACROLEIN

3.373min (-0.226) 0.02PPBV

response 64

Ion	Exp%	Act%
56.00	100	100
55.00	70.00	81.25
0.00	0.00	0.00
0.00	0.00	0.00

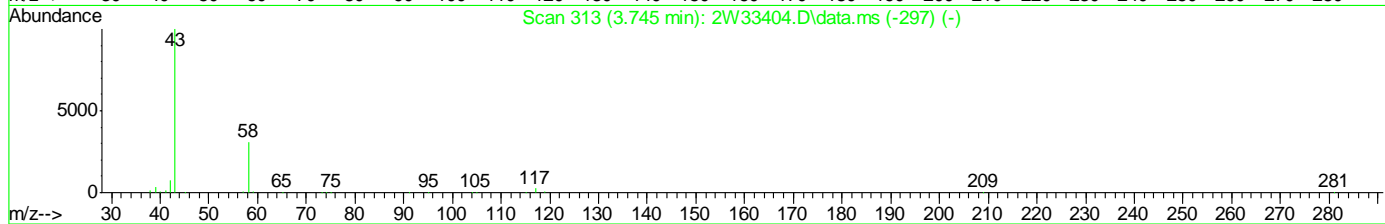
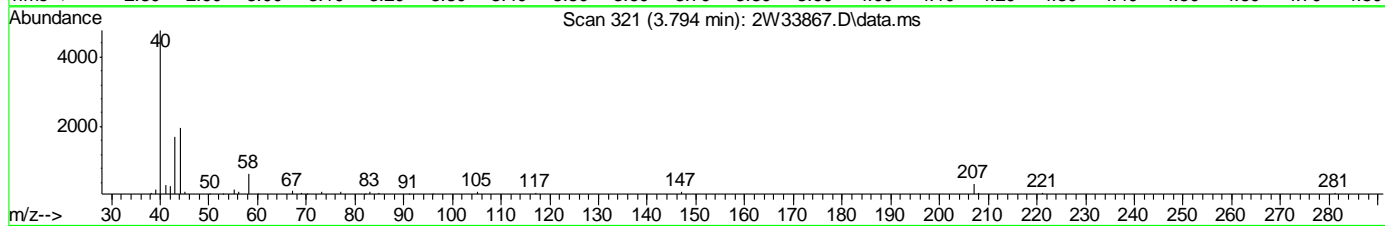
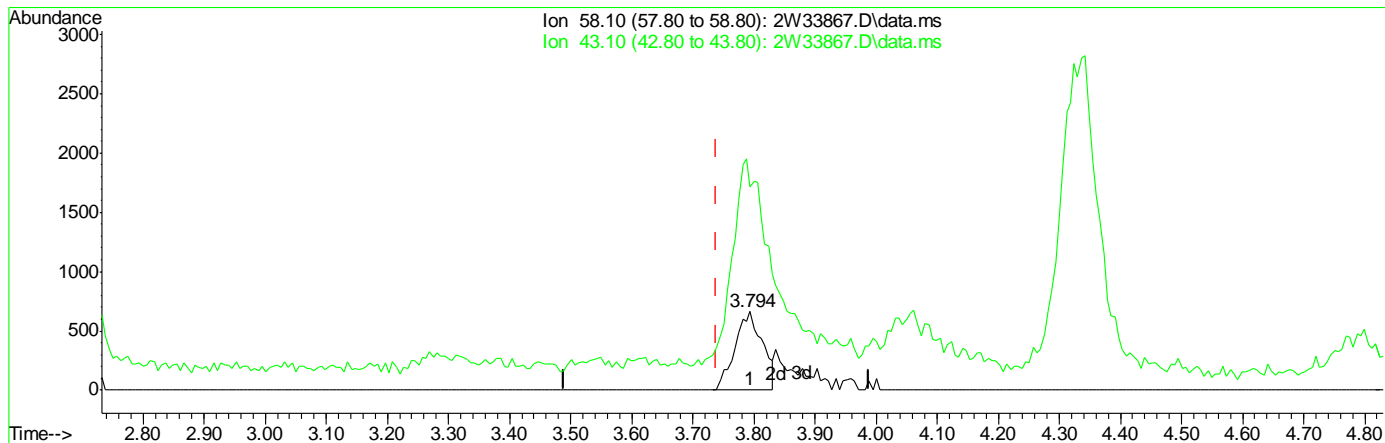
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.16

6



TIC: 2W33867.D\data.ms

(20) ACETONE
 3.794min (+0.055) 0.39PPBV
 response 2082

Ion	Exp%	Act%
58.10	100	100
43.10	282.10	388.23#
0.00	0.00	0.00
0.00	0.00	0.00

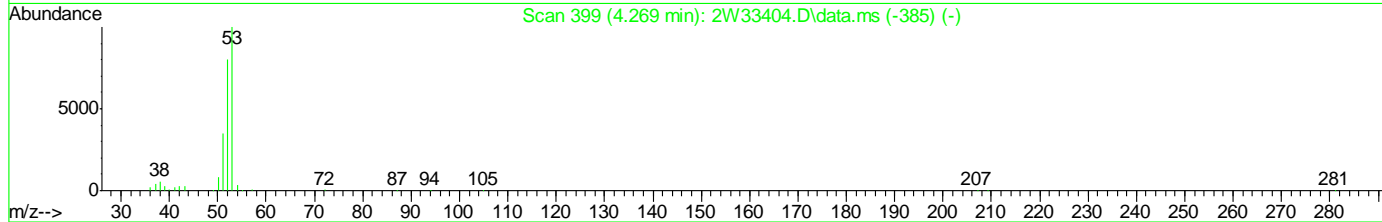
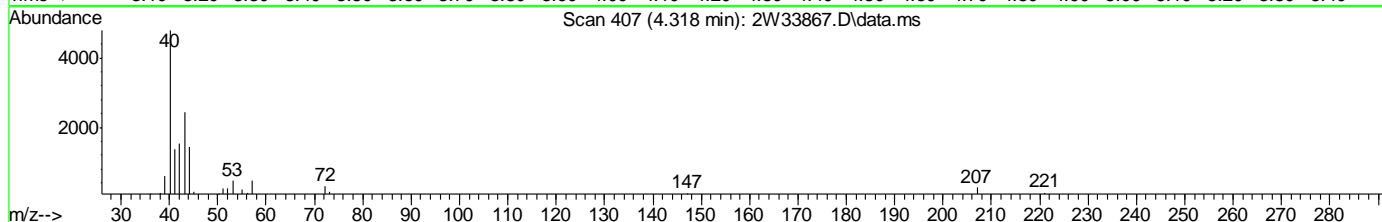
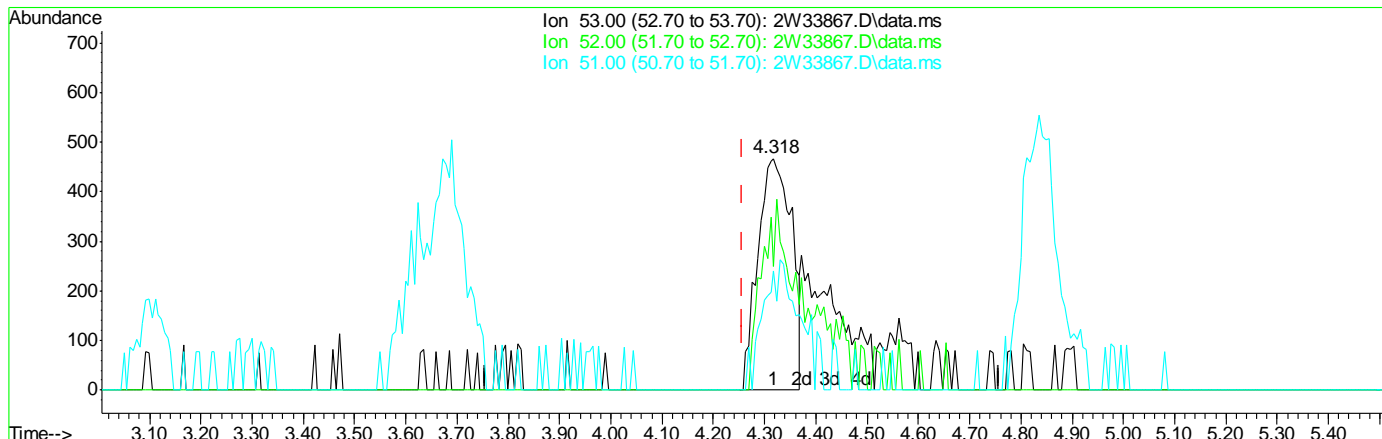
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.17

6



TIC: 2W33867.D\data.ms

(22) ACRYLONITRILE

4.318min (+0.061) 0.29PPBV

response 2123

Ion	Exp%	Act%
53.00	100	100
52.00	80.20	28.03#
51.00	34.30	57.75#
0.00	0.00	0.00

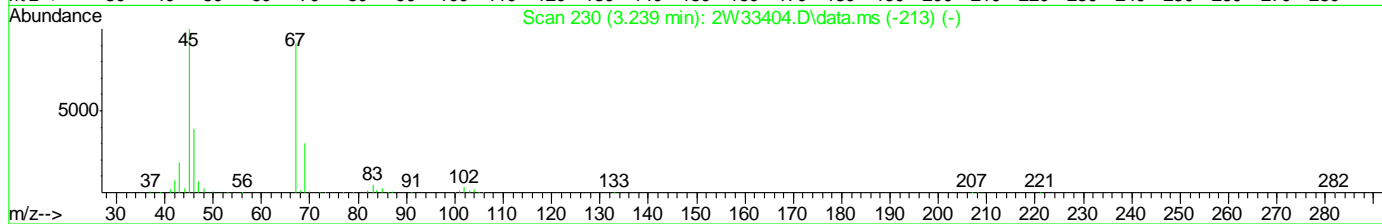
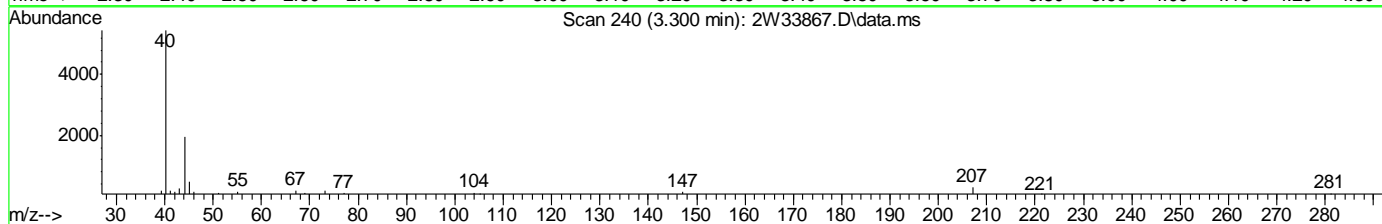
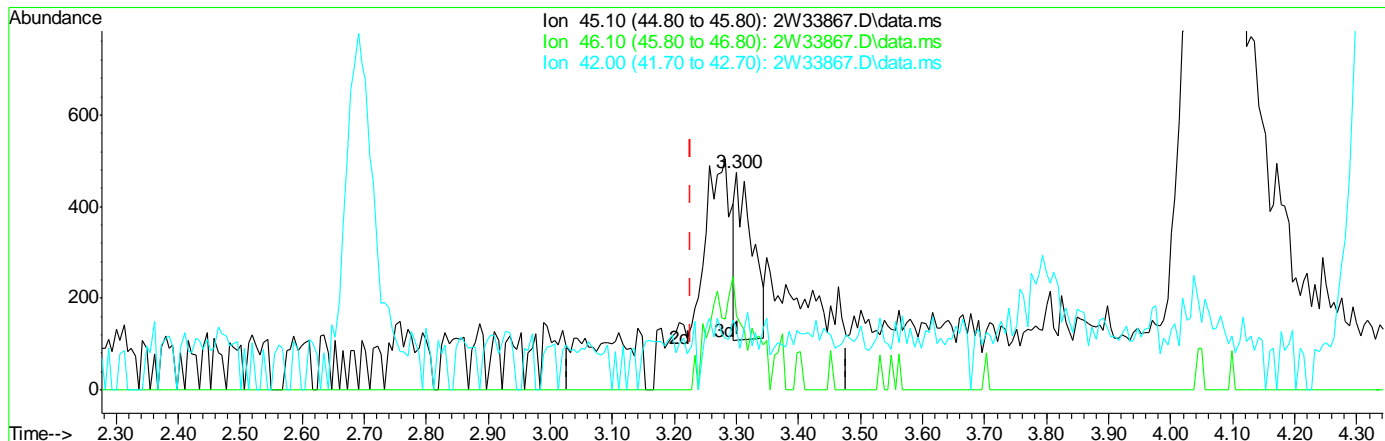
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.18

6



TIC: 2W33867.D\data.ms

(27) ETHANOL

3.300min (+0.073) 0.16PPBV

response 687

Ion	Exp%	Act%
45.10	100	100
46.10	41.90	51.82
42.00	5.50	8.30
0.00	0.00	0.00

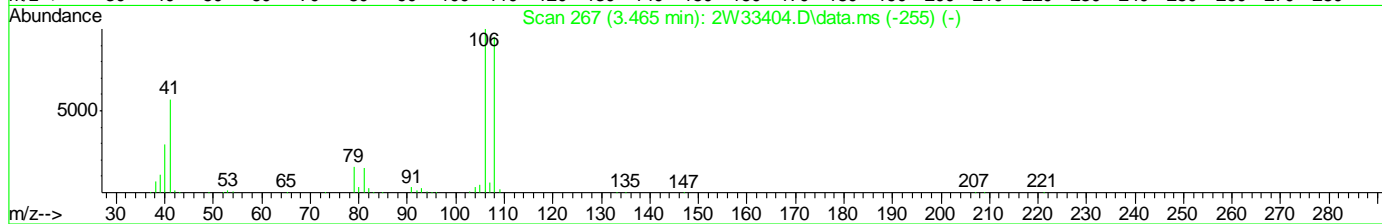
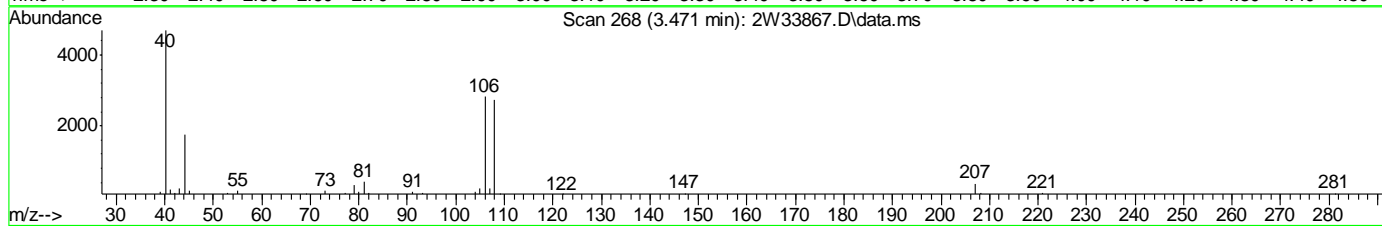
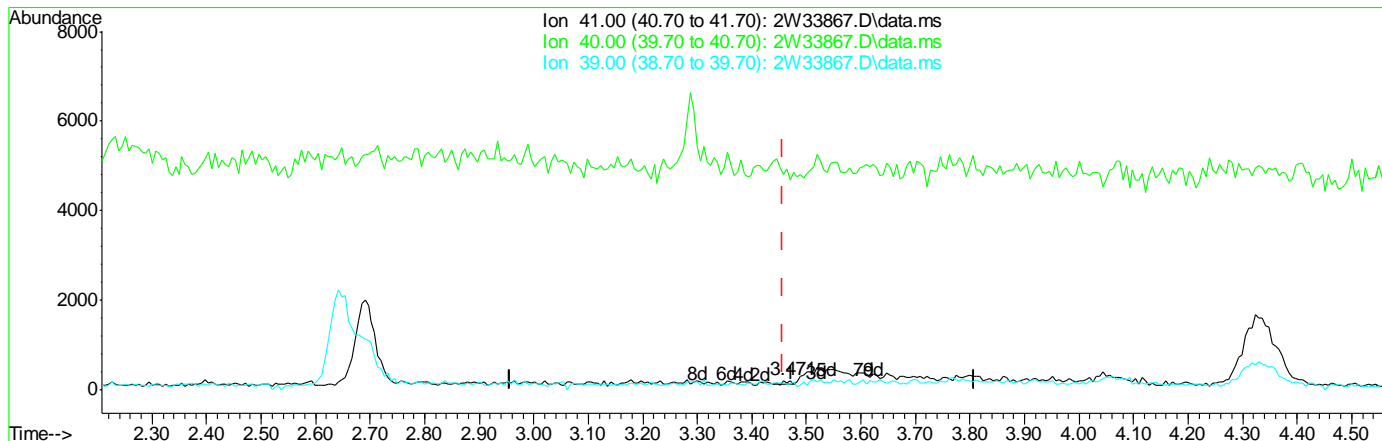
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.19

6



TIC: 2W33867.D\data.ms

(29) ACETONITRILE
 3.471min (+0.013) 0.01PPBV
 response 61

Ion	Exp%	Act%
41.00	100	100
40.00	65.70	245.90#
39.00	20.10	300.00#
0.00	0.00	0.00

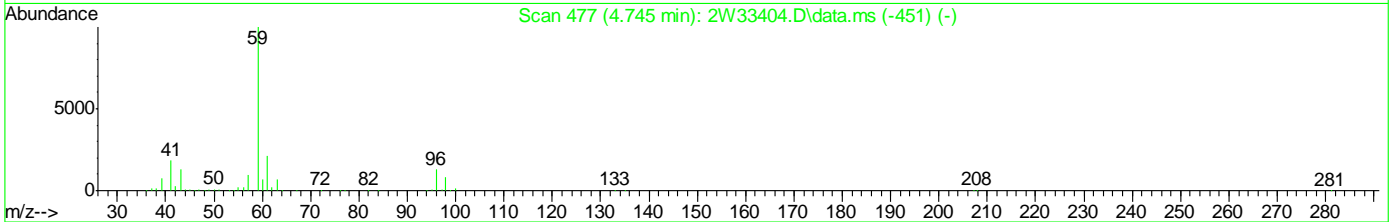
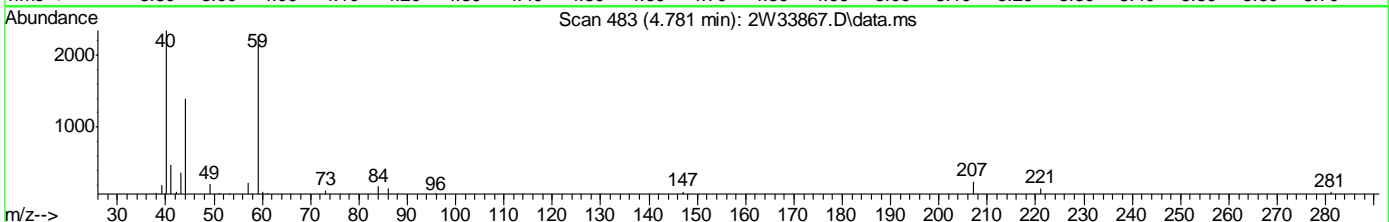
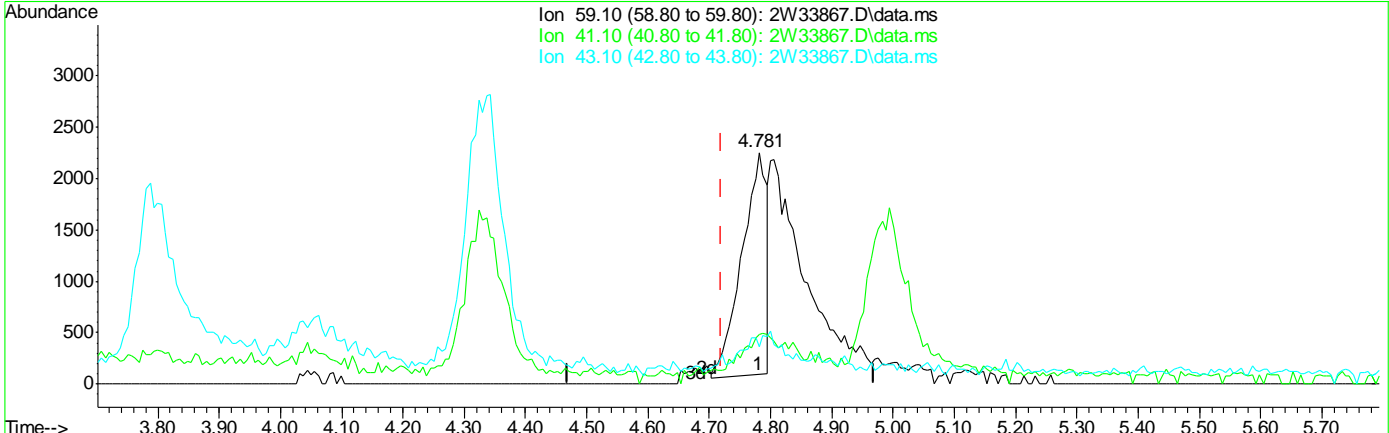
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.20

6



TIC: 2W33867.D\data.ms

(34) TERTIARY BUTYL ALCOHOL
 4.781min (+0.061) 0.18PPBV
 response 5984

Ion	Exp%	Act%
59.10	100	100
41.10	18.50	22.39
43.10	11.60	10.58
0.00	0.00	0.00

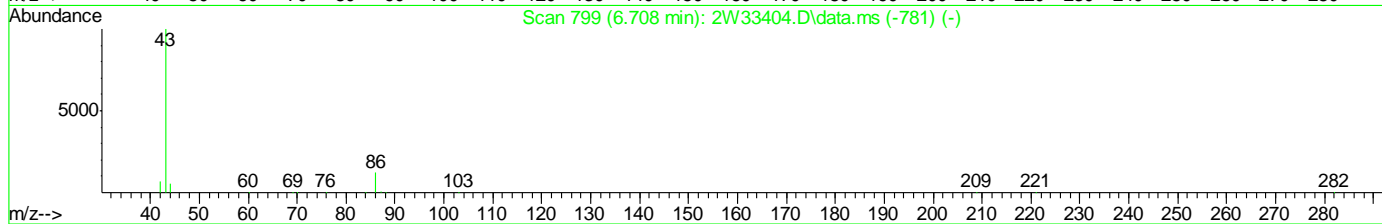
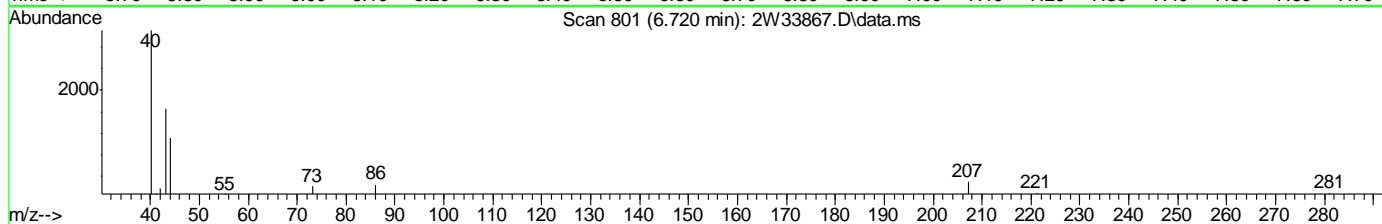
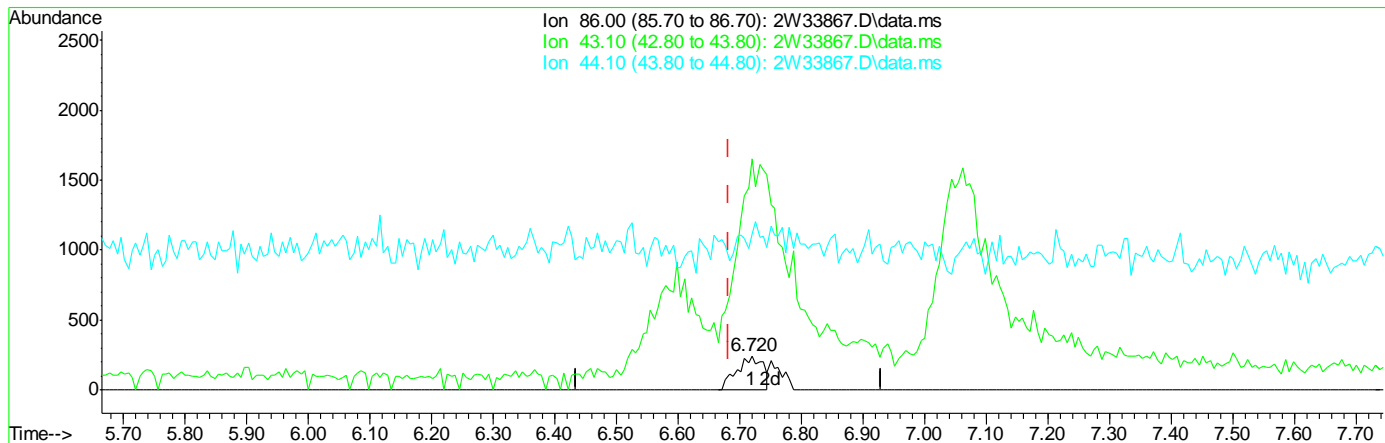
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.21

6



TIC: 2W33867.D\data.ms

(38) VINYL ACETATE

6.720min (+0.037) 0.24PPBV

response 710

Ion	Exp%	Act%
86.00	100	100
43.10	1215.50	458.87#
44.10	48.40	35.21
0.00	0.00	0.00

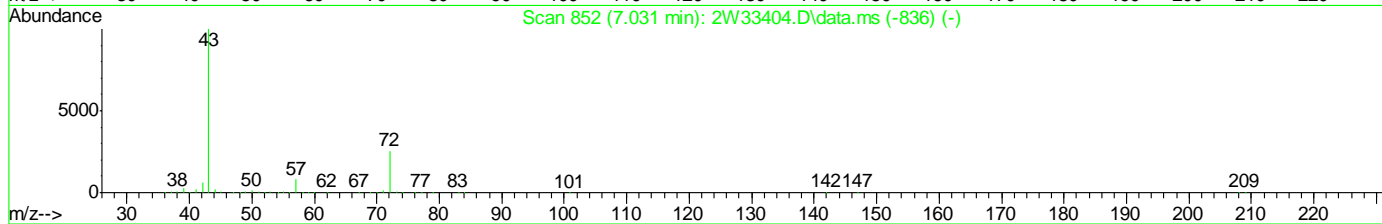
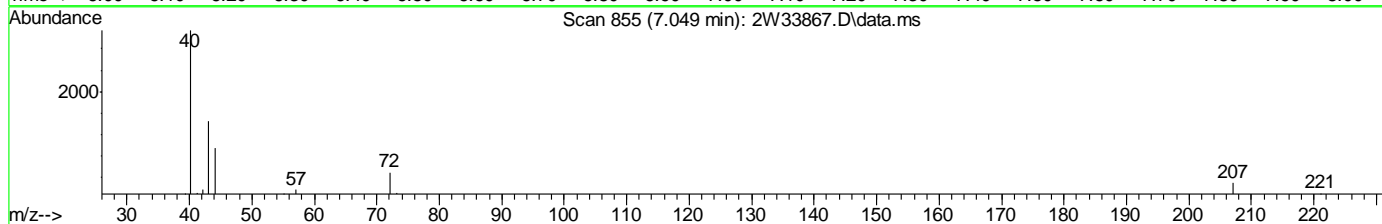
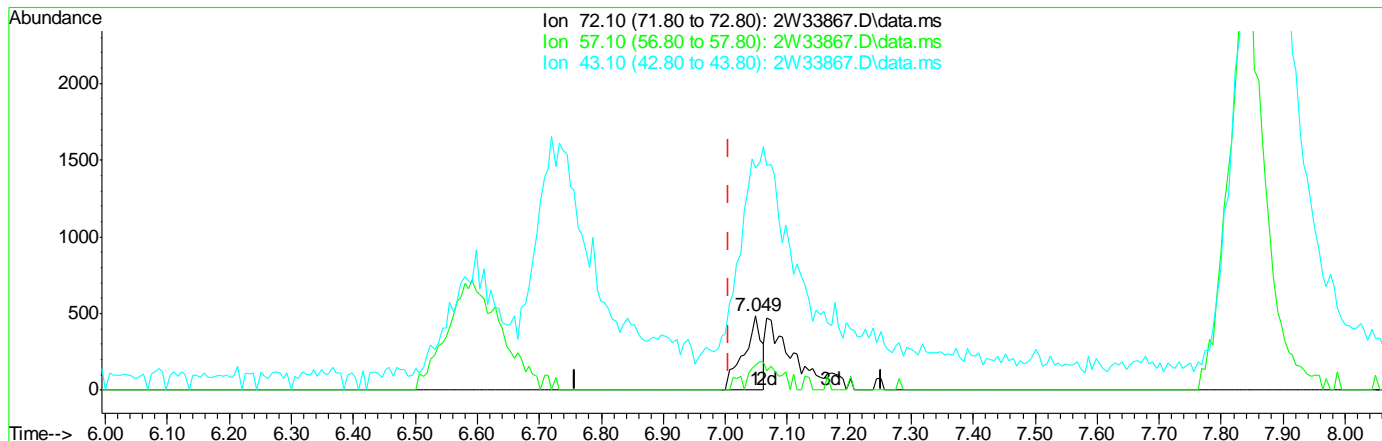
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.22

6



TIC: 2W33867.D\data.ms

(40) METHYL ETHYL KETONE

7.049min (+0.043) 0.18PPBV

response 968

Ion	Exp%	Act%
72.10	100	100
57.10	31.40	33.95
43.10	397.60	299.79#
0.00	0.00	0.00

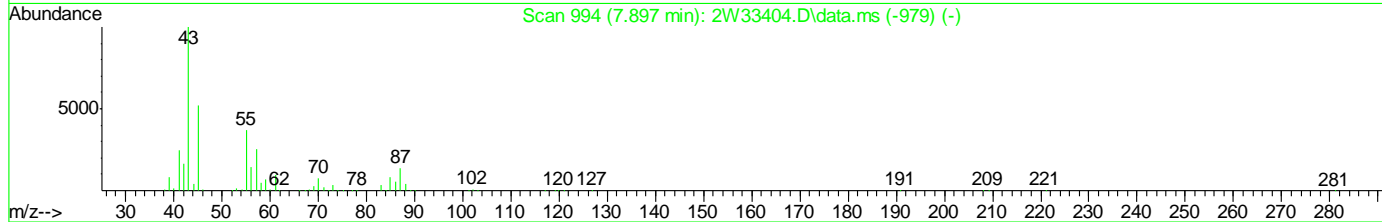
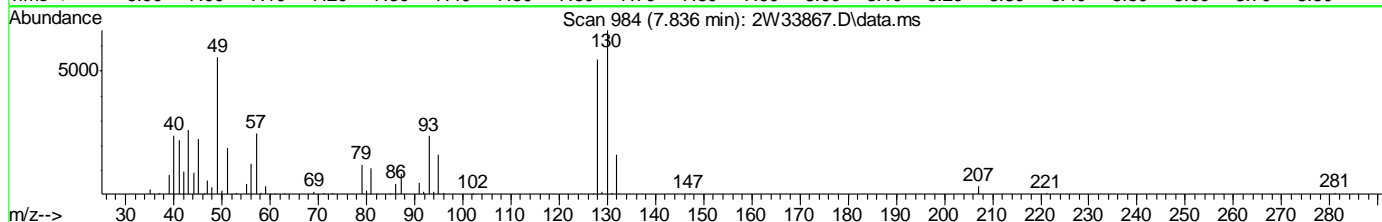
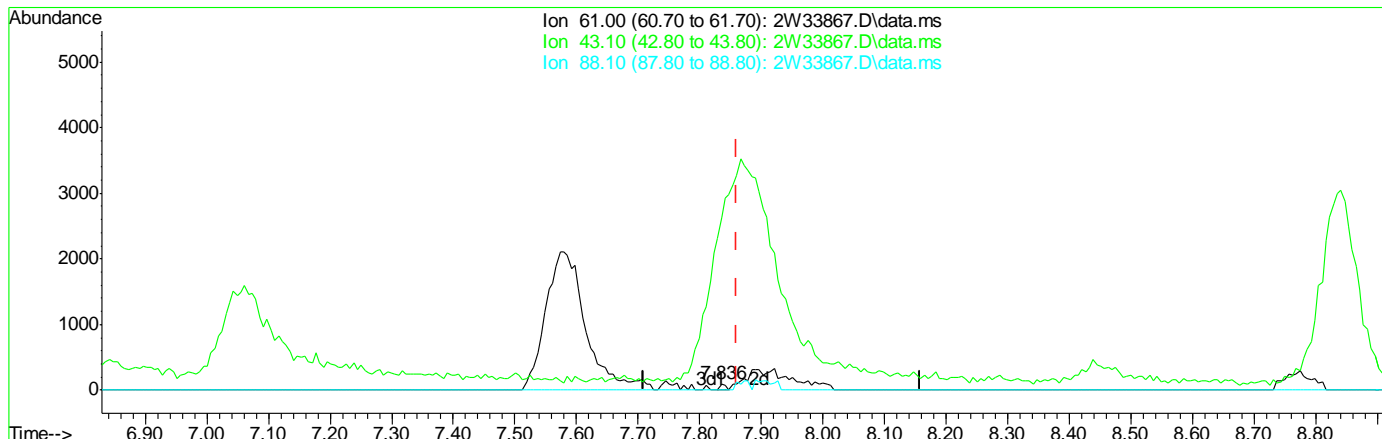
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.23

6



TIC: 2W33867.D\data.ms

(42) ETHYL ACETATE
 7.836min (-0.024) 0.02PPBV
 response 63

Ion	Exp%	Act%
61.00	100	100
43.10	1502.40	0.00#
88.10	46.70	0.00#
0.00	0.00	0.00

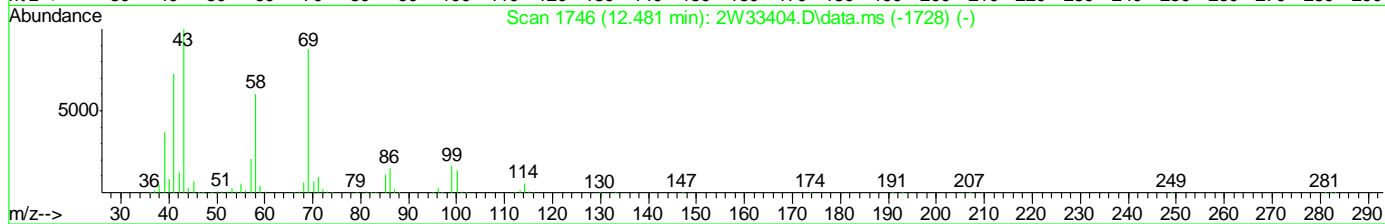
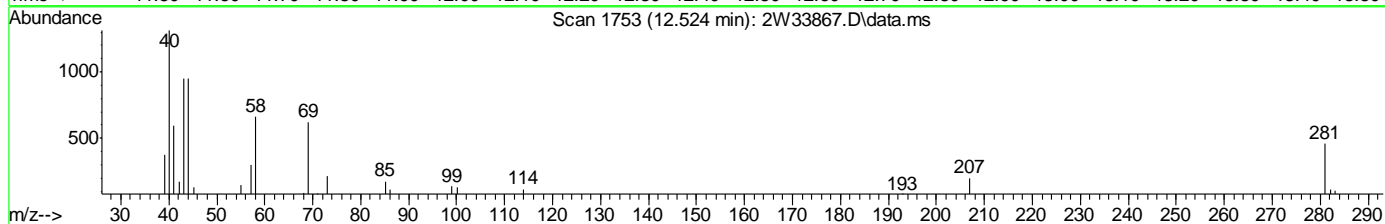
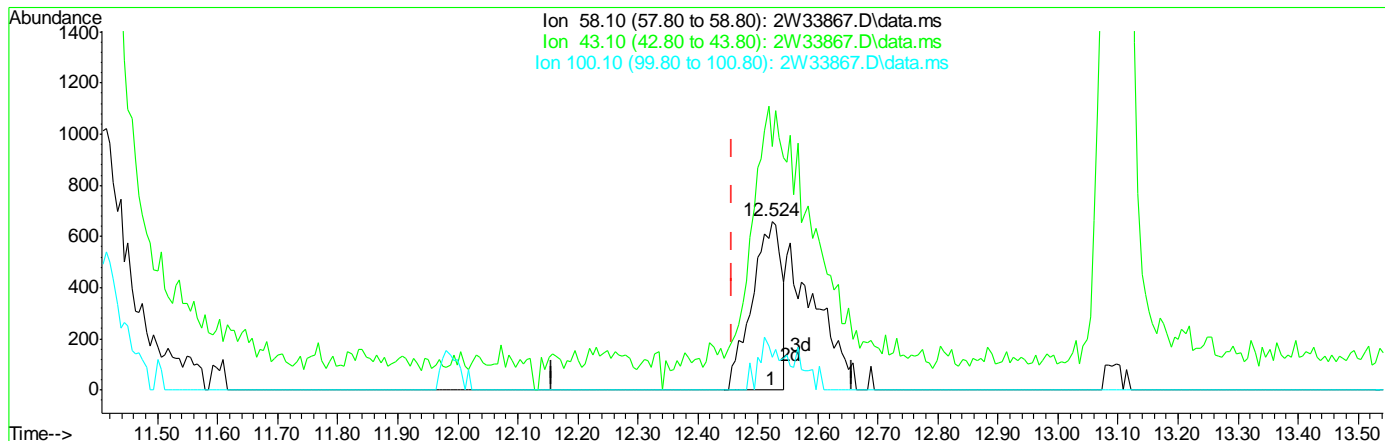
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.24

6



TIC: 2W33867.D\data.ms

(69) 2-HEXANONE
 12.524min (+0.067) 0.23PPBV
 response 2212

Ion	Exp%	Act%
58.10	100	100
43.10	170.30	268.81#
100.10	21.40	25.95
0.00	0.00	0.00

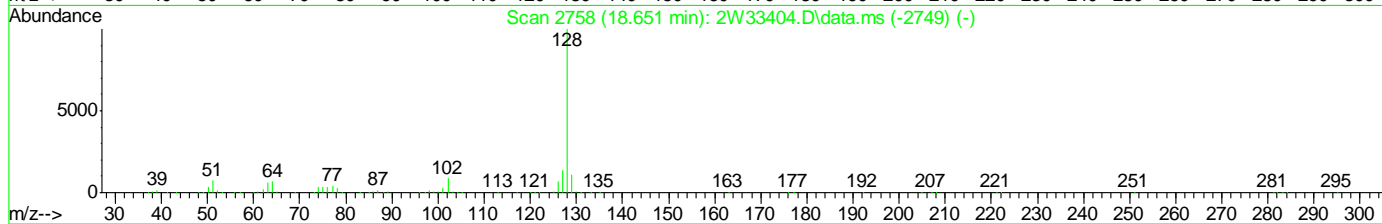
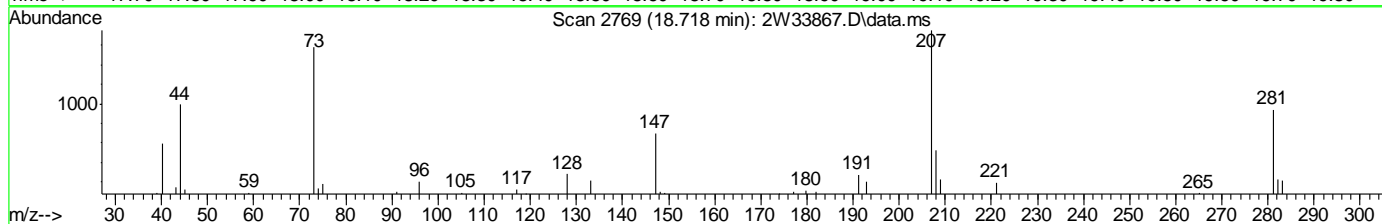
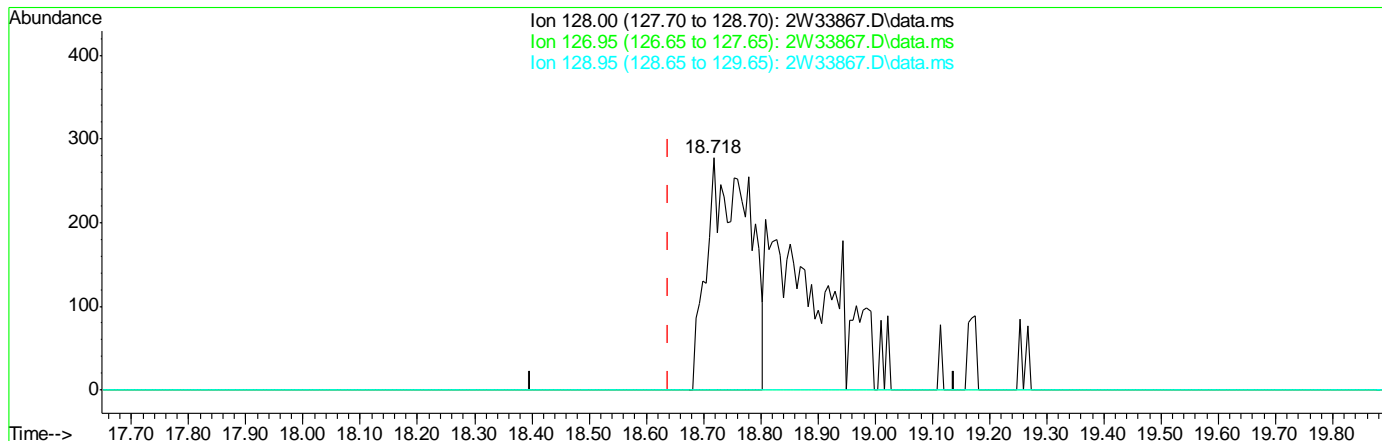
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33867.D
 Acq On : 16 Jan 2012 9:12 pm
 Operator : YOUMINH
 Sample : IC1426-0.5
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 17 14:06:01 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.4.25

6



TIC: 2W33867.D\data.ms

(105) NAPHTHALENE

18.718min (+0.079) 0.17PPBV

response 1391

Ion	Exp%	Act%
128.00	100	100
126.95	12.90	0.00
128.95	11.20	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33868.D
 Acq On : 16 Jan 2012 9:52 pm
 Operator : YOUMINH
 Sample : IC1426-20
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:02 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) BROMOCHLOROMETHANE	7.781	128	131019	10.00	PPBV	#	0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	569834	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	13.847	82	317437	10.00	PPBV	#	0.00
104) CHLOROBENZENE-D5(A)	13.847	82	319378	10.00	PPBV	#	0.00
System Monitoring Compounds							
83) 4-BROMOFLUOROBENZENE	15.261	95	400678	10.52	PPBV		0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=		105.20%
Target Compounds							
						Qvalue	
3) DICHLORODIFLUOROMETHANE	2.105	85	1205961	18.95	PPBV		99
4) FREON 152A	1.953	65	237363	19.05	PPBV		92
5) CHLORODIFLUOROMETHANE	1.995	67	112409	18.56	PPBV		97
6) PROPYLENE	2.032	41	231434	18.93	PPBV		93
7) FREON 114	2.373	85	1204972	19.48	PPBV		87
8) CHLOROMETHANE	2.276	52	93149	19.65	PPBV		90
9) VINYL CHLORIDE	2.501	62	380599	19.63	PPBV		99
10) 1,3-BUTADIENE	2.635	54	256305	18.85	PPBV	#	84
11) n-BUTANE	2.690	43	465618	18.37	PPBV		97
12) BROMOMETHANE	2.922	94	393875	18.76	PPBV		99
13) CHLOROETHANE	3.099	64	186419	18.77	PPBV		98
14) DICHLOROFLUOROMETHANE	3.190	67	772541	18.94	PPBV		99
15) ACROLEIN	3.593	56	96352	21.30	PPBV		98
16) FREON 123	3.623	83	855229	19.34	PPBV	#	96
17) FREON 123A	3.690	117	572062	19.22	PPBV	#	71
18) TRICHLOROFLUOROMETHANE	3.928	101	1184722	18.93	PPBV		99
19) ISOPROPYL ALCOHOL	4.001	45	456309	19.74	PPBV		94
20) ACETONE	3.733	58	112397	20.48	PPBV	#	82
21) PENTANE	4.330	42	258583	20.49	PPBV		83
22) ACRYLONITRILE	4.257	53	176456	22.17	PPBV		96
23) TVHC as EQUIV PENTANE	4.508	TIC	1389446m	20.06	PPBV		
24) IODOMETHANE	4.586	142	1097526	19.29	PPBV		96
25) 1,1-DICHLOROETHYLENE	4.678	96	378154	19.51	PPBV		90
26) CARBON DISULFIDE	5.220	76	812090	19.62	PPBV		96
27) ETHANOL	3.221	45	94090	21.14	PPBV		93
28) BROMOETHENE	3.471	106	394187	19.15	PPBV		98
29) ACETONITRILE	3.452	41	142824	21.51	PPBV	#	85
30) METHYLENE CHLORIDE	4.830	84	301153	19.84	PPBV		86
31) 3-CHLOROPROPENE	4.983	76	159518	19.93	PPBV	#	75
32) FREON 113	5.178	151	747190	19.31	PPBV	#	84
33) TRANS-1,2-DICHLOROETHY...	6.165	96	340812	19.52	PPBV		90
34) TERTIARY BUTYL ALCOHOL	4.726	59	707077	19.76	PPBV		96
35) METHYL TERTIARY BUTYL ...	6.549	73	917792	20.48	PPBV		91
36) TETRAHYDROFURAN	8.396	72	139264	22.17	PPBV	#	75
37) HEXANE	7.842	57	470224	21.30	PPBV		99
38) VINYL ACETATE	6.689	86	80307	22.83	PPBV	#	14
39) 1,1-DICHLOROETHANE	6.458	63	611861	20.09	PPBV		98
40) METHYL ETHYL KETONE	7.013	72	129289	21.13	PPBV	#	73
41) cis-1,2-DICHLOROETHYLENE	7.580	96	382638	20.40	PPBV		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33868.D
 Acq On : 16 Jan 2012 9:52 pm
 Operator : YOUMINH
 Sample : IC1426-20
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:02 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) ETHYL ACETATE	7.866	61	73503	23.06	PPBV	98
43) METHYL ACRYLATE	7.848	55	459911	23.56	PPBV #	94
44) CHLOROFORM	7.939	83	796351	20.12	PPBV	99
45) 2,4-DIMETHYLPENTANE	8.842	57	584855	21.68	PPBV #	94
46) 1,1,1-TRICHLOROETHANE	9.043	97	919089	19.68	PPBV	96
47) CARBON TETRACHLORIDE	9.671	117	1029454	19.33	PPBV	100
48) 1,2-DICHLOROETHANE	8.768	62	492751	20.41	PPBV	99
50) BENZENE	9.518	78	1067605	20.77	PPBV	98
51) CYCLOHEXANE	9.793	84	493892	19.99	PPBV #	80
52) 2,3-DIMETHYLPENTANE	10.030	71	241194	20.49	PPBV	87
53) DIBROMOMETHANE	10.305	174	513002	20.47	PPBV	91
54) TRICHLOROETHYLENE	10.555	95	504693	20.46	PPBV	93
55) 1,2-DICHLOROPROPANE	10.323	63	363536	21.54	PPBV	87
56) ETHYL ACRYLATE	10.317	55	541482	22.33	PPBV #	94
57) BROMODICHLOROMETHANE	10.518	83	882626	20.12	PPBV	98
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	1616759	20.61	PPBV	96
59) 1,4-DIOXANE	10.555	88	221974	20.46	PPBV #	1
60) METHYL METHACRYLATE	10.731	69	299645	21.23	PPBV #	90
61) HEPTANE	10.823	43	504310	20.92	PPBV	85
62) TVHC as EQUIV HEPTANE	10.823	TIC	2579024m	20.12	PPBV	
63) METHYL ISOBUTYL KETONE	11.378	58	227710	20.35	PPBV	87
64) cis-1,3-DICHLOROPROPENE	11.353	75	582641	20.75	PPBV	96
65) TOLUENE	12.249	92	777125	20.86	PPBV	99
66) trans-1,3-DICHLOROPROPENE	11.823	75	572506	21.26	PPBV	97
67) 1,1,2-TRICHLOROETHANE	11.993	83	361199	20.90	PPBV	93
69) 2-HEXANONE	12.457	58	305560	19.20	PPBV	94
70) ETHYL METHACRYLATE	12.457	69	488461	19.54	PPBV #	94
71) TETRACHLOROETHYLENE	13.274	164	607861	19.06	PPBV	96
72) DIBROMOCHLOROMETHANE	12.640	129	961302	19.04	PPBV	99
73) 1,2-DIBROMOETHANE	12.859	107	663481	19.33	PPBV	99
74) OCTANE	13.097	43	674349	19.51	PPBV #	80
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	686148	19.32	PPBV	99
76) CHLOROBENZENE	13.889	112	1026937	19.68	PPBV	94
77) ETHYLBENZENE	14.219	91	1567532	20.82	PPBV	99
78) m,p-XYLENE	14.377	106	1208789	41.83	PPBV	99
79) o-XYLENE	14.822	106	594598	21.39	PPBV	99
80) STYRENE	14.718	104	870357	21.28	PPBV	99
81) NONANE	14.981	43	669271	21.65	PPBV	88
82) BROMOFORM	14.481	173	899497	19.66	PPBV	99
84) 1,1,2,2-TETRACHLOROETHANE	14.816	83	739737	21.71	PPBV	97
85) ISOPROPYLBENZENE	15.377	105	1772749	21.28	PPBV	99
86) BROMOBENZENE	15.493	156	528168	20.66	PPBV #	82
87) 2-CHLOROTOLUENE	15.865	126	428770	21.35	PPBV #	70
88) n-PROPYLBENZENE	15.883	120	439239	22.32	PPBV	90
89) 4-ETHYLTOLUENE	16.017	105	1468087	22.56	PPBV	96
90) 1,3,5-TRIMETHYLBENZENE	16.090	105	1177925	22.55	PPBV	98
91) ALPHA-METHYLSTYRENE	16.243	118	548407	22.53	PPBV	98
92) TERT-BUTYLBENZENE	16.480	134	318845	21.83	PPBV	94
93) 1,2,4-TRIMETHYLBENZENE	16.480	105	1122453	22.15	PPBV	96
94) m-DICHLOROBENZENE	16.639	146	756530	22.40	PPBV	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33868.D
 Acq On : 16 Jan 2012 9:52 pm
 Operator : YOUMINH
 Sample : IC1426-20
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:02 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

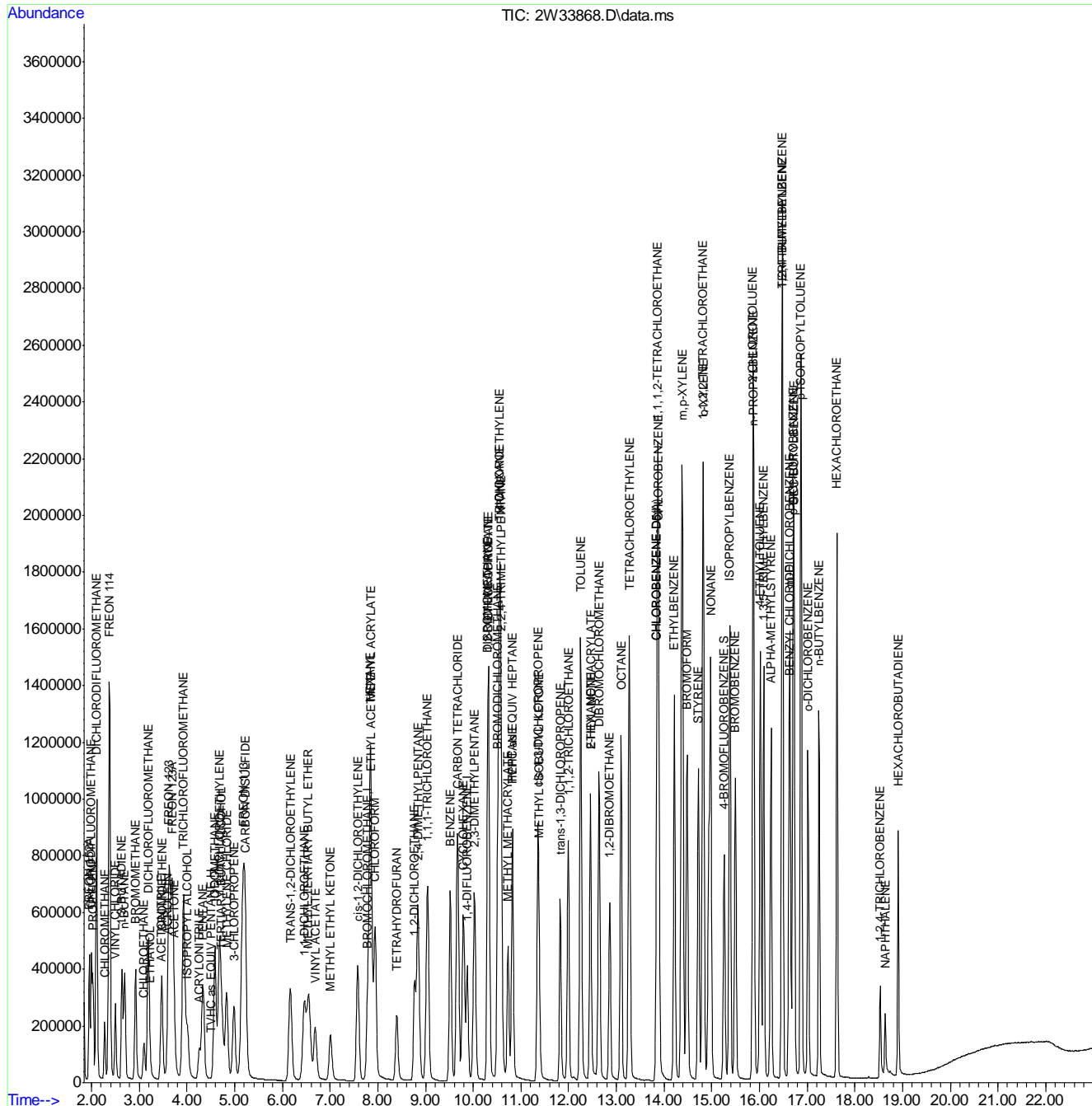
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) BENZYL CHLORIDE	16.620	91	849065	23.32	PPBV	98
96) p-DICHLOROBENZENE	16.706	146	696916	21.30	PPBV	99
97) SEC-BUTYLBENZENE	16.730	134	365416	21.74	PPBV	86
98) p-ISOPROPYLTOLUENE	16.864	134	344180	21.79	PPBV	94
99) o-DICHLOROBENZENE	17.023	146	645023	21.77	PPBV	98
100) n-BUTYLBENZENE	17.248	134	260846	22.52	PPBV	83
101) HEXACHLOROETHANE	17.626	201	489021	20.32	PPBV	82
102) HEXACHLOROBUTADIENE	18.907	225	221052	22.28	PPBV	99
103) 1,2,4-TRICHLOROBENZENE	18.535	180	162396	23.49	PPBV	91
105) NAPHTHALENE	18.638	128	283315	22.60	PPBV	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33868.D
 Acq On : 16 Jan 2012 9:52 pm
 Operator : YOUMINH
 Sample : IC1426-20
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:02 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-IC1426 **Method:** TO-15
Lab FileID: 2W33868.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/16/12 21:52 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.82	Poor instrument integration

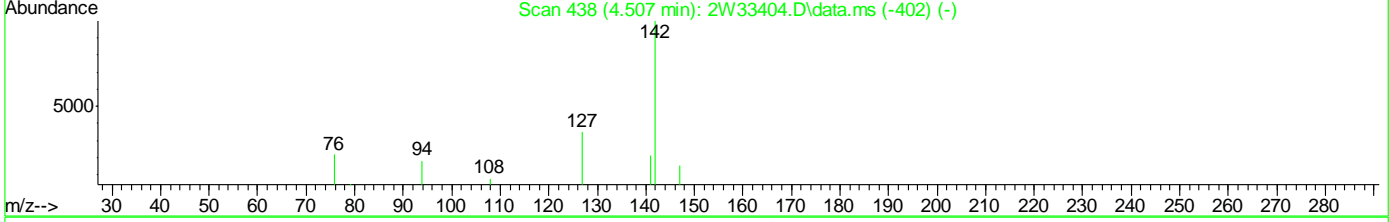
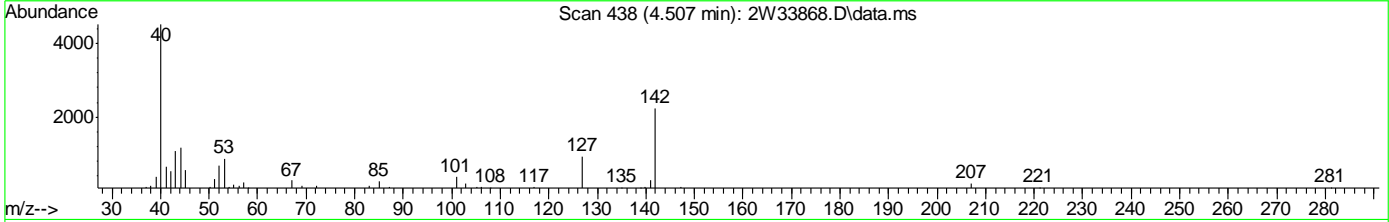
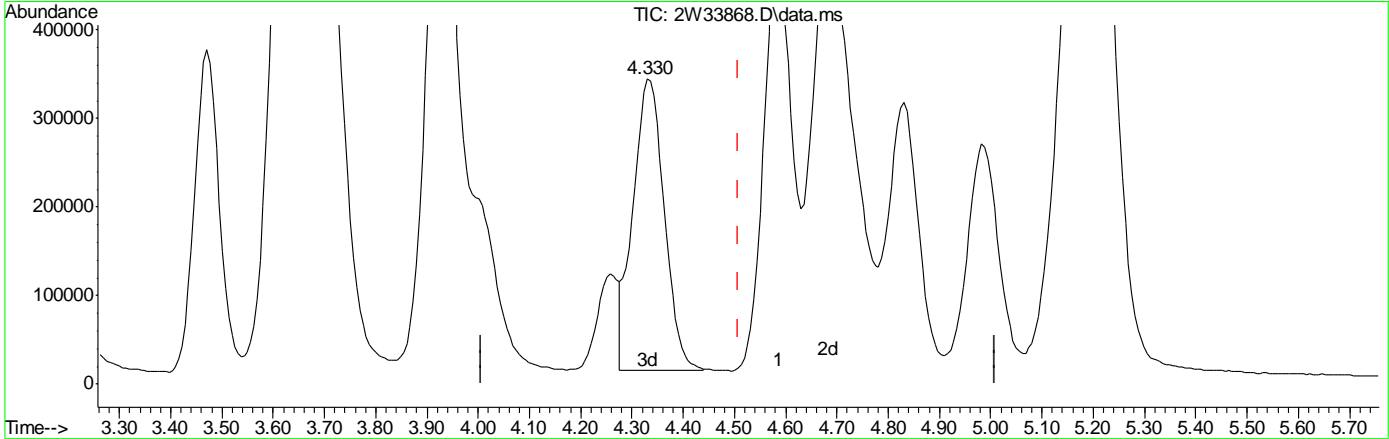
6.7.5.1

6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33868.D
 Acq On : 16 Jan 2012 9:52 pm
 Operator : YOUMINH
 Sample : IC1426-20
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:02 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



TIC: 2W33868.D\data.ms

(23) TVHC as EQUIV PENTANE (H)
 4.508min (0.000) 20.06PPBV m
 response 1389446

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

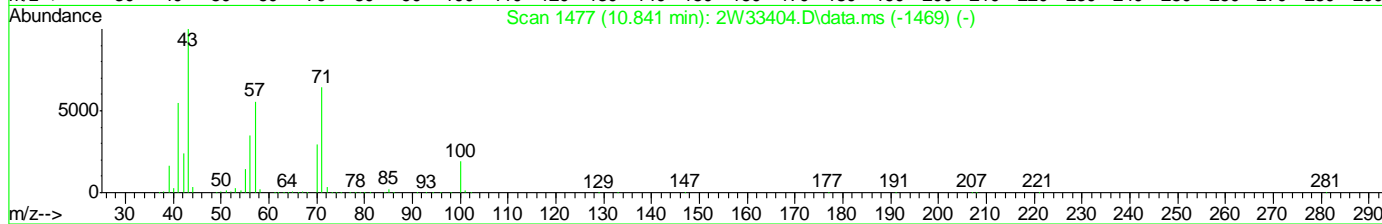
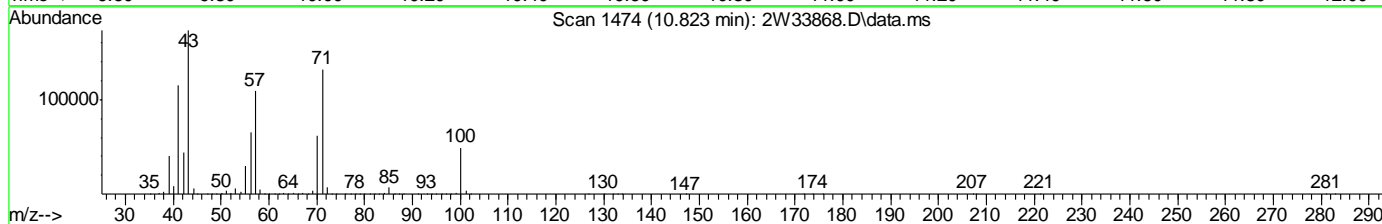
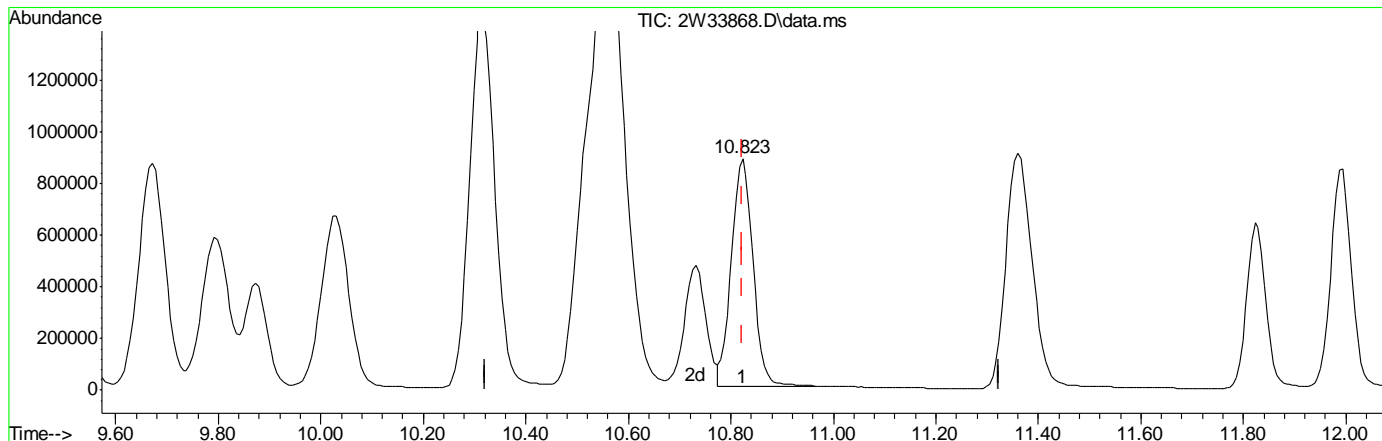
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33868.D
 Acq On : 16 Jan 2012 9:52 pm
 Operator : YOUMINH
 Sample : IC1426-20
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:02 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.5.3

6



(62) TVHC as EQUIV HEPTANE

10.823min (+0.000) 20.12PPBV m

response 2579024

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33869.D
 Acq On : 16 Jan 2012 10:31 pm
 Operator : YOUMINH
 Sample : IC1426-5.0
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:59 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.781	128	144184	10.00	PPBV	# 0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	601288	10.00	PPBV	0.00
68) CHLOROENZENE-D5	13.847	82	287009	10.00	PPBV	0.00
104) CHLOROENZENE-D5(A)	13.847	82	288952	10.00	PPBV	0.00
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.255	95	361609	10.50	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	105.00%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	353906	5.05	PPBV	99
4) FREON 152A	1.953	65	69849	5.09	PPBV	96
5) CHLORODIFLUOROMETHANE	2.001	67	32107	4.82	PPBV	97
6) PROPYLENE	2.032	41	73585	5.47	PPBV	94
7) FREON 114	2.373	85	367727	5.40	PPBV	88
8) CHLOROMETHANE	2.276	52	28954	5.55	PPBV	94
9) VINYL CHLORIDE	2.501	62	119941	5.62	PPBV	100
10) 1,3-BUTADIENE	2.641	54	76383	5.10	PPBV	# 85
11) n-BUTANE	2.690	43	145356	5.21	PPBV	# 96
12) BROMOMETHANE	2.922	94	124283	5.38	PPBV	98
13) CHLOROETHANE	3.099	64	57357	5.25	PPBV	98
14) DICHLOROFLUOROMETHANE	3.190	67	221579	4.94	PPBV	100
15) ACROLEIN	3.605	56	21375	4.29	PPBV	95
16) FREON 123	3.623	83	236492	4.86	PPBV	# 97
17) FREON 123A	3.690	117	150966	4.61	PPBV	# 73
18) TRICHLOROFLUOROMETHANE	3.928	101	340321	4.94	PPBV	99
19) ISOPROPYL ALCOHOL	4.007	45	121956	4.79	PPBV	95
20) ACETONE	3.745	58	25586	4.24	PPBV	93
21) PENTANE	4.330	42	78127	5.63	PPBV	86
22) ACRYLONITRILE	4.263	53	34303	3.92	PPBV	# 96
23) TVHC as EQUIV PENTANE	4.508	TIC	388770m	5.10	PPBV	
24) IODOMETHANE	4.580	142	313368	5.01	PPBV	100
25) 1,1-DICHLOROETHYLENE	4.678	96	108465	5.08	PPBV	88
26) CARBON DISULFIDE	5.220	76	243125	5.34	PPBV	97
27) ETHANOL	3.245	45	26214	5.35	PPBV	94
28) BROMOETHENE	3.471	106	121420	5.36	PPBV	99
29) ACETONITRILE	3.477	41	29306	4.01	PPBV	# 80
30) METHYLENE CHLORIDE	4.830	84	82138	4.92	PPBV	85
31) 3-CHLOROPROPENE	4.982	76	42165	4.79	PPBV	# 75
32) FREON 113	5.178	151	200053	4.70	PPBV	# 84
33) TRANS-1,2-DICHLOROETHY...	6.159	96	88031	4.58	PPBV	89
34) TERTIARY BUTYL ALCOHOL	4.733	59	186354	4.73	PPBV	85
35) METHYL TERTIARY BUTYL ...	6.549	73	198710	4.03	PPBV	91
36) TETRAHYDROFURAN	8.403	72	30156	4.36	PPBV	# 74
37) HEXANE	7.836	57	122161	5.03	PPBV	97
38) VINYL ACETATE	6.689	86	15027	3.88	PPBV	# 10
39) 1,1-DICHLOROETHANE	6.452	63	157847	4.71	PPBV	98
40) METHYL ETHYL KETONE	7.013	72	27931	4.15	PPBV	# 71
41) cis-1,2-DICHLOROETHYLENE	7.580	96	97168	4.71	PPBV	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33869.D
 Acq On : 16 Jan 2012 10:31 pm
 Operator : YOUMINH
 Sample : IC1426-5.0
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:59 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) ETHYL ACETATE	7.872	61	16167	4.61	PPBV	99
43) METHYL ACRYLATE	7.848	55	89395	4.16	PPBV	97
44) CHLOROFORM	7.933	83	200894	4.61	PPBV	98
45) 2,4-DIMETHYLPENTANE	8.835	57	147366	4.96	PPBV #	95
46) 1,1,1-TRICHLOROETHANE	9.037	97	226477	4.41	PPBV	96
47) CARBON TETRACHLORIDE	9.665	117	254490	4.34	PPBV	99
48) 1,2-DICHLOROETHANE	8.762	62	112386	4.23	PPBV	99
50) BENZENE	9.518	78	258421	4.76	PPBV	98
51) CYCLOHEXANE	9.793	84	128417	4.93	PPBV #	82
52) 2,3-DIMETHYLPENTANE	10.024	71	61466	4.95	PPBV #	86
53) DIBROMOMETHANE	10.299	174	123047	4.65	PPBV	91
54) TRICHLOROETHYLENE	10.548	95	122188	4.69	PPBV	92
55) 1,2-DICHLOROPROPANE	10.323	63	84023	4.72	PPBV	90
56) ETHYL ACRYLATE	10.323	55	107212	4.19	PPBV #	94
57) BROMODICHLOROMETHANE	10.512	83	215770	4.66	PPBV	98
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	400748	4.84	PPBV	96
59) 1,4-DIOXANE	10.567	88	51730	4.52	PPBV #	45
60) METHYL METHACRYLATE	10.731	69	65343	4.39	PPBV	86
61) HEPTANE	10.817	43	123050	4.84	PPBV	86
62) TVHC as EQUIV HEPTANE	10.823	TIC	619690m	4.58	PPBV	
63) METHYL ISOBUTYL KETONE	11.384	58	50951	4.31	PPBV	88
64) cis-1,3-DICHLOROPROPENE	11.347	75	129454	4.37	PPBV	97
65) TOLUENE	12.243	92	161031	4.10	PPBV	99
66) trans-1,3-DICHLOROPROPENE	11.823	75	114978	4.05	PPBV	97
67) 1,1,2-TRICHLOROETHANE	11.987	83	78944	4.33	PPBV	95
69) 2-HEXANONE	12.463	58	60308	4.19	PPBV	95
70) ETHYL METHACRYLATE	12.457	69	102832	4.55	PPBV #	94
71) TETRACHLOROETHYLENE	13.267	164	143558	4.98	PPBV	96
72) DIBROMOCHLOROMETHANE	12.633	129	215106	4.71	PPBV	99
73) 1,2-DIBROMOETHANE	12.859	107	141469	4.56	PPBV	99
74) OCTANE	13.097	43	157573	5.04	PPBV #	79
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	143065	4.45	PPBV	99
76) CHLOROBENZENE	13.883	112	212808	4.51	PPBV	96
77) ETHYLBENZENE	14.212	91	286304	4.21	PPBV	98
78) m,p-XYLENE	14.377	106	216714	8.29	PPBV	96
79) o-XYLENE	14.822	106	105064	4.18	PPBV	98
80) STYRENE	14.718	104	149195	4.03	PPBV	100
81) NONANE	14.981	43	130759	4.68	PPBV	88
82) BROMOFORM	14.481	173	182790	4.42	PPBV	100
84) 1,1,2,2-TETRACHLOROETHANE	14.810	83	134954	4.38	PPBV	97
85) ISOPROPYLBENZENE	15.377	105	311873	4.14	PPBV	100
86) BROMOBENZENE	15.493	156	96980	4.20	PPBV #	83
87) 2-CHLOROTOLUENE	15.865	126	75293	4.15	PPBV #	67
88) n-PROPYLBENZENE	15.883	120	73515	4.13	PPBV	96
89) 4-ETHYLTOLUENE	16.017	105	244835	4.16	PPBV	96
90) 1,3,5-TRIMETHYLBENZENE	16.090	105	201644	4.27	PPBV	98
91) ALPHA-METHYLSTYRENE	16.236	118	87769	3.99	PPBV	98
92) TERT-BUTYLBENZENE	16.474	134	54725	4.14	PPBV	96
93) 1,2,4-TRIMETHYLBENZENE	16.480	105	185748	4.05	PPBV	92
94) m-DICHLOROBENZENE	16.639	146	115730	3.79	PPBV	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33869.D
 Acq On : 16 Jan 2012 10:31 pm
 Operator : YOUMINH
 Sample : IC1426-5.0
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:59 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

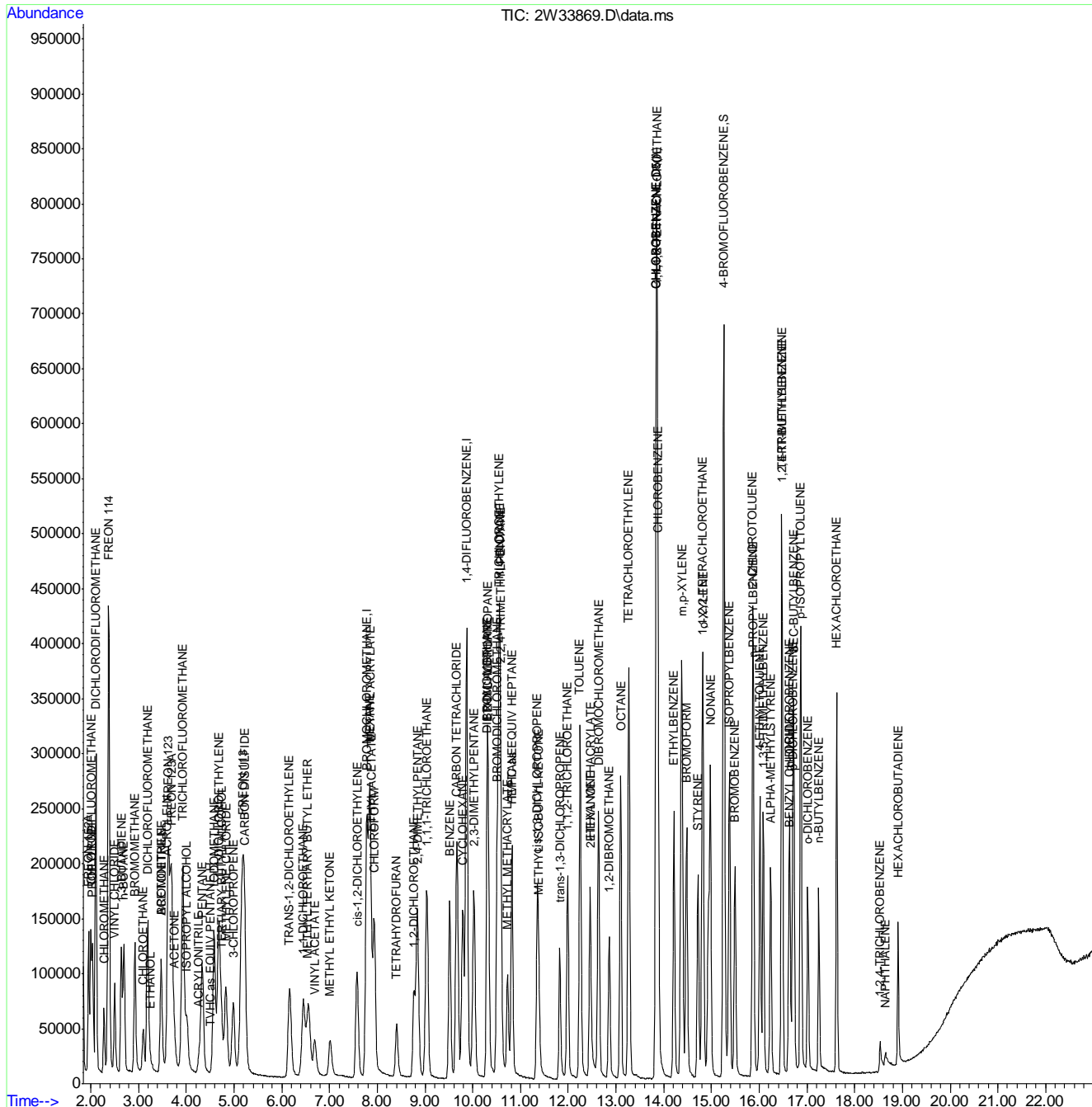
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) BENZYL CHLORIDE	16.620	91	120127	3.65	PPBV	97
96) p-DICHLOROBENZENE	16.700	146	103698	3.50	PPBV	96
97) SEC-BUTYLBENZENE	16.724	134	60302	3.97	PPBV	89
98) p-ISOPROPYLTOLUENE	16.864	134	56324	3.94	PPBV	94
99) o-DICHLOROBENZENE	17.023	146	97937	3.66	PPBV	97
100) n-BUTYLBENZENE	17.248	134	35165	3.36	PPBV	84
101) HEXACHLOROETHANE	17.626	201	89203	4.10	PPBV	82
102) HEXACHLOROBUTADIENE	18.907	225	37311	4.16	PPBV	98
103) 1,2,4-TRICHLOROBENZENE	18.535	180	23024	3.68	PPBV #	81
105) NAPHTHALENE	18.644	128	42049	3.71	PPBV	83

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2W33869.D
Acq On : 16 Jan 2012 10:31 pm
Operator : YOUMINH
Sample : IC1426-5.0
Misc : MS23893,V2W1426,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:59 2012
Quant Method : C:\msdchem\1\METHODS\M2W1426.M
Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
QLast Update : Tue Jan 17 09:41:38 2012
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-IC1426 **Method:** TO-15
Lab FileID: 2W33869.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/16/12 22:31 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.82	Poor instrument integration

6.7.6.1

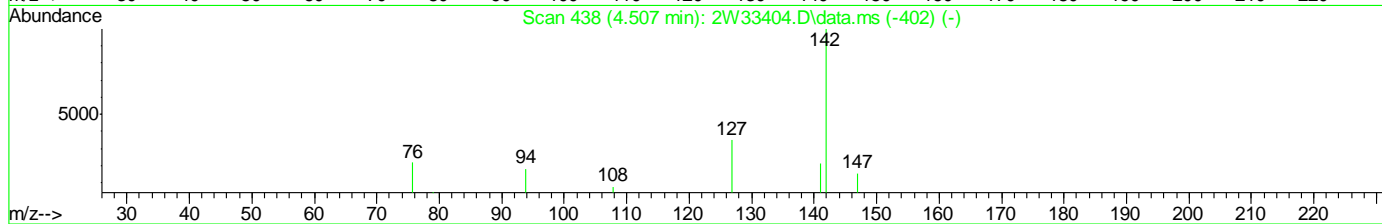
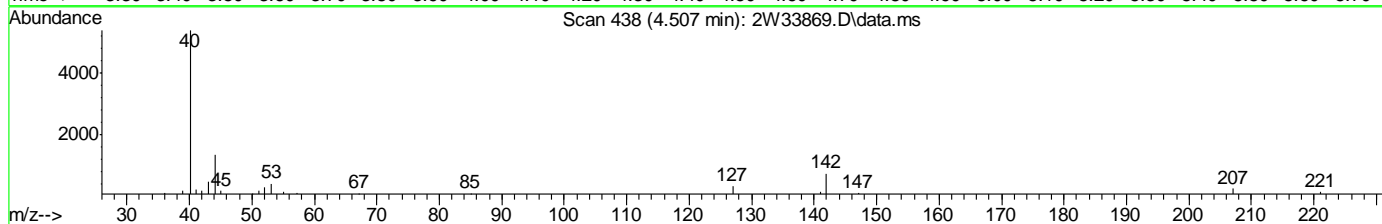
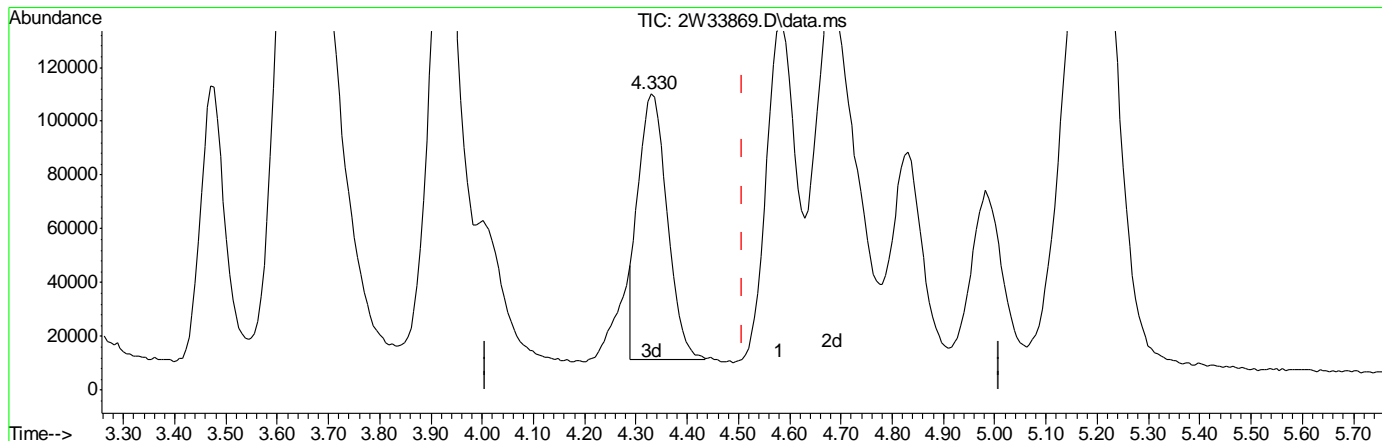
6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33869.D
 Acq On : 16 Jan 2012 10:31 pm
 Operator : YOUMINH
 Sample : IC1426-5.0
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:59 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.6.2
 6



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 5.10PPBV m

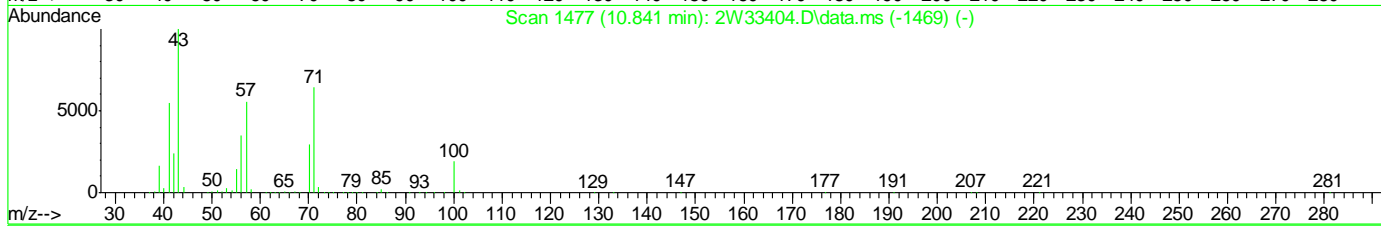
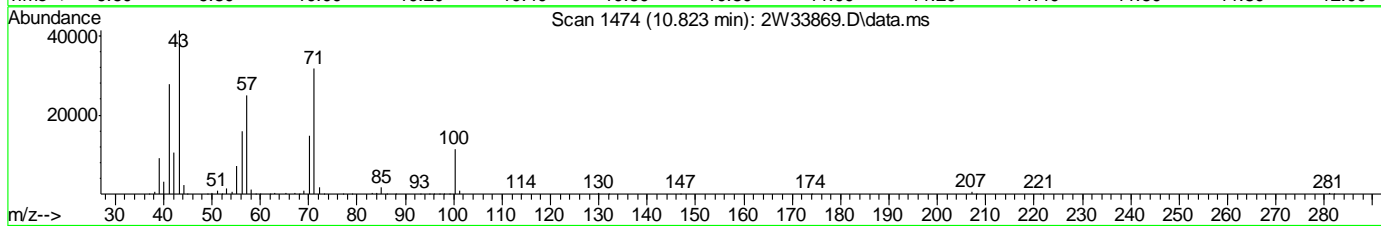
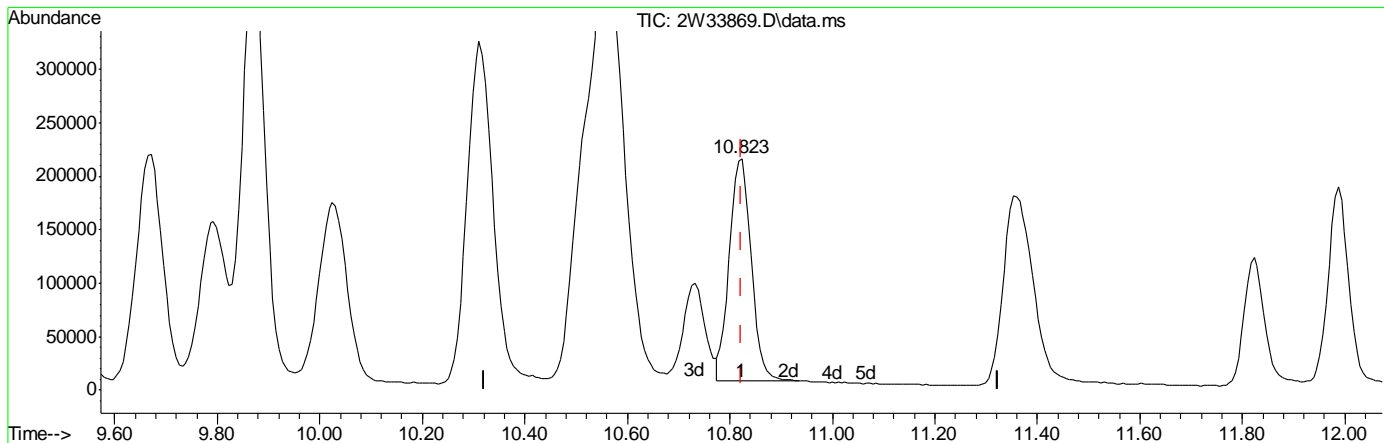
response 388770

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33869.D
 Acq On : 16 Jan 2012 10:31 pm
 Operator : YOUMINH
 Sample : IC1426-5.0
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:16:59 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



(62) TVHC as EQUIV HEPTANE

10.823min (+0.000) 4.58PPBV m

response 619690

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) BROMOCHLOROMETHANE	7.781	128	125525	10.00	PPBV	#	0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	508839	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	13.847	82	215320	10.00	PPBV	#	0.00
104) CHLOROBENZENE-D5(A)	13.847	82	217420	10.00	PPBV	#	0.00
System Monitoring Compounds							
83) 4-BROMOFLUOROBENZENE	15.261	95	224259	8.68	PPBV		0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=		86.80%
Target Compounds							
							Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	6528	0.11	PPBV		98
5) CHLORODIFLUOROMETHANE	1.995	67	613	0.11	PPBV		99
7) FREON 114	2.379	85	6975	0.12	PPBV		88
8) CHLOROMETHANE	2.288	52	506	0.11	PPBV	#	48
9) VINYL CHLORIDE	2.514	62	2025	0.11	PPBV		96
10) 1,3-BUTADIENE	2.660	54	1404	0.11	PPBV	#	79
12) BROMOMETHANE	2.934	94	2022	0.10	PPBV		84
13) CHLOROETHANE	3.111	64	1111	0.12	PPBV		73
14) DICHLOROFLUOROMETHANE	3.196	67	4510	0.12	PPBV		90
16) FREON 123	3.635	83	4867	0.11	PPBV	#	83
17) FREON 123A	3.690	117	3157	0.11	PPBV		80
18) TRICHLOROFLUOROMETHANE	3.928	101	6570	0.11	PPBV		95
23) TVHC as EQUIV PENTANE	4.508	TIC	6943m	0.10	PPBV		
24) IODOMETHANE	4.586	142	5659	0.10	PPBV		97
25) 1,1-DICHLOROETHYLENE	4.678	96	2070	0.11	PPBV	#	81
26) CARBON DISULFIDE	5.233	76	4551	0.11	PPBV	#	62
28) BROMOETHENE	3.483	106	2157	0.11	PPBV	#	97
32) FREON 113	5.190	151	3680m	0.10	PPBV		
33) TRANS-1,2-DICHLOROETHY...	6.184	96	1690	0.10	PPBV	#	70
34) TERTIARY BUTYL ALCOHOL	4.891	59	2643m	0.08	PPBV		
35) METHYL TERTIARY BUTYL ...	6.629	73	4154m	0.10	PPBV		
37) HEXANE	7.848	57	2522	0.12	PPBV		96
39) 1,1-DICHLOROETHANE	6.470	63	3002m	0.10	PPBV		
41) cis-1,2-DICHLOROETHYLENE	7.598	96	2131	0.12	PPBV	#	1
44) CHLOROFORM	7.933	83	4175	0.11	PPBV		91
45) 2,4-DIMETHYLPENTANE	8.848	57	3045	0.12	PPBV	#	94
46) 1,1,1-TRICHLOROETHANE	9.031	97	4888	0.11	PPBV		92
47) CARBON TETRACHLORIDE	9.665	117	5267	0.10	PPBV		95
48) 1,2-DICHLOROETHANE	8.775	62	1919	0.08	PPBV		89
50) BENZENE	9.518	78	5664	0.12	PPBV		96
52) 2,3-DIMETHYLPENTANE	10.012	71	1310	0.12	PPBV	#	97
53) DIBROMOMETHANE	10.311	174	2447	0.11	PPBV		88
54) TRICHLOROETHYLENE	10.567	95	2882	0.13	PPBV		94
57) BROMODICHLOROMETHANE	10.512	83	4227	0.11	PPBV		98
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	8045	0.11	PPBV		98
62) TVHC as EQUIV HEPTANE	10.823	TIC	14132m	0.12	PPBV		
64) cis-1,3-DICHLOROPROPENE	11.359	75	2169	0.09	PPBV		84
65) TOLUENE	12.249	92	3634	0.11	PPBV		93
67) 1,1,2-TRICHLOROETHANE	11.987	83	1468	0.10	PPBV		90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

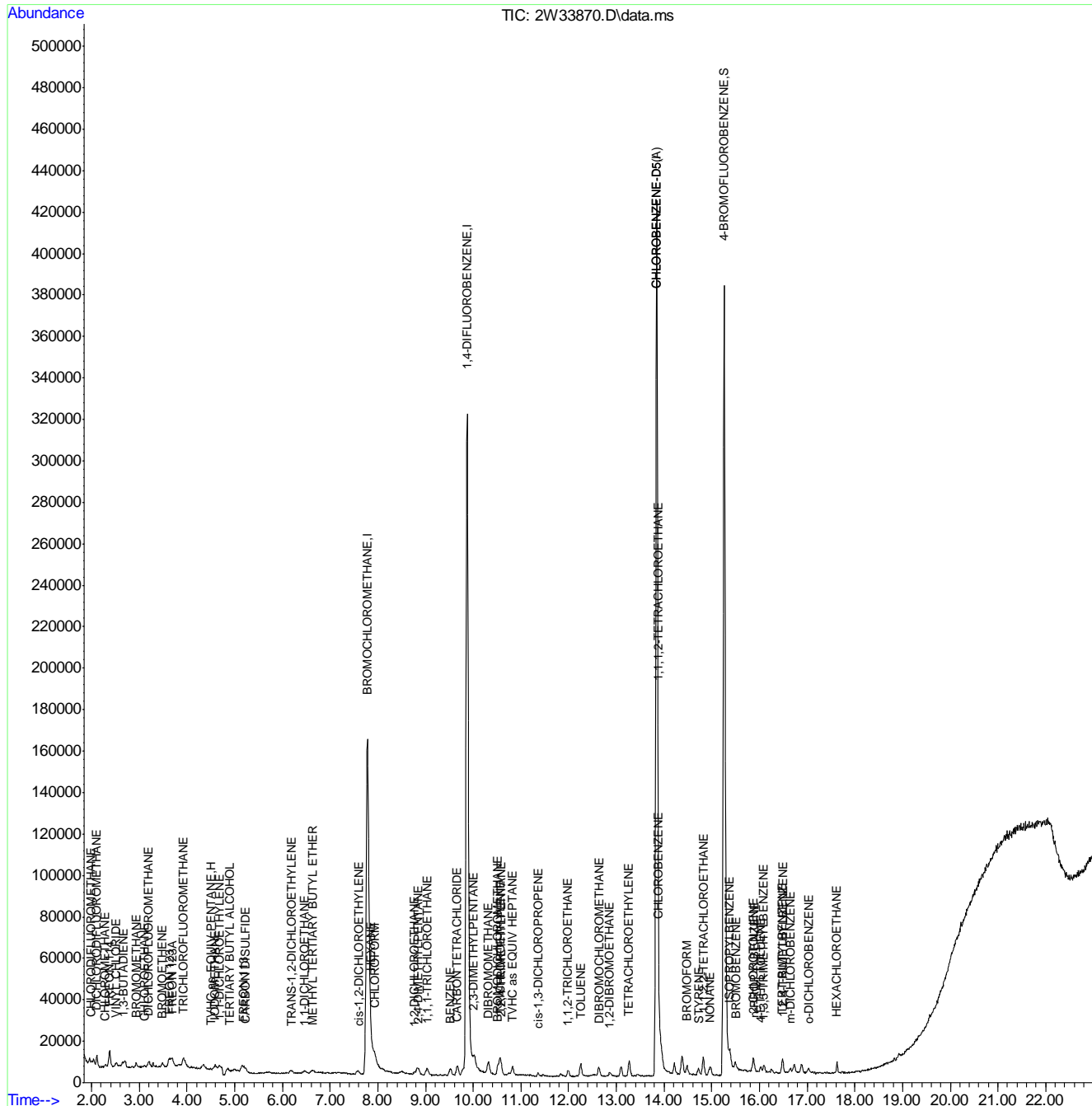
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
71) TETRACHLOROETHYLENE	13.268	164	3046	0.14	PPBV	93
72) DIBROMOCHLOROMETHANE	12.634	129	4075	0.12	PPBV	96
73) 1,2-DIBROMOETHANE	12.859	107	2534	0.11	PPBV #	96
75) 1,1,1,2-TETRACHLOROETHANE	13.871	131	2807	0.12	PPBV	89
76) CHLOROBENZENE	13.889	112	4089	0.12	PPBV #	36
80) STYRENE	14.725	104	3077	0.11	PPBV	96
81) NONANE	14.975	43	2483	0.12	PPBV	86
82) BROMOFORM	14.481	173	3621	0.12	PPBV	97
84) 1,1,2,2-TETRACHLOROETHANE	14.822	83	2816	0.12	PPBV	98
85) ISOPROPYLBENZENE	15.377	105	5989	0.11	PPBV	96
86) BROMOBENZENE	15.499	156	1770	0.10	PPBV	90
87) 2-CHLOROTOLUENE	15.871	126	1419	0.10	PPBV #	50
88) n-PROPYLBENZENE	15.889	120	1064	0.08	PPBV	72
89) 4-ETHYLTOLUENE	16.029	105	3426	0.08	PPBV	93
90) 1,3,5-TRIMETHYLBENZENE	16.096	105	2821	0.08	PPBV #	81
92) TERT-BUTYLBENZENE	16.480	134	881	0.09	PPBV #	72
93) 1,2,4-TRIMETHYLBENZENE	16.493	105	3222	0.09	PPBV #	83
94) m-DICHLOROBENZENE	16.651	146	1524	0.07	PPBV #	78
99) o-DICHLOROBENZENE	17.029	146	1819	0.09	PPBV	85
101) HEXACHLOROETHANE	17.627	201	1276	0.08	PPBV	92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-IC1426 **Method:** TO-15
Lab FileID: 2W33870.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/16/12 23:11 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tertiary Butyl Alcohol	75-65-0		4.89	Poor instrument integration
Freon 113	76-13-1		5.19	Poor instrument integration
1,1-Dichloroethane	75-34-3		6.47	Poor instrument integration
Methyl Tert Butyl Ether	1634-04-4		6.63	Poor instrument integration
TVHC As Equiv Heptane			10.82	Poor instrument integration

6.7.7.1
6

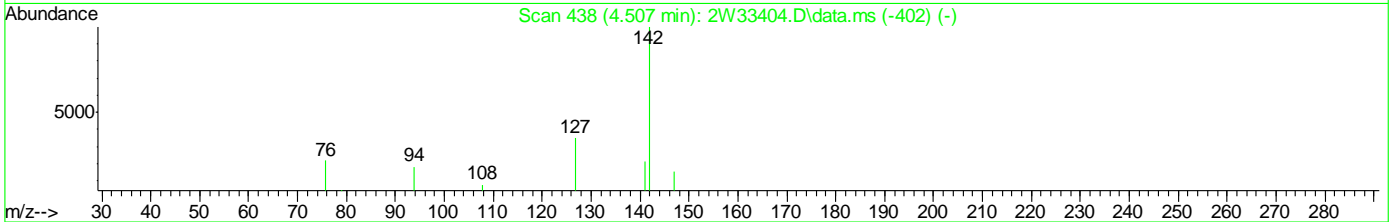
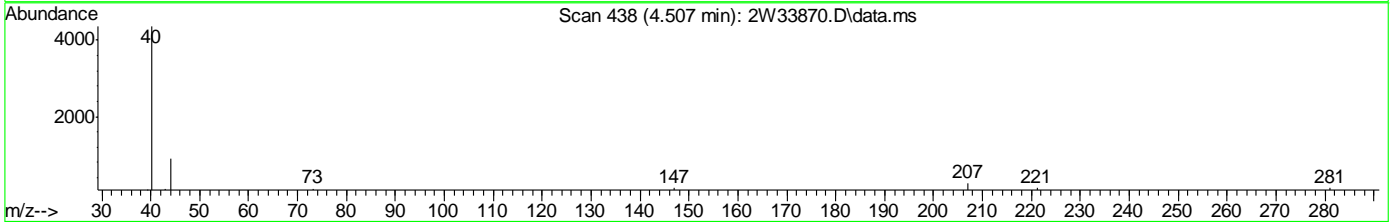
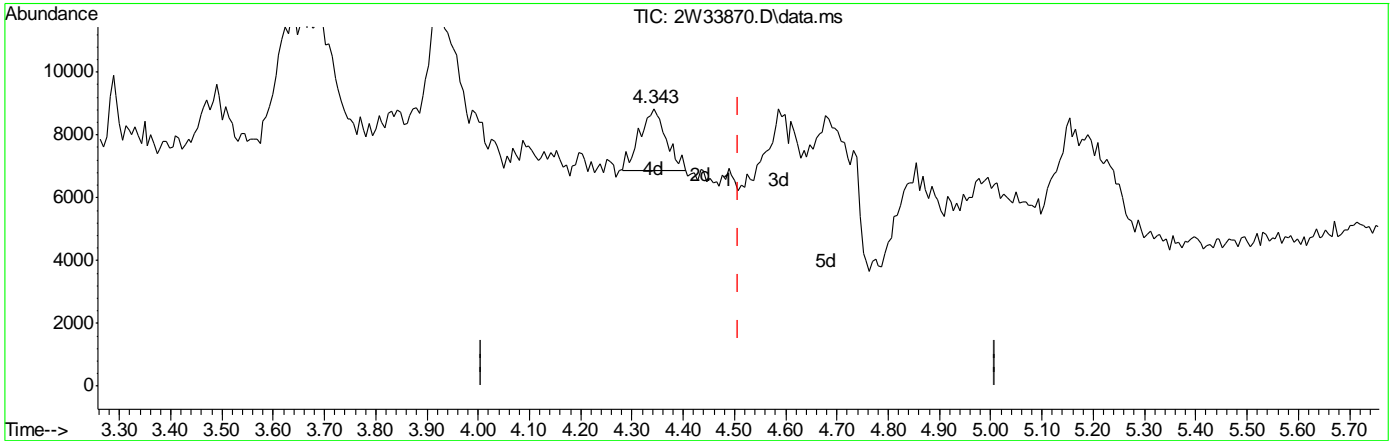
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.7.2

6



TIC: 2W33870.D\data.ms

(23) TVHC as EQUIV PENTANE (H)
 4.508min (0.000) 0.10PPBV m
 response 6943

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

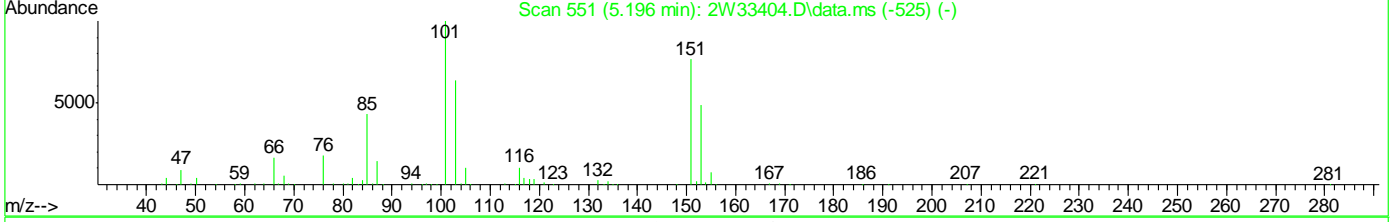
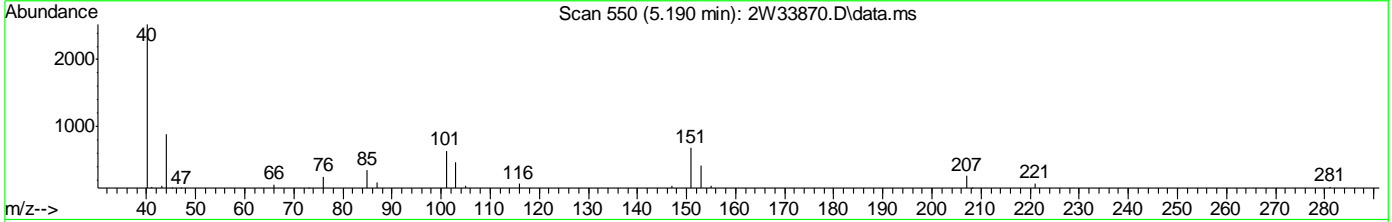
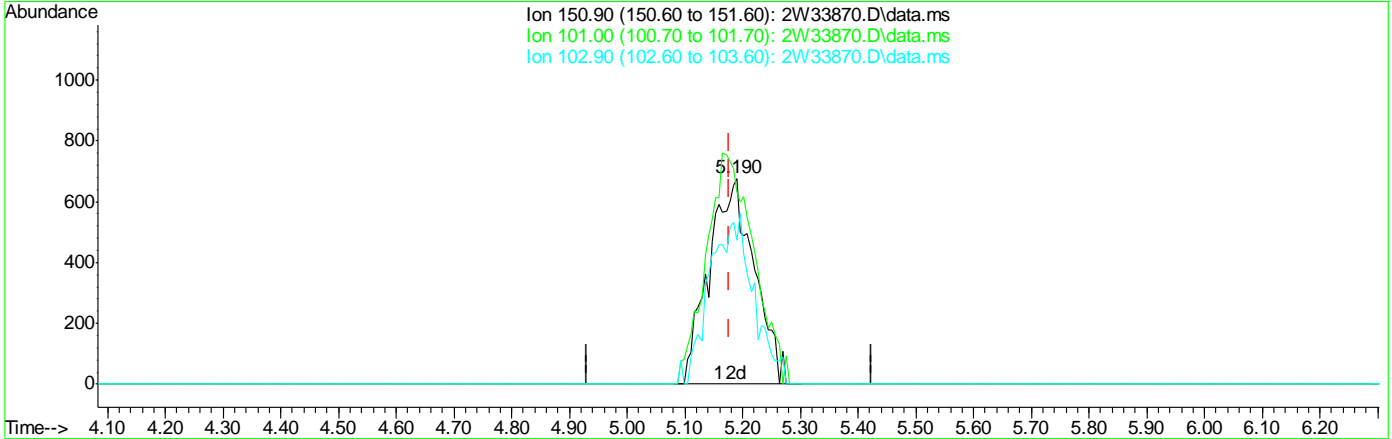
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.7.3

6



TIC: 2W33870.D\data.ms

(32) FREON 113		
5.190min (+0.012) 0.10PPBV m		
response 3680		
Ion	Exp%	Act%
150.90	100	100
101.00	131.90	117.61
102.90	84.40	0.00#
0.00	0.00	0.00

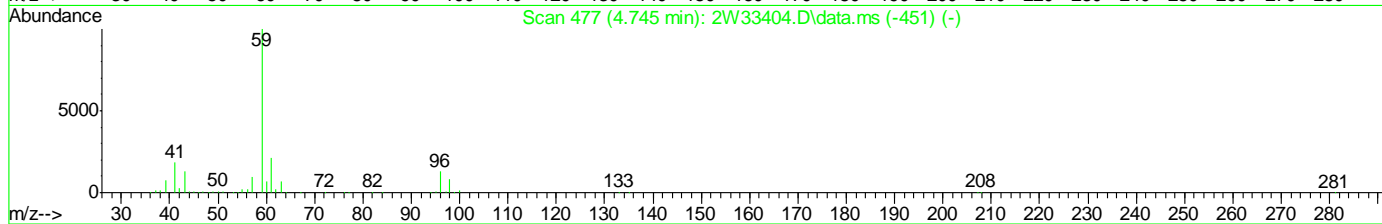
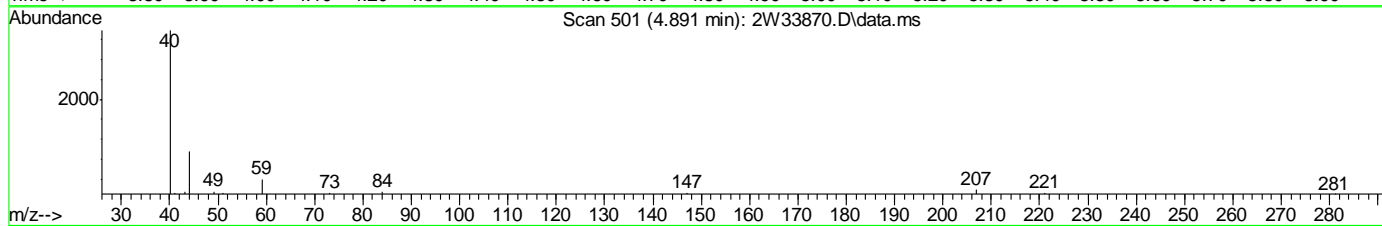
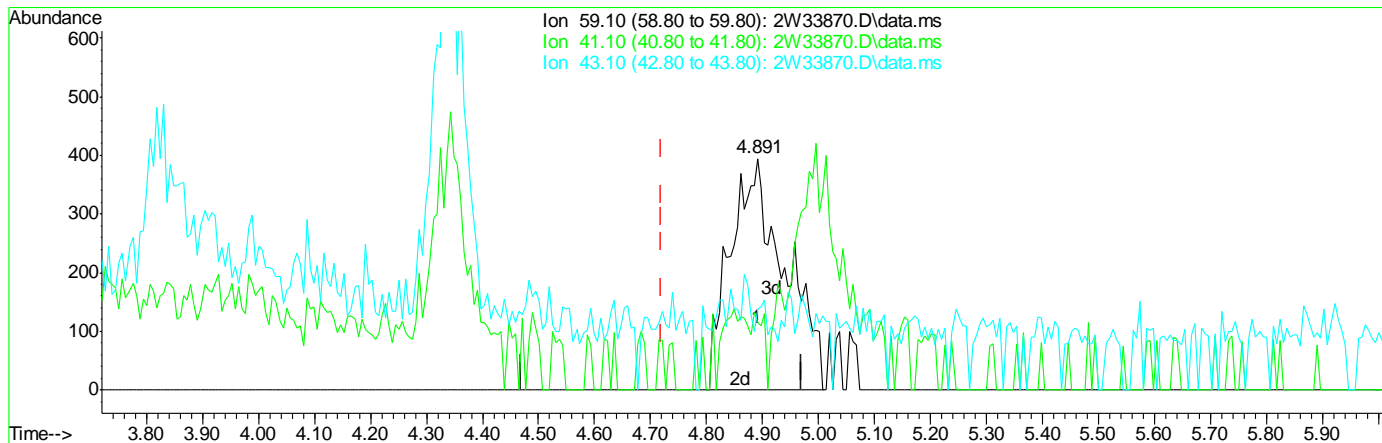
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.7.4

6



(34) TERTIARY BUTYL ALCOHOL

4.891min (+0.171) 0.08PPBV m

response 2643

Ion	Exp%	Act%
59.10	100	100
41.10	18.50	6.77
43.10	11.60	3.41
0.00	0.00	0.00

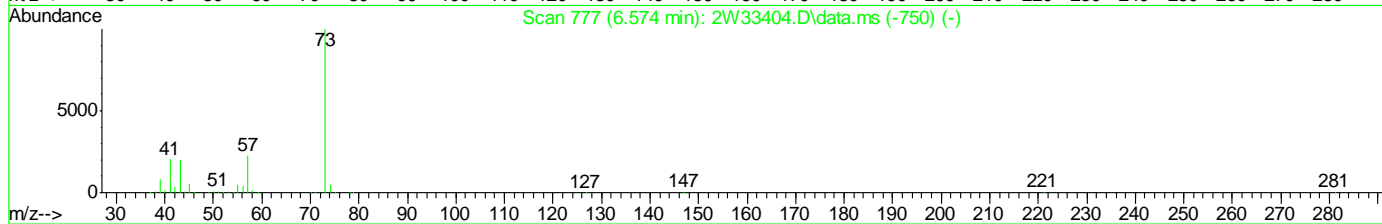
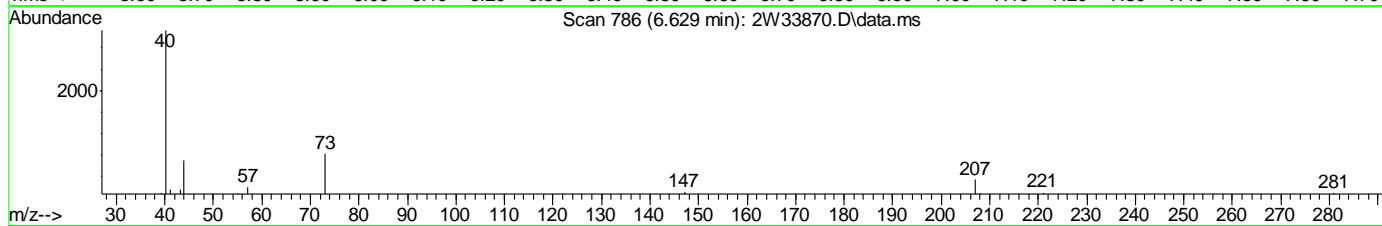
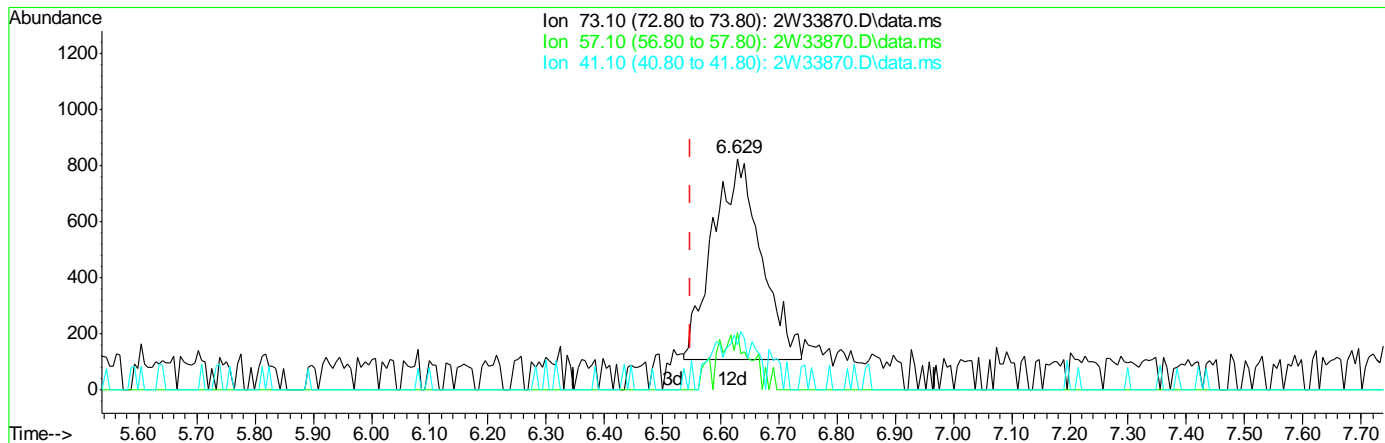
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.7.5

6



TIC: 2W33870.D\data.ms

(35) METHYL TERTIARY BUTYL ETHER

6.629min (+0.079) 0.10PPBV m

response 4154

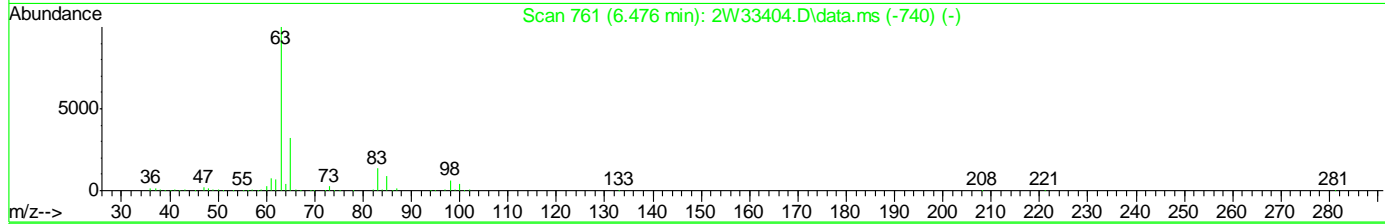
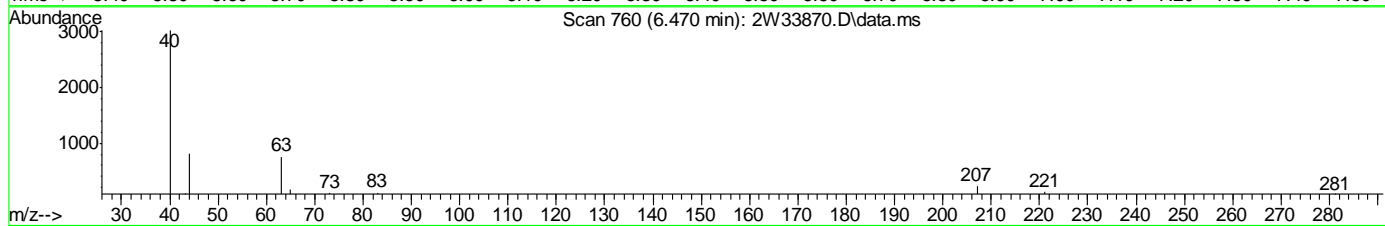
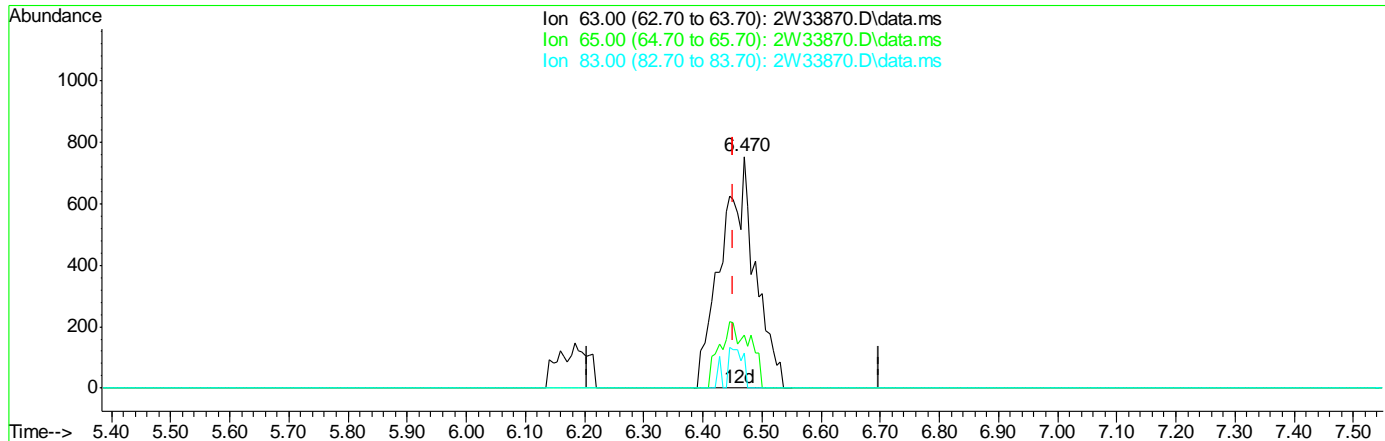
Ion	Exp%	Act%
73.10	100	100
57.10	23.50	3.88
41.10	21.40	7.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.7.6
 6



TIC: 2W33870.D\data.ms

(39) 1,1-DICHLOROETHANE

6.470min (+0.018) 0.10PPBV m

response 3002

Ion	Exp%	Act%
63.00	100	100
65.00	32.50	16.76
83.00	12.90	7.13
0.00	0.00	0.00

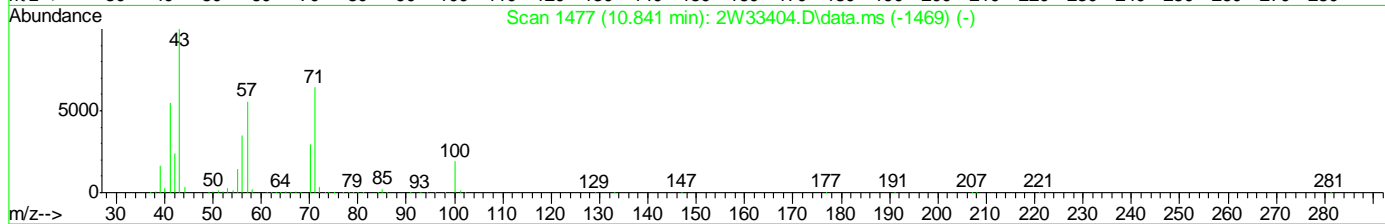
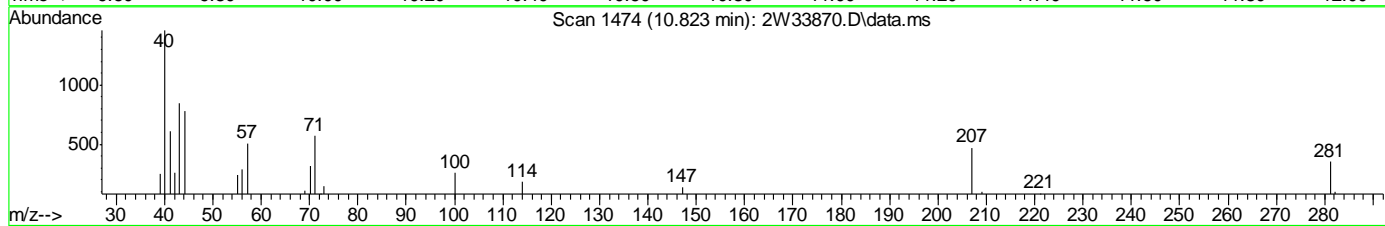
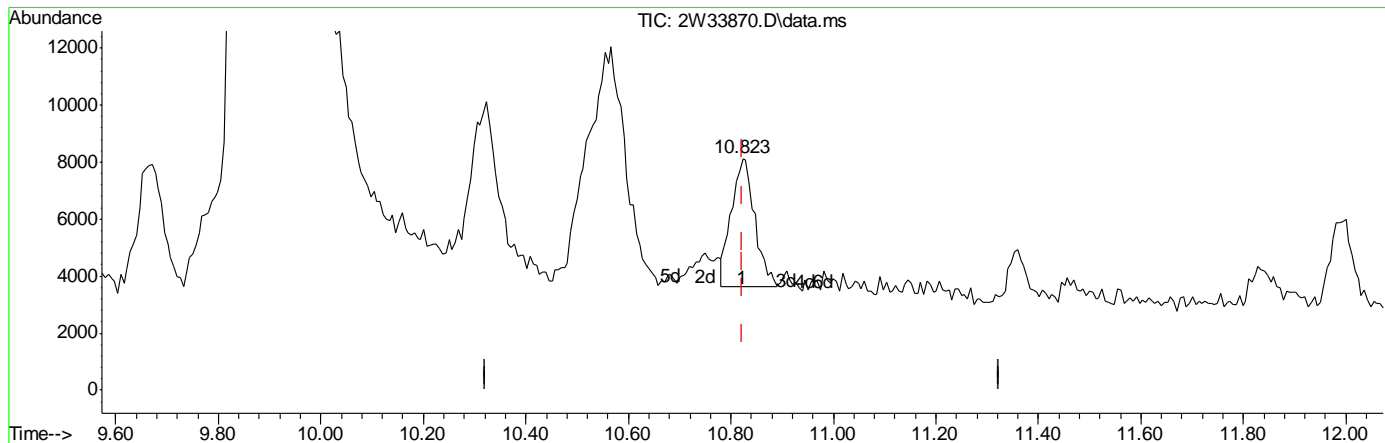
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:22:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.7.7

6



(62) TVHC as EQUIV HEPTANE

10.823min (+0.000) 0.12PPBV m

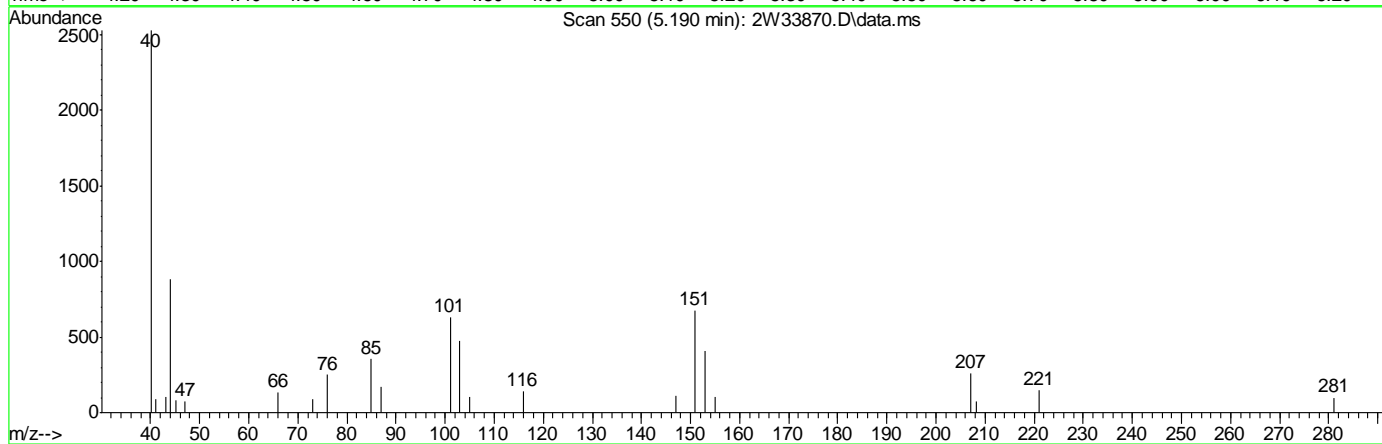
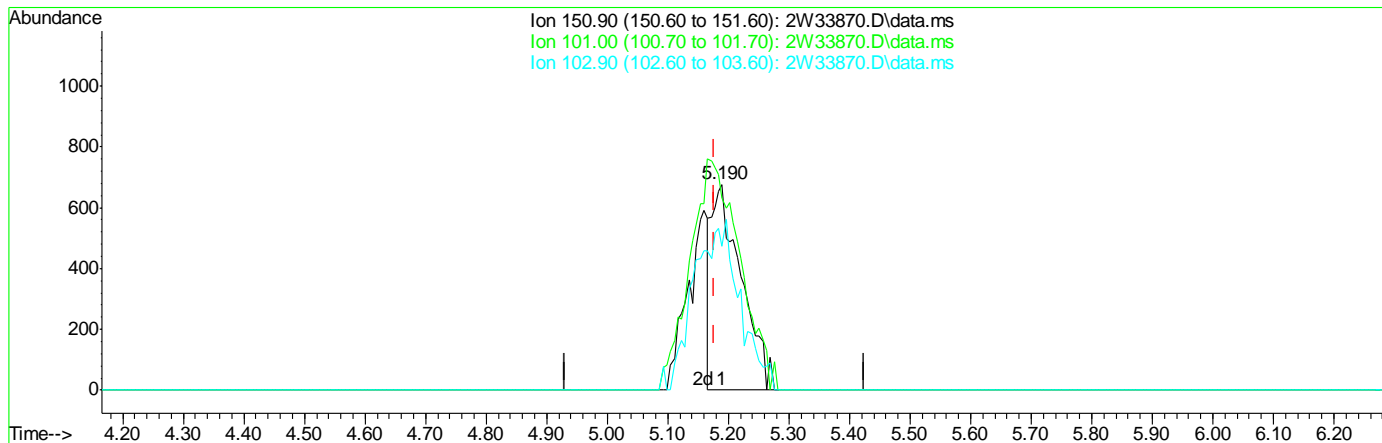
response 14132

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 14:06:37 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration



(32) FREON 113

5.190min (+0.012) 0.06PPBV

response 2294

Ion	Exp%	Act%
150.90	100	100
101.00	131.90	0.00#
102.90	84.40	126.98#
0.00	0.00	0.00

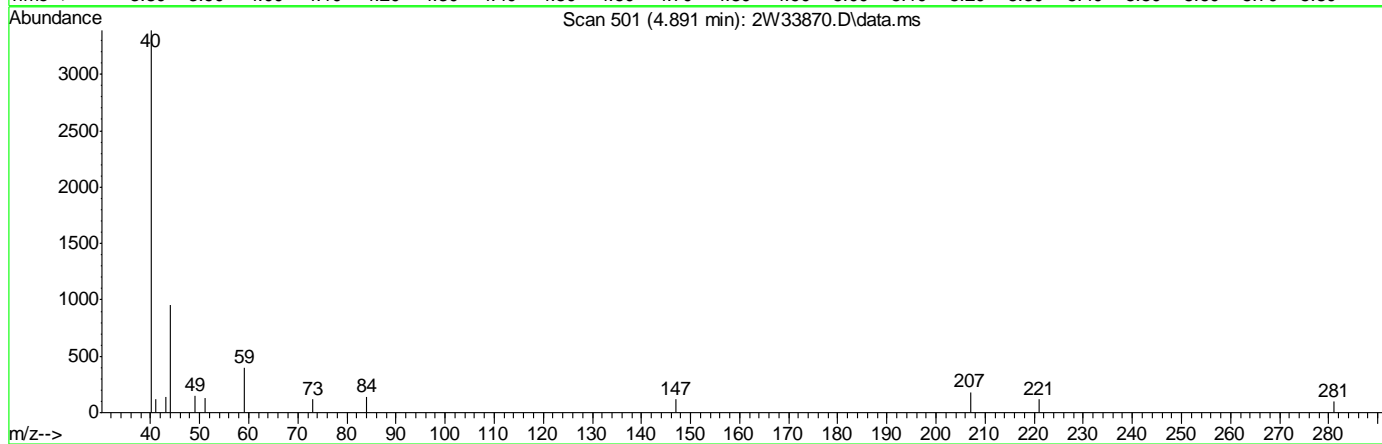
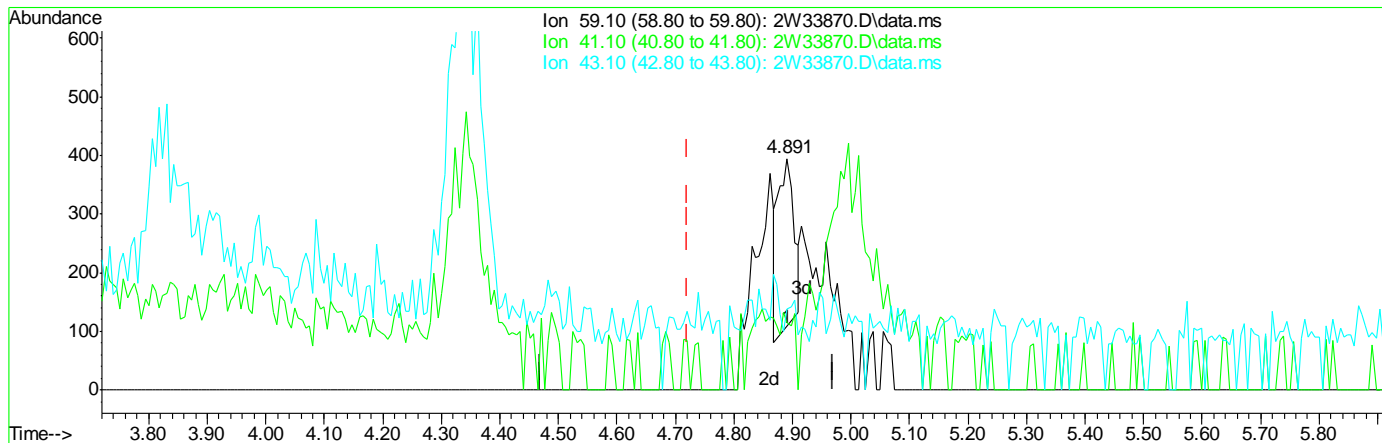
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 14:06:37 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.7.9

6



(34) TERTIARY BUTYL ALCOHOL

4.891min (+0.171) 0.02PPBV

response 554

Ion	Exp%	Act%
59.10	100	100
41.10	18.50	32.31
43.10	11.60	16.25
0.00	0.00	0.00

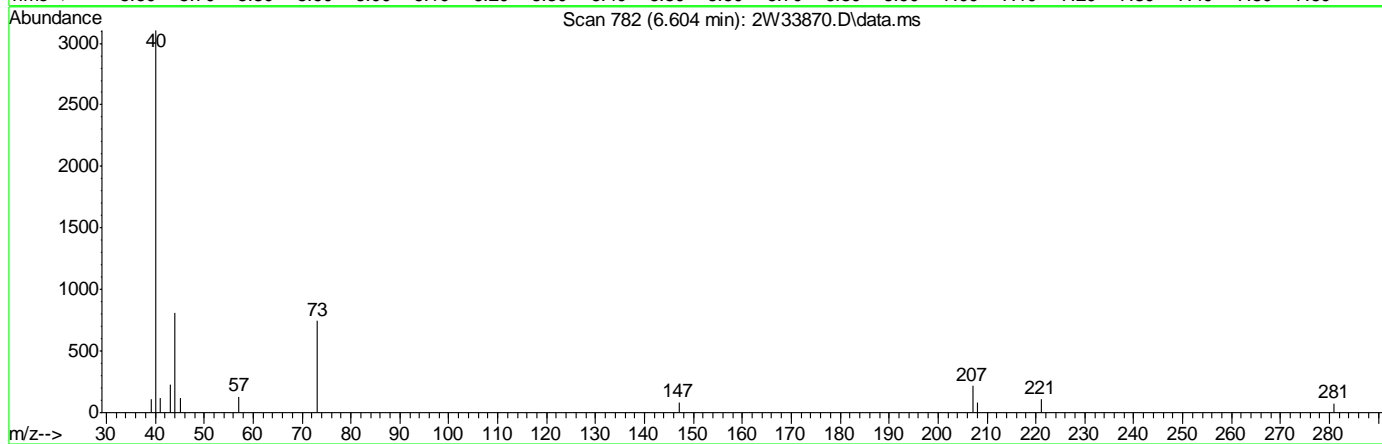
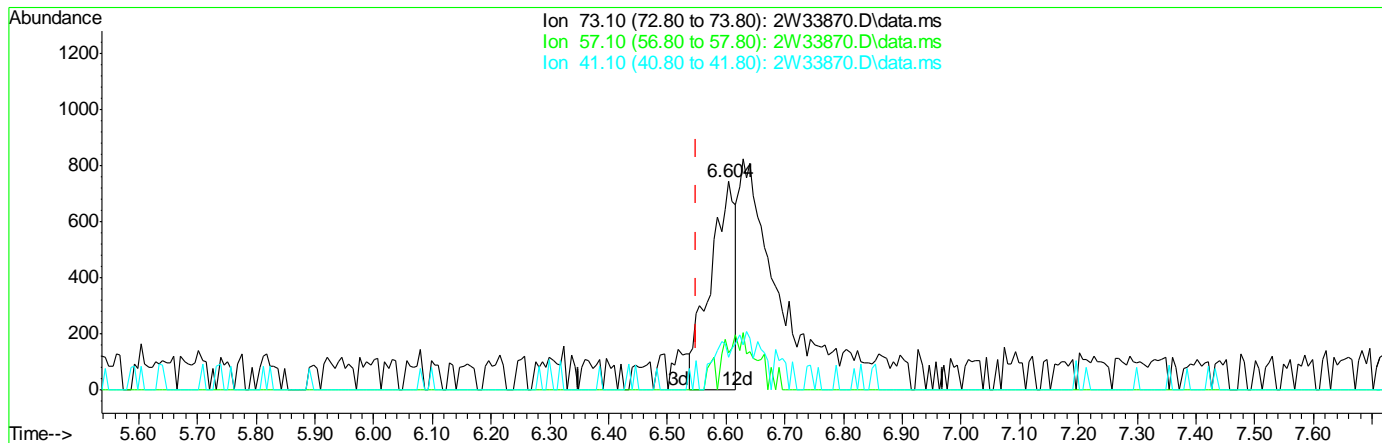
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 14:06:37 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.7.10

6



TIC: 2W33870.D\data.ms

(35) METHYL TERTIARY BUTYL ETHER

6.604min (+0.055) 0.05PPBV

response 2229

Ion	Exp%	Act%
73.10	100	100
57.10	23.50	7.22
41.10	21.40	14.63
0.00	0.00	0.00

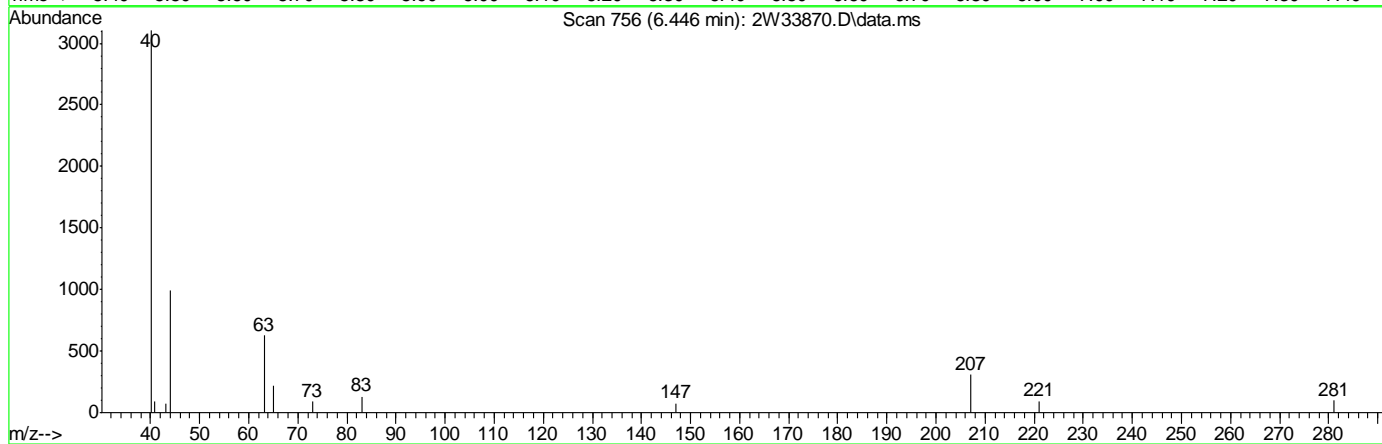
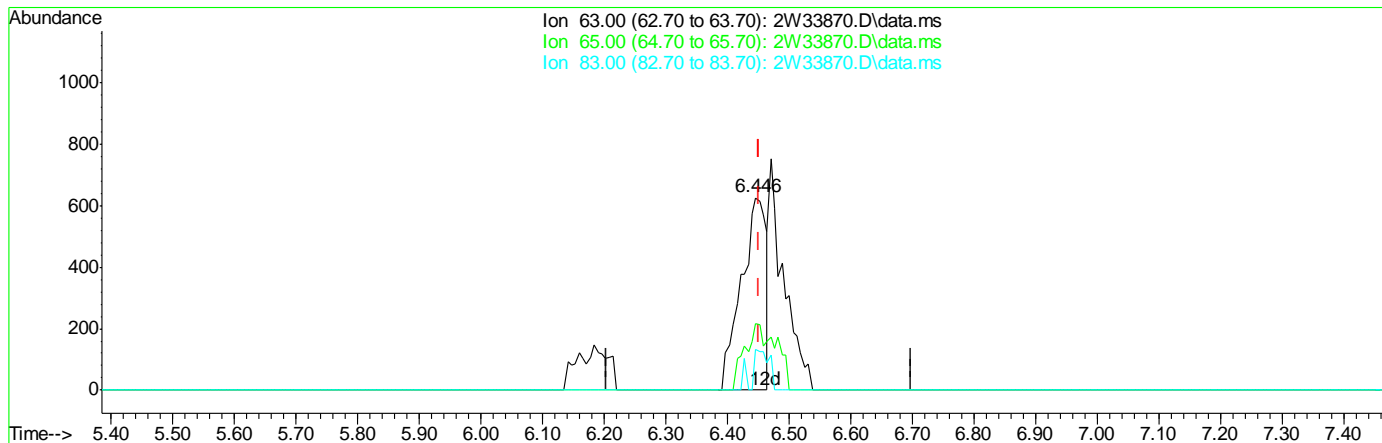
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33870.D
 Acq On : 16 Jan 2012 11:11 pm
 Operator : YOUMINH
 Sample : IC1426-0.1
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 14:06:37 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.7.11

6



(39) 1,1-DICHLOROETHANE

6.446min (-0.006) 0.06PPBV

response 1764

Ion	Exp%	Act%
63.00	100	100
65.00	32.50	28.51
83.00	12.90	12.13
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33871.D
 Acq On : 16 Jan 2012 11:50 pm
 Operator : YOUMINH
 Sample : IC1426-0.04
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:25:14 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.787	128	114786	10.00	PPBV	# 0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	441060	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	13.847	82	186186	10.00	PPBV	# 0.00
104) CHLOROBENZENE-D5(A)	13.847	82	186722	10.00	PPBV	# 0.00
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.261	95	202982	9.09	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	90.90%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.111	85	2306	0.04	PPBV	95
4) FREON 152A	1.959	65	478	0.04	PPBV	# 1
7) FREON 114	2.373	85	2496	0.05	PPBV	87
8) CHLOROMETHANE	2.282	52	127	0.03	PPBV	# 1
9) VINYL CHLORIDE	2.507	62	622	0.04	PPBV	# 57
10) 1,3-BUTADIENE	2.648	54	460	0.04	PPBV	# 67
12) BROMOMETHANE	2.934	94	666	0.04	PPBV	# 64
14) DICHLOROFLUOROMETHANE	3.196	67	1675	0.05	PPBV	# 77
15) ACROLEIN	3.672	56	153	0.04	PPBV	# 28
16) FREON 123	3.629	83	1934	0.05	PPBV	# 77
17) FREON 123A	3.696	117	1206	0.05	PPBV	# 86
18) TRICHLOROFLUOROMETHANE	3.940	101	2504	0.05	PPBV	93
24) IODOMETHANE	4.599	142	2020	0.04	PPBV	97
25) 1,1-DICHLOROETHYLENE	4.690	96	858	0.05	PPBV	# 57
26) CARBON DISULFIDE	5.245	76	1750	0.05	PPBV	# 1
28) BROMOETHENE	3.483	106	668	0.04	PPBV	# 95
30) METHYLENE CHLORIDE	4.848	84	690	0.05	PPBV	# 10
37) HEXANE	7.842	57	996	0.05	PPBV	# 73
41) cis-1,2-DICHLOROETHYLENE	7.586	96	758	0.05	PPBV	# 48
44) CHLOROFORM	7.939	83	1560	0.04	PPBV	# 79
45) 2,4-DIMETHYLPENTANE	8.842	57	1229	0.05	PPBV	# 80
46) 1,1,1-TRICHLOROETHANE	9.043	97	1691	0.04	PPBV	# 71
47) CARBON TETRACHLORIDE	9.677	117	1975	0.04	PPBV	96
51) CYCLOHEXANE	9.787	84	1028	0.05	PPBV	# 51
53) DIBROMOMETHANE	10.305	174	969	0.05	PPBV	# 52
54) TRICHLOROETHYLENE	10.567	95	1039	0.05	PPBV	# 76
57) BROMODICHLOROMETHANE	10.506	83	1710	0.05	PPBV	# 94
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	3319	0.05	PPBV	79
64) cis-1,3-DICHLOROPROPENE	11.353	75	854	0.04	PPBV	# 34
67) 1,1,2-TRICHLOROETHANE	11.987	83	552	0.04	PPBV	# 79
71) TETRACHLOROETHYLENE	13.280	164	1110	0.06	PPBV	96
73) 1,2-DIBROMOETHANE	12.871	107	946	0.05	PPBV	# 99
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	1138	0.05	PPBV	# 79
82) BROMOFORM	14.475	173	1374	0.05	PPBV	# 94
84) 1,1,2,2-TETRACHLOROETHANE	14.828	83	1032	0.05	PPBV	# 88
85) ISOPROPYLBENZENE	15.377	105	2532	0.05	PPBV	93
86) BROMOBENZENE	15.487	156	643	0.04	PPBV	96
87) 2-CHLOROTOLUENE	15.865	126	534	0.05	PPBV	# 56
90) 1,3,5-TRIMETHYLBENZENE	16.096	105	1434	0.05	PPBV	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33871.D
 Acq On : 16 Jan 2012 11:50 pm
 Operator : YOUMINH
 Sample : IC1426-0.04
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:25:14 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-TRIMETHYLBENZENE	16.486	105	991	0.03	PPBV #	56
99) o-DICHLOROBENZENE	17.029	146	524	0.03	PPBV #	60
101) HEXACHLOROETHANE	17.626	201	529	0.04	PPBV #	79

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

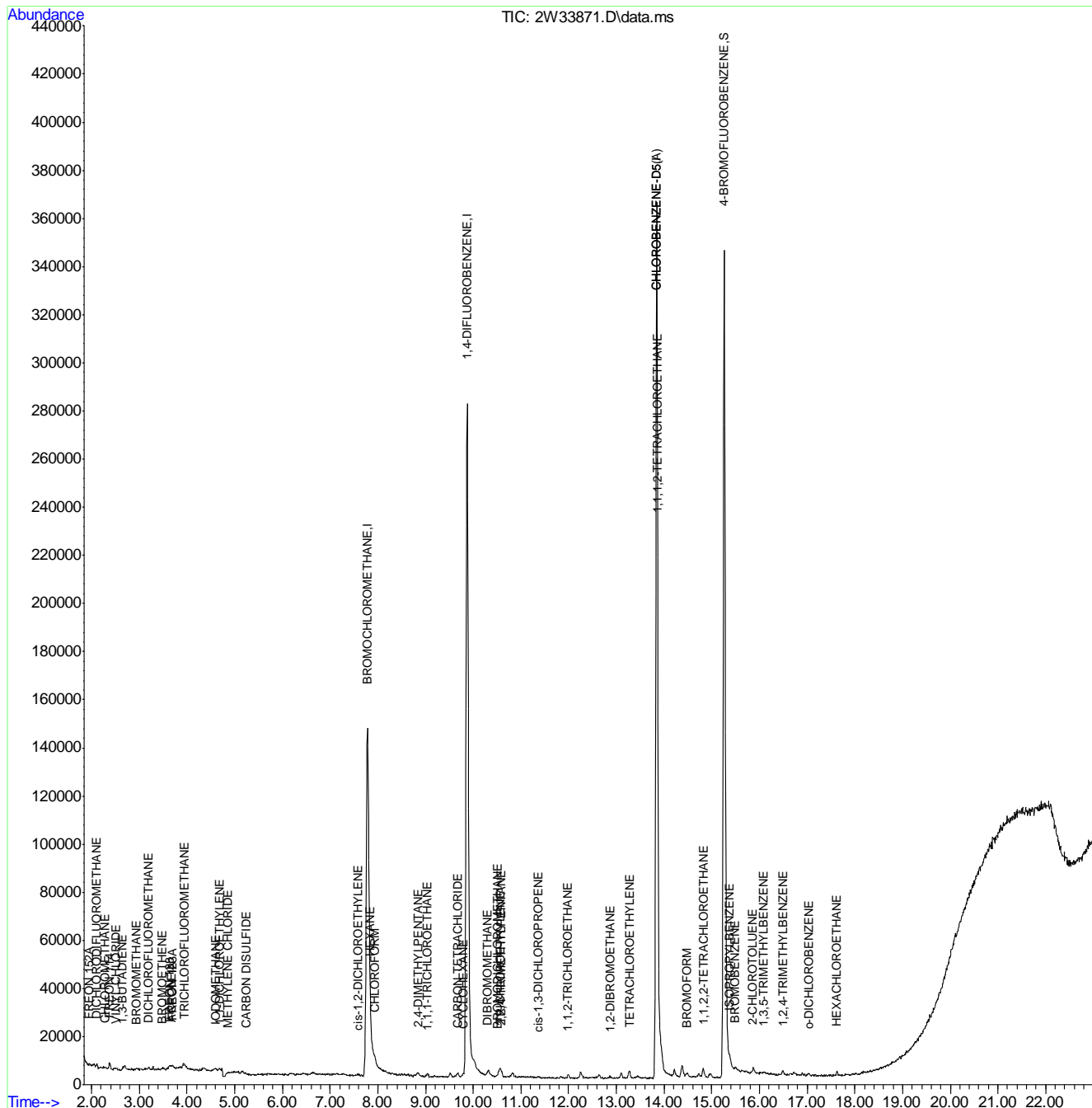
6.7.8

6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33871.D
 Acq On : 16 Jan 2012 11:50 pm
 Operator : YOU MINH
 Sample : IC1426-0.04
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 10:25:14 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



6.7.8
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33872.D
 Acq On : 17 Jan 2012 12:32 am
 Operator : YOUMINH
 Sample : IC1426-40
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:26:33 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.787	128	134373	10.00	PPBV	# 0.00
49) 1,4-DIFLUOROBENZENE	9.878	114	598189	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	13.853	82	374489	10.00	PPBV	# 0.00
104) CHLOROBENZENE-D5(A)	13.853	82	374489	10.00	PPBV	# 0.00
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.261	95	425850	9.48	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	94.80%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	2245587	34.40	PPBV	99
4) FREON 152A	1.953	65	441252	34.52	PPBV	91
5) CHLORODIFLUOROMETHANE	1.995	67	213934	34.45	PPBV	98
6) PROPYLENE	2.032	41	430216	34.32	PPBV	93
7) FREON 114	2.373	85	2262029	35.66	PPBV	86
8) CHLOROMETHANE	2.276	52	162885	33.50	PPBV	97
9) VINYL CHLORIDE	2.501	62	684472	34.42	PPBV	99
10) 1,3-BUTADIENE	2.642	54	461558	33.10	PPBV	# 86
11) n-BUTANE	2.690	43	835856	32.16	PPBV	96
12) BROMOMETHANE	2.922	94	727355	33.77	PPBV	99
13) CHLOROETHANE	3.099	64	339505	33.34	PPBV	99
14) DICHLOROFLUOROMETHANE	3.190	67	1449073	34.63	PPBV	99
15) ACROLEIN	3.593	56	193297	41.67	PPBV	98
16) FREON 123	3.629	83	1593845	35.14	PPBV	# 95
17) FREON 123A	3.690	117	1086380	35.60	PPBV	# 70
18) TRICHLOROFLUOROMETHANE	3.934	101	2274805	35.44	PPBV	99
19) ISOPROPYL ALCOHOL	4.013	45	746406	31.48	PPBV	93
20) ACETONE	3.733	58	226342	40.21	PPBV	# 81
21) PENTANE	4.336	42	458820	35.45	PPBV	81
22) ACRYLONITRILE	4.263	53	348853	42.73	PPBV	97
23) TVHC as EQUIV PENTANE	4.508	TIC	2463780m	34.68	PPBV	
24) IODOMETHANE	4.586	142	2088552	35.80	PPBV	94
25) 1,1-DICHLOROETHYLENE	4.684	96	707021	35.56	PPBV	91
26) CARBON DISULFIDE	5.226	76	1537491	36.21	PPBV	96
27) ETHANOL	3.227	45	149302	32.71	PPBV	95
28) BROMOETHENE	3.471	106	742259	35.16	PPBV	98
29) ACETONITRILE	3.452	41	266652	39.16	PPBV	89
30) METHYLENE CHLORIDE	4.836	84	562595	36.13	PPBV	85
31) 3-CHLOROPROPENE	4.989	76	299138	36.45	PPBV	# 73
32) FREON 113	5.190	151	1425591	35.91	PPBV	# 83
33) TRANS-1,2-DICHLOROETHY...	6.171	96	654093	36.53	PPBV	89
34) TERTIARY BUTYL ALCOHOL	4.739	59	1204264	32.81	PPBV	97
35) METHYL TERTIARY BUTYL ...	6.549	73	1837358	39.98	PPBV	90
36) TETRAHYDROFURAN	8.396	72	285927	44.38	PPBV	# 74
37) HEXANE	7.842	57	903552	39.91	PPBV	97
38) VINYL ACETATE	6.696	86	166653	46.20	PPBV	# 13
39) 1,1-DICHLOROETHANE	6.464	63	1150193	36.82	PPBV	98
40) METHYL ETHYL KETONE	7.013	72	268308	42.76	PPBV	# 71
41) cis-1,2-DICHLOROETHYLENE	7.586	96	734630	38.20	PPBV	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33872.D
 Acq On : 17 Jan 2012 12:32 am
 Operator : YOUMINH
 Sample : IC1426-40
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:26:33 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) ETHYL ACETATE	7.872	61	155867	47.69	PPBV #	88
43) METHYL ACRYLATE	7.854	55	982051	49.04	PPBV #	95
44) CHLOROFORM	7.945	83	1562562	38.49	PPBV	99
45) 2,4-DIMETHYLPENTANE	8.842	57	1123797	40.61	PPBV #	93
46) 1,1,1-TRICHLOROETHANE	9.043	97	1801776	37.62	PPBV	96
47) CARBON TETRACHLORIDE	9.671	117	2043738	37.43	PPBV	100
48) 1,2-DICHLOROETHANE	8.774	62	987220	39.88	PPBV	99
50) BENZENE	9.524	78	2097552	38.86	PPBV	98
51) CYCLOHEXANE	9.799	84	963792	37.17	PPBV #	78
52) 2,3-DIMETHYLPENTANE	10.030	71	473003	38.27	PPBV	87
53) DIBROMOMETHANE	10.311	174	1051806	39.98	PPBV	91
54) TRICHLOROETHYLENE	10.555	95	1041515	40.22	PPBV	93
55) 1,2-DICHLOROPROPANE	10.329	63	742538	41.90	PPBV	87
56) ETHYL ACRYLATE	10.323	55	1203421	47.28	PPBV #	94
57) BROMODICHLOROMETHANE	10.518	83	1786582	38.80	PPBV	97
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	3213734	39.03	PPBV	96
59) 1,4-DIOXANE	10.555	88	405935	35.64	PPBV #	1
60) METHYL METHACRYLATE	10.731	69	661293	44.63	PPBV #	91
61) HEPTANE	10.823	43	1012071	39.99	PPBV	85
62) TVHC as EQUIV HEPTANE	10.823	TIC	5170347m	38.43	PPBV	
63) METHYL ISOBUTYL KETONE	11.378	58	489993	41.71	PPBV	88
64) cis-1,3-DICHLOROPROPENE	11.353	75	1216158	41.26	PPBV	97
65) TOLUENE	12.249	92	1646999	42.11	PPBV	99
66) trans-1,3-DICHLOROPROPENE	11.829	75	1226277	43.37	PPBV	97
67) 1,1,2-TRICHLOROETHANE	11.993	83	759340	41.85	PPBV	94
69) 2-HEXANONE	12.463	58	658484	35.08	PPBV	93
70) ETHYL METHACRYLATE	12.457	69	1083908	36.76	PPBV #	94
71) TETRACHLOROETHYLENE	13.274	164	1277537	33.95	PPBV	96
72) DIBROMOCHLOROMETHANE	12.640	129	1992694	33.46	PPBV	100
73) 1,2-DIBROMOETHANE	12.865	107	1427005	35.24	PPBV	99
74) OCTANE	13.097	43	1417260	34.76	PPBV #	80
75) 1,1,1,2-TETRACHLOROETHANE	13.871	131	1447848	34.55	PPBV	99
76) CHLOROBENZENE	13.889	112	2200706	35.75	PPBV	94
77) ETHYLBENZENE	14.219	91	3341730	37.63	PPBV	99
78) m,p-XYLENE	14.383	106	2620281	76.86	PPBV	97
79) o-XYLENE	14.828	106	1289810	39.34	PPBV	98
80) STYRENE	14.725	104	1889916	39.17	PPBV	99
81) NONANE	14.981	43	1379926	37.84	PPBV	88
82) BROMOFORM	14.487	173	1905975	35.31	PPBV	100
84) 1,1,2,2-TETRACHLOROETHANE	14.816	83	1605095	39.92	PPBV	97
85) ISOPROPYLBENZENE	15.383	105	3786467	38.53	PPBV	99
86) BROMOBENZENE	15.499	156	1123701	37.26	PPBV #	82
87) 2-CHLOROTOLUENE	15.865	126	912828	38.53	PPBV #	73
88) n-PROPYLBENZENE	15.883	120	973668	41.94	PPBV	85
89) 4-ETHYLTOLUENE	16.023	105	3203469	41.73	PPBV	96
90) 1,3,5-TRIMETHYLBENZENE	16.090	105	2606060	42.28	PPBV	98
91) ALPHA-METHYLSTYRENE	16.243	118	1205241	41.97	PPBV	98
92) TERT-BUTYLBENZENE	16.480	134	708995	41.15	PPBV	94
93) 1,2,4-TRIMETHYLBENZENE	16.486	105	2532630	42.36	PPBV	96
94) m-DICHLOROBENZENE	16.645	146	1639969	41.16	PPBV	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33872.D
 Acq On : 17 Jan 2012 12:32 am
 Operator : YOUMINH
 Sample : IC1426-40
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:26:33 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

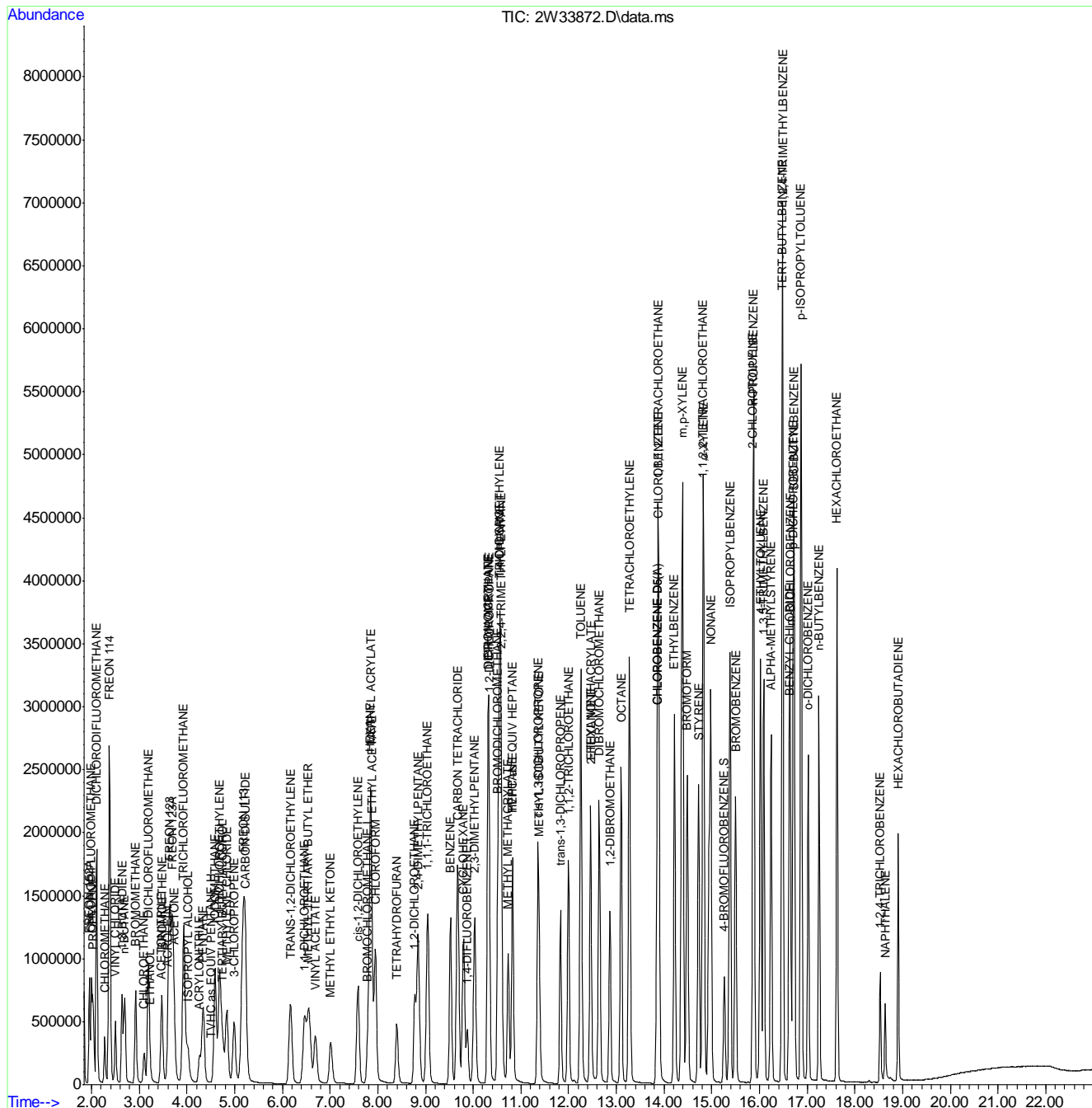
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) BENZYL CHLORIDE	16.620	91	1992367	46.39	PPBV	98
96) p-DICHLOROBENZENE	16.706	146	1565644	40.56	PPBV	98
97) SEC-BUTYLBENZENE	16.730	134	809644	40.83	PPBV	85
98) p-ISOPROPYLTOLUENE	16.870	134	784348	42.09	PPBV	92
99) o-DICHLOROBENZENE	17.023	146	1416796	40.53	PPBV	98
100) n-BUTYLBENZENE	17.248	134	608661	44.55	PPBV	81
101) HEXACHLOROETHANE	17.626	201	1035107	36.46	PPBV	81
102) HEXACHLOROBUTADIENE	18.907	225	487481	41.64	PPBV	99
103) 1,2,4-TRICHLOROBENZENE	18.535	180	395909	48.53	PPBV	94
105) NAPHTHALENE	18.638	128	686668	46.70	PPBV	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 2W33872.D
 Acq On : 17 Jan 2012 12:32 am
 Operator : YOUMINH
 Sample : IC1426-40
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:26:33 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-IC1426 **Method:** TO-15
Lab FileID: 2W33872.D **Analyst approved:** 01/17/12 15:11 Youmin Hu
Injection Time: 01/17/12 00:32 **Supervisor approved:** 01/20/12 04:05 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.82	Poor instrument integration

6.7.9.1

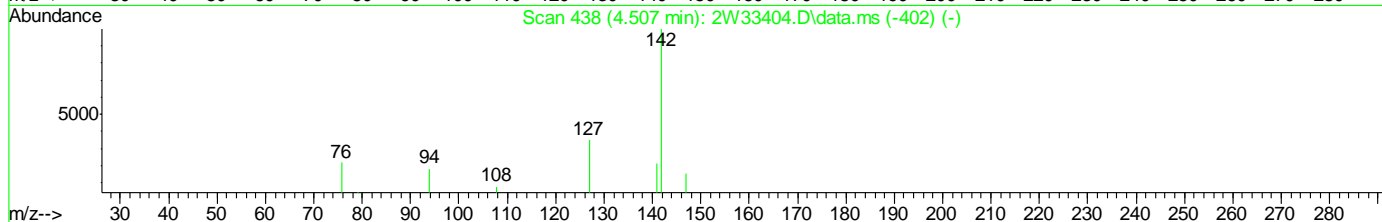
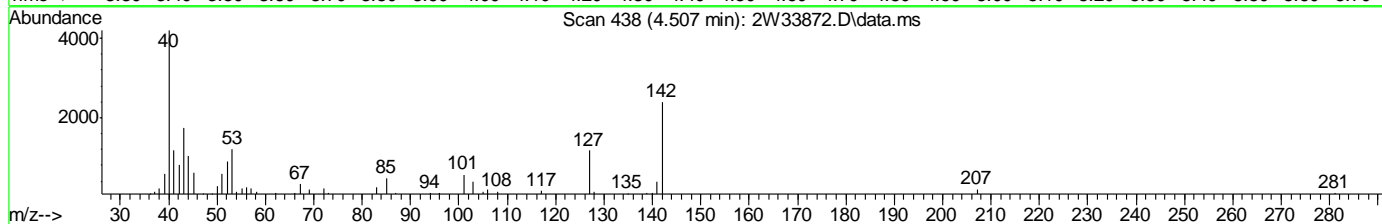
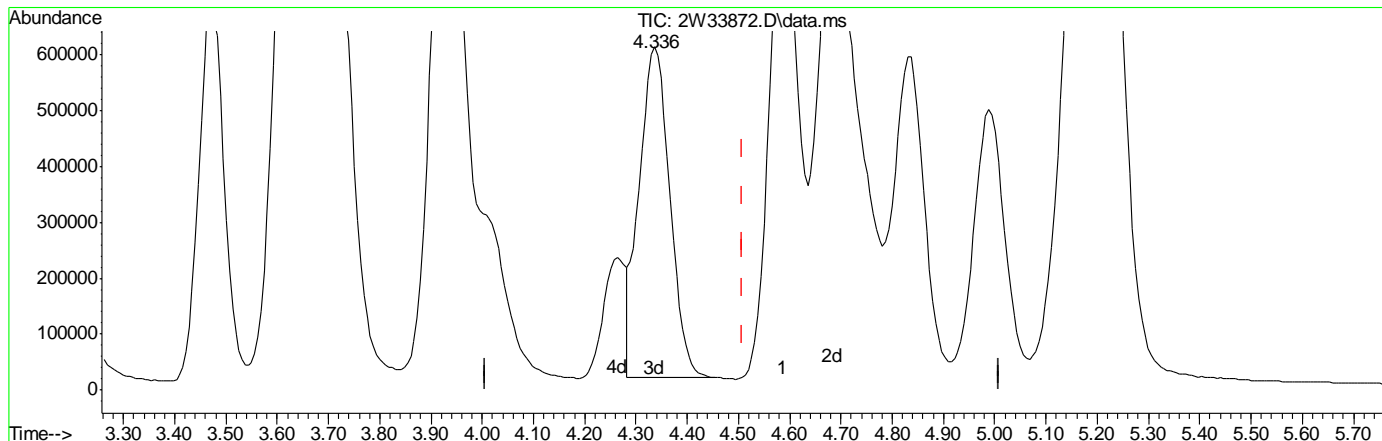
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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33872.D
 Acq On : 17 Jan 2012 12:32 am
 Operator : YOUMINH
 Sample : IC1426-40
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:26:33 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration

6.7.9.2
 6



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 34.68PPBV m

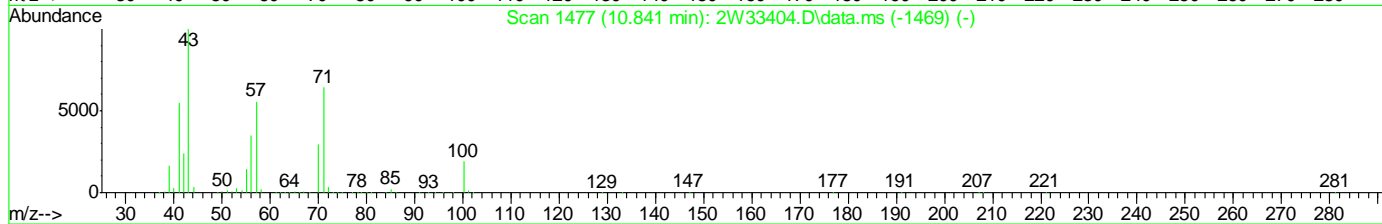
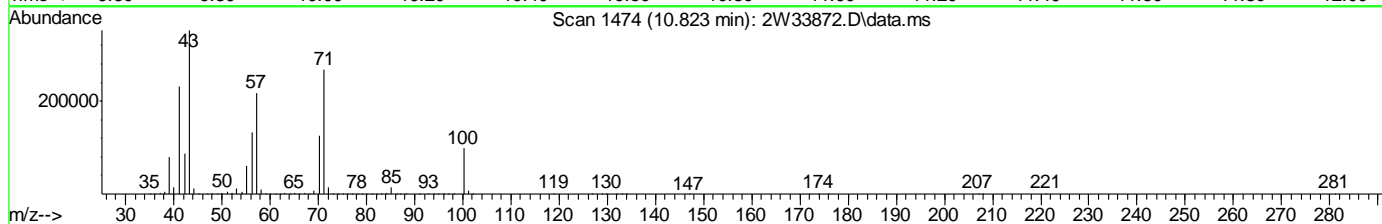
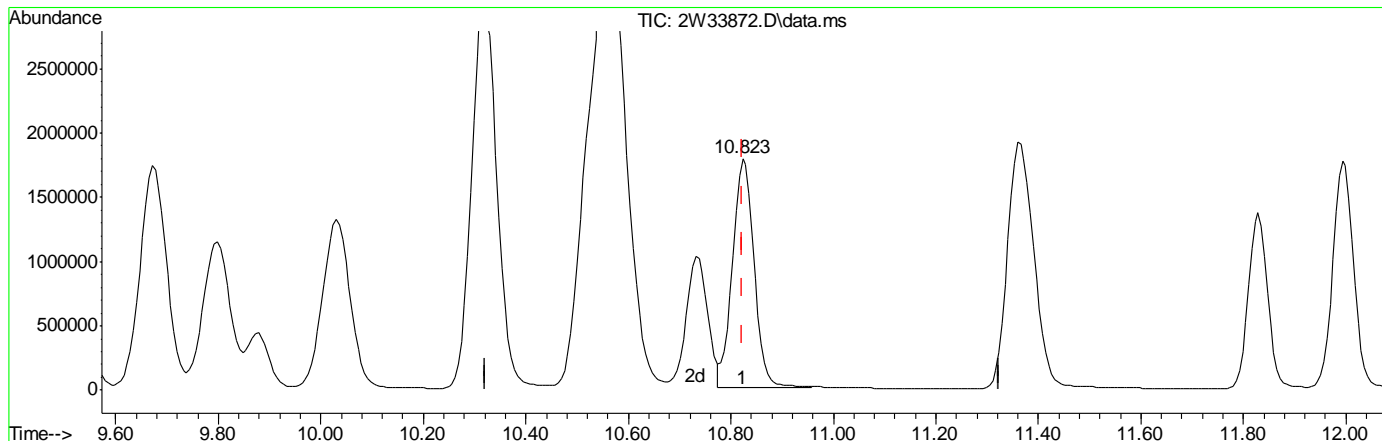
response 2463780

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33872.D
 Acq On : 17 Jan 2012 12:32 am
 Operator : YOUMINH
 Sample : IC1426-40
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 10:26:33 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 09:41:38 2012
 Response via : Initial Calibration



(62) TVHC as EQUIV HEPTANE

10.823min (+0.000) 38.43PPBV m

response 5170347

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 13:49:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	7.775	128	127546	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	9.872	114	552473	10.00	PPBV	0.00
68) CHLOROENZENE-D5	13.847	82	282159	10.00	PPBV	0.00
104) CHLOROENZENE-D5(A)	14.084	82	143	10.00	PPBV	0.24
System Monitoring Compounds						
83) 4-BROMOFLUOROBENZENE	15.261	95	334842	10.10	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	101.00%
Target Compounds						
						Qvalue
3) DICHLORODIFLUOROMETHANE	2.105	85	610865	9.71	PPBV	99
4) FREON 152A	1.953	65	118531	9.86	PPBV	94
5) CHLORODIFLUOROMETHANE	1.995	67	56602	9.87	PPBV	98
6) PROPYLENE	2.032	41	115324	8.96	PPBV	94
7) FREON 114	2.373	85	541185	8.42	PPBV #	78
8) CHLOROMETHANE	2.276	52	48520	10.43	PPBV	96
9) VINYL CHLORIDE	2.495	62	197539	10.32	PPBV	100
10) 1,3-BUTADIENE	2.635	54	133527	10.19	PPBV #	83
11) n-BUTANE	2.690	43	247398	9.63	PPBV	96
12) BROMOMETHANE	2.922	94	212850	10.29	PPBV	99
13) CHLOROETHANE	3.099	64	99177	9.81	PPBV	99
15) ACROLEIN	3.599	56	44951	10.30	PPBV	94
16) FREON 123	3.623	83	439129	9.50	PPBV #	96
17) FREON 123A	3.684	117	294737	9.73	PPBV #	71
18) TRICHLOROFLUOROMETHANE	3.922	101	607902	9.80	PPBV	99
19) ISOPROPYL ALCOHOL	4.001	45	224300	10.33	PPBV	95
20) ACETONE	3.739	58	50107	9.13	PPBV #	88
21) PENTANE	4.330	42	129422	9.31	PPBV	83
23) TVHC as EQUIV PENTANE	4.508	TIC	671607m	9.44	PPBV	
24) IODOMETHANE	4.580	142	562484	10.07	PPBV	98
25) 1,1-DICHLOROETHYLENE	4.678	96	191778	9.57	PPBV	87
26) CARBON DISULFIDE	5.220	76	362807	8.36	PPBV	97
27) ETHANOL	3.227	45	42835	9.80	PPBV	94
28) BROMOETHENE	3.471	106	213707	10.51	PPBV	100
30) METHYLENE CHLORIDE	4.830	84	150056	9.32	PPBV	84
31) 3-CHLOROPROPENE	4.989	76	77943	9.82	PPBV #	73
32) FREON 113	5.178	151	371411	9.89	PPBV #	83
33) TRANS-1,2-DICHLOROETHY...	6.165	96	155708	9.42	PPBV #	87
34) TERTIARY BUTYL ALCOHOL	4.727	59	347696	10.43	PPBV	97
35) METHYL TERTIARY BUTYL ...	6.549	73	408204	9.15	PPBV	91
36) TETRAHYDROFURAN	8.397	72	52458	8.38	PPBV #	70
37) HEXANE	7.842	57	187397	7.95	PPBV	99
38) VINYL ACETATE	6.683	86	32205	10.65	PPBV #	8
39) 1,1-DICHLOROETHANE	6.452	63	294754	9.76	PPBV	98
40) METHYL ETHYL KETONE	7.141	72	626	0.11	PPBV	92
41) cis-1,2-DICHLOROETHYLENE	7.574	96	174667	9.09	PPBV	90
42) ETHYL ACETATE	7.866	61	23829	7.28	PPBV #	75
44) CHLOROFORM	7.939	83	355761	8.99	PPBV	99
45) 2,4-DIMETHYLPENTANE	8.842	57	247399	8.58	PPBV #	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 13:49:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) 1,1,1-TRICHLOROETHANE	9.037	97	431029	9.47	PPBV	95
47) CARBON TETRACHLORIDE	9.671	117	482455	9.46	PPBV	100
48) 1,2-DICHLOROETHANE	8.762	62	217848	9.93	PPBV	98
50) BENZENE	9.518	78	464315	8.70	PPBV	97
51) CYCLOHEXANE	9.799	84	220947	8.27	PPBV #	77
52) 2,3-DIMETHYLPENTANE	10.024	71	105719	8.50	PPBV #	86
54) TRICHLOROETHYLENE	10.555	95	227081	8.48	PPBV	92
55) 1,2-DICHLOROPROPANE	10.323	63	152105	8.42	PPBV	85
57) BROMODICHLOROMETHANE	10.512	83	389385	8.63	PPBV	97
58) 2,2,4-TRIMETHYLPENTANE	10.579	57	679713	8.21	PPBV	96
59) 1,4-DIOXANE	10.561	88	95628	8.90	PPBV #	13
60) METHYL METHACRYLATE	10.731	69	117297	8.28	PPBV #	87
61) HEPTANE	10.731	43	1910	0.08	PPBV	93
62) TVHC as EQUIV HEPTANE	10.823	TIC	1099591m	8.34	PPBV	
63) METHYL ISOBUTYL KETONE	11.378	58	96903	8.99	PPBV	86
64) cis-1,3-DICHLOROPROPENE	11.347	75	257599	9.76	PPBV	97
65) TOLUENE	12.243	92	320510	8.68	PPBV	98
66) trans-1,3-DICHLOROPROPENE	11.823	75	239857	9.62	PPBV	97
67) 1,1,2-TRICHLOROETHANE	11.987	83	154909	9.04	PPBV	93
69) 2-HEXANONE	12.463	58	113734	9.09	PPBV	94
71) TETRACHLOROETHYLENE	13.268	164	277470	8.57	PPBV	95
72) DIBROMOCHLOROMETHANE	12.634	129	432784	9.25	PPBV	100
73) 1,2-DIBROMOETHANE	12.859	107	294113	9.50	PPBV	99
74) OCTANE	13.097	43	286724	9.01	PPBV #	76
75) 1,1,1,2-TETRACHLOROETHANE	13.865	131	315315	9.38	PPBV	99
76) CHLOROBENZENE	13.883	112	460045	9.52	PPBV	94
77) ETHYLBENZENE	14.212	91	666223	9.32	PPBV	99
78) m,p-XYLENE	14.377	106	501021	18.21	PPBV	97
79) o-XYLENE	14.822	106	245254	9.10	PPBV	98
80) STYRENE	14.718	104	353117	9.47	PPBV	99
81) NONANE	14.981	43	265413	9.37	PPBV	85
82) BROMOFORM	14.481	173	400858	9.34	PPBV	99
84) 1,1,2,2-TETRACHLOROETHANE	14.810	83	302928	9.03	PPBV	97
85) ISOPROPYLBENZENE	15.377	105	708523	8.92	PPBV	99
87) 2-CHLOROTOLUENE	15.865	126	179506	9.79	PPBV #	63
88) n-PROPYLBENZENE	15.877	120	173784	10.14	PPBV	93
89) 4-ETHYLTOLUENE	16.017	105	575424	10.36	PPBV	96
90) 1,3,5-TRIMETHYLBENZENE	16.084	105	473291	10.01	PPBV	98
92) TERT-BUTYLBENZENE	16.474	134	127106	9.89	PPBV	95
93) 1,2,4-TRIMETHYLBENZENE	16.480	105	439098	10.23	PPBV	94
94) m-DICHLOROBENZENE	16.639	146	293101	10.99	PPBV	97
95) BENZYL CHLORIDE	16.621	91	301040	10.52	PPBV	97
96) p-DICHLOROBENZENE	16.700	146	283983	11.24	PPBV	98
97) SEC-BUTYLBENZENE	16.724	134	145471	10.24	PPBV	86
98) p-ISOPROPYLTOLUENE	16.864	134	137862	10.57	PPBV	95
99) o-DICHLOROBENZENE	17.017	146	255187	10.75	PPBV	98
100) n-BUTYLBENZENE	17.248	134	97304	11.98	PPBV	82
102) HEXACHLOROBTADIENE	18.913	225	93708	9.73	PPBV	97
103) 1,2,4-TRICHLOROBENZENE	18.535	180	58860	10.08	PPBV	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 13:49:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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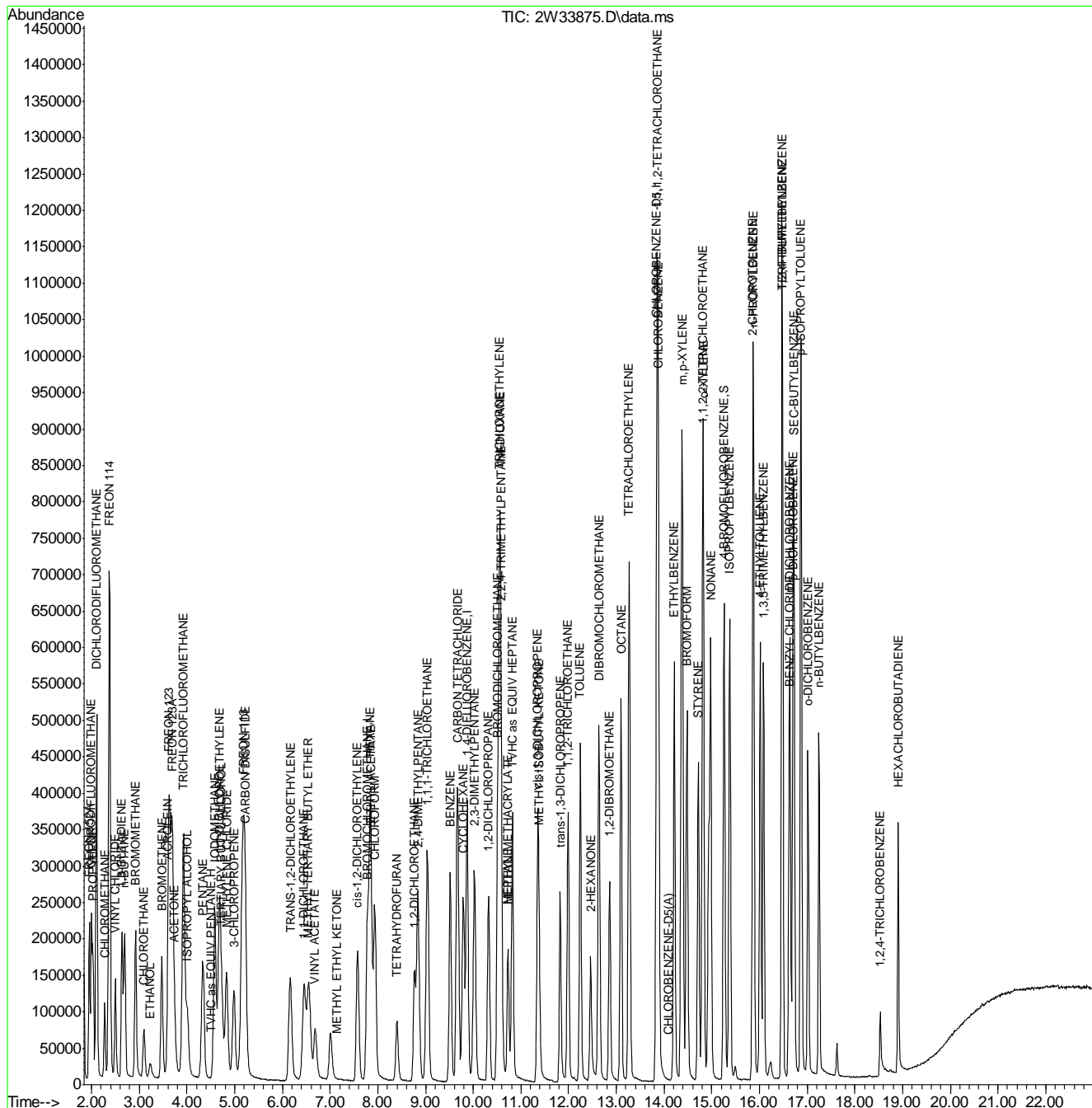
(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.7.10
6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOU MINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 13:49:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1426-ICV1426 **Method:** TO-15
Lab FileID: 2W33875.D **Analyst approved:** 01/20/12 17:38 Kanya Veerawat
Injection Time: 01/17/12 02:30 **Supervisor approved:** 01/20/12 17:39 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl ethyl ketone	78-93-3		7.01	Poor instrument integration
TVHC As Equiv Heptane			10.82	Poor instrument integration

6.7.10.1

6

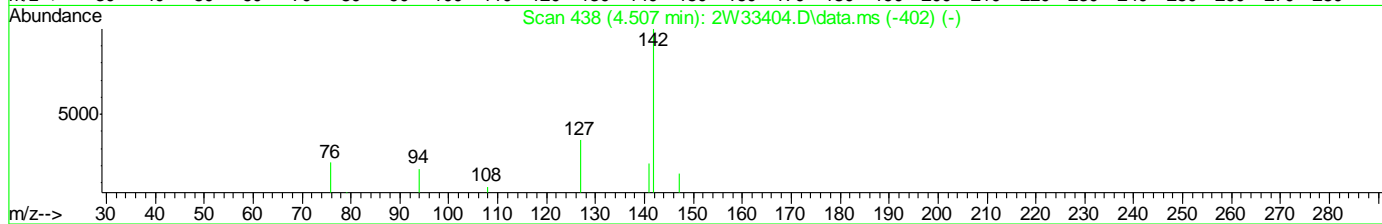
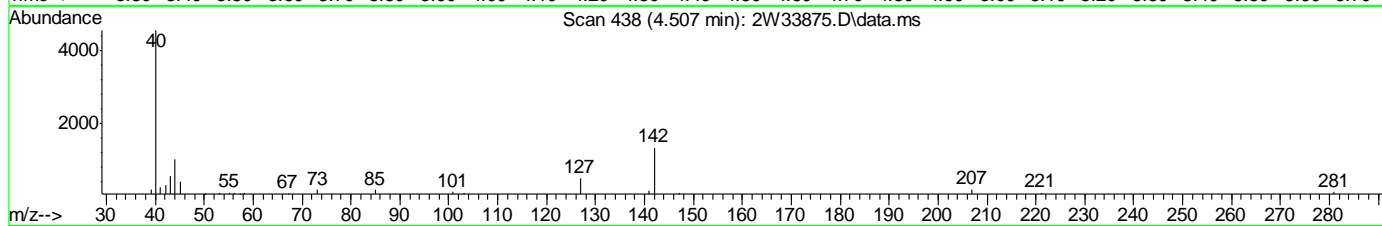
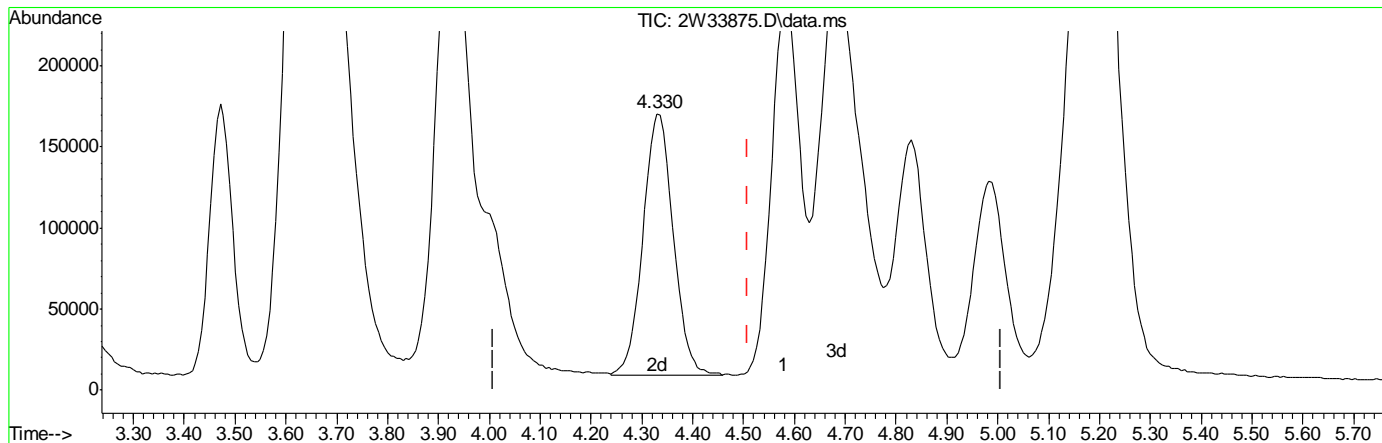
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 13:49:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration

6.7.10.2

6



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 9.44PPBV m

response 671607

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

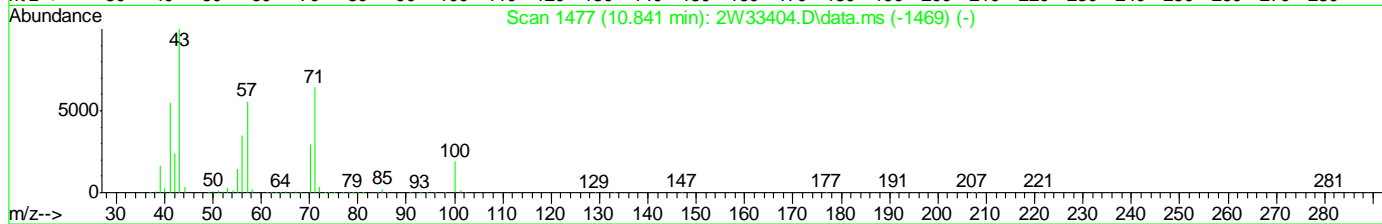
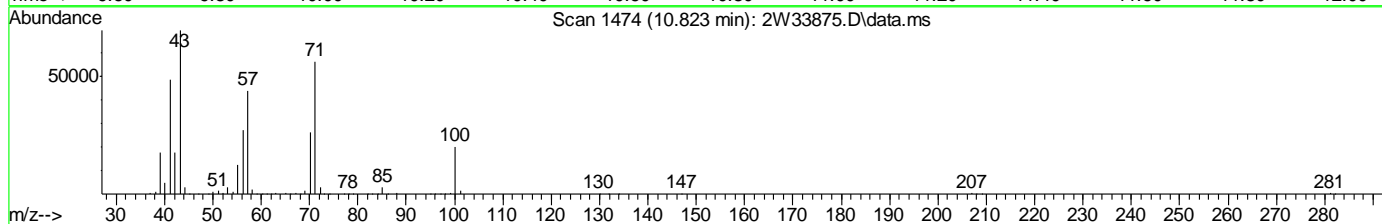
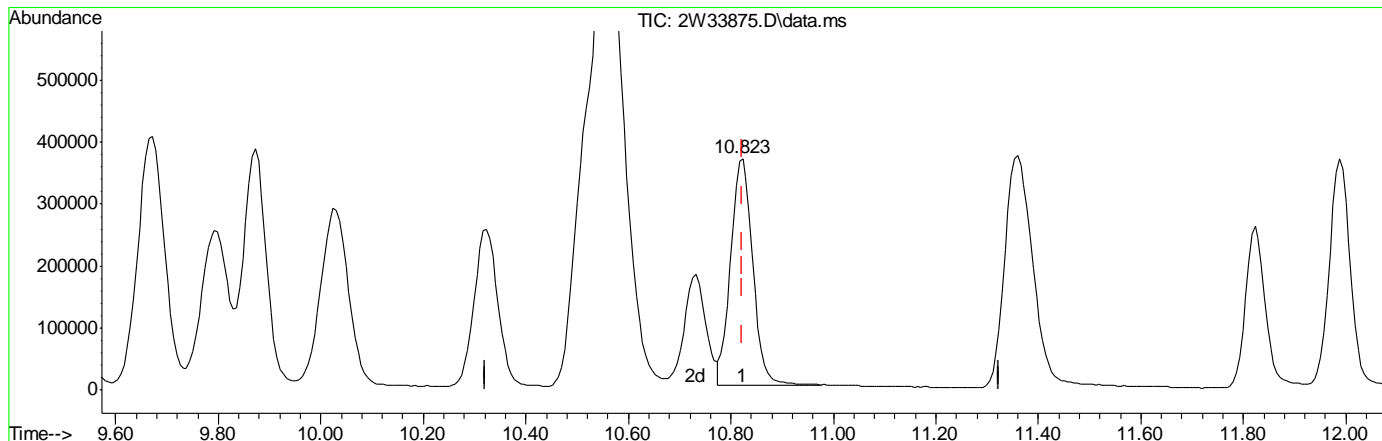
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 13:49:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration

6.7.10.3

6



(62) TVHC as EQUIV HEPTANE

10.823min (+0.000) 8.34PPBV m

response 1099591

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

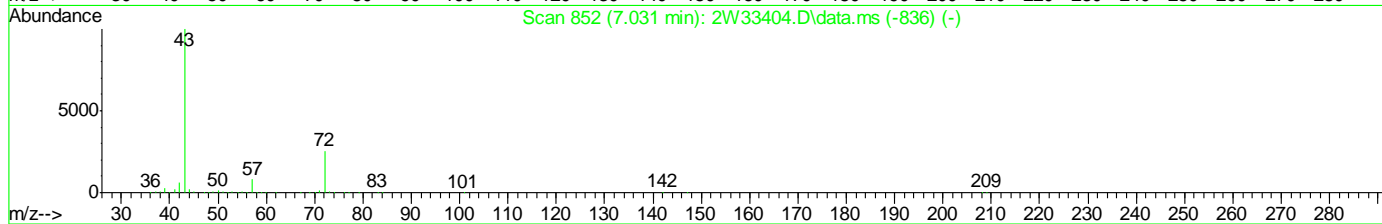
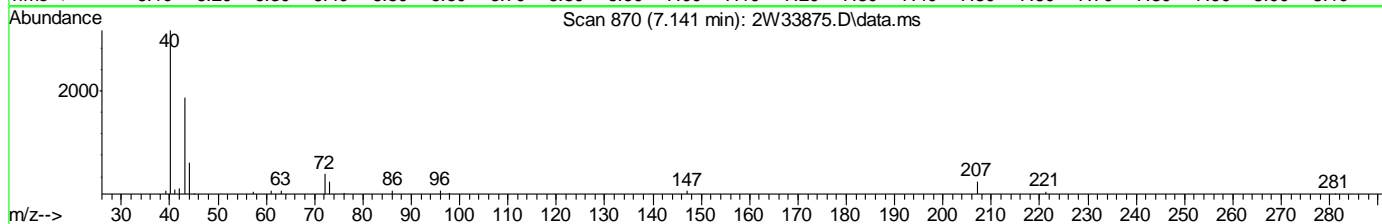
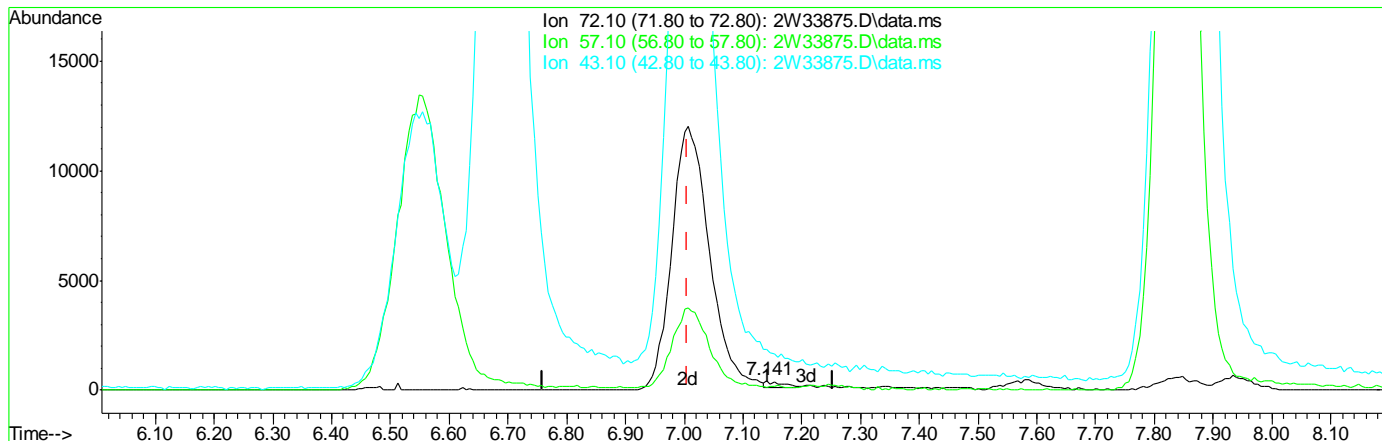
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426_RAW\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 14:07:24 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.10.4

6



TIC: 2W33875.D\data.ms

(40) METHYL ETHYL KETONE

7.141min (+0.135) 0.09PPBV

response 532

Ion	Exp%	Act%
72.10	100	100
57.10	31.40	27.56
43.10	397.60	416.67
0.00	0.00	0.00

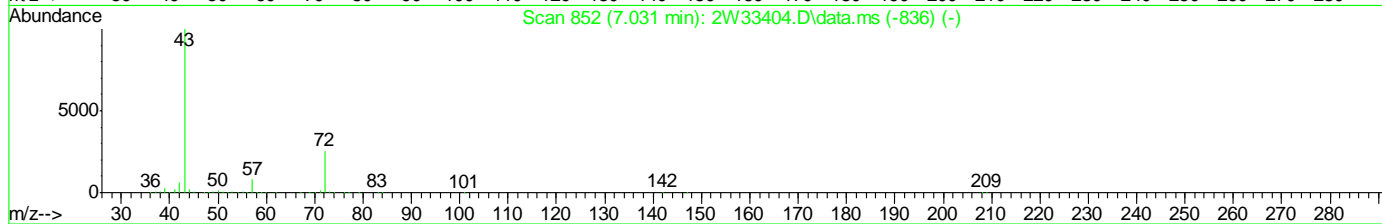
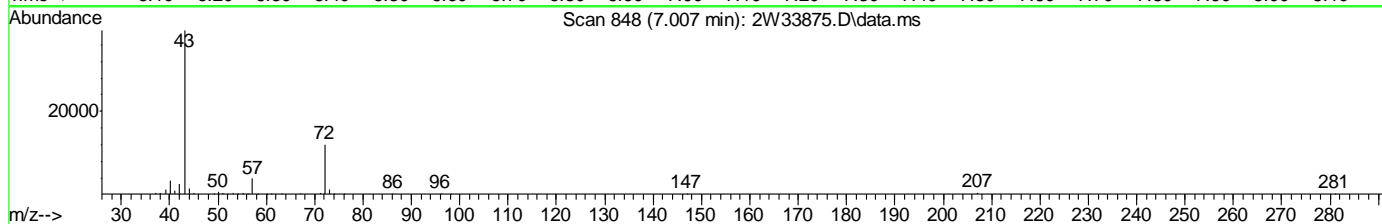
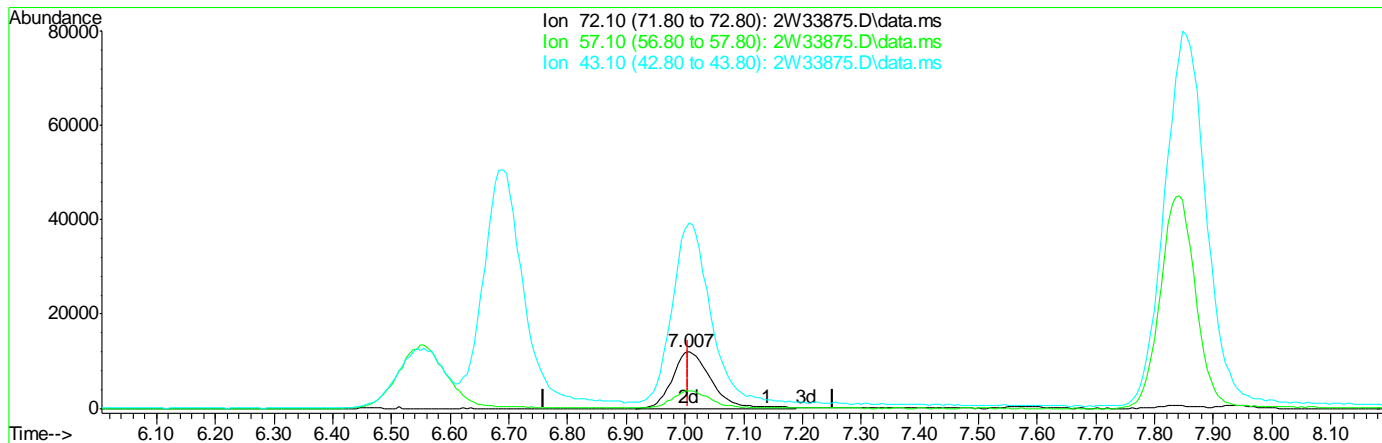
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\V2W1426\
 Data File : 2W33875.D
 Acq On : 17 Jan 2012 2:30 am
 Operator : YOUMINH
 Sample : ICV1426-10
 Misc : MS23893,V2W1426,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 13:49:00 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:32:08 2012
 Response via : Initial Calibration

6.7.10.5

6



TIC: 2W33875.D\data.ms

(40) METHYL ETHYL KETONE

7.007min (+0.000) 9.68PPBV m

response 54938

Ion	Exp%	Act%
72.10	100	100
57.10	31.40	31.35
43.10	397.60	328.36#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34264.D
 Acq On : 15 Feb 2012 10:38 am
 Operator : YOUMINH
 Sample : CC1426-10
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 16 08:38:10 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) BROMOCHLOROMETHANE	7.756	128	161548	10.00	PPBV	#-0.02	
49) 1,4-DIFLUOROBENZENE	9.854	114	644445	10.00	PPBV	-0.02	
68) CHLOROBENZENE-D5	13.828	82	315022	10.00	PPBV	#-0.02	
104) CHLOROBENZENE-D5(A)	13.828	82	317209	10.00	PPBV	#-0.02	
System Monitoring Compounds							
83) 4-BROMOFLUOROBENZENE	15.243	95	352842	9.54	PPBV	-0.01	
Spiked Amount	10.000	Range	65 - 128	Recovery	=	95.40%	
Target Compounds							
							Qvalue
3) DICHLORODIFLUOROMETHANE	2.099	85	775557	9.74	PPBV		99
4) FREON 152A	1.947	65	137837	9.19	PPBV		90
5) CHLORODIFLUOROMETHANE	1.995	67	73233	10.09	PPBV		96
6) PROPYLENE	2.026	41	129869	7.96	PPBV		94
7) FREON 114	2.367	85	784946	9.64	PPBV		84
8) CHLOROMETHANE	2.270	52	52287	8.88	PPBV		92
9) VINYL CHLORIDE	2.495	62	237380	9.80	PPBV		100
10) 1,3-BUTADIENE	2.636	54	168207	10.14	PPBV		97
11) n-BUTANE	2.684	43	310816	9.55	PPBV		97
12) BROMOMETHANE	2.916	94	281758	10.75	PPBV		98
13) CHLOROETHANE	3.087	64	125758	9.83	PPBV		99
14) DICHLOROFLUOROMETHANE	3.178	67	545144	10.27	PPBV		98
15) ACROLEIN	3.580	56	61885	11.15	PPBV		96
16) FREON 123	3.611	83	615842	10.52	PPBV	#	96
17) FREON 123A	3.678	117	426503	11.12	PPBV	#	61
18) TRICHLOROFLUOROMETHANE	3.910	101	862105	10.97	PPBV		100
19) ISOPROPYL ALCOHOL	3.983	45	310282	11.28	PPBV		96
20) ACETONE	3.721	58	73502	10.57	PPBV		99
21) PENTANE	4.312	42	176790	10.05	PPBV		85
22) ACRYLONITRILE	4.245	53	103190	10.67	PPBV		98
23) TVHC as EQUIV PENTANE	4.508	TIC	931981m	10.34	PPBV		
24) IODOMETHANE	4.562	142	779043	11.02	PPBV		99
25) 1,1-DICHLOROETHYLENE	4.660	96	268203	10.57	PPBV	#	80
26) CARBON DISULFIDE	5.202	76	526222	9.57	PPBV		96
27) ETHANOL	3.209	45	59040	10.67	PPBV		95
28) BROMOETHENE	3.459	106	302275	11.74	PPBV		99
29) ACETONITRILE	3.446	41	85843	9.41	PPBV	#	96
30) METHYLENE CHLORIDE	4.812	84	200257	10.10	PPBV		86
31) 3-CHLOROPROPENE	4.958	76	98940	9.85	PPBV	#	77
32) FREON 113	5.159	151	510341	10.73	PPBV	#	79
33) TRANS-1,2-DICHLOROETHY...	6.135	96	219823	10.50	PPBV	#	85
34) TERTIARY BUTYL ALCOHOL	4.696	59	444901	10.54	PPBV		97
35) METHYL TERTIARY BUTYL ...	6.531	73	535632	9.48	PPBV		91
36) TETRAHYDROFURAN	8.378	72	74259	9.37	PPBV	#	70
37) HEXANE	7.817	57	274969	9.21	PPBV		97
38) VINYL ACETATE	6.659	86	42604	11.12	PPBV	#	1
39) 1,1-DICHLOROETHANE	6.421	63	352487	9.21	PPBV		97
40) METHYL ETHYL KETONE	6.982	72	70359	9.78	PPBV	#	62
41) cis-1,2-DICHLOROETHYLENE	7.555	96	241277	9.92	PPBV	#	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34264.D
 Acq On : 15 Feb 2012 10:38 am
 Operator : YOUMINH
 Sample : CC1426-10
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 16 08:38:10 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) ETHYL ACETATE	7.842	61	36457	8.80	PPBV #	88
43) METHYL ACRYLATE	7.830	55	225886	9.26	PPBV #	90
44) CHLOROFORM	7.915	83	485116	9.68	PPBV	98
45) 2,4-DIMETHYLPENTANE	8.823	57	349317	9.56	PPBV #	95
46) 1,1,1-TRICHLOROETHANE	9.018	97	579021	10.04	PPBV	95
47) CARBON TETRACHLORIDE	9.652	117	648452	10.04	PPBV	100
48) 1,2-DICHLOROETHANE	8.750	62	278723	10.03	PPBV	99
50) BENZENE	9.500	78	628957	10.11	PPBV	97
51) CYCLOHEXANE	9.774	84	299139	9.89	PPBV #	81
52) 2,3-DIMETHYLPENTANE	10.012	71	145671	10.04	PPBV #	85
53) DIBROMOMETHANE	10.286	174	334722	11.25	PPBV #	86
54) TRICHLOROETHYLENE	10.530	95	299079	9.57	PPBV	87
55) 1,2-DICHLOROPROPANE	10.305	63	196461	9.33	PPBV	82
56) ETHYL ACRYLATE	10.305	55	254069	9.27	PPBV #	89
57) BROMODICHLOROMETHANE	10.494	83	515353	9.80	PPBV	98
58) 2,2,4-TRIMETHYLPENTANE	10.561	57	937809	9.71	PPBV	97
59) 1,4-DIOXANE	10.543	88	130970	10.45	PPBV #	9
60) METHYL METHACRYLATE	10.707	69	158832	9.61	PPBV #	81
61) HEPTANE	10.805	43	279304	9.82	PPBV	83
62) TVHC as EQUIV HEPTANE	10.805	TIC	1477254m	9.61	PPBV	
63) METHYL ISOBUTYL KETONE	11.359	58	116071	9.23	PPBV #	81
64) cis-1,3-DICHLOROPROPENE	11.335	75	301960	9.81	PPBV	99
65) TOLUENE	12.231	92	446327	10.36	PPBV	98
66) trans-1,3-DICHLOROPROPENE	11.804	75	290249	9.97	PPBV	99
67) 1,1,2-TRICHLOROETHANE	11.969	83	195620	9.78	PPBV	90
69) 2-HEXANONE	12.445	58	150114	10.75	PPBV	90
70) ETHYL METHACRYLATE	12.438	69	242474	10.04	PPBV #	88
71) TETRACHLOROETHYLENE	13.255	164	389748	10.78	PPBV	92
72) DIBROMOCHLOROMETHANE	12.615	129	548623	10.50	PPBV	99
73) 1,2-DIBROMOETHANE	12.841	107	357724	10.35	PPBV	99
74) OCTANE	13.079	43	360207	10.14	PPBV #	74
75) 1,1,1,2-TETRACHLOROETHANE	13.847	131	376453	10.03	PPBV	99
76) CHLOROBENZENE	13.871	112	568357	10.54	PPBV	93
77) ETHYLBENZENE	14.200	91	794363	9.96	PPBV	96
78) m,p-XYLENE	14.359	106	660820	21.52	PPBV	89
79) o-XYLENE	14.804	106	310436	10.32	PPBV	92
80) STYRENE	14.700	104	428122	10.29	PPBV	99
81) NONANE	14.962	43	306093	9.68	PPBV	85
82) BROMOFORM	14.462	173	472563	9.86	PPBV	98
84) 1,1,2,2-TETRACHLOROETHANE	14.798	83	323761	8.65	PPBV	97
85) ISOPROPYLBENZENE	15.359	105	857062	9.67	PPBV	97
86) BROMOBENZENE	15.474	156	283463	11.18	PPBV #	74
87) 2-CHLOROTOLUENE	15.846	126	215770	10.54	PPBV #	54
88) n-PROPYLBENZENE	15.865	120	216195	11.30	PPBV	75
89) 4-ETHYLTOLUENE	16.005	105	658799	10.62	PPBV	93
90) 1,3,5-TRIMETHYLBENZENE	16.072	105	563221	10.67	PPBV	99
91) ALPHA-METHYLSTYRENE	16.224	118	255885	11.51	PPBV #	96
92) TERT-BUTYLBENZENE	16.462	134	153379	10.69	PPBV	91
93) 1,2,4-TRIMETHYLBENZENE	16.462	105	515503	10.75	PPBV	92
94) m-DICHLOROBENZENE	16.627	146	356554	11.97	PPBV	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34264.D
 Acq On : 15 Feb 2012 10:38 am
 Operator : YOUMINH
 Sample : CC1426-10
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 16 08:38:10 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : T015 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

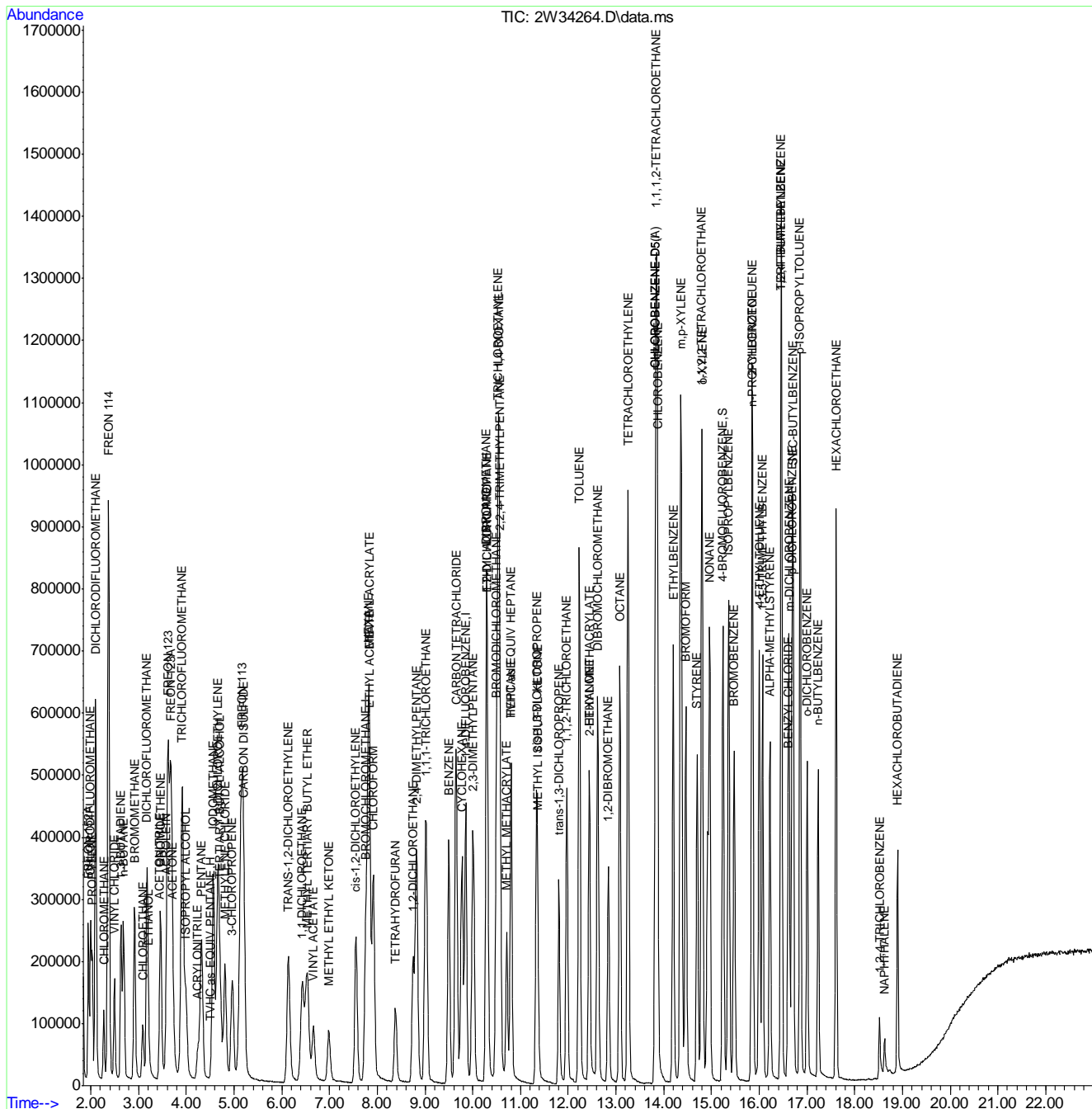
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) BENZYL CHLORIDE	16.602	91	323142	10.11	PPBV	95
96) p-DICHLOROBENZENE	16.688	146	333960	11.84	PPBV	97
97) SEC-BUTYLBENZENE	16.712	134	174002	10.97	PPBV	77
98) p-ISOPROPYLTOLUENE	16.852	134	163401	11.22	PPBV	89
99) o-DICHLOROBENZENE	17.005	146	294599	11.11	PPBV	97
100) n-BUTYLBENZENE	17.236	134	114057	12.58	PPBV #	65
101) HEXACHLOROETHANE	17.614	201	252507	11.68	PPBV #	73
102) HEXACHLOROBUTADIENE	18.901	225	102401	9.52	PPBV	100
103) 1,2,4-TRICHLOROBENZENE	18.523	180	58392	8.95	PPBV	95
105) NAPHTHALENE	18.626	128	95621	8.29	PPBV	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : 2W34264.D
 Acq On : 15 Feb 2012 10:38 am
 Operator : YOUMINH
 Sample : CC1426-10
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 16 08:38:10 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2W1441-CC1426 **Method:** TO-15
Lab FileID: 2W34264.D **Analyst approved:** 02/23/12 17:48 Jessica Reitan-Chu
Injection Time: 02/15/12 10:38 **Supervisor approved:** 02/23/12 17:50 Jessica Reitan-Chu

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Heptane			10.80	Poor instrument integration

6.7.11.1

6

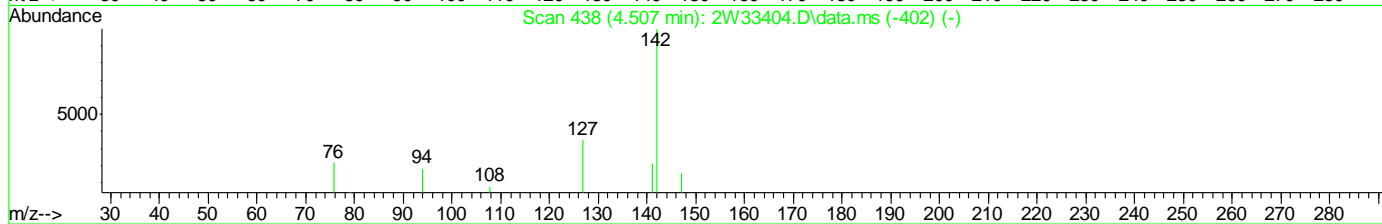
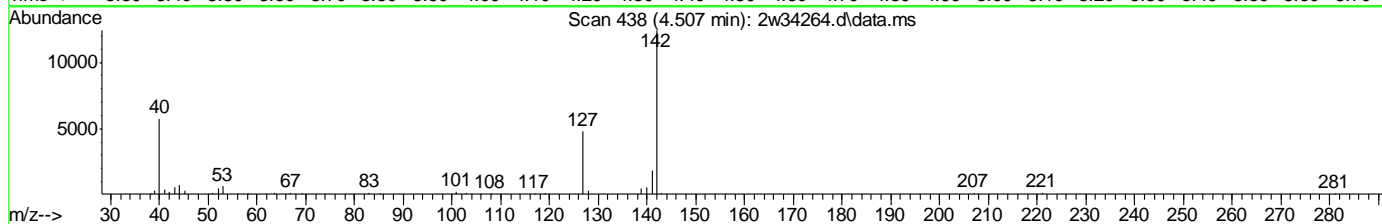
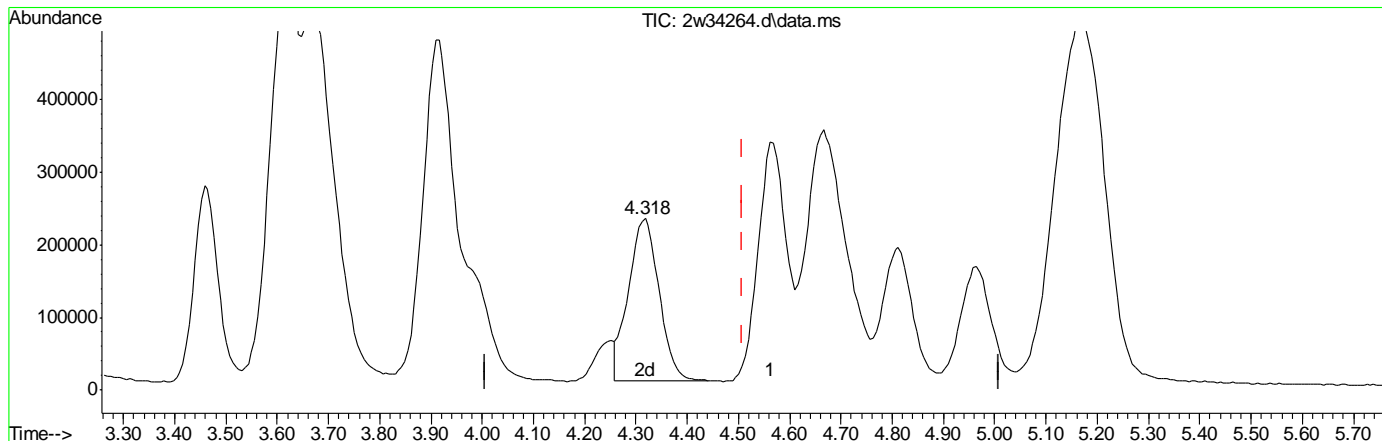
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\v2w1442\
 Data File : 2w34264.d
 Acq On : 15 Feb 2012 10:38 am
 Operator : YOUMINH
 Sample : CC1426-10
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 16 08:38:10 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.11.2

6



(23) TVHC as EQUIV PENTANE (H)

4.508min (0.000) 10.34PPBV m

response 931981

Signal	Exp%	Act%
TIC	100	100
0.00	1.90	0.00
0.00	1.60	0.00
0.00	0.00	0.00

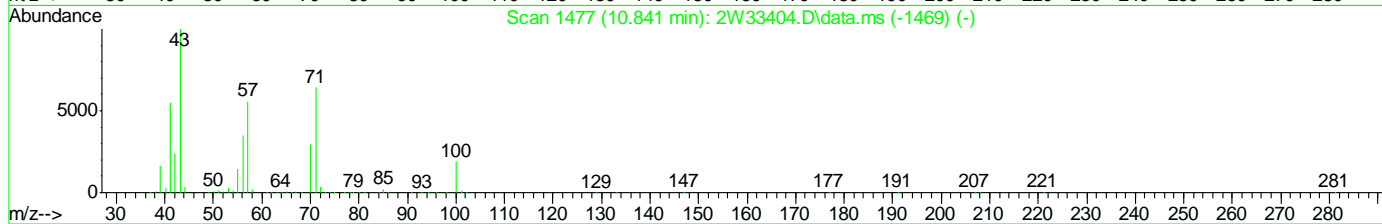
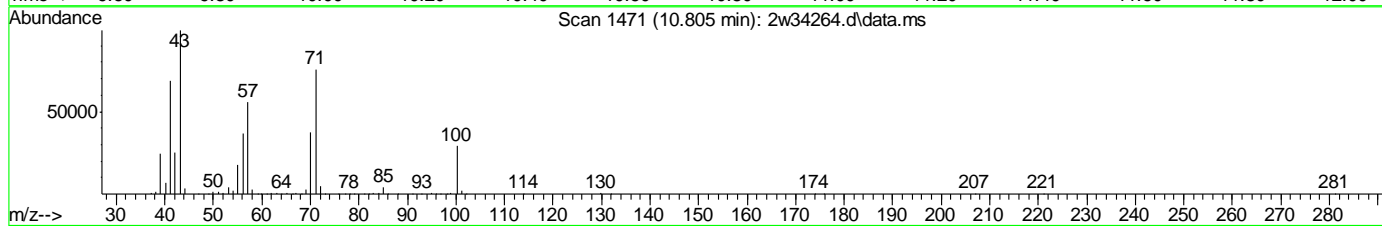
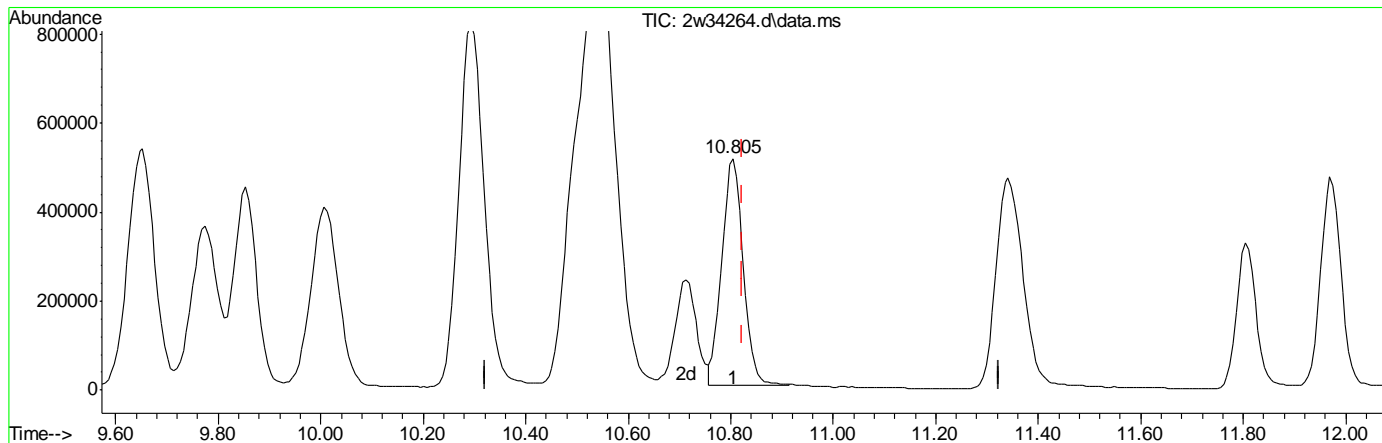
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V2W-CORE\v2w1442\
 Data File : 2w34264.d
 Acq On : 15 Feb 2012 10:38 am
 Operator : YOUMINH
 Sample : CC1426-10
 Misc : MS25531,V2W1442,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 16 08:38:10 2012
 Quant Method : C:\msdchem\1\METHODS\M2W1426.M
 Quant Title : TO15 by GCMS w/Rtx-1 60m X 0.32mm ID X 1.0 um
 QLast Update : Tue Jan 17 10:35:27 2012
 Response via : Initial Calibration

6.7.11.3

6



(62) TVHC as EQUIV HEPTANE

10.805min (-0.018) 9.61PPBV m

response 1477254

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34784.D Vial: 2
 Acq On : 18 Jan 2012 7:17 pm Operator: YOUMINH
 Sample : ICC1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:02 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.37	128	59980	10.00	PPBV	0.00
50) 1,4-DIFLUOROBENZENE	10.07	114	268264	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.35	82	134230	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.35	82	134236	10.00	PPBV	0.00

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 16.00 95 157340 10.78 PPBV 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 107.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.67	65	49239	9.38	PPBV	100
4) CHLORODIFLUOROMETHANE	4.70	67	19528	11.04	PPBV	100
5) DICHLORODIFLUOROMETHANE	4.79	85	216312	10.09	PPBV	100
6) PROPYLENE	4.73	41	70317	9.77	PPBV	100
7) FREON 114	4.98	85	270983	10.34	PPBV	100
8) CHLOROMETHANE	4.92	52	28108	10.74	PPBV	100
9) VINYL CHLORIDE	5.08	62	107174	10.30	PPBV	100
10) 1,3-BUTADIENE	5.18	54	86124	10.47	PPBV	100
11) n-BUTANE	5.22	43	167997	10.14	PPBV	100
12) BROMOMETHANE	5.39	94	92240	10.40	PPBV	100
13) CHLOROETHANE	5.51	64	61560	10.75	PPBV	100
14) DICHLOROFLUOROMETHANE	5.57	67	221112	10.42	PPBV	100
15) ACROLEIN	5.85	56	42513	10.77	PPBV	100
16) FREON 123	5.86	83	239267	10.68	PPBV #	100
17) FREON 123A	5.90	117	140048	10.71	PPBV	100
18) TRICHLOROFLUOROMETHANE	6.07	101	228859	10.50	PPBV	100
19) ISOPROPYL ALCOHOL	6.13	45	177192	10.55	PPBV	100
20) ACETONE	5.95	58	46064	10.54	PPBV	100
21) ACRYLONITRILE	6.29	53	83419	11.14	PPBV	100
22) PENTANE	6.32	57	32047	11.19	PPBV	100
23) TVHC as EQUIV PENTANE	6.32	TIC	603330m	10.63	PPBV	
24) IODOMETHANE	6.51	142	252184	10.48	PPBV	100
25) 1,1-DICHLOROETHYLENE	6.55	96	105266	10.41	PPBV	100
26) CARBON DISULFIDE	6.90	76	255959	10.21	PPBV	100
27) ETHANOL	5.60	45	41021	10.36	PPBV	100
28) ACETONITRILE	5.76	41	81949	10.63	PPBV	100
29) BROMOETHENE	5.77	106	96994	10.31	PPBV	100
30) METHYLENE CHLORIDE	6.63	84	96933	10.42	PPBV	100
31) 3-CHLOROPROPENE	6.73	76	53474	11.22	PPBV	100
32) FREON 113	6.82	151	171458	10.49	PPBV	100
33) TRANS-1,2-DICHLOROETHYLENE	7.37	96	99571	10.04	PPBV	100
34) TERTIARY BUTYL ALCOHOL	6.58	59	225583	11.43	PPBV	100
35) METHYL TERTIARY BUTYL ETHE	7.57	73	245158	10.44	PPBV	100
36) TETRAHYDROFURAN	8.85	72	45487	10.82	PPBV	100
37) HEXANE	8.37	57	183274	11.08	PPBV	100
38) VINYL ACETATE	7.63	86	27263	11.47	PPBV	100
39) 1,1-DICHLOROETHANE	7.53	63	188572	10.75	PPBV	100
40) METHYL ETHYL KETONE	7.85	72	44829	10.78	PPBV	100
41) cis-1,2-DICHLOROETHYLENE	8.22	96	110106	10.60	PPBV	100
42) DI-ISOPROPYL ETHER	8.37	45	324889	10.50	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34784.D Vial: 2
 Acq On : 18 Jan 2012 7:17 pm Operator: YOUMINH
 Sample : ICC1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:02 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) ETHYL ACETATE	8.39	61	28813	10.65	PPBV	100
44) METHYL ACRYLATE	8.39	55	177834	10.85	PPBV	100
45) CHLOROFORM	8.48	83	197194	10.91	PPBV	100
46) 2,4-DIMETHYLPENTANE	9.14	57	217647	11.10	PPBV	100
47) 1,1,1-TRICHLOROETHANE	9.34	97	190076	10.78	PPBV	100
48) CARBON TETRACHLORIDE	9.90	117	198921	10.75	PPBV	100
49) 1,2-DICHLOROETHANE	9.12	62	111272	10.82	PPBV	100
51) BENZENE	9.76	78	326830	10.31	PPBV	100
52) CYCLOHEXANE	10.01	84	154457	10.53	PPBV	100
53) 2,3-DIMETHYLPENTANE	10.21	71	82367	11.14	PPBV	100
54) TRICHLOROETHYLENE	10.73	95	133270	10.16	PPBV	100
55) DIBROMOMETHANE	10.49	174	123968	10.70	PPBV	100
56) 1,2-DICHLOROPROPANE	10.51	63	120061	10.82	PPBV	100
57) ETHYL ACRYLATE	10.49	55	192612	10.90	PPBV	100
58) BROMODICHLOROMETHANE	10.70	83	206464	10.73	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.74	57	590843	11.19	PPBV	100
60) 1,4-DIOXANE	10.76	88	64151	10.92	PPBV	100
61) METHYL METHACRYLATE	10.91	69	98312	10.76	PPBV	100
62) HEPTANE	10.99	43	197390	11.44	PPBV	100
63) TVHC as EQUIV HEPTANE	10.99	TIC	854368m	11.22	PPBV	
64) METHYL ISOBUTYL KETONE	11.59	43	184916	11.20	PPBV	100
65) cis-1,3-DICHLOROPROPENE	11.55	75	164640	11.11	PPBV	100
66) TOLUENE	12.52	92	221368	10.70	PPBV	100
67) trans-1,3-DICHLOROPROPENE	12.07	75	153665	11.36	PPBV	100
68) 1,1,2-TRICHLOROETHANE	12.25	83	97810	10.78	PPBV	100
70) ETHYL METHACRYLATE	12.79	69	152511	11.37	PPBV	100
71) 2-HEXANONE	12.79	43	174553	11.38	PPBV	100
72) TETRACHLOROETHYLENE	13.68	164	143102	10.65	PPBV	100
73) DIBROMOCHLOROMETHANE	12.96	129	199624	10.70	PPBV	100
74) 1,2-DIBROMOETHANE	13.21	107	165212	10.91	PPBV	100
75) OCTANE	13.50	43	244255	11.37	PPBV	100
76) 1,1,1,2-TETRACHLOROETHANE	14.37	131	143905	10.76	PPBV #	100
77) CHLOROBENZENE	14.39	112	269132	10.78	PPBV	100
78) ETHYLBENZENE	14.79	91	419741	10.47	PPBV	100
79) m,p-XYLENE	14.97	106	334251	21.33	PPBV	100
80) o-XYLENE	15.49	106	159560	10.61	PPBV	100
81) STYRENE	15.37	104	237146	11.70	PPBV	100
82) 1,2,3-TRICHLOROPROPANE	15.63	75	148573	11.37	PPBV	100
83) NONANE	15.72	43	218956	11.76	PPBV	100
84) BROMOFORM	15.07	173	180985	11.11	PPBV	100
86) 1,1,2,2-TETRACHLOROETHANE	15.49	83	192607	11.05	PPBV	100
87) ISOPROPYLBENZENE	16.15	105	435921	11.51	PPBV	100
88) BROMOBENZENE	16.26	156	124042	11.49	PPBV	100
89) 2-CHLOROTOLUENE	16.69	126	100862	11.97	PPBV #	100
90) n-PROPYLBENZENE	16.73	120	112819	11.91	PPBV	100
91) 4-ETHYLTOLUENE	16.89	105	367960	12.34	PPBV	100
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	285110	11.97	PPBV	100
93) ALPHA-METHYLSTYRENE	17.17	118	136346	12.27	PPBV	100
94) TERT-BUTYLBENZENE	17.45	134	75851	12.01	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34784.D Vial: 2
 Acq On : 18 Jan 2012 7:17 pm Operator: YOUMINH
 Sample : ICC1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:02 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) 1,2,4-TRIMETHYLBENZENE	17.46	105	267981	12.42	PPBV	100
96) m-DICHLOROBENZENE	17.63	146	169930	12.08	PPBV	100
97) BENZYL CHLORIDE	17.61	91	203594	12.45	PPBV	100
98) p-DICHLOROBENZENE	17.71	146	165433	12.60	PPBV	100
99) SEC-BUTYLBENZENE	17.76	134	84857	12.10	PPBV	100
100) p-ISOPROPYLTOLUENE	17.94	134	81307	12.70	PPBV	100
101) o-DICHLOROBENZENE	18.10	146	144661	12.24	PPBV	100
102) n-BUTYLBENZENE	18.44	134	60864	12.81	PPBV	100
103) HEXACHLOROETHANE	18.88	201	94781	11.99	PPBV	100
104) HEXACHLOROBUTADIENE	20.61	225	43420	13.52	PPBV	100
105) 1,2,4-TRICHLOROBENZENE	20.08	180	30752	12.84	PPBV	100
107) NAPHTHALENE	20.21	128	60265	11.41	PPBV	100

6.7.12
6

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34784.D MW1417.M Fri Jan 20 14:04:16 2012 MSW

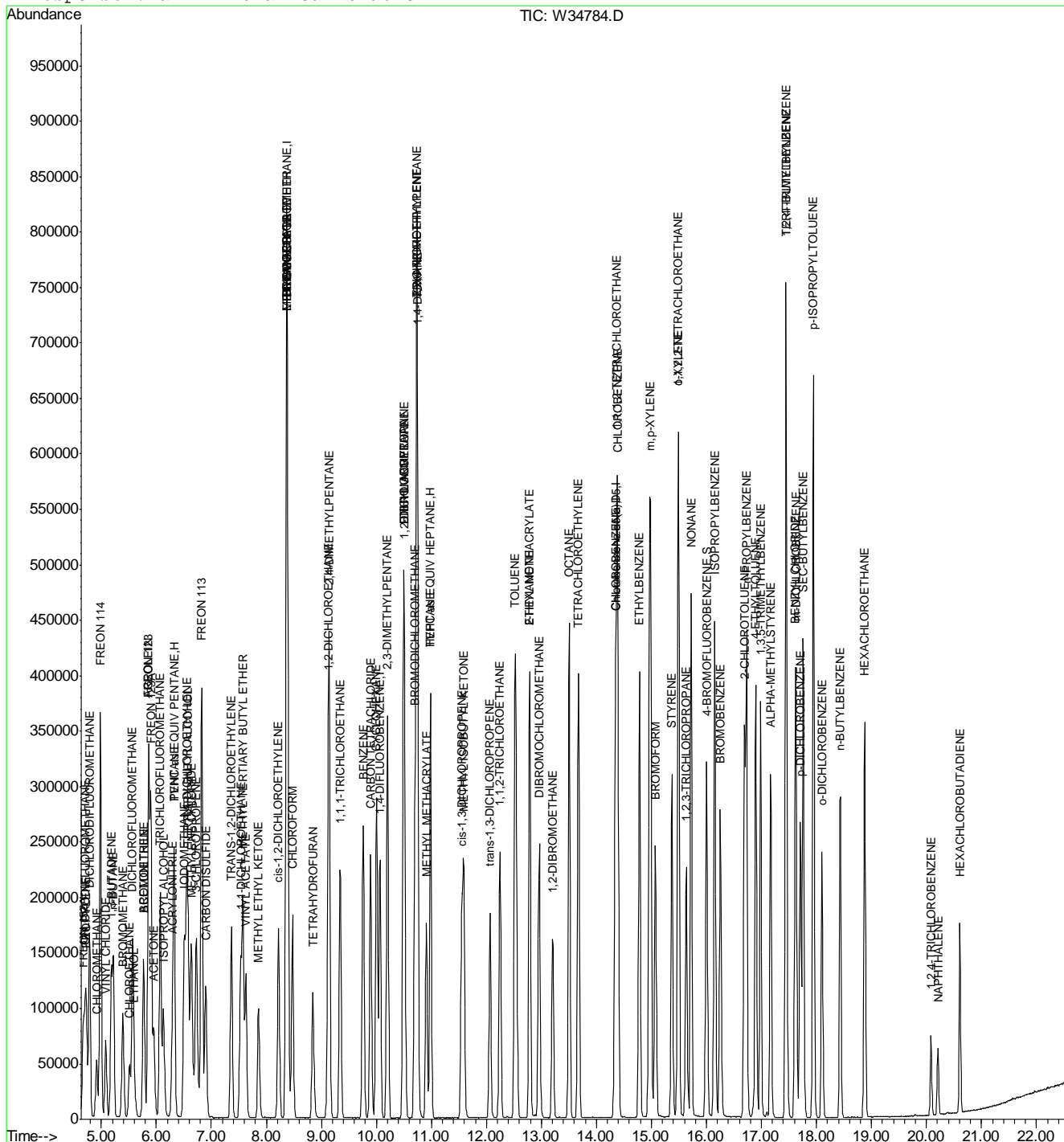
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34784.D
 Acq On : 18 Jan 2012 7:17 pm
 Sample : ICC1417-10
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:11 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Initial Calibration

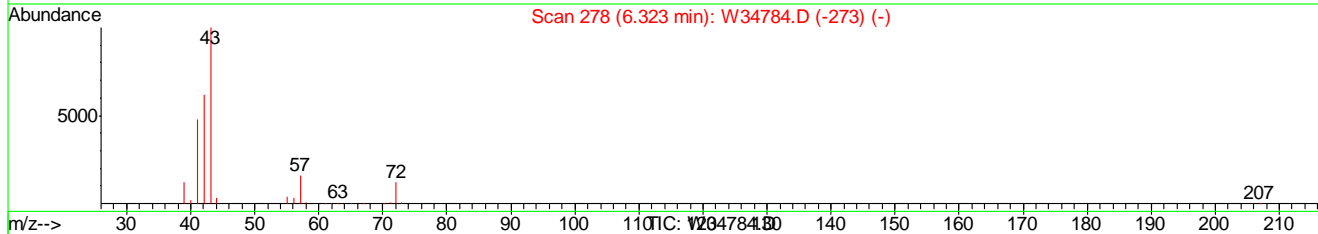
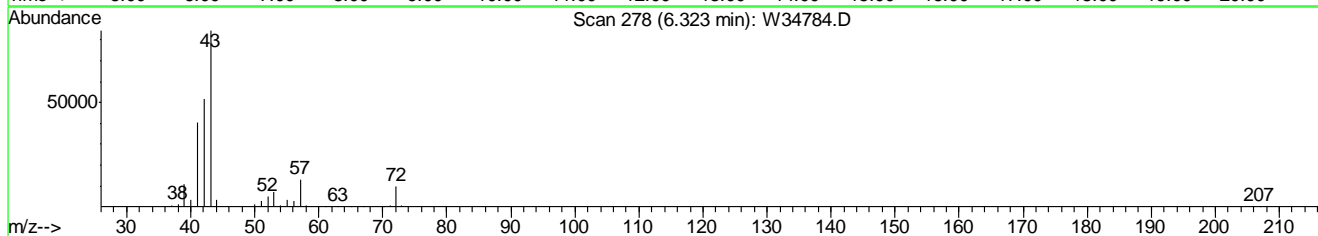
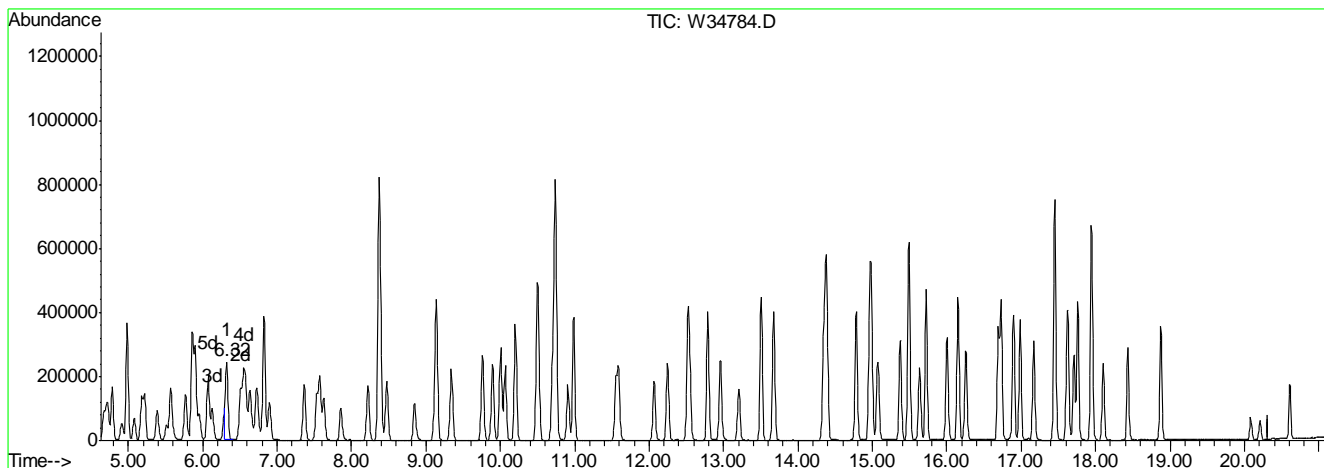


Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34784.D Vial: 2
 Acq On : 18 Jan 2012 7:17 pm Operator: YOUMINH
 Sample : ICC1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:11 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.12.1
 6



(23) TVHC as EQUIV PENTANE (H)

6.32min 10.63PPBV m

response 603330

Signal Exp% Act%

TIC 100 100

0.00 1.30 1.33#

0.00 1.10 1.11#

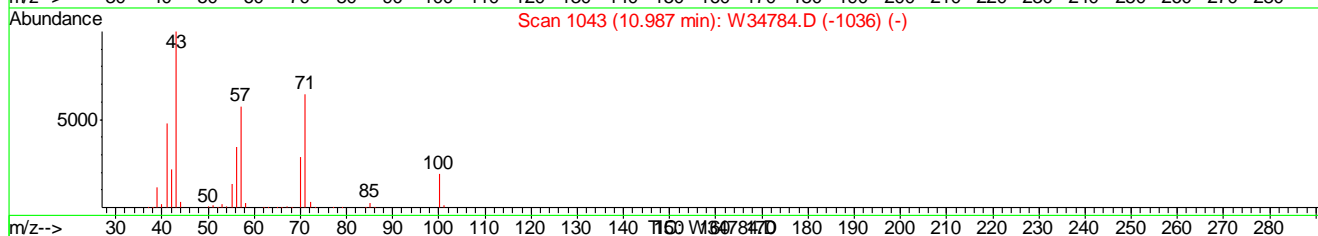
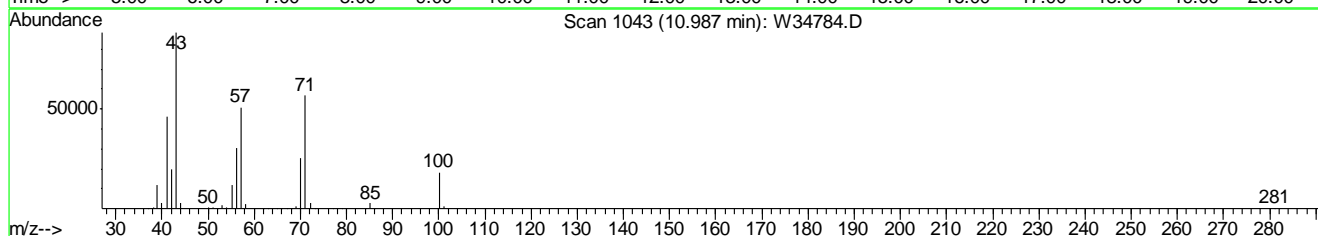
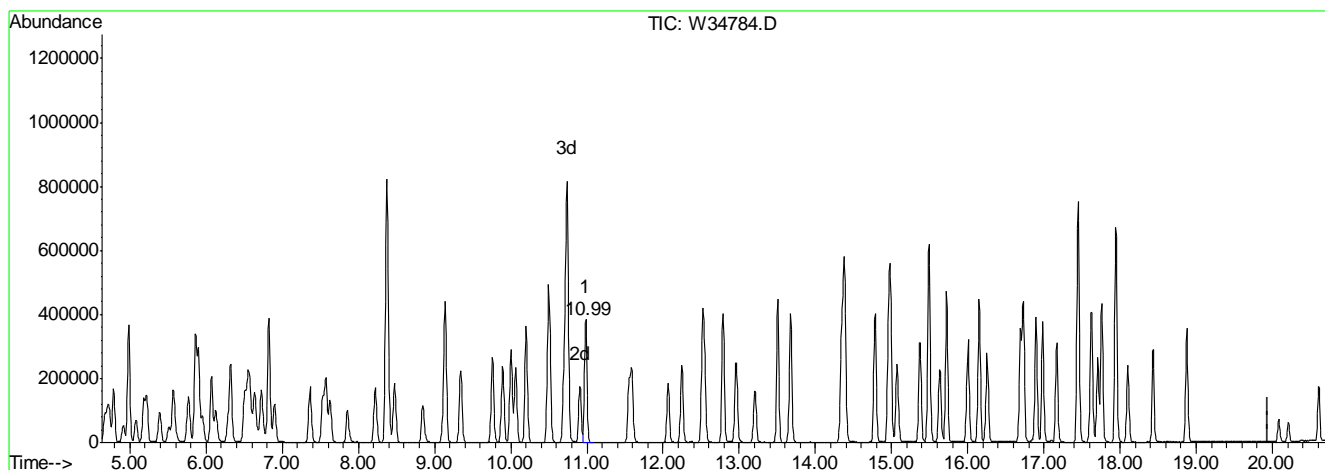
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Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34784.D Vial: 2
 Acq On : 18 Jan 2012 7:17 pm Operator: YOUMINH
 Sample : ICC1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:11 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.12.2
 6



(63) TVHC as EQUIV HEPTANE (H)

10.99min 11.22PPBV m

response 854368

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.94#
0.00	0.80	0.78#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34785.D
 Acq On : 18 Jan 2012 7:57 pm
 Sample : IC1417-0.5
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:05 2012

Vial: 1
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.36	128	58241	10.00	PPBV	0.00
50) 1,4-DIFLUOROBENZENE	10.06	114	266217	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.34	82	118084	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.34	82	117686	10.00	PPBV	0.00

System Monitoring Compounds

85) 4-BROMOFLUOROBENZENE	16.00	95	126336	9.84	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	98.40%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.67	65	2490	0.49	PPBV	97
4) CHLORODIFLUOROMETHANE	4.71	67	906	0.53	PPBV #	81
5) DICHLORODIFLUOROMETHANE	4.79	85	11678	0.56	PPBV	100
6) PROPYLENE	4.73	41	3738	0.53	PPBV	94
7) FREON 114	4.98	85	14231	0.56	PPBV	100
8) CHLOROMETHANE	4.91	52	1380	0.54	PPBV	89
9) VINYL CHLORIDE	5.07	62	5571	0.55	PPBV	98
10) 1,3-BUTADIENE	5.18	54	4402	0.55	PPBV	94
11) n-BUTANE	5.22	43	9051	0.56	PPBV #	97
12) BROMOMETHANE	5.39	94	4980	0.58	PPBV	94
13) CHLOROETHANE	5.51	64	3176	0.57	PPBV	97
14) DICHLOROFLUOROMETHANE	5.57	67	11629	0.56	PPBV	99
15) ACROLEIN	5.85	56	2157	0.56	PPBV	100
16) FREON 123	5.85	83	12340	0.57	PPBV #	100
17) FREON 123A	5.90	117	7231	0.57	PPBV	100
18) TRICHLOROFLUOROMETHANE	6.07	101	11975	0.57	PPBV	99
19) ISOPROPYL ALCOHOL	6.15	45	9918	0.61	PPBV	99
20) ACETONE	5.96	58	2650	0.62	PPBV	95
21) ACRYLONITRILE	6.29	53	4177	0.57	PPBV	99
22) PENTANE	6.31	57	1512	0.54	PPBV #	82
23) TVHC as EQUIV PENTANE	6.32	TIC	30189m	0.55	PPBV	
24) IODOMETHANE	6.51	142	13436	0.58	PPBV	99
25) 1,1-DICHLOROETHYLENE	6.54	96	5718	0.58	PPBV	93
26) CARBON DISULFIDE	6.90	76	14039	0.58	PPBV	97
27) ETHANOL	5.61	45	2293	0.60	PPBV	93
28) ACETONITRILE	5.77	41	4439	0.59	PPBV #	86
29) BROMOETHENE	5.77	106	5272	0.58	PPBV	99
30) METHYLENE CHLORIDE	6.63	84	5168	0.57	PPBV	96
31) 3-CHLOROPROPENE	6.72	76	2490	0.54	PPBV	91
32) FREON 113	6.82	151	8918	0.56	PPBV	99
33) TRANS-1,2-DICHLOROETHYLENE	7.36	96	5750	0.60	PPBV	90
34) TERTIARY BUTYL ALCOHOL	6.60	59	12547	0.65	PPBV	96
35) METHYL TERTIARY BUTYL ETHE	7.58	73	13468	0.59	PPBV	99
36) TETRAHYDROFURAN	8.87	72	2365	0.58	PPBV	97
37) HEXANE	8.37	57	8919	0.56	PPBV	96
38) VINYL ACETATE	7.62	86	1197	0.52	PPBV #	72
39) 1,1-DICHLOROETHANE	7.52	63	9560	0.56	PPBV	99
40) METHYL ETHYL KETONE	7.85	72	2390	0.59	PPBV #	77
41) cis-1,2-DICHLOROETHYLENE	8.21	96	5749	0.57	PPBV	96
42) DI-ISOPROPYL ETHER	8.37	45	17538	0.58	PPBV	98

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

W34785.D MW1417.M

Fri Jan 20 14:04:18 2012

MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34785.D
 Acq On : 18 Jan 2012 7:57 pm
 Sample : IC1417-0.5
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:05 2012

Vial: 1
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) ETHYL ACETATE	8.38	61	1584	0.60	PPBV #	93
44) METHYL ACRYLATE	8.38	55	9065	0.57	PPBV	97
45) CHLOROFORM	8.46	83	9987	0.57	PPBV	96
46) 2,4-DIMETHYLPENTANE	9.14	57	10206	0.54	PPBV	96
47) 1,1,1-TRICHLOROETHANE	9.33	97	9433	0.55	PPBV	99
48) CARBON TETRACHLORIDE	9.89	117	10045	0.56	PPBV	99
49) 1,2-DICHLOROETHANE	9.12	62	5500	0.55	PPBV	95
51) BENZENE	9.76	78	16748	0.53	PPBV	99
52) CYCLOHEXANE	10.01	84	7657	0.53	PPBV	98
53) 2,3-DIMETHYLPENTANE	10.19	71	3893	0.53	PPBV	97
54) TRICHLOROETHYLENE	10.72	95	6661	0.51	PPBV	98
55) DIBROMOMETHANE	10.49	174	6192	0.54	PPBV	99
56) 1,2-DICHLOROPROPANE	10.51	63	6007	0.55	PPBV	96
57) ETHYL ACRYLATE	10.50	55	9402	0.54	PPBV #	96
58) BROMODICHLOROMETHANE	10.69	83	10328	0.54	PPBV	98
59) 2,2,4-TRIMETHYLPENTANE	10.74	57	27132	0.52	PPBV	98
60) 1,4-DIOXANE	10.79	88	3550	0.61	PPBV #	1
61) METHYL METHACRYLATE	10.91	69	5148	0.57	PPBV	100
62) HEPTANE	10.98	43	8964	0.52	PPBV	98
63) TVHC as EQUIV HEPTANE	10.98	TIC	38610m	0.51	PPBV	
64) METHYL ISOBUTYL KETONE	11.60	43	9283	0.57	PPBV	98
65) cis-1,3-DICHLOROPROPENE	11.55	75	7763	0.53	PPBV	92
66) TOLUENE	12.51	92	10778	0.52	PPBV	100
67) trans-1,3-DICHLOROPROPENE	12.06	75	6980	0.52	PPBV	99
68) 1,1,2-TRICHLOROETHANE	12.24	83	4832	0.54	PPBV	98
70) ETHYL METHACRYLATE	12.79	69	6937	0.59	PPBV #	98
71) 2-HEXANONE	12.80	43	9136	0.68	PPBV	97
72) TETRACHLOROETHYLENE	13.67	164	6940	0.59	PPBV	98
73) DIBROMOCHLOROMETHANE	12.96	129	9268	0.56	PPBV	98
74) 1,2-DIBROMOETHANE	13.20	107	7620	0.57	PPBV	98
75) OCTANE	13.50	43	10409	0.55	PPBV	99
76) 1,1,1,2-TETRACHLOROETHANE	14.36	131	6666	0.57	PPBV #	98
77) CHLOROBENZENE	14.38	112	12705	0.58	PPBV	90
78) ETHYLBENZENE	14.78	91	19187	0.54	PPBV	100
79) m,p-XYLENE	14.97	106	15083	1.09	PPBV	96
80) o-XYLENE	15.49	106	7037	0.53	PPBV	99
81) STYRENE	15.37	104	9764	0.55	PPBV	98
82) 1,2,3-TRICHLOROPROPANE	15.63	75	6714	0.58	PPBV	98
83) NONANE	15.72	43	8323	0.51	PPBV	97
84) BROMOFORM	15.07	173	7779	0.54	PPBV	99
86) 1,1,2,2-TETRACHLOROETHANE	15.49	83	8065	0.53	PPBV	97
87) ISOPROPYLBENZENE	16.14	105	18328	0.55	PPBV	99
88) BROMOBENZENE	16.25	156	5110	0.54	PPBV	95
89) 2-CHLOROTOLUENE	16.69	126	3953	0.53	PPBV #	97
90) n-PROPYLBENZENE	16.72	120	4217	0.51	PPBV	89
91) 4-ETHYLTOLUENE	16.89	105	13913	0.53	PPBV	99
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	11518	0.55	PPBV	97
93) ALPHA-METHYLSTYRENE	17.17	118	4606	0.47	PPBV	98
94) TERT-BUTYLBENZENE	17.44	134	2789	0.50	PPBV	93

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

W34785.D MW1417.M

Fri Jan 20 14:04:18 2012

MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34785.D Vial: 1
 Acq On : 18 Jan 2012 7:57 pm Operator: YOUMINH
 Sample : IC1417-0.5 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:05 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) 1,2,4-TRIMETHYLBENZENE	17.45	105	9651	0.51	PPBV	95
96) m-DICHLOROBENZENE	17.63	146	6322	0.51	PPBV	98
97) BENZYL CHLORIDE	17.61	91	7172	0.50	PPBV	99
98) p-DICHLOROBENZENE	17.71	146	5916	0.51	PPBV	97
99) SEC-BUTYLBENZENE	17.76	134	3050	0.49	PPBV	99
100) p-ISOPROPYLTOLUENE	17.95	134	2737	0.49	PPBV	95
101) o-DICHLOROBENZENE	18.10	146	5397	0.52	PPBV	100
102) n-BUTYLBENZENE	18.43	134	1786	0.43	PPBV	88
103) HEXACHLOROETHANE	18.88	201	3333	0.48	PPBV	95
104) HEXACHLOROBUTADIENE	20.61	225	1713	0.61	PPBV	93
105) 1,2,4-TRICHLOROBENZENE	20.09	180	1569	0.74	PPBV	97
107) NAPHTHALENE	20.21	128	4250	0.92	PPBV	98

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34785.D MW1417.M Fri Jan 20 14:04:18 2012 MSW

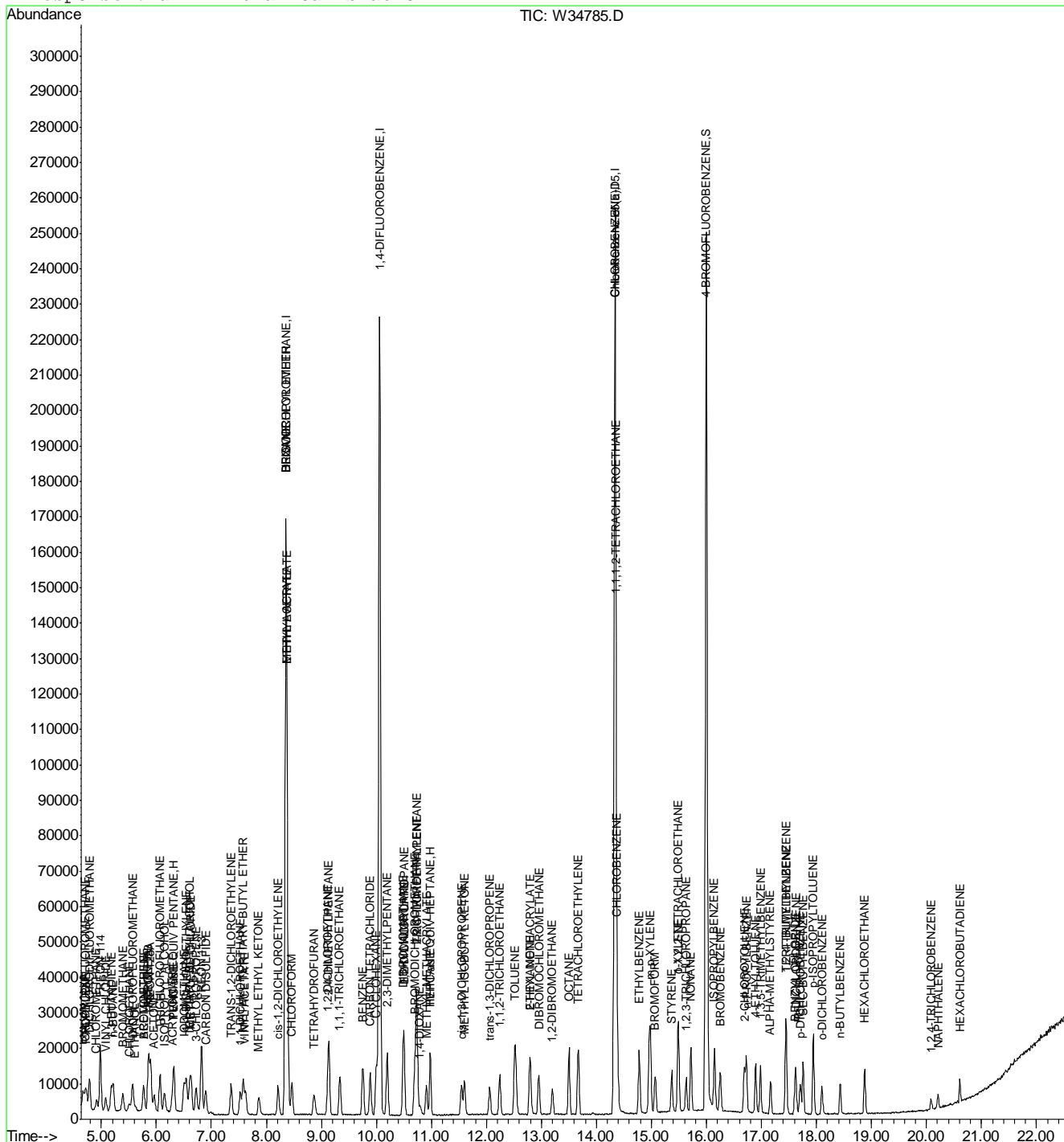
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34785.D
Acq On : 18 Jan 2012 7:57 pm
Sample : IC1417-0.5
Misc : MS23560,VW1417,,,,,1
MS Integration Params: rteint.p
Quant Time: Jan 19 15:13 2012

Vial: 1
Operator: YOUMINH
Inst : MSW
Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Jan 19 15:22:56 2012
Response via : Initial Calibration



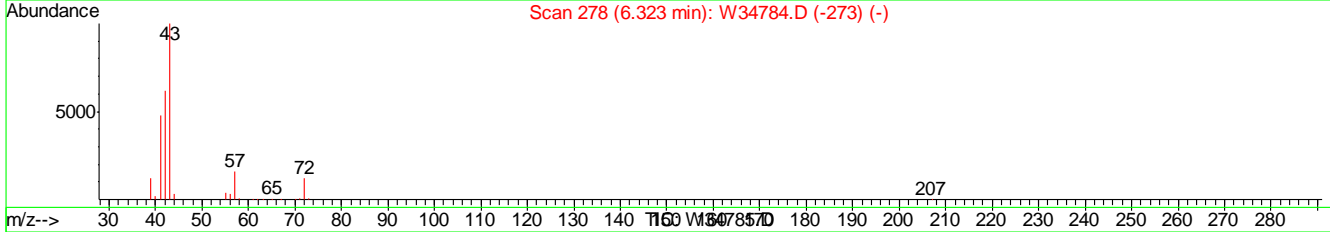
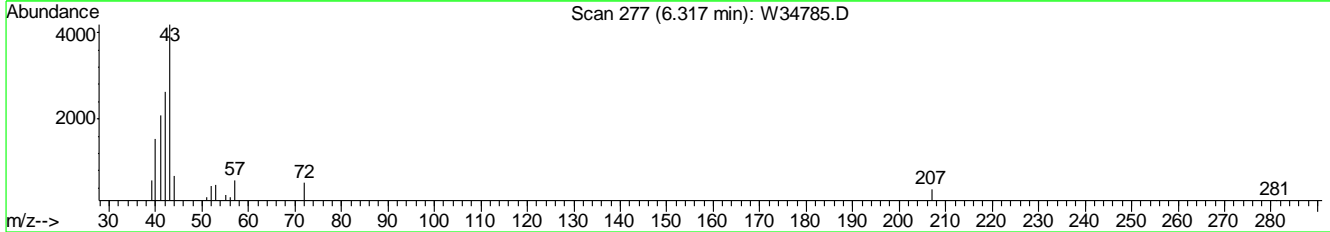
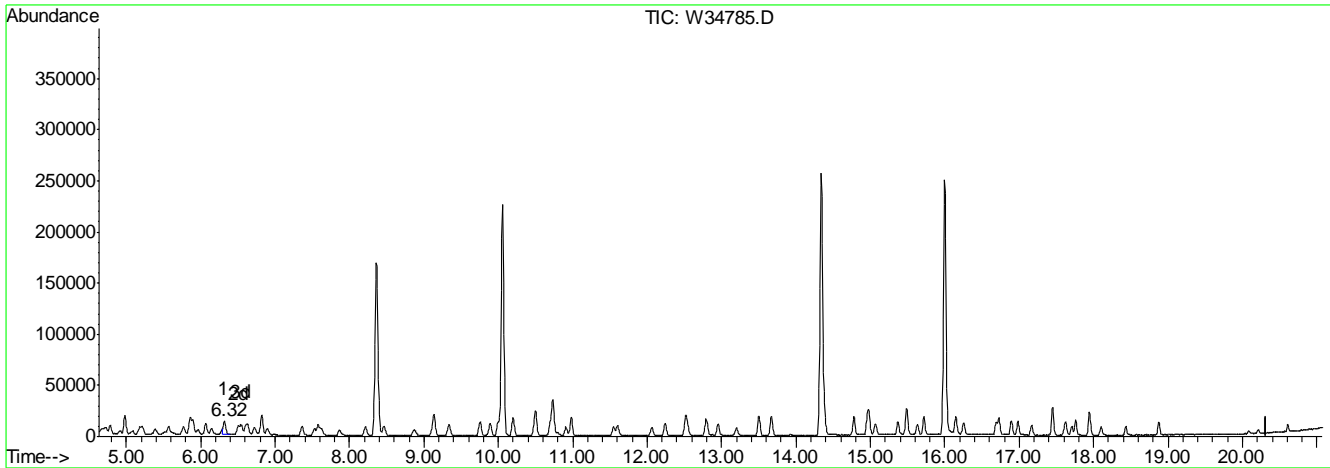
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34785.D Vial: 1
 Acq On : 18 Jan 2012 7:57 pm Operator: YOUMINH
 Sample : IC1417-0.5 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:13 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.13.1

6



(23) TVHC as EQUIV PENTANE (H)

6.32min 0.55PPBV m

response 30189

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	1.78#
0.00	1.10	1.41#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34785.D
 Acq On : 18 Jan 2012 7:57 pm
 Sample : IC1417-0.5
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:13 2012

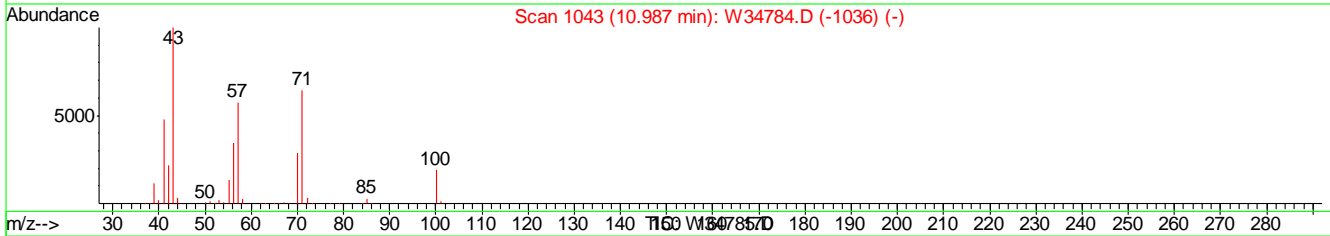
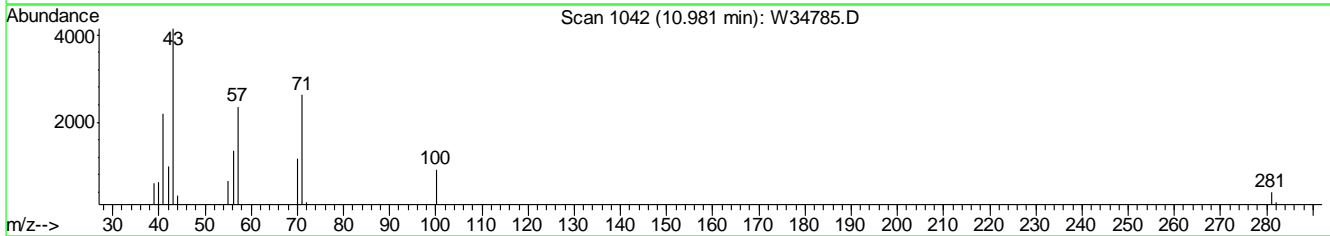
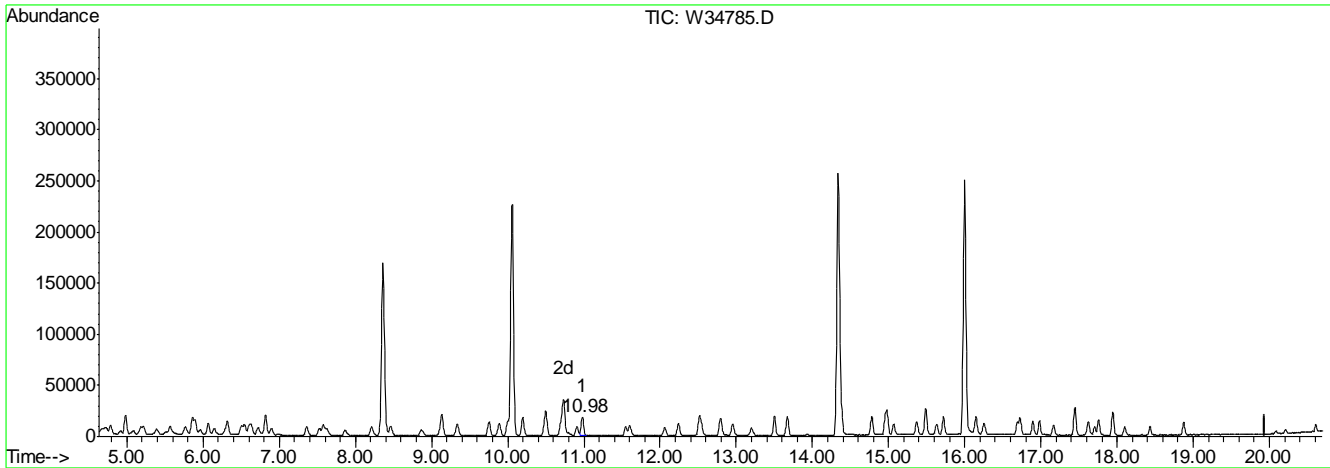
Vial: 1
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.13.2

6



(63) TVHC as EQUIV HEPTANE (H)

10.98min 0.51PPBV m

response 38610

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	1.39#
0.00	0.80	1.11#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34786.D Vial: 2
 Acq On : 18 Jan 2012 8:37 pm Operator: YOUMINH
 Sample : IC1417-15 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:08 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.37	128	61447	10.00	PPBV	0.00
50) 1,4-DIFLUOROBENZENE	10.07	114	278836	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.35	82	144717	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.35	82	144720	10.00	PPBV	0.00

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 16.00 95 167736 10.66 PPBV 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 106.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.67	65	68251	12.70	PPBV	100
4) CHLORODIFLUOROMETHANE	4.71	67	26013	14.36	PPBV	100
5) DICHLORODIFLUOROMETHANE	4.79	85	292348	13.31	PPBV	100
6) PROPYLENE	4.73	41	95525	12.95	PPBV	98
7) FREON 114	4.99	85	364425	13.57	PPBV	100
8) CHLOROMETHANE	4.92	52	37452	13.96	PPBV	97
9) VINYL CHLORIDE	5.08	62	144428	13.55	PPBV	100
10) 1,3-BUTADIENE	5.18	54	117185	13.91	PPBV	99
11) n-BUTANE	5.22	43	225858	13.30	PPBV	100
12) BROMOMETHANE	5.39	94	124442	13.69	PPBV	99
13) CHLOROETHANE	5.51	64	82366	14.04	PPBV	100
14) DICHLOROFLUOROMETHANE	5.57	67	296414	13.63	PPBV	99
15) ACROLEIN	5.86	56	59504	14.72	PPBV	98
16) FREON 123	5.87	83	318685	13.88	PPBV #	100
17) FREON 123A	5.90	117	185525	13.84	PPBV	100
18) TRICHLOROFLUOROMETHANE	6.07	101	306103	13.71	PPBV	99
19) ISOPROPYL ALCOHOL	6.13	45	236504	13.75	PPBV	99
20) ACETONE	5.96	58	64071	14.31	PPBV	99
21) ACRYLONITRILE	6.29	53	114990	14.98	PPBV	99
22) PENTANE	6.33	57	42664	14.54	PPBV	99
23) TVHC as EQUIV PENTANE	6.32	TIC	782758m	13.47	PPBV	
24) IODOMETHANE	6.51	142	336352	13.65	PPBV	100
25) 1,1-DICHLOROETHYLENE	6.55	96	140211	13.53	PPBV	100
26) CARBON DISULFIDE	6.90	76	341519	13.29	PPBV	100
27) ETHANOL	5.61	45	56014	13.81	PPBV	100
28) ACETONITRILE	5.77	41	112358	14.23	PPBV	99
29) BROMOETHENE	5.77	106	130287	13.52	PPBV	100
30) METHYLENE CHLORIDE	6.64	84	126103	13.23	PPBV	98
31) 3-CHLOROPROPENE	6.73	76	69087	14.15	PPBV	99
32) FREON 113	6.83	151	228164	13.63	PPBV	100
33) TRANS-1,2-DICHLOROETHYLENE	7.37	96	132613	13.05	PPBV	100
34) TERTIARY BUTYL ALCOHOL	6.59	59	297354	14.71	PPBV	100
35) METHYL TERTIARY BUTYL ETHE	7.58	73	338546	14.07	PPBV	100
36) TETRAHYDROFURAN	8.85	72	62326	14.48	PPBV	98
37) HEXANE	8.38	57	243997	14.40	PPBV	99
38) VINYL ACETATE	7.63	86	37767	15.51	PPBV #	76
39) 1,1-DICHLOROETHANE	7.54	63	253632	14.12	PPBV	99
40) METHYL ETHYL KETONE	7.86	72	61145	14.35	PPBV	98
41) cis-1,2-DICHLOROETHYLENE	8.23	96	146306	13.75	PPBV	99
42) DI-ISOPROPYL ETHER	8.37	45	448703	14.15	PPBV	100

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

W34786.D MW1417.M Fri Jan 20 14:04:19 2012 MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34786.D Vial: 2
 Acq On : 18 Jan 2012 8:37 pm Operator: YOUMINH
 Sample : IC1417-15 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:08 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) ETHYL ACETATE	8.40	61	39873	14.38	PPBV	97
44) METHYL ACRYLATE	8.39	55	248897	14.83	PPBV	99
45) CHLOROFORM	8.48	83	259113	13.99	PPBV	100
46) 2,4-DIMETHYLPENTANE	9.15	57	290015	14.43	PPBV	100
47) 1,1,1-TRICHLOROETHANE	9.35	97	252434	13.97	PPBV	99
48) CARBON TETRACHLORIDE	9.90	117	263091	13.88	PPBV	99
49) 1,2-DICHLOROETHANE	9.12	62	150571	14.29	PPBV	99
51) BENZENE	9.76	78	444659	13.50	PPBV	100
52) CYCLOHEXANE	10.01	84	206538	13.55	PPBV	99
53) 2,3-DIMETHYLPENTANE	10.21	71	109734	14.28	PPBV	100
54) TRICHLOROETHYLENE	10.73	95	178444	13.09	PPBV	99
55) DIBROMOMETHANE	10.50	174	164591	13.67	PPBV	99
56) 1,2-DICHLOROPROPANE	10.52	63	165366	14.33	PPBV	100
57) ETHYL ACRYLATE	10.50	55	263560	14.35	PPBV	100
58) BROMODICHLOROMETHANE	10.70	83	277096	13.85	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.74	57	793414	14.45	PPBV	100
60) 1,4-DIOXANE	10.76	88	84154	13.78	PPBV #	68
61) METHYL METHACRYLATE	10.91	69	136542	14.37	PPBV	99
62) HEPTANE	10.99	43	265707	14.82	PPBV	99
63) TVHC as EQUIV HEPTANE	10.99	TIC	1132081m	14.31	PPBV	
64) METHYL ISOBUTYL KETONE	11.59	43	247495	14.43	PPBV	99
65) cis-1,3-DICHLOROPROPENE	11.55	75	225731	14.66	PPBV	100
66) TOLUENE	12.52	92	304356	14.15	PPBV	100
67) trans-1,3-DICHLOROPROPENE	12.07	75	211654	15.05	PPBV	100
68) 1,1,2-TRICHLOROETHANE	12.25	83	135934	14.42	PPBV	98
70) ETHYL METHACRYLATE	12.79	69	204422	14.13	PPBV	100
71) 2-HEXANONE	12.79	43	230714	13.95	PPBV	100
72) TETRACHLOROETHYLENE	13.68	164	190227	13.13	PPBV	100
73) DIBROMOCHLOROMETHANE	12.96	129	270064	13.43	PPBV	99
74) 1,2-DIBROMOETHANE	13.21	107	226029	13.84	PPBV	100
75) OCTANE	13.51	43	335444	14.49	PPBV	100
76) 1,1,1,2-TETRACHLOROETHANE	14.38	131	198220	13.74	PPBV #	99
77) CHLOROBENZENE	14.39	112	370658	13.77	PPBV	100
78) ETHYLBENZENE	14.79	91	579478	13.41	PPBV	100
79) m,p-XYLENE	14.98	106	463579	27.44	PPBV	98
80) o-XYLENE	15.49	106	220542	13.60	PPBV	99
81) STYRENE	15.38	104	328436	15.03	PPBV	100
82) 1,2,3-TRICHLOROPROPANE	15.64	75	207754	14.75	PPBV	100
83) NONANE	15.72	43	305298	15.21	PPBV	100
84) BROMOFORM	15.08	173	247809	14.12	PPBV	100
86) 1,1,2,2-TETRACHLOROETHANE	15.49	83	270218	14.38	PPBV	100
87) ISOPROPYLBENZENE	16.15	105	608425	14.89	PPBV	100
88) BROMOBENZENE	16.26	156	168757	14.50	PPBV	98
89) 2-CHLOROTOLUENE	16.69	126	138776	15.27	PPBV #	99
90) n-PROPYLBENZENE	16.73	120	157305	15.40	PPBV	99
91) 4-ETHYLTOLUENE	16.90	105	516458	16.06	PPBV	100
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	401086	15.62	PPBV	100
93) ALPHA-METHYLSTYRENE	17.17	118	192924	16.10	PPBV	100
94) TERT-BUTYLBENZENE	17.45	134	105345	15.48	PPBV	98

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

W34786.D MW1417.M Fri Jan 20 14:04:19 2012 MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34786.D Vial: 2
 Acq On : 18 Jan 2012 8:37 pm Operator: YOUMINH
 Sample : IC1417-15 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:08 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) 1,2,4-TRIMETHYLBENZENE	17.46	105	377441	16.23	PPBV	99
96) m-DICHLOROBENZENE	17.63	146	238581	15.73	PPBV	100
97) BENZYL CHLORIDE	17.61	91	283771	16.09	PPBV	100
98) p-DICHLOROBENZENE	17.71	146	225985	15.96	PPBV	99
99) SEC-BUTYLBENZENE	17.76	134	120624	15.96	PPBV	98
100) p-ISOPROPYLTOLUENE	17.95	134	113108	16.38	PPBV	99
101) o-DICHLOROBENZENE	18.11	146	200510	15.73	PPBV	100
102) n-BUTYLBENZENE	18.44	134	83897	16.38	PPBV	100
103) HEXACHLOROETHANE	18.88	201	130607	15.33	PPBV	99
104) HEXACHLOROBUTADIENE	20.61	225	53412	15.43	PPBV	100
105) 1,2,4-TRICHLOROBENZENE	20.08	180	34113	13.21	PPBV	99
107) NAPHTHALENE	20.21	128	67295	11.82	PPBV	99

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34786.D MW1417.M Fri Jan 20 14:04:19 2012 MSW

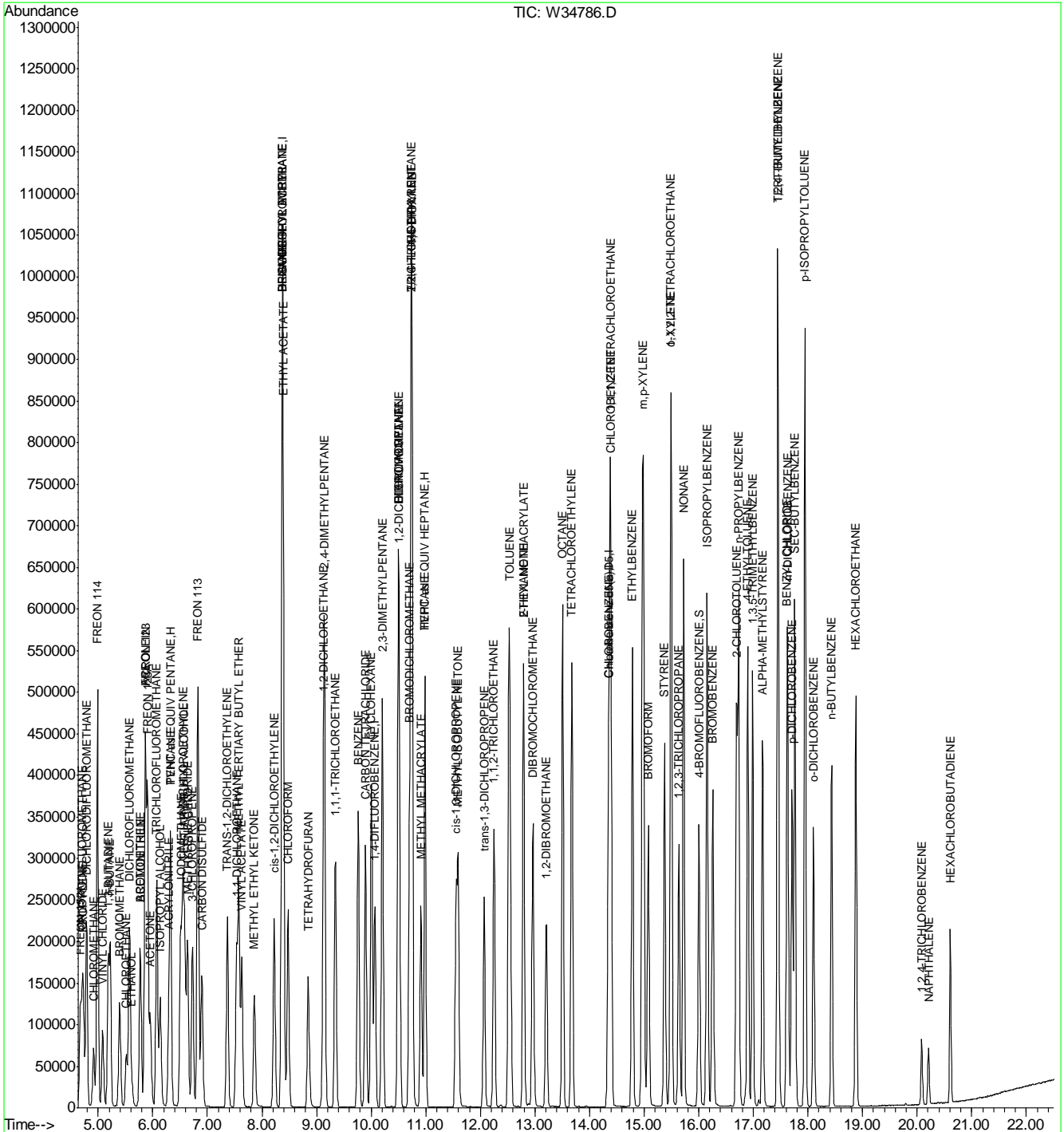
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34786.D
 Acq On : 18 Jan 2012 8:37 pm
 Sample : IC1417-15
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:13 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Initial Calibration

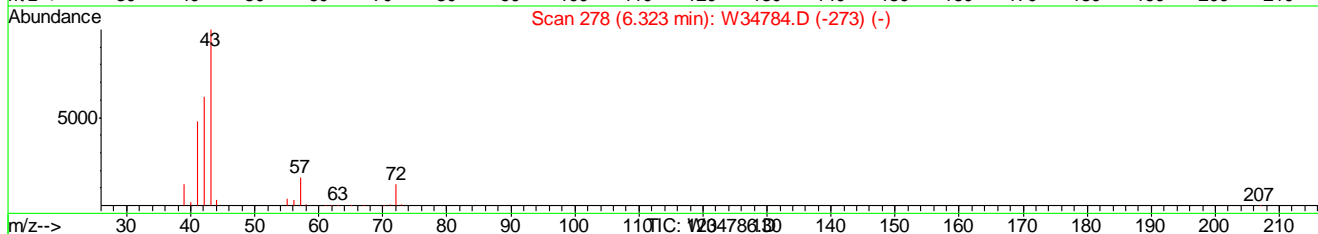
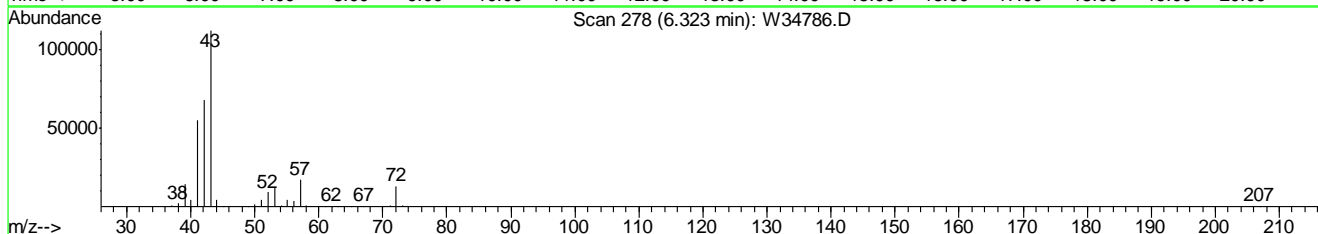
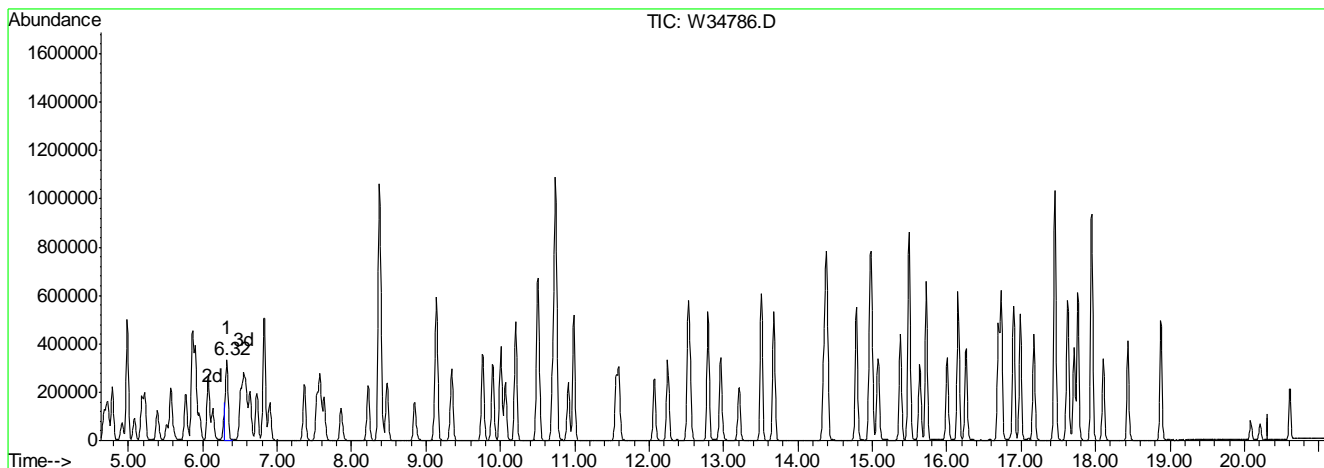


Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34786.D Vial: 2
 Acq On : 18 Jan 2012 8:37 pm Operator: YOUMINH
 Sample : IC1417-15 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:13 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.14.1
 6



(23) TVHC as EQUIV PENTANE (H)

6.32min 13.47PPBV m

response 782758

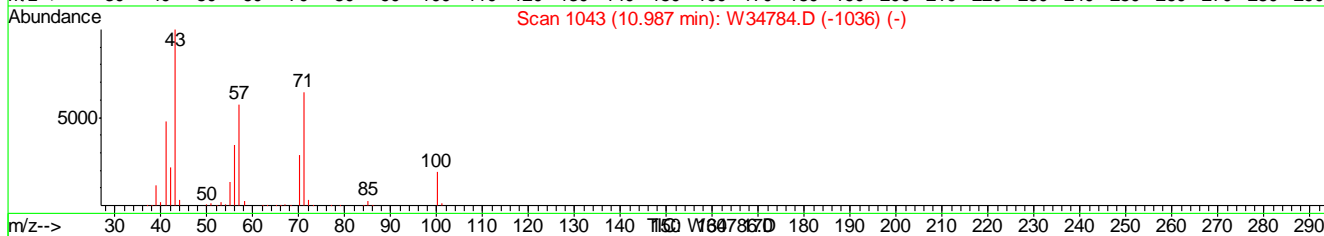
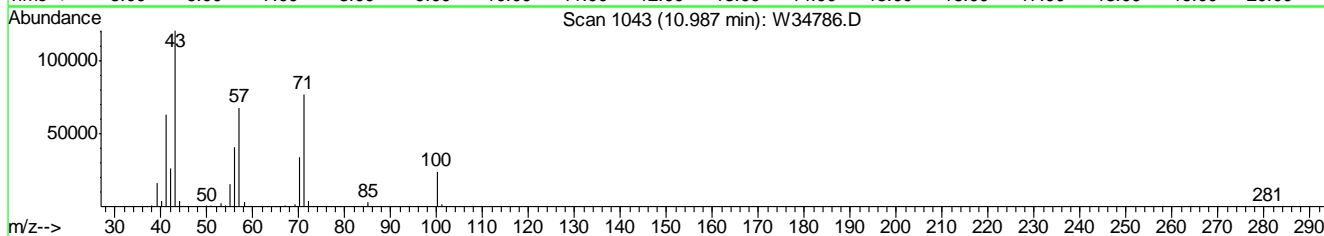
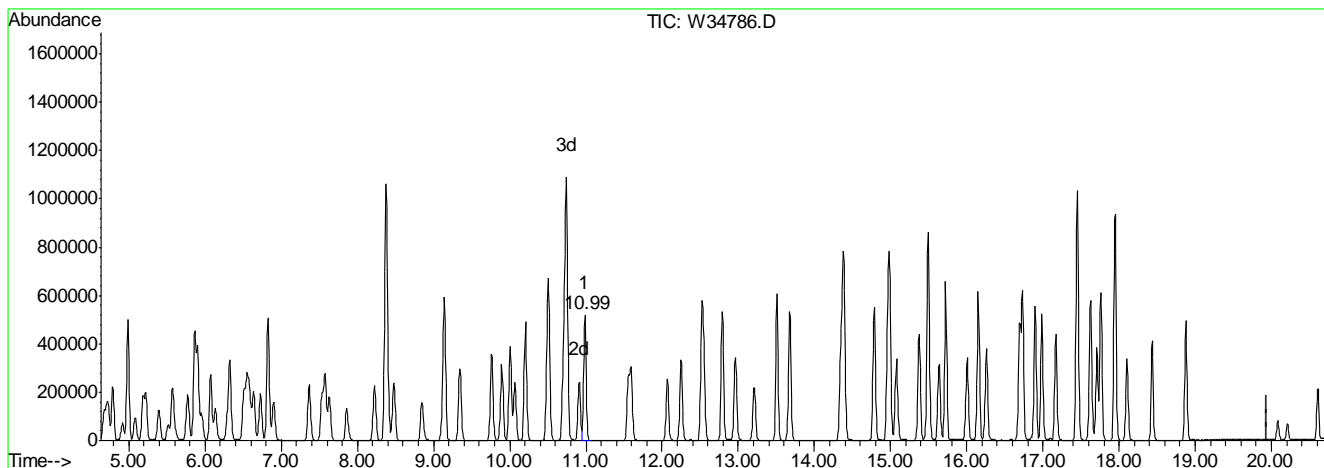
Signal	Exp%	Act%
TIC	100	100
0.00	1.30	1.18#
0.00	1.10	0.95#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34786.D Vial: 2
 Acq On : 18 Jan 2012 8:37 pm Operator: YOUMINH
 Sample : IC1417-15 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:13 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.14.2
 6



(63) TVHC as EQUIV HEPTANE (H)

10.99min 14.31PPBV m

response 1132081

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.82#
0.00	0.80	0.66#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34787.D
 Acq On : 18 Jan 2012 9:17 pm
 Sample : IC1417-5.0
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:12 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.38	128	60663	10.00	PPBV	0.01
50) 1,4-DIFLUOROBENZENE	10.07	114	278661	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.35	82	135019	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.35	82	135021	10.00	PPBV	0.00

System Monitoring Compounds

85) 4-BROMOFLUOROBENZENE 16.00 95 158472 10.80 PPBV 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 108.00%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.69	65	28047	5.29	PPBV	99
4) CHLORODIFLUOROMETHANE	4.72	67	9881	5.52	PPBV	98
5) DICHLORODIFLUOROMETHANE	4.80	85	112682	5.19	PPBV	100
6) PROPYLENE	4.74	41	36879	5.06	PPBV	99
7) FREON 114	5.00	85	137984	5.21	PPBV	99
8) CHLOROMETHANE	4.93	52	14317	5.41	PPBV	98
9) VINYL CHLORIDE	5.10	62	55114	5.24	PPBV	99
10) 1,3-BUTADIENE	5.20	54	43662	5.25	PPBV	100
11) n-BUTANE	5.23	43	85188	5.08	PPBV	100
12) BROMOMETHANE	5.41	94	47873	5.33	PPBV	99
13) CHLOROETHANE	5.53	64	31462	5.43	PPBV	98
14) DICHLOROFLUOROMETHANE	5.59	67	110966	5.17	PPBV	100
15) ACROLEIN	5.87	56	19391	4.86	PPBV	98
16) FREON 123	5.87	83	117421	5.18	PPBV #	99
17) FREON 123A	5.91	117	68808	5.20	PPBV	98
18) TRICHLOROFLUOROMETHANE	6.09	101	114239	5.18	PPBV	99
19) ISOPROPYL ALCOHOL	6.16	45	79948	4.71	PPBV	99
20) ACETONE	5.98	58	20129	4.55	PPBV	98
21) ACRYLONITRILE	6.31	53	37004	4.88	PPBV	99
22) PENTANE	6.34	57	16010	5.53	PPBV	96
23) TVHC as EQUIV PENTANE	6.34	TIC	281583m	4.91	PPBV	
24) IODOMETHANE	6.52	142	127322	5.23	PPBV	99
25) 1,1-DICHLOROETHYLENE	6.56	96	52619	5.14	PPBV	99
26) CARBON DISULFIDE	6.91	76	129967	5.12	PPBV	100
27) ETHANOL	5.64	45	18959	4.73	PPBV	99
28) ACETONITRILE	5.79	41	36557	4.69	PPBV	95
29) BROMOETHENE	5.79	106	49873	5.24	PPBV	99
30) METHYLENE CHLORIDE	6.65	84	47414	5.04	PPBV	99
31) 3-CHLOROPROPENE	6.74	76	25819	5.36	PPBV	98
32) FREON 113	6.84	151	84424	5.11	PPBV	100
33) TRANS-1,2-DICHLOROETHYLENE	7.38	96	50074	4.99	PPBV	99
34) TERTIARY BUTYL ALCOHOL	6.62	59	101190	5.07	PPBV	100
35) METHYL TERTIARY BUTYL ETHE	7.59	73	106844	4.50	PPBV	99
36) TETRAHYDROFURAN	8.87	72	19978	4.70	PPBV	100
37) HEXANE	8.38	57	88144	5.27	PPBV	99
38) VINYL ACETATE	7.64	86	11846	4.93	PPBV	100
39) 1,1-DICHLOROETHANE	7.54	63	90572	5.11	PPBV	99
40) METHYL ETHYL KETONE	7.87	72	20078	4.77	PPBV	99
41) cis-1,2-DICHLOROETHYLENE	8.23	96	53152	5.06	PPBV	100
42) DI-ISOPROPYL ETHER	8.38	45	142053	4.54	PPBV	100

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

W34787.D MW1417.M Fri Jan 20 14:04:21 2012 MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34787.D
 Acq On : 18 Jan 2012 9:17 pm
 Sample : IC1417-5.0
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:12 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) ETHYL ACETATE	8.40	61	12798	4.68	PPBV	98
44) METHYL ACRYLATE	8.40	55	76201	4.60	PPBV	99
45) CHLOROFORM	8.48	83	94650	5.18	PPBV	100
46) 2,4-DIMETHYLPENTANE	9.15	57	105501	5.32	PPBV	100
47) 1,1,1-TRICHLOROETHANE	9.35	97	91171	5.11	PPBV	100
48) CARBON TETRACHLORIDE	9.90	117	96806	5.17	PPBV	99
49) 1,2-DICHLOROETHANE	9.13	62	53023	5.10	PPBV	100
51) BENZENE	9.77	78	157193	4.77	PPBV	100
52) CYCLOHEXANE	10.01	84	76007	4.99	PPBV	98
53) 2,3-DIMETHYLPENTANE	10.21	71	39662	5.16	PPBV	100
54) TRICHLOROETHYLENE	10.74	95	62872	4.62	PPBV	100
55) DIBROMOMETHANE	10.51	174	58266	4.84	PPBV	99
56) 1,2-DICHLOROPROPANE	10.52	63	56855	4.93	PPBV	100
57) ETHYL ACRYLATE	10.51	55	82348	4.49	PPBV	99
58) BROMODICHLOROMETHANE	10.71	83	97331	4.87	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.75	57	278340	5.07	PPBV	100
60) 1,4-DIOXANE	10.78	88	28870	4.73	PPBV #	1
61) METHYL METHACRYLATE	10.92	69	41980	4.42	PPBV	99
62) HEPTANE	10.99	43	93261	5.20	PPBV	100
63) TVHC as EQUIV HEPTANE	10.99	TIC	406241m	5.14	PPBV	
64) METHYL ISOBUTYL KETONE	11.60	43	82429	4.81	PPBV	100
65) cis-1,3-DICHLOROPROPENE	11.56	75	76404	4.97	PPBV	100
66) TOLUENE	12.52	92	102776	4.78	PPBV	99
67) trans-1,3-DICHLOROPROPENE	12.07	75	70156	4.99	PPBV	99
68) 1,1,2-TRICHLOROETHANE	12.26	83	46866	4.97	PPBV	98
70) ETHYL METHACRYLATE	12.80	69	64965	4.81	PPBV	100
71) 2-HEXANONE	12.80	43	78456	5.09	PPBV	99
72) TETRACHLOROETHYLENE	13.68	164	67236	4.98	PPBV	99
73) DIBROMOCHLOROMETHANE	12.96	129	93640	4.99	PPBV	100
74) 1,2-DIBROMOETHANE	13.21	107	76797	5.04	PPBV	99
75) OCTANE	13.51	43	114726	5.31	PPBV	100
76) 1,1,1,2-TETRACHLOROETHANE	14.38	131	66984	4.98	PPBV #	99
77) CHLOROBENZENE	14.39	112	124983	4.98	PPBV	99
78) ETHYLBENZENE	14.79	91	188450	4.68	PPBV	100
79) m,p-XYLENE	14.98	106	146782	9.31	PPBV	99
80) o-XYLENE	15.49	106	69858	4.62	PPBV	99
81) STYRENE	15.38	104	101989	5.00	PPBV	100
82) 1,2,3-TRICHLOROPROPANE	15.64	75	63390	4.82	PPBV	100
83) NONANE	15.72	43	99245	5.30	PPBV	100
84) BROMOFORM	15.08	173	82807	5.06	PPBV	99
86) 1,1,2,2-TETRACHLOROETHANE	15.50	83	82736	4.72	PPBV	99
87) ISOPROPYLBENZENE	16.15	105	188814	4.95	PPBV	100
88) BROMOBENZENE	16.26	156	54730	5.04	PPBV	98
89) 2-CHLOROTOLUENE	16.69	126	44278	5.22	PPBV #	100
90) n-PROPYLBENZENE	16.73	120	46673	4.90	PPBV	92
91) 4-ETHYLTOLUENE	16.90	105	151874	5.06	PPBV	100
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	119024	4.97	PPBV	100
93) ALPHA-METHYLSTYRENE	17.17	118	54078	4.84	PPBV	99
94) TERT-BUTYLBENZENE	17.45	134	31549	4.97	PPBV	98

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

W34787.D MW1417.M

Fri Jan 20 14:04:21 2012

MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34787.D Vial: 2
 Acq On : 18 Jan 2012 9:17 pm Operator: YOUMINH
 Sample : IC1417-5.0 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:12 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) 1,2,4-TRIMETHYLBENZENE	17.46	105	108808	5.01	PPBV	99
96) m-DICHLOROBENZENE	17.63	146	69936	4.94	PPBV	100
97) BENZYL CHLORIDE	17.61	91	77088	4.69	PPBV	100
98) p-DICHLOROBENZENE	17.71	146	66467	5.03	PPBV	99
99) SEC-BUTYLBENZENE	17.76	134	34659	4.91	PPBV	100
100) p-ISOPROPYLTOLUENE	17.95	134	32183	5.00	PPBV	100
101) o-DICHLOROBENZENE	18.11	146	58682	4.93	PPBV	100
102) n-BUTYLBENZENE	18.44	134	22470	4.70	PPBV	99
103) HEXACHLOROETHANE	18.88	201	41144	5.18	PPBV	99
104) HEXACHLOROBUTADIENE	20.61	225	16013	4.96	PPBV	98
105) 1,2,4-TRICHLOROBENZENE	20.09	180	10754	4.46	PPBV	99
107) NAPHTHALENE	20.21	128	23328	4.39	PPBV	100

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34787.D MW1417.M Fri Jan 20 14:04:21 2012 MSW

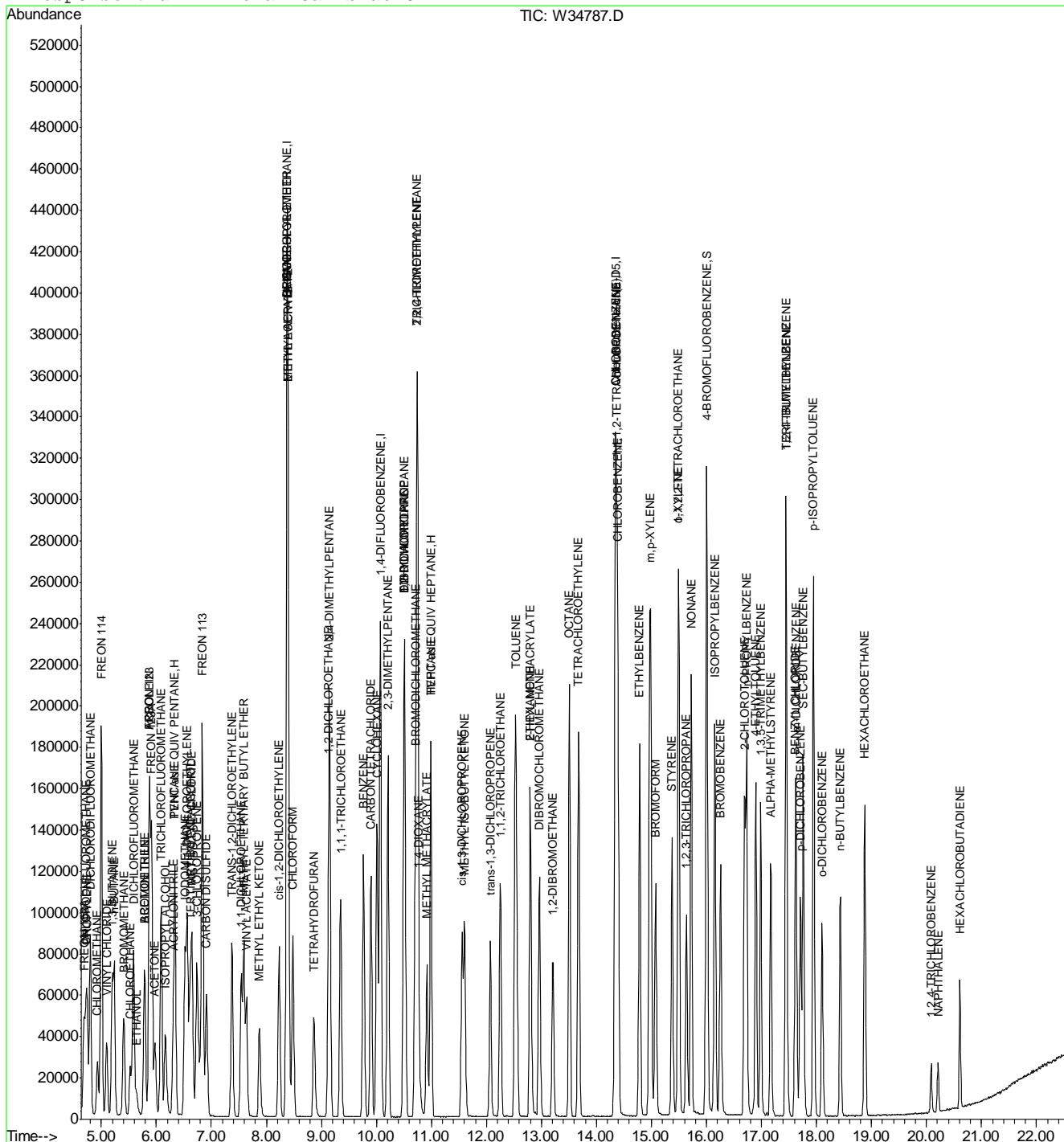
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34787.D
Acq On : 18 Jan 2012 9:17 pm
Sample : IC1417-5.0
Misc : MS23560,VW1417,,,,,1
MS Integration Params: rteint.p
Quant Time: Jan 19 15:14 2012

Vial: 2
Operator: YOUMINH
Inst : MSW
Multiplr: 1.00

Quant Results File: MW1417.RES

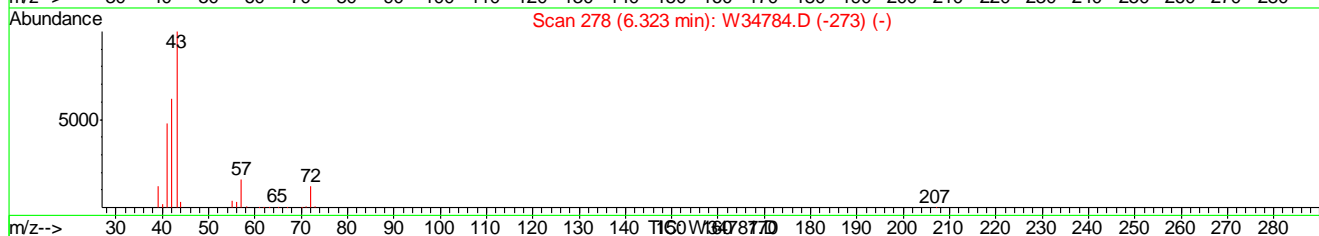
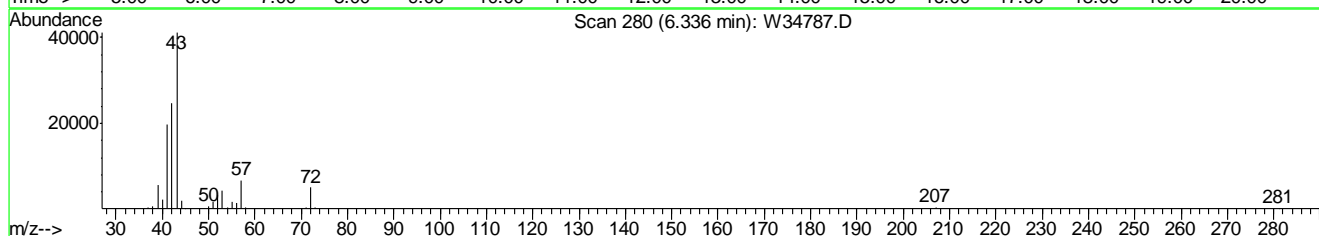
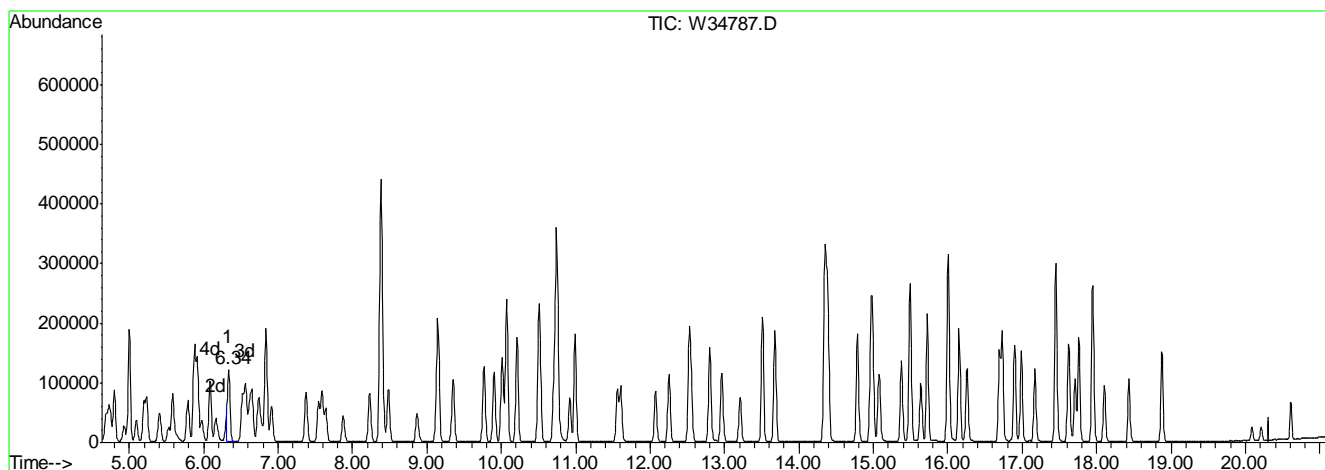
Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Jan 19 15:22:56 2012
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34787.D Vial: 2
 Acq On : 18 Jan 2012 9:17 pm Operator: YOUMINH
 Sample : IC1417-5.0 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:14 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(23) TVHC as EQUIV PENTANE (H)

6.34min 4.91PPBV m

response 281583

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	1.08#
0.00	1.10	0.91#
0.00	0.00	0.00

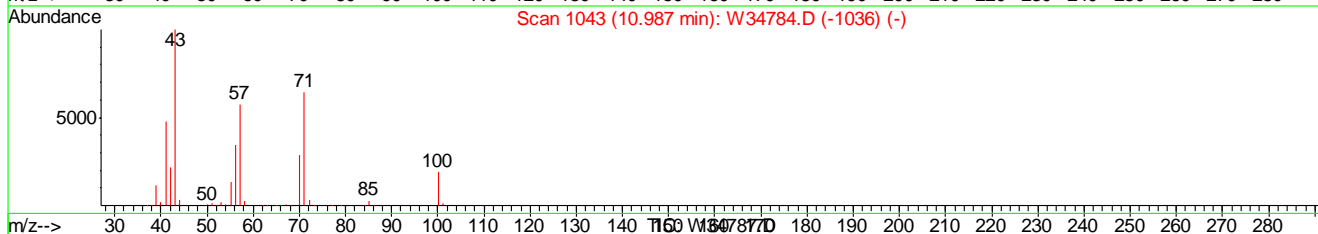
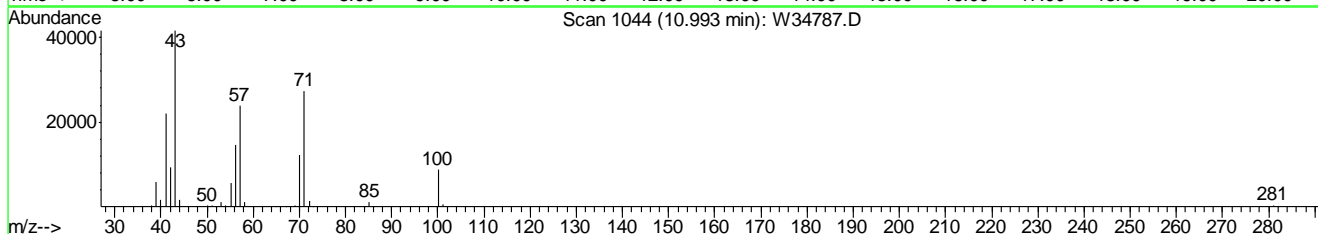
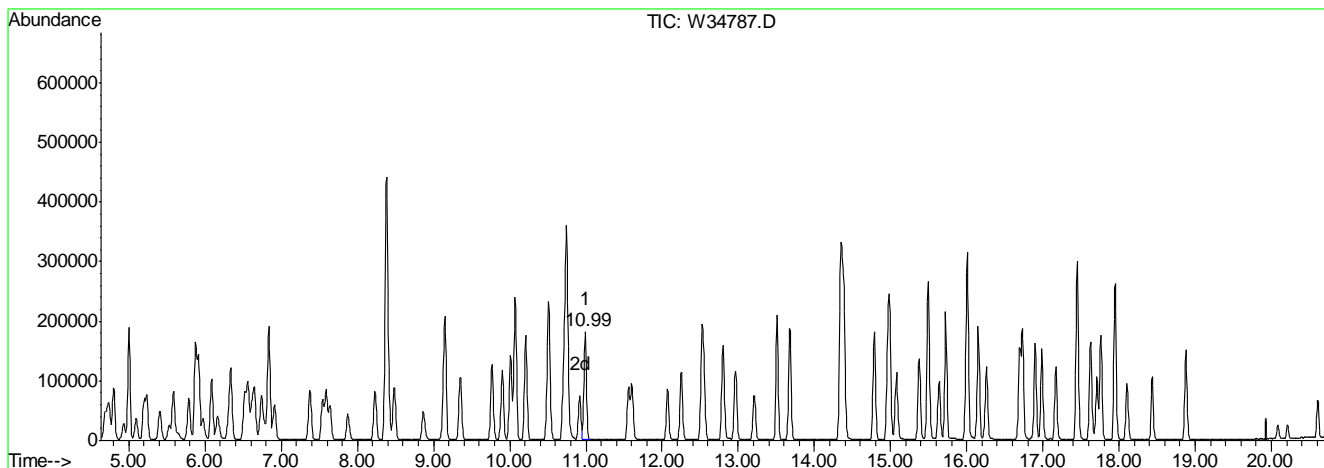
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34787.D Vial: 2
 Acq On : 18 Jan 2012 9:17 pm Operator: YOUMINH
 Sample : IC1417-5.0 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:14 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

6.7.15.2

6



(63) TVHC as EQUIV HEPTANE (H)

10.99min 5.14PPBV m

response 406241

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.75#
0.00	0.80	0.63#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34789.D
 Acq On : 18 Jan 2012 10:37 pm
 Sample : IC1417-20
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:19 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.39	128	61174	10.00	PPBV	0.02
50) 1,4-DIFLUOROBENZENE	10.09	114	279042	10.00	PPBV	0.02
69) CHLOROBENZENE-D5	14.36	82	148927	10.00	PPBV	0.01
106) Chlorobenzene-d5(a)	14.36	82	148918	10.00	PPBV	0.01

System Monitoring Compounds

85) 4-BROMOFLUOROBENZENE	16.02	95	167765	10.36	PPBV	0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	103.60%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.70	65	106144	19.84	PPBV	99
4) CHLORODIFLUOROMETHANE	4.73	67	37075	20.55	PPBV	100
5) DICHLORODIFLUOROMETHANE	4.81	85	418649	19.14	PPBV	100
6) PROPYLENE	4.76	41	140857	19.18	PPBV	99
7) FREON 114	5.01	85	515741	19.29	PPBV	100
8) CHLOROMETHANE	4.94	52	53120	19.89	PPBV	95
9) VINYL CHLORIDE	5.10	62	203616	19.19	PPBV	100
10) 1,3-BUTADIENE	5.21	54	162964	19.43	PPBV	99
11) n-BUTANE	5.24	43	316767	18.74	PPBV	100
12) BROMOMETHANE	5.42	94	173206	19.14	PPBV	99
13) CHLOROETHANE	5.54	64	114591	19.62	PPBV	98
14) DICHLOROFLUOROMETHANE	5.59	67	408942	18.89	PPBV	100
15) ACROLEIN	5.88	56	80564	20.02	PPBV	100
16) FREON 123	5.88	83	439623	19.24	PPBV #	100
17) FREON 123A	5.93	117	257887	19.33	PPBV	99
18) TRICHLOROFLUOROMETHANE	6.10	101	423887	19.07	PPBV	99
19) ISOPROPYL ALCOHOL	6.19	45	314730	18.37	PPBV	99
20) ACETONE	5.98	58	85893	19.27	PPBV	100
21) ACRYLONITRILE	6.32	53	155714	20.38	PPBV	99
22) PENTANE	6.35	57	59021	20.21	PPBV	98
23) TVHC as EQUIV PENTANE	6.35	TIC	1166165m	20.15	PPBV	
24) IODOMETHANE	6.53	142	466515	19.01	PPBV	100
25) 1,1-DICHLOROETHYLENE	6.57	96	194844	18.89	PPBV	100
26) CARBON DISULFIDE	6.92	76	480226	18.77	PPBV	100
27) ETHANOL	5.66	45	74114	18.36	PPBV	99
28) ACETONITRILE	5.79	41	153793	19.56	PPBV	99
29) BROMOETHENE	5.79	106	181060	18.87	PPBV	100
30) METHYLENE CHLORIDE	6.66	84	175243	18.46	PPBV	99
31) 3-CHLOROPROPENE	6.75	76	97636	20.09	PPBV	98
32) FREON 113	6.85	151	317265	19.04	PPBV	99
33) TRANS-1,2-DICHLOROETHYLENE	7.38	96	187509	18.54	PPBV	99
34) TERTIARY BUTYL ALCOHOL	6.64	59	381815	18.97	PPBV	100
35) METHYL TERTIARY BUTYL ETHE	7.60	73	469362	19.59	PPBV	99
36) TETRAHYDROFURAN	8.87	72	86913	20.28	PPBV	97
37) HEXANE	8.39	57	351459	20.83	PPBV	99
38) VINYL ACETATE	7.66	86	51686	21.32	PPBV #	79
39) 1,1-DICHLOROETHANE	7.55	63	354714	19.83	PPBV	100
40) METHYL ETHYL KETONE	7.89	72	85466	20.15	PPBV	98
41) cis-1,2-DICHLOROETHYLENE	8.24	96	205982	19.45	PPBV	99
42) DI-ISOPROPYL ETHER	8.40	45	632704	20.04	PPBV	100

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

W34789.D MW1417.M Fri Jan 20 14:04:22 2012 MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34789.D Vial: 2
 Acq On : 18 Jan 2012 10:37 pm Operator: YOUMINH
 Sample : IC1417-20 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:19 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) ETHYL ACETATE	8.42	61	55847	20.24	PPBV	99
44) METHYL ACRYLATE	8.42	55	349740	20.93	PPBV	99
45) CHLOROFORM	8.50	83	365929	19.85	PPBV	100
46) 2,4-DIMETHYLPENTANE	9.16	57	414453	20.72	PPBV	100
47) 1,1,1-TRICHLOROETHANE	9.36	97	356593	19.82	PPBV	100
48) CARBON TETRACHLORIDE	9.91	117	374374	19.84	PPBV	100
49) 1,2-DICHLOROETHANE	9.15	62	213700	20.37	PPBV	99
51) BENZENE	9.78	78	624686	18.95	PPBV	100
52) CYCLOHEXANE	10.02	84	293468	19.24	PPBV	100
53) 2,3-DIMETHYLPENTANE	10.23	71	155064	20.17	PPBV	100
54) TRICHLOROETHYLENE	10.75	95	256112	18.78	PPBV	99
55) DIBROMOMETHANE	10.52	174	230243	19.10	PPBV	98
56) 1,2-DICHLOROPROPANE	10.54	63	233895	20.26	PPBV	100
57) ETHYL ACRYLATE	10.52	55	379345	20.64	PPBV	99
58) BROMODICHLOROMETHANE	10.72	83	393822	19.67	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.76	57	1127949	20.53	PPBV	100
60) 1,4-DIOXANE	10.79	88	119741	19.59	PPBV #	6
61) METHYL METHACRYLATE	10.93	69	196094	20.62	PPBV	99
62) HEPTANE	11.01	43	380382	21.20	PPBV	99
63) TVHC as EQUIV HEPTANE	11.01	TIC	1610358m	20.34	PPBV	
64) METHYL ISOBUTYL KETONE	11.62	43	355279	20.69	PPBV	99
65) cis-1,3-DICHLOROPROPENE	11.57	75	315811	20.50	PPBV	100
66) TOLUENE	12.54	92	425381	19.76	PPBV	100
67) trans-1,3-DICHLOROPROPENE	12.09	75	297049	21.11	PPBV	99
68) 1,1,2-TRICHLOROETHANE	12.27	83	188805	20.01	PPBV	98
70) ETHYL METHACRYLATE	12.81	69	290717	19.53	PPBV	99
71) 2-HEXANONE	12.82	43	326297	19.18	PPBV	99
72) TETRACHLOROETHYLENE	13.69	164	267922	17.97	PPBV	99
73) DIBROMOCHLOROMETHANE	12.98	129	376703	18.20	PPBV	100
74) 1,2-DIBROMOETHANE	13.22	107	316157	18.82	PPBV	100
75) OCTANE	13.52	43	477040	20.02	PPBV	99
76) 1,1,1,2-TETRACHLOROETHANE	14.39	131	274482	18.49	PPBV #	100
77) CHLOROBENZENE	14.41	112	518319	18.71	PPBV	99
78) ETHYLBENZENE	14.80	91	811364	18.25	PPBV	100
79) m,p-XYLENE	14.99	106	643137	36.99	PPBV	99
80) o-XYLENE	15.50	106	308205	18.47	PPBV	99
81) STYRENE	15.39	104	460732	20.48	PPBV	100
82) 1,2,3-TRICHLOROPROPANE	15.65	75	289506	19.98	PPBV	100
83) NONANE	15.74	43	434183	21.03	PPBV	100
84) BROMOFORM	15.10	173	343119	18.99	PPBV	100
86) 1,1,2,2-TETRACHLOROETHANE	15.51	83	375816	19.43	PPBV	100
87) ISOPROPYLBENZENE	16.16	105	841699	20.02	PPBV	100
88) BROMOBENZENE	16.27	156	233373	19.49	PPBV	98
89) 2-CHLOROTOLUENE	16.71	126	191766	20.51	PPBV #	98
90) n-PROPYLBENZENE	16.74	120	217957	20.73	PPBV	99
91) 4-ETHYLTOLUENE	16.91	105	713085	21.55	PPBV	99
92) 1,3,5-TRIMETHYLBENZENE	17.00	105	554371	20.98	PPBV	100
93) ALPHA-METHYLSTYRENE	17.18	118	266393	21.60	PPBV	100
94) TERT-BUTYLBENZENE	17.46	134	147357	21.04	PPBV	99

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

W34789.D MW1417.M Fri Jan 20 14:04:22 2012 MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34789.D Vial: 2
 Acq On : 18 Jan 2012 10:37 pm Operator: YOUMINH
 Sample : IC1417-20 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:19 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) 1,2,4-TRIMETHYLBENZENE	17.47	105	526887	22.01	PPBV	99
96) m-DICHLOROBENZENE	17.64	146	328005	21.02	PPBV	100
97) BENZYL CHLORIDE	17.63	91	395662	21.80	PPBV	100
98) p-DICHLOROBENZENE	17.72	146	310107	21.28	PPBV	99
99) SEC-BUTYLBENZENE	17.77	134	165565	21.29	PPBV	99
100) p-ISOPROPYLTOLUENE	17.96	134	157055	22.10	PPBV	100
101) o-DICHLOROBENZENE	18.11	146	275109	20.97	PPBV	99
102) n-BUTYLBENZENE	18.44	134	114717	21.77	PPBV	100
103) HEXACHLOROETHANE	18.88	201	179281	20.45	PPBV	98
104) HEXACHLOROBUTADIENE	20.61	225	54405	15.27	PPBV	99
105) 1,2,4-TRICHLOROBENZENE	20.09	180	42476	15.99	PPBV	99
107) NAPHTHALENE	20.21	128	86957	14.84	PPBV	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34789.D MW1417.M Fri Jan 20 14:04:22 2012 MSW

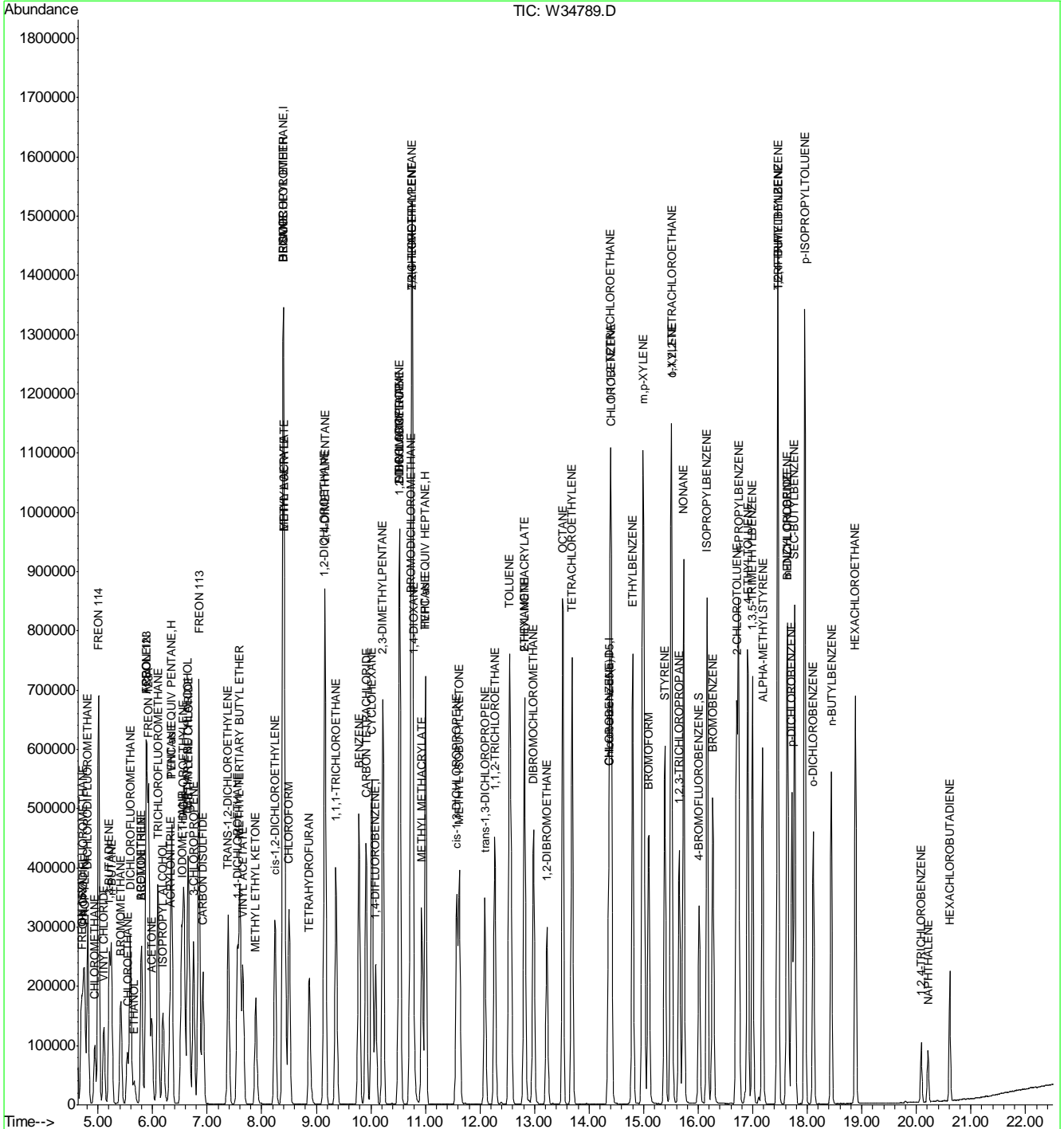
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34789.D
Acq On : 18 Jan 2012 10:37 pm
Sample : IC1417-20
Misc : MS23560,VW1417,,,,,1
MS Integration Params: rteint.p
Quant Time: Jan 19 15:15 2012

Vial: 2
Operator: YOUMINH
Inst : MSW
Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Jan 19 15:22:56 2012
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34789.D
 Acq On : 18 Jan 2012 10:37 pm
 Sample : IC1417-20
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:15 2012

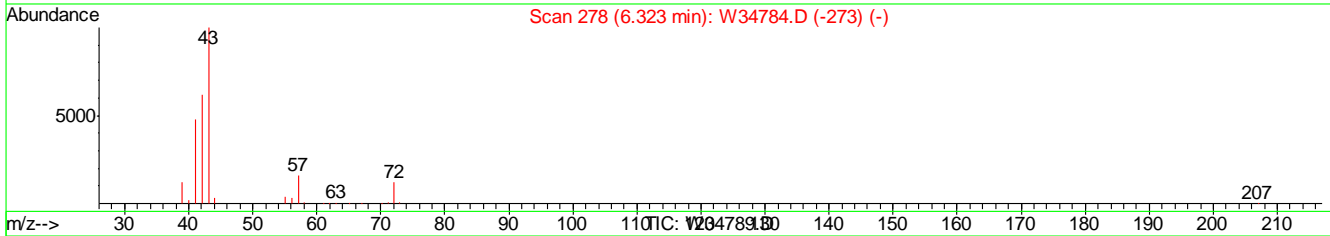
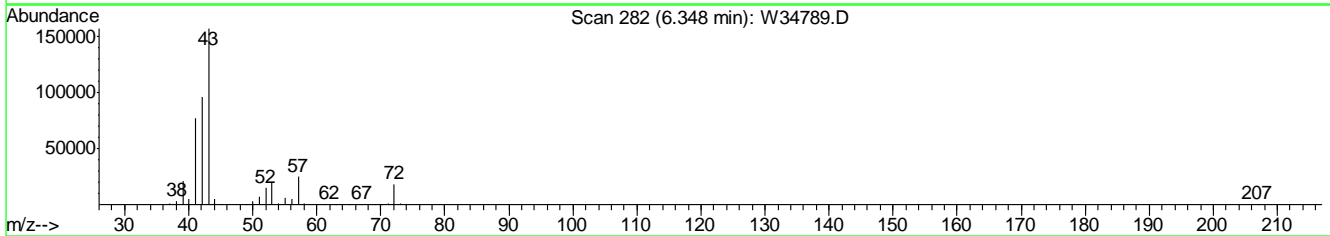
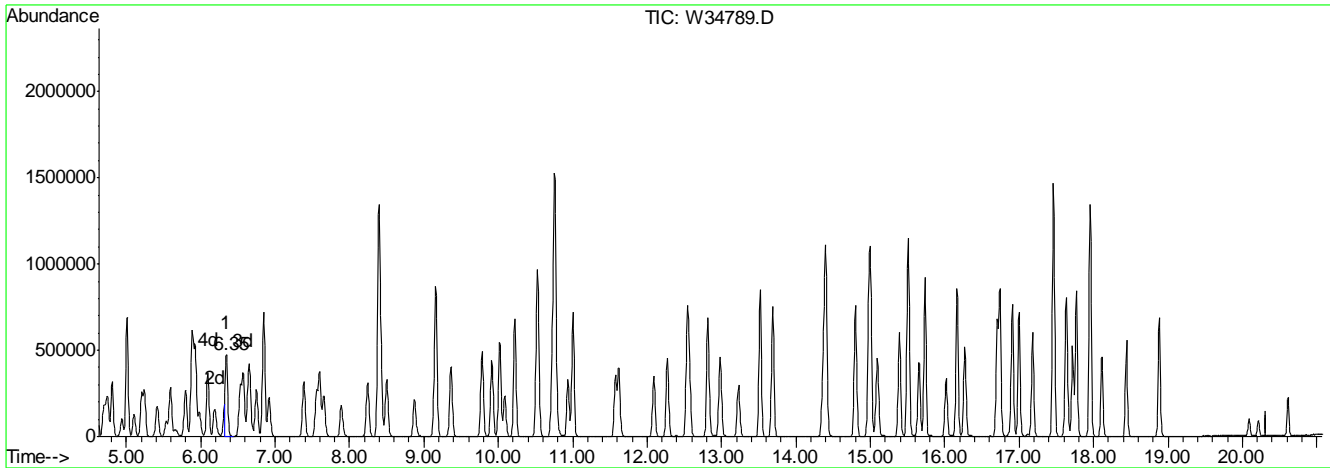
Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.16.1

6



(23) TVHC as EQUIV PENTANE (H)

6.35min 20.15PPBV m

response 1166165

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.98#
0.00	1.10	0.81#
0.00	0.00	0.00

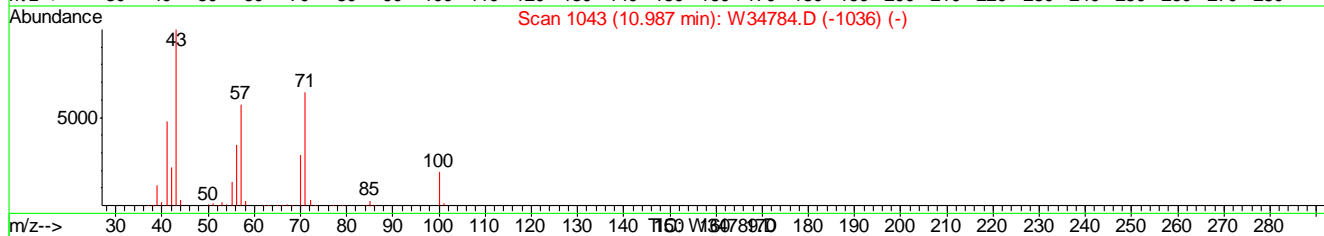
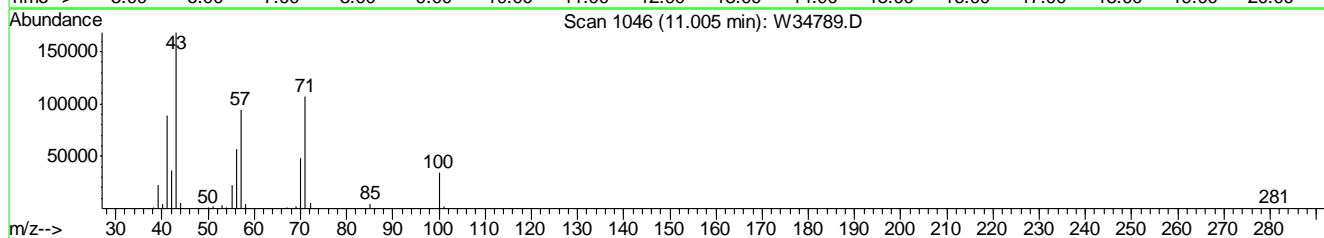
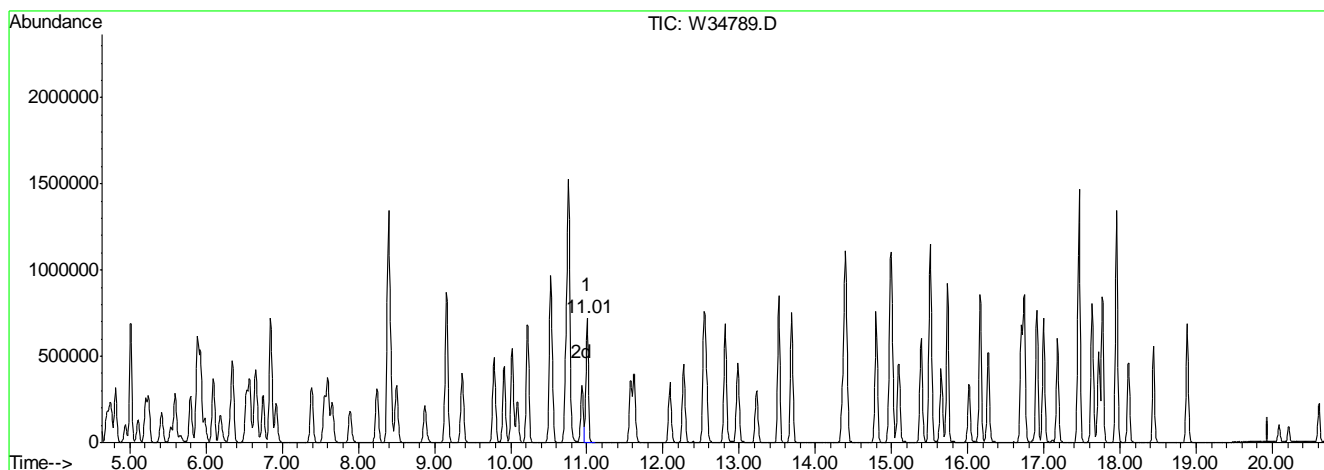
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34789.D
 Acq On : 18 Jan 2012 10:37 pm
 Sample : IC1417-20
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:15 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration



(63) TVHC as EQUIV HEPTANE (H)

11.01min 20.34PPBV m

response 1610358

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.71#
0.00	0.80	0.59#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34793.D
 Acq On : 19 Jan 2012 1:17 am
 Sample : IC1417-40
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:32 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.40	128	61826	10.00	PPBV	0.03
50) 1,4-DIFLUOROBENZENE	10.09	114	267216	10.00	PPBV	0.02
69) CHLOROBENZENE-D5	14.36	82	155963	10.00	PPBV	0.02
106) Chlorobenzene-d5(a)	14.36	82	155950	10.00	PPBV	0.02

System Monitoring Compounds

85) 4-BROMOFLUOROBENZENE	16.02	95	160467	9.46	PPBV	0.02
Spiked Amount	10.000	Range	65 - 128	Recovery	=	94.60%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.70	65	206435	38.17	PPBV	99
4) CHLORODIFLUOROMETHANE	4.73	67	70806	38.84	PPBV	100
5) DICHLORODIFLUOROMETHANE	4.81	85	799177	36.15	PPBV	100
6) PROPYLENE	4.76	41	272639	36.74	PPBV	99
7) FREON 114	5.01	85	995055	36.83	PPBV	99
8) CHLOROMETHANE	4.94	52	102033	37.81	PPBV	91
9) VINYL CHLORIDE	5.10	62	385865	35.99	PPBV	100
10) 1,3-BUTADIENE	5.21	54	314042	37.05	PPBV	99
11) n-BUTANE	5.24	43	606425	35.50	PPBV	99
12) BROMOMETHANE	5.41	94	326851	35.74	PPBV	99
13) CHLOROETHANE	5.54	64	218479	37.02	PPBV	99
14) DICHLOROFLUOROMETHANE	5.59	67	784426	35.85	PPBV	100
15) ACROLEIN	5.88	56	164875	40.53	PPBV	99
16) FREON 123	5.88	83	856867	37.10	PPBV #	100
17) FREON 123A	5.93	117	498886	37.00	PPBV	99
18) TRICHLOROFLUOROMETHANE	6.10	101	807344	35.95	PPBV	99
19) ISOPROPYL ALCOHOL	6.19	45	666369	38.49	PPBV	98
20) ACETONE	5.98	58	179991	39.96	PPBV	98
21) ACRYLONITRILE	6.32	53	311453	40.34	PPBV	99
22) PENTANE	6.35	57	113132	38.32	PPBV	98
23) TVHC as EQUIV PENTANE	6.35	TIC	2111840m	36.11	PPBV	
24) IODOMETHANE	6.53	142	896980	36.17	PPBV	99
25) 1,1-DICHLOROETHYLENE	6.57	96	371928	35.68	PPBV	100
26) CARBON DISULFIDE	6.92	76	909113	35.17	PPBV	100
27) ETHANOL	5.65	45	159937	39.19	PPBV	98
28) ACETONITRILE	5.79	41	312448	39.32	PPBV	99
29) BROMOETHENE	5.80	106	345466	35.62	PPBV	100
30) METHYLENE CHLORIDE	6.66	84	334498	34.87	PPBV	99
31) 3-CHLOROPROPENE	6.75	76	187889	38.25	PPBV	99
32) FREON 113	6.85	151	617902	36.68	PPBV	99
33) TRANS-1,2-DICHLOROETHYLENE	7.39	96	359159	35.13	PPBV	99
34) TERTIARY BUTYL ALCOHOL	6.64	59	456509	22.44	PPBV	98
35) METHYL TERTIARY BUTYL ETHE	7.60	73	1003718	41.46	PPBV	99
36) TETRAHYDROFURAN	8.87	72	185575	42.84	PPBV	99
37) HEXANE	8.40	57	679813	39.87	PPBV	98
38) VINYL ACETATE	7.66	86	105295	42.98	PPBV #	76
39) 1,1-DICHLOROETHANE	7.56	63	685126	37.91	PPBV	99
40) METHYL ETHYL KETONE	7.89	72	184768	43.09	PPBV	99
41) cis-1,2-DICHLOROETHYLENE	8.25	96	397370	37.12	PPBV	99
42) DI-ISOPROPYL ETHER	8.40	45	1353219	42.42	PPBV	100

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

W34793.D MW1417.M Fri Jan 20 14:04:24 2012 MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34793.D
 Acq On : 19 Jan 2012 1:17 am
 Sample : IC1417-40
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:32 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) ETHYL ACETATE	8.43	61	119650	42.90	PPBV #	1
44) METHYL ACRYLATE	8.42	55	734378	43.48	PPBV	98
45) CHLOROFORM	8.51	83	699959	37.57	PPBV	99
46) 2,4-DIMETHYLPENTANE	9.16	57	804861	39.81	PPBV	100
47) 1,1,1-TRICHLOROETHANE	9.37	97	692151	38.07	PPBV	100
48) CARBON TETRACHLORIDE	9.91	117	724160	37.96	PPBV	99
49) 1,2-DICHLOROETHANE	9.15	62	416851	39.32	PPBV	99
51) BENZENE	9.79	78	1209409	38.31	PPBV	100
52) CYCLOHEXANE	10.02	84	561844	38.46	PPBV	99
53) 2,3-DIMETHYLPENTANE	10.23	71	300265	40.78	PPBV	99
54) TRICHLOROETHYLENE	10.76	95	502596	38.47	PPBV	99
55) DIBROMOMETHANE	10.52	174	455719	39.49	PPBV	98
56) 1,2-DICHLOROPROPANE	10.54	63	466201	42.16	PPBV	100
57) ETHYL ACRYLATE	10.52	55	826403	46.95	PPBV	99
58) BROMODICHLOROMETHANE	10.73	83	778996	40.64	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.76	57	2220680	42.21	PPBV	100
60) 1,4-DIOXANE	10.79	88	255160	43.60	PPBV #	25
61) METHYL METHACRYLATE	10.94	69	422082	46.36	PPBV	97
62) HEPTANE	11.01	43	736628	42.87	PPBV	100
63) TVHC as EQUIV HEPTANE	11.01	TIC	3171110m	41.82	PPBV	
64) METHYL ISOBUTYL KETONE	11.62	43	742377	45.16	PPBV	99
65) cis-1,3-DICHLOROPROPENE	11.58	75	624032	42.29	PPBV	99
66) TOLUENE	12.54	92	846786	41.08	PPBV	100
67) trans-1,3-DICHLOROPROPENE	12.10	75	592945	44.01	PPBV	100
68) 1,1,2-TRICHLOROETHANE	12.27	83	376179	41.64	PPBV	98
70) ETHYL METHACRYLATE	12.82	69	621999	39.89	PPBV	100
71) 2-HEXANONE	12.82	43	679931	38.16	PPBV	100
72) TETRACHLOROETHYLENE	13.69	164	532821	34.13	PPBV	99
73) DIBROMOCHLOROMETHANE	12.99	129	752900	34.74	PPBV	99
74) 1,2-DIBROMOETHANE	13.23	107	629201	35.76	PPBV	100
75) OCTANE	13.52	43	933836	37.43	PPBV	100
76) 1,1,1,2-TETRACHLOROETHANE	14.39	131	556389	35.80	PPBV #	100
77) CHLOROBENZENE	14.41	112	1049671	36.17	PPBV	100
78) ETHYLBENZENE	14.80	91	1639407	35.21	PPBV	100
79) m,p-XYLENE	15.00	106	1319703	72.48	PPBV	99
80) o-XYLENE	15.51	106	634669	36.33	PPBV	99
81) STYRENE	15.39	104	939779	39.90	PPBV	99
82) 1,2,3-TRICHLOROPROPANE	15.66	75	594277	39.16	PPBV	99
83) NONANE	15.74	43	862974	39.91	PPBV	99
84) BROMOFORM	15.10	173	696825	36.83	PPBV	99
86) 1,1,2,2-TETRACHLOROETHANE	15.52	83	792857	39.14	PPBV	100
87) ISOPROPYLBENZENE	16.17	105	1725328	39.19	PPBV	100
88) BROMOBENZENE	16.28	156	470761	37.54	PPBV	98
89) 2-CHLOROTOLUENE	16.71	126	390512	39.88	PPBV #	99
90) n-PROPYLBENZENE	16.75	120	454632	41.29	PPBV	97
91) 4-ETHYLTOLUENE	16.91	105	1492235	43.07	PPBV	99
92) 1,3,5-TRIMETHYLBENZENE	17.00	105	1162054	41.99	PPBV	100
93) ALPHA-METHYLSTYRENE	17.19	118	563739	43.65	PPBV	100
94) TERT-BUTYLBENZENE	17.46	134	318024	43.35	PPBV	98

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

W34793.D MW1417.M

Fri Jan 20 14:04:24 2012

MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34793.D Vial: 2
 Acq On : 19 Jan 2012 1:17 am Operator: YOUMINH
 Sample : IC1417-40 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:32 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) 1,2,4-TRIMETHYLBENZENE	17.47	105	1147060	45.75	PPBV	97
96) m-DICHLOROBENZENE	17.64	146	693305	42.42	PPBV	100
97) BENZYL CHLORIDE	17.63	91	892059	46.94	PPBV	100
98) p-DICHLOROBENZENE	17.72	146	653992	42.86	PPBV	99
99) SEC-BUTYLBENZENE	17.77	134	353054	43.34	PPBV	98
100) p-ISOPROPYLTOLUENE	17.96	134	347218	46.66	PPBV	98
101) o-DICHLOROBENZENE	18.11	146	580002	42.22	PPBV	100
102) n-BUTYLBENZENE	18.44	134	255655	46.32	PPBV	100
103) HEXACHLOROETHANE	18.89	201	373051	40.62	PPBV	99
104) HEXACHLOROBUTADIENE	20.61	225	92674	24.84	PPBV	98
105) 1,2,4-TRICHLOROBENZENE	20.09	180	78915	28.36	PPBV	99
107) NAPHTHALENE	20.21	128	155208	25.29	PPBV	99

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34793.D MW1417.M Fri Jan 20 14:04:24 2012 MSW

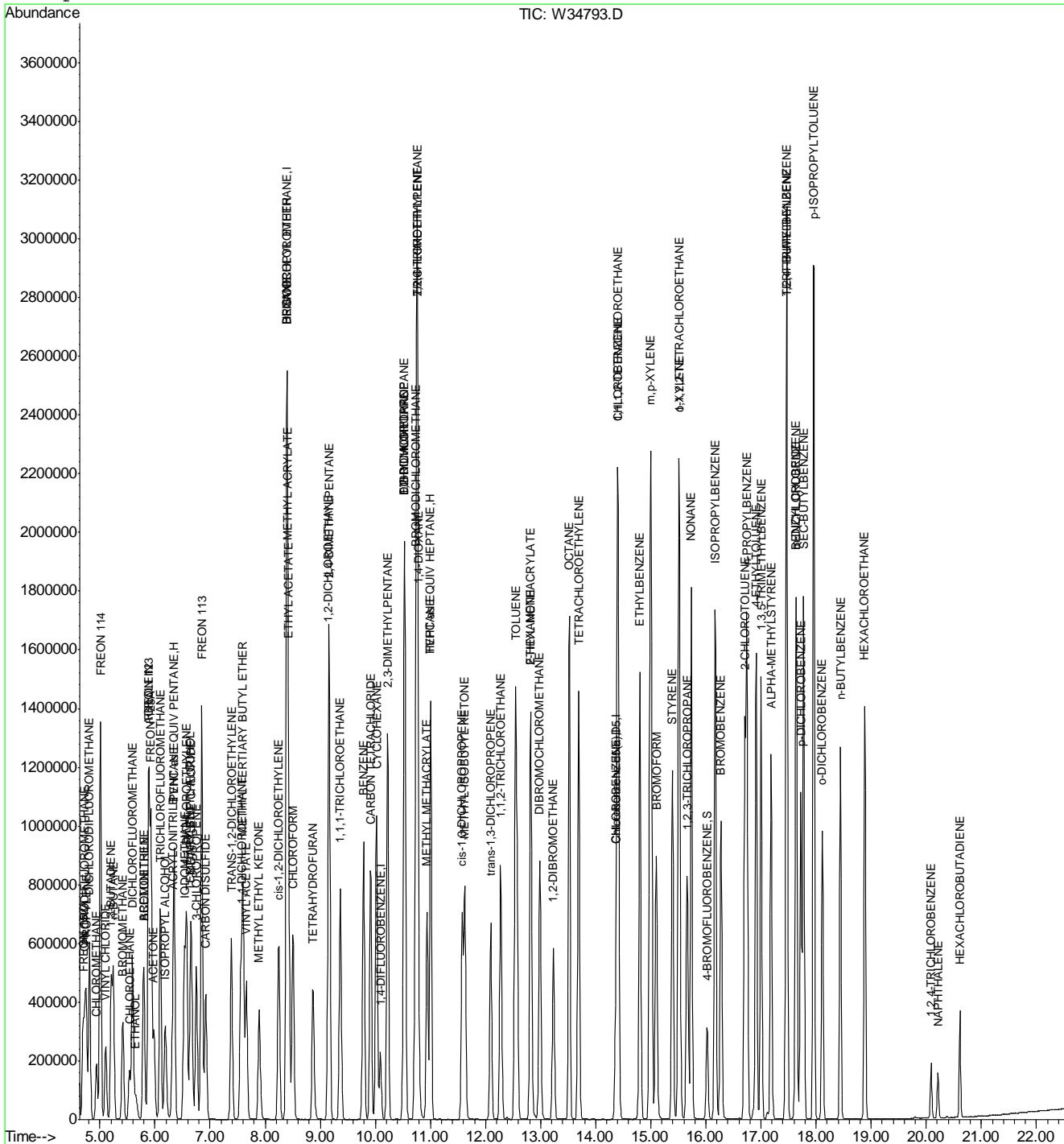
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34793.D
Acq On : 19 Jan 2012 1:17 am
Sample : IC1417-40
Misc : MS23560,VW1417,,,,,1
MS Integration Params: rteint.p
Quant Time: Jan 19 15:15 2012

Vial: 2
Operator: YOUMINH
Inst : MSW
Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Jan 19 15:22:56 2012
Response via : Initial Calibration



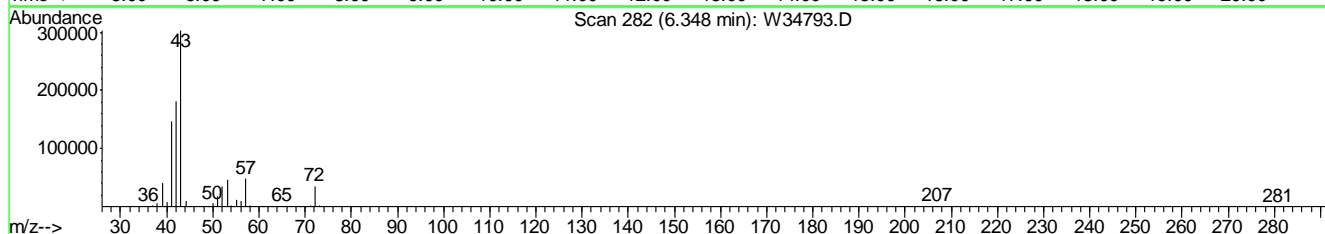
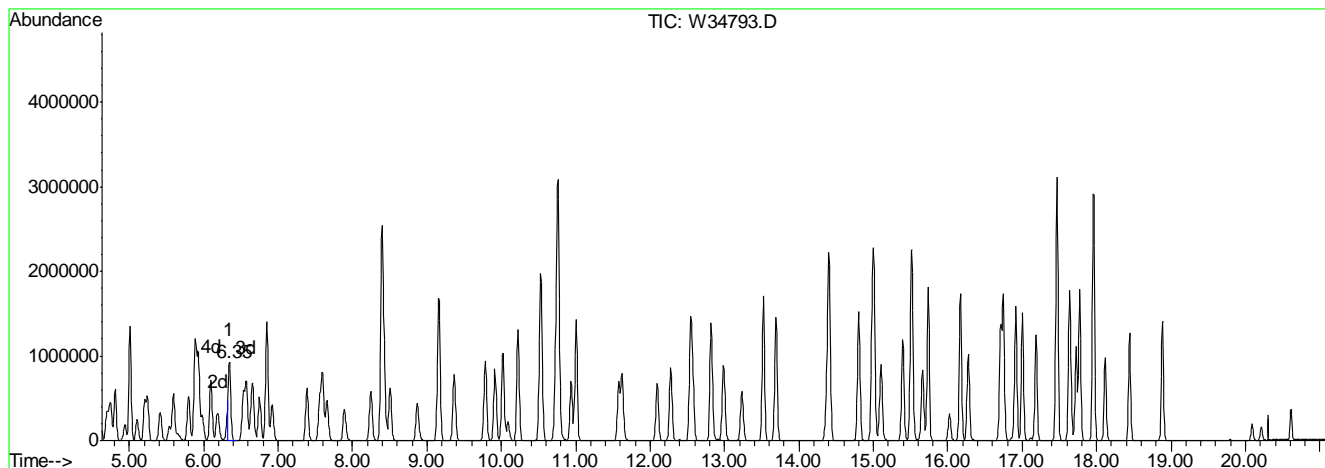
6.7.17 6

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34793.D Vial: 2
 Acq On : 19 Jan 2012 1:17 am Operator: YOUMINH
 Sample : IC1417-40 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:15 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.17.1
 6



(23) TVHC as EQUIV PENTANE (H)

6.35min 36.11PPBV m

response 2111840

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.99#
0.00	1.10	0.80#
0.00	0.00	0.00

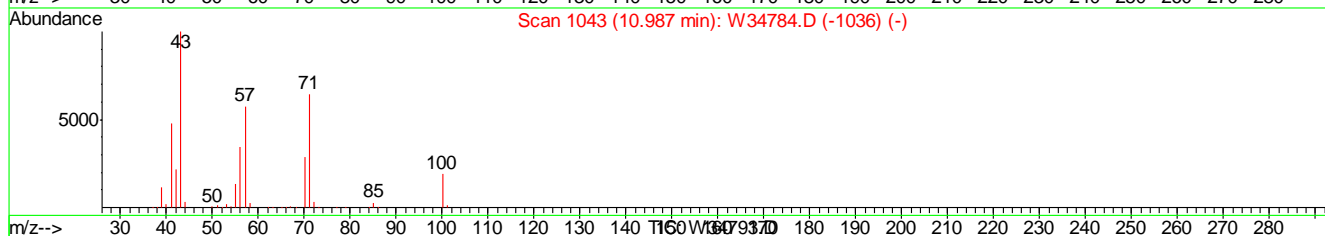
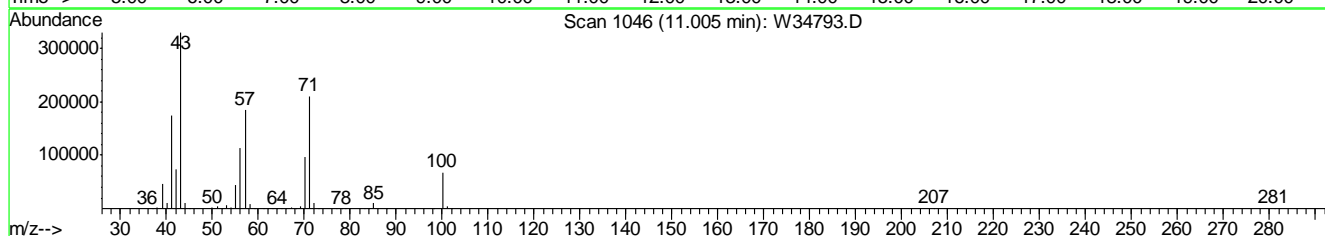
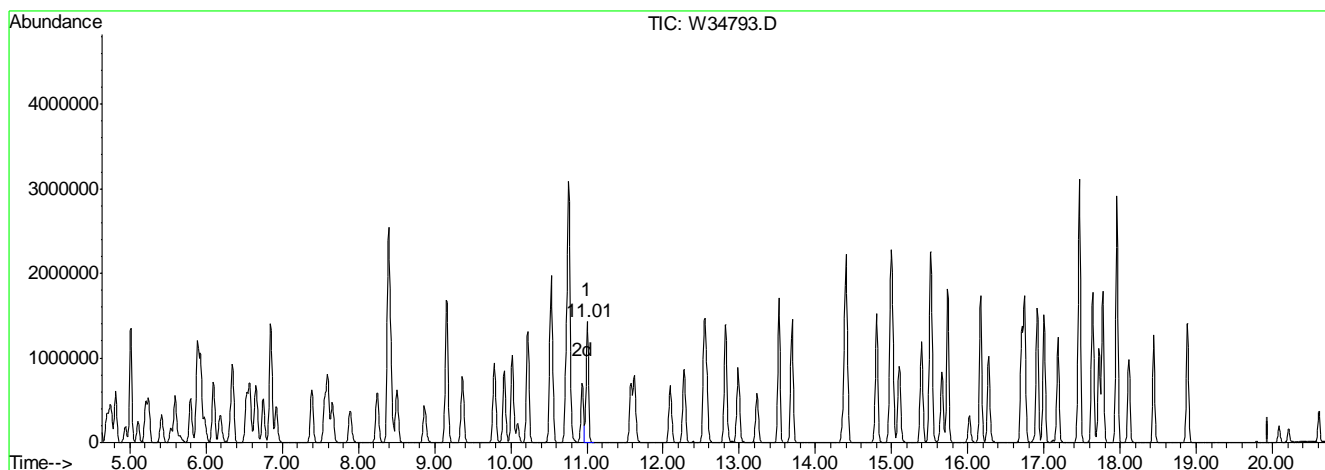
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34793.D Vial: 2
 Acq On : 19 Jan 2012 1:17 am Operator: YOUMINH
 Sample : IC1417-40 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:15 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.17.2

6



(63) TVHC as EQUIV HEPTANE (H)

11.01min 41.82PPBV m

response 3171110

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.66#
0.00	0.80	0.53#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34796.D Vial: 1
 Acq On : 19 Jan 2012 11:38 am Operator: YOUMINH
 Sample : IC1417-0.2 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:41 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.37	128	58908	10.00	PPBV	0.00
50) 1,4-DIFLUOROBENZENE	10.07	114	248733	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.34	82	105749	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.34	82	105239	10.00	PPBV	0.00

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 16.00 95 109066 9.49 PPBV 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 94.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.68	65	1272	0.25	PPBV #	78
4) CHLORODIFLUOROMETHANE	4.71	67	271	0.16	PPBV #	67
5) DICHLORODIFLUOROMETHANE	4.79	85	4516	0.21	PPBV	97
6) PROPYLENE	4.74	41	1545	0.22	PPBV	84
7) FREON 114	4.99	85	5273	0.20	PPBV	94
8) CHLOROMETHANE	4.92	52	457	0.18	PPBV #	69
9) VINYL CHLORIDE	5.09	62	2141	0.21	PPBV	92
10) 1,3-BUTADIENE	5.19	54	1487	0.18	PPBV	90
11) n-BUTANE	5.23	43	3392	0.21	PPBV #	87
12) BROMOMETHANE	5.40	94	1814	0.21	PPBV	95
13) CHLOROETHANE	5.53	64	1171	0.21	PPBV #	65
14) DICHLOROFLUOROMETHANE	5.59	67	4120	0.20	PPBV #	95
15) ACROLEIN	5.88	56	643	0.17	PPBV	86
16) FREON 123	5.87	83	4498	0.20	PPBV #	99
17) FREON 123A	5.91	117	2729	0.21	PPBV	90
18) TRICHLOROFLUOROMETHANE	6.09	101	4295	0.20	PPBV	95
19) ISOPROPYL ALCOHOL	6.21	45	3266	0.20	PPBV	91
20) ACETONE	5.98	58	828	0.19	PPBV #	82
21) ACRYLONITRILE	6.31	53	1243	0.17	PPBV #	87
22) PENTANE	6.33	57	422	0.15	PPBV #	35
23) TVHC as EQUIV PENTANE	6.33	TIC	10879m	0.20	PPBV	
24) IODOMETHANE	6.52	142	5144	0.22	PPBV	96
25) 1,1-DICHLOROETHYLENE	6.55	96	2040	0.21	PPBV	89
26) CARBON DISULFIDE	6.91	76	5150	0.21	PPBV	95
27) ETHANOL	5.65	45	782	0.20	PPBV #	48
28) ACETONITRILE	5.79	41	1368	0.18	PPBV #	77
29) BROMOETHENE	5.77	106	1958	0.21	PPBV #	90
30) METHYLENE CHLORIDE	6.65	84	2066	0.23	PPBV	94
31) 3-CHLOROPROPENE	6.74	76	774	0.17	PPBV #	71
32) FREON 113	6.84	151	3493	0.22	PPBV	93
33) TRANS-1,2-DICHLOROETHYLENE	7.37	96	1864	0.19	PPBV	93
34) TERTIARY BUTYL ALCOHOL	6.67	59	3758	0.19	PPBV	93
35) METHYL TERTIARY BUTYL ETHE	7.60	73	4115	0.18	PPBV	99
36) TETRAHYDROFURAN	8.90	72	634	0.15	PPBV #	87
37) HEXANE	8.37	57	2949	0.18	PPBV	98
38) VINYL ACETATE	7.64	86	306	0.13	PPBV #	29
39) 1,1-DICHLOROETHANE	7.54	63	3176	0.18	PPBV	98
40) METHYL ETHYL KETONE	7.88	72	607	0.15	PPBV #	87
41) cis-1,2-DICHLOROETHYLENE	8.23	96	1896	0.19	PPBV	91
42) DI-ISOPROPYL ETHER	8.38	45	5318	0.17	PPBV	96

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

W34796.D MW1417.M Fri Jan 20 14:04:25 2012 MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34796.D Vial: 1
 Acq On : 19 Jan 2012 11:38 am Operator: YOUMINH
 Sample : IC1417-0.2 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:41 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) ETHYL ACETATE	8.40	61	399	0.15	PPBV #	53
44) METHYL ACRYLATE	8.40	55	2653	0.16	PPBV #	94
45) CHLOROFORM	8.48	83	3426	0.19	PPBV	99
46) 2,4-DIMETHYLPENTANE	9.14	57	3334	0.17	PPBV	95
47) 1,1,1-TRICHLOROETHANE	9.35	97	3263	0.19	PPBV	97
48) CARBON TETRACHLORIDE	9.89	117	3595	0.20	PPBV	95
49) 1,2-DICHLOROETHANE	9.12	62	1830	0.18	PPBV	85
51) BENZENE	9.76	78	5620	0.19	PPBV	98
52) CYCLOHEXANE	10.01	84	2674	0.20	PPBV	87
53) 2,3-DIMETHYLPENTANE	10.21	71	1275	0.19	PPBV #	93
54) TRICHLOROETHYLENE	10.73	95	2156	0.18	PPBV	97
55) DIBROMOMETHANE	10.49	174	2145	0.20	PPBV	95
56) 1,2-DICHLOROPROPANE	10.52	63	1841	0.18	PPBV	90
57) ETHYL ACRYLATE	10.52	55	2548	0.16	PPBV #	79
58) BROMODICHLOROMETHANE	10.70	83	3340	0.19	PPBV	98
59) 2,2,4-TRIMETHYLPENTANE	10.74	57	8538	0.17	PPBV	98
60) 1,4-DIOXANE	10.85	88	824	0.15	PPBV #	1
61) METHYL METHACRYLATE	10.91	69	1401	0.17	PPBV	97
62) HEPTANE	10.99	43	2828	0.18	PPBV	98
63) TVHC as EQUIV HEPTANE	10.99	TIC	12453m	0.18	PPBV	
64) METHYL ISOBUTYL KETONE	11.63	43	2363	0.15	PPBV	93
65) cis-1,3-DICHLOROPROPENE	11.56	75	2408	0.18	PPBV	86
66) TOLUENE	12.52	92	3539	0.18	PPBV	97
67) trans-1,3-DICHLOROPROPENE	12.07	75	1974	0.16	PPBV	92
68) 1,1,2-TRICHLOROETHANE	12.24	83	1525	0.18	PPBV	100
70) ETHYL METHACRYLATE	12.80	69	1712	0.16	PPBV #	80
71) 2-HEXANONE	12.83	43	1954	0.16	PPBV	90
72) TETRACHLOROETHYLENE	13.68	164	2358	0.22	PPBV	98
73) DIBROMOCHLOROMETHANE	12.96	129	2950	0.20	PPBV	98
74) 1,2-DIBROMOETHANE	13.21	107	2315	0.19	PPBV #	96
75) OCTANE	13.50	43	3049	0.18	PPBV	97
76) 1,1,1,2-TETRACHLOROETHANE	14.38	131	2132	0.20	PPBV #	100
77) CHLOROBENZENE	14.38	112	3995	0.20	PPBV	99
78) ETHYLBENZENE	14.78	91	5965	0.19	PPBV	97
79) m,p-XYLENE	14.97	106	4721	0.38	PPBV	96
80) o-XYLENE	15.49	106	2162	0.18	PPBV	98
81) STYRENE	15.37	104	2642	0.17	PPBV	96
82) 1,2,3-TRICHLOROPROPANE	15.64	75	1868	0.18	PPBV	91
83) NONANE	15.72	43	2004	0.14	PPBV	89
84) BROMOFORM	15.07	173	2478	0.19	PPBV	93
86) 1,1,2,2-TETRACHLOROETHANE	15.50	83	2559	0.19	PPBV	97
87) ISOPROPYLBENZENE	16.15	105	5242	0.18	PPBV	98
88) BROMOBENZENE	16.25	156	1546	0.18	PPBV	98
89) 2-CHLOROTOLUENE	16.69	126	1074	0.16	PPBV #	52
90) n-PROPYLBENZENE	16.73	120	1080	0.14	PPBV	81
91) 4-ETHYLTOLUENE	16.89	105	3356	0.14	PPBV #	99
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	2756	0.15	PPBV	97
93) ALPHA-METHYLSTYRENE	17.16	118	1086	0.12	PPBV #	89
94) TERT-BUTYLBENZENE	17.45	134	630	0.13	PPBV	74

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

W34796.D MW1417.M Fri Jan 20 14:04:26 2012 MSW

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34796.D Vial: 1
 Acq On : 19 Jan 2012 11:38 am Operator: YOUMINH
 Sample : IC1417-0.2 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:41 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) 1,2,4-TRIMETHYLBENZENE	17.45	105	2347	0.14	PPBV	91
96) m-DICHLOROBENZENE	17.63	146	1720	0.16	PPBV	97
97) BENZYL CHLORIDE	17.62	91	1823	0.14	PPBV	88
98) p-DICHLOROBENZENE	17.71	146	1587	0.15	PPBV	96
99) SEC-BUTYLBENZENE	17.76	134	669	0.12	PPBV	74
100) p-ISOPROPYLTOLUENE	17.95	134	647	0.13	PPBV	80
101) o-DICHLOROBENZENE	18.10	146	1416	0.15	PPBV	94
102) n-BUTYLBENZENE	18.44	134	438	0.12	PPBV #	66
103) HEXACHLOROETHANE	18.88	201	1073	0.17	PPBV	91
104) HEXACHLOROBUTADIENE	20.61	225	573	0.23	PPBV	96
105) 1,2,4-TRICHLOROBENZENE	20.09	180	356	0.19	PPBV #	71
107) NAPHTHALENE	20.21	128	814	0.20	PPBV #	69

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34796.D MW1417.M Fri Jan 20 14:04:26 2012 MSW

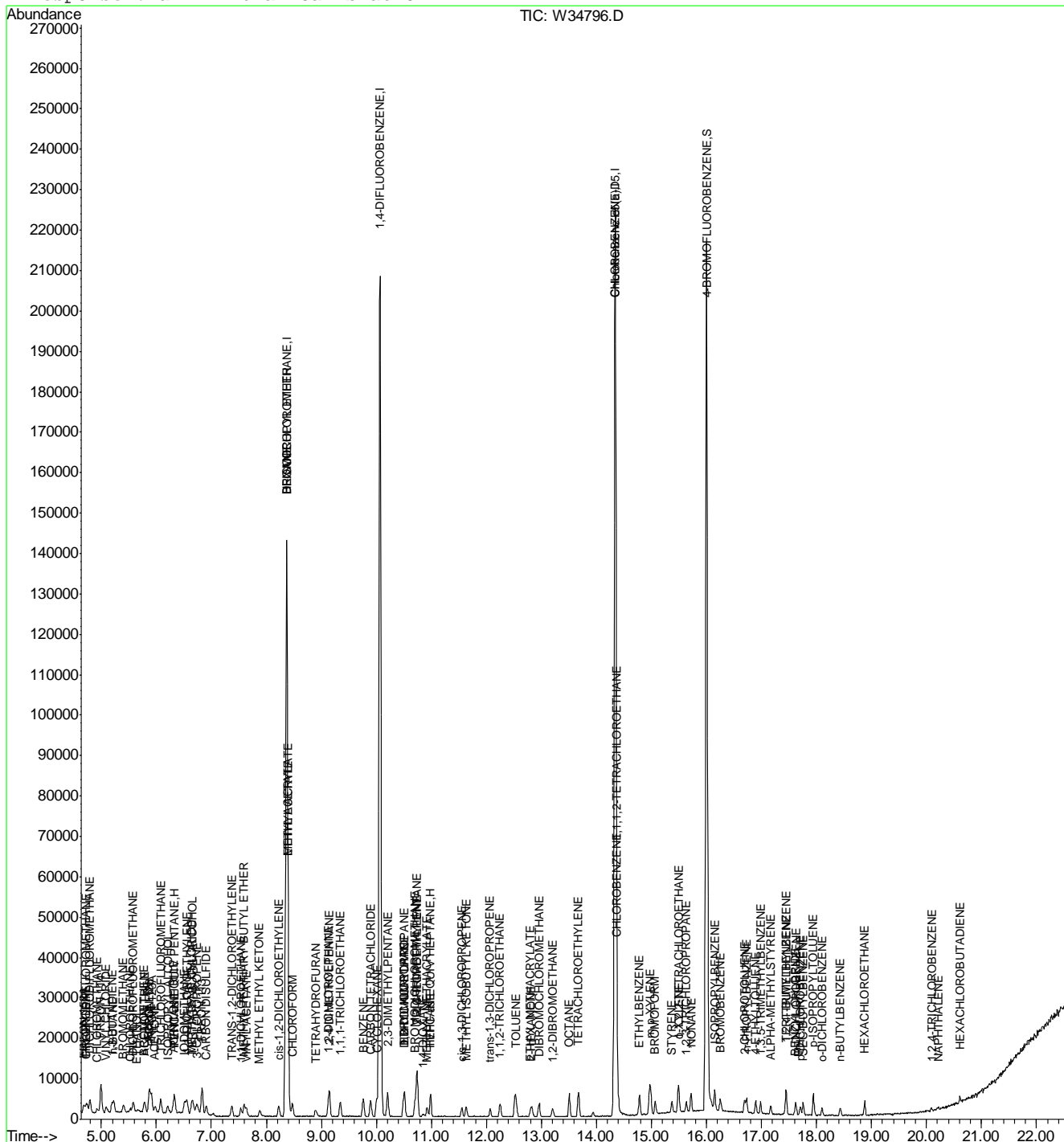
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34796.D
 Acq On : 19 Jan 2012 11:38 am
 Sample : IC1417-0.2
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:16 2012

Vial: 1
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Initial Calibration

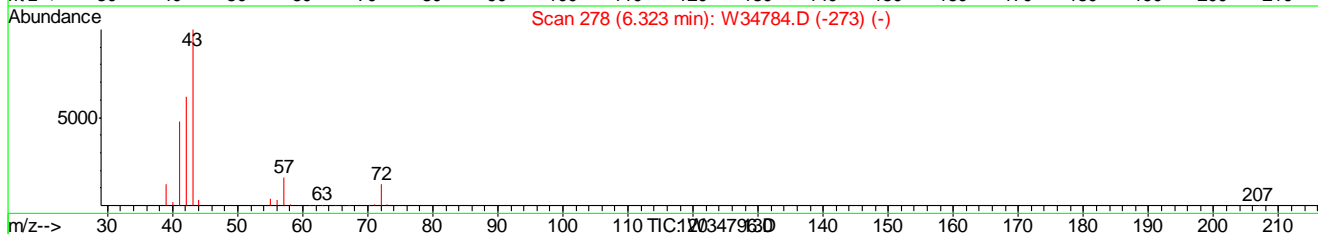
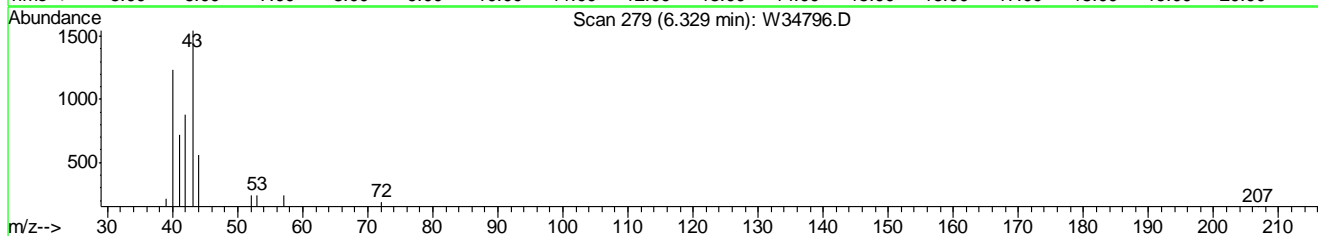
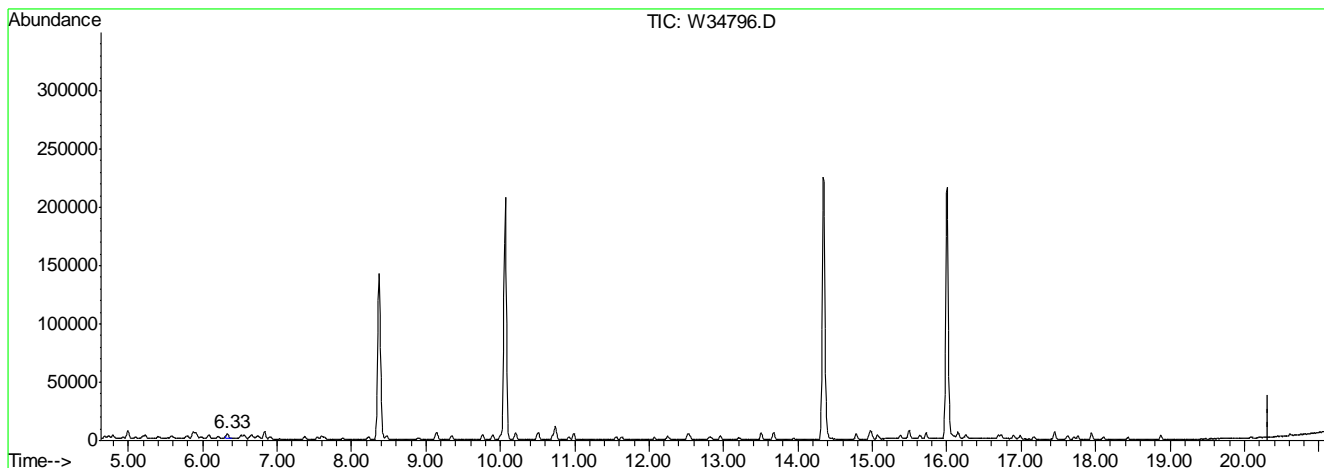


Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34796.D Vial: 1
 Acq On : 19 Jan 2012 11:38 am Operator: YOUMINH
 Sample : IC1417-0.2 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:16 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration

6.7.18.1
 6



(23) TVHC as EQUIV PENTANE (H)

6.33min 0.20PPBV m

response 10879

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.00
0.00	1.10	0.00
0.00	0.00	0.00

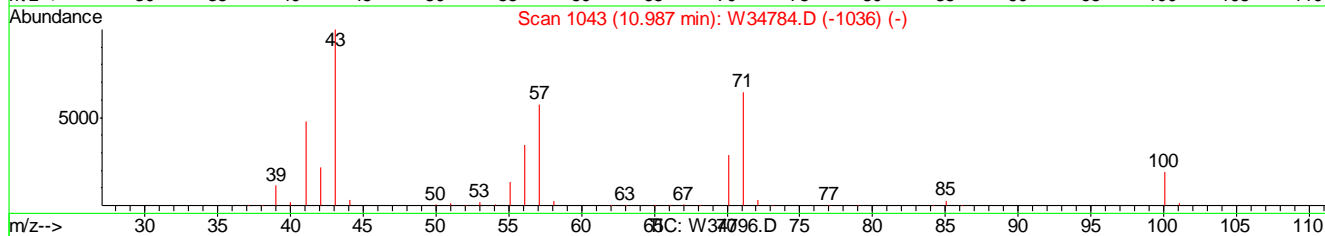
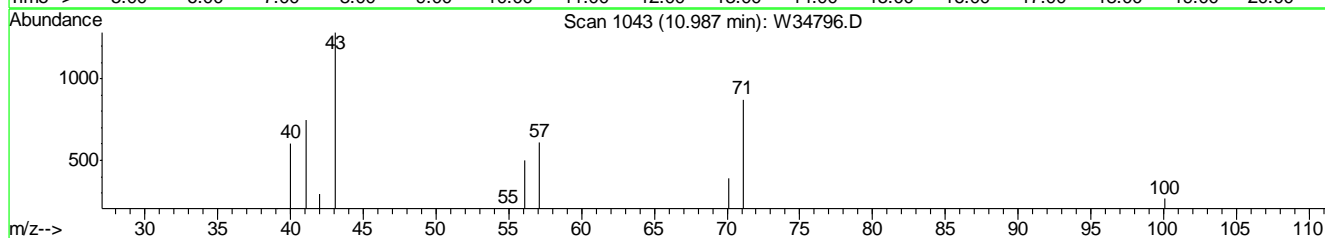
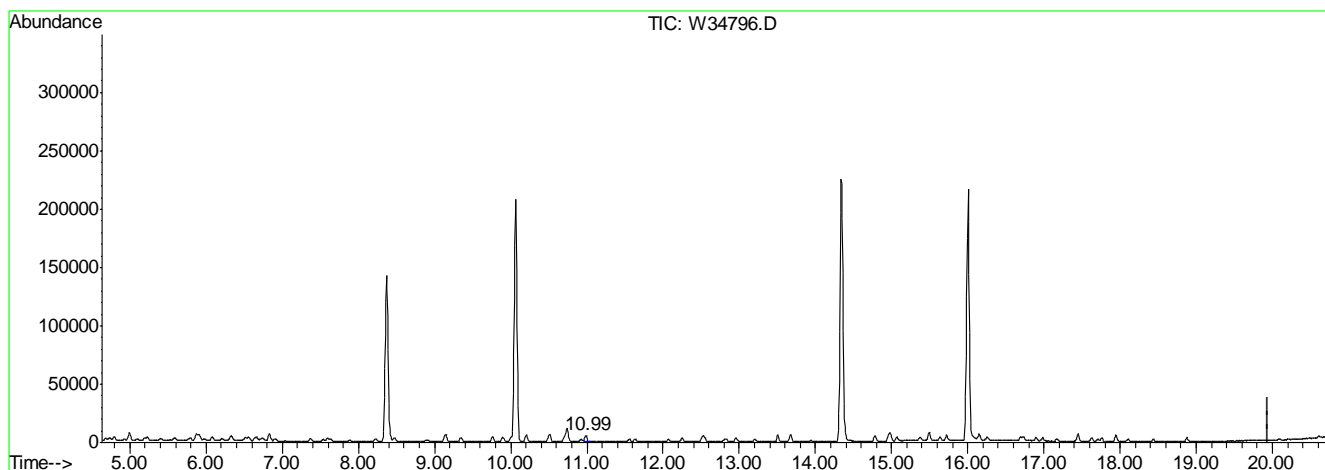
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34796.D
 Acq On : 19 Jan 2012 11:38 am
 Sample : IC1417-0.2
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:16 2012

Vial: 1
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Multiple Level Calibration



(63) TVHC as EQUIV HEPTANE (H)

10.99min 0.18PPBV m

response 12453

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.00
0.00	0.80	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34797.D Vial: 4
 Acq On : 19 Jan 2012 12:19 pm Operator: YOUMINH
 Sample : IC1417-0.1 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:45 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.37	128	56871	10.00	PPBV	0.00
50) 1,4-DIFLUOROBENZENE	10.06	114	245716	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.34	82	104700	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.34	82	103622	10.00	PPBV	0.00

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 16.00 95 105962 9.31 PPBV 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 93.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) DICHLORODIFLUOROMETHANE	4.79	85	1994	0.10	PPBV	94
6) PROPYLENE	4.74	41	756	0.11	PPBV	94
7) FREON 114	4.99	85	2685	0.11	PPBV	98
9) VINYL CHLORIDE	5.09	62	994	0.10	PPBV #	77
10) 1,3-BUTADIENE	5.18	54	822	0.11	PPBV	83
11) n-BUTANE	5.23	43	1714	0.11	PPBV #	72
12) BROMOMETHANE	5.40	94	785	0.09	PPBV #	61
13) CHLOROETHANE	5.52	64	441	0.08	PPBV #	45
14) DICHLOROFLUOROMETHANE	5.57	67	2130	0.11	PPBV #	85
16) FREON 123	5.86	83	2161	0.10	PPBV #	97
17) FREON 123A	5.91	117	1225	0.10	PPBV #	97
18) TRICHLOROFLUOROMETHANE	6.07	101	2166	0.10	PPBV	93
21) ACRYLONITRILE	6.30	53	632	0.09	PPBV #	23
24) IODOMETHANE	6.51	142	2288	0.10	PPBV	94
26) CARBON DISULFIDE	6.90	76	2503	0.11	PPBV	88
29) BROMOETHENE	5.78	106	867	0.10	PPBV #	95
32) FREON 113	6.82	151	1585	0.10	PPBV	96
33) TRANS-1,2-DICHLOROETHYLENE	7.37	96	1019	0.11	PPBV #	75
34) TERTIARY BUTYL ALCOHOL	6.66	59	2011	0.11	PPBV	91
35) METHYL TERTIARY BUTYL ETHE	7.60	73	2325	0.10	PPBV	95
37) HEXANE	8.37	57	1449	0.09	PPBV	89
39) 1,1-DICHLOROETHANE	7.52	63	1625	0.10	PPBV #	85
41) cis-1,2-DICHLOROETHYLENE	8.23	96	1109	0.11	PPBV #	74
42) DI-ISOPROPYL ETHER	8.37	45	2918	0.10	PPBV #	91
44) METHYL ACRYLATE	8.40	55	1413	0.09	PPBV #	66
45) CHLOROFORM	8.47	83	1674	0.10	PPBV	99
46) 2,4-DIMETHYLPENTANE	9.13	57	1665	0.09	PPBV	92
47) 1,1,1-TRICHLOROETHANE	9.33	97	1645	0.10	PPBV	96
48) CARBON TETRACHLORIDE	9.88	117	1610	0.09	PPBV	88
49) 1,2-DICHLOROETHANE	9.12	62	914	0.09	PPBV #	71
51) BENZENE	9.76	78	3156	0.11	PPBV	92
52) CYCLOHEXANE	10.00	84	1461	0.11	PPBV	83
53) 2,3-DIMETHYLPENTANE	10.21	71	597	0.09	PPBV #	79
54) TRICHLOROETHYLENE	10.72	95	1113	0.09	PPBV	99
55) DIBROMOMETHANE	10.49	174	1096	0.10	PPBV	94
56) 1,2-DICHLOROPROPANE	10.51	63	941	0.09	PPBV	83
58) BROMODICHLOROMETHANE	10.71	83	1785	0.10	PPBV	96
59) 2,2,4-TRIMETHYLPENTANE	10.74	57	4421	0.09	PPBV	97
61) METHYL METHACRYLATE	10.92	69	779	0.09	PPBV	94
62) HEPTANE	10.98	43	1490	0.09	PPBV	96

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

W34797.D MW1417.M Fri Jan 20 14:04:28 2012 MSW

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34797.D Vial: 4
 Acq On : 19 Jan 2012 12:19 pm Operator: YOUMINH
 Sample : IC1417-0.1 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:45 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
63) TVHC as EQUIV HEPTANE	10.98	TIC	6647m	0.10	PPBV	
64) METHYL ISOBUTYL KETONE	11.63	43	1341	0.09	PPBV #	77
65) cis-1,3-DICHLOROPROPENE	11.55	75	1226	0.09	PPBV	78
66) TOLUENE	12.52	92	1964	0.10	PPBV	95
67) trans-1,3-DICHLOROPROPENE	12.06	75	1089	0.09	PPBV	82
68) 1,1,2-TRICHLOROETHANE	12.24	83	784	0.09	PPBV	95
71) 2-HEXANONE	12.82	43	1095	0.09	PPBV #	78
72) TETRACHLOROETHYLENE	13.68	164	1185	0.11	PPBV	95
73) DIBROMOCHLOROMETHANE	12.96	129	1635	0.11	PPBV	91
74) 1,2-DIBROMOETHANE	13.21	107	1216	0.10	PPBV #	96
75) OCTANE	13.50	43	1626	0.10	PPBV	98
76) 1,1,1,2-TETRACHLOROETHANE	14.37	131	1094	0.10	PPBV #	81
77) CHLOROBENZENE	14.39	112	2160	0.11	PPBV	99
78) ETHYLBENZENE	14.78	91	3520	0.11	PPBV #	51
79) m,p-XYLENE	14.97	106	2555	0.21	PPBV	95
80) o-XYLENE	15.49	106	1276	0.11	PPBV	91
81) STYRENE	15.37	104	1478	0.09	PPBV	94
82) 1,2,3-TRICHLOROPROPANE	15.63	75	983	0.10	PPBV #	80
84) BROMOFORM	15.07	173	1288	0.10	PPBV #	92
86) 1,1,2,2-TETRACHLOROETHANE	15.49	83	1442	0.11	PPBV #	90
87) ISOPROPYLBENZENE	16.15	105	2970	0.10	PPBV	97
88) BROMOBENZENE	16.26	156	822	0.10	PPBV	98
91) 4-ETHYLTOLUENE	16.89	105	1751	0.08	PPBV #	93
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	1552	0.08	PPBV #	91
95) 1,2,4-TRIMETHYLBENZENE	17.46	105	1215	0.07	PPBV #	81
96) m-DICHLOROBENZENE	17.63	146	927	0.08	PPBV	88
97) BENZYL CHLORIDE	17.61	91	992	0.08	PPBV #	66
98) p-DICHLOROBENZENE	17.71	146	762	0.07	PPBV	82
100) p-ISOPROPYLTOLUENE	17.94	134	377	0.08	PPBV	89
101) o-DICHLOROBENZENE	18.10	146	773	0.08	PPBV #	78
103) HEXACHLOROETHANE	18.88	201	546	0.09	PPBV #	76
104) HEXACHLOROBUTADIENE	20.61	225	225	0.09	PPBV #	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34797.D MW1417.M Fri Jan 20 14:04:28 2012 MSW

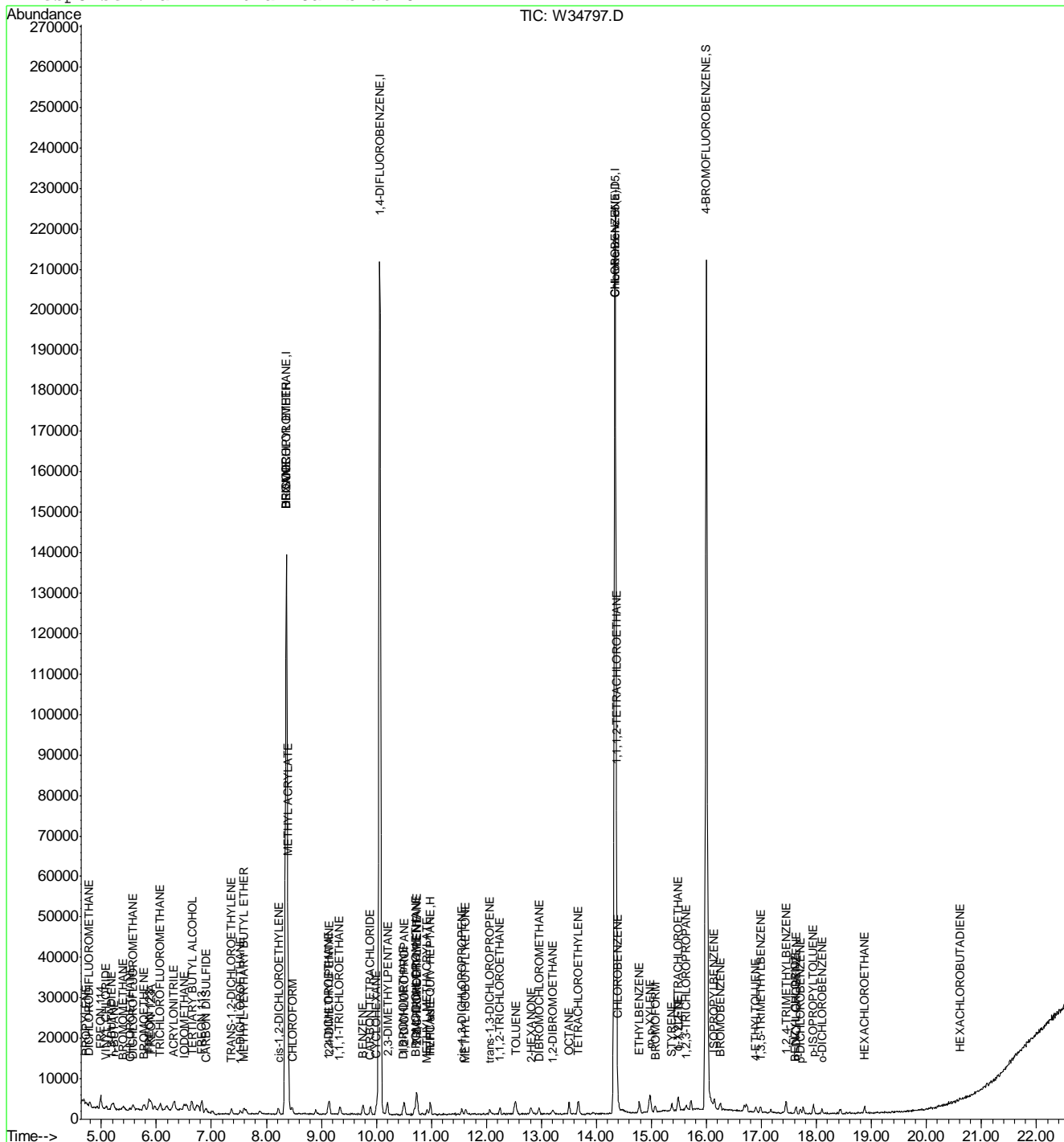
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34797.D
 Acq On : 19 Jan 2012 12:19 pm
 Sample : IC1417-0.1
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:18 2012

Vial: 4
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Initial Calibration

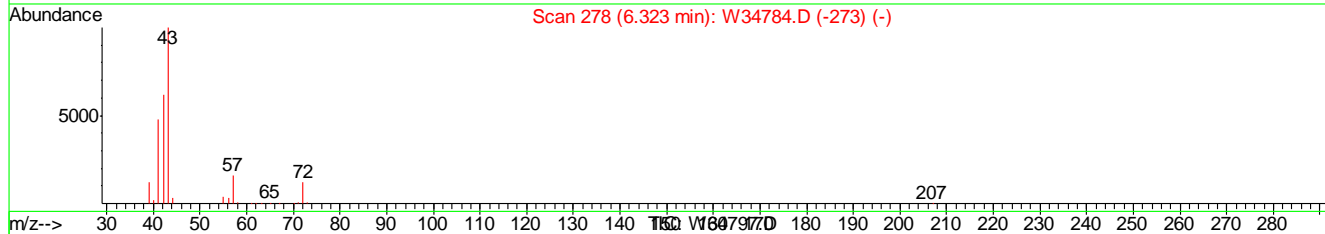
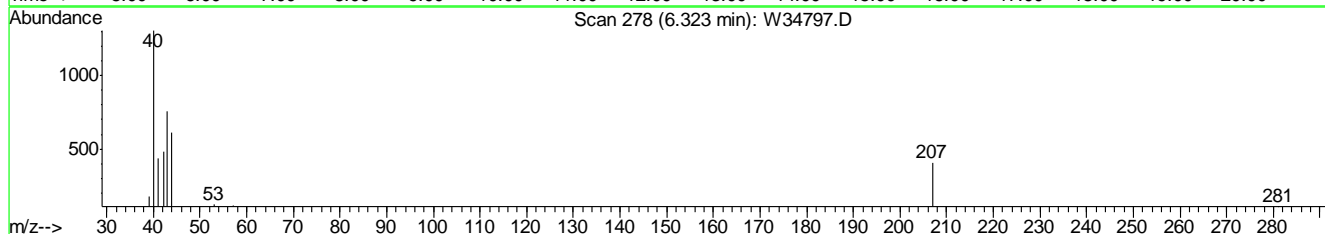
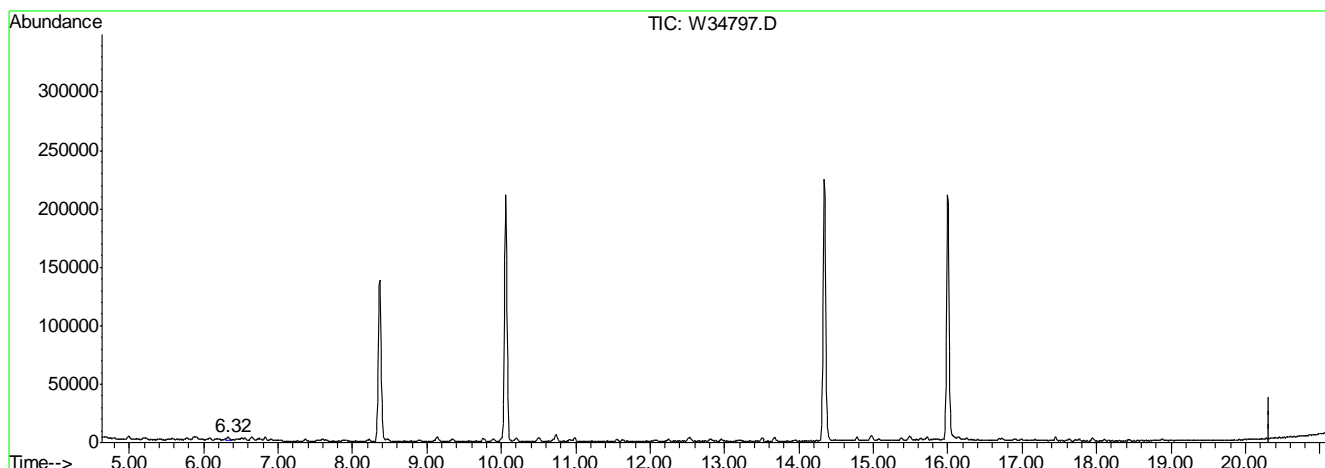


Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34797.D Vial: 4
 Acq On : 19 Jan 2012 12:19 pm Operator: YOUMINH
 Sample : IC1417-0.1 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:05 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

6.7.19.1
 6



(23) TVHC as EQUIV PENTANE (H)

6.32min 0.10PPBV m

response 5552

Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.00
0.00	1.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34797.D
 Acq On : 19 Jan 2012 12:19 pm
 Sample : IC1417-0.1
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:05 2012

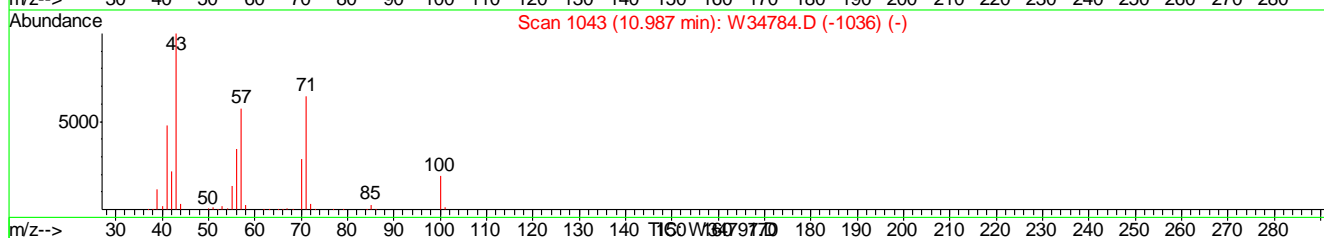
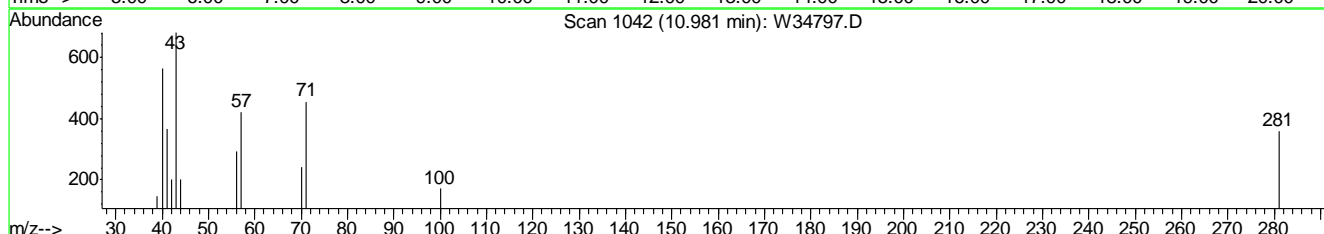
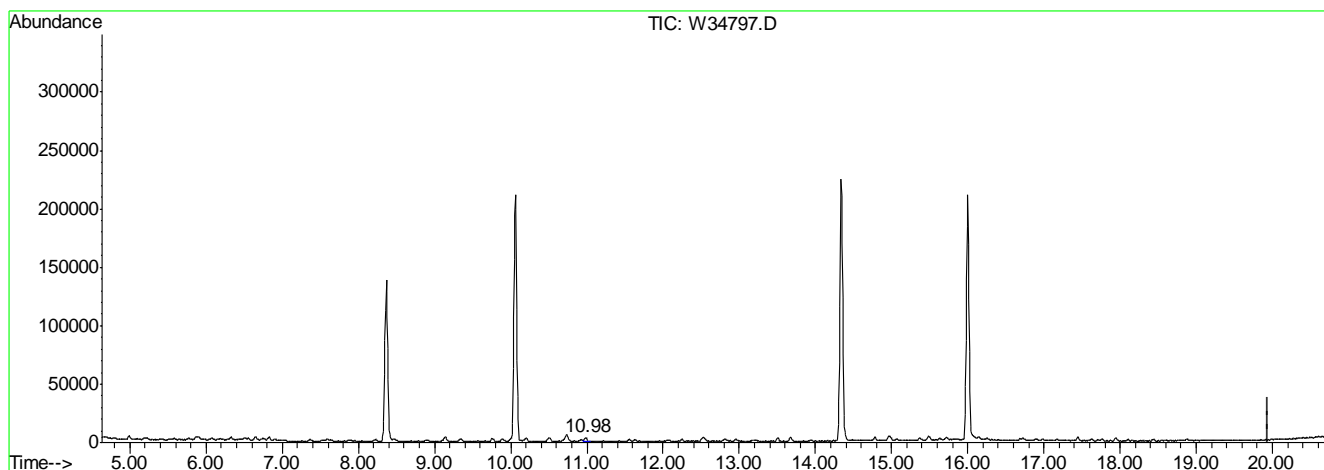
Vial: 4
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

6.7.19.2

6



(63) TVHC as EQUIV HEPTANE (H)

10.98min 0.10PPBV m

response 6647

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.00
0.00	0.80	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34798.D Vial: 4
 Acq On : 19 Jan 2012 12:59 pm Operator: YOUMINH
 Sample : IC1417-0.04 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:48 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.37	128	58276	10.00	PPBV	0.00
50) 1,4-DIFLUOROBENZENE	10.06	114	256661	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.34	82	110462	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.34	82	109586	10.00	PPBV	0.00

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 16.00 95 111748 9.30 PPBV 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 93.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) DICHLORODIFLUOROMETHANE	4.79	85	859	0.04	PPBV #	76
6) PROPYLENE	4.74	41	303	0.04	PPBV #	76
7) FREON 114	4.99	85	928	0.04	PPBV	94
11) n-BUTANE	5.22	43	682	0.04	PPBV #	70
14) DICHLOROFLUOROMETHANE	5.57	67	704	0.03	PPBV #	76
16) FREON 123	5.87	83	791	0.04	PPBV #	95
17) FREON 123A	5.91	117	451	0.04	PPBV #	79
18) TRICHLOROFLUOROMETHANE	6.07	101	815	0.04	PPBV #	85
24) IODOMETHANE	6.51	142	840	0.04	PPBV #	77
32) FREON 113	6.82	151	582	0.04	PPBV	91
33) TRANS-1,2-DICHLOROETHYLENE	7.36	96	419	0.04	PPBV #	42
35) METHYL TERTIARY BUTYL ETHE	7.59	73	900	0.04	PPBV #	59
37) HEXANE	8.38	57	577	0.04	PPBV	91
39) 1,1-DICHLOROETHANE	7.54	63	539	0.03	PPBV #	59
41) cis-1,2-DICHLOROETHYLENE	8.21	96	369	0.04	PPBV #	68
45) CHLOROFORM	8.48	83	652	0.04	PPBV #	71
47) 1,1,1-TRICHLOROETHANE	9.33	97	579	0.03	PPBV #	70
48) CARBON TETRACHLORIDE	9.89	117	609	0.03	PPBV #	85
51) BENZENE	9.74	78	1335	0.04	PPBV	79
54) TRICHLOROETHYLENE	10.73	95	728	0.06	PPBV	89
55) DIBROMOMETHANE	10.50	174	417	0.04	PPBV #	76
58) BROMODICHLOROMETHANE	10.69	83	592	0.03	PPBV	81
59) 2,2,4-TRIMETHYLPENTANE	10.74	57	1740	0.03	PPBV #	91
62) HEPTANE	10.98	43	542	0.03	PPBV	79
66) TOLUENE	12.52	92	798	0.04	PPBV #	77
71) 2-HEXANONE	12.83	43	466	0.04	PPBV #	55
72) TETRACHLOROETHYLENE	13.68	164	395	0.04	PPBV #	75
73) DIBROMOCHLOROMETHANE	12.96	129	519	0.03	PPBV #	88
74) 1,2-DIBROMOETHANE	13.20	107	418	0.03	PPBV #	92
75) OCTANE	13.50	43	653	0.04	PPBV #	81
76) 1,1,1,2-TETRACHLOROETHANE	14.36	131	302	0.03	PPBV #	48
77) CHLOROBENZENE	14.38	112	731	0.04	PPBV #	41
78) ETHYLBENZENE	14.78	91	1545	0.05	PPBV #	94
79) m,p-XYLENE	14.99	106	1198	0.09	PPBV	97
80) o-XYLENE	15.49	106	600	0.05	PPBV #	92
81) STYRENE	15.37	104	634	0.04	PPBV	88
82) 1,2,3-TRICHLOROPROPANE	15.64	75	385	0.04	PPBV #	43
86) 1,1,2,2-TETRACHLOROETHANE	15.50	83	533	0.04	PPBV #	79
87) ISOPROPYLBENZENE	16.15	105	1125	0.04	PPBV #	79
91) 4-ETHYLTOLUENE	16.89	105	623	0.03	PPBV #	82

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34798.D Vial: 4
 Acq On : 19 Jan 2012 12:59 pm Operator: YOUMINH
 Sample : IC1417-0.04 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 19 13:52:48 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 13:47:15 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	521	0.03	PPBV #	89
95) 1,2,4-TRIMETHYLBENZENE	17.46	105	447	0.03	PPBV #	75

6.7.20
6

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34798.D MW1417.M Fri Jan 20 14:04:30 2012 MSW

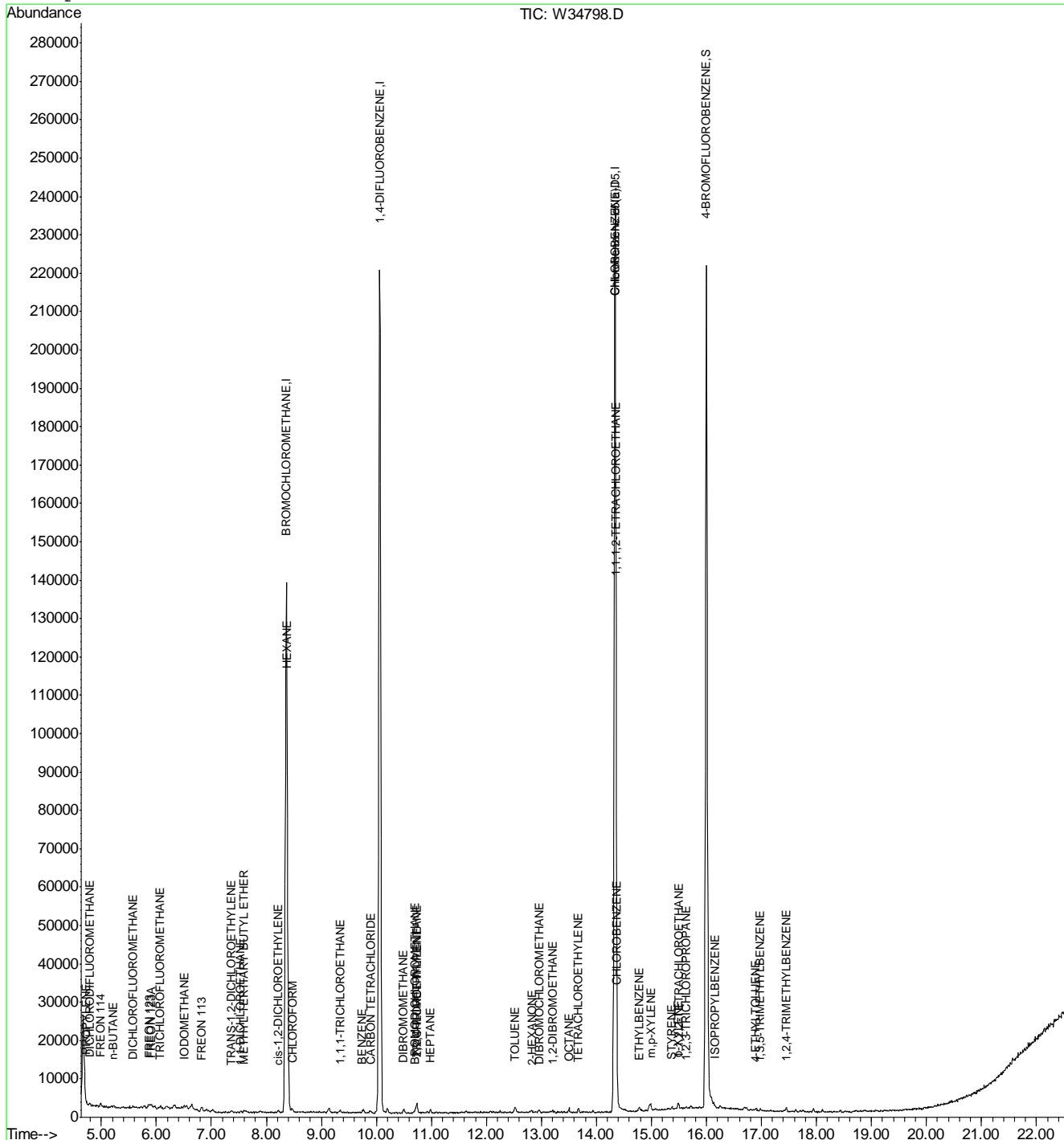
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34798.D
 Acq On : 19 Jan 2012 12:59 pm
 Sample : IC1417-0.04
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 19 15:21 2012

Vial: 4
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Thu Jan 19 15:22:56 2012
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34801.D Vial: 3
 Acq On : 19 Jan 2012 4:06 pm Operator: YOUMINH
 Sample : ICV1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:07:25 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.37	128	60015	10.00	PPBV	0.00
50) 1,4-DIFLUOROBENZENE	10.07	114	271848	10.00	PPBV	0.00
69) CHLOROBENZENE-D5	14.34	82	133333	10.00	PPBV	0.00
106) Chlorobenzene-d5(a)	14.34	82	133335	10.00	PPBV	0.00

System Monitoring Compounds

85) 4-BROMOFLUOROBENZENE	16.00	95	158621	10.94	PPBV	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	109.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) FREON 152A	4.66	65	39910	7.60	PPBV	98
4) CHLORODIFLUOROMETHANE	4.70	67	15323	8.66	PPBV	100
5) DICHLORODIFLUOROMETHANE	4.78	85	178321	8.31	PPBV	100
6) PROPYLENE	4.73	41	54788	7.54	PPBV	99
7) FREON 114	4.98	85	206817	7.89	PPBV	92
8) CHLOROMETHANE	4.91	52	23294	8.89	PPBV	95
9) VINYL CHLORIDE	5.08	62	91861	8.83	PPBV	99
10) 1,3-BUTADIENE	5.18	54	72368	8.80	PPBV	98
11) n-BUTANE	5.21	43	138723	8.31	PPBV	99
12) BROMOMETHANE	5.39	94	79023	8.90	PPBV	99
13) CHLOROETHANE	5.51	64	53002	9.25	PPBV	96
15) ACROLEIN	5.85	56	35094	8.89	PPBV	99
16) FREON 123	5.86	83	207757	9.27	PPBV #	100
17) FREON 123A	5.90	117	123367	9.42	PPBV	97
18) TRICHLOROFLUOROMETHANE	6.07	101	193855	8.89	PPBV	100
19) ISOPROPYL ALCOHOL	6.13	45	145038	8.63	PPBV	98
20) ACETONE	5.95	58	36346	8.20	PPBV	96
22) PENTANE	6.32	57	27427	9.57	PPBV	97
23) TVHC as EQUIV PENTANE	6.32	TIC	467835m	8.29	PPBV	
24) IODOMETHANE	6.51	142	219991	9.14	PPBV	98
25) 1,1-DICHLOROETHYLENE	6.55	96	89961	8.89	PPBV	98
26) CARBON DISULFIDE	6.90	76	185752	7.40	PPBV	99
27) ETHANOL	5.60	45	30935	7.81	PPBV	99
29) BROMOETHENE	5.77	106	85011	9.03	PPBV	100
30) METHYLENE CHLORIDE	6.63	84	81790	8.78	PPBV	99
31) 3-CHLOROPROPENE	6.72	76	43606	9.14	PPBV	95
32) FREON 113	6.82	151	145812	8.92	PPBV	100
33) TRANS-1,2-DICHLOROETHYLENE	7.36	96	78462	7.91	PPBV	98
34) TERTIARY BUTYL ALCOHOL	6.58	59	191365	9.69	PPBV	99
35) METHYL TERTIARY BUTYL ETHER	7.57	73	196866	8.38	PPBV	99
36) TETRAHYDROFURAN	8.85	72	36192	8.61	PPBV	97
37) HEXANE	8.37	57	147572	8.92	PPBV	98
38) VINYL ACETATE	7.63	86	21295	8.95	PPBV #	95
39) 1,1-DICHLOROETHANE	7.53	63	155359	9.07	PPBV	99
40) METHYL ETHYL KETONE	7.85	72	36448	8.76	PPBV	95
41) cis-1,2-DICHLOROETHYLENE	8.22	96	92473	8.90	PPBV	98
42) DI-ISOPROPYL ETHER	8.37	45	254908	8.23	PPBV	95
43) ETHYL ACETATE	8.39	61	22012	8.13	PPBV	98
45) CHLOROFORM	8.47	83	162841	9.00	PPBV	100
46) 2,4-DIMETHYLPENTANE	9.14	57	182372	9.29	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34801.D Vial: 3
 Acq On : 19 Jan 2012 4:06 pm Operator: YOUMINH
 Sample : ICV1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:07:25 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,1,1-TRICHLOROETHANE	9.34	97	158337	9.13	PPBV	99
48) CARBON TETRACHLORIDE	9.90	117	167522	9.20	PPBV	99
49) 1,2-DICHLOROETHANE	9.12	62	91675	8.91	PPBV	99
51) BENZENE	9.76	78	274947	8.56	PPBV	99
52) CYCLOHEXANE	10.00	84	132332	8.90	PPBV	99
53) 2,3-DIMETHYLPENTANE	10.20	71	69146	9.23	PPBV	99
54) TRICHLOROETHYLENE	10.73	95	111872	8.42	PPBV	99
56) 1,2-DICHLOROPROPANE	10.51	63	98113	8.72	PPBV	100
58) BROMODICHLOROMETHANE	10.70	83	168177	8.82	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.74	57	482541	9.16	PPBV	100
60) 1,4-DIOXANE	10.76	88	53656	9.01	PPBV #	86
61) METHYL METHACRYLATE	10.91	69	78953	8.52	PPBV	97
62) HEPTANE	10.98	43	157252	9.00	PPBV	98
63) TVHC as EQUIV HEPTANE	10.98	TIC	686086m	8.87	PPBV	
64) METHYL ISOBUTYL KETONE	11.59	43	154109	9.21	PPBV	99
65) cis-1,3-DICHLOROPROPENE	11.55	75	135500	9.03	PPBV	99
66) TOLUENE	12.52	92	183971	8.77	PPBV	99
67) trans-1,3-DICHLOROPROPENE	12.07	75	125049	9.12	PPBV	99
68) 1,1,2-TRICHLOROETHANE	12.24	83	82582	8.98	PPBV	99
71) 2-HEXANONE	12.79	43	134625	8.84	PPBV	99
72) TETRACHLOROETHYLENE	13.68	164	121389	9.10	PPBV	100
73) DIBROMOCHLOROMETHANE	12.96	129	164811	9.05	PPBV	100
74) 1,2-DIBROMOETHANE	13.21	107	138451	9.37	PPBV	100
75) OCTANE	13.50	43	198845	9.32	PPBV	99
76) 1,1,1,2-TETRACHLOROETHANE	14.37	131	119857	9.35	PPBV #	99
77) CHLOROBENZENE	14.39	112	226708	9.14	PPBV	99
78) ETHYLBENZENE	14.78	91	343590	8.63	PPBV	99
79) m,p-XYLENE	14.97	106	274689	17.65	PPBV	99
80) o-XYLENE	15.49	106	130946	8.77	PPBV	99
81) STYRENE	15.37	104	194229	9.64	PPBV	99
82) 1,2,3-TRICHLOROPROPANE	15.63	75	119017	9.17	PPBV	100
83) NONANE	15.72	43	176600	9.55	PPBV	98
84) BROMOFORM	15.07	173	150907	9.33	PPBV	100
86) 1,1,2,2-TETRACHLOROETHANE	15.49	83	158361	9.22	PPBV	100
87) ISOPROPYLBENZENE	16.15	105	352189	9.36	PPBV	100
89) 2-CHLOROTOLUENE	16.69	126	82338	9.62	PPBV #	99
90) n-PROPYLBENZENE	16.73	120	90725	9.64	PPBV	99
91) 4-ETHYLTOLUENE	16.89	105	293040	10.31	PPBV	100
92) 1,3,5-TRIMETHYLBENZENE	16.99	105	231865	10.18	PPBV	99
94) TERT-BUTYLBENZENE	17.44	134	61772	9.85	PPBV	98
95) 1,2,4-TRIMETHYLBENZENE	17.46	105	216652	10.54	PPBV	100
96) m-DICHLOROBENZENE	17.63	146	139243	9.97	PPBV	100
97) BENZYL CHLORIDE	17.61	91	156789	9.65	PPBV	99
98) p-DICHLOROBENZENE	17.71	146	133901	10.26	PPBV	100
99) SEC-BUTYLBENZENE	17.76	134	68876	9.89	PPBV	99
100) p-ISOPROPYLTOLUENE	17.94	134	65543	10.30	PPBV	99
101) o-DICHLOROBENZENE	18.10	146	116969	9.96	PPBV	99
102) n-BUTYLBENZENE	18.44	134	46970	9.95	PPBV	99
104) HEXACHLOROBUTADIENE	20.61	225	34073	10.68	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34801.D Vial: 3
 Acq On : 19 Jan 2012 4:06 pm Operator: YOUMINH
 Sample : ICV1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:07:25 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
105) 1,2,4-TRICHLOROBENZENE	20.09	180	23373	9.83	PPBV	98

6.7.21
6

 (#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34801.D MW1417.M Fri Jan 20 14:09:29 2012 MSW

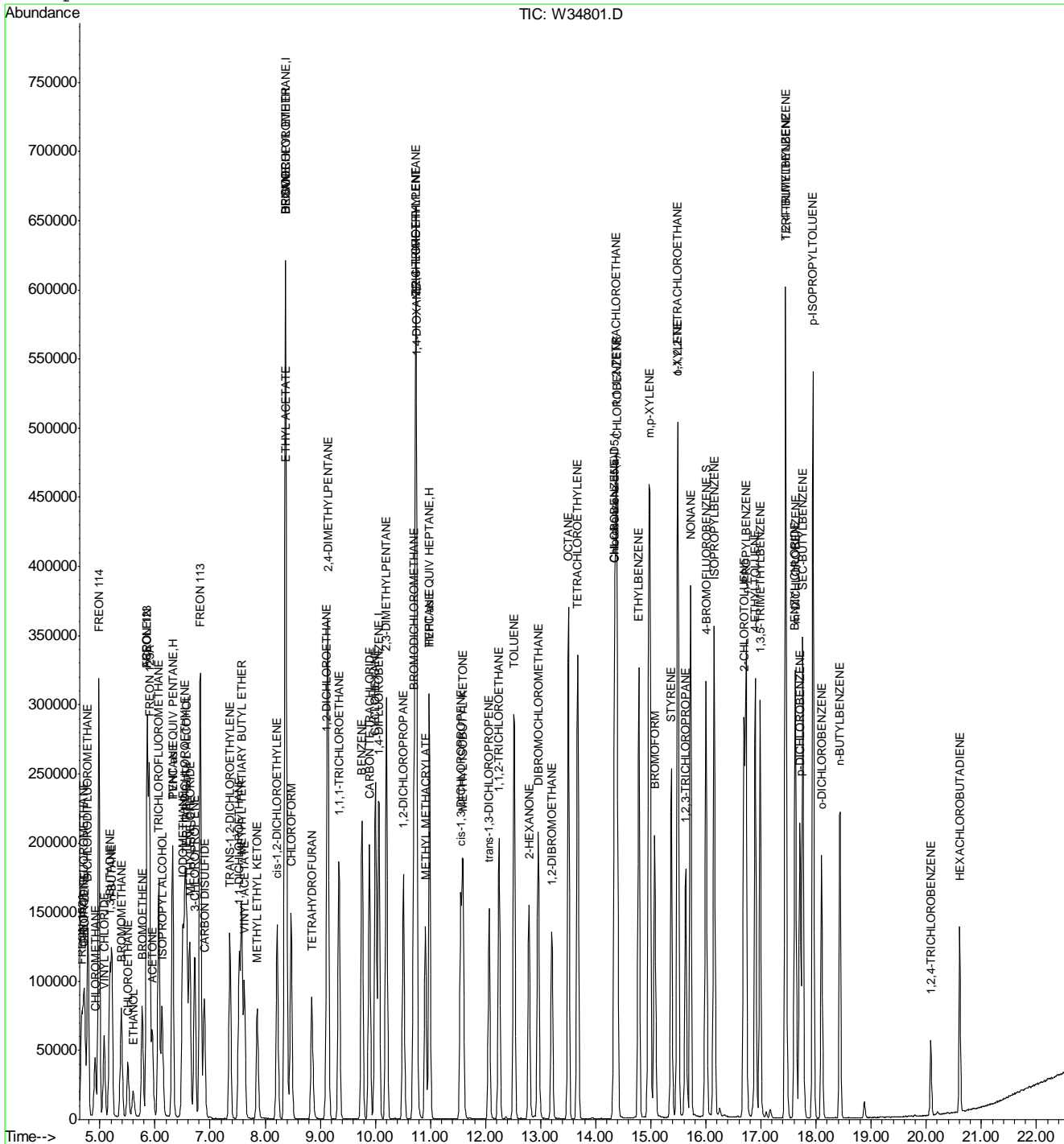
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34801.D
 Acq On : 19 Jan 2012 4:06 pm
 Sample : ICV1417-10
 Misc : MS23560,VW1417,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:08 2012

Vial: 3
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

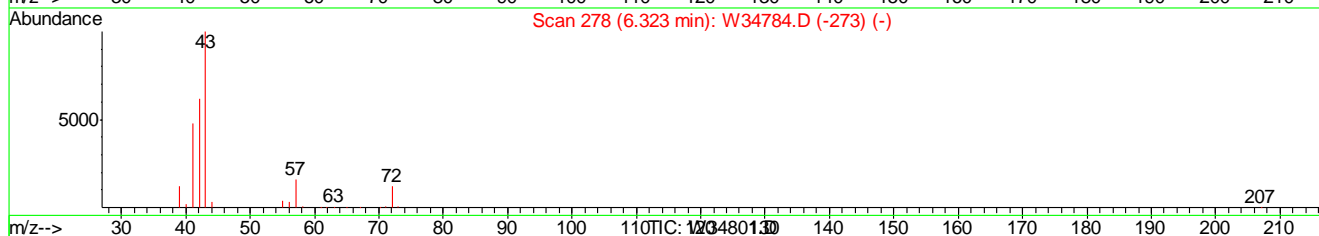
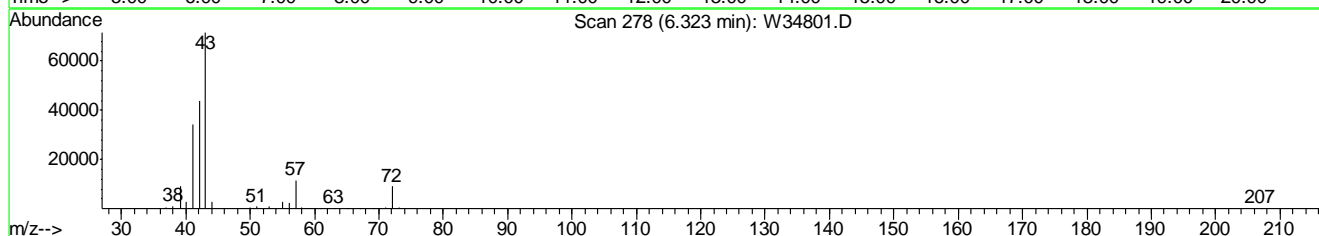
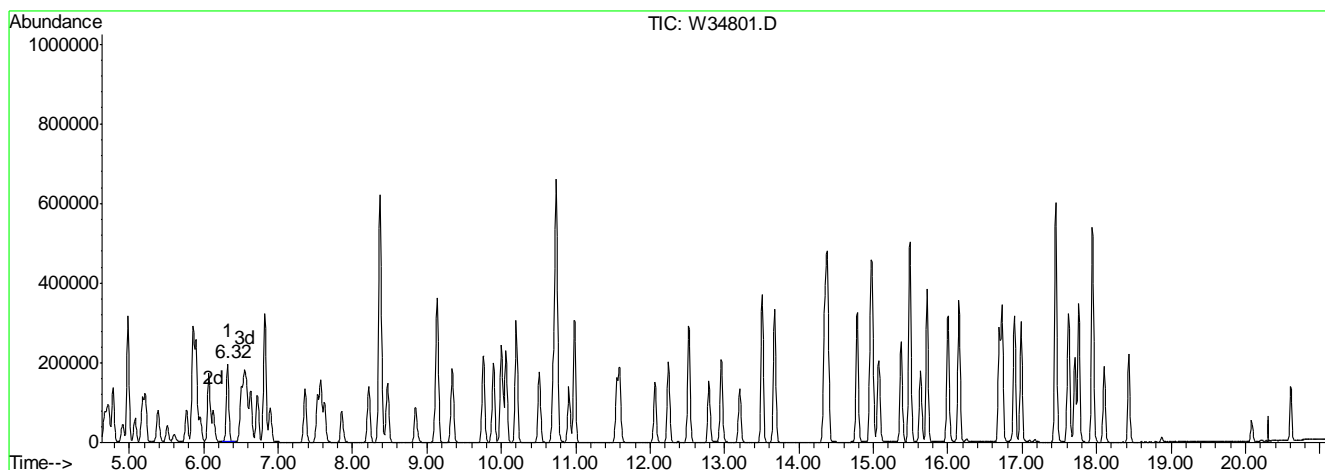
Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34801.D Vial: 3
 Acq On : 19 Jan 2012 4:06 pm Operator: YOUMINH
 Sample : ICV1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:08 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration



(23) TVHC as EQUIV PENTANE (H)

6.32min 8.29PPBV m

response 467835

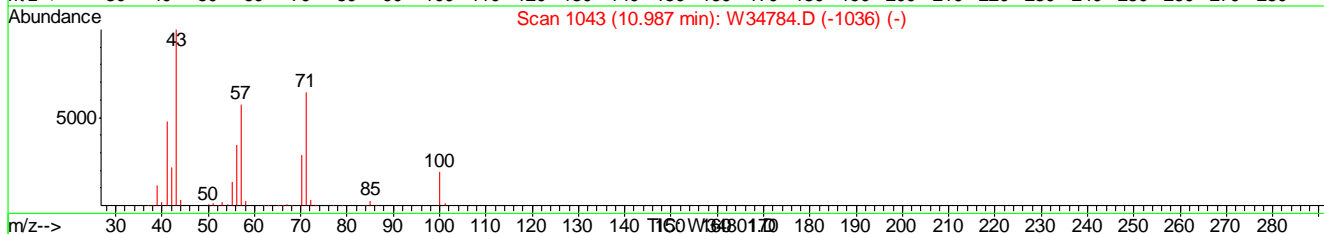
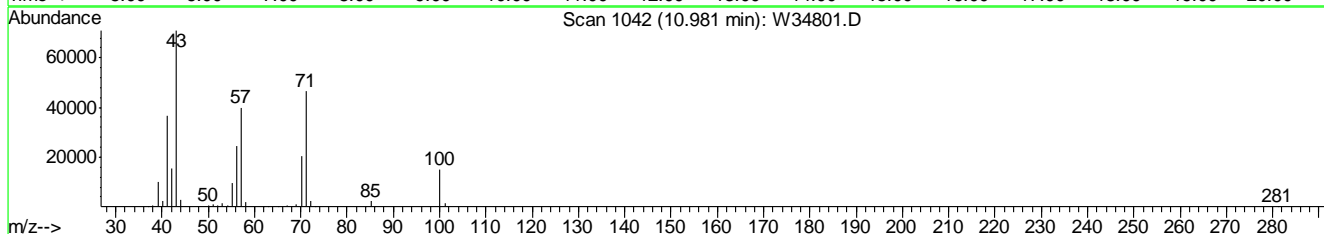
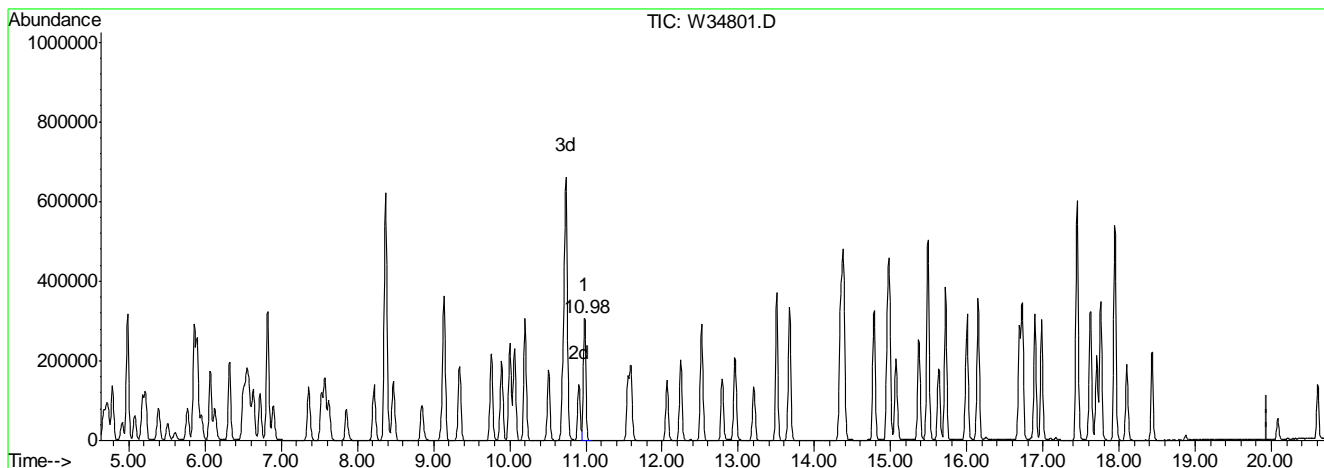
Signal	Exp%	Act%
TIC	100	100
0.00	1.30	0.05#
0.00	1.10	0.04#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34801.D Vial: 3
 Acq On : 19 Jan 2012 4:06 pm Operator: YOUMINH
 Sample : ICV1417-10 Inst : MSW
 Misc : MS23560,VW1417,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 20 14:08 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

6.7.21.2
 6



(63) TVHC as EQUIV HEPTANE (H)

10.98min 8.87PPBV m

response 686086

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.03#
0.00	0.80	0.03#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34941.D Vial: 2
 Acq On : 30 Jan 2012 11:42 am Operator: YOUMINH
 Sample : CC1417-10 Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:37 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	8.35	128	53643	10.00	PPBV	-0.02
50) 1,4-DIFLUOROBENZENE	10.05	114	232745	10.00	PPBV	-0.02
69) CHLOROBENZENE-D5	14.33	82	111908	10.00	PPBV	-0.02
106) Chlorobenzene-d5(a)	14.33	82	111949	10.00	PPBV	-0.02

System Monitoring Compounds
 85) 4-BROMOFLUOROBENZENE 15.99 95 137152 11.27 PPBV -0.01
 Spiked Amount 10.000 Range 65 - 128 Recovery = 112.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) CHLORODIFLUOROMETHANE	4.68	67	22058	13.95	PPBV	100
5) DICHLORODIFLUOROMETHANE	4.76	85	243419	12.69	PPBV	100
6) PROPYLENE	4.71	41	70618	10.87	PPBV	99
7) FREON 114	4.96	85	272171	11.61	PPBV	94
8) CHLOROMETHANE	4.90	52	25491	10.89	PPBV	96
9) VINYL CHLORIDE	5.06	62	97806	10.51	PPBV	100
10) 1,3-BUTADIENE	5.16	54	75784	10.30	PPBV	99
11) n-BUTANE	5.20	43	140073	9.39	PPBV	98
12) BROMOMETHANE	5.37	94	91863	11.58	PPBV	100
13) CHLOROETHANE	5.49	64	53527	10.45	PPBV	98
14) DICHLOROFLUOROMETHANE	5.55	67	199487	10.68	PPBV	100
15) ACROLEIN	5.84	56	32813	9.30	PPBV	100
16) FREON 123	5.84	83	218072	10.88	PPBV #	100
17) FREON 123A	5.88	117	141172	12.07	PPBV	84
18) TRICHLOROFLUOROMETHANE	6.05	101	240326	12.33	PPBV	99
19) ISOPROPYL ALCOHOL	6.11	45	133127	8.86	PPBV	98
20) ACETONE	5.93	58	36500	9.21	PPBV	100
21) ACRYLONITRILE	6.27	53	62282	9.30	PPBV	99
22) PENTANE	6.30	57	26295	10.27	PPBV #	92
23) TVHC as EQUIV PENTANE	6.30	TIC	488928m	9.69	PPBV	
24) IODOMETHANE	6.49	142	260381	12.10	PPBV	98
25) 1,1-DICHLOROETHYLENE	6.53	96	98673	10.91	PPBV	93
26) CARBON DISULFIDE	6.88	76	220499	9.83	PPBV	99
27) ETHANOL	5.59	45	31742	8.96	PPBV	99
28) ACETONITRILE	5.74	41	59000	8.56	PPBV	98
29) BROMOETHENE	5.75	106	95885	11.40	PPBV	98
30) METHYLENE CHLORIDE	6.62	84	85431	10.26	PPBV	92
31) 3-CHLOROPROPENE	6.70	76	43173	10.13	PPBV #	91
32) FREON 113	6.80	151	167041	11.43	PPBV	92
33) TRANS-1,2-DICHLOROETHYLENE	7.34	96	87672	9.88	PPBV	94
34) TERTIARY BUTYL ALCOHOL	6.56	59	184366	10.44	PPBV	99
35) METHYL TERTIARY BUTYL ETHE	7.55	73	191578	9.12	PPBV	97
36) TETRAHYDROFURAN	8.82	72	32901	8.75	PPBV #	91
37) HEXANE	8.35	57	131706	8.90	PPBV	97
38) VINYL ACETATE	7.60	86	20724	9.75	PPBV #	55
39) 1,1-DICHLOROETHANE	7.51	63	149644	9.77	PPBV	99
40) METHYL ETHYL KETONE	7.84	72	32946	8.86	PPBV #	88
41) cis-1,2-DICHLOROETHYLENE	8.20	96	92435	9.95	PPBV	95
42) DI-ISOPROPYL ETHER	8.35	45	211185	7.63	PPBV	97
43) ETHYL ACETATE	8.37	61	20037	8.28	PPBV #	94

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34941.D Vial: 2
 Acq On : 30 Jan 2012 11:42 am Operator: YOUMINH
 Sample : CC1417-10 Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:37 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) METHYL ACRYLATE	8.37	55	119520	8.16	PPBV	98
45) CHLOROFORM	8.46	83	170519	10.55	PPBV	100
46) 2,4-DIMETHYLPENTANE	9.12	57	158544	9.04	PPBV	98
47) 1,1,1-TRICHLOROETHANE	9.32	97	177818	11.47	PPBV	97
48) CARBON TETRACHLORIDE	9.88	117	192573	11.84	PPBV	99
49) 1,2-DICHLOROETHANE	9.10	62	96876	10.53	PPBV	99
51) BENZENE	9.74	78	254171	9.24	PPBV	98
52) CYCLOHEXANE	9.99	84	124510	9.78	PPBV	93
53) 2,3-DIMETHYLPENTANE	10.19	71	61635	9.61	PPBV	96
54) TRICHLOROETHYLENE	10.71	95	110661	9.73	PPBV	98
55) DIBROMOMETHANE	10.47	174	110039	11.02	PPBV	93
56) 1,2-DICHLOROPROPANE	10.49	63	85819	8.91	PPBV	93
57) ETHYL ACRYLATE	10.47	55	128497	8.38	PPBV	97
58) BROMODICHLOROMETHANE	10.68	83	176207	10.79	PPBV	100
59) 2,2,4-TRIMETHYLPENTANE	10.72	57	419184	9.29	PPBV	99
60) 1,4-DIOXANE	10.74	88	48571	9.53	PPBV	98
61) METHYL METHACRYLATE	10.90	69	69652	8.78	PPBV	95
62) HEPTANE	10.97	43	139102	9.29	PPBV	97
63) TVHC as EQUIV HEPTANE	10.97	TIC	638186m	9.63	PPBV	
64) METHYL ISOBUTYL KETONE	11.57	43	126299	8.82	PPBV	98
65) cis-1,3-DICHLOROPROPENE	11.54	75	125601	9.77	PPBV	97
66) TOLUENE	12.51	92	174072	9.70	PPBV	97
67) trans-1,3-DICHLOROPROPENE	12.05	75	120583	10.28	PPBV	99
68) 1,1,2-TRICHLOROETHANE	12.23	83	76471	9.72	PPBV	99
70) ETHYL METHACRYLATE	12.77	69	107987	9.65	PPBV #	97
71) 2-HEXANONE	12.77	43	117591	9.20	PPBV	99
72) TETRACHLOROETHYLENE	13.66	164	127676	11.40	PPBV	98
73) DIBROMOCHLOROMETHANE	12.94	129	174899	11.44	PPBV	100
74) 1,2-DIBROMOETHANE	13.19	107	135572	10.93	PPBV	100
75) OCTANE	13.49	43	167769	9.37	PPBV	94
76) 1,1,1,2-TETRACHLOROETHANE	14.36	131	122617	11.39	PPBV #	100
77) CHLOROBENZENE	14.38	112	217545	10.45	PPBV	98
78) ETHYLBENZENE	14.77	91	329624	9.87	PPBV	99
79) m,p-XYLENE	14.96	106	265812	20.35	PPBV	98
80) o-XYLENE	15.47	106	127633	10.18	PPBV	99
81) STYRENE	15.36	104	188934	11.18	PPBV	99
82) 1,2,3-TRICHLOROPROPANE	15.62	75	114091	10.48	PPBV	97
83) NONANE	15.71	43	149853	9.66	PPBV	95
84) BROMOFORM	15.06	173	160456	11.82	PPBV	99
86) 1,1,2,2-TETRACHLOROETHANE	15.48	83	141753	9.83	PPBV	99
87) ISOPROPYLBENZENE	16.14	105	351688	11.13	PPBV	99
88) BROMOBENZENE	16.24	156	108747	12.09	PPBV	93
89) 2-CHLOROTOLUENE	16.68	126	84463	11.76	PPBV #	99
90) n-PROPYLBENZENE	16.72	120	91737	11.61	PPBV	94
91) 4-ETHYLTOLUENE	16.89	105	291167	12.21	PPBV	99
92) 1,3,5-TRIMETHYLBENZENE	16.97	105	229631	12.01	PPBV	98
93) ALPHA-METHYLSTYRENE	17.16	118	108732	11.73	PPBV	99
94) TERT-BUTYLBENZENE	17.44	134	60411	11.48	PPBV	97
95) 1,2,4-TRIMETHYLBENZENE	17.44	105	211180	12.24	PPBV	98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34941.D Vial: 2
 Acq On : 30 Jan 2012 11:42 am Operator: YOUMINH
 Sample : CC1417-10 Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 08:34:37 2012 Quant Results File: MW1417.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration
 DataAcq Meth : TO15W

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) m-DICHLOROBENZENE	17.62	146	145543	12.41	PPBV	98
97) BENZYL CHLORIDE	17.60	91	154415	11.32	PPBV	99
98) p-DICHLOROBENZENE	17.70	146	138326	12.63	PPBV	98
99) SEC-BUTYLBENZENE	17.75	134	69681	11.92	PPBV	92
100) p-ISOPROPYLTOLUENE	17.94	134	65902	12.34	PPBV	98
101) o-DICHLOROBENZENE	18.09	146	122929	12.47	PPBV	99
102) n-BUTYLBENZENE	18.42	134	48520	12.25	PPBV	88
103) HEXACHLOROETHANE	18.87	201	87161	13.23	PPBV	93
104) HEXACHLOROBUTADIENE	20.60	225	36588	13.67	PPBV	99
105) 1,2,4-TRICHLOROBENZENE	20.08	180	25130	12.59	PPBV	98
107) NAPHTHALENE	20.20	128	46316	10.51	PPBV	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 W34941.D MW1417.M Tue Jan 31 12:26:30 2012 MSW

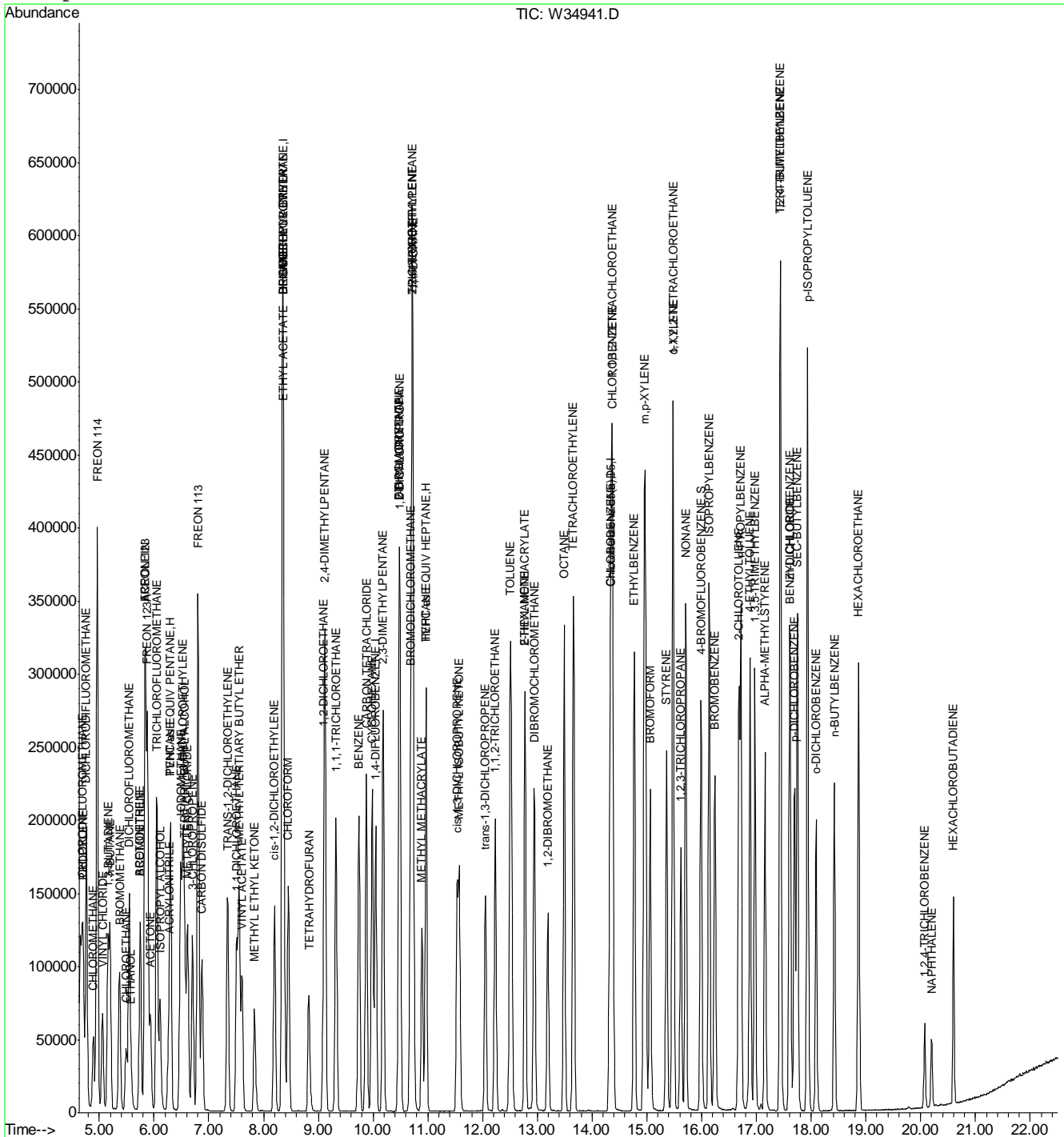
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W34941.D
 Acq On : 30 Jan 2012 11:42 am
 Sample : CC1417-10
 Misc : MS24617,VW1423,,,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:51 2012

Vial: 2
 Operator: YOUMINH
 Inst : MSW
 Multiplr: 1.00

Quant Results File: MW1417.RES

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Initial Calibration



6.7.22
 6

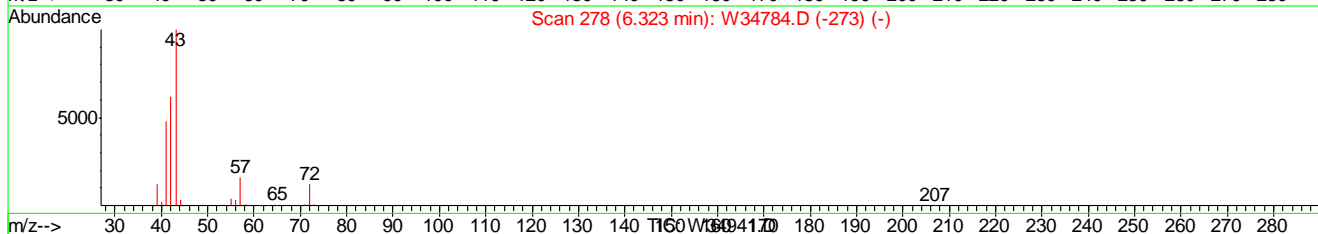
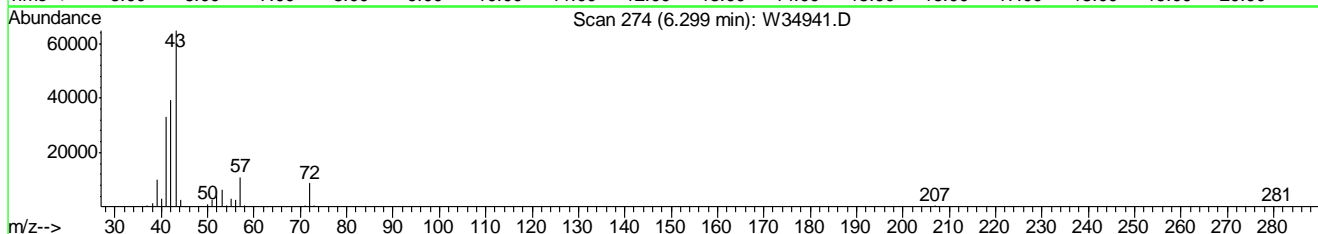
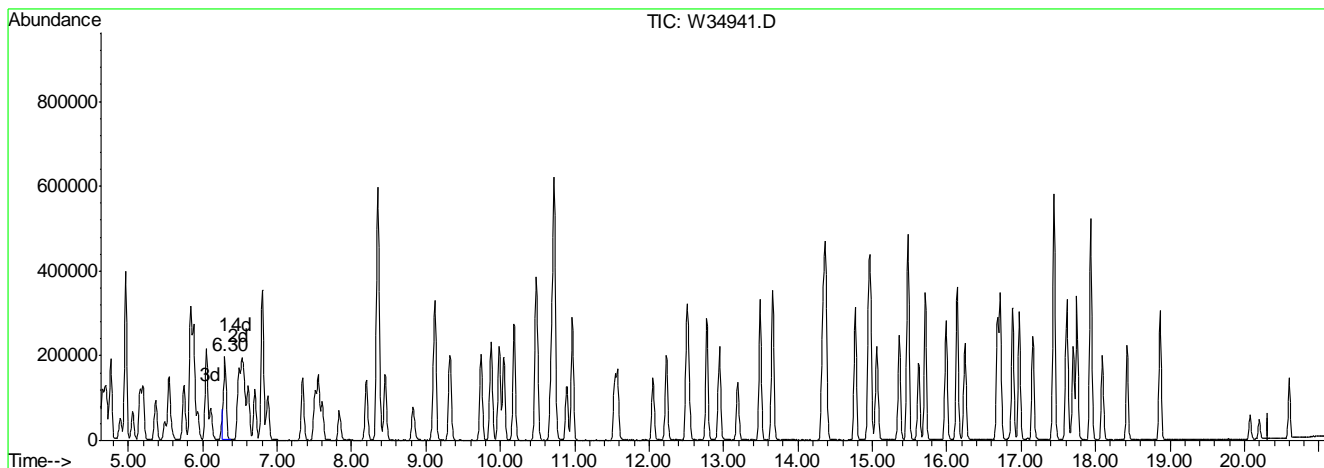
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34941.D Vial: 2
 Acq On : 30 Jan 2012 11:42 am Operator: YOUMINH
 Sample : CC1417-10 Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:51 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

6.7.22.1

6



(23) TVHC as EQUIV PENTANE (H)

6.30min 9.69PPBV m

response 488928

Signal Exp% Act%

TIC 100 100

0.00 1.30 1.28#

0.00 1.10 1.04#

0.00 0.00 0.00

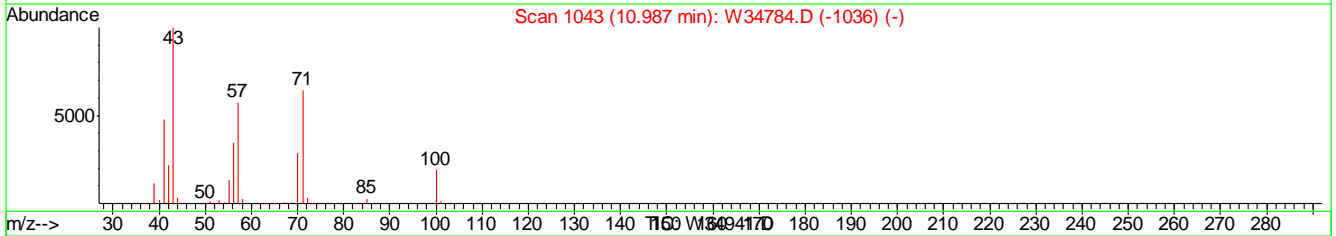
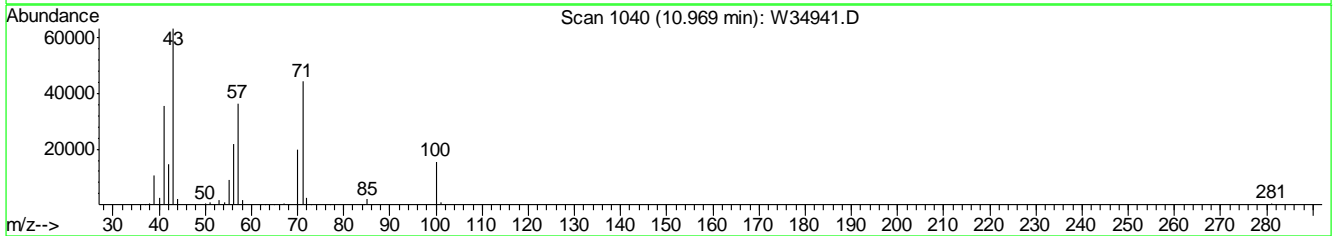
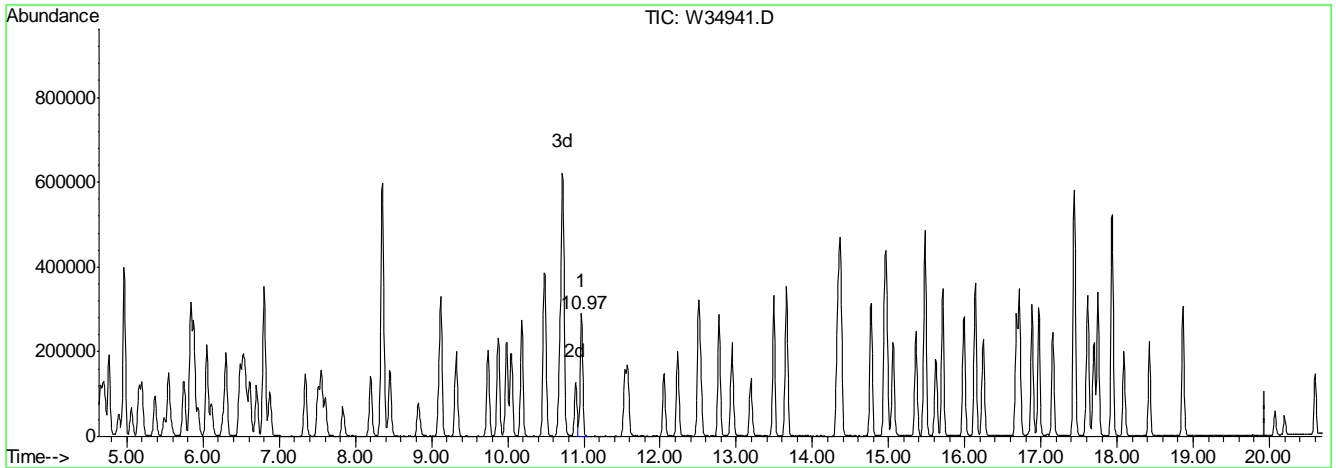
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W34941.D Vial: 2
 Acq On : 30 Jan 2012 11:42 am Operator: YOUMINH
 Sample : CC1417-10 Inst : MSW
 Misc : MS24617,VW1423,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 31 11:51 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW1417.M (RTE Integrator)
 Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
 Last Update : Fri Jan 20 14:06:03 2012
 Response via : Multiple Level Calibration

6.7.22.2

6



(63) TVHC as EQUIV HEPTANE (H)

10.97min 9.63PPBV m

response 638186

Signal	Exp%	Act%
TIC	100	100
0.00	0.90	0.98#
0.00	0.80	0.79#
0.00	0.00	0.00



Date: 1/16/12

Analyst Signature: [Signature]

Columns: RTX-160PMX.32mm
 Method: TO152W.M
 Seq. File: 2W011612.S
 Initial Cal. Method: M2W1426

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.
AS SD81	ISISUR	401ppbw

Standard Data

Lot #	Description	Conc.
AS SD82	TO15LCS	40ppbw
AS SD83	TO15ST0	40ppbw
AS SD84	TO15ST0	2.0ppbw
AS SD85	TO15ST0	0.4ppbw

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 1/12/12

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
5	2W33850	BFB		A959	100					NG	
5	2W33857	BFB		A959	100					OK	
2	2W33852	CC1408-10		A969	100					Nt	
2	2W33853	CC1408-10		A969	100					OK	
3	2W33854	BS		A975	100					NG	
3	2W33855	BS 7H		A975	100					Nt	
3	2W33856	BS		A975	100					NG	
5	2W33857	IB		A959	100					not used	
5	2W33858	IB		A959	100					not used	
5	2W33859	IB		A959	100					not used	
5	2W33860	IB		A959	100					not used	
5	2W33861	IB		A959	100					not used	
5	2W33862	BFB		A959	100					OK	
2	2W33863	IC1426-15		A969	100			/	/	OK	
2	2W33864	IC1426-5.0		A969	50			/	/	OK	
1	2W33865	IC1426-0.2		A965	40			/	/	OK	
2	2W33866	IC1426-10		A969	100			/	/	OK	
1	2W33867	IC1426-0.5		A965	100			/	/	OK	
2	2W33868	IC1426-20		A969	200			/	/	OK	
2	2W33869	IC1426-5.0		A969	50			/	/	OK	
4	2W33870	IC1426-0.1		A976	100			/	/	OK	
4	2W33871	IC1426-0.04		A976	40			/	/	OK	
2	2W33872	IC1426-40		A969	400			/	/	OK	
5	2W33873	IB		A959	100			/	/	not used	
5	2W33874	IB		A959	100			/	/	not used	
3	2W33875	ICV1426-10		A975	100			/	/	OK	

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error; # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error

Form: AT008-05
 Rev. Date: 10/20/09

681
 6



Date: 2/14/12

Analyst Signature: [Signature]

Columns: RTX-160MX.32mm
 Method: TO152W.M
 Seq. File: 2W021412.5
 Initial Cal. Method: M2W1426

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS514	TO15STD	40ppbv
AS 518	TO15LCS	40ppbv
AS 5061	ISISURF	40ppbv

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 2/15/12

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
5	2W34235	BFB		A959	100					OK	
2	2W34236	CC1426-10		A970	100			/	/	Not used	
2	2W34237	CC1426-10		A970	100			/	/	OK	
3	2W34238	BS		A977	100			/	/	OK	
3	2W34239	BSD		A977	100			/	/	OK	
5	2W34240	MB		A959	400			/	/	OK	
6	2W34241	JA98889-1	STD	A756	100	1		/	/	OK	
7	2W34242	JA98889-2	↓	A447	100	1		/	/	OK	
8	2W34243	SCC		A601	400	1		/	/	OK	
9	2W34244	JA99253-1	STD	A758	100	1		↑	/	RR	
10	2W34245	JA99253-2	↓	A993	100	1		/	/	OK	
10	2W34246	JA99253-2Dup	↓	A993	100	1		↑	/	RR	
11	2W34247	SCC		A002	400	1		/	/	OK	
12	2W34248	JA99161-4	STD	A790	25	1		/	/	OK	
13	2W34249	JA99161-5	↓	A504	25	1		/	/	OK	
14	2W34250	JA99161-6	↓	A413	100	1		/	/	OK/DC	RR 200X
14	2W34251	JA99161-6	↓	A413	25	1		/	/	RR	
15	2W34251 ²	JA98480-1	STD	A849	100	1		/	/	OK	
16	2W34253 ³	JA98480-2	↓	A464	100	1		/	/	OK	
1	2W34254 ⁴	JA98480-3	↓	A211	400	1		/	/	OK	
2	2W34257 ⁴	JA99084-1	STD	A719	100	1		/	/	OK	
3	2W34258 ⁴	JA99110-10	STD	A380	100	1		/	/	OK	
4	2W34257	JA99110-11	↓	A677	100	1		/	/	OK	
6	2W34258	JA99110-12	↓	A805	100	1		/	/	OK	
7	2W34259	JA99110-13	↓	A526	100	1		/	/	OK	
8	2W34260	JA99198-1	STD	A513	100	1		/	/	OK	
9	2W34261 ⁴	JA99198-2	↓	A502	100	1		/	/	OK	

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error; # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error

Form: AT008-05
 Rev. Date: 10/20/09

682
 6



Analyst Signature: [Signature]
 Columns: RTX-1601X, 32mm
 Method: TO152W.M
 Seq. File: 2W021512.S
 Initial Cal. Method: M2W1426

ite: 2/15/12

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS5119	TO15STD	40ppm
AS5118	TO15LCS	40ppm
AS5081	TO15SURR	40ppm

D) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 2/16/12

S #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
5	2W34262	BFB		A959	100					OK	
2	2W34263	CC1426-10		A970	100					not used	
2	2W34264	CC1426-10		A970	100					OK	
3	2W34265	BS		A977	100					OK	
3	2W34266	BSD		A977	100					OK	
5	2W34267	MBZ		A959	400	1				OK	
6	2W34268	JA99253-2Dup	STD	A993	100	1				OK	
5	2W34269	MB		A959	400	1				OK	
6	2W34270	JA99253-1	STD	A158	100	1				OK	
7	2W34271	JA99161-6	STD	A413, A678	100	76.5				OK	
8	2W34272	JA99139-1	STD	A823	100	1				OK	
9	2W34273	JA99237-1	STD	A399	100	1				OK	
9	2W34274	JA99237-1Dup	↓	A399	100	1				OK	
10	2W34275	JA99200-1	STD	A368, A530	100	55				OK/OL	RR 2,000X
11	2W34276	JA98115-1R	STD	A648	400	1				OK	
12	2W34277	JA99254-1	BTXMT	A303, A681	100	120				OK/OL	RR 1,000X
13	2W34278	JA99271-1	STD	A833	400	1				OK	
14	2W34279	JA99271-2	↓	A651	400	1				OK	
15	2W34280	JA99271-3	↓	A245	400	1				OK	
16	2W34281	JA99271-4	↓	A340	100	1				OK/OL	RR 50X
1	2W34282	JA99271-5	↓	A219	100	1				OK	
23 th	2W34283	JA99110-1	STD	A284	400	1				OK	
24 th	2W34284	JA99110-2	↓	A079	400	1				OK	
4	2W34285	JA99110-23 th	↓	A193	400	1				OK/OL	RR 100ml
YH											

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error; # 2 = Transcription Error; # 3 = Computer Miscalculation; # 4 = Analyst's Correction Error
 Form: AT008-05
 Rev. Date: 10/20/09

Original Canister Dilution				Secondary Canister Dilution					Final Canister Dilution Factor			
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equip Total Volume CC	Dilution Factor	
2/15/12	YH	JAA9161-6	A 413	-8.0	1.3	1.3	1000	40	14.7	2000	50	76.5
2/15/12	YH	JAA9200-1	A368	-0.5	1.2	1.1	1000	40	14.7	2000	50	55
2/15/12	YH	JAA9274-1	A303	-3.0	1.2	1.2	1000	20	14.7	2000	100	120

Definition: Final DF = (Original Canister DF) x (Secondary Canister DF)
 Dilution Factor at Instrument = (Final Canister Dilution Factor) x (Normal Sampling Volume in cc)
 (Sample Volume in cc injected)

Example: Original Canister is diluted 2x for manual sample draw. 75cc from this canister is added to a 375cc minican and brought to 14.7 psig or 750cc equiv volume. This results in an additional dilution of 750/75 or 10. The final canister dilution factor is 2 x 10 = 20. From the dilution canister 20cc is injected at the instrument where normal volume is 400cc. This is an additional instrument dilution factor of 20. The final dilution multiplier is 20(from canister dilution) x 20(from instrument dilution) = 400

Notes:

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error, # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error

Form: AT003-03
 Rev. Date: 6/13/06

124

ate: 2/15/12

Analyst Signature: *[Signature]*

Columns: RTX-1601X, 32mm

Method: TO152W.M

Seq. File: 2W021512.S

Initial Cal. Method: M2W1426

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS 519	TO15STD	40ppbv
AS 518	TO15LCS	40ppbv
AS 5081	ISISurr	40ppbv

v) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: *[Signature]*

Date: 2/16/12

S #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments	
5	2W34262	BFB		A959	100					OK		
2	2W34263	CC1426-10		A970	100			/	/	not used		
2	2W34264	CC1426-10		A970	100			/	/	OK		
3	2W34265	BS		A977	100			/	/	OK		
3	2W34266	BSD		A977	100			/	/	OK		
5	2W34267	MBZ		A959	400	1		/	/	OK		
6	2W34268	JA99253-2Dup	STD	A993	100	1		/	/	OK		
5	2W34269	MB		A959	400	1		/	/	OK		
6	2W34270	JA99253-1	STD	A758	100	1		/	/	OK		
7	2W34271	JA99161-6	STD	A413, A678	100	76.5		/	/	OK		
8	2W34272	JA99139-1	STD	A823	100	1		/	/	OK		
9	2W34273	JA99237-1	STD	A399	100	1		/	/	OK		
9	2W34274	JA99237-1Dup	↓	A399	100	1		/	/	OK		
10	2W34275	JA99200-1	STD	A388, A330	100	55		/	/	OK/OL	RR 2,000X	
11	2W34276	JA98115-1R	STD	A648	400	1		/	/	OK		
12	2W34277	JA99254-1	BTXMT	A303, A681	100	120		/	/	OK/OL	RR 1,000X	
13	2W34278	JA99271-1	STD	A833	400	1		/	/	OK		
14	2W34279	JA99271-2	↓	A651	400	1		/	/	OK		
15	2W34280	JA99271-3	↓	A245	400	1		/	/	OK		
16	2W34281	JA99271-4	↓	A340	100	1		/	/	OK/OL	RR 50X	
1	2W34282	JA99271-5	↓	A219	100	1		/	/	OK		
28th	2W34283	JA99110-1	STD	A284	400	1		/	/	OK		
34th	2W34284	JA99110-2	↓	A079	400	1		/	/	OK		
4	2W34285	JA99110-23th	↓	A193	400	1		/	/	OK/OL	RR 100ml	
							YH					

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error; # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error
 Form: AT008-05
 Rev. Date: 10/20/09

			Original Canister Dilution				Secondary Canister Dilution				Final Canister Dilution	
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equip Total Volume CC	Dilution Factor	Final Canister Dilution Factor
2/15/12	YH	JA99181-6	A 413	-8.0	1.3	1.53	1000	40	14.7	2000	50	76.5
2/15/12	YH	JA99200-1	A368	-0.5	1.2	1.1	1000	40	14.7	2000	50	55
2/15/12	YH	JA99204-1	A303	-3.0	1.2	1.2	1000	20	14.7	2000	100	120

Definition: Final DF = (Original Canister DF) x (Secondary Canister DF)

Dilution Factor at Instrument = (Final Canister Dilution Factor) x (Normal Sampling Volume in cc) / (Sample Volume in cc injected)

Example: Original Canister is diluted 2x for manual sample draw. 75cc from this canister is added to a 375cc minican and brought to 14.7 psig or 750cc equiv volume. This results in an additional dilution of 750/75 or 10. The final canister dilution factor is 2 x 10 = 20. From the dilution canister 20cc is injected at the instrument where normal volume is 400cc. This is an additional instrument dilution factor of 20. The final dilution multiplier is 20(from canister dilution) x 20(from instrument dilution) = 400

Notes:

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error, # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error

Form: AT003-03
 Rev. Date: 6/13/06



Analyst Signature: [Signature]

Date: 1/18/12

Columns: RTX-160MX

Method: TO15.W.M

Seq. File: WD11812.S

Initial Cal. Method: MW1417

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.
AS 5043	IS/Surr	40ppbw

Standard Data

Lot #	Description	Conc.
AS 5044	TO15 LCS	40ppbw
AS 5045	TO15 STD	40ppbw
AS 5046	TO15 STD	2.0ppbw
AS 5047	TO15 STD	0.4ppbw

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 1/20/12

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
5	W34777	BFB		A962	100					OK	
2	W34778	IC1417-10		A980	100					NG	std NG
1	W34779	IC1417-0.5		A970	100					NG	reprepare STD
2	W34780	IC1417-15		A980	150					NG	
2	W34781	IC1417-5.0		A980	50					NG	
1	W34782	IC1417-0.2		A970	40					NG	↓
5	W34783	BFB		A962	100					OK	
2	W34784	IC1417-10		A980	100			/	/	OK	
1	W34785	IC1417-0.5		A970	100			/	/	OK	
2	W34786	IC1417-15		A980	150			/	/	OK	
2	W34787	IC1417-5.0		A980	50			/	/	OK	
1	W34788	IC1417-0.2		A970	40			/	/	not used	
2	W34789	IC1417-20		A980	200			/	/	OK	
2	W34790	IC1417-5.0		A980	50			/	/	not used	bad purge
4	W34791	IC1417-0.1		A977	100			/	/	not used	
4	W34792	IC1417-0.04		A977	40			/	/	not used	
2	W34793	IC1417-40		A980	400			/	/	OK	
5	W34794	IB		A962	100					not used	
5	W34795	IB		A962	100					not used	
1	W34796	IC1417-0.2		A970	40			/	/	OK	
4	W34797	IC1417-0.1		A977	100			/	/	OK	
4	W34798	IC1417-0.04		A977	40			/	/	OK	

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error; # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error
 Form: AT008-05
 Rev. Date: 10/20/09

TO-14/TO-15

Batch ID: VW1417



Date: 1/19/12

Analyst Signature: [Signature]

Columns: RTX-760MX, 32mm

Method: TD15W.M

Seq. File: W011912.S

Initial Cal. Method: MW1417

AS Data

Method: TD15.MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS 5095	TO15STO	40ppbv
AS 5094	TO15LCS	40ppbv
AS 5093	ISISURF	40ppbv

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 1/20/12

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
5	W34799	BFB		A962	100					OK	
2	W34800	CC1417-10		A980	100			/	/	OK	
3	W34800 ^M	BS		A968	100			/	/	OK	
3	W34802	BSD		A968	100					NG	
5	W34803	MB		A962	400					NG	
1	W34805 ⁴	JA94175-1B		A970	40	1				NG	filament broke
1	W34806 ⁵	JA94175-1B		A970	40	1				not run	
1	W34807 ⁶	JA94175-1B		A970	40	1					
1	W34808 ⁷	JA94175-1B		A970	40	1					
1	W34809 ⁸	JA94175-1B		A970	40	1					
1	W34810 ⁹	JA94175-1B		A970	40	1					
4	W34811	JA94175-1A		A977	100	1					
4	W34812	JA94175-1A		A977	100	1					
4	W34813	JA94175-1A		A977	100	1					
4	W34814	JA94175-1A		A977	100	1					
4	W34815	JA94175-1A		A977	100	1					
4	W34816	JA94175-1A		A977	100	1					
4	W34817	JA94175-1A		A977	100	1					

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error; # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error

Form: AT008-05
Rev. Date: 10/20/09

6.8.4
6

Date: 1/30/12

Analyst Signature: [Signature]
 Columns: RTX-160MX.32mm
 Method: TOISW.M
 Seq. File: WD13012.S
 Initial Cal. Method: MW1417

AS Data

Method: TOIS.MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS 5045	TOISSTD	40ppbw
AS 5044	TOISLCS	40ppbw
AS 5043	ISISURR	40ppbw

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 1/31/12

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
5	W34938	BFB		A962	100					NF	
5	W34939	CC1417-10 ^{YH}		A962	100					OK	BFB
2	W34940	CC1417-10		A980	100					not used	
2	W34941	BS ^{YH}		A980	100			/	/	OK	CC1417-10
3	W34942	BSD ^{YH}		A968	100			/	/	OK	BS
3	W34943	MB ^{YH}		A968	100			/	/	OK	BSD
5	W34944	MB		A962	400			/	/	OK	
6	W34945	JA97602-1	STD	A638,A606	10	224		/	/	OK	
7	W34946	JA97799-1	STD	A894	80	1		/	/	OK	
8	W34947	JA97799-5	↓	A256	400	1		/	/	OK	
9	W34948	JA97799-6	↓	A723	100	1		/	/	OK	
10	W34949	SCC		A441	400	1		/	/	OK	
11	W34950	JA97908-1	STD	A688	100	1		/	/	OK	
12	W34951	JA97909-1	STD	A797	100	1		/	/	OK	
13	W34952	JA98042-1	STD	A038	100	1		/	/	OK	
13	W34953	JA98042-1Dup	↓	A038	100	1		/	/	OK	
14	W34954	JA98042-2	↓	A265	100	1		/	/	OK	
15	W34955	JA98078-1	STD	A355	400	1		/	/	OK	
16	W34956	JA98078-2	↓	A881	400	1		/	/	OK	
1	W34957	JA98078-3	↓	A584	100	1		/	/	OK	
3	W34958	JA97684-1	STD	A229,A589	100	100		/	/	RR	RR20m
4	W34959	JA97684-2	↓	A064	400	1		/	/	OK	
6	W34960	JA97684-3	↓	A339	400	1		/	/	OK	
7	W34961	JA97684-4	↓	A891	400	1		/	/	OK	
5	W34962	SCC		A133	400	1		/	/	OK	

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error; # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error
 Form: AT008-05
 Rev. Date: 10/20/09

				Original Canister Dilution				Secondary Canister Dilution				Final Canister Dilution		
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equiv Total Volume CC	Dilution Factor	Canister Volume CC	Final Pressure psig	Dilution Factor
1/30/12	YH	JA97684-1	A229	±2.0	±2.0	1	1000	20	14.7	2000	100			100

Definition:

Final DF = (Original Canister DF) x (Secondary Canister DF)
 Dilution Factor at Instrument = (Final Canister Dilution Factor) x (Normal Sampling Volume in cc)
 (Sample Volume in cc Injected)

Example:

Original Canister is diluted 2x for manual sample draw. 75cc from this canister is added to a 375cc minican and brought to 14.7 psig or 750cc equiv volume. This results in an additional dilution of 750/75 or 10. The final canister dilution factor is 2 x 10 = 20. From the dilution canister 20cc is injected at the instrument where normal volume is 400cc. This is an additional instrument dilution factor of 20. The final dilution multiplier is 20(from canister dilution) x 20(from instrument dilution) = 400

Notes:

All strikeouts must be initial, dated and reason code applied as follows: # 1 = Reviewer Correction Error, # 2 = Transcription Error, # 3 = Computer Miscalculation, # 4 = Analyst's Correction Error

INSTALLATION INSTRUCTIONS FOR THE AIR PRESSURE INDICATOR



READ AND SAVE THESE INSTRUCTIONS (FOR GENERAL VENTILATION PURPOSE ONLY)

MODEL: PI004

Mounting Your Air Pressure Indicator:

Install the Air Pressure Indicator on any clean and dry vertical section of the suction side of the vent pipe in an indoor location where the Air Pressure Indicator can be easily read.

1. Using the adhesive tape on the back, mount to the vent pipe, keeping the Air Pressure Indicator vertical so that the fluid does not run out.
2. Remove the sealing caps from the tube and allow the liquid to settle. You may need to tap the Air Pressure Indicator lightly with your finger to settle the liquid.
3. Slide the tube up-down until the liquid level is at the Zero level in both columns. Use screw provided to hold tube in place. Screw goes into the hole above the numbered section. (See photo #1) This is how the indicator will look if the fan is not operating.
4. Using a 3/16" drill bit, drill a hole in the vent pipe 1" to 2" below the top of the Air Pressure Indicator.
5. Connect one end of the tubing to the top of either opening of the Air Pressure Indicator and insert the other end into the 3/16" hole. Use a little silicon sealant to make sure the hose connections are airtight.
6. Complete the information on the installation label and apply to the vent pipe near the installation.
7. See photo #2 to see how the liquid should appear when the fan is running. The liquid will be higher on the side the 3/16" tubing was inserted into. The markings are not calibrated. You may get a different reading than what is pictured.

Please Note: Do not ingest the liquid. Liquid will stain if spilled.

**Photo #1
Fan not running**



**Photo #2
Fan running**



Warranty

Subject to the following limitations, Suncourt Inc. (manufacturer) warrants that the Air Pressure Indicator will, for 5 (five) years from date of original purchase, remain free from appearance of defects in workmanship or materials. This warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase, to Suncourt; and (c) this warranty does not apply to defects resulting from the alteration, abuse, accidental damage, unauthorized repair, or misuse of the unit. This warranty is given in lieu of all other warranties, guarantees, and conditions on manufacturer's part, and the manufacturer shall have no tortious or other liability in respect to this Air Pressure Indicator. There is no implied warranty of merchantability and fitness for a particular purpose. Suncourt shall not be liable for any direct, indirect, special, incidental or consequential damages arising from, or relating to, the Air Pressure Indicator or the performance of it. Suncourt's maximum liability shall not exceed the amount of the purchase price of the Air Pressure Indicator. The sole remedy under this warranty shall be the repair or replacement of the product. Ship unit to Suncourt Inc. only after obtaining a Return Goods Authorization (RGA) number. Returns without this RGA number will not be accepted.

Actual product appearance may differ from illustrations. Suncourt reserves the right to modify any or all of its products' features, designs, components and specifications without notice.