DURHAM SCHOOL SERVICES
SUPPLEMENTAL VAPOR INTRUSION (VI) SAMPLING REPORT

Former Norton Company/Nashua Tape Products Facility
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Watervliet, New York
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Prepared for:
Saint-Gobain Corporation
750 East Swedesford Road
P.O. Box 860
Valley Forge, Pennsylvania 19482
(610) 594-3940

Prepared by:
Forensic Environmental Services, Inc.
113 John Robert Thomas Drive
Exton, Pennsylvania 19341
(610) 594-3940

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SECTION 1.0

INTRODUCTION

Per direction of NYSDEC/NYSDOH, a vapor intrusion (VI) study was conducted at the new Durham School Services (Durham) facilities at the Former Norton/Nashua site (see Figure 1-1) in March 2015. Access was received from the current facility owner (Stone Management; Stone) and Durham to install and sample two sub-slab vapor monitoring points (VMPs) and conduct a concurrent indoor and outdoor ambient air sampling event. Sub-slab vapor and ambient air samples were collected in March 2015 and results were presented in the April 2015 Durham School Services Vapor Intrusion (VI) Sampling Report.

The NYSDEC/NYSDOH requested that Saint-Gobain conduct a supplemental VI sampling event concurrent with the In-situ Chemical Oxidation (ISCO) pilot testing investigation, which was conducted in February 2016. The supplemental VI sampling event utilized the existing Durham sub-slab VMPs. Sampling procedures for the supplemental VI sampling event, which are summarized in this report, were generally the same as those used during the March 2015 sampling event (see the 2015 Durham VI Sampling Report) except for minor modifications (see Section 2.0).

The supplemental VI sampling event was conducted during the third day of on-site ISCO pilot testing. The ISO pilot testing wells, MW-27 & MP-37, are located approximately 180 to 200 feet northwest and southwest of the VI sampling area, respectively (see Figure 1-2). (Note: rather than alternating areas of ISCO pilot testing as outlined in the December 2015 Pilot Testing Workplan, due to field conditions, ISCO injections were conducted for four consecutive days at wells.) VI sampling locations at the Durham facility during the 2016 sampling event (see Figure 1-2) included existing VMP-1 & VMP-2 (see below), ambient indoor air near VMP-2 (IA3), and ambient outdoor air (OA).

Vapor QA/QC samples (see Section 4.0) included the collection of a trip blank. (Due to the limited number of proposed vapor samples, a field duplicate sample was not collected.)

The existing VMP locations (see Figure 1-2), which were previously reviewed and approved by the NYSDEC, NYSDOH, Stone, and Durham, are: 1) in the bus repair area, adjacent to the Durham General Manager's office (DB-VMP-1); and 2) in Building #61, adjacent to the Durham "break room" and offices (DB-VMP-2). VMP assembly and installation (see the 2015 Durham VI Sampling Report) generally followed the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) except six-inch long, 0.50-inch outer diameter (OD), stainless-steel vapor implants, which extend slightly below the base of the concrete slab, were installed for greater VMP durability. Additional details on VMP construction are provided in the 2015 Durham VI Sampling Report. Each VMP is protected with a small-diameter flush-mount manhole.

SECTION 2.0

SUB-SLAB VAPOR AND INDOOR/OUTDOOR AIR SAMPLING

Following a pre-sampling inspection and site walkover, sub-slab vapor and ambient indoor/outdoor air samples were collected at the Stone/Durham facility on February 25, 2016. This sampling date is within the general heating period specified in the NYSDOH Guidance, and the heating system in the Durham facility was active during the sampling event. Sub-slab vapor and ambient air sampling protocol was based upon the 2006 NYSDOH Guidance document.

2.1 Pre-Sampling Activities and Inspection

A pre-sampling inspection was conducted at the Stone/Durham facility on February 25, 2015. The pre-sampling inspection included: 1) a site walkover; 2) confirmation of the general floor plan and air flow in the facility; and 3) an inventory of potentially contributing substances in the sampling areas. During the inspection, an Indoor Air Quality Questionnaire and Building Characteristics Inventory form (IAQQ/BCIF), as provided in the 2006 NYSDOH Guidance, was completed. A copy of the IAQQ/BCIF, which includes a photo log, is presented in Appendix A.

In addition to a natural gas furnace, with inlet and outlet vents in each room, the Durham facility has overhead space heaters, indoor/outdoor air exchangers, and a portable oil heater. As previously observed during the 2015 vapor testing: 1) there are strong air currents in and out of the Durham offices via the heating ventilation system when the furnace blower is running; 2) strong infiltration of outdoor air occurs around the large overhead doors on the north side of the Durham facility (see Figure 1-2); 3) strong infiltration of outdoor air occurs when the access doors on the east and north sides of the Durham facility are opened; and 4) there is general upward air flow near DB-VMP-1 & DB-VMP-2.

The primary objective of the walkover inspection inventory was to identify products (or other substances stored or present in the facility) that could potentially interfere with the testing and/or contribute site-specific compounds of concern (COCs) to the vapor samples. Because toluene is the primary site-specific COC identified in groundwater at the former Norton/Nashua Site, the inventory focused on potential toluene sources. Small containers of industrial products containing toluene were previously identified in a hazardous materials storage cabinet near DB-VMP-1. The cabinet doors were secured during the February 2016 VI sampling event. However, the Durham facility is a working bus maintenance/repair shop, and these activities continued on the day of sampling.

Prior to the proposed sampling event, sampling protocol was reviewed with Durham, including items detailed in a handout (adopted from NYSDOH, 2006; see Appendix B), which asked the facility to refrain from the following activities during the 24 hours prior to testing and during the 8-hour testing period:

- opening any windows or vents *(however, Durham employees used access doors during the sampling period and large warehouse doors were in use at Stone);*
- operating ventilation fans *(operation of auxiliary ventilation fans in the bus repair area was not observed during the sampling event);*
- using auxiliary heating equipment *(operation of a portable oil-fired heater in the bus repair area was not observed during the sampling event)*
- smoking in the facility *(smoking is not allowed in the facility, but employees were smoking in adjacent outdoor areas);*
- painting in the facility *(none was observed during the 2016 sampling event)*;
- using cosmetics, including hair spray, nail polish, nail polish remover, etc.;
- using perfume/cologne or air fresheners or odor eliminators;
- cleaning, waxing, or polishing furniture or floors with petroleum or oil-based products;
- engaging in any other activities that use materials containing volatile organic compounds (VOCs);
- applying pesticides;
- allowing containers of gasoline or oil to remain within the facility *(there were open containers of oil and waste oil present in the Durham bus repair area)*;
- operating or storing automobiles in an attached garage *(The Durham facility [DB-VMP-1] is an active bus maintenance/repair shop and these activities continued during the 2016 sampling event. The Stone facility [DB-VMP-2; DB-IA3] is an active warehouse, and the operation of propane-fueled forklifts and other equipment continued in the warehouse during the 2016 sampling event.)*

As part of the 2016 sampling event, the concrete slab in the vicinity of each VMP was inspected for water leaks, cracks, floor drains, and other penetrations. No floor penetrations were noted. The integrity of each VMP was inspected. Melted beeswax was used to seal the surface at DB-VMP-1 (and DB-VMP-2) where small cracks were noted in the surface of the bentonite seal during the March 2015 sampling event.

2.2 Sub-Slab VMP Sampling

On the day of VMP sampling, a final site inspection, VMP inspection, and photoionization detector (PID) field screening survey were performed to document conditions at the time of sampling. PID field screening results indicated VOC levels were minimal (less than 0.001 parts per million; ppmv) in the outdoor ambient air sample area, but PID readings ranging from 3.3 to 6.3 ppmv (3.5 ppmv in the immediate vicinity of DB-VMP-1) were obtained at various locations in the Durham facility on February 25, 2015. PID field screening results were minimal (less than 0.075 ppmv) in the immediate vicinity of DB-VMP-2 on February 25, 2015, but PID readings as high as 40 ppmv were obtained from materials stored on pallets in the general vicinity of DB-VMP-2 and the location of indoor air sample DB-IA3 (see Figure 1-2 for sample locations).

The sub-slab soil vapor permanent VMP seals were inspected to ensure that indoor air infiltration was not occurring. The plugs were removed from each VMP assembly and connected to several feet of dedicated 0.25-inch ID Teflon tubing.

The pre-sample vacuum of each Summa canister, which was previously recorded by the laboratory prior to shipping, was recorded. The pre-sampling vacuum of the two Summa canisters was 29.4 inches of mercury (inHg). Vacuums on February 25, 2016 were 27.5 inHg at DB-VMP-1 and 29.0 inHg at VMP-2. Summa canister information is provided in Table 2-1.

Immediately prior to VMP sampling, tracer gas monitoring was conducted per the 2006 NYSDOH guidance document and the previously approved tracer gas monitoring protocol (see Appendix C) to confirm the integrity of each VMP (and associated fittings). The flux chamber at each VMP was enriched with helium gas until a field reading of at least 75% helium was obtained. Additional tracer gas data is provided in Table 2-1.

A low-flow peristaltic pump (i.e., flow rate 0.2 liters per minute or less) was connected to the open end of the Teflon tubing to purge approximately 1.5 VMP assembly volumes (0.05 to 0.06 liters per volume) from each VMP location. Following purging, a small vapor sample was collected from each VMP for tracer gas monitoring and PID field screening.

After the tracer gas monitoring sample was obtained, the air purging pump was deactivated. Tracer gas readings were 6.9% at DB-VMP-1 and 3.5% at DB-VMP-2 (i.e., both samples were within the tracer gas test screening limit of 20%). Due to the detection of tracer gas in the monitoring samples, the VMP assemblies were reexamined for potential leaks and additional beeswax was applied as a sealant. Pre-test PID readings were 0.325 ppmv at DB-VMP-1 and 0.016 ppmv at DB-VMP-2 (see Table 2-1).

The Teflon tubing from the VMP was attached to the 6-liter Summa canister and the canister valve was opened to begin sub-slab vapor collection at each VMP location at a flow rate of approximately 0.75 liters per hour. The sampling assembly was periodically inspected during testing to determine the rate of vacuum loss (i.e., sample collection). The VMP sub-slab samples were recovered approximately 8 hours later by closing the Summa canister valves, disconnecting the Teflon tubing from the VMP, and recording the remaining vacuum.

Final vacuum readings were 4 inHg or greater (i.e., they exceeded the required 2 inHg) to allow the laboratory to check for leaks. The final vacuum of the DB-VMP-2 Summa sample was within 1.5 inHg of the vacuum recorded in the laboratory prior to analysis, but the final vacuum of the DB-VMP-1 sample was 3.0 inHg lower upon receipt at the laboratory (see Table 2-1).

At the end of VMP sampling, tracer gas helium concentrations in the flux chambers had decreased to 6.4% at DB-VMP-1 and 9.5% at DB-VMP-2. Immediately after VMP sampling was completed, tracer gas monitoring and PID field screening was repeated as described above by recharging the flux chambers with helium gas. (However, insufficient helium gas was available to fully recharge the flux chamber at DB-VMP-1.)

Post-sampling tracer gas readings were <1% at DB-VMP-1 and 5.5% at DB-VMP-2 (see Table 2-1), i.e., post-test tracer gas concentrations in both VMP samples were well below the screening limit of 20%. Post-test PID readings were 0.000 ppmv at VMP-1 and 0.082 ppmv at VMP-2 (see Table 2-1). VMPs were then plugged and each manhole was secured.

VMP sub-slab samples were submitted to Accutest Laboratories of Dayton, New Jersey (Accutest) for analysis of VOCs via EPA Method TO-15 plus tentatively identified compounds (TICs) with a target reporting limit (RL; see Section 4.3) of 1.0 micrograms per cubic meter ($\mu g/m^3$). Accutest is an NYSDOH – Environmental Laboratory Approval Program (NYSDOH-ELAP) certified laboratory. All vapor samples were analyzed following NYSDEC, ASP (June 2000) CLP procedures with complete NYSDEC CLP/Category B laboratory deliverables including TICs. Results are discussed in Section 3.0.

2.3 Indoor/Outdoor Air Sampling

In conjunction with subs-slab VMP sampling, concurrent ambient indoor/outdoor air samples were collected on February 25, 2016 (see Figure 1-2 for sample locations). Ambient indoor/outdoor air samples were collected by placing certified-clean 6L Summa canisters, equipped with particulate filters and 8-hour regulators preset by the laboratory, in each sampling area approximately three feet off the floor (i.e., on a box or chair) to collect representative "breathing air" samples.

Pre-sample vacuums of the two Summa canisters, which were previously recorded by the laboratory prior to shipping, were recorded. The pre-sampling vacuum of the two Summa canisters was 29.4 inHg. Vacuums on February 25, 2016 were 27.5 inHg at DB-OA and 29.0 inHg at DB-IA3. Summa canister information is provided in Table 2-1.

The Summa canisters were not attached to any tubing. The Summa canister valves were opened to begin indoor/outdoor ambient air collection at a rate of approximately 0.75 liters per hour.

Indoor/outdoor temperatures and barometric pressure were recorded along with current weather conditions at the time of sampling. The sampling assembly was periodically inspected during testing to determine the rate of vacuum loss (i.e., sample collection). Normal business activities continued at Stone/Durham during the air sampling event and employees were often present near or in the active sampling areas. Also, as noted previously, employees frequently entered/exited the facility via adjacent access doors.

Ambient air samples were recovered approximately 8 hours later by closing the Summa canister regulator valves, and recording the vacuum reading. All final vacuum readings exceeded the required 2 inHg. The final field Summa vacuum of the DB-OA sample was within 1.5 inHg of the vacuum recorded in the laboratory prior to analysis, but the DB-IA3 sample Summa vacuum was 2.0 inHg lower upon receipt at the laboratory (see Table 2-1).

Ambient indoor/outdoor air samples were submitted for laboratory analysis of VOCs via EPA Method TO-15 with a target reporting limit of 0.25 $\mu g/m^3$ for Matrix 1 compounds (i.e., carbon tetrachloride, trichloroethene [TCE], and vinyl chloride) in the indoor air samples and 1.0 $\mu g/m^3$ for other VOCs in the indoor and outdoor air samples (see Section 4.3). All air samples were analyzed following NYSDEC, ASP (June 2000) CLP procedures with complete NYSDEC CLP/Category B laboratory deliverables including TICs.

2.4 QA/QC Air Samples

The QA/QC program included the collection of a trip blank sample. The trip blank sample, which was analyzed for VOC target parameters and TICs, was a prepared gas sample (laboratory certified "clean air") provided in a laboratory supplied Summa canister. The blank was transported and handled in the same manner as other vapor sampling equipment (i.e., Summa canisters) before analysis by the laboratory. Trip blank sample results are discussed in Section 4.2.

SECTION 3.0

SUB-SLAB VAPOR AND INDOOR/OUTDOOR AIR SAMPLING RESULTS

Per the direction of NYSDEC & NYSDOH, supplemental sub-slab vapor and indoor air samples were collected from the new Durham facility in February 2016. Results are discussed below and summarized in Table 3-1.

Previously, on-site vapor/air samples were collected (see Figure 3-1 for sample locations) at: 1) three sewer bedding wells in Building #61 in February 2004; 2) ambient air locations in Buildings #58 & #61 in December 2004; 3) sub-slab vapor and ambient air locations in Building #59 in February 2009 & February 2010; and 4) the previously mentioned sub-slab vapor and ambient air locations at Durham in March 2015. Vapor sampling details and results were presented in: 1) the December 2007 RFI Report; 2) the July 2014 Corrective Measures Study (CMS) Report; and 3) the April 2015 Durham VI Sampling Report.

3.1 February 2016 Sub-Slab Vapor Samples

Total vapor-phase VOC concentrations (including TICs) in DB-VMP-1 & DB-VMP-2 in February 2016 (328 µg/m^3 & 42.5 µg/m^3, respectively) were significantly lower than the total vapor-phase VOC concentrations obtained from these two sampling points in March 2015 (2,534 µg/m^3 & 1,097 µg/m^3, respectively). Vapor-phase toluene concentrations in DB-VMP-1 & DB-VMP-2 decreased in February 2016 (42.2 µg/m^3 & 0.29 J µg/m^3, respectively) as compared with March 2015 (59.5 µg/m^3 & 37 µg/m^3, respectively). Vapor-phase heptane concentrations in DB-VMP-2 in February 2016 decreased to 0.45 J µg/m^3 from 8.2 µg/m^3 in March 2015, but vapor-phase heptane concentrations in DB-VMP-1 in February 2016 increased to 102 µg/m^3 from 13 µg/m^3 in March 2015 (see Table 3-1).

Individual VOC analyte concentrations in the February 2016 VMP samples were generally an order of magnitude (or more) lower than the March 2015 VMP samples. Except for heptane at DB-VMP-1, any VOC analyte concentration increases in February 2016 were less than 2.0 µg/m^3 (see Table 3-1). A copy of the laboratory report is included as Appendix D.

3.2 February 2016 Ambient Air Samples

The total vapor-phase VOC concentration (including TICs) in ambient indoor air sample DB-IA3 in February 2016 was 1,161 µg/m^3. Vapor-phase toluene and heptane concentrations in sample DB-IA3 were 331 µg/m^3 and 324 µg/m^3, respectively (see Table 3-1). TCE and vinyl chloride were not detected (ND) in sample DB-IA-3, but 13 VOC analyte concentrations (including toluene and heptane) exceeded 3.0 µg/m^3 in sample DB-IA3, and 5 VOC analyte concentrations exceeded 30 µg/m^3: toluene, heptane, tetrachloroethene (PCE; 102 µg/m^3), acetone (67.7 µg/m^3), and ethanol (54.8 µg/m^3).

Al detected VOC analyte concentrations in indoor air sample DB-IA3 were higher than the concentrations detected in the adjacent and concurrent sub-slab vapor sample DB-VMP-2. (Except cyclohexane, 1,1,1-trichloroethane [1,1,1-TCA], and TCE. These three VOCs were detected in sub-slab vapor sample DB-VMP-2 at concentrations of 1.1 µg/m^3 or less, and were ND in ambient indoor air sample DB-IA3.)

February 2016 outdoor ambient air (DB-OA) sampling results (total VOC analyte concentration 51.1 µg/m^3) were similar to March 2015 outdoor ambient air sampling results (total VOC analyte concentration 49.4 µg/m^3). A total of 15 VOC analytes plus TICs were detected in the February 2016 outdoor ambient air sample including COCs toluene (concentration 1.7 µg/m^3) and heptane (concentration 0.98 µg/m^3), several VOCs potentially associated with motor fuel combustion (benzene, ethanol, and xylene), and possible laboratory contaminants such as acetone and hexane.

3.3 February 2016 Vapor/Air Sampling Review

February 2016 sub-slab vapor and indoor air samples were compared to the October 2006 NYSDOH Soil Vapor/Indoor Air Matrices. The February 2016 TCE results were compared to Matrix 1. (The other compounds assigned to Matrix 1, carbon tetrachloride and vinyl chloride, were not detected in any sub-slab vapor or indoor air samples, and therefore, no further action is indicated.) Sub-slab vapor TCE concentrations ranged from 0.13 J µg/m^3 (DB-VMP-1) to 0.35 µg/m^3 (DB-VMP-2), and the indoor air TCE concentration was ND (DB-IA3). These results generate a Matrix 1 result of "monitor" or "no further action". TCE has never been detected in the groundwater or soil at the Former Norton/Nashua site except for a trace soil detection of 12 micrograms per kilogram (µg/kg) in one former soil boring in Building #58 (see Figure 3-1).

The February 2016 1,1,1-TCA and PCE data were compared to Matrix 2. (The other compounds assigned to Matrix 2; 1,1-dichloroethene and cis-1,2-dichloroethene, were not detected in any vapor or air samples, and therefore, no further action is indicated.) 1,1,1-TCA was not detected in the indoor air sample resulting in a Matrix 2 result of "no further action". PCE sub-slab results of less than 100 µg/m^3 (28 µg/m^3 at DB-VMP-1 & 7.5 µg/m^3 at DB-VMP-2) and the indoor air PCE concentration of 102 µg/m^3 generate a Matrix 2 result of "take reasonable and practical actions to identify source(s) and reduce exposures". PCE has never been detected in the groundwater or soil at the Former Norton/Nashua site. Durham and Stone will be informed of the PCE results.

A total of 22 other VOCs were detected in the February 2016 sub-slab soil vapor and ambient indoor air samples. These VOCs were compared to Matrix 2. Ten VOC analytes had soil vapor concentrations of less than less than 100 µg/m^3 and indoor air concentrations of less than 3 µg/m^3, generating a Matrix 2 result of "no further action".

As noted previously, vapor-phase COC (toluene and heptane) concentrations were significantly higher in the indoor air sample (DB-IA3) as compared to the adjacent sub-slab vapor sample (DB-VMP-2), but sub-slab COC concentrations were less than 100 µg/m^3 (however, heptane, at a concentration of 102 µg/m^3, slightly exceeded 100 µg/m^3 in DB-VMP-1). This produces a Matrix 2 result of "take reasonable and practical actions to identify source(s) and reduce exposures".

The same concentration Matrix 2 relationship (less than 100 µg/m^3 sub-slab vapor concentration, greater than 3 µg/m^3 indoor air concentration) applies to the other 10 VOCs where the indoor air concentrations were greater than the sub-slab vapor concentrations: acetone, ethanol, ethyl acetate, hexane, isopropyl alcohol, methylene chloride, trichlorofluoromethane (TCFM), 2,2,4-trimethylpentane, and m,p- & o-xylenes. Many of these VOCs have documented utilization at the Durham/Stone facilities, but the source(s) of the other compounds, which are not site-specific COCs for the Former Norton/Nashua site is unknown. Durham and Stone will be informed of the testing results.

As noted previously, vapor-phase COC (and many other VOC) concentrations were significantly higher in indoor air sample DB-IA3 as compared to adjacent sub-slab vapor sample DB-VMP-2 indicating a confounding source(s) is present at the Stone facility. This conclusion is supported by the pre-sample inventory, where PID field screening readings up to 40 ppmv were noted in adjacent warehoused materials (see photos in Appendix A) and an odor was noted in the ambient air.

In conclusion, based on the February 2016 sub-slab vapor and indoor air samples, there is currently no unacceptable exposure via migration of vapor-phase COCs from groundwater or soil to the Stone/Durham facility and on-site workers. As previously noted, the February 2016 sub-slab vapor and indoor air results will be provided to Durham and Stone for possible action.

3.4 Contingent Sub-Slab Vapor/Indoor Air Sampling

The February 2016 sub-slab vapor and ambient indoor/outdoor air sampling data will be reviewed and discussed with project representatives from the NYSDEC and the NYSDOH. This data assessment will determine whether additional VMP and/or ambient indoor air sampling locations (or the collection of additional samples from the existing VMPs) are needed to complete the evaluation of the potential vapor intrusion exposure pathway at the Stone/Durham facility.

SECTION 4.0

LABORATORY ANALYSIS

All vapor samples were submitted to Accutest for analysis via standard turn around times. All samples were analyzed following NYSDEC, ASP (June 2000) CLP procedures with complete NYSDEC CLP/Category B laboratory deliverables including TICs. The final laboratory deliverables package for volatiles via Method TO-15 was requested to include the following:

1) Chain of custody forms;
2) Instrument run logs with time and date information;
3) A case narrative describing any QC problems encountered by the lab, in addition to a written statement with regard to sample holding times (30 days for Summa canisters);
4) CLP Form I for each sample analyzed plus total/extracted ion chromatographs;
5) CLP Form II, system monitoring compounds (surrogate recoveries);
6) CLP Form III, matrix spike (MS)/MS duplicate (MSD) recoveries and relative percent differences (RPDs);
7) CLP Form IV, system, field and trip blanks where applicable;
8) CLP Form V, gas chromatograph/mass spectrometer (GC/MS) instrument performance check for bromofluorobenzene;
9) CLP Form VI, GC/MS initial calibration form;
10) CLP Form VII, GC/MS continuing calibration;
11) CLP Form VIII, internal standard area and retention time summaries; and
12) CLP Form IV, system, field and trip blanks where applicable.

4.1 Data Validation

Data validation will be performed by a third party reviewer retained by Saint-Gobain in accordance with the NYSDEC ASP (June 2000), the USEPA Region II document CLP Organics Data Review and Preliminary Review (SOP No. HW-6, Revision No. 8, January 1992), and USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994). The data validation will include a comparison of QC checks to prescribed acceptance criteria and compliance with applicable performance criteria for the following major elements: trip blank, field duplicate sample, laboratory qualifiers, holding times, detection limits (practical quantitation limits need to meet the Contract Required Quantitation Limit (CRQL) per NYSDEC ASP), surrogate recoveries, GC/MS calibrations, and system performance checks.

As part of the internal data review, the analytical data package was compared with the list of analyses requested on the chain-of-custody record and the project workplan to ensure all analyses were performed as requested. No analytical samples exceeded the method-specific holding time. In several instances, the laboratory estimated analyte concentrations when samples were below quantification limits by qualifying these concentrations with a "J", indicating they represent the laboratory's "best" estimate of a specific analyte concentration.

All data will also be reviewed for precision, accuracy, representativeness, completeness, and comparability (PARCC). The final data validation package was not available at the time of this report, but any changes to the data made during the data validation process will be incorporated into the EQuIS database submittal. Following third-party validation, the final laboratory data package will be forwarded to NYSDEC & NYSDOH for review and discussion.

4.2 Trip Blank Sample

The trip blank sample was analyzed for the full VOC analyte list. All results were ND except for acetone (detected at a concentration of 0.74 $\mu g/m^3$), ethanol (1.0 $\mu g/m^3$), and hexane (0.85 $\mu g/m^3$). These VOC analytes are frequently reported as laboratory contaminants in Summa canister samples.

4.3 Target Reporting Limits (RLs)

Target RLs were 0.25 $\mu g/m^3$ for Matrix 1 compounds in the indoor air samples and 1.0 $\mu g/m^3$ for other VOCs in the remaining samples. Accutest RLs for all VOC analytes in all samples were 0.50 parts per billion by volume (ppbv) or less, resulting in equivalent RLs that were generally less than 1.0 $\mu g/m^3$ (the maximum RL was 2.1 $\mu g/m^3$ for bromoform and hexachlorobutadiene, which are not COCs for the Former Norton/Nashua site). Accutest RLs for Matrix 1 compounds ranged from 0.21 $\mu g/m^3$ (TCE) to 0.51 $\mu g/m^3$ (vinyl chloride).

TABLES

Table 2-1
Vapor/Ambient Air Sampling Field Measurements
Former Norton/Nashua Tape Products Facility
Watervliet, New York

Sample Designation	Pre-Sample Laboratory Summa Vacuum (inHg)	Initial Summa Vacuum (inHg)	Post-Sample Summa Vacuum (inHg)	Post-Sample Laboratory Summa Vacuum (inHg)	Pre-Sample PID Screening (ppmv)	Post-Sample PID Screening (ppmv)	Tracer Gas (Helium) Monitoring			
							Pre-Sample Concentration (Flux Chamber) (%)	Pre-Sample Concentration (Tedlar Bag) (%)	Post-Sample Concentration (Flux Chamber) (%)	Post-Sample Concentration (Tedlar Bag) (%)
DB-VMP-1	29.4	27.5	4.0	1.0	0.325	0.000	75.0	6.9	11.9*	<1.0
DB-VMP-2	29.4	29.0	6.0	5.0	0.016	0.082	76.7	3.5	75.0	5.5
DB-IA3	29.4	29.0	6.0	4.0						
DB-OA	29.4	27.5	7.0	5.5						
DB-TB	29.4	*29.4*	*29.4*	29.4						

* = Prepared gas helium (He) canister expired prior to flux chamber concentration reaching 75%.

PID = photoionization detector; inHg = inches of mercury; ppmv = parts per million by volume; VMP = vapor monitoring point; IA = indoor ambient air; OA = outdoor ambient air; TB = trip blank.

The purge volume of each VMP assembly (point and tubing) ranged from 0.05 to 0.06 liters. Therefore, prior to sampling, each VMP was purged at a rate of approximately 200 milliliters per minute for approximately 30 seconds (approximately 1.5-2 purge volumes).

All field readings obtained on February 25, 2016.

Table 3-1
Durham School Services - February 2016 Vapor Analytical Data
Former Norton/Nashua Facility
Watervliet, NY

Sample ID:	DB-VMP1	DB-VMP1	DB-VMP2	DB-VMP2	DB-IA3	DB-OA	DB-OA	DB-TB
Date Sampled:	3/3/2015	2/25/2016	3/3/2015	2/25/2016	2/25/2016	3/4/2015	2/25/2016	2/25/2016
Acetone	**129**	**45.1**	**37.5**	**2.9**	**67.7**	**5.5**	**9.3**	**0.74**
Benzene	**4.5**	**0.54 J**	**2.9**	ND (0.099)	**1.7**	**0.73**	**3.2**	ND (0.099)
Carbon disulfide	**50.1**	**0.84**	**4.7**	ND (0.097)	ND (0.097)	ND (0.097)	ND (0.097)	ND (0.097)
Chloromethane	**0.39 J**	**0.45**	ND (0.64)	ND (0.11)	**1.7**	**1.0**	**1.5**	ND (0.11)
Cyclohexane	**2.7**	ND (0.055)	ND (0.38)	**0.45 J**	ND (0.055)	ND (0.093)	ND (0.055)	ND (0.055)
1,1-Dichloroethane	**0.61 J**	ND (0.061)	ND (0.45)	ND (0.061)	ND (0.061)	ND (0.11)	ND (0.061)	ND (0.061)
DCDFM	**2.2**	**2.7**	**2.2 J**	**2.6**	**2.9**	**2.6**	**3.1**	ND (0.094)
trans-1,2-DCE	**2.3**	ND (0.11)	ND (1.1)	ND (0.11)	ND (0.11)	ND (0.28)	ND (0.11)	ND (0.11)
m-Dichlorobenzene	**7.8**	ND (0.12)	ND (0.78)	ND (0.12)	ND (0.12)	ND (0.20)	ND (0.12)	ND (0.12)
p-Dichlorobenzene	ND (0.22)	ND (0.16)	**2.3 J**	ND (0.16)	ND (0.16)	ND (0.22)	ND (0.16)	ND (0.16)
Ethanol	**614 E**	**26.0**	**252**	**18**	**54.8**	**3.2**	**13**	**1.0**
Ethylbenzene	**26**	**0.91**	**12**	ND (0.18)	**2.8**	ND (0.15)	ND (0.18)	ND (0.18)
Ethyl Acetate	**6.8**	**4.0**	**4.7**	**2.3**	**5.4**	**27**	**1.6**	ND (0.27)
4-Ethyltoluene	**9.3**	ND (0.084)	**3.6 J**	ND (0.084)	ND (0.084)	ND (0.16)	ND (0.084)	ND (0.084)
Heptane	**13**	**102**	**8.2**	**0.45 J**	**324**	ND (0.086)	**0.98**	ND (0.082)
Hexane	**5.6**	**2.5**	**8.1**	**0.34 J**	**11**	ND (0.15)	**3.3**	**0.85**
2-Hexanone	**0.86**	ND (0.18)	ND (1.1)	ND (0.18)	ND (0.18)	ND (0.26)	ND (0.18)	ND (0.18)
Isopropyl alcohol	**897 E**	**1.8**	**415 E**	ND (0.39)	**5.4**	**1.1**	**1.1**	ND (0.39)
Methylene chloride	**1.0**	**1.7**	ND (1.9)	ND (0.087)	**11**	ND (0.45)	**5.9**	ND (0.087)
Methyl ethyl ketone	**61.3**	**1.7**	**9.4**	**0.32 J**	**2.4**	**1.1**	**1.9**	ND (0.14)
MIBK	**2.0**	ND (0.23)	ND (0.70)	ND (0.23)	ND (0.23)	ND (0.17)	ND (0.23)	ND (0.23)
Propylene	ND (0.082)	ND (0.055)	**60.6**	ND (0.055)	ND (0.055)	ND (0.082)	ND (0.055)	ND (0.055)
Styrene	**20**	ND (0.064)	**8.5**	ND (0.064)	ND (0.064)	ND (0.14)	ND (0.064)	ND (0.064)

Table 3-1
Durham School Services - February 2016 Vapor Analytical Data
Former Norton/Nashua Facility
Watervliet, NY

Sample ID: / Date Sampled:	DB-VMP1 3/3/2015	DB-VMP1 2/25/2016	DB-VMP2 3/3/2015	DB-VMP2 2/25/2016	DB-IA3 2/25/2016	DB-OA 3/4/2015	DB-OA 2/25/2016	DB-TB 2/25/2016
1,1,1-TCA	**1.3**	**1.7**	ND (0.53)	**1.1**	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)
1,2,4-TMB	**41**	**0.74 J**	**15**	ND (0.074)	**0.79 J**	**1.1**	ND (0.074)	ND (0.074)
1,3,5-TMB	**9.8**	ND (0.22)	**3.6 J**	ND (0.22)	ND (0.22)	ND (0.14)	ND (0.22)	ND (0.22)
2,2,4-TMP	**6.5**	**1.7**	**4.2**	ND (0.11)	**4.7**	ND (0.12)	ND (0.11)	ND (0.11)
TBA	**4.5**	**0.85**	**1.8 J**	ND (0.16)	**1.1**	ND (0.13)	ND (0.16)	ND (0.16)
Tetrachloroethene	**38**	**28**	**17**	**7.5**	**102**	ND (0.25)	**0.39**	ND (0.16)
Tetrahydrofuran	**98.5**	**0.32 J**	**5.0**	ND (0.13)	ND (0.13)	ND (0.14)	ND (0.13)	ND (0.13)
Toluene	**59.5**	**42.2**	**37**	**0.29 J**	**331**	**1.7**	**1.7**	ND (0.045)
Trichloroethene	**9.7**	**0.13 J**	**6.4**	**0.35**	ND (0.10)	ND (0.16)	ND (0.10)	ND (0.10)
TCFM	**1.6**	**2.4**	ND (0.67)	**1.7**	**3.5**	**1.4**	**2.2**	ND (0.12)
m,p-Xylene	**80.8**	**3.3**	**40**	ND (0.30)	**10**	**1.5**	**0.96**	ND (0.30)
o-Xylene	**32**	**1.0**	**14**	ND (0.22)	**3.0**	ND (0.15)	ND (0.22)	ND (0.22)
Xylenes (total)	**112**	**4.3**	**54**	ND (0.22)	**13**	**1.5**	**0.96**	ND (0.22)
Total VOCs	**2352**	**251**	**1030**	**38.3**	**960**	**49.4**	**51.1**	**2.59**
Total VOC TICs	**182 J**	**78.6 J**	**67 J**	**4.2 J**	**201 J**	**0**	**145.7 J**	**0**

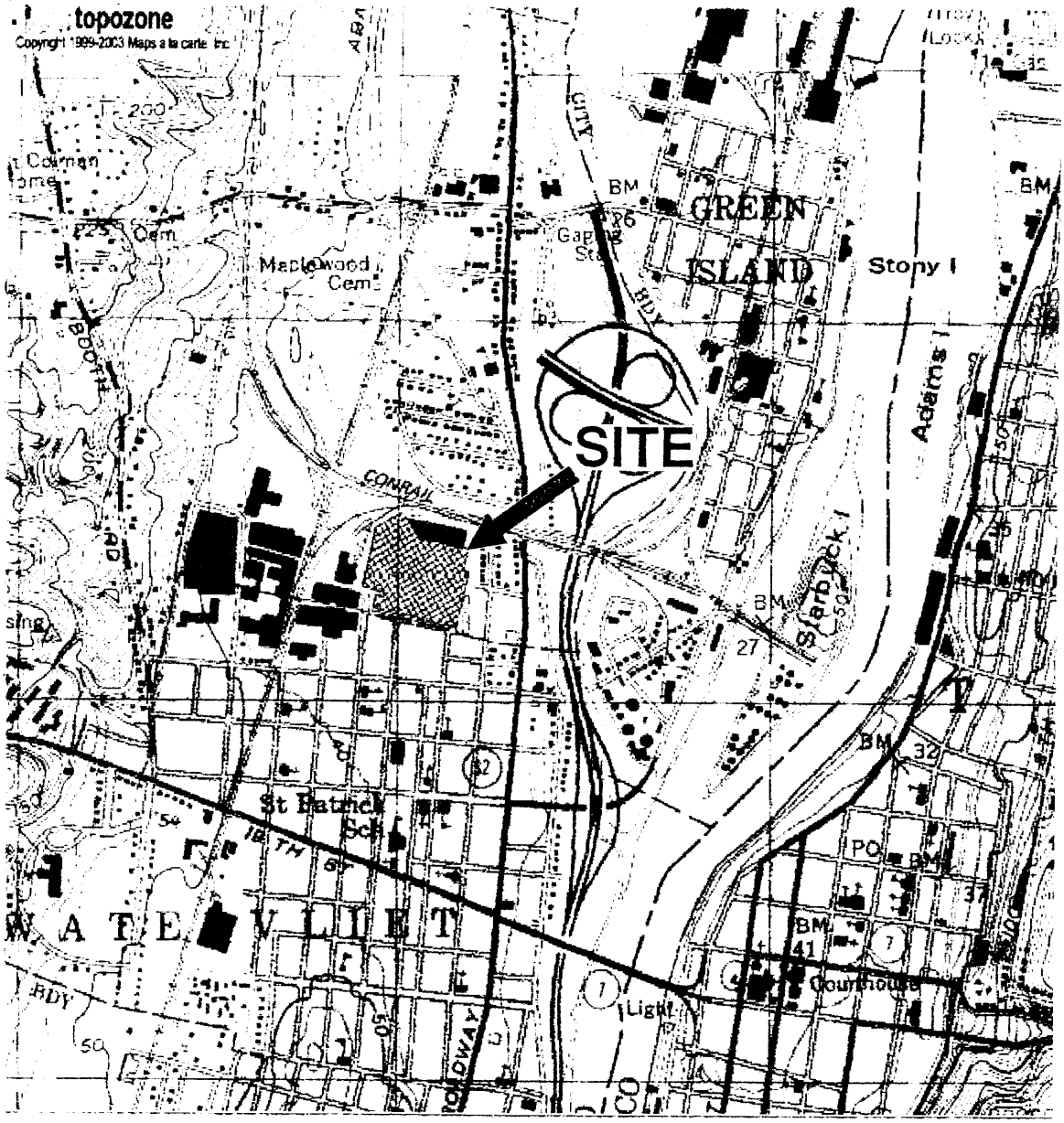
All results presented in micrograms per cubic meter ($\mu g/m^3$) except total volatile organic compound (VOC) tentatively identified compounds (TICs), which are presented in parts per billion by volume (ppbv).

DCDFM = dichlorodifluoromethane; DCE = dichloroethene; MIBK = methyl isobutyl ketone; TCA = trichloroethane; TMB = trimethylbenzene; TMP = trimethylpentane; TBA= tertiary butyl alcohol; TCFM = trichlorofluoromethane.

E = laboratory estimated concentration; J = estimated concentration, compound detected below the quantitation limit; ND = not detected (laboratory detection limit); detections in boldface. VMP = vapor monitoring point; IA = indoor air; OA = outdoor ambient air; TB = trip blank.

All samples were analyzed for VOCs via EPA Method TO-15 plus TICs. Only detected analytes are listed above. Complete lists of analytes are provided in the original laboratory reports.

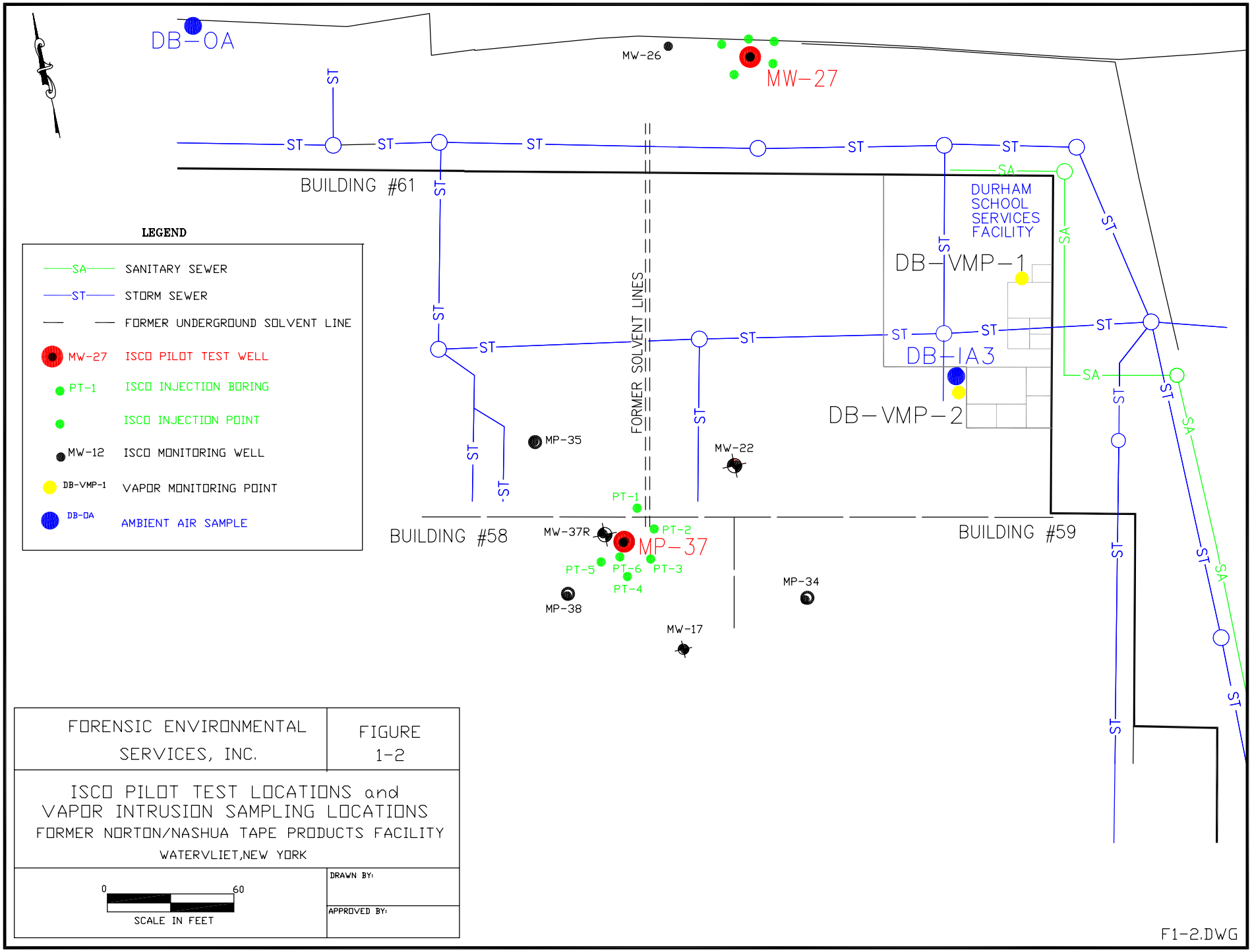
FIGURES

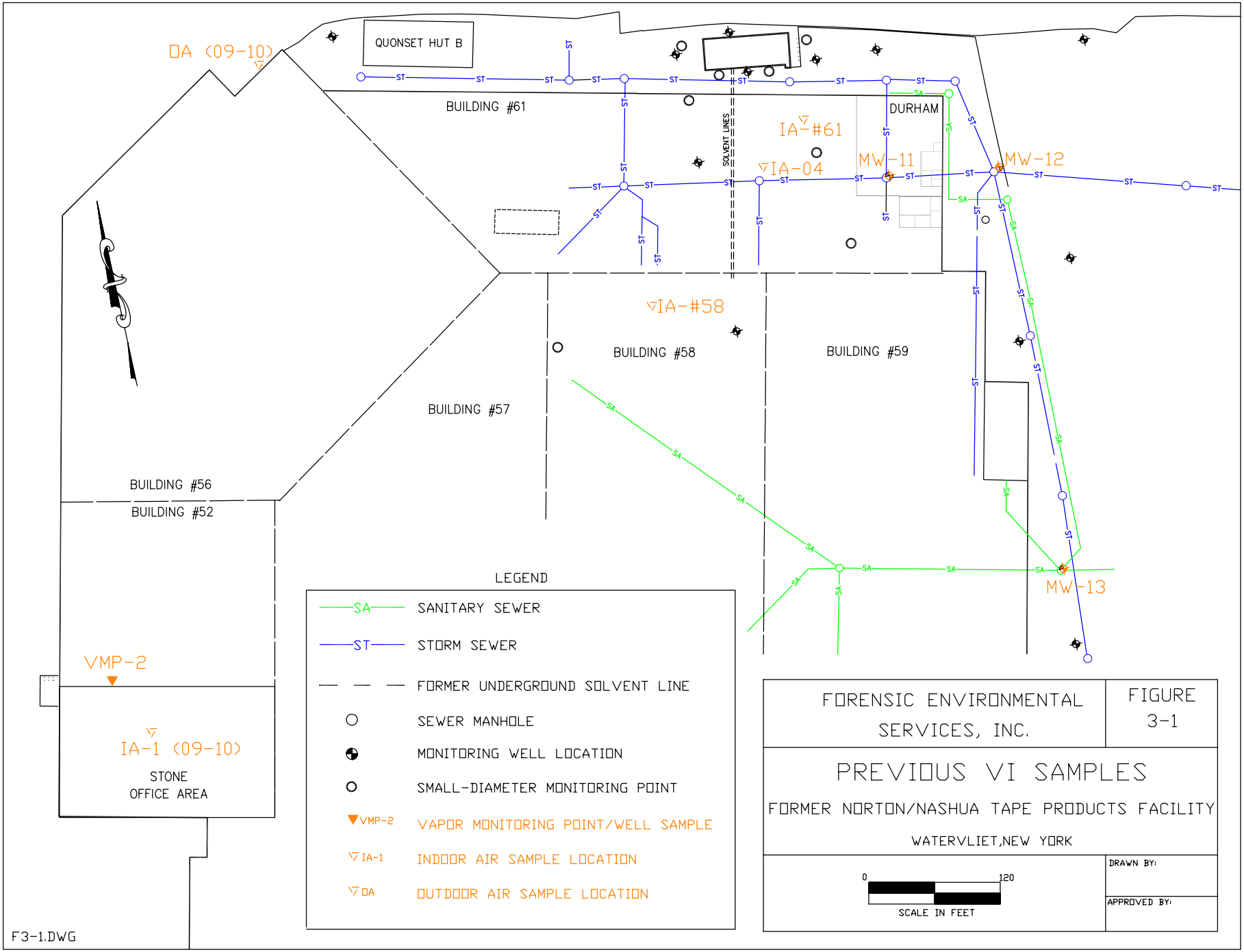


FORENSIC ENVIRONMENTAL SERVICES, INC.	FIGURE 1-1
SITE LOCATION MAP FORMER NORTON/NASHUA TAPE PRODUCTS FACILITY WATERVLIET, NEW YORK	
0 1540 SCALE IN FEET	DRAWN BY: APPROVED BY:

DERIVED FROM THE TROY SOUTH QUADRANGLE
COMPILED BY THE U.S. GEOLOGICAL SURVEY.

WV-TOPO.DWG


DB-0A
MW-26
MW-27
ST
SA
BUILDING #61
DURHAM SCHOOL SERVICES FACILITY
DB-VMP-1
DB-IA3
DB-VMP-2
FORMER SOLVENT LINES
MP-35
MW-22
PT-1
PT-2
MW-37R
MP-37
PT-5
PT-6
PT-3
PT-4
MP-38
MP-34
MW-17
BUILDING #58
BUILDING #59
LEGEND
SANITARY SEWER
STORM SEWER
FORMER UNDERGROUND SOLVENT LINE
MW-27 ISCO PILOT TEST WELL
PT-1 ISCO INJECTION BORING
ISCO INJECTION POINT
MW-12 ISCO MONITORING WELL
DB-VMP-1 VAPOR MONITORING POINT
DB-0A AMBIENT AIR SAMPLE
FORENSIC ENVIRONMENTAL SERVICES, INC.
FIGURE 1-2
ISCO PILOT TEST LOCATIONS and VAPOR INTRUSION SAMPLING LOCATIONS
FORMER NORTON/NASHUA TAPE PRODUCTS FACILITY
WATERVLIET,NEW YORK
0
60
SCALE IN FEET
DRAWN BY:
APPROVED BY:
F1-2.DWG


DA (09-10)
QUONSET HUT B
BUILDING #61
DURHAM
SOLVENT LINES
IA-#61
IA-04
MW-11
MW-12
IA-#58
BUILDING #58
BUILDING #59
BUILDING #57
BUILDING #56
BUILDING #52
MW-13
VMP-2
IA-1 (09-10)
STONE
OFFICE AREA
LEGEND
SA SANITARY SEWER
ST STORM SEWER
FORMER UNDERGROUND SOLVENT LINE
SEWER MANHOLE
MONITORING WELL LOCATION
SMALL-DIAMETER MONITORING POINT
VMP-2 VAPOR MONITORING POINT/WELL SAMPLE
IA-1 INDOOR AIR SAMPLE LOCATION
DA OUTDOOR AIR SAMPLE LOCATION
FORENSIC ENVIRONMENTAL SERVICES, INC.
FIGURE 3-1
PREVIOUS VI SAMPLES
FORMER NORTON/NASHUA TAPE PRODUCTS FACILITY
WATERVLIET,NEW YORK
0
120
SCALE IN FEET
DRAWN BY:
APPROVED BY:
F3-1.DWG

APPENDIX A

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING CHARACTERISTICS INVENTORY FORM, EQUIPMENT CALIBRATION DOCUMENTATION, and OTHER FIELD INFORMATION

6

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Bryan MacNeill Date/Time Prepared 2/25/2016

Preparer's Affiliation FES, on Behalf of Saint-Gobain Phone No. 610-594-3940

Purpose of Investigation Vapor Intrusion Sampling Investigation

1. OCCUPANT:

Interviewed: Y (N)

Last Name: Nelf First Name: Brian

Address: 2622 Seventh Ave.

County: Albany

Home Phone: NA Office Phone: 518-272-2136 x113

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant X)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial/Multi-use)
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response) NA

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? NA

If the property is commercial, type?

Business Type(s) Warehouse

Does it include residences (i.e., multi-use)? Y (N) If yes, how many? NA

Other characteristics:

Number of floors 1 Building age 55+

Is the building insulated? Y (N) How air tight? Tight / Average / (Not Tight)

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

~~Airflow between floors~~ Used air current Smoke tubes
At VMP-2 (outside DB offices) - to east

Airflow near source

Outdoor air infiltration
- overhead doors + regular doors - strong air flow into Building

Infiltration into air ducts

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	(stone) Cinder Block	brick
b. Basement type: NA	full	crawlspace	slab	other NA
c. Basement floor: NA	concrete	dirt	stone	other NA
d. Basement floor: NA	uncovered	covered	covered with ___	___
e. Concrete floor:	(unsealed)	sealed	sealed with ___	
f. Foundation walls: NA	poured	block	stone	other ___
g. Foundation walls: NA	unsealed	sealed	sealed with	___
h. The basement is: NA	wet	damp	dry	moldy
i. The basement is: NA	finished	unfinished	partially finished	
j. Sump present?	Y / (N)			
k. Water in sump?	Y / N / (not applicable)			

Basement/Lowest level depth below grade: 0 (feet) Main Floor

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

- No evidence of cracks in floor
- Storm sewer manholes & monitoring wells w/ caps/Lids

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other ___

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural Gas

Boiler/furnace located in:	Basement	Outdoors	(Main Floor)	Other ___
Air conditioning:	Central Air	Window units	Open Windows	(None)

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

5am-7pm M-F

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)
Basement	NA
1st Floor	Warehouse space
2nd Floor	NA
3rd Floor	NA
4th Floor	NA

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify - Propane-powered forklifts

d. Has the building ever had a fire? Y (N) When?

e. Is a kerosene or unvented gas space heater present? Y (N) Where?

f. Is there a workshop or hobby/craft area? Y (N) Where & Type?

g. Is there smoking in the building? Y (N) How frequently?

h. Have cleaning products been used recently? Y (N) When & Type?

i. Have cosmetic products been used recently? Y (N) When & Type?

j. Has painting/staining been done in the last 6 months? (Y) / N Where & When? Drywall painted in Fall 2015

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented? _____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? Y / (N)
If yes, please describe: _____

35m

Do any of the building occupants use solvents at work? (X) / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? ~~Y~~ (N) NA

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency) NA

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel NA

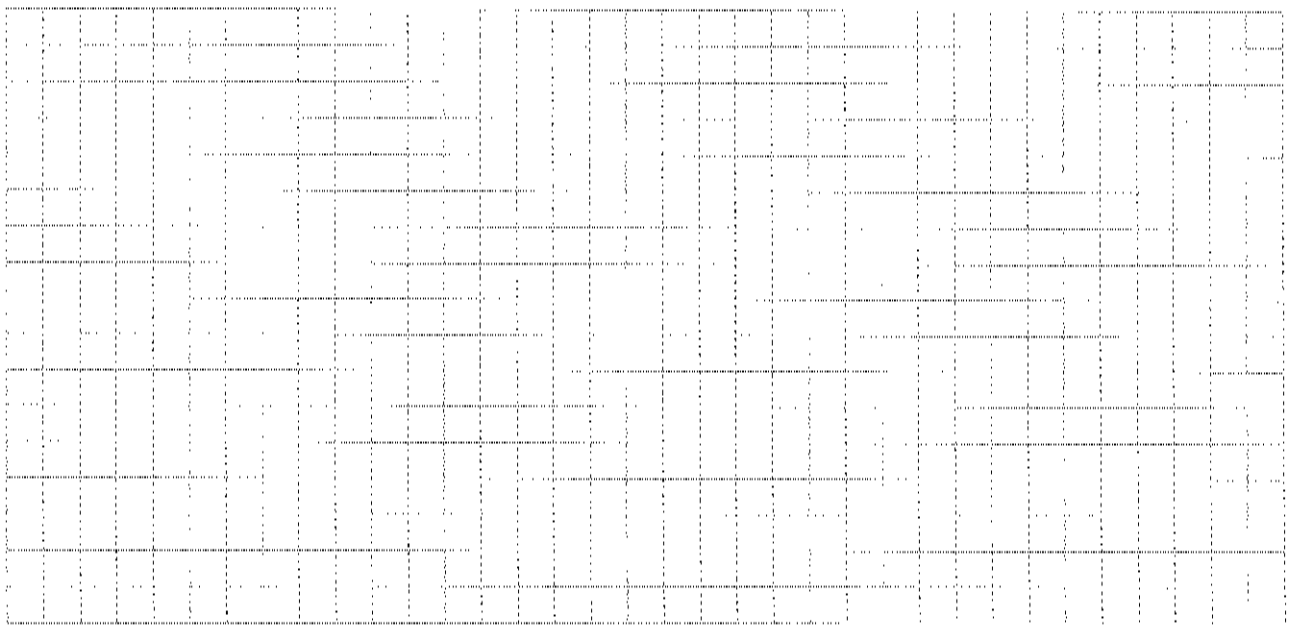
c. Responsibility for costs associated with reimbursement explained? Y / N NA

d. Relocation package provided and explained to residents? Y / N NA

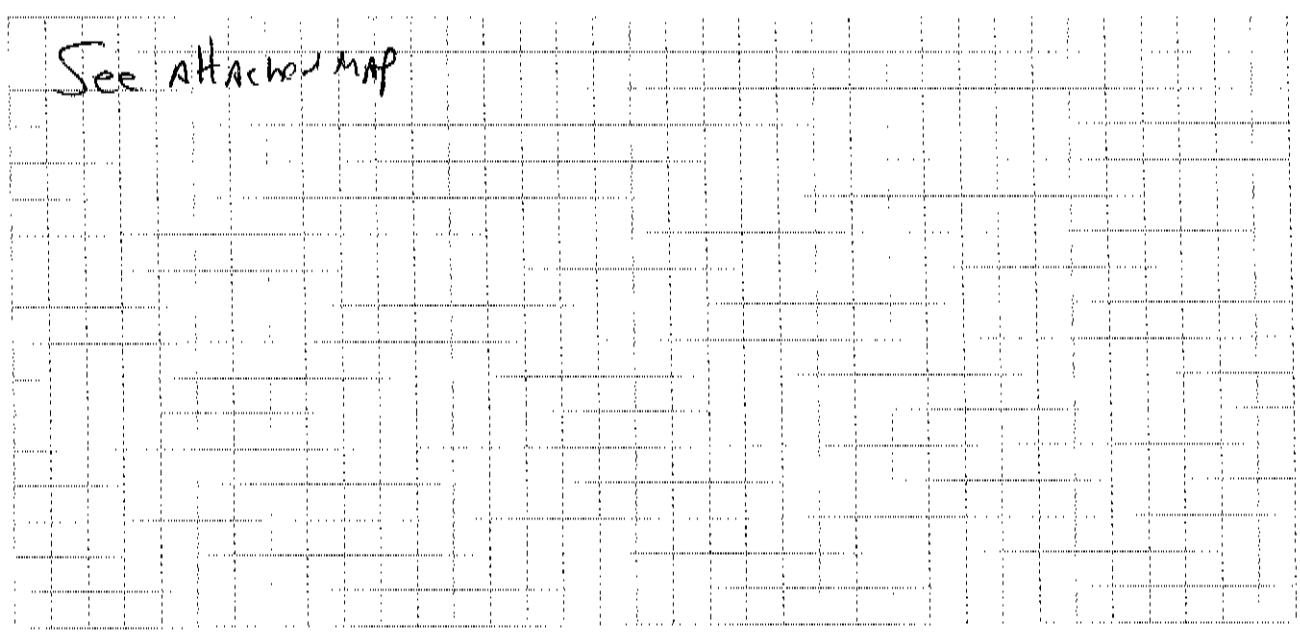
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



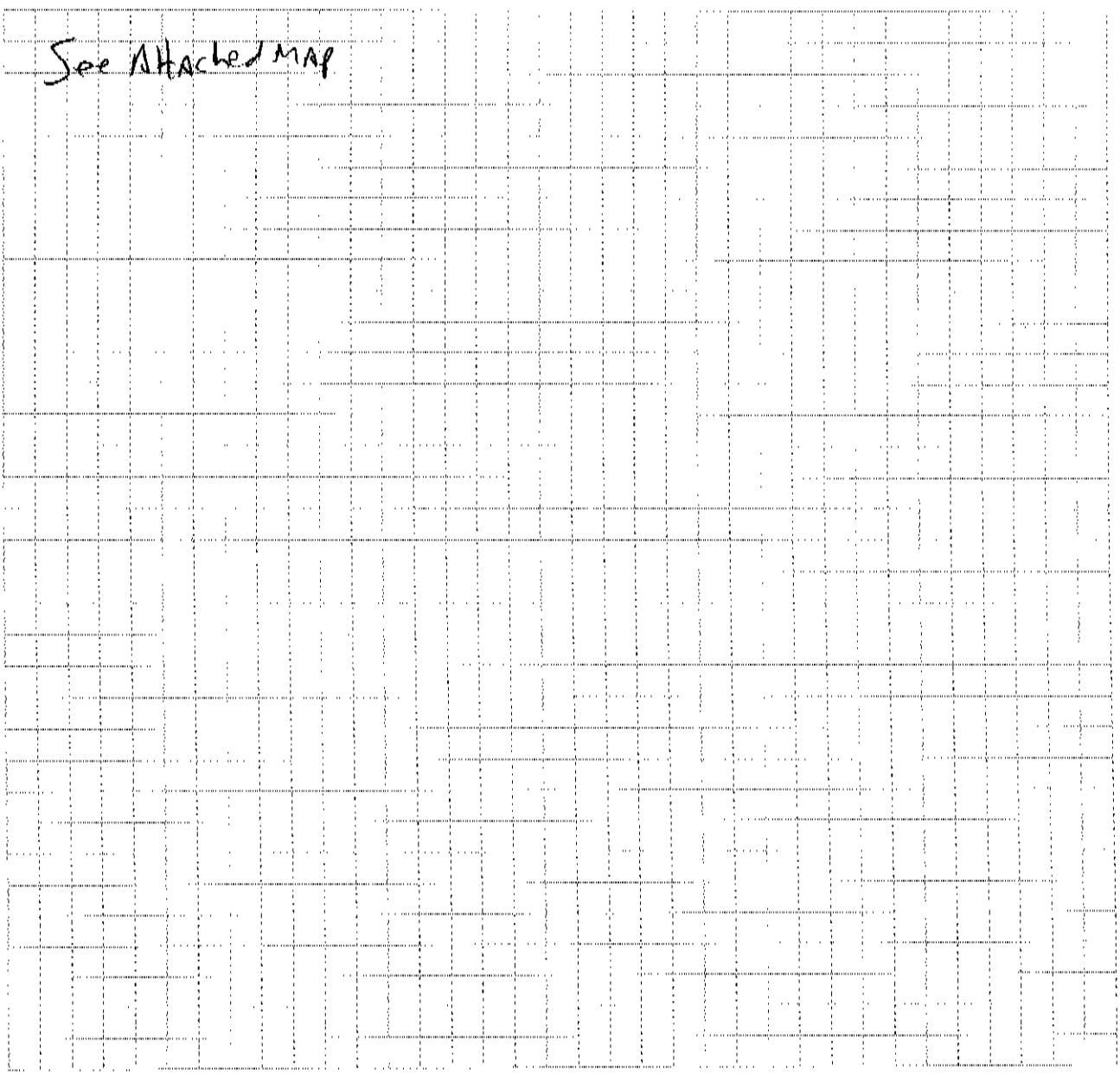
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



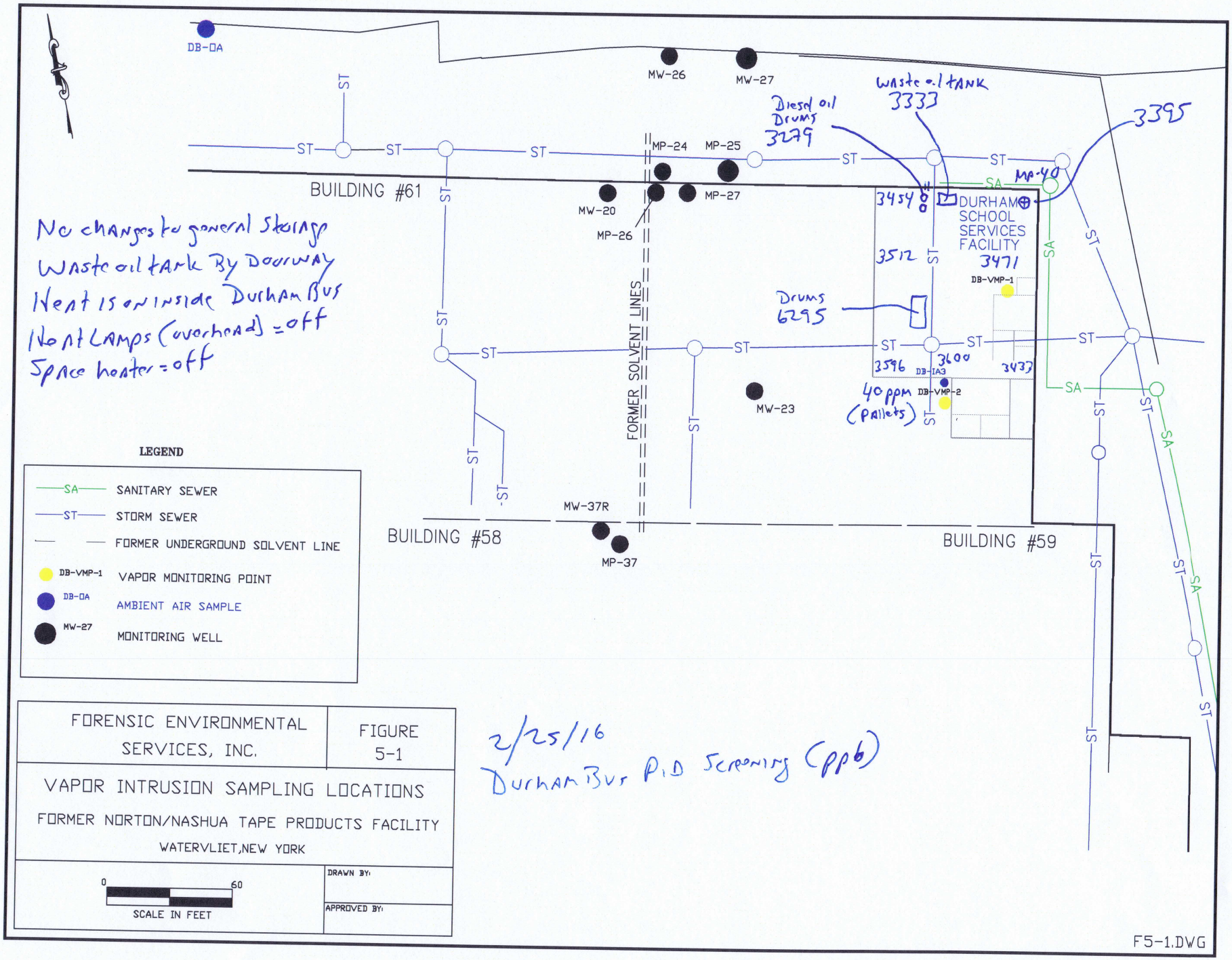
13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Bldg 61	GenFlex	Pallets	Sealed	EPDM for Synthetic Flooring (Goo		Y
"	AEROSIL 200	"	"	Silicon Dioxide (See MSDS)		Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.


DB-DA
MW-26
MW-27
Waste oil TANK
3333
Diesel oil
Drums
3279
3395
ST
SA
MP-24
MP-25
MP-27
MP-20
MP-26
MP-40
BUILDING #61
3454
DURHAM
SCHOOL
SERVICES
FACILITY
3471
3512
DB-VMP-1
Drums
6295
FORMER SOLVENT LINES
3596
3600
3437
DB-IA3
DB-VMP-2
40 ppm
(Pallets)
MW-23
MW-37R
MP-37
BUILDING #58
BUILDING #59
No changes to general Storage
Waste oil tank By Doorway
Heat is on inside Durham Bus
Heat Lamps (overhead) = off
Space heater = off
LEGEND
SANITARY SEWER
STORM SEWER
FORMER UNDERGROUND SOLVENT LINE
DB-VMP-1 VAPOR MONITORING POINT
DB-DA AMBIENT AIR SAMPLE
MW-27 MONITORING WELL
FORENSIC ENVIRONMENTAL SERVICES, INC.
FIGURE 5-1
VAPOR INTRUSION SAMPLING LOCATIONS
FORMER NORTON/NASHUA TAPE PRODUCTS FACILITY
WATERVLIET, NEW YORK
0
60
SCALE IN FEET
DRAWN BY:
APPROVED BY:
2/25/16
Durham Bus P.I.D Screening (ppb)
F5-1.DWG

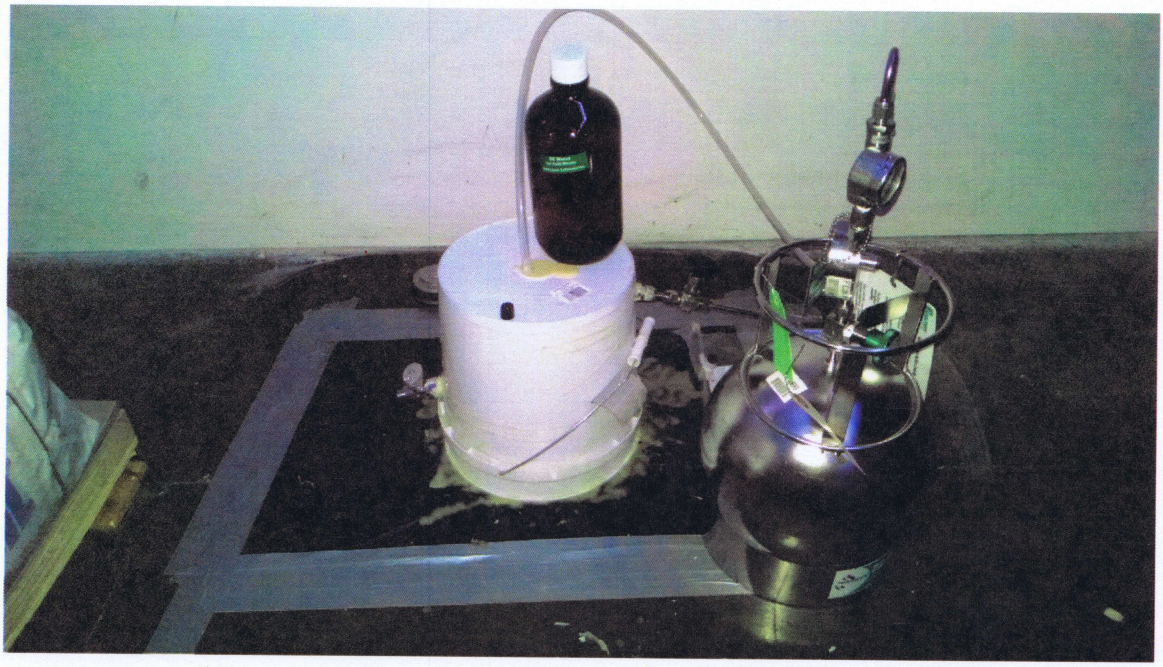


Figure 1: Sub-Slab sampling point (DB-VMP-2).

Figure 2: Indoor Air Sampling Location (Far Wall).

Figure 3: Building #61 Warehouse Product (Gezoflex).

Figure 4: Building #61 Warehouse Product (Aerosil 200).


Y/+
MODE
ON
N/-


ROM:
ILHOUETTE OPTICAL
TO:
STONE MANAGEMENT
2622 7TH AVE.
WATERVLIET, NY 12189
WSH001000210000
EIGHT PIECE COLL. TRAY
120 PCS.
03/16/16

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Former Norton / Nashua Tape Products Facility
Site Address: 2600 South Ave Waterviliet, NY
Field ID No: DR-VMP-1
Sampling Date(s): 2/25/16
Shipping Date: 2/29/16
Size of Canister: 6L
Canister Serial No: A252
Flow Controller No: FC524

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	63	52	54	42
Stop	65	42		

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.16	29.22	29.15
Stop	29.22		

CANISTER PRESSURE (inches of Hg) FROM GAUGE

		Time	VAC
Start	27.5	9:41	21.5
Stop	4	1:10	12.0

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	7:26	8 hours, 21 minutes
Stop	15:47	

Project Manager
Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab		required (from lab record log) after return
Receiving in Lab		(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)		required (from lab record log) after return
Final Pressure (from field)		required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

_____
Signature/Title
GC/MS Analyst for TO-15

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Former Norton/ Nashua
Site Address: 2600 7th Ave. Watervliet, NY
Field ID No: DB-VMP-2
Sampling Date(s): 2/25/16
Shipping Date: 2/29/16
Size of Canister: 6L
Canister Serial No: A1166
Flow Controller No: FC368

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	45	53	56	42
Stop	55	42		

PRESSURE (Inches of Hg)

	Ambient	Maximum	Minimum
Start	29.16	29.22	29.15
Stop	29.22		

CANISTER PRESSURE (inches of Hg) FROM GAUGE

Start	29	
Stop	6	

Time VAC
9:36 22.5
1:14 12.5

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	7:08	
Stop	15:28	8 hours, 20 minutes

[signature] / Project MANAGER
Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab		required (from lab record log) after return
Receiving in Lab		(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)		required (from lab record log) after return
Final Pressure (from field)		required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

_____
Signature/Title
GC/MS Analyst for TO-15

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Former Norton/NASHUA
Site Address: 2600 7th Ave, Watervliet, NY
Field ID No: Indoor Air
Sampling Date(s): 2/25/16
Shipping Date: 2/29/16
Size of Canister: 6L
Canister Serial No: A284
Flow Controller No: FC351

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	45	52	56	42
Stop	55	42		

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.16	29.22	29.15
Stop	29.22		

CANISTER PRESSURE (inches of Hg) FROM GAUGE

		Time	VAC
Start	29	9:36	22.5
Stop	6	1:14	12.5

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	7:09	8 hrs, 19 min
Stop	15:28	

Project MANAGER
Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab		required (from lab record log) after return
Receiving in Lab		(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)		required (from lab record log) after return
Final Pressure (from field)		required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

_____
Signature/Title
GC/MS Analyst for TO-15

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Former Nortel/NASHUA
Site Address: 2600 7th Ave
Field ID No: Outdoor Ambient
Sampling Date(s): 2/25/16
Shipping Date: 2/25/16

Size of Canister: 6L
Canister Serial No: A251
Flow Controller No: FC420

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	–	52	56	42
Stop	–	42		

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.16	29.22	29.15
Stop	29.22		

CANISTER PRESSURE (inches of Hg) FROM GAUGE

			Time	Vac.
Start	27.5		9:44	24
Stop	7		1:07	15

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	7:50	8 hrs, 12 min
Stop	16:02	

Project Manager
Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab		required (from lab record log) after return
Receiving in Lab		(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)		required (from lab record log) after return
Final Pressure (from field)		required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

_____
Signature/Title
GC/MS Analyst for TO-15

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Former Norton/ NASHUA
Site Address: 2600 7th Ave. Watervliet, NY
Field ID No: Trip BLANK
Sampling Date(s): —
Shipping Date: 2/29/16
Size of Canister: 6L
Canister Serial No: ~~NA~~ A263
Flow Controller No: NA

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	45	53	56	42
Stop	55	42		

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.16	29.22	29.15
Stop	29.22		

CANISTER PRESSURE (inches of Hg) FROM GAUGE

Start	NA
Stop	NA

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	NA	
Stop	NA	

Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab		required (from lab record log) after return
Receiving in Lab		(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)		required (from lab record log) after return
Final Pressure (from field)		required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

_____
Signature/Title
GC/MS Analyst for TO-15

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

Air Sampling Field Data Sheet

FED-EX Tracking #: | Bottle Order Control #:

Lab Quote #: | Lab Job #:

PAGE 1 OF 1

Client / Reporting Information

Company Name: Forensic Environmental Services

Address: 113 John Robert Thomas Drive

City: Exton State: PA Zip: 19341

Project Contact: Bob Zei E-mail: Forensic@chesco.com

Phone #: 610-594-3940 Fax #: 610-594-3943

Sampler(s) Name(s): Bryan Machella

Project Name: Former Norton/Nashua Tape

Street: 2600 Seventh Ave.

City: Watervliet State: NY

Project #: 029.08

Client Purchase Order #:

Weather Parameters

Temperature (Fahrenheit)

Start: 52 Maximum: 56

Stop: 42 Minimum: 42

Atmospheric Pressure (Inches of Hg)

Start: 29.16 Maximum: 29.22

Stop: 29.22 Minimum: 29.15

Other weather comment: Heavy Rain

Requested Analysis

Standard TO-15 Reporting List + TICs

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor(I) Soil Vap(SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Standard TO-15 Reporting List + TICs		
	DB-VMP-1	SV	A252	6	FC524	4/25/16	7:28	27.5	63	BM	4/25/16	15:49	4	65	BM	X		
	DB-VMP-2	SV	A1166	6	FC368	4/25/16	7:08	29	46	BM	4/25/16	15:28	6	55	BM	X		
	Indoor Air	I	A284	6	FC351	4/25/16	7:09	29	46	BM	4/25/16	15:28	6	55	BM	X		
	Outdoor Ambient	A	A251	6	FC420	4/25/16	7:50	27.5	52	BM	4/25/16	16:02	7	42	BM	X		
	Trip Blank	-	A263	6	-	-	-	-	-	-	-	-	-	-	-	X		

Turnaround Time (Business days)

Standard - 15 Days	X
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

Comm A	
Comm B	
Reduced T2	
Full T1	
Other:	X Full Category B Rept. NYSDEC

Comments / Remarks

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

Relinquished by Laboratory: 1	Date Time: 2/24/16 8:20	Received By: 1	Relinquished By: 2	Date Time: 2/29/16	Received By: 2
Relinquished by: 3	Date Time: 2/29/16 12:00	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #		

Summa Canister and Flow Controller Log

Bottle Order #: KP-2/15/2016-123

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
A1166	6	29.4	02/17/16	RC	CP8232	5W16063.D							
A251	6	29.4	02/17/16	RC	CP8235	5W16087.D							
A252	6	29.4	02/17/16	RC	CP8229	5W16060.D							
A263	6	29.4	02/17/16	RC	CP8234	5W16081.D							
A284	6	29.4	02/17/16	RC	CP8245	W53498.D							

FLOW CONTROLLERS / OTHER

Shipping					Receiving			
Flow Crtl ID	Date Out	By	cc/ min	Time hrs.	Date In	By	cc/ min	Equipment Type
FC351	02/17/16	RC	9.4	8				Flow Controller
FC368	02/17/16	RC	9.4	8				Flow Controller
FC420	02/17/16	RC	9.4	8				Flow Controller
FC524	02/17/16	RC	9.4	8				Flow Controller

Prep Date	Room Temp(F)	Bar Pres "Hg
02/17/16	70	29.92

CMR 2/17/2016

√RAM 2/17

INSTRUMENT CALIBRATION REPORT

Advanced Labs, Inc.

Pine Environmental Services, Inc

Instrument ID 12582
Description Bios Defender 510-L
Calibrated 8/19/2015

Manufacturer Bios
Model Number 510-L
Serial Number 114144
Location New Jersey
Temp 77

Classification
Status pass
Frequency Yearly
Department Lab
Humidity 35

Calibration Specifications

Group # 1
Group Name Calibration
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 1.0000
Plus/Minus 0.0000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
30.000 / 30.529	ccm	30.5290	ccm	30.4090	30.4090	-0.39%	Pass
100.000 / 100.020	ccm	100.0200	ccm	99.6660	99.6660	-0.35%	Pass
500.000 / 498.630	ccm	498.6300	ccm	495.1500	495.1500	-0.70%	Pass

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Serial Number	(As Of Cal Entry Date) Last Cal Date	Next Cal Date
FLUKE 114	Fluke 114 NIST Traceable Multimeter	Fluke	15310288	4/25/2015	4/25/2016
ML-500-10	Met Lab ML-500-10	Bios International	119826	3/19/2015	3/19/2016
ML-500-24	Met Lab ML-500-24	Bios International	116617	3/19/2015	3/19/2016
ML-500-44	Met Lab ML-500-44	Bios International	120274	3/19/2015	3/19/2016
ML-500-B	Met Lab ML-500-B	Bios International	120696	3/19/2015	3/19/2016

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Kevin Cole

Advanced Labs, Inc. hereby certifies that this instrument is calibrated and functions to meet the manufacture's specifications using NIST traceable standards, or is derived from accepted values of physical constants.

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
10611 Harwin Drive, Suite 416
Houston, TX 77036
Toll-free: 866-981-PINE

Pine Environmental Services, Inc.

Instrument ID 15582
Description Radiodetection MGD-2002 Multi-Gas Leak Locator
Calibrated 2/16/2016 5:52:58PM

Manufacturer Radiodetection
Model Number MGD-2002
Serial Number/ Lot Number 041398
Location Texas
Department

State Certified
Status Pass
Temp °C 22
Humidity % 48

Calibration Specifications

Group # 1
Group Name Helium 99% to Zero
Test Performed: Yes **As Found Result: Pass** **As Left Result: Pass**

Group # 2
Group Name Hydrogen
Stated Accy
Range Acc % 0.0000
Reading Acc % 0.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
2.00 / 2.00	%Volume	2.00		0.00	0.00	-100.00%	Pass

Test Instruments Used During the Calibration

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	(As Of Cal Entry Date) Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
TX HELIUM 99.999 KAO-HELIUM-5	TX HELIUM 99.999 KAO-HELIUM-5	Gasco	KAO-HELIUM-5	KAO-HELIUM-5		10/9/2018
TX HYDROGEN 99.999 CAO-83-9	TX HYDROGEN 99.999 CAO-83-9	Gasco	TX HYDROGEN 99.999	CAO-83-9		2/27/2018

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Edgar Hernandez

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID R4602
Description ppb Rae
Calibrated 2/19/2016 8:46:56AM

Manufacturer Rae Systems
Model Number PGM-7240
Serial Number/ Lot Number 250-100460
Location New Jersey
Department

State Certified
Status Pass
Temp °C 16.7
Humidity % 24

Calibration Specifications

Group # 1
Group Name Isobutylene
Stated Accy Pct of Range
Range Acc % 0.0000
Reading Acc % 0.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
10.00 / 10.00	PPM	10.00	PPM	10.00	10.00	0.00%	Pass

Test Instruments Used During the Calibration

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	(As Of Cal Entry Date) Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
NJ ISO 10 - LTL273-RR-CM	NJ ISO 10 LTL273-RR-CM	Airgas	GP11006	LTL273-RR-CM		11/1/2016

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Silas Saye

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

APPENDIX B

PRE-SAMPLING
INFORMATIONAL HANDOUT

Representatives of _____ will be collecting one or more indoor air samples from your building in the near future. Your assistance is requested during the sampling program in order to collect an indoor air sample that is both representative of indoor conditions and avoids the common background indoor air sources associated with occupant activities and consumer products.

Please follow the instructions below starting at least 48 hours prior to and during the indoor air sampling event:

- ☑ Operate your furnace and whole house air conditioner as appropriate for the current weather conditions
- ☑ Do not use wood stoves, fireplaces or auxiliary heating equipment
- ☑ Do not open windows or keep doors open.
- ☑ Avoid using window air conditioners, fans or vents
- ☑ Do not smoke in the building
- ☑ Do not use air fresheners or odor eliminators
- ☑ Do not use paints or varnishes (up to a week in advance, if possible)
- ☑ Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, all-purpose cleaners, floor cleaners)
- ☑ Do not use cosmetics, including hair spray, nail polish remover, perfume, etc.
- ☑ Avoid bringing freshly dry cleaned clothes into the building
- ☑ Do not engage in hobbies indoors that use solvents
- ☑ Do not apply pesticides
- ☑ Do not store containers of gasoline, oil or petroleum based or other solvents within the building or attached garages (except for fuel oil tanks)
- ☑ Do not operate or store automobiles in an attached garage
- ☑ Do not operate gasoline powered equipment within the building, attached garage or around the immediate perimeter of the building

You will be asked a series of questions about the structure, consumer products you store in your building, and occupant activities typically occurring in the building. These questions are designed to identify "background" sources of indoor air contamination. While this investigation is looking for a select number of chemicals related to the subsurface contamination, the laboratory will be analyzing the indoor air samples for a wide variety of chemicals. As a result, chemicals such as tetrachloroethene that is commonly used in dry cleaning or acetone found in nail polish remover might be detected in your sample results.

Typical air sampling canister

Your cooperation is greatly appreciated.

If you have any questions about these instructions, please feel free to contact

_____ at _____.

APPENDIX C

TRACER GAS MONITORING PROTOCOL
(Appendix C of 2008 CMS Workplan)

APPENDIX C

Tracer Gas Monitoring Protocol

Tracer gas monitoring will be performed per the 2006 NYSDOH guidance document immediately before and immediately after collection of environmental samples from the sub-slab VMP to confirm the integrity of the VMP (and associated fittings). Pre-sampling tracer gas monitoring will be performed as follows:

- Remove the VMP plug and connect the open end of approximately two to three feet of dedicated ¼-inch ID Teflon tubing to the VMP compression fitting (or nipple). Use the VMP plug to seal the open end of the tubing.

- Insert the plugged end of the Teflon tubing through the opening on the top of the tracer gas flux chamber. Seal the tubing penetration with beeswax.

- Place a piece of plastic sheeting measuring approximately 2 feet by 2 feet over the VMP and seal the sheeting to the slab/floor with duct tape. Puncture the plastic sheeting to expose the VMP compression fitting (or nipple). Seal the flux chamber to the surface with beeswax.

- Open the inlet valve and outlet valve on the flux chamber and connect a short length of Teflon tubing to each.

- Connect the helium source to the inlet valve tubing and open the valve on the helium source allowing helium to enter the flux chamber. Any excess vapor pressure will be relieved via the outlet valve (see above).

- Activate the helium detector and connect it to the outlet valve tubing. Continue to introduce helium into the flux chamber until helium is detected at the outlet valve. Close the helium source valve and flux chamber inlet valve.

- Record the % helium in the flux chamber. Close the outlet valve.

- Unplug the sample tubing and connect to a low-flow peristaltic pump. Collect a one-liter (L) Tedlar bag sample at a flow rate of less than 0.2 liters per minute (lpm).

- After the Tedlar bag is filled, deactivate the pump, and seal the Tedlar bag.

- Connect the sample tubing to a 6L Summa canister positioned adjacent to the flux chamber in preparation for later sampling.

- Screen the Tedlar bag sample for helium by connecting it to the helium detector.

- If no helium is detected in the Tedlar bag sample (or if the ratio of the helium in the Tedlar bag versus the flux chamber is less than 1:5), seal the Tedlar bag sample and set it aside for later volatile organic compound (VOC) screening with a photoionization detector (PID). Proceed with VMP sampling.

- If pre-sampling tracer gas monitoring indicates a 20% leak by volume or greater, check the integrity of the VMP and all fittings, correct if possible, and return to the first step of pre-sampling tracer gas monitoring. If the integrity of the fitting cannot be corrected in the field (i.e., the VMP needs to be resealed or is defective), terminate VMP sampling (and any concurrent indoor air sampling) until the problem is corrected.

Post-sampling tracer gas monitoring will be performed as follows:

- Terminate VMP sampling by recording the post-sample vacuum, closing the Summa canister sample valve, and disconnecting and plugging the sampling tubing.

- Screen the flux chamber by connecting the helium detector to the outlet valve tubing and opening the outlet valve. If helium is not detected, recharge the flux chamber until helium is detected at the outlet valve. Close the helium source valve and flux chamber inlet and outlet valves.

- Unplug the VMP sample tubing and connect to a low-flow peristaltic pump. Collect a 1-L Tedlar bag sample at a flow rate of less than 0.2 lpm.

- After the Tedlar bag is filled, deactivate the pump, and seal the VMP and Tedlar bag.

- Screen the Tedlar bag sample for helium by connecting it to the helium detector.

- If no helium is detected in the Tedlar bag sample (or if the ratio of the helium in the Tedlar bag versus the flux chamber is less than 1:5), tracer gas monitoring is complete. Seal the Tedlar bag sample and set it aside for later VOC screening.

- Remove the sample tubing and plug the VMP. Restore the floor to its previous condition to the extent practicable. Submit the Summa canister for laboratory analysis.

- If post-sampling tracer gas monitoring indicates a 20% leak by volume or greater, set aside the Summa canister (and any concurrent ambient indoor air samples) for optional lab submittal. Check the integrity of the VMP and all fittings, correct if possible, and begin collection of a replacement VMP sample starting with pre-sample tracer gas monitoring (or schedule a follow-up sampling date). If the integrity of the fittings cannot be corrected in the field (i.e., the VMP needs to be resealed or is defective), postpone additional sampling until the problem is corrected, and restore the sampling area as described above.

APPENDIX D

LABORATORY REPORT

e-Hardcopy 2.0
Automated Report

Technical Report for

Forensic Environmental Services

Former Norton, 2600 Seventh Avenue, Watervliet, NY

029.08

SGS Accutest Job Number: JC15063

Sampling Date: 02/25/16

Report to:

Forensic Environmental Services
113 John Robert Thomas Drive
Exton, PA 19341
forensic@chesco.com

ATTN: Bob Zei

Total number of pages in report: **606**

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

Nancy Cole
Laboratory Director

Client Service contact: Kelly Patterson 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

Sections: 1 2 3 4 5 6 7

Table of Contents

Sample Summary

Forensic Environmental Services

Job No: JC15063

Former Norton, 2600 Seventh Avenue, Watervliet, NY
Project No: 029.08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC15063-1	02/25/16	15:49	BM	02/29/16	AIR	Soil Vapor Comp.	DB-VMP-1
JC15063-2	02/25/16	15:28	BM	02/29/16	AIR	Soil Vapor Comp.	DB-VMP-2
JC15063-3	02/25/16	15:28	BM	02/29/16	AIR	Indoor Air Comp.	INDOOR AIR
JC15063-4	02/25/16	16:02	BM	02/29/16	AIR	Ambient Air Comp.	OUTDOOR AMBIENT
JC15063-5	02/25/16	16:02	BM	02/29/16	AIR	Trip Blank Air	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Forensic Environmental Services	**Job No**	JC15063
Site:	Former Norton, 2600 Seventh Avenue, Watervliet, NY	**Report Date**	4/6/2016 2:41:38 PM

On 02/29/2016, 4 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories. An Accutest Job Number of JC15063 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:** VW2161

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC15063-2DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Tetrachloroethylene, Trichloroethylene are outside control limits for sample JC15063-2DUP.

Matrix: AIR **Batch ID:** VW2162

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC15508-2DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Ethyl Acetate are outside control limits for sample JC15508-2DUP.

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

Summary of Hits

Job Number: JC15063
Account: Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY
Collected: 02/25/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC15063-1	**DB-VMP-1**					
Acetone		19.0	0.20	0.036	ppbv	TO-15
Benzene		0.17 J	0.20	0.031	ppbv	TO-15
Carbon disulfide		0.27	0.20	0.031	ppbv	TO-15
Chloromethane		0.22	0.20	0.052	ppbv	TO-15
Dichlorodifluoromethane		0.54	0.20	0.019	ppbv	TO-15
Ethanol		13.8	0.50	0.075	ppbv	TO-15
Ethylbenzene		0.21	0.20	0.042	ppbv	TO-15
Ethyl Acetate		1.1	0.20	0.075	ppbv	TO-15
Heptane		24.9	0.20	0.020	ppbv	TO-15
Hexane		0.71	0.20	0.023	ppbv	TO-15
Isopropyl Alcohol		0.73	0.20	0.16	ppbv	TO-15
Methylene chloride		0.49	0.20	0.025	ppbv	TO-15
Methyl ethyl ketone		0.56	0.20	0.048	ppbv	TO-15
1,1,1-Trichloroethane		0.32	0.20	0.024	ppbv	TO-15
1,2,4-Trimethylbenzene		0.15 J	0.20	0.015	ppbv	TO-15
2,2,4-Trimethylpentane		0.36	0.20	0.023	ppbv	TO-15
Tertiary Butyl Alcohol		0.28	0.20	0.053	ppbv	TO-15
Tetrachloroethylene		4.1	0.040	0.023	ppbv	TO-15
Tetrahydrofuran		0.11 J	0.20	0.045	ppbv	TO-15
Toluene		11.2	0.20	0.012	ppbv	TO-15
Trichloroethylene		0.025 J	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane		0.42	0.20	0.022	ppbv	TO-15
m,p-Xylene		0.77	0.20	0.068	ppbv	TO-15
o-Xylene		0.24	0.20	0.051	ppbv	TO-15
Xylenes (total)		1.0	0.20	0.051	ppbv	TO-15
Acetone		45.1	0.48	0.086	ug/m3	TO-15
Benzene		0.54 J	0.64	0.099	ug/m3	TO-15
Carbon disulfide		0.84	0.62	0.097	ug/m3	TO-15
Chloromethane		0.45	0.41	0.11	ug/m3	TO-15
Dichlorodifluoromethane		2.7	0.99	0.094	ug/m3	TO-15
Ethanol		26.0	0.94	0.14	ug/m3	TO-15
Ethylbenzene		0.91	0.87	0.18	ug/m3	TO-15
Ethyl Acetate		4.0	0.72	0.27	ug/m3	TO-15
Heptane		102	0.82	0.082	ug/m3	TO-15
Hexane		2.5	0.70	0.081	ug/m3	TO-15
Isopropyl Alcohol		1.8	0.49	0.39	ug/m3	TO-15
Methylene chloride		1.7	0.69	0.087	ug/m3	TO-15
Methyl ethyl ketone		1.7	0.59	0.14	ug/m3	TO-15
1,1,1-Trichloroethane		1.7	1.1	0.13	ug/m3	TO-15
1,2,4-Trimethylbenzene		0.74 J	0.98	0.074	ug/m3	TO-15
2,2,4-Trimethylpentane		1.7	0.93	0.11	ug/m3	TO-15
Tertiary Butyl Alcohol		0.85	0.61	0.16	ug/m3	TO-15
Tetrachloroethylene		28	0.27	0.16	ug/m3	TO-15

Summary of Hits

Job Number: JC15063
Account: Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY
Collected: 02/25/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Tetrahydrofuran		0.32 J	0.59	0.13	ug/m3	TO-15
Toluene		42.2	0.75	0.045	ug/m3	TO-15
Trichloroethylene		0.13 J	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		2.4	1.1	0.12	ug/m3	TO-15
m,p-Xylene		3.3	0.87	0.30	ug/m3	TO-15
o-Xylene		1.0	0.87	0.22	ug/m3	TO-15
Xylenes (total)		4.3	0.87	0.22	ug/m3	TO-15
Total TIC, Volatile		78.6 J			ppbv	
JC15063-2	**DB-VMP-2**					
Acetone		1.2	0.20	0.036	ppbv	TO-15
Cyclohexane		0.13 J	0.20	0.016	ppbv	TO-15
Dichlorodifluoromethane		0.52	0.20	0.019	ppbv	TO-15
Ethanol		9.6	0.50	0.075	ppbv	TO-15
Ethyl Acetate		0.64	0.20	0.075	ppbv	TO-15
Heptane		0.11 J	0.20	0.020	ppbv	TO-15
Hexane		0.096 J	0.20	0.023	ppbv	TO-15
Methyl ethyl ketone		0.11 J	0.20	0.048	ppbv	TO-15
1,1,1-Trichloroethane		0.21	0.20	0.024	ppbv	TO-15
Tetrachloroethylene		1.1	0.040	0.023	ppbv	TO-15
Toluene		0.077 J	0.20	0.012	ppbv	TO-15
Trichloroethylene		0.066	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane		0.30	0.20	0.022	ppbv	TO-15
Acetone		2.9	0.48	0.086	ug/m3	TO-15
Cyclohexane		0.45 J	0.69	0.055	ug/m3	TO-15
Dichlorodifluoromethane		2.6	0.99	0.094	ug/m3	TO-15
Ethanol		18	0.94	0.14	ug/m3	TO-15
Ethyl Acetate		2.3	0.72	0.27	ug/m3	TO-15
Heptane		0.45 J	0.82	0.082	ug/m3	TO-15
Hexane		0.34 J	0.70	0.081	ug/m3	TO-15
Methyl ethyl ketone		0.32 J	0.59	0.14	ug/m3	TO-15
1,1,1-Trichloroethane		1.1	1.1	0.13	ug/m3	TO-15
Tetrachloroethylene		7.5	0.27	0.16	ug/m3	TO-15
Toluene		0.29 J	0.75	0.045	ug/m3	TO-15
Trichloroethylene		0.35	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		1.7	1.1	0.12	ug/m3	TO-15
Total TIC, Volatile		4.2 J			ppbv	
JC15063-3	**INDOOR AIR**					
Acetone		28.5	0.20	0.036	ppbv	TO-15
Benzene		0.54	0.20	0.031	ppbv	TO-15
Chloromethane		0.80	0.20	0.052	ppbv	TO-15
Dichlorodifluoromethane		0.58	0.20	0.019	ppbv	TO-15

Summary of Hits

Job Number: JC15063
Account: Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY
Collected: 02/25/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Ethanol		29.1	0.50	0.075	ppbv	TO-15
Ethylbenzene		0.64	0.20	0.042	ppbv	TO-15
Ethyl Acetate		1.5	0.20	0.075	ppbv	TO-15
Heptane		79.1	0.80	0.081	ppbv	TO-15
Hexane		3.0	0.20	0.023	ppbv	TO-15
Isopropyl Alcohol		2.2	0.20	0.16	ppbv	TO-15
Methylene chloride		3.3	0.20	0.025	ppbv	TO-15
Methyl ethyl ketone		0.83	0.20	0.048	ppbv	TO-15
1,2,4-Trimethylbenzene		0.16 J	0.20	0.015	ppbv	TO-15
2,2,4-Trimethylpentane		1.0	0.20	0.023	ppbv	TO-15
Tertiary Butyl Alcohol		0.36	0.20	0.053	ppbv	TO-15
Tetrachloroethylene		15.1	0.040	0.023	ppbv	TO-15
Toluene		87.9	0.80	0.050	ppbv	TO-15
Trichlorofluoromethane		0.62	0.20	0.022	ppbv	TO-15
m,p-Xylene		2.4	0.20	0.068	ppbv	TO-15
o-Xylene		0.69	0.20	0.051	ppbv	TO-15
Xylenes (total)		3.1	0.20	0.051	ppbv	TO-15
Acetone		67.7	0.48	0.086	ug/m3	TO-15
Benzene		1.7	0.64	0.099	ug/m3	TO-15
Chloromethane		1.7	0.41	0.11	ug/m3	TO-15
Dichlorodifluoromethane		2.9	0.99	0.094	ug/m3	TO-15
Ethanol		54.8	0.94	0.14	ug/m3	TO-15
Ethylbenzene		2.8	0.87	0.18	ug/m3	TO-15
Ethyl Acetate		5.4	0.72	0.27	ug/m3	TO-15
Heptane		324	3.3	0.33	ug/m3	TO-15
Hexane		11	0.70	0.081	ug/m3	TO-15
Isopropyl Alcohol		5.4	0.49	0.39	ug/m3	TO-15
Methylene chloride		11	0.69	0.087	ug/m3	TO-15
Methyl ethyl ketone		2.4	0.59	0.14	ug/m3	TO-15
1,2,4-Trimethylbenzene		0.79 J	0.98	0.074	ug/m3	TO-15
2,2,4-Trimethylpentane		4.7	0.93	0.11	ug/m3	TO-15
Tertiary Butyl Alcohol		1.1	0.61	0.16	ug/m3	TO-15
Tetrachloroethylene		102	0.27	0.16	ug/m3	TO-15
Toluene		331	3.0	0.19	ug/m3	TO-15
Trichlorofluoromethane		3.5	1.1	0.12	ug/m3	TO-15
m,p-Xylene		10	0.87	0.30	ug/m3	TO-15
o-Xylene		3.0	0.87	0.22	ug/m3	TO-15
Xylenes (total)		13	0.87	0.22	ug/m3	TO-15
Total TIC, Volatile		201 J			ppbv	
JC15063-4	**OUTDOOR AMBIENT**					
Acetone		3.9	0.20	0.036	ppbv	TO-15
Benzene		1.0	0.20	0.031	ppbv	TO-15
Chloromethane		0.75	0.20	0.052	ppbv	TO-15

Summary of Hits

Job Number: JC15063
Account: Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY
Collected: 02/25/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Dichlorodifluoromethane		0.62	0.20	0.019	ppbv	TO-15
Ethanol		7.0	0.50	0.075	ppbv	TO-15
Ethyl Acetate		0.45	0.20	0.075	ppbv	TO-15
Heptane		0.24	0.20	0.020	ppbv	TO-15
Hexane		0.94	0.20	0.023	ppbv	TO-15
Isopropyl Alcohol		0.46	0.20	0.16	ppbv	TO-15
Methylene chloride		1.7	0.20	0.025	ppbv	TO-15
Methyl ethyl ketone		0.65	0.20	0.048	ppbv	TO-15
Tetrachloroethylene		0.057	0.040	0.023	ppbv	TO-15
Toluene		0.46	0.20	0.012	ppbv	TO-15
Trichlorofluoromethane		0.40	0.20	0.022	ppbv	TO-15
m,p-Xylene		0.22	0.20	0.068	ppbv	TO-15
Xylenes (total)		0.22	0.20	0.051	ppbv	TO-15
Acetone		9.3	0.48	0.086	ug/m3	TO-15
Benzene		3.2	0.64	0.099	ug/m3	TO-15
Chloromethane		1.5	0.41	0.11	ug/m3	TO-15
Dichlorodifluoromethane		3.1	0.99	0.094	ug/m3	TO-15
Ethanol		13	0.94	0.14	ug/m3	TO-15
Ethyl Acetate		1.6	0.72	0.27	ug/m3	TO-15
Heptane		0.98	0.82	0.082	ug/m3	TO-15
Hexane		3.3	0.70	0.081	ug/m3	TO-15
Isopropyl Alcohol		1.1	0.49	0.39	ug/m3	TO-15
Methylene chloride		5.9	0.69	0.087	ug/m3	TO-15
Methyl ethyl ketone		1.9	0.59	0.14	ug/m3	TO-15
Tetrachloroethylene		0.39	0.27	0.16	ug/m3	TO-15
Toluene		1.7	0.75	0.045	ug/m3	TO-15
Trichlorofluoromethane		2.2	1.1	0.12	ug/m3	TO-15
m,p-Xylene		0.96	0.87	0.30	ug/m3	TO-15
Xylenes (total)		0.96	0.87	0.22	ug/m3	TO-15
Total TIC, Volatile		145.7 J			ppbv	
JC15063-5	**TRIP BLANK**					
Acetone		0.31	0.20	0.036	ppbv	TO-15
Ethanol		0.55	0.50	0.075	ppbv	TO-15
Hexane		0.24	0.20	0.023	ppbv	TO-15
Acetone		0.74	0.48	0.086	ug/m3	TO-15
Ethanol		1.0	0.94	0.14	ug/m3	TO-15
Hexane		0.85	0.70	0.081	ug/m3	TO-15

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID: DB-VMP-1
Lab Sample ID: JC15063-1 **Date Sampled:** 02/25/16
Matrix: AIR - Soil Vapor Comp. Summa ID: A252 **Date Received:** 02/29/16
Method: TO-15 **Percent Solids:** n/a
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W54117.D	1	03/12/16	YMH	n/a	n/a	VW2162
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	19.0	0.20	0.036	ppbv		45.1	0.48	0.086	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.028	ppbv		ND	0.44	0.062	ug/m3
71-43-2	78.11	Benzene	0.17	0.20	0.031	ppbv	J	0.54	0.64	0.099	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	0.26	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	0.17	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	0.070	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	0.079	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	0.14	ug/m3
75-15-0	76.14	Carbon disulfide	0.27	0.20	0.031	ppbv		0.84	0.62	0.097	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	0.26	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	0.095	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	0.083	ug/m3
74-87-3	50.49	Chloromethane	0.22	0.20	0.052	ppbv		0.45	0.41	0.11	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	0.085	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	0.088	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	0.20	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	0.055	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	0.061	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	0.32	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	0.073	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	0.10	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.54	0.20	0.019	ppbv		2.7	0.99	0.094	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	0.45	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	0.068	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	0.12	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	0.096	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	0.16	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	0.082	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: DB-VMP-1
Lab Sample ID: JC15063-1
Matrix: AIR - Soil Vapor Comp. Summa ID: A252
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	13.8	0.50	0.075	ppbv		26.0	0.94	0.14	ug/m3
100-41-4	106.2	Ethylbenzene	0.21	0.20	0.042	ppbv		0.91	0.87	0.18	ug/m3
141-78-6	88	Ethyl Acetate	1.1	0.20	0.075	ppbv		4.0	0.72	0.27	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	0.084	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.021	ppbv		ND	1.5	0.16	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	0.22	ug/m3
142-82-5	100.2	Heptane	24.9	0.20	0.020	ppbv		102	0.82	0.082	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	0.21	ug/m3
110-54-3	86.17	Hexane	0.71	0.20	0.023	ppbv		2.5	0.70	0.081	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.73	0.20	0.16	ppbv		1.8	0.49	0.39	ug/m3
75-09-2	84.94	Methylene chloride	0.49	0.20	0.025	ppbv		1.7	0.69	0.087	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.56	0.20	0.048	ppbv		1.7	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.055	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	0.072	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	0.16	ug/m3
115-07-1	42	Propylene	ND	0.50	0.032	ppbv		ND	0.86	0.055	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.015	ppbv		ND	0.85	0.064	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.32	0.20	0.024	ppbv		1.7	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	0.11	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	0.21	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	0.42	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.15	0.20	0.015	ppbv	J	0.74	0.98	0.074	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.36	0.20	0.023	ppbv		1.7	0.93	0.11	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.28	0.20	0.053	ppbv		0.85	0.61	0.16	ug/m3
127-18-4	165.8	Tetrachloroethylene	4.1	0.040	0.023	ppbv		28	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.11	0.20	0.045	ppbv	J	0.32	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	11.2	0.20	0.012	ppbv		42.2	0.75	0.045	ug/m3
79-01-6	131.4	Trichloroethylene	0.025	0.040	0.019	ppbv	J	0.13	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.42	0.20	0.022	ppbv		2.4	1.1	0.12	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	0.054	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	0.77	0.20	0.068	ppbv		3.3	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	0.24	0.20	0.051	ppbv		1.0	0.87	0.22	ug/m3
1330-20-7	106.2	Xylenes (total)	1.0	0.20	0.051	ppbv		4.3	0.87	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78%		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

Report of Analysis

Client Sample ID:	DB-VMP-1		
Lab Sample ID:	JC15063-1	**Date Sampled:**	02/25/16
Matrix:	AIR - Soil Vapor Comp. Summa ID: A252	**Date Received:**	02/29/16
Method:	TO-15	**Percent Solids:**	n/a
Project:	Former Norton, 2600 Seventh Avenue, Watervliet, NY		

VOA TO15 List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Alkane	5.41	2.3	ppbv	J
	Alkane	5.67	4.9	ppbv	J
1066-40-6	Silanol, trimethyl-	8.22	2.3	ppbv	JN
	Alkane	9.96	1.5	ppbv	J
562-49-2	alkane - Pentane, 3,3-dimethyl-	10.68	1.9	ppbv	JN
591-76-4	alkane - Hexane, 2-methyl-	10.95	15	ppbv	JN
565-59-3	alkane - Pentane, 2,3-dimethyl-	11.04	7.9	ppbv	JN
589-34-4	alkane - Hexane, 3-methyl-	11.19	25	ppbv	JN
617-78-7	alkane - Pentane, 3-ethyl-	11.47	7.8	ppbv	JN
108-87-2	Cyclohexane, methyl-	12.49	4.9	ppbv	JN
592-13-2	alkane - Hexane, 2,5-dimethyl-	12.64	1.6	ppbv	JN
589-43-5	alkane - Hexane, 2,4-dimethyl-	12.71	2.2	ppbv	JN
	Alkane	12.93	1.3	ppbv	J
	System artifact	14.66	3.9	ppbv	J
	System artifact	18.01	2	ppbv	J
	Total TIC, Volatile		78.6	ppbv	J

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

SGS Accutest

Report of Analysis

Client Sample ID: DB-VMP-2
Lab Sample ID: JC15063-2 **Date Sampled:** 02/25/16
Matrix: AIR - Soil Vapor Comp. Summa ID: A1166 **Date Received:** 02/29/16
Method: TO-15 **Percent Solids:** n/a
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W54092.D	1	03/11/16	YMH	n/a	n/a	VW2161
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	1.2	0.20	0.036	ppbv		2.9	0.48	0.086	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.028	ppbv		ND	0.44	0.062	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.031	ppbv		ND	0.64	0.099	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	0.26	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	0.17	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	0.070	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	0.079	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	0.14	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	0.097	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	0.26	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	0.095	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	0.083	ug/m3
74-87-3	50.49	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	0.11	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	0.085	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	0.088	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	0.20	ug/m3
110-82-7	84.16	Cyclohexane	0.13	0.20	0.016	ppbv	J	0.45	0.69	0.055	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	0.061	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	0.32	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	0.073	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	0.10	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.52	0.20	0.019	ppbv		2.6	0.99	0.094	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	0.45	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	0.068	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	0.12	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	0.096	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	0.16	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	0.082	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: DB-VMP-2
Lab Sample ID: JC15063-2
Matrix: AIR - Soil Vapor Comp. Summa ID: A1166
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	9.6	0.50	0.075	ppbv		18	0.94	0.14	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	0.18	ug/m3
141-78-6	88	Ethyl Acetate	0.64	0.20	0.075	ppbv		2.3	0.72	0.27	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	0.084	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.021	ppbv		ND	1.5	0.16	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	0.22	ug/m3
142-82-5	100.2	Heptane	0.11	0.20	0.020	ppbv	J	0.45	0.82	0.082	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	0.21	ug/m3
110-54-3	86.17	Hexane	0.096	0.20	0.023	ppbv	J	0.34	0.70	0.081	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	0.39	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.025	ppbv		ND	0.69	0.087	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.11	0.20	0.048	ppbv	J	0.32	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.055	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	0.072	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	0.16	ug/m3
115-07-1	42	Propylene	ND	0.50	0.032	ppbv		ND	0.86	0.055	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.015	ppbv		ND	0.85	0.064	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.21	0.20	0.024	ppbv		1.1	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	0.11	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	0.21	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	0.42	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	0.074	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	0.11	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	0.16	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.1	0.040	0.023	ppbv		7.5	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.077	0.20	0.012	ppbv	J	0.29	0.75	0.045	ug/m3
79-01-6	131.4	Trichloroethylene	0.066	0.040	0.019	ppbv		0.35	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.30	0.20	0.022	ppbv		1.7	1.1	0.12	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	0.054	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	0.22	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	74%		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

Report of Analysis

Client Sample ID:	DB-VMP-2		
Lab Sample ID:	JC15063-2	**Date Sampled:**	02/25/16
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1166	**Date Received:**	02/29/16
Method:	TO-15	**Percent Solids:**	n/a
Project:	Former Norton, 2600 Seventh Avenue, Watervliet, NY		

VOA TO15 List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Alkane	5.41	1.5	ppbv	J
	Alkane	5.66	2.7	ppbv	J
	System artifact	14.66	7.5	ppbv	J
	System artifact	18.01	4.4	ppbv	J
	Total TIC, Volatile		4.2	ppbv	J

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

SGS Accutest

Report of Analysis

Client Sample ID: INDOOR AIR
Lab Sample ID: JC15063-3
Matrix: AIR - Indoor Air Comp. Summa ID: A284
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W54094.D	1	03/11/16	YMH	n/a	n/a	VW2161
Run #2	W54118.D	1	03/12/16	YMH	n/a	n/a	VW2162

	Initial Volume
Run #1	400 ml
Run #2	100 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	28.5	0.20	0.036	ppbv		67.7	0.48	0.086	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.028	ppbv		ND	0.44	0.062	ug/m3
71-43-2	78.11	Benzene	0.54	0.20	0.031	ppbv		1.7	0.64	0.099	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	0.26	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	0.17	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	0.070	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	0.079	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	0.14	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	0.097	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	0.26	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	0.095	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	0.083	ug/m3
74-87-3	50.49	Chloromethane	0.80	0.20	0.052	ppbv		1.7	0.41	0.11	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	0.085	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	0.088	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	0.20	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	0.055	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	0.061	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	0.32	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	0.073	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	0.10	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.58	0.20	0.019	ppbv		2.9	0.99	0.094	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	0.45	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	0.068	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	0.12	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	0.096	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	0.16	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	0.082	ug/m3

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

Report of Analysis

Client Sample ID: INDOOR AIR
Lab Sample ID: JC15063-3
Matrix: AIR - Indoor Air Comp. Summa ID: A284
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	29.1	0.50	0.075	ppbv		54.8	0.94	0.14	ug/m3
100-41-4	106.2	Ethylbenzene	0.64	0.20	0.042	ppbv		2.8	0.87	0.18	ug/m3
141-78-6	88	Ethyl Acetate	1.5	0.20	0.075	ppbv		5.4	0.72	0.27	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	0.084	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.021	ppbv		ND	1.5	0.16	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	0.22	ug/m3
142-82-5	100.2	Heptane	79.1 [a]	0.80	0.081	ppbv		324 [a]	3.3	0.33	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	0.21	ug/m3
110-54-3	86.17	Hexane	3.0	0.20	0.023	ppbv		11	0.70	0.081	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	2.2	0.20	0.16	ppbv		5.4	0.49	0.39	ug/m3
75-09-2	84.94	Methylene chloride	3.3	0.20	0.025	ppbv		11	0.69	0.087	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.83	0.20	0.048	ppbv		2.4	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.055	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	0.072	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	0.16	ug/m3
115-07-1	42	Propylene	ND	0.50	0.032	ppbv		ND	0.86	0.055	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.015	ppbv		ND	0.85	0.064	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	0.11	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	0.21	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	0.42	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.16	0.20	0.015	ppbv	J	0.79	0.98	0.074	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	1.0	0.20	0.023	ppbv		4.7	0.93	0.11	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.36	0.20	0.053	ppbv		1.1	0.61	0.16	ug/m3
127-18-4	165.8	Tetrachloroethylene	15.1	0.040	0.023	ppbv		102	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	87.9 [a]	0.80	0.050	ppbv		331 [a]	3.0	0.19	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.62	0.20	0.022	ppbv		3.5	1.1	0.12	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	0.054	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	2.4	0.20	0.068	ppbv		10	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	0.69	0.20	0.051	ppbv		3.0	0.87	0.22	ug/m3
1330-20-7	106.2	Xylenes (total)	3.1	0.20	0.051	ppbv		13	0.87	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%	81%	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

Report of Analysis

Client Sample ID:	INDOOR AIR		
Lab Sample ID:	JC15063-3	**Date Sampled:**	02/25/16
Matrix:	AIR - Indoor Air Comp. Summa ID: A284	**Date Received:**	02/29/16
Method:	TO-15	**Percent Solids:**	n/a
Project:	Former Norton, 2600 Seventh Avenue, Watervliet, NY		

VOA TO15 List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Alkane	5.68	2.5	ppbv	J
590-35-2	Alkane - Pentane, 2,2-dimethyl-	9.82	2.7	ppbv	JN
	Alkane	9.96	5.5	ppbv	J
562-49-2	Alkane - Pentane, 3,3-dimethyl-	10.68	7.9	ppbv	JN
591-76-4	Alkane - Hexane, 2-methyl-	10.95	33	ppbv	JN
565-59-3	Alkane - Pentane, 2,3-dimethyl-	11.04	28	ppbv	JN
589-34-4	Alkane - Hexane, 3-methyl-	11.19	50	ppbv	JN
617-78-7	Alkane - Pentane, 3-ethyl-	11.47	25	ppbv	JN
	Alkane	12.40	2.8	ppbv	J
108-87-2	Cyclohexane, methyl-	12.50	10	ppbv	JN
592-13-2	Alkane - Hexane, 2,5-dimethyl-	12.64	7.7	ppbv	JN
589-43-5	Alkane - Hexane, 2,4-dimethyl-	12.71	15	ppbv	JN
	alkene	12.94	6.4	ppbv	J
592-27-8	Alkane - Heptane, 2-methyl-	13.48	2.6	ppbv	JN
	Unknown	13.53	1.9	ppbv	J
	Total TIC, Volatile		201	ppbv	J

(a) Result is from Run# 2

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

SGS Accutest

Report of Analysis

Client Sample ID: OUTDOOR AMBIENT
Lab Sample ID: JC15063-4
Matrix: AIR - Ambient Air Comp. Summa ID: A251
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W54095.D	1	03/11/16	YMH	n/a	n/a	VW2161
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	3.9	0.20	0.036	ppbv		9.3	0.48	0.086	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.028	ppbv		ND	0.44	0.062	ug/m3
71-43-2	78.11	Benzene	1.0	0.20	0.031	ppbv		3.2	0.64	0.099	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	0.26	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	0.17	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	0.070	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	0.079	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	0.14	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	0.097	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	0.26	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	0.095	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	0.083	ug/m3
74-87-3	50.49	Chloromethane	0.75	0.20	0.052	ppbv		1.5	0.41	0.11	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	0.085	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	0.088	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	0.20	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	0.055	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	0.061	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	0.32	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	0.073	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	0.10	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.62	0.20	0.019	ppbv		3.1	0.99	0.094	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	0.45	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	0.068	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	0.12	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	0.096	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	0.16	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	0.082	ug/m3

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

Report of Analysis

Client Sample ID: OUTDOOR AMBIENT
Lab Sample ID: JC15063-4
Matrix: AIR - Ambient Air Comp. Summa ID: A251
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	7.0	0.50	0.075	ppbv		13	0.94	0.14	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	0.18	ug/m3
141-78-6	88	Ethyl Acetate	0.45	0.20	0.075	ppbv		1.6	0.72	0.27	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	0.084	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.021	ppbv		ND	1.5	0.16	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	0.22	ug/m3
142-82-5	100.2	Heptane	0.24	0.20	0.020	ppbv		0.98	0.82	0.082	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	0.21	ug/m3
110-54-3	86.17	Hexane	0.94	0.20	0.023	ppbv		3.3	0.70	0.081	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.46	0.20	0.16	ppbv		1.1	0.49	0.39	ug/m3
75-09-2	84.94	Methylene chloride	1.7	0.20	0.025	ppbv		5.9	0.69	0.087	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.65	0.20	0.048	ppbv		1.9	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.055	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	0.072	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	0.16	ug/m3
115-07-1	42	Propylene	ND	0.50	0.032	ppbv		ND	0.86	0.055	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.015	ppbv		ND	0.85	0.064	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	0.11	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	0.21	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	0.42	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	0.074	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	0.11	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	0.16	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.057	0.040	0.023	ppbv		0.39	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.46	0.20	0.012	ppbv		1.7	0.75	0.045	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.40	0.20	0.022	ppbv		2.2	1.1	0.12	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	0.054	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	0.22	0.20	0.068	ppbv		0.96	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	0.22	ug/m3
1330-20-7	106.2	Xylenes (total)	0.22	0.20	0.051	ppbv		0.96	0.87	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	77%		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

Report of Analysis

Client Sample ID:	OUTDOOR AMBIENT		
Lab Sample ID:	JC15063-4	**Date Sampled:**	02/25/16
Matrix:	AIR - Ambient Air Comp. Summa ID: A251	**Date Received:**	02/29/16
Method:	TO-15	**Percent Solids:**	n/a
Project:	Former Norton, 2600 Seventh Avenue, Watervliet, NY		

VOA TO15 List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.86	140	ppbv	J
	Unknown	5.10	1.5	ppbv	J
	Alkane	8.42	1.4	ppbv	J
96-37-7	Cyclopentane, methyl-	9.96	1.3	ppbv	JN
	System artifact	14.66	1.3	ppbv	J
80-56-8	.alpha.-Pinene	17.31	1.5	ppbv	JN
	Total TIC, Volatile		145.7	ppbv	J

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

SGS Accutest

Report of Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: JC15063-5
Matrix: AIR - Trip Blank Air Summa ID: A263
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W54096.D	1	03/11/16	YMH	n/a	n/a	VW2161
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	0.31	0.20	0.036	ppbv		0.74	0.48	0.086	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.028	ppbv		ND	0.44	0.062	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.031	ppbv		ND	0.64	0.099	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	0.26	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	0.17	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	0.070	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	0.079	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	0.14	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	0.097	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	0.26	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	0.095	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	0.083	ug/m3
74-87-3	50.49	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	0.11	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	0.085	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	0.088	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	0.20	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	0.055	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	0.061	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	0.32	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	0.073	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	0.10	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	0.094	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	0.45	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	0.068	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	0.12	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	0.096	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	0.16	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	0.082	ug/m3

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

Report of Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: JC15063-5
Matrix: AIR - Trip Blank Air Summa ID: A263
Method: TO-15
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Date Sampled: 02/25/16
Date Received: 02/29/16
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	0.55	0.50	0.075	ppbv		1.0	0.94	0.14	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	0.18	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	0.27	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	0.084	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.021	ppbv		ND	1.5	0.16	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	0.22	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.020	ppbv		ND	0.82	0.082	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	0.21	ug/m3
110-54-3	86.17	Hexane	0.24	0.20	0.023	ppbv		0.85	0.70	0.081	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	0.39	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.025	ppbv		ND	0.69	0.087	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	0.048	ppbv		ND	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.055	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	0.072	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	0.16	ug/m3
115-07-1	42	Propylene	ND	0.50	0.032	ppbv		ND	0.86	0.055	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.015	ppbv		ND	0.85	0.064	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	0.11	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	0.21	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	0.42	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	0.074	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	0.11	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	0.16	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	ND	0.20	0.012	ppbv		ND	0.75	0.045	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	0.12	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	0.054	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	0.22	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	76%		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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JC15063-5	**Date Sampled:**	02/25/16
Matrix:	AIR - Trip Blank Air Summa ID: A263	**Date Received:**	02/29/16
Method:	TO-15	**Percent Solids:**	n/a
Project:	Former Norton, 2600 Seventh Avenue, Watervliet, NY		

VOA TO15 List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ppbv	

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
- 2016 MDL Study - Method: TO-15

CERT AIR

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Air Sampling Field Data Sheet

FED-EX Tracking #	Bottle Order Control #	PAGE 1 OF 1
Lab Quote #	Lab Job # JC15063	

Client / Reporting Information

Company Name: Forensic Environmental Services	Project Name: Former Norton/Nashua Tape
Address: 113 John Robert Thomas Drive	Street: 2600 Seventh Ave.
City: Exton State: PA Zip: 19341	City: Watervliet State: NY
Project Contact: Bob Bei E-mail: forensic@echesco.com	Project #: 029.08
Phone #: 610-594-3940 Fax #: 610-594-3943	Client Purchase Order #:
Sampler(s) Name(s): Bryan Machella	

Weather Parameters

Temperature (Fahrenheit): Start: 52 Maximum: 56; Stop: 42 Minimum: 42

Atmospheric Pressure (inches of Hg): Start: 29.16 Maximum: 29.22; Stop: 29.22 Minimum: 29.15

Other weather comment: Heavy Rain

Requested Analysis

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor(I) Soil Vap(SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Standard TO-15 Reporting List + TICS		
1	DB-VMP-1	SV	A252	6	FC524	2/25/16	7:28	27.5	63	BM	2/25/16	15:49	4	65	BM	X		
2	DB-VMP-2	SV	A1166	6	FC368	2/25/16	7:08	29	46	BM	2/25/16	15:28	6	55	BM	X		
3	Indoor Air	I	A284	6	FC351	2/25/16	7:09	29	46	BM	2/25/16	15:28	6	55	BM	X		
4	Outdoor Ambient	A	A251	6	FC420	2/25/16	7:50	27.5	52	BM	2/25/16	16:02	7	42	BM	X		
5	Trip Blank	-	A263	6	-	-	-	-	-	-	-	-	-	-	-	X		

Turnaround Time (Business days)

Standard - 15 Days	X
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

Comm A ☐ Comm B ☐ Reduced T2 ☐ Full T1 ☐ Other: X Full Category B Rept. NYSDEC

Comments / Remarks

INITIAL ASESSMENT NL 4B

LABEL VERIFICATION OB

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

Relinquished by Laboratory: 1	Date Time: 2/26/16 8:20	Received By: 1	Relinquished By: 2	Date Time: 2/29/16	Received By: 2
Relinquished by: 3	Date Time: 2/29/16 1750	Received By: 3	Relinquished By: 4	Date Time: 2-29-16 1625	Received By:
Relinquished by: 5	Date Time: 2-29-16 1805	Received By: 5	Custody Seal #		

5.1 5

JC15063: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC15063 **Client:** _____ **Project:** _____

Date / Time Received: 2/29/2016 6:05:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☐		☐
2. Cooler temp verification:	N/A		
3. Cooler media:	N/A		
4. No. Coolers:	N/A		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

JC15063: Chain of Custody
Page 2 of 2

Summa Canister and Flow Controller Log

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY
Received: 02/29/16

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
A252	6	29.4	02/17/16	RC	CP8229	5W16060.D	JC15063-1	03/01/16	RD	1			1
A1166	6	29.4	02/17/16	RC	CP8232	5W16063.D	JC15063-2	03/01/16	RD	5			1
A284	6	29.4	02/17/16	RC	CP8245	W53498.D	JC15063-3	03/01/16	RD	4			1
A251	6	29.4	02/17/16	RC	CP8235	5W16087.D	JC15063-4	03/01/16	RD	5.5			1
A263	6	29.4	02/17/16	RC	CP8234	5W16081.D	JC15063-5	03/01/16	RD	29.4		1	1

FLOW CONTROLLERS / OTHER

Shipping					Receiving			
Flow Crtl ID	Date Out	By	cc/ min	Time hrs.	Date In	By	cc/ min	Equipment Type
FC351	02/17/16	RC	9.4	8	03/02/16	RC	9.5	Flow Controller
FC368	02/17/16	RC	9.4	8	03/02/16	RC	9.4	Flow Controller
FC420	02/17/16	RC	9.4	8	03/02/16	RC	9.6	Flow Controller
FC524	02/17/16	RC	9.4	8	03/02/16	RC	9.4	Flow Controller

SGS Accutest Bottle Order(s):
KP-2/15/2016-123

Prep Date	Room Temp(F)	Bar Pres "Hg
02/17/16	70	29.92

Internal Sample Tracking Chronicle

Forensic Environmental Services

Job No: JC15063

Former Norton, 2600 Seventh Avenue, Watervliet, NY
Project No: 029.08

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC15063-1 DB-VMP-1	Collected: 25-FEB-16 15:49 By: BM		Received: 29-FEB-16 By: AS			
JC15063-1	TO-15	12-MAR-16 16:01	YMH			VTO15STD+
JC15063-2 DB-VMP-2	Collected: 25-FEB-16 15:28 By: BM		Received: 29-FEB-16 By: AS			
JC15063-2	TO-15	11-MAR-16 19:07	YMH			VTO15STD+
JC15063-3 INDOOR AIR	Collected: 25-FEB-16 15:28 By: BM		Received: 29-FEB-16 By: AS			
JC15063-3	TO-15	11-MAR-16 20:29	YMH			VTO15STD+
JC15063-3	TO-15	12-MAR-16 16:43	YMH			VTO15STD+
JC15063-4 OUTDOOR AMBIENT	Collected: 25-FEB-16 16:02 By: BM		Received: 29-FEB-16 By: AS			
JC15063-4	TO-15	11-MAR-16 21:10	YMH			VTO15STD+
JC15063-5 TRIP BLANK	Collected: 25-FEB-16 16:02 By: BM		Received: 29-FEB-16 By: AS			
JC15063-5	TO-15	11-MAR-16 21:52	YMH			VTO15STD+

SGS Accutest Internal Chain of Custody

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY
Received: 02/29/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15063-1.1	Oleg Berenzon	Secured Storage	02/29/16 19:26	Return to Storage
JC15063-1.1	Secured Storage	Youmin Hu	03/12/16 16:39	Retrieve from Storage
JC15063-1.1	Youmin Hu	GCMSW	03/12/16 16:39	Load on Instrument
JC15063-1.1	GCMSW	Youmin Hu	03/13/16 09:37	Unload from Instrument
JC15063-1.1	Youmin Hu	Air Storage	03/13/16 09:37	Return to Storage
JC15063-2.1	Oleg Berenzon	Secured Storage	02/29/16 19:26	Return to Storage
JC15063-2.1	Secured Storage	Youmin Hu	03/12/16 16:39	Retrieve from Storage
JC15063-2.1	Youmin Hu	GCMSW	03/12/16 16:39	Load on Instrument
JC15063-2.1	GCMSW	Youmin Hu	03/13/16 09:37	Unload from Instrument
JC15063-2.1	Youmin Hu	Air Storage	03/13/16 09:37	Return to Storage
JC15063-3.1	Oleg Berenzon	Secured Storage	02/29/16 19:26	Return to Storage
JC15063-3.1	Secured Storage	Youmin Hu	03/12/16 16:39	Retrieve from Storage
JC15063-3.1	Youmin Hu	GCMSW	03/12/16 16:39	Load on Instrument
JC15063-3.1	GCMSW	Youmin Hu	03/13/16 09:37	Unload from Instrument
JC15063-3.1	Youmin Hu	Air Storage	03/13/16 09:37	Return to Storage
JC15063-4.1	Oleg Berenzon	Secured Storage	02/29/16 19:26	Return to Storage
JC15063-4.1	Secured Storage	Youmin Hu	03/12/16 16:39	Retrieve from Storage
JC15063-4.1	Youmin Hu	GCMSW	03/12/16 16:39	Load on Instrument
JC15063-4.1	GCMSW	Youmin Hu	03/13/16 09:37	Unload from Instrument
JC15063-4.1	Youmin Hu	Air Storage	03/13/16 09:37	Return to Storage
JC15063-5.1	Oleg Berenzon	Secured Storage	02/29/16 19:26	Return to Storage
JC15063-5.1	Secured Storage	Youmin Hu	03/12/16 16:39	Retrieve from Storage
JC15063-5.1	Youmin Hu	GCMSW	03/12/16 16:39	Load on Instrument
JC15063-5.1	GCMSW	Youmin Hu	03/13/16 09:37	Unload from Instrument
JC15063-5.1	Youmin Hu	Air Storage	03/13/16 09:37	Return to Storage

Accutest Laboratories Annual Method Detection Limit Determination
Dayton, NJ Facility

Method: TO-15 (VTO14/15)
Instrument(s): GCMSW, GCMS3W, GCMS5W
Analyst: Pooled

Matrix: AIR
Quant Factor: 1.00
Study Period: January,2016

			Replicate Spikes											
Cmpd./Element/Parm. Name	Analysis Date	Spike ppbv	R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv	X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv	MDL	Spike/MDL Ratio
Acetone	8-Jan-16	0.1	0.159	0.136	0.161	0.150	0.137	0.147	0.133	0.146	146.04	0.012	0.036	2.76
Acrolein	7-Jan-16	0.1	0.056	0.062	0.053	0.044	0.054	0.045	0.062	0.054	53.45	0.007	0.023	4.38
Acrylonitrile	7-Jan-16	0.1	0.051	0.063	0.064	0.045	0.067	0.062	0.058	0.059	58.54	0.008	0.025	4.00
Acetonitrile	4-Jan-16	0.2	0.249	0.155	0.211	0.182	0.200	0.233	0.259	0.213	106.29	0.037	0.117	1.71
1,3-Butadiene	8-Jan-16	0.1	0.110	0.116	0.105	0.113	0.094	0.121	0.104	0.109	109.08	0.009	0.028	3.62
Benzene	4-Jan-16	0.2	0.204	0.189	0.184	0.208	0.209	0.193	0.204	0.199	99.36	0.010	0.031	6.38
Bromobenzene	8-Jan-16	0.1	0.091	0.089	0.086	0.089	0.074	0.091	0.078	0.085	85.29	0.007	0.021	4.75
Bromodichloromethane	4-Jan-16	0.2	0.208	0.190	0.189	0.215	0.215	0.209	0.220	0.207	103.27	0.012	0.039	5.19
Bromoform	8-Jan-16	0.1	0.092	0.088	0.086	0.087	0.076	0.083	0.082	0.085	84.96	0.005	0.016	6.35
Bromomethane	5-Jan-16	0.1	0.097	0.101	0.100	0.094	0.094	0.110	0.094	0.099	98.57	0.006	0.018	5.42
Bromoethene	8-Jan-16	0.1	0.102	0.106	0.108	0.100	0.095	0.113	0.102	0.103	103.44	0.006	0.018	5.45
n-Butane	8-Jan-16	0.2	0.181	0.224	0.212	0.191	0.237	0.178	0.165	0.198	99.11	0.026	0.083	2.42
Benzyl Chloride	6-Jan-16	0.2	0.108	0.108	0.098	0.104	0.116	0.118	0.096	0.107	53.39	0.009	0.027	7.47
n-Butylbenzene	4-Jan-16	0.2	0.101	0.091	0.085	0.101	0.100	0.088	0.103	0.096	47.80	0.007	0.023	8.72
sec-Butylbenzene	8-Jan-16	0.1	0.082	0.070	0.076	0.070	0.063	0.078	0.074	0.073	73.29	0.006	0.019	5.21
tert-Butylbenzene	5-Jan-16	0.1	0.063	0.060	0.048	0.063	0.066	0.069	0.065	0.062	61.95	0.007	0.021	4.87
Carbon disulfide	7-Jan-16	0.1	0.096	0.108	0.096	0.096	0.083	0.083	0.080	0.092	91.79	0.010	0.031	3.19
Chlorobenzene	4-Jan-16	0.2	0.190	0.169	0.166	0.198	0.211	0.190	0.209	0.191	95.26	0.018	0.056	3.60
Chlorodifluoromethane	6-Jan-16	0.2	0.145	0.159	0.170	0.130	0.177	0.184	0.157	0.160	80.12	0.019	0.059	3.40
Chloroethane	8-Jan-16	0.1	0.131	0.108	0.113	0.104	0.100	0.125	0.110	0.113	112.89	0.011	0.036	2.81
Chloroform	5-Jan-16	0.1	0.110	0.097	0.098	0.105	0.099	0.106	0.108	0.103	103.33	0.005	0.017	6.06
Chloromethane	6-Jan-16	0.2	0.126	0.156	0.156	0.170	0.160	0.179	0.152	0.157	78.42	0.017	0.052	3.83
3-Chloropropene	7-Jan-16	0.1	0.051	0.068	0.057	0.046	0.043	0.054	0.046	0.052	52.15	0.009	0.027	3.76
2-Chlorotoluene	7-Jan-16	0.1	0.052	0.063	0.055	0.051	0.050	0.047	0.048	0.052	52.31	0.005	0.017	5.93
Carbon tetrachloride	4-Jan-16	0.2	0.203	0.191	0.189	0.204	0.219	0.204	0.204	0.202	101.05	0.010	0.031	6.42
Cyclohexane	7-Jan-16	0.1	0.101	0.112	0.104	0.105	0.100	0.101	0.096	0.103	102.71	0.005	0.016	6.19
1,1-Dichloroethane	8-Jan-16	0.1	0.111	0.108	0.102	0.109	0.098	0.111	0.106	0.106	106.24	0.005	0.015	6.59
1,1-Dichloroethylene	6-Jan-16	0.2	0.188	0.177	0.180	0.184	0.189	0.194	0.176	0.184	92.03	0.007	0.021	9.56
1,2-Dibromoethane	4-Jan-16	0.2	0.181	0.161	0.153	0.177	0.188	0.188	0.179	0.176	87.73	0.013	0.042	4.77
1,2-Dichloroethane	8-Jan-16	0.1	0.099	0.094	0.099	0.099	0.084	0.097	0.091	0.095	94.66	0.006	0.018	5.70
1,2-Dichloropropane	7-Jan-16	0.1	0.069	0.082	0.071	0.085	0.070	0.071	0.068	0.074	73.88	0.007	0.022	4.57

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

Method: TO-15 (VTO14/15)
Instrument(s): GCMSW, GCMS3W, GCMS5W
Analyst: Pooled

Matrix: AIR
Quant Factor: 1.00
Study Period: January,2016

			Replicate Spikes											
Cmpd./Element/Parm. Name	Analysis Date	Spike ppbv	R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv	X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv	MDL	Spike/MDL Ratio
1,3-Dichloropropane	4-Jan-16	0.2	0.196	0.174	0.169	0.196	0.208	0.192	0.204	0.191	95.65	0.015	0.046	4.39
1,4-Dioxane	6-Jan-16	0.2	0.103	0.095	0.091	0.100	0.116	0.132	0.102	0.106	52.76	0.014	0.045	4.45
Dichlorodifluoromethane	7-Jan-16	0.1	0.086	0.093	0.083	0.087	0.079	0.076	0.076	0.083	82.77	0.006	0.019	5.25
Dichlorofluoromethane	4-Jan-16	0.2	0.216	0.205	0.197	0.215	0.222	0.215	0.219	0.213	106.41	0.009	0.027	7.31
Dibromochloromethane	4-Jan-16	0.2	0.196	0.173	0.170	0.204	0.216	0.200	0.198	0.194	97.06	0.017	0.053	3.81
Dibromomethane	7-Jan-16	0.1	0.066	0.076	0.065	0.067	0.062	0.061	0.059	0.065	65.02	0.006	0.018	5.51
trans-1,2-Dichloroethylene	7-Jan-16	0.1	0.082	0.098	0.085	0.090	0.074	0.082	0.072	0.083	83.23	0.009	0.028	3.57
cis-1,2-Dichloroethylene	5-Jan-16	0.1	0.088	0.078	0.079	0.078	0.094	0.078	0.076	0.081	81.42	0.007	0.021	4.75
cis-1,3-Dichloropropene	5-Jan-16	0.1	0.078	0.076	0.081	0.080	0.076	0.090	0.083	0.081	80.60	0.005	0.015	6.60
m-Dichlorobenzene	8-Jan-16	0.1	0.088	0.078	0.079	0.085	0.069	0.077	0.077	0.079	79.01	0.006	0.020	5.14
o-Dichlorobenzene	8-Jan-16	0.1	0.088	0.084	0.081	0.081	0.072	0.082	0.076	0.081	80.53	0.005	0.016	6.25
p-Dichlorobenzene	6-Jan-16	0.2	0.125	0.126	0.112	0.117	0.127	0.136	0.113	0.122	61.09	0.009	0.027	7.43
trans-1,3-Dichloropropene	8-Jan-16	0.1	0.080	0.072	0.067	0.071	0.062	0.073	0.066	0.070	70.08	0.006	0.018	5.50
Di-Isopropyl ether	5-Jan-16	0.1	0.066	0.073	0.076	0.048	0.073	0.077	0.066	0.068	68.33	0.010	0.031	3.19
2,3-Dimethylpentane	4-Jan-16	0.2	0.245	0.252	0.248	0.240	0.268	0.248	0.251	0.250	125.13	0.009	0.027	7.35
2,4-Dimethylpentane	7-Jan-16	0.1	0.066	0.072	0.064	0.066	0.057	0.060	0.055	0.063	62.83	0.006	0.019	5.34
Ethanol	6-Jan-16	0.2	0.282	0.279	0.309	0.282	0.341	0.307	0.277	0.297	148.31	0.024	0.075	2.67
Ethylbenzene	4-Jan-16	0.2	0.194	0.174	0.169	0.196	0.206	0.195	0.194	0.190	94.84	0.013	0.042	4.74
Ethyl Acetate	8-Jan-16	0.2	0.166	0.130	0.196	0.147	0.129	0.159	0.168	0.156	78.22	0.024	0.075	2.68
4-Ethyltoluene	8-Jan-16	0.1	0.087	0.082	0.082	0.083	0.072	0.088	0.078	0.082	81.67	0.005	0.017	5.99
Freon 113	7-Jan-16	0.1	0.074	0.084	0.078	0.081	0.070	0.067	0.067	0.074	74.39	0.007	0.021	4.67
Freon 114	4-Jan-16	0.2	0.205	0.205	0.195	0.218	0.225	0.208	0.217	0.211	105.24	0.010	0.031	6.37
Freon 115	5-Jan-16	0.1	0.096	0.084	0.084	0.087	0.088	0.078	0.077	0.085	84.74	0.006	0.020	4.98
Freon 123	4-Jan-16	0.2	0.204	0.196	0.186	0.204	0.218	0.204	0.205	0.202	101.20	0.010	0.031	6.52
Freon 123A	5-Jan-16	0.1	0.091	0.091	0.106	0.096	0.098	0.103	0.098	0.098	97.65	0.006	0.018	5.65
Freon 141B	8-Jan-16	0.1	0.111	0.105	0.104	0.112	0.101	0.116	0.120	0.110	109.86	0.007	0.022	4.63
Freon 142B	7-Jan-16	0.1	0.082	0.091	0.086	0.085	0.075	0.076	0.074	0.081	81.35	0.006	0.020	4.94
Freon 143a	8-Jan-16	0.1	0.125	0.143	0.137	0.120	0.129	0.123	0.124	0.129	128.70	0.008	0.027	3.78
Freon 152A	8-Jan-16	0.2	0.240	0.273	0.269	0.252	0.252	0.242	0.260	0.255	127.66	0.013	0.040	5.07
Heptane	8-Jan-16	0.1	0.079	0.087	0.080	0.096	0.077	0.087	0.081	0.084	83.87	0.006	0.020	4.96
Hexachlorobutadiene	8-Jan-16	0.1	0.085	0.085	0.079	0.083	0.068	0.073	0.079	0.079	78.76	0.007	0.020	4.93
Hexachloroethane	8-Jan-16	0.1	0.079	0.077	0.074	0.074	0.061	0.075	0.071	0.073	73.25	0.006	0.019	5.34
Hexane	4-Jan-16	0.2	0.178	0.177	0.179	0.195	0.183	0.171	0.182	0.181	90.43	0.007	0.023	8.85
2-Hexanone	6-Jan-16	0.2	0.087	0.098	0.094	0.102	0.111	0.121	0.079	0.099	49.46	0.014	0.045	4.46

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

Method: TO-15 (VTO14/15)
Instrument(s): GCMSW, GCMS3W, GCMS5W
Analyst: Pooled

Matrix: AIR
Quant Factor: 1.00
Study Period: January,2016

			Replicate Spikes											
Cmpd./Element/Parm. Name	Analysis Date	Spike ppbv	R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv	X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv	MDL	Spike/MDL Ratio
Iodomethane	7-Jan-16	0.1	0.073	0.083	0.074	0.074	0.065	0.067	0.064	0.071	71.37	0.007	0.021	4.74
Isopropylbenzene	4-Jan-16	0.2	0.194	0.173	0.165	0.197	0.205	0.199	0.198	0.190	95.03	0.015	0.047	4.26
Isopropyl Alcohol	8-Jan-16	0.2	0.345	0.388	0.410	0.398	0.309	0.414	0.462	0.390	194.78	0.050	0.156	1.28
p-Isopropyltoluene	4-Jan-16	0.2	0.131	0.116	0.114	0.133	0.138	0.124	0.137	0.128	63.81	0.010	0.031	6.47
Methylene chloride	7-Jan-16	0.1	0.074	0.084	0.079	0.075	0.063	0.071	0.063	0.073	72.69	0.008	0.025	4.02
Methyl ethyl ketone	6-Jan-16	0.2	0.119	0.114	0.106	0.116	0.133	0.153	0.118	0.123	61.36	0.015	0.048	4.14
Methyl Isobutyl Ketone	4-Jan-16	0.2	0.145	0.110	0.140	0.160	0.149	0.163	0.136	0.143	71.60	0.018	0.055	3.64
Methyl Tert Butyl Ether	4-Jan-16	0.2	0.183	0.173	0.177	0.187	0.189	0.180	0.188	0.183	91.25	0.006	0.020	10.16
Methylmethacrylate	4-Jan-16	0.2	0.142	0.115	0.136	0.151	0.150	0.148	0.146	0.141	70.56	0.013	0.040	5.00
Naphthalene	4-Jan-16	0.2	0.106	0.090	0.067	0.108	0.124	0.097	0.103	0.100	49.74	0.018	0.056	3.55
Nonane	4-Jan-16	0.2	0.166	0.145	0.142	0.166	0.170	0.174	0.166	0.161	80.63	0.013	0.039	5.09
Octane	4-Jan-16	0.2	0.188	0.169	0.160	0.197	0.203	0.195	0.191	0.186	92.94	0.016	0.049	4.08
Pentane	8-Jan-16	0.2	0.184	0.183	0.195	0.173	0.155	0.161	0.179	0.176	87.75	0.014	0.044	4.54
n-Propylbenzene	8-Jan-16	0.1	0.081	0.078	0.079	0.072	0.062	0.077	0.070	0.074	74.31	0.007	0.021	4.75
Propylene	5-Jan-16	0.1	0.174	0.185	0.160	0.172	0.158	0.159	0.161	0.167	166.86	0.010	0.032	3.09
Styrene	8-Jan-16	0.1	0.081	0.078	0.079	0.081	0.067	0.076	0.077	0.077	76.91	0.005	0.015	6.50
1,1,1-Trichloroethane	4-Jan-16	0.2	0.196	0.186	0.194	0.201	0.208	0.200	0.207	0.199	99.46	0.008	0.024	8.50
1,1,1,2-Tetrachloroethane	7-Jan-16	0.1	0.061	0.071	0.067	0.063	0.062	0.061	0.058	0.063	63.22	0.004	0.014	7.23
1,1,2,2-Tetrachloroethane	7-Jan-16	0.1	0.063	0.074	0.061	0.067	0.059	0.063	0.061	0.064	64.00	0.005	0.016	6.21
1,1,2-Trichloroethane	4-Jan-16	0.2	0.201	0.174	0.176	0.205	0.202	0.195	0.193	0.192	96.16	0.012	0.039	5.16
1,2,4-Trichlorobenzene	4-Jan-16	0.2	0.140	0.105	0.083	0.119	0.125	0.119	0.120	0.116	57.86	0.018	0.056	3.58
1,2,3-Trichloropropane	5-Jan-16	0.1	0.079	0.082	0.092	0.078	0.088	0.079	0.090	0.084	84.06	0.006	0.018	5.50
1,2,4-Trimethylbenzene	8-Jan-16	0.1	0.079	0.076	0.076	0.080	0.067	0.082	0.074	0.076	76.27	0.005	0.015	6.59
1,3,5-Trimethylbenzene	4-Jan-16	0.2	0.169	0.154	0.150	0.186	0.187	0.171	0.168	0.169	84.52	0.014	0.045	4.46
2,2,4-Trimethylpentane	4-Jan-16	0.2	0.207	0.199	0.192	0.211	0.213	0.210	0.207	0.205	102.70	0.007	0.023	8.79
Tertiary Butyl Alcohol	4-Jan-16	0.2	0.194	0.177	0.162	0.203	0.208	0.199	0.206	0.193	96.34	0.017	0.053	3.77
Tetrachloroethylene	7-Jan-16	0.1	0.061	0.074	0.063	0.066	0.059	0.057	0.052	0.062	61.60	0.007	0.023	4.36
Tetrahydrofuran	6-Jan-16	0.2	0.100	0.103	0.094	0.102	0.117	0.137	0.104	0.108	54.15	0.014	0.045	4.41
Toluene	8-Jan-16	0.1	0.092	0.088	0.090	0.093	0.081	0.091	0.089	0.089	89.24	0.004	0.012	8.08
Trichloroethylene	7-Jan-16	0.1	0.064	0.070	0.061	0.071	0.056	0.060	0.057	0.063	62.73	0.006	0.019	5.38
Trichlorofluoromethane	7-Jan-16	0.1	0.080	0.092	0.081	0.082	0.072	0.076	0.071	0.079	79.13	0.007	0.022	4.56
Vinyl chloride	5-Jan-16	0.1	0.098	0.106	0.111	0.096	0.102	0.096	0.110	0.103	102.76	0.007	0.021	4.85
Vinyl Acetate	4-Jan-16	0.2	0.096	0.110	0.102	0.091	0.067	0.090	0.122	0.097	48.42	0.017	0.054	3.72
m,p-Xylene	4-Jan-16	0.4	0.370	0.333	0.323	0.371	0.376	0.369	0.374	0.360	89.89	0.022	0.068	5.85

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

Method: TO-15 (VTO14/15)
Instrument(s): GCMSW, GCMS3W, GCMS5W
Analyst: Pooled

Matrix: AIR
Quant Factor: 1.00
Study Period: January,2016

			Replicate Spikes											
Cmpd./Element/Parm. Name	Analysis Date	Spike ppbv	R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv	X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv	MDL	Spike/MDL Ratio
o-Xylene	4-Jan-16	0.2	0.180	0.159	0.159	0.198	0.197	0.184	0.186	0.181	90.23	0.016	0.051	3.93
TVHC As Equiv Pentane	8-Jan-16	0.1	0.112	0.108	0.109	0.130	0.112	0.113	0.104	0.113	112.51	0.008	0.026	3.90
4-Bromofluorobenzene	6-Jan-16	0.2	10.03	10.12	10.18	10.19	10.10	10.07	9.96	10.09	5045.72	0.081	0.255	0.79

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

GC/MS Volatiles

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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: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2161-MB	W54084.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2161-MB	W54084.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2161-MB	W54084.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	73%	65-128%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ppbv	

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2162-MB	W54115.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2162-MB	W54115.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2162-MB	W54115.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	79%	65-128%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ppbv	

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-MB	5W16059.D	1	02/04/16	TCH	n/a	n/a	V5W646

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

V5W646-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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-MB	5W16059.D	1	02/04/16	TCH	n/a	n/a	V5W646

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

V5W646-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-MB	5W16059.D	1	02/04/16	TCH	n/a	n/a	V5W646

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

V5W646-SCC

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	65-128%

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-MB	5W16069.D	1	02/05/16	TCH	n/a	n/a	V5W647

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

V5W647-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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-MB	5W16069.D	1	02/05/16	TCH	n/a	n/a	V5W647

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

V5W647-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-MB	5W16069.D	1	02/05/16	TCH	n/a	n/a	V5W647

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

V5W647-SCC

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	97%	65-128%

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-MB	W53486.D	1	02/12/16	YMH	n/a	n/a	VW2141

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

VW2141-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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-MB	W53486.D	1	02/12/16	YMH	n/a	n/a	VW2141

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

VW2141-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-MB	W53486.D	1	02/12/16	YMH	n/a	n/a	VW2141

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

VW2141-SCC

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	90%	65-128%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2161-BS	W54081.D	1	03/11/16	YMH	n/a	n/a	VW2161
VW2161-BSD	W54082.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.7	107	9.3	93	14	70-130/30
106-99-0	1,3-Butadiene	10	11.8	118	11.0	110	7	70-130/30
71-43-2	Benzene	10	10.5	105	9.4	94	11	70-130/30
75-27-4	Bromodichloromethane	10	9.7	97	9.2	92	5	70-130/30
75-25-2	Bromoform	10	9.7	97	9.5	95	2	70-130/30
74-83-9	Bromomethane	10	12.0	120	10.4	104	14	70-130/30
593-60-2	Bromoethene	10	11.7	117	10.0	100	16	70-130/30
100-44-7	Benzyl Chloride	10	10.6	106	10.3	103	3	70-130/30
75-15-0	Carbon disulfide	10	10.5	105	9.1	91	14	70-130/30
108-90-7	Chlorobenzene	10	9.7	97	9.4	94	3	70-130/30
75-00-3	Chloroethane	10	11.6	116	10.1	101	14	70-130/30
67-66-3	Chloroform	10	10.7	107	9.2	92	15	70-130/30
74-87-3	Chloromethane	10	11.5	115	10.7	107	7	70-130/30
107-05-1	3-Chloropropene	10	10.9	109	9.2	92	17	70-130/30
95-49-8	2-Chlorotoluene	10	10.6	106	10.6	106	0	70-130/30
56-23-5	Carbon tetrachloride	10	10.7	107	9.5	95	12	70-130/30
110-82-7	Cyclohexane	10	9.8	98	8.8	88	11	70-130/30
75-34-3	1,1-Dichloroethane	10	11.2	112	9.3	93	19	70-130/30
75-35-4	1,1-Dichloroethylene	10	10.2	102	9.0	90	13	70-130/30
106-93-4	1,2-Dibromoethane	10	9.8	98	9.3	93	5	70-130/30
107-06-2	1,2-Dichloroethane	10	11.4	114	10	100	13	70-130/30
78-87-5	1,2-Dichloropropane	10	10.0	100	9.2	92	8	70-130/30
123-91-1	1,4-Dioxane	10	10.9	109	9.9	99	10	70-130/30
75-71-8	Dichlorodifluoromethane	10	11.6	116	10	100	15	70-130/30
124-48-1	Dibromochloromethane	10	10.0	100	9.5	95	5	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.6	106	8.9	89	17	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.1	101	8.6	86	16	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	9.7	97	9.1	91	6	70-130/30
541-73-1	m-Dichlorobenzene	10	10.9	109	10.7	107	2	70-130/30
95-50-1	o-Dichlorobenzene	10	11.2	112	10.7	107	5	70-130/30
106-46-7	p-Dichlorobenzene	10	10.8	108	10.5	105	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.3	103	9.7	97	6	70-130/30
64-17-5	Ethanol	10	12.1	121	11.2	112	8	70-130/30
100-41-4	Ethylbenzene	10	9.7	97	9.5	95	2	70-130/30
141-78-6	Ethyl Acetate	10	10.2	102	9.0	90	13	70-130/30
622-96-8	4-Ethyltoluene	10	10.7	107	10.6	106	1	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2161-BS	W54081.D	1	03/11/16	YMH	n/a	n/a	VW2161
VW2161-BSD	W54082.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.4	104	9.1	91	13	70-130/30
76-14-2	Freon 114	10	11.7	117	10.6	106	10	70-130/30
142-82-5	Heptane	10	11.4	114	10.8	108	5	70-130/30
87-68-3	Hexachlorobutadiene	10	11.3	113	11.0	110	3	70-130/30
110-54-3	Hexane	10	11.0	110	9.2	92	18	70-130/30
591-78-6	2-Hexanone	10	10.0	100	9.2	92	8	70-130/30
67-63-0	Isopropyl Alcohol	10	10.3	103	9.2	92	11	70-130/30
75-09-2	Methylene chloride	10	9.5	95	8.3	83	13	70-130/30
78-93-3	Methyl ethyl ketone	10	10.6	106	8.9	89	17	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	9.9	99	9.1	91	8	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	10.6	106	9.0	90	16	70-130/30
80-62-6	Methylmethacrylate	10	9.2	92	9.2	92	0	70-130/30
115-07-1	Propylene	10	10.7	107	10.2	102	5	70-130/30
100-42-5	Styrene	10	10.4	104	10.1	101	3	70-130/30
71-55-6	1,1,1-Trichloroethane	10	10.8	108	9.5	95	13	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10	100	9.7	97	3	70-130/30
79-00-5	1,1,2-Trichloroethane	10	10.2	102	9.5	95	7	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	12.5	125	11.7	117	7	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.4	104	10.2	102	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	10.5	105	10.4	104	1	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	10.4	104	9.7	97	7	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	11.2	112	9.6	96	15	70-130/30
127-18-4	Tetrachloroethylene	10	8.6	86	8.2	82	5	70-130/30
109-99-9	Tetrahydrofuran	10	10.9	109	9.2	92	17	70-130/30
108-88-3	Toluene	10	10.4	104	9.5	95	9	70-130/30
79-01-6	Trichloroethylene	10	8.3	83	7.9	79	5	70-130/30
75-69-4	Trichlorofluoromethane	10	11.4	114	10.2	102	11	70-130/30
75-01-4	Vinyl chloride	10	12.0	120	11.1	111	8	70-130/30
108-05-4	Vinyl Acetate	10	10.9	109	9.5	95	14	70-130/30
	m,p-Xylene	20	20.5	103	19.8	99	3	70-130/30
95-47-6	o-Xylene	10	10.5	105	10.1	101	4	70-130/30
1330-20-7	Xylenes (total)	30	30.9	103	29.9	100	3	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2161-BS	W54081.D	1	03/11/16	YMH	n/a	n/a	VW2161
VW2161-BSD	W54082.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	102%	104%	65-128%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2162-BS	W54112.D	1	03/12/16	YMH	n/a	n/a	VW2162
VW2162-BSD	W54113.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	9.6	96	9.5	95	1	70-130/30
106-99-0	1,3-Butadiene	10	10.1	101	10.7	107	6	70-130/30
71-43-2	Benzene	10	10.5	105	9.8	98	7	70-130/30
75-27-4	Bromodichloromethane	10	10.2	102	9.8	98	4	70-130/30
75-25-2	Bromoform	10	10.5	105	10.3	103	2	70-130/30
74-83-9	Bromomethane	10	10.4	104	10.7	107	3	70-130/30
593-60-2	Bromoethene	10	10.8	108	10.8	108	0	70-130/30
100-44-7	Benzyl Chloride	10	10.1	101	9.5	95	6	70-130/30
75-15-0	Carbon disulfide	10	11.0	110	9.7	97	13	70-130/30
108-90-7	Chlorobenzene	10	10.5	105	10.0	100	5	70-130/30
75-00-3	Chloroethane	10	10.0	100	10.2	102	2	70-130/30
67-66-3	Chloroform	10	10.7	107	10.0	100	7	70-130/30
74-87-3	Chloromethane	10	9.6	96	10.5	105	9	70-130/30
107-05-1	3-Chloropropene	10	11.6	116	10.1	101	14	70-130/30
95-49-8	2-Chlorotoluene	10	11.0	110	10.1	101	9	70-130/30
56-23-5	Carbon tetrachloride	10	10.9	109	10.5	105	4	70-130/30
110-82-7	Cyclohexane	10	9.9	99	9.3	93	6	70-130/30
75-34-3	1,1-Dichloroethane	10	10.9	109	10	100	9	70-130/30
75-35-4	1,1-Dichloroethylene	10	11.3	113	9.8	98	14	70-130/30
106-93-4	1,2-Dibromoethane	10	11.0	110	10.3	103	7	70-130/30
107-06-2	1,2-Dichloroethane	10	11.7	117	11.1	111	5	70-130/30
78-87-5	1,2-Dichloropropane	10	10.0	100	9.5	95	5	70-130/30
123-91-1	1,4-Dioxane	10	10.4	104	10.3	103	1	70-130/30
75-71-8	Dichlorodifluoromethane	10	10.6	106	10.4	104	2	70-130/30
124-48-1	Dibromochloromethane	10	11.1	111	10.5	105	6	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.7	107	9.7	97	10	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.2	102	9.4	94	8	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10.3	103	9.6	96	7	70-130/30
541-73-1	m-Dichlorobenzene	10	11.2	112	10.4	104	7	70-130/30
95-50-1	o-Dichlorobenzene	10	10.9	109	10.3	103	6	70-130/30
106-46-7	p-Dichlorobenzene	10	10.2	102	10	100	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.7	107	10.2	102	5	70-130/30
64-17-5	Ethanol	10	10.4	104	10.8	108	4	70-130/30
100-41-4	Ethylbenzene	10	10.4	104	9.8	98	6	70-130/30
141-78-6	Ethyl Acetate	10	9.7	97	9.0	90	7	70-130/30
622-96-8	4-Ethyltoluene	10	11.0	110	10.3	103	7	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2162-BS	W54112.D	1	03/12/16	YMH	n/a	n/a	VW2162
VW2162-BSD	W54113.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.6	106	10.2	102	4	70-130/30
76-14-2	Freon 114	10	9.9	99	10.7	107	8	70-130/30
142-82-5	Heptane	10	11.1	111	10.7	107	4	70-130/30
87-68-3	Hexachlorobutadiene	10	11.1	111	10.9	109	2	70-130/30
110-54-3	Hexane	10	10.6	106	9.7	97	9	70-130/30
591-78-6	2-Hexanone	10	9.6	96	8.9	89	8	70-130/30
67-63-0	Isopropyl Alcohol	10	9.2	92	9.3	93	1	70-130/30
75-09-2	Methylene chloride	10	10.2	102	9.1	91	11	70-130/30
78-93-3	Methyl ethyl ketone	10	10.1	101	9.4	94	7	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	8.9	89	9.1	91	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	10.2	102	9.5	95	7	70-130/30
80-62-6	Methylmethacrylate	10	9.6	96	8.7	87	10	70-130/30
115-07-1	Propylene	10	9.5	95	10.4	104	9	70-130/30
100-42-5	Styrene	10	11.0	110	10.3	103	7	70-130/30
71-55-6	1,1,1-Trichloroethane	10	10.8	108	10.3	103	5	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.2	102	9.4	94	8	70-130/30
79-00-5	1,1,2-Trichloroethane	10	10.5	105	9.8	98	7	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	11.0	110	10.4	104	6	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.4	104	9.9	99	5	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	10.3	103	10.1	101	2	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	10.7	107	9.9	99	8	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	11.4	114	10.1	101	12	70-130/30
127-18-4	Tetrachloroethylene	10	9.8	98	9.4	94	4	70-130/30
109-99-9	Tetrahydrofuran	10	10.4	104	9.7	97	7	70-130/30
108-88-3	Toluene	10	10.7	107	10.1	101	6	70-130/30
79-01-6	Trichloroethylene	10	9.2	92	8.9	89	3	70-130/30
75-69-4	Trichlorofluoromethane	10	11.0	110	11.4	114	4	70-130/30
75-01-4	Vinyl chloride	10	10.0	100	10.8	108	8	70-130/30
108-05-4	Vinyl Acetate	10	11.0	110	10.1	101	9	70-130/30
	m,p-Xylene	20	22.0	110	20.5	103	7	70-130/30
95-47-6	o-Xylene	10	11.0	110	10.1	101	9	70-130/30
1330-20-7	Xylenes (total)	30	33.0	110	30.6	102	8	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2162-BS	W54112.D	1	03/12/16	YMH	n/a	n/a	VW2162
VW2162-BSD	W54113.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	100%	101%	65-128%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-BS	5W16056.D	1	02/04/16	TCH	n/a	n/a	V5W646
V5W646-BSD	5W16057.D	1	02/04/16	TCH	n/a	n/a	V5W646

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

V5W646-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.1	101	10.7	107	6	70-130/30
106-99-0	1,3-Butadiene	10	11.0	110	11.7	117	6	70-130/30
71-43-2	Benzene	10	10.7	107	11.5	115	7	70-130/30
75-27-4	Bromodichloromethane	10	11.1	111	11.6	116	4	70-130/30
75-25-2	Bromoform	10	10.4	104	10.9	109	5	70-130/30
74-83-9	Bromomethane	10	10.0	100	10.7	107	7	70-130/30
593-60-2	Bromoethene	10	10.3	103	10.9	109	6	70-130/30
100-44-7	Benzyl Chloride	10	10.3	103	10.9	109	6	70-130/30
75-15-0	Carbon disulfide	10	11.5	115	12.2	122	6	70-130/30
108-90-7	Chlorobenzene	10	10.1	101	10.6	106	5	70-130/30
75-00-3	Chloroethane	10	11.2	112	11.9	119	6	70-130/30
67-66-3	Chloroform	10	11.1	111	11.7	117	5	70-130/30
74-87-3	Chloromethane	10	11.3	113	12.0	120	6	70-130/30
107-05-1	3-Chloropropene	10	11.3	113	12.0	120	6	70-130/30
95-49-8	2-Chlorotoluene	10	10	100	10.5	105	5	70-130/30
56-23-5	Carbon tetrachloride	10	10.8	108	11.5	115	6	70-130/30
110-82-7	Cyclohexane	10	10.5	105	11.3	113	7	70-130/30
75-34-3	1,1-Dichloroethane	10	11.1	111	11.7	117	5	70-130/30
75-35-4	1,1-Dichloroethylene	10	11.2	112	11.8	118	5	70-130/30
106-93-4	1,2-Dibromoethane	10	10.9	109	11.6	116	6	70-130/30
107-06-2	1,2-Dichloroethane	10	11.1	111	12.0	120	8	70-130/30
78-87-5	1,2-Dichloropropane	10	11.8	118	12.4	124	5	70-130/30
123-91-1	1,4-Dioxane	10	11.4	114	12.1	121	6	70-130/30
75-71-8	Dichlorodifluoromethane	10	11.1	111	11.9	119	7	70-130/30
124-48-1	Dibromochloromethane	10	11.4	114	12.0	120	5	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	11.4	114	12.1	121	6	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	11.0	110	11.7	117	6	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10.5	105	11.1	111	6	70-130/30
541-73-1	m-Dichlorobenzene	10	10.1	101	10.7	107	6	70-130/30
95-50-1	o-Dichlorobenzene	10	10	100	10.5	105	5	70-130/30
106-46-7	p-Dichlorobenzene	10	9.6	96	10.1	101	5	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	11.4	114	12.0	120	5	70-130/30
64-17-5	Ethanol	10	10.6	106	11.2	112	6	70-130/30
100-41-4	Ethylbenzene	10	10.2	102	10.7	107	5	70-130/30
141-78-6	Ethyl Acetate	10	12.5	125	13.3	133* [a]	6	70-130/30
622-96-8	4-Ethyltoluene	10	10.6	106	10.9	109	3	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-BS	5W16056.D	1	02/04/16	TCH	n/a	n/a	V5W646
V5W646-BSD	5W16057.D	1	02/04/16	TCH	n/a	n/a	V5W646

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

V5W646-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.9	109	11.6	116	6	70-130/30
76-14-2	Freon 114	10	10.9	109	11.6	116	6	70-130/30
142-82-5	Heptane	10	11.3	113	12.0	120	6	70-130/30
87-68-3	Hexachlorobutadiene	10	10.0	100	10.4	104	4	70-130/30
110-54-3	Hexane	10	10.3	103	10.8	108	5	70-130/30
591-78-6	2-Hexanone	10	11.9	119	12.6	126	6	70-130/30
67-63-0	Isopropyl Alcohol	10	10.0	100	10.2	102	2	70-130/30
75-09-2	Methylene chloride	10	10.2	102	10.7	107	5	70-130/30
78-93-3	Methyl ethyl ketone	10	11.2	112	11.8	118	5	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	12.0	120	12.6	126	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	10.3	103	10.9	109	6	70-130/30
80-62-6	Methylmethacrylate	10	10.9	109	11.6	116	6	70-130/30
115-07-1	Propylene	10	10.5	105	11.2	112	6	70-130/30
100-42-5	Styrene	10	10.4	104	11.0	110	6	70-130/30
71-55-6	1,1,1-Trichloroethane	10	10.7	107	11.4	114	6	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.8	108	11.4	114	5	70-130/30
79-00-5	1,1,2-Trichloroethane	10	11.3	113	11.9	119	5	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	9.4	94	9.7	97	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.4	104	10.8	108	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	10.2	102	10.7	107	5	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	11.5	115	12.1	121	5	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	10.5	105	11.2	112	6	70-130/30
127-18-4	Tetrachloroethylene	10	10.9	109	11.5	115	5	70-130/30
109-99-9	Tetrahydrofuran	10	12.2	122	13.1	131* [a]	7	70-130/30
108-88-3	Toluene	10	10.8	108	11.6	116	7	70-130/30
79-01-6	Trichloroethylene	10	10.9	109	11.5	115	5	70-130/30
75-69-4	Trichlorofluoromethane	10	10.2	102	10.9	109	7	70-130/30
75-01-4	Vinyl chloride	10	11.7	117	12.4	124	6	70-130/30
108-05-4	Vinyl Acetate	10	11.6	116	12.4	124	7	70-130/30
	m,p-Xylene	20	20.7	104	21.8	109	5	70-130/30
95-47-6	o-Xylene	10	10.3	103	10.9	109	6	70-130/30
1330-20-7	Xylenes (total)	30	31.0	103	32.6	109	5	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-BS	5W16056.D	1	02/04/16	TCH	n/a	n/a	V5W646
V5W646-BSD	5W16057.D	1	02/04/16	TCH	n/a	n/a	V5W646

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

V5W646-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	98%	99%	65-128%

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-BS	5W16066.D	1	02/05/16	TCH	n/a	n/a	V5W647
V5W647-BSD	5W16067.D	1	02/05/16	TCH	n/a	n/a	V5W647

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

V5W647-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	9.8	98	10	100	2	70-130/30
106-99-0	1,3-Butadiene	10	10.7	107	10.8	108	1	70-130/30
71-43-2	Benzene	10	10.5	105	10.3	103	2	70-130/30
75-27-4	Bromodichloromethane	10	10.7	107	10.6	106	1	70-130/30
75-25-2	Bromoform	10	10.5	105	10.6	106	1	70-130/30
74-83-9	Bromomethane	10	10.2	102	10.3	103	1	70-130/30
593-60-2	Bromoethene	10	10.4	104	10.6	106	2	70-130/30
100-44-7	Benzyl Chloride	10	10.1	101	10.4	104	3	70-130/30
75-15-0	Carbon disulfide	10	10.9	109	11.1	111	2	70-130/30
108-90-7	Chlorobenzene	10	10.0	100	10.2	102	2	70-130/30
75-00-3	Chloroethane	10	11.1	111	11.1	111	0	70-130/30
67-66-3	Chloroform	10	10.5	105	10.4	104	1	70-130/30
74-87-3	Chloromethane	10	11.1	111	11.1	111	0	70-130/30
107-05-1	3-Chloropropene	10	10.7	107	10.9	109	2	70-130/30
95-49-8	2-Chlorotoluene	10	10.1	101	10.1	101	0	70-130/30
56-23-5	Carbon tetrachloride	10	10.5	105	10.4	104	1	70-130/30
110-82-7	Cyclohexane	10	10.2	102	10.2	102	0	70-130/30
75-34-3	1,1-Dichloroethane	10	10.5	105	10.5	105	0	70-130/30
75-35-4	1,1-Dichloroethylene	10	10.5	105	10.5	105	0	70-130/30
106-93-4	1,2-Dibromoethane	10	10.9	109	10.9	109	0	70-130/30
107-06-2	1,2-Dichloroethane	10	10.5	105	10.5	105	0	70-130/30
78-87-5	1,2-Dichloropropane	10	11.5	115	11.5	115	0	70-130/30
123-91-1	1,4-Dioxane	10	11.1	111	11.2	112	1	70-130/30
75-71-8	Dichlorodifluoromethane	10	10.6	106	10.7	107	1	70-130/30
124-48-1	Dibromochloromethane	10	11.4	114	11.5	115	1	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.8	108	10.8	108	0	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.3	103	10.6	106	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10.3	103	10.5	105	2	70-130/30
541-73-1	m-Dichlorobenzene	10	10.1	101	10.3	103	2	70-130/30
95-50-1	o-Dichlorobenzene	10	10	100	10.0	100	0	70-130/30
106-46-7	p-Dichlorobenzene	10	9.6	96	9.6	96	0	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	11.1	111	11.1	111	0	70-130/30
64-17-5	Ethanol	10	10.2	102	10.4	104	2	70-130/30
100-41-4	Ethylbenzene	10	10	100	10.2	102	2	70-130/30
141-78-6	Ethyl Acetate	10	12.2	122	12.1	121	1	70-130/30
622-96-8	4-Ethyltoluene	10	10.4	104	10.6	106	2	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-BS	5W16066.D	1	02/05/16	TCH	n/a	n/a	V5W647
V5W647-BSD	5W16067.D	1	02/05/16	TCH	n/a	n/a	V5W647

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

V5W647-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.6	106	10.8	108	2	70-130/30
76-14-2	Freon 114	10	11.0	110	11.0	110	0	70-130/30
142-82-5	Heptane	10	10.9	109	11.1	111	2	70-130/30
87-68-3	Hexachlorobutadiene	10	9.6	96	10.3	103	7	70-130/30
110-54-3	Hexane	10	10	100	9.9	99	1	70-130/30
591-78-6	2-Hexanone	10	11.6	116	11.9	119	3	70-130/30
67-63-0	Isopropyl Alcohol	10	8.8	88	8.8	88	0	70-130/30
75-09-2	Methylene chloride	10	9.8	98	9.8	98	0	70-130/30
78-93-3	Methyl ethyl ketone	10	10.7	107	10.7	107	0	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	11.6	116	11.5	115	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	9.7	97	9.9	99	2	70-130/30
80-62-6	Methylmethacrylate	10	10.6	106	10.6	106	0	70-130/30
115-07-1	Propylene	10	10	100	10.2	102	2	70-130/30
100-42-5	Styrene	10	10.3	103	10.4	104	1	70-130/30
71-55-6	1,1,1-Trichloroethane	10	10.2	102	10.2	102	0	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.8	108	10.7	107	1	70-130/30
79-00-5	1,1,2-Trichloroethane	10	11.0	110	11.1	111	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	9.1	91	9.4	94	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.2	102	10.1	101	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	10	100	10.0	100	0	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	11.1	111	11.1	111	0	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	10	100	10.1	101	1	70-130/30
127-18-4	Tetrachloroethylene	10	11.0	110	11.0	110	0	70-130/30
109-99-9	Tetrahydrofuran	10	11.7	117	11.8	118	1	70-130/30
108-88-3	Toluene	10	10.6	106	10.7	107	1	70-130/30
79-01-6	Trichloroethylene	10	10.6	106	10.7	107	1	70-130/30
75-69-4	Trichlorofluoromethane	10	10.2	102	10.2	102	0	70-130/30
75-01-4	Vinyl chloride	10	11.5	115	11.7	117	2	70-130/30
108-05-4	Vinyl Acetate	10	11.0	110	11.1	111	1	70-130/30
	m,p-Xylene	20	20.4	102	20.4	102	0	70-130/30
95-47-6	o-Xylene	10	10.2	102	10.2	102	0	70-130/30
1330-20-7	Xylenes (total)	30	30.6	102	30.6	102	0	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-BS	5W16066.D	1	02/05/16	TCH	n/a	n/a	V5W647
V5W647-BSD	5W16067.D	1	02/05/16	TCH	n/a	n/a	V5W647

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

V5W647-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	101%	99%	65-128%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-BS	W53483.D	1	02/12/16	YMH	n/a	n/a	VW2141
VW2141-BSD	W53484.D	1	02/12/16	YMH	n/a	n/a	VW2141

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

VW2141-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.3	103	8.4	84	20	70-130/30
106-99-0	1,3-Butadiene	10	10.8	108	9.3	93	15	70-130/30
71-43-2	Benzene	10	10.2	102	8.3	83	21	70-130/30
75-27-4	Bromodichloromethane	10	10.4	104	8.4	84	21	70-130/30
75-25-2	Bromoform	10	11.8	118	9.3	93	24	70-130/30
74-83-9	Bromomethane	10	10.8	108	9.4	94	14	70-130/30
593-60-2	Bromoethene	10	10.4	104	8.9	89	16	70-130/30
100-44-7	Benzyl Chloride	10	12.1	121	9.2	92	27	70-130/30
75-15-0	Carbon disulfide	10	9.9	99	8.3	83	18	70-130/30
108-90-7	Chlorobenzene	10	10.9	109	8.7	87	22	70-130/30
75-00-3	Chloroethane	10	10.9	109	9.4	94	15	70-130/30
67-66-3	Chloroform	10	10.5	105	8.6	86	20	70-130/30
74-87-3	Chloromethane	10	11.2	112	10	100	11	70-130/30
107-05-1	3-Chloropropene	10	11.1	111	9.2	92	19	70-130/30
95-49-8	2-Chlorotoluene	10	11.9	119	9.2	92	26	70-130/30
56-23-5	Carbon tetrachloride	10	10.5	105	8.5	85	21	70-130/30
110-82-7	Cyclohexane	10	10.1	101	8.2	82	21	70-130/30
75-34-3	1,1-Dichloroethane	10	10.2	102	8.4	84	19	70-130/30
75-35-4	1,1-Dichloroethylene	10	9.3	93	7.6	76	20	70-130/30
106-93-4	1,2-Dibromoethane	10	11.6	116	9.3	93	22	70-130/30
107-06-2	1,2-Dichloroethane	10	10.8	108	8.9	89	19	70-130/30
78-87-5	1,2-Dichloropropane	10	10.2	102	8.1	81	23	70-130/30
123-91-1	1,4-Dioxane	10	11.3	113	8.8	88	25	70-130/30
75-71-8	Dichlorodifluoromethane	10	10.8	108	9.6	96	12	70-130/30
124-48-1	Dibromochloromethane	10	11.2	112	9.1	91	21	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	9.6	96	7.8	78	21	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	9.8	98	8.1	81	19	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10.8	108	8.6	86	23	70-130/30
541-73-1	m-Dichlorobenzene	10	11.7	117	9.2	92	24	70-130/30
95-50-1	o-Dichlorobenzene	10	11.7	117	9.0	90	26	70-130/30
106-46-7	p-Dichlorobenzene	10	11.8	118	9.1	91	26	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	11.9	119	9.3	93	25	70-130/30
64-17-5	Ethanol	10	9.3	93	7.8	78	18	70-130/30
100-41-4	Ethylbenzene	10	11.2	112	8.7	87	25	70-130/30
141-78-6	Ethyl Acetate	10	11.6	116	9.1	91	24	70-130/30
622-96-8	4-Ethyltoluene	10	12.2	122	9.3	93	27	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-BS	W53483.D	1	02/12/16	YMH	n/a	n/a	VW2141
VW2141-BSD	W53484.D	1	02/12/16	YMH	n/a	n/a	VW2141

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

VW2141-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.4	104	8.6	86	19	70-130/30
76-14-2	Freon 114	10	10.7	107	9.2	92	15	70-130/30
142-82-5	Heptane	10	10.6	106	8.3	83	24	70-130/30
87-68-3	Hexachlorobutadiene	10	12.0	120	9.1	91	27	70-130/30
110-54-3	Hexane	10	9.8	98	8.0	80	20	70-130/30
591-78-6	2-Hexanone	10	11.2	112	9.0	90	22	70-130/30
67-63-0	Isopropyl Alcohol	10	8.7	87	7.3	73	18	70-130/30
75-09-2	Methylene chloride	10	9.6	96	8.1	81	17	70-130/30
78-93-3	Methyl ethyl ketone	10	11.6	116	8.9	89	26	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	11.2	112	8.6	86	26	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	10.7	107	8.3	83	25	70-130/30
80-62-6	Methylmethacrylate	10	11.8	118	8.8	88	29	70-130/30
115-07-1	Propylene	10	9.8	98	8.8	88	11	70-130/30
100-42-5	Styrene	10	12.8	128	10	100	25	70-130/30
71-55-6	1,1,1-Trichloroethane	10	10.4	104	8.5	85	20	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	11.4	114	8.8	88	26	70-130/30
79-00-5	1,1,2-Trichloroethane	10	11.4	114	8.9	89	25	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	11.7	117	8.8	88	28	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	12.1	121	9.2	92	27	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	12.2	122	9.4	94	26	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	10.6	106	8.5	85	22	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	10.4	104	8.4	84	21	70-130/30
127-18-4	Tetrachloroethylene	10	10.7	107	8.7	87	21	70-130/30
109-99-9	Tetrahydrofuran	10	11.4	114	8.8	88	26	70-130/30
108-88-3	Toluene	10	11.4	114	8.9	89	25	70-130/30
79-01-6	Trichloroethylene	10	10.4	104	8.4	84	21	70-130/30
75-69-4	Trichlorofluoromethane	10	9.9	99	8.4	84	16	70-130/30
75-01-4	Vinyl chloride	10	11.0	110	9.8	98	12	70-130/30
108-05-4	Vinyl Acetate	10	12.1	121	9.6	96	23	70-130/30
	m,p-Xylene	20	24.1	121	18.7	94	25	70-130/30
95-47-6	o-Xylene	10	12.2	122	9.6	96	24	70-130/30
1330-20-7	Xylenes (total)	30	36.3	121	28.3	94	25	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-BS	W53483.D	1	02/12/16	YMH	n/a	n/a	VW2141
VW2141-BSD	W53484.D	1	02/12/16	YMH	n/a	n/a	VW2141

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

VW2141-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	109%	110%	65-128%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15063-2DUP	W54093.D	1	03/11/16	YMH	n/a	n/a	VW2161
JC15063-2	W54092.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Compound	JC15063-2 ppbv	Q	DUP ppbv	Q	RPD	Limits
67-64-1	Acetone	1.2		1.1		9	27
106-99-0	1,3-Butadiene	ND		ND		nc	20
71-43-2	Benzene	ND		ND		nc	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	ND		ND		nc	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	0.13	J	0.13	J	0	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	0.52		0.47		10	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	9.6		8.8		9	33
100-41-4	Ethylbenzene	ND		ND		nc	15
141-78-6	Ethyl Acetate	0.64		0.59		8	20
622-96-8	4-Ethyltoluene	ND		ND		nc	13

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15063-2DUP	W54093.D	1	03/11/16	YMH	n/a	n/a	VW2161
JC15063-2	W54092.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Compound	JC15063-2 ppbv	Q	DUP 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	0.11	J	0.099	J	11	20
87-68-3	Hexachlorobutadiene	ND		ND		nc	20
110-54-3	Hexane	0.096	J	0.10	J	4	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	0.11	J	0.11	J	0	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	0.21		0.20		5	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	ND		ND		nc	19
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	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	1.1		0.81		30* [a]	17
109-99-9	Tetrahydrofuran	ND		ND		nc	20
108-88-3	Toluene	0.077	J	0.065	J	17	20
79-01-6	Trichloroethylene	0.066		0.057		15* [a]	13
75-69-4	Trichlorofluoromethane	0.30		0.28		7	21
75-01-4	Vinyl chloride	ND		ND		nc	20
108-05-4	Vinyl Acetate	ND		ND		nc	20
	m,p-Xylene	ND		ND		nc	26
95-47-6	o-Xylene	ND		ND		nc	20
1330-20-7	Xylenes (total)	ND		ND		nc	26

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15063-2DUP	W54093.D	1	03/11/16	YMH	n/a	n/a	VW2161
JC15063-2	W54092.D	1	03/11/16	YMH	n/a	n/a	VW2161

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

JC15063-2, JC15063-3, JC15063-4, JC15063-5

CAS No.	Surrogate Recoveries	DUP	JC15063-2	Limits
460-00-4	4-Bromofluorobenzene	75%	74%	65-128%

(a) Outside in house control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15508-2DUP	W54125.D	1	03/12/16	YMH	n/a	n/a	VW2162
JC15508-2	W54124.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Compound	JC15508-2 ppbv	Q	DUP ppbv	Q	RPD	Limits
67-64-1	Acetone	9.9		9.9		0	27
106-99-0	1,3-Butadiene	ND		ND		nc	20
71-43-2	Benzene	0.19		0.21		10	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	ND		ND		nc	12
74-87-3	Chloromethane	0.71		0.64		10	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	0.52		0.54		4	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	397	E	381	E	4	33
100-41-4	Ethylbenzene	ND		ND		nc	15
141-78-6	Ethyl Acetate	0.31		0.25		21* [a]	20
622-96-8	4-Ethyltoluene	ND		ND		nc	13

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15508-2DUP	W54125.D	1	03/12/16	YMH	n/a	n/a	VW2162
JC15508-2	W54124.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Compound	JC15508-2 ppbv	Q	DUP 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	1.0		0.94		6	17
591-78-6	2-Hexanone	ND		ND		nc	20
67-63-0	Isopropyl Alcohol	14.4		14.1		2	26
75-09-2	Methylene chloride	0.80		0.86		7	26
78-93-3	Methyl ethyl ketone	0.28		0.31		10	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	ND		ND		nc	19
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	13
540-84-1	2,2,4-Trimethylpentane	ND		ND		nc	18
75-65-0	Tertiary Butyl Alcohol	0.19		0.20		5	21
127-18-4	Tetrachloroethylene	0.18		0.18		0	17
109-99-9	Tetrahydrofuran	ND		ND		nc	20
108-88-3	Toluene	0.18		0.20		11	20
79-01-6	Trichloroethylene	ND		ND		nc	13
75-69-4	Trichlorofluoromethane	0.39		0.41		5	21
75-01-4	Vinyl chloride	ND		ND		nc	20
108-05-4	Vinyl Acetate	ND		ND		nc	20
	m,p-Xylene	0.11		0.099	J	11	26
95-47-6	o-Xylene	ND		ND		nc	20
1330-20-7	Xylenes (total)	0.11		0.099	J	11	26

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15508-2DUP	W54125.D	1	03/12/16	YMH	n/a	n/a	VW2162
JC15508-2	W54124.D	1	03/12/16	YMH	n/a	n/a	VW2162

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

JC15063-1, JC15063-3

CAS No.	Surrogate Recoveries	DUP	JC15508-2	Limits
460-00-4	4-Bromofluorobenzene	80%	81%	65-128%

(a) Outside in house control limits.

* = Outside of Control Limits.

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-SCC	5W16060.D	1	02/04/16	TCH	n/a	n/a	V5W646

The QC reported here (Summa A252) applies to the following samples: **Method:** TO-15

Batch CP8229 cleaned 02/01/16: JC15063-1(A252)

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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-SCC	5W16060.D	1	02/04/16	TCH	n/a	n/a	V5W646

The QC reported here (Summa A252) applies to the following samples: **Method:** TO-15

Batch CP8229 cleaned 02/01/16: JC15063-1(A252)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-SCC	5W16060.D	1	02/04/16	TCH	n/a	n/a	V5W646

The QC reported here (Summa A252) applies to the following samples: **Method:** TO-15

Batch CP8229 cleaned 02/01/16: JC15063-1(A252)

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	65-128%

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-SCC	5W16063.D	1	02/04/16	TCH	n/a	n/a	V5W646

The QC reported here (Summa A1166) applies to the following samples: **Method:** TO-15

Batch CP8232 cleaned 02/01/16: JC15063-2(A1166)

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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-SCC	5W16063.D	1	02/04/16	TCH	n/a	n/a	V5W646

The QC reported here (Summa A1166) applies to the following samples: **Method:** TO-15

Batch CP8232 cleaned 02/01/16: JC15063-2(A1166)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W646-SCC	5W16063.D	1	02/04/16	TCH	n/a	n/a	V5W646

The QC reported here (Summa A1166) applies to the following samples: **Method:** TO-15

Batch CP8232 cleaned 02/01/16: JC15063-2(A1166)

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	96%	65-128%

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-SCC	5W16081.D	1	02/05/16	TCH	n/a	n/a	V5W647

The QC reported here (Summa A263) applies to the following samples: **Method:** TO-15

Batch CP8234 cleaned 02/02/16: JC15063-5(A263)

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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-SCC	5W16081.D	1	02/05/16	TCH	n/a	n/a	V5W647

The QC reported here (Summa A263) applies to the following samples: **Method:** TO-15

Batch CP8234 cleaned 02/02/16: JC15063-5(A263)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-SCC	5W16081.D	1	02/05/16	TCH	n/a	n/a	V5W647

The QC reported here (Summa A263) applies to the following samples: **Method:** TO-15

Batch CP8234 cleaned 02/02/16: JC15063-5(A263)

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	96%	65-128%

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-SCC	5W16087.D	1	02/06/16	TCH	n/a	n/a	V5W647

The QC reported here (Summa A251) applies to the following samples: **Method:** TO-15

Batch CP8235 cleaned 02/02/16: JC15063-4(A251)

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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-SCC	5W16087.D	1	02/06/16	TCH	n/a	n/a	V5W647

The QC reported here (Summa A251) applies to the following samples: **Method:** TO-15

Batch CP8235 cleaned 02/02/16: JC15063-4(A251)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W647-SCC	5W16087.D	1	02/06/16	TCH	n/a	n/a	V5W647

The QC reported here (Summa A251) applies to the following samples: **Method:** TO-15

Batch CP8235 cleaned 02/02/16: JC15063-4(A251)

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	65-128%

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-SCC	W53498.D	1	02/12/16	YMH	n/a	n/a	VW2141

The QC reported here (Summa A746) applies to the following samples: **Method:** TO-15

Batch CP8245 cleaned 02/05/16: JC15063-3(A284)

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	0.028	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.031	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.056	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.052	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.042	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.019	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.075	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-SCC	W53498.D	1	02/12/16	YMH	n/a	n/a	VW2141

The QC reported here (Summa A746) applies to the following samples: **Method:** TO-15

Batch CP8245 cleaned 02/05/16: JC15063-3(A284)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.021	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	0.020	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.023	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.16	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.025	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	0.055	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.032	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.015	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.016	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.053	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.012	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.068	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW2141-SCC	W53498.D	1	02/12/16	YMH	n/a	n/a	VW2141

The QC reported here (Summa A746) applies to the following samples: **Method:** TO-15

Batch CP8245 cleaned 02/05/16: JC15063-3(A284)

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	88%	65-128%

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: V5W637-BFB
Lab File ID: 5W15840.D
Instrument ID: GCMS5W
Injection Date: 01/22/16
Injection Time: 21:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	21160	14.2		Pass
75	30.0 - 66.0% of mass 95	62069	41.6		Pass
95	Base peak, 100% relative abundance	149226	100.0		Pass
96	5.0 - 9.0% of mass 95	9967	6.68		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	131890	88.4		Pass
175	4.0 - 9.01% of mass 174	9709	6.51	(7.36) [a]	Pass
176	93.0 - 101.0% of mass 174	127597	85.5	(96.7) [a]	Pass
177	5.0 - 9.0% of mass 176	8559	5.74	(6.71) [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
V5W637-ICC637	5W15841.D	01/22/16	21:47	00:42	Initial cal 10
V5W637-IC637	5W15842.D	01/22/16	22:29	01:24	Initial cal 5
V5W637-IC637	5W15843.D	01/22/16	23:13	02:08	Initial cal 0.5
V5W637-IC637	5W15844.D	01/22/16	23:56	02:51	Initial cal 0.2
V5W637-IC637	5W15845.D	01/23/16	00:40	03:35	Initial cal 20
V5W637-IC637	5W15847.D	01/23/16	02:07	05:02	Initial cal 0.1
V5W637-IC637	5W15848.D	01/23/16	02:48	05:43	Initial cal 0.04
V5W637-IC637	5W15849.D	01/23/16	03:33	06:28	Initial cal 30
V5W637-IC637	5W15851.D	01/23/16	05:01	07:56	Initial cal 40
V5W637-ICV637	5W15853.D	01/23/16	06:25	09:20	Initial cal verification 10

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: V5W646-BFB
Lab File ID: 5W16054.D
Instrument ID: GCMS5W
Injection Date: 02/04/16
Injection Time: 14:33

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	23504	15.0		Pass
75	30.0 - 66.0% of mass 95	67448	43.1		Pass
95	Base peak, 100% relative abundance	156608	100.0		Pass
96	5.0 - 9.0% of mass 95	10317	6.59		Pass
173	Less than 2.0% of mass 174	803	0.51	(0.58) [a]	Pass
174	50.0 - 120.0% of mass 95	138408	88.4		Pass
175	4.0 - 9.01% of mass 174	10108	6.45	(7.30) [a]	Pass
176	93.0 - 101.0% of mass 174	132973	84.9	(96.1) [a]	Pass
177	5.0 - 9.0% of mass 176	8973	5.73	(6.75) [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
V5W646-CC637	5W16055.D	02/04/16	15:17	00:44	Continuing cal 10
V5W646-BS	5W16056.D	02/04/16	16:03	01:30	Blank Spike
V5W646-BSD	5W16057.D	02/04/16	16:45	02:12	Blank Spike Duplicate
V5W646-MB	5W16059.D	02/04/16	18:17	03:44	Method Blank
V5W646-SCC	5W16060.D	02/04/16	19:02	04:29	Summa Cleaning Certification
V5W646-SCC	5W16061.D	02/04/16	19:48	05:15	Summa Cleaning Certification
V5W646-SCC	5W16062.D	02/04/16	20:32	05:59	Summa Cleaning Certification
V5W646-SCC	5W16063.D	02/04/16	21:19	06:46	Summa Cleaning Certification

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: V5W647-BFB
Lab File ID: 5W16064.D
Instrument ID: GCMS5W
Injection Date: 02/05/16
Injection Time: 09:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	18776	14.7		Pass
75	30.0 - 66.0% of mass 95	53520	42.0		Pass
95	Base peak, 100% relative abundance	127405	100.0		Pass
96	5.0 - 9.0% of mass 95	8517	6.68		Pass
173	Less than 2.0% of mass 174	742	0.58	(0.62) [a]	Pass
174	50.0 - 120.0% of mass 95	119344	93.7		Pass
175	4.0 - 9.01% of mass 174	8915	7.00	(7.47) [a]	Pass
176	93.0 - 101.0% of mass 174	116456	91.4	(97.6) [a]	Pass
177	5.0 - 9.0% of mass 176	7582	5.95	(6.51) [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
V5W647-CC637	5W16065.D	02/05/16	10:31	00:43	Continuing cal 10
V5W647-BS	5W16066.D	02/05/16	11:15	01:27	Blank Spike
V5W647-BSD	5W16067.D	02/05/16	12:22	02:34	Blank Spike Duplicate
V5W647-MB	5W16069.D	02/05/16	13:49	04:01	Method Blank
ZZZZZZ	5W16070.D	02/05/16	14:49	05:01	(unrelated sample)
ZZZZZZ	5W16071.D	02/05/16	15:37	05:49	(unrelated sample)
ZZZZZZ	5W16072.D	02/05/16	16:24	06:36	(unrelated sample)
ZZZZZZ	5W16074.D	02/05/16	17:48	08:00	(unrelated sample)
ZZZZZZ	5W16075.D	02/05/16	18:30	08:42	(unrelated sample)
JC13758-3	5W16076.D	02/05/16	19:12	09:24	(used for QC only; not part of job JC15063)
JC13758-3DUP	5W16077.D	02/05/16	19:55	10:07	Duplicate
ZZZZZZ	5W16078.D	02/05/16	20:37	10:49	(unrelated sample)
ZZZZZZ	5W16079.D	02/05/16	21:21	11:33	(unrelated sample)
ZZZZZZ	5W16080.D	02/05/16	22:04	12:16	(unrelated sample)
V5W647-SCC	5W16081.D	02/05/16	22:51	13:03	Summa Cleaning Certification
ZZZZZZ	5W16082.D	02/05/16	23:40	13:52	(unrelated sample)
ZZZZZZ	5W16083.D	02/06/16	00:30	14:42	(unrelated sample)
ZZZZZZ	5W16084.D	02/06/16	01:15	15:27	(unrelated sample)
ZZZZZZ	5W16085.D	02/06/16	02:05	16:17	(unrelated sample)
ZZZZZZ	5W16086.D	02/06/16	02:51	17:03	(unrelated sample)
V5W647-SCC	5W16087.D	02/06/16	03:35	17:47	Summa Cleaning Certification

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: VW2140-BFB
Lab File ID: W53465.D
Instrument ID: GCMSW
Injection Date: 02/11/16
Injection Time: 12:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	14541	16.6		Pass
75	30.0 - 66.0% of mass 95	39973	45.7		Pass
95	Base peak, 100% relative abundance	87434	100.0		Pass
96	5.0 - 9.0% of mass 95	5623	6.43		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	79701	91.2		Pass
175	4.0 - 9.01% of mass 174	5745	6.57	(7.21) [a]	Pass
176	93.0 - 101.0% of mass 174	77192	88.3	(96.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4959	5.67	(6.42) [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
VW2140-ICC2140	W53466.D	02/11/16	13:34	00:41	Initial cal 10
VW2140-IC2140	W53468.D	02/11/16	14:56	02:03	Initial cal 0.5
VW2140-IC2140	W53469.D	02/11/16	15:37	02:44	Initial cal 0.2
VW2140-IC2140	W53470.D	02/11/16	16:19	03:26	Initial cal 20
VW2140-IC2140	W53471.D	02/11/16	17:01	04:08	Initial cal 15
VW2140-IC2140	W53473.D	02/11/16	18:23	05:30	Initial cal 0.1
VW2140-IC2140	W53474.D	02/11/16	19:04	06:11	Initial cal 0.04
VW2140-IC2140	W53475.D	02/11/16	19:44	06:51	Initial cal 30
VW2140-IC2140	W53477.D	02/11/16	21:07	08:14	Initial cal 5
VW2140-IC2140	W53478.D	02/11/16	21:47	08:54	Initial cal 40
VW2140-ICV2140	W53480.D	02/11/16	23:08	10:15	Initial cal verification 10

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: VW2141-BFB
Lab File ID: W53481.D
Instrument ID: GCMSW
Injection Date: 02/12/16
Injection Time: 09:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	14353	16.7		Pass
75	30.0 - 66.0% of mass 95	40736	47.4		Pass
95	Base peak, 100% relative abundance	85914	100.0		Pass
96	5.0 - 9.0% of mass 95	5763	6.71		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	73965	86.1		Pass
175	4.0 - 9.01% of mass 174	5795	6.75	(7.83) [a]	Pass
176	93.0 - 101.0% of mass 174	72453	84.3	(98.0) [a]	Pass
177	5.0 - 9.0% of mass 176	4755	5.53	(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
VW2141-CC2140	W53482.D	02/12/16	10:00	00:41	Continuing cal 10
VW2141-BS	W53483.D	02/12/16	10:41	01:22	Blank Spike
VW2141-BSD	W53484.D	02/12/16	11:22	02:03	Blank Spike Duplicate
VW2141-MB	W53486.D	02/12/16	12:50	03:31	Method Blank
ZZZZZZ	W53487.D	02/12/16	13:31	04:12	(unrelated sample)
ZZZZZZ	W53488.D	02/12/16	14:37	05:18	(unrelated sample)
ZZZZZZ	W53489.D	02/12/16	15:18	05:59	(unrelated sample)
ZZZZZZ	W53490.D	02/12/16	15:59	06:40	(unrelated sample)
ZZZZZZ	W53491.D	02/12/16	16:40	07:21	(unrelated sample)
ZZZZZZ	W53493.D	02/12/16	18:26	09:07	(unrelated sample)
JC14012-2	W53494.D	02/12/16	19:07	09:48	(used for QC only; not part of job JC15063)
JC14012-2DUP	W53495.D	02/12/16	19:50	10:31	Duplicate
ZZZZZZ	W53496.D	02/12/16	20:31	11:12	(unrelated sample)
ZZZZZZ	W53497.D	02/12/16	21:12	11:53	(unrelated sample)
VW2141-SCC	W53498.D	02/12/16	21:53	12:34	Summa Cleaning Certification
ZZZZZZ	W53499.D	02/12/16	22:34	13:15	(unrelated sample)
ZZZZZZ	W53500.D	02/12/16	23:15	13:56	(unrelated sample)
ZZZZZZ	W53501.D	02/12/16	23:56	14:37	(unrelated sample)
ZZZZZZ	W53502.D	02/13/16	00:37	15:18	(unrelated sample)
ZZZZZZ	W53504.D	02/13/16	02:00	16:41	(unrelated sample)
ZZZZZZ	W53505.D	02/13/16	02:42	17:23	(unrelated sample)
ZZZZZZ	W53506.D	02/13/16	03:23	18:04	(unrelated sample)
ZZZZZZ	W53507.D	02/13/16	04:05	18:46	(unrelated sample)
ZZZZZZ	W53508.D	02/13/16	04:47	19:28	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample:	VW2141-BFB	**Injection Date:**	02/12/16
Lab File ID:	W53481.D	**Injection Time:**	09:19
Instrument ID:	GCMSW		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	W53509.D	02/13/16	05:29	20:10	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: VW2152-BFB
Lab File ID: W53822.D
Instrument ID: GCMSW
Injection Date: 03/01/16
Injection Time: 16:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	28194	15.2		Pass
75	30.0 - 66.0% of mass 95	80816	43.6		Pass
95	Base peak, 100% relative abundance	185301	100.0		Pass
96	5.0 - 9.0% of mass 95	12095	6.53		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	179882	97.1		Pass
175	4.0 - 9.01% of mass 174	13155	7.10	(7.31) [a]	Pass
176	93.0 - 101.0% of mass 174	175125	94.5	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	11450	6.18	(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
VW2152-IC2152	W53823.D	03/01/16	17:28	00:44	Initial cal 0.2
VW2152-IC2152	W53824.D	03/01/16	18:09	01:25	Initial cal 0.5
VW2152-IC2152	W53825.D	03/01/16	18:51	02:07	Initial cal 0.04
VW2152-IC2152	W53826.D	03/01/16	19:32	02:48	Initial cal 5
VW2152-ICC2152	W53827.D	03/01/16	20:13	03:29	Initial cal 10
VW2152-IC2152	W53828.D	03/01/16	20:54	04:10	Initial cal 20
VW2152-IC2152	W53830.D	03/01/16	22:16	05:32	Initial cal 40
VW2152-ICV2152	W53833.D	03/02/16	09:25	16:41	Initial cal verification 10

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: VW2161-BFB
Lab File ID: W54079.D
Instrument ID: GCMSW
Injection Date: 03/11/16
Injection Time: 08:39

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	19034	18.2		Pass
75	30.0 - 66.0% of mass 95	49896	47.8		Pass
95	Base peak, 100% relative abundance	104413	100.0		Pass
96	5.0 - 9.0% of mass 95	7070	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	95141	91.1		Pass
175	4.0 - 9.01% of mass 174	7202	6.90	(7.57) [a]	Pass
176	93.0 - 101.0% of mass 174	93994	90.0	(98.8) [a]	Pass
177	5.0 - 9.0% of mass 176	6060	5.80	(6.45) [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
ZZZZZZ	W54079.D	03/11/16	08:39	00:00	(unrelated sample)
VW2161-CC2152	W54080.D	03/11/16	09:32	00:53	Continuing cal 10
VW2161-BS	W54081.D	03/11/16	10:16	01:37	Blank Spike
VW2161-BSD	W54082.D	03/11/16	11:04	02:25	Blank Spike Duplicate
VW2161-MB	W54084.D	03/11/16	12:46	04:07	Method Blank
ZZZZZZ	W54085.D	03/11/16	13:49	05:10	(unrelated sample)
ZZZZZZ	W54086.D	03/11/16	14:29	05:50	(unrelated sample)
ZZZZZZ	W54087.D	03/11/16	15:11	06:32	(unrelated sample)
ZZZZZZ	W54089.D	03/11/16	17:02	08:23	(unrelated sample)
VW2161-SCC	W54090.D	03/11/16	17:43	09:04	Summa Cleaning Certification
ZZZZZZ	W54091.D	03/11/16	18:26	09:47	(unrelated sample)
JC15063-2	W54092.D	03/11/16	19:07	10:28	DB-VMP-2
JC15063-2DUP	W54093.D	03/11/16	19:48	11:09	Duplicate
JC15063-3	W54094.D	03/11/16	20:29	11:50	INDOOR AIR
JC15063-4	W54095.D	03/11/16	21:10	12:31	OUTDOOR AMBIENT
JC15063-5	W54096.D	03/11/16	21:52	13:13	TRIP BLANK
ZZZZZZ	W54097.D	03/11/16	22:32	13:53	(unrelated sample)
ZZZZZZ	W54098.D	03/11/16	23:16	14:37	(unrelated sample)
ZZZZZZ	W54099.D	03/11/16	23:58	15:19	(unrelated sample)
ZZZZZZ	W54100.D	03/12/16	00:41	16:02	(unrelated sample)
VW2161-SCC	W54101.D	03/12/16	01:22	16:43	Summa Cleaning Certification
ZZZZZZ	W54102.D	03/12/16	02:03	17:24	(unrelated sample)
ZZZZZZ	W54103.D	03/12/16	02:44	18:05	(unrelated sample)
ZZZZZZ	W54104.D	03/12/16	03:24	18:45	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample:	VW2161-BFB	**Injection Date:**	03/11/16
Lab File ID:	W54079.D	**Injection Time:**	08:39
Instrument ID:	GCMSW		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	W54105.D	03/12/16	04:05	19:26	(unrelated sample)
ZZZZZZ	W54106.D	03/12/16	04:46	20:07	(unrelated sample)
ZZZZZZ	W54107.D	03/12/16	05:26	20:47	(unrelated sample)
ZZZZZZ	W54108.D	03/12/16	06:08	21:29	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample: VW2162-BFB
Lab File ID: W54109.D
Instrument ID: GCMSW
Injection Date: 03/12/16
Injection Time: 09:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	18162	20.3		Pass
75	30.0 - 66.0% of mass 95	44706	50.0		Pass
95	Base peak, 100% relative abundance	89424	100.0		Pass
96	5.0 - 9.0% of mass 95	6057	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	76920	86.0		Pass
175	4.0 - 9.01% of mass 174	5926	6.63	(7.70) [a]	Pass
176	93.0 - 101.0% of mass 174	74173	82.9	(96.4) [a]	Pass
177	5.0 - 9.0% of mass 176	5069	5.67	(6.83) [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
ZZZZZZ	W54109.D	03/12/16	09:23	00:00	(unrelated sample)
VW2162-CC2152	W54111.D	03/12/16	11:14	01:51	Continuing cal 10
VW2162-BS	W54112.D	03/12/16	12:16	02:53	Blank Spike
VW2162-BSD	W54113.D	03/12/16	12:58	03:35	Blank Spike Duplicate
VW2162-MB	W54115.D	03/12/16	14:39	05:16	Method Blank
ZZZZZZ	W54116.D	03/12/16	15:20	05:57	(unrelated sample)
JC15063-1	W54117.D	03/12/16	16:01	06:38	DB-VMP-1
JC15063-3	W54118.D	03/12/16	16:43	07:20	INDOOR AIR
ZZZZZZ	W54119.D	03/12/16	17:24	08:01	(unrelated sample)
ZZZZZZ	W54120.D	03/12/16	18:05	08:42	(unrelated sample)
ZZZZZZ	W54121.D	03/12/16	18:46	09:23	(unrelated sample)
VW2162-SCC	W54122.D	03/12/16	19:28	10:05	Summa Cleaning Certification
ZZZZZZ	W54123.D	03/12/16	20:09	10:46	(unrelated sample)
JC15508-2	W54124.D	03/12/16	20:51	11:28	(used for QC only; not part of job JC15063)
JC15508-2DUP	W54125.D	03/12/16	21:32	12:09	Duplicate
ZZZZZZ	W54126.D	03/12/16	22:14	12:51	(unrelated sample)
ZZZZZZ	W54127.D	03/12/16	22:58	13:35	(unrelated sample)
ZZZZZZ	W54128.D	03/12/16	23:39	14:16	(unrelated sample)
ZZZZZZ	W54130.D	03/13/16	01:01	15:38	(unrelated sample)
ZZZZZZ	W54131.D	03/13/16	01:43	16:20	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Check Std:	V5W646-CC637	**Injection Date:**	02/04/16
Lab File ID:	5W16055.D	**Injection Time:**	15:17
Instrument ID:	GCMS5W	**Method:**	TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	166689	8.29	596181	10.49	307906	16.05
Upper Limit [a]	233365	8.62	834653	10.82	431068	16.38
Lower Limit [b]	100013	7.96	357709	10.16	184744	15.72

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V5W646-BS	169313	8.28	613299	10.48	317970	16.04
V5W646-BSD	159675	8.28	584192	10.48	302744	16.04
V5W646-MB	175519	8.27	617457	10.48	299651	16.04
V5W646-SCC	165553	8.27	575725	10.48	279949	16.04
V5W646-SCC	161463	8.27	557107	10.48	268750	16.04
V5W646-SCC	161757	8.29	547518	10.48	270312	16.04
V5W646-SCC	160469	8.27	542631	10.48	268002	16.04

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.

Volatile Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Check Std:	V5W647-CC637	**Injection Date:**	02/05/16
Lab File ID:	5W16065.D	**Injection Time:**	10:31
Instrument ID:	GCMS5W	**Method:**	TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	119023	8.28	427827	10.48	223386	16.04
Upper Limit [a]	166632	8.61	598958	10.81	312740	16.37
Lower Limit [b]	71414	7.95	256696	10.15	134032	15.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V5W647-BS	134491	8.29	487889	10.48	249110	16.04
V5W647-BSD	138604	8.28	496797	10.48	252560	16.04
V5W647-MB	138544	8.29	484774	10.48	233102	16.04
ZZZZZZ	138516	8.28	495750	10.48	239309	16.04
ZZZZZZ	138264	8.28	479576	10.48	231580	16.04
ZZZZZZ	124865	8.28	448016	10.48	230592	16.04
ZZZZZZ	136509	8.29	486159	10.48	234625	16.04
ZZZZZZ	124012	8.27	445310	10.48	209078	16.04
JC13758-3	131990	8.28	461612	10.48	216377	16.04
JC13758-3DUP	132291	8.28	443218	10.48	220191	16.04
ZZZZZZ	133366	8.28	446478	10.48	216667	16.04
ZZZZZZ	125873	8.29	419056	10.48	206695	16.04
ZZZZZZ	132414	8.27	439391	10.47	214745	16.04
V5W647-SCC	126148	8.29	430571	10.48	210847	16.04
ZZZZZZ	106609	8.27	369230	10.48	206748	16.04
ZZZZZZ	137702	8.29	478599	10.48	249628	16.04
ZZZZZZ	149329	8.29	534641	10.48	266723	16.04
ZZZZZZ	136044	8.28	462010	10.48	235129	16.04
ZZZZZZ	147164	8.27	503939	10.48	247225	16.04
V5W647-SCC	138364	8.27	481617	10.48	233395	16.04
ZZZZZZ	146207	8.27	529018	10.48	256414	16.04

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.

Volatile Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Check Std:	VW2141-CC2140	**Injection Date:**	02/12/16
Lab File ID:	W53482.D	**Injection Time:**	10:00
Instrument ID:	GCMSW	**Method:**	TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	100341	9.18	541819	10.91	258099	15.18
Upper Limit [a]	140477	9.51	758547	11.24	361339	15.51
Lower Limit [b]	60205	8.85	325091	10.58	154859	14.85

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VW2141-BS	96205	9.19	509400	10.91	248380	15.18
VW2141-BSD	104379	9.18	556539	10.91	264913	15.17
VW2141-MB	99417	9.20	534263	10.92	210357	15.18
ZZZZZZ	92834	9.19	504365	10.91	213276	15.18
ZZZZZZ	89126	9.19	482018	10.91	215150	15.18
ZZZZZZ	88809	9.19	475284	10.91	211530	15.18
ZZZZZZ	95947	9.19	509356	10.91	217777	15.18
ZZZZZZ	80956	9.19	428315	10.91	188075	15.18
ZZZZZZ	83832	9.18	452102	10.91	196304	15.17
JC14012-2	91070	9.20	494572	10.92	252311	15.19
JC14012-2DUP	93839	9.18	505145	10.91	255010	15.17
ZZZZZZ	91546	9.18	492724	10.91	246519	15.18
ZZZZZZ	93327	9.19	501095	10.91	225558	15.18
VW2141-SCC	85967	9.19	471114	10.91	194213	15.18
ZZZZZZ	82757	9.19	454480	10.92	221219	15.18
ZZZZZZ	93570	9.19	505012	10.92	277356	15.18
ZZZZZZ	96904	9.18	525574	10.91	282937	15.18
ZZZZZZ	116741	9.19	613107	10.92	363138[c]	15.18
ZZZZZZ	108709	9.18	579203	10.91	234917	15.17
ZZZZZZ	93694	9.19	508791	10.91	208048	15.18
ZZZZZZ	85841	9.19	476131	10.91	201285	15.17
ZZZZZZ	80983	9.19	434877	10.92	195605	15.18
ZZZZZZ	79426	9.18	427568	10.91	185790	15.17
ZZZZZZ	78159	9.18	420959	10.91	187667	15.17

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.
(c) Outside control limits due to matrix interference.

Volatile Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Check Std:	VW2161-CC2152	**Injection Date:**	03/11/16
Lab File ID:	W54080.D	**Injection Time:**	09:32
Instrument ID:	GCMSW	**Method:**	TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	215818	9.16	1111676	10.88	537229	15.15
Upper Limit [a]	302145	9.49	1556346	11.21	752121	15.48
Lower Limit [b]	129491	8.83	667006	10.55	322337	14.82

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VW2161-BS	213431	9.17	1145306	10.89	504895	15.15
VW2161-BSD	234928	9.17	1209443	10.89	532741	15.15
VW2161-MB	212200	9.16	1088054	10.88	421711	15.15
ZZZZZZ	192300	9.16	972233	10.89	388030	15.15
ZZZZZZ	194548	9.16	982131	10.89	370928	15.14
ZZZZZZ	197398	9.16	1003804	10.88	397666	15.15
ZZZZZZ	179873	9.17	909364	10.89	378786	15.15
VW2161-SCC	169074	9.17	863342	10.89	333545	15.15
ZZZZZZ	166304	9.17	911185	10.89	647214	15.15
JC15063-2	262263	9.17	1254160	10.89	414861	15.15
JC15063-2DUP	232265	9.17	1179311	10.89	452755	15.15
JC15063-3	191443	9.16	1068129	10.89	477063	15.15
JC15063-4	181103	9.18	939446	10.89	377258	15.15
JC15063-5	188820	9.16	980471	10.88	404246	15.14
ZZZZZZ	194280	9.16	1006245	10.88	485685	15.15
ZZZZZZ	202586	9.17	1073149	10.89	393135	15.15
ZZZZZZ	242294	9.16	1304493	10.88	544598	15.14
ZZZZZZ	175356	9.16	932919	10.88	369166	15.14
VW2161-SCC	169195	9.18	868888	10.89	329852	15.15
ZZZZZZ	196217	9.16	945306	10.88	378070	15.14
ZZZZZZ	173353	9.16	892501	10.88	361381	15.15
ZZZZZZ	187589	9.16	964104	10.88	399912	15.14
ZZZZZZ	169250	9.18	870795	10.89	354342	15.15
ZZZZZZ	182421	9.17	929052	10.89	374287	15.15
ZZZZZZ	166003	9.16	856771	10.88	356381	15.14
ZZZZZZ	175043	9.16	879263	10.88	367376	15.14
ZZZZZZ	161368	9.18	851649	10.89	348652	15.15

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.

Volatile Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Check Std:	VW2162-CC2152	**Injection Date:**	03/12/16
Lab File ID:	W54111.D	**Injection Time:**	11:14
Instrument ID:	GCMSW	**Method:**	TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	240563	9.16	1281910	10.89	587871	15.15
Upper Limit [a]	336788	9.49	1794674	11.22	823019	15.48
Lower Limit [b]	144338	8.83	769146	10.56	352723	14.82

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VW2162-BS	255786	9.19	1360675	10.91	585526	15.16
VW2162-BSD	248928	9.17	1295014	10.89	576927	15.15
VW2162-MB	276853	9.16	1445304	10.88	535278	15.14
ZZZZZZ	243106	9.16	1251892	10.88	478222	15.14
JC15063-1	254716	9.17	1331356	10.89	507143	15.14
JC15063-3	222266	9.17	1132571	10.88	455340	15.14
ZZZZZZ	209742	9.16	1050287	10.88	403842	15.15
ZZZZZZ	263258	9.16	1378359	10.88	554141	15.15
ZZZZZZ	232934	9.16	1159407	10.88	463221	15.15
VW2162-SCC	219576	9.16	1124261	10.88	437186	15.14
ZZZZZZ	248915	9.16	1264992	10.88	493716	15.14
JC15508-2	246498	9.16	1269000	10.88	500661	15.14
JC15508-2DUP	246390	9.16	1253078	10.88	489336	15.14
ZZZZZZ	231749	9.16	1175036	10.88	457637	15.14
ZZZZZZ	228915	9.16	1170874	10.88	471481	15.14
ZZZZZZ	237355	9.16	1210899	10.88	534065	15.14
ZZZZZZ	240273	9.16	1219843	10.88	497432	15.15
ZZZZZZ	241463	9.17	1200995	10.89	513715	15.15

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.

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.28	8.29	0.637	ok	0.638	0.578-0.698
Acrylonitrile	5.69	8.29	0.686	ok	0.688	0.628-0.748
Acetonitrile	5.06	8.29	0.610	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.29	0.530	ok	0.530	0.470-0.590
Benzene	10.05	8.29	1.212	ok	1.213	1.153-1.273
Bromobenzene	18.62	16.05	1.160	ok	1.161	1.101-1.221
Bromodichloromethane	11.27	10.49	1.074	ok	1.075	1.015-1.135
Bromoform	17.00	16.05	1.059	ok	1.060	1.000-1.120
Bromomethane	4.61	8.29	0.556	ok	0.556	0.496-0.616
Bromoethene	5.06	8.29	0.610	ok	0.610	0.550-0.670
n-Butane	4.43	8.29	0.534	ok	0.534	0.474-0.594
Benzyl Chloride	20.40	16.05	1.271	ok	1.271	1.211-1.331
n-Butylbenzene	21.38	16.05	1.332	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.20	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.29	0.771	ok	0.771	0.711-0.831
Chlorobenzene	16.11	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.88	8.29	0.468	ok	0.468	0.408-0.528
Chloroethane	4.76	8.29	0.574	ok	0.574	0.514-0.634
Chloroform	8.43	8.29	1.017	ok	1.017	0.957-1.077
Chloromethane	4.10	8.29	0.495	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.29	0.750	ok	0.751	0.691-0.811
2-Chlorotoluene	19.23	16.05	1.198	ok	1.198	1.138-1.258
Carbon tetrachloride	10.22	8.29	1.233	ok	1.234	1.174-1.294
Cyclohexane	10.36	8.29	1.250	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.22	8.29	0.871	ok	0.872	0.812-0.932
1,1-Dichloroethylene	6.00	8.29	0.724	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.49	1.385	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.24	8.29	1.115	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.02	10.49	1.051	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.69	10.49	1.305	ok	1.306	1.246-1.366
1,4-Dioxane	11.34	10.49	1.081	ok	1.082	1.022-1.142
Dichlorodifluoromethane	3.96	8.29	0.478	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.29	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.49	1.355	ok	1.355	1.295-1.415
Dibromomethane	11.00	10.49	1.049	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.01	8.29	0.846	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.11	8.29	0.978	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.40	10.49	1.182	ok	1.183	1.123-1.243

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
m-Dichlorobenzene	20.41	16.05	1.272	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.51	16.05	1.278	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.08	10.49	1.247	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.31	8.29	1.002	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.65	8.29	1.285	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.29	1.121	ok	1.121	1.061-1.181
Ethanol	4.87	8.29	0.587	ok	0.588	0.528-0.648
Ethylbenzene	16.65	16.05	1.037	ok	1.038	0.978-1.098
Ethyl Acetate	8.35	8.29	1.007	ok	1.009	0.949-1.069
4-Ethyltoluene	19.52	16.05	1.216	ok	1.216	1.156-1.276
Freon 113	6.35	8.29	0.766	ok	0.766	0.706-0.826
Freon 114	4.17	8.29	0.503	ok	0.503	0.443-0.563
Freon 123	5.18	8.29	0.625	ok	0.625	0.565-0.685
Freon 123A	5.23	8.29	0.631	ok	0.631	0.571-0.691
Freon 141B	5.52	8.29	0.666	ok	0.666	0.606-0.726
Freon 142B	4.08	8.29	0.492	ok	0.492	0.432-0.552
Freon 143a	3.75	8.29	0.452	ok	0.452	0.392-0.512
Freon 152A	3.84	8.29	0.463	ok	0.463	0.403-0.523
Heptane	11.68	10.49	1.113	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.30	8.29	1.001	ok	1.002	0.942-1.062
2-Hexanone	14.02	10.49	1.337	ok	1.338	1.278-1.398
Iodomethane	5.93	8.29	0.715	ok	0.715	0.655-0.775
Isopropylbenzene	18.51	16.05	1.153	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.50	8.29	0.663	ok	0.664	0.604-0.724
p-Isopropyltoluene	20.81	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.29	0.737	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.64	8.29	0.922	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.45	10.49	1.187	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.28	8.29	0.878	ok	0.880	0.820-0.940
Methylmethacrylate	11.59	10.49	1.105	ok	1.106	1.046-1.166
Naphthalene	23.29	16.05	1.451	ok	1.451	1.391-1.511
Nonane	17.98	16.05	1.120	ok	1.120	1.060-1.180
Octane	14.99	10.49	1.429	ok	1.430	1.370-1.490
Pentane	5.72	8.29	0.690	ok	0.690	0.630-0.750
n-Propylbenzene	19.30	16.05	1.202	ok	1.203	1.143-1.263
Propylene	3.91	8.29	0.472	ok	0.471	0.411-0.531

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Styrene	17.45	16.05	1.087	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.52	8.29	1.148	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.09	10.49	1.534	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.60	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.29	10.49	1.267	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.16	16.05	1.443	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.22	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.64	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.49	1.081	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.03	8.29	0.727	ok	0.731	0.671-0.791
Tetrachloroethylene	15.16	10.49	1.445	ok	1.446	1.386-1.506
Tetrahydrofuran	8.87	8.29	1.070	ok	1.074	1.014-1.134
Toluene	13.64	10.49	1.300	ok	1.302	1.242-1.362
Trichloroethylene	11.32	10.49	1.079	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.42	8.29	0.654	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.29	0.516	ok	0.516	0.456-0.576
Vinyl Acetate	7.38	8.29	0.890	ok	0.892	0.832-0.952
m,p-Xylene	16.93	16.05	1.055	ok	1.055	0.995-1.115
o-Xylene	17.60	16.05	1.097	ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.72	16.05	0.356	ok	0.356	0.296-0.416

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.29	ok	8.29	7.96-8.62	165817	ok	162544	97526-227562
1,4-Difluorobenzene	10.49	ok	10.49	10.16-10.82	626348	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	304742	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.28	8.29	0.637	ok	0.638	0.578-0.698
Acrylonitrile	5.69	8.29	0.686	ok	0.688	0.628-0.748
Acetonitrile	5.05	8.29	0.609	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.29	0.530	ok	0.530	0.470-0.590
Benzene	10.05	8.29	1.212	ok	1.213	1.153-1.273
Bromobenzene	18.62	16.05	1.160	ok	1.161	1.101-1.221
Bromodichloromethane	11.27	10.48	1.075	ok	1.075	1.015-1.135
Bromoform	17.00	16.05	1.059	ok	1.060	1.000-1.120
Bromomethane	4.61	8.29	0.556	ok	0.556	0.496-0.616
Bromoethene	5.05	8.29	0.609	ok	0.610	0.550-0.670
n-Butane	4.43	8.29	0.534	ok	0.534	0.474-0.594
Benzyl Chloride	20.40	16.05	1.271	ok	1.271	1.211-1.331
n-Butylbenzene	21.38	16.05	1.332	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.20	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.29	0.771	ok	0.771	0.711-0.831
Chlorobenzene	16.11	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.88	8.29	0.468	ok	0.468	0.408-0.528
Chloroethane	4.76	8.29	0.574	ok	0.574	0.514-0.634
Chloroform	8.42	8.29	1.016	ok	1.017	0.957-1.077
Chloromethane	4.10	8.29	0.495	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.29	0.750	ok	0.751	0.691-0.811
2-Chlorotoluene	19.22	16.05	1.198	ok	1.198	1.138-1.258
Carbon tetrachloride	10.22	8.29	1.233	ok	1.234	1.174-1.294
Cyclohexane	10.36	8.29	1.250	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.22	8.29	0.871	ok	0.872	0.812-0.932
1,1-Dichloroethylene	5.99	8.29	0.723	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.52	10.48	1.385	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.24	8.29	1.115	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.02	10.48	1.052	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.69	10.48	1.306	ok	1.306	1.246-1.366
1,4-Dioxane	11.34	10.48	1.082	ok	1.082	1.022-1.142
Dichlorodifluoromethane	3.96	8.29	0.478	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.29	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.20	10.48	1.355	ok	1.355	1.295-1.415
Dibromomethane	11.00	10.48	1.050	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.01	8.29	0.846	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.10	8.29	0.977	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.40	10.48	1.183	ok	1.183	1.123-1.243

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
m-Dichlorobenzene	20.41	16.05	1.272	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.51	16.05	1.278	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.08	10.48	1.248	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.31	8.29	1.002	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.65	8.29	1.285	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.29	1.121	ok	1.121	1.061-1.181
Ethanol	4.87	8.29	0.587	ok	0.588	0.528-0.648
Ethylbenzene	16.65	16.05	1.037	ok	1.038	0.978-1.098
Ethyl Acetate	8.35	8.29	1.007	ok	1.009	0.949-1.069
4-Ethyltoluene	19.52	16.05	1.216	ok	1.216	1.156-1.276
Freon 113	6.35	8.29	0.766	ok	0.766	0.706-0.826
Freon 114	4.17	8.29	0.503	ok	0.503	0.443-0.563
Freon 123	5.18	8.29	0.625	ok	0.625	0.565-0.685
Freon 123A	5.23	8.29	0.631	ok	0.631	0.571-0.691
Freon 141B	5.52	8.29	0.666	ok	0.666	0.606-0.726
Freon 142B	4.08	8.29	0.492	ok	0.492	0.432-0.552
Freon 143a	3.75	8.29	0.452	ok	0.452	0.392-0.512
Freon 152A	3.84	8.29	0.463	ok	0.463	0.403-0.523
Heptane	11.68	10.48	1.115	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.30	8.29	1.001	ok	1.002	0.942-1.062
2-Hexanone	14.02	10.48	1.338	ok	1.338	1.278-1.398
Iodomethane	5.92	8.29	0.714	ok	0.715	0.655-0.775
Isopropylbenzene	18.51	16.05	1.153	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.50	8.29	0.663	ok	0.664	0.604-0.724
p-Isopropyltoluene	20.81	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.29	0.737	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.64	8.29	0.922	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.45	10.48	1.188	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.28	8.29	0.878	ok	0.880	0.820-0.940
Methylmethacrylate	11.59	10.48	1.106	ok	1.106	1.046-1.166
Naphthalene	23.29	16.05	1.451	ok	1.451	1.391-1.511
Nonane	17.98	16.05	1.120	ok	1.120	1.060-1.180
Octane	14.99	10.48	1.430	ok	1.430	1.370-1.490
Pentane	5.72	8.29	0.690	ok	0.690	0.630-0.750
n-Propylbenzene	19.30	16.05	1.202	ok	1.203	1.143-1.263
Propylene	3.90	8.29	0.470	ok	0.471	0.411-0.531

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Styrene	17.45	16.05	1.087	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.52	8.29	1.148	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.09	10.48	1.535	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.60	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.29	10.48	1.268	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.16	16.05	1.443	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.21	16.05	1.259	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.64	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.48	1.082	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.04	8.29	0.729	ok	0.731	0.671-0.791
Tetrachloroethylene	15.16	10.48	1.447	ok	1.446	1.386-1.506
Tetrahydrofuran	8.88	8.29	1.071	ok	1.074	1.014-1.134
Toluene	13.64	10.48	1.302	ok	1.302	1.242-1.362
Trichloroethylene	11.31	10.48	1.079	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.42	8.29	0.654	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.29	0.516	ok	0.516	0.456-0.576
Vinyl Acetate	7.38	8.29	0.890	ok	0.892	0.832-0.952
m,p-Xylene	16.93	16.05	1.055	ok	1.055	0.995-1.115
o-Xylene	17.60	16.05	1.097	ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.72	16.05	0.356	ok	0.356	0.296-0.416

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.29	ok	8.29	7.96-8.62	157743	ok	162544	97526-227562
1,4-Difluorobenzene	10.48	ok	10.49	10.16-10.82	605028	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	285988	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.31	8.29	0.641	ok	0.638	0.578-0.698
Acrylonitrile	5.71	8.29	0.689	ok	0.688	0.628-0.748
Acetonitrile	5.08	8.29	0.613	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.29	0.530	ok	0.530	0.470-0.590
Benzene	10.06	8.29	1.214	ok	1.213	1.153-1.273
Bromobenzene	18.63	16.05	1.161	ok	1.161	1.101-1.221
Bromodichloromethane	11.27	10.49	1.074	ok	1.075	1.015-1.135
Bromoform	17.01	16.05	1.060	ok	1.060	1.000-1.120
Bromomethane	4.61	8.29	0.556	ok	0.556	0.496-0.616
Bromoethene	5.05	8.29	0.609	ok	0.610	0.550-0.670
n-Butane	4.43	8.29	0.534	ok	0.534	0.474-0.594
Benzyl Chloride	20.40	16.05	1.271	ok	1.271	1.211-1.331
n-Butylbenzene	21.38	16.05	1.332	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.20	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.29	0.771	ok	0.771	0.711-0.831
Chlorobenzene	16.12	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.87	8.29	0.467	ok	0.468	0.408-0.528
Chloroethane	4.76	8.29	0.574	ok	0.574	0.514-0.634
Chloroform	8.43	8.29	1.017	ok	1.017	0.957-1.077
Chloromethane	4.09	8.29	0.493	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.29	0.750	ok	0.751	0.691-0.811
2-Chlorotoluene	19.24	16.05	1.199	ok	1.198	1.138-1.258
Carbon tetrachloride	10.23	8.29	1.234	ok	1.234	1.174-1.294
Cyclohexane	10.36	8.29	1.250	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.23	8.29	0.872	ok	0.872	0.812-0.932
1,1-Dichloroethylene	5.99	8.29	0.723	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.49	1.385	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.25	8.29	1.116	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.03	10.49	1.051	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.69	10.49	1.305	ok	1.306	1.246-1.366
1,4-Dioxane	11.37	10.49	1.084	ok	1.082	1.022-1.142
Dichlorodifluoromethane	3.96	8.29	0.478	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.29	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.49	1.355	ok	1.355	1.295-1.415
Dibromomethane	11.00	10.49	1.049	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.02	8.29	0.847	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.11	8.29	0.978	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.40	10.49	1.182	ok	1.183	1.123-1.243

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
m-Dichlorobenzene	20.41	16.05	1.272	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.51	16.05	1.278	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.09	10.49	1.248	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.33	8.29	1.005	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.65	8.29	1.285	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.29	1.121	ok	1.121	1.061-1.181
Ethanol	4.88	8.29	0.589	ok	0.588	0.528-0.648
Ethylbenzene	16.66	16.05	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.38	8.29	1.011	ok	1.009	0.949-1.069
4-Ethyltoluene	19.52	16.05	1.216	ok	1.216	1.156-1.276
Freon 113	6.35	8.29	0.766	ok	0.766	0.706-0.826
Freon 114	4.17	8.29	0.503	ok	0.503	0.443-0.563
Freon 123	5.18	8.29	0.625	ok	0.625	0.565-0.685
Freon 123A	5.23	8.29	0.631	ok	0.631	0.571-0.691
Freon 141B	5.52	8.29	0.666	ok	0.666	0.606-0.726
Freon 142B	4.08	8.29	0.492	ok	0.492	0.432-0.552
Freon 143a	3.75	8.29	0.452	ok	0.452	0.392-0.512
Freon 152A	3.84	8.29	0.463	ok	0.463	0.403-0.523
Heptane	11.69	10.49	1.114	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.31	8.29	1.002	ok	1.002	0.942-1.062
2-Hexanone	14.04	10.49	1.338	ok	1.338	1.278-1.398
Iodomethane	5.92	8.29	0.714	ok	0.715	0.655-0.775
Isopropylbenzene	18.51	16.05	1.153	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.51	8.29	0.665	ok	0.664	0.604-0.724
p-Isopropyltoluene	20.81	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.29	0.737	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.68	8.29	0.926	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.46	10.49	1.188	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.31	8.29	0.882	ok	0.880	0.820-0.940
Methylmethacrylate	11.60	10.49	1.106	ok	1.106	1.046-1.166
Naphthalene	23.29	16.05	1.451	ok	1.451	1.391-1.511
Nonane	17.98	16.05	1.120	ok	1.120	1.060-1.180
Octane	15.00	10.49	1.430	ok	1.430	1.370-1.490
Pentane	5.72	8.29	0.690	ok	0.690	0.630-0.750
n-Propylbenzene	19.30	16.05	1.202	ok	1.203	1.143-1.263
Propylene	3.90	8.29	0.470	ok	0.471	0.411-0.531

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Styrene	17.46	16.05	1.088	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.52	8.29	1.148	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.09	10.49	1.534	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.61	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.30	10.49	1.268	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.17	16.05	1.444	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.22	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.64	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.49	1.081	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.08	8.29	0.733	ok	0.731	0.671-0.791
Tetrachloroethylene	15.17	10.49	1.446	ok	1.446	1.386-1.506
Tetrahydrofuran	8.92	8.29	1.076	ok	1.074	1.014-1.134
Toluene	13.65	10.49	1.301	ok	1.302	1.242-1.362
Trichloroethylene	11.32	10.49	1.079	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.42	8.29	0.654	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.29	0.516	ok	0.516	0.456-0.576
Vinyl Acetate	7.39	8.29	0.891	ok	0.892	0.832-0.952
m,p-Xylene	16.90	16.05	1.053	ok	1.055	0.995-1.115
o-Xylene	17.60	16.05	1.097	ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.72	16.05	0.356	ok	0.356	0.296-0.416

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.29	ok	8.29	7.96-8.62	178138	ok	162544	97526-227562
1,4-Difluorobenzene	10.49	ok	10.49	10.16-10.82	673869	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	314609	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.31	8.28	0.641	ok	0.638	0.578-0.698
Acrylonitrile	5.70	8.28	0.688	ok	0.688	0.628-0.748
Acetonitrile	5.07	8.28	0.612	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.28	0.530	ok	0.530	0.470-0.590
Benzene	10.05	8.28	1.214	ok	1.213	1.153-1.273
Bromobenzene	18.63	16.05	1.161	ok	1.161	1.101-1.221
Bromodichloromethane	11.26	10.48	1.074	ok	1.075	1.015-1.135
Bromoform	17.01	16.05	1.060	ok	1.060	1.000-1.120
Bromomethane	4.61	8.28	0.557	ok	0.556	0.496-0.616
Bromoethene	5.06	8.28	0.611	ok	0.610	0.550-0.670
n-Butane	4.43	8.28	0.535	ok	0.534	0.474-0.594
Benzyl Chloride	20.40	16.05	1.271	ok	1.271	1.211-1.331
n-Butylbenzene	21.39	16.05	1.333	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.20	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.28	0.772	ok	0.771	0.711-0.831
Chlorobenzene	16.11	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.87	8.28	0.467	ok	0.468	0.408-0.528
Chloroethane	4.76	8.28	0.575	ok	0.574	0.514-0.634
Chloroform	8.41	8.28	1.016	ok	1.017	0.957-1.077
Chloromethane	4.09	8.28	0.494	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.28	0.751	ok	0.751	0.691-0.811
2-Chlorotoluene	19.23	16.05	1.198	ok	1.198	1.138-1.258
Carbon tetrachloride	10.22	8.28	1.234	ok	1.234	1.174-1.294
Cyclohexane	10.35	8.28	1.250	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.22	8.28	0.872	ok	0.872	0.812-0.932
1,1-Dichloroethylene	5.99	8.28	0.723	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.48	1.386	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.24	8.28	1.116	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.03	10.48	1.052	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.69	10.48	1.306	ok	1.306	1.246-1.366
1,4-Dioxane	11.38	10.48	1.086	ok	1.082	1.022-1.142
Dichlorodifluoromethane	3.96	8.28	0.478	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.28	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.48	1.356	ok	1.355	1.295-1.415
Dibromomethane	11.00	10.48	1.050	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.02	8.28	0.848	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.10	8.28	0.978	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.40	10.48	1.183	ok	1.183	1.123-1.243

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
m-Dichlorobenzene	20.42	16.05	1.272	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.51	16.05	1.278	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.09	10.48	1.249	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.32	8.28	1.005	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.64	8.28	1.285	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.28	1.122	ok	1.121	1.061-1.181
Ethylbenzene	16.66	16.05	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.37	8.28	1.011	ok	1.009	0.949-1.069
4-Ethyltoluene	19.52	16.05	1.216	ok	1.216	1.156-1.276
Freon 113	6.35	8.28	0.767	ok	0.766	0.706-0.826
Freon 114	4.17	8.28	0.504	ok	0.503	0.443-0.563
Freon 123	5.18	8.28	0.626	ok	0.625	0.565-0.685
Freon 123A	5.23	8.28	0.632	ok	0.631	0.571-0.691
Freon 141B	5.52	8.28	0.667	ok	0.666	0.606-0.726
Freon 142B	4.08	8.28	0.493	ok	0.492	0.432-0.552
Freon 143a	3.75	8.28	0.453	ok	0.452	0.392-0.512
Freon 152A	3.84	8.28	0.464	ok	0.463	0.403-0.523
Heptane	11.68	10.48	1.115	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.31	8.28	1.004	ok	1.002	0.942-1.062
2-Hexanone	14.06	10.48	1.342	ok	1.338	1.278-1.398
Iodomethane	5.92	8.28	0.715	ok	0.715	0.655-0.775
Isopropylbenzene	18.51	16.05	1.153	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.52	8.28	0.667	ok	0.664	0.604-0.724
p-Isopropyltoluene	20.82	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.28	0.738	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.68	8.28	0.928	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.48	10.48	1.191	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.31	8.28	0.883	ok	0.880	0.820-0.940
Methylmethacrylate	11.61	10.48	1.108	ok	1.106	1.046-1.166
Naphthalene	23.30	16.05	1.452	ok	1.451	1.391-1.511
Nonane	17.98	16.05	1.120	ok	1.120	1.060-1.180
Octane	15.00	10.48	1.431	ok	1.430	1.370-1.490
Pentane	5.72	8.28	0.691	ok	0.690	0.630-0.750
n-Propylbenzene	19.30	16.05	1.202	ok	1.203	1.143-1.263
Propylene	3.90	8.28	0.471	ok	0.471	0.411-0.531
Styrene	17.46	16.05	1.088	ok	1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.51	8.28	1.149	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.09	10.48	1.535	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.61	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.30	10.48	1.269	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.17	16.05	1.444	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.22	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.64	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.48	1.082	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.07	8.28	0.733	ok	0.731	0.671-0.791
Tetrachloroethylene	15.16	10.48	1.447	ok	1.446	1.386-1.506
Tetrahydrofuran	8.93	8.28	1.079	ok	1.074	1.014-1.134
Toluene	13.65	10.48	1.302	ok	1.302	1.242-1.362
Trichloroethylene	11.31	10.48	1.079	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.42	8.28	0.655	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.28	0.517	ok	0.516	0.456-0.576
Vinyl Acetate	7.39	8.28	0.893	ok	0.892	0.832-0.952
m,p-Xylene	16.91	16.05	1.054	ok	1.055	0.995-1.115
o-Xylene	17.61	16.05	1.097	ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.72	16.05	0.356	ok	0.356	0.296-0.416

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.28	ok	8.29	7.96-8.62	156402	ok	162544	97526-227562
1,4-Difluorobenzene	10.48	ok	10.49	10.16-10.82	586634	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	270919	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.28	8.29	0.637	ok	0.638	0.578-0.698
Acrylonitrile	5.70	8.29	0.688	ok	0.688	0.628-0.748
Acetonitrile	5.06	8.29	0.610	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.29	0.530	ok	0.530	0.470-0.590
Benzene	10.06	8.29	1.214	ok	1.213	1.153-1.273
Bromobenzene	18.63	16.05	1.161	ok	1.161	1.101-1.221
Bromodichloromethane	11.28	10.49	1.075	ok	1.075	1.015-1.135
Bromoform	17.01	16.05	1.060	ok	1.060	1.000-1.120
Bromomethane	4.62	8.29	0.557	ok	0.556	0.496-0.616
Bromoethene	5.06	8.29	0.610	ok	0.610	0.550-0.670
n-Butane	4.43	8.29	0.534	ok	0.534	0.474-0.594
Benzyl Chloride	20.40	16.05	1.271	ok	1.271	1.211-1.331
n-Butylbenzene	21.38	16.05	1.332	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.21	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.29	0.771	ok	0.771	0.711-0.831
Chlorobenzene	16.12	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.88	8.29	0.468	ok	0.468	0.408-0.528
Chloroethane	4.76	8.29	0.574	ok	0.574	0.514-0.634
Chloroform	8.43	8.29	1.017	ok	1.017	0.957-1.077
Chloromethane	4.10	8.29	0.495	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.29	0.750	ok	0.751	0.691-0.811
2-Chlorotoluene	19.23	16.05	1.198	ok	1.198	1.138-1.258
Carbon tetrachloride	10.23	8.29	1.234	ok	1.234	1.174-1.294
Cyclohexane	10.36	8.29	1.250	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.23	8.29	0.872	ok	0.872	0.812-0.932
1,1-Dichloroethylene	6.00	8.29	0.724	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.49	1.385	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.24	8.29	1.115	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.03	10.49	1.051	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.69	10.49	1.305	ok	1.306	1.246-1.366
1,4-Dioxane	11.34	10.49	1.081	ok	1.082	1.022-1.142
Dichlorodifluoromethane	3.97	8.29	0.479	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.29	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.49	1.355	ok	1.355	1.295-1.415
Dibromomethane	11.01	10.49	1.050	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.02	8.29	0.847	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.11	8.29	0.978	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.40	10.49	1.182	ok	1.183	1.123-1.243

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
m-Dichlorobenzene	20.41	16.05	1.272	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.51	16.05	1.278	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.08	10.49	1.247	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.31	8.29	1.002	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.65	8.29	1.285	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.29	1.121	ok	1.121	1.061-1.181
Ethanol	4.87	8.29	0.587	ok	0.588	0.528-0.648
Ethylbenzene	16.66	16.05	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.35	8.29	1.007	ok	1.009	0.949-1.069
4-Ethyltoluene	19.52	16.05	1.216	ok	1.216	1.156-1.276
Freon 113	6.35	8.29	0.766	ok	0.766	0.706-0.826
Freon 114	4.18	8.29	0.504	ok	0.503	0.443-0.563
Freon 123	5.18	8.29	0.625	ok	0.625	0.565-0.685
Freon 123A	5.23	8.29	0.631	ok	0.631	0.571-0.691
Freon 141B	5.52	8.29	0.666	ok	0.666	0.606-0.726
Freon 142B	4.08	8.29	0.492	ok	0.492	0.432-0.552
Freon 143a	3.75	8.29	0.452	ok	0.452	0.392-0.512
Freon 152A	3.84	8.29	0.463	ok	0.463	0.403-0.523
Heptane	11.68	10.49	1.113	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.31	8.29	1.002	ok	1.002	0.942-1.062
2-Hexanone	14.02	10.49	1.337	ok	1.338	1.278-1.398
Iodomethane	5.93	8.29	0.715	ok	0.715	0.655-0.775
Isopropylbenzene	18.51	16.05	1.153	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.50	8.29	0.663	ok	0.664	0.604-0.724
p-Isopropyltoluene	20.82	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.29	0.737	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.64	8.29	0.922	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.45	10.49	1.187	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.28	8.29	0.878	ok	0.880	0.820-0.940
Methylmethacrylate	11.59	10.49	1.105	ok	1.106	1.046-1.166
Naphthalene	23.29	16.05	1.451	ok	1.451	1.391-1.511
Nonane	17.98	16.05	1.120	ok	1.120	1.060-1.180
Octane	15.00	10.49	1.430	ok	1.430	1.370-1.490
Pentane	5.72	8.29	0.690	ok	0.690	0.630-0.750
n-Propylbenzene	19.30	16.05	1.202	ok	1.203	1.143-1.263
Propylene	3.90	8.29	0.470	ok	0.471	0.411-0.531

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Styrene	17.46	16.05	1.088	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.52	8.29	1.148	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.09	10.49	1.534	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.61	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.30	10.49	1.268	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.16	16.05	1.443	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.22	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.64	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.49	1.081	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.04	8.29	0.729	ok	0.731	0.671-0.791
Tetrachloroethylene	15.17	10.49	1.446	ok	1.446	1.386-1.506
Tetrahydrofuran	8.87	8.29	1.070	ok	1.074	1.014-1.134
Toluene	13.65	10.49	1.301	ok	1.302	1.242-1.362
Trichloroethylene	11.32	10.49	1.079	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.42	8.29	0.654	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.29	0.516	ok	0.516	0.456-0.576
Vinyl Acetate	7.39	8.29	0.891	ok	0.892	0.832-0.952
m,p-Xylene	16.93	16.05	1.055	ok	1.055	0.995-1.115
o-Xylene	17.61	16.05	1.097	ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.72	16.05	0.356	ok	0.356	0.296-0.416

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.29	ok	8.29	7.96-8.62	159701	ok	162544	97526-227562
1,4-Difluorobenzene	10.49	ok	10.49	10.16-10.82	592191	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	300685	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.31	8.28	0.641	ok	0.638	0.578-0.698
Acrylonitrile	5.70	8.28	0.688	ok	0.688	0.628-0.748
Acetonitrile	5.07	8.28	0.612	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.28	0.530	ok	0.530	0.470-0.590
Benzene	10.06	8.28	1.215	ok	1.213	1.153-1.273
Bromobenzene	18.64	16.05	1.161	ok	1.161	1.101-1.221
Bromodichloromethane	11.27	10.48	1.075	ok	1.075	1.015-1.135
Bromoform	17.02	16.05	1.060	ok	1.060	1.000-1.120
Bromomethane	4.61	8.28	0.557	ok	0.556	0.496-0.616
Bromoethene	5.05	8.28	0.610	ok	0.610	0.550-0.670
n-Butane	4.43	8.28	0.535	ok	0.534	0.474-0.594
Benzyl Chloride	20.41	16.05	1.272	ok	1.271	1.211-1.331
n-Butylbenzene	21.39	16.05	1.333	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.21	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.28	0.772	ok	0.771	0.711-0.831
Chlorobenzene	16.11	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.88	8.28	0.469	ok	0.468	0.408-0.528
Chloroethane	4.76	8.28	0.575	ok	0.574	0.514-0.634
Chloroform	8.42	8.28	1.017	ok	1.017	0.957-1.077
Chloromethane	4.10	8.28	0.495	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.28	0.751	ok	0.751	0.691-0.811
2-Chlorotoluene	19.24	16.05	1.199	ok	1.198	1.138-1.258
Carbon tetrachloride	10.22	8.28	1.234	ok	1.234	1.174-1.294
Cyclohexane	10.35	8.28	1.250	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.22	8.28	0.872	ok	0.872	0.812-0.932
1,1-Dichloroethylene	6.00	8.28	0.725	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.48	1.386	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.24	8.28	1.116	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.03	10.48	1.052	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.70	10.48	1.307	ok	1.306	1.246-1.366
Dichlorodifluoromethane	3.96	8.28	0.478	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.28	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.48	1.356	ok	1.355	1.295-1.415
Dibromomethane	11.01	10.48	1.051	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.02	8.28	0.848	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.11	8.28	0.979	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.41	10.48	1.184	ok	1.183	1.123-1.243
m-Dichlorobenzene	20.42	16.05	1.272	ok	1.272	1.212-1.332

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.52	16.05	1.279	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.10	10.48	1.250	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.33	8.28	1.006	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.65	8.28	1.286	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.28	1.122	ok	1.121	1.061-1.181
Ethylbenzene	16.67	16.05	1.039	ok	1.038	0.978-1.098
Ethyl Acetate	8.39	8.28	1.013	ok	1.009	0.949-1.069
4-Ethyltoluene	19.53	16.05	1.217	ok	1.216	1.156-1.276
Freon 113	6.35	8.28	0.767	ok	0.766	0.706-0.826
Freon 114	4.17	8.28	0.504	ok	0.503	0.443-0.563
Freon 123	5.18	8.28	0.626	ok	0.625	0.565-0.685
Freon 123A	5.23	8.28	0.632	ok	0.631	0.571-0.691
Freon 141B	5.51	8.28	0.665	ok	0.666	0.606-0.726
Freon 142B	4.08	8.28	0.493	ok	0.492	0.432-0.552
Freon 143a	3.75	8.28	0.453	ok	0.452	0.392-0.512
Freon 152A	3.84	8.28	0.464	ok	0.463	0.403-0.523
Heptane	11.69	10.48	1.115	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.31	8.28	1.004	ok	1.002	0.942-1.062
2-Hexanone	14.08	10.48	1.344	ok	1.338	1.278-1.398
Iodomethane	5.92	8.28	0.715	ok	0.715	0.655-0.775
Isopropylbenzene	18.52	16.05	1.154	ok	1.154	1.094-1.214
p-Isopropyltoluene	20.82	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.28	0.738	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.69	8.28	0.929	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.49	10.48	1.192	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.31	8.28	0.883	ok	0.880	0.820-0.940
Methylmethacrylate	11.61	10.48	1.108	ok	1.106	1.046-1.166
Naphthalene	23.30	16.05	1.452	ok	1.451	1.391-1.511
Nonane	17.98	16.05	1.120	ok	1.120	1.060-1.180
Octane	15.00	10.48	1.431	ok	1.430	1.370-1.490
Pentane	5.72	8.28	0.691	ok	0.690	0.630-0.750
n-Propylbenzene	19.31	16.05	1.203	ok	1.203	1.143-1.263
Propylene	3.90	8.28	0.471	ok	0.471	0.411-0.531
Styrene	17.47	16.05	1.088	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.52	8.28	1.150	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.10	10.48	1.536	ok	1.535	1.475-1.595

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,2,2-Tetrachloroethane	17.61	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.30	10.48	1.269	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.18	16.05	1.444	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.22	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.65	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.33	10.48	1.081	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.09	8.28	0.736	ok	0.731	0.671-0.791
Tetrachloroethylene	15.16	10.48	1.447	ok	1.446	1.386-1.506
Tetrahydrofuran	8.95	8.28	1.081	ok	1.074	1.014-1.134
Toluene	13.65	10.48	1.302	ok	1.302	1.242-1.362
Trichloroethylene	11.32	10.48	1.080	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.41	8.28	0.653	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.28	0.517	ok	0.516	0.456-0.576
Vinyl Acetate	7.39	8.28	0.893	ok	0.892	0.832-0.952
m,p-Xylene	16.94	16.05	1.055	ok	1.055	0.995-1.115
o-Xylene	17.61	16.05	1.097	ok	1.097	1.037-1.157

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.28	ok	8.29	7.96-8.62	157444	ok	162544	97526-227562
1,4-Difluorobenzene	10.48	ok	10.49	10.16-10.82	596904	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	276760	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acrylonitrile	5.71	8.28	0.690	ok	0.688	0.628-0.748
Acetonitrile	5.07	8.28	0.612	ok	0.611	0.551-0.671
1,3-Butadiene	4.38	8.28	0.529	ok	0.530	0.470-0.590
Benzene	10.05	8.28	1.214	ok	1.213	1.153-1.273
Bromobenzene	18.64	16.05	1.161	ok	1.161	1.101-1.221
Bromodichloromethane	11.27	10.48	1.075	ok	1.075	1.015-1.135
Bromoform	17.02	16.05	1.060	ok	1.060	1.000-1.120
Bromomethane	4.61	8.28	0.557	ok	0.556	0.496-0.616
Bromoethene	5.06	8.28	0.611	ok	0.610	0.550-0.670
Benzyl Chloride	20.42	16.05	1.272	ok	1.271	1.211-1.331
n-Butylbenzene	21.40	16.05	1.333	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.21	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.28	0.772	ok	0.771	0.711-0.831
Chlorobenzene	16.11	16.05	1.004	ok	1.004	0.944-1.064
Chloroethane	4.76	8.28	0.575	ok	0.574	0.514-0.634
Chloroform	8.42	8.28	1.017	ok	1.017	0.957-1.077
Chloromethane	4.09	8.28	0.494	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.28	0.751	ok	0.751	0.691-0.811
2-Chlorotoluene	19.24	16.05	1.199	ok	1.198	1.138-1.258
Carbon tetrachloride	10.22	8.28	1.234	ok	1.234	1.174-1.294
Cyclohexane	10.36	8.28	1.251	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.23	8.28	0.873	ok	0.872	0.812-0.932
1,1-Dichloroethylene	5.99	8.28	0.723	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.48	1.386	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.23	8.28	1.115	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.02	10.48	1.052	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.71	10.48	1.308	ok	1.306	1.246-1.366
Dichlorodifluoromethane	3.96	8.28	0.478	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.28	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.48	1.356	ok	1.355	1.295-1.415
Dibromomethane	11.00	10.48	1.050	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.01	8.28	0.847	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.10	8.28	0.978	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.41	10.48	1.184	ok	1.183	1.123-1.243
m-Dichlorobenzene	20.43	16.05	1.273	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.98	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.52	16.05	1.279	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.11	10.48	1.251	ok	1.248	1.188-1.308

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Di-Isopropyl ether	8.33	8.28	1.006	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.63	8.28	1.284	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.28	8.28	1.121	ok	1.121	1.061-1.181
Ethylbenzene	16.67	16.05	1.039	ok	1.038	0.978-1.098
4-Ethyltoluene	19.54	16.05	1.217	ok	1.216	1.156-1.276
Freon 113	6.35	8.28	0.767	ok	0.766	0.706-0.826
Freon 114	4.17	8.28	0.504	ok	0.503	0.443-0.563
Freon 123	5.18	8.28	0.626	ok	0.625	0.565-0.685
Freon 123A	5.23	8.28	0.632	ok	0.631	0.571-0.691
Freon 141B	5.52	8.28	0.667	ok	0.666	0.606-0.726
Freon 142B	4.08	8.28	0.493	ok	0.492	0.432-0.552
Freon 143a	3.74	8.28	0.452	ok	0.452	0.392-0.512
Freon 152A	3.84	8.28	0.464	ok	0.463	0.403-0.523
Heptane	11.67	10.48	1.114	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.30	8.28	1.002	ok	1.002	0.942-1.062
Iodomethane	5.92	8.28	0.715	ok	0.715	0.655-0.775
Isopropylbenzene	18.52	16.05	1.154	ok	1.154	1.094-1.214
p-Isopropyltoluene	20.82	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.28	0.738	ok	0.737	0.677-0.797
Methyl Tert Butyl Ether	7.31	8.28	0.883	ok	0.880	0.820-0.940
Methylmethacrylate	11.63	10.48	1.110	ok	1.106	1.046-1.166
Naphthalene	23.31	16.05	1.452	ok	1.451	1.391-1.511
Nonane	17.99	16.05	1.121	ok	1.120	1.060-1.180
Octane	15.00	10.48	1.431	ok	1.430	1.370-1.490
n-Propylbenzene	19.32	16.05	1.204	ok	1.203	1.143-1.263
Styrene	17.48	16.05	1.089	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.51	8.28	1.149	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.09	10.48	1.535	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.61	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.31	10.48	1.270	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.18	16.05	1.444	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.82	16.05	1.110	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.23	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.65	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.48	1.082	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.09	8.28	0.736	ok	0.731	0.671-0.791
Tetrachloroethylene	15.17	10.48	1.448	ok	1.446	1.386-1.506

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Tetrahydrofuran	8.94	8.28	1.080	ok	1.074	1.014-1.134
Toluene	13.66	10.48	1.303	ok	1.302	1.242-1.362
Trichloroethylene	11.32	10.48	1.080	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.41	8.28	0.653	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.28	0.517	ok	0.516	0.456-0.576
Vinyl Acetate	7.40	8.28	0.894	ok	0.892	0.832-0.952
m,p-Xylene	16.94	16.05	1.055	ok	1.055	0.995-1.115
o-Xylene	17.61	16.05	1.097	ok	1.097	1.037-1.157

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.28	ok	8.29	7.96-8.62	159611	ok	162544	97526-227562
1,4-Difluorobenzene	10.48	ok	10.49	10.16-10.82	599773	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	280374	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.28	8.30	0.636	ok	0.638	0.578-0.698
Acrylonitrile	5.70	8.30	0.687	ok	0.688	0.628-0.748
Acetonitrile	5.07	8.30	0.611	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.30	0.529	ok	0.530	0.470-0.590
Benzene	10.07	8.30	1.213	ok	1.213	1.153-1.273
Bromobenzene	18.63	16.05	1.161	ok	1.161	1.101-1.221
Bromodichloromethane	11.28	10.49	1.075	ok	1.075	1.015-1.135
Bromoform	17.01	16.05	1.060	ok	1.060	1.000-1.120
Bromomethane	4.61	8.30	0.555	ok	0.556	0.496-0.616
Bromoethene	5.06	8.30	0.610	ok	0.610	0.550-0.670
n-Butane	4.43	8.30	0.534	ok	0.534	0.474-0.594
Benzyl Chloride	20.40	16.05	1.271	ok	1.271	1.211-1.331
n-Butylbenzene	21.39	16.05	1.333	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.21	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.40	8.30	0.771	ok	0.771	0.711-0.831
Chlorobenzene	16.12	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.88	8.30	0.467	ok	0.468	0.408-0.528
Chloroethane	4.76	8.30	0.573	ok	0.574	0.514-0.634
Chloroform	8.44	8.30	1.017	ok	1.017	0.957-1.077
Chloromethane	4.10	8.30	0.494	ok	0.494	0.434-0.554
3-Chloropropene	6.23	8.30	0.751	ok	0.751	0.691-0.811
2-Chlorotoluene	19.23	16.05	1.198	ok	1.198	1.138-1.258
Carbon tetrachloride	10.23	8.30	1.233	ok	1.234	1.174-1.294
Cyclohexane	10.37	8.30	1.249	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.23	8.30	0.871	ok	0.872	0.812-0.932
1,1-Dichloroethylene	6.00	8.30	0.723	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.49	1.385	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.25	8.30	1.114	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.03	10.49	1.051	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.69	10.49	1.305	ok	1.306	1.246-1.366
1,4-Dioxane	11.34	10.49	1.081	ok	1.082	1.022-1.142
Dichlorodifluoromethane	3.96	8.30	0.477	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.30	0.582	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.49	1.355	ok	1.355	1.295-1.415
Dibromomethane	11.01	10.49	1.050	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.03	8.30	0.847	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.11	8.30	0.977	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.41	10.49	1.183	ok	1.183	1.123-1.243

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
m-Dichlorobenzene	20.42	16.05	1.272	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.51	16.05	1.278	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.08	10.49	1.247	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.32	8.30	1.002	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.65	8.30	1.283	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.30	1.119	ok	1.121	1.061-1.181
Ethanol	4.88	8.30	0.588	ok	0.588	0.528-0.648
Ethylbenzene	16.66	16.05	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.36	8.30	1.007	ok	1.009	0.949-1.069
4-Ethyltoluene	19.52	16.05	1.216	ok	1.216	1.156-1.276
Freon 113	6.36	8.30	0.766	ok	0.766	0.706-0.826
Freon 114	4.17	8.30	0.502	ok	0.503	0.443-0.563
Freon 123	5.19	8.30	0.625	ok	0.625	0.565-0.685
Freon 123A	5.24	8.30	0.631	ok	0.631	0.571-0.691
Freon 141B	5.53	8.30	0.666	ok	0.666	0.606-0.726
Freon 142B	4.08	8.30	0.492	ok	0.492	0.432-0.552
Freon 143a	3.75	8.30	0.452	ok	0.452	0.392-0.512
Freon 152A	3.84	8.30	0.463	ok	0.463	0.403-0.523
Heptane	11.69	10.49	1.114	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.32	8.30	1.002	ok	1.002	0.942-1.062
2-Hexanone	14.02	10.49	1.337	ok	1.338	1.278-1.398
Iodomethane	5.94	8.30	0.716	ok	0.715	0.655-0.775
Isopropylbenzene	18.52	16.05	1.154	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.51	8.30	0.664	ok	0.664	0.604-0.724
p-Isopropyltoluene	20.82	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.13	8.30	0.739	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.65	8.30	0.922	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.45	10.49	1.187	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.28	8.30	0.877	ok	0.880	0.820-0.940
Methylmethacrylate	11.59	10.49	1.105	ok	1.106	1.046-1.166
Naphthalene	23.29	16.05	1.451	ok	1.451	1.391-1.511
Nonane	17.98	16.05	1.120	ok	1.120	1.060-1.180
Octane	15.00	10.49	1.430	ok	1.430	1.370-1.490
Pentane	5.73	8.30	0.690	ok	0.690	0.630-0.750
n-Propylbenzene	19.30	16.05	1.202	ok	1.203	1.143-1.263
Propylene	3.91	8.30	0.471	ok	0.471	0.411-0.531

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	Reporting this level
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Styrene	17.46	16.05	1.088	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.53	8.30	1.148	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.10	10.49	1.535	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.61	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.30	10.49	1.268	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.17	16.05	1.444	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.22	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.64	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.49	1.081	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.05	8.30	0.729	ok	0.731	0.671-0.791
Tetrachloroethylene	15.17	10.49	1.446	ok	1.446	1.386-1.506
Tetrahydrofuran	8.87	8.30	1.069	ok	1.074	1.014-1.134
Toluene	13.65	10.49	1.301	ok	1.302	1.242-1.362
Trichloroethylene	11.33	10.49	1.080	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.42	8.30	0.653	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.30	0.516	ok	0.516	0.456-0.576
Vinyl Acetate	7.39	8.30	0.890	ok	0.892	0.832-0.952
m,p-Xylene	16.94	16.05	1.055	ok	1.055	0.995-1.115
o-Xylene	17.61	16.05	1.097	ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.73	16.05	0.357	ok	0.356	0.296-0.416

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.30	ok	8.29	7.96-8.62	156620	ok	162544	97526-227562
1,4-Difluorobenzene	10.49	ok	10.49	10.16-10.82	575274	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	302180	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.28	8.29	0.637	ok	0.638	0.578-0.698
Acrylonitrile	5.70	8.29	0.688	ok	0.688	0.628-0.748
Acetonitrile	5.06	8.29	0.610	ok	0.611	0.551-0.671
1,3-Butadiene	4.39	8.29	0.530	ok	0.530	0.470-0.590
Benzene	10.06	8.29	1.214	ok	1.213	1.153-1.273
Bromobenzene	18.63	16.05	1.161	ok	1.161	1.101-1.221
Bromodichloromethane	11.28	10.49	1.075	ok	1.075	1.015-1.135
Bromoform	17.02	16.05	1.060	ok	1.060	1.000-1.120
Bromomethane	4.61	8.29	0.556	ok	0.556	0.496-0.616
Bromoethene	5.06	8.29	0.610	ok	0.610	0.550-0.670
n-Butane	4.43	8.29	0.534	ok	0.534	0.474-0.594
Benzyl Chloride	20.40	16.05	1.271	ok	1.271	1.211-1.331
n-Butylbenzene	21.39	16.05	1.333	ok	1.333	1.273-1.393
sec-Butylbenzene	20.59	16.05	1.283	ok	1.283	1.223-1.343
tert-Butylbenzene	20.21	16.05	1.259	ok	1.259	1.199-1.319
Carbon disulfide	6.39	8.29	0.771	ok	0.771	0.711-0.831
Chlorobenzene	16.12	16.05	1.004	ok	1.004	0.944-1.064
Chlorodifluoromethane	3.87	8.29	0.467	ok	0.468	0.408-0.528
Chloroethane	4.76	8.29	0.574	ok	0.574	0.514-0.634
Chloroform	8.43	8.29	1.017	ok	1.017	0.957-1.077
Chloromethane	4.09	8.29	0.493	ok	0.494	0.434-0.554
3-Chloropropene	6.22	8.29	0.750	ok	0.751	0.691-0.811
2-Chlorotoluene	19.23	16.05	1.198	ok	1.198	1.138-1.258
Carbon tetrachloride	10.23	8.29	1.234	ok	1.234	1.174-1.294
Cyclohexane	10.36	8.29	1.250	ok	1.250	1.190-1.310
1,1-Dichloroethane	7.23	8.29	0.872	ok	0.872	0.812-0.932
1,1-Dichloroethylene	6.00	8.29	0.724	ok	0.723	0.663-0.783
1,2-Dibromoethane	14.53	10.49	1.385	ok	1.386	1.326-1.446
1,2-Dichloroethane	9.25	8.29	1.116	ok	1.115	1.055-1.175
1,2-Dichloropropane	11.03	10.49	1.051	ok	1.052	0.992-1.112
1,3-Dichloropropane	13.69	10.49	1.305	ok	1.306	1.246-1.366
1,4-Dioxane	11.34	10.49	1.081	ok	1.082	1.022-1.142
Dichlorodifluoromethane	3.96	8.29	0.478	ok	0.478	0.418-0.538
Dichlorofluoromethane	4.83	8.29	0.583	ok	0.583	0.523-0.643
Dibromochloromethane	14.21	10.49	1.355	ok	1.355	1.295-1.415
Dibromomethane	11.01	10.49	1.050	ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	7.02	8.29	0.847	ok	0.847	0.787-0.907
cis-1,2-Dichloroethylene	8.11	8.29	0.978	ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.41	10.49	1.183	ok	1.183	1.123-1.243

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
m-Dichlorobenzene	20.42	16.05	1.272	ok	1.272	1.212-1.332
o-Dichlorobenzene	20.97	16.05	1.307	ok	1.307	1.247-1.367
p-Dichlorobenzene	20.51	16.05	1.278	ok	1.278	1.218-1.338
trans-1,3-Dichloropropene	13.08	10.49	1.247	ok	1.248	1.188-1.308
Di-Isopropyl ether	8.32	8.29	1.004	ok	1.004	0.944-1.064
2,3-Dimethylpentane	10.65	8.29	1.285	ok	1.285	1.225-1.345
2,4-Dimethylpentane	9.29	8.29	1.121	ok	1.121	1.061-1.181
Ethanol	4.87	8.29	0.587	ok	0.588	0.528-0.648
Ethylbenzene	16.66	16.05	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.36	8.29	1.008	ok	1.009	0.949-1.069
4-Ethyltoluene	19.52	16.05	1.216	ok	1.216	1.156-1.276
Freon 113	6.35	8.29	0.766	ok	0.766	0.706-0.826
Freon 114	4.17	8.29	0.503	ok	0.503	0.443-0.563
Freon 123	5.18	8.29	0.625	ok	0.625	0.565-0.685
Freon 123A	5.23	8.29	0.631	ok	0.631	0.571-0.691
Freon 141B	5.52	8.29	0.666	ok	0.666	0.606-0.726
Freon 142B	4.08	8.29	0.492	ok	0.492	0.432-0.552
Freon 143a	3.75	8.29	0.452	ok	0.452	0.392-0.512
Freon 152A	3.84	8.29	0.463	ok	0.463	0.403-0.523
Heptane	11.69	10.49	1.114	ok	1.114	1.054-1.174
Hexachlorobutadiene	23.74	16.05	1.479	ok	1.479	1.419-1.539
Hexachloroethane	21.85	16.05	1.361	ok	1.361	1.301-1.421
Hexane	8.31	8.29	1.002	ok	1.002	0.942-1.062
2-Hexanone	14.02	10.49	1.337	ok	1.338	1.278-1.398
Iodomethane	5.93	8.29	0.715	ok	0.715	0.655-0.775
Isopropylbenzene	18.52	16.05	1.154	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.50	8.29	0.663	ok	0.664	0.604-0.724
p-Isopropyltoluene	20.82	16.05	1.297	ok	1.297	1.237-1.357
Methylene chloride	6.11	8.29	0.737	ok	0.737	0.677-0.797
Methyl ethyl ketone	7.64	8.29	0.922	ok	0.924	0.864-0.984
Methyl Isobutyl Ketone	12.45	10.49	1.187	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.28	8.29	0.878	ok	0.880	0.820-0.940
Methylmethacrylate	11.59	10.49	1.105	ok	1.106	1.046-1.166
Naphthalene	23.29	16.05	1.451	ok	1.451	1.391-1.511
Nonane	17.99	16.05	1.121	ok	1.120	1.060-1.180
Octane	15.00	10.49	1.430	ok	1.430	1.370-1.490
Pentane	5.72	8.29	0.690	ok	0.690	0.630-0.750
n-Propylbenzene	19.30	16.05	1.202	ok	1.203	1.143-1.263
Propylene	3.90	8.29	0.470	ok	0.471	0.411-0.531

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W637-ICC637	5W15841.D	01/22/16 21:47	TCH	10	GCMS5W	TO-15	
V5W637-IC637	5W15842.D	01/22/16 22:29	TCH	5	GCMS5W	TO-15	
V5W637-IC637	5W15843.D	01/22/16 23:13	TCH	0.5	GCMS5W	TO-15	
V5W637-IC637	5W15844.D	01/22/16 23:56	TCH	0.2	GCMS5W	TO-15	
V5W637-IC637	5W15845.D	01/23/16 00:40	TCH	20	GCMS5W	TO-15	
V5W637-IC637	5W15847.D	01/23/16 02:07	TCH	0.1	GCMS5W	TO-15	
V5W637-IC637	5W15848.D	01/23/16 02:48	TCH	0.04	GCMS5W	TO-15	
V5W637-IC637	5W15849.D	01/23/16 03:33	TCH	30	GCMS5W	TO-15	
V5W637-IC637	5W15851.D	01/23/16 05:01	TCH	40	GCMS5W	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Styrene	17.46	16.05	1.088	ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.53	8.29	1.150	ok	1.149	1.089-1.209
1,1,1,2-Tetrachloroethane	16.10	10.49	1.535	ok	1.535	1.475-1.595
1,1,2,2-Tetrachloroethane	17.61	16.05	1.097	ok	1.097	1.037-1.157
1,1,2-Trichloroethane	13.30	10.49	1.268	ok	1.268	1.208-1.328
1,2,4-Trichlorobenzene	23.17	16.05	1.444	ok	1.444	1.384-1.504
1,2,3-Trichloropropane	17.80	16.05	1.109	ok	1.109	1.049-1.169
1,2,4-Trimethylbenzene	20.23	16.05	1.260	ok	1.260	1.200-1.320
1,3,5-Trimethylbenzene	19.65	16.05	1.224	ok	1.224	1.164-1.284
2,2,4-Trimethylpentane	11.34	10.49	1.081	ok	1.081	1.021-1.141
Tertiary Butyl Alcohol	6.05	8.29	0.730	ok	0.731	0.671-0.791
Tetrachloroethylene	15.17	10.49	1.446	ok	1.446	1.386-1.506
Tetrahydrofuran	8.87	8.29	1.070	ok	1.074	1.014-1.134
Toluene	13.65	10.49	1.301	ok	1.302	1.242-1.362
Trichloroethylene	11.33	10.49	1.080	ok	1.080	1.020-1.140
Trichlorofluoromethane	5.42	8.29	0.654	ok	0.654	0.594-0.714
Vinyl chloride	4.28	8.29	0.516	ok	0.516	0.456-0.576
Vinyl Acetate	7.39	8.29	0.891	ok	0.892	0.832-0.952
m,p-Xylene	16.94	16.05	1.055	ok	1.055	0.995-1.115
o-Xylene	17.61	16.05	1.097	ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.72	16.05	0.356	ok	0.356	0.296-0.416

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.29	ok	8.29	7.96-8.62	171418	ok	162544	97526-227562
1,4-Difluorobenzene	10.49	ok	10.49	10.16-10.82	631746	ok	609752	365851-853653
Chlorobenzene-D5	16.05	ok	16.05	15.72-16.38	339871	ok	297348	178409-416287

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.53	9.19	0.711	ok	0.711	0.651-0.771
Acrolein	6.43	9.19	0.700	ok	0.699	0.639-0.759
Acrylonitrile	6.92	9.19	0.753	ok	0.753	0.693-0.813
Acetonitrile	6.32	9.19	0.688	ok	0.687	0.627-0.747
1,3-Butadiene	5.64	9.19	0.614	ok	0.614	0.554-0.674
Benzene	10.63	10.92	0.973	ok	0.974	0.914-1.034
Bromobenzene	17.05	15.18	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.56	10.92	1.059	ok	1.060	1.000-1.120
Bromoform	15.91	15.18	1.048	ok	1.048	0.988-1.108
Bromomethane	5.90	9.19	0.642	ok	0.641	0.581-0.701
Bromoethene	6.35	9.19	0.691	ok	0.690	0.630-0.750
n-Butane	5.69	9.19	0.619	ok	0.619	0.559-0.679
Benzyl Chloride	18.33	15.18	1.208	ok	1.207	1.147-1.267
n-Butylbenzene	19.11	15.18	1.259	ok	1.258	1.198-1.318
sec-Butylbenzene	18.47	15.18	1.217	ok	1.216	1.156-1.276
tert-Butylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.64	9.19	0.831	ok	0.831	0.771-0.891
Chlorobenzene	15.23	15.18	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.05	9.19	0.550	ok	0.550	0.490-0.610
Chloroethane	6.04	9.19	0.657	ok	0.656	0.596-0.716
Chloroform	9.30	9.19	1.012	ok	1.012	0.952-1.072
Chloromethane	5.32	9.19	0.579	ok	0.579	0.519-0.639
3-Chloropropene	7.43	9.19	0.808	ok	0.808	0.748-0.868
2-Chlorotoluene	17.46	15.18	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.19	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.92	0.997	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.32	9.19	0.905	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.24	9.19	0.788	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.07	15.18	0.927	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.19	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.38	10.92	1.042	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.92	1.226	ok	1.227	1.167-1.287
1,4-Dioxane	11.60	10.92	1.062	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.16	9.19	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.19	0.664	ok	0.663	0.603-0.723
Dibromochloromethane	13.81	15.18	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.37	10.92	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.13	9.19	0.885	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.04	9.19	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.92	1.136	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.36	15.18	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.18	1.239	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.43	15.18	1.214	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.92	1.182	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.17	9.19	0.998	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.92	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.19	1.087	ok	1.087	1.027-1.147
Ethanol	6.11	9.19	0.665	ok	0.664	0.604-0.724
Ethylbenzene	15.61	15.18	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.18	9.19	0.999	ok	0.999	0.939-1.059
4-Ethyltoluene	17.64	15.18	1.162	ok	1.162	1.102-1.222
Freon 113	7.54	9.19	0.820	ok	0.820	0.760-0.880
Freon 114	5.40	9.19	0.588	ok	0.587	0.527-0.647
Freon 152A	5.01	9.19	0.545	ok	0.545	0.485-0.605
Heptane	11.83	10.92	1.083	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.21	15.18	1.397	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.18	1.289	ok	1.288	1.228-1.348
Hexane	9.20	9.19	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.59	15.18	0.895	ok	0.896	0.836-0.956
Iodomethane	7.19	9.19	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.93	15.18	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.71	9.19	0.730	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.64	15.18	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.33	9.19	0.798	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.63	9.19	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.41	10.92	1.136	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.33	9.19	0.906	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.92	1.075	ok	1.075	1.015-1.135
Naphthalene	20.84	15.18	1.373	ok	1.373	1.313-1.433
Nonane	16.49	15.18	1.086	ok	1.086	1.026-1.146
Octane	14.31	15.18	0.943	ok	0.943	0.883-1.003
Pentane	6.98	9.19	0.760	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.18	1.152	ok	1.151	1.091-1.211
Propylene	5.08	9.19	0.553	ok	0.553	0.493-0.613
Styrene	16.19	15.18	1.067	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.21	9.19	1.111	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.20	15.18	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.30	15.18	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.10	10.92	1.200	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.18	1.391	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.44	15.18	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.72	15.18	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.92	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.23	9.19	0.787	ok	0.788	0.728-0.848
Tetrachloroethylene	14.52	15.18	0.957	ok	0.957	0.897-1.017
Tetrahydrofuran	9.66	9.19	1.051	ok	1.052	0.992-1.112
Toluene	13.38	10.92	1.225	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.92	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.19	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.52	9.19	0.601	ok	0.600	0.540-0.660
Vinyl Acetate	8.39	9.19	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.80	15.18	1.041	ok	1.040	0.980-1.100
o-Xylene	16.31	15.18	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	101649	ok	101620	60972-142268
1,4-Difluorobenzene	10.92	ok	10.91	10.58-11.24	547699	ok	541849	325109-758589
Chlorobenzene-D5	15.18	ok	15.18	14.85-15.51	260995	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
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Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.54	9.19	0.712	ok	0.711	0.651-0.771
Acrolein	6.43	9.19	0.700	ok	0.699	0.639-0.759
Acrylonitrile	6.93	9.19	0.754	ok	0.753	0.693-0.813
Acetonitrile	6.33	9.19	0.689	ok	0.687	0.627-0.747
1,3-Butadiene	5.65	9.19	0.615	ok	0.614	0.554-0.674
Benzene	10.63	10.91	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.05	15.18	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.57	10.91	1.060	ok	1.060	1.000-1.120
Bromoform	15.91	15.18	1.048	ok	1.048	0.988-1.108
Bromomethane	5.90	9.19	0.642	ok	0.641	0.581-0.701
Bromoethene	6.34	9.19	0.690	ok	0.690	0.630-0.750
n-Butane	5.69	9.19	0.619	ok	0.619	0.559-0.679
Benzyl Chloride	18.33	15.18	1.208	ok	1.207	1.147-1.267
n-Butylbenzene	19.11	15.18	1.259	ok	1.258	1.198-1.318
sec-Butylbenzene	18.47	15.18	1.217	ok	1.216	1.156-1.276
tert-Butylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.65	9.19	0.832	ok	0.831	0.771-0.891
Chlorobenzene	15.22	15.18	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.05	9.19	0.550	ok	0.550	0.490-0.610
Chloroethane	6.04	9.19	0.657	ok	0.656	0.596-0.716
Chloroform	9.30	9.19	1.012	ok	1.012	0.952-1.072
Chloromethane	5.32	9.19	0.579	ok	0.579	0.519-0.639
3-Chloropropene	7.43	9.19	0.808	ok	0.808	0.748-0.868
2-Chlorotoluene	17.45	15.18	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.19	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.91	0.998	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.31	9.19	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.24	9.19	0.788	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.06	15.18	0.926	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.96	9.19	1.084	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.38	10.91	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.91	1.227	ok	1.227	1.167-1.287
1,4-Dioxane	11.61	10.91	1.064	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.16	9.19	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.19	0.664	ok	0.663	0.603-0.723
Dibromochloromethane	13.81	15.18	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.36	10.91	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.14	9.19	0.886	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.04	9.19	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.91	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.35	15.18	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.18	1.239	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.42	15.18	1.213	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.91	1.183	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.18	9.19	0.999	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.91	1.015	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.19	1.087	ok	1.087	1.027-1.147
Ethanol	6.11	9.19	0.665	ok	0.664	0.604-0.724
Ethylbenzene	15.61	15.18	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.19	9.19	1.000	ok	0.999	0.939-1.059
4-Ethyltoluene	17.63	15.18	1.161	ok	1.162	1.102-1.222
Freon 113	7.54	9.19	0.820	ok	0.820	0.760-0.880
Freon 114	5.40	9.19	0.588	ok	0.587	0.527-0.647
Freon 152A	5.01	9.19	0.545	ok	0.545	0.485-0.605
Heptane	11.83	10.91	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.21	15.18	1.397	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.18	1.289	ok	1.288	1.228-1.348
Hexane	9.20	9.19	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.60	15.18	0.896	ok	0.896	0.836-0.956
Iodomethane	7.19	9.19	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.93	15.18	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.73	9.19	0.732	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.64	15.18	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.32	9.19	0.797	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.65	9.19	0.941	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.42	10.91	1.138	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.35	9.19	0.909	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.91	1.076	ok	1.075	1.015-1.135
Naphthalene	20.84	15.18	1.373	ok	1.373	1.313-1.433
Nonane	16.49	15.18	1.086	ok	1.086	1.026-1.146
Octane	14.31	15.18	0.943	ok	0.943	0.883-1.003
Pentane	6.99	9.19	0.761	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.18	1.152	ok	1.151	1.091-1.211
Propylene	5.09	9.19	0.554	ok	0.553	0.493-0.613
Styrene	16.19	15.18	1.067	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.21	9.19	1.111	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.20	15.18	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.30	15.18	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.10	10.91	1.201	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.18	1.391	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.43	15.18	1.082	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.72	15.18	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.91	1.064	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.25	9.19	0.789	ok	0.788	0.728-0.848
Tetrachloroethylene	14.52	15.18	0.957	ok	0.957	0.897-1.017
Tetrahydrofuran	9.69	9.19	1.054	ok	1.052	0.992-1.112
Toluene	13.38	10.91	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.91	1.063	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.19	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.52	9.19	0.601	ok	0.600	0.540-0.660
Vinyl Acetate	8.39	9.19	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.80	15.18	1.041	ok	1.040	0.980-1.100
o-Xylene	16.31	15.18	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	99936	ok	101620	60972-142268
1,4-Difluorobenzene	10.91	ok	10.91	10.58-11.24	524874	ok	541849	325109-758589
Chlorobenzene-D5	15.18	ok	15.18	14.85-15.51	226781	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.55	9.19	0.713	ok	0.711	0.651-0.771
Acrolein	6.43	9.19	0.700	ok	0.699	0.639-0.759
Acrylonitrile	6.93	9.19	0.754	ok	0.753	0.693-0.813
Acetonitrile	6.34	9.19	0.690	ok	0.687	0.627-0.747
1,3-Butadiene	5.64	9.19	0.614	ok	0.614	0.554-0.674
Benzene	10.63	10.91	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.05	15.18	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.56	10.91	1.060	ok	1.060	1.000-1.120
Bromoform	15.91	15.18	1.048	ok	1.048	0.988-1.108
Bromomethane	5.89	9.19	0.641	ok	0.641	0.581-0.701
Bromoethene	6.34	9.19	0.690	ok	0.690	0.630-0.750
n-Butane	5.68	9.19	0.618	ok	0.619	0.559-0.679
Benzyl Chloride	18.34	15.18	1.208	ok	1.207	1.147-1.267
n-Butylbenzene	19.10	15.18	1.258	ok	1.258	1.198-1.318
sec-Butylbenzene	18.46	15.18	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.16	15.18	1.196	ok	1.197	1.137-1.257
Carbon disulfide	7.63	9.19	0.830	ok	0.831	0.771-0.891
Chlorobenzene	15.23	15.18	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.06	9.19	0.551	ok	0.550	0.490-0.610
Chloroethane	6.03	9.19	0.656	ok	0.656	0.596-0.716
Chloroform	9.30	9.19	1.012	ok	1.012	0.952-1.072
Chloromethane	5.32	9.19	0.579	ok	0.579	0.519-0.639
3-Chloropropene	7.44	9.19	0.810	ok	0.808	0.748-0.868
2-Chlorotoluene	17.45	15.18	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.76	9.19	1.171	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.91	0.998	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.31	9.19	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.23	9.19	0.787	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.06	15.18	0.926	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.19	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.37	10.91	1.042	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.91	1.227	ok	1.227	1.167-1.287
1,4-Dioxane	11.63	10.91	1.066	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.16	9.19	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.19	0.664	ok	0.663	0.603-0.723
Dibromochloromethane	13.81	15.18	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.36	10.91	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.13	9.19	0.885	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.03	9.19	0.983	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.91	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.35	15.18	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.18	1.239	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.43	15.18	1.214	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.90	10.91	1.182	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.19	9.19	1.000	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.91	1.015	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.19	1.087	ok	1.087	1.027-1.147
Ethanol	6.10	9.19	0.664	ok	0.664	0.604-0.724
Ethylbenzene	15.61	15.18	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.20	9.19	1.001	ok	0.999	0.939-1.059
4-Ethyltoluene	17.64	15.18	1.162	ok	1.162	1.102-1.222
Freon 113	7.54	9.19	0.820	ok	0.820	0.760-0.880
Freon 114	5.40	9.19	0.588	ok	0.587	0.527-0.647
Freon 152A	5.02	9.19	0.546	ok	0.545	0.485-0.605
Heptane	11.83	10.91	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.22	15.18	1.398	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.18	1.289	ok	1.288	1.228-1.348
Hexane	9.19	9.19	1.000	ok	1.001	0.941-1.061
2-Hexanone	13.61	15.18	0.897	ok	0.896	0.836-0.956
Iodomethane	7.19	9.19	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.92	15.18	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.74	9.19	0.733	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.64	15.18	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.32	9.19	0.797	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.66	9.19	0.942	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.43	10.91	1.139	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.35	9.19	0.909	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.91	1.076	ok	1.075	1.015-1.135
Naphthalene	20.85	15.18	1.374	ok	1.373	1.313-1.433
Nonane	16.49	15.18	1.086	ok	1.086	1.026-1.146
Octane	14.31	15.18	0.943	ok	0.943	0.883-1.003
Pentane	6.98	9.19	0.760	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.18	1.152	ok	1.151	1.091-1.211
Propylene	5.08	9.19	0.553	ok	0.553	0.493-0.613
Styrene	16.19	15.18	1.067	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.20	9.19	1.110	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.20	15.18	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.30	15.18	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.10	10.91	1.201	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.18	1.391	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.44	15.18	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.71	15.18	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.91	1.064	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.26	9.19	0.790	ok	0.788	0.728-0.848
Tetrachloroethylene	14.52	15.18	0.957	ok	0.957	0.897-1.017
Tetrahydrofuran	9.69	9.19	1.054	ok	1.052	0.992-1.112
Toluene	13.38	10.91	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.59	10.91	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.68	9.19	0.727	ok	0.728	0.668-0.788
Vinyl chloride	5.51	9.19	0.600	ok	0.600	0.540-0.660
Vinyl Acetate	8.39	9.19	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.79	15.18	1.040	ok	1.040	0.980-1.100
o-Xylene	16.30	15.18	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	95593	ok	101620	60972-142268
1,4-Difluorobenzene	10.91	ok	10.91	10.58-11.24	510625	ok	541849	325109-758589
Chlorobenzene-D5	15.18	ok	15.18	14.85-15.51	223271	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.52	9.19	0.709	ok	0.711	0.651-0.771
Acrolein	6.42	9.19	0.699	ok	0.699	0.639-0.759
Acrylonitrile	6.92	9.19	0.753	ok	0.753	0.693-0.813
Acetonitrile	6.31	9.19	0.687	ok	0.687	0.627-0.747
1,3-Butadiene	5.64	9.19	0.614	ok	0.614	0.554-0.674
Benzene	10.63	10.92	0.973	ok	0.974	0.914-1.034
Bromobenzene	17.06	15.19	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.57	10.92	1.060	ok	1.060	1.000-1.120
Bromoform	15.92	15.19	1.048	ok	1.048	0.988-1.108
Bromomethane	5.89	9.19	0.641	ok	0.641	0.581-0.701
Bromoethene	6.34	9.19	0.690	ok	0.690	0.630-0.750
n-Butane	5.69	9.19	0.619	ok	0.619	0.559-0.679
Benzyl Chloride	18.33	15.19	1.207	ok	1.207	1.147-1.267
n-Butylbenzene	19.11	15.19	1.258	ok	1.258	1.198-1.318
sec-Butylbenzene	18.47	15.19	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
Carbon disulfide	7.64	9.19	0.831	ok	0.831	0.771-0.891
Chlorobenzene	15.23	15.19	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.05	9.19	0.550	ok	0.550	0.490-0.610
Chloroethane	6.04	9.19	0.657	ok	0.656	0.596-0.716
Chloroform	9.30	9.19	1.012	ok	1.012	0.952-1.072
Chloromethane	5.32	9.19	0.579	ok	0.579	0.519-0.639
3-Chloropropene	7.43	9.19	0.808	ok	0.808	0.748-0.868
2-Chlorotoluene	17.46	15.19	1.149	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.19	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.92	0.997	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.31	9.19	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.24	9.19	0.788	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.07	15.19	0.926	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.19	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.38	10.92	1.042	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.92	1.226	ok	1.227	1.167-1.287
1,4-Dioxane	11.59	10.92	1.061	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.16	9.19	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.19	0.664	ok	0.663	0.603-0.723
Dibromochloromethane	13.82	15.19	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.37	10.92	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.13	9.19	0.885	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.04	9.19	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.92	1.136	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.36	15.19	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.19	1.238	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.43	15.19	1.213	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.92	1.182	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.17	9.19	0.998	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.92	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.19	1.087	ok	1.087	1.027-1.147
Ethanol	6.11	9.19	0.665	ok	0.664	0.604-0.724
Ethylbenzene	15.61	15.19	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.18	9.19	0.999	ok	0.999	0.939-1.059
4-Ethyltoluene	17.64	15.19	1.161	ok	1.162	1.102-1.222
Freon 113	7.54	9.19	0.820	ok	0.820	0.760-0.880
Freon 114	5.40	9.19	0.588	ok	0.587	0.527-0.647
Freon 152A	5.01	9.19	0.545	ok	0.545	0.485-0.605
Heptane	11.83	10.92	1.083	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.21	15.19	1.396	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.19	1.288	ok	1.288	1.228-1.348
Hexane	9.20	9.19	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.60	15.19	0.895	ok	0.896	0.836-0.956
Iodomethane	7.19	9.19	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.93	15.19	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.71	9.19	0.730	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.64	15.19	1.227	ok	1.228	1.168-1.288
Methylene chloride	7.33	9.19	0.798	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.63	9.19	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.42	10.92	1.137	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.33	9.19	0.906	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.92	1.075	ok	1.075	1.015-1.135
Naphthalene	20.84	15.19	1.372	ok	1.373	1.313-1.433
Nonane	16.49	15.19	1.086	ok	1.086	1.026-1.146
Octane	14.31	15.19	0.942	ok	0.943	0.883-1.003
Pentane	6.97	9.19	0.758	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.19	1.151	ok	1.151	1.091-1.211
Propylene	5.08	9.19	0.553	ok	0.553	0.493-0.613
Styrene	16.19	15.19	1.066	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.21	9.19	1.111	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.20	15.19	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.30	15.19	1.073	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.10	10.92	1.200	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.19	1.390	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.44	15.19	1.082	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.72	15.19	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.92	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.23	9.19	0.787	ok	0.788	0.728-0.848
Tetrachloroethylene	14.53	15.19	0.957	ok	0.957	0.897-1.017
Tetrahydrofuran	9.66	9.19	1.051	ok	1.052	0.992-1.112
Toluene	13.38	10.92	1.225	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.92	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.19	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.52	9.19	0.601	ok	0.600	0.540-0.660
Vinyl Acetate	8.39	9.19	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.80	15.19	1.040	ok	1.040	0.980-1.100
o-Xylene	16.31	15.19	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	99320	ok	101620	60972-142268
1,4-Difluorobenzene	10.92	ok	10.91	10.58-11.24	529940	ok	541849	325109-758589
Chlorobenzene-D5	15.19	ok	15.18	14.85-15.51	281117	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.53	9.19	0.711	ok	0.711	0.651-0.771
Acrolein	6.43	9.19	0.700	ok	0.699	0.639-0.759
Acrylonitrile	6.93	9.19	0.754	ok	0.753	0.693-0.813
Acetonitrile	6.31	9.19	0.687	ok	0.687	0.627-0.747
1,3-Butadiene	5.65	9.19	0.615	ok	0.614	0.554-0.674
Benzene	10.63	10.92	0.973	ok	0.974	0.914-1.034
Bromobenzene	17.05	15.19	1.122	ok	1.123	1.063-1.183
Bromodichloromethane	11.56	10.92	1.059	ok	1.060	1.000-1.120
Bromoform	15.92	15.19	1.048	ok	1.048	0.988-1.108
Bromomethane	5.90	9.19	0.642	ok	0.641	0.581-0.701
Bromoethene	6.35	9.19	0.691	ok	0.690	0.630-0.750
n-Butane	5.69	9.19	0.619	ok	0.619	0.559-0.679
Benzyl Chloride	18.33	15.19	1.207	ok	1.207	1.147-1.267
n-Butylbenzene	19.11	15.19	1.258	ok	1.258	1.198-1.318
sec-Butylbenzene	18.47	15.19	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
Carbon disulfide	7.64	9.19	0.831	ok	0.831	0.771-0.891
Chlorobenzene	15.23	15.19	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.06	9.19	0.551	ok	0.550	0.490-0.610
Chloroethane	6.04	9.19	0.657	ok	0.656	0.596-0.716
Chloroform	9.30	9.19	1.012	ok	1.012	0.952-1.072
Chloromethane	5.32	9.19	0.579	ok	0.579	0.519-0.639
3-Chloropropene	7.43	9.19	0.808	ok	0.808	0.748-0.868
2-Chlorotoluene	17.46	15.19	1.149	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.19	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.92	0.997	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.32	9.19	0.905	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.24	9.19	0.788	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.07	15.19	0.926	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.19	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.38	10.92	1.042	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.92	1.226	ok	1.227	1.167-1.287
1,4-Dioxane	11.60	10.92	1.062	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.16	9.19	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.19	0.664	ok	0.663	0.603-0.723
Dibromochloromethane	13.81	15.19	0.909	ok	0.910	0.850-0.970
Dibromomethane	11.37	10.92	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.14	9.19	0.886	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.04	9.19	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.92	1.136	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.36	15.19	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.19	1.238	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.43	15.19	1.213	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.92	1.182	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.17	9.19	0.998	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.92	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.19	1.087	ok	1.087	1.027-1.147
Ethanol	6.11	9.19	0.665	ok	0.664	0.604-0.724
Ethylbenzene	15.61	15.19	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.18	9.19	0.999	ok	0.999	0.939-1.059
4-Ethyltoluene	17.64	15.19	1.161	ok	1.162	1.102-1.222
Freon 113	7.54	9.19	0.820	ok	0.820	0.760-0.880
Freon 114	5.41	9.19	0.589	ok	0.587	0.527-0.647
Freon 152A	5.02	9.19	0.546	ok	0.545	0.485-0.605
Heptane	11.83	10.92	1.083	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.21	15.19	1.396	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.19	1.288	ok	1.288	1.228-1.348
Hexane	9.20	9.19	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.60	15.19	0.895	ok	0.896	0.836-0.956
Iodomethane	7.20	9.19	0.783	ok	0.782	0.722-0.842
Isopropylbenzene	16.93	15.19	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.72	9.19	0.731	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.64	15.19	1.227	ok	1.228	1.168-1.288
Methylene chloride	7.33	9.19	0.798	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.63	9.19	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.42	10.92	1.137	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.34	9.19	0.908	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.92	1.075	ok	1.075	1.015-1.135
Naphthalene	20.84	15.19	1.372	ok	1.373	1.313-1.433
Nonane	16.49	15.19	1.086	ok	1.086	1.026-1.146
Octane	14.31	15.19	0.942	ok	0.943	0.883-1.003
Pentane	6.99	9.19	0.761	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.19	1.151	ok	1.151	1.091-1.211
Propylene	5.08	9.19	0.553	ok	0.553	0.493-0.613
Styrene	16.19	15.19	1.066	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.21	9.19	1.111	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.20	15.19	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.30	15.19	1.073	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.10	10.92	1.200	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.19	1.390	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.44	15.19	1.082	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.72	15.19	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.92	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.23	9.19	0.787	ok	0.788	0.728-0.848
Tetrachloroethylene	14.52	15.19	0.956	ok	0.957	0.897-1.017
Tetrahydrofuran	9.67	9.19	1.052	ok	1.052	0.992-1.112
Toluene	13.38	10.92	1.225	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.92	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.19	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.52	9.19	0.601	ok	0.600	0.540-0.660
Vinyl Acetate	8.39	9.19	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.80	15.19	1.040	ok	1.040	0.980-1.100
o-Xylene	16.31	15.19	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	106605	ok	101620	60972-142268
1,4-Difluorobenzene	10.92	ok	10.91	10.58-11.24	573587	ok	541849	325109-758589
Chlorobenzene-D5	15.19	ok	15.18	14.85-15.51	285258	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acrolein	6.44	9.19	0.701	ok	0.699	0.639-0.759
Acrylonitrile	6.93	9.19	0.754	ok	0.753	0.693-0.813
1,3-Butadiene	5.63	9.19	0.613	ok	0.614	0.554-0.674
Benzene	10.63	10.91	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.05	15.18	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.57	10.91	1.060	ok	1.060	1.000-1.120
Bromoform	15.91	15.18	1.048	ok	1.048	0.988-1.108
Bromomethane	5.90	9.19	0.642	ok	0.641	0.581-0.701
Bromoethene	6.34	9.19	0.690	ok	0.690	0.630-0.750
n-Butane	5.69	9.19	0.619	ok	0.619	0.559-0.679
Benzyl Chloride	18.33	15.18	1.208	ok	1.207	1.147-1.267
n-Butylbenzene	19.10	15.18	1.258	ok	1.258	1.198-1.318
sec-Butylbenzene	18.46	15.18	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.64	9.19	0.831	ok	0.831	0.771-0.891
Chlorobenzene	15.22	15.18	1.003	ok	1.003	0.943-1.063
Chloroethane	6.03	9.19	0.656	ok	0.656	0.596-0.716
Chloroform	9.29	9.19	1.011	ok	1.012	0.952-1.072
Chloromethane	5.32	9.19	0.579	ok	0.579	0.519-0.639
3-Chloropropene	7.44	9.19	0.810	ok	0.808	0.748-0.868
2-Chlorotoluene	17.45	15.18	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.19	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.91	0.998	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.31	9.19	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.24	9.19	0.788	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.06	15.18	0.926	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.19	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.39	10.91	1.044	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.91	1.227	ok	1.227	1.167-1.287
Dichlorodifluoromethane	5.16	9.19	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.19	0.664	ok	0.663	0.603-0.723
Dibromochloromethane	13.81	15.18	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.36	10.91	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.13	9.19	0.885	ok	0.885	0.825-0.945
cis-1,2-Dichloroethylene	9.04	9.19	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.40	10.91	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.35	15.18	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.18	1.239	ok	1.239	1.179-1.299

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
p-Dichlorobenzene	18.42	15.18	1.213	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.91	1.183	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.19	9.19	1.000	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.91	1.015	ok	1.014	0.954-1.074
2,4-Dimethylpentane	10.00	9.19	1.088	ok	1.087	1.027-1.147
Ethylbenzene	15.61	15.18	1.028	ok	1.028	0.968-1.088
4-Ethyltoluene	17.63	15.18	1.161	ok	1.162	1.102-1.222
Freon 113	7.54	9.19	0.820	ok	0.820	0.760-0.880
Freon 114	5.40	9.19	0.588	ok	0.587	0.527-0.647
Freon 152A	5.02	9.19	0.546	ok	0.545	0.485-0.605
Heptane	11.83	10.91	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.22	15.18	1.398	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.18	1.289	ok	1.288	1.228-1.348
Hexane	9.20	9.19	1.001	ok	1.001	0.941-1.061
Iodomethane	7.19	9.19	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.93	15.18	1.115	ok	1.115	1.055-1.175
p-Isopropyltoluene	18.64	15.18	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.33	9.19	0.798	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.66	9.19	0.942	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.44	10.91	1.140	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.36	9.19	0.910	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.91	1.076	ok	1.075	1.015-1.135
Naphthalene	20.84	15.18	1.373	ok	1.373	1.313-1.433
Nonane	16.48	15.18	1.086	ok	1.086	1.026-1.146
Octane	14.32	15.18	0.943	ok	0.943	0.883-1.003
Pentane	6.98	9.19	0.760	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.18	1.152	ok	1.151	1.091-1.211
Propylene	5.08	9.19	0.553	ok	0.553	0.493-0.613
Styrene	16.18	15.18	1.066	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.21	9.19	1.111	ok	1.111	1.051-1.171
1,1,1,2-Tetrachloroethane	15.20	15.18	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.30	15.18	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.10	10.91	1.201	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.18	1.391	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.44	15.18	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.72	15.18	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.60	10.91	1.063	ok	1.063	1.003-1.123

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Tertiary Butyl Alcohol	7.27	9.19	0.791	ok	0.788	0.728-0.848
Tetrachloroethylene	14.52	15.18	0.957	ok	0.957	0.897-1.017
Toluene	13.38	10.91	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.91	1.063	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.19	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.54	9.19	0.603	ok	0.600	0.540-0.660
m,p-Xylene	15.79	15.18	1.040	ok	1.040	0.980-1.100
o-Xylene	16.30	15.18	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	109455	ok	101620	60972-142268
1,4-Difluorobenzene	10.91	ok	10.91	10.58-11.24	573672	ok	541849	325109-758589
Chlorobenzene-D5	15.18	ok	15.18	14.85-15.51	238799	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,3-Butadiene	5.65	9.19	0.615	ok	0.614	0.554-0.674
Benzene	10.63	10.91	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.05	15.17	1.124	ok	1.123	1.063-1.183
Bromodichloromethane	11.56	10.91	1.060	ok	1.060	1.000-1.120
Bromoform	15.91	15.17	1.049	ok	1.048	0.988-1.108
Bromomethane	5.88	9.19	0.640	ok	0.641	0.581-0.701
Bromoethene	6.33	9.19	0.689	ok	0.690	0.630-0.750
Benzyl Chloride	18.33	15.17	1.208	ok	1.207	1.147-1.267
n-Butylbenzene	19.10	15.17	1.259	ok	1.258	1.198-1.318
sec-Butylbenzene	18.45	15.17	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.16	15.17	1.197	ok	1.197	1.137-1.257
Chlorobenzene	15.22	15.17	1.003	ok	1.003	0.943-1.063
Chloroethane	6.02	9.19	0.655	ok	0.656	0.596-0.716
Chloroform	9.30	9.19	1.012	ok	1.012	0.952-1.072
2-Chlorotoluene	17.46	15.17	1.151	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.19	1.172	ok	1.172	1.112-1.232
1,1-Dichloroethane	8.30	9.19	0.903	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.24	9.19	0.788	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.07	15.17	0.927	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.19	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.38	10.91	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.91	1.227	ok	1.227	1.167-1.287
Dichlorodifluoromethane	5.15	9.19	0.560	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.08	9.19	0.662	ok	0.663	0.603-0.723
Dibromochloromethane	13.81	15.17	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.36	10.91	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.13	9.19	0.885	ok	0.885	0.825-0.945
cis-1,2-Dichloroethylene	9.03	9.19	0.983	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.91	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.36	15.17	1.210	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.17	1.240	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.43	15.17	1.215	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.91	1.183	ok	1.183	1.123-1.243
2,3-Dimethylpentane	11.07	10.91	1.015	ok	1.014	0.954-1.074
2,4-Dimethylpentane	10.00	9.19	1.088	ok	1.087	1.027-1.147
Ethylbenzene	15.61	15.17	1.029	ok	1.028	0.968-1.088
4-Ethyltoluene	17.63	15.17	1.162	ok	1.162	1.102-1.222
Freon 113	7.53	9.19	0.819	ok	0.820	0.760-0.880

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Freon 114	5.38	9.19	0.585	ok	0.587	0.527-0.647
Heptane	11.83	10.91	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.21	15.17	1.398	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.17	1.289	ok	1.288	1.228-1.348
Hexane	9.19	9.19	1.000	ok	1.001	0.941-1.061
Iodomethane	7.18	9.19	0.781	ok	0.782	0.722-0.842
Isopropylbenzene	16.92	15.17	1.115	ok	1.115	1.055-1.175
p-Isopropyltoluene	18.63	15.17	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.32	9.19	0.797	ok	0.797	0.737-0.857
Methyl Isobutyl Ketone	12.44	10.91	1.140	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.36	9.19	0.910	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.91	1.076	ok	1.075	1.015-1.135
Naphthalene	20.84	15.17	1.374	ok	1.373	1.313-1.433
Nonane	16.49	15.17	1.087	ok	1.086	1.026-1.146
Octane	14.31	15.17	0.943	ok	0.943	0.883-1.003
n-Propylbenzene	17.47	15.17	1.152	ok	1.151	1.091-1.211
Styrene	16.19	15.17	1.067	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.19	9.19	1.109	ok	1.111	1.051-1.171
1,1,1,2-Tetrachloroethane	15.20	15.17	1.002	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.30	15.17	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.09	10.91	1.200	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.13	15.17	1.393	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.44	15.17	1.084	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.17	1.198	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.71	15.17	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.91	1.064	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.27	9.19	0.791	ok	0.788	0.728-0.848
Tetrachloroethylene	14.52	15.17	0.957	ok	0.957	0.897-1.017
Toluene	13.38	10.91	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.91	1.063	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.19	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.51	9.19	0.600	ok	0.600	0.540-0.660
m,p-Xylene	15.80	15.17	1.042	ok	1.040	0.980-1.100
o-Xylene	16.30	15.17	1.074	ok	1.074	1.014-1.134

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	95538	ok	101620	60972-142268
1,4-Difluorobenzene	10.91	ok	10.91	10.58-11.24	503299	ok	541849	325109-758589
Chlorobenzene-D5	15.17	ok	15.18	14.85-15.51	214446	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.53	9.20	0.710	ok	0.711	0.651-0.771
Acrolein	6.43	9.20	0.699	ok	0.699	0.639-0.759
Acrylonitrile	6.92	9.20	0.752	ok	0.753	0.693-0.813
Acetonitrile	6.31	9.20	0.686	ok	0.687	0.627-0.747
1,3-Butadiene	5.64	9.20	0.613	ok	0.614	0.554-0.674
Benzene	10.64	10.92	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.06	15.19	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.57	10.92	1.060	ok	1.060	1.000-1.120
Bromoform	15.92	15.19	1.048	ok	1.048	0.988-1.108
Bromomethane	5.89	9.20	0.640	ok	0.641	0.581-0.701
Bromoethene	6.34	9.20	0.689	ok	0.690	0.630-0.750
n-Butane	5.69	9.20	0.618	ok	0.619	0.559-0.679
Benzyl Chloride	18.34	15.19	1.207	ok	1.207	1.147-1.267
n-Butylbenzene	19.11	15.19	1.258	ok	1.258	1.198-1.318
sec-Butylbenzene	18.47	15.19	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
Carbon disulfide	7.64	9.20	0.830	ok	0.831	0.771-0.891
Chlorobenzene	15.23	15.19	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.05	9.20	0.549	ok	0.550	0.490-0.610
Chloroethane	6.04	9.20	0.657	ok	0.656	0.596-0.716
Chloroform	9.30	9.20	1.011	ok	1.012	0.952-1.072
Chloromethane	5.32	9.20	0.578	ok	0.579	0.519-0.639
3-Chloropropene	7.43	9.20	0.808	ok	0.808	0.748-0.868
2-Chlorotoluene	17.46	15.19	1.149	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.20	1.171	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.92	0.997	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.32	9.20	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.24	9.20	0.787	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.08	15.19	0.927	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.20	1.084	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.39	10.92	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.40	10.92	1.227	ok	1.227	1.167-1.287
1,4-Dioxane	11.60	10.92	1.062	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.16	9.20	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.20	0.663	ok	0.663	0.603-0.723
Dibromochloromethane	13.82	15.19	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.38	10.92	1.042	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.13	9.20	0.884	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.04	9.20	0.983	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.92	1.136	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.36	15.19	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.82	15.19	1.239	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.44	15.19	1.214	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.92	1.182	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.18	9.20	0.998	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.92	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.20	1.086	ok	1.087	1.027-1.147
Ethanol	6.11	9.20	0.664	ok	0.664	0.604-0.724
Ethylbenzene	15.61	15.19	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.19	9.20	0.999	ok	0.999	0.939-1.059
4-Ethyltoluene	17.64	15.19	1.161	ok	1.162	1.102-1.222
Freon 113	7.54	9.20	0.820	ok	0.820	0.760-0.880
Freon 114	5.40	9.20	0.587	ok	0.587	0.527-0.647
Freon 152A	5.01	9.20	0.545	ok	0.545	0.485-0.605
Heptane	11.84	10.92	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.22	15.19	1.397	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.19	1.288	ok	1.288	1.228-1.348
Hexane	9.20	9.20	1.000	ok	1.001	0.941-1.061
2-Hexanone	13.60	15.19	0.895	ok	0.896	0.836-0.956
Iodomethane	7.19	9.20	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.94	15.19	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.72	9.20	0.730	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.64	15.19	1.227	ok	1.228	1.168-1.288
Methylene chloride	7.33	9.20	0.797	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.63	9.20	0.938	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.42	10.92	1.137	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.33	9.20	0.905	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.92	1.075	ok	1.075	1.015-1.135
Naphthalene	20.84	15.19	1.372	ok	1.373	1.313-1.433
Nonane	16.50	15.19	1.086	ok	1.086	1.026-1.146
Octane	14.32	15.19	0.943	ok	0.943	0.883-1.003
Pentane	6.98	9.20	0.759	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.19	1.151	ok	1.151	1.091-1.211
Propylene	5.08	9.20	0.552	ok	0.553	0.493-0.613
Styrene	16.19	15.19	1.066	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.21	9.20	1.110	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.21	15.19	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.31	15.19	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.11	10.92	1.201	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.19	1.390	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.45	15.19	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.72	15.19	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.92	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.24	9.20	0.787	ok	0.788	0.728-0.848
Tetrachloroethylene	14.53	15.19	0.957	ok	0.957	0.897-1.017
Tetrahydrofuran	9.66	9.20	1.050	ok	1.052	0.992-1.112
Toluene	13.38	10.92	1.225	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.92	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.20	0.727	ok	0.728	0.668-0.788
Vinyl chloride	5.52	9.20	0.600	ok	0.600	0.540-0.660
Vinyl Acetate	8.39	9.20	0.912	ok	0.913	0.853-0.973
m,p-Xylene	15.80	15.19	1.040	ok	1.040	0.980-1.100
o-Xylene	16.31	15.19	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.20	ok	9.19	8.86-9.52	101546	ok	101620	60972-142268
1,4-Difluorobenzene	10.92	ok	10.91	10.58-11.24	546038	ok	541849	325109-758589
Chlorobenzene-D5	15.19	ok	15.18	14.85-15.51	306390	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.52	9.18	0.710	ok	0.711	0.651-0.771
Acrolein	6.41	9.18	0.698	ok	0.699	0.639-0.759
Acrylonitrile	6.91	9.18	0.753	ok	0.753	0.693-0.813
Acetonitrile	6.30	9.18	0.686	ok	0.687	0.627-0.747
1,3-Butadiene	5.63	9.18	0.613	ok	0.614	0.554-0.674
Benzene	10.63	10.91	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.05	15.18	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.56	10.91	1.060	ok	1.060	1.000-1.120
Bromoform	15.91	15.18	1.048	ok	1.048	0.988-1.108
Bromomethane	5.88	9.18	0.641	ok	0.641	0.581-0.701
Bromoethene	6.33	9.18	0.690	ok	0.690	0.630-0.750
n-Butane	5.68	9.18	0.619	ok	0.619	0.559-0.679
Benzyl Chloride	18.33	15.18	1.208	ok	1.207	1.147-1.267
n-Butylbenzene	19.10	15.18	1.258	ok	1.258	1.198-1.318
sec-Butylbenzene	18.46	15.18	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.16	15.18	1.196	ok	1.197	1.137-1.257
Carbon disulfide	7.62	9.18	0.830	ok	0.831	0.771-0.891
Chlorobenzene	15.22	15.18	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.04	9.18	0.549	ok	0.550	0.490-0.610
Chloroethane	6.02	9.18	0.656	ok	0.656	0.596-0.716
Chloroform	9.29	9.18	1.012	ok	1.012	0.952-1.072
Chloromethane	5.30	9.18	0.577	ok	0.579	0.519-0.639
3-Chloropropene	7.41	9.18	0.807	ok	0.808	0.748-0.868
2-Chlorotoluene	17.45	15.18	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.76	9.18	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.88	10.91	0.997	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.30	9.18	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.22	9.18	0.786	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.06	15.18	0.926	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.96	9.18	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.38	10.91	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.39	10.91	1.227	ok	1.227	1.167-1.287
1,4-Dioxane	11.58	10.91	1.061	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.15	9.18	0.561	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.08	9.18	0.662	ok	0.663	0.603-0.723
Dibromochloromethane	13.81	15.18	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.36	10.91	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.12	9.18	0.885	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.03	9.18	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.40	10.91	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.36	15.18	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.18	1.239	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.43	15.18	1.214	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.90	10.91	1.182	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.16	9.18	0.998	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.06	10.91	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.18	1.088	ok	1.087	1.027-1.147
Ethanol	6.09	9.18	0.663	ok	0.664	0.604-0.724
Ethylbenzene	15.60	15.18	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.17	9.18	0.999	ok	0.999	0.939-1.059
4-Ethyltoluene	17.63	15.18	1.161	ok	1.162	1.102-1.222
Freon 113	7.53	9.18	0.820	ok	0.820	0.760-0.880
Freon 114	5.39	9.18	0.587	ok	0.587	0.527-0.647
Freon 152A	5.00	9.18	0.545	ok	0.545	0.485-0.605
Heptane	11.83	10.91	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.21	15.18	1.397	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.18	1.289	ok	1.288	1.228-1.348
Hexane	9.19	9.18	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.59	15.18	0.895	ok	0.896	0.836-0.956
Iodomethane	7.18	9.18	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.92	15.18	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.70	9.18	0.730	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.63	15.18	1.227	ok	1.228	1.168-1.288
Methylene chloride	7.32	9.18	0.797	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.63	9.18	0.940	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.41	10.91	1.137	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.33	9.18	0.907	ok	0.908	0.848-0.968
Methylmethacrylate	11.73	10.91	1.075	ok	1.075	1.015-1.135
Naphthalene	20.84	15.18	1.373	ok	1.373	1.313-1.433
Nonane	16.48	15.18	1.086	ok	1.086	1.026-1.146
Octane	14.31	15.18	0.943	ok	0.943	0.883-1.003
Pentane	6.97	9.18	0.759	ok	0.759	0.699-0.819
n-Propylbenzene	17.47	15.18	1.151	ok	1.151	1.091-1.211
Propylene	5.07	9.18	0.552	ok	0.553	0.493-0.613
Styrene	16.19	15.18	1.067	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.20	9.18	1.111	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	Reporting this level
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.20	15.18	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.29	15.18	1.073	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.09	10.91	1.200	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.18	1.391	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.44	15.18	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.18	1.197	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.71	15.18	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.60	10.91	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.22	9.18	0.786	ok	0.788	0.728-0.848
Tetrachloroethylene	14.52	15.18	0.957	ok	0.957	0.897-1.017
Tetrahydrofuran	9.66	9.18	1.052	ok	1.052	0.992-1.112
Toluene	13.38	10.91	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.91	1.063	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.68	9.18	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.50	9.18	0.599	ok	0.600	0.540-0.660
Vinyl Acetate	8.38	9.18	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.79	15.18	1.040	ok	1.040	0.980-1.100
o-Xylene	16.30	15.18	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.18	ok	9.19	8.86-9.52	98243	ok	101620	60972-142268
1,4-Difluorobenzene	10.91	ok	10.91	10.58-11.24	533582	ok	541849	325109-758589
Chlorobenzene-D5	15.18	ok	15.18	14.85-15.51	244513	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.52	9.19	0.709	ok	0.711	0.651-0.771
Acrolein	6.42	9.19	0.699	ok	0.699	0.639-0.759
Acrylonitrile	6.92	9.19	0.753	ok	0.753	0.693-0.813
Acetonitrile	6.30	9.19	0.686	ok	0.687	0.627-0.747
1,3-Butadiene	5.64	9.19	0.614	ok	0.614	0.554-0.674
Benzene	10.63	10.92	0.973	ok	0.974	0.914-1.034
Bromobenzene	17.06	15.19	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.57	10.92	1.060	ok	1.060	1.000-1.120
Bromoform	15.92	15.19	1.048	ok	1.048	0.988-1.108
Bromomethane	5.88	9.19	0.640	ok	0.641	0.581-0.701
Bromoethene	6.33	9.19	0.689	ok	0.690	0.630-0.750
n-Butane	5.68	9.19	0.618	ok	0.619	0.559-0.679
Benzyl Chloride	18.34	15.19	1.207	ok	1.207	1.147-1.267
n-Butylbenzene	19.11	15.19	1.258	ok	1.258	1.198-1.318
sec-Butylbenzene	18.47	15.19	1.216	ok	1.216	1.156-1.276
tert-Butylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
Carbon disulfide	7.63	9.19	0.830	ok	0.831	0.771-0.891
Chlorobenzene	15.23	15.19	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.05	9.19	0.550	ok	0.550	0.490-0.610
Chloroethane	6.03	9.19	0.656	ok	0.656	0.596-0.716
Chloroform	9.30	9.19	1.012	ok	1.012	0.952-1.072
Chloromethane	5.31	9.19	0.578	ok	0.579	0.519-0.639
3-Chloropropene	7.43	9.19	0.808	ok	0.808	0.748-0.868
2-Chlorotoluene	17.46	15.19	1.149	ok	1.150	1.090-1.210
Carbon tetrachloride	10.77	9.19	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.89	10.92	0.997	ok	0.998	0.938-1.058
1,1-Dichloroethane	8.31	9.19	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.23	9.19	0.787	ok	0.787	0.727-0.847
1,2-Dibromoethane	14.07	15.19	0.926	ok	0.926	0.866-0.986
1,2-Dichloroethane	9.97	9.19	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.38	10.92	1.042	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.40	10.92	1.227	ok	1.227	1.167-1.287
1,4-Dioxane	11.59	10.92	1.061	ok	1.063	1.003-1.123
Dichlorodifluoromethane	5.15	9.19	0.560	ok	0.561	0.501-0.621
Dichlorofluoromethane	6.10	9.19	0.664	ok	0.663	0.603-0.723
Dibromochloromethane	13.82	15.19	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.37	10.92	1.041	ok	1.041	0.981-1.101
trans-1,2-Dichloroethylene	8.13	9.19	0.885	ok	0.885	0.825-0.945

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,2-Dichloroethylene	9.03	9.19	0.983	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.41	10.92	1.136	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.36	15.19	1.209	ok	1.209	1.149-1.269
o-Dichlorobenzene	18.81	15.19	1.238	ok	1.239	1.179-1.299
p-Dichlorobenzene	18.44	15.19	1.214	ok	1.214	1.154-1.274
trans-1,3-Dichloropropene	12.91	10.92	1.182	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.17	9.19	0.998	ok	0.998	0.938-1.058
2,3-Dimethylpentane	11.07	10.92	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.99	9.19	1.087	ok	1.087	1.027-1.147
Ethanol	6.11	9.19	0.665	ok	0.664	0.604-0.724
Ethylbenzene	15.61	15.19	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.18	9.19	0.999	ok	0.999	0.939-1.059
4-Ethyltoluene	17.64	15.19	1.161	ok	1.162	1.102-1.222
Freon 113	7.54	9.19	0.820	ok	0.820	0.760-0.880
Freon 114	5.40	9.19	0.588	ok	0.587	0.527-0.647
Freon 152A	5.01	9.19	0.545	ok	0.545	0.485-0.605
Heptane	11.83	10.92	1.083	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.21	15.19	1.396	ok	1.397	1.337-1.457
Hexachloroethane	19.56	15.19	1.288	ok	1.288	1.228-1.348
Hexane	9.19	9.19	1.000	ok	1.001	0.941-1.061
2-Hexanone	13.60	15.19	0.895	ok	0.896	0.836-0.956
Iodomethane	7.19	9.19	0.782	ok	0.782	0.722-0.842
Isopropylbenzene	16.93	15.19	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.71	9.19	0.730	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.64	15.19	1.227	ok	1.228	1.168-1.288
Methylene chloride	7.32	9.19	0.797	ok	0.797	0.737-0.857
Methyl ethyl ketone	8.63	9.19	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.42	10.92	1.137	ok	1.138	1.078-1.198
Methyl Tert Butyl Ether	8.33	9.19	0.906	ok	0.908	0.848-0.968
Methylmethacrylate	11.74	10.92	1.075	ok	1.075	1.015-1.135
Naphthalene	20.84	15.19	1.372	ok	1.373	1.313-1.433
Nonane	16.49	15.19	1.086	ok	1.086	1.026-1.146
Octane	14.31	15.19	0.942	ok	0.943	0.883-1.003
Pentane	6.97	9.19	0.758	ok	0.759	0.699-0.819
n-Propylbenzene	17.48	15.19	1.151	ok	1.151	1.091-1.211
Propylene	5.08	9.19	0.553	ok	0.553	0.493-0.613
Styrene	16.19	15.19	1.066	ok	1.066	1.006-1.126
1,1,1-Trichloroethane	10.21	9.19	1.111	ok	1.111	1.051-1.171

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2140-ICC2140	W53466.D	02/11/16 13:34	YMH	10	GCMSW	TO-15	
VW2140-IC2140	W53468.D	02/11/16 14:56	YMH	0.5	GCMSW	TO-15	
VW2140-IC2140	W53469.D	02/11/16 15:37	YMH	0.2	GCMSW	TO-15	
VW2140-IC2140	W53470.D	02/11/16 16:19	YMH	20	GCMSW	TO-15	
VW2140-IC2140	W53471.D	02/11/16 17:01	YMH	15	GCMSW	TO-15	
VW2140-IC2140	W53473.D	02/11/16 18:23	YMH	0.1	GCMSW	TO-15	
VW2140-IC2140	W53474.D	02/11/16 19:04	YMH	0.04	GCMSW	TO-15	
VW2140-IC2140	W53475.D	02/11/16 19:44	YMH	30	GCMSW	TO-15	
VW2140-IC2140	W53477.D	02/11/16 21:07	YMH	5	GCMSW	TO-15	
VW2140-IC2140	W53478.D	02/11/16 21:47	YMH	40	GCMSW	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.21	15.19	1.001	ok	1.001	0.941-1.061
1,1,2,2-Tetrachloroethane	16.31	15.19	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.10	10.92	1.200	ok	1.200	1.140-1.260
1,2,4-Trichlorobenzene	21.12	15.19	1.390	ok	1.391	1.331-1.451
1,2,3-Trichloropropane	16.45	15.19	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.17	15.19	1.196	ok	1.197	1.137-1.257
1,3,5-Trimethylbenzene	17.72	15.19	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.61	10.92	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.23	9.19	0.787	ok	0.788	0.728-0.848
Tetrachloroethylene	14.53	15.19	0.957	ok	0.957	0.897-1.017
Tetrahydrofuran	9.66	9.19	1.051	ok	1.052	0.992-1.112
Toluene	13.38	10.92	1.225	ok	1.226	1.166-1.286
Trichloroethylene	11.60	10.92	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.69	9.19	0.728	ok	0.728	0.668-0.788
Vinyl chloride	5.52	9.19	0.601	ok	0.600	0.540-0.660
Vinyl Acetate	8.39	9.19	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.80	15.19	1.040	ok	1.040	0.980-1.100
o-Xylene	16.31	15.19	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.19	ok	9.19	8.86-9.52	108312	ok	101620	60972-142268
1,4-Difluorobenzene	10.92	ok	10.91	10.58-11.24	575172	ok	541849	325109-758589
Chlorobenzene-D5	15.19	ok	15.18	14.85-15.51	339037	ok	262061	157237-366885

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.55	9.18	0.714	ok	0.711	0.651-0.771
Acrolein	6.43	9.18	0.700	ok	0.699	0.639-0.759
Acrylonitrile	6.93	9.18	0.755	ok	0.753	0.693-0.813
Acetonitrile	6.32	9.18	0.688	ok	0.686	0.626-0.746
1,3-Butadiene	5.63	9.18	0.613	ok	0.612	0.552-0.672
Benzene	10.61	10.90	0.973	ok	0.974	0.914-1.034
Bromobenzene	17.03	15.16	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.55	10.90	1.060	ok	1.060	1.000-1.120
Bromoform	15.89	15.16	1.048	ok	1.048	0.988-1.108
Bromomethane	5.88	9.18	0.641	ok	0.640	0.580-0.700
Bromoethene	6.33	9.18	0.690	ok	0.689	0.629-0.749
n-Butane	5.68	9.18	0.619	ok	0.617	0.557-0.677
Benzyl Chloride	18.31	15.16	1.208	ok	1.208	1.148-1.268
n-Butylbenzene	19.09	15.16	1.259	ok	1.259	1.199-1.319
sec-Butylbenzene	18.45	15.16	1.217	ok	1.217	1.157-1.277
tert-Butylbenzene	18.14	15.16	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.62	9.18	0.830	ok	0.830	0.770-0.890
Chlorobenzene	15.20	15.16	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.05	9.18	0.550	ok	0.549	0.489-0.609
Chloroethane	6.03	9.18	0.657	ok	0.656	0.596-0.716
Chloroform	9.29	9.18	1.012	ok	1.011	0.951-1.071
Chloromethane	5.32	9.18	0.580	ok	0.578	0.518-0.638
3-Chloropropene	7.41	9.18	0.807	ok	0.807	0.747-0.867
2-Chlorotoluene	17.44	15.16	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.75	9.18	1.171	ok	1.172	1.112-1.232
Cyclohexane	10.87	10.90	0.997	ok	0.997	0.937-1.057
1,1-Dichloroethane	8.29	9.18	0.903	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.22	9.18	0.786	ok	0.786	0.726-0.846
1,2-Dibromoethane	14.05	15.16	0.927	ok	0.927	0.867-0.987
1,2-Dichloroethane	9.96	9.18	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.36	10.90	1.042	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.38	10.90	1.228	ok	1.228	1.168-1.288
1,4-Dioxane	11.63	10.90	1.067	ok	1.064	1.004-1.124
Dichlorodifluoromethane	5.16	9.18	0.562	ok	0.560	0.500-0.620
Dichlorofluoromethane	6.09	9.18	0.663	ok	0.663	0.603-0.723
Dibromochloromethane	13.80	15.16	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.35	10.90	1.041	ok	1.042	0.982-1.102
trans-1,2-Dichloroethylene	8.11	9.18	0.883	ok	0.884	0.824-0.944
cis-1,2-Dichloroethylene	9.03	9.18	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.39	10.90	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.34	15.16	1.210	ok	1.210	1.150-1.270

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
o-Dichlorobenzene	18.80	15.16	1.240	ok	1.240	1.180-1.300
p-Dichlorobenzene	18.42	15.16	1.215	ok	1.215	1.155-1.275
trans-1,3-Dichloropropene	12.89	10.90	1.183	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.18	9.18	1.000	ok	0.999	0.939-1.059
2,3-Dimethylpentane	11.05	10.90	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.97	9.18	1.086	ok	1.087	1.027-1.147
Ethanol	6.15	9.18	0.670	ok	0.665	0.605-0.725
Ethylbenzene	15.59	15.16	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.19	9.18	1.001	ok	1.000	0.940-1.060
4-Ethyltoluene	17.62	15.16	1.162	ok	1.162	1.102-1.222
Freon 113	7.53	9.18	0.820	ok	0.819	0.759-0.879
Freon 114	5.40	9.18	0.588	ok	0.586	0.526-0.646
Freon 152A	5.01	9.18	0.546	ok	0.544	0.484-0.604
Heptane	11.82	10.90	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.20	15.16	1.398	ok	1.398	1.338-1.458
Hexachloroethane	19.55	15.16	1.290	ok	1.289	1.229-1.349
Hexane	9.19	9.18	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.60	15.16	0.897	ok	0.896	0.836-0.956
Iodomethane	7.18	9.18	0.782	ok	0.781	0.721-0.841
Isopropylbenzene	16.91	15.16	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.74	9.18	0.734	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.62	15.16	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.32	9.18	0.797	ok	0.796	0.736-0.856
Methyl ethyl ketone	8.64	9.18	0.941	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.42	10.90	1.139	ok	1.139	1.079-1.199
Methyl Tert Butyl Ether	8.35	9.18	0.910	ok	0.908	0.848-0.968
Methylmethacrylate	11.73	10.90	1.076	ok	1.076	1.016-1.136
Naphthalene	20.83	15.16	1.374	ok	1.374	1.314-1.434
Nonane	16.47	15.16	1.086	ok	1.086	1.026-1.146
Octane	14.30	15.16	0.943	ok	0.943	0.883-1.003
Pentane	6.96	9.18	0.758	ok	0.758	0.698-0.818
n-Propylbenzene	17.46	15.16	1.152	ok	1.152	1.092-1.212
Propylene	5.08	9.18	0.553	ok	0.552	0.492-0.612
Styrene	16.17	15.16	1.067	ok	1.067	1.007-1.127
1,1,1-Trichloroethane	10.19	9.18	1.110	ok	1.110	1.050-1.170
1,1,1,2-Tetrachloroethane	15.19	15.16	1.002	ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	16.28	15.16	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.08	10.90	1.200	ok	1.201	1.141-1.261
1,2,4-Trichlorobenzene	21.11	15.16	1.392	ok	1.392	1.332-1.452
1,2,3-Trichloropropane	16.42	15.16	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.15	15.16	1.197	ok	1.198	1.138-1.258

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	17.70	15.16	1.168	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.59	10.90	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.26	9.18	0.791	ok	0.787	0.727-0.847
Tetrachloroethylene	14.50	15.16	0.956	ok	0.956	0.896-1.016
Tetrahydrofuran	9.69	9.18	1.056	ok	1.053	0.993-1.113
Toluene	13.36	10.90	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.58	10.90	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.68	9.18	0.728	ok	0.727	0.667-0.787
Vinyl chloride	5.52	9.18	0.601	ok	0.599	0.539-0.659
Vinyl Acetate	8.40	9.18	0.915	ok	0.913	0.853-0.973
m,p-Xylene	15.78	15.16	1.041	ok	1.041	0.981-1.101
o-Xylene	16.28	15.16	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.18	ok	9.17	8.84-9.50	280261	ok	292322	175393-409251
1,4-Difluorobenzene	10.90	ok	10.89	10.56-11.22	1491504	ok	1532203	919322-2145084
Chlorobenzene-D5	15.16	ok	15.16	14.83-15.49	606644	ok	693011	415807-970215

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.52	9.16	0.712	ok	0.711	0.651-0.771
Acrolein	6.41	9.16	0.700	ok	0.699	0.639-0.759
Acrylonitrile	6.91	9.16	0.754	ok	0.753	0.693-0.813
Acetonitrile	6.30	9.16	0.688	ok	0.686	0.626-0.746
1,3-Butadiene	5.61	9.16	0.612	ok	0.612	0.552-0.672
Benzene	10.60	10.89	0.973	ok	0.974	0.914-1.034
Bromobenzene	17.03	15.16	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.53	10.89	1.059	ok	1.060	1.000-1.120
Bromoform	15.89	15.16	1.048	ok	1.048	0.988-1.108
Bromomethane	5.86	9.16	0.640	ok	0.640	0.580-0.700
Bromoethene	6.31	9.16	0.689	ok	0.689	0.629-0.749
n-Butane	5.66	9.16	0.618	ok	0.617	0.557-0.677
Benzyl Chloride	18.31	15.16	1.208	ok	1.208	1.148-1.268
n-Butylbenzene	19.09	15.16	1.259	ok	1.259	1.199-1.319
sec-Butylbenzene	18.45	15.16	1.217	ok	1.217	1.157-1.277
tert-Butylbenzene	18.14	15.16	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.60	9.16	0.830	ok	0.830	0.770-0.890
Chlorobenzene	15.20	15.16	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.02	9.16	0.548	ok	0.549	0.489-0.609
Chloroethane	6.01	9.16	0.656	ok	0.656	0.596-0.716
Chloroform	9.27	9.16	1.012	ok	1.011	0.951-1.071
Chloromethane	5.29	9.16	0.578	ok	0.578	0.518-0.638
3-Chloropropene	7.41	9.16	0.809	ok	0.807	0.747-0.867
2-Chlorotoluene	17.44	15.16	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.74	9.16	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.86	10.89	0.997	ok	0.997	0.937-1.057
1,1-Dichloroethane	8.29	9.16	0.905	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.21	9.16	0.787	ok	0.786	0.726-0.846
1,2-Dibromoethane	14.05	15.16	0.927	ok	0.927	0.867-0.987
1,2-Dichloroethane	9.95	9.16	1.086	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.36	10.89	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.37	10.89	1.228	ok	1.228	1.168-1.288
1,4-Dioxane	11.59	10.89	1.064	ok	1.064	1.004-1.124
Dichlorodifluoromethane	5.13	9.16	0.560	ok	0.560	0.500-0.620
Dichlorofluoromethane	6.07	9.16	0.663	ok	0.663	0.603-0.723
Dibromochloromethane	13.79	15.16	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.34	10.89	1.041	ok	1.042	0.982-1.102
trans-1,2-Dichloroethylene	8.11	9.16	0.885	ok	0.884	0.824-0.944
cis-1,2-Dichloroethylene	9.01	9.16	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.38	10.89	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.34	15.16	1.210	ok	1.210	1.150-1.270

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
o-Dichlorobenzene	18.80	15.16	1.240	ok	1.240	1.180-1.300
p-Dichlorobenzene	18.41	15.16	1.214	ok	1.215	1.155-1.275
trans-1,3-Dichloropropene	12.89	10.89	1.184	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.16	9.16	1.000	ok	0.999	0.939-1.059
2,3-Dimethylpentane	11.05	10.89	1.015	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.96	9.16	1.087	ok	1.087	1.027-1.147
Ethanol	6.09	9.16	0.665	ok	0.665	0.605-0.725
Ethylbenzene	15.58	15.16	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.17	9.16	1.001	ok	1.000	0.940-1.060
4-Ethyltoluene	17.61	15.16	1.162	ok	1.162	1.102-1.222
Freon 113	7.50	9.16	0.819	ok	0.819	0.759-0.879
Freon 114	5.37	9.16	0.586	ok	0.586	0.526-0.646
Freon 152A	4.99	9.16	0.545	ok	0.544	0.484-0.604
Heptane	11.81	10.89	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.20	15.16	1.398	ok	1.398	1.338-1.458
Hexachloroethane	19.55	15.16	1.290	ok	1.289	1.229-1.349
Hexane	9.17	9.16	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.58	15.16	0.896	ok	0.896	0.836-0.956
Iodomethane	7.16	9.16	0.782	ok	0.781	0.721-0.841
Isopropylbenzene	16.91	15.16	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.70	9.16	0.731	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.62	15.16	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.30	9.16	0.797	ok	0.796	0.736-0.856
Methyl ethyl ketone	8.63	9.16	0.942	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.41	10.89	1.140	ok	1.139	1.079-1.199
Methyl Tert Butyl Ether	8.33	9.16	0.909	ok	0.908	0.848-0.968
Methylmethacrylate	11.72	10.89	1.076	ok	1.076	1.016-1.136
Naphthalene	20.83	15.16	1.374	ok	1.374	1.314-1.434
Nonane	16.47	15.16	1.086	ok	1.086	1.026-1.146
Octane	14.29	15.16	0.943	ok	0.943	0.883-1.003
Pentane	6.94	9.16	0.758	ok	0.758	0.698-0.818
n-Propylbenzene	17.46	15.16	1.152	ok	1.152	1.092-1.212
Propylene	5.06	9.16	0.552	ok	0.552	0.492-0.612
Styrene	16.17	15.16	1.067	ok	1.067	1.007-1.127
1,1,1-Trichloroethane	10.18	9.16	1.111	ok	1.110	1.050-1.170
1,1,1,2-Tetrachloroethane	15.18	15.16	1.001	ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	16.28	15.16	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.07	10.89	1.200	ok	1.201	1.141-1.261
1,2,4-Trichlorobenzene	21.11	15.16	1.392	ok	1.392	1.332-1.452
1,2,3-Trichloropropane	16.42	15.16	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.15	15.16	1.197	ok	1.198	1.138-1.258

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	17.69	15.16	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.58	10.89	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.22	9.16	0.788	ok	0.787	0.727-0.847
Tetrachloroethylene	14.50	15.16	0.956	ok	0.956	0.896-1.016
Tetrahydrofuran	9.67	9.16	1.056	ok	1.053	0.993-1.113
Toluene	13.35	10.89	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.57	10.89	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.66	9.16	0.727	ok	0.727	0.667-0.787
Vinyl chloride	5.49	9.16	0.599	ok	0.599	0.539-0.659
Vinyl Acetate	8.36	9.16	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.77	15.16	1.040	ok	1.041	0.981-1.101
o-Xylene	16.29	15.16	1.075	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.16	ok	9.17	8.84-9.50	279291	ok	292322	175393-409251
1,4-Difluorobenzene	10.89	ok	10.89	10.56-11.22	1472191	ok	1532203	919322-2145084
Chlorobenzene-D5	15.16	ok	15.16	14.83-15.49	600087	ok	693011	415807-970215

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Tetrachloroethylene	14.50	15.16	0.956	ok	0.956	0.896-1.016
Trichloroethylene	11.57	10.89	1.062	ok	1.063	1.003-1.123

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.16	ok	9.17	8.84-9.50	269058	ok	292322	175393-409251
1,4-Difluorobenzene	10.89	ok	10.89	10.56-11.22	1406857	ok	1532203	919322-2145084
Chlorobenzene-D5	15.16	ok	15.16	14.83-15.49	567931	ok	693011	415807-970215

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	Reporting this level
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.52	9.17	0.711	ok	0.711	0.651-0.771
Acrolein	6.40	9.17	0.698	ok	0.699	0.639-0.759
Acrylonitrile	6.90	9.17	0.752	ok	0.753	0.693-0.813
Acetonitrile	6.29	9.17	0.686	ok	0.686	0.626-0.746
1,3-Butadiene	5.62	9.17	0.613	ok	0.612	0.552-0.672
Benzene	10.61	10.89	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.03	15.16	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.54	10.89	1.060	ok	1.060	1.000-1.120
Bromoform	15.89	15.16	1.048	ok	1.048	0.988-1.108
Bromomethane	5.87	9.17	0.640	ok	0.640	0.580-0.700
Bromoethene	6.32	9.17	0.689	ok	0.689	0.629-0.749
n-Butane	5.66	9.17	0.617	ok	0.617	0.557-0.677
Benzyl Chloride	18.31	15.16	1.208	ok	1.208	1.148-1.268
n-Butylbenzene	19.09	15.16	1.259	ok	1.259	1.199-1.319
sec-Butylbenzene	18.45	15.16	1.217	ok	1.217	1.157-1.277
tert-Butylbenzene	18.15	15.16	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.61	9.17	0.830	ok	0.830	0.770-0.890
Chlorobenzene	15.21	15.16	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.04	9.17	0.550	ok	0.549	0.489-0.609
Chloroethane	6.01	9.17	0.655	ok	0.656	0.596-0.716
Chloroform	9.27	9.17	1.011	ok	1.011	0.951-1.071
Chloromethane	5.29	9.17	0.577	ok	0.578	0.518-0.638
3-Chloropropene	7.41	9.17	0.808	ok	0.807	0.747-0.867
2-Chlorotoluene	17.44	15.16	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.75	9.17	1.172	ok	1.172	1.112-1.232
Cyclohexane	10.86	10.89	0.997	ok	0.997	0.937-1.057
1,1-Dichloroethane	8.29	9.17	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.21	9.17	0.786	ok	0.786	0.726-0.846
1,2-Dibromoethane	14.05	15.16	0.927	ok	0.927	0.867-0.987
1,2-Dichloroethane	9.95	9.17	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.36	10.89	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.37	10.89	1.228	ok	1.228	1.168-1.288
1,4-Dioxane	11.58	10.89	1.063	ok	1.064	1.004-1.124
Dichlorodifluoromethane	5.14	9.17	0.561	ok	0.560	0.500-0.620
Dichlorofluoromethane	6.08	9.17	0.663	ok	0.663	0.603-0.723
Dibromochloromethane	13.79	15.16	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.35	10.89	1.042	ok	1.042	0.982-1.102
trans-1,2-Dichloroethylene	8.11	9.17	0.884	ok	0.884	0.824-0.944
cis-1,2-Dichloroethylene	9.02	9.17	0.984	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.38	10.89	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.34	15.16	1.210	ok	1.210	1.150-1.270

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	Reporting this level
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
o-Dichlorobenzene	18.80	15.16	1.240	ok	1.240	1.180-1.300
p-Dichlorobenzene	18.41	15.16	1.214	ok	1.215	1.155-1.275
trans-1,3-Dichloropropene	12.89	10.89	1.184	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.15	9.17	0.998	ok	0.999	0.939-1.059
2,3-Dimethylpentane	11.05	10.89	1.015	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.97	9.17	1.087	ok	1.087	1.027-1.147
Ethanol	6.09	9.17	0.664	ok	0.665	0.605-0.725
Ethylbenzene	15.58	15.16	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.17	9.17	1.000	ok	1.000	0.940-1.060
4-Ethyltoluene	17.62	15.16	1.162	ok	1.162	1.102-1.222
Freon 113	7.51	9.17	0.819	ok	0.819	0.759-0.879
Freon 114	5.38	9.17	0.587	ok	0.586	0.526-0.646
Freon 152A	4.99	9.17	0.544	ok	0.544	0.484-0.604
Heptane	11.81	10.89	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.20	15.16	1.398	ok	1.398	1.338-1.458
Hexachloroethane	19.55	15.16	1.290	ok	1.289	1.229-1.349
Hexane	9.18	9.17	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.58	15.16	0.896	ok	0.896	0.836-0.956
Iodomethane	7.16	9.17	0.781	ok	0.781	0.721-0.841
Isopropylbenzene	16.91	15.16	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.70	9.17	0.731	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.62	15.16	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.30	9.17	0.796	ok	0.796	0.736-0.856
Methyl ethyl ketone	8.61	9.17	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.40	10.89	1.139	ok	1.139	1.079-1.199
Methyl Tert Butyl Ether	8.32	9.17	0.907	ok	0.908	0.848-0.968
Methylmethacrylate	11.72	10.89	1.076	ok	1.076	1.016-1.136
Naphthalene	20.83	15.16	1.374	ok	1.374	1.314-1.434
Nonane	16.47	15.16	1.086	ok	1.086	1.026-1.146
Octane	14.30	15.16	0.943	ok	0.943	0.883-1.003
Pentane	6.96	9.17	0.759	ok	0.758	0.698-0.818
n-Propylbenzene	17.46	15.16	1.152	ok	1.152	1.092-1.212
Propylene	5.07	9.17	0.553	ok	0.552	0.492-0.612
Styrene	16.17	15.16	1.067	ok	1.067	1.007-1.127
1,1,1-Trichloroethane	10.18	9.17	1.110	ok	1.110	1.050-1.170
1,1,1,2-Tetrachloroethane	15.19	15.16	1.002	ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	16.28	15.16	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.08	10.89	1.201	ok	1.201	1.141-1.261
1,2,4-Trichlorobenzene	21.11	15.16	1.392	ok	1.392	1.332-1.452
1,2,3-Trichloropropane	16.42	15.16	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.16	15.16	1.198	ok	1.198	1.138-1.258

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	Reporting this level
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	17.70	15.16	1.168	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.58	10.89	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.21	9.17	0.786	ok	0.787	0.727-0.847
Tetrachloroethylene	14.50	15.16	0.956	ok	0.956	0.896-1.016
Tetrahydrofuran	9.66	9.17	1.053	ok	1.053	0.993-1.113
Toluene	13.35	10.89	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.58	10.89	1.063	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.66	9.17	0.726	ok	0.727	0.667-0.787
Vinyl chloride	5.50	9.17	0.600	ok	0.599	0.539-0.659
Vinyl Acetate	8.38	9.17	0.914	ok	0.913	0.853-0.973
m,p-Xylene	15.77	15.16	1.040	ok	1.041	0.981-1.101
o-Xylene	16.29	15.16	1.075	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.17	ok	9.17	8.84-9.50	276901	ok	292322	175393-409251
1,4-Difluorobenzene	10.89	ok	10.89	10.56-11.22	1445998	ok	1532203	919322-2145084
Chlorobenzene-D5	15.16	ok	15.16	14.83-15.49	636640	ok	693011	415807-970215

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.52	9.18	0.710	ok	0.711	0.651-0.771
Acrolein	6.41	9.18	0.698	ok	0.699	0.639-0.759
Acrylonitrile	6.91	9.18	0.753	ok	0.753	0.693-0.813
Acetonitrile	6.30	9.18	0.686	ok	0.686	0.626-0.746
1,3-Butadiene	5.63	9.18	0.613	ok	0.612	0.552-0.672
Benzene	10.61	10.90	0.973	ok	0.974	0.914-1.034
Bromobenzene	17.03	15.16	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.55	10.90	1.060	ok	1.060	1.000-1.120
Bromoform	15.89	15.16	1.048	ok	1.048	0.988-1.108
Bromomethane	5.88	9.18	0.641	ok	0.640	0.580-0.700
Bromoethene	6.33	9.18	0.690	ok	0.689	0.629-0.749
n-Butane	5.68	9.18	0.619	ok	0.617	0.557-0.677
Benzyl Chloride	18.32	15.16	1.208	ok	1.208	1.148-1.268
n-Butylbenzene	19.09	15.16	1.259	ok	1.259	1.199-1.319
sec-Butylbenzene	18.45	15.16	1.217	ok	1.217	1.157-1.277
tert-Butylbenzene	18.15	15.16	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.62	9.18	0.830	ok	0.830	0.770-0.890
Chlorobenzene	15.21	15.16	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.05	9.18	0.550	ok	0.549	0.489-0.609
Chloroethane	6.03	9.18	0.657	ok	0.656	0.596-0.716
Chloroform	9.28	9.18	1.011	ok	1.011	0.951-1.071
Chloromethane	5.31	9.18	0.578	ok	0.578	0.518-0.638
3-Chloropropene	7.41	9.18	0.807	ok	0.807	0.747-0.867
2-Chlorotoluene	17.44	15.16	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.75	9.18	1.171	ok	1.172	1.112-1.232
Cyclohexane	10.87	10.90	0.997	ok	0.997	0.937-1.057
1,1-Dichloroethane	8.30	9.18	0.904	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.22	9.18	0.786	ok	0.786	0.726-0.846
1,2-Dibromoethane	14.05	15.16	0.927	ok	0.927	0.867-0.987
1,2-Dichloroethane	9.95	9.18	1.084	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.36	10.90	1.042	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.38	10.90	1.228	ok	1.228	1.168-1.288
1,4-Dioxane	11.58	10.90	1.062	ok	1.064	1.004-1.124
Dichlorodifluoromethane	5.15	9.18	0.561	ok	0.560	0.500-0.620
Dichlorofluoromethane	6.09	9.18	0.663	ok	0.663	0.603-0.723
Dibromochloromethane	13.80	15.16	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.35	10.90	1.041	ok	1.042	0.982-1.102
trans-1,2-Dichloroethylene	8.12	9.18	0.885	ok	0.884	0.824-0.944
cis-1,2-Dichloroethylene	9.02	9.18	0.983	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.39	10.90	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.34	15.16	1.210	ok	1.210	1.150-1.270

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
o-Dichlorobenzene	18.80	15.16	1.240	ok	1.240	1.180-1.300
p-Dichlorobenzene	18.42	15.16	1.215	ok	1.215	1.155-1.275
trans-1,3-Dichloropropene	12.89	10.90	1.183	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.16	9.18	0.998	ok	0.999	0.939-1.059
2,3-Dimethylpentane	11.05	10.90	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.97	9.18	1.086	ok	1.087	1.027-1.147
Ethanol	6.11	9.18	0.666	ok	0.665	0.605-0.725
Ethylbenzene	15.59	15.16	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.17	9.18	0.999	ok	1.000	0.940-1.060
4-Ethyltoluene	17.62	15.16	1.162	ok	1.162	1.102-1.222
Freon 113	7.52	9.18	0.819	ok	0.819	0.759-0.879
Freon 114	5.40	9.18	0.588	ok	0.586	0.526-0.646
Freon 152A	5.01	9.18	0.546	ok	0.544	0.484-0.604
Heptane	11.81	10.90	1.083	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.20	15.16	1.398	ok	1.398	1.338-1.458
Hexachloroethane	19.55	15.16	1.290	ok	1.289	1.229-1.349
Hexane	9.18	9.18	1.000	ok	1.001	0.941-1.061
2-Hexanone	13.58	15.16	0.896	ok	0.896	0.836-0.956
Iodomethane	7.18	9.18	0.782	ok	0.781	0.721-0.841
Isopropylbenzene	16.91	15.16	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.71	9.18	0.731	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.62	15.16	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.32	9.18	0.797	ok	0.796	0.736-0.856
Methyl ethyl ketone	8.62	9.18	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.40	10.90	1.138	ok	1.139	1.079-1.199
Methyl Tert Butyl Ether	8.33	9.18	0.907	ok	0.908	0.848-0.968
Methylmethacrylate	11.72	10.90	1.075	ok	1.076	1.016-1.136
Naphthalene	20.83	15.16	1.374	ok	1.374	1.314-1.434
Nonane	16.47	15.16	1.086	ok	1.086	1.026-1.146
Octane	14.30	15.16	0.943	ok	0.943	0.883-1.003
Pentane	6.97	9.18	0.759	ok	0.758	0.698-0.818
n-Propylbenzene	17.46	15.16	1.152	ok	1.152	1.092-1.212
Propylene	5.08	9.18	0.553	ok	0.552	0.492-0.612
Styrene	16.17	15.16	1.067	ok	1.067	1.007-1.127
1,1,1-Trichloroethane	10.19	9.18	1.110	ok	1.110	1.050-1.170
1,1,1,2-Tetrachloroethane	15.19	15.16	1.002	ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	16.28	15.16	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.08	10.90	1.200	ok	1.201	1.141-1.261
1,2,4-Trichlorobenzene	21.11	15.16	1.392	ok	1.392	1.332-1.452
1,2,3-Trichloropropane	16.42	15.16	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.16	15.16	1.198	ok	1.198	1.138-1.258

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	17.70	15.16	1.168	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.59	10.90	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.22	9.18	0.786	ok	0.787	0.727-0.847
Tetrachloroethylene	14.50	15.16	0.956	ok	0.956	0.896-1.016
Tetrahydrofuran	9.66	9.18	1.052	ok	1.053	0.993-1.113
Toluene	13.36	10.90	1.226	ok	1.226	1.166-1.286
Trichloroethylene	11.58	10.90	1.062	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.68	9.18	0.728	ok	0.727	0.667-0.787
Vinyl chloride	5.51	9.18	0.600	ok	0.599	0.539-0.659
Vinyl Acetate	8.38	9.18	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.78	15.16	1.041	ok	1.041	0.981-1.101
o-Xylene	16.29	15.16	1.075	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.18	ok	9.17	8.84-9.50	296507	ok	292322	175393-409251
1,4-Difluorobenzene	10.90	ok	10.89	10.56-11.22	1567400	ok	1532203	919322-2145084
Chlorobenzene-D5	15.16	ok	15.16	14.83-15.49	717878	ok	693011	415807-970215

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.50	9.17	0.709	ok	0.711	0.651-0.771
Acrolein	6.40	9.17	0.698	ok	0.699	0.639-0.759
Acrylonitrile	6.89	9.17	0.751	ok	0.753	0.693-0.813
Acetonitrile	6.28	9.17	0.685	ok	0.686	0.626-0.746
1,3-Butadiene	5.60	9.17	0.611	ok	0.612	0.552-0.672
Benzene	10.61	10.89	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.03	15.16	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.54	10.89	1.060	ok	1.060	1.000-1.120
Bromoform	15.89	15.16	1.048	ok	1.048	0.988-1.108
Bromomethane	5.86	9.17	0.639	ok	0.640	0.580-0.700
Bromoethene	6.31	9.17	0.688	ok	0.689	0.629-0.749
n-Butane	5.65	9.17	0.616	ok	0.617	0.557-0.677
Benzyl Chloride	18.31	15.16	1.208	ok	1.208	1.148-1.268
n-Butylbenzene	19.09	15.16	1.259	ok	1.259	1.199-1.319
sec-Butylbenzene	18.45	15.16	1.217	ok	1.217	1.157-1.277
tert-Butylbenzene	18.15	15.16	1.197	ok	1.197	1.137-1.257
Carbon disulfide	7.60	9.17	0.829	ok	0.830	0.770-0.890
Chlorobenzene	15.21	15.16	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.02	9.17	0.547	ok	0.549	0.489-0.609
Chloroethane	6.00	9.17	0.654	ok	0.656	0.596-0.716
Chloroform	9.27	9.17	1.011	ok	1.011	0.951-1.071
Chloromethane	5.29	9.17	0.577	ok	0.578	0.518-0.638
3-Chloropropene	7.40	9.17	0.807	ok	0.807	0.747-0.867
2-Chlorotoluene	17.44	15.16	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.74	9.17	1.171	ok	1.172	1.112-1.232
Cyclohexane	10.86	10.89	0.997	ok	0.997	0.937-1.057
1,1-Dichloroethane	8.28	9.17	0.903	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.20	9.17	0.785	ok	0.786	0.726-0.846
1,2-Dibromoethane	14.05	15.16	0.927	ok	0.927	0.867-0.987
1,2-Dichloroethane	9.94	9.17	1.084	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.36	10.89	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.38	10.89	1.229	ok	1.228	1.168-1.288
1,4-Dioxane	11.57	10.89	1.062	ok	1.064	1.004-1.124
Dichlorodifluoromethane	5.13	9.17	0.559	ok	0.560	0.500-0.620
Dichlorofluoromethane	6.07	9.17	0.662	ok	0.663	0.603-0.723
Dibromochloromethane	13.80	15.16	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.35	10.89	1.042	ok	1.042	0.982-1.102
trans-1,2-Dichloroethylene	8.10	9.17	0.883	ok	0.884	0.824-0.944
cis-1,2-Dichloroethylene	9.01	9.17	0.983	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.38	10.89	1.137	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.34	15.16	1.210	ok	1.210	1.150-1.270

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
o-Dichlorobenzene	18.80	15.16	1.240	ok	1.240	1.180-1.300
p-Dichlorobenzene	18.41	15.16	1.214	ok	1.215	1.155-1.275
trans-1,3-Dichloropropene	12.89	10.89	1.184	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.15	9.17	0.998	ok	0.999	0.939-1.059
2,3-Dimethylpentane	11.04	10.89	1.014	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.96	9.17	1.086	ok	1.087	1.027-1.147
Ethanol	6.08	9.17	0.663	ok	0.665	0.605-0.725
Ethylbenzene	15.59	15.16	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.16	9.17	0.999	ok	1.000	0.940-1.060
4-Ethyltoluene	17.62	15.16	1.162	ok	1.162	1.102-1.222
Freon 113	7.50	9.17	0.818	ok	0.819	0.759-0.879
Freon 114	5.36	9.17	0.585	ok	0.586	0.526-0.646
Freon 152A	4.98	9.17	0.543	ok	0.544	0.484-0.604
Heptane	11.81	10.89	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.20	15.16	1.398	ok	1.398	1.338-1.458
Hexachloroethane	19.55	15.16	1.290	ok	1.289	1.229-1.349
Hexane	9.17	9.17	1.000	ok	1.001	0.941-1.061
2-Hexanone	13.58	15.16	0.896	ok	0.896	0.836-0.956
Iodomethane	7.16	9.17	0.781	ok	0.781	0.721-0.841
Isopropylbenzene	16.91	15.16	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.69	9.17	0.730	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.62	15.16	1.228	ok	1.228	1.168-1.288
Methylene chloride	7.30	9.17	0.796	ok	0.796	0.736-0.856
Methyl ethyl ketone	8.61	9.17	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.40	10.89	1.139	ok	1.139	1.079-1.199
Methyl Tert Butyl Ether	8.32	9.17	0.907	ok	0.908	0.848-0.968
Methylmethacrylate	11.72	10.89	1.076	ok	1.076	1.016-1.136
Naphthalene	20.83	15.16	1.374	ok	1.374	1.314-1.434
Nonane	16.47	15.16	1.086	ok	1.086	1.026-1.146
Octane	14.30	15.16	0.943	ok	0.943	0.883-1.003
Pentane	6.94	9.17	0.757	ok	0.758	0.698-0.818
n-Propylbenzene	17.46	15.16	1.152	ok	1.152	1.092-1.212
Propylene	5.06	9.17	0.552	ok	0.552	0.492-0.612
Styrene	16.17	15.16	1.067	ok	1.067	1.007-1.127
1,1,1-Trichloroethane	10.18	9.17	1.110	ok	1.110	1.050-1.170
1,1,1,2-Tetrachloroethane	15.19	15.16	1.002	ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	16.28	15.16	1.074	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.08	10.89	1.201	ok	1.201	1.141-1.261
1,2,4-Trichlorobenzene	21.11	15.16	1.392	ok	1.392	1.332-1.452
1,2,3-Trichloropropane	16.42	15.16	1.083	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.16	15.16	1.198	ok	1.198	1.138-1.258

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	Reporting this level
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
1,3,5-Trimethylbenzene	17.70	15.16	1.168	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.58	10.89	1.063	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.21	9.17	0.786	ok	0.787	0.727-0.847
Tetrachloroethylene	14.50	15.16	0.956	ok	0.956	0.896-1.016
Tetrahydrofuran	9.64	9.17	1.051	ok	1.053	0.993-1.113
Toluene	13.36	10.89	1.227	ok	1.226	1.166-1.286
Trichloroethylene	11.58	10.89	1.063	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.66	9.17	0.726	ok	0.727	0.667-0.787
Vinyl chloride	5.49	9.17	0.599	ok	0.599	0.539-0.659
Vinyl Acetate	8.37	9.17	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.78	15.16	1.041	ok	1.041	0.981-1.101
o-Xylene	16.29	15.16	1.075	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.17	ok	9.17	8.84-9.50	315223	ok	292322	175393-409251
1,4-Difluorobenzene	10.89	ok	10.89	10.56-11.22	1632931	ok	1532203	919322-2145084
Chlorobenzene-D5	15.16	ok	15.16	14.83-15.49	804339	ok	693011	415807-970215

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	6.50	9.17	0.709	ok	0.711	0.651-0.771
Acrolein	6.39	9.17	0.697	ok	0.699	0.639-0.759
Acrylonitrile	6.89	9.17	0.751	ok	0.753	0.693-0.813
Acetonitrile	6.28	9.17	0.685	ok	0.686	0.626-0.746
1,3-Butadiene	5.60	9.17	0.611	ok	0.612	0.552-0.672
Benzene	10.61	10.89	0.974	ok	0.974	0.914-1.034
Bromobenzene	17.04	15.17	1.123	ok	1.123	1.063-1.183
Bromodichloromethane	11.55	10.89	1.061	ok	1.060	1.000-1.120
Bromoform	15.90	15.17	1.048	ok	1.048	0.988-1.108
Bromomethane	5.85	9.17	0.638	ok	0.640	0.580-0.700
Bromoethene	6.30	9.17	0.687	ok	0.689	0.629-0.749
n-Butane	5.65	9.17	0.616	ok	0.617	0.557-0.677
Benzyl Chloride	18.32	15.17	1.208	ok	1.208	1.148-1.268
n-Butylbenzene	19.09	15.17	1.258	ok	1.259	1.199-1.319
sec-Butylbenzene	18.45	15.17	1.216	ok	1.217	1.157-1.277
tert-Butylbenzene	18.15	15.17	1.196	ok	1.197	1.137-1.257
Carbon disulfide	7.60	9.17	0.829	ok	0.830	0.770-0.890
Chlorobenzene	15.21	15.17	1.003	ok	1.003	0.943-1.063
Chlorodifluoromethane	5.02	9.17	0.547	ok	0.549	0.489-0.609
Chloroethane	6.00	9.17	0.654	ok	0.656	0.596-0.716
Chloroform	9.28	9.17	1.012	ok	1.011	0.951-1.071
Chloromethane	5.28	9.17	0.576	ok	0.578	0.518-0.638
3-Chloropropene	7.39	9.17	0.806	ok	0.807	0.747-0.867
2-Chlorotoluene	17.44	15.17	1.150	ok	1.150	1.090-1.210
Carbon tetrachloride	10.74	9.17	1.171	ok	1.172	1.112-1.232
Cyclohexane	10.86	10.89	0.997	ok	0.997	0.937-1.057
1,1-Dichloroethane	8.28	9.17	0.903	ok	0.904	0.844-0.964
1,1-Dichloroethylene	7.20	9.17	0.785	ok	0.786	0.726-0.846
1,2-Dibromoethane	14.05	15.17	0.926	ok	0.927	0.867-0.987
1,2-Dichloroethane	9.95	9.17	1.085	ok	1.085	1.025-1.145
1,2-Dichloropropane	11.36	10.89	1.043	ok	1.043	0.983-1.103
1,3-Dichloropropane	13.38	10.89	1.229	ok	1.228	1.168-1.288
1,4-Dioxane	11.57	10.89	1.062	ok	1.064	1.004-1.124
Dichlorodifluoromethane	5.13	9.17	0.559	ok	0.560	0.500-0.620
Dichlorofluoromethane	6.07	9.17	0.662	ok	0.663	0.603-0.723
Dibromochloromethane	13.80	15.17	0.910	ok	0.910	0.850-0.970
Dibromomethane	11.35	10.89	1.042	ok	1.042	0.982-1.102
trans-1,2-Dichloroethylene	8.10	9.17	0.883	ok	0.884	0.824-0.944
cis-1,2-Dichloroethylene	9.01	9.17	0.983	ok	0.983	0.923-1.043
cis-1,3-Dichloropropene	12.39	10.89	1.138	ok	1.137	1.077-1.197
m-Dichlorobenzene	18.34	15.17	1.209	ok	1.210	1.150-1.270

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	TO-15	Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
o-Dichlorobenzene	18.80	15.17	1.239	ok	1.240	1.180-1.300
p-Dichlorobenzene	18.42	15.17	1.214	ok	1.215	1.155-1.275
trans-1,3-Dichloropropene	12.89	10.89	1.184	ok	1.183	1.123-1.243
Di-Isopropyl ether	9.15	9.17	0.998	ok	0.999	0.939-1.059
2,3-Dimethylpentane	11.05	10.89	1.015	ok	1.014	0.954-1.074
2,4-Dimethylpentane	9.97	9.17	1.087	ok	1.087	1.027-1.147
Ethanol	6.08	9.17	0.663	ok	0.665	0.605-0.725
Ethylbenzene	15.59	15.17	1.028	ok	1.028	0.968-1.088
Ethyl Acetate	9.17	9.17	1.000	ok	1.000	0.940-1.060
4-Ethyltoluene	17.62	15.17	1.162	ok	1.162	1.102-1.222
Freon 113	7.50	9.17	0.818	ok	0.819	0.759-0.879
Freon 114	5.36	9.17	0.585	ok	0.586	0.526-0.646
Freon 152A	4.98	9.17	0.543	ok	0.544	0.484-0.604
Heptane	11.81	10.89	1.084	ok	1.084	1.024-1.144
Hexachlorobutadiene	21.20	15.17	1.397	ok	1.398	1.338-1.458
Hexachloroethane	19.54	15.17	1.288	ok	1.289	1.229-1.349
Hexane	9.17	9.17	1.000	ok	1.001	0.941-1.061
2-Hexanone	13.58	15.17	0.895	ok	0.896	0.836-0.956
Iodomethane	7.16	9.17	0.781	ok	0.781	0.721-0.841
Isopropylbenzene	16.91	15.17	1.115	ok	1.115	1.055-1.175
Isopropyl Alcohol	6.69	9.17	0.730	ok	0.731	0.671-0.791
p-Isopropyltoluene	18.62	15.17	1.227	ok	1.228	1.168-1.288
Methylene chloride	7.29	9.17	0.795	ok	0.796	0.736-0.856
Methyl ethyl ketone	8.61	9.17	0.939	ok	0.940	0.880-1.000
Methyl Isobutyl Ketone	12.40	10.89	1.139	ok	1.139	1.079-1.199
Methyl Tert Butyl Ether	8.32	9.17	0.907	ok	0.908	0.848-0.968
Methylmethacrylate	11.72	10.89	1.076	ok	1.076	1.016-1.136
Naphthalene	20.83	15.17	1.373	ok	1.374	1.314-1.434
Nonane	16.48	15.17	1.086	ok	1.086	1.026-1.146
Octane	14.30	15.17	0.943	ok	0.943	0.883-1.003
Pentane	6.94	9.17	0.757	ok	0.758	0.698-0.818
n-Propylbenzene	17.47	15.17	1.152	ok	1.152	1.092-1.212
Propylene	5.05	9.17	0.551	ok	0.552	0.492-0.612
Styrene	16.17	15.17	1.066	ok	1.067	1.007-1.127
1,1,1-Trichloroethane	10.18	9.17	1.110	ok	1.110	1.050-1.170
1,1,1,2-Tetrachloroethane	15.19	15.17	1.001	ok	1.002	0.942-1.062
1,1,2,2-Tetrachloroethane	16.28	15.17	1.073	ok	1.074	1.014-1.134
1,1,2-Trichloroethane	13.08	10.89	1.201	ok	1.201	1.141-1.261
1,2,4-Trichlorobenzene	21.11	15.17	1.392	ok	1.392	1.332-1.452
1,2,3-Trichloropropane	16.42	15.17	1.082	ok	1.083	1.023-1.143
1,2,4-Trimethylbenzene	18.16	15.17	1.197	ok	1.198	1.138-1.258

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
VW2152-IC2152	W53823.D	03/01/16 17:28	DFT	0.2	GCMSW	TO-15	
VW2152-IC2152	W53824.D	03/01/16 18:09	DFT	0.5	GCMSW	TO-15	
VW2152-IC2152	W53825.D	03/01/16 18:51	DFT	0.04	GCMSW	TO-15	
VW2152-IC2152	W53826.D	03/01/16 19:32	DFT	5	GCMSW	TO-15	
VW2152-ICC2152	W53827.D	03/01/16 20:13	DFT	10	GCMSW	TO-15	
VW2152-IC2152	W53828.D	03/01/16 20:54	DFT	20	GCMSW	TO-15	
VW2152-IC2152	W53830.D	03/01/16 22:16	DFT	40	GCMSW	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	17.70	15.17	1.167	ok	1.167	1.107-1.227
2,2,4-Trimethylpentane	11.59	10.89	1.064	ok	1.063	1.003-1.123
Tertiary Butyl Alcohol	7.21	9.17	0.786	ok	0.787	0.727-0.847
Tetrachloroethylene	14.50	15.17	0.956	ok	0.956	0.896-1.016
Tetrahydrofuran	9.64	9.17	1.051	ok	1.053	0.993-1.113
Toluene	13.36	10.89	1.227	ok	1.226	1.166-1.286
Trichloroethylene	11.58	10.89	1.063	ok	1.063	1.003-1.123
Trichlorofluoromethane	6.66	9.17	0.726	ok	0.727	0.667-0.787
Vinyl chloride	5.48	9.17	0.598	ok	0.599	0.539-0.659
Vinyl Acetate	8.37	9.17	0.913	ok	0.913	0.853-0.973
m,p-Xylene	15.78	15.17	1.040	ok	1.041	0.981-1.101
o-Xylene	16.30	15.17	1.074	ok	1.074	1.014-1.134

Internal Standard	RT (min.)		Mean RT(min.)	RT Range (+ /- 0.33)	Area		Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	9.17	ok	9.17	8.84-9.50	329014	ok	292322	175393-409251
1,4-Difluorobenzene	10.89	ok	10.89	10.56-11.22	1708540	ok	1532203	919322-2145084
Chlorobenzene-D5	15.17	ok	15.16	14.83-15.49	917558	ok	693011	415807-970215

Volatile Surrogate Recovery Summary

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Method: TO-15 **Matrix:** AIR

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JC15063-1	W54117.D	78
JC15063-2	W54092.D	74
JC15063-3	W54118.D	81
JC15063-3	W54094.D	83
JC15063-4	W54095.D	77
JC15063-5	W54096.D	76
JC15063-2DUP	W54093.D	75
JC15508-2DUP	W54125.D	80
V5W646-SCC	5W16060.D	98
V5W646-SCC	5W16063.D	96
V5W647-SCC	5W16081.D	96
V5W647-SCC	5W16087.D	98
VW2141-SCC	W53498.D	88
VW2161-BS	W54081.D	102
VW2161-BSD	W54082.D	104
VW2161-MB	W54084.D	73
VW2162-BS	W54112.D	100
VW2162-BSD	W54113.D	101
VW2162-MB	W54115.D	79
V5W646-BS	5W16056.D	98
V5W646-BSD	5W16057.D	99
V5W646-MB	5W16059.D	98
V5W647-BS	5W16066.D	101
V5W647-BSD	5W16067.D	99
V5W647-MB	5W16069.D	97
VW2141-BS	W53483.D	109
VW2141-BSD	W53484.D	110
VW2141-MB	W53486.D	90

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

Initial Calibration Summary

Job Number: JC15063 **Sample:** V5W637-ICC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W15841.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Response Factor Report GCMS5W

Method Path : C:\msdchem\1\METHODS\
Method File : m5w637.M
Title : TO-15 Full Scan Mode
Last Update : Mon Jan 25 09:32:20 2016
Response Via : Initial Calibration

Calibration Files
20 =5W15845.D 30 =5W15849.D 0.5 =5W15843.D 0.2 =5W15844.D 0.1 =5W15847.D 0.04=5W15848.D 10 =5W15841.D
5 =5W15842.D 40 =5W15851.D

	Compound	20	30	0.5	0.2	0.1	0.04	10	5	40	Avg	%RSD
1) I	Bromochloromethane	----------ISTD----------										
2)	1,1,1-Trifluor...	2.375	2.434	2.174	2.538	2.563	3.034	2.540	2.520	2.199	2.486	10.13
3)	Freon 152A	0.529	0.537	0.471	0.555	0.623	0.628	0.564	0.559	0.492	0.551	9.51
4)	Chlorodifluoro...	0.198	0.205	0.190	0.226	0.200		0.210	0.210	0.186	0.203	6.31
5)	Propene	0.538	0.548	0.566	0.775	0.918		0.574	0.574	0.502	0.624	23.10
6)	Dichlorodifluo...	2.192	2.238	1.964	2.323	2.320	2.616	2.337	2.328	2.039	2.262	8.36
7)	1-Chloro-1,1-d...	1.456	1.491	1.302	1.566	1.582	1.781	1.542	1.532	1.365	1.513	9.08
8)	Chloromethane	0.743	0.753	0.676	0.865	0.806	1.009	0.792	0.786	0.690	0.791	12.67
9)	Dichlorotetraf...	2.476	2.512	2.224	2.586	2.712	2.843	2.631	2.619	2.280	2.543	7.74
10)	Vinyl Chloride	0.893	0.903	0.772	0.920	0.870	0.940	0.945	0.936	0.820	0.889	6.63
11)	1,3-Butadiene	0.629	0.638	0.573	0.682	0.695	0.838	0.674	0.668	0.581	0.664	11.77
12)	n-Butane	0.138	0.138	0.132	0.157	0.188		0.146	0.146	0.126	0.146	13.31
13)	Bromomethane	0.971	0.980	0.881	1.064	1.115	1.266	1.027	1.018	0.897	1.024	11.42
14)	Chloroethane	0.436	0.443	0.377	0.469	0.458	0.428	0.466	0.461	0.406	0.438	7.01
15)	Dichlorofluoro...	1.974	2.001	1.760	2.153	2.255	2.439	2.094	2.090	1.841	2.068	9.97
16)	Acetonitrile	0.616	0.626	0.696	0.924	0.823	0.855	0.665	0.658	0.575	0.715	16.99
17)	Freon 123	2.364	2.389	2.103	2.544	2.589	2.656	2.508	2.495	2.193	2.427	7.56
18)	Freon 123A	1.265	1.378	1.106	1.376	1.315	1.300	1.445	1.426	1.279	1.321	7.76
19)	Bromoethene	1.001	1.015	0.860	0.984	1.012	0.951	1.065	1.051	0.933	0.986	6.43
20)	Trichlorofluor...	2.295	2.320	1.988	2.352	2.392	2.550	2.420	2.391	2.136	2.316	7.14
21)	Acetone	0.399	0.407	0.431	0.580	0.774		0.419	0.427	0.372	0.476	28.48
22)	Pentane	0.212	0.213	0.224	0.303	0.292		0.228	0.230	0.197	0.237	16.30
23)	1,1-Dichloro-1...	1.863	1.846	1.657	2.017	2.117	2.492	1.968	1.954	1.736	1.961	12.43
24)	Iodomethane	2.790	2.812	2.415	2.820	2.800	2.906	2.964	2.909	2.602	2.780	6.16
25)	Isopropyl Alcohol	0.260	0.258	0.356	0.504			0.275	0.282	0.238	0.310	29.93
26)	1,1-Dichloroet...	1.396	1.414	1.227	1.444	1.383	1.436	1.477	1.457	1.307	1.394	5.73
27)	Freon 113	2.059	2.086	1.752	2.017	2.083	2.187	2.170	2.149	1.933	2.049	6.66
28)	Methylene Chlo...	0.863	0.876	0.773	0.900	1.165	1.289	0.921	0.908	0.809	0.945	17.96
29)	Carbon Disulfide	2.783	2.818	2.392	2.682	2.718	2.844	2.955	2.899	2.596	2.743	6.27
30)	Ethanol	0.327	0.334	0.530				0.347	0.348	0.307	0.365	22.44
31)	Acrylonitrile	0.667	0.672	0.681	0.728	0.708	0.658	0.704	0.688	0.619	0.681	4.70
32)	3-Chloropropene	0.438	0.441	0.370	0.424	0.423	0.309	0.456	0.458	0.410	0.414	11.54
33)	trans-1,2-Dich...	1.286	1.299	1.070	1.272	1.255	1.181	1.362	1.332	1.200	1.251	7.12
34)	tert-Butyl Alc...	1.975	1.991	1.718	2.025	1.979	1.751	2.130	2.099	1.827	1.944	7.54
35)	Methyl tert-Bu...	2.434	2.486	2.128	2.528	2.536	2.716	2.618	2.582	2.294	2.480	7.15
36)	Vinyl Acetate	2.179	2.217	1.902	2.211	1.918	2.409	2.346	2.290	2.055	2.170	8.23
37)	1,1-Dichloroet...	1.662	1.680	1.452	1.647	1.636	1.710	1.766	1.737	1.554	1.649	5.83
38)	2-Butanone	0.451	0.456	0.403	0.462	0.309		0.478	0.471	0.423	0.431	12.86
39)	Hexane	1.294	1.309	1.185	1.503	1.630	1.861	1.362	1.356	1.200	1.411	15.52
40)	cis-1,2-Dichlo...	1.247	1.260	1.064	1.228	1.217	1.266	1.315	1.281	1.162	1.227	6.07
41)	Di-isopropyl E...	0.785	0.797	0.655	0.779	0.740	0.630	0.820	0.804	0.734	0.749	8.96
42)	Ethyl Acetate	0.310	0.316	0.258	0.264	0.154		0.329	0.321	0.288	0.280	20.49
43)	Methyl Acrylate	1.696	1.731	1.544	2.231			1.791	1.770	1.575	1.763	12.86
44)	Chloroform	2.027	2.065	1.785	2.081	2.085	2.307	2.140	2.129	1.888	2.056	7.29
45)	2,4-Dimethylpe...	1.596	1.594	1.413	1.750	1.701	2.041	1.680	1.653	1.468	1.655	10.93

Initial Calibration Summary

Job Number: JC15063 **Sample:** V5W637-ICC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W15841.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

46)	Tetrahydrofuran	0.453	0.460	0.388	0.417	0.329	0.191	0.480	0.472	0.420	0.401	22.91
47)	1,1,1-Trichlor...	1.997	2.011	1.677	2.024	1.997	2.102	2.079	2.075	1.844	1.978	6.87
48)	1,2-Dichloroet...	1.158	1.165	0.969	1.142	1.096	1.042	1.215	1.198	1.076	1.118	7.10
49)	Benzene	2.994	3.018	2.583	2.959	3.054	3.274	3.186	3.148	2.778	2.999	7.06
50)	Carbon Tetrach...	2.095	2.135	1.729	1.998	1.949	2.091	2.180	2.173	1.982	2.037	6.98
51)	Cyclohexane	1.340	1.353	1.197	1.440	1.415	1.668	1.419	1.413	1.255	1.389	9.57
52)	2,3-Dimethylpe...	0.622	0.627	0.536	0.654	0.608	0.650	0.651	0.650	0.581	0.620	6.43
53) I	1,4-Difluorobenzene	----------ISTD----------										
54)	2,2,4-Trimethy...	1.194	1.209	1.036	1.245	1.239	1.311	1.249	1.215	1.095	1.199	7.01
55)	Heptane	0.252	0.255	0.208	0.248	0.255	0.240	0.260	0.251	0.234	0.245	6.49
56)	Trichloroethene	0.389	0.397	0.329	0.387	0.374	0.399	0.399	0.388	0.363	0.380	5.99
57)	1,2-Dichloropr...	0.299	0.306	0.247	0.289	0.278	0.256	0.308	0.301	0.281	0.285	7.67
58)	Dibromomethane	0.388	0.394	0.324	0.366	0.351	0.405	0.389	0.383	0.363	0.374	6.71
59)	Ethyl Acrylate	0.575	0.588	0.534	0.558	0.531	0.511	0.597	0.578	0.539	0.557	5.28
60)	Methyl Methacr...	0.284	0.291	0.253	0.294	0.239	0.243	0.295	0.291	0.265	0.273	8.46
61)	1,4-Dioxane	0.198	0.203	0.172	0.182			0.201	0.197	0.184	0.191	6.02
62)	Bromodichlorom...	0.620	0.633	0.519	0.604	0.597	0.580	0.633	0.623	0.581	0.599	6.04
63)	cis-1,3-Dichlo...	0.511	0.521	0.418	0.473	0.449	0.463	0.527	0.512	0.481	0.484	7.66
64)	4-Methyl-2-pen...	0.241	0.248	0.193	0.194	0.163		0.252	0.239	0.228	0.220	14.77
65)	trans-1,3-Dich...	0.433	0.446	0.366	0.391	0.362	0.302	0.450	0.434	0.413	0.400	12.27
66)	Toluene	0.995	1.006	0.831	0.966	0.994	1.005	1.027	1.006	0.918	0.972	6.32
67)	1,1,2-Trichlor...	0.361	0.370	0.301	0.349	0.336	0.331	0.371	0.363	0.340	0.347	6.53
68)	1,3-Dichloropr...	0.467	0.474	0.392	0.445	0.405	0.382	0.485	0.471	0.437	0.440	8.75
69)	2-Hexanone	0.338	0.347	0.289	0.278	0.157		0.351	0.341	0.317	0.302	21.41
70)	Ethyl Methacry...	0.493	0.510	0.427	0.467	0.421	0.365	0.515	0.499	0.465	0.462	10.74
71)	Dibromochlorom...	0.678	0.692	0.556	0.645	0.607	0.597	0.687	0.673	0.633	0.641	7.29
72)	Tetrachloroethene	0.523	0.534	0.437	0.498	0.492	0.532	0.535	0.525	0.493	0.508	6.25
73)	1,2-Dibromoethane	0.593	0.604	0.504	0.567	0.554	0.550	0.607	0.593	0.553	0.569	5.89
74)	Octane	0.531	0.537	0.453	0.547	0.522	0.678	0.556	0.532	0.495	0.539	11.26
75)	1,1,1,2-Tetrac...	0.463	0.473	0.374	0.435	0.421	0.436	0.471	0.459	0.434	0.441	7.03
76) I	Chlorobenzene-d5	----------ISTD----------										
77)	Chlorobenzene	1.627	1.597	1.439	1.725	1.711	1.831	1.718	1.738	1.423	1.645	8.42
78)	Ethylbenzene	2.535	2.477	2.311	2.687	2.603	2.790	2.719	2.731	2.215	2.563	7.72
79)	m,p-Xylene	1.901	1.896	1.725	2.207	2.018	2.185	2.064	2.066	1.677	1.971	9.48
80)	Styrene	1.520	1.507	1.340	1.488	1.407	1.366	1.616	1.625	1.348	1.469	7.46
81)	Nonane	1.046	1.027	1.013	1.214	1.303	1.448	1.132	1.106	0.916	1.134	14.47
82)	o-Xylene	1.945	1.923	1.785	2.143	2.084	2.294	2.091	2.102	1.690	2.006	9.39
83)	Bromoform	1.415	1.412	1.216	1.371	1.324	1.314	1.493	1.501	1.262	1.368	7.16
84)	1,1,2,2-Tetrac...	1.591	1.583	1.453	1.703	1.603	1.729	1.705	1.705	1.399	1.608	7.33
85)	1,2,3-Trichlor...	1.111	1.099	1.023	1.183	1.166	1.230	1.202	1.200	0.993	1.134	7.34
86)	Isopropylbenzene	2.786	2.729	2.515	2.954	2.930	3.042	2.983	2.995	2.433	2.819	7.82
87)	Bromobenzene	0.994	0.979	0.903	1.034	1.040	1.068	1.045	1.045	0.880	0.999	6.69
88)	2-Chlorotoluene	0.730	0.728	0.643	0.747	0.703	0.689	0.770	0.776	0.648	0.715	6.75
89)	n-Propylbenzene	0.762	0.756	0.663	0.756	0.761	0.664	0.799	0.802	0.677	0.738	7.48
90) S	4-Bromofluorob...	1.280	1.251	1.359	1.379	1.362	1.358	1.332	1.345	1.210	1.320	4.43
91)	4-Ethyltoluene	2.603	2.561	2.378	2.778	2.736	2.822	2.769	2.788	2.269	2.634	7.51
92)	1,3,5-Trimethy...	2.224	2.187	2.000	2.396	2.424	2.520	2.348	2.369	1.951	2.269	8.55
93)	alpha-Methylst...	1.179	1.161	1.031	1.161	1.102	1.063	1.250	1.255	1.048	1.139	7.31
94)	tert-Butylbenzene	0.494	0.491	0.434	0.510	0.471	0.436	0.521	0.519	0.439	0.479	7.43
95)	1,2,4-Trimethy...	2.248	2.226	2.040	2.308	2.282	2.564	2.400	2.423	1.966	2.273	8.17
96)	1,3-Dichlorobe...	1.563	1.549	1.418	1.630	1.704	1.803	1.630	1.649	1.390	1.593	8.20
97)	Benzyl Chloride	2.025	2.016	1.780	1.973	1.976	2.017	2.134	2.106	1.802	1.981	6.07
98)	1,4-Dichlorobe...	1.565	1.555	1.476	1.686	1.836	2.006	1.647	1.657	1.387	1.646	11.33
99)	sec-Butylbenzene	0.612	0.624	0.538	0.612	0.596	0.594	0.645	0.648	0.555	0.603	6.18
100)	p-Isopropyltol...	0.699	0.692	0.616	0.681	0.630	0.620	0.726	0.725	0.610	0.667	7.13
101)	1,2-Dichlorobe...	1.475	1.475	1.345	1.542	1.696	1.687	1.554	1.560	1.309	1.516	8.75
102)	n-Butylbenzene	0.640	0.639	0.542	0.583	0.543	0.489	0.651	0.661	0.575	0.591	10.13
103)	Hexachloroethane	0.960	0.957	0.776	0.909	0.825	0.832	0.983	0.983	0.854	0.898	8.68

Initial Calibration Summary

Job Number: JC15063 **Sample:** V5W637-ICC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W15841.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

104)	1,2,4-Trichlor...	0.918	0.929	0.852	0.855	1.074	1.071	0.928	0.933	0.839	0.933	9.33
105)	Naphthalene	1.927	1.954	1.926	1.965	2.494	2.526	1.982	2.005	1.741	2.058	12.99
106)	Hexachlorobuta...	0.890	0.878	0.844	0.935	0.959	0.972	0.901	0.949	0.775	0.900	6.97
107) I	Bromochloromethane...	----------ISTD----------										
108)	TVHC as equiv ...	4.998	5.038	4.630	5.004			5.340	5.312	4.635	4.994	5.69

(#) = Out of Range

m5w637.M Mon Jan 25 12:13:25 2016 GCMS5W

Initial Calibration Verification

Job Number: JC15063 **Sample:** V5W637-ICV637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W15853.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\5W15853.D Vial: 4
Acq On : 23 Jan 2016 6:25 am Operator: THOMASH
Sample : ICV637-10 Inst : GCMS5W
Misc : MS97607,v5w637,,,,,1 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\msdchem\1\METHODS\m5w637.M (RTE Integrator)
Title : TO-15 Full Scan Mode
Last Update : Mon Jan 25 09:32:20 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	95	0.00	8.29
2	1,1,1-Trifluoroethane		----------NA----------				
3	Freon 152A	0.551	0.585	-6.2	98	0.00	3.84
4	Chlorodifluoromethane	0.203	0.227	-11.8	102	0.00	3.88
5	Propene	0.624	0.609	2.4	100	0.00	3.90
6	Dichlorodifluoromethane	2.262	2.471	-9.2	100	0.00	3.97
7	1-Chloro-1,1-difluoroetha	1.513	1.654	-9.3	102	0.00	4.08
8	Chloromethane	0.791	0.813	-2.8	97	0.00	4.10
9	Dichlorotetrafluoroethane	2.543	2.718	-6.9	98	0.00	4.17
10	Vinyl Chloride	0.889	0.972	-9.3	98	0.00	4.28
11	1,3-Butadiene	0.664	0.679	-2.3	95	0.00	4.39
12	n-Butane	0.146	0.150	-2.7	98	0.00	4.43
13	Bromomethane	1.024	1.024	0.0	95	0.00	4.61
14	Chloroethane	0.438	0.466	-6.4	95	0.00	4.76
15	Dichlorofluoromethane	2.068	2.196	-6.2	99	0.00	4.83
16	Acetonitrile	0.715	0.703	1.7	100	0.00	5.06
17	Freon 123	2.427	2.532	-4.3	96	0.00	5.18
18	Freon 123A	1.321	1.263	4.4	83	0.00	5.23
19	Bromoethene	0.986	1.050	-6.5	93	0.00	5.06
20	Trichlorofluoromethane	2.316	2.474	-6.8	97	0.00	5.42
21	Acetone	0.476	0.447	6.1	101	0.00	5.28
22	Pentane	0.237	0.243	-2.5	101	0.00	5.72
23	1,1-Dichloro-1-fluoroetha		----------NA----------				
24	Iodomethane	2.780	3.074	-10.6	98	0.00	5.92
25	Isopropyl Alcohol	0.310	0.277	10.6	95	0.00	5.50
26	1,1-Dichloroethene	1.394	1.529	-9.7	98	0.00	6.00
27	Freon 113	2.049	2.275	-11.0	99	0.00	6.35
28	Methylene Chloride	0.945	0.952	-0.7	98	0.00	6.11
29	Carbon Disulfide	2.743	3.038	-10.8	97	0.00	6.39
30	Ethanol	0.365	0.348	4.7	95	0.00	4.87
31	Acrylonitrile	0.681	0.756	-11.0	102	0.00	5.69
32	3-Chloropropene	0.414	0.470	-13.5	98	0.00	6.22
33	trans-1,2-Dichloroethene	1.251	1.420	-13.5	99	0.00	7.02
34	tert-Butyl Alcohol	1.944	2.129	-9.5	95	0.00	6.04
35	Methyl tert-Butyl Ether	2.480	2.684	-8.2	97	0.00	7.28
36	Vinyl Acetate	2.170	2.513	-15.8	102	0.00	7.38
37	1,1-Dichloroethane	1.649	1.825	-10.7	98	0.00	7.23
38	2-Butanone	0.431	0.484	-12.3	96	0.00	7.64
39	Hexane	1.411	1.421	-0.7	99	0.00	8.30
40	cis-1,2-Dichloroethene	1.227	1.337	-9.0	96	0.00	8.11
41	Di-isopropyl Ether	0.749	0.883	-17.9	102	0.00	8.31
42	Ethyl Acetate	0.280	0.347	-23.9	100	0.00	8.35

Initial Calibration Verification

Job Number: JC15063 **Sample:** V5W637-ICV637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W15853.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		Methyl Acrylate	1.763	1.844	-4.6	98	0.00	8.34
44		Chloroform	2.056	2.285	-11.1	101	0.00	8.43
45		2,4-Dimethylpentane	1.655	1.734	-4.8	98	0.00	9.29
46		Tetrahydrofuran	0.401	0.505	-25.9	100	0.00	8.87
47		1,1,1-Trichloroethane	1.978	2.211	-11.8	101	0.00	9.52
48		1,2-Dichloroethane	1.118	1.287	-15.1	100	0.00	9.24
49		Benzene	2.999	3.299	-10.0	98	0.00	10.05
50		Carbon Tetrachloride	2.037	2.330	-14.4	101	0.00	10.22
51		Cyclohexane	1.389	1.479	-6.5	99	0.00	10.36
52		2,3-Dimethylpentane	0.620	0.680	-9.7	99	0.00	10.65
53	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00	10.49
54		2,2,4-Trimethylpentane	1.199	1.306	-8.9	98	0.00	11.34
55		Heptane	0.245	0.269	-9.8	97	0.00	11.68
56		Trichloroethene	0.380	0.417	-9.7	98	0.00	11.32
57		1,2-Dichloropropane	0.285	0.326	-14.4	99	0.00	11.02
58		Dibromomethane	0.374	0.416	-11.2	100	0.00	11.00
59		Ethyl Acrylate	0.557	0.627	-12.6	99	0.00	11.06
60		Methyl Methacrylate	0.273	0.301	-10.3	96	0.00	11.59
61		1,4-Dioxane	0.191	0.215	-12.6	100	0.00	11.34
62		Bromodichloromethane	0.599	0.657	-9.7	98	0.00	11.27
63		cis-1,3-Dichloropropene	0.484	0.521	-7.6	93	0.00	12.40
64		4-Methyl-2-pentanone	0.220	0.257	-16.8	96	0.00	12.45
65		trans-1,3-Dichloropropene	0.400	0.468	-17.0	98	0.00	13.08
66		Toluene	0.972	1.069	-10.0	98	0.00	13.64
67		1,1,2-Trichloroethane	0.347	0.385	-11.0	98	0.00	13.29
68		1,3-Dichloropropane	0.440	0.500	-13.6	97	0.00	13.69
69		2-Hexanone	0.302	0.354	-17.2	95	0.00	14.02
70		Ethyl Methacrylate	0.462	0.536	-16.0	98	0.00	14.05
71		Dibromochloromethane	0.641	0.733	-14.4	100	0.00	14.21
72		Tetrachloroethene	0.508	0.565	-11.2	99	0.00	15.16
73		1,2-Dibromoethane	0.569	0.637	-12.0	99	0.00	14.53
74		Octane	0.539	0.581	-7.8	98	0.00	15.00
75		1,1,1,2-Tetrachloroethane	0.441	0.501	-13.6	100	0.00	16.09
76	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00	16.05
77		Chlorobenzene	1.645	1.789	-8.8	98	0.00	16.11
78		Ethylbenzene	2.563	2.806	-9.5	97	0.00	16.65
79		m,p-Xylene	1.971	2.164	-9.8	99	0.00	16.92
80		Styrene	1.469	1.686	-14.8	98	0.00	17.45
81		Nonane	1.134	1.184	-4.4	98	0.00	17.98
82		o-Xylene	2.006	2.202	-9.8	99	0.00	17.60
83		Bromoform	1.368	1.543	-12.8	97	0.00	17.01
84		1,1,2,2-Tetrachloroethane	1.608	1.765	-9.8	97	0.00	17.60
85		1,2,3-Trichloropropane	1.134	1.257	-10.8	98	0.00	17.80
86		Isopropylbenzene	2.819	3.136	-11.2	99	0.00	18.51
87		Bromobenzene	0.999	1.088	-8.9	98	0.00	18.62
88		2-Chlorotoluene	0.715	0.790	-10.5	97	0.00	19.23
89		n-Propylbenzene	0.738	0.830	-12.5	98	0.00	19.30
90	S	4-Bromofluorobenzene	1.320	1.339	-1.4	95	0.00	18.30
91		4-Ethyltoluene	2.634	2.979	-13.1	101	0.00	19.52
92		1,3,5-Trimethylbenzene	2.269	2.452	-8.1	98	0.00	19.64
93		alpha-Methylstyrene	1.139	1.318	-15.7	99	0.00	19.87
94		tert-Butylbenzene	0.479	0.543	-13.4	98	0.00	20.21
95		1,2,4-Trimethylbenzene	2.273	2.483	-9.2	97	0.00	20.22
96		1,3-Dichlorobenzene	1.593	1.703	-6.9	98	0.00	20.41
97		Benzyl Chloride	1.981	2.160	-9.0	95	0.00	20.40
98		1,4-Dichlorobenzene	1.646	1.676	-1.8	96	0.00	20.51
99		sec-Butylbenzene	0.603	0.680	-12.8	99	0.00	20.59
100		p-Isopropyltoluene	0.667	0.773	-15.9	100	0.00	20.82

Initial Calibration Verification

Job Number: JC15063
Account: FESPAE Forensic Environmental Services
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY
Sample: V5W637-ICV637
Lab FileID: 5W15853.D

101		1,2-Dichlorobenzene	1.516	1.604	-5.8	97	0.00	20.97
102		n-Butylbenzene	0.591	0.682	-15.4	99	0.00	21.38
103		Hexachloroethane	0.898	1.022	-13.8	98	0.00	21.85
104		1,2,4-Trichlorobenzene	0.933	0.940	-0.8	95	0.00	23.16
105		Naphthalene	2.058	1.978	3.9	94	0.00	23.29
106		Hexachlorobutadiene	0.900	0.927	-3.0	97	0.00	23.74
107	I	Bromochloromethane (A)	1.000	1.000	0.0	95	0.00	8.29
108		TVHC as equiv Pentane	4.994	5.781	-15.8	103	0.00	5.72

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

5W15841.D m5w637.M Mon Jan 25 12:14:13 2016 GCMS5W

Continuing Calibration Summary

Job Number: JC15063 **Sample:** V5W646-CC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W16055.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\5W16055.D Vial: 2
Acq On : 4 Feb 2016 3:17 pm Operator: THOMASH
Sample : cc637-10 Inst : GCMS5W
Misc : MS97993,v5w646,,,,,1 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\msdchem\1\METHODS\m5w637.M (RTE Integrator)
Title : TO-15 Full Scan Mode
Last Update : Mon Jan 25 09:32:20 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	101	0.00	8.29
2	1,1,1-Trifluoroethane	2.486	2.570	-3.4	102	0.00	3.75
3	Freon 152A	0.551	0.588	-6.7	105	0.01	3.85
4	Chlorodifluoromethane	0.203	0.218	-7.4	104	0.00	3.89
5	Propene	0.624	0.620	0.6	109	0.00	3.91
6	Dichlorodifluoromethane	2.262	2.416	-6.8	104	0.01	3.97
7	1-Chloro-1,1-difluoroetha	1.513	1.565	-3.4	102	0.01	4.09
8	Chloromethane	0.791	0.850	-7.5	108	0.00	4.11
9	Dichlorotetrafluoroethane	2.543	2.664	-4.8	102	0.01	4.19
10	Vinyl Chloride	0.889	0.987	-11.0	105	0.01	4.29
11	1,3-Butadiene	0.664	0.698	-5.1	104	0.01	4.40
12	n-Butane	0.146	0.152	-4.1	105	0.00	4.44
13	Bromomethane	1.024	1.008	1.6	99	0.01	4.63
14	Chloroethane	0.438	0.470	-7.3	102	0.01	4.77
15	Dichlorofluoromethane	2.068	2.182	-5.5	105	0.01	4.84
16	Acetonitrile	0.715	0.730	-2.1	110	0.02	5.08
17	Freon 123	2.427	2.495	-2.8	100	0.01	5.19
18	Freon 123A	1.321	1.386	-4.9	96	0.02	5.24
19	Bromoethene	0.986	0.992	-0.6	94	0.01	5.07
20	Trichlorofluoromethane	2.316	2.340	-1.0	97	0.01	5.43
21	Acetone	0.476	0.452	5.0	108	0.02	5.29
22	Pentane	0.237	0.228	3.8	100	0.01	5.73
23	1,1-Dichloro-1-fluoroetha	1.961	1.937	1.2	99	0.01	5.53
24	Iodomethane	2.780	2.696	3.0	91	0.00	5.94
25	Isopropyl Alcohol	0.310	0.304	1.9	111	0.02	5.51
26	1,1-Dichloroethene	1.394	1.486	-6.6	101	0.00	6.00
27	Freon 113	2.049	2.123	-3.6	98	0.01	6.36
28	Methylene Chloride	0.945	0.915	3.2	100	0.01	6.13
29	Carbon Disulfide	2.743	3.012	-9.8	102	0.00	6.40
30	Ethanol	0.365	0.379	-3.8	110	0.02	4.89
31	Acrylonitrile	0.681	0.712	-4.6	102	0.02	5.71
32	3-Chloropropene	0.414	0.444	-7.2	98	0.01	6.23
33	trans-1,2-Dichloroethene	1.251	1.342	-7.3	99	0.01	7.02
34	tert-Butyl Alcohol	1.944	1.985	-2.1	94	0.02	6.06
35	Methyl tert-Butyl Ether	2.480	2.414	2.7	93	0.01	7.29
36	Vinyl Acetate	2.170	2.249	-3.6	96	0.01	7.39
37	1,1-Dichloroethane	1.649	1.738	-5.4	99	0.01	7.23
38	2-Butanone	0.431	0.457	-6.0	96	0.01	7.65
39	Hexane	1.411	1.384	1.9	102	0.00	8.31
40	cis-1,2-Dichloroethene	1.227	1.299	-5.9	99	0.00	8.11
41	Di-isopropyl Ether	0.749	0.799	-6.7	98	0.01	8.32
42	Ethyl Acetate	0.280	0.326	-16.4	100	0.01	8.36

Continuing Calibration Summary

Job Number: JC15063 **Sample:** V5W646-CC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W16055.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		Methyl Acrylate	1.763	1.801	-2.2	101	0.01	8.35
44		Chloroform	2.056	2.134	-3.8	100	0.00	8.43
45		2,4-Dimethylpentane	1.655	1.682	-1.6	101	0.00	9.29
46		Tetrahydrofuran	0.401	0.447	-11.5	93	0.01	8.88
47		1,1,1-Trichloroethane	1.978	2.010	-1.6	97	0.00	9.53
48		1,2-Dichloroethane	1.118	1.196	-7.0	99	0.00	9.25
49		Benzene	2.999	3.065	-2.2	97	0.00	10.06
50		Carbon Tetrachloride	2.037	2.081	-2.2	96	0.00	10.23
51		Cyclohexane	1.389	1.385	0.3	98	0.00	10.36
52		2,3-Dimethylpentane	0.620	0.638	-2.9	99	0.00	10.65
53	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00	10.49
54		2,2,4-Trimethylpentane	1.199	1.332	-11.1	101	0.00	11.34
55		Heptane	0.245	0.270	-10.2	99	0.00	11.68
56		Trichloroethene	0.380	0.408	-7.4	97	0.00	11.32
57		1,2-Dichloropropane	0.285	0.325	-14.0	100	0.00	11.03
58		Dibromomethane	0.374	0.389	-4.0	95	0.00	11.01
59		Ethyl Acrylate	0.557	0.599	-7.5	96	0.00	11.06
60		Methyl Methacrylate	0.273	0.292	-7.0	94	0.00	11.59
61		1,4-Dioxane	0.191	0.204	-6.8	97	0.00	11.34
62		Bromodichloromethane	0.599	0.661	-10.4	99	0.00	11.27
63		cis-1,3-Dichloropropene	0.484	0.521	-7.6	94	0.00	12.40
64		4-Methyl-2-pentanone	0.220	0.254	-15.5	96	0.00	12.45
65		trans-1,3-Dichloropropene	0.400	0.435	-8.7	92	0.00	13.08
66		Toluene	0.972	1.029	-5.9	95	0.00	13.64
67		1,1,2-Trichloroethane	0.347	0.382	-10.1	98	0.00	13.29
68		1,3-Dichloropropane	0.440	0.500	-13.6	98	0.00	13.69
69		2-Hexanone	0.302	0.347	-14.9	94	0.00	14.02
70		Ethyl Methacrylate	0.462	0.521	-12.8	96	0.00	14.05
71		Dibromochloromethane	0.641	0.710	-10.8	98	0.00	14.21
72		Tetrachloroethene	0.508	0.539	-6.1	96	0.00	15.16
73		1,2-Dibromoethane	0.569	0.605	-6.3	95	0.00	14.52
74		Octane	0.539	0.586	-8.7	100	0.00	14.99
75		1,1,1,2-Tetrachloroethane	0.441	0.472	-7.0	95	0.00	16.09
76	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	16.05
77		Chlorobenzene	1.645	1.631	0.9	96	0.00	16.10
78		Ethylbenzene	2.563	2.533	1.2	94	0.00	16.65
79		m,p-Xylene	1.971	1.973	-0.1	97	0.00	16.92
80		Styrene	1.469	1.468	0.1	92	0.00	17.45
81		Nonane	1.134	1.185	-4.5	106	0.00	17.98
82		o-Xylene	2.006	2.025	-0.9	98	0.00	17.60
83		Bromoform	1.368	1.384	-1.2	94	0.00	17.00
84		1,1,2,2-Tetrachloroethane	1.608	1.737	-8.0	103	0.00	17.60
85		1,2,3-Trichloropropane	1.134	1.180	-4.1	99	0.00	17.79
86		Isopropylbenzene	2.819	2.867	-1.7	97	0.00	18.51
87		Bromobenzene	0.999	0.984	1.5	95	0.00	18.62
88		2-Chlorotoluene	0.715	0.709	0.8	93	0.00	19.22
89		n-Propylbenzene	0.738	0.773	-4.7	98	0.00	19.29
90	S	4-Bromofluorobenzene	1.320	1.337	-1.3	101	0.00	18.29
91		4-Ethyltoluene	2.634	2.692	-2.2	98	0.00	19.51
92		1,3,5-Trimethylbenzene	2.269	2.278	-0.4	98	0.00	19.63
93		alpha-Methylstyrene	1.139	1.161	-1.9	94	0.00	19.87
94		tert-Butylbenzene	0.479	0.496	-3.5	96	0.00	20.20
95		1,2,4-Trimethylbenzene	2.273	2.387	-5.0	100	0.00	20.21
96		1,3-Dichlorobenzene	1.593	1.594	-0.1	99	0.00	20.40
97		Benzyl Chloride	1.981	2.013	-1.6	95	0.00	20.39
98		1,4-Dichlorobenzene	1.646	1.580	4.0	97	0.00	20.50
99		sec-Butylbenzene	0.603	0.625	-3.6	98	0.00	20.58
100		p-Isopropyltoluene	0.667	0.699	-4.8	97	0.00	20.81

Continuing Calibration Summary

Job Number: JC15063 **Sample:** V5W646-CC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W16055.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

101		1,2-Dichlorobenzene	1.516	1.493	1.5	97	0.00	20.96
102		n-Butylbenzene	0.591	0.625	-5.8	97	0.00	21.38
103		Hexachloroethane	0.898	0.937	-4.3	96	0.00	21.84
104		1,2,4-Trichlorobenzene	0.933	0.835	10.5	91	0.00	23.16
105		Naphthalene	2.058	1.789	13.1	91	0.00	23.29
106		Hexachlorobutadiene	0.900	0.898	0.2	101	0.00	23.74
107	I	Bromochloromethane (A)	1.000	1.000	0.0	101	0.00	8.29
108		TVHC as equiv Pentane	4.994	5.496	-10.1	103	0.01	5.73

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5W15841.D m5w637.M Fri Feb 05 12:17:01 2016 GCMS5W

Continuing Calibration Summary

Job Number: JC15063 **Sample:** V5W647-CC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W16065.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\5W16065.D Vial: 2
Acq On : 5 Feb 2016 10:31 am Operator: THOMASH
Sample : CC637-10 Inst : GCMS5W
Misc : MS97993,v5w647,,,,,1 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\msdchem\1\METHODS\m5w637.M (RTE Integrator)
Title : TO-15 Full Scan Mode
Last Update : Mon Jan 25 09:32:20 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	72	0.00	8.28
2	1,1,1-Trifluoroethane	2.486	2.865	-15.2	81	0.00	3.75
3	Freon 152A	0.551	0.629	-14.2	80	0.00	3.84
4	Chlorodifluoromethane	0.203	0.227	-11.8	78	0.00	3.88
5	Propene	0.624	0.651	-4.3	81	0.00	3.90
6	Dichlorodifluoromethane	2.262	2.546	-12.6	78	0.00	3.96
7	1-Chloro-1,1-difluoroetha	1.513	1.672	-10.5	78	0.00	4.08
8	Chloromethane	0.791	0.934	-18.1	85	0.00	4.09
9	Dichlorotetrafluoroethane	2.543	2.947	-15.9	80	0.00	4.17
10	Vinyl Chloride	0.889	1.071	-20.5	81	0.00	4.28
11	1,3-Butadiene	0.664	0.757	-14.0	81	0.00	4.39
12	n-Butane	0.146	0.167	-14.4	82	0.00	4.42
13	Bromomethane	1.024	1.122	-9.6	78	0.00	4.61
14	Chloroethane	0.438	0.512	-16.9	79	0.00	4.76
15	Dichlorofluoromethane	2.068	2.371	-14.7	81	0.00	4.83
16	Acetonitrile	0.715	0.789	-10.3	85	0.00	5.05
17	Freon 123	2.427	2.760	-13.7	79	0.00	5.18
18	Freon 123A	1.321	1.458	-10.4	72	0.00	5.23
19	Bromoethene	0.986	1.118	-13.4	75	0.00	5.05
20	Trichlorofluoromethane	2.316	2.562	-10.6	76	0.00	5.41
21	Acetone	0.476	0.486	-2.1	83	0.00	5.28
22	Pentane	0.237	0.241	-1.7	76	0.00	5.72
23	1,1-Dichloro-1-fluoroetha	1.961	2.066	-5.4	75	0.00	5.51
24	Iodomethane	2.780	2.957	-6.4	72	0.00	5.92
25	Isopropyl Alcohol	0.310	0.323	-4.2	84	0.00	5.49
26	1,1-Dichloroethene	1.394	1.558	-11.8	76	0.00	5.99
27	Freon 113	2.049	2.266	-10.6	75	0.00	6.35
28	Methylene Chloride	0.945	0.976	-3.3	76	0.00	6.11
29	Carbon Disulfide	2.743	3.203	-16.8	78	0.00	6.39
30	Ethanol	0.365	0.405	-11.0	84	0.00	4.87
31	Acrylonitrile	0.681	0.744	-9.3	76	0.00	5.69
32	3-Chloropropene	0.414	0.466	-12.6	73	0.00	6.22
33	trans-1,2-Dichloroethene	1.251	1.405	-12.3	74	0.00	7.01
34	tert-Butyl Alcohol	1.944	2.070	-6.5	70	0.00	6.03
35	Methyl tert-Butyl Ether	2.480	2.537	-2.3	70	0.00	7.27
36	Vinyl Acetate	2.170	2.345	-8.1	72	0.00	7.37
37	1,1-Dichloroethane	1.649	1.823	-10.6	74	0.00	7.22
38	2-Butanone	0.431	0.489	-13.5	74	0.00	7.64
39	Hexane	1.411	1.480	-4.9	78	0.00	8.30
40	cis-1,2-Dichloroethene	1.227	1.360	-10.8	74	0.00	8.10
41	Di-isopropyl Ether	0.749	0.851	-13.6	74	0.00	8.30
42	Ethyl Acetate	0.280	0.349	-24.6	76	0.00	8.35

Continuing Calibration Summary

Job Number: JC15063 **Sample:** V5W647-CC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W16065.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		Methyl Acrylate	1.763	1.916	-8.7	77	0.00	8.33
44		Chloroform	2.056	2.261	-10.0	76	0.00	8.42
45		2,4-Dimethylpentane	1.655	1.784	-7.8	76	0.00	9.28
46		Tetrahydrofuran	0.401	0.486	-21.2	73	0.00	8.87
47		1,1,1-Trichloroethane	1.978	2.111	-6.7	73	0.00	9.51
48		1,2-Dichloroethane	1.118	1.250	-11.8	74	0.00	9.23
49		Benzene	2.999	3.271	-9.1	74	0.00	10.05
50		Carbon Tetrachloride	2.037	2.214	-8.7	73	0.00	10.22
51		Cyclohexane	1.389	1.478	-6.4	75	0.00	10.35
52		2,3-Dimethylpentane	0.620	0.684	-10.3	75	0.00	10.64
53	I	1,4-Difluorobenzene	1.000	1.000	0.0	68	-0.01	10.48
54		2,2,4-Trimethylpentane	1.199	1.435	-19.7	78	-0.01	11.33
55		Heptane	0.245	0.285	-16.3	75	0.00	11.67
56		Trichloroethene	0.380	0.437	-15.0	75	-0.01	11.31
57		1,2-Dichloropropane	0.285	0.346	-21.4	77	0.00	11.01
58		Dibromomethane	0.374	0.425	-13.6	75	0.00	11.00
59		Ethyl Acrylate	0.557	0.627	-12.6	72	0.00	11.05
60		Methyl Methacrylate	0.273	0.303	-11.0	70	0.00	11.58
61		1,4-Dioxane	0.191	0.220	-15.2	75	-0.01	11.33
62		Bromodichloromethane	0.599	0.696	-16.2	75	0.00	11.26
63		cis-1,3-Dichloropropene	0.484	0.552	-14.0	72	0.00	12.39
64		4-Methyl-2-pentanone	0.220	0.267	-21.4	72	0.00	12.44
65		trans-1,3-Dichloropropene	0.400	0.463	-15.8	70	0.00	13.07
66		Toluene	0.972	1.110	-14.2	74	0.00	13.64
67		1,1,2-Trichloroethane	0.347	0.409	-17.9	75	0.00	13.28
68		1,3-Dichloropropane	0.440	0.533	-21.1	75	0.00	13.68
69		2-Hexanone	0.302	0.370	-22.5	72	0.00	14.01
70		Ethyl Methacrylate	0.462	0.547	-18.4	73	-0.01	14.04
71		Dibromochloromethane	0.641	0.770	-20.1	77	-0.01	14.19
72		Tetrachloroethene	0.508	0.602	-18.5	77	0.00	15.16
73		1,2-Dibromoethane	0.569	0.653	-14.8	74	-0.01	14.51
74		Octane	0.539	0.628	-16.5	77	0.00	14.98
75		1,1,1,2-Tetrachloroethane	0.441	0.508	-15.2	74	-0.01	16.08
76	I	Chlorobenzene-d5	1.000	1.000	0.0	73	0.00	16.04
77		Chlorobenzene	1.645	1.730	-5.2	74	0.00	16.10
78		Ethylbenzene	2.563	2.702	-5.4	73	0.00	16.65
79		m,p-Xylene	1.971	2.091	-6.1	74	-0.01	16.92
80		Styrene	1.469	1.566	-6.6	71	0.00	17.44
81		Nonane	1.134	1.256	-10.8	81	-0.01	17.97
82		o-Xylene	2.006	2.151	-7.2	75	0.00	17.60
83		Bromoform	1.368	1.508	-10.2	74	0.00	17.00
84		1,1,2,2-Tetrachloroethane	1.608	1.863	-15.9	80	0.00	17.60
85		1,2,3-Trichloropropane	1.134	1.251	-10.3	76	-0.01	17.79
86		Isopropylbenzene	2.819	3.050	-8.2	75	-0.01	18.50
87		Bromobenzene	0.999	1.082	-8.3	76	0.00	18.62
88		2-Chlorotoluene	0.715	0.770	-7.7	73	-0.01	19.22
89		n-Propylbenzene	0.738	0.821	-11.2	75	0.00	19.29
90	S	4-Bromofluorobenzene	1.320	1.333	-1.0	73	-0.01	18.29
91		4-Ethyltoluene	2.634	2.841	-7.9	75	0.00	19.51
92		1,3,5-Trimethylbenzene	2.269	2.402	-5.9	75	0.00	19.63
93		alpha-Methylstyrene	1.139	1.225	-7.6	72	0.00	19.87
94		tert-Butylbenzene	0.479	0.538	-12.3	76	0.00	20.20
95		1,2,4-Trimethylbenzene	2.273	2.517	-10.7	77	-0.01	20.21
96		1,3-Dichlorobenzene	1.593	1.729	-8.5	78	0.00	20.40
97		Benzyl Chloride	1.981	2.139	-8.0	73	0.00	20.39
98		1,4-Dichlorobenzene	1.646	1.697	-3.1	76	0.00	20.50
99		sec-Butylbenzene	0.603	0.665	-10.3	76	0.00	20.58
100		p-Isopropyltoluene	0.667	0.753	-12.9	76	0.00	20.81

Continuing Calibration Summary

Job Number: JC15063 **Sample:** V5W647-CC637
Account: FESPAE Forensic Environmental Services **Lab FileID:** 5W16065.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

101		1,2-Dichlorobenzene	1.516	1.624	-7.1	77	0.00	20.96
102		n-Butylbenzene	0.591	0.672	-13.7	76	0.00	21.38
103		Hexachloroethane	0.898	1.033	-15.0	77	0.00	21.84
104		1,2,4-Trichlorobenzene	0.933	0.900	3.5	71	0.00	23.16
105		Naphthalene	2.058	1.871	9.1	69	0.00	23.29
106		Hexachlorobutadiene	0.900	0.953	-5.9	78	0.00	23.73
107	I	Bromochloromethane (A)	1.000	1.000	0.0	72	0.00	8.28
108		TVHC as equiv Pentane	4.994	5.778	-15.7	78	0.00	5.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5W15841.D m5w637.M Mon Feb 08 10:02:57 2016 GCMS5W

Initial Calibration Summary

Job Number: JC15063 **Sample:** VW2140-ICC2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53466.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Response Factor Report MSW

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration

Calibration Files
0.04=W53474.D 0.1 =W53473.D 0.2 =W53469.D 0.5 =W53468.D
5 =W53476A.D 10 =W53466.D 20 =W53470.D 30 =W53475.D
15 =W53471.D 40 =W53477.D = =

Compound	0.04	0.1	0.2	0.5	5	10	20	30	15	40	Avg	%RSD
1) I BROMOCHLOROMETHANE	----------ISTD----------											
2) 1,1,1-TRIFLUOROETHANE											0.000	-1.00
3) FREON 152A	0.917	0.785	0.843	0.871	0.883	0.757	0.722	1.001	0.768		0.839	10.65
4) CHLORODIFLUOROMETHANE			0.253	0.306	0.356	0.347	0.309	0.295	0.372	0.296	0.317	12.37
5) DICHLORODIFLUOROMETHANE	3.852	3.994	3.445	3.522	3.774	3.487	3.117	2.987	3.804	3.074	3.506	10.11
6) PROPYLENE	1.824	1.358	1.253	1.203	1.130	1.015	0.967	1.259	0.992		1.222	21.50
7) FREON 114	4.524	4.369	3.444	3.641	3.587	3.658	3.194	3.021	4.121	3.254	3.681	13.73
8) 1-CHLORO-1,1-DIFLUOROETHANE											0.000	-1.00
9) CHLOROMETHANE	0.428	0.344	0.380	0.414	0.395	0.345	0.330	0.448	0.351		0.382	10.97
10) VINYL CHLORIDE	1.581	1.767	1.294	1.420	1.483	1.441	1.268	1.200	1.630	1.290	1.437	12.62
11) 1,3-BUTADIENE	1.104	1.274	1.088	1.107	1.169	1.135	1.023	0.969	1.296	1.030	1.120	9.38
12) n-BUTANE	0.258	0.189	0.307	0.333	0.315	0.284	0.266	0.363	0.284		0.289	17.33
13) BROMOMETHANE	1.253	1.332	1.158	1.182	1.268	1.221	1.096	1.049	1.397	1.095	1.205	9.21
14) CHLOROETHANE	0.830	0.717	0.598	0.688	0.795	0.755	0.690	0.659	0.851	0.667	0.725	11.16
15) DICHLOROFLUOROMETHANE	4.114	3.288	2.924	2.823	3.157	2.979	2.785	2.652	3.168	2.628	3.052	14.21
16) ACROLEIN	0.478	0.478	0.456	0.556	0.545	0.528	0.516	0.540	0.492		0.510	6.91
17) TRICHLOROFLUOROMETHANE	4.548	3.339	3.511	3.290	3.710	3.370	3.281	3.232	3.591	3.033	3.491	11.98
18) ISOPROPYL ALCOHOL			4.455	3.029	2.598	2.430	2.356	2.355	2.377	2.195	2.724	27.28
19) ACETONE			0.782	0.637	0.652	0.627	0.612	0.591	0.609	0.549	0.632	10.76
20) 1,1-DICHLORO-1-FLUOROETHANE											0.000	-1.00
21) ACRYLONITRILE	0.721	0.747	0.790	1.029	0.971	0.974	0.941	0.924	0.897		0.888	12.33
22) PENTANE	0.315	0.364	0.353	0.396	0.368	0.353	0.337	0.379	0.328		0.355	7.20
23) IODOMETHANE												

Initial Calibration Summary

Job Number: JC15063 **Sample:** VW2140-ICC2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53466.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

		3.941	3.148	2.940	2.839	3.232	3.043	2.967	2.887	3.187	2.805	3.099	10.66
24)	1,1-DICHLOROETHYLENE												
		2.161	1.465	1.309	1.239	1.315	1.237	1.193	1.152	1.268	1.117	1.346	22.49
25)	CARBON DISULFIDE												
		4.447	3.993	3.695	3.814	3.606	3.445	3.260	3.586	3.103	3.661		10.93
26)	ETHANOL												
		0.753	0.629	0.554	0.529	0.495	0.489	0.536	0.478	0.558			16.53
27)	ACETONITRILE												
		1.006	1.134	1.061	1.017	0.979	0.955	0.998	0.897	1.006			7.02
28)	BROMOETHENE												
		1.269	1.282	1.202	1.168	1.327	1.240	1.184	1.129	1.398	1.114	1.231	7.28
29)	METHYLENE CHLORIDE												
		1.562	1.313	1.018	1.004	1.137	1.080	1.039	0.979	1.057	0.936	1.113	17.00
30)	3-CHLOROPROPENE												
		0.451	0.480	0.525	0.645	0.606	0.591	0.573	0.599	0.549	0.558		11.28
31)	FREON 113												
		2.604	2.079	2.014	1.963	2.221	2.131	2.042	1.980	2.094	1.913	2.104	9.35
32)	TRANS-1,2-DICHLOROETHYLENE												
		2.232	1.315	1.228	1.146	1.291	1.228	1.196	1.160	1.217	1.115	1.313	25.05
33)	TERTIARY BUTYL ALCOHOL												
		3.232	2.553	2.401	2.426	2.979	2.832	2.779	2.565	2.722	2.644	2.713	9.44
34)	METHYL TERTIARY BUTYL ETHER												
		4.477	3.182	2.784	2.783	3.598	3.478	3.539	3.495	3.204	3.282	3.382	14.25
35)	TETRAHYDROFURAN												
		0.384	0.418	0.588	0.582	0.591	0.588	0.534	0.550	0.529			15.53
36)	HEXANE												
		3.020	1.983	1.882	1.869	2.209	2.142	2.085	2.041	2.013	1.943	2.119	15.78
37)	VINYL ACETATE												
		0.184	0.201	0.337	0.333	0.335	0.332	0.306	0.312	0.292			21.49
38)	1,1-DICHLOROETHANE												
		2.889	2.164	2.165	2.117	2.467	2.350	2.267	2.192	2.194	2.080	2.288	10.49
39)	METHYL ETHYL KETONE												
		0.333	0.394	0.450	0.594	0.588	0.594	0.595	0.539	0.552	0.516		19.14
40)	cis-1,2-DICHLOROETHYLENE												
		1.800	1.246	1.231	1.164	1.356	1.297	1.269	1.236	1.241	1.172	1.301	14.14
41)	DI-ISOPROPYL ETHER												
		0.854	0.864	0.840	1.127	1.089	1.122	1.127	1.022	1.069	1.013		12.30
42)	ETHYL ACETATE												
		0.195	0.298	0.414	0.421	0.422	0.410	0.359	0.383	0.363			21.97
43)	METHYL ACRYLATE												
		1.635	1.630	1.778	2.323	2.379	2.392	2.364	2.124	2.239	2.096		15.49
44)	CHLOROFORM												
		3.198	2.217	2.396	2.244	2.706	2.568	2.487	2.419	2.373	2.291	2.490	11.63
45)	2,4-DIMETHYLPENTANE												
		3.300	2.078	2.083	2.068	2.560	2.480	2.444	2.392	2.337	2.272	2.401	15.06
46)	1,1,1-TRICHLOROETHANE												
		3.470	2.352	2.565	2.396	2.836	2.675	2.626	2.571	2.486	2.431	2.641	12.30
47)	CARBON TETRACHLORIDE												
		3.582	2.539	2.691	2.482	2.948	2.795	2.742	2.712	2.631	2.586	2.771	11.37
48)	1,2-DICHLOROETHANE												
		1.693	1.308	1.396	1.421	1.781	1.707	1.690	1.647	1.580	1.564	1.579	9.89
49)	I 1,4-DIFLUOROBENZENE	----------				ISTD							
50)	BENZENE												
		1.080	0.716	0.664	0.674	0.778	0.764	0.749	0.723	0.704	0.689	0.754	15.99
51)	CYCLOHEXANE												
		0.381	0.382	0.325	0.342	0.329	0.327	0.317	0.320	0.307	0.337		8.06
52)	2,3-DIMETHYLPENTANE												
		0.173	0.153	0.146	0.145	0.176	0.171	0.172	0.169	0.164	0.162	0.163	6.91
53)	TRICHLOROETHYLENE												

	0.372	0.250	0.266	0.278	0.322	0.318	0.320	0.316	0.298	0.313	0.305	11.24
54)	DIBROMOMETHANE												
	0.326	0.211	0.243	0.243	0.293	0.289	0.286	0.280	0.271	0.275	0.272	11.85
55)	1,2-DICHLOROPROPANE												
	0.379	0.242	0.237	0.220	0.267	0.270	0.266	0.264	0.245	0.254	0.264	16.34
56)	ETHYL ACRYLATE												
	0.429		0.292	0.334	0.470	0.483	0.517	0.514	0.447	0.486	0.441	17.82
57)	BROMODICHLOROMETHANE												
	0.596	0.442	0.456	0.458	0.547	0.534	0.534	0.524	0.490	0.510	0.509	9.44
58)	2,2,4-TRIMETHYLPENTANE												
	1.547	1.014	0.999	1.022	1.280	1.249	1.279	1.271	1.164	1.238	1.206	13.80
59)	1,4-DIOXANE												
			0.089	0.103	0.153	0.150	0.156	0.161	0.138	0.159	0.139	19.73
60)	METHYL METHACRYLATE												
	0.184	0.168	0.157	0.173	0.234	0.239	0.257	0.255	0.224	0.245	0.214	18.13
61)	HEPTANE												
	0.500	0.375	0.362	0.370	0.462	0.451	0.460	0.451	0.420	0.430	0.428	10.74
62)	METHYL ISOBUTYL KETONE												
	0.452	0.317	0.344	0.370	0.495	0.508	0.541	0.530	0.465	0.506	0.453	17.87
63)	cis-1,3-DICHLOROPROPENE												
	0.424	0.300	0.307	0.320	0.439	0.455	0.457	0.453	0.414	0.442	0.401	16.21
64)	TOLUENE												
	0.523	0.358	0.367	0.385	0.522	0.519	0.537	0.539	0.485	0.525	0.476	15.73
65)	1,3-DICHLOROPROPANE												
	0.380	0.277	0.284	0.299	0.414	0.412	0.432	0.429	0.381	0.416	0.373	16.58
66)	trans-1,3-DICHLOROPROPENE												
	0.296	0.211	0.229	0.243	0.340	0.349	0.368	0.365	0.328	0.359	0.309	19.49
67)	1,1,2-TRICHLOROETHANE												
	0.187	0.161	0.175	0.170	0.232	0.233	0.238	0.236	0.213	0.228	0.207	14.86
68)	I CHLOROBENZENE-D5				----------ISTD----------								
69)	ETHYL METHACRYLATE												
		0.528	0.505	0.588	0.848	0.867	0.847	0.803	0.771	0.737	0.722	19.85
70)	2-HEXANONE												
			0.310	0.420	0.567	0.567	0.552	0.517	0.518	0.487	0.492	17.91
71)	TETRACHLOROETHYLENE												
	0.978	0.700	0.600	0.646	0.750	0.715	0.659	0.629	0.646	0.584	0.691	16.38
72)	DIBROMOCHLOROMETHANE												
	1.277	0.835	0.842	0.921	1.108	1.070	0.986	0.927	0.956	0.863	0.978	14.18
73)	1,2-DIBROMOETHANE												
	0.808	0.626	0.559	0.656	0.836	0.838	0.782	0.741	0.747	0.692	0.729	12.87
74)	OCTANE												
	1.292	0.969	0.900	0.995	1.308	1.301	1.219	1.147	1.157	1.051	1.134	13.10
75)	1,1,1,2-TETRACHLOROETHANE												
	0.846	0.595	0.628	0.689	0.809	0.784	0.733	0.697	0.697	0.651	0.713	11.31
76)	CHLOROBENZENE												
	1.669	1.183	1.128	1.205	1.425	1.401	1.303	1.248	1.246	1.165	1.297	12.55
77)	ETHYLBENZENE												
	2.543	1.813	1.640	1.727	2.193	2.144	2.089	1.987	1.928	1.830	1.989	13.32
78)	m,p-XYLENE												
	0.852	0.633	0.638	0.697	0.902	0.881	0.848	0.805	0.790	0.743	0.779	12.55
79)	o-XYLENE												
	0.824	0.583	0.569	0.657	0.856	0.836	0.807	0.772	0.748	0.712	0.736	14.10
80)	STYRENE												
	1.082	0.840	0.711	0.880	1.295	1.300	1.279	1.216	1.185	1.123	1.091	19.27
81)	1,2,3-TRICHLOROPROPANE												
	1.075	0.765	0.723	0.759	0.885	0.873	0.846	0.801	0.779	0.735	0.824	12.66
82)	NONANE												
	1.187	0.882	0.815	0.854	1.278	1.349	1.259	1.171	1.166	1.074	1.104	17.24
83)	BROMOFORM												

Initial Calibration Summary

Job Number: JC15063 **Sample:** VW2140-ICC2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53466.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

	1.003	0.656	0.667	0.772	0.983	0.990	0.934	0.888	0.882	0.831	0.861	14.82
84)	4-BROMOFLUOROBENZENE											
	1.076	1.059	1.089	1.097	1.188	1.171	1.174	1.133	1.195	1.114	1.130	4.39
85)	1,1,2,2-TETRACHLOROETHANE											
	1.271	0.912	0.893	0.960	1.170	1.152	1.129	1.073	1.042	0.991	1.059	11.56
86)	ISOPROPYLBENZENE											
	3.383	2.149	1.926	1.998	2.530	2.504	2.438	2.301	2.251	2.122	2.360	17.52
87)	BROMOBENZENE											
	0.651	0.485	0.513	0.566	0.718	0.715	0.696	0.659	0.648	0.616	0.627	13.01
88)	2-CHLOROTOLUENE											
	0.635	0.435	0.387	0.444	0.584	0.577	0.567	0.541	0.526	0.511	0.521	14.90
89)	n-PROPYLBENZENE											
	0.592	0.462	0.439	0.462	0.644	0.654	0.648	0.616	0.591	0.581	0.569	14.60
90)	4-ETHYLTOLUENE											
	2.325	1.537	1.316	1.435	2.022	2.099	2.091	1.979	1.902	1.847	1.855	17.50
91)	1,3,5-TRIMETHYLBENZENE											
	2.343	1.590	1.386	1.432	1.997	1.953	1.883	1.778	1.735	1.628	1.772	16.20
92)	ALPHA-METHYLSTYRENE											
	0.649	0.573	0.543	0.549	0.841	0.874	0.882	0.841	0.800	0.789	0.734	19.04
93)	TERT-BUTYLBENZENE											
	0.413	0.349	0.327	0.339	0.482	0.484	0.480	0.466	0.440	0.447	0.423	14.77
94)	1,2,4-TRIMETHYLBENZENE											
	1.971	1.451	1.198	1.296	1.806	1.819	1.825	1.756	1.648	1.672	1.644	15.27
95)	m-DICHLOROBENZENE											
	1.110	0.835	0.698	0.711	0.969	0.999	1.022	0.983	0.939	0.962	0.923	14.50
96)	BENZYL CHLORIDE											
	1.236	0.836	0.698	0.765	1.140	1.253	1.311	1.288	1.158	1.258	1.094	21.43
97)	p-DICHLOROBENZENE											
	1.127	0.746	0.628	0.725	0.965	1.038	1.004	0.971	0.912	0.954	0.907	17.30
98)	SEC-BUTYLBENZENE											
	0.540	0.454	0.375	0.402	0.557	0.565	0.556	0.540	0.510	0.518	0.502	13.54
99)	p-ISOPROPYLTOLUENE											
	0.499	0.463	0.339	0.395	0.576	0.585	0.588	0.580	0.532	0.564	0.512	17.07
100)	o-DICHLOROBENZENE											
	1.112	0.806	0.701	0.721	0.925	0.942	0.944	0.934	0.873	0.919	0.888	13.57
101)	n-BUTYLBENZENE											
	0.424	0.329	0.265	0.307	0.450	0.480	0.498	0.500	0.450	0.494	0.420	20.77
102)	1,2-DIBROMO-3-CHLOROPROPANE											
	0.472	0.328	0.241	0.286	0.375	0.409	0.442	0.485	0.397	0.507	0.394	22.26
103)	HEXACHLOROETHANE											
	0.761	0.604	0.527	0.530	0.730	0.746	0.751	0.764	0.705	0.754	0.687	13.97
104)	HEXACHLOROBUTADIENE											
	0.954	0.612	0.550	0.548	0.669	0.674	0.740	0.672	0.675	0.701	0.679	16.88
105)	1,2,4-TRICHLOROBENZENE											
	0.533	0.320	0.224	0.254	0.280	0.351	0.421	0.345	0.379	0.415	0.352	25.83
106)	NAPHTHALENE											
	1.195	0.780	0.480	0.565	0.685	0.824	1.037	1.056	0.909	1.180	0.871	28.50

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

MW2140.M Fri Feb 12 15:53:33 2016 MSW

Initial Calibration Verification

Job Number: JC15063 **Sample:** VW2140-ICV2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53480.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\W53480.D Vial: 4
Acq On : 11 Feb 2016 11:08 pm Operator: YOUMINH
Sample : ICV2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	BROMOCHLOROMETHANE	1.000	1.000	0.0	103	0.00
2	1,1,1-TRIFLUOROETHANE	0.000	0.000	0.0	0#	-4.97#
3	FREON 152A	0.839	0.851	-1.4	99	0.00
4	CHLORODIFLUOROMETHANE	0.317	0.342	-7.9	101	0.00
5	DICHLORODIFLUOROMETHANE	3.506	3.257	7.1	96	0.00
6	PROPYLENE	1.222	1.015	16.9	92	0.00
7	FREON 114	3.681	3.470	5.7	97	0.00
8	1-CHLORO-1,1-DIFLUOROETHANE	0.000	0.000	0.0	0#	-5.36#
9	CHLOROMETHANE	0.382	0.374	2.1	97	0.00
10	VINYL CHLORIDE	1.437	1.368	4.8	97	0.00
11	1,3-BUTADIENE	1.120	1.094	2.3	99	0.00
12	n-BUTANE	0.289	0.298	-3.1	97	0.00
13	BROMOMETHANE	1.205	1.182	1.9	99	0.00
14	CHLOROETHANE	0.725	0.748	-3.2	102	0.00
15	DICHLOROFLUOROMETHANE	3.052	3.022	1.0	104	0.00
16	ACROLEIN	0.510	0.519	-1.8	98	0.00
17	TRICHLOROFLUOROMETHANE	3.491	3.496	-0.1	106	0.00
18	ISOPROPYL ALCOHOL	2.724	2.276	16.4	96	0.00
19	ACETONE	0.632	0.602	4.7	98	0.00
20	1,1-DICHLORO-1-FLUOROETHANE	0.000	0.000	0.0	0#	-6.84#
21	ACRYLONITRILE	0.888	0.980	-10.4	104	0.00
22	PENTANE	0.355	0.387	-9.0	108	0.00
23	IODOMETHANE	3.099	3.192	-3.0	108	0.00
24	1,1-DICHLOROETHYLENE	1.346	1.246	7.4	103	0.00
25	CARBON DISULFIDE	3.661	3.611	1.4	103	0.00
26	ETHANOL	0.558	0.449	19.5	87	0.00
27	ACETONITRILE	1.006	0.985	2.1	99	0.00
28	BROMOETHENE	1.231	1.254	-1.9	104	0.00
29	METHYLENE CHLORIDE	1.113	1.079	3.1	103	0.00
30	3-CHLOROPROPENE	0.558	0.609	-9.1	103	0.00
31	FREON 113	2.104	2.177	-3.5	105	0.00
32	TRANS-1,2-DICHLOROETHYLENE	1.313	1.259	4.1	105	0.00
33	TERTIARY BUTYL ALCOHOL	2.713	2.637	2.8	96	0.00
34	METHYL TERTIARY BUTYL ETHER	3.382	3.351	0.9	99	0.00
35	TETRAHYDROFURAN	0.529	0.554	-4.7	98	0.00
36	HEXANE	2.119	2.060	2.8	99	0.00
37	VINYL ACETATE	0.292	0.334	-14.4	103	0.00
38	1,1-DICHLOROETHANE	2.288	2.288	0.0	100	0.00
39	METHYL ETHYL KETONE	0.516	0.546	-5.8	95	0.00
40	cis-1,2-DICHLOROETHYLENE	1.301	1.261	3.1	100	0.00
41	DI-ISOPROPYL ETHER	1.013	1.088	-7.4	103	0.00
42	ETHYL ACETATE	0.363	0.378	-4.1	92	0.00

Initial Calibration Verification

Job Number: JC15063 **Sample:** VW2140-ICV2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53480.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		METHYL ACRYLATE	2.096	2.139	-2.1	92	0.00
44		CHLOROFORM	2.490	2.546	-2.2	102	0.00
45		2,4-DIMETHYLPENTANE	2.401	2.427	-1.1	100	0.00
46		1,1,1-TRICHLOROETHANE	2.641	2.679	-1.4	103	0.00
47		CARBON TETRACHLORIDE	2.771	2.797	-0.9	103	0.00
48		1,2-DICHLOROETHANE	1.579	1.673	-6.0	101	0.00
49	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	102	0.00
50		BENZENE	0.754	0.743	1.5	100	0.00
51		CYCLOHEXANE	0.337	0.329	2.4	102	0.00
52		2,3-DIMETHYLPENTANE	0.163	0.169	-3.7	101	0.00
53		TRICHLOROETHYLENE	0.305	0.313	-2.6	101	0.00
54		DIBROMOMETHANE	0.272	0.281	-3.3	100	0.00
55		1,2-DICHLOROPROPANE	0.264	0.259	1.9	98	0.00
56		ETHYL ACRYLATE	0.441	0.460	-4.3	98	0.00
57		BROMODICHLOROMETHANE	0.509	0.510	-0.2	98	0.00
58		2,2,4-TRIMETHYLPENTANE	1.206	1.227	-1.7	101	0.00
59		1,4-DIOXANE	0.139	0.141	-1.4	96	0.00
60		METHYL METHACRYLATE	0.214	0.224	-4.7	96	0.00
61		HEPTANE	0.428	0.436	-1.9	99	0.00
62		METHYL ISOBUTYL KETONE	0.453	0.461	-1.8	93	0.00
63		cis-1,3-DICHLOROPROPENE	0.401	0.412	-2.7	93	0.00
64		TOLUENE	0.476	0.506	-6.3	100	0.00
65		1,3-DICHLOROPROPANE	0.373	0.386	-3.5	96	0.00
66		trans-1,3-DICHLOROPROPENE	0.309	0.337	-9.1	99	0.00
67		1,1,2-TRICHLOROETHANE	0.207	0.216	-4.3	95	0.00
68	I	CHLOROBENZENE-D5	1.000	1.000	0.0	104	0.00
69		ETHYL METHACRYLATE	0.722	0.803	-11.2	96	0.00
70		2-HEXANONE	0.492	0.515	-4.7	94	0.00
71		TETRACHLOROETHYLENE	0.691	0.701	-1.4	102	0.00
72		DIBROMOCHLOROMETHANE	0.978	1.049	-7.3	102	0.00
73		1,2-DIBROMOETHANE	0.729	0.793	-8.8	98	0.00
74		OCTANE	1.134	1.235	-8.9	99	0.00
75		1,1,1,2-TETRACHLOROETHANE	0.713	0.774	-8.6	103	0.00
76		CHLOROBENZENE	1.297	1.336	-3.0	99	0.00
77		ETHYLBENZENE	1.989	2.038	-2.5	99	0.00
78		m,p-XYLENE	0.779	0.849	-9.0	100	0.00
79		o-XYLENE	0.736	0.808	-9.8	101	0.00
80		STYRENE	1.091	1.252	-14.8	100	0.00
81		1,2,3-TRICHLOROPROPANE	0.824	0.836	-1.5	100	0.00
82		NONANE	1.104	1.263	-14.4	97	0.00
83		BROMOFORM	0.861	0.936	-8.7	98	0.00
84	S	4-BROMOFLUOROBENZENE	1.130	1.204	-6.5	107	0.00
85		1,1,2,2-TETRACHLOROETHANE	1.059	1.079	-1.9	97	0.00
86		ISOPROPYLBENZENE	2.360	2.446	-3.6	102	0.00
87		BROMOBENZENE	0.627	0.686	-9.4	100	0.00
88		2-CHLOROTOLUENE	0.521	0.550	-5.6	99	0.00
89		n-PROPYLBENZENE	0.569	0.626	-10.0	100	0.00
90		4-ETHYLTOLUENE	1.855	2.005	-8.1	99	0.00
91		1,3,5-TRIMETHYLBENZENE	1.772	1.913	-8.0	102	0.00
92		ALPHA-METHYLSTYRENE	0.734	0.870	-18.5	104	0.00
93		TERT-BUTYLBENZENE	0.423	0.476	-12.5	102	0.00
94		1,2,4-TRIMETHYLBENZENE	1.644	1.741	-5.9	100	0.00
95		m-DICHLOROBENZENE	0.923	0.957	-3.7	100	0.00
96		BENZYL CHLORIDE	1.094	1.148	-4.9	95	0.00
97		p-DICHLOROBENZENE	0.907	0.944	-4.1	95	0.00
98		SEC-BUTYLBENZENE	0.502	0.552	-10.0	102	0.00
99		p-ISOPROPYLTOLUENE	0.512	0.579	-13.1	103	0.00
100		o-DICHLOROBENZENE	0.888	0.896	-0.9	99	0.00

Initial Calibration Verification

Job Number: JC15063 **Sample:** VW2140-ICV2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53480.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

101	n-BUTYLBENZENE	0.420	0.470	-11.9	102	0.00
102	1,2-DIBROMO-3-CHLOROPROPANE	0.394	0.374	5.1	95	0.00
103	HEXACHLOROETHANE	0.687	0.735	-7.0	102	0.00
104	HEXACHLOROBUTADIENE	0.679	0.677	0.3	105	0.00
105	1,2,4-TRICHLOROBENZENE	0.352	0.329	6.5	97	0.00
106	NAPHTHALENE	0.871	0.769	11.7	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
W53466.D MW2140.M Fri Feb 12 15:54:26 2016 MSW

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2141-CC2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53482.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\W53482.D Vial: 2
Acq On : 12 Feb 2016 10:00 am Operator: YOUMINH
Sample : CC2140-10 Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	BROMOCHLOROMETHANE	1.000	1.000	0.0	99	-0.01
2	1,1,1-TRIFLUOROETHANE	0.000	0.000	0.0	0#	-4.97#
3	FREON 152A	0.839	0.909	-8.3	102	-0.01
4	CHLORODIFLUOROMETHANE	0.317	0.298	6.0	85	-0.01
5	DICHLORODIFLUOROMETHANE	3.506	3.154	10.0	89	-0.01
6	PROPYLENE	1.222	0.961	21.4	84	-0.01
7	FREON 114	3.681	3.114	15.4	84	-0.01
8	1-CHLORO-1,1-DIFLUOROETHANE	0.000	0.000	0.0	0#	-5.36#
9	CHLOROMETHANE	0.382	0.342	10.5	85	-0.01
10	VINYL CHLORIDE	1.437	1.250	13.0	86	0.00
11	1,3-BUTADIENE	1.120	0.982	12.3	85	-0.01
12	n-BUTANE	0.289	0.281	2.8	88	-0.01
13	BROMOMETHANE	1.205	1.108	8.0	90	-0.02
14	CHLOROETHANE	0.725	0.675	6.9	88	-0.01
15	DICHLOROFLUOROMETHANE	3.052	2.723	10.8	90	-0.02
16	ACROLEIN	0.510	0.483	5.3	88	-0.02
17	TRICHLOROFLUOROMETHANE	3.491	3.240	7.2	95	-0.02
18	ISOPROPYL ALCOHOL	2.724	2.257	17.1	92	-0.02
19	ACETONE	0.632	0.558	11.7	88	-0.01
20	1,1-DICHLORO-1-FLUOROETHANE	0.000	0.000	0.0	0#	-6.84#
21	ACRYLONITRILE	0.888	0.887	0.1	90	-0.01
22	PENTANE	0.355	0.343	3.4	92	-0.02
23	IODOMETHANE	3.099	2.792	9.9	91	-0.01
24	1,1-DICHLOROETHYLENE	1.346	1.114	17.2	89	-0.01
25	CARBON DISULFIDE	3.661	3.239	11.5	89	-0.01
26	ETHANOL	0.558	0.480	14.0	89	-0.02
27	ACETONITRILE	1.006	0.900	10.5	87	-0.02
28	BROMOETHENE	1.231	1.165	5.4	93	-0.02
29	METHYLENE CHLORIDE	1.113	0.958	13.9	88	-0.01
30	3-CHLOROPROPENE	0.558	0.551	1.3	90	-0.01
31	FREON 113	2.104	1.903	9.6	88	-0.02
32	TRANS-1,2-DICHLOROETHYLENE	1.313	1.100	16.2	88	0.00
33	TERTIARY BUTYL ALCOHOL	2.713	2.583	4.8	90	-0.01
34	METHYL TERTIARY BUTYL ETHER	3.382	3.094	8.5	88	0.00
35	TETRAHYDROFURAN	0.529	0.511	3.4	87	0.00
36	HEXANE	2.119	1.900	10.3	88	0.00
37	VINYL ACETATE	0.292	0.290	0.7	86	-0.01
38	1,1-DICHLOROETHANE	2.288	2.061	9.9	87	-0.02
39	METHYL ETHYL KETONE	0.516	0.511	1.0	86	0.00
40	cis-1,2-DICHLOROETHYLENE	1.301	1.146	11.9	87	-0.01
41	DI-ISOPROPYL ETHER	1.013	0.979	3.4	89	0.00
42	ETHYL ACETATE	0.363	0.348	4.1	82	0.00

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2141-CC2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53482.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		METHYL ACRYLATE	2.096	2.006	4.3	83	0.00
44		CHLOROFORM	2.490	2.313	7.1	89	0.00
45		2,4-DIMETHYLPENTANE	2.401	2.176	9.4	87	0.00
46		1,1,1-TRICHLOROETHANE	2.641	2.451	7.2	90	0.00
47		CARBON TETRACHLORIDE	2.771	2.568	7.3	91	-0.01
48		1,2-DICHLOROETHANE	1.579	1.533	2.9	89	0.00
49	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	99	-0.01
50		BENZENE	0.754	0.670	11.1	87	0.00
51		CYCLOHEXANE	0.337	0.293	13.1	88	-0.01
52		2,3-DIMETHYLPENTANE	0.163	0.152	6.7	88	-0.01
53		TRICHLOROETHYLENE	0.305	0.281	7.9	87	0.00
54		DIBROMOMETHANE	0.272	0.255	6.3	87	-0.01
55		1,2-DICHLOROPROPANE	0.264	0.233	11.7	85	0.00
56		ETHYL ACRYLATE	0.441	0.426	3.4	87	0.00
57		BROMODICHLOROMETHANE	0.509	0.476	6.5	88	0.00
58		2,2,4-TRIMETHYLPENTANE	1.206	1.111	7.9	88	0.00
59		1,4-DIOXANE	0.139	0.136	2.2	90	-0.01
60		METHYL METHACRYLATE	0.214	0.212	0.9	88	-0.01
61		HEPTANE	0.428	0.393	8.2	86	0.00
62		METHYL ISOBUTYL KETONE	0.453	0.437	3.5	85	0.00
63		cis-1,3-DICHLOROPROPENE	0.401	0.396	1.2	86	0.00
64		TOLUENE	0.476	0.460	3.4	88	0.00
65		1,3-DICHLOROPROPANE	0.373	0.366	1.9	88	0.00
66		trans-1,3-DICHLOROPROPENE	0.309	0.308	0.3	87	0.00
67		1,1,2-TRICHLOROETHANE	0.207	0.203	1.9	86	0.00
68	I	CHLOROBENZENE-D5	1.000	1.000	0.0	99	0.00
69		ETHYL METHACRYLATE	0.722	0.758	-5.0	86	0.00
70		2-HEXANONE	0.492	0.490	0.4	85	0.00
71		TETRACHLOROETHYLENE	0.691	0.638	7.7	88	0.00
72		DIBROMOCHLOROMETHANE	0.978	0.974	0.4	90	0.00
73		1,2-DIBROMOETHANE	0.729	0.741	-1.6	87	-0.01
74		OCTANE	1.134	1.119	1.3	85	0.00
75		1,1,1,2-TETRACHLOROETHANE	0.713	0.704	1.3	89	0.00
76		CHLOROBENZENE	1.297	1.242	4.2	88	0.00
77		ETHYLBENZENE	1.989	1.911	3.9	88	0.00
78		m,p-XYLENE	0.779	0.788	-1.2	88	0.00
79		o-XYLENE	0.736	0.759	-3.1	90	0.00
80		STYRENE	1.091	1.175	-7.7	89	0.00
81		1,2,3-TRICHLOROPROPANE	0.824	0.779	5.5	88	0.00
82		NONANE	1.104	1.174	-6.3	86	0.00
83		BROMOFORM	0.861	0.898	-4.3	90	0.00
84	S	4-BROMOFLUOROBENZENE	1.130	1.240	-9.7	105	0.00
85		1,1,2,2-TETRACHLOROETHANE	1.059	1.028	2.9	88	0.00
86		ISOPROPYLBENZENE	2.360	2.281	3.3	90	0.00
87		BROMOBENZENE	0.627	0.652	-4.0	90	0.00
88		2-CHLOROTOLUENE	0.521	0.528	-1.3	91	0.00
89		n-PROPYLBENZENE	0.569	0.594	-4.4	90	0.00
90		4-ETHYLTOLUENE	1.855	1.874	-1.0	88	0.00
91		1,3,5-TRIMETHYLBENZENE	1.772	1.799	-1.5	91	0.00
92		ALPHA-METHYLSTYRENE	0.734	0.796	-8.4	90	0.00
93		TERT-BUTYLBENZENE	0.423	0.447	-5.7	91	0.00
94		1,2,4-TRIMETHYLBENZENE	1.644	1.656	-0.7	90	0.00
95		m-DICHLOROBENZENE	0.923	0.920	0.3	91	0.00
96		BENZYL CHLORIDE	1.094	1.106	-1.1	87	0.00
97		p-DICHLOROBENZENE	0.907	0.914	-0.8	87	0.00
98		SEC-BUTYLBENZENE	0.502	0.511	-1.8	90	0.00
99		p-ISOPROPYLTOLUENE	0.512	0.541	-5.7	91	0.00
100		o-DICHLOROBENZENE	0.888	0.858	3.4	90	0.00

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2141-CC2140
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53482.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

101	n-BUTYLBENZENE	0.420	0.432	-2.9	89	0.00
102	1,2-DIBROMO-3-CHLOROPROPANE	0.394	0.366	7.1	88	0.00
103	HEXACHLOROETHANE	0.687	0.684	0.4	91	0.00
104	HEXACHLOROBUTADIENE	0.679	0.603	11.2	89	0.00
105	1,2,4-TRICHLOROBENZENE	0.352	0.293	16.8	83	0.00
106	NAPHTHALENE	0.871	0.724	16.9	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
W53466.D MW2140.M Fri Feb 12 16:05:29 2016 MSW

Initial Calibration Summary

Job Number: JC15063 **Sample:** VW2152-ICC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53827.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Response Factor Report MSW

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:57:14 2016
Response via : Initial Calibration

Calibration Files
0.04=W53825.D 0.2 =W53823.D 0.5 =W53824.D 5 =W53826.D
10 =W53827.D 20 =W53828.D 40 =W53830.D =
= = = =

Compound	0.04	0.2	0.5	5	10	20	40	Avg	%RSD
1) I BROMOCHLOROMETHANE	----------ISTD----------								
2) 1,1,1-TRIFLUOROETHANE								0.000	-1.00
3) FREON 152A	0.811	0.677	0.767	0.687	0.653	0.572		0.694	12.20
4) CHLORODIFLUOROMETHANE	0.337	0.255	0.283	0.245	0.230	0.203		0.259	17.95
5) DICHLORODIFLUOROMETHANE	3.164	2.591	2.964	2.664	2.458	2.188		2.672	13.12
6) PROPYLENE	1.298	0.895	0.987	0.865	0.791	0.720		0.926	22.01
7) FREON 114	3.340	2.703	3.163	2.882	2.790	2.382		2.877	11.83
8) 1-CHLORO-1,1-DIFLUOROETHANE								0.000	-1.00
9) CHLOROMETHANE	0.371	0.304	0.341	0.299	0.291	0.257		0.311	12.89
10) VINYL CHLORIDE	1.271	1.079	1.245	1.114	1.099	0.937		1.124	10.83
11) 1,3-BUTADIENE	1.016	0.837	0.979	0.876	0.867	0.749		0.887	10.96
12) n-BUTANE	0.293	0.264	0.285	0.255	0.244	0.212		0.259	11.38
13) BROMOMETHANE	1.152	0.955	1.080	1.004	0.971	0.810		0.995	11.77
14) CHLOROETHANE	0.698	0.573	0.675	0.618	0.603	0.515		0.614	10.86
15) DICHLOROFLUOROMETHANE	2.648	2.239	2.546	2.311	2.240	1.913		2.316	11.21
16) ACROLEIN	0.745	0.523	0.500	0.445	0.466	0.405		0.514	23.48
17) TRICHLOROFLUOROMETHANE	2.930	2.357	2.753	2.387	2.312	2.068		2.468	12.79
18) ISOPROPYL ALCOHOL	3.378	2.064	2.146	1.727	1.652	1.486		2.076	33.03
19) ACETONE	0.793	0.585	0.564	0.497	0.522	0.467		0.571	20.47
20) 1,1-DICHLORO-1-FLUOROETHANE								0.000	-1.00
21) ACRYLONITRILE	0.868	0.781	0.907	0.779	0.824	0.750		0.818	7.33
22) PENTANE	0.463	0.346	0.349	0.295	0.289	0.260		0.334	21.64
23) IODOMETHANE									

Initial Calibration Summary

Job Number: JC15063 **Sample:** VW2152-ICC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53827.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

		3.117	2.582	3.014	2.700	2.655	2.393	2.743	9.93
24)	1,1-DICHLOROETHYLENE								
		1.261	1.009	1.159	1.020	1.005	0.919	1.062	11.70
25)	CARBON DISULFIDE								
		3.945	3.001	3.404	2.890	2.791	2.531	3.094	16.36
26)	ETHANOL								
			0.495	0.451	0.374	0.372	0.338	0.406	15.92
27)	ACETONITRILE								
		0.898	0.797	0.906	0.801	0.833	0.743	0.829	7.61
28)	BROMOETHENE								
		1.204	0.991	1.112	1.043	1.005	0.863	1.036	11.15
29)	METHYLENE CHLORIDE								
		1.382	1.116	1.024	0.913	0.898	0.804	1.023	20.17
30)	3-CHLOROPROPENE								
		0.581	0.466	0.567	0.504	0.501	0.454	0.512	10.13
31)	FREON 113								
		2.139	1.809	2.096	1.839	1.829	1.669	1.897	9.59
32)	TRANS-1,2-DICHLOROETHYLENE								
		1.406	0.974	1.154	1.027	1.016	0.933	1.085	16.04
33)	TERTIARY BUTYL ALCOHOL								
		2.477	1.909	2.566	2.082	2.003	1.691	2.121	15.91
34)	METHYL TERTIARY BUTYL ETHER								
		3.431	2.678	3.307	2.733	2.899	2.655	2.951	11.44
35)	TETRAHYDROFURAN								
		0.531	0.492	0.577	0.492	0.524	0.485	0.517	6.76
36)	HEXANE								
		2.022	1.660	1.948	1.688	1.673	1.551	1.757	10.52
37)	VINYL ACETATE								
		0.285	0.252	0.323	0.279	0.299	0.276	0.286	8.33
38)	1,1-DICHLOROETHANE								
		2.154	1.762	2.124	1.812	1.780	1.626	1.876	11.36
39)	METHYL ETHYL KETONE								
		0.512	0.465	0.584	0.495	0.524	0.489	0.511	7.96
40)	cis-1,2-DICHLOROETHYLENE								
		1.443	1.059	1.212	1.089	1.082	0.993	1.146	14.12
41)	DI-ISOPROPYL ETHER								
		1.058	0.894	1.105	0.919	0.986	0.921	0.981	8.69
42)	ETHYL ACETATE								
		0.343	0.335	0.389	0.326	0.358	0.332	0.347	6.65
43)	METHYL ACRYLATE								
		2.023	1.837	2.188	1.847	1.993	1.856	1.957	7.06
44)	CHLOROFORM								
		2.317	1.959	2.293	1.992	1.983	1.817	2.060	9.70
45)	2,4-DIMETHYLPENTANE								
		2.207	1.886	2.277	1.980	1.959	1.831	2.023	8.83
46)	1,1,1-TRICHLOROETHANE								
		2.292	1.967	2.377	2.035	2.008	1.850	2.088	9.72
47)	CARBON TETRACHLORIDE								
		2.470	2.030	2.474	2.124	2.105	1.953	2.193	10.24
48)	1,2-DICHLOROETHANE								
		1.279	1.082	1.310	1.159	1.168	1.071	1.178	8.36
49)	I 1,4-DIFLUOROBENZENE	----------					ISTD	----------	
50)	BENZENE								
		0.734	0.611	0.743	0.637	0.653	0.596	0.662	9.41
51)	CYCLOHEXANE								
		0.391	0.302	0.334	0.287	0.288	0.267	0.311	14.35
52)	2,3-DIMETHYLPENTANE								
		0.173	0.147	0.171	0.147	0.151	0.142	0.155	8.59
53)	TRICHLOROETHYLENE								

Initial Calibration Summary

Job Number: JC15063 **Sample:** VW2152-ICC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53827.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

	0.435	0.288	0.248	0.297	0.266	0.282	0.267	0.298	21.10
54)	DIBROMOMETHANE								
	0.283	0.249	0.305	0.269	0.286	0.266		0.276	6.99
55)	1,2-DICHLOROPROPANE								
	0.283	0.237	0.253	0.217	0.229	0.214		0.239	10.89
56)	ETHYL ACRYLATE								
	0.419	0.377	0.488	0.401	0.457	0.434		0.429	9.27
57)	BROMODICHLOROMETHANE								
	0.468	0.393	0.490	0.424	0.443	0.415		0.439	8.13
58)	2,2,4-TRIMETHYLPENTANE								
	1.132	0.941	1.190	1.029	1.068	0.992		1.058	8.64
59)	1,4-DIOXANE								
	0.110	0.102	0.142	0.113	0.125	0.125		0.119	11.73
60)	METHYL METHACRYLATE								
	0.229	0.196	0.265	0.218	0.234	0.222		0.227	9.99
61)	HEPTANE								
	0.395	0.327	0.413	0.351	0.363	0.341		0.365	9.03
62)	METHYL ISOBUTYL KETONE								
	0.457	0.416	0.498	0.413	0.456	0.432		0.445	7.21
63)	cis-1,3-DICHLOROPROPENE								
	0.352	0.300	0.393	0.358	0.390	0.370		0.361	9.46
64)	TOLUENE								
	0.470	0.413	0.523	0.452	0.489	0.464		0.468	7.84
65)	1,3-DICHLOROPROPANE								
	0.344	0.309	0.396	0.348	0.378	0.360		0.356	8.42
66)	trans-1,3-DICHLOROPROPENE								
	0.230	0.211	0.292	0.262	0.304	0.292		0.265	14.28
67)	1,1,2-TRICHLOROETHANE								
	0.207	0.180	0.232	0.201	0.214	0.203		0.206	8.40
68)	I CHLOROBENZENE-D5	----------ISTD----------							
69)	ETHYL METHACRYLATE								
	0.832	0.788	0.980	0.793	0.845	0.751		0.831	9.64
70)	2-HEXANONE								
	0.514	0.472	0.628	0.510	0.546	0.490		0.527	10.51
71)	TETRACHLOROETHYLENE								
	1.207	0.827	0.714	0.839	0.704	0.703	0.616	0.802	24.30
72)	DIBROMOCHLOROMETHANE								
	1.076	0.942	1.134	0.968	0.975	0.845		0.990	10.32
73)	1,2-DIBROMOETHANE								
	0.700	0.661	0.820	0.734	0.778	0.686		0.730	8.24
74)	OCTANE								
	1.331	1.049	1.265	1.053	1.045	0.900		1.107	14.46
75)	1,1,1,2-TETRACHLOROETHANE								
	0.866	0.780	0.884	0.723	0.729	0.633		0.769	12.33
76)	CHLOROBENZENE								
	1.482	1.272	1.536	1.297	1.333	1.164		1.348	10.27
77)	ETHYLBENZENE								
	2.264	1.959	2.346	1.988	2.057	1.805		2.070	9.74
78)	m,p-XYLENE								
	0.937	0.817	1.006	0.835	0.863	0.758		0.869	10.28
79)	o-XYLENE								
	0.897	0.768	0.971	0.791	0.819	0.725		0.828	10.90
80)	STYRENE								
	1.204	1.050	1.450	1.226	1.305	1.159		1.232	11.01
81)	1,2,3-TRICHLOROPROPANE								
	0.945	0.792	0.940	0.764	0.800	0.705		0.824	11.82
82)	NONANE								
	1.169	0.952	1.286	1.060	1.077	0.922		1.078	12.62
83)	BROMOFORM								

Initial Calibration Summary

Job Number: JC15063 **Sample:** VW2152-ICC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53827.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

```
            0.928 0.847 1.087 0.933 0.988 0.882                    0.944    9.00
 84)  4-BROMOFLUOROBENZENE
             0.998 1.001 1.032 1.205 1.198 1.209 1.166              1.116    8.96
 85)  1,1,2,2-TETRACHLOROETHANE
            1.231 1.090 1.336 1.085 1.147 1.018                    1.151   10.01
 86)  ISOPROPYLBENZENE
            2.719 2.338 2.904 2.356 2.443 2.119                    2.480   11.46
 87)  BROMOBENZENE
            0.659 0.612 0.808 0.688 0.739 0.653                    0.693   10.11
 88)  2-CHLOROTOLUENE
            0.591 0.526 0.669 0.556 0.580 0.509                    0.572    9.92
 89)  n-PROPYLBENZENE
            0.643 0.572 0.766 0.622 0.666 0.590                    0.643   10.78
 90)  4-ETHYLTOLUENE
            1.895 1.714 2.369 1.956 2.108 1.835                    1.980   11.67
 91)  1,3,5-TRIMETHYLBENZENE
            1.983 1.765 2.350 1.868 1.943 1.701                    1.935   11.85
 92)  ALPHA-METHYLSTYRENE
            0.713 0.647 1.019 0.843 0.917 0.818                    0.826   16.29
 93)  TERT-BUTYLBENZENE
            0.560 0.469 0.604 0.486 0.510 0.446                    0.512   11.61
 94)  1,2,4-TRIMETHYLBENZENE
            1.763 1.543 2.117 1.717 1.837 1.618                    1.766   11.39
 95)  m-DICHLOROBENZENE
            0.753 0.646 1.100 0.929 1.054 0.956                    0.906   19.33
 96)  BENZYL CHLORIDE
            0.689 0.628 1.187 1.028 1.257 1.202                    0.999   27.52
 97)  p-DICHLOROBENZENE
            0.667 0.637 1.049 0.907 1.055 0.982                    0.883   21.19
 98)  SEC-BUTYLBENZENE
            0.610 0.532 0.697 0.559 0.588 0.519                    0.584   11.13
 99)  p-ISOPROPYLTOLUENE
            0.602 0.528 0.734 0.585 0.624 0.553                    0.604   11.92
100)  o-DICHLOROBENZENE
            0.812 0.733 1.090 0.901 0.989 0.900                    0.904   13.93
101)  n-BUTYLBENZENE
            0.409 0.358 0.584 0.472 0.518 0.472                    0.469   16.98
102)  1,2-DIBROMO-3-CHLOROPROPANE
            0.312 0.285 0.470 0.393 0.465 0.509                    0.406   22.57
103)  HEXACHLOROETHANE
            0.792 0.722 0.929 0.759 0.774 0.696                    0.779   10.46
104)  HEXACHLOROBUTADIENE
            0.776 0.718 0.903 0.711 0.789 0.672                    0.762   10.72
105)  1,2,4-TRICHLOROBENZENE
            0.190 0.160 0.352 0.287 0.404 0.363                    0.293   33.88
     --Compound 106 fails criteria.--
106)  NAPHTHALENE
            0.403 0.341 0.791 0.697 0.987 1.055                    0.712   41.33
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MW2152.M          Wed Mar 02 09:49:40 2016   MSW
```

Initial Calibration Verification

Job Number: JC15063 **Sample:** VW2152-ICV2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53833.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\W53833.D Vial: 14
Acq On : 2 Mar 2016 9:25 am Operator: danat
Sample : icv2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	BROMOCHLOROMETHANE	1.000	1.000	0.0	100	0.01
2	1,1,1-TRIFLUOROETHANE	0.000	0.000	0.0	0#	-4.97#
3	FREON 152A	0.694	0.746	-7.5	108	0.02
4	CHLORODIFLUOROMETHANE	0.259	0.263	-1.5	107	0.02
5	DICHLORODIFLUOROMETHANE	2.672	2.798	-4.7	105	0.02
6	PROPYLENE	0.926	0.922	0.4	106	0.02
7	FREON 114	2.877	2.973	-3.3	103	0.02
8	1-CHLORO-1,1-DIFLUOROETHANE	0.000	0.000	0.0	0#	-5.36#
9	CHLOROMETHANE	0.311	0.313	-0.6	104	0.02
10	VINYL CHLORIDE	1.124	1.165	-3.6	104	0.02
11	1,3-BUTADIENE	0.887	0.900	-1.5	102	0.02
12	n-BUTANE	0.259	0.266	-2.7	104	0.02
13	BROMOMETHANE	0.995	1.016	-2.1	101	0.02
14	CHLOROETHANE	0.614	0.641	-4.4	103	0.02
15	DICHLOROFLUOROMETHANE	2.316	2.492	-7.6	108	0.02
16	ACROLEIN	0.514	0.495	3.7	111	0.02
17	TRICHLOROFLUOROMETHANE	2.468	2.512	-1.8	105	0.01
18	ISOPROPYL ALCOHOL	2.076	1.989	4.2	115	0.03
19	ACETONE	0.571	0.587	-2.8	118	0.02
20	1,1-DICHLORO-1-FLUOROETHANE	0.000	0.000	0.0	0#	-6.84#
21	ACRYLONITRILE	0.818	0.943	-15.3	121	0.02
22	PENTANE	0.334	0.343	-2.7	116	0.01
23	IODOMETHANE	2.743	2.850	-3.9	105	0.01
24	1,1-DICHLOROETHYLENE	1.062	1.109	-4.4	108	0.01
25	CARBON DISULFIDE	3.094	3.056	1.2	105	0.01
26	ETHANOL	0.406	0.425	-4.7	113	0.03
27	ACETONITRILE	0.829	0.962	-16.0	120	0.02
28	BROMOETHENE	1.036	1.068	-3.1	102	0.01
29	METHYLENE CHLORIDE	1.023	0.944	7.7	103	0.00
30	3-CHLOROPROPENE	0.512	0.485	5.3	96	0.01
31	FREON 113	1.897	1.963	-3.5	106	0.01
32	TRANS-1,2-DICHLOROETHYLENE	1.085	1.075	0.9	104	0.00
33	TERTIARY BUTYL ALCOHOL	2.121	2.170	-2.3	104	0.03
34	METHYL TERTIARY BUTYL ETHER	2.951	2.936	0.5	107	0.01
35	TETRAHYDROFURAN	0.517	0.552	-6.8	112	0.02
36	HEXANE	1.757	1.803	-2.6	107	0.01
37	VINYL ACETATE	0.286	0.236	17.5	84	0.01
38	1,1-DICHLOROETHANE	1.876	1.912	-1.9	105	0.00
39	METHYL ETHYL KETONE	0.511	0.542	-6.1	109	0.01
40	cis-1,2-DICHLOROETHYLENE	1.146	1.119	2.4	102	0.00
41	DI-ISOPROPYL ETHER	0.981	1.044	-6.4	113	0.01
42	ETHYL ACETATE	0.347	0.326	6.1	100	0.02

Initial Calibration Verification

Job Number: JC15063 **Sample:** VW2152-ICV2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53833.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		METHYL ACRYLATE	1.957	1.788	8.6	97	0.01
44		CHLOROFORM	2.060	2.092	-1.6	105	0.01
45		2,4-DIMETHYLPENTANE	2.023	2.162	-6.9	109	0.00
46		1,1,1-TRICHLOROETHANE	2.088	1.930	7.6	95	0.00
47		CARBON TETRACHLORIDE	2.193	1.838	16.2	86	0.00
48		1,2-DICHLOROETHANE	1.178	1.210	-2.7	104	0.01
49	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	101	0.00
50		BENZENE	0.662	0.659	0.5	105	0.00
51		CYCLOHEXANE	0.311	0.301	3.2	106	0.00
52		2,3-DIMETHYLPENTANE	0.155	0.157	-1.3	108	0.00
53		TRICHLOROETHYLENE	0.298	0.262	12.1	100	0.01
54		DIBROMOMETHANE	0.276	0.271	1.8	102	0.00
55		1,2-DICHLOROPROPANE	0.239	0.233	2.5	109	0.00
56		ETHYL ACRYLATE	0.429	0.394	8.2	99	0.01
57		BROMODICHLOROMETHANE	0.439	0.385	12.3	92	0.00
58		2,2,4-TRIMETHYLPENTANE	1.058	1.090	-3.0	107	0.00
59		1,4-DIOXANE	0.119	0.130	-9.2	116	0.02
60		METHYL METHACRYLATE	0.227	0.216	4.8	100	0.01
61		HEPTANE	0.365	0.372	-1.9	107	0.00
62		METHYL ISOBUTYL KETONE	0.445	0.453	-1.8	111	0.02
63		cis-1,3-DICHLOROPROPENE	0.361	0.328	9.1	93	0.00
64		TOLUENE	0.468	0.476	-1.7	107	0.00
65		1,3-DICHLOROPROPANE	0.356	0.353	0.8	103	0.00
66		trans-1,3-DICHLOROPROPENE	0.265	0.256	3.4	99	0.01
67		1,1,2-TRICHLOROETHANE	0.206	0.208	-1.0	105	0.01
68	I	CHLOROBENZENE-D5	1.000	1.000	0.0	101	0.00
69		ETHYL METHACRYLATE	0.831	0.790	4.9	101	0.01
70		2-HEXANONE	0.527	0.542	-2.8	107	0.02
71		TETRACHLOROETHYLENE	0.802	0.709	11.6	102	0.00
72		DIBROMOCHLOROMETHANE	0.990	0.850	14.1	89	0.01
73		1,2-DIBROMOETHANE	0.730	0.716	1.9	98	0.01
74		OCTANE	1.107	1.120	-1.2	107	0.00
75		1,1,1,2-TETRACHLOROETHANE	0.769	0.700	9.0	98	0.00
76		CHLOROBENZENE	1.348	1.318	2.2	102	0.00
77		ETHYLBENZENE	2.070	2.057	0.6	104	0.00
78		m,p-XYLENE	0.869	0.857	1.4	104	0.00
79		o-XYLENE	0.828	0.822	0.7	105	0.00
80		STYRENE	1.232	1.245	-1.1	102	0.01
81		1,2,3-TRICHLOROPROPANE	0.824	0.802	2.7	106	0.00
82		NONANE	1.078	1.144	-6.1	109	0.00
83		BROMOFORM	0.944	0.802	15.0	87	0.01
84	S	4-BROMOFLUOROBENZENE	1.116	1.178	-5.6	99	0.00
85		1,1,2,2-TETRACHLOROETHANE	1.151	1.115	3.1	104	0.00
86		ISOPROPYLBENZENE	2.480	2.478	0.1	106	0.00
87		BROMOBENZENE	0.693	0.688	0.7	101	0.00
88		2-CHLOROTOLUENE	0.572	0.562	1.7	102	0.00
89		n-PROPYLBENZENE	0.643	0.645	-0.3	105	0.00
90		4-ETHYLTOLUENE	1.980	2.089	-5.5	108	0.00
91		1,3,5-TRIMETHYLBENZENE	1.935	1.900	1.8	103	0.00
92		ALPHA-METHYLSTYRENE	0.826	0.893	-8.1	107	0.00
93		TERT-BUTYLBENZENE	0.512	0.511	0.2	106	0.00
94		1,2,4-TRIMETHYLBENZENE	1.766	1.769	-0.2	104	0.00
95		m-DICHLOROBENZENE	0.906	0.969	-7.0	105	0.00
96		BENZYL CHLORIDE	0.999	0.943	5.6	92	0.00
97		p-DICHLOROBENZENE	0.883	0.881	0.2	98	0.00
98		SEC-BUTYLBENZENE	0.584	0.588	-0.7	106	0.00
99		p-ISOPROPYLTOLUENE	0.604	0.625	-3.5	108	0.00
100		o-DICHLOROBENZENE	0.904	0.918	-1.5	103	0.00

Initial Calibration Verification

Job Number: JC15063 **Sample:** VW2152-ICV2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W53833.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

101	n-BUTYLBENZENE	0.469	0.503	-7.2	107	0.00
102	1,2-DIBROMO-3-CHLOROPROPANE	0.406	0.382	5.9	98	0.00
103	HEXACHLOROETHANE	0.779	0.643	17.5	85	0.00
104	HEXACHLOROBUTADIENE	0.762	0.739	3.0	105	0.00
105	1,2,4-TRICHLOROBENZENE	0.293	0.349	-19.1	123	0.00
106	NAPHTHALENE	0.712	0.733	-2.9	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
W53827.D MW2152.M Wed Mar 02 09:50:40 2016 MSW

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2161-CC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W54080.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\W54080.D Vial: 2
Acq On : 11 Mar 2016 9:32 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	BROMOCHLOROMETHANE	1.000	1.000	0.0	73	-0.02
2	1,1,1-TRIFLUOROETHANE	0.000	0.000	0.0	0#	-4.97#
3	FREON 152A	0.694	0.700	-0.9	74	-0.02
4	CHLORODIFLUOROMETHANE	0.259	0.268	-3.5	80	-0.02
5	DICHLORODIFLUOROMETHANE	2.672	2.739	-2.5	75	-0.02
6	PROPYLENE	0.926	1.020	-10.2	86	-0.02
7	FREON 114	2.877	2.783	3.3	70	-0.02
8	1-CHLORO-1,1-DIFLUOROETHANE	0.000	0.000	0.0	0#	-5.36#
9	CHLOROMETHANE	0.311	0.338	-8.7	82	-0.02
10	VINYL CHLORIDE	1.124	1.177	-4.7	77	-0.02
11	1,3-BUTADIENE	0.887	0.961	-8.3	80	-0.02
12	n-BUTANE	0.259	0.266	-2.7	76	-0.02
13	BROMOMETHANE	0.995	0.959	3.6	70	-0.03
14	CHLOROETHANE	0.614	0.640	-4.2	75	-0.03
15	DICHLOROFLUOROMETHANE	2.316	2.497	-7.8	79	-0.02
16	ACROLEIN	0.514	0.477	7.2	78	-0.02
17	TRICHLOROFLUOROMETHANE	2.468	2.807	-13.7	86	-0.03
18	ISOPROPYL ALCOHOL	2.076	2.304	-11.0	97	-0.02
19	ACETONE	0.571	0.575	-0.7	84	-0.02
20	1,1-DICHLORO-1-FLUOROETHANE	0.000	0.000	0.0	0#	-6.84#
21	ACRYLONITRILE	0.818	0.939	-14.8	88	-0.02
22	PENTANE	0.334	0.347	-3.9	86	-0.02
23	IODOMETHANE	2.743	2.604	5.1	70	-0.02
24	1,1-DICHLOROETHYLENE	1.062	1.054	0.8	75	-0.03
25	CARBON DISULFIDE	3.094	3.197	-3.3	81	-0.02
26	ETHANOL	0.406	0.518	-27.6	101	-0.03
27	ACETONITRILE	0.829	1.035	-24.8	94	-0.02
28	BROMOETHENE	1.036	1.020	1.5	71	-0.03
29	METHYLENE CHLORIDE	1.023	0.972	5.0	77	-0.02
30	3-CHLOROPROPENE	0.512	0.542	-5.9	78	-0.02
31	FREON 113	1.897	1.779	6.2	70	-0.02
32	TRANS-1,2-DICHLOROETHYLENE	1.085	1.054	2.9	75	-0.02
33	TERTIARY BUTYL ALCOHOL	2.121	2.494	-17.6	87	-0.01
34	METHYL TERTIARY BUTYL ETHER	2.951	3.126	-5.9	83	-0.01
35	TETRAHYDROFURAN	0.517	0.540	-4.4	80	0.00
36	HEXANE	1.757	1.977	-12.5	85	-0.02
37	VINYL ACETATE	0.286	0.295	-3.1	77	-0.02
38	1,1-DICHLOROETHANE	1.876	2.101	-12.0	84	-0.02
39	METHYL ETHYL KETONE	0.511	0.534	-4.5	79	-0.01
40	cis-1,2-DICHLOROETHYLENE	1.146	1.113	2.9	74	-0.02
41	DI-ISOPROPYL ETHER	0.981	0.974	0.7	77	-0.01
42	ETHYL ACETATE	0.347	0.359	-3.5	80	0.00

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2161-CC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W54080.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		METHYL ACRYLATE	1.957	2.189	-11.9	86	-0.02
44		CHLOROFORM	2.060	2.180	-5.8	80	-0.02
45		2,4-DIMETHYLPENTANE	2.023	2.301	-13.7	85	-0.02
46		1,1,1-TRICHLOROETHANE	2.088	2.257	-8.1	81	-0.02
47		CARBON TETRACHLORIDE	2.193	2.364	-7.8	81	-0.02
48		1,2-DICHLOROETHANE	1.178	1.439	-22.2	90	-0.02
49	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	71	-0.02
50		BENZENE	0.662	0.706	-6.6	79	-0.02
51		CYCLOHEXANE	0.311	0.313	-0.6	77	-0.02
52		2,3-DIMETHYLPENTANE	0.155	0.163	-5.2	78	-0.02
53		TRICHLOROETHYLENE	0.298	0.277	7.0	74	-0.01
54		DIBROMOMETHANE	0.276	0.250	9.4	66	-0.02
55		1,2-DICHLOROPROPANE	0.239	0.263	-10.0	86	-0.02
56		ETHYL ACRYLATE	0.429	0.470	-9.6	83	-0.01
57		BROMODICHLOROMETHANE	0.439	0.476	-8.4	80	-0.02
58		2,2,4-TRIMETHYLPENTANE	1.058	1.238	-17.0	85	-0.02
59		1,4-DIOXANE	0.119	0.133	-11.8	84	-0.02
60		METHYL METHACRYLATE	0.227	0.231	-1.8	75	-0.01
61		HEPTANE	0.365	0.468	-28.2	95	-0.02
62		METHYL ISOBUTYL KETONE	0.445	0.521	-17.1	90	0.00
63		cis-1,3-DICHLOROPROPENE	0.361	0.395	-9.4	78	-0.01
64		TOLUENE	0.468	0.504	-7.7	79	-0.02
65		1,3-DICHLOROPROPANE	0.356	0.400	-12.4	81	-0.02
66		trans-1,3-DICHLOROPROPENE	0.265	0.294	-10.9	80	-0.01
67		1,1,2-TRICHLOROETHANE	0.206	0.224	-8.7	79	-0.02
68	I	CHLOROBENZENE-D5	1.000	1.000	0.0	75	-0.01
69		ETHYL METHACRYLATE	0.831	0.792	4.7	75	-0.01
70		2-HEXANONE	0.527	0.540	-2.5	79	-0.01
71		TETRACHLOROETHYLENE	0.802	0.639	20.3	68	-0.02
72		DIBROMOCHLOROMETHANE	0.990	0.957	3.3	74	-0.02
73		1,2-DIBROMOETHANE	0.730	0.697	4.5	71	-0.01
74		OCTANE	1.107	1.374	-24.1	98	-0.02
75		1,1,1,2-TETRACHLOROETHANE	0.769	0.733	4.7	76	-0.02
76		CHLOROBENZENE	1.348	1.283	4.8	74	-0.02
77		ETHYLBENZENE	2.070	2.040	1.4	77	-0.02
78		m,p-XYLENE	0.869	0.850	2.2	76	-0.02
79		o-XYLENE	0.828	0.835	-0.8	79	-0.02
80		STYRENE	1.232	1.233	-0.1	75	-0.01
81		1,2,3-TRICHLOROPROPANE	0.824	0.877	-6.4	86	-0.02
82		NONANE	1.078	1.502	-39.3#	106	-0.01
83		BROMOFORM	0.944	0.908	3.8	73	-0.01
84	S	4-BROMOFLUOROBENZENE	1.116	1.131	-1.3	71	-0.02
85		1,1,2,2-TETRACHLOROETHANE	1.151	1.195	-3.8	82	-0.02
86		ISOPROPYLBENZENE	2.480	2.540	-2.4	81	-0.01
87		BROMOBENZENE	0.693	0.681	1.7	74	-0.01
88		2-CHLOROTOLUENE	0.572	0.588	-2.8	79	-0.01
89		n-PROPYLBENZENE	0.643	0.666	-3.6	80	-0.01
90		4-ETHYLTOLUENE	1.980	2.125	-7.3	81	-0.01
91		1,3,5-TRIMETHYLBENZENE	1.935	2.020	-4.4	81	-0.01
92		ALPHA-METHYLSTYRENE	0.826	0.885	-7.1	79	-0.01
93		TERT-BUTYLBENZENE	0.512	0.524	-2.3	81	-0.01
94		1,2,4-TRIMETHYLBENZENE	1.766	1.891	-7.1	82	-0.01
95		m-DICHLOROBENZENE	0.906	0.950	-4.9	76	-0.01
96		BENZYL CHLORIDE	0.999	1.043	-4.4	76	-0.02
97		p-DICHLOROBENZENE	0.883	0.899	-1.8	74	-0.02
98		SEC-BUTYLBENZENE	0.584	0.618	-5.8	83	-0.01
99		p-ISOPROPYLTOLUENE	0.604	0.640	-6.0	82	-0.01
100		o-DICHLOROBENZENE	0.904	0.953	-5.4	79	-0.01

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2161-CC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W54080.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

101	n-BUTYLBENZENE	0.469	0.508	-8.3	81	-0.02
102	1,2-DIBROMO-3-CHLOROPROPANE	0.406	0.397	2.2	76	-0.01
103	HEXACHLOROETHANE	0.779	0.824	-5.8	81	-0.01
104	HEXACHLOROBUTADIENE	0.762	0.773	-1.4	81	-0.01
105	1,2,4-TRICHLOROBENZENE	0.293	0.300	-2.4	78	-0.01
106	NAPHTHALENE	0.712	0.721	-1.3	77	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
W53827.D MW2152.M Fri Mar 11 15:49:53 2016 MSW

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2162-CC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W54111.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\W54111.D Vial: 2
Acq On : 12 Mar 2016 11:14 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	BROMOCHLOROMETHANE	1.000	1.000	0.0	81	-0.01
2	1,1,1-TRIFLUOROETHANE	0.000	0.000	0.0	0#	-4.97#
3	FREON 152A	0.694	0.750	-8.1	89	0.00
4	CHLORODIFLUOROMETHANE	0.259	0.278	-7.3	92	0.00
5	DICHLORODIFLUOROMETHANE	2.672	3.027	-13.3	92	0.00
6	PROPYLENE	0.926	1.074	-16.0	101	0.00
7	FREON 114	2.877	3.241	-12.7	91	0.00
8	1-CHLORO-1,1-DIFLUOROETHANE	0.000	0.000	0.0	0#	-5.36#
9	CHLOROMETHANE	0.311	0.361	-16.1	98	0.00
10	VINYL CHLORIDE	1.124	1.308	-16.4	95	0.00
11	1,3-BUTADIENE	0.887	1.037	-16.9	96	0.00
12	n-BUTANE	0.259	0.296	-14.3	94	0.00
13	BROMOMETHANE	0.995	1.145	-15.1	93	0.00
14	CHLOROETHANE	0.614	0.684	-11.4	90	0.00
15	DICHLOROFLUOROMETHANE	2.316	2.651	-14.5	93	0.00
16	ACROLEIN	0.514	0.477	7.2	87	0.00
17	TRICHLOROFLUOROMETHANE	2.468	3.026	-22.6	103	0.00
18	ISOPROPYL ALCOHOL	2.076	2.219	-6.9	104	0.00
19	ACETONE	0.571	0.571	0.0	93	0.00
20	1,1-DICHLORO-1-FLUOROETHANE	0.000	0.000	0.0	0#	-6.84#
21	ACRYLONITRILE	0.818	0.932	-13.9	97	0.00
22	PENTANE	0.334	0.351	-5.1	97	0.00
23	IODOMETHANE	2.743	3.035	-10.6	91	0.00
24	1,1-DICHLOROETHYLENE	1.062	1.133	-6.7	90	-0.01
25	CARBON DISULFIDE	3.094	3.289	-6.3	92	0.00
26	ETHANOL	0.406	0.516	-27.1	112	0.00
27	ACETONITRILE	0.829	0.980	-18.2	99	0.00
28	BROMOETHENE	1.036	1.205	-16.3	94	0.00
29	METHYLENE CHLORIDE	1.023	1.003	2.0	89	-0.01
30	3-CHLOROPROPENE	0.512	0.569	-11.1	91	0.00
31	FREON 113	1.897	1.970	-3.8	87	0.00
32	TRANS-1,2-DICHLOROETHYLENE	1.085	1.121	-3.3	89	-0.01
33	TERTIARY BUTYL ALCOHOL	2.121	2.498	-17.8	97	0.00
34	METHYL TERTIARY BUTYL ETHER	2.951	3.075	-4.2	91	0.00
35	TETRAHYDROFURAN	0.517	0.534	-3.3	88	0.00
36	HEXANE	1.757	1.894	-7.8	91	-0.01
37	VINYL ACETATE	0.286	0.299	-4.5	87	0.00
38	1,1-DICHLOROETHANE	1.876	2.051	-9.3	92	-0.01
39	METHYL ETHYL KETONE	0.511	0.521	-2.0	85	0.00
40	cis-1,2-DICHLOROETHYLENE	1.146	1.153	-0.6	86	-0.01
41	DI-ISOPROPYL ETHER	0.981	0.971	1.0	86	0.00
42	ETHYL ACETATE	0.347	0.341	1.7	85	0.00

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2162-CC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W54111.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

43		METHYL ACRYLATE	1.957	2.054	-5.0	90	0.00
44		CHLOROFORM	2.060	2.209	-7.2	90	0.00
45		2,4-DIMETHYLPENTANE	2.023	2.253	-11.4	92	-0.01
46		1,1,1-TRICHLOROETHANE	2.088	2.290	-9.7	91	-0.01
47		CARBON TETRACHLORIDE	2.193	2.424	-10.5	93	-0.01
48		1,2-DICHLOROETHANE	1.178	1.431	-21.5	100	0.00
49	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	82	-0.01
50		BENZENE	0.662	0.682	-3.0	88	-0.01
51		CYCLOHEXANE	0.311	0.306	1.6	87	-0.02
52		2,3-DIMETHYLPENTANE	0.155	0.157	-1.3	88	-0.01
53		TRICHLOROETHYLENE	0.298	0.275	7.7	85	-0.01
54		DIBROMOMETHANE	0.276	0.281	-1.8	85	-0.02
55		1,2-DICHLOROPROPANE	0.239	0.243	-1.7	91	-0.01
56		ETHYL ACRYLATE	0.429	0.429	0.0	87	0.00
57		BROMODICHLOROMETHANE	0.439	0.460	-4.8	89	-0.01
58		2,2,4-TRIMETHYLPENTANE	1.058	1.160	-9.6	92	-0.02
59		1,4-DIOXANE	0.119	0.130	-9.2	94	0.00
60		METHYL METHACRYLATE	0.227	0.214	5.7	80	0.00
61		HEPTANE	0.365	0.450	-23.3	105	-0.01
62		METHYL ISOBUTYL KETONE	0.445	0.464	-4.3	92	0.00
63		cis-1,3-DICHLOROPROPENE	0.361	0.391	-8.3	89	-0.01
64		TOLUENE	0.468	0.483	-3.2	87	-0.01
65		1,3-DICHLOROPROPANE	0.356	0.348	2.2	82	-0.01
66		trans-1,3-DICHLOROPROPENE	0.265	0.282	-6.4	88	-0.01
67		1,1,2-TRICHLOROETHANE	0.206	0.214	-3.9	87	-0.01
68	I	CHLOROBENZENE-D5	1.000	1.000	0.0	82	-0.01
69		ETHYL METHACRYLATE	0.831	0.770	7.3	80	-0.01
70		2-HEXANONE	0.527	0.527	0.0	85	0.00
71		TETRACHLOROETHYLENE	0.802	0.728	9.2	85	-0.01
72		DIBROMOCHLOROMETHANE	0.990	1.041	-5.2	88	-0.01
73		1,2-DIBROMOETHANE	0.730	0.759	-4.0	85	-0.01
74		OCTANE	1.107	1.304	-17.8	101	-0.01
75		1,1,1,2-TETRACHLOROETHANE	0.769	0.768	0.1	87	-0.02
76		CHLOROBENZENE	1.348	1.336	0.9	84	-0.01
77		ETHYLBENZENE	2.070	2.045	1.2	84	-0.01
78		m,p-XYLENE	0.869	0.861	0.9	84	-0.02
79		o-XYLENE	0.828	0.825	0.4	85	-0.01
80		STYRENE	1.232	1.229	0.2	82	-0.01
81		1,2,3-TRICHLOROPROPANE	0.824	0.813	1.3	87	-0.01
82		NONANE	1.078	1.325	-22.9	102	-0.01
83		BROMOFORM	0.944	0.979	-3.7	86	-0.01
84	S	4-BROMOFLUOROBENZENE	1.116	1.108	0.7	76	-0.02
85		1,1,2,2-TETRACHLOROETHANE	1.151	1.134	1.5	86	-0.01
86		ISOPROPYLBENZENE	2.480	2.450	1.2	85	-0.01
87		BROMOBENZENE	0.693	0.694	-0.1	83	-0.01
88		2-CHLOROTOLUENE	0.572	0.576	-0.7	85	-0.01
89		n-PROPYLBENZENE	0.643	0.645	-0.3	85	-0.01
90		4-ETHYLTOLUENE	1.980	2.030	-2.5	85	-0.01
91		1,3,5-TRIMETHYLBENZENE	1.935	1.920	0.8	84	-0.01
92		ALPHA-METHYLSTYRENE	0.826	0.851	-3.0	83	-0.01
93		TERT-BUTYLBENZENE	0.512	0.510	0.4	86	-0.02
94		1,2,4-TRIMETHYLBENZENE	1.766	1.772	-0.3	85	-0.01
95		m-DICHLOROBENZENE	0.906	0.922	-1.8	81	-0.01
96		BENZYL CHLORIDE	0.999	0.943	5.6	75	-0.02
97		p-DICHLOROBENZENE	0.883	0.855	3.2	77	-0.02
98		SEC-BUTYLBENZENE	0.584	0.591	-1.2	87	-0.01
99		p-ISOPROPYLTOLUENE	0.604	0.614	-1.7	86	-0.01
100		o-DICHLOROBENZENE	0.904	0.926	-2.4	84	-0.01

Continuing Calibration Summary

Job Number: JC15063 **Sample:** VW2162-CC2152
Account: FESPAE Forensic Environmental Services **Lab FileID:** W54111.D
Project: Former Norton, 2600 Seventh Avenue, Watervliet, NY

101	n-BUTYLBENZENE	0.469	0.477	-1.7	83	-0.02
102	1,2-DIBROMO-3-CHLOROPROPANE	0.406	0.389	4.2	81	-0.01
103	HEXACHLOROETHANE	0.779	0.828	-6.3	89	-0.01
104	HEXACHLOROBUTADIENE	0.762	0.792	-3.9	91	-0.01
105	1,2,4-TRICHLOROBENZENE	0.293	0.292	0.3	83	-0.01
106	NAPHTHALENE	0.712	0.674	5.3	79	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
W53827.D MW2152.M Sun Mar 13 11:23:08 2016 MSW

GC/MS Volatiles

Raw Data

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:48:08 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

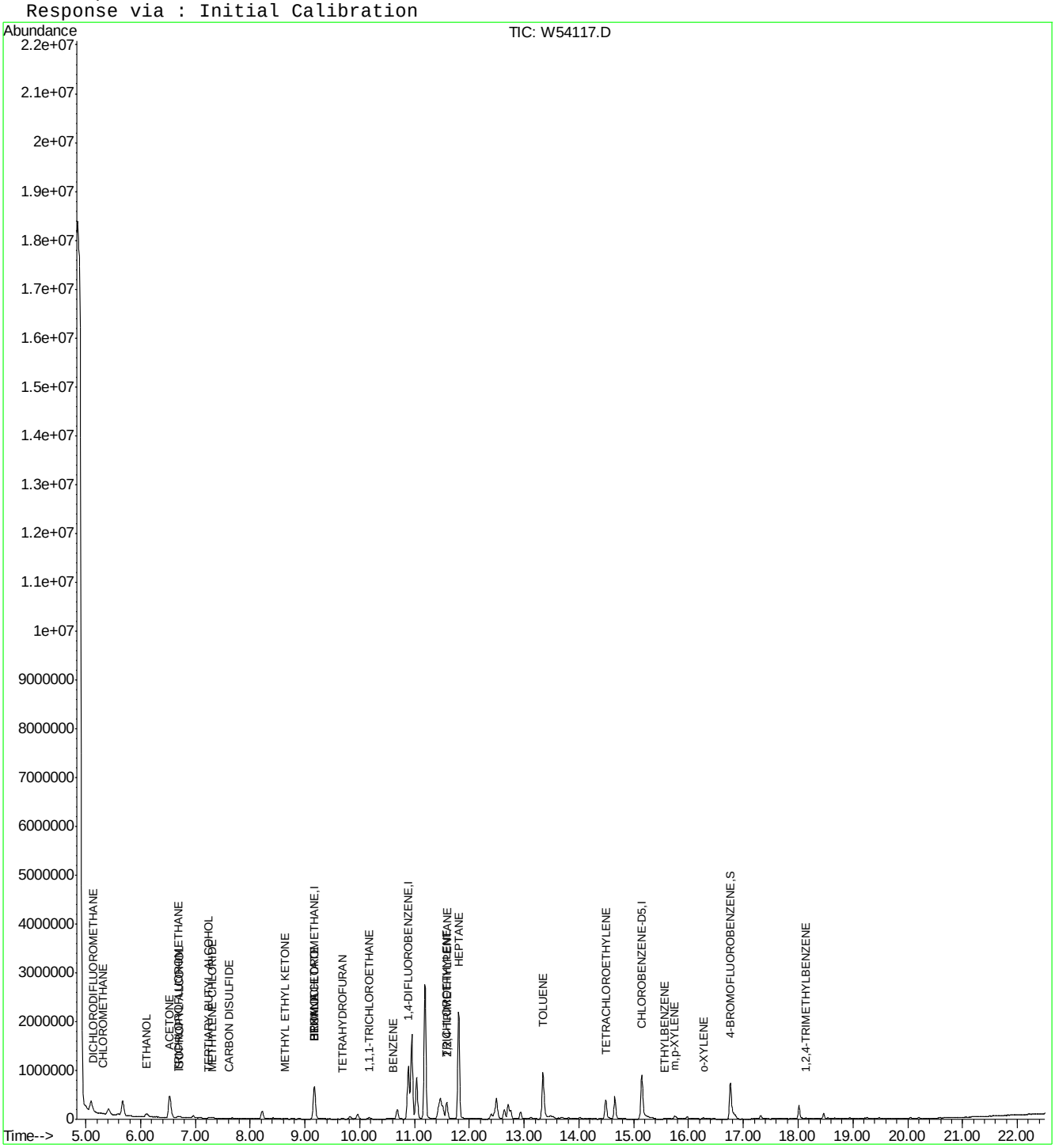
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	254716	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1331356	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.14	82	507143	10.00	PPBV		-0.02
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	440358	7.78	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 77.80%				
Target Compounds							Qvalue
5) DICHLORODIFLUOROMETHANE	5.14	85	36917	0.54	PPBV		97
9) CHLOROMETHANE	5.32	52	1726	0.22	PPBV	#	43
17) TRICHLOROFLUOROMETHANE	6.68	101	26457	0.42	PPBV		98
18) ISOPROPYL ALCOHOL	6.71	45	38478	0.73	PPBV		74
19) ACETONE	6.53	58	276109	18.98	PPBV		90
25) CARBON DISULFIDE	7.61	76	21227	0.27	PPBV	#	81
26) ETHANOL	6.10	45	142243	13.75	PPBV		98
29) METHYLENE CHLORIDE	7.31	84	12884	0.49	PPBV		86
33) TERTIARY BUTYL ALCOHOL	7.24	59	15108	0.28	PPBV	#	65
35) TETRAHYDROFURAN	9.68	72	1509	0.11	PPBV	#	77
36) HEXANE	9.18	57	31685	0.71	PPBV		90
39) METHYL ETHYL KETONE	8.63	72	7314	0.56	PPBV	#	91
42) ETHYL ACETATE	9.18	61	9881	1.12	PPBV	#	32
46) 1,1,1-TRICHLOROETHANE	10.17	97	17230	0.32	PPBV		98
50) BENZENE	10.60	78	14846	0.17	PPBV		95
53) TRICHLOROETHYLENE	11.58	95	1000	0.03	PPBV	#	1
58) 2,2,4-TRIMETHYLPENTANE	11.58	57	50401	0.36	PPBV	#	1
61) HEPTANE	11.80	43	1207587	24.85	PPBV		92
64) TOLUENE	13.35	92	701346	11.25	PPBV		98
71) TETRACHLOROETHYLENE	14.49	164	166939	4.11	PPBV		97
77) ETHYLBENZENE	15.57	91	22294	0.21	PPBV		97
78) m,p-XYLENE	15.75	106	33958	0.77	PPBV		93
79) o-XYLENE	16.27	106	10177	0.24	PPBV		92
94) 1,2,4-TRIMETHYLBENZENE	18.14	105	13525	0.15	PPBV	#	33

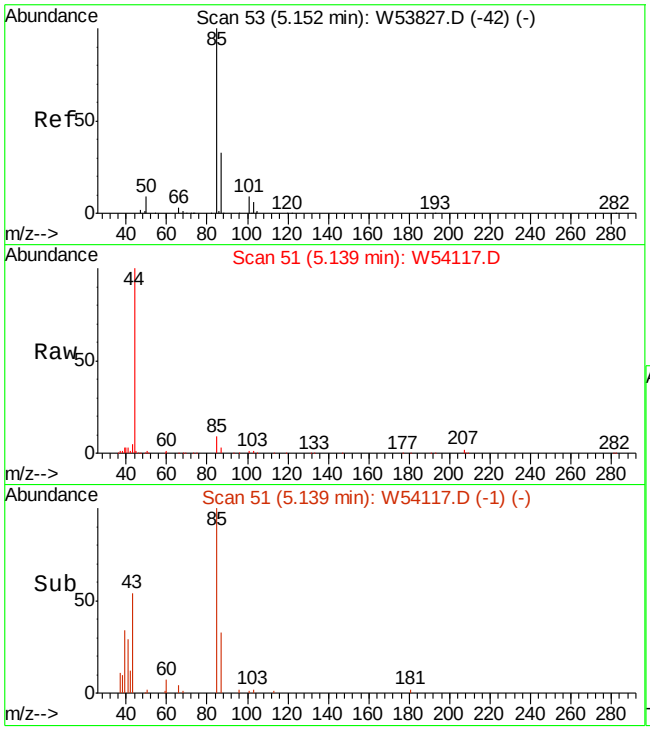
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:29 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration

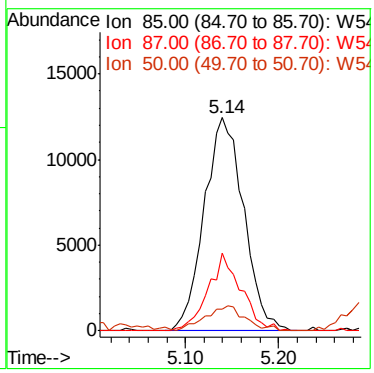


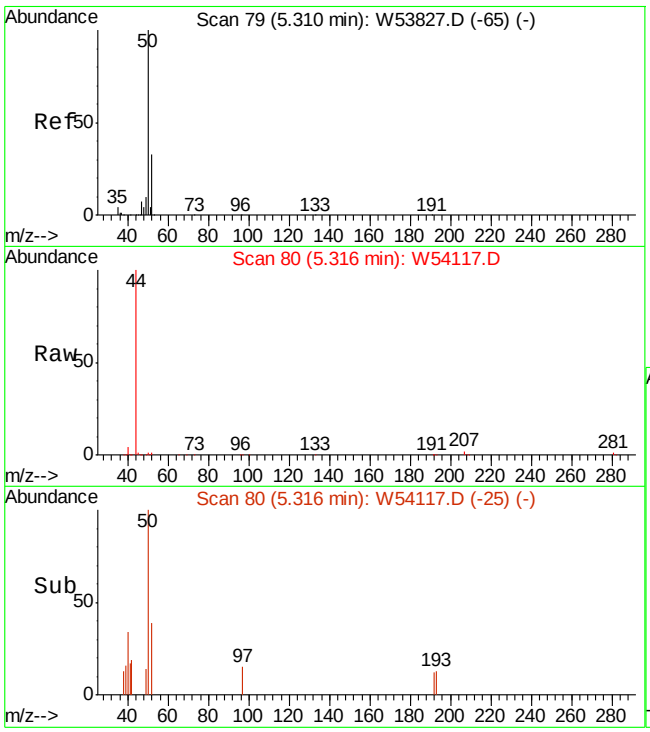


#5
DICHLORODIFLUOROMETHANE
Concen: 0.54 PPBV
RT: 5.14 min Scan# 51
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 85 Resp: 36917

Ion	Ratio	Lower	Upper
85	100		
87	30.6	12.4	52.4
50	11.8	0.0	30.2

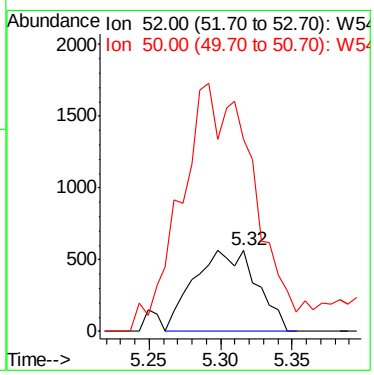


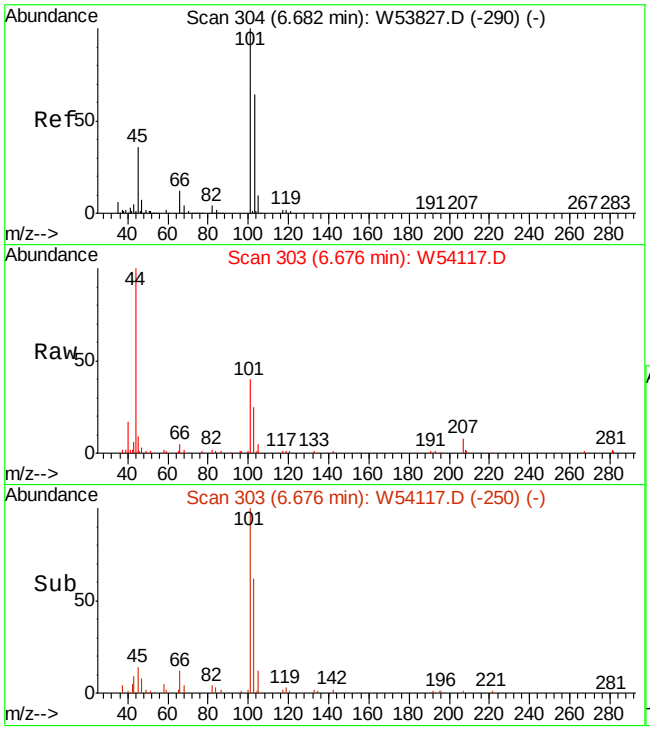


#9
CHLOROMETHANE
Concen: 0.22 PPBV
RT: 5.32 min Scan# 80
Delta R.T. 0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 52 Resp: 1726

Ion	Ratio	Lower	Upper
52	100		
50	184.6	274.8	314.8#

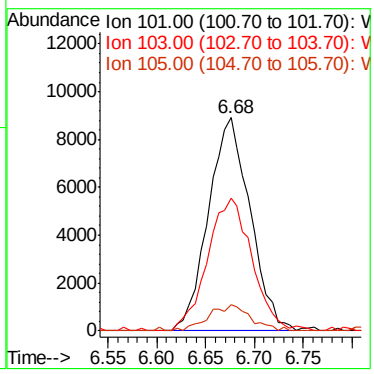


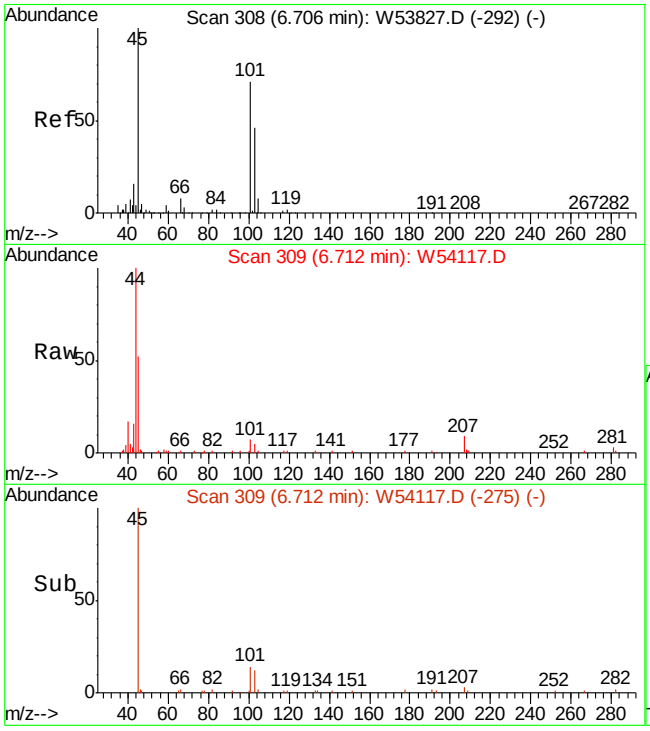


#17
TRICHLOROFLUOROMETHANE
Concen: 0.42 PPBV
RT: 6.68 min Scan# 303
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion:101 Resp: 26457

Ion	Ratio	Lower	Upper
101	100		
103	66.5	45.0	85.0
105	12.2	0.0	30.6

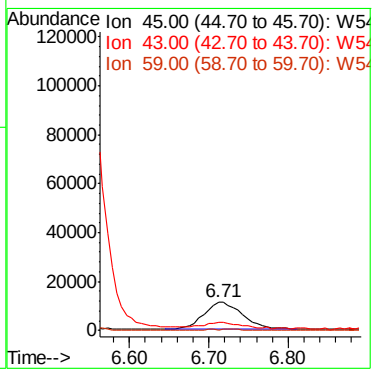


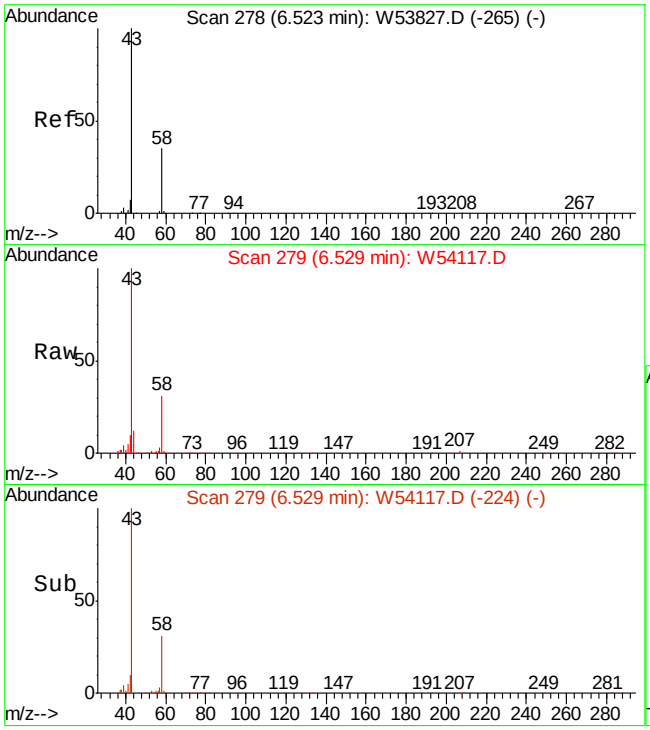


#18
ISOPROPYL ALCOHOL
Concen: 0.73 PPBV
RT: 6.71 min Scan# 309
Delta R.T. 0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 45 Resp: 38478

Ion	Ratio	Lower	Upper
45	100		
43	30.5	0.0	37.1
59	2.8	0.0	24.3

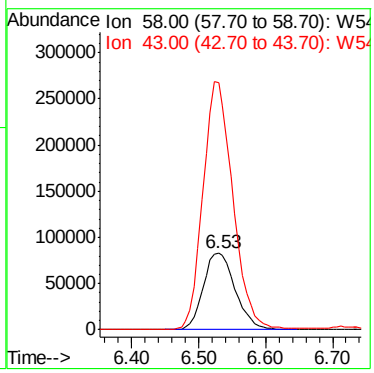


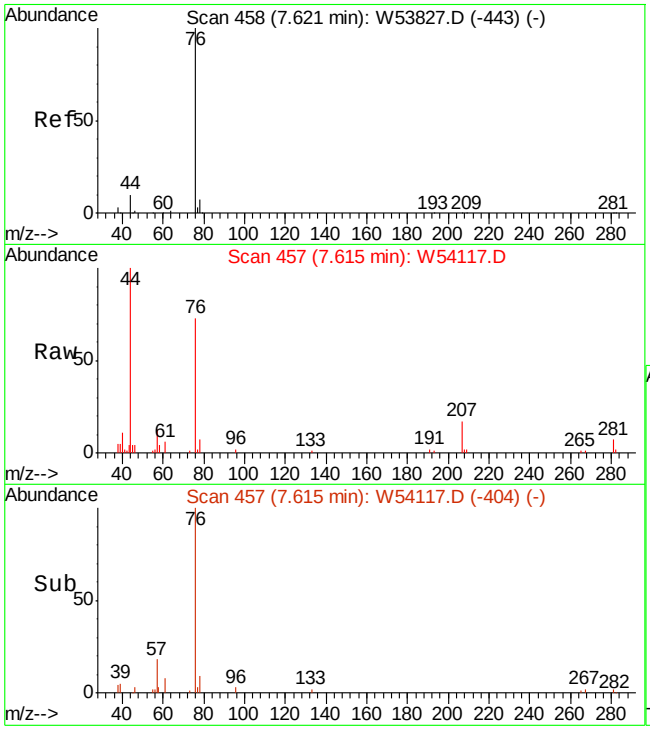


#19
ACETONE
Concen: 18.98 PPBV
RT: 6.53 min Scan# 279
Delta R.T. 0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 58 Resp: 276109

Ion	Ratio	Lower	Upper
58	100		
43	302.6	263.9	303.9

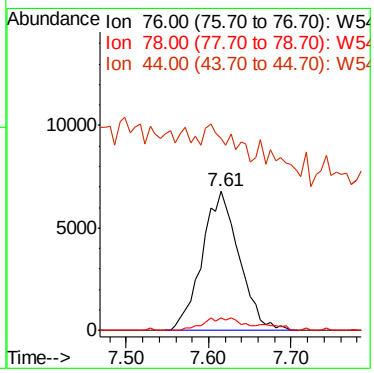


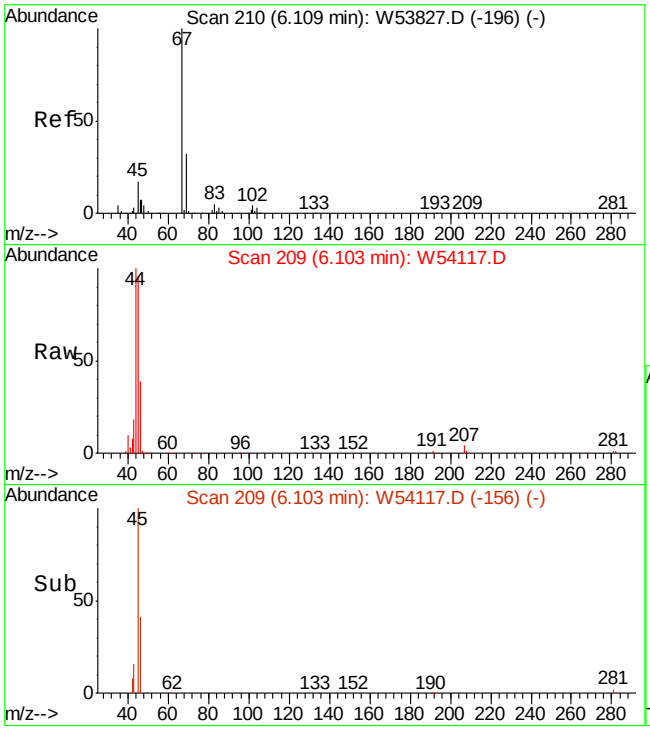


#25
CARBON DISULFIDE
Concen: 0.27 PPBV
RT: 7.61 min Scan# 457
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 76 Resp: 21227

Ion	Ratio	Lower	Upper
76	100		
78	12.0	0.0	28.8
44	0.0	0.0	30.4

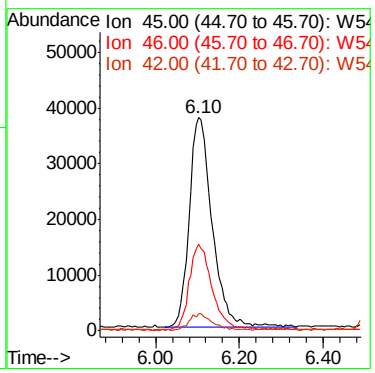


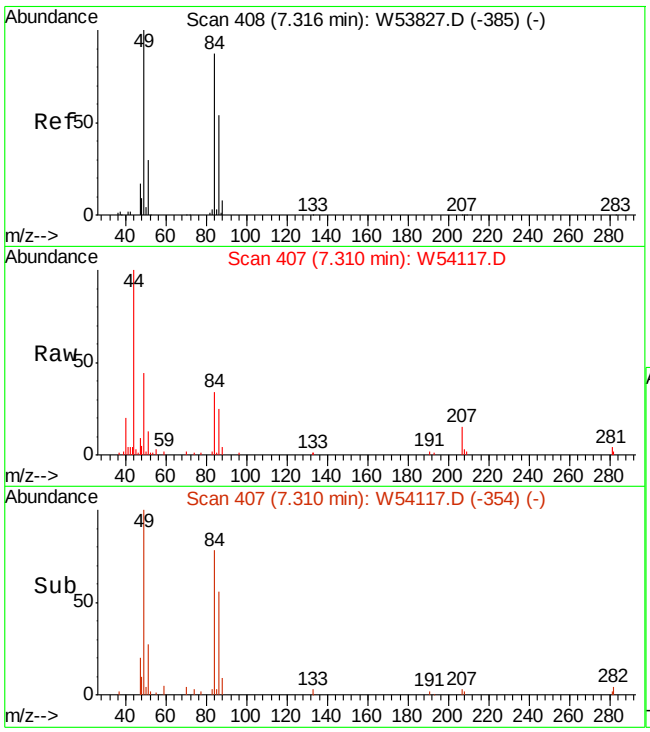


#26
ETHANOL
Concen: 13.75 PPBV
RT: 6.10 min Scan# 209
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 45 Resp: 142243

Ion	Ratio	Lower	Upper
45	100		
46	40.3	21.2	61.2
42	7.9	0.0	29.3

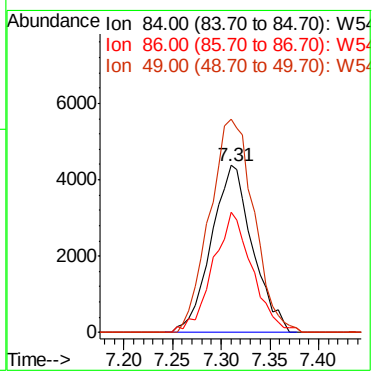


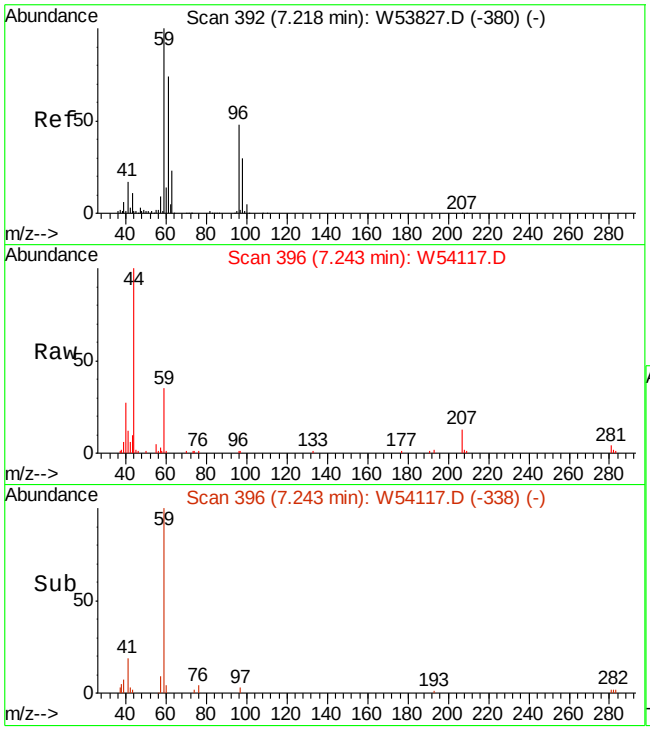


#29
METHYLENE CHLORIDE
Concen: 0.49 PPBV
RT: 7.31 min Scan# 407
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 84 Resp: 12884

Ion	Ratio	Lower	Upper
84	100		
86	68.6	43.3	83.3
49	137.1	0.0	317.4

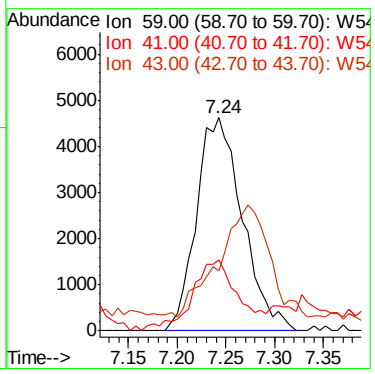


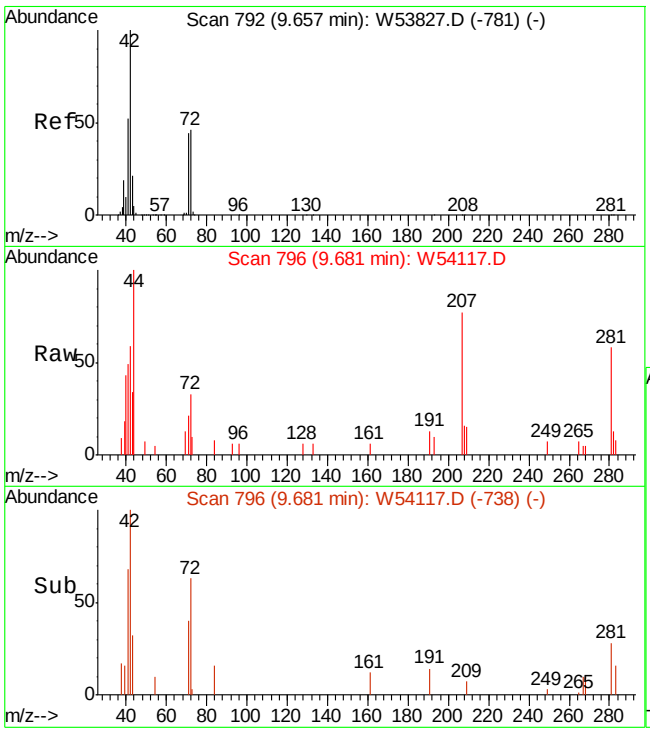


#33
TERTIARY BUTYL ALCOHOL
Concen: 0.28 PPBV
RT: 7.24 min Scan# 396
Delta R.T. 0.02 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 59 Resp: 15108

Ion	Ratio	Lower	Upper
59	100		
41	33.7	0.0	37.3
43	0.0	0.0	31.8

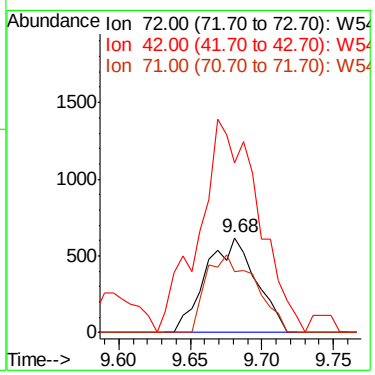


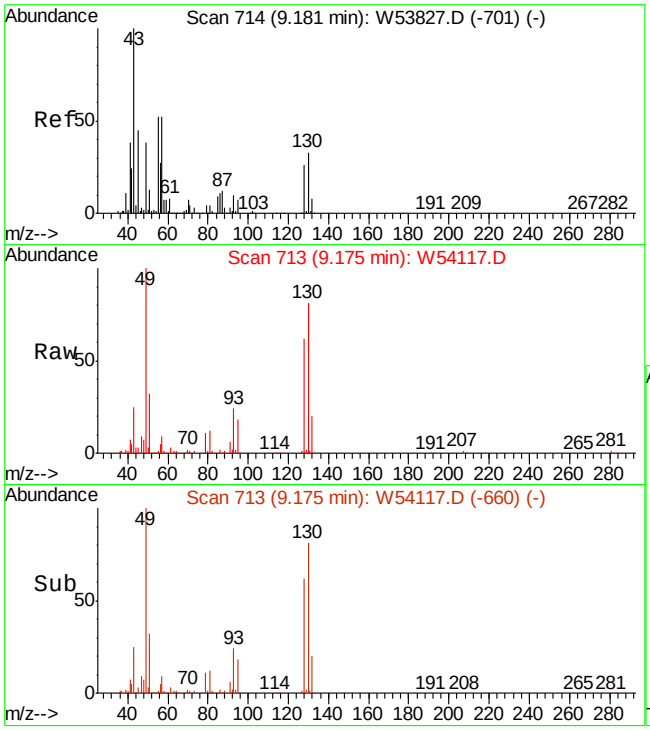


#35
TETRAHYDROFURAN
Concen: 0.11 PPBV
RT: 9.68 min Scan# 796
Delta R.T. 0.02 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 72 Resp: 1509

Ion	Ratio	Lower	Upper
72	100		
42	264.3	199.8	239.8#
71	80.1	72.3	112.3

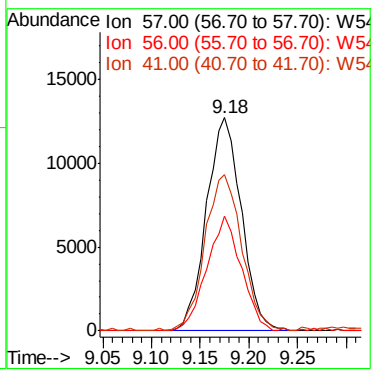


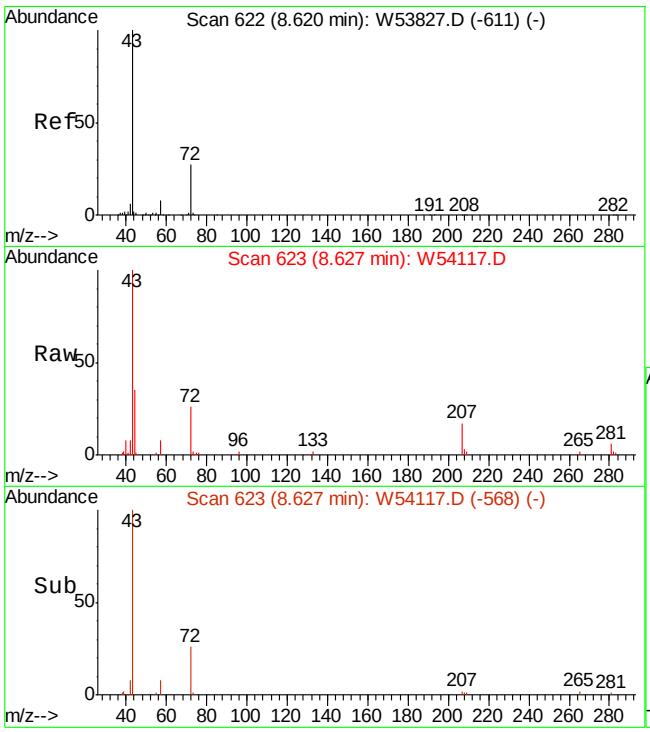


#36
HEXANE
Concen: 0.71 PPBV
RT: 9.18 min Scan# 713
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 57 Resp: 31685

Ion	Ratio	Lower	Upper
57	100		
56	52.9	32.7	72.7
41	77.6	72.1	112.1

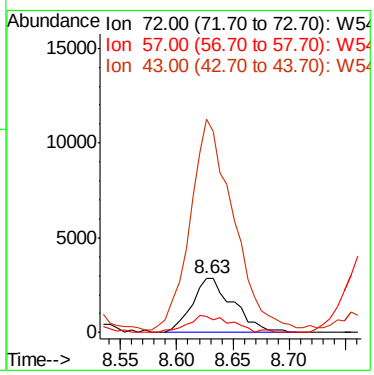


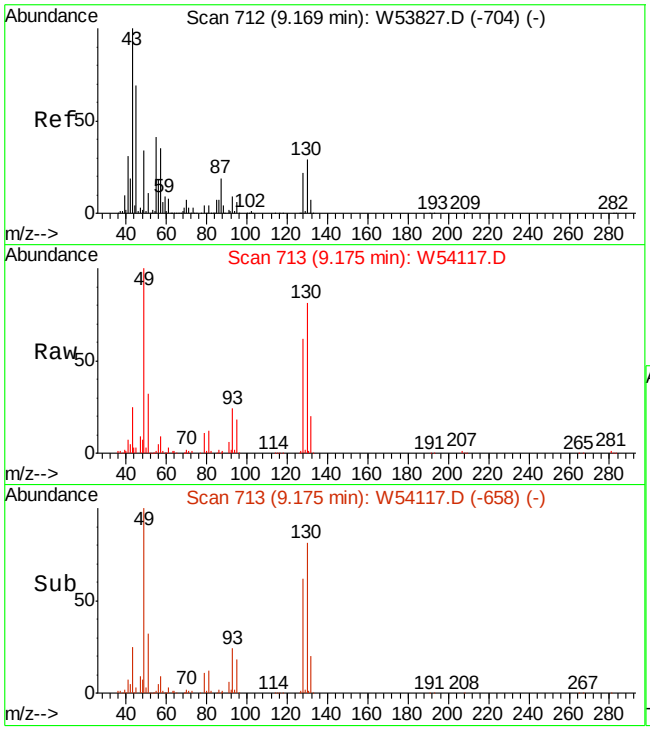


#39
METHYL ETHYL KETONE
Concen: 0.56 PPBV
RT: 8.63 min Scan# 623
Delta R.T. 0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 72 Resp: 7314

Ion	Ratio	Lower	Upper
72	100		
57	29.8	9.3	49.3
43	391.3	348.6	388.6#

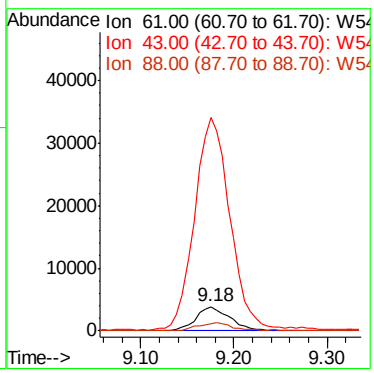


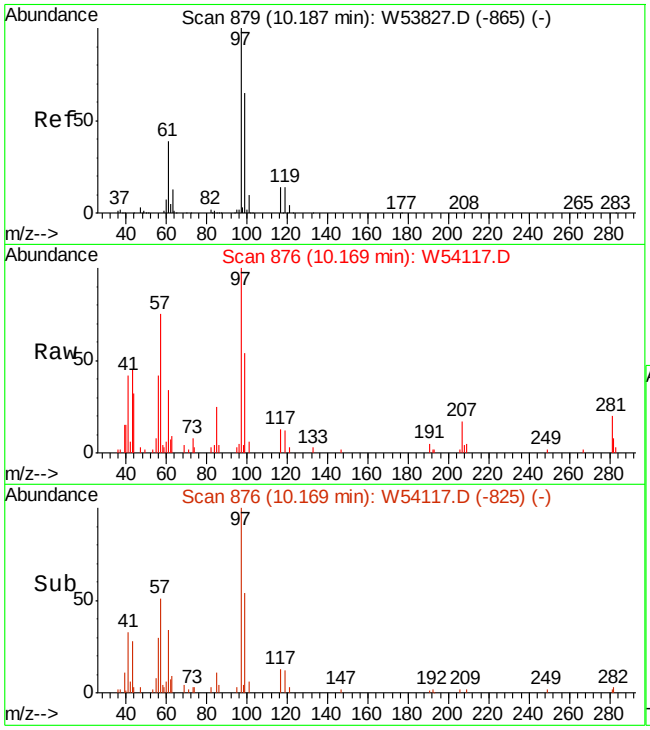


#42
ETHYL ACETATE
Concen: 1.12 PPBV
RT: 9.18 min Scan# 713
Delta R.T. 0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 61 Resp: 9881

Ion	Ratio	Lower	Upper
61	100		
43	877.2	1218.3	1258.3#
88	30.4	24.0	64.0

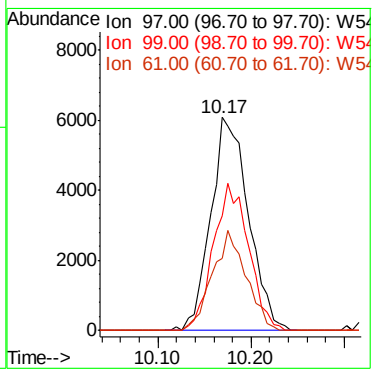


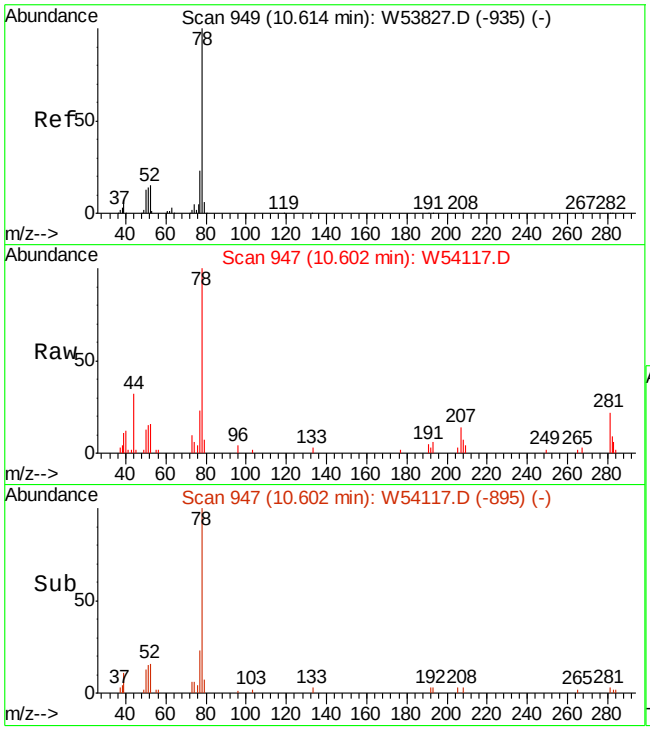


#46
1,1,1-TRICHLOROETHANE
Concen: 0.32 PPBV
RT: 10.17 min Scan# 876
Delta R.T. -0.02 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 97 Resp: 17230

Ion	Ratio	Lower	Upper
97	100		
99	64.5	44.2	84.2
61	42.2	19.7	59.7

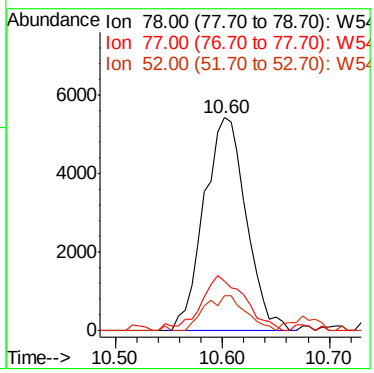


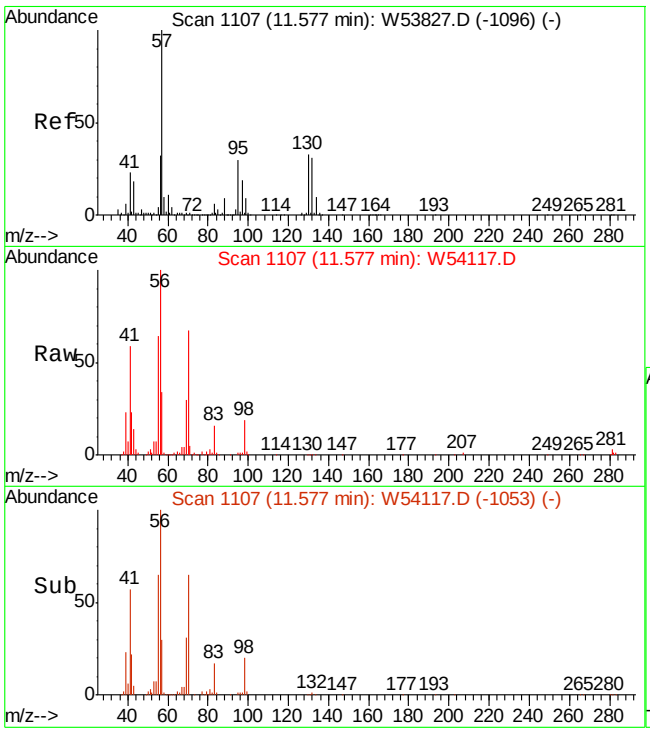


#50
BENZENE
Concen: 0.17 PPBV
RT: 10.60 min Scan# 947
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 78 Resp: 14846

Ion	Ratio	Lower	Upper
78	100		
77	26.7	3.3	43.3
52	16.1	0.0	34.9

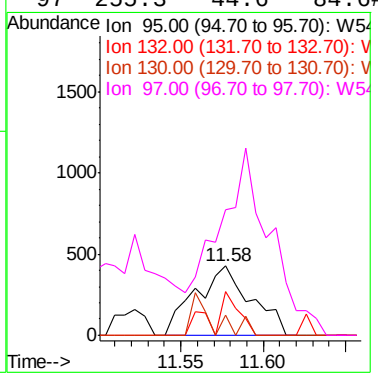


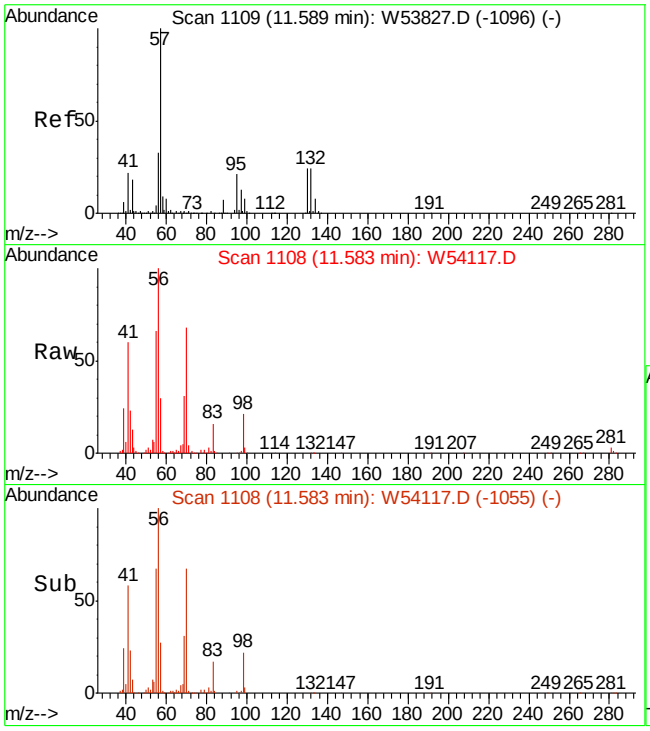


#53
TRICHLOROETHYLENE
Concen: 0.03 PPBV
RT: 11.58 min Scan# 1107
Delta R.T. -0.00 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 95 Resp: 1000

Ion	Ratio	Lower	Upper
95	100		
132	30.1	88.3	128.3#
130	0.0	93.1	133.1#
97	255.3	44.6	84.6#

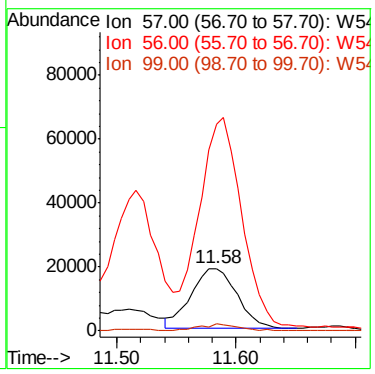


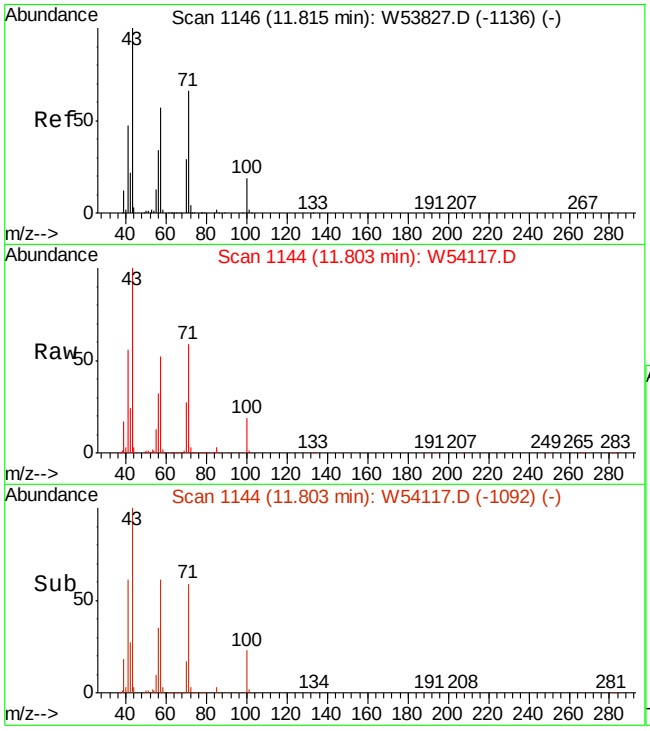


#58
2,2,4-TRIMETHYLPENTANE
Concen: 0.36 PPBV
RT: 11.58 min Scan# 1108
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 57 Resp: 50401

Ion	Ratio	Lower	Upper
57	100		
56	326.6	12.1	52.1#
99	9.1	0.0	28.4

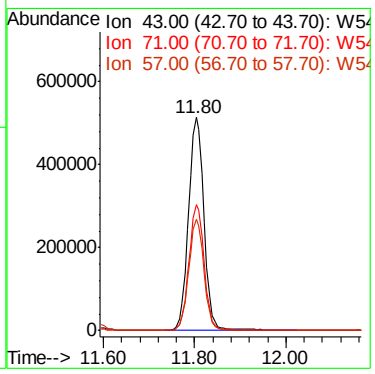


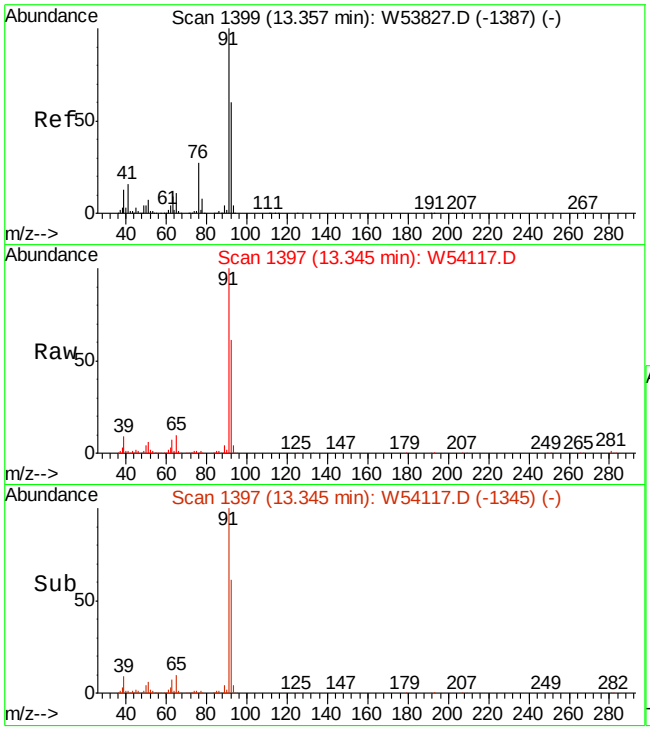


#61
HEPTANE
Concen: 24.85 PPBV
RT: 11.80 min Scan# 1144
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 43 Resp: 1207587

Ion	Ratio	Lower	Upper
43	100		
71	58.8	44.7	84.7
57	52.0	38.6	78.6

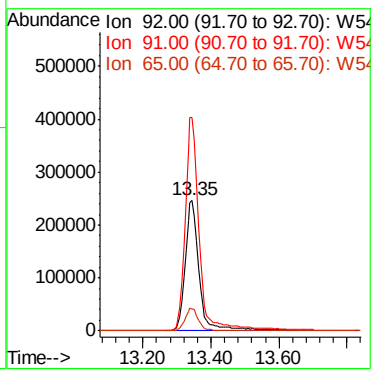


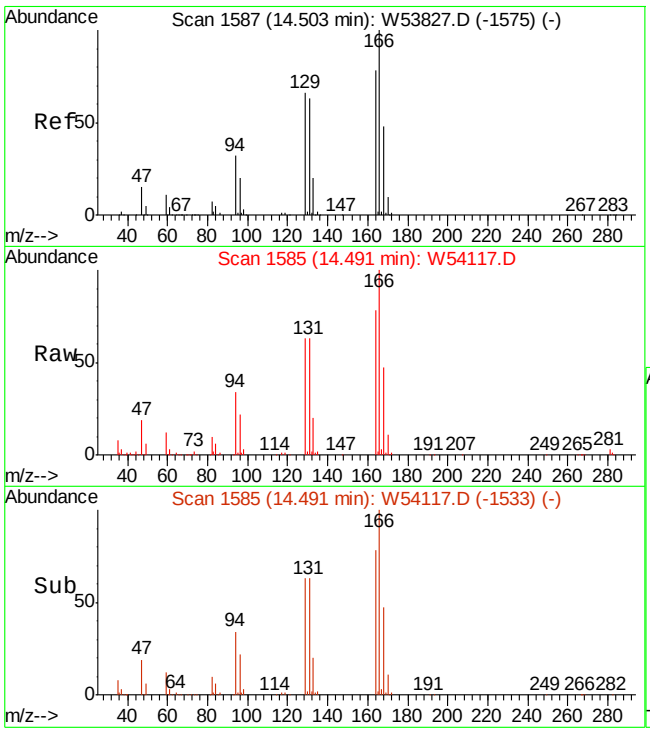


#64
TOLUENE
Concen: 11.25 PPBV
RT: 13.35 min Scan# 1397
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 92 Resp: 701346

Ion	Ratio	Lower	Upper
92	100		
91	164.9	147.8	187.8
65	17.7	0.0	39.8

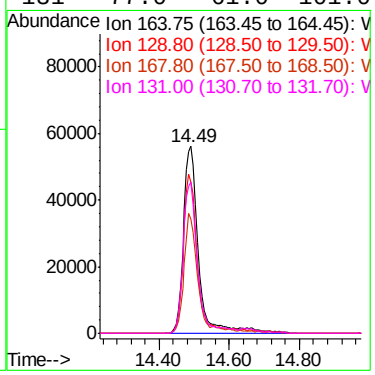


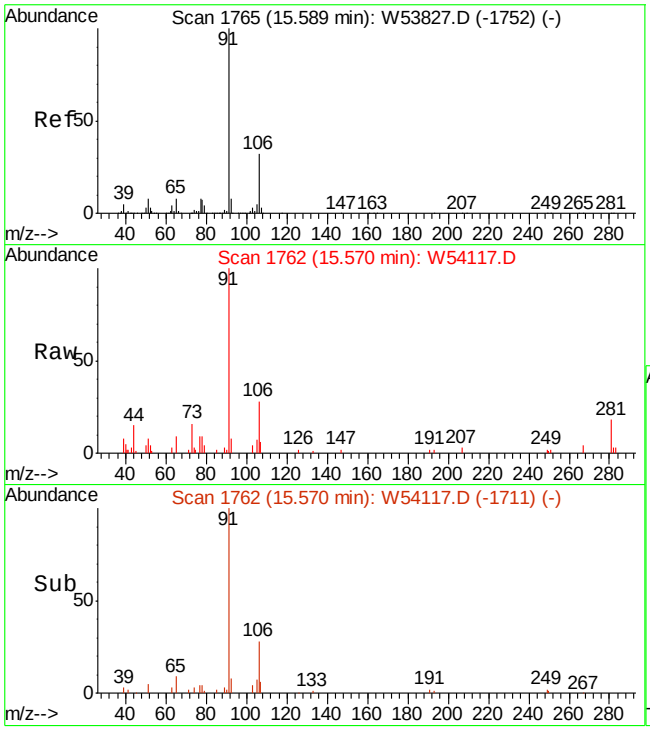


#71
TETRACHLOROETHYLENE
Concen: 4.11 PPBV
RT: 14.49 min Scan# 1585
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion:164 Resp: 166939

Ion	Ratio	Lower	Upper
164	100		
129	81.0	63.7	103.7
168	59.9	41.6	81.6
131	77.0	61.0	101.0

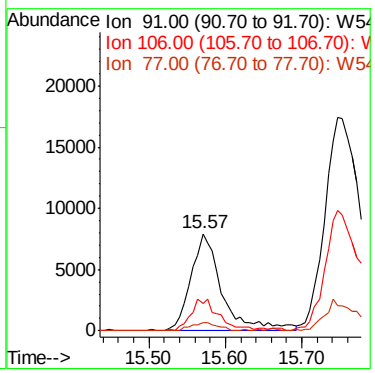


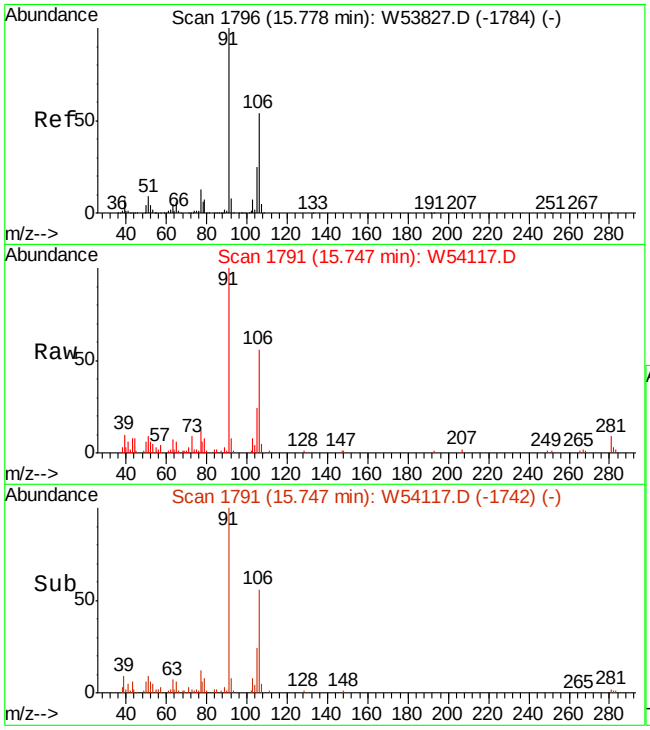


#77
ETHYLBENZENE
Concen: 0.21 PPBV
RT: 15.57 min Scan# 1762
Delta R.T. -0.02 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion: 91 Resp: 22294

Ion	Ratio	Lower	Upper
91	100		
106	30.1	12.2	52.2
77	7.3	0.0	27.9

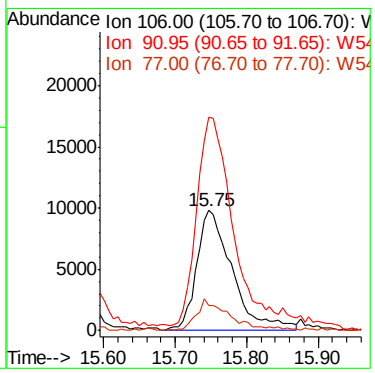


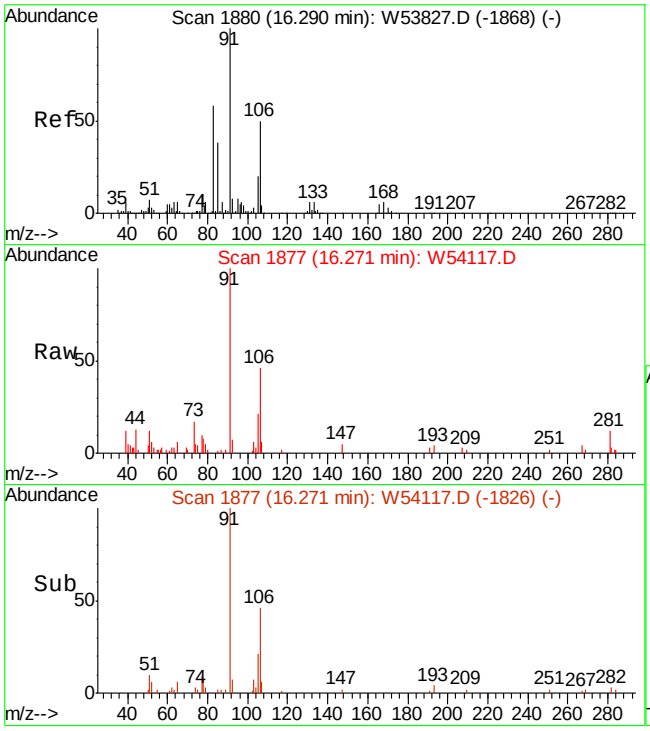


#78
m,p-XYLENE
Concen: 0.77 PPBV
RT: 15.75 min Scan# 1791
Delta R.T. -0.03 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion:106 Resp: 33958

Ion	Ratio	Lower	Upper
106	100		
91	177.4	150.4	225.6
77	20.9	18.6	28.0

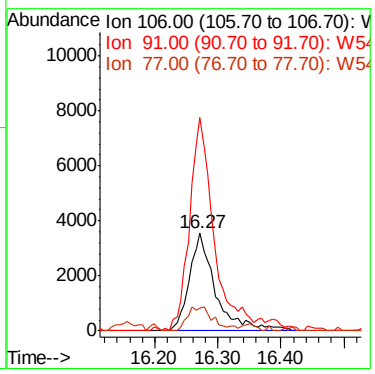


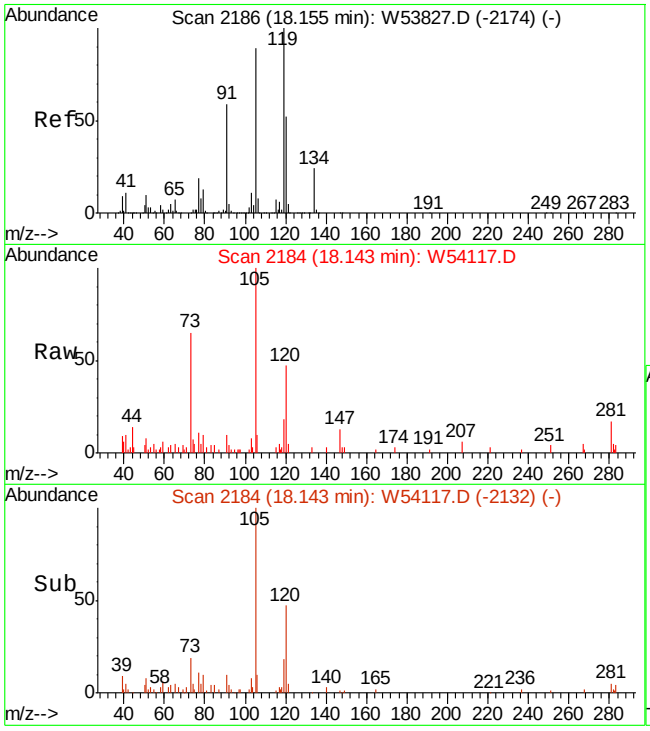


#79
o-XYLENE
Concen: 0.24 PPBV
RT: 16.27 min Scan# 1877
Delta R.T. -0.02 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion:106 Resp: 10177

Ion	Ratio	Lower	Upper
106	100		
91	214.3	180.3	220.3
77	24.4	5.2	45.2

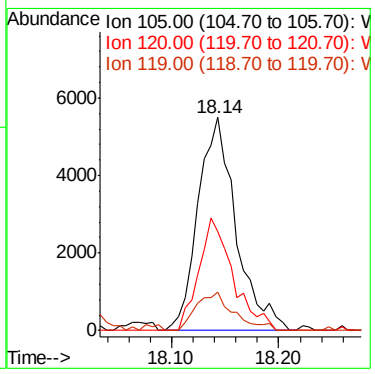




#94
1,2,4-TRIMETHYLBENZENE
Concen: 0.15 PPBV
RT: 18.14 min Scan# 2184
Delta R.T. -0.01 min
Lab File: W54117.D
Acq: 12 Mar 2016 4:01 pm

Tgt Ion:105 Resp: 13525

Ion	Ratio	Lower	Upper
105	100		
120	47.4	39.3	79.3
119	17.8	100.1	140.1#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 0.5 % of largest Peak
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.03 Peak Location: TOP

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

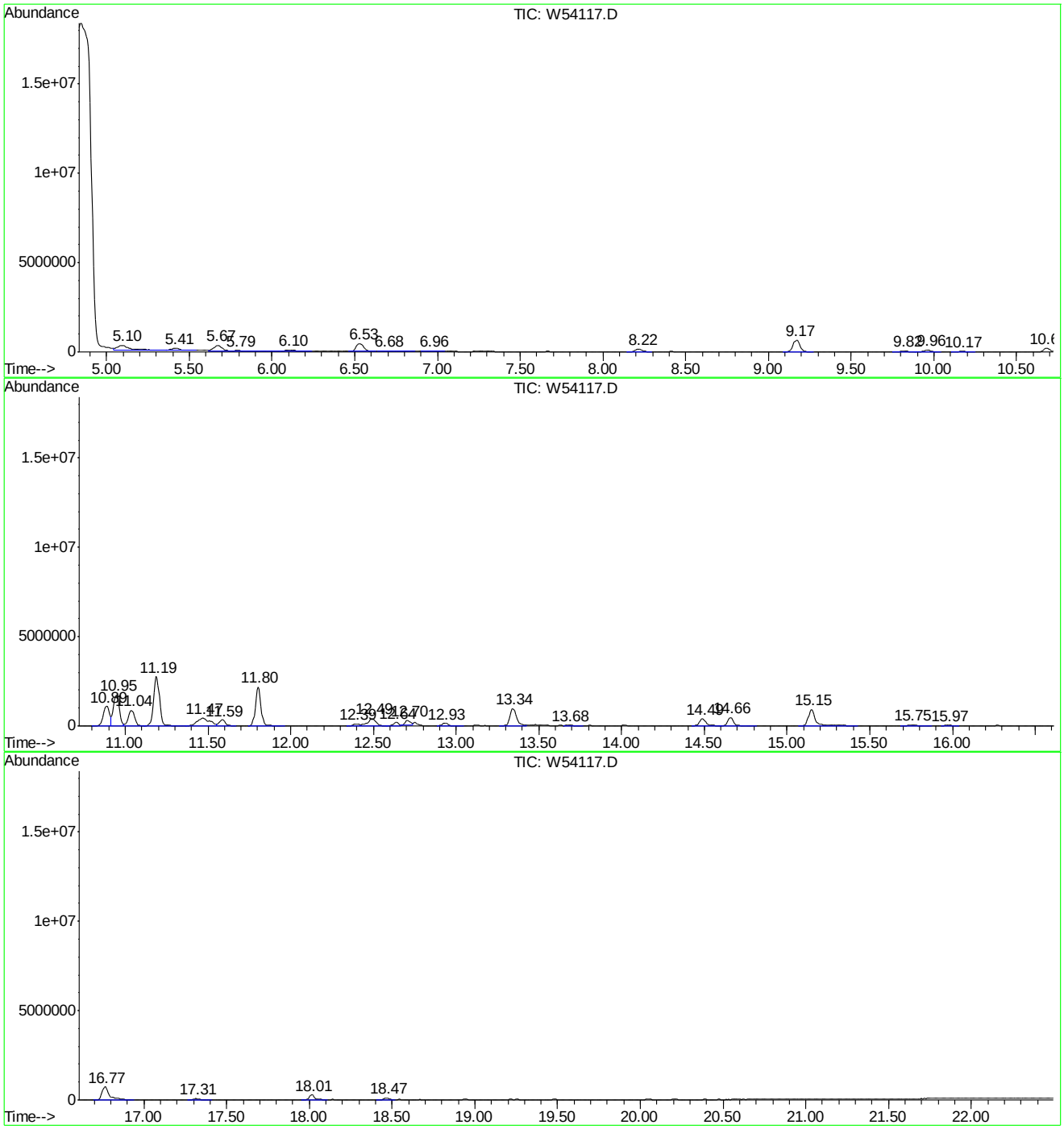
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.097	35	44	87	rVB3	271113	1326844	19.23%	2.811%
2	5.414	87	96	117	rVB2	124737	434662	6.30%	0.921%
3	5.670	129	138	153	rVB	301956	938151	13.60%	1.987%
4	5.786	154	157	200	rVB2	26987	153447	2.22%	0.325%
5	6.103	200	209	231	rVB3	68519	278428	4.04%	0.590%
6	6.529	268	279	295	rVB	443950	1426839	20.68%	3.022%
7	6.682	297	304	333	rVB3	25059	131579	1.91%	0.279%
8	6.956	340	349	363	rVB3	45152	136856	1.98%	0.290%
9	8.218	544	556	568	rBV	159976	453659	6.58%	0.961%
10	9.169	699	712	728	rBV2	669931	1934641	28.04%	4.098%
11	9.815	807	818	830	rBV	48095	130336	1.89%	0.276%
12	9.962	830	842	855	rVB3	95248	281564	4.08%	0.596%
13	10.169	865	876	889	rVB5	33661	101100	1.47%	0.214%
14	10.681	952	960	979	rVB3	195439	535892	7.77%	1.135%
15	10.888	979	994	998	rBV	1083934	2810828	40.74%	5.954%
16	10.949	998	1004	1011	rVV	1734418	4309298	62.46%	9.128%
17	11.041	1011	1019	1031	rVV	851780	2219473	32.17%	4.701%
18	11.187	1031	1043	1072	rVV	2753827	6898802	100.00%	14.613%
19	11.467	1072	1089	1103	rVV3	422080	2204317	31.95%	4.669%
20	11.589	1103	1109	1122	rVB2	334034	839873	12.17%	1.779%
21	11.803	1134	1144	1170	rBV	2180961	5129891	74.36%	10.866%
22	12.394	1232	1241	1245	rBV	106383	250022	3.62%	0.530%
23	12.492	1245	1257	1271	rVB3	416918	1382463	20.04%	2.928%
24	12.638	1271	1281	1286	rBV	185198	435808	6.32%	0.923%
25	12.705	1286	1292	1297	rBV	264886	618285	8.96%	1.310%
26	12.931	1321	1329	1347	rVB2	140512	353718	5.13%	0.749%
27	13.339	1383	1396	1410	rBV	959810	2728321	39.55%	5.779%
28	13.680	1447	1452	1466	rVB5	29539	104009	1.51%	0.220%
29	14.491	1574	1585	1602	rBV	385011	1088192	15.77%	2.305%
30	14.656	1602	1612	1638	rVB	462513	1124812	16.30%	2.383%
31	15.150	1680	1693	1738	rBV	910231	2916638	42.28%	6.178%
32	15.747	1781	1791	1811	rBV2	56310	178717	2.59%	0.379%
33	15.973	1821	1828	1838	rVB2	37728	97325	1.41%	0.206%
34	16.765	1947	1958	1986	rBV	737887	2280756	33.06%	4.831%
35	17.314	2040	2048	2063	rBV2	70333	171645	2.49%	0.364%
36	18.015	2153	2163	2178	rBV	276050	569830	8.26%	1.207%
37	18.466	2227	2237	2245	rBV2	110786	232683	3.37%	0.493%

Sum of corrected areas: 47209704

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\W54117.D
Operator : YOUMINH
Acquired : 12 Mar 2016 4:01 pm using AcqMethod TO15W
Instrument : MSW
Sample Name: JC15063-1
Misc Info : MS99025,VW2162,400,,,,1
Vial Number: 6
Quant File :MW2152.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

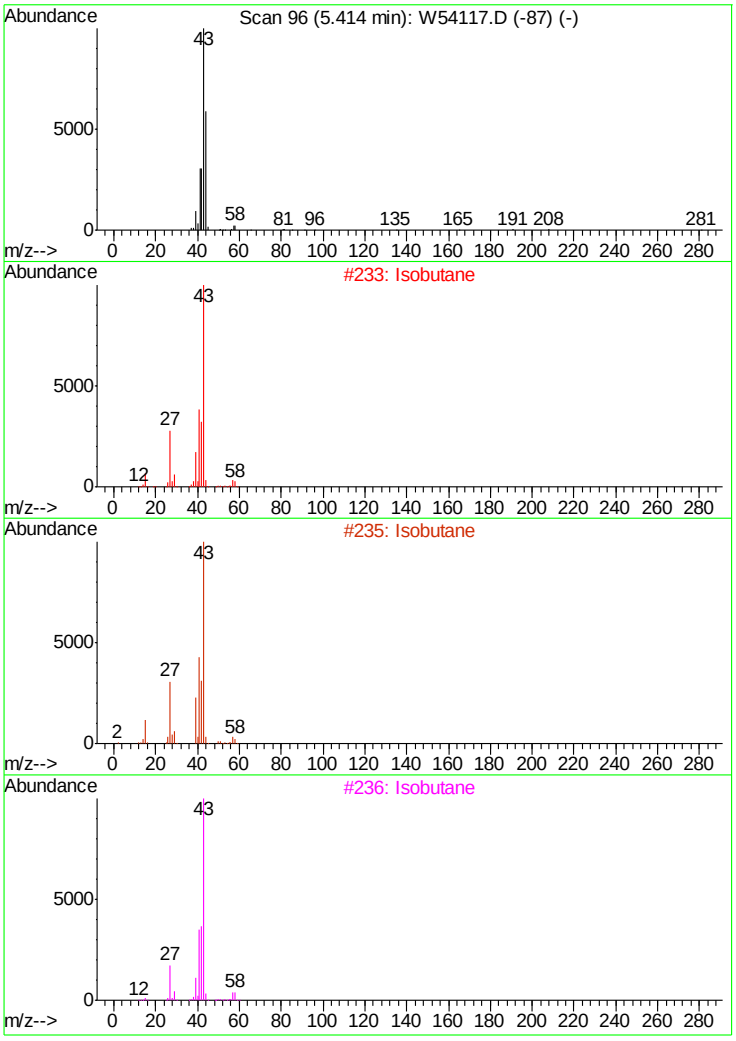
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

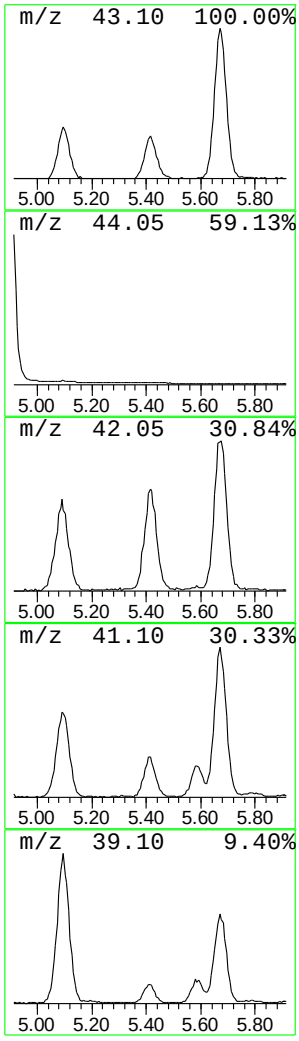
****

Peak Number 1 Isobutane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.41	2.25 PPBV	434662	BROMOCHLOROMETHANE	9.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isobutane	58	C4H10	000075-28-5	32
2	Isobutane	58	C4H10	000075-28-5	32
3	Isobutane	58	C4H10	000075-28-5	17
4	Isobutane	58	C4H10	000075-28-5	7





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

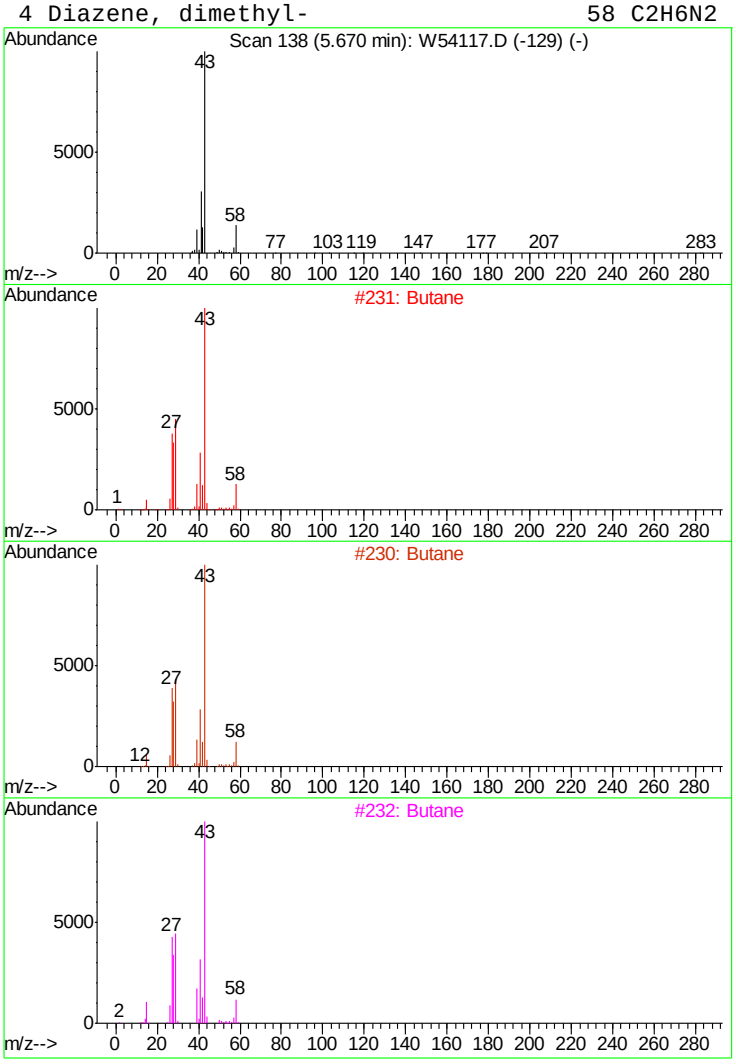
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

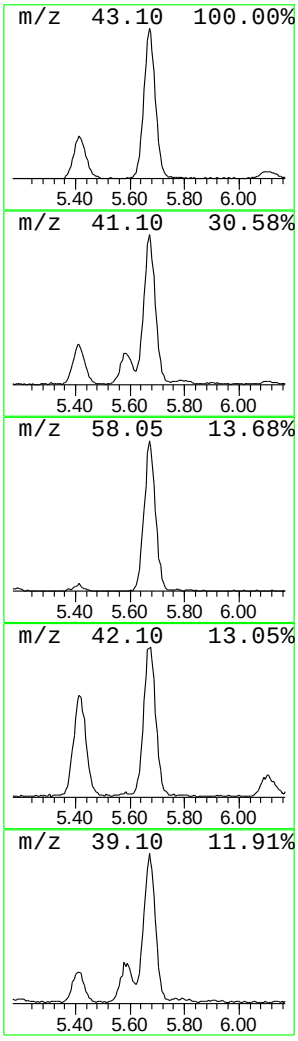
****

Peak Number 2 Butane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.67	4.85 PPBV	938151	BROMOCHLOROMETHANE	9.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	64
3	Butane	58	C4H10	000106-97-8	50
4	Diazene, dimethyl-	58	C2H6N2	000503-28-6	5





Library Search Compound Report

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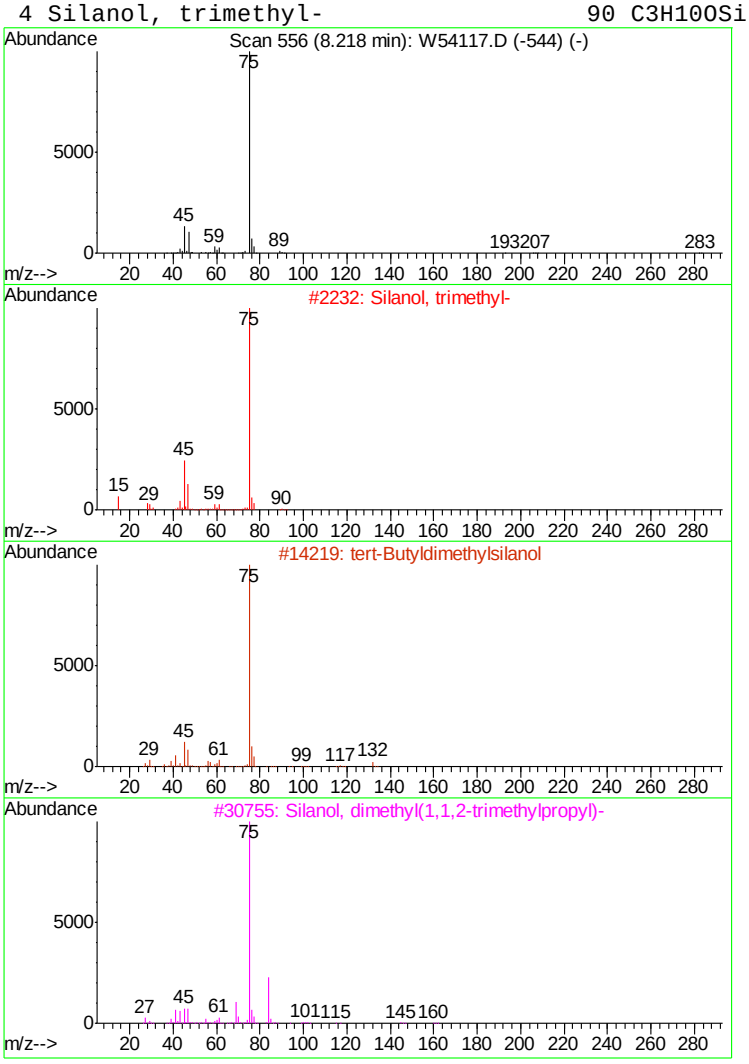
Data File : C:\MSDCHEM\1\DATA\W54117.D                  Vial: 6
Acq On    : 12 Mar 2016   4:01 pm                     Operator: YOUMINH
Sample    : JC15063-1                                 Inst    : MSW
Misc      : MS99025,VW2162,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

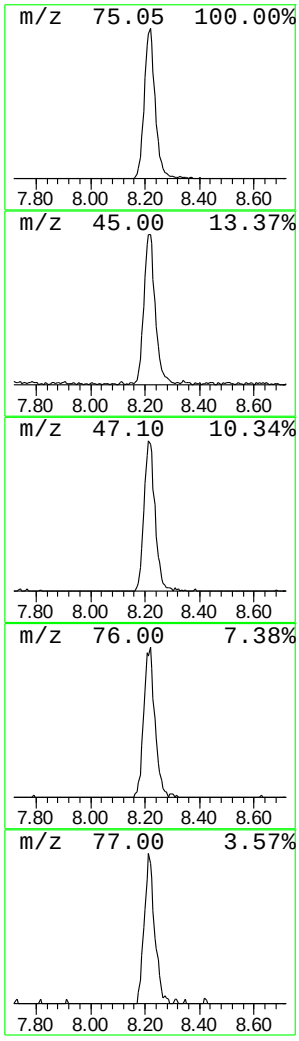
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
```

Peak Number 3 Silanol, trimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.22	2.34 PPBV	453659	BROMOCHLOROMETHANE	9.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silanol, trimethyl-	90	C3H10OSi	001066-40-6	91
2	tert-Butyldimethylsilanol	132	C6H16OSi	018173-64-3	83
3	Silanol, dimethyl(1,1,2-trimethy...	160	C8H20OSi	055644-10-5	78
4	Silanol, trimethyl-	90	C3H10OSi	001066-40-6	78





Library Search Compound Report

```
Data File : C:\MSDCHEM\1\DATA\W54117.D                    Vial: 6
Acq On    : 12 Mar 2016   4:01 pm                     Operator: YOUMINH
Sample    : JC15063-1                                 Inst    : MSW
Misc      : MS99025,VW2162,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number  4  Pentane, 2,3-dimethyl-          Concentration Rank 14

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
   9.96    1.46 PPBV       281564     BROMOCHLOROMETHANE          9.17

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------------
  1 Pentane, 2,3-dimethyl-                100 C7H16          000565-59-3 72
  2 1,4-Dioxaspiro[2.4]heptan-5-one       114 C5H6O3         126091-78-9 53
  3 1-Pentene, 4-methyl-                   84 C6H12          000691-37-2 53
  4 Cyclopropane, propyl-                  84 C6H12          002415-72-7 52
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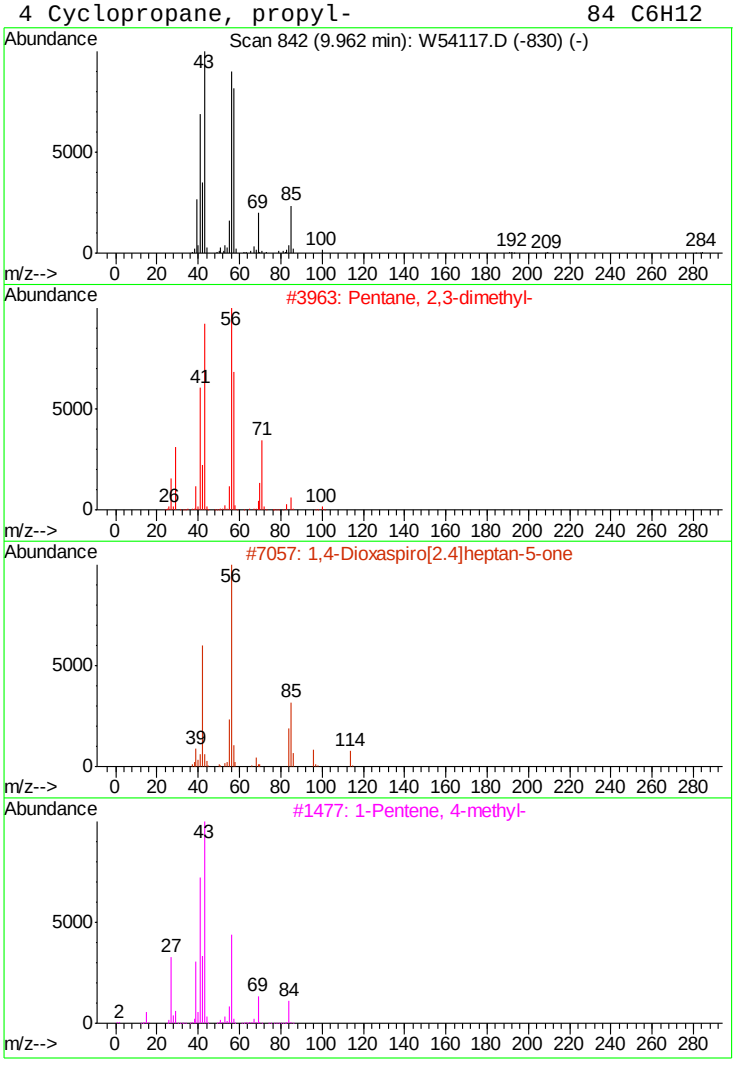
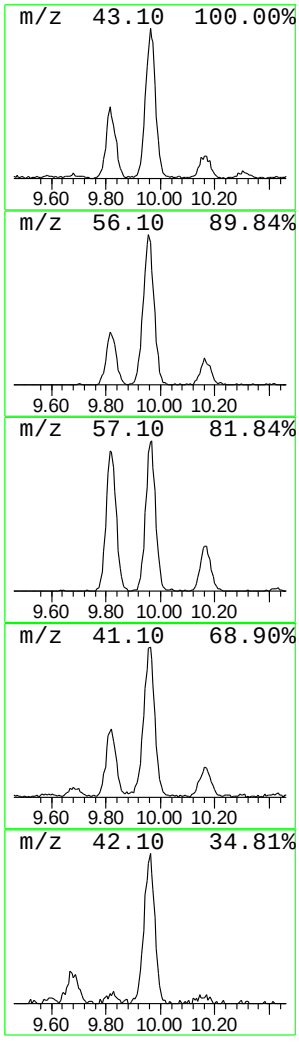




Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

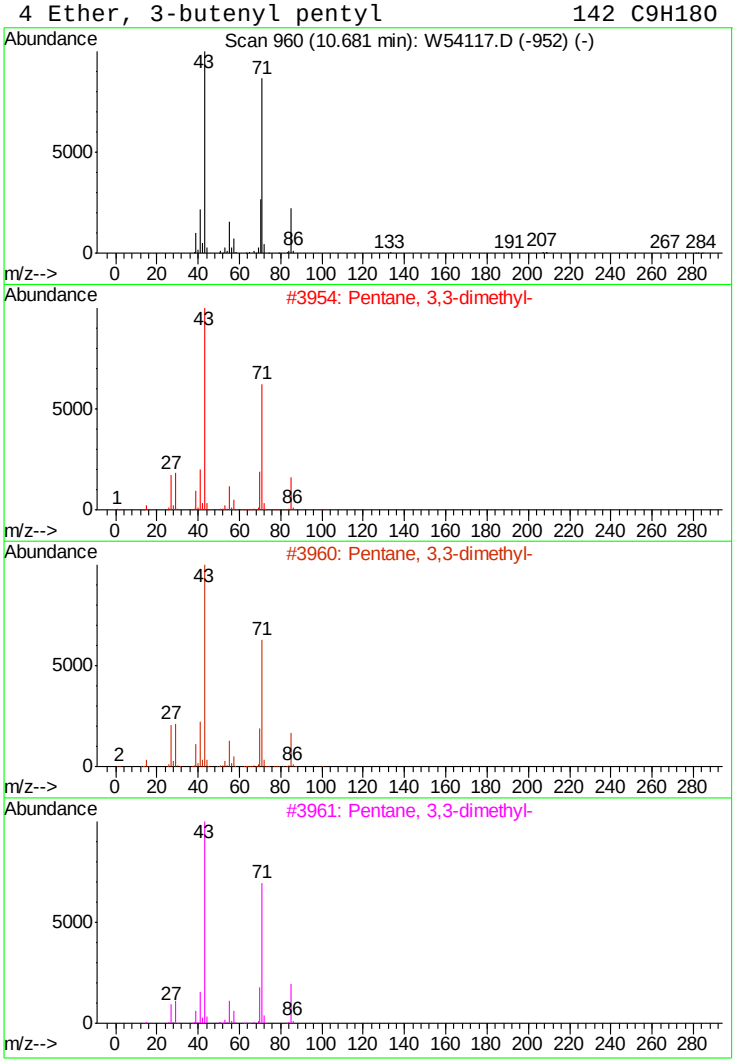
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

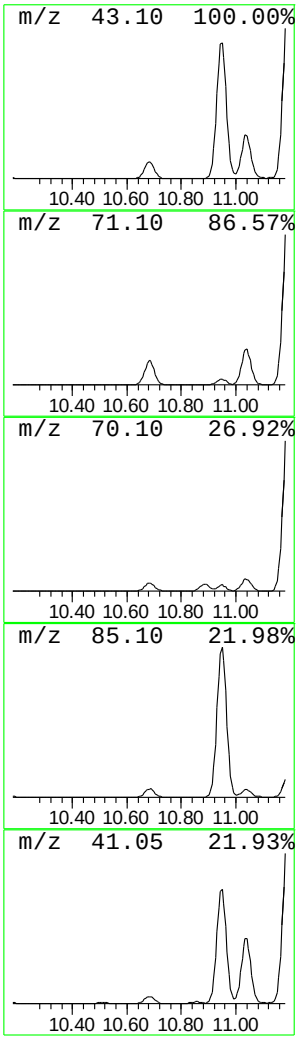
****

Peak Number 5 Pentane, 3,3-dimethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.68	1.91 PPBV	535892	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	90
2	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	90
3	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	72
4	Ether, 3-butenyl pentyl	142	C9H18O	034061-78-4	64





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

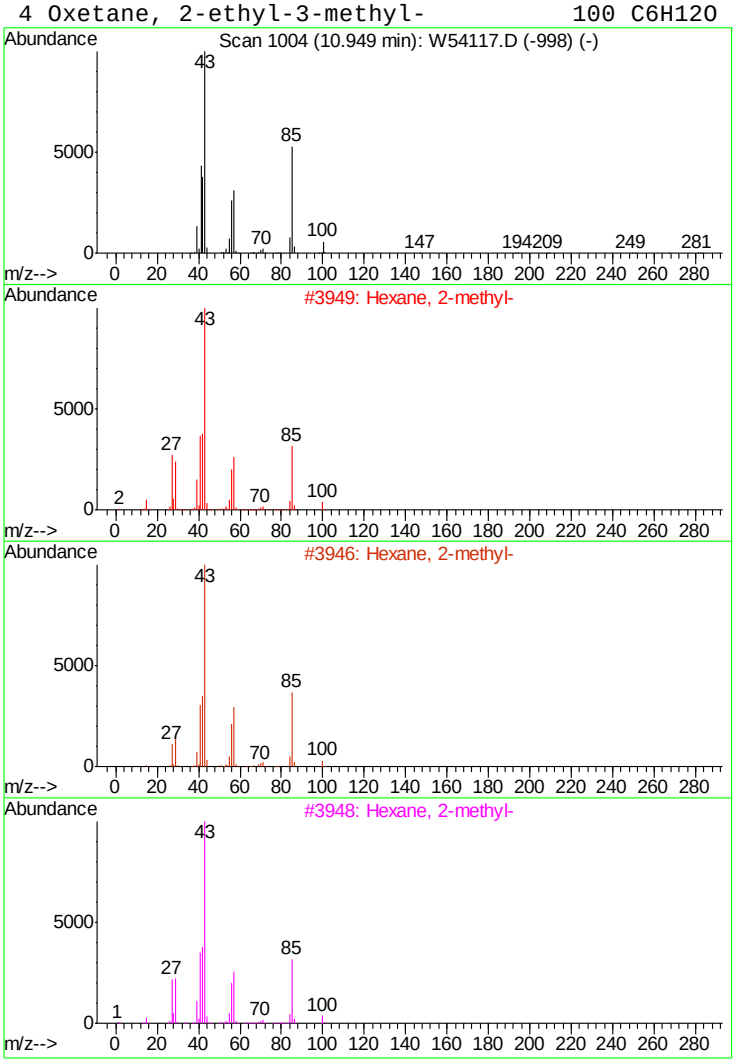
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

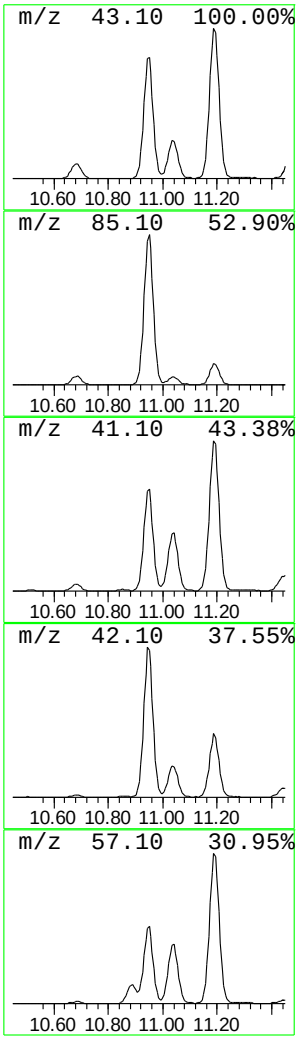
****

Peak Number 6 Hexane, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.95	15.33 PPBV	4309300	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2-methyl-	100	C7H16	000591-76-4	90
2	Hexane, 2-methyl-	100	C7H16	000591-76-4	90
3	Hexane, 2-methyl-	100	C7H16	000591-76-4	90
4	Oxetane, 2-ethyl-3-methyl-	100	C6H12O	053778-62-4	53





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

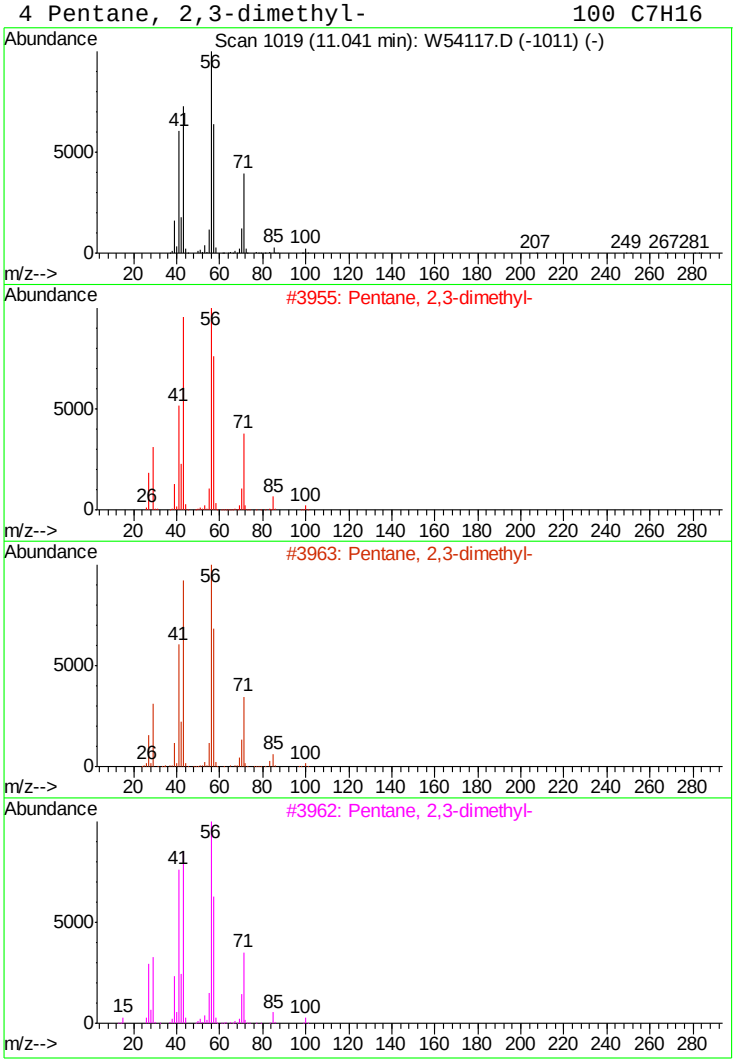
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

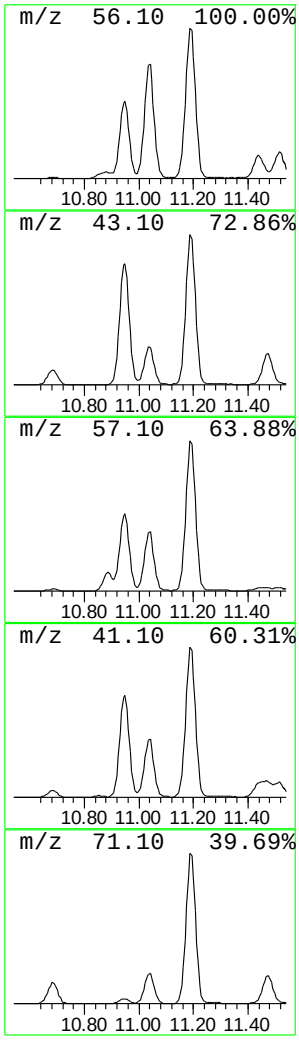
****

Peak Number 7 Pentane, 2,3-dimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.04	7.90 PPBV	2219470	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
2	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
3	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	90
4	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	72





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

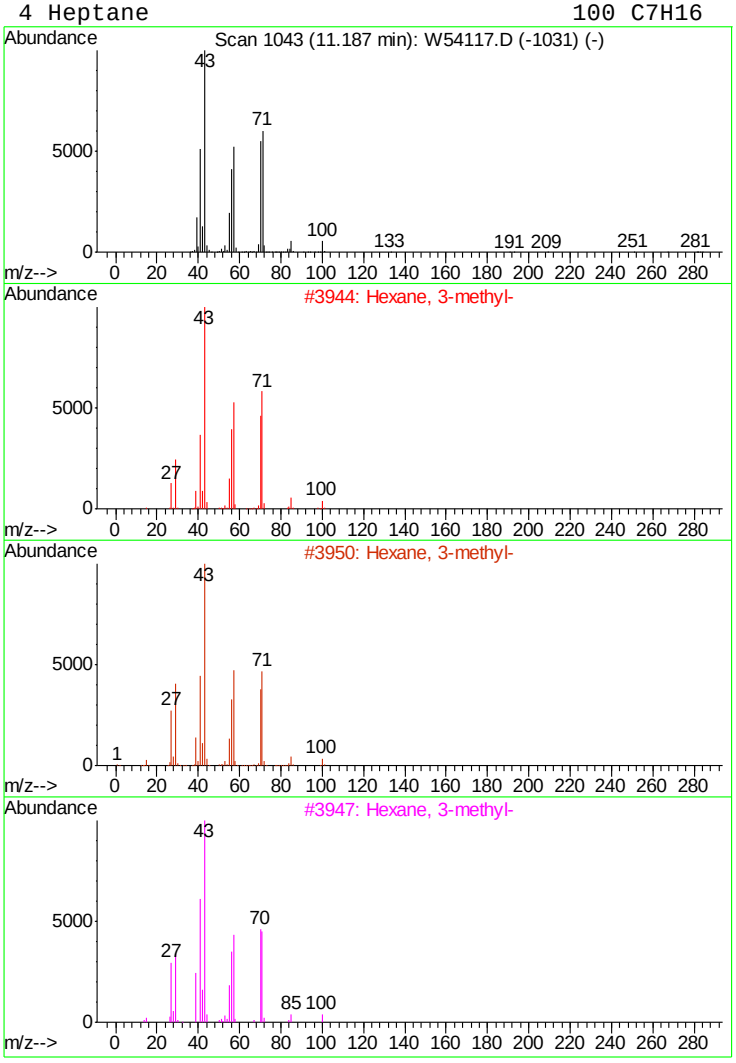
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

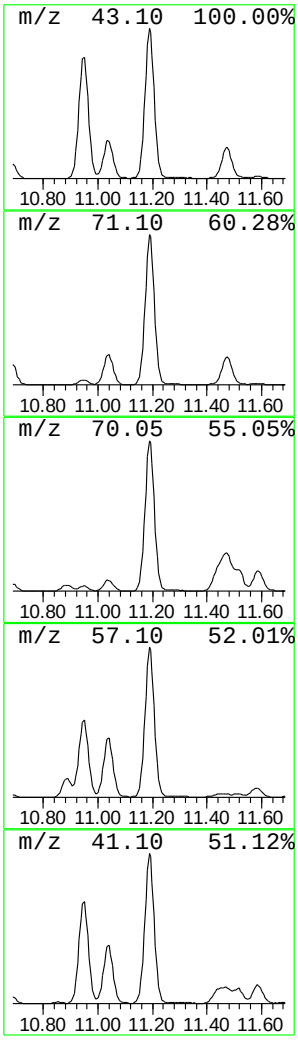
****

Peak Number 8 Hexane, 3-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	24.54 PPBV	6898800	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 3-methyl-	100	C7H16	000589-34-4	94
2	Hexane, 3-methyl-	100	C7H16	000589-34-4	91
3	Hexane, 3-methyl-	100	C7H16	000589-34-4	87
4	Heptane	100	C7H16	000142-82-5	80





Library Search Compound Report

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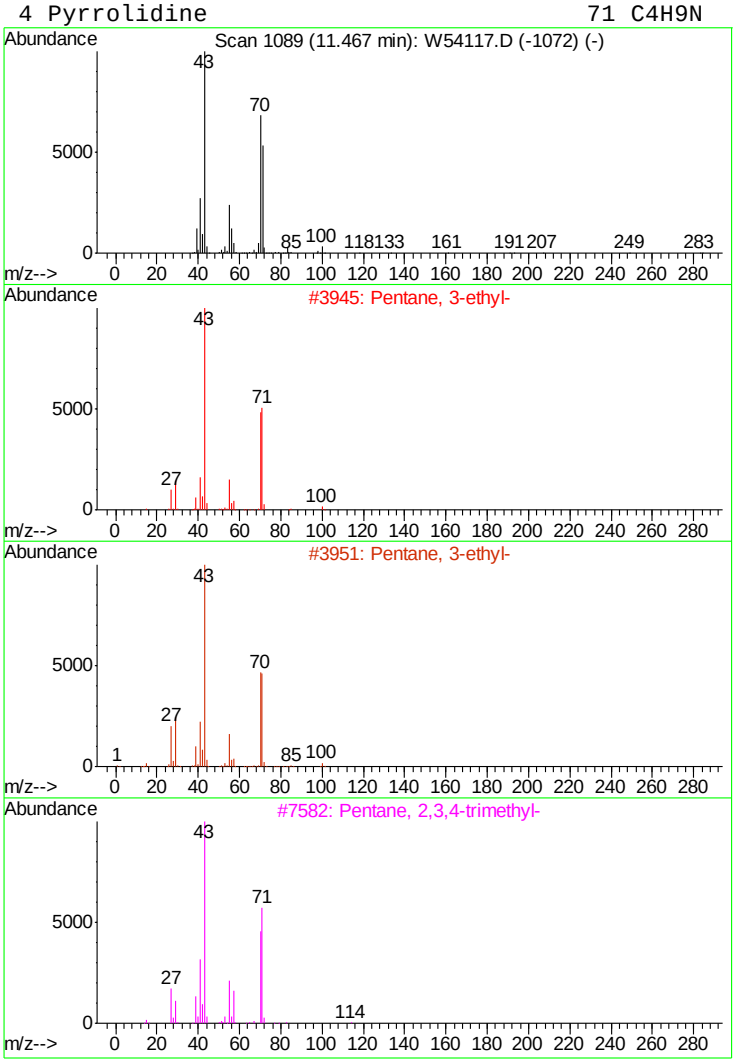
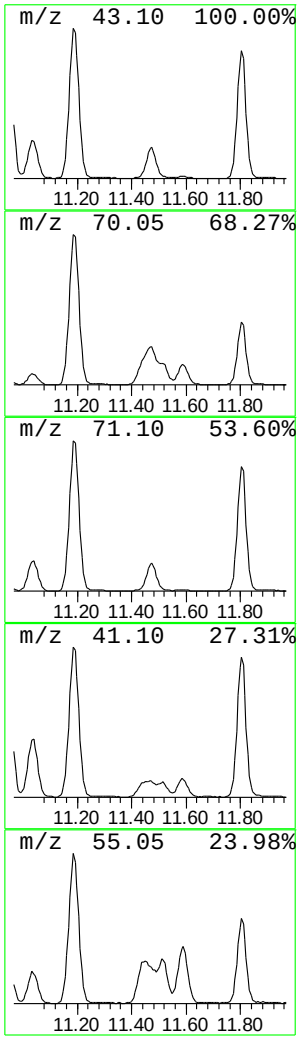
Data File : C:\MSDCHEM\1\DATA\W54117.D                  Vial: 6
Acq On    : 12 Mar 2016   4:01 pm                    Operator: YOUMINH
Sample    : JC15063-1                                Inst    : MSW
Misc      : MS99025,VW2162,400,,,,1                  Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 ********************************************************************
 Peak Number  9  Pentane, 3-ethyl-              Concentration Rank  4

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ------------------------------------------------------------------------
  11.47    7.84 PPBV      2204320    1,4-DIFLUOROBENZENE         10.89

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------------
  1 Pentane, 3-ethyl-                    100 C7H16          000617-78-7 86
  2 Pentane, 3-ethyl-                    100 C7H16          000617-78-7 86
  3 Pentane, 2,3,4-trimethyl-            114 C8H18          000565-75-3 64
  4 Pyrrolidine                           71 C4H9N          000123-75-1 59
```





Library Search Compound Report

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Data File : C:\MSDCHEM\1\DATA\W54117.D                  Vial: 6
Acq On    : 12 Mar 2016   4:01 pm                    Operator: YOUMINH
Sample    : JC15063-1                                Inst    : MSW
Misc      : MS99025,VW2162,400,,,,1                  Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number 10  Cyclohexane, methyl-           Concentration Rank  5

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
  12.49    4.92 PPBV      1382460    1,4-DIFLUOROBENZENE         10.89

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------------
  1 Cyclohexane, methyl-                  98 C7H14          000108-87-2 90
  2 Cyclohexane, methyl-                  98 C7H14          000108-87-2 87
  3 Cyclohexane, methyl-                  98 C7H14          000108-87-2 80
  4 Cyclohexane, methyl-                  98 C7H14          000108-87-2 68
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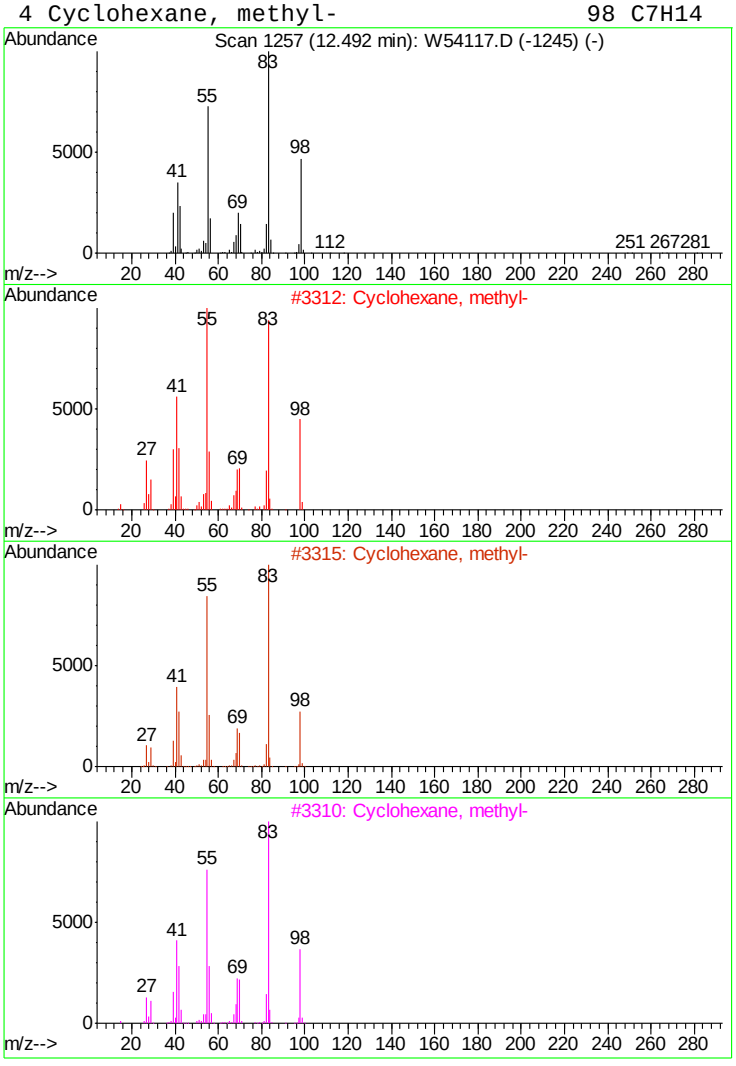
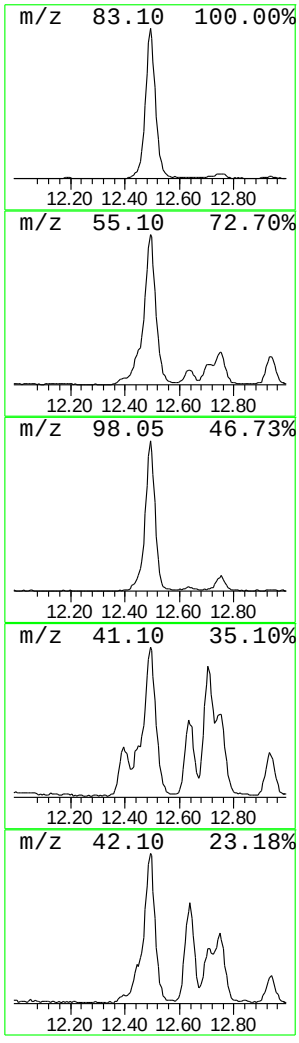




Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

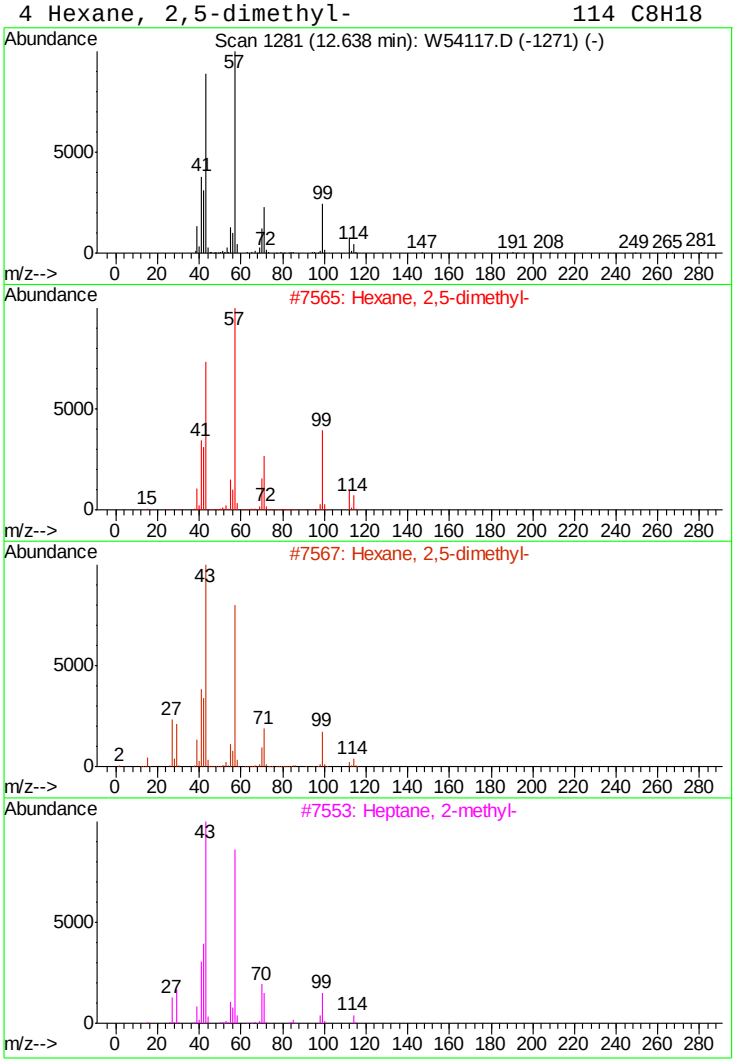
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

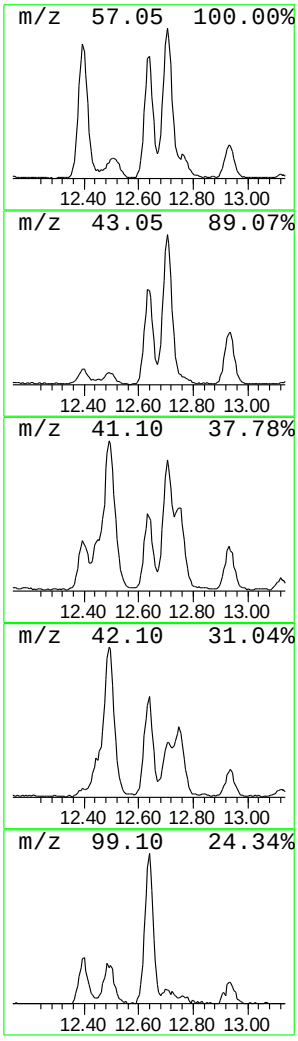
****

Peak Number 11 Hexane, 2,5-dimethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.64	1.55 PPBV	435808	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	94
2	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	87
3	Heptane, 2-methyl-	114	C8H18	000592-27-8	83
4	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	83





Library Search Compound Report

```
Data File : C:\MSDCHEM\1\DATA\W54117.D                  Vial: 6
Acq On    : 12 Mar 2016   4:01 pm                     Operator: YOUMINH
Sample    : JC15063-1                                 Inst    : MSW
Misc      : MS99025,VW2162,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number 12  Hexane, 2,4-dimethyl-          Concentration Rank 10

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ---------------------------------------------------------------------
  12.71    2.20 PPBV       618285    1,4-DIFLUOROBENZENE        10.89

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------------
  1 Hexane, 2,4-dimethyl-                 114 C8H18          000589-43-5 91
  2 Hexane, 2,4-dimethyl-                 114 C8H18          000589-43-5 91
  3 Hexane, 2,4-dimethyl-                 114 C8H18          000589-43-5 91
  4 Hexane, 2,4-dimethyl-                 114 C8H18          000589-43-5 90
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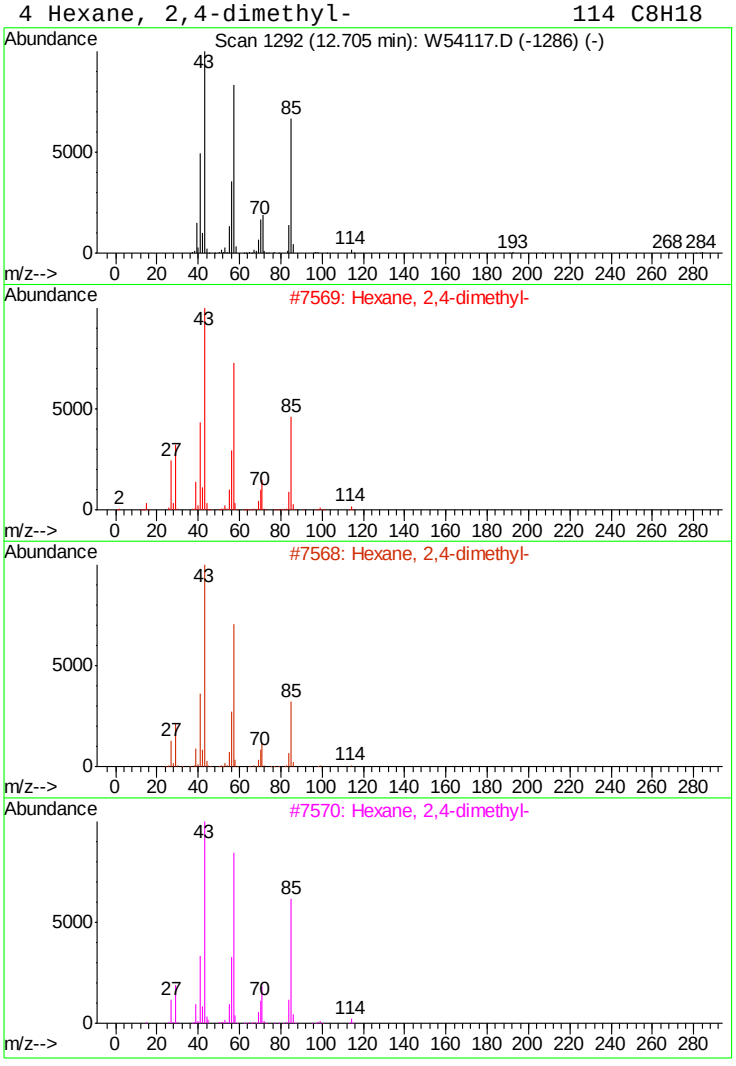

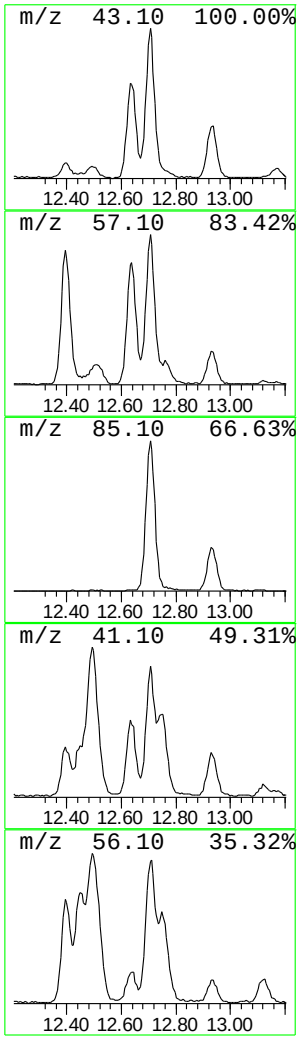

Library Search Compound Report

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Data File : C:\MSDCHEM\1\DATA\W54117.D                  Vial: 6
Acq On    : 12 Mar 2016   4:01 pm                     Operator: YOUMINH
Sample    : JC15063-1                                 Inst    : MSW
Misc      : MS99025,VW2162,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

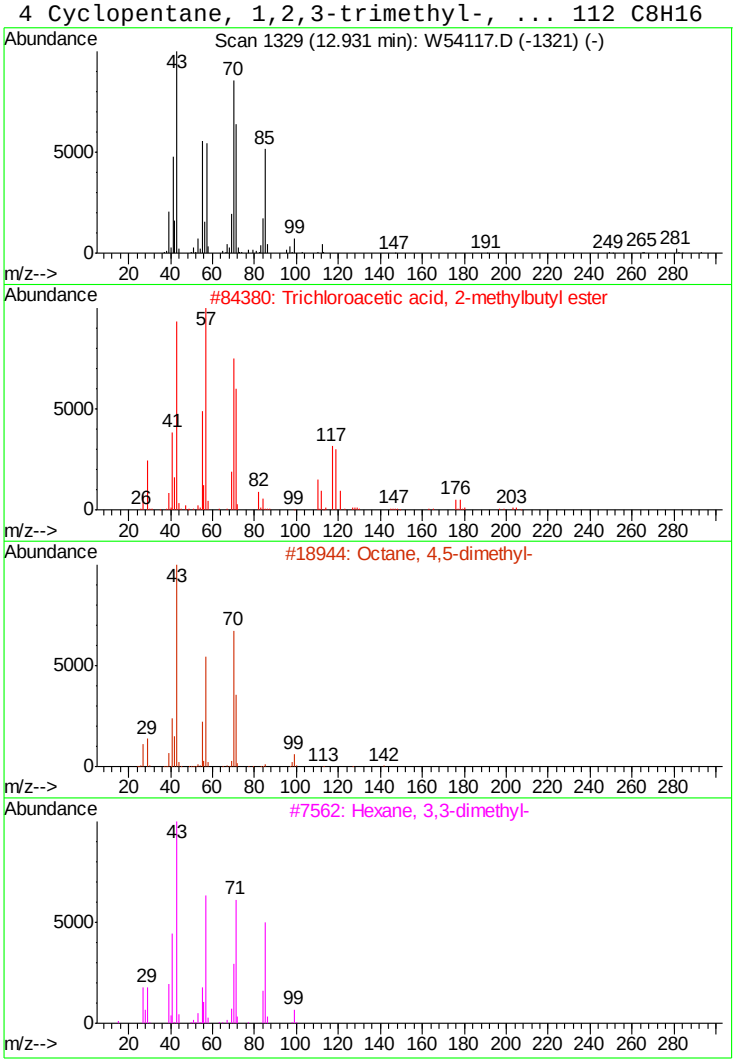
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
```

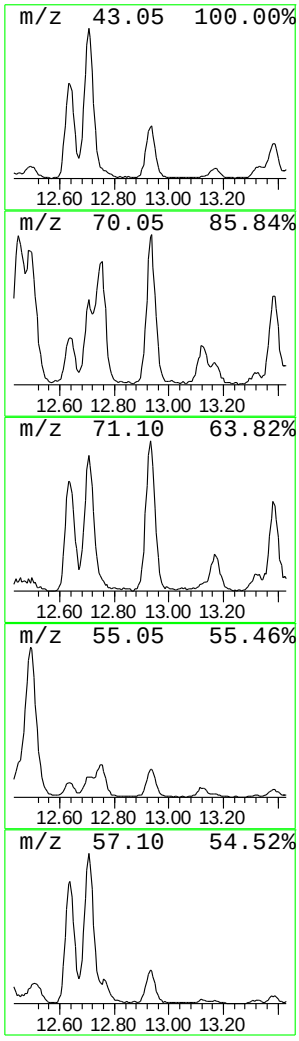
****

Peak Number 13 Trichloroacetic acid, 2-met... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.93	1.26 PPBV	353718	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trichloroacetic acid, 2-methylbu...	232	C7H11Cl3O2	1000330-88-8	50
2	Octane, 4,5-dimethyl-	142	C10H22	015869-96-2	50
3	Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	50
4	Cyclopentane, 1,2,3-trimethyl-, ...	112	C8H16	002613-69-6	49





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54117.D Vial: 6
Acq On : 12 Mar 2016 4:01 pm Operator: YOUMINH
Sample : JC15063-1 Inst : MSW
Misc : MS99025,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

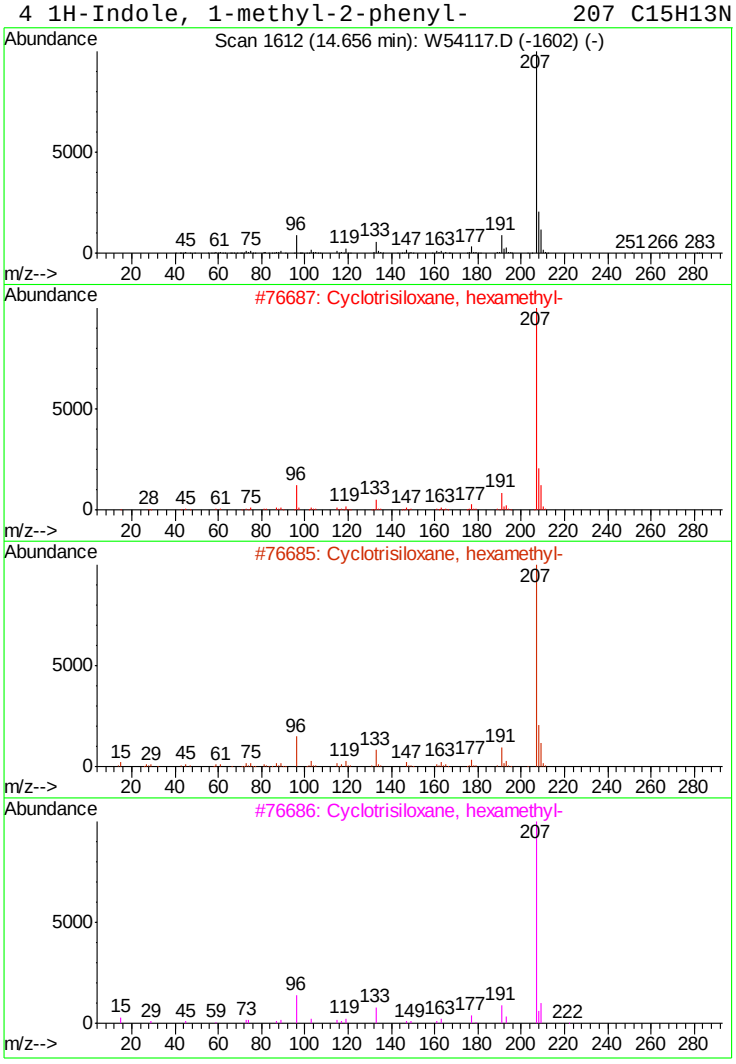
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

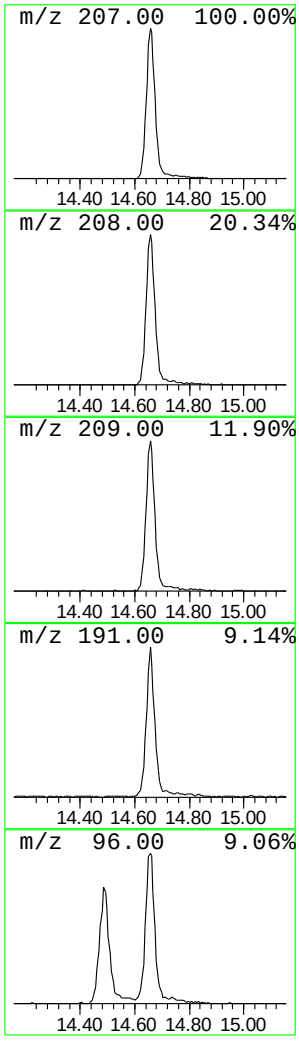
****

Peak Number 14 Cyclotrisiloxane, hexamethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.66	3.86 PPBV	1124810	CHLOROBENZENE-D5	15.14

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	49
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	46
4	1H-Indole, 1-methyl-2-phenyl-	207	C15H13N	003558-24-5	39





Library Search Compound Report

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Data File : C:\MSDCHEM\1\DATA\W54117.D                  Vial: 6
Acq On    : 12 Mar 2016   4:01 pm                    Operator: YOUMINH
Sample    : JC15063-1                                Inst    : MSW
Misc      : MS99025,VW2162,400,,,,1                  Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 ********************************************************************
 Peak Number 15  Cyclotetrasiloxane, octamet...  Concentration Rank 11

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ------------------------------------------------------------------------
  18.01    1.95 PPBV       569830    CHLOROBENZENE-D5           15.14

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------------
  1 Cyclotetrasiloxane, octamethyl-      296 C8H24O4Si4     000556-67-2 78
  2 5H-Naphtho[2,3-c]carbazole, 5-me... 281 C21H15N         100025-44-3 50
  3 Cyclotetrasiloxane, octamethyl-      296 C8H24O4Si4     000556-67-2 49
  4 7H-Dibenzo[b,g]carbazole, 7-methyl- 281 C21H15N         003557-49-1 45
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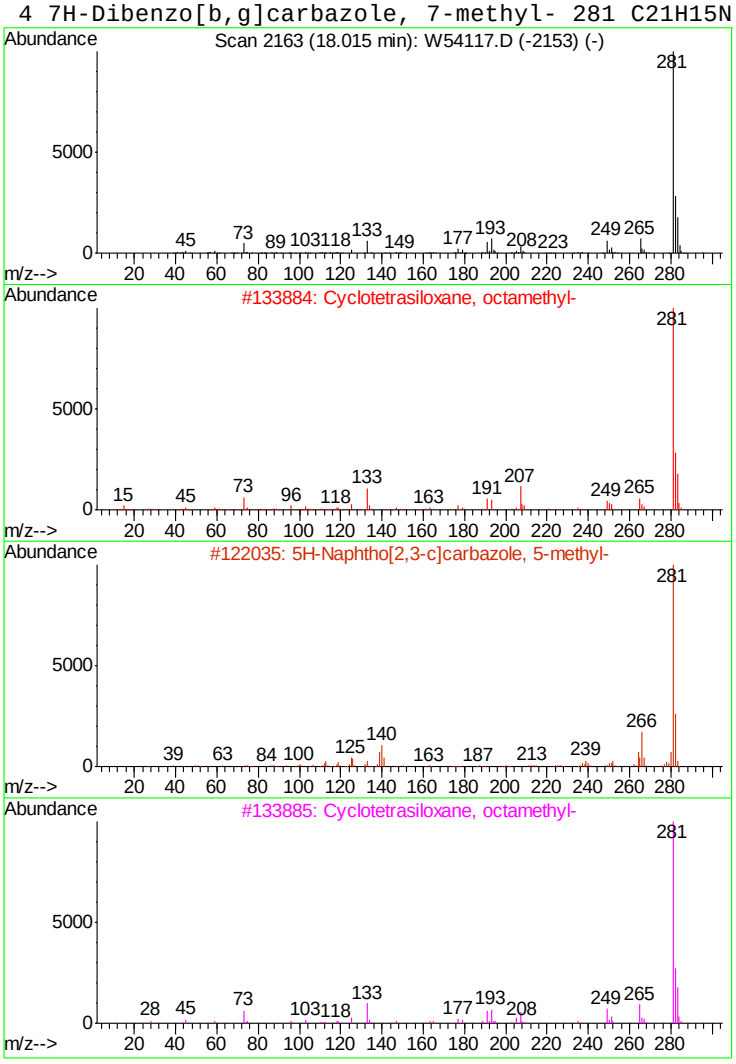
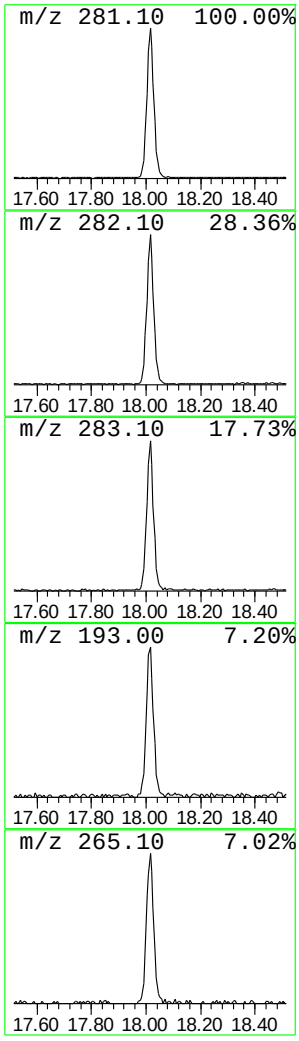




Tentatively Identified Compound (LSC) summary

Operator ID: YOUMINH Date Acquired: 12 Mar 2016 4:01 pm
Data File: C:\MSDCHEM\1\DATA\W54117.D
Name: JC15063-1
Misc: MS99025,VW2162,400,,,,1
Method: C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title: TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library Searched: C:\DATABASE\NIST08.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Isobutane	5.41	2.2	PPBV	434662	1	9.17	1934640	10.0
Butane	5.67	4.8	PPBV	938151	1	9.17	1934640	10.0
Silanol, trimethyl-	8.22	2.3	PPBV	453659	1	9.17	1934640	10.0
Pentane, 2,3-dime...	9.96	1.5	PPBV	281564	1	9.17	1934640	10.0
Pentane, 3,3-dime...	10.68	1.9	PPBV	535892	2	10.89	2810830	10.0
Hexane, 2-methyl-	10.95	15.3	PPBV	4309300	2	10.89	2810830	10.0
Pentane, 2,3-dime...	11.04	7.9	PPBV	2219470	2	10.89	2810830	10.0
Hexane, 3-methyl-	11.19	24.5	PPBV	6898800	2	10.89	2810830	10.0
Pentane, 3-ethyl-	11.47	7.8	PPBV	2204320	2	10.89	2810830	10.0
Cyclohexane, methyl-	12.49	4.9	PPBV	1382460	2	10.89	2810830	10.0
Hexane, 2,5-dimet...	12.64	1.6	PPBV	435808	2	10.89	2810830	10.0
Hexane, 2,4-dimet...	12.71	2.2	PPBV	618285	2	10.89	2810830	10.0
Trichloroacetic a...	12.93	1.3	PPBV	353718	2	10.89	2810830	10.0
Cyclotrisiloxane,...	14.66	3.9	PPBV	1124810	3	15.14	2916640	10.0
Cyclotetrasiloxan...	18.01	2.0	PPBV	569830	3	15.14	2916640	10.0

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54092.D Vial: 12
Acq On : 11 Mar 2016 7:07 pm Operator: YOUMINH
Sample : JC15063-2 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 09:25:01 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

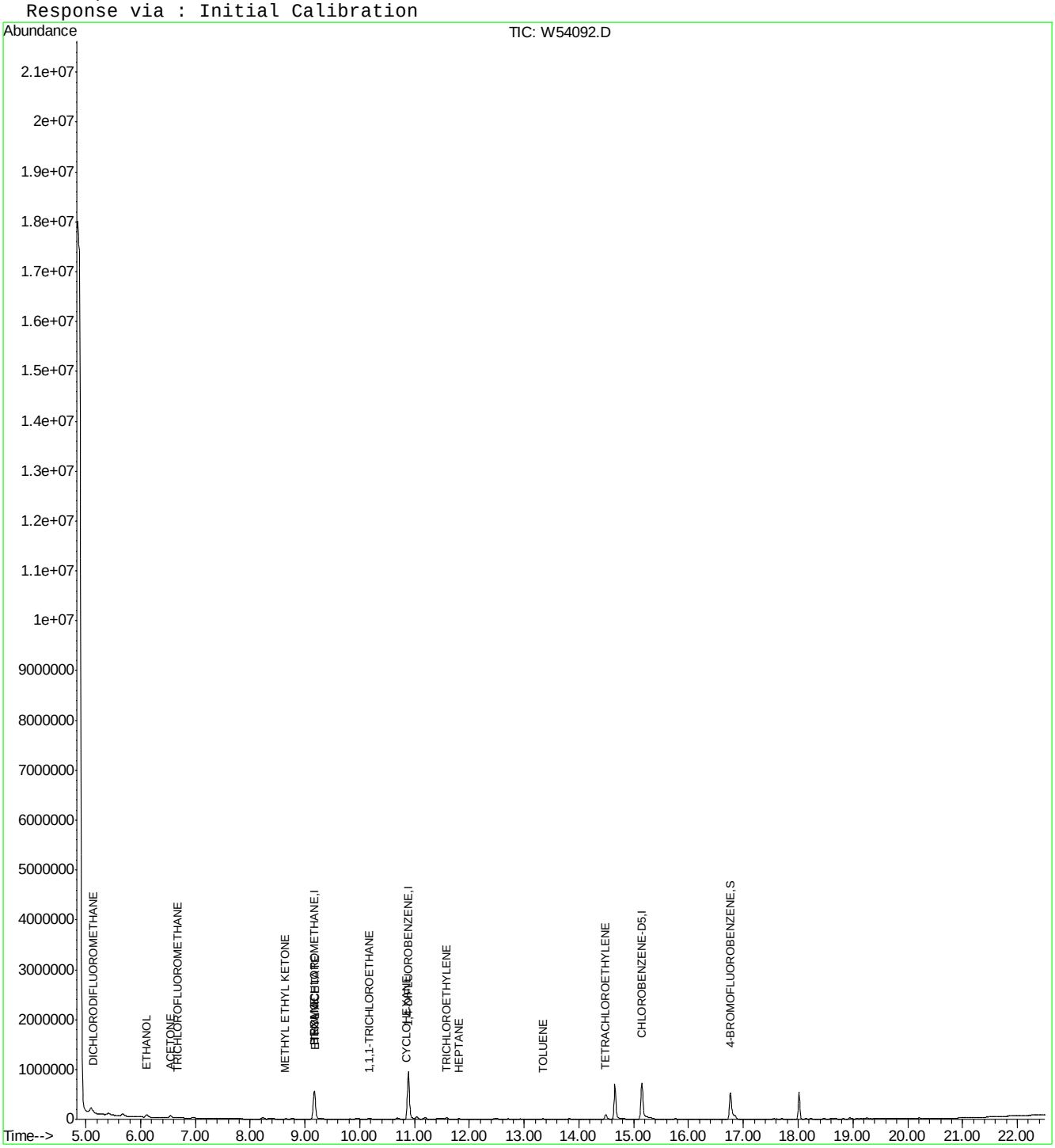
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	262263	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1254160	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	414861	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	341563	7.38	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 73.80%				
Target Compounds							Qvalue
5) DICHLORODIFLUOROMETHANE	5.15	85	36707	0.52	PPBV		98
17) TRICHLOROFLUOROMETHANE	6.67	101	19128	0.30	PPBV		96
19) ACETONE	6.55	58	17916	1.20	PPBV	#	57
26) ETHANOL	6.11	45	101829	9.56	PPBV		97
36) HEXANE	9.17	57	4426	0.10	PPBV		93
39) METHYL ETHYL KETONE	8.64	72	1457	0.11	PPBV	#	68
42) ETHYL ACETATE	9.19	61	5817	0.64	PPBV	#	1
46) 1,1,1-TRICHLOROETHANE	10.18	97	11569	0.21	PPBV		95
51) CYCLOHEXANE	10.85	84	5115	0.13	PPBV	#	4
53) TRICHLOROETHYLENE	11.57	95	2460	0.07	PPBV		92
61) HEPTANE	11.81	43	4852	0.11	PPBV		84
64) TOLUENE	13.34	92	4526	0.08	PPBV		92
71) TETRACHLOROETHYLENE	14.49	164	38030	1.14	PPBV		96

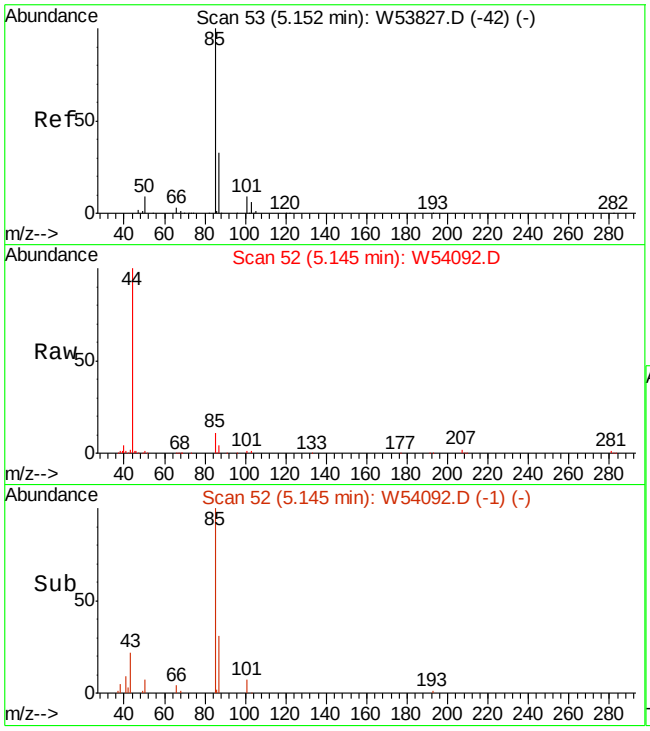
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54092.D Vial: 12
Acq On : 11 Mar 2016 7:07 pm Operator: YOUMINH
Sample : JC15063-2 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 13:30 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration

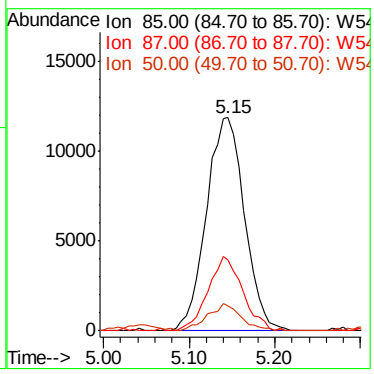


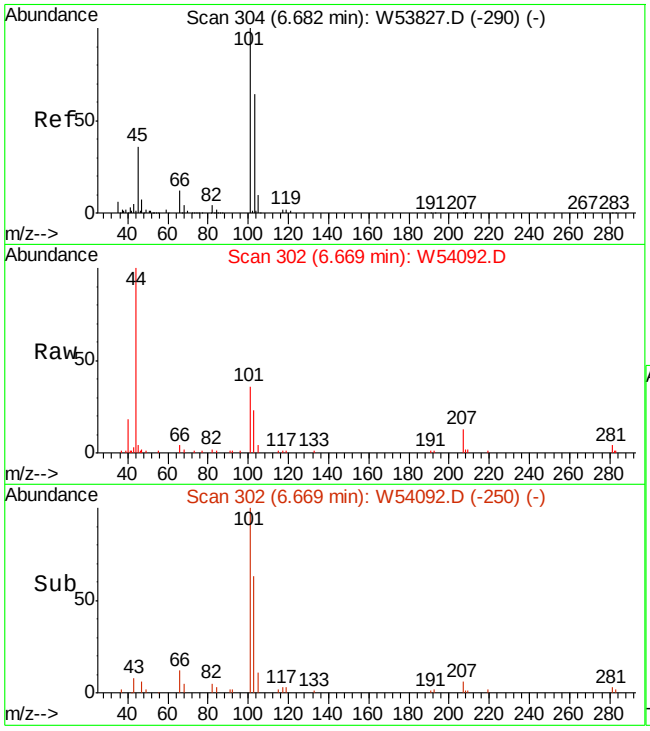


#5
DICHLORODIFLUOROMETHANE
Concen: 0.52 PPBV
RT: 5.15 min Scan# 52
Delta R.T. -0.01 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 85 Resp: 36707

Ion	Ratio	Lower	Upper
85	100		
87	31.6	12.4	52.4
50	11.2	0.0	30.2

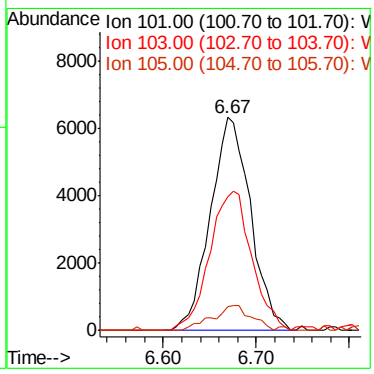


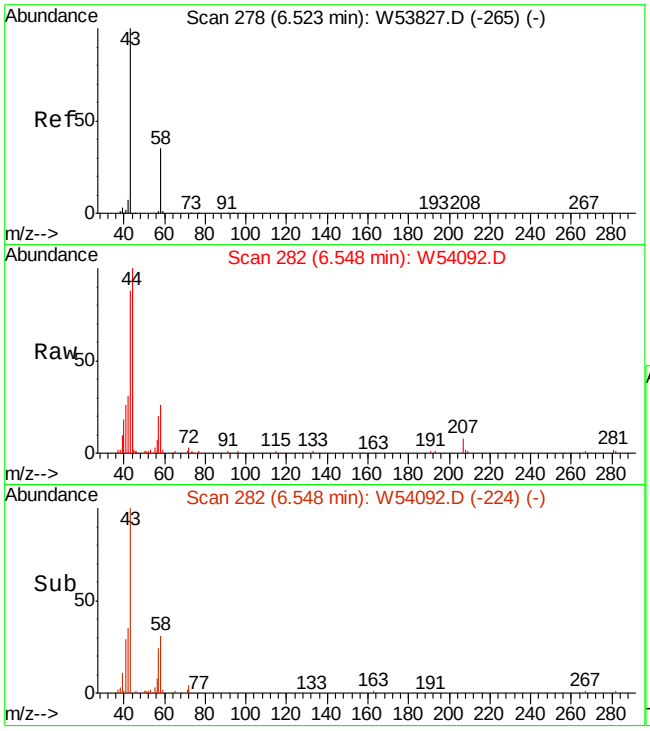


#17
TRICHLOROFLUOROMETHANE
Concen: 0.30 PPBV
RT: 6.67 min Scan# 302
Delta R.T. -0.01 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion:101 Resp: 19128

Ion	Ratio	Lower	Upper
101	100		
103	68.2	45.0	85.0
105	11.4	0.0	30.6

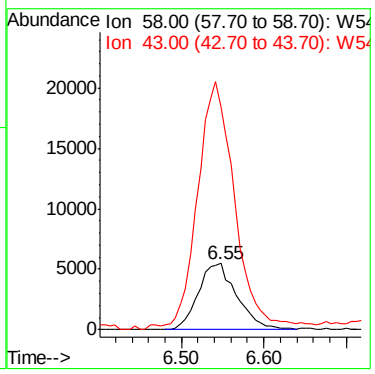


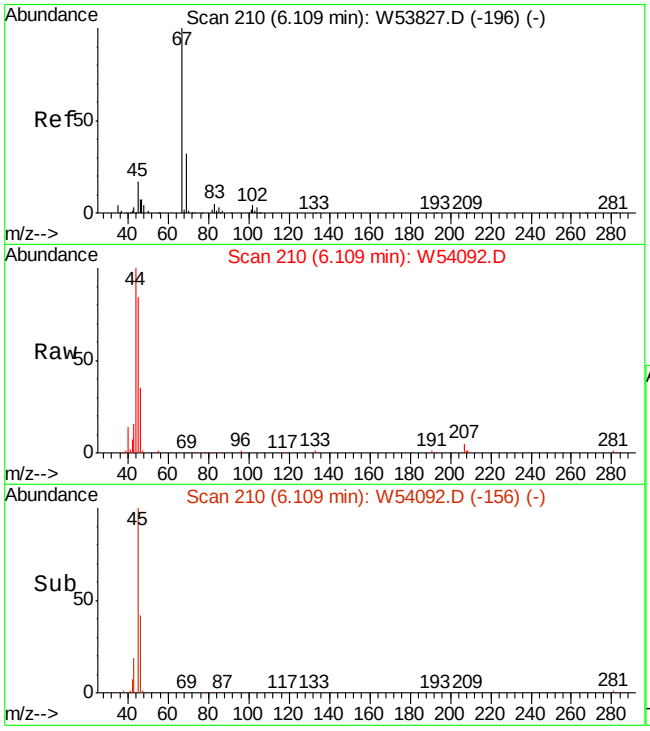


#19
ACETONE
Concen: 1.20 PPBV
RT: 6.55 min Scan# 282
Delta R.T. 0.02 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 58 Resp: 17916

Ion	Ratio	Lower	Upper
58	100		
43	365.3	263.9	303.9#

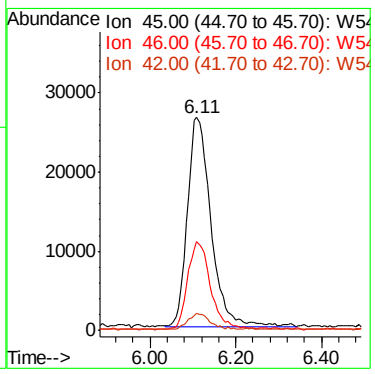


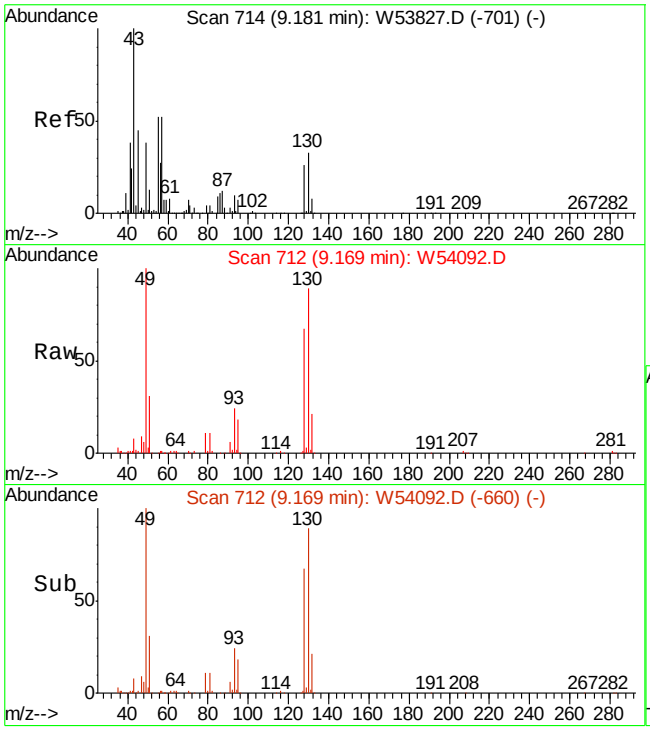


#26
ETHANOL
Concen: 9.56 PPBV
RT: 6.11 min Scan# 210
Delta R.T. 0.00 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 45 Resp: 101829

Ion	Ratio	Lower	Upper
45	100		
46	39.6	21.2	61.2
42	7.2	0.0	29.3

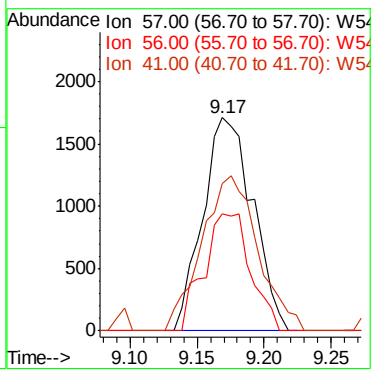


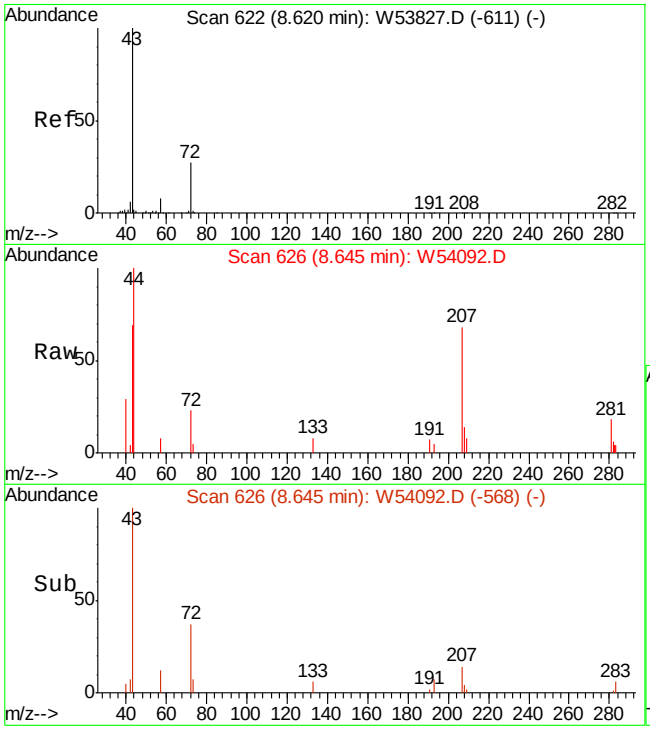


#36
HEXANE
Concen: 0.10 PPBV
RT: 9.17 min Scan# 712
Delta R.T. -0.01 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 57 Resp: 4426

Ion	Ratio	Lower	Upper
57	100		
56	51.4	32.7	72.7
41	81.9	72.1	112.1

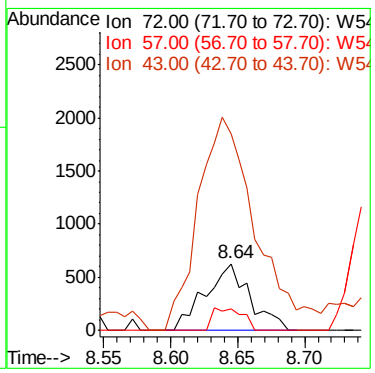


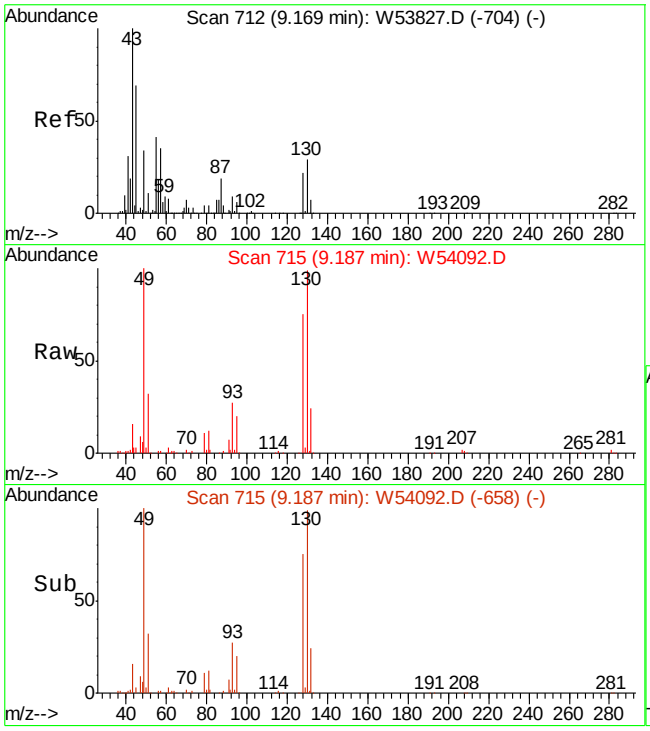


#39
METHYL ETHYL KETONE
Concen: 0.11 PPBV
RT: 8.64 min Scan# 626
Delta R.T. 0.02 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 72 Resp: 1457

Ion	Ratio	Lower	Upper
72	100		
57	32.7	9.3	49.3
43	293.2	348.6	388.6#

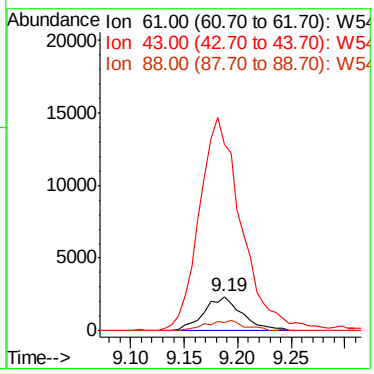


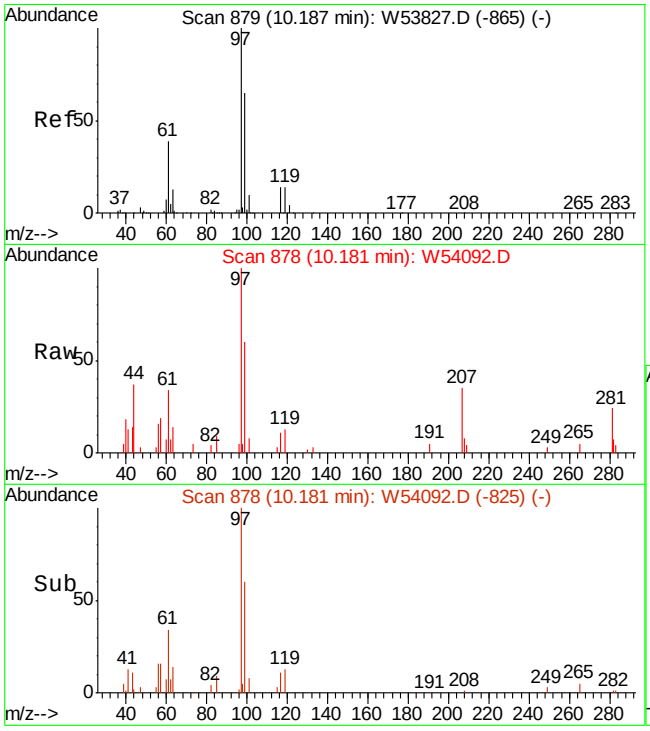


#42
ETHYL ACETATE
Concen: 0.64 PPBV
RT: 9.19 min Scan# 715
Delta R.T. 0.02 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 61 Resp: 5817

Ion	Ratio	Lower	Upper
61	100		
43	546.6	1218.3	1258.3#
88	24.6	24.0	64.0

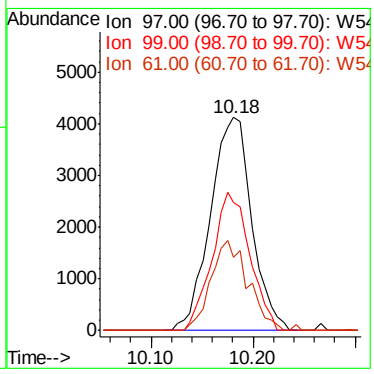


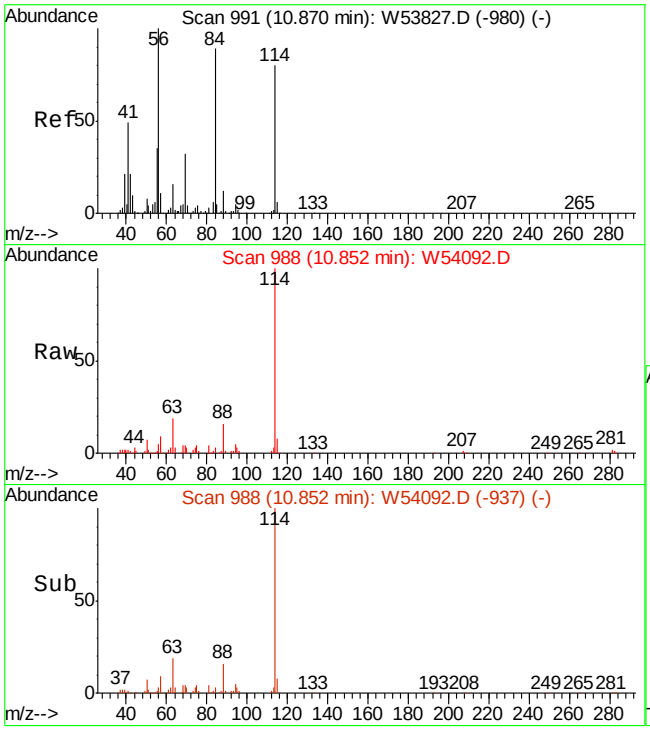


#46
1,1,1-TRICHLOROETHANE
Concen: 0.21 PPBV
RT: 10.18 min Scan# 878
Delta R.T. -0.01 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 97 Resp: 11569

Ion	Ratio	Lower	Upper
97	100		
99	59.3	44.2	84.2
61	37.9	19.7	59.7

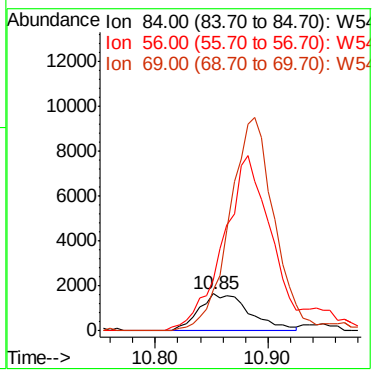


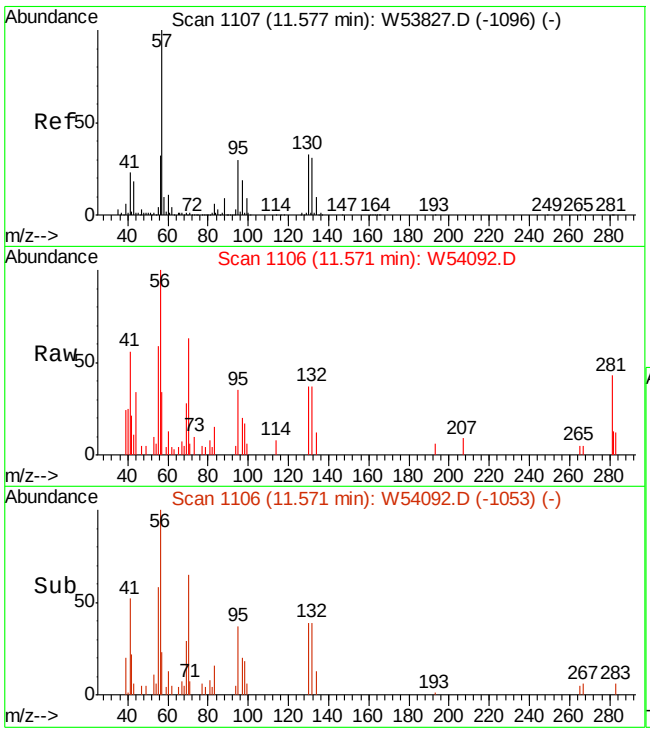


#51
CYCLOHEXANE
Concen: 0.13 PPBV
RT: 10.85 min Scan# 988
Delta R.T. -0.02 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 84 Resp: 5115

Ion	Ratio	Lower	Upper
84	100		
56	0.0	95.7	135.7#
69	0.0	21.6	61.6#

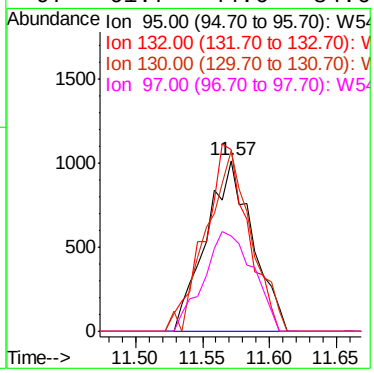


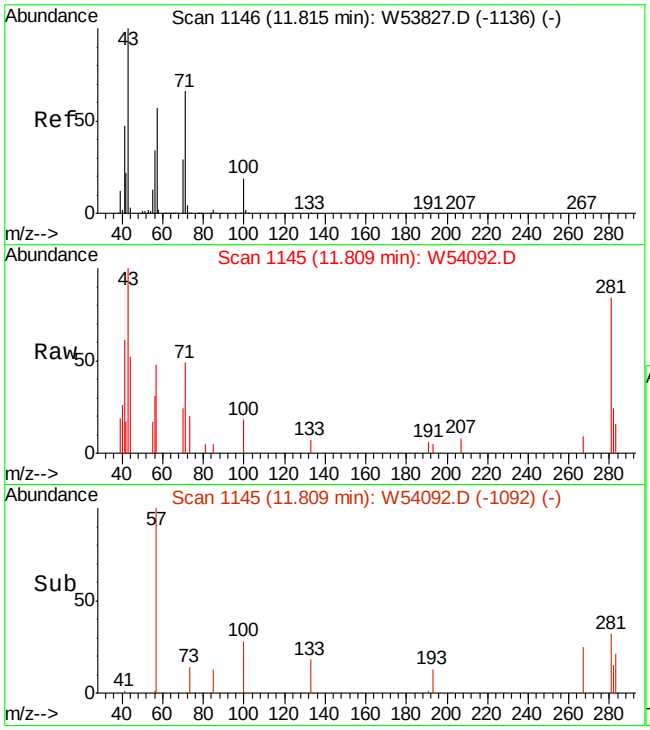


#53
TRICHLOROETHYLENE
Concen: 0.07 PPBV
RT: 11.57 min Scan# 1106
Delta R.T. -0.01 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 95 Resp: 2460

Ion	Ratio	Lower	Upper
95	100		
132	101.1	88.3	128.3
130	101.5	93.1	133.1
97	61.7	44.6	84.6

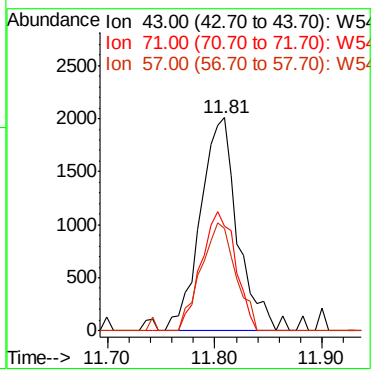


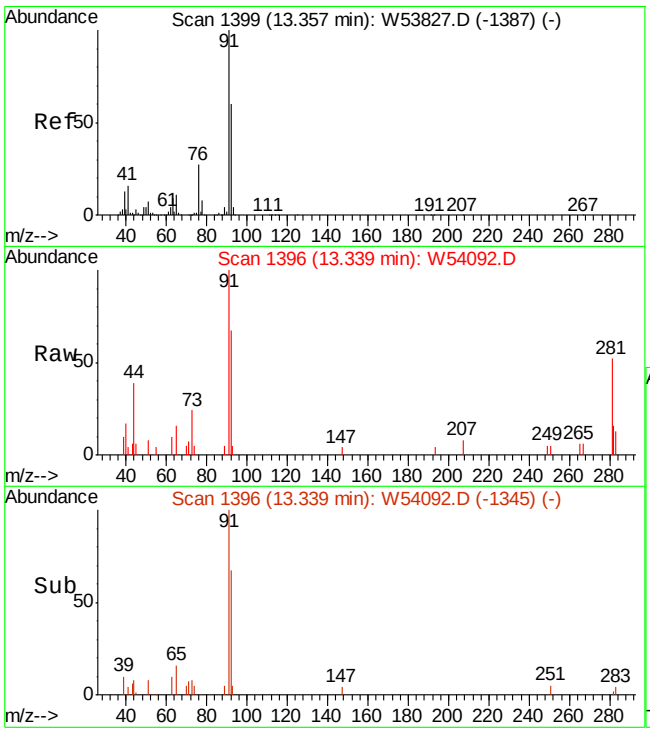


#61
HEPTANE
Concen: 0.11 PPBV
RT: 11.81 min Scan# 1145
Delta R.T. -0.01 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 43 Resp: 4852

Ion	Ratio	Lower	Upper
43	100		
71	51.1	44.7	84.7
57	47.3	38.6	78.6

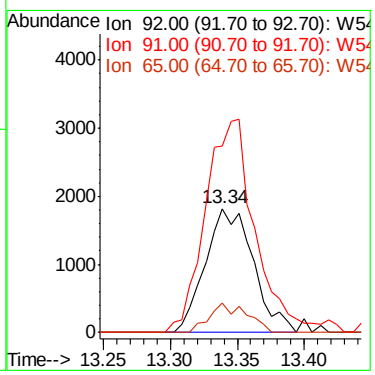


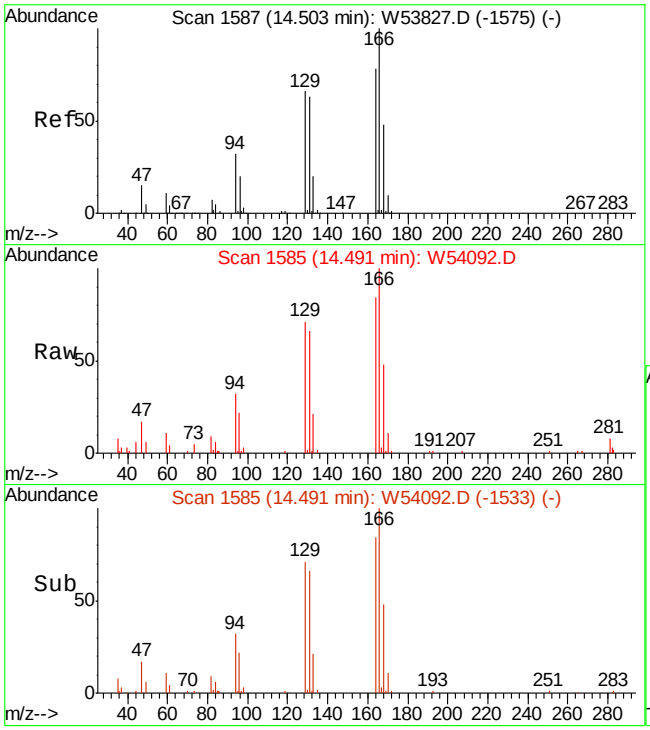


#64
TOLUENE
Concen: 0.08 PPBV
RT: 13.34 min Scan# 1396
Delta R.T. -0.02 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion: 92 Resp: 4526

Ion	Ratio	Lower	Upper
92	100		
91	180.0	147.8	187.8
65	18.7	0.0	39.8

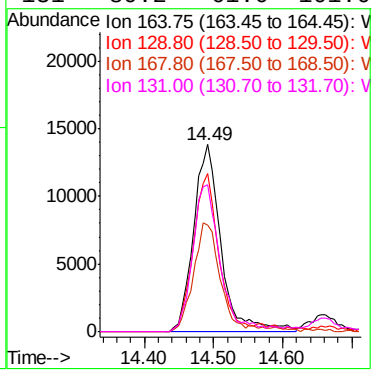




#71
TETRACHLOROETHYLENE
Concen: 1.14 PPBV
RT: 14.49 min Scan# 1585
Delta R.T. -0.01 min
Lab File: W54092.D
Acq: 11 Mar 2016 7:07 pm

Tgt Ion:164 Resp: 38030

Ion	Ratio	Lower	Upper
164	100		
129	78.4	63.7	103.7
168	58.7	41.6	81.6
131	80.2	61.0	101.0



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\W54092.D Vial: 12
Acq On : 11 Mar 2016 7:07 pm Operator: YOUMINH
Sample : JC15063-2 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

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

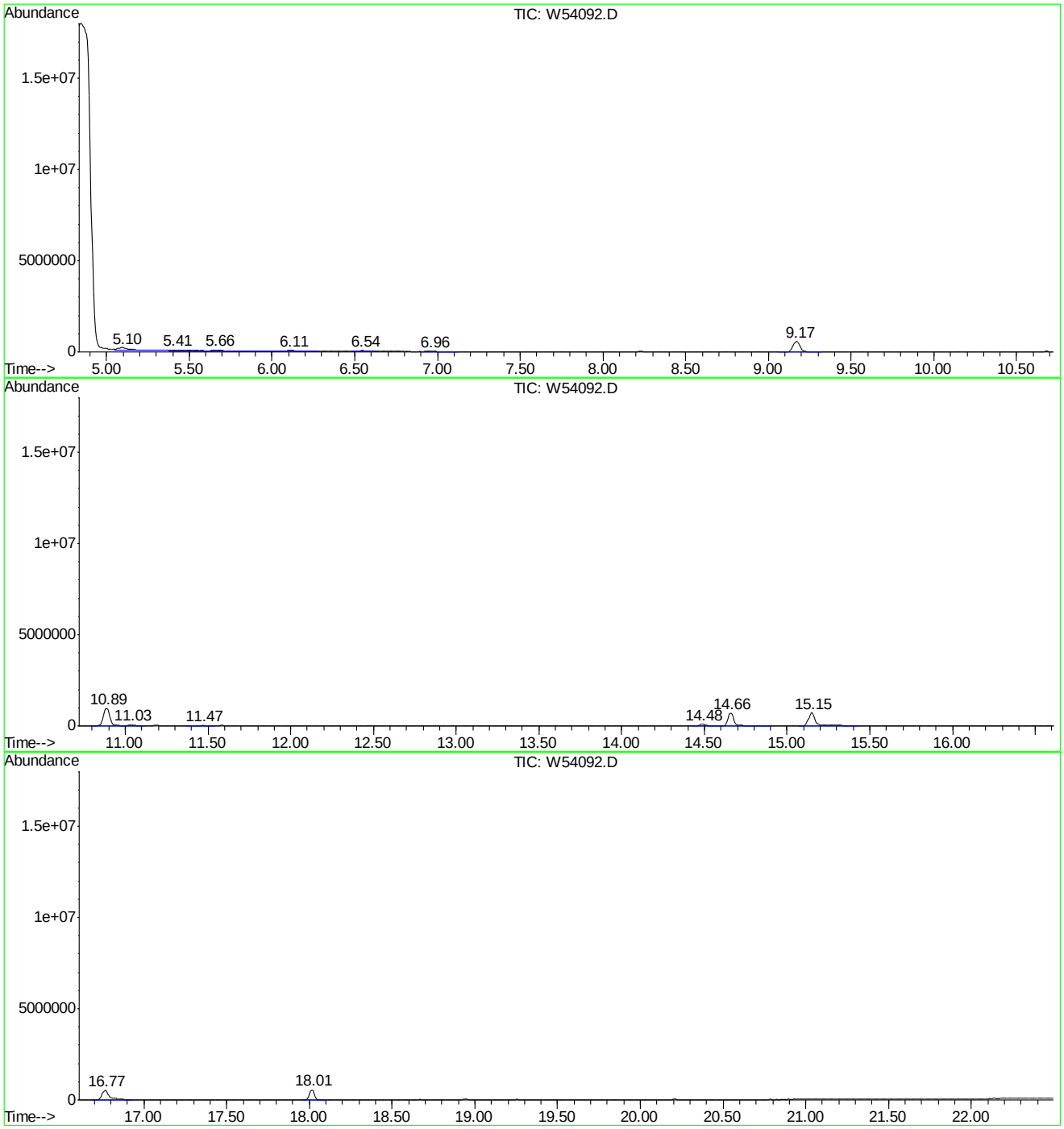
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.097	36	44	88	rVB3	136295	725272	27.93%	5.363%
2	5.407	90	95	131	rVV2	46601	261201	10.06%	1.932%
3	5.664	131	137	201	rVB3	68086	453000	17.45%	3.350%
4	6.109	201	210	238	rVB3	51059	227795	8.77%	1.685%
5	6.541	272	281	295	rVB	51058	163864	6.31%	1.212%
6	6.962	342	350	376	rVB3	28157	120271	4.63%	0.889%
7	9.169	694	712	736	rBV	572050	1711816	65.93%	12.659%
8	10.888	980	994	1012	rBV	959485	2596599	100.00%	19.202%
9	11.034	1012	1018	1029	rVB4	41890	116213	4.48%	0.859%
10	11.467	1072	1089	1101	rBV5	21147	106588	4.10%	0.788%
11	14.485	1574	1584	1602	rBV	90044	246201	9.48%	1.821%
12	14.656	1603	1612	1651	rVB	703406	1753528	67.53%	12.967%
13	15.150	1680	1693	1739	rBV	729400	2331580	89.79%	17.242%
14	16.765	1946	1958	1985	rVB	535413	1673252	64.44%	12.373%
15	18.015	2154	2163	2175	rVB	542473	1035698	39.89%	7.659%

Sum of corrected areas: 13522878

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\W54092.D
Operator : YOUMINH
Acquired : 11 Mar 2016 7:07 pm using AcqMethod TO15W
Instrument : MSW
Sample Name: JC15063-2
Misc Info : MS99025,VW2161,400,,,,1
Vial Number: 12
Quant File :MW2152.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54092.D Vial: 12
Acq On : 11 Mar 2016 7:07 pm Operator: YOUMINH
Sample : JC15063-2 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

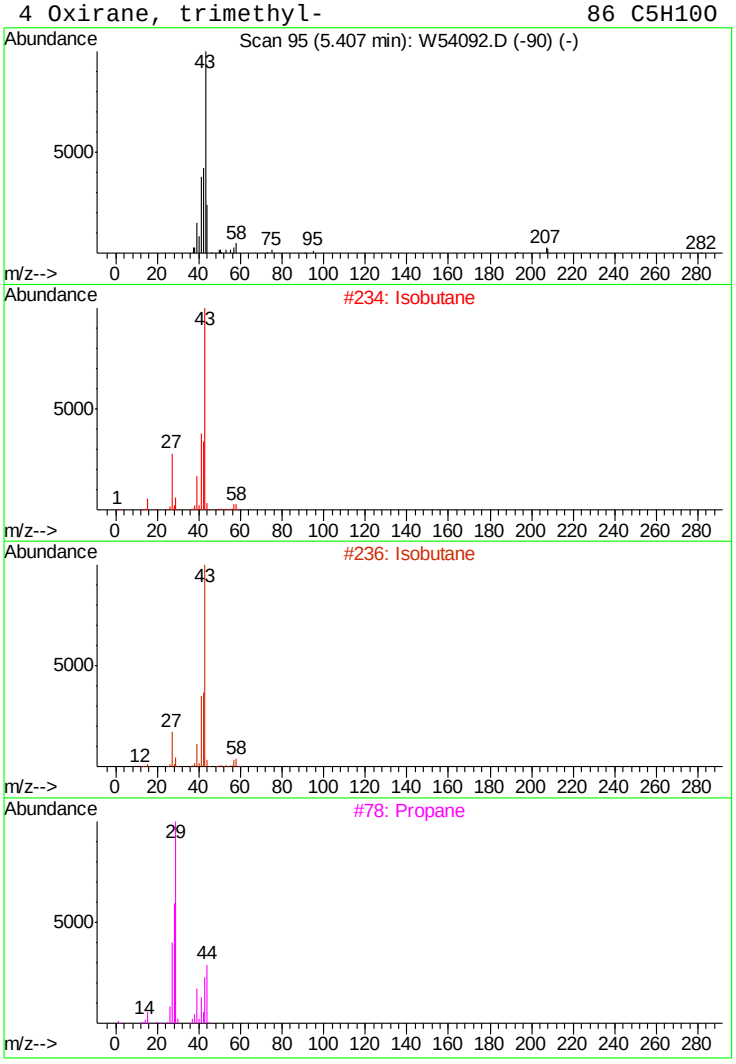
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

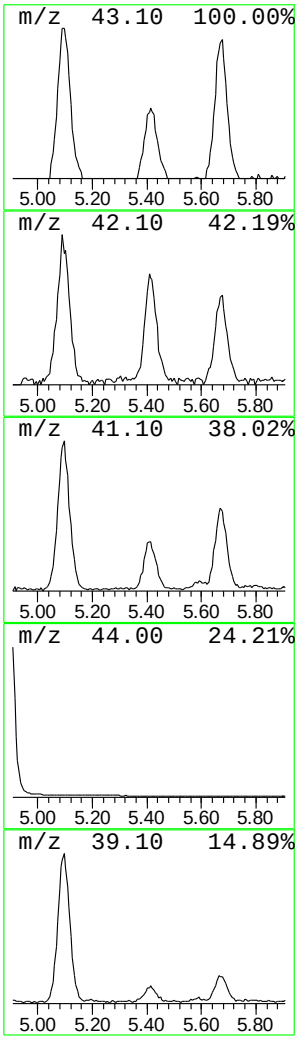
****

Peak Number 1 Alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.41	1.53 PPBV	261201	BROMOCHLOROMETHANE	9.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isobutane	58	C4H10	000075-28-5	40
2	Isobutane	58	C4H10	000075-28-5	40
3	Propane	44	C3H8	000074-98-6	5
4	Oxirane, trimethyl-	86	C5H10O	005076-19-7	4





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54092.D Vial: 12
Acq On : 11 Mar 2016 7:07 pm Operator: YOUMINH
Sample : JC15063-2 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

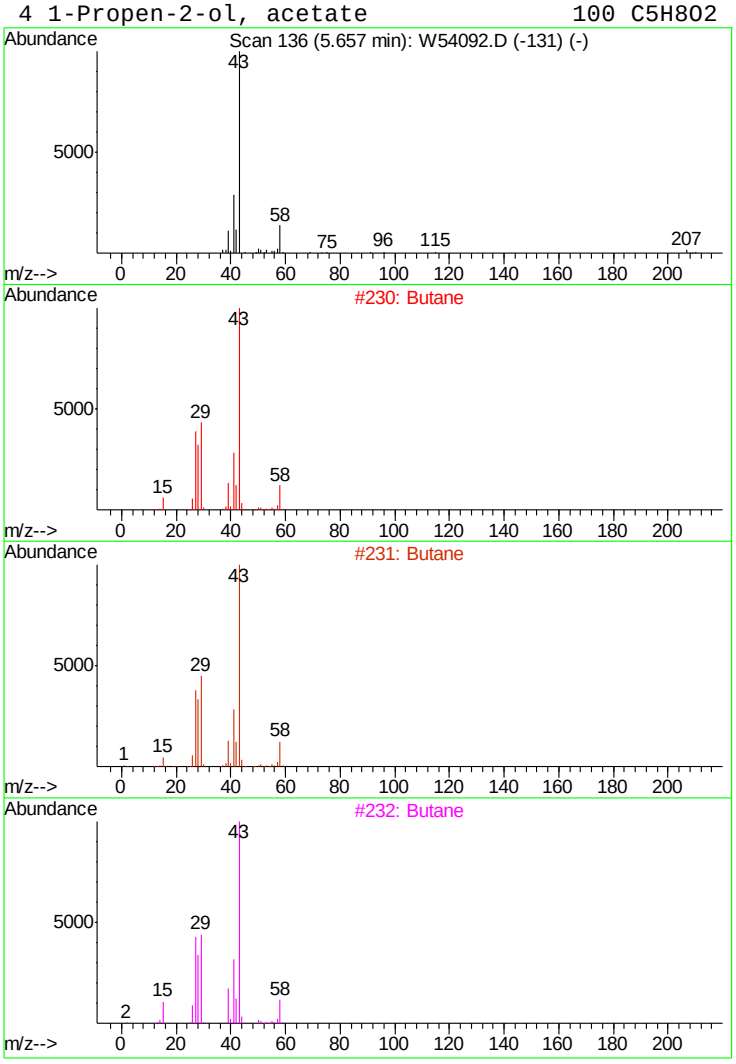
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

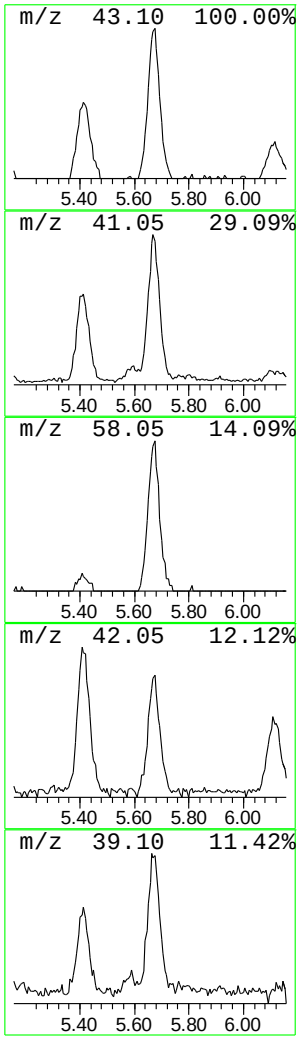
****

Peak Number 2 Alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.66	2.65 PPBV	453000	BROMOCHLOROMETHANE	9.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	39





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54092.D Vial: 12
Acq On : 11 Mar 2016 7:07 pm Operator: YOUMINH
Sample : JC15063-2 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

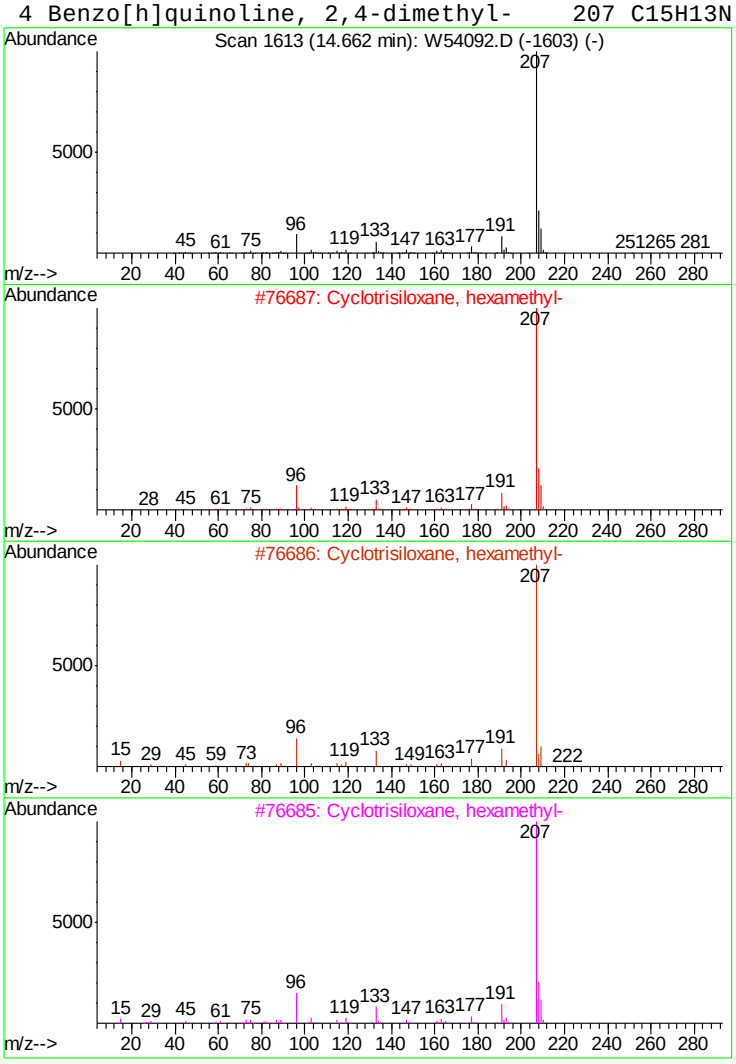
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

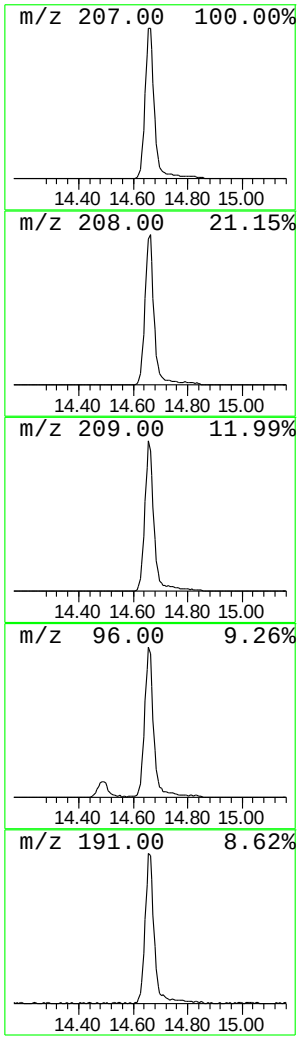
****

Peak Number 3 System artifact Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.66	7.52 PPBV	1753530	CHLOROBENZENE-D5	15.15

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	72
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	49
4	Benzo[h]quinoline, 2,4-dimethyl-	207	C15H13N	000605-67-4	45





Library Search Compound Report

```
Data File : C:\MSDCHEM\1\DATA\W54092.D                  Vial: 12
Acq On    : 11 Mar 2016   7:07 pm                    Operator: YOUMINH
Sample    : JC15063-2                                Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                  Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number  4  System artifact                 Concentration Rank  2

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
  18.01    4.44 PPBV      1035700    CHLOROBENZENE-D5           15.15

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------------
  1 Cyclotetrasiloxane, octamethyl-      296 C8H24O4Si4     000556-67-2 91
  2 Cyclotetrasiloxane, octamethyl-      296 C8H24O4Si4     000556-67-2 78
  3 Cyclotetrasiloxane, octamethyl-      296 C8H24O4Si4     000556-67-2 74
  4 4H-1,2,4-Triazole-3-thiol, 4-all... 281 C16H15N3S       031803-13-1 59
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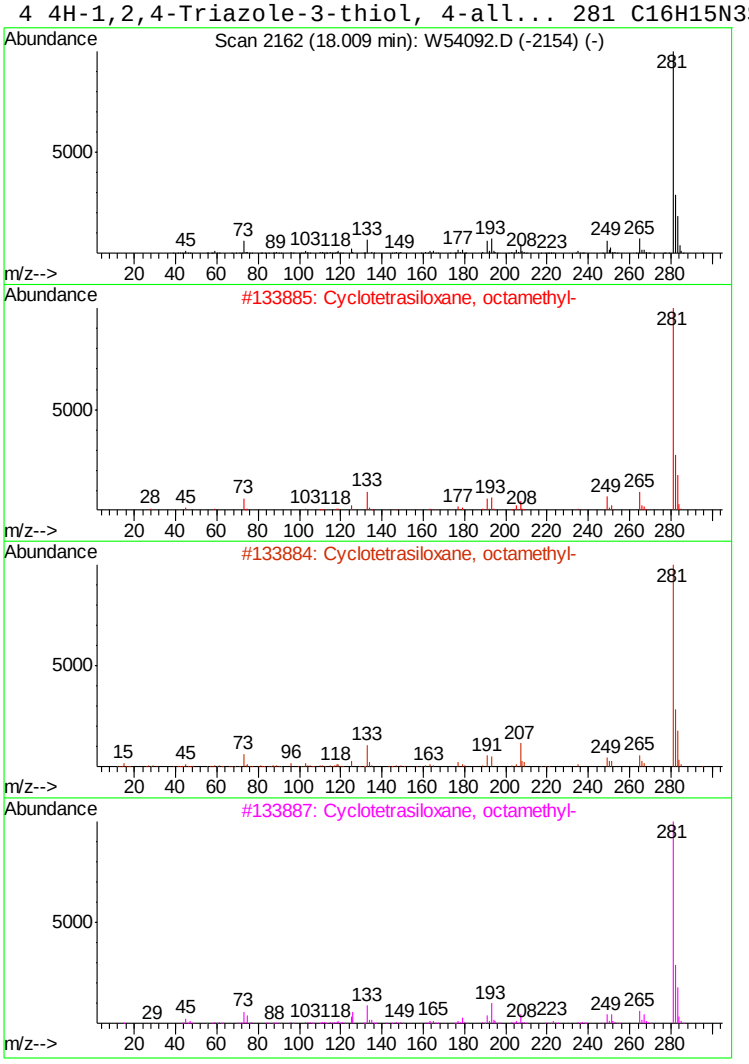
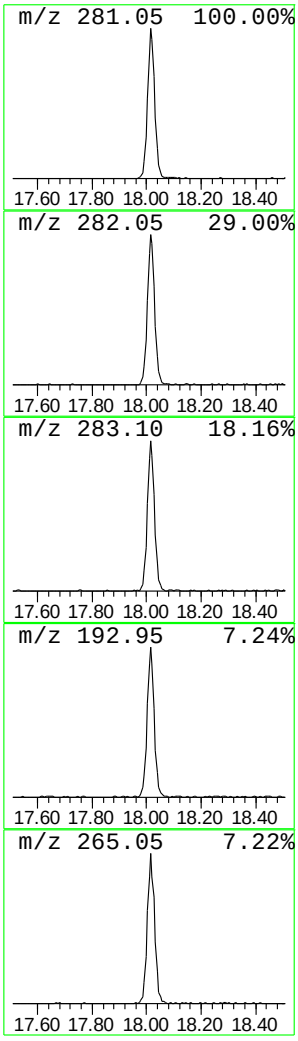




Tentatively Identified Compound (LSC) summary

Operator ID: YOUMINH Date Acquired: 11 Mar 2016 7:07 pm
Data File: C:\MSDCHEM\1\DATA\W54092.D
Name: JC15063-2
Misc: MS99025,VW2161,400,,,,1
Method: C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title: TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library Searched: C:\DATABASE\NIST08.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Alkane	5.41	1.5	PPBV	261201	1	9.17	1711820	10.0
Alkane	5.66	2.6	PPBV	453000	1	9.17	1711820	10.0
System artifact	14.66	7.5	PPBV	1753530	3	15.15	2331580	10.0
System artifact	18.01	4.4	PPBV	1035700	3	15.15	2331580	10.0

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 09:25:07 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

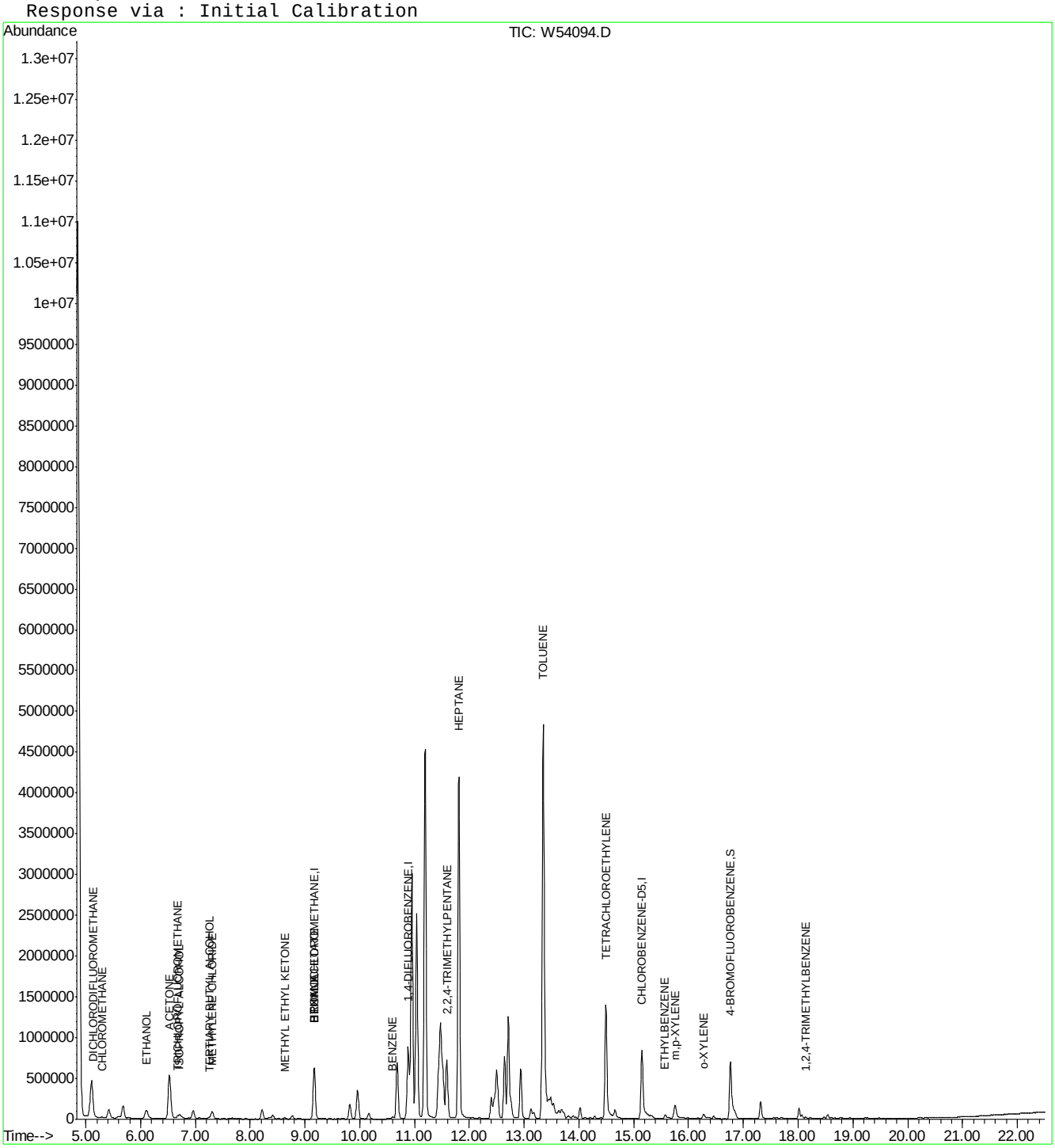
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	191443	10.00	PPBV		-0.01
49) 1,4-DIFLUOROBENZENE	10.89	114	1068129	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	477063	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	442364	8.31	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 83.10%				
Target Compounds							Qvalue
5) DICHLORODIFLUOROMETHANE	5.15	85	29641	0.58	PPBV		97
9) CHLOROMETHANE	5.30	52	4746	0.80	PPBV	#	84
17) TRICHLOROFLUOROMETHANE	6.67	101	29429	0.62	PPBV		98
18) ISOPROPYL ALCOHOL	6.72	45	88506	2.23	PPBV		92
19) ACETONE	6.52	58	312172	28.54	PPBV	#	70
26) ETHANOL	6.10	45	225898	29.05	PPBV		98
29) METHYLENE CHLORIDE	7.30	84	63694	3.25	PPBV		89
33) TERTIARY BUTYL ALCOHOL	7.24	59	14685	0.36	PPBV	#	73
36) HEXANE	9.18	57	101473	3.02	PPBV		88
39) METHYL ETHYL KETONE	8.62	72	8098	0.83	PPBV		94
42) ETHYL ACETATE	9.18	61	9865	1.48	PPBV	#	66
50) BENZENE	10.60	78	37875	0.54	PPBV		98
58) 2,2,4-TRIMETHYLPENTANE	11.58	57	118175	1.05	PPBV	#	1
61) HEPTANE	11.81	43	2409292	61.81	PPBV		90
64) TOLUENE	13.35	92	3449726	68.95	PPBV		97
71) TETRACHLOROETHYLENE	14.49	164	576559	15.08	PPBV		99
77) ETHYLBENZENE	15.58	91	63253	0.64	PPBV		99
78) m,p-XYLENE	15.75	106	100560	2.43	PPBV		94
79) o-XYLENE	16.27	106	27171	0.69	PPBV		98
94) 1,2,4-TRIMETHYLBENZENE	18.14	105	13433	0.16	PPBV	#	33

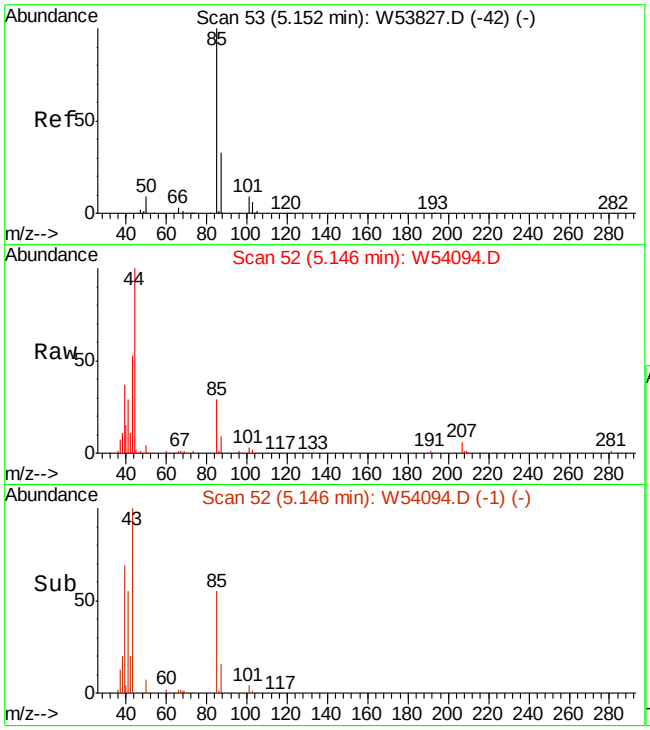
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 13:19 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration

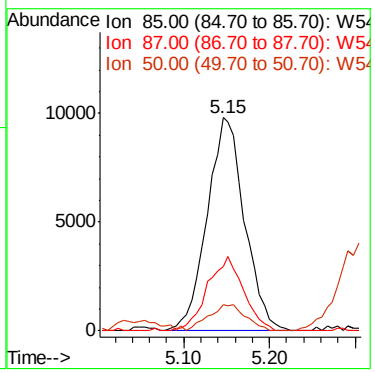


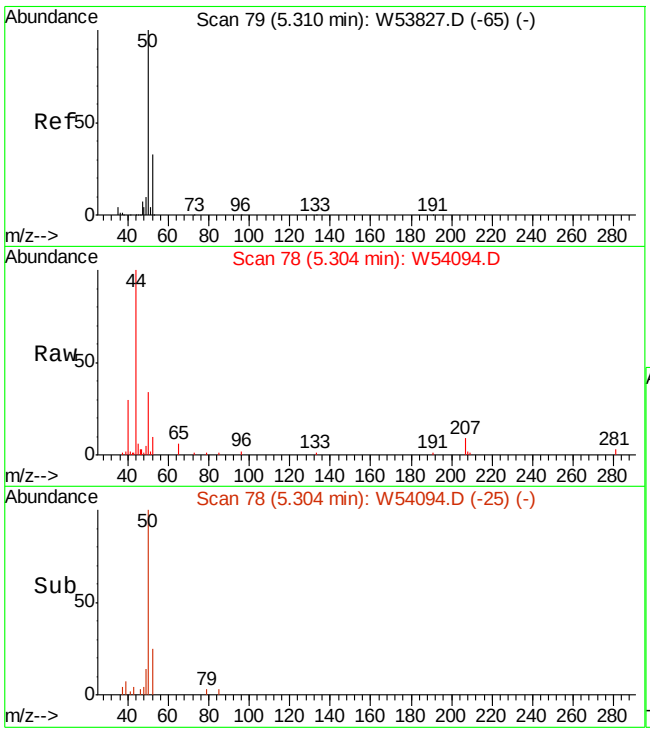


#5
DICHLORODIFLUOROMETHANE
Concen: 0.58 PPBV
RT: 5.15 min Scan# 52
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 85 Resp: 29641

Ion	Ratio	Lower	Upper
85	100		
87	33.6	12.4	52.4
50	12.1	0.0	30.2

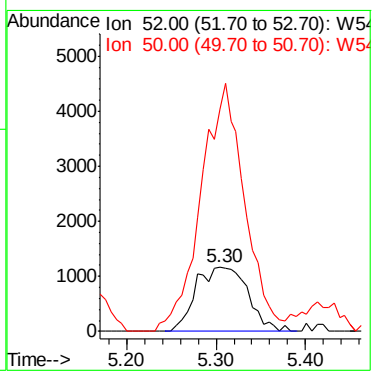


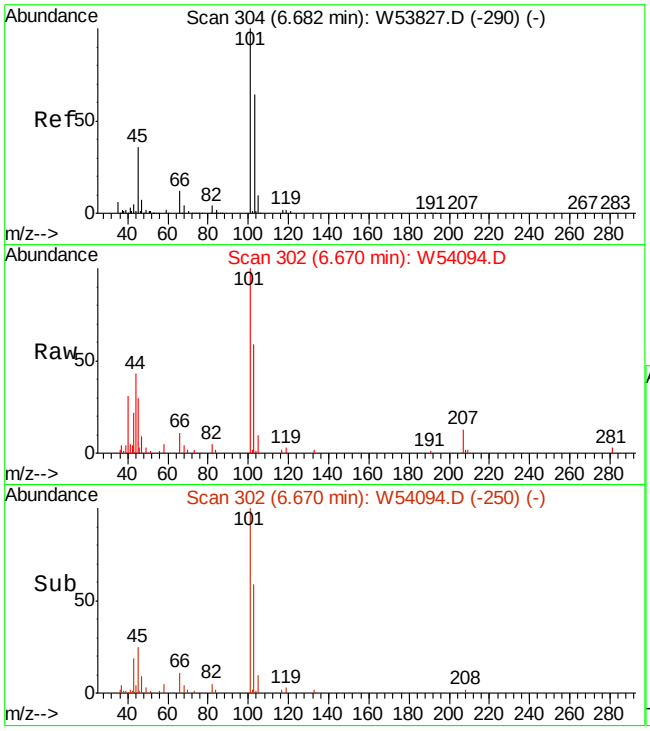


#9
CHLOROMETHANE
Concen: 0.80 PPBV
RT: 5.30 min Scan# 78
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 52 Resp: 4746

Ion	Ratio	Lower	Upper
52	100		
50	325.8	274.8	314.8#

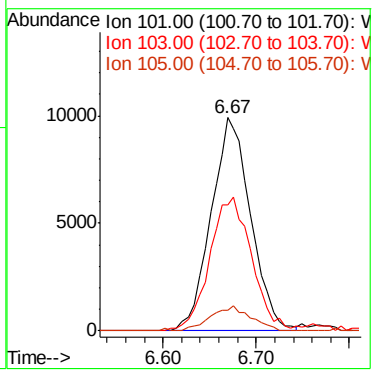


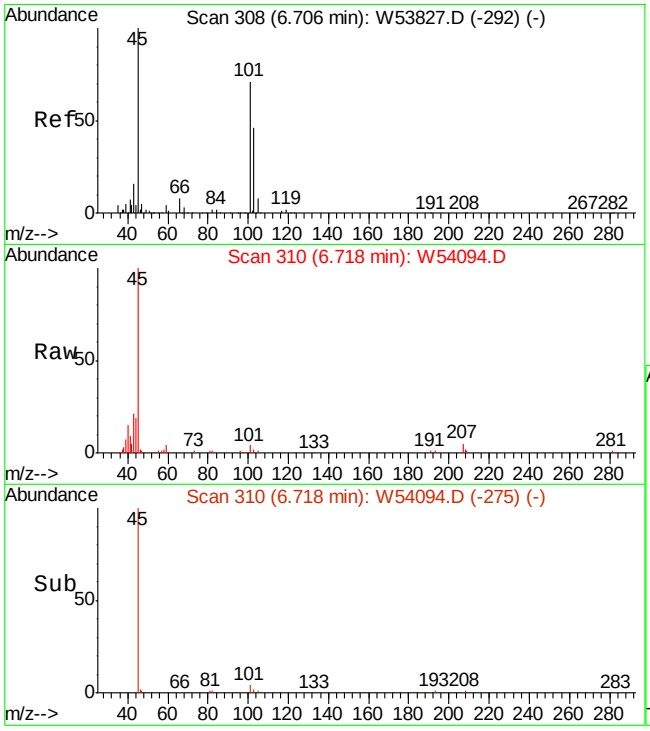


#17
TRICHLOROFLUOROMETHANE
Concen: 0.62 PPBV
RT: 6.67 min Scan# 302
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion:101 Resp: 29429

Ion	Ratio	Lower	Upper
101	100		
103	66.5	45.0	85.0
105	11.7	0.0	30.6

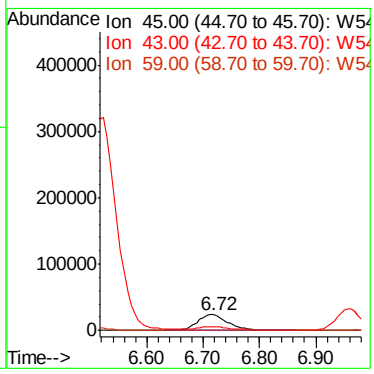


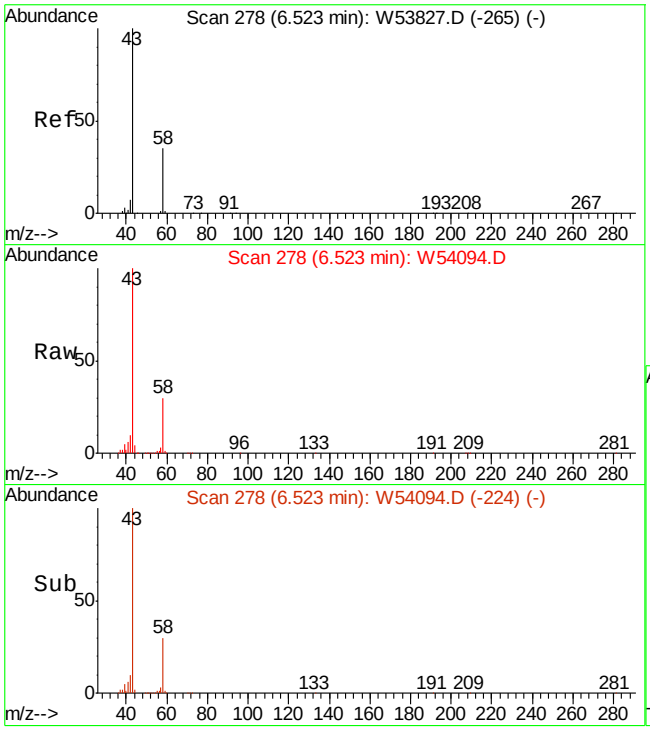


#18
ISOPROPYL ALCOHOL
Concen: 2.23 PPBV
RT: 6.72 min Scan# 310
Delta R.T. 0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 45 Resp: 88506

Ion	Ratio	Lower	Upper
45	100		
43	21.5	0.0	37.1
59	4.2	0.0	24.3

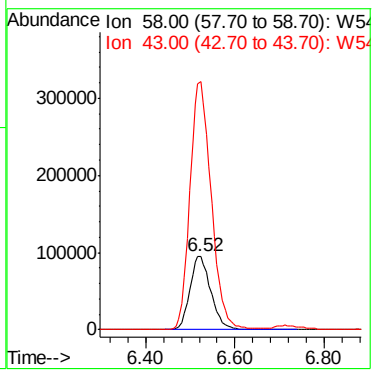


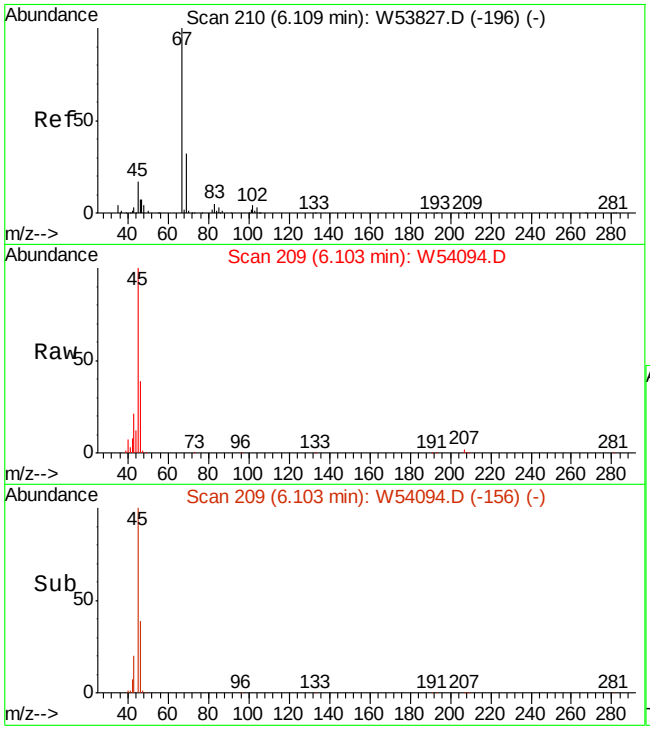


#19
ACETONE
Concen: 28.54 PPBV
RT: 6.52 min Scan# 278
Delta R.T. -0.00 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 58 Resp: 312172

Ion	Ratio	Lower	Upper
58	100		
43	340.9	263.9	303.9#

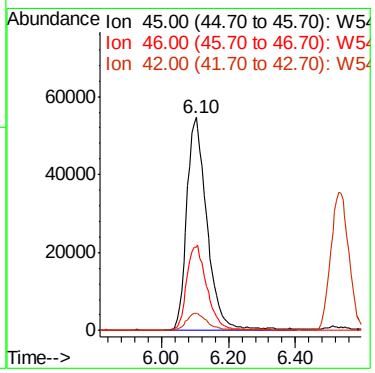


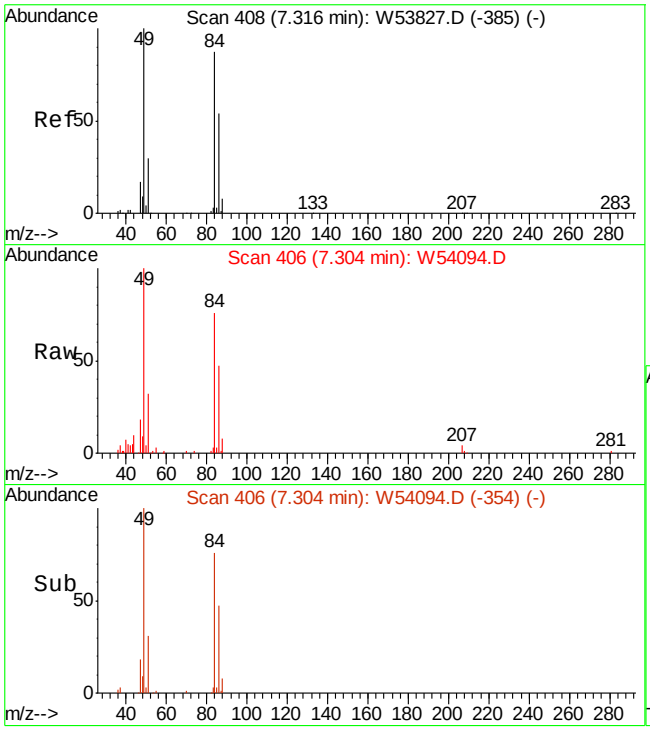


#26
ETHANOL
Concen: 29.05 PPBV
RT: 6.10 min Scan# 209
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 45 Resp: 225898

Ion	Ratio	Lower	Upper
45	100		
46	40.4	21.2	61.2
42	8.4	0.0	29.3

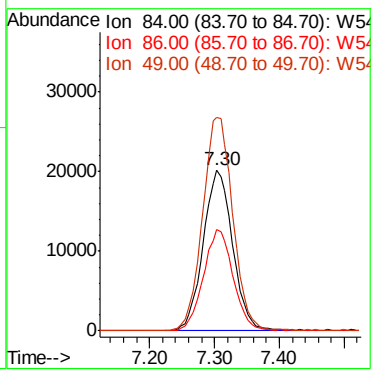


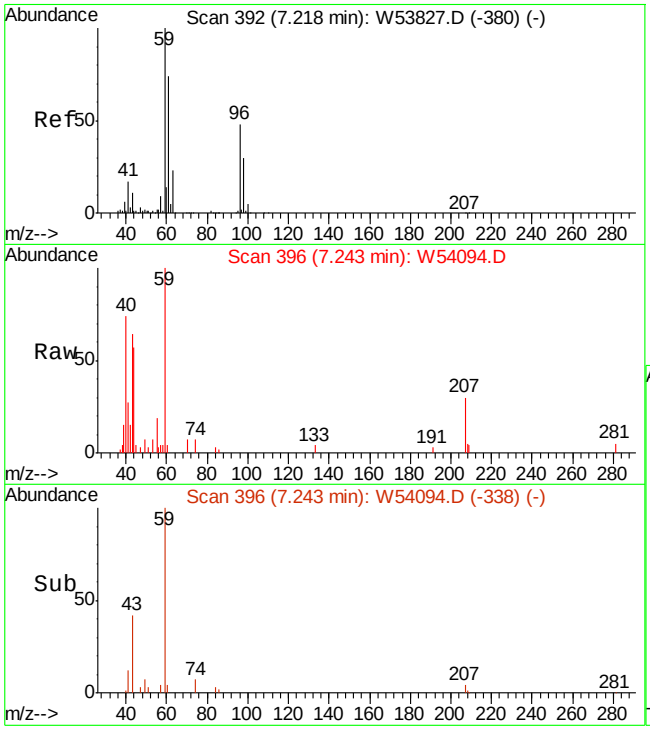


#29
METHYLENE CHLORIDE
Concen: 3.25 PPBV
RT: 7.30 min Scan# 406
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 84 Resp: 63694

Ion	Ratio	Lower	Upper
84	100		
86	63.3	43.3	83.3
49	136.4	0.0	317.4

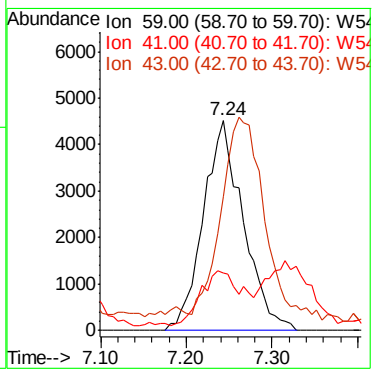


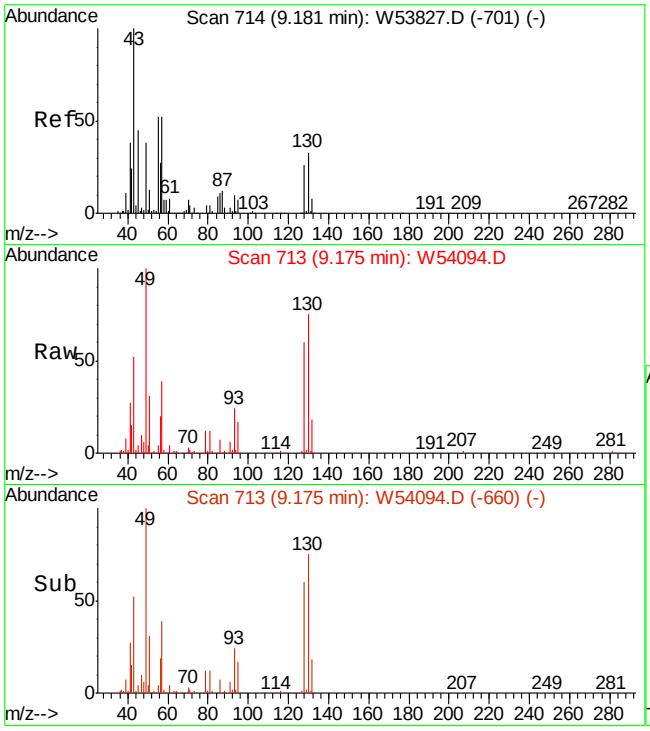


#33
TERTIARY BUTYL ALCOHOL
Concen: 0.36 PPBV
RT: 7.24 min Scan# 396
Delta R.T. 0.02 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 59 Resp: 14685

Ion	Ratio	Lower	Upper
59	100		
41	28.2	0.0	37.3
43	0.0	0.0	31.8

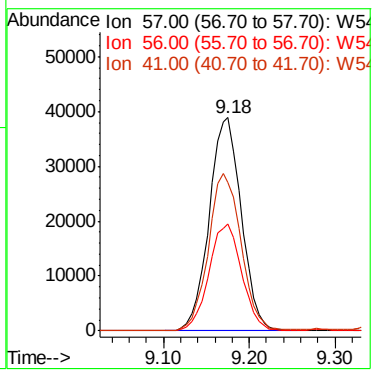


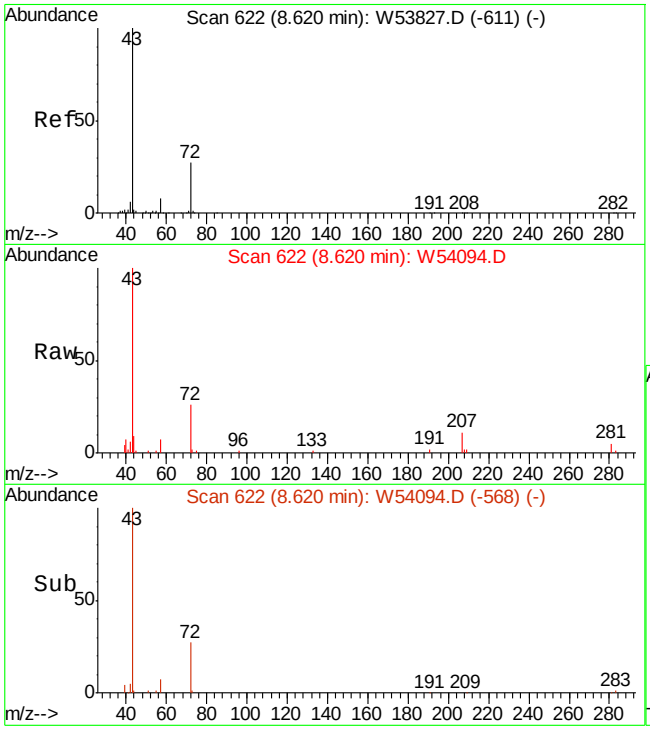


#36
HEXANE
Concen: 3.02 PPBV
RT: 9.18 min Scan# 713
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 57 Resp: 101473

Ion	Ratio	Lower	Upper
57	100		
56	51.4	32.7	72.7
41	75.6	72.1	112.1

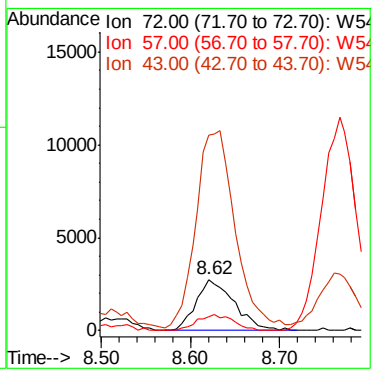


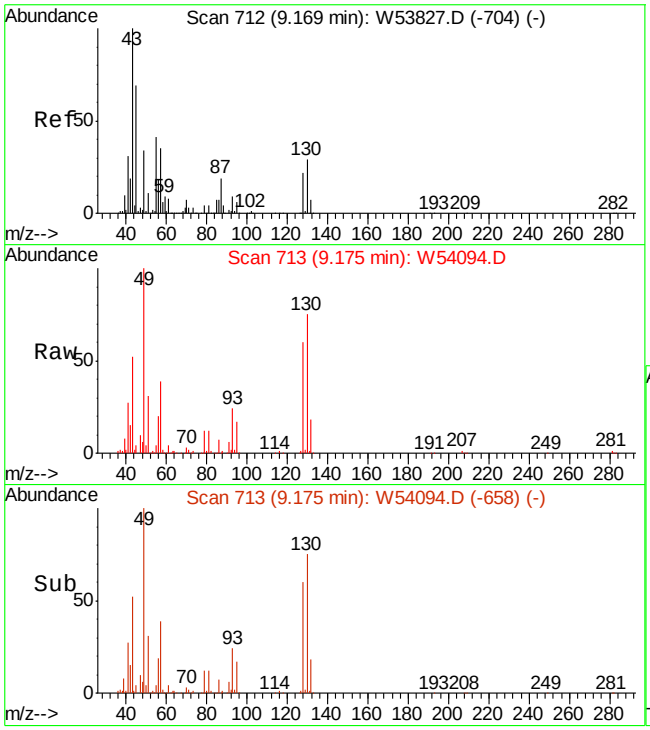


#39
METHYL ETHYL KETONE
Concen: 0.83 PPBV
RT: 8.62 min Scan# 622
Delta R.T. -0.00 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 72 Resp: 8098

Ion	Ratio	Lower	Upper
72	100		
57	27.7	9.3	49.3
43	383.8	348.6	388.6

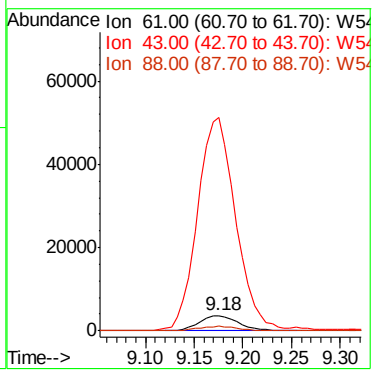


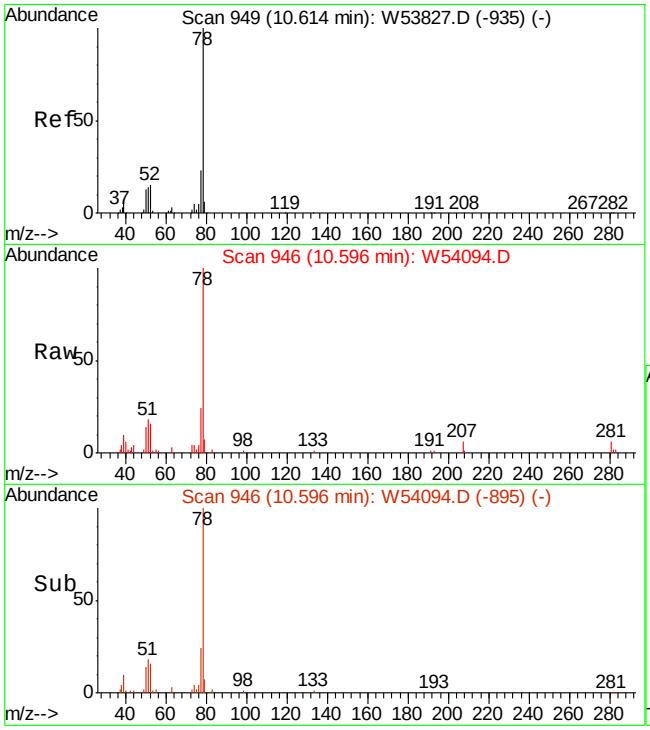


#42
ETHYL ACETATE
Concen: 1.48 PPBV
RT: 9.18 min Scan# 713
Delta R.T. 0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 61 Resp: 9865

Ion	Ratio	Lower	Upper
61	100		
43	1416.4	1218.3	1258.3#
88	30.8	24.0	64.0

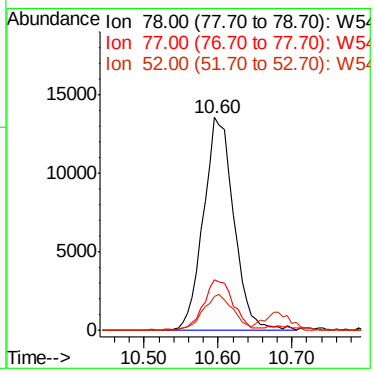


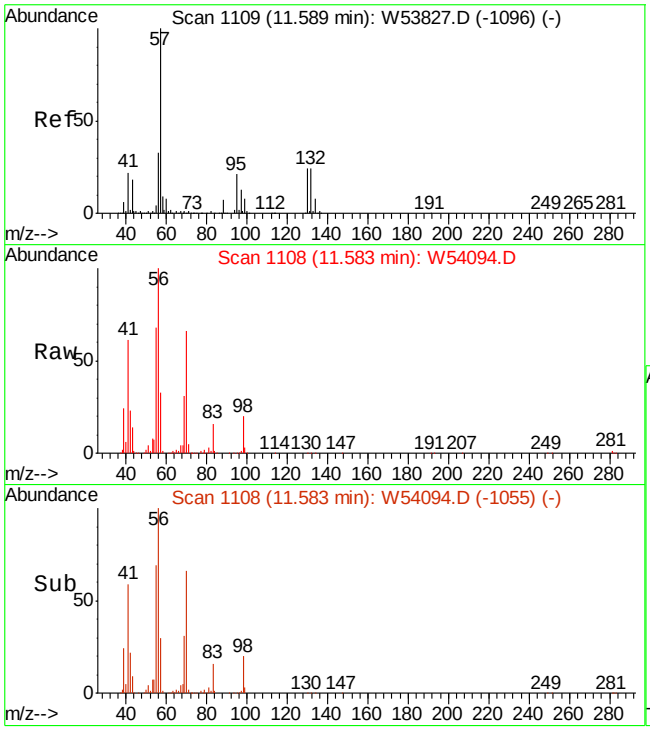


#50
BENZENE
Concen: 0.54 PPBV
RT: 10.60 min Scan# 946
Delta R.T. -0.02 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 78 Resp: 37875

Ion	Ratio	Lower	Upper
78	100		
77	23.2	3.3	43.3
52	17.0	0.0	34.9

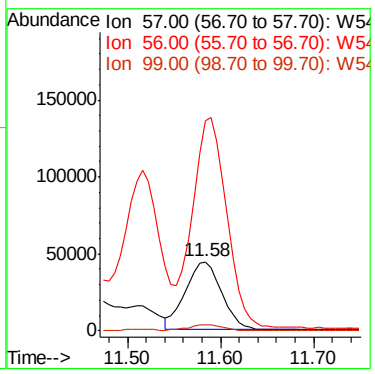


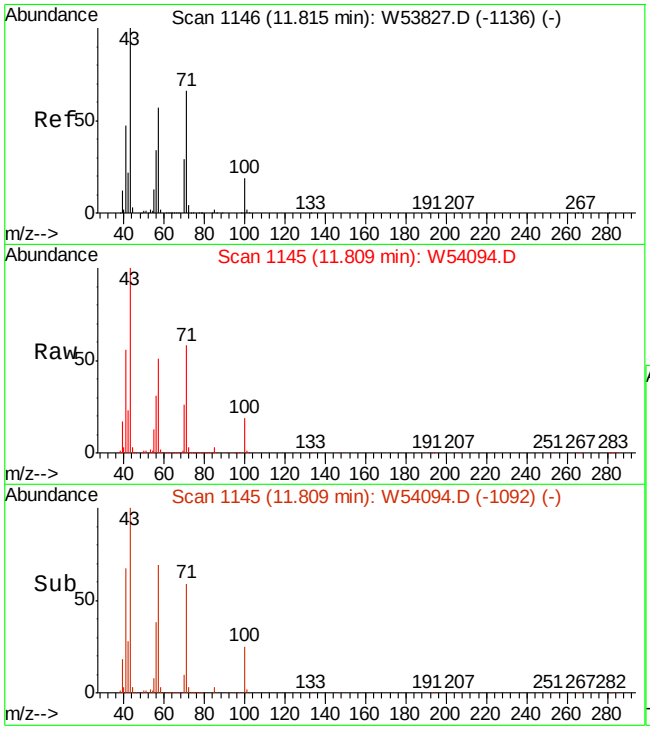


#58
2,2,4-TRIMETHYLPENTANE
Concen: 1.05 PPBV
RT: 11.58 min Scan# 1108
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 57 Resp: 118175

Ion	Ratio	Lower	Upper
57	100		
56	295.1	12.1	52.1#
99	8.7	0.0	28.4

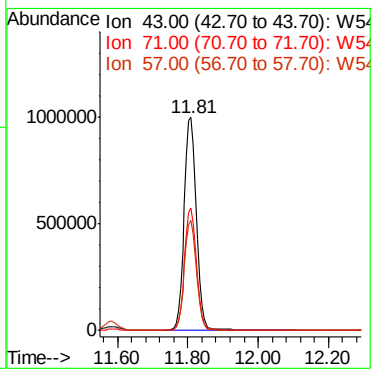


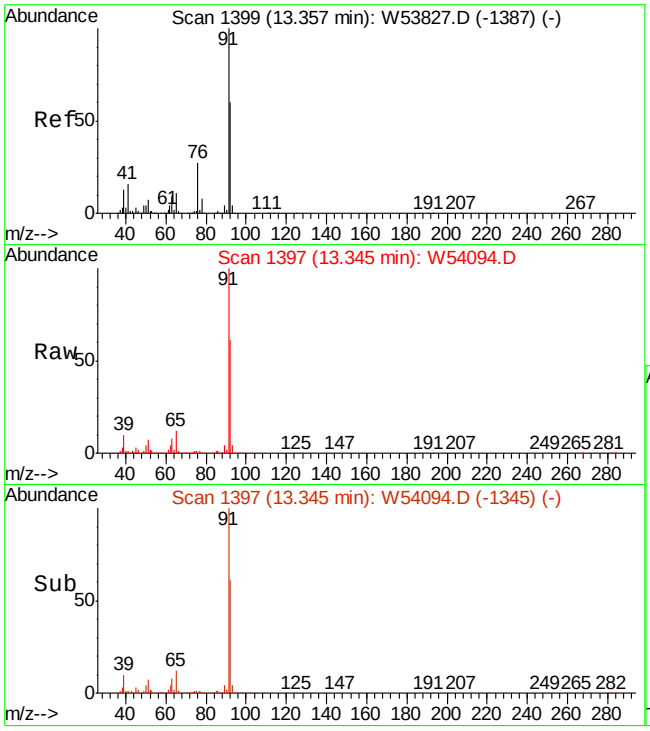


#61
HEPTANE
Concen: 61.81 PPBV
RT: 11.81 min Scan# 1145
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 43 Resp: 2409292

Ion	Ratio	Lower	Upper
43	100		
71	56.7	44.7	84.7
57	51.1	38.6	78.6

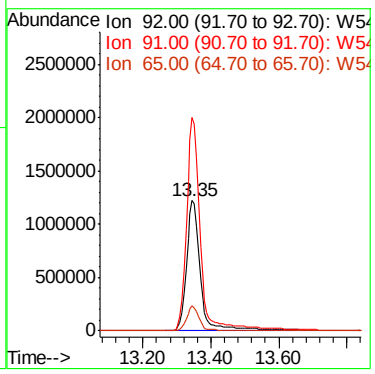


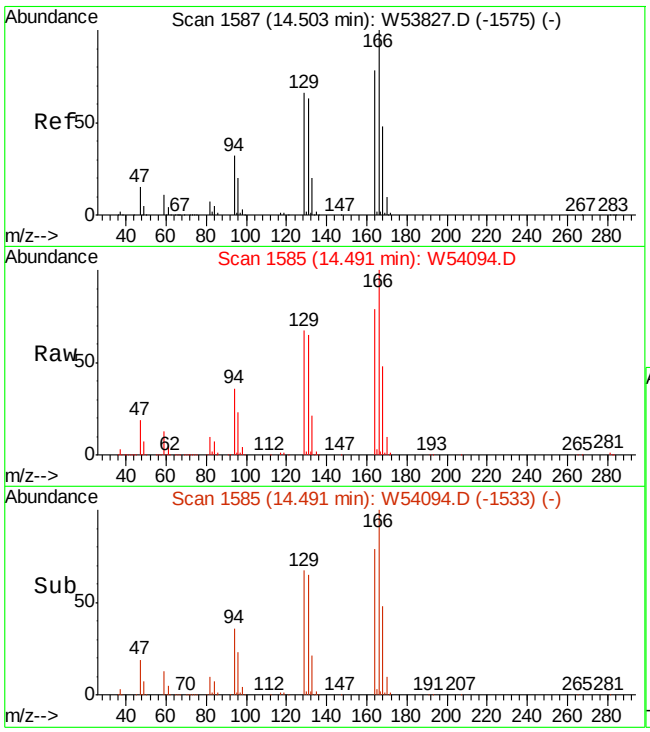


#64
TOLUENE
Concen: 68.95 PPBV
RT: 13.35 min Scan# 1397
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 92 Resp: 3449726

Ion	Ratio	Lower	Upper
92	100		
91	164.1	147.8	187.8
65	18.6	0.0	39.8

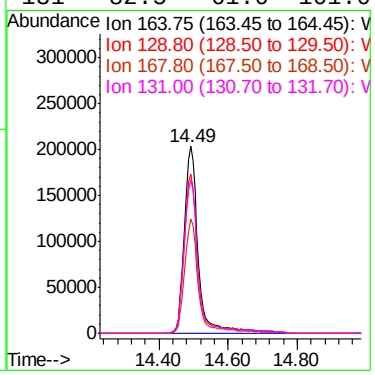


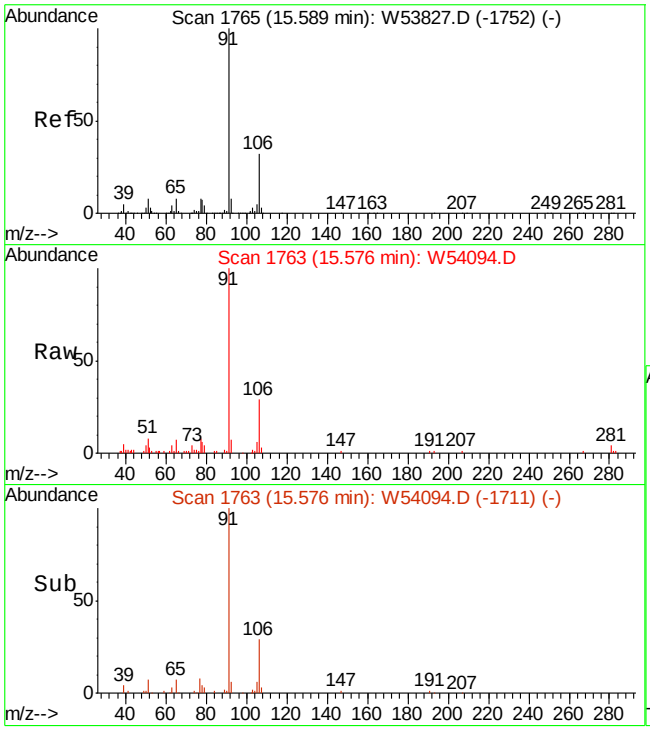


#71
TETRACHLOROETHYLENE
Concen: 15.08 PPBV
RT: 14.49 min Scan# 1585
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion:164 Resp: 576559

Ion	Ratio	Lower	Upper
164	100		
129	85.0	63.7	103.7
168	60.9	41.6	81.6
131	82.5	61.0	101.0

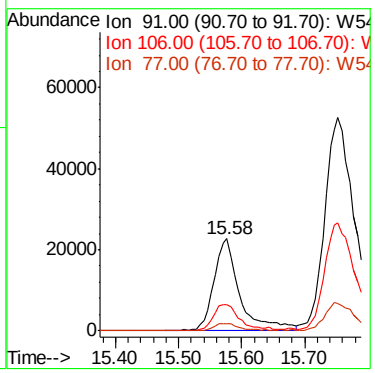


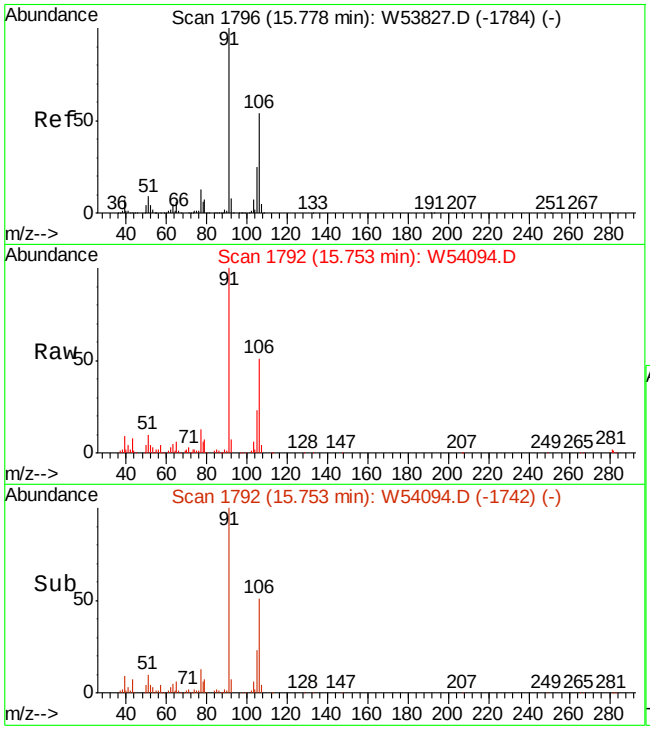


#77
ETHYLBENZENE
Concen: 0.64 PPBV
RT: 15.58 min Scan# 1763
Delta R.T. -0.01 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion: 91 Resp: 63253

Ion	Ratio	Lower	Upper
91	100		
106	31.9	12.2	52.2
77	8.5	0.0	27.9

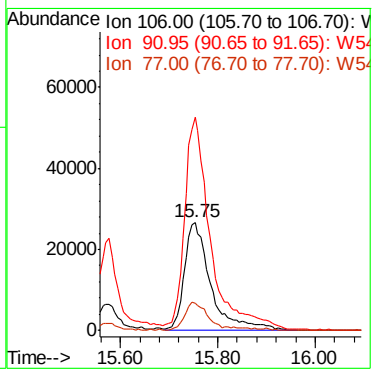


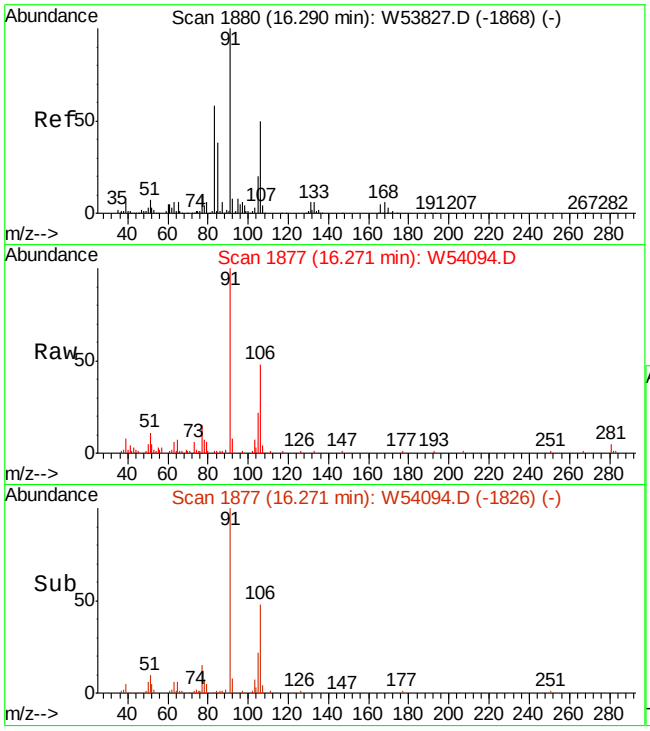


#78
m,p-XYLENE
Concen: 2.43 PPBV
RT: 15.75 min Scan# 1792
Delta R.T. -0.02 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion:106 Resp: 100560

Ion	Ratio	Lower	Upper
106	100		
91	197.5	150.4	225.6
77	25.0	18.6	28.0

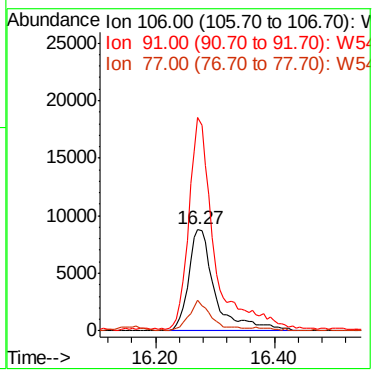


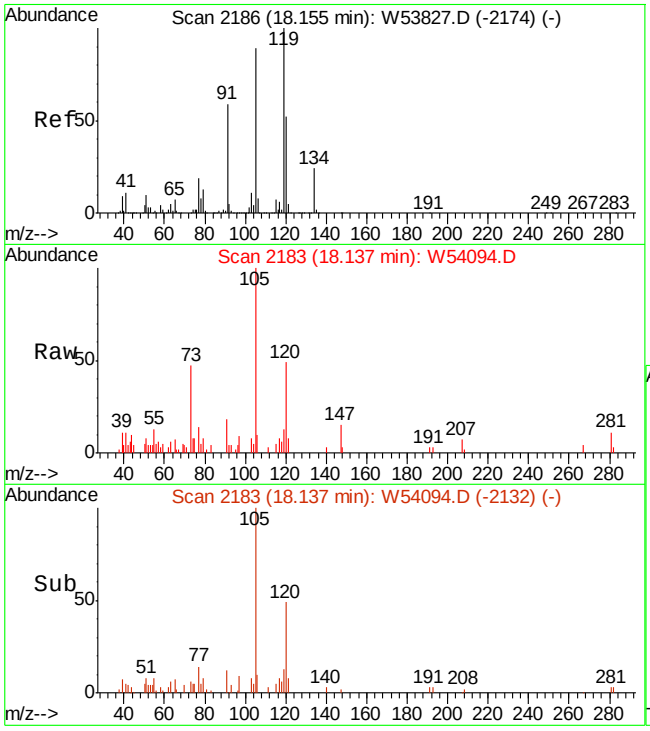


#79
o-XYLENE
Concen: 0.69 PPBV
RT: 16.27 min Scan# 1877
Delta R.T. -0.02 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion:106 Resp: 27171

Ion	Ratio	Lower	Upper
106	100		
91	202.4	180.3	220.3
77	28.6	5.2	45.2

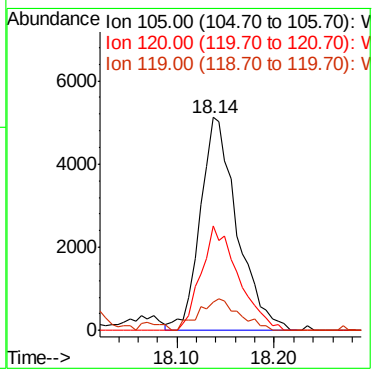




#94
1,2,4-TRIMETHYLBENZENE
Concen: 0.16 PPBV
RT: 18.14 min Scan# 2183
Delta R.T. -0.02 min
Lab File: W54094.D
Acq: 11 Mar 2016 8:29 pm

Tgt Ion:105 Resp: 13433

Ion	Ratio	Lower	Upper
105	100		
120	49.5	39.3	79.3
119	16.2	100.1	140.1#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

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

Signal : TIC

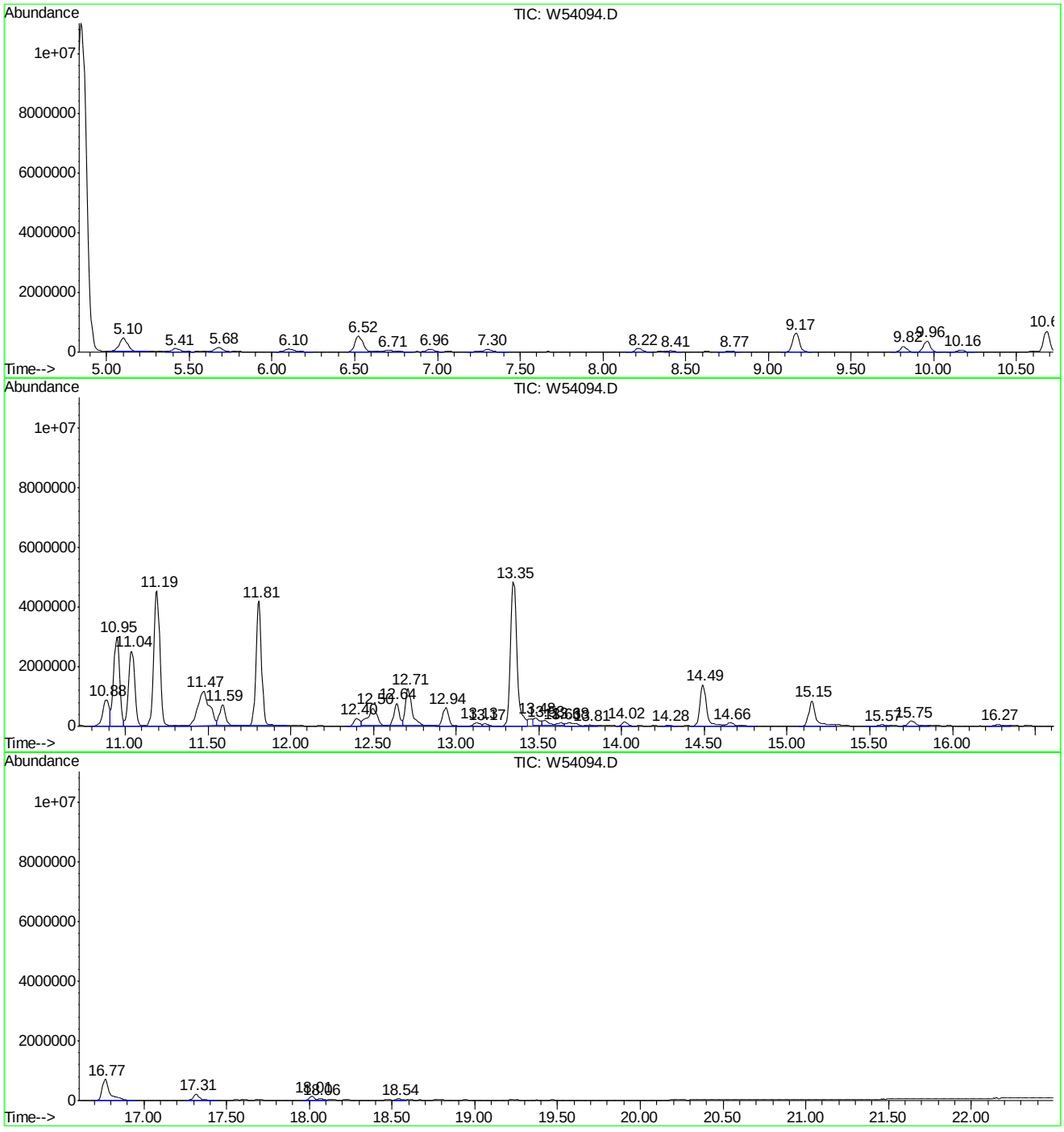
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.103	31	45	70	rVB	461526	1670215	12.67%	1.781%
2	5.414	86	96	115	rVB	104051	331046	2.51%	0.353%
3	5.682	129	140	151	rVB	145581	464013	3.52%	0.495%
4	6.103	196	209	232	rVB2	95404	390846	2.96%	0.417%
5	6.523	267	278	294	rBV	530322	1815315	13.77%	1.935%
6	6.706	294	308	331	rVB3	40364	230804	1.75%	0.246%
7	6.956	340	349	360	rVB	92477	265788	2.02%	0.283%
8	7.304	386	406	426	rVB3	89155	361672	2.74%	0.386%
9	8.218	543	556	568	rBV	113034	333256	2.53%	0.355%
10	8.413	581	588	598	rVB3	44443	127731	0.97%	0.136%
11	8.767	634	646	656	rVB2	38950	110940	0.84%	0.118%
12	9.169	697	712	727	rBV2	624265	1854800	14.07%	1.977%
13	9.815	806	818	829	rBV	185050	496303	3.76%	0.529%
14	9.956	829	841	856	rVB3	358156	1024286	7.77%	1.092%
15	10.163	861	875	888	rVB3	66825	189873	1.44%	0.202%
16	10.681	951	960	978	rVB	690295	1850483	14.03%	1.973%
17	10.882	978	993	997	rBV	882822	2336382	17.72%	2.491%
18	10.949	997	1004	1011	rVV	2995898	7618149	57.78%	8.122%
19	11.041	1011	1019	1031	rVV	2506638	6522266	49.47%	6.954%
20	11.193	1031	1044	1072	rVV	4523278	11691927	88.67%	12.465%
21	11.474	1072	1090	1103	rVV3	1171276	5763561	43.71%	6.145%
22	11.589	1103	1109	1133	rVB2	708046	1830453	13.88%	1.952%
23	11.809	1133	1145	1172	rBV	4185890	10039841	76.14%	10.704%
24	12.400	1232	1242	1246	rBV	263188	649596	4.93%	0.693%
25	12.498	1246	1258	1272	rVB4	592027	2335269	17.71%	2.490%
26	12.638	1272	1281	1287	rBV	751745	1798435	13.64%	1.917%
27	12.711	1287	1293	1320	rVB	1246697	3438154	26.08%	3.666%
28	12.937	1320	1330	1351	rVB2	611661	1492330	11.32%	1.591%
29	13.126	1351	1361	1366	rBV2	113578	293846	2.23%	0.313%
30	13.174	1366	1369	1385	rVB3	74430	162957	1.24%	0.174%
31	13.345	1385	1397	1411	rBV	4829162	13185279	100.00%	14.057%
32	13.479	1416	1419	1425	rVV4	253947	688110	5.22%	0.734%
33	13.534	1425	1428	1437	rVV4	181139	509110	3.86%	0.543%
34	13.632	1438	1444	1448	rVV3	91802	272584	2.07%	0.291%
35	13.680	1448	1452	1466	rVB5	108421	408864	3.10%	0.436%
36	13.808	1466	1473	1481	rBV3	31699	73781	0.56%	0.079%
37	14.016	1500	1507	1516	rVB	132248	293500	2.23%	0.313%
38	14.284	1544	1551	1559	rVB2	31334	66502	0.50%	0.071%

39	14.491	1574	1585	1606	rBV	1388101	3788760	28.73%	4.039%
40	14.656	1606	1612	1636	rVB	114000	385517	2.92%	0.411%
41	15.150	1680	1693	1716	rBV	843232	2623246	19.90%	2.797%
42	15.570	1747	1762	1770	rBV	48987	141705	1.07%	0.151%
43	15.753	1781	1792	1810	rBV	154643	512917	3.89%	0.547%
44	16.271	1868	1877	1890	rBV	54235	173061	1.31%	0.185%
45	16.765	1947	1958	1987	rBV	707179	2249453	17.06%	2.398%
46	17.314	2038	2048	2068	rVB	211084	506723	3.84%	0.540%
47	18.015	2153	2163	2168	rBV	132123	265760	2.02%	0.283%
48	18.064	2168	2171	2178	rVB2	37582	78097	0.59%	0.083%
49	18.539	2244	2249	2256	rBV2	40393	83605	0.63%	0.089%

Sum of corrected areas: 93797111

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\W54094.D
Operator : YOUMINH
Acquired : 11 Mar 2016 8:29 pm using AcqMethod TO15W
Instrument : MSW
Sample Name: JC15063-3
Misc Info : MS99025,VW2161,400,,,,1
Vial Number: 13
Quant File :MW2152.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

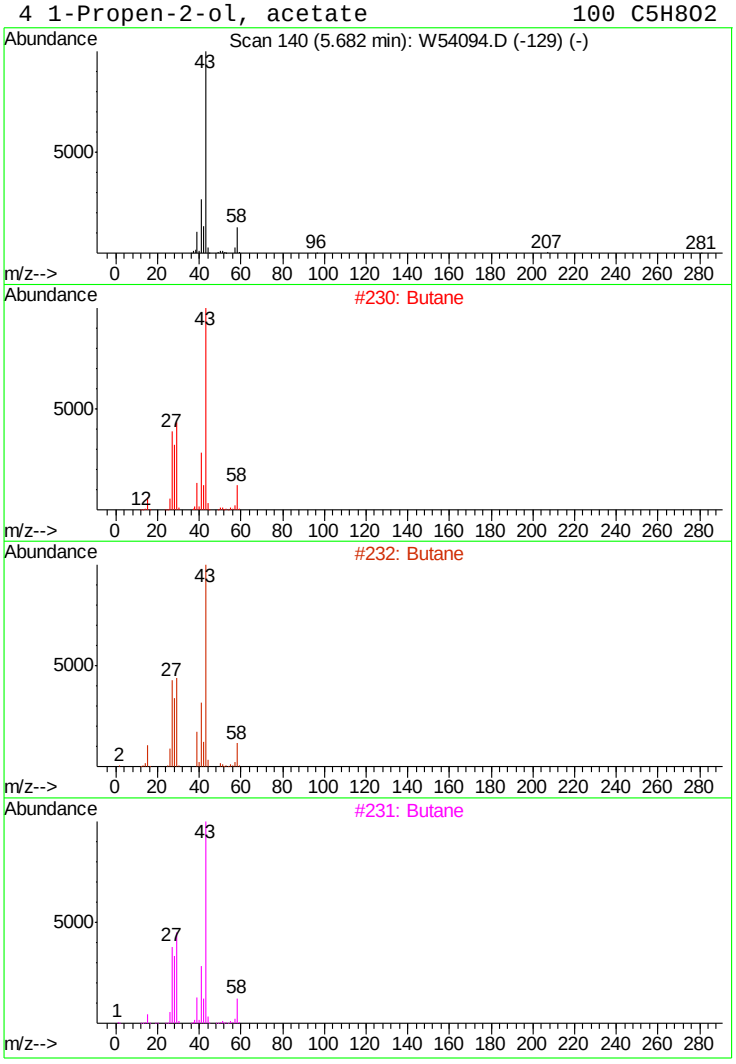
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

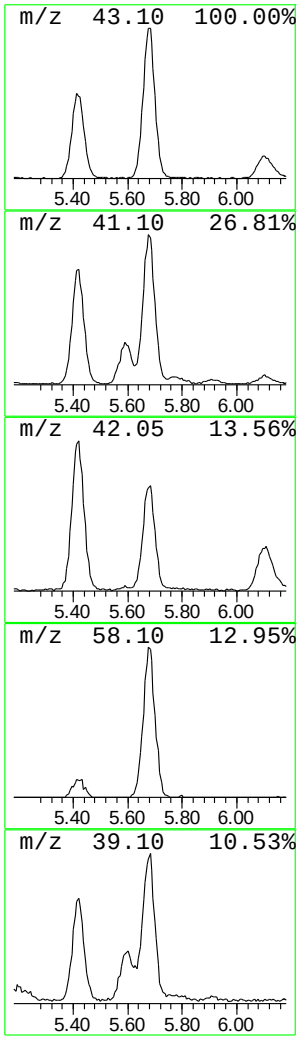
****

Peak Number 1 Alkane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.68	2.50 PPBV	464013	BROMOCHLOROMETHANE	9.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	80
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	39





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

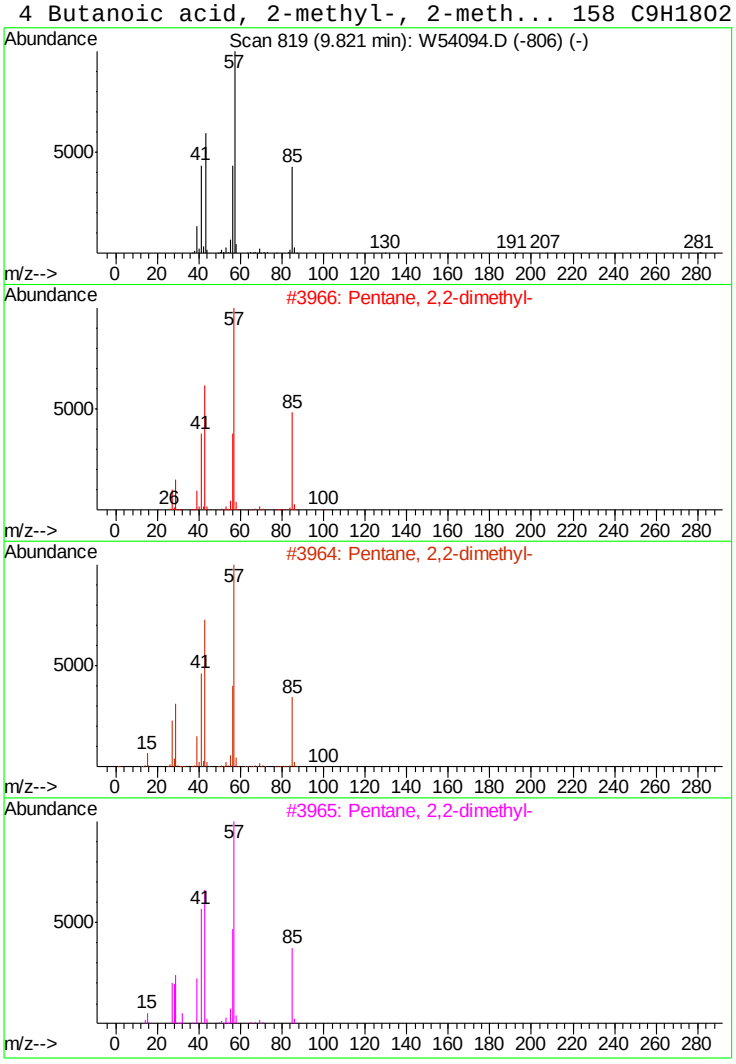
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

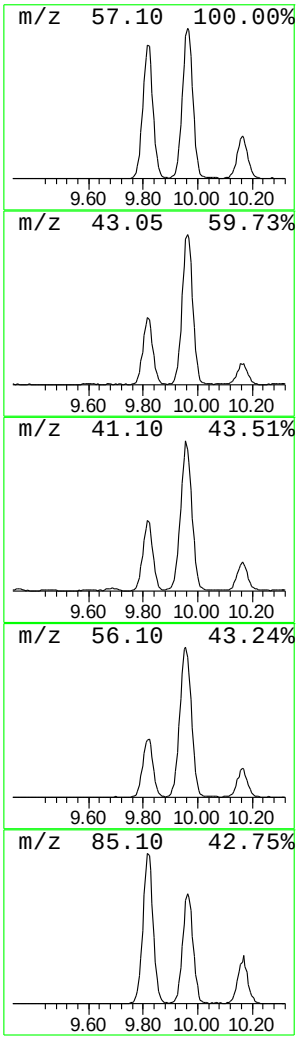
****

Peak Number 2 Alkane - Pentane, 2,2-dimet... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.82	2.68 PPBV	496303	BROMOCHLOROMETHANE	9.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,2-dimethyl-	100	C7H16	000590-35-2	90
2	Pentane, 2,2-dimethyl-	100	C7H16	000590-35-2	83
3	Pentane, 2,2-dimethyl-	100	C7H16	000590-35-2	83
4	Butanoic acid, 2-methyl-, 2-meth...	158	C9H18O2	002445-67-2	78





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

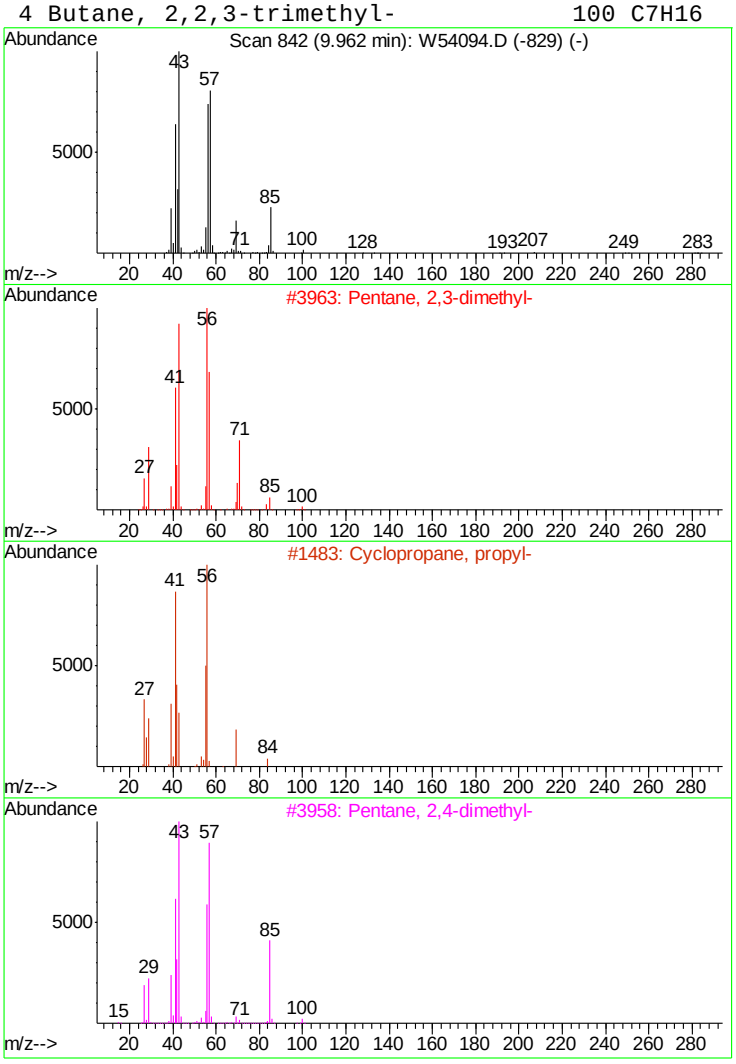
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

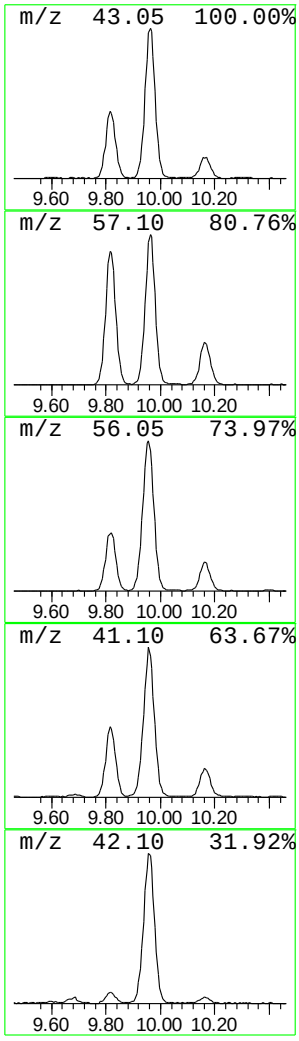
****

Peak Number 3 Alkane Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.96	5.52 PPBV	1024290	BROMOCHLOROMETHANE	9.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	64
2	Cyclopropane, propyl-	84	C6H12	002415-72-7	58
3	Pentane, 2,4-dimethyl-	100	C7H16	000108-08-7	53
4	Butane, 2,2,3-trimethyl-	100	C7H16	000464-06-2	53





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

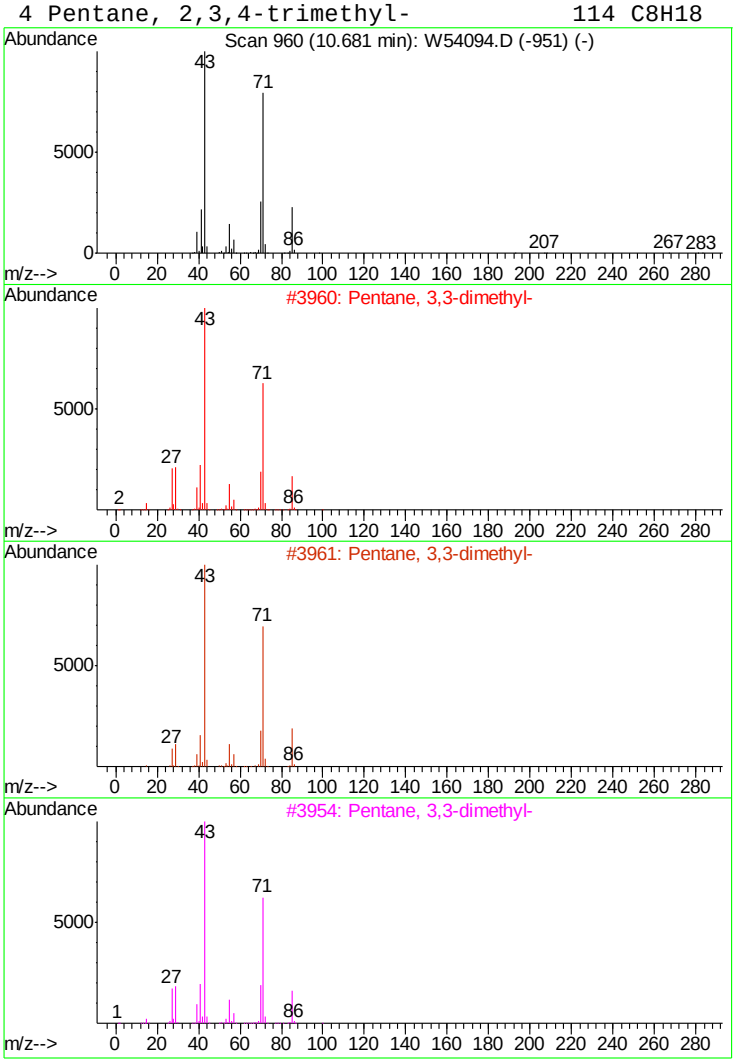
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

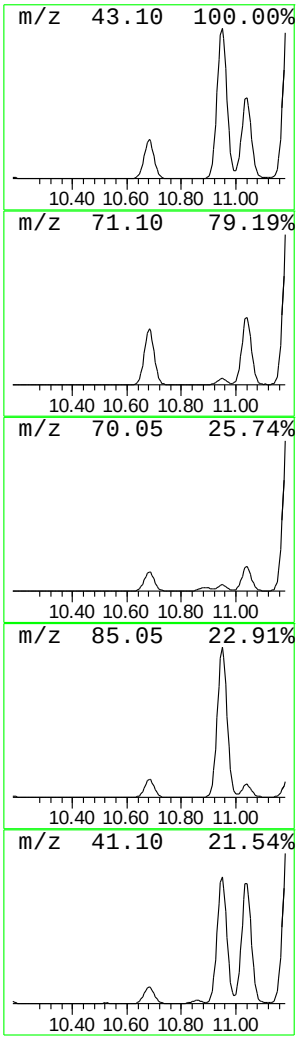
****

Peak Number 4 Alkane - Pentane, 3,3-dimet... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.68	7.92 PPBV	1850480	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	90
2	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	90
3	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	90
4	Pentane, 2,3,4-trimethyl-	114	C8H18	000565-75-3	50





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

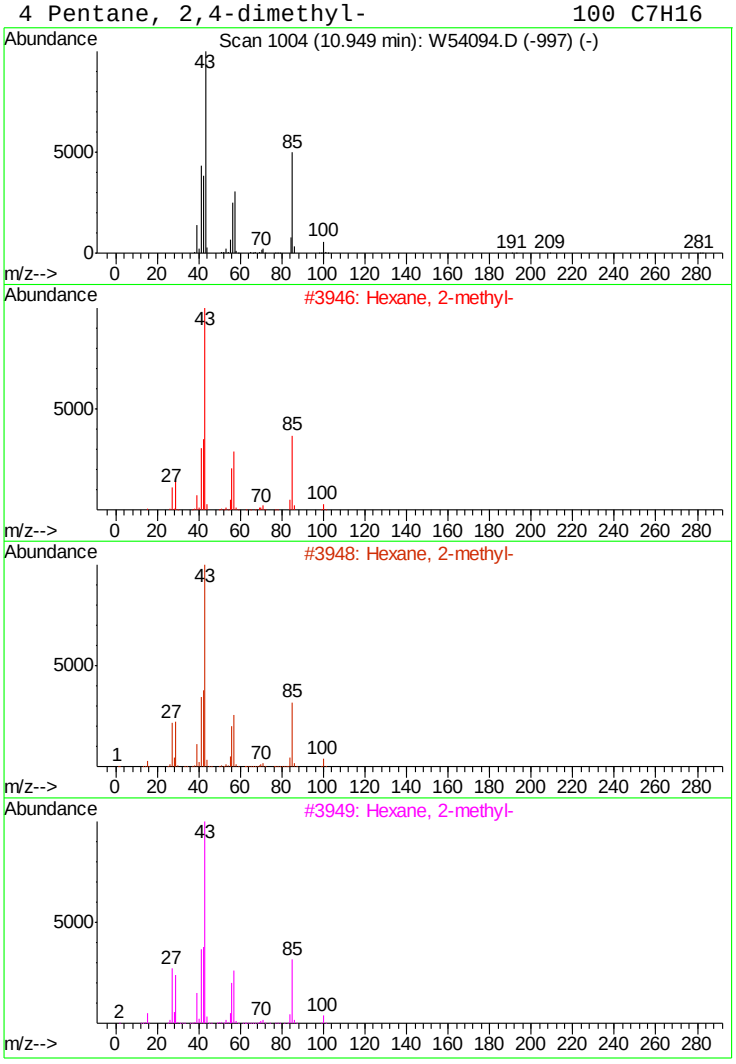
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

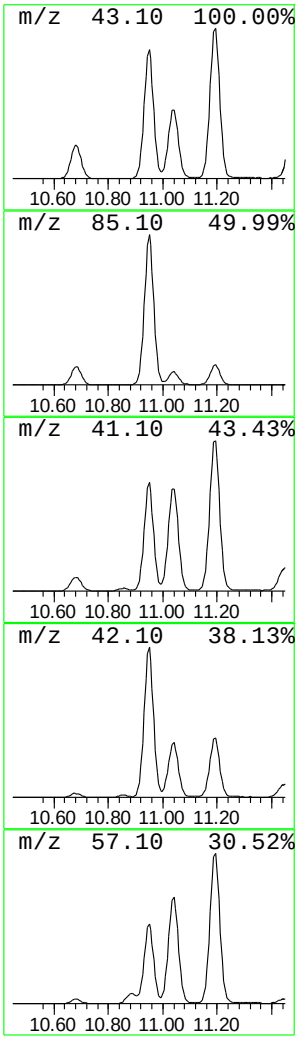
****

Peak Number 5 Alkane - Hexane, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.95	32.61 PPBV	7618150	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2-methyl-	100	C7H16	000591-76-4	90
2	Hexane, 2-methyl-	100	C7H16	000591-76-4	90
3	Hexane, 2-methyl-	100	C7H16	000591-76-4	81
4	Pentane, 2,4-dimethyl-	100	C7H16	000108-08-7	46





Library Search Compound Report

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Data File : C:\MSDCHEM\1\DATA\W54094.D                  Vial: 13
Acq On    : 11 Mar 2016   8:29 pm                     Operator: YOUMINH
Sample    : JC15063-3                                 Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 ********************************************************************
 Peak Number  6  Alkane - Pentane, 2,3-dimet...  Concentration Rank  3

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ------------------------------------------------------------------------
  11.04   27.92 PPBV      6522270    1,4-DIFLUOROBENZENE         10.89

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------------
  1 Pentane, 2,3-dimethyl-                100 C7H16         000565-59-3 91
  2 Pentane, 2,3-dimethyl-                100 C7H16         000565-59-3 91
  3 Pentane, 2,3-dimethyl-                100 C7H16         000565-59-3 62
  4 Pentane, 2,3-dimethyl-                100 C7H16         000565-59-3 52
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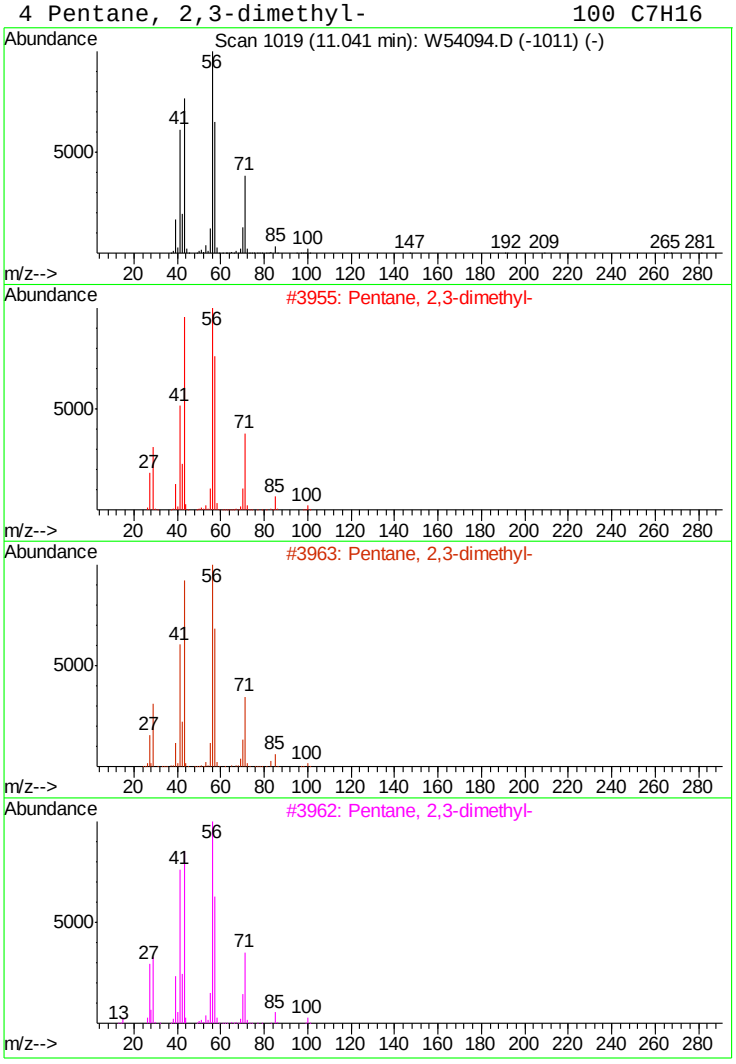

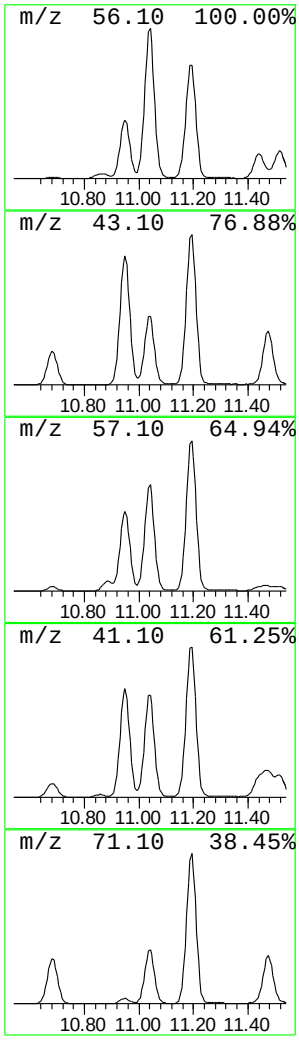

Library Search Compound Report

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Data File : C:\MSDCHEM\1\DATA\W54094.D                  Vial: 13
Acq On    : 11 Mar 2016   8:29 pm                     Operator: YOUMINH
Sample    : JC15063-3                                 Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number  7  Alkane - Hexane, 3-methyl-      Concentration Rank  1

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
  11.19   50.04 PPBV     11691900    1,4-DIFLUOROBENZENE         10.89

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------------
  1 Hexane, 3-methyl-                    100 C7H16          000589-34-4 94
  2 Hexane, 3-methyl-                    100 C7H16          000589-34-4 91
  3 Hexane, 3-methyl-                    100 C7H16          000589-34-4 87
  4 Heptane, 3,4-dimethyl-               128 C9H20          000922-28-1 59
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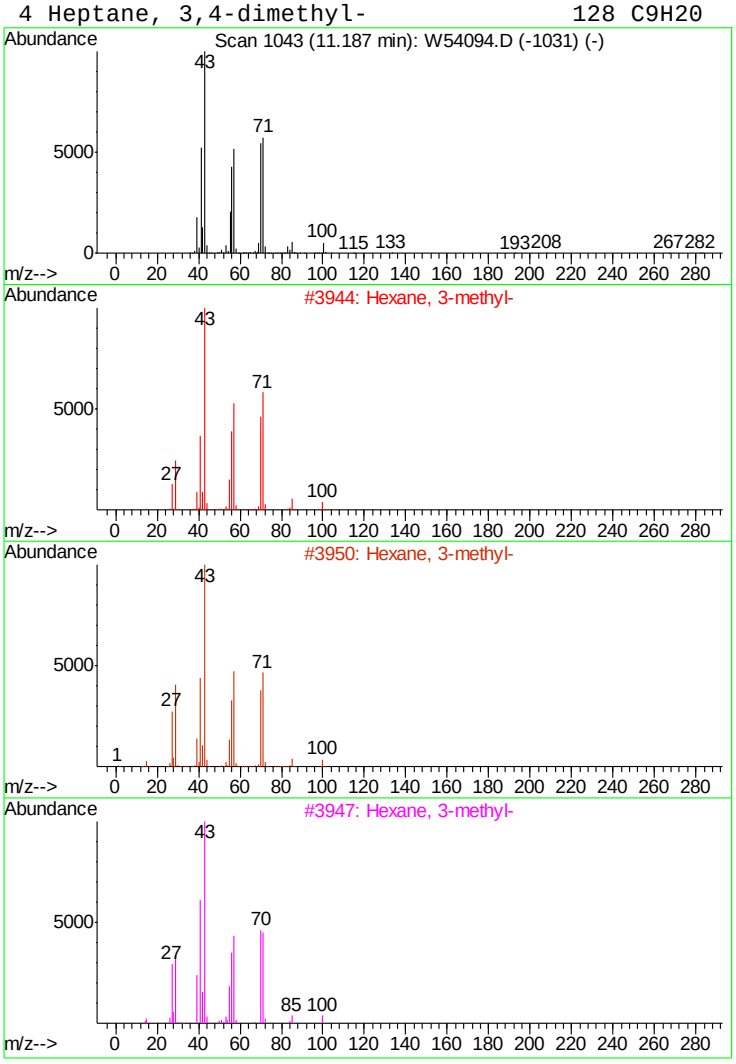
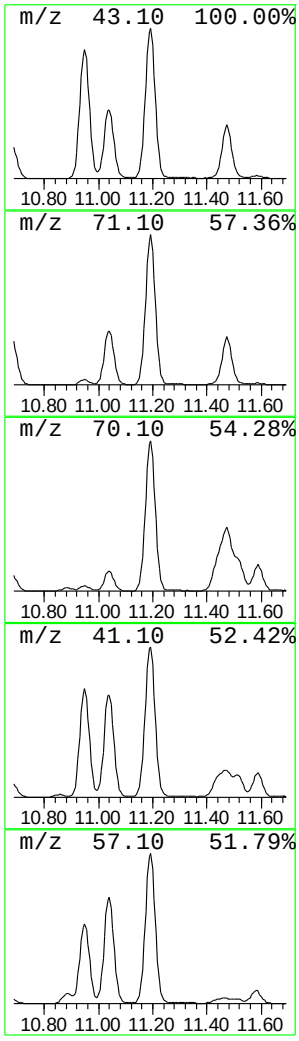




Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

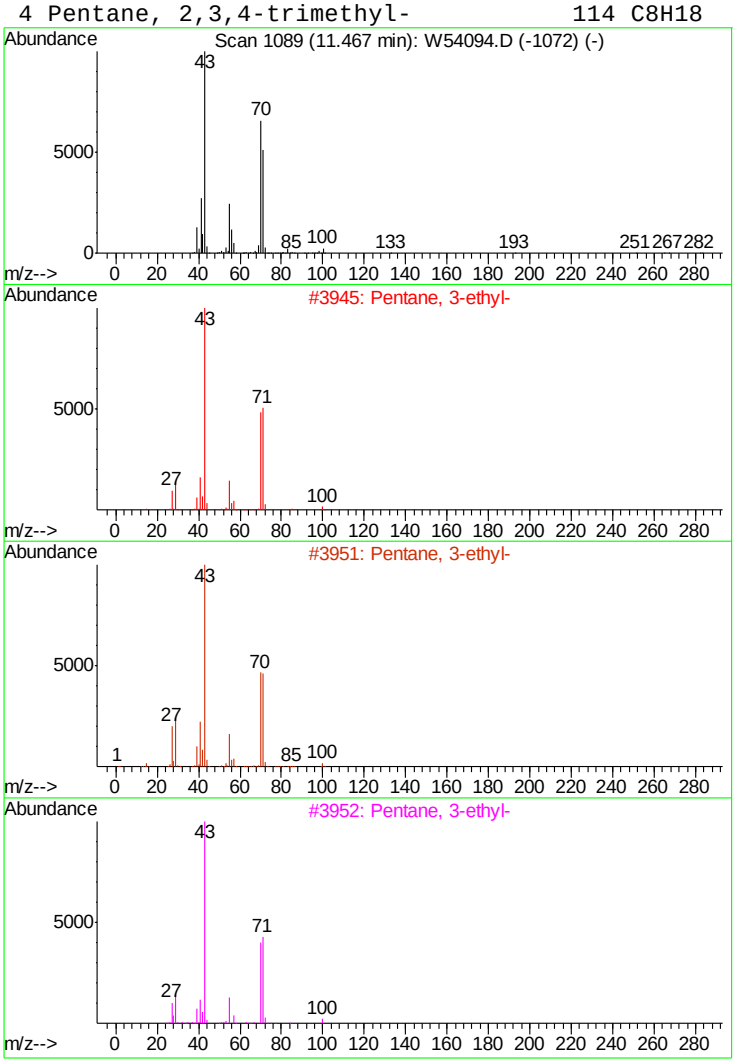
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

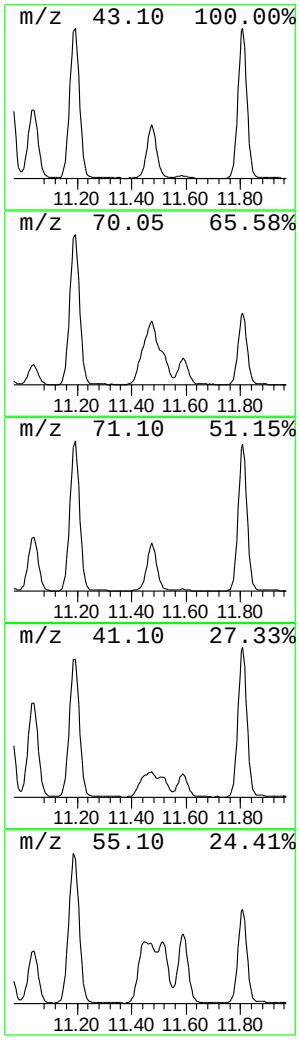
****

Peak Number 8 Alkane - Pentane, 3-ethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.47	24.67 PPBV	5763560	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-ethyl-	100	C7H16	000617-78-7	90
2	Pentane, 3-ethyl-	100	C7H16	000617-78-7	72
3	Pentane, 3-ethyl-	100	C7H16	000617-78-7	72
4	Pentane, 2,3,4-trimethyl-	114	C8H18	000565-75-3	64





Library Search Compound Report

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Data File : C:\MSDCHEM\1\DATA\W54094.D                  Vial: 13
Acq On    : 11 Mar 2016   8:29 pm                     Operator: YOUMINH
Sample    : JC15063-3                                 Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
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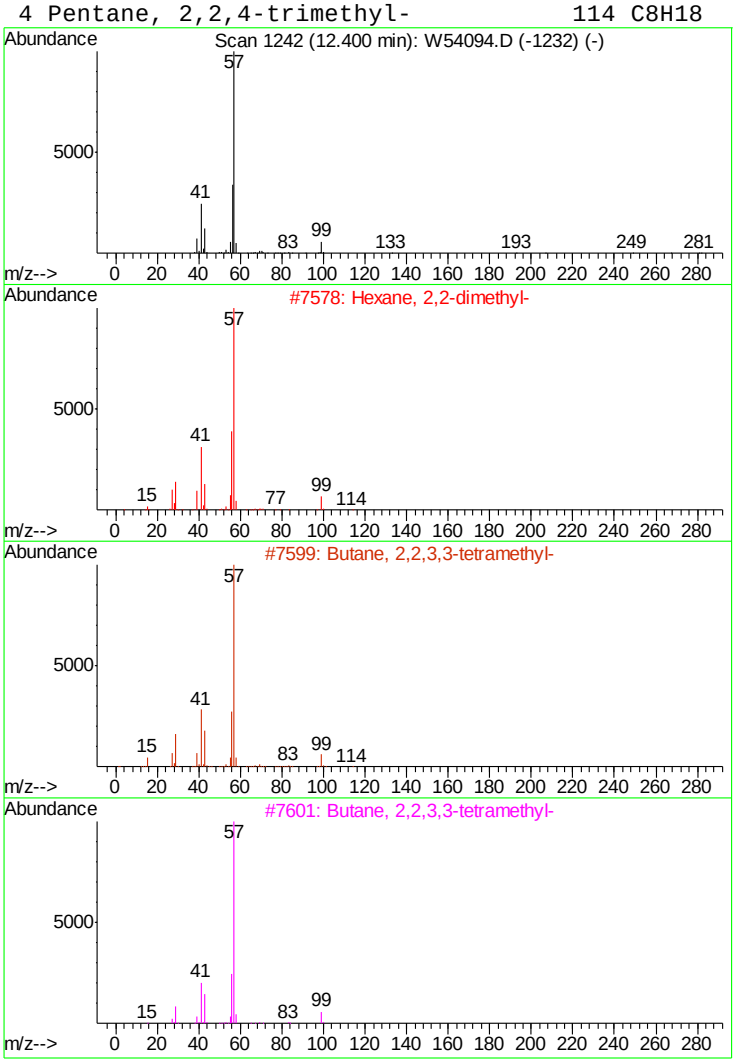
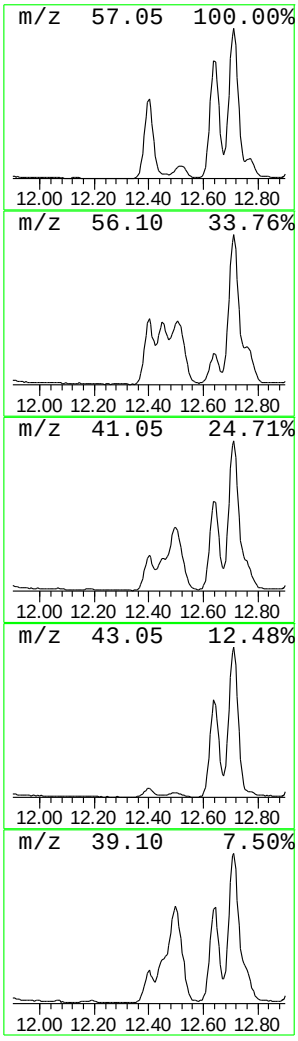
Peak Number 9 Alkane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	2.78 PPBV	649596	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2,2-dimethyl-	114	C8H18	000590-73-8	78
2	Butane, 2,2,3,3-tetramethyl-	114	C8H18	000594-82-1	78
3	Butane, 2,2,3,3-tetramethyl-	114	C8H18	000594-82-1	72
4	Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	72





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

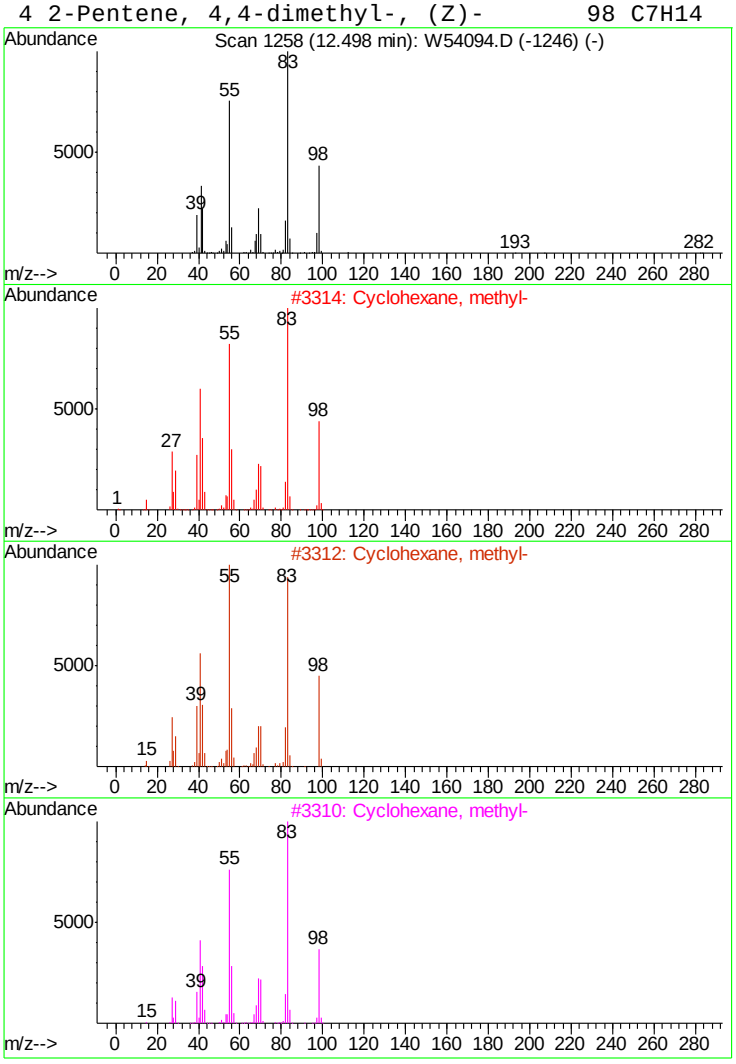
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

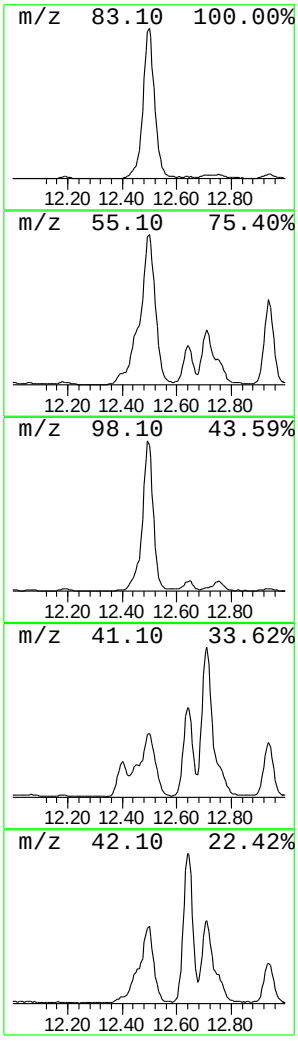
****

Peak Number 10 Cyclohexane, methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	10.00 PPBV	2335270	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	83
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	80
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	64
4	2-Pentene, 4,4-dimethyl-, (Z)-	98	C7H14	000762-63-0	59





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

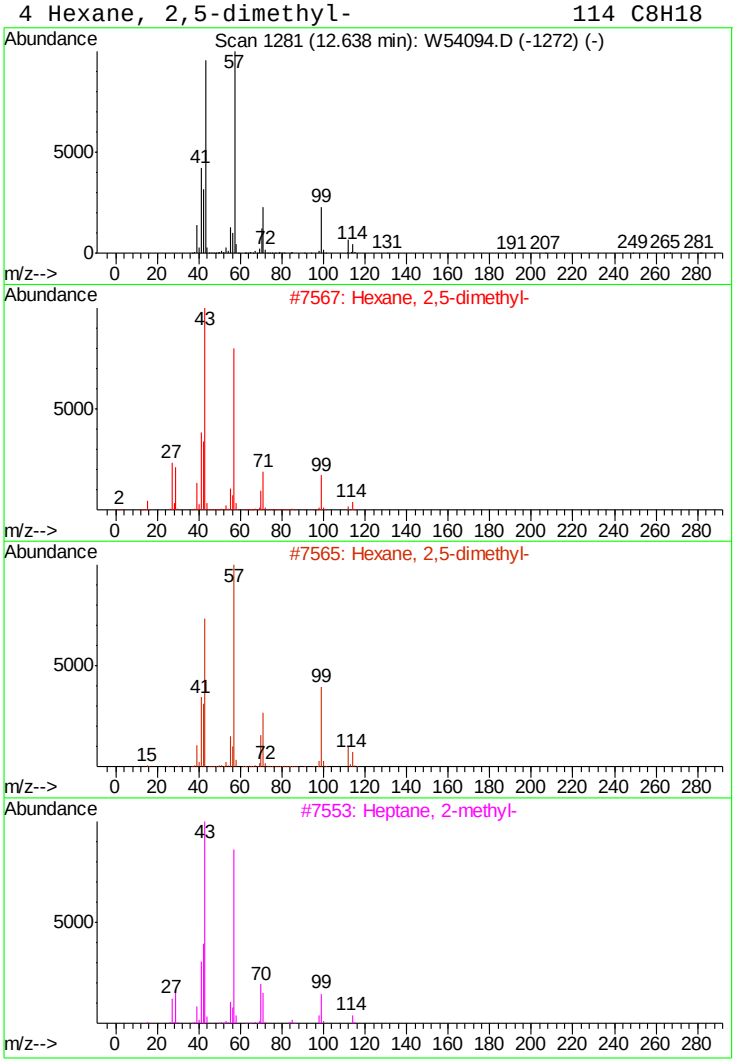
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

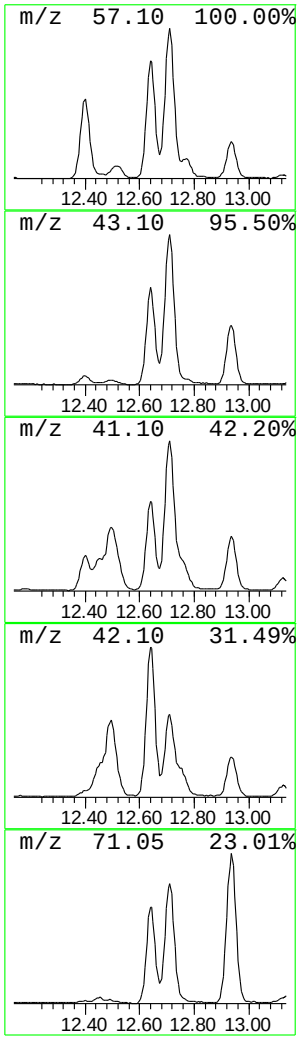
****

Peak Number 11 Alkane - Hexane, 2,5-dimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.64	7.70 PPBV	1798440	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	94
2	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	91
3	Heptane, 2-methyl-	114	C8H18	000592-27-8	83
4	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	72





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

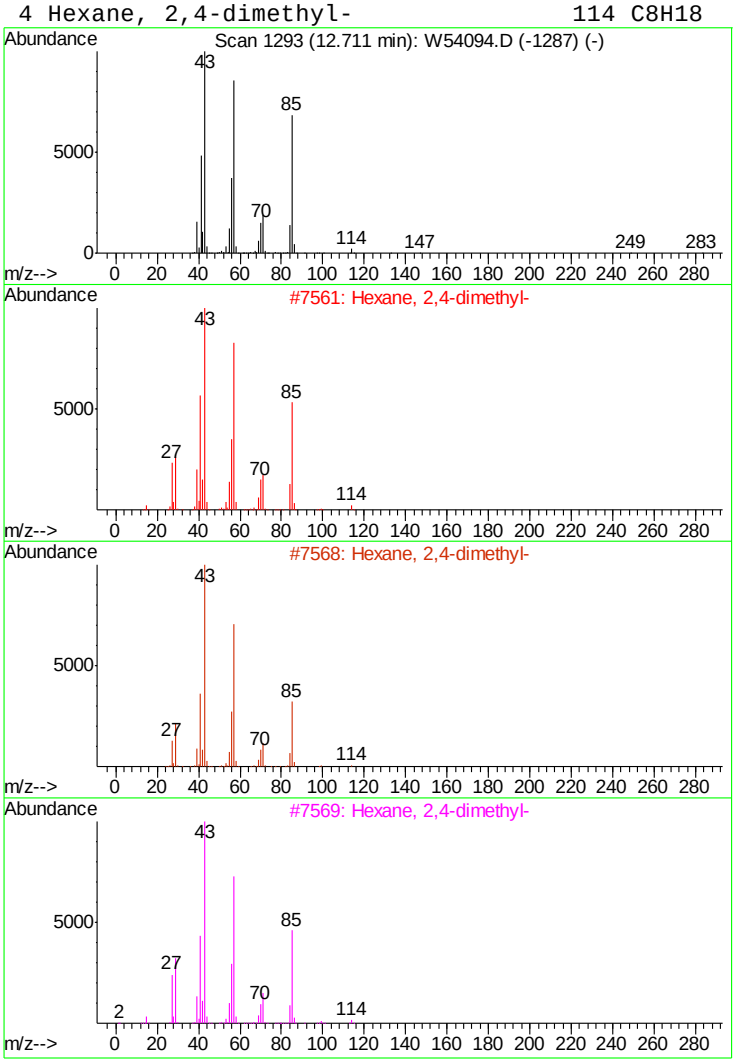
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

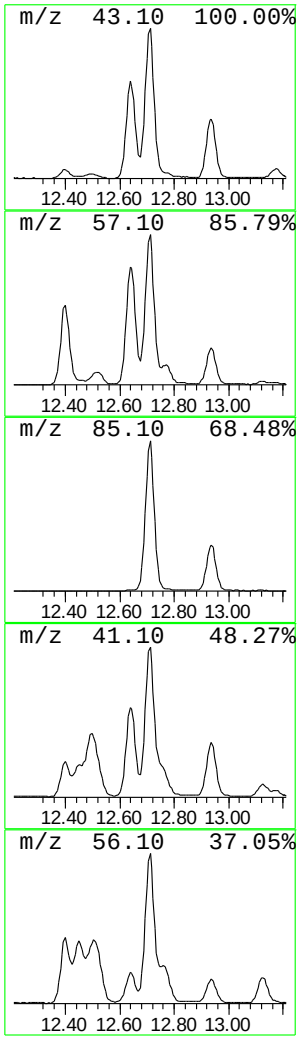
****

Peak Number 12 Alkane - Hexane, 2,4-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.71	14.72 PPBV	3438150	1,4-DIFLUOROBENZENE	10.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	96
2	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	94
3	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	91
4	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	91





Library Search Compound Report

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Data File : C:\MSDCHEM\1\DATA\W54094.D                  Vial: 13
Acq On    : 11 Mar 2016   8:29 pm                     Operator: YOUMINH
Sample    : JC15063-3                                 Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
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 Peak Number 13  alkene                          Concentration Rank  9

   R.T.   EstConc          Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
  12.94    6.39 PPBV      1492330    1,4-DIFLUOROBENZENE        10.89

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------------
  1 1-Heptene, 4-methyl-                  112 C8H16          013151-05-8 58
  2 1-Hexene, 4-ethyl-                    112 C8H16          016746-85-3 52
  3 Hexane, 3,3-dimethyl-                 114 C8H18          000563-16-6 52
  4 Methylamine, N-(1-ethylhexylidene)- 141 C9H19N           018641-74-2 50
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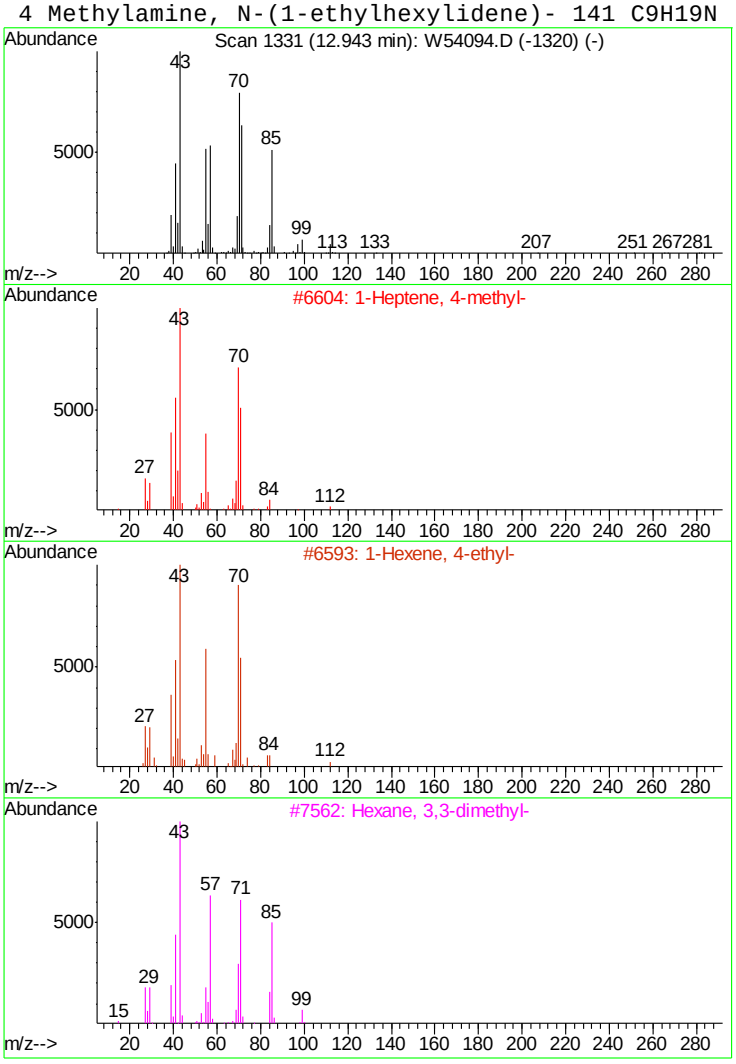
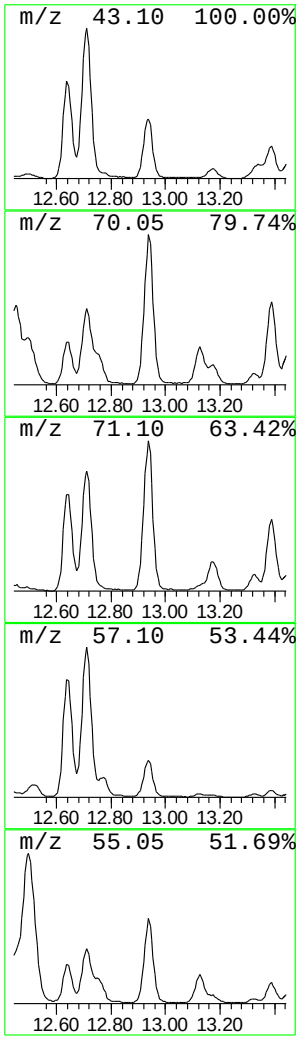




Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

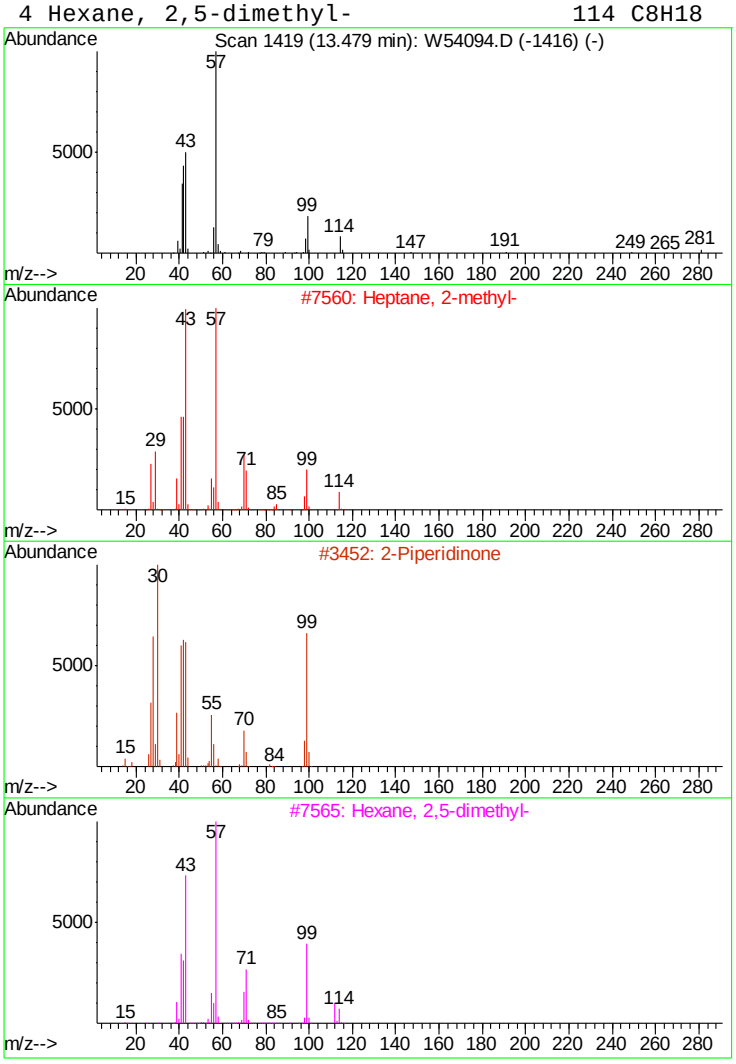
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

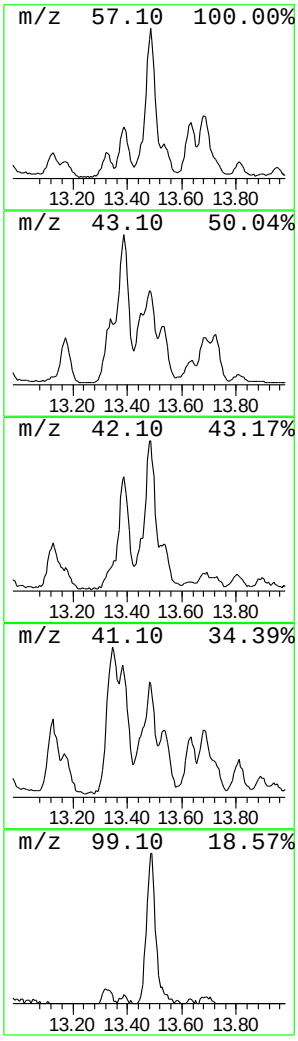
****

Peak Number 14 Alkane - Heptane, 2-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.48	2.62 PPBV	688110	CHLOROBENZENE-D5	15.15

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2-methyl-	114	C8H18	000592-27-8	86
2	2-Piperidinone	99	C5H9NO	000675-20-7	50
3	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	38
4	Hexane, 2,5-dimethyl-	114	C8H18	000592-13-2	38





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54094.D Vial: 13
Acq On : 11 Mar 2016 8:29 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

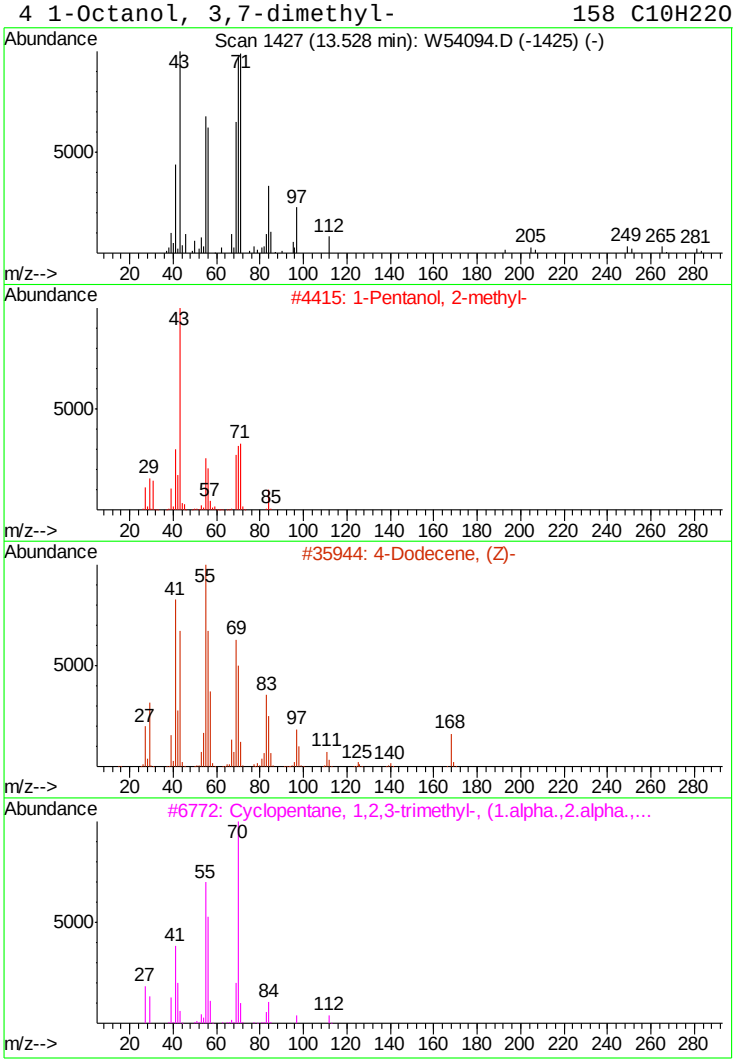
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

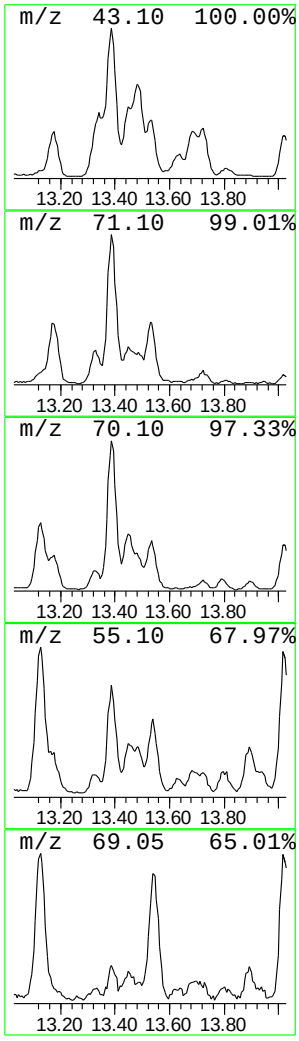
****

Peak Number 15 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.53	1.94 PPBV	509110	CHLOROBENZENE-D5	15.15

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentanol, 2-methyl-	102	C6H14O	000105-30-6	50
2	4-Dodecene, (Z)-	168	C12H24	007206-27-1	43
3	Cyclopentane, 1,2,3-trimethyl-, ...	112	C8H16	002613-69-6	43
4	1-Octanol, 3,7-dimethyl-	158	C10H22O	000106-21-8	42





Tentatively Identified Compound (LSC) summary

Operator ID: YOUMINH Date Acquired: 11 Mar 2016 8:29 pm
Data File: C:\MSDCHEM\1\DATA\W54094.D
Name: JC15063-3
Misc: MS99025,VW2161,400,,,,1
Method: C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title: TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library Searched: C:\DATABASE\NIST08.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Alkane	5.68	2.5	PPBV	464013	1	9.16	1854800	10.0
Alkane - Pentane,...	9.82	2.7	PPBV	496303	1	9.16	1854800	10.0
Alkane	9.96	5.5	PPBV	1024290	1	9.16	1854800	10.0
Alkane - Pentane,...	10.68	7.9	PPBV	1850480	2	10.89	2336380	10.0
Alkane - Hexane, ...	10.95	32.6	PPBV	7618150	2	10.89	2336380	10.0
Alkane - Pentane,...	11.04	27.9	PPBV	6522270	2	10.89	2336380	10.0
Alkane - Hexane, ...	11.19	50.0	PPBV	11691900	2	10.89	2336380	10.0
Alkane - Pentane,...	11.47	24.7	PPBV	5763560	2	10.89	2336380	10.0
Alkane	12.40	2.8	PPBV	649596	2	10.89	2336380	10.0
Cyclohexane, methyl-	12.50	10.0	PPBV	2335270	2	10.89	2336380	10.0
Alkane - Hexane, ...	12.64	7.7	PPBV	1798440	2	10.89	2336380	10.0
Alkane - Hexane, ...	12.71	14.7	PPBV	3438150	2	10.89	2336380	10.0
alkene	12.94	6.4	PPBV	1492330	2	10.89	2336380	10.0
Alkane - Heptane,...	13.48	2.6	PPBV	688110	3	15.15	2623250	10.0
Unknown	13.53	1.9	PPBV	509110	3	15.15	2623250	10.0

Manual Integrations APPROVED (compounds with "m" flag)
Dana Tryon 03/13/16 14:19

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54118.D Vial: 7
Acq On : 12 Mar 2016 4:43 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2162,100,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:48:10 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

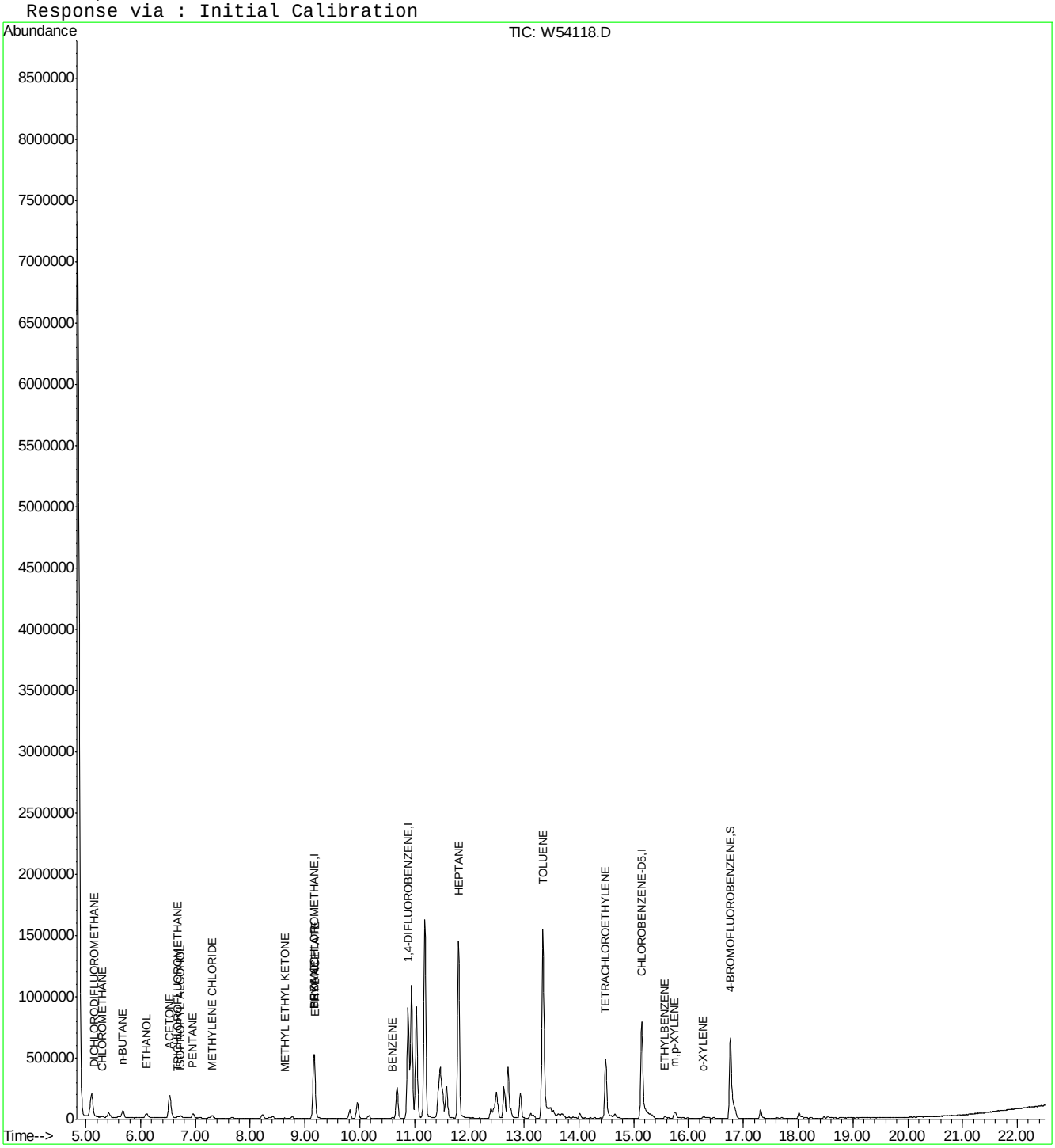
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	222266	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.88	114	1132571	10.00	PPBV		-0.02
68) CHLOROBENZENE-D5	15.14	82	455340	10.00	PPBV		-0.02
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	411763	8.11	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 81.10%				
Target Compounds							Qvalue
5) DICHLORODIFLUOROMETHANE	5.15	85	9969	0.17	PPBV		97
9) CHLOROMETHANE	5.31	52	1605m	0.23	PPBV		
12) n-BUTANE	5.68	58	12284	2.14	PPBV	#	76
17) TRICHLOROFLUOROMETHANE	6.66	101	8897	0.16	PPBV		95
18) ISOPROPYL ALCOHOL	6.72	45	30571	0.66	PPBV		83
19) ACETONE	6.53	58	104748	8.25	PPBV	#	70
22) PENTANE	6.96	57	5587	0.75	PPBV	#	85
26) ETHANOL	6.11	45	79587	8.82	PPBV		98
29) METHYLENE CHLORIDE	7.30	84	15041	0.66	PPBV		90
36) HEXANE	9.17	57	28426	0.73	PPBV		88
39) METHYL ETHYL KETONE	8.63	72	2780	0.24	PPBV	#	73
42) ETHYL ACETATE	9.18	61	3315	0.43	PPBV	#	66
50) BENZENE	10.60	78	13683	0.18	PPBV		94
61) HEPTANE	11.80	43	817599	19.78	PPBV		91
64) TOLUENE	13.34	92	1166360	21.98	PPBV		98
71) TETRACHLOROETHYLENE	14.49	164	215971	5.92	PPBV		99
77) ETHYLBENZENE	15.57	91	22712	0.24	PPBV		98
78) m,p-XYLENE	15.75	106	34745	0.88	PPBV		98
79) o-XYLENE	16.27	106	8359	0.22	PPBV	#	81

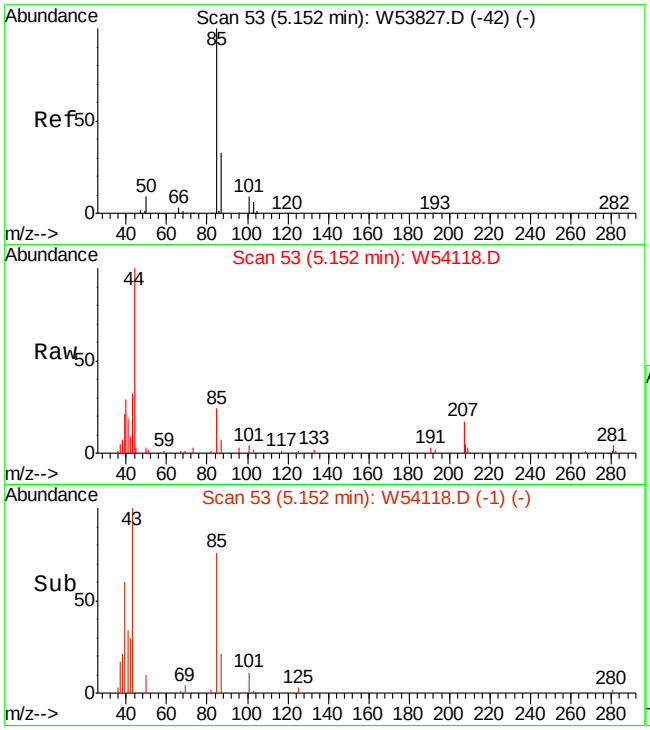
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54118.D Vial: 7
Acq On : 12 Mar 2016 4:43 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2162,100,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:32 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration

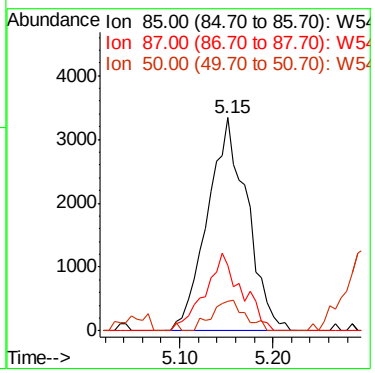


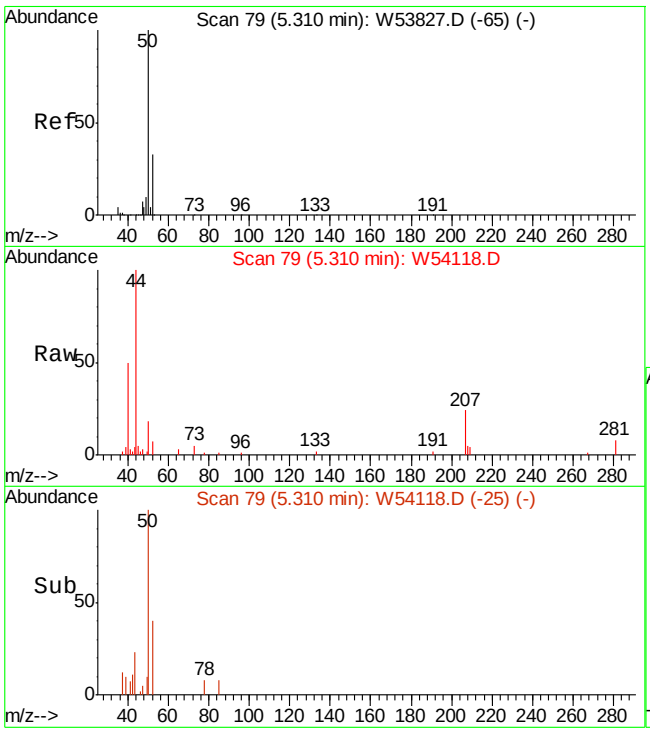


#5
DICHLORODIFLUOROMETHANE
Concen: 0.17 PPBV
RT: 5.15 min Scan# 53
Delta R.T. 0.00 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 85 Resp: 9969

Ion	Ratio	Lower	Upper
85	100		
87	33.8	12.4	52.4
50	12.1	0.0	30.2

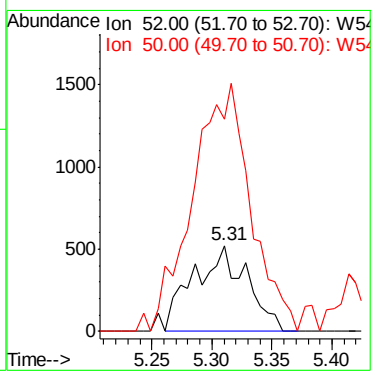


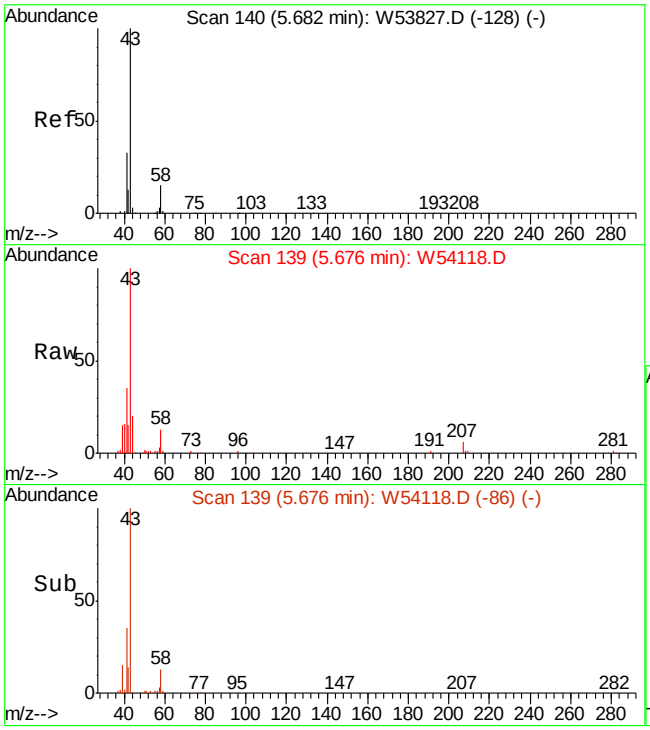


#9
CHLOROMETHANE
Concen: 0.23 PPBV m
RT: 5.31 min Scan# 79
Delta R.T. 0.00 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 52 Resp: 1605

Ion	Ratio	Lower	Upper
52	100		
50	247.1	274.8	314.8#

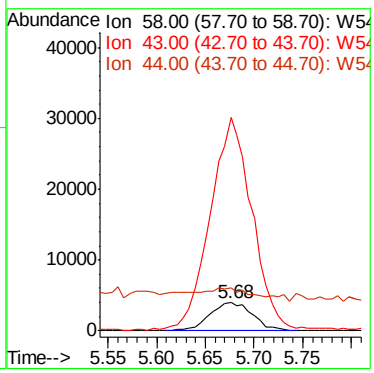


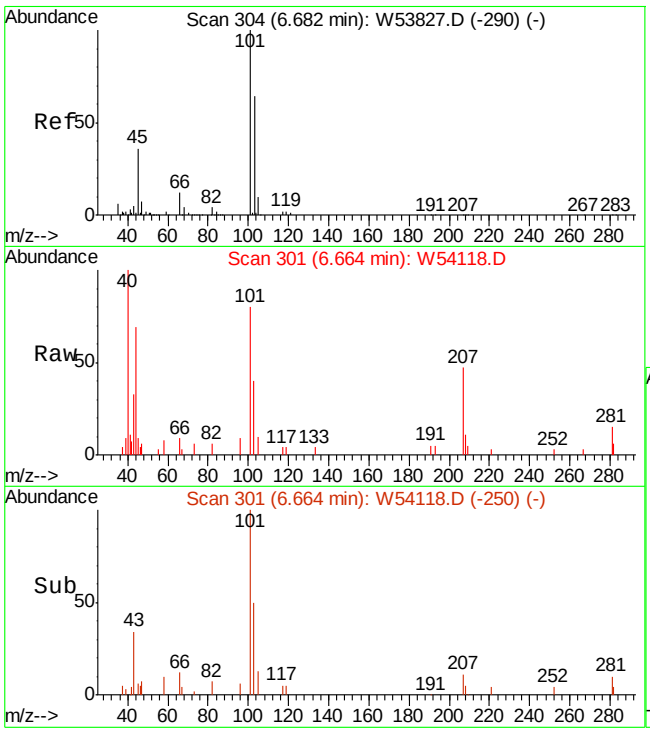


#12
n-BUTANE
Concen: 2.14 PPBV
RT: 5.68 min Scan# 139
Delta R.T. -0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 58 Resp: 12284

Ion	Ratio	Lower	Upper
58	100		
43	749.8	534.9	802.3
44	39.7	19.2	28.8#

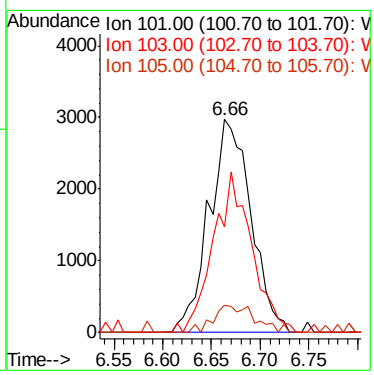


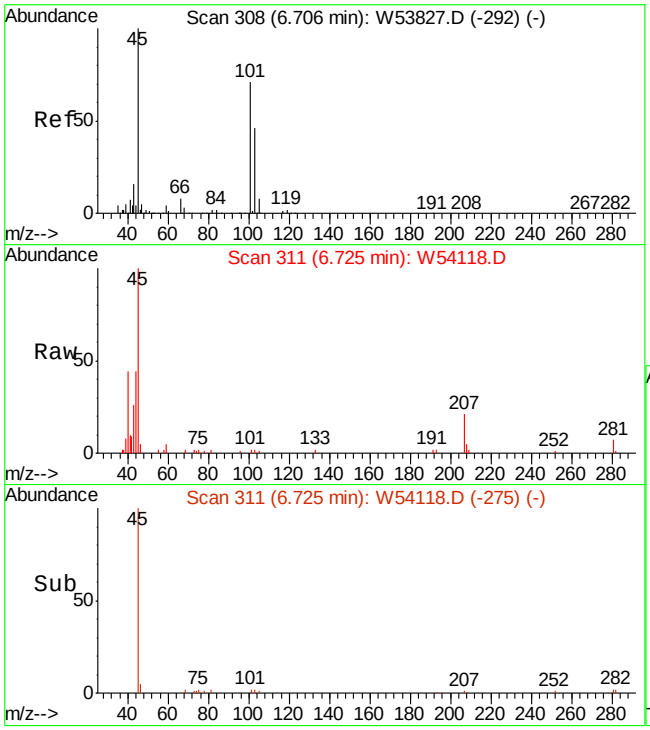


#17
TRICHLOROFLUOROMETHANE
Concen: 0.16 PPBV
RT: 6.66 min Scan# 301
Delta R.T. -0.02 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion:101 Resp: 8897

Ion	Ratio	Lower	Upper
101	100		
103	68.7	45.0	85.0
105	12.7	0.0	30.6

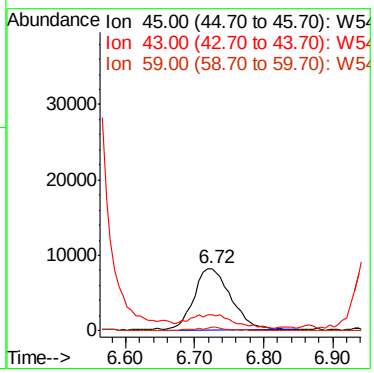


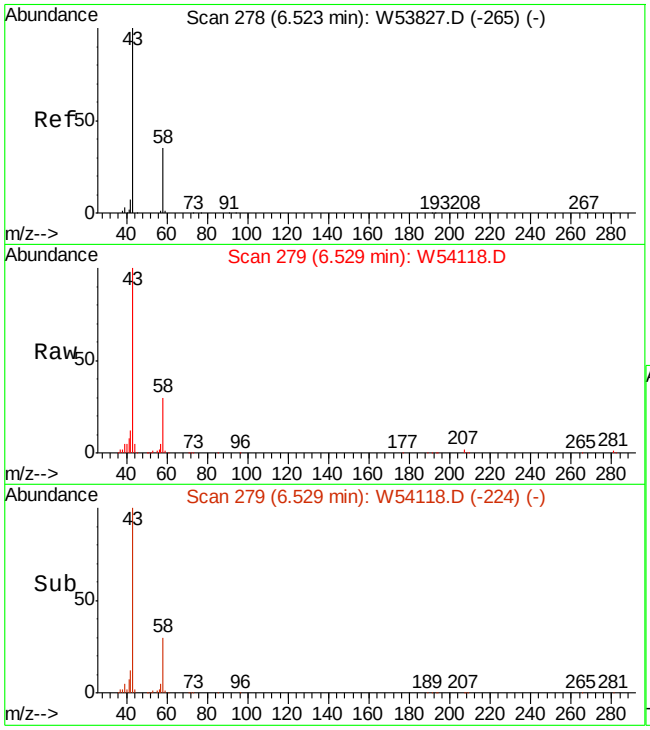


#18
ISOPROPYL ALCOHOL
Concen: 0.66 PPBV
RT: 6.72 min Scan# 311
Delta R.T. 0.02 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 45 Resp: 30571

Ion	Ratio	Lower	Upper
45	100		
43	26.2	0.0	37.1
59	5.3	0.0	24.3

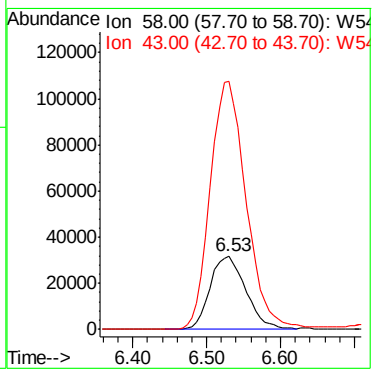


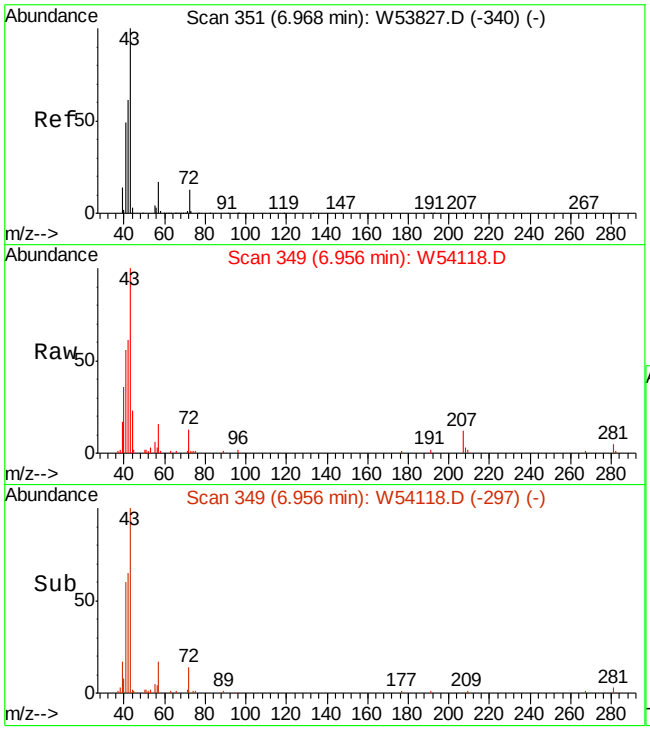


#19
ACETONE
Concen: 8.25 PPBV
RT: 6.53 min Scan# 279
Delta R.T. 0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 58 Resp: 104748

Ion	Ratio	Lower	Upper
58	100		
43	340.1	263.9	303.9#

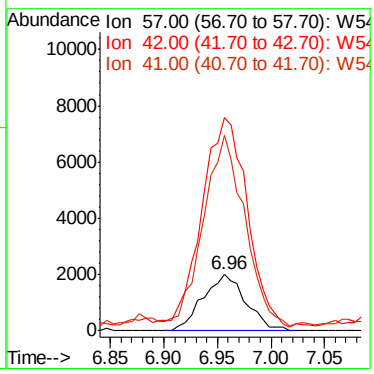


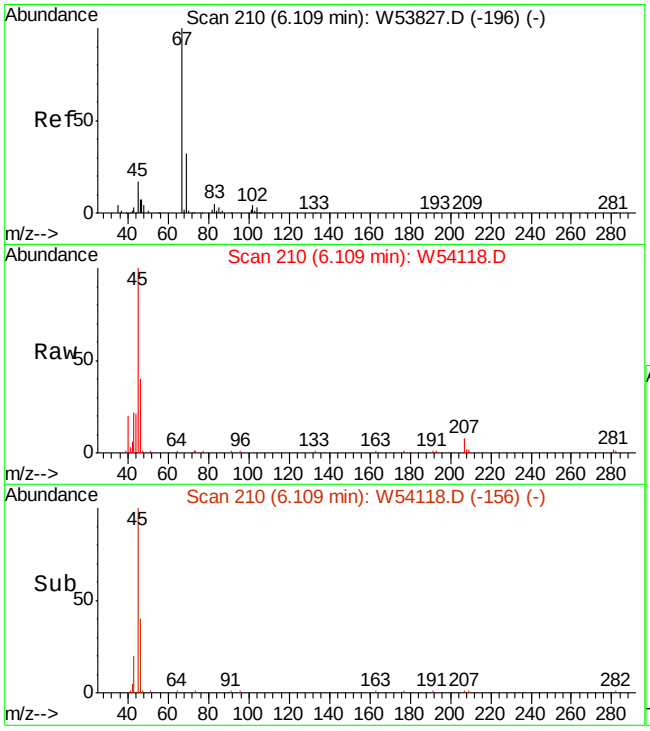


#22
PENTANE
Concen: 0.75 PPBV
RT: 6.96 min Scan# 349
Delta R.T. -0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 57 Resp: 5587

Ion	Ratio	Lower	Upper
57	100		
42	401.8	345.4	385.4#
41	324.9	280.2	320.2#

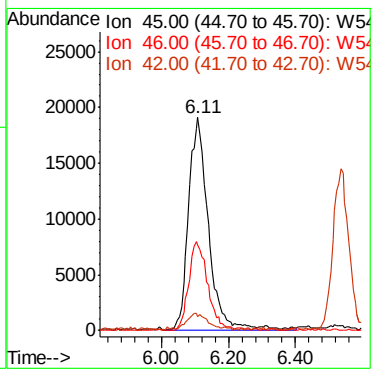


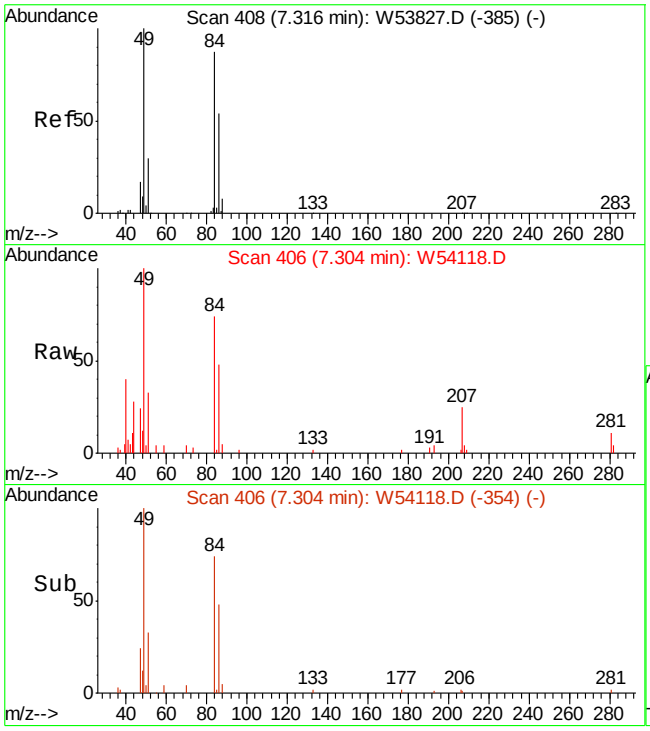


#26
ETHANOL
Concen: 8.82 PPBV
RT: 6.11 min Scan# 210
Delta R.T. 0.00 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 45 Resp: 79587

Ion	Ratio	Lower	Upper
45	100		
46	39.8	21.2	61.2
42	8.9	0.0	29.3

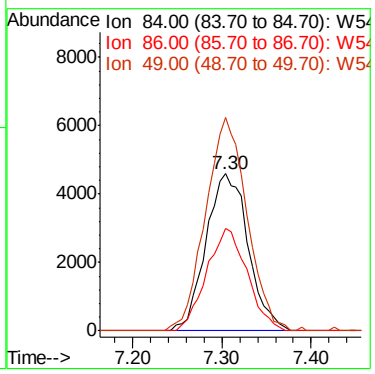


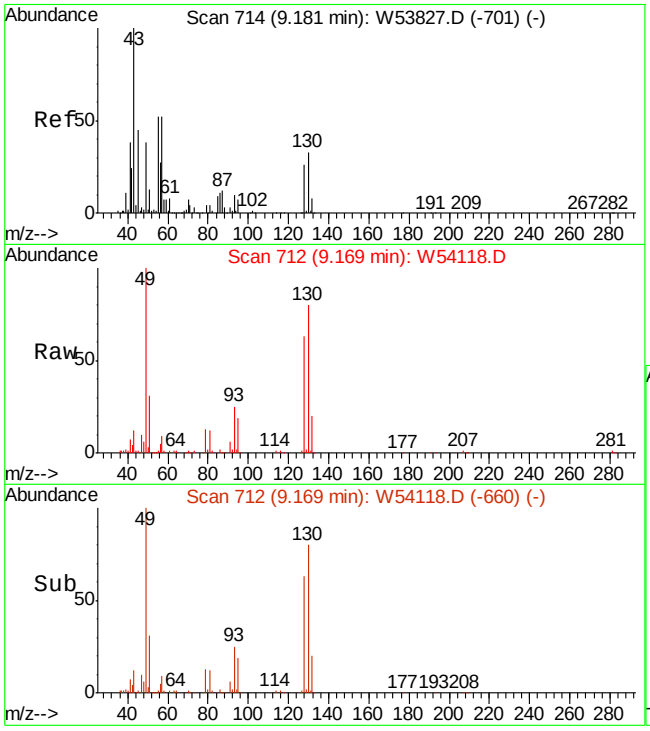


#29
METHYLENE CHLORIDE
Concen: 0.66 PPBV
RT: 7.30 min Scan# 406
Delta R.T. -0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 84 Resp: 15041

Ion	Ratio	Lower	Upper
84	100		
86	63.1	43.3	83.3
49	133.5	0.0	317.4

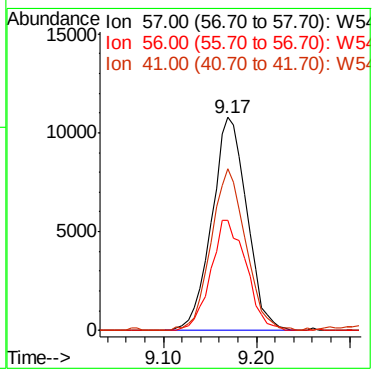


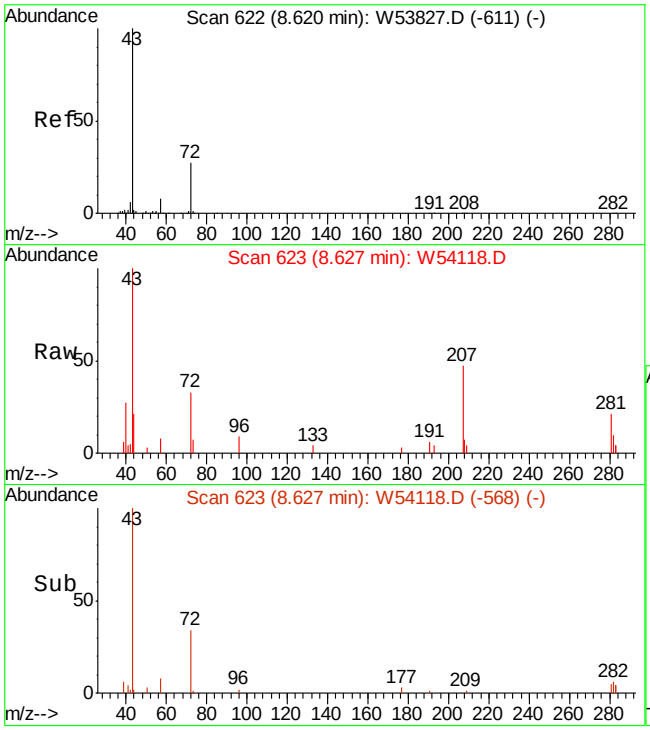


#36
HEXANE
Concen: 0.73 PPBV
RT: 9.17 min Scan# 712
Delta R.T. -0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 57 Resp: 28426

Ion	Ratio	Lower	Upper
57	100		
56	52.2	32.7	72.7
41	75.1	72.1	112.1

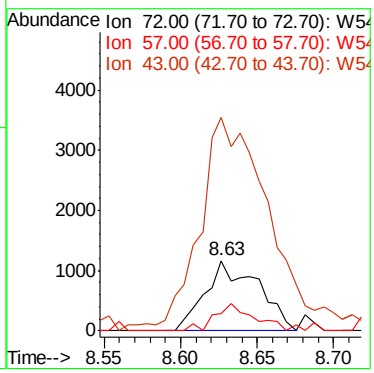


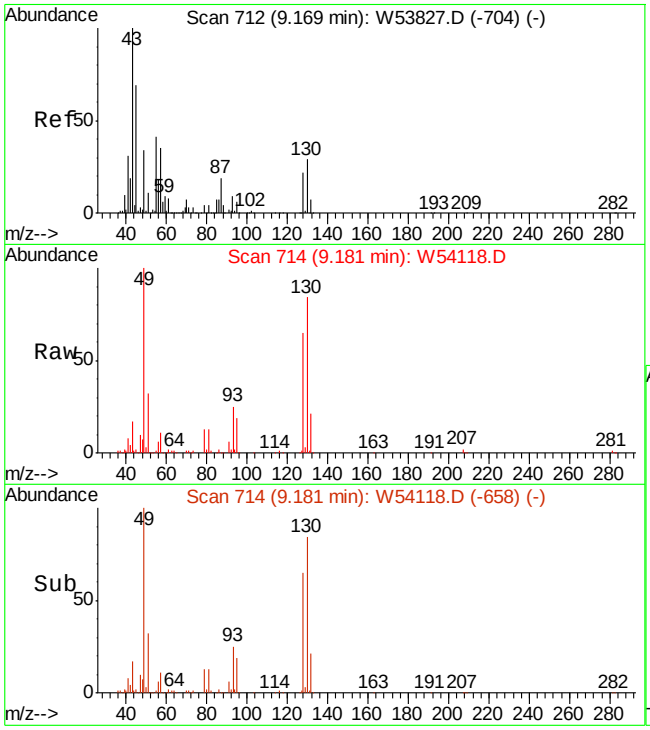


#39
METHYL ETHYL KETONE
Concen: 0.24 PPBV
RT: 8.63 min Scan# 623
Delta R.T. 0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 72 Resp: 2780

Ion	Ratio	Lower	Upper
72	100		
57	24.1	9.3	49.3
43	304.5	348.6	388.6#

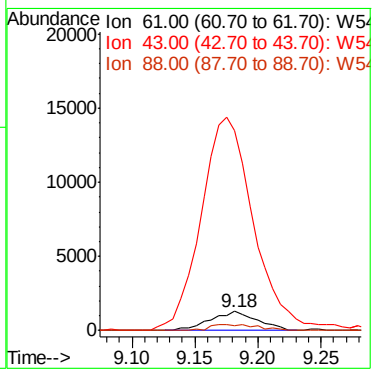


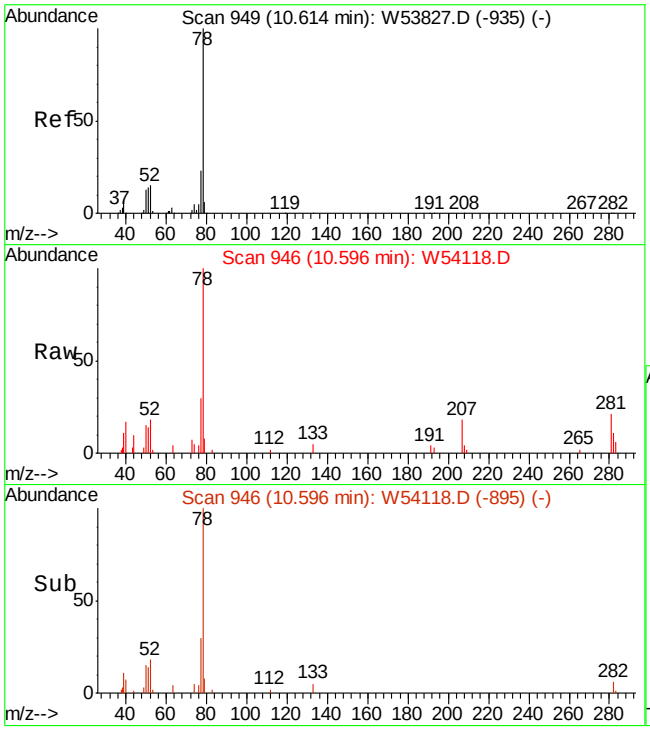


#42
ETHYL ACETATE
Concen: 0.43 PPBV
RT: 9.18 min Scan# 714
Delta R.T. 0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 61 Resp: 3315

Ion	Ratio	Lower	Upper
61	100		
43	1059.1	1218.3	1258.3#
88	24.7	24.0	64.0

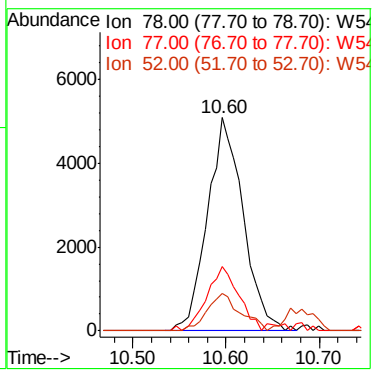


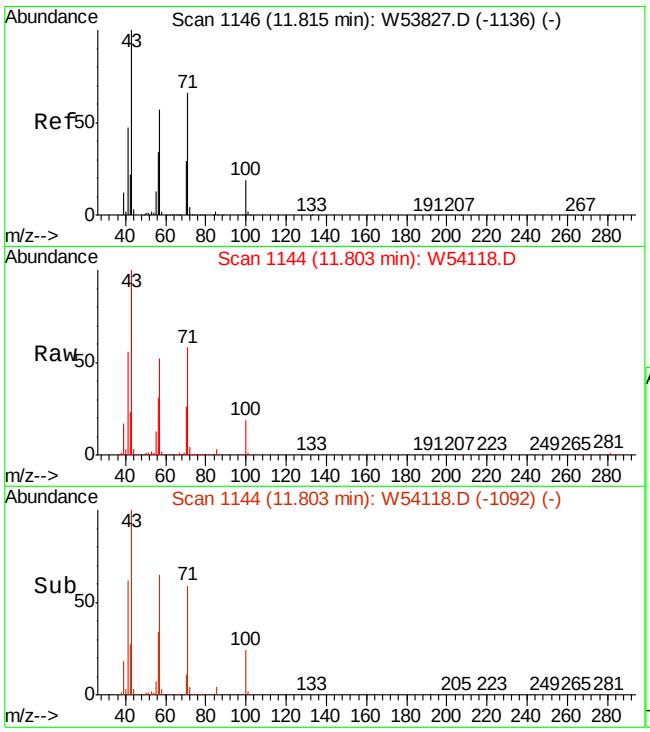


#50
BENZENE
Concen: 0.18 PPBV
RT: 10.60 min Scan# 946
Delta R.T. -0.02 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 78 Resp: 13683

Ion	Ratio	Lower	Upper
78	100		
77	26.8	3.3	43.3
52	16.3	0.0	34.9

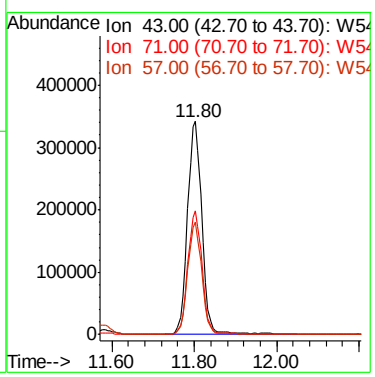


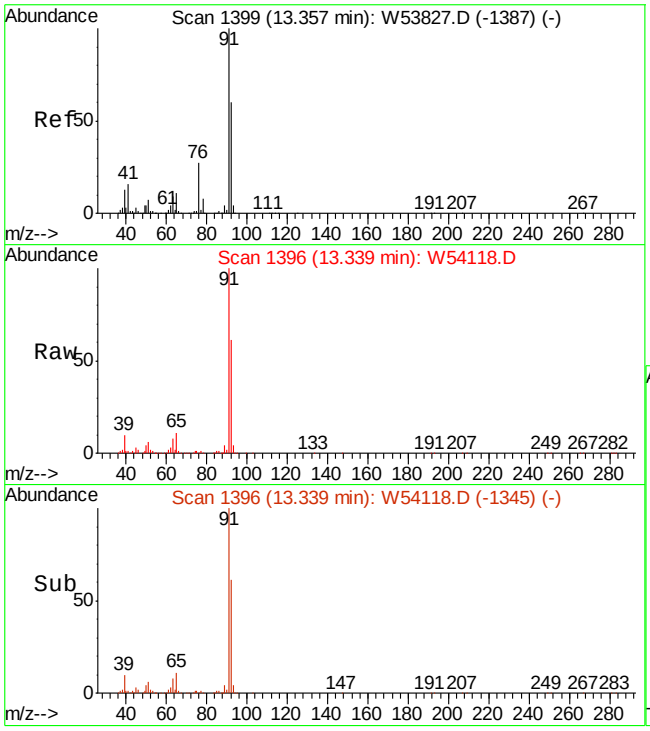


#61
HEPTANE
Concen: 19.78 PPBV
RT: 11.80 min Scan# 1144
Delta R.T. -0.01 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 43 Resp: 817599

Ion	Ratio	Lower	Upper
43	100		
71	57.4	44.7	84.7
57	52.2	38.6	78.6

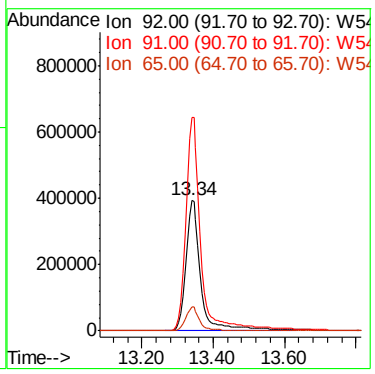


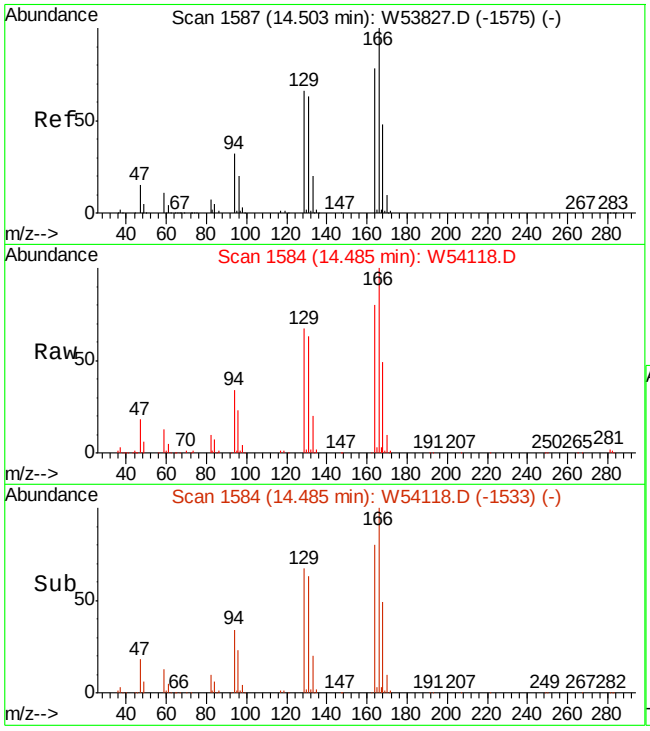


#64
TOLUENE
Concen: 21.98 PPBV
RT: 13.34 min Scan# 1396
Delta R.T. -0.02 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 92 Resp: 1166360

Ion	Ratio	Lower	Upper
92	100		
91	164.8	147.8	187.8
65	17.7	0.0	39.8

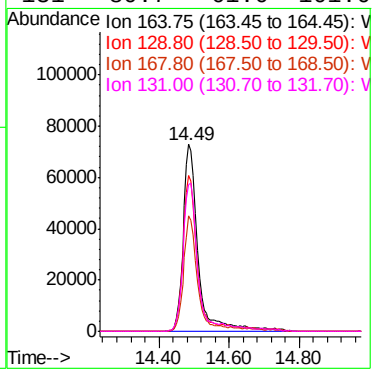


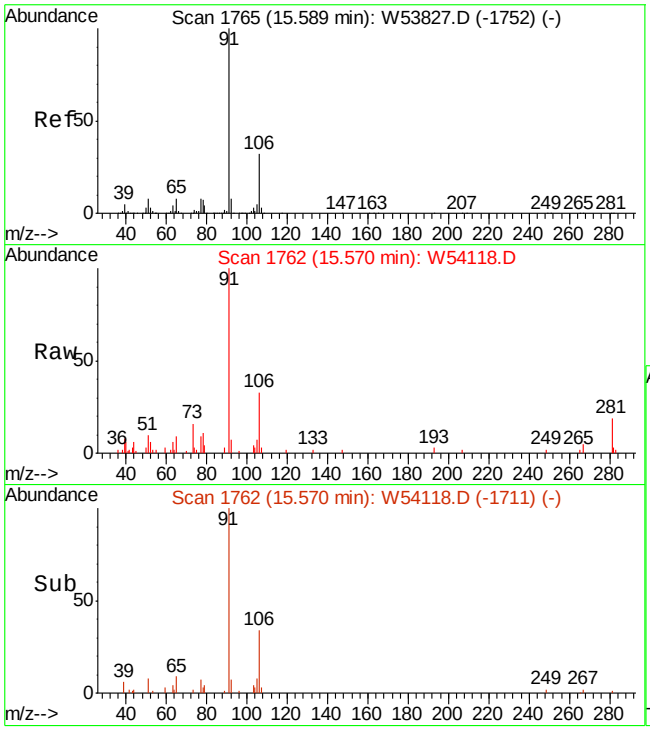


#71
TETRACHLOROETHYLENE
Concen: 5.92 PPBV
RT: 14.49 min Scan# 1584
Delta R.T. -0.02 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion:164 Resp: 215971

Ion	Ratio	Lower	Upper
164	100		
129	82.9	63.7	103.7
168	60.4	41.6	81.6
131	80.7	61.0	101.0

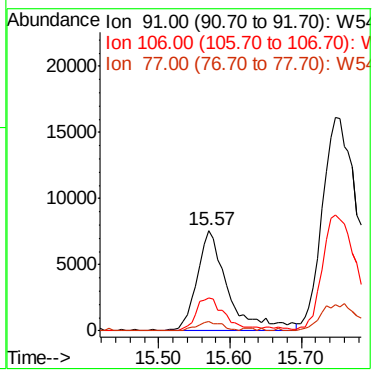


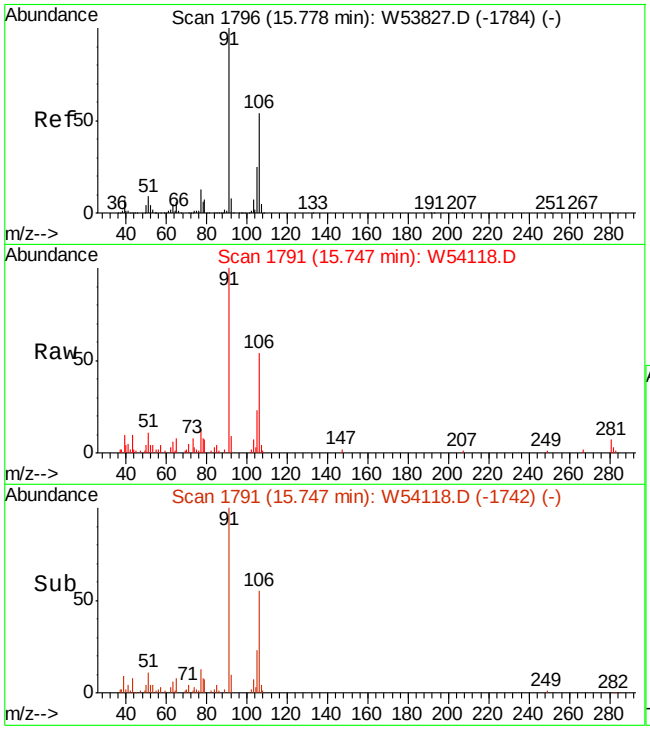


#77
ETHYLBENZENE
Concen: 0.24 PPBV
RT: 15.57 min Scan# 1762
Delta R.T. -0.02 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion: 91 Resp: 22712

Ion	Ratio	Lower	Upper
91	100		
106	33.2	12.2	52.2
77	7.3	0.0	27.9

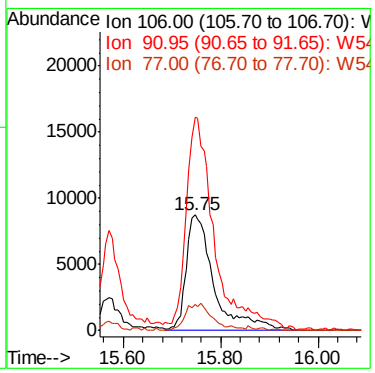


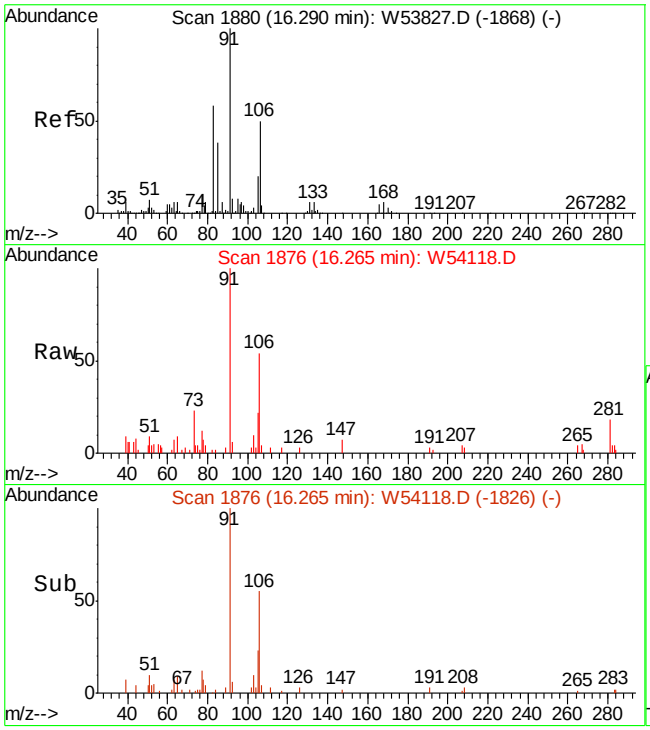


#78
m,p-XYLENE
Concen: 0.88 PPBV
RT: 15.75 min Scan# 1791
Delta R.T. -0.03 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion:106 Resp: 34745

Ion	Ratio	Lower	Upper
106	100		
91	184.5	150.4	225.6
77	23.1	18.6	28.0

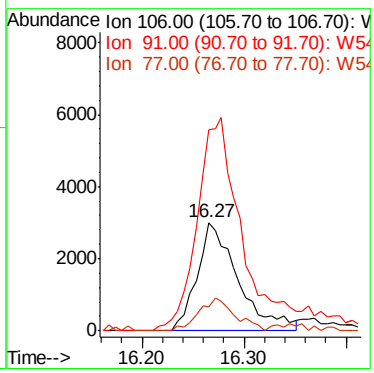




#79
o-XYLENE
Concen: 0.22 PPBV
RT: 16.27 min Scan# 1876
Delta R.T. -0.02 min
Lab File: W54118.D
Acq: 12 Mar 2016 4:43 pm

Tgt Ion:106 Resp: 8359

Ion	Ratio	Lower	Upper
106	100		
91	231.9	180.3	220.3#
77	26.3	5.2	45.2



Manual Integration Approval Summary

Sample Number: JC15063-3
Lab FileID: W54118.D
Injection Time: 03/12/16 16:43

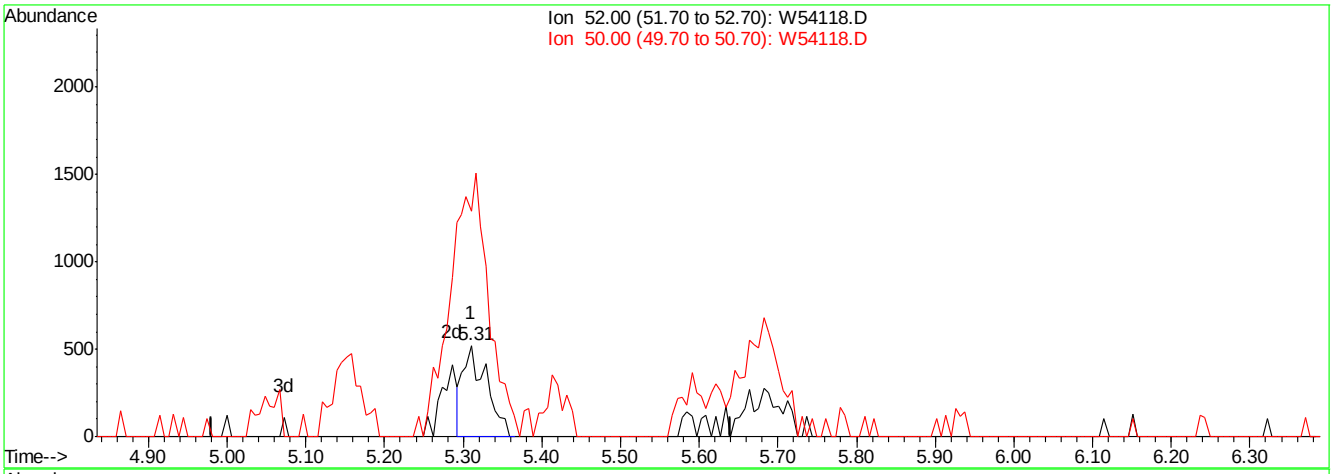
Method: TO-15
Analyst approved: 03/13/16 12:14 Youmin Hu
Supervisor approved: 03/13/16 14:19 Dana Tryon

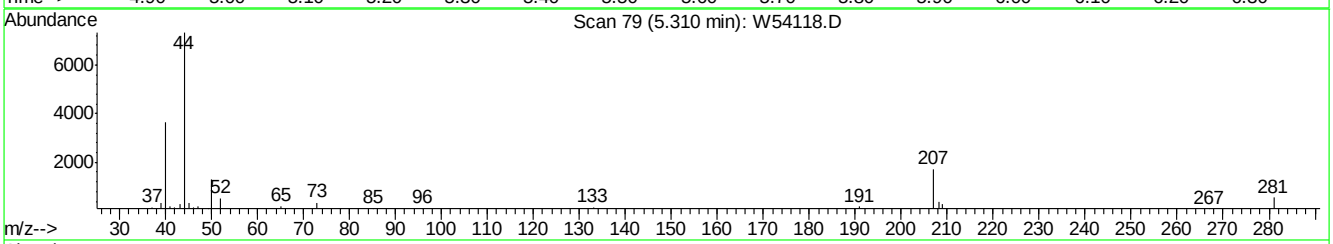
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chloromethane	74-87-3		5.31	Missed peak

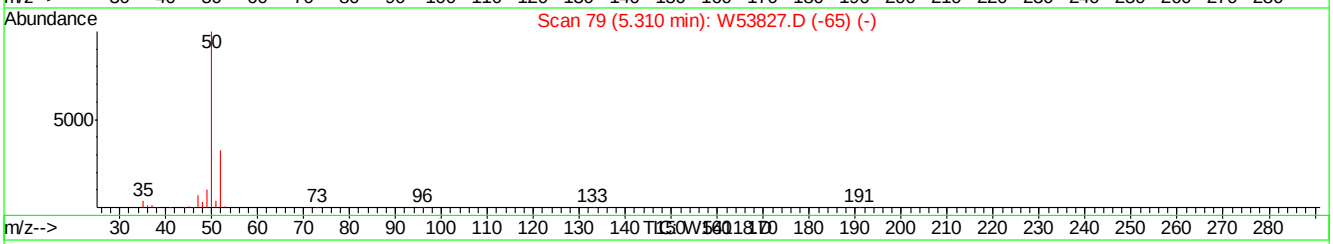
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W54118.D Vial: 7
Acq On : 12 Mar 2016 4:43 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2162,100,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:29 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Single Level Calibration







(9) CHLOROMETHANE

5.31min 0.16PPBV

response 1079

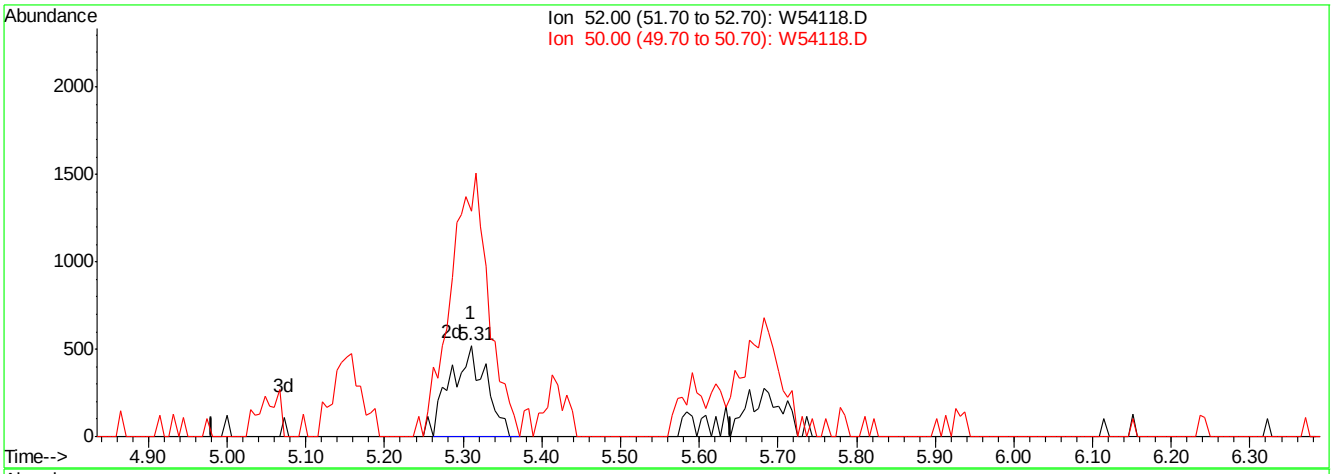
Ion	Exp%	Act%
52.00	100	100
50.00	294.80	161.13#
0.00	0.00	0.00
0.00	0.00	0.00

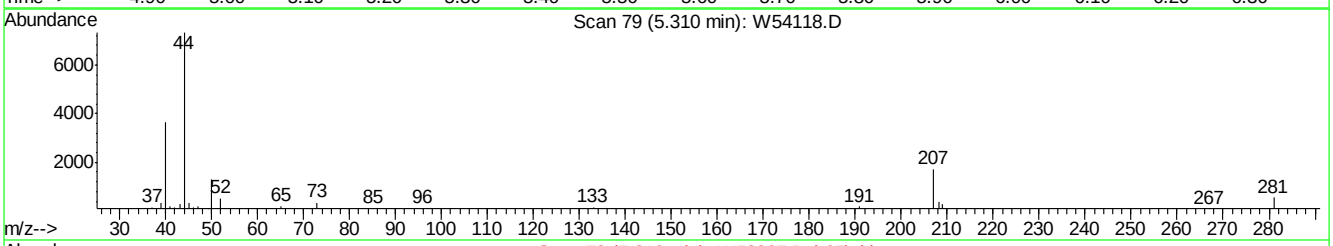
W54118.D MW2152.M Sun Mar 13 10:29:57 2016 MSW

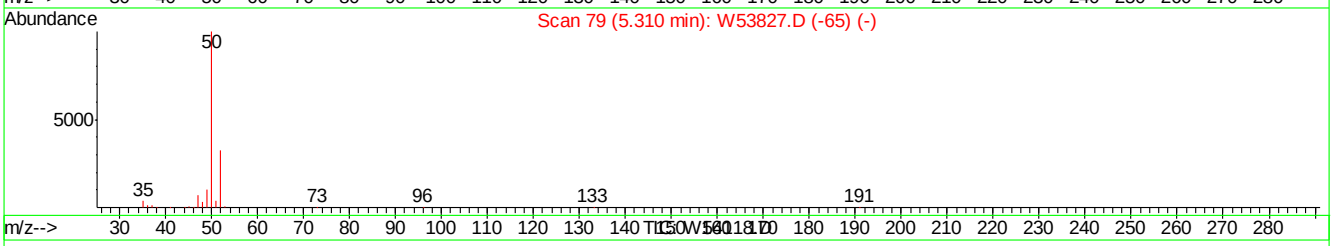
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W54118.D Vial: 7
Acq On : 12 Mar 2016 4:43 pm Operator: YOUMINH
Sample : JC15063-3 Inst : MSW
Misc : MS99025,VW2162,100,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:32 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Single Level Calibration







(9) CHLOROMETHANE

5.31min 0.23PPBV m

response 1605

Ion	Exp%	Act%
52.00	100	100
50.00	294.80	247.13#
0.00	0.00	0.00
0.00	0.00	0.00

W54118.D MW2152.M Sun Mar 13 12:11:21 2016 MSW

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54095.D Vial: 14
Acq On : 11 Mar 2016 9:10 pm Operator: YOUMINH
Sample : JC15063-4 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 09:25:09 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

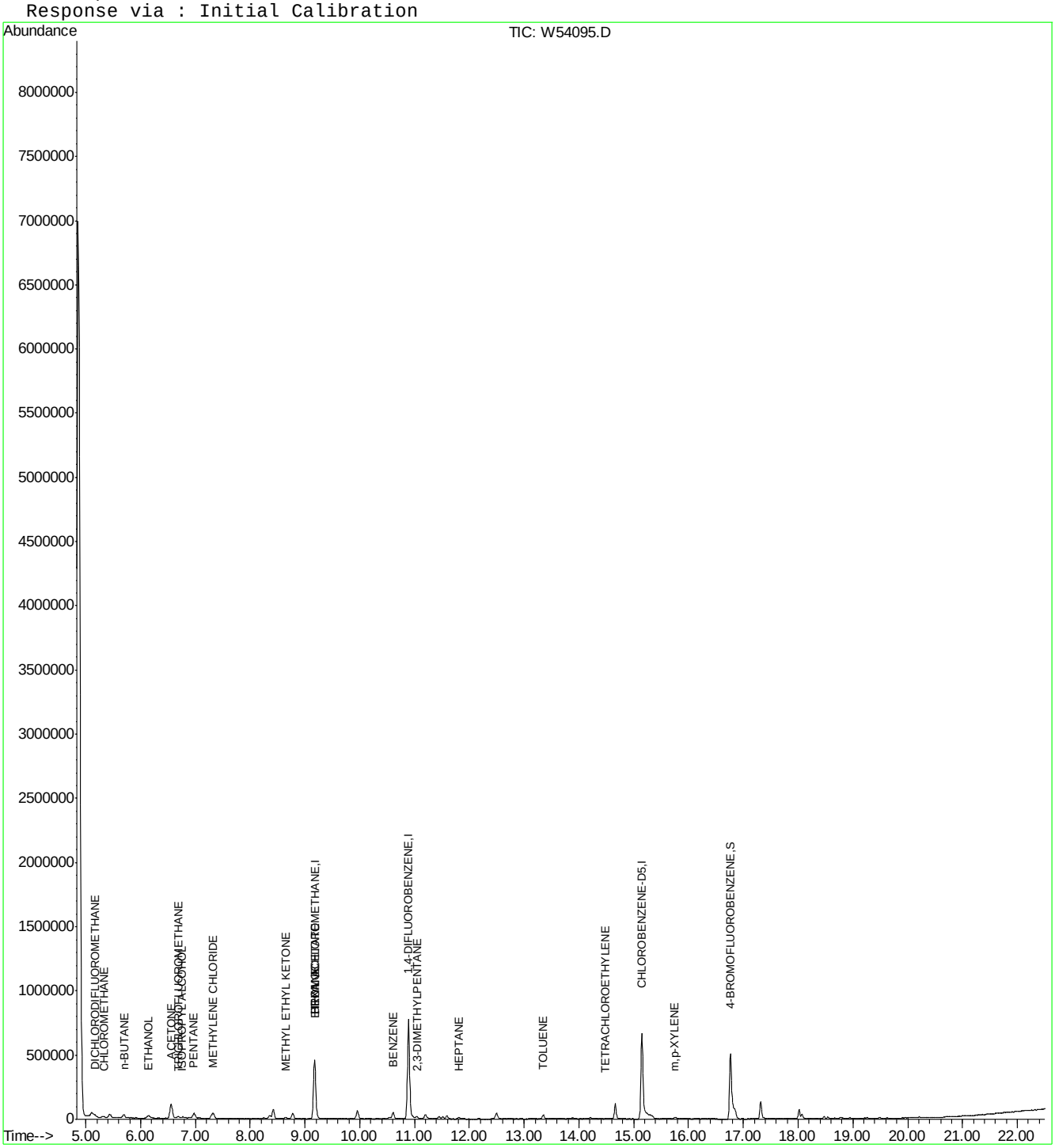
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.18	128	181103	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	939446	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	377258	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	323908	7.70	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 77.00%				
Target Compounds							Qvalue
5) DICHLORODIFLUOROMETHANE	5.16	85	29821	0.62	PPBV		98
9) CHLOROMETHANE	5.33	52	4194	0.75	PPBV		92
12) n-BUTANE	5.70	58	5721	1.22	PPBV	#	76
17) TRICHLOROFLUOROMETHANE	6.69	101	17959	0.40	PPBV		99
18) ISOPROPYL ALCOHOL	6.76	45	17294	0.46	PPBV		90
19) ACETONE	6.55	58	40479	3.91	PPBV	#	51
22) PENTANE	6.97	57	6154	1.02	PPBV	#	74
26) ETHANOL	6.14	45	51273	6.97	PPBV		96
29) METHYLENE CHLORIDE	7.32	84	30724	1.66	PPBV		90
36) HEXANE	9.18	57	29981	0.94	PPBV		91
39) METHYL ETHYL KETONE	8.64	72	6035	0.65	PPBV	#	89
42) ETHYL ACETATE	9.19	61	2826	0.45	PPBV	#	86
50) BENZENE	10.61	78	62521	1.00	PPBV		98
52) 2,3-DIMETHYLPENTANE	11.04	71	3342	0.23	PPBV	#	92
61) HEPTANE	11.81	43	8304	0.24	PPBV		81
64) TOLUENE	13.35	92	20341	0.46	PPBV		95
71) TETRACHLOROETHYLENE	14.49	164	1736	0.06	PPBV		94
78) m,p-XYLENE	15.75	106	7306	0.22	PPBV		92

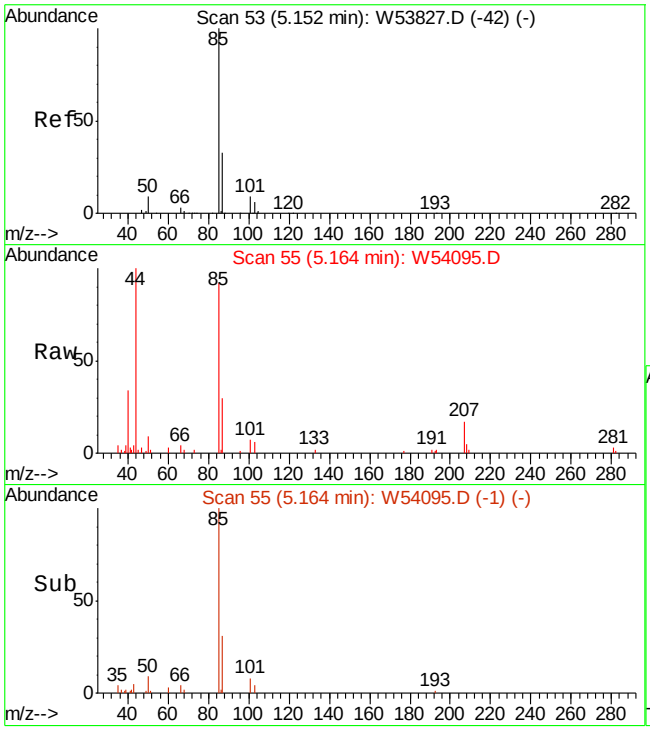
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54095.D Vial: 14
Acq On : 11 Mar 2016 9:10 pm Operator: YOUMINH
Sample : JC15063-4 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 11:24 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration

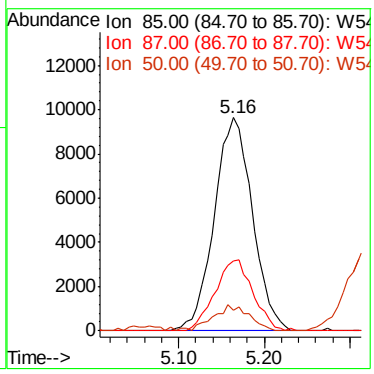


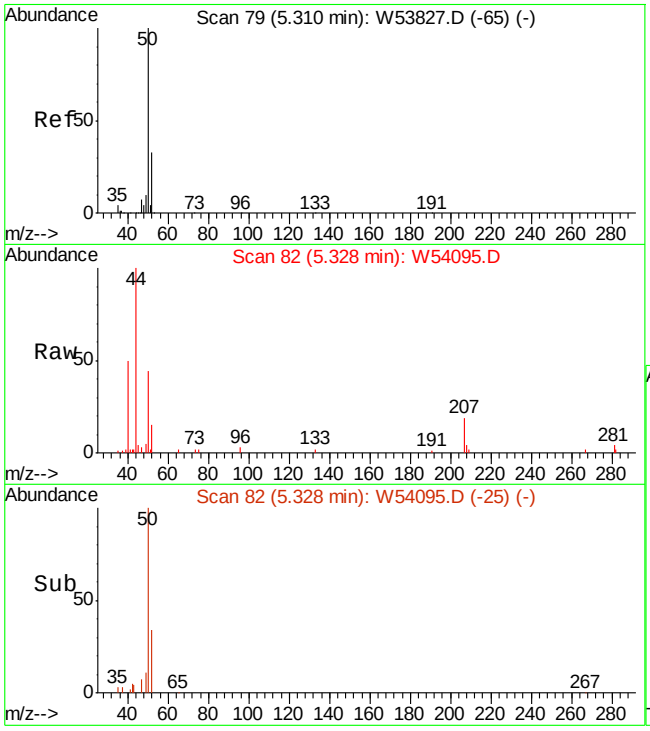


#5
DICHLORODIFLUOROMETHANE
Concen: 0.62 PPBV
RT: 5.16 min Scan# 55
Delta R.T. 0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 85 Resp: 29821

Ion	Ratio	Lower	Upper
85	100		
87	33.1	12.4	52.4
50	11.4	0.0	30.2

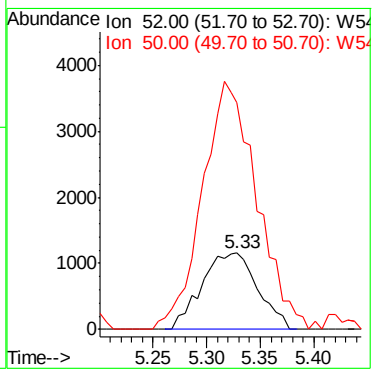


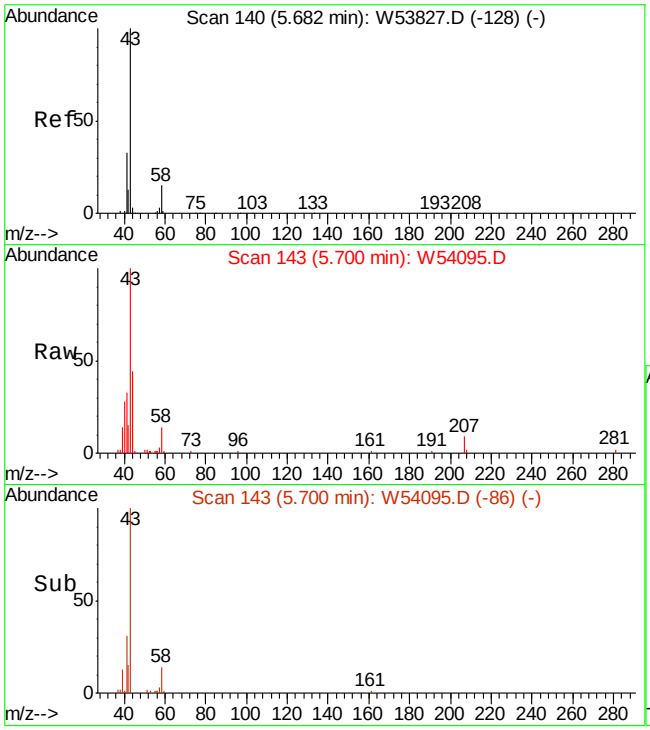


#9
CHLOROMETHANE
Concen: 0.75 PPBV
RT: 5.33 min Scan# 82
Delta R.T. 0.02 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 52 Resp: 4194

Ion	Ratio	Lower	Upper
52	100		
50	278.4	274.8	314.8

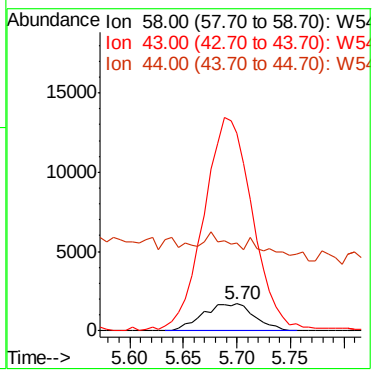


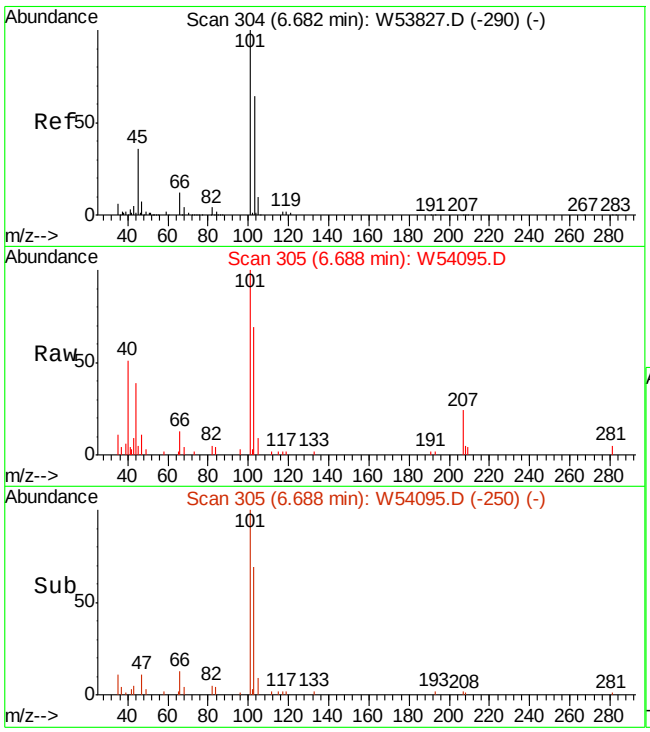


#12
n-BUTANE
Concen: 1.22 PPBV
RT: 5.70 min Scan# 143
Delta R.T. 0.02 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 58 Resp: 5721

Ion	Ratio	Lower	Upper
58	100		
43	747.1	534.9	802.3
44	0.0	19.2	28.8#

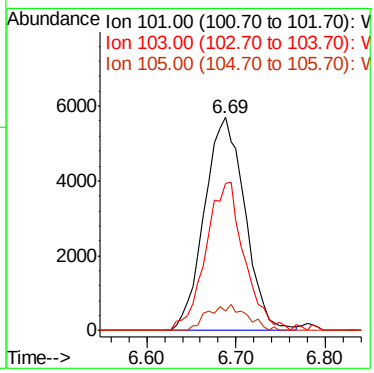


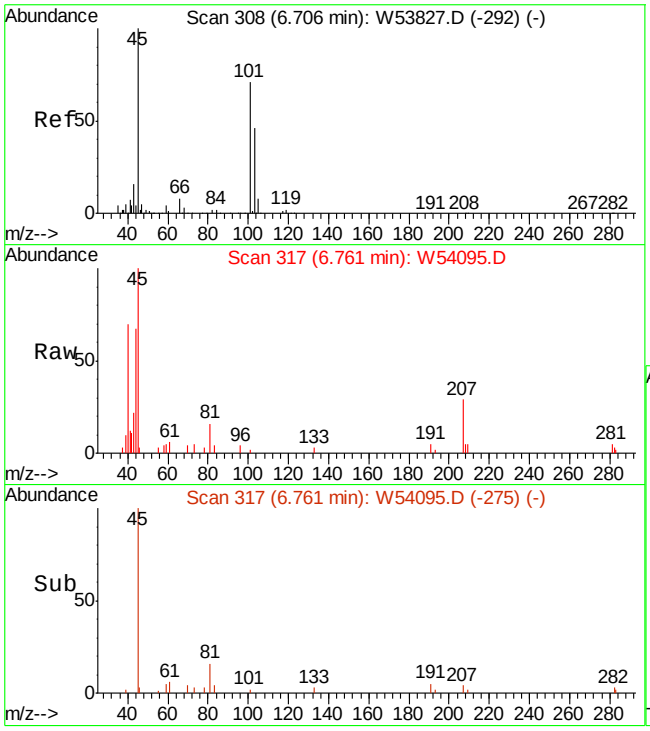


#17
TRICHLOROFLUOROMETHANE
Concen: 0.40 PPBV
RT: 6.69 min Scan# 305
Delta R.T. 0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion:101 Resp: 17959

Ion	Ratio	Lower	Upper
101	100		
103	65.8	45.0	85.0
105	11.7	0.0	30.6

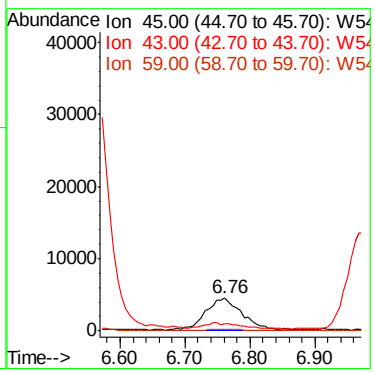


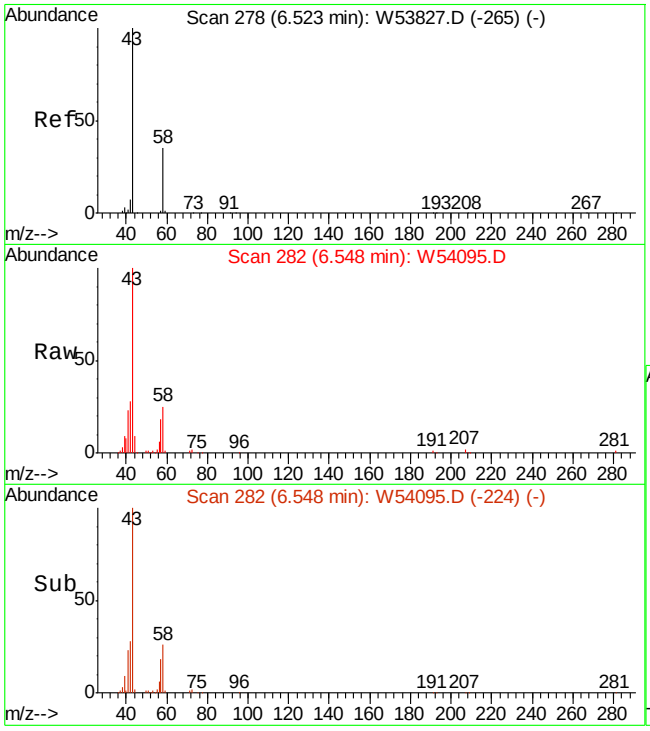


#18
ISOPROPYL ALCOHOL
Concen: 0.46 PPBV
RT: 6.76 min Scan# 317
Delta R.T. 0.05 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 45 Resp: 17294

Ion	Ratio	Lower	Upper
45	100		
43	22.4	0.0	37.1
59	4.8	0.0	24.3

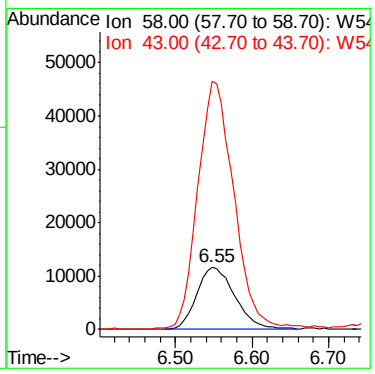


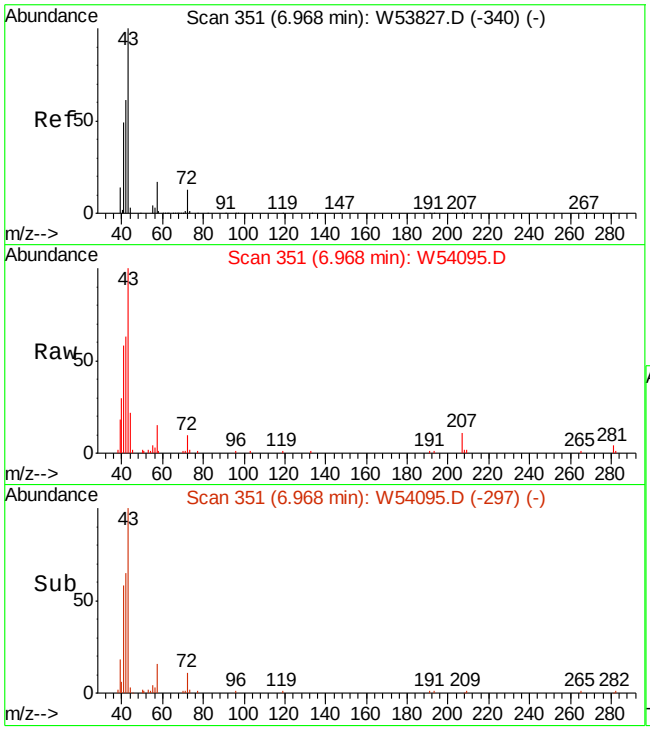


#19
ACETONE
Concen: 3.91 PPBV
RT: 6.55 min Scan# 282
Delta R.T. 0.02 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 58 Resp: 40479

Ion	Ratio	Lower	Upper
58	100		
43	377.1	263.9	303.9#

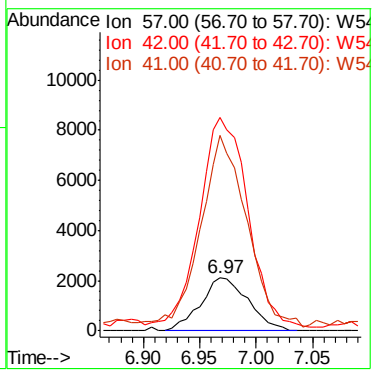


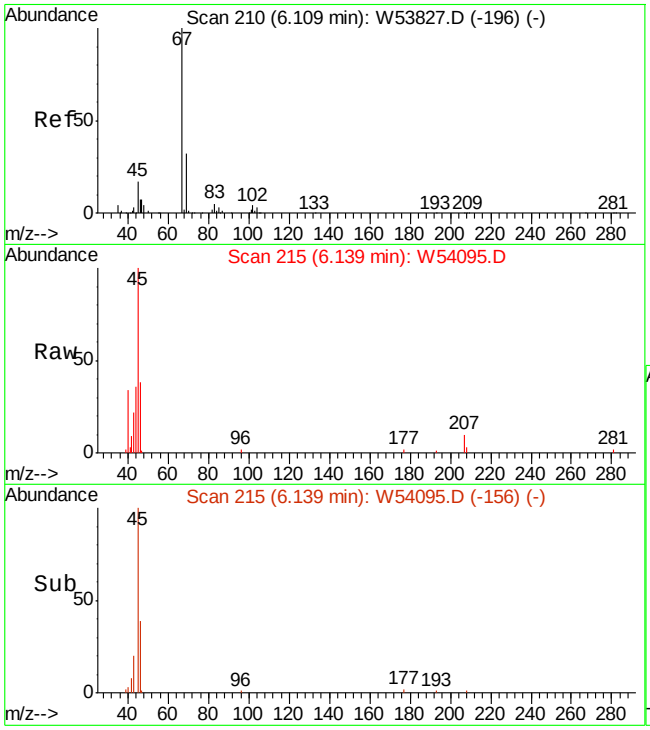


#22
PENTANE
Concen: 1.02 PPBV
RT: 6.97 min Scan# 351
Delta R.T. -0.00 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 57 Resp: 6154

Ion	Ratio	Lower	Upper
57	100		
42	415.4	345.4	385.4#
41	358.4	280.2	320.2#

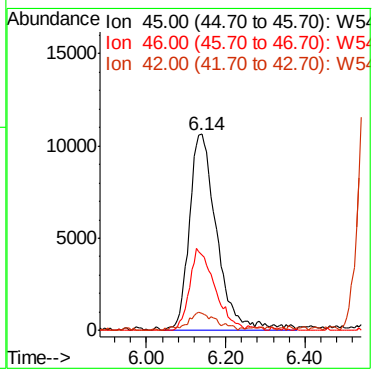


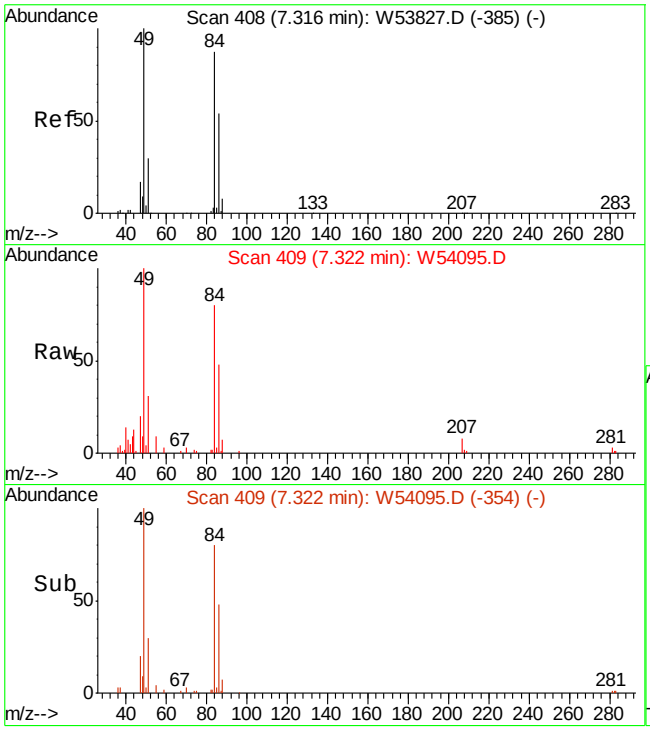


#26
ETHANOL
Concen: 6.97 PPBV
RT: 6.14 min Scan# 215
Delta R.T. 0.03 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 45 Resp: 51273

Ion	Ratio	Lower	Upper
45	100		
46	38.3	21.2	61.2
42	8.9	0.0	29.3

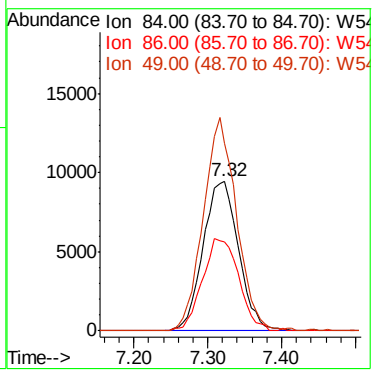


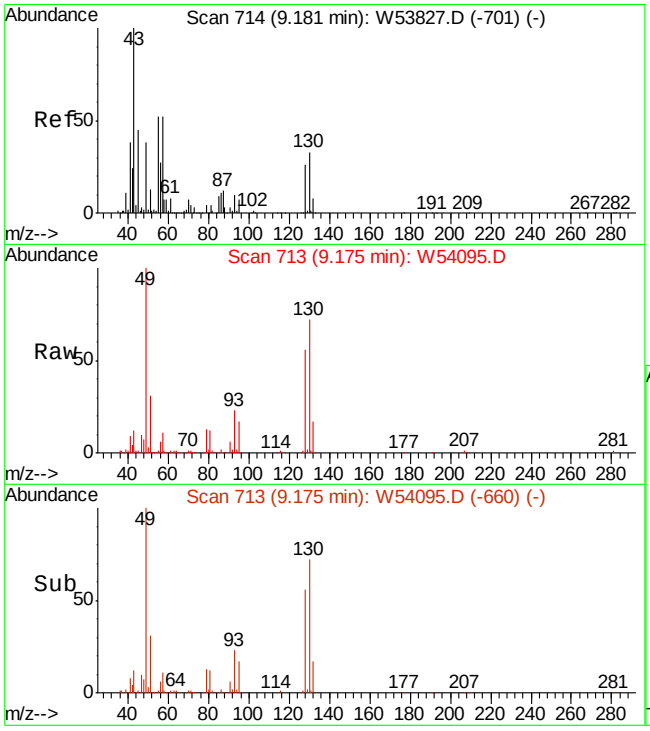


#29
METHYLENE CHLORIDE
Concen: 1.66 PPBV
RT: 7.32 min Scan# 409
Delta R.T. 0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 84 Resp: 30724

Ion	Ratio	Lower	Upper
84	100		
86	63.2	43.3	83.3
49	133.8	0.0	317.4

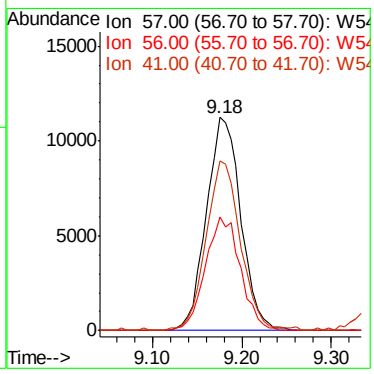


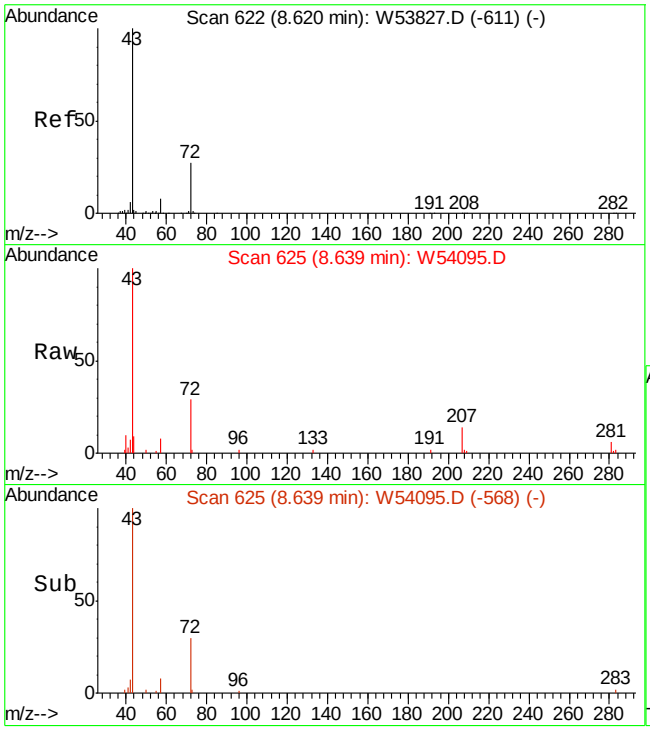


#36
HEXANE
Concen: 0.94 PPBV
RT: 9.18 min Scan# 713
Delta R.T. -0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 57 Resp: 29981

Ion	Ratio	Lower	Upper
57	100		
56	54.2	32.7	72.7
41	79.9	72.1	112.1

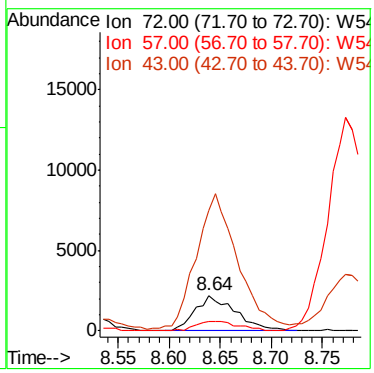


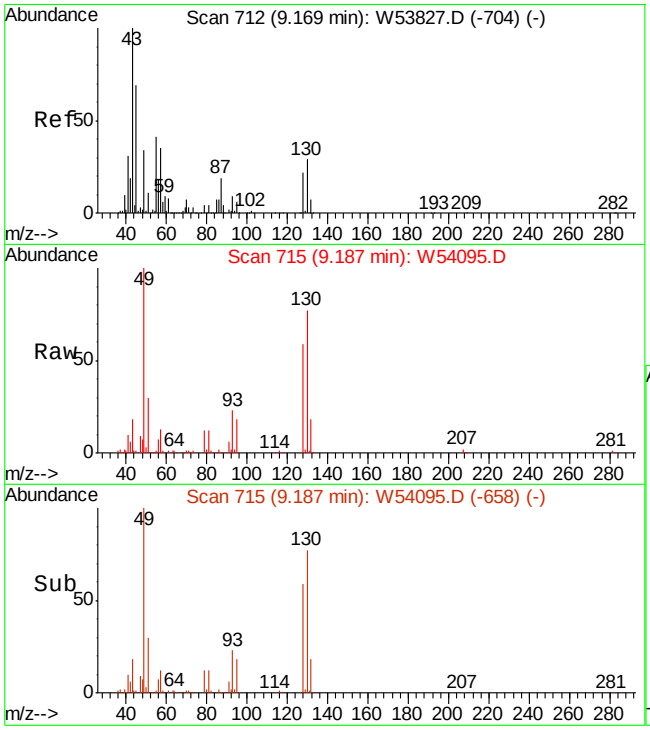


#39
METHYL ETHYL KETONE
Concen: 0.65 PPBV
RT: 8.64 min Scan# 625
Delta R.T. 0.02 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 72 Resp: 6035

Ion	Ratio	Lower	Upper
72	100		
57	26.0	9.3	49.3
43	341.9	348.6	388.6#

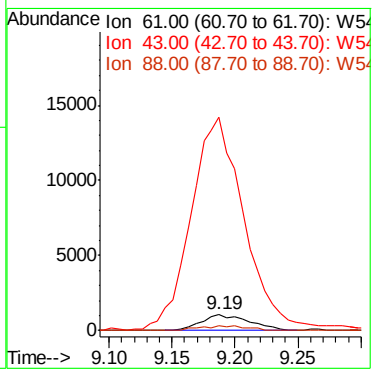


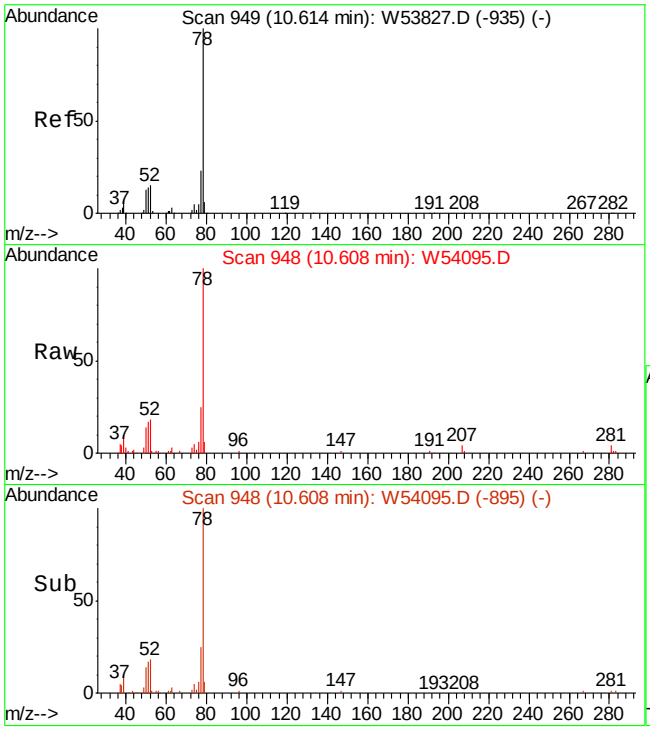


#42
ETHYL ACETATE
Concen: 0.45 PPBV
RT: 9.19 min Scan# 715
Delta R.T. 0.02 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 61 Resp: 2826

Ion	Ratio	Lower	Upper
61	100		
43	1308.4	1218.3	1258.3#
88	31.8	24.0	64.0

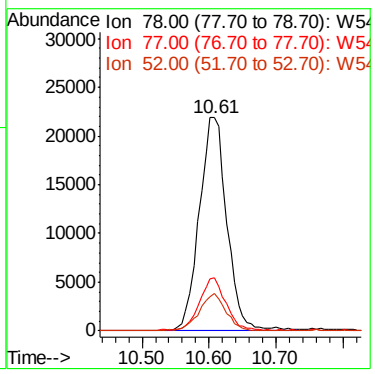


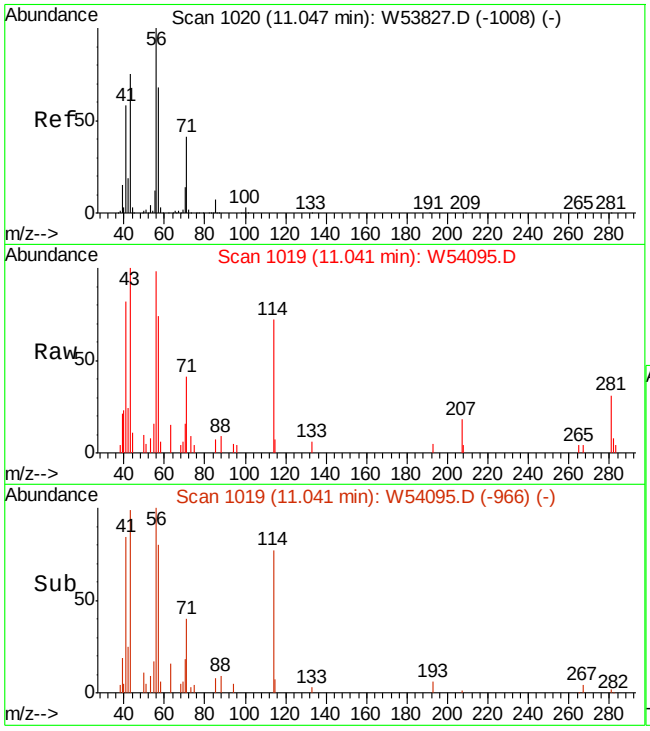


#50
BENZENE
Concen: 1.00 PPBV
RT: 10.61 min Scan# 948
Delta R.T. -0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 78 Resp: 62521

Ion	Ratio	Lower	Upper
78	100		
77	23.8	3.3	43.3
52	16.9	0.0	34.9

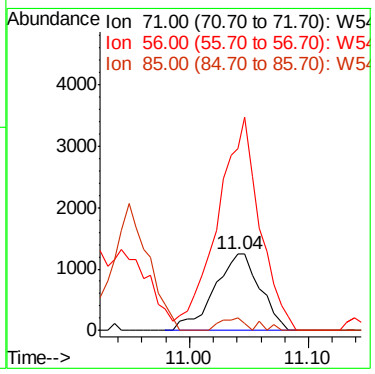


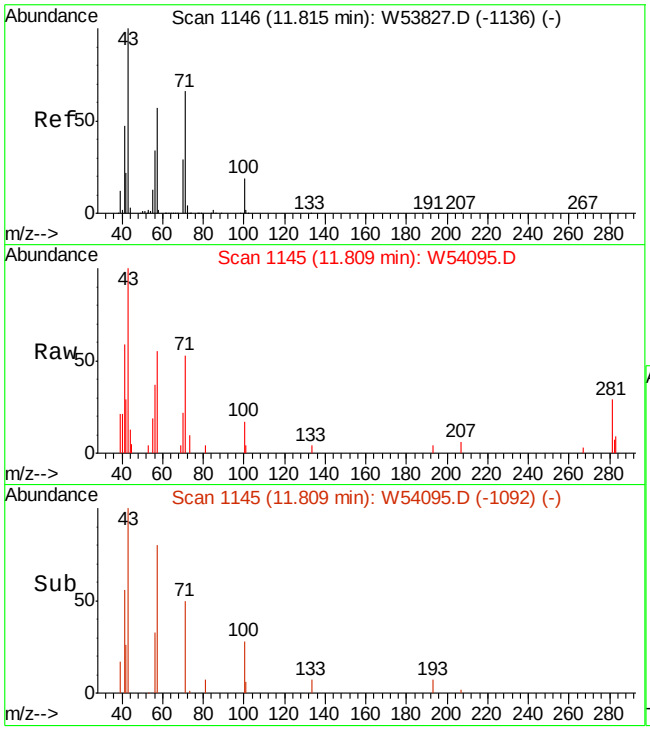


#52
2,3-DIMETHYLPENTANE
Concen: 0.23 PPBV
RT: 11.04 min Scan# 1019
Delta R.T. -0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 71 Resp: 3342

Ion	Ratio	Lower	Upper
71	100		
56	256.9	195.4	293.2
85	8.7	13.8	20.6#

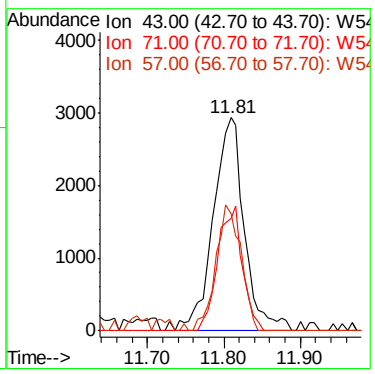


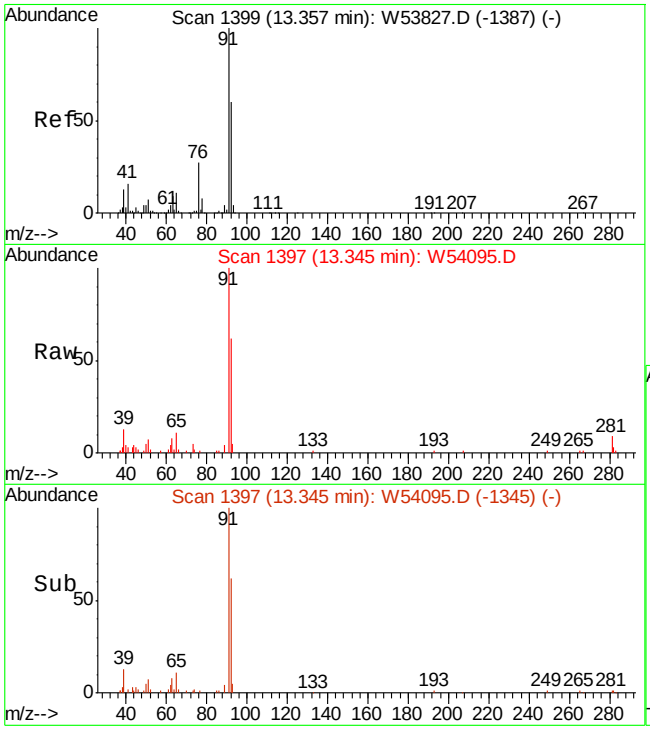


#61
HEPTANE
Concen: 0.24 PPBV
RT: 11.81 min Scan# 1145
Delta R.T. -0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 43 Resp: 8304

Ion	Ratio	Lower	Upper
43	100		
71	46.2	44.7	84.7
57	47.6	38.6	78.6

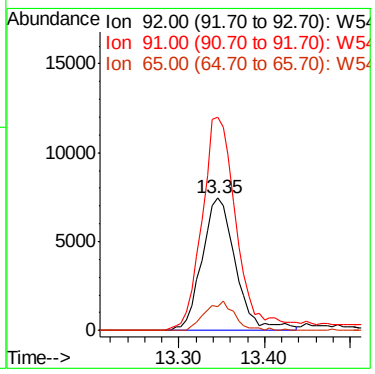


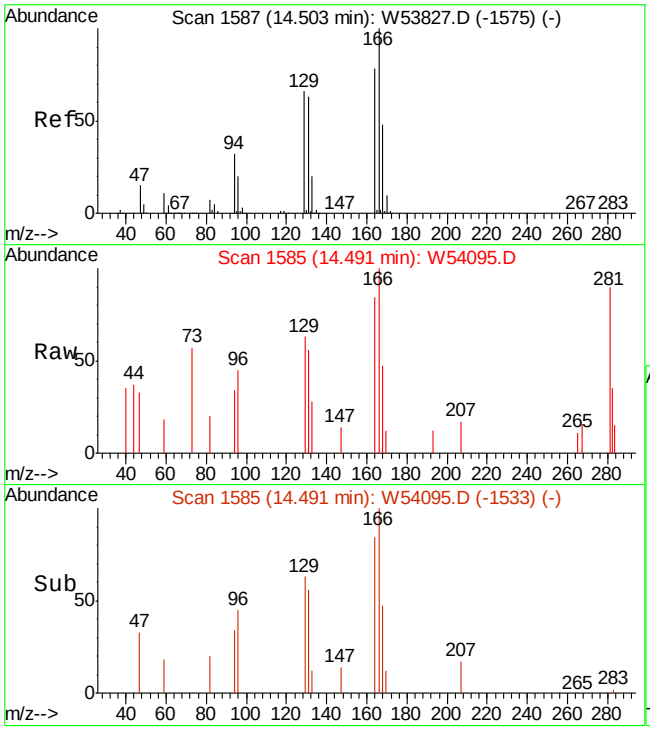


#64
TOLUENE
Concen: 0.46 PPBV
RT: 13.35 min Scan# 1397
Delta R.T. -0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion: 92 Resp: 20341

Ion	Ratio	Lower	Upper
92	100		
91	175.0	147.8	187.8
65	19.5	0.0	39.8

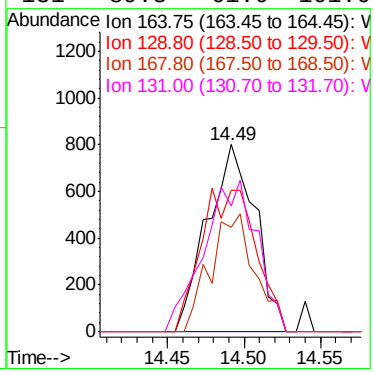


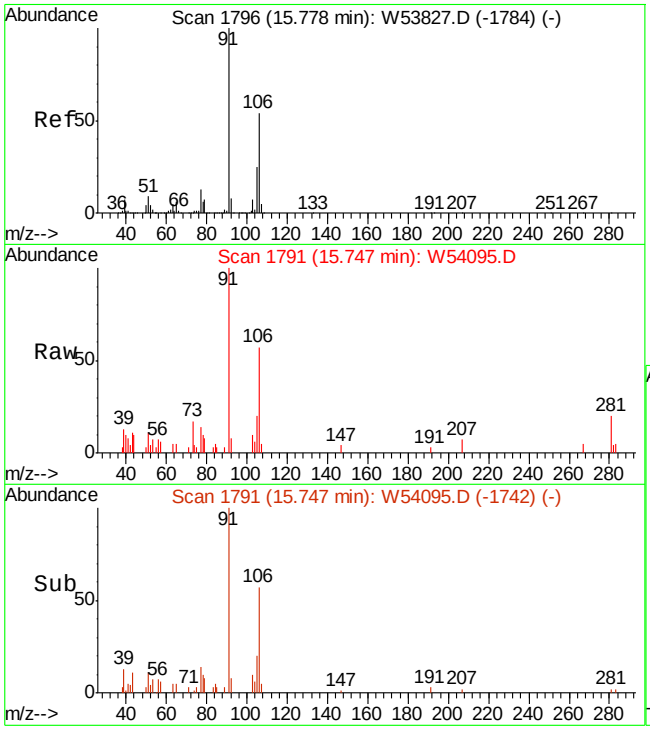


#71
TETRACHLOROETHYLENE
Concen: 0.06 PPBV
RT: 14.49 min Scan# 1585
Delta R.T. -0.01 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion:164 Resp: 1736

Ion	Ratio	Lower	Upper
164	100		
129	88.4	63.7	103.7
168	59.0	41.6	81.6
131	89.3	61.0	101.0

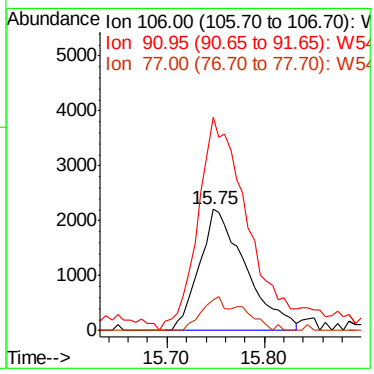




#78
m,p-XYLENE
Concen: 0.22 PPBV
RT: 15.75 min Scan# 1791
Delta R.T. -0.03 min
Lab File: W54095.D
Acq: 11 Mar 2016 9:10 pm

Tgt Ion:106 Resp: 7306

Ion	Ratio	Lower	Upper
106	100		
91	174.8	150.4	225.6
77	25.0	18.6	28.0



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\W54095.D Vial: 14
Acq On : 11 Mar 2016 9:10 pm Operator: YOUMINH
Sample : JC15063-4 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

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

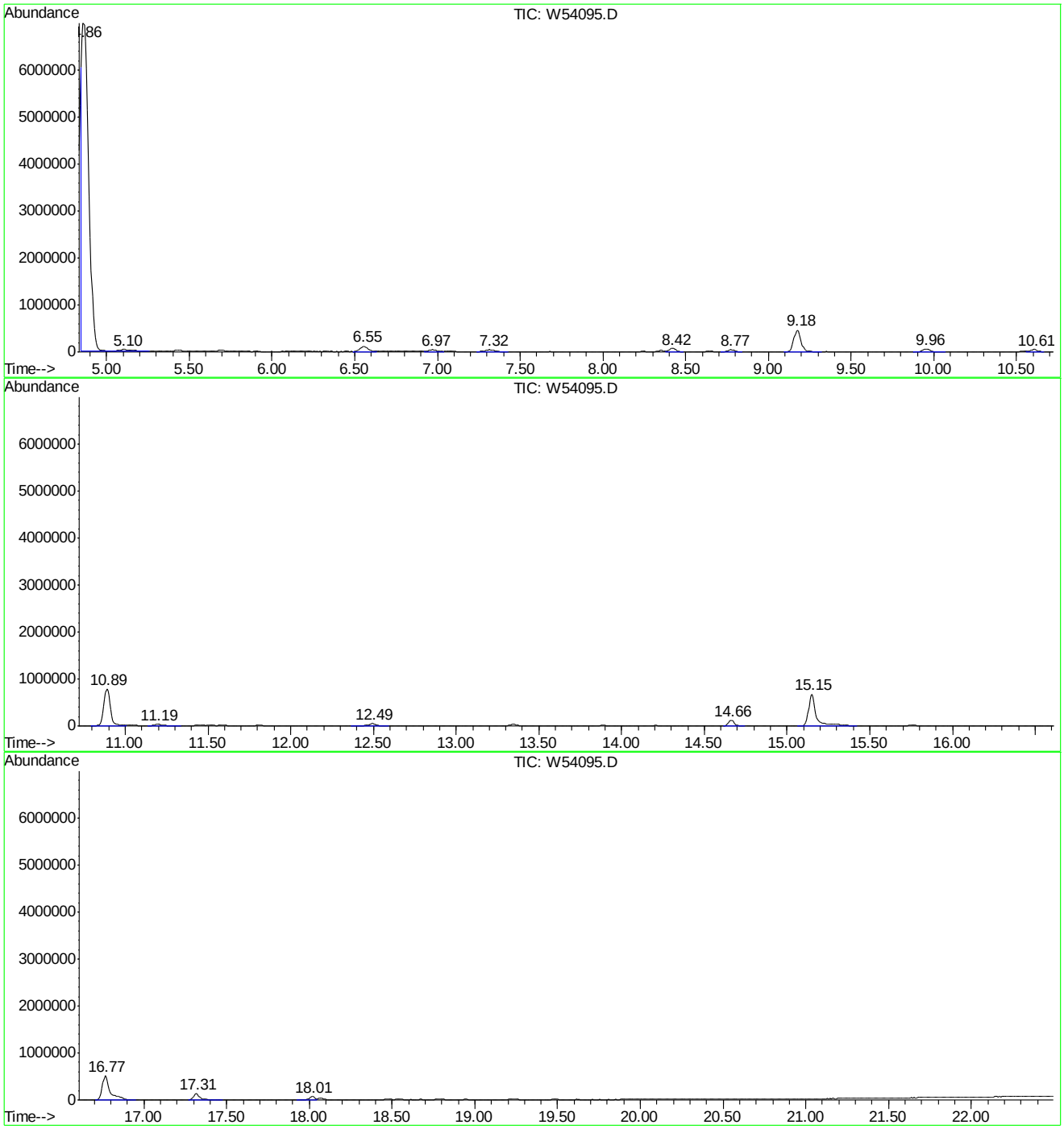
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.859	3	5	33	rVB	6974284	19372778	100.00%	66.262%
2	5.103	34	45	70	rVB6	36977	215661	1.11%	0.738%
3	6.554	272	283	296	rBV2	109636	360018	1.86%	1.231%
4	6.968	343	351	362	rVB2	39544	115696	0.60%	0.396%
5	7.316	395	408	426	rVB5	44632	173189	0.89%	0.592%
6	8.419	582	589	599	rVB	70821	201401	1.04%	0.689%
7	8.773	637	647	658	rVV2	45797	124912	0.64%	0.427%
8	9.175	700	713	736	rBV2	459434	1397808	7.22%	4.781%
9	9.956	828	841	859	rBV2	62565	186418	0.96%	0.638%
10	10.608	940	948	957	rVB	48866	136925	0.71%	0.468%
11	10.888	978	994	1013	rBV	779052	2165546	11.18%	7.407%
12	11.193	1035	1044	1067	rVB7	31236	111988	0.58%	0.383%
13	12.492	1236	1257	1273	rBV2	46490	151065	0.78%	0.517%
14	14.662	1605	1613	1626	rBV	117501	274929	1.42%	0.940%
15	15.150	1679	1693	1737	rBV	669819	2137068	11.03%	7.310%
16	16.765	1948	1958	1988	rBV	508828	1627661	8.40%	5.567%
17	17.314	2041	2048	2074	rVB	136748	329988	1.70%	1.129%
18	18.015	2148	2163	2168	rBV	70406	153484	0.79%	0.525%

Sum of corrected areas: 29236535

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\W54095.D
Operator : YOUMINH
Acquired : 11 Mar 2016 9:10 pm using AcqMethod TO15W
Instrument : MSW
Sample Name: JC15063-4
Misc Info : MS99025,VW2161,400,,,,1
Vial Number: 14
Quant File :MW2152.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54095.D Vial: 14
Acq On : 11 Mar 2016 9:10 pm Operator: YOUMINH
Sample : JC15063-4 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

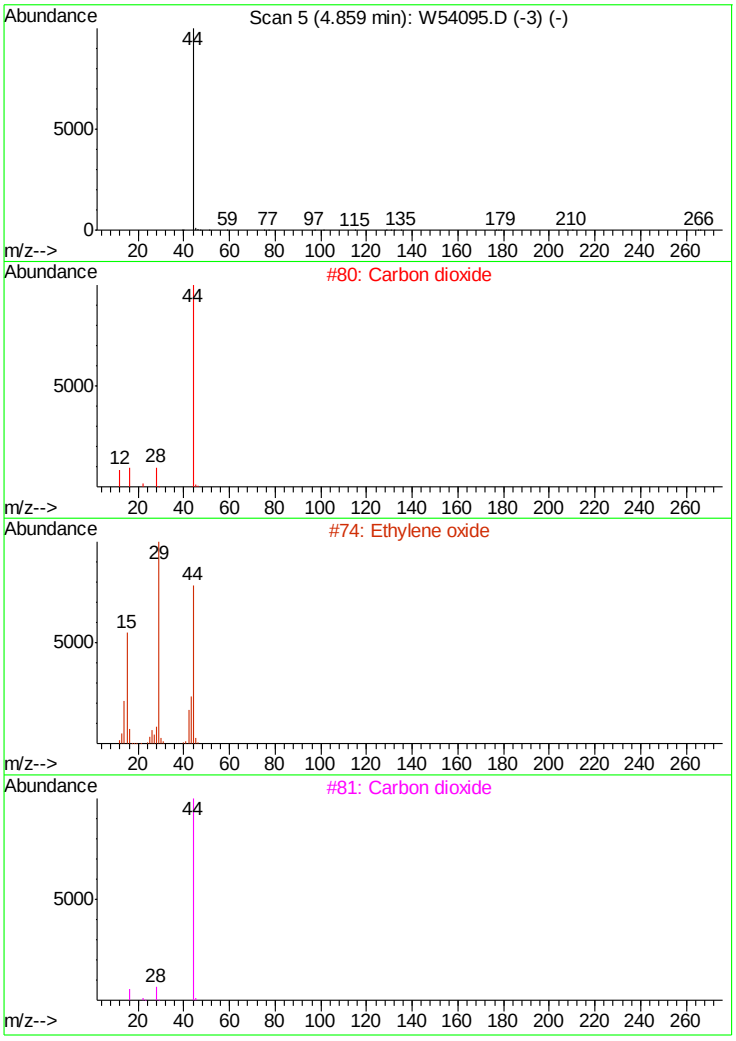
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

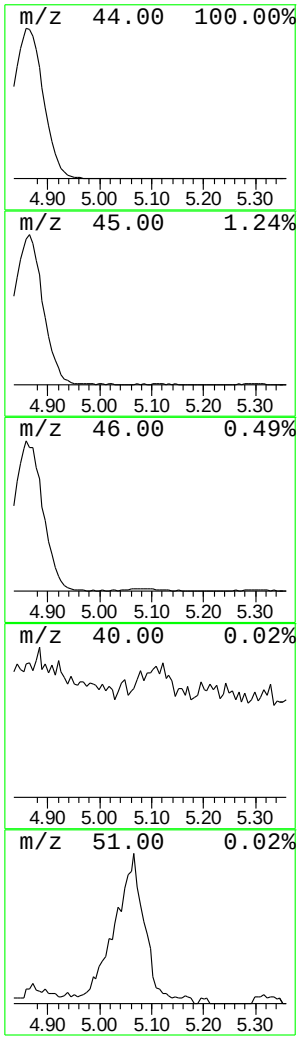
****

Peak Number 1 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.86	138.59 PPBV	19372800	BROMOCHLOROMETHANE	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Carbon dioxide	44	CO2	000124-38-9	3
4	Nitrous Oxide	44	N2O	010024-97-2	3





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54095.D Vial: 14
Acq On : 11 Mar 2016 9:10 pm Operator: YOUMINH
Sample : JC15063-4 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

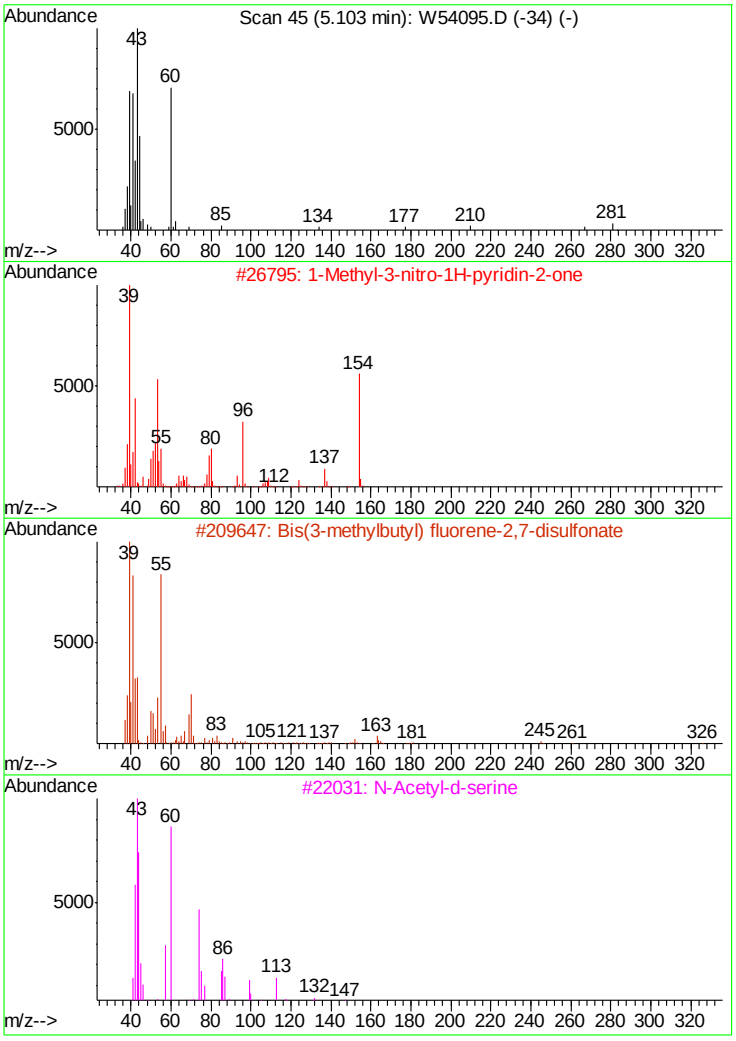
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

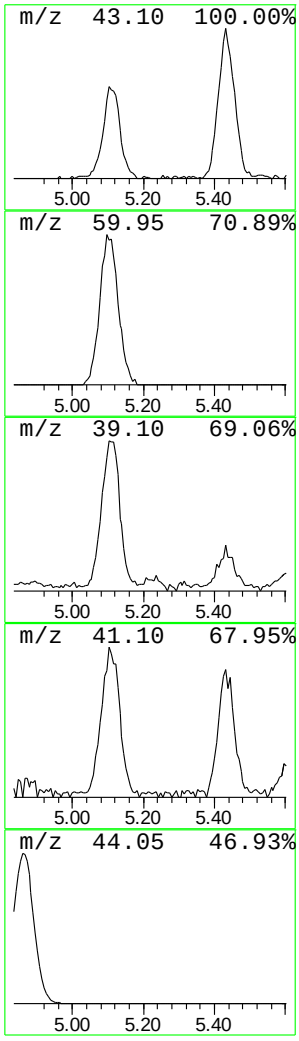
****

Peak Number 2 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.10	1.54 PPBV	215661	BROMOCHLOROMETHANE	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-3-nitro-1H-pyridin-2-one	154	C6H6N2O3	032896-91-6	50
2	Bis(3-methylbutyl) fluorene-2,7-...	466	C23H30O6S2	253664-95-8	47
3	N-Acetyl-d-serine	147	C5H9NO4	1000126-44-0	43
4	3-Butenoic acid	86	C4H6O2	000625-38-7	35





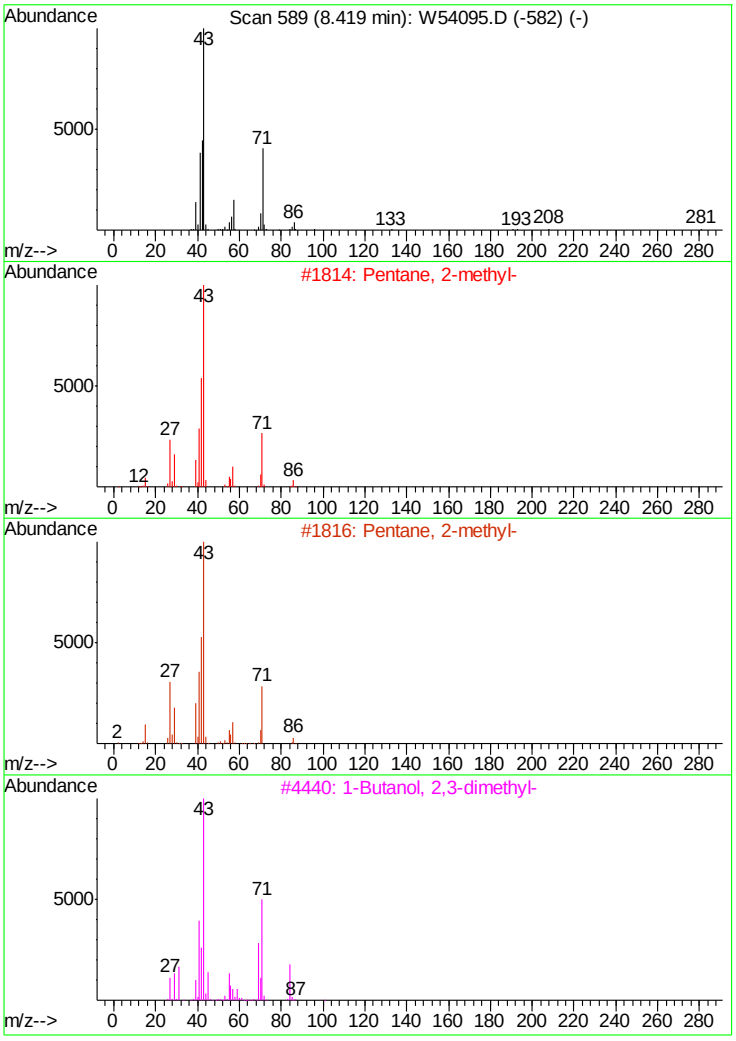
Library Search Compound Report

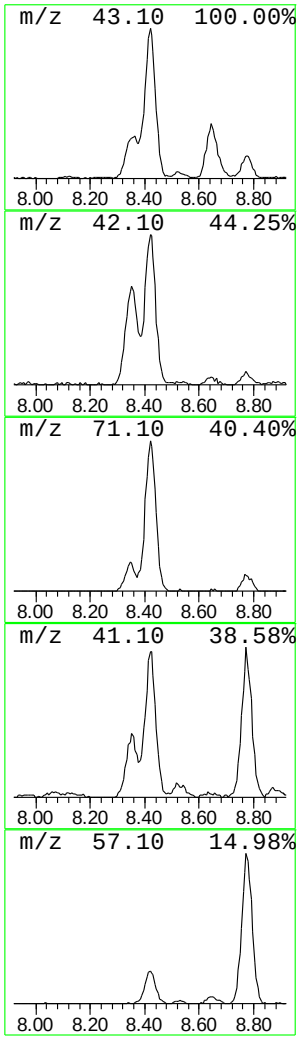
```
Data File : C:\MSDCHEM\1\DATA\W54095.D                  Vial: 14
Acq On    : 11 Mar 2016   9:10 pm                     Operator: YOUMINH
Sample    : JC15063-4                                 Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number  3  Alkane                          Concentration Rank  4

   R.T.   EstConc          Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
   8.42    1.44 PPBV       201401    BROMOCHLOROMETHANE          9.18

  Hit# of  5    Tentative ID             MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------
  1 Pentane, 2-methyl-                    86 C6H14          000107-83-5 64
  2 Pentane, 2-methyl-                    86 C6H14          000107-83-5 43
  3 1-Butanol, 2,3-dimethyl-             102 C6H14O         019550-30-2 40
  4 Pentane                               72 C5H12          000109-66-0 35
```





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\W54095.D Vial: 14
Acq On : 11 Mar 2016 9:10 pm Operator: YOUMINH
Sample : JC15063-4 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

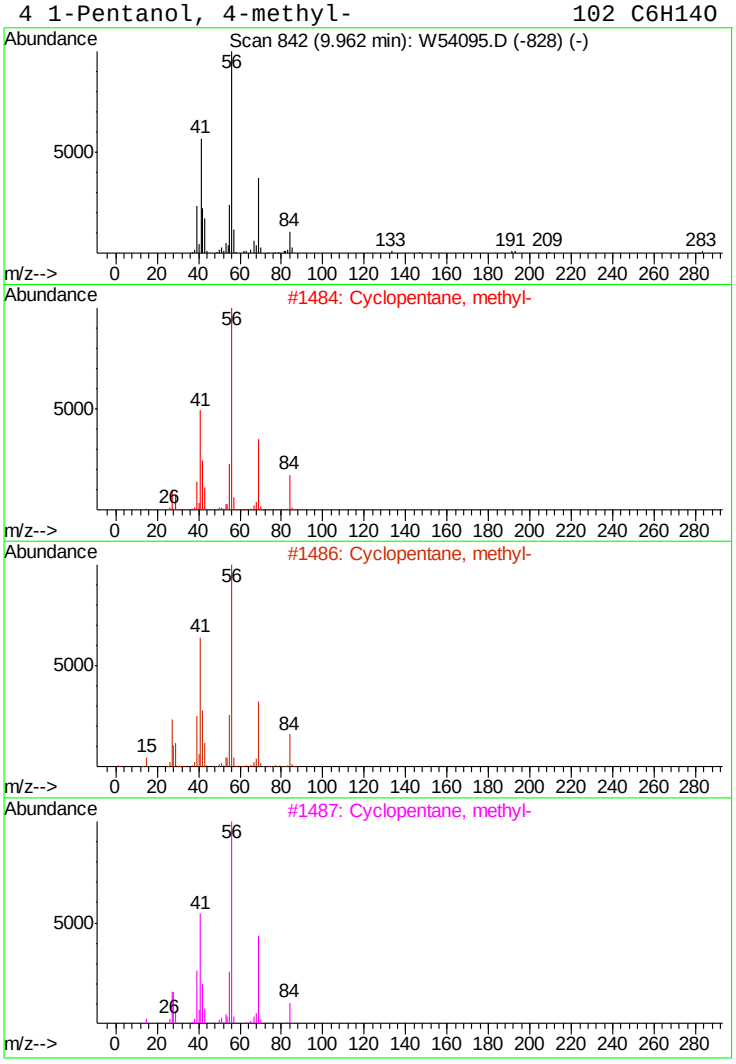
Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library : C:\DATABASE\NIST08.L

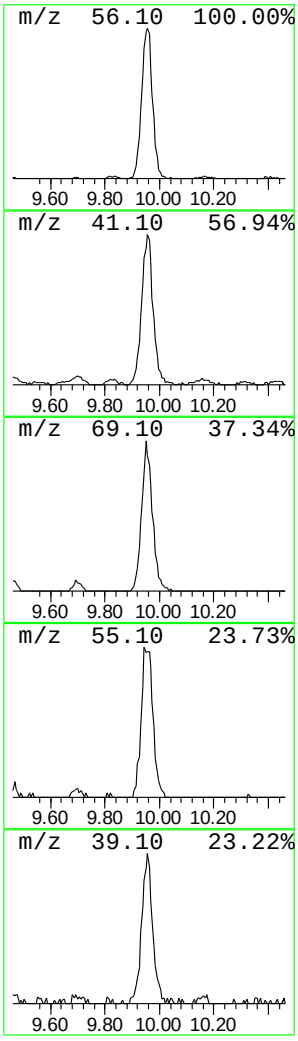
****

Peak Number 4 Cyclopentane, methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.96	1.33 PPBV	186418	BROMOCHLOROMETHANE	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	86
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	83
3	Cyclopentane, methyl-	84	C6H12	000096-37-7	81
4	1-Pentanol, 4-methyl-	102	C6H14O	000626-89-1	72





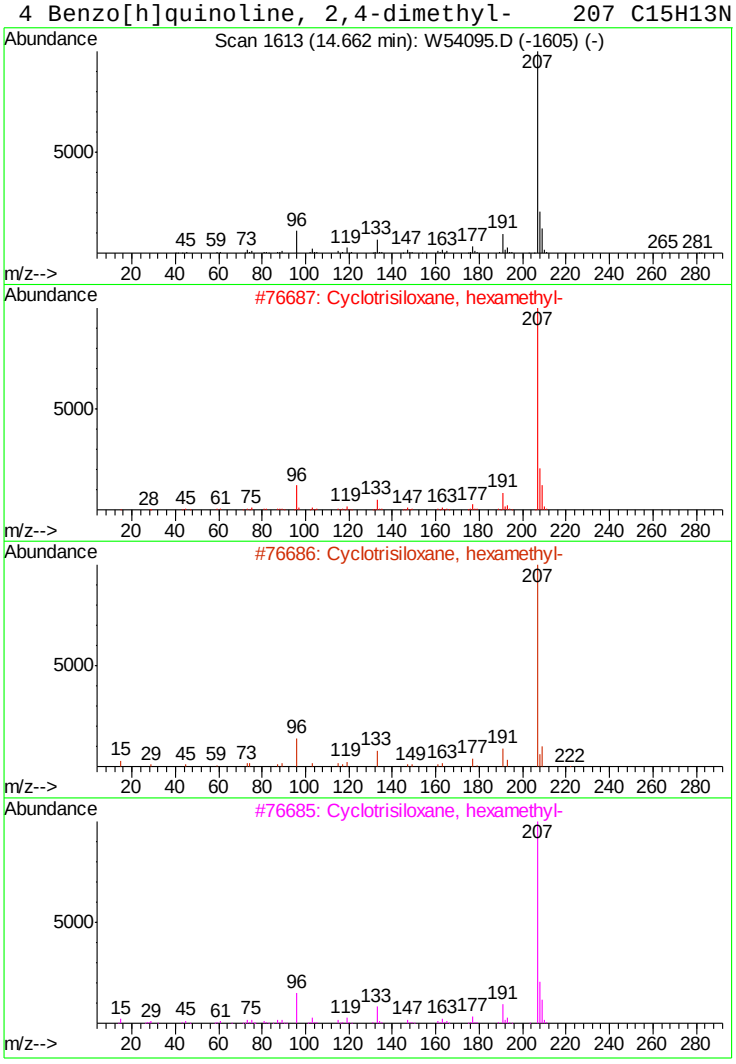
Library Search Compound Report

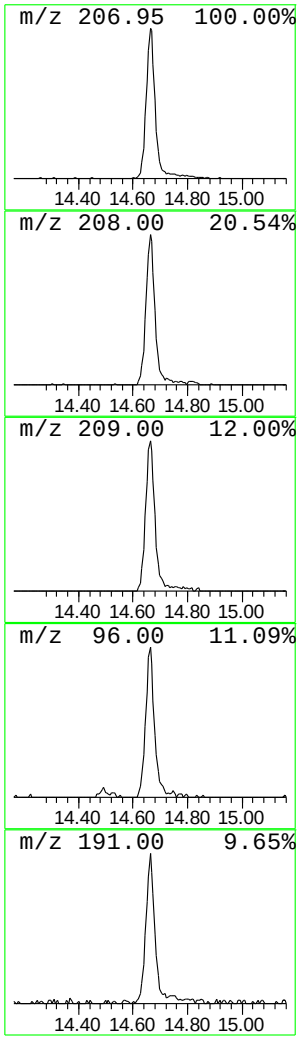
```
Data File : C:\MSDCHEM\1\DATA\W54095.D                  Vial: 14
Acq On    : 11 Mar 2016   9:10 pm                    Operator: YOUMINH
Sample    : JC15063-4                                Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                  Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number  5  System artifact                Concentration Rank  6

   R.T.   EstConc           Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
  14.66    1.29 PPBV       274929    CHLOROBENZENE-D5           15.15

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------------
  1 Cyclotrisiloxane, hexamethyl-        222 C6H18O3Si3     000541-05-9 91
  2 Cyclotrisiloxane, hexamethyl-        222 C6H18O3Si3     000541-05-9 80
  3 Cyclotrisiloxane, hexamethyl-        222 C6H18O3Si3     000541-05-9 49
  4 Benzo[h]quinoline, 2,4-dimethyl-     207 C15H13N        000605-67-4 39
```





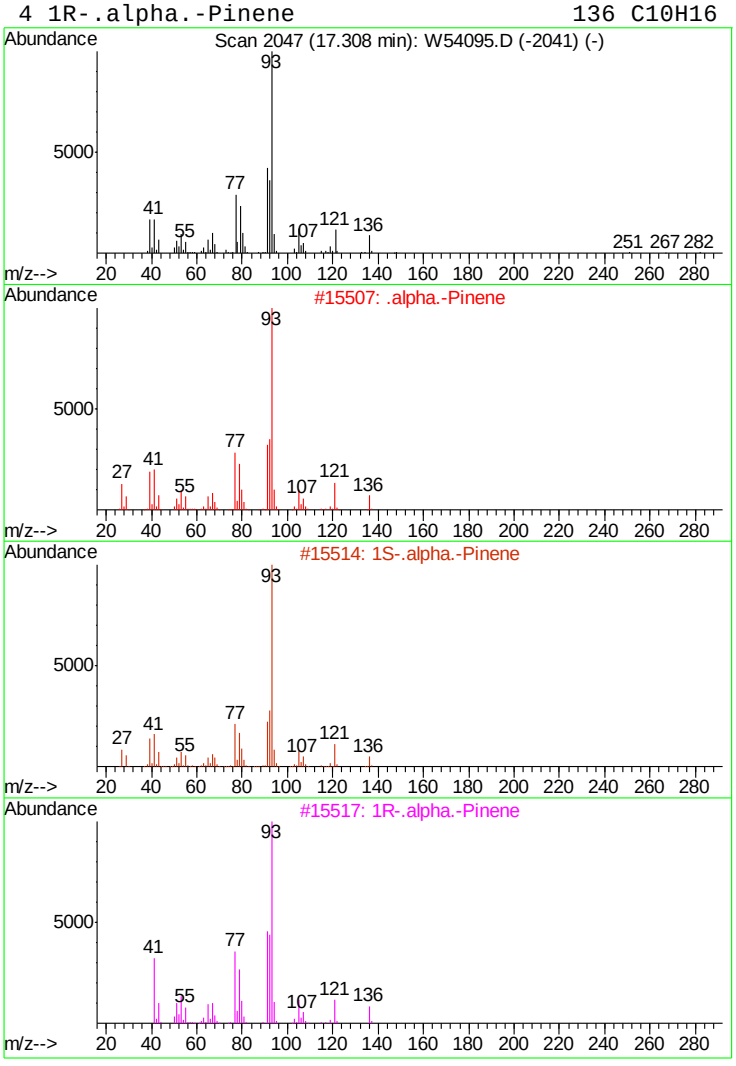
Library Search Compound Report

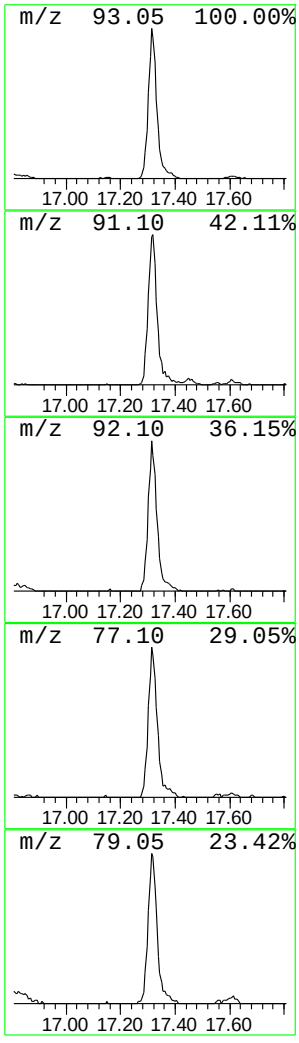
```
Data File : C:\MSDCHEM\1\DATA\W54095.D                  Vial: 14
Acq On    : 11 Mar 2016   9:10 pm                     Operator: YOUMINH
Sample    : JC15063-4                                 Inst    : MSW
Misc      : MS99025,VW2161,400,,,,1                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title        : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
Library      : C:\DATABASE\NIST08.L
 *********************************************************************
 Peak Number  6  .alpha.-Pinene                  Concentration Rank  2

  R.T.   EstConc           Area       Relative to ISTD          R.T.
 ---------------------------------------------------------------------
 17.31    1.54 PPBV       329988    CHLOROBENZENE-D5           15.15

 Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ---------------------------------------------------------------------
 1 .alpha.-Pinene                       136 C10H16         000080-56-8 96
 2 1S-.alpha.-Pinene                    136 C10H16         007785-26-4 94
 3 1R-.alpha.-Pinene                    136 C10H16         007785-70-8 94
 4 1R-.alpha.-Pinene                    136 C10H16         007785-70-8 94
```





Tentatively Identified Compound (LSC) summary

Operator ID: YOUMINH Date Acquired: 11 Mar 2016 9:10 pm
Data File: C:\MSDCHEM\1\DATA\W54095.D
Name: JC15063-4
Misc: MS99025,VW2161,400,,,,1
Method: C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title: TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library Searched: C:\DATABASE\NIST08.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Unknown	4.86	138.6	PPBV	19372800	1	9.18	1397810	10.0
Unknown	5.10	1.5	PPBV	215661	1	9.18	1397810	10.0
Alkane	8.42	1.4	PPBV	201401	1	9.18	1397810	10.0
Cyclopentane, met...	9.96	1.3	PPBV	186418	1	9.18	1397810	10.0
System artifact	14.66	1.3	PPBV	274929	3	15.15	2137070	10.0
.alpha.-Pinene	17.31	1.5	PPBV	329988	3	15.15	2137070	10.0

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54096.D Vial: 15
Acq On : 11 Mar 2016 9:52 pm Operator: YOUMINH
Sample : JC15063-5 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 09:25:12 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

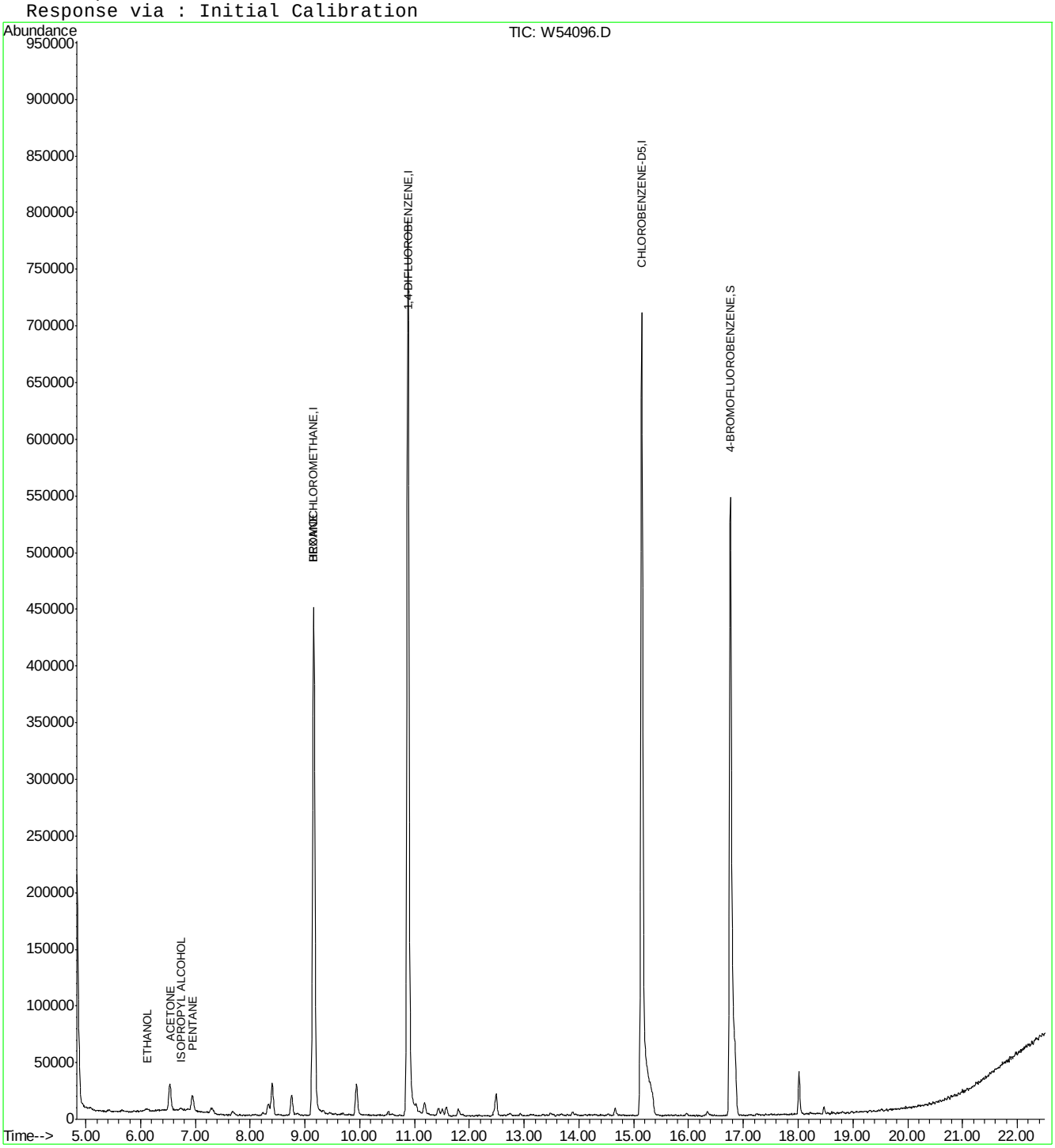
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	188820	10.00	PPBV	-0.02
49) 1,4-DIFLUOROBENZENE	10.88	114	980471	10.00	PPBV	-0.02
68) CHLOROBENZENE-D5	15.14	82	404246	10.00	PPBV	-0.02
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.77	95	342440	7.59	PPBV	-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 75.90%			
Target Compounds						Qvalue
18) ISOPROPYL ALCOHOL	6.73	45	4088	0.10	PPBV	61
19) ACETONE	6.55	58	3305	0.31	PPBV #	1
22) PENTANE	6.95	57	1921	0.30	PPBV #	37
26) ETHANOL	6.11	45	4198	0.55	PPBV	90
36) HEXANE	9.16	57	7928	0.24	PPBV	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54096.D MW2152.M Sat Mar 12 13:23:13 2016 MSW Page 1

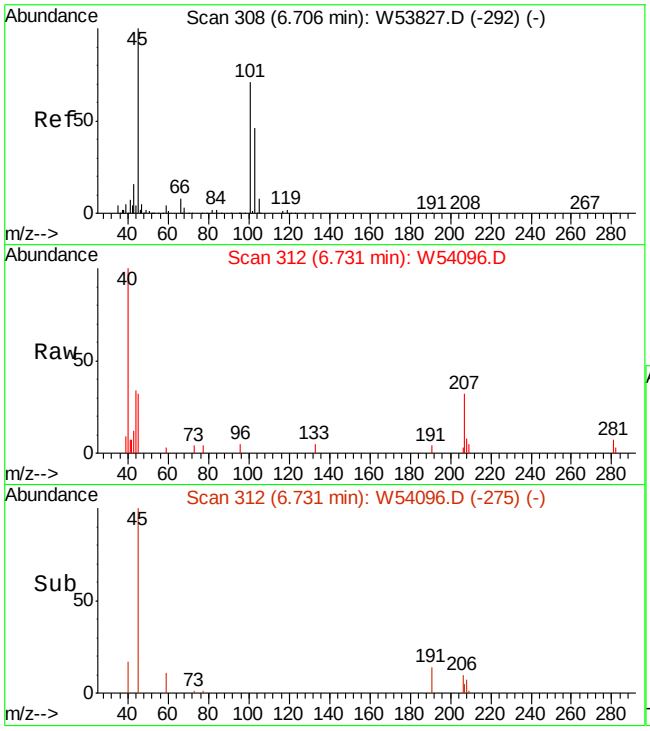
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54096.D Vial: 15
Acq On : 11 Mar 2016 9:52 pm Operator: YOUMINH
Sample : JC15063-5 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 11:25 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



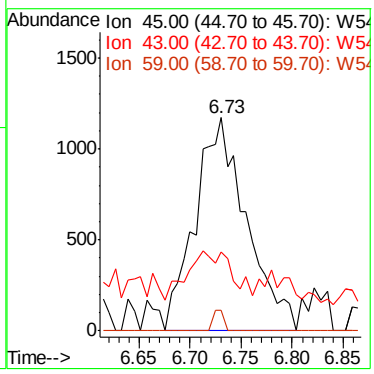
W54096.D MW2152.M Sat Mar 12 13:23:13 2016 MSW Page 2

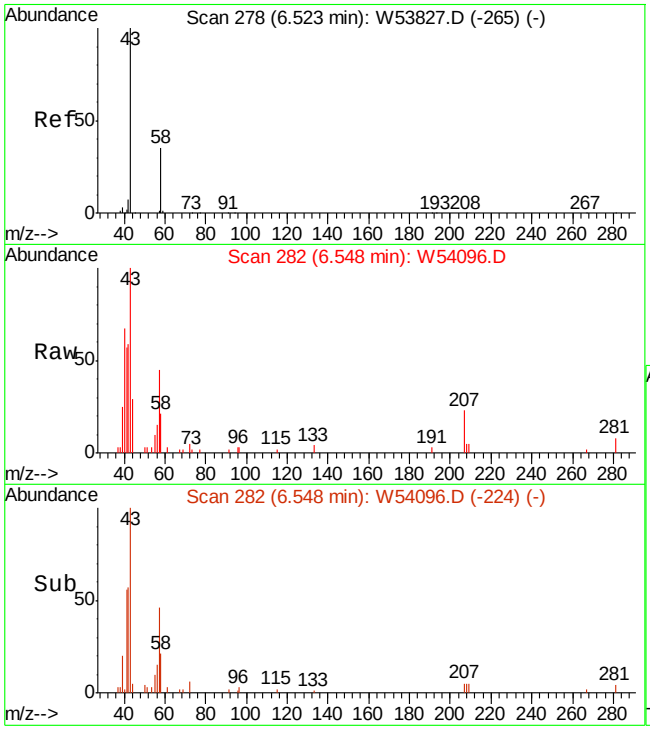


#18
ISOPROPYL ALCOHOL
Concen: 0.10 PPBV
RT: 6.73 min Scan# 312
Delta R.T. 0.02 min
Lab File: W54096.D
Acq: 11 Mar 2016 9:52 pm

Tgt Ion: 45 Resp: 4088

Ion	Ratio	Lower	Upper
45	100		
43	36.8	0.0	37.1
59	9.6	0.0	24.3

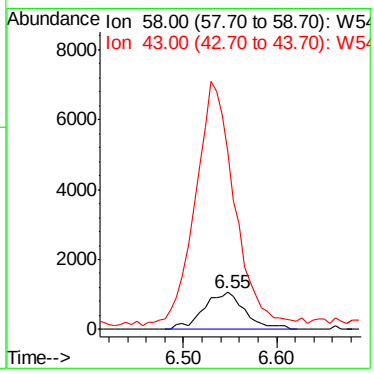


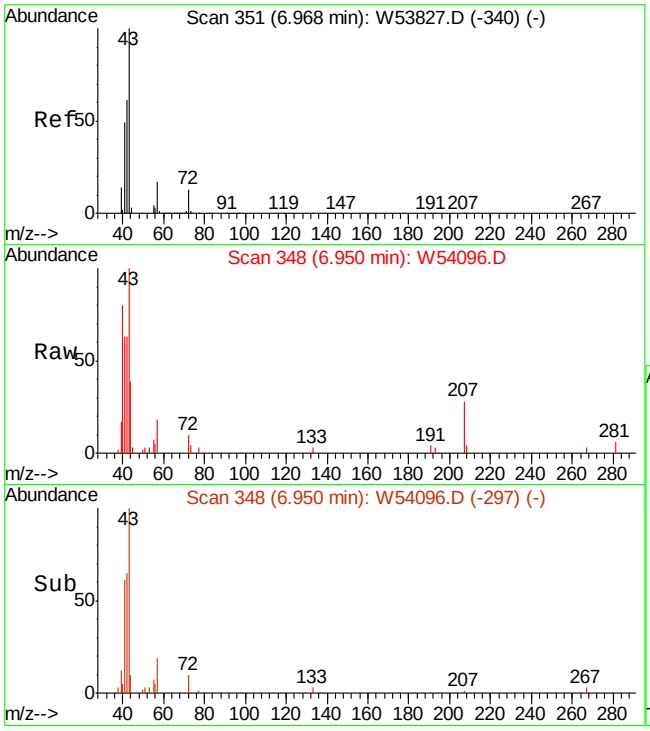


#19
ACETONE
Concen: 0.31 PPBV
RT: 6.55 min Scan# 282
Delta R.T. 0.02 min
Lab File: W54096.D
Acq: 11 Mar 2016 9:52 pm

Tgt Ion: 58 Resp: 3305

Ion	Ratio	Lower	Upper
58	100		
43	621.8	263.9	303.9#

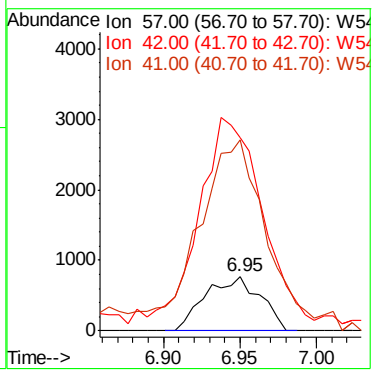


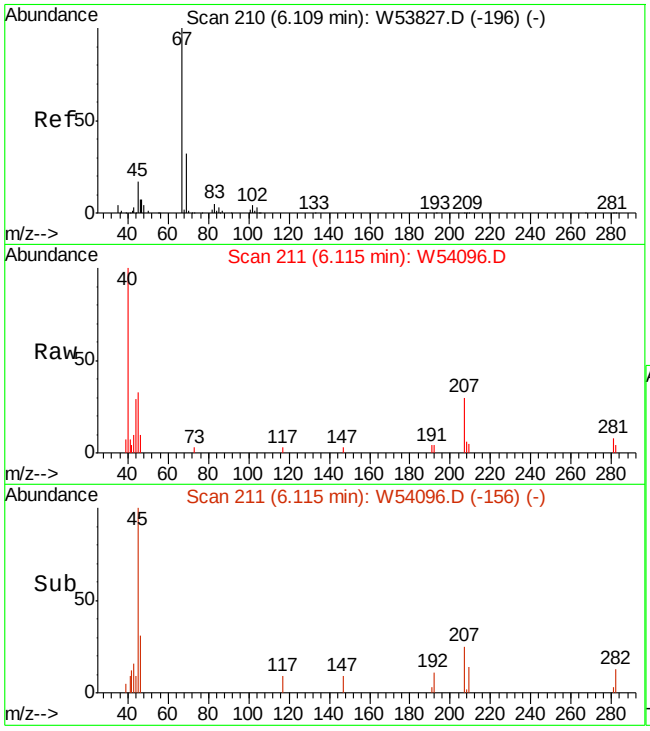


#22
PENTANE
Concen: 0.30 PPBV
RT: 6.95 min Scan# 348
Delta R.T. -0.02 min
Lab File: W54096.D
Acq: 11 Mar 2016 9:52 pm

Tgt Ion: 57 Resp: 1921

Ion	Ratio	Lower	Upper
57	100		
42	489.9	345.4	385.4#
41	441.8	280.2	320.2#

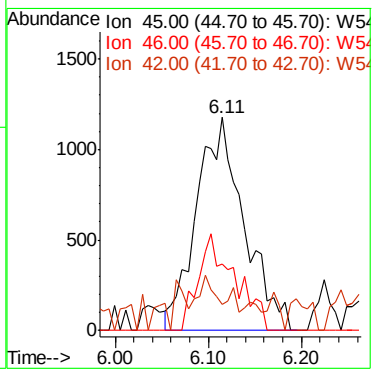


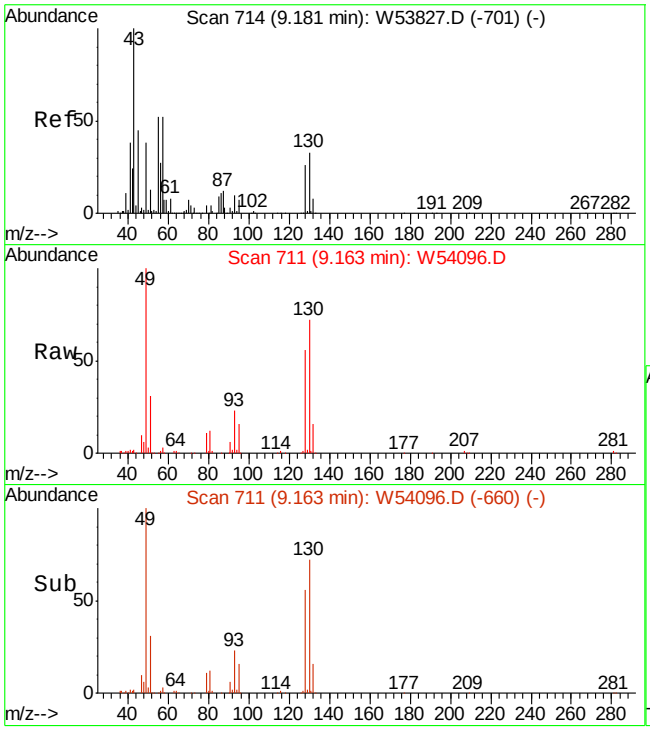


#26
ETHANOL
Concen: 0.55 PPBV
RT: 6.11 min Scan# 211
Delta R.T. 0.01 min
Lab File: W54096.D
Acq: 11 Mar 2016 9:52 pm

Tgt Ion: 45 Resp: 4198

Ion	Ratio	Lower	Upper
45	100		
46	35.0	21.2	61.2
42	13.1	0.0	29.3

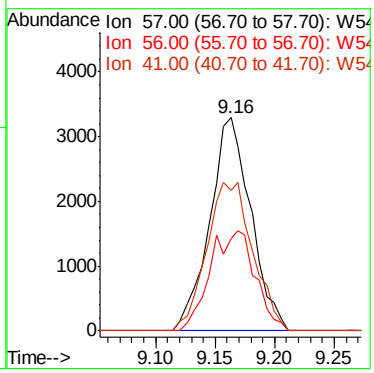




#36
HEXANE
Concen: 0.24 PPBV
RT: 9.16 min Scan# 711
Delta R.T. -0.02 min
Lab File: W54096.D
Acq: 11 Mar 2016 9:52 pm

Tgt Ion: 57 Resp: 7928

Ion	Ratio	Lower	Upper
57	100		
56	51.7	32.7	72.7
41	78.3	72.1	112.1



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\W54096.D Vial: 15
Acq On : 11 Mar 2016 9:52 pm Operator: YOUMINH
Sample : JC15063-5 Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 0.5 % of largest Peak
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.03 Peak Location: TOP

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

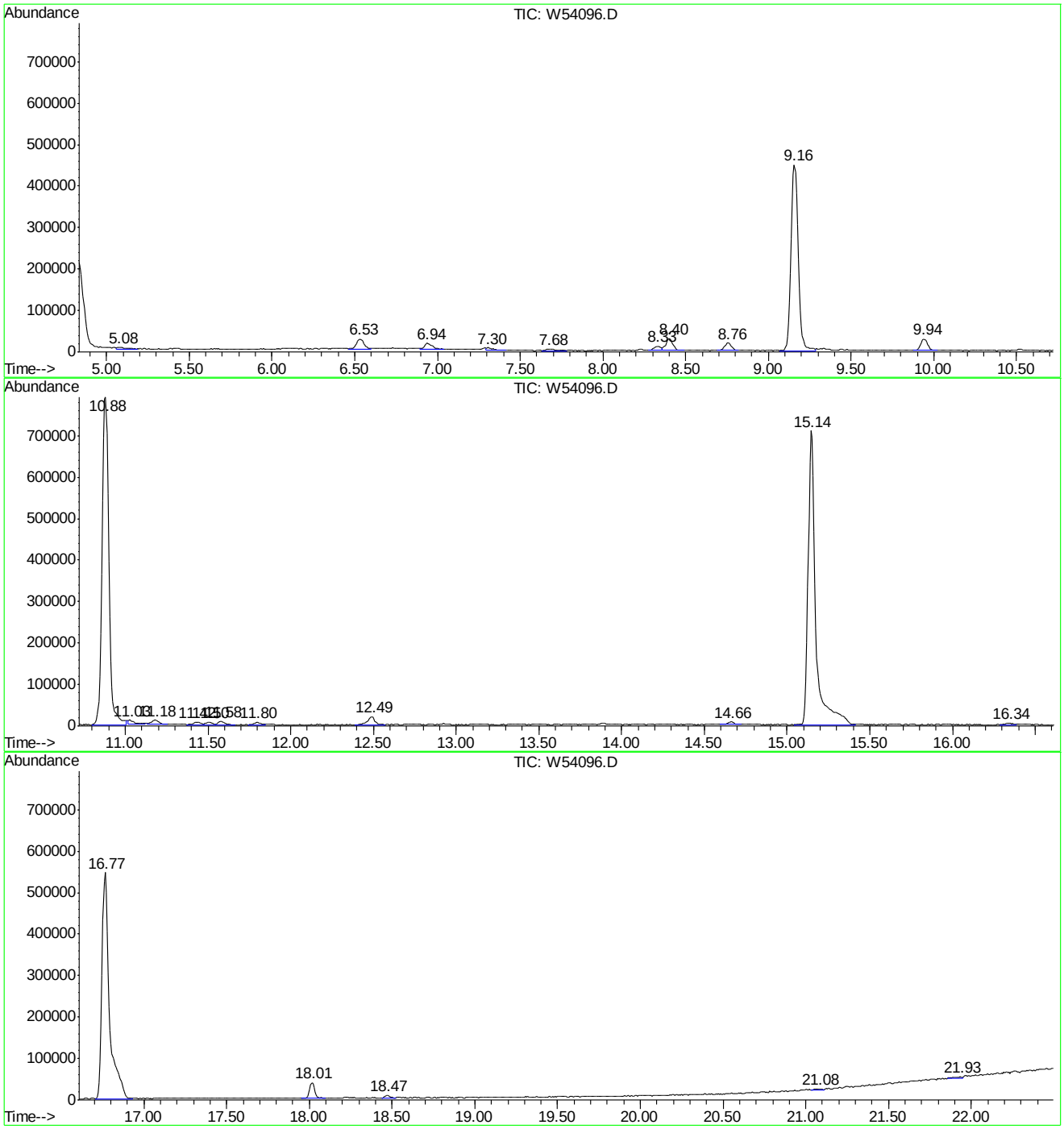
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.078	38	41	58	rVB10	3779	12423	0.54%	0.149%
2	6.529	268	279	290	rBV4	23883	73868	3.24%	0.886%
3	6.938	339	346	362	rVB3	14607	48127	2.11%	0.578%
4	7.304	404	406	424	rVB9	6382	18485	0.81%	0.222%
5	7.675	460	467	484	rVB3	3697	14886	0.65%	0.179%
6	8.334	565	575	579	rVV2	10092	30275	1.33%	0.363%
7	8.401	579	586	600	rVB3	28625	83214	3.65%	0.999%
8	8.761	633	645	654	rBV2	17657	51931	2.28%	0.623%
9	9.157	695	710	731	rBV	448536	1357416	59.49%	16.289%
10	9.937	828	838	851	rBV2	27749	80717	3.54%	0.969%
11	10.882	979	993	1013	rBV	790038	2217666	97.20%	26.612%
12	11.028	1015	1017	1032	rVV8	10553	29853	1.31%	0.358%
13	11.181	1034	1042	1054	rVB5	10783	31156	1.37%	0.374%
14	11.425	1073	1082	1090	rBV6	6766	21065	0.92%	0.253%
15	11.504	1090	1095	1102	rVV7	6534	17752	0.78%	0.213%
16	11.583	1102	1108	1121	rVB5	8500	22905	1.00%	0.275%
17	11.797	1134	1143	1151	rBV7	6429	18150	0.80%	0.218%
18	12.492	1240	1257	1269	rBV4	19785	64170	2.81%	0.770%
19	14.662	1602	1613	1622	rBV	6927	17195	0.75%	0.206%
20	15.144	1675	1692	1736	rBV	708629	2281566	100.00%	27.379%
21	16.345	1879	1889	1896	rBV4	4309	13760	0.60%	0.165%
22	16.765	1948	1958	1985	rBV	545576	1704863	74.72%	20.458%
23	18.015	2153	2163	2176	rVB2	38002	77348	3.39%	0.928%
24	18.466	2232	2237	2246	rBV4	6784	15982	0.70%	0.192%
25	21.081	2658	2666	2670	rBV9	4138	11707	0.51%	0.140%
26	21.935	2793	2806	2808	rBV10	4131	16850	0.74%	0.202%

Sum of corrected areas: 8333330

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\W54096.D
Operator : YOUMINH
Acquired : 11 Mar 2016 9:52 pm using AcqMethod TO15W
Instrument : MSW
Sample Name: JC15063-5
Misc Info : MS99025,VW2161,400,,,,1
Vial Number: 15
Quant File :MW2152.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: YOUMINH Date Acquired: 11 Mar 2016 9:52 pm
Data File: C:\MSDCHEM\1\DATA\W54096.D
Name: JC15063-5
Misc: MS99025,VW2161,400,,,,1
Method: C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title: TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library Searched: C:\DATABASE\NIST08.L

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54084.D Vial: 4
Acq On : 11 Mar 2016 12:46 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:42:28 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

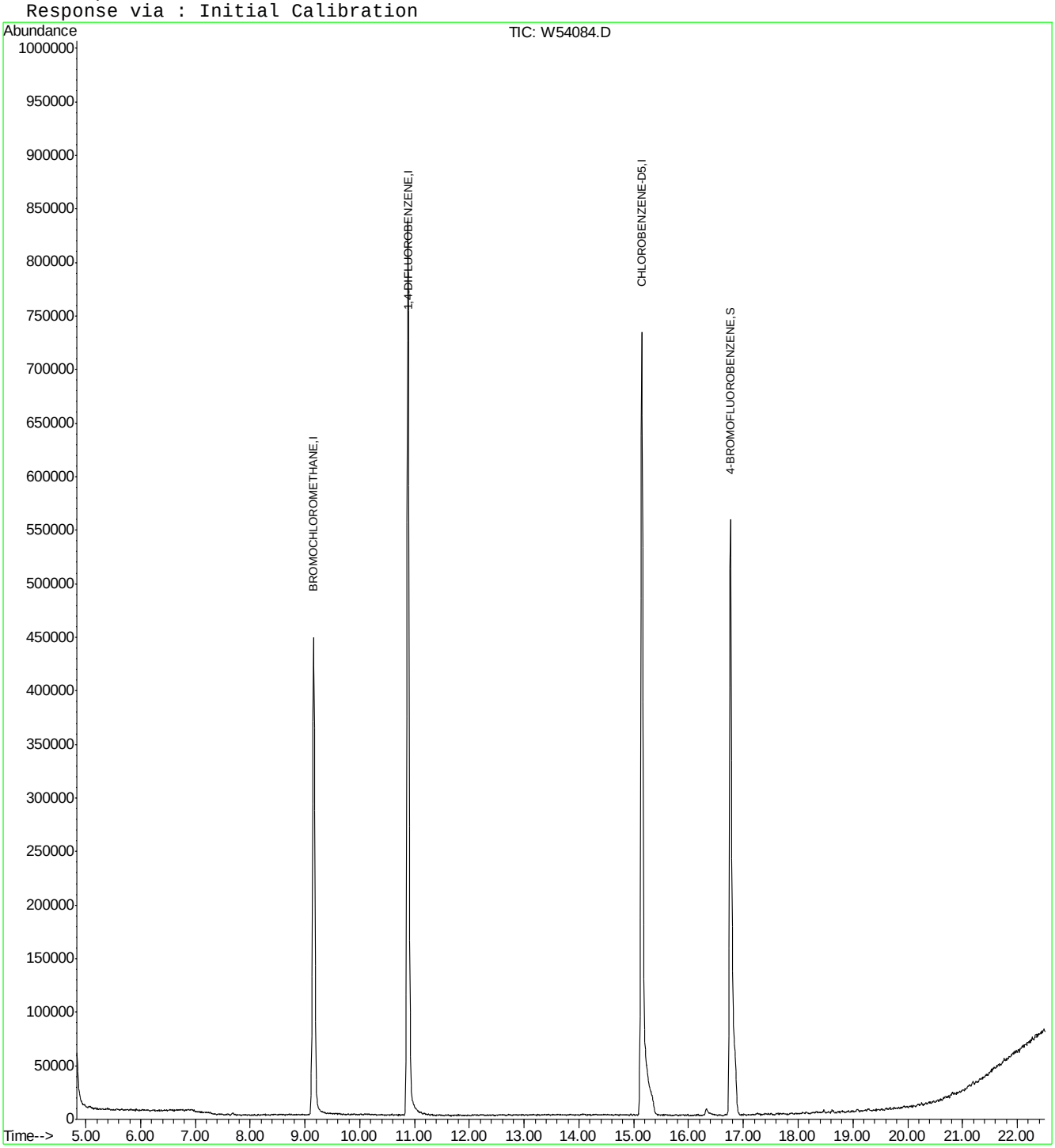
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	212200	10.00	PPBV	-0.02
49) 1,4-DIFLUOROBENZENE	10.88	114	1088054	10.00	PPBV	-0.02
68) CHLOROBENZENE-D5	15.15	82	421711	10.00	PPBV	-0.01
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.77	95	344523	7.32	PPBV	-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 73.20%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54084.D MW2152.M Fri Mar 11 15:50:23 2016 MSW Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54084.D Vial: 4
Acq On : 11 Mar 2016 12:46 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:45 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\OLD_W\VW2161\W54084.D Vial: 4
Acq On : 11 Mar 2016 12:46 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 0.5 % of largest Peak
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.03 Peak Location: TOP

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

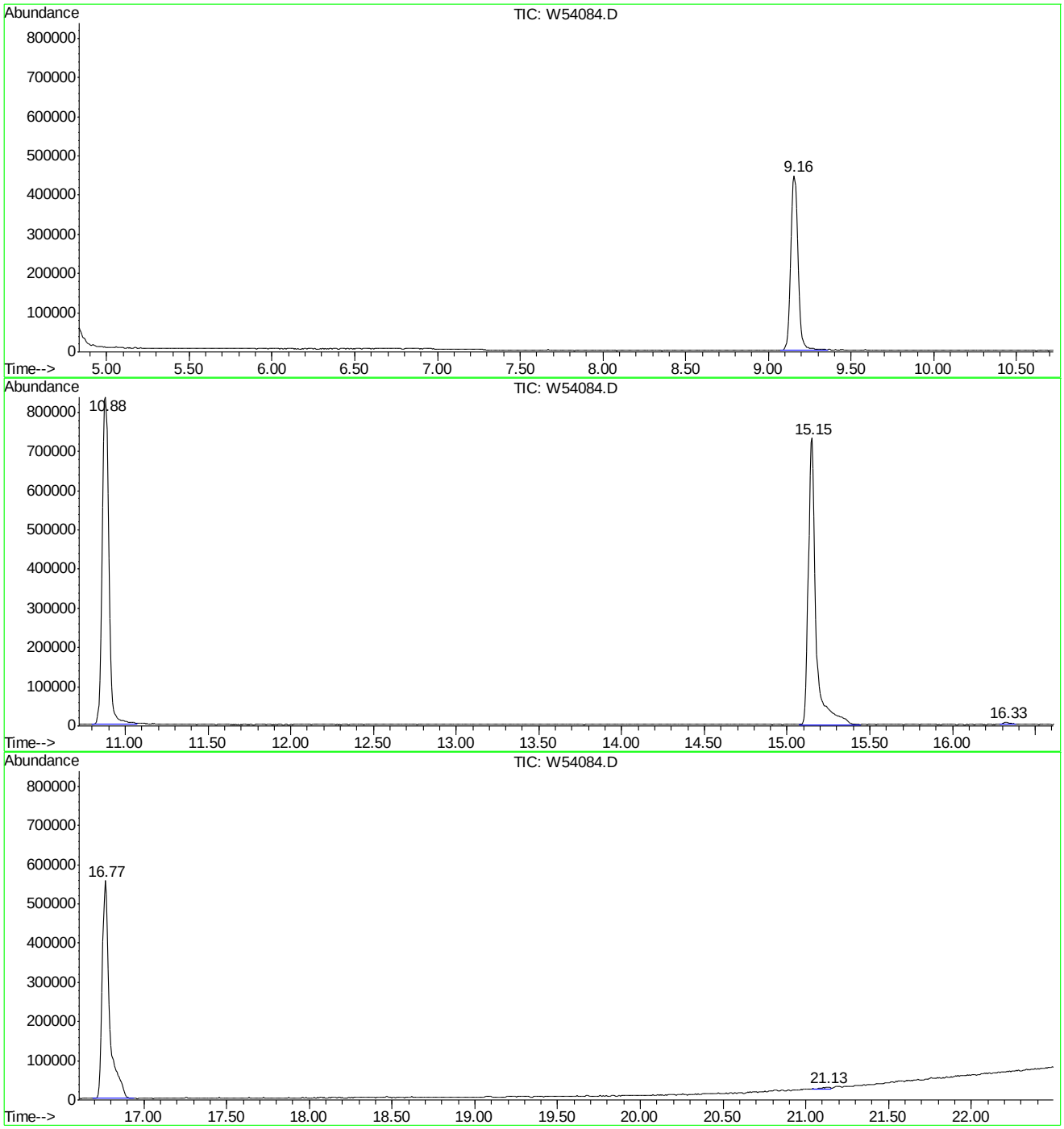
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	9.157	696	710	743	rBV	446330	1366080	58.02%	17.551%
2	10.882	979	993	1024	rBV	835195	2317065	98.41%	29.768%
3	15.149	1681	1693	1741	rVB	731195	2354611	100.00%	30.251%
4	16.326	1879	1886	1895	rBV5	5698	17856	0.76%	0.229%
5	16.765	1946	1958	1986	rBV	556094	1706046	72.46%	21.918%
6	21.130	2659	2674	2678	rBV	5304	22008	0.93%	0.283%

Sum of corrected areas: 7783666

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\OLD_W\VW2161\W54084.D
Operator : YOUMINH
Acquired : 11 Mar 2016 12:46 pm using AcqMethod TO15W
Instrument : MSW
Sample Name: MB
Misc Info : MS99025,VW2161,,,,,1
Vial Number: 4
Quant File :MW2152.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: YOUMINH Date Acquired: 11 Mar 2016 12:46 pm
Data File: C:\MSDCHEM\1\DATA\OLD_W\VW2161\W54084.D
Name: MB
Misc: MS99025,VW2161,,,,,1
Method: C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title: TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library Searched: C:\DATABASE\NIST08.L

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54115.D Vial: 4
Acq On : 12 Mar 2016 2:39 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS99025,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:48:05 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

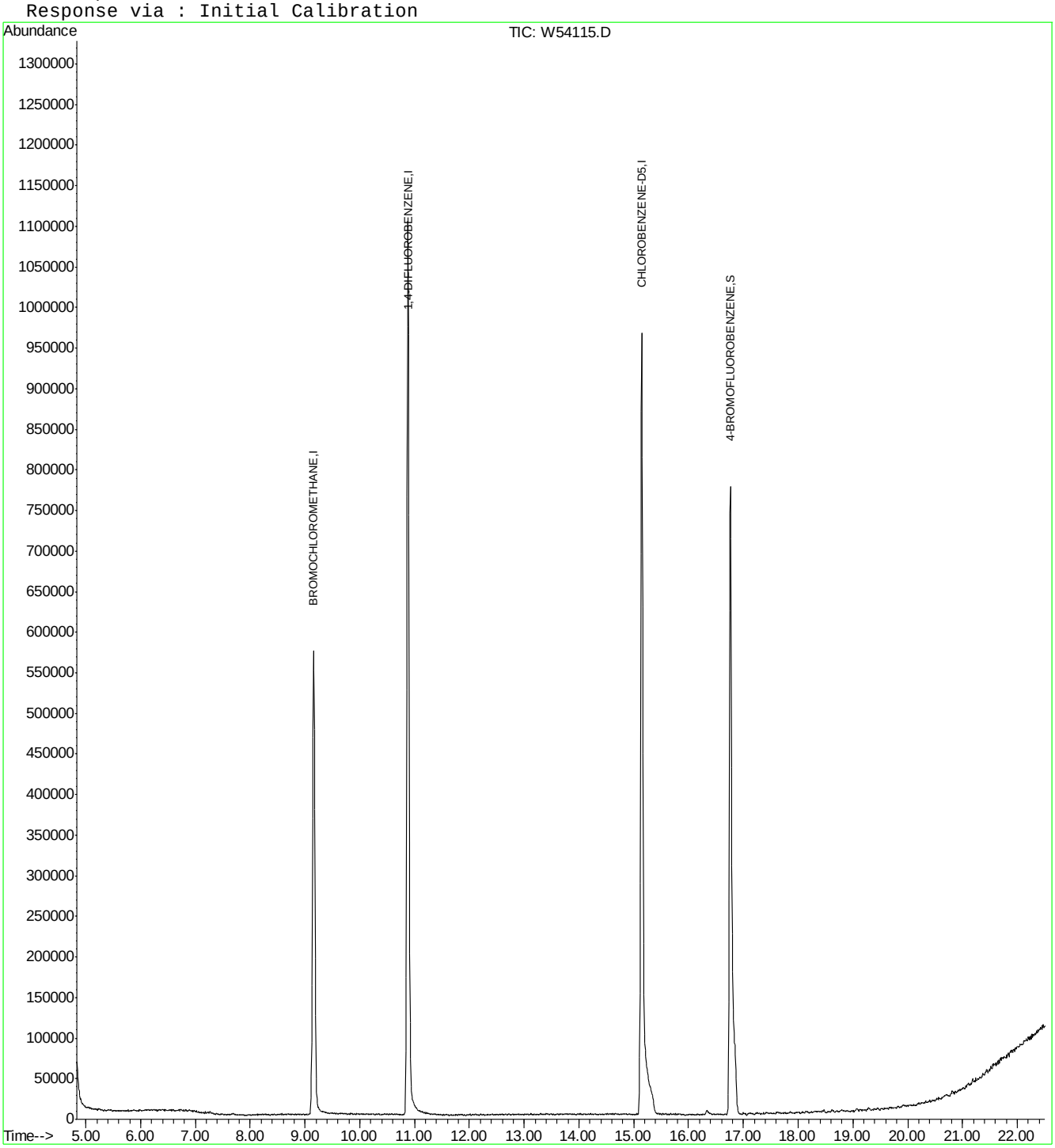
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	276853	10.00	PPBV	-0.01
49) 1,4-DIFLUOROBENZENE	10.88	114	1445304	10.00	PPBV	-0.02
68) CHLOROBENZENE-D5	15.14	82	535278	10.00	PPBV	-0.02
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.77	95	473374	7.93	PPBV	-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 79.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54115.D MW2152.M Sun Mar 13 11:23:00 2016 MSW Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54115.D Vial: 4
Acq On : 12 Mar 2016 2:39 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS99025,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:27 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\W54115.D Vial: 4
Acq On : 12 Mar 2016 2:39 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS99025,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

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

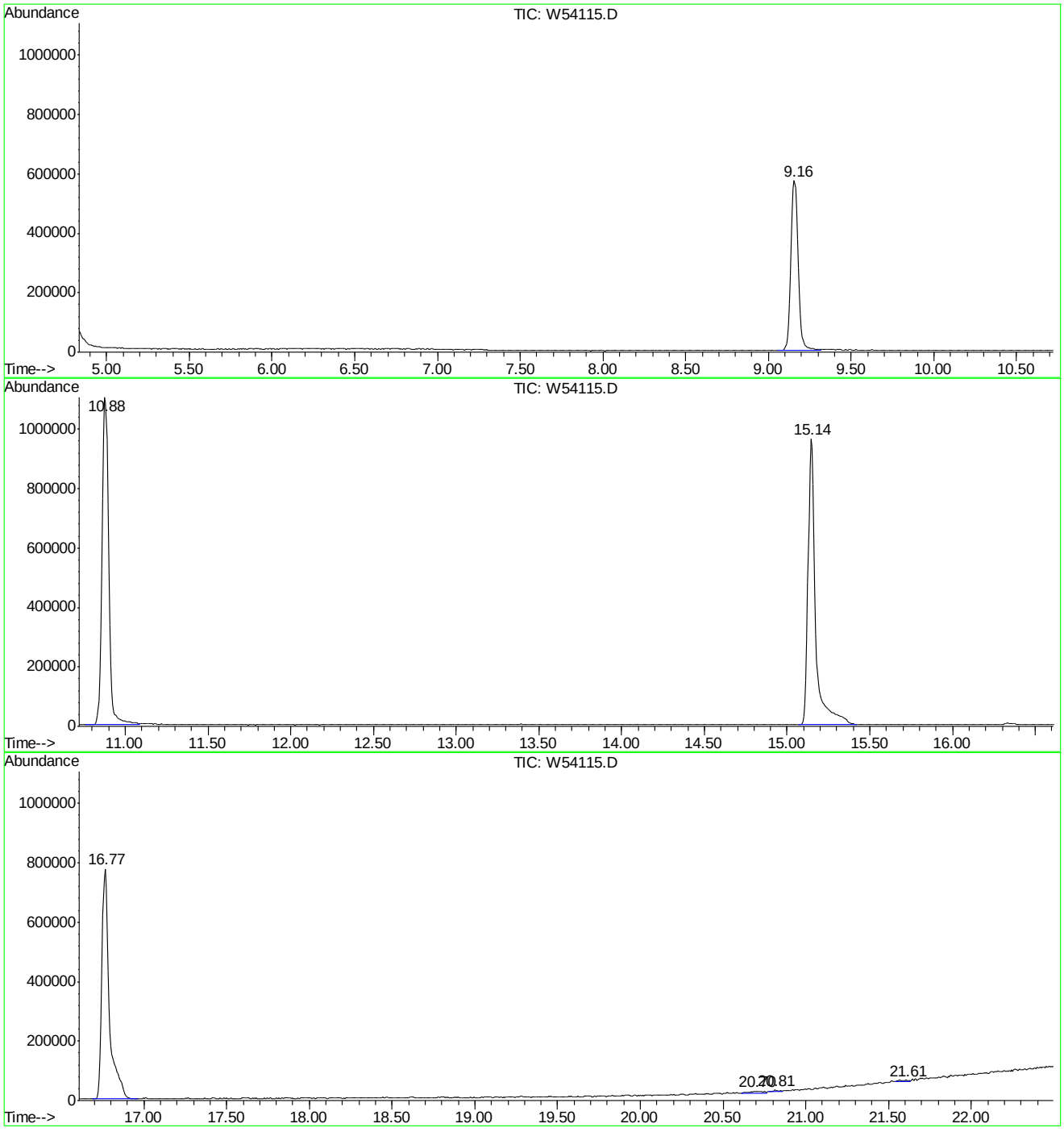
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	9.157	693	710	736	rBV	571392	1749135	56.84%	16.847%
2	10.876	973	992	1027	rBV	1101927	3067733	99.68%	29.547%
3	15.143	1680	1692	1737	rBV	962326	3077493	100.00%	29.641%
4	16.765	1946	1958	1990	rBV	773829	2410604	78.33%	23.218%
5	20.697	2589	2603	2614	rBV	6291	34930	1.14%	0.336%
6	20.813	2616	2622	2629	rBV9	6163	18610	0.60%	0.179%
7	21.606	2741	2752	2756	rVV9	6798	24090	0.78%	0.232%

Sum of corrected areas: 10382595

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\W54115.D
Operator : YOUMINH
Acquired : 12 Mar 2016 2:39 pm using AcqMethod TO15W
Instrument : MSW
Sample Name: MB
Misc Info : MS99025,VW2162,,,,,1
Vial Number: 4
Quant File :MW2152.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: YOUMINH Date Acquired: 12 Mar 2016 2:39 pm
Data File: C:\MSDCHEM\1\DATA\W54115.D
Name: MB
Misc: MS99025,VW2162,,,,,1
Method: C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title: TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Library Searched: C:\DATABASE\NIST08.L

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16059.D
Acq On : 4 Feb 2016 6:17 pm
Operator : THOMASH
Sample : MB
Misc : MS97993,v5w646,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 05 12:10:30 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

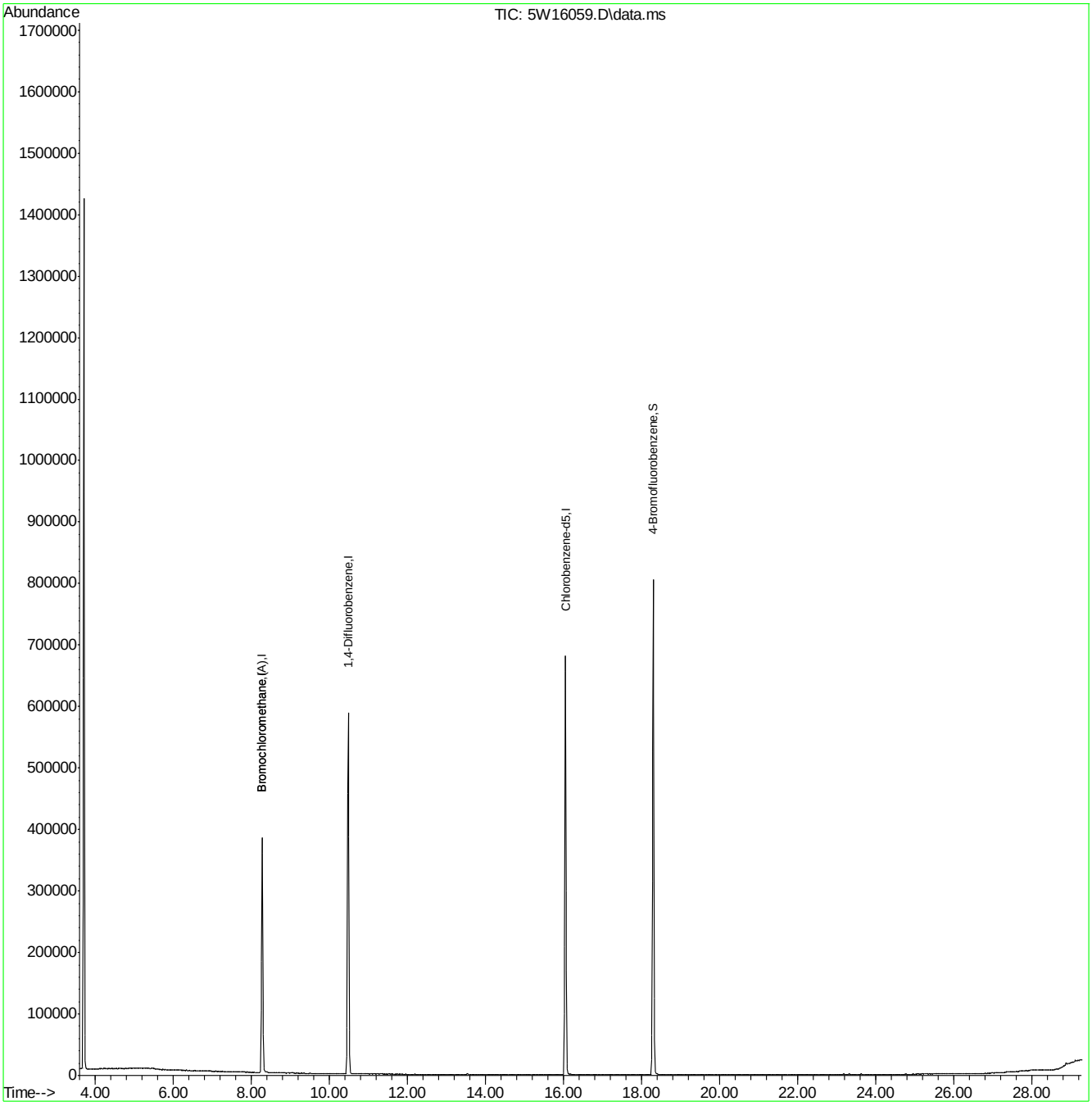
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.273	130	175519	10.00	ppb(v	-0.01
53) 1,4-Difluorobenzene	10.475	114	617457	10.00	ppb(v	-0.01
76) Chlorobenzene-d5	16.042	82	299651	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.273	130	175519	10.00	ppb(v	-0.01
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	385943	9.76	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 97.60%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16059.D
Acq On : 4 Feb 2016 6:17 pm
Operator : THOMASH
Sample : MB
Misc : MS97993,v5w646,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 05 12:10:30 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16069.D
Acq On : 5 Feb 2016 1:49 pm
Operator : THOMASH
Sample : MB
Misc : MS97993,v5w647,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 08 08:59:06 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

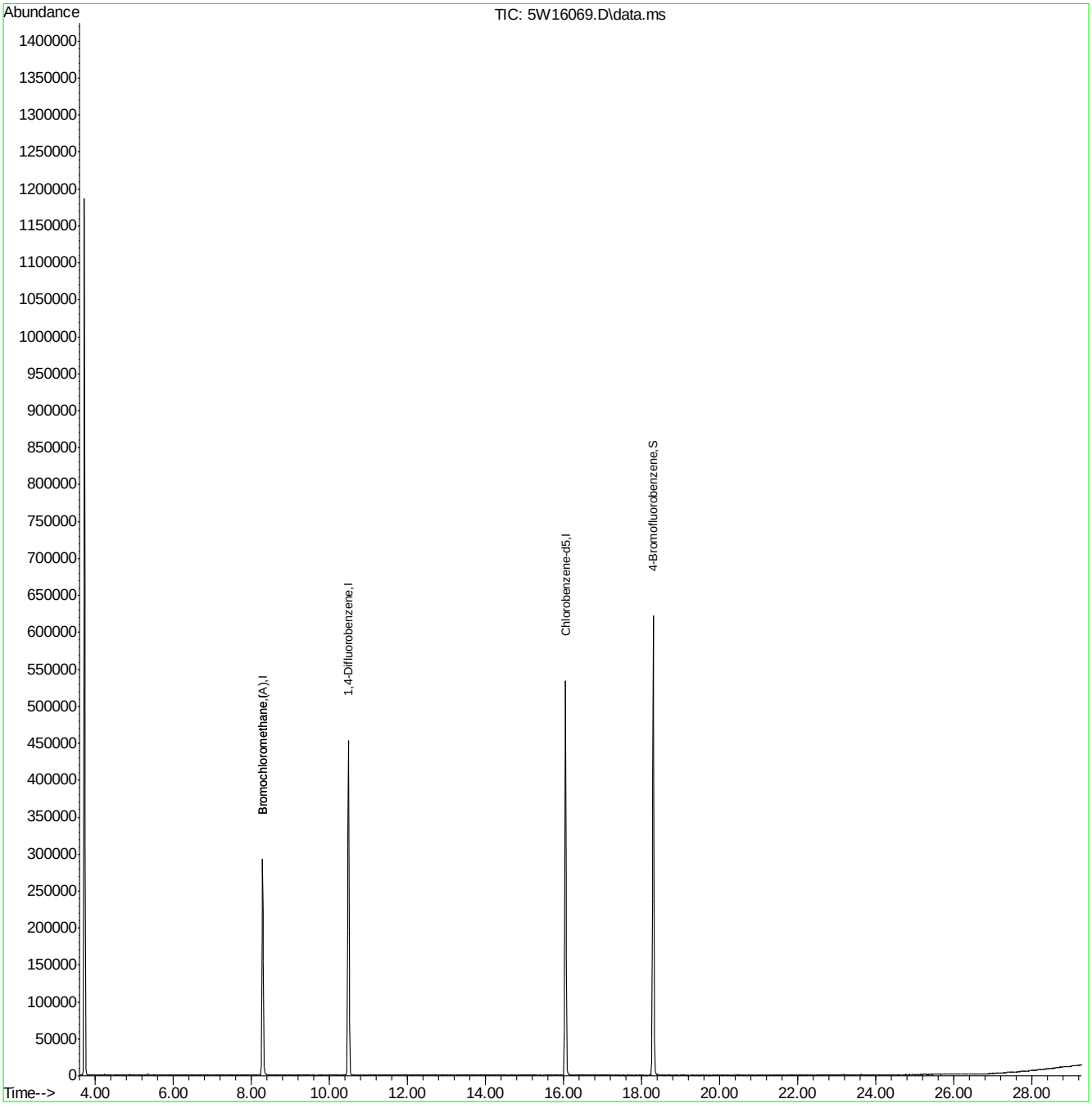
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.285	130	138544	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.482	114	484774	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.043	82	233102	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.285	130	138544	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	299196	9.73	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 97.30%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16069.D
Acq On : 5 Feb 2016 1:49 pm
Operator : THOMASH
Sample : MB
Misc : MS97993,v5w647,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 08 08:59:06 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53486.D Vial: 4
Acq On : 12 Feb 2016 12:50 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:57:13 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

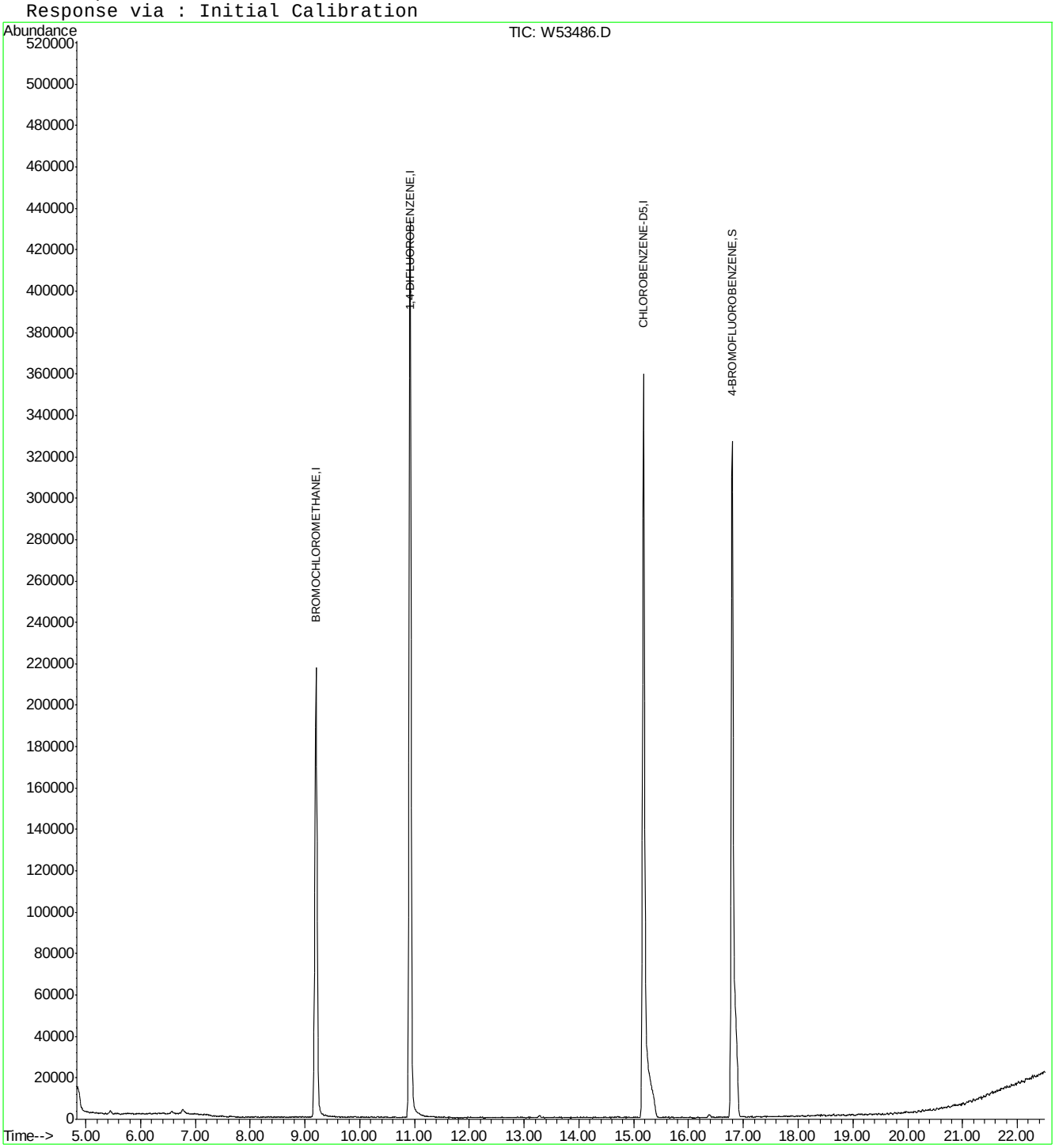
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.20	128	99417	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.92	114	534263	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.18	82	210357	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	212767	8.95	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 89.50%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W53486.D MW2140.M Fri Feb 12 16:04:09 2016 MSW Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53486.D Vial: 4
Acq On : 12 Feb 2016 12:50 pm Operator: YOUMINH
Sample : MB Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:59 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54081.D Vial: 3
Acq On : 11 Mar 2016 10:16 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 10:48:05 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	213431	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1145306	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	504895	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	575203	10.21	PPBV		-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 102.10%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	162865	10.99	PPBV		99
4) CHLORODIFLUOROMETHANE	5.05	67	60456	10.95	PPBV		98
5) DICHLORODIFLUOROMETHANE	5.15	85	659837	11.57	PPBV		100
6) PROPYLENE	5.08	41	211335	10.69	PPBV		98
7) FREON 114	5.39	85	720445	11.73	PPBV		97
9) CHLOROMETHANE	5.31	52	76409	11.52	PPBV		99
10) VINYL CHLORIDE	5.51	62	288135	12.01	PPBV		99
11) 1,3-BUTADIENE	5.63	54	223596	11.81	PPBV		97
12) n-BUTANE	5.68	58	65181	11.80	PPBV		92
13) BROMOMETHANE	5.88	94	254494	11.98	PPBV		99
14) CHLOROETHANE	6.02	64	151282	11.55	PPBV		98
15) DICHLOROFLUOROMETHANE	6.09	67	594316	12.02	PPBV		100
16) ACROLEIN	6.41	56	109134	9.95	PPBV		99
17) TRICHLOROFLUOROMETHANE	6.68	101	603008	11.45	PPBV		100
18) ISOPROPYL ALCOHOL	6.71	45	454203	10.25	PPBV		99
19) ACETONE	6.52	58	130398	10.69	PPBV		96
21) ACRYLONITRILE	6.91	53	207577	11.89	PPBV		99
22) PENTANE	6.96	57	76359	10.72	PPBV	#	84
23) IODOMETHANE	7.17	142	625115	10.68	PPBV		99
24) 1,1-DICHLOROETHYLENE	7.22	96	231963	10.23	PPBV		94
25) CARBON DISULFIDE	7.61	76	690593	10.46	PPBV		98
26) ETHANOL	6.10	45	104899	12.10	PPBV		100
27) ACETONITRILE	6.30	41	217028	12.26	PPBV		97
28) BROMOETHENE	6.33	106	258809	11.70	PPBV		99
29) METHYLENE CHLORIDE	7.31	84	208475	9.55	PPBV		92
30) 3-CHLOROPROPENE	7.41	76	119218	10.90	PPBV	#	89
31) FREON 113	7.52	151	419834	10.37	PPBV		100
32) TRANS-1,2-DICHLOROETHYLENE	8.11	96	245056	10.58	PPBV		98
33) TERTIARY BUTYL ALCOHOL	7.22	59	508485	11.23	PPBV		95
34) METHYL TERTIARY BUTYL ETHE	8.33	73	667840	10.60	PPBV		99
35) TETRAHYDROFURAN	9.66	72	120142	10.89	PPBV	#	91
36) HEXANE	9.17	57	410826	10.95	PPBV		97
37) VINYL ACETATE	8.38	86	66804	10.95	PPBV	#	81
38) 1,1-DICHLOROETHANE	8.29	63	449803	11.23	PPBV		99
39) METHYL ETHYL KETONE	8.62	72	115941	10.62	PPBV	#	89
40) cis-1,2-DICHLOROETHYLENE	9.02	96	247037	10.10	PPBV		96
41) DI-ISOPROPYL ETHER	9.15	87	223939	10.70	PPBV		97
42) ETHYL ACETATE	9.17	61	75830	10.23	PPBV	#	71
43) METHYL ACRYLATE	9.18	55	419178	10.03	PPBV		98
44) CHLOROFORM	9.27	83	470445	10.70	PPBV		99
45) 2,4-DIMETHYLPENTANE	9.96	57	497564	11.52	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54081.D Vial: 3
Acq On : 11 Mar 2016 10:16 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 10:48:05 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	1,1,1-TRICHLOROETHANE	10.18	97	481757	10.81	PPBV	99
47)	CARBON TETRACHLORIDE	10.74	117	500353	10.69	PPBV	99
48)	1,2-DICHLOROETHANE	9.94	62	287901	11.45	PPBV	99
50)	BENZENE	10.60	78	793703	10.46	PPBV	98
51)	CYCLOHEXANE	10.86	84	347904	9.75	PPBV	95
52)	2,3-DIMETHYLPENTANE	11.03	71	184271	10.38	PPBV	93
53)	TRICHLOROETHYLENE	11.57	95	283124	8.31	PPBV	99
54)	DIBROMOMETHANE	11.34	174	283704	8.97	PPBV	94
55)	1,2-DICHLOROPROPANE	11.35	63	274733	10.04	PPBV	99
56)	ETHYL ACRYLATE	11.30	55	479775	9.75	PPBV	99
57)	BROMODICHLOROMETHANE	11.53	83	488019	9.71	PPBV	99
58)	2,2,4-TRIMETHYLPENTANE	11.58	57	1263249	10.42	PPBV	99
59)	1,4-DIOXANE	11.58	88	148899	10.88	PPBV	94
60)	METHYL METHACRYLATE	11.72	69	239764	9.22	PPBV	86
61)	HEPTANE	11.80	43	474988	11.36	PPBV	92
62)	METHYL ISOBUTYL KETONE	12.40	43	507302	9.95	PPBV	96
63)	cis-1,3-DICHLOROPROPENE	12.38	75	399601	9.68	PPBV	93
64)	TOLUENE	13.35	92	555922	10.36	PPBV	94
65)	1,3-DICHLOROPROPANE	13.36	76	402168	9.87	PPBV	91
66)	trans-1,3-DICHLOROPROPENE	12.88	75	313599	10.33	PPBV	95
67)	1,1,2-TRICHLOROETHANE	13.07	83	239703	10.15	PPBV	99
69)	ETHYL METHACRYLATE	13.56	69	402053	9.58	PPBV	98
70)	2-HEXANONE	13.58	58	267252	10.05	PPBV	94
71)	TETRACHLOROETHYLENE	14.49	164	348336	8.61	PPBV	99
72)	DIBROMOCHLOROMETHANE	13.78	129	500352	10.01	PPBV	99
73)	1,2-DIBROMOETHANE	14.03	107	359876	9.77	PPBV	100
74)	OCTANE	14.28	43	649223	11.61	PPBV	92
75)	1,1,1,2-TETRACHLOROETHANE	15.17	131	383942	9.89	PPBV	96
76)	CHLOROBENZENE	15.20	112	661883	9.73	PPBV	98
77)	ETHYLBENZENE	15.58	91	1017679	9.74	PPBV	98
78)	m,p-XYLENE	15.77	106	898766	20.48	PPBV	97
79)	o-XYLENE	16.28	106	437440	10.46	PPBV	96
80)	STYRENE	16.16	104	645567	10.38	PPBV	98
81)	1,2,3-TRICHLOROPROPANE	16.41	75	429455	10.32	PPBV	98
82)	NONANE	16.46	43	680655	12.51	PPBV	95
83)	BROMOFORM	15.89	173	460970	9.67	PPBV	99
85)	1,1,2,2-TETRACHLOROETHANE	16.27	83	580621	9.99	PPBV	99
86)	ISOPROPYLBENZENE	16.90	105	1306510	10.43	PPBV	99
87)	BROMOBENZENE	17.02	156	356700	10.19	PPBV	99
88)	2-CHLOROTOLUENE	17.43	126	306520	10.62	PPBV	95
89)	n-PROPYLBENZENE	17.45	120	353211	10.88	PPBV	91
90)	4-ETHYLTOLUENE	17.61	105	1072621	10.73	PPBV	98
91)	1,3,5-TRIMETHYLBENZENE	17.69	105	1023845	10.48	PPBV	97
92)	ALPHA-METHYLSTYRENE	17.86	118	485858	11.65	PPBV	96
93)	TERT-BUTYLBENZENE	18.14	134	276548	10.69	PPBV	97
94)	1,2,4-TRIMETHYLBENZENE	18.14	105	928828	10.42	PPBV	96
95)	m-DICHLOROBENZENE	18.33	146	500977	10.95	PPBV	99
96)	BENZYL CHLORIDE	18.31	91	532750	10.57	PPBV	99
97)	p-DICHLOROBENZENE	18.40	146	482344	10.82	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54081.D Vial: 3
Acq On : 11 Mar 2016 10:16 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 10:48:05 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

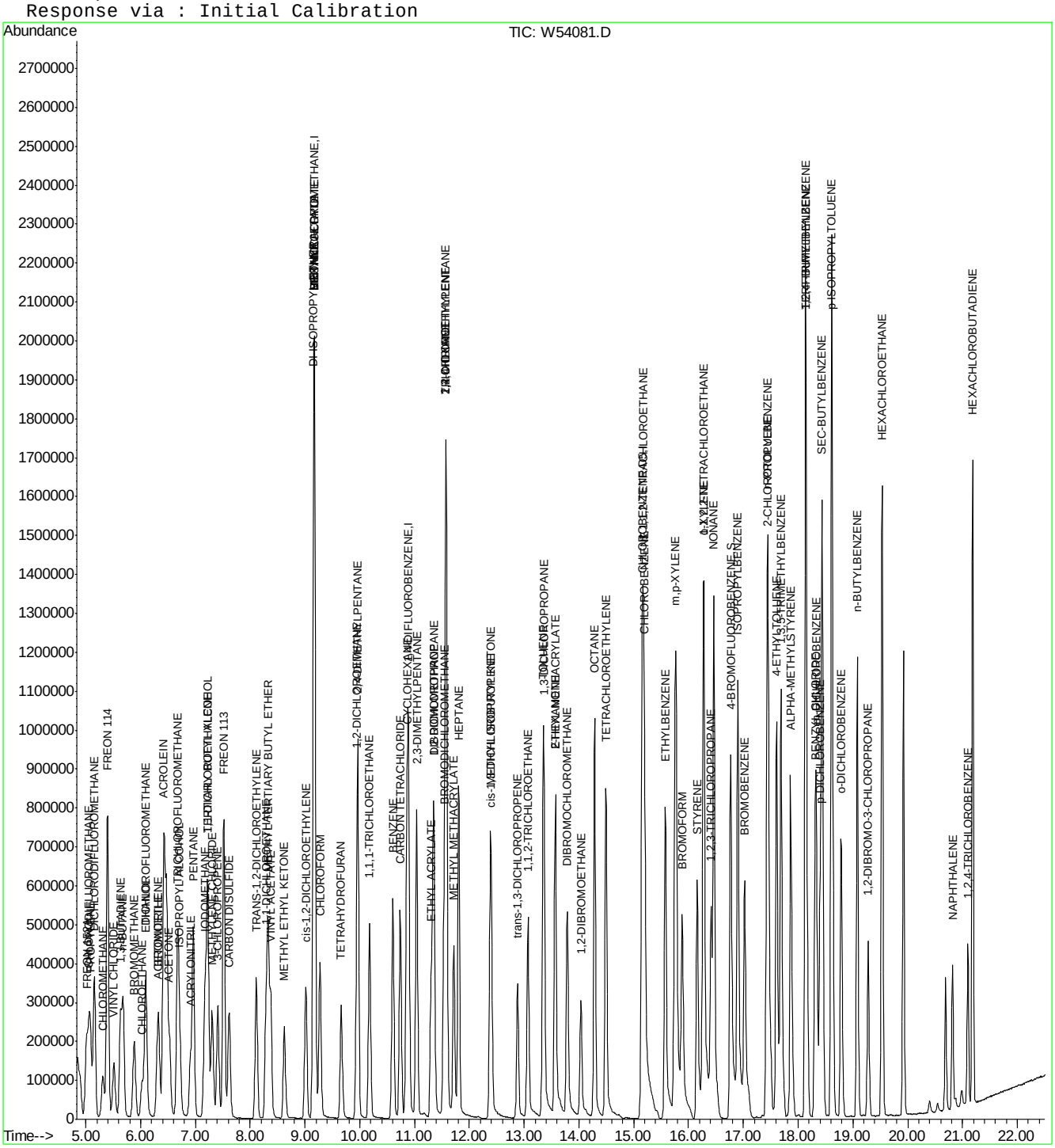
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.44	134	330483	11.20	PPBV	97
99)	p-ISOPROPYLTOLUENE	18.61	134	349499	11.46	PPBV	97
100)	o-DICHLOROBENZENE	18.78	146	509100	11.15	PPBV	100
101)	n-BUTYLBENZENE	19.08	134	282972	11.95	PPBV	97
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.28	157	210355	10.27	PPBV	100
103)	HEXACHLOROETHANE	19.53	201	450617	11.46	PPBV	95
104)	HEXACHLOROBUTADIENE	21.19	225	433714	11.28	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.10	180	184476	12.49	PPBV	99
106)	NAPHTHALENE	20.82	128	403965	11.23	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54081.D Vial: 3
Acq On : 11 Mar 2016 10:16 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:44 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54082.D Vial: 3
Acq On : 11 Mar 2016 11:04 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:41:26 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	234928	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1209443	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	532741	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	620727	10.44	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 104.40%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	164936	10.11	PPBV		97
4) CHLORODIFLUOROMETHANE	5.05	67	58984	9.70	PPBV		98
5) DICHLORODIFLUOROMETHANE	5.15	85	626777	9.99	PPBV		99
6) PROPYLENE	5.08	41	222851	10.24	PPBV		96
7) FREON 114	5.39	85	717259	10.61	PPBV		100
9) CHLOROMETHANE	5.30	52	78463	10.75	PPBV		95
10) VINYL CHLORIDE	5.51	62	293248	11.10	PPBV		100
11) 1,3-BUTADIENE	5.63	54	228690	10.97	PPBV		97
12) n-BUTANE	5.68	58	65939	10.85	PPBV		93
13) BROMOMETHANE	5.88	94	243550	10.42	PPBV		99
14) CHLOROETHANE	6.02	64	146281	10.15	PPBV		97
15) DICHLOROFLUOROMETHANE	6.08	67	574586	10.56	PPBV		99
16) ACROLEIN	6.41	56	107567	8.91	PPBV		98
17) TRICHLOROFLUOROMETHANE	6.68	101	591167	10.20	PPBV		100
18) ISOPROPYL ALCOHOL	6.71	45	448393	9.20	PPBV		99
19) ACETONE	6.52	58	124540	9.28	PPBV	#	87
21) ACRYLONITRILE	6.91	53	204258	10.63	PPBV		100
22) PENTANE	6.96	57	75103	9.58	PPBV	#	86
23) IODOMETHANE	7.17	142	603731	9.37	PPBV		98
24) 1,1-DICHLOROETHYLENE	7.22	96	225317	9.03	PPBV		95
25) CARBON DISULFIDE	7.61	76	657891	9.05	PPBV		97
26) ETHANOL	6.10	45	106635	11.18	PPBV		97
27) ACETONITRILE	6.30	41	215718	11.07	PPBV		99
28) BROMOETHENE	6.33	106	244293	10.03	PPBV	#	99
29) METHYLENE CHLORIDE	7.30	84	199924	8.32	PPBV		92
30) 3-CHLOROPROPENE	7.41	76	111078	9.23	PPBV	#	85
31) FREON 113	7.52	151	407208	9.14	PPBV		99
32) TRANS-1,2-DICHLOROETHYLENE	8.11	96	225900	8.86	PPBV		98
33) TERTIARY BUTYL ALCOHOL	7.22	59	478662	9.60	PPBV		95
34) METHYL TERTIARY BUTYL ETHE	8.33	73	623834	9.00	PPBV		97
35) TETRAHYDROFURAN	9.66	72	111926	9.22	PPBV	#	88
36) HEXANE	9.17	57	379847	9.20	PPBV		93
37) VINYL ACETATE	8.37	86	63870	9.51	PPBV	#	80
38) 1,1-DICHLOROETHANE	8.29	63	411886	9.34	PPBV		100
39) METHYL ETHYL KETONE	8.62	72	107433	8.94	PPBV	#	89
40) cis-1,2-DICHLOROETHYLENE	9.01	96	230283	8.55	PPBV		96
41) DI-ISOPROPYL ETHER	9.16	87	209274	9.08	PPBV		98
42) ETHYL ACETATE	9.17	61	73090	8.96	PPBV	#	70
43) METHYL ACRYLATE	9.18	55	406970	8.85	PPBV		99
44) CHLOROFORM	9.27	83	442965	9.15	PPBV		99
45) 2,4-DIMETHYLPENTANE	9.96	57	457660	9.63	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54082.D Vial: 3
Acq On : 11 Mar 2016 11:04 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:41:26 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.17	97	465742	9.49	PPBV		98
47)	CARBON TETRACHLORIDE	10.74	117	488551	9.48	PPBV		99
48)	1,2-DICHLOROETHANE	9.94	62	276362	9.98	PPBV		99
50)	BENZENE	10.60	78	751722	9.39	PPBV		99
51)	CYCLOHEXANE	10.86	84	332350	8.82	PPBV		93
52)	2,3-DIMETHYLPENTANE	11.04	71	175042	9.34	PPBV		94
53)	TRICHLOROETHYLENE	11.57	95	285985	7.95	PPBV		98
54)	DIBROMOMETHANE	11.34	174	287331	8.60	PPBV		93
55)	1,2-DICHLOROPROPANE	11.35	63	264473	9.16	PPBV		99
56)	ETHYL ACRYLATE	11.30	55	476040	9.16	PPBV		99
57)	BROMODICHLOROMETHANE	11.53	83	487453	9.18	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.58	57	1244159	9.72	PPBV		99
59)	1,4-DIOXANE	11.58	88	142932	9.89	PPBV	#	87
60)	METHYL METHACRYLATE	11.71	69	253536	9.23	PPBV		90
61)	HEPTANE	11.80	43	474663	10.75	PPBV		91
62)	METHYL ISOBUTYL KETONE	12.40	43	492251	9.14	PPBV		95
63)	cis-1,3-DICHLOROPROPENE	12.38	75	396029	9.08	PPBV		93
64)	TOLUENE	13.34	92	536614	9.47	PPBV		97
65)	1,3-DICHLOROPROPANE	13.36	76	398397	9.26	PPBV		91
66)	trans-1,3-DICHLOROPROPENE	12.88	75	312399	9.75	PPBV		94
67)	1,1,2-TRICHLOROETHANE	13.06	83	236453	9.48	PPBV		98
69)	ETHYL METHACRYLATE	13.56	69	394845	8.91	PPBV		97
70)	2-HEXANONE	13.57	58	257895	9.19	PPBV		93
71)	TETRACHLOROETHYLENE	14.49	164	351818	8.24	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.78	129	502213	9.52	PPBV		99
73)	1,2-DIBROMOETHANE	14.03	107	361031	9.28	PPBV		99
74)	OCTANE	14.28	43	630358	10.69	PPBV		92
75)	1,1,1,2-TETRACHLOROETHANE	15.17	131	390272	9.52	PPBV		96
76)	CHLOROBENZENE	15.20	112	673511	9.38	PPBV		99
77)	ETHYLBENZENE	15.58	91	1051687	9.54	PPBV		100
78)	m,p-XYLENE	15.77	106	916698	19.80	PPBV		99
79)	o-XYLENE	16.28	106	445190	10.09	PPBV		98
80)	STYRENE	16.16	104	660540	10.06	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.41	75	440006	10.02	PPBV		98
82)	NONANE	16.46	43	680470	11.85	PPBV		95
83)	BROMOFORM	15.88	173	475594	9.45	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.27	83	594481	9.70	PPBV		100
86)	ISOPROPYLBENZENE	16.90	105	1333371	10.09	PPBV		99
87)	BROMOBENZENE	17.02	156	366583	9.93	PPBV		99
88)	2-CHLOROTOLUENE	17.43	126	321788	10.56	PPBV	#	93
89)	n-PROPYLBENZENE	17.45	120	363832	10.62	PPBV		93
90)	4-ETHYLTOLUENE	17.61	105	1113028	10.55	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.69	105	1068268	10.36	PPBV		97
92)	ALPHA-METHYLSTYRENE	17.86	118	501248	11.39	PPBV		96
93)	TERT-BUTYLBENZENE	18.14	134	285373	10.46	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.14	105	962021	10.23	PPBV		95
95)	m-DICHLOROBENZENE	18.33	146	517233	10.71	PPBV		99
96)	BENZYL CHLORIDE	18.31	91	548428	10.31	PPBV		99
97)	p-DICHLOROBENZENE	18.40	146	494025	10.50	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54082.D Vial: 3
Acq On : 11 Mar 2016 11:04 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:41:26 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

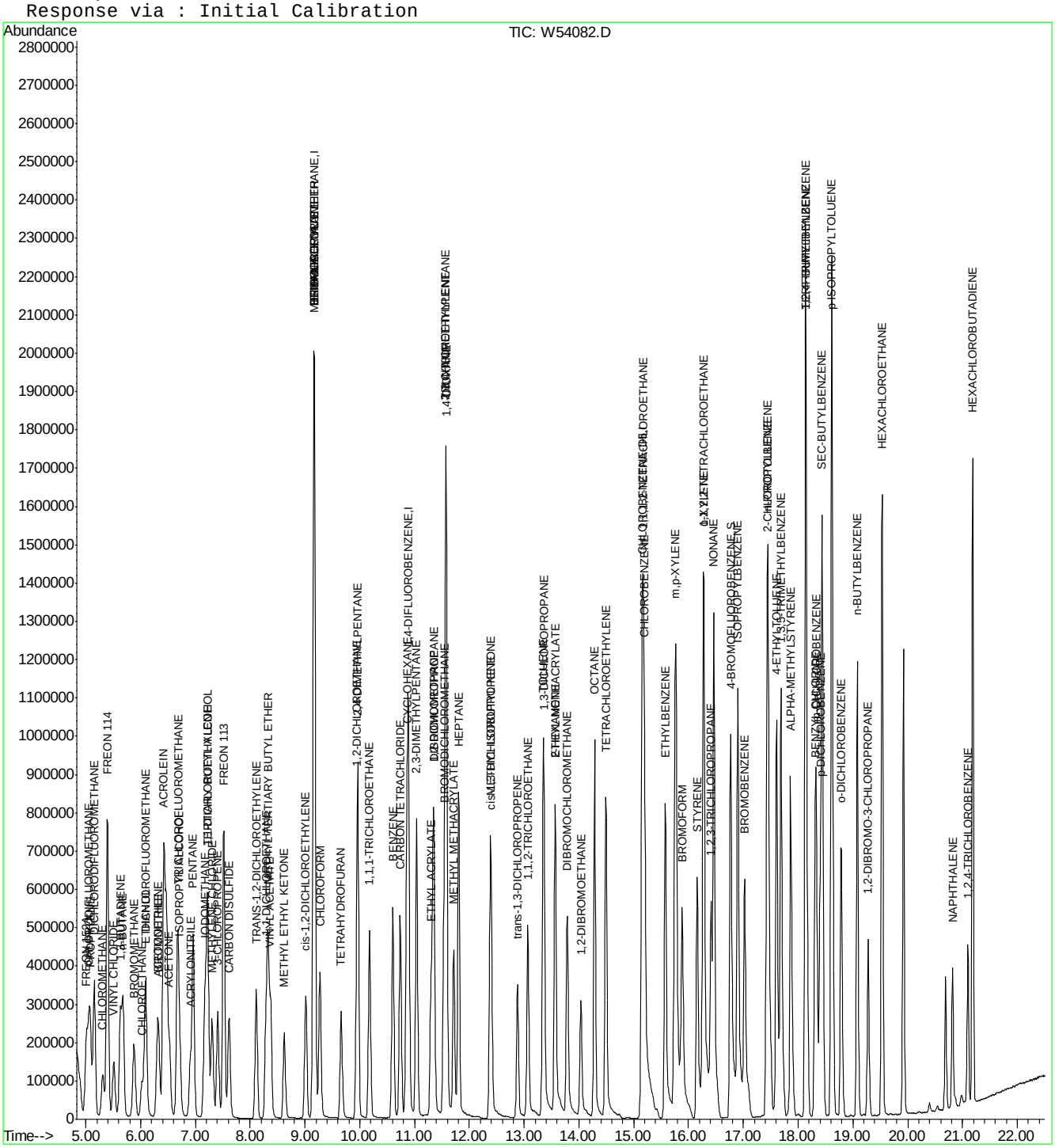
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.44	134	337469	10.84	PPBV	95
99)	p-ISOPROPYLTOLUENE	18.61	134	349524	10.86	PPBV	98
100)	o-DICHLOROBENZENE	18.78	146	517302	10.74	PPBV	99
101)	n-BUTYLBENZENE	19.08	134	290529	11.63	PPBV	94
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.28	157	215893	9.99	PPBV	99
103)	HEXACHLOROETHANE	19.53	201	455869	10.99	PPBV	96
104)	HEXACHLOROBUTADIENE	21.18	225	447825	11.04	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.10	180	183091	11.75	PPBV	99
106)	NAPHTHALENE	20.82	128	396950	10.46	PPBV	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54082.D MW2152.M Fri Mar 11 15:50:17 2016 MSW Page 3

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54082.D Vial: 3
Acq On : 11 Mar 2016 11:04 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:44 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54112.D Vial: 3
Acq On : 12 Mar 2016 12:16 pm Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:47:56 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	255786	10.00	PPBV		0.01
49) 1,4-DIFLUOROBENZENE	10.91	114	1360675	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.16	82	585526	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.78	95	655440	10.03	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 100.30%				
Target Compounds							Qvalue
3) FREON 152A	5.04	65	171939	9.68	PPBV		99
4) CHLORODIFLUOROMETHANE	5.08	67	65310	9.87	PPBV		99
5) DICHLORODIFLUOROMETHANE	5.18	85	727736	10.65	PPBV		100
6) PROPYLENE	5.11	41	223877	9.45	PPBV		95
7) FREON 114	5.42	85	727185	9.88	PPBV		95
9) CHLOROMETHANE	5.34	52	76300	9.60	PPBV		91
10) VINYL CHLORIDE	5.54	62	288868	10.04	PPBV		99
11) 1,3-BUTADIENE	5.66	54	229509	10.11	PPBV		98
12) n-BUTANE	5.70	58	67372	10.18	PPBV		93
13) BROMOMETHANE	5.91	94	265950	10.45	PPBV		100
14) CHLOROETHANE	6.05	64	157407	10.03	PPBV		97
15) DICHLOROFLUOROMETHANE	6.11	67	627267	10.59	PPBV		100
16) ACROLEIN	6.44	56	116786	8.89	PPBV		96
17) TRICHLOROFLUOROMETHANE	6.70	101	692754	10.97	PPBV		100
18) ISOPROPYL ALCOHOL	6.77	45	487251	9.18	PPBV		99
19) ACETONE	6.55	58	140994	9.65	PPBV		98
21) ACRYLONITRILE	6.93	53	236384	11.30	PPBV		97
22) PENTANE	6.99	57	90897	10.65	PPBV	#	92
23) IODOMETHANE	7.19	142	822702	11.72	PPBV		100
24) 1,1-DICHLOROETHYLENE	7.24	96	307635	11.32	PPBV		98
25) CARBON DISULFIDE	7.63	76	867533	10.96	PPBV		98
26) ETHANOL	6.17	45	107523	10.35	PPBV		99
27) ACETONITRILE	6.33	41	230915	10.88	PPBV		97
28) BROMOETHENE	6.36	106	285234	10.76	PPBV		99
29) METHYLENE CHLORIDE	7.33	84	267938	10.24	PPBV		93
30) 3-CHLOROPROPENE	7.43	76	152188	11.61	PPBV	#	88
31) FREON 113	7.54	151	516218	10.64	PPBV		99
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	297223	10.71	PPBV		100
33) TERTIARY BUTYL ALCOHOL	7.29	59	615963	11.35	PPBV		98
34) METHYL TERTIARY BUTYL ETHE	8.35	73	771765	10.23	PPBV		99
35) TETRAHYDROFURAN	9.69	72	138054	10.44	PPBV		92
36) HEXANE	9.19	57	477688	10.63	PPBV		98
37) VINYL ACETATE	8.39	86	80508	11.01	PPBV	#	92
38) 1,1-DICHLOROETHANE	8.30	63	522202	10.88	PPBV		99
39) METHYL ETHYL KETONE	8.65	72	131936	10.09	PPBV		96
40) cis-1,2-DICHLOROETHYLENE	9.03	96	300337	10.24	PPBV		98
41) DI-ISOPROPYL ETHER	9.18	87	262209	10.45	PPBV		94
42) ETHYL ACETATE	9.21	61	85791	9.66	PPBV	#	57
43) METHYL ACRYLATE	9.20	55	485615	9.70	PPBV		98
44) CHLOROFORM	9.29	83	561386	10.65	PPBV		99
45) 2,4-DIMETHYLPENTANE	9.97	57	578731	11.18	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54112.D Vial: 3
Acq On : 12 Mar 2016 12:16 pm Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:47:56 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.19	97	579050	10.84	PPBV		100
47)	CARBON TETRACHLORIDE	10.75	117	613766	10.94	PPBV		100
48)	1,2-DICHLOROETHANE	9.96	62	351330	11.66	PPBV		99
50)	BENZENE	10.62	78	947794	10.52	PPBV		98
51)	CYCLOHEXANE	10.86	84	418999	9.89	PPBV		96
52)	2,3-DIMETHYLPENTANE	11.05	71	220358	10.45	PPBV		94
53)	TRICHLOROETHYLENE	11.58	95	370732	9.16	PPBV		99
54)	DIBROMOMETHANE	11.36	174	371936	9.89	PPBV		97
55)	1,2-DICHLOROPROPANE	11.37	63	326439	10.04	PPBV		99
56)	ETHYL ACRYLATE	11.33	55	549061	9.40	PPBV		100
57)	BROMODICHLOROMETHANE	11.55	83	608200	10.18	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.59	57	1539041	10.69	PPBV		98
59)	1,4-DIOXANE	11.61	88	168666	10.37	PPBV	#	31
60)	METHYL METHACRYLATE	11.74	69	297987	9.65	PPBV		95
61)	HEPTANE	11.82	43	551167	11.10	PPBV		95
62)	METHYL ISOBUTYL KETONE	12.43	43	539736	8.91	PPBV		98
63)	cis-1,3-DICHLOROPROPENE	12.39	75	505005	10.29	PPBV		98
64)	TOLUENE	13.36	92	683550	10.72	PPBV		92
65)	1,3-DICHLOROPROPANE	13.38	76	492023	10.16	PPBV		92
66)	trans-1,3-DICHLOROPROPENE	12.89	75	384337	10.66	PPBV		97
67)	1,1,2-TRICHLOROETHANE	13.09	83	295436	10.53	PPBV		98
69)	ETHYL METHACRYLATE	13.58	69	452313	9.29	PPBV		98
70)	2-HEXANONE	13.60	58	294833	9.56	PPBV		97
71)	TETRACHLOROETHYLENE	14.50	164	458573	9.77	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.80	129	640927	11.06	PPBV		99
73)	1,2-DIBROMOETHANE	14.05	107	470147	11.00	PPBV		99
74)	OCTANE	14.29	43	774696	11.95	PPBV		94
75)	1,1,1,2-TETRACHLOROETHANE	15.19	131	475564	10.56	PPBV		94
76)	CHLOROBENZENE	15.21	112	831799	10.54	PPBV		100
77)	ETHYLBENZENE	15.59	91	1259838	10.40	PPBV		98
78)	m,p-XYLENE	15.77	106	1119581	22.00	PPBV		94
79)	o-XYLENE	16.29	106	534578	11.02	PPBV		92
80)	STYRENE	16.17	104	794759	11.01	PPBV		98
81)	1,2,3-TRICHLOROPROPANE	16.42	75	501900	10.40	PPBV		98
82)	NONANE	16.47	43	768946	12.19	PPBV		97
83)	BROMOFORM	15.90	173	582247	10.53	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.28	83	685577	10.17	PPBV		99
86)	ISOPROPYLBENZENE	16.91	105	1528343	10.53	PPBV		98
87)	BROMOBENZENE	17.03	156	438943	10.82	PPBV		97
88)	2-CHLOROTOLUENE	17.44	126	368381	11.00	PPBV	#	85
89)	n-PROPYLBENZENE	17.46	120	417506	11.09	PPBV		89
90)	4-ETHYLTOLUENE	17.61	105	1269611	10.95	PPBV		97
91)	1,3,5-TRIMETHYLBENZENE	17.69	105	1162360	10.26	PPBV		95
92)	ALPHA-METHYLSTYRENE	17.87	118	569356	11.77	PPBV		95
93)	TERT-BUTYLBENZENE	18.14	134	321965	10.73	PPBV		95
94)	1,2,4-TRIMETHYLBENZENE	18.15	105	1071024	10.36	PPBV		95
95)	m-DICHLOROBENZENE	18.33	146	592013	11.15	PPBV		99
96)	BENZYL CHLORIDE	18.31	91	589583	10.08	PPBV		98
97)	p-DICHLOROBENZENE	18.41	146	526964	10.19	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54112.D Vial: 3
Acq On : 12 Mar 2016 12:16 pm Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:47:56 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

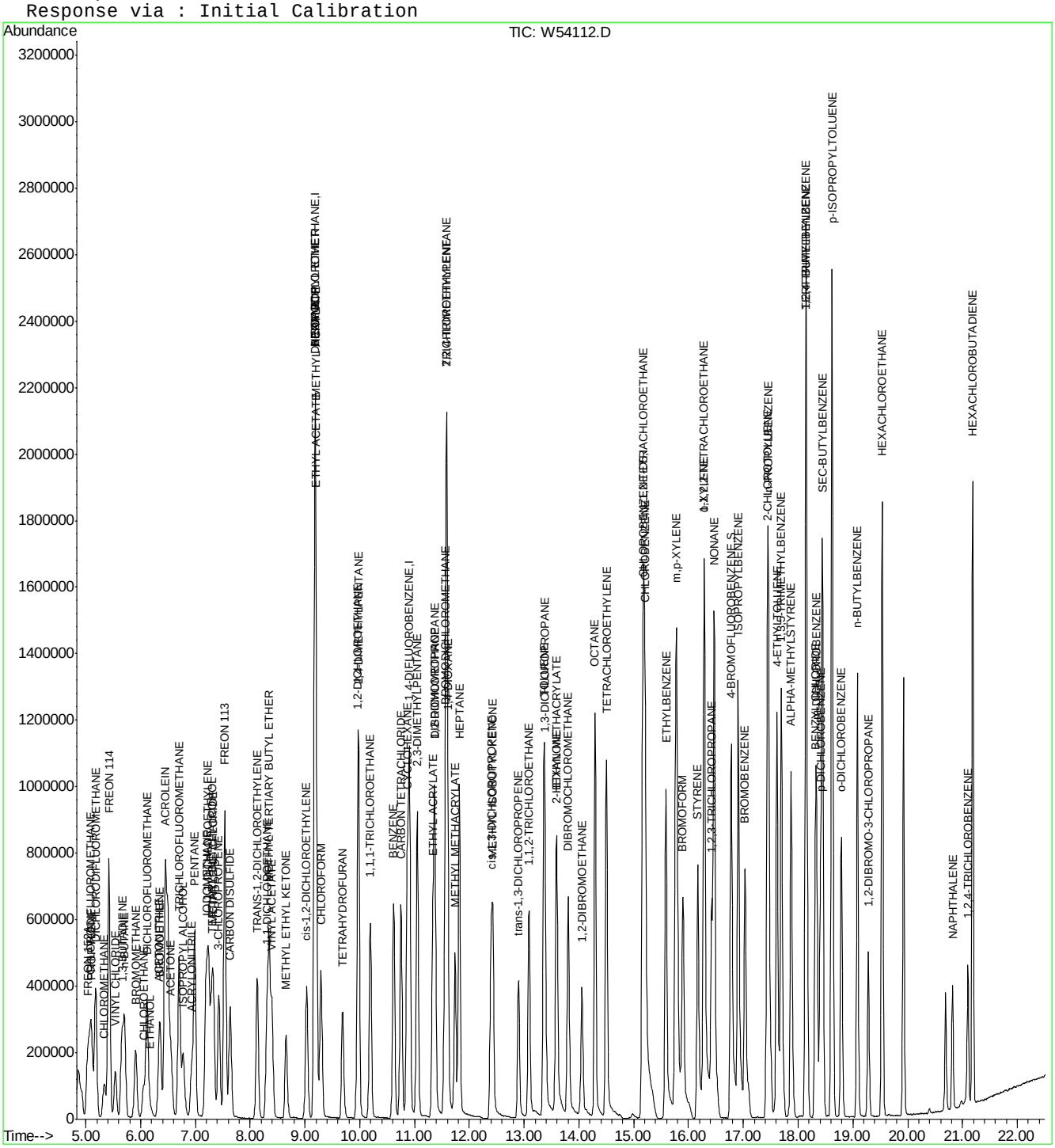
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.44	134	374665	10.95	PPBV	94
99)	p-ISOPROPYLTOLUENE	18.61	134	390920	11.05	PPBV	96
100)	o-DICHLOROBENZENE	18.79	146	576670	10.89	PPBV	99
101)	n-BUTYLBENZENE	19.08	134	310805	11.32	PPBV	93
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.28	157	232039	9.77	PPBV	99
103)	HEXACHLOROETHANE	19.53	201	518501	11.37	PPBV	99
104)	HEXACHLOROBUTADIENE	21.19	225	494429	11.09	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.10	180	188370	11.00	PPBV	99
106)	NAPHTHALENE	20.82	128	398897	9.57	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54112.D Vial: 3
Acq On : 12 Mar 2016 12:16 pm Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:27 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54113.D Vial: 3
Acq On : 12 Mar 2016 12:58 pm Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:48:00 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	248928	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1295014	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	576927	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	651247	10.12	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 101.20%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	173973	10.06	PPBV		97
4) CHLORODIFLUOROMETHANE	5.05	67	66411	10.31	PPBV		99
5) DICHLORODIFLUOROMETHANE	5.16	85	694783	10.45	PPBV		99
6) PROPYLENE	5.08	41	239259	10.38	PPBV		96
7) FREON 114	5.40	85	764166	10.67	PPBV		97
9) CHLOROMETHANE	5.31	52	81077	10.48	PPBV		99
10) VINYL CHLORIDE	5.52	62	302515	10.81	PPBV		99
11) 1,3-BUTADIENE	5.63	54	236183	10.69	PPBV		94
12) n-BUTANE	5.68	58	68563	10.65	PPBV		90
13) BROMOMETHANE	5.88	94	265160	10.70	PPBV		100
14) CHLOROETHANE	6.02	64	155912	10.21	PPBV		96
15) DICHLOROFLUOROMETHANE	6.09	67	619668	10.75	PPBV		99
16) ACROLEIN	6.41	56	114135	8.92	PPBV		100
17) TRICHLOROFLUOROMETHANE	6.68	101	700893	11.41	PPBV		99
18) ISOPROPYL ALCOHOL	6.71	45	478383	9.26	PPBV		99
19) ACETONE	6.52	58	135487	9.53	PPBV		90
21) ACRYLONITRILE	6.91	53	222513	10.93	PPBV		98
22) PENTANE	6.96	57	85296	10.26	PPBV	#	90
23) IODOMETHANE	7.17	142	732674	10.73	PPBV		98
24) 1,1-DICHLOROETHYLENE	7.21	96	259941	9.83	PPBV		96
25) CARBON DISULFIDE	7.61	76	746735	9.70	PPBV		98
26) ETHANOL	6.11	45	108908	10.77	PPBV		100
27) ACETONITRILE	6.30	41	226465	10.97	PPBV		99
28) BROMOETHENE	6.33	106	278531	10.80	PPBV	#	99
29) METHYLENE CHLORIDE	7.30	84	231303	9.08	PPBV		94
30) 3-CHLOROPROPENE	7.41	76	128681	10.09	PPBV	#	88
31) FREON 113	7.52	151	483578	10.24	PPBV		98
32) TRANS-1,2-DICHLOROETHYLENE	8.11	96	261087	9.67	PPBV		98
33) TERTIARY BUTYL ALCOHOL	7.23	59	534228	10.12	PPBV		95
34) METHYL TERTIARY BUTYL ETHE	8.33	73	699951	9.53	PPBV		98
35) TETRAHYDROFURAN	9.66	72	124658	9.69	PPBV		92
36) HEXANE	9.18	57	423918	9.69	PPBV		94
37) VINYL ACETATE	8.38	86	71637	10.06	PPBV	#	82
38) 1,1-DICHLOROETHANE	8.29	63	466096	9.98	PPBV		99
39) METHYL ETHYL KETONE	8.62	72	119612	9.40	PPBV	#	87
40) cis-1,2-DICHLOROETHYLENE	9.02	96	267314	9.37	PPBV		97
41) DI-ISOPROPYL ETHER	9.16	87	230420	9.44	PPBV		98
42) ETHYL ACETATE	9.17	61	77617	8.98	PPBV	#	69
43) METHYL ACRYLATE	9.18	55	450306	9.24	PPBV		98
44) CHLOROFORM	9.27	83	512892	10.00	PPBV		98
45) 2,4-DIMETHYLPENTANE	9.96	57	506122	10.05	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54113.D Vial: 3
Acq On : 12 Mar 2016 12:58 pm Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:48:00 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.17	97	537971	10.35	PPBV		99
47)	CARBON TETRACHLORIDE	10.74	117	575641	10.55	PPBV		100
48)	1,2-DICHLOROETHANE	9.94	62	324554	11.07	PPBV		98
50)	BENZENE	10.60	78	841372	9.81	PPBV		99
51)	CYCLOHEXANE	10.86	84	376404	9.33	PPBV		96
52)	2,3-DIMETHYLPENTANE	11.03	71	192979	9.61	PPBV		94
53)	TRICHLOROETHYLENE	11.56	95	343717	8.92	PPBV		99
54)	DIBROMOMETHANE	11.33	174	359812	10.06	PPBV		100
55)	1,2-DICHLOROPROPANE	11.35	63	292390	9.45	PPBV		98
56)	ETHYL ACRYLATE	11.30	55	516994	9.30	PPBV		100
57)	BROMODICHLOROMETHANE	11.53	83	559285	9.84	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.58	57	1358569	9.91	PPBV		99
59)	1,4-DIOXANE	11.58	88	160032	10.34	PPBV	#	81
60)	METHYL METHACRYLATE	11.72	69	256496	8.72	PPBV		86
61)	HEPTANE	11.80	43	507219	10.73	PPBV		92
62)	METHYL ISOBUTYL KETONE	12.40	43	522508	9.06	PPBV		96
63)	cis-1,3-DICHLOROPROPENE	12.38	75	448423	9.60	PPBV		94
64)	TOLUENE	13.35	92	610919	10.07	PPBV		97
65)	1,3-DICHLOROPROPANE	13.36	76	448450	9.73	PPBV		92
66)	trans-1,3-DICHLOROPROPENE	12.88	75	350013	10.20	PPBV		96
67)	1,1,2-TRICHLOROETHANE	13.07	83	262707	9.84	PPBV		98
69)	ETHYL METHACRYLATE	13.56	69	432657	9.02	PPBV		99
70)	2-HEXANONE	13.58	58	271797	8.94	PPBV		92
71)	TETRACHLOROETHYLENE	14.49	164	435335	9.41	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.78	129	597482	10.46	PPBV		99
73)	1,2-DIBROMOETHANE	14.03	107	433530	10.30	PPBV		100
74)	OCTANE	14.28	43	700320	10.96	PPBV		94
75)	1,1,1,2-TETRACHLOROETHANE	15.17	131	452866	10.21	PPBV		91
76)	CHLOROBENZENE	15.20	112	780954	10.05	PPBV		100
77)	ETHYLBENZENE	15.58	91	1171665	9.81	PPBV		98
78)	m,p-XYLENE	15.77	106	1025848	20.46	PPBV		97
79)	o-XYLENE	16.28	106	484814	10.14	PPBV		98
80)	STYRENE	16.16	104	731368	10.29	PPBV		100
81)	1,2,3-TRICHLOROPROPANE	16.41	75	468945	9.86	PPBV		99
82)	NONANE	16.46	43	717219	11.54	PPBV		96
83)	BROMOFORM	15.88	173	563776	10.35	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.27	83	623540	9.39	PPBV		99
86)	ISOPROPYLBENZENE	16.90	105	1437203	10.05	PPBV		99
87)	BROMOBENZENE	17.02	156	408935	10.23	PPBV		98
88)	2-CHLOROTOLUENE	17.43	126	333554	10.11	PPBV		97
89)	n-PROPYLBENZENE	17.45	120	377746	10.18	PPBV		94
90)	4-ETHYLTOLUENE	17.61	105	1173300	10.27	PPBV		100
91)	1,3,5-TRIMETHYLBENZENE	17.69	105	1123841	10.07	PPBV		98
92)	ALPHA-METHYLSTYRENE	17.86	118	515801	10.82	PPBV		98
93)	TERT-BUTYLBENZENE	18.14	134	298410	10.10	PPBV		100
94)	1,2,4-TRIMETHYLBENZENE	18.14	105	1011753	9.93	PPBV		96
95)	m-DICHLOROBENZENE	18.33	146	546385	10.45	PPBV		99
96)	BENZYL CHLORIDE	18.31	91	546148	9.48	PPBV		99
97)	p-DICHLOROBENZENE	18.40	146	507666	9.97	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54113.D Vial: 3
Acq On : 12 Mar 2016 12:58 pm Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:48:00 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

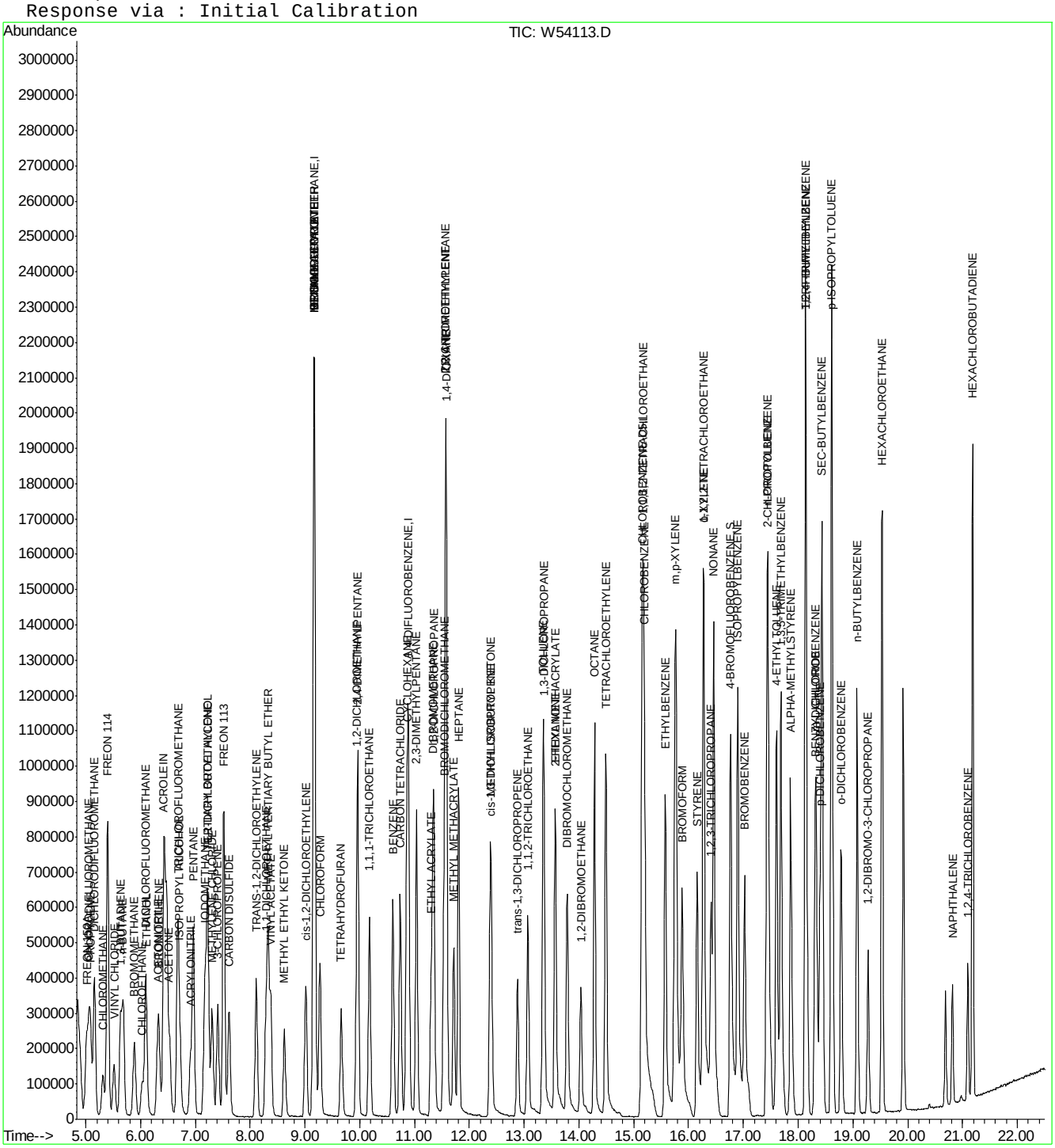
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.44	134	347225	10.30	PPBV	97
99)	p-ISOPROPYLTOLUENE	18.61	134	361050	10.36	PPBV	99
100)	o-DICHLOROBENZENE	18.78	146	538692	10.33	PPBV	99
101)	n-BUTYLBENZENE	19.08	134	283212	10.47	PPBV	97
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.28	157	213771	9.13	PPBV	99
103)	HEXACHLOROETHANE	19.53	201	490892	10.92	PPBV	97
104)	HEXACHLOROBUTADIENE	21.19	225	481102	10.95	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.10	180	175621	10.40	PPBV	99
106)	NAPHTHALENE	20.82	128	368924	8.98	PPBV	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54113.D MW2152.M Sun Mar 13 11:22:54 2016 MSW Page 3

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54113.D Vial: 3
Acq On : 12 Mar 2016 12:58 pm Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:27 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16056.D
Acq On : 4 Feb 2016 4:03 pm
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:00 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.279	130	169313	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.475	114	613299	10.00	ppb(v	-0.01
76) Chlorobenzene-d5	16.043	82	317970	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.279	130	169313	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	410784	9.79	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 97.90%			
Target Compounds						Qvalue
3) Freon 152A	3.838	65	104749	11.23	ppb(v	88
4) Chlorodifluoromethane	3.874	67	38771	11.27	ppb(v	97
5) Propene	3.899	41	110912	10.49	ppb(v#	95
6) Dichlorodifluoromethane	3.960	85	425924	11.12	ppb(v	100
7) 1-Chloro-1,1-difluoroe...	4.076	65	279557	10.91	ppb(v	96
8) Chloromethane	4.095	50	150999	11.27	ppb(v	99
9) Dichlorotetrafluoroethane	4.174	85	470548	10.93	ppb(v	99
10) Vinyl Chloride	4.272	62	176698	11.74	ppb(v#	99
11) 1,3-Butadiene	4.382	54	123682	11.00	ppb(v	93
12) n-Butane	4.425	58	27421	11.08	ppb(v	82
13) Bromomethane	4.609	94	174124	10.04	ppb(v	99
14) Chloroethane	4.749	64	82962	11.18	ppb(v	97
15) Dichlorofluoromethane	4.829	67	390152	11.15	ppb(v	99
16) Acetonitrile	5.055	41	135045	11.15	ppb(v	88
17) Freon 123	5.171	83	431711	10.51	ppb(v	98
18) Freon 123A	5.220	117	211323	9.45	ppb(v	99
19) Bromoethene	5.049	106	172256	10.32	ppb(v	97
20) Trichlorofluoromethane	5.410	101	401230	10.23	ppb(v	99
21) Acetone	5.269	58	81088	10.06	ppb(v	82
22) Pentane	5.716	57	43416	10.80	ppb(v	76
24) Iodomethane	5.918	142	484965	10.30	ppb(v	96
25) Isopropyl Alcohol	5.483	43	52747	10.03	ppb(v	99
26) 1,1-Dichloroethene	5.985	61	263800	11.18	ppb(v	96
27) Freon 113	6.346	101	379540	10.94	ppb(v	98
28) Methylene Chloride	6.107	84	163222	10.20	ppb(v	92
29) Carbon Disulfide	6.383	76	532486	11.47	ppb(v	100
30) Ethanol	4.865	45	65296	10.55	ppb(v	98
31) Acrylonitrile	5.685	53	135039	11.72	ppb(v	96
32) 3-Chloropropene	6.211	76	79231	11.29	ppb(v	84
33) trans-1,2-Dichloroethene	7.007	61	241969	11.43	ppb(v	98
34) tert-Butyl Alcohol	6.028	59	346994	10.54	ppb(v	98
35) Methyl tert-Butyl Ether	7.270	73	431236	10.27	ppb(v	98
36) Vinyl Acetate	7.374	43	425413	11.58	ppb(v	98
37) 1,1-Dichloroethane	7.215	63	309679	11.09	ppb(v	98
38) 2-Butanone	7.631	72	82143	11.25	ppb(v	80
39) Hexane	8.297	57	245680	10.28	ppb(v	91
40) cis-1,2-Dichloroethene	8.096	61	229174	11.03	ppb(v	97
41) Di-isopropyl Ether	8.304	87	145219	11.44	ppb(v	83
42) Ethyl Acetate	8.346	61	59231	12.50	ppb(v	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16056.D
Acq On : 4 Feb 2016 4:03 pm
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:00 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43)	Methyl Acrylate	8.334	55	314199	10.53	ppb(v	98
44)	Chloroform	8.414	83	385046	11.06	ppb(v	98
45)	2,4-Dimethylpentane	9.276	57	300458	10.72	ppb(v	100
46)	Tetrahydrofuran	8.866	72	82896	12.20	ppb(v	89
47)	1,1,1-Trichloroethane	9.509	97	359885	10.74	ppb(v	99
48)	1,2-Dichloroethane	9.233	62	210808	11.14	ppb(v	99
49)	Benzene	10.047	78	544535	10.72	ppb(v	98
50)	Carbon Tetrachloride	10.218	117	373444	10.83	ppb(v	99
51)	Cyclohexane	10.347	56	247692	10.53	ppb(v	98
52)	2,3-Dimethylpentane	10.641	71	113401	10.81	ppb(v	95
54)	2,2,4-Trimethylpentane	11.326	57	846320	11.51	ppb(v	97
55)	Heptane	11.674	71	169962	11.32	ppb(v	97
56)	Trichloroethene	11.307	95	254559	10.91	ppb(v	97
57)	1,2-Dichloropropane	11.014	63	206517	11.82	ppb(v	99
58)	Dibromomethane	10.995	174	247791	10.81	ppb(v	91
59)	Ethyl Acrylate	11.050	55	385724	11.30	ppb(v	98
60)	Methyl Methacrylate	11.583	69	182543	10.91	ppb(v	90
61)	1,4-Dioxane	11.326	88	133242	11.38	ppb(v	88
62)	Bromodichloromethane	11.265	83	406133	11.06	ppb(v	99
63)	cis-1,3-Dichloropropene	12.390	75	312132	10.52	ppb(v	98
64)	4-Methyl-2-pentanone	12.439	58	161539	11.99	ppb(v	90
65)	trans-1,3-Dichloropropene	13.069	75	278897	11.37	ppb(v	98
66)	Toluene	13.638	91	645153	10.82	ppb(v	99
67)	1,1,2-Trichloroethane	13.283	97	241116	11.33	ppb(v	98
68)	1,3-Dichloropropane	13.681	76	309500	11.47	ppb(v	93
69)	2-Hexanone	14.011	58	220343	11.89	ppb(v	89
70)	Ethyl Methacrylate	14.042	69	336509	11.87	ppb(v	99
71)	Dibromochloromethane	14.195	129	450035	11.45	ppb(v	99
72)	Tetrachloroethene	15.155	166	338710	10.88	ppb(v	98
73)	1,2-Dibromoethane	14.513	107	381278	10.92	ppb(v	99
74)	Octane	14.984	43	368630	11.15	ppb(v	96
75)	1,1,1,2-Tetrachloroethane	16.079	131	302318	11.19	ppb(v	98
77)	Chlorobenzene	16.104	112	528062	10.09	ppb(v	98
78)	Ethylbenzene	16.648	91	831062	10.20	ppb(v	99
79)	m,p-Xylene	16.923	91	1298624	20.72	ppb(v	98
80)	Styrene	17.443	104	483596	10.36	ppb(v	99
81)	Nonane	17.976	43	376127	10.43	ppb(v	95
82)	o-Xylene	17.596	91	658451	10.32	ppb(v	98
83)	Bromoform	16.997	173	450543	10.36	ppb(v	100
84)	1,1,2,2-Tetrachloroethane	17.596	83	551459	10.79	ppb(v	99
85)	1,2,3-Trichloropropane	17.786	75	386273	10.71	ppb(v	99
86)	Isopropylbenzene	18.508	105	923014	10.30	ppb(v	99
87)	Bromobenzene	18.618	156	316210	9.96	ppb(v	96
88)	2-Chlorotoluene	19.224	126	227160	9.99	ppb(v	97
89)	n-Propylbenzene	19.291	120	246862	10.52	ppb(v	96
91)	4-Ethyltoluene	19.511	105	890080	10.63	ppb(v	99
92)	1,3,5-Trimethylbenzene	19.634	105	736769	10.21	ppb(v	99
93)	alpha-Methylstyrene	19.866	118	387880	10.71	ppb(v	97
94)	tert-Butylbenzene	20.196	134	159075	10.43	ppb(v	95
95)	1,2,4-Trimethylbenzene	20.209	105	748400	10.35	ppb(v#	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16056.D
Acq On : 4 Feb 2016 4:03 pm
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:00 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

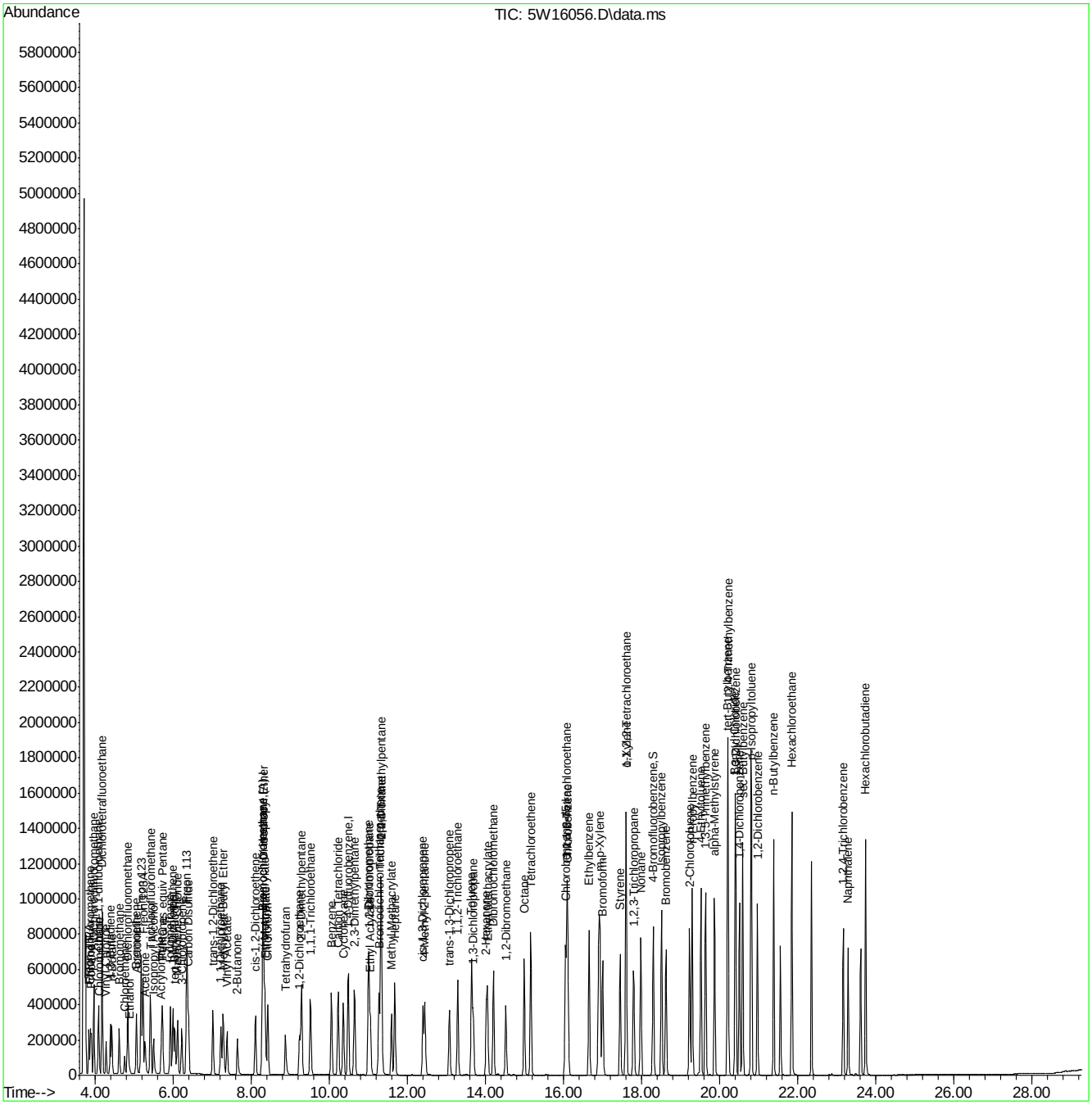
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 1,3-Dichlorobenzene	20.404	146	513817	10.14	ppb(v	97
97) Benzyl Chloride	20.392	91	650754	10.33	ppb(v	98
98) 1,4-Dichlorobenzene	20.502	146	502329	9.60	ppb(v	98
99) sec-Butylbenzene	20.582	134	198984	10.38	ppb(v	95
100) p-Isopropyltoluene	20.814	134	229168	10.81	ppb(v	94
101) 1,2-Dichlorobenzene	20.961	146	481198	9.98	ppb(v	97
102) n-Butylbenzene	21.377	134	198551	10.56	ppb(v	93
103) Hexachloroethane	21.842	201	302537	10.60	ppb(v	92
104) 1,2,4-Trichlorobenzene	23.157	180	278347	9.38	ppb(v	99
105) Naphthalene	23.286	128	587893	8.98	ppb(v	100
106) Hexachlorobutadiene	23.732	225	287477	10.04	ppb(v	99
108) TVHC as equiv Pentane	5.716	TIC	1052402	12.45	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16056.D
Acq On : 4 Feb 2016 4:03 pm
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:00 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16057.D
Acq On : 4 Feb 2016 4:45 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.279	130	159675	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.481	114	584192	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.042	82	302744	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.279	130	159675	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	396596	9.93	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 99.30%			
Target Compounds						Qvalue
3) Freon 152A	3.838	65	105283	11.97	ppb(v	89
4) Chlorodifluoromethane	3.874	67	39299	12.12	ppb(v	97
5) Propene	3.899	41	112132	11.25	ppb(v#	95
6) Dichlorodifluoromethane	3.960	85	429364	11.89	ppb(v	99
7) 1-Chloro-1,1-difluoroe...	4.076	65	283177	11.72	ppb(v	96
8) Chloromethane	4.095	50	151522	12.00	ppb(v	99
9) Dichlorotetrafluoroethane	4.174	85	471091	11.60	ppb(v	100
10) Vinyl Chloride	4.272	62	176252	12.42	ppb(v#	99
11) 1,3-Butadiene	4.382	54	123974	11.69	ppb(v	92
12) n-Butane	4.425	58	27324	11.71	ppb(v	93
13) Bromomethane	4.615	94	174472	10.67	ppb(v	99
14) Chloroethane	4.755	64	83014	11.87	ppb(v	97
15) Dichlorofluoromethane	4.829	67	389934	11.81	ppb(v	99
16) Acetonitrile	5.055	41	136049	11.91	ppb(v	90
17) Freon 123	5.177	83	432016	11.15	ppb(v	99
18) Freon 123A	5.226	117	209068	9.91	ppb(v	100
19) Bromoethene	5.049	106	171303	10.88	ppb(v	97
20) Trichlorofluoromethane	5.410	101	403756	10.92	ppb(v	99
21) Acetone	5.275	58	81021	10.66	ppb(v	82
22) Pentane	5.716	57	42667	11.25	ppb(v	79
24) Iodomethane	5.924	142	485793	10.94	ppb(v	96
25) Isopropyl Alcohol	5.489	43	50474	10.18	ppb(v	97
26) 1,1-Dichloroethene	5.991	61	261876	11.77	ppb(v	96
27) Freon 113	6.346	101	380675	11.64	ppb(v	99
28) Methylene Chloride	6.107	84	162042	10.74	ppb(v	92
29) Carbon Disulfide	6.389	76	535745	12.23	ppb(v	100
30) Ethanol	4.865	45	65320	11.19	ppb(v	99
31) Acrylonitrile	5.691	53	133882	12.32	ppb(v	97
32) 3-Chloropropene	6.211	76	79102	11.95	ppb(v	86
33) trans-1,2-Dichloroethene	7.013	61	240882	12.06	ppb(v	96
34) tert-Butyl Alcohol	6.034	59	348559	11.23	ppb(v	98
35) Methyl tert-Butyl Ether	7.270	73	433313	10.94	ppb(v	98
36) Vinyl Acetate	7.374	43	428126	12.36	ppb(v	97
37) 1,1-Dichloroethane	7.221	63	308972	11.73	ppb(v	99
38) 2-Butanone	7.637	72	81458	11.83	ppb(v	80
39) Hexane	8.297	57	244182	10.84	ppb(v	89
40) cis-1,2-Dichloroethene	8.102	61	228228	11.65	ppb(v	96
41) Di-isopropyl Ether	8.303	87	145157	12.13	ppb(v	86
42) Ethyl Acetate	8.346	61	59275	13.26	ppb(v	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16057.D
Acq On : 4 Feb 2016 4:45 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Methyl Acrylate	8.334	55	314211	11.16	ppb(v	98
44) Chloroform	8.420	83	383795	11.69	ppb(v	98
45) 2,4-Dimethylpentane	9.282	57	301562	11.41	ppb(v	99
46) Tetrahydrofuran	8.866	72	84012	13.12	ppb(v	90
47) 1,1,1-Trichloroethane	9.515	97	358959	11.36	ppb(v	99
48) 1,2-Dichloroethane	9.233	62	213381	11.95	ppb(v	99
49) Benzene	10.047	78	549202	11.47	ppb(v	98
50) Carbon Tetrachloride	10.218	117	374513	11.51	ppb(v	99
51) Cyclohexane	10.347	56	249989	11.27	ppb(v	99
52) 2,3-Dimethylpentane	10.640	71	114887	11.61	ppb(v	95
54) 2,2,4-Trimethylpentane	11.332	57	850298	12.14	ppb(v	97
55) Heptane	11.674	71	171576	12.00	ppb(v	98
56) Trichloroethene	11.313	95	256057	11.52	ppb(v	98
57) 1,2-Dichloropropane	11.014	63	207164	12.44	ppb(v	98
58) Dibromomethane	10.995	174	249065	11.41	ppb(v	92
59) Ethyl Acrylate	11.050	55	387764	11.92	ppb(v	98
60) Methyl Methacrylate	11.583	69	184505	11.57	ppb(v	90
61) 1,4-Dioxane	11.332	88	134806	12.08	ppb(v	87
62) Bromodichloromethane	11.264	83	406578	11.62	ppb(v	99
63) cis-1,3-Dichloropropene	12.390	75	313388	11.09	ppb(v	98
64) 4-Methyl-2-pentanone	12.439	58	162211	12.64	ppb(v	89
65) trans-1,3-Dichloropropene	13.069	75	280147	11.99	ppb(v	98
66) Toluene	13.638	91	656762	11.57	ppb(v	100
67) 1,1,2-Trichloroethane	13.283	97	241664	11.92	ppb(v	99
68) 1,3-Dichloropropane	13.681	76	313962	12.22	ppb(v	94
69) 2-Hexanone	14.011	58	222564	12.61	ppb(v	89
70) Ethyl Methacrylate	14.048	69	339436	12.57	ppb(v	99
71) Dibromochloromethane	14.201	129	448335	11.97	ppb(v	99
72) Tetrachloroethene	15.155	166	341980	11.53	ppb(v	99
73) 1,2-Dibromoethane	14.513	107	384277	11.55	ppb(v	100
74) Octane	14.984	43	375524	11.93	ppb(v	95
75) 1,1,1,2-Tetrachloroethane	16.085	131	300430	11.67	ppb(v	98
77) Chlorobenzene	16.104	112	525605	10.55	ppb(v	98
78) Ethylbenzene	16.648	91	827193	10.66	ppb(v	99
79) m,p-Xylene	16.923	91	1298723	21.77	ppb(v	98
80) Styrene	17.443	104	487412	10.96	ppb(v	99
81) Nonane	17.976	43	377415	10.99	ppb(v	95
82) o-Xylene	17.596	91	660587	10.88	ppb(v	99
83) Bromoform	16.997	173	450495	10.88	ppb(v	100
84) 1,1,2,2-Tetrachloroethane	17.596	83	553037	11.36	ppb(v	99
85) 1,2,3-Trichloropropane	17.786	75	385849	11.24	ppb(v	99
86) Isopropylbenzene	18.508	105	932339	10.93	ppb(v	98
87) Bromobenzene	18.618	156	316643	10.47	ppb(v	97
88) 2-Chlorotoluene	19.224	126	226930	10.49	ppb(v	94
89) n-Propylbenzene	19.291	120	248442	11.12	ppb(v	94
91) 4-Ethyltoluene	19.511	105	865765	10.86	ppb(v	99
92) 1,3,5-Trimethylbenzene	19.633	105	732464	10.66	ppb(v	98
93) alpha-Methylstyrene	19.866	118	384674	11.16	ppb(v	98
94) tert-Butylbenzene	20.196	134	157150	10.83	ppb(v	98
95) 1,2,4-Trimethylbenzene	20.215	105	744675	10.82	ppb(v	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16057.D
Acq On : 4 Feb 2016 4:45 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

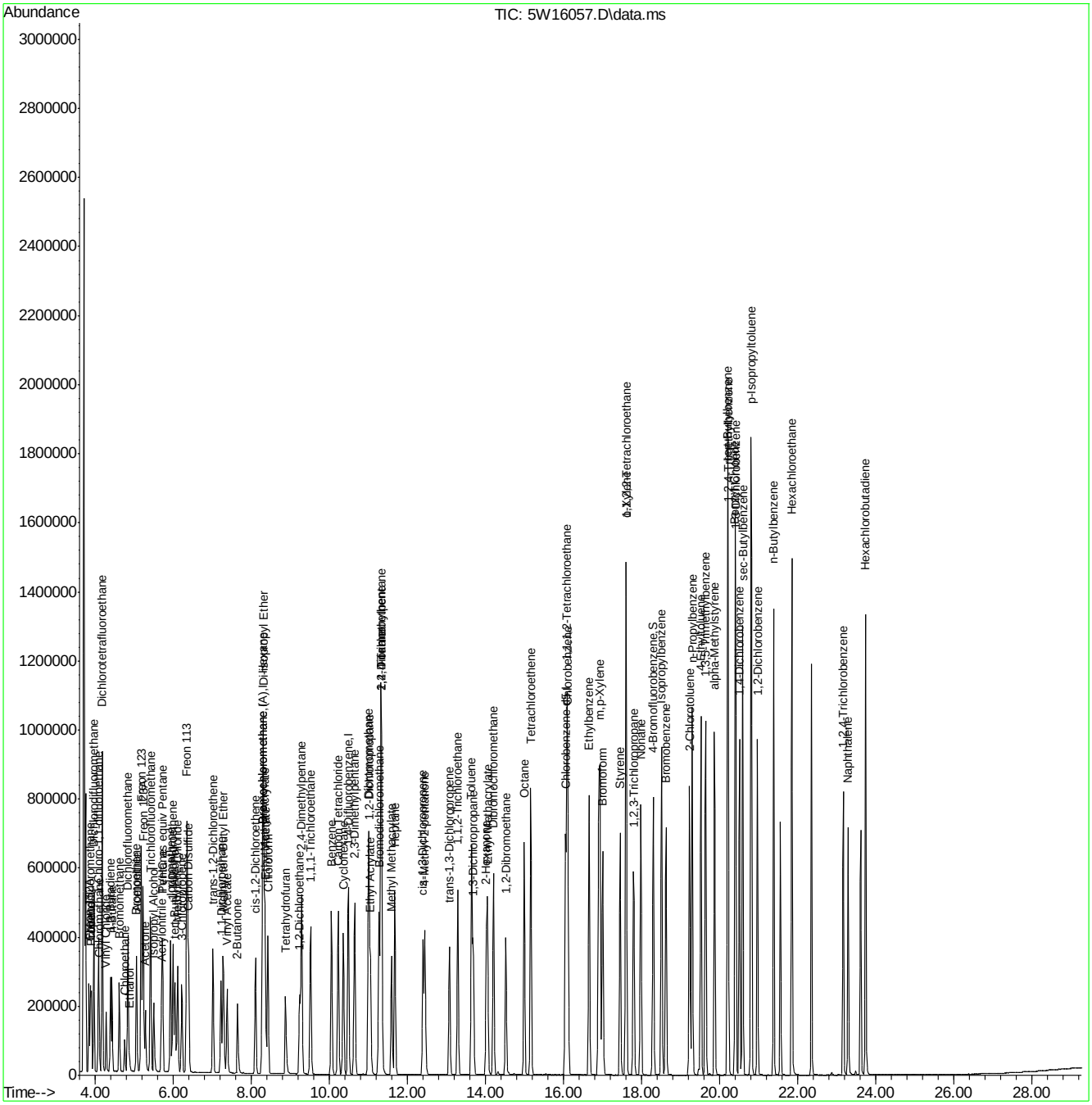
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96)	1,3-Dichlorobenzene	20.404	146	513833	10.66	ppb(v	97
97)	Benzyl Chloride	20.392	91	654898	10.92	ppb(v	98
98)	1,4-Dichlorobenzene	20.502	146	501416	10.06	ppb(v	97
99)	sec-Butylbenzene	20.582	134	198033	10.86	ppb(v	93
100)	p-Isopropyltoluene	20.808	134	227636	11.28	ppb(v	99
101)	1,2-Dichlorobenzene	20.961	146	480011	10.46	ppb(v	98
102)	n-Butylbenzene	21.377	134	197864	11.05	ppb(v	95
103)	Hexachloroethane	21.842	201	301789	11.10	ppb(v	92
104)	1,2,4-Trichlorobenzene	23.157	180	272833	9.65	ppb(v	99
105)	Naphthalene	23.286	128	585592	9.40	ppb(v	100
106)	Hexachlorobutadiene	23.732	225	282886	10.38	ppb(v	99
108)	TVHC as equiv Pentane	5.716	TIC	1044449	13.10	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16057.D
Acq On : 4 Feb 2016 4:45 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w646,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 05 12:10:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16066.D
Acq On : 5 Feb 2016 11:15 am
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:57:47 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.285	130	134491	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.481	114	487889	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.042	82	249110	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.285	130	134491	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	331235	10.08	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 100.80%			
Target Compounds						Qvalue
3) Freon 152A	3.844	65	79951	10.79	ppb(v	88
4) Chlorodifluoromethane	3.887	67	28899	10.58	ppb(v	98
5) Propene	3.911	41	83755	9.97	ppb(v	96
6) Dichlorodifluoromethane	3.972	85	322136	10.59	ppb(v	100
7) 1-Chloro-1,1-difluoroe...	4.082	65	212308	10.43	ppb(v	95
8) Chloromethane	4.107	50	117799	11.07	ppb(v	100
9) Dichlorotetrafluoroethane	4.180	85	374850	10.96	ppb(v	99
10) Vinyl Chloride	4.284	62	137433	11.50	ppb(v#	98
11) 1,3-Butadiene	4.394	54	95770	10.72	ppb(v	93
12) n-Butane	4.437	58	21508	10.94	ppb(v	81
13) Bromomethane	4.621	94	140181	10.17	ppb(v	98
14) Chloroethane	4.761	64	65599	11.13	ppb(v	97
15) Dichlorofluoromethane	4.835	67	305681	10.99	ppb(v	98
16) Acetonitrile	5.067	41	104182	10.83	ppb(v	96
17) Freon 123	5.184	83	343789	10.53	ppb(v	99
18) Freon 123A	5.232	117	183621	10.33	ppb(v	98
19) Bromoethene	5.061	106	138330	10.43	ppb(v	97
20) Trichlorofluoromethane	5.422	101	318316	10.22	ppb(v	99
21) Acetone	5.281	58	62831	9.81	ppb(v	81
22) Pentane	5.728	57	31563	9.88	ppb(v	85
24) Iodomethane	5.930	142	385372	10.31	ppb(v	95
25) Isopropyl Alcohol	5.502	43	36865	8.83	ppb(v	87
26) 1,1-Dichloroethene	5.997	61	196506	10.48	ppb(v	94
27) Freon 113	6.352	101	292640	10.62	ppb(v	97
28) Methylene Chloride	6.120	84	124337	9.78	ppb(v	92
29) Carbon Disulfide	6.395	76	403397	10.93	ppb(v	99
30) Ethanol	4.878	45	49934	10.16	ppb(v	98
31) Acrylonitrile	5.697	53	98709	10.78	ppb(v	99
32) 3-Chloropropene	6.224	76	59663	10.71	ppb(v	82
33) trans-1,2-Dichloroethene	7.019	61	181442	10.79	ppb(v	94
34) tert-Butyl Alcohol	6.046	59	261020	9.98	ppb(v	97
35) Methyl tert-Butyl Ether	7.276	73	324503	9.73	ppb(v	97
36) Vinyl Acetate	7.386	43	321782	11.03	ppb(v	96
37) 1,1-Dichloroethane	7.227	63	232265	10.47	ppb(v	99
38) 2-Butanone	7.643	72	62193	10.72	ppb(v	80
39) Hexane	8.304	57	189397	9.98	ppb(v	90
40) cis-1,2-Dichloroethene	8.108	61	170694	10.35	ppb(v	93
41) Di-isopropyl Ether	8.310	87	112104	11.12	ppb(v	89
42) Ethyl Acetate	8.353	61	45745	12.15	ppb(v	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16066.D
Acq On : 5 Feb 2016 11:15 am
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:57:47 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Methyl Acrylate	8.340	55	239727	10.11	ppb(v	98
44) Chloroform	8.426	83	290909	10.52	ppb(v	97
45) 2,4-Dimethylpentane	9.289	57	229008	10.29	ppb(v	99
46) Tetrahydrofuran	8.873	72	63233	11.72	ppb(v	87
47) 1,1,1-Trichloroethane	9.521	97	271010	10.19	ppb(v	98
48) 1,2-Dichloroethane	9.240	62	157404	10.47	ppb(v	99
49) Benzene	10.053	78	424044	10.51	ppb(v	98
50) Carbon Tetrachloride	10.225	117	286751	10.47	ppb(v	99
51) Cyclohexane	10.353	56	190653	10.21	ppb(v	98
52) 2,3-Dimethylpentane	10.641	71	87877	10.54	ppb(v	93
54) 2,2,4-Trimethylpentane	11.332	57	651504	11.13	ppb(v	97
55) Heptane	11.674	71	130318	10.91	ppb(v	99
56) Trichloroethene	11.313	95	197345	10.63	ppb(v	96
57) 1,2-Dichloropropane	11.020	63	159597	11.48	ppb(v	98
58) Dibromomethane	11.001	174	198157	10.87	ppb(v	87
59) Ethyl Acrylate	11.050	55	296383	10.91	ppb(v	98
60) Methyl Methacrylate	11.589	69	141558	10.63	ppb(v	90
61) 1,4-Dioxane	11.332	88	103266	11.08	ppb(v	87
62) Bromodichloromethane	11.265	83	312301	10.69	ppb(v	99
63) cis-1,3-Dichloropropene	12.396	75	243066	10.29	ppb(v	98
64) 4-Methyl-2-pentanone	12.439	58	124191	11.58	ppb(v	90
65) trans-1,3-Dichloropropene	13.075	75	215895	11.07	ppb(v	97
66) Toluene	13.638	91	503761	10.62	ppb(v	100
67) 1,1,2-Trichloroethane	13.283	97	186290	11.00	ppb(v	98
68) 1,3-Dichloropropane	13.681	76	237927	11.09	ppb(v	93
69) 2-Hexanone	14.011	58	170847	11.59	ppb(v	89
70) Ethyl Methacrylate	14.048	69	256500	11.37	ppb(v	99
71) Dibromochloromethane	14.201	129	355590	11.37	ppb(v	100
72) Tetrachloroethene	15.155	166	271797	10.97	ppb(v	98
73) 1,2-Dibromoethane	14.519	107	302449	10.89	ppb(v	99
74) Octane	14.990	43	286798	10.91	ppb(v	94
75) 1,1,1,2-Tetrachloroethane	16.085	131	237391	11.04	ppb(v	98
77) Chlorobenzene	16.104	112	410970	10.03	ppb(v	96
78) Ethylbenzene	16.648	91	638266	10.00	ppb(v	98
79) m,p-Xylene	16.923	91	999612	20.36	ppb(v	97
80) Styrene	17.443	104	375009	10.25	ppb(v	98
81) Nonane	17.976	43	288919	10.23	ppb(v	95
82) o-Xylene	17.596	91	511463	10.23	ppb(v	99
83) Bromoform	16.997	173	358905	10.53	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.596	83	431304	10.77	ppb(v	99
85) 1,2,3-Trichloropropane	17.786	75	290735	10.29	ppb(v	99
86) Isopropylbenzene	18.502	105	716856	10.21	ppb(v	98
87) Bromobenzene	18.618	156	250175	10.06	ppb(v	93
88) 2-Chlorotoluene	19.218	126	179646	10.09	ppb(v	93
89) n-Propylbenzene	19.291	120	193160	10.51	ppb(v	93
91) 4-Ethyltoluene	19.511	105	684394	10.43	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.634	105	564857	9.99	ppb(v	98
93) alpha-Methylstyrene	19.860	118	300418	10.59	ppb(v	98
94) tert-Butylbenzene	20.196	134	124364	10.41	ppb(v	90
95) 1,2,4-Trimethylbenzene	20.209	105	575120	10.16	ppb(v#	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16066.D
Acq On : 5 Feb 2016 11:15 am
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:57:47 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

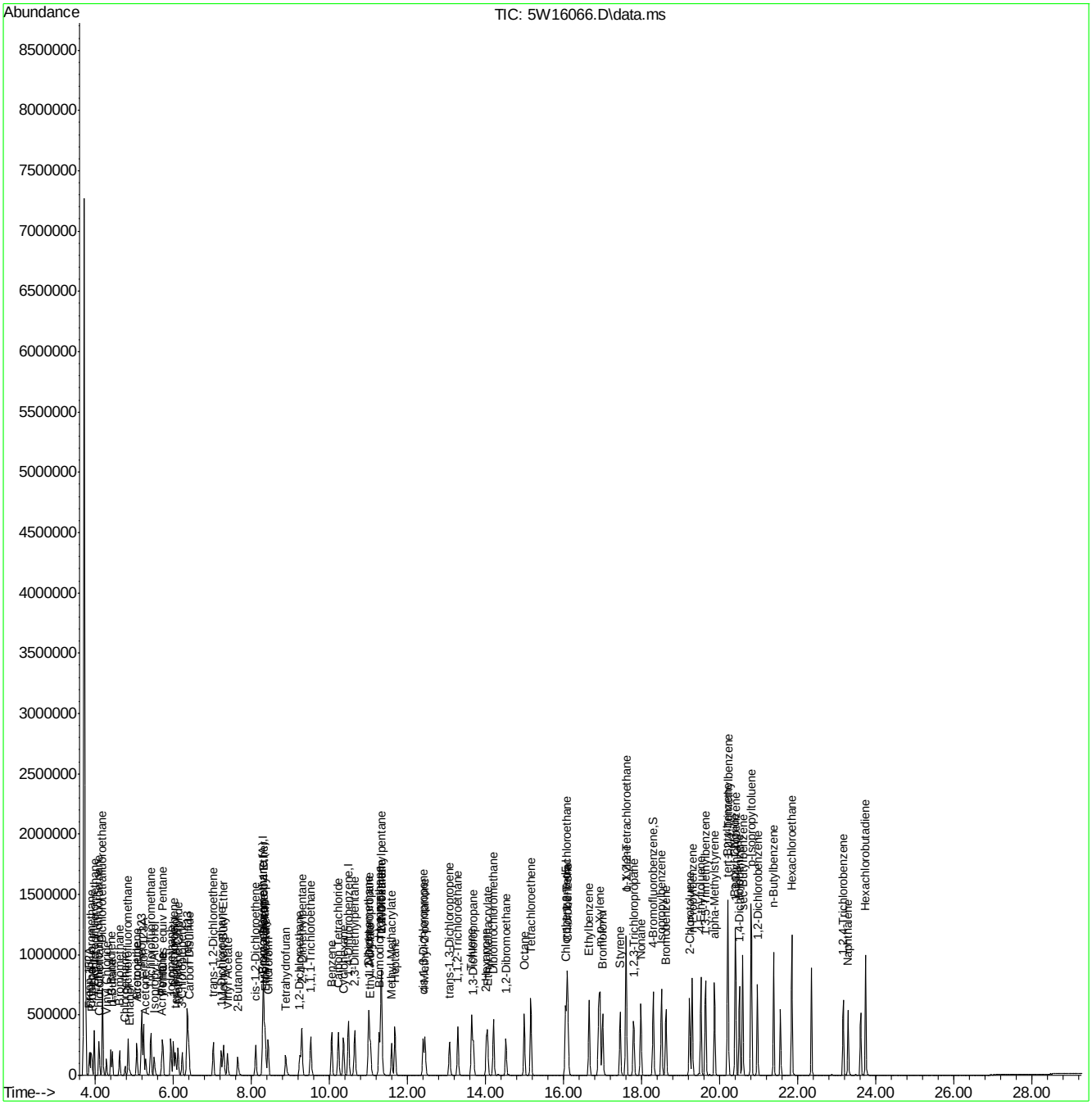
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 1,3-Dichlorobenzene	20.404	146	401118	10.11	ppb(v	96
97) Benzyl Chloride	20.392	91	499787	10.13	ppb(v	97
98) 1,4-Dichlorobenzene	20.502	146	392989	9.58	ppb(v	96
99) sec-Butylbenzene	20.582	134	156182	10.40	ppb(v	95
100) p-Isopropyltoluene	20.808	134	177258	10.68	ppb(v	97
101) 1,2-Dichlorobenzene	20.961	146	377344	9.99	ppb(v	96
102) n-Butylbenzene	21.377	134	153734	10.44	ppb(v	94
103) Hexachloroethane	21.842	201	241034	10.78	ppb(v	90
104) 1,2,4-Trichlorobenzene	23.157	180	212527	9.14	ppb(v	100
105) Naphthalene	23.286	128	445934	8.70	ppb(v	100
106) Hexachlorobutadiene	23.732	225	214470	9.56	ppb(v	98
108) TVHC as equiv Pentane	5.722	TIC	760834	11.33	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16066.D
Acq On : 5 Feb 2016 11:15 am
Operator : THOMASH
Sample : BS
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:57:47 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16067.D
Acq On : 5 Feb 2016 12:22 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:58:05 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.279	130	138604	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.475	114	496797	10.00	ppb(v	-0.01
76) Chlorobenzene-d5	16.042	82	252560	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.279	130	138604	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	330142	9.91	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 99.10%			
Target Compounds						Qvalue
3) Freon 152A	3.838	65	82585	10.82	ppb(v	90
4) Chlorodifluoromethane	3.874	67	30127	10.70	ppb(v	97
5) Propene	3.899	41	88468	10.22	ppb(v	98
6) Dichlorodifluoromethane	3.960	85	335911	10.72	ppb(v	100
7) 1-Chloro-1,1-difluoroe...	4.076	65	220225	10.50	ppb(v#	95
8) Chloromethane	4.095	50	122016	11.13	ppb(v	99
9) Dichlorotetrafluoroethane	4.174	85	388743	11.03	ppb(v	99
10) Vinyl Chloride	4.278	62	144232	11.71	ppb(v#	99
11) 1,3-Butadiene	4.382	54	99286	10.78	ppb(v	92
12) n-Butane	4.425	58	21878	10.80	ppb(v	84
13) Bromomethane	4.615	94	145579	10.25	ppb(v	99
14) Chloroethane	4.755	64	67434	11.10	ppb(v	97
15) Dichlorofluoromethane	4.829	67	314283	10.97	ppb(v	99
16) Acetonitrile	5.055	41	108715	10.96	ppb(v	98
17) Freon 123	5.177	83	356399	10.60	ppb(v	99
18) Freon 123A	5.226	117	175504	9.58	ppb(v	96
19) Bromoethene	5.049	106	144911	10.61	ppb(v	98
20) Trichlorofluoromethane	5.410	101	326791	10.18	ppb(v	100
21) Acetone	5.275	58	65999	10.00	ppb(v	72
22) Pentane	5.716	57	32877	9.99	ppb(v	79
24) Iodomethane	5.924	142	396792	10.30	ppb(v	94
25) Isopropyl Alcohol	5.489	43	37684	8.76	ppb(v	82
26) 1,1-Dichloroethene	5.991	61	202246	10.47	ppb(v	93
27) Freon 113	6.346	101	305490	10.76	ppb(v	97
28) Methylene Chloride	6.107	84	128046	9.78	ppb(v	90
29) Carbon Disulfide	6.389	76	423112	11.13	ppb(v	100
30) Ethanol	4.865	45	52565	10.38	ppb(v	98
31) Acrylonitrile	5.691	53	103887	11.01	ppb(v	96
32) 3-Chloropropene	6.217	76	62642	10.91	ppb(v	79
33) trans-1,2-Dichloroethene	7.013	61	187056	10.79	ppb(v	94
34) tert-Butyl Alcohol	6.034	59	271718	10.08	ppb(v	97
35) Methyl tert-Butyl Ether	7.270	73	340902	9.92	ppb(v	97
36) Vinyl Acetate	7.374	43	332887	11.07	ppb(v	96
37) 1,1-Dichloroethane	7.215	63	240733	10.53	ppb(v	99
38) 2-Butanone	7.637	72	64094	10.72	ppb(v	79
39) Hexane	8.297	57	194228	9.93	ppb(v	91
40) cis-1,2-Dichloroethene	8.102	61	179623	10.56	ppb(v	92
41) Di-isopropyl Ether	8.304	87	115333	11.10	ppb(v	89
42) Ethyl Acetate	8.346	61	46858	12.08	ppb(v	77

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16067.D
Acq On : 5 Feb 2016 12:22 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:58:05 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Methyl Acrylate	8.334	55	246147	10.08	ppb(v	99
44) Chloroform	8.420	83	296085	10.39	ppb(v	98
45) 2,4-Dimethylpentane	9.282	57	236698	10.32	ppb(v	99
46) Tetrahydrofuran	8.866	72	65760	11.83	ppb(v	89
47) 1,1,1-Trichloroethane	9.515	97	279983	10.21	ppb(v	98
48) 1,2-Dichloroethane	9.233	62	163044	10.52	ppb(v	98
49) Benzene	10.047	78	429047	10.32	ppb(v	98
50) Carbon Tetrachloride	10.218	117	293606	10.40	ppb(v	99
51) Cyclohexane	10.347	56	196284	10.20	ppb(v	98
52) 2,3-Dimethylpentane	10.634	71	89770	10.45	ppb(v	94
54) 2,2,4-Trimethylpentane	11.326	57	662014	11.11	ppb(v	96
55) Heptane	11.668	71	134848	11.09	ppb(v	98
56) Trichloroethene	11.307	95	201368	10.65	ppb(v	96
57) 1,2-Dichloropropane	11.014	63	162951	11.51	ppb(v	97
58) Dibromomethane	10.995	174	202375	10.90	ppb(v	89
59) Ethyl Acrylate	11.050	55	303259	10.96	ppb(v	98
60) Methyl Methacrylate	11.583	69	143290	10.57	ppb(v	89
61) 1,4-Dioxane	11.326	88	105879	11.16	ppb(v	85
62) Bromodichloromethane	11.258	83	316100	10.62	ppb(v	99
63) cis-1,3-Dichloropropene	12.390	75	251506	10.46	ppb(v	98
64) 4-Methyl-2-pentanone	12.439	58	125744	11.52	ppb(v	90
65) trans-1,3-Dichloropropene	13.069	75	220787	11.11	ppb(v	97
66) Toluene	13.638	91	518123	10.73	ppb(v	99
67) 1,1,2-Trichloroethane	13.283	97	190613	11.06	ppb(v	98
68) 1,3-Dichloropropane	13.681	76	241931	11.07	ppb(v	93
69) 2-Hexanone	14.011	58	178359	11.88	ppb(v	88
70) Ethyl Methacrylate	14.042	69	265199	11.55	ppb(v	99
71) Dibromochloromethane	14.195	129	364949	11.46	ppb(v	99
72) Tetrachloroethene	15.155	166	276349	10.96	ppb(v	98
73) 1,2-Dibromoethane	14.513	107	309528	10.94	ppb(v	98
74) Octane	14.984	43	291269	10.88	ppb(v	96
75) 1,1,1,2-Tetrachloroethane	16.079	131	243001	11.10	ppb(v	97
77) Chlorobenzene	16.104	112	423523	10.19	ppb(v	96
78) Ethylbenzene	16.648	91	657942	10.16	ppb(v	98
79) m,p-Xylene	16.899	91	1013688	20.36	ppb(v	97
80) Styrene	17.443	104	385963	10.41	ppb(v	97
81) Nonane	17.970	43	294542	10.28	ppb(v	94
82) o-Xylene	17.596	91	517604	10.22	ppb(v	99
83) Bromoform	16.997	173	366789	10.62	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.596	83	435720	10.73	ppb(v	99
85) 1,2,3-Trichloropropane	17.786	75	296771	10.36	ppb(v	99
86) Isopropylbenzene	18.502	105	735035	10.33	ppb(v	98
87) Bromobenzene	18.618	156	254752	10.10	ppb(v	92
88) 2-Chlorotoluene	19.218	126	182277	10.10	ppb(v	94
89) n-Propylbenzene	19.291	120	195958	10.52	ppb(v	91
91) 4-Ethyltoluene	19.511	105	702006	10.55	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.634	105	573424	10.01	ppb(v	98
93) alpha-Methylstyrene	19.860	118	305142	10.61	ppb(v	97
94) tert-Butylbenzene	20.196	134	126966	10.48	ppb(v	92
95) 1,2,4-Trimethylbenzene	20.209	105	581231	10.12	ppb(v	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16067.D
Acq On : 5 Feb 2016 12:22 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:58:05 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

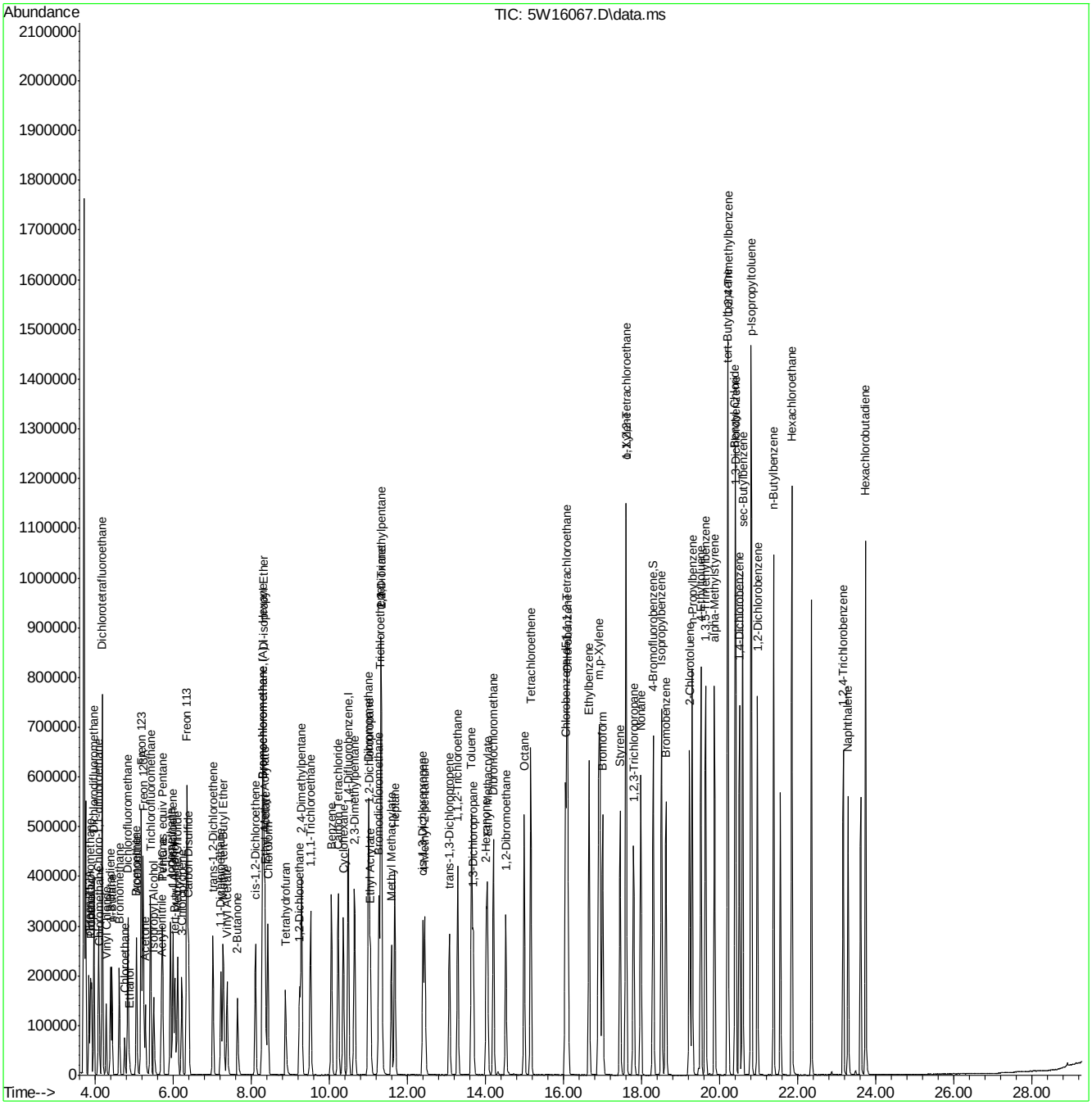
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 1,3-Dichlorobenzene	20.404	146	413613	10.28	ppb(v	95
97) Benzyl Chloride	20.392	91	517932	10.35	ppb(v	97
98) 1,4-Dichlorobenzene	20.502	146	399362	9.61	ppb(v	96
99) sec-Butylbenzene	20.582	134	158071	10.39	ppb(v	94
100) p-Isopropyltoluene	20.808	134	183062	10.87	ppb(v	98
101) 1,2-Dichlorobenzene	20.961	146	383597	10.02	ppb(v	96
102) n-Butylbenzene	21.377	134	161312	10.80	ppb(v	90
103) Hexachloroethane	21.842	201	246269	10.86	ppb(v	90
104) 1,2,4-Trichlorobenzene	23.157	180	222290	9.43	ppb(v	99
105) Naphthalene	23.286	128	473602	9.11	ppb(v	100
106) Hexachlorobutadiene	23.732	225	233155	10.25	ppb(v	99
108) TVHC as equiv Pentane	5.716	TIC	785796	11.35	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16067.D
Acq On : 5 Feb 2016 12:22 pm
Operator : THOMASH
Sample : BSD
Misc : MS97993,v5w647,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 08 08:58:05 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53483.D Vial: 3
Acq On : 12 Feb 2016 10:41 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:57:02 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	96205	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.91	114	509400	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.18	82	248380	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	305255	10.88	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 108.80%			
Target Compounds						Qvalue
3) FREON 152A	5.01	65	88884	11.02	PPBV	100
4) CHLORODIFLUOROMETHANE	5.05	67	35019	11.49	PPBV	99
5) DICHLORODIFLUOROMETHANE	5.16	85	365139	10.83	PPBV	100
6) PROPYLENE	5.08	41	115646	9.84	PPBV	99
7) FREON 114	5.40	85	378892	10.70	PPBV	99
9) CHLOROMETHANE	5.32	52	40962	11.16	PPBV	100
10) VINYL CHLORIDE	5.52	62	151451	10.95	PPBV	100
11) 1,3-BUTADIENE	5.64	54	116728	10.84	PPBV	99
12) n-BUTANE	5.69	58	33495	12.06	PPBV	95
13) BROMOMETHANE	5.89	94	125368	10.81	PPBV	100
14) CHLOROETHANE	6.03	64	75729	10.86	PPBV	90
15) DICHLOROFLUOROMETHANE	6.10	67	307860	10.49	PPBV	100
16) ACROLEIN	6.42	56	53780	10.96	PPBV	100
17) TRICHLOROFLUOROMETHANE	6.69	101	331639	9.88	PPBV	100
18) ISOPROPYL ALCOHOL	6.71	45	229114	8.74	PPBV	99
19) ACETONE	6.52	58	62591	10.29	PPBV	97
21) ACRYLONITRILE	6.92	53	101762	11.91	PPBV	99
22) PENTANE	6.97	57	37795	11.08	PPBV	99
23) IODOMETHANE	7.19	142	306626	10.28	PPBV	100
24) 1,1-DICHLOROETHYLENE	7.23	96	119814	9.26	PPBV	99
25) CARBON DISULFIDE	7.63	76	346991	9.85	PPBV	99
26) ETHANOL	6.11	45	49977	9.31	PPBV	99
27) ACETONITRILE	6.30	41	103031	10.65	PPBV	100
28) BROMOETHENE	6.34	106	123402	10.42	PPBV	100
29) METHYLENE CHLORIDE	7.32	84	103177	9.64	PPBV	100
30) 3-CHLOROPROPENE	7.43	76	59439	11.08	PPBV	95
31) FREON 113	7.54	151	210050	10.38	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	120995	9.58	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.22	59	270634	10.37	PPBV	99
34) METHYL TERTIARY BUTYL ETHE	8.33	73	348923	10.72	PPBV	98
35) TETRAHYDROFURAN	9.66	72	58262	11.44	PPBV	98
36) HEXANE	9.19	57	200442	9.83	PPBV	99
37) VINYL ACETATE	8.39	86	34125	12.13	PPBV #	92
38) 1,1-DICHLOROETHANE	8.31	63	224069	10.18	PPBV	99
39) METHYL ETHYL KETONE	8.63	72	57474	11.59	PPBV	93
40) cis-1,2-DICHLOROETHYLENE	9.04	96	123186	9.84	PPBV	100
41) DI-ISOPROPYL ETHER	9.16	87	112897	11.59	PPBV	96
42) ETHYL ACETATE	9.18	61	40316	11.55	PPBV #	93
43) METHYL ACRYLATE	9.19	55	223182	11.07	PPBV	99
44) CHLOROFORM	9.30	83	251137	10.48	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.99	57	237362	10.27	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53483.D Vial: 3
Acq On : 12 Feb 2016 10:41 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:57:02 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	263452	10.37	PPBV		99
47)	CARBON TETRACHLORIDE	10.77	117	278747	10.46	PPBV		99
48)	1,2-DICHLOROETHANE	9.97	62	163797	10.78	PPBV		100
50)	BENZENE	10.63	78	392475	10.22	PPBV		99
51)	CYCLOHEXANE	10.89	84	173128	10.09	PPBV		98
52)	2,3-DIMETHYLPENTANE	11.07	71	88776	10.69	PPBV		98
53)	TRICHLOROETHYLENE	11.60	95	161939	10.41	PPBV		97
54)	DIBROMOMETHANE	11.36	174	150328	10.86	PPBV		100
55)	1,2-DICHLOROPROPANE	11.38	63	137276	10.19	PPBV		100
56)	ETHYL ACRYLATE	11.31	55	256204	11.40	PPBV		99
57)	BROMODICHLOROMETHANE	11.56	83	270559	10.44	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.60	57	649251	10.57	PPBV		99
59)	1,4-DIOXANE	11.59	88	79960	11.31	PPBV	#	88
60)	METHYL METHACRYLATE	11.73	69	128093	11.77	PPBV		97
61)	HEPTANE	11.83	43	230421	10.57	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.41	43	258062	11.19	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.40	75	220354	10.78	PPBV		99
64)	TOLUENE	13.38	92	275327	11.35	PPBV		99
65)	1,3-DICHLOROPROPANE	13.39	76	215775	11.37	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.91	75	187635	11.93	PPBV		98
67)	1,1,2-TRICHLOROETHANE	13.10	83	120651	11.43	PPBV		100
69)	ETHYL METHACRYLATE	13.58	69	224241	12.51	PPBV		99
70)	2-HEXANONE	13.58	58	136663	11.17	PPBV		98
71)	TETRACHLOROETHYLENE	14.52	164	183581	10.70	PPBV		100
72)	DIBROMOCHLOROMETHANE	13.81	129	272466	11.21	PPBV		99
73)	1,2-DIBROMOETHANE	14.06	107	209902	11.60	PPBV		99
74)	OCTANE	14.31	43	317468	11.27	PPBV		97
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	204198	11.53	PPBV		94
76)	CHLOROBENZENE	15.22	112	352207	10.93	PPBV		99
77)	ETHYLBENZENE	15.60	91	555845	11.25	PPBV		100
78)	m,p-XYLENE	15.79	106	465466	24.06	PPBV		100
79)	o-XYLENE	16.30	106	223230	12.21	PPBV		100
80)	STYRENE	16.19	104	346455	12.78	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.44	75	232583	11.36	PPBV		99
82)	NONANE	16.48	43	330535	12.06	PPBV		99
83)	BROMOFORM	15.91	173	252431	11.81	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	298833	11.36	PPBV		99
86)	ISOPROPYLBENZENE	16.92	105	676847	11.55	PPBV		99
87)	BROMOBENZENE	17.05	156	187202	12.03	PPBV		98
88)	2-CHLOROTOLUENE	17.45	126	153543	11.87	PPBV	#	79
89)	n-PROPYLBENZENE	17.48	120	176695	12.50	PPBV		95
90)	4-ETHYLTOLUENE	17.63	105	563831	12.23	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.71	105	535831	12.17	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.89	118	245189	13.45	PPBV		100
93)	TERT-BUTYLBENZENE	18.16	134	134606	12.82	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	495481	12.13	PPBV		99
95)	m-DICHLOROBENZENE	18.36	146	269255	11.75	PPBV		100
96)	BENZYL CHLORIDE	18.33	91	328113	12.07	PPBV		99
97)	p-DICHLOROBENZENE	18.43	146	265007	11.76	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53483.D Vial: 3
Acq On : 12 Feb 2016 10:41 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:57:02 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

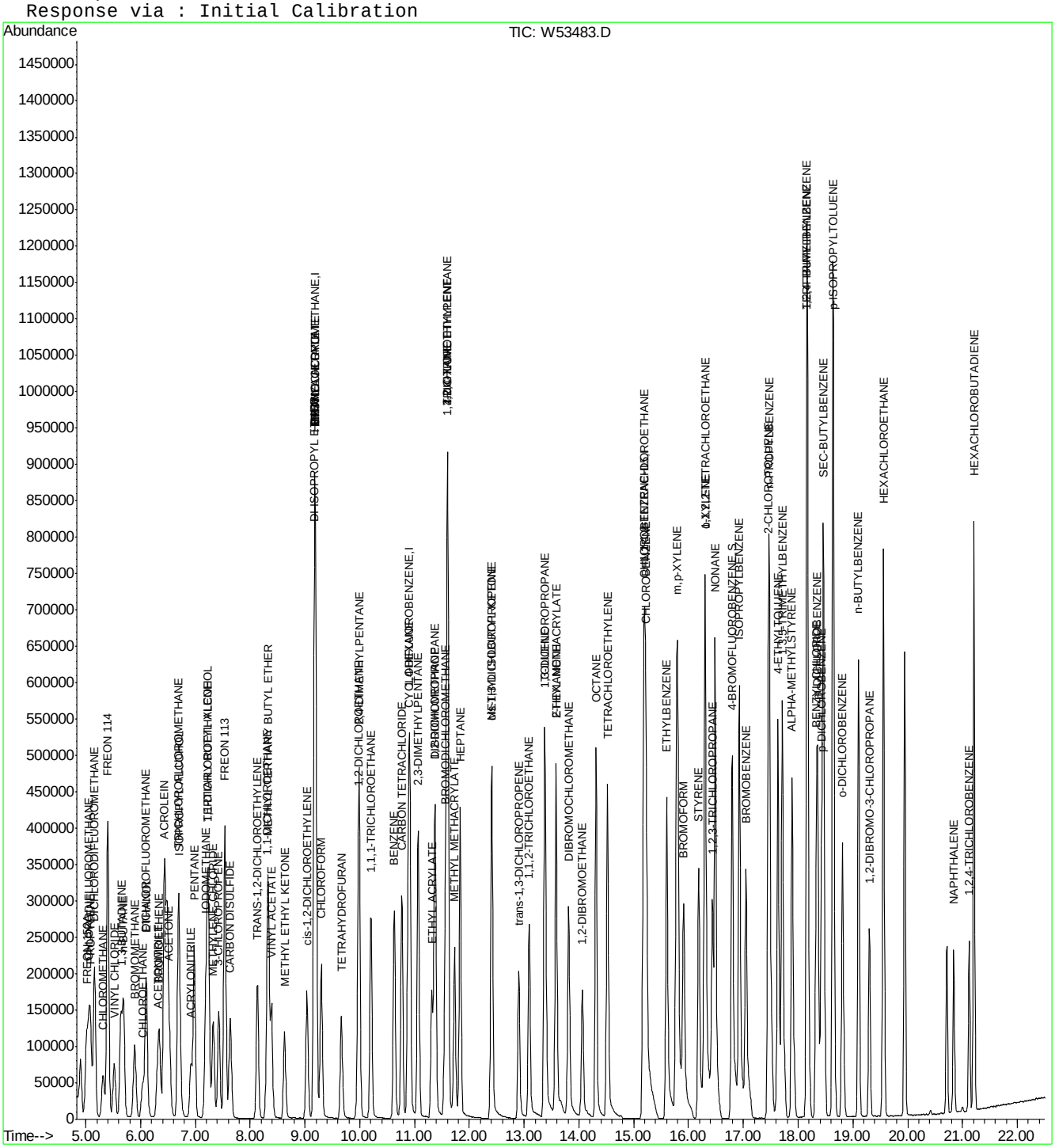
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.46	134	158101	12.69	PPBV	98
99)	p-ISOPROPYLTOLUENE	18.63	134	166621	13.10	PPBV	99
100)	o-DICHLOROBENZENE	18.81	146	257774	11.69	PPBV	99
101)	n-BUTYLBENZENE	19.11	134	136561	13.10	PPBV	97
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	110361	11.27	PPBV	99
103)	HEXACHLOROETHANE	19.56	201	202020	11.84	PPBV	99
104)	HEXACHLOROBUTADIENE	21.21	225	202474	12.00	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.12	180	102104	11.68	PPBV	100
106)	NAPHTHALENE	20.84	128	236925	10.95	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53483.D Vial: 3
Acq On : 12 Feb 2016 10:41 am Operator: YOUMINH
Sample : BS Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:58 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53484.D Vial: 3
Acq On : 12 Feb 2016 11:22 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:57:06 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.18	128	104379	10.00	PPBV	-0.01
49) 1,4-DIFLUOROBENZENE	10.91	114	556539	10.00	PPBV	-0.01
68) CHLOROBENZENE-D5	15.17	82	264913	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	328587	10.98	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 109.80%			
Target Compounds						Qvalue
3) FREON 152A	4.99	65	84348	9.64	PPBV	98
4) CHLORODIFLUOROMETHANE	5.04	67	33056	10.00	PPBV	99
5) DICHLORODIFLUOROMETHANE	5.13	85	349868	9.56	PPBV	100
6) PROPYLENE	5.06	41	112173	8.79	PPBV	98
7) FREON 114	5.38	85	353119	9.19	PPBV	98
9) CHLOROMETHANE	5.29	52	39785	9.99	PPBV	96
10) VINYL CHLORIDE	5.50	62	146691	9.78	PPBV	100
11) 1,3-BUTADIENE	5.62	54	108930	9.32	PPBV	100
12) n-BUTANE	5.67	58	32436	10.77	PPBV	93
13) BROMOMETHANE	5.87	94	118792	9.44	PPBV	100
14) CHLOROETHANE	6.02	64	70820	9.36	PPBV	99
15) DICHLOROFLUOROMETHANE	6.08	67	285198	8.95	PPBV	99
16) ACROLEIN	6.40	56	47278	8.88	PPBV	96
17) TRICHLOROFLUOROMETHANE	6.67	101	306087	8.40	PPBV	100
18) ISOPROPYL ALCOHOL	6.69	45	208619	7.34	PPBV	100
19) ACETONE	6.52	58	55404	8.39	PPBV	92
21) ACRYLONITRILE	6.91	53	90565	9.77	PPBV	98
22) PENTANE	6.96	57	34266	9.26	PPBV	98
23) IODOMETHANE	7.17	142	275269	8.51	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.22	96	107199	7.63	PPBV	99
25) CARBON DISULFIDE	7.62	76	316264	8.28	PPBV	100
26) ETHANOL	6.08	45	45262	7.77	PPBV	99
27) ACETONITRILE	6.29	41	90641	8.63	PPBV	99
28) BROMOETHENE	6.32	106	113915	8.86	PPBV	100
29) METHYLENE CHLORIDE	7.31	84	93524	8.05	PPBV	99
30) 3-CHLOROPROPENE	7.41	76	53656	9.22	PPBV	95
31) FREON 113	7.52	151	188448	8.58	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.12	96	107055	7.81	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.21	59	238793	8.43	PPBV	99
34) METHYL TERTIARY BUTYL ETHE	8.32	73	293915	8.33	PPBV	98
35) TETRAHYDROFURAN	9.66	72	48751	8.82	PPBV	98
36) HEXANE	9.19	57	176368	7.97	PPBV	99
37) VINYL ACETATE	8.38	86	29297	9.60	PPBV #	89
38) 1,1-DICHLOROETHANE	8.30	63	200396	8.39	PPBV	100
39) METHYL ETHYL KETONE	8.62	72	47999	8.92	PPBV #	91
40) cis-1,2-DICHLOROETHYLENE	9.03	96	110430	8.13	PPBV	99
41) DI-ISOPROPYL ETHER	9.16	87	94758	8.97	PPBV	95
42) ETHYL ACETATE	9.17	61	34556	9.12	PPBV #	95
43) METHYL ACRYLATE	9.18	55	186746	8.54	PPBV	99
44) CHLOROFORM	9.29	83	223127	8.59	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.98	57	207533	8.28	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53484.D Vial: 3
Acq On : 12 Feb 2016 11:22 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:57:06 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.19	97	233707	8.48	PPBV		99
47)	CARBON TETRACHLORIDE	10.76	117	244673	8.46	PPBV		99
48)	1,2-DICHLOROETHANE	9.96	62	145998	8.86	PPBV		100
50)	BENZENE	10.62	78	348086	8.29	PPBV		99
51)	CYCLOHEXANE	10.88	84	153880	8.21	PPBV		98
52)	2,3-DIMETHYLPENTANE	11.06	71	78911	8.69	PPBV		97
53)	TRICHLOROETHYLENE	11.59	95	143199	8.43	PPBV		98
54)	DIBROMOMETHANE	11.36	174	132518	8.76	PPBV		99
55)	1,2-DICHLOROPROPANE	11.37	63	118777	8.07	PPBV		99
56)	ETHYL ACRYLATE	11.30	55	214304	8.73	PPBV		99
57)	BROMODICHLOROMETHANE	11.56	83	236898	8.36	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.60	57	568121	8.46	PPBV		99
59)	1,4-DIOXANE	11.58	88	68225	8.83	PPBV	#	85
60)	METHYL METHACRYLATE	11.72	69	104648	8.80	PPBV		97
61)	HEPTANE	11.83	43	198536	8.34	PPBV		98
62)	METHYL ISOBUTYL KETONE	12.41	43	216263	8.58	PPBV		98
63)	cis-1,3-DICHLOROPROPENE	12.40	75	191875	8.59	PPBV		99
64)	TOLUENE	13.37	92	235182	8.88	PPBV		99
65)	1,3-DICHLOROPROPANE	13.39	76	182500	8.80	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.90	75	159007	9.25	PPBV		100
67)	1,1,2-TRICHLOROETHANE	13.09	83	103131	8.94	PPBV		99
69)	ETHYL METHACRYLATE	13.58	69	184410	9.64	PPBV		100
70)	2-HEXANONE	13.58	58	117003	8.97	PPBV		98
71)	TETRACHLOROETHYLENE	14.52	164	158753	8.68	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.81	129	237058	9.15	PPBV		99
73)	1,2-DIBROMOETHANE	14.06	107	178837	9.27	PPBV		99
74)	OCTANE	14.31	43	273655	9.11	PPBV		97
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	172780	9.15	PPBV		89
76)	CHLOROBENZENE	15.22	112	299845	8.73	PPBV		100
77)	ETHYLBENZENE	15.60	91	461083	8.75	PPBV		100
78)	m,p-XYLENE	15.79	106	386071	18.71	PPBV		98
79)	o-XYLENE	16.30	106	186817	9.58	PPBV		98
80)	STYRENE	16.19	104	288313	9.97	PPBV		100
81)	1,2,3-TRICHLOROPROPANE	16.44	75	191914	8.79	PPBV		100
82)	NONANE	16.48	43	281100	9.62	PPBV		99
83)	BROMOFORM	15.91	173	211865	9.29	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	246985	8.80	PPBV		100
86)	ISOPROPYLBENZENE	16.92	105	560234	8.96	PPBV		99
87)	BROMOBENZENE	17.05	156	157305	9.47	PPBV		98
88)	2-CHLOROTOLUENE	17.45	126	127541	9.25	PPBV	#	88
89)	n-PROPYLBENZENE	17.47	120	145073	9.62	PPBV		95
90)	4-ETHYLTOLUENE	17.63	105	458726	9.33	PPBV		97
91)	1,3,5-TRIMETHYLBENZENE	17.71	105	439604	9.36	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.89	118	199719	10.27	PPBV		100
93)	TERT-BUTYLBENZENE	18.16	134	109153	9.75	PPBV		100
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	400193	9.19	PPBV		98
95)	m-DICHLOROBENZENE	18.36	146	225526	9.22	PPBV		100
96)	BENZYL CHLORIDE	18.33	91	266586	9.20	PPBV		100
97)	p-DICHLOROBENZENE	18.42	146	219874	9.15	PPBV		100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53484.D Vial: 3
Acq On : 12 Feb 2016 11:22 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:57:06 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

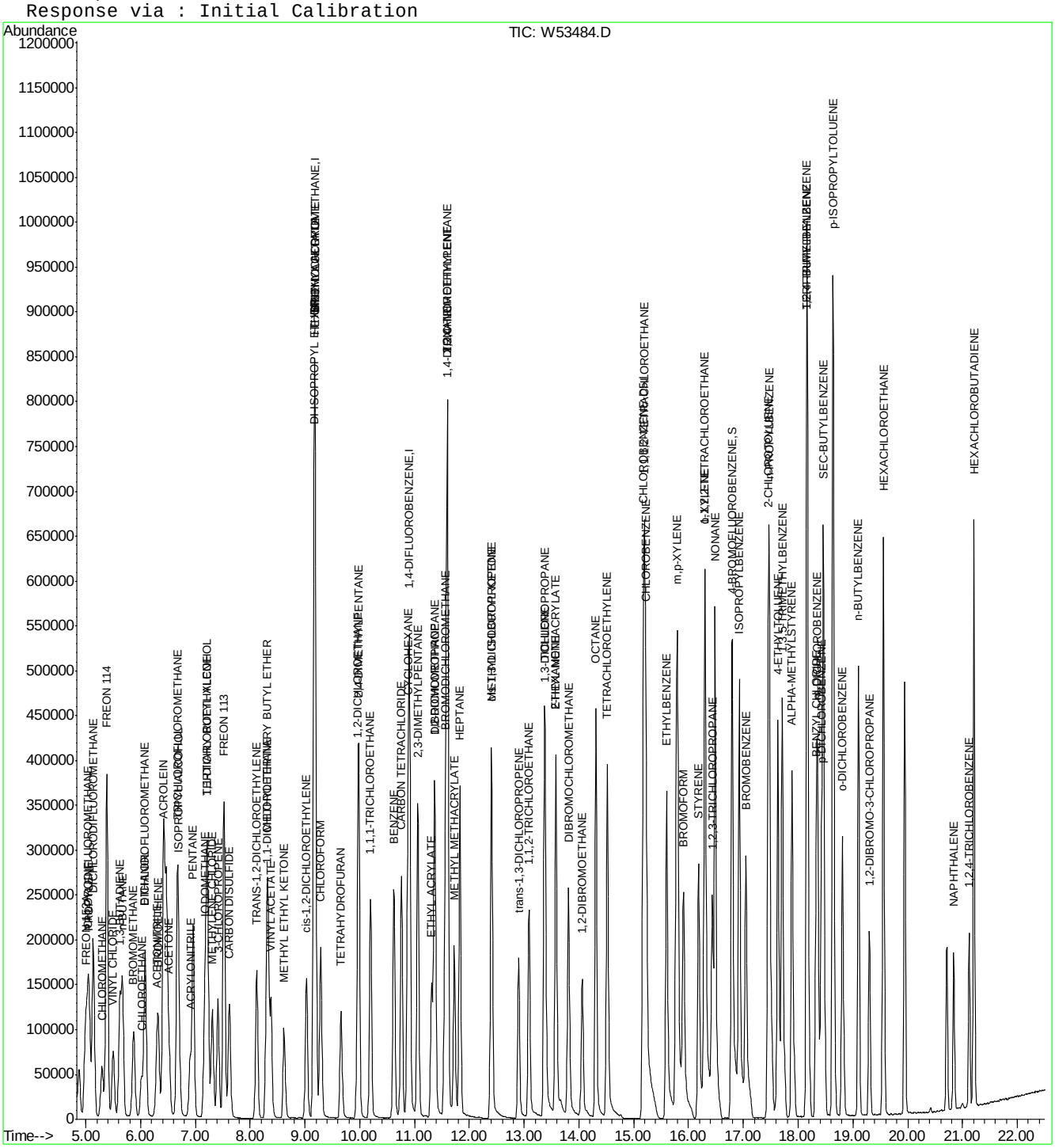
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.46	134	128285	9.65	PPBV	99
99)	p-ISOPROPYLTOLUENE	18.63	134	135191	9.96	PPBV	99
100)	o-DICHLOROBENZENE	18.81	146	211076	8.98	PPBV	99
101)	n-BUTYLBENZENE	19.10	134	109695	9.87	PPBV	96
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	88775	8.50	PPBV	99
103)	HEXACHLOROETHANE	19.56	201	169831	9.33	PPBV	99
104)	HEXACHLOROBUTADIENE	21.21	225	163087	9.06	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.12	180	82546	8.85	PPBV	100
106)	NAPHTHALENE	20.84	128	189048	8.19	PPBV	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W53484.D MW2140.M Fri Feb 12 16:03:58 2016 MSW Page 3

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53484.D Vial: 3
Acq On : 12 Feb 2016 11:22 am Operator: YOUMINH
Sample : BSD Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:58 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54093.D Vial: 12
Acq On : 11 Mar 2016 7:48 pm Operator: YOUMINH
Sample : JC15063-2DUP Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 10:56:01 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

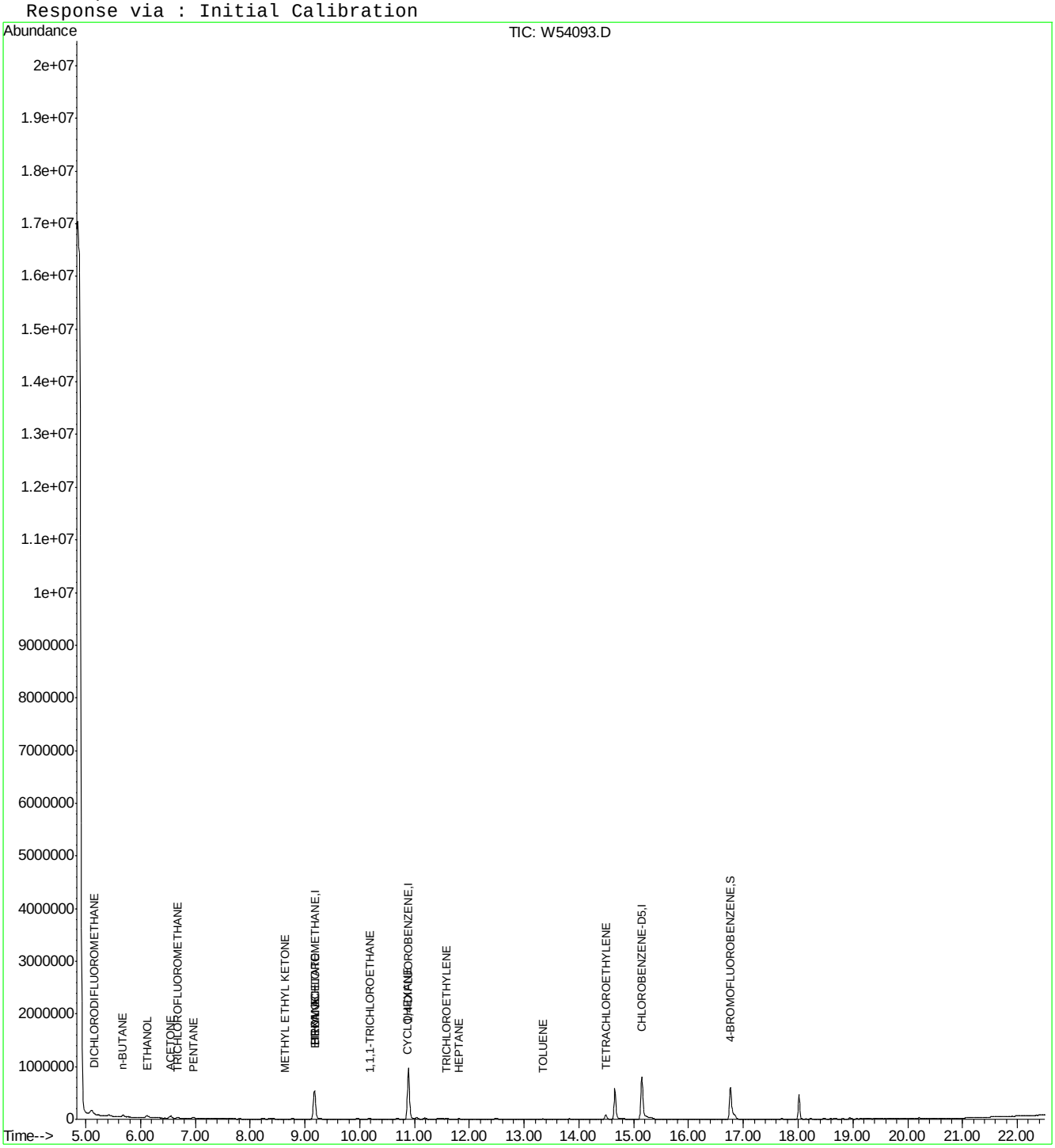
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	232265	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1179311	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	452755	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	377550	7.48	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 74.80%				
Target Compounds							Qvalue
5) DICHLORODIFLUOROMETHANE	5.15	85	29006	0.47	PPBV		97
12) n-BUTANE	5.68	58	7536	1.25	PPBV	#	71
17) TRICHLOROFLUOROMETHANE	6.68	101	15821	0.28	PPBV		96
19) ACETONE	6.54	58	14951	1.13	PPBV	#	48
22) PENTANE	6.96	57	3066	0.40	PPBV	#	70
26) ETHANOL	6.12	45	82790	8.78	PPBV		99
36) HEXANE	9.18	57	4162	0.10	PPBV		97
39) METHYL ETHYL KETONE	8.64	72	1276	0.11	PPBV	#	90
42) ETHYL ACETATE	9.19	61	4766	0.59	PPBV	#	15
46) 1,1,1-TRICHLOROETHANE	10.19	97	9559	0.20	PPBV		95
51) CYCLOHEXANE	10.86	84	4899	0.13	PPBV	#	4
53) TRICHLOROETHYLENE	11.57	95	1992	0.06	PPBV		89
61) HEPTANE	11.80	43	4262	0.10	PPBV		82
64) TOLUENE	13.35	92	3608	0.07	PPBV		99
71) TETRACHLOROETHYLENE	14.49	164	29408	0.81	PPBV		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54093.D MW2152.M Sat Mar 12 13:30:03 2016 MSW Page 1

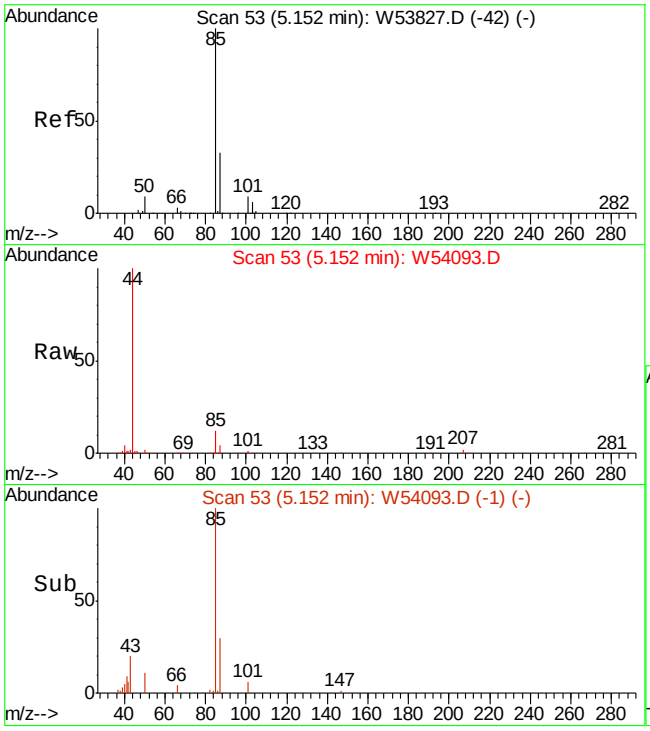
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54093.D Vial: 12
Acq On : 11 Mar 2016 7:48 pm Operator: YOUMINH
Sample : JC15063-2DUP Inst : MSW
Misc : MS99025,VW2161,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 12 13:29 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



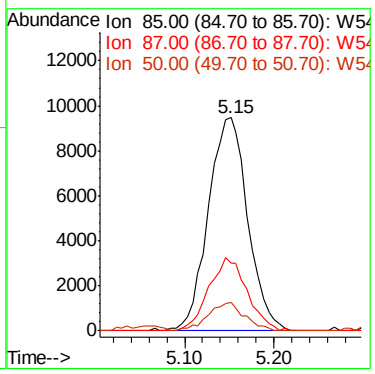
W54093.D MW2152.M Sat Mar 12 13:30:03 2016 MSW Page 2

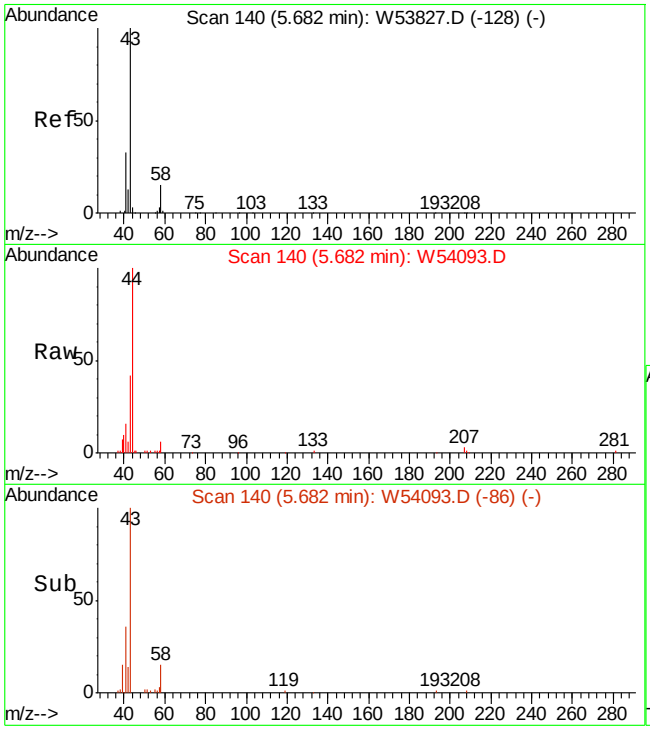


#5
DICHLORODIFLUOROMETHANE
Concen: 0.47 PPBV
RT: 5.15 min Scan# 53
Delta R.T. -0.00 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 85 Resp: 29006

Ion	Ratio	Lower	Upper
85	100		
87	33.3	12.4	52.4
50	12.3	0.0	30.2

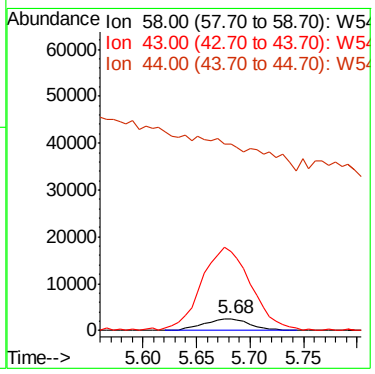


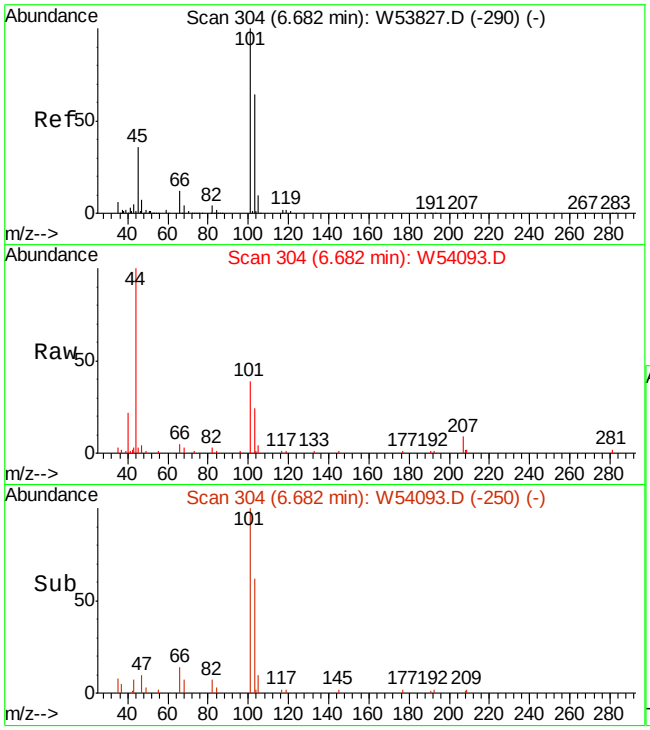


#12
n-BUTANE
Concen: 1.25 PPBV
RT: 5.68 min Scan# 140
Delta R.T. -0.00 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 58 Resp: 7536

Ion	Ratio	Lower	Upper
58	100		
43	762.3	534.9	802.3
44	0.0	19.2	28.8#

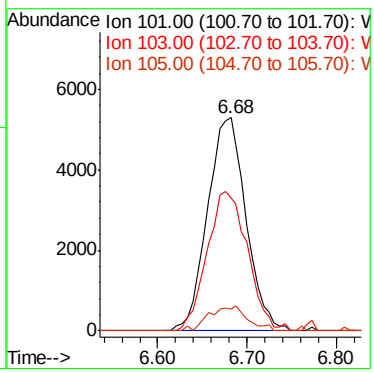


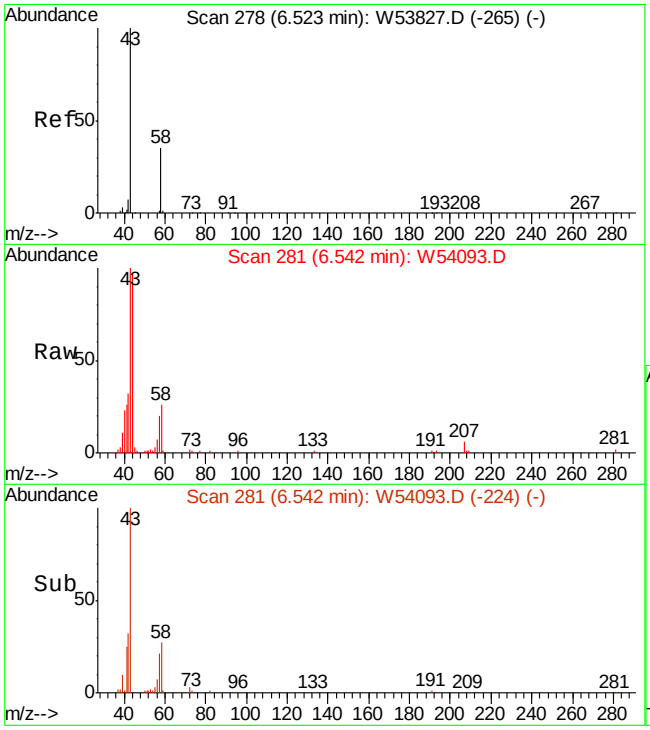


#17
TRICHLOROFLUOROMETHANE
Concen: 0.28 PPBV
RT: 6.68 min Scan# 304
Delta R.T. -0.00 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion:101 Resp: 15821

Ion	Ratio	Lower	Upper
101	100		
103	68.8	45.0	85.0
105	11.5	0.0	30.6

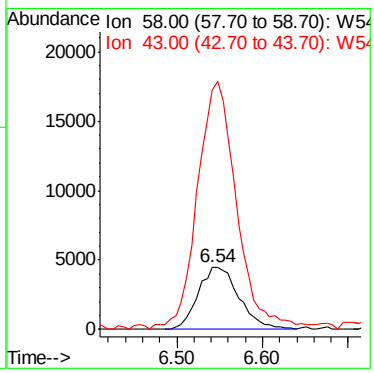


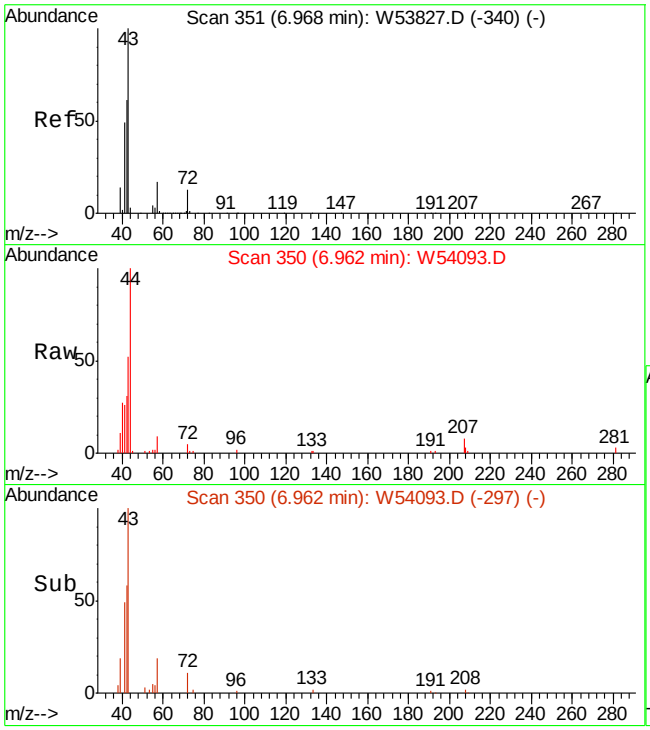


#19
ACETONE
Concen: 1.13 PPBV
RT: 6.54 min Scan# 281
Delta R.T. 0.02 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 58 Resp: 14951

Ion	Ratio	Lower	Upper
58	100		
43	382.2	263.9	303.9#

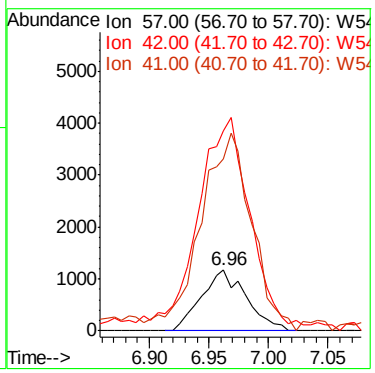


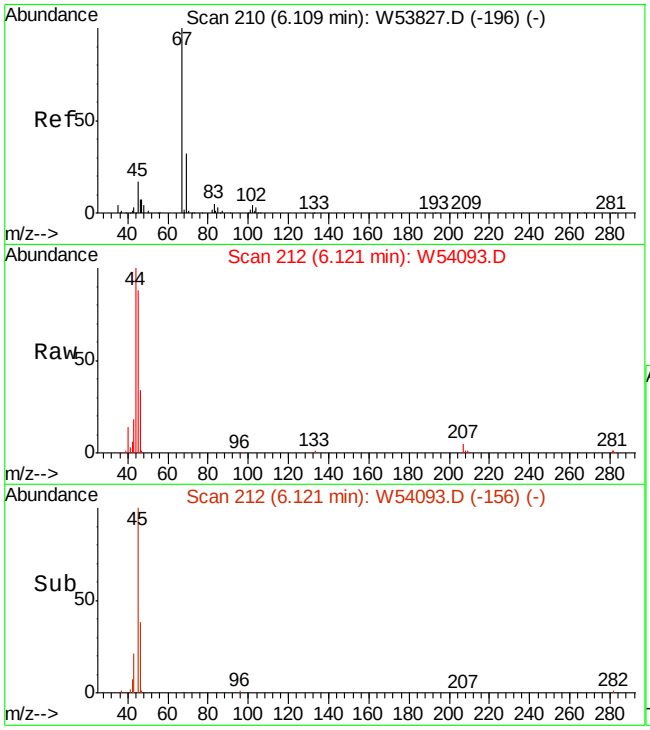


#22
PENTANE
Concen: 0.40 PPBV
RT: 6.96 min Scan# 350
Delta R.T. -0.01 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 57 Resp: 3066

Ion	Ratio	Lower	Upper
57	100		
42	420.5	345.4	385.4#
41	373.1	280.2	320.2#

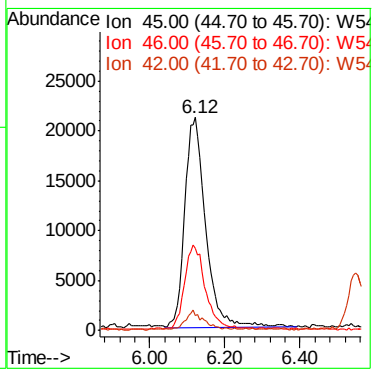


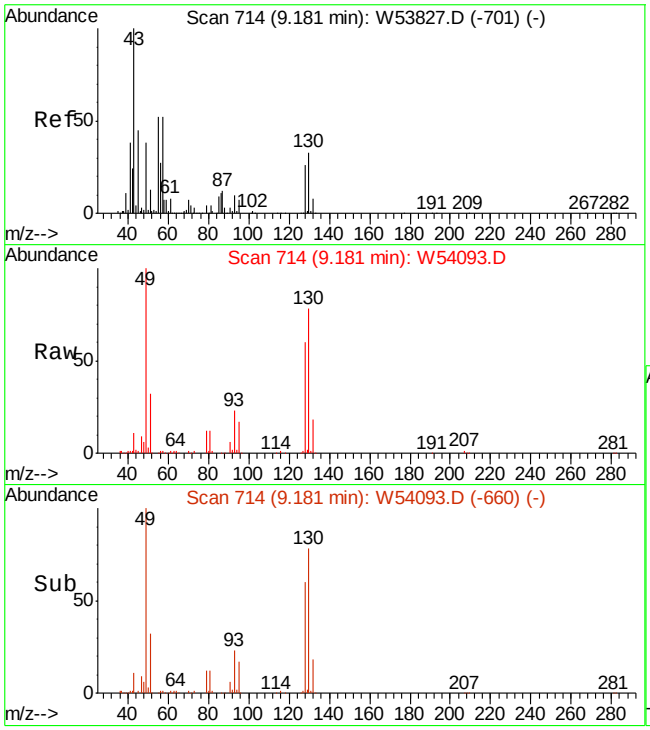


#26
ETHANOL
Concen: 8.78 PPBV
RT: 6.12 min Scan# 212
Delta R.T. 0.01 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 45 Resp: 82790

Ion	Ratio	Lower	Upper
45	100		
46	40.4	21.2	61.2
42	8.8	0.0	29.3

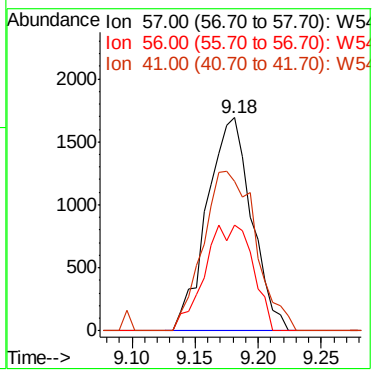


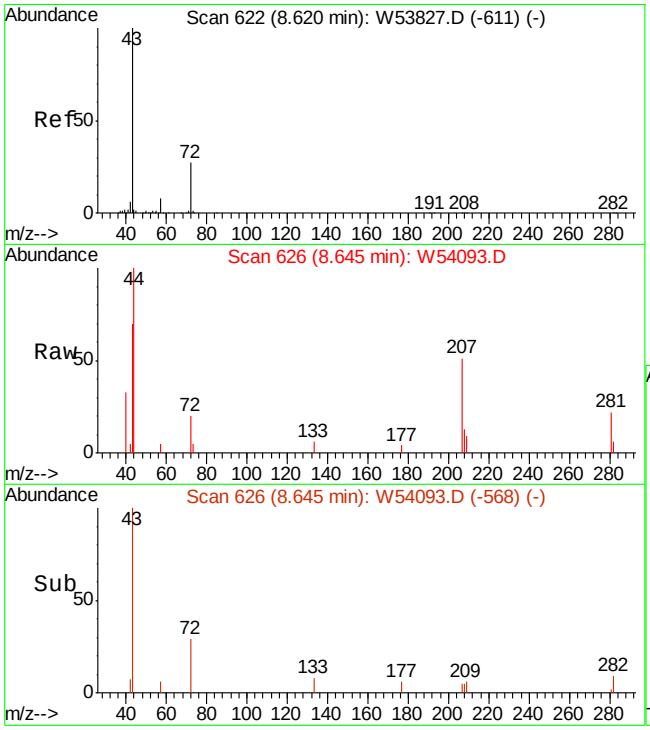


#36
HEXANE
Concen: 0.10 PPBV
RT: 9.18 min Scan# 714
Delta R.T. -0.00 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 57 Resp: 4162

Ion	Ratio	Lower	Upper
57	100		
56	53.6	32.7	72.7
41	88.0	72.1	112.1

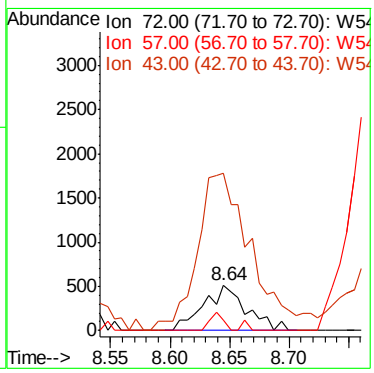


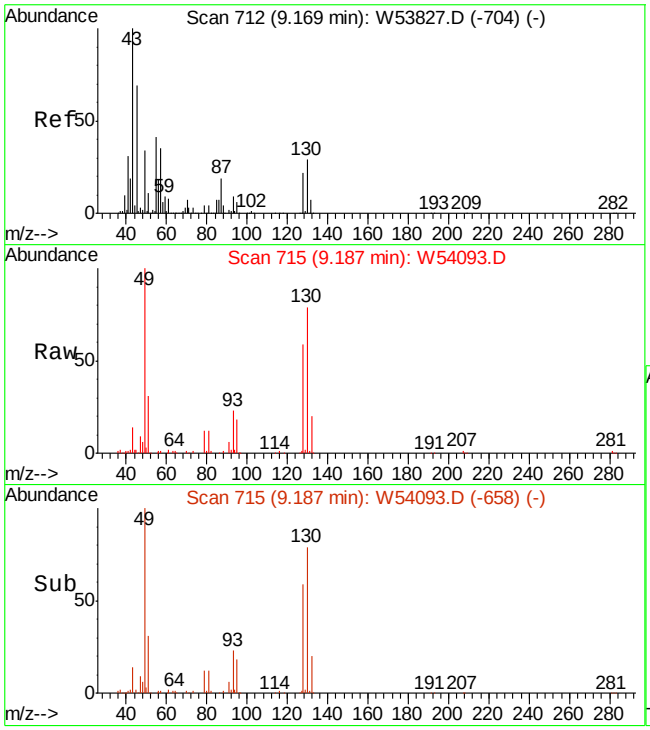


#39
METHYL ETHYL KETONE
Concen: 0.11 PPBV
RT: 8.64 min Scan# 626
Delta R.T. 0.02 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 72 Resp: 1276

Ion	Ratio	Lower	Upper
72	100		
57	22.3	9.3	49.3
43	345.9	348.6	388.6#

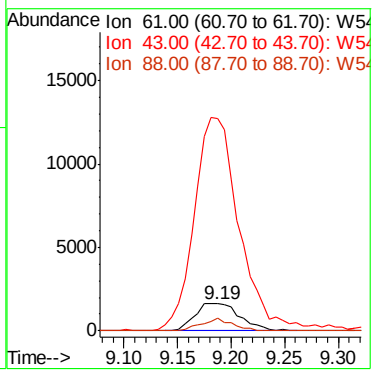


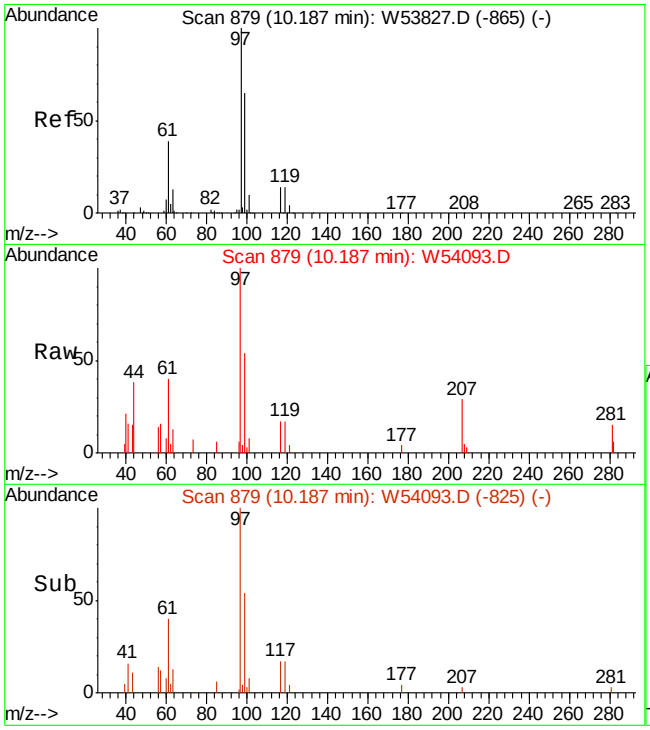


#42
ETHYL ACETATE
Concen: 0.59 PPBV
RT: 9.19 min Scan# 715
Delta R.T. 0.02 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 61 Resp: 4766

Ion	Ratio	Lower	Upper
61	100		
43	782.3	1218.3	1258.3#
88	44.9	24.0	64.0

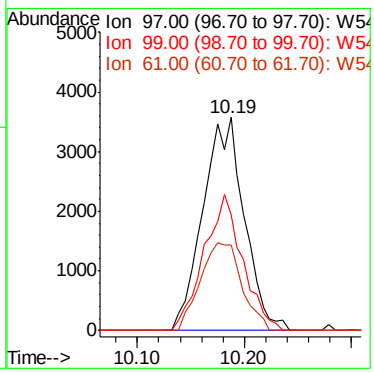


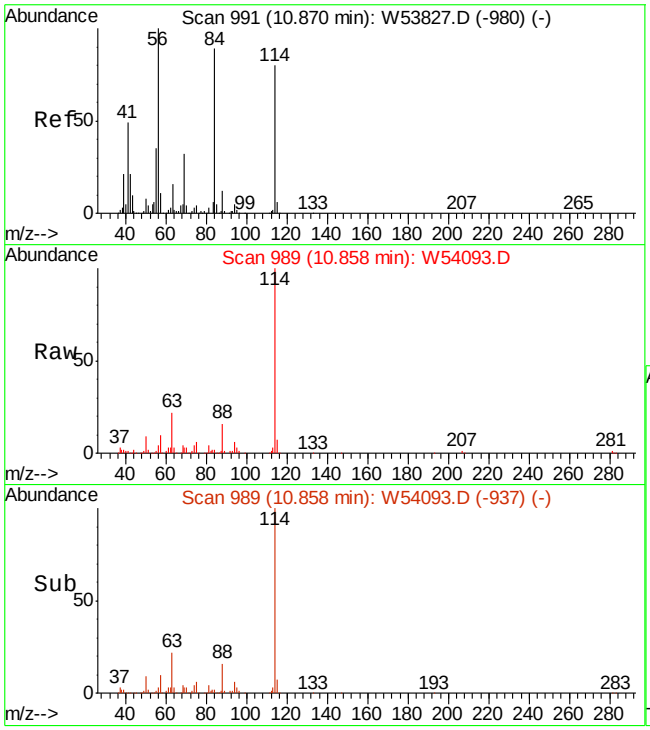


#46
1,1,1-TRICHLOROETHANE
Concen: 0.20 PPBV
RT: 10.19 min Scan# 879
Delta R.T. -0.00 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 97 Resp: 9559

Ion	Ratio	Lower	Upper
97	100		
99	59.5	44.2	84.2
61	41.2	19.7	59.7

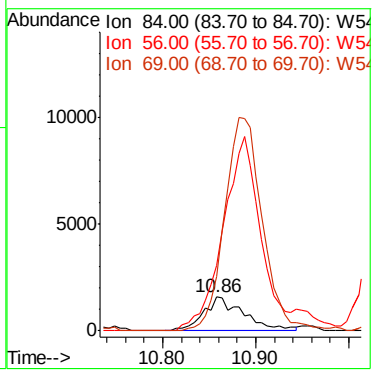


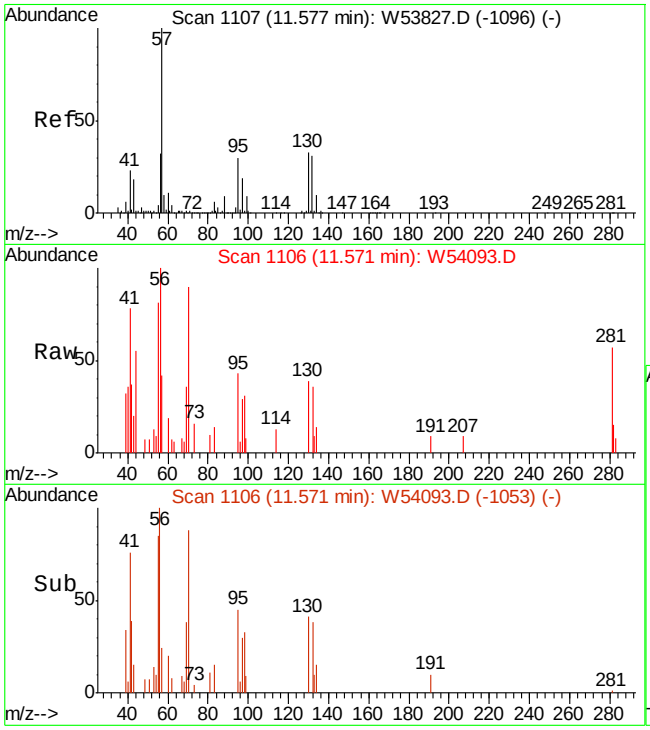


#51
CYCLOHEXANE
Concen: 0.13 PPBV
RT: 10.86 min Scan# 989
Delta R.T. -0.01 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 84 Resp: 4899

Ion	Ratio	Lower	Upper
84	100		
56	0.0	95.7	135.7#
69	0.0	21.6	61.6#

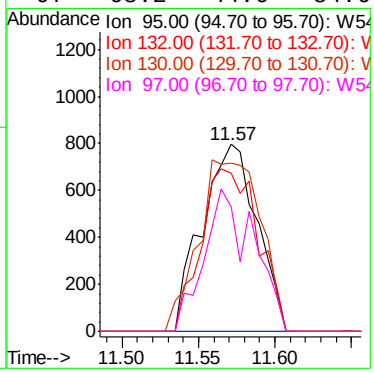


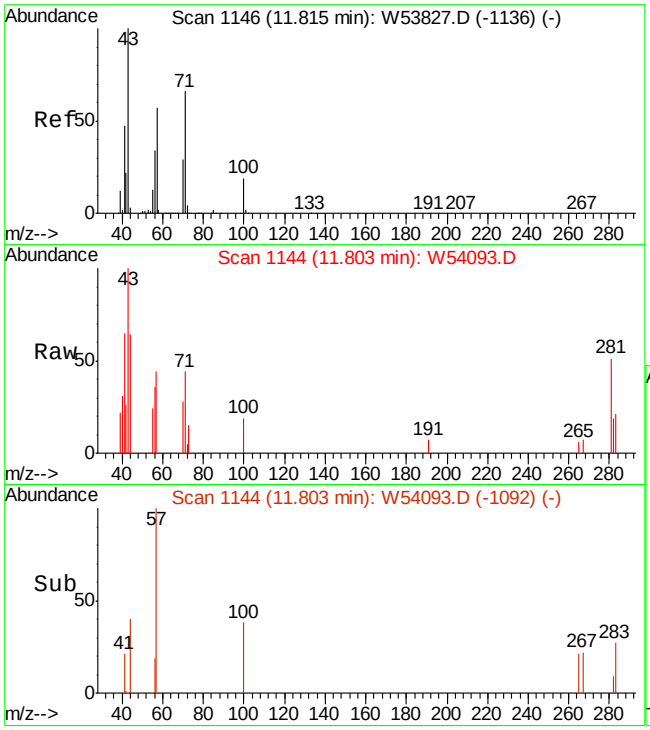


#53
TRICHLOROETHYLENE
Concen: 0.06 PPBV
RT: 11.57 min Scan# 1106
Delta R.T. -0.01 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 95 Resp: 1992

Ion	Ratio	Lower	Upper
95	100		
132	89.6	88.3	128.3
130	103.1	93.1	133.1
97	68.2	44.6	84.6

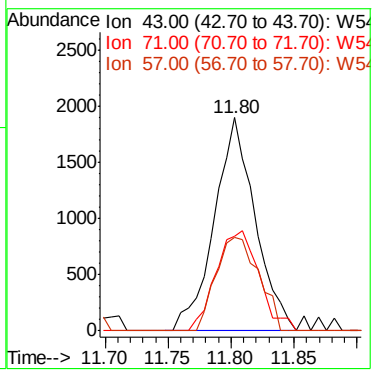


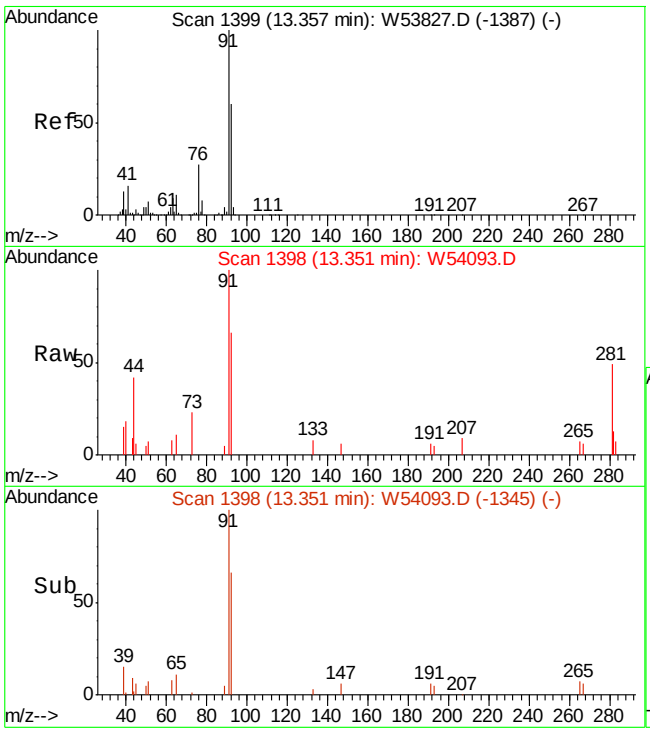


#61
HEPTANE
Concen: 0.10 PPBV
RT: 11.80 min Scan# 1144
Delta R.T. -0.01 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 43 Resp: 4262

Ion	Ratio	Lower	Upper
43	100		
71	49.5	44.7	84.7
57	45.9	38.6	78.6

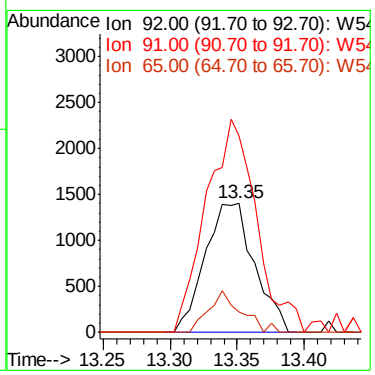


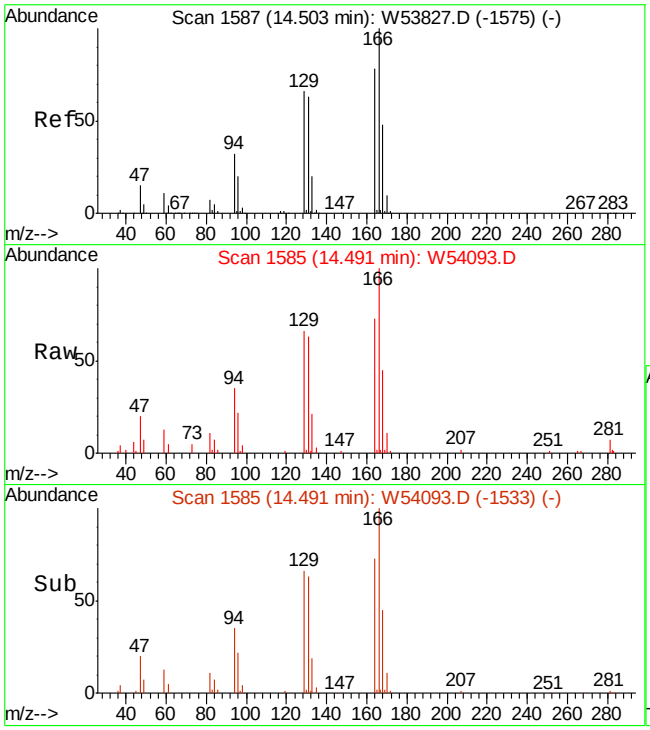


#64
TOLUENE
Concen: 0.07 PPBV
RT: 13.35 min Scan# 1398
Delta R.T. -0.01 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion: 92 Resp: 3608

Ion	Ratio	Lower	Upper
92	100		
91	169.0	147.8	187.8
65	21.3	0.0	39.8

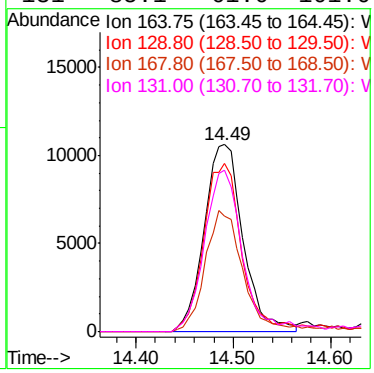




#71
TETRACHLOROETHYLENE
Concen: 0.81 PPBV
RT: 14.49 min Scan# 1585
Delta R.T. -0.01 min
Lab File: W54093.D
Acq: 11 Mar 2016 7:48 pm

Tgt Ion:164 Resp: 29408

Ion	Ratio	Lower	Upper
164	100		
129	90.6	63.7	103.7
168	63.3	41.6	81.6
131	85.1	61.0	101.0



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54125.D Vial: 13
Acq On : 12 Mar 2016 9:32 pm Operator: YOUMINH
Sample : JC15508-2DUP Inst : MSW
Misc : MS99350,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:48:26 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

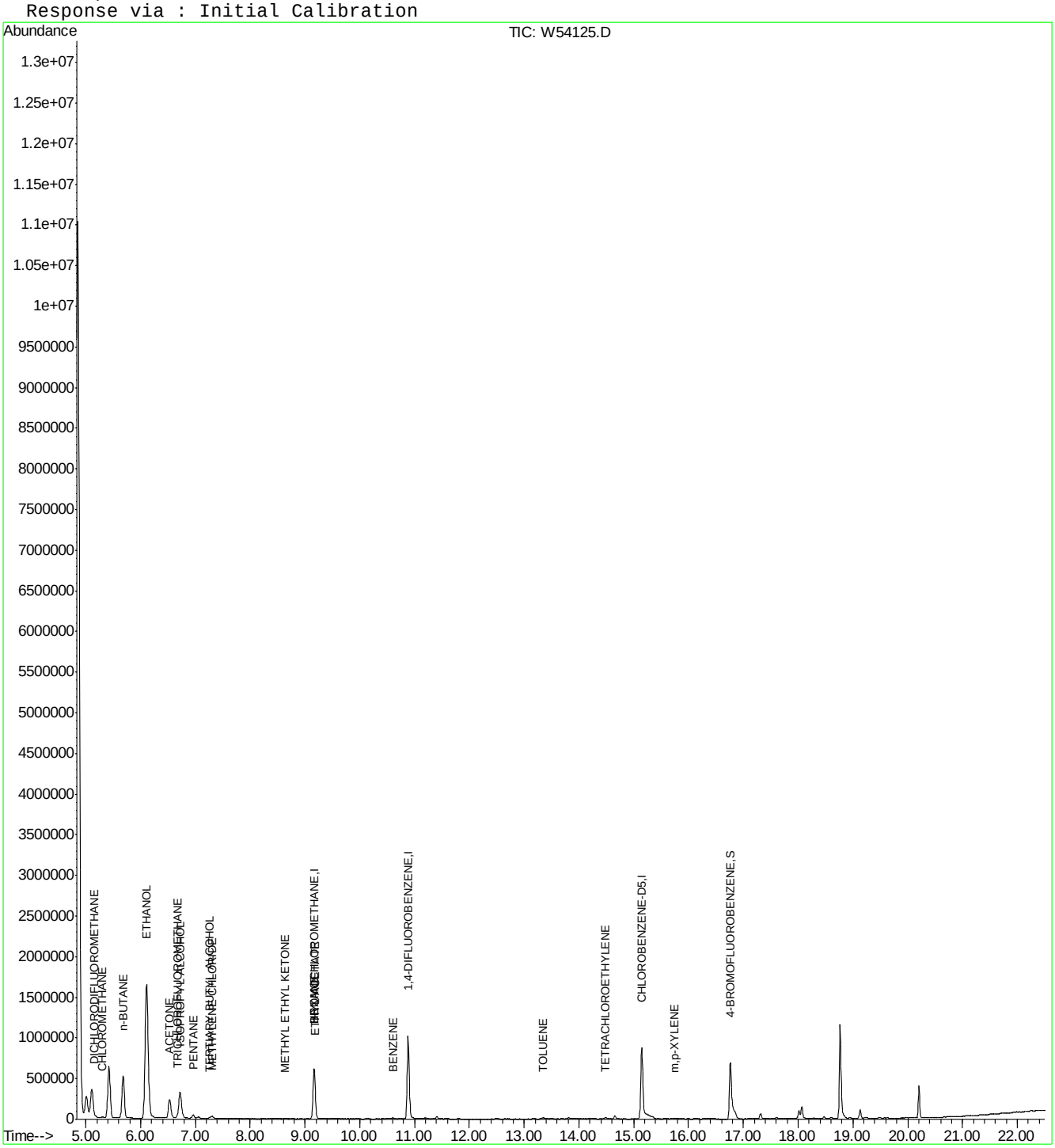
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	246390	10.00	PPBV		-0.01
49) 1,4-DIFLUOROBENZENE	10.88	114	1253078	10.00	PPBV		-0.02
68) CHLOROBENZENE-D5	15.14	82	489336	10.00	PPBV		-0.02
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.76	95	434845	7.97	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 79.70%				
Target Compounds							Qvalue
5) DICHLORODIFLUOROMETHANE	5.15	85	35234	0.54	PPBV		98
9) CHLOROMETHANE	5.30	52	4873	0.64	PPBV	#	68
12) n-BUTANE	5.68	58	112584	17.66	PPBV	#	80
17) TRICHLOROFLUOROMETHANE	6.67	101	25035	0.41	PPBV		96
18) ISOPROPYL ALCOHOL	6.72	45	721948	14.12	PPBV		99
19) ACETONE	6.52	58	139009	9.88	PPBV	#	78
22) PENTANE	6.96	57	6264	0.76	PPBV		96
26) ETHANOL	6.11	45	3809316	380.67	PPBV		98
29) METHYLENE CHLORIDE	7.30	84	21633	0.86	PPBV		89
33) TERTIARY BUTYL ALCOHOL	7.26	59	10290	0.20	PPBV	#	1
36) HEXANE	9.16	57	40573	0.94	PPBV		91
39) METHYL ETHYL KETONE	8.64	72	3853	0.31	PPBV	#	78
42) ETHYL ACETATE	9.19	61	2134	0.25	PPBV	#	88
50) BENZENE	10.61	78	17031	0.21	PPBV		98
64) TOLUENE	13.34	92	11454	0.20	PPBV		99
71) TETRACHLOROETHYLENE	14.48	164	7124	0.18	PPBV		97
78) m,p-XYLENE	15.74	106	4197	0.10	PPBV	#	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54125.D MW2152.M Sun Mar 13 11:22:27 2016 MSW Page 1

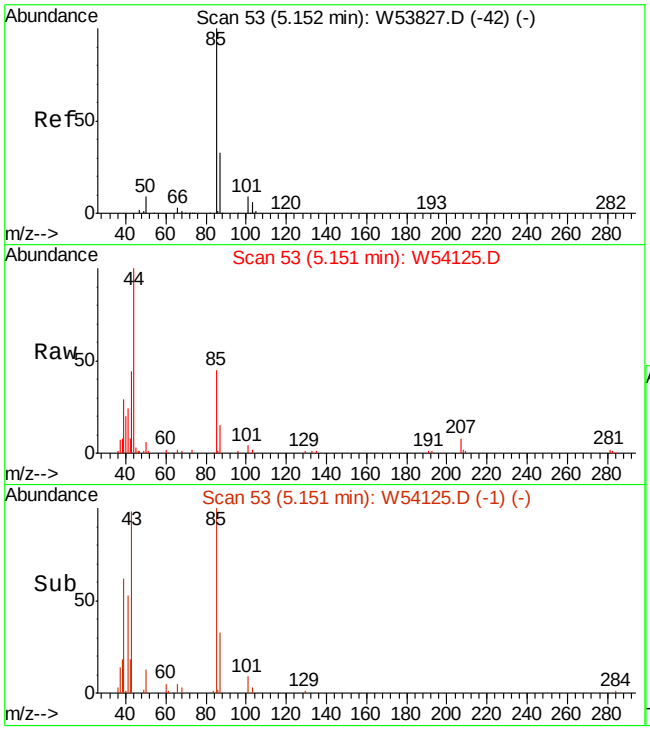
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54125.D Vial: 13
Acq On : 12 Mar 2016 9:32 pm Operator: YOUMINH
Sample : JC15508-2DUP Inst : MSW
Misc : MS99350,VW2162,400,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:41 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



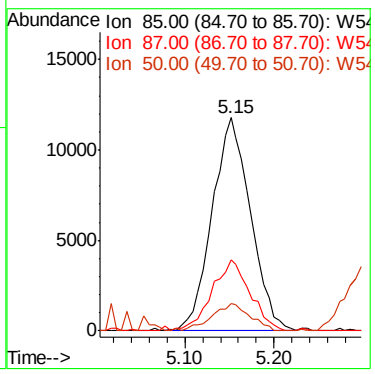
W54125.D MW2152.M Sun Mar 13 11:22:28 2016 MSW Page 2

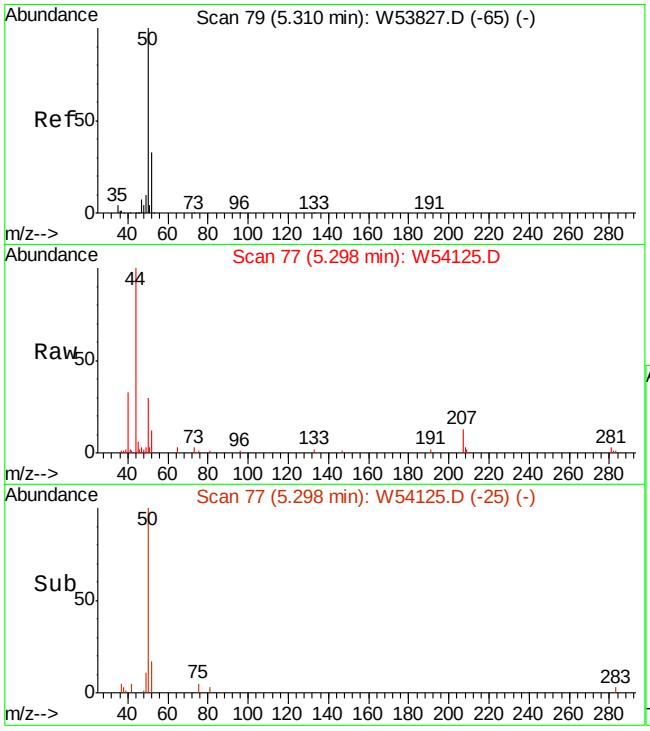


#5
DICHLORODIFLUOROMETHANE
Concen: 0.54 PPBV
RT: 5.15 min Scan# 53
Delta R.T. -0.00 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 85 Resp: 35234

Ion	Ratio	Lower	Upper
85	100		
87	32.9	12.4	52.4
50	12.6	0.0	30.2

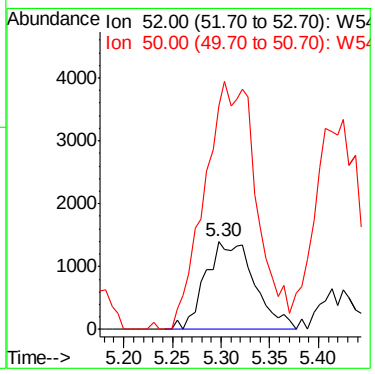


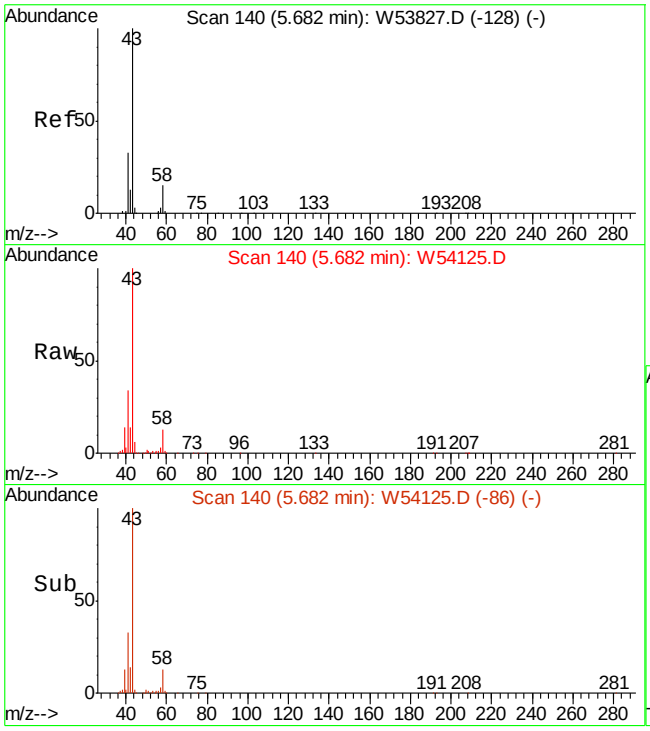


#9
CHLOROMETHANE
Concen: 0.64 PPBV
RT: 5.30 min Scan# 77
Delta R.T. -0.01 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 52 Resp: 4873

Ion	Ratio	Lower	Upper
52	100		
50	233.2	274.8	314.8#

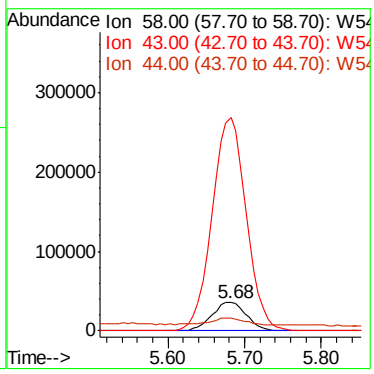


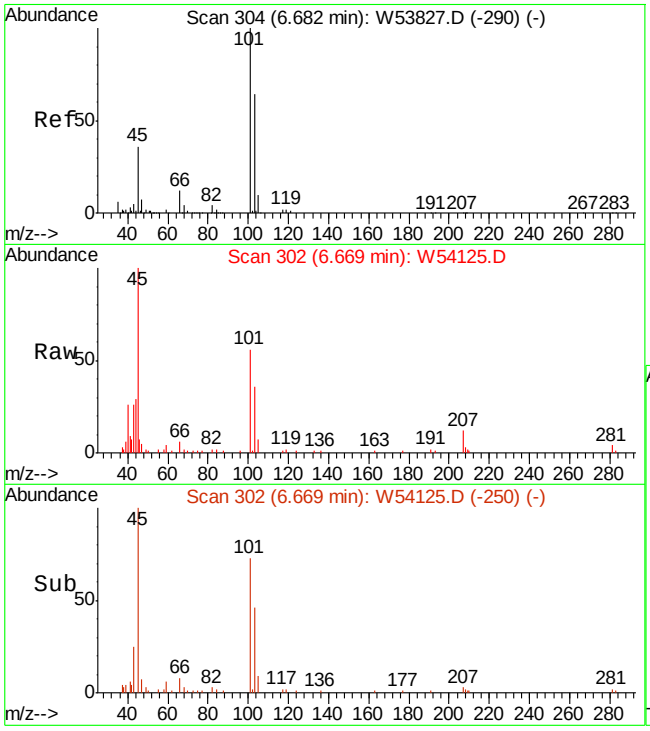


#12
n-BUTANE
Concen: 17.66 PPBV
RT: 5.68 min Scan# 140
Delta R.T. -0.00 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 58 Resp: 112584

Ion	Ratio	Lower	Upper
58	100		
43	737.4	534.9	802.3
44	29.1	19.2	28.8#

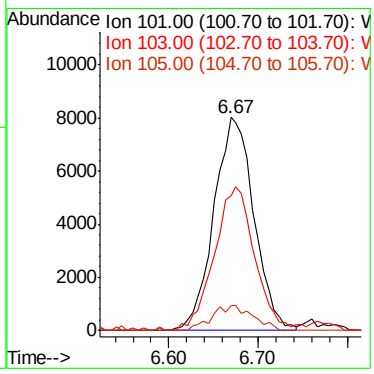


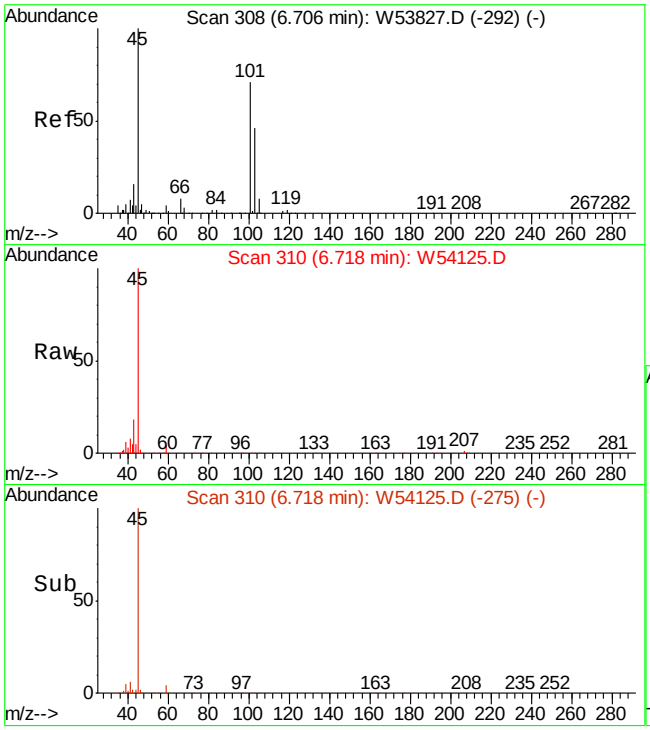


#17
TRICHLOROFLUOROMETHANE
Concen: 0.41 PPBV
RT: 6.67 min Scan# 302
Delta R.T. -0.01 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion:101 Resp: 25035

Ion	Ratio	Lower	Upper
101	100		
103	68.0	45.0	85.0
105	12.0	0.0	30.6

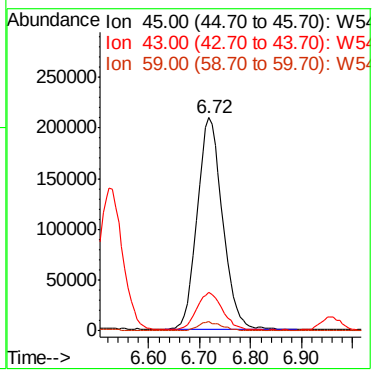


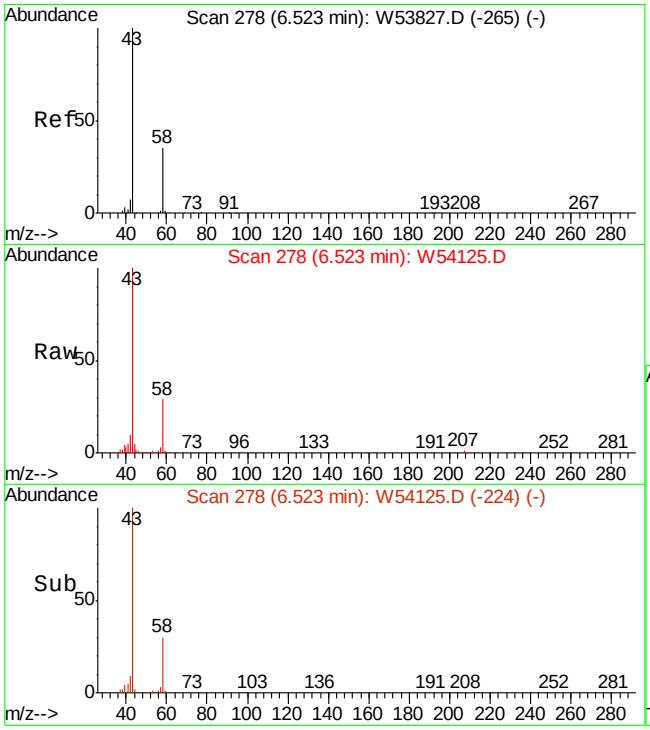


#18
ISOPROPYL ALCOHOL
Concen: 14.12 PPBV
RT: 6.72 min Scan# 310
Delta R.T. 0.01 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 45 Resp: 721948

Ion	Ratio	Lower	Upper
45	100		
43	17.8	0.0	37.1
59	4.4	0.0	24.3

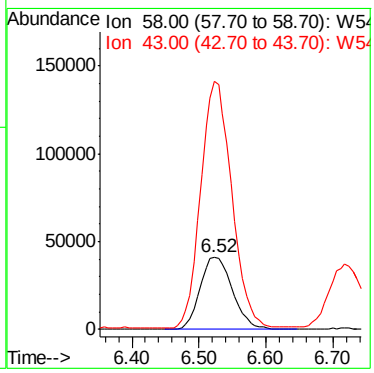


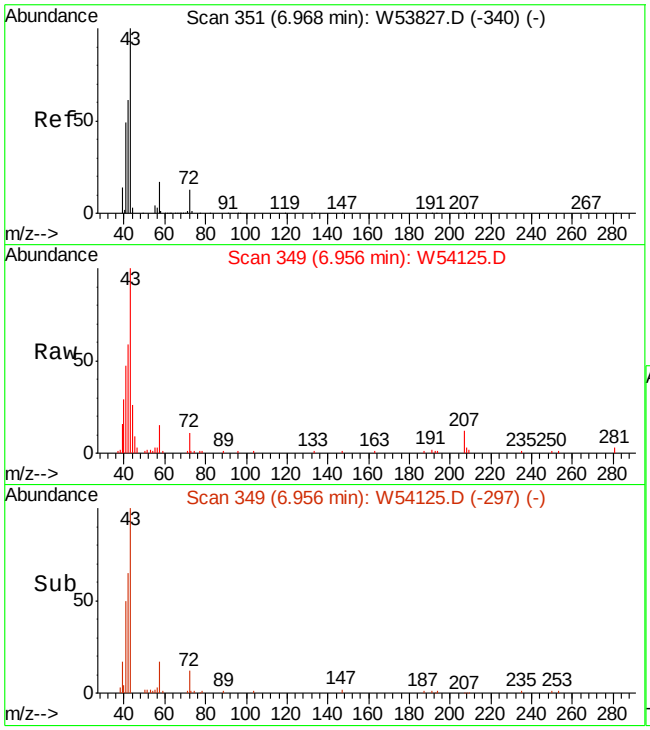


#19
ACETONE
Concen: 9.88 PPBV
RT: 6.52 min Scan# 278
Delta R.T. -0.00 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 58 Resp: 139009

Ion	Ratio	Lower	Upper
58	100		
43	325.7	263.9	303.9#

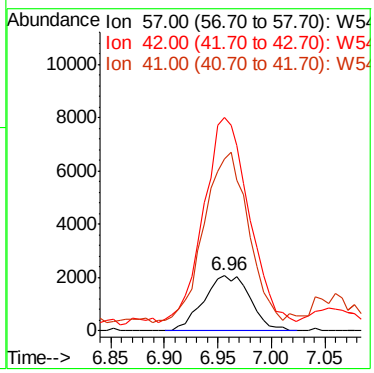


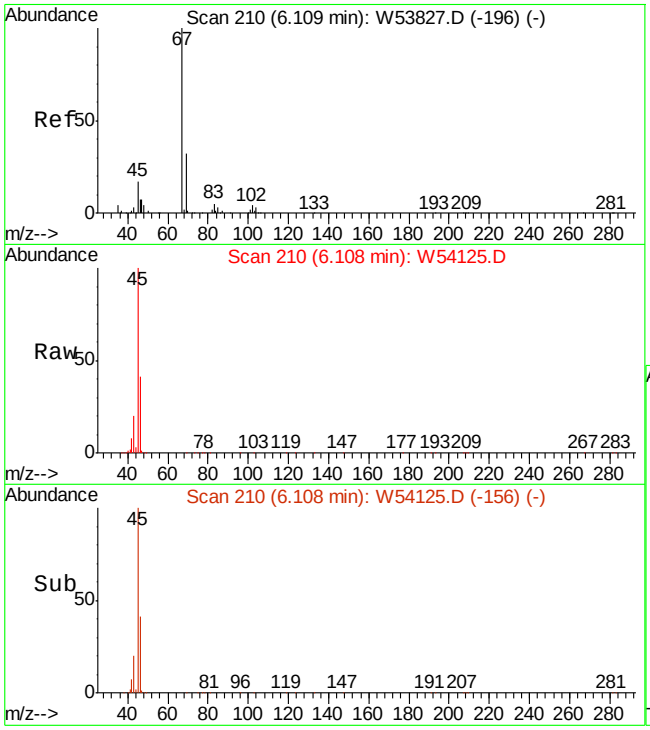


#22
PENTANE
Concen: 0.76 PPBV
RT: 6.96 min Scan# 349
Delta R.T. -0.01 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 57 Resp: 6264

Ion	Ratio	Lower	Upper
57	100		
42	376.9	345.4	385.4
41	297.1	280.2	320.2

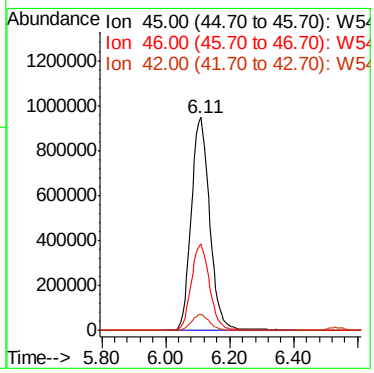


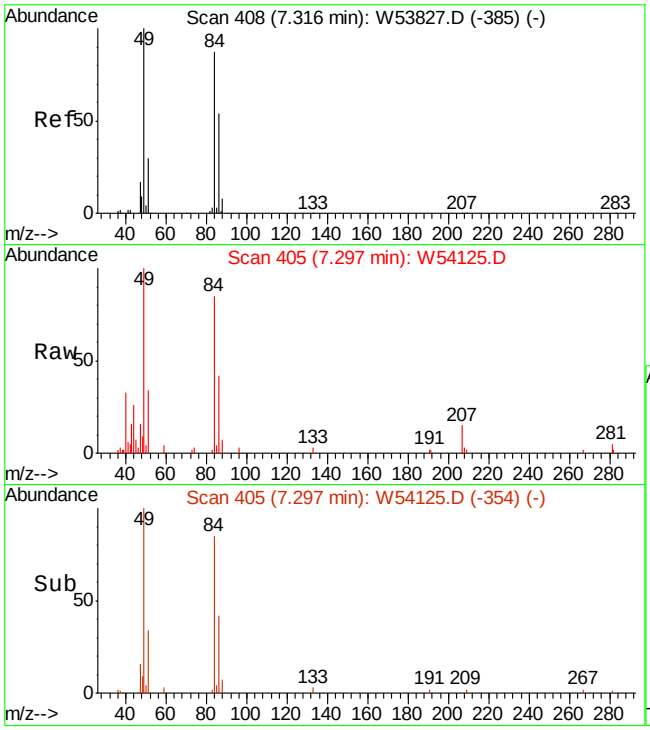


#26
ETHANOL
Concen: 380.67 PPBV
RT: 6.11 min Scan# 210
Delta R.T. 0.00 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 45 Resp: 3809316

Ion	Ratio	Lower	Upper
45	100		
46	40.4	21.2	61.2
42	7.4	0.0	29.3

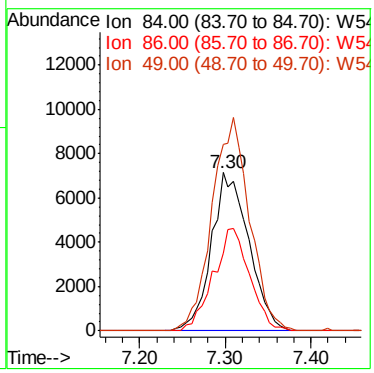


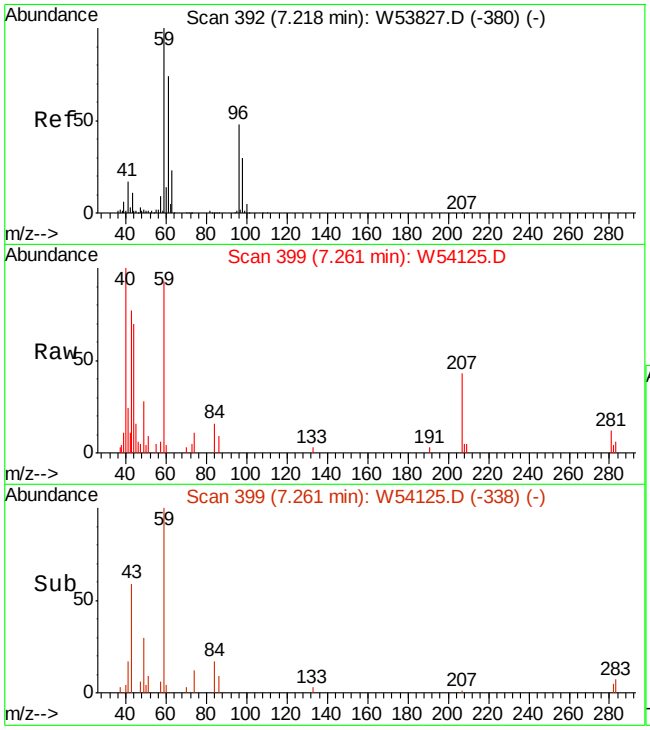


#29
METHYLENE CHLORIDE
Concen: 0.86 PPBV
RT: 7.30 min Scan# 405
Delta R.T. -0.02 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 84 Resp: 21633

Ion	Ratio	Lower	Upper
84	100		
86	62.8	43.3	83.3
49	135.4	0.0	317.4

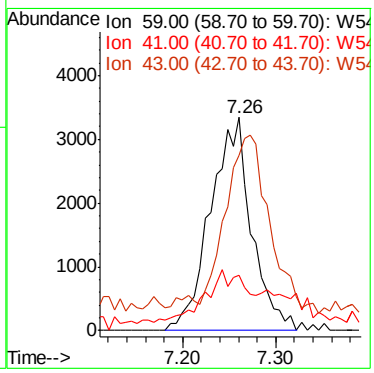


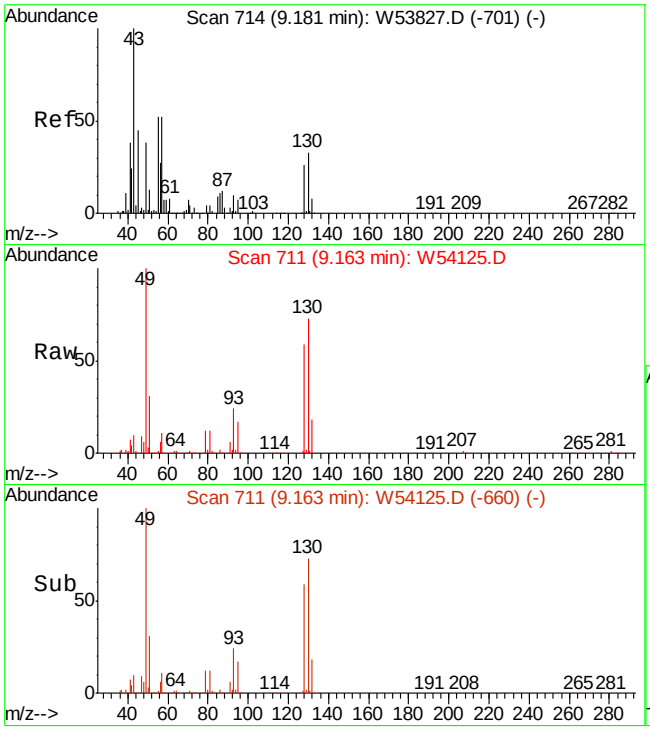


#33
TERTIARY BUTYL ALCOHOL
Concen: 0.20 PPBV
RT: 7.26 min Scan# 399
Delta R.T. 0.04 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 59 Resp: 10290

Ion	Ratio	Lower	Upper
59	100		
41	0.0	0.0	37.3
43	89.8	0.0	31.8#

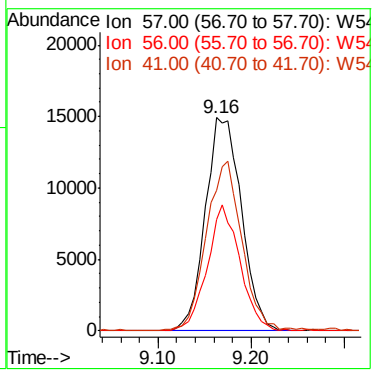


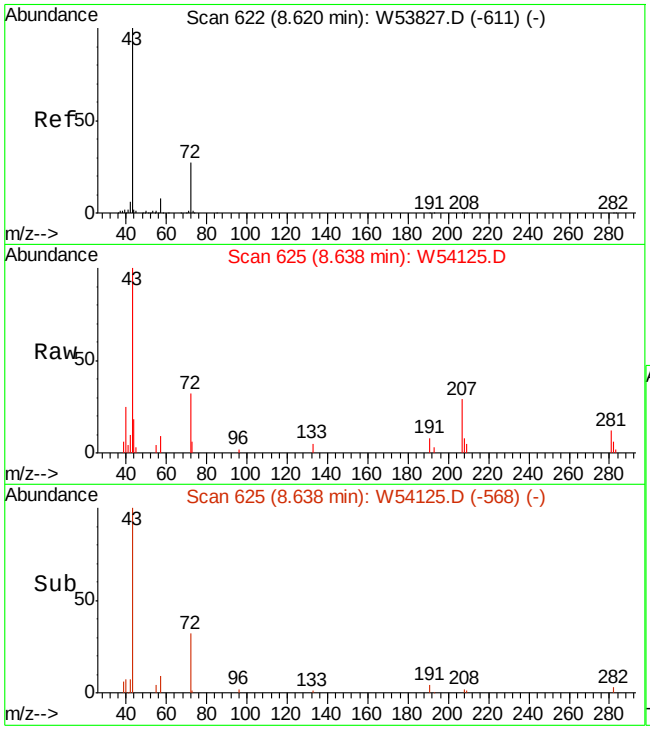


#36
HEXANE
Concen: 0.94 PPBV
RT: 9.16 min Scan# 711
Delta R.T. -0.02 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 57 Resp: 40573

Ion	Ratio	Lower	Upper
57	100		
56	53.6	32.7	72.7
41	78.8	72.1	112.1

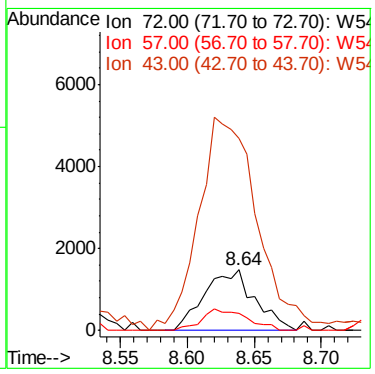


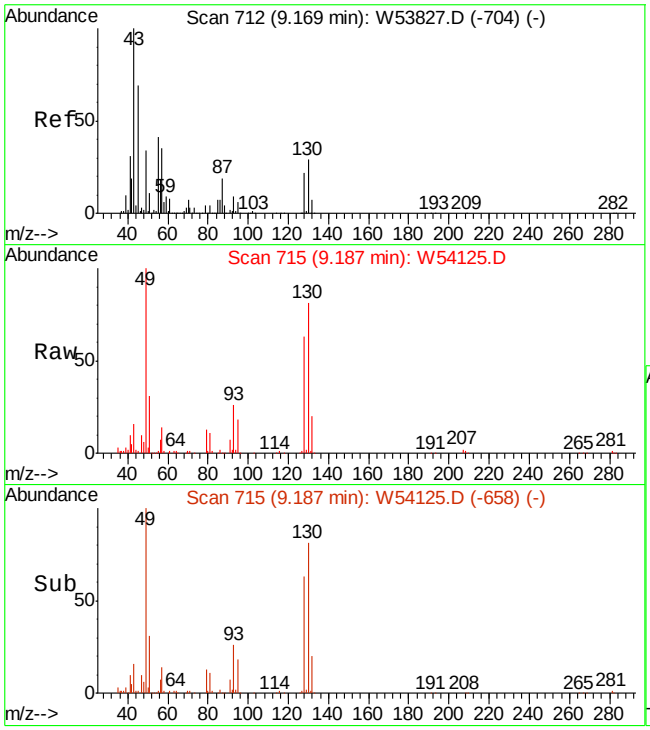


#39
METHYL ETHYL KETONE
Concen: 0.31 PPBV
RT: 8.64 min Scan# 625
Delta R.T. 0.02 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 72 Resp: 3853

Ion	Ratio	Lower	Upper
72	100		
57	29.1	9.3	49.3
43	316.3	348.6	388.6#

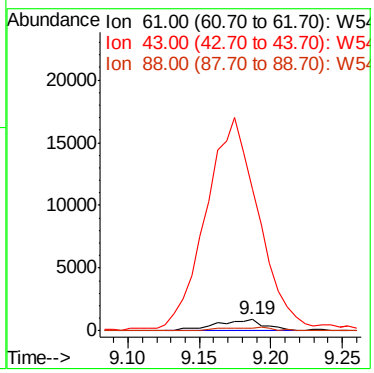


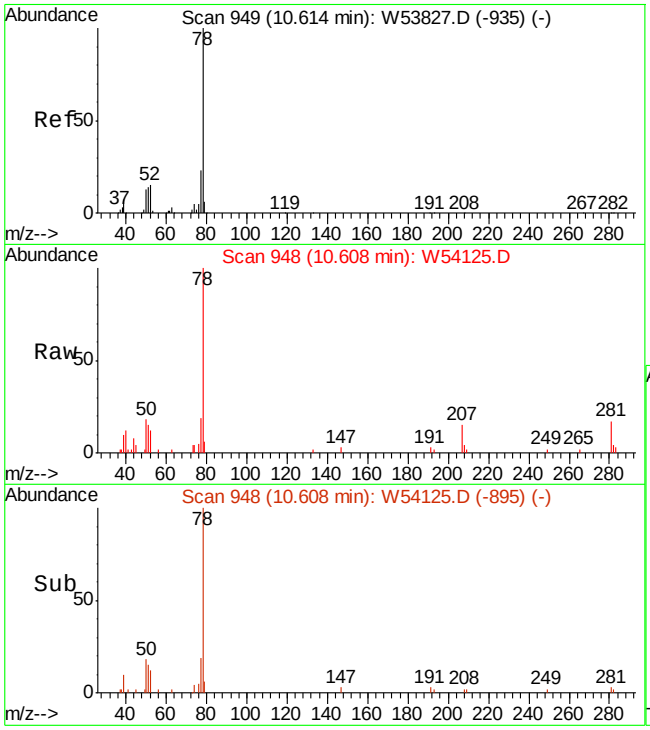


#42
ETHYL ACETATE
Concen: 0.25 PPBV
RT: 9.19 min Scan# 715
Delta R.T. 0.02 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 61 Resp: 2134

Ion	Ratio	Lower	Upper
61	100		
43	1180.0	1218.3	1258.3#
88	22.5	24.0	64.0#

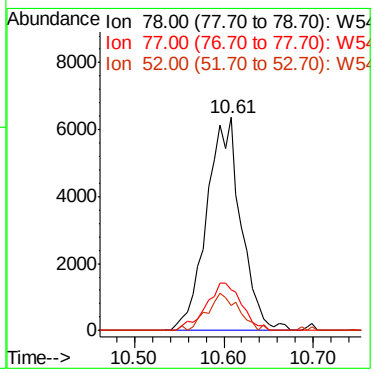


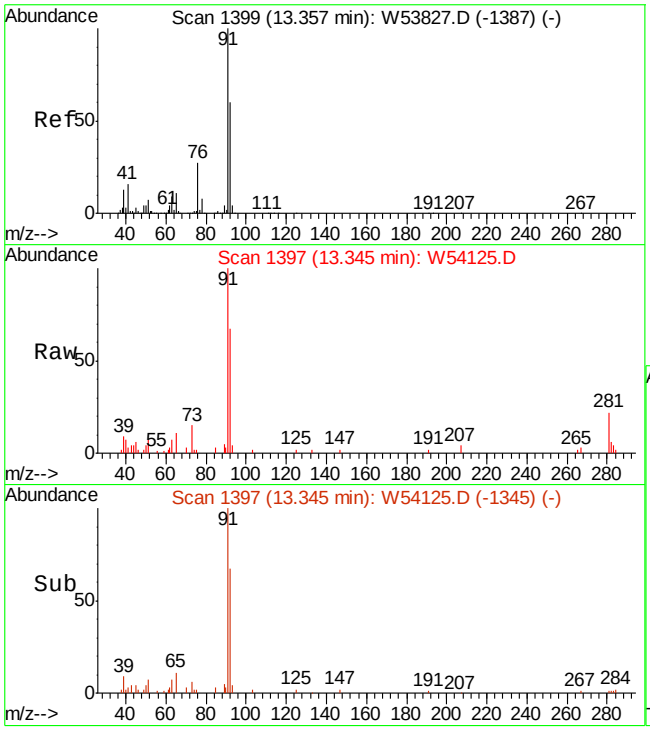


#50
BENZENE
Concen: 0.21 PPBV
RT: 10.61 min Scan# 948
Delta R.T. -0.01 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 78 Resp: 17031

Ion	Ratio	Lower	Upper
78	100		
77	22.8	3.3	43.3
52	16.0	0.0	34.9

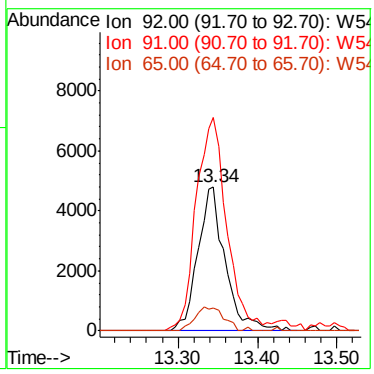


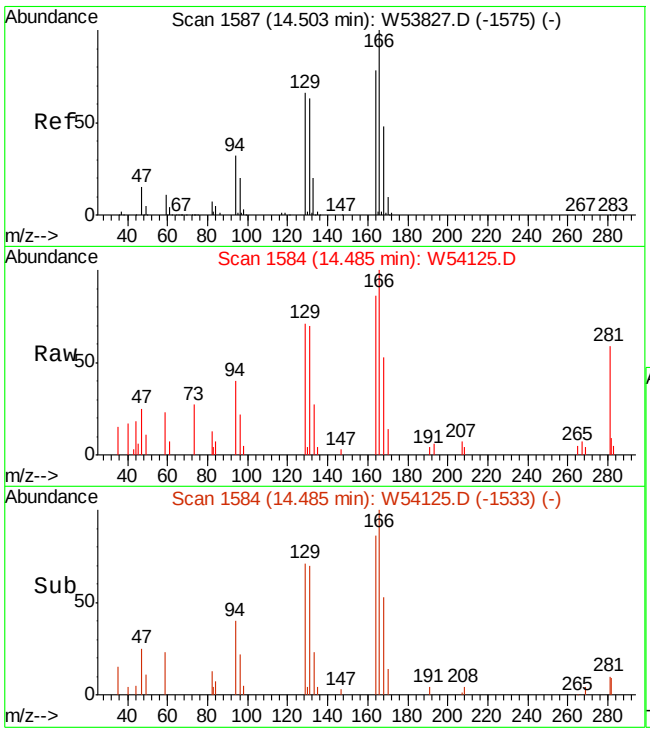


#64
TOLUENE
Concen: 0.20 PPBV
RT: 13.34 min Scan# 1397
Delta R.T. -0.01 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion: 92 Resp: 11454

Ion	Ratio	Lower	Upper
92	100		
91	166.6	147.8	187.8
65	16.9	0.0	39.8

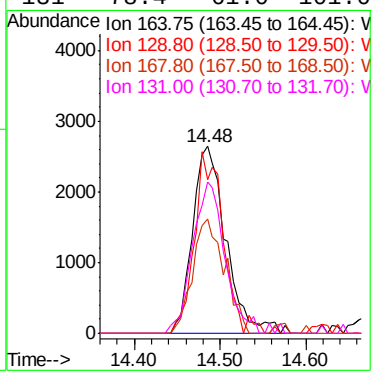


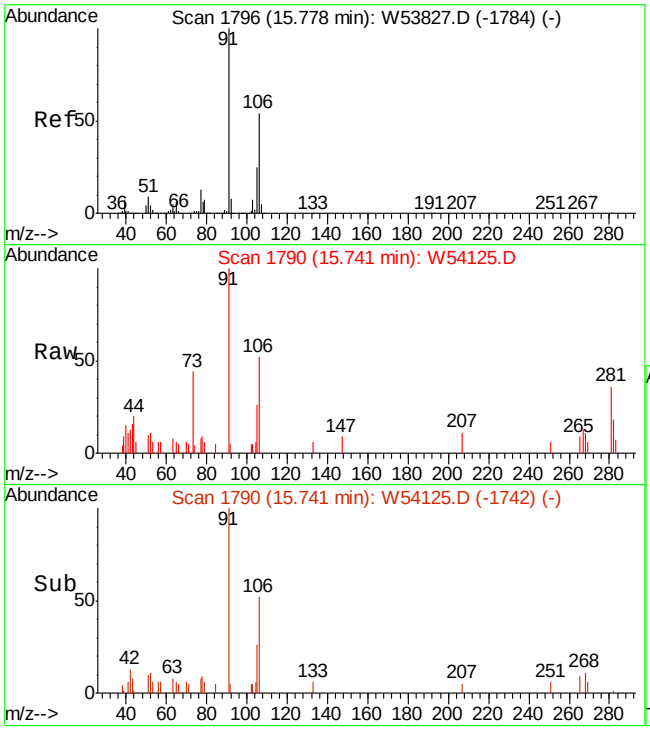


#71
TETRACHLOROETHYLENE
Concen: 0.18 PPBV
RT: 14.48 min Scan# 1584
Delta R.T. -0.02 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion:164 Resp: 7124

Ion	Ratio	Lower	Upper
164	100		
129	81.2	63.7	103.7
168	59.2	41.6	81.6
131	78.4	61.0	101.0

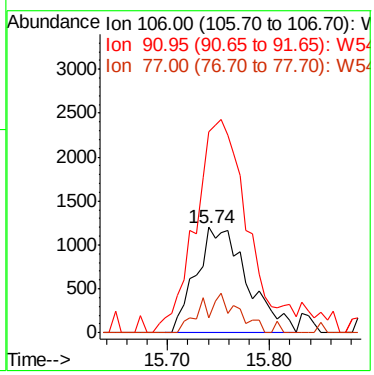




#78
m,p-XYLENE
Concen: 0.10 PPBV
RT: 15.74 min Scan# 1790
Delta R.T. -0.04 min
Lab File: W54125.D
Acq: 12 Mar 2016 9:32 pm

Tgt Ion:106 Resp: 4197

Ion	Ratio	Lower	Upper
106	100		
91	190.6	150.4	225.6
77	14.4	18.6	28.0#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16060.D
Acq On : 4 Feb 2016 7:02 pm
Operator : THOMASH
Sample : SCC(A252)
Misc : MS97993,v5w646,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 05 12:10:55 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

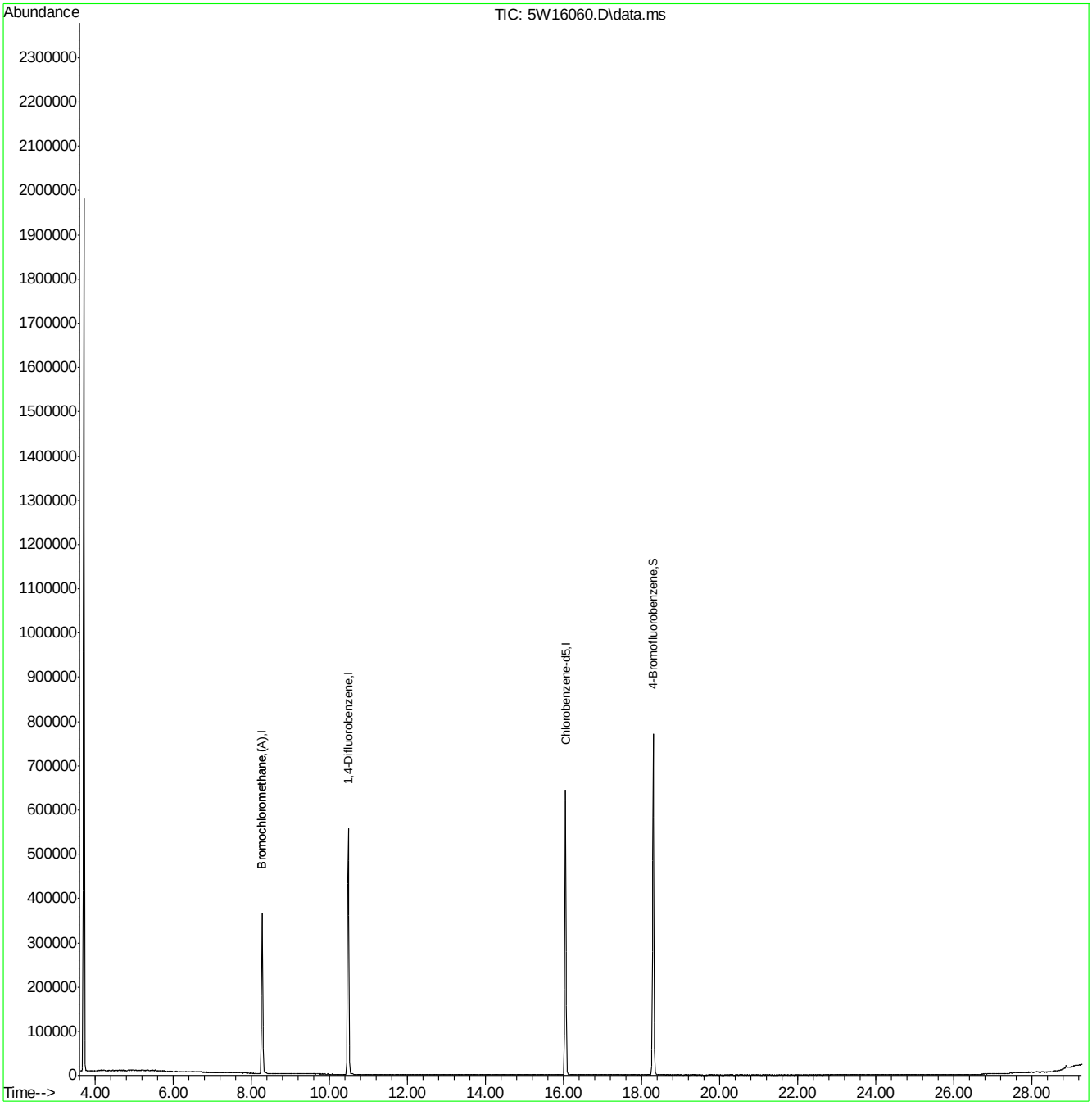
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.273	130	165553	10.00	ppb(v	-0.01
53) 1,4-Difluorobenzene	10.475	114	575725	10.00	ppb(v	-0.01
76) Chlorobenzene-d5	16.042	82	279949	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.273	130	165553	10.00	ppb(v	-0.01
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	362752	9.82	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 98.20%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16060.D
Acq On : 4 Feb 2016 7:02 pm
Operator : THOMASH
Sample : SCC(A252)
Misc : MS97993,v5w646,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 05 12:10:55 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16063.D
Acq On : 4 Feb 2016 9:19 pm
Operator : THOMASH
Sample : SCC(A1166)
Misc : MS97993,v5w646,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 12:15:52 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

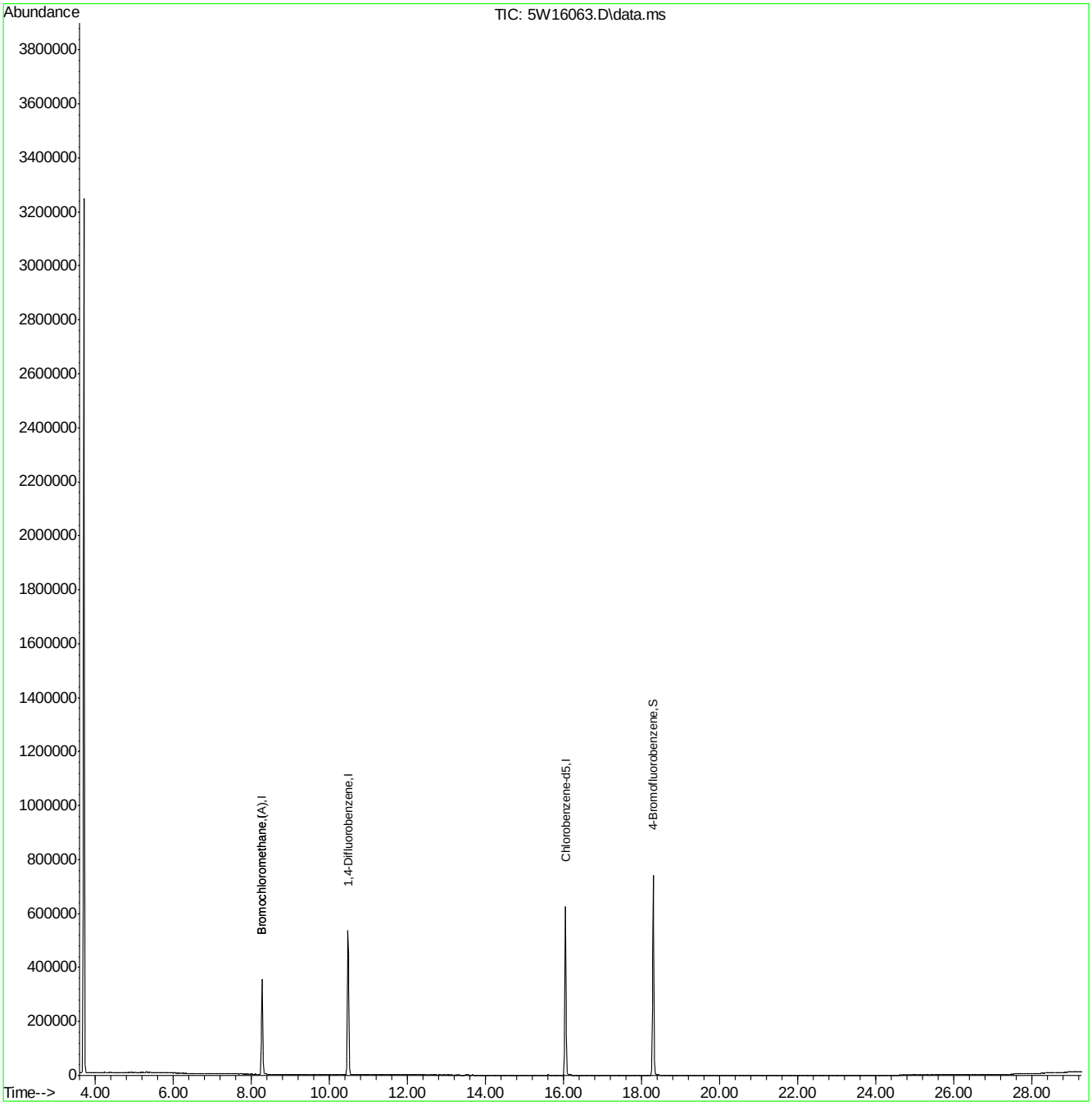
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.273	130	160469	10.00	ppb(v	-0.01
53) 1,4-Difluorobenzene	10.475	114	542631	10.00	ppb(v	-0.01
76) Chlorobenzene-d5	16.043	82	268002	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.273	130	160469	10.00	ppb(v	-0.01
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	341195	9.65	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 96.50%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16063.D
Acq On : 4 Feb 2016 9:19 pm
Operator : THOMASH
Sample : SCC(A1166)
Misc : MS97993,v5w646,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 12:15:52 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16081.D
Acq On : 5 Feb 2016 10:51 pm
Operator : THOMASH
Sample : SCC(A263)
Misc : MS97992,v5w647,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 08 10:21:57 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

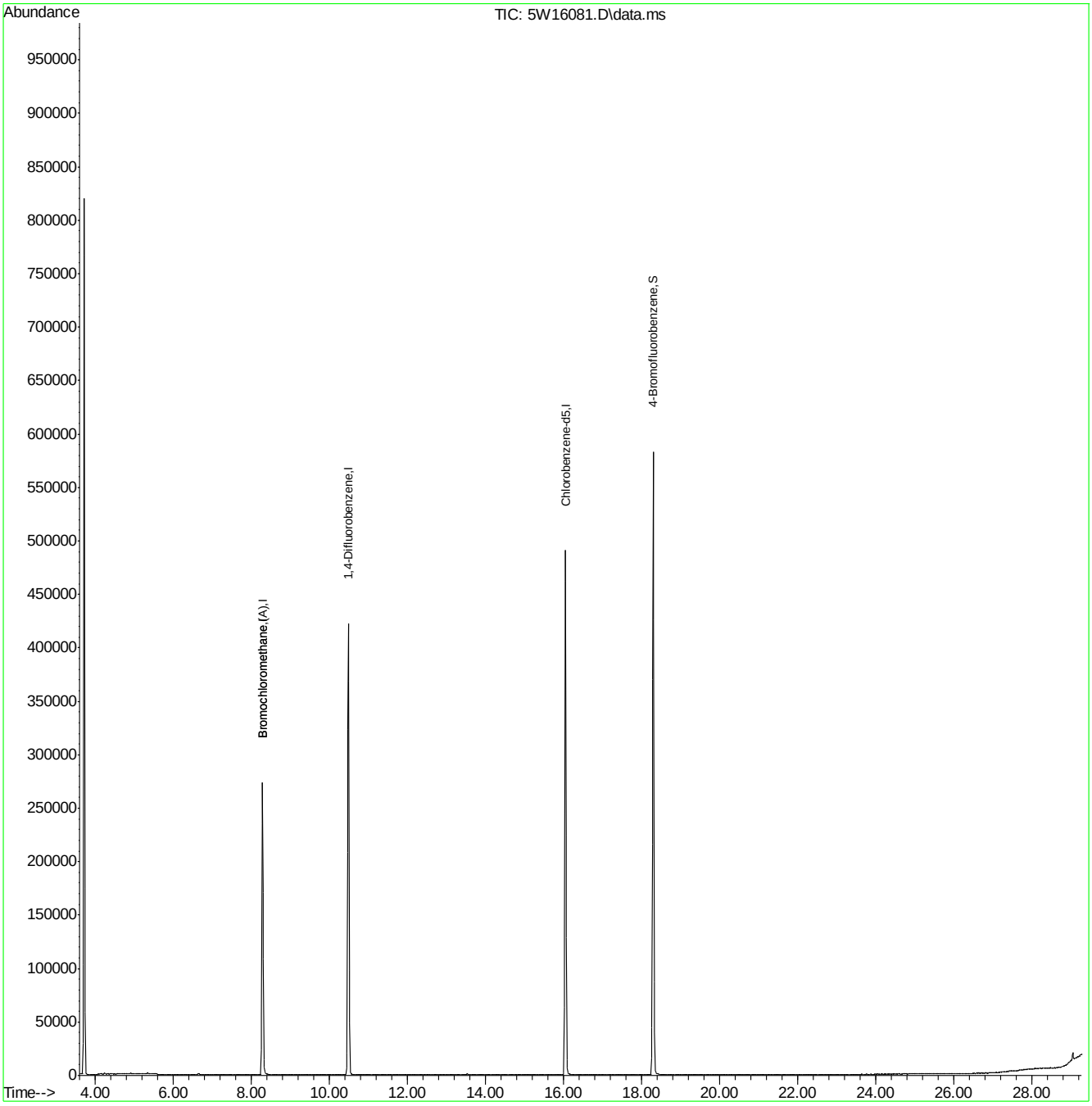
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.285	130	126148	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.481	114	430571	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.042	82	210847	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.285	130	126148	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	268311	9.64	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 96.40%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16081.D
Acq On : 5 Feb 2016 10:51 pm
Operator : THOMASH
Sample : SCC(A263)
Misc : MS97992,v5w647,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 08 10:21:57 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16087.D
Acq On : 6 Feb 2016 3:35 am
Operator : THOMASH
Sample : SCC(A251)
Misc : MS98173,v5w647,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 08 10:24:46 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

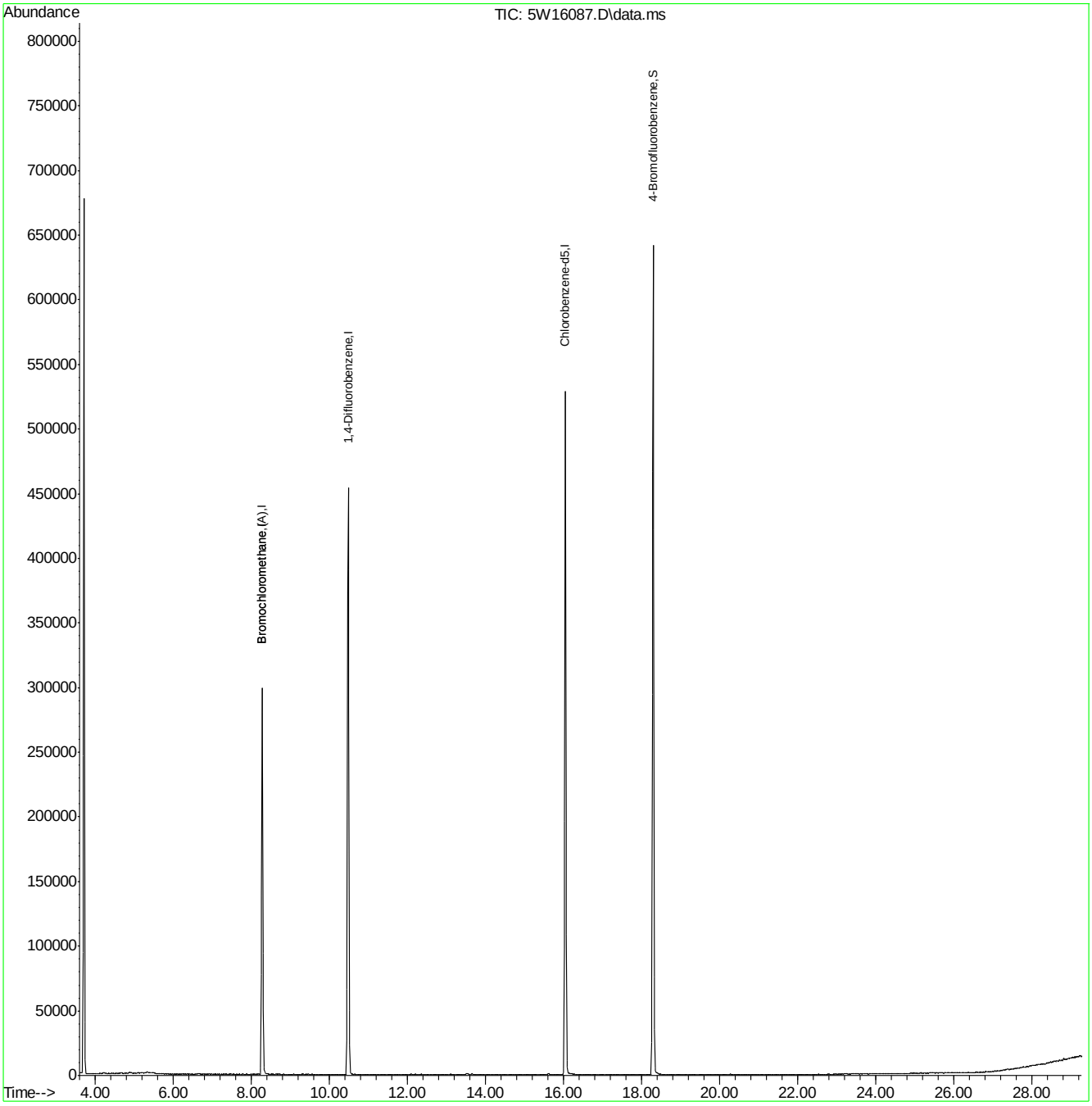
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.273	130	138364	10.00	ppb(v	-0.01
53) 1,4-Difluorobenzene	10.475	114	481617	10.00	ppb(v	-0.01
76) Chlorobenzene-d5	16.036	82	233395	10.00	ppb(v	-0.01
107) Bromochloromethane (A)	8.273	130	138364	10.00	ppb(v	-0.01
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.288	95	300371	9.75	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 97.50%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16087.D
Acq On : 6 Feb 2016 3:35 am
Operator : THOMASH
Sample : SCC(A251)
Misc : MS98173,v5w647,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 08 10:24:46 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53498.D Vial: 15
Acq On : 12 Feb 2016 9:53 pm Operator: YOUMINH
Sample : SCC(A746) Inst : MSW
Misc : MS98120,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 09:04:15 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

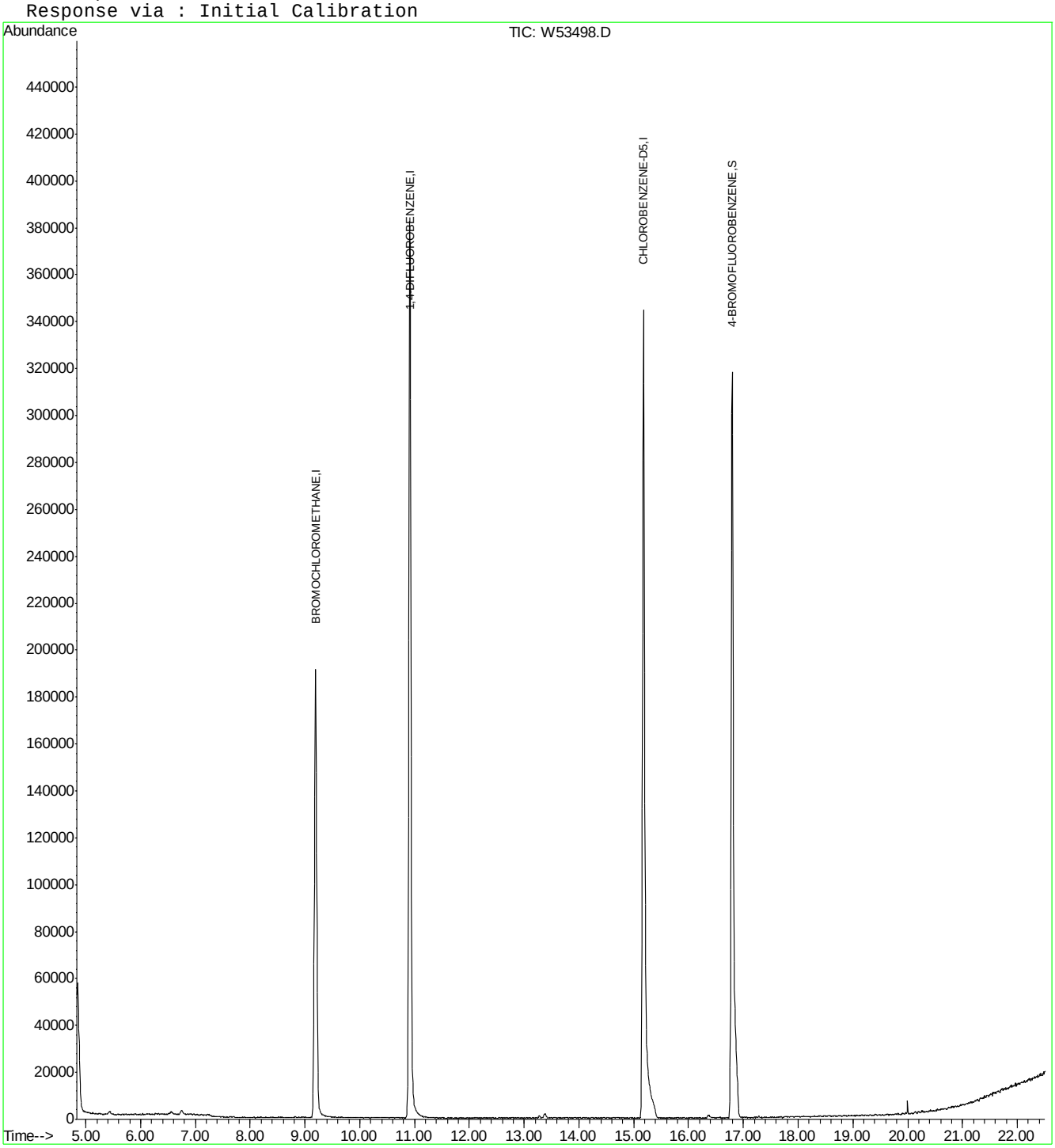
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	85967	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.91	114	471114	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.18	82	194213	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	192251	8.76	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 87.60%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W53498.D MW2140.M Mon Feb 15 10:46:28 2016 MSW Page 1

Quantitation Report (QT Reviewed)

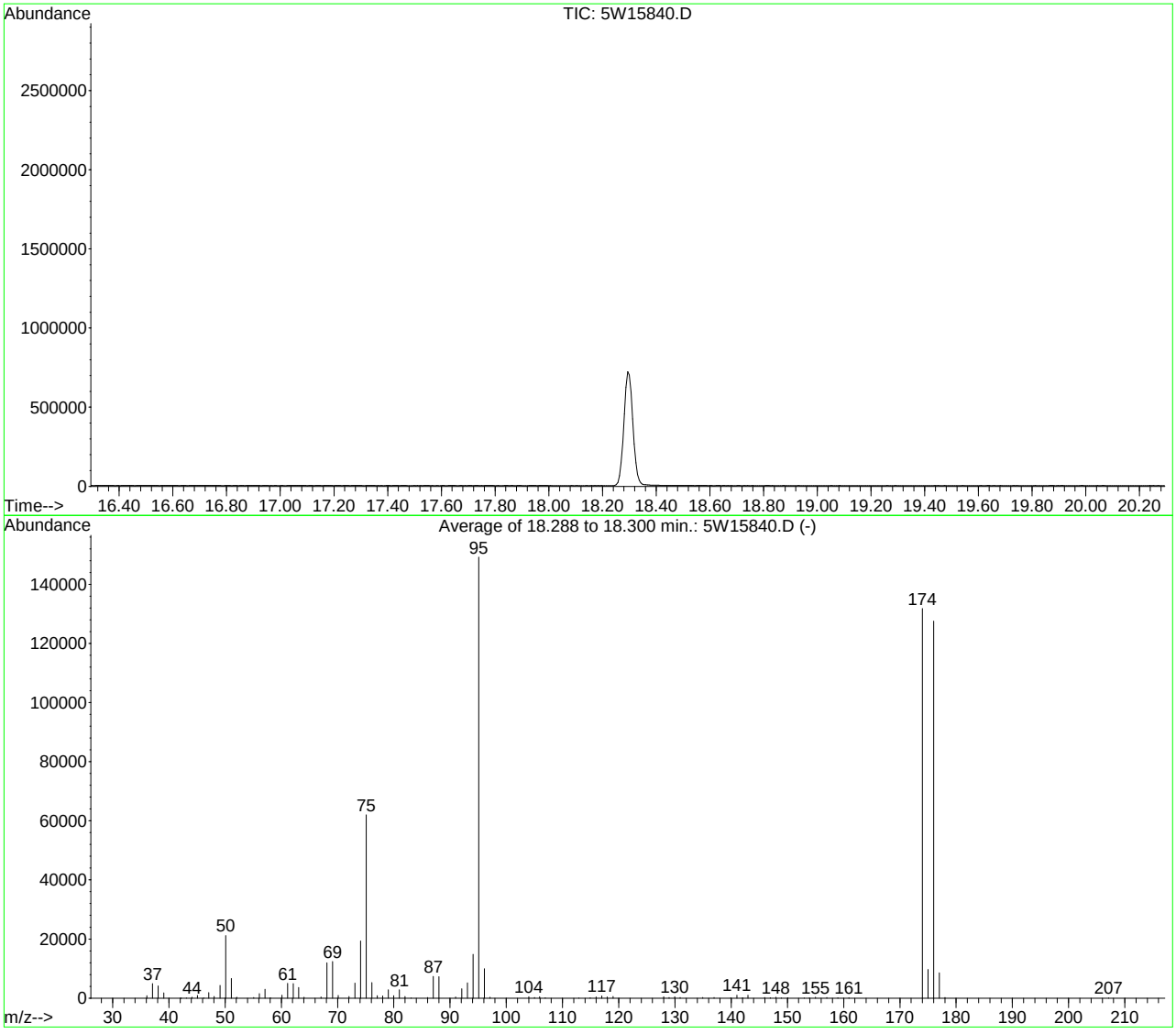
Data File : C:\MSDCHEM\1\DATA\W53498.D Vial: 15
Acq On : 12 Feb 2016 9:53 pm Operator: YOUMINH
Sample : SCC(A746) Inst : MSW
Misc : MS98120,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:54 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



BFB

```
Data File : C:\MSDCHEM\1\DATA\OLDV3W\5W15840.D          Vial: 5
Acq On    : 22 Jan 2016   9:05 pm                   Operator: THOMASH
Sample    : BFB                                     Inst    : GCMS5W
Misc      : MS97607,v5w637,,,,,1                    Multiplr: 1.00
MS Integration Params: RTEINT1.P
Method    : C:\MSDCHEM\1\METHODS\M3W1967.M (RTE Integrator)
Title     : TO15 by GCMS w/Rtx-1, 60 m X 0.32mm ID X 1.0 um
```



AutoFind: Scans 2403, 2404, 2405; Background Corrected with Scan 2393

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.2	21160	PASS
75	95	30	66	41.6	62069	PASS
95	95	100	100	100.0	149226	PASS
96	95	5	9	6.7	9967	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	88.4	131890	PASS
175	174	4	9	7.4	9709	PASS
176	174	93	101	96.7	127597	PASS
177	176	5	9	6.7	8559	PASS

5W15840.D M3W1967.M Mon Jan 25 12:16:58 2016 MS3W

Average of 18.288 to 18.300 min.: 5W15840.D
BFB
Modified:subtracted

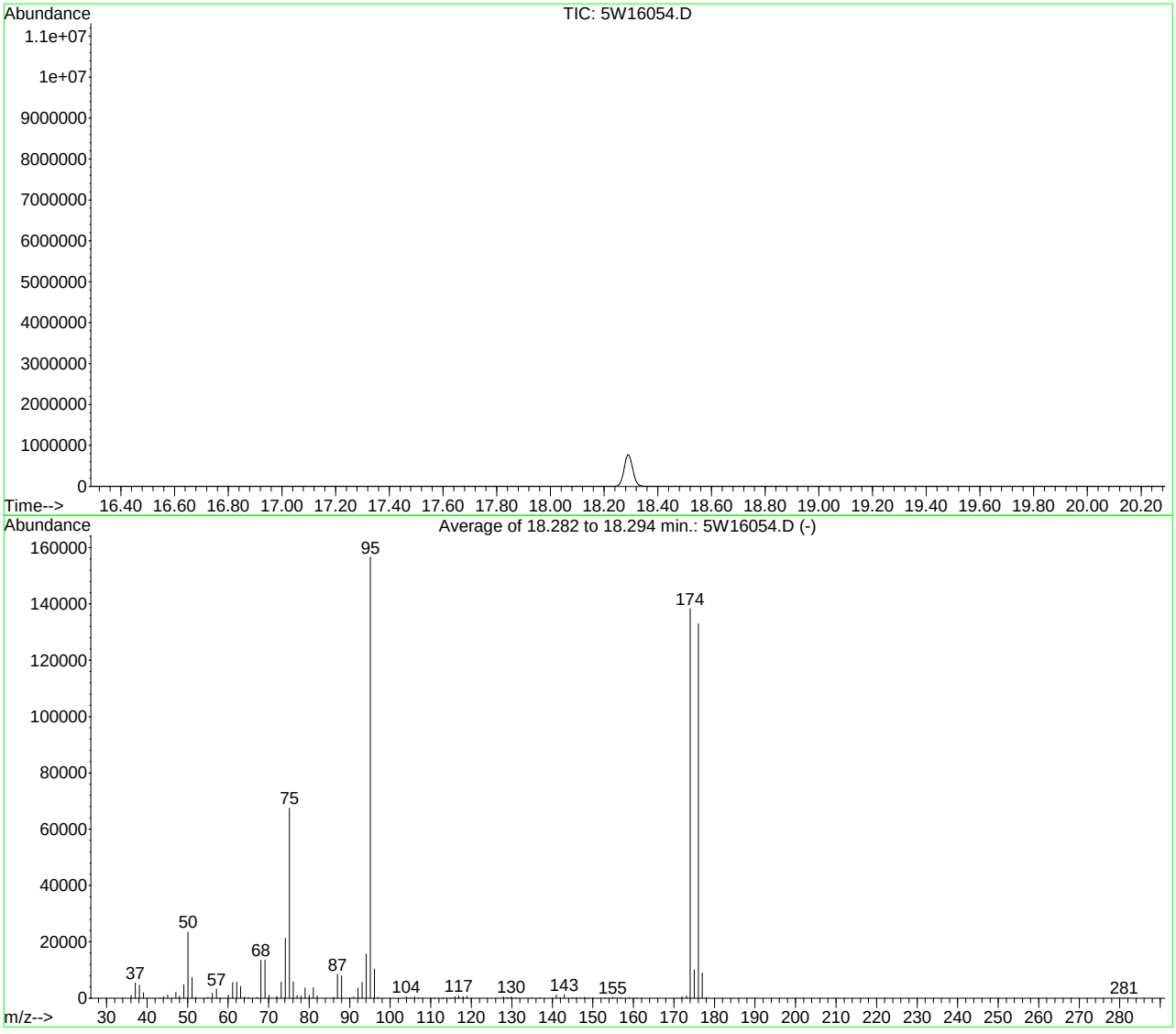
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	872	49.10	4327	63.10	3619	77.05	849
37.10	4911	50.10	21160	64.05	324	78.00	737
38.10	4151	51.10	6658	67.05	359	79.00	2832
39.10	1760	52.05	320	68.10	12007	80.00	809
42.05	3	55.10	248	69.10	12427	81.00	2865
43.10	26	56.10	1563	70.10	957	82.00	570
44.10	322	57.10	2996	72.05	615	83.10	38
45.10	936	58.05	147	73.10	5061	86.00	195
46.20	35	60.10	997	74.10	19349	87.00	7397
47.10	1865	61.10	5023	75.10	62069	88.00	7298
48.05	574	62.10	4916	76.10	5274	91.00	434

Average of 18.288 to 18.300 min.: 5W15840.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.10	3205	114.95	131	139.90	33	155.00	305
93.10	5186	116.00	406	141.00	1040	157.00	249
94.10	14787	117.00	737	142.00	144	158.95	167
95.10	149226	117.95	426	143.00	1000	160.95	153
96.10	9967	119.00	596	145.95	186	174.00	131890
97.10	324	128.00	451	146.95	117	175.00	9709
104.00	511	128.95	218	147.95	304	176.00	127597
105.00	197	129.95	475	148.90	44	177.00	8559
105.95	495	130.90	189	150.05	132	178.00	237
106.95	140	134.95	208	153.00	70	207.10	33
112.90	35	136.95	189	153.90	79		

BFB

```
Data File : C:\MSDCHEM\1\DATA\OLDV3W\5W16054.D          Vial: 1
Acq On    :  4 Feb 2016   2:33 pm                   Operator: THOMASH
Sample    : bfb                                     Inst    : GCMS5W
Misc      : MS97993,v5w646,,,,,1                    Multiplr: 1.00
MS Integration Params: RTEINT1.P
Method    : C:\MSDCHEM\1\METHODS\M3W1967.M (RTE Integrator)
Title     : TO15 by GCMS w/Rtx-1, 60 m X 0.32mm ID X 1.0 um
```



AutoFind: Scans 2402, 2403, 2404; Background Corrected with Scan 2392

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.0	23504	PASS
75	95	30	66	43.1	67448	PASS
95	95	100	100	100.0	156608	PASS
96	95	5	9	6.6	10317	PASS
173	174	0.00	2	0.6	803	PASS
174	95	50	120	88.4	138408	PASS
175	174	4	9	7.3	10108	PASS
176	174	93	101	96.1	132973	PASS
177	176	5	9	6.7	8973	PASS

5W16054.D M3W1967.M Fri Feb 05 12:22:58 2016 MS3W

Average of 18.282 to 18.294 min.: 5W16054.D
bfb
Modified:subtracted

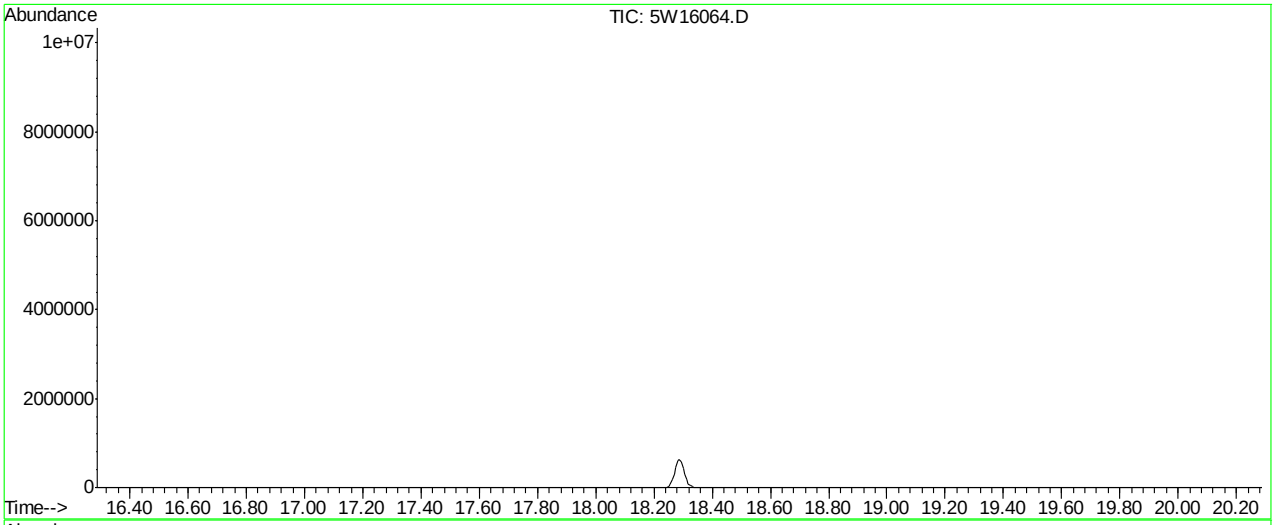
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	975	50.10	23504	64.05	436	77.05	926
37.10	5437	51.10	7336	65.05	237	78.00	737
38.10	4609	52.05	322	67.05	359	79.00	3574
39.10	1986	55.05	329	68.10	13429	80.00	1072
40.00	33	56.10	1758	69.10	13545	81.00	3751
43.10	41	57.10	3230	70.10	1027	81.95	812
44.05	529	58.00	136	72.00	680	86.05	226
45.05	1107	60.05	1141	73.10	5670	87.00	8487
47.10	2030	61.10	5535	74.10	21309	88.00	7863
48.00	651	62.10	5599	75.10	67448	90.95	441
49.10	4772	63.10	4204	76.10	5793	92.05	3622

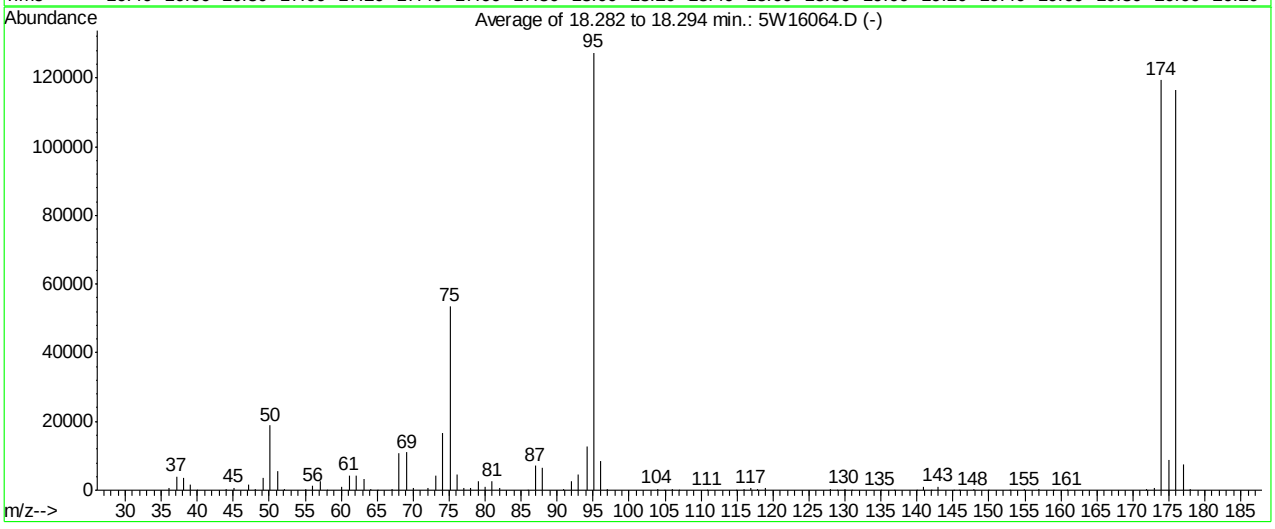
Average of 18.282 to 18.294 min.: 5W16054.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.05	5625	114.95	135	141.00	1125	156.95	277
94.10	15650	115.95	480	141.95	139	158.95	155
95.10	156608	116.90	783	142.95	1241	160.90	144
96.10	10317	117.95	488	144.95	171	171.95	465
97.00	321	118.95	689	145.90	224	173.10	803
103.95	524	127.90	490	146.95	124	174.00	138408
104.90	189	128.95	214	147.95	330	175.00	10108
106.00	524	129.90	534	148.90	71	176.00	132973
106.95	162	130.95	170	149.95	140	177.00	8973
110.95	75	134.90	229	153.00	77	177.95	249
113.00	38	136.95	222	154.95	333	281.10	34

BFB

```
Data File : C:\MSDCHEM\1\DATA\OLD_W\5W16064.D            Vial: 1
Acq On    :  5 Feb 2016   9:48 am                    Operator: THOMASH
Sample    : BFB                                      Inst    : GCMS5W
Misc      : MS97993,v5w647,,,,,1                     Multiplr: 1.00
MS Integration Params: RTEINT.P
Method    : C:\MSDCHEM\1\METHODS\MW2135.M (RTE Integrator)
Title     : MA-APH by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
```





AutoFind: Scans 2402, 2403, 2404; Background Corrected with Scan 2391

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.7	18776	PASS
75	95	30	66	42.0	53520	PASS
95	95	100	100	100.0	127405	PASS
96	95	5	9	6.7	8517	PASS
173	174	0.00	2	0.6	742	PASS
174	95	50	120	93.7	119344	PASS
175	174	4	9	7.5	8915	PASS
176	174	93	101	97.6	116456	PASS
177	176	5	9	6.5	7582	PASS

5W16064.D MW2135.M Mon Feb 08 10:11:17 2016 MSW

Average of 18.282 to 18.294 min.: 5W16064.D
BFB
Modified:subtracted

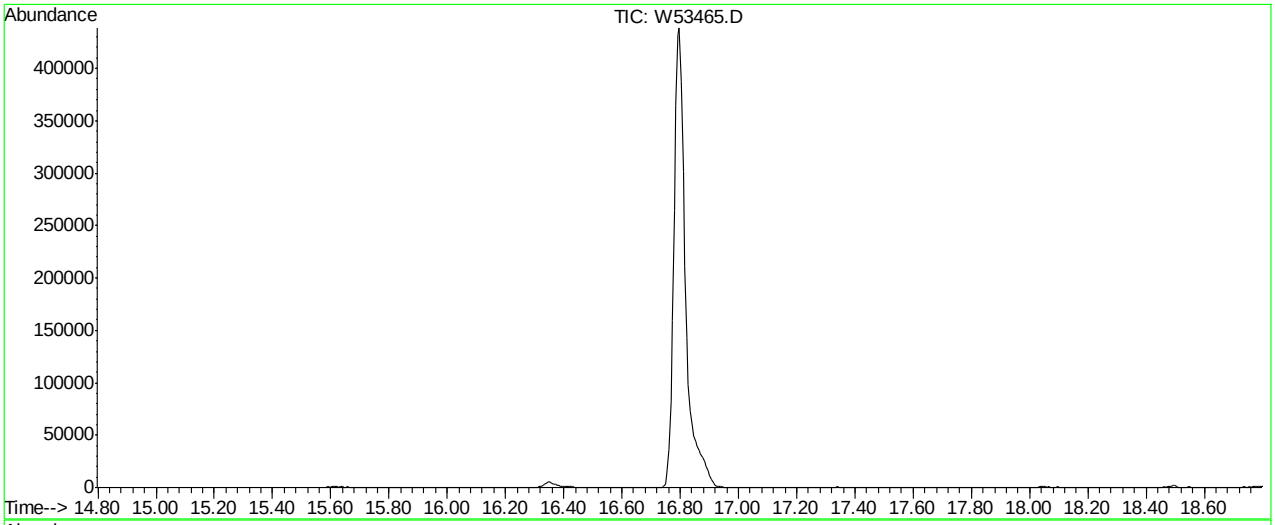
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	716	51.10	5709	65.05	149	78.00	611
37.10	3933	52.10	223	67.05	284	79.00	2682
38.10	3544	55.05	266	68.05	10652	79.95	873
39.10	1502	56.05	1306	69.10	11010	80.95	2746
40.00	68	57.10	2543	70.05	828	81.95	644
44.05	362	58.05	113	72.05	567	85.95	149
45.10	818	60.05	849	73.10	4401	87.00	7166
47.05	1697	61.10	4304	74.10	16687	88.00	6686
48.05	498	62.05	4290	75.10	53520	90.95	370
49.10	3758	63.10	3247	76.10	4537	92.00	2743
50.10	18776	64.05	323	77.05	823	93.00	4522

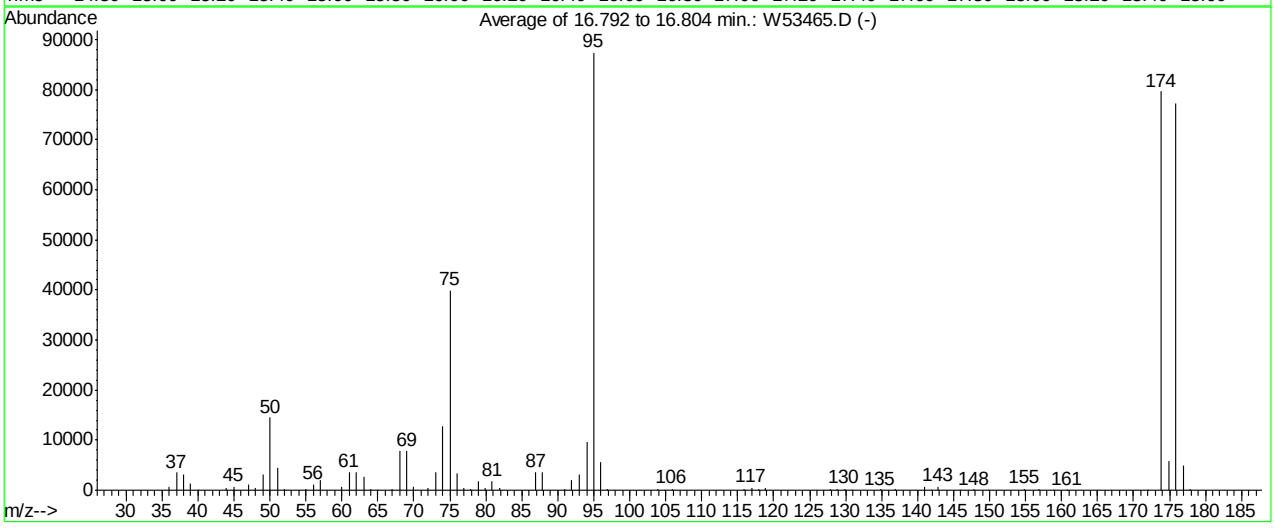
Average of 18.282 to 18.294 min.: 5W16064.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.10	12724	116.95	612	141.95	123	171.95	283
95.10	127405	117.90	357	142.95	1008	173.05	742
96.10	8517	118.90	516	145.10	44	174.00	119344
97.05	259	127.95	405	145.85	155	175.00	8915
103.95	451	128.90	169	147.90	296	176.00	116456
104.90	97	129.95	418	149.95	113	177.00	7582
105.95	430	130.95	136	152.90	71	177.95	206
106.95	123	134.95	175	154.95	293		
110.90	35	136.90	166	156.95	222		
114.95	113	140.00	34	158.95	124		
115.90	344	140.95	934	160.90	128		

BFB

```
Data File : C:\MSDCHEM\1\DATA\W53465.D                    Vial: 5
Acq On    : 11 Feb 2016  12:53 pm                  Operator: YOUMINH
Sample    : BFB                                    Inst    : MSW
Misc      : MS96317,VW2140,,,,,1                   Multiplr: 1.00
MS Integration Params: rteint.p
Method    : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title     : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
```





AutoFind: Scans 199, 200, 201; Background Corrected with Scan 187

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.6	14541	PASS
75	95	30	66	45.7	39973	PASS
95	95	100	100	100.0	87434	PASS
96	95	5	9	6.4	5623	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.2	79701	PASS
175	174	4	9	7.2	5745	PASS
176	174	93	101	96.9	77192	PASS
177	176	5	9	6.4	4959	PASS

W53465.D MW2140.M Fri Feb 12 10:38:02 2016 MSW

Average of 16.792 to 16.804 min.: W53465.D
BFB
Modified:subtracted

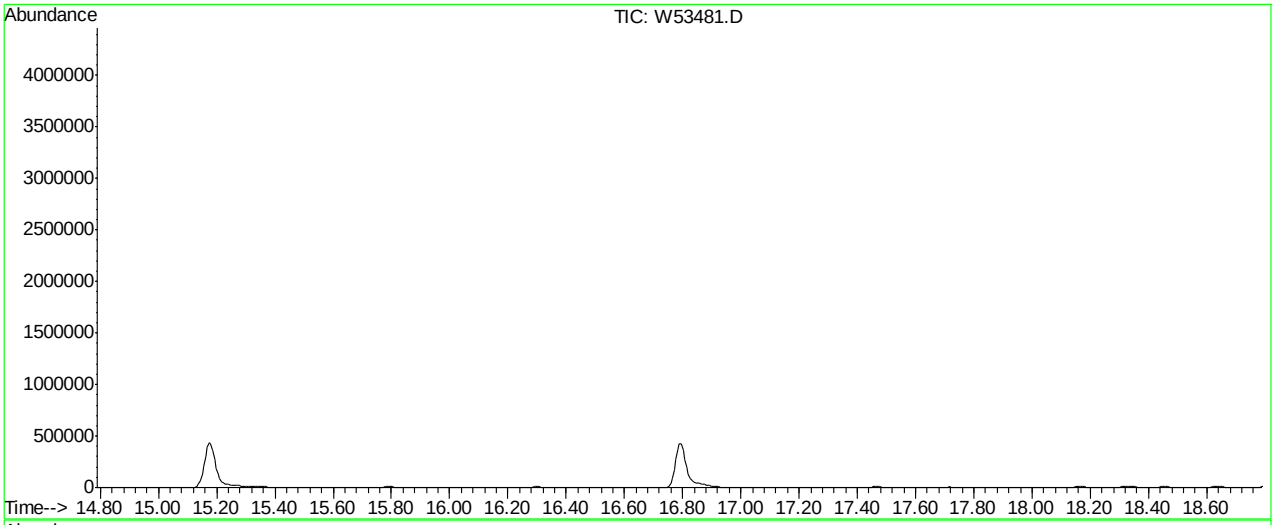
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	675	51.00	4563	67.00	235	78.90	1741
37.00	3579	51.95	192	68.00	7794	79.90	540
38.00	3197	54.95	194	69.00	7827	80.90	1831
39.00	1250	56.00	1184	70.00	578	81.90	387
39.95	60	57.00	1976	72.00	455	86.95	3663
43.95	379	59.95	709	73.00	3521	87.90	3642
45.00	693	61.00	3612	74.00	12826	90.95	250
47.00	1133	62.00	3496	75.00	39973	91.95	2063
48.00	457	63.00	2670	76.00	3306	93.00	3223
49.00	3217	64.00	223	77.00	455	94.00	9707
50.00	14541	64.90	36	77.90	308	95.00	87434

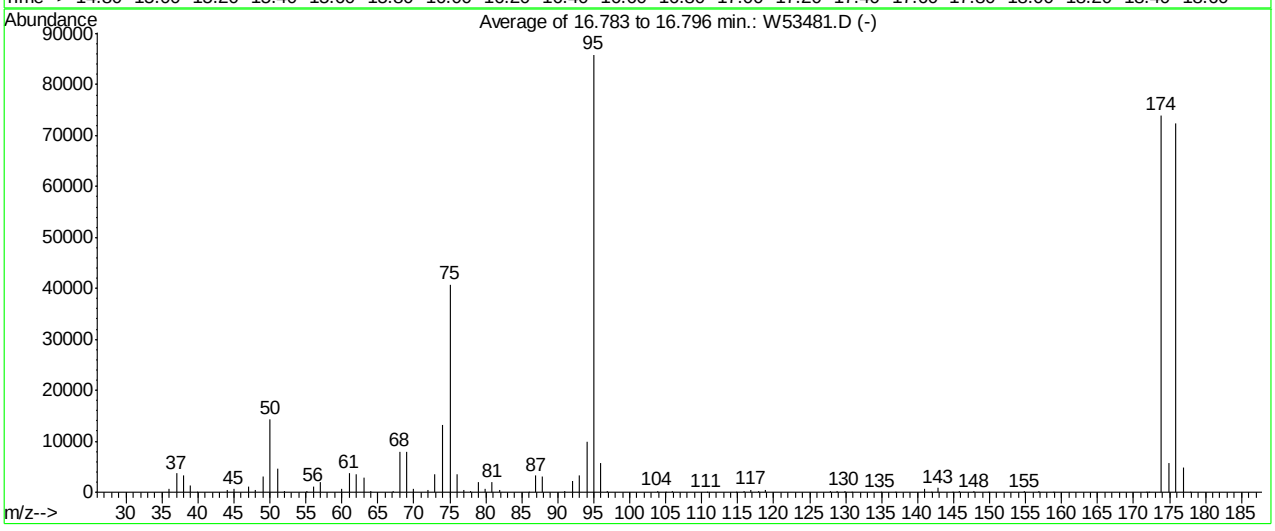
Average of 16.792 to 16.804 min.: W53465.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	5623	129.85	294	156.90	180		
96.95	205	130.80	112	158.80	77		
103.85	293	134.85	126	160.80	37		
104.80	85	136.85	126	171.95	101		
105.85	314	140.90	686	173.90	79701		
115.85	272	141.90	75	174.90	5745		
116.90	479	142.85	755	175.90	77192		
117.85	253	145.90	69	176.90	4959		
118.85	418	147.85	208	177.85	128		
127.90	279	149.80	86				
128.80	127	154.85	247				

BFB

Data File : C:\MSDCHEM\1\DATA\W53481.D Vial: 5
Acq On : 12 Feb 2016 9:19 am Operator: YOUMINH
Sample : BFB Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um





AutoFind: Scans 1961, 1962, 1963; Background Corrected with Scan 1951

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.7	14353	PASS
75	95	30	66	47.4	40736	PASS
95	95	100	100	100.0	85914	PASS
96	95	5	9	6.7	5763	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.1	73965	PASS
175	174	4	9	7.8	5795	PASS
176	174	93	101	98.0	72453	PASS
177	176	5	9	6.6	4755	PASS

W53481.D MW2140.M Fri Feb 12 16:03:07 2016 MSW

Average of 16.783 to 16.796 min.: W53481.D
BFB
Modified:subtracted

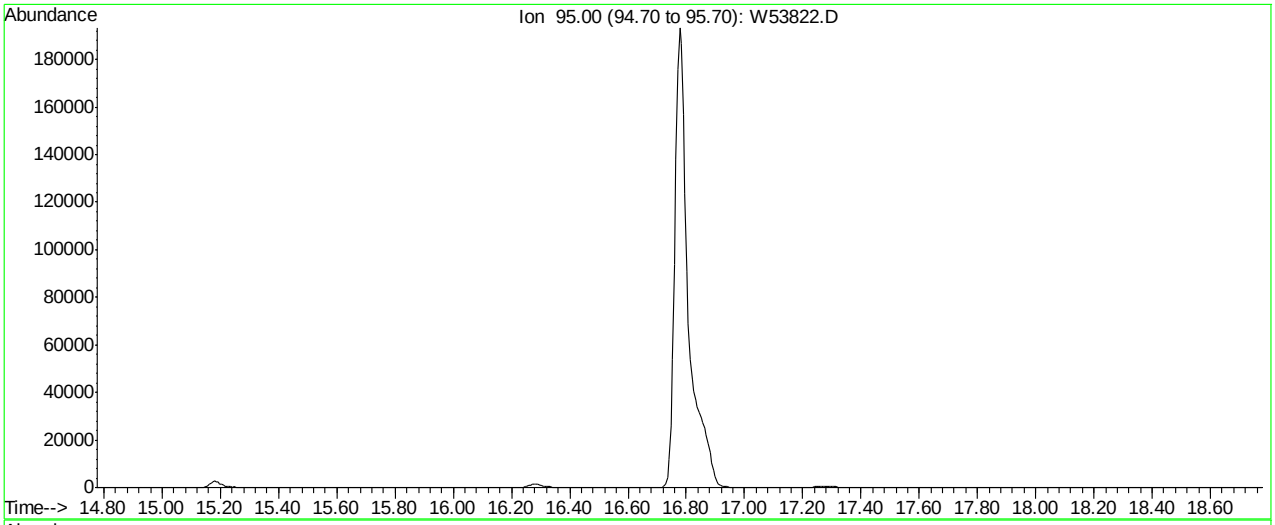
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	693	51.00	4630	68.00	8033	79.95	632
37.00	3663	52.05	202	69.00	8003	80.90	2016
38.00	3278	55.05	208	70.00	583	81.90	523
39.00	1261	56.00	1182	71.95	446	85.90	48
39.90	30	57.00	1902	72.95	3463	86.95	3235
44.00	429	60.00	730	74.00	13142	87.90	3074
45.00	602	61.00	3792	75.00	40736	90.95	246
47.00	1011	62.00	3604	76.00	3576	92.00	2184
48.00	462	63.00	2773	77.00	408	93.00	3320
49.00	3069	64.00	247	77.90	300	94.00	9847
50.00	14353	67.05	174	78.90	1900	95.00	85914

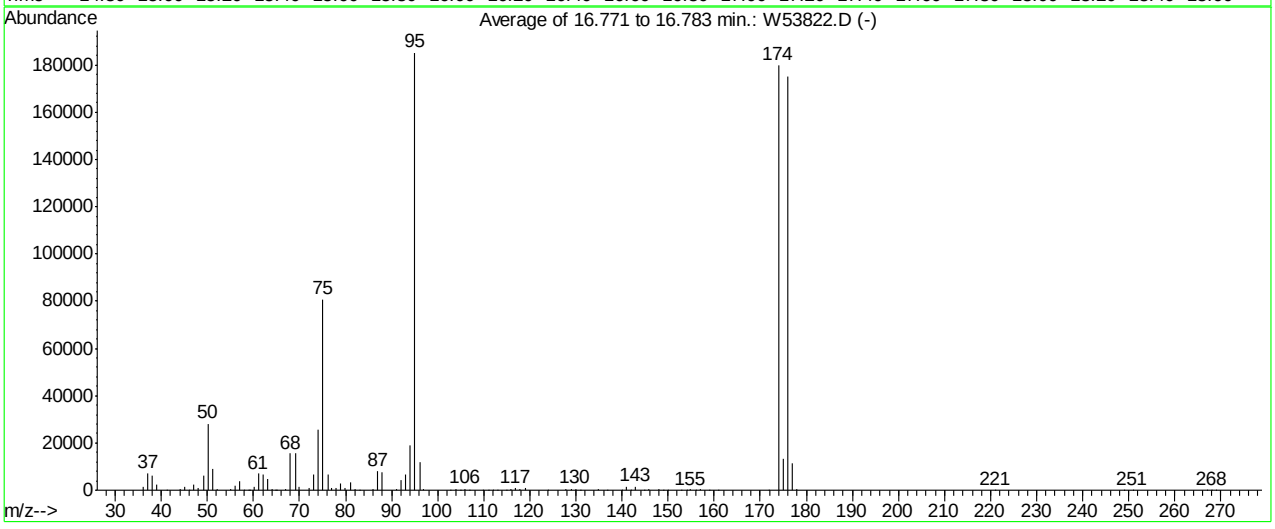
Average of 16.783 to 16.796 min.: W53481.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	5763	127.90	254	147.85	222	177.85	110
96.95	182	128.85	132	149.90	33		
103.85	307	129.90	319	154.85	193		
104.90	35	130.80	34	156.90	139		
105.85	298	134.85	117	158.80	34		
110.70	36	136.85	112	171.85	97		
114.80	37	140.90	760	172.10	49		
115.85	287	141.90	83	173.90	73965		
116.85	476	142.90	826	174.90	5795		
117.85	237	144.80	34	175.90	72453		
118.90	412	145.85	120	176.90	4755		

BFB

Data File : C:\MSDCHEM\1\DATA\W53822.D Vial: 3
Acq On : 1 Mar 2016 4:44 pm Operator: danat
Sample : bfb Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um





AutoFind: Scans 1959, 1960, 1961; Background Corrected with Scan 1947

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.2	28194	PASS
75	95	30	66	43.6	80816	PASS
95	95	100	100	100.0	185301	PASS
96	95	5	9	6.5	12095	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	97.1	179882	PASS
175	174	4	9	7.3	13155	PASS
176	174	93	101	97.4	175125	PASS
177	176	5	9	6.5	11450	PASS

W53822.D MW2152.M Wed Mar 02 09:53:01 2016 MSW

Average of 16.771 to 16.783 min.: W53822.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1354	50.10	28194	62.10	6707	74.10	25662
37.10	7207	51.10	8966	63.05	4984	75.05	80816
38.10	6312	52.10	398	64.05	415	76.10	6887
39.10	2486	55.05	402	64.90	101	77.00	1089
41.10	39	56.05	1963	65.10	34	78.00	728
44.05	679	57.10	3806	67.05	494	79.00	2902
45.05	1238	58.05	176	68.00	15505	79.95	895
46.10	81	59.00	48	69.10	15448	81.00	3150
47.05	2354	59.15	110	70.00	1212	81.95	663
48.05	900	60.05	1443	72.00	940	83.05	93
49.10	6032	61.05	6949	73.05	6715	85.95	264

Average of 16.771 to 16.783 min.: W53822.D
bfb
Modified:subtracted

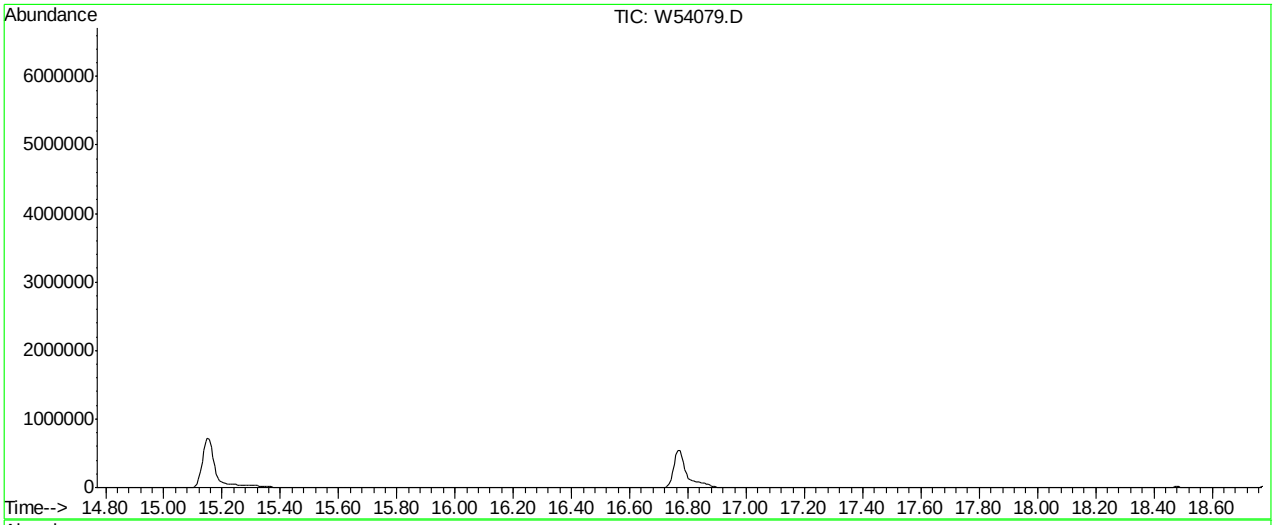
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.00	8259	104.90	215	118.95	773	142.95	1459
88.00	7691	105.95	582	123.90	46	144.90	127
91.00	491	106.90	137	127.90	641	145.85	273
92.00	4371	109.90	33	128.95	275	147.90	447
93.00	6657	110.90	75	129.90	645	148.85	161
94.05	19045	111.90	107	130.95	255	149.85	155
95.05	185301	112.90	38	134.95	258	152.95	133
96.05	12095	114.90	148	136.90	243	154.00	42
97.00	354	115.95	574	139.90	83	154.90	468
102.80	45	116.95	852	140.95	1401	156.00	35
103.95	568	117.90	559	141.95	170	156.90	335

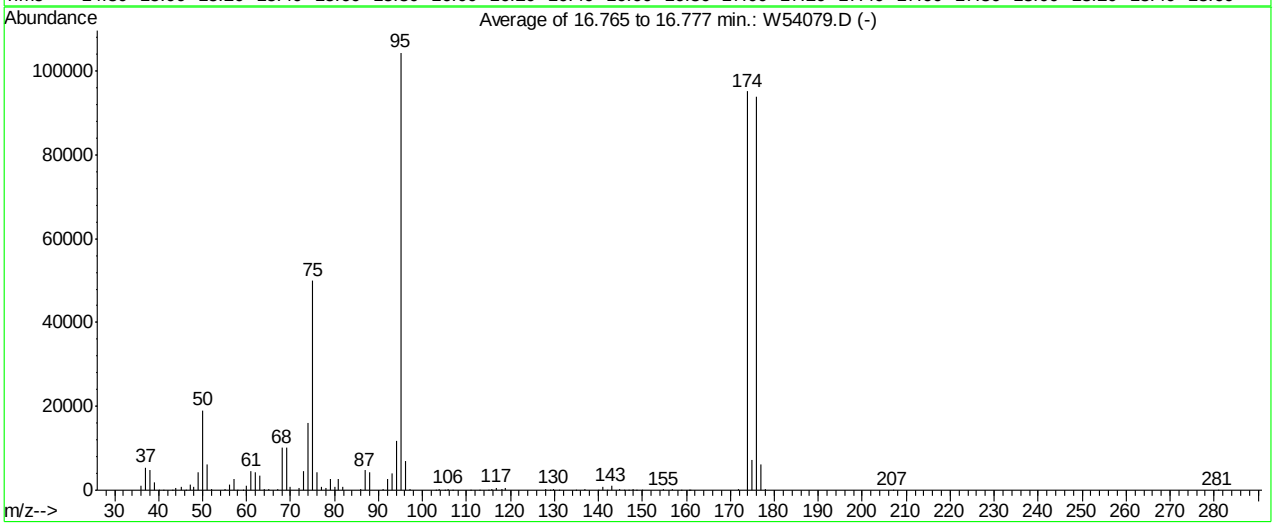
Average of 16.771 to 16.783 min.: W53822.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
158.85	183	267.00	64				
160.95	194	268.05	76				
171.95	176	268.90	40				
173.95	179882						
175.00	13155						
175.90	175125						
176.90	11450						
177.95	322						
221.00	34						
249.00	34						
250.90	51						

BFB

```
Data File : C:\MSDCHEM\1\DATA\W54079.D                    Vial: 1
Acq On    : 11 Mar 2016   8:39 am                  Operator: YOUMINH
Sample    : BFB                                    Inst    : MSW
Misc      : MS99025,VW2161,,,,,1                   Multiplr: 1.00
MS Integration Params: rteint.p
Method    : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title     : TO15 by GCMS w/Rtx-1, 60m  X 0.32mm ID X 1.0 um
```





AutoFind: Scans 1958, 1959, 1960; Background Corrected with Scan 1946

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.2	19034	PASS
75	95	30	66	47.8	49896	PASS
95	95	100	100	100.0	104413	PASS
96	95	5	9	6.8	7070	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.1	95141	PASS
175	174	4	9	7.6	7202	PASS
176	174	93	101	98.8	93994	PASS
177	176	5	9	6.4	6060	PASS

W54079.D MW2152.M Fri Mar 11 15:49:32 2016 MSW

Average of 16.765 to 16.777 min.: W54079.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	979	48.05	689	61.00	4635	74.05	16164
37.05	5469	49.05	4305	62.05	4413	75.00	49896
38.10	4848	50.10	19034	63.10	3506	76.05	4393
39.10	1764	51.05	6265	64.00	356	77.00	733
40.00	126	52.05	327	65.05	155	77.95	426
41.00	82	55.00	300	67.15	325	78.95	2744
43.10	59	56.05	1430	68.00	10053	80.00	881
44.00	583	57.05	2683	69.00	10260	80.90	2696
45.05	947	57.90	95	70.00	791	81.95	687
46.20	36	59.10	33	71.95	547	86.00	169
47.10	1454	60.00	979	73.00	4587	86.95	4740

Average of 16.765 to 16.777 min.: W54079.D
BFB
Modified:subtracted

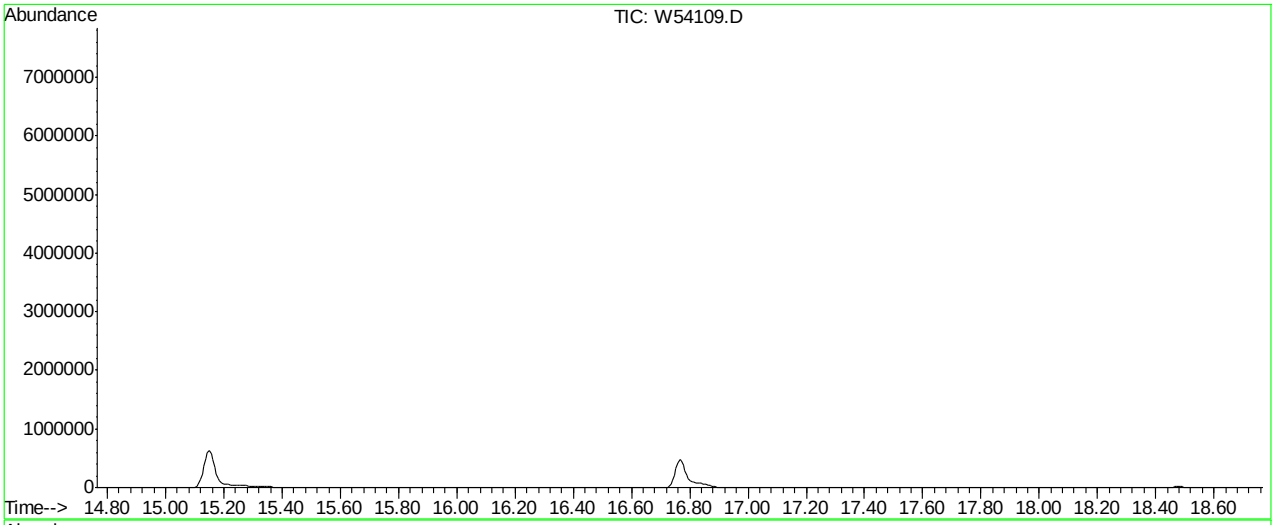
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.00	4220	105.85	383	129.90	356	147.85	195
91.00	328	106.85	68	130.95	143	148.75	68
92.00	2739	110.90	36	134.95	99	150.00	37
93.05	4021	112.90	33	136.95	174	154.85	255
94.00	11835	114.95	105	140.00	121	156.90	224
95.00	104413	115.85	409	140.90	893	158.80	57
96.05	7070	116.90	554	141.95	113	160.60	44
97.05	245	117.95	381	142.95	1010	161.00	51
102.90	35	118.95	466	144.90	154	171.95	325
103.85	374	127.90	348	145.85	124	173.90	95141
104.95	129	128.90	98	146.90	103	174.95	7202

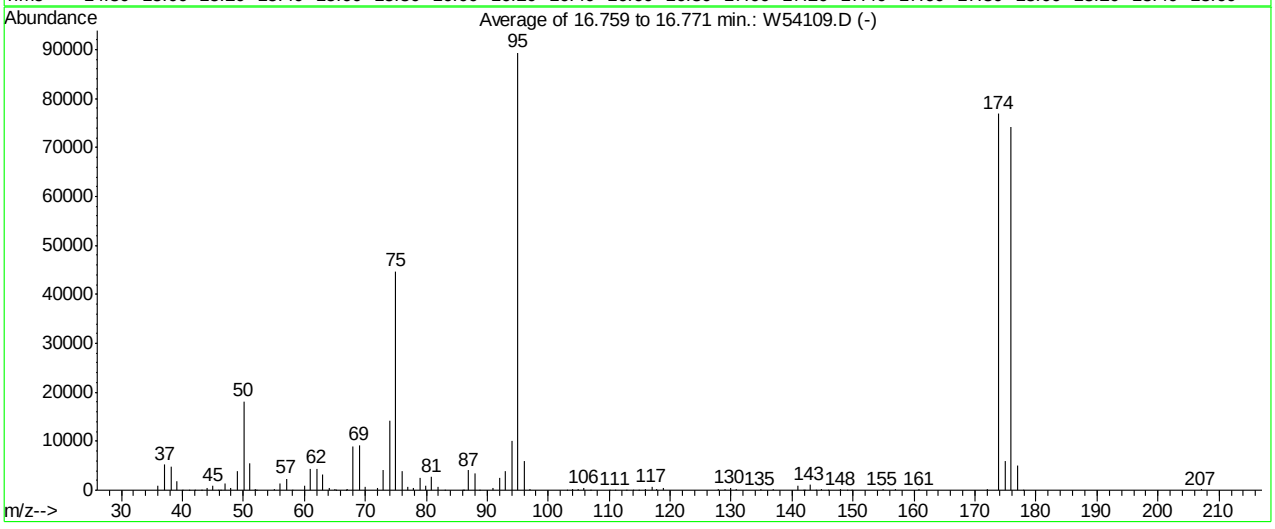
Average of 16.765 to 16.777 min.: W54079.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.90	93994						
176.95	6060						
177.95	161						
206.90	125						
280.90	33						

BFB

Data File : C:\MSDCHEM\1\DATA\W54109.D Vial: 1
Acq On : 12 Mar 2016 9:23 am Operator: YOUMINH
Sample : BFB Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um





AutoFind: Scans 1957, 1958, 1959; Background Corrected with Scan 1946

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.3	18162	PASS
75	95	30	66	50.0	44706	PASS
95	95	100	100	100.0	89424	PASS
96	95	5	9	6.8	6057	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.0	76920	PASS
175	174	4	9	7.7	5926	PASS
176	174	93	101	96.4	74173	PASS
177	176	5	9	6.8	5069	PASS

W54109.D MW2152.M Sun Mar 13 11:22:21 2016 MSW

Average of 16.759 to 16.771 min.: W54109.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	972	46.25	92	58.05	109	69.05	9168
37.10	5222	47.00	1442	60.05	862	70.00	791
38.10	4717	47.95	549	61.05	4270	71.95	510
39.05	1754	49.05	4012	62.05	4359	73.00	4118
40.00	46	50.10	18162	63.05	3327	74.00	14305
41.10	50	51.10	5611	64.05	362	75.00	44706
42.10	34	52.00	257	65.00	177	76.05	3892
43.05	93	52.20	71	65.20	50	76.95	608
44.05	364	55.05	338	66.90	90	77.95	405
45.05	864	56.00	1377	67.10	253	78.95	2501
45.95	86	57.05	2392	68.00	8984	79.95	817

Average of 16.759 to 16.771 min.: W54109.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	2728	94.05	10172	112.90	77	134.85	179
81.95	687	95.00	89424	113.90	35	136.85	175
83.00	53	96.00	6057	114.80	37	140.90	1004
85.95	108	96.95	223	115.90	288	141.80	35
86.20	66	103.00	34	116.95	647	142.00	56
86.95	4061	103.90	303	117.85	329	142.95	1079
88.00	3524	104.95	141	118.85	528	143.80	51
88.70	45	105.85	358	127.95	310	144.80	133
90.95	469	107.00	46	128.95	154	145.95	105
92.00	2539	110.10	34	129.85	354	147.95	199
93.00	3896	111.00	34	130.80	138	149.00	38

Average of 16.759 to 16.771 min.: W54109.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
149.80	79						
154.85	195						
156.95	167						
160.85	149						
172.00	294						
173.90	76920						
174.95	5926						
175.90	74173						
176.95	5069						
177.90	94						
207.05	145						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15841.D
Acq On : 22 Jan 2016 9:47 pm
Operator : THOMASH
Sample : ICC637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.285	130	165817	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.488	114	626348	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.049	82	304742	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.285	130	165817	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.300	95	405807	10.00	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 100.00%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	421218	10.00	ppb(v	95
3) Freon 152A	3.838	65	93544	10.00	ppb(v	90
4) Chlorodifluoromethane	3.881	67	34847	10.00	ppb(v	97
5) Propene	3.905	41	95240	10.00	ppb(v	98
6) Dichlorodifluoromethane	3.960	85	387523	10.00	ppb(v	100
7) 1-Chloro-1,1-difluoroe...	4.076	65	255633	10.00	ppb(v	96
8) Chloromethane	4.101	50	131255	10.00	ppb(v	99
9) Dichlorotetrafluoroethane	4.174	85	436191	10.00	ppb(v	99
10) Vinyl Chloride	4.278	62	156744	10.00	ppb(v#	99
11) 1,3-Butadiene	4.388	54	111783	10.00	ppb(v	91
12) n-Butane	4.431	58	24170	10.00	ppb(v#	76
13) Bromomethane	4.615	94	170373	10.00	ppb(v	99
14) Chloroethane	4.755	64	77197	10.00	ppb(v	96
15) Dichlorofluoromethane	4.829	67	347296	10.00	ppb(v	99
16) Acetonitrile	5.055	41	110290	10.00	ppb(v	98
17) Freon 123	5.178	83	415874	10.00	ppb(v	98
18) Freon 123A	5.226	117	239575	10.00	ppb(v	94
19) Bromoethene	5.055	106	176553	10.00	ppb(v	97
20) Trichlorofluoromethane	5.416	101	401215	10.00	ppb(v	100
21) Acetone	5.275	58	69437	10.00	ppb(v	84
22) Pentane	5.722	57	37871	10.00	ppb(v	78
23) 1,1-Dichloro-1-fluoroe...	5.520	81	326258	10.00	ppb(v	97
24) Iodomethane	5.930	142	491510	10.00	ppb(v	93
25) Isopropyl Alcohol	5.496	43	45674	10.00	ppb(v	83
26) 1,1-Dichloroethene	5.997	61	244845	10.00	ppb(v	91
27) Freon 113	6.352	101	359890	10.00	ppb(v	96
28) Methylene Chloride	6.114	84	152665	10.00	ppb(v	90
29) Carbon Disulfide	6.395	76	490023	10.00	ppb(v	100
30) Ethanol	4.866	45	57490	10.00	ppb(v	96
31) Acrylonitrile	5.691	53	116751	10.00	ppb(v	99
32) 3-Chloropropene	6.218	76	75624	10.00	ppb(v	82
33) trans-1,2-Dichloroethene	7.013	61	225822	10.00	ppb(v	95
34) tert-Butyl Alcohol	6.034	59	353248	10.00	ppb(v	95
35) Methyl tert-Butyl Ether	7.276	73	434156	10.00	ppb(v	96
36) Vinyl Acetate	7.380	43	389039	10.00	ppb(v	95
37) 1,1-Dichloroethane	7.221	63	292830	10.00	ppb(v	99
38) 2-Butanone	7.643	72	79178	10.00	ppb(v	78
39) Hexane	8.304	57	225897	10.00	ppb(v	89
40) cis-1,2-Dichloroethene	8.108	61	217987	10.00	ppb(v	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15841.D
Acq On : 22 Jan 2016 9:47 pm
Operator : THOMASH
Sample : ICC637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Di-isopropyl Ether	8.310	87	136036	10.00	ppb(v	80
42) Ethyl Acetate	8.353	61	54548	10.00	ppb(v	80
43) Methyl Acrylate	8.340	55	296928	10.00	ppb(v	97
44) Chloroform	8.426	83	354880	10.00	ppb(v	98
45) 2,4-Dimethylpentane	9.289	57	278517	10.00	ppb(v	98
46) Tetrahydrofuran	8.873	72	79672	10.00	ppb(v	85
47) 1,1,1-Trichloroethane	9.521	97	344679	10.00	ppb(v	98
48) 1,2-Dichloroethane	9.240	62	201525	10.00	ppb(v	99
49) Benzene	10.053	78	528351	10.00	ppb(v	98
50) Carbon Tetrachloride	10.225	117	361449	10.00	ppb(v	99
51) Cyclohexane	10.359	56	235335	10.00	ppb(v	95
52) 2,3-Dimethylpentane	10.647	71	107942	10.00	ppb(v	94
54) 2,2,4-Trimethylpentane	11.338	57	782600	10.00	ppb(v	97
55) Heptane	11.681	71	162754	10.00	ppb(v	97
56) Trichloroethene	11.320	95	249950	10.00	ppb(v	96
57) 1,2-Dichloropropane	11.020	63	193219	10.00	ppb(v	98
58) Dibromomethane	11.002	174	243786	10.00	ppb(v	88
59) Ethyl Acrylate	11.057	55	373900	10.00	ppb(v	97
60) Methyl Methacrylate	11.589	69	185073	10.00	ppb(v	88
61) 1,4-Dioxane	11.338	88	126001	10.00	ppb(v	85
62) Bromodichloromethane	11.271	83	396337	10.00	ppb(v	99
63) cis-1,3-Dichloropropene	12.396	75	330017	10.00	ppb(v	99
64) 4-Methyl-2-pentanone	12.445	58	157559	10.00	ppb(v	89
65) trans-1,3-Dichloropropene	13.075	75	282055	10.00	ppb(v	98
66) Toluene	13.644	91	643347	10.00	ppb(v	100
67) 1,1,2-Trichloroethane	13.290	97	232543	10.00	ppb(v	97
68) 1,3-Dichloropropane	13.687	76	303950	10.00	ppb(v	93
69) 2-Hexanone	14.018	58	219837	10.00	ppb(v	88
70) Ethyl Methacrylate	14.054	69	322275	10.00	ppb(v	97
71) Dibromochloromethane	14.207	129	430308	10.00	ppb(v	100
72) Tetrachloroethene	15.162	166	334865	10.00	ppb(v	99
73) 1,2-Dibromoethane	14.525	107	379933	10.00	ppb(v	98
74) Octane	14.990	43	348035	10.00	ppb(v	93
75) 1,1,1,2-Tetrachloroethane	16.092	131	294847	10.00	ppb(v	98
77) Chlorobenzene	16.110	112	523597	10.00	ppb(v	97
78) Ethylbenzene	16.654	91	828591	10.00	ppb(v	98
79) m,p-Xylene	16.930	91	1257673	20.00	ppb(v	97
80) Styrene	17.450	104	492542	10.00	ppb(v	99
81) Nonane	17.982	43	344929	10.00	ppb(v	94
82) o-Xylene	17.603	91	637326	10.00	ppb(v	99
83) Bromoform	17.003	173	455013	10.00	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.603	83	519650	10.00	ppb(v	100
85) 1,2,3-Trichloropropane	17.798	75	366292	10.00	ppb(v	98
86) Isopropylbenzene	18.514	105	909101	10.00	ppb(v	98
87) Bromobenzene	18.624	156	318500	10.00	ppb(v	94
88) 2-Chlorotoluene	19.230	126	234514	10.00	ppb(v	91
89) n-Propylbenzene	19.297	120	243453	10.00	ppb(v	93
91) 4-Ethyltoluene	19.517	105	843766	10.00	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.640	105	715631	10.00	ppb(v	98
93) alpha-Methylstyrene	19.872	118	380939	10.00	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15841.D
Acq On : 22 Jan 2016 9:47 pm
Operator : THOMASH
Sample : ICC637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

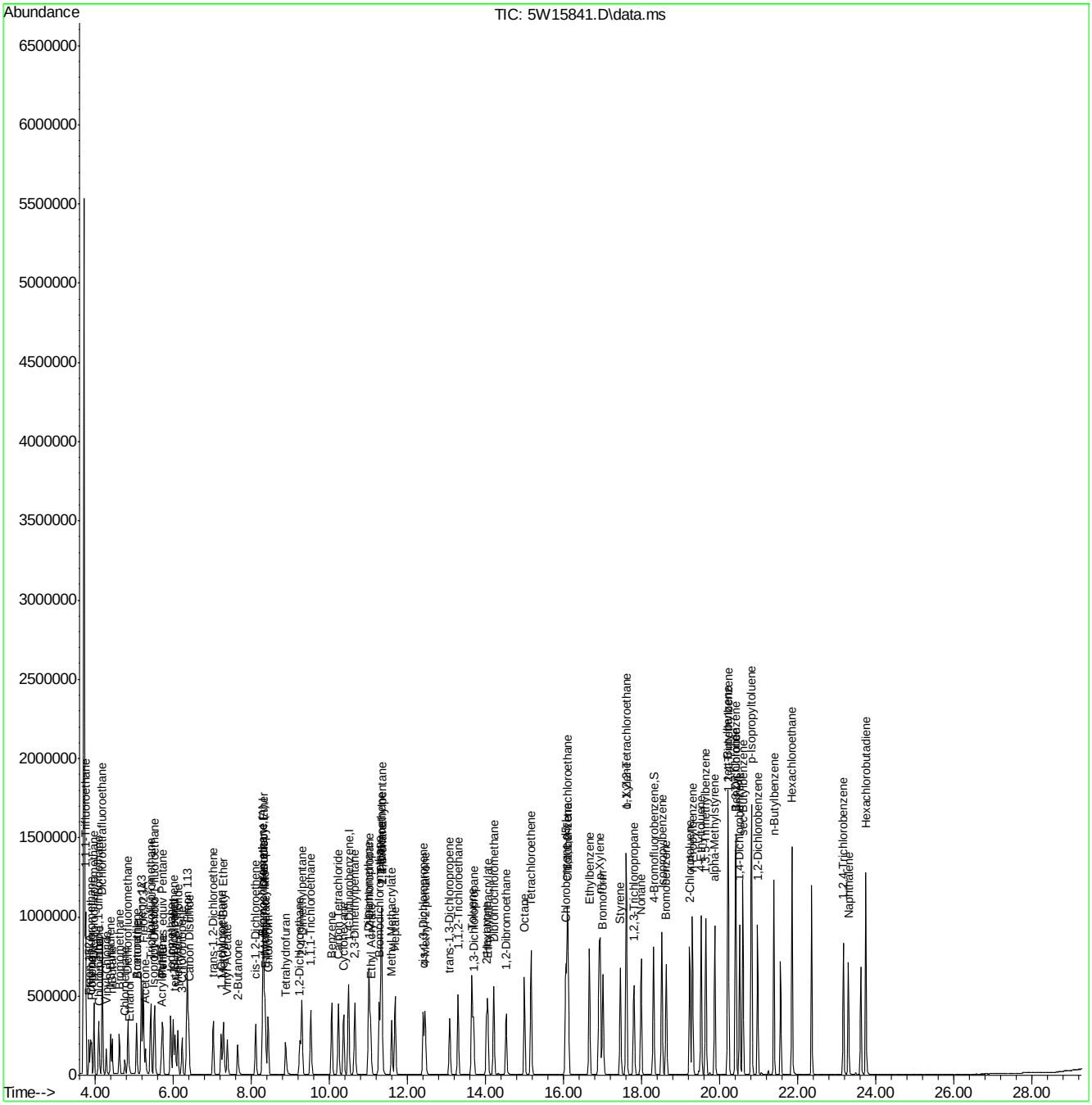
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	tert-Butylbenzene	20.203	134	158765	10.00	ppb(v	84
95)	1,2,4-Trimethylbenzene	20.221	105	731496	10.00	ppb(v	95
96)	1,3-Dichlorobenzene	20.411	146	496593	10.00	ppb(v	97
97)	Benzyl Chloride	20.398	91	650204	10.00	ppb(v	97
98)	1,4-Dichlorobenzene	20.508	146	501932	10.00	ppb(v	97
99)	sec-Butylbenzene	20.588	134	196618	10.00	ppb(v	89
100)	p-Isopropyltoluene	20.814	134	221180	10.00	ppb(v	96
101)	1,2-Dichlorobenzene	20.967	146	473417	10.00	ppb(v	97
102)	n-Butylbenzene	21.383	134	198460	10.00	ppb(v	86
103)	Hexachloroethane	21.848	201	299598	10.00	ppb(v	89
104)	1,2,4-Trichlorobenzene	23.164	180	282945	10.00	ppb(v	99
105)	Naphthalene	23.292	128	604138	10.00	ppb(v	100
106)	Hexachlorobutadiene	23.739	225	274575	10.00	ppb(v	99
108)	TVHC as equiv Pentane	5.722	TIC	885404	10.00	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15841.D
Acq On : 22 Jan 2016 9:47 pm
Operator : THOMASH
Sample : ICC637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15842.D
Acq On : 22 Jan 2016 10:29 pm
Operator : THOMASH
Sample : IC637-5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:43 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.285	130	157743	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.481	114	605028	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.049	82	285988	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.285	130	157743	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.294	95	384679	10.10	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 101.00%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	198782	4.96	ppb(v	95
3) Freon 152A	3.838	65	44121	4.96	ppb(v	91
4) Chlorodifluoromethane	3.880	67	16579	5.00	ppb(v	98
5) Propene	3.905	41	45291	5.00	ppb(v	97
6) Dichlorodifluoromethane	3.960	85	183596	4.98	ppb(v	99
7) 1-Chloro-1,1-difluoroe...	4.076	65	120827	4.97	ppb(v	95
8) Chloromethane	4.101	50	62011	4.97	ppb(v	97
9) Dichlorotetrafluoroethane	4.174	85	206563	4.98	ppb(v	99
10) Vinyl Chloride	4.278	62	73815	4.95	ppb(v#	99
11) 1,3-Butadiene	4.388	54	52669	4.95	ppb(v	92
12) n-Butane	4.431	58	11481	4.99	ppb(v#	83
13) Bromomethane	4.614	94	80298	4.95	ppb(v	99
14) Chloroethane	4.755	64	36378	4.95	ppb(v	98
15) Dichlorofluoromethane	4.829	67	164864	4.99	ppb(v	99
16) Acetonitrile	5.055	41	51917	4.95	ppb(v	98
17) Freon 123	5.177	83	196745	4.97	ppb(v	99
18) Freon 123A	5.226	117	112459	4.93	ppb(v	95
19) Bromoethene	5.055	106	82868	4.93	ppb(v	97
20) Trichlorofluoromethane	5.416	101	188544	4.94	ppb(v	100
21) Acetone	5.281	58	33710	5.10	ppb(v	81
22) Pentane	5.722	57	18113	5.03	ppb(v	75
23) 1,1-Dichloro-1-fluoroe...	5.520	81	154104	4.97	ppb(v	97
24) Iodomethane	5.924	142	229425	4.91	ppb(v	93
25) Isopropyl Alcohol	5.495	43	22231	5.12	ppb(v	91
26) 1,1-Dichloroethene	5.991	61	114952	4.94	ppb(v	93
27) Freon 113	6.352	101	169478	4.95	ppb(v	96
28) Methylene Chloride	6.113	84	71607	4.93	ppb(v	90
29) Carbon Disulfide	6.395	76	228626	4.90	ppb(v	100
30) Ethanol	4.865	45	27417	5.01	ppb(v	99
31) Acrylonitrile	5.691	53	54299	4.89	ppb(v	97
32) 3-Chloropropene	6.217	76	36156	5.03	ppb(v	78
33) trans-1,2-Dichloroethene	7.013	61	105089	4.89	ppb(v	95
34) tert-Butyl Alcohol	6.040	59	165564	4.93	ppb(v	95
35) Methyl tert-Butyl Ether	7.282	73	203643	4.93	ppb(v	96
36) Vinyl Acetate	7.380	43	180653	4.88	ppb(v	97
37) 1,1-Dichloroethane	7.221	63	136977	4.92	ppb(v	98
38) 2-Butanone	7.643	72	37114	4.93	ppb(v	80
39) Hexane	8.303	57	106939	4.98	ppb(v	90
40) cis-1,2-Dichloroethene	8.102	61	101022	4.87	ppb(v	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15842.D
Acq On : 22 Jan 2016 10:29 pm
Operator : THOMASH
Sample : IC637-5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:43 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Di-isopropyl Ether	8.310	87	63434	4.90	ppb(v	82
42) Ethyl Acetate	8.352	61	25294	4.87	ppb(v	82
43) Methyl Acrylate	8.340	55	139607	4.94	ppb(v	98
44) Chloroform	8.420	83	167953	4.97	ppb(v	98
45) 2,4-Dimethylpentane	9.288	57	130397	4.92	ppb(v	98
46) Tetrahydrofuran	8.879	72	37211	4.91	ppb(v	86
47) 1,1,1-Trichloroethane	9.521	97	163650	4.99	ppb(v	98
48) 1,2-Dichloroethane	9.239	62	94493	4.93	ppb(v	99
49) Benzene	10.053	78	248251	4.94	ppb(v	97
50) Carbon Tetrachloride	10.224	117	171399	4.98	ppb(v	99
51) Cyclohexane	10.359	56	111413	4.98	ppb(v	95
52) 2,3-Dimethylpentane	10.647	71	51297	5.00	ppb(v	95
54) 2,2,4-Trimethylpentane	11.338	57	367558	4.86	ppb(v	97
55) Heptane	11.680	71	75949	4.83	ppb(v	97
56) Trichloroethene	11.313	95	117343	4.86	ppb(v	97
57) 1,2-Dichloropropane	11.020	63	91009	4.88	ppb(v	98
58) Dibromomethane	11.001	174	115982	4.93	ppb(v	88
59) Ethyl Acrylate	11.056	55	174706	4.84	ppb(v	98
60) Methyl Methacrylate	11.589	69	88098	4.93	ppb(v	88
61) 1,4-Dioxane	11.338	88	59480	4.89	ppb(v	83
62) Bromodichloromethane	11.271	83	188348	4.92	ppb(v	98
63) cis-1,3-Dichloropropene	12.396	75	154923	4.86	ppb(v	98
64) 4-Methyl-2-pentanone	12.445	58	72438	4.76	ppb(v	90
65) trans-1,3-Dichloropropene	13.075	75	131287	4.82	ppb(v	97
66) Toluene	13.644	91	304436	4.90	ppb(v	99
67) 1,1,2-Trichloroethane	13.289	97	109902	4.89	ppb(v	98
68) 1,3-Dichloropropane	13.687	76	142370	4.85	ppb(v	93
69) 2-Hexanone	14.017	58	103030	4.85	ppb(v	86
70) Ethyl Methacrylate	14.054	69	151072	4.85	ppb(v	97
71) Dibromochloromethane	14.201	129	203673	4.90	ppb(v	100
72) Tetrachloroethene	15.161	166	158872	4.91	ppb(v	99
73) 1,2-Dibromoethane	14.519	107	179483	4.89	ppb(v	98
74) Octane	14.990	43	160883	4.79	ppb(v	92
75) 1,1,1,2-Tetrachloroethane	16.085	131	138840	4.87	ppb(v	91
77) Chlorobenzene	16.110	112	248521	5.06	ppb(v	96
78) Ethylbenzene	16.654	91	390529	5.02	ppb(v	98
79) m,p-Xylene	16.929	91	590861	10.01	ppb(v	97
80) Styrene	17.449	104	232312	5.03	ppb(v	98
81) Nonane	17.982	43	158194	4.89	ppb(v#	93
82) o-Xylene	17.602	91	300553	5.03	ppb(v	98
83) Bromoform	17.003	173	214616	5.03	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.602	83	243866	5.00	ppb(v	100
85) 1,2,3-Trichloropropane	17.798	75	171600	4.99	ppb(v	97
86) Isopropylbenzene	18.514	105	428222	5.02	ppb(v	98
87) Bromobenzene	18.624	156	149461	5.00	ppb(v	93
88) 2-Chlorotoluene	19.224	126	110977	5.04	ppb(v	93
89) n-Propylbenzene	19.297	120	114683	5.02	ppb(v	92
91) 4-Ethyltoluene	19.517	105	398663	5.03	ppb(v	99
92) 1,3,5-Trimethylbenzene	19.640	105	338686	5.04	ppb(v	97
93) alpha-Methylstyrene	19.872	118	179405	5.02	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15842.D
Acq On : 22 Jan 2016 10:29 pm
Operator : THOMASH
Sample : IC637-5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:43 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

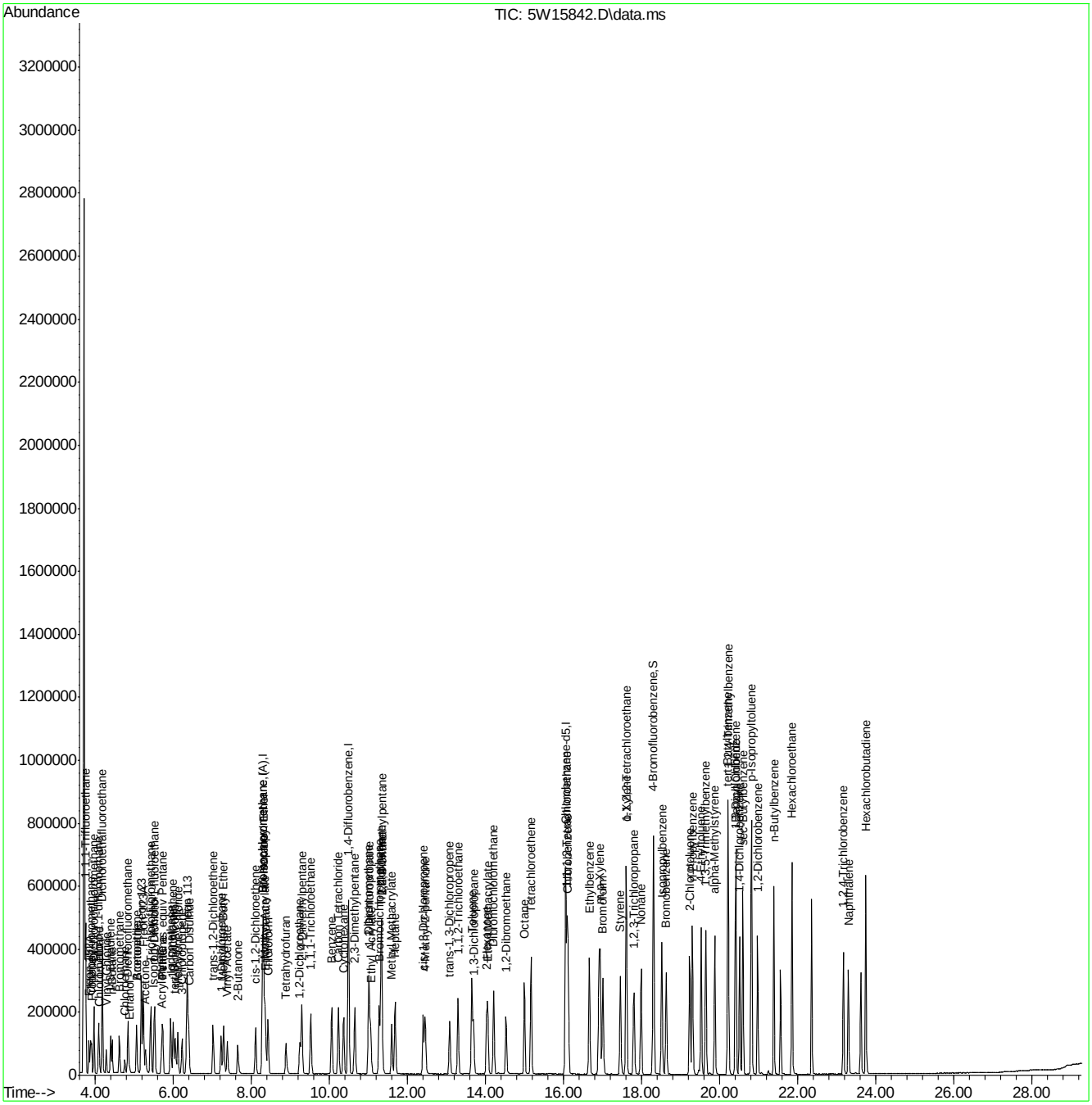
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	tert-Butylbenzene	20.202	134	74188	4.98	ppb(v	91
95)	1,2,4-Trimethylbenzene	20.215	105	346541	5.05	ppb(v	90
96)	1,3-Dichlorobenzene	20.410	146	235760	5.06	ppb(v	96
97)	Benzyl Chloride	20.398	91	301099	4.93	ppb(v	97
98)	1,4-Dichlorobenzene	20.508	146	237006	5.03	ppb(v	96
99)	sec-Butylbenzene	20.588	134	92622	5.02	ppb(v	90
100)	p-Isopropyltoluene	20.814	134	103656	4.99	ppb(v	98
101)	1,2-Dichlorobenzene	20.967	146	223062	5.02	ppb(v	97
102)	n-Butylbenzene	21.383	134	94448	5.07	ppb(v	87
103)	Hexachloroethane	21.848	201	140553	5.00	ppb(v	87
104)	1,2,4-Trichlorobenzene	23.163	180	133452	5.03	ppb(v	100
105)	Naphthalene	23.292	128	286729	5.06	ppb(v	100
106)	Hexachlorobutadiene	23.738	225	135648	5.26	ppb(v	99
108)	TVHC as equiv Pentane	5.722	TIC	418934	4.97	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15842.D
Acq On : 22 Jan 2016 10:29 pm
Operator : THOMASH
Sample : IC637-5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:46:43 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Dana Tryon
01/26/16 15:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15843.D
Acq On : 22 Jan 2016 11:13 pm
Operator : THOMASH
Sample : IC637-0.5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:55:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.285	130	178138	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.487	114	673869	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.048	82	314609	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.285	130	178138	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.294	95	427491	10.20	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 102.00%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	19361	0.43	ppb(v	96
3) Freon 152A	3.838	65	4195	0.42	ppb(v	99
4) Chlorodifluoromethane	3.874	67	1688	0.45	ppb(v	87
5) Propene	3.899	41	5039	0.49	ppb(v#	83
6) Dichlorodifluoromethane	3.960	85	17495	0.42	ppb(v	100
7) 1-Chloro-1,1-difluoroe...	4.076	65	11595	0.42	ppb(v#	95
8) Chloromethane	4.094	50	6021	0.43	ppb(v	98
9) Dichlorotetrafluoroethane	4.174	85	19812	0.42	ppb(v	97
10) Vinyl Chloride	4.278	62	6877	0.41	ppb(v#	97
11) 1,3-Butadiene	4.388	54	5101	0.42	ppb(v	95
12) n-Butane	4.431	58	1174	0.45	ppb(v#	38
13) Bromomethane	4.614	94	7850	0.43	ppb(v	99
14) Chloroethane	4.755	64	3358	0.40	ppb(v	92
15) Dichlorofluoromethane	4.829	67	15678	0.42	ppb(v	98
16) Acetonitrile	5.079	41	6198	0.52	ppb(v#	47
17) Freon 123	5.177	83	18728	0.42	ppb(v	97
18) Freon 123A	5.226	117	9853	0.38	ppb(v	98
19) Bromoethene	5.055	106	7657	0.40	ppb(v	96
20) Trichlorofluoromethane	5.416	101	17703	0.41	ppb(v	99
21) Acetone	5.306	58	3839	0.51	ppb(v	87
22) Pentane	5.716	57	1998	0.49	ppb(v	66
23) 1,1-Dichloro-1-fluoroe...	5.520	81	14756	0.42	ppb(v	97
24) Iodomethane	5.924	142	21511	0.41	ppb(v	90
25) Isopropyl Alcohol	5.514	43	3168	0.65	ppb(v	63
26) 1,1-Dichloroethene	5.991	61	10931	0.42	ppb(v	96
27) Freon 113	6.352	101	15607	0.40	ppb(v	96
28) Methylene Chloride	6.113	84	6881	0.42	ppb(v	89
29) Carbon Disulfide	6.395	76	21301	0.40	ppb(v	100
30) Ethanol	4.884	45	4722	0.76	ppb(v#	91
31) Acrylonitrile	5.710	53	6070	0.48	ppb(v	92
32) 3-Chloropropene	6.217	76	3296	0.41	ppb(v	79
33) trans-1,2-Dichloroethene	7.019	61	9527	0.39	ppb(v	89
34) tert-Butyl Alcohol	6.077	59	15304	0.40	ppb(v	96
35) Methyl tert-Butyl Ether	7.306	73	18950	0.41	ppb(v	96
36) Vinyl Acetate	7.392	43	16942	0.41	ppb(v	98
37) 1,1-Dichloroethane	7.227	63	12935	0.41	ppb(v	100
38) 2-Butanone	7.679	72	3586	0.42	ppb(v	82
39) Hexane	8.310	57	10557	0.44	ppb(v	76
40) cis-1,2-Dichloroethene	8.108	61	9477	0.40	ppb(v	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15843.D
Acq On : 22 Jan 2016 11:13 pm
Operator : THOMASH
Sample : IC637-0.5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:55:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Di-isopropyl Ether	8.328	87	5835	0.40	ppb(v	80
42) Ethyl Acetate	8.377	61	2296	0.39	ppb(v	78
43) Methyl Acrylate	8.358	55	13752	0.43	ppb(v	99
44) Chloroform	8.426	83	15897	0.42	ppb(v	98
45) 2,4-Dimethylpentane	9.288	57	12581	0.42	ppb(v	97
46) Tetrahydrofuran	8.921	72	3453	0.40	ppb(v	86
47) 1,1,1-Trichloroethane	9.521	97	14934	0.40	ppb(v	97
48) 1,2-Dichloroethane	9.246	62	8634	0.40	ppb(v#	98
49) Benzene	10.059	78	23009	0.41	ppb(v	98
50) Carbon Tetrachloride	10.231	117	15403	0.40	ppb(v	99
51) Cyclohexane	10.359	56	10661	0.42	ppb(v	97
52) 2,3-Dimethylpentane	10.653	71	4775	0.41	ppb(v	95
54) 2,2,4-Trimethylpentane	11.338	57	34916	0.41	ppb(v	95
55) Heptane	11.687	71	7009	0.40	ppb(v	97
56) Trichloroethene	11.319	95	11074	0.41	ppb(v	96
57) 1,2-Dichloropropane	11.026	63	8308	0.40	ppb(v	97
58) Dibromomethane	11.001	174	10931	0.42	ppb(v	90
59) Ethyl Acrylate	11.075	55	17976	0.45	ppb(v#	96
60) Methyl Methacrylate	11.601	69	8516	0.43	ppb(v	86
61) 1,4-Dioxane	11.375	88	5802	0.43	ppb(v#	48
62) Bromodichloromethane	11.271	83	17485	0.41	ppb(v	95
63) cis-1,3-Dichloropropene	12.402	75	14072	0.40	ppb(v	98
64) 4-Methyl-2-pentanone	12.463	58	6497	0.38	ppb(v	87
65) trans-1,3-Dichloropropene	13.087	75	12344	0.41	ppb(v	96
66) Toluene	13.650	91	28014	0.40	ppb(v	98
67) 1,1,2-Trichloroethane	13.295	97	10151	0.41	ppb(v	96
68) 1,3-Dichloropropane	13.693	76	13196	0.40	ppb(v	95
69) 2-Hexanone	14.042	58	9741	0.41	ppb(v	91
70) Ethyl Methacrylate	14.060	69	14400	0.42	ppb(v	97
71) Dibromochloromethane	14.207	129	18748	0.40	ppb(v	97
72) Tetrachloroethene	15.168	166	14739	0.41	ppb(v	97
73) 1,2-Dibromoethane	14.525	107	16965	0.42	ppb(v	99
74) Octane	14.996	43	15275	0.41	ppb(v	93
75) 1,1,1,2-Tetrachloroethane	16.091	131	12612	0.40	ppb(v#	21
77) Chlorobenzene	16.116	112	22641	0.42	ppb(v	95
78) Ethylbenzene	16.660	91	36360	0.43	ppb(v	98
79) m,p-Xylene	16.905	91	54262	0.84	ppb(v	98
80) Styrene	17.456	104	21081	0.41	ppb(v	99
81) Nonane	17.982	43	15936	0.45	ppb(v	96
82) o-Xylene	17.602	91	28076	0.43	ppb(v	97
83) Bromoform	17.009	173	19121	0.41	ppb(v	98
84) 1,1,2,2-Tetrachloroethane	17.608	83	22855	0.43	ppb(v	98
85) 1,2,3-Trichloropropane	17.804	75	16087	0.43	ppb(v	97
86) Isopropylbenzene	18.514	105	39559	0.42	ppb(v	97
87) Bromobenzene	18.630	156	14211	0.43	ppb(v	89
88) 2-Chlorotoluene	19.236	126	10116	0.42	ppb(v	88
89) n-Propylbenzene	19.297	120	10430	0.41	ppb(v	93
91) 4-Ethyltoluene	19.523	105	37412	0.43	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.640	105	31467	0.43	ppb(v	99
93) alpha-Methylstyrene	19.872	118	16217	0.41	ppb(v	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15843.D
Acq On : 22 Jan 2016 11:13 pm
Operator : THOMASH
Sample : IC637-0.5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:55:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) tert-Butylbenzene	20.202	134	6832	0.42	ppb(v	84
95) 1,2,4-Trimethylbenzene	20.221	105	32095	0.42	ppb(v	93
96) 1,3-Dichlorobenzene	20.410	146	22313	0.44	ppb(v	96
97) Benzyl Chloride	20.404	91	28008	0.42	ppb(v	96
98) 1,4-Dichlorobenzene	20.508	146	23222	0.45	ppb(v	97
99) sec-Butylbenzene	20.588	134	8461	0.42	ppb(v	100
100) p-Isopropyltoluene	20.814	134	9687	0.42	ppb(v	96
101) 1,2-Dichlorobenzene	20.973	146	21165	0.43	ppb(v	96
102) n-Butylbenzene	21.383	134	8523	0.42	ppb(v	98
103) Hexachloroethane	21.848	201	12204	0.39	ppb(v	89
104) 1,2,4-Trichlorobenzene	23.169	180	13400	0.46	ppb(v	99
105) Naphthalene	23.292	128	30303	0.49	ppb(v	100
106) Hexachlorobutadiene	23.745	225	13278	0.47	ppb(v	97
108) TVHC as equiv Pentane	5.716	TIC	41238m	0.43	ppb(v	

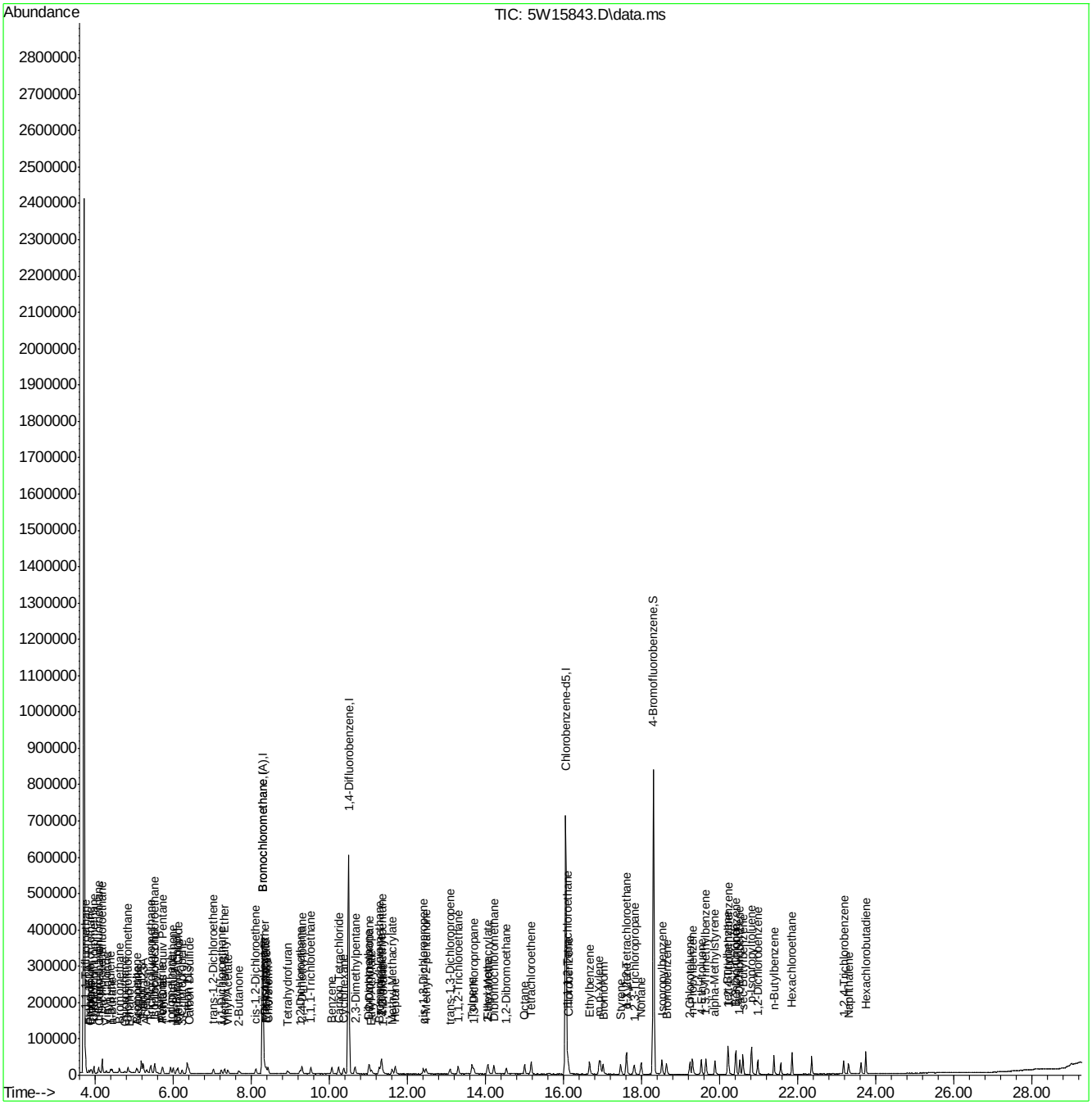
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15843.D
Acq On : 22 Jan 2016 11:13 pm
Operator : THOMASH
Sample : IC637-0.5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:55:32 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Manual Integration Approval Summary

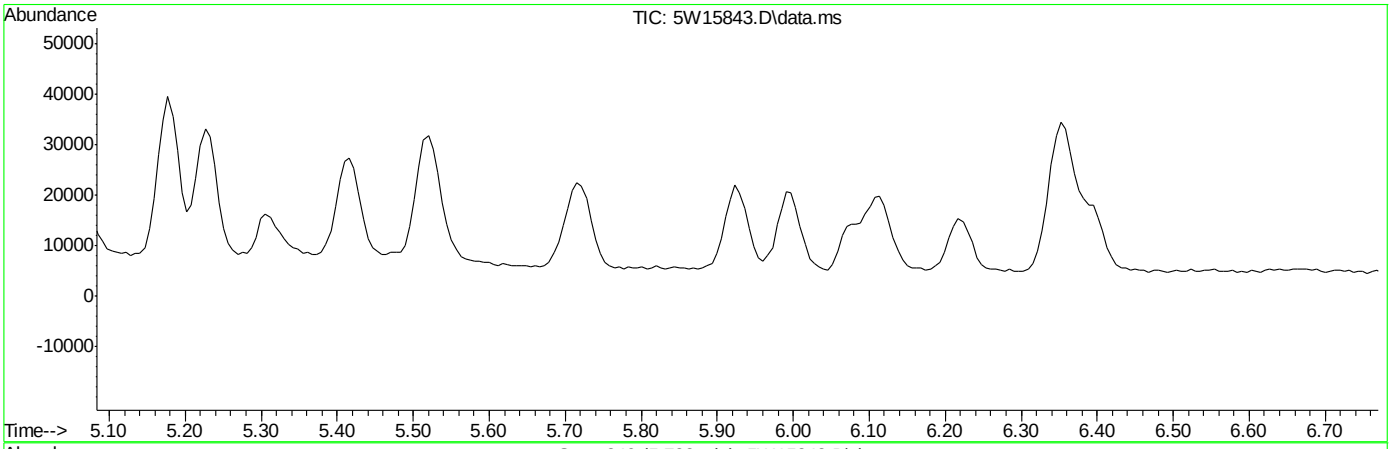
Sample Number:	V5W637-IC637	**Method:**	TO-15
Lab FileID:	5W15843.D	**Analyst approved:**	01/25/16 12:26 Thomas Hilbig
Injection Time:	01/22/16 23:13	**Supervisor approved:**	01/26/16 15:29 Dana Tryon

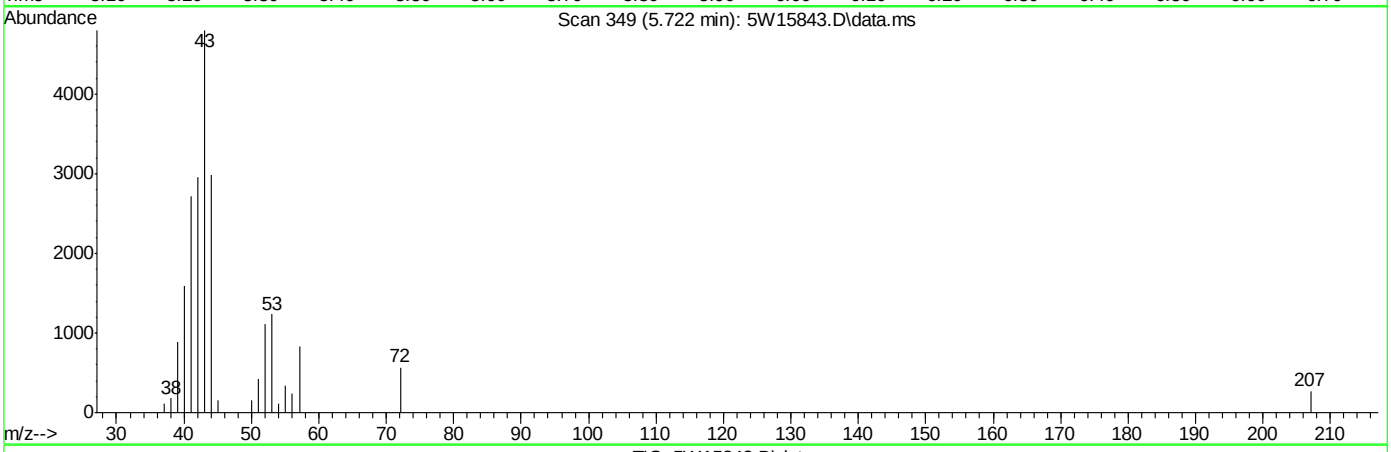
Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.72	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15843.D
Acq On : 22 Jan 2016 11:13 pm
Operator : THOMASH
Sample : IC637-0.5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:46:57 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15843.D\data.ms

(108) TVHC as equiv Pentane

5.722min (-5.722) 0.00ppb(v)

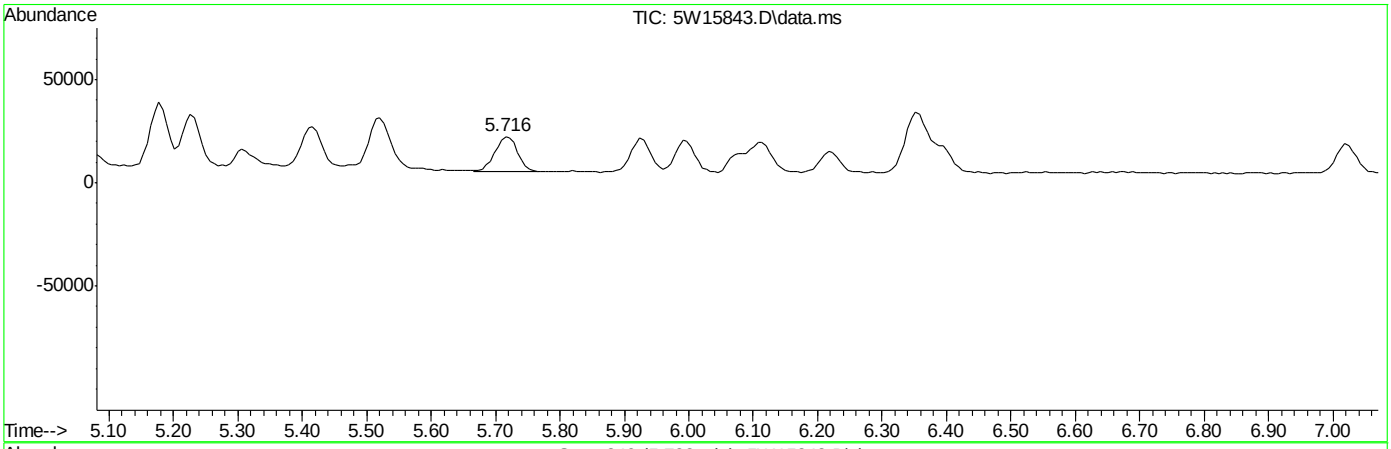
response 0

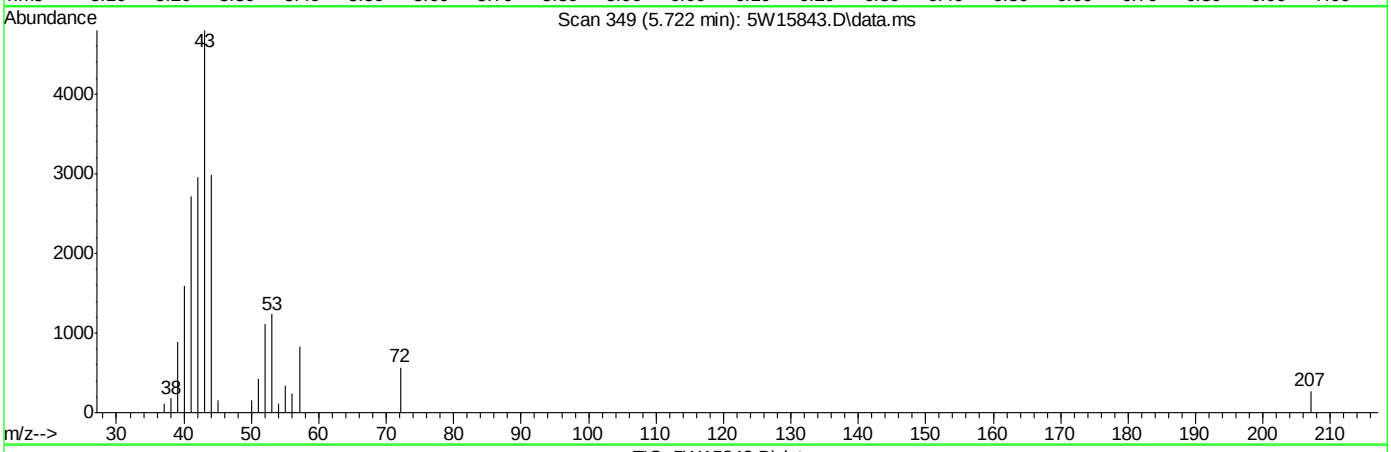
Signal	Exp%	Act%
TIC	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15843.D
Acq On : 22 Jan 2016 11:13 pm
Operator : THOMASH
Sample : IC637-0.5
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:46:57 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15843.D\data.ms

(108) TVHC as equiv Pentane

5.716min (-0.006) 0.43ppb(v) m

response 41238

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

5W15843.D edits: TVHC as equiv Pentane

Manual Integrations APPROVED (compounds with "m" flag)
Dana Tryon
01/26/16 15:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 09:32:37 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.279	130	156402	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.482	114	586634	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.049	82	270919	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.279	130	156402	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.294	95	373662	10.36	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 103.60%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	7939	0.20	ppb(v	96
3) Freon 152A	3.838	65	1735	0.20	ppb(v	88
4) Chlorodifluoromethane	3.874	67	708	0.22	ppb(v#	79
5) Propene	3.899	41	2425	0.27	ppb(v#	68
6) Dichlorodifluoromethane	3.960	85	7265	0.20	ppb(v	97
7) 1-Chloro-1,1-difluoroe...	4.076	65	4900	0.20	ppb(v#	69
8) Chloromethane	4.095	50	2706	0.22	ppb(v	99
9) Dichlorotetrafluoroethane	4.174	85	8089	0.20	ppb(v	97
10) Vinyl Chloride	4.278	62	2877	0.19	ppb(v#	87
11) 1,3-Butadiene	4.388	54	2134	0.20	ppb(v	93
12) n-Butane	4.425	58	492	0.22	ppb(v#	1
13) Bromomethane	4.615	94	3328	0.21	ppb(v	99
14) Chloroethane	4.755	64	1468	0.20	ppb(v#	91
15) Dichlorofluoromethane	4.835	67	6735	0.21	ppb(v	94
16) Acetonitrile	5.067	41	2889	0.28	ppb(v#	1
17) Freon 123	5.177	83	7959	0.20	ppb(v	98
18) Freon 123A	5.226	117	4305	0.19	ppb(v	99
19) Bromoethene	5.055	106	3077	0.18	ppb(v	94
20) Trichlorofluoromethane	5.416	101	7356	0.19	ppb(v	97
21) Acetone	5.312	58	1813	0.28	ppb(v	83
22) Pentane	5.722	57	948	0.27	ppb(v#	49
23) 1,1-Dichloro-1-fluoroe...	5.520	81	6310	0.21	ppb(v	97
24) Iodomethane	5.924	142	8821	0.19	ppb(v	92
25) Isopropyl Alcohol	5.520	43	1575	0.37	ppb(v#	45
26) 1,1-Dichloroethene	5.991	61	4517	0.20	ppb(v	95
27) Freon 113	6.352	101	6308	0.19	ppb(v	96
28) Methylene Chloride	6.107	84	2815	0.20	ppb(v	84
29) Carbon Disulfide	6.389	76	8389	0.18	ppb(v	98
31) Acrylonitrile	5.704	53	2278	0.21	ppb(v	92
32) 3-Chloropropene	6.218	76	1326	0.19	ppb(v	85
33) trans-1,2-Dichloroethene	7.019	61	3980	0.19	ppb(v	95
34) tert-Butyl Alcohol	6.071	59	6334	0.19	ppb(v#	91
35) Methyl tert-Butyl Ether	7.306	73	7907	0.19	ppb(v	98
36) Vinyl Acetate	7.392	43	6916	0.19	ppb(v	97
37) 1,1-Dichloroethane	7.221	63	5152	0.19	ppb(v#	96
38) 2-Butanone	7.680	72	1446	0.19	ppb(v#	77
39) Hexane	8.310	57	4701	0.22	ppb(v	77
40) cis-1,2-Dichloroethene	8.102	61	3842	0.19	ppb(v	94
41) Di-isopropyl Ether	8.322	87	2437	0.19	ppb(v	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 09:32:37 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Ethyl Acetate	8.371	61	825	0.16	ppb(v#	90
43) Methyl Acrylate	8.359	55	6978	0.25	ppb(v	100
44) Chloroform	8.414	83	6510	0.19	ppb(v	96
45) 2,4-Dimethylpentane	9.289	57	5473	0.21	ppb(v	99
46) Tetrahydrofuran	8.928	72	1304	0.17	ppb(v	86
47) 1,1,1-Trichloroethane	9.515	97	6330	0.19	ppb(v	96
48) 1,2-Dichloroethane	9.240	62	3572	0.19	ppb(v#	96
49) Benzene	10.053	78	9256	0.19	ppb(v	95
50) Carbon Tetrachloride	10.225	117	6250	0.18	ppb(v	99
51) Cyclohexane	10.353	56	4503	0.20	ppb(v	94
52) 2,3-Dimethylpentane	10.641	71	2045	0.20	ppb(v	80
54) 2,2,4-Trimethylpentane	11.338	57	14603	0.20	ppb(v	97
55) Heptane	11.681	71	2910	0.19	ppb(v	93
56) Trichloroethene	11.314	95	4543	0.19	ppb(v	98
57) 1,2-Dichloropropane	11.026	63	3386	0.19	ppb(v	95
58) Dibromomethane	11.002	174	4295	0.19	ppb(v	94
59) Ethyl Acrylate	11.081	55	6550m	0.19	ppb(v	
60) Methyl Methacrylate	11.607	69	3450	0.20	ppb(v	84
61) 1,4-Dioxane	11.381	88	2140	0.18	ppb(v#	48
62) Bromodichloromethane	11.265	83	7089	0.19	ppb(v	98
63) cis-1,3-Dichloropropene	12.403	75	5549	0.18	ppb(v	94
64) 4-Methyl-2-pentanone	12.476	58	2273	0.15	ppb(v	94
65) trans-1,3-Dichloropropene	13.088	75	4592	0.17	ppb(v	96
66) Toluene	13.650	91	11328	0.19	ppb(v	99
67) 1,1,2-Trichloroethane	13.296	97	4096	0.19	ppb(v	92
68) 1,3-Dichloropropane	13.693	76	5225	0.18	ppb(v	92
69) 2-Hexanone	14.060	58	3260	0.16	ppb(v	96
70) Ethyl Methacrylate	14.067	69	5476	0.18	ppb(v#	93
71) Dibromochloromethane	14.207	129	7566	0.19	ppb(v	99
72) Tetrachloroethene	15.162	166	5843	0.19	ppb(v	96
73) 1,2-Dibromoethane	14.531	107	6648	0.19	ppb(v	100
74) Octane	14.996	43	6419	0.20	ppb(v	95
75) 1,1,1,2-Tetrachloroethane	16.091	131	5100	0.18	ppb(v#	1
77) Chlorobenzene	16.110	112	9344	0.20	ppb(v	89
78) Ethylbenzene	16.660	91	14558	0.20	ppb(v	95
79) m,p-Xylene	16.911	91	23915	0.43	ppb(v	98
80) Styrene	17.462	104	8064	0.18	ppb(v	97
81) Nonane	17.982	43	6576	0.21	ppb(v#	95
82) o-Xylene	17.609	91	11612	0.20	ppb(v	97
83) Bromoform	17.009	173	7431	0.18	ppb(v	97
84) 1,1,2,2-Tetrachloroethane	17.609	83	9226	0.20	ppb(v	99
85) 1,2,3-Trichloropropane	17.804	75	6408	0.20	ppb(v	98
86) Isopropylbenzene	18.514	105	16007	0.20	ppb(v	96
87) Bromobenzene	18.630	156	5600	0.20	ppb(v	96
88) 2-Chlorotoluene	19.230	126	4048	0.19	ppb(v#	82
89) n-Propylbenzene	19.303	120	4094	0.19	ppb(v	99
91) 4-Ethyltoluene	19.523	105	15050	0.20	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.640	105	12980	0.20	ppb(v	97
93) alpha-Methylstyrene	19.878	118	6290	0.19	ppb(v	96
94) tert-Butylbenzene	20.203	134	2762	0.20	ppb(v	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 09:32:37 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	1,2,4-Trimethylbenzene	20.221	105	12503	0.19	ppb(v	94
96)	1,3-Dichlorobenzene	20.417	146	8831	0.20	ppb(v	95
97)	Benzyl Chloride	20.404	91	10690	0.18	ppb(v	98
98)	1,4-Dichlorobenzene	20.515	146	9133	0.20	ppb(v	96
99)	sec-Butylbenzene	20.588	134	3317	0.19	ppb(v	93
100)	p-Isopropyltoluene	20.820	134	3689	0.19	ppb(v	98
101)	1,2-Dichlorobenzene	20.973	146	8354	0.20	ppb(v	95
102)	n-Butylbenzene	21.389	134	3158	0.18	ppb(v	90
103)	Hexachloroethane	21.848	201	4928	0.19	ppb(v	96
104)	1,2,4-Trichlorobenzene	23.170	180	4631	0.18	ppb(v	89
105)	Naphthalene	23.298	128	10646	0.20	ppb(v	99
106)	Hexachlorobutadiene	23.745	225	5066	0.21	ppb(v	98
108)	TVHC as equiv Pentane	5.716	TIC	15654m	0.19	ppb(v	

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

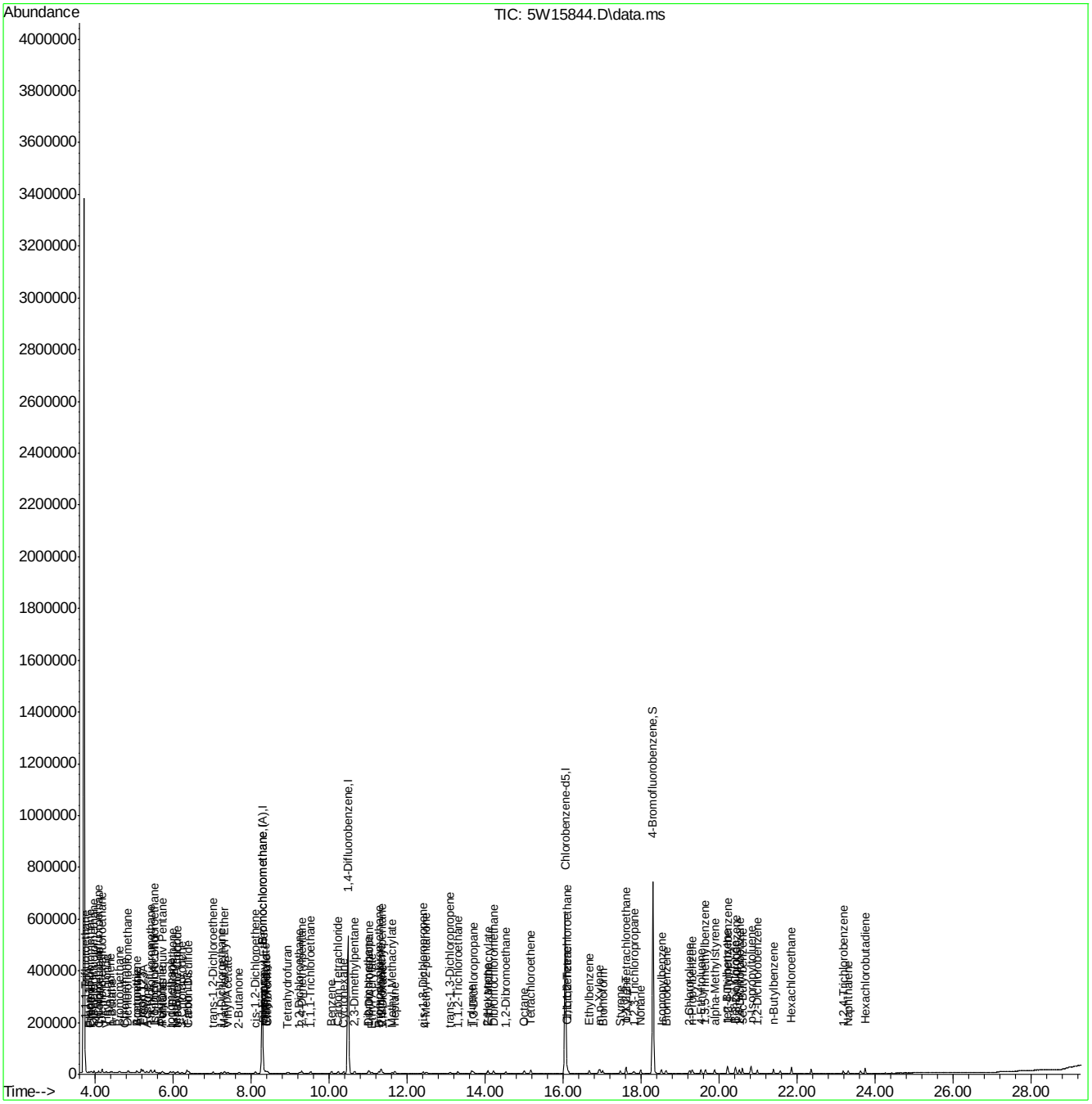
7.7.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 09:32:37 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Manual Integration Approval Summary

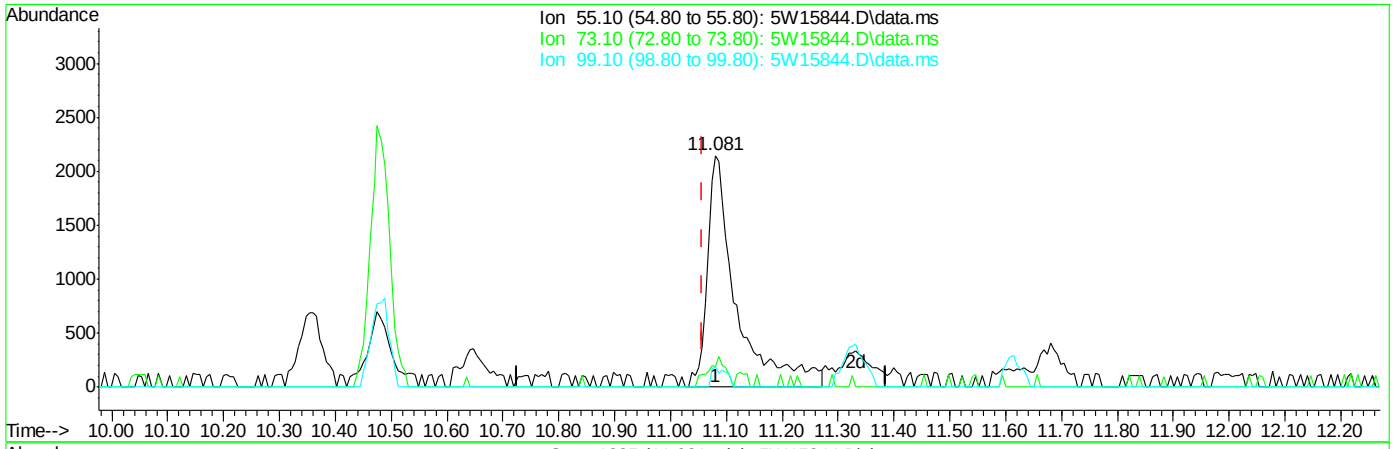
Sample Number:	V5W637-IC637	**Method:**	TO-15
Lab FileID:	5W15844.D	**Analyst approved:**	01/25/16 12:26 Thomas Hilbig
Injection Time:	01/22/16 23:56	**Supervisor approved:**	01/26/16 15:29 Dana Tryon

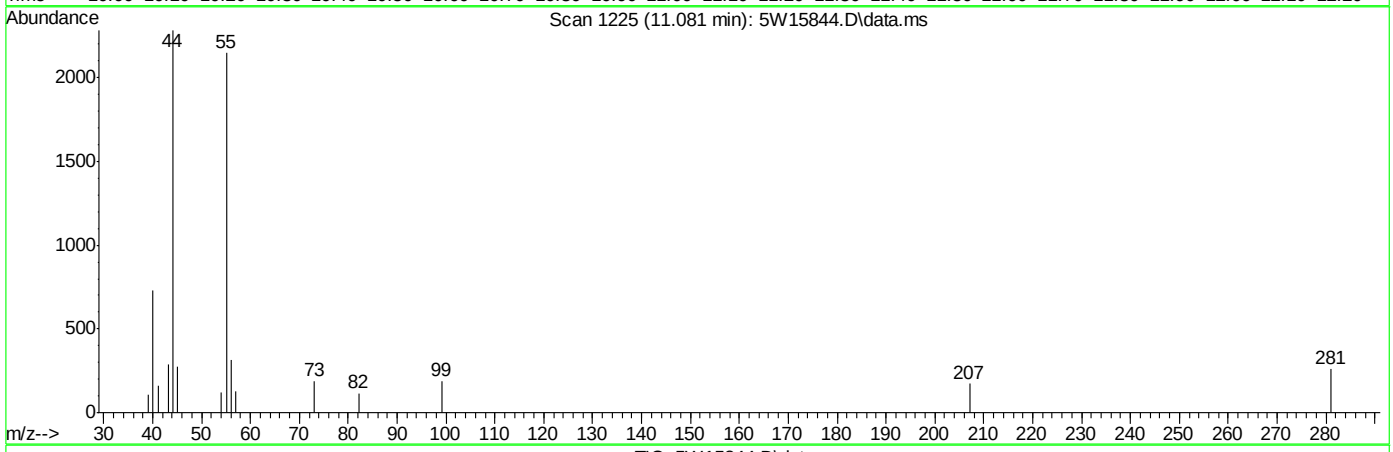
Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.72	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:47:11 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15844.D\data.ms

(59) Ethyl Acrylate

11.081min (+0.024) 0.22ppb(v)

response 7714

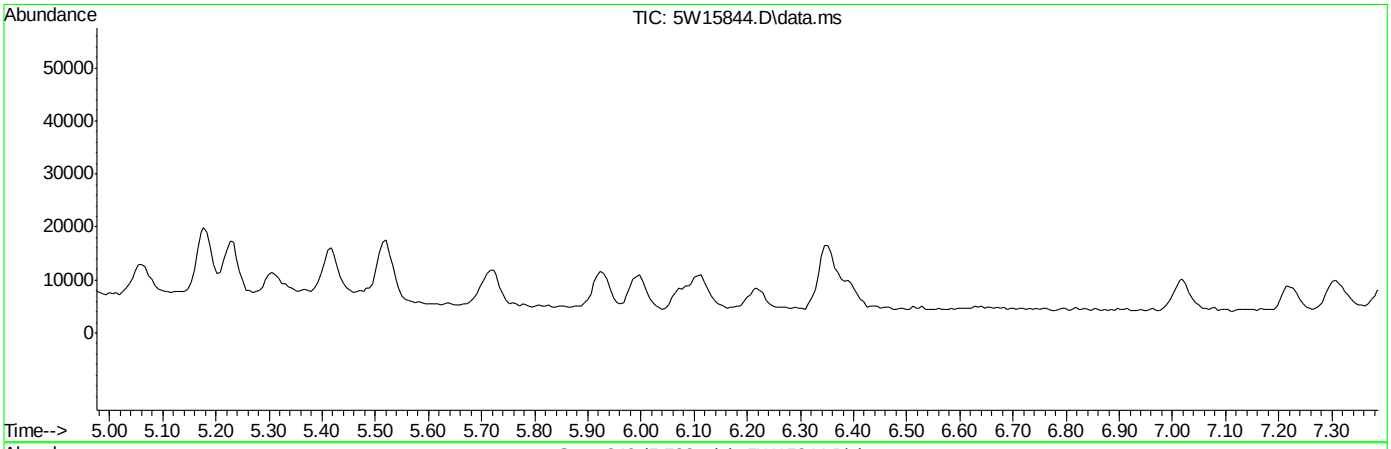
Ion	Exp%	Act%
55.10	100	100
73.10	7.50	8.90
99.10	7.70	8.90
0.00	0.00	0.00

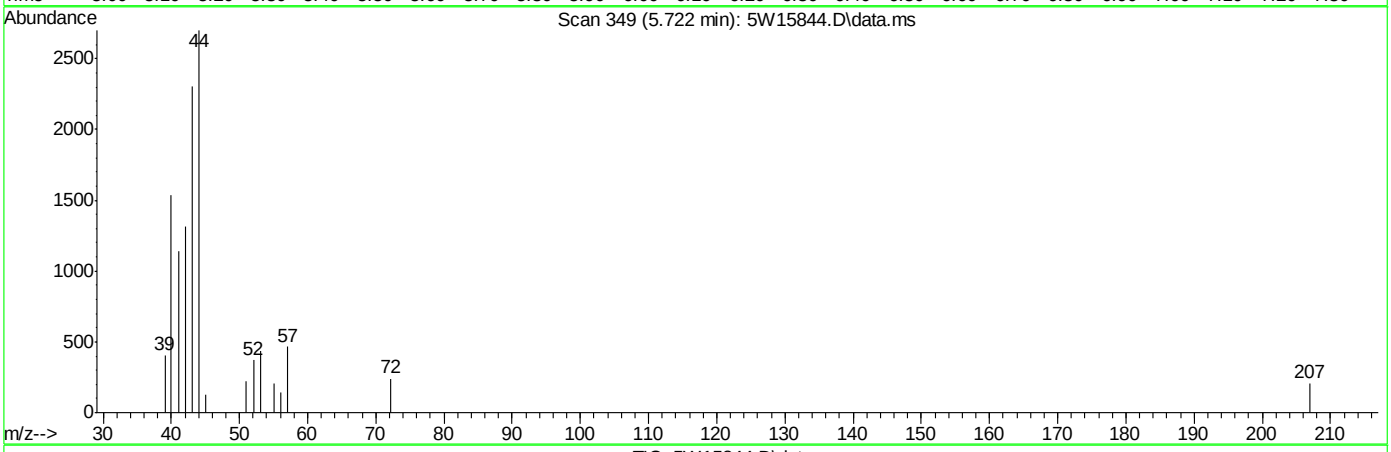
5W15844.D edits: Ethyl Acrylate

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:47:11 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15844.D\data.ms

(108) TVHC as equiv Pentane

5.722min (-5.722) 0.00ppb(v)

response 0

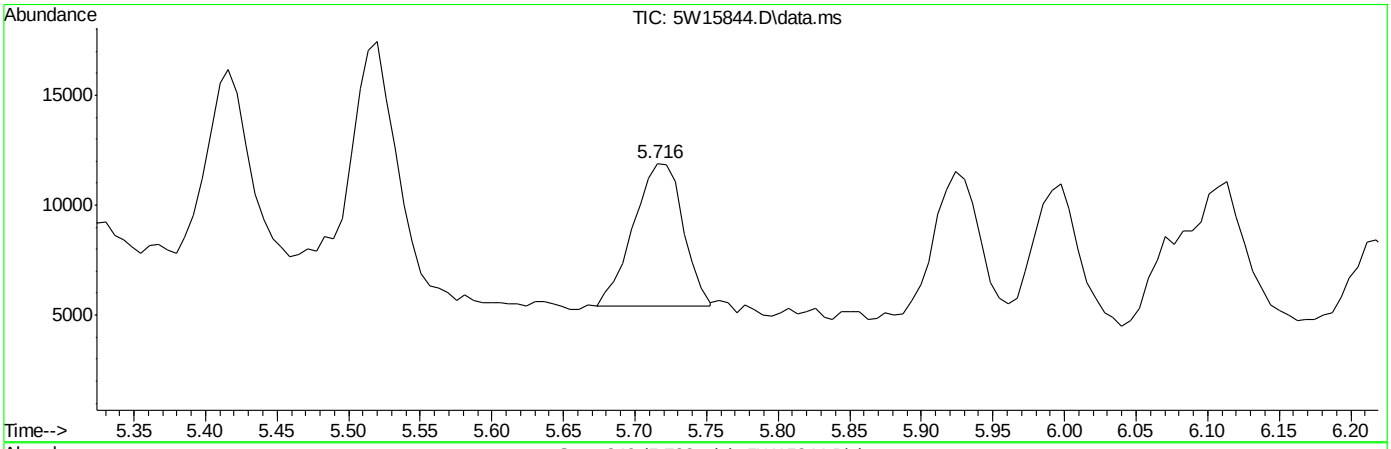
Signal	Exp%	Act%
TIC	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

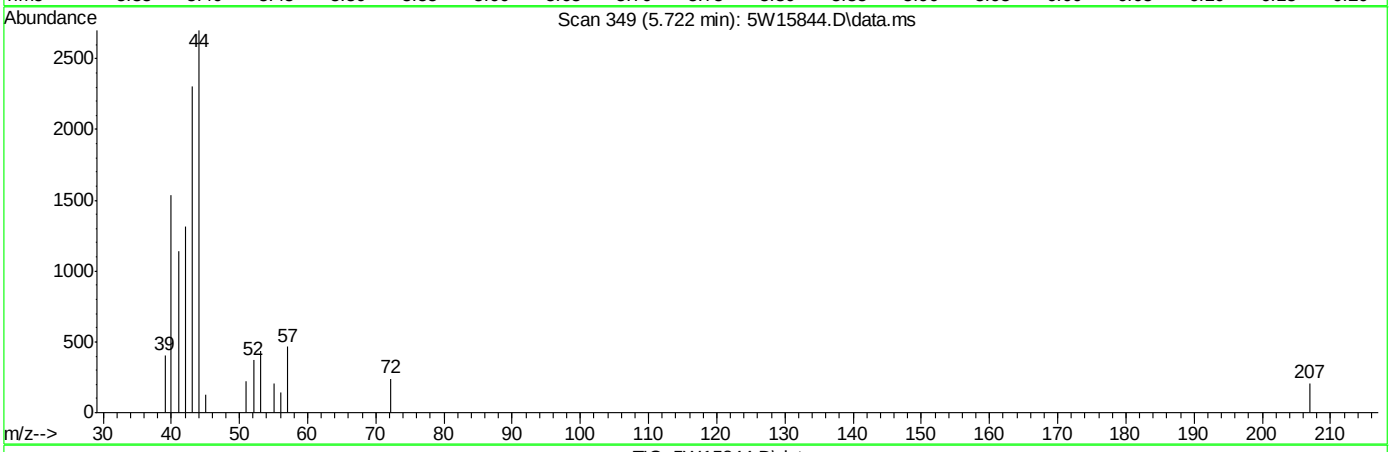
5W15844.D edits: TVHC as equiv Pentane

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 08:47:11 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15844.D\data.ms

(108) TVHC as equiv Pentane

5.716min (-0.006) 0.19ppb(v) m

response 15654

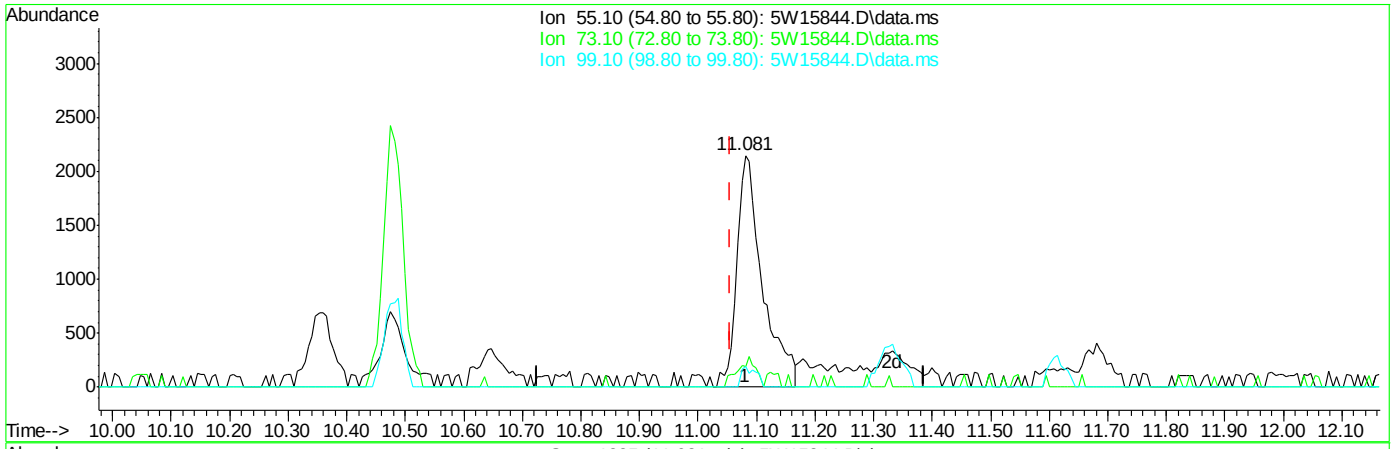
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

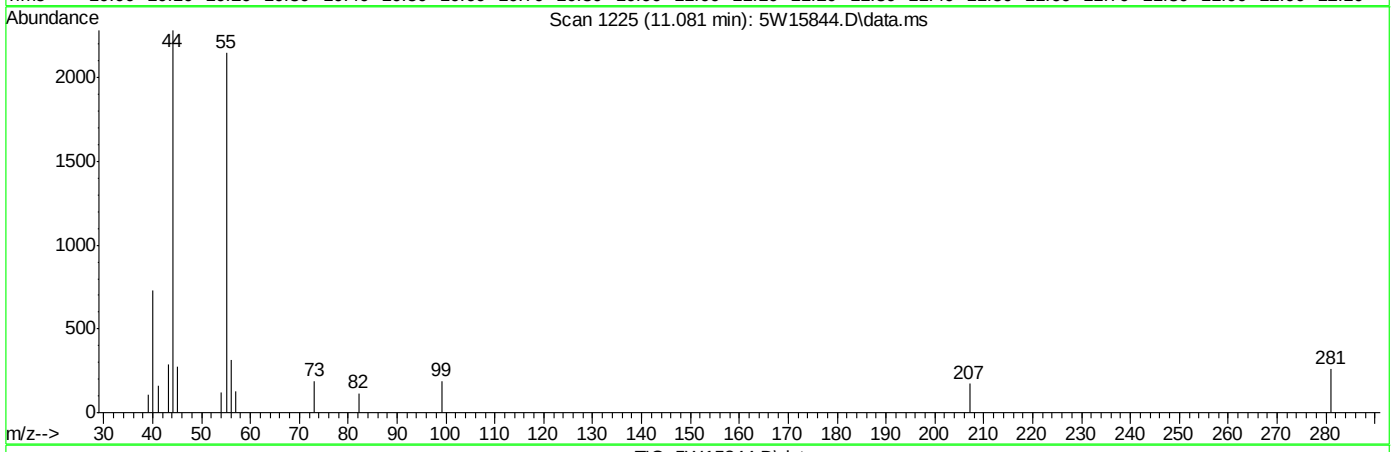
5W15844.D edits: TVHC as equiv Pentane

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15844.D
Acq On : 22 Jan 2016 11:56 pm
Operator : THOMASH
Sample : IC637-0.2
Misc : MS97607,v5w637,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 09:32:37 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15844.D\data.ms

(59) Ethyl Acrylate

11.081min (+0.024) 0.19ppb(v) m

response 6550

Ion	Exp%	Act%
55.10	100	100
73.10	7.50	8.90
99.10	7.70	8.90
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15845.D
Acq On : 23 Jan 2016 12:40 am
Operator : THOMASH
Sample : IC637-20
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:47:22 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.291	130	159701	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.488	114	592191	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.055	82	300685	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.291	130	159701	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.300	95	384745	9.61	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 96.10%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	758567	18.70	ppb(v	95
3) Freon 152A	3.844	65	168879	18.74	ppb(v	89
4) Chlorodifluoromethane	3.880	67	63330	18.87	ppb(v	98
5) Propene	3.905	41	171772	18.73	ppb(v	98
6) Dichlorodifluoromethane	3.966	85	700076	18.76	ppb(v	99
7) 1-Chloro-1,1-difluoroe...	4.082	65	464966	18.89	ppb(v	95
8) Chloromethane	4.101	50	237185	18.76	ppb(v	99
9) Dichlorotetrafluoroethane	4.180	85	790913	18.83	ppb(v	95
10) Vinyl Chloride	4.278	62	285211	18.89	ppb(v#	99
11) 1,3-Butadiene	4.388	54	200927	18.66	ppb(v	92
12) n-Butane	4.431	58	44029	18.91	ppb(v	82
13) Bromomethane	4.621	94	310141	18.90	ppb(v	99
14) Chloroethane	4.755	64	139112	18.71	ppb(v	96
15) Dichlorofluoromethane	4.835	67	630393	18.85	ppb(v	99
16) Acetonitrile	5.061	41	196858	18.53	ppb(v	98
17) Freon 123	5.184	83	755200	18.85	ppb(v	98
18) Freon 123A	5.232	117	403963	17.51	ppb(v	91
19) Bromoethene	5.055	106	319811	18.81	ppb(v	96
20) Trichlorofluoromethane	5.416	101	732931	18.97	ppb(v	100
21) Acetone	5.275	58	127592	19.08	ppb(v	80
22) Pentane	5.722	57	67815	18.59	ppb(v	78
23) 1,1-Dichloro-1-fluoroe...	5.520	81	595054	18.94	ppb(v	98
24) Iodomethane	5.930	142	891291	18.83	ppb(v	93
25) Isopropyl Alcohol	5.502	43	83202	18.91	ppb(v	71
26) 1,1-Dichloroethene	5.997	61	445896	18.91	ppb(v	92
27) Freon 113	6.352	101	657769	18.98	ppb(v	96
28) Methylene Chloride	6.113	84	275799	18.76	ppb(v	90
29) Carbon Disulfide	6.395	76	888799	18.83	ppb(v	100
30) Ethanol	4.872	45	104438	18.86	ppb(v	99
31) Acrylonitrile	5.697	53	213149	18.96	ppb(v	99
32) 3-Chloropropene	6.224	76	140053	19.23	ppb(v	76
33) trans-1,2-Dichloroethene	7.019	61	410894	18.89	ppb(v	93
34) tert-Butyl Alcohol	6.040	59	630845	18.54	ppb(v	95
35) Methyl tert-Butyl Ether	7.276	73	777558	18.60	ppb(v	96
36) Vinyl Acetate	7.386	43	695893	18.57	ppb(v	95
37) 1,1-Dichloroethane	7.227	63	530796	18.82	ppb(v	100
38) 2-Butanone	7.643	72	143935	18.87	ppb(v	77
39) Hexane	8.310	57	413357	19.00	ppb(v	90
40) cis-1,2-Dichloroethene	8.108	61	398279	18.97	ppb(v	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15845.D
Acq On : 23 Jan 2016 12:40 am
Operator : THOMASH
Sample : IC637-20
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:47:22 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Di-isopropyl Ether	8.310	87	250676	19.13	ppb(v	79
42) Ethyl Acetate	8.353	61	99088	18.86	ppb(v	78
43) Methyl Acrylate	8.346	55	541630	18.94	ppb(v	97
44) Chloroform	8.432	83	647359	18.94	ppb(v	97
45) 2,4-Dimethylpentane	9.289	57	509897	19.01	ppb(v	97
46) Tetrahydrofuran	8.873	72	144775	18.87	ppb(v	86
47) 1,1,1-Trichloroethane	9.521	97	637930	19.22	ppb(v	98
48) 1,2-Dichloroethane	9.240	62	369798	19.05	ppb(v	99
49) Benzene	10.059	78	956279	18.79	ppb(v	98
50) Carbon Tetrachloride	10.231	117	669289	19.23	ppb(v	99
51) Cyclohexane	10.359	56	428102	18.89	ppb(v	95
52) 2,3-Dimethylpentane	10.647	71	198577	19.10	ppb(v	93
54) 2,2,4-Trimethylpentane	11.338	57	1414162	19.11	ppb(v	97
55) Heptane	11.681	71	298201	19.38	ppb(v	96
56) Trichloroethene	11.320	95	460202	19.47	ppb(v	95
57) 1,2-Dichloropropane	11.026	63	354244	19.39	ppb(v	99
58) Dibromomethane	11.008	174	459057	19.92	ppb(v	86
59) Ethyl Acrylate	11.057	55	680594	19.25	ppb(v	97
60) Methyl Methacrylate	11.595	69	336546	19.23	ppb(v	86
61) 1,4-Dioxane	11.338	88	233988	19.64	ppb(v	83
62) Bromodichloromethane	11.277	83	734680	19.61	ppb(v	98
63) cis-1,3-Dichloropropene	12.402	75	605652	19.41	ppb(v	98
64) 4-Methyl-2-pentanone	12.445	58	285872	19.19	ppb(v	88
65) trans-1,3-Dichloropropene	13.082	75	513358	19.25	ppb(v	97
66) Toluene	13.650	91	1177940	19.37	ppb(v	99
67) 1,1,2-Trichloroethane	13.296	97	427574	19.45	ppb(v	97
68) 1,3-Dichloropropane	13.693	76	553652	19.27	ppb(v	91
69) 2-Hexanone	14.018	58	400046	19.25	ppb(v	88
70) Ethyl Methacrylate	14.054	69	583488	19.15	ppb(v	98
71) Dibromochloromethane	14.207	129	803130	19.74	ppb(v	98
72) Tetrachloroethene	15.168	166	618993	19.55	ppb(v	99
73) 1,2-Dibromoethane	14.525	107	702359	19.55	ppb(v	98
74) Octane	14.996	43	628496	19.10	ppb(v	90
75) 1,1,1,2-Tetrachloroethane	16.091	131	548258	19.67	ppb(v	97
77) Chlorobenzene	16.116	112	978168	18.93	ppb(v	96
78) Ethylbenzene	16.660	91	1524516	18.65	ppb(v	98
79) m,p-Xylene	16.930	91	2286659	36.85	ppb(v	97
80) Styrene	17.456	104	913931	18.81	ppb(v	98
81) Nonane	17.982	43	629246	18.49	ppb(v	93
82) o-Xylene	17.609	91	1169663	18.60	ppb(v	98
83) Bromoform	17.009	173	850714	18.95	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.609	83	956864	18.66	ppb(v	99
85) 1,2,3-Trichloropropane	17.798	75	668208	18.49	ppb(v	97
86) Isopropylbenzene	18.514	105	1675324	18.68	ppb(v	98
87) Bromobenzene	18.630	156	597593	19.02	ppb(v	91
88) 2-Chlorotoluene	19.230	126	439216	18.98	ppb(v	91
89) n-Propylbenzene	19.297	120	458101	19.07	ppb(v	89
91) 4-Ethyltoluene	19.523	105	1565605	18.81	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.640	105	1337727	18.95	ppb(v	98
93) alpha-Methylstyrene	19.872	118	709287	18.87	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15845.D
Acq On : 23 Jan 2016 12:40 am
Operator : THOMASH
Sample : IC637-20
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:47:22 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

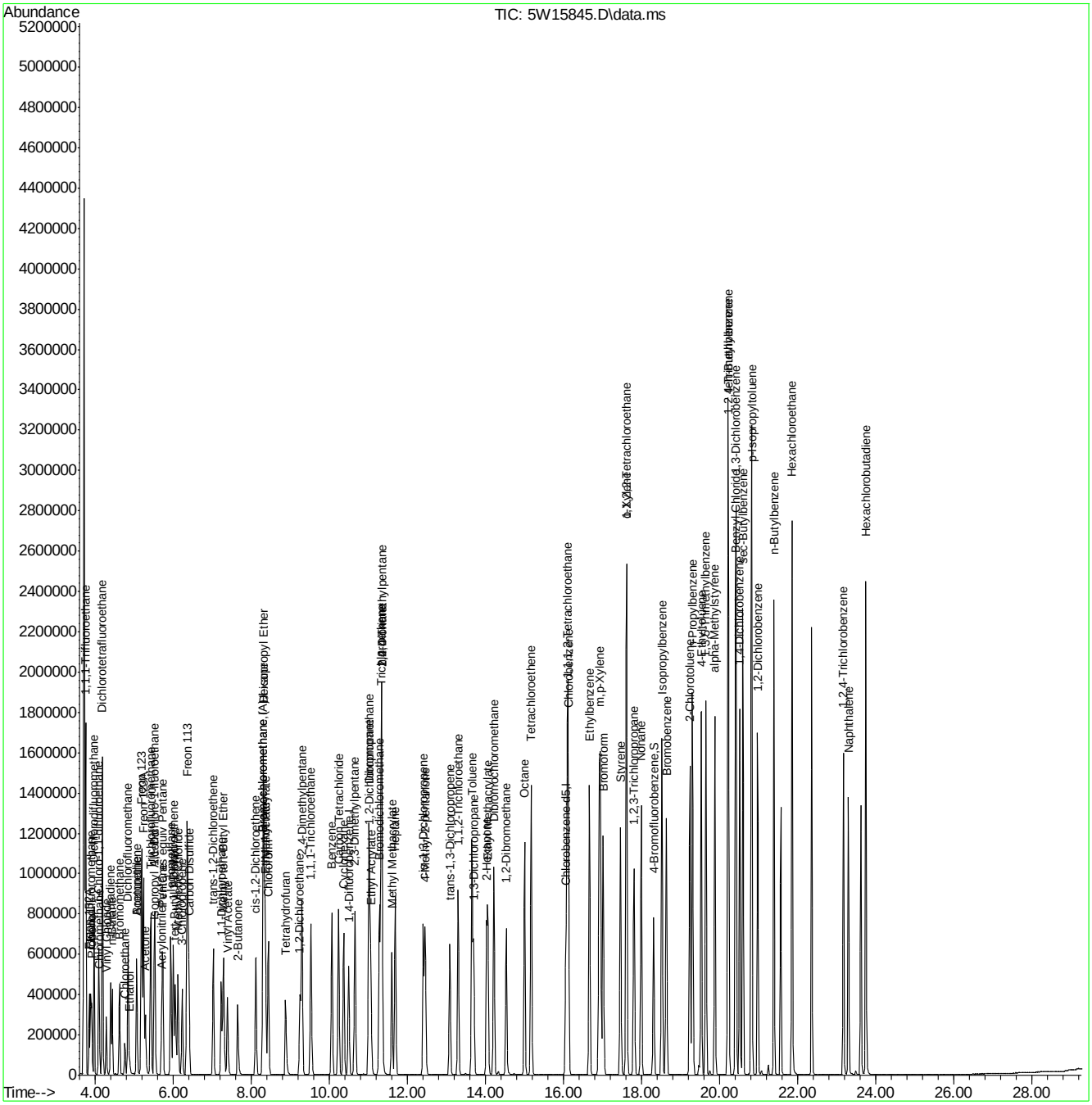
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	tert-Butylbenzene	20.209	134	297072	18.96	ppb(v	88
95)	1,2,4-Trimethylbenzene	20.221	105	1351721	18.73	ppb(v	97
96)	1,3-Dichlorobenzene	20.411	146	939722	19.18	ppb(v	97
97)	Benzyl Chloride	20.398	91	1217607	18.98	ppb(v	97
98)	1,4-Dichlorobenzene	20.508	146	940894	19.00	ppb(v	97
99)	sec-Butylbenzene	20.588	134	368060	18.97	ppb(v	87
100)	p-Isopropyltoluene	20.820	134	420623	19.27	ppb(v	91
101)	1,2-Dichlorobenzene	20.973	146	887032	18.99	ppb(v	95
102)	n-Butylbenzene	21.383	134	384804	19.65	ppb(v	84
103)	Hexachloroethane	21.848	201	577478	19.54	ppb(v	91
104)	1,2,4-Trichlorobenzene	23.163	180	552323	19.78	ppb(v	99
105)	Naphthalene	23.292	128	1158803	19.44	ppb(v	100
106)	Hexachlorobutadiene	23.739	225	535281	19.76	ppb(v	99
108)	TVHC as equiv Pentane	5.722	TIC	1596368	18.72	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15845.D
Acq On : 23 Jan 2016 12:40 am
Operator : THOMASH
Sample : IC637-20
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:47:22 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15847.D
Acq On : 23 Jan 2016 2:07 am
Operator : THOMASH
Sample : IC637-0.1
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:30:06 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.279	130	157444	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.481	114	596904	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.048	82	276760	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.279	130	157444	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.294	95	377035	10.23	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 102.30%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	4036	0.10	ppb(v	94
3) Freon 152A	3.838	65	981	0.11	ppb(v	84
4) Chlorodifluoromethane	3.880	67	315	0.10	ppb(v#	66
5) Propene	3.899	41	1445	0.16	ppb(v#	53
6) Dichlorodifluoromethane	3.960	85	3652	0.10	ppb(v	99
7) 1-Chloro-1,1-difluoroe...	4.076	65	2491	0.10	ppb(v#	68
8) Chloromethane	4.101	50	1269	0.10	ppb(v	95
9) Dichlorotetrafluoroethane	4.174	85	4270	0.10	ppb(v	96
10) Vinyl Chloride	4.278	62	1370	0.09	ppb(v#	97
11) 1,3-Butadiene	4.388	54	1095	0.10	ppb(v#	88
12) n-Butane	4.431	58	296	0.13	ppb(v#	1
13) Bromomethane	4.614	94	1756	0.11	ppb(v	95
14) Chloroethane	4.755	64	721	0.10	ppb(v#	86
15) Dichlorofluoromethane	4.835	67	3550	0.11	ppb(v	94
16) Acetonitrile	5.067	41	1296	0.12	ppb(v#	1
17) Freon 123	5.177	83	4077	0.10	ppb(v	94
18) Freon 123A	5.232	117	2071	0.09	ppb(v	95
19) Bromoethene	5.049	106	1594	0.10	ppb(v	88
20) Trichlorofluoromethane	5.410	101	3766	0.10	ppb(v	93
21) Acetone	5.312	58	1219	0.18	ppb(v	72
22) Pentane	5.722	57	460	0.13	ppb(v	66
23) 1,1-Dichloro-1-fluoroe...	5.514	81	3333	0.11	ppb(v#	94
24) Iodomethane	5.924	142	4408	0.09	ppb(v	91
26) 1,1-Dichloroethene	5.997	61	2178	0.09	ppb(v	86
27) Freon 113	6.346	101	3280	0.10	ppb(v	92
28) Methylene Chloride	6.113	84	1834	0.13	ppb(v	95
29) Carbon Disulfide	6.395	76	4280	0.09	ppb(v	96
31) Acrylonitrile	5.703	53	1115	0.10	ppb(v	95
32) 3-Chloropropene	6.217	76	666	0.09	ppb(v#	91
33) trans-1,2-Dichloroethene	7.019	61	1976	0.09	ppb(v	89
34) tert-Butyl Alcohol	6.095	59	3116	0.09	ppb(v#	72
35) Methyl tert-Butyl Ether	7.312	73	3993	0.10	ppb(v	98
36) Vinyl Acetate	7.392	43	3020	0.08	ppb(v	98
37) 1,1-Dichloroethane	7.221	63	2576	0.09	ppb(v#	96
38) 2-Butanone	7.686	72	486	0.06	ppb(v#	99
39) Hexane	8.310	57	2567	0.12	ppb(v#	68
40) cis-1,2-Dichloroethene	8.108	61	1916	0.09	ppb(v	90
41) Di-isopropyl Ether	8.328	87	1165	0.09	ppb(v	92
42) Ethyl Acetate	8.389	61	242	0.05	ppb(v#	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15847.D
Acq On : 23 Jan 2016 2:07 am
Operator : THOMASH
Sample : IC637-0.1
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:30:06 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) Chloroform	8.420	83	3282	0.10	ppb(v	96
45) 2,4-Dimethylpentane	9.288	57	2678	0.10	ppb(v	96
46) Tetrahydrofuran	8.946	72	518	0.07	ppb(v	91
47) 1,1,1-Trichloroethane	9.521	97	3144	0.10	ppb(v	91
48) 1,2-Dichloroethane	9.239	62	1726	0.09	ppb(v#	92
49) Benzene	10.059	78	4808	0.10	ppb(v	94
50) Carbon Tetrachloride	10.224	117	3069	0.09	ppb(v	98
51) Cyclohexane	10.353	56	2228	0.10	ppb(v	98
52) 2,3-Dimethylpentane	10.647	71	958	0.09	ppb(v#	83
54) 2,2,4-Trimethylpentane	11.332	57	7397	0.10	ppb(v#	95
55) Heptane	11.687	71	1521	0.10	ppb(v	93
56) Trichloroethene	11.320	95	2230	0.09	ppb(v	96
57) 1,2-Dichloropropane	11.032	63	1661	0.09	ppb(v#	94
58) Dibromomethane	11.008	174	2095	0.09	ppb(v	88
59) Ethyl Acrylate	11.105	55	3170	0.09	ppb(v#	78
60) Methyl Methacrylate	11.613	69	1428	0.08	ppb(v	97
62) Bromodichloromethane	11.271	83	3563	0.09	ppb(v	96
63) cis-1,3-Dichloropropene	12.408	75	2678	0.09	ppb(v#	86
64) 4-Methyl-2-pentanone	12.488	58	972	0.06	ppb(v	85
65) trans-1,3-Dichloropropene	13.100	75	2163	0.08	ppb(v#	89
66) Toluene	13.650	91	5935	0.10	ppb(v	97
67) 1,1,2-Trichloroethane	13.296	97	2008	0.09	ppb(v	97
68) 1,3-Dichloropropane	13.699	76	2420	0.08	ppb(v#	85
69) 2-Hexanone	14.079	58	936	0.04	ppb(v#	91
70) Ethyl Methacrylate	14.079	69	2514	0.08	ppb(v#	95
71) Dibromochloromethane	14.213	129	3624	0.09	ppb(v#	97
72) Tetrachloroethene	15.161	166	2935	0.09	ppb(v	96
73) 1,2-Dibromoethane	14.525	107	3304	0.09	ppb(v#	95
74) Octane	14.996	43	3114	0.09	ppb(v	96
75) 1,1,1,2-Tetrachloroethane	16.097	131	2511	0.09	ppb(v#	1
77) Chlorobenzene	16.110	112	4735	0.10	ppb(v	98
78) Ethylbenzene	16.666	91	7205	0.10	ppb(v	91
79) m,p-Xylene	16.936	91	11169	0.20	ppb(v	97
80) Styrene	17.468	104	3894	0.09	ppb(v	93
81) Nonane	17.982	43	3606	0.12	ppb(v#	94
82) o-Xylene	17.608	91	5767	0.10	ppb(v	97
83) Bromoform	17.015	173	3665	0.09	ppb(v	97
84) 1,1,2,2-Tetrachloroethane	17.615	83	4437	0.09	ppb(v#	96
85) 1,2,3-Trichloropropane	17.804	75	3227	0.10	ppb(v	100
86) Isopropylbenzene	18.520	105	8110	0.10	ppb(v	98
87) Bromobenzene	18.636	156	2877	0.10	ppb(v	87
88) 2-Chlorotoluene	19.236	126	1946	0.09	ppb(v	90
89) n-Propylbenzene	19.309	120	2107	0.10	ppb(v	83
91) 4-Ethyltoluene	19.529	105	7573	0.10	ppb(v	95
92) 1,3,5-Trimethylbenzene	19.646	105	6709	0.10	ppb(v	97
93) alpha-Methylstyrene	19.884	118	3050	0.09	ppb(v	99
94) tert-Butylbenzene	20.209	134	1304	0.09	ppb(v	76
95) 1,2,4-Trimethylbenzene	20.221	105	6315	0.10	ppb(v	97
96) 1,3-Dichlorobenzene	20.423	146	4717	0.10	ppb(v	91
97) Benzyl Chloride	20.410	91	5469	0.09	ppb(v	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15847.D
Acq On : 23 Jan 2016 2:07 am
Operator : THOMASH
Sample : IC637-0.1
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:30:06 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

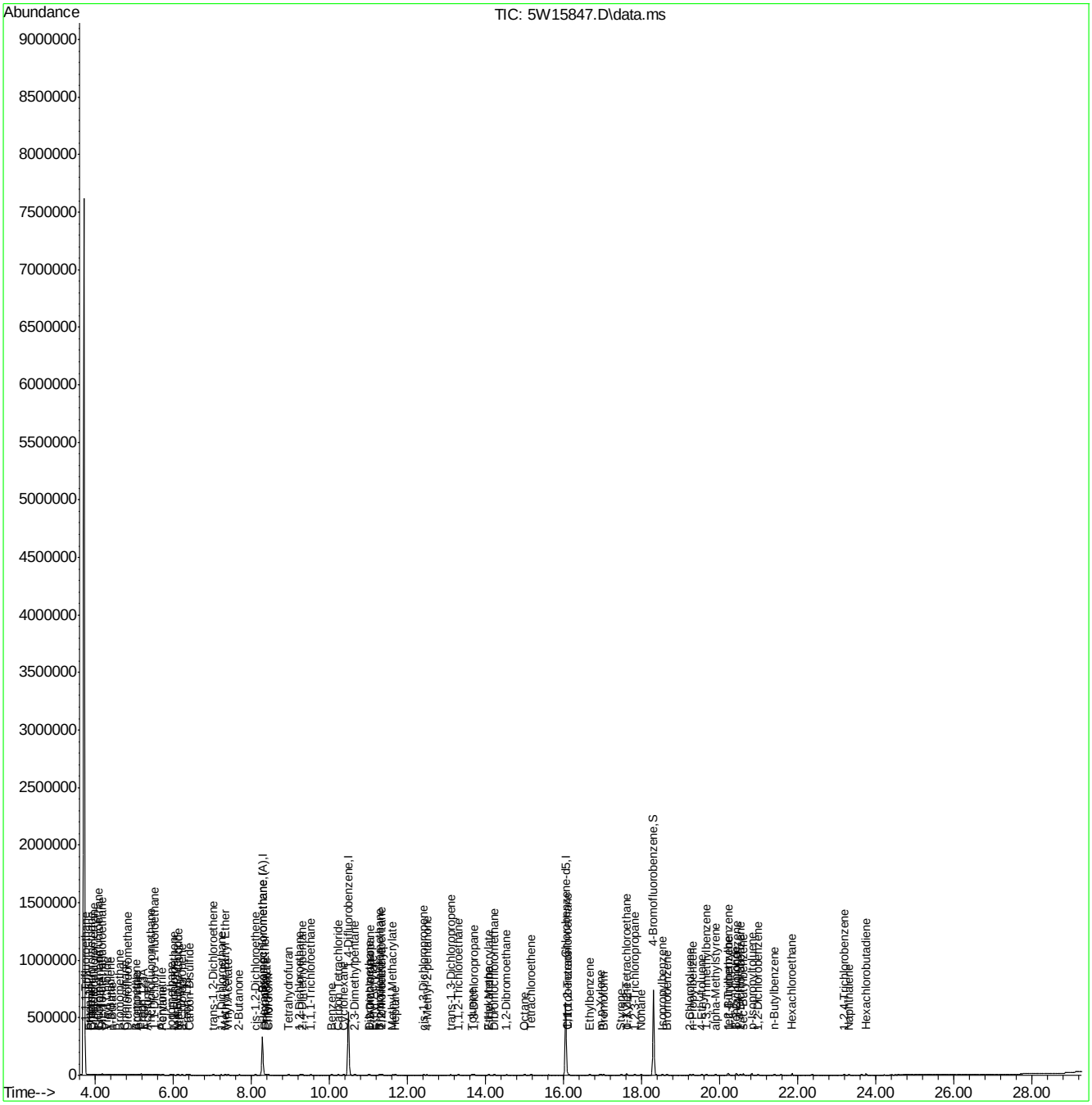
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	1,4-Dichlorobenzene	20.521	146	5080	0.11	ppb(v	96
99)	sec-Butylbenzene	20.594	134	1650	0.09	ppb(v	96
100)	p-Isopropyltoluene	20.820	134	1744	0.09	ppb(v	92
101)	1,2-Dichlorobenzene	20.973	146	4694	0.11	ppb(v	96
102)	n-Butylbenzene	21.389	134	1502	0.08	ppb(v	99
103)	Hexachloroethane	21.848	201	2282	0.08	ppb(v	95
104)	1,2,4-Trichlorobenzene	23.176	180	2973	0.12	ppb(v	93
105)	Naphthalene	23.304	128	6902	0.13	ppb(v	98
106)	Hexachlorobutadiene	23.745	225	2654	0.11	ppb(v	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15847.D
Acq On : 23 Jan 2016 2:07 am
Operator : THOMASH
Sample : IC637-0.1
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:30:06 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



5W15848.D

Manual Integrations APPROVED (compounds with "m" flag)

Dana Tryon
01/26/16 15:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15848.D
Acq On : 23 Jan 2016 2:48 am
Operator : THOMASH
Sample : IC637-0.04
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:16:23 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.279	130	159611	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.481	114	599773	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.048	82	280374	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.279	130	159611	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.294	95	380645	10.20	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 102.00%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.740	69	1937	0.05	ppb(v#	85
3) Freon 152A	3.838	65	401	0.04	ppb(v#	61
6) Dichlorodifluoromethane	3.960	85	1670	0.04	ppb(v#	89
7) 1-Chloro-1,1-difluoroe...	4.076	65	1137	0.05	ppb(v#	70
8) Chloromethane	4.094	50	644	0.05	ppb(v	95
9) Dichlorotetrafluoroethane	4.174	85	1815	0.04	ppb(v	96
10) Vinyl Chloride	4.278	62	600	0.04	ppb(v#	92
11) 1,3-Butadiene	4.382	54	535	0.05	ppb(v#	87
13) Bromomethane	4.614	94	808	0.05	ppb(v#	82
14) Chloroethane	4.755	64	273	0.04	ppb(v#	48
15) Dichlorofluoromethane	4.835	67	1557	0.05	ppb(v#	72
16) Acetonitrile	5.067	41	546m	0.05	ppb(v	
17) Freon 123	5.177	83	1696	0.04	ppb(v	95
18) Freon 123A	5.226	117	830	0.04	ppb(v	93
19) Bromoethene	5.061	106	607	0.04	ppb(v#	91
20) Trichlorofluoromethane	5.410	101	1628	0.04	ppb(v#	93
23) 1,1-Dichloro-1-fluoroe...	5.520	81	1591	0.05	ppb(v#	77
24) Iodomethane	5.924	142	1855	0.04	ppb(v	91
26) 1,1-Dichloroethene	5.991	61	917	0.04	ppb(v	93
27) Freon 113	6.346	101	1396	0.04	ppb(v	91
28) Methylene Chloride	6.107	84	823	0.06	ppb(v	82
29) Carbon Disulfide	6.389	76	1816	0.04	ppb(v#	74
31) Acrylonitrile	5.710	53	420	0.04	ppb(v#	85
32) 3-Chloropropene	6.223	76	197	0.03	ppb(v#	74
33) trans-1,2-Dichloroethene	7.013	61	754	0.03	ppb(v#	78
34) tert-Butyl Alcohol	6.095	59	1118	0.03	ppb(v#	40
35) Methyl tert-Butyl Ether	7.312	73	1734	0.04	ppb(v#	88
36) Vinyl Acetate	7.398	43	1538	0.04	ppb(v#	78
37) 1,1-Dichloroethane	7.227	63	1092	0.04	ppb(v#	86
39) Hexane	8.303	57	1188	0.05	ppb(v#	59
40) cis-1,2-Dichloroethene	8.102	61	808	0.04	ppb(v	94
41) Di-isopropyl Ether	8.328	87	402	0.03	ppb(v#	86
44) Chloroform	8.420	83	1473	0.04	ppb(v#	84
45) 2,4-Dimethylpentane	9.282	57	1303	0.05	ppb(v	94
46) Tetrahydrofuran	8.940	72	122	0.02	ppb(v	78
47) 1,1,1-Trichloroethane	9.515	97	1342	0.04	ppb(v#	82
48) 1,2-Dichloroethane	9.233	62	665	0.03	ppb(v#	53
49) Benzene	10.047	78	2090	0.04	ppb(v	93
50) Carbon Tetrachloride	10.224	117	1335	0.04	ppb(v#	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15848.D
Acq On : 23 Jan 2016 2:48 am
Operator : THOMASH
Sample : IC637-0.04
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:16:23 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51)	Cyclohexane	10.359	56	1065	0.05	ppb(v#	79
52)	2,3-Dimethylpentane	10.634	71	415	0.04	ppb(v#	63
54)	2,2,4-Trimethylpentane	11.338	57	3146	0.04	ppb(v#	90
55)	Heptane	11.674	71	576	0.04	ppb(v#	89
56)	Trichloroethene	11.319	95	957	0.04	ppb(v	89
57)	1,2-Dichloropropane	11.020	63	615	0.03	ppb(v#	92
58)	Dibromomethane	11.001	174	972	0.04	ppb(v	93
59)	Ethyl Acrylate	11.118	55	1227	0.03	ppb(v#	78
60)	Methyl Methacrylate	11.631	69	583	0.03	ppb(v#	75
62)	Bromodichloromethane	11.271	83	1391	0.04	ppb(v#	93
63)	cis-1,3-Dichloropropene	12.415	75	1111	0.04	ppb(v#	81
65)	trans-1,3-Dichloropropene	13.106	75	725	0.03	ppb(v#	50
66)	Toluene	13.656	91	2411	0.04	ppb(v	89
67)	1,1,2-Trichloroethane	13.308	97	794	0.04	ppb(v	89
68)	1,3-Dichloropropane	13.711	76	916	0.03	ppb(v#	71
70)	Ethyl Methacrylate	14.091	69	875	0.03	ppb(v#	63
71)	Dibromochloromethane	14.207	129	1432	0.03	ppb(v#	99
72)	Tetrachloroethene	15.168	166	1277	0.04	ppb(v	92
73)	1,2-Dibromoethane	14.531	107	1319	0.04	ppb(v#	91
74)	Octane	14.996	43	1627	0.05	ppb(v	87
75)	1,1,1,2-Tetrachloroethane	16.091	131	1045	0.04	ppb(v#	1
77)	Chlorobenzene	16.110	112	2053	0.04	ppb(v	99
78)	Ethylbenzene	16.672	91	3129	0.04	ppb(v#	90
79)	m,p-Xylene	16.942	91	4902	0.08	ppb(v	95
80)	Styrene	17.480	104	1532	0.03	ppb(v	95
81)	Nonane	17.988	43	1624	0.05	ppb(v#	97
82)	o-Xylene	17.615	91	2573	0.04	ppb(v	88
83)	Bromoform	17.015	173	1474	0.04	ppb(v#	95
84)	1,1,2,2-Tetrachloroethane	17.615	83	1939	0.04	ppb(v#	92
85)	1,2,3-Trichloropropane	17.816	75	1379	0.04	ppb(v#	77
86)	Isopropylbenzene	18.520	105	3412	0.04	ppb(v	97
87)	Bromobenzene	18.642	156	1198	0.04	ppb(v	89
88)	2-Chlorotoluene	19.236	126	773	0.04	ppb(v	94
89)	n-Propylbenzene	19.315	120	745	0.03	ppb(v	89
91)	4-Ethyltoluene	19.536	105	3165	0.04	ppb(v	97
92)	1,3,5-Trimethylbenzene	19.646	105	2826	0.04	ppb(v	94
93)	alpha-Methylstyrene	19.890	118	1192	0.03	ppb(v	94
94)	tert-Butylbenzene	20.209	134	489	0.03	ppb(v	94
95)	1,2,4-Trimethylbenzene	20.227	105	2876	0.04	ppb(v#	79
96)	1,3-Dichlorobenzene	20.429	146	2022	0.04	ppb(v	94
97)	Benzyl Chloride	20.423	91	2262	0.04	ppb(v#	95
98)	1,4-Dichlorobenzene	20.520	146	2250	0.05	ppb(v	95
99)	sec-Butylbenzene	20.594	134	666	0.04	ppb(v	83
100)	p-Isopropyltoluene	20.820	134	695	0.03	ppb(v	84
101)	1,2-Dichlorobenzene	20.979	146	1892	0.04	ppb(v	97
102)	n-Butylbenzene	21.395	134	548	0.03	ppb(v	99
103)	Hexachloroethane	21.848	201	933	0.03	ppb(v	94
104)	1,2,4-Trichlorobenzene	23.182	180	1201	0.05	ppb(v	93
105)	Naphthalene	23.310	128	2833	0.05	ppb(v#	86
106)	Hexachlorobutadiene	23.745	225	1090	0.04	ppb(v	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15848.D
Acq On : 23 Jan 2016 2:48 am
Operator : THOMASH
Sample : IC637-0.04
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:16:23 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

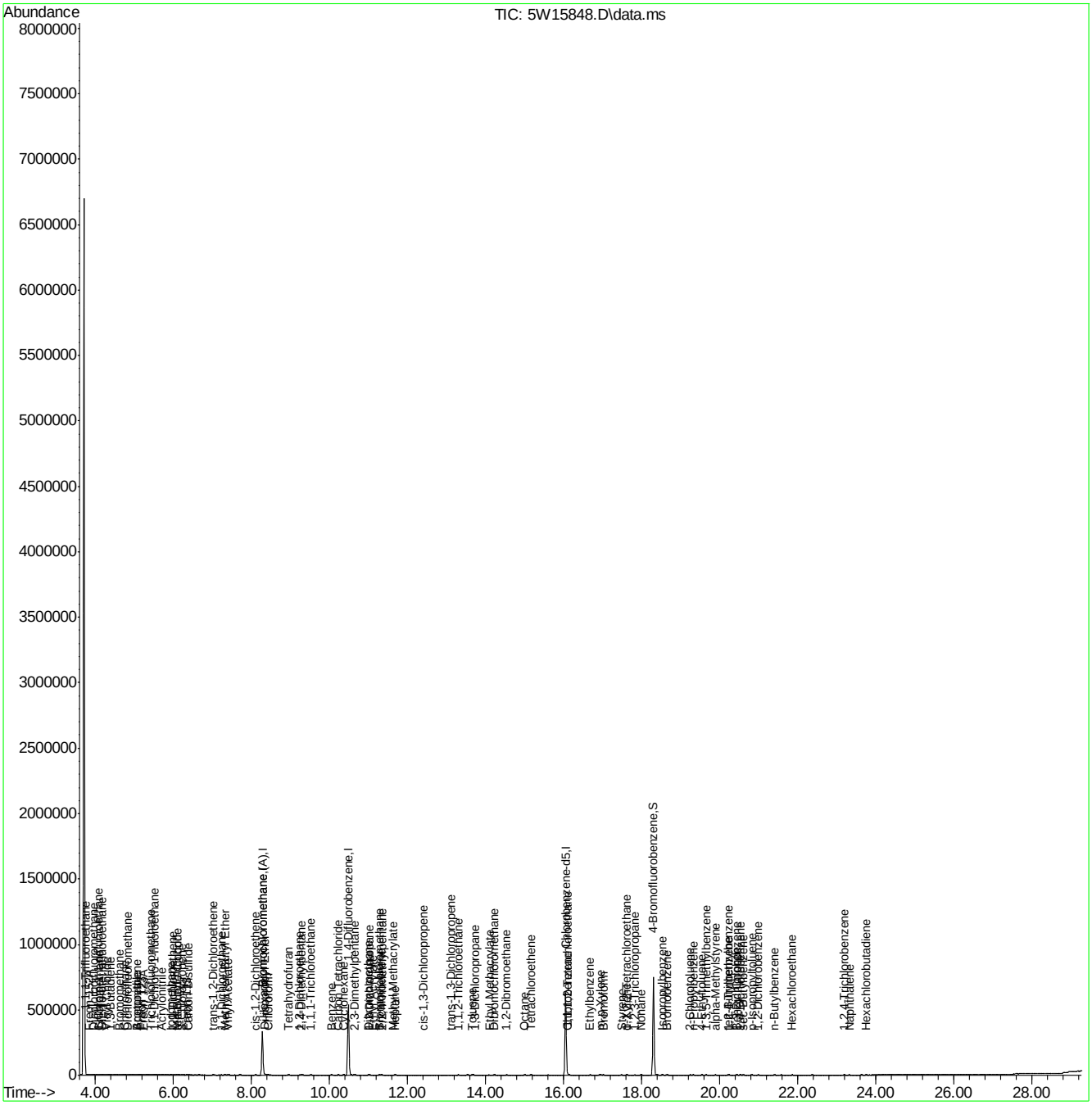
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15848.D
Acq On : 23 Jan 2016 2:48 am
Operator : THOMASH
Sample : IC637-0.04
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 09:16:23 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5W637-IC637
Lab FileID: 5W15848.D
Injection Time: 01/23/16 02:48

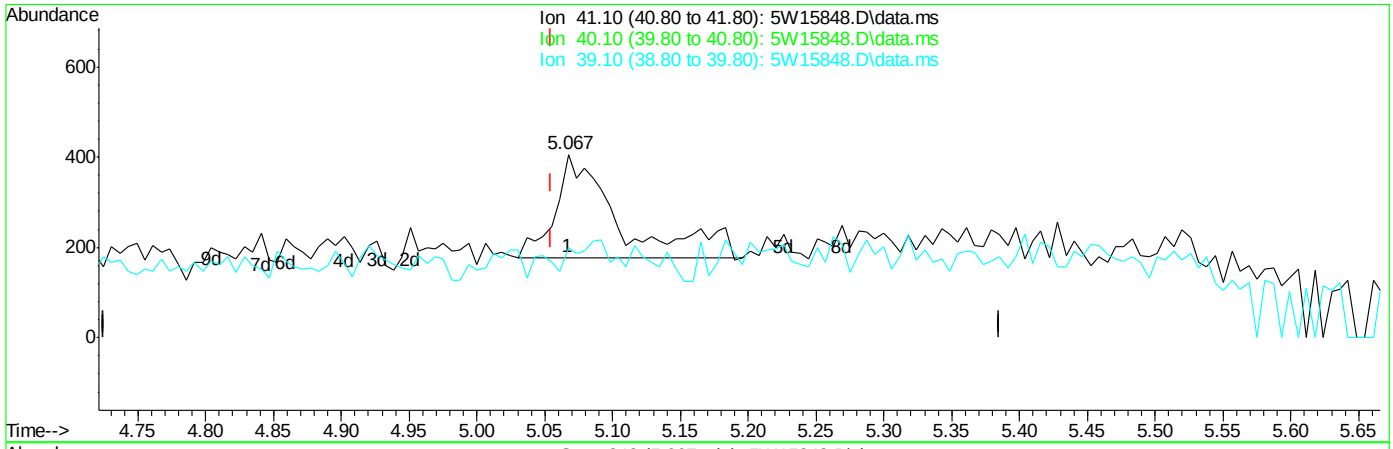
Method: TO-15
Analyst approved: 01/25/16 12:26 Thomas Hilbig
Supervisor approved: 01/26/16 15:29 Dana Tryon

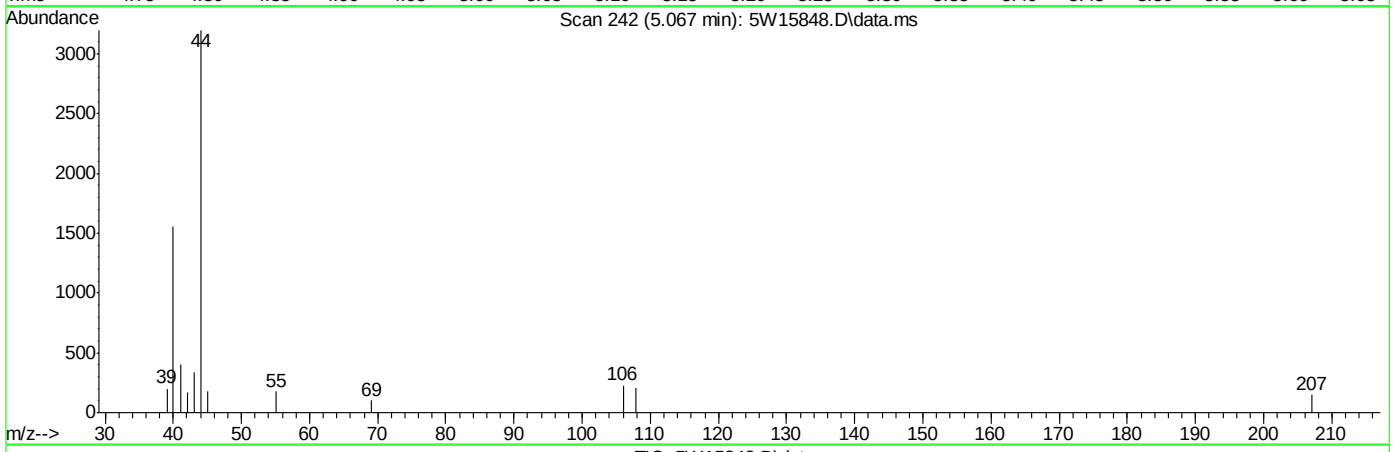
Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetonitrile	75-05-8		5.07	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15848.D
Acq On : 23 Jan 2016 2:48 am
Operator : THOMASH
Sample : IC637-0.04
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 08:48:00 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15848.D\data.ms

(16) Acetonitrile

5.067min (+0.012) 0.07ppb(v)

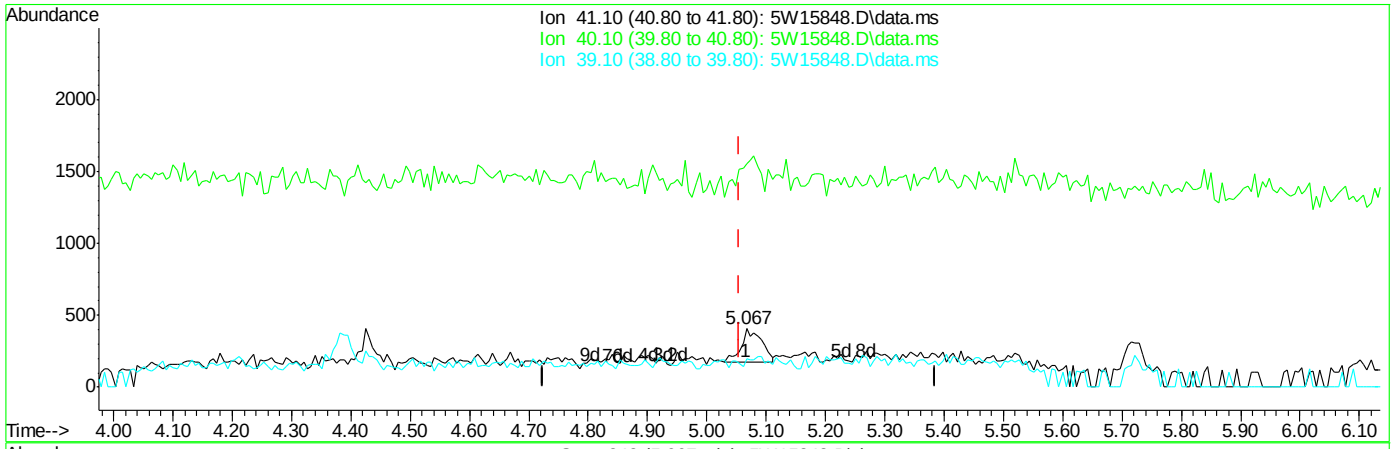
response 740

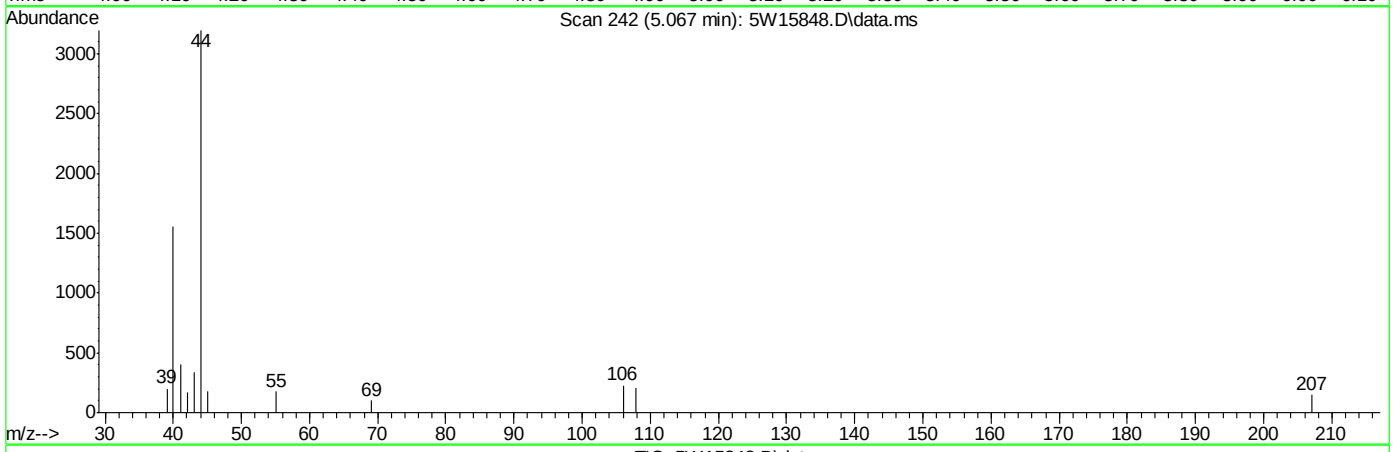
Ion	Exp%	Act%
41.10	100	100
40.10	55.30	383.50#
39.10	20.00	49.01#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15848.D
Acq On : 23 Jan 2016 2:48 am
Operator : THOMASH
Sample : IC637-0.04
Misc : MS97607,v5w637,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 25 08:48:00 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration





TIC: 5W15848.D\data.ms

(16) Acetonitrile

5.067min (+0.012) 0.05ppb(v) m

response 546

Ion	Exp%	Act%
41.10	100	100
40.10	55.30	383.50#
39.10	20.00	49.01#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15849.D
Acq On : 23 Jan 2016 3:33 am
Operator : THOMASH
Sample : IC637-30
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:31 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.298	130	156620	10.00	ppb(v	0.01
53) 1,4-Difluorobenzene	10.494	114	575274	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.055	82	302180	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.298	130	156620	10.00	ppb(v	0.01
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.300	95	378160	9.40	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 94.00%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	1143871	28.75	ppb(v	95
3) Freon 152A	3.838	65	252161	28.54	ppb(v	91
4) Chlorodifluoromethane	3.881	67	96098	29.20	ppb(v	98
5) Propene	3.905	41	257384	28.61	ppb(v	98
6) Dichlorodifluoromethane	3.960	85	1051452	28.73	ppb(v	100
7) 1-Chloro-1,1-difluoroe...	4.076	65	700347	29.01	ppb(v	95
8) Chloromethane	4.101	50	353847	28.54	ppb(v	98
9) Dichlorotetrafluoroethane	4.174	85	1180434	28.65	ppb(v	99
10) Vinyl Chloride	4.278	62	424063	28.64	ppb(v#	99
11) 1,3-Butadiene	4.388	54	299698	28.39	ppb(v	92
12) n-Butane	4.431	58	64615	28.30	ppb(v	77
13) Bromomethane	4.615	94	460419	28.61	ppb(v	98
14) Chloroethane	4.761	64	208100	28.54	ppb(v	97
15) Dichlorofluoromethane	4.835	67	940216	28.66	ppb(v	99
16) Acetonitrile	5.067	41	294166	28.24	ppb(v	98
17) Freon 123	5.190	83	1122274	28.57	ppb(v	98
18) Freon 123A	5.239	117	647508	28.61	ppb(v	91
19) Bromoethene	5.055	106	477025	28.61	ppb(v	97
20) Trichlorofluoromethane	5.422	101	1090015	28.76	ppb(v	100
21) Acetone	5.282	58	191365	29.18	ppb(v	82
22) Pentane	5.728	57	99890	27.93	ppb(v	78
23) 1,1-Dichloro-1-fluoroe...	5.526	81	867176	28.14	ppb(v	97
24) Iodomethane	5.936	142	1321286	28.46	ppb(v	94
25) Isopropyl Alcohol	5.508	43	121396	28.14	ppb(v	72
26) 1,1-Dichloroethene	6.003	61	664402	28.73	ppb(v	92
27) Freon 113	6.358	101	980242	28.84	ppb(v	96
28) Methylene Chloride	6.126	84	411643	28.55	ppb(v	89
29) Carbon Disulfide	6.401	76	1324140	28.61	ppb(v	100
30) Ethanol	4.878	45	156985	28.91	ppb(v	99
31) Acrylonitrile	5.704	53	315901	28.65	ppb(v	98
32) 3-Chloropropene	6.230	76	207162	29.00	ppb(v	78
33) trans-1,2-Dichloroethene	7.025	61	610341	28.61	ppb(v	93
34) tert-Butyl Alcohol	6.052	59	935683	28.04	ppb(v	95
35) Methyl tert-Butyl Ether	7.282	73	1168019	28.48	ppb(v	97
36) Vinyl Acetate	7.392	43	1041675	28.35	ppb(v	95
37) 1,1-Dichloroethane	7.233	63	789201	28.53	ppb(v	100
38) 2-Butanone	7.649	72	214328	28.66	ppb(v	76
39) Hexane	8.316	57	615227	28.83	ppb(v	89
40) cis-1,2-Dichloroethene	8.114	61	592217	28.76	ppb(v	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15849.D
Acq On : 23 Jan 2016 3:33 am
Operator : THOMASH
Sample : IC637-30
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:31 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Di-isopropyl Ether	8.322	87	374694	29.16	ppb(v	75
42) Ethyl Acetate	8.359	61	148384	28.80	ppb(v	78
43) Methyl Acrylate	8.353	55	813416	29.00	ppb(v	96
44) Chloroform	8.438	83	970372	28.95	ppb(v	98
45) 2,4-Dimethylpentane	9.295	57	748772	28.46	ppb(v	98
46) Tetrahydrofuran	8.873	72	216173	28.73	ppb(v	85
47) 1,1,1-Trichloroethane	9.527	97	944869	29.02	ppb(v	99
48) 1,2-Dichloroethane	9.246	62	547570	28.77	ppb(v	99
49) Benzene	10.066	78	1418261	28.42	ppb(v	98
50) Carbon Tetrachloride	10.231	117	1003315	29.39	ppb(v	99
51) Cyclohexane	10.365	56	635647	28.60	ppb(v	95
52) 2,3-Dimethylpentane	10.653	71	294407	28.88	ppb(v	91
54) 2,2,4-Trimethylpentane	11.344	57	2086558	29.03	ppb(v	97
55) Heptane	11.687	71	440529	29.47	ppb(v	96
56) Trichloroethene	11.326	95	685098	29.84	ppb(v	95
57) 1,2-Dichloropropane	11.032	63	528250	29.77	ppb(v	99
58) Dibromomethane	11.008	174	679165	30.33	ppb(v	90
59) Ethyl Acrylate	11.063	55	1014912	29.55	ppb(v	97
60) Methyl Methacrylate	11.595	69	503071	29.60	ppb(v	87
61) 1,4-Dioxane	11.338	88	350108	30.25	ppb(v	76
62) Bromodichloromethane	11.277	83	1093018	30.03	ppb(v	99
63) cis-1,3-Dichloropropene	12.409	75	899691	29.68	ppb(v	98
64) 4-Methyl-2-pentanone	12.451	58	427694	29.55	ppb(v	87
65) trans-1,3-Dichloropropene	13.082	75	769556	29.71	ppb(v	98
66) Toluene	13.651	91	1736379	29.39	ppb(v	100
67) 1,1,2-Trichloroethane	13.296	97	639118	29.92	ppb(v	98
68) 1,3-Dichloropropane	13.693	76	818115	29.31	ppb(v	91
69) 2-Hexanone	14.024	58	599649	29.70	ppb(v	88
70) Ethyl Methacrylate	14.060	69	879374	29.71	ppb(v	97
71) Dibromochloromethane	14.213	129	1194325	30.22	ppb(v	99
72) Tetrachloroethene	15.168	166	922380	29.99	ppb(v	99
73) 1,2-Dibromoethane	14.531	107	1042904	29.89	ppb(v	98
74) Octane	14.996	43	926374	28.98	ppb(v	90
75) 1,1,1,2-Tetrachloroethane	16.098	131	816224	30.14	ppb(v	96
77) Chlorobenzene	16.116	112	1447307	27.88	ppb(v	96
78) Ethylbenzene	16.660	91	2245633	27.33	ppb(v	98
79) m,p-Xylene	16.936	91	3438222	55.14	ppb(v	97
80) Styrene	17.456	104	1366197	27.97	ppb(v	99
81) Nonane	17.982	43	931253	27.23	ppb(v	93
82) o-Xylene	17.609	91	1742862	27.58	ppb(v	98
83) Bromoform	17.009	173	1280016	28.37	ppb(v	100
84) 1,1,2,2-Tetrachloroethane	17.609	83	1435004	27.85	ppb(v	99
85) 1,2,3-Trichloropropane	17.798	75	996125	27.43	ppb(v	98
86) Isopropylbenzene	18.520	105	2474350	27.45	ppb(v	97
87) Bromobenzene	18.630	156	887053	28.09	ppb(v	93
88) 2-Chlorotoluene	19.230	126	659721	28.37	ppb(v	91
89) n-Propylbenzene	19.303	120	685075	28.38	ppb(v	86
91) 4-Ethyltoluene	19.524	105	2321534	27.75	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.640	105	1982729	27.94	ppb(v	98
93) alpha-Methylstyrene	19.872	118	1052170	27.85	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15849.D
Acq On : 23 Jan 2016 3:33 am
Operator : THOMASH
Sample : IC637-30
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:31 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

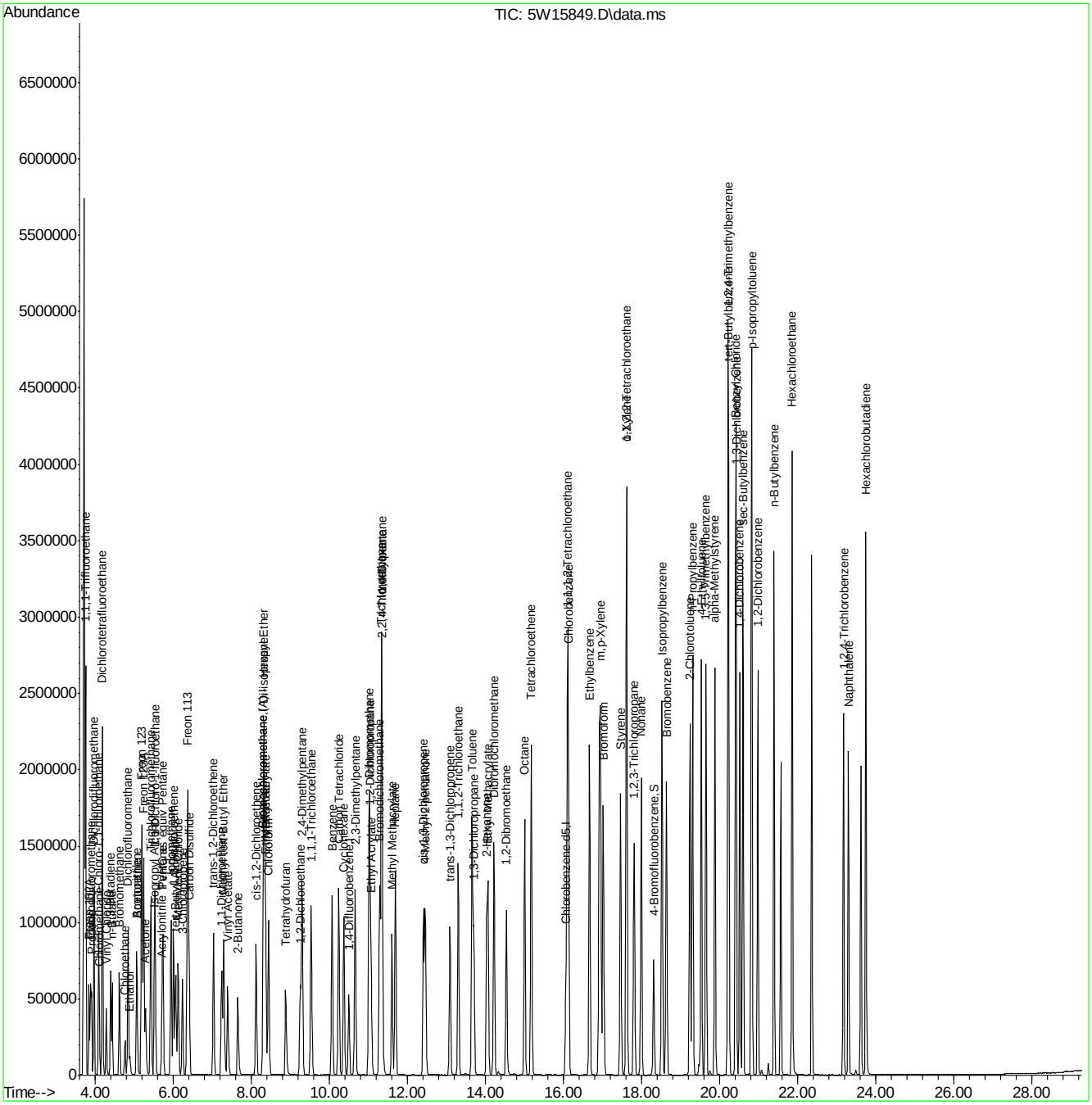
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	tert-Butylbenzene	20.209	134	445413	28.29	ppb(v	84
95)	1,2,4-Trimethylbenzene	20.221	105	2018177	27.82	ppb(v	90
96)	1,3-Dichlorobenzene	20.417	146	1404515	28.52	ppb(v	96
97)	Benzyl Chloride	20.404	91	1827972	28.35	ppb(v	95
98)	1,4-Dichlorobenzene	20.508	146	1409895	28.33	ppb(v	98
99)	sec-Butylbenzene	20.594	134	565535	29.01	ppb(v	81
100)	p-Isopropyltoluene	20.820	134	627285	28.60	ppb(v	92
101)	1,2-Dichlorobenzene	20.973	146	1337021	28.48	ppb(v	96
102)	n-Butylbenzene	21.389	134	578857	29.41	ppb(v	77
103)	Hexachloroethane	21.848	201	867588	29.20	ppb(v	92
104)	1,2,4-Trichlorobenzene	23.170	180	842559	30.03	ppb(v	99
105)	Naphthalene	23.292	128	1771537	29.57	ppb(v	100
106)	Hexachlorobutadiene	23.745	225	795805	29.23	ppb(v	98
108)	TVHC as equiv Pentane	5.728	TIC	2366966	28.30	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15849.D
Acq On : 23 Jan 2016 3:33 am
Operator : THOMASH
Sample : IC637-30
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:31 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15851.D
Acq On : 23 Jan 2016 5:01 am
Operator : THOMASH
Sample : IC637-40
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:39 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.291	130	171418	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.494	114	631746	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.055	82	339871	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.291	130	171418	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.300	95	411348	9.09	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 90.90%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	1508002	34.63	ppb(v	95
3) Freon 152A	3.838	65	337472	34.90	ppb(v	91
4) Chlorodifluoromethane	3.874	67	127544	35.41	ppb(v	99
5) Propene	3.899	41	344129	34.95	ppb(v	98
6) Dichlorodifluoromethane	3.960	85	1398202	34.90	ppb(v	100
7) 1-Chloro-1,1-difluoroe...	4.076	65	935780	35.41	ppb(v	95
8) Chloromethane	4.095	50	472937	34.85	ppb(v	100
9) Dichlorotetrafluoroethane	4.174	85	1563378	34.67	ppb(v	98
10) Vinyl Chloride	4.278	62	562535	34.72	ppb(v#	99
11) 1,3-Butadiene	4.388	54	398089	34.45	ppb(v	91
12) n-Butane	4.431	58	86083	34.45	ppb(v	76
13) Bromomethane	4.615	94	615175	34.93	ppb(v	99
14) Chloroethane	4.755	64	278430	34.89	ppb(v	97
15) Dichlorofluoromethane	4.829	67	1262557	35.17	ppb(v	99
16) Acetonitrile	5.061	41	394313	34.58	ppb(v	97
17) Freon 123	5.184	83	1503625	34.97	ppb(v	98
18) Freon 123A	5.232	117	877305	35.42	ppb(v	91
19) Bromoethene	5.055	106	639890	35.06	ppb(v	97
20) Trichlorofluoromethane	5.416	101	1464789	35.32	ppb(v	100
21) Acetone	5.275	58	254944	35.52	ppb(v	79
22) Pentane	5.722	57	135203	34.53	ppb(v	76
23) 1,1-Dichloro-1-fluoroe...	5.520	81	1190485	35.30	ppb(v	97
24) Iodomethane	5.930	142	1783953	35.11	ppb(v	95
25) Isopropyl Alcohol	5.502	43	163186	34.56	ppb(v	71
26) 1,1-Dichloroethene	5.997	61	896111	35.40	ppb(v	93
27) Freon 113	6.352	101	1325544	35.63	ppb(v	97
28) Methylene Chloride	6.113	84	554776	35.15	ppb(v	90
29) Carbon Disulfide	6.395	76	1779931	35.14	ppb(v	100
30) Ethanol	4.872	45	210768	35.46	ppb(v	99
31) Acrylonitrile	5.697	53	424476	35.17	ppb(v	98
32) 3-Chloropropene	6.224	76	281283	35.98	ppb(v	75
33) trans-1,2-Dichloroethene	7.019	61	822717	35.24	ppb(v	93
34) tert-Butyl Alcohol	6.046	59	1252411	34.30	ppb(v	95
35) Methyl tert-Butyl Ether	7.276	73	1573120	35.05	ppb(v	96
36) Vinyl Acetate	7.386	43	1408757	35.03	ppb(v	95
37) 1,1-Dichloroethane	7.227	63	1065786	35.21	ppb(v	100
38) 2-Butanone	7.643	72	289966	35.43	ppb(v	76
39) Hexane	8.310	57	822655	35.23	ppb(v	86
40) cis-1,2-Dichloroethene	8.114	61	797037	35.37	ppb(v	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15851.D
Acq On : 23 Jan 2016 5:01 am
Operator : THOMASH
Sample : IC637-40
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:39 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Di-isopropyl Ether	8.316	87	503537	35.81	ppb(v	73
42) Ethyl Acetate	8.359	61	197740	35.07	ppb(v	74
43) Methyl Acrylate	8.346	55	1080059	35.19	ppb(v	97
44) Chloroform	8.432	83	1294646	35.29	ppb(v	98
45) 2,4-Dimethylpentane	9.289	57	1006482	34.96	ppb(v	98
46) Tetrahydrofuran	8.866	72	288106	34.98	ppb(v	86
47) 1,1,1-Trichloroethane	9.527	97	1264331	35.48	ppb(v	98
48) 1,2-Dichloroethane	9.246	62	737650	35.41	ppb(v	99
49) Benzene	10.059	78	1904892	34.88	ppb(v	98
50) Carbon Tetrachloride	10.231	117	1359042	36.37	ppb(v	99
51) Cyclohexane	10.359	56	860394	35.37	ppb(v	94
52) 2,3-Dimethylpentane	10.653	71	398053	35.67	ppb(v	88
54) 2,2,4-Trimethylpentane	11.344	57	2767211	35.06	ppb(v	97
55) Heptane	11.687	71	592378	36.09	ppb(v	95
56) Trichloroethene	11.326	95	917760	36.40	ppb(v	95
57) 1,2-Dichloropropane	11.026	63	709069	36.38	ppb(v	99
58) Dibromomethane	11.008	174	917070	37.30	ppb(v	89
59) Ethyl Acrylate	11.063	55	1362570	36.13	ppb(v	97
60) Methyl Methacrylate	11.595	69	669564	35.87	ppb(v	87
61) 1,4-Dioxane	11.338	88	465305	36.61	ppb(v	76
62) Bromodichloromethane	11.277	83	1468803	36.74	ppb(v	98
63) cis-1,3-Dichloropropene	12.409	75	1216308	36.54	ppb(v	98
64) 4-Methyl-2-pentanone	12.451	58	576972	36.31	ppb(v	85
65) trans-1,3-Dichloropropene	13.082	75	1043791	36.69	ppb(v	98
66) Toluene	13.650	91	2320624	35.76	ppb(v	99
67) 1,1,2-Trichloroethane	13.296	97	858962	36.62	ppb(v	98
68) 1,3-Dichloropropane	13.693	76	1104504	36.03	ppb(v	91
69) 2-Hexanone	14.024	58	801930	36.17	ppb(v	87
70) Ethyl Methacrylate	14.060	69	1173991	36.12	ppb(v	97
71) Dibromochloromethane	14.213	129	1598577	36.83	ppb(v	99
72) Tetrachloroethene	15.168	166	1246848	36.92	ppb(v	99
73) 1,2-Dibromoethane	14.531	107	1397485	36.47	ppb(v	99
74) Octane	14.996	43	1249674	35.60	ppb(v	90
75) 1,1,1,2-Tetrachloroethane	16.098	131	1096988	36.89	ppb(v	96
77) Chlorobenzene	16.116	112	1934415	33.13	ppb(v	97
78) Ethylbenzene	16.660	91	3011573	32.59	ppb(v	98
79) m,p-Xylene	16.936	91	4558673	65.00	ppb(v	97
80) Styrene	17.456	104	1832171	33.35	ppb(v	99
81) Nonane	17.988	43	1245456	32.38	ppb(v#	90
82) o-Xylene	17.609	91	2297078	32.32	ppb(v	98
83) Bromoform	17.015	173	1716304	33.82	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.609	83	1902043	32.82	ppb(v	100
85) 1,2,3-Trichloropropane	17.804	75	1350329	33.05	ppb(v	97
86) Isopropylbenzene	18.520	105	3307928	32.63	ppb(v	97
87) Bromobenzene	18.630	156	1195843	33.67	ppb(v	92
88) 2-Chlorotoluene	19.230	126	880464	33.66	ppb(v	91
89) n-Propylbenzene	19.303	120	919795	33.88	ppb(v	85
91) 4-Ethyltoluene	19.523	105	3084487	32.78	ppb(v	98
92) 1,3,5-Trimethylbenzene	19.646	105	2652093	33.23	ppb(v	97
93) alpha-Methylstyrene	19.872	118	1424515	33.53	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15851.D
Acq On : 23 Jan 2016 5:01 am
Operator : THOMASH
Sample : IC637-40
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:39 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration

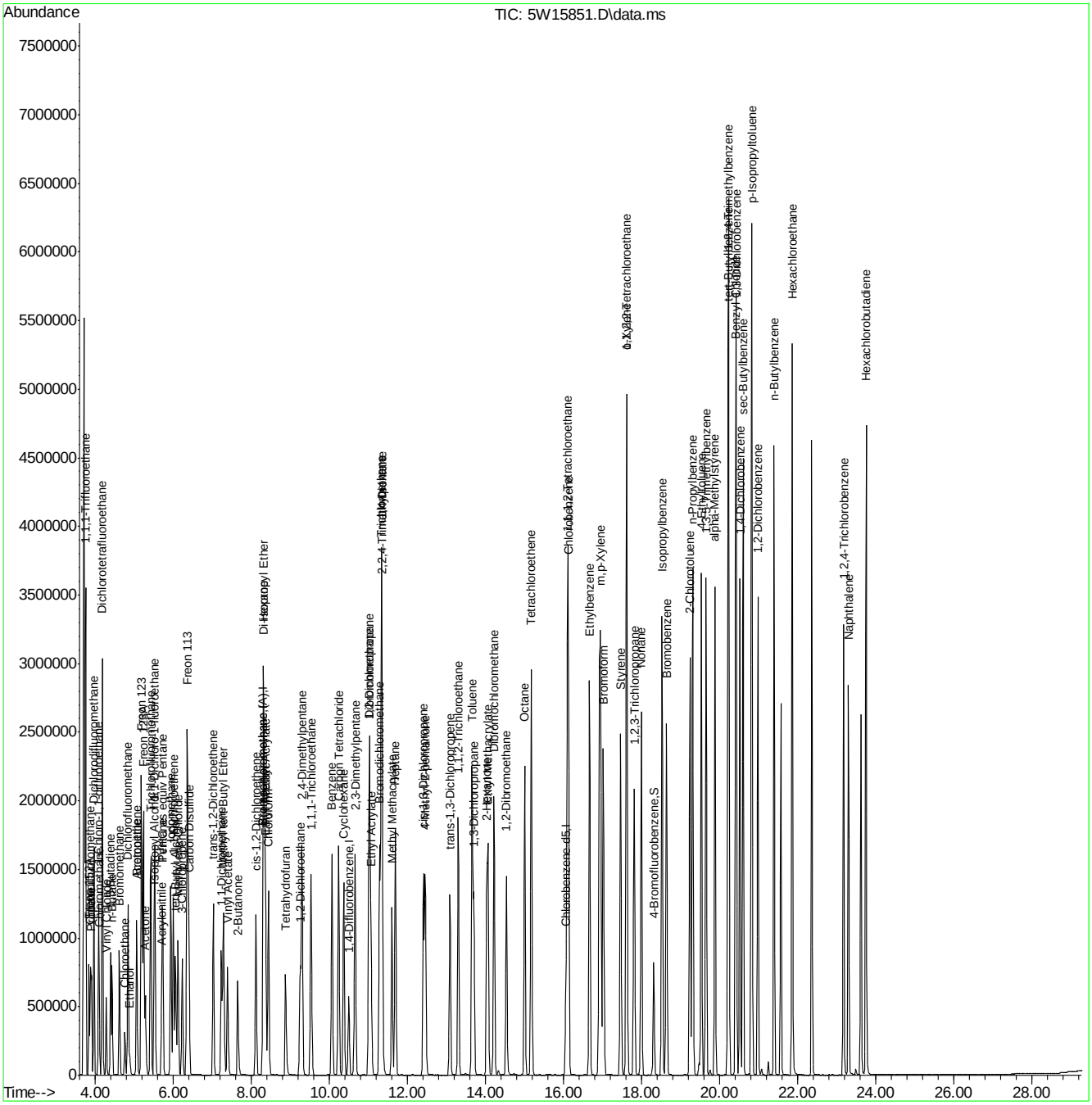
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) tert-Butylbenzene	20.209	134	596931	33.71	ppb(v	83
95) 1,2,4-Trimethylbenzene	20.227	105	2672985	32.76	ppb(v	97
96) 1,3-Dichlorobenzene	20.417	146	1890207	34.13	ppb(v	97
97) Benzyl Chloride	20.404	91	2449310	33.78	ppb(v	95
98) 1,4-Dichlorobenzene	20.515	146	1885543	33.68	ppb(v	97
99) sec-Butylbenzene	20.594	134	753850	34.38	ppb(v	79
100) p-Isopropyltoluene	20.820	134	829915	33.64	ppb(v	92
101) 1,2-Dichlorobenzene	20.973	146	1780012	33.71	ppb(v	97
102) n-Butylbenzene	21.389	134	781351	35.30	ppb(v	76
103) Hexachloroethane	21.854	201	1161454	34.76	ppb(v	85
104) 1,2,4-Trichlorobenzene	23.170	180	1141170	36.16	ppb(v	99
105) Naphthalene	23.292	128	2367478	35.14	ppb(v	99
106) Hexachlorobutadiene	23.745	225	1054046	34.42	ppb(v	98
108) TVHC as equiv Pentane	5.722	TIC	3178064	34.72	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15851.D
Acq On : 23 Jan 2016 5:01 am
Operator : THOMASH
Sample : IC637-40
Misc : MS97607,v5w637,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 25 08:48:39 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 08:46:26 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15853.D
Acq On : 23 Jan 2016 6:25 am
Operator : THOMASH
Sample : ICV637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 10:06:26 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.285	130	157187	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.488	114	588906	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.049	82	286878	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.285	130	157187	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.300	95	383997	10.14	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 101.40%			
Target Compounds						Qvalue
3) Freon 152A	3.838	65	91965	10.62	ppb(v	93
4) Chlorodifluoromethane	3.880	67	35660	11.17	ppb(v	100
5) Propene	3.905	41	95715	9.75	ppb(v	98
6) Dichlorodifluoromethane	3.966	85	388390	10.92	ppb(v	99
7) 1-Chloro-1,1-difluoroe...	4.076	65	260062	10.94	ppb(v	95
8) Chloromethane	4.101	50	127784	10.28	ppb(v	99
9) Dichlorotetrafluoroethane	4.174	85	427161	10.69	ppb(v	100
10) Vinyl Chloride	4.278	62	152840	10.94	ppb(v#	99
11) 1,3-Butadiene	4.388	54	106719	10.22	ppb(v	91
12) n-Butane	4.431	58	23642	10.29	ppb(v	77
13) Bromomethane	4.615	94	161021	10.00	ppb(v	98
14) Chloroethane	4.755	64	73213	10.63	ppb(v	97
15) Dichlorofluoromethane	4.829	67	345210	10.62	ppb(v	99
16) Acetonitrile	5.061	41	110506	9.83	ppb(v	98
17) Freon 123	5.177	83	398044	10.43	ppb(v	99
18) Freon 123A	5.226	117	198474	9.56	ppb(v	94
19) Bromoethene	5.055	106	165020	10.65	ppb(v	97
20) Trichlorofluoromethane	5.416	101	388906	10.68	ppb(v	99
21) Acetone	5.275	58	70211	9.38	ppb(v	81
22) Pentane	5.722	57	38219	10.24	ppb(v	81
24) Iodomethane	5.924	142	483171	11.06	ppb(v	94
25) Isopropyl Alcohol	5.495	43	43573	8.93	ppb(v	97
26) 1,1-Dichloroethene	5.997	61	240268	10.97	ppb(v	93
27) Freon 113	6.352	101	357663	11.11	ppb(v	98
28) Methylene Chloride	6.113	84	149595	10.07	ppb(v	90
29) Carbon Disulfide	6.395	76	477517	11.08	ppb(v	100
30) Ethanol	4.865	45	54682	9.52	ppb(v	99
31) Acrylonitrile	5.691	53	118894	11.11	ppb(v	99
32) 3-Chloropropene	6.217	76	73953	11.35	ppb(v	83
33) trans-1,2-Dichloroethene	7.019	61	223262	11.36	ppb(v	93
34) tert-Butyl Alcohol	6.040	59	334586	10.95	ppb(v	95
35) Methyl tert-Butyl Ether	7.276	73	421853	10.82	ppb(v	97
36) Vinyl Acetate	7.380	43	394956	11.58	ppb(v	97
37) 1,1-Dichloroethane	7.227	63	286838	11.06	ppb(v	100
38) 2-Butanone	7.643	72	76049	11.21	ppb(v	77
39) Hexane	8.304	57	223408	10.07	ppb(v	90
40) cis-1,2-Dichloroethene	8.108	61	210191	10.90	ppb(v	91
41) Di-isopropyl Ether	8.310	87	138849	11.79	ppb(v	80
42) Ethyl Acetate	8.352	61	54588	12.41	ppb(v	78

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15853.D
Acq On : 23 Jan 2016 6:25 am
Operator : THOMASH
Sample : ICV637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 10:06:26 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Methyl Acrylate	8.340	55	289777	10.46	ppb(v	97
44) Chloroform	8.426	83	359120	11.11	ppb(v	98
45) 2,4-Dimethylpentane	9.288	57	272577	10.48	ppb(v	97
46) Tetrahydrofuran	8.872	72	79344	12.58	ppb(v	87
47) 1,1,1-Trichloroethane	9.521	97	347619	11.18	ppb(v	99
48) 1,2-Dichloroethane	9.240	62	202347	11.51	ppb(v	99
49) Benzene	10.053	78	518615	11.00	ppb(v	98
50) Carbon Tetrachloride	10.225	117	366283	11.44	ppb(v	98
51) Cyclohexane	10.359	56	232405	10.65	ppb(v	96
52) 2,3-Dimethylpentane	10.647	71	106965	10.98	ppb(v	93
54) 2,2,4-Trimethylpentane	11.338	57	768907	10.89	ppb(v	97
55) Heptane	11.681	71	158447	10.99	ppb(v	96
56) Trichloroethene	11.320	95	245704	10.97	ppb(v	96
57) 1,2-Dichloropropane	11.020	63	192246	11.45	ppb(v	99
58) Dibromomethane	11.001	174	244940	11.13	ppb(v	89
59) Ethyl Acrylate	11.057	55	368996	11.25	ppb(v	98
60) Methyl Methacrylate	11.589	69	177161	11.02	ppb(v	89
61) 1,4-Dioxane	11.338	88	126625	11.26	ppb(v	84
62) Bromodichloromethane	11.271	83	386922	10.97	ppb(v	99
63) cis-1,3-Dichloropropene	12.402	75	306744	10.76	ppb(v	97
64) 4-Methyl-2-pentanone	12.445	58	151637	11.72	ppb(v	90
65) trans-1,3-Dichloropropene	13.075	75	275892	11.72	ppb(v	98
66) Toluene	13.644	91	629599	11.00	ppb(v	99
67) 1,1,2-Trichloroethane	13.289	97	226987	11.11	ppb(v	98
68) 1,3-Dichloropropane	13.687	76	294315	11.36	ppb(v	93
69) 2-Hexanone	14.017	58	208461	11.71	ppb(v	90
70) Ethyl Methacrylate	14.054	69	315435	11.59	ppb(v	97
71) Dibromochloromethane	14.207	129	431613	11.44	ppb(v	100
72) Tetrachloroethene	15.161	166	332957	11.14	ppb(v	98
73) 1,2-Dibromoethane	14.525	107	374856	11.18	ppb(v	99
74) Octane	14.996	43	341914	10.77	ppb(v	91
75) 1,1,1,2-Tetrachloroethane	16.091	131	294888	11.37	ppb(v	98
77) Chlorobenzene	16.110	112	513213	10.87	ppb(v	96
78) Ethylbenzene	16.654	91	805017	10.95	ppb(v	99
79) m,p-Xylene	16.923	91	1241434	21.96	ppb(v	98
80) Styrene	17.450	104	483675	11.48	ppb(v	99
81) Nonane	17.982	43	339621	10.44	ppb(v	94
82) o-Xylene	17.602	91	631746	10.98	ppb(v	100
83) Bromoform	17.009	173	442747	11.28	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.602	83	506305	10.98	ppb(v	100
85) 1,2,3-Trichloropropane	17.798	75	360511	11.08	ppb(v	97
86) Isopropylbenzene	18.514	105	899784	11.13	ppb(v	98
87) Bromobenzene	18.624	156	312067	10.89	ppb(v	93
88) 2-Chlorotoluene	19.230	126	226757	11.06	ppb(v	93
89) n-Propylbenzene	19.297	120	238203	11.26	ppb(v	93
91) 4-Ethyltoluene	19.517	105	854548	11.31	ppb(v	99
92) 1,3,5-Trimethylbenzene	19.640	105	703527	10.81	ppb(v	98
93) alpha-Methylstyrene	19.872	118	378114	11.57	ppb(v	97
94) tert-Butylbenzene	20.209	134	155911	11.33	ppb(v	90
95) 1,2,4-Trimethylbenzene	20.221	105	712373	10.92	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15853.D
Acq On : 23 Jan 2016 6:25 am
Operator : THOMASH
Sample : ICV637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 10:06:26 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 1,3-Dichlorobenzene	20.410	146	488588	10.69	ppb(v	96
97) Benzyl Chloride	20.398	91	619658	10.90	ppb(v	97
98) 1,4-Dichlorobenzene	20.508	146	480862	10.18	ppb(v	97
99) sec-Butylbenzene	20.588	134	195002	11.28	ppb(v	92
100) p-Isopropyltoluene	20.820	134	221821	11.60	ppb(v	92
101) 1,2-Dichlorobenzene	20.967	146	460062	10.58	ppb(v	97
102) n-Butylbenzene	21.383	134	195593	11.53	ppb(v	88
103) Hexachloroethane	21.848	201	293120	11.38	ppb(v	91
104) 1,2,4-Trichlorobenzene	23.163	180	269748	10.07	ppb(v	99
105) Naphthalene	23.292	128	567379	9.61	ppb(v	100
106) Hexachlorobutadiene	23.738	225	265811	10.29	ppb(v	99
108) TVHC as equiv Pentane	5.722	TIC	908644	11.58	ppb(v	100

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

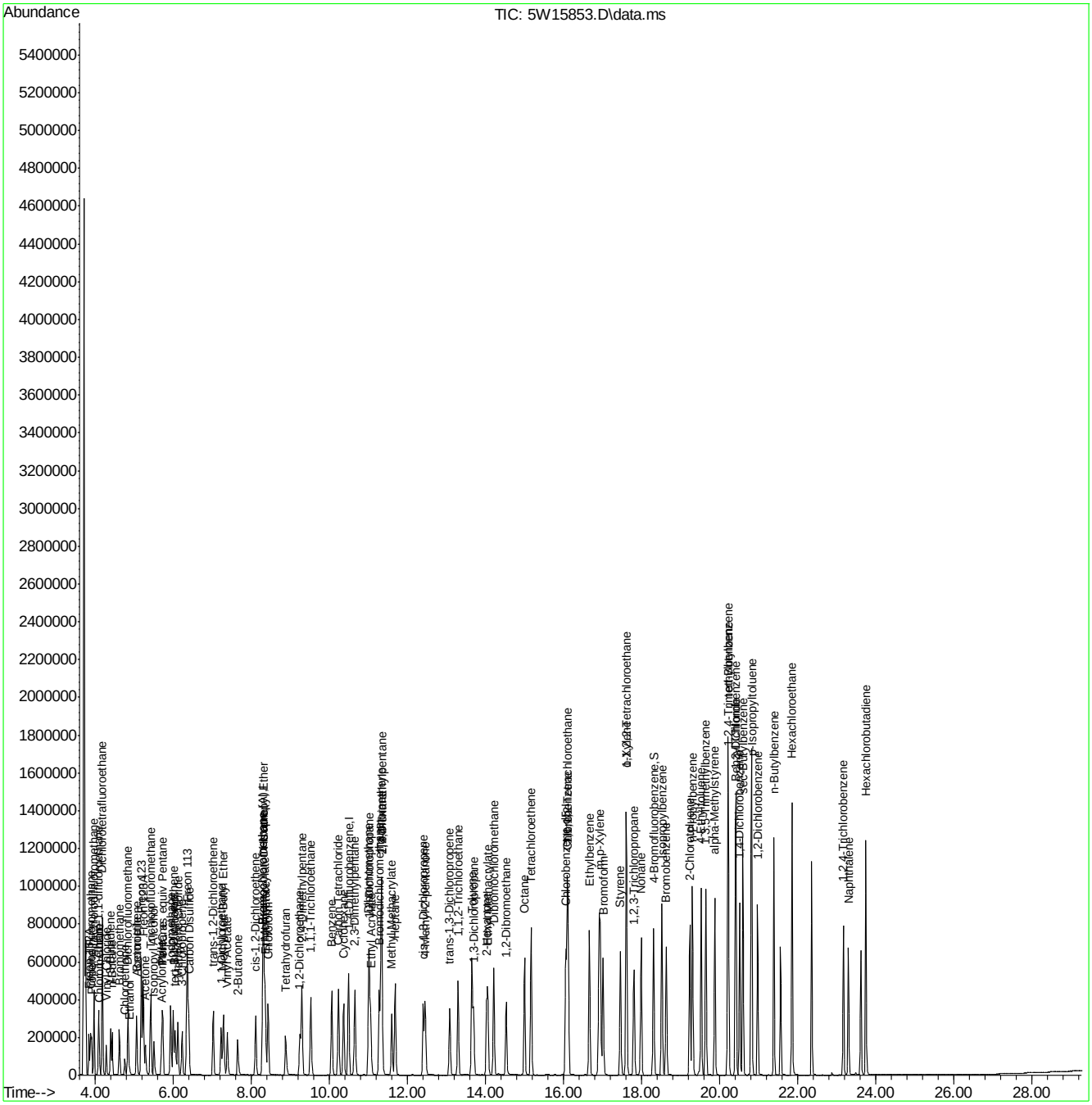
7.7.10

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W15853.D
Acq On : 23 Jan 2016 6:25 am
Operator : THOMASH
Sample : ICV637-10
Misc : MS97607,v5w637,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 10:06:26 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16055.D
Acq On : 4 Feb 2016 3:17 pm
Operator : THOMASH
Sample : cc637-10
Misc : MS97993,v5w646,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 12:06:33 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.291	130	166689	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.487	114	596181	10.00	ppb(v	0.00
76) Chlorobenzene-d5	16.048	82	307906	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.291	130	166689	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.294	95	411718	10.13	ppb(v	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 101.30%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.752	69	428332	10.33	ppb(v	93
3) Freon 152A	3.850	65	97932	10.66	ppb(v	90
4) Chlorodifluoromethane	3.886	67	36281	10.71	ppb(v	97
5) Propene	3.911	41	103368	9.93	ppb(v#	95
6) Dichlorodifluoromethane	3.972	85	402677	10.68	ppb(v	99
7) 1-Chloro-1,1-difluoroe...	4.088	65	260919	10.35	ppb(v	96
8) Chloromethane	4.107	50	141681	10.75	ppb(v	99
9) Dichlorotetrafluoroethane	4.186	85	444033	10.48	ppb(v	97
10) Vinyl Chloride	4.290	62	164552	11.11	ppb(v#	98
11) 1,3-Butadiene	4.400	54	116310	10.51	ppb(v	92
12) n-Butane	4.437	58	25304	10.39	ppb(v	88
13) Bromomethane	4.627	94	167957	9.84	ppb(v	99
14) Chloroethane	4.767	64	78418	10.74	ppb(v	98
15) Dichlorofluoromethane	4.841	67	363648	10.55	ppb(v	99
16) Acetonitrile	5.079	41	121739	10.21	ppb(v	87
17) Freon 123	5.190	83	415880	10.28	ppb(v	99
18) Freon 123A	5.245	117	231105	10.49	ppb(v	99
19) Bromoethene	5.067	106	165295	10.06	ppb(v	98
20) Trichlorofluoromethane	5.428	101	390097	10.11	ppb(v	99
21) Acetone	5.294	58	75287	9.48	ppb(v	81
22) Pentane	5.734	57	37961	9.59	ppb(v	83
23) 1,1-Dichloro-1-fluoroe...	5.532	81	322851	9.88	ppb(v	99
24) Iodomethane	5.936	142	449370	9.70	ppb(v	98
25) Isopropyl Alcohol	5.514	43	50716	9.80	ppb(v	81
26) 1,1-Dichloroethene	6.003	61	247716	10.66	ppb(v	97
27) Freon 113	6.364	101	353844	10.36	ppb(v	99
28) Methylene Chloride	6.126	84	152493	9.68	ppb(v	93
29) Carbon Disulfide	6.401	76	502029	10.98	ppb(v	100
30) Ethanol	4.890	45	63231	10.38	ppb(v	98
31) Acrylonitrile	5.710	53	118620	10.45	ppb(v	99
32) 3-Chloropropene	6.230	76	74006	10.71	ppb(v	86
33) trans-1,2-Dichloroethene	7.025	61	223757	10.73	ppb(v	96
34) tert-Butyl Alcohol	6.058	59	330937	10.21	ppb(v	98
35) Methyl tert-Butyl Ether	7.288	73	402392	9.73	ppb(v	98
36) Vinyl Acetate	7.392	43	374931	10.37	ppb(v	98
37) 1,1-Dichloroethane	7.233	63	289665	10.54	ppb(v	100
38) 2-Butanone	7.655	72	76167	10.59	ppb(v	81
39) Hexane	8.310	57	230740	9.81	ppb(v	84
40) cis-1,2-Dichloroethene	8.114	61	216558	10.59	ppb(v	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16055.D
Acq On : 4 Feb 2016 3:17 pm
Operator : THOMASH
Sample : cc637-10
Misc : MS97993,v5w646,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 12:06:33 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41)	Di-isopropyl Ether	8.322	87	133195	10.66	ppb(v	84
42)	Ethyl Acetate	8.365	61	54291	11.64	ppb(v	77
43)	Methyl Acrylate	8.352	55	300219	10.22	ppb(v	98
44)	Chloroform	8.432	83	355736	10.38	ppb(v	98
45)	2,4-Dimethylpentane	9.295	57	280414	10.16	ppb(v	99
46)	Tetrahydrofuran	8.885	72	74428	11.13	ppb(v	91
47)	1,1,1-Trichloroethane	9.527	97	335071	10.16	ppb(v	99
48)	1,2-Dichloroethane	9.246	62	199410	10.70	ppb(v	99
49)	Benzene	10.059	78	510873	10.22	ppb(v	98
50)	Carbon Tetrachloride	10.231	117	346879	10.22	ppb(v	99
51)	Cyclohexane	10.359	56	230888	9.97	ppb(v	99
52)	2,3-Dimethylpentane	10.647	71	106342	10.29	ppb(v	98
54)	2,2,4-Trimethylpentane	11.338	57	794040	11.11	ppb(v	97
55)	Heptane	11.680	71	160934	11.03	ppb(v	99
56)	Trichloroethene	11.319	95	243087	10.72	ppb(v	97
57)	1,2-Dichloropropane	11.026	63	193930	11.41	ppb(v	98
58)	Dibromomethane	11.007	174	231994	10.41	ppb(v	90
59)	Ethyl Acrylate	11.056	55	357261	10.76	ppb(v	98
60)	Methyl Methacrylate	11.595	69	173895	10.69	ppb(v	90
61)	1,4-Dioxane	11.338	88	121871	10.70	ppb(v	90
62)	Bromodichloromethane	11.271	83	394164	11.04	ppb(v	100
63)	cis-1,3-Dichloropropene	12.402	75	310338	10.76	ppb(v	98
64)	4-Methyl-2-pentanone	12.445	58	151322	11.55	ppb(v	90
65)	trans-1,3-Dichloropropene	13.075	75	259510	10.89	ppb(v	97
66)	Toluene	13.644	91	613757	10.59	ppb(v	100
67)	1,1,2-Trichloroethane	13.289	97	227629	11.00	ppb(v	99
68)	1,3-Dichloropropane	13.687	76	297848	11.36	ppb(v	94
69)	2-Hexanone	14.017	58	206623	11.47	ppb(v	88
70)	Ethyl Methacrylate	14.048	69	310349	11.26	ppb(v	99
71)	Dibromochloromethane	14.207	129	423243	11.08	ppb(v	100
72)	Tetrachloroethene	15.161	166	321422	10.62	ppb(v	99
73)	1,2-Dibromoethane	14.519	107	360493	10.62	ppb(v	99
74)	Octane	14.990	43	349376	10.88	ppb(v	95
75)	1,1,1,2-Tetrachloroethane	16.085	131	281206	10.71	ppb(v	98
77)	Chlorobenzene	16.104	112	502180	9.91	ppb(v	99
78)	Ethylbenzene	16.654	91	779834	9.88	ppb(v	98
79)	m,p-Xylene	16.923	91	1215047	20.02	ppb(v	97
80)	Styrene	17.449	104	451883	9.99	ppb(v	99
81)	Nonane	17.976	43	364794	10.45	ppb(v	95
82)	o-Xylene	17.596	91	623641	10.10	ppb(v	99
83)	Bromoform	17.003	173	426206	10.12	ppb(v	99
84)	1,1,2,2-Tetrachloroethane	17.596	83	534889	10.80	ppb(v	100
85)	1,2,3-Trichloropropane	17.792	75	363312	10.40	ppb(v	99
86)	Isopropylbenzene	18.508	105	882830	10.17	ppb(v	99
87)	Bromobenzene	18.618	156	302895	9.85	ppb(v	98
88)	2-Chlorotoluene	19.224	126	218283	9.92	ppb(v	98
89)	n-Propylbenzene	19.291	120	238164	10.49	ppb(v	94
91)	4-Ethyltoluene	19.511	105	829032	10.22	ppb(v	99
92)	1,3,5-Trimethylbenzene	19.633	105	701297	10.04	ppb(v	99
93)	alpha-Methylstyrene	19.866	118	357334	10.19	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16055.D
Acq On : 4 Feb 2016 3:17 pm
Operator : THOMASH
Sample : cc637-10
Misc : MS97993,v5w646,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 12:06:33 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

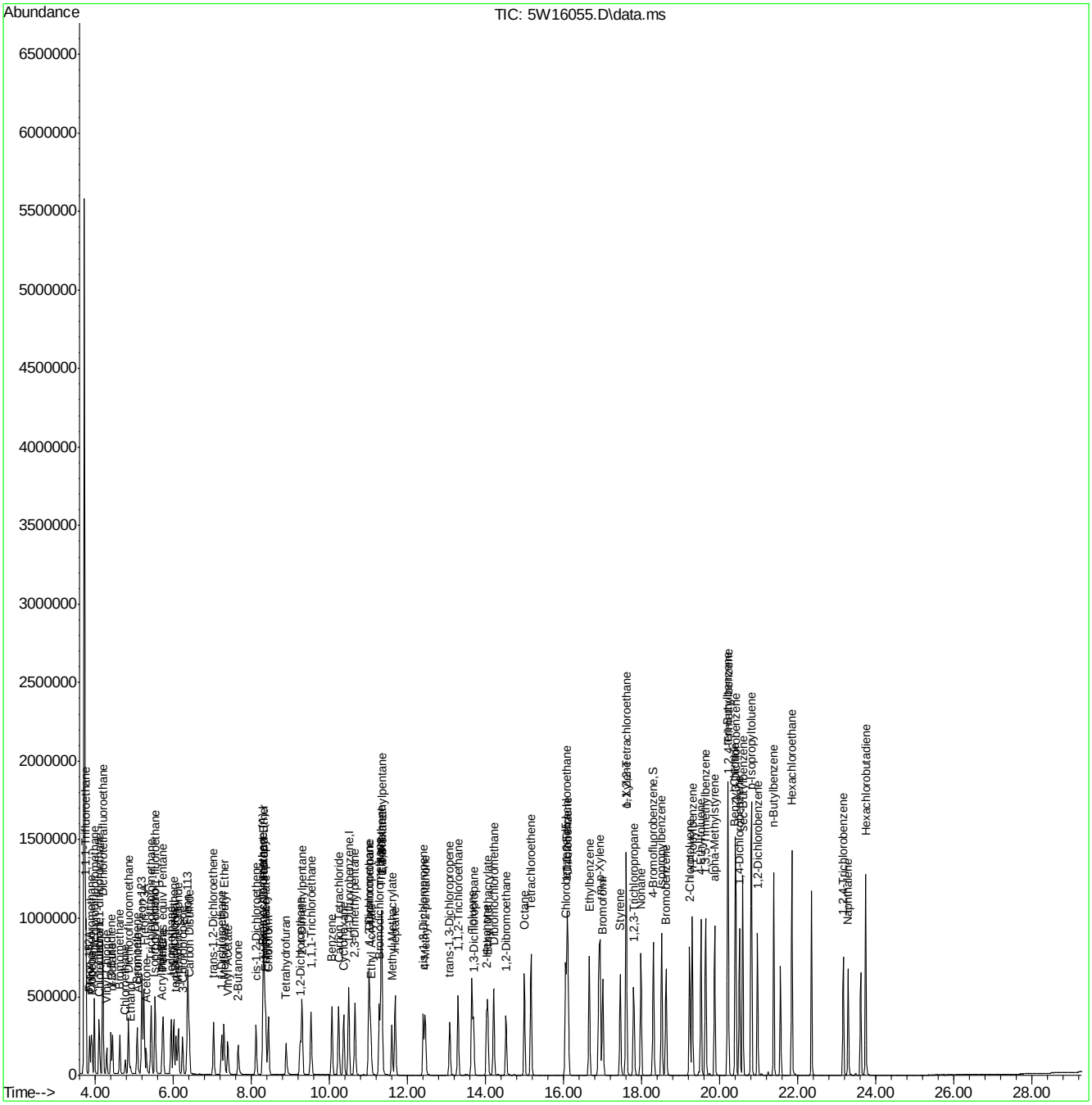
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	tert-Butylbenzene	20.202	134	152736	10.35	ppb(v	96
95)	1,2,4-Trimethylbenzene	20.215	105	735109	10.50	ppb(v	98
96)	1,3-Dichlorobenzene	20.404	146	490944	10.01	ppb(v	97
97)	Benzyl Chloride	20.392	91	619872	10.16	ppb(v	98
98)	1,4-Dichlorobenzene	20.502	146	486586	9.60	ppb(v	97
99)	sec-Butylbenzene	20.582	134	192532	10.38	ppb(v	93
100)	p-Isopropyltoluene	20.814	134	215198	10.49	ppb(v	99
101)	1,2-Dichlorobenzene	20.961	146	459722	9.85	ppb(v	98
102)	n-Butylbenzene	21.377	134	192431	10.57	ppb(v	96
103)	Hexachloroethane	21.842	201	288549	10.44	ppb(v	95
104)	1,2,4-Trichlorobenzene	23.163	180	257165	8.95	ppb(v	100
105)	Naphthalene	23.286	128	550931	8.69	ppb(v	100
106)	Hexachlorobutadiene	23.738	225	276567	9.98	ppb(v	99
108)	TVHC as equiv Pentane	5.734	TIC	916099	11.01	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16055.D
Acq On : 4 Feb 2016 3:17 pm
Operator : THOMASH
Sample : cc637-10
Misc : MS97993,v5w646,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 12:06:33 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16065.D
Acq On : 5 Feb 2016 10:31 am
Operator : THOMASH
Sample : CC637-10
Misc : MS97993,v5w647,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 08 08:48:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.279	130	119023	10.00	ppb(v	0.00
53) 1,4-Difluorobenzene	10.475	114	427827	10.00	ppb(v	-0.01
76) Chlorobenzene-d5	16.042	82	223386	10.00	ppb(v	0.00
107) Bromochloromethane (A)	8.279	130	119023	10.00	ppb(v	0.00
System Monitoring Compounds						
90) 4-Bromofluorobenzene	18.287	95	297719	10.10	ppb(v	-0.01
Spiked Amount 10.000	Range 65 - 128		Recovery = 101.00%			
Target Compounds						Qvalue
2) 1,1,1-Trifluoroethane	3.746	69	341041	11.52	ppb(v	93
3) Freon 152A	3.837	65	74830	11.41	ppb(v	90
4) Chlorodifluoromethane	3.880	67	27075	11.20	ppb(v	99
5) Propene	3.899	41	77470	10.42	ppb(v	97
6) Dichlorodifluoromethane	3.960	85	303055	11.26	ppb(v	99
7) 1-Chloro-1,1-difluoroe...	4.076	65	198983	11.05	ppb(v	96
8) Chloromethane	4.094	50	111193	11.81	ppb(v	99
9) Dichlorotetrafluoroethane	4.174	85	350812	11.59	ppb(v	98
10) Vinyl Chloride	4.278	62	127417	12.05	ppb(v#	98
11) 1,3-Butadiene	4.388	54	90098	11.40	ppb(v	91
12) n-Butane	4.425	58	19819	11.39	ppb(v	84
13) Bromomethane	4.614	94	133541	10.95	ppb(v	99
14) Chloroethane	4.755	64	60895	11.68	ppb(v	98
15) Dichlorofluoromethane	4.828	67	282159	11.47	ppb(v	99
16) Acetonitrile	5.055	41	93888	11.03	ppb(v	98
17) Freon 123	5.177	83	328543	11.37	ppb(v	99
18) Freon 123A	5.226	117	173553	11.04	ppb(v	100
19) Bromoethene	5.055	106	133095	11.34	ppb(v	96
20) Trichlorofluoromethane	5.410	101	304931	11.06	ppb(v	99
21) Acetone	5.275	58	57887	10.21	ppb(v	78
22) Pentane	5.716	57	28690	10.15	ppb(v	83
23) 1,1-Dichloro-1-fluoroe...	5.514	81	245933	10.54	ppb(v	98
24) Iodomethane	5.924	142	351926	10.64	ppb(v	96
25) Isopropyl Alcohol	5.489	43	38412	10.39	ppb(v	92
26) 1,1-Dichloroethene	5.991	61	185431	11.18	ppb(v	94
27) Freon 113	6.346	101	269660	11.06	ppb(v	98
28) Methylene Chloride	6.107	84	116109	10.32	ppb(v	93
29) Carbon Disulfide	6.388	76	381285	11.68	ppb(v	100
30) Ethanol	4.865	45	48183	11.08	ppb(v	98
31) Acrylonitrile	5.691	53	88582	10.93	ppb(v	97
32) 3-Chloropropene	6.217	76	55437	11.24	ppb(v	80
33) trans-1,2-Dichloroethene	7.012	61	167240	11.23	ppb(v	94
34) tert-Butyl Alcohol	6.034	59	246413	10.65	ppb(v	98
35) Methyl tert-Butyl Ether	7.269	73	301964	10.23	ppb(v	98
36) Vinyl Acetate	7.373	43	279161	10.81	ppb(v	97
37) 1,1-Dichloroethane	7.220	63	217006	11.05	ppb(v	99
38) 2-Butanone	7.636	72	58243	11.34	ppb(v	82
39) Hexane	8.297	57	176123	10.49	ppb(v	88
40) cis-1,2-Dichloroethene	8.101	61	161843	11.09	ppb(v	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16065.D
Acq On : 5 Feb 2016 10:31 am
Operator : THOMASH
Sample : CC637-10
Misc : MS97993,v5w647,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 08 08:48:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Di-isopropyl Ether	8.303	87	101232	11.35	ppb(v	86
42) Ethyl Acetate	8.346	61	41591	12.48	ppb(v	82
43) Methyl Acrylate	8.334	55	228093	10.87	ppb(v	99
44) Chloroform	8.420	83	269144	11.00	ppb(v	98
45) 2,4-Dimethylpentane	9.282	57	212352	10.78	ppb(v	99
46) Tetrahydrofuran	8.866	72	57787	12.10	ppb(v	88
47) 1,1,1-Trichloroethane	9.515	97	251208	10.67	ppb(v	98
48) 1,2-Dichloroethane	9.233	62	148751	11.18	ppb(v	98
49) Benzene	10.047	78	389324	10.91	ppb(v	98
50) Carbon Tetrachloride	10.218	117	263552	10.87	ppb(v	99
51) Cyclohexane	10.353	56	175874	10.64	ppb(v	98
52) 2,3-Dimethylpentane	10.640	71	81456	11.04	ppb(v	91
54) 2,2,4-Trimethylpentane	11.325	57	614017	11.97	ppb(v	97
55) Heptane	11.674	71	121807	11.63	ppb(v	98
56) Trichloroethene	11.307	95	186877	11.48	ppb(v	97
57) 1,2-Dichloropropane	11.013	63	148128	12.15	ppb(v	97
58) Dibromomethane	10.995	174	181698	11.36	ppb(v	89
59) Ethyl Acrylate	11.050	55	268150	11.26	ppb(v	98
60) Methyl Methacrylate	11.582	69	129834	11.12	ppb(v	90
61) 1,4-Dioxane	11.325	88	93989	11.50	ppb(v	91
62) Bromodichloromethane	11.264	83	297955	11.63	ppb(v	99
63) cis-1,3-Dichloropropene	12.390	75	236032	11.40	ppb(v	98
64) 4-Methyl-2-pentanone	12.439	58	114048	12.13	ppb(v	92
65) trans-1,3-Dichloropropene	13.069	75	197941	11.57	ppb(v	98
66) Toluene	13.638	91	474837	11.42	ppb(v	99
67) 1,1,2-Trichloroethane	13.283	97	175034	11.79	ppb(v	98
68) 1,3-Dichloropropane	13.681	76	228083	12.12	ppb(v	93
69) 2-Hexanone	14.011	58	158315	12.24	ppb(v	90
70) Ethyl Methacrylate	14.042	69	234149	11.84	ppb(v	99
71) Dibromochloromethane	14.195	129	329272	12.01	ppb(v	99
72) Tetrachloroethene	15.155	166	257509	11.85	ppb(v	98
73) 1,2-Dibromoethane	14.513	107	279563	11.48	ppb(v	99
74) Octane	14.984	43	268612	11.65	ppb(v	97
75) 1,1,1,2-Tetrachloroethane	16.079	131	217140	11.52	ppb(v	98
77) Chlorobenzene	16.103	112	386488	10.52	ppb(v	96
78) Ethylbenzene	16.648	91	603642	10.54	ppb(v	98
79) m,p-Xylene	16.917	91	933988	21.21	ppb(v	98
80) Styrene	17.443	104	349848	10.66	ppb(v	98
81) Nonane	17.969	43	280625	11.08	ppb(v	96
82) o-Xylene	17.596	91	480398	10.72	ppb(v	98
83) Bromoform	16.997	173	336884	11.03	ppb(v	99
84) 1,1,2,2-Tetrachloroethane	17.596	83	416127	11.59	ppb(v	99
85) 1,2,3-Trichloropropane	17.786	75	279401	11.03	ppb(v	99
86) Isopropylbenzene	18.502	105	681412	10.82	ppb(v	98
87) Bromobenzene	18.618	156	241788	10.84	ppb(v	92
88) 2-Chlorotoluene	19.217	126	171900	10.76	ppb(v	97
89) n-Propylbenzene	19.291	120	183483	11.13	ppb(v	92
91) 4-Ethyltoluene	19.511	105	634575	10.79	ppb(v	99
92) 1,3,5-Trimethylbenzene	19.633	105	536581	10.59	ppb(v	98
93) alpha-Methylstyrene	19.866	118	273600	10.75	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16065.D
Acq On : 5 Feb 2016 10:31 am
Operator : THOMASH
Sample : CC637-10
Misc : MS97993,v5w647,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 08 08:48:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration

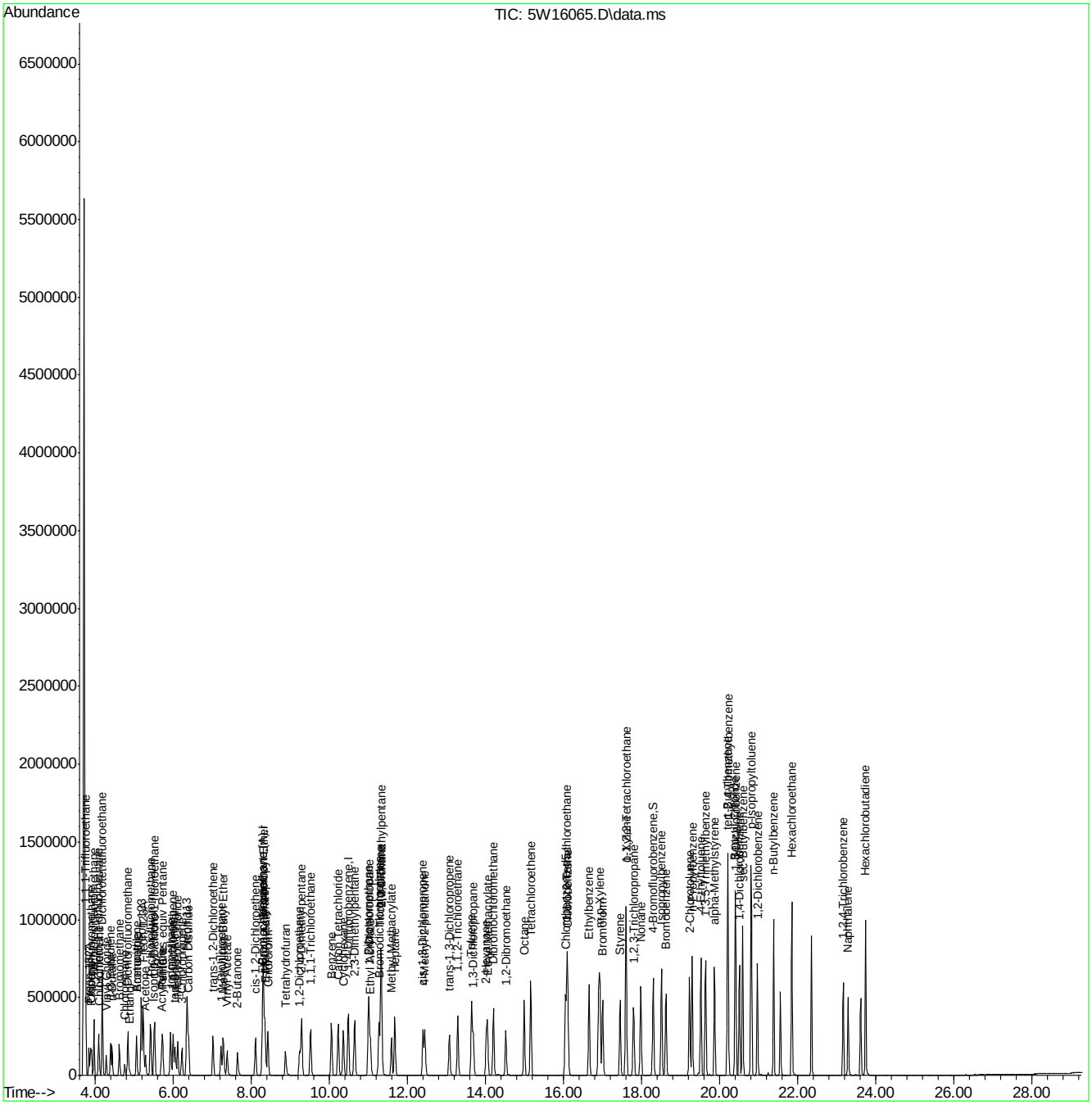
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	tert-Butylbenzene	20.196	134	120285	11.23	ppb(v	91
95)	1,2,4-Trimethylbenzene	20.208	105	562302	11.07	ppb(v	90
96)	1,3-Dichlorobenzene	20.404	146	386239	10.85	ppb(v	95
97)	Benzyl Chloride	20.392	91	477817	10.80	ppb(v	97
98)	1,4-Dichlorobenzene	20.502	146	379192	10.31	ppb(v	96
99)	sec-Butylbenzene	20.582	134	148580	11.04	ppb(v	93
100)	p-Isopropyltoluene	20.808	134	168137	11.29	ppb(v	97
101)	1,2-Dichlorobenzene	20.961	146	362703	10.71	ppb(v	96
102)	n-Butylbenzene	21.377	134	150062	11.36	ppb(v	92
103)	Hexachloroethane	21.842	201	230669	11.50	ppb(v	91
104)	1,2,4-Trichlorobenzene	23.157	180	201069	9.64	ppb(v	100
105)	Naphthalene	23.286	128	417924	9.09	ppb(v	100
106)	Hexachlorobutadiene	23.732	225	212974	10.59	ppb(v	99
108)	TVHC as equiv Pentane	5.716	TIC	687723	11.57	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 5W16065.D
Acq On : 5 Feb 2016 10:31 am
Operator : THOMASH
Sample : CC637-10
Misc : MS97993,v5w647,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 08 08:48:08 2016
Quant Method : C:\msdchem\1\METHODS\m5w637.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Mon Jan 25 09:32:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53466.D Vial: 1
Acq On : 11 Feb 2016 1:34 pm Operator: YOUMINH
Sample : ICC2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:59:09 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:58:57 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	101649	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.92	114	547699	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.18	82	260995	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	305496	10.19	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 101.90%			
Target Compounds						Qvalue
3) FREON 152A	5.01	65	89708	9.79	PPBV	100
4) CHLORODIFLUOROMETHANE	5.05	67	35254	10.32	PPBV	100
5) DICHLORODIFLUOROMETHANE	5.16	85	354426	9.60	PPBV	100
6) PROPYLENE	5.08	41	114828	9.06	PPBV	100
7) FREON 114	5.40	85	371861	9.60	PPBV	100
9) CHLOROMETHANE	5.32	52	40167	10.24	PPBV	100
10) VINYL CHLORIDE	5.52	62	146472	9.69	PPBV	100
11) 1,3-BUTADIENE	5.64	54	115416	9.54	PPBV	100
12) n-BUTANE	5.69	58	31972	10.07	PPBV	100
13) BROMOMETHANE	5.90	94	124100	9.56	PPBV	100
14) CHLOROETHANE	6.04	64	76750	9.92	PPBV	100
15) DICHLOROFLUOROMETHANE	6.10	67	302801	9.73	PPBV	100
16) ACROLEIN	6.43	56	55400	10.51	PPBV	100
17) TRICHLOROFLUOROMETHANE	6.69	101	342558	9.49	PPBV	100
18) ISOPROPYL ALCOHOL	6.71	45	247045	8.40	PPBV	100
19) ACETONE	6.53	58	63759	9.60	PPBV	100
21) ACRYLONITRILE	6.92	53	98662	10.74	PPBV	100
22) PENTANE	6.98	57	37388	9.65	PPBV	100
23) IODOMETHANE	7.19	142	309309	9.70	PPBV	100
24) 1,1-DICHLOROETHYLENE	7.24	96	125774	9.51	PPBV	100
25) CARBON DISULFIDE	7.64	76	366560	9.47	PPBV	100
26) ETHANOL	6.11	45	53787	8.98	PPBV	100
27) ACETONITRILE	6.32	41	103356	9.82	PPBV	100
28) BROMOETHENE	6.35	106	126008	9.51	PPBV	100
29) METHYLENE CHLORIDE	7.33	84	109762	10.00	PPBV	100
30) 3-CHLOROPROPENE	7.43	76	61619	10.32	PPBV	100
31) FREON 113	7.54	151	216631	10.03	PPBV	100
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	124816	9.86	PPBV	100
33) TERTIARY BUTYL ALCOHOL	7.23	59	287851	10.45	PPBV	100
34) METHYL TERTIARY BUTYL ETHE	8.33	73	353497	10.76	PPBV	100
35) TETRAHYDROFURAN	9.66	72	59137	11.25	PPBV	100
36) HEXANE	9.20	57	217753	10.38	PPBV	100
37) VINYL ACETATE	8.39	86	33843	11.81	PPBV	100
38) 1,1-DICHLOROETHANE	8.32	63	238892	10.25	PPBV	100
39) METHYL ETHYL KETONE	8.63	72	59793	11.11	PPBV	100
40) cis-1,2-DICHLOROETHYLENE	9.04	96	131809	10.16	PPBV	100
41) DI-ISOPROPYL ETHER	9.17	87	110691	10.77	PPBV	100
42) ETHYL ACETATE	9.18	61	42781	11.92	PPBV	100
43) METHYL ACRYLATE	9.19	55	241850	11.27	PPBV	100
44) CHLOROFORM	9.30	83	261016	10.35	PPBV	100
45) 2,4-DIMETHYLPENTANE	9.99	57	252044	10.53	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53466.D Vial: 1
Acq On : 11 Feb 2016 1:34 pm Operator: YOUMINH
Sample : ICC2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:59:09 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:58:57 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	271955	10.23	PPBV	100
47)	CARBON TETRACHLORIDE	10.77	117	284077	10.20	PPBV	100
48)	1,2-DICHLOROETHANE	9.97	62	173556	10.64	PPBV	100
50)	BENZENE	10.63	78	418553	10.47	PPBV	100
51)	CYCLOHEXANE	10.89	84	180056	9.56	PPBV	100
52)	2,3-DIMETHYLPENTANE	11.07	71	93624	10.38	PPBV	100
53)	TRICHLOROETHYLENE	11.60	95	174349	10.42	PPBV	100
54)	DIBROMOMETHANE	11.37	174	158174	10.55	PPBV	100
55)	1,2-DICHLOROPROPANE	11.38	63	147781	10.65	PPBV	100
56)	ETHYL ACRYLATE	11.31	55	264386	11.36	PPBV	100
57)	BROMODICHLOROMETHANE	11.56	83	292622	10.55	PPBV	100
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	683817	10.60	PPBV	100
59)	1,4-DIOXANE	11.60	88	82425	11.44	PPBV	100
60)	METHYL METHACRYLATE	11.74	69	131154	11.14	PPBV	100
61)	HEPTANE	11.83	43	246746	10.60	PPBV	100
62)	METHYL ISOBUTYL KETONE	12.41	43	278270	11.18	PPBV	100
63)	cis-1,3-DICHLOROPROPENE	12.41	75	249160	11.32	PPBV	100
64)	TOLUENE	13.38	92	284178	11.04	PPBV	100
65)	1,3-DICHLOROPROPANE	13.39	76	225853	11.13	PPBV	100
66)	trans-1,3-DICHLOROPROPENE	12.91	75	191331	11.25	PPBV	100
67)	1,1,2-TRICHLOROETHANE	13.10	83	127497	11.00	PPBV	100
69)	ETHYL METHACRYLATE	13.58	69	226291	11.63	PPBV	100
70)	2-HEXANONE	13.59	58	148074	11.49	PPBV	100
71)	TETRACHLOROETHYLENE	14.52	164	186729	10.56	PPBV	100
72)	DIBROMOCHLOROMETHANE	13.81	129	279233	10.76	PPBV	100
73)	1,2-DIBROMOETHANE	14.07	107	218733	11.22	PPBV	100
74)	OCTANE	14.31	43	339495	11.19	PPBV	100
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	204608	10.73	PPBV	100
76)	CHLOROBENZENE	15.23	112	365713	10.79	PPBV	100
77)	ETHYLBENZENE	15.61	91	559496	10.91	PPBV	100
78)	m,p-XYLENE	15.80	106	460128	22.14	PPBV	100
79)	o-XYLENE	16.31	106	218154	11.15	PPBV	100
80)	STYRENE	16.19	104	339297	11.66	PPBV	100
81)	1,2,3-TRICHLOROPROPANE	16.44	75	227723	10.66	PPBV	100
82)	NONANE	16.49	43	351980	11.88	PPBV	100
83)	BROMOFORM	15.91	173	258363	11.21	PPBV	100
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	300717	10.79	PPBV	100
86)	ISOPROPYLBENZENE	16.93	105	653481	10.94	PPBV	100
87)	BROMOBENZENE	17.05	156	186694	11.02	PPBV	100
88)	2-CHLOROTOLUENE	17.46	126	150507	11.12	PPBV	100
89)	n-PROPYLBENZENE	17.48	120	170658	11.34	PPBV	100
90)	4-ETHYLTOLUENE	17.64	105	547744	11.44	PPBV	100
91)	1,3,5-TRIMETHYLBENZENE	17.72	105	509608	11.20	PPBV	100
92)	ALPHA-METHYLSTYRENE	17.89	118	228191	11.58	PPBV	100
93)	TERT-BUTYLBENZENE	18.17	134	126340	11.30	PPBV	100
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	474794	11.30	PPBV	100
95)	m-DICHLOROBENZENE	18.36	146	260850	11.12	PPBV	100
96)	BENZYL CHLORIDE	18.33	91	327001	11.73	PPBV	100
97)	p-DICHLOROBENZENE	18.43	146	270850	11.66	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53466.D Vial: 1
Acq On : 11 Feb 2016 1:34 pm Operator: YOUMINH
Sample : ICC2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:59:09 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:58:57 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

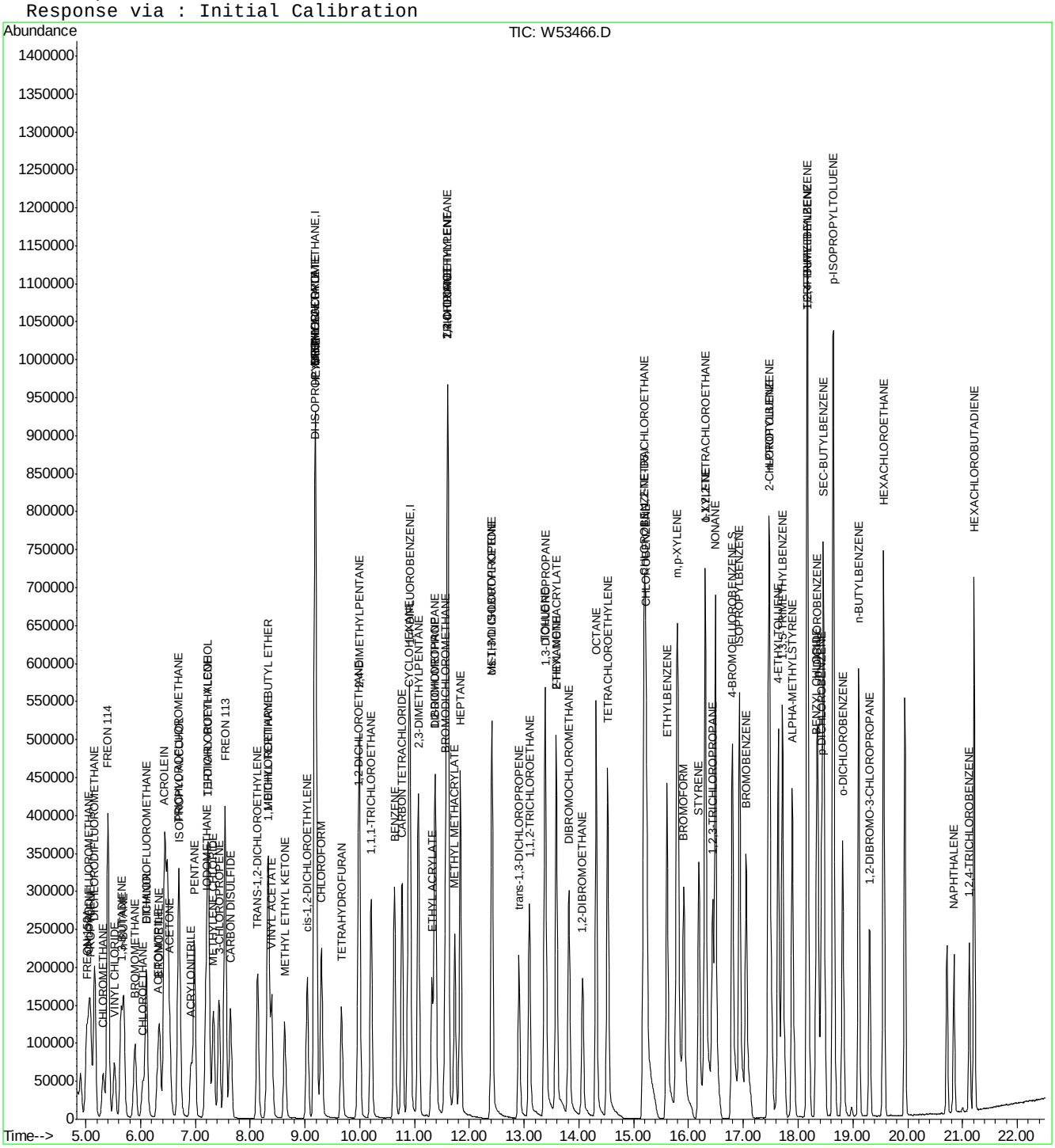
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.47	134	147353	11.33	PPBV	100
99)	p-ISOPROPYLTOLUENE	18.64	134	152719	11.53	PPBV	100
100)	o-DICHLOROBENZENE	18.81	146	245865	10.95	PPBV	100
101)	n-BUTYLBENZENE	19.11	134	125288	11.58	PPBV	100
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.31	157	106670	11.22	PPBV	100
103)	HEXACHLOROETHANE	19.56	201	194776	11.11	PPBV	100
104)	HEXACHLOROBUTADIENE	21.21	225	175813	10.35	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.12	180	91552	10.63	PPBV	100
106)	NAPHTHALENE	20.84	128	215093	10.66	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53466.D Vial: 1
Acq On : 11 Feb 2016 1:34 pm Operator: YOUMINH
Sample : ICC2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 8:56 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53468.D Vial: 2
Acq On : 11 Feb 2016 2:56 pm Operator: YOUMINH
Sample : IC2140-0.5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:26 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	99936	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.91	114	524874	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.18	82	226781	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.80	95	248888	9.38	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 93.80%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	4211	0.48	PPBV		98
4) CHLORODIFLUOROMETHANE	5.05	67	1531	0.44	PPBV	#	65
5) DICHLORODIFLUOROMETHANE	5.16	85	17598	0.51	PPBV		100
6) PROPYLENE	5.09	41	6260	0.55	PPBV		99
7) FREON 114	5.40	85	18195	0.50	PPBV		99
9) CHLOROMETHANE	5.32	52	1897	0.48	PPBV	#	85
10) VINYL CHLORIDE	5.52	62	7094	0.49	PPBV		97
11) 1,3-BUTADIENE	5.65	54	5533	0.49	PPBV		95
12) n-BUTANE	5.69	58	1536	0.49	PPBV	#	88
13) BROMOMETHANE	5.90	94	5904	0.48	PPBV		93
14) CHLOROETHANE	6.04	64	3438	0.46	PPBV		96
15) DICHLOROFLUOROMETHANE	6.10	67	14106	0.47	PPBV		99
16) ACROLEIN	6.43	56	2279	0.42	PPBV		95
17) TRICHLOROFLUOROMETHANE	6.69	101	16439	0.49	PPBV		99
18) ISOPROPYL ALCOHOL	6.73	45	15137	3.37	PPBV	#	1
19) ACETONE	6.54	58	3181	0.51	PPBV		93
21) ACRYLONITRILE	6.93	53	3947	0.41	PPBV		98
22) PENTANE	6.99	57	1762	0.48	PPBV	#	90
23) IODOMETHANE	7.19	142	14186	0.47	PPBV		99
24) 1,1-DICHLOROETHYLENE	7.24	96	6190	0.50	PPBV		97
25) CARBON DISULFIDE	7.65	76	18462	0.51	PPBV		94
26) ETHANOL	6.11	45	3143	0.59	PPBV		86
27) ACETONITRILE	6.33	41	5667	0.56	PPBV		93
28) BROMOETHENE	6.34	106	5837	0.47	PPBV		97
29) METHYLENE CHLORIDE	7.32	84	5015	0.46	PPBV		98
30) 3-CHLOROPROPENE	7.43	76	2623	0.43	PPBV		97
31) FREON 113	7.54	151	9808	0.46	PPBV		98
32) TRANS-1,2-DICHLOROETHYLENE	8.14	96	5728	0.47	PPBV		96
33) TERTIARY BUTYL ALCOHOL	7.25	59	12124	0.43	PPBV		98
34) METHYL TERTIARY BUTYL ETHE	8.35	73	13908	0.40	PPBV		98
35) TETRAHYDROFURAN	9.69	72	2087	0.36	PPBV		98
36) HEXANE	9.20	57	9341	0.44	PPBV		98
37) VINYL ACETATE	8.39	86	1004	0.30	PPBV	#	38
38) 1,1-DICHLOROETHANE	8.31	63	10578	0.45	PPBV		99
39) METHYL ETHYL KETONE	8.65	72	2250	0.38	PPBV	#	89
40) cis-1,2-DICHLOROETHYLENE	9.04	96	5814	0.45	PPBV		92
41) DI-ISOPROPYL ETHER	9.18	87	4198	0.39	PPBV		95
42) ETHYL ACETATE	9.19	61	1490	0.35	PPBV	#	82
43) METHYL ACRYLATE	9.20	55	8886	0.37	PPBV		96
44) CHLOROFORM	9.30	83	11212	0.44	PPBV		96
45) 2,4-DIMETHYLPENTANE	9.99	57	10335	0.42	PPBV		97

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53468.D Vial: 2
Acq On : 11 Feb 2016 2:56 pm Operator: YOUMINH
Sample : IC2140-0.5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:26 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	11973	0.45	PPBV		100
47)	CARBON TETRACHLORIDE	10.77	117	12401	0.44	PPBV		99
48)	1,2-DICHLOROETHANE	9.96	62	7100	0.42	PPBV		98
50)	BENZENE	10.63	78	17686	0.44	PPBV		100
51)	CYCLOHEXANE	10.89	84	8532	0.49	PPBV	#	1
52)	2,3-DIMETHYLPENTANE	11.07	71	3816	0.43	PPBV		93
53)	TRICHLOROETHYLENE	11.60	95	7288	0.44	PPBV		96
54)	DIBROMOMETHANE	11.36	174	6386	0.42	PPBV		99
55)	1,2-DICHLOROPROPANE	11.38	63	5772	0.41	PPBV		96
56)	ETHYL ACRYLATE	11.32	55	8758	0.35	PPBV	#	87
57)	BROMODICHLOROMETHANE	11.57	83	12008	0.43	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	26811	0.41	PPBV		98
59)	1,4-DIOXANE	11.61	88	2710	0.34	PPBV	#	84
60)	METHYL METHACRYLATE	11.74	69	4535	0.36	PPBV		93
61)	HEPTANE	11.83	43	9706	0.41	PPBV		98
62)	METHYL ISOBUTYL KETONE	12.42	43	9705	0.36	PPBV		97
63)	cis-1,3-DICHLOROPROPENE	12.41	75	8399	0.35	PPBV		99
64)	TOLUENE	13.38	92	10097	0.37	PPBV		96
65)	1,3-DICHLOROPROPANE	13.39	76	7859	0.36	PPBV		95
66)	trans-1,3-DICHLOROPROPENE	12.91	75	6370	0.35	PPBV		98
67)	1,1,2-TRICHLOROETHANE	13.10	83	4454	0.36	PPBV		96
69)	ETHYL METHACRYLATE	13.58	69	6673	0.34	PPBV	#	96
70)	2-HEXANONE	13.60	58	4768	0.37	PPBV		95
71)	TETRACHLOROETHYLENE	14.52	164	7324	0.45	PPBV		98
72)	DIBROMOCHLOROMETHANE	13.81	129	10447	0.43	PPBV		93
73)	1,2-DIBROMOETHANE	14.06	107	7439	0.39	PPBV		99
74)	OCTANE	14.31	43	11283	0.38	PPBV		97
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	7815	0.44	PPBV	#	1
76)	CHLOROBENZENE	15.22	112	13660	0.43	PPBV	#	77
77)	ETHYLBENZENE	15.61	91	19579	0.40	PPBV		98
78)	m,p-XYLENE	15.80	106	15804	0.79	PPBV		94
79)	o-XYLENE	16.31	106	7451	0.39	PPBV		99
80)	STYRENE	16.19	104	9974	0.34	PPBV		98
81)	1,2,3-TRICHLOROPROPANE	16.43	75	8607	0.43	PPBV	#	92
82)	NONANE	16.49	43	9689	0.32	PPBV		98
83)	BROMOFORM	15.91	173	8755	0.39	PPBV		94
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	10887	0.42	PPBV		98
86)	ISOPROPYLBENZENE	16.93	105	22656	0.40	PPBV		99
87)	BROMOBENZENE	17.05	156	6416	0.40	PPBV		97
88)	2-CHLOROTOLUENE	17.45	126	5035	0.39	PPBV	#	70
89)	n-PROPYLBENZENE	17.48	120	5238	0.35	PPBV		91
90)	4-ETHYLTOLUENE	17.63	105	16272	0.34	PPBV		97
91)	1,3,5-TRIMETHYLBENZENE	17.72	105	16237	0.37	PPBV		98
92)	ALPHA-METHYLSTYRENE	17.89	118	6221	0.31	PPBV		98
93)	TERT-BUTYLBENZENE	18.17	134	3843	0.35	PPBV		90
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	14697	0.36	PPBV		97
95)	m-DICHLOROBENZENE	18.35	146	8066	0.36	PPBV		99
96)	BENZYL CHLORIDE	18.33	91	8672	0.31	PPBV		99
97)	p-DICHLOROBENZENE	18.42	146	8226	0.35	PPBV		97

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53468.D Vial: 2
Acq On : 11 Feb 2016 2:56 pm Operator: YOUMINH
Sample : IC2140-0.5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:26 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

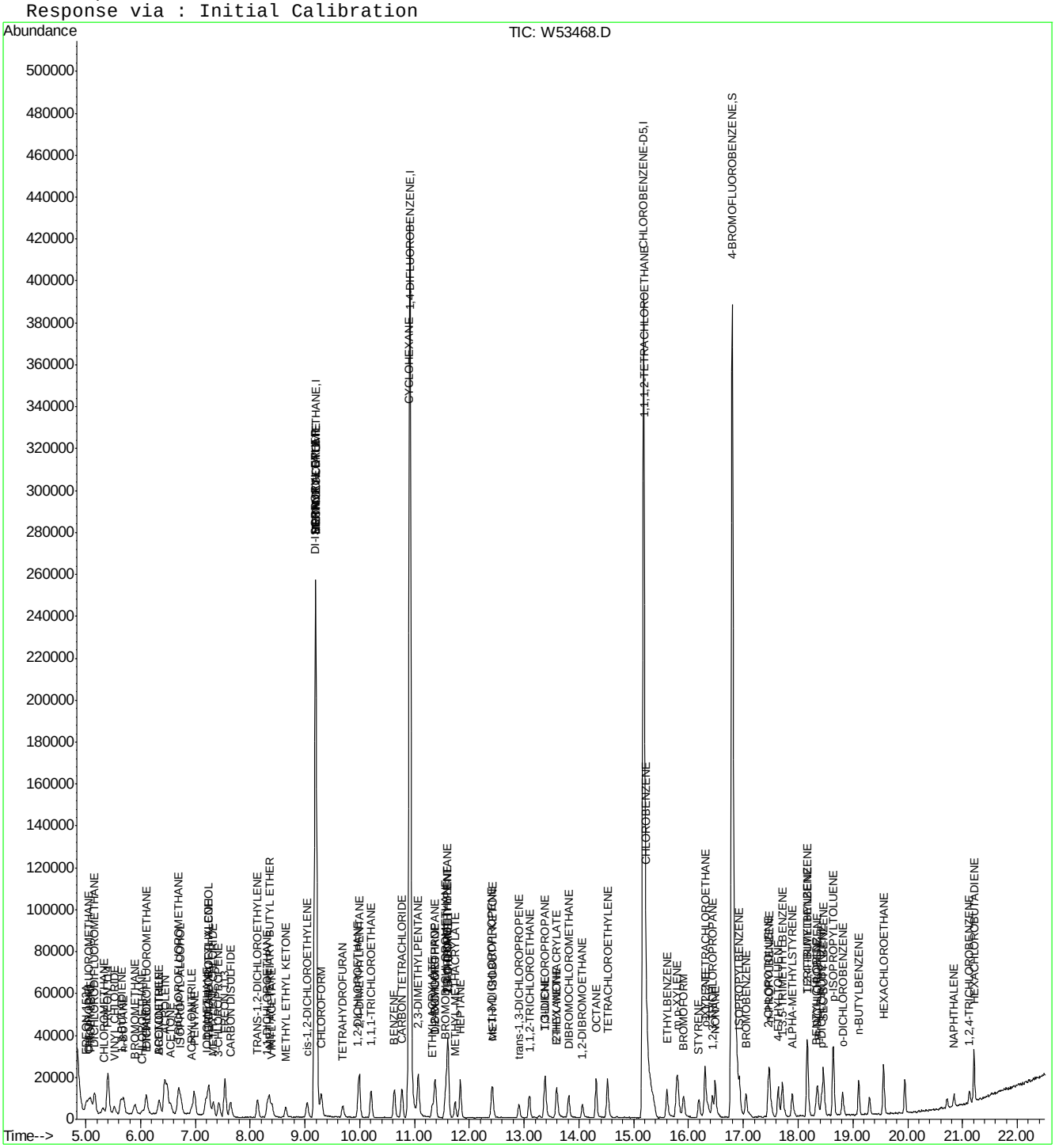
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.47	134	4563	0.36	PPBV	97
99)	p-ISOPROPYLTOLUENE	18.64	134	4482	0.34	PPBV	92
100)	o-DICHLOROBENZENE	18.81	146	8173	0.38	PPBV	99
101)	n-BUTYLBENZENE	19.11	134	3485	0.32	PPBV	99
103)	HEXACHLOROETHANE	19.56	201	6005	0.35	PPBV	93
104)	HEXACHLOROBUTADIENE	21.21	225	6209	0.41	PPBV	98
105)	1,2,4-TRICHLOROBENZENE	21.12	180	2878	0.36	PPBV	98
106)	NAPHTHALENE	20.84	128	6409	0.34	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53468.D Vial: 2
Acq On : 11 Feb 2016 2:56 pm Operator: YOUMINH
Sample : IC2140-0.5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:55 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Dana Tryon 02/12/16 16:19

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:27 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	95593	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.91	114	510625	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.18	82	223271	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.80	95	243063	9.30	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 93.00%				
Target Compounds							Qvalue
3) FREON 152A	5.02	65	1501	0.18	PPBV	#	47
4) CHLORODIFLUOROMETHANE	5.06	67	483	0.15	PPBV	#	42
5) DICHLORODIFLUOROMETHANE	5.16	85	6586	0.20	PPBV		98
6) PROPYLENE	5.08	41	2597	0.24	PPBV		99
7) FREON 114	5.40	85	6584	0.19	PPBV		98
9) CHLOROMETHANE	5.32	52	658m	0.17	PPBV		
10) VINYL CHLORIDE	5.51	62	2473	0.18	PPBV	#	91
11) 1,3-BUTADIENE	5.64	54	2081	0.19	PPBV	#	84
12) n-BUTANE	5.68	58	361	0.12	PPBV	#	1
13) BROMOMETHANE	5.89	94	2214	0.19	PPBV		87
14) CHLOROETHANE	6.03	64	1143	0.16	PPBV		83
15) DICHLOROFLUOROMETHANE	6.10	67	5590	0.20	PPBV	#	97
16) ACROLEIN	6.43	56	914	0.18	PPBV		84
17) TRICHLOROFLUOROMETHANE	6.68	101	6712	0.21	PPBV		98
18) ISOPROPYL ALCOHOL	6.74	45	8518	1.98	PPBV	#	1
19) ACETONE	6.55	58	1495	0.25	PPBV	#	88
21) ACRYLONITRILE	6.93	53	1428	0.15	PPBV	#	90
22) PENTANE	6.98	57	695	0.20	PPBV	#	70
23) IODOMETHANE	7.19	142	5621	0.19	PPBV		99
24) 1,1-DICHLOROETHYLENE	7.23	96	2502	0.21	PPBV		89
25) CARBON DISULFIDE	7.63	76	7635	0.22	PPBV		89
26) ETHANOL	6.10	45	1440	0.28	PPBV		76
27) ACETONITRILE	6.34	41	1923	0.20	PPBV	#	54
28) BROMOETHENE	6.34	106	2299	0.19	PPBV	#	97
29) METHYLENE CHLORIDE	7.32	84	1947	0.19	PPBV		93
30) 3-CHLOROPROPENE	7.44	76	917	0.16	PPBV	#	78
31) FREON 113	7.54	151	3850	0.19	PPBV		98
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	2348	0.20	PPBV		89
33) TERTIARY BUTYL ALCOHOL	7.26	59	4591	0.17	PPBV		98
34) METHYL TERTIARY BUTYL ETHE	8.35	73	5323	0.16	PPBV		98
35) TETRAHYDROFURAN	9.69	72	735	0.13	PPBV		91
36) HEXANE	9.19	57	3598	0.18	PPBV		97
37) VINYL ACETATE	8.39	86	352	0.11	PPBV	#	12
38) 1,1-DICHLOROETHANE	8.31	63	4139	0.18	PPBV		95
39) METHYL ETHYL KETONE	8.66	72	754	0.13	PPBV	#	88
40) cis-1,2-DICHLOROETHYLENE	9.03	96	2353	0.19	PPBV		90
41) DI-ISOPROPYL ETHER	9.19	87	1652	0.16	PPBV		87
42) ETHYL ACETATE	9.20	61	373	0.09	PPBV	#	87
43) METHYL ACRYLATE	9.20	55	3116	0.14	PPBV		95
44) CHLOROFORM	9.30	83	4581	0.19	PPBV		98
45) 2,4-DIMETHYLPENTANE	9.99	57	3982	0.17	PPBV		96

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:27 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.20	97	4904	0.19	PPBV		97
47)	CARBON TETRACHLORIDE	10.76	117	5144	0.19	PPBV		98
48)	1,2-DICHLOROETHANE	9.97	62	2669	0.16	PPBV	#	90
50)	BENZENE	10.63	78	6783	0.17	PPBV		99
51)	CYCLOHEXANE	10.89	84	3901	0.23	PPBV	#	1
52)	2,3-DIMETHYLPENTANE	11.07	71	1490	0.17	PPBV	#	82
53)	TRICHLOROETHYLENE	11.59	95	2718	0.17	PPBV		99
54)	DIBROMOMETHANE	11.36	174	2479	0.17	PPBV		95
55)	1,2-DICHLOROPROPANE	11.37	63	2421	0.18	PPBV		88
56)	ETHYL ACRYLATE	11.33	55	2984	0.12	PPBV	#	73
57)	BROMODICHLOROMETHANE	11.56	83	4660	0.17	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	10205	0.16	PPBV		99
59)	1,4-DIOXANE	11.63	88	914	0.12	PPBV	#	59
60)	METHYL METHACRYLATE	11.74	69	1606	0.13	PPBV		88
61)	HEPTANE	11.83	43	3694	0.16	PPBV		95
62)	METHYL ISOBUTYL KETONE	12.43	43	3509	0.14	PPBV		94
63)	cis-1,3-DICHLOROPROPENE	12.41	75	3137	0.14	PPBV		95
64)	TOLUENE	13.38	92	3750	0.14	PPBV		95
65)	1,3-DICHLOROPROPANE	13.39	76	2902	0.14	PPBV		96
66)	trans-1,3-DICHLOROPROPENE	12.90	75	2343	0.13	PPBV		91
67)	1,1,2-TRICHLOROETHANE	13.10	83	1787	0.15	PPBV		95
69)	ETHYL METHACRYLATE	13.58	69	2257	0.12	PPBV	#	79
70)	2-HEXANONE	13.61	58	1385	0.11	PPBV	#	77
71)	TETRACHLOROETHYLENE	14.52	164	2680	0.17	PPBV		95
72)	DIBROMOCHLOROMETHANE	13.81	129	3761	0.16	PPBV		96
73)	1,2-DIBROMOETHANE	14.06	107	2496	0.13	PPBV	#	96
74)	OCTANE	14.31	43	4021	0.14	PPBV		96
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	2803	0.16	PPBV	#	1
76)	CHLOROBENZENE	15.23	112	5035	0.16	PPBV	#	48
77)	ETHYLBENZENE	15.61	91	7325	0.15	PPBV		97
78)	m,p-XYLENE	15.79	106	5700	0.29	PPBV	#	73
79)	o-XYLENE	16.30	106	2539	0.14	PPBV		91
80)	STYRENE	16.19	104	3177	0.11	PPBV		96
81)	1,2,3-TRICHLOROPROPANE	16.44	75	3228	0.17	PPBV	#	89
82)	NONANE	16.49	43	3638	0.12	PPBV		91
83)	BROMOFORM	15.91	173	2979	0.13	PPBV		96
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	3986	0.15	PPBV		94
86)	ISOPROPYLBENZENE	16.92	105	8601	0.15	PPBV		96
87)	BROMOBENZENE	17.05	156	2292	0.14	PPBV		93
88)	2-CHLOROTOLUENE	17.45	126	1727	0.13	PPBV	#	77
89)	n-PROPYLBENZENE	17.48	120	1962	0.13	PPBV		89
90)	4-ETHYLTOLUENE	17.64	105	5878m	0.13	PPBV		
91)	1,3,5-TRIMETHYLBENZENE	17.71	105	6187	0.14	PPBV		96
92)	ALPHA-METHYLSTYRENE	17.89	118	2426	0.12	PPBV	#	94
93)	TERT-BUTYLBENZENE	18.16	134	1459	0.13	PPBV		85
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	5350	0.13	PPBV		92
95)	m-DICHLOROBENZENE	18.35	146	3117	0.14	PPBV		94
96)	BENZYL CHLORIDE	18.34	91	3116	0.11	PPBV		89
97)	p-DICHLOROBENZENE	18.43	146	2805	0.12	PPBV		91

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:27 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

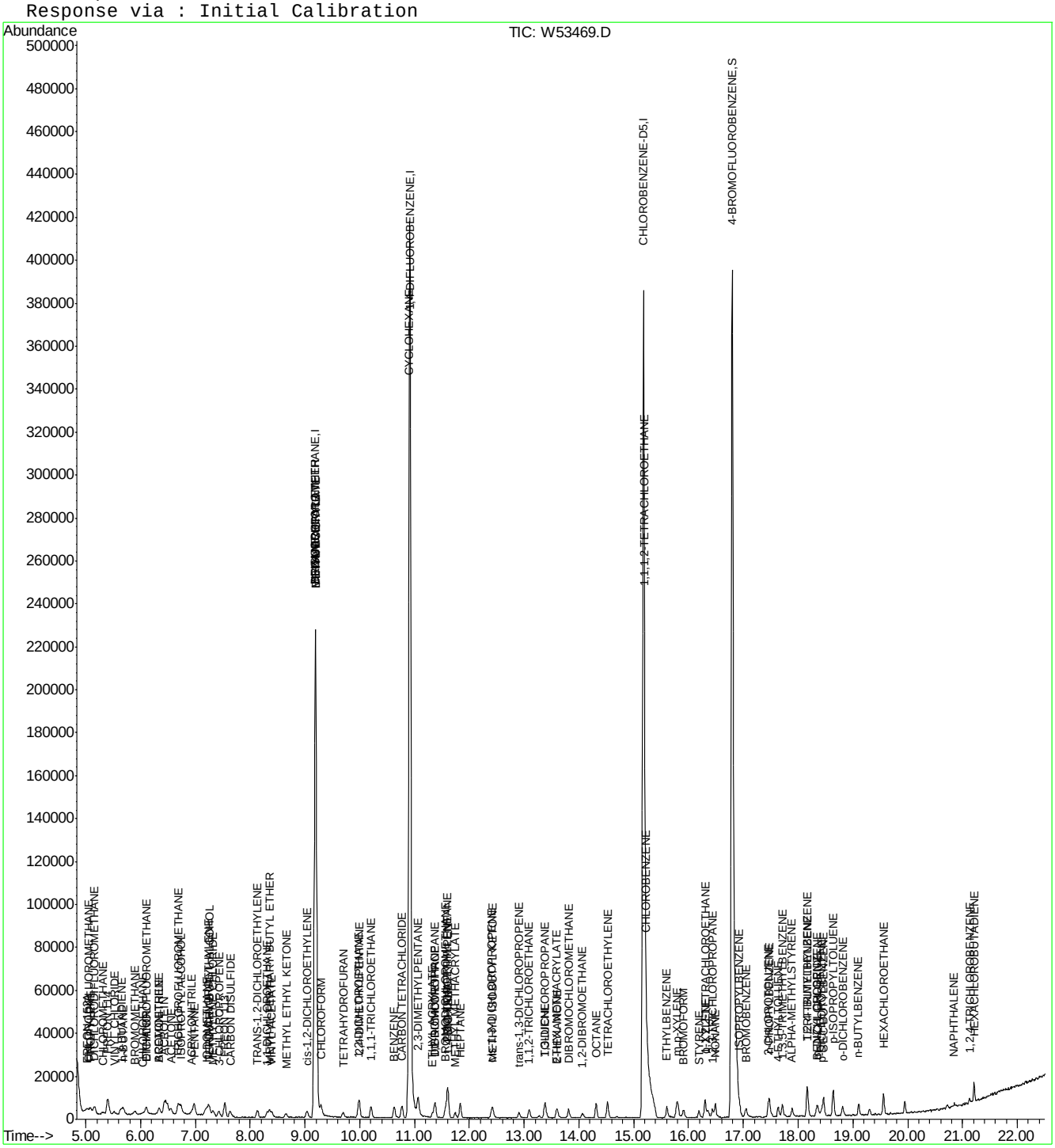
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
98)	SEC-BUTYLBENZENE	18.46	134	1673	0.13	PPBV		91
99)	p-ISOPROPYLTOLUENE	18.64	134	1516	0.12	PPBV	#	76
100)	o-DICHLOROBENZENE	18.81	146	3132	0.15	PPBV		95
101)	n-BUTYLBENZENE	19.10	134	1183	0.11	PPBV		89
103)	HEXACHLOROETHANE	19.56	201	2353	0.14	PPBV		88
104)	HEXACHLOROBUTADIENE	21.22	225	2455	0.16	PPBV		97
105)	1,2,4-TRICHLOROBENZENE	21.12	180	999	0.13	PPBV		90
106)	NAPHTHALENE	20.85	128	2144	0.12	PPBV		89

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:47 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Manual Integration Approval Summary

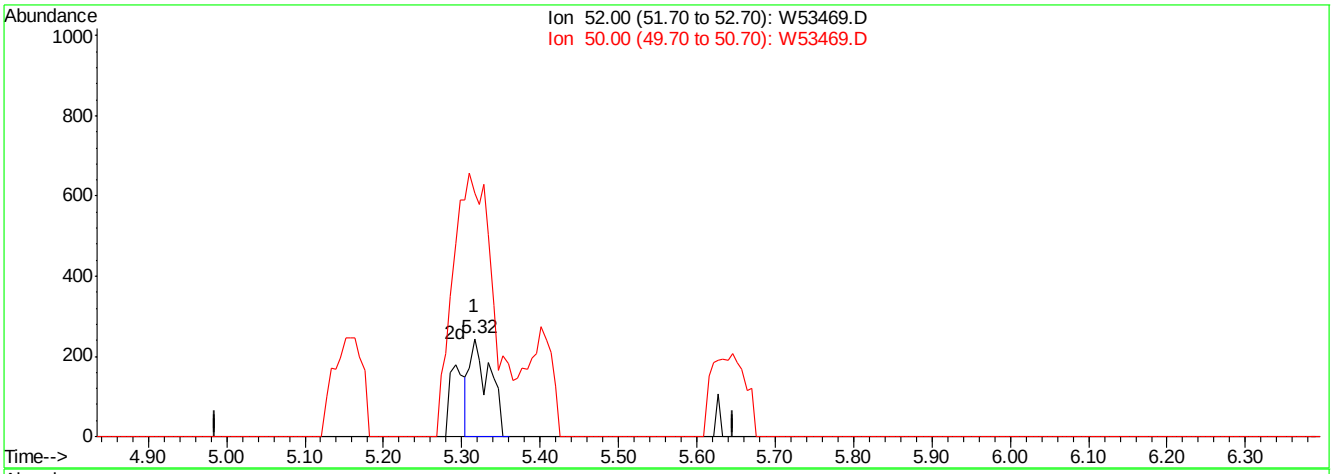
Sample Number: VW2140-IC2140 **Method:** TO-15
Lab FileID: W53469.D **Analyst approved:** 02/12/16 15:56 Dana Tryon
Injection Time: 02/11/16 15:37 **Supervisor approved:** 02/12/16 16:19 Dana Tryon

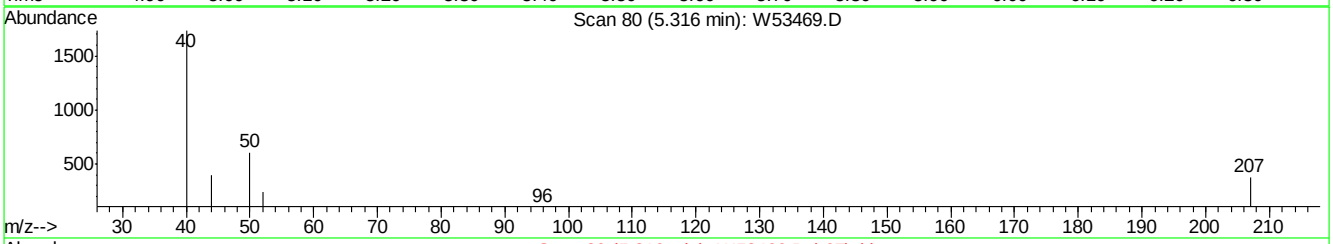
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chloromethane	74-87-3		5.32	Poor instrument integration
4-Ethyltoluene	622-96-8		17.64	Poor instrument integration

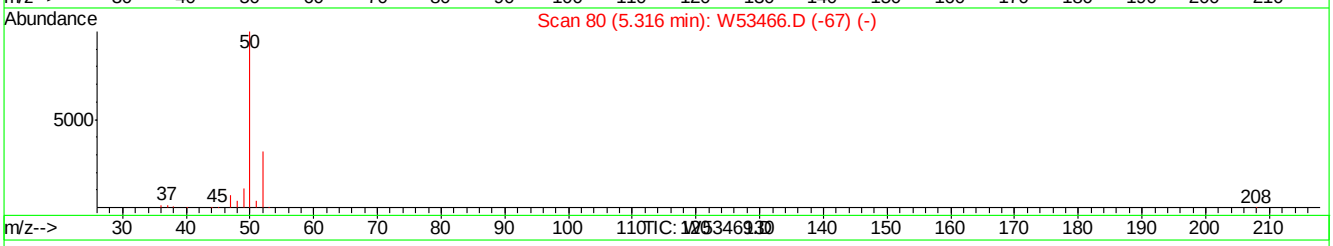
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:56 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 10:30:14 2016
Response via : Multiple Level Calibration







(9) CHLOROMETHANE

5.32min 0.11PPBV

response 423

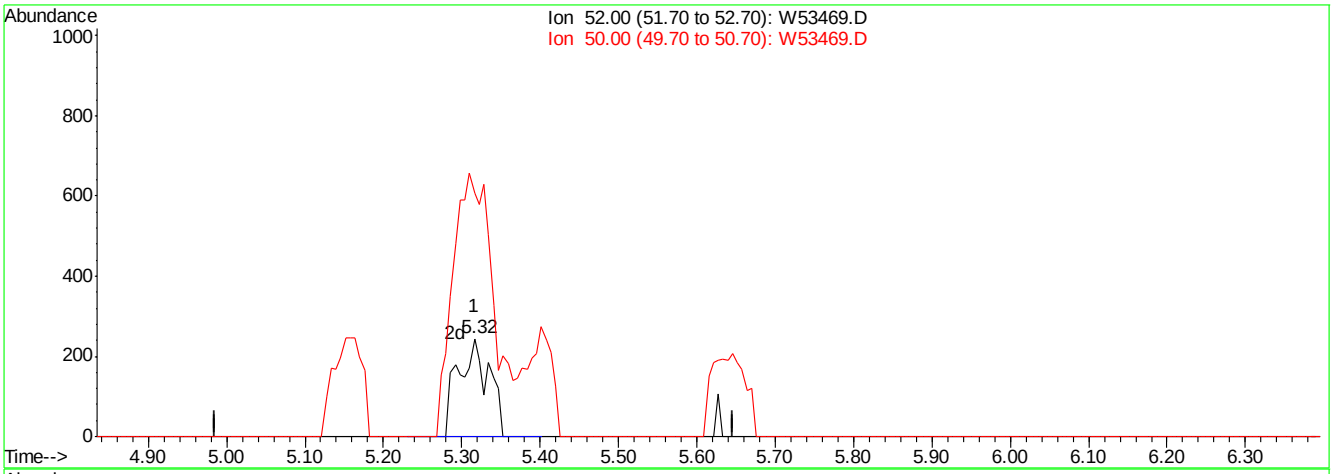
Ion	Exp%	Act%
52.00	100	100
50.00	266.70	130.21#
0.00	0.00	0.00
0.00	0.00	0.00

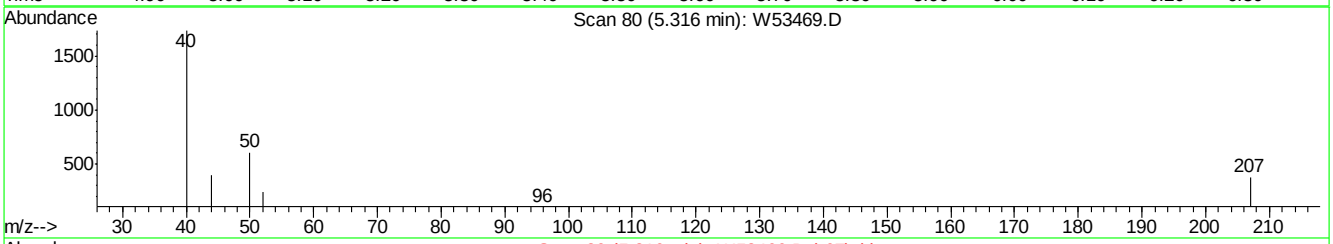
W53469.D MW2140.M Fri Feb 12 15:47:25 2016 MSW

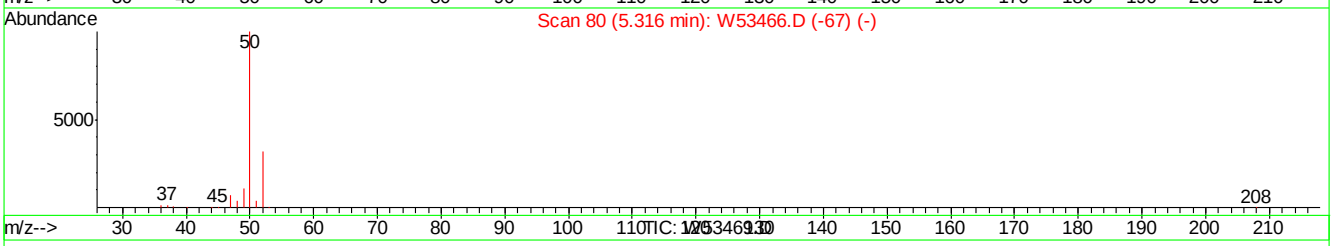
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:47 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 10:30:14 2016
Response via : Multiple Level Calibration







(9) CHLOROMETHANE

5.32min 0.17PPBV m

response 658

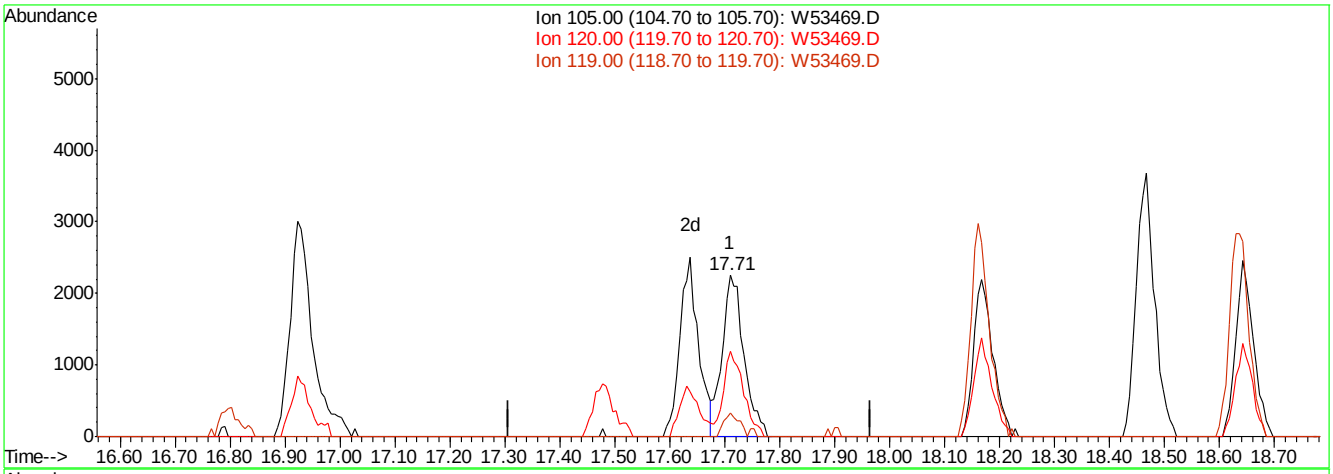
Ion	Exp%	Act%
52.00	100	100
50.00	266.70	249.18
0.00	0.00	0.00
0.00	0.00	0.00

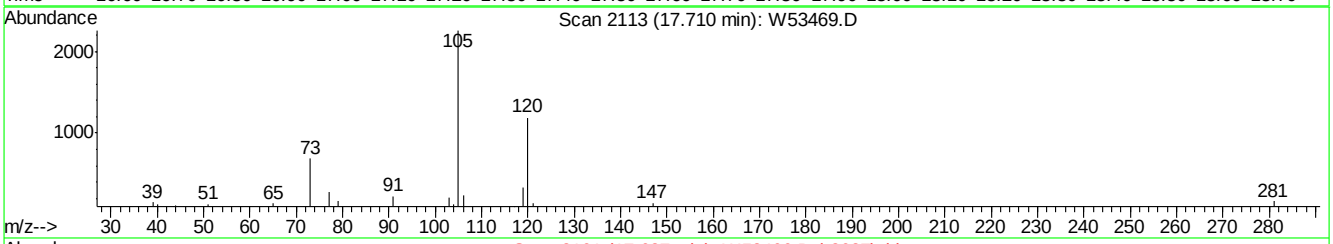
W53469.D MW2140.M Fri Feb 12 15:47:33 2016 MSW

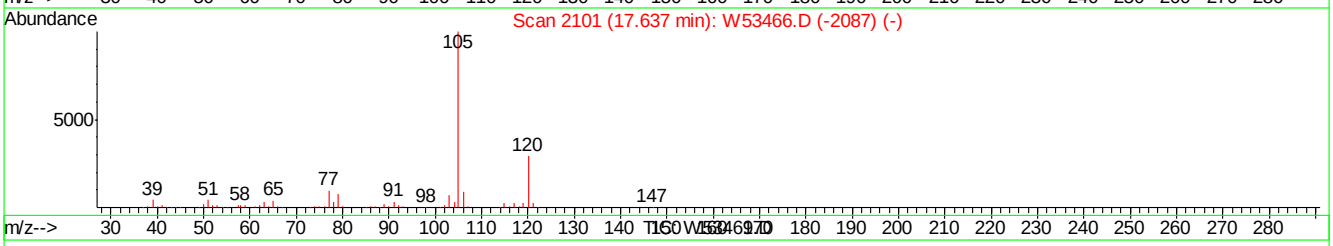
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:47 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 10:30:14 2016
Response via : Multiple Level Calibration







(90) 4-ETHYLTOLUENE

17.71min 0.13PPBV

response 6187

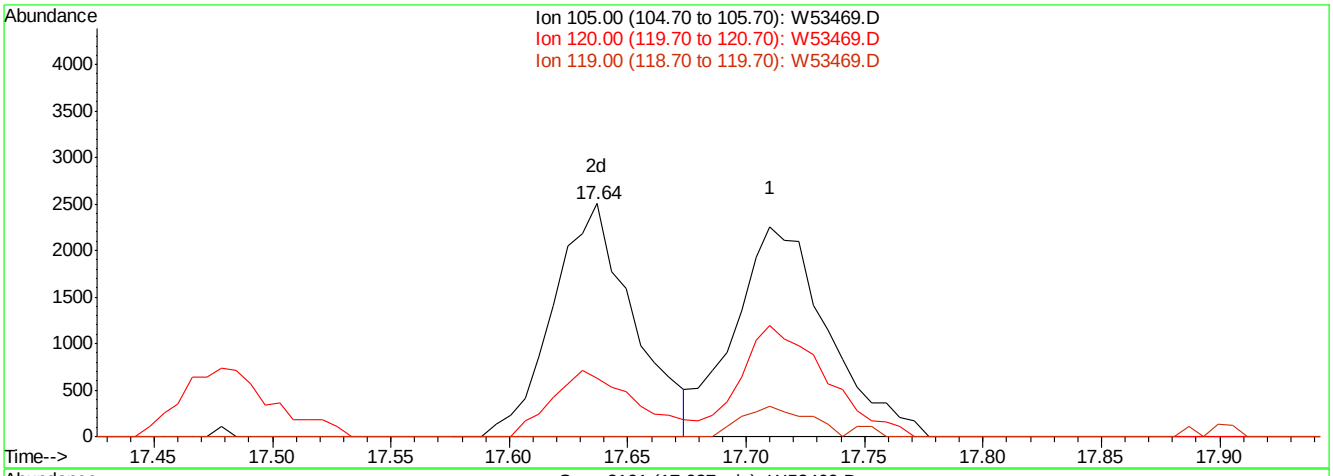
Ion	Exp%	Act%
105.00	100	100
120.00	28.80	48.20
119.00	2.40	10.44
0.00	0.00	0.00

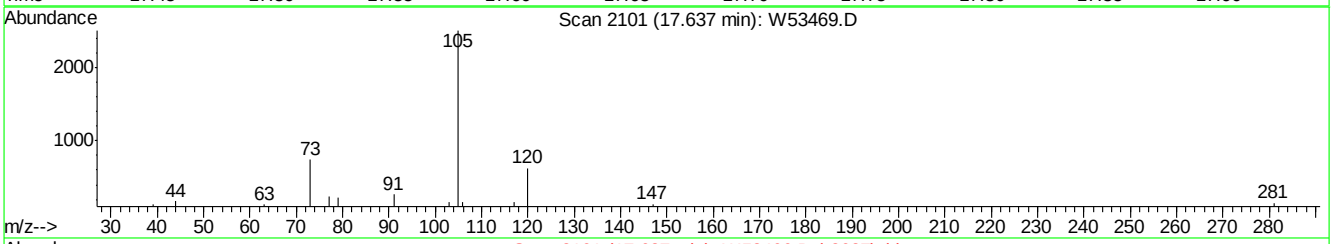
W53469.D MW2140.M Fri Feb 12 15:47:40 2016 MSW

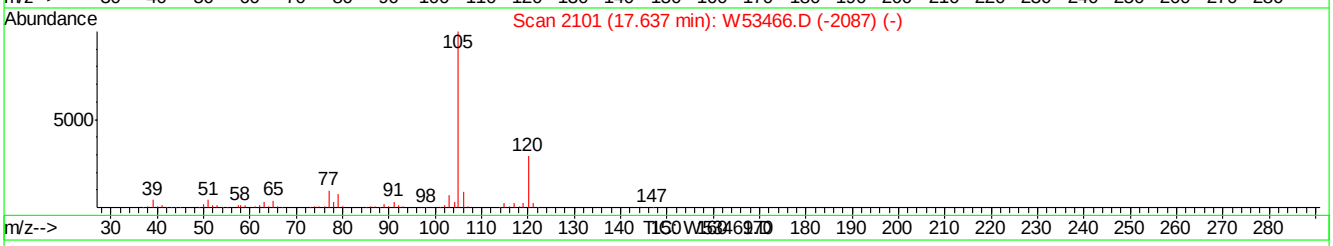
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53469.D Vial: 2
Acq On : 11 Feb 2016 3:37 pm Operator: YOUMINH
Sample : IC2140-0.2 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:47 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 10:30:14 2016
Response via : Multiple Level Calibration







(90) 4-ETHYLTOLUENE

17.64min 0.13PPBV m

response 5878

Ion	Exp%	Act%
105.00	100	100
120.00	28.80	50.73#
119.00	2.40	10.99
0.00	0.00	0.00

W53469.D MW2140.M Fri Feb 12 15:47:51 2016 MSW

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53470.D Vial: 1
Acq On : 11 Feb 2016 4:19 pm Operator: YOUMINH
Sample : IC2140-20 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:28 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	99320	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.92	114	529940	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.19	82	281117	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	330018	10.03	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 100.30%			
Target Compounds						Qvalue
3) FREON 152A	5.01	65	150466	17.17	PPBV	98
4) CHLORODIFLUOROMETHANE	5.05	67	61475	17.85	PPBV	100
5) DICHLORODIFLUOROMETHANE	5.16	85	619204	17.88	PPBV	99
6) PROPYLENE	5.08	41	201536	17.96	PPBV	98
7) FREON 114	5.40	85	634535	17.46	PPBV	100
9) CHLOROMETHANE	5.32	52	68476	17.45	PPBV	99
10) VINYL CHLORIDE	5.52	62	251922	17.60	PPBV	100
11) 1,3-BUTADIENE	5.64	54	203222	18.02	PPBV	98
12) n-BUTANE	5.69	58	56438	18.07	PPBV	98
13) BROMOMETHANE	5.89	94	217734	17.96	PPBV	99
14) CHLOROETHANE	6.04	64	137053	18.28	PPBV	91
15) DICHLOROFLUOROMETHANE	6.10	67	553248	18.70	PPBV	100
16) ACROLEIN	6.42	56	104921	19.38	PPBV	99
17) TRICHLOROFLUOROMETHANE	6.69	101	651820	19.47	PPBV	100
18) ISOPROPYL ALCOHOL	6.71	45	467957	104.85	PPBV #	1
19) ACETONE	6.52	58	121525	19.51	PPBV	97
21) ACRYLONITRILE	6.92	53	193544	20.08	PPBV	99
22) PENTANE	6.97	57	70128	19.20	PPBV	98
23) IODOMETHANE	7.19	142	589456	19.50	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.24	96	237014	19.29	PPBV	98
25) CARBON DISULFIDE	7.64	76	684237	19.09	PPBV	99
26) ETHANOL	6.11	45	98410	18.73	PPBV	99
27) ACETONITRILE	6.31	41	194449	19.25	PPBV	99
28) BROMOETHENE	6.34	106	235139	19.10	PPBV	99
29) METHYLENE CHLORIDE	7.33	84	206314	19.24	PPBV	99
30) 3-CHLOROPROPENE	7.43	76	117451	19.51	PPBV	100
31) FREON 113	7.54	151	405570	19.16	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	237667	19.49	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.23	59	552039	19.63	PPBV	98
34) METHYL TERTIARY BUTYL ETHE	8.33	73	702893	20.35	PPBV	99
35) TETRAHYDROFURAN	9.66	72	117359	20.31	PPBV	99
36) HEXANE	9.20	57	414164	19.47	PPBV	99
37) VINYL ACETATE	8.39	86	66534	20.12	PPBV	99
38) 1,1-DICHLOROETHANE	8.31	63	450376	19.29	PPBV	99
39) METHYL ETHYL KETONE	8.63	72	117984	20.19	PPBV	94
40) cis-1,2-DICHLOROETHYLENE	9.04	96	252131	19.58	PPBV	99
41) DI-ISOPROPYL ETHER	9.17	87	222776	20.60	PPBV	98
42) ETHYL ACETATE	9.18	61	83854	20.06	PPBV	99
43) METHYL ACRYLATE	9.19	55	475229	20.11	PPBV	99
44) CHLOROFORM	9.30	83	493990	19.37	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.99	57	485398	19.71	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53470.D Vial: 1
Acq On : 11 Feb 2016 4:19 pm Operator: YOUMINH
Sample : IC2140-20 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:28 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	521678	19.64	PPBV		100
47)	CARBON TETRACHLORIDE	10.77	117	544748	19.64	PPBV		99
48)	1,2-DICHLOROETHANE	9.97	62	335648	19.79	PPBV		99
50)	BENZENE	10.63	78	794245	19.61	PPBV		100
51)	CYCLOHEXANE	10.89	84	346799	19.90	PPBV		97
52)	2,3-DIMETHYLPENTANE	11.07	71	182015	20.09	PPBV		98
53)	TRICHLOROETHYLENE	11.60	95	339133	20.20	PPBV		99
54)	DIBROMOMETHANE	11.37	174	303558	19.84	PPBV		99
55)	1,2-DICHLOROPROPANE	11.38	63	281775	19.70	PPBV		100
56)	ETHYL ACRYLATE	11.32	55	547855	21.41	PPBV		100
57)	BROMODICHLOROMETHANE	11.57	83	565535	19.97	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	1355330	20.48	PPBV		99
59)	1,4-DIOXANE	11.59	88	165443	20.59	PPBV	#	74
60)	METHYL METHACRYLATE	11.74	69	271900	21.42	PPBV		100
61)	HEPTANE	11.83	43	487313	20.40	PPBV		100
62)	METHYL ISOBUTYL KETONE	12.42	43	572937	21.24	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.41	75	484689	20.11	PPBV		99
64)	TOLUENE	13.38	92	569262	20.73	PPBV		100
65)	1,3-DICHLOROPROPANE	13.39	76	457825	20.94	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.91	75	390070	21.06	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.10	83	252713	20.48	PPBV		100
69)	ETHYL METHACRYLATE	13.58	69	476479	19.54	PPBV		100
70)	2-HEXANONE	13.60	58	310435	19.44	PPBV		97
71)	TETRACHLOROETHYLENE	14.53	164	370311	18.41	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.82	129	554447	18.42	PPBV		99
73)	1,2-DIBROMOETHANE	14.07	107	439843	18.67	PPBV		100
74)	OCTANE	14.31	43	685523	18.75	PPBV		99
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	412176	18.70	PPBV	#	79
76)	CHLOROBENZENE	15.23	112	732346	18.59	PPBV		100
77)	ETHYLBENZENE	15.61	91	1174351	19.49	PPBV		100
78)	m,p-XYLENE	15.80	106	954013	38.50	PPBV		100
79)	o-XYLENE	16.31	106	453942	19.32	PPBV		100
80)	STYRENE	16.19	104	719351	19.68	PPBV		98
81)	1,2,3-TRICHLOROPROPANE	16.44	75	475539	19.39	PPBV		100
82)	NONANE	16.49	43	707978	18.67	PPBV		99
83)	BROMOFORM	15.92	173	525134	18.87	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	634778	19.60	PPBV		99
86)	ISOPROPYLBENZENE	16.93	105	1370911	19.48	PPBV		99
87)	BROMOBENZENE	17.06	156	391357	19.46	PPBV		100
88)	2-CHLOROTOLUENE	17.46	126	318708	19.66	PPBV	#	92
89)	n-PROPYLBENZENE	17.48	120	364099	19.81	PPBV		97
90)	4-ETHYLTOLUENE	17.64	105	1175820	19.93	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.72	105	1058444	19.28	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.89	118	496105	20.18	PPBV		100
93)	TERT-BUTYLBENZENE	18.17	134	269726	19.82	PPBV		100
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	1025941	20.06	PPBV		99
95)	m-DICHLOROBENZENE	18.36	146	574570	20.45	PPBV		99
96)	BENZYL CHLORIDE	18.33	91	736833	20.92	PPBV		99
97)	p-DICHLOROBENZENE	18.43	146	564586	19.35	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53470.D Vial: 1
Acq On : 11 Feb 2016 4:19 pm Operator: YOUMINH
Sample : IC2140-20 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:28 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

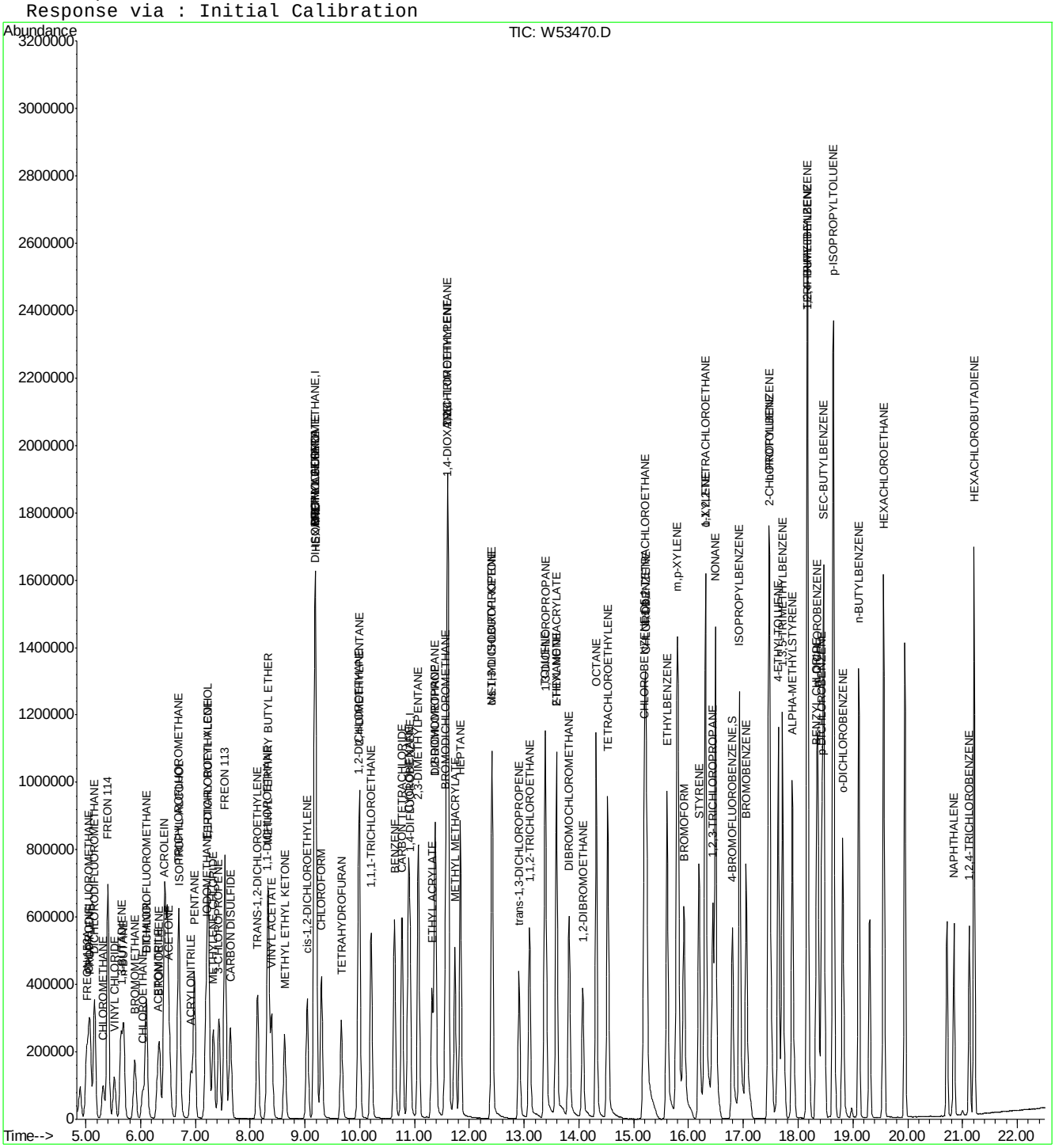
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.47	134	312628	19.70	PPBV	99
99)	p-ISOPROPYLTOLUENE	18.64	134	330543	20.09	PPBV	100
100)	o-DICHLOROBENZENE	18.81	146	530566	20.03	PPBV	99
101)	n-BUTYLBENZENE	19.11	134	279930	20.74	PPBV	98
103)	HEXACHLOROETHANE	19.56	201	422107	20.12	PPBV	99
104)	HEXACHLOROBUTADIENE	21.21	225	416152	21.98	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.12	180	236721	24.01	PPBV	99
106)	NAPHTHALENE	20.84	128	582809	25.16	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53470.D Vial: 1
Acq On : 11 Feb 2016 4:19 pm Operator: YOUMINH
Sample : IC2140-20 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:56 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53471.D Vial: 1
Acq On : 11 Feb 2016 5:01 pm Operator: YOUMINH
Sample : IC2140-15 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:29 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	106605	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.92	114	573587	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.19	82	285258	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.80	95	340809	10.21	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 102.10%				
Target Compounds							Qvalue
3) FREON 152A	5.02	65	160109	17.02	PPBV		97
4) CHLORODIFLUOROMETHANE	5.06	67	59527	16.10	PPBV		100
5) DICHLORODIFLUOROMETHANE	5.16	85	608355	16.37	PPBV		99
6) PROPYLENE	5.08	41	201290	16.71	PPBV		99
7) FREON 114	5.41	85	658908	16.90	PPBV		99
9) CHLOROMETHANE	5.32	52	71602	17.00	PPBV		99
10) VINYL CHLORIDE	5.52	62	260684	16.97	PPBV		100
11) 1,3-BUTADIENE	5.65	54	207265	17.12	PPBV		98
12) n-BUTANE	5.69	58	58083	17.32	PPBV		96
13) BROMOMETHANE	5.90	94	223400	17.16	PPBV		99
14) CHLOROETHANE	6.04	64	136006	16.90	PPBV		93
15) DICHLOROFLUOROMETHANE	6.10	67	506563	15.95	PPBV		99
16) ACROLEIN	6.43	56	86396	14.87	PPBV		99
17) TRICHLOROFLUOROMETHANE	6.69	101	574295	15.99	PPBV		100
18) ISOPROPYL ALCOHOL	6.72	45	380118	79.35	PPBV	#	1
19) ACETONE	6.53	58	97364	14.56	PPBV		92
21) ACRYLONITRILE	6.93	53	147737	14.28	PPBV		99
22) PENTANE	6.99	57	60659	15.47	PPBV		97
23) IODOMETHANE	7.20	142	509692	15.71	PPBV		99
24) 1,1-DICHLOROETHYLENE	7.24	96	202839	15.38	PPBV		99
25) CARBON DISULFIDE	7.64	76	573499	14.91	PPBV		99
26) ETHANOL	6.11	45	85708	15.19	PPBV		100
27) ACETONITRILE	6.31	41	159529	14.72	PPBV		98
28) BROMOETHENE	6.35	106	223550	16.92	PPBV		99
29) METHYLENE CHLORIDE	7.33	84	169023	14.68	PPBV		99
30) 3-CHLOROPROPENE	7.43	76	95771	14.82	PPBV		95
31) FREON 113	7.54	151	334911	14.74	PPBV		100
32) TRANS-1,2-DICHLOROETHYLENE	8.14	96	194597	14.87	PPBV		99
33) TERTIARY BUTYL ALCOHOL	7.23	59	435265	14.42	PPBV		97
34) METHYL TERTIARY BUTYL ETHE	8.34	73	512295	13.82	PPBV		99
35) TETRAHYDROFURAN	9.67	72	85311	13.76	PPBV		98
36) HEXANE	9.20	57	321903	14.10	PPBV		98
37) VINYL ACETATE	8.39	86	48910	13.78	PPBV	#	95
38) 1,1-DICHLOROETHANE	8.32	63	350793	14.00	PPBV		99
39) METHYL ETHYL KETONE	8.63	72	86186	13.74	PPBV	#	86
40) cis-1,2-DICHLOROETHYLENE	9.04	96	198466	14.36	PPBV		99
41) DI-ISOPROPYL ETHER	9.17	87	163376	14.07	PPBV		97
42) ETHYL ACETATE	9.18	61	57393	12.79	PPBV		98
43) METHYL ACRYLATE	9.19	55	339633	13.39	PPBV		99
44) CHLOROFORM	9.30	83	379448	13.86	PPBV		99
45) 2,4-DIMETHYLPENTANE	9.99	57	373749	14.14	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53471.D Vial: 1
Acq On : 11 Feb 2016 5:01 pm Operator: YOUMINH
Sample : IC2140-15 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:29 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	397549	13.95	PPBV		99
47)	CARBON TETRACHLORIDE	10.77	117	420651	14.13	PPBV		99
48)	1,2-DICHLOROETHANE	9.97	62	252680	13.88	PPBV		100
50)	BENZENE	10.63	78	605865	13.82	PPBV		100
51)	CYCLOHEXANE	10.89	84	275562	14.61	PPBV		97
52)	2,3-DIMETHYLPENTANE	11.07	71	140743	14.35	PPBV		96
53)	TRICHLOROETHYLENE	11.60	95	256334	14.10	PPBV		100
54)	DIBROMOMETHANE	11.37	174	232900	14.06	PPBV		100
55)	1,2-DICHLOROPROPANE	11.38	63	210620	13.60	PPBV		99
56)	ETHYL ACRYLATE	11.31	55	384712	13.89	PPBV		100
57)	BROMODICHLOROMETHANE	11.56	83	421224	13.74	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	1001573	13.98	PPBV		100
59)	1,4-DIOXANE	11.60	88	118516	13.63	PPBV		98
60)	METHYL METHACRYLATE	11.74	69	192515	14.01	PPBV		97
61)	HEPTANE	11.83	43	360962	13.96	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.42	43	400154	13.71	PPBV		98
63)	cis-1,3-DICHLOROPROPENE	12.41	75	356295	13.66	PPBV		98
64)	TOLUENE	13.38	92	417647	14.05	PPBV		99
65)	1,3-DICHLOROPROPANE	13.39	76	327584	13.85	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.91	75	282013	14.07	PPBV		98
67)	1,1,2-TRICHLOROETHANE	13.10	83	183437	13.73	PPBV		99
69)	ETHYL METHACRYLATE	13.58	69	329981	13.34	PPBV		99
70)	2-HEXANONE	13.60	58	221565	13.67	PPBV		96
71)	TETRACHLOROETHYLENE	14.52	164	276382	13.54	PPBV		100
72)	DIBROMOCHLOROMETHANE	13.81	129	409063	13.39	PPBV		99
73)	1,2-DIBROMOETHANE	14.07	107	319796	13.38	PPBV		100
74)	OCTANE	14.31	43	495187	13.35	PPBV		98
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	298328	13.34	PPBV		91
76)	CHLOROBENZENE	15.23	112	532993	13.33	PPBV		99
77)	ETHYLBENZENE	15.61	91	824877	13.49	PPBV		100
78)	m,p-XYLENE	15.80	106	675638	26.87	PPBV		99
79)	o-XYLENE	16.31	106	319902	13.42	PPBV		100
80)	STYRENE	16.19	104	507082	13.67	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.44	75	333261	13.39	PPBV		100
82)	NONANE	16.49	43	498907	12.97	PPBV		99
83)	BROMOFORM	15.92	173	377556	13.37	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	445658	13.56	PPBV		99
86)	ISOPROPYLBENZENE	16.93	105	963080	13.48	PPBV		100
87)	BROMOBENZENE	17.05	156	277480	13.60	PPBV		98
88)	2-CHLOROTOLUENE	17.46	126	224856	13.67	PPBV	#	88
89)	n-PROPYLBENZENE	17.48	120	252950	13.56	PPBV		98
90)	4-ETHYLTOLUENE	17.64	105	813969	13.60	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.72	105	742245	13.33	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.89	118	342336	13.73	PPBV		100
93)	TERT-BUTYLBENZENE	18.17	134	188468	13.65	PPBV		98
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	705174	13.59	PPBV		99
95)	m-DICHLOROBENZENE	18.36	146	401967	14.10	PPBV		100
96)	BENZYL CHLORIDE	18.33	91	495349	13.86	PPBV		99
97)	p-DICHLOROBENZENE	18.43	146	390345	13.19	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53471.D Vial: 1
Acq On : 11 Feb 2016 5:01 pm Operator: YOUMINH
Sample : IC2140-15 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:54:29 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Thu Feb 11 17:54:08 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

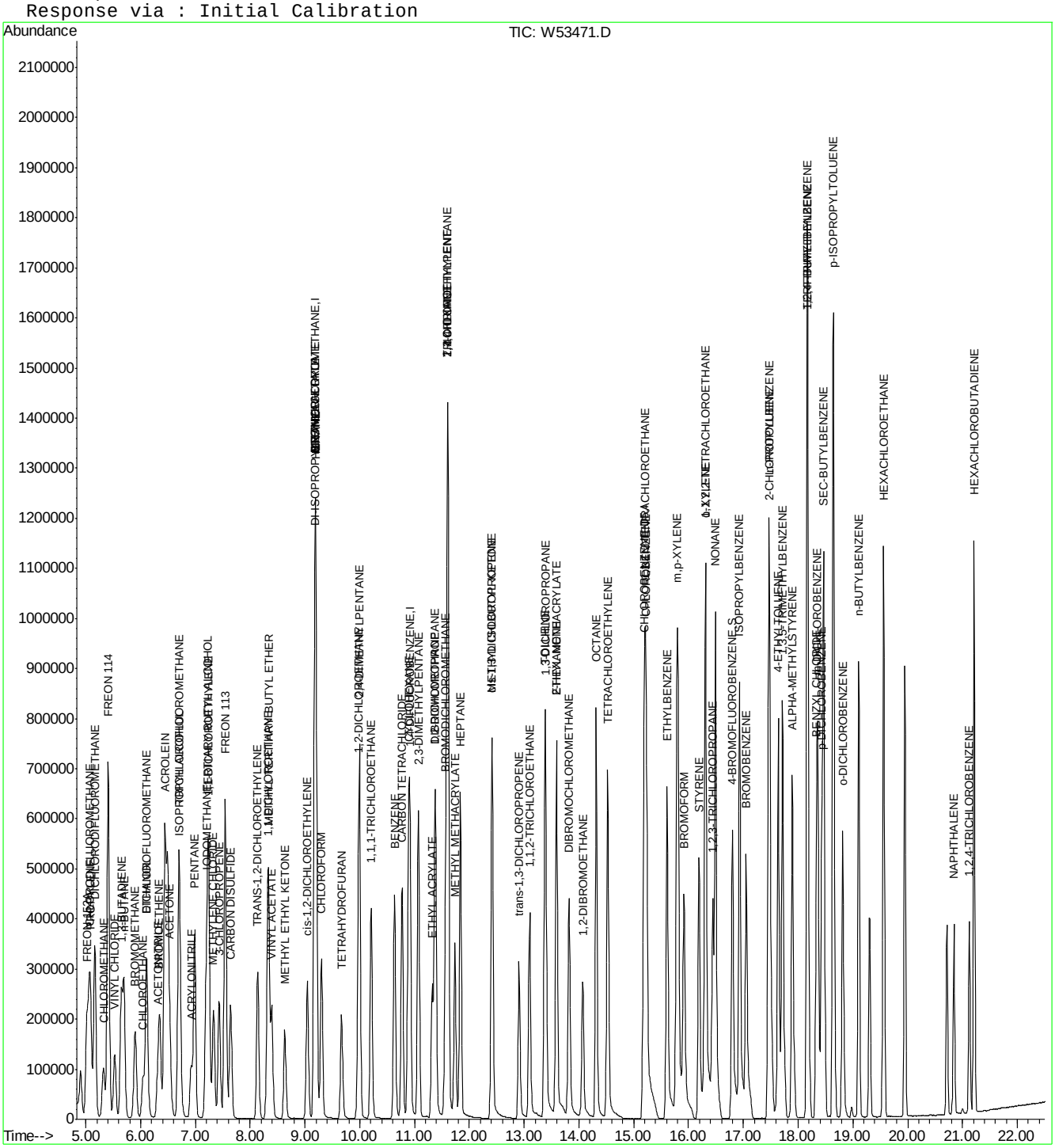
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.47	134	218192	13.55	PPBV	99
99)	p-ISOPROPYLTOLUENE	18.64	134	227784	13.65	PPBV	99
100)	o-DICHLOROBENZENE	18.81	146	373457	13.90	PPBV	99
101)	n-BUTYLBENZENE	19.11	134	192455	14.05	PPBV	98
103)	HEXACHLOROETHANE	19.56	201	301490	14.16	PPBV	100
104)	HEXACHLOROBUTADIENE	21.21	225	288689	15.02	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.12	180	162271	16.22	PPBV	100
106)	NAPHTHALENE	20.84	128	388867	16.54	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53471.D Vial: 1
Acq On : 11 Feb 2016 5:01 pm Operator: YOUMINH
Sample : IC2140-15 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 11 17:57 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Dana Tryon 02/12/16 16:19

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53473.D Vial: 3
Acq On : 11 Feb 2016 6:23 pm Operator: YOUMINH
Sample : IC2140-0.1 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:00:32 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:00:22 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	109455	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.91	114	573672	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.18	82	238799	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.80	95	252822	9.21	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 92.10%				
Target Compounds							Qvalue
3) FREON 152A	5.02	65	1004	0.10	PPBV	#	72
5) DICHLORODIFLUOROMETHANE	5.16	85	4372	0.11	PPBV		96
6) PROPYLENE	5.08	41	1996	0.15	PPBV		93
7) FREON 114	5.40	85	4782	0.11	PPBV		99
9) CHLOROMETHANE	5.32	52	468	0.11	PPBV	#	20
10) VINYL CHLORIDE	5.54	62	1934	0.12	PPBV	#	80
11) 1,3-BUTADIENE	5.63	54	1395	0.11	PPBV	#	73
12) n-BUTANE	5.69	58	282	0.08	PPBV	#	1
13) BROMOMETHANE	5.90	94	1458	0.10	PPBV	#	69
14) CHLOROETHANE	6.03	64	785	0.09	PPBV	#	49
15) DICHLOROFLUOROMETHANE	6.10	67	3599	0.11	PPBV	#	90
16) ACROLEIN	6.44	56	523	0.09	PPBV		87
17) TRICHLOROFLUOROMETHANE	6.69	101	3655	0.09	PPBV		94
21) ACRYLONITRILE	6.93	53	789	0.08	PPBV	#	79
22) PENTANE	6.98	57	345	0.08	PPBV	#	39
23) IODOMETHANE	7.19	142	3446	0.10	PPBV		89
24) 1,1-DICHLOROETHYLENE	7.24	96	1603	0.11	PPBV	#	79
25) CARBON DISULFIDE	7.64	76	4868	0.12	PPBV		94
28) BROMOETHENE	6.34	106	1403	0.10	PPBV	#	92
29) METHYLENE CHLORIDE	7.33	84	1437	0.12	PPBV		96
30) 3-CHLOROPROPENE	7.44	76	494	0.08	PPBV	#	56
31) FREON 113	7.54	151	2276	0.10	PPBV		97
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	1439	0.11	PPBV	#	76
33) TERTIARY BUTYL ALCOHOL	7.27	59	2794	0.09	PPBV		92
34) METHYL TERTIARY BUTYL ETHE	8.36	73	3483	0.10	PPBV	#	63
36) HEXANE	9.20	57	2171	0.10	PPBV		92
38) 1,1-DICHLOROETHANE	8.31	63	2369	0.09	PPBV		89
39) METHYL ETHYL KETONE	8.66	72	365	0.06	PPBV	#	93
40) cis-1,2-DICHLOROETHYLENE	9.04	96	1364	0.10	PPBV	#	81
41) DI-ISOPROPYL ETHER	9.19	87	935	0.08	PPBV	#	76
43) METHYL ACRYLATE	9.21	55	1790	0.08	PPBV	#	71
44) CHLOROFORM	9.29	83	2427	0.09	PPBV		97
45) 2,4-DIMETHYLPENTANE	10.00	57	2275	0.09	PPBV	#	91
46) 1,1,1-TRICHLOROETHANE	10.21	97	2574	0.09	PPBV		96
47) CARBON TETRACHLORIDE	10.77	117	2779	0.09	PPBV		99
48) 1,2-DICHLOROETHANE	9.97	62	1432	0.08	PPBV	#	79
50) BENZENE	10.63	78	4105	0.10	PPBV		98
51) CYCLOHEXANE	10.89	84	2186	0.11	PPBV	#	2
52) 2,3-DIMETHYLPENTANE	11.07	71	879	0.09	PPBV	#	86
53) TRICHLOROETHYLENE	11.60	95	1437	0.08	PPBV		97
54) DIBROMOMETHANE	11.36	174	1212	0.08	PPBV	#	86

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53473.D Vial: 3
Acq On : 11 Feb 2016 6:23 pm Operator: YOUMINH
Sample : IC2140-0.1 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:00:32 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:00:22 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

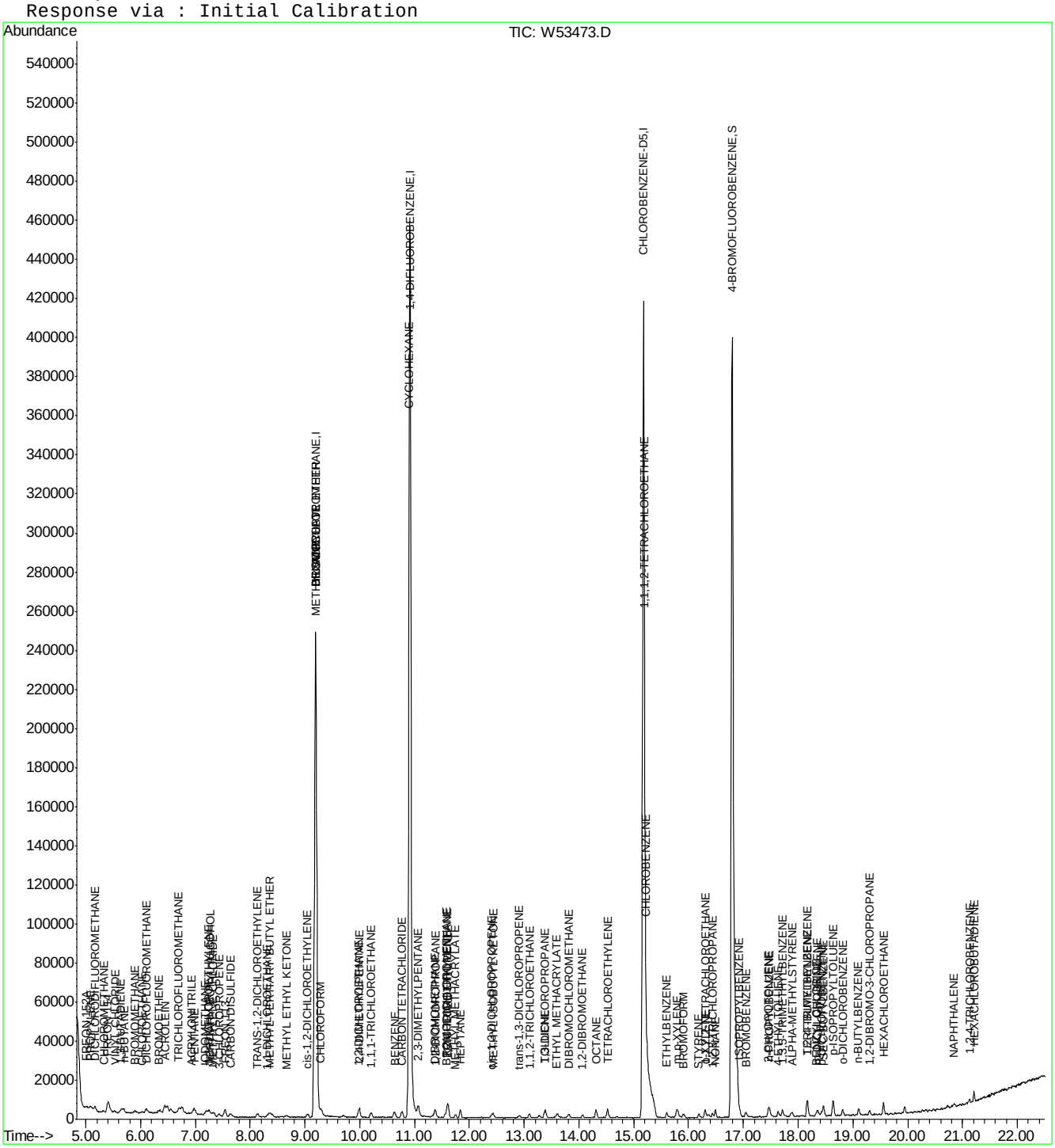
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	1,2-DICHLOROPROPANE	11.39	63	1386	0.10	PPBV		79
57)	BROMODICHLOROMETHANE	11.57	83	2533	0.09	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.60	57	5819	0.09	PPBV		99
60)	METHYL METHACRYLATE	11.74	69	964	0.08	PPBV		89
61)	HEPTANE	11.83	43	2151	0.09	PPBV		97
62)	METHYL ISOBUTYL KETONE	12.44	43	1817	0.07	PPBV		94
63)	cis-1,3-DICHLOROPROPENE	12.40	75	1723	0.07	PPBV		97
64)	TOLUENE	13.38	92	2055	0.08	PPBV	#	85
65)	1,3-DICHLOROPROPANE	13.39	76	1590	0.07	PPBV	#	90
66)	trans-1,3-DICHLOROPROPENE	12.91	75	1211	0.07	PPBV	#	50
67)	1,1,2-TRICHLOROETHANE	13.10	83	923	0.08	PPBV		95
69)	ETHYL METHACRYLATE	13.59	69	1262	0.07	PPBV	#	70
71)	TETRACHLOROETHYLENE	14.52	164	1671	0.10	PPBV		94
72)	DIBROMOCHLOROMETHANE	13.81	129	1993	0.08	PPBV		97
73)	1,2-DIBROMOETHANE	14.06	107	1496	0.08	PPBV	#	94
74)	OCTANE	14.32	43	2315	0.08	PPBV		94
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	1421	0.08	PPBV	#	1
76)	CHLOROBENZENE	15.22	112	2825	0.09	PPBV	#	49
77)	ETHYLBENZENE	15.61	91	4329	0.09	PPBV		95
78)	m,p-XYLENE	15.79	106	3021	0.16	PPBV	#	88
79)	o-XYLENE	16.30	106	1392	0.08	PPBV		88
80)	STYRENE	16.18	104	2006	0.08	PPBV		98
81)	1,2,3-TRICHLOROPROPANE	16.44	75	1826	0.09	PPBV	#	84
82)	NONANE	16.48	43	2106m	0.08	PPBV		
83)	BROMOFORM	15.91	173	1567	0.07	PPBV	#	86
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	2177	0.09	PPBV	#	86
86)	ISOPROPYLBENZENE	16.93	105	5131	0.09	PPBV		94
87)	BROMOBENZENE	17.05	156	1158	0.07	PPBV	#	80
88)	2-CHLOROTOLUENE	17.45	126	1038	0.08	PPBV	#	84
89)	n-PROPYLBENZENE	17.48	120	1104	0.08	PPBV		67
90)	4-ETHYLTOLUENE	17.63	105	3670	0.08	PPBV	#	99
91)	1,3,5-TRIMETHYLBENZENE	17.72	105	3798	0.09	PPBV	#	94
92)	ALPHA-METHYLSTYRENE	17.89	118	1368	0.08	PPBV	#	84
93)	TERT-BUTYLBENZENE	18.17	134	833	0.08	PPBV		77
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	3465	0.09	PPBV		98
95)	m-DICHLOROBENZENE	18.35	146	1995	0.09	PPBV		91
96)	BENZYL CHLORIDE	18.33	91	1996	0.08	PPBV	#	85
97)	p-DICHLOROBENZENE	18.42	146	1781m	0.08	PPBV		
98)	SEC-BUTYLBENZENE	18.46	134	1083	0.09	PPBV		97
99)	p-ISOPROPYLTOLUENE	18.64	134	1106	0.09	PPBV		100
100)	o-DICHLOROBENZENE	18.81	146	1924	0.09	PPBV		85
101)	n-BUTYLBENZENE	19.10	134	785	0.08	PPBV		96
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	784	0.09	PPBV	#	88
103)	HEXACHLOROETHANE	19.56	201	1442	0.09	PPBV		92
104)	HEXACHLOROBUTADIENE	21.22	225	1461	0.09	PPBV		87
105)	1,2,4-TRICHLOROBENZENE	21.12	180	763	0.10	PPBV		97
106)	NAPHTHALENE	20.84	128	1862	0.10	PPBV		85

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53473.D Vial: 3
Acq On : 11 Feb 2016 6:23 pm Operator: YOUMINH
Sample : IC2140-0.1 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:05 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Manual Integration Approval Summary

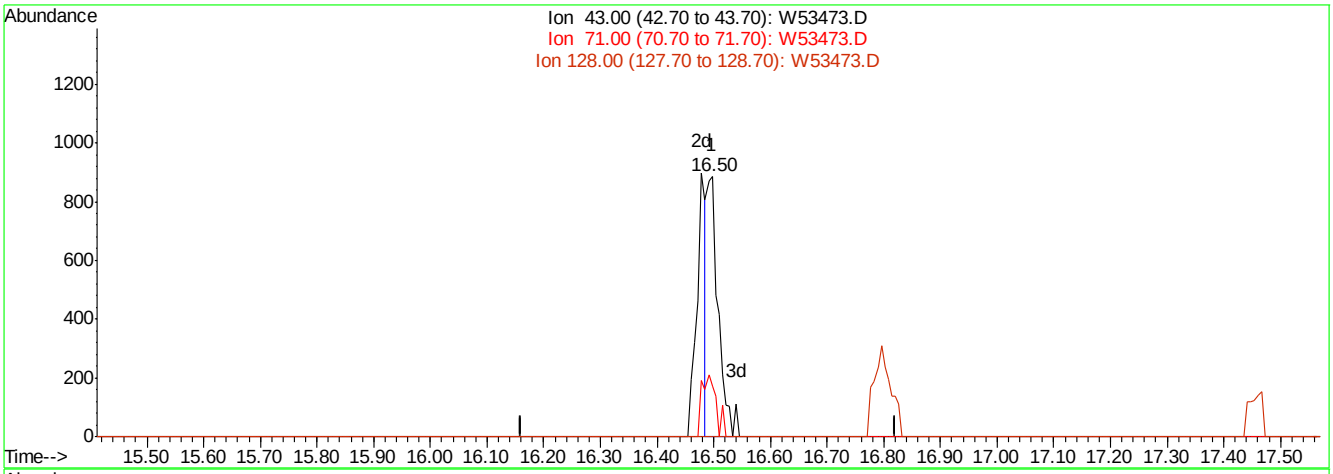
Sample Number: VW2140-IC2140 **Method:** TO-15
Lab FileID: W53473.D **Analyst approved:** 02/12/16 11:45 Youmin Hu
Injection Time: 02/11/16 18:23 **Supervisor approved:** 02/12/16 16:19 Dana Tryon

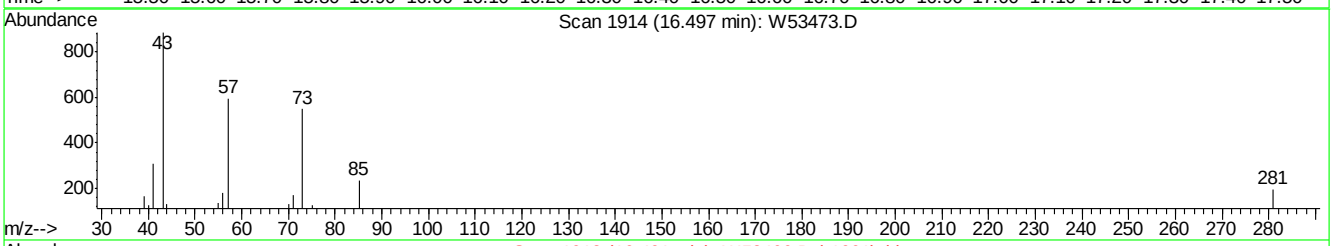
Parameter	CAS	Sig#	R.T. (min.)	Reason
Nonane	111-84-2		16.48	Poor instrument integration
p-Dichlorobenzene	106-46-7		18.42	Poor instrument integration

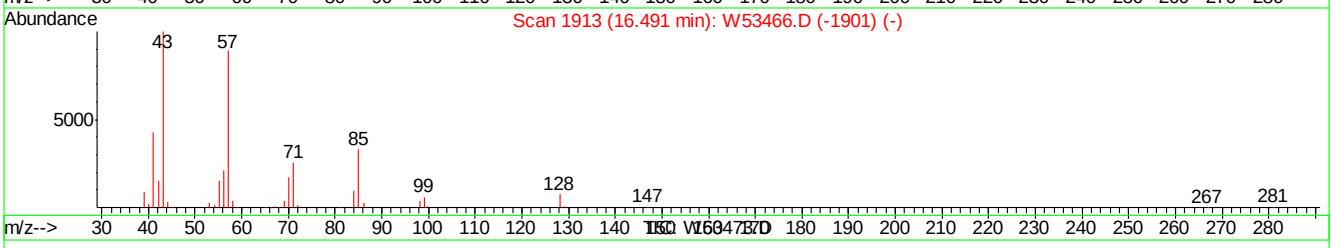
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53473.D Vial: 3
Acq On : 11 Feb 2016 6:23 pm Operator: YOUMINH
Sample : IC2140-0.1 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:04 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:00:22 2016
Response via : Multiple Level Calibration







(82) NONANE

16.50min 0.04PPBV

response 1124

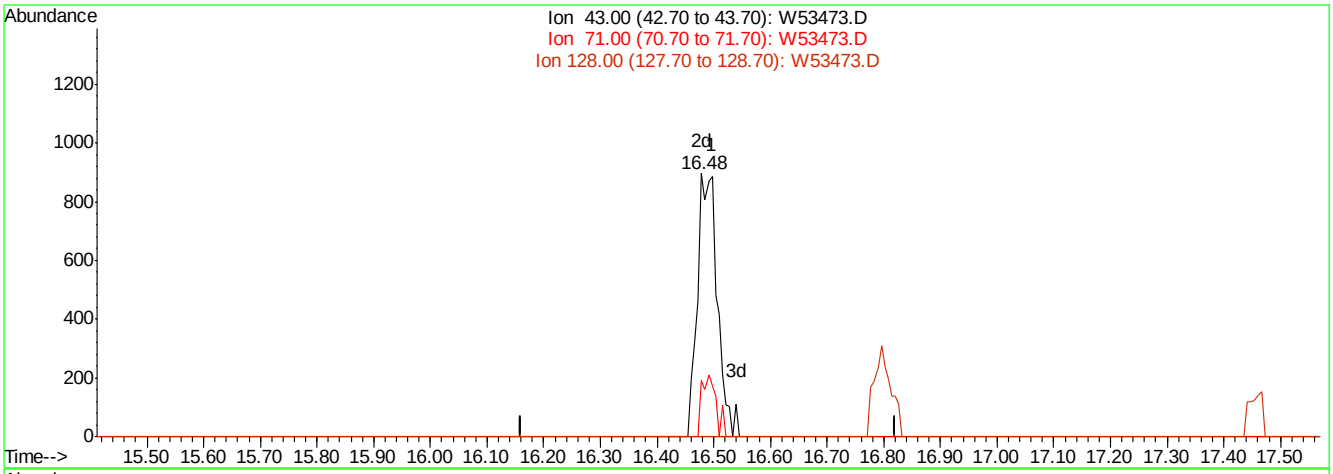
Ion	Exp%	Act%
43.00	100	100
71.00	25.50	31.85
128.00	7.40	0.00
0.00	0.00	0.00

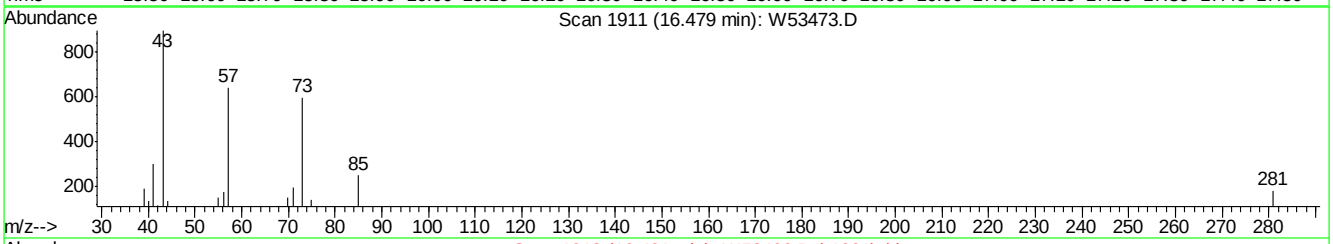
W53473.D MW2140.M Fri Feb 12 09:04:30 2016 MSW

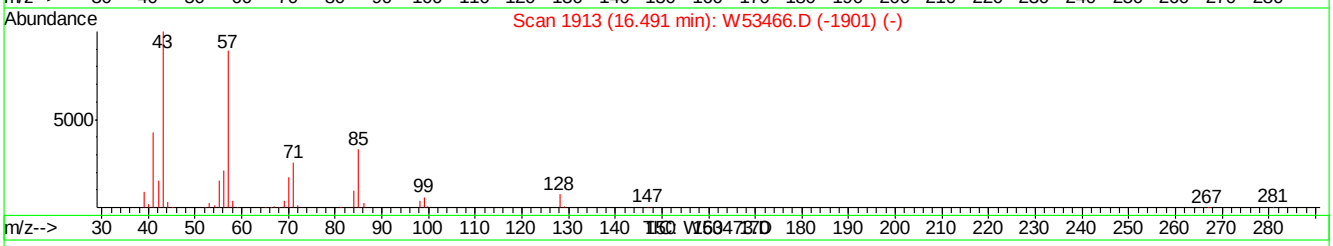
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53473.D Vial: 3
Acq On : 11 Feb 2016 6:23 pm Operator: YOUMINH
Sample : IC2140-0.1 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:04 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:00:22 2016
Response via : Multiple Level Calibration







(82) NONANE

16.48min 0.08PPBV m

response 2106

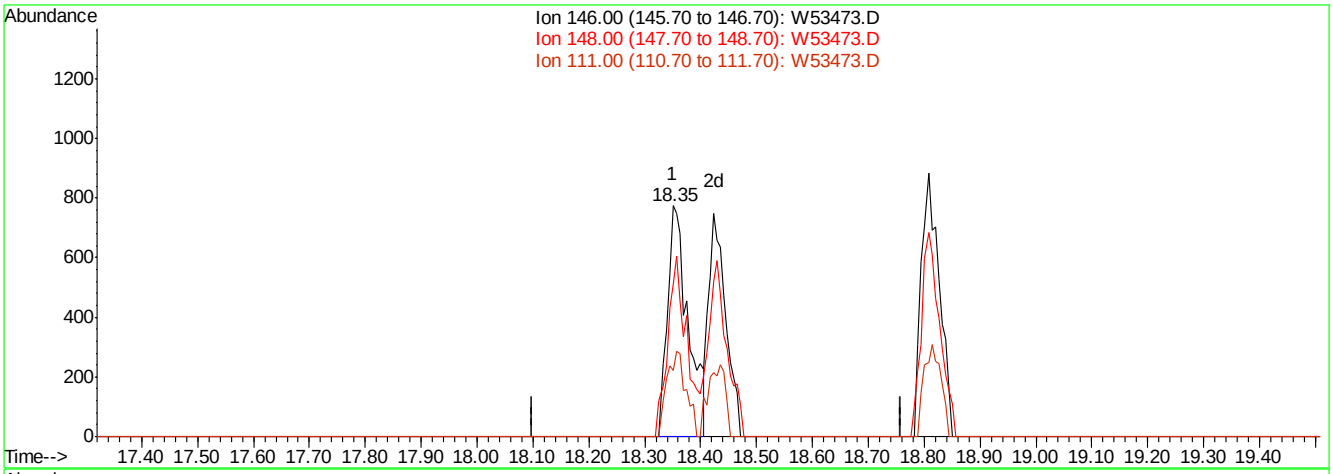
Ion	Exp%	Act%
43.00	100	100
71.00	25.50	17.00
128.00	7.40	0.00
0.00	0.00	0.00

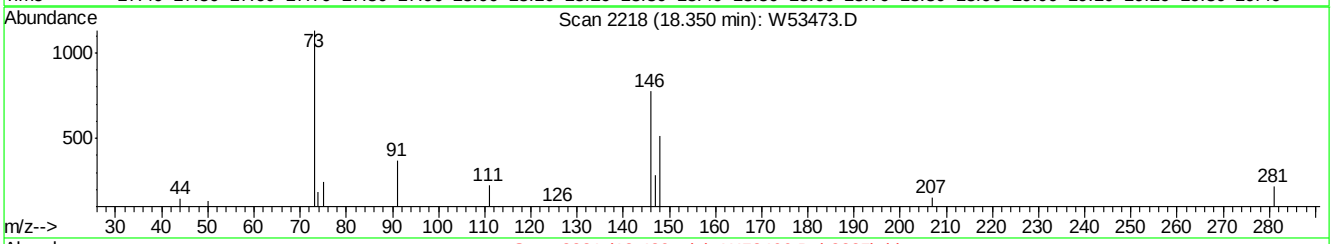
W53473.D MW2140.M Fri Feb 12 09:04:36 2016 MSW

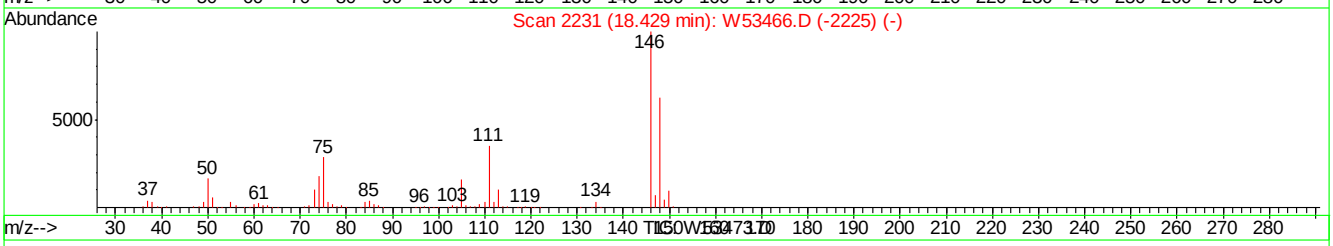
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53473.D Vial: 3
Acq On : 11 Feb 2016 6:23 pm Operator: YOUMINH
Sample : IC2140-0.1 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:04 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:00:22 2016
Response via : Multiple Level Calibration







(97) p-DICHLOROBENZENE

18.35min 0.09PPBV

response 1995

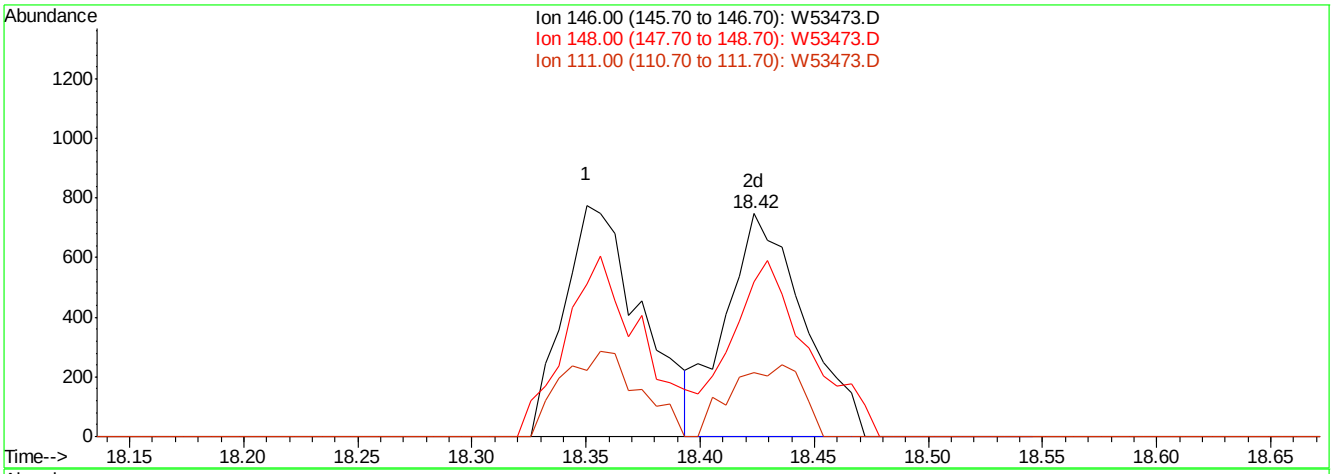
Ion	Exp%	Act%
146.00	100	100
148.00	64.00	72.38
111.00	35.40	34.09
0.00	0.00	0.00

W53473.D MW2140.M Fri Feb 12 09:05:03 2016 MSW

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\W53473.D Vial: 3
Acq On : 11 Feb 2016 6:23 pm Operator: YOUMINH
Sample : IC2140-0.1 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:05 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:00:22 2016
Response via : Multiple Level Calibration



(97) p-DICHLOROBENZENE

18.42min 0.08PPBV m

response 1781

Ion	Exp%	Act%
146.00	100	100
148.00	64.00	81.08
111.00	35.40	38.18
0.00	0.00	0.00

W53473.D MW2140.M Fri Feb 12 09:05:13 2016 MSW

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53474.D Vial: 3
Acq On : 11 Feb 2016 7:04 pm Operator: YOUMINH
Sample : IC2140-0.04 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:05:56 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:05:39 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	95538	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.91	114	503299	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.17	82	214446	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	230776	9.47	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 94.70%			
Target Compounds						Qvalue
5) DICHLORODIFLUOROMETHANE	5.15	85	1472	0.04	PPBV #	91
7) FREON 114	5.38	85	1729	0.05	PPBV	98
10) VINYL CHLORIDE	5.51	62	604	0.04	PPBV #	50
11) 1,3-BUTADIENE	5.65	54	422	0.04	PPBV #	41
13) BROMOMETHANE	5.88	94	479	0.04	PPBV #	11
14) CHLOROETHANE	6.02	64	317	0.04	PPBV #	39
15) DICHLOROFLUOROMETHANE	6.08	67	1572	0.05	PPBV #	82
17) TRICHLOROFLUOROMETHANE	6.69	101	1738	0.05	PPBV #	88
23) IODOMETHANE	7.18	142	1506	0.05	PPBV #	87
24) 1,1-DICHLOROETHYLENE	7.24	96	826	0.07	PPBV #	1
28) BROMOETHENE	6.33	106	485	0.04	PPBV #	90
29) METHYLENE CHLORIDE	7.32	84	597	0.06	PPBV	85
31) FREON 113	7.53	151	995	0.05	PPBV	91
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	853	0.07	PPBV #	60
33) TERTIARY BUTYL ALCOHOL	7.27	59	1235	0.05	PPBV #	65
34) METHYL TERTIARY BUTYL ETHE	8.36	73	1711	0.06	PPBV	72
36) HEXANE	9.19	57	1154	0.06	PPBV	96
38) 1,1-DICHLOROETHANE	8.30	63	1104	0.05	PPBV #	68
40) cis-1,2-DICHLOROETHYLENE	9.03	96	688	0.06	PPBV #	71
44) CHLOROFORM	9.30	83	1222	0.05	PPBV #	86
45) 2,4-DIMETHYLPENTANE	10.00	57	1261	0.06	PPBV #	88
46) 1,1,1-TRICHLOROETHANE	10.19	97	1326	0.05	PPBV	92
47) CARBON TETRACHLORIDE	10.77	117	1369	0.05	PPBV	95
48) 1,2-DICHLOROETHANE	9.97	62	647	0.04	PPBV #	75
50) BENZENE	10.63	78	2175	0.06	PPBV	78
52) 2,3-DIMETHYLPENTANE	11.07	71	348	0.04	PPBV #	12
53) TRICHLOROETHYLENE	11.60	95	748	0.05	PPBV	91
54) DIBROMOMETHANE	11.36	174	657	0.05	PPBV	92
55) 1,2-DICHLOROPROPANE	11.38	63	762	0.06	PPBV #	43
56) ETHYL ACRYLATE	11.33	55	863	0.04	PPBV #	35
57) BROMODICHLOROMETHANE	11.56	83	1199	0.05	PPBV	97
58) 2,2,4-TRIMETHYLPENTANE	11.61	57	3115	0.05	PPBV	95
60) METHYL METHACRYLATE	11.74	69	371	0.04	PPBV #	61
61) HEPTANE	11.83	43	1006	0.05	PPBV	96
62) METHYL ISOBUTYL KETONE	12.44	43	909	0.04	PPBV #	74
63) cis-1,3-DICHLOROPROPENE	12.41	75	853	0.04	PPBV	84
64) TOLUENE	13.38	92	1053	0.05	PPBV #	93
65) 1,3-DICHLOROPROPANE	13.39	76	766	0.04	PPBV #	78
66) trans-1,3-DICHLOROPROPENE	12.91	75	595	0.04	PPBV #	65
67) 1,1,2-TRICHLOROETHANE	13.09	83	376	0.04	PPBV #	12
71) TETRACHLOROETHYLENE	14.52	164	839	0.06	PPBV	90

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53474.D Vial: 3
Acq On : 11 Feb 2016 7:04 pm Operator: YOUMINH
Sample : IC2140-0.04 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:05:56 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:05:39 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

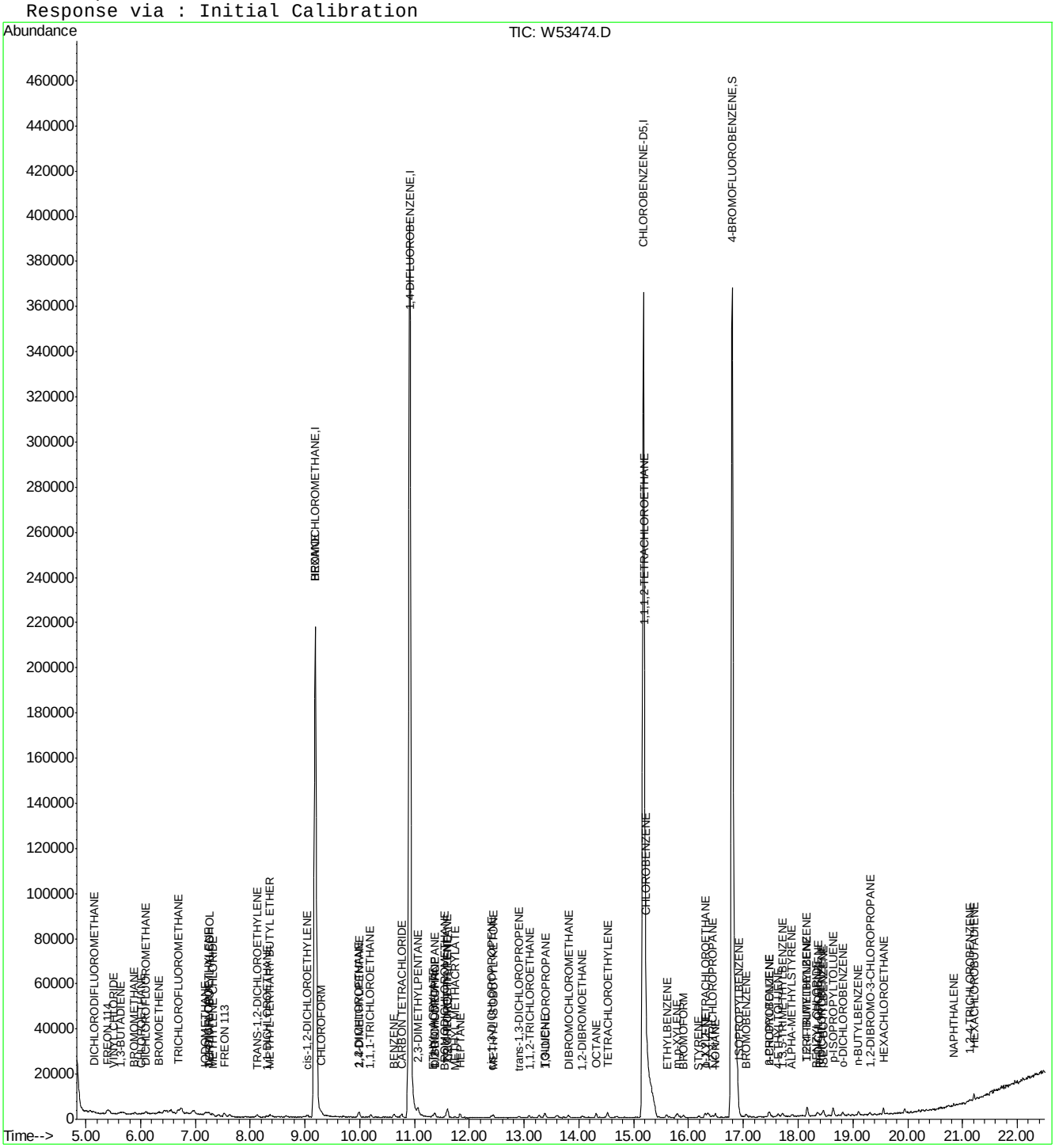
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
72)	DIBROMOCHLOROMETHANE	13.81	129	1095	0.05	PPBV		85
73)	1,2-DIBROMOETHANE	14.07	107	693	0.04	PPBV	#	98
74)	OCTANE	14.31	43	1108	0.05	PPBV		90
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	726	0.05	PPBV	#	1
76)	CHLOROBENZENE	15.22	112	1432	0.05	PPBV	#	49
77)	ETHYLBENZENE	15.61	91	2181	0.05	PPBV		87
78)	m,p-XYLENE	15.80	106	1462	0.09	PPBV	#	94
79)	o-XYLENE	16.30	106	707	0.05	PPBV		88
80)	STYRENE	16.19	104	928	0.04	PPBV	#	78
81)	1,2,3-TRICHLOROPROPANE	16.44	75	922	0.05	PPBV	#	68
82)	NONANE	16.49	43	1018	0.04	PPBV	#	80
83)	BROMOFORM	15.91	173	860	0.05	PPBV	#	74
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	1090	0.05	PPBV	#	88
86)	ISOPROPYLBENZENE	16.92	105	2902	0.06	PPBV		88
87)	BROMOBENZENE	17.05	156	558	0.04	PPBV		91
88)	2-CHLOROTOLUENE	17.46	126	545	0.05	PPBV	#	77
89)	n-PROPYLBENZENE	17.47	120	508	0.04	PPBV	#	44
90)	4-ETHYLTOLUENE	17.63	105	1994	0.05	PPBV	#	91
91)	1,3,5-TRIMETHYLBENZENE	17.71	105	2010	0.05	PPBV	#	95
92)	ALPHA-METHYLSTYRENE	17.89	118	557	0.04	PPBV	#	84
93)	TERT-BUTYLBENZENE	18.16	134	354	0.04	PPBV	#	26
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	1691	0.05	PPBV		87
95)	m-DICHLOROBENZENE	18.36	146	952	0.05	PPBV		79
96)	BENZYL CHLORIDE	18.33	91	1060	0.05	PPBV	#	65
97)	p-DICHLOROBENZENE	18.43	146	967	0.05	PPBV		92
98)	SEC-BUTYLBENZENE	18.45	134	463	0.04	PPBV	#	63
99)	p-ISOPROPYLTOLUENE	18.63	134	428	0.04	PPBV	#	54
100)	o-DICHLOROBENZENE	18.81	146	954	0.05	PPBV		79
101)	n-BUTYLBENZENE	19.10	134	364	0.04	PPBV		80
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.31	157	405	0.05	PPBV	#	79
103)	HEXACHLOROETHANE	19.56	201	653	0.05	PPBV	#	74
104)	HEXACHLOROBUTADIENE	21.21	225	818	0.06	PPBV		78
105)	1,2,4-TRICHLOROBENZENE	21.13	180	457	0.06	PPBV	#	69
106)	NAPHTHALENE	20.84	128	1025	0.06	PPBV	#	75

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53474.D Vial: 3
Acq On : 11 Feb 2016 7:04 pm Operator: YOUMINH
Sample : IC2140-0.04 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 10:29 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53475.D Vial: 1
Acq On : 11 Feb 2016 7:44 pm Operator: YOUMINH
Sample : IC2140-30 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:09:51 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:09:42 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.20	128	101546	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.92	114	546038	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.19	82	306390	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.80	95	347184	10.04	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 100.40%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	219874	23.96	PPBV		99
4) CHLORODIFLUOROMETHANE	5.05	67	89753	26.31	PPBV		98
5) DICHLORODIFLUOROMETHANE	5.16	85	910071	24.19	PPBV		100
6) PROPYLENE	5.08	41	294659	21.83	PPBV		99
7) FREON 114	5.40	85	920280	22.82	PPBV		99
9) CHLOROMETHANE	5.32	52	100584	25.28	PPBV	#	85
10) VINYL CHLORIDE	5.52	62	365590	23.47	PPBV		99
11) 1,3-BUTADIENE	5.64	54	295257	24.43	PPBV		98
12) n-BUTANE	5.69	58	80923	26.18	PPBV		97
13) BROMOMETHANE	5.89	94	319490	24.56	PPBV		100
14) CHLOROETHANE	6.04	64	200889	25.89	PPBV		91
15) DICHLOROFLUOROMETHANE	6.10	67	807840	24.69	PPBV		100
16) ACROLEIN	6.43	56	157086	33.42	PPBV		99
17) TRICHLOROFLUOROMETHANE	6.69	101	984545	26.57	PPBV		100
18) ISOPROPYL ALCOHOL	6.72	45	717274	24.41	PPBV		99
19) ACETONE	6.53	58	180174	27.16	PPBV		99
21) ACRYLONITRILE	6.92	53	286591	32.16	PPBV		99
22) PENTANE	6.98	57	102575	27.17	PPBV		99
23) IODOMETHANE	7.19	142	879618	26.75	PPBV		99
24) 1,1-DICHLOROETHYLENE	7.24	96	350900	24.18	PPBV		98
25) CARBON DISULFIDE	7.64	76	993028	25.09	PPBV		100
26) ETHANOL	6.11	45	148827	24.86	PPBV		99
27) ACETONITRILE	6.31	41	291073	27.68	PPBV		98
28) BROMOETHENE	6.34	106	343931	26.13	PPBV		100
29) METHYLENE CHLORIDE	7.33	84	298344	25.12	PPBV		99
30) 3-CHLOROPROPENE	7.43	76	174531	30.27	PPBV		98
31) FREON 113	7.54	151	603223	27.26	PPBV		100
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	353388	25.26	PPBV		100
33) TERTIARY BUTYL ALCOHOL	7.24	59	781364	27.92	PPBV		99
34) METHYL TERTIARY BUTYL ETHE	8.33	73	1064786	31.02	PPBV		99
35) TETRAHYDROFURAN	9.66	72	179026	34.09	PPBV		99
36) HEXANE	9.20	57	621733	28.17	PPBV		99
37) VINYL ACETATE	8.39	86	101165	35.33	PPBV	#	66
38) 1,1-DICHLOROETHANE	8.32	63	667622	27.97	PPBV		99
39) METHYL ETHYL KETONE	8.63	72	181202	35.59	PPBV	#	91
40) cis-1,2-DICHLOROETHYLENE	9.04	96	376606	27.71	PPBV		100
41) DI-ISOPROPYL ETHER	9.18	87	343459	34.21	PPBV		97
42) ETHYL ACETATE	9.19	61	125002	34.87	PPBV		98
43) METHYL ACRYLATE	9.19	55	720219	34.73	PPBV		99
44) CHLOROFORM	9.30	83	736920	28.60	PPBV		99
45) 2,4-DIMETHYLPENTANE	9.99	57	728639	29.42	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53475.D Vial: 1
Acq On : 11 Feb 2016 7:44 pm Operator: YOUMINH
Sample : IC2140-30 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:09:51 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:09:42 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	783368	28.69	PPBV		100
47)	CARBON TETRACHLORIDE	10.77	117	826177	28.86	PPBV		99
48)	1,2-DICHLOROETHANE	9.97	62	501754	31.29	PPBV		99
50)	BENZENE	10.64	78	1184262	28.09	PPBV		100
51)	CYCLOHEXANE	10.89	84	519376	27.25	PPBV		96
52)	2,3-DIMETHYLPENTANE	11.07	71	277186	30.91	PPBV		97
53)	TRICHLOROETHYLENE	11.60	95	518176	30.92	PPBV		99
54)	DIBROMOMETHANE	11.38	174	458444	30.81	PPBV		99
55)	1,2-DICHLOROPROPANE	11.39	63	432471	29.61	PPBV		100
56)	ETHYL ACRYLATE	11.32	55	841577	36.23	PPBV		100
57)	BROMODICHLOROMETHANE	11.57	83	857986	30.85	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	2082719	31.70	PPBV		99
59)	1,4-DIOXANE	11.60	88	263978	36.74	PPBV	#	78
60)	METHYL METHACRYLATE	11.74	69	417550	37.26	PPBV		99
61)	HEPTANE	11.84	43	738963	31.62	PPBV		100
62)	METHYL ISOBUTYL KETONE	12.42	43	868608	36.40	PPBV		98
63)	cis-1,3-DICHLOROPROPENE	12.41	75	742100	34.68	PPBV		99
64)	TOLUENE	13.38	92	883694	34.98	PPBV		99
65)	1,3-DICHLOROPROPANE	13.40	76	703504	35.79	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.91	75	597824	36.96	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.11	83	386493	35.01	PPBV		99
69)	ETHYL METHACRYLATE	13.59	69	738473	33.73	PPBV		99
70)	2-HEXANONE	13.60	58	475204	31.40	PPBV		96
71)	TETRACHLOROETHYLENE	14.53	164	578385	26.29	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.82	129	851736	27.53	PPBV		99
73)	1,2-DIBROMOETHANE	14.08	107	681283	30.08	PPBV		100
74)	OCTANE	14.32	43	1054686	29.81	PPBV		98
75)	1,1,1,2-TETRACHLOROETHANE	15.21	131	640793	28.72	PPBV	#	69
76)	CHLOROBENZENE	15.23	112	1147153	28.14	PPBV		99
77)	ETHYLBENZENE	15.61	91	1826375	29.55	PPBV		100
78)	m,p-XYLENE	15.80	106	1480080	61.70	PPBV		99
79)	o-XYLENE	16.31	106	709319	31.37	PPBV		99
80)	STYRENE	16.19	104	1117443	33.89	PPBV		98
81)	1,2,3-TRICHLOROPROPANE	16.45	75	736049	28.47	PPBV		100
82)	NONANE	16.50	43	1076700	31.66	PPBV		99
83)	BROMOFORM	15.92	173	815971	30.63	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.31	83	985812	29.97	PPBV		99
86)	ISOPROPYLBENZENE	16.94	105	2115260	28.67	PPBV		99
87)	BROMOBENZENE	17.06	156	605594	31.43	PPBV		99
88)	2-CHLOROTOLUENE	17.46	126	497225	31.05	PPBV	#	78
89)	n-PROPYLBENZENE	17.48	120	566489	32.76	PPBV		96
90)	4-ETHYLTOLUENE	17.64	105	1819294	31.94	PPBV		97
91)	1,3,5-TRIMETHYLBENZENE	17.72	105	1633914	29.64	PPBV		100
92)	ALPHA-METHYLSTYRENE	17.89	118	773100	35.08	PPBV		99
93)	TERT-BUTYLBENZENE	18.17	134	428070	33.55	PPBV		100
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	1613885	32.20	PPBV		99
95)	m-DICHLOROBENZENE	18.36	146	903830	32.17	PPBV		99
96)	BENZYL CHLORIDE	18.34	91	1184252	36.45	PPBV		99
97)	p-DICHLOROBENZENE	18.44	146	892945	32.32	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53475.D Vial: 1
Acq On : 11 Feb 2016 7:44 pm Operator: YOUMINH
Sample : IC2140-30 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:09:51 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:09:42 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

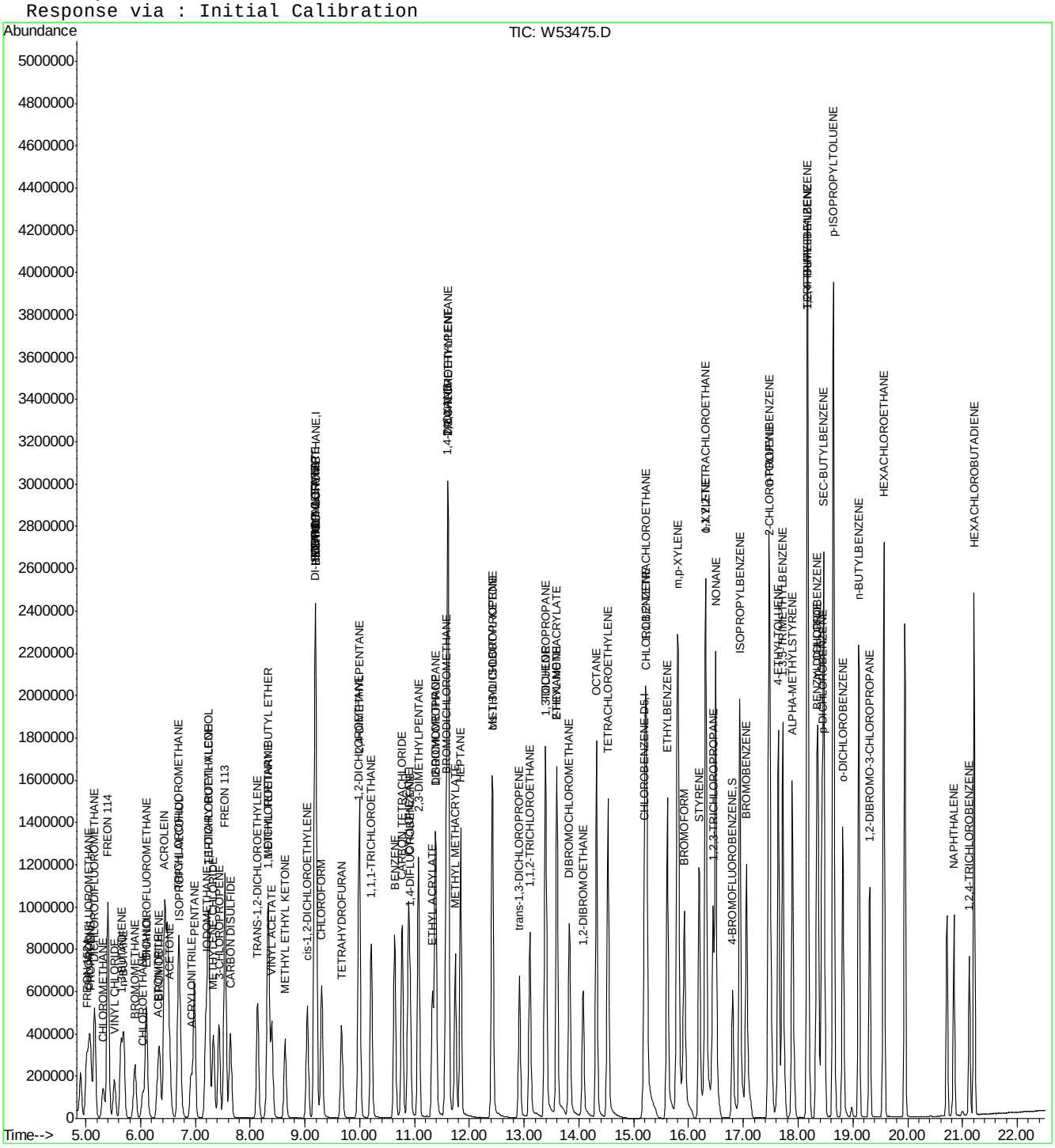
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.47	134	496371	32.55	PPBV	98
99)	p-ISOPROPYLTOLUENE	18.64	134	532830	34.71	PPBV	99
100)	o-DICHLOROBENZENE	18.82	146	858549	31.67	PPBV	99
101)	n-BUTYLBENZENE	19.11	134	459638	37.04	PPBV	97
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.31	157	446114	39.00	PPBV	99
103)	HEXACHLOROETHANE	19.56	201	701992	33.96	PPBV	100
104)	HEXACHLOROBUTADIENE	21.22	225	617978	29.50	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.12	180	317247	29.25	PPBV	100
106)	NAPHTHALENE	20.84	128	971071	38.34	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53475.D Vial: 1
Acq On : 11 Feb 2016 7:44 pm Operator: YOUMINH
Sample : IC2140-30 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:10 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53477.D Vial: 1
Acq On : 11 Feb 2016 9:07 pm Operator: YOUMINH
Sample : IC2140-5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:12:22 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:11:49 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.18	128	98243	10.00	PPBV	-0.01
49) 1,4-DIFLUOROBENZENE	10.91	114	533582	10.00	PPBV	-0.01
68) CHLOROBENZENE-D5	15.18	82	244513	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	290488	10.52	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 105.20%			
Target Compounds						Qvalue
3) FREON 152A	5.00	65	42803	4.95	PPBV	99
4) CHLORODIFLUOROMETHANE	5.04	67	17501	5.40	PPBV	98
5) DICHLORODIFLUOROMETHANE	5.15	85	185378	5.20	PPBV	99
6) PROPYLENE	5.07	41	59076	4.68	PPBV	98
7) FREON 114	5.39	85	176183	4.64	PPBV	100
9) CHLOROMETHANE	5.30	52	20315	5.38	PPBV	91
10) VINYL CHLORIDE	5.50	62	72855	4.95	PPBV	100
11) 1,3-BUTADIENE	5.63	54	57402	5.01	PPBV	98
12) n-BUTANE	5.68	58	16341	5.55	PPBV	99
13) BROMOMETHANE	5.88	94	62281	5.05	PPBV	99
14) CHLOROETHANE	6.02	64	39045	5.28	PPBV	91
15) DICHLOROFLUOROMETHANE	6.08	67	155087	5.00	PPBV	99
16) ACROLEIN	6.41	56	27330	5.93	PPBV	97
17) TRICHLOROFLUOROMETHANE	6.68	101	182258	5.15	PPBV	99
18) ISOPROPYL ALCOHOL	6.70	45	127616	4.61	PPBV	98
19) ACETONE	6.52	58	32045	5.06	PPBV	96
21) ACRYLONITRILE	6.91	53	50564	5.81	PPBV	99
22) PENTANE	6.97	57	19474	5.39	PPBV	98
23) IODOMETHANE	7.18	142	158761	5.05	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.22	96	64579	4.70	PPBV	98
25) CARBON DISULFIDE	7.62	76	187331	4.99	PPBV	99
26) ETHANOL	6.09	45	27204	4.81	PPBV	98
27) ACETONITRILE	6.30	41	52142	5.18	PPBV	98
28) BROMOETHENE	6.33	106	65179	5.19	PPBV	99
29) METHYLENE CHLORIDE	7.32	84	55857	4.95	PPBV	99
30) 3-CHLOROPROPENE	7.41	76	31697	5.68	PPBV	99
31) FREON 113	7.53	151	109084	5.15	PPBV	100
32) TRANS-1,2-DICHLOROETHYLENE	8.12	96	63400	4.77	PPBV	100
33) TERTIARY BUTYL ALCOHOL	7.22	59	146357	5.45	PPBV	99
34) METHYL TERTIARY BUTYL ETHE	8.33	73	176718	5.30	PPBV	99
35) TETRAHYDROFURAN	9.66	72	28896	5.58	PPBV	100
36) HEXANE	9.19	57	108499	5.12	PPBV	99
37) VINYL ACETATE	8.38	86	16531	5.82	PPBV	98
38) 1,1-DICHLOROETHANE	8.30	63	121176	5.29	PPBV	100
39) METHYL ETHYL KETONE	8.63	72	29197	5.79	PPBV #	89
40) cis-1,2-DICHLOROETHYLENE	9.03	96	66586	5.11	PPBV	100
41) DI-ISOPROPYL ETHER	9.16	87	55345	5.60	PPBV	97
42) ETHYL ACETATE	9.17	61	20327	5.73	PPBV	98
43) METHYL ACRYLATE	9.19	55	114086	5.58	PPBV	99
44) CHLOROFORM	9.29	83	132902	5.36	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.99	57	125767	5.26	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53477.D Vial: 1
Acq On : 11 Feb 2016 9:07 pm Operator: YOUMINH
Sample : IC2140-5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:12:22 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:11:49 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.20	97	139327	5.30	PPBV		99
47)	CARBON TETRACHLORIDE	10.76	117	144814	5.25	PPBV		99
48)	1,2-DICHLOROETHANE	9.96	62	87501	5.61	PPBV		99
50)	BENZENE	10.63	78	207554	5.07	PPBV		100
51)	CYCLOHEXANE	10.88	84	91327	4.96	PPBV		93
52)	2,3-DIMETHYLPENTANE	11.06	71	46962	5.34	PPBV		99
53)	TRICHLOROETHYLENE	11.60	95	86009	5.23	PPBV		99
54)	DIBROMOMETHANE	11.36	174	78298	5.37	PPBV		99
55)	1,2-DICHLOROPROPANE	11.38	63	71352	5.01	PPBV		99
56)	ETHYL ACRYLATE	11.31	55	125277	5.38	PPBV		99
57)	BROMODICHLOROMETHANE	11.56	83	145957	5.35	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.60	57	341443	5.28	PPBV		99
59)	1,4-DIOXANE	11.58	88	40795	5.63	PPBV	#	73
60)	METHYL METHACRYLATE	11.73	69	62515	5.56	PPBV		99
61)	HEPTANE	11.83	43	123178	5.36	PPBV		98
62)	METHYL ISOBUTYL KETONE	12.41	43	132181	5.54	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.40	75	117173	5.51	PPBV		99
64)	TOLUENE	13.38	92	139242	5.54	PPBV		100
65)	1,3-DICHLOROPROPANE	13.39	76	110346	5.62	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.90	75	90837	5.60	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.09	83	61786	5.62	PPBV		99
69)	ETHYL METHACRYLATE	13.58	69	103724	5.85	PPBV		99
70)	2-HEXANONE	13.59	58	69366	5.71	PPBV		98
71)	TETRACHLOROETHYLENE	14.52	164	91707	5.30	PPBV		100
72)	DIBROMOCHLOROMETHANE	13.81	129	135471	5.54	PPBV		99
73)	1,2-DIBROMOETHANE	14.06	107	102223	5.65	PPBV		100
74)	OCTANE	14.31	43	159854	5.67	PPBV		100
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	98907	5.58	PPBV	#	40
76)	CHLOROBENZENE	15.22	112	174199	5.39	PPBV		99
77)	ETHYLBENZENE	15.60	91	268061	5.44	PPBV		100
78)	m,p-XYLENE	15.79	106	220572	11.49	PPBV		99
79)	o-XYLENE	16.30	106	104712	5.77	PPBV		99
80)	STYRENE	16.19	104	158331	5.93	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.44	75	108252	5.28	PPBV		100
82)	NONANE	16.48	43	156236	5.72	PPBV		100
83)	BROMOFORM	15.91	173	120182	5.64	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.29	83	143013	5.45	PPBV		100
86)	ISOPROPYLBENZENE	16.92	105	309326	5.28	PPBV		100
87)	BROMOBENZENE	17.05	156	87740	5.68	PPBV		100
88)	2-CHLOROTOLUENE	17.45	126	71387	5.57	PPBV	#	82
89)	n-PROPYLBENZENE	17.47	120	78784	5.65	PPBV		98
90)	4-ETHYLTOLUENE	17.63	105	247237	5.40	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.71	105	244089	5.56	PPBV		98
92)	ALPHA-METHYLSTYRENE	17.89	118	102785	5.74	PPBV		100
93)	TERT-BUTYLBENZENE	18.16	134	58925	5.71	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	220788	5.48	PPBV		99
95)	m-DICHLOROBENZENE	18.36	146	118411	5.24	PPBV		99
96)	BENZYL CHLORIDE	18.33	91	139397	5.25	PPBV		100
97)	p-DICHLOROBENZENE	18.43	146	117980	5.30	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53477.D Vial: 1
Acq On : 11 Feb 2016 9:07 pm Operator: YOUMINH
Sample : IC2140-5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:12:22 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:11:49 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

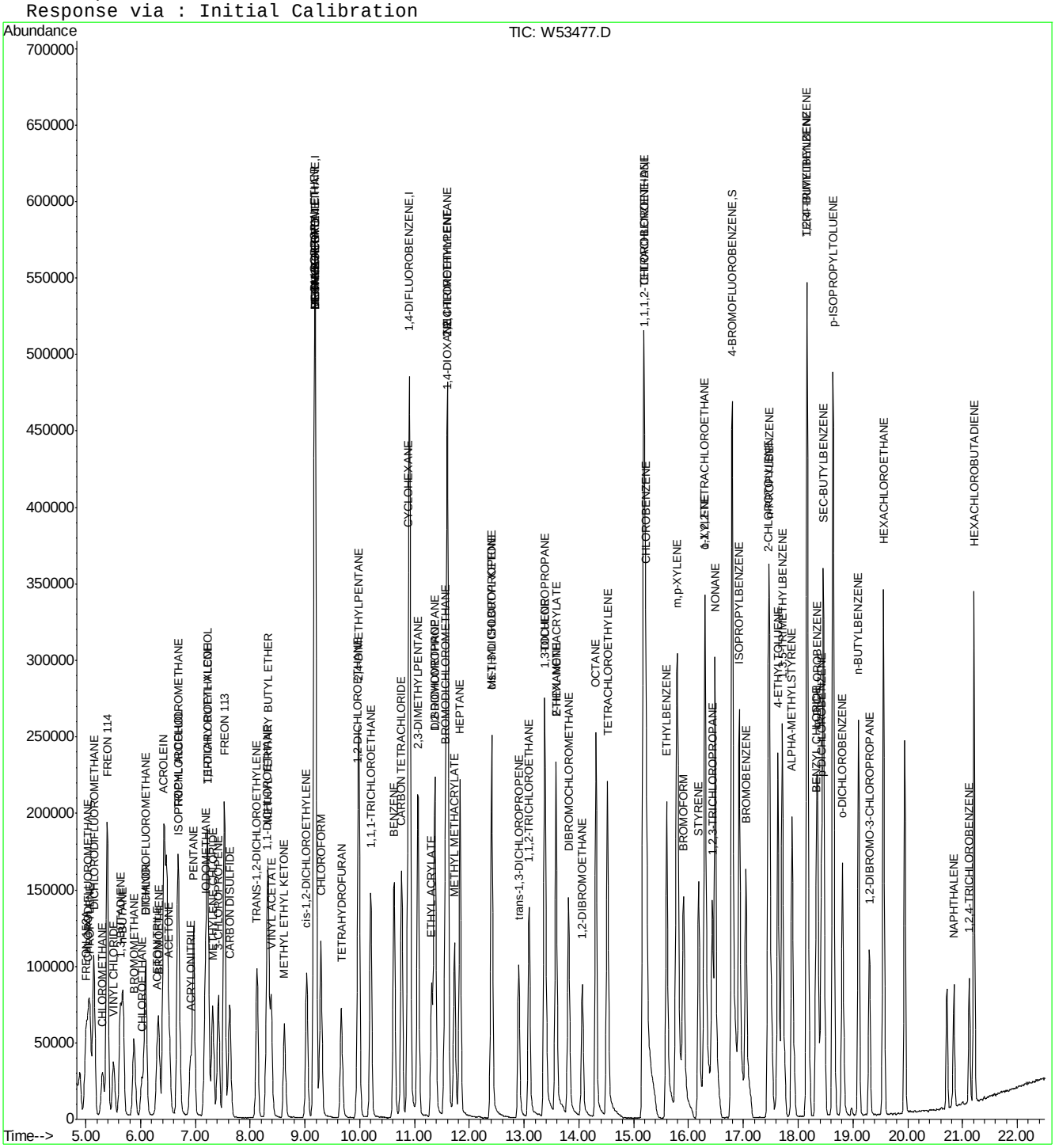
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.46	134	68070	5.54	PPBV	98
99)	p-ISOPROPYLTOLUENE	18.63	134	70402	5.65	PPBV	99
100)	o-DICHLOROBENZENE	18.81	146	113044	5.19	PPBV	100
101)	n-BUTYLBENZENE	19.10	134	54964	5.41	PPBV	97
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	45788	4.85	PPBV	100
103)	HEXACHLOROETHANE	19.56	201	89231	5.33	PPBV	98
104)	HEXACHLOROBUTADIENE	21.21	225	81795	4.90	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.12	180	34287	3.97	PPBV	98
106)	NAPHTHALENE	20.84	128	83751	4.02	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53477.D Vial: 1
Acq On : 11 Feb 2016 9:07 pm Operator: YOUMINH
Sample : IC2140-5 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:12 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53478.D Vial: 1
Acq On : 11 Feb 2016 9:47 pm Operator: YOUMINH
Sample : IC2140-40 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:14:40 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:14:31 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	108312	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.92	114	575172	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.19	82	339037	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.80	95	377663	9.80	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 98.00%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	332538	40.11	PPBV		99
4) CHLORODIFLUOROMETHANE	5.05	67	128076	41.44	PPBV		99
5) DICHLORODIFLUOROMETHANE	5.15	85	1331688	37.88	PPBV		99
6) PROPYLENE	5.08	41	429982	35.17	PPBV		99
7) FREON 114	5.40	85	1409732	38.27	PPBV		99
9) CHLOROMETHANE	5.31	52	152234	42.00	PPBV	#	79
10) VINYL CHLORIDE	5.52	62	558790	38.88	PPBV		100
11) 1,3-BUTADIENE	5.64	54	446055	39.93	PPBV		98
12) n-BUTANE	5.68	58	122932	43.36	PPBV		97
13) BROMOMETHANE	5.88	94	474205	39.39	PPBV		100
14) CHLOROETHANE	6.03	64	289120	39.95	PPBV		92
15) DICHLOROFLUOROMETHANE	6.10	67	1138389	37.16	PPBV		100
16) ACROLEIN	6.42	56	213270	45.98	PPBV		99
17) TRICHLOROFLUOROMETHANE	6.69	101	1313944	37.52	PPBV		99
18) ISOPROPYL ALCOHOL	6.71	45	950892	35.25	PPBV		99
19) ACETONE	6.52	58	237805	38.25	PPBV		96
21) ACRYLONITRILE	6.92	53	388499	44.68	PPBV		99
22) PENTANE	6.97	57	141969	40.48	PPBV		98
23) IODOMETHANE	7.19	142	1215075	39.24	PPBV		99
24) 1,1-DICHLOROETHYLENE	7.23	96	483764	35.72	PPBV		99
25) CARBON DISULFIDE	7.63	76	1344550	36.84	PPBV		100
26) ETHANOL	6.11	45	207267	37.76	PPBV		99
27) ACETONITRILE	6.30	41	388575	39.41	PPBV		99
28) BROMOETHENE	6.33	106	482641	39.21	PPBV		100
29) METHYLENE CHLORIDE	7.32	84	405730	36.26	PPBV		100
30) 3-CHLOROPROPENE	7.43	76	237658	43.39	PPBV		96
31) FREON 113	7.54	151	828825	39.43	PPBV		100
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	482937	36.62	PPBV		99
33) TERTIARY BUTYL ALCOHOL	7.23	59	1145442	42.54	PPBV		98
34) METHYL TERTIARY BUTYL ETHE	8.33	73	1422075	42.37	PPBV		99
35) TETRAHYDROFURAN	9.66	72	238412	46.86	PPBV		97
36) HEXANE	9.19	57	841937	39.82	PPBV		100
37) VINYL ACETATE	8.39	86	135249	48.27	PPBV	#	59
38) 1,1-DICHLOROETHANE	8.31	63	900996	39.40	PPBV		99
39) METHYL ETHYL KETONE	8.63	72	239236	47.75	PPBV	#	91
40) cis-1,2-DICHLOROETHYLENE	9.03	96	507956	39.05	PPBV		100
41) DI-ISOPROPYL ETHER	9.17	87	463112	47.01	PPBV		96
42) ETHYL ACETATE	9.18	61	166005	47.69	PPBV		99
43) METHYL ACRYLATE	9.19	55	970235	47.66	PPBV		99
44) CHLOROFORM	9.30	83	992779	39.95	PPBV		99
45) 2,4-DIMETHYLPENTANE	9.99	57	984276	41.19	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53478.D Vial: 1
Acq On : 11 Feb 2016 9:47 pm Operator: YOUMINH
Sample : IC2140-40 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:14:40 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:14:31 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	1053210	39.96	PPBV		99
47)	CARBON TETRACHLORIDE	10.77	117	1120207	40.57	PPBV		99
48)	1,2-DICHLOROETHANE	9.97	62	677681	43.31	PPBV		99
50)	BENZENE	10.63	78	1585236	39.66	PPBV		100
51)	CYCLOHEXANE	10.89	84	705578	39.91	PPBV		95
52)	2,3-DIMETHYLPENTANE	11.07	71	372730	43.47	PPBV		97
53)	TRICHLOROETHYLENE	11.60	95	719808	45.00	PPBV		100
54)	DIBROMOMETHANE	11.37	174	632698	44.36	PPBV		99
55)	1,2-DICHLOROPROPANE	11.38	63	585476	42.02	PPBV		99
56)	ETHYL ACRYLATE	11.32	55	1117167	49.33	PPBV		100
57)	BROMODICHLOROMETHANE	11.57	83	1172817	43.87	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	2848651	45.09	PPBV		99
59)	1,4-DIOXANE	11.59	88	366438	52.53	PPBV	#	63
60)	METHYL METHACRYLATE	11.74	69	562949	50.96	PPBV		98
61)	HEPTANE	11.83	43	990164	44.07	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.42	43	1164533	49.59	PPBV		97
63)	cis-1,3-DICHLOROPROPENE	12.41	75	1016079	48.74	PPBV		98
64)	TOLUENE	13.38	92	1208212	48.84	PPBV		99
65)	1,3-DICHLOROPROPANE	13.40	76	957323	49.52	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.91	75	826564	51.84	PPBV		98
67)	1,1,2-TRICHLOROETHANE	13.10	83	525397	48.76	PPBV		99
69)	ETHYL METHACRYLATE	13.59	69	999497	45.23	PPBV		99
70)	2-HEXANONE	13.60	58	660945	44.27	PPBV		95
71)	TETRACHLOROETHYLENE	14.53	164	791925	36.40	PPBV		98
72)	DIBROMOCHLOROMETHANE	13.82	129	1170254	38.10	PPBV		99
73)	1,2-DIBROMOETHANE	14.07	107	937808	41.29	PPBV		100
74)	OCTANE	14.31	43	1425220	40.22	PPBV		97
75)	1,1,1,2-TETRACHLOROETHANE	15.21	131	883243	39.59	PPBV	#	65
76)	CHLOROBENZENE	15.23	112	1580287	38.89	PPBV		99
77)	ETHYLBENZENE	15.61	91	2482358	39.93	PPBV		100
78)	m,p-XYLENE	15.80	106	2014128	82.98	PPBV		99
79)	o-XYLENE	16.31	106	965218	42.12	PPBV		99
80)	STYRENE	16.19	104	1522725	45.14	PPBV		98
81)	1,2,3-TRICHLOROPROPANE	16.45	75	997311	38.63	PPBV		99
82)	NONANE	16.49	43	1456612	42.45	PPBV		98
83)	BROMOFORM	15.92	173	1126877	42.08	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.31	83	1344105	40.68	PPBV		99
86)	ISOPROPYLBENZENE	16.93	105	2877487	38.94	PPBV		99
87)	BROMOBENZENE	17.06	156	835948	42.95	PPBV		98
88)	2-CHLOROTOLUENE	17.46	126	693442	42.90	PPBV	#	82
89)	n-PROPYLBENZENE	17.48	120	787736	44.77	PPBV		93
90)	4-ETHYLTOLUENE	17.64	105	2504713	43.38	PPBV		97
91)	1,3,5-TRIMETHYLBENZENE	17.72	105	2207571	39.84	PPBV		100
92)	ALPHA-METHYLSTYRENE	17.89	118	1069998	47.40	PPBV		99
93)	TERT-BUTYLBENZENE	18.17	134	606660	46.61	PPBV		98
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	2268151	44.61	PPBV		99
95)	m-DICHLOROBENZENE	18.36	146	1304299	45.86	PPBV		99
96)	BENZYL CHLORIDE	18.34	91	1705449	51.19	PPBV		99
97)	p-DICHLOROBENZENE	18.44	146	1294132	46.33	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53478.D Vial: 1
Acq On : 11 Feb 2016 9:47 pm Operator: YOUMINH
Sample : IC2140-40 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 09:14:40 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 09:14:31 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

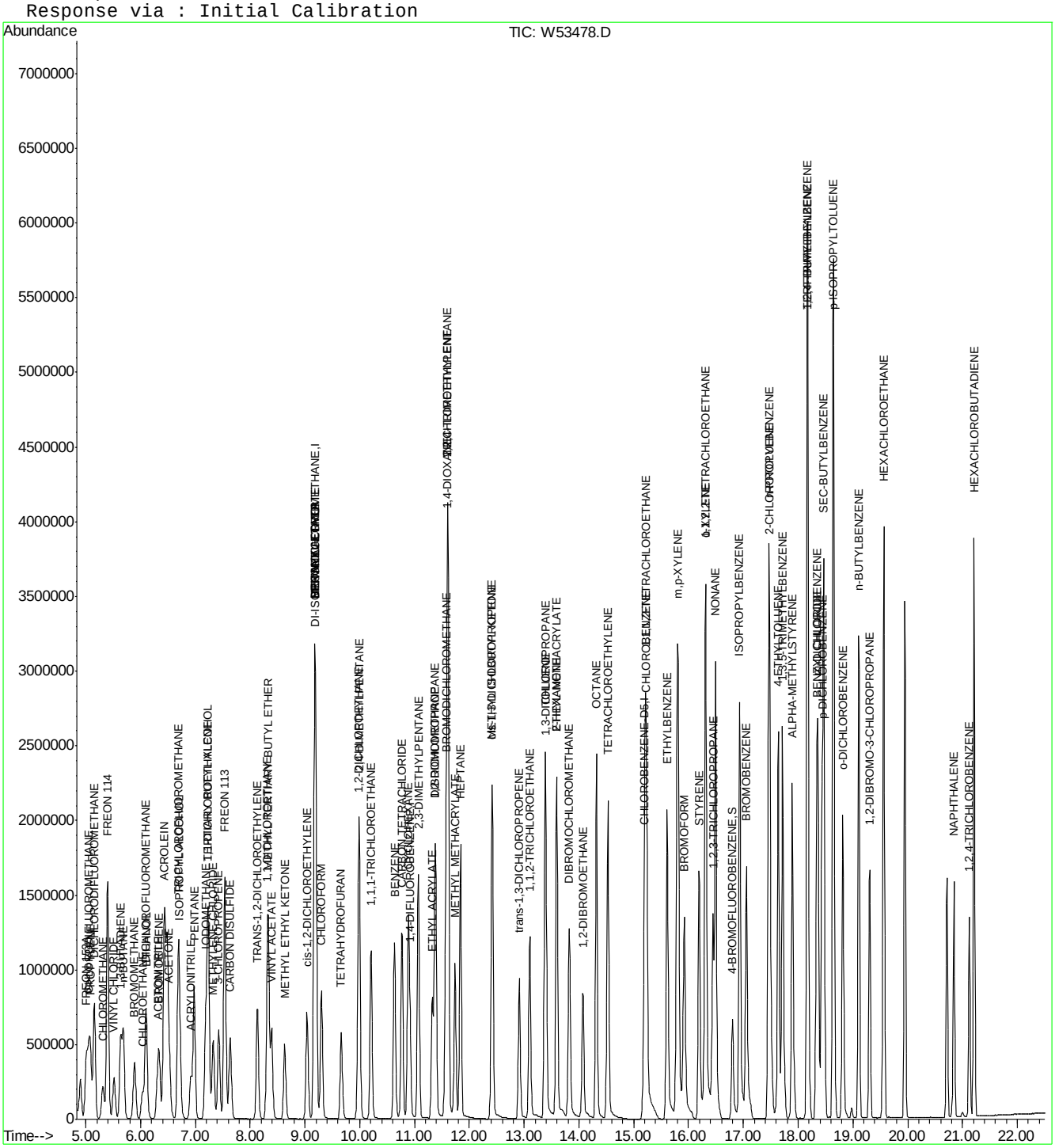
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.47	134	703116	45.41	PPBV	96
99)	p-ISOPROPYLTOLUENE	18.64	134	764569	48.71	PPBV	99
100)	o-DICHLOROBENZENE	18.81	146	1246903	45.56	PPBV	99
101)	n-BUTYLBENZENE	19.11	134	669753	52.55	PPBV	96
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.31	157	687828	58.27	PPBV	99
103)	HEXACHLOROETHANE	19.56	201	1021875	48.55	PPBV	99
104)	HEXACHLOROBUTADIENE	21.21	225	950285	45.38	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.12	180	562161	52.78	PPBV	100
106)	NAPHTHALENE	20.84	128	1599583	61.94	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53478.D Vial: 1
Acq On : 11 Feb 2016 9:47 pm Operator: YOUMINH
Sample : IC2140-40 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 9:15 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53480.D Vial: 4
Acq On : 11 Feb 2016 11:08 pm Operator: YOUMINH
Sample : ICV2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:52:02 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	104340	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.91	114	560957	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.18	82	271638	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.80	95	327040	10.66	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 106.60%			
Target Compounds						Qvalue
3) FREON 152A	5.02	65	88749	10.14	PPBV	100
4) CHLORODIFLUOROMETHANE	5.05	67	35694	10.80	PPBV	99
5) DICHLORODIFLUOROMETHANE	5.16	85	339860	9.29	PPBV	100
6) PROPYLENE	5.08	41	105954	8.31	PPBV	98
7) FREON 114	5.40	85	362074	9.43	PPBV	99
9) CHLOROMETHANE	5.32	52	39019	9.80	PPBV	98
10) VINYL CHLORIDE	5.52	62	142745	9.52	PPBV	100
11) 1,3-BUTADIENE	5.65	54	114195	9.77	PPBV	100
12) n-BUTANE	5.69	58	31068	10.32	PPBV	100
13) BROMOMETHANE	5.89	94	123338	9.81	PPBV	100
14) CHLOROETHANE	6.04	64	78075	10.32	PPBV	90
15) DICHLOROFLUOROMETHANE	6.10	67	315330	9.90	PPBV	100
16) ACROLEIN	6.43	56	54185	10.18	PPBV	99
17) TRICHLOROFLUOROMETHANE	6.69	101	364798	10.02	PPBV	100
18) ISOPROPYL ALCOHOL	6.71	45	237498	8.35	PPBV	100
19) ACETONE	6.53	58	62771	9.51	PPBV	95
21) ACRYLONITRILE	6.92	53	102286	11.04	PPBV	99
22) PENTANE	6.97	57	40352	10.90	PPBV	99
23) IODOMETHANE	7.19	142	333017	10.30	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.24	96	130056	9.26	PPBV	99
25) CARBON DISULFIDE	7.64	76	376790	9.86	PPBV	100
26) ETHANOL	6.11	45	46885	8.05	PPBV	99
27) ACETONITRILE	6.31	41	102781	9.79	PPBV	99
28) BROMOETHENE	6.35	106	130825	10.18	PPBV	99
29) METHYLENE CHLORIDE	7.33	84	112537	9.69	PPBV	99
30) 3-CHLOROPROPENE	7.43	76	63556	10.92	PPBV	96
31) FREON 113	7.54	151	227097	10.34	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	131342	9.59	PPBV	98
33) TERTIARY BUTYL ALCOHOL	7.22	59	275118	9.72	PPBV	99
34) METHYL TERTIARY BUTYL ETHE	8.33	73	349625	9.91	PPBV	98
35) TETRAHYDROFURAN	9.66	72	57803	10.47	PPBV	98
36) HEXANE	9.20	57	214939	9.72	PPBV	98
37) VINYL ACETATE	8.39	86	34817	11.41	PPBV #	90
38) 1,1-DICHLOROETHANE	8.31	63	238699	10.00	PPBV	99
39) METHYL ETHYL KETONE	8.63	72	56976	10.59	PPBV #	92
40) cis-1,2-DICHLOROETHYLENE	9.03	96	131532	9.69	PPBV	100
41) DI-ISOPROPYL ETHER	9.17	87	113516	10.74	PPBV	95
42) ETHYL ACETATE	9.18	61	39481	10.43	PPBV	100
43) METHYL ACRYLATE	9.19	55	223200	10.21	PPBV	99
44) CHLOROFORM	9.30	83	265666	10.23	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.99	57	253195	10.11	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53480.D Vial: 4
Acq On : 11 Feb 2016 11:08 pm Operator: YOUMINH
Sample : ICV2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:52:02 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.21	97	279521	10.14	PPBV		99
47)	CARBON TETRACHLORIDE	10.77	117	291805	10.09	PPBV		99
48)	1,2-DICHLOROETHANE	9.97	62	174553	10.60	PPBV		100
50)	BENZENE	10.63	78	416979	9.86	PPBV		99
51)	CYCLOHEXANE	10.89	84	184450	9.77	PPBV		99
52)	2,3-DIMETHYLPENTANE	11.07	71	95012	10.39	PPBV		98
53)	TRICHLOROETHYLENE	11.60	95	175763	10.26	PPBV		99
54)	DIBROMOMETHANE	11.36	174	157483	10.33	PPBV		99
55)	1,2-DICHLOROPROPANE	11.38	63	145034	9.78	PPBV		100
56)	ETHYL ACRYLATE	11.31	55	258157	10.43	PPBV		99
57)	BROMODICHLOROMETHANE	11.56	83	286022	10.02	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.61	57	688025	10.17	PPBV		99
59)	1,4-DIOXANE	11.60	88	79130	10.16	PPBV	#	88
60)	METHYL METHACRYLATE	11.73	69	125781	10.50	PPBV		97
61)	HEPTANE	11.83	43	244612	10.19	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.41	43	258774	10.19	PPBV		98
63)	cis-1,3-DICHLOROPROPENE	12.41	75	230982	10.26	PPBV		99
64)	TOLUENE	13.38	92	283971	10.63	PPBV		99
65)	1,3-DICHLOROPROPANE	13.39	76	216682	10.37	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.91	75	189158	10.92	PPBV		100
67)	1,1,2-TRICHLOROETHANE	13.10	83	121054	10.41	PPBV		97
69)	ETHYL METHACRYLATE	13.58	69	218144	11.12	PPBV		100
70)	2-HEXANONE	13.59	58	139852	10.45	PPBV		95
71)	TETRACHLOROETHYLENE	14.52	164	190414	10.15	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.81	129	285059	10.73	PPBV		99
73)	1,2-DIBROMOETHANE	14.06	107	215379	10.88	PPBV		99
74)	OCTANE	14.31	43	335568	10.89	PPBV		98
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	210337	10.86	PPBV	#	83
76)	CHLOROBENZENE	15.23	112	362844	10.30	PPBV		100
77)	ETHYLBENZENE	15.61	91	553589	10.24	PPBV		99
78)	m,p-XYLENE	15.80	106	461281	21.80	PPBV		100
79)	o-XYLENE	16.30	106	219511	10.97	PPBV		100
80)	STYRENE	16.19	104	339995	11.47	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.44	75	227084	10.15	PPBV		100
82)	NONANE	16.49	43	342954	11.44	PPBV		99
83)	BROMOFORM	15.91	173	254178	10.87	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	293015	10.18	PPBV		100
86)	ISOPROPYLBENZENE	16.93	105	664463	10.36	PPBV		99
87)	BROMOBENZENE	17.05	156	186232	10.94	PPBV		98
88)	2-CHLOROTOLUENE	17.45	126	149528	10.57	PPBV	#	78
89)	n-PROPYLBENZENE	17.48	120	170044	11.00	PPBV		99
90)	4-ETHYLTOLUENE	17.63	105	544698	10.81	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.71	105	519622	10.79	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.89	118	236326	11.85	PPBV		100
93)	TERT-BUTYLBENZENE	18.16	134	129435	11.27	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	472868	10.59	PPBV		98
95)	m-DICHLOROBENZENE	18.36	146	259914	10.37	PPBV		100
96)	BENZYL CHLORIDE	18.33	91	311720	10.49	PPBV		100
97)	p-DICHLOROBENZENE	18.43	146	256529	10.41	PPBV		100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53480.D Vial: 4
Acq On : 11 Feb 2016 11:08 pm Operator: YOUMINH
Sample : ICV2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:52:02 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

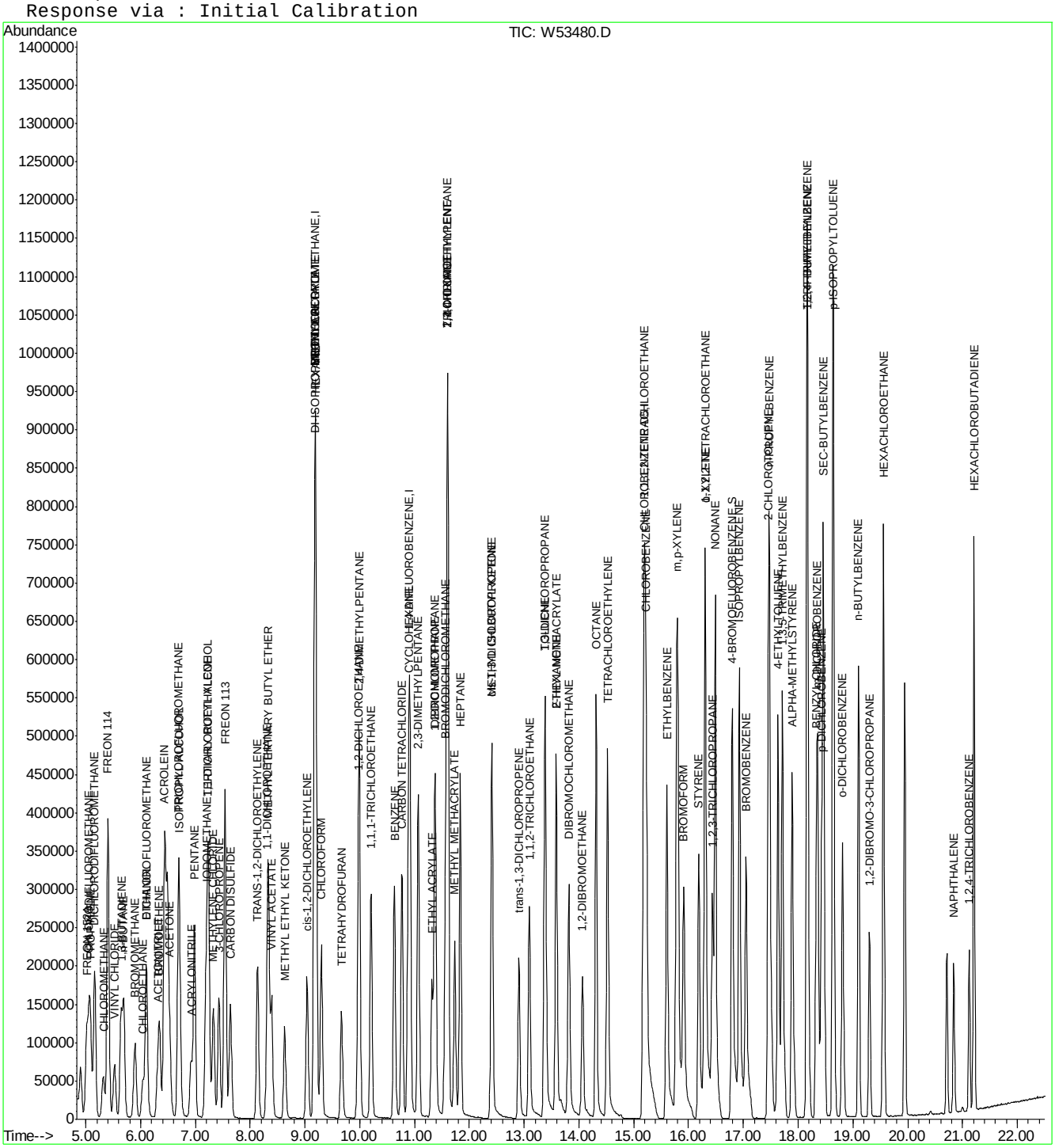
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.46	134	149829	11.00	PPBV	100
99)	p-ISOPROPYLTOLUENE	18.63	134	157313	11.31	PPBV	99
100)	o-DICHLOROBENZENE	18.81	146	243403	10.09	PPBV	99
101)	n-BUTYLBENZENE	19.10	134	127571	11.19	PPBV	98
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	101515	9.48	PPBV	98
103)	HEXACHLOROETHANE	19.56	201	199534	10.69	PPBV	99
104)	HEXACHLOROBUTADIENE	21.21	225	183919	9.97	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.12	180	89249	9.33	PPBV	98
106)	NAPHTHALENE	20.84	128	208867	8.83	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53480.D Vial: 4
Acq On : 11 Feb 2016 11:08 pm Operator: YOUMINH
Sample : ICV2140-10 Inst : MSW
Misc : MS96317,VW2140,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:52 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53482.D Vial: 2
Acq On : 12 Feb 2016 10:00 am Operator: YOUMINH
Sample : CC2140-10 Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:56:58 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.18	128	100341	10.00	PPBV	-0.01
49) 1,4-DIFLUOROBENZENE	10.91	114	541819	10.00	PPBV	-0.01
68) CHLOROBENZENE-D5	15.18	82	258099	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.79	95	319953	10.97	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 109.70%			
Target Compounds						Qvalue
3) FREON 152A	5.00	65	91257	10.85	PPBV	99
4) CHLORODIFLUOROMETHANE	5.04	67	29911	9.41	PPBV	100
5) DICHLORODIFLUOROMETHANE	5.15	85	316489	9.00	PPBV	100
6) PROPYLENE	5.07	41	96401	7.86	PPBV	98
7) FREON 114	5.39	85	312484	8.46	PPBV	99
9) CHLOROMETHANE	5.30	52	34336	8.97	PPBV	96
10) VINYL CHLORIDE	5.51	62	125402	8.70	PPBV	100
11) 1,3-BUTADIENE	5.63	54	98565	8.77	PPBV	99
12) n-BUTANE	5.68	58	28217	9.74	PPBV	99
13) BROMOMETHANE	5.88	94	111182	9.20	PPBV	100
14) CHLOROETHANE	6.02	64	67761	9.31	PPBV	91
15) DICHLOROFLUOROMETHANE	6.08	67	273223	8.92	PPBV	99
16) ACROLEIN	6.41	56	48503	9.48	PPBV	98
17) TRICHLOROFLUOROMETHANE	6.68	101	325108	9.28	PPBV	100
18) ISOPROPYL ALCOHOL	6.69	45	226462	8.28	PPBV	99
19) ACETONE	6.52	58	55958	8.82	PPBV	96
21) ACRYLONITRILE	6.91	53	89022	9.99	PPBV	99
22) PENTANE	6.96	57	34443	9.68	PPBV	97
23) IODOMETHANE	7.18	142	280108	9.01	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.22	96	111787	8.28	PPBV	99
25) CARBON DISULFIDE	7.63	76	324990	8.85	PPBV	100
26) ETHANOL	6.09	45	48132	8.60	PPBV	100
27) ACETONITRILE	6.30	41	90300	8.95	PPBV	100
28) BROMOETHENE	6.33	106	116877	9.46	PPBV	99
29) METHYLENE CHLORIDE	7.32	84	96142	8.61	PPBV	99
30) 3-CHLOROPROPENE	7.42	76	55249	9.87	PPBV	97
31) FREON 113	7.52	151	190977	9.05	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	110385	8.38	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.22	59	259187	9.52	PPBV	99
34) METHYL TERTIARY BUTYL ETHE	8.33	73	310452	9.15	PPBV	98
35) TETRAHYDROFURAN	9.66	72	51281	9.66	PPBV	97
36) HEXANE	9.19	57	190678	8.97	PPBV	99
37) VINYL ACETATE	8.38	86	29059	9.90	PPBV	100
38) 1,1-DICHLOROETHANE	8.30	63	206852	9.01	PPBV	99
39) METHYL ETHYL KETONE	8.62	72	51314	9.92	PPBV	92
40) cis-1,2-DICHLOROETHYLENE	9.03	96	115033	8.81	PPBV	99
41) DI-ISOPROPYL ETHER	9.16	87	98197	9.66	PPBV	97
42) ETHYL ACETATE	9.18	61	34958	9.60	PPBV #	95
43) METHYL ACRYLATE	9.18	55	201274	9.57	PPBV	99
44) CHLOROFORM	9.29	83	232132	9.29	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.99	57	218292	9.06	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53482.D Vial: 2
Acq On : 12 Feb 2016 10:00 am Operator: YOUMINH
Sample : CC2140-10 Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:56:58 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.20	97	245929	9.28	PPBV		99
47)	CARBON TETRACHLORIDE	10.76	117	257660	9.27	PPBV		99
48)	1,2-DICHLOROETHANE	9.96	62	153816	9.71	PPBV		99
50)	BENZENE	10.63	78	363044	8.88	PPBV		100
51)	CYCLOHEXANE	10.88	84	158826	8.71	PPBV		99
52)	2,3-DIMETHYLPENTANE	11.06	71	82159	9.30	PPBV		97
53)	TRICHLOROETHYLENE	11.60	95	152455	9.21	PPBV		98
54)	DIBROMOMETHANE	11.36	174	138034	9.37	PPBV		99
55)	1,2-DICHLOROPROPANE	11.38	63	126298	8.82	PPBV		99
56)	ETHYL ACRYLATE	11.31	55	231028	9.67	PPBV		99
57)	BROMODICHLOROMETHANE	11.56	83	258163	9.36	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.60	57	602007	9.21	PPBV		99
59)	1,4-DIOXANE	11.58	88	73888	9.82	PPBV	#	76
60)	METHYL METHACRYLATE	11.72	69	114942	9.93	PPBV		98
61)	HEPTANE	11.83	43	212725	9.17	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.41	43	236599	9.65	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.40	75	214717	9.88	PPBV		100
64)	TOLUENE	13.37	92	249414	9.67	PPBV		99
65)	1,3-DICHLOROPROPANE	13.39	76	198344	9.83	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.90	75	167067	9.98	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.09	83	110186	9.81	PPBV		99
69)	ETHYL METHACRYLATE	13.58	69	195726	10.50	PPBV		100
70)	2-HEXANONE	13.58	58	126566	9.96	PPBV		100
71)	TETRACHLOROETHYLENE	14.52	164	164664	9.24	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.81	129	251456	9.96	PPBV		99
73)	1,2-DIBROMOETHANE	14.06	107	191249	10.17	PPBV		100
74)	OCTANE	14.31	43	288834	9.87	PPBV		98
75)	1,1,1,2-TETRACHLOROETHANE	15.20	131	181584	9.87	PPBV		90
76)	CHLOROBENZENE	15.22	112	320577	9.57	PPBV		100
77)	ETHYLBENZENE	15.60	91	493112	9.60	PPBV		100
78)	m,p-XYLENE	15.79	106	406662	20.23	PPBV		99
79)	o-XYLENE	16.30	106	195913	10.31	PPBV		99
80)	STYRENE	16.19	104	303350	10.77	PPBV		100
81)	1,2,3-TRICHLOROPROPANE	16.44	75	200985	9.45	PPBV		100
82)	NONANE	16.48	43	302901	10.64	PPBV		99
83)	BROMOFORM	15.91	173	231839	10.44	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.30	83	265212	9.70	PPBV		99
86)	ISOPROPYLBENZENE	16.92	105	588834	9.67	PPBV		100
87)	BROMOBENZENE	17.05	156	168390	10.41	PPBV		99
88)	2-CHLOROTOLUENE	17.45	126	136321	10.15	PPBV	#	84
89)	n-PROPYLBENZENE	17.47	120	153285	10.44	PPBV		98
90)	4-ETHYLTOLUENE	17.63	105	483666	10.10	PPBV		97
91)	1,3,5-TRIMETHYLBENZENE	17.71	105	464340	10.15	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.89	118	205480	10.84	PPBV		100
93)	TERT-BUTYLBENZENE	18.16	134	115319	10.57	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.17	105	427512	10.07	PPBV		99
95)	m-DICHLOROBENZENE	18.35	146	237342	9.96	PPBV		99
96)	BENZYL CHLORIDE	18.33	91	285553	10.11	PPBV		100
97)	p-DICHLOROBENZENE	18.42	146	235909	10.08	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53482.D Vial: 2
Acq On : 12 Feb 2016 10:00 am Operator: YOUMINH
Sample : CC2140-10 Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:56:58 2016 Quant Results File: MW2140.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

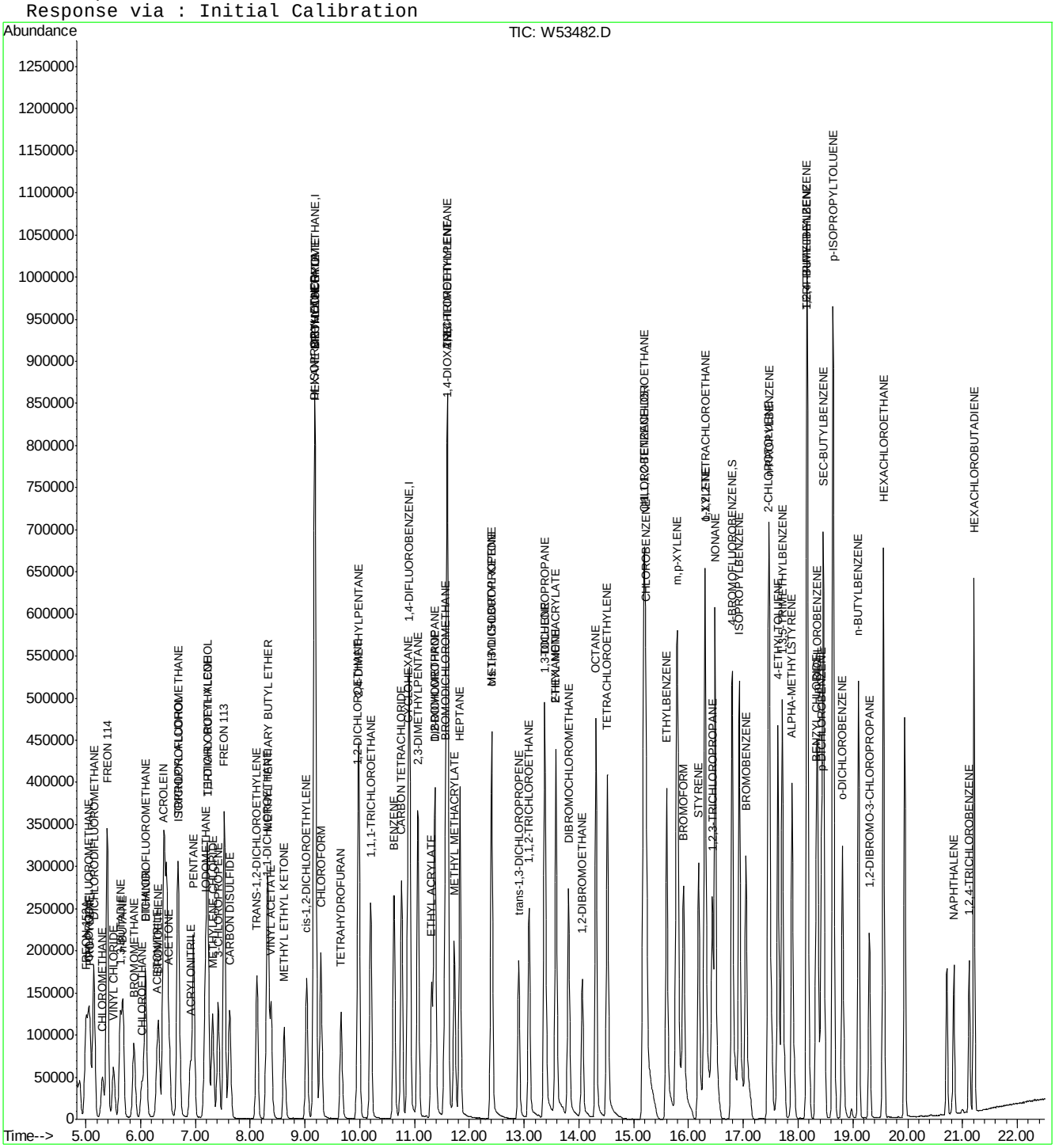
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.46	134	131907	10.19	PPBV	98
99)	p-ISOPROPYLTOLUENE	18.63	134	139590	10.56	PPBV	99
100)	o-DICHLOROBENZENE	18.81	146	221458	9.67	PPBV	99
101)	n-BUTYLBENZENE	19.10	134	111508	10.30	PPBV	99
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	94396	9.28	PPBV	100
103)	HEXACHLOROETHANE	19.56	201	176618	9.96	PPBV	99
104)	HEXACHLOROBUTADIENE	21.21	225	155708	8.88	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.12	180	75701	8.33	PPBV	100
106)	NAPHTHALENE	20.84	128	186937	8.32	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53482.D Vial: 2
Acq On : 12 Feb 2016 10:00 am Operator: YOUMINH
Sample : CC2140-10 Inst : MSW
Misc : MS96317,VW2141,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 15:58 2016 Quant Results File: MW2140.RES

Method : C:\MSDCHEM\1\METHODS\MW2140.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Fri Feb 12 15:48:53 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53823.D Vial: 4
Acq On : 1 Mar 2016 5:28 pm Operator: danat
Sample : ic2152-0.2 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:27:34 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:27:24 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.18	128	280261	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.90	114	1491504	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.16	82	606644	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.78	95	607440	8.36	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 83.60%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	4547	0.24	PPBV	#	63
4) CHLORODIFLUOROMETHANE	5.05	67	1887	0.27	PPBV	#	88
5) DICHLORODIFLUOROMETHANE	5.16	85	17735	0.24	PPBV		99
6) PROPYLENE	5.08	41	7278	0.30	PPBV		92
7) FREON 114	5.40	85	18723	0.23	PPBV		99
9) CHLOROMETHANE	5.32	52	2081	0.25	PPBV	#	60
10) VINYL CHLORIDE	5.52	62	7127	0.23	PPBV		98
11) 1,3-BUTADIENE	5.63	54	5693	0.23	PPBV	#	85
12) n-BUTANE	5.68	58	1644	0.23	PPBV	#	74
13) BROMOMETHANE	5.88	94	6457	0.23	PPBV		84
14) CHLOROETHANE	6.03	64	3910	0.23	PPBV		87
15) DICHLOROFLUOROMETHANE	6.09	67	14840	0.23	PPBV		95
16) ACROLEIN	6.43	56	4177	0.34	PPBV	#	73
17) TRICHLOROFLUOROMETHANE	6.68	101	16423	0.25	PPBV		95
18) ISOPROPYL ALCOHOL	6.74	45	18936	0.39	PPBV		84
19) ACETONE	6.55	58	4445	0.32	PPBV		93
21) ACRYLONITRILE	6.93	53	4865	0.22	PPBV		96
22) PENTANE	6.96	57	2598	0.31	PPBV	#	82
23) IODOMETHANE	7.18	142	17469	0.23	PPBV		100
24) 1,1-DICHLOROETHYLENE	7.22	96	7070	0.25	PPBV		94
25) CARBON DISULFIDE	7.62	76	22115	0.27	PPBV		91
27) ACETONITRILE	6.32	41	5033	0.22	PPBV	#	90
28) BROMOETHENE	6.33	106	6747	0.23	PPBV	#	97
29) METHYLENE CHLORIDE	7.32	84	7746	0.30	PPBV		98
30) 3-CHLOROPROPENE	7.41	76	3258	0.23	PPBV	#	89
31) FREON 113	7.53	151	11990	0.23	PPBV		98
32) TRANS-1,2-DICHLOROETHYLENE	8.11	96	7880	0.27	PPBV	#	82
33) TERTIARY BUTYL ALCOHOL	7.26	59	13884	0.24	PPBV		88
34) METHYL TERTIARY BUTYL ETHE	8.35	73	19233	0.25	PPBV		95
35) TETRAHYDROFURAN	9.69	72	2976	0.22	PPBV		93
36) HEXANE	9.19	57	11336	0.24	PPBV		95
37) VINYL ACETATE	8.40	86	1597	0.20	PPBV	#	63
38) 1,1-DICHLOROETHANE	8.29	63	12072	0.24	PPBV		99
39) METHYL ETHYL KETONE	8.64	72	2868	0.21	PPBV		99
40) cis-1,2-DICHLOROETHYLENE	9.03	96	8087	0.27	PPBV		85
41) DI-ISOPROPYL ETHER	9.18	87	5929	0.23	PPBV		99
42) ETHYL ACETATE	9.19	61	1923	0.21	PPBV	#	90
43) METHYL ACRYLATE	9.20	55	11337	0.22	PPBV		100
44) CHLOROFORM	9.29	83	12987	0.23	PPBV		97
45) 2,4-DIMETHYLPENTANE	9.97	57	12368	0.22	PPBV		97
46) 1,1,1-TRICHLOROETHANE	10.19	97	12848	0.23	PPBV		98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53823.D Vial: 4
Acq On : 1 Mar 2016 5:28 pm Operator: danat
Sample : ic2152-0.2 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:27:34 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:27:24 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	CARBON TETRACHLORIDE	10.75	117	13846	0.23	PPBV		100
48)	1,2-DICHLOROETHANE	9.96	62	7167	0.22	PPBV		99
50)	BENZENE	10.61	78	21906	0.23	PPBV		99
51)	CYCLOHEXANE	10.87	84	11657	0.27	PPBV	#	4
52)	2,3-DIMETHYLPENTANE	11.05	71	5152	0.24	PPBV		95
53)	TRICHLOROETHYLENE	11.58	95	8583	0.22	PPBV		97
54)	DIBROMOMETHANE	11.35	174	8437	0.21	PPBV		94
55)	1,2-DICHLOROPROPANE	11.36	63	8456	0.26	PPBV		87
56)	ETHYL ACRYLATE	11.32	55	12513	0.21	PPBV		97
57)	BROMODICHLOROMETHANE	11.55	83	13962	0.22	PPBV		97
58)	2,2,4-TRIMETHYLPENTANE	11.59	57	33753	0.22	PPBV		97
59)	1,4-DIOXANE	11.63	88	3279	0.19	PPBV	#	4
60)	METHYL METHACRYLATE	11.73	69	6818	0.21	PPBV		95
61)	HEPTANE	11.82	43	11777	0.22	PPBV		98
62)	METHYL ISOBUTYL KETONE	12.42	43	13638	0.22	PPBV		95
63)	cis-1,3-DICHLOROPROPENE	12.39	75	10504	0.20	PPBV		97
64)	TOLUENE	13.36	92	14030	0.21	PPBV		97
65)	1,3-DICHLOROPROPANE	13.38	76	10256	0.20	PPBV		94
66)	trans-1,3-DICHLOROPROPENE	12.89	75	6852	0.18	PPBV		98
67)	1,1,2-TRICHLOROETHANE	13.08	83	6171	0.21	PPBV		99
69)	ETHYL METHACRYLATE	13.58	69	10095	0.21	PPBV		96
70)	2-HEXANONE	13.60	58	6241	0.20	PPBV	#	84
71)	TETRACHLOROETHYLENE	14.50	164	10034	0.24	PPBV		97
72)	DIBROMOCHLOROMETHANE	13.80	129	13057	0.22	PPBV		96
73)	1,2-DIBROMOETHANE	14.05	107	8492	0.19	PPBV		97
74)	OCTANE	14.30	43	16146	0.25	PPBV		91
75)	1,1,1,2-TETRACHLOROETHANE	15.19	131	10506	0.24	PPBV	#	1
76)	CHLOROBENZENE	15.20	112	17980	0.23	PPBV		91
77)	ETHYLBENZENE	15.59	91	27464	0.23	PPBV		100
78)	m,p-XYLENE	15.78	106	22744	0.45	PPBV		94
79)	o-XYLENE	16.28	106	10879	0.23	PPBV		96
80)	STYRENE	16.17	104	14611	0.20	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.42	75	11463	0.25	PPBV		90
82)	NONANE	16.47	43	14185	0.22	PPBV		94
83)	BROMOFORM	15.89	173	11263	0.20	PPBV		98
85)	1,1,2,2-TETRACHLOROETHANE	16.28	83	14931	0.23	PPBV		96
86)	ISOPROPYLBENZENE	16.91	105	32989	0.23	PPBV		99
87)	BROMOBENZENE	17.03	156	7992	0.19	PPBV		92
88)	2-CHLOROTOLUENE	17.44	126	7167	0.21	PPBV	#	80
89)	n-PROPYLBENZENE	17.46	120	7800	0.21	PPBV		99
90)	4-ETHYLTOLUENE	17.62	105	22995	0.19	PPBV		97
91)	1,3,5-TRIMETHYLBENZENE	17.70	105	24063	0.21	PPBV		98
92)	ALPHA-METHYLSTYRENE	17.87	118	8647	0.17	PPBV		89
93)	TERT-BUTYLBENZENE	18.14	134	6794	0.23	PPBV		97
94)	1,2,4-TRIMETHYLBENZENE	18.15	105	21385	0.21	PPBV		90
95)	m-DICHLOROBENZENE	18.34	146	9141	0.16	PPBV		96
96)	BENZYL CHLORIDE	18.31	91	8359	0.13	PPBV		95
97)	p-DICHLOROBENZENE	18.42	146	8091	0.15	PPBV		91
98)	SEC-BUTYLBENZENE	18.45	134	7400	0.22	PPBV		97

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53823.D Vial: 4
Acq On : 1 Mar 2016 5:28 pm Operator: danat
Sample : ic2152-0.2 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:27:34 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:27:24 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

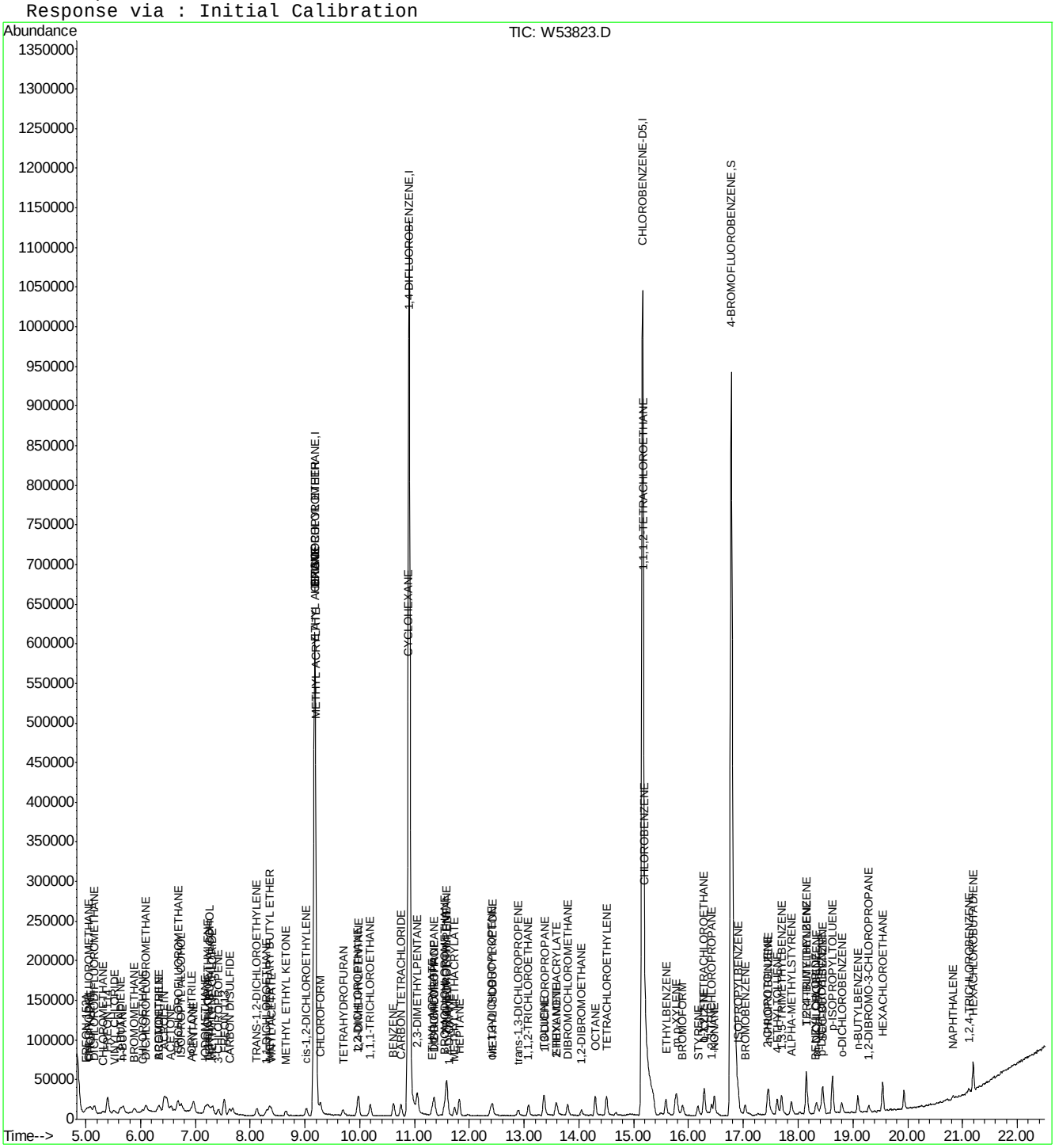
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
99)	p-ISOPROPYLTOLUENE	18.62	134	7301	0.21	PPBV	96
100)	o-DICHLOROBENZENE	18.80	146	9855	0.18	PPBV	93
101)	n-BUTYLBENZENE	19.09	134	4966	0.17	PPBV	95
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.29	157	3785	0.16	PPBV	97
103)	HEXACHLOROETHANE	19.55	201	9613	0.21	PPBV	89
104)	HEXACHLOROBUTADIENE	21.20	225	9411	0.22	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.11	180	2300	0.13	PPBV	96
106)	NAPHTHALENE	20.83	128	4884	0.12	PPBV	98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53823.D Vial: 4
Acq On : 1 Mar 2016 5:28 pm Operator: danat
Sample : ic2152-0.2 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 10:12 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53824.D Vial: 5
Acq On : 1 Mar 2016 6:09 pm Operator: danat
Sample : ic2152-0.5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:31:36 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:31:26 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	279291	10.00	PPBV	-0.01
49) 1,4-DIFLUOROBENZENE	10.89	114	1472191	10.00	PPBV	-0.01
68) CHLOROBENZENE-D5	15.16	82	600087	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.78	95	619405	9.39	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 93.90%			
Target Compounds						Qvalue
3) FREON 152A	4.99	65	9453	0.45	PPBV #	83
4) CHLORODIFLUOROMETHANE	5.02	67	3555	0.44	PPBV #	83
5) DICHLORODIFLUOROMETHANE	5.13	85	36189	0.44	PPBV	98
6) PROPYLENE	5.06	41	12493	0.41	PPBV	99
7) FREON 114	5.37	85	37741	0.43	PPBV	98
9) CHLOROMETHANE	5.29	52	4248	0.45	PPBV #	78
10) VINYL CHLORIDE	5.49	62	15064	0.45	PPBV	99
11) 1,3-BUTADIENE	5.61	54	11685	0.44	PPBV	96
12) n-BUTANE	5.66	58	3683	0.48	PPBV #	94
13) BROMOMETHANE	5.86	94	13332	0.44	PPBV	98
14) CHLOROETHANE	6.01	64	8001	0.44	PPBV	92
15) DICHLOROFLUOROMETHANE	6.07	67	31268	0.45	PPBV	97
16) ACROLEIN	6.41	56	7298	0.44	PPBV	86
17) TRICHLOROFLUOROMETHANE	6.66	101	32917	0.44	PPBV	96
18) ISOPROPYL ALCOHOL	6.70	45	28828	0.40	PPBV	95
19) ACETONE	6.52	58	8175	0.45	PPBV	99
21) ACRYLONITRILE	6.91	53	10904	0.47	PPBV	98
22) PENTANE	6.94	57	4834	0.46	PPBV #	93
23) IODOMETHANE	7.16	142	36061	0.44	PPBV	100
24) 1,1-DICHLOROETHYLENE	7.21	96	14090	0.44	PPBV	99
25) CARBON DISULFIDE	7.60	76	41906	0.44	PPBV	97
26) ETHANOL	6.09	45	6910	0.42	PPBV #	92
27) ACETONITRILE	6.30	41	11135	0.47	PPBV #	81
28) BROMOETHENE	6.31	106	13836	0.44	PPBV #	99
29) METHYLENE CHLORIDE	7.30	84	15582	0.49	PPBV	98
30) 3-CHLOROPROPENE	7.41	76	6508	0.43	PPBV #	84
31) FREON 113	7.50	151	25257	0.45	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.11	96	13598	0.40	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.22	59	26663	0.42	PPBV	80
34) METHYL TERTIARY BUTYL ETHE	8.33	73	37395	0.43	PPBV	94
35) TETRAHYDROFURAN	9.67	72	6870	0.48	PPBV	99
36) HEXANE	9.17	57	23179	0.45	PPBV	93
37) VINYL ACETATE	8.36	86	3525	0.45	PPBV #	75
38) 1,1-DICHLOROETHANE	8.29	63	24604	0.44	PPBV	99
39) METHYL ETHYL KETONE	8.63	72	6498	0.46	PPBV	98
40) cis-1,2-DICHLOROETHYLENE	9.01	96	14787	0.42	PPBV	99
41) DI-ISOPROPYL ETHER	9.16	87	12484	0.45	PPBV	98
42) ETHYL ACETATE	9.17	61	4683	0.50	PPBV #	91
43) METHYL ACRYLATE	9.18	55	25658	0.47	PPBV	97
44) CHLOROFORM	9.27	83	27361	0.45	PPBV	97
45) 2,4-DIMETHYLPENTANE	9.96	57	26343	0.45	PPBV	98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53824.D Vial: 5
Acq On : 1 Mar 2016 6:09 pm Operator: danat
Sample : ic2152-0.5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:31:36 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:31:26 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.18	97	27463	0.45	PPBV		99
47)	CARBON TETRACHLORIDE	10.74	117	28354	0.44	PPBV		98
48)	1,2-DICHLOROETHANE	9.95	62	15116	0.44	PPBV		99
50)	BENZENE	10.60	78	44967	0.45	PPBV		99
51)	CYCLOHEXANE	10.86	84	22263	0.45	PPBV	#	4
52)	2,3-DIMETHYLPENTANE	11.05	71	10812	0.46	PPBV		97
53)	TRICHLOROETHYLENE	11.57	95	18288	0.45	PPBV		97
54)	DIBROMOMETHANE	11.34	174	18302	0.45	PPBV		97
55)	1,2-DICHLOROPROPANE	11.36	63	17470	0.47	PPBV		92
56)	ETHYL ACRYLATE	11.30	55	27718	0.46	PPBV		97
57)	BROMODICHLOROMETHANE	11.53	83	28946	0.44	PPBV		98
58)	2,2,4-TRIMETHYLPENTANE	11.58	57	69296	0.44	PPBV		98
59)	1,4-DIOXANE	11.59	88	7517	0.46	PPBV	#	71
60)	METHYL METHACRYLATE	11.72	69	14405	0.44	PPBV		93
61)	HEPTANE	11.81	43	24055	0.44	PPBV		96
62)	METHYL ISOBUTYL KETONE	12.41	43	30595	0.48	PPBV		94
63)	cis-1,3-DICHLOROPROPENE	12.38	75	22056	0.42	PPBV		95
64)	TOLUENE	13.35	92	30368	0.45	PPBV		98
65)	1,3-DICHLOROPROPANE	13.37	76	22744	0.45	PPBV		94
66)	trans-1,3-DICHLOROPROPENE	12.89	75	15525	0.43	PPBV		97
67)	1,1,2-TRICHLOROETHANE	13.07	83	13216	0.44	PPBV		99
69)	ETHYL METHACRYLATE	13.57	69	23640	0.48	PPBV		97
70)	2-HEXANONE	13.58	58	14176	0.46	PPBV	#	82
71)	TETRACHLOROETHYLENE	14.50	164	21418	0.47	PPBV		98
72)	DIBROMOCHLOROMETHANE	13.79	129	28275	0.46	PPBV		96
73)	1,2-DIBROMOETHANE	14.05	107	19827	0.46	PPBV		99
74)	OCTANE	14.29	43	31489	0.44	PPBV		95
75)	1,1,1,2-TETRACHLOROETHANE	15.18	131	23413	0.49	PPBV	#	1
76)	CHLOROBENZENE	15.20	112	38165	0.46	PPBV	#	77
77)	ETHYLBENZENE	15.58	91	58790	0.46	PPBV		99
78)	m,p-XYLENE	15.77	106	49003	0.92	PPBV		95
79)	o-XYLENE	16.29	106	23049	0.46	PPBV		99
80)	STYRENE	16.17	104	31492	0.43	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.42	75	23769	0.46	PPBV		98
82)	NONANE	16.47	43	28558	0.43	PPBV		97
83)	BROMOFORM	15.89	173	25409	0.45	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.28	83	32717	0.47	PPBV		100
86)	ISOPROPYLBENZENE	16.91	105	70147	0.46	PPBV		99
87)	BROMOBENZENE	17.03	156	18367	0.45	PPBV		99
88)	2-CHLOROTOLUENE	17.44	126	15782	0.46	PPBV	#	74
89)	n-PROPYLBENZENE	17.46	120	17159	0.45	PPBV		98
90)	4-ETHYLTOLUENE	17.61	105	51438	0.45	PPBV		99
91)	1,3,5-TRIMETHYLBENZENE	17.69	105	52966	0.46	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.87	118	19418	0.42	PPBV		94
93)	TERT-BUTYLBENZENE	18.14	134	14066	0.45	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.15	105	46302	0.44	PPBV		94
95)	m-DICHLOROBENZENE	18.34	146	19380	0.38	PPBV		95
96)	BENZYL CHLORIDE	18.31	91	18854	0.37	PPBV		97
97)	p-DICHLOROBENZENE	18.41	146	19110	0.40	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53824.D Vial: 5
Acq On : 1 Mar 2016 6:09 pm Operator: danat
Sample : ic2152-0.5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:31:36 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:31:26 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

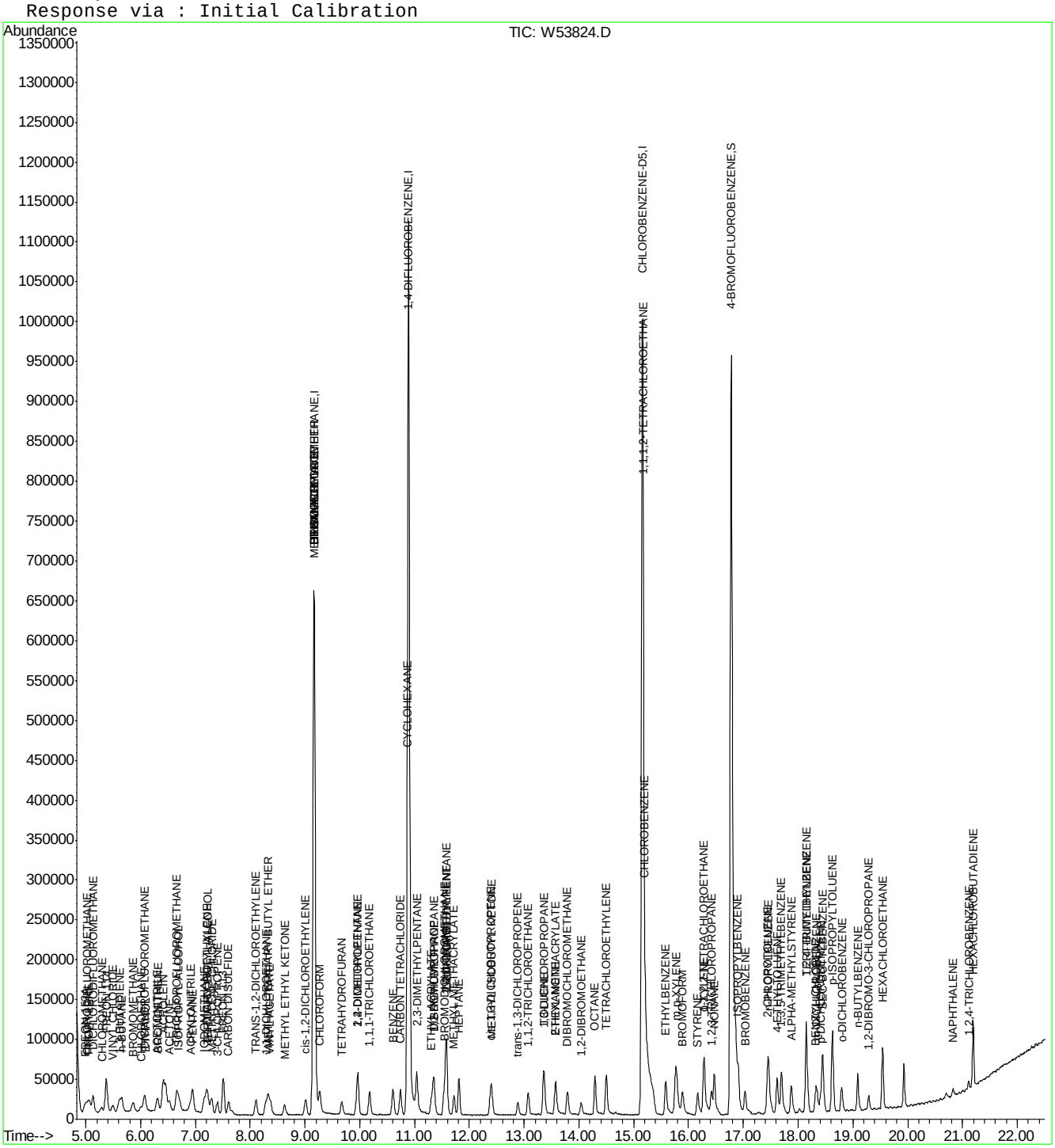
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.45	134	15960	0.46	PPBV	97
99)	p-ISOPROPYLTOLUENE	18.62	134	15845	0.45	PPBV	98
100)	o-DICHLOROBENZENE	18.80	146	22004	0.43	PPBV	98
101)	n-BUTYLBENZENE	19.09	134	10729	0.41	PPBV	97
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.29	157	8547	0.40	PPBV	98
103)	HEXACHLOROETHANE	19.55	201	21672	0.47	PPBV	97
104)	HEXACHLOROBUTADIENE	21.20	225	21551	0.48	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.11	180	4801	0.34	PPBV	94
106)	NAPHTHALENE	20.83	128	10232	0.31	PPBV	98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53824.D Vial: 5
Acq On : 1 Mar 2016 6:09 pm Operator: danat
Sample : ic2152-0.5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 8:32 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53825.D Vial: 6
Acq On : 1 Mar 2016 6:51 pm Operator: danat
Sample : ic2152-0.04 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:33:24 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:33:14 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

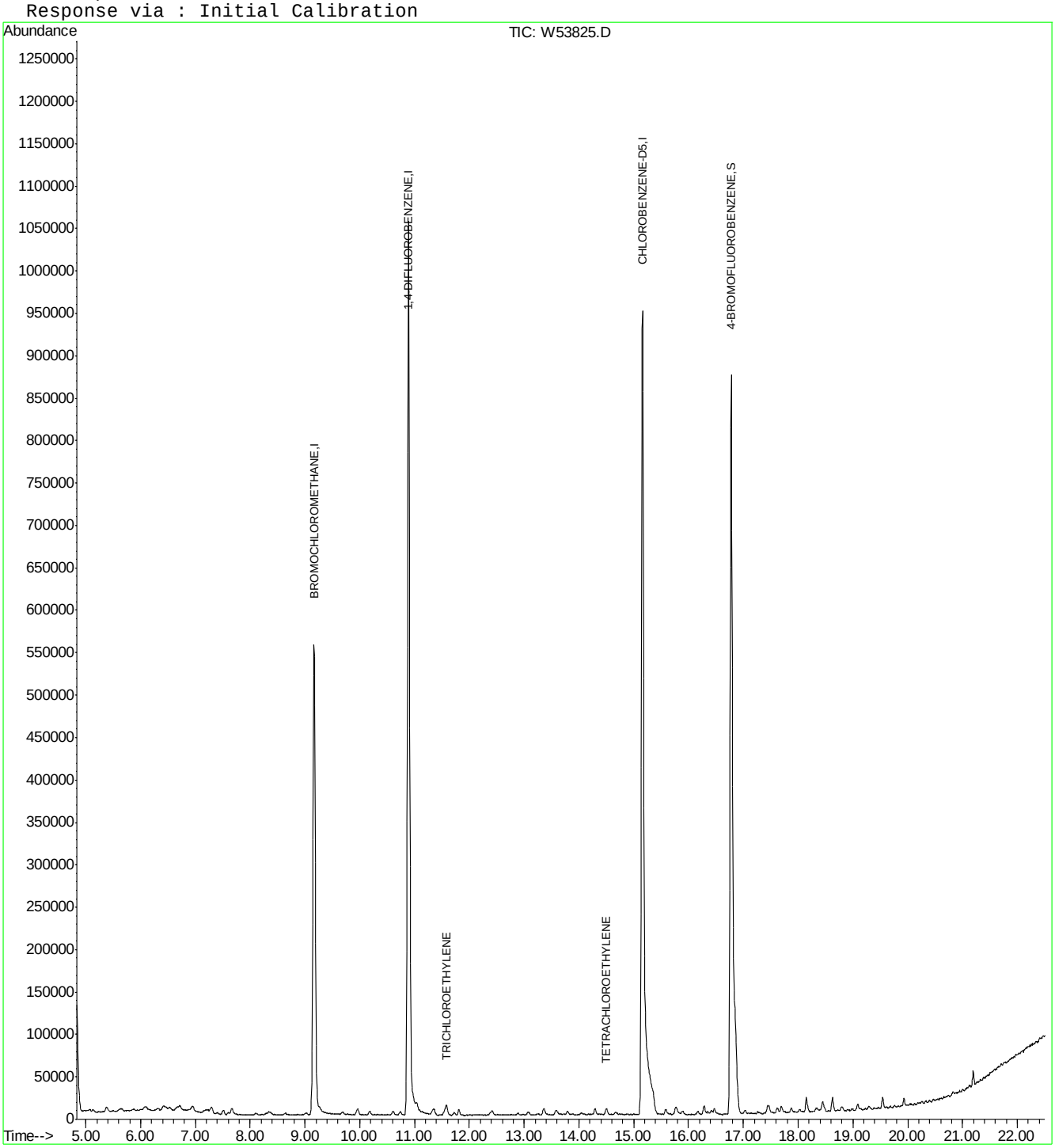
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	269058	10.00	PPBV	-0.01
49) 1,4-DIFLUOROBENZENE	10.89	114	1406857	10.00	PPBV	-0.01
68) CHLOROBENZENE-D5	15.16	82	567931	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.78	95	566543	9.26	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 92.60%			
Target Compounds						Qvalue
53) TRICHLOROETHYLENE	11.57	95	2449	0.07	PPBV	94
71) TETRACHLOROETHYLENE	14.50	164	2742	0.06	PPBV	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W53825.D MW2152.M Thu Mar 03 11:07:04 2016 MSW Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53825.D Vial: 6
Acq On : 1 Mar 2016 6:51 pm Operator: danat
Sample : ic2152-0.04 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 8:52 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



7.7.27

7

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53826.D Vial: 7
Acq On : 1 Mar 2016 7:32 pm Operator: danat
Sample : ic2152-5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:33:38 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:33:14 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	276901	10.00	PPBV		0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1445998	10.00	PPBV		0.00
68) CHLOROBENZENE-D5	15.16	82	636640	10.00	PPBV		0.00
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.78	95	766971	11.18	PPBV		0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 111.80%				
Target Compounds							Qvalue
3) FREON 152A	4.99	65	106151	5.29	PPBV		95
4) CHLORODIFLUOROMETHANE	5.04	67	39199	5.08	PPBV		99
5) DICHLORODIFLUOROMETHANE	5.14	85	410392	5.28	PPBV		99
6) PROPYLENE	5.07	41	136587	4.84	PPBV		98
7) FREON 114	5.38	85	437881	5.32	PPBV		98
9) CHLOROMETHANE	5.29	52	47232	5.25	PPBV	#	87
10) VINYL CHLORIDE	5.50	62	172402	5.39	PPBV		100
11) 1,3-BUTADIENE	5.62	54	135598	5.38	PPBV		98
12) n-BUTANE	5.66	58	39421	5.26	PPBV	#	95
13) BROMOMETHANE	5.87	94	149530	5.21	PPBV		99
14) CHLOROETHANE	6.01	64	93402	5.36	PPBV		99
15) DICHLOROFLUOROMETHANE	6.08	67	352515	5.31	PPBV		99
16) ACROLEIN	6.40	56	69225	4.38	PPBV		98
17) TRICHLOROFLUOROMETHANE	6.66	101	381180	5.38	PPBV		100
18) ISOPROPYL ALCOHOL	6.70	45	297125	4.49	PPBV		99
19) ACETONE	6.52	58	78038	4.51	PPBV		95
21) ACRYLONITRILE	6.90	53	125529	5.60	PPBV		99
22) PENTANE	6.96	57	48282	4.74	PPBV		97
23) IODOMETHANE	7.16	142	417317	5.38	PPBV		99
24) 1,1-DICHLOROETHYLENE	7.21	96	160439	5.28	PPBV		99
25) CARBON DISULFIDE	7.61	76	471246	5.19	PPBV		99
26) ETHANOL	6.09	45	62486	4.06	PPBV		98
27) ACETONITRILE	6.29	41	125368	5.44	PPBV		100
28) BROMOETHENE	6.32	106	153908	5.15	PPBV		100
29) METHYLENE CHLORIDE	7.30	84	141764	4.50	PPBV		97
30) 3-CHLOROPROPENE	7.41	76	78532	5.48	PPBV		96
31) FREON 113	7.51	151	290131	5.43	PPBV		99
32) TRANS-1,2-DICHLOROETHYLENE	8.11	96	159721	5.08	PPBV		99
33) TERTIARY BUTYL ALCOHOL	7.21	59	355236	5.95	PPBV		97
34) METHYL TERTIARY BUTYL ETHE	8.32	73	457866	5.61	PPBV		99
35) TETRAHYDROFURAN	9.66	72	79869	5.71	PPBV		96
36) HEXANE	9.18	57	269725	5.44	PPBV		97
37) VINYL ACETATE	8.38	86	44769	5.94	PPBV	#	94
38) 1,1-DICHLOROETHANE	8.29	63	294076	5.56	PPBV		99
39) METHYL ETHYL KETONE	8.61	72	80821	5.95	PPBV		98
40) cis-1,2-DICHLOROETHYLENE	9.02	96	167826	5.06	PPBV		98
41) DI-ISOPROPYL ETHER	9.15	87	153026	5.77	PPBV		99
42) ETHYL ACETATE	9.17	61	53810	5.80	PPBV		97
43) METHYL ACRYLATE	9.18	55	302880	5.75	PPBV		99
44) CHLOROFORM	9.27	83	317426	5.49	PPBV		99
45) 2,4-DIMETHYLPENTANE	9.97	57	315197	5.62	PPBV		100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53826.D Vial: 7
Acq On : 1 Mar 2016 7:32 pm Operator: danat
Sample : ic2152-5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:33:38 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:33:14 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.18	97	329141	5.67	PPBV		100
47)	CARBON TETRACHLORIDE	10.75	117	342555	5.60	PPBV		100
48)	1,2-DICHLOROETHANE	9.95	62	181351	5.58	PPBV		100
50)	BENZENE	10.61	78	536895	5.62	PPBV		100
51)	CYCLOHEXANE	10.86	84	241174	5.11	PPBV		94
52)	2,3-DIMETHYLPENTANE	11.05	71	123500	5.49	PPBV		99
53)	TRICHLOROETHYLENE	11.58	95	214971	5.56	PPBV		99
54)	DIBROMOMETHANE	11.35	174	220398	5.71	PPBV		99
55)	1,2-DICHLOROPROPANE	11.36	63	182558	5.13	PPBV		100
56)	ETHYL ACRYLATE	11.30	55	352954	6.12	PPBV		100
57)	BROMODICHLOROMETHANE	11.54	83	354396	5.72	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.58	57	860335	5.75	PPBV		100
59)	1,4-DIOXANE	11.58	88	102342	6.53	PPBV	#	85
60)	METHYL METHACRYLATE	11.72	69	191545	6.19	PPBV		98
61)	HEPTANE	11.81	43	298607	5.77	PPBV		98
62)	METHYL ISOBUTYL KETONE	12.40	43	360008	5.81	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.38	75	284184	5.84	PPBV		98
64)	TOLUENE	13.35	92	377794	5.87	PPBV		99
65)	1,3-DICHLOROPROPANE	13.37	76	286081	5.93	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.89	75	211141	6.24	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.08	83	168041	5.93	PPBV		99
69)	ETHYL METHACRYLATE	13.56	69	311962	6.09	PPBV		100
70)	2-HEXANONE	13.58	58	199797	6.29	PPBV		98
71)	TETRACHLOROETHYLENE	14.50	164	267150	5.61	PPBV		100
72)	DIBROMOCHLOROMETHANE	13.79	129	361029	5.70	PPBV		100
73)	1,2-DIBROMOETHANE	14.05	107	261148	5.87	PPBV		100
74)	OCTANE	14.30	43	402815	5.53	PPBV		99
75)	1,1,1,2-TETRACHLOROETHANE	15.19	131	281318	5.60	PPBV	#	73
76)	CHLOROBENZENE	15.21	112	489095	5.69	PPBV		99
77)	ETHYLBENZENE	15.58	91	746922	5.67	PPBV		100
78)	m,p-XYLENE	15.77	106	640594	11.66	PPBV		99
79)	o-XYLENE	16.29	106	308972	5.93	PPBV		100
80)	STYRENE	16.17	104	461532	6.25	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.42	75	299273	5.64	PPBV		99
82)	NONANE	16.47	43	409500	6.07	PPBV		99
83)	BROMOFORM	15.89	173	346060	6.02	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.28	83	425177	5.88	PPBV		100
86)	ISOPROPYLBENZENE	16.91	105	924351	5.88	PPBV		100
87)	BROMOBENZENE	17.03	156	257049	6.18	PPBV		98
88)	2-CHLOROTOLUENE	17.44	126	212841	6.00	PPBV	#	74
89)	n-PROPYLBENZENE	17.46	120	243843	6.26	PPBV		98
90)	4-ETHYLTOLUENE	17.62	105	753948	6.38	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.70	105	748080	6.28	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.87	118	324251	6.94	PPBV		99
93)	TERT-BUTYLBENZENE	18.15	134	192217	5.98	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.16	105	673901	6.32	PPBV		99
95)	m-DICHLOROBENZENE	18.34	146	350077	7.09	PPBV		100
96)	BENZYL CHLORIDE	18.31	91	377967	7.59	PPBV		100
97)	p-DICHLOROBENZENE	18.41	146	334041	7.12	PPBV		100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53826.D Vial: 7
Acq On : 1 Mar 2016 7:32 pm Operator: danat
Sample : ic2152-5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:33:38 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:33:14 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

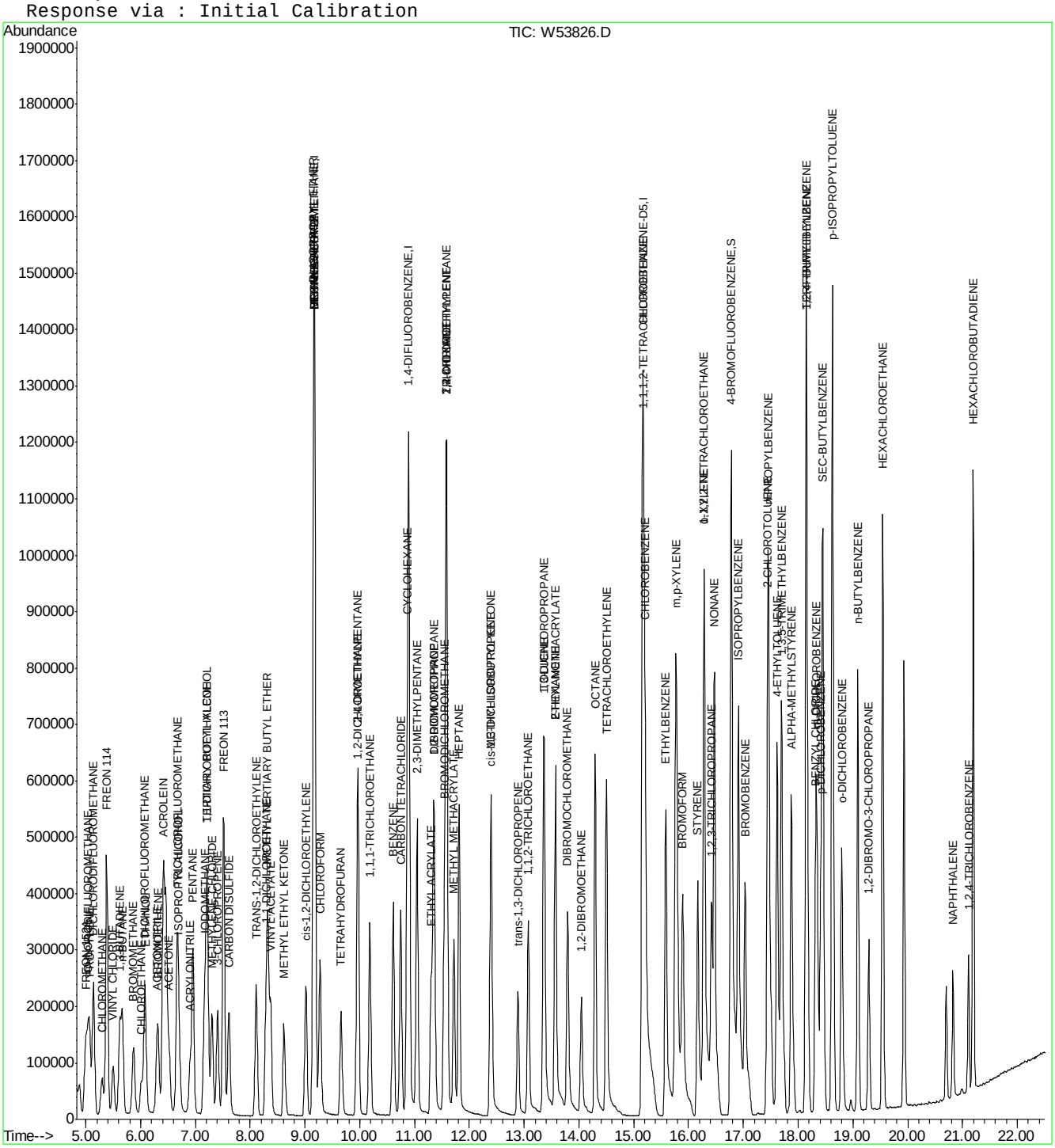
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.45	134	222015	6.15	PPBV	99
99)	p-ISOPROPYLTOLUENE	18.62	134	233520	6.42	PPBV	100
100)	o-DICHLOROBENZENE	18.80	146	346898	6.68	PPBV	99
101)	n-BUTYLBENZENE	19.09	134	185980	7.07	PPBV	99
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.29	157	149530	7.12	PPBV	100
103)	HEXACHLOROETHANE	19.55	201	295742	6.13	PPBV	100
104)	HEXACHLOROBUTADIENE	21.20	225	287386	6.14	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.11	180	112012	8.30	PPBV	100
106)	NAPHTHALENE	20.83	128	251695	8.23	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53826.D Vial: 7
Acq On : 1 Mar 2016 7:32 pm Operator: danat
Sample : ic2152-5 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 8:34 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53827.D Vial: 8
Acq On : 1 Mar 2016 8:13 pm Operator: danat
Sample : icc2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:22:27 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Tue Mar 01 16:38:15 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.18	128	296507	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.90	114	1567400	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.16	82	717878	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.78	95	860252	10.60	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 106.00%			
Target Compounds						Qvalue
3) FREON 152A	5.01	65	203732	9.57	PPBV	100
4) CHLORODIFLUOROMETHANE	5.05	67	72596	9.14	PPBV	100
5) DICHLORODIFLUOROMETHANE	5.15	85	790036	9.70	PPBV	100
6) PROPYLENE	5.08	41	256541	9.30	PPBV	99
7) FREON 114	5.40	85	854618	9.55	PPBV	100
9) CHLOROMETHANE	5.31	52	88787	9.37	PPBV	100
10) VINYL CHLORIDE	5.51	62	330373	9.67	PPBV	100
11) 1,3-BUTADIENE	5.63	54	259778	9.65	PPBV	97
12) n-BUTANE	5.68	58	75527	9.71	PPBV	97
13) BROMOMETHANE	5.88	94	297570	9.39	PPBV	100
14) CHLOROETHANE	6.03	64	183364	9.78	PPBV	99
15) DICHLOROFLUOROMETHANE	6.09	67	685367	9.51	PPBV	100
16) ACROLEIN	6.41	56	131850	7.42	PPBV	98
17) TRICHLOROFLUOROMETHANE	6.68	101	707769	9.17	PPBV	100
18) ISOPROPYL ALCOHOL	6.71	45	511985	7.36	PPBV	100
19) ACETONE	6.52	58	147250	8.29	PPBV	97
21) ACRYLONITRILE	6.91	53	230977	8.90	PPBV	99
22) PENTANE	6.97	57	87436	7.57	PPBV	96
23) IODOMETHANE	7.18	142	800432	9.14	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.22	96	302457	9.12	PPBV	96
25) CARBON DISULFIDE	7.62	76	857005	8.74	PPBV	99
26) ETHANOL	6.11	45	111013	7.30	PPBV	99
27) ACETONITRILE	6.30	41	237363	9.60	PPBV	99
28) BROMOETHENE	6.33	106	309405	9.24	PPBV	99
29) METHYLENE CHLORIDE	7.32	84	270836	8.96	PPBV	98
30) 3-CHLOROPROPENE	7.41	76	149555	9.31	PPBV	96
31) FREON 113	7.52	151	545276	9.05	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.12	96	304406	9.04	PPBV	98
33) TERTIARY BUTYL ALCOHOL	7.22	59	617327	8.79	PPBV	99
34) METHYL TERTIARY BUTYL ETHE	8.33	73	810471	8.96	PPBV	99
35) TETRAHYDROFURAN	9.66	72	145959	9.22	PPBV	99
36) HEXANE	9.18	57	500388	9.27	PPBV	99
37) VINYL ACETATE	8.38	86	82856	9.63	PPBV #	89
38) 1,1-DICHLOROETHANE	8.30	63	537254	9.32	PPBV	100
39) METHYL ETHYL KETONE	8.62	72	146649	9.33	PPBV	96
40) cis-1,2-DICHLOROETHYLENE	9.02	96	322816	8.92	PPBV	98
41) DI-ISOPROPYL ETHER	9.16	87	272616	9.06	PPBV	98
42) ETHYL ACETATE	9.17	61	96655	9.19	PPBV #	90
43) METHYL ACRYLATE	9.18	55	547721	9.26	PPBV	99
44) CHLOROFORM	9.28	83	590681	9.27	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.97	57	586987	9.45	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53827.D Vial: 8
Acq On : 1 Mar 2016 8:13 pm Operator: danat
Sample : icc2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:22:27 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Tue Mar 01 16:38:15 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.19	97	603325	9.24	PPBV		100
47)	CARBON TETRACHLORIDE	10.75	117	629910	9.23	PPBV		100
48)	1,2-DICHLOROETHANE	9.95	62	343668	9.35	PPBV		100
50)	BENZENE	10.61	78	999049	9.15	PPBV		100
51)	CYCLOHEXANE	10.87	84	449330	8.66	PPBV		99
52)	2,3-DIMETHYLPENTANE	11.05	71	230359	9.23	PPBV		98
53)	TRICHLOROETHYLENE	11.58	95	416954	9.42	PPBV		100
54)	DIBROMOMETHANE	11.35	174	421830	9.26	PPBV		99
55)	1,2-DICHLOROPROPANE	11.36	63	340179	8.80	PPBV		100
56)	ETHYL ACRYLATE	11.30	55	629214	9.43	PPBV		100
57)	BROMODICHLOROMETHANE	11.55	83	664564	9.36	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.59	57	1612305	9.36	PPBV		100
59)	1,4-DIOXANE	11.58	88	177376	9.30	PPBV	#	71
60)	METHYL METHACRYLATE	11.72	69	341453	9.06	PPBV		99
61)	HEPTANE	11.81	43	550927	9.57	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.40	43	646849	9.07	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.39	75	561447	9.62	PPBV		99
64)	TOLUENE	13.36	92	708786	9.38	PPBV		100
65)	1,3-DICHLOROPROPANE	13.38	76	545551	9.68	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.89	75	410191	9.97	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.08	83	315264	9.49	PPBV		99
69)	ETHYL METHACRYLATE	13.57	69	569170	8.97	PPBV		99
70)	2-HEXANONE	13.58	58	366127	9.04	PPBV		99
71)	TETRACHLOROETHYLENE	14.50	164	505225	8.75	PPBV		100
72)	DIBROMOCHLOROMETHANE	13.80	129	694696	9.16	PPBV		100
73)	1,2-DIBROMOETHANE	14.05	107	527210	9.35	PPBV		100
74)	OCTANE	14.30	43	755636	8.92	PPBV		99
75)	1,1,1,2-TETRACHLOROETHANE	15.19	131	519087	8.57	PPBV		83
76)	CHLOROBENZENE	15.21	112	931375	8.72	PPBV		100
77)	ETHYLBENZENE	15.59	91	1427087	8.85	PPBV		100
78)	m,p-XYLENE	15.78	106	1198291	17.90	PPBV		99
79)	o-XYLENE	16.29	106	568097	8.99	PPBV		100
80)	STYRENE	16.17	104	880133	9.36	PPBV		100
81)	1,2,3-TRICHLOROPROPANE	16.42	75	548299	8.53	PPBV		99
82)	NONANE	16.47	43	760967	9.44	PPBV		99
83)	BROMOFORM	15.89	173	669888	9.34	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.28	83	778658	8.84	PPBV		100
86)	ISOPROPYLBENZENE	16.91	105	1691670	8.80	PPBV		100
87)	BROMOBENZENE	17.03	156	493859	9.25	PPBV		99
88)	2-CHLOROTOLUENE	17.44	126	399277	9.09	PPBV	#	80
89)	n-PROPYLBENZENE	17.46	120	446600	9.21	PPBV		97
90)	4-ETHYLTOLUENE	17.62	105	1404203	9.37	PPBV		100
91)	1,3,5-TRIMETHYLBENZENE	17.70	105	1340901	9.01	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.87	118	605051	9.67	PPBV		99
93)	TERT-BUTYLBENZENE	18.15	134	348851	8.91	PPBV		100
94)	1,2,4-TRIMETHYLBENZENE	18.16	105	1232398	9.24	PPBV		99
95)	m-DICHLOROBENZENE	18.34	146	666833	10.27	PPBV		100
96)	BENZYL CHLORIDE	18.32	91	738115	10.77	PPBV		100
97)	p-DICHLOROBENZENE	18.42	146	651265	10.22	PPBV		100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53827.D Vial: 8
Acq On : 1 Mar 2016 8:13 pm Operator: danat
Sample : icc2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:22:27 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Tue Mar 01 16:38:15 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

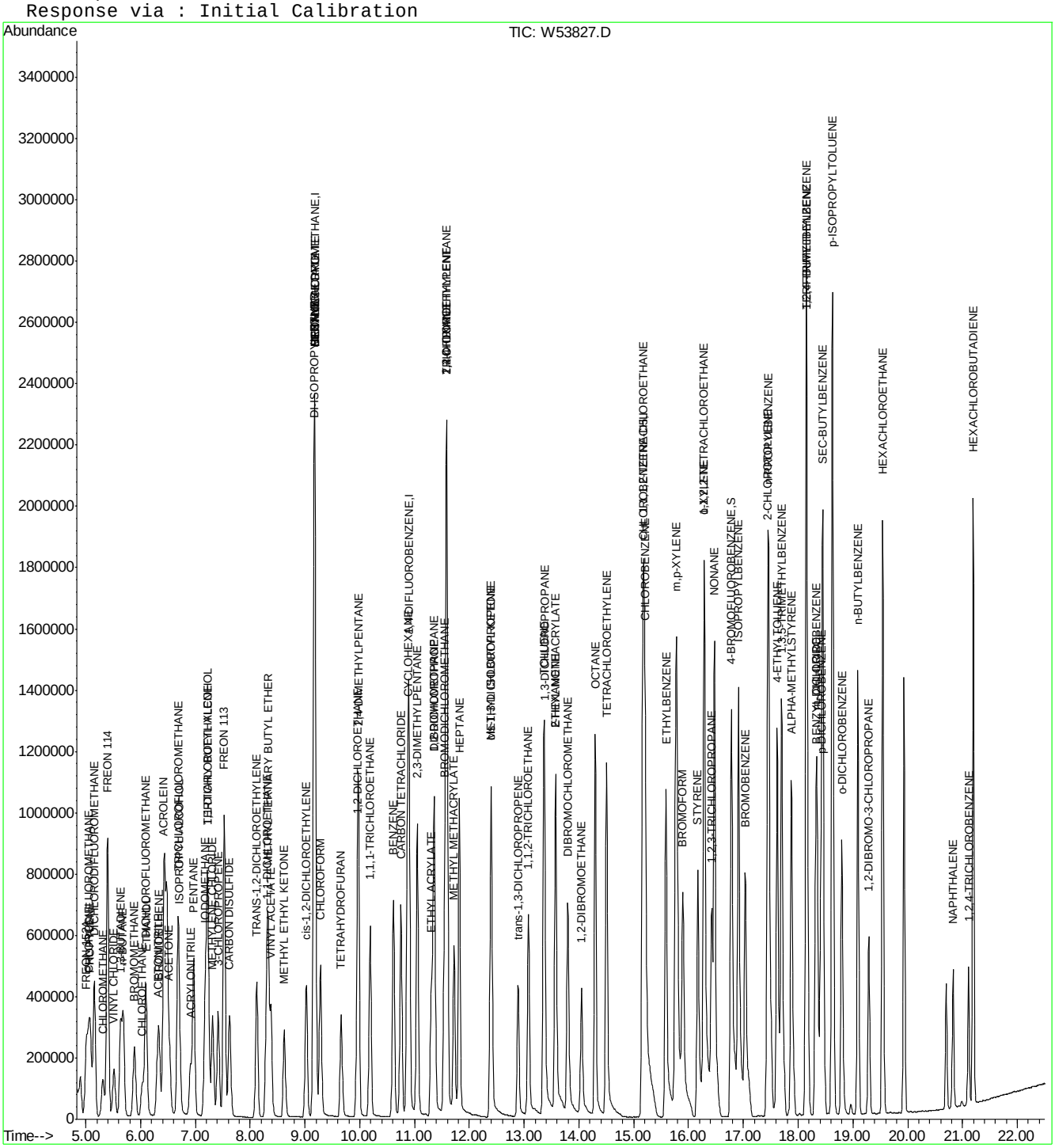
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.45	134	400992	9.01	PPBV	99
99)	p-ISOPROPYLTOLUENE	18.62	134	419869	9.23	PPBV	99
100)	o-DICHLOROBENZENE	18.80	146	646477	9.68	PPBV	100
101)	n-BUTYLBENZENE	19.09	134	339079	9.86	PPBV	100
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.29	157	282077	9.67	PPBV	100
103)	HEXACHLOROETHANE	19.55	201	544885	9.21	PPBV	99
104)	HEXACHLOROBUTADIENE	21.20	225	510637	8.01	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.11	180	205818	9.27	PPBV	100
106)	NAPHTHALENE	20.83	128	500192	10.50	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53827.D Vial: 8
Acq On : 1 Mar 2016 8:13 pm Operator: danat
Sample : icc2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 8:23 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



W53827.D MW2152.M Thu Mar 03 11:07:19 2016 MSW Page 4

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53828.D Vial: 9
Acq On : 1 Mar 2016 8:54 pm Operator: danat
Sample : ic2152-20 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:35:36 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:35:28 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	315223	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1632931	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.16	82	804339	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.78	95	972092	10.90	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 109.00%			
Target Compounds						Qvalue
3) FREON 152A	4.98	65	411521	17.75	PPBV	99
4) CHLORODIFLUOROMETHANE	5.02	67	145143	16.46	PPBV	99
5) DICHLORODIFLUOROMETHANE	5.13	85	1549875	17.28	PPBV	100
6) PROPYLENE	5.06	41	498656	15.64	PPBV	99
7) FREON 114	5.36	85	1758806	18.46	PPBV	99
9) CHLOROMETHANE	5.29	52	183751	17.72	PPBV	96
10) VINYL CHLORIDE	5.49	62	693078	18.67	PPBV	99
11) 1,3-BUTADIENE	5.60	54	546636	18.71	PPBV	98
12) n-BUTANE	5.65	58	154032	17.83	PPBV	100
13) BROMOMETHANE	5.86	94	612059	18.54	PPBV	100
14) CHLOROETHANE	6.00	64	379855	18.80	PPBV	99
15) DICHLOROFLUOROMETHANE	6.07	67	1412115	18.39	PPBV	100
16) ACROLEIN	6.40	56	293649	16.84	PPBV	99
17) TRICHLOROFLUOROMETHANE	6.66	101	1457669	17.74	PPBV	100
18) ISOPROPYL ALCOHOL	6.69	45	1041737	14.19	PPBV	99
19) ACETONE	6.50	58	329269	17.13	PPBV	96
21) ACRYLONITRILE	6.89	53	519359	19.76	PPBV	99
22) PENTANE	6.94	57	182280	15.92	PPBV	99
23) IODOMETHANE	7.16	142	1673669	18.61	PPBV	100
24) 1,1-DICHLOROETHYLENE	7.20	96	633824	18.08	PPBV	98
25) CARBON DISULFIDE	7.60	76	1759609	16.86	PPBV	100
26) ETHANOL	6.08	45	234767	14.05	PPBV	99
27) ACETONITRILE	6.28	41	525169	19.59	PPBV	99
28) BROMOETHENE	6.31	106	633823	18.49	PPBV	99
29) METHYLENE CHLORIDE	7.30	84	566389	16.21	PPBV	100
30) 3-CHLOROPROPENE	7.40	76	315739	18.91	PPBV	98
31) FREON 113	7.50	151	1153299	18.57	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.10	96	640618	17.83	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.21	59	1262604	17.73	PPBV	100
34) METHYL TERTIARY BUTYL ETHE	8.32	73	1827663	19.09	PPBV	100
35) TETRAHYDROFURAN	9.64	72	330486	20.05	PPBV	99
36) HEXANE	9.17	57	1055012	18.29	PPBV	100
37) VINYL ACETATE	8.37	86	188654	21.00	PPBV #	94
38) 1,1-DICHLOROETHANE	8.28	63	1122196	18.14	PPBV	99
39) METHYL ETHYL KETONE	8.61	72	330196	20.39	PPBV	100
40) cis-1,2-DICHLOROETHYLENE	9.01	96	681853	18.02	PPBV	99
41) DI-ISOPROPYL ETHER	9.15	87	621623	19.84	PPBV	99
42) ETHYL ACETATE	9.16	61	225942	20.58	PPBV #	88
43) METHYL ACRYLATE	9.17	55	1256321	20.19	PPBV	99
44) CHLOROFORM	9.27	83	1249860	18.53	PPBV	100
45) 2,4-DIMETHYLPENTANE	9.96	57	1235349	18.78	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53828.D Vial: 9
Acq On : 1 Mar 2016 8:54 pm Operator: danat
Sample : ic2152-20 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:35:36 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:35:28 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.18	97	1265991	18.53	PPBV		100
47)	CARBON TETRACHLORIDE	10.74	117	1327192	18.51	PPBV		100
48)	1,2-DICHLOROETHANE	9.94	62	736468	19.35	PPBV		99
50)	BENZENE	10.61	78	2131391	19.16	PPBV		100
51)	CYCLOHEXANE	10.86	84	939336	17.52	PPBV		97
52)	2,3-DIMETHYLPENTANE	11.04	71	493602	18.97	PPBV		99
53)	TRICHLOROETHYLENE	11.58	95	919993	20.50	PPBV		100
54)	DIBROMOMETHANE	11.35	174	933983	20.70	PPBV		100
55)	1,2-DICHLOROPROPANE	11.36	63	747753	18.50	PPBV		100
56)	ETHYL ACRYLATE	11.30	55	1493039	21.70	PPBV		98
57)	BROMODICHLOROMETHANE	11.54	83	1446414	19.96	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.58	57	3487613	19.91	PPBV		100
59)	1,4-DIOXANE	11.57	88	407838	21.40	PPBV	#	61
60)	METHYL METHACRYLATE	11.72	69	762592	20.59	PPBV		95
61)	HEPTANE	11.81	43	1184678	19.53	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.40	43	1490474	20.47	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.38	75	1274754	22.26	PPBV		99
64)	TOLUENE	13.36	92	1596032	21.05	PPBV		100
65)	1,3-DICHLOROPROPANE	13.38	76	1233846	21.64	PPBV		100
66)	trans-1,3-DICHLOROPROPENE	12.89	75	993641	24.48	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.08	83	699571	20.90	PPBV		99
69)	ETHYL METHACRYLATE	13.56	69	1358885	19.92	PPBV		100
70)	2-HEXANONE	13.58	58	878480	20.56	PPBV		98
71)	TETRACHLOROETHYLENE	14.50	164	1131263	18.24	PPBV		100
72)	DIBROMOCHLOROMETHANE	13.80	129	1567859	18.92	PPBV		100
73)	1,2-DIBROMOETHANE	14.05	107	1250997	21.34	PPBV		100
74)	OCTANE	14.30	43	1680435	17.79	PPBV		99
75)	1,1,1,2-TETRACHLOROETHANE	15.19	131	1173091	17.93	PPBV	#	70
76)	CHLOROBENZENE	15.21	112	2144831	19.09	PPBV		100
77)	ETHYLBENZENE	15.59	91	3308323	19.23	PPBV		100
78)	m,p-XYLENE	15.78	106	2774984	38.39	PPBV		99
79)	o-XYLENE	16.29	106	1317899	19.13	PPBV		99
80)	STYRENE	16.17	104	2098523	21.17	PPBV		100
81)	1,2,3-TRICHLOROPROPANE	16.42	75	1287583	18.61	PPBV		99
82)	NONANE	16.47	43	1732910	19.29	PPBV		99
83)	BROMOFORM	15.89	173	1589269	20.82	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.28	83	1844732	19.35	PPBV		100
86)	ISOPROPYLBENZENE	16.91	105	3930802	18.95	PPBV		100
87)	BROMOBENZENE	17.03	156	1188528	21.37	PPBV		99
88)	2-CHLOROTOLUENE	17.44	126	933385	19.82	PPBV		95
89)	n-PROPYLBENZENE	17.46	120	1071226	20.47	PPBV		95
90)	4-ETHYLTOLUENE	17.62	105	3391266	21.26	PPBV		100
91)	1,3,5-TRIMETHYLBENZENE	17.70	105	3125424	19.51	PPBV		100
92)	ALPHA-METHYLSTYRENE	17.87	118	1475239	22.77	PPBV		100
93)	TERT-BUTYLBENZENE	18.15	134	820037	19.25	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.16	105	2954853	20.58	PPBV		98
95)	m-DICHLOROBENZENE	18.34	146	1695962	24.60	PPBV		100
96)	BENZYL CHLORIDE	18.31	91	2021793	28.46	PPBV		100
97)	p-DICHLOROBENZENE	18.41	146	1696846	25.88	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53828.D Vial: 9
Acq On : 1 Mar 2016 8:54 pm Operator: danat
Sample : ic2152-20 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:35:36 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:35:28 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

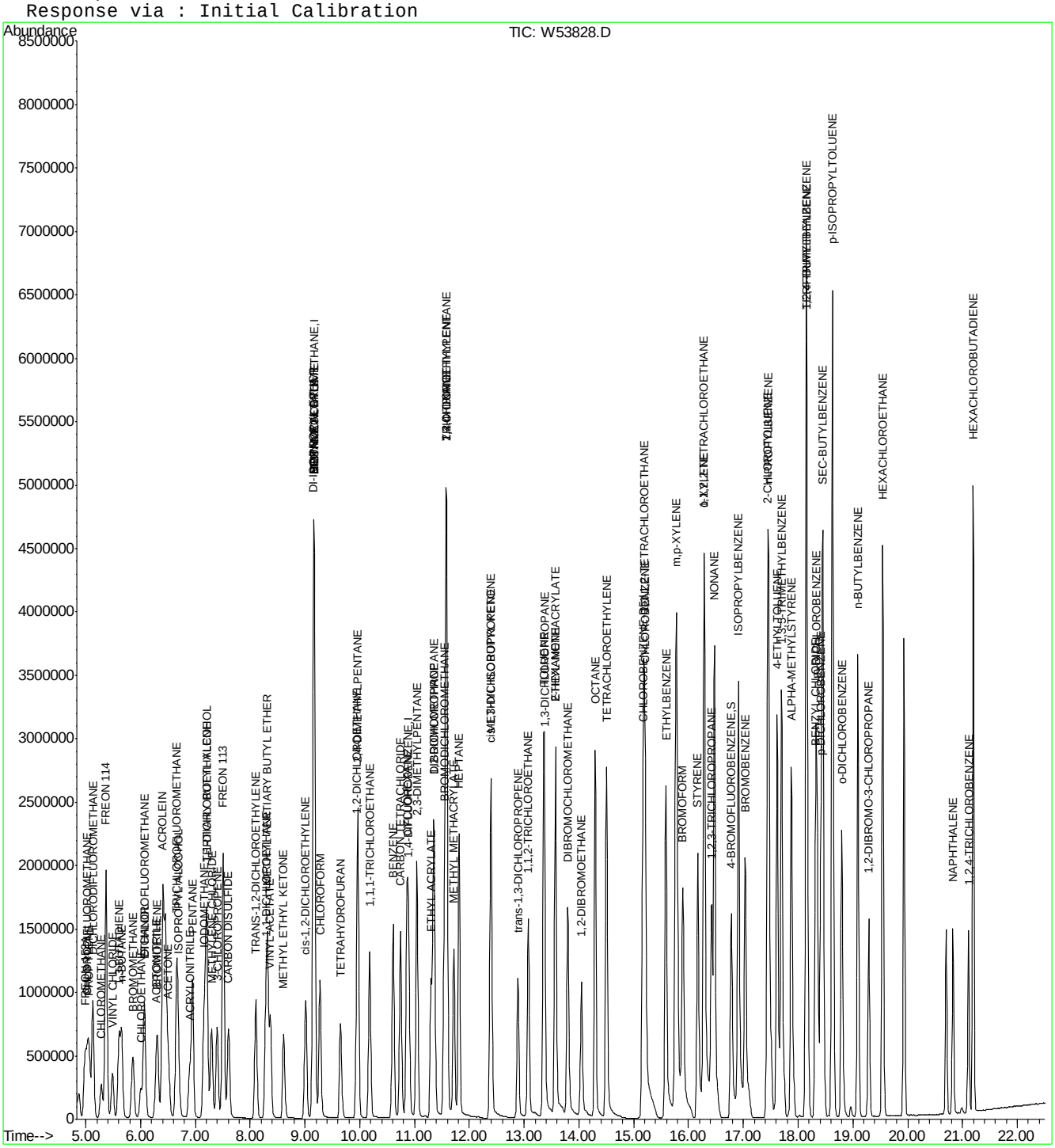
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.45	134	946167	19.62	PPBV	98
99)	p-ISOPROPYLTOLUENE	18.62	134	1004189	20.40	PPBV	99
100)	o-DICHLOROBENZENE	18.80	146	1591150	22.38	PPBV	100
101)	n-BUTYLBENZENE	19.09	134	833629	22.73	PPBV	100
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.29	157	748129	25.49	PPBV	100
103)	HEXACHLOROETHANE	19.55	201	1245457	19.34	PPBV	100
104)	HEXACHLOROBUTADIENE	21.20	225	1269996	20.32	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.11	180	649596	32.69	PPBV	99
106)	NAPHTHALENE	20.83	128	1587065	35.38	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53828.D Vial: 9
Acq On : 1 Mar 2016 8:54 pm Operator: danat
Sample : ic2152-20 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 8:36 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53830.D Vial: 11
Acq On : 1 Mar 2016 10:16 pm Operator: danat
Sample : ic2152-40 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:37:30 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:37:18 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.17	128	329014	10.00	PPBV	0.00
49) 1,4-DIFLUOROBENZENE	10.89	114	1708540	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.17	82	917558	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.78	95	1069953	10.33	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 103.30%			
Target Compounds						Qvalue
3) FREON 152A	4.98	65	752959	31.83	PPBV	100
4) CHLORODIFLUOROMETHANE	5.02	67	267308	30.10	PPBV	98
5) DICHLORODIFLUOROMETHANE	5.13	85	2879063	31.61	PPBV	100
6) PROPYLENE	5.05	41	947683	29.78	PPBV	99
7) FREON 114	5.36	85	3134820	32.02	PPBV	98
9) CHLOROMETHANE	5.28	52	338175	31.97	PPBV	94
10) VINYL CHLORIDE	5.48	62	1233475	32.27	PPBV	99
11) 1,3-BUTADIENE	5.60	54	985349	32.73	PPBV	100
12) n-BUTANE	5.65	58	278522	31.57	PPBV	97
13) BROMOMETHANE	5.85	94	1065350	31.37	PPBV	100
14) CHLOROETHANE	6.00	64	678348	32.56	PPBV	99
15) DICHLOROFLUOROMETHANE	6.07	67	2517979	31.93	PPBV	100
16) ACROLEIN	6.39	56	532775	30.23	PPBV	100
17) TRICHLOROFLUOROMETHANE	6.66	101	2721031	32.46	PPBV	100
18) ISOPROPYL ALCOHOL	6.69	45	1955961	27.10	PPBV	100
19) ACETONE	6.50	58	614056	31.52	PPBV	98
21) ACRYLONITRILE	6.89	53	986503	36.05	PPBV	99
22) PENTANE	6.94	57	342793	29.90	PPBV	99
23) IODOMETHANE	7.16	142	3149045	34.02	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.20	96	1209692	33.70	PPBV	97
25) CARBON DISULFIDE	7.60	76	3330362	31.57	PPBV	100
26) ETHANOL	6.08	45	444489	27.09	PPBV	99
27) ACETONITRILE	6.28	41	977174	35.07	PPBV	100
28) BROMOETHENE	6.30	106	1136108	32.24	PPBV	100
29) METHYLENE CHLORIDE	7.29	84	1058458	30.16	PPBV	99
30) 3-CHLOROPROPENE	7.39	76	597972	34.69	PPBV	99
31) FREON 113	7.50	151	2196940	34.38	PPBV	100
32) TRANS-1,2-DICHLOROETHYLENE	8.10	96	1227498	33.45	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.21	59	2225688	30.65	PPBV	100
34) METHYL TERTIARY BUTYL ETHE	8.32	73	3494450	35.29	PPBV	100
35) TETRAHYDROFURAN	9.64	72	638058	37.06	PPBV	99
36) HEXANE	9.17	57	2041122	34.50	PPBV	99
37) VINYL ACETATE	8.37	86	363475	38.38	PPBV #	95
38) 1,1-DICHLOROETHANE	8.28	63	2140290	33.77	PPBV	99
39) METHYL ETHYL KETONE	8.61	72	643713	37.93	PPBV	99
40) cis-1,2-DICHLOROETHYLENE	9.01	96	1306824	33.75	PPBV	100
41) DI-ISOPROPYL ETHER	9.15	87	1212344	37.13	PPBV	99
42) ETHYL ACETATE	9.17	61	437476	37.96	PPBV #	74
43) METHYL ACRYLATE	9.18	55	2442074	37.53	PPBV	99
44) CHLOROFORM	9.28	83	2391742	34.47	PPBV	100
45) 2,4-DIMETHYLPENTANE	9.97	57	2409690	35.52	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53830.D Vial: 11
Acq On : 1 Mar 2016 10:16 pm Operator: danat
Sample : ic2152-40 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:37:30 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:37:18 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.18	97	2434826	34.65	PPBV		100
47)	CARBON TETRACHLORIDE	10.74	117	2570324	34.86	PPBV		100
48)	1,2-DICHLOROETHANE	9.95	62	1409617	35.71	PPBV		99
50)	BENZENE	10.61	78	4070823	35.27	PPBV		100
51)	CYCLOHEXANE	10.86	84	1827757	33.41	PPBV		96
52)	2,3-DIMETHYLPENTANE	11.05	71	968125	35.93	PPBV		98
53)	TRICHLOROETHYLENE	11.58	95	1821871	38.60	PPBV		99
54)	DIBROMOMETHANE	11.35	174	1820082	38.28	PPBV		99
55)	1,2-DICHLOROPROPANE	11.36	63	1460769	35.06	PPBV		100
56)	ETHYL ACRYLATE	11.30	55	2965989	40.51	PPBV		100
57)	BROMODICHLOROMETHANE	11.55	83	2836752	37.42	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.59	57	6776393	37.00	PPBV		100
59)	1,4-DIOXANE	11.57	88	856175	42.35	PPBV	#	45
60)	METHYL METHACRYLATE	11.72	69	1515911	38.90	PPBV		96
61)	HEPTANE	11.81	43	2329267	36.87	PPBV		98
62)	METHYL ISOBUTYL KETONE	12.40	43	2953992	38.60	PPBV		98
63)	cis-1,3-DICHLOROPROPENE	12.39	75	2527262	41.24	PPBV		98
64)	TOLUENE	13.36	92	3173115	39.58	PPBV		99
65)	1,3-DICHLOROPROPANE	13.38	76	2462236	40.61	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.89	75	1993221	44.92	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.08	83	1386734	39.24	PPBV		99
69)	ETHYL METHACRYLATE	13.57	69	2755858	35.44	PPBV		100
70)	2-HEXANONE	13.58	58	1796851	36.66	PPBV		96
71)	TETRACHLOROETHYLENE	14.50	164	2262644	32.56	PPBV		100
72)	DIBROMOCHLOROMETHANE	13.80	129	3102191	33.18	PPBV		100
73)	1,2-DIBROMOETHANE	14.05	107	2518652	37.16	PPBV		100
74)	OCTANE	14.30	43	3303583	31.35	PPBV		98
75)	1,1,1,2-TETRACHLOROETHANE	15.19	131	2322074	31.77	PPBV	#	64
76)	CHLOROBENZENE	15.21	112	4273539	33.65	PPBV		99
77)	ETHYLBENZENE	15.59	91	6625433	34.02	PPBV		100
78)	m,p-XYLENE	15.78	106	5560807	67.98	PPBV		99
79)	o-XYLENE	16.30	106	2659630	34.13	PPBV		100
80)	STYRENE	16.17	104	4255582	37.20	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.42	75	2586476	33.23	PPBV		99
82)	NONANE	16.48	43	3382820	33.25	PPBV		97
83)	BROMOFORM	15.90	173	3236453	36.87	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.28	83	3735039	34.57	PPBV		100
86)	ISOPROPYLBENZENE	16.91	105	7777173	33.21	PPBV		99
87)	BROMOBENZENE	17.04	156	2397147	37.27	PPBV		100
88)	2-CHLOROTOLUENE	17.44	126	1867880	34.84	PPBV	#	85
89)	n-PROPYLBENZENE	17.47	120	2163766	36.07	PPBV		92
90)	4-ETHYLTOLUENE	17.62	105	6735615	36.55	PPBV		100
91)	1,3,5-TRIMETHYLBENZENE	17.70	105	6242263	34.33	PPBV		100
92)	ALPHA-METHYLSTYRENE	17.87	118	3002677	39.54	PPBV		99
93)	TERT-BUTYLBENZENE	18.15	134	1635950	33.92	PPBV		97
94)	1,2,4-TRIMETHYLBENZENE	18.16	105	5938489	36.05	PPBV		96
95)	m-DICHLOROBENZENE	18.34	146	3509195	42.66	PPBV		100
96)	BENZYL CHLORIDE	18.32	91	4412987	50.21	PPBV		99
97)	p-DICHLOROBENZENE	18.42	146	3605810	45.53	PPBV		100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53830.D Vial: 11
Acq On : 1 Mar 2016 10:16 pm Operator: danat
Sample : ic2152-40 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 08:37:30 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:37:18 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

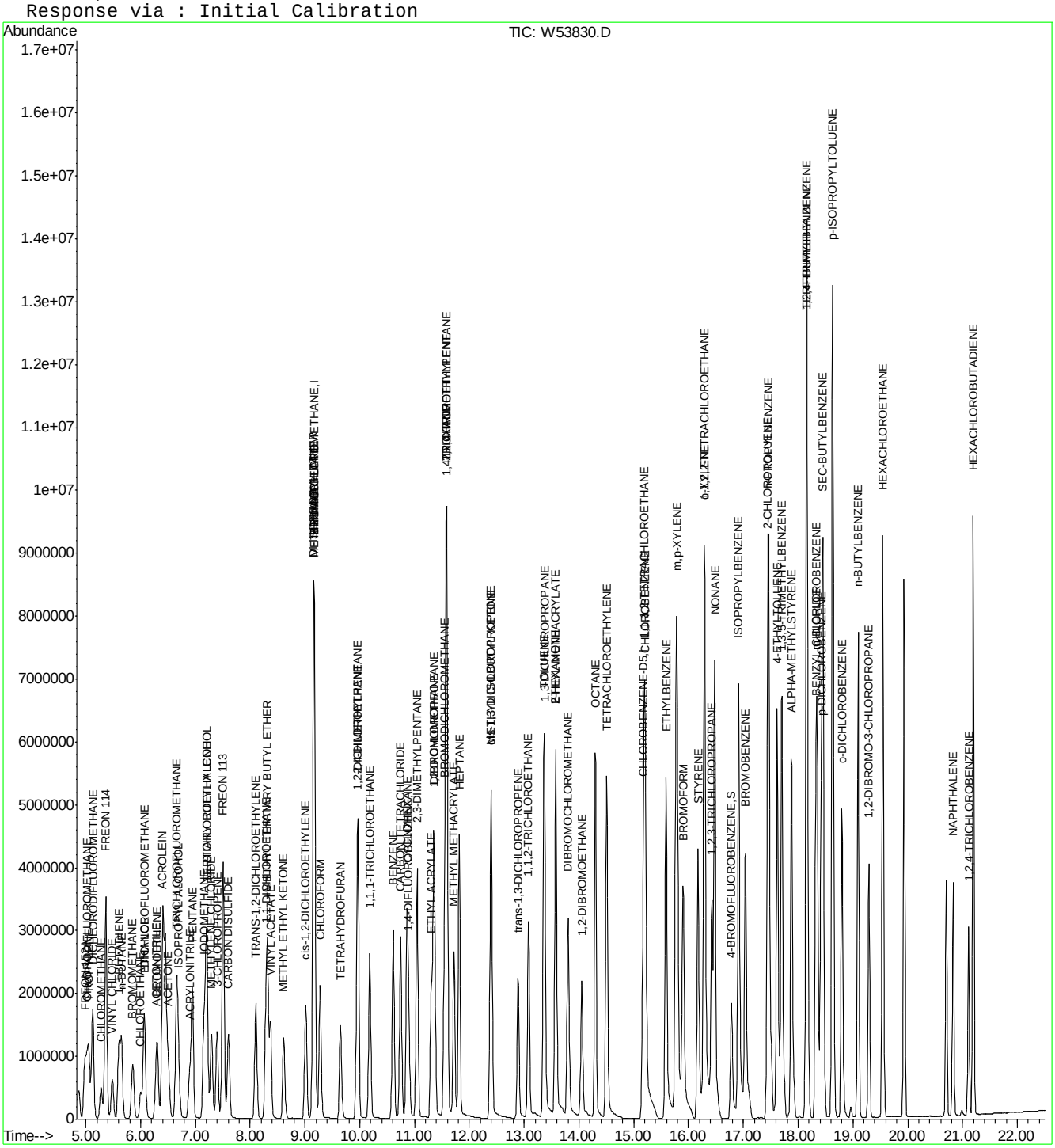
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.45	134	1905343	34.77	PPBV	96
99)	p-ISOPROPYLTOLUENE	18.62	134	2030280	36.01	PPBV	96
100)	o-DICHLOROBENZENE	18.80	146	3303992	39.79	PPBV	100
101)	n-BUTYLBENZENE	19.09	134	1731057	40.28	PPBV	98
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	1868923	52.92	PPBV	100
103)	HEXACHLOROETHANE	19.54	201	2555204	35.01	PPBV	99
104)	HEXACHLOROBUTADIENE	21.20	225	2467202	34.49	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.11	180	1334012	52.22	PPBV	99
106)	NAPHTHALENE	20.83	128	3873198	65.60	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53830.D Vial: 11
Acq On : 1 Mar 2016 10:16 pm Operator: danat
Sample : ic2152-40 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 8:38 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53833.D Vial: 14
Acq On : 2 Mar 2016 9:25 am Operator: danat
Sample : icv2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 09:48:31 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:57:14 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	9.19	128	295657	10.00	PPBV	0.01
49) 1,4-DIFLUOROBENZENE	10.91	114	1586396	10.00	PPBV	0.00
68) CHLOROBENZENE-D5	15.17	82	724138	10.00	PPBV	0.00
System Monitoring Compounds						
84) 4-BROMOFLUOROBENZENE	16.79	95	852841	10.56	PPBV	0.00
Spiked Amount 10.000	Range 65 - 128		Recovery = 105.60%			
Target Compounds						Qvalue
3) FREON 152A	5.02	65	220476	10.74	PPBV	98
4) CHLORODIFLUOROMETHANE	5.07	67	77721	10.16	PPBV	100
5) DICHLORODIFLUOROMETHANE	5.17	85	827279	10.47	PPBV	100
6) PROPYLENE	5.10	41	272621	9.96	PPBV	99
7) FREON 114	5.41	85	878991	10.34	PPBV	99
9) CHLOROMETHANE	5.33	52	92451	10.06	PPBV	97
10) VINYL CHLORIDE	5.53	62	344519	10.36	PPBV	100
11) 1,3-BUTADIENE	5.65	54	266216	10.15	PPBV	98
12) n-BUTANE	5.70	58	78767	10.30	PPBV	97
13) BROMOMETHANE	5.90	94	300417	10.21	PPBV	99
14) CHLOROETHANE	6.05	64	189542	10.45	PPBV	99
15) DICHLOROFLUOROMETHANE	6.11	67	736923	10.76	PPBV	100
16) ACROLEIN	6.43	56	146255	9.63	PPBV	97
17) TRICHLOROFLUOROMETHANE	6.69	101	742681	10.18	PPBV	100
18) ISOPROPYL ALCOHOL	6.74	45	587990	9.58	PPBV	100
19) ACETONE	6.54	58	173633	10.28	PPBV	98
21) ACRYLONITRILE	6.93	53	278816	11.53	PPBV	99
22) PENTANE	6.98	57	101513	10.29	PPBV	99
23) IODOMETHANE	7.19	142	842706	10.39	PPBV	99
24) 1,1-DICHLOROETHYLENE	7.24	96	327824	10.44	PPBV	97
25) CARBON DISULFIDE	7.63	76	903447	9.88	PPBV	99
26) ETHANOL	6.13	45	125759	10.47	PPBV	99
27) ACETONITRILE	6.32	41	284524	11.60	PPBV	99
28) BROMOETHENE	6.35	106	315770	10.31	PPBV	100
29) METHYLENE CHLORIDE	7.32	84	279007	9.23	PPBV	96
30) 3-CHLOROPROPENE	7.43	76	143251	9.46	PPBV	91
31) FREON 113	7.54	151	580321	10.35	PPBV	99
32) TRANS-1,2-DICHLOROETHYLENE	8.13	96	317977	9.91	PPBV	99
33) TERTIARY BUTYL ALCOHOL	7.25	59	641617	10.23	PPBV	98
34) METHYL TERTIARY BUTYL ETHE	8.34	73	868003	9.95	PPBV	98
35) TETRAHYDROFURAN	9.68	72	163130	10.68	PPBV	98
36) HEXANE	9.19	57	533194	10.26	PPBV	98
37) VINYL ACETATE	8.39	86	69658	8.24	PPBV #	81
38) 1,1-DICHLOROETHANE	8.30	63	565149	10.19	PPBV	100
39) METHYL ETHYL KETONE	8.63	72	160192	10.60	PPBV	98
40) cis-1,2-DICHLOROETHYLENE	9.03	96	330706	9.76	PPBV	99
41) DI-ISOPROPYL ETHER	9.17	87	308661	10.65	PPBV	97
42) ETHYL ACETATE	9.19	61	96517	9.40	PPBV #	91
43) METHYL ACRYLATE	9.19	55	528621	9.14	PPBV	99
44) CHLOROFORM	9.29	83	618541	10.15	PPBV	99
45) 2,4-DIMETHYLPENTANE	9.98	57	639217	10.69	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53833.D Vial: 14
Acq On : 2 Mar 2016 9:25 am Operator: danat
Sample : icv2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 09:48:31 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:57:14 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.19	97	570759	9.24	PPBV		99
47)	CARBON TETRACHLORIDE	10.75	117	543565	8.38	PPBV		100
48)	1,2-DICHLOROETHANE	9.96	62	357732	10.27	PPBV		100
50)	BENZENE	10.62	78	1045502	9.95	PPBV		100
51)	CYCLOHEXANE	10.88	84	478201	9.68	PPBV		99
52)	2,3-DIMETHYLPENTANE	11.05	71	249018	10.13	PPBV		99
53)	TRICHLOROETHYLENE	11.59	95	415001	8.79	PPBV		100
54)	DIBROMOMETHANE	11.36	174	429169	9.79	PPBV		99
55)	1,2-DICHLOROPROPANE	11.37	63	369228	9.74	PPBV		100
56)	ETHYL ACRYLATE	11.32	55	624466	9.17	PPBV		100
57)	BROMODICHLOROMETHANE	11.55	83	611374	8.78	PPBV		100
58)	2,2,4-TRIMETHYLPENTANE	11.60	57	1729718	10.30	PPBV		100
59)	1,4-DIOXANE	11.60	88	205947	10.86	PPBV	#	79
60)	METHYL METHACRYLATE	11.73	69	342354	9.50	PPBV		98
61)	HEPTANE	11.82	43	590094	10.19	PPBV		99
62)	METHYL ISOBUTYL KETONE	12.42	43	717853	10.16	PPBV		99
63)	cis-1,3-DICHLOROPROPENE	12.39	75	520377	9.10	PPBV		97
64)	TOLUENE	13.36	92	755582	10.17	PPBV		100
65)	1,3-DICHLOROPROPANE	13.38	76	559866	9.92	PPBV		99
66)	trans-1,3-DICHLOROPROPENE	12.90	75	405515	9.64	PPBV		99
67)	1,1,2-TRICHLOROETHANE	13.09	83	330593	10.11	PPBV		100
69)	ETHYL METHACRYLATE	13.58	69	572218	9.50	PPBV		99
70)	2-HEXANONE	13.60	58	392273	10.29	PPBV		99
71)	TETRACHLOROETHYLENE	14.51	164	513422	8.85	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.81	129	615337	8.58	PPBV		100
73)	1,2-DIBROMOETHANE	14.06	107	518648	9.81	PPBV		100
74)	OCTANE	14.30	43	811150	10.12	PPBV		99
75)	1,1,1,2-TETRACHLOROETHANE	15.19	131	506949	9.10	PPBV		94
76)	CHLOROBENZENE	15.22	112	954355	9.78	PPBV		99
77)	ETHYLBENZENE	15.59	91	1489308	9.94	PPBV		100
78)	m,p-XYLENE	15.78	106	1240756	19.71	PPBV		98
79)	o-XYLENE	16.30	106	595076	9.92	PPBV		99
80)	STYRENE	16.18	104	901413	10.10	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.43	75	580798	9.73	PPBV		100
82)	NONANE	16.48	43	828419	10.62	PPBV		99
83)	BROMOFORM	15.91	173	580672	8.49	PPBV		100
85)	1,1,2,2-TETRACHLOROETHANE	16.29	83	807555	9.69	PPBV		100
86)	ISOPROPYLBENZENE	16.92	105	1794579	9.99	PPBV		100
87)	BROMOBENZENE	17.04	156	498056	9.92	PPBV		99
88)	2-CHLOROTOLUENE	17.45	126	406640	9.82	PPBV	#	93
89)	n-PROPYLBENZENE	17.47	120	467126	10.03	PPBV		98
90)	4-ETHYLTOLUENE	17.62	105	1512607	10.55	PPBV		99
91)	1,3,5-TRIMETHYLBENZENE	17.70	105	1375644	9.82	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.88	118	646635	10.81	PPBV		99
93)	TERT-BUTYLBENZENE	18.15	134	370330	9.98	PPBV		99
94)	1,2,4-TRIMETHYLBENZENE	18.16	105	1280721	10.02	PPBV		99
95)	m-DICHLOROBENZENE	18.34	146	701465	10.69	PPBV		100
96)	BENZYL CHLORIDE	18.32	91	682588	9.44	PPBV		99
97)	p-DICHLOROBENZENE	18.42	146	638049	9.98	PPBV		100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53833.D Vial: 14
Acq On : 2 Mar 2016 9:25 am Operator: danat
Sample : icv2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 02 09:48:31 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:57:14 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

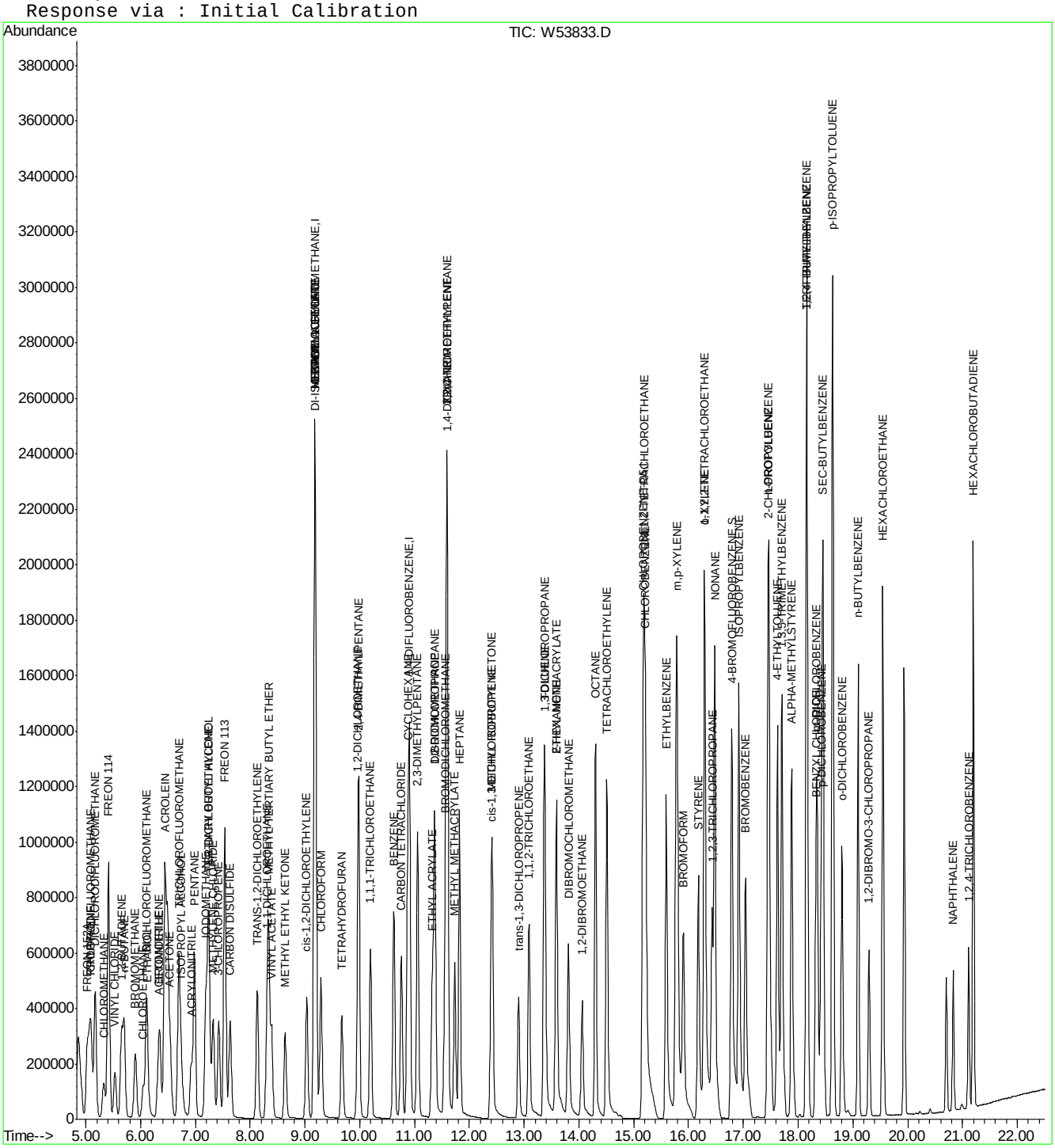
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.45	134	425634	10.06	PPBV	99
99)	p-ISOPROPYLTOLUENE	18.62	134	452567	10.34	PPBV	99
100)	o-DICHLOROBENZENE	18.80	146	664681	10.15	PPBV	100
101)	n-BUTYLBENZENE	19.09	134	364286	10.73	PPBV	98
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.30	157	276517	9.41	PPBV	99
103)	HEXACHLOROETHANE	19.55	201	465345	8.25	PPBV	99
104)	HEXACHLOROBUTADIENE	21.20	225	535046	9.70	PPBV	100
105)	1,2,4-TRICHLOROBENZENE	21.11	180	252673	11.93	PPBV	99
106)	NAPHTHALENE	20.83	128	530732	10.29	PPBV	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W53833.D Vial: 14
Acq On : 2 Mar 2016 9:25 am Operator: danat
Sample : icv2152-10 Inst : MSW
Misc : MS98719,VW2152,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 2 9:48 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 08:57:14 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54080.D Vial: 2
Acq On : 11 Mar 2016 9:32 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 14:05:44 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	215818	10.00	PPBV		-0.02
49) 1,4-DIFLUOROBENZENE	10.88	114	1111676	10.00	PPBV		-0.02
68) CHLOROBENZENE-D5	15.15	82	537229	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	607568	10.14	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 101.40%				
Target Compounds							Qvalue
3) FREON 152A	4.99	65	151170	10.09	PPBV		91
4) CHLORODIFLUOROMETHANE	5.03	67	57937	10.37	PPBV		99
5) DICHLORODIFLUOROMETHANE	5.13	85	591024	10.25	PPBV		99
6) PROPYLENE	5.06	41	220035	11.01	PPBV		99
7) FREON 114	5.37	85	600683	9.68	PPBV		95
9) CHLOROMETHANE	5.29	52	72868	10.87	PPBV		94
10) VINYL CHLORIDE	5.49	62	254010	10.47	PPBV		100
11) 1,3-BUTADIENE	5.61	54	207409	10.83	PPBV	#	88
12) n-BUTANE	5.66	58	57472	10.29	PPBV		68
13) BROMOMETHANE	5.85	94	206988	9.64	PPBV		99
14) CHLOROETHANE	6.00	64	138133	10.43	PPBV		94
15) DICHLOROFLUOROMETHANE	6.07	67	538907	10.78	PPBV	#	98
16) ACROLEIN	6.40	56	102893	9.28	PPBV		97
17) TRICHLOROFLUOROMETHANE	6.65	101	605698	11.37	PPBV		100
18) ISOPROPYL ALCOHOL	6.69	45	497305	11.10	PPBV		97
19) ACETONE	6.50	58	124095	10.07	PPBV	#	71
21) ACRYLONITRILE	6.89	53	202592	11.48	PPBV		97
22) PENTANE	6.94	57	74801	10.38	PPBV	#	74
23) IODOMETHANE	7.15	142	562012	9.49	PPBV		92
24) 1,1-DICHLOROETHYLENE	7.19	96	227424	9.92	PPBV	#	85
25) CARBON DISULFIDE	7.60	76	690016	10.33	PPBV		96
26) ETHANOL	6.08	45	111719	12.75	PPBV		96
27) ACETONITRILE	6.29	41	223367	12.48	PPBV		99
28) BROMOETHENE	6.30	106	220057	9.84	PPBV	#	99
29) METHYLENE CHLORIDE	7.29	84	209752	9.50	PPBV		85
30) 3-CHLOROPROPENE	7.39	76	116955	10.58	PPBV	#	69
31) FREON 113	7.50	151	383954	9.38	PPBV		93
32) TRANS-1,2-DICHLOROETHYLENE	8.10	96	227523	9.72	PPBV		91
33) TERTIARY BUTYL ALCOHOL	7.21	59	538197	11.76	PPBV		92
34) METHYL TERTIARY BUTYL ETHE	8.32	73	674672	10.59	PPBV		94
35) TETRAHYDROFURAN	9.65	72	116502	10.44	PPBV	#	77
36) HEXANE	9.16	57	426643	11.25	PPBV		90
37) VINYL ACETATE	8.36	86	63632	10.31	PPBV	#	44
38) 1,1-DICHLOROETHANE	8.27	63	453365	11.20	PPBV		99
39) METHYL ETHYL KETONE	8.61	72	115183	10.44	PPBV	#	71
40) cis-1,2-DICHLOROETHYLENE	9.00	96	240172	9.71	PPBV		91
41) DI-ISOPROPYL ETHER	9.14	87	210264	9.94	PPBV		95
42) ETHYL ACETATE	9.16	61	77383	10.32	PPBV	#	61
43) METHYL ACRYLATE	9.16	55	472480	11.19	PPBV		98
44) CHLOROFORM	9.26	83	470416	10.58	PPBV		96
45) 2,4-DIMETHYLPENTANE	9.95	57	496638	11.37	PPBV		97

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54080.D Vial: 2
Acq On : 11 Mar 2016 9:32 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 14:05:44 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.17	97	487165	10.81	PPBV		96
47)	CARBON TETRACHLORIDE	10.73	117	510106	10.78	PPBV		99
48)	1,2-DICHLOROETHANE	9.93	62	310645	12.22	PPBV		98
50)	BENZENE	10.60	78	784702	10.66	PPBV		98
51)	CYCLOHEXANE	10.85	84	347808	10.05	PPBV		91
52)	2,3-DIMETHYLPENTANE	11.03	71	180719	10.49	PPBV		86
53)	TRICHLOROETHYLENE	11.56	95	307568	9.30	PPBV		95
54)	DIBROMOMETHANE	11.33	174	277502	9.03	PPBV		86
55)	1,2-DICHLOROPROPANE	11.35	63	292597	11.02	PPBV		100
56)	ETHYL ACRYLATE	11.29	55	522725	10.95	PPBV	#	95
57)	BROMODICHLOROMETHANE	11.53	83	529072	10.84	PPBV		99
58)	2,2,4-TRIMETHYLPENTANE	11.57	57	1376544	11.70	PPBV		99
59)	1,4-DIOXANE	11.56	88	148130	11.15	PPBV		94
60)	METHYL METHACRYLATE	11.71	69	256911	10.18	PPBV	#	77
61)	HEPTANE	11.80	43	520817	12.84	PPBV		89
62)	METHYL ISOBUTYL KETONE	12.39	43	579167	11.70	PPBV		91
63)	cis-1,3-DICHLOROPROPENE	12.38	75	439260	10.96	PPBV		87
64)	TOLUENE	13.34	92	560367	10.76	PPBV		99
65)	1,3-DICHLOROPROPANE	13.36	76	444138	11.23	PPBV	#	86
66)	trans-1,3-DICHLOROPROPENE	12.88	75	327123	11.10	PPBV		90
67)	1,1,2-TRICHLOROETHANE	13.06	83	248613	10.85	PPBV		98
69)	ETHYL METHACRYLATE	13.56	69	425436	9.53	PPBV		97
70)	2-HEXANONE	13.56	58	290057	10.25	PPBV	#	83
71)	TETRACHLOROETHYLENE	14.48	164	343383	7.97	PPBV		96
72)	DIBROMOCHLOROMETHANE	13.78	129	514077	9.67	PPBV		99
73)	1,2-DIBROMOETHANE	14.03	107	374379	9.55	PPBV		100
74)	OCTANE	14.28	43	737994	12.41	PPBV	#	87
75)	1,1,1,2-TETRACHLOROETHANE	15.17	131	393942	9.53	PPBV		97
76)	CHLOROBENZENE	15.19	112	689039	9.52	PPBV		96
77)	ETHYLBENZENE	15.57	91	1095706	9.85	PPBV		98
78)	m,p-XYLENE	15.76	106	913327	19.56	PPBV		97
79)	o-XYLENE	16.27	106	448766	10.08	PPBV		97
80)	STYRENE	16.16	104	662296	10.00	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.41	75	471028	10.64	PPBV		95
82)	NONANE	16.46	43	806811	13.93	PPBV		92
83)	BROMOFORM	15.88	173	487750	9.62	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.27	83	641916	10.38	PPBV		100
86)	ISOPROPYLBENZENE	16.90	105	1364312	10.24	PPBV		99
87)	BROMOBENZENE	17.02	156	366059	9.83	PPBV		93
88)	2-CHLOROTOLUENE	17.43	126	315704	10.28	PPBV	#	82
89)	n-PROPYLBENZENE	17.45	120	357904	10.36	PPBV		95
90)	4-ETHYLTOLUENE	17.61	105	1141633	10.73	PPBV		98
91)	1,3,5-TRIMETHYLBENZENE	17.69	105	1085030	10.44	PPBV		99
92)	ALPHA-METHYLSTYRENE	17.86	118	475245	10.71	PPBV		99
93)	TERT-BUTYLBENZENE	18.14	134	281443	10.23	PPBV		94
94)	1,2,4-TRIMETHYLBENZENE	18.14	105	1015777	10.71	PPBV		100
95)	m-DICHLOROBENZENE	18.33	146	510125	10.48	PPBV		99
96)	BENZYL CHLORIDE	18.30	91	560150	10.44	PPBV		99
97)	p-DICHLOROBENZENE	18.40	146	483129	10.19	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54080.D Vial: 2
Acq On : 11 Mar 2016 9:32 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 14:05:44 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

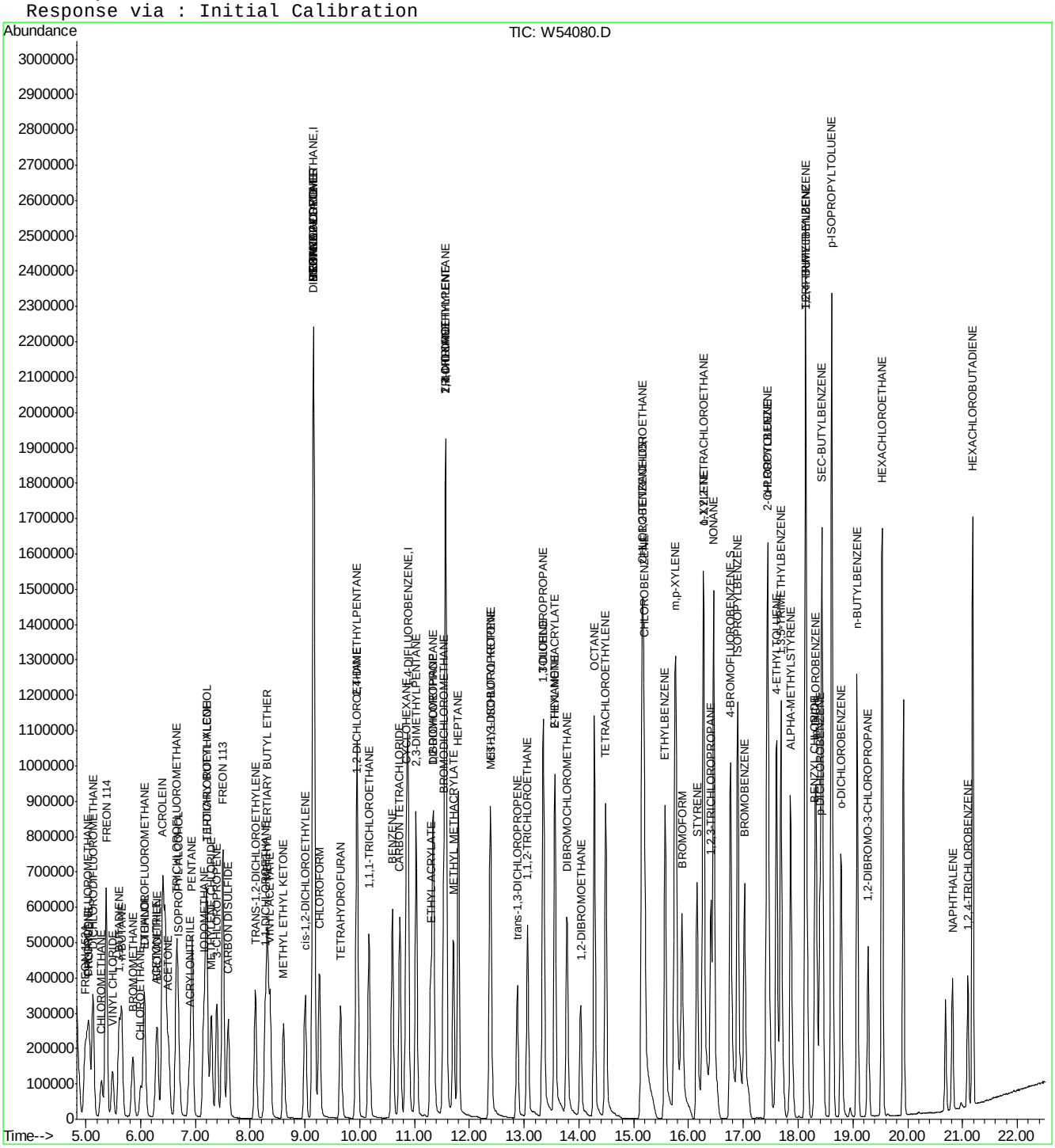
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.44	134	332276	10.59	PPBV	97
99)	p-ISOPROPYLTOLUENE	18.61	134	343939	10.59	PPBV	97
100)	o-DICHLOROBENZENE	18.78	146	511757	10.54	PPBV	99
101)	n-BUTYLBENZENE	19.08	134	273073	10.84	PPBV	94
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.28	157	213257	9.79	PPBV	100
103)	HEXACHLOROETHANE	19.53	201	442816	10.58	PPBV	92
104)	HEXACHLOROBUTADIENE	21.18	225	415354	10.15	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.10	180	160979	10.24	PPBV	100
106)	NAPHTHALENE	20.82	128	387578	10.13	PPBV	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
W54080.D MW2152.M Fri Mar 11 15:49:44 2016 MSW Page 3

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54080.D Vial: 2
Acq On : 11 Mar 2016 9:32 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS99025,VW2161,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 15:44 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54111.D Vial: 2
Acq On : 12 Mar 2016 11:14 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:47:53 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	9.16	128	240563	10.00	PPBV		-0.01
49) 1,4-DIFLUOROBENZENE	10.89	114	1281910	10.00	PPBV		-0.01
68) CHLOROBENZENE-D5	15.15	82	587871	10.00	PPBV		-0.01
System Monitoring Compounds							
84) 4-BROMOFLUOROBENZENE	16.77	95	651132	9.93	PPBV		-0.02
Spiked Amount 10.000	Range 65 - 128		Recovery = 99.30%				
Target Compounds							Qvalue
3) FREON 152A	5.01	65	180363	10.80	PPBV		96
4) CHLORODIFLUOROMETHANE	5.05	67	66816	10.73	PPBV		100
5) DICHLORODIFLUOROMETHANE	5.15	85	728173	11.33	PPBV		99
6) PROPYLENE	5.08	41	258402	11.60	PPBV		98
7) FREON 114	5.40	85	779567	11.27	PPBV		99
9) CHLOROMETHANE	5.31	52	86731	11.60	PPBV		93
10) VINYL CHLORIDE	5.51	62	314739	11.64	PPBV		99
11) 1,3-BUTADIENE	5.63	54	249434	11.69	PPBV		95
12) n-BUTANE	5.68	58	71121	11.43	PPBV		83
13) BROMOMETHANE	5.88	94	275488	11.51	PPBV		99
14) CHLOROETHANE	6.02	64	164434	11.14	PPBV		95
15) DICHLOROFLUOROMETHANE	6.09	67	637728	11.45	PPBV		99
16) ACROLEIN	6.41	56	114847	9.29	PPBV		97
17) TRICHLOROFLUOROMETHANE	6.68	101	728046	12.26	PPBV		99
18) ISOPROPYL ALCOHOL	6.71	45	533826	10.69	PPBV		98
19) ACETONE	6.53	58	137358	10.00	PPBV	#	84
21) ACRYLONITRILE	6.91	53	224160	11.39	PPBV		100
22) PENTANE	6.96	57	84453	10.52	PPBV	#	84
23) IODOMETHANE	7.17	142	730013	11.06	PPBV		96
24) 1,1-DICHLOROETHYLENE	7.21	96	272569	10.67	PPBV		93
25) CARBON DISULFIDE	7.61	76	791099	10.63	PPBV		97
26) ETHANOL	6.11	45	124119	12.70	PPBV		98
27) ACETONITRILE	6.30	41	235856	11.82	PPBV		98
28) BROMOETHENE	6.33	106	289942	11.63	PPBV	#	98
29) METHYLENE CHLORIDE	7.30	84	241202	9.80	PPBV		90
30) 3-CHLOROPROPENE	7.41	76	136811	11.10	PPBV	#	82
31) FREON 113	7.52	151	474016	10.39	PPBV		98
32) TRANS-1,2-DICHLOROETHYLENE	8.11	96	269681	10.33	PPBV		95
33) TERTIARY BUTYL ALCOHOL	7.22	59	600956	11.78	PPBV		94
34) METHYL TERTIARY BUTYL ETHE	8.33	73	739795	10.42	PPBV		96
35) TETRAHYDROFURAN	9.66	72	128471	10.33	PPBV	#	85
36) HEXANE	9.17	57	455603	10.78	PPBV		92
37) VINYL ACETATE	8.38	86	71819	10.44	PPBV	#	65
38) 1,1-DICHLOROETHANE	8.29	63	493406	10.93	PPBV		100
39) METHYL ETHYL KETONE	8.62	72	125340	10.19	PPBV	#	76
40) cis-1,2-DICHLOROETHYLENE	9.01	96	277362	10.06	PPBV		93
41) DI-ISOPROPYL ETHER	9.16	87	233542	9.90	PPBV		98
42) ETHYL ACETATE	9.17	61	82133	9.83	PPBV	#	56
43) METHYL ACRYLATE	9.18	55	494173	10.50	PPBV		98
44) CHLOROFORM	9.27	83	531382	10.72	PPBV		97
45) 2,4-DIMETHYLPENTANE	9.96	57	542019	11.14	PPBV		99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54111.D Vial: 2
Acq On : 12 Mar 2016 11:14 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:47:53 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	1,1,1-TRICHLOROETHANE	10.18	97	550818	10.97	PPBV		97
47)	CARBON TETRACHLORIDE	10.74	117	583132	11.05	PPBV		99
48)	1,2-DICHLOROETHANE	9.94	62	344333	12.15	PPBV		98
50)	BENZENE	10.60	78	874295	10.30	PPBV		99
51)	CYCLOHEXANE	10.85	84	392220	9.82	PPBV		94
52)	2,3-DIMETHYLPENTANE	11.03	71	201735	10.15	PPBV		91
53)	TRICHLOROETHYLENE	11.57	95	352958	9.25	PPBV		99
54)	DIBROMOMETHANE	11.33	174	360017	10.16	PPBV		96
55)	1,2-DICHLOROPROPANE	11.35	63	311115	10.16	PPBV		99
56)	ETHYL ACRYLATE	11.30	55	549502	9.98	PPBV		99
57)	BROMODICHLOROMETHANE	11.53	83	589670	10.48	PPBV		98
58)	2,2,4-TRIMETHYLPENTANE	11.57	57	1487029	10.96	PPBV		99
59)	1,4-DIOXANE	11.58	88	166776	10.89	PPBV		98
60)	METHYL METHACRYLATE	11.71	69	274211	9.42	PPBV	#	82
61)	HEPTANE	11.80	43	576897	12.33	PPBV		89
62)	METHYL ISOBUTYL KETONE	12.40	43	595150	10.42	PPBV		93
63)	cis-1,3-DICHLOROPROPENE	12.38	75	501365	10.85	PPBV		91
64)	TOLUENE	13.35	92	619260	10.31	PPBV		99
65)	1,3-DICHLOROPROPANE	13.36	76	445931	9.78	PPBV	#	85
66)	trans-1,3-DICHLOROPROPENE	12.88	75	361839	10.65	PPBV		92
67)	1,1,2-TRICHLOROETHANE	13.06	83	274462	10.38	PPBV		100
69)	ETHYL METHACRYLATE	13.56	69	452921	9.27	PPBV		99
70)	2-HEXANONE	13.58	58	310065	10.01	PPBV		89
71)	TETRACHLOROETHYLENE	14.49	164	427857	9.08	PPBV		99
72)	DIBROMOCHLOROMETHANE	13.78	129	612046	10.52	PPBV		100
73)	1,2-DIBROMOETHANE	14.03	107	445932	10.39	PPBV		99
74)	OCTANE	14.28	43	766293	11.77	PPBV		91
75)	1,1,1,2-TETRACHLOROETHANE	15.17	131	451460	9.98	PPBV		90
76)	CHLOROBENZENE	15.20	112	785617	9.92	PPBV		99
77)	ETHYLBENZENE	15.58	91	1202318	9.88	PPBV		100
78)	m,p-XYLENE	15.76	106	1011785	19.80	PPBV		99
79)	o-XYLENE	16.28	106	484721	9.95	PPBV		100
80)	STYRENE	16.16	104	722447	9.97	PPBV		99
81)	1,2,3-TRICHLOROPROPANE	16.41	75	477754	9.86	PPBV		98
82)	NONANE	16.46	43	778676	12.29	PPBV		94
83)	BROMOFORM	15.88	173	575463	10.37	PPBV		99
85)	1,1,2,2-TETRACHLOROETHANE	16.27	83	666697	9.85	PPBV		99
86)	ISOPROPYLBENZENE	16.90	105	1440547	9.88	PPBV		100
87)	BROMOBENZENE	17.02	156	407724	10.01	PPBV		99
88)	2-CHLOROTOLUENE	17.43	126	338765	10.08	PPBV		93
89)	n-PROPYLBENZENE	17.45	120	379333	10.03	PPBV		99
90)	4-ETHYLTOLUENE	17.61	105	1193315	10.25	PPBV		99
91)	1,3,5-TRIMETHYLBENZENE	17.69	105	1128836	9.92	PPBV		98
92)	ALPHA-METHYLSTYRENE	17.86	118	500155	10.30	PPBV		99
93)	TERT-BUTYLBENZENE	18.13	134	299805	9.95	PPBV		98
94)	1,2,4-TRIMETHYLBENZENE	18.14	105	1041990	10.04	PPBV		98
95)	m-DICHLOROBENZENE	18.33	146	542271	10.18	PPBV		100
96)	BENZYL CHLORIDE	18.30	91	554633	9.45	PPBV		99
97)	p-DICHLOROBENZENE	18.40	146	502649	9.68	PPBV		98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54111.D Vial: 2
Acq On : 12 Mar 2016 11:14 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 09:47:53 2016 Quant Results File: MW2152.RES

Quant Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration
DataAcq Meth : TO15W

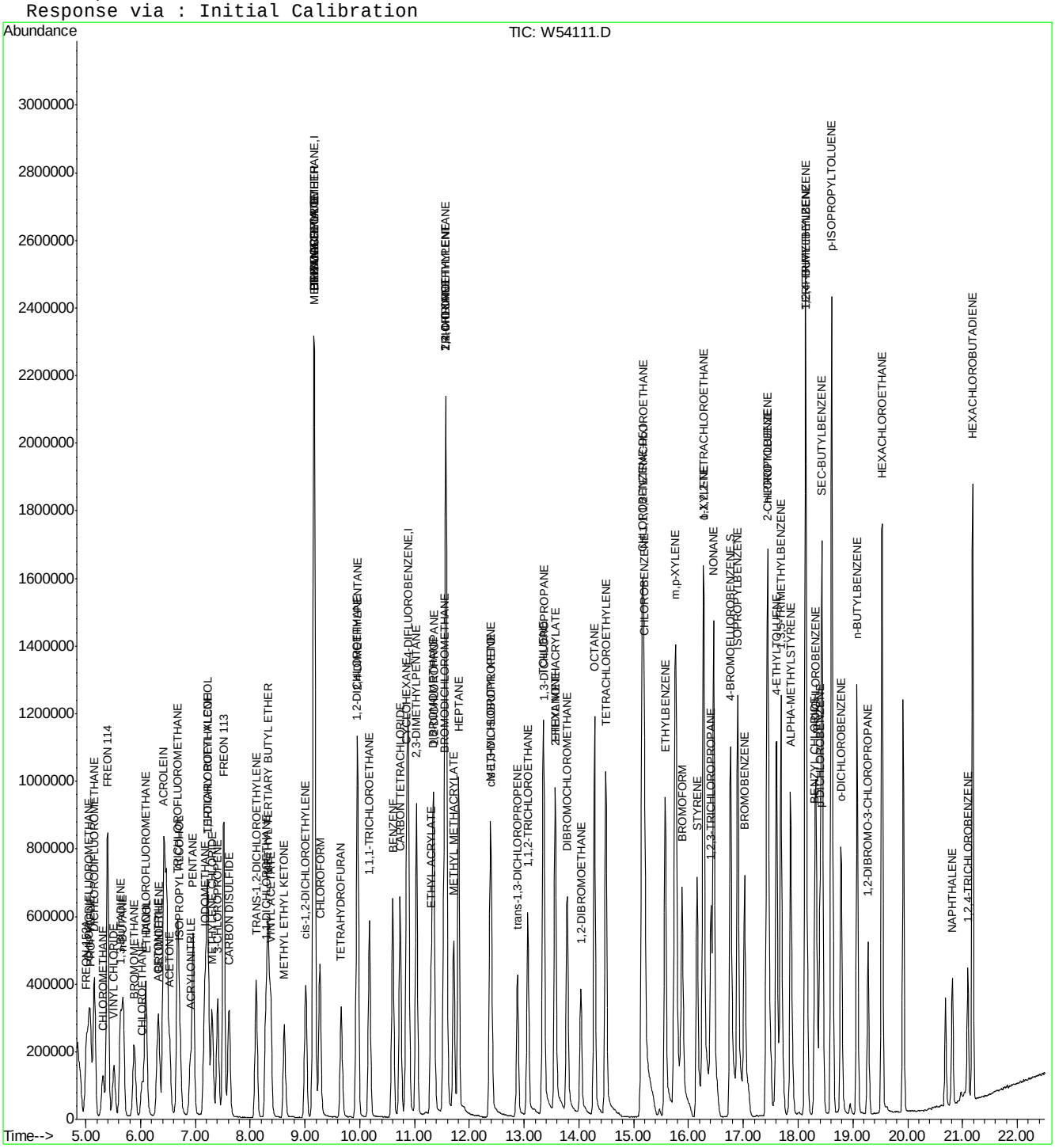
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	SEC-BUTYLBENZENE	18.44	134	347468	10.12	PPBV	100
99)	p-ISOPROPYLTOLUENE	18.61	134	361144	10.17	PPBV	98
100)	o-DICHLOROBENZENE	18.78	146	544579	10.24	PPBV	99
101)	n-BUTYLBENZENE	19.08	134	280292	10.17	PPBV	98
102)	1,2-DIBROMO-3-CHLOROPROPAN	19.28	157	228634	9.59	PPBV	99
103)	HEXACHLOROETHANE	19.53	201	486771	10.63	PPBV	98
104)	HEXACHLOROBUTADIENE	21.19	225	465315	10.39	PPBV	99
105)	1,2,4-TRICHLOROBENZENE	21.10	180	171848	9.99	PPBV	99
106)	NAPHTHALENE	20.81	128	396313	9.47	PPBV	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\W54111.D Vial: 2
Acq On : 12 Mar 2016 11:14 am Operator: YOUMINH
Sample : CC2152-10 Inst : MSW
Misc : MS98978,VW2162,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 13 10:27 2016 Quant Results File: MW2152.RES

Method : C:\MSDCHEM\1\METHODS\MW2152.M (RTE Integrator)
Title : TO15 by GCMS w/Rtx-1, 60m X 0.32mm ID X 1.0 um
Last Update : Wed Mar 02 09:50:16 2016
Response via : Initial Calibration



TO-14/TO-15

ACCUTEST

Batch ID: V5W637

Date: 1/22/16

Analyst Signature:

Columns: RTX-1 60m x0.32mm x1.0µm

Method: SWT015.M

Seq. File: 160122.S

Initial Cal. Method: MSW634
MSW637

AS Data

Method: T015.CTD

Standard Data

Lot #	Description	Conc.
AS6861	T015 STD	40ppbv
AS6864	T015 LCS	40ppbv
AS6862	T015 STD	1.0ppbv
AS6863	T015 STD	0.4ppbv

Standard Data

Lot #	Description	Conc.
AS6850	T015 STD	40ppbv
AS6853	T015 LCS	40ppbv
AS6813	IS/Surr.	100ppbv

(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: Date: 1/26/16

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
1	SW15830	BFB		open position	400					RR	CC-10 failed
2	SW15831	CC634-10		A971	100			✓	✓	RR	
2	SW15832	CC634-10		A971	100			✓	✓	NG	
1	SW15833	BFB		open position	400					not used	
2	SW15834	CC634-10		A971	100			✓	✓	NG	
5	SW15835	IB		A963	100			✓	✓	not used	
5	SW15836	IB		A963	100			✓	✓	not used	
5	SW15837	IB		A963	100			✓	✓	not used	
5	SW15838	IB		A963	100			✓	✓	not used	
5	SW15839	IB		A963	100			✓	✓	not used	
5	SW15840	BFB		A963	100					OK	
1	SW15841	ICC637-10		A971	100			✓	✓	OK	
1	SW15842	IC637-5		A971	50			✓	✓	OK	
2	SW15843	IC637-0.5		A976	200			✓	✓	OK	
2	SW15844	IC637-0.2		A976	80			✓	✓	OK	
1	SW15845	IC637-20		A971	200			✓	✓	OK	
5	SW15846	IB		A963	100			✓	✓	not used	
3	SW15847	IC637-0.1		A970	100			✓	✓	OK	
3	SW15848	IC637-0.04		A970	40			✓	✓	OK	
1	SW15849	IC637-30		A971	~~300~~ 400			✓	✓	OK	
5	SW15850	IB		A963	100			✓	✓	not used	
1	SW15851	IC637-40		A971	400			✓	✓	OK	
5	~~SW15852~~ TH	IB		A963	100			✓	✓	not used	SW15852
4	~~SW15853~~ TH	ICV637-10		A964	100			✓	✓	OK	SW15853
										TH	1/25/16

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

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ACCUTEST Laboratories

Canister Secondary Dilution Log

			Original Canister Dilution				Secondary Canister Dilution						
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister ID	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equiv Total Volume CC	Dilution Factor	Final Canister Dilution Factor
1/25/16	TH	JC13098-1	A 1149	6.0	1.2	1.35	A783	1000	20	14.7	2000	100	135
1/25/16	TH	JC13098-3	A 575	7.5	1.3	1.95	A 423	1000	40	14.7	2000	50	72.5
1/25/16	TH	JC13098-5	A677	1.5	1.0	1.13	A 698	1000	40	14.7	2000	50	56.5

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 Miscalclulation, # 4 = Analyst's Correction Error

Form: AT003-03
Rev. Date: 6/13/06.

TO-14/TO-15

ACCUTEST

Batch ID: V5W646

Date: 2/4/16

Analyst Signature:

Columns: RTX-1 60m x 0.32mm x 1.0µm
Method: SW8015.M
Seq. File: 160204.S
Initial Cal. Method: MSW637

AS Data

Method: TO15

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS6866	TO15 STD	40ppbv
AS6864	TO15 LCS	40ppbv
AS6869	15/surr	160ppbv

(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: Date: 2/5/16

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int/STD Areas	Surr	Status Data	Comments
1	SW16047	BFB		open Position	400					NG	
2	SW16048	CC637-10		A971	100						
2	SW16049	CC637-10		A971	100						
1	SW16050	BFB		open position	400						
2	SW16051	CC637-10		A971	100						
3	SW16052	BS		A964	100						
3	SW16053	BSD		A964	100					↓	
1	SW16054	BFB		open position	400					on	
2	SW16055	CC637-10		A971	100			✓	✓	on	
3	SW16056	BS		YH A963 A964	100			✓	✓	on	
3	SW16057	BSD		YH A963 A964	100			✓	✓	on	Tetrahydrofuran↑
4	SW16058	IB		A963	100			✓	✓	—	
4	SW16059	MB		A963	400			✓	✓	on	
5	SW16060	SCC		A252	400	1		✓	✓	on	
6	SW16061	SCC		A1190	400	1		✓	✓	on	
7	SW16062	SCC		A1580	400	1		✓	✓	on	
8	SW16063	SCC		A1166	400	1		✓	✓	on	
					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

ACCUTEST

TO-14/TO-15

Batch ID: V5W647 ~~V5W6467~~ TH 2/8/16

Date: 2/5/16

Analyst Signature:

Columns: RTX-160MX0.32mm

Method: SWTO15.M

Seq. File: 160205.S

Initial Cal. Method: M5W637

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS6861	TO15STD	40ppbv
AS6864	TO15LCS	40ppbv
AS6869	IS/SURR	100ppbv

(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: YH Date: 2/12/16

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
1	SW16064	BFB		openposition	400					OK	
2	SW16065	CC637-10		A971	100			✓	✓	OK	
3	SW16066	BS		A964	100			✓	✓	OK	
3	SW16067	BSD		A964	100			✓	✓	OK	
4	SW16068	IB		A963	100			✓	✓	—	
4	SW16069	MB		A963	400			✓	✓	OK	
5	SW16070	JC13324-1	SL	M261	400	1		✓	✓	OK	
6	SW16071	JC13324-2	↓	A880	400	1		✓	✓	OK	
7	SW16072	JC13324-3	↓	A467	400	1		✓	✓	OK	
8	SW16073	IB		A963	100	1		✓	✓	—	
9	SW16074	JC13758-1	RCP	A766	YH ~~100~~	1		✓	✓	OK/DL	80ml; ARLOW
10	SW16075	JC13758-2	↓	A349	100	1		✓	✓	OK	
11	SW16076	JC13758-3		YH M036	152	1.52		✓	✓	OK	
11	SW16077	JC13758-30up		M036	152	1.52		✓	✓	OK	
12	SW16078	JC13758-4		A862	100	1		✓	✓	OK	
13	SW16079	JC13758-5		A750	100	1		✓	✓	OK	
14	SW16080	JC13758-6	↓	A323	100	1		✓	✓	OK	
15	SW16081	SCC		A263	400	1		✓	✓	OK	
16	SW16082	JC13755-1	STD	A313	608	1.52		✓	✓	OK	
1	SW16083	JC13796-1	SL	A1086	660	1.65		✓	✓	OK	
2	SW16084	JC13796-2	↓	A265	400	1		✓	✓	OK	
3	SW16085	JC13795-1	↓	A474	660	1.65		✓	✓	OK	
4	SW16086	JC13795-2	↓	A1063	400	1		✓	✓	OK	
5	SW16087	SCC		A251	400	1		✓	✓	OK	

TH 2/8/16

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

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ACCUTEST Laboratories

Canister Secondary Dilution Log

			Original Canister Dilution				Secondary Canister Dilution						
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister ID	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equiv Total Volume CC	Dilution Factor	Final Canister Dilution Factor
2/6/16	ML	JC137581	A716	5.0	1.2	1.30							1.3
		JC137561	A311	8.5	1.3	1.52	A684	1000	100	14.7	2000	20	30.4
								1000	100	14.7	2000	20	22

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 Miscalclulation, # 4 = Analyst's Correction Error

TO-14/TO-15

ACCUTEST

Batch ID: VW2140

Date: 2/11/16

Analyst Signature: [signature]

Columns: RTX-160MX0.32mm

Method: TO15W.M

Seq. File: W160211.S

Initial Cal. Method: MW2140

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.
AS6874	IS/SURR	100ppbv

Standard Data

Lot #	Description	Conc.
AS6898	TO15STD	40ppbv
AS6899	TO15STD	1.0ppbv
AS6900	TO15STD	0.4ppbv
AS6901	TO15LCS	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: 2/12/16

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
5	W53465	BFB		A963	100			/	/	OK	
1	W53466	ICC2140-10		A977	100			/	/	OK	
1	W53467	IC2140-5		A977	50			/	/	~~OK~~ YH	not used
2	W53468	IC2140-0.5		A976	200			/	/	OK	
2	W53469	IC2140-0.2		A976	80			/	/	OK	
1	W53470	IC2140-20		A977	200			/	/	OK	
1	W53471	IC2140-15		A977	150			/	/	OK	
5	W53472	IB		A963	100			/	/	-	
3	W53473	IC2140-0.1		A970	100			/	/	OK	
3	W53474	IC2140-0.04		A970	40			/	/	OK	
1	W53475	IC2140-30		A977	300			/	/	OK	
5	W53476	IB		A963	100			/	/	-	
1	W53477	IC2140-5		A977	50			/	/	OK	
1	W53478	IC2140-40		A977	400			/	/	OK	
5	W53479	IB		A963	100			/	/	-	
4	W53480	ICV2140-10		A978	100			/	/	OK	
						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

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ACCUTEST

TO-14/TO-15

Batch ID: VW2141

Date: 2/12/16

Analyst Signature:

Columns: RTX-1 60M X 0.32mm

Method: TO15W,M

Seq. File: W160212.S

Initial Cal. Method: MW2140

AS Data

Method: TO15,MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS6898	TO15STD	40ppbv
AS6901	TO15LCS	40ppbv
AS6874	IS/SURR	100ppbv

(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: Date: 2/17/16

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
1	WS3481	BFB		openposition	400					OK	
2	WS3482	CC2140-10		A977	100			/	/	OK	
3	WS3483	BS		A978	100			/	/	OK	
3	WS3484	BSD		A978	100			/	/	OK	
4	WS3485	IB		A963	100			/	/	—	
4	WS3486	MB		A963	400			/	/	OK	
5	WS3487	JC14011-1	STD	A1049	100	1		/	/	OK	
6	WS3488	JC14011-2	↓	A220	20	1		/	/	OK	
7	WS3489	JC14011-3		A985	20	1		/	/	OK	
8	WS3490	JC14011-2		A220, A253	200	246		/	/	OK	
9	WS3491	JC14011-3		A985, A870	200	250		/	/	OK	
10	WS3492	SCC		A496	400	1		/	/	RR	PCE hit
11	WS3493	JC14012-1	STD	A297	800	2.29		/	/	OK	
12	WS3494	JC14012-2	↓	A1071	400	1		/	/	OK/DC	RR40ml
12	WS3495	JC14012-2Dup		A1071	400	1		/	/	OK	
13	WS3496	JC14012-3		A259	400	1		/	/	OK/DC	RR20ml
14	WS3497	JC14012-4	↓	A472	400	1		/	/	OK/DC	RR100ml
15	WS3498	SCC		A746	400	1		/	/	OK	
16	WS3499	JC14012-5	STD	A308	400	1		/	/	OK/DC	RR50ml
1	WS3500	JC14012-6	↓	A1032	592	1.48		/	/	OK/DC	RR ~~20ml~~ YH 50ml/SDX
2	WS3501	JC14012-7		A667	400	1		/	/	OK/DC	RR 50ml/SDX
3	WS3502	JC14012-8	↓	A841	400	1		↑	/	OK/DC	RR50ml/SDX
4	WS3503	JC14058-1	STD	A1112	400	1		/	/	RR	RR40ml/100ml C/O
5	WS3504	JC14058-2	↓	A1067	400	1		/	/	OK/DC	RR100ml
6	WS3505	JC14058-3		YH AM012	400	1		/	/	OK	
7	WS3506	JC14058-4		A278	400	1		/	/	OK	
8	WS3507	JC14058-5		YH JCA421	100	1		/	/	OK/DC	RR40ml
9	WS3508	JC14058-6		A411	100	1		/	/	OK	
10	WS3509	JC14058-7	↓	A788	100	1		/	/	OK/DC	RR40ml

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

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7.8.5

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ACCUTEST Laboratories

Canister Secondary Dilution Log

			Original Canister Dilution				Secondary Canister Dilution						
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister ID	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equiv Total Volume CC	Dilution Factor	Final Canister Dilution Factor
2/12/16	YH	JC14011-2	A220	3.5	1.2	1.23	A253	6000	50	9.8	10,000	200	246
		JC14011-3	A985	4	1.2	1.25	A870	6000	50	9.8	10,000	200	250
		JC14058-1	A1112	9	1.2	1.55							
		" -2	A1067	10	1	1.60							
		JC14012-5	A308	11	1.1	1.70							
		" -7	A667	10	1.0	1.60							
		" -8	A841	10	1.0	1.60							
		JC14150-1	A1157	2	1.1	1.15	A299	6000	10	9.8	10,000	1,000	1,150

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

TO-14/TO-15

ACCUTEST

Date: 3/1/16

Batch ID: VW2152

Analyst Signature:

Columns: RTX-1-60mX0.32mmX1.0µm

Method: TO15W.M

Seq. File: W160301.S

Initial Cal. Method: MW2152.M

AS Data

Method: TO15.MPT

Standard Data

Lot #	Description	Conc.
AS6906	Int/Surr exp 1/4/17	100 ppbV
AS6925	TO15 LCS (A978) exp 4/2/16	40 ppbV

Standard Data

Lot #	Description	Conc.
AS6924	TO15 Std (A977) exp 4/2/16	40 ppbV
AS6926	TO15 Std (A976) exp 4/2/16	1.0 ppbV
AS6927	TO15 Std (A970) exp 4/2/16	0.4 ppbV
AS6914	TO15 LCS (A965) exp 1/9/16	40 ppbV

(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: Date: 3/2/2016

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
3	W53822	BFB		A976	5 200 ml					ok	Time 1644
3	W53823	IC2152-0.2		A976	200 ml			✓	✓	ok	
3	W53824	IC2152-0.5		A976	500 ml			✓	✓	ok	
1	W53825	IC2152-0.04		A970	40			✓	✓	ok	
2	W53826	IC2152-5		A977	50			✓	✓	ok	
2	W53827	IC2152-10		A977	100			✓	✓	ok	
2	W53828	IC2152-20		A977	200			✓	✓	ok	
4	W53829	IB		A962	400						
2	W53830	IC2152-40		A977	400			✓	✓	ok	
4	W53831	IB		A962	400						naph fails for initial cal
5	W53832	ICV2152-10		A978	100			✓	✓	OR	fails high; use diff standard
5	W53833	ICV2152-10		A965	100			✓	✓	ok	

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Form: AT 008-05

Rev. Date: 10/20/09

TO-14/TO-15

Batch ID: VW2161

ACCUTEST

Date: 3/11/16

Analyst Signature:

Columns: RTX-160MX0.32mm
Method: TO15W,M
Seq. File: W160311.S
Initial Cal. Method: MW2152

AS Data

Method: TO15,MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS6924	TO15STD	40ppbv
AS6925	TO15LCS	40ppbv
AS ~~6809~~ YH	IS/Surr	100ppbv
6929		

(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: Date: 3/14/16

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
1	W54079	BFB		~~open DOS~~ from A977	400			✓	✓	OK	
2	W54080	CC2152-10		A977	100			✓	✓	OK	
3	W54081	BS		A978	100			✓	✓	OK	
3	W54082	BSD		A978	100			✓	✓	OK	
4	W54083	IB		A963	100			✓	✓	—	
4	W54084	MB		A963	400			✓	✓	OK	
5	W54085	JC15481-1	STD	A1099	50	1.55		✓	✓	OK	
6	W54086	JC15483-1	STD	A318	20	1.48		✓	✓	OK	
7	W54087	JC15483-2	↓	A308	20	1.58		✓	✓	OK	
8	W54088	JC14928-2	STD	A441	100	1		✓	✓	OK	don't report
9	W54089	~~JC14928-3~~ YH	↓	A1062 YH ~~A1064~~	100	1		✓	✓	OK	JC15488-1
10	W54090	SCC		A850	400	1		✓	✓	OK	CP8318
11	W54091	~~JC15063-1~~ YH	STD+	YH ~~A252~~ A1204	YH ~~400~~	1.60		✓	✓	OK	JC15930-1 (640ml
12	W54092	JC15063-2		A1166	400	1		✓	✓	OK	
12	W54093	JC15063-20up		A1166	400	1		✓	✓	OK	
13	W54094	JC15063-3		A284	400	1		✓	✓	OK	RR (100ml
14	W54095	JC15063-4		A251	400	1		✓	✓	OK	
15	W54096	JC15063-5	↓	A263	400	1		✓	✓	OK	
16	W54097	JC15930-1	STD	A1204	200	1.60		✓	✓	OK	
1	W54098	JC15386-1	SL	A1196	820	2.05		✓	✓	OK	RR (200ml
2	W54099	JC15386-2		A277	700	1.75		✓	✓	OK	
3	W54100	JC15386-3	↓	A195	680	YH ~~1.70~~	1.80	✓	✓	OK	
4	W54101	SCC		A360	400	1		✓	✓	OK	CP8321
5	W54102	JC15030-1	STD+	A1036	50	1.48		✓	✓	OK	
6	W54103	JC15030-2		A1062	50	1.70		✓	✓	OK	
7	W54104	JC15030-3		A1077	50	1.60		✓	✓	OK	
8	W54105	JC15030-5		A469	100	1.55		✓	✓	OK	
9	W54106	JC15030-6		A1175	100	1.60		✓	✓	OK	
10	W54107	JC15030-7		A487	100	1.60		✓	✓	OK	
11	W54108	JC15030-8	↓	A293	100	~~1.60~~ YH		✓	✓	OK	1.70DF

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

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Rev. Date: 10/20/09

ACCUTEST Laboratories

Canister Secondary Dilution Log

			Original Canister Dilution				Secondary Canister Dilution						
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister ID	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equiv Total Volume CC	Dilution Factor	Final Canister Dilution Factor
3/11/16	YH	JC15481-1	A1099	9	1.2	1.55							
		JC15483-1	A318	8	1.2	1.48							
		JC15031-3	A1077	10	1	1.60							
		-6	A1175	10	1	1.60							
		-8	A293	11	1.1	1.70							

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

TO-14/TO-15

ACCUTEST

Batch ID: VW2162

Date: 3/12/16

Analyst Signature:

Columns: RTX-160MX0.32mm

Method: TO15W,M

Seq. File: W160312.S

Initial Cal. Method: MW152

AS Data

Method: TO15,MPT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS6924	TO15STD	40ppbv
AS 6925	TO15LCS	40ppbv
AS ~~6904~~ YH	IS/Surr	100ppbv
6929		

(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: Date: 3/14/16

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
1	WS4109	BFB		openposition	400					on	
2	WS4110	CC2152-10		A977	100			✓	✓	notused	
2	WS4111	CC2152-10		A977	100			✓	✓	on	
3	WS4112	BS		A978	100			✓	✓	on	
3	WS4113	BSD		A978	100			✓	✓	on	
4	WS4114	IB		A963	100			✓	✓	—	
4	WS4115	MB		A963	400			✓	✓	on	
5	WS4116	JC15386-1	SL	A1196	200	2.05		✓	✓	on	
6	WS4117	JC15063-1	STD+	A252	400	1		✓	✓	on	
7	WS4118	JC15063-3	↓	A284	100	1		✓	✓	on	
8	WS4119	JC15023-1	SL1	A987, M196	200	77.5		✓	✓	on	
9	WS4120	JC15023-2	↓	A838, M189	200	74		✓	✓	on	
10	WS4121	JC15061-1	STD+	A385, M179	25	120		✓	✓	on	
11	WS4122	SCC		M402	400	1		✓	✓	on	CP8322
12	WS4123	JC15508-1	SL	A833	640	1.60		✓	✓	on	
13	WS4124	JC15508-2	↓	A243	400	1		✓	✓	on	
13	WS4125	JC15508-2dup	↓	A243	400	1		✓	✓	on	
14	WS4126	JC15508-3	↓	A1096	400	1		✓	✓	on	
15	WS4127	JC15508-4	↓	A778	608	1.52		✓	✓	on	
16	WS4128	JC15078-1	SL	A398	20	1		✓	✓	on	RR500X
1	WS4129	SCC		A1184	400	1		✓	✓	RR	CP8323 Possible C/O
2	WS4130	JC15142-1	STD	M445	50	1		✓	✓	on	RR1om
3	WS4131	JC15143-1	↓	M317	50	1		✓	✓	on	RR1om
4	WS4132	JC15144-1	STD	A1210	100	1				notrun	instrumentstopped
5	WS4133	JC15144-2	↓	A1222	100	1					
6	WS4134	JC15144-3	↓	M449	100	1					
7	WS4135	JC15144-4	↓	A606	100	1					
8	WS4136	JC15144-5	↓	A568	100	1					
9	WS4137	JC15180-1	SL	A501	100	1					

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Rev. Date: 10/20/09

ACCUTEST Laboratories

Canister Secondary Dilution Log

			Original Canister Dilution				Secondary Canister Dilution						
Date	Initials	Accutest Sample ID	Canister ID	Vacuum in "Hg at time of Dilution	Final Pressure psig	Dilution Factor	Canister ID	Canister Volume CC	Sample Volume Added CC	Final Pressure psig	Equiv Total Volume CC	Dilution Factor	Final Canister Dilution Factor
3/12/16	YH	JC15023-1	A987	9	1.2	1.55	M196	1000	40	14.7	2000	50	77.5
		↓ -2	A838	8	1.2	1.48	M189	1000	40	14.7	2000	50	74

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