NEW YORK CITY SCHOOL
CONSTRUCTION AUTHORITY

January 12, 2018

Ms. Wendi Zheng
Project Manager
New York State Department of Environmental Conservation
Region 2
1 Hunter's Point Plaza
47-40 21st Street
Long Island City, NY 11101-5401

Re: Interim Remedial Measure Construction Completion Report
Brownfield Cleanup Program (BCP) Site No. C224266
Proposed Pre-Kindergarten Facility K710
168 8th Street (Block 1003, Lot 11), Brooklyn, New York 11215

Dear Ms. Zheng:

Attached please find the Interim Remedial Measure (IRM) Construction Completion Report, prepared by the New York City School Construction Authority's (NYCSCA's) environmental consultant, TRC Engineers, Inc. (TRC), in connection with the proposed Pre-Kindergarten Facility K710 located at 168 8th Street, Brooklyn, New York 11215 (the "Site").

The IRM Construction Completion Report describes the remedial activities completed between October 30, 2017 and November 29, 2017, including investigation and removal of a drainage feature, subsurface piping, and suspected source material in the northern portion of the Site.

We have submitted a Brownfield Cleanup Program (BCP) Application for this Site and await conclusion of the public comment period on January 19, 2018.

If you have any questions, please contact me at (718) 472-8502.

Sincerely,

Lee Guterman
Director, Hazmat Unit
Industrial and Environmental Hygiene Division

cc: A. Lempert, S. Kanaparthi, M. Sherwood (NYCSCA)
D. Glass, J. Miranda, L. O'Hara, E. Ebert (TRC)

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January 12, 2018

Mr. Srinivas Kanaparthi
Industrial Hygienist C, IEH Division
New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, NY 11101-3045

Re: Interim Remedial Measure Construction Completion Report
Brownfield Cleanup Program (BCP) Site No. C224266
Proposed Pre-Kindergarten Facility K710
168 8th Street, Brooklyn, New York 11215
Block 1003, Lot 11
TRC Project No.: 275864

Dear Mr. Kanaparthi:

This Construction Completion Report documents and presents the results of the Interim Remedial Measure (IRM) completed at the site of the proposed Pre-Kindergarten Facility K710, located at 168 8th Street, Brooklyn, New York 11215 (hereafter referred to as the "Site"). The IRM was completed in accordance with the IRM Work Plan dated September 25, 2017 and New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER), Technical Guidance for Site Investigation and Remediation (DER-10).

BACKGROUND AND SITE DESCRIPTION

The Site encompasses approximately 13,500 square-feet and is currently vacant and fenced. Ground surface coverings consist primarily of concrete and gravel. The Site was historically occupied by an ink manufacturer, a storage facility with a gauge manufacturer, a chemical laboratory, a machine works facility, a garage and a gasoline station, a plumbing supply/metal products manufacturer, and a textile factory. A fire occurred at the Site in the early 1990s, and the lot has been vacant since approximately 1992. The New York City School Construction Authority (NYCSCA) purchased the Site in May 2017 for the construction of a Pre-Kindergarten Facility. Figure 1 present a Site Location Map and Figure 2 presents a Site Plan.

Between 2011 and 2013, TRC completed a Phase I Environmental Site Assessment (ESA) and a Phase II Environmental Site Investigation (ESI) for the Site. Additionally, since the Site had been identified by local community groups as a potential burial ground for Revolutionary War soldiers, archeological investigations were completed by AKRF Engineering, P.C. (AKRF) in June and September 2017. The archeological investigations included excavation of ten (10) trenches to a maximum depth of 10 feet below ground surface (bgs). No evidence of human remains or grave shafts were observed during the archeological investigations.

The results of the Phase II ESI revealed elevated concentrations of chlorinated volatile organic compounds (CVOCs) in soil vapor and groundwater in the northern portion of the Site. Specifically, trichloroethene (TCE) was detected at a maximum concentration of 99 micrograms per liter (µg/L) in the groundwater sample collected adjacent to the northwest corner of the Site (in groundwater sample TRC-MW12) and TCE was detected in soil vapor at a maximum concentration of 16,000 micrograms per cubic meter (µg/m^3) (in soil vapor sample TRC-SG1) collected in the northern portion of the Site. Additionally, during the archeological investigation TCE was detected in one sample (TRC-TR-2(3.5-4)) of soil excavated from Trench 2 at a concentration of 8.44 milligrams per kilogram (mg/kg), which is above the Protection of Groundwater Soil Cleanup Objective (SCO) of 0.47 mg/kg. The TCE detected in the soil sample was attributed to former Site uses and associated with the former drainage system identified in Trench 2. The location of the former drainage feature and historic sample locations are shown on Figures 3 and 4.

In September 2017, TRC prepared an IRM Work Plan to expeditiously address concerns regarding the potential for off-site migration of TCE in soil vapor detected at the Site. Specifically, the IRM Work Plan scope included investigation and removal of the observed drainage feature located on the northeastern portion of the Site (in Trench 2), subsurface piping and drainage features northwest of Trench 2, subsurface piping southwest of Trench 2, and impacted soil encountered. Note that the IRM Work Plan scope included investigation and excavation in areas beyond the limits of Trench 2, including previously unexcavated areas. The proposed area of the IRM is shown on Figure 2 of the IRM Work Plan (refer to Attachment A for the complete IRM Work Plan).

The IRM Work Plan was submitted to NYSDEC on September 26, 2017. An email was received from NYSDEC on October 16, 2017 indicating that NYSDEC had no objection to the submitted Work Plan. However, NYSDEC clearly indicated that the IRM would be completed outside of the Brownfield Cleanup Program (BCP). A description of the IRM scope, completed IRM activities, deviations from the IRM Work Plan, and a summary and conclusions are provided below.

DESCRIPTION OF IRM SCOPE

Field activities were conducted at the Site between October 30, 2017 and November 29, 2017. The IRM was performed in compliance with Site-specific and regulatory agency requirements, including worker health and safety requirements mandated by the Occupational Safety and Health Administration (OSHA). Environmental sampling and laboratory analysis were performed in accordance with the Quality Assurance Project Plan (QAPP).

The IRM field activities consisted of the following:

- Investigation and removal of the drainage feature, subsurface piping, and potential source material based on field observations (e.g., odors, staining or elevated photoionization detector (PID) measurements) in the northern portion of the Site;

- Implementation of the community air monitoring plan (CAMP) which included real-time air monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of the work area;

- Collection and laboratory analysis of post-excavation and documentation samples subsequent to removal of impacted soil and subsurface piping. Soil samples were analyzed for VOCs;

- Installation of a demarcation layer between the existing soil and imported fill material;

- Backfilling of excavation with clean fill material (sand) from Evergreen Recycling of Corona, New York (EROC)[1] and covering of backfilled areas with a 2-foot thick layer of virgin bluestone;

- Collection and laboratory analysis of two (2) waste characterization soil samples in accordance with disposal facility requirements; and,

- Off-site transport and disposal of impacted material excavated and removed during the IRM in accordance with Federal, State, and local laws and regulations.

The locations of removed subsurface piping and drainage features, limits of the IRM excavation, post-excavation and documentation soil sampling locations, excavation depths and recorded PID measurements are shown on Figure 3. The post-excavation and documentation sampling results are presented on Figures 3 and 4. Representative photographs of the field work activities are provided in Attachment B.

SUMMARY OF COMPLETED IRM ACTIVITIES

Brookside Environmental, Inc. (Brookside) was retained as a subcontractor to TRC for excavation services. Excavation activities were performed between October 30 and November 6, 2017 as described below.

Removal of Drainage Features and Subsurface Piping

Excavation began in the vicinity of the observed drainage feature identified during the June 2017 archeological investigation located in the northeastern portion of the Site (in Trench 2). Refer to Figure 3 for the location of the drainage feature. Subsurface pipes and drainage features were investigated, inspected, and removed. The limits of excavation were advanced based on field observations with the objectives of investigating and removing potential "source material" encountered during IRM implementation, consisting of drainage features, subsurface piping and impacted soil. Figure 3 shows the locations of subsurface piping and drainage features identified during excavation. During removal of drainage features and subsurface piping TRC noted the following:

- Over 15 separate pipes, ranging in length between approximately 1 and 9 feet, were identified in the excavation area. The majority of the pipes identified were 4-inch inner-diameter (ID) cast iron pipes located approximately 3.5 feet bgs. TRC also observed several 1-, 2-, and 3-inch ID cast iron pipes, a 1.5-inch ID steel pipe, and a 1-inch ID lead pipe. With the exception of the vertical pipe described below, there were no pipes identified deeper than 4 feet bgs in the excavation area.

- TRC noted an approximately 2-inch ID vertical steel pipe in the northwestern portion of the excavation (refer to Figure 3). The excavation was advanced to approximately 13 feet bgs around

[1] The clean fill material (sand) used was in compliance with the Restricted-Residential Use requirements for imported fill material found in Appendix 5 of DER-10 and the definition of environmentally clean fill and backfill for non-contact material in NYCSCA Specification Section 02200 (Earthwork).

the vertical pipe. Soil around the pipe appeared to be undisturbed, and no elevated PID readings were recorded. Since there were no structures or impacted soils identified at 13 feet bgs and the excavation could not be advanced deeper due to safety concerns (i.e., side slope stability), further investigation of the vertical pipe ceased. The pipe could not be safely removed from the excavation and was left in place.

- There were no free-flowing liquids observed in the pipes removed from the excavation. There was no evidence of contamination in soil inside of and immediately adjacent to the majority of the pipes; however, three pipes in the central and southwest portion of the excavation contained soil which exhibited elevated PID readings (refer to Figure 3).

- Five apparent drains were observed in the excavation area as follows:

    - Four circular in shape which appeared to connect to 4-inch ID cast iron pipe. The connecting pipe was in the central portion of the excavation oriented east-west.

    - One rectangular and embedded in concrete (refer to Detail on Figure 3). An approximately 3-inch ID cast-iron pipe (located approximately 3 feet bgs) was connected to the bottom of the rectangular metal drain. Additionally, a 1.5-inch ID steel pipe was observed 1 to 2 feet bgs (sloping downwards towards the east) approximately one foot south of and parallel to the cast iron pipe. The steel pipe was not connected to the cast-iron pipe or drain, and the point of origin could not be determined.

- Piping and drains that did not exhibit elevated PID readings were transported off-Site by Brookside Environmental. Piping and drains that exhibited evidence of impacts (i.e., elevated PID readings) were combined with stockpiled soil for transport off-Site.

Soil Excavation

At completion, the excavation area was approximately 48 feet wide by 44 feet long and up to 19 feet deep. The sidewalls were sloped to the extent practical in order to maintain an open excavation without support. Excavated soil was screened for VOCs using a PID. Excavated soil which was determined to be impacted based on visual and olfactory observations, or elevated PID measurements, was stockpiled on polyethylene sheeting, covered, and secured prior to transportation off-Site for disposal. Excavated soil that did not exhibit evidence of impacts was reused for backfill within the excavation. For the purposes of this report, the footprint of the excavation has been divided into three areas as follows: the southeastern portion of the excavation, the southwestern portion of the excavation, and the northern portion of the excavation, as shown on Figure 3. Refer to Figure 3 for a Summary of Field Conditions and Soil Sampling Locations.

The southeastern portion of the excavation was advanced to a maximum depth of approximately 19 feet bgs, at which depth groundwater was encountered. The following is a summary of activities completed and observations recorded in connection with the southeastern portion of the excavation:

- PID readings of approximately 100 parts per million (ppm) were recorded for soil at depths of approximately 19 feet bgs.

- Maximum PID readings (up to 608.5 ppm) and odors were recorded for soil approximately 6 to 7 feet bgs.

- Soil was saturated at approximately 19 feet bgs; however, groundwater did not accumulate in the excavation due to cave in of material from sidewalls. Therefore, a groundwater sample could not be collected.

- The southeastern portion of the excavation area was extended towards the east and south until clean soil sidewalls were encountered. PID readings for eastern sidewall soil ranged between 1.6 to 9.8 ppm. PID readings for southern sidewall soil ranged between 2.4 and 5.8 ppm.

The southwestern portion of the excavation was advanced to a maximum depth of approximately 18 feet bgs. The excavation could not be advanced deeper due to safety concerns (i.e., side slope stability and limits of the excavator). The following is a summary of activities completed and observations recorded in connection with the southwestern portion of the excavation:

- A PID reading of 181.2 ppm was recorded for soil at a depth of approximately 18 feet bgs.

- Maximum PID readings (up to 274.8 ppm) were recorded for soil approximately 11 to 12 feet bgs.

- The southwestern portion of the excavation area was extended towards the west until soil free of impacts was encountered. PID readings between 1.8 and 4.3 ppm were recorded during screening of soil on the western sidewall.

The northern portion of the excavation was advanced to a maximum depth of approximately 13 feet bgs. The excavation could not be advanced deeper due to safety concerns (i.e., side slope stability and limits of the excavator). The following is a summary of activities completed and observations recorded in connection with the northern portion of the excavation:

- The excavation was advanced towards the northwest and PID readings ranging from 89.9 to 179 ppm were recorded when screening soil on the northwest sidewall. PID readings of up to 301.7 ppm were recorded when screening soil on the northern sidewall.

- A PID reading of 398.6 ppm was recorded for soil approximately 13 feet bgs.

- Since the excavation was approaching the sidewalk, a northern sidewall and northwestern sidewall free of impacts (PID readings and odor) was not achieved.

CAMP Results

Air monitoring for ambient VOCs and particulates was performed during the excavation, backfill, and truck loading activities, in accordance with the IRM Work Plan. The purpose of the CAMP was to monitor air downwind of the work areas for potential impacts associated with IRM field activities. The objective was to maintain particulate readings below the NYSDOH-defined action level of 100 micrograms per cubic meter ($\mu g/m^3$) above the daily measured background level and maintain total organic vapor levels below 5 ppm. Instantaneous elevated particulate and organic vapor readings were

recorded on November 3 and 6, 2017. The elevated instantaneous readings were recorded at the downwind CAMP station located in the northeastern corner of the Site, downwind of the work area. The elevated instantaneous readings resulted from the movement of the excavator (which generated dust and vehicle exhaust) and activities associated with securing the soil stockpile with polyethylene sheeting. The elevated instantaneous readings were not attributable to intrusive work activities or movement of impacted soil. There were no exceedances above the CAMP action levels which required corrective actions. The CAMP data is presented in Attachment C.

Demarcation Layer, Backfill, and Cover Layer

Excavated material that did not exhibit evidence of impacts based on field observations and PID measurements was reused for backfill within the excavation. In areas where impacted soil was identified and removed, a demarcation layer (i.e., plastic orange fencing) was placed between Site soil and imported material.

On November 8, 2017, the excavation was backfilled to within two (2) feet of pre-existing grade with approximately 160 cubic yards of environmentally clean fill material from Evergreen Recycling of Corona, New York (EROC). A minimum of two (2) feet of virgin bluestone was placed above the clean fill. As mentioned above, the imported fill material was in compliance with the definition of environmentally clean fill and backfill for non-contact material in NYCSCA Specification Section 02200 (Earthwork) and Restricted-Residential Use requirements found in Appendix 5 of DER-10 which is the lower of the Protection of Groundwater SCOs and the Restricted-Residential Use SCOs. The backfill material laboratory analytical data and weight slips are presented in Attachment D.

OFF-SITE DISPOSAL OF CONATMINATED MATERIAL

Waste characterization sampling was performed by TRC to select appropriate disposal facilities for soil to be removed from the Site. On November 1, 2017, one soil sample was collected from the soil stockpile generated from the excavation and submitted to SGS Accutest (Accutest) of Dayton, New Jersey for analysis of VOCs, polycyclic aromatic hydrocarbons (PAHs), total metals, Toxicity Characteristic Leaching Procedure (TCLP) metals, total petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and the Resource Conservation and Recovery Act (RCRA) characteristics of corrosivity, reactivity and ignitability. On November 8, 2017, one additional soil sample was collected from the soil stockpile generated from the excavation and submitted to Alpha Analytical Laboratories, Inc. (Alpha) of Westborough, Massachusetts for analysis of TCLP VOCs, TCLP herbicides, TCLP pesticides, TCLP SVOCs, TCLP pH, oil and grease, paint filter, total volatile solids, ammonia-nitrogen, total solids, and chemical oxygen demand. The waste characterization sampling analytical reports, prior reports for the Site (including the Phase II Environmental Site Investigation (ESI) Report dated March 2013 and Letter Report for Inspection Services during Phase IB Archeological Investigation dated July 2017), and waste profile form were submitted to Waste Management of New York (WMNY) for review and acceptance of the contaminated soil for disposal at High Acres Landfill in Fairport, New York. In a letter dated November 22, 2017, WMNY approved the material for acceptance at the High Acres Landfill via the Varick 1 Transfer Station in Brooklyn, NY.

On November 28 and November 29, 2017 approximately 354 tons of excavated soil were loaded into tri-axle trucks and transported to WMNY Varick 1 Transfer Station in Brooklyn, New York for transport via

rail to the High Acres Landfill. The contents of each truck were covered with tarps prior to leaving the Site. The soil disposal manifests, and associated disposal approvals are provided in Attachment E.

POST-EXCAVATION AND DOCUMENTATION SOIL SAMPLING

This section presents a discussion of the results of soil sampling completed as part of the IRM. Tabulated results of laboratory analyses are presented in the Tables section of this report. The complete laboratory analytical data packages are included in Attachment F.

Standards, Criteria, and Guidance (SCGs) presented in 6 NYCRR Part 375-6 are typically used in evaluating soil at BCP Sites.

In accordance with 6 NYCRR Part 375-6, applicable soil cleanup objectives include:

- Unrestricted Use Soil Cleanup Objectives (SCOs): A comparison to the Unrestricted Use SCOs should be made to evaluate the feasibility of an unrestricted remedy and is a requirement of the BCP.

- Restricted-Residential Use SCOs: Restricted-Residential Use SCOs for the protection of public health are the applicable SCOs for the proposed use of the Site (i.e., public school).

- Protection of Groundwater SCOs: The Protection of Groundwater SCOs should be used for parameters that exceed NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values" in groundwater in accordance with 6 NYCRR 375-6.5(a).

Post-Excavation and Documentation Sampling Results

Soil sampling was performed to verify the conditions at the limits of the IRM excavation ("post-excavation samples") and to document the conditions below drainage features and piping runs ("documentation samples"). Five (5) sidewall post-excavation soil samples and three (3) bottom post-excavation soil samples were collected for analysis. Additionally, three (3) documentation soil samples and one (1) duplicate soil sample collected beneath the pipes/drains were submitted for analysis. The soil samples were collected in accordance with NYSDEC/USEPA protocols, containerized in laboratory supplied jars, placed in chilled coolers, and transported via courier to SGS Accutest for analysis of VOCs via United States Environmental Protection Agency (USEPA) Method 8260C. Standard chain-of-custody procedures were followed.

Four (4) VOCs, including acetone, cis-1,2-dichloroethene, tetrachloroethene (PCE), and TCE, were detected in the soil samples. One VOC, acetone, was detected marginally above the Unrestricted Use SCO (UUSCO) and Protection of Groundwater SCO in two (2) soil samples (TRC-S3(5') and TRC-S6(4')). Acetone is a common laboratory contaminant and is not a compound of concern at the Site. Cis-1,2-dichloroethene, PCE, and TCE were detected at concentrations which are below the UUSCOs, Restricted-Residential Use SCOs, and Protection of Groundwater SCOs. There were no other VOCs detected.

A summary of the soil samples collected for analysis is presented in Table 1 and the analytical data is summarized in Table 2. The analytical data package is presented as Attachment F. The post-excavation and documentation soil sample locations and analytical results are shown on Figures 3 and 4.

Quality Assurance/Quality Control Data Evaluation

The results of the data validation are summarized in the Data Usability Summary Report (DUSR). QA/QC procedures for data completeness; sample holding time and preservation; gas chromatography/mass spectrometry (GS/MS) tunes; instrument initial and continuing calibration; blanks; surrogate recoveries; matrix spike/matrix spike duplicate results; laboratory control sample/laboratory control sample duplicate results; field duplicate results, sample quantitation and quantitation limits; target compound identification; and internal standards performance are documented in the DUSR.

Based on review of the DUSR, no data was rejected and the results are deemed usable for project objectives, with minor data qualifiers which do not affect data usability. The DUSR is included in Attachment G.

DEVIATIONS FROM THE IRM WORK PLAN

The remedial activities were conducted in accordance with the IRM Work Plan dated September 25, 2017, with the following exceptions:

- Soil samples were not collected at the bottoms of trench excavations since the excavation was extended below the bottom of trenches based on evidence of contamination.

- Since the apparent source area was identified and evidence of contamination was not identified on the southern sidewall of the excavation, additional excavation, in the vicinity of Trench 3, was not warranted.

The Global Positioning System (GPS) coordinates of all sample locations and limits of each excavation could not be recorded due to safety-related concerns.

SUMMARY AND CONCLUSIONS

Presented below is a summary of the IRM activities:

- Between October 30, 2017 and November 6, 2017, excavation activities were completed on the northern portion of the Site to investigate and remove potential source material. The excavation extended over an approximately 48 feet wide by 44 feet long area to a maximum depth of 19 feet bgs. Soil at the deepest part of the excavation was saturated; however, groundwater did not accumulate in the excavation.

- Subsurface structures identified in the excavation included cast-iron and lead piping, brick walls, and drains. Five drains and approximately 15 separate pipes (ranging in length from approximately 1 to 9 feet) were removed from the excavation. One 2-inch ID vertical steel pipe in the northwestern portion of the excavation (refer to Figure 3) could not be safely removed from

the excavation and was left in place. The majority of the subsurface piping was not connected. Free-flowing liquid was not identified in the piping.

- The most impacted interval of soil (exhibiting odors, and a maximum PID reading of 608.5 ppm) was encountered in the southeastern portion of the excavation from approximately 6 to 7 feet bgs, which was approximately 3 feet below the nearest subsurface piping. The soil inside the piping and in the immediate vicinity of the nearest subsurface piping did not exhibit evidence of contamination and the exact point of the release could not be determined. Free product was not observed in the excavation.

- Approximately 354 tons of impacted soil and crushed scrap metal (subsurface piping) were loaded into tri-axle trucks and transported to the Waste Management of New York (WMNY) Varick 1 Transfer Station in Brooklyn, New York. Impacted soil and crushed scrap metal were subsequently transported from Varick 1 Transfer Station via rail to High Acres Landfill in Fairport, New York for disposal. Excavated soil which was free of impacts was reused in the excavation.

- Eight (8) post-excavation soil samples, three (3) documentation soil samples and one duplicate soil sample were collected for analysis for VOCs. Acetone (a common laboratory contaminant) was the only VOC detected above the UUSCO and Protection of Groundwater SCO. The post-excavation and documentation soil sampling results indicate that there were no other VOCs detected at concentrations above the UUSCOs, Restricted-Residential Use SCOs, and Protection of Groundwater SCOs.

- The excavation area was backfilled with clean fill material (sand) which met the Restricted-Residential Use requirements for imported fill material found in Appendix 5 of DER-10. The clean fill material also met the requirements for non-contact environmentally clean fill/backfill as defined in NYCSCA Specification Section 02200. A demarcation layer (i.e., plastic orange fencing) was placed between Site soil and imported material. The ground surface was restored with two feet of virgin bluestone.

Note that soil in the vicinity of historic soil vapor sample location TRC-SG1 (which contained TCE at 16,000 $\mu g/m^3$) and soil in the vicinity of historic soil sample location TRC-TR-2(3.5-4) (which contained TCE at 8.44 mg/kg) were excavated to a depth of approximately 13 to 19 feet bgs and disposed of off-Site. Based on the above, subsurface material that has been determined to be the likely source of CVOCs in soil, groundwater, and soil vapor in the northern portion of the Site was substantially removed and disposed of off-Site.

On October 27, 2017 the NYCSCA submitted an application to the NYSDEC seeking to enroll as a Volunteer into the BCP for the Site. A Remedial Investigation (RI) Work Plan was submitted to the NYSDEC for review with the BCP Application. The RI Work Plan scope included the advancement of soil borings, installation of monitoring wells, the performance of a survey to determine groundwater elevations and flow direction, and the collection and laboratory analysis of soil vapor, soil, and groundwater samples. The RI Work Plan will be implemented following approval from NYSDEC and execution of the Brownfield Cleanup Agreement (BCA).

Comments on the BCP Application were received from NYSDEC in a letter dated November 2, 2017 and the BCP Application was revised and resubmitted to the NYSDEC on November 14, 2017. A Notice of Complete Application was issued on December 13, 2017 and copies of the complete BCP Application and RI Work Plan were delivered to the document repositories on December 18, 2017. A Public Notice/Fact Sheet, which invites public comments on the complete application, was mailed to all parties listed on the Contact List in the BCP Application. Additionally, the Public Notice/Fact Sheet was published on December 20, 2017 in a local newspaper (amNew York). The public comment period ends on January 19, 2018 and it is anticipated that the Brownfield Cleanup Agreement will be executed in February 2018.

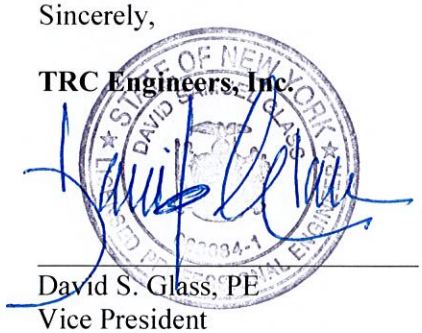
CERTIFICATION

I, David S. Glass, certify that I am currently a New York State registered professional engineer, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Interim Remedial Measure (IRM) Work Plan was implemented and that all construction activities were completed in substantial conformance with the IRM Work Plan, with the exception of deviations noted in this report.

Please do not hesitate to contact me at (212) 221-7822 if you have any questions.

Sincerely,

TRC Engineers, Inc.



David S. Glass, PE
Vice President
NYS Professional Engineer No. 68884-1

cc: L. Guterman, M. Sherwood, NYCSCA
E. Ebert, J. Miranda, L. O'Hara, TRC

Attachments:
Table 1 – Soil Sample Summary
Table 2 – Volatile Organic Compounds in Soil Samples

Figure 1 – Site Location Map
Figure 2 – Site Plan
Figure 3 – Summary of Field Conditions and Soil Sampling Locations
Figure 4 – Soil Sampling Results and Final Site Conditions

Attachment A – IRM Work Plan
Attachment B – Photographic Log
Attachment C – Community Air Monitoring Results
Attachment D – Imported Clean Fill Documentation
Attachment E – Waste Disposal Records
Attachment F – Laboratory Analytical Report
Attachment G – Data Usability Summary Reports (DUSRs)

TABLES

Table 1
New York City School Construction Authority
Interim Remedial Measure Construction Completion Report
168 8th Street, Brooklyn, NY
Soil Sample Summary

Sample Name	Depth Interval (feet bgs)	Date of Collection	Lab Job Number	Lab Sample Number	Matrix	Analyses Performed
						TCL/Part 375 VOCs
TRC-S1(6')	6	10/30/2017	JC54277	JC54277-1	S	X
TRC-S2(19')	19	11/1/2017	JC54422	JC54422-1	S	X
TRC-S3(5')	5	11/1/2017	JC54422	JC54422-2	S	X
TRC-S4(5')	5	11/1/2017	JC54422	JC54422-3	S	X
TRC-S5(12')	12	11/1/2017	JC54422	JC54422-4	S	X
TRC-S6(4')	4	11/2/2017	JC54555	JC54555-1	S	X
TRC-S7(4')	4	11/2/2017	JC54555	JC54555-2	S	X
TRC-DUP-1	4	11/2/2017	JC54555	JC54555-3	S	X
TRC-S8(5')	5	11/3/2017	JC54689	JC54689-1	S	X
TRC-S9(13')	13	11/6/2017	JC54803	JC54803-1	S	X
TRC-S10(5')	5	11/6/2017	JC54803	JC54803-2	S	X
TRC-S11(5')	5	11/6/2017	JC54803	JC54803-3	S	X

Notes:
bgs - Below ground surface
TCL - Target Compound List
S - Soil
VOCs - Volatile Organic Compounds
TRC-DUP-1 is a duplicate of sample TRC-S7(4')

Table 2
New York City School Construction Authority
Interim Remedial Measure Construction Completion Report
168 8th Street, Brooklyn, NY
Volatile Organic Compounds in Soil Samples

			SAMPLE NAME	TRC-S1(6')		TRC-S2(19')		TRC-S3(5')		TRC-S4(5')		TRC-S5(12')		TRC-S6(4')	
			LAB SAMPLE ID	JC54277-1		JC54422-1		JC54422-2		JC54422-3		JC54422-4		JC54555-1	
			DATE SAMPLE COLLECTED	10/30/2017		11/1/2017		11/1/2017		11/1/2017		11/1/2017		11/2/2017	
VOLATILE ORGANIC COMPOUNDS (mg/kg)	Unrestricted Use SCO	Part 375 - Restricted Residential SCO	Part 375 - Protection of Groundwater SCO	Result		Result		Result		Result		Result		Result	
1,1,1-Trichloroethane	0.68	100	0.68	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
1,1,2-Trichloroethane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
1,1-Dichloroethane	0.27	26	0.27	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
1,1-Dichloroethene	0.33	100	0.33	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
1,2-Dibromo-3-chloropropane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
1,2-Dibromoethane (EDB)	NC	NC	NC	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
1,2-Dichlorobenzene	1.1	100	1.1	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
1,2-Dichloroethane	0.02	3.1	0.02	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
1,2-Dichloropropane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
1,3,5-Trimethylbenzene	8.4	52	8.4	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
1,3-Dichlorobenzene	2.4	49	2.4	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
1,4-Dichlorobenzene	1.8	13	1.8	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
1,4-Dioxane	0.1	13	0.1	0.11[a]	U	0.11	U	0.14	U	0.13	U	0.1	U	0.12	U
2-Butanone (MEK)	0.12	100	0.12	0.0085	U	0.0091	U	0.012	U	0.01	U	0.008	U	0.0094	U
2-Hexanone (MBK)	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
4-Methyl-2-Pentanone	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
Acetone	0.05	100	0.05	0.042		0.0139		**0.0655**		0.0234		0.0125		**0.0569**	
Benzene	0.06	4.8	0.06	0.00042	U	0.00046	U	0.00058	U	0.00052	U	0.0004	U	0.00047	U
Bromochloromethane	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
Bromodichloromethane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Bromoform	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
Bromomethane	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
Carbon Disulfide	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019[b]	U
Carbon Tetrachloride	0.76	2.4	0.76	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Chlorobenzene	1.1	100	1.1	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Chloroethane	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
Chloroform	0.37	49	0.37	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Chloromethane	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
cis-1,2-Dichloroethene	0.25	100	0.25	0.0018		0.00046	J	0.0045		0.00068	J	0.0046		0.0065	
cis-1,3-Dichloropropene	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Cyclohexane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Dibromochloromethane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Dichlorodifluoromethane	NC	NC	NC	0.0042	U	0.0046[a]	U	0.0058[a]	U	0.0052[a]	U	0.004	U	0.0047	U
Ethylbenzene	1	41	1	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U

Table 2
New York City School Construction Authority
Interim Remedial Measure Construction Completion Report
168 8th Street, Brooklyn, NY
Volatile Organic Compounds in Soil Samples

			SAMPLE NAME	TRC-S1(6')		TRC-S2(19')		TRC-S3(5')		TRC-S4(5')		TRC-S5(12')		TRC-S6(4')	
			LAB SAMPLE ID	JC54277-1		JC54422-1		JC54422-2		JC54422-3		JC54422-4		JC54555-1	
			DATE SAMPLE COLLECTED	10/30/2017		11/1/2017		11/1/2017		11/1/2017		11/1/2017		11/2/2017	
VOLATILE ORGANIC COMPOUNDS (mg/kg)	Unrestricted Use SCO	Part 375 - Restricted Residential SCO	Part 375 - Protection of Groundwater SCO	Result		Result		Result		Result		Result		Result	
Isopropylbenzene	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
m/p-Xylene	0.26[(1)]	100	1.6	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
Methyl acetate	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
Methyl tert-butyl ether	0.93	100	0.93	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
Methylcyclohexane	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Methylene chloride	0.05	100	0.05	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
n-Butylbenzene	12	100	12	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
n-Propylbenzene	3.9	100	3.9	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
o-Xylene	0.26[(1)]	100	1.6	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
sec-Butylbenzene	11	100	11	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Styrene	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Tert-Butylbenzene	5.9	100	5.9	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Tetrachloroethene	1.3	19	1.3	0.0156		0.0018	U	0.0082		0.00071	J	0.00077	J	0.0016	J
Toluene	0.7	100	0.7	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
trans-1,2-Dichloroethene	0.19	100	0.19	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U
trans-1,3-Dichloropropene	NC	NC	NC	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Trichloroethene	0.47	21	0.47	0.02		0.0016		0.0239		0.0171		0.0126		0.0354	
Trichlorofluoromethane	NC	NC	NC	0.0042	U	0.0046	U	0.0058	U	0.0052	U	0.004	U	0.0047	U
Vinyl chloride	0.02	0.9	0.02	0.0017	U	0.0018	U	0.0023	U	0.0021	U	0.0016	U	0.0019	U
Xylenes (Total)	0.26[(1)]	100[(1)]	1.6[(1)]	0.00085	U	0.00091	U	0.0012	U	0.001	U	0.0008	U	0.00094	U

Notes:
mg/kg - milligrams per kilogram
U - Analyte not detected in sample; reporting limit is shown.
J - Estimated value
NC - No criterion
SCO - Soil Cleanup Objective
Shaded and **bold** results exceed Unrestricted Use SCO and/or Protection of Groundwater SCO.

TRC-DUP-1 is a duplicate of sample TRC-S7(4')

(1) - There is no SCO for m/p xylene or o-xylene. The Unrestricted Use SCO, Restricted Residential SCO, and Protection of Groundwater SCO for total xylenes are 0.26, 100, and 1.6 mg/kg, respectively.

a - Associated CCV outside of control limits high, compound was not detected.

b - Associated CCV outside of control limits, low.

c - Result is from the second run.

The J qualifier for acetone and cis-1,2-dichloroethene in sample TRC-S10(5') were added as a result of the completion of the Data Usability Summary Report.

Table 2
New York City School Construction Authority
Interim Remedial Measure Construction Completion Report
168 8th Street, Brooklyn, NY
Volatile Organic Compounds in Soil Samples

			SAMPLE NAME	TRC-S7(4')		TRC-DUP-1		TRC-S8(5')		TRC-S9(13')		TRC-S10(5')		TRC-S11(5')	
			LAB SAMPLE ID	JC54555-2		JC54555-3		JC54689-1		JC54803-1		JC54803-2		JC54803-3	
			DATE SAMPLE COLLECTED	11/2/2017		11/2/2017		11/3/2017		11/6/2017		11/6/2017		11/6/2017	
VOLATILE ORGANIC COMPOUNDS (mg/kg)	Unrestricted Use SCO	Part 375 - Restricted Residential SCO	Part 375 - Protection of Groundwater SCO	Result		Result		Result		Result		Result		Result	
1,1,1-Trichloroethane	0.68	100	0.68	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
1,1,2-Trichloroethane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
1,1-Dichloroethane	0.27	26	0.27	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
1,1-Dichloroethene	0.33	100	0.33	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
1,2-Dibromo-3-chloropropane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
1,2-Dibromoethane (EDB)	NC	NC	NC	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
1,2-Dichlorobenzene	1.1	100	1.1	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
1,2-Dichloroethane	0.02	3.1	0.02	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
1,2-Dichloropropane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
1,3,5-Trimethylbenzene	8.4	52	8.4	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
1,3-Dichlorobenzene	2.4	49	2.4	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
1,4-Dichlorobenzene	1.8	13	1.8	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
1,4-Dioxane	0.1	13	0.1	0.12	U	0.11	U	0.11	U	0.12	U	0.13	U	0.13	U
2-Butanone (MEK)	0.12	100	0.12	0.0098	U	0.0089	U	0.0084	U	0.0097	U	0.011	U	0.01	U
2-Hexanone (MBK)	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
4-Methyl-2-Pentanone	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
Acetone	0.05	100	0.05	0.0145		0.0114		0.0111		0.0087	J	0.0338	J	0.0192	
Benzene	0.06	4.8	0.06	0.00049	U	0.00044	U	0.00042	U	0.00048	U	0.00054	U	0.00051	U
Bromochloromethane	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
Bromodichloromethane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Bromoform	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048 [a]	U	0.0054 [a]	U	0.0051 [a]	U
Bromomethane	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
Carbon Disulfide	NC	NC	NC	0.002	U	0.0018 [b]	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Carbon Tetrachloride	0.76	2.4	0.76	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Chlorobenzene	1.1	100	1.1	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Chloroethane	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
Chloroform	0.37	49	0.37	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Chloromethane	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
cis-1,2-Dichloroethene	0.25	100	0.25	0.0023		0.0029		0.0056		0.00051	J	0.0015	J	0.0038	
cis-1,3-Dichloropropene	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Cyclohexane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Dibromochloromethane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Dichlorodifluoromethane	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048 [b]	U	0.0054 [b]	U	0.0051 [b]	U
Ethylbenzene	1	41	1	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U

Table 2
New York City School Construction Authority
Interim Remedial Measure Construction Completion Report
168 8th Street, Brooklyn, NY
Volatile Organic Compounds in Soil Samples

			SAMPLE NAME	TRC-S7(4')		TRC-DUP-1		TRC-S8(5')		TRC-S9(13')		TRC-S10(5')		TRC-S11(5')	
			LAB SAMPLE ID	JC54555-2		JC54555-3		JC54689-1		JC54803-1		JC54803-2		JC54803-3	
			DATE SAMPLE COLLECTED	11/2/2017		11/2/2017		11/3/2017		11/6/2017		11/6/2017		11/6/2017	
VOLATILE ORGANIC COMPOUNDS (mg/kg)	Unrestricted Use SCO	Part 375 - Restricted Residential SCO	Part 375 - Protection of Groundwater SCO	Result		Result		Result		Result		Result		Result	
Isopropylbenzene	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
m/p-Xylene	0.26[(1)]	100	1.6	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
Methyl acetate	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
Methyl tert-butyl ether	0.93	100	0.93	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
Methylcyclohexane	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Methylene chloride	0.05	100	0.05	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
n-Butylbenzene	12	100	12	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
n-Propylbenzene	3.9	100	3.9	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
o-Xylene	0.26[(1)]	100	1.6	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
sec-Butylbenzene	11	100	11	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Styrene	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Tert-Butylbenzene	5.9	100	5.9	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Tetrachloroethene	1.3	19	1.3	0.00064	J	0.00067	J	0.00085	J	0.00091	J	0.102 [c]	J	0.0033	
Toluene	0.7	100	0.7	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
trans-1,2-Dichloroethene	0.19	100	0.19	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U
trans-1,3-Dichloropropene	NC	NC	NC	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Trichloroethene	0.47	21	0.47	0.0206		0.0257		0.0192		0.0021		0.149 [c]		0.0344	
Trichlorofluoromethane	NC	NC	NC	0.0049	U	0.0044	U	0.0042	U	0.0048	U	0.0054	U	0.0051	U
Vinyl chloride	0.02	0.9	0.02	0.002	U	0.0018	U	0.0017	U	0.0019	U	0.0022	U	0.002	U
Xylenes (Total)	0.26[(1)]	100[(1)]	1.6[(1)]	0.00098	U	0.00089	U	0.00084	U	0.00097	U	0.0011	U	0.001	U

Notes:
mg/kg - milligrams per kilogram
U - Analyte not detected in sample; reporting limit is shown.
J - Estimated value
NC - No criterion
SCO - Soil Cleanup Objective
Shaded and **bold** results exceed Unrestricted Use SCO and/or Protection of Groundwater SCO.

TRC-DUP-1 is a duplicate of sample TRC-S7(4')

[(1)] - There is no SCO for m/p xylene or o-xylene. The Unrestricted Use SCO, Restricted Residential SCO, and Protection of Groundwater SCO for total xylenes are 0.26, 100, and 1.6 mg/kg, respectively.

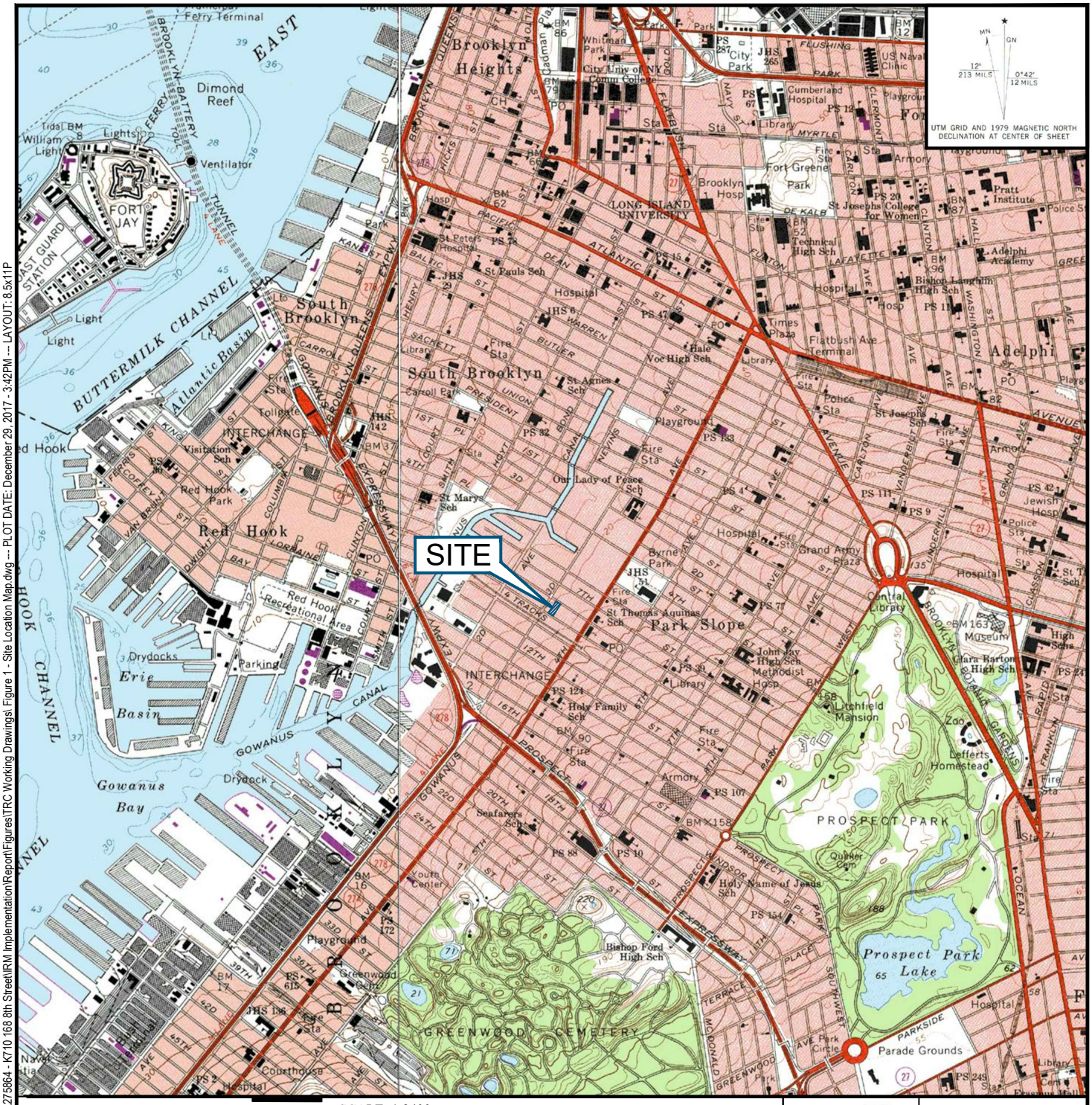
[a] - Associated CCV outside of control limits high, compound was not detected.

[b] - Associated CCV outside of control limits, low.

[c] - Result is from the second run.
The J qualifier for acetone and cis-1,2-dichloroethene in sample TRC-S10(5') were added as a result of the completion of the Data Usability Summary Report.

FIGURE 1

Site Location Map



SCALE: 1:2400

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER



MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEET(S):
TP, BROOKLYN, NY, 7.5 MINUTE, DATED 1967, PHOTOREVISED 1979
W, CENTRAL PARK, NY-NJ, 7.5 MINUTE DATED 1966, PHOTOREVISED 1979

MAP OBTAINED THROUGH USE OF MAPTECH TERRAIN NAVIGATOR PRO SOFTWARE.

TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

PROJECT: **NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY**
INTERIM REMEDIAL MEASURE CONSTRUCTION COMPLETION REPORT
BROWNFIELD CLEANUP PROGRAM (BCP) SITE NO. C224266
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK 1003, LOT 11
BROOKLYN, NY 11215

TITLE:

SITE LOCATION MAP

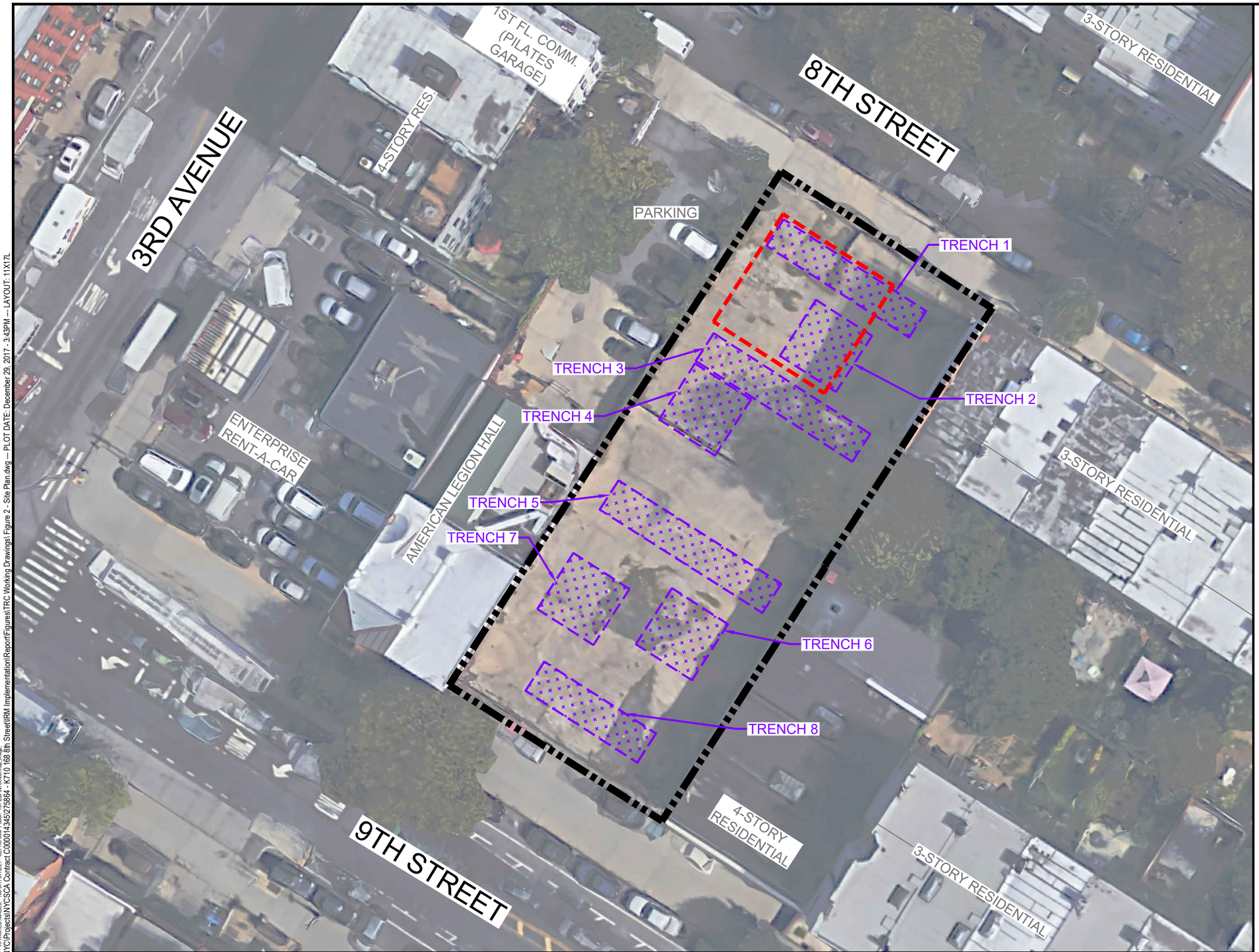
DRAWN BY:	H. DELGADO
CHECKED BY:	E. EBERT
APPROVED BY:	D. GLASS
DATE:	JANUARY 2018
PROJ. NO.:	275864
FILE:	Figure 1 - Site Location Map.dwg

FIGURE 1

8.5x11 --- ATTACHED XREF'S: --- ATTACHED IMAGES: 197-203 9th street, 01; 197-203 9th street, 02;
DRAWING NAME: \\NTAPA-NYC\Projects\NYCSCA Contract C000014345\275864 - K710 168 8th Street\IRM Implementation\Report\Figures\TRC Working Drawings\ Figure 1 - Site Location Map.dwg --- PLOT DATE: December 29, 2017 - 3:42PM --- LAYOUT: 8.5x11P

FIGURE 2

Site Plan



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- APPROXIMATE LIMITS OF IRM EXCAVATION
- TRENCH AREA LOCATION (JUNE 2017 ARCHEOLOGICAL INVESTIGATION)

W N E

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.

0 30' 60'

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
INTERIM REMEDIAL MEASURE CONSTRUCTION COMPLETION REPORT
BROWNFIELD CLEANUP PROGRAM (BCP) SITE NO. C224266
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK 1003, LOT 11
BROOKLYN, NY 11215

TITLE: **SITE PLAN**

DRAWN BY:	H. DELGADO	PROJ NO.:	275864
CHECKED BY:	E. EBERT		**FIGURE 2**
APPROVED BY:	D. GLASS		
DATE:	JANUARY 2018		

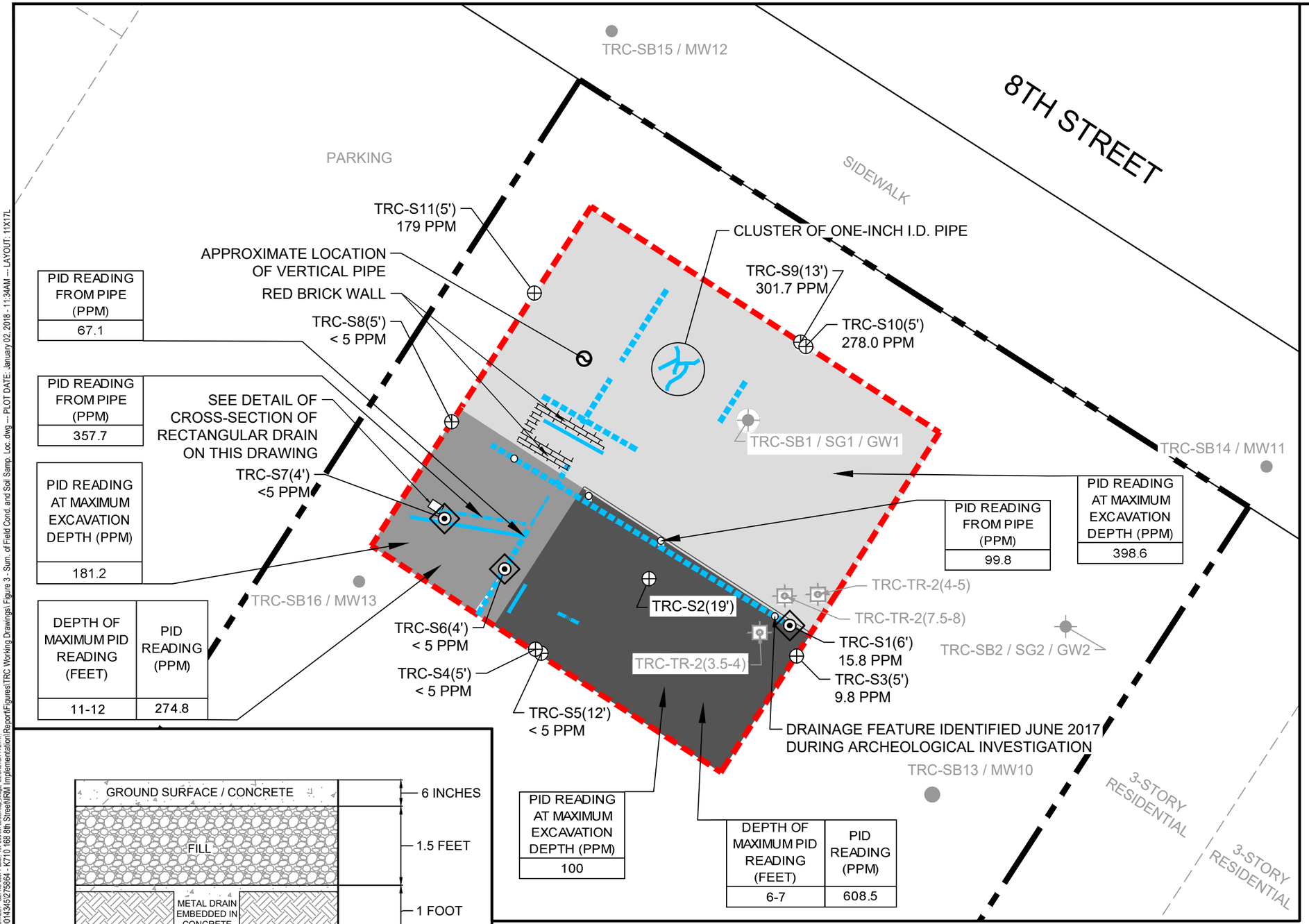
TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 2 - Site Plan.dwg

11:17 — ATTACHED XREFS: Border — ATTACHED IMAGES: 168 8TH STREET - GEORGIS.MRT Date: 197.233.9h Streets.jpg
DRAWING NAME: \\NTAPA-NYC\Projects\NYCSCA Contract C000014345\275864 - K710 168 8th Street\IRM Implementation\Report\Figures\TRC Working Drawings\ Figure 2 - Site Plan.dwg — PLOT DATE: December 29, 2017 - 3:43PM — LAYOUT: 11X17L

FIGURE 3

Summary of Field Conditions and Soil Sampling Locations



CROSS-SECTION OF RECTANGULAR DRAIN
VIEWED FACING SOUTH
NOT TO SCALE

LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- APPROXIMATE LIMITS OF IRM EXCAVATION
- ONE-INCH I.D. PIPE
- TWO-INCH I.D. PIPE
- THREE-INCH I.D. PIPE
- FOUR-INCH I.D. PIPE
- CIRCULAR DRAIN
- RECTANGULAR DRAIN
- TRC-SX(X') / X PPM — POST-EXCAVATION SOIL SAMPLE LOCATION AND IDENTIFICATION NUMBER (DEPTH IN FEET). PID READING FOR ANALYZED POST-EXCAVATION SAMPLE (PPM)
- TRC-SX(X') / X PPM — DOCUMENTATION SOIL SAMPLE BELOW PIPING (DEPTH IN FEET). PID READING FOR ANALYZED DOCUMENTATION SAMPLE (PPM)
- ADDITIONAL SOIL EXCAVATED BELOW DUE TO ADJACENT ELEVATED PID READINGS IN SOIL
- NORTHERN PORTION OF EXCAVATION MAXIMUM EXCAVATION DEPTH OF 13 ' BGS
- SOUTHWESTERN PORTION OF EXCAVATION MAXIMUM EXCAVATION DEPTH OF 18 ' BGS
- SOUTHEASTERN PORTION OF EXCAVATION MAXIMUM EXCAVATION DEPTH OF 19 ' BGS
- TRC-SBX / SGX — SOIL SAMPLING AND SOIL VAPOR SAMPLING LOCATION AND IDENTIFICATION NUMBER (NOVEMBER 2012)
- TRC-SBX / SGX / GWX — SOIL SAMPLING, SOIL VAPOR SAMPLING, AND GROUNDWATER SAMPLING LOCATION AND IDENTIFICATION NUMBER (NOVEMBER 2012)
- TRC-SBX / MWX — SOIL SAMPLING AND GROUNDWATER SAMPLING LOCATION AND IDENTIFICATION NUMBER (JANUARY 2013)
- TRC-TR-2 (X-X) — SOIL SAMPLE LOCATION AND IDENTIFICATION NUMBER FROM TRENCH EXCAVATION DURING ARCHEOLOGICAL ASSESSMENT (JUNE 2017) (DEPTH IN FEET)
- ASSUMED GROUNDWATER FLOW DIRECTION

W N E

0 10' 20'
SCALE: 1" = 10'
SHEET SIZE: 11" BY 17"

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. BGS = BELOW GROUND SURFACE
3. PPM = PARTS PER MILLION
4. PID = PHOTOIONIZATION DETECTOR
5. SOIL ASSOCIATED WITH SAMPLES TRC-TR-2(3.5-4), TRC-TRC-2(4-5), AND TRC-TR-2(7.5-8) WAS REMOVED AS PART OF THIS IRM.
6. WITH THE EXCEPTION OF THE VERTICAL PIPE, ALL SUBSURFACE FEATURES (I.E. PIPING, RED BRICK WALL, AND DRAINS) IDENTIFIED WERE REMOVED AND DISPOSED OF DURING IRM FIELD ACTIVITIES.

PROJECT:
NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
INTERIM REMEDIAL MEASURE CONSTRUCTION COMPLETION REPORT
BROWNFIELD CLEANUP PROGRAM (BCP) SITE NO. C224266
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK 1003, LOT 11
BROOKLYN, NY 11215

TITLE:
SUMMARY OF FIELD CONDITIONS AND SOIL SAMPLING LOCATIONS

DRAWN BY:	H. DELGADO	PROJ NO.:	275864
CHECKED BY:	E. EBERT		
APPROVED BY:	D. GLASS		**FIGURE 3**
DATE:	JANUARY 2018		

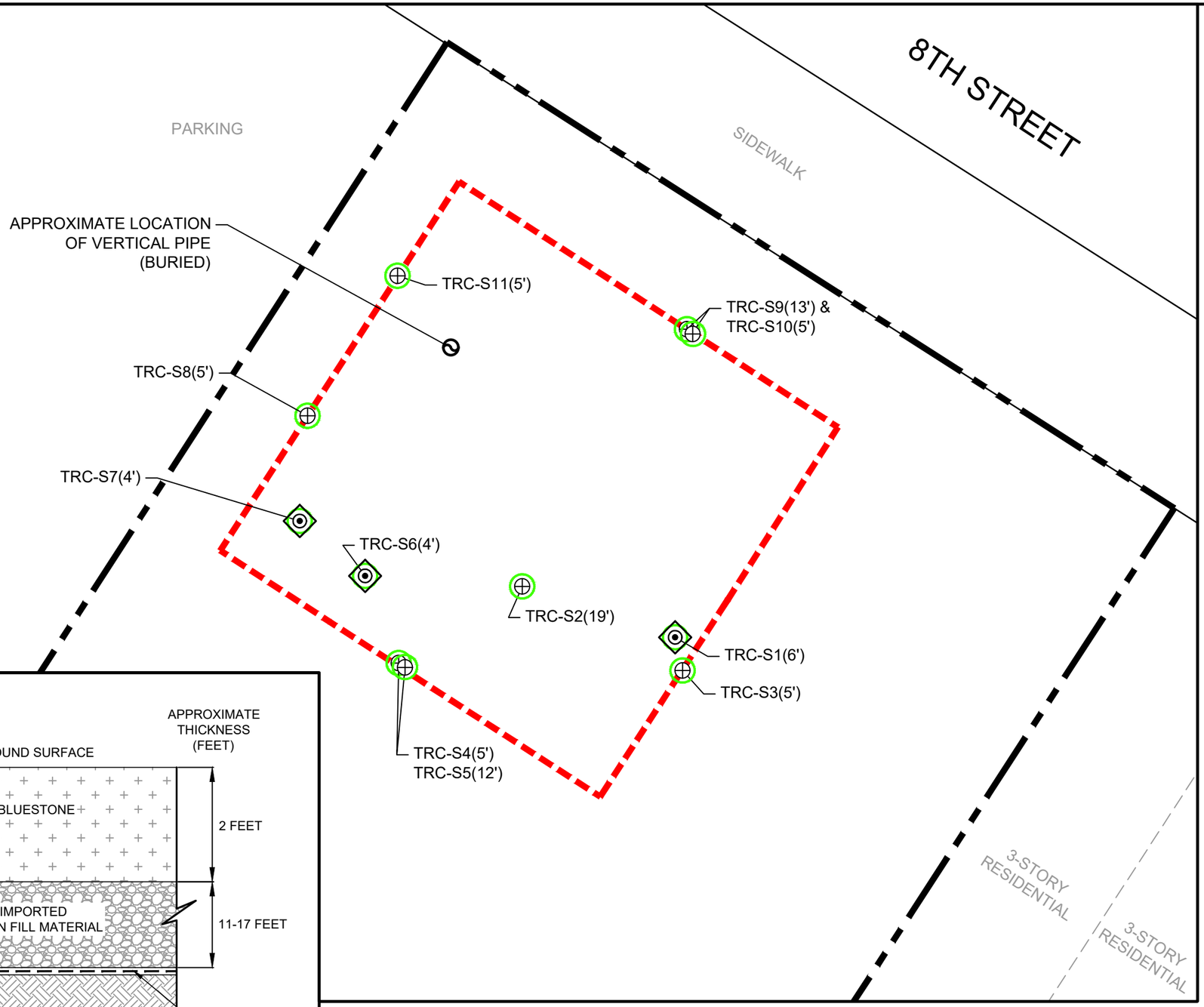
TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 3 - Sum. of Field Cond. and Soil Samp. Loc..dwg

11x17 --- ATTACHED XREFS: Brooklyn --- ATTACHED IMAGES: 168 8TH STREET - GEPRO-600FT color; 197-203 9th Street.map_image EE SKETCH 11.21.17;
DRAWING NAME: I:\Projects\NYCSCA Contract C000014345\275864 - K710 168 8th Street\IRM Implementation\Report\Figures\TRC Working Drawings\ Figure 3 - Sum. of Field Cond. and Soil Samp. Loc..dwg --- PLOT DATE: January 02, 2018 - 11:34AM --- LAYOUT: 11X17L

FIGURE 4

Soil Sampling Results and Final Site Conditions



LEGEND (SYMBOLS NOT TO SCALE):

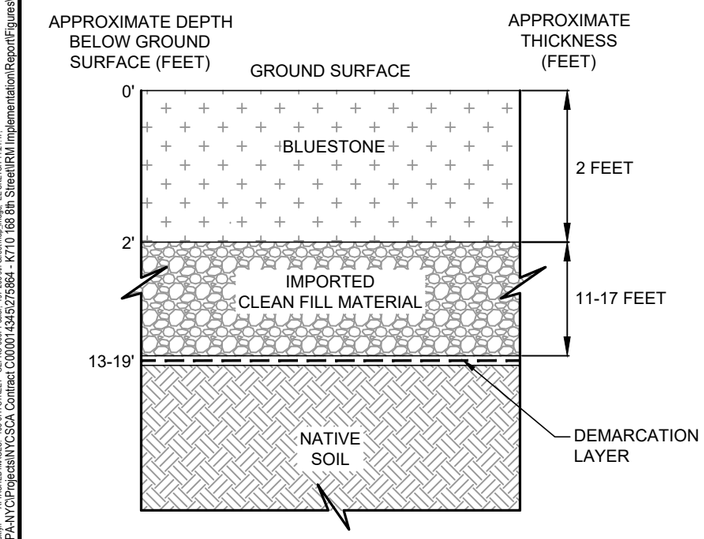
- SITE BOUNDARY
- APPROXIMATE LIMITS OF IRM EXCAVATION
- TRC-SX(X') — POST-EXCAVATION SOIL SAMPLE LOCATION AND IDENTIFICATION NUMBER (DEPTH IN FEET)
- TRC-SX(X') — DOCUMENTATION SOIL SAMPLE BELOW PIPING
- VOLATILE ORGANIC COMPOUNDS ≤ RESTRICTED-RESIDENTIAL SOIL CLEANUP OBJECTIVES (RRSCOs)
- ADDITIONAL SOIL EXCAVATED BELOW DUE TO ADJACENT ELEVATED PID READINGS IN SOIL

W N E

ASSUMED GROUNDWATER FLOW DIRECTION

0 10' 20'

SCALE: 1" = 10'
SHEET SIZE: 11" BY 17"



CROSS-SECTION OF EXCAVATION FOLLOWING IRM ACTIVITIES
NOT TO SCALE

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. A GREEN RING INDICATES NON-DETECT OR CONTAMINANT CONCENTRATIONS BELOW RRSCO.
3. DEMARCATION LAYER (ORANGE PLASTIC FENCING) INSTALLED BETWEEN SITE SOIL AND IMPORTED FILL MATERIAL.
4. EXCAVATION WAS BACKFILLED WITH APPROXIMATELY 160 CUBIC YARDS OF ENVIRONMENTALLY CLEAN FILL.
5. THERE IS A MINIMUM OF 2 FEET OF IMPORTED CLEAN BLUESTONE OVER IMPORTED CLEAN FILL.

PROJECT:
NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
INTERIM REMEDIAL MEASURE CONSTRUCTION COMPLETION REPORT
BROWNFIELD CLEANUP PROGRAM (BCP) SITE NO. C224266
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK 1003, LOT 11
BROOKLYN, NY 11215

TITLE:
SOIL SAMPLING RESULTS AND FINAL SITE CONDITIONS

DRAWN BY:	H. DELGADO	PROJ NO.:	275864
CHECKED BY:	E. EBERT		
APPROVED BY:	D. GLASS		
DATE:	JANUARY 2018		

FIGURE 4

TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 4 - Soil Samp. Results and Final Site Cond..dwg

11x17 --- ATTACHED XREFS: Brooklyn --- ATTACHED IMAGES: 168 8TH STREET - GEPRO-606FT color: 197-203 9in Streetmap_image, EE SKETCH 11.21.17;
DRAWING NAME: \\NTAPA.NYC\Projects\NYCSCA Contract C600014345\275864 - K710 168 8th Street\IRM Implementation\Report\Figures\TRC Working Drawings\ Figure 4 - Soil Samp. Results and Final Site Cond..dwg --- PLOT DATE: January 02, 2018 - 11:17AM --- LAYOUT: 11X17L

ATTACHMENT A

IRM Work Plan

NEW YORK CITY SCHOOL
CONSTRUCTION AUTHORITY

September 26, 2017

Ms. Jane O'Connell
Chief, Superfund and Brownfield Cleanup Section
Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

RE: Interim Remedial Measure Work Plan
Proposed Pre-Kindergarten Facility K710
168 8th Street
Brooklyn, New York 11215
Block 1003, Lot 11

Dear Ms. O'Connell:

Attached please find the Interim Remedial Measure (IRM) Work Plan, prepared by the New York City School Construction Authority's (NYCSCA's) environmental consultant, TRC Engineers, Inc., in connection with the site of the proposed Pre-Kindergarten Facility K710 located at 168 8th Street, Brooklyn, New York 11215 (the "Site"). The IRM Work Plan was prepared in response to the Department's recommendation provided at our August 18, 2017 meeting.

The IRM Work Plan describes the remedial activities to be implemented including investigation and removal of a drainage feature and subsurface piping and potential source material at the Site, and preparation of an IRM Completion Report.

IRM field activities will be initiated upon satisfactory completion of the archeological investigation, which we anticipate to be in early November 2017.

We would very much appreciate your review and comments on our proposed plan.

If you have any questions, please contact me at (718) 472-8502.

Sincerely,

Lee Guterman
Director, Hazmat Unit
Industrial and Environmental Hygiene Division

cc: A. Lempert (NYCSCA)
S. Kanaparthi (NYCSCA)
J. Miranda (TRC)
L. O'Hara (TRC)

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

September 25, 2017

Ms. Lee Guterman
Director of Hazmat Unit, IEH Division
New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, NY 11101-3045

Re: Interim Remedial Measure Work Plan
Proposed Pre-Kindergarten Facility K710
168 8th Street
Brooklyn, New York 11215
Block 1003, Lot 11
NYCSCA Project ID 099267

Dear Ms. Guterman:

This Interim Remedial Measure (IRM) Work Plan has been prepared for the site of the Proposed Pre-Kindergarten Facility K710, located at 168 8th Street, Brooklyn, New York 11215 (the "Site"). The primary objective of the IRM is to further investigate and remove subsurface material that has been determined to be the likely source of chlorinated volatile organic compounds (CVOCs) in soil, groundwater, and soil vapor in the northern portion of the Site.

Site Description and Background

The Site encompasses approximately 13,500 square feet and is currently a concrete and gravel covered vacant lot. Historic uses of the Site consist of an ink manufacturer, a storage facility with a gauge manufacturer, a chemical laboratory, a machine works facility, a garage and a gasoline station, a plumbing supply manufacturer, and a textile factory. A fire occurred on the Site in the early 1990s and the lot has been vacant since approximately 1992. The New York City School Construction Authority (NYCSCA) purchased the Site in May 2017 for the construction of a Pre-Kindergarten Facility. A Site location map is attached as *Figure 1.*

Between 2011 and 2013, TRC conducted environmental due diligence activities at the Site consisting of a Phase I Environmental Site Assessment (ESA) and a Phase II Environmental Site Investigation (ESI). Additionally, since the Site has been identified by local community groups as a potential burial ground for Revolutionary War soldiers, an archeological investigation was completed by AKRF Engineering, P.C. (AKRF) in June 2017.

The results of the due diligence investigations revealed elevated concentrations of CVOCs in soil vapor and groundwater in the northern portion of the Site. Specifically, trichloroethene (TCE) was detected at a maximum concentration of 99 micrograms per liter (µg/L) in the groundwater sample collected adjacent to the northwest corner of the Site (in groundwater sample (TRC-MW12)) and TCE was detected in soil vapor at a maximum concentration of 16,000 micrograms per cubic meter (µg/m^3) in soil vapor sample TRC-SG1 collected in the northern portion of the Site (near Trench 1). Additionally, TCE was detected in one soil sample (TRC-TR-2(3.5-4)) collected in Trench 2 during the archeological investigation at a concentration of 8.44 milligrams per kilogram (mg/kg), which is above the Protection of Groundwater Soil Cleanup Objective (SCO) of 0.47 mg/kg. The TCE detected in the soil sample is likely attributable to former Site uses and may be associated with a former drainage system identified in the excavated trench (Trench 2). The Phase II ESI and archeological investigation sample locations are shown on *Figure 2*.

The IRM Work Plan Scope of Work presented below has been prepared to expeditiously address concerns regarding the potential for off-site migration of soil vapor detected at the Site. As described further below, initially investigation and removal (as warranted) will begin in the area of the observed drainage feature (Trench 2) and proceed northwesterly to Trench 1. Subsequently excavation will be advanced in the vicinity of subsurface piping in Trench 3.

IRM Work Plan Scope of Work

The activities described in this Work Plan will be performed in accordance with applicable Federal, State and local regulations, and the Quality Assurance Project Plan (QAPP), Community Air Monitoring Plan (CAMP)[1] and site-specific Health and Safety Plan (HASP), presented as *Attachment A, Attachment B,* and *Attachment C,* respectively.

Investigation and Removal of Drainage Feature and Subsurface Piping and Potential Source Material Removal

- As noted above, investigation and removal of subsurface material (as warranted) will begin in the area of the observed drainage feature (Trench 2) and proceed northwesterly to Trench 1. Subsequently excavation will be advanced in the vicinity of subsurface piping in Trench 3. The lateral and vertical extent of excavations will be determined as the work proceeds and will be based on visual observations, field screening results (i.e., photoionization detector [PID] readings), and the results of efforts to expose the limits of impacted soil and the subsurface piping and drainage feature(s). It is anticipated that the excavations will extend to a maximum depth of 5 feet below ground surface (bgs). However, excavations may extend to the groundwater interface (at depths ranging between 13 and 19 feet bgs), if warranted based on an apparent source area. Refer to *Figure 2* for the approximate areas of the subsurface piping identified in Trenches 1 and 3 and the drainage feature and associated piping identified in Trench 2.

[1] Additionally, a CAMP will be implemented during future archeological investigation activities.

- The excavation sidewalls will be sloped to the extent practical, in order to maintain the excavations safely without additional support. Excavation will be limited to areas that will not result in potentially jeopardizing existing structures (e.g., adjacent buildings or sidewalks).

- As mentioned above, excavated soil will be screened for volatile organic vapor using a PID. Additionally, a five-gas meter will be used to screen excavated soil. Soil determined to be impacted based on field observation (e.g., odors, discoloration, etc.) or elevated PID measurements will be containerized in a polyethylene-lined roll-off container. Impacted excavated materials will be characterized and transported off-site for disposal at a facility properly permitted to accept the waste. Additionally, subsurface piping and drainage features will be removed from the excavation and disposed of off-Site. Prior to disturbance of piping, screening and inspection will be performed to confirm there are no free-flowing liquids. If free-flowing liquid is found, the liquid will be removed, properly containerized, characterized, and disposed off-site.

- Prior to backfilling, soil samples will be collected in accordance with the protocols in the NYSDEC Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10). Soil samples will be collected at the bottom of the trench excavations at a frequency of one sample per every 15 linear feet. Additionally, if groundwater is encountered in an excavation, a grab groundwater sample will be collected. The Global Positioning System (GPS) coordinates of the sample locations and limits of each excavation will be recorded.

- Soil and groundwater samples will be transported to a New York State Department of Health Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory and analyzed for Target Compound List (TCL) and NYSDEC Part 375-listed VOCs. NYSDEC Analytical Services Protocol (ASP) Category B data deliverables will be obtained. Data validation will be performed on the analytical data and a Data Usability Summary Report (DUSR) will be prepared. Waste characterization sampling analytical data will not be validated. Additional information regarding quality control is presented in the QAPP (refer to *Attachment A).*

- Excavated material that does not exhibit evidence of impacts based on field observation and PID measurements will be reused for backfill within the same excavation, or approved ¾-inch stone from a virgin source which meets NYCSCA's specifications may be used as backfill. In areas where source material is identified and removed as described above, a demarcation layer (i.e., plastic orange fencing) will be placed between Site soil and imported material. At each excavation area, the ground surface will be restored with ¾-inch stone.

Report Preparation

After completion of off-site material disposal, site restoration, and receipt of validated laboratory results, an IRM Completion Report will be prepared. The IRM Completion Report will be prepared in accordance with DER-10, Section 5.8, and will contain a description of field activities, description of excavated areas, soil quantities removed, waste disposal documentation, and sampling results. The report will include an evaluation of the quality of the analytical data and the reliability of the data for its intended use. The report will contain NYSDEC ASP Category B data deliverables and a DUSR. The IRM Completion Report will be signed and sealed by a licensed New York State Professional Engineer. The data deliverables package will be submitted to NYSDEC in approved electronic data deliverable (EDD) format.

Schedule

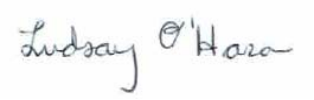
TRC anticipates scheduling of the IRM field activities immediately following the next phase of the archeological investigation, which is expected to be completed by early November 2017. It is anticipated that the IRM field activities will be completed within one week and the IRM Completion Report will be submitted to NYCSCA within approximately three weeks of receipt of validated data (expected by early December 2017).

Certification

I, Lindsay Ann O'Hara, certify that I am currently a Qualified Environmental Professional and that this Interim Remedial Measure Work Plan was prepared in accordance with applicable statutes and regulations and in substantial conformance with DER-10.

Please contact me at (203) 278-5305 or lohara@trcsolutions.com with any questions or comments.

Sincerely,
TRC Engineers, Inc.

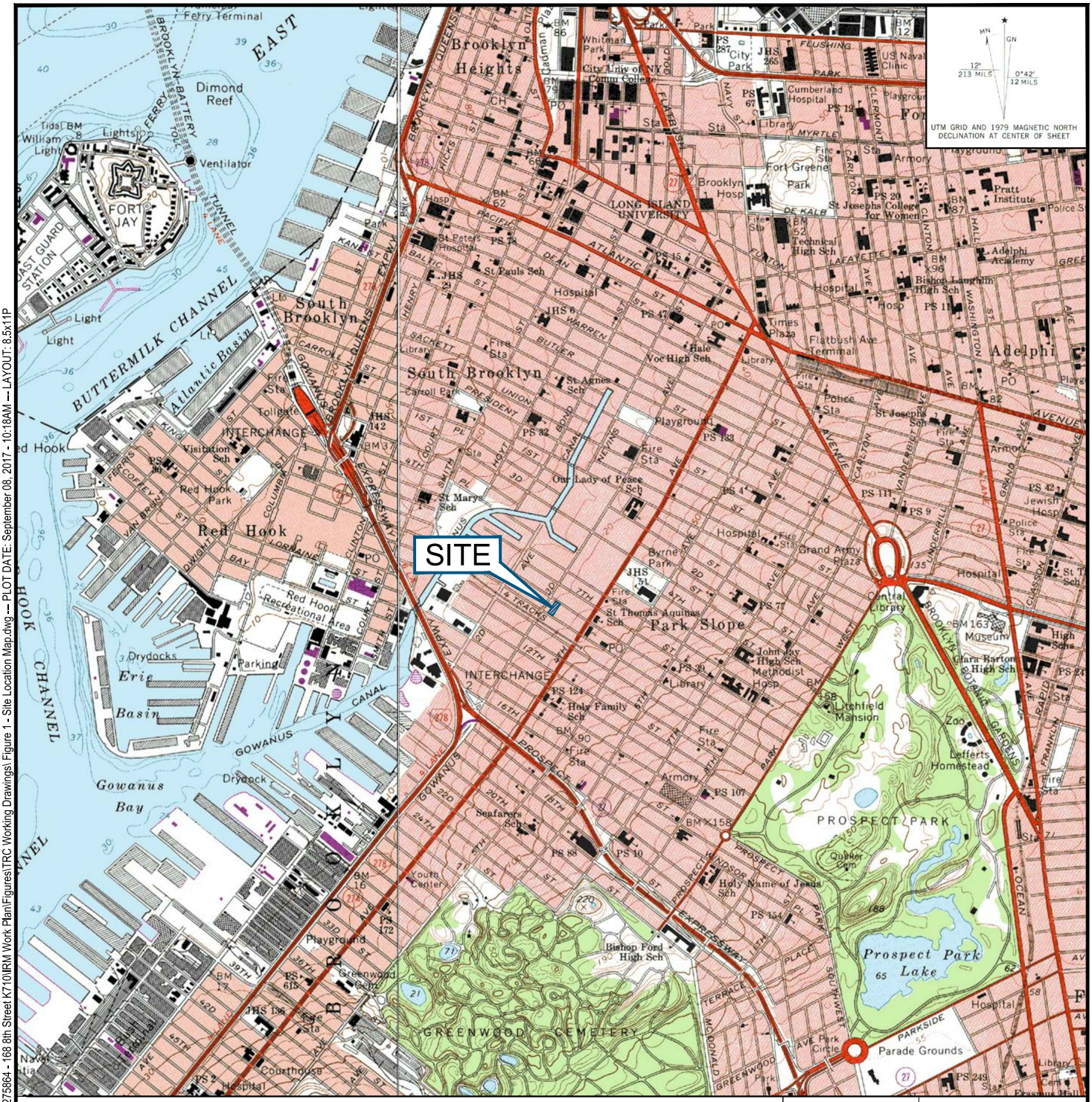


Lindsay A. O'Hara, CHMM
Project Manager
Certified Hazardous Materials Manager No. 16749 (February 2015)

cc: S. Kanaparthi, NYCSCA
M. Sherwood, NYCSCA
J. Miranda, TRC

Enclosures: Figure 1 – Site Location Map
Figure 2 – Sample Location Plan
Attachment A – Quality Assurance Project Plan
Attachment B – Community Air Monitoring Plan
Attachment C – Health and Safety Plan

FIGURES



TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

PROJECT: **NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY**
INTERIM REMEDIAL MEASURE WORK PLAN
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK: 1003, LOT: 11
BROOKLYN, NY 11215

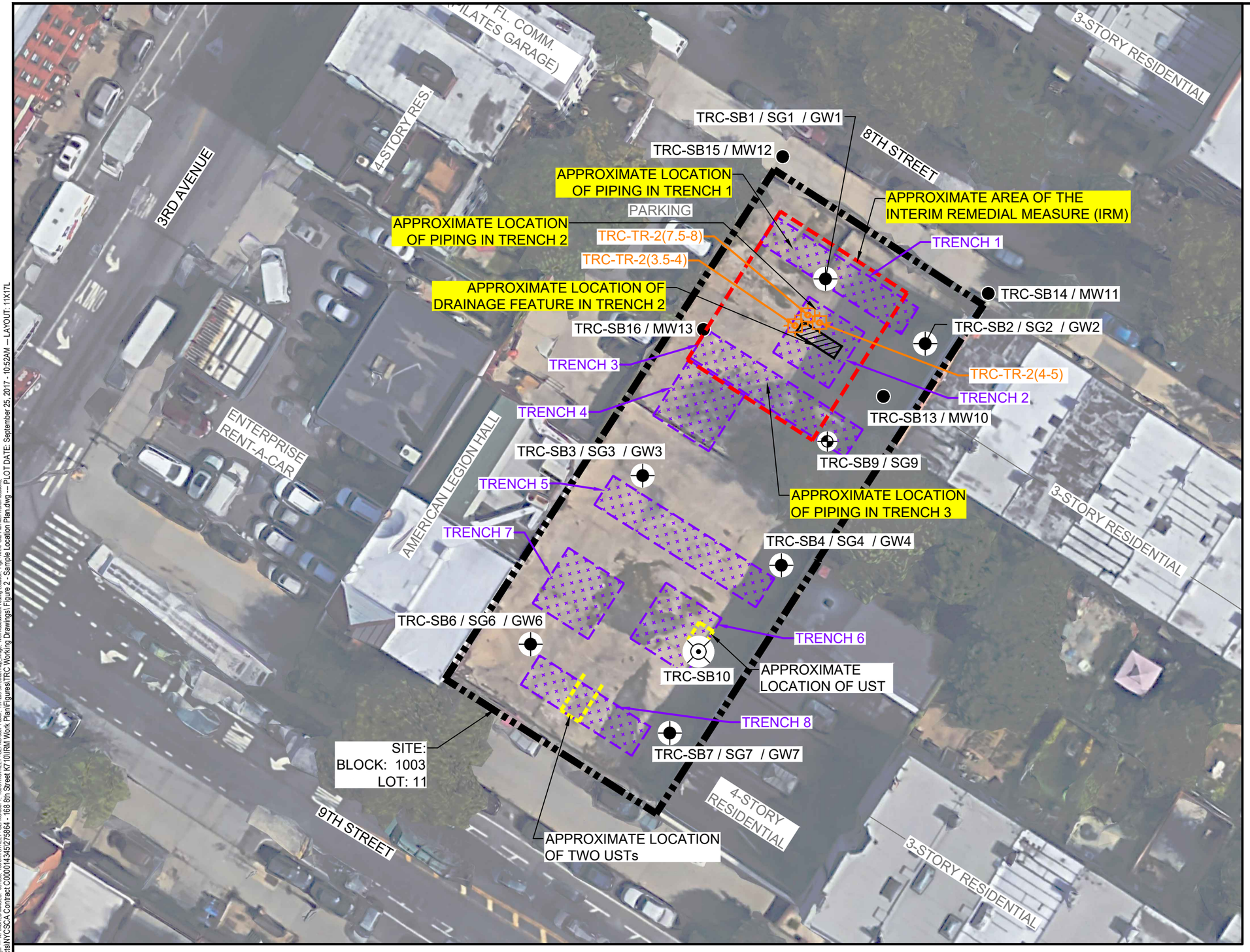
TITLE:

SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	E. EBERT
APPROVED BY:	J. MIRANDA
DATE:	SEPTEMBER 2017
PROJ. NO.:	275864.0000.0000
FILE:	Figure 1 - Site Location Map.dwg

FIGURE 1

8.5x11 -- ATTACHED XREFS: -- ATTACHED IMAGES: 197-203 9th street_01:
DRAWING NAME: \\NTAPA-NYC\Projects\NYCSCA Contract C000014345\275864 - 168 8th Street K710\IRM Work Plan\Figures\TRC Working Drawings\ Figure 1 - Site Location Map.dwg -- PLOT DATE: September 08, 2017 - 10:18AM -- LAYOUT: 8.5x11P



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- TRC-TR-2 (X-X) — TRENCH SAMPLE LOCATION AND IDENTIFICATION NUMBER (DEPTH IN FEET)
- TRENCH AREA LOCATION AND IDENTIFICATION (JUNE 2017 ARCHEOLOGICAL INVESTIGATION)
- TRC-SBX — SOIL SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JUNE, JULY, AND NOVEMBER 2012)
- TRC-SBX / SGX — SOIL SAMPLING AND SOIL VAPOR SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JUNE, JULY AND NOVEMBER 2012)
- TRC-SBX / SGX / GWX — SOIL SAMPLING, SOIL VAPOR SAMPLING, AND GROUNDWATER SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JUNE, JULY AND NOVEMBER 2012)
- TRC-SBX / MWX — SOIL SAMPLING AND GROUNDWATER SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JANUARY 2013)

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. THE NORTHERN LIMITS OF THE TANKS IN TRENCH 8 WERE NOT IDENTIFIED SINCE TRENCH 8 WAS NOT EXCAVATED TO THE LIMITS.

0 30' 60'

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

ASSUMED GROUNDWATER FLOW DIRECTION

PROJECT: **NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY**
INTERIM REMEDIAL MEASURE WORK PLAN
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK: 1003, LOT: 11
BROOKLYN, NY 11215

TITLE:

SAMPLE LOCATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	275864.0000.0000
CHECKED BY:	E. EBERT		**FIGURE 2**
APPROVED BY:	J. MIRANDA		
DATE:	SEPTEMBER 2017		

TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 2 - Sample Location Plan.dwg

11x17 --- ATTACHED IMAGES: 0510A_168 8TH STREET - GEPROGRAPHY - 168 8TH STREET - GEPROGRAPHY.mxd --- 167 8th Street.mpk --- Image: ; Aerial Assessment Existing Location - Fig2 - AMXF Site Plan with Trench locations
DRAWING NAME: I:\Projects\NYCSCA Contract C000001434\275864 - 168 8th Street K710\IRM Work Plan\Figures\TRC Working Drawings\Figure 2 - Sample Location Plan.dwg --- PLOT DATE: September 25, 2017 - 10:52AM --- LAYOUT: 11X17L

ATTACHMENT A

QUALITY ASSURANCE PROJECT PLAN

QUALITY ASSURANCE PROJECT PLAN

This Quality Assurance Project Plan (QAPP) presents the organization, objectives, planned activities, and specific quality assurance/quality control (QA/QC) procedures associated with the field activities described in the scope of work. The Section also describes specific protocols for field sampling, sample handling and storage, and laboratory analysis. The data generated from the analysis of samples will be used to determine that the Interim Remedial Measure (IRM) was effective and to document the extent of IRM Activity.

Project Organization and Responsibility

A qualified person will coordinate and manage the sampling and analysis program, data reduction, QA/QC, data validation, analysis, and reporting. TRC will direct the sampling activities and coordinate laboratory and excavation activities. The TRC Project Quality Assurance (QA) Officer will be Elizabeth Denly and will report directly to the Project Manager, Lindsay O'Hara.

A qualified person will insure that the QAPP is implemented and will oversee data validation. A qualified person will provide oversight and technical support for the sampling and analytical procedures followed in this project. This individual has the broad authority to approve or disapprove project plans, specific analyses, and final reports. The Project QA Officer is independent from the data generation activities. In general, the QA officer will be responsible for reviewing and advising on all QA/QC aspects of this program.

Laboratories used will be New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratories. The laboratories will communicate directly with the sampler regarding the analytical results and reporting and will be responsible for providing all labels, sample containers, trip blanks, shipping coolers, and laboratory documentation.

QA Objectives for Data Management

The analytical data used to make remedial action decisions (i.e., post-excavation documentation samples. Remedial Investigation (RI) data) will be provided by the laboratory using the New York State ASP Category B deliverable format. Analytical data generated for the purposed of waste characterization and off-Site disposal will not be subjected to the requirements of this QAPP.

All analytical measurements will be made so that the results are representative of the media sampled and the conditions measured. Data will be reported in consistent dry weight units for solid samples (i.e., µg/kg and/or mg/kg). Table 1 presents the proposed samples, sampling and analytical parameters, analytical methods, sample preservation requirements, containers and QA/QC samples.

Quantitation Limits (QLs) are laboratory-specific and reflect those values achievable by the laboratory performing the analyses. Data Quality Levels (DQLs) are those reporting limits required to meet the objectives of the program (i.e., program action levels, cleanup standards, etc.). Data Quality Objectives (DQOs) define the quality of data and documentation required to support decisions made in the various phases of the data collection activities. The DQOs are dependent on the end uses of the data to be collected and are also expressed in terms of objectives for precision, accuracy, representativeness, completeness, and comparability.

The analytical methods to be used at this site provide the highest level of data quality and can be used for purposes of risk assessment, evaluation of remedial alternatives and verification that cleanup standards have been met. However, in order to ensure that the analytical methodologies are capable of achieving the DQOs, measurement performance criteria have been set for the analytical measurements in terms of accuracy and precision.

The overall QA objective is to develop and implement procedures for field sampling, chain-of-custody, laboratory analysis, and reporting which will provide results that are scientifically valid, and the levels of which are sufficient to meet DQOs.

For quantitation limits for parameters associated with soil samples, the laboratory will be required to attempt to meet or surpass the parameter-specific limits listed in 6 NYCRR Part 375 and CP-51.

For quantitation limits for parameters associated with groundwater samples, the laboratory will be required to attempt to meet or surpass the parameter-specific limits for groundwater from the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values.

The QA objectives are defined as follows:

- ***Accuracy*** is the closeness of agreement between an observed value and an accepted reference value. The difference between the observed value and the reference value includes components of both systematic error (bias) and random error.

  Accuracy in the field is assessed through the adherence to all field instrument calibration procedures, sample handling, preservation, and holding time requirements, and through the collection of equipment blanks prior to the collection of samples for each type of equipment being.

  The laboratory will assess the overall accuracy of their instruments and analytical methods (independent of sample or matrix effects) through the measurement of "standards," materials of accepted reference value. Accuracy will vary from analysis to analysis because of individual sample and matrix effects. In an individual analysis, accuracy will be measured in terms of blank results, the percent recovery (%R) of surrogate compounds in organic analyses and/or laboratory control samples (LCSs). This gives an indication of expected recovery for analytes tending to behave

chemically like the spiked or surrogate compounds. Tables 2a, 2b, and 2c summarize the laboratory accuracy requirements.

- ***Precision*** is the agreement among a set of replicate measurements without consideration of the "true" or accurate value: i.e., variability between measurements of the same material for the same analyte. Precision is measured in a variety of ways including statistically, such as calculating variance or standard deviation.

  Precision in the field is assessed through the collection and measurement of field duplicates (one extra sample in addition to the original field sample). Field duplicates will be collected at a frequency of one per twenty investigative samples per matrix per analytical parameter. Precision will be measured through the calculation of relative percent differences (RPDs). The resulting information will be used to assess sampling and analytical variability. These criteria apply only if the sample and/or duplicate results are >5x the quantitation limit; if both results are $\leq$ 5x the quantitation limit, the criterion will be doubled.

  Precision in the laboratory is assessed through the calculation of RPD for duplicate samples. For organic soil and groundwater analyses, laboratory precision will be assessed through the analysis of field duplicates.

- ***Completeness*** is a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. "Normal conditions" are defined as the conditions expected if the sampling plan was implemented as planned.

  Field completeness is a measure of the amount of (1) valid measurements obtained from all the measurements taken in the project and (2) valid samples collected. The field completeness objective is greater than 90 percent.

  Laboratory completeness is a measure of the amount of valid measurements obtained from all valid samples submitted to the laboratory. The laboratory completeness objective is greater than 95 percent.

- ***Representativeness*** is a qualitative parameter that expresses the degree to which data accurately and precisely represents either a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition within a defined spatial and/or temporal boundary. To ensure representativeness, the sampling locations have been selected to provide coverage over a wide area and to highlight potential trends in the data. In addition, field duplicate samples will provide an additional measure of representativeness at a given location.

  Representativeness is dependent upon the proper design of the sampling program and will be satisfied by ensuring that the IRM Work Plan (Work Plan) are followed and that proper sampling, sample handling, and sample preservation techniques are used.

Representativeness in the laboratory is ensured by using the proper analytical procedures, appropriate methods, and meeting sample holding times.

- ***Comparability*** expresses the confidence with which one data set can be compared to another. Comparability is dependent upon the proper design of the sampling program and will be satisfied by ensuring that the Work Plan are followed and that proper sampling techniques are used. Maximization of comparability with previous data sets is expected because the sampling design and field protocols are consistent with those previously used.

  Comparability is dependent on the use of recognized EPA or equivalent analytical methods and the reporting of data in standardized units. Laboratory procedures are consistent with those used for previous sampling efforts.

Table 1
Analytical Parameters, Methods, Preservation, Holding Time and Container Requirements

Sample Matrix	Analytical Parameter	Sample Type[1]	No. of Samples[2]	No. of QA/QC Samples	EPA Analytical Method	Sample Preservation	Holding Time[3]	Sample Container[4]
Soil	TCL/Part 375/ CP-51 VOCs	Grab	12	Duplicate: 1/20	EPA Method 8260C	Sealed in EnCore® bag; Cool to 4^0 C	48 hours to extract: 2 EnCore® samplers extruded in 5mL DI water and freeze vials to <-7°C; 1 EnCore® sampler extruded in 5 mL methanol and Cool to 4^0 C; 14 days to analysis	3 x 5 gram EnCore® samplers
Groundwater	TCL/Part 375/ CP-51 VOCs	Grab	2	Trip Blank: as necessary Duplicate: 1/20	EPA Method 8260C	pH<2 with HCl; Cool to 4^0 C; no headspace	14 days to analysis	(3) 40 mL VOA vials

[1] For soil samples, a six-inch sampling interval is the preferred sample size; however, sample volume recovery, analytical method requirements, and field conditions can affect the actual sample interval size. For these reasons, the actual sampling interval may change in order to obtain adequate volume.
[2] Actual number of samples may vary depending on field conditions, sample material availability, and field observations.
[3] From date of sample collection
[4] Trip blank bottleware = (3) 40 mL VOA vials
TBD = To Be Determined

Table 2
Laboratory Data Quality Objectives: Precision and Accuracy: Soil and Groundwater Samples

Parameter	Method	Matrix	Accuracy Control Limits		Accuracy Frequency Requirements	Precision (RPD) Control Limits	Precision Frequency Requirements
VOCs (TCL/Part 375/CP-51)	EPA Method 8260C	Soil	Surrogates	% Rec.	Surrogates: All samples, standards, QC samples	Field Duplicates RPD ≤50	Field Duplicates: One per 20 per soils
			1,2-Dichloroethane-d4	70-130			
			4-Bromofluorobenzene	70-130			
			Toluene-d8	70-130			
VOCs (TCL/NYSDEC CP-51)	EPA Method 8260C	Groundwater	Surrogates	% Rec.	Surrogates: All samples, standards, QC samples	Field Duplicates RPD ≤30	Field Duplicates: One per 20
			1,2-Dichloroethane-d4	30-150			
			4-Bromofluorobenzene	30-150			
			Toluene-d8	30-150			

Laboratory control limits are periodically updated. The latest control limits will be utilized at the time of sample analysis.

Sampling Plan

Environmental sampling will include soil and groundwater (if encountered in an excavation) as described below. An excavator will be utilized to obtain subsurface soil samples and grab groundwater samples will be collected via a bailer.

Soil Sampling

Soil in the vicinity of a drainage structure and historic building foundations and features in the northern portion of the Site will be excavated. Excavated soil will be screened using a PID, to detect organic vapors. The excavated soil will be examined for staining, discoloration and odors. Post-excavation documentation samples will be collected utilizing dedicated sterile scoops. Samples for laboratory analysis will be chosen as described in the scope of work.

Groundwater Sampling

If groundwater is encountered in an excavation, a grab groundwater sample will be collected. Groundwater samples will be collected using a dedicated Teflon-lined bailer. The samples will be collected in sample bottles (pre-preserved, if appropriate), placed in iced coolers and removed from light immediately after collection. In addition, all sample bottles must be filled to the top so that no aeration of the samples occurs during transport. All bottles will be filled to avoid cascading and aeration of the samples, the goal being to minimize any precipitation of colloidal matter.

QC Sample Collection

QC samples will include trip blanks for groundwater and field duplicates for soil and groundwater samples. Refer to Table 1 for a summary of QC sample preservation and container requirements.

Trip blanks will consist of distilled water (supplied by the laboratory) and will be used to assess the potential for volatile organic compound contamination of groundwater samples due to contaminant migration during sample shipment and storage. Trip blanks will be transported to the Site unopened, stored with the investigative samples, and kept closed until analyzed by the laboratory. Trip blanks will be submitted to the laboratory at a frequency of one per cooler that contains groundwater samples for analysis for VOCs.

Field duplicates are an additional aliquot of the same sample submitted for the same parameters as the original sample. Field duplicates will be used to assess the sampling and analytical reproducibility. Field duplicates will be collected by alternately filling sample bottles from the source being sampled. Field duplicates will be submitted at a frequency of one per 20 samples for all matrices and all parameters.

Refer to Table 1 for a summary of QC sample preservation and container requirements.

Sample Preservation and Containerization

The analytical laboratory will supply the sample containers for the chemical samples. These containers will be cleaned by the manufacturer to meet or exceed all analyte specifications established in the latest U.S. EPA's *Specifications and Guidance for Contaminant-Free Sample Containers*. Certificates of analysis are provided with each bottle lot and maintained on file to document conformance to EPA specifications. Soil and groundwater samples will be placed in iced coolers immediately after collection.

Equipment Decontamination

Re-usable sampling equipment will not be used. Sampling equipment will be disposed after use.

Field Custody Procedures

Sample chain-of-custody and packaging procedures are summarized below. These procedures are intended to ensure that the samples will arrive at the laboratory with the chain-of-custody intact.

- The field sampler is personally responsible for the care and custody of the samples until they are transferred or dispatched properly. Field procedures have been designed such that as few people as possible will handle the samples.
- All bottles will be identified by the use of sample labels with sample numbers, sampling locations, date/time of collection, and type of analysis.
- Sample labels will be completed for each sample using waterproof ink unless prohibited by weather conditions. For example, a logbook notation would explain that a pencil was used to fill out the sample label because the pen would not function in wet weather.
- Samples will be accompanied by a properly completed chain-of-custody form. The sample numbers and locations will be listed on the chain-of-custody form. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents the transfer of custody of samples from the sampler to another person, to a mobile laboratory, to the permanent laboratory, or to/from a secure storage location.
- All shipments will be accompanied by the chain-of-custody record identifying the contents. The original record will accompany the shipment, and copies will be retained by the sampler and placed in the project files.
- Samples will be properly packaged for shipment and dispatched to the appropriate laboratory for analysis, with a separate signed custody record enclosed in and secured to the inside top of each sample box or cooler. Shipping containers will be secured with strapping tape and custody seals for shipment to the laboratory. The custody seals will be attached to the front right and back left of the cooler and covered with clear plastic tape after being signed by field personnel. The cooler will be strapped shut with strapping tape in at least two locations.

- If the samples are sent by common carrier, the air bill will be used. Air bills will be retained as part of the permanent documentation. Commercial carriers are not required to sign off on the custody forms since the custody forms will be sealed inside the sample cooler and the custody seals will remain intact.
- Samples remain in the custody of the sampler until transfer of custody is completed. This consists of delivery of samples to the laboratory sample custodian, and signature of the laboratory sample custodian on chain-of-custody document as receiving the samples and signature of sampler as relinquishing samples.

ATTACHMENT B
COMMUNITY AIR MONITORING PLAN

ATTACHMENT B - COMMUNITY AIR MONITORING PLAN

The Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area at the Site. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities do not spread contamination off-site through the air.

Community Air Monitoring Plan

Real-time air monitoring for VOCs and observations of particulate levels at the perimeter of the work areas will be completed during intrusive activities. Continuous monitoring and observations will be required during soil excavation activities. The downwind location will be just inside the fence line at the edge of the property.

VOC Monitoring, Response Levels, and Actions

VOCs will be monitored at the downwind perimeter of each designated work area on a continuous basis. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated daily. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring will continue. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring will continue. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the work area or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings will be recorded and will be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind locations of the borings at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne

particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work will be stopped and a re-evaluation of activities will be initiated. Work will be able to be resumed provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

3. All readings will be recorded and be available for State (NYSDEC and NYSDOH) personnel to review.

ATTACHMENT C

HEALTH AND SAFETY PLAN

SITE-SPECIFIC HEALTH AND SAFETY PLAN

FOR
INTERIM REMEDIAL MEASURE WORK PLAN

168 8th Street
Brooklyn, New York

Prepared by:

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018

TRC Project Number 275864

September 2017

DISCLAIMER

STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY AT THESE SITES. THE HEALTH AND SAFETY GUIDELINES IN THIS HEALTH AND SAFETY PLAN WERE PREPARED SPECIFICALLY FOR THIS PROJECT AND SHOULD NOT BE USED ON ANY OTHER SITE OR PROJECT WITHOUT PRIOR RESEARCH AND EVALUATION BY TRAINED HEALTH AND SAFETY SPECIALISTS.

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Attachment B – Safety Data Sheets for Potential Contaminants of Concern

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Attachment I – Safe Catch Report

1.0 SITE INFORMATION

1.1 Introduction

The following is the Health and Safety Plan (HASP) for Interim Remedial Measure (IRM) Work Plan activities in connection with the proposed Pre-Kindergarten Facility K710, located at 168 8th Street, Brooklyn, New York 11215 (the "Site").

The site-specific safety plan was developed from preliminary Site visits and performance of a site assessment. Revisions and/or alterations to this HASP may become necessary as more information becomes available. Any proposed changes to this HASP will be approved by the Health & Safety Coordinator prior to implementation. All on-site personnel are required to read, review and strictly comply with the HASP. It is the responsibility of the Project Manager or designee to ensure that the HASP is implemented and enforced.

1.2 Site Description and History

The Site encompasses approximately 13,500 square feet and is currently a concrete- and asphalt-paved vacant lot. Historically, the Site was occupied by an ink manufacturer from approximately 1888 to at least 1906, a storage facility from approximately 1906 to at least 1926, a chemical laboratory in 1926, a garage from approximately 1926 to at least 1951, a plumbing supply manufacturer from approximately 1951 to 1965, and a textile factory from approximately 1976 to at least 1992. The Site has been vacant since approximately 1992.

TRC conducted environmental due diligence activities at the Site between 2011 and 2013. Based on the results of due diligence activities, elevated concentrations of chlorinated volatile organic compounds (VOCs) are present in soil, soil vapor and groundwater. TRC understands that the NYCSCA is pursuing a Brownfield Cleanup Agreement (BCA) with the NYSDEC. Based on the BCP Pre-Application meeting with the NYSDEC, the NYSDEC indicated that immediate action was warranted. The purpose of the IRM Work Plan is to present the details of the interim remedial measure.

2.0 SCOPE OF WORK

Work included in this IRM Work Plan includes excavation of test pits and removal of previously identified drainage features, soil disposal, and site restoration. During the investigation, TRC will screen excavated soil and select samples for laboratory analysis.

3.0 EMERGENCY AND TRC CONTACT NUMBERS

Ambulance: **911** Fire Department: **911**

Police Department: **911**

Hospital: **New York Presbyterian Brooklyn Methodist Hospital**
Emergency Center No.: **(718) 780 3000**
Hospital Address: **506 6th Street, Brooklyn, NY**
HOSPITAL DIRECTIONS

NOTE: FOR ANY TYPE OF SERIOUS MEDICAL EMERGENCY, CALL 911 AND REQUEST AN AMBULANCE. NEW YORK CITY STREETS ARE OFTEN CONGESTED DUE TO HEAVY TRAFFIC, CONSTRUCTION AND DOUBLE-PARKED VEHICLES AND IT MAY BE DIFFICULT TO DRIVE TO THE EMERGENCY ROOM.

Refer to **Attachment C** for Hospital Route Direction with maps.

TRC Contacts

1. Project Manager

Name:	Lindsay O'Hara
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Cell Phone: 914-420-9649

2. Certified Industrial Hygienist

   Name: Jack Springston, CIH

   Office/Division: New York, NY

   Office Phone: 212-221-7822 ext. 108

3. National Safety Director

   Name: Mike Glenn

   Office/Division: Irvine, CA

   Office Phone: 949-727-7347

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4. Office Safety Coordinator (OSC)

   Name: Wes Lindemuth, CHMM, CSP

   Office/Division: New York City

   Office Phone: 212-221-7822 ext. 103

   Cell Phone: 347-738-1452

5. Work Care can provide assistance in providing first aid advice and directing an injured worker to non-emergency medical care. WorkCare is a service that provides 24/7 access to an Occupational Healthcare physician or clinician.

   Work Care Incident Intervention: 888-449-7787 (refer to **Attachment D)**

6. Human Resource Manager

   Name: Suzanne Micallef

   Office/Division: Administrative

   Office Telephone: 978-656-3628

4.0 HAZARD ASSESSMENT

4.1 Contaminants of Concern

The analytical results of soil samples detected two (2) volatile organic compounds (VOCs) and five (5) metals exceeding comparison criteria, which were attributed to evidence of petroleum contamination in the soil interval and/or evidence of fill material at the Site. One VOC, trichloroethene (TCE) present in shallow soil samples may be attributable to former Site uses and/or to historic uses of the former drainage system.

Two (2) VOCs were detected in groundwater samples at concentrations exceeding the corresponding Class GA Values which may attributed to former Site uses. Additionally, elevated concentrations of metals were detected in groundwater at the Site, which are attributed to the characteristics of the fill and/or Site soils. Note that it is not anticipated that groundwater will be encountered during IRM activities.

Sample bottles containing hazardous preservatives will be handled with care. Sample bottles will be checked for leaks and lids tightened. Nitrile chemical resistant gloves and safety glasses will be worn at all times when handling sample bottles.

Isobutylene gas will be used during a short time period at the beginning of each work day to calibrate the photoionization detector (PID). 100 parts per million (ppm) isobutylene will be primarily contained in a Tedlar bag. Any gas that is released to the air will quickly disperse and will not pose a threat to on-Site workers. No monitoring is required for isobutylene.

Safety Data Sheets (SDS) for compounds of concern are provided in **Attachment B**.

4.2 First Aid Procedures for Chemical Exposures

EYE: If any chemicals come in contact with eyes, immediately wash the eyes with large amounts of water, occasionally lifting lower and upper lids. Get medical attention immediately.

BREATH: If person breathes large amounts of any chemicals, remove person to fresh air. If breathing has stopped, perform artificial respiration. Keep affected person warm and rested. Get medical attention as soon as possible.

SKIN: If any chemicals except those listed below come in contact with the skin, immediately wash skin with soap and water. Get medical attention promptly. If chemical penetrates clothing,

immediately remove clothing and wash with soap and water.

Soap should not be used if the following chemicals (sample preservatives) potentially encountered at the site contact skin or clothing, **water wash only**:

Hydrochloric acid

SWALLOW: If any chemicals are swallowed get medical attention immediately.

4.3 Biological Hazards

During the course of the project, there is a potential for workers to come into contact with biological hazards, such as animals and their scat.

During Site operations, wild animals such as birds, rats, stray dogs or cats, raccoons, and other rodents and their scat may be encountered. Workers will use discretion and avoid all contact with wild animals and their scat. Avoid areas and habitats inside and outside work areas that are contaminated with scat. If unsafe conditions are noted (e.g., gross accumulations of scat or vermin infestations), work in these areas will be halted and reevaluated.

4.4 Physical Hazards

The physical hazards are anticipated to be low and are outlined in Table A-1 below.

TABLE A-1
PHYSICAL HAZARDS

HAZARD TYPE	KNOWN	POTENTIAL
Heat Stress/Cold Stress		**X**
Severe Weather (lightning, snow, sleet)		**X**
Excessive Noise	**X**	
Facility Operations (machinery, structures)	**X**	
Unstable ground (wet and/or icy areas)	**X**	
Site Operations (Excavation, drilling, hand and power tool use)	**X**	

HAZARD TYPE	KNOWN	POTENTIAL
Heavy lifting/moving		**X**
Hazardous materials use & storage		**X**
Fire		**X**
Slips, trips, and falls	**X**	
Cuts, punctures		**X**

TRC personnel can avoid most of the hazards listed above including hand tools, hazardous materials use, slips, trips and falls, and punctures and cuts by remaining alert and performing safe work practices during all site activities. Other proper work practices are outlined below.

1. To avoid falling objects:
   a. Do not walk or stand under suspended/overhead loads (including scaffolding).
   b. Be aware of falling objects in the work area.
   c. Secure overhead objects.
2. When using hand tools:
   a. Hand tools will meet the manufacturer's safety standards.
   b. Hand tools will not be altered in any way.
   c. Makeshift tools will not be used.
   d. At a minimum, eye protection will be used when working with hand tools.
   e. Wrenches, including adjustable, pipe, end and socket wrenches, will not be used when jaws are sprung to the point that slippage occurs.
   f. Impact tools such as drift pins, wedges and chisels, will be kept free of mushroom heads.
   g. Wooden handles will be free of splinters or cracks and secured tightly to the tool.
3. Slips, Trips and Falls:
   a. Proper lighting will be maintained at all times.
   b. Walkways will remain clear and unobstructed at all times.
   c. When possible, cords, hose lines, etc., will be raised to reduce or eliminate trip hazards.

4.5 Noise

Approved hearing protection will be required in work areas involving heavy equipment, impact tools, drilling, etc. In general, hearing protection should be worn if an individual cannot be heard in a normal speaking voice at a distance of two feet.

4.6 Mechanical Hazards

The mechanical hazards are anticipated to be associated with excavation operations. Various types of mechanical equipment may be used to provide the excavation. Depending on the particular excavator employed, excavation operations can present exposure to the following:

- Flying objects (chipped asphalt or concrete, soil) and dust. Measures used to control such exposures will include use of water misting apparatus to keep dust down, or use of a guard installed around the drill to protect against flying objects and dust.
- TRC understands that all subsurface utility lines in the area of drilling have been identified by AKRF and its utility mark-out subcontractor and NYC One-Call Center.
- Underground utilities present fire, electrocution, burn and explosion hazards. If possible, all lines in the area of drilling will be de-energized, locked-out, and tested before work begins.
- Assembling and disassembling rigs.
- Perimeter protection in the form of barricades is necessary for the protection of employees and subcontractor personnel and the public. Such protection will meet requirements set forth in 29 CFR 1926, as well as in the New York City Building Code, Article 19.

A Job-Safety Analysis for excavation operations is provided in **Attachment E.**

5.0 Air Monitoring Requirements

An organic vapor photoionization detector (PID) will be used to evaluate airborne levels of VOCs during the excavation of soil. If ionizable total organic vapors are detected at 5 parts per million (ppm) or higher above ambient background levels in the breathing zone, TRC will follow the response actions, which may

include establishing exclusion zones and/or upgrading personal protective equipment (PPE).

If the vapor levels continue to be elevated, other air monitoring devices may be utilized to measure airborne concentrations of specific suspected contaminants of concern (see below) and to assess the need to upgrade the respiratory PPE.

Exposure Limits

The OSHA Permissible Exposure Limit (PEL), for benzene, which will be used to determine the appropriate respiratory protection, is 1 part per million (ppm) over an 8-hour time-weighted average or 5 ppm over 15 minutes. This value is based upon the OSHA PEL for benzene, which, of the VOC constituents of petroleum compounds, has the lowest PEL.

The National Institute for Occupational Safety and Health (NIOSH) considers trichloroethene (TCE) to be a potential occupational carcinogen and the recommended exposure limit (REL) is 25 ppm (as a 10-hour TWA).

Respiratory Protection

It is unlikely that respiratory protection will be required during implementation of the work plan. If air monitoring measurements indicate that levels of organic vapors have reached 5 ppm, workers will cease work in the area until levels of organic vapors have decreased. If necessary, modifications to work practices will be implemented to reduce or avoid generating elevated levels of organic vapors.

6.0 General Safety Requirements

The general safety rules listed below apply to all TRC personnel present at the site.

- A tailgate health and safety meeting will be held with all field team members and subcontractors each day prior to the start of work (refer to Section 12.0).
- Adhere to all requirements of this health and safety plan (HASP).
- Wear protective clothing appropriate for the designated level of protection and decontaminate before entering clean areas when applicable.
- Use safety equipment in accordance with OSHA guidance and labeling instructions.
- Maintain safety equipment in good condition and proper working order and make sure that the equipment is calibrated prior to use.
- Immediately report unsafe acts or conditions to the Project Manager and OSC.
- Eating, drinking, and smoking are prohibited on site, except in designated areas.
- Maintaining a position upwind from intrusive activities is encouraged.
- The emergency shutoff switch should be demonstrated to be working prior to initiating drilling.
- An adequately stocked first-aid kit will be maintained at the work site.

Communication

TRC team-sampling members shall be equipped with cellular telephones. If an emergency occurs, and the team members are not in close proximity to each other, communication will occur via telephone.

7.0 Personal Protective Equipment (PPE)

TRC personnel will use Level D PPE as noted/modified below:

Level D Personal Protective Equipment	
Item	**Rationale/Notes**
Hardhat	Appropriately rated hard hats will be worn by personnel for protection against overhead hazards, including electrical.
Hearing protection	Hearing protection will be worn by all personnel exposed to more than 85 dB of sound during the workday.
Safety boots	Safety boots will be worn by all personnel during project work described in this HASP and at all times on site.
Eye protection (safety glasses)	Eye protection will be worn when personnel are exposed to flying debris, chemical vapors or particulates. Chemical splash goggles will be worn for protection against chemical gases, vapors or particulates. Safety glasses will be worn for protection against flying objects.
Safety vest	Utilize in areas in or near vehicular traffic of any kind on or off property.
Gloves	Gloves to be changed between samples to avoid cross-contamination. Nitrile chemically resistant gloves will be worn when handling sample bottles.
Kevlar work gloves	As indicated herein, use Cut and Abrasion Resistance Level 4 or Level 5 gloves when necessary for hand protection during field tasks.

A basic first aid kit will be provided by the contractor and readily available on-Site in the event of an emergency.

A fire extinguisher should be present with the excavator. All personnel working on or around the excavator should know the location of and how to operate the fire extinguisher. TRC will confirm the location of the first aid kid and fire extinguisher during daily tailgate safety meetings.

8.0 DECONTAMINATION PROCEDURES

8.1 Minimization of Contact with Contaminants

During the completion of all Site activities, personnel should attempt to minimize the degree of contact with contaminated materials. This involves a conscientious effort to keep "clean" during Site activities. All personnel should minimize kneeling, splash generation, and other physical contact with contamination. This may ultimately minimize the degree of decontamination required and the generation of waste materials from Site operations.

8.2 Personnel Decontamination Procedures

The following describes procedures to be employed for personnel decontamination.

PERSONNEL DECONTAMINATION PROCEDURES FOR LEVEL D PROTECTION	
1.	Decontaminate equipment used on-Site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) with moist towel.
2.	Use boot brush to remove soil from treads of shoes.
2.	Remove PPE and wipe down with moist towel.
3.	Remove gloves and deposit in waste container.
4.	If inner clothing has become contaminated, remove it and place it into a poly bag.
5.	Wash hands and face.

8.3 Decontamination Procedures

All liquids used in the decontamination procedure will be collected, stored, and disposed in accordance with federal, state, and local regulations. Personnel performing this task will wear the proper PPE as prescribed in the table in Section 8.

8.4 Emergency Decontamination

If circumstances dictate that contaminated clothing cannot be readily removed, then remove gross contamination; wrap injured personnel with clean garments/blankets to avoid contaminating other personnel or transporting equipment.

If the person cannot be moved because of the extent of the injury (a back or neck injury) provisions will be made to ensure that emergency response personnel are able to respond to victim without being exposed to potentially hazardous atmospheric conditions. If the potential

for inhalation hazards exist, such as with open excavation, this area will be covered with poly to eliminate any potential inhalation hazards. All emergency personnel are to be immediately informed of the injured person's condition, potential contaminants, and provided with all pertinent chemical data.

8.5 Hand Held Equipment Decontamination

Hand held equipment includes all monitoring instruments, samples, hand tools, and field logbooks. To aid in decontamination, monitoring instruments can be sealed in plastic bags or wrapped in polyethylene. This will also protect the instruments against contaminants. The instruments will be wiped clean using wipes or paper towels if contamination is visually evident.

Decontamination procedures for sampling equipment, hand tools, etc. will include a moist towel wipe, as appropriate for the Site conditions.

9.0 JOB SAFETY ANALYSIS

A Job Safety Analysis (JSA) is a safety management tool in which the risks or hazards of a specific job in the workplace are identified, and then measures to eliminate or control those hazards are determined and implemented. More specifically, a JSA is a process of systematically evaluating certain jobs, tasks, processes or procedures and eliminating or reducing the risks or hazards to as low as reasonably practical (ALARP) in order to protect workers from injury or illness. The JSA process is documented and the JSA document is used in the workplace or at the job site to guide workers in safe job performance. The JSA document is also a living document that is adjusted as conditions warrant.

The JSA process begins with identification of the potential hazards or risks associated with a particular job. Once the hazards are understood, the consequences of those hazards are then identified, followed by control measures to eliminate or mitigate the hazards.

Please refer to Attachment E for the Job Safety Analysis for Excavation.

10.0 REQUIRED PERSONNEL TRAINING

TRC field personnel will have the training outlined below before on-Site work activities:

Project Training Requirements				
(* required for all sites; but minimum recommended) Check "A" if training required for everyone, and check "T" if training required for specific task or per notations.				
A	**T**	**SUBJECT**	**REFERENCE**	
			29 CFR 1910	**29 CFR 1926 or Other**
☒	☐	HAZWOPER 40 hour	1910.120	1926.65
☐	☐	3-Day HAZWOPER Supervised On-site	1910.120	1926.65
☒	☐	8-Hour HAZWOPER Refresher	1910.120	1926.65
☐	☒	8-Hour Supervisor HAZWOPER*	1910.120	1926.65
☐	☒	First Aid, CPR[1]	1910.151	1926.23,.50
☒	☐	Hazard Communication (HAZCOM)	1910.1200	1926.59
☐	☐	DOT / IATA Shipping Training	1910.1201	49 CFR 172.704
☒	☐	TRC Hand Protection Policy	1910.138	TRC Policy[2]
☒	☐	Defensive Driving	N/A	White Paper[3] TRC Manual[4]
Client-specific training: ☐ Not Applicable ☐ Specify				
Client-specific training: ☐ Not Applicable ☐ Specify				
Client-specific training: ☐ Not Applicable ☐ Specify				

Project Training Requirements

(* required for all sites; but minimum recommended)

Check "A" if training required for everyone, and check "T" if training required for specific task or per notations.

Note:

***** The OHSO shall have OSHA 8-hour supervisor training, in addition to 40-hour HAZWOPER.

1 Per the TRC Health and Safety Policy and Procedure Manual, each TRC project will have at least one certified CPR/first aid trained person on- Site at all times. All Project Managers, and anyone acting as the on-site Health and Safety Officer, must be current in First Aid/CPR.

2 TRC RMD Hand Protection Policy, August 2012

3 Guidelines for Employers to Reduce Motor Vehicle Crashes (joint white paper by NETS, NHTSA and OSHA)

4 TRC Driver and Vehicle Management Policy and Procedure Manual, Rev 1 (April 2012)

Project training requirements beyond those provided in the above table will require a HASP revision/upgrade or concurrence of the TRC Safety Director or Practice Safety Manager.

11.0 MEDICAL MONITORING

Medical monitoring will apply routinely to all employees who are or may be exposed to hazardous substances or health hazards at or above the established permissible exposure limit, above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year (40 CFR 1910.120[f][2][i]). Said TRC field personnel will have the medical surveillance outlined in the table below prior to commencing on-site work activities.

Medical Surveillance Required			
*Baseline is minimum recommended.			
	29 CFR 1910	**29 CFR 1926 or Other**	**Notes**
☒ HAZWOPER Physical - Baseline	1910.120	1926.65	
☒ HAZWOPER Physical – Annual	1910.120	1926.65	
☐ HAZWOPER Physical - Biennial	1910.120	1926.65	
Client-specific drug testing[1]	☒ Not Applicable ☐ Specify		
Client-specific medical monitoring[1]	☒ Not Applicable ☐ Specify		
Site-specific medical monitoring:	☒ Not Applicable ☐ Specify		

Note:

[1] Client required drug testing or medical monitoring should be coordinated through the Project Manager.

TRC has a Drug and Alcohol-Free Workplace Policy. TRC may require employees or subcontractors to be tested upon reasonable suspicion, following accidents or incidents during work activities, or during travel to or from a project Site. Client policies may be stricter in regard to procedures following an accident. Project Managers must be aware of these and inform employees and subcontractors of any additional requirements.

12.0 TAILGATE SAFETY MEETINGS

A tailgate safety meeting will be conducted daily prior to commencement of the work day (see Daily Pre-Job Safety Briefing Form provided in **Attachment F**) or if site conditions change.

Topics covered by the tailgate safety meeting will include, but not be limited to:

- Scope of work and who will conduct each task
- Potential hazards for the scope of work
- weather forecast
- PPE
- Emergency procedures and the route to the medical facility
- Site conditions and features
- Communication guidelines related to stakeholder engagement and visitors

Safety meetings will be held to address modifications to this HASP and any addenda prepared to supplement the HASP. Subcontractors and personnel present at the tailgate safety meeting shall be required to sign an acknowledgement form after each meeting.

13.0 INCIDENT REPORTING

In case of an incident, TRC personnel must report the incident immediately to their project manager/supervisor and/or OSC, and client's representative, and follow the TRC Incident Response and Reporting Process (see Attachment G). Required forms must be completed within 24 hours following the incident. If the forms are unavailable, the incident shall be reported to the TRC Safety Director (Mike Glenn). Accident/injury/exposure information must be recorded per TRC policy (see Attachment G) and will be the basis of any accident/incident investigations.

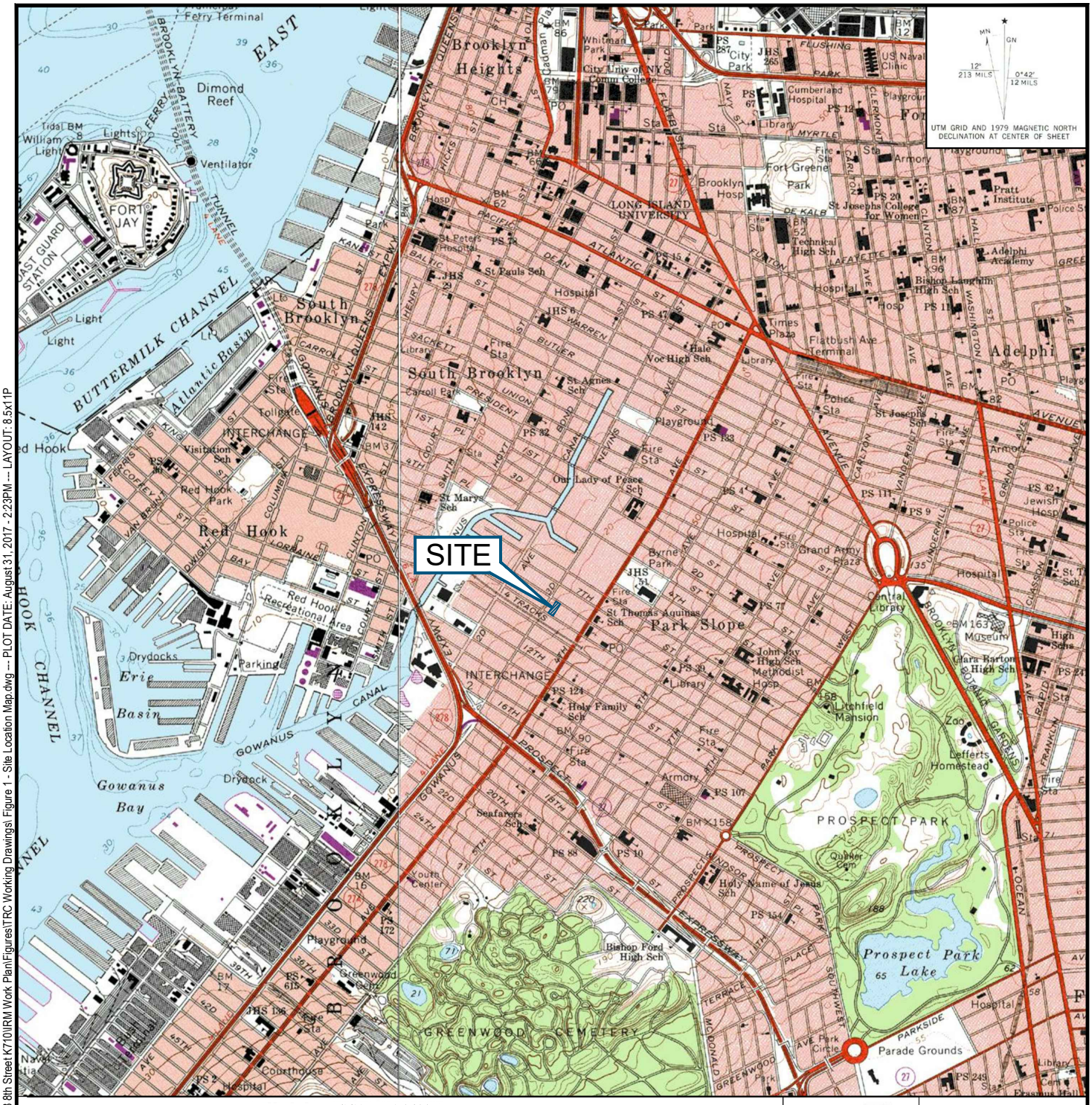
14.0 ACKNOWLEDGEMENT

All TRC personnel operating under this HASP must read the HASP and sign the acknowledgment page in Attachment A.

15.0 SUBCONTRACTORS AND HEALTH AND SAFETY PLANNING

TRC personnel must provide the complete HASP to all subcontractors for their reference in advance of the work. Subcontractors must prepare their own site-specific HASP and provide evidence of HASP preparation before the start of site work to ensure that the subcontractor has an understanding of the safety hazards associated with the work that they are performing. Subcontractor HASPs are not required to be included unless contractually/client required, of is so desired by the Project Manager or OSC.

Figures



TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

PROJECT: **NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY**
INTERIM REMEDIAL MEASURE WORK PLAN
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK: 1003, LOT: 11
BROOKLYN, NY 11215

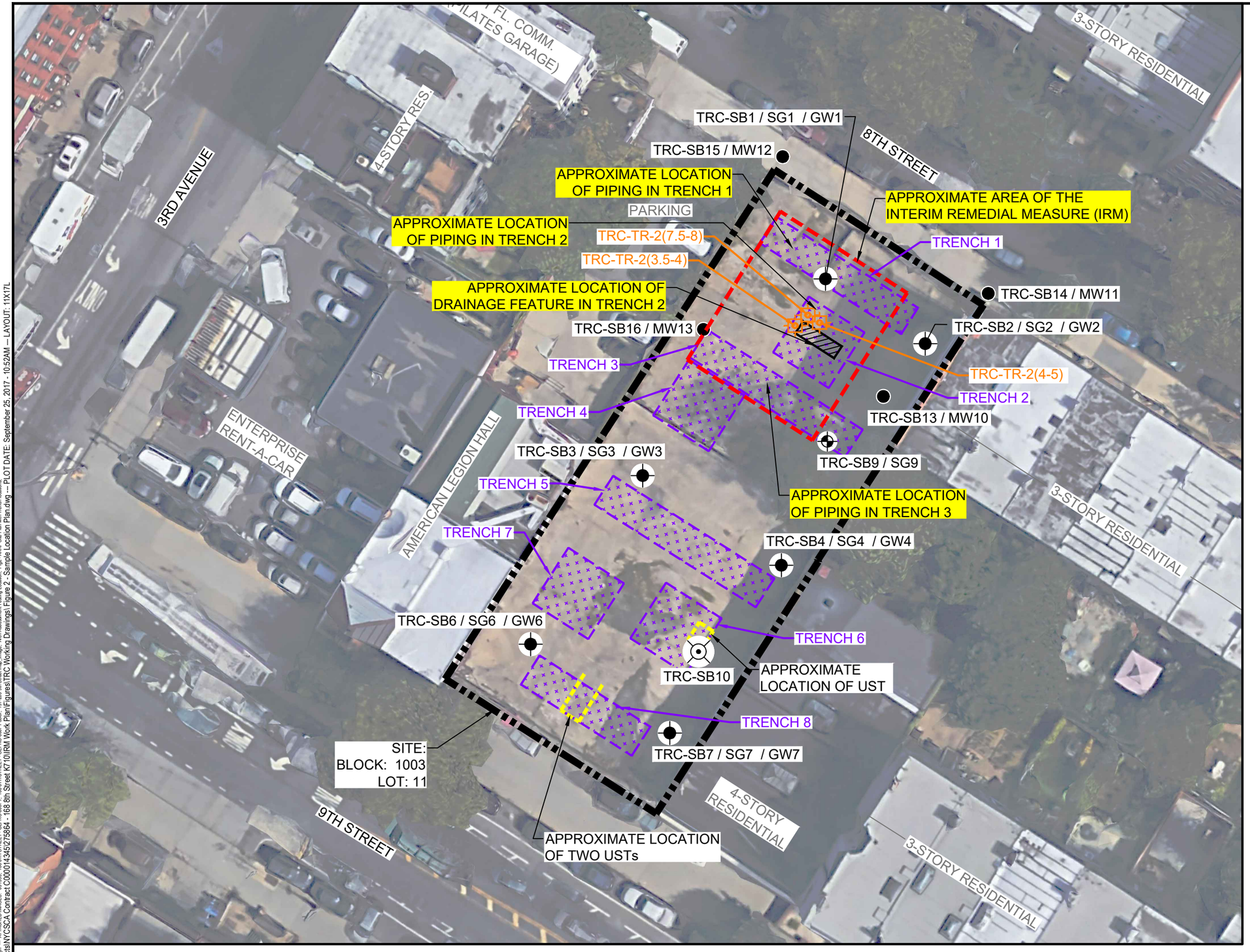
TITLE:

SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	E. EBERT
APPROVED BY:	J. MIRANDA
DATE:	AUGUST 2017
PROJ. NO.:	275864.0000.0000
FILE:	Figure 1 - Site Location Map.dwg

FIGURE 1

8.5x11 --- ATTACHED XREF'S: --- ATTACHED IMAGES: 197-203 9th street, 01; 197-203 9th street, 02;
DRAWING NAME: I:\Projects\NYCSCA Contract C000014345\275864 - 168 8th Street K710\IRM Work Plan\Figures\TRC Working Drawings\ Figure 1 - Site Location Map.dwg --- PLOT DATE: August 31, 2017 - 2:23PM --- LAYOUT: 8.5x11P



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- TRC-TR-2 (X-X) — TRENCH SAMPLE LOCATION AND IDENTIFICATION NUMBER (DEPTH IN FEET)
- TRENCH AREA LOCATION AND IDENTIFICATION (JUNE 2017 ARCHEOLOGICAL INVESTIGATION)
- TRC-SBX — SOIL SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JUNE, JULY, AND NOVEMBER 2012)
- TRC-SBX / SGX — SOIL SAMPLING AND SOIL VAPOR SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JUNE, JULY AND NOVEMBER 2012)
- TRC-SBX / SGX / GWX — SOIL SAMPLING, SOIL VAPOR SAMPLING, AND GROUNDWATER SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JUNE, JULY AND NOVEMBER 2012)
- TRC-SBX / MWX — SOIL SAMPLING AND GROUNDWATER SAMPLING LOCATION AND IDENTIFICATION NUMBER (TRC INVESTIGATION CONDUCTED IN JANUARY 2013)

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. THE NORTHERN LIMITS OF THE TANKS IN TRENCH 8 WERE NOT IDENTIFIED SINCE TRENCH 8 WAS NOT EXCAVATED TO THE LIMITS.

0 30' 60'

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

ASSUMED GROUNDWATER FLOW DIRECTION

PROJECT: **NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY**
INTERIM REMEDIAL MEASURE WORK PLAN
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK: 1003, LOT: 11
BROOKLYN, NY 11215

TITLE:

SAMPLE LOCATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	275864.0000.0000
CHECKED BY:	E. EBERT		**FIGURE 2**
APPROVED BY:	J. MIRANDA		
DATE:	SEPTEMBER 2017		

TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 2 - Sample Location Plan.dwg

11x17 --- ATTACHED IMAGES: 0510A_168 8TH STREET - GEPROGRAPHY - 168 8TH STREET - GEPROGRAPHY.mxd --- 167 8th Street.mpk --- Image: ; Aerial Assessment Existing Location - Fig2 - AMXF Site Plan with Trench locations
DRAWING NAME: I:\Projects\NYCSCA Contract C000001434\275864 - 168 8th Street K710\IRM Work Plan\Figures\TRC Working Drawings\Figure 2 - Sample Location Plan.dwg --- PLOT DATE: September 25, 2017 - 10:52AM --- LAYOUT: 11X17L

Attachment A
Health and Safety Plan Acceptance

ATTACHMENT A

HEALTH AND SAFETY PLAN ACCEPTANCE

SITE:

168 8th Street, Brooklyn, NY

I have received a copy of the Health and Safety Plan for this site and have read, understand and will abide by the procedures set forth in this Health and Safety Plan and any amendments to this plan.

Printed Name	**Signature**	**Date**

Attachment B

Safety Data Sheets for Potential Contaminants of Concern

MATERIAL SAFETY DATA SHEET

ALCONOX®

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH Regulations

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	**ALCONOX®**
CHEMICAL FAMILY NAME:	Detergent.
PRODUCT USE:	Critical-cleaning detergent for laboratory, healthcare and industrial applications
U.N. NUMBER:	Not Applicable
U.N. DANGEROUS GOODS CLASS:	Non-Regulated Material
SUPPLIER/MANUFACTURER'S NAME:	Alconox, Inc.
ADDRESS:	30 Glenn St., Suite 309, White Plains, NY 10603. USA
EMERGENCY PHONE:	**TOLL-FREE in USA/Canada** 800-255-3924
	International calls 813-248-0585
BUSINESS PHONE:	914-948-4040
DATE OF PREPARATION:	May 2011
DATE OF LAST REVISION:	February 2008

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is a white granular powder with little or no odor. Exposure can be irritating to eyes, respiratory system and skin. It is a non-flammable solid. The Environmental effects of this product have not been investigated.

US DOT SYMBOLS

Non-Regulated

CANADA (WHMIS) SYMBOLS



EUROPEAN and (GHS) Hazard Symbols



Signal Word: **Warning!**

EU LABELING AND CLASSIFICATION:

Classification of the substance or mixture according to Regulation (EC) No1272/2008 Annex 1
EC# 205-633-8 This substance is not classified in the Annex I of Directive 67/548/EEC
EC# 268-356-1 This substance is not classified in the Annex I of Directive 67/548/EEC
EC# 231-838-7 This substance is not classified in the Annex I of Directive 67/548/EEC
EC# 231-767-1 This substance is not classified in the Annex I of Directive 67/548/EEC
EC# 207-638-8 Index# 011-005-00-2
EC# 205-788-1 This substance is not classified in the Annex I of Directive 67/548/EEC

GHS Hazard Classification(s):

Eye Irritant Category 2A

Hazard Statement(s):

H319: Causes serious eye irritation

Precautionary Statement(s):

P260: Do not breath dust/fume/gas/mist/vapors/spray
P264: Wash hands thoroughly after handling
P271: Use only in well ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection/

Hazard Symbol(s):

[Xi] Irritant

Risk Phrases:
R20: Harmful by inhalation
R36/37/38: Irritating to eyes, respiratory system and skin

Safety Phrases:
S8: Keep container dry
S22: Do not breath dust
S24/25: Avoid contact with skin and eyes

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE: Exposure to this product may cause irritation of the eyes, respiratory system and skin. Ingestion may cause gastrointestinal irritation including pain, vomiting or diarrhea.

CHRONIC: This product contains an ingredient which may be corrosive.

TARGET ORGANS: ACUTE: Eye, respiratory System, Skin CHRONIC: None Known

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
Sodium Bicarbonate	144-55-8	205-633-8	1044	33 - 43%	HAZARD CLASSIFICATION: None RISK PHRASES: None
Sodium (C10 – C16) Alkylbenzene Sulfonate	68081-81-2	268-356-1	Not Listed	10 – 20%	HAZARD CLASSIFICATION: None RISK PHRASES: None
Sodium Tripolyphosphate	7758-29-4	231-838-7	1469	5 - 15%	HAZARD CLASSIFICATION: None RISK PHRASES: None
Tetrasodium Pyrophosphate	7722-88-5	231-767-1	1140	5 - 15%	HAZARD CLASSIFICATION: None RISK PHRASES: None
Sodium Carbonate	497-19-8	207-638-8	1135	1 - 10%	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R36
Sodium Alcohol Sulfate	151-21-3	205-788-1	0502	1 – 5%	HAZARD CLASSIFICATION: None RISK PHRASES: None
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000*.

SECTION 4 - FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing dificulty continues.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin, or eye problems may be aggravated by prolonged contact.

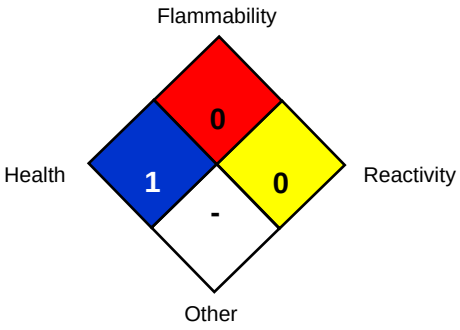
RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: Not Flammable
AUTOIGNITION TEMPERATURE: Not Applicable
FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): NA Upper (UEL): NA
FIRE EXTINGUISHING MATERIALS: As appropriate for surrounding fire. Carbon dioxide, foam, dry chemical, halon, or water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is non-flammable and has no known explosion hazards.
Explosion Sensitivity to Mechanical Impact: Not Sensitive.
Explosion Sensitivity to Static Discharge: Not Sensitive
SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD (BLUE)	1
FLAMMABILITY HAZARD (RED)	0
PHYSICAL HAZARD (YELLOW)	0

PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8

For Routine Industrial Use and Handling Applications

Hazard Scale: **0** = Minimal **1** = Slight **2** = Moderate **3** = Serious **4** = Severe * = Chronic hazard

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.
SPILLS: Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Sweep, shovel or vacuum spilled material and place in an appropriate container for re-use or disposal. Avoid dust generation if possible. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing dusts generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: Containers of this product must be properly labeled. Store containers in a cool, dry location. Keep container tightly closed when not in use. Store away from strong acids or oxidizers.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH TWA	OSHA TWA	SWA
Sodium Bicarbonate	144-55-8	10 mg/m³ Total Dust	15 mg/m³ Total Dust	10 mg/m³ Total Dust
Sodium (C10 – C16) Alkylbenzene Sulfonate	68081-81-2	10 mg/m³ Total Dust	15 mg/m³ Total Dust	10 mg/m³ Total Dust
Sodium Tripolyphosphate	7758-29-4	10 mg/m³ Total Dust	15 mg/m³ Total Dust	10 mg/m³ Total Dust
Tetrasodium Pyrophosphate	7722-88-5	5 mg/m³	5 mg/m³	5 mg/m³
Sodium Carbonate	497-19-8	10 mg/m³ Total Dust	15 mg/m³ Total Dust	10 mg/m³ Total Dust
Sodium Alcohol Sulfate	151-21-3	10 mg/m³ Total Dust	15 mg/m³ Total Dust	10 mg/m³ Total Dust

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Based on test data, exposure limits should not be exceeded under normal use conditions when using Alconox Detergent. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact.. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
APPEARANCE & ODOR:	White granular powder with little or no odor.
ODOR THRESHOLD (PPM):	Not Available
VAPOR PRESSURE (mmHg):	Not Applicable
VAPOR DENSITY (AIR=1):	Not Applicable.
BY WEIGHT:	Not Available
EVAPORATION RATE (nBuAc = 1):	Not Applicable.
BOILING POINT (C°):	Not Applicable.
FREEZING POINT (C°):	Not Applicable.
pH:	9.5 (1% aqueous solution)
SPECIFIC GRAVITY 20°C: (WATER =1)	0.85 – 1.1
SOLUBILITY IN WATER (%)	>10% w/w
COEFFICIENT OF WATER/OIL DIST.:	Not Available
VOC:	None
CHEMICAL FAMILY:	Detergent

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable
DECOMPOSITION PRODUCTS: When heated to decomposition this product produces Oxides of carbon (COx)
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong acids and strong oxidizing agents.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Contact with incompatible materials and dust generation.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is available for mixture:

CAS# 497-19-8 LD50 Oral (Rat)	4090 mg/kg
CAS# 497-19-8 LD50 Oral (Mouse)	6600 mg/kg
CAS# 497-19-8 LC50 Inhalation (Rat)	2300 mg/m³ 2H
CAS# 497-19-8 LC50 Inhalation (Mouse)	1200 mg/m³ 2H
CAS# 7758-29-4 LD50 Oral (Rat)	3120 mg/kg
CAS# 7758-29-4 LD50 Oral (Mouse)	3100 mg/kg
CAS# 7722-88-5 LD50 Oral (Rat)	4000 mg/kg

SUSPECTED CANCER AGENT: None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.
IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes and respiratory system.
SENSITIZATION OF PRODUCT: This product is not considered a sensitizer.
REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.
ENVIRONMENTAL STABILITY: No Data available at this time.
EFFECT OF MATERIAL ON PLANTS or ANIMALS: No evidence is currently available on this product's effects on plants or animals.

EFFECT OF CHEMICAL ON AQUATIC LIFE: No evidence is currently available on this product's effects on aquatic life.

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.
PROPER SHIPPING NAME: Non-Regulated Material
HAZARD CLASS NUMBER and DESCRIPTION: Not Applicable
UN IDENTIFICATION NUMBER: Not Applicable
PACKING GROUP: Not Applicable.
DOT LABEL(S) REQUIRED: Not Applicable
NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2004): Not Applicable
MARINE POLLUTANT: None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:
This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:
This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):
This product is not classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:
This product is not classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):

This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows: None

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes Chronic Health: No Fire: No Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): None of the ingredients are on the California Proposition 65 lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as a Controlled Product, Hazard Class D2B as per the Controlled Product Regulations

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:

Classification of the mixture according to Regulation (EC) No1272/2008. See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	Listed
Australian Inventory of Chemical Substances (AICS):	Listed
Korean Existing Chemicals List (ECL):	Listed
Japanese Existing National Inventory of Chemical Substances (ENCS):	Listed
Philippines Inventory if Chemicals and Chemical Substances (PICCS):	Listed
Swiss Giftliste List of Toxic Substances:	Listed
U.S. TSCA:	Listed

SECTION 16 - OTHER INFORMATION

PREPARED BY: Paul Eigbrett Global Safety Management, 10006 Cross Creek Blvd. Suite 440, Tampa, FL 33647

Disclaimer: To the best of Alconox, Inc. knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type either express or implied are provided. The information contained herein relates only to this specific product.

ANNEX:

IDENTIFIED USES OF ALCONOX® AND DIRECTIONS FOR USE

Used to clean: Healthcare instruments, laboratory ware, vacuum equipment, tissue culture ware, personal protective equipment, sampling apparatus, catheters, tubing, pipes, radioactive contaminated articles, optical parts, electronic components, pharmaceutical apparatus, cosmetics manufacturing equipment, metal castings, forgings and stampings, industrial parts, tanks and reactors. Authorized by USDA for use in federally inspected meat and poultry plants. Passes inhibitory residue test for water analysis. FDA certified.

Used to remove: Soil, grit, grime, buffing compound, slime, grease, oils, blood, tissue, salts, deposits, particulates, solvents, chemicals, radioisotopes, radioactive contaminations, silicon oils, mold release agents.

Surfaces cleaned: Corrosion inhibited formulation recommended for glass, metal, stainless steel, porcelain, ceramic, plastic, rubber and fiberglass. Can be used on soft metals such as copper, aluminum, zinc and magnesium if rinsed promptly. Corrosion testing may be advisable.

Cleaning method: Soak, brush, sponge, cloth, ultrasonic, flow through clean-inplace. Will foam—not for spray or machine use.

Directions: Make a fresh 1% solution (2 1/2 Tbsp. per gal., 1 1/4 oz. per gal. or 10 grams per liter) in cold, warm, or hot water. If available use warm water. Use cold water for blood stains. For difficult soils, raise water temperature and use more detergent. Clean by soak, circulate, wipe, or ultrasonic method. Not for spray machines, will foam. For nonabrasive scouring, make paste. Use 2% solution to soak frozen stopcocks. To remove silver tarnish, soak in 1% solution in aluminum container. RINSE THOROUGHLY—preferably with running water. For critical cleaning, do final or all rinsing in distilled, deionized, or purified water. For food contact surfaces, rinse with potable water. Used on a wide range of glass, ceramic, plastic, and metal surfaces. Corrosion testing may be advisable.

SAFETY DATA SHEET

Nonflammable Gas Mixture: Isobutylene / Nitrogen / Oxygen

Section 1. Identification

GHS product identifier : Nonflammable Gas Mixture: Isobutylene / Nitrogen / Oxygen

Other means of identification : Not available.

Product use : Synthetic/Analytical chemistry.

SDS # : 002103

Supplier's details : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

Emergency telephone number (with hours of operation) : 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : GASES UNDER PRESSURE - Compressed gas

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Contains gas under pressure; may explode if heated.

Precautionary statements

General : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction.

Prevention : Use and store only outdoors or in a well ventilated place.

Response : Not applicable.

Storage : Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

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Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

Product code : 002103

Ingredient name	%	CAS number
Nitrogen	75 - 80.5	7727-37-9
oxygen	19.5 - 23.5	7782-44-7
2-methylpropene	0.0001 - 1.13	115-11-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : As this product is a gas, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Frostbite : Try to warm up the frozen tissues and seek medical attention.

Ingestion : As this product is a gas, refer to the inhalation section.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

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Section 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Immediately contact emergency personnel. Stop leak if without risk.

Large spill : Immediately contact emergency personnel. Stop leak if without risk. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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Section 8. Exposure controls/personal protection

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas.

Color : Not available.

Melting/freezing point : -140.7°C (-221.3°F) This is based on data for the following ingredient: 2-methylpropene. Weighted average: -211.14°C (-348.1°F)

Critical temperature : Lowest known value: -146.95°C (-232.5°F) (nitrogen).

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Flash point : Not available.

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Highest known value: 1.94 (Air = 1) (2-methylpropene). Weighted average: 1.01 (Air = 1)

Gas Density (lb/ft ^{3}) : Weighted average: 0.07

Relative density : Not applicable.

Solubility : Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

SADT : Not available.

Viscosity : Not applicable.

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Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatibility with various substances : Extremely reactive or incompatible with the following materials: reducing materials and combustible materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

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Section 11. Toxicological information

Potential acute health effects

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion : As this product is a gas, refer to the inhalation section.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

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Section 12. Ecological information

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1956	UN1956	UN1956	UN1956	UN1956
UN proper shipping name	COMPRESSED GAS, N.O.S. (nitrogen, oxygen)	COMPRESSED GAS, N.O.S. (nitrogen, oxygen)	COMPRESSED GAS, N.O.S. (nitrogen, oxygen)	COMPRESSED GAS, N.O.S. (nitrogen, oxygen)	COMPRESSED GAS, N.O.S. (nitrogen, oxygen)
Transport hazard class(es)	2.2 	2.2 	2.2 	2.2 	2.2 
Packing group	-	-	-	-	-
Environment	No.	No.	No.	No.	No.
Additional information	-	**Explosive Limit and Limited Quantity Index** 0.125 **Passenger Carrying Road or Rail Index** 75	-	-	-

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

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Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act (CAA) 112 regulated flammable substances: 2-methylpropene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Sudden release of pressure

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : The following components are listed: NITROGEN; OXYGEN (LIQUID); 2-METHYLPROPENE

New York : None of the components are listed.

New Jersey : The following components are listed: NITROGEN; OXYGEN; ISOBUTYLENE; 1-PROPENE, 2-METHYL-

Pennsylvania : The following components are listed: NITROGEN; OXYGEN; 1-PROPENE, 2-METHYL-

Canada inventory : All components are listed or exempted.

International regulations

International lists : **Australia inventory (AICS)**: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: Not determined.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

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Section 15. Regulatory information

Chemical Weapons Convention List Schedule III Chemicals : Not listed

Canada

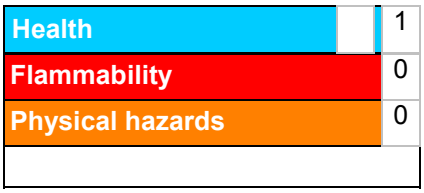
WHMIS (Canada) : Class A: Compressed gas.

CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: The following components are listed: Butene (all isomers)
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

Section 16. Other information

Canada Label requirements : Class A: Compressed gas.

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing : 1/23/2015.

Date of issue/Date of revision : 1/23/2015.

Date of previous issue : No previous validation.

Version : 0.01

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Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United NationsACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
CAS – Chemical Abstract Services
CEPA – Canadian Environmental Protection Act
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act (EPA)
CFR – United States Code of Federal Regulations
CPR – Controlled Products Regulations
DSL – Domestic Substances List
GWP – Global Warming Potential
IARC – International Agency for Research on Cancer
ICAO – International Civil Aviation Organisation
Inh – Inhalation
LC – Lethal concentration
LD – Lethal dosage
NDSL – Non-Domestic Substances List
NIOSH – National Institute for Occupational Safety and Health
TDG – Canadian Transportation of Dangerous Goods Act and Regulations
TLV – Threshold Limit Value
TSCA – Toxic Substances Control Act
WEEL – Workplace Environmental Exposure Level
WHMIS – Canadian Workplace Hazardous Material Information System

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Hydrochloric Acid, 31 – 36.7%

Product Name: Hydrochloric Acid, 31 – 36.7%

Identified Uses: acid etching, steel pickling, oil and gas, ore and mineral, food processing, pharmaceutical, organic chemical synthesis

Company Information:
ASHTA Chemicals Inc.
P.O. Box 858
Ashtabula Ohio 44005
Phone: (440) 997-5221
Fax: (440) 998-0286
24-hour Emergency Phone: CHEMTREC: (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

GHS label elements, including precautionary statements:

Signal Word: **Danger**

Pictogram(s):



Hazard Statements	
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Precautionary Statements	
P234	Keep only in original container.
P261	Avoid breathing dust/ fume/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water. Shower.

P304 + P340 + P310	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P403 + P233	Store in a well-ventilated place. Keep container with a resistant inner liner.
P405	Store locked up.
P406	Store in corrosive resistant stainless steel container with a resistant inner liner.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:

CHEMICAL NAME:	Hydrochloric acid
TRADE NAME:	Hydrochloric acid, 31 – 36.7%
SYNONYMS:	Muriatic acid, Chlorohydric acid, Hydrogen Chloride
C.A.S:	7647-01-0
EC:	231-595-7
WHMIS:	D2A, E
CHEMICAL FORMULA:	HCl (in aqueous solution)
CHEMICAL FAMILY:	Inorganic Acid

SECTION 4 FIRST AID MEASURES

Description of first aid measures:
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give humidified air. Give oxygen, but only by a certified physician. Consult a physician.

In case of skin contact
Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contact lenses if present and easy to do. Continue rinsing eyes during transport to medical facility.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Consult a physician.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point (Method):	Non-combustible.
Extinguishing Media:	Use extinguishing agents compatible with acid and appropriate for the burning material. Use water spray to keep fire-exposed containers cool.
Auto Ignition Temp:	Non-combustible.
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and full protective clothing. In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials.
Unusual Fire/Explosion Hazards:	Releases flammable hydrogen gas when reacting with metals.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Environmental Precautions:
Use closed systems when possible. Provide local exhaust ventilation where vapor or mist may be generated. Avoid discharge into drains, water courses or onto the ground.

Containment and Cleaning:
Follow preplanned emergency procedures. Only properly equipped, trained, functional personnel should attempt to contain a leak. All other personnel should be evacuated from the danger area. Using full protective equipment, apply appropriate emergency device or other securement technology to stop the leak if possible.

Small Spill:	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: neutralize the residue with a dilute solution of sodium carbonate.
Large Spill:	Corrosive liquid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to knock down vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that vapor is not present at a concentration level above TLV.

SECTION 7: HANDLING AND STORAGE

Precautions to be taken for handling and storage:
Wear appropriate personal protective equipment. Do not get in eyes, on skin, on clothing. Do not breathe mist or vapor. Observe good industrial hygiene practices. Do not empty into drains. Use caution when combining with water; DO NOT add water to acid, ALWAYS add acid to water while stirring to prevent release of heat, steam and fumes. Store in a well-ventilated place. Store away from incompatible materials. Store closed containers in a clean, cool, open or well ventilated area. Keep out of sun.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Principal Component: Hydrochloric Acid
Occupational Exposure Limits:
Regulatory Limits:

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PEL Ceiling
Hydrochloric Acid Mixture	---	---	5 ppm 7.59 mg/m^3

ACGIH TLV = 5 ppm (7.59 mg/m^3) TWA

NIOSH IDLH = 50 ppm (as HCl, 2010)

Exposure Controls:

Eye Protection: Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Other Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Ventilation Recommended: Exhaust ventilation is required to meet PEL limits.

Glove Type Recommended: Wear neoprene, nitrile, butyl rubber or PVC gloves to prevent exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance	Colorless to light yellow liquid
Odor	Pungent (irritating/strong)
Odor Threshold	0.3ppm (can cause olfactory fatigue)
pH	<1 (in aqueous solution)
Melting point/freezing point	-30°C (-22°F)
Initial boiling point	>100°C (>212°F)
Flash point	Not applicable
Auto-ignition Temp	Not applicable
Evaporation rate	No data available

Decomposition temperature	No data available
Flammability (solid, gas)	Not combustible
Upper/lower flammability or explosive limits	Not combustible
Water solubility	100%
Molecular Weight	36.46
Relative Density (Specific Gravity)	1.16 (32% HCl solution) 1.19 (36.5% HCl solution)
Bulk Density	8.75 lbs/gal (32% HCl solution) 9.83 lbs/gal (36.5% HCl solution)
Vapor Density (air = 1)	1.267 at 20 °C
Vapor Pressure	84 mm Hg @ 20°C
Partition Coefficient: n-octanol/water	No data available

SECTION 10: STABILITY AND REACTIVITY

Stability: Hydrochloric acid is stable under normal conditions and pressures.

Conditions to avoid: Incompatible materials, metals, excess heat, bases.

Incompatibility: Bases, amines, metals, permanganates, (e.g. potassium permanganate), fluorine, metal acetylides, hexalithium disilicide.

Hazardous decomposition products: Hydrogen chloride, chlorine, hydrogen gas.

Polymerization: Hazardous polymerization WILL NOT occur.

SECTION 11: TOXICOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation: Vapors and mist will irritate throat and respiratory system and cause coughing.

Skin contact: Causes skin burns.

Eye contact: Causes eye burns.

Ingestion: Harmful if swallowed. Causes digestive tract burns. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics:

Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Information on toxicological effects:

Acute toxicity: Harmful if swallowed.

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye Irritation: Causes serious eye damage.

Respiratory sensitization: Not available.

Skin sensitization:	No data available.
Germ cell mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure:	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure:	No data available.
Aspiration hazard:	Not available.
Chronic effects:	Prolonged inhalation may be harmful.

Components Species Test Results:
Hydrochloric acid (CAS# 7647-01-0)

Rat - Inhalation LC_{50}:	3124 ppm, (1 hour)
Rabbit - Dermal LD_{50}:	5010 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Because of the low pH of this product, it would be expected produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Aquatic Toxicity:	This material is toxic to fish and aquatic organisms. Most aquatic species do not tolerate pH lower than 5.5 for any extended period.
Fish Toxicity:	Fish LC_{50} Mosquito fish: 282 mg/l, 96 hours Fish LC_{50} Bluegill: 3.6 mg/l, 48 hours
Persistence and degradability:	Not biodegradable. Hydrochloric acid will likely be neutralized to chloride by alkalinity present in natural environment..
Bioaccumulative Potential:	No data available.
Mobility in soil:	Hydrochloric acid will be neutralized by naturally occurring alkalinity. The acid will permeate soil, dissolving some soil material and will then neutralize.
Other adverse effects:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

SECTION 13: DISPOSAL CONSIDERATIONS

Collect and reclaim or dispose in sealed containers at a properly licensed waste disposal site. This material , if not neutralized, must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national or international regulations.

SECTION 14: TRANSPORT INFORMATION

Shipping:

Usual Shipping Containers:	Tank cars, bulk tankers.
Usual Shelf Life:	Indefinite (life of containers).
Storage/Transport Temperatures:	Ambient.

Suitable Storage:

Materials/Coatings:	Teflon, Tygon, Rubber, PVC and polypropylene materials.

D.O.T. Information:

Labeling:	Corrosive
D.O.T. Identification Number	UN 1789
D.O.T. Shipping Name:	Hydrochloric Acid
Hazard Class:	8
Packing Group:	II
Hazard Guide:	157
Placard:	UN 1789

SECTION 15 REGULATORY INFORMATION

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:
Hydrochloric Acid CAS#: 7647-01-0

SARA 311/312 Hazards
Acute health hazard, reactive hazard.

Massachusetts Right To Know Components
Hydrochloric Acid CAS#: 7647-01-0
Pennsylvania Right To Know Components
Hydrochloric Acid CAS#: 7647-01-0
New Jersey Right To Know Components
Hydrochloric Acid CAS#: 7647-01-0

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

OSHA PSM TPQ:
CAS# 7647-01-0 is regulated under OSHA PSM ***only*** if anhydrous or >37% HCl.

Toxic Substances Control Act (TSCA):
Hydrochloric Acid CAS#: 7647-01-0

Comprehensive Environmental Response Compensation Liability Act: (CERCLA)
Hydrochloric Acid CAS#: 7647-01-0

SECTION 16 OTHER INFORMATION

NFPA Rating:
Health hazard: 3
Fire Hazard: 0
Reactivity Hazard: 1

This information is drawn from recognized sources believed to be reliable. ASHTA Chemicals, Inc. Makes no guarantees or assumes any liability in connection with this information. The user should be aware of changing technology, research, regulations, and analytical procedures that may require changes herein. The above data is supplied upon the condition that persons will evaluate this information and then determine its suitability for their use. Only U.S.A regulations apply to the above.

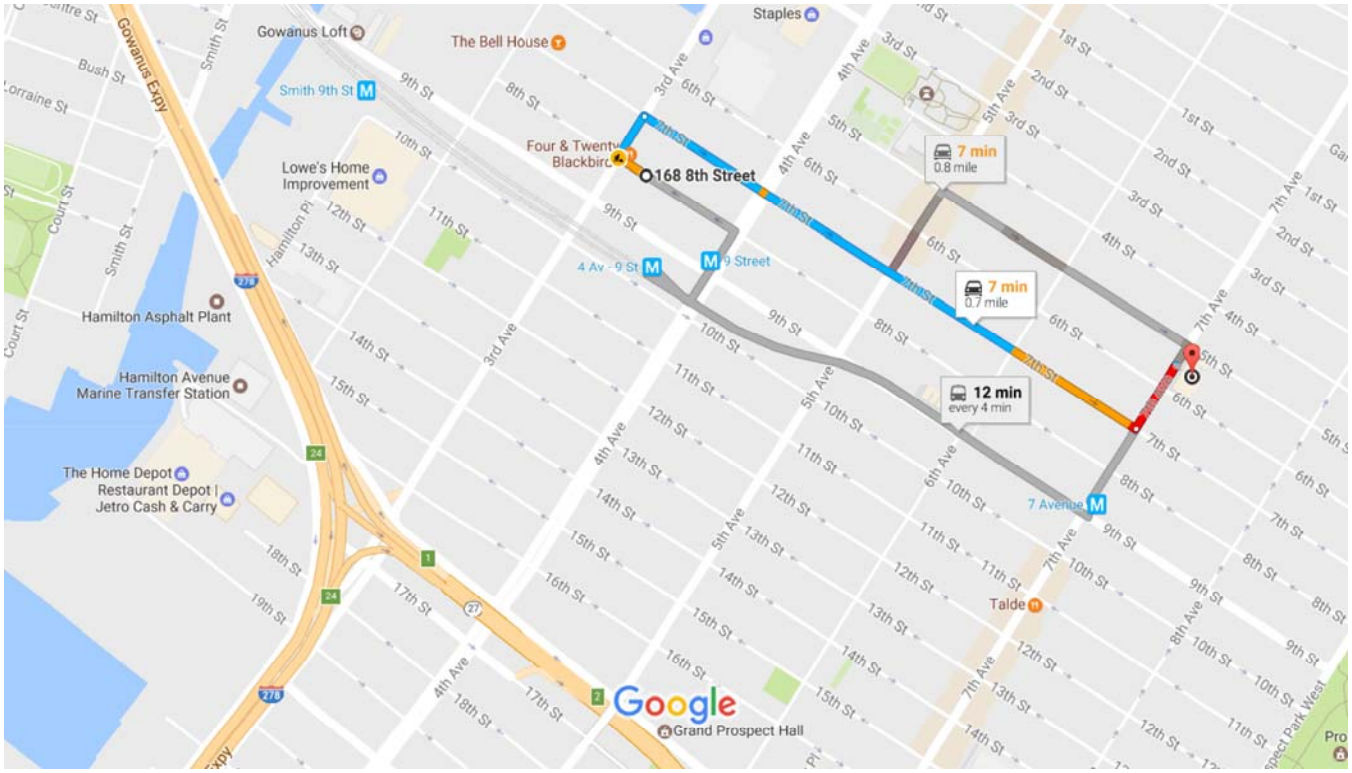
Version 1.0	For the new GHS SDS Standard	Revision Date: 12/31/2014
Version 1.1	Graphics updated	Revision Date: 3/9/2015
Version 1.2	Title updated	Revision Date: 6/2/2015
Version 1.3	Section 9 changes	Revision Date: 7/30/2015

Attachment C
Hospital Route

Google Maps

168 8th St, Brooklyn, NY 11215 to NewYork-Presbyterian Brooklyn Methodist Hospital Faculty Practice

Drive 0.7 mile, 7 min



Map data ©2017 Google 500 ft

168 8th St
Brooklyn, NY 11215

1. Head northwest on 8th St toward 3rd Ave

177 ft

2. Turn right at the 1st cross street onto 3rd Ave

262 ft

3. Turn right at the 1st cross street onto 7th St

0.6 mi

4. Turn left onto 7th Ave

Destination will be on the right

397 ft

NewYork-Presbyterian Brooklyn Methodist Hospital Faculty Practice
263 7th Ave, Brooklyn, NY 11215

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Attachment D
Work Care Information

EARLY INCIDENT INTERVENTION®

Immediate Access to Medical Advice for Work Related Incidents

(888) 449-7787

INTRODUCTION

WorkCare, Inc. (WorkCare) and TRC have partnered together to promote Incident Intervention®, a resource designed to support company safety goals/targets—while reducing runaway-costs associated with workplace injuries and illnesses.

PURPOSE

Early Incident Intervention provides TRC employees with **IMMEDIATE** telephonic access to WorkCare clinicians at the time of a presumed, non-emergency workplace injury or illness. Clinicians provide expert guidance on the evaluation of symptoms, appropriate first aid, and the need for additional medical evaluation or treatment.

When utilizing this service within the first hour of an incident, known as the "Golden Hour," licensed medical staff can guide the case so that medical evaluation and treatment are rendered appropriately.

> ***"…helps the worker traverse the unpredictable terrain of work-related injuries and illness."***

PRINCIPLES OF EARLY INCIDENT INTERVENTION

- Utilizes principles of the "Golden Hour."
- Provides workers immediate clinician support at the time of an incident.
- Focuses on providing the right care, at the right time in the proper setting.

BENEFITS FOR EMPLOYEES

- Instant access to a medically qualified professional for evaluation of symptoms and possible outcomes.
- Professional guidance on appropriate first aid measures and medications.
- Professional advice regarding the need for additional medical evaluation or treatment.

BENEFITS FOR TRC

- Point of contact for emergency and non-emergency medical clinicians.
- Triages the incident to determine risk and urgency, delivering interventions that are consistent with medical guidelines for the specified injury and illness.
- Maintains communication with clinicians to ensure accurate and timely reporting.

Attachment E

Job-Safety Analyses (JSA)

TRC JOB SAFETY ANALYSIS

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE	☐ NEW ☒ REVISED
168 8th Street, Brooklyn, NY	~~6/13/17~~8/30/17	

WORK ACTIVITY (Description):
Excavation

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY: POSITION/ TITLE	Signature

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT (SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

☒ REFLECTIVE VEST ☒ HARD HAT ☐ LIFELINE / HARNESS ☒ SAFETY GLASSES	☐ GOGGLES ☐ FACE SHIELD ☒ HEARING PROTECTION ☒ SAFETY SHOES: Protective Toe	☐ AIR PURIFYING RESPIRATOR ☐ SUPPLIED RESPIRATOR ☒ PPE CLOTHING (Nomex)	☒ GLOVES ☐ OTHER: Dust Masks

- **THROUGHOUT THE DAY - MENTALLY FOCUS UPON EACH NEW TASK, DIFFERENT PROCEDURES, AND SKILL SETS TO BE USED.**

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS TO MITIGATE HAZARDS
1. Set-up Activities	a. Lack of concentration or focus b. Malfunctioning Heavy Equipment Safety Devices	a. Review all plans (HASP, Work, Utility Plans, etc.) and logs in field notebook prior to starting a new task. Identify daily tasks and required personnel actions. b. Perform all equipment and safety checks prior to event startup (per operating manual).
2. Excavation / Soil Removal	a. Eye injury from flying debris. b. High Noise Level. c. Being struck by moving vehicles or equipment onsite. d. Cut/Pinched fingers or toes; and strained muscles e. Equipment tip over. f. Slip/trips and falls. g. Physical injury to visitors/spectators	a. Wear ANSI approved-safety glasses when exposed to flying debris. b. Wear Ear Plugs or Ear Muffs <u>when equipment is operating</u> onsite. c. Establish eye contact with operators when moving about. d. Wear proper work and protective clothing (long pants, sleeved-shirt, steel-toed boots, safety vest, safety glasses, and safety helmet) at all times while on jobsite. d. Lift heavy objects utilizing leg muscles and get assistance when equipment exceeds 70-lbs. e. Watch equipment location & swing points, monitor live & dead loads adjacent to the excavation. e. Maintain 2-foot safety buffer at edge of excavation. f. Maintain good house keeping - place unused equipment out of walkways and work areas. Clean-up all spills and debris. g. Control entry in work area using exclusions zones and use check-in logs (found in field notebook)
3. Staging and dumping of spoils	a. . Bad organization creating confusion and hazard	a. Identify staging area, clearly mark and keep area clear of parked vehicles or stored materials/equipment. a. Identify truck ingress/egress lanes and keep clear. a. Clear stockpile area (including overhead obstructions) so that loader bucket doesn't impact a surface appurtenance or overhead line.
4. Clean-up	a. Slips, trips, and falls	a. Use good house-keeping, put equipment away as it is disconnected.

TRC JOB SAFETY ANALYSIS

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify some potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

Field Changes:

Attachment F
Daily Pre-Job Safety Briefing Form

Daily Pre-Job Safety Briefing

Project Name: _____ Project Number: _____

Work Location: _____ Date: _____

Tasks Performed: _____ Time: _____ AM PM

Client Name: _____ Submitted By: _____

Health and Safety Plan Available Onsite: Yes ☐ No ☐ Health and Safety Plan Location: _____

Emergency Facility(s): _____ Number(s): _____

Physical Address: _____

First Aid/CPR Persons: _____

For Emergencies Dial 911/For Non-Emergencies Dial WorkCare (888) 449-7787

Personal Protective Equipment Required	Yes	No	Type
Fall Protection	☐	☐	_____
body harness, lifelines, barricades, other (specify)			
Eye/Face	☐	☐	_____
goggles, face shield, hood, other (specify)			
Respirator	☐	☐	_____
SCBA, supplied air, HEPA, dust, other (specify)			
Foot Protection	☐	☐	_____
safety toe, EH rated, rubber boots, other (specify)			
Hand Protection	☐	☐	_____
leather, cut resistant, chemical, EH, other (specify)			
Head Protection	☐	☐	_____
hard hat, helmet, electrical hazard, other (specify)			
Clothing	☐	☐	_____
coveralls, welding, sleeves, rain, FR, reflective vest, chemical, other (specify)			
Hearing Protection	☐	☐	_____

Procedures/Programs Required	Yes	No
Hot Work	☐	☐
LOTO/Energy Control	☐	☐
Trenching/Excavation	☐	☐
Signs/Barricades	☐	☐
Confined Space	☐	☐
Cranes/Critical Lifts	☐	☐
Line Breaking/Hot Tap	☐	☐
Scaffolds/Aerial Lifts	☐	☐
System Testing/ Grounding	☐	☐
Employee Certification/Training Required		
Crane Operator	☐	☐
Forklift Operator	☐	☐
Mobile Equipment Operator	☐	☐
Competent Person	☐	☐
OSHA 10/30	☐	☐
HAZWOPER	☐	☐
Clearance/Tagging Authority	☐	☐

Additional Considerations

Work Procedures: ☐ Isolation of equipment
☐ Check for potential ☐ Adequate grounding
☐ Vehicle grounds ☐ Working clearances
☐ Dig Safe/CBYD ☐ E-911 Protocol
People: ☐ Worker fatigue ☐ Other work groups
☐ Public safety ☐ Pedestrian control ☐ Experience
☐ Traffic control ☐ Other utilities ☐ Spec. Training
Tools/Equipment: ☐ Adequate cover-up
☐ Live line tools ☐ Portable Grounds
☐ Inspection of tools/equipment
☐ Specialized tools/equipment
☐ Correct tool/equipment for the job
Special Precautions: ☐ Adjacent structures
☐ Condition of structures ☐ Weather conditions
☐ Lighting conditions ☐ Terrain ☐ Water bodies
☐ Spills and leaks ☐ Environmental ☐ Cultural
Other: _____

If Conditions CHANGE…Stop Work, Review and Revise the Plan!!

Daily Pre-Job Safety Briefing

Hazards Associated with the Job (focus on the GEMS)				
Gravity	**Electrical**	**Mechanical**	**Kinetic**	**Other/Environmental**
☐ Falling from a height	☐ Electrical contact	☐ Equipment failure	☐ Traffic	☐ Asbestos/Lead
☐ Falling objects	☐ Induced voltage	☐ Conductor tension	☐ Driving conditions	☐ Animals/Insects
☐ Falling structures	☐ Back-feed	☐ Cable tension	☐ Moving/Shifting loads	☐ Confined space
☐ Climbing obstructions	☐ Flash potential	☐ Loaded springs	☐ Rotating machinery	☐ Excavations
☐ Dangerous trees	☐ Step/Touch potential	☐ Moving parts	☐ Vehicle stability	☐ Heat/Cold
☐ Aerial device operation	☐ Static charge	☐ Crane/Rigging	☐ Heavy equip. operation	☐ Pressurized fluids/gases

List all hazards associated with this task	**Signature of Crew Members Present**	**Post Task Safety Analysis**
		Did any injuries or incidents occur today? If yes, explain.
		☐ Yes ☐ No
Barriers to eliminate/control above hazards?		Was the injury or incident reported the safety department?
		☐ Yes ☐ No ☐ N/A
		What problems did you have with today's work assignment?
		What can we do tomorrow to improve performance?
Supervisor Signature		

Attachment G
Incident Reporting Forms

TRC Incident Reporting Guidelines

Incident Response:

1. For life threatening injuries and medical emergencies call 911 or go to the closest emergency room.
2. An injured worker must report an injury to their supervisor immediately.
3. Supervisor is required to complete The TRC Incident Report Form within 24 hours of the reported accident and forward to Bill Russell at Sargent & Associates with a copy to Mike Glenn.

   Bill Russell – Sargent &Associates
   Office: (978) 256-7459; Fax: (978) 256-4941
   bill@sargentandassociates.com

   Mike Glenn, National Safety Director
   Office: (949) 727-7347; Mobile: (949) 697-7418
   mglenn@trcsolutions.com

4. WorkCare can provide assistance in providing first aid advice and directing an injured worker to non-emergency medical care. WorkCare is a service that provides 24/7 access to an Occupational Healthcare physician or clinician.

   WorkCare Incident Intervention
   (888) 449-7787

Return to Work:

1. The injured worker is responsible for providing the Supervisor with a copy of the doctor's note detailing the injury and "return to work" status within 24 hours of the doctor's visit. The supervisor must email or fax the completed TRC Incident Report and Doctor's notes to Sargent & Associates.
2. Sargent & Associates will contact the injured worker and the Supervisor to confirm the facts surrounding the injury.
3. Sargent & Associates will report the injury to the workers' compensation insurance carrier, Zurich.

4. Zurich may contact the injured worker and supervisor to conduct an accident investigation.
5. Sargent & Associates will maintain communication with all parties in order to monitor the medical treatment, and the injured worker's return to work status. They will act as liaison between the injured worker, TRC, and Zurich.
6. Sargent & Associates will work with TRC's Health & Safety, Human Resources, and/or Supervisors to determine if modified duty work is an option, until the injured worker is able to return to full duty work activities.

Incident Investigation:

1. All incidents that result in injuries that require reporting for OSHA recordkeeping purposes and all high potential first aid and near miss events require an incident investigation.
2. The Supervisor with assistance from the National Safety Director and/or Safety Coordinator, must complete the incident investigation report/contributing cause analysis within 7 days of the incident and must develop a corrective action plan within 14 days of the incident.

TRC Incident Report Form

(To be completed immediately after an Injury, Illness, Incident, Accident or Significant Near Miss by Employee's Supervisor and Employee involved)

Incident Category						
☐ Employee Injury/Illness	☐ Near Miss/Loss	☐ Property Damage	☐ Vehicle Accident	☐ Fire	☐ Other: Specify	
1	Incident Location:					
2	Site Identification/Project No.:					
3	Site Address:					
4	Date Incident Occurred:					
5	Time Incident Occurred:					
6	Date Incident Reported to Supervisor:					
7	Date Report Completed:					
8	Was WorkCare Contacted? ☐ Yes ☐ No					
9	Client:					

TRC Employee Information					
10	Name:				
11	Address:				
12	Employee Phone:				
13	Title or Occupation:				
14	Sector/Practice:				
15	Supervisor Name/Phone:				
TRC Employee Information (to be completed by Worker's Compensation Claims Administrator)					
16	Employee Date of Birth:				
17	Employee Social Security Number:				
18	Employee Marital Status:	☐ Married	☐ Single		
19	Number of Dependant under the age of 18:				
20	Date of Hire:				
21	Rate of Pay:		Hours per week:		

Type of Employee Injury or Illness (To be determined by Safety Director)			
22	☐ First Aid Only	20	☐ Extended Time Away From Work (3 days or more)
23	☐ Medical Treatment Only	21	☐ Fatality
24	☐ Restricted Work-case	22	☐ Other (specify):
25	☐ Lost Workday		
26	Estimated Number of Days on Restricted Work:		
27	Estimated Number of Days Away from Work:		

Employee Injury or Illness Description	
28	Describe the Injury or Illness:
29	First Aid/Medical Treatment Administered:
30	Name of Doctor's Office, Clinic, or Hospital: Concentra
31	Address and Phone Number:

Incident Description	
32	Equipment Involved:
33	Site Description:
34	What task was being performed at time of incident?
35	Describe Incident in Detail :
36	Conditions at time of Incident: (weather, lighting, etc.):
37	Motor Vehicle Accident:
38	TRC Vehicle ID:

39	Year/Make/Model:	
☐ DOT Regulated Vehicle ☐ Towed From Scene ☐ Airbag Deployed ☐ Seatbelt in Use ☐ TRC Fleet ☐ Rental ☐ Personal Vehicle		
40	Other Vehicle License Plate	
41	Other Vehicle Year/Make/Model	
42	Other Vehicle Driver Name	
43	Other Vehicle Year/Make/Model	
44	Other Injured Parties ☐ Yes ☐ No	
43	Description of other injuries:	

Subcontractor Involvement / Description of Incident	
44	Subcontractor Involved: ☐ Yes ☐ No
45	Name of Company:
46	Address:
47	Contact Name and Phone Number:
48	Subcontractor Description of Incident:

Witness Involvement / Description of Incident	
49	Witnesses to Incident: ☐ Yes ☐ No
50	Name(s) and Address(s):
51	Phone Number(s):
52	Witness Description of Incident:

Personal Protective Equipment (PPE)	
53	List PPE required to complete the task: (glasses, gloves, shoes, hard hat, respirator, hearing protection, etc.)
54	Was the employee using the proper PPE at the time of the Incident?

Immediate Corrective Actions			
55	Describe the immediate corrective actions taken:		
56	Immediate Supervisor:	Signature:	Date:
57	Employee:	Signature:	Date:

Supervisor's Post-Incident Review and Recommendations

	Safety Violation	☐ Yes	☐ No
58	State the company safety rule, OSHA regulation, or specific training that was violated:		
59	Describe the training the employee received to prevent this violation:		

#	Root Cause Factors (RCF)
1	Lack of skill or knowledge
2	In the past, did not follow procedures or acceptable practices and no incident occurred (injury, product quality incident, equipment damage, regulatory assessment or production delay)
3	Doing the job according to procedures or acceptable practices takes more time/effort
4	Short-cutting procedures or acceptable practices are positively reinforced or tolerated
5	Lack of or inadequate operational procedures
6	Inadequate communication of expectations regarding procedures or acceptable practices
7	Inadequate tools or equipment (available, operable and safely maintained, proper task and workplace design)
8	External factors

60	Root Cause(s)	Identified Root Cause(s):							
		#1	#2	#3	#4	#5	#6	#7	#8
A		☐	☐	☐	☐	☐	☐	☐	☐
B		☐	☐	☐	☐	☐	☐	☐	☐
C		☐	☐	☐	☐	☐	☐	☐	☐
D		☐	☐	☐	☐	☐	☐	☐	☐
E		☐	☐	☐	☐	☐	☐	☐	☐
F		☐	☐	☐	☐	☐	☐	☐	☐
G		☐	☐	☐	☐	☐	☐	☐	☐
H		☐	☐	☐	☐	☐	☐	☐	☐

61 **Conclusion: Why did the Incident Occur?**

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Item No.	RCF No.	Recommended Corrective Action(s) How to Prevent Incident from Reoccurring	Responsible Person	Due Date	Completed (date)	Verified/ Validated (date)

Supervisor: _____ Signature: _____ Date: _____

TRC Safety Director: _____ Signature: _____ Date:_____

ATTACHMENT B

Photographic Log

Attachment B
Interim Remedial Measure (IRM) Photograph Log



Photo 1: 4-inch inner diameter cast iron pipe containing soil, typical.



Photo 2: Excavation of northwestern portion of Site.



Photo 3: Excavation of northwestern portion of Site.



Photo 4: Side view of rectangular metal drain embedded in concrete.



Photo 5: Excavation area and soil beneath rectangular metal drain and associated pipes.



Photo 6: View of excavation, taken facing west.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	1 of 2	New York City School Construction Authority	Proposed Pre-Kindergarten Facility K710 - 168 8th Street, Brooklyn, New York	TRC

Attachment B
Interim Remedial Measure (IRM) Photograph Log



Photo 7: One of five circular drains identified in the excavation.



Photo 8: Vertical pipe noted on the northwestern portion of the Site.



Photo 9: View of excavation with eastern portion backfilled, taken facing northeast. Demarcation layer (orange fencing) visible.



Photo 10: Soil stockpile staged on center of Site on polyethylene sheeting and covered with 10 mil tarps.



Photo 13: Loading of soil into a truck for off-Site soil transport and disposal.



Photo 14: View of Site at the completion of IRM field activities.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	2 of 2	New York City School Construction Authority	Proposed Pre-Kindergarten Facility K710 - 168 8th Street, Brooklyn, New York	TRC

ATTACHMENT C

Community Air Monitoring Results

Community Air Monitoring Summary Table
New York City School Construction Authority
Interim Remedial Measure Construction Completion Report
168 8th Street, Brooklyn, New York 11215

Community Air Monitoring Data			
Date/Time	Background Level (Initial Daily Upwind Reading)	Action Level	Results Downwind Daily Average
10/30/2017	NC	0.100	0.005
10/31/2017	0.015	0.115	0.014
11/1/2017	0.013	0.113	0.016
11/2/2017	0.046	0.146	0.026
11/3/2017	0.024	0.124	0.021
11/6/2017	0.032	0.132	0.043
11/8/2017	0.015	0.115	0.017
11/9/2017	0.029	0.129	0.023
11/27/2017	NC	0.100	0.025
11/28/2017	0.014	0.114	0.007
11/29/2017	0.042	0.142	0.047

Notes:

1. All reported units are milligrams per cubic meter (mg/m^3)
2. The action level was calculated at the beginning of each work day by caculating the 15-minute time weighted average (TWA) (i.e. background) plus 0.1 mg/m^3
3. Particulate readings measured and reported for respirable dust (matter less than 10 micrometers in size referred to as PM-10 per NYSDOH guidelines)
4. NC = Not Collected
5. Initial upwind background readings were not collected on 10/30/2017 and 11/27/2017. Action level of 0.100 mg/m^3 was utilized.

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_002
Test Start Time	7:13:52 AM
Test Start Date	10/31/2017
Test Length [D:H:M]	0:00:31
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.015
Mass Minimum [mg/m3]	0.008
Mass Maximum [mg/m3]	0.018
Mass TWA [mg/m3]	0.001
Photometric User Cal	1
Flow User Cal	0
Errors	Flow Error
Number of Samples	31

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 min TWA
60	0.018			0.0156
120	0.016			
180	0.015			
240	0.015			
300	0.015			
360	0.016			
420	0.017			
480	0.018			
540	0.017			
600	0.016			
660	0.014			
720	0.014			
780	0.014			
840	0.014			
900	0.015			
960	0.015			0.0142
1020	0.015			
1080	0.014			
1140	0.014			
1200	0.014			
1260	0.014			
1320	0.014			
1380	0.014			
1440	0.015			
1500	0.015			
1560	0.015			
1620	0.014			

1680	0.015			
1740	0.016			
1800	0.009		Flow Error	0.0085
1860	0.008			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_004
Test Start Time	7:21:12 AM
Test Start Date	11/1/2017
Test Length [D:H:M]	0:00:14
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.013
Mass Minimum [mg/m3]	0.012
Mass Maximum [mg/m3]	0.016
Mass TWA [mg/m3]	0
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	14

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA	
60	0.014			0.013	
120	0.014				
180	0.013				
240	0.012				
300	0.012				
360	0.013				
420	0.016				
480	0.012				
540	0.012				
600	0.012				
660	0.013				
720	0.013				
780	0.013				
840	0.013				

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_006
Test Start Time	7:14:49 AM
Test Start Date	11/2/2017
Test Length [D:H:M]	0:00:19
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.046
Mass Minimum [mg/m	0.043
Mass Maximum [mg/n	0.051
Mass TWA [mg/m3]	0.002
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	19

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.043			0.043
120	0.043			
180	0.044			
240	0.044			
300	0.044			
360	0.044			
420	0.045			
480	0.045			
540	0.043			
600	0.044			
660	0.046			
720	0.049			
780	0.049			
840	0.051			
900	0.048			
960	0.049			0.049
1020	0.049			
1080	0.051			
1140	0.048			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_008
Test Start Time	7:12:58 AM
Test Start Date	11/3/2017
Test Length [D:H:M]	0:00:16
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.024
Mass Minimum [mg/m	0.022
Mass Maximum [mg/n	0.038
Mass TWA [mg/m3]	0.001
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	16

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.022			0.024066667
120	0.022			
180	0.022			
240	0.022			
300	0.022			
360	0.022			
420	0.023			
480	0.022			
540	0.022			
600	0.022			
660	0.022			
720	0.028			
780	0.027			
840	0.025			
900	0.038			
960	0.031			0.031

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_010
Test Start Time	8:20:07 AM
Test Start Date	11/6/2017
Test Length [D:H:M]	0:00:18
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.032
Mass Minimum [mg/m	0.031
Mass Maximum [mg/n	0.036
Mass TWA [mg/m3]	0.001
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	18

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.036			0.036
120	0.033			
180	0.031			
240	0.031			
300	0.031			
360	0.031			
420	0.031			
480	0.031			
540	0.031			
600	0.031			
660	0.031			
720	0.031			
780	0.031			
840	0.032			
900	0.032			
960	0.032			0.032
1020	0.032			
1080	0.032			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_016
Test Start Time	8:09:51 AM
Test Start Date	11/8/2017
Test Length [D:H:M]	0:00:17
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.015
Mass Minimum [mg/m3]	0.011
Mass Maximum [mg/m3]	0.025
Mass TWA [mg/m3]	0.001
Photometric User Cal	1
Flow User Cal	0
Errors	Flow Error
Number of Samples	17

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.016			0.014466667
120	0.013			
180	0.013			
240	0.014			
300	0.013			
360	0.012			
420	0.012			
480	0.012			
540	0.013			
600	0.013			
660	0.014			
720	0.017			
780	0.018			
840	0.017			
900	0.02		Flow Error	
960	0.011		Flow Error	0.018
1020	0.025			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_019
Test Start Time	8:29:20 AM
Test Start Date	11/9/2017
Test Length [D:H:M]	0:00:15
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.029
Mass Minimum [mg/m3	0.025
Mass Maximum [mg/m3	0.036
Mass TWA [mg/m3]	0.001
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	15

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.027			0.028533333
120	0.027			
180	0.033			
240	0.036			
300	0.031			
360	0.031			
420	0.028			
480	0.029			
540	0.028			
600	0.027			
660	0.026			
720	0.027			
780	0.025			
840	0.026			
900	0.027			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113613
Firmware Version	3.3
Calibration Date	1/15/2015
Test Name	MANUAL_002
Test Start Time	7:11:33 AM
Test Start Date	11/28/2017
Test Length [D:H:M]	0:00:21
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.014
Mass Minimum [mg/m3]	0.009
Mass Maximum [mg/m3]	0.017
Mass TWA [mg/m3]	0.001
Photometric User Cal	0.9
Flow User Cal	0
Errors	Flow Error
Number of Samples	21

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.009			0.014733333
120	0.014			
180	0.017			
240	0.015			
300	0.015			
360	0.015			
420	0.015			
480	0.015			
540	0.016			
600	0.017			
660	0.016			
720	0.015			
780	0.014			
840	0.014			
900	0.014			
960	0.014			0.013166667
1020	0.013			
1080	0.013			
1140	0.013			
1200	0.013			
1260	0.013			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113613
Firmware Version	3.3
Calibration Date	1/15/2015
Test Name	MANUAL_004
Test Start Time	7:06:57 AM
Test Start Date	11/29/2017
Test Length [D:H:M]	0:00:22
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.042
Mass Minimum [mg/m	0.04
Mass Maximum [mg/m	0.044
Mass TWA [mg/m3]	0.002
Photometric User Cal	0.9
Flow User Cal	0
Errors	
Number of Samples	22

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.042			0.041266667
120	0.04			
180	0.04			
240	0.041			
300	0.042			
360	0.041			
420	0.04			
480	0.04			
540	0.041			
600	0.041			
660	0.041			
720	0.044			
780	0.042			
840	0.042			
900	0.042			
960	0.043			0.042857143
1020	0.043			
1080	0.043			
1140	0.042			
1200	0.042			
1260	0.043			
1320	0.044			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_001
Test Start Time	9:59:08 AM
Test Start Date	10/30/2017
Test Length [D:H:M]	0:05:11
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.005
Mass Minimum [mg/m3]	0
Mass Maximum [mg/m3]	0.036
Mass TWA [mg/m3]	0.003
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	311

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 min TWA
60	0.005			0.005466667
120	0.01			
180	0.006			
240	0.006			
300	0.006			
360	0.005			
420	0.005			
480	0.006			
540	0.006			
600	0.005			
660	0.004			
720	0.005			
780	0.004			
840	0.005			
900	0.004			
960	0.004			0.004666667
1020	0.005			
1080	0.004			
1140	0.004			
1200	0.004			
1260	0.005			
1320	0.005			
1380	0.006			
1440	0.006			
1500	0.005			
1560	0.005			
1620	0.006			

1680	0.004			
1740	0.003			
1800	0.004			
1860	0.005			0.004333333
1920	0.005			
1980	0.005			
2040	0.005			
2100	0.006			
2160	0.005			
2220	0.005			
2280	0.006			
2340	0.004			
2400	0.003			
2460	0.004			
2520	0.003			
2580	0.003			
2640	0.003			
2700	0.003			
2760	0.004			0.003
2820	0.003			
2880	0.003			
2940	0.003			
3000	0.004			
3060	0.003			
3120	0.003			
3180	0.003			
3240	0.003			
3300	0.004			
3360	0.003			
3420	0.002			
3480	0.002			
3540	0.003			
3600	0.002			
3660	0.002			0.002066667
3720	0.002			
3780	0.002			
3840	0.001			
3900	0.002			
3960	0.003			
4020	0.002			
4080	0.002			
4140	0.002			
4200	0.002			
4260	0.002			
4320	0.003			
4380	0.002			
4440	0.002			

4500	0.002			
4560	0.003			0.0018
4620	0.003			
4680	0.002			
4740	0.001			
4800	0.002			
4860	0.003			
4920	0.001			
4980	0.001			
5040	0.002			
5100	0.002			
5160	0.001			
5220	0.001			
5280	0.001			
5340	0.002			
5400	0.002			0.0018
5460	0.002			
5520	0.003			
5580	0.001			
5640	0.002			
5700	0.002			
5760	0.002			
5820	0.002			
5880	0.002			
5940	0.001			
6000	0.002			
6060	0.001			
6120	0.001			
6180	0.002			
6240	0.002			
6300	0.001			0.002
6360	0.001			
6420	0.001			
6480	0.001			
6540	0.001			
6600	0.001			
6660	0.001			
6720	0.002			
6780	0.002			
6840	0.004			
6900	0.006			
6960	0.003			
7020	0.002			
7080	0.002			
7140	0.002			
7200	0.002			0.001733333
7260	0.008			

7320	0.003			
7380	0.002			
7440	0.001			
7500	0.001			
7560	0.001			
7620	0			
7680	0.001			
7740	0.002			
7800	0.001			
7860	0.001			
7920	0.001			
7980	0.001			
8040	0.001			
8100	0.002			0.001066667
8160	0.001			
8220	0.001			
8280	0.001			
8340	0.001			
8400	0.001			
8460	0.001			
8520	0.001			
8580	0			
8640	0.001			
8700	0.001			
8760	0.001			
8820	0.001			
8880	0.001			
8940	0.002			
9000	0.004			0.006
9060	0.002			
9120	0.005			
9180	0.009			
9240	0.007			
9300	0.005			
9360	0.002			
9420	0.001			
9480	0.003			
9540	0.003			
9600	0.005			
9660	0.01			
9720	0.01			
9780	0.011			
9840	0.013			
9900	0.01			0.007266667
9960	0.013			
10020	0.009			
10080	0.011			

10140	0.004			
10200	0.002			
10260	0.002			
10320	0.002			
10380	0.002			
10440	0.001			
10500	0.001			
10560	0.015			
10620	0.015			
10680	0.008			
10740	0.014			
10800	0.028			0.0258
10860	0.012			
10920	0.021			
10980	0.034			
11040	0.032			
11100	0.023			
11160	0.026			
11220	0.03			
11280	0.027			
11340	0.029			
11400	0.029			
11460	0.036			
11520	0.031			
11580	0.021			
11640	0.008			
11700	0.003			0.010466667
11760	0.001			
11820	0.002			
11880	0.001			
11940	0.004			
12000	0.023			
12060	0.024			
12120	0.007			
12180	0.001			
12240	0			
12300	0.015			
12360	0.025			
12420	0.025			
12480	0.018			
12540	0.015			
12600	0.015			0.003266667
12660	0.013			
12720	0.001			
12780	0			
12840	0			
12900	0.001			

12960	0.001			
13020	0.002			
13080	0			
13140	0.001			
13200	0			
13260	0			
13320	0			
13380	0			
13440	0			
13500	0			0.0068
13560	0			
13620	0.001			
13680	0.005			
13740	0.02			
13800	0.009			
13860	0.009			
13920	0.007			
13980	0.002			
14040	0.011			
14100	0.016			
14160	0.009			
14220	0.007			
14280	0.005			
14340	0.001			
14400	0.002			0.0022
14460	0.001			
14520	0.001			
14580	0.002			
14640	0.003			
14700	0.005			
14760	0.004			
14820	0.002			
14880	0.001			
14940	0.002			
15000	0.003			
15060	0.002			
15120	0.002			
15180	0.002			
15240	0.001			
15300	0.001			0.001733333
15360	0.001			
15420	0.001			
15480	0.002			
15540	0.002			
15600	0.003			
15660	0.002			
15720	0.002			

15780	0.002			
15840	0.003			
15900	0.002			
15960	0.002			
16020	0.001			
16080	0.001			
16140	0.001			
16200	0.002			0.002933333
16260	0.002			
16320	0.005			
16380	0.002			
16440	0.003			
16500	0.003			
16560	0.002			
16620	0.002			
16680	0.003			
16740	0.003			
16800	0.004			
16860	0.004			
16920	0.003			
16980	0.004			
17040	0.002			
17100	0.036			0.009866667
17160	0.004			
17220	0.006			
17280	0.004			
17340	0.014			
17400	0.003			
17460	0.003			
17520	0.012			
17580	0.005			
17640	0.004			
17700	0.016			
17760	0.032			
17820	0.004			
17880	0.003			
17940	0.002			
18000	0.002			0.00375
18060	0.003			
18120	0.004			
18180	0.004			
18240	0.003			
18300	0.003			
18360	0.004			
18420	0.004			
18480	0.003			
18540	0.004			

18600	0.005			
18660	0.006			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_003
Test Start Time	7:45:02 AM
Test Start Date	10/31/2017
Test Length [D:H:M]	0:07:08
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.014
Mass Minimum [mg/m	0.005
Mass Maximum [mg/n	0.063
Mass TWA [mg/m3]	0.013
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	428

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.015			0.020333333
120	0.015			
180	0.014			
240	0.016			
300	0.016			
360	0.015			
420	0.015			
480	0.016			
540	0.018			
600	0.025			
660	0.023			
720	0.017			
780	0.022			
840	0.045			
900	0.033			
960	0.041			0.0226
1020	0.021			
1080	0.017			
1140	0.017			
1200	0.016			
1260	0.017			
1320	0.019			
1380	0.016			
1440	0.02			
1500	0.027			
1560	0.024			
1620	0.024			

1680	0.026			
1740	0.029			
1800	0.025			
1860	0.022			0.026933333
1920	0.02			
1980	0.016			
2040	0.015			
2100	0.015			
2160	0.017			
2220	0.022			
2280	0.017			
2340	0.015			
2400	0.016			
2460	0.026			
2520	0.063			
2580	0.054			
2640	0.043			
2700	0.043			
2760	0.048			0.029666667
2820	0.049			
2880	0.05			
2940	0.045			
3000	0.042			
3060	0.042			
3120	0.023			
3180	0.018			
3240	0.015			
3300	0.017			
3360	0.018			
3420	0.02			
3480	0.017			
3540	0.02			
3600	0.021			
3660	0.022			0.0158
3720	0.019			
3780	0.018			
3840	0.017			
3900	0.015			
3960	0.015			
4020	0.015			
4080	0.014			
4140	0.015			
4200	0.014			
4260	0.014			
4320	0.014			
4380	0.014			
4440	0.015			

4500	0.016			
4560	0.03			0.016266667
4620	0.014			
4680	0.014			
4740	0.014			
4800	0.014			
4860	0.015			
4920	0.015			
4980	0.016			
5040	0.017			
5100	0.016			
5160	0.021			
5220	0.016			
5280	0.013			
5340	0.014			
5400	0.015			
5460	0.016			0.019266667
5520	0.017			
5580	0.018			
5640	0.018			
5700	0.018			
5760	0.018			
5820	0.019			
5880	0.019			
5940	0.02			
6000	0.02			
6060	0.021			
6120	0.025			
6180	0.023			
6240	0.019			
6300	0.018			
6360	0.017			0.022066667
6420	0.018			
6480	0.017			
6540	0.017			
6600	0.016			
6660	0.019			
6720	0.023			
6780	0.024			
6840	0.025			
6900	0.028			
6960	0.032			
7020	0.032			
7080	0.026			
7140	0.023			
7200	0.014			
7260	0.014			0.016933333

7320	0.019			
7380	0.022			
7440	0.024			
7500	0.017			
7560	0.016			
7620	0.015			
7680	0.017			
7740	0.026			
7800	0.018			
7860	0.011			
7920	0.013			
7980	0.009			
8040	0.014			
8100	0.019			
8160	0.018			0.019733333
8220	0.014			
8280	0.022			
8340	0.029			
8400	0.023			
8460	0.016			
8520	0.023			
8580	0.014			
8640	0.017			
8700	0.019			
8760	0.028			
8820	0.023			
8880	0.023			
8940	0.015			
9000	0.012			
9060	0.016			0.022466667
9120	0.017			
9180	0.023			
9240	0.03			
9300	0.024			
9360	0.024			
9420	0.021			
9480	0.019			
9540	0.018			
9600	0.016			
9660	0.022			
9720	0.027			
9780	0.023			
9840	0.03			
9900	0.027			
9960	0.027			0.022133333
10020	0.028			
10080	0.024			

10140	0.021			
10200	0.019			
10260	0.02			
10320	0.031			
10380	0.022			
10440	0.023			
10500	0.022			
10560	0.02			
10620	0.022			
10680	0.021			
10740	0.019			
10800	0.013			
10860	0.017			0.017266667
10920	0.023			
10980	0.022			
11040	0.022			
11100	0.021			
11160	0.021			
11220	0.019			
11280	0.015			
11340	0.023			
11400	0.021			
11460	0.017			
11520	0.014			
11580	0.008			
11640	0.008			
11700	0.008			
11760	0.011			0.009866667
11820	0.009			
11880	0.011			
11940	0.009			
12000	0.007			
12060	0.007			
12120	0.007			
12180	0.008			
12240	0.01			
12300	0.013			
12360	0.013			
12420	0.013			
12480	0.011			
12540	0.009			
12600	0.01			
12660	0.009			0.0124
12720	0.01			
12780	0.009			
12840	0.009			
12900	0.009			

12960	0.011			
13020	0.011			
13080	0.012			
13140	0.014			
13200	0.014			
13260	0.02			
13320	0.015			
13380	0.015			
13440	0.016			
13500	0.012			
13560	0.007			0.013733333
13620	0.008			
13680	0.009			
13740	0.01			
13800	0.032			
13860	0.009			
13920	0.009			
13980	0.013			
14040	0.016			
14100	0.01			
14160	0.011			
14220	0.017			
14280	0.021			
14340	0.021			
14400	0.013			
14460	0.012			0.0124
14520	0.021			
14580	0.019			
14640	0.018			
14700	0.013			
14760	0.009			
14820	0.011			
14880	0.016			
14940	0.01			
15000	0.011			
15060	0.009			
15120	0.008			
15180	0.01			
15240	0.01			
15300	0.009			
15360	0.007			0.007933333
15420	0.009			
15480	0.01			
15540	0.01			
15600	0.009			
15660	0.009			
15720	0.008			

15780	0.007			
15840	0.008			
15900	0.008			
15960	0.006			
16020	0.006			
16080	0.006			
16140	0.007			
16200	0.009			
16260	0.008			0.0066
16320	0.006			
16380	0.007			
16440	0.007			
16500	0.006			
16560	0.006			
16620	0.006			
16680	0.007			
16740	0.007			
16800	0.006			
16860	0.007			
16920	0.007			
16980	0.007			
17040	0.006			
17100	0.006			
17160	0.006			0.0066
17220	0.006			
17280	0.005			
17340	0.005			
17400	0.005			
17460	0.006			
17520	0.006			
17580	0.006			
17640	0.007			
17700	0.007			
17760	0.007			
17820	0.007			
17880	0.008			
17940	0.01			
18000	0.008			
18060	0.008			0.0074
18120	0.007			
18180	0.007			
18240	0.007			
18300	0.006			
18360	0.008			
18420	0.007			
18480	0.01			
18540	0.009			

18600	0.008			
18660	0.006			
18720	0.007			
18780	0.007			
18840	0.007			
18900	0.007			
18960	0.006			0.007333333
19020	0.007			
19080	0.006			
19140	0.007			
19200	0.011			
19260	0.01			
19320	0.008			
19380	0.007			
19440	0.007			
19500	0.007			
19560	0.007			
19620	0.006			
19680	0.007			
19740	0.008			
19800	0.006			
19860	0.005			0.0076
19920	0.006			
19980	0.006			
20040	0.007			
20100	0.006			
20160	0.007			
20220	0.008			
20280	0.01			
20340	0.008			
20400	0.009			
20460	0.008			
20520	0.008			
20580	0.009			
20640	0.009			
20700	0.008			
20760	0.009			0.008066667
20820	0.008			
20880	0.008			
20940	0.011			
21000	0.008			
21060	0.007			
21120	0.007			
21180	0.007			
21240	0.007			
21300	0.008			
21360	0.008			

21420	0.008			
21480	0.008			
21540	0.008			
21600	0.009			
21660	0.009			0.008466667
21720	0.009			
21780	0.009			
21840	0.008			
21900	0.008			
21960	0.008			
22020	0.007			
22080	0.008			
22140	0.009			
22200	0.009			
22260	0.008			
22320	0.009			
22380	0.008			
22440	0.01			
22500	0.008			
22560	0.008			0.007933333
22620	0.009			
22680	0.008			
22740	0.008			
22800	0.008			
22860	0.009			
22920	0.008			
22980	0.008			
23040	0.008			
23100	0.008			
23160	0.008			
23220	0.008			
23280	0.007			
23340	0.007			
23400	0.007			
23460	0.007			0.007533333
23520	0.008			
23580	0.008			
23640	0.008			
23700	0.008			
23760	0.007			
23820	0.007			
23880	0.007			
23940	0.007			
24000	0.008			
24060	0.01			
24120	0.007			
24180	0.007			

24240	0.007			
24300	0.007			
24360	0.009			0.009933333
24420	0.009			
24480	0.008			
24540	0.008			
24600	0.01			
24660	0.01			
24720	0.008			
24780	0.008			
24840	0.013			
24900	0.009			
24960	0.013			
25020	0.013			
25080	0.013			
25140	0.009			
25200	0.009			
25260	0.01			0.008875
25320	0.01			
25380	0.011			
25440	0.009			
25500	0.006			
25560	0.008			
25620	0.008			
25680	0.009			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_005
Test Start Time	7:38:47 AM
Test Start Date	11/1/2017
Test Length [D:H:M]	0:07:04
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.016
Mass Minimum [mg/m	0.01
Mass Maximum [mg/n	0.025
Mass TWA [mg/m3]	0.014
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	424

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.014			0.013666667
120	0.014			
180	0.013			
240	0.013			
300	0.013			
360	0.013			
420	0.013			
480	0.013			
540	0.013			
600	0.014			
660	0.014			
720	0.014			
780	0.015			
840	0.015			
900	0.014			
960	0.015			0.014666667
1020	0.014			
1080	0.014			
1140	0.015			
1200	0.015			
1260	0.015			
1320	0.015			
1380	0.015			
1440	0.015			
1500	0.015			
1560	0.015			
1620	0.014			

1680	0.014			
1740	0.014			
1800	0.015			
1860	0.016			0.016733333
1920	0.018			
1980	0.015			
2040	0.016			
2100	0.016			
2160	0.015			
2220	0.015			
2280	0.016			
2340	0.016			
2400	0.016			
2460	0.017			
2520	0.017			
2580	0.017			
2640	0.02			
2700	0.021			
2760	0.019			0.020466667
2820	0.019			
2880	0.019			
2940	0.019			
3000	0.021			
3060	0.021			
3120	0.02			
3180	0.021			
3240	0.021			
3300	0.021			
3360	0.021			
3420	0.022			
3480	0.021			
3540	0.021			
3600	0.021			
3660	0.021			0.020666667
3720	0.021			
3780	0.022			
3840	0.021			
3900	0.021			
3960	0.021			
4020	0.02			
4080	0.021			
4140	0.02			
4200	0.02			
4260	0.02			
4320	0.02			
4380	0.021			
4440	0.02			

4500	0.021			
4560	0.02			0.022466667
4620	0.022			
4680	0.021			
4740	0.021			
4800	0.021			
4860	0.022			
4920	0.022			
4980	0.022			
5040	0.023			
5100	0.022			
5160	0.024			
5220	0.024			
5280	0.024			
5340	0.025			
5400	0.024			
5460	0.023			0.022266667
5520	0.024			
5580	0.022			
5640	0.022			
5700	0.023			
5760	0.024			
5820	0.024			
5880	0.025			
5940	0.023			
6000	0.022			
6060	0.021			
6120	0.021			
6180	0.021			
6240	0.019			
6300	0.02			
6360	0.02			0.018533333
6420	0.018			
6480	0.018			
6540	0.018			
6600	0.017			
6660	0.021			
6720	0.018			
6780	0.017			
6840	0.018			
6900	0.017			
6960	0.019			
7020	0.02			
7080	0.02			
7140	0.019			
7200	0.018			
7260	0.017			0.019066667

7320	0.016			
7380	0.017			
7440	0.018			
7500	0.018			
7560	0.018			
7620	0.02			
7680	0.021			
7740	0.02			
7800	0.019			
7860	0.02			
7920	0.02			
7980	0.02			
8040	0.021			
8100	0.021			
8160	0.021			0.020933333
8220	0.02			
8280	0.021			
8340	0.02			
8400	0.02			
8460	0.02			
8520	0.021			
8580	0.022			
8640	0.021			
8700	0.021			
8760	0.021			
8820	0.021			
8880	0.022			
8940	0.021			
9000	0.022			
9060	0.02			0.020733333
9120	0.021			
9180	0.021			
9240	0.021			
9300	0.021			
9360	0.021			
9420	0.021			
9480	0.021			
9540	0.021			
9600	0.021			
9660	0.021			
9720	0.021			
9780	0.02			
9840	0.021			
9900	0.019			
9960	0.019			0.019066667
10020	0.019			
10080	0.02			

10140	0.021			
10200	0.021			
10260	0.02			
10320	0.019			
10380	0.019			
10440	0.019			
10500	0.019			
10560	0.018			
10620	0.018			
10680	0.018			
10740	0.018			
10800	0.018			
10860	0.019			0.018133333
10920	0.018			
10980	0.019			
11040	0.018			
11100	0.018			
11160	0.018			
11220	0.019			
11280	0.018			
11340	0.018			
11400	0.018			
11460	0.018			
11520	0.018			
11580	0.018			
11640	0.017			
11700	0.018			
11760	0.018			0.019733333
11820	0.018			
11880	0.018			
11940	0.019			
12000	0.019			
12060	0.019			
12120	0.019			
12180	0.019			
12240	0.019			
12300	0.022			
12360	0.023			
12420	0.022			
12480	0.022			
12540	0.02			
12600	0.019			
12660	0.02			0.018466667
12720	0.02			
12780	0.019			
12840	0.018			
12900	0.018			

12960	0.017			
13020	0.018			
13080	0.018			
13140	0.018			
13200	0.021			
13260	0.019			
13320	0.017			
13380	0.018			
13440	0.018			
13500	0.018			
13560	0.018			0.016333333
13620	0.018			
13680	0.018			
13740	0.017			
13800	0.018			
13860	0.018			
13920	0.017			
13980	0.015			
14040	0.015			
14100	0.015			
14160	0.015			
14220	0.015			
14280	0.015			
14340	0.015			
14400	0.016			
14460	0.016			0.014933333
14520	0.016			
14580	0.016			
14640	0.016			
14700	0.015			
14760	0.014			
14820	0.015			
14880	0.014			
14940	0.014			
15000	0.015			
15060	0.015			
15120	0.014			
15180	0.014			
15240	0.015			
15300	0.015			
15360	0.017			0.013133333
15420	0.014			
15480	0.013			
15540	0.012			
15600	0.012			
15660	0.012			
15720	0.013			

15780	0.013			
15840	0.013			
15900	0.013			
15960	0.013			
16020	0.013			
16080	0.013			
16140	0.013			
16200	0.013			
16260	0.014			0.0134
16320	0.014			
16380	0.014			
16440	0.013			
16500	0.014			
16560	0.014			
16620	0.014			
16680	0.014			
16740	0.013			
16800	0.013			
16860	0.013			
16920	0.013			
16980	0.013			
17040	0.012			
17100	0.013			
17160	0.014			0.014
17220	0.015			
17280	0.014			
17340	0.015			
17400	0.015			
17460	0.013			
17520	0.014			
17580	0.013			
17640	0.013			
17700	0.013			
17760	0.014			
17820	0.014			
17880	0.014			
17940	0.015			
18000	0.014			
18060	0.013			0.014666667
18120	0.013			
18180	0.013			
18240	0.015			
18300	0.016			
18360	0.015			
18420	0.014			
18480	0.013			
18540	0.016			

18600	0.014			
18660	0.017			
18720	0.019			
18780	0.015			
18840	0.014			
18900	0.013			
18960	0.012			0.0134
19020	0.011			
19080	0.012			
19140	0.012			
19200	0.013			
19260	0.014			
19320	0.013			
19380	0.013			
19440	0.014			
19500	0.02			
19560	0.015			
19620	0.013			
19680	0.013			
19740	0.013			
19800	0.013			
19860	0.014			0.013733333
19920	0.015			
19980	0.015			
20040	0.015			
20100	0.013			
20160	0.014			
20220	0.013			
20280	0.013			
20340	0.012			
20400	0.013			
20460	0.013			
20520	0.014			
20580	0.015			
20640	0.014			
20700	0.013			
20760	0.013			0.012466667
20820	0.013			
20880	0.013			
20940	0.014			
21000	0.013			
21060	0.013			
21120	0.012			
21180	0.013			
21240	0.012			
21300	0.012			
21360	0.012			

21420	0.013			
21480	0.012			
21540	0.011			
21600	0.011			
21660	0.011			0.012066667
21720	0.011			
21780	0.011			
21840	0.012			
21900	0.011			
21960	0.011			
22020	0.012			
22080	0.013			
22140	0.011			
22200	0.014			
22260	0.015			
22320	0.014			
22380	0.012			
22440	0.011			
22500	0.012			
22560	0.013			0.012533333
22620	0.015			
22680	0.015			
22740	0.014			
22800	0.013			
22860	0.013			
22920	0.013			
22980	0.011			
23040	0.011			
23100	0.012			
23160	0.011			
23220	0.012			
23280	0.013			
23340	0.011			
23400	0.011			
23460	0.011			0.012933333
23520	0.012			
23580	0.016			
23640	0.012			
23700	0.017			
23760	0.013			
23820	0.014			
23880	0.012			
23940	0.012			
24000	0.012			
24060	0.012			
24120	0.013			
24180	0.013			

24240	0.013			
24300	0.012			
24360	0.011			0.011733333
24420	0.013			
24480	0.011			
24540	0.012			
24600	0.015			
24660	0.014			
24720	0.011			
24780	0.01			
24840	0.011			
24900	0.011			
24960	0.012			
25020	0.012			
25080	0.011			
25140	0.011			
25200	0.011			
25260	0.011			0.0105
25320	0.01			
25380	0.011			
25440	0.01			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_007
Test Start Time	7:37:48 AM
Test Start Date	11/2/2017
Test Length [D:H:M]	0:07:25
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.026
Mass Minimum [mg/m	0.002
Mass Maximum [mg/m	0.582
Mass TWA [mg/m3]	0.024
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	445

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.048			0.0548
120	0.051			
180	0.051			
240	0.051			
300	0.051			
360	0.05			
420	0.051			
480	0.052			
540	0.052			
600	0.06			
660	0.052			
720	0.053			
780	0.063			
840	0.083			
900	0.054			
960	0.055			0.062266667
1020	0.074			
1080	0.08			
1140	0.104			
1200	0.063			
1260	0.058			
1320	0.069			
1380	0.055			
1440	0.053			
1500	0.055			
1560	0.055			
1620	0.053			

1680	0.053			
1740	0.053			
1800	0.054			
1860	0.061			0.054
1920	0.06			
1980	0.054			
2040	0.053			
2100	0.053			
2160	0.053			
2220	0.051			
2280	0.051			
2340	0.051			
2400	0.053			
2460	0.061			
2520	0.056			
2580	0.052			
2640	0.05			
2700	0.051			
2760	0.052			0.047533333
2820	0.05			
2880	0.05			
2940	0.049			
3000	0.049			
3060	0.049			
3120	0.048			
3180	0.048			
3240	0.049			
3300	0.048			
3360	0.046			
3420	0.045			
3480	0.044			
3540	0.043			
3600	0.043			
3660	0.043			0.043733333
3720	0.042			
3780	0.044			
3840	0.041			
3900	0.039			
3960	0.038			
4020	0.039			
4080	0.039			
4140	0.039			
4200	0.038			
4260	0.041			
4320	0.044			
4380	0.087			
4440	0.042			

4500	0.04			
4560	0.031			0.031
4620	0.028			
4680	0.053			
4740	0.034			
4800	0.028			
4860	0.028			
4920	0.028			
4980	0.028			
5040	0.028			
5100	0.029			
5160	0.03			
5220	0.029			
5280	0.03			
5340	0.03			
5400	0.031			
5460	0.031			0.030666667
5520	0.031			
5580	0.031			
5640	0.032			
5700	0.032			
5760	0.032			
5820	0.032			
5880	0.031			
5940	0.031			
6000	0.029			
6060	0.03			
6120	0.028			
6180	0.03			
6240	0.03			
6300	0.03			
6360	0.03			0.032
6420	0.031			
6480	0.032			
6540	0.031			
6600	0.031			
6660	0.033			
6720	0.032			
6780	0.034			
6840	0.046			
6900	0.034			
6960	0.029			
7020	0.029			
7080	0.029			
7140	0.028			
7200	0.031			
7260	0.032			0.0482

7320	0.028			
7380	0.035			
7440	0.032			
7500	0.085			
7560	0.073			
7620	0.03			
7680	0.031			
7740	0.031			
7800	0.027			
7860	0.027			
7920	0.029			
7980	0.03			
8040	0.043			
8100	0.19			
8160	0.031			0.0336
8220	0.03			
8280	0.029			
8340	0.031			
8400	0.061			
8460	0.045			
8520	0.032			
8580	0.031			
8640	0.03			
8700	0.03			
8760	0.033			
8820	0.031			
8880	0.031			
8940	0.03			
9000	0.029			
9060	0.029			0.0692
9120	0.028			
9180	0.029			
9240	0.03			
9300	0.031			
9360	0.03			
9420	0.036			
9480	0.582			
9540	0.064			
9600	0.03			
9660	0.03			
9720	0.029			
9780	0.03			
9840	0.03			
9900	0.03			
9960	0.026			0.0674
10020	0.027			
10080	0.026			

10140	0.028			
10200	0.123			
10260	0.534			
10320	0.031			
10380	0.026			
10440	0.04			
10500	0.031			
10560	0.026			
10620	0.024			
10680	0.024			
10740	0.023			
10800	0.022			
10860	0.024			0.0228
10920	0.023			
10980	0.021			
11040	0.021			
11100	0.02			
11160	0.019			
11220	0.02			
11280	0.023			
11340	0.022			
11400	0.029			
11460	0.024			
11520	0.023			
11580	0.024			
11640	0.024			
11700	0.025			
11760	0.025			0.023466667
11820	0.026			
11880	0.023			
11940	0.023			
12000	0.025			
12060	0.024			
12120	0.022			
12180	0.023			
12240	0.022			
12300	0.023			
12360	0.025			
12420	0.023			
12480	0.022			
12540	0.028			
12600	0.018			
12660	0.019			0.0204
12720	0.02			
12780	0.022			
12840	0.022			
12900	0.022			

12960	0.023			
13020	0.022			
13080	0.022			
13140	0.02			
13200	0.017			
13260	0.018			
13320	0.019			
13380	0.02			
13440	0.02			
13500	0.02			
13560	0.02			0.023133333
13620	0.018			
13680	0.019			
13740	0.019			
13800	0.018			
13860	0.019			
13920	0.022			
13980	0.033			
14040	0.057			
14100	0.022			
14160	0.023			
14220	0.02			
14280	0.02			
14340	0.02			
14400	0.017			
14460	0.018			0.017733333
14520	0.018			
14580	0.02			
14640	0.018			
14700	0.021			
14760	0.018			
14820	0.017			
14880	0.017			
14940	0.017			
15000	0.017			
15060	0.017			
15120	0.019			
15180	0.017			
15240	0.016			
15300	0.016			
15360	0.017			0.0144
15420	0.015			
15480	0.015			
15540	0.014			
15600	0.015			
15660	0.014			
15720	0.013			

15780	0.015			
15840	0.017			
15900	0.017			
15960	0.016			
16020	0.016			
16080	0.013			
16140	0.01			
16200	0.009			
16260	0.01			0.0096
16320	0.011			
16380	0.01			
16440	0.009			
16500	0.009			
16560	0.008			
16620	0.009			
16680	0.01			
16740	0.01			
16800	0.009			
16860	0.011			
16920	0.01			
16980	0.01			
17040	0.01			
17100	0.008			
17160	0.008			0.008933333
17220	0.008			
17280	0.007			
17340	0.008			
17400	0.009			
17460	0.007			
17520	0.007			
17580	0.007			
17640	0.007			
17700	0.008			
17760	0.009			
17820	0.012			
17880	0.013			
17940	0.013			
18000	0.011			
18060	0.011			0.011133333
18120	0.011			
18180	0.013			
18240	0.015			
18300	0.012			
18360	0.013			
18420	0.011			
18480	0.01			
18540	0.011			

18600	0.01			
18660	0.01			
18720	0.011			
18780	0.009			
18840	0.01			
18900	0.01			
18960	0.009			0.009866667
19020	0.009			
19080	0.011			
19140	0.011			
19200	0.009			
19260	0.009			
19320	0.012			
19380	0.01			
19440	0.009			
19500	0.009			
19560	0.008			
19620	0.007			
19680	0.007			
19740	0.009			
19800	0.019			
19860	0.008			0.006933333
19920	0.008			
19980	0.009			
20040	0.008			
20100	0.007			
20160	0.006			
20220	0.007			
20280	0.007			
20340	0.006			
20400	0.006			
20460	0.007			
20520	0.007			
20580	0.006			
20640	0.006			
20700	0.006			
20760	0.005			0.005666667
20820	0.005			
20880	0.006			
20940	0.005			
21000	0.006			
21060	0.008			
21120	0.006			
21180	0.006			
21240	0.006			
21300	0.006			
21360	0.006			

21420	0.006			
21480	0.005			
21540	0.004			
21600	0.005			
21660	0.005			0.0048
21720	0.004			
21780	0.005			
21840	0.004			
21900	0.004			
21960	0.006			
22020	0.004			
22080	0.006			
22140	0.004			
22200	0.005			
22260	0.004			
22320	0.006			
22380	0.005			
22440	0.005			
22500	0.005			
22560	0.005			0.004866667
22620	0.004			
22680	0.003			
22740	0.004			
22800	0.004			
22860	0.006			
22920	0.005			
22980	0.004			
23040	0.006			
23100	0.005			
23160	0.004			
23220	0.007			
23280	0.008			
23340	0.004			
23400	0.004			
23460	0.004			0.004133333
23520	0.003			
23580	0.004			
23640	0.004			
23700	0.004			
23760	0.005			
23820	0.007			
23880	0.005			
23940	0.004			
24000	0.003			
24060	0.003			
24120	0.003			
24180	0.004			

24240	0.004			
24300	0.005			
24360	0.007			0.004733333
24420	0.011			
24480	0.005			
24540	0.004			
24600	0.004			
24660	0.004			
24720	0.005			
24780	0.004			
24840	0.004			
24900	0.003			
24960	0.003			
25020	0.004			
25080	0.003			
25140	0.004			
25200	0.006			
25260	0.004			0.004933333
25320	0.003			
25380	0.004			
25440	0.004			
25500	0.005			
25560	0.006			
25620	0.005			
25680	0.004			
25740	0.004			
25800	0.005			
25860	0.004			
25920	0.003			
25980	0.006			
26040	0.006			
26100	0.011			
26160	0.005			0.0036
26220	0.003			
26280	0.003			
26340	0.003			
26400	0.003			
26460	0.003			
26520	0.004			
26580	0.002			
26640	0.003			
26700	0.007			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_009
Test Start Time	7:30:05 AM
Test Start Date	11/3/2017
Test Length [D:H:M]	0:07:31
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.021
Mass Minimum [mg/m	0.013
Mass Maximum [mg/n	0.1
Mass TWA [mg/m3]	0.02
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	451

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.027			0.027
120	0.027			
180	0.031			
240	0.033			
300	0.037			
360	0.034			
420	0.036			
480	0.034			
540	0.034			
600	0.039			
660	0.041			
720	0.048			
780	0.047			
840	0.044			
900	0.044			
960	0.042			0.042
1020	0.039			
1080	0.036			
1140	0.035			
1200	0.034			
1260	0.031			
1320	0.028			
1380	0.029			
1440	0.028			
1500	0.026			
1560	0.027			
1620	0.027			

1680	0.027			
1740	0.028			
1800	0.023			
1860	0.023			0.023
1920	0.023			
1980	0.024			
2040	0.023			
2100	0.023			
2160	0.023			
2220	0.023			
2280	0.022			
2340	0.022			
2400	0.022			
2460	0.032			
2520	0.032			
2580	0.023			
2640	0.044			
2700	0.025			
2760	0.023			0.023
2820	0.023			
2880	0.022			
2940	0.022			
3000	0.022			
3060	0.022			
3120	0.022			
3180	0.021			
3240	0.022			
3300	0.022			
3360	0.021			
3420	0.021			
3480	0.021			
3540	0.022			
3600	0.022			
3660	0.024			0.024
3720	0.022			
3780	0.021			
3840	0.021			
3900	0.022			
3960	0.022			
4020	0.021			
4080	0.02			
4140	0.023			
4200	0.022			
4260	0.021			
4320	0.021			
4380	0.019			
4440	0.018			

4500	0.018			
4560	0.018			0.018
4620	0.018			
4680	0.018			
4740	0.019			
4800	0.018			
4860	0.017			
4920	0.02			
4980	0.018			
5040	0.017			
5100	0.017			
5160	0.017			
5220	0.021			
5280	0.018			
5340	0.018			
5400	0.02			
5460	0.019			0.019
5520	0.017			
5580	0.017			
5640	0.018			
5700	0.019			
5760	0.017			
5820	0.017			
5880	0.016			
5940	0.017			
6000	0.017			
6060	0.018			
6120	0.019			
6180	0.019			
6240	0.018			
6300	0.017			
6360	0.017			0.017
6420	0.019			
6480	0.018			
6540	0.019			
6600	0.019			
6660	0.019			
6720	0.018			
6780	0.017			
6840	0.018			
6900	0.018			
6960	0.019			
7020	0.019			
7080	0.019			
7140	0.02			
7200	0.018			
7260	0.019			0.019

7320	0.019			
7380	0.019			
7440	0.019			
7500	0.019			
7560	0.019			
7620	0.018			
7680	0.018			
7740	0.019			
7800	0.017			
7860	0.017			
7920	0.017			
7980	0.017			
8040	0.017			
8100	0.018			
8160	0.017			0.017
8220	0.018			
8280	0.018			
8340	0.017			
8400	0.017			
8460	0.017			
8520	0.018			
8580	0.019			
8640	0.02			
8700	0.018			
8760	0.019			
8820	0.05			
8880	0.064			
8940	0.048			
9000	0.036			
9060	0.022			0.022
9120	0.02			
9180	0.021			
9240	0.016			
9300	0.016			
9360	0.017			
9420	0.017			
9480	0.016			
9540	0.017			
9600	0.018			
9660	0.018			
9720	0.017			
9780	0.017			
9840	0.017			
9900	0.018			
9960	0.019			0.019
10020	0.025			
10080	0.022			

10140	0.021			
10200	0.021			
10260	0.021			
10320	0.02			
10380	0.02			
10440	0.1			
10500	0.023			
10560	0.021			
10620	0.019			
10680	0.021			
10740	0.022			
10800	0.021			
10860	0.021			0.021
10920	0.026			
10980	0.026			
11040	0.041			
11100	0.031			
11160	0.036			
11220	0.023			
11280	0.02			
11340	0.017			
11400	0.017			
11460	0.016			
11520	0.015			
11580	0.016			
11640	0.017			
11700	0.016			
11760	0.017			0.017
11820	0.019			
11880	0.021			
11940	0.027			
12000	0.021			
12060	0.029			
12120	0.047			
12180	0.048			
12240	0.065			
12300	0.051			
12360	0.045			
12420	0.03			
12480	0.026			
12540	0.02			
12600	0.018			
12660	0.014			0.014
12720	0.021			
12780	0.023			
12840	0.022			
12900	0.033			

12960	0.019			
13020	0.018			
13080	0.032			
13140	0.022			
13200	0.014			
13260	0.015			
13320	0.018			
13380	0.017			
13440	0.018			
13500	0.02			
13560	0.019			0.019
13620	0.017			
13680	0.017			
13740	0.016			
13800	0.014			
13860	0.014			
13920	0.013			
13980	0.013			
14040	0.014			
14100	0.013			
14160	0.016			
14220	0.014			
14280	0.013			
14340	0.013			
14400	0.013			
14460	0.015			0.015
14520	0.014			
14580	0.014			
14640	0.015			
14700	0.014			
14760	0.015			
14820	0.015			
14880	0.016			
14940	0.017			
15000	0.016			
15060	0.015			
15120	0.016			
15180	0.018			
15240	0.02			
15300	0.017			
15360	0.017			0.017
15420	0.015			
15480	0.015			
15540	0.019			
15600	0.025			
15660	0.031			
15720	0.026			

15780	0.02			
15840	0.02			
15900	0.019			
15960	0.018			
16020	0.019			
16080	0.017			
16140	0.016			
16200	0.016			
16260	0.014			0.014
16320	0.014			
16380	0.014			
16440	0.015			
16500	0.016			
16560	0.015			
16620	0.021			
16680	0.022			
16740	0.023			
16800	0.02			
16860	0.018			
16920	0.016			
16980	0.021			
17040	0.018			
17100	0.018			
17160	0.016			0.016
17220	0.017			
17280	0.017			
17340	0.018			
17400	0.022			
17460	0.024			
17520	0.022			
17580	0.021			
17640	0.018			
17700	0.019			
17760	0.016			
17820	0.017			
17880	0.016			
17940	0.015			
18000	0.015			
18060	0.015			0.015
18120	0.017			
18180	0.017			
18240	0.016			
18300	0.016			
18360	0.016			
18420	0.017			
18480	0.017			
18540	0.017			

18600	0.018			
18660	0.017			
18720	0.017			
18780	0.018			
18840	0.018			
18900	0.018			
18960	0.017			0.017
19020	0.018			
19080	0.017			
19140	0.02			
19200	0.019			
19260	0.018			
19320	0.018			
19380	0.036			
19440	0.019			
19500	0.021			
19560	0.018			
19620	0.019			
19680	0.018			
19740	0.018			
19800	0.021			
19860	0.017			0.017
19920	0.017			
19980	0.018			
20040	0.018			
20100	0.017			
20160	0.018			
20220	0.019			
20280	0.019			
20340	0.018			
20400	0.018			
20460	0.018			
20520	0.018			
20580	0.02			
20640	0.02			
20700	0.019			
20760	0.018			0.018
20820	0.019			
20880	0.018			
20940	0.019			
21000	0.018			
21060	0.018			
21120	0.017			
21180	0.017			
21240	0.017			
21300	0.018			
21360	0.018			

21420	0.02			
21480	0.019			
21540	0.018			
21600	0.021			
21660	0.019			0.019
21720	0.019			
21780	0.019			
21840	0.018			
21900	0.018			
21960	0.018			
22020	0.02			
22080	0.017			
22140	0.017			
22200	0.017			
22260	0.017			
22320	0.025			
22380	0.022			
22440	0.018			
22500	0.019			
22560	0.021			0.021
22620	0.018			
22680	0.019			
22740	0.019			
22800	0.02			
22860	0.019			
22920	0.018			
22980	0.018			
23040	0.018			
23100	0.018			
23160	0.02			
23220	0.018			
23280	0.019			
23340	0.019			
23400	0.019			
23460	0.019			0.019
23520	0.02			
23580	0.02			
23640	0.024			
23700	0.026			
23760	0.02			
23820	0.019			
23880	0.02			
23940	0.023			
24000	0.022			
24060	0.021			
24120	0.022			
24180	0.025			

24240	0.023			
24300	0.023			
24360	0.021			0.021
24420	0.022			
24480	0.023			
24540	0.022			
24600	0.021			
24660	0.022			
24720	0.022			
24780	0.022			
24840	0.023			
24900	0.023			
24960	0.023			
25020	0.022			
25080	0.022			
25140	0.021			
25200	0.022			
25260	0.024			0.024
25320	0.022			
25380	0.023			
25440	0.023			
25500	0.022			
25560	0.021			
25620	0.022			
25680	0.022			
25740	0.028			
25800	0.027			
25860	0.024			
25920	0.026			
25980	0.024			
26040	0.023			
26100	0.022			
26160	0.023			0.023
26220	0.023			
26280	0.023			
26340	0.023			
26400	0.024			
26460	0.023			
26520	0.022			
26580	0.021			
26640	0.024			
26700	0.022			
26760	0.023			
26820	0.022			
26880	0.023			
26940	0.024			
27000	0.024			

27060	0.024			0.024

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_011
Test Start Time	8:42:40 AM
Test Start Date	11/6/2017
Test Length [D:H:M]	0:00:13
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.012
Mass Minimum [mg/m	0
Mass Maximum [mg/m	0.118
Mass TWA [mg/m3]	0
Photometric User Cal	1
Flow User Cal	0
Errors	Flow Error
Number of Samples	13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.028		Flow Error	NA
120	0.118		Flow Error	
180	0.005		Flow Error	
240	0.003		Flow Error	
300	0.001		Flow Error	
360	0		Flow Error	
420	0		Flow Error	
480	0		Flow Error	
540	0		Flow Error	
600	0		Flow Error	
660	0		Flow Error	
720	0		Flow Error	
780	0		Flow Error	

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_012
Test Start Time	9:16:46 AM
Test Start Date	11/6/2017
Test Length [D:H:M]	0:00:13
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.006
Mass Minimum [mg/m	0
Mass Maximum [mg/n	0.026
Mass TWA [mg/m3]	0
Photometric User Cal	1
Flow User Cal	0
Errors	Flow Error
Number of Samples	13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.019		Flow Error	NA
120	0.01		Flow Error	
180	0.012		Flow Error	
240	0.01		Flow Error	
300	0.001		Flow Error	
360	0.026		Flow Error	
420	0		Flow Error	
480	0		Flow Error	
540	0		Flow Error	
600	0		Flow Error	
660	0		Flow Error	
720	0		Flow Error	
780	0		Flow Error	

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_013
Test Start Time	11:25:52 AM
Test Start Date	11/6/2017
Test Length [D:H:M]	0:00:13
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.008
Mass Minimum [mg/m	0
Mass Maximum [mg/n	0.037
Mass TWA [mg/m3]	0
Photometric User Cal	1
Flow User Cal	0
Errors	Flow Error
Number of Samples	13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.037		Flow Error	NA
120	0.033		Flow Error	
180	0.014		Flow Error	
240	0.017		Flow Error	
300	0.002		Flow Error	
360	0		Flow Error	
420	0.006		Flow Error	
480	0		Flow Error	
540	0		Flow Error	
600	0		Flow Error	
660	0		Flow Error	
720	0		Flow Error	
780	0		Flow Error	

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_014
Test Start Time	12:44:28 PM
Test Start Date	11/6/2017
Test Length [D:H:M]	0:00:13
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.004
Mass Minimum [mg/m	0
Mass Maximum [mg/n	0.022
Mass TWA [mg/m3]	0
Photometric User Cal	1
Flow User Cal	0
Errors	Flow Error
Number of Samples	13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.022		Flow Error	NA
120	0.011		Flow Error	
180	0.01		Flow Error	
240	0.007		Flow Error	
300	0.002		Flow Error	
360	0.002		Flow Error	
420	0.001		Flow Error	
480	0		Flow Error	
540	0		Flow Error	
600	0		Flow Error	
660	0		Flow Error	
720	0		Flow Error	
780	0		Flow Error	

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_015
Test Start Time	1:24:33 PM
Test Start Date	11/6/2017
Test Length [D:H:M]	0:02:09
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.043
Mass Minimum [mg/m	0.035
Mass Maximum [mg/r	0.335
Mass TWA [mg/m3]	0.011
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	129

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.041			0.041066667
120	0.041			
180	0.041			
240	0.041			
300	0.041			
360	0.04			
420	0.039			
480	0.039			
540	0.041			
600	0.043			
660	0.041			
720	0.042			
780	0.042			
840	0.042			
900	0.042			
960	0.042			0.041133333
1020	0.042			
1080	0.048			
1140	0.043			
1200	0.041			
1260	0.039			
1320	0.039			
1380	0.038			
1440	0.039			
1500	0.038			
1560	0.038			
1620	0.046			

1680	0.038			
1740	0.038			
1800	0.048			
1860	0.038			0.0414
1920	0.039			
1980	0.039			
2040	0.039			
2100	0.039			
2160	0.041			
2220	0.043			
2280	0.056			
2340	0.039			
2400	0.04			
2460	0.039			
2520	0.053			
2580	0.042			
2640	0.038			
2700	0.036			
2760	0.036			0.039733333
2820	0.039			
2880	0.038			
2940	0.038			
3000	0.041			
3060	0.041			
3120	0.041			
3180	0.04			
3240	0.043			
3300	0.043			
3360	0.038			
3420	0.039			
3480	0.039			
3540	0.041			
3600	0.039			
3660	0.038			0.0386
3720	0.038			
3780	0.037			
3840	0.038			
3900	0.036			
3960	0.037			
4020	0.037			
4080	0.036			
4140	0.038			
4200	0.041			
4260	0.039			
4320	0.04			
4380	0.04			
4440	0.042			

4500	0.042			
4560	0.041			0.037866667
4620	0.041			
4680	0.04			
4740	0.038			
4800	0.037			
4860	0.038			
4920	0.038			
4980	0.042			
5040	0.036			
5100	0.036			
5160	0.037			
5220	0.035			
5280	0.036			
5340	0.036			
5400	0.037			
5460	0.036			0.0376
5520	0.037			
5580	0.037			
5640	0.037			
5700	0.037			
5760	0.037			
5820	0.037			
5880	0.039			
5940	0.041			
6000	0.036			
6060	0.036			
6120	0.037			
6180	0.04			
6240	0.039			
6300	0.038			
6360	0.037			0.064266667
6420	0.041			
6480	0.04			
6540	0.043			
6600	0.335			
6660	0.105			
6720	0.041			
6780	0.042			
6840	0.041			
6900	0.04			
6960	0.04			
7020	0.04			
7080	0.04			
7140	0.039			
7200	0.04			
7260	0.04			0.040222222

7320	0.04			
7380	0.041			
7440	0.044			
7500	0.041			
7560	0.039			
7620	0.039			
7680	0.039			
7740	0.039			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_017
Test Start Time	8:27:22 AM
Test Start Date	11/8/2017
Test Length [D:H:M]	0:00:14
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.015
Mass Minimum [mg/m	0.008
Mass Maximum [mg/m	0.039
Mass TWA [mg/m3]	0
Photometric User Cal	1
Flow User Cal	0
Errors	Flow Error
Number of Samples	14

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.016			NA
120	0.017		Flow Error	
180	0.014		Flow Error	
240	0.012		Flow Error	
300	0.01		Flow Error	
360	0.011		Flow Error	
420	0.009		Flow Error	
480	0.015		Flow Error	
540	0.013		Flow Error	
600	0.012		Flow Error	
660	0.039		Flow Error	
720	0.017		Flow Error	
780	0.01		Flow Error	
840	0.008		Flow Error	

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_018
Test Start Time	8:47:30 AM
Test Start Date	11/8/2017
Test Length [D:H:M]	0:14:42
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.017
Mass Minimum [mg/m	0
Mass Maximum [mg/n	0.065
Mass TWA [mg/m3]	0
Photometric User Cal	1
Flow User Cal	0
Errors	Max Concentration
Number of Samples	122

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.017			0.018266667
120	0.017			
180	0.015			
240	0.016			
300	0.017			
360	0.017			
420	0.024			
480	0.019			
540	0.017			
600	0.029			
660	0.018			
720	0.017			
780	0.017			
840	0.017			
900	0.017			
960	0.017			0.0176
1020	0.016			
1080	0.015			
1140	0.016			
1200	0.016			
1260	0.016			
1320	0.016			
1380	0.018			
1440	0.019			
1500	0.018			
1560	0.018			
1620	0.018			

1680	0.017			
1740	0.02			
1800	0.024			
1860	0.02			0.018733333
1920	0.018			
1980	0.018			
2040	0.019			
2100	0.017			
2160	0.018			
2220	0.018			
2280	0.018			
2340	0.017			
2400	0.018			
2460	0.036			
2520	0.018			
2580	0.015			
2640	0.015			
2700	0.016			
2760	0.016			0.016
2820	0.016			
2880	0.017			
2940	0.017			
3000	0.016			
3060	0.015			
3120	0.014			
3180	0.014			
3240	0.016			
3300	0.017			
3360	0.016			
3420	0.016			
3480	0.016			
3540	0.017			
3600	0.017			
3660	0.018			0.018333333
3720	0.018			
3780	0.018			
3840	0.017			
3900	0.019			
3960	0.018			
4020	0.019			
4080	0.02			
4140	0.02			
4200	0.018			
4260	0.018			
4320	0.017			
4380	0.017			
4440	0.019			

4500	0.019			
4560	0.018			0.020733333
4620	0.017			
4680	0.018			
4740	0.02			
4800	0.024			
4860	0.024			
4920	0.023			
4980	0.02			
5040	0.019			
5100	0.021			
5160	0.02			
5220	0.02			
5280	0.024			
5340	0.022			
5400	0.021			
5460	0.02			0.019133333
5520	0.02			
5580	0.02			
5640	0.02			
5700	0.022			
5760	0.025			
5820	0.025			
5880	0.024			
5940	0.02			
6000	0.024			
6060	0.028			
6120	0.027			
6180	0.008		Flow Error	
6240	0.002		Flow Error	
6300	0.002		Flow Error	
6360	0.004		Flow Error	0.011
6420	0.014		Flow Error	
6480	0.005		Flow Error	
6540	0.065		Flow Error	
6600	0.005		Flow Error	
6660	0.003		Flow Error	
14349	0.004			
14400	0.02		Flow Error	
14460	0.006		Flow Error	
14520	0.005		Flow Error	
14580	0.005		Flow Error	
14640	0.005		Flow Error	
14700	0.008		Flow Error	
35805	0			
35820	0.016			
35880	0.018			0.009

52961	0			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530173511
Firmware Version	3.6
Calibration Date	8/31/2017
Test Name	MANUAL_020
Test Start Time	8:46:27 AM
Test Start Date	11/9/2017
Test Length [D:H:M]	0:04:41
Test Interval [M:S]	1:00
Mass Average [mg/m3	0.023
Mass Minimum [mg/m	0.006
Mass Maximum [mg/n	0.1
Mass TWA [mg/m3]	0.014
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	281

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.027			0.0272
120	0.027			
180	0.027			
240	0.026			
300	0.026			
360	0.028			
420	0.028			
480	0.028			
540	0.028			
600	0.028			
660	0.028			
720	0.027			
780	0.027			
840	0.027			
900	0.026			
960	0.026			0.027066667
1020	0.027			
1080	0.027			
1140	0.027			
1200	0.027			
1260	0.026			
1320	0.026			
1380	0.027			
1440	0.027			
1500	0.027			
1560	0.027			
1620	0.028			

1680	0.028			
1740	0.028			
1800	0.028			
1860	0.027			0.0306
1920	0.027			
1980	0.028			
2040	0.028			
2100	0.027			
2160	0.027			
2220	0.027			
2280	0.027			
2340	0.028			
2400	0.043			
2460	0.05			
2520	0.03			
2580	0.03			
2640	0.03			
2700	0.03			
2760	0.033			0.031866667
2820	0.034			
2880	0.033			
2940	0.033			
3000	0.034			
3060	0.032			
3120	0.029			
3180	0.03			
3240	0.032			
3300	0.03			
3360	0.034			
3420	0.032			
3480	0.032			
3540	0.03			
3600	0.03			
3660	0.03			0.030466667
3720	0.028			
3780	0.031			
3840	0.04			
3900	0.033			
3960	0.03			
4020	0.03			
4080	0.034			
4140	0.031			
4200	0.03			
4260	0.029			
4320	0.028			
4380	0.028			
4440	0.028			

4500	0.027			
4560	0.027			0.0312
4620	0.028			
4680	0.028			
4740	0.03			
4800	0.028			
4860	0.037			
4920	0.033			
4980	0.031			
5040	0.028			
5100	0.029			
5160	0.031			
5220	0.035			
5280	0.036			
5340	0.035			
5400	0.032			
5460	0.031			0.026266667
5520	0.028			
5580	0.027			
5640	0.025			
5700	0.024			
5760	0.024			
5820	0.025			
5880	0.027			
5940	0.024			
6000	0.024			
6060	0.025			
6120	0.026			
6180	0.026			
6240	0.03			
6300	0.028			
6360	0.029			0.032
6420	0.03			
6480	0.035			
6540	0.036			
6600	0.032			
6660	0.029			
6720	0.029			
6780	0.026			
6840	0.027			
6900	0.051			
6960	0.048			
7020	0.03			
7080	0.028			
7140	0.026			
7200	0.024			
7260	0.026			0.026666667

7320	0.026			
7380	0.025			
7440	0.025			
7500	0.025			
7560	0.026			
7620	0.028			
7680	0.026			
7740	0.026			
7800	0.026			
7860	0.026			
7920	0.026			
7980	0.026			
8040	0.026			
8100	0.037			
8160	0.034			0.024466667
8220	0.026			
8280	0.025			
8340	0.025			
8400	0.026			
8460	0.027			
8520	0.027			
8580	0.025			
8640	0.025			
8700	0.023			
8760	0.021			
8820	0.021			
8880	0.021			
8940	0.021			
9000	0.02			
9060	0.021			0.022
9120	0.021			
9180	0.022			
9240	0.022			
9300	0.022			
9360	0.022			
9420	0.021			
9480	0.021			
9540	0.022			
9600	0.022			
9660	0.022			
9720	0.023			
9780	0.028			
9840	0.02			
9900	0.021			
9960	0.021			0.022533333
10020	0.022			
10080	0.021			

10140	0.024			
10200	0.03			
10260	0.026			
10320	0.023			
10380	0.023			
10440	0.023			
10500	0.021			
10560	0.022			
10620	0.02			
10680	0.021			
10740	0.021			
10800	0.02			
10860	0.02			0.0198
10920	0.02			
10980	0.019			
11040	0.022			
11100	0.022			
11160	0.024			
11220	0.019			
11280	0.019			
11340	0.019			
11400	0.019			
11460	0.018			
11520	0.02			
11580	0.02			
11640	0.019			
11700	0.017			
11760	0.018			0.025933333
11820	0.019			
11880	0.02			
11940	0.02			
12000	0.1			
12060	0.027			
12120	0.025			
12180	0.02			
12240	0.021			
12300	0.02			
12360	0.018			
12420	0.015			
12480	0.016			
12540	0.019			
12600	0.031			
12660	0.02			0.018866667
12720	0.017			
12780	0.018			
12840	0.019			
12900	0.018			

12960	0.029			
13020	0.023			
13080	0.018			
13140	0.019			
13200	0.021			
13260	0.019			
13320	0.017			
13380	0.015			
13440	0.015			
13500	0.015			
13560	0.015			0.015133333
13620	0.015			
13680	0.015			
13740	0.015			
13800	0.013			
13860	0.014			
13920	0.014			
13980	0.016			
14040	0.015			
14100	0.016			
14160	0.016			
14220	0.017			
14280	0.016			
14340	0.016			
14400	0.014			
14460	0.013			0.0088
14520	0.01			
14580	0.01			
14640	0.01			
14700	0.009			
14760	0.009			
14820	0.009			
14880	0.008			
14940	0.008			
15000	0.008			
15060	0.007			
15120	0.007			
15180	0.008			
15240	0.008			
15300	0.008			
15360	0.007			0.007133333
15420	0.007			
15480	0.006			
15540	0.006			
15600	0.007			
15660	0.008			
15720	0.007			

15780	0.009			
15840	0.007			
15900	0.007			
15960	0.007			
16020	0.008			
16080	0.007			
16140	0.007			
16200	0.007			
16260	0.007			0.007363636
16320	0.006			
16380	0.007			
16440	0.008			
16500	0.007			
16560	0.006			
16620	0.007			
16680	0.007			
16740	0.008			
16800	0.009			
16860	0.009			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113613
Firmware Version	3.3
Calibration Date	1/15/2015
Test Name	MANUAL_001
Test Start Time	7:03:22 AM
Test Start Date	11/27/2017
Test Length [D:H:M]	0:00:33
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.025
Mass Minimum [mg/m3	0.02
Mass Maximum [mg/m3	0.03
Mass TWA [mg/m3]	0.002
Photometric User Cal	0.9
Flow User Cal	0
Errors	
Number of Samples	33

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.022			0.0252
120	0.02			
180	0.022			
240	0.029			
300	0.028			
360	0.026			
420	0.022			
480	0.022			
540	0.023			
600	0.022			
660	0.028			
720	0.03			
780	0.027			
840	0.027			
900	0.03			
960	0.028			0.024666667
1020	0.029			
1080	0.028			
1140	0.029			
1200	0.026			
1260	0.026			
1320	0.023			
1380	0.024			
1440	0.023			
1500	0.022	ck+A1		
1560	0.024			
1620	0.022			

1680	0.021			
1740	0.024			
1800	0.021			
1860	0.023			0.026333333
1920	0.027			
1980	0.029			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113613
Firmware Version	3.3
Calibration Date	1/15/2015
Test Name	MANUAL_003
Test Start Time	7:33:45 AM
Test Start Date	11/28/2017
Test Length [D:H:M]	0:06:30
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.007
Mass Minimum [mg/m3	0
Mass Maximum [mg/m3	0.016
Mass TWA [mg/m3]	0.006
Photometric User Cal	0.9
Flow User Cal	0
Errors	
Number of Samples	390

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.015			0.0136
120	0.014			
180	0.015			
240	0.014			
300	0.014			
360	0.014			
420	0.013			
480	0.012			
540	0.013			
600	0.012			
660	0.013			
720	0.014			
780	0.014			
840	0.014			
900	0.013			
960	0.012			0.012333333
1020	0.012			
1080	0.012			
1140	0.013			
1200	0.012			
1260	0.013			
1320	0.013			
1380	0.013			
1440	0.013			
1500	0.012			
1560	0.013			
1620	0.012			

1680	0.012			
1740	0.011			
1800	0.012			
1860	0.012			0.012933333
1920	0.012			
1980	0.012			
2040	0.013			
2100	0.014			
2160	0.014			
2220	0.013			
2280	0.013			
2340	0.014			
2400	0.014			
2460	0.013			
2520	0.013			
2580	0.013			
2640	0.012			
2700	0.012			
2760	0.013			0.013333333
2820	0.013			
2880	0.014			
2940	0.013			
3000	0.013			
3060	0.014			
3120	0.013			
3180	0.014			
3240	0.014			
3300	0.014			
3360	0.013			
3420	0.013			
3480	0.013			
3540	0.013			
3600	0.013			
3660	0.013			0.012533333
3720	0.011			
3780	0.013			
3840	0.012			
3900	0.012			
3960	0.012			
4020	0.012			
4080	0.013			
4140	0.012			
4200	0.013			
4260	0.013			
4320	0.013			
4380	0.013			
4440	0.013			

4500	0.013			
4560	0.012			0.0112
4620	0.011			
4680	0.01			
4740	0.01			
4800	0.01			
4860	0.01			
4920	0.01			
4980	0.011			
5040	0.011			
5100	0.012			
5160	0.012			
5220	0.013			
5280	0.012			
5340	0.012			
5400	0.012			
5460	0.013			0.011333333
5520	0.012			
5580	0.012			
5640	0.011			
5700	0.012			
5760	0.01			
5820	0.012			
5880	0.011			
5940	0.011			
6000	0.011			
6060	0.011			
6120	0.011			
6180	0.011			
6240	0.011			
6300	0.011			
6360	0.011			0.011333333
6420	0.011			
6480	0.011			
6540	0.011			
6600	0.011			
6660	0.011			
6720	0.011			
6780	0.01			
6840	0.01			
6900	0.01			
6960	0.013			
7020	0.016			
7080	0.012			
7140	0.011			
7200	0.011			
7260	0.013			0.011333333

7320	0.012			
7380	0.011			
7440	0.011			
7500	0.012			
7560	0.012			
7620	0.011			
7680	0.011			
7740	0.012			
7800	0.011			
7860	0.011			
7920	0.011			
7980	0.011			
8040	0.011			
8100	0.01			
8160	0.01			0.008333333
8220	0.01			
8280	0.009			
8340	0.009			
8400	0.009			
8460	0.008			
8520	0.008			
8580	0.008			
8640	0.008			
8700	0.008			
8760	0.008			
8820	0.007			
8880	0.007			
8940	0.008			
9000	0.008			
9060	0.008			0.007866667
9120	0.008			
9180	0.01			
9240	0.008			
9300	0.008			
9360	0.008			
9420	0.008			
9480	0.008			
9540	0.008			
9600	0.008			
9660	0.007			
9720	0.007			
9780	0.007			
9840	0.007			
9900	0.008			
9960	0.008			0.006533333
10020	0.007			
10080	0.007			

10140	0.007			
10200	0.007			
10260	0.006			
10320	0.006			
10380	0.007			
10440	0.007			
10500	0.006			
10560	0.006			
10620	0.006			
10680	0.006			
10740	0.006			
10800	0.006			
10860	0.006			0.006066667
10920	0.007			
10980	0.006			
11040	0.005			
11100	0.006			
11160	0.006			
11220	0.006			
11280	0.006			
11340	0.006			
11400	0.006			
11460	0.007			
11520	0.007			
11580	0.006			
11640	0.006			
11700	0.005			
11760	0.005			0.005266667
11820	0.007			
11880	0.008			
11940	0.005			
12000	0.006			
12060	0.006			
12120	0.006			
12180	0.005			
12240	0.005			
12300	0.005			
12360	0.006			
12420	0.006			
12480	0.003			
12540	0.003			
12600	0.003			
12660	0.005			0.0052
12720	0.006			
12780	0.006			
12840	0.009			
12900	0.007			

12960	0.006			
13020	0.005			
13080	0.005			
13140	0.005			
13200	0.005			
13260	0.005			
13320	0.003			
13380	0.004			
13440	0.004			
13500	0.003			
13560	0.003			0.004266667
13620	0.003			
13680	0.004			
13740	0.003			
13800	0.005			
13860	0.004			
13920	0.003			
13980	0.002			
14040	0.004			
14100	0.005			
14160	0.005			
14220	0.006			
14280	0.006			
14340	0.007			
14400	0.004			
14460	0.003			0.003
14520	0.003			
14580	0.006			
14640	0.005			
14700	0.003			
14760	0.003			
14820	0.003			
14880	0.002			
14940	0.002			
15000	0.002			
15060	0.002			
15120	0.002			
15180	0.002			
15240	0.003			
15300	0.004			
15360	0.005			0.0044
15420	0.003			
15480	0.004			
15540	0.004			
15600	0.006			
15660	0.004			
15720	0.006			

15780	0.006			
15840	0.005			
15900	0.003			
15960	0.003			
16020	0.004			
16080	0.004			
16140	0.004			
16200	0.005			
16260	0.004			0.0026
16320	0.004			
16380	0.004			
16440	0.003			
16500	0.003			
16560	0.003			
16620	0.003			
16680	0.001			
16740	0.002			
16800	0.002			
16860	0.002			
16920	0.003			
16980	0.003			
17040	0.001			
17100	0.001			
17160	0.002			0.001133333
17220	0.001			
17280	0.002			
17340	0.002			
17400	0.001			
17460	0			
17520	0			
17580	0			
17640	0.001			
17700	0			
17760	0.002			
17820	0.001			
17880	0.001			
17940	0.002			
18000	0.002			
18060	0.002			0.001733333
18120	0.001			
18180	0.001			
18240	0.001			
18300	0.003			
18360	0.002			
18420	0.003			
18480	0.003			
18540	0.002			

18600	0.001			
18660	0.002			
18720	0.002			
18780	0.001			
18840	0.001			
18900	0.001			
18960	0			0.001333333
19020	0			
19080	0.001			
19140	0.001			
19200	0			
19260	0			
19320	0.001			
19380	0.005			
19440	0.003			
19500	0.002			
19560	0.001			
19620	0.001			
19680	0.002			
19740	0.001			
19800	0.002			
19860	0.001			0.0014
19920	0.001			
19980	0.001			
20040	0.001			
20100	0.005			
20160	0.001			
20220	0.002			
20280	0.001			
20340	0.001			
20400	0.001			
20460	0.002			
20520	0.001			
20580	0.001			
20640	0.001			
20700	0.001			
20760	0.001			0.001466667
20820	0.001			
20880	0.001			
20940	0.001			
21000	0.002			
21060	0.001			
21120	0.001			
21180	0.001			
21240	0.001			
21300	0.001			
21360	0.002			

21420	0.002			
21480	0.002			
21540	0.002			
21600	0.003			
21660	0.004			0.003733333
21720	0.005			
21780	0.003			
21840	0.003			
21900	0.002			
21960	0.003			
22020	0.004			
22080	0.004			
22140	0.005			
22200	0.006			
22260	0.004			
22320	0.004			
22380	0.003			
22440	0.004			
22500	0.002			
22560	0.009			0.003333333
22620	0.002			
22680	0.003			
22740	0.003			
22800	0.003			
22860	0.003			
22920	0.003			
22980	0.003			
23040	0.003			
23100	0.003			
23160	0.003			
23220	0.003			
23280	0.003			
23340	0.003			
23400	0.003			

Notes:

All reported units are milligrams per cubic meter (mg/m^3)

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113613
Firmware Version	3.3
Calibration Date	1/15/2015
Test Name	MANUAL_005
Test Start Time	7:30:06 AM
Test Start Date	11/29/2017
Test Length [D:H:M]	0:04:15
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.047
Mass Minimum [mg/m3	0.025
Mass Maximum [mg/m3	0.081
Mass TWA [mg/m3]	0.025
Photometric User Cal	0.9
Flow User Cal	0
Errors	
Number of Samples	255

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors	15 minute TWA
60	0.043			0.049133333
120	0.043			
180	0.05			
240	0.058			
300	0.052			
360	0.048			
420	0.052			
480	0.057			
540	0.049			
600	0.046			
660	0.048			
720	0.047			
780	0.049			
840	0.047			
900	0.048			
960	0.048			0.0552
1020	0.049			
1080	0.05			
1140	0.049			
1200	0.056			
1260	0.065			
1320	0.06			
1380	0.051			
1440	0.052			
1500	0.053			
1560	0.055			
1620	0.061			

1680	0.06			
1740	0.059			
1800	0.06			
1860	0.059			0.0612
1920	0.053			
1980	0.059			
2040	0.074			
2100	0.077			
2160	0.074			
2220	0.073			
2280	0.068			
2340	0.056			
2400	0.051			
2460	0.05			
2520	0.05			
2580	0.052			
2640	0.057			
2700	0.065			
2760	0.06			0.060066667
2820	0.055			
2880	0.061			
2940	0.068			
3000	0.068			
3060	0.067			
3120	0.064			
3180	0.064			
3240	0.058			
3300	0.053			
3360	0.052			
3420	0.053			
3480	0.055			
3540	0.062			
3600	0.061			
3660	0.063			0.057533333
3720	0.063			
3780	0.063			
3840	0.062			
3900	0.054			
3960	0.058			
4020	0.057			
4080	0.058			
4140	0.057			
4200	0.057			
4260	0.053			
4320	0.053			
4380	0.054			
4440	0.056			

4500	0.055			
4560	0.057			0.0522
4620	0.057			
4680	0.052			
4740	0.047			
4800	0.049			
4860	0.053			
4920	0.05			
4980	0.05			
5040	0.047			
5100	0.057			
5160	0.057			
5220	0.051			
5280	0.052			
5340	0.05			
5400	0.054			
5460	0.055			0.054533333
5520	0.054			
5580	0.06			
5640	0.06			
5700	0.062			
5760	0.053			
5820	0.051			
5880	0.053			
5940	0.055			
6000	0.052			
6060	0.056			
6120	0.053			
6180	0.048			
6240	0.05			
6300	0.056			
6360	0.051			0.049933333
6420	0.051			
6480	0.048			
6540	0.047			
6600	0.046			
6660	0.047			
6720	0.051			
6780	0.053			
6840	0.049			
6900	0.05			
6960	0.051			
7020	0.05			
7080	0.051			
7140	0.052			
7200	0.052			
7260	0.049			0.047533333

7320	0.043			
7380	0.042			
7440	0.042			
7500	0.047			
7560	0.048			
7620	0.048			
7680	0.053			
7740	0.053			
7800	0.049			
7860	0.043			
7920	0.045			
7980	0.047			
8040	0.059			
8100	0.045			
8160	0.043			0.047933333
8220	0.042			
8280	0.043			
8340	0.046			
8400	0.081			
8460	0.047			
8520	0.047			
8580	0.046			
8640	0.048			
8700	0.05			
8760	0.048			
8820	0.05			
8880	0.047			
8940	0.044			
9000	0.037			
9060	0.036			0.0422
9120	0.035			
9180	0.034			
9240	0.036			
9300	0.034			
9360	0.042			
9420	0.047			
9480	0.051			
9540	0.055			
9600	0.056			
9660	0.047			
9720	0.043			
9780	0.042			
9840	0.039			
9900	0.036			
9960	0.035			0.039466667
10020	0.036			
10080	0.041			

10140	0.043			
10200	0.044			
10260	0.04			
10320	0.036			
10380	0.035			
10440	0.035			
10500	0.036			
10560	0.038			
10620	0.038			
10680	0.038			
10740	0.044			
10800	0.053			
10860	0.054			0.045133333
10920	0.063			
10980	0.062			
11040	0.057			
11100	0.048			
11160	0.045			
11220	0.04			
11280	0.039			
11340	0.037			
11400	0.036			
11460	0.038			
11520	0.039			
11580	0.04			
11640	0.039			
11700	0.04			
11760	0.042			0.038866667
11820	0.045			
11880	0.039			
11940	0.039			
12000	0.04			
12060	0.039			
12120	0.039			
12180	0.039			
12240	0.042			
12300	0.037			
12360	0.036			
12420	0.037			
12480	0.035			
12540	0.039			
12600	0.035			
12660	0.034			0.032533333
12720	0.034			
12780	0.034			
12840	0.034			
12900	0.032			

12960	0.032			
13020	0.032			
13080	0.032			
13140	0.033			
13200	0.032			
13260	0.032			
13320	0.031			
13380	0.034			
13440	0.031			
13500	0.031			
13560	0.032			0.0334
13620	0.032			
13680	0.033			
13740	0.046			
13800	0.046			
13860	0.036			
13920	0.034			
13980	0.036			
14040	0.034			
14100	0.028			
14160	0.032			
14220	0.028			
14280	0.029			
14340	0.029			
14400	0.026			
14460	0.025			0.0308
14520	0.025			
14580	0.025			
14640	0.026			
14700	0.03			
14760	0.033			
14820	0.031			
14880	0.03			
14940	0.032			
15000	0.039			
15060	0.037			
15120	0.032			
15180	0.033			
15240	0.033			
15300	0.031			

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-920975
Location: Downwind
Data Points: 328 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	10/31/2017 9:34	NC		0		NC	
2	10/31/2017 9:35	NC		0		NC	
3	10/31/2017 9:36	NC		0		NC	
4	10/31/2017 9:37	NC		0		NC	
5	10/31/2017 9:38	NC		0		NC	
6	10/31/2017 9:39	NC		0		NC	
7	10/31/2017 9:40	NC		0.1		NC	
8	10/31/2017 9:41	NC		0		NC	
9	10/31/2017 9:42	NC		0		NC	
10	10/31/2017 9:43	NC		0		NC	
11	10/31/2017 9:44	NC		0		NC	
12	10/31/2017 9:45	NC		0		NC	
13	10/31/2017 9:46	NC		0		NC	
14	10/31/2017 9:47	NC		0		NC	
15	10/31/2017 9:48	NC		0		NC	
16	10/31/2017 9:49	NC		0.1		NC	
17	10/31/2017 9:50	NC		0.1		NC	
18	10/31/2017 9:51	NC		0.1		NC	
19	10/31/2017 9:52	NC		0.1		NC	
20	10/31/2017 9:53	NC		0		NC	
21	10/31/2017 9:54	NC		0		NC	
22	10/31/2017 9:55	NC		0		NC	
23	10/31/2017 9:56	NC		0		NC	
24	10/31/2017 9:57	NC		0		NC	
25	10/31/2017 9:58	NC		0		NC	
26	10/31/2017 9:59	NC		0		NC	
27	10/31/2017 10:00	NC		0		NC	
28	10/31/2017 10:01	NC		0		NC	
29	10/31/2017 10:02	NC		0		NC	
30	10/31/2017 10:03	NC		0		NC	
31	10/31/2017 10:04	NC		0		NC	
32	10/31/2017 10:05	NC		0		NC	
33	10/31/2017 10:06	NC		0		NC	
34	10/31/2017 10:07	NC		0		NC	
35	10/31/2017 10:08	NC		0		NC	
36	10/31/2017 10:09	NC		0		NC	
37	10/31/2017 10:10	NC		0		NC	
38	10/31/2017 10:11	NC		0		NC	
39	10/31/2017 10:12	NC		0		NC	
40	10/31/2017 10:13	NC		0		NC	
41	10/31/2017 10:14	NC		0		NC	

42	10/31/2017 10:15	NC	0	NC
43	10/31/2017 10:16	NC	0	NC
44	10/31/2017 10:17	NC	0	NC
45	10/31/2017 10:18	NC	0	NC
46	10/31/2017 10:19	NC	0	NC
47	10/31/2017 10:20	NC	0	NC
48	10/31/2017 10:21	NC	0	NC
49	10/31/2017 10:22	NC	0	NC
50	10/31/2017 10:23	NC	0	NC
51	10/31/2017 10:24	NC	0	NC
52	10/31/2017 10:25	NC	0	NC
53	10/31/2017 10:26	NC	0	NC
54	10/31/2017 10:27	NC	0	NC
55	10/31/2017 10:28	NC	0	NC
56	10/31/2017 10:29	NC	0.1	NC
57	10/31/2017 10:30	NC	0.1	NC
58	10/31/2017 10:31	NC	0.1	NC
59	10/31/2017 10:32	NC	0.1	NC
60	10/31/2017 10:33	NC	0.1	NC
61	10/31/2017 10:34	NC	0.1	NC
62	10/31/2017 10:35	NC	0.1	NC
63	10/31/2017 10:36	NC	0.1	NC
64	10/31/2017 10:37	NC	0.1	NC
65	10/31/2017 10:38	NC	0.1	NC
66	10/31/2017 10:39	NC	0.1	NC
67	10/31/2017 10:40	NC	0.1	NC
68	10/31/2017 10:41	NC	0.1	NC
69	10/31/2017 10:42	NC	0.1	NC
70	10/31/2017 10:43	NC	0.1	NC
71	10/31/2017 10:44	NC	0.1	NC
72	10/31/2017 10:45	NC	0.1	NC
73	10/31/2017 10:46	NC	0.1	NC
74	10/31/2017 10:47	NC	0.1	NC
75	10/31/2017 10:48	NC	0.1	NC
76	10/31/2017 10:49	NC	0.1	NC
77	10/31/2017 10:50	NC	0.1	NC
78	10/31/2017 10:51	NC	0.1	NC
79	10/31/2017 10:52	NC	0.1	NC
80	10/31/2017 10:53	NC	0.1	NC
81	10/31/2017 10:54	NC	0.1	NC
82	10/31/2017 10:55	NC	0.2	NC
83	10/31/2017 10:56	NC	0.2	NC
84	10/31/2017 10:57	NC	0.1	NC
85	10/31/2017 10:58	NC	0.1	NC
86	10/31/2017 10:59	NC	0.1	NC
87	10/31/2017 11:00	NC	0.1	NC
88	10/31/2017 11:01	NC	0.1	NC
89	10/31/2017 11:02	NC	0.1	NC
90	10/31/2017 11:03	NC	0.1	NC
91	10/31/2017 11:04	NC	0.1	NC
92	10/31/2017 11:05	NC	0.1	NC

93	10/31/2017 11:06	NC	0.1	NC
94	10/31/2017 11:07	NC	0	NC
95	10/31/2017 11:08	NC	0.1	NC
96	10/31/2017 11:09	NC	0.1	NC
97	10/31/2017 11:10	NC	0.1	NC
98	10/31/2017 11:11	NC	0.1	NC
99	10/31/2017 11:12	NC	0	NC
100	10/31/2017 11:13	NC	0	NC
101	10/31/2017 11:14	NC	0	NC
102	10/31/2017 11:15	NC	0	NC
103	10/31/2017 11:16	NC	0	NC
104	10/31/2017 11:17	NC	0	NC
105	10/31/2017 11:18	NC	0.1	NC
106	10/31/2017 11:19	NC	0.1	NC
107	10/31/2017 11:20	NC	0.1	NC
108	10/31/2017 11:21	NC	0.1	NC
109	10/31/2017 11:22	NC	0	NC
110	10/31/2017 11:23	NC	0.1	NC
111	10/31/2017 11:24	NC	0	NC
112	10/31/2017 11:25	NC	0.1	NC
113	10/31/2017 11:26	NC	0	NC
114	10/31/2017 11:27	NC	0.1	NC
115	10/31/2017 11:28	NC	0.1	NC
116	10/31/2017 11:29	NC	0.1	NC
117	10/31/2017 11:30	NC	0	NC
118	10/31/2017 11:31	NC	0.1	NC
119	10/31/2017 11:32	NC	0.1	NC
120	10/31/2017 11:33	NC	0.1	NC
121	10/31/2017 11:34	NC	0.1	NC
122	10/31/2017 11:35	NC	0.1	NC
123	10/31/2017 11:36	NC	0.1	NC
124	10/31/2017 11:37	NC	0	NC
125	10/31/2017 11:38	NC	0	NC
126	10/31/2017 11:39	NC	0	NC
127	10/31/2017 11:40	NC	0	NC
128	10/31/2017 11:41	NC	0	NC
129	10/31/2017 11:42	NC	0	NC
130	10/31/2017 11:43	NC	0	NC
131	10/31/2017 11:44	NC	0	NC
132	10/31/2017 11:45	NC	0	NC
133	10/31/2017 11:46	NC	0	NC
134	10/31/2017 11:47	NC	0	NC
135	10/31/2017 11:48	NC	0	NC
136	10/31/2017 11:49	NC	0	NC
137	10/31/2017 11:50	NC	0.1	NC
138	10/31/2017 11:51	NC	0.1	NC
139	10/31/2017 11:52	NC	0.1	NC
140	10/31/2017 11:53	NC	0	NC
141	10/31/2017 11:54	NC	0.1	NC
142	10/31/2017 11:55	NC	0.1	NC
143	10/31/2017 11:56	NC	0.1	NC

144	10/31/2017 11:57	NC	0	NC
145	10/31/2017 11:58	NC	0	NC
146	10/31/2017 11:59	NC	0	NC
147	10/31/2017 12:00	NC	0	NC
148	10/31/2017 12:01	NC	0	NC
149	10/31/2017 12:02	NC	0	NC
150	10/31/2017 12:03	NC	0	NC
151	10/31/2017 12:04	NC	0	NC
152	10/31/2017 12:05	NC	0	NC
153	10/31/2017 12:06	NC	0.1	NC
154	10/31/2017 12:07	NC	0.1	NC
155	10/31/2017 12:08	NC	0.1	NC
156	10/31/2017 12:09	NC	0.1	NC
157	10/31/2017 12:10	NC	0.1	NC
158	10/31/2017 12:11	NC	0.1	NC
159	10/31/2017 12:12	NC	0.1	NC
160	10/31/2017 12:13	NC	0.1	NC
161	10/31/2017 12:14	NC	0.1	NC
162	10/31/2017 12:15	NC	0.1	NC
163	10/31/2017 12:16	NC	0.1	NC
164	10/31/2017 12:17	NC	0.1	NC
165	10/31/2017 12:18	NC	0.1	NC
166	10/31/2017 12:19	NC	0.1	NC
167	10/31/2017 12:20	NC	0.1	NC
168	10/31/2017 12:21	NC	0.1	NC
169	10/31/2017 12:22	NC	0.1	NC
170	10/31/2017 12:23	NC	0.1	NC
171	10/31/2017 12:24	NC	0.1	NC
172	10/31/2017 12:25	NC	0.1	NC
173	10/31/2017 12:26	NC	0.1	NC
174	10/31/2017 12:27	NC	0.1	NC
175	10/31/2017 12:28	NC	0.1	NC
176	10/31/2017 12:29	NC	0.1	NC
177	10/31/2017 12:30	NC	0.1	NC
178	10/31/2017 12:31	NC	0.1	NC
179	10/31/2017 12:32	NC	0.1	NC
180	10/31/2017 12:33	NC	0.1	NC
181	10/31/2017 12:34	NC	0.1	NC
182	10/31/2017 12:35	NC	0.1	NC
183	10/31/2017 12:36	NC	0	NC
184	10/31/2017 12:37	NC	0	NC
185	10/31/2017 12:38	NC	0.1	NC
186	10/31/2017 12:39	NC	0.1	NC
187	10/31/2017 12:40	NC	0.1	NC
188	10/31/2017 12:41	NC	0.1	NC
189	10/31/2017 12:42	NC	0.1	NC
190	10/31/2017 12:43	NC	0.1	NC
191	10/31/2017 12:44	NC	0.1	NC
192	10/31/2017 12:45	NC	0	NC
193	10/31/2017 12:46	NC	0	NC
194	10/31/2017 12:47	NC	0	NC

195	10/31/2017 12:48	NC	0	NC
196	10/31/2017 12:49	NC	0	NC
197	10/31/2017 12:50	NC	0	NC
198	10/31/2017 12:51	NC	0	NC
199	10/31/2017 12:52	NC	0	NC
200	10/31/2017 12:53	NC	0	NC
201	10/31/2017 12:54	NC	0	NC
202	10/31/2017 12:55	NC	0	NC
203	10/31/2017 12:56	NC	0	NC
204	10/31/2017 12:57	NC	0	NC
205	10/31/2017 12:58	NC	0	NC
206	10/31/2017 12:59	NC	0	NC
207	10/31/2017 13:00	NC	0	NC
208	10/31/2017 13:01	NC	0	NC
209	10/31/2017 13:02	NC	0	NC
210	10/31/2017 13:03	NC	0	NC
211	10/31/2017 13:04	NC	0	NC
212	10/31/2017 13:05	NC	0	NC
213	10/31/2017 13:06	NC	0	NC
214	10/31/2017 13:07	NC	0	NC
215	10/31/2017 13:08	NC	0	NC
216	10/31/2017 13:09	NC	0	NC
217	10/31/2017 13:10	NC	0.1	NC
218	10/31/2017 13:11	NC	0	NC
219	10/31/2017 13:12	NC	0	NC
220	10/31/2017 13:13	NC	0	NC
221	10/31/2017 13:14	NC	0	NC
222	10/31/2017 13:15	NC	0	NC
223	10/31/2017 13:16	NC	0	NC
224	10/31/2017 13:17	NC	0.1	NC
225	10/31/2017 13:18	NC	0.1	NC
226	10/31/2017 13:19	NC	0.1	NC
227	10/31/2017 13:20	NC	0.1	NC
228	10/31/2017 13:21	NC	0.1	NC
229	10/31/2017 13:22	NC	0	NC
230	10/31/2017 13:23	NC	0	NC
231	10/31/2017 13:24	NC	0	NC
232	10/31/2017 13:25	NC	0	NC
233	10/31/2017 13:26	NC	0	NC
234	10/31/2017 13:27	NC	0	NC
235	10/31/2017 13:28	NC	0	NC
236	10/31/2017 13:29	NC	0.1	NC
237	10/31/2017 13:30	NC	0	NC
238	10/31/2017 13:31	NC	0	NC
239	10/31/2017 13:32	NC	0	NC
240	10/31/2017 13:33	NC	0	NC
241	10/31/2017 13:34	NC	0	NC
242	10/31/2017 13:35	NC	0	NC
243	10/31/2017 13:36	NC	0	NC
244	10/31/2017 13:37	NC	0	NC
245	10/31/2017 13:38	NC	0	NC

246	10/31/2017 13:39	NC	0	NC
247	10/31/2017 13:40	NC	0	NC
248	10/31/2017 13:41	NC	0	NC
249	10/31/2017 13:42	NC	0	NC
250	10/31/2017 13:43	NC	0	NC
251	10/31/2017 13:44	NC	0	NC
252	10/31/2017 13:45	NC	0	NC
253	10/31/2017 13:46	NC	0	NC
254	10/31/2017 13:47	NC	0	NC
255	10/31/2017 13:48	NC	0	NC
256	10/31/2017 13:49	NC	0	NC
257	10/31/2017 13:50	NC	0	NC
258	10/31/2017 13:51	NC	0	NC
259	10/31/2017 13:52	NC	0	NC
260	10/31/2017 13:53	NC	0	NC
261	10/31/2017 13:54	NC	0	NC
262	10/31/2017 13:55	NC	0	NC
263	10/31/2017 13:56	NC	0	NC
264	10/31/2017 13:57	NC	0	NC
265	10/31/2017 13:58	NC	0	NC
266	10/31/2017 13:59	NC	0	NC
267	10/31/2017 14:00	NC	0	NC
268	10/31/2017 14:01	NC	0.1	NC
269	10/31/2017 14:02	NC	0.1	NC
270	10/31/2017 14:03	NC	0	NC
271	10/31/2017 14:04	NC	0	NC
272	10/31/2017 14:05	NC	0	NC
273	10/31/2017 14:06	NC	0	NC
274	10/31/2017 14:07	NC	0.1	NC
275	10/31/2017 14:08	NC	0.1	NC
276	10/31/2017 14:09	NC	0	NC
277	10/31/2017 14:10	NC	0	NC
278	10/31/2017 14:11	NC	0	NC
279	10/31/2017 14:12	NC	0	NC
280	10/31/2017 14:13	NC	0.1	NC
281	10/31/2017 14:14	NC	0	NC
282	10/31/2017 14:15	NC	0	NC
283	10/31/2017 14:16	NC	0	NC
284	10/31/2017 14:17	NC	0	NC
285	10/31/2017 14:18	NC	0	NC
286	10/31/2017 14:19	NC	0	NC
287	10/31/2017 14:20	NC	0	NC
288	10/31/2017 14:21	NC	0	NC
289	10/31/2017 14:22	NC	0	NC
290	10/31/2017 14:23	NC	0	NC
291	10/31/2017 14:24	NC	0	NC
292	10/31/2017 14:25	NC	0	NC
293	10/31/2017 14:26	NC	0	NC
294	10/31/2017 14:27	NC	0	NC
295	10/31/2017 14:28	NC	0	NC
296	10/31/2017 14:29	NC	0	NC

297	10/31/2017 14:30	NC	0	NC
298	10/31/2017 14:31	NC	0	NC
299	10/31/2017 14:32	NC	0	NC
300	10/31/2017 14:33	NC	0	NC
301	10/31/2017 14:34	NC	0	NC
302	10/31/2017 14:35	NC	0	NC
303	10/31/2017 14:36	NC	0	NC
304	10/31/2017 14:37	NC	0	NC
305	10/31/2017 14:38	NC	0	NC
306	10/31/2017 14:39	NC	0	NC
307	10/31/2017 14:40	NC	0	NC
308	10/31/2017 14:41	NC	0	NC
309	10/31/2017 14:42	NC	0	NC
310	10/31/2017 14:43	NC	0	NC
311	10/31/2017 14:44	NC	0	NC
312	10/31/2017 14:45	NC	0	NC
313	10/31/2017 14:46	NC	0	NC
314	10/31/2017 14:47	NC	0	NC
315	10/31/2017 14:48	NC	0	NC
316	10/31/2017 14:49	NC	0	NC
317	10/31/2017 14:50	NC	0.1	NC
318	10/31/2017 14:51	NC	0.1	NC
319	10/31/2017 14:52	NC	0.1	NC
320	10/31/2017 14:53	NC	0.1	NC
321	10/31/2017 14:54	NC	0.1	NC
322	10/31/2017 14:55	NC	0	NC
323	10/31/2017 14:56	NC	0.1	NC
324	10/31/2017 14:57	NC	0.1	NC
325	10/31/2017 14:58	NC	0	NC
326	10/31/2017 14:59	NC	0	NC
327	10/31/2017 15:00	NC	0	NC
328	10/31/2017 15:01	NC	0.1	NC

NC = Not Collected

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-920975
Location: Downwind
Data Points: 423 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/1/2017 7:49	NC		0		NC	
2	11/1/2017 7:50	NC		0		NC	
3	11/1/2017 7:51	NC		0		NC	
4	11/1/2017 7:52	NC		0		NC	
5	11/1/2017 7:53	NC		0		NC	
6	11/1/2017 7:54	NC		0		NC	
7	11/1/2017 7:55	NC		0		NC	
8	11/1/2017 7:56	NC		0		NC	
9	11/1/2017 7:57	NC		0		NC	
10	11/1/2017 7:58	NC		0		NC	
11	11/1/2017 7:59	NC		0		NC	
12	11/1/2017 8:00	NC		0		NC	
13	11/1/2017 8:01	NC		0		NC	
14	11/1/2017 8:02	NC		0		NC	
15	11/1/2017 8:03	NC		0		NC	
16	11/1/2017 8:04	NC		0		NC	
17	11/1/2017 8:05	NC		0		NC	
18	11/1/2017 8:06	NC		0		NC	
19	11/1/2017 8:07	NC		0		NC	
20	11/1/2017 8:08	NC		0		NC	
21	11/1/2017 8:09	NC		0		NC	
22	11/1/2017 8:10	NC		0.1		NC	
23	11/1/2017 8:11	NC		0		NC	
24	11/1/2017 8:12	NC		0		NC	
25	11/1/2017 8:13	NC		0		NC	
26	11/1/2017 8:14	NC		0		NC	
27	11/1/2017 8:15	NC		0		NC	
28	11/1/2017 8:16	NC		0.1		NC	
29	11/1/2017 8:17	NC		0		NC	
30	11/1/2017 8:18	NC		0		NC	
31	11/1/2017 8:19	NC		0		NC	
32	11/1/2017 8:20	NC		0.1		NC	
33	11/1/2017 8:21	NC		0.3		NC	
34	11/1/2017 8:22	NC		0		NC	
35	11/1/2017 8:23	NC		0		NC	
36	11/1/2017 8:24	NC		0.1		NC	
37	11/1/2017 8:25	NC		0.1		NC	
38	11/1/2017 8:26	NC		0.2		NC	
39	11/1/2017 8:27	NC		0.2		NC	
40	11/1/2017 8:28	NC		0.2		NC	
41	11/1/2017 8:29	NC		0.4		NC	
42	11/1/2017 8:30	NC		0.1		NC	
43	11/1/2017 8:31	NC		0.2		NC	
44	11/1/2017 8:32	NC		0.8		NC	
45	11/1/2017 8:33	NC		0.4		NC	

46	11/1/2017 8:34	NC	0.5	NC
47	11/1/2017 8:35	NC	0.7	NC
48	11/1/2017 8:36	NC	1.3	NC
49	11/1/2017 8:37	NC	1.4	NC
50	11/1/2017 8:38	NC	1.4	NC
51	11/1/2017 8:39	NC	1	NC
52	11/1/2017 8:40	NC	1.2	NC
53	11/1/2017 8:41	NC	0.8	NC
54	11/1/2017 8:42	NC	0.8	NC
55	11/1/2017 8:43	NC	0.8	NC
56	11/1/2017 8:44	NC	1.1	NC
57	11/1/2017 8:45	NC	1.1	NC
58	11/1/2017 8:46	NC	1	NC
59	11/1/2017 8:47	NC	1.5	NC
60	11/1/2017 8:48	NC	1.8	NC
61	11/1/2017 8:49	NC	1.4	NC
62	11/1/2017 8:50	NC	1.4	NC
63	11/1/2017 8:51	NC	1.6	NC
64	11/1/2017 8:52	NC	1.5	NC
65	11/1/2017 8:53	NC	1.2	NC
66	11/1/2017 8:54	NC	1.3	NC
67	11/1/2017 8:55	NC	1.6	NC
68	11/1/2017 8:56	NC	1.3	NC
69	11/1/2017 8:57	NC	1.5	NC
70	11/1/2017 8:58	NC	1	NC
71	11/1/2017 8:59	NC	1.1	NC
72	11/1/2017 9:00	NC	1.4	NC
73	11/1/2017 9:01	NC	1.1	NC
74	11/1/2017 9:02	NC	1.4	NC
75	11/1/2017 9:03	NC	1.3	NC
76	11/1/2017 9:04	NC	1.2	NC
77	11/1/2017 9:05	NC	1.6	NC
78	11/1/2017 9:06	NC	1.2	NC
79	11/1/2017 9:07	NC	1.4	NC
80	11/1/2017 9:08	NC	1.4	NC
81	11/1/2017 9:09	NC	1.4	NC
82	11/1/2017 9:10	NC	1.6	NC
83	11/1/2017 9:11	NC	1.7	NC
84	11/1/2017 9:12	NC	1.6	NC
85	11/1/2017 9:13	NC	1.8	NC
86	11/1/2017 9:14	NC	2	NC
87	11/1/2017 9:15	NC	2.1	NC
88	11/1/2017 9:16	NC	2.1	NC
89	11/1/2017 9:17	NC	2.4	NC
90	11/1/2017 9:18	NC	2	NC
91	11/1/2017 9:19	NC	2	NC
92	11/1/2017 9:20	NC	2	NC
93	11/1/2017 9:21	NC	1.9	NC
94	11/1/2017 9:22	NC	2	NC
95	11/1/2017 9:23	NC	2	NC
96	11/1/2017 9:24	NC	1.9	NC
97	11/1/2017 9:25	NC	2.2	NC
98	11/1/2017 9:26	NC	1.9	NC
99	11/1/2017 9:27	NC	1.6	NC
100	11/1/2017 9:28	NC	1.7	NC

101	11/1/2017 9:29	NC	1.5	NC
102	11/1/2017 9:30	NC	1.5	NC
103	11/1/2017 9:31	NC	1.4	NC
104	11/1/2017 9:32	NC	1.6	NC
105	11/1/2017 9:33	NC	1.6	NC
106	11/1/2017 9:34	NC	1.3	NC
107	11/1/2017 9:35	NC	1.4	NC
108	11/1/2017 9:36	NC	1.4	NC
109	11/1/2017 9:37	NC	1.3	NC
110	11/1/2017 9:38	NC	1.4	NC
111	11/1/2017 9:39	NC	1.2	NC
112	11/1/2017 9:40	NC	1.3	NC
113	11/1/2017 9:41	NC	1.5	NC
114	11/1/2017 9:42	NC	1.9	NC
115	11/1/2017 9:43	NC	3.6	NC
116	11/1/2017 9:44	NC	4.6	NC
117	11/1/2017 9:45	NC	2.3	NC
118	11/1/2017 9:46	NC	1.9	NC
119	11/1/2017 9:47	NC	1.3	NC
120	11/1/2017 9:48	NC	1.5	NC
121	11/1/2017 9:49	NC	1.5	NC
122	11/1/2017 9:50	NC	1.4	NC
123	11/1/2017 9:51	NC	1.3	NC
124	11/1/2017 9:52	NC	1.4	NC
125	11/1/2017 9:53	NC	2	NC
126	11/1/2017 9:54	NC	1.6	NC
127	11/1/2017 9:55	NC	1.6	NC
128	11/1/2017 9:56	NC	1.4	NC
129	11/1/2017 9:57	NC	1.5	NC
130	11/1/2017 9:58	NC	1.9	NC
131	11/1/2017 9:59	NC	1.7	NC
132	11/1/2017 10:00	NC	1.8	NC
133	11/1/2017 10:01	NC	1.8	NC
134	11/1/2017 10:02	NC	1.8	NC
135	11/1/2017 10:03	NC	1.9	NC
136	11/1/2017 10:04	NC	1.5	NC
137	11/1/2017 10:05	NC	1.6	NC
138	11/1/2017 10:06	NC	1.5	NC
139	11/1/2017 10:07	NC	1.5	NC
140	11/1/2017 10:08	NC	1.7	NC
141	11/1/2017 10:09	NC	1.5	NC
142	11/1/2017 10:10	NC	1.5	NC
143	11/1/2017 10:11	NC	1.5	NC
144	11/1/2017 10:12	NC	1.4	NC
145	11/1/2017 10:13	NC	1.4	NC
146	11/1/2017 10:14	NC	1.4	NC
147	11/1/2017 10:15	NC	1.5	NC
148	11/1/2017 10:16	NC	1.8	NC
149	11/1/2017 10:17	NC	1.7	NC
150	11/1/2017 10:18	NC	1.7	NC
151	11/1/2017 10:19	NC	1.4	NC
152	11/1/2017 10:20	NC	1.7	NC
153	11/1/2017 10:21	NC	1.6	NC
154	11/1/2017 10:22	NC	1.6	NC
155	11/1/2017 10:23	NC	1.9	NC

156	11/1/2017 10:24	NC	1.7	NC
157	11/1/2017 10:25	NC	1.8	NC
158	11/1/2017 10:26	NC	2.5	NC
159	11/1/2017 10:27	NC	1.7	NC
160	11/1/2017 10:28	NC	1.6	NC
161	11/1/2017 10:29	NC	1.5	NC
162	11/1/2017 10:30	NC	1.3	NC
163	11/1/2017 10:31	NC	1.6	NC
164	11/1/2017 10:32	NC	1.4	NC
165	11/1/2017 10:33	NC	1.4	NC
166	11/1/2017 10:34	NC	1.4	NC
167	11/1/2017 10:35	NC	1.3	NC
168	11/1/2017 10:36	NC	1.4	NC
169	11/1/2017 10:37	NC	1.9	NC
170	11/1/2017 10:38	NC	1.6	NC
171	11/1/2017 10:39	NC	1.5	NC
172	11/1/2017 10:40	NC	1.3	NC
173	11/1/2017 10:41	NC	1.1	NC
174	11/1/2017 10:42	NC	1.4	NC
175	11/1/2017 10:43	NC	1.6	NC
176	11/1/2017 10:44	NC	1.3	NC
177	11/1/2017 10:45	NC	1.3	NC
178	11/1/2017 10:46	NC	1.8	NC
179	11/1/2017 10:47	NC	1.6	NC
180	11/1/2017 10:48	NC	1.1	NC
181	11/1/2017 10:49	NC	1	NC
182	11/1/2017 10:50	NC	1	NC
183	11/1/2017 10:51	NC	1.4	NC
184	11/1/2017 10:52	NC	1.3	NC
185	11/1/2017 10:53	NC	1.9	NC
186	11/1/2017 10:54	NC	2.5	NC
187	11/1/2017 10:55	NC	1.8	NC
188	11/1/2017 10:56	NC	1.3	NC
189	11/1/2017 10:57	NC	1.4	NC
190	11/1/2017 10:58	NC	1.1	NC
191	11/1/2017 10:59	NC	1.6	NC
192	11/1/2017 11:00	NC	1.1	NC
193	11/1/2017 11:01	NC	1.2	NC
194	11/1/2017 11:02	NC	0.9	NC
195	11/1/2017 11:03	NC	0.9	NC
196	11/1/2017 11:04	NC	1.3	NC
197	11/1/2017 11:05	NC	1.7	NC
198	11/1/2017 11:06	NC	1.2	NC
199	11/1/2017 11:07	NC	1.1	NC
200	11/1/2017 11:08	NC	1.4	NC
201	11/1/2017 11:09	NC	1.9	NC
202	11/1/2017 11:10	NC	3.2	NC
203	11/1/2017 11:11	NC	1.8	NC
204	11/1/2017 11:12	NC	1.4	NC
205	11/1/2017 11:13	NC	1.4	NC
206	11/1/2017 11:14	NC	1.6	NC
207	11/1/2017 11:15	NC	1.9	NC
208	11/1/2017 11:16	NC	1.7	NC
209	11/1/2017 11:17	NC	1.4	NC
210	11/1/2017 11:18	NC	1.3	NC

211	11/1/2017 11:19	NC	1.4	NC
212	11/1/2017 11:20	NC	1.2	NC
213	11/1/2017 11:21	NC	1.4	NC
214	11/1/2017 11:22	NC	1.2	NC
215	11/1/2017 11:23	NC	1.6	NC
216	11/1/2017 11:24	NC	1.6	NC
217	11/1/2017 11:25	NC	1.2	NC
218	11/1/2017 11:26	NC	1.7	NC
219	11/1/2017 11:27	NC	1.3	NC
220	11/1/2017 11:28	NC	1.2	NC
221	11/1/2017 11:29	NC	1.1	NC
222	11/1/2017 11:30	NC	1.5	NC
223	11/1/2017 11:31	NC	1.1	NC
224	11/1/2017 11:32	NC	1.1	NC
225	11/1/2017 11:33	NC	1.6	NC
226	11/1/2017 11:34	NC	1.4	NC
227	11/1/2017 11:35	NC	1.1	NC
228	11/1/2017 11:36	NC	0.8	NC
229	11/1/2017 11:37	NC	1.3	NC
230	11/1/2017 11:38	NC	1.4	NC
231	11/1/2017 11:39	NC	0.9	NC
232	11/1/2017 11:40	NC	1.4	NC
233	11/1/2017 11:41	NC	0.7	NC
234	11/1/2017 11:42	NC	0.4	NC
235	11/1/2017 11:43	NC	0.4	NC
236	11/1/2017 11:44	NC	0.4	NC
237	11/1/2017 11:45	NC	1.8	NC
238	11/1/2017 11:46	NC	0.9	NC
239	11/1/2017 11:47	NC	0.5	NC
240	11/1/2017 11:48	NC	0.4	NC
241	11/1/2017 11:49	NC	1	NC
242	11/1/2017 11:50	NC	0.5	NC
243	11/1/2017 11:51	NC	0.6	NC
244	11/1/2017 11:52	NC	0	NC
245	11/1/2017 11:53	NC	0.4	NC
246	11/1/2017 11:54	NC	0.7	NC
247	11/1/2017 11:55	NC	0.3	NC
248	11/1/2017 11:56	NC	0.4	NC
249	11/1/2017 11:57	NC	1.2	NC
250	11/1/2017 11:58	NC	2	NC
251	11/1/2017 11:59	NC	0.6	NC
252	11/1/2017 12:00	NC	0.5	NC
253	11/1/2017 12:01	NC	0.1	NC
254	11/1/2017 12:02	NC	0.3	NC
255	11/1/2017 12:03	NC	1	NC
256	11/1/2017 12:04	NC	0.2	NC
257	11/1/2017 12:05	NC	0.6	NC
258	11/1/2017 12:06	NC	0	NC
259	11/1/2017 12:07	NC	0	NC
260	11/1/2017 12:08	NC	0.1	NC
261	11/1/2017 12:09	NC	0.1	NC
262	11/1/2017 12:10	NC	0	NC
263	11/1/2017 12:11	NC	0	NC
264	11/1/2017 12:12	NC	0	NC
265	11/1/2017 12:13	NC	0.3	NC

266	11/1/2017 12:14	NC	0.5	NC
267	11/1/2017 12:15	NC	0	NC
268	11/1/2017 12:16	NC	0	NC
269	11/1/2017 12:17	NC	0.3	NC
270	11/1/2017 12:18	NC	0.7	NC
271	11/1/2017 12:19	NC	0.1	NC
272	11/1/2017 12:20	NC	0.4	NC
273	11/1/2017 12:21	NC	0	NC
274	11/1/2017 12:22	NC	0.2	NC
275	11/1/2017 12:23	NC	0	NC
276	11/1/2017 12:24	NC	0	NC
277	11/1/2017 12:25	NC	0.6	NC
278	11/1/2017 12:26	NC	0.4	NC
279	11/1/2017 12:27	NC	0.4	NC
280	11/1/2017 12:28	NC	0.1	NC
281	11/1/2017 12:29	NC	0	NC
282	11/1/2017 12:30	NC	0.4	NC
283	11/1/2017 12:31	NC	0.3	NC
284	11/1/2017 12:32	NC	0.6	NC
285	11/1/2017 12:33	NC	0.4	NC
286	11/1/2017 12:34	NC	0.5	NC
287	11/1/2017 12:35	NC	0.1	NC
288	11/1/2017 12:36	NC	0	NC
289	11/1/2017 12:37	NC	0	NC
290	11/1/2017 12:38	NC	0	NC
291	11/1/2017 12:39	NC	0	NC
292	11/1/2017 12:40	NC	0	NC
293	11/1/2017 12:41	NC	0	NC
294	11/1/2017 12:42	NC	0	NC
295	11/1/2017 12:43	NC	0.1	NC
296	11/1/2017 12:44	NC	1	NC
297	11/1/2017 12:45	NC	1.5	NC
298	11/1/2017 12:46	NC	1.8	NC
299	11/1/2017 12:47	NC	1.3	NC
300	11/1/2017 12:48	NC	1.1	NC
301	11/1/2017 12:49	NC	0.4	NC
302	11/1/2017 12:50	NC	0.3	NC
303	11/1/2017 12:51	NC	1.1	NC
304	11/1/2017 12:52	NC	0.6	NC
305	11/1/2017 12:53	NC	0.4	NC
306	11/1/2017 12:54	NC	0.5	NC
307	11/1/2017 12:55	NC	1.2	NC
308	11/1/2017 12:56	NC	0.3	NC
309	11/1/2017 12:57	NC	0.3	NC
310	11/1/2017 12:58	NC	0.5	NC
311	11/1/2017 12:59	NC	1.3	NC
312	11/1/2017 13:00	NC	1.4	NC
313	11/1/2017 13:01	NC	0.8	NC
314	11/1/2017 13:02	NC	0.9	NC
315	11/1/2017 13:03	NC	0.9	NC
316	11/1/2017 13:04	NC	0.4	NC
317	11/1/2017 13:05	NC	0.1	NC
318	11/1/2017 13:06	NC	0.2	NC
319	11/1/2017 13:07	NC	0.5	NC
320	11/1/2017 13:08	NC	0.6	NC

321	11/1/2017 13:09	NC	0.3	NC
322	11/1/2017 13:10	NC	0.2	NC
323	11/1/2017 13:11	NC	0.3	NC
324	11/1/2017 13:12	NC	0.5	NC
325	11/1/2017 13:13	NC	1.2	NC
326	11/1/2017 13:14	NC	0.7	NC
327	11/1/2017 13:15	NC	0.6	NC
328	11/1/2017 13:16	NC	0.5	NC
329	11/1/2017 13:17	NC	0.7	NC
330	11/1/2017 13:18	NC	1	NC
331	11/1/2017 13:19	NC	1	NC
332	11/1/2017 13:20	NC	0.4	NC
333	11/1/2017 13:21	NC	0.8	NC
334	11/1/2017 13:22	NC	0.1	NC
335	11/1/2017 13:23	NC	0.5	NC
336	11/1/2017 13:24	NC	0.4	NC
337	11/1/2017 13:25	NC	0.7	NC
338	11/1/2017 13:26	NC	0.3	NC
339	11/1/2017 13:27	NC	0.1	NC
340	11/1/2017 13:28	NC	0	NC
341	11/1/2017 13:29	NC	0.3	NC
342	11/1/2017 13:30	NC	1	NC
343	11/1/2017 13:31	NC	0.2	NC
344	11/1/2017 13:32	NC	0.1	NC
345	11/1/2017 13:33	NC	0.6	NC
346	11/1/2017 13:34	NC	0.9	NC
347	11/1/2017 13:35	NC	0.6	NC
348	11/1/2017 13:36	NC	0.6	NC
349	11/1/2017 13:37	NC	0.3	NC
350	11/1/2017 13:38	NC	0	NC
351	11/1/2017 13:39	NC	0.1	NC
352	11/1/2017 13:40	NC	0	NC
353	11/1/2017 13:41	NC	0	NC
354	11/1/2017 13:42	NC	0.3	NC
355	11/1/2017 13:43	NC	0.4	NC
356	11/1/2017 13:44	NC	0.2	NC
357	11/1/2017 13:45	NC	0.1	NC
358	11/1/2017 13:46	NC	0.2	NC
359	11/1/2017 13:47	NC	0.2	NC
360	11/1/2017 13:48	NC	0.2	NC
361	11/1/2017 13:49	NC	0.3	NC
362	11/1/2017 13:50	NC	0.2	NC
363	11/1/2017 13:51	NC	0.2	NC
364	11/1/2017 13:52	NC	0	NC
365	11/1/2017 13:53	NC	0.1	NC
366	11/1/2017 13:54	NC	0.2	NC
367	11/1/2017 13:55	NC	0.4	NC
368	11/1/2017 13:56	NC	0.2	NC
369	11/1/2017 13:57	NC	0.6	NC
370	11/1/2017 13:58	NC	0.1	NC
371	11/1/2017 13:59	NC	0.4	NC
372	11/1/2017 14:00	NC	0.4	NC
373	11/1/2017 14:01	NC	0.2	NC
374	11/1/2017 14:02	NC	0.6	NC
375	11/1/2017 14:03	NC	0.7	NC

376	11/1/2017 14:04	NC	0.8	NC
377	11/1/2017 14:05	NC	1.3	NC
378	11/1/2017 14:06	NC	1.3	NC
379	11/1/2017 14:07	NC	1.2	NC
380	11/1/2017 14:08	NC	0.4	NC
381	11/1/2017 14:09	NC	0.4	NC
382	11/1/2017 14:10	NC	1	NC
383	11/1/2017 14:11	NC	0.2	NC
384	11/1/2017 14:12	NC	0.1	NC
385	11/1/2017 14:13	NC	0.2	NC
386	11/1/2017 14:14	NC	0.7	NC
387	11/1/2017 14:15	NC	0.4	NC
388	11/1/2017 14:16	NC	0.2	NC
389	11/1/2017 14:17	NC	0.2	NC
390	11/1/2017 14:18	NC	0.3	NC
391	11/1/2017 14:19	NC	0.8	NC
392	11/1/2017 14:20	NC	1	NC
393	11/1/2017 14:21	NC	0.3	NC
394	11/1/2017 14:22	NC	0.5	NC
395	11/1/2017 14:23	NC	0	NC
396	11/1/2017 14:24	NC	0.1	NC
397	11/1/2017 14:25	NC	0.3	NC
398	11/1/2017 14:26	NC	0.5	NC
399	11/1/2017 14:27	NC	0.4	NC
400	11/1/2017 14:28	NC	1	NC
401	11/1/2017 14:29	NC	0.4	NC
402	11/1/2017 14:30	NC	0.6	NC
403	11/1/2017 14:31	NC	0.7	NC
404	11/1/2017 14:32	NC	0.4	NC
405	11/1/2017 14:33	NC	1.2	NC
406	11/1/2017 14:34	NC	0.6	NC
407	11/1/2017 14:35	NC	0	NC
408	11/1/2017 14:36	NC	0.1	NC
409	11/1/2017 14:37	NC	0	NC
410	11/1/2017 14:38	NC	0	NC
411	11/1/2017 14:39	NC	0	NC
412	11/1/2017 14:40	NC	0.1	NC
413	11/1/2017 14:41	NC	0.6	NC
414	11/1/2017 14:42	NC	0.5	NC
415	11/1/2017 14:43	NC	0.2	NC
416	11/1/2017 14:44	NC	0.4	NC
417	11/1/2017 14:45	NC	0	NC
418	11/1/2017 14:46	NC	0	NC
419	11/1/2017 14:47	NC	0.2	NC
420	11/1/2017 14:48	NC	0	NC
421	11/1/2017 14:49	NC	0.1	NC
422	11/1/2017 14:50	NC	0.1	NC
423	11/1/2017 14:51	NC	0	NC

NC = Not Collected

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-920975
Location: Downwind
Data Points: 419 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/2/2017 8:13	NC		0		NC	
2	11/2/2017 8:14	NC		0		NC	
3	11/2/2017 8:15	NC		0		NC	
4	11/2/2017 8:16	NC		0		NC	
5	11/2/2017 8:17	NC		0		NC	
6	11/2/2017 8:18	NC		0		NC	
7	11/2/2017 8:19	NC		0		NC	
8	11/2/2017 8:20	NC		0		NC	
9	11/2/2017 8:21	NC		0		NC	
10	11/2/2017 8:22	NC		0		NC	
11	11/2/2017 8:23	NC		0		NC	
12	11/2/2017 8:24	NC		0		NC	
13	11/2/2017 8:25	NC		0		NC	
14	11/2/2017 8:26	NC		0		NC	
15	11/2/2017 8:27	NC		0		NC	
16	11/2/2017 8:28	NC		0		NC	
17	11/2/2017 8:29	NC		0		NC	
18	11/2/2017 8:30	NC		0		NC	
19	11/2/2017 8:31	NC		0		NC	
20	11/2/2017 8:32	NC		0		NC	
21	11/2/2017 8:33	NC		0		NC	
22	11/2/2017 8:34	NC		0		NC	
23	11/2/2017 8:35	NC		0		NC	
24	11/2/2017 8:36	NC		0		NC	
25	11/2/2017 8:37	NC		0		NC	
26	11/2/2017 8:38	NC		0		NC	
27	11/2/2017 8:39	NC		0		NC	
28	11/2/2017 8:40	NC		0		NC	
29	11/2/2017 8:41	NC		0		NC	
30	11/2/2017 8:42	NC		0		NC	
31	11/2/2017 8:43	NC		0		NC	
32	11/2/2017 8:44	NC		0		NC	
33	11/2/2017 8:45	NC		0		NC	
34	11/2/2017 8:46	NC		0		NC	
35	11/2/2017 8:47	NC		0		NC	
36	11/2/2017 8:48	NC		0		NC	
37	11/2/2017 8:49	NC		0		NC	
38	11/2/2017 8:50	NC		0		NC	
39	11/2/2017 8:51	NC		0		NC	
40	11/2/2017 8:52	NC		0		NC	
41	11/2/2017 8:53	NC		0		NC	
42	11/2/2017 8:54	NC		0		NC	
43	11/2/2017 8:55	NC		0		NC	
44	11/2/2017 8:56	NC		0		NC	
45	11/2/2017 8:57	NC		0		NC	

46	11/2/2017 8:58	NC	0	NC
47	11/2/2017 8:59	NC	0	NC
48	11/2/2017 9:00	NC	0	NC
49	11/2/2017 9:01	NC	0	NC
50	11/2/2017 9:02	NC	0	NC
51	11/2/2017 9:03	NC	0	NC
52	11/2/2017 9:04	NC	0	NC
53	11/2/2017 9:05	NC	0	NC
54	11/2/2017 9:06	NC	0	NC
55	11/2/2017 9:07	NC	0	NC
56	11/2/2017 9:08	NC	0	NC
57	11/2/2017 9:09	NC	0	NC
58	11/2/2017 9:10	NC	0	NC
59	11/2/2017 9:11	NC	0	NC
60	11/2/2017 9:12	NC	0	NC
61	11/2/2017 9:13	NC	0	NC
62	11/2/2017 9:14	NC	0	NC
63	11/2/2017 9:15	NC	0	NC
64	11/2/2017 9:16	NC	0	NC
65	11/2/2017 9:17	NC	0	NC
66	11/2/2017 9:18	NC	0	NC
67	11/2/2017 9:19	NC	0	NC
68	11/2/2017 9:20	NC	0	NC
69	11/2/2017 9:21	NC	0	NC
70	11/2/2017 9:22	NC	0	NC
71	11/2/2017 9:23	NC	0	NC
72	11/2/2017 9:24	NC	0	NC
73	11/2/2017 9:25	NC	0	NC
74	11/2/2017 9:26	NC	0.1	NC
75	11/2/2017 9:27	NC	0	NC
76	11/2/2017 9:28	NC	0	NC
77	11/2/2017 9:29	NC	0	NC
78	11/2/2017 9:30	NC	0	NC
79	11/2/2017 9:31	NC	0	NC
80	11/2/2017 9:32	NC	0	NC
81	11/2/2017 9:33	NC	0	NC
82	11/2/2017 9:34	NC	0	NC
83	11/2/2017 9:35	NC	0	NC
84	11/2/2017 9:36	NC	0	NC
85	11/2/2017 9:37	NC	0	NC
86	11/2/2017 9:38	NC	0	NC
87	11/2/2017 9:39	NC	0	NC
88	11/2/2017 9:40	NC	0	NC
89	11/2/2017 9:41	NC	0	NC
90	11/2/2017 9:42	NC	0	NC
91	11/2/2017 9:43	NC	0	NC
92	11/2/2017 9:44	NC	0.1	NC
93	11/2/2017 9:45	NC	0	NC
94	11/2/2017 9:46	NC	0	NC
95	11/2/2017 9:47	NC	0.1	NC
96	11/2/2017 9:48	NC	0.1	NC
97	11/2/2017 9:49	NC	0.1	NC
98	11/2/2017 9:50	NC	0.3	NC
99	11/2/2017 9:51	NC	0.3	NC
100	11/2/2017 9:52	NC	0.2	NC

101	11/2/2017 9:53	NC	0.3	NC
102	11/2/2017 9:54	NC	0.5	NC
103	11/2/2017 9:55	NC	0.3	NC
104	11/2/2017 9:56	NC	0.1	NC
105	11/2/2017 9:57	NC	0.2	NC
106	11/2/2017 9:58	NC	0.1	NC
107	11/2/2017 9:59	NC	0.1	NC
108	11/2/2017 10:00	NC	0	NC
109	11/2/2017 10:01	NC	0.1	NC
110	11/2/2017 10:02	NC	0.1	NC
111	11/2/2017 10:03	NC	0.2	NC
112	11/2/2017 10:04	NC	0.1	NC
113	11/2/2017 10:05	NC	0.1	NC
114	11/2/2017 10:06	NC	0.2	NC
115	11/2/2017 10:07	NC	0.2	NC
116	11/2/2017 10:08	NC	0.2	NC
117	11/2/2017 10:09	NC	0.1	NC
118	11/2/2017 10:10	NC	0.1	NC
119	11/2/2017 10:11	NC	0.1	NC
120	11/2/2017 10:12	NC	0.1	NC
121	11/2/2017 10:13	NC	0.1	NC
122	11/2/2017 10:14	NC	0.1	NC
123	11/2/2017 10:15	NC	0.1	NC
124	11/2/2017 10:16	NC	0.2	NC
125	11/2/2017 10:17	NC	0.2	NC
126	11/2/2017 10:18	NC	0.2	NC
127	11/2/2017 10:19	NC	0.2	NC
128	11/2/2017 10:20	NC	0.2	NC
129	11/2/2017 10:21	NC	0.2	NC
130	11/2/2017 10:22	NC	0.2	NC
131	11/2/2017 10:23	NC	0.2	NC
132	11/2/2017 10:24	NC	0.2	NC
133	11/2/2017 10:25	NC	0.2	NC
134	11/2/2017 10:26	NC	0.3	NC
135	11/2/2017 10:27	NC	0.3	NC
136	11/2/2017 10:28	NC	0.4	NC
137	11/2/2017 10:29	NC	0.5	NC
138	11/2/2017 10:30	NC	0.4	NC
139	11/2/2017 10:31	NC	0.7	NC
140	11/2/2017 10:32	NC	0.5	NC
141	11/2/2017 10:33	NC	0.5	NC
142	11/2/2017 10:34	NC	0.5	NC
143	11/2/2017 10:35	NC	0.4	NC
144	11/2/2017 10:36	NC	0.6	NC
145	11/2/2017 10:37	NC	0.6	NC
146	11/2/2017 10:38	NC	0.6	NC
147	11/2/2017 10:39	NC	0.6	NC
148	11/2/2017 10:40	NC	0.5	NC
149	11/2/2017 10:41	NC	0.6	NC
150	11/2/2017 10:42	NC	0.6	NC
151	11/2/2017 10:43	NC	0.6	NC
152	11/2/2017 10:44	NC	0.5	NC
153	11/2/2017 10:45	NC	0.5	NC
154	11/2/2017 10:46	NC	0.6	NC
155	11/2/2017 10:47	NC	0.5	NC

156	11/2/2017 10:48	NC	0.6	NC
157	11/2/2017 10:49	NC	0.4	NC
158	11/2/2017 10:50	NC	0.4	NC
159	11/2/2017 10:51	NC	0.4	NC
160	11/2/2017 10:52	NC	0.4	NC
161	11/2/2017 10:53	NC	0.5	NC
162	11/2/2017 10:54	NC	0.4	NC
163	11/2/2017 10:55	NC	0.4	NC
164	11/2/2017 10:56	NC	0.7	NC
165	11/2/2017 10:57	NC	0.6	NC
166	11/2/2017 10:58	NC	0.6	NC
167	11/2/2017 10:59	NC	0.6	NC
168	11/2/2017 11:00	NC	0.6	NC
169	11/2/2017 11:01	NC	0.6	NC
170	11/2/2017 11:02	NC	0.6	NC
171	11/2/2017 11:03	NC	0.7	NC
172	11/2/2017 11:04	NC	0.6	NC
173	11/2/2017 11:05	NC	0.6	NC
174	11/2/2017 11:06	NC	0.6	NC
175	11/2/2017 11:07	NC	0.6	NC
176	11/2/2017 11:08	NC	0.6	NC
177	11/2/2017 11:09	NC	0.6	NC
178	11/2/2017 11:10	NC	0.5	NC
179	11/2/2017 11:11	NC	0.5	NC
180	11/2/2017 11:12	NC	0.6	NC
181	11/2/2017 11:13	NC	0.6	NC
182	11/2/2017 11:14	NC	0.6	NC
183	11/2/2017 11:15	NC	0.5	NC
184	11/2/2017 11:16	NC	0.5	NC
185	11/2/2017 11:17	NC	0.5	NC
186	11/2/2017 11:18	NC	0.6	NC
187	11/2/2017 11:19	NC	0.6	NC
188	11/2/2017 11:20	NC	0.5	NC
189	11/2/2017 11:21	NC	0.5	NC
190	11/2/2017 11:22	NC	0.6	NC
191	11/2/2017 11:23	NC	0.6	NC
192	11/2/2017 11:24	NC	0.6	NC
193	11/2/2017 11:25	NC	0.5	NC
194	11/2/2017 11:26	NC	0.5	NC
195	11/2/2017 11:27	NC	0.6	NC
196	11/2/2017 11:28	NC	0.6	NC
197	11/2/2017 11:29	NC	0.7	NC
198	11/2/2017 11:30	NC	0.7	NC
199	11/2/2017 11:31	NC	0.7	NC
200	11/2/2017 11:32	NC	0.6	NC
201	11/2/2017 11:33	NC	0.5	NC
202	11/2/2017 11:34	NC	0.5	NC
203	11/2/2017 11:35	NC	0.5	NC
204	11/2/2017 11:36	NC	0.5	NC
205	11/2/2017 11:37	NC	0.7	NC
206	11/2/2017 11:38	NC	0.7	NC
207	11/2/2017 11:39	NC	0.8	NC
208	11/2/2017 11:40	NC	0.8	NC
209	11/2/2017 11:41	NC	0.6	NC
210	11/2/2017 11:42	NC	0.6	NC

211	11/2/2017 11:43	NC	0.6	NC
212	11/2/2017 11:44	NC	0.6	NC
213	11/2/2017 11:45	NC	0.7	NC
214	11/2/2017 11:46	NC	0.6	NC
215	11/2/2017 11:47	NC	0.6	NC
216	11/2/2017 11:48	NC	0.8	NC
217	11/2/2017 11:49	NC	0.8	NC
218	11/2/2017 11:50	NC	0.7	NC
219	11/2/2017 11:51	NC	0.8	NC
220	11/2/2017 11:52	NC	0.8	NC
221	11/2/2017 11:53	NC	0.7	NC
222	11/2/2017 11:54	NC	0.7	NC
223	11/2/2017 11:55	NC	0.8	NC
224	11/2/2017 11:56	NC	0.7	NC
225	11/2/2017 11:57	NC	0.6	NC
226	11/2/2017 11:58	NC	4.1	NC
227	11/2/2017 11:59	NC	1.6	NC
228	11/2/2017 12:00	NC	1.2	NC
229	11/2/2017 12:01	NC	0.9	NC
230	11/2/2017 12:02	NC	1.1	NC
231	11/2/2017 12:03	NC	1	NC
232	11/2/2017 12:04	NC	0.8	NC
233	11/2/2017 12:05	NC	1	NC
234	11/2/2017 12:06	NC	0.9	NC
235	11/2/2017 12:07	NC	0.8	NC
236	11/2/2017 12:08	NC	0.8	NC
237	11/2/2017 12:09	NC	1.2	NC
238	11/2/2017 12:10	NC	1.1	NC
239	11/2/2017 12:11	NC	1.2	NC
240	11/2/2017 12:12	NC	1	NC
241	11/2/2017 12:13	NC	0.9	NC
242	11/2/2017 12:14	NC	0.8	NC
243	11/2/2017 12:15	NC	0.7	NC
244	11/2/2017 12:16	NC	0.5	NC
245	11/2/2017 12:17	NC	0.5	NC
246	11/2/2017 12:18	NC	0.5	NC
247	11/2/2017 12:19	NC	0.6	NC
248	11/2/2017 12:20	NC	0.5	NC
249	11/2/2017 12:21	NC	0.7	NC
250	11/2/2017 12:22	NC	0.6	NC
251	11/2/2017 12:23	NC	0.6	NC
252	11/2/2017 12:24	NC	0.6	NC
253	11/2/2017 12:25	NC	0.8	NC
254	11/2/2017 12:26	NC	0.8	NC
255	11/2/2017 12:27	NC	0.6	NC
256	11/2/2017 12:28	NC	0.5	NC
257	11/2/2017 12:29	NC	0.6	NC
258	11/2/2017 12:30	NC	0.5	NC
259	11/2/2017 12:31	NC	0.5	NC
260	11/2/2017 12:32	NC	0.4	NC
261	11/2/2017 12:33	NC	0.5	NC
262	11/2/2017 12:34	NC	0.3	NC
263	11/2/2017 12:35	NC	0.3	NC
264	11/2/2017 12:36	NC	0.4	NC
265	11/2/2017 12:37	NC	0.2	NC

266	11/2/2017 12:38	NC	0.3	NC
267	11/2/2017 12:39	NC	0.4	NC
268	11/2/2017 12:40	NC	0.3	NC
269	11/2/2017 12:41	NC	0.4	NC
270	11/2/2017 12:42	NC	0.4	NC
271	11/2/2017 12:43	NC	0.4	NC
272	11/2/2017 12:44	NC	0.4	NC
273	11/2/2017 12:45	NC	0.4	NC
274	11/2/2017 12:46	NC	0.3	NC
275	11/2/2017 12:47	NC	0.3	NC
276	11/2/2017 12:48	NC	0.4	NC
277	11/2/2017 12:49	NC	0.2	NC
278	11/2/2017 12:50	NC	0.3	NC
279	11/2/2017 12:51	NC	0.3	NC
280	11/2/2017 12:52	NC	0.3	NC
281	11/2/2017 12:53	NC	0.3	NC
282	11/2/2017 12:54	NC	0.4	NC
283	11/2/2017 12:55	NC	0.5	NC
284	11/2/2017 12:56	NC	0.4	NC
285	11/2/2017 12:57	NC	0.3	NC
286	11/2/2017 12:58	NC	0.3	NC
287	11/2/2017 12:59	NC	0.3	NC
288	11/2/2017 13:00	NC	0.3	NC
289	11/2/2017 13:01	NC	0.4	NC
290	11/2/2017 13:02	NC	0.4	NC
291	11/2/2017 13:03	NC	0.3	NC
292	11/2/2017 13:04	NC	0.4	NC
293	11/2/2017 13:05	NC	0.6	NC
294	11/2/2017 13:06	NC	0.5	NC
295	11/2/2017 13:07	NC	0.4	NC
296	11/2/2017 13:08	NC	0.6	NC
297	11/2/2017 13:09	NC	0.7	NC
298	11/2/2017 13:10	NC	0.6	NC
299	11/2/2017 13:11	NC	0.5	NC
300	11/2/2017 13:12	NC	0.4	NC
301	11/2/2017 13:13	NC	0.3	NC
302	11/2/2017 13:14	NC	0.3	NC
303	11/2/2017 13:15	NC	0.5	NC
304	11/2/2017 13:16	NC	0.8	NC
305	11/2/2017 13:17	NC	0.5	NC
306	11/2/2017 13:18	NC	0.4	NC
307	11/2/2017 13:19	NC	0.3	NC
308	11/2/2017 13:20	NC	0.4	NC
309	11/2/2017 13:21	NC	0.3	NC
310	11/2/2017 13:22	NC	0.3	NC
311	11/2/2017 13:23	NC	0.5	NC
312	11/2/2017 13:24	NC	0.6	NC
313	11/2/2017 13:25	NC	0.5	NC
314	11/2/2017 13:26	NC	0.3	NC
315	11/2/2017 13:27	NC	0.3	NC
316	11/2/2017 13:28	NC	0.3	NC
317	11/2/2017 13:29	NC	0.4	NC
318	11/2/2017 13:30	NC	0.3	NC
319	11/2/2017 13:31	NC	0.3	NC
320	11/2/2017 13:32	NC	0.3	NC

321	11/2/2017 13:33	NC	0.3	NC
322	11/2/2017 13:34	NC	0.4	NC
323	11/2/2017 13:35	NC	0.6	NC
324	11/2/2017 13:36	NC	0.5	NC
325	11/2/2017 13:37	NC	0.4	NC
326	11/2/2017 13:38	NC	0.6	NC
327	11/2/2017 13:39	NC	0.6	NC
328	11/2/2017 13:40	NC	0.5	NC
329	11/2/2017 13:41	NC	0.4	NC
330	11/2/2017 13:42	NC	1	NC
331	11/2/2017 13:43	NC	0.7	NC
332	11/2/2017 13:44	NC	0.5	NC
333	11/2/2017 13:45	NC	0.4	NC
334	11/2/2017 13:46	NC	0.3	NC
335	11/2/2017 13:47	NC	0.5	NC
336	11/2/2017 13:48	NC	0.4	NC
337	11/2/2017 13:49	NC	0.5	NC
338	11/2/2017 13:50	NC	2.2	NC
339	11/2/2017 13:51	NC	0.6	NC
340	11/2/2017 13:52	NC	1.9	NC
341	11/2/2017 13:53	NC	0.6	NC
342	11/2/2017 13:54	NC	0.7	NC
343	11/2/2017 13:55	NC	0.5	NC
344	11/2/2017 13:56	NC	0.5	NC
345	11/2/2017 13:57	NC	0.5	NC
346	11/2/2017 13:58	NC	0.5	NC
347	11/2/2017 13:59	NC	0.6	NC
348	11/2/2017 14:00	NC	0.6	NC
349	11/2/2017 14:01	NC	0.6	NC
350	11/2/2017 14:02	NC	0.6	NC
351	11/2/2017 14:03	NC	0.6	NC
352	11/2/2017 14:04	NC	0.6	NC
353	11/2/2017 14:05	NC	0.4	NC
354	11/2/2017 14:06	NC	0.6	NC
355	11/2/2017 14:07	NC	0.6	NC
356	11/2/2017 14:08	NC	0.5	NC
357	11/2/2017 14:09	NC	0.5	NC
358	11/2/2017 14:10	NC	0.5	NC
359	11/2/2017 14:11	NC	0.5	NC
360	11/2/2017 14:12	NC	0.6	NC
361	11/2/2017 14:13	NC	0.7	NC
362	11/2/2017 14:14	NC	0.7	NC
363	11/2/2017 14:15	NC	0.8	NC
364	11/2/2017 14:16	NC	0.8	NC
365	11/2/2017 14:17	NC	0.6	NC
366	11/2/2017 14:18	NC	0.5	NC
367	11/2/2017 14:19	NC	0.5	NC
368	11/2/2017 14:20	NC	0.6	NC
369	11/2/2017 14:21	NC	0.8	NC
370	11/2/2017 14:22	NC	0.6	NC
371	11/2/2017 14:23	NC	0.5	NC
372	11/2/2017 14:24	NC	0.6	NC
373	11/2/2017 14:25	NC	0.6	NC
374	11/2/2017 14:26	NC	0.5	NC
375	11/2/2017 14:27	NC	0.5	NC

376	11/2/2017 14:28	NC	0.4	NC
377	11/2/2017 14:29	NC	0.4	NC
378	11/2/2017 14:30	NC	0.4	NC
379	11/2/2017 14:31	NC	1	NC
380	11/2/2017 14:32	NC	1.3	NC
381	11/2/2017 14:33	NC	0.6	NC
382	11/2/2017 14:34	NC	0.3	NC
383	11/2/2017 14:35	NC	0.3	NC
384	11/2/2017 14:36	NC	0.2	NC
385	11/2/2017 14:37	NC	0.3	NC
386	11/2/2017 14:38	NC	0.3	NC
387	11/2/2017 14:39	NC	0.4	NC
388	11/2/2017 14:40	NC	0.5	NC
389	11/2/2017 14:41	NC	0.3	NC
390	11/2/2017 14:42	NC	0.4	NC
391	11/2/2017 14:43	NC	0.4	NC
392	11/2/2017 14:44	NC	0.4	NC
393	11/2/2017 14:45	NC	0.3	NC
394	11/2/2017 14:46	NC	0.3	NC
395	11/2/2017 14:47	NC	0.2	NC
396	11/2/2017 14:48	NC	0.2	NC
397	11/2/2017 14:49	NC	0.1	NC
398	11/2/2017 14:50	NC	0.2	NC
399	11/2/2017 14:51	NC	0.1	NC
400	11/2/2017 14:52	NC	0.2	NC
401	11/2/2017 14:53	NC	0.1	NC
402	11/2/2017 14:54	NC	0.1	NC
403	11/2/2017 14:55	NC	0.2	NC
404	11/2/2017 14:56	NC	0.1	NC
405	11/2/2017 14:57	NC	0.1	NC
406	11/2/2017 14:58	NC	0.1	NC
407	11/2/2017 14:59	NC	0	NC
408	11/2/2017 15:00	NC	0.1	NC
409	11/2/2017 15:01	NC	0.1	NC
410	11/2/2017 15:02	NC	0	NC
411	11/2/2017 15:03	NC	0.2	NC
412	11/2/2017 15:04	NC	0.1	NC
413	11/2/2017 15:05	NC	0	NC
414	11/2/2017 15:06	NC	0	NC
415	11/2/2017 15:07	NC	0.1	NC
416	11/2/2017 15:08	NC	0	NC
417	11/2/2017 15:09	NC	0	NC
418	11/2/2017 15:10	NC	0.2	NC
419	11/2/2017 15:11	NC	0.2	NC

NC = Not Collected

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-920975
Location: Downwind
Data Points: 225 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/3/2017 7:57	NC		0		NC	
2	11/3/2017 7:58	NC		0		NC	
3	11/3/2017 7:59	NC		0.2		NC	
4	11/3/2017 8:00	NC		0		NC	
5	11/3/2017 8:01	NC		0		NC	
6	11/3/2017 8:02	NC		0		NC	
7	11/3/2017 8:03	NC		0		NC	
8	11/3/2017 8:04	NC		0		NC	
9	11/3/2017 8:05	NC		0		NC	
10	11/3/2017 8:06	NC		0		NC	
11	11/3/2017 8:07	NC		0		NC	
12	11/3/2017 8:08	NC		0.1		NC	
13	11/3/2017 8:09	NC		0		NC	
14	11/3/2017 8:10	NC		0		NC	
15	11/3/2017 8:11	NC		0		NC	
16	11/3/2017 8:12	NC		0		NC	
17	11/3/2017 8:13	NC		0		NC	
18	11/3/2017 8:14	NC		0		NC	
19	11/3/2017 8:15	NC		0		NC	
20	11/3/2017 8:16	NC		0		NC	
21	11/3/2017 8:17	NC		0		NC	
22	11/3/2017 8:18	NC		0		NC	
23	11/3/2017 8:19	NC		0		NC	
24	11/3/2017 8:20	NC		0		NC	
25	11/3/2017 8:21	NC		0		NC	
26	11/3/2017 8:22	NC		0		NC	
27	11/3/2017 8:23	NC		0		NC	
28	11/3/2017 8:24	NC		0		NC	
29	11/3/2017 8:25	NC		0		NC	
30	11/3/2017 8:26	NC		0		NC	
31	11/3/2017 8:27	NC		0		NC	
32	11/3/2017 8:28	NC		0		NC	
33	11/3/2017 8:29	NC		0		NC	
34	11/3/2017 8:30	NC		0		NC	
35	11/3/2017 8:31	NC		0		NC	
36	11/3/2017 8:32	NC		0		NC	
37	11/3/2017 8:33	NC		0		NC	
38	11/3/2017 8:34	NC		0		NC	
39	11/3/2017 8:35	NC		0		NC	
40	11/3/2017 8:36	NC		0		NC	
41	11/3/2017 8:37	NC		0		NC	
42	11/3/2017 8:38	NC		0		NC	
43	11/3/2017 8:39	NC		0		NC	
44	11/3/2017 8:40	NC		0		NC	
45	11/3/2017 8:41	NC		0		NC	

46	11/3/2017 8:42	NC	0	NC
47	11/3/2017 8:43	NC	0	NC
48	11/3/2017 8:44	NC	0	NC
49	11/3/2017 8:45	NC	0	NC
50	11/3/2017 8:46	NC	0	NC
51	11/3/2017 8:47	NC	0	NC
52	11/3/2017 8:48	NC	0	NC
53	11/3/2017 8:49	NC	0	NC
54	11/3/2017 8:50	NC	0	NC
55	11/3/2017 8:51	NC	0	NC
56	11/3/2017 8:52	NC	0	NC
57	11/3/2017 8:53	NC	0	NC
58	11/3/2017 8:54	NC	0	NC
59	11/3/2017 8:55	NC	0	NC
60	11/3/2017 8:56	NC	0	NC
61	11/3/2017 8:57	NC	0	NC
62	11/3/2017 8:58	NC	0	NC
63	11/3/2017 8:59	NC	0	NC
64	11/3/2017 9:00	NC	0	NC
65	11/3/2017 9:01	NC	0	NC
66	11/3/2017 9:02	NC	0	NC
67	11/3/2017 9:03	NC	0	NC
68	11/3/2017 9:04	NC	0	NC
69	11/3/2017 9:05	NC	0	NC
70	11/3/2017 9:06	NC	0	NC
71	11/3/2017 9:07	NC	0	NC
72	11/3/2017 9:08	NC	0	NC
73	11/3/2017 9:09	NC	0	NC
74	11/3/2017 9:10	NC	0	NC
75	11/3/2017 9:11	NC	0	NC
76	11/3/2017 9:12	NC	0	NC
77	11/3/2017 9:13	NC	0	NC
78	11/3/2017 9:14	NC	0	NC
79	11/3/2017 9:15	NC	0	NC
80	11/3/2017 9:16	NC	0	NC
81	11/3/2017 9:17	NC	0	NC
82	11/3/2017 9:18	NC	0	NC
83	11/3/2017 9:19	NC	0	NC
84	11/3/2017 9:20	NC	0	NC
85	11/3/2017 9:21	NC	0	NC
86	11/3/2017 9:22	NC	0	NC
87	11/3/2017 9:23	NC	0	NC
88	11/3/2017 9:24	NC	0	NC
89	11/3/2017 9:25	NC	0	NC
90	11/3/2017 9:26	NC	0	NC
91	11/3/2017 9:27	NC	0	NC
92	11/3/2017 9:28	NC	0	NC
93	11/3/2017 9:29	NC	0	NC
94	11/3/2017 9:30	NC	0	NC
95	11/3/2017 9:31	NC	0	NC
96	11/3/2017 9:32	NC	0	NC
97	11/3/2017 9:33	NC	0	NC
98	11/3/2017 9:34	NC	0	NC
99	11/3/2017 9:35	NC	0	NC
100	11/3/2017 9:36	NC	0	NC

101	11/3/2017 9:37	NC	0	NC
102	11/3/2017 9:38	NC	0	NC
103	11/3/2017 9:39	NC	0	NC
104	11/3/2017 9:40	NC	0	NC
105	11/3/2017 9:41	NC	0	NC
106	11/3/2017 9:42	NC	0	NC
107	11/3/2017 9:43	NC	0	NC
108	11/3/2017 9:44	NC	0	NC
109	11/3/2017 9:45	NC	0	NC
110	11/3/2017 9:46	NC	0	NC
111	11/3/2017 9:47	NC	0	NC
112	11/3/2017 9:48	NC	0	NC
113	11/3/2017 9:49	NC	0	NC
114	11/3/2017 9:50	NC	0	NC
115	11/3/2017 9:51	NC	0	NC
116	11/3/2017 9:52	NC	0	NC
117	11/3/2017 9:53	NC	0	NC
118	11/3/2017 9:54	NC	0	NC
119	11/3/2017 9:55	NC	0	NC
120	11/3/2017 9:56	NC	0	NC
121	11/3/2017 9:57	NC	0	NC
122	11/3/2017 9:58	NC	0	NC
123	11/3/2017 9:59	NC	0	NC
124	11/3/2017 10:00	NC	0	NC
125	11/3/2017 10:01	NC	0.1	NC
126	11/3/2017 10:02	NC	0.1	NC
127	11/3/2017 10:03	NC	0.2	NC
128	11/3/2017 10:04	NC	0.1	NC
129	11/3/2017 10:05	NC	0.1	NC
130	11/3/2017 10:06	NC	0.1	NC
131	11/3/2017 10:07	NC	0.1	NC
132	11/3/2017 10:08	NC	0.1	NC
133	11/3/2017 10:09	NC	0.2	NC
134	11/3/2017 10:10	NC	0.2	NC
135	11/3/2017 10:11	NC	0.2	NC
136	11/3/2017 10:12	NC	0.2	NC
137	11/3/2017 10:13	NC	0.1	NC
138	11/3/2017 10:14	NC	0.1	NC
139	11/3/2017 10:15	NC	0.2	NC
140	11/3/2017 10:16	NC	0.3	NC
141	11/3/2017 10:17	NC	0.2	NC
142	11/3/2017 10:18	NC	0.8	NC
143	11/3/2017 10:19	NC	0.6	NC
144	11/3/2017 10:20	NC	0.4	NC
145	11/3/2017 10:21	NC	0.5	NC
146	11/3/2017 10:22	NC	0.5	NC
147	11/3/2017 10:23	NC	0.4	NC
148	11/3/2017 10:24	NC	0.3	NC
149	11/3/2017 10:25	NC	0.5	NC
150	11/3/2017 10:26	NC	0.6	NC
151	11/3/2017 10:27	NC	0.8	NC
152	11/3/2017 10:28	NC	1.2	NC
153	11/3/2017 10:29	NC	1.1	NC
154	11/3/2017 10:30	NC	0.9	NC
155	11/3/2017 10:31	NC	1.4	NC

156	11/3/2017 10:32	NC	1.6	NC
157	11/3/2017 10:33	NC	1.9	NC
158	11/3/2017 10:34	NC	1.6	NC
159	11/3/2017 10:35	NC	2	NC
160	11/3/2017 10:36	NC	1.9	NC
161	11/3/2017 10:37	NC	2.2	NC
162	11/3/2017 10:38	NC	2.7	NC
163	11/3/2017 10:39	NC	2.2	NC
164	11/3/2017 10:40	NC	1.8	NC
165	11/3/2017 10:41	NC	1.8	NC
166	11/3/2017 10:42	NC	2.2	NC
167	11/3/2017 10:43	NC	2.1	NC
168	11/3/2017 10:44	NC	2	NC
169	11/3/2017 10:45	NC	2.2	NC
170	11/3/2017 10:46	NC	2.2	NC
171	11/3/2017 10:47	NC	1.7	NC
172	11/3/2017 10:48	NC	1.4	NC
173	11/3/2017 10:49	NC	1.4	NC
174	11/3/2017 10:50	NC	1.2	NC
175	11/3/2017 10:51	NC	1.4	NC
176	11/3/2017 10:52	NC	1.8	NC
177	11/3/2017 10:53	NC	2.5	NC
178	11/3/2017 10:54	NC	2.5	NC
179	11/3/2017 10:55	NC	2	NC
180	11/3/2017 10:56	NC	1.6	NC
181	11/3/2017 10:57	NC	1.8	NC
182	11/3/2017 10:58	NC	1.5	NC
183	11/3/2017 10:59	NC	2.1	NC
184	11/3/2017 11:00	NC	1.9	NC
185	11/3/2017 11:01	NC	1.4	NC
186	11/3/2017 11:02	NC	1.7	NC
187	11/3/2017 11:03	NC	2	NC
188	11/3/2017 11:04	NC	2	NC
189	11/3/2017 11:05	NC	2.1	NC
190	11/3/2017 11:06	NC	2	NC
191	11/3/2017 11:07	NC	1.8	NC
192	11/3/2017 11:08	NC	1.2	NC
193	11/3/2017 11:09	NC	0.8	NC
194	11/3/2017 11:10	NC	0.7	NC
195	11/3/2017 11:11	NC	1.6	NC
196	11/3/2017 11:12	NC	1.8	NC
197	11/3/2017 11:13	NC	1.8	NC
198	11/3/2017 11:14	NC	1.1	NC
199	11/3/2017 11:15	NC	0.8	NC
200	11/3/2017 11:16	NC	0.7	NC
201	11/3/2017 11:17	NC	0.8	NC
202	11/3/2017 11:18	NC	0.6	NC
203	11/3/2017 11:19	NC	0.5	NC
204	11/3/2017 11:20	NC	0.6	NC
205	11/3/2017 11:21	NC	0.6	NC
206	11/3/2017 11:22	NC	0.8	NC
207	11/3/2017 11:23	NC	1.3	NC
208	11/3/2017 11:24	NC	1.4	NC
209	11/3/2017 11:25	NC	1.7	NC
210	11/3/2017 11:26	NC	2	NC

211	11/3/2017 11:27	NC	2	NC
212	11/3/2017 11:28	NC	1.6	NC
213	11/3/2017 11:29	NC	1.1	NC
214	11/3/2017 11:30	NC	0.6	NC
215	11/3/2017 11:31	NC	0.7	NC
216	11/3/2017 11:32	NC	0.8	NC
217	11/3/2017 11:33	NC	1	NC
218	11/3/2017 11:34	NC	0.5	NC
219	11/3/2017 11:35	NC	0.5	NC
220	11/3/2017 11:36	NC	0.5	NC
221	11/3/2017 11:37	NC	0.3	NC
222	11/3/2017 11:38	NC	0.3	NC
223	11/3/2017 11:39	NC	0.4	NC
224	11/3/2017 11:40	NC	0.5	NC
225	11/3/2017 11:41	NC	0.5	NC

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-920975
Location: Downwind
Data Points: 409 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/6/2017 8:54	NC		0		NC	
2	11/6/2017 8:55	NC		0		NC	
3	11/6/2017 8:56	NC		0		NC	
4	11/6/2017 8:57	NC		0		NC	
5	11/6/2017 8:58	NC		0		NC	
6	11/6/2017 8:59	NC		0.5		NC	
7	11/6/2017 9:00	NC		0		NC	
8	11/6/2017 9:01	NC		0		NC	
9	11/6/2017 9:02	NC		0		NC	
10	11/6/2017 9:03	NC		2.2		NC	
11	11/6/2017 9:04	NC		0.2		NC	
12	11/6/2017 9:05	NC		0		NC	
13	11/6/2017 9:06	NC		0		NC	
14	11/6/2017 9:07	NC		1.2		NC	
15	11/6/2017 9:08	NC		0.3		NC	
16	11/6/2017 9:09	NC		0.2		NC	
17	11/6/2017 9:10	NC		0		NC	
18	11/6/2017 9:11	NC		0.1		NC	
19	11/6/2017 9:12	NC		0		NC	
20	11/6/2017 9:13	NC		0		NC	
21	11/6/2017 9:14	NC		0		NC	
22	11/6/2017 9:15	NC		0.9		NC	
23	11/6/2017 9:16	NC		0.3		NC	
24	11/6/2017 9:17	NC		0.3		NC	
25	11/6/2017 9:18	NC		0		NC	
26	11/6/2017 9:19	NC		0		NC	
27	11/6/2017 9:20	NC		0		NC	
28	11/6/2017 9:21	NC		0.1		NC	
29	11/6/2017 9:22	NC		1.2		NC	
30	11/6/2017 9:23	NC		0.8		NC	
31	11/6/2017 9:24	NC		0.2		NC	
32	11/6/2017 9:25	NC		0.1		NC	
33	11/6/2017 9:26	NC		0.2		NC	
34	11/6/2017 9:27	NC		0.7		NC	
35	11/6/2017 9:28	NC		0		NC	
36	11/6/2017 9:29	NC		0		NC	
37	11/6/2017 9:30	NC		0.1		NC	
38	11/6/2017 9:31	NC		0		NC	
39	11/6/2017 9:32	NC		0.1		NC	
40	11/6/2017 9:33	NC		0.1		NC	
41	11/6/2017 9:34	NC		0.1		NC	
42	11/6/2017 9:35	NC		0.1		NC	
43	11/6/2017 9:36	NC		0		NC	
44	11/6/2017 9:37	NC		0.1		NC	
45	11/6/2017 9:38	NC		0		NC	
46	11/6/2017 9:39	NC		0		NC	

47	11/6/2017 9:40	NC	0.1	NC
48	11/6/2017 9:41	NC	0	NC
49	11/6/2017 9:42	NC	0	NC
50	11/6/2017 9:43	NC	0	NC
51	11/6/2017 9:44	NC	0	NC
52	11/6/2017 9:45	NC	0	NC
53	11/6/2017 9:46	NC	0	NC
54	11/6/2017 9:47	NC	0	NC
55	11/6/2017 9:48	NC	0	NC
56	11/6/2017 9:49	NC	0	NC
57	11/6/2017 9:50	NC	0	NC
58	11/6/2017 9:51	NC	0	NC
59	11/6/2017 9:52	NC	0	NC
60	11/6/2017 9:53	NC	0	NC
61	11/6/2017 9:54	NC	0	NC
62	11/6/2017 9:55	NC	0	NC
63	11/6/2017 9:56	NC	0	NC
64	11/6/2017 9:57	NC	0	NC
65	11/6/2017 9:58	NC	0	NC
66	11/6/2017 9:59	NC	70.2	NC
67	11/6/2017 10:00	NC	4.1	NC
68	11/6/2017 10:01	NC	2.5	NC
69	11/6/2017 10:02	NC	2.1	NC
70	11/6/2017 10:03	NC	2	NC
71	11/6/2017 10:04	NC	2.1	NC
72	11/6/2017 10:05	NC	2.1	NC
73	11/6/2017 10:06	NC	2.2	NC
74	11/6/2017 10:07	NC	2.2	NC
75	11/6/2017 10:08	NC	2.3	NC
76	11/6/2017 10:09	NC	2.2	NC
77	11/6/2017 10:10	NC	2.1	NC
78	11/6/2017 10:11	NC	2	NC
79	11/6/2017 10:12	NC	2	NC
80	11/6/2017 10:13	NC	1.9	NC
81	11/6/2017 10:14	NC	2.1	NC
82	11/6/2017 10:15	NC	2.2	NC
83	11/6/2017 10:16	NC	2	NC
84	11/6/2017 10:17	NC	1.9	NC
85	11/6/2017 10:18	NC	2	NC
86	11/6/2017 10:19	NC	1.9	NC
87	11/6/2017 10:20	NC	1.8	NC
88	11/6/2017 10:21	NC	1.8	NC
89	11/6/2017 10:22	NC	1.9	NC
90	11/6/2017 10:23	NC	1.8	NC
91	11/6/2017 10:24	NC	1.8	NC
92	11/6/2017 10:25	NC	1.8	NC
93	11/6/2017 10:26	NC	1.8	NC
94	11/6/2017 10:27	NC	1.7	NC
95	11/6/2017 10:28	NC	1.7	NC
96	11/6/2017 10:29	NC	1.8	NC
97	11/6/2017 10:30	NC	1.8	NC
98	11/6/2017 10:31	NC	1.8	NC
99	11/6/2017 10:32	NC	1.8	NC
100	11/6/2017 10:33	NC	1.8	NC
101	11/6/2017 10:34	NC	1.7	NC
102	11/6/2017 10:35	NC	1.7	NC

103	11/6/2017 10:36	NC	1.8	NC
104	11/6/2017 10:37	NC	1.8	NC
105	11/6/2017 10:38	NC	1.8	NC
106	11/6/2017 10:39	NC	1.8	NC
107	11/6/2017 10:40	NC	1.9	NC
108	11/6/2017 10:41	NC	1.9	NC
109	11/6/2017 10:42	NC	2	NC
110	11/6/2017 10:43	NC	2	NC
111	11/6/2017 10:44	NC	1.9	NC
112	11/6/2017 10:45	NC	2	NC
113	11/6/2017 10:46	NC	2.1	NC
114	11/6/2017 10:47	NC	1.7	NC
115	11/6/2017 10:48	NC	1.8	NC
116	11/6/2017 10:49	NC	3.1	NC
117	11/6/2017 10:50	NC	1.9	NC
118	11/6/2017 10:51	NC	1.7	NC
119	11/6/2017 10:52	NC	1.6	NC
120	11/6/2017 10:53	NC	1.6	NC
121	11/6/2017 10:54	NC	1.6	NC
122	11/6/2017 10:55	NC	1.7	NC
123	11/6/2017 10:56	NC	1.7	NC
124	11/6/2017 10:57	NC	1.6	NC
125	11/6/2017 10:58	NC	1.6	NC
126	11/6/2017 10:59	NC	1.6	NC
127	11/6/2017 11:00	NC	1.6	NC
128	11/6/2017 11:01	NC	2	NC
129	11/6/2017 11:02	NC	1.8	NC
130	11/6/2017 11:03	NC	1.7	NC
131	11/6/2017 11:04	NC	1.7	NC
132	11/6/2017 11:05	NC	1.6	NC
133	11/6/2017 11:06	NC	1.7	NC
134	11/6/2017 11:07	NC	1.7	NC
135	11/6/2017 11:08	NC	1.7	NC
136	11/6/2017 11:09	NC	1.6	NC
137	11/6/2017 11:10	NC	1.7	NC
138	11/6/2017 11:11	NC	1.8	NC
139	11/6/2017 11:12	NC	1.8	NC
140	11/6/2017 11:13	NC	1.8	NC
141	11/6/2017 11:14	NC	1.7	NC
142	11/6/2017 11:15	NC	1.7	NC
143	11/6/2017 11:16	NC	1.6	NC
144	11/6/2017 11:17	NC	1.5	NC
145	11/6/2017 11:18	NC	1.6	NC
146	11/6/2017 11:19	NC	1.7	NC
147	11/6/2017 11:20	NC	1.6	NC
148	11/6/2017 11:21	NC	1.7	NC
149	11/6/2017 11:22	NC	1.7	NC
150	11/6/2017 11:23	NC	1.7	NC
151	11/6/2017 11:24	NC	1.9	NC
152	11/6/2017 11:25	NC	1.7	NC
153	11/6/2017 11:26	NC	1.8	NC
154	11/6/2017 11:27	NC	2.1	NC
155	11/6/2017 11:28	NC	2	NC
156	11/6/2017 11:29	NC	2	NC
157	11/6/2017 11:30	NC	2	NC
158	11/6/2017 11:31	NC	1.8	NC

159	11/6/2017 11:32	NC	1.8	NC
160	11/6/2017 11:33	NC	1.8	NC
161	11/6/2017 11:34	NC	1.8	NC
162	11/6/2017 11:35	NC	1.9	NC
163	11/6/2017 11:36	NC	1.8	NC
164	11/6/2017 11:37	NC	2.1	NC
165	11/6/2017 11:38	NC	1.9	NC
166	11/6/2017 11:39	NC	1.9	NC
167	11/6/2017 11:40	NC	2.1	NC
168	11/6/2017 11:41	NC	1.8	NC
169	11/6/2017 11:42	NC	1.7	NC
170	11/6/2017 11:43	NC	1.8	NC
171	11/6/2017 11:44	NC	1.7	NC
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175	11/6/2017 11:48	NC	1.8	NC
176	11/6/2017 11:49	NC	1.9	NC
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186	11/6/2017 11:59	NC	1.7	NC
187	11/6/2017 12:00	NC	1.7	NC
188	11/6/2017 12:01	NC	1.7	NC
189	11/6/2017 12:02	NC	1.7	NC
190	11/6/2017 12:03	NC	1.6	NC
191	11/6/2017 12:04	NC	1.7	NC
192	11/6/2017 12:05	NC	1.7	NC
193	11/6/2017 12:06	NC	1.6	NC
194	11/6/2017 12:07	NC	1.6	NC
195	11/6/2017 12:08	NC	1.7	NC
196	11/6/2017 12:09	NC	1.9	NC
197	11/6/2017 12:10	NC	2	NC
198	11/6/2017 12:11	NC	1.9	NC
199	11/6/2017 12:12	NC	1.7	NC
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201	11/6/2017 12:14	NC	1.8	NC
202	11/6/2017 12:15	NC	1.7	NC
203	11/6/2017 12:16	NC	1.8	NC
204	11/6/2017 12:17	NC	1.8	NC
205	11/6/2017 12:18	NC	1.8	NC
206	11/6/2017 12:19	NC	1.7	NC
207	11/6/2017 12:20	NC	1.5	NC
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209	11/6/2017 12:22	NC	1.5	NC
210	11/6/2017 12:23	NC	1.5	NC
211	11/6/2017 12:24	NC	1.5	NC
212	11/6/2017 12:25	NC	1.7	NC
213	11/6/2017 12:26	NC	1.8	NC
214	11/6/2017 12:27	NC	1.8	NC

215	11/6/2017 12:28	NC	1.9	NC
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217	11/6/2017 12:30	NC	1.8	NC
218	11/6/2017 12:31	NC	1.7	NC
219	11/6/2017 12:32	NC	1.6	NC
220	11/6/2017 12:33	NC	1.6	NC
221	11/6/2017 12:34	NC	1.6	NC
222	11/6/2017 12:35	NC	1.7	NC
223	11/6/2017 12:36	NC	1.7	NC
224	11/6/2017 12:37	NC	1.6	NC
225	11/6/2017 12:38	NC	1.6	NC
226	11/6/2017 12:39	NC	1.7	NC
227	11/6/2017 12:40	NC	1.9	NC
228	11/6/2017 12:41	NC	2.1	NC
229	11/6/2017 12:42	NC	1.6	NC
230	11/6/2017 12:43	NC	1.6	NC
231	11/6/2017 12:44	NC	1.6	NC
232	11/6/2017 12:45	NC	1.6	NC
233	11/6/2017 12:46	NC	1.6	NC
234	11/6/2017 12:47	NC	1.7	NC
235	11/6/2017 12:48	NC	1.8	NC
236	11/6/2017 12:49	NC	1.7	NC
237	11/6/2017 12:50	NC	1.7	NC
238	11/6/2017 12:51	NC	1.6	NC
239	11/6/2017 12:52	NC	1.5	NC
240	11/6/2017 12:53	NC	1.6	NC
241	11/6/2017 12:54	NC	1.7	NC
242	11/6/2017 12:55	NC	1.6	NC
243	11/6/2017 12:56	NC	1.6	NC
244	11/6/2017 12:57	NC	1.6	NC
245	11/6/2017 12:58	NC	1.8	NC
246	11/6/2017 12:59	NC	1.7	NC
247	11/6/2017 13:00	NC	1.8	NC
248	11/6/2017 13:01	NC	1.5	NC
249	11/6/2017 13:02	NC	1.5	NC
250	11/6/2017 13:03	NC	1.6	NC
251	11/6/2017 13:04	NC	1.7	NC
252	11/6/2017 13:05	NC	1.8	NC
253	11/6/2017 13:06	NC	1.8	NC
254	11/6/2017 13:07	NC	1.8	NC
255	11/6/2017 13:08	NC	1.9	NC
256	11/6/2017 13:09	NC	2.2	NC
257	11/6/2017 13:10	NC	2.1	NC
258	11/6/2017 13:11	NC	2	NC
259	11/6/2017 13:12	NC	1.8	NC
260	11/6/2017 13:13	NC	2	NC
261	11/6/2017 13:14	NC	2	NC
262	11/6/2017 13:15	NC	1.9	NC
263	11/6/2017 13:16	NC	1.8	NC
264	11/6/2017 13:17	NC	1.7	NC
265	11/6/2017 13:18	NC	1.6	NC
266	11/6/2017 13:19	NC	1.6	NC
267	11/6/2017 13:20	NC	1.6	NC
268	11/6/2017 13:21	NC	1.6	NC
269	11/6/2017 13:22	NC	1.5	NC
270	11/6/2017 13:23	NC	1.4	NC

271	11/6/2017 13:24	NC	1.4	NC
272	11/6/2017 13:25	NC	1.4	NC
273	11/6/2017 13:26	NC	1.4	NC
274	11/6/2017 13:27	NC	1.5	NC
275	11/6/2017 13:28	NC	1.6	NC
276	11/6/2017 13:29	NC	1.9	NC
277	11/6/2017 13:30	NC	1.8	NC
278	11/6/2017 13:31	NC	1.7	NC
279	11/6/2017 13:32	NC	1.7	NC
280	11/6/2017 13:33	NC	1.7	NC
281	11/6/2017 13:34	NC	1.6	NC
282	11/6/2017 13:35	NC	1.6	NC
283	11/6/2017 13:36	NC	1.7	NC
284	11/6/2017 13:37	NC	1.7	NC
285	11/6/2017 13:38	NC	1.8	NC
286	11/6/2017 13:39	NC	1.8	NC
287	11/6/2017 13:40	NC	1.7	NC
288	11/6/2017 13:41	NC	1.6	NC
289	11/6/2017 13:42	NC	1.6	NC
290	11/6/2017 13:43	NC	1.6	NC
291	11/6/2017 13:44	NC	1.6	NC
292	11/6/2017 13:45	NC	1.7	NC
293	11/6/2017 13:46	NC	1.8	NC
294	11/6/2017 13:47	NC	1.8	NC
295	11/6/2017 13:48	NC	1.9	NC
296	11/6/2017 13:49	NC	1.9	NC
297	11/6/2017 13:50	NC	1.8	NC
298	11/6/2017 13:51	NC	1.8	NC
299	11/6/2017 13:52	NC	1.8	NC
300	11/6/2017 13:53	NC	1.8	NC
301	11/6/2017 13:54	NC	1.9	NC
302	11/6/2017 13:55	NC	1.9	NC
303	11/6/2017 13:56	NC	2	NC
304	11/6/2017 13:57	NC	1.8	NC
305	11/6/2017 13:58	NC	2.1	NC
306	11/6/2017 13:59	NC	2.3	NC
307	11/6/2017 14:00	NC	2	NC
308	11/6/2017 14:01	NC	1.8	NC
309	11/6/2017 14:02	NC	1.9	NC
310	11/6/2017 14:03	NC	1.8	NC
311	11/6/2017 14:04	NC	1.8	NC
312	11/6/2017 14:05	NC	1.6	NC
313	11/6/2017 14:06	NC	1.6	NC
314	11/6/2017 14:07	NC	1.5	NC
315	11/6/2017 14:08	NC	1.5	NC
316	11/6/2017 14:09	NC	1.5	NC
317	11/6/2017 14:10	NC	1.8	NC
318	11/6/2017 14:11	NC	1.7	NC
319	11/6/2017 14:12	NC	1.7	NC
320	11/6/2017 14:13	NC	2	NC
321	11/6/2017 14:14	NC	2	NC
322	11/6/2017 14:15	NC	1.9	NC
323	11/6/2017 14:16	NC	1.8	NC
324	11/6/2017 14:17	NC	1.8	NC
325	11/6/2017 14:18	NC	1.8	NC
326	11/6/2017 14:19	NC	1.8	NC

327	11/6/2017 14:20	NC	1.7	NC
328	11/6/2017 14:21	NC	1.6	NC
329	11/6/2017 14:22	NC	1.6	NC
330	11/6/2017 14:23	NC	1.5	NC
331	11/6/2017 14:24	NC	1.5	NC
332	11/6/2017 14:25	NC	1.5	NC
333	11/6/2017 14:26	NC	1.6	NC
334	11/6/2017 14:27	NC	1.6	NC
335	11/6/2017 14:28	NC	1.6	NC
336	11/6/2017 14:29	NC	1.6	NC
337	11/6/2017 14:30	NC	1.6	NC
338	11/6/2017 14:31	NC	1.8	NC
339	11/6/2017 14:32	NC	1.9	NC
340	11/6/2017 14:33	NC	2	NC
341	11/6/2017 14:34	NC	1.7	NC
342	11/6/2017 14:35	NC	1.6	NC
343	11/6/2017 14:36	NC	1.6	NC
344	11/6/2017 14:37	NC	1.6	NC
345	11/6/2017 14:38	NC	1.6	NC
346	11/6/2017 14:39	NC	1.6	NC
347	11/6/2017 14:40	NC	1.6	NC
348	11/6/2017 14:41	NC	1.4	NC
349	11/6/2017 14:42	NC	1.4	NC
350	11/6/2017 14:43	NC	1.6	NC
351	11/6/2017 14:44	NC	1.9	NC
352	11/6/2017 14:45	NC	1.8	NC
353	11/6/2017 14:46	NC	1.7	NC
354	11/6/2017 14:47	NC	1.7	NC
355	11/6/2017 14:48	NC	1.7	NC
356	11/6/2017 14:49	NC	1.7	NC
357	11/6/2017 14:50	NC	1.7	NC
358	11/6/2017 14:51	NC	1.6	NC
359	11/6/2017 14:52	NC	1.7	NC
360	11/6/2017 14:53	NC	1.6	NC
361	11/6/2017 14:54	NC	1.6	NC
362	11/6/2017 14:55	NC	1.7	NC
363	11/6/2017 14:56	NC	1.6	NC
364	11/6/2017 14:57	NC	1.7	NC
365	11/6/2017 14:58	NC	1.6	NC
366	11/6/2017 14:59	NC	1.7	NC
367	11/6/2017 15:00	NC	1.8	NC
368	11/6/2017 15:01	NC	1.8	NC
369	11/6/2017 15:02	NC	1.8	NC
370	11/6/2017 15:03	NC	1.8	NC
371	11/6/2017 15:04	NC	1.6	NC
372	11/6/2017 15:05	NC	1.6	NC
373	11/6/2017 15:06	NC	1.7	NC
374	11/6/2017 15:07	NC	1.8	NC
375	11/6/2017 15:08	NC	1.7	NC
376	11/6/2017 15:09	NC	1.8	NC
377	11/6/2017 15:10	NC	1.8	NC
378	11/6/2017 15:11	NC	1.8	NC
379	11/6/2017 15:12	NC	1.8	NC
380	11/6/2017 15:13	NC	1.7	NC
381	11/6/2017 15:14	NC	1.7	NC
382	11/6/2017 15:15	NC	1.7	NC

383	11/6/2017 15:16	NC	1.7	NC
384	11/6/2017 15:17	NC	1.9	NC
385	11/6/2017 15:18	NC	1.9	NC
386	11/6/2017 15:19	NC	1.9	NC
387	11/6/2017 15:20	NC	1.8	NC
388	11/6/2017 15:21	NC	1.7	NC
389	11/6/2017 15:22	NC	1.6	NC
390	11/6/2017 15:23	NC	1.7	NC
391	11/6/2017 15:24	NC	1.8	NC
392	11/6/2017 15:25	NC	1.8	NC
393	11/6/2017 15:26	NC	1.6	NC
394	11/6/2017 15:27	NC	1.5	NC
395	11/6/2017 15:28	NC	1.4	NC
396	11/6/2017 15:29	NC	1.5	NC
397	11/6/2017 15:30	NC	1.5	NC
398	11/6/2017 15:31	NC	1.9	NC
399	11/6/2017 15:32	NC	1.8	NC
400	11/6/2017 15:33	NC	1.9	NC
401	11/6/2017 15:34	NC	1.8	NC
402	11/6/2017 15:35	NC	1.8	NC
403	11/6/2017 15:36	NC	1.8	NC
404	11/6/2017 15:37	NC	2	NC
405	11/6/2017 15:38	NC	1.8	NC
406	11/6/2017 15:39	NC	2	NC
407	11/6/2017 15:40	NC	2.1	NC
408	11/6/2017 15:41	NC	2.1	NC
409	11/6/2017 15:42	NC	2.1	NC

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-918777
Location: Downwind
Data Points: 391 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/8/2017 9:22	0		0		0	
2	11/8/2017 9:23	0		0		0	
3	11/8/2017 9:24	0		0		0	
4	11/8/2017 9:25	0		0		0	
5	11/8/2017 9:26	0		0		0	
6	11/8/2017 9:27	0		0		0	
7	11/8/2017 9:28	0		0		0	
8	11/8/2017 9:29	0		0		0	
9	11/8/2017 9:30	0		0		0	
10	11/8/2017 9:31	0		0		0	
11	11/8/2017 9:32	0		0		0	
12	11/8/2017 9:33	0		0		0	
13	11/8/2017 9:34	0		0		0	
14	11/8/2017 9:35	0		0		0	
15	11/8/2017 9:36	0		0		0	
16	11/8/2017 9:37	0		0		0	
17	11/8/2017 9:38	0		0		0	
18	11/8/2017 9:39	0		0		0	
19	11/8/2017 9:40	0		0		0	
20	11/8/2017 9:41	0		0		0	
21	11/8/2017 9:42	0		0		0	
22	11/8/2017 9:43	0		0		0	
23	11/8/2017 9:44	0		0		0	
24	11/8/2017 9:45	0		0		0	
25	11/8/2017 9:46	0		0		0	
26	11/8/2017 9:47	0		0		0	
27	11/8/2017 9:48	0		0		0	
28	11/8/2017 9:49	0		0		0	
29	11/8/2017 9:50	0		0		0	
30	11/8/2017 9:51	0		0		0	
31	11/8/2017 9:52	0		0		0	
32	11/8/2017 9:53	0		0		0	
33	11/8/2017 9:54	0		0		0	
34	11/8/2017 9:55	0		0		0	
35	11/8/2017 9:56	0		0		0	
36	11/8/2017 9:57	0		0		0	
37	11/8/2017 9:58	0		0		0	
38	11/8/2017 9:59	0		0		0	
39	11/8/2017 10:00	0		0		0	
40	11/8/2017 10:01	0		0		0	
41	11/8/2017 10:02	0		0		0	
42	11/8/2017 10:03	0		0		0	
43	11/8/2017 10:04	0		0		0	
44	11/8/2017 10:05	0		0		0	
45	11/8/2017 10:06	0		0		0	
46	11/8/2017 10:07	0		0		0	
47	11/8/2017 10:08	0		0		0	

48	11/8/2017 10:09	0	0	0
49	11/8/2017 10:10	0	0	0
50	11/8/2017 10:11	0	0	0
51	11/8/2017 10:12	0	0	0
52	11/8/2017 10:13	0	0	0
53	11/8/2017 10:14	0	0	0
54	11/8/2017 10:15	0	0	0
55	11/8/2017 10:16	0	0	0
56	11/8/2017 10:17	0	0	0
57	11/8/2017 10:18	0	0	0
58	11/8/2017 10:19	0	0	0
59	11/8/2017 10:20	0	0	0
60	11/8/2017 10:21	0	0	0
61	11/8/2017 10:22	0	0	0
62	11/8/2017 10:23	0	0	0
63	11/8/2017 10:24	0	0	0
64	11/8/2017 10:25	0	0	0
65	11/8/2017 10:26	0	0	0
66	11/8/2017 10:27	0	0	0
67	11/8/2017 10:28	0	0	0
68	11/8/2017 10:29	0	0	0
69	11/8/2017 10:30	0	0	0
70	11/8/2017 10:31	0	0	0
71	11/8/2017 10:32	0	0	0
72	11/8/2017 10:33	0	0	0
73	11/8/2017 10:34	0	0	0
74	11/8/2017 10:35	0	0	0
75	11/8/2017 10:36	0	0	0
76	11/8/2017 10:37	0	0	0
77	11/8/2017 10:38	0	0	0
78	11/8/2017 10:39	0	0	0
79	11/8/2017 10:40	0	0	0
80	11/8/2017 10:41	0	0	0
81	11/8/2017 10:42	0	0	0
82	11/8/2017 10:43	0	0	0
83	11/8/2017 10:44	0	0	0
84	11/8/2017 10:45	0	0	0
85	11/8/2017 10:46	0	0	0
86	11/8/2017 10:47	0	0	0
87	11/8/2017 10:48	0	0	0
88	11/8/2017 10:49	0	0	0
89	11/8/2017 10:50	0	0	0
90	11/8/2017 10:51	0	0	0
91	11/8/2017 10:52	0	0	0
92	11/8/2017 10:53	0	0	0
93	11/8/2017 10:54	0	0	0
94	11/8/2017 10:55	0	0	0
95	11/8/2017 10:56	0	0	0
96	11/8/2017 10:57	0	0	0
97	11/8/2017 10:58	0	0	0
98	11/8/2017 10:59	0	0	0
99	11/8/2017 11:00	0	0	0
100	11/8/2017 11:01	0	0	0
101	11/8/2017 11:02	0	0	0
102	11/8/2017 11:03	0	0	0
103	11/8/2017 11:04	0	0	0
104	11/8/2017 11:05	0	0	0

105	11/8/2017 11:06	0	0	0
106	11/8/2017 11:07	0	0	0
107	11/8/2017 11:08	0	0	0
108	11/8/2017 11:09	0	0	0
109	11/8/2017 11:10	0	0	0
110	11/8/2017 11:11	0	0	0
111	11/8/2017 11:12	0	0	0
112	11/8/2017 11:13	0	0	0
113	11/8/2017 11:14	0	0	0
114	11/8/2017 11:15	0	0	0
115	11/8/2017 11:16	0	0	0
116	11/8/2017 11:17	0	0	0
117	11/8/2017 11:18	0	0	0
118	11/8/2017 11:19	0	0	0
119	11/8/2017 11:20	0	0	0
120	11/8/2017 11:21	0	0	0
121	11/8/2017 11:22	0	0	0
122	11/8/2017 11:23	0	0	0
123	11/8/2017 11:24	0	0	0
124	11/8/2017 11:25	0	0	0
125	11/8/2017 11:26	0	0	0
126	11/8/2017 11:27	0	0	0
127	11/8/2017 11:28	0	0	0
128	11/8/2017 11:29	0	0	0
129	11/8/2017 11:30	0	0	0
130	11/8/2017 11:31	0	0	0
131	11/8/2017 11:32	0	0	0
132	11/8/2017 11:33	0	0	0
133	11/8/2017 11:34	0	0	0
134	11/8/2017 11:35	0	0	0
135	11/8/2017 11:36	0	0	0
136	11/8/2017 11:37	0	0	0
137	11/8/2017 11:38	0	0	0
138	11/8/2017 11:39	0	0	0
139	11/8/2017 11:40	0	0	0
140	11/8/2017 11:41	0	0	0
141	11/8/2017 11:42	0	0	0
142	11/8/2017 11:43	0	0	0
143	11/8/2017 11:44	0	0	0
144	11/8/2017 11:45	0	0	0
145	11/8/2017 11:46	0	0	0
146	11/8/2017 11:47	0	0	0
147	11/8/2017 11:48	0	0	0
148	11/8/2017 11:49	0	0	0
149	11/8/2017 11:50	0	0	0
150	11/8/2017 11:51	0	0	0
151	11/8/2017 11:52	0	0	0
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153	11/8/2017 11:54	0	0	0
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155	11/8/2017 11:56	0	0	0
156	11/8/2017 11:57	0	0	0
157	11/8/2017 11:58	0	0	0
158	11/8/2017 11:59	0	0	0
159	11/8/2017 12:00	0	0	0
160	11/8/2017 12:01	0	0	0
161	11/8/2017 12:02	0	0	0

162	11/8/2017 12:03	0	0	0
163	11/8/2017 12:04	0	0	0
164	11/8/2017 12:05	0	0	0
165	11/8/2017 12:06	0	0	0
166	11/8/2017 12:07	0	0	0
167	11/8/2017 12:08	0	0	0
168	11/8/2017 12:09	0	0	0
169	11/8/2017 12:10	0	0	0
170	11/8/2017 12:11	0	0	0
171	11/8/2017 12:12	0	0	0
172	11/8/2017 12:13	0	0	0
173	11/8/2017 12:14	0	0	0
174	11/8/2017 12:15	0	0	0
175	11/8/2017 12:16	0	0	0
176	11/8/2017 12:17	0	0	0
177	11/8/2017 12:18	0	0	0
178	11/8/2017 12:19	0	0	0
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180	11/8/2017 12:21	0	0	0
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183	11/8/2017 12:24	0	0	0
184	11/8/2017 12:25	0	0	0
185	11/8/2017 12:26	0	0	0
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187	11/8/2017 12:28	0	0	0
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194	11/8/2017 12:35	0	0	0
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203	11/8/2017 12:44	0	0	0
204	11/8/2017 12:45	0	0	0
205	11/8/2017 12:46	0	0	0
206	11/8/2017 12:47	0	0	0
207	11/8/2017 12:48	0	0	0
208	11/8/2017 12:49	0	0	0
209	11/8/2017 12:50	0	0	0
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212	11/8/2017 12:53	0	0	0
213	11/8/2017 12:54	0	0	0
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215	11/8/2017 12:56	0	0	0
216	11/8/2017 12:57	0	0	0
217	11/8/2017 12:58	0	0	0
218	11/8/2017 12:59	0	0	0

219	11/8/2017 13:00	0	0	0
220	11/8/2017 13:01	0	0	0
221	11/8/2017 13:02	0	0	0
222	11/8/2017 13:03	0	0	0
223	11/8/2017 13:04	0	0	0
224	11/8/2017 13:05	0	0	0
225	11/8/2017 13:06	0	0	0
226	11/8/2017 13:07	0	0	0
227	11/8/2017 13:08	0	0	0
228	11/8/2017 13:09	0	0	0
229	11/8/2017 13:10	0	0	0
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232	11/8/2017 13:13	0	0	0
233	11/8/2017 13:14	0	0	0
234	11/8/2017 13:15	0	0	0
235	11/8/2017 13:16	0	0	0
236	11/8/2017 13:17	0	0	0
237	11/8/2017 13:18	0	0	0
238	11/8/2017 13:19	0	0	0
239	11/8/2017 13:20	0	0	0
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245	11/8/2017 13:26	0	0	0
246	11/8/2017 13:27	0	0	0
247	11/8/2017 13:28	0	0	0
248	11/8/2017 13:29	0	0	0
249	11/8/2017 13:30	0	0	0
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252	11/8/2017 13:33	0	0	0
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254	11/8/2017 13:35	0	0	0
255	11/8/2017 13:36	0	0	0
256	11/8/2017 13:37	0	0	0
257	11/8/2017 13:38	0	0	0
258	11/8/2017 13:39	0	0	0
259	11/8/2017 13:40	0	0	0
260	11/8/2017 13:41	0	0	0
261	11/8/2017 13:42	0	0	0
262	11/8/2017 13:43	0	0	0
263	11/8/2017 13:44	0	0	0
264	11/8/2017 13:45	0	0	0
265	11/8/2017 13:46	0	0	0
266	11/8/2017 13:47	0	0	0
267	11/8/2017 13:48	0	0	0
268	11/8/2017 13:49	0	0	0
269	11/8/2017 13:50	0	0	0
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271	11/8/2017 13:52	0	0	0
272	11/8/2017 13:53	0	0	0
273	11/8/2017 13:54	0	0	0
274	11/8/2017 13:55	0	0	0
275	11/8/2017 13:56	0	0	0

276	11/8/2017 13:57	0	0	0
277	11/8/2017 13:58	0	0	0
278	11/8/2017 13:59	0	0	0
279	11/8/2017 14:00	0	0	0
280	11/8/2017 14:01	0	0	0
281	11/8/2017 14:02	0	0	0
282	11/8/2017 14:03	0	0	0
283	11/8/2017 14:04	0	0	0
284	11/8/2017 14:05	0	0	0
285	11/8/2017 14:06	0	0	0
286	11/8/2017 14:07	0	0	0
287	11/8/2017 14:08	0	0	0
288	11/8/2017 14:09	0	0	0
289	11/8/2017 14:10	0	0	0
290	11/8/2017 14:11	0	0	0
291	11/8/2017 14:12	0	0	0
292	11/8/2017 14:13	0	0	0
293	11/8/2017 14:14	0	0	0
294	11/8/2017 14:15	0	0	0
295	11/8/2017 14:16	0	0	0
296	11/8/2017 14:17	0	0	0
297	11/8/2017 14:18	0	0	0
298	11/8/2017 14:19	0	0	0
299	11/8/2017 14:20	0	0	0.1
300	11/8/2017 14:21	0	0	0.1
301	11/8/2017 14:22	0	0	0.1
302	11/8/2017 14:23	0	0	0.1
303	11/8/2017 14:24	0	0	0.1
304	11/8/2017 14:25	0	0	0
305	11/8/2017 14:26	0	0	0
306	11/8/2017 14:27	0	0	0
307	11/8/2017 14:28	0	0	0
308	11/8/2017 14:29	0	0	0
309	11/8/2017 14:30	0	0	0
310	11/8/2017 14:31	0	0	0.1
311	11/8/2017 14:32	0	0	0
312	11/8/2017 14:33	0	0	0
313	11/8/2017 14:34	0	0	0
314	11/8/2017 14:35	0	0	0
315	11/8/2017 14:36	0	0	0
316	11/8/2017 14:37	0	0	0
317	11/8/2017 14:38	0	0	0
318	11/8/2017 14:39	0	0	0
319	11/8/2017 14:40	0	0	0.1
320	11/8/2017 14:41	0	0.1	0.1
321	11/8/2017 14:42	0	0	0
322	11/8/2017 14:43	0	0	0
323	11/8/2017 14:44	0	0	0
324	11/8/2017 14:45	0	0	0
325	11/8/2017 14:46	0	0	0
326	11/8/2017 14:47	0	0	0
327	11/8/2017 14:48	0	0	0
328	11/8/2017 14:49	0	0	0
329	11/8/2017 14:50	0	0	0
330	11/8/2017 14:51	0	0	0
331	11/8/2017 14:52	0	0	0
332	11/8/2017 14:53	0	0	0

333	11/8/2017 14:54	0	0	0
334	11/8/2017 14:55	0	0	0
335	11/8/2017 14:56	0	0	0
336	11/8/2017 14:57	0	0	0
337	11/8/2017 14:58	0	0	0
338	11/8/2017 14:59	0	0	0
339	11/8/2017 15:00	0	0	0
340	11/8/2017 15:01	0	0	0
341	11/8/2017 15:02	0	0	0
342	11/8/2017 15:03	0	0	0
343	11/8/2017 15:04	0	0	0
344	11/8/2017 15:05	0	0	0
345	11/8/2017 15:06	0	0	0
346	11/8/2017 15:07	0	0	0
347	11/8/2017 15:08	0	0	0
348	11/8/2017 15:09	0	0	0
349	11/8/2017 15:10	0	0	0
350	11/8/2017 15:11	0	0	0
351	11/8/2017 15:12	0	0	0
352	11/8/2017 15:13	0	0	0
353	11/8/2017 15:14	0	0	0
354	11/8/2017 15:15	0	0	0
355	11/8/2017 15:16	0	0	0
356	11/8/2017 15:17	0	0	0
357	11/8/2017 15:18	0	0	0
358	11/8/2017 15:19	0	0	0
359	11/8/2017 15:20	0	0	0
360	11/8/2017 15:21	0	0	0
361	11/8/2017 15:22	0	0	0
362	11/8/2017 15:23	0	0	0
363	11/8/2017 15:24	0	0	0
364	11/8/2017 15:25	0	0	0
365	11/8/2017 15:26	0	0	0
366	11/8/2017 15:27	0	0	0
367	11/8/2017 15:28	0	0	0
368	11/8/2017 15:29	0	0	0
369	11/8/2017 15:30	0	0	0
370	11/8/2017 15:31	0	0	0
371	11/8/2017 15:32	0	0	0
372	11/8/2017 15:33	0	0	0
373	11/8/2017 15:34	0	0	0
374	11/8/2017 15:35	0	0	0
375	11/8/2017 15:36	0	0	0
376	11/8/2017 15:37	0	0	0
377	11/8/2017 15:38	0	0	0
378	11/8/2017 15:39	0	0	0
379	11/8/2017 15:40	0	0	0
380	11/8/2017 15:41	0	0	0
381	11/8/2017 15:42	0	0	0
382	11/8/2017 15:43	0	0	0
383	11/8/2017 15:44	0	0	0
384	11/8/2017 15:45	0	0	0
385	11/8/2017 15:46	0	0	0
386	11/8/2017 15:47	0	0	0
387	11/8/2017 15:48	0	0	0
388	11/8/2017 15:49	0	0	0.1
389	11/8/2017 15:50	0	0	0.1

390	11/8/2017 15:51	0	0	0
391	11/8/2017 15:52	0	0	0

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-918777
Location: Downwind
Data Points: 280 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/9/2017 9:21	0		0.1		0.1	
2	11/9/2017 9:22	0		0		0.1	
3	11/9/2017 9:23	0		0.1		0.1	
4	11/9/2017 9:24	0		0.1		0.1	
5	11/9/2017 9:25	0.1		0.1		0.1	
6	11/9/2017 9:26	0.1		0.1		0.1	
7	11/9/2017 9:27	0.1		0.1		0.1	
8	11/9/2017 9:28	0.1		0.1		0.1	
9	11/9/2017 9:29	0.1		0.1		0.1	
10	11/9/2017 9:30	0.1		0.1		0.1	
11	11/9/2017 9:31	0.1		0.1		0.1	
12	11/9/2017 9:32	0.1		0.1		0.1	
13	11/9/2017 9:33	0.1		0.1		0.1	
14	11/9/2017 9:34	0.1		0.1		0.1	
15	11/9/2017 9:35	0.1		0.1		0.1	
16	11/9/2017 9:36	0.1		0.1		0.1	
17	11/9/2017 9:37	0.1		0.1		0.1	
18	11/9/2017 9:38	0.1		0.1		0.1	
19	11/9/2017 9:39	0.1		0.1		0.1	
20	11/9/2017 9:40	0.1		0.1		0.1	
21	11/9/2017 9:41	0.1		0.1		0.1	
22	11/9/2017 9:42	0.1		0.1		0.1	
23	11/9/2017 9:43	0.1		0.1		0.1	
24	11/9/2017 9:44	0.1		0.1		0.1	
25	11/9/2017 9:45	0.1		0.1		0.1	
26	11/9/2017 9:46	0.1		0.1		0.1	
27	11/9/2017 9:47	0.1		0.1		0.1	
28	11/9/2017 9:48	0.1		0.1		0.1	
29	11/9/2017 9:49	0.1		0.1		0.1	
30	11/9/2017 9:50	0.1		0.1		0.1	
31	11/9/2017 9:51	0.1		0.1		0.1	
32	11/9/2017 9:52	0.1		0.1		0.1	
33	11/9/2017 9:53	0.1		0.1		0.1	
34	11/9/2017 9:54	0.1		0.1		0.2	
35	11/9/2017 9:55	0.1		0.1		0.2	
36	11/9/2017 9:56	0.2		0.2		0.2	
37	11/9/2017 9:57	0.2		0.2		0.2	
38	11/9/2017 9:58	0.2		0.2		0.2	
39	11/9/2017 9:59	0.1		0.1		0.2	
40	11/9/2017 10:00	0.1		0.1		0.1	
41	11/9/2017 10:01	0.1		0.1		0.2	
42	11/9/2017 10:02	0.2		0.2		0.2	

43	11/9/2017 10:03	0.2	0.2	0.2
44	11/9/2017 10:04	0.2	0.2	0.2
45	11/9/2017 10:05	0.2	0.2	0.2
46	11/9/2017 10:06	0.2	0.2	0.2
47	11/9/2017 10:07	0.2	0.2	0.2
48	11/9/2017 10:08	0.2	0.2	0.2
49	11/9/2017 10:09	0.2	0.2	0.2
50	11/9/2017 10:10	0.2	0.2	0.2
51	11/9/2017 10:11	0.2	0.2	0.2
52	11/9/2017 10:12	0.2	0.2	0.2
53	11/9/2017 10:13	0.2	0.2	0.2
54	11/9/2017 10:14	0.2	0.2	0.2
55	11/9/2017 10:15	0.2	0.2	0.2
56	11/9/2017 10:16	0.2	0.2	0.2
57	11/9/2017 10:17	0.2	0.2	0.2
58	11/9/2017 10:18	0.2	0.2	0.2
59	11/9/2017 10:19	0.2	0.2	0.2
60	11/9/2017 10:20	0.2	0.2	0.2
61	11/9/2017 10:21	0.2	0.2	0.2
62	11/9/2017 10:22	0.2	0.2	0.2
63	11/9/2017 10:23	0.2	0.2	0.2
64	11/9/2017 10:24	0.2	0.2	0.2
65	11/9/2017 10:25	0.2	0.2	0.2
66	11/9/2017 10:26	0.2	0.2	0.2
67	11/9/2017 10:27	0.2	0.2	0.2
68	11/9/2017 10:28	0.2	0.2	0.2
69	11/9/2017 10:29	0.2	0.2	0.2
70	11/9/2017 10:30	0.2	0.2	0.2
71	11/9/2017 10:31	0.2	0.2	0.2
72	11/9/2017 10:32	0.2	0.2	0.2
73	11/9/2017 10:33	0.2	0.2	0.2
74	11/9/2017 10:34	0.2	0.2	0.2
75	11/9/2017 10:35	0.2	0.2	0.2
76	11/9/2017 10:36	0.2	0.2	0.2
77	11/9/2017 10:37	0.2	0.2	0.2
78	11/9/2017 10:38	0.2	0.2	0.2
79	11/9/2017 10:39	0.2	0.2	0.2
80	11/9/2017 10:40	0.2	0.2	0.2
81	11/9/2017 10:41	0.2	0.2	0.2
82	11/9/2017 10:42	0.2	0.2	0.2
83	11/9/2017 10:43	0.2	0.2	0.2
84	11/9/2017 10:44	0.2	0.2	0.2
85	11/9/2017 10:45	0.2	0.2	0.2
86	11/9/2017 10:46	0.2	0.2	0.2
87	11/9/2017 10:47	0.2	0.2	0.2
88	11/9/2017 10:48	0.2	0.2	0.3
89	11/9/2017 10:49	0.2	0.2	0.2
90	11/9/2017 10:50	0.2	0.2	0.2
91	11/9/2017 10:51	0.2	0.2	0.2
92	11/9/2017 10:52	0.2	0.2	0.2
93	11/9/2017 10:53	0.2	0.2	0.2
94	11/9/2017 10:54	0.2	0.2	0.2

95	11/9/2017 10:55	0.2	0.2	0.2
96	11/9/2017 10:56	0.2	0.2	0.2
97	11/9/2017 10:57	0.2	0.2	0.2
98	11/9/2017 10:58	0.2	0.2	0.2
99	11/9/2017 10:59	0.2	0.2	0.2
100	11/9/2017 11:00	0.2	0.2	0.2
101	11/9/2017 11:01	0.2	0.2	0.2
102	11/9/2017 11:02	0.2	0.2	0.2
103	11/9/2017 11:03	0.2	0.2	0.3
104	11/9/2017 11:04	0.2	0.2	0.3
105	11/9/2017 11:05	0.2	0.2	0.3
106	11/9/2017 11:06	0.2	0.3	0.3
107	11/9/2017 11:07	0.3	0.3	0.3
108	11/9/2017 11:08	0.2	0.3	0.3
109	11/9/2017 11:09	0.2	0.3	0.3
110	11/9/2017 11:10	0.2	0.2	0.3
111	11/9/2017 11:11	0.2	0.3	0.3
112	11/9/2017 11:12	0.3	0.3	0.3
113	11/9/2017 11:13	0.2	0.3	0.3
114	11/9/2017 11:14	0.3	0.3	0.3
115	11/9/2017 11:15	0.3	0.3	0.3
116	11/9/2017 11:16	0.3	0.3	0.3
117	11/9/2017 11:17	0.3	0.3	0.3
118	11/9/2017 11:18	0.3	0.3	0.3
119	11/9/2017 11:19	0.2	0.3	0.3
120	11/9/2017 11:20	0.2	0.2	0.3
121	11/9/2017 11:21	0.2	0.2	0.2
122	11/9/2017 11:22	0.2	0.2	0.2
123	11/9/2017 11:23	0.2	0.2	0.3
124	11/9/2017 11:24	0.2	0.2	0.3
125	11/9/2017 11:25	0.2	0.2	0.3
126	11/9/2017 11:26	0.2	0.3	0.3
127	11/9/2017 11:27	0.2	0.2	0.3
128	11/9/2017 11:28	0.2	0.2	0.3
129	11/9/2017 11:29	0.2	0.2	0.2
130	11/9/2017 11:30	0.2	0.2	0.2
131	11/9/2017 11:31	0.2	0.3	0.3
132	11/9/2017 11:32	0.2	0.3	0.3
133	11/9/2017 11:33	0.2	0.3	0.3
134	11/9/2017 11:34	0.2	0.2	0.3
135	11/9/2017 11:35	0.2	0.2	0.2
136	11/9/2017 11:36	0.2	0.2	0.2
137	11/9/2017 11:37	0.2	0.2	0.3
138	11/9/2017 11:38	0.2	0.2	0.3
139	11/9/2017 11:39	0.2	0.2	0.3
140	11/9/2017 11:40	0.2	0.2	0.3
141	11/9/2017 11:41	0.2	0.2	0.3
142	11/9/2017 11:42	0.2	0.3	0.3
143	11/9/2017 11:43	0.3	0.3	0.3
144	11/9/2017 11:44	0.2	0.2	0.3
145	11/9/2017 11:45	0.2	0.2	0.3
146	11/9/2017 11:46	0.2	0.2	0.3

147	11/9/2017 11:47	0.2	0.2	0.3
148	11/9/2017 11:48	0.2	0.3	0.3
149	11/9/2017 11:49	0.2	0.3	0.3
150	11/9/2017 11:50	0.3	0.3	0.3
151	11/9/2017 11:51	0.3	0.3	0.3
152	11/9/2017 11:52	0.3	0.3	0.3
153	11/9/2017 11:53	0.2	0.3	0.3
154	11/9/2017 11:54	0.2	0.3	0.3
155	11/9/2017 11:55	0.2	0.3	0.3
156	11/9/2017 11:56	0.3	0.3	0.3
157	11/9/2017 11:57	0.2	0.3	0.3
158	11/9/2017 11:58	0.2	0.3	0.3
159	11/9/2017 11:59	0.2	0.3	0.3
160	11/9/2017 12:00	0.2	0.2	0.3
161	11/9/2017 12:01	0.2	0.2	0.3
162	11/9/2017 12:02	0.3	0.3	0.3
163	11/9/2017 12:03	0.2	0.3	0.3
164	11/9/2017 12:04	0.2	0.3	0.3
165	11/9/2017 12:05	0.2	0.3	0.3
166	11/9/2017 12:06	0.2	0.3	0.3
167	11/9/2017 12:07	0.2	0.2	0.3
168	11/9/2017 12:08	0.2	0.2	0.3
169	11/9/2017 12:09	0.3	0.3	0.3
170	11/9/2017 12:10	0.3	0.3	0.3
171	11/9/2017 12:11	0.3	0.3	0.3
172	11/9/2017 12:12	0.3	0.3	0.3
173	11/9/2017 12:13	0.3	0.3	0.3
174	11/9/2017 12:14	0.3	0.3	0.3
175	11/9/2017 12:15	0.3	0.3	0.4
176	11/9/2017 12:16	0.4	0.4	0.4
177	11/9/2017 12:17	0.4	0.4	0.4
178	11/9/2017 12:18	0.4	0.4	0.4
179	11/9/2017 12:19	0.4	0.4	0.4
180	11/9/2017 12:20	0.4	0.4	0.4
181	11/9/2017 12:21	0.4	0.4	0.5
182	11/9/2017 12:22	0.5	0.5	0.5
183	11/9/2017 12:23	0.5	0.5	0.5
184	11/9/2017 12:24	0.5	0.5	0.5
185	11/9/2017 12:25	0.5	0.7	1
186	11/9/2017 12:26	0.7	0.7	1
187	11/9/2017 12:27	0.6	0.7	0.7
188	11/9/2017 12:28	0.6	0.6	0.6
189	11/9/2017 12:29	0.6	0.6	0.7
190	11/9/2017 12:30	0.6	0.6	0.6
191	11/9/2017 12:31	0.6	0.7	0.7
192	11/9/2017 12:32	0.7	0.7	0.8
193	11/9/2017 12:33	0.7	0.7	0.8
194	11/9/2017 12:34	0.7	0.7	0.7
195	11/9/2017 12:35	0.7	0.8	0.9
196	11/9/2017 12:36	0.8	0.8	0.9
197	11/9/2017 12:37	0.8	0.8	0.8
198	11/9/2017 12:38	0.8	0.8	0.8

199	11/9/2017 12:39	0.8	0.8	0.8
200	11/9/2017 12:40	0.8	0.8	0.8
201	11/9/2017 12:41	0.8	0.8	0.8
202	11/9/2017 12:42	0.8	0.8	0.9
203	11/9/2017 12:43	0.9	0.9	0.9
204	11/9/2017 12:44	0.9	0.9	0.9
205	11/9/2017 12:45	0.9	0.9	0.9
206	11/9/2017 12:46	0.9	0.9	0.9
207	11/9/2017 12:47	0.9	0.9	0.9
208	11/9/2017 12:48	0.9	1	1.4
209	11/9/2017 12:49	1.1	1.2	1.4
210	11/9/2017 12:50	1	1	1.1
211	11/9/2017 12:51	1	1	1
212	11/9/2017 12:52	1	1.1	1.1
213	11/9/2017 12:53	1	1	1
214	11/9/2017 12:54	1	1	1
215	11/9/2017 12:55	1	1	1
216	11/9/2017 12:56	1	1	1
217	11/9/2017 12:57	1	1	1
218	11/9/2017 12:58	1	1	1
219	11/9/2017 12:59	1	1	1
220	11/9/2017 13:00	1	1	1
221	11/9/2017 13:01	1	1	1
222	11/9/2017 13:02	1	1	1
223	11/9/2017 13:03	1	1	1
224	11/9/2017 13:04	1	1	1
225	11/9/2017 13:05	1	1	1
226	11/9/2017 13:06	1	1	1
227	11/9/2017 13:07	1	1	1
228	11/9/2017 13:08	1	1	1
229	11/9/2017 13:09	1	1	1
230	11/9/2017 13:10	1	1	1
231	11/9/2017 13:11	1	1	1
232	11/9/2017 13:12	1	1	1
233	11/9/2017 13:13	1	1	1
234	11/9/2017 13:14	1	1	1
235	11/9/2017 13:15	1	1	1
236	11/9/2017 13:16	1	1	1
237	11/9/2017 13:17	1	1	1.1
238	11/9/2017 13:18	1.1	1.1	1.1
239	11/9/2017 13:19	1.1	1.1	1.1
240	11/9/2017 13:20	1.1	1.1	1.1
241	11/9/2017 13:21	1.1	1.1	1.1
242	11/9/2017 13:22	1.1	1.1	1.1
243	11/9/2017 13:23	1.1	1.1	1.2
244	11/9/2017 13:24	1.1	1.2	1.2
245	11/9/2017 13:25	1.2	1.2	1.2
246	11/9/2017 13:26	1.2	1.2	1.2
247	11/9/2017 13:27	1.2	1.2	1.2
248	11/9/2017 13:28	1.2	1.2	1.2
249	11/9/2017 13:29	1.2	1.2	1.2
250	11/9/2017 13:30	1.2	1.2	1.2

251	11/9/2017 13:31	1.2	1.2	1.2
252	11/9/2017 13:32	1.2	1.2	1.2
253	11/9/2017 13:33	1.2	1.2	1.2
254	11/9/2017 13:34	1.2	1.2	1.2
255	11/9/2017 13:35	1.2	1.2	1.2
256	11/9/2017 13:36	1.2	1.2	1.2
257	11/9/2017 13:37	1.2	1.2	1.2
258	11/9/2017 13:38	1.2	1.2	1.2
259	11/9/2017 13:39	1.2	1.2	1.2
260	11/9/2017 13:40	1.2	1.2	1.2
261	11/9/2017 13:41	1.2	1.2	1.4
262	11/9/2017 13:42	1.2	1.3	1.3
263	11/9/2017 13:43	1.2	1.2	1.2
264	11/9/2017 13:44	1.2	1.2	1.2
265	11/9/2017 13:45	1.2	1.2	1.3
266	11/9/2017 13:46	1.3	1.3	1.3
267	11/9/2017 13:47	1.3	1.3	1.3
268	11/9/2017 13:48	1.3	1.3	1.3
269	11/9/2017 13:49	1.3	1.3	1.3
270	11/9/2017 13:50	1.2	1.2	1.3
271	11/9/2017 13:51	1.2	1.2	1.2
272	11/9/2017 13:52	1.2	1.2	1.2
273	11/9/2017 13:53	1.2	1.2	1.2
274	11/9/2017 13:54	1.2	1.2	1.2
275	11/9/2017 13:55	1.2	1.2	1.2
276	11/9/2017 13:56	1.2	1.2	1.2
277	11/9/2017 13:57	1.1	1.1	1.2
278	11/9/2017 13:58	1.1	1.1	1.1
279	11/9/2017 13:59	1.1	1.1	1.1
280	11/9/2017 14:00	1.1	1.1	1.1

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-915620
Location: Downwind
Data Points: 30 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/27/2017 7:06	0		0		0	
2	11/27/2017 7:07	0		0		0	
3	11/27/2017 7:08	0		0		0	
4	11/27/2017 7:09	0		0		0	
5	11/27/2017 7:10	0		0		0	
6	11/27/2017 7:11	0		0		0	
7	11/27/2017 7:12	0		0		0	
8	11/27/2017 7:13	0		0		0	
9	11/27/2017 7:14	0		0		0	
10	11/27/2017 7:15	0		0		0	
11	11/27/2017 7:16	0		0		0	
12	11/27/2017 7:17	0		0		0	
13	11/27/2017 7:18	0		0		0	
14	11/27/2017 7:19	0		0		0	
15	11/27/2017 7:20	0		0		0	
16	11/27/2017 7:21	0		0		0	
17	11/27/2017 7:22	0		0		0	
18	11/27/2017 7:23	0		0		0	
19	11/27/2017 7:24	0		0		0	
20	11/27/2017 7:25	0		0		0	
21	11/27/2017 7:26	0		0		0	
22	11/27/2017 7:27	0		0		0	
23	11/27/2017 7:28	0		0		0	
24	11/27/2017 7:29	0		0		0	
25	11/27/2017 7:30	0		0		0	
26	11/27/2017 7:31	0		0		0	
27	11/27/2017 7:32	0		0		0	
28	11/27/2017 7:33	0		0		0	
29	11/27/2017 7:34	0		0		0	
30	11/27/2017 7:35	0		0		0	

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-915620
Location: Downwind
Data Points: 102 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/28/2017 7:36	0.1		0.1		0.2	
2	11/28/2017 7:37	0.1		0.1		0.2	
3	11/28/2017 7:38	0.1		0.1		0.1	
4	11/28/2017 7:39	0.1		0.1		0.2	
5	11/28/2017 7:40	0.1		0.1		0.2	
6	11/28/2017 7:41	0.1		0.1		0.2	
7	11/28/2017 7:42	0.1		0.1		0.1	
8	11/28/2017 7:43	0.1		0.1		0.1	
9	11/28/2017 7:44	0.1		0.1		0.1	
10	11/28/2017 7:45	0.1		0.1		0.1	
11	11/28/2017 7:46	0.1		0.1		0.1	
12	11/28/2017 7:47	0.1		0.2		0.2	
13	11/28/2017 7:48	0.1		0.1		0.2	
14	11/28/2017 7:49	0.1		0.1		0.1	
15	11/28/2017 7:50	0.1		0.1		0.1	
16	11/28/2017 7:51	0.1		0.1		0.1	
17	11/28/2017 7:52	0.1		0.1		0.1	
18	11/28/2017 7:53	0.1		0.1		0.2	
19	11/28/2017 7:54	0.1		0.1		0.1	
20	11/28/2017 7:55	0.1		0.1		0.1	
21	11/28/2017 7:56	0.1		0.1		0.1	
22	11/28/2017 7:57	0.1		0.1		0.1	
23	11/28/2017 7:58	0.1		0.1		0.1	
24	11/28/2017 7:59	0.1		0.1		0.1	
25	11/28/2017 8:00	0.1		0.1		0.1	
26	11/28/2017 8:01	0.1		0.1		0.1	
27	11/28/2017 8:02	0.1		0.1		0.1	
28	11/28/2017 8:03	0.1		0.1		0.1	
29	11/28/2017 8:04	0.1		0.1		0.1	
30	11/28/2017 8:05	0.1		0.1		0.1	
31	11/28/2017 8:06	0.1		0.1		0.1	
32	11/28/2017 8:07	0.1		0.1		0.1	
33	11/28/2017 8:08	0.1		0.1		0.1	
34	11/28/2017 8:09	0.1		0.1		0.1	
35	11/28/2017 8:10	0.1		0.1		0.1	
36	11/28/2017 8:11	0.1		0.1		0.1	
37	11/28/2017 8:12	0.1		0.1		0.1	
38	11/28/2017 8:13	0.1		0.1		0.1	
39	11/28/2017 8:14	0.1		0.1		0.1	
40	11/28/2017 8:15	0.1		0.1		0.1	
41	11/28/2017 8:16	0.1		0.1		0.1	
42	11/28/2017 8:17	0.1		0.1		0.1	
43	11/28/2017 8:18	0.1		0.1		0.1	
44	11/28/2017 8:19	0.1		0.1		0.1	
45	11/28/2017 8:20	0.1		0.1		0.1	

46	11/28/2017 8:21	0.1	0.1	0.1
47	11/28/2017 8:22	0.1	0.1	0.1
48	11/28/2017 8:23	0.1	0.1	0.1
49	11/28/2017 8:24	0.1	0.1	0.1
50	11/28/2017 8:25	0.1	0.1	0.1
51	11/28/2017 8:26	0.1	0.1	0.1
52	11/28/2017 8:27	0.1	0.1	0.1
53	11/28/2017 8:28	0.1	0.1	0.1
54	11/28/2017 8:29	0.1	0.1	0.1
55	11/28/2017 8:30	0.1	0.1	0.1
56	11/28/2017 8:31	0.1	0.1	0.1
57	11/28/2017 8:32	0.1	0.1	0.1
58	11/28/2017 8:33	0	0.1	0.1
59	11/28/2017 8:34	0	0.1	0.1
60	11/28/2017 8:35	0	0.1	0.1
61	11/28/2017 8:36	0	0	0.1
62	11/28/2017 8:37	0	0.1	0.1
63	11/28/2017 8:38	0	0.1	0.1
64	11/28/2017 8:39	0	0.1	0.1
65	11/28/2017 8:40	0.1	0.1	0.1
66	11/28/2017 8:41	0.1	0.1	0.1
67	11/28/2017 8:42	0.1	0.1	0.1
68	11/28/2017 8:43	0.1	0.1	0.1
69	11/28/2017 8:44	0.1	0.1	0.1
70	11/28/2017 8:45	0.1	0.1	0.1
71	11/28/2017 8:46	0.1	0.1	0.1
72	11/28/2017 8:47	0.1	0.1	0.1
73	11/28/2017 8:48	0.1	0.1	0.1
74	11/28/2017 8:49	0.1	0.1	0.1
75	11/28/2017 8:50	0.1	0.1	0.1
76	11/28/2017 8:51	0	0.1	0.1
77	11/28/2017 8:52	0	0	0.1
78	11/28/2017 8:53	0	0.1	0.1
79	11/28/2017 8:54	0	0.1	0.1
80	11/28/2017 8:55	0.1	0.1	0.1
81	11/28/2017 8:56	0.1	0.1	0.1
82	11/28/2017 8:57	0	0.1	0.1
83	11/28/2017 8:58	0	0.1	0.1
84	11/28/2017 8:59	0.1	0.1	0.1
85	11/28/2017 9:00	0.1	0.1	0.1
86	11/28/2017 9:01	0	0.1	0.1
87	11/28/2017 9:02	0.1	0.1	0.1
88	11/28/2017 9:03	0.1	0.1	0.1
89	11/28/2017 9:04	0.1	0.1	0.1
90	11/28/2017 9:05	0.1	0.1	0.1
91	11/28/2017 9:06	0.1	0.1	0.1
92	11/28/2017 9:07	0.1	0.1	0.1
93	11/28/2017 9:08	0.1	0.1	0.1
94	11/28/2017 9:09	0.1	0.1	0.1
95	11/28/2017 9:10	0.1	0.1	0.1
96	11/28/2017 9:11	0	0.1	0.1
97	11/28/2017 9:12	0.1	0.1	0.1
98	11/28/2017 9:13	0.1	0.1	0.1
99	11/28/2017 9:14	0.1	0.1	0.1
100	11/28/2017 9:15	0.1	0.1	0.1

101	11/28/2017 9:16	0.1	0.1	0.1
102	11/28/2017 9:17	0.1	0.1	0.1

Instrument: MiniRAE 2000 (PGM7320) Serial Number: 592-915620
Location: Downwind
Data Points: 225 Gas Name: Isobutylene Sample Period: 60 sec

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	100	100	100
Low Alarm Levels:	50	50	50

Line#	Date Time	Min(ppm)	Alarm	Avg(ppm)	Alarm	Max(ppm)	Alarm
1	11/29/2017 7:32	0.2		0.2		0.2	
2	11/29/2017 7:33	0.2		0.2		0.3	
3	11/29/2017 7:34	0.3		0.3		0.3	
4	11/29/2017 7:35	0.3		0.3		0.3	
5	11/29/2017 7:36	0.3		0.3		0.3	
6	11/29/2017 7:37	0.3		0.3		0.3	
7	11/29/2017 7:38	0.3		0.3		0.3	
8	11/29/2017 7:39	0.3		0.3		0.3	
9	11/29/2017 7:40	0.3		0.3		0.3	
10	11/29/2017 7:41	0.3		0.3		0.3	
11	11/29/2017 7:42	0.3		0.3		0.3	
12	11/29/2017 7:43	0.3		0.3		0.3	
13	11/29/2017 7:44	0.3		0.3		0.3	
14	11/29/2017 7:45	0.3		0.3		0.3	
15	11/29/2017 7:46	0.3		0.3		0.3	
16	11/29/2017 7:47	0.3		0.3		0.4	
17	11/29/2017 7:48	0.4		0.4		0.4	
18	11/29/2017 7:49	0.4		0.4		0.4	
19	11/29/2017 7:50	0.4		0.4		0.4	
20	11/29/2017 7:51	0.4		0.4		0.4	
21	11/29/2017 7:52	0.4		0.4		0.4	
22	11/29/2017 7:53	0.4		0.4		0.4	
23	11/29/2017 7:54	0.4		0.4		0.5	
24	11/29/2017 7:55	0.4		0.4		0.5	
25	11/29/2017 7:56	0.4		0.5		0.5	
26	11/29/2017 7:57	0.4		0.4		0.4	
27	11/29/2017 7:58	0.4		0.4		0.5	
28	11/29/2017 7:59	0.4		0.4		0.5	
29	11/29/2017 8:00	0.4		0.4		0.4	
30	11/29/2017 8:01	0.4		0.5		0.5	
31	11/29/2017 8:02	0.5		0.5		0.5	
32	11/29/2017 8:03	0.5		0.5		0.5	
33	11/29/2017 8:04	0.4		0.5		0.6	
34	11/29/2017 8:05	0.5		0.5		0.6	
35	11/29/2017 8:06	0.5		0.5		0.6	
36	11/29/2017 8:07	0.5		0.6		0.6	
37	11/29/2017 8:08	0.5		0.5		0.6	
38	11/29/2017 8:09	0.4		0.5		0.5	
39	11/29/2017 8:10	0.4		0.4		0.5	
40	11/29/2017 8:11	0.4		0.4		0.5	
41	11/29/2017 8:12	0.4		0.4		0.5	
42	11/29/2017 8:13	0.4		0.5		0.5	
43	11/29/2017 8:14	0.5		0.5		0.5	
44	11/29/2017 8:15	0.5		0.5		0.6	
45	11/29/2017 8:16	0.6		0.6		0.6	

46	11/29/2017 8:17	0.6	0.6	0.6
47	11/29/2017 8:18	0.5	0.6	0.6
48	11/29/2017 8:19	0.6	0.6	0.7
49	11/29/2017 8:20	0.5	0.6	0.6
50	11/29/2017 8:21	0.5	0.5	0.5
51	11/29/2017 8:22	0.6	0.6	0.6
52	11/29/2017 8:23	0.5	0.6	0.6
53	11/29/2017 8:24	0.6	0.6	0.6
54	11/29/2017 8:25	0.5	0.6	0.6
55	11/29/2017 8:26	0.6	0.6	0.6
56	11/29/2017 8:27	0.6	0.6	0.6
57	11/29/2017 8:28	0.6	0.6	0.6
58	11/29/2017 8:29	0.6	0.6	0.6
59	11/29/2017 8:30	0.6	0.6	0.6
60	11/29/2017 8:31	0.6	0.6	0.6
61	11/29/2017 8:32	0.6	0.6	0.6
62	11/29/2017 8:33	0.6	0.6	0.6
63	11/29/2017 8:34	0.6	0.6	0.6
64	11/29/2017 8:35	0.6	0.6	0.6
65	11/29/2017 8:36	0.6	0.6	0.6
66	11/29/2017 8:37	0.6	0.6	0.6
67	11/29/2017 8:38	0.6	0.6	0.6
68	11/29/2017 8:39	0.6	0.6	0.6
69	11/29/2017 8:40	0.6	0.6	0.6
70	11/29/2017 8:41	0.6	0.6	0.6
71	11/29/2017 8:42	0.6	0.6	0.6
72	11/29/2017 8:43	0.6	0.6	0.6
73	11/29/2017 8:44	0.6	0.7	0.7
74	11/29/2017 8:45	0.6	0.6	0.6
75	11/29/2017 8:46	0.6	0.6	0.6
76	11/29/2017 8:47	0.6	0.6	0.7
77	11/29/2017 8:48	0.7	0.7	0.8
78	11/29/2017 8:49	0.6	0.7	0.7
79	11/29/2017 8:50	0.7	0.7	0.8
80	11/29/2017 8:51	0.7	0.7	0.8
81	11/29/2017 8:52	0.7	0.7	0.7
82	11/29/2017 8:53	0.7	0.7	0.8
83	11/29/2017 8:54	0.7	0.7	0.7
84	11/29/2017 8:55	0.7	0.7	0.8
85	11/29/2017 8:56	0.8	0.8	0.9
86	11/29/2017 8:57	0.7	0.7	0.9
87	11/29/2017 8:58	0.6	0.7	0.8
88	11/29/2017 8:59	0.7	0.7	0.7
89	11/29/2017 9:00	0.7	0.7	0.7
90	11/29/2017 9:01	0.7	0.7	0.8
91	11/29/2017 9:02	0.7	0.7	0.8
92	11/29/2017 9:03	0.7	0.7	0.7
93	11/29/2017 9:04	0.7	0.8	0.8
94	11/29/2017 9:05	0.7	0.7	0.8
95	11/29/2017 9:06	0.7	0.7	0.8
96	11/29/2017 9:07	0.7	0.7	0.8
97	11/29/2017 9:08	0.7	0.7	0.8
98	11/29/2017 9:09	0.7	0.7	0.9
99	11/29/2017 9:10	0.7	0.7	0.8
100	11/29/2017 9:11	0.7	0.7	0.7

101	11/29/2017 9:12	0.7	0.7	0.7
102	11/29/2017 9:13	0.7	0.7	0.7
103	11/29/2017 9:14	0.7	0.7	0.7
104	11/29/2017 9:15	0.7	0.7	0.8
105	11/29/2017 9:16	0.7	0.7	0.7
106	11/29/2017 9:17	0.7	0.7	0.9
107	11/29/2017 9:18	0.7	0.7	0.7
108	11/29/2017 9:19	0.7	0.7	0.7
109	11/29/2017 9:20	0.7	0.8	0.9
110	11/29/2017 9:21	0.7	0.7	0.7
111	11/29/2017 9:22	0.7	0.8	0.9
112	11/29/2017 9:23	0.7	0.8	0.9
113	11/29/2017 9:24	0.7	0.8	0.8
114	11/29/2017 9:25	0.7	0.8	0.8
115	11/29/2017 9:26	0.7	0.8	0.8
116	11/29/2017 9:27	0.7	0.7	0.7
117	11/29/2017 9:28	0.7	0.8	0.8
118	11/29/2017 9:29	0.8	0.8	0.8
119	11/29/2017 9:30	0.8	0.8	0.8
120	11/29/2017 9:31	0.7	0.8	0.8
121	11/29/2017 9:32	0.7	0.7	0.8
122	11/29/2017 9:33	0.7	0.7	0.7
123	11/29/2017 9:34	0.7	0.7	0.7
124	11/29/2017 9:35	0.7	0.8	0.8
125	11/29/2017 9:36	0.7	0.8	0.8
126	11/29/2017 9:37	0.7	0.7	0.7
127	11/29/2017 9:38	0.7	0.7	0.7
128	11/29/2017 9:39	0.7	0.7	0.8
129	11/29/2017 9:40	0.7	0.7	0.8
130	11/29/2017 9:41	0.7	0.7	0.7
131	11/29/2017 9:42	0.7	0.7	0.8
132	11/29/2017 9:43	0.7	0.8	0.8
133	11/29/2017 9:44	0.8	0.8	0.8
134	11/29/2017 9:45	0.7	0.7	0.8
135	11/29/2017 9:46	0.7	0.7	0.7
136	11/29/2017 9:47	0.7	0.7	0.7
137	11/29/2017 9:48	0.7	0.7	0.7
138	11/29/2017 9:49	0.7	0.7	0.8
139	11/29/2017 9:50	0.7	0.7	0.9
140	11/29/2017 9:51	0.7	0.7	0.8
141	11/29/2017 9:52	0.7	0.8	0.8
142	11/29/2017 9:53	0.7	0.7	0.8
143	11/29/2017 9:54	0.7	0.7	0.8
144	11/29/2017 9:55	0.7	0.8	0.8
145	11/29/2017 9:56	0.7	0.8	0.8
146	11/29/2017 9:57	0.8	0.8	0.8
147	11/29/2017 9:58	0.7	0.8	0.9
148	11/29/2017 9:59	0.7	0.8	0.8
149	###############	0.7	0.8	0.8
150	###############	0.7	0.7	0.7
151	###############	0.7	0.7	0.7
152	###############	0.7	0.7	0.7
153	###############	0.7	0.7	0.8
154	###############	0.7	0.7	0.7
155	###############	0.7	0.7	0.7

156	##########	0.7	0.7	0.7
157	##########	0.7	0.7	0.7
158	##########	0.7	0.7	0.7
159	##########	0.7	0.7	0.7
160	##########	0.7	0.7	0.7
161	##########	0.7	0.7	0.7
162	##########	0.7	0.7	0.7
163	##########	0.7	0.7	0.7
164	##########	0.7	0.7	0.7
165	##########	0.7	0.7	0.7
166	##########	0.7	0.7	0.7
167	##########	0.7	0.7	0.7
168	##########	0.7	0.7	0.7
169	##########	0.7	0.7	0.7
170	##########	0.7	0.7	0.7
171	##########	0.7	0.7	0.7
172	##########	0.7	0.7	0.8
173	##########	0.7	0.7	0.7
174	##########	0.7	0.7	0.8
175	##########	0.8	0.8	0.9
176	##########	0.8	0.9	1
177	##########	0.8	1	1.2
178	##########	0.9	0.9	1
179	##########	0.8	0.8	0.9
180	##########	0.8	0.8	0.9
181	##########	0.7	0.8	0.9
182	##########	0.8	0.8	0.8
183	##########	0.8	0.8	0.8
184	##########	0.7	0.7	0.8
185	##########	0.7	0.7	0.7
186	##########	0.7	0.7	0.8
187	##########	0.7	0.7	0.7
188	##########	0.7	0.7	0.7
189	##########	0.7	0.7	0.7
190	##########	0.7	0.7	0.7
191	##########	0.7	0.8	0.8
192	##########	0.8	0.8	0.9
193	##########	0.7	0.8	0.8
194	##########	0.7	0.7	0.8
195	##########	0.7	0.7	0.8
196	##########	0.7	0.7	0.8
197	##########	0.8	0.8	0.8
198	##########	0.8	0.8	0.9
199	##########	0.7	0.8	0.8
200	##########	0.7	0.8	0.8
201	##########	0.7	0.8	0.8
202	##########	0.7	0.8	0.8
203	##########	0.8	0.8	0.9
204	##########	0.8	0.9	0.9
205	##########	0.8	0.9	0.9
206	##########	0.8	0.9	0.9
207	##########	0.8	0.8	0.9
208	##########	0.8	0.8	0.9
209	##########	0.8	0.9	0.9
210	##########	0.8	0.8	0.9

211	##########	0.8	0.8	0.9
212	##########	0.8	0.8	0.9
213	##########	0.8	0.9	1
214	##########	0.9	1	1
215	##########	0.8	0.9	1
216	##########	0.8	0.8	0.9
217	##########	0.8	0.8	0.8
218	##########	0.8	0.8	0.9
219	##########	0.8	0.8	0.8
220	##########	0.8	0.8	0.9
221	##########	0.7	0.7	0.8
222	##########	0.7	0.7	0.8
223	##########	0.7	0.7	0.7
224	##########	0.7	0.7	0.7
225	##########	0.7	0.7	0.8

ATTACHMENT D

Imported Clean Fill Documentation

K710 - 168 8th Street, Brooklyn, NY
Specification Section 02200
Environmentally Clean Fill/Backfill Criteria
Summary of Analytic Results
Criteria for Sites with No Ecological Resources*

						Sample ID	SCA Sand		
						Lab ID	1709069-001A		
						Date Collected	9/12/2017		
ANALYTE	CAS	6 NYCRR 375.6 Unrestricted Use SCO (mg/kg)	DER-10 Appendix 5 Restricted Residential Use SCO (mg/kg)	NYSDEC CP-51 Soil Residential Use Supplemental SCO (mg/kg)	NYSDEC CP-51 Protection of Groundwater Supplemental SCO (mg/kg)	Specification Section 02200 Maximum Reporting Limit (mg/kg)	Result (mg/kg)	Lab Qualifier	MDL
1,1,1-Trichloroethane	71-55-6	0.68	0.68			0.68	0.00097	U	
1,1,2,2-Tetrachloroethane	79-34-5			35	0.6	0.6	0.00097	U	
1,1-Dichloroethane	75-34-3	0.27	0.27			0.27	0.00097	U	
1,1-Dichloroethene	75-35-4	0.33	0.33			0.33	0.00097	U	
1,2,3-Trichloropropane	96-18-4			80	0.34	0.34	0.00097	U	
1,2,4-Trichlorobenzene	120-82-1				3.4	3.4	0.00097	U	
1,2,4-Trimethylbenzene	95-63-6	3.6	3.6			3.6	0.00097	U	
1,2-Dichlorobenzene	95-50-1	1.1	1.1			1.1	0.00097	U	
1,2-Dichloroethane	107-06-2	0.02	0.02			0.02	0.00097	U	
1,3,5-Trimethylbenzene	108-67-8	8.4	8.4			8.4	0.00097	U	
1,3-Dichlorobenzene	541-73-1	2.4	2.4			2.4	0.00097	U	
1,3-Dichloropropane	142-28-9				0.3	0.3	0.00097	U	
1,4-Dichlorobenzene	106-46-7	1.8	1.8			1.8	0.00097	U	
1,4-Dioxane	123-91-1	0.1	0.1			0.1	0.00097	U	
2,6-Dinitrotoluene[1]	606-20-2			1.03	0.17	0.17	0.05000	U	
4-Methyl-2-Pentanone	108-10-1				1.0	1.0	0.00490	U	
Acetone	67-64-1	0.05	0.05			0.05	0.00490	U	
Benzene	71-43-2	0.06	0.06			0.06	0.00097	U	
Carbon Disulfide	75-15-0			100	2.7	2.7	0.00097	U	
Carbon Tetrachloride	56-23-5	0.76	0.76			0.76	0.00097	U	
Chlorobenzene	108-90-7	1.1	1.1			1.1	0.00097	U	
Chloroform	67-66-3	0.37	0.37			0.37	0.00097	U	
cis-1,2-Dichloroethene	156-59-2	0.25	0.25			0.25	0.00097	U	
Ethylbenzene	100-41-4	1	1			1	0.00097	U	
Freon 113 (1,1,2-TFE)	76-13-1			100	6	6	0.00097	U	
Hexachlorobenzene[1]	118-74-1	0.33	1.2			0.33	0.0250	U	
Isopropylbenzene	98-82-8			100	2.3	2.3	0.00097	U	
Methyl ethyl ketone (2-Butanone)	78-93-3	0.12	0.12	100	0.3	0.12	0.0049	U	
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	0.93			0.93	0.00097	U	
Methylene chloride	75-09-2	0.05	0.05			0.05	0.0049	U	
n-Butylbenzene	104-51-8	12	12			12	0.00097	U	
n-Propylbenzene	103-65-1	3.9	3.9			3.9	0.00097	U	
p-Isopropyltoluene	99-87-6				10	10	0.00097	U	
sec-Butylbenzene	135-98-8	11	11			11	0.00097	U	
tert-Butylbenzene	98-06-6	5.9	5.9			5.9	0.00097	U	
Tetrachloroethene	127-18-4	1.3	1.3			1.3	0.00097	U	
Toluene	108-88-3	0.7	0.7			0.7	0.00097	U	
trans-1,2-Dichloroethene	156-60-5	0.19	0.19			0.19	0.00097	U	
Trichloroethene	79-01-6	0.47	0.47			0.47	0.00097	U	
Vinyl Chloride	75-01-4	0.02	0.02			0.02	0.00097	U	
Xylene (mixed)	1330-20-7	0.26	1.6			0.26	0.0029	U	

Notes:
NA - Not analyzed
NR - Not required
Values **bolded** and **underlined** exceed specified levels for Cover and Non-Contact material
Values highlighted in **YELLOW** were not detected, however the Reporting Limit (RL) exceeds the specificed levels for Cover material, but the Method Detection Limit (MDL) does not
SCO - Soil Cleanup Objectives
1 - The compounds 2,6-Dinitrotoluene and Hexachlorobenzene were analyzed via EPA Method 8270D and reported by the laboratory as Semi-volatile Organic Compounds.

Lab Qualifiers:
U - Undetected

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Practical Solutions, Exceptional Service
29-24 40th Ave, Long Island City NY, 11101

Particle-Size Analysis of Soils
ASTM D 422, D6913

Project: Evergreen Recycling

W.O.#: 4872.01
Date Tested: 06/06/17
Date Sampled: 06/05/17

Sample Source: Evergreen Recycling of Corona
Proposed Use Fill and Backfill (SCA)
LIC Sample ID: BS 97

Description: *SP-SM - Poorly graded sand with silt*

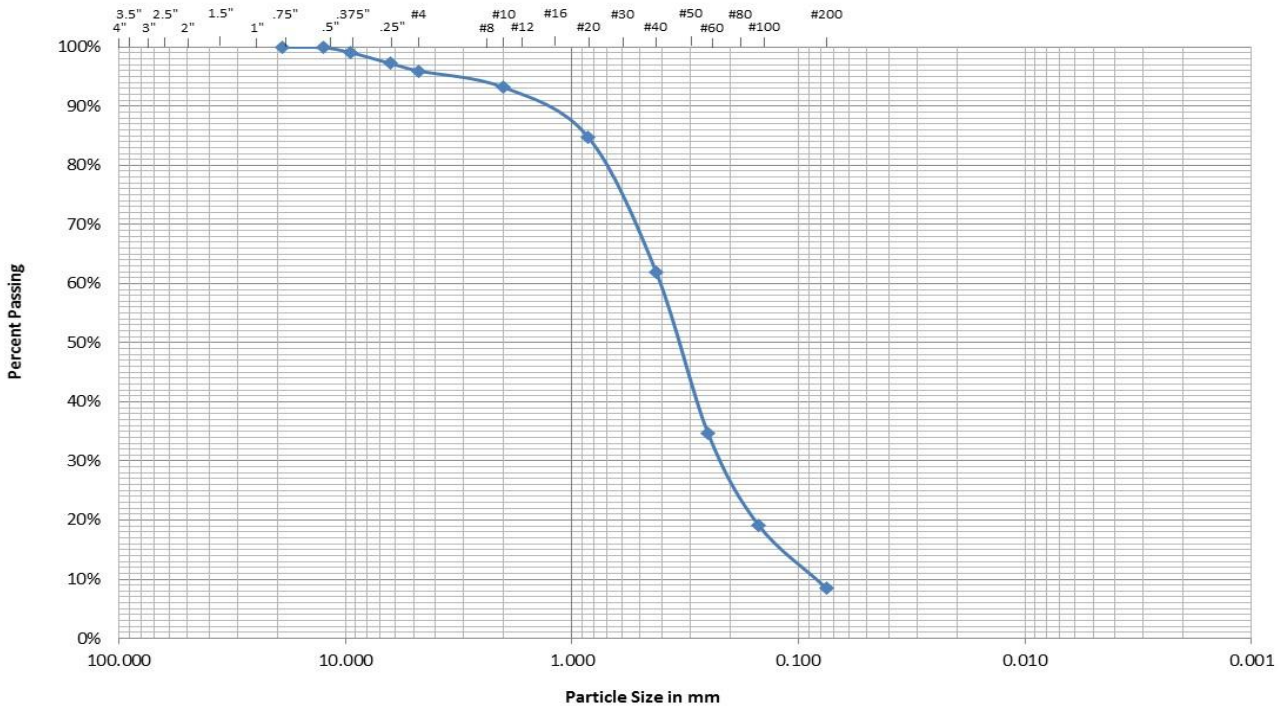
GRAVEL	4.0%
SAND	87.5%

SILT/CLAY	8.5%
MOISTURE CONTENT	11.3%

	Sieve Size	% Passing	Specification	Pass / Fail
Cobbles	4"			
Coarse Gravel	3"	100.0%	100%	Pass
↓	2.5"			
↓	2"			
↓	1.5"			
↓	1"			
Fine Gravel	3/4"	100.0%	70-100%	Pass
↓	1/2"	99.9%		
↓	3/8"	99.1%		
↓	1/4"	97.2%		
Coarse Sand	no. 4	96.0%		
↓	no. 8			
↓	no. 10	93.2%		
Medium Sand	no. 12			
↓	no. 16			
↓	no. 20	84.8%		
↓	no. 30			
↓	no. 40	62.0%		
Fine Sand	no. 50			
↓	no. 60	34.6%		
↓	no. 80			
↓	no. 100	19.2%		
↓	no. 200	8.5%	0-10%	Pass
Silt/Clay				

Note: • sample meets gradation specification for SCA Fill and Backfill.
Specification: NYCSCA, EARTHWORK, Sect. 02200, Part 2, 2.01, B. Fill and Backfill.

ASTM D422, D6913 Particle Size Analysis
4872.01 - Evergreen Recycling, BS 97



COBBLES	GRAVEL		SAND			SILT/CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Evergreen Recycling of Corona

127-50 Northern Blvd.Flushing, N.Y. 11368
718-205-8038 Fax 718-205-8202
Yard: 35th ave & Willets Point Blvd.

November 6, 2017

Phillip Castellano
TRC Solutions
1430 Broadway
New York, NY 10018

Dear Phillip,

Evergreen Recycling of Corona is to supply imported fill material that is environmentally clean and meets the specification requirements of section 02200 and the test data is representative of the source to SCA project K710, 168 8th street, Brooklyn, NY. The sand has a separate stock pile at Evergreen Recycling of Corona Department of Environmental permit #41W93 and is represented by American Analytical report # 1709069 dated September 12, 2017. The material was picked up from East Coast Mine Limited,41 Lewis Rd, East Quogue, NY tax map #900.250.1.1.1 Coram Materials Corp, 416-418 Yaphank Miller place Rd, Miller Place, NY tax map #0200 262.00 01.00 001.009 and Corbett Aggregates Corp,144 W Broadway, Salem, NJ Block #35 lot 54.

If there are any questions please feel free to contact me at any time.

Sincerely,

David Cinquemani
General Manager

American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

September 21, 2017

Dave Cinquemani
Evergreen Recycling of Corona
127-50 Northern Boulevard
Flushing, NY 11368
TEL: (718) 205-8038
FAX (718) 205-8202

RE: EROC Order No.: 1709069

Dear Dave Cinquemani:

American Analytical Laboratories, LLC. received 1 sample(s) on 9/12/2017 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report. The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Lori Beyer

Lori Beyer
Lab Director
American Analytical Laboratories, LLC.

American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Workorder Sample Summary

WO#: **1709069**

21-Sep-17

CLIENT: Evergreen Recycling of Corona
Project: EROC

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1709069-001A	SCA Sand		9/12/2017 3:30:00 PM	9/12/2017 4:45:00 PM	Soil
1709069-001B	SCA Sand		9/12/2017 3:30:00 PM	9/12/2017 4:45:00 PM	Soil

CHAIN OF CUSTODY

AMERICAN ANALYTICAL LABORATORIES

56 Toledo Street, Farmingdale NY 11735
(T) 631-454-6100 (F) 631-454-8027
www.american-analytical.com

CERTIFICATIONS
NY ELAP - 11418 PA DEP - 68-00573
NJ DEP - NY050 CT DOH - PH-0205

Client Information		Project Information	
Company Name	Evergreen Recycling of Corona	Project Name	SCA SAND
Address	127-50 Northern Blvd	Street	
City	Flushing	City	
State	NY	State	
Zip	11368	Zip	
Project Contact	Dan D'Angelo	Project # / Purchase Order #	
Phone #		Sampler's Name / Company	
E-mail		Sampler's Signature	

Analytical Test / Information: SCA Sand

LAB SAMPLE # (LAB USE ONLY)	Sample Information: Client Sample ID	Sample Type	Matrix Code	Sample Collection: Date	Time	Glass / Plastic	Sample Containers: Total # of bottles	Number of Each Preserved Bottle: NONE	HCl	NaOH	HNO_3	H_2SO_4	DI Water (5035A)	MeOH	OTHER
1709069-001	SCA Sand.	G	S	9/11/17	3:30 PM	G	2								

Turnaround Time (Business Days)

Standard
- [ ] 7-10 Business Days
- [ ] 3 Day *RUSH*
- [x] 5 Day *RUSH*
- [ ] 2 Day *RUSH*
- [ ] 4 Day *RUSH*
- [ ] 1 Day *RUSH*

Please contact laboratory for rush service availability

SAMPLE TYPE
- **G = Grab**
- **C = Composite**
- **B = Blank**

MATRIX CODE
- **L** = Liquid
- **S** = Soil
- **O** = Oil
- **W** = Wipe
- **PC** = Paint Chip
- **SL** = Sludge
- **SD** = Solid
- **M** = Misc

ELECTRONIC DELIVERABLES
- **NYCRR Part 375 - please circle**
  Unres/ Comm/ Industrial/ Residential/ Res Residential/ PGW
- **NJ Soil Clean Up Criteria**
- **SCDOH Action Levels**
- **CP 51 - Gas / Fuel**
- **TCLP Hazardous Waste**
- **TOGS**
- **NYSDEC EQUIS**

Comments / Remarks

Cooler Temp: 4.2°C

Sample custody must be documented below, each time samples change possession, with a signature, date, and time.

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY LAB (SIGNATURE)	DATE / TIME	PRINTED NAME
	DATE TIME			DATE 9-12-17 TIME 10:55	
	DATE 9-12-17 TIME 16:45			DATE 9/12/2017 TIME 16:45	J MULLORY

American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Sample Log-In Check List

Client Name: **EROC** Work Order Number: **1709069** RcptNo: **1**

Logged by:	**Jenny Mullady**	**9/12/2017 4:45:00 PM**	Jennifer Mullady
Completed By:	**Jenny Mullady**	**9/12/2017**	Jennifer Mullady
Reviewed By:	**Lori Beyer**	**9/13/2017 7:46:43 AM**	Lori Beyer

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	AAL Lab Courier		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
	Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
	No. Seal Date:	Signed By:		
5.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
8.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9.	Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11.	Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes ☐	No ☐	No VOA Vials ☑
12.	Were any sample containers received broken?	Yes ☐	No ☑	
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15.	Is it clear what analyses were requested?	Yes ☑	No ☐	
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

Special Handling (if applicable)

17.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

18. Additional remarks:

VOC collected in 8 oz jar, with zero headspace.

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By

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Case Narrative

WO#: **1709069**
Date: **9/21/2017**

CLIENT: Evergreen Recycling of Corona
Project: EROC

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846 and additional methods as detailed throughout the text of the report. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives with exceptions notated in this Narrative discussion and/or in the QC Summary Section of the lab report with appropriate qualifiers. Additional quality control information such as surrogate recovery values for organic testing is provided as part of the analytical results.

Soil sample results analyzed for Volatile Organics via preparation method SW846 Method 5035A by the Low Level procedures potentially may be estimated, "J" (biased low) since the samples for this test were not collected according to the 5035A Method. Volatile LCS are analyzed with preservatives - HCL/NaHSO4/Methanol depending on level of analysis (high/low) similar to sample analysis. Outliers can be attributed to the presence of chemical preservatives. 2-Chloroethyl vinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

SVOA: Calibration for Benzoic Acid does not meet method requirements. Reporting limit must be considered estimated.

Pesticide/PCB/Herbicide analysis are analyzed on two distinct columns. Once a target compound is qualitatively confirmed by detection on both columns and quantitation is determined to be >40% between the two columns, AAL's policy is to report the lower of the values as suggested by SW846 Method 8000C in cases where no interference exists. If in the professional judgment of the laboratory, the higher value must be utilized this is explained in the lab report.

The following parameters (if included in this report) are not offered by NY ELAP: VOA 8260 Soil; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Diisopropyl ether, Ethanol, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Isopropyl Acetate, n-Amyl Acetate, n-Butyl Acetate, n-Propyl Acetate. VOA 8260 Liquid; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Isopropyl Acetate, n-Amyl acetate, n-Butyl Acetate, n-Propyl Acetate. Pesticides 8081 Soil; DBCP. Herbicides 8151 Soil; 3,5-Dichlorobenzoic Acid, 4-Nitrophenol, Acifluorfen, Bentazon, Chloramben, DCPA, Picloram .Lachat 10-107-6-1B Ammonia in Soil, SM 2540G Total Volatile Solids, Soil TKN, Soil Organic Nitrogen, Percent Moisture, pH in non-potable water and temperature at which pH is measured, SM 4500-SO3 B Sulfite in Liquid, Total Sulfur in Soil, Acid Soluble

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Case Narrative

WO#: **1709069**
Date: **9/21/2017**

CLIENT: Evergreen Recycling of Corona
Project: EROC

Chloride by ASTMC1152, Water Soluble Chloride by ASTMC1218, Chlorine Demand by SM 2350 B, Total Residual Chlorine in Liquid and Reactivity to Sulfide and Reactivity to Cyanide.

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical report is the sole property of American Analytical Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. The sample receipt checklist is included as part of this lab report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.

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Definition Only

WO#: **1709069**
Date: **9/21/2017**

Definitions:

Sample Result and QC Summary Qualifiers - Level I and Level II Reports
ND - Not detected at the reporting limit/Limit of Quantitation

B - The analyte was detected in the associated method blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <5x the blank value as artifact.

E - The value is above the quantitation range

D - Analyte concentration was obtained from diluted analysis or from analysis using reduced sample volume.

J - The analyte was detected below the limit of quantitation but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

U - The compound was analyzed for but not detected.

H - Holding time for preparation or analysis has been exceeded.

S - Spike recovery is outside accepted recovery limits.

R - RPD is outside accepted recovery range.

P - Secondary column exceeds 40% difference for GC test.

* - Calibration exceeds method requirement. Due to the large number of analytes for organic testing, the method allows 10% of analytes to have %RSD and/or %D to be >20%.
LOD - Limit of Detection; the lowest level the analyte can be determined to be statistically different from a blank.
LOQ - Limit of Quantitation; the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accuracy.
PQL - Practical Quantitation Limit; the lowest level that can be reliably achieved within the specific limits of Precision and accuracy. Listed on the QC Summary Forms.
m - Analyte was manually integrated for GC/MS.
+ - Concentration exceeds regulatory level for TCLP

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1,2-Tetrachloroethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,1,1-Trichloroethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,1,2,2-Tetrachloroethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethan	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,1,2-Trichloroethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,1-Dichloroethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,1-Dichloroethene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,1-Dichloropropene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2,3-Trichlorobenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2,3-Trichloropropane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2,4,5-Tetramethylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2,4-Trichlorobenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2,4-Trimethylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2-Dibromo-3-chloropropane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2-Dibromoethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2-Dichlorobenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2-Dichloroethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,2-Dichloropropane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,3,5-Trimethylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,3-Dichlorobenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,3-dichloropropane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,4-Dichlorobenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
1,4-Dioxane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
2,2-Dichloropropane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
2-Butanone	ND	4.9	9.7	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
2-Chloroethyl vinyl ether	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
2-Chlorotoluene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
2-Hexanone	ND	4.9	9.7	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
2-Propanol	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
4-Chlorotoluene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
4-Isopropyltoluene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
4-Methyl-2-pentanone	ND	4.9	9.7	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Acetone	ND	4.9	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Benzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Bromobenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Bromochloromethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Bromodichloromethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Bromoform	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Bromomethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Carbon disulfide	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Carbon tetrachloride	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Chlorobenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Chlorodifluoromethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Chloroethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Chloroform	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Chloromethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
cis-1,2-Dichloroethene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
cis-1,3-Dichloropropene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Cyclohexane	ND	1.9	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Dibromochloromethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Dibromomethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Dichlorodifluoromethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Diisopropyl ether	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Ethanol	ND	9.7	19	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Ethylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Freon-114	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Hexachlorobutadiene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Isopropylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
m,p-Xylene	ND	1.9	9.7	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Methyl Acetate	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Methyl tert-butyl ether	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Methylene chloride	ND	4.9	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
n-Butylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
n-Propylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Naphthalene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
o-Xylene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
p-Diethylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
p-Ethyltoluene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
sec-Butylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Styrene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
t-Butyl alcohol	ND	2.4	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
tert-Butylbenzene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Tetrachloroethene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Toluene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
trans-1,2-Dichloroethene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
trans-1,3-Dichloropropene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Trichloroethene	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Trichlorofluoromethane	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Vinyl acetate	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Vinyl chloride	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Xylenes, Total	ND	2.9	9.7	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Acrolein	ND	12	24	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Acrylonitrile	ND	0.97	4.9	U	µg/Kg-dry	1	9/13/2017 5:03:00 PM
Surr: 4-Bromofluorobenzene	97.1	0	54-132		%Rec	1	9/13/2017 5:03:00 PM
Surr: Dibromofluoromethane	117	0	58-135		%Rec	1	9/13/2017 5:03:00 PM
Surr: Toluene-d8	104	0	70-124		%Rec	1	9/13/2017 5:03:00 PM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0129	0.00690	0.0129		mg/Kg-dry	1	9/14/2017 12:32:46 PM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151A**		Analyst: **SB**
2,4,5-T	ND	1.0	3.0	U	µg/Kg-dry	1	9/19/2017 6:37:00 PM
2,4,5-TP	ND	1.0	3.0	U	µg/Kg-dry	1	9/19/2017 6:37:00 PM
2,4-D	ND	1.0	3.0	U	µg/Kg-dry	1	9/19/2017 6:37:00 PM
Dicamba	ND	1.0	3.0	U	µg/Kg-dry	1	9/19/2017 6:37:00 PM
Surr: 2,4-DCAA	26.4	0	13-153	P	%Rec	1	9/19/2017 6:37:00 PM
Surr: 2,4-DCAA	1330	0	13-153	PS	%Rec	1	9/19/2017 6:37:00 PM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1221	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1232	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1242	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1248	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1254	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1260	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1262	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Aroclor 1268	ND	9.8	20	U	µg/Kg-dry	1	9/16/2017 9:28:00 AM
Surr: DCB	78.1	0	11-146		%Rec	1	9/16/2017 9:28:00 AM
Surr: DCB	74.0	0	11-146		%Rec	1	9/16/2017 9:28:00 AM
Surr: TCX	86.3	0	11-147		%Rec	1	9/16/2017 9:28:00 AM
Surr: TCX	88.0	0	11-147		%Rec	1	9/16/2017 9:28:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4´-DDD	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
4,4´-DDE	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
4,4´-DDT	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Aldrin	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
alpha-BHC	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
alpha-Chlordane	26	6.1	10		µg/Kg-dry	1	9/15/2017 8:55:00 PM
beta-BHC	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Chlorobenzilate	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
DBCP	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
delta-BHC	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Dieldrin	5.2	1.0	2.5		µg/Kg-dry	1	9/15/2017 8:55:00 PM
Endosulfan I	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Endosulfan II	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Endosulfan sulfate	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Endrin	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Endrin aldehyde	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Endrin ketone	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
gamma-BHC	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
gamma-Chlordane	28	6.1	10		µg/Kg-dry	1	9/15/2017 8:55:00 PM
Heptachlor	ND	2.0	3.0	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Heptachlor epoxide	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Hexachlorobenzene	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Hexachlorocyclopentadiene	ND	3.0	3.0	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Methoxychlor	ND	1.0	2.5	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Toxaphene	ND	13	25	U	µg/Kg-dry	1	9/15/2017 8:55:00 PM
Surr: DCB	58.2	0	12-154		%Rec	1	9/15/2017 8:55:00 PM
Surr: DCB	60.7	0	12-154		%Rec	1	9/15/2017 8:55:00 PM
Surr: TCX	91.4	0	12-153		%Rec	1	9/15/2017 8:55:00 PM
Surr: TCX	84.2	0	12-153		%Rec	1	9/15/2017 8:55:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **KK**
Percent Moisture	0.960	0	1.00	J	wt%	1	9/14/2017 9:21:58 AM
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Aluminum	3030	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Antimony	ND	0.181	0.452	U	mg/Kg-dry	1	9/14/2017 11:11:46 AM
Arsenic	1.49	0.181	0.452		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Barium	23.3	0.181	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Beryllium	ND	0.0905	0.362	U	mg/Kg-dry	1	9/14/2017 11:11:46 AM
Cadmium	ND	0.0905	0.362	U	mg/Kg-dry	1	9/14/2017 11:11:46 AM
Calcium	1130	0.181	0.452		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Chromium	8.80	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Cobalt	0.765	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Copper	8.00	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Iron	8830	1.81	3.62	D	mg/Kg-dry	10	9/14/2017 11:37:28 AM
Lead	7.82	0.181	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Magnesium	1190	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Manganese	151	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Nickel	10.9	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Potassium	801	0.181	0.452		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Selenium	ND	0.181	0.452	U	mg/Kg-dry	1	9/14/2017 11:11:46 AM
Silver	0.238	0.0905	0.362	J	mg/Kg-dry	1	9/14/2017 11:11:46 AM
Sodium	42.2	0.181	0.452		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Thallium	0.527	0.271	0.452		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Vanadium	14.0	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
Zinc	17.9	0.0905	0.362		mg/Kg-dry	1	9/14/2017 11:11:46 AM
SEMIVOLATILE SW-846 METHOD 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Biphenyl	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
1,2,4-Trichlorobenzene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
1,2-Dichlorobenzene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
1,3-Dichlorobenzene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
1,4-Dichlorobenzene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2,4,5-Trichlorophenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2,4,6-Trichlorophenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2,4-Dichlorophenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2,4-Dimethylphenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2,4-Dinitrophenol	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2,4-Dinitrotoluene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2,6-Dinitrotoluene	ND	50	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2-Chloronaphthalene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2-Chlorophenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2-Methylnaphthalene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2-Methylphenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
2-Nitroaniline	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 METHOD 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Nitrophenol	ND	50	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
3+4-Methylphenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
3,3´-Dichlorobenzidine	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
3-Nitroaniline	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
4,6-Dinitro-2-methylphenol	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
4-Bromophenyl phenyl ether	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
4-Chloro-3-methylphenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
4-Chloroaniline	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
4-Chlorophenyl phenyl ether	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
4-Nitroaniline	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
4-Nitrophenol	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Acenaphthene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Acenaphthylene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Acetophenone	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Aniline	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Anthracene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Atrazine	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Azobenzene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzaldehyde	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzidine	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzo(a)anthracene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzo(a)pyrene	ND	25	150	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzo(b)fluoranthene	31	25	250	J	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzo(g,h,i)perylene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzo(k)fluoranthene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzoic acid	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Benzyl alcohol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Bis(2-chloroethoxy)methane	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Bis(2-chloroethyl)ether	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Bis(2-chloroisopropyl)ether	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Bis(2-ethylhexyl)phthalate	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Butyl benzyl phthalate	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Caprolactam	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 METHOD 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Carbazole	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Chrysene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Di-n-butyl phthalate	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Di-n-octyl phthalate	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Dibenzo(a,h)anthracene	ND	25	150	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Dibenzofuran	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Diethyl phthalate	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Dimethyl phthalate	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Fluoranthene	43	25	250	J	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Fluorene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Hexachlorobenzene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Hexachlorobutadiene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Hexachlorocyclopentadiene	ND	50	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Hexachloroethane	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Indeno(1,2,3-c,d)pyrene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Isophorone	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
N-Nitrosodi-n-propylamine	ND	25	150	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
N-Nitrosodimethylamine	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
N-Nitrosodiphenylamine	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Naphthalene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Nitrobenzene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Parathion	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Pentachlorophenol	ND	50	500	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Phenanthrene	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Phenol	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Pyrene	38	25	250	J	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Pyridine	ND	25	250	U	µg/Kg-dry	1	9/21/2017 12:07:00 PM
Surr: 2,4,6-Tribromophenol	61.7	0	11-144		%Rec	1	9/21/2017 12:07:00 PM
Surr: 2-Fluorobiphenyl	65.8	0	17-137		%Rec	1	9/21/2017 12:07:00 PM
Surr: 2-Fluorophenol	72.4	0	13-131		%Rec	1	9/21/2017 12:07:00 PM
Surr: 4-Terphenyl-d14	79.3	0	20-143		%Rec	1	9/21/2017 12:07:00 PM
Surr: Nitrobenzene-d5	62.2	0	13-139		%Rec	1	9/21/2017 12:07:00 PM
Surr: Phenol-d6	71.1	0	12-135		%Rec	1	9/21/2017 12:07:00 PM

American Analytical Laboratories, LLC.

Date: *21-Sep-17*

ELAP ID : 11418

CLIENT:	Evergreen Recycling of Corona	**Client Sample ID:**	SCA Sand
Lab Order:	1709069	**Collection Date:**	9/12/2017 3:30:00 PM
Project:	EROC	**Matrix:**	SOIL
Lab ID:	1709069-001B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	ND	0.0505	0.101	U	mg/Kg-dry	1	9/18/2017 11:40:19 AM
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **JP**
Chromium, Trivalent	8.80	0.0905	0.362		mg/Kg-dry	1	9/14/2017
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **JaP**
Chromium, Hexavalent	ND	0.247	0.493	U	mg/Kg-dry	1	9/19/2017 10:00:00 AM
SOIL/WASTE PH MEASURED IN WATER			**SW9045D**				Analyst: **JaP**
pH	8.27	0.500	1.00		pH Units	1	9/18/2017 9:30:00 AM
TEMPERATURE			**M2550 B**				Analyst: **JaP**
Temp at which pH was measured	25.0	0	0		°C	1	9/18/2017 9:30:00 AM

NEW YORK SAND & STONE, LLC
BROOKLYN NAVY YARD
63 FLUSHING AVE., 11205
TEL: 718/596-2897

25TH STREET TERMINAL
75 25TH ST., BROOKLYN, NY 11232
INWOOD TERMINAL
1 SHERIDAN BLVD., INWOOD, NY 11096
PIER J
BROOKLYN NAVY YARD, PIER J, BROOKLYN, NY 11205

53031123

TICKET | PLANT | SCALE | DATE | TIME | ORDER #
| | | 10/30/17 | 09:40 | 11005 |

SHIPPING PLANT	SOURCE CODE	JOB#	JOB LOCATION
25TH STREET			

CUSTOMER CODE	CUSTOMER NAME	HAULER
405527	BROOKSIDE ENVIRONMENTAL	HILLWICK INC

PROJECT CODE	PROJECT NAME	TRUCK	TRUCK LICENSE
545090	(NYSS) 8TH STREET	1313	AS206W

DELV TYPE	ZONE		
DELIVERED	53031		

DRIVER PRINTED NAME (NO INITIALS) | DRIVER SIGNATURE

DELIVERY ADDRESS	PO #
168 8TH ST, BROOKLYN	

INSTRUCTION
516-852-3436 BRIAN

ITEM CODE	DESCRIPTION	UNIT	EXTENDED
1722502	LIME ITEM4 TYPE2		
	AGG HAUL CHARGE		

GROSS	79180	LBS	39.59	TN	WEIGHMASTER TWARREN		SUB TOTAL	
TARE	27140	LBS	13.57	TN	LOADS TODAY: 1	ARRIVE JOB	TAX	
NET	52040	LBS	26.02	TN	TONS TODAY: 26.02	LEAVE JOB	TOTAL	

11039600

CUSTOMER SIGNATURE

Customer and its designated carrier accept full responsibility for all claims arising out of the delivery and use of the materials described herein, including compliance with all laws and regulations (including carrier weight limitations), and any damages caused during the delivery, handling or use of the materials and hereby agrees to indemnify and defend New York Sand & Stone, LLC. from any such claims. Customer is solely responsible for determining the suitability of the materials for its intended purpose and accepts the materials "AS IS", without any representations or warranties, including fitness for a particular purpose.

CUSTOMER COPY

NEW YORK SAND & STONE
THE CITY QUARRY

NEW YORK SAND & STONE, LLC
BROOKLYN NAVY YARD
63 FLUSHING AVE., 11205
TEL: 718/596-2897

25TH STREET TERMINAL
75 25TH ST., BROOKLYN, NY 11232
INWOOD TERMINAL
1 SHERIDAN BLVD., INWOOD, NY 11096
PIER J
BROOKLYN NAVY YARD, PIER J, BROOKLYN, NY 11205

53031261

TICKET | PLANT | SCALE | DATE 11/01/17 | TIME 08:11 | ORDER# 1011

SHIPPING PLANT	SOURCE CODE	JOB#	JOB LOCATION
25TH STREET			

CUSTOMER CODE	CUSTOMER NAME	HAULER
405527	BROOKSIDE ENVIRONMENTAL	HILLWICK INC

PROJECT CODE	PROJECT NAME	TRUCK	TRUCK LICENSE
2545090	(NYSS) 8TH STREET	E1320	HS256H

DELV TYPE	ZONE	DRIVER PRINTED NAME (NO INITIALS)	DRIVER SIGNATURE
DELIVERED	53031	Lou	

DELIVERY ADDRESS	PO #
168 8TH ST, BROOKLYN	

INSTRUCTION 516-852-3436 BRIAN

ITEM CODE	DESCRIPTION	UNIT	EXTENDED
1722502	LIME ITEM 4 TYPE 2 SUBBASE		
	AGG HAUL CHARGE		

GROSS	79960	LBS	39.98	TN	WEIGHMASTER	JWARREN		SUB TOTAL	
TARE	27860	LBS	13.93	TN	LOADS TODAY:	1	ARRIVE JOB	TAX	
NET	52100	LBS	26.05	TN	TONS TODAY:	26.05	LEAVE JOB	TOTAL	

11039738

CUSTOMER SIGNATURE

Customer and its designated carrier accept full responsibility for all claims arising out of the delivery and use of the materials described herein, including compliance with all laws and regulations (including carrier weight limitations), and any damages caused during the delivery, handling or use of the materials and hereby agrees to indemnify and defend New York Sand & Stone, LLC. from any such claims. Customer is solely responsible for determining the suitability of the materials for its intended purpose and accepts the materials "AS IS", without any representations or warranties, including fitness for a particular purpose.

CUSTOMER COPY

NEW YORK SAND & STONE, LLC
BROOKLYN NAVY YARD
63 FLUSHING AVE., 11205
TEL: 718/596-2897

25TH STREET TERMINAL
75 25TH ST., BROOKLYN, NY 11232
INWOOD TERMINAL
1 SHERIDAN BLVD., INWOOD, NY 11096
PIER J
BROOKLYN NAVY YARD, PIER J, BROOKLYN, NY 11205

53031266

TICKET

PLANT	SCALE	DATE	TIME	ORDER #
		06/01/17	08:44	1011

SHIPPING PLANT	SOURCE CODE	JOB#	JOB LOCATION
25TH STREET			

CUSTOMER CODE	CUSTOMER NAME	HAULER
405527	BROOKSIDE ENVIRONMENTAL	HILLWICK INC

PROJECT CODE	PROJECT NAME	TRUCK	TRUCK LICENSE
545090	(NYSS) 8TH STREET	21320	HS256H

DELV TYPE	ZONE
DELIVERED	53031

DRIVER PRINTED NAME (NO INITIALS) LOU

DRIVER SIGNATURE

DELIVERY ADDRESS 168 8TH ST, BROOKLYN

PO #

INSTRUCTION 516-852-3436 BRIAN

ITEM CODE	DESCRIPTION	UNIT	EXTENDED
722502	LIME ITEM 4 TYPE 2 SUBBASE		
	AGG HAUL CHARGE		

GROSS	79680	LBS	39.84	TN	WEIGHMASTER JWARREN		SUB TOTAL	
TARE	27860	LBS	13.93	TN	LOADS TODAY: 2	ARRIVE JOB	TAX	
NET	51820	LBS	25.91	TN	TONS TODAY: 51.96	LEAVE JOB	TOTAL	

11039743

CUSTOMER SIGNATURE

Customer and its designated carrier accept full responsibility for all claims arising out of the delivery and use of the materials described herein, including compliance with all laws and regulations (including carrier weight limitations), and any damages caused during the delivery, handling or use of the materials and hereby agrees to indemnify and defend New York Sand & Stone, LLC. from any such claims. Customer is solely responsible for determining the suitability of the materials for its intended purpose and accepts the materials "AS IS", without any representations or warranties, including fitness for a particular purpose.

CUSTOMER COPY

NEW YORK SAND & STONE
THE CITY QUARRY

NEW YORK SAND & STONE, LLC
BROOKLYN NAVY YARD
63 FLUSHING AVE., 11205
TEL: 718/596-2897

25TH STREET TERMINAL
75 25TH ST., BROOKLYN, NY 11232
INWOOD TERMINAL
1 SHERIDAN BLVD., INWOOD, NY 11096
PIER J
BROOKLYN NAVY YARD, PIER J, BROOKLYN, NY 11205

53031721

TICKET | PLANT | SCALE | DATE 11/09/17 | TIME 09:41 | ORDER # 14026

SHIPPING PLANT	SOURCE CODE	JOB#	JOB LOCATION
25TH STREET			

CUSTOMER CODE	CUSTOMER NAME	HAULER
1405527	BROOKSIDE ENVIRONMENTAL	FOB

PROJECT CODE	PROJECT NAME	TRUCK	TRUCK LICENSE
1545090	(NYSS) 8TH STREET	81428MG	81428MG

DELV TYPE	ZONE	
PICKED UP	53031	

DRIVER PRINTED NAME (NO INITIALS) | DRIVER SIGNATURE

DELIVERY ADDRESS	PO #
168 8TH ST, BROOKLYN	

INSTRUCTION: 646-852-3436 BRIAN

ITEM CODE	DESCRIPTION	UNIT	EXTENDED
1722502	LIME ITEM 4 TYPE 2 SUBBASE		
	AGG HAUL CHARGE		

GROSS	71200	LBS	35.60	TN	WEIGHMASTER JWARREN			SUB TOTAL	
TARE	29400	LBS	14.70	TN	LOADS TODAY: 1	ARRIVE JOB		TAX	
NET	41800	LBS	20.90	TN	TONS TODAY: 20.90	LEAVE JOB		TOTAL	

11078203

CUSTOMER SIGNATURE

Customer and its designated carrier accept full responsibility for all claims arising out of the delivery and use of the materials described herein, including compliance with all laws and regulations (including carrier weight limitations), and any damages caused during the delivery, handling or use of the materials and hereby agrees to indemnify and defend New York Sand & Stone, LLC. from any such claims. Customer is solely responsible for determining the suitability of the materials for its intended purpose and accepts the materials "AS IS", without any representations or warranties, including fitness for a particular purpose.

CUSTOMER COPY

100 779660

SCALE TICKET

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

Brookside Env. 168 8th St Brk

Customer: Brookside Environmental, Inc.
Address: 22 Ocean Avenue
Copiage, N.Y. 11726
Phone: (516) 377-6300
Job No 168-8TH ST BRK

Ticket Number: 100587401
Date: 11/8/2017 6:01 AM
Trucker: Two Cousins
Truck No.: TRK..20
License No.:
Job No.:
Entered By: valba

PRODUCT	YARDS/TONS YARDS / TONS
Raw Materials Out Clean Sand - Out	20.00

X

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

J. Sanchez

FULL SIGNATURE—NO INITIALS

100 779847

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

SCALE TICKET

Ticket Number: 100587585
Date: 11/8/2017 12:48 PM
Trucker: Two Cousins
Truck No.: 03
License No.:
Job No.:
Entered By: valba

Customer: Brookside Environmental, Inc.
Address: 22 Ocean Avenue
Copiage, N.Y. 11726
Phone: (516) 377-6300
Job No

PRODUCT	YARDS/TONS YARDS / TONS
Raw Materials Out Clean Sand - Out	20.00

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

DANY BATISTA

FULL SIGNATURE—NO INITIALS

100 779848

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

SCALE TICKET

100587586

Ticket Number: 11/8/2017 12:48 PM
Date: Two Cousins
Trucker: 20
Truck No.:
License No.:
Job No.: valba
Entered By: YARDS/TONS

Customer: Brookside Environmental, Inc.
Address: 22 Ocean Avenue
Copiage, N.Y. 11726
(516) 377-6300

Phone: Job No

PRODUCT	YARDS / TONS
Raw Materials Out	
Clean Sand - Out	20.00

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

FRANK

FULL SIGNATURE—NO INITIALS

100 779656

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

SCALE TICKET

Ticket Number: 100587397
Date: 11/8/2017 5:53 AM
Trucker: Two Cousins
Truck No.: 16
License No.:
Job No.:
Entered By: valba

Customer:
Address: Brookside Environmental, Inc.
22 Ocean Avenue
Phone: Copiage, N.Y. 11726
(516) 377-6300

Job No 168-8TH ST BRK

PRODUCT	YARDS / TONS
	YARDS/TONS
Raw Materials Out	
Clean Sand - Out	20.00

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

CELE

FULL SIGNATURE—NO INITIALS

100 779659

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

SCALE TICKET

Ticket Number: 100587400
Date: 11/8/2017 6:00 AM
Trucker: Two Cousins
Truck No.: 03
License No.:
Job No.:
Entered By: valba

Customer: Brookside Environmental, Inc.
Address: 22 Ocean Avenue
Copiage, N.Y. 11726
Phone: (516) 377-6300

Job No 168-8TH ST BRK

PRODUCT	YARDS/TONS YARDS / TONS
Raw Materials Out Clean Sand - Out	20.00

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

DANY BATISTA

FULL SIGNATURE—NO INITIALS

100779705

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

SCALE TICKET

Ticket Number: 100587444
Date: 11/8/2017 8:24 AM
Trucker: Two Cousins
Truck No.: 16
License No.:
Job No.:
Entered By: valba

Customer:
Address: Brookside Environmental, Inc.
22 Ocean Avenue
Copiage, N.Y. 11726
Phone: (516) 377-6300

Job No

PRODUCT	YARDS / TONS
Raw Materials Out	
Clean Sand - Out	20.00

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

FULL SIGNATURE—NO INITIALS

100779733

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

SCALE TICKET

Ticket Number: 100587472
Date: 11/8/2017 9:33 AM
Trucker: Two Cousins
Truck No.: 20
License No.:
Job No.:
Entered By: valba

Customer: Brookside Environmental, Inc.
Address: 22 Ocean Avenue
Copiage, N.Y. 11726
Phone: (516) 377-6300
Job No

PRODUCT	YARDS/TONS YARDS / TONS
Raw Materials Out Clean Sand - Out	20.00

X

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

F. Sanchez

FULL SIGNATURE—NO INITIALS

100 779719

Evergreen Recycling of Corona Inc.
127-50 Northern Blvd.
Flushing, NY 11368
YARD 35th Ave. Willets Point Blvd.
Tel: 718-205-8038 Fax: 718-205-8202

SCALE TICKET

Ticket Number: 100587458
Date: 11/8/2017 9:02 AM
Trucker: Two Cousins
Truck No.: 03
License No.:
Job No.:
Entered By: valba

Customer: Brookside Environmental, Inc.
Address: 22 Ocean Avenue
Copiage, N.Y. 11726
Phone: (516) 377-6300
Job No

PRODUCT	YARDS/TONS YARDS / TONS
Raw Materials Out	
Clean Sand - Out	20.00

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

DANY BATISTA

FULL SIGNATURE—NO INITIALS

ATTACHMENT E

Waste Disposal Records

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

e-Hardcopy 2.0
Automated Report

Technical Report for

TRC

K710, 168 8th Street, Brooklyn, NY

275864 PO # 110129

SGS Accutest Job Number: JC54421

Sampling Date: 11/01/17



Report to:

lohara@trcsolutions.com

ATTN: Distribution4

Total number of pages in report: 6

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: Matt Cordova 732-329-0200

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

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Test results relate only to samples analyzed.

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Sample Summary

TRC

Job No: JC54421

K710, 168 8th Street, Brooklyn, NY
Project No: 275864 PO # 110129

	Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
	JC54421-1	11/01/17	14:30	EE	11/01/17	SO	Soil	TRC-WC-1
*	JC54421-1A	11/01/17	14:30	EE	11/01/17	SO	Soil	TRC-WC-1

* The following report applies to these samples only (3 day TAT).

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: TRC-WC-1
Lab Sample ID: JC54421-1A
Matrix: SO - Soil
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 91.7

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 0.50	D004	5.0	0.50	mg/l	5	11/03/17	11/05/17	GT	SW846 6010C [1]	SW846 3010A [3]
Barium	< 1.0	D005	100	1.0	mg/l	5	11/03/17	11/05/17	GT	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 0.025	D006	1.0	0.025	mg/l	5	11/03/17	11/05/17	GT	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 0.050	D007	5.0	0.050	mg/l	5	11/03/17	11/05/17	GT	SW846 6010C [1]	SW846 3010A [3]
Lead	< 0.50	D008	5.0	0.50	mg/l	5	11/03/17	11/05/17	GT	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	11/06/17	11/06/17	JPM	SW846 7470A [2]	SW846 7470A [4]
Selenium	< 0.50	D010	1.0	0.50	mg/l	5	11/03/17	11/05/17	GT	SW846 6010C [1]	SW846 3010A [3]
Silver	< 0.050	D011	5.0	0.050	mg/l	5	11/03/17	11/05/17	GT	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA43166
(2) Instrument QC Batch: MA43174
(3) Prep QC Batch: MP4005
(4) Prep QC Batch: MP4011

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 7/1/11)

Report of Analysis

Client Sample ID:	TRC-WC-1		
Lab Sample ID:	JC54421-1A	**Date Sampled:**	11/01/17
Matrix:	SO - Soil	**Date Received:**	11/01/17
		Percent Solids:	91.7
Project:	K710, 168 8th Street, Brooklyn, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	N.C 8.007		su	1	11/03/17 16:16	RI	SW846 9045D
Cyanide Reactivity	< 10	10	mg/kg	1	11/03/17 12:06	BM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	11/04/17 14:28	AC	SW846 1010A/ASTM D93
Sulfide Reactivity	< 100	100	mg/kg	1	11/03/17 10:31	MP	SW846 CHAP7/9034

RL = Reporting Limit

ACCUTEST LABORATORIES

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CHAIN OF CUSTODY

PAGE 1 OF 1

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # JC54421

Client / Reporting Information

Company Name: TRC Engineers, Inc.
Street Address: 1430 Broadway
City: New York State: NY Zip: 10024
Project Contact: Lindsay O'Hara E-mail:
Phone #: 203 278 5305 Fax #:
Sampler(s) Name(s): Emily Ebert Phone #:

Project Information

Project Name: 168 8th Street IRM
Street:
City: Brooklyn State: NY
Project #: 275804
Client Purchase Order #:
Project Manager: Lindsay O'Hara

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Total metals (RCRA)	TCLP metals (RCRA)	Ignitability	Corrosivity	reactivity - Sulfide Cyanide	PCBs	TPH - DRO	TPH - GRO	VOCs by 8260	LAB USE ONLY
1	TRC-VC-1		11/1/17	1430	EE	S	2					X		X		X	X	X	X	X	X	X	X	X	C3 1474 40126
							END																		

D.I. slurry voc vials frozen storage
Date: ___ Time: ___ Initials: ___

Turnaround Time (Business days)

- Std. 10 Business Days
- ~~5 Day RUSH~~
- 3 Day RUSH
- 2 Day RUSH
- 1 Day RUSH
- other ____

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:
INITIAL ASSESSMENT: 3B KAP
LABEL VERIFICATION: ____

Data Deliverable Information

- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- FULLT1 (Level 3+4)
- NJ Reduced
- Commercial "C"
- NJ Data of Known Quality Protocol Reporting

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

- NYASP Category A
- NYASP Category B
- State Forms
- EDD Format ____
- Other ____

Comments / Special Instructions

SCA project

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11-1-17 1520	1 Robert Chambers	2 Robert Chambers	11-1-17 1620	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal # 617 Intact / Not Intact	Preserved where applicable	On Ice / Cooler Temp. 1.6 3.1
5		5			

SGS Accutest Sample Receipt Summary

Job Number: JC54421 **Client:** _____ **Project:** _____

Date / Time Received: 11/1/2017 4:20:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.4);

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:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

SM089-02
Rev. Date 12/1/16

JC54421: Chain of Custody
Page 2 of 2

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Automated Report

Technical Report for

TRC

K710, 168 8th Street, Brooklyn, NY

275864 PO # 110129

SGS Accutest Job Number: JC54421

Sampling Date: 11/01/17



Report to:

lohara@trcsolutions.com

ATTN: Distribution4

Total number of pages in report: **10**

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: Matt Cordova 732-329-0200

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

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Sample Summary

TRC

Job No: JC54421

K710, 168 8th Street, Brooklyn, NY
Project No: 275864 PO # 110129

	Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
*	JC54421-1	11/01/17	14:30	EE	11/01/17	SO	Soil	TRC-WC-1
	JC54421-1A	11/01/17	14:30	EE	11/01/17	SO	Soil	TRC-WC-1

* The following report applies to these samples only (2 day TAT).

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: TRC-WC-1
Lab Sample ID: JC54421-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 91.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216563.D	1	11/03/17 03:25	PS	n/a	n/a	VI8696
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	14.0	11	7.0	ug/kg	
71-43-2	Benzene	ND	0.55	0.12	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.47	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.26	ug/kg	
75-25-2	Bromoform	ND	5.5	0.34	ug/kg	
74-83-9	Bromomethane	ND	5.5	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	5.7	ug/kg	
104-51-8	n-Butylbenzene	ND	2.2	0.40	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.2	0.25	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.2	0.48	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.67	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.71	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.31	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.98	ug/kg	
67-66-3	Chloroform	ND	2.2	0.35	ug/kg	
74-87-3	Chloromethane	ND	5.5	1.1	ug/kg	
110-82-7	Cyclohexane [a]	ND	2.2	0.37	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.42	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.27	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.56	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	0.66	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.28	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.77	ug/kg	
156-59-2	cis-1,2-Dichloroethene	5.3	1.1	0.44	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.42	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.26	ug/kg	

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:	TRC-WC-1		
Lab Sample ID:	JC54421-1	**Date Sampled:**	11/01/17
Matrix:	SO - Soil	**Date Received:**	11/01/17
Method:	SW846 8260C	**Percent Solids:**	91.7
Project:	K710, 168 8th Street, Brooklyn, NY		

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	140	52	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.32	ug/kg	
76-13-1	Freon 113	ND	5.5	0.74	ug/kg	
591-78-6	2-Hexanone	ND	5.5	3.0	ug/kg	
98-82-8	Isopropylbenzene	ND	2.2	0.27	ug/kg	
79-20-9	Methyl Acetate	ND	5.5	2.8	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.60	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.0	ug/kg	
75-09-2	Methylene chloride	ND	5.5	2.7	ug/kg	
103-65-1	n-Propylbenzene	ND	2.2	0.25	ug/kg	
100-42-5	Styrene	ND	2.2	0.54	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.28	ug/kg	
127-18-4	Tetrachloroethene	5.7	2.2	0.69	ug/kg	
108-88-3	Toluene	ND	1.1	0.60	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.63	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.46	ug/kg	
79-01-6	Trichloroethene	8.9	1.1	0.60	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.52	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.2	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.2	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.83	ug/kg	
	m,p-Xylene	ND	1.1	0.60	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.27	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	102%		73-132%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	121%		77-125%

(a) Associated CCV outside of control limits low.

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: TRC-WC-1
Lab Sample ID: JC54421-1
Matrix: SO - Soil
Method: SW846 8015C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 91.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM91559.D	1	11/02/17 16:53	KC	n/a	n/a	GLM3700
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.5 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	98.6	25	13	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	88%		70-116%

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: TRC-WC-1
Lab Sample ID: JC54421-1
Matrix: SO - Soil
Method: SW846 8082A SW846 3546
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 91.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF176245.D	1	11/02/17 21:53	RK	11/02/17 03:06	OP7480	GEF6085
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	14	ug/kg	
11104-28-2	Aroclor 1221	ND	34	14	ug/kg	
11141-16-5	Aroclor 1232	ND	34	9.2	ug/kg	
53469-21-9	Aroclor 1242	ND	34	5.5	ug/kg	
12672-29-6	Aroclor 1248	ND	34	20	ug/kg	
11097-69-1	Aroclor 1254	ND	34	8.4	ug/kg	
11096-82-5	Aroclor 1260	ND	34	11	ug/kg	
11100-14-4	Aroclor 1268	ND	34	5.1	ug/kg	
37324-23-5	Aroclor 1262	ND	34	2.6	ug/kg	
1336-36-3	Total PCBs	ND	34		ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	48%		24-152%
877-09-8	Tetrachloro-m-xylene	53%		24-152%
2051-24-3	Decachlorobiphenyl	58%		10-166%
2051-24-3	Decachlorobiphenyl	62%		10-166%

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: TRC-WC-1
Lab Sample ID: JC54421-1
Matrix: SO - Soil
Method: SW846 8015C SW846 3546
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 91.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y87304.D	1	11/03/17 12:25	DS	11/02/17 03:06	OP7448	G2Y3342
Run #2							

	Initial Weight	Final Volume
Run #1	10.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1670	10	2.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		18-132%
16416-32-3	Tetracosane-d50	88%		25-137%
438-22-2	5a-Androstane	75%		22-134%

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:	TRC-WC-1		
Lab Sample ID:	JC54421-1	**Date Sampled:**	11/01/17
Matrix:	SO - Soil	**Date Received:**	11/01/17
		Percent Solids:	91.7
Project:	K710, 168 8th Street, Brooklyn, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	4.4	2.2	mg/kg	1	11/02/17	11/03/17	ND	SW846 6010C [2]	SW846 3050B [4]
Barium	30.9	22	mg/kg	1	11/02/17	11/03/17	ND	SW846 6010C [2]	SW846 3050B [4]
Cadmium	< 0.56	0.56	mg/kg	1	11/02/17	11/03/17	ND	SW846 6010C [2]	SW846 3050B [4]
Chromium	15.9	1.1	mg/kg	1	11/02/17	11/03/17	ND	SW846 6010C [2]	SW846 3050B [4]
Lead	15.5	2.2	mg/kg	1	11/02/17	11/03/17	ND	SW846 6010C [2]	SW846 3050B [4]
Mercury	0.038	0.034	mg/kg	1	11/02/17	11/02/17	JA	SW846 7471B [1]	SW846 7471B [3]
Selenium	< 2.2	2.2	mg/kg	1	11/02/17	11/03/17	ND	SW846 6010C [2]	SW846 3050B [4]
Silver	< 0.56	0.56	mg/kg	1	11/02/17	11/03/17	ND	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA43134
(2) Instrument QC Batch: MA43156
(3) Prep QC Batch: MP3964
(4) Prep QC Batch: MP3983

RL = Reporting Limit

ACCUTEST LABORATORIES

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PAGE 1 OF 1

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # JC54421

Client / Reporting Information

Company Name: TRC Engineers, Inc.
Street Address: 1430 Broadway
City / State / Zip: New York NY 10024
Project Contact: Lindsay O'Hara | E-mail:
Phone #: 203 278 5305 | Fax #:
Sampler(s) Name(s): Emily Eberl | Phone #:

Project Information

Project Name: 168 8th Street IRM
Street:
City / State:
Project #: 275804
Client Purchase Order #:
Project Manager: Lindsay O'Hara

Billing Information (If different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Total metals (RCRA)	TCLP metals (RCRA)	Ignitability	Corrosivity	reactivity - Sulfide Cyanide	PCBs	TPH - DRO	TPH - GRO	VOCs by 8260	LAB USE ONLY
1	TRC-VC-1		11/1/17	1430	EE	S	2					XX	X			X	X	X	X	X	X	X	X	X	C3 1474 40126
							END																		

D.I. slurry voc vials frozen storage
Date: ___ Time: ___ Initials: ___

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] ~~5 Day RUSH~~
- [ ] 3 Day RUSH
- [x] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other ____

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:
INITIAL ASSESSMENT: 3B KAP
LABEL VERIFICATION: ____

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [x] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format ____
- [ ] Other ____

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

SCA project

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11-1-17 1520	1 Robert Chambers	2 Robert Chambers	11-1-17 1620	2
3			3	4		4
5			5	Custody Seal # 617	Intact / Not Intact	Preserved where applicable: On Ice ☒ Cooler Temp. 1.6 3.1

SGS Accutest Sample Receipt Summary

Job Number: JC54421 **Client:** **Project:**

Date / Time Received: 11/1/2017 4:20:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.4);

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:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

SM089-02
Rev. Date 12/1/16

ANALYTICAL REPORT

Lab Number:	L1741031
Client:	TRC Environmental Corp 1430 Broadway 10th Floor New York, NY 10018
ATTN:	Emily Ebert
Phone:	(212) 221-7822
Project Name:	168 8TH ST. IRM
Project Number:	275864
Report Date:	11/13/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1741031-01	TRC-WC-2	SOIL	168 8TH ST., BROOKLYN, NY	11/08/17 11:30	11/08/17

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

At the client's request, the analysis of PCBs was performed on L1741031-01.

L1741031-01: The sample was received in an inappropriate container for the TCLP Volatiles analysis.

Chemical Oxygen Demand

The WG1062247-4 MS recovery (72%), performed on L1741031-01, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Amita Naik

Title: Technical Director/Representative Date: 11/13/17

ORGANICS

VOLATILES

Project Name: 168 8TH ST. IRM
Lab Number: L1741031
Project Number: 275864
Report Date: 11/13/17

SAMPLE RESULTS

Lab ID: L1741031-01
Client ID: TRC-WC-2
Sample Location: 168 8TH ST., BROOKLYN, NY

Date Collected: 11/08/17 11:30
Date Received: 11/08/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 11/10/17 10:34
Analyst: NL
Percent Solids: 92%
TCLP/SPLP Ext. Date: 11/09/17 14:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	3.0	J	ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	113		70-130

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/10/17 08:28
Analyst: NL
TCLP/SPLP Extraction Date: 11/09/17 14:13

Extraction Date: 11/09/17 14:13

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1061855-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	92		70-130
dibromofluoromethane	113		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 168 8TH ST. IRM

Project Number: 275864

Lab Number: L1741031

Report Date: 11/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1061855-3 WG1061855-4								
Chloroform	130		130		70-130	0		20
Carbon tetrachloride	**140**	Q	130		63-132	7		20
Tetrachloroethene	120		120		70-130	0		20
Chlorobenzene	110		100		75-130	10		25
1,2-Dichloroethane	110		120		70-130	9		20
Benzene	110		110		70-130	0		25
Vinyl chloride	88		79		55-140	11		20
1,1-Dichloroethene	99		92		61-145	7		25
Trichloroethene	120		110		70-130	9		25
1,4-Dichlorobenzene	110		100		70-130	10		20
2-Butanone	85		91		63-138	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		103		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	90		90		70-130
dibromofluoromethane	113		113		70-130

SEMIVOLATILES

Project Name: 168 8TH ST. IRM
Project Number: 275864
Lab Number: L1741031
Report Date: 11/13/17

SAMPLE RESULTS

Lab ID: L1741031-01
Client ID: TRC-WC-2
Sample Location: 168 8TH ST., BROOKLYN, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/10/17 23:22
Analyst: CB
Percent Solids: 92%
TCLP/SPLP Ext. Date: 11/09/17 06:52

Date Collected: 11/08/17 11:30
Date Received: 11/08/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/10/17 06:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	2.9	1
2,4-Dinitrotoluene	ND		ug/l	25	4.2	1
Hexachlorobutadiene	ND		ug/l	10	3.6	1
Hexachloroethane	ND		ug/l	10	3.4	1
Nitrobenzene	ND		ug/l	10	3.8	1
2,4,6-Trichlorophenol	ND		ug/l	25	3.4	1
Pentachlorophenol	ND		ug/l	50	17.	1
2-Methylphenol	ND		ug/l	25	5.1	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	5.6	1
2,4,5-Trichlorophenol	ND		ug/l	25	3.6	1
Pyridine	ND		ug/l	18	9.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		21-120
Phenol-d6	73		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	102		33-120

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/10/17 19:36
Analyst: CB
TCLP/SPLP Extraction Date: 11/09/17 06:52

Extraction Method: EPA 3510C
Extraction Date: 11/10/17 06:28

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1061595-1					
Hexachlorobenzene	ND		ug/l	10	2.9
2,4-Dinitrotoluene	ND		ug/l	25	4.2
Hexachlorobutadiene	ND		ug/l	10	3.6
Hexachloroethane	ND		ug/l	10	3.4
Nitrobenzene	ND		ug/l	10	3.8
2,4,6-Trichlorophenol	ND		ug/l	25	3.4
Pentachlorophenol	ND		ug/l	50	17.
2-Methylphenol	ND		ug/l	25	5.1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	5.6
2,4,5-Trichlorophenol	ND		ug/l	25	3.6
Pyridine	ND		ug/l	18	9.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	93		21-120
Phenol-d6	85		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	102		15-120
2,4,6-Tribromophenol	104		10-120
4-Terphenyl-d14	111		33-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 168 8TH ST. IRM

Project Number: 275864

Lab Number: L1741031

Report Date: 11/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1061595-2 WG1061595-3								
Hexachlorobenzene	85		81		40-140	5		30
2,4-Dinitrotoluene	80		81		40-132	1		30
Hexachlorobutadiene	79		83		28-111	5		30
Hexachloroethane	72		74		21-105	3		30
Nitrobenzene	76		77		40-140	1		30
2,4,6-Trichlorophenol	82		81		30-130	1		30
Pentachlorophenol	81		81		9-103	0		30
2-Methylphenol	77		78		30-130	1		30
3-Methylphenol/4-Methylphenol	77		78		30-130	1		30
2,4,5-Trichlorophenol	84		83		30-130	1		30
Pyridine	63		66		10-66	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	83		90		21-120
Phenol-d6	77		81		10-120
Nitrobenzene-d5	81		88		23-120
2-Fluorobiphenyl	86		90		15-120
2,4,6-Tribromophenol	92		99		10-120
4-Terphenyl-d14	91		95		33-120

PCBS

Project Name: 168 8TH ST. IRM
Project Number: 275864
Lab Number: L1741031
Report Date: 11/13/17

SAMPLE RESULTS

Lab ID: L1741031-01
Client ID: TRC-WC-2
Sample Location: 168 8TH ST., BROOKLYN, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 11/13/17 00:37
Analyst: HT
Percent Solids: 92%

Date Collected: 11/08/17 11:30
Date Received: 11/08/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 11/11/17 02:36
Cleanup Method: EPA 3665A
Cleanup Date: 11/11/17
Cleanup Method: EPA 3660B
Cleanup Date: 11/12/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.2	3.99	1	A
Aroclor 1221	ND		ug/kg	35.2	5.35	1	A
Aroclor 1232	ND		ug/kg	35.2	3.46	1	A
Aroclor 1242	ND		ug/kg	35.2	4.30	1	A
Aroclor 1248	ND		ug/kg	35.2	3.95	1	A
Aroclor 1254	18.3	J	ug/kg	35.2	2.87	1	A
Aroclor 1260	13.5	J	ug/kg	35.2	3.67	1	B
Aroclor 1262	ND		ug/kg	35.2	2.89	1	A
Aroclor 1268	ND		ug/kg	35.2	2.49	1	A
PCBs, Total	31.8	J	ug/kg	35.2	2.49	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 11/11/17 23:24
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 11/10/17 11:03
Cleanup Method: EPA 3665A
Cleanup Date: 11/10/17
Cleanup Method: EPA 3660B
Cleanup Date: 11/11/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1061745-1						
Aroclor 1016	ND		ug/kg	31.7	3.59	A
Aroclor 1221	ND		ug/kg	31.7	4.82	A
Aroclor 1232	ND		ug/kg	31.7	3.12	A
Aroclor 1242	ND		ug/kg	31.7	3.88	A
Aroclor 1248	ND		ug/kg	31.7	3.56	A
Aroclor 1254	ND		ug/kg	31.7	2.58	A
Aroclor 1260	ND		ug/kg	31.7	3.31	A
Aroclor 1262	ND		ug/kg	31.7	2.60	A
Aroclor 1268	ND		ug/kg	31.7	2.24	A
PCBs, Total	ND		ug/kg	31.7	2.24	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	76		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 168 8TH ST. IRM

Project Number: 275864

Lab Number: L1741031

Report Date: 11/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1061745-2 WG1061745-3									
Aroclor 1016	72		75		40-140	4		50	A
Aroclor 1260	67		68		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		81		30-150	A
Decachlorobiphenyl	73		73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		90		30-150	B
Decachlorobiphenyl	77		77		30-150	B

PESTICIDES

Project Name: 168 8TH ST. IRM
Project Number: 275864
Lab Number: L1741031
Report Date: 11/13/17

SAMPLE RESULTS

Lab ID: L1741031-01
Client ID: TRC-WC-2
Sample Location: 168 8TH ST., BROOKLYN, NY

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 11/10/17 23:31
Analyst: CD
Percent Solids: 92%
TCLP/SPLP Ext. Date: 11/09/17 06:52

Date Collected: 11/08/17 11:30
Date Received: 11/08/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/10/17 06:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: 168 8TH ST. IRM
Project Number: 275864
Lab Number: L1741031
Report Date: 11/13/17

SAMPLE RESULTS

Lab ID: L1741031-01
Client ID: TRC-WC-2
Sample Location: 168 8TH ST., BROOKLYN, NY

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 11/11/17 16:43
Analyst: SL
Percent Solids: 92%
TCLP/SPLP Ext. Date: 11/09/17 06:52
Methylation Date: 11/10/17 17:16

Date Collected: 11/08/17 11:30
Date Received: 11/08/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 11/10/17 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	70		30-150	B

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 11/11/17 15:45
Analyst: SL
TCLP/SPLP Extraction Date: 11/09/17 06:52
Methylation Date: 11/10/17 17:16

Extraction Method: EPA 8151A
Extraction Date: 11/10/17 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1061559-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	66		30-150	B

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 11/10/17 22:00
Analyst: CD
TCLP/SPLP Extraction Date: 11/09/17 06:52

Extraction Method: EPA 3510C
Extraction Date: 11/10/17 06:25

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1061594-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	86		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 168 8TH ST. IRM

Project Number: 275864

Lab Number: L1741031

Report Date: 11/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1061559-2 WG1061559-3									
2,4-D	**154**	Q	**151**	Q	30-150	2		25	A
2,4,5-TP (Silvex)	71		75		30-150	5		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	99		107		30-150	A
DCAA	69		73		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1061594-2 WG1061594-3									
Lindane	101		89		30-150	13		20	A
Heptachlor	98		86		30-150	12		20	A
Heptachlor epoxide	94		83		30-150	13		20	A
Endrin	104		90		30-150	14		20	A
Methoxychlor	94		82		30-150	14		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		93		30-150	A
Decachlorobiphenyl	90		77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	104		92		30-150	B
Decachlorobiphenyl	96		85		30-150	B

METALS

Project Name: 168 8TH ST. IRM
Lab Number: L1741031
Project Number: 275864
Report Date: 11/13/17

SAMPLE RESULTS

Lab ID: L1741031-01
Client ID: TRC-WC-2
Sample Location: 168 8TH ST., BROOKLYN, NY
Matrix: Soil
Percent Solids: 92%

Date Collected: 11/08/17 11:30
Date Received: 11/08/17
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 11/09/17 06:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	11/10/17 12:16	11/10/17 21:28	EPA 3015	1,6010C	AB
Barium, TCLP	0.347	J	mg/l	0.500	0.021	1	11/10/17 12:16	11/10/17 21:28	EPA 3015	1,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	11/10/17 12:16	11/10/17 21:28	EPA 3015	1,6010C	AB
Chromium, TCLP	ND		mg/l	0.200	0.021	1	11/10/17 12:16	11/10/17 21:28	EPA 3015	1,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	11/10/17 12:16	11/10/17 21:28	EPA 3015	1,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0003	1	11/10/17 16:55	11/10/17 20:39	EPA 7470A	1,7470A	EA
Selenium, TCLP	ND		mg/l	0.500	0.035	1	11/10/17 12:16	11/10/17 21:28	EPA 3015	1,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	11/10/17 12:16	11/10/17 21:28	EPA 3015	1,6010C	AB

Project Name: 168 8TH ST. IRM
Project Number: 275864
Lab Number: L1741031
Report Date: 11/13/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1061757-1										
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	11/10/17 12:16	11/10/17 22:24	1,6010C	AB
Barium, TCLP	ND		mg/l	0.500	0.021	1	11/10/17 12:16	11/10/17 22:24	1,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	11/10/17 12:16	11/10/17 22:24	1,6010C	AB
Chromium, TCLP	ND		mg/l	0.200	0.021	1	11/10/17 12:16	11/10/17 22:24	1,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	11/10/17 12:16	11/10/17 22:24	1,6010C	AB
Selenium, TCLP	ND		mg/l	0.500	0.035	1	11/10/17 12:16	11/10/17 22:24	1,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	11/10/17 12:16	11/10/17 22:24	1,6010C	AB

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 11/09/17 06:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1061865-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0003	1	11/10/17 16:55	11/10/17 20:15	1,7470A	EA

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 11/09/17 06:52

Lab Control Sample Analysis

Batch Quality Control

Project Name: 168 8TH ST. IRM

Project Number: 275864

Lab Number: L1741031

Report Date: 11/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1061757-2								
Arsenic, TCLP	95		-		75-125	-		20
Barium, TCLP	92		-		75-125	-		20
Cadmium, TCLP	100		-		75-125	-		20
Chromium, TCLP	92		-		75-125	-		20
Lead, TCLP	94		-		75-125	-		20
Selenium, TCLP	100		-		75-125	-		20
Silver, TCLP	91		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1061865-2								
Mercury, TCLP	108		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1061757-3 QC Sample: L1740544-01 Client ID: MS Sample												
Arsenic, TCLP	ND	1.2	1.13	94		-	-		75-125	-		20
Barium, TCLP	0.544	20	18.8	91		-	-		75-125	-		20
Cadmium, TCLP	ND	0.51	0.504	99		-	-		75-125	-		20
Chromium, TCLP	ND	2	1.81	90		-	-		75-125	-		20
Lead, TCLP	ND	5.1	4.76	93		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.20	100		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.461	92		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1061865-3 QC Sample: L1740580-01 Client ID: MS Sample												
Mercury, TCLP	ND	0.025	0.0267	107		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1061757-4 QC Sample: L1740544-01 Client ID: DUP Sample						
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.544	0.550	mg/l	1		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1061865-4 QC Sample: L1740580-01 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

SAMPLE RESULTS

Lab ID: L1741031-01
Client ID: TRC-WC-2
Sample Location: 168 8TH ST., BROOKLYN, NY
Matrix: Soil

Date Collected: 11/08/17 11:30
Date Received: 11/08/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP pH Extraction Data - Westborough Lab										
pH, Extraction Post-Filtration	5.05		SU	-	NA	1	-	11/09/17 22:52	1,1311	LB
General Chemistry - Westborough Lab										
Solids, Total	91.7		%	0.100	NA	1	-	11/09/17 13:34	121,2540G	RI
Solids, Total Volatile	1.9		%	0.10	0.10	1	-	11/11/17 13:10	121,2540G	RP
Nitrogen, Ammonia	ND		mg/kg	8.3	3.1	1	11/10/17 17:00	11/10/17 21:51	121,4500NH3-BH	AT
Chemical Oxygen Demand	5040		mg/kg	872	872.	4	11/12/17 16:50	11/12/17 19:36	121,5220D(M)	RP
Oil & Grease, Hem-Grav	2370		mg/kg	218	218.	1	11/11/17 07:40	11/11/17 12:00	1,9071B	KZ
Paint Filter Liquid	NEGATIVE		-	0	NA	1	-	11/10/17 16:48	1,9095B	AS

Project Name: 168 8TH ST. IRM
Project Number: 275864
Lab Number: L1741031
Report Date: 11/13/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1061871-1										
Nitrogen, Ammonia	ND		mg/kg	7.5	0.02	1	11/10/17 17:00	11/10/17 21:48	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1062046-1										
Oil & Grease, Hem-Grav	ND		mg/kg	200	200.	1	11/11/17 07:40	11/11/17 12:00	1,9071B	KZ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1062119-1										
Solids, Total Volatile	ND		%	0.10	0.10	1	-	11/11/17 13:10	121,2540G	RP
TCLP pH Extraction Data - Westborough Lab for sample(s): 01 Batch: WG1062150-1										
pH, Extraction Post-Filtration	4.86		SU	-	NA	1	-	11/09/17 22:52	1,1311	LB
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1062247-1										
Chemical Oxygen Demand	ND		mg/kg	200	200.	1	11/12/17 16:50	11/12/17 19:36	121,5220D(M)	RP

Lab Control Sample Analysis

Batch Quality Control

Project Name: 168 8TH ST. IRM

Project Number: 275864

Lab Number: L1741031

Report Date: 11/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1061871-2								
Nitrogen, Ammonia	100		-		83-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1062046-2								
Oil & Grease, Hem-Grav	102		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1062247-2								
Chemical Oxygen Demand	101		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1061871-4 QC Sample: L1741031-01 Client ID: TRC-WC-2												
Nitrogen, Ammonia	ND	440	430	98		-	-		55-144	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062046-4 QC Sample: L1741031-01 Client ID: TRC-WC-2												
Oil & Grease, Hem-Grav	2370	4360	6620	97		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062247-4 QC Sample: L1741031-01 Client ID: TRC-WC-2												
Chemical Oxygen Demand	5040	2720	6990	**72**	Q	-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1061341-1 QC Sample: L1740559-01 Client ID: DUP Sample						
Solids, Total	80.2	80.6	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1061871-3 QC Sample: L1741031-01 Client ID: TRC-WC-2						
Nitrogen, Ammonia	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062046-3 QC Sample: L1741031-01 Client ID: TRC-WC-2						
Oil & Grease, Hem-Grav	2370	1800	mg/kg	27		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062119-2 QC Sample: L1741031-01 Client ID: TRC-WC-2						
Solids, Total Volatile	1.9	1.7	%	11		11
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062247-3 QC Sample: L1741031-01 Client ID: TRC-WC-2						
Chemical Oxygen Demand	5040	4190	mg/kg	18		20

Project Name: 168 8TH ST. IRM
Project Number: 275864

Lab Number: L1741031
Report Date: 11/13/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1741031-01A	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		TCLP-EXT-ZHE(14),NYTCL-8082(14)
L1741031-01B	Glass 250ml/8oz unpreserved	A	NA		2.6	Y	Absent		-
L1741031-01C	Glass 250ml/8oz unpreserved	A	NA		2.6	Y	Absent		-
L1741031-01D	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		TS(7)
L1741031-01E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		COD-5220(28),PH-TCLP(180),TVS-2540(7),PAINTF(),OG-9071(28),NH3-4500(28)
L1741031-01F	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		COD-5220(28),PH-TCLP(180),TVS-2540(7),PAINTF(),OG-9071(28),NH3-4500(28)
L1741031-01G	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		COD-5220(28),PH-TCLP(180),TVS-2540(7),PAINTF(),OG-9071(28),NH3-4500(28)
L1741031-01H	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		COD-5220(28),PH-TCLP(180),TVS-2540(7),PAINTF(),OG-9071(28),NH3-4500(28)
L1741031-01I	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		COD-5220(28),PH-TCLP(180),TVS-2540(7),PAINTF(),OG-9071(28),NH3-4500(28)
L1741031-01J	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		COD-5220(28),PH-TCLP(180),TVS-2540(7),PAINTF(),OG-9071(28),NH3-4500(28)
L1741031-01S	Vial unpreserved Extracts	A	NA		2.6	Y	Absent		TCLP-VOA(14)
L1741031-01T	Vial unpreserved Extracts	A	NA		2.6	Y	Absent		TCLP-VOA(14)
L1741031-01U	Vial unpreserved Extracts	A	NA		2.6	Y	Absent		TCLP-VOA(14)
L1741031-01W	Amber 1000ml unpreserved Extracts	A	NA		2.6	Y	Absent		TCLP-8270(14),HERB-TCLP*(14),PEST-TCLP*(14)
L1741031-01X	Plastic 120ml HNO3 preserved Extracts	A	NA		2.6	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L1741031-01X9	Tumble Vessel	A	NA		2.6	Y	Absent		-

*Values in parentheses indicate holding time in days

Project Name:	168 8TH ST. IRM	**Lab Number:**	L1741031
Project Number:	275864	**Report Date:**	11/13/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	168 8TH ST. IRM	**Lab Number:**	L1741031
Project Number:	275864	**Report Date:**	11/13/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	168 8TH ST. IRM	**Lab Number:**	L1741031
Project Number:	275864	**Report Date:**	11/13/17

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 11/8/17

ALPHA Job #: L1741031

Client Information
Client: TRC Engineers Inc
Address: 1430 Broadway NY, NY 10018
Phone: 212.221.7822
Fax:
Email: 10nova@trcsolutions.com

Project Information
Project Name: 108 8th St IRM
Project Location: 108 8th St. Brooklyn, NY
Project #: 275864
(Use Project name as Project #)
Project Manager: Lindsay O'Hara
ALPHAQuote #:

Turn-Around Time
Standard ☐ Due Date: EOD 11/13
Rush (only if pre approved) ☒ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☒ Other Commercial "B"

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☒ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
NYCSCA Project

Please specify Metals or TAL.
*HOLD any remaining sample.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCLP VOCs	TCLP Herbicides	TCLP Pesticides	TCLP SVOCs	Oil & Grease (Hexane) Paint Filter	TCLP Volatiles	Ammonia-Nitrogen	Total Solids	TCLP Chem. Oxygen Demand
41031-01	TRC-WC-2	11/8	1130	S	EE	X	X	X	X	X	X	X	X	
			END											

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

Total Bottle

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	A	A	A	A	A	A	A	A	
Preservative	A	A	A	A	A	A	A	A	

Relinquished By:	Date/Time	Received By:	Date/Time
	11/8/17 1700	Roy Vogt RAL	11/8/17 1700
Roy Vogt RAL	11/8/17 1820		11/8/17 1820
Hayat Bitar	11/8 2220		11/8/17 2220

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Ph: 718-533-5260

Original
Ticket# 938162

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# 61428MB
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator
In	11/28/2017 08:13:50	SCALE1 In	ANGELIQUE
Out	11/28/2017 08:19:55	SCALE4 Out	smelender

Inbound

Gross	80540 lb
Tare	29380 lb
Net	51160 lb
Tons	25.58

Comments 2215-1

Open 24 hrs M-F Till 8 PM on Sat

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Special Misc-Tons-Specia	100	25.58	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	2215 — \

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 533-5260

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) WM Approval #: 11850SNY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month 11 Day 28 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Librizzi — Signature: Michael Librizzi — Month 11 Day 28 Year 17

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month Day Year

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #2

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Ph: 718-533-5260

Original
Ticket# 928166

Customer Name BROOKSIDEENVCOPIAGUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# AS7424
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator	Inbound		
In	11/28/2017 08:45:39	SCALE1 In	ANGELIQUE		Gross	69720 lb
Out	11/28/2017 09:06:53	SCALE4 Out	swelendez		Tare	30320 lb
					Net	39400 lb
					Tons	29.70

Comments 2215-2

Open 24 hrs M-F Till 8 PM on Sat

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Tons-Specia	100	29.70	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: Not required — Attn: Alex Lempert
2. Page 1 of
3. Emergency Response Phone: 631-668-5810
4. Waste Tracking Number: 2215-2

GENERATOR

5. Generator's Name and Mailing Address
New York City Transit Authority
30-30 Thompson Avenue
Long Island City NY 11101
718 472-8501

Generator's Site Address (if different than mailing address)
New York City Transit Authority
168 8th Street
Brooklyn NY 11215

Generator's Phone:

6. Transporter 1 Company Name: DSM Trucking, LLC # 001 — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Varick Recycling Station
123 Varick Avenue
Brooklyn NY 11237
718 533-6260

U.S. EPA ID Number:

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Non-hazardous soil
AS74211-NJ

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: [illegible] as agent to NYCSCA — Signature: [signature] as agent to NYCSCA — Month 11 Day 28 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Luis V — Signature: [signature] — Month 11 Day 28 Year 17

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month Day Year

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #2

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY 11237
Ph: 718-533-5260

Original
Ticket# 928167

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# AUB34A
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator
In	11/28/2017 08:55:54	SCALE1 In	ANGELIQUE
Out	11/28/2017 09:13:58	SCALE4 Out	smelendez

Inbound

Gross	92240 lb
Tare	28080 lb
Net	64160 lb
Tons	32.08

Comments 2215-3

Open 24 hrs M-F Till 8 PM on Sat

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Tons-Specia	100	32.08	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature Doug G Weightmaster

204WM

#AV-8221A - NJ

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	2215-3

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name
DSM Trucking, LLC 7
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Varick Varick Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 533-5260
U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Trans Approval #: T1250284V

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Ebert as agent to NYCSCA
Signature: Emily Ebert as agent to NYCSCA
Month: 11 Day: 28 Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Danny Gavilanez
Signature: Danny G
Month: 11 Day: 28 Year: 17

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: Day: Year:

160-PLC-O.5 11977 (Rev. 9/09)

TRANSPORTER #

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Ph: 718-533-5260

Original
Ticket# 928174

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# 61420MG
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator
In	11/28/2017 10:06:57	SCALE1 In	ANGELIQUE
Out	11/28/2017 10:40:27	SCALE4 Out	smelendez

Inbound

Gross	81800 lb
Tare	29360 lb
Net	52440 lb
Tons	26.22

Comments 2215-4

Open 24 hrs M-F Till 8 PM on Sat

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Special Misc-Tons-Specia	100	26.22	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

61428 MG

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631 608 8510	2215 -4

GENERATOR

5. Generator's Name and Mailing Address

NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempart
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)

NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name: Brookside Environmental Inc.
U.S. EPA ID Number:

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address

WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 933-8220

U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

1) WMA Approval #: 118509NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Ebert as agent to NYCSCA
Signature: as agent to NYCSCA
Month: 11 Day: 28 Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Librizzi
Signature: Michael Librizzi
Month: 11 Day: 28 Year: 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name
Signature
Month Day Year

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Original
Ticket# 928183

Ph: 718-533-5260

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# AV824A
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator	Inbound	Gross	86240 lb
In	11/28/2017 11:17:14	SCALE1 In	ANGELIQUE		Tare	28060 lb
Out	11/28/2017 11:49:37	SCALE4 Out	smelendez		Net	58180 lb
					Tons	29.09

Comments 2215-6

Open 24 hrs M-F Till 6 PM on Sat

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Tons-Specia	100	29.09	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature Doug G Weightmaster

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-606-8810	2215-6

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name
DSM Trucking LLC #7
U.S. EPA ID Number

7. Transporter 2 Company Name
NJ AV-834A
U.S. EPA ID Number

8. Designated Facility Name and Site Address
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 533-5260
U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) WM Approval #: 11893NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Ebert as Agent to NYCSCA
Signature: as agent to NYCSCA
Month: 11 Day: 28 Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Danny Gutierrez
Signature:
Month: 11 Day: 28 Year: 17

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: 11 Day: 28 Year: 17

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Original
Ticket# 928180

Ph: 718-533-3260

Customer Name BROOKSIDEENVCOPIAQUE-118509NY Carrier BROOKSIDE BROOKSIDE
Ticket Date 11/28/2017 Vehicle# AS742U Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Route State & License
Hauling Ticket# Check#
Destination Billing 0001363
PO#

	Time	Scale	Operator	Inbound		
In	11/28/2017 11:01:47	SCALE1 In	ANGELIQUE		Gross	87760 lb
Out	11/28/2017 11:33:05	SCALE4 Out	smelendez		Tare	30200 lb
					Net	57560 lb
					Tons	28.78

Comments 2215-S

Open 24 hrs M-F Till 8 PM on Sat

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Tons-Specia	100	28.78	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature_____ Weightmaster_____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	2215-5

GENERATOR

5. Generator's Name and Mailing Address
Attn: Alex Lompart
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name
WM Intelligy, LLC # 001
U.S. EPA ID Number

7. Transporter 2 Company Name
AS7421-NJ
U.S. EPA ID Number

8. Designated Facility Name and Site Address
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 533-5260
U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) WM Approval #: 118509NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Expert as agent to NYCSCA
Signature: as agent to NYC SCA
Month: 11 Day: 28 Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: LON V
Signature:
Month: 11 Day: 28 Year: 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name
Signature
Month Day Year

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Original
Ticket# 928188

Ph: 718-533-5260

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# 61428MG
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator	Inbound		
In	11/28/2017 11:53:22	SCALE1 In	ANGELIQUE		Gross	86020 lb
Out	11/28/2017 12:33:13	SCALE4 Out	smelendez		Tare	29320 lb
					Net	56700 lb
					Tons	28.35

Comments 2215-7

Open 24 hrs M-F Till 8 PM on Sat

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Tons-Specia	100	28.35	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	2215-7

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name
Progressive Environmental, Inc. NY 01429-MG
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 533-5260
U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) WM Approval #: 118509NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Eric as agent to NYCSCA
Signature: Eric as agent to NYCSCA
Month: 11 Day: 28 Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Librizzi
Signature: Michael Librizzi
Month: 11 Day: 28 Year: 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name
Signature
Month Day Year

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #2

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Original
Ticket# 928191

Ph: 718-533-5260

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# AS742U
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator	Inbound		
In	11/28/2017 13:24:27	SCALE1 In	ANGELIQUE		Gross	89040 lb
Out	11/28/2017 13:33:28	SCALE4 Out	smelendez		Tare	30220 lb
					Net	58820 lb
					Tons	29.41

Comments 2215-8

Open 24 hrs M-F Till 8 PM on Sat

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Special Misc-Tons-Specia	100	29.41	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature_____ Weightmaster_____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	2215-8

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Generator's Phone: 718 472-8501

Attn: Alex Lempert
Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name
DSM Trucking, LLC.
U.S. EPA ID Number
NJ

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Varick Street Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 633-5260
U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) WM Approval #: 118506NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Printed Name as agent to NYCSCA
Signature: as agent to NYCSCA
Month: 11 Day: 28 Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Luis V.
Signature:
Month: 11 Day: 28 Year: 17

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: 11 Day: 28 Year: 17

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Ph: 718-533-5260

Original
Ticket# 928196

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# AV824A
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator
In	11/28/2017 13:45:26	SCALE1 In	ANGELIQUE
Out	11/28/2017 13:51:15	SCALE4 Out	smelendez

Inbound

Gross	90640 lb
Tare	29020 lb
Net	62620 lb
Tons	31.31

Comments 2215-9

Open 24 hrs M-F Till 8 PM on Sat

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Special Misc-Tons-Specia	100	31.31	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature Weightmaster

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-808-8810	2215-9

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11216

6. Transporter 1 Company Name: DSM TRUCKING LLC #1 NJ AV-824A — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 533-5260
U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) WM Approval #: 118503NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: EMMY EBERT as agent to NYCSCA — Signature: as agent to NYCSCA — Month: 11 — Day: 28 — Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Doug Gerber — Signature: D. G. — Month: 11 — Day: 28 — Year: 17

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Original
Ticket# 928197

Ph: 718-533-5260

Customer Name BROOKSIDEENVCOPIAQUE-I18509NY
Ticket Date 11/28/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# 61428MG
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator
In	11/28/2017 14:32:46	SCALE1 In	robert
Out	11/28/2017 14:51:01	SCALE4 Out	eedouard

Inbound

Gross	83500 lb
Tare	29300 lb
Net	54200 lb
Tons	27.10

Comments 2215-10

Open 24 hrs M-F Till 8 PM on Sat

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Special Misc-Tons-Specia	100	27.10	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-606-8810	2216-10

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Generator's Phone: 718 472-8601

Attn: Alex Lampert

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
165 9th Street
Brooklyn NY 11215

6. Transporter 1 Company Name — U.S. EPA ID Number
Progressive Environmental Inc. NY 6143-MG

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 599-5260

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) VAM Approval #: 118509NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Kurt as agent for NYCSCA
Signature: as agent for NYCSCA
Month: 11 Day: 28 Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Librizzi
Signature: Michael Librizzi
Month: 11 Day: 28 Year: 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name
Signature
Month: 11 Day: 29 Year: 17

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Original
Ticket# 928289

Ph: 718-533-5260

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/29/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# 61428MG
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator	Inbound		
In	11/29/2017 07:56:39	SCALE1 In	ANGELIQUE		Gross	81140 lb
Out	11/29/2017 08:05:23	SCALE4 Out	eedouard		Tare	29620 lb
					Net	51520 lb
					Tons	25.76

Comments 22:5-11

Open 24 hrs M-F Till 8 PM on Sat

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Special Misc-Tons-Specia	100	25.76	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	2215 – 11

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8601

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name — U.S. EPA ID Number
Tully Environmental LLC NY 0142 MG

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 533-5260

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1) WM Approval # 118509NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Edell for NYCSCA — Signature — Month: 11 — Day: 29 — Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Librizzi — Signature: Michael Librizzi — Month: 11 — Day: 29 — Year: 17

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month: 11 — Day: 29 — Year: 17

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Ph: 718-533-5260

Original
Ticket# 928294

Customer Name BROOKSIDEENVCOPIAQUE-118909NY
Ticket Date 11/29/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# 61428MG
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator	Inbound		
In	11/29/2017 09:58:17	SCALE1 In	ANGELIQUE		Gross	78900 lb
Out	11/29/2017 10:05:42	SCALE4 Out	eedouard		Tare	29440 lb
					Net	49460 lb
					Tons	24.73

Comments 2215-12

Open 24 hrs M-F Till 8 PM on Sat

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Special Misc-Tons-Specia	100	24.73	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	2215-12

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-00 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name: Envirosystems LLC - NY 6142-MG — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 633-5260
U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
NJ WM Approval #: 118509NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Ewert as agent for NYCSCA — Signature: [signature] as agent for NYCSCA — Month: 11 — Day: 29 — Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Librizzi — Signature: [signature] — Month: 11 — Day: 29 — Year: 17

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Anna Volkova — Signature: [signature] — Month: 11 — Day: 29 — Year: 17

WASTE MANAGEMENT

Varick Transfer Station
221 Varick Avenue
Brooklyn, NY, 11237

Ph: 718-533-5260

Original
Ticket# 928301

Customer Name BROOKSIDEENVCOPIAQUE-118509NY
Ticket Date 11/29/2017
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier BROOKSIDE BROOKSIDE
Vehicle# 61428MG
Container
Driver
State & License
Check#
Billing 0001363

Volume

	Time	Scale	Operator	Inbound		
In	11/29/2017 12:19:42	SCALE1 In	ANGELIQUE		Gross	61940 lb
Out	11/29/2017 12:28:11	SCALE4 Out	eedouard		Tare	29540 lb
					Net	32400 lb
					Tons	16.20

Comments 2215-13

Open 24 hrs M-F Till 8 PM on Sat

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Tons-Specia	100	16.20	Tons				KINGS

Total Tax
Total Ticket

Driver's Signature _____ Weightmaster _____

204WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-600-8810	2215-13

GENERATOR

5. Generator's Name and Mailing Address
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City NY 11101
Attn: Alex Lempert
Generator's Phone: 718 472-8501

Generator's Site Address (if different than mailing address)
NYC School Construction Authority
168 8th Street
Brooklyn NY 11215

6. Transporter 1 Company Name: Brickyard Environmental LLC — U.S. EPA ID Number: NY 0142MA

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
WMNY Varick 1 Transfer Station
123 Varick Avenue
Brooklyn NY 11237
Facility's Phone: 718 633-5260
U.S. EPA ID Number

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1. Non-hazardous soil Non-DOT / Non-RCRA	001	DT	00020	T	
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
1) WM Approval # 118509NY

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Emily Lynch as agent for NYCSCA — Signature: Emily Lynch as agent for NYCSCA — Month: 11 — Day: 29 — Year: 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Librizzi — Signature: Michael Librizzi — Month: 11 — Day: 29 — Year: 17

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

ATTACHMENT F

Laboratory Analytical Data Report

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

e-Hardcopy 2.0
Automated Report

Technical Report for

TRC

K710, 168 8th Street, Brooklyn, NY

275864 PO # 110129

SGS Accutest Job Number: JC54422



Sampling Dates: 10/30/17 - 11/06/17

Report to:

TRC
1430 Broadway 10th Floor
New York, NY 10018
LOHara@TRCSolutions.com; EEbert@TRCSolutions.com

ATTN: Lindsay O'Hara

Total number of pages in report: **640**

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: Matt Cordova 732-329-0200

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

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Test results relate only to samples analyzed.

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Sample Summary

TRC

Job No: JC54422

K710, 168 8th Street, Brooklyn, NY
Project No: 275864 PO # 110129

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC54277-1	10/30/17	14:30	EE	10/30/17	SO	Soil	TRC-S1(6')
JC54422-1	11/01/17	09:15	EE	11/01/17	SO	Soil	TRC-S2(19')
JC54422-2	11/01/17	09:50	EE	11/01/17	SO	Soil	TRC-S3(5')
JC54422-3	11/01/17	13:00	EE	11/01/17	SO	Soil	TRC-S4(5')
JC54422-4	11/01/17	13:40	EE	11/01/17	SO	Soil	TRC-S5(12')
JC54555-1	11/02/17	08:30	EE	11/02/17	SO	Soil	TRC-S6(4')
JC54555-2	11/02/17	11:15	EE	11/02/17	SO	Soil	TRC-S7(4')
JC54555-3	11/02/17	11:15	EE	11/02/17	SO	Soil	TRC-DUP-1
JC54689-1	11/03/17	09:40	EE	11/03/17	SO	Soil	TRC-S8(5')
JC54803-1	11/06/17	12:40	EE	11/06/17	SO	Soil	TRC-S9(13')
JC54803-2	11/06/17	13:30	EE	11/06/17	SO	Soil	TRC-S10(5')
JC54803-3	11/06/17	13:45	EE	11/06/17	SO	Soil	TRC-S11(5')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: TRC **Job No** JC54422

Site: K710, 168 8th Street, Brooklyn, NY **Report Date** 11/15/2017 5:08:04 P

Between 10/30/2017 and 11/06/2017, 12 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 1.5 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC54422 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.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: SO **Batch ID:** V1C6761

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC54047-72MS, JC54047-74DUP were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Acetate, Methyl Tert Butyl Ether are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for Trichloroethene are outside control limits for sample JC54047-74DUP. High RPD due to possible sample nonhomogeneity.

Matrix: SO **Batch ID:** V1C6762

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54507-2DUP, JC54507-3MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Acetone are outside control limits for sample JC54507-2DUP. High RPD due to possible sample nonhomogeneity.
- JC54803-1 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC54803-2 for Dichlorodifluoromethane: Associated CCV outside of control limits low.
- JC54803-2 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC54803-3 for Dichlorodifluoromethane: Associated CCV outside of control limits low.
- JC54803-1 for Dichlorodifluoromethane: Associated CCV outside of control limits low.
- JC54803-2 for 4-Bromofluorobenzene: Outside control limits due to matrix interference.
- JC54803-3 for Bromoform: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** V3C6357

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC54680-1DUP, JC54680-2MS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Acetate are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for o-Xylene, Xylene (total) are outside control limits for sample JC54680-1DUP. High RPD due to low concentration of hit
- JC54277-1 for 1,4-Dioxane: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** VE10685

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

MS Volatiles By Method SW846 8260C

Matrix: SO **Batch ID:** VE10685

- Sample(s) JC54405-5MS, JC54405-5MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VI8698

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54428-2MS, JC54428-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Acetone, Carbon disulfide, Methylene chloride are outside control limits for sample JC54428-3DUP. High RPD due to possible sample nonhomogeneity.
- JC54555-3 for Carbon disulfide: Associated CCV outside of control limits low.
- JC54555-1 for Carbon disulfide: Associated CCV outside of control limits low.

Matrix: SO **Batch ID:** VI8700

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54422-1MS, JC54422-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Methyl Tert Butyl Ether are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for Acetone, Tetrachloroethene are outside control limits for sample JC54422-2DUP. High RPD due to possible sample nonhomogeneity.
- JC54422-3 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC54422-2 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC54422-1 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** VI8701

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54136-1MS, JC54136-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN71864

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO **Batch ID:** GN72105

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO **Batch ID:** GN72109

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO **Batch ID:** GN72217

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO **Batch ID:** GN72297

- The data for SM2540 G-97 meets quality control requirements.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the 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.

SGS Accutest 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 SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: JC54422
Account: TRC
Project: K710, 168 8th Street, Brooklyn, NY
Collected: 10/30/17 thru 11/06/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC54277-1	**TRC-S1(6')**					
Acetone		42.0	8.5	5.4	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		1.8	0.85	0.34	ug/kg	SW846 8260C
Tetrachloroethene		15.6	1.7	0.54	ug/kg	SW846 8260C
Trichloroethene		20.0	0.85	0.46	ug/kg	SW846 8260C
JC54422-1	**TRC-S2(19')**					
Acetone		13.9	9.1	5.9	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		0.46 J	0.91	0.37	ug/kg	SW846 8260C
Trichloroethene		1.6	0.91	0.50	ug/kg	SW846 8260C
JC54422-2	**TRC-S3(5')**					
Acetone		65.5	12	7.4	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		4.5	1.2	0.47	ug/kg	SW846 8260C
Tetrachloroethene		8.2	2.3	0.74	ug/kg	SW846 8260C
Trichloroethene		23.9	1.2	0.63	ug/kg	SW846 8260C
JC54422-3	**TRC-S4(5')**					
Acetone		23.4	10	6.6	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		0.68 J	1.0	0.42	ug/kg	SW846 8260C
Tetrachloroethene		0.71 J	2.1	0.66	ug/kg	SW846 8260C
Trichloroethene		17.1	1.0	0.57	ug/kg	SW846 8260C
JC54422-4	**TRC-S5(12')**					
Acetone		12.5	8.0	5.1	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		4.6	0.80	0.32	ug/kg	SW846 8260C
Tetrachloroethene		0.77 J	1.6	0.51	ug/kg	SW846 8260C
Trichloroethene		12.6	0.80	0.44	ug/kg	SW846 8260C
JC54555-1	**TRC-S6(4')**					
Acetone		56.9	9.4	6.0	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		6.5	0.94	0.38	ug/kg	SW846 8260C
Tetrachloroethene		1.6 J	1.9	0.60	ug/kg	SW846 8260C
Trichloroethene		35.4	0.94	0.51	ug/kg	SW846 8260C
JC54555-2	**TRC-S7(4')**					
Acetone		14.5	9.8	6.3	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		2.3	0.98	0.39	ug/kg	SW846 8260C

Summary of Hits

Job Number: JC54422
Account: TRC
Project: K710, 168 8th Street, Brooklyn, NY
Collected: 10/30/17 thru 11/06/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Tetrachloroethene		0.64 J	2.0	0.62	ug/kg	SW846 8260C
Trichloroethene		20.6	0.98	0.53	ug/kg	SW846 8260C
JC54555-3	**TRC-DUP-1**					
Acetone		11.4	8.9	5.7	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		2.9	0.89	0.36	ug/kg	SW846 8260C
Tetrachloroethene		0.67 J	1.8	0.57	ug/kg	SW846 8260C
Trichloroethene		25.7	0.89	0.49	ug/kg	SW846 8260C
JC54689-1	**TRC-S8(5')**					
Acetone		11.1	8.4	5.4	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		5.6	0.84	0.34	ug/kg	SW846 8260C
Tetrachloroethene		0.85 J	1.7	0.54	ug/kg	SW846 8260C
Trichloroethene		19.2	0.84	0.46	ug/kg	SW846 8260C
JC54803-1	**TRC-S9(13')**					
Acetone		8.7 J	9.7	6.2	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		0.51 J	0.97	0.39	ug/kg	SW846 8260C
Tetrachloroethene		0.91 J	1.9	0.62	ug/kg	SW846 8260C
Trichloroethene		2.1	0.97	0.53	ug/kg	SW846 8260C
JC54803-2	**TRC-S10(5')**					
Acetone		33.8	11	6.9	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		1.5	1.1	0.43	ug/kg	SW846 8260C
Tetrachloroethene		102 J	260	84	ug/kg	SW846 8260C
Trichloroethene		149	130	72	ug/kg	SW846 8260C
JC54803-3	**TRC-S11(5')**					
Acetone		19.2	10	6.5	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		3.8	1.0	0.41	ug/kg	SW846 8260C
Tetrachloroethene		3.3	2.0	0.65	ug/kg	SW846 8260C
Trichloroethene		34.4	1.0	0.56	ug/kg	SW846 8260C

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID: TRC-S1(6')
Lab Sample ID: JC54277-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 10/30/17
Date Received: 10/30/17
Percent Solids: 90.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140191.D	1	11/06/17 13:14	PS	n/a	n/a	V3C6357
Run #2							

	Initial Weight
Run #1	6.5 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	42.0	8.5	5.4	ug/kg	
71-43-2	Benzene	ND	0.42	0.091	ug/kg	
74-97-5	Bromochloromethane	ND	4.2	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	0.21	ug/kg	
75-25-2	Bromoform	ND	4.2	0.26	ug/kg	
74-83-9	Bromomethane	ND	4.2	0.59	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.5	4.4	ug/kg	
104-51-8	n-Butylbenzene	ND	1.7	0.31	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.7	0.20	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.7	0.37	ug/kg	
75-15-0	Carbon disulfide	ND	1.7	0.52	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.55	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.24	ug/kg	
75-00-3	Chloroethane	ND	4.2	0.76	ug/kg	
67-66-3	Chloroform	ND	1.7	0.27	ug/kg	
74-87-3	Chloromethane	ND	4.2	0.83	ug/kg	
110-82-7	Cyclohexane	ND	1.7	0.29	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	0.57	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.32	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.85	0.21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.85	0.44	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.85	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.85	0.41	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.2	0.52	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.85	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.85	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.85	0.60	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.8	0.85	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.85	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.34	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.33	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.20	ug/kg	

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: TRC-S1(6')
Lab Sample ID: JC54277-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 10/30/17
Date Received: 10/30/17
Percent Solids: 90.8

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	ND	110	40	ug/kg	
100-41-4	Ethylbenzene	ND	0.85	0.24	ug/kg	
76-13-1	Freon 113	ND	4.2	0.57	ug/kg	
591-78-6	2-Hexanone	ND	4.2	2.4	ug/kg	
98-82-8	Isopropylbenzene	ND	1.7	0.21	ug/kg	
79-20-9	Methyl Acetate	ND	4.2	2.1	ug/kg	
108-87-2	Methylcyclohexane	ND	1.7	0.46	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.85	0.36	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.2	1.5	ug/kg	
75-09-2	Methylene chloride	ND	4.2	2.1	ug/kg	
103-65-1	n-Propylbenzene	ND	1.7	0.19	ug/kg	
100-42-5	Styrene	ND	1.7	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.22	ug/kg	
127-18-4	Tetrachloroethene	15.6	1.7	0.54	ug/kg	
108-88-3	Toluene	ND	0.85	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.2	0.85	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.85	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.36	ug/kg	
79-01-6	Trichloroethene	20.0	0.85	0.46	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.2	0.41	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.7	0.85	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.7	0.85	ug/kg	
75-01-4	Vinyl chloride	ND	1.7	0.65	ug/kg	
	m,p-Xylene	ND	0.85	0.46	ug/kg	
95-47-6	o-Xylene	ND	0.85	0.21	ug/kg	
1330-20-7	Xylene (total)	ND	0.85	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-129%
17060-07-0	1,2-Dichloroethane-D4	111%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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: TRC-S2(19')
Lab Sample ID: JC54422-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 91.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216647.D	1	11/06/17 15:59	PS	n/a	n/a	VI8700
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.9	9.1	5.9	ug/kg	
71-43-2	Benzene	ND	0.46	0.098	ug/kg	
74-97-5	Bromochloromethane	ND	4.6	0.40	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.22	ug/kg	
75-25-2	Bromoform	ND	4.6	0.28	ug/kg	
74-83-9	Bromomethane	ND	4.6	0.64	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.1	4.8	ug/kg	
104-51-8	n-Butylbenzene	ND	1.8	0.33	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.8	0.21	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.8	0.40	ug/kg	
75-15-0	Carbon disulfide	ND	1.8	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.59	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.26	ug/kg	
75-00-3	Chloroethane	ND	4.6	0.82	ug/kg	
67-66-3	Chloroform	ND	1.8	0.29	ug/kg	
74-87-3	Chloromethane	ND	4.6	0.90	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.31	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.61	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.35	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.91	0.22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.91	0.47	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.91	0.26	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.91	0.44	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	4.6	0.55	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.91	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.91	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.91	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.46	0.91	0.37	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.91	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.36	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.35	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.22	ug/kg	

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: TRC-S2(19')
Lab Sample ID: JC54422-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 91.3

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	110	43	ug/kg	
100-41-4	Ethylbenzene	ND	0.91	0.26	ug/kg	
76-13-1	Freon 113	ND	4.6	0.62	ug/kg	
591-78-6	2-Hexanone	ND	4.6	2.5	ug/kg	
98-82-8	Isopropylbenzene	ND	1.8	0.23	ug/kg	
79-20-9	Methyl Acetate	ND	4.6	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.91	0.39	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.6	1.6	ug/kg	
75-09-2	Methylene chloride	ND	4.6	2.3	ug/kg	
103-65-1	n-Propylbenzene	ND	1.8	0.21	ug/kg	
100-42-5	Styrene	ND	1.8	0.45	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.23	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.58	ug/kg	
108-88-3	Toluene	ND	0.91	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.6	0.91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	0.91	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.38	ug/kg	
79-01-6	Trichloroethene	1.6	0.91	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.6	0.44	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.8	0.91	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.8	0.91	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.70	ug/kg	
	m,p-Xylene	ND	0.91	0.50	ug/kg	
95-47-6	o-Xylene	ND	0.91	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	0.91	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	109%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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: TRC-S3(5')
Lab Sample ID: JC54422-2
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 88.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216648.D	1	11/06/17 16:25	PS	n/a	n/a	VI8700
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	65.5	12	7.4	ug/kg	
71-43-2	Benzene	ND	0.58	0.12	ug/kg	
74-97-5	Bromochloromethane	ND	5.8	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	0.28	ug/kg	
75-25-2	Bromoform	ND	5.8	0.36	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.81	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	6.1	ug/kg	
104-51-8	n-Butylbenzene	ND	2.3	0.42	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.3	0.27	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.3	0.51	ug/kg	
75-15-0	Carbon disulfide	ND	2.3	0.71	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.3	0.75	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	0.33	ug/kg	
75-00-3	Chloroethane	ND	5.8	1.0	ug/kg	
67-66-3	Chloroform	ND	2.3	0.37	ug/kg	
74-87-3	Chloromethane	ND	5.8	1.1	ug/kg	
110-82-7	Cyclohexane	ND	2.3	0.40	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.3	0.78	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	0.44	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.2	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.2	0.33	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.2	0.55	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.8	0.70	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.2	0.30	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.2	0.82	ug/kg	
156-59-2	cis-1,2-Dichloroethene	4.5	1.2	0.47	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.2	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.3	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.27	ug/kg	

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: TRC-S3(5')
Lab Sample ID: JC54422-2
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 88.1

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	140	55	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.33	ug/kg	
76-13-1	Freon 113	ND	5.8	0.78	ug/kg	
591-78-6	2-Hexanone	ND	5.8	3.2	ug/kg	
98-82-8	Isopropylbenzene	ND	2.3	0.29	ug/kg	
79-20-9	Methyl Acetate	ND	5.8	2.9	ug/kg	
108-87-2	Methylcyclohexane	ND	2.3	0.63	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	2.1	ug/kg	
75-09-2	Methylene chloride	ND	5.8	2.9	ug/kg	
103-65-1	n-Propylbenzene	ND	2.3	0.27	ug/kg	
100-42-5	Styrene	ND	2.3	0.57	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.29	ug/kg	
127-18-4	Tetrachloroethene	8.2	2.3	0.74	ug/kg	
108-88-3	Toluene	ND	1.2	0.63	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.8	1.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	1.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.67	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.49	ug/kg	
79-01-6	Trichloroethene	23.9	1.2	0.63	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	0.56	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	1.2	ug/kg	
75-01-4	Vinyl chloride	ND	2.3	0.89	ug/kg	
	m,p-Xylene	ND	1.2	0.63	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.29	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	113%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	109%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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: TRC-S4(5')
Lab Sample ID: JC54422-3
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 83.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216663.D	1	11/06/17 23:04	PS	n/a	n/a	VI8700
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	23.4	10	6.6	ug/kg	
71-43-2	Benzene	ND	0.52	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.45	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.25	ug/kg	
75-25-2	Bromoform	ND	5.2	0.32	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.73	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.4	ug/kg	
104-51-8	n-Butylbenzene	ND	2.1	0.38	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.1	0.24	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.1	0.46	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.63	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.30	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.93	ug/kg	
67-66-3	Chloroform	ND	2.1	0.33	ug/kg	
74-87-3	Chloromethane	ND	5.2	1.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.35	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.39	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.2	0.63	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.73	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.68	1.0	0.42	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.41	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.40	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.24	ug/kg	

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: TRC-S4(5')
Lab Sample ID: JC54422-3
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 83.4

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	130	49	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
76-13-1	Freon 113	ND	5.2	0.70	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.9	ug/kg	
98-82-8	Isopropylbenzene	ND	2.1	0.26	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	2.6	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.56	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	1.9	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.6	ug/kg	
103-65-1	n-Propylbenzene	ND	2.1	0.24	ug/kg	
100-42-5	Styrene	ND	2.1	0.51	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.26	ug/kg	
127-18-4	Tetrachloroethene	0.71	2.1	0.66	ug/kg	J
108-88-3	Toluene	ND	1.0	0.57	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.60	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.43	ug/kg	
79-01-6	Trichloroethene	17.1	1.0	0.57	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.79	ug/kg	
	m,p-Xylene	ND	1.0	0.57	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.26	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		72-129%
17060-07-0	1,2-Dichloroethane-D4	118%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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: TRC-S5(12')
Lab Sample ID: JC54422-4
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 92.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216678.D	1	11/07/17 15:49	PS	n/a	n/a	VI8701
Run #2							

	Initial Weight
Run #1	6.8 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.5	8.0	5.1	ug/kg	
71-43-2	Benzene	ND	0.40	0.086	ug/kg	
74-97-5	Bromochloromethane	ND	4.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	1.6	0.19	ug/kg	
75-25-2	Bromoform	ND	4.0	0.25	ug/kg	
74-83-9	Bromomethane	ND	4.0	0.56	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.0	4.2	ug/kg	
104-51-8	n-Butylbenzene	ND	1.6	0.29	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.6	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.6	0.35	ug/kg	
75-15-0	Carbon disulfide	ND	1.6	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.6	0.52	ug/kg	
108-90-7	Chlorobenzene	ND	1.6	0.23	ug/kg	
75-00-3	Chloroethane	ND	4.0	0.72	ug/kg	
67-66-3	Chloroform	ND	1.6	0.26	ug/kg	
74-87-3	Chloromethane	ND	4.0	0.79	ug/kg	
110-82-7	Cyclohexane	ND	1.6	0.27	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.6	0.54	ug/kg	
124-48-1	Dibromochloromethane	ND	1.6	0.30	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.80	0.20	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.80	0.41	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.80	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.80	0.38	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.0	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.80	0.21	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.80	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.80	0.57	ug/kg	
156-59-2	cis-1,2-Dichloroethene	4.6	0.80	0.32	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.80	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.6	0.32	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.6	0.31	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.6	0.19	ug/kg	

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: TRC-S5(12')
Lab Sample ID: JC54422-4
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/01/17
Date Received: 11/01/17
Percent Solids: 92.0

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	100	38	ug/kg	
100-41-4	Ethylbenzene	ND	0.80	0.23	ug/kg	
76-13-1	Freon 113	ND	4.0	0.54	ug/kg	
591-78-6	2-Hexanone	ND	4.0	2.2	ug/kg	
98-82-8	Isopropylbenzene	ND	1.6	0.20	ug/kg	
79-20-9	Methyl Acetate	ND	4.0	2.0	ug/kg	
108-87-2	Methylcyclohexane	ND	1.6	0.44	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.80	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.0	1.4	ug/kg	
75-09-2	Methylene chloride	ND	4.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	1.6	0.18	ug/kg	
100-42-5	Styrene	ND	1.6	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.6	0.20	ug/kg	
127-18-4	Tetrachloroethene	0.77	1.6	0.51	ug/kg	J
108-88-3	Toluene	ND	0.80	0.44	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.0	0.80	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	0.80	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.6	0.46	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.6	0.34	ug/kg	
79-01-6	Trichloroethene	12.6	0.80	0.44	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.0	0.38	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.6	0.80	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.6	0.80	ug/kg	
75-01-4	Vinyl chloride	ND	1.6	0.61	ug/kg	
	m,p-Xylene	ND	0.80	0.44	ug/kg	
95-47-6	o-Xylene	ND	0.80	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	0.80	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	117%		73-132%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	111%		77-125%

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: TRC-S6(4')
Lab Sample ID: JC54555-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/02/17
Date Received: 11/02/17
Percent Solids: 82.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216611.D	1	11/04/17 05:07	PS	n/a	n/a	VI8698
Run #2							

	Initial Weight
Run #1	6.5 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	56.9	9.4	6.0	ug/kg	
71-43-2	Benzene	ND	0.47	0.10	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.41	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.23	ug/kg	
75-25-2	Bromoform	ND	4.7	0.29	ug/kg	
74-83-9	Bromomethane	ND	4.7	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.4	4.9	ug/kg	
104-51-8	n-Butylbenzene	ND	1.9	0.34	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.9	0.22	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.9	0.41	ug/kg	
75-15-0	Carbon disulfide [a]	ND	1.9	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.27	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.85	ug/kg	
67-66-3	Chloroform	ND	1.9	0.30	ug/kg	
74-87-3	Chloromethane	ND	4.7	0.92	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.32	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.63	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.36	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.94	0.23	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.94	0.48	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.94	0.27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.94	0.45	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.57	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.94	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.94	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.94	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	6.5	0.94	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.94	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.37	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.36	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.22	ug/kg	

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: TRC-S6(4')
Lab Sample ID: JC54555-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/02/17
Date Received: 11/02/17
Percent Solids: 82.2

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	120	44	ug/kg	
100-41-4	Ethylbenzene	ND	0.94	0.27	ug/kg	
76-13-1	Freon 113	ND	4.7	0.63	ug/kg	
591-78-6	2-Hexanone	ND	4.7	2.6	ug/kg	
98-82-8	Isopropylbenzene	ND	1.9	0.23	ug/kg	
79-20-9	Methyl Acetate	ND	4.7	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.51	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.94	0.40	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	1.7	ug/kg	
75-09-2	Methylene chloride	ND	4.7	2.3	ug/kg	
103-65-1	n-Propylbenzene	ND	1.9	0.21	ug/kg	
100-42-5	Styrene	ND	1.9	0.46	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.24	ug/kg	
127-18-4	Tetrachloroethene	1.6	1.9	0.60	ug/kg	J
108-88-3	Toluene	ND	0.94	0.51	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	0.94	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.94	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.54	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.39	ug/kg	
79-01-6	Trichloroethene	35.4	0.94	0.51	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.45	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.9	0.94	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	0.94	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.72	ug/kg	
	m,p-Xylene	ND	0.94	0.51	ug/kg	
95-47-6	o-Xylene	ND	0.94	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	0.94	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		72-129%
17060-07-0	1,2-Dichloroethane-D4	93%		73-132%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

(a) Associated CCV outside of control limits low.

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: TRC-S7(4')
Lab Sample ID: JC54555-2
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/02/17
Date Received: 11/02/17
Percent Solids: 82.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216677.D	1	11/07/17 15:23	PS	n/a	n/a	VI8701
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	14.5	9.8	6.3	ug/kg	
71-43-2	Benzene	ND	0.49	0.10	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.42	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	4.9	0.30	ug/kg	
74-83-9	Bromomethane	ND	4.9	0.69	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.8	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.43	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.60	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.28	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.88	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	4.9	0.96	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.66	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.37	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.98	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.98	0.50	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.98	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.98	0.47	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.59	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.98	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.98	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.98	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	2.3	0.98	0.39	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.98	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.39	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.37	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	

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: TRC-S7(4')
Lab Sample ID: JC54555-2
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/02/17
Date Received: 11/02/17
Percent Solids: 82.6

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	120	46	ug/kg	
100-41-4	Ethylbenzene	ND	0.98	0.28	ug/kg	
76-13-1	Freon 113	ND	4.9	0.66	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	0.24	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.53	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.98	0.42	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	1.8	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.4	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.22	ug/kg	
100-42-5	Styrene	ND	2.0	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	0.64	2.0	0.62	ug/kg	J
108-88-3	Toluene	ND	0.98	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.98	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.98	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.57	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.41	ug/kg	
79-01-6	Trichloroethene	20.6	0.98	0.53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.47	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.98	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.98	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.75	ug/kg	
	m,p-Xylene	ND	0.98	0.54	ug/kg	
95-47-6	o-Xylene	ND	0.98	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	0.98	0.25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	113%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	111%		77-125%

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: TRC-DUP-1
Lab Sample ID: JC54555-3
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/02/17
Date Received: 11/02/17
Percent Solids: 82.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216613.D	1	11/04/17 06:00	PS	n/a	n/a	VI8698
Run #2							

	Initial Weight
Run #1	6.8 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.4	8.9	5.7	ug/kg	
71-43-2	Benzene	ND	0.44	0.095	ug/kg	
74-97-5	Bromochloromethane	ND	4.4	0.39	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.22	ug/kg	
75-25-2	Bromoform	ND	4.4	0.28	ug/kg	
74-83-9	Bromomethane	ND	4.4	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.9	4.7	ug/kg	
104-51-8	n-Butylbenzene	ND	1.8	0.32	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.8	0.21	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.8	0.39	ug/kg	
75-15-0	Carbon disulfide [a]	ND	1.8	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.58	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.26	ug/kg	
75-00-3	Chloroethane	ND	4.4	0.80	ug/kg	
67-66-3	Chloroform	ND	1.8	0.29	ug/kg	
74-87-3	Chloromethane	ND	4.4	0.88	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.30	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.60	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.34	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.89	0.22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.89	0.46	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.89	0.26	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.89	0.43	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	0.54	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.89	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.89	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.89	0.63	ug/kg	
156-59-2	cis-1,2-Dichloroethene	2.9	0.89	0.36	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.89	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.35	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.34	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.21	ug/kg	

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: TRC-DUP-1
Lab Sample ID: JC54555-3
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/02/17
Date Received: 11/02/17
Percent Solids: 82.7

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	110	42	ug/kg	
100-41-4	Ethylbenzene	ND	0.89	0.26	ug/kg	
76-13-1	Freon 113	ND	4.4	0.60	ug/kg	
591-78-6	2-Hexanone	ND	4.4	2.5	ug/kg	
98-82-8	Isopropylbenzene	ND	1.8	0.22	ug/kg	
79-20-9	Methyl Acetate	ND	4.4	2.2	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.49	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.89	0.38	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.4	1.6	ug/kg	
75-09-2	Methylene chloride	ND	4.4	2.2	ug/kg	
103-65-1	n-Propylbenzene	ND	1.8	0.20	ug/kg	
100-42-5	Styrene	ND	1.8	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.23	ug/kg	
127-18-4	Tetrachloroethene	0.67	1.8	0.57	ug/kg	J
108-88-3	Toluene	ND	0.89	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.4	0.89	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.89	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.37	ug/kg	
79-01-6	Trichloroethene	25.7	0.89	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.4	0.43	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.8	0.89	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.8	0.89	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.68	ug/kg	
	m,p-Xylene	ND	0.89	0.49	ug/kg	
95-47-6	o-Xylene	ND	0.89	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	0.89	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	107%		77-125%

(a) Associated CCV outside of control limits low.

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: TRC-S8(5')
Lab Sample ID: JC54689-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/03/17
Date Received: 11/03/17
Percent Solids: 93.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153146.D	1	11/07/17 21:26	PS	n/a	n/a	V1C6761
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.1	8.4	5.4	ug/kg	
71-43-2	Benzene	ND	0.42	0.090	ug/kg	
74-97-5	Bromochloromethane	ND	4.2	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	0.20	ug/kg	
75-25-2	Bromoform	ND	4.2	0.26	ug/kg	
74-83-9	Bromomethane	ND	4.2	0.59	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.4	4.4	ug/kg	
104-51-8	n-Butylbenzene	ND	1.7	0.31	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.7	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.7	0.37	ug/kg	
75-15-0	Carbon disulfide	ND	1.7	0.51	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.55	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.24	ug/kg	
75-00-3	Chloroethane	ND	4.2	0.76	ug/kg	
67-66-3	Chloroform	ND	1.7	0.27	ug/kg	
74-87-3	Chloromethane	ND	4.2	0.83	ug/kg	
110-82-7	Cyclohexane	ND	1.7	0.29	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	0.57	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.32	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.84	0.21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.84	0.43	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.84	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.84	0.40	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.2	0.51	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.84	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.84	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.84	0.59	ug/kg	
156-59-2	cis-1,2-Dichloroethene	5.6	0.84	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.84	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.33	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.32	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.20	ug/kg	

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: TRC-S8(5')
Lab Sample ID: JC54689-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/03/17
Date Received: 11/03/17
Percent Solids: 93.0

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	110	40	ug/kg	
100-41-4	Ethylbenzene	ND	0.84	0.24	ug/kg	
76-13-1	Freon 113	ND	4.2	0.57	ug/kg	
591-78-6	2-Hexanone	ND	4.2	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	1.7	0.21	ug/kg	
79-20-9	Methyl Acetate	ND	4.2	2.1	ug/kg	
108-87-2	Methylcyclohexane	ND	1.7	0.46	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.84	0.36	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.2	1.5	ug/kg	
75-09-2	Methylene chloride	ND	4.2	2.1	ug/kg	
103-65-1	n-Propylbenzene	ND	1.7	0.19	ug/kg	
100-42-5	Styrene	ND	1.7	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.21	ug/kg	
127-18-4	Tetrachloroethene	0.85	1.7	0.54	ug/kg	J
108-88-3	Toluene	ND	0.84	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.2	0.84	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.84	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.35	ug/kg	
79-01-6	Trichloroethene	19.2	0.84	0.46	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.2	0.40	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.7	0.84	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.7	0.84	ug/kg	
75-01-4	Vinyl chloride	ND	1.7	0.64	ug/kg	
	m,p-Xylene	ND	0.84	0.46	ug/kg	
95-47-6	o-Xylene	ND	0.84	0.21	ug/kg	
1330-20-7	Xylene (total)	ND	0.84	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		72-129%
17060-07-0	1,2-Dichloroethane-D4	94%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	100%		77-125%

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:	TRC-S9(13')		
Lab Sample ID:	JC54803-1	**Date Sampled:**	11/06/17
Matrix:	SO - Soil	**Date Received:**	11/06/17
Method:	SW846 8260C	**Percent Solids:**	95.8
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153162.D	1	11/08/17 05:42	PS	n/a	n/a	V1C6762
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.7	9.7	6.2	ug/kg	J
71-43-2	Benzene	ND	0.48	0.10	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	0.42	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.23	ug/kg	
75-25-2	Bromoform [a]	ND	4.8	0.30	ug/kg	
74-83-9	Bromomethane	ND	4.8	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.7	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	1.9	0.35	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.9	0.22	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.9	0.43	ug/kg	
75-15-0	Carbon disulfide	ND	1.9	0.59	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.28	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.87	ug/kg	
67-66-3	Chloroform	ND	1.9	0.31	ug/kg	
74-87-3	Chloromethane	ND	4.8	0.95	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.65	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.37	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.97	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.97	0.50	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.97	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.97	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	4.8	0.59	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.97	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.97	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.97	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.51	0.97	0.39	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.97	0.56	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.38	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.37	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.23	ug/kg	

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: TRC-S9(13')
Lab Sample ID: JC54803-1
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/06/17
Date Received: 11/06/17
Percent Solids: 95.8

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	120	46	ug/kg	
100-41-4	Ethylbenzene	ND	0.97	0.28	ug/kg	
76-13-1	Freon 113	ND	4.8	0.65	ug/kg	
591-78-6	2-Hexanone	ND	4.8	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	1.9	0.24	ug/kg	
79-20-9	Methyl Acetate	ND	4.8	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.53	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.97	0.41	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.8	1.7	ug/kg	
75-09-2	Methylene chloride	ND	4.8	2.4	ug/kg	
103-65-1	n-Propylbenzene	ND	1.9	0.22	ug/kg	
100-42-5	Styrene	ND	1.9	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.25	ug/kg	
127-18-4	Tetrachloroethene	0.91	1.9	0.62	ug/kg	J
108-88-3	Toluene	ND	0.97	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	0.97	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.97	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.56	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.41	ug/kg	
79-01-6	Trichloroethene	2.1	0.97	0.53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.46	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.9	0.97	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	0.97	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.74	ug/kg	
	m,p-Xylene	ND	0.97	0.53	ug/kg	
95-47-6	o-Xylene	ND	0.97	0.24	ug/kg	
1330-20-7	Xylene (total)	ND	0.97	0.24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		72-129%
17060-07-0	1,2-Dichloroethane-D4	101%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	101%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.

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: TRC-S10(5')
Lab Sample ID: JC54803-2
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/06/17
Date Received: 11/06/17
Percent Solids: 81.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153164.D	1	11/08/17 06:40	PS	n/a	n/a	V1C6762
Run #2	E248828.D	1	11/09/17 18:52	TDN	n/a	n/a	VE10685

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.7 g		
Run #2	5.1 g	10.0 ml	100 ul

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	33.8	11	6.9	ug/kg	
71-43-2	Benzene	ND	0.54	0.12	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.47	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.26	ug/kg	
75-25-2	Bromoform [a]	ND	5.4	0.34	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.76	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	5.6	ug/kg	
104-51-8	n-Butylbenzene	ND	2.2	0.39	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.2	0.25	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.2	0.48	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.66	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.70	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.31	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.97	ug/kg	
67-66-3	Chloroform	ND	2.2	0.35	ug/kg	
74-87-3	Chloromethane	ND	5.4	1.1	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.37	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.41	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.56	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	5.4	0.65	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.28	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.76	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.5	1.1	0.43	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.41	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.26	ug/kg	

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: TRC-S10(5')
Lab Sample ID: JC54803-2
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/06/17
Date Received: 11/06/17
Percent Solids: 81.5

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	130	51	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.31	ug/kg	
76-13-1	Freon 113	ND	5.4	0.73	ug/kg	
591-78-6	2-Hexanone	ND	5.4	3.0	ug/kg	
98-82-8	Isopropylbenzene	ND	2.2	0.27	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	2.7	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.59	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	1.9	ug/kg	
75-09-2	Methylene chloride	ND	5.4	2.7	ug/kg	
103-65-1	n-Propylbenzene	ND	2.2	0.25	ug/kg	
100-42-5	Styrene	ND	2.2	0.53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.27	ug/kg	
127-18-4	Tetrachloroethene	102 [c]	260	84	ug/kg	J
108-88-3	Toluene	ND	1.1	0.59	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.63	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.45	ug/kg	
79-01-6	Trichloroethene	149 [c]	130	72	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.2	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.2	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.82	ug/kg	
	m,p-Xylene	ND	1.1	0.59	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.27	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%	94%	72-129%
17060-07-0	1,2-Dichloroethane-D4	122%	88%	73-132%
2037-26-5	Toluene-D8	82%	94%	80-120%
460-00-4	4-Bromofluorobenzene	133% [d]	97%	77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.
(c) Result is from Run# 2
(d) Outside control limits due to matrix interference.

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: TRC-S11(5')
Lab Sample ID: JC54803-3
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/06/17
Date Received: 11/06/17
Percent Solids: 87.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153163.D	1	11/08/17 06:11	PS	n/a	n/a	V1C6762
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.2	10	6.5	ug/kg	
71-43-2	Benzene	ND	0.51	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.1	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.25	ug/kg	
75-25-2	Bromoform [a]	ND	5.1	0.32	ug/kg	
74-83-9	Bromomethane	ND	5.1	0.72	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.3	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.37	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.24	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.45	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.92	ug/kg	
67-66-3	Chloroform	ND	2.0	0.33	ug/kg	
74-87-3	Chloromethane	ND	5.1	1.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.35	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.39	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	5.1	0.62	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	3.8	1.0	0.41	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.41	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.39	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	

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: TRC-S11(5')
Lab Sample ID: JC54803-3
Matrix: SO - Soil
Method: SW846 8260C
Project: K710, 168 8th Street, Brooklyn, NY

Date Sampled: 11/06/17
Date Received: 11/06/17
Percent Solids: 87.4

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	130	48	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
76-13-1	Freon 113	ND	5.1	0.69	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.9	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.1	2.6	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.56	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.1	2.6	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.51	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.26	ug/kg	
127-18-4	Tetrachloroethene	3.3	2.0	0.65	ug/kg	
108-88-3	Toluene	ND	1.0	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.1	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.59	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.43	ug/kg	
79-01-6	Trichloroethene	34.4	1.0	0.56	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.78	ug/kg	
	m,p-Xylene	ND	1.0	0.56	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.26	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.

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
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

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CHAIN OF CUSTODY

PAGE __ OF __

2235 Route 130, Dayton, NJ 08810
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www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JC54422

Client / Reporting Information

Company Name: TRC Engineers, Inc.
Street Address: 1430 Broadway
City: New York State: NY Zip: 10024
Project Contact: Lindsay O'Hara E-mail:
Phone #: 203.270.5305 Fax #:
Sampler(s) Name(s): Emily Ebert Phone #: 908.451.0[illegible]

Project Information

Project Name: 168 8th Street IRM
Street: "
City: BROOKLYN State: NY
Project #: 275864
Client Purchase Order #:
Project Manager: Lindsay O'Hara

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

TCL + RP4 375 VOCs
% Solids

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL + RP4 375 VOCs	% Solids	LAB USE ONLY
1	TRC - S2 (19')		11/1/17	0915	EE	S	4						X	X		X	X	P6
2	TRC - S3 (5')			0950														14T4
3	TRC - S4 (5')			1300														40127
4	TRC - S5 (12')			1340														
							END											

D.I. slurry voc vials frozen storage
Date: ___ Time: ___ Initials: ___

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [x] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other ____

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [x] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [ ] EDD Format ____
- [ ] Other ____
- [ ] *NJ Data of Known Quality Protocol Reporting*

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

NYCSCA project

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11.1.17 1450	1 Robert Chambers	2 Robert Chambers	11.1.17 1621	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 613 [x] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [x] Cooler Temp. 3.2°C

5.1 5

SGS Accutest Sample Receipt Summary

Job Number: JC54422 **Client:** _____ **Project:** _____

Date / Time Received: 11/1/2017 4:21:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.5);

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:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

SM089-02
Rev. Date 12/1/16

ACCUTEST LABORATORIES

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CHAIN OF CUSTODY

PAGE 1 OF 1

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FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JC54555

Client / Reporting Information

Company Name: TRC Engineers, INC.
Street Address: 1430 Broadway
City State Zip: New York NY 10024
Project Contact: Lindsay O'Hara E-mail:
Phone #: 203 278-5305 Fax #:
Sampler(s) Name(s): Emily Ebert Phone #:

Project Information

Project Name: 168 8th St. IEM
Street: " "
City: Brooklyn State: NY
Project #: 275864
Client Purchase Order #:
Project Manager: Lindsay O'Hara

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

TCL + Part 375 VOCs
% solids

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	TRC-S6(		11/2	0830	EE	S	4						X	X		89
2	TRC-S7(		↓	1135	↓	↓	↓						↓	↓		1401
3	TRC-Dup-1		↓	1135	↓	↓	↓						↓	↓		40132
	END															

BAIDS
INITIAL ASESSMENT
LABEL VERIFICATION

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [X] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

NYCSCA Project-
D.I. slurry voc vials frozen storage
Date: Time: Initials:

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11/2 1500	1	2	11-2-17 1647	2
3		3	4		4
5		5	Custody Seal # 834 ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☐ Cooler Temp 3.4

SGS Accutest Sample Receipt Summary

Job Number: JC54555 **Client:** _____ **Project:** _____

Date / Time Received: 11/2/2017 4:47:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4);

Cooler Temps (Corrected) °C: Cooler 1: (1.8);

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:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

SM089-02
Rev. Date 12/1/16

Job Change Order: JC54555

Requested Date: 11/9/2017 **Received Date:** 11/2/2017

Account Name: TRC **Due Date:** 11/9/2017

Project Description: K710, 168 8th Street, Brooklyn, NY **Deliverable:** NYASPB

C/O Initiated By: peted **PM:** MC **TAT (Days):** 7

==========

Sample #: JC54555-1 **Change:**

Dept: Revise sample ID to TRC-S6(4')

TAT: 7

TRC-S6

==========

Sample #: JC54555-2 **Change:**

Dept: Revise sample ID to TRC-S7(4')

TAT: 7

TRC-S7

==========

Above Changes Per: Lindsay O'Hara @ TRC **Date/Time:** 11/9/2017 1:39:20 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Job Change Order: JC54555

Requested Date: 11/14/2017
Account Name: TRC
Project Description: K710, 168 8th Street, Brooklyn, NY
C/O Initiated By: michelld **PM:** MC

Received Date: 11/2/2017
Due Date: 11/9/2017
Deliverable: NYASPB
TAT (Days): 1

==========

Sample #: JC54555-All
Dept:
TAT: 1

Change:
Move all samples to JC54422

==========

Above Changes Per:

Date/Time: 11/14/2017 2:22:10 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

ACCUTEST LABORATORIES

SLL

CHAIN OF CUSTODY

PAGE 1 OF 1

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FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JC54689

Client / Reporting Information

Company Name: TRC Engineers Inc.
Street Address: 1430 Broadway
City: NewYork State: NY Zip: 10024
Project Contact: Lindsay O'Hara E-mail:
Phone #: 203-278-5308 Fax #:
Sampler(s) Name(s): Emily Ebert Phone #:

Project Information

Project Name: 168 8th Street IRM
Street: " "
City: BROOKLIN State: NY
Project #: 275864
Client Purchase Order #: ~~Linda~~
Project Manager: Lindsay O'Hara

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

TCL + Part 375 VOCs
% Solids

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	TRC-S8(5')		11/3	0940	EE	S	4						X	X		P12
					END											1402
																4900

D.I. slurry voc vials frozen storage
Date: ___ Time: ___ Initials: ___

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [x] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [x] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

NJ Data of Known Quality Protocol Reporting

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

SCA project

INITIAL ASESSMENT GCB

LABEL VERIFICATION

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/3 1457	1	2	11-3-17 1705	2
3			3	4		4
5			5			

Custody Seal # 477 — [ ] Intact [ ] Not intact — Preserved where applicable [ ] — On Ice [x] — Cooler Temp 2.5°C JP

SGS Accutest Sample Receipt Summary

Job Number: JC54689 **Client:** _____ **Project:** _____

Date / Time Received: 11/3/2017 5:05:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.5);

Cooler Temps (Corrected) °C: Cooler 1: (0.9);

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:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

SM089-02
Rev. Date 12/1/16

Job Change Order: JC54689

Requested Date: 11/14/2017
Account Name: TRC
Project Description: K710, 168 8th Street, Brooklyn, NY
C/O Initiated By: michelld **PM:** MC

Received Date: 11/3/2017
Due Date: 11/10/2017
Deliverable: COMMB
TAT (Days): 1

==========

Sample #: JC54689-All
Dept:
TAT: 1

Change:
Move all samples to JC54422

==========

Above Changes Per:

Date/Time: 11/14/2017 2:22:47 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

ACCUTEST Laboratories

SCC

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE 1 OF 1

Accutest New Jersey (Mid Atlantic) Regional Lab
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JC54803

Client / Reporting Information

Company Name: TRC Engineers, Inc.
Street Address: 1430 Broadway
City State Zip: New York NY 10024
Project Contact: Lindsay O'Hara
E-mail
Phone # 203.278.5305 Fax #
Sampler(s) Name(s): Emily Ebert Phone #

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

~~Retail Project (Site Name)~~: 168 8th St IRM
~~Major Project (AFE)~~
~~Project Name~~
City: Brooklyn State: NY
~~ExxonMobil Manager~~ PROJ.#
~~ExxonMobil Purchase Order #~~: 275864
Attention PO#

~~ExxonMobil Environmental Services Co.~~

If Project is Direct Bill to Consultant

Company Name
Street Address
City State Zip

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved Bottles: HCl	NaOH-	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL + Part 375 VOCs	% Solids	LAB USE ONLY
1	TRC-S9(13')		11/6	1240	EE	S	4						X	X		X	X	P12
2	TRC-S10(5')			1330									X	X		X	X	14V1
3	TRC-S11(5')			1345									X	X		X	X	4906
							END											

D.I. slurry voc vials frozen storage
Date: ___ Time: ___ Initials: ___

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- Std. 10 Business Days
- 8 Day *RUSH*
- 4 Day *RUSH*
- 3 Day *EMERGENCY*
- 2 Day *EMERGENCY*
- 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- FULLT1 (Level 3+4)
- NJ Reduced
- Commercial "C"
- NYASP Category A
- NYASP Category B
- State Forms
- EDD Format
- Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

SCA Project

INITIAL ASSESSMENT 3B(19)

LABEL VERIFICATION

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/6/17 1430			11/6/17 1631	
2	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3						
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable
5						On Ice: ☐ Cooler Temp. 02.9

SGS Accutest Sample Receipt Summary

Job Number: JC54803 **Client:** _____ **Project:** _____

Date / Time Received: 11/6/2017 4:21:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.9);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

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:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

SM089-02
Rev. Date 12/1/16

Job Change Order: JC54277

Requested Date:	11/15/2017	**Received Date:**	10/30/2017
Account Name:	TRC	**Due Date:**	11/6/2017
Project Description:	K710, 168 8th Street, Brooklyn, NY	**Deliverable:**	COMMB
C/O Initiated By:	michelld **PM:** MC	**TAT (Days):**	1

==========

Sample #: JC54277-All

Dept:

TAT: 1

Change:
Move all samples to JC54422

==========

Above Changes Per:

Date/Time: 11/15/2017 4:54:13 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

SGS Accutest Sample Receipt Summary

Job Number: JC54277 **Client:** _____ **Project:** _____

Date / Time Received: 10/30/2017 4:07:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.6);

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:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

SM089-02
Rev. Date 12/1/16

SGS ACCUTEST SO

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking # | Bottle Order Control #
SGS Accutest Quote # | SGS Accutest Job # 54422

Client / Reporting Information

Company Name: TRC Engineers, Inc.
Street Address: 1436 Broadway
City: New York State: NY Zip: 10024
Project Contact: Lindsay O'Hara E-mail:
Phone #: 203 271.5305 Fax #:
Sampler(s) Name(s): Emily Ford Phone #: 908-451-0203

Project Information

Project Name: 168 8th St. IRM
Street: " "
City: Brooklyn State: NY
Project #: 275864
Client Purchase Order #:
Project Manager: Lindsay O'Hara

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL & Part 375 VOCs	Total Solids	LAB USE ONLY
	TRC-SW(6')		10/30	1430	EE	S	4						X	X		X	X	P7
	END																	14TI 40122

D.I slurry voc vials frozen storage

Date:____ Time:____ Initials:____

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [x] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

INITIAL ASESSMENT 3.A Dom
LABEL VERIFICATION

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

NYLSCA project

Sample inventory is verified upon receipt in the Laboratory

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		10/30/17 1510	Robert Chambers	Robert Chambers	10.30.17 1607	
2	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3						
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable
5						On Ice: I G Cooler Temp: 3.2ºC

Form:SM088-01CRev.Date:9/13/16

Job Change Order: JC54803

Requested Date:	11/14/2017	**Received Date:**	11/6/2017
Account Name:	TRC	**Due Date:**	11/13/2017
Project Description:	K710, 168 8th Street, Brooklyn, NY	**Deliverable:**	COMMB
C/O Initiated By:	michelld **PM:** MC	**TAT (Days):**	1

==========

Sample #: JC54803-All

Dept:

TAT: 1

Change:
Move all samples tp JC54422

==========

Above Changes Per:

Date/Time: 11/14/2017 2:23:28 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Internal Sample Tracking Chronicle

TRC

Job No: JC54422

K710, 168 8th Street, Brooklyn, NY
Project No: 275864 PO # 110129

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC54277-1	Collected: 30-OCT-17 14:30 By: EE		Received: 30-OCT-17 By: TRS			
TRC-S1(6')						
JC54277-1	SM2540 G-97	01-NOV-17 09:15	MH			SOL104
JC54277-1	SW846 8260C	06-NOV-17 13:14	PS			V8260SCOTCL20
JC54422-1	Collected: 01-NOV-17 09:15 By: EE		Received: 01-NOV-17 By: AS			
TRC-S2(19')						
JC54422-1	SM2540 G-97	06-NOV-17 10:45	PN			SOL104
JC54422-1	SW846 8260C	06-NOV-17 15:59	PS			V8260SCOTCL20
JC54422-2	Collected: 01-NOV-17 09:50 By: EE		Received: 01-NOV-17 By: AS			
TRC-S3(5')						
JC54422-2	SM2540 G-97	06-NOV-17 10:45	PN			SOL104
JC54422-2	SW846 8260C	06-NOV-17 16:25	PS			V8260SCOTCL20
JC54422-3	Collected: 01-NOV-17 13:00 By: EE		Received: 01-NOV-17 By: AS			
TRC-S4(5')						
JC54422-3	SM2540 G-97	06-NOV-17 10:45	PN			SOL104
JC54422-3	SW846 8260C	06-NOV-17 23:04	PS			V8260SCOTCL20
JC54422-4	Collected: 01-NOV-17 13:40 By: EE		Received: 01-NOV-17 By: AS			
TRC-S5(12')						
JC54422-4	SM2540 G-97	06-NOV-17 10:45	PN			SOL104
JC54422-4	SW846 8260C	07-NOV-17 15:49	PS			V8260SCOTCL20
JC54555-1	Collected: 02-NOV-17 08:30 By: EE		Received: 02-NOV-17 By: AS			
TRC-S6(4')						
JC54555-1	SW846 8260C	04-NOV-17 05:07	PS			V8260SCOTCL20
JC54555-1	SM2540 G-97	06-NOV-17 10:45	PN			SOL104
JC54555-2	Collected: 02-NOV-17 11:15 By: EE		Received: 02-NOV-17 By: AS			
TRC-S7(4')						
JC54555-2	SM2540 G-97	06-NOV-17 10:45	PN			SOL104

Internal Sample Tracking Chronicle

TRC

Job No: JC54422

K710, 168 8th Street, Brooklyn, NY
Project No: 275864 PO # 110129

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC54555-2	SW846 8260C	07-NOV-17 15:23	PS			V8260SCOTCL20
JC54555-3	Collected: 02-NOV-17 11:15 By: EE		Received: 02-NOV-17 By: AS			
TRC-DUP-1						
JC54555-3	SW846 8260C	04-NOV-17 06:00	PS			V8260SCOTCL20
JC54555-3	SM2540 G-97	06-NOV-17 10:45	PN			SOL104
JC54689-1	Collected: 03-NOV-17 09:40 By: EE		Received: 03-NOV-17 By: AS			
TRC-S8(5')						
JC54689-1	SM2540 G-97	07-NOV-17 16:00	LV			SOL104
JC54689-1	SW846 8260C	07-NOV-17 21:26	PS			V8260SCOTCL20
JC54803-1	Collected: 06-NOV-17 12:40 By: EE		Received: 06-NOV-17 By: AS			
TRC-S9(13')						
JC54803-1	SW846 8260C	08-NOV-17 05:42	PS			V8260SCOTCL20
JC54803-1	SM2540 G-97	08-NOV-17 19:40	LV			SOL104
JC54803-2	Collected: 06-NOV-17 13:30 By: EE		Received: 06-NOV-17 By: AS			
TRC-S10(5')						
JC54803-2	SW846 8260C	08-NOV-17 06:40	PS			V8260SCOTCL20
JC54803-2	SM2540 G-97	08-NOV-17 19:40	LV			SOL104
JC54803-2	SW846 8260C	09-NOV-17 18:52	TDN			V8260SCOTCL20
JC54803-3	Collected: 06-NOV-17 13:45 By: EE		Received: 06-NOV-17 By: AS			
TRC-S11(5')						
JC54803-3	SW846 8260C	08-NOV-17 06:11	PS			V8260SCOTCL20
JC54803-3	SM2540 G-97	08-NOV-17 19:40	LV			SOL104

SGS Accutest Internal Chain of Custody

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY
Received: 10/30/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC54277-1.1	Secured Storage	Dwayne Johnson	10/31/17 10:32	Retrieve from Storage
JC54277-1.1	Secured Storage	Dwayne Johnson	10/31/17 10:32	Retrieve from Storage
Analyst chain of custody update error.				
JC54277-1.1	Dwayne Johnson	Secured Storage	10/31/17 13:11	Return to Storage
JC54277-1.1	Secured Storage	Dave Hunkele	11/01/17 07:43	Retrieve from Storage
JC54277-1.1	Dave Hunkele	Secured Staging Area	11/01/17 07:44	Return to Storage
JC54277-1.1	Secured Staging Area	Minhaj Hashmi	11/01/17 08:14	Retrieve from Storage
JC54277-1.1	Minhaj Hashmi	Secured Storage	11/01/17 09:18	Return to Storage
JC54277-1.3	Secured Storage	Henny Salim	11/06/17 12:00	Retrieve from Storage
JC54277-1.3	Henny Salim	GCMS3C	11/06/17 12:00	Load on Instrument
JC54277-1.3	GCMS3C	Henny Salim	11/07/17 09:03	Unload from Instrument
JC54277-1.3	Henny Salim		11/07/17 09:04	Depleted
JC54277-1.4	Secured Storage	Toan Pham	10/31/17 19:00	Retrieve from Storage
JC54277-1.4	Toan Pham	GCMSI	10/31/17 19:00	Load on Instrument
JC54277-1.4	GCMSI	Prashant Shukla	11/01/17 12:48	Unload from Instrument
JC54277-1.4	Prashant Shukla		11/01/17 12:49	Depleted
JC54422-1.1	Secured Storage	Todd Shoemaker	11/03/17 10:49	Retrieve from Storage
JC54422-1.1	Todd Shoemaker	Secured Staging Area	11/03/17 10:50	Return to Storage
JC54422-1.1	Secured Staging Area	Priti Nayak	11/03/17 12:34	Retrieve from Storage
JC54422-1.1	Priti Nayak	Secured Storage	11/03/17 15:13	Return to Storage
JC54422-1.3	Secured Storage	Robert Szot	11/06/17 16:06	Retrieve from Storage
JC54422-1.3	Robert Szot	GCMSI	11/06/17 16:06	Load on Instrument
JC54422-1.3	GCMSI	Robert Szot	11/07/17 11:33	Unload from Instrument
JC54422-1.3	Robert Szot		11/07/17 11:33	Depleted
JC54422-1.4	Secured Storage	Robert Szot	11/06/17 15:43	Retrieve from Storage
JC54422-1.4	Robert Szot	GCMSI	11/06/17 15:43	Load on Instrument
JC54422-1.4	GCMSI	Robert Szot	11/07/17 11:33	Unload from Instrument
JC54422-1.4	Robert Szot		11/07/17 11:33	Depleted
JC54422-2.1	Secured Storage	Todd Shoemaker	11/03/17 10:49	Retrieve from Storage
JC54422-2.1	Todd Shoemaker	Secured Staging Area	11/03/17 10:50	Return to Storage
JC54422-2.1	Secured Staging Area	Priti Nayak	11/03/17 12:34	Retrieve from Storage
JC54422-2.1	Priti Nayak	Secured Storage	11/03/17 15:13	Return to Storage
JC54422-2.3	Secured Storage	Robert Szot	11/06/17 16:06	Retrieve from Storage
JC54422-2.3	Robert Szot	GCMSI	11/06/17 16:06	Load on Instrument
JC54422-2.3	GCMSI	Robert Szot	11/07/17 11:33	Unload from Instrument
JC54422-2.3	Robert Szot		11/07/17 11:33	Depleted

SGS Accutest Internal Chain of Custody

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY
Received: 10/30/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC54422-2.4	Secured Storage	Robert Szot	11/06/17 15:43	Retrieve from Storage
JC54422-2.4	Robert Szot	GCMSI	11/06/17 15:43	Load on Instrument
JC54422-2.4	GCMSI	Robert Szot	11/07/17 11:33	Unload from Instrument
JC54422-2.4	Robert Szot		11/07/17 11:33	Depleted
JC54422-3.1	Secured Storage	Todd Shoemaker	11/03/17 10:49	Retrieve from Storage
JC54422-3.1	Todd Shoemaker	Secured Staging Area	11/03/17 10:50	Return to Storage
JC54422-3.1	Secured Staging Area	Priti Nayak	11/03/17 12:34	Retrieve from Storage
JC54422-3.1	Priti Nayak	Secured Storage	11/03/17 15:13	Return to Storage
JC54422-3.4	Secured Storage	Robert Szot	11/06/17 16:06	Retrieve from Storage
JC54422-3.4	Robert Szot	GCMSI	11/06/17 16:06	Load on Instrument
JC54422-3.4	GCMSI	Robert Szot	11/07/17 11:33	Unload from Instrument
JC54422-3.4	Robert Szot		11/07/17 11:33	Depleted
JC54422-4.1	Secured Storage	Todd Shoemaker	11/03/17 10:49	Retrieve from Storage
JC54422-4.1	Todd Shoemaker	Secured Staging Area	11/03/17 10:50	Return to Storage
JC54422-4.1	Secured Staging Area	Priti Nayak	11/03/17 12:34	Retrieve from Storage
JC54422-4.1	Priti Nayak	Secured Storage	11/03/17 15:13	Return to Storage
JC54422-4.4	Secured Storage	Robert Szot	11/06/17 16:06	Retrieve from Storage
JC54422-4.4	Robert Szot	GCMSI	11/06/17 16:06	Load on Instrument
JC54422-4.4	GCMSI	Prashant Shukla	11/08/17 12:16	Unload from Instrument
JC54422-4.4	Prashant Shukla		11/08/17 12:17	Depleted
JC54555-1.1	Secured Storage	Todd Shoemaker	11/03/17 10:49	Retrieve from Storage
JC54555-1.1	Todd Shoemaker	Secured Staging Area	11/03/17 10:50	Return to Storage
JC54555-1.1	Secured Staging Area	Priti Nayak	11/03/17 12:34	Retrieve from Storage
JC54555-1.1	Priti Nayak	Secured Storage	11/03/17 15:13	Return to Storage
JC54555-1.4	Secured Storage	Toan Pham	11/03/17 22:25	Retrieve from Storage
JC54555-1.4	Toan Pham	GCMSI	11/03/17 22:25	Load on Instrument
JC54555-1.4	GCMSI	Prashant Shukla	11/04/17 10:30	Unload from Instrument
JC54555-1.4	Prashant Shukla		11/04/17 10:30	Depleted
JC54555-2.1	Secured Storage	Todd Shoemaker	11/03/17 10:49	Retrieve from Storage
JC54555-2.1	Todd Shoemaker	Secured Staging Area	11/03/17 10:50	Return to Storage
JC54555-2.1	Secured Staging Area	Priti Nayak	11/03/17 12:34	Retrieve from Storage
JC54555-2.1	Priti Nayak	Secured Storage	11/03/17 15:13	Return to Storage
JC54555-2.3	Secured Storage	Robert Szot	11/07/17 15:06	Retrieve from Storage
JC54555-2.3	Robert Szot	GCMSI	11/07/17 15:06	Load on Instrument
JC54555-2.3	GCMSI	Prashant Shukla	11/08/17 12:16	Unload from Instrument
JC54555-2.3	Prashant Shukla		11/08/17 12:17	Depleted

SGS Accutest Internal Chain of Custody

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY
Received: 10/30/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC54555-2.4	Secured Storage	Toan Pham	11/03/17 22:25	Retrieve from Storage
JC54555-2.4	Toan Pham	GCMSI	11/03/17 22:25	Load on Instrument
JC54555-2.4	GCMSI	Prashant Shukla	11/04/17 10:30	Unload from Instrument
JC54555-2.4	Prashant Shukla		11/04/17 10:30	Depleted
JC54555-3.1	Secured Storage	Todd Shoemaker	11/03/17 10:49	Retrieve from Storage
JC54555-3.1	Todd Shoemaker	Secured Staging Area	11/03/17 10:50	Return to Storage
JC54555-3.1	Secured Staging Area	Priti Nayak	11/03/17 12:34	Retrieve from Storage
JC54555-3.1	Priti Nayak	Secured Storage	11/03/17 15:13	Return to Storage
JC54555-3.4	Secured Storage	Toan Pham	11/03/17 22:25	Retrieve from Storage
JC54555-3.4	Toan Pham	GCMSI	11/03/17 22:25	Load on Instrument
JC54555-3.4	GCMSI	Prashant Shukla	11/04/17 10:30	Unload from Instrument
JC54555-3.4	Prashant Shukla		11/04/17 10:30	Depleted
JC54689-1.1	Secured Storage	Dwayne Johnson	11/07/17 13:30	Retrieve from Storage
JC54689-1.1	Dwayne Johnson	Secured Staging Area	11/07/17 13:30	Return to Storage
JC54689-1.1	Secured Staging Area	Luis Villanueva	11/07/17 13:50	Retrieve from Storage
JC54689-1.1	Luis Villanueva	Secured Storage	11/07/17 15:51	Return to Storage
JC54689-1.4	Secured Storage	Robert Szot	11/07/17 14:29	Retrieve from Storage
JC54689-1.4	Robert Szot	GCMS1C	11/07/17 14:29	Load on Instrument
JC54689-1.4	GCMS1C	Prashant Shukla	11/08/17 12:15	Unload from Instrument
JC54689-1.4	Prashant Shukla		11/08/17 12:17	Depleted
JC54803-1.1	Secured Storage	Dave Hunkele	11/08/17 13:41	Retrieve from Storage
JC54803-1.1	Dave Hunkele	Secured Staging Area	11/08/17 13:42	Return to Storage
JC54803-1.1	Secured Staging Area	Shirley Grzybowski	11/09/17 11:05	Retrieve from Storage
JC54803-1.1	Shirley Grzybowski	Secured Storage	11/09/17 11:05	Return to Storage
JC54803-2.1	Secured Storage	Dave Hunkele	11/08/17 13:41	Retrieve from Storage
JC54803-2.1	Dave Hunkele	Secured Staging Area	11/08/17 13:42	Return to Storage
JC54803-2.1	Secured Staging Area	Shirley Grzybowski	11/09/17 11:05	Retrieve from Storage
JC54803-2.1	Shirley Grzybowski	Secured Storage	11/09/17 11:05	Return to Storage
JC54803-2.2	Secured Storage	Thien Nguyen	11/09/17 11:21	Retrieve from Storage
JC54803-2.2	Thien Nguyen	Secured Storage	11/09/17 11:21	Return to Storage
JC54803-3.1	Secured Storage	Dave Hunkele	11/08/17 13:41	Retrieve from Storage
JC54803-3.1	Dave Hunkele	Secured Staging Area	11/08/17 13:42	Return to Storage
JC54803-3.1	Secured Staging Area	Shirley Grzybowski	11/09/17 11:05	Retrieve from Storage
JC54803-3.1	Shirley Grzybowski	Secured Storage	11/09/17 11:05	Return to Storage

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
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8698-MB	I216595.D	1	11/03/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.4	ug/kg	
71-43-2	Benzene	ND	0.50	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	5.0	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.44	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.90	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.99	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.34	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.38	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	
123-91-1	1,4-Dioxane	ND	130	47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/kg	
76-13-1	Freon 113	ND	5.0	0.67	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.8	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8698-MB	I216595.D	1	11/03/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.42	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.77	ug/kg	
	m,p-Xylene	ND	1.0	0.55	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	72-129%
17060-07-0	1,2-Dichloroethane-D4	110%	73-132%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	110%	77-125%

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

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-MB	3C140184.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.4	ug/kg	
71-43-2	Benzene	ND	0.50	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	5.0	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.44	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.90	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.99	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.34	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.38	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	
123-91-1	1,4-Dioxane	ND	130	47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/kg	
76-13-1	Freon 113	ND	5.0	0.67	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.8	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-MB	3C140184.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.42	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.77	ug/kg	
	m,p-Xylene	ND	1.0	0.55	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	72-129%
17060-07-0	1,2-Dichloroethane-D4	98%	73-132%
2037-26-5	Toluene-D8	96%	80-120%
460-00-4	4-Bromofluorobenzene	103%	77-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	.94	35	ug/kg	J

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-MB	3C140184.D	1	11/06/17	PS	n/a	n/a	V3C6357

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

JC54277-1

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

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8700-MB	I216645.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.4	ug/kg	
71-43-2	Benzene	ND	0.50	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	5.0	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.44	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.90	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.99	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.34	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.38	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	
123-91-1	1,4-Dioxane	ND	130	47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/kg	
76-13-1	Freon 113	ND	5.0	0.67	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.8	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8700-MB	I216645.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.42	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.77	ug/kg	
	m,p-Xylene	ND	1.0	0.55	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	72-129%
17060-07-0	1,2-Dichloroethane-D4	110%	73-132%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	108%	77-125%

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

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8701-MB	I216670.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.4	ug/kg	
71-43-2	Benzene	ND	0.50	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	5.0	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.44	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.90	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.99	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.34	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.38	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	
123-91-1	1,4-Dioxane	ND	130	47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/kg	
76-13-1	Freon 113	ND	5.0	0.67	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.8	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8701-MB	I216670.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.42	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.77	ug/kg	
	m,p-Xylene	ND	1.0	0.55	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	72-129%
17060-07-0	1,2-Dichloroethane-D4	100%	73-132%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	105%	77-125%

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

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6761-MB	1C153129.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.4	ug/kg	
71-43-2	Benzene	ND	0.50	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	5.0	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.44	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.90	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.99	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.34	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.38	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	
123-91-1	1,4-Dioxane	ND	130	47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/kg	
76-13-1	Freon 113	ND	5.0	0.67	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.8	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6761-MB	1C153129.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.42	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.77	ug/kg	
	m,p-Xylene	ND	1.0	0.55	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	72-129%
17060-07-0	1,2-Dichloroethane-D4	96%	73-132%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	103%	77-125%

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

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6762-MB	1C153151.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.4	ug/kg	
71-43-2	Benzene	ND	0.50	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	5.0	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.44	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.90	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.99	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.34	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.38	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	
123-91-1	1,4-Dioxane	ND	130	47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/kg	
76-13-1	Freon 113	ND	5.0	0.67	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.8	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6762-MB	1C153151.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.42	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.77	ug/kg	
	m,p-Xylene	ND	1.0	0.55	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	72-129%
17060-07-0	1,2-Dichloroethane-D4	93%	73-132%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	101%	77-125%

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE10685-MB	E248812.D	1	11/09/17	TDN	n/a	n/a	VE10685

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-2

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethene	ND	100	32	ug/kg	
79-01-6	Trichloroethene	ND	50	27	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	72-129%
17060-07-0	1,2-Dichloroethane-D4	90%	73-132%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	100%	77-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.07	770	ug/kg	J
	system artifact	11.04	530	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-MB2	3C140208.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54680-2MS

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.4	ug/kg	
71-43-2	Benzene	ND	0.50	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	5.0	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.44	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.90	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.99	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.34	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.38	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	
123-91-1	1,4-Dioxane	ND	130	47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/kg	
76-13-1	Freon 113	ND	5.0	0.67	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.8	ug/kg	

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-MB2	3C140208.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54680-2MS

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.42	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.77	ug/kg	
	m,p-Xylene	ND	1.0	0.55	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	110%	72-129%
17060-07-0	1,2-Dichloroethane-D4	99%	73-132%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	102%	77-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	.94	38	ug/kg	J

Method Blank Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-MB2	3C140208.D	1	11/06/17	PS	n/a	n/a	V3C6357

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

JC54680-2MS

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

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8698-BS	I216596.D	1	11/03/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	196	98	45-144
71-43-2	Benzene	50	41.4	83	76-117
74-97-5	Bromochloromethane	50	43.0	86	82-121
75-27-4	Bromodichloromethane	50	47.9	96	76-121
75-25-2	Bromoform	50	47.7	95	78-129
74-83-9	Bromomethane	50	38.2	76	61-137
78-93-3	2-Butanone (MEK)	200	194	97	70-136
104-51-8	n-Butylbenzene	50	48.0	96	72-127
135-98-8	sec-Butylbenzene	50	46.5	93	73-128
98-06-6	tert-Butylbenzene	50	45.9	92	75-127
75-15-0	Carbon disulfide	50	34.9	70	68-135
56-23-5	Carbon tetrachloride	50	44.6	89	74-139
108-90-7	Chlorobenzene	50	41.6	83	80-118
75-00-3	Chloroethane	50	42.5	85	63-133
67-66-3	Chloroform	50	41.7	83	79-125
74-87-3	Chloromethane	50	37.3	75	56-138
110-82-7	Cyclohexane	50	42.0	84	64-139
96-12-8	1,2-Dibromo-3-chloropropane	50	42.7	85	76-125
124-48-1	Dibromochloromethane	50	47.2	94	78-125
106-93-4	1,2-Dibromoethane	50	47.9	96	77-120
95-50-1	1,2-Dichlorobenzene	50	44.2	88	77-119
541-73-1	1,3-Dichlorobenzene	50	42.4	85	75-117
106-46-7	1,4-Dichlorobenzene	50	42.0	84	76-116
75-71-8	Dichlorodifluoromethane	50	40.7	81	47-152
75-34-3	1,1-Dichloroethane	50	42.5	85	75-124
107-06-2	1,2-Dichloroethane	50	49.0	98	72-132
75-35-4	1,1-Dichloroethene	50	42.8	86	71-134
156-59-2	cis-1,2-Dichloroethene	50	40.2	80	73-116
156-60-5	trans-1,2-Dichloroethene	50	43.2	86	73-124
78-87-5	1,2-Dichloropropane	50	44.7	89	78-118
10061-01-5	cis-1,3-Dichloropropene	50	47.6	95	79-120
10061-02-6	trans-1,3-Dichloropropene	50	46.7	93	77-121
123-91-1	1,4-Dioxane	1250	1230	98	68-130
100-41-4	Ethylbenzene	50	42.3	85	77-118
76-13-1	Freon 113	50	37.5	75	70-162
591-78-6	2-Hexanone	200	207	104	66-133

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8698-BS	I216596.D	1	11/03/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
98-82-8	Isopropylbenzene	50	45.0	90	72-129
79-20-9	Methyl Acetate	50	47.1	94	62-132
108-87-2	Methylcyclohexane	50	41.7	83	64-138
1634-04-4	Methyl Tert Butyl Ether	50	48.5	97	73-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	209	105	72-133
75-09-2	Methylene chloride	50	40.1	80	72-120
103-65-1	n-Propylbenzene	50	44.9	90	75-126
100-42-5	Styrene	50	46.8	94	79-118
79-34-5	1,1,2,2-Tetrachloroethane	50	49.0	98	72-120
127-18-4	Tetrachloroethene	50	38.2	76	70-132
108-88-3	Toluene	50	40.7	81	76-118
87-61-6	1,2,3-Trichlorobenzene	50	51.8	104	71-132
120-82-1	1,2,4-Trichlorobenzene	50	51.6	103	76-132
71-55-6	1,1,1-Trichloroethane	50	43.8	88	78-138
79-00-5	1,1,2-Trichloroethane	50	46.5	93	79-117
79-01-6	Trichloroethene	50	42.2	84	79-124
75-69-4	Trichlorofluoromethane	50	42.9	86	64-142
95-63-6	1,2,4-Trimethylbenzene	50	45.1	90	75-123
108-67-8	1,3,5-Trimethylbenzene	50	46.2	92	73-125
75-01-4	Vinyl chloride	50	40.2	80	55-139
	m,p-Xylene	100	86.0	86	79-119
95-47-6	o-Xylene	50	44.7	89	77-122
1330-20-7	Xylene (total)	150	131	87	79-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	72-129%
17060-07-0	1,2-Dichloroethane-D4	111%	73-132%
2037-26-5	Toluene-D8	97%	80-120%
460-00-4	4-Bromofluorobenzene	99%	77-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-BS	3C140185.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	217	109	45-144
71-43-2	Benzene	50	48.1	96	76-117
74-97-5	Bromochloromethane	50	55.1	110	82-121
75-27-4	Bromodichloromethane	50	55.6	111	76-121
75-25-2	Bromoform	50	57.1	114	78-129
74-83-9	Bromomethane	50	46.1	92	61-137
78-93-3	2-Butanone (MEK)	200	233	117	70-136
104-51-8	n-Butylbenzene	50	45.5	91	72-127
135-98-8	sec-Butylbenzene	50	44.7	89	73-128
98-06-6	tert-Butylbenzene	50	44.2	88	75-127
75-15-0	Carbon disulfide	50	45.4	91	68-135
56-23-5	Carbon tetrachloride	50	53.9	108	74-139
108-90-7	Chlorobenzene	50	46.0	92	80-118
75-00-3	Chloroethane	50	55.5	111	63-133
67-66-3	Chloroform	50	51.2	102	79-125
74-87-3	Chloromethane	50	48.7	97	56-138
110-82-7	Cyclohexane	50	46.0	92	64-139
96-12-8	1,2-Dibromo-3-chloropropane	50	51.5	103	76-125
124-48-1	Dibromochloromethane	50	55.2	110	78-125
106-93-4	1,2-Dibromoethane	50	49.7	99	77-120
95-50-1	1,2-Dichlorobenzene	50	47.1	94	77-119
541-73-1	1,3-Dichlorobenzene	50	45.7	91	75-117
106-46-7	1,4-Dichlorobenzene	50	45.8	92	76-116
75-71-8	Dichlorodifluoromethane	50	46.5	93	47-152
75-34-3	1,1-Dichloroethane	50	54.6	109	75-124
107-06-2	1,2-Dichloroethane	50	54.2	108	72-132
75-35-4	1,1-Dichloroethene	50	52.9	106	71-134
156-59-2	cis-1,2-Dichloroethene	50	53.2	106	73-116
156-60-5	trans-1,2-Dichloroethene	50	50.9	102	73-124
78-87-5	1,2-Dichloropropane	50	53.0	106	78-118
10061-01-5	cis-1,3-Dichloropropene	50	53.8	108	79-120
10061-02-6	trans-1,3-Dichloropropene	50	51.1	102	77-121
123-91-1	1,4-Dioxane	1250	1610	129	68-130
100-41-4	Ethylbenzene	50	44.3	89	77-118
76-13-1	Freon 113	50	50.6	101	70-162
591-78-6	2-Hexanone	200	200	100	66-133

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C6357-BS	3C140185.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
98-82-8	Isopropylbenzene	50	45.4	91	72-129
79-20-9	Methyl Acetate	50	51.9	104	62-132
108-87-2	Methylcyclohexane	50	46.7	93	64-138
1634-04-4	Methyl Tert Butyl Ether	50	53.8	108	73-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	210	105	72-133
75-09-2	Methylene chloride	50	54.7	109	72-120
103-65-1	n-Propylbenzene	50	45.2	90	75-126
100-42-5	Styrene	50	47.5	95	79-118
79-34-5	1,1,2,2-Tetrachloroethane	50	49.2	98	72-120
127-18-4	Tetrachloroethene	50	47.0	94	70-132
108-88-3	Toluene	50	44.5	89	76-118
87-61-6	1,2,3-Trichlorobenzene	50	48.9	98	71-132
120-82-1	1,2,4-Trichlorobenzene	50	48.7	97	76-132
71-55-6	1,1,1-Trichloroethane	50	51.4	103	78-138
79-00-5	1,1,2-Trichloroethane	50	49.0	98	79-117
79-01-6	Trichloroethene	50	48.6	97	79-124
75-69-4	Trichlorofluoromethane	50	47.2	94	64-142
95-63-6	1,2,4-Trimethylbenzene	50	45.5	91	75-123
108-67-8	1,3,5-Trimethylbenzene	50	45.3	91	73-125
75-01-4	Vinyl chloride	50	48.2	96	55-139
	m,p-Xylene	100	91.3	91	79-119
95-47-6	o-Xylene	50	45.0	90	77-122
1330-20-7	Xylene (total)	150	136	91	79-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	72-129%
17060-07-0	1,2-Dichloroethane-D4	108%	73-132%
2037-26-5	Toluene-D8	97%	80-120%
460-00-4	4-Bromofluorobenzene	100%	77-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8700-BS	I216646.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	184	92	45-144
71-43-2	Benzene	50	46.9	94	76-117
74-97-5	Bromochloromethane	50	48.8	98	82-121
75-27-4	Bromodichloromethane	50	53.5	107	76-121
75-25-2	Bromoform	50	54.3	109	78-129
74-83-9	Bromomethane	50	47.7	95	61-137
78-93-3	2-Butanone (MEK)	200	214	107	70-136
104-51-8	n-Butylbenzene	50	53.5	107	72-127
135-98-8	sec-Butylbenzene	50	52.3	105	73-128
98-06-6	tert-Butylbenzene	50	51.3	103	75-127
75-15-0	Carbon disulfide	50	42.3	85	68-135
56-23-5	Carbon tetrachloride	50	53.5	107	74-139
108-90-7	Chlorobenzene	50	46.3	93	80-118
75-00-3	Chloroethane	50	52.0	104	63-133
67-66-3	Chloroform	50	47.9	96	79-125
74-87-3	Chloromethane	50	46.9	94	56-138
110-82-7	Cyclohexane	50	42.7	85	64-139
96-12-8	1,2-Dibromo-3-chloropropane	50	45.7	91	76-125
124-48-1	Dibromochloromethane	50	52.6	105	78-125
106-93-4	1,2-Dibromoethane	50	50.8	102	77-120
95-50-1	1,2-Dichlorobenzene	50	48.6	97	77-119
541-73-1	1,3-Dichlorobenzene	50	47.0	94	75-117
106-46-7	1,4-Dichlorobenzene	50	46.2	92	76-116
75-71-8	Dichlorodifluoromethane	50	57.8	116	47-152
75-34-3	1,1-Dichloroethane	50	49.0	98	75-124
107-06-2	1,2-Dichloroethane	50	54.4	109	72-132
75-35-4	1,1-Dichloroethene	50	50.9	102	71-134
156-59-2	cis-1,2-Dichloroethene	50	44.8	90	73-116
156-60-5	trans-1,2-Dichloroethene	50	50.2	100	73-124
78-87-5	1,2-Dichloropropane	50	48.8	98	78-118
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	79-120
10061-02-6	trans-1,3-Dichloropropene	50	50.5	101	77-121
123-91-1	1,4-Dioxane	1250	1420	114	68-130
100-41-4	Ethylbenzene	50	47.7	95	77-118
76-13-1	Freon 113	50	46.3	93	70-162
591-78-6	2-Hexanone	200	197	99	66-133

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8700-BS	I216646.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
98-82-8	Isopropylbenzene	50	50.8	102	72-129
79-20-9	Methyl Acetate	50	51.1	102	62-132
108-87-2	Methylcyclohexane	50	49.4	99	64-138
1634-04-4	Methyl Tert Butyl Ether	50	51.6	103	73-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	222	111	72-133
75-09-2	Methylene chloride	50	46.4	93	72-120
103-65-1	n-Propylbenzene	50	49.4	99	75-126
100-42-5	Styrene	50	52.3	105	79-118
79-34-5	1,1,2,2-Tetrachloroethane	50	50.2	100	72-120
127-18-4	Tetrachloroethene	50	44.4	89	70-132
108-88-3	Toluene	50	46.4	93	76-118
87-61-6	1,2,3-Trichlorobenzene	50	55.9	112	71-132
120-82-1	1,2,4-Trichlorobenzene	50	55.0	110	76-132
71-55-6	1,1,1-Trichloroethane	50	51.8	104	78-138
79-00-5	1,1,2-Trichloroethane	50	50.7	101	79-117
79-01-6	Trichloroethene	50	48.9	98	79-124
75-69-4	Trichlorofluoromethane	50	55.0	110	64-142
95-63-6	1,2,4-Trimethylbenzene	50	49.8	100	75-123
108-67-8	1,3,5-Trimethylbenzene	50	51.4	103	73-125
75-01-4	Vinyl chloride	50	50.0	100	55-139
	m,p-Xylene	100	97.5	98	79-119
95-47-6	o-Xylene	50	50.4	101	77-122
1330-20-7	Xylene (total)	150	148	99	79-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	72-129%
17060-07-0	1,2-Dichloroethane-D4	110%	73-132%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	95%	77-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8701-BS	I216671.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	173	87	45-144
71-43-2	Benzene	50	47.4	95	76-117
74-97-5	Bromochloromethane	50	49.8	100	82-121
75-27-4	Bromodichloromethane	50	52.7	105	76-121
75-25-2	Bromoform	50	52.1	104	78-129
74-83-9	Bromomethane	50	48.8	98	61-137
78-93-3	2-Butanone (MEK)	200	196	98	70-136
104-51-8	n-Butylbenzene	50	52.2	104	72-127
135-98-8	sec-Butylbenzene	50	51.3	103	73-128
98-06-6	tert-Butylbenzene	50	51.3	103	75-127
75-15-0	Carbon disulfide	50	41.7	83	68-135
56-23-5	Carbon tetrachloride	50	50.4	101	74-139
108-90-7	Chlorobenzene	50	47.2	94	80-118
75-00-3	Chloroethane	50	52.8	106	63-133
67-66-3	Chloroform	50	47.1	94	79-125
74-87-3	Chloromethane	50	47.7	95	56-138
110-82-7	Cyclohexane	50	44.1	88	64-139
96-12-8	1,2-Dibromo-3-chloropropane	50	47.7	95	76-125
124-48-1	Dibromochloromethane	50	52.7	105	78-125
106-93-4	1,2-Dibromoethane	50	51.8	104	77-120
95-50-1	1,2-Dichlorobenzene	50	49.1	98	77-119
541-73-1	1,3-Dichlorobenzene	50	47.0	94	75-117
106-46-7	1,4-Dichlorobenzene	50	46.3	93	76-116
75-71-8	Dichlorodifluoromethane	50	54.7	109	47-152
75-34-3	1,1-Dichloroethane	50	48.5	97	75-124
107-06-2	1,2-Dichloroethane	50	52.0	104	72-132
75-35-4	1,1-Dichloroethene	50	48.8	98	71-134
156-59-2	cis-1,2-Dichloroethene	50	45.8	92	73-116
156-60-5	trans-1,2-Dichloroethene	50	48.7	97	73-124
78-87-5	1,2-Dichloropropane	50	50.9	102	78-118
10061-01-5	cis-1,3-Dichloropropene	50	52.2	104	79-120
10061-02-6	trans-1,3-Dichloropropene	50	49.9	100	77-121
123-91-1	1,4-Dioxane	1250	1370	110	68-130
100-41-4	Ethylbenzene	50	46.8	94	77-118
76-13-1	Freon 113	50	45.3	91	70-162
591-78-6	2-Hexanone	200	194	97	66-133

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI8701-BS	I216671.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
98-82-8	Isopropylbenzene	50	49.6	99	72-129
79-20-9	Methyl Acetate	50	50.7	101	62-132
108-87-2	Methylcyclohexane	50	50.2	100	64-138
1634-04-4	Methyl Tert Butyl Ether	50	52.4	105	73-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	216	108	72-133
75-09-2	Methylene chloride	50	47.2	94	72-120
103-65-1	n-Propylbenzene	50	48.4	97	75-126
100-42-5	Styrene	50	52.6	105	79-118
79-34-5	1,1,2,2-Tetrachloroethane	50	51.2	102	72-120
127-18-4	Tetrachloroethene	50	44.4	89	70-132
108-88-3	Toluene	50	47.1	94	76-118
87-61-6	1,2,3-Trichlorobenzene	50	57.3	115	71-132
120-82-1	1,2,4-Trichlorobenzene	50	55.5	111	76-132
71-55-6	1,1,1-Trichloroethane	50	49.1	98	78-138
79-00-5	1,1,2-Trichloroethane	50	50.5	101	79-117
79-01-6	Trichloroethene	50	48.8	98	79-124
75-69-4	Trichlorofluoromethane	50	52.5	105	64-142
95-63-6	1,2,4-Trimethylbenzene	50	49.9	100	75-123
108-67-8	1,3,5-Trimethylbenzene	50	50.7	101	73-125
75-01-4	Vinyl chloride	50	50.7	101	55-139
	m,p-Xylene	100	96.7	97	79-119
95-47-6	o-Xylene	50	50.5	101	77-122
1330-20-7	Xylene (total)	150	147	98	79-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	72-129%
17060-07-0	1,2-Dichloroethane-D4	106%	73-132%
2037-26-5	Toluene-D8	96%	80-120%
460-00-4	4-Bromofluorobenzene	96%	77-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6761-BS	1C153130.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	197	99	45-144
71-43-2	Benzene	50	46.9	94	76-117
74-97-5	Bromochloromethane	50	55.7	111	82-121
75-27-4	Bromodichloromethane	50	52.1	104	76-121
75-25-2	Bromoform	50	60.2	120	78-129
74-83-9	Bromomethane	50	49.8	100	61-137
78-93-3	2-Butanone (MEK)	200	213	107	70-136
104-51-8	n-Butylbenzene	50	43.4	87	72-127
135-98-8	sec-Butylbenzene	50	46.0	92	73-128
98-06-6	tert-Butylbenzene	50	46.7	93	75-127
75-15-0	Carbon disulfide	50	46.1	92	68-135
56-23-5	Carbon tetrachloride	50	45.6	91	74-139
108-90-7	Chlorobenzene	50	49.7	99	80-118
75-00-3	Chloroethane	50	48.9	98	63-133
67-66-3	Chloroform	50	48.0	96	79-125
74-87-3	Chloromethane	50	47.7	95	56-138
110-82-7	Cyclohexane	50	47.5	95	64-139
96-12-8	1,2-Dibromo-3-chloropropane	50	54.7	109	76-125
124-48-1	Dibromochloromethane	50	57.8	116	78-125
106-93-4	1,2-Dibromoethane	50	56.7	113	77-120
95-50-1	1,2-Dichlorobenzene	50	52.1	104	77-119
541-73-1	1,3-Dichlorobenzene	50	50.0	100	75-117
106-46-7	1,4-Dichlorobenzene	50	48.9	98	76-116
75-71-8	Dichlorodifluoromethane	50	41.9	84	47-152
75-34-3	1,1-Dichloroethane	50	49.2	98	75-124
107-06-2	1,2-Dichloroethane	50	53.1	106	72-132
75-35-4	1,1-Dichloroethene	50	46.5	93	71-134
156-59-2	cis-1,2-Dichloroethene	50	48.8	98	73-116
156-60-5	trans-1,2-Dichloroethene	50	47.5	95	73-124
78-87-5	1,2-Dichloropropane	50	52.7	105	78-118
10061-01-5	cis-1,3-Dichloropropene	50	53.9	108	79-120
10061-02-6	trans-1,3-Dichloropropene	50	53.8	108	77-121
123-91-1	1,4-Dioxane	1250	1380	110	68-130
100-41-4	Ethylbenzene	50	46.1	92	77-118
76-13-1	Freon 113	50	49.0	98	70-162
591-78-6	2-Hexanone	200	180	90	66-133

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6761-BS	1C153130.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
98-82-8	Isopropylbenzene	50	45.8	92	72-129
79-20-9	Methyl Acetate	50	56.0	112	62-132
108-87-2	Methylcyclohexane	50	43.5	87	64-138
1634-04-4	Methyl Tert Butyl Ether	50	57.2	114	73-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	199	100	72-133
75-09-2	Methylene chloride	50	49.1	98	72-120
103-65-1	n-Propylbenzene	50	44.8	90	75-126
100-42-5	Styrene	50	48.1	96	79-118
79-34-5	1,1,2,2-Tetrachloroethane	50	53.1	106	72-120
127-18-4	Tetrachloroethene	50	48.2	96	70-132
108-88-3	Toluene	50	43.8	88	76-118
87-61-6	1,2,3-Trichlorobenzene	50	55.8	112	71-132
120-82-1	1,2,4-Trichlorobenzene	50	54.4	109	76-132
71-55-6	1,1,1-Trichloroethane	50	46.4	93	78-138
79-00-5	1,1,2-Trichloroethane	50	52.9	106	79-117
79-01-6	Trichloroethene	50	47.0	94	79-124
75-69-4	Trichlorofluoromethane	50	44.3	89	64-142
95-63-6	1,2,4-Trimethylbenzene	50	45.1	90	75-123
108-67-8	1,3,5-Trimethylbenzene	50	45.8	92	73-125
75-01-4	Vinyl chloride	50	49.9	100	55-139
	m,p-Xylene	100	93.0	93	79-119
95-47-6	o-Xylene	50	47.7	95	77-122
1330-20-7	Xylene (total)	150	141	94	79-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	72-129%
17060-07-0	1,2-Dichloroethane-D4	100%	73-132%
2037-26-5	Toluene-D8	94%	80-120%
460-00-4	4-Bromofluorobenzene	98%	77-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6762-BS	1C153152.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	189	95	45-144
71-43-2	Benzene	50	48.0	96	76-117
74-97-5	Bromochloromethane	50	55.5	111	82-121
75-27-4	Bromodichloromethane	50	52.6	105	76-121
75-25-2	Bromoform	50	61.3	123	78-129
74-83-9	Bromomethane	50	56.5	113	61-137
78-93-3	2-Butanone (MEK)	200	206	103	70-136
104-51-8	n-Butylbenzene	50	49.5	99	72-127
135-98-8	sec-Butylbenzene	50	49.2	98	73-128
98-06-6	tert-Butylbenzene	50	50.5	101	75-127
75-15-0	Carbon disulfide	50	47.6	95	68-135
56-23-5	Carbon tetrachloride	50	46.6	93	74-139
108-90-7	Chlorobenzene	50	51.5	103	80-118
75-00-3	Chloroethane	50	56.1	112	63-133
67-66-3	Chloroform	50	48.1	96	79-125
74-87-3	Chloromethane	50	54.7	109	56-138
110-82-7	Cyclohexane	50	53.2	106	64-139
96-12-8	1,2-Dibromo-3-chloropropane	50	55.4	111	76-125
124-48-1	Dibromochloromethane	50	58.1	116	78-125
106-93-4	1,2-Dibromoethane	50	57.1	114	77-120
95-50-1	1,2-Dichlorobenzene	50	54.7	109	77-119
541-73-1	1,3-Dichlorobenzene	50	53.7	107	75-117
106-46-7	1,4-Dichlorobenzene	50	53.2	106	76-116
75-71-8	Dichlorodifluoromethane	50	49.2	98	47-152
75-34-3	1,1-Dichloroethane	50	49.4	99	75-124
107-06-2	1,2-Dichloroethane	50	53.3	107	72-132
75-35-4	1,1-Dichloroethene	50	47.4	95	71-134
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	73-116
156-60-5	trans-1,2-Dichloroethene	50	48.1	96	73-124
78-87-5	1,2-Dichloropropane	50	52.2	104	78-118
10061-01-5	cis-1,3-Dichloropropene	50	54.3	109	79-120
10061-02-6	trans-1,3-Dichloropropene	50	53.8	108	77-121
123-91-1	1,4-Dioxane	1250	1410	113	68-130
100-41-4	Ethylbenzene	50	48.2	96	77-118
76-13-1	Freon 113	50	52.2	104	70-162
591-78-6	2-Hexanone	200	181	91	66-133

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C6762-BS	1C153152.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
98-82-8	Isopropylbenzene	50	48.7	97	72-129
79-20-9	Methyl Acetate	50	54.6	109	62-132
108-87-2	Methylcyclohexane	50	45.6	91	64-138
1634-04-4	Methyl Tert Butyl Ether	50	56.7	113	73-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	200	100	72-133
75-09-2	Methylene chloride	50	48.4	97	72-120
103-65-1	n-Propylbenzene	50	48.6	97	75-126
100-42-5	Styrene	50	50.2	100	79-118
79-34-5	1,1,2,2-Tetrachloroethane	50	54.1	108	72-120
127-18-4	Tetrachloroethene	50	52.6	105	70-132
108-88-3	Toluene	50	45.0	90	76-118
87-61-6	1,2,3-Trichlorobenzene	50	60.0	120	71-132
120-82-1	1,2,4-Trichlorobenzene	50	60.1	120	76-132
71-55-6	1,1,1-Trichloroethane	50	47.3	95	78-138
79-00-5	1,1,2-Trichloroethane	50	54.4	109	79-117
79-01-6	Trichloroethene	50	49.1	98	79-124
75-69-4	Trichlorofluoromethane	50	50.9	102	64-142
95-63-6	1,2,4-Trimethylbenzene	50	48.7	97	75-123
108-67-8	1,3,5-Trimethylbenzene	50	48.7	97	73-125
75-01-4	Vinyl chloride	50	56.8	114	55-139
	m,p-Xylene	100	97.5	98	79-119
95-47-6	o-Xylene	50	49.4	99	77-122
1330-20-7	Xylene (total)	150	147	98	79-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	72-129%
17060-07-0	1,2-Dichloroethane-D4	96%	73-132%
2037-26-5	Toluene-D8	94%	80-120%
460-00-4	4-Bromofluorobenzene	100%	77-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE10685-BS	E248813.D	1	11/09/17	TDN	n/a	n/a	VE10685

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
127-18-4	Tetrachloroethene	2500	2080	83	70-132
79-01-6	Trichloroethene	2500	2250	90	79-124

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	72-129%
17060-07-0	1,2-Dichloroethane-D4	87%	73-132%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	100%	77-125%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54428-2MS	I216623.D	1	11/04/17	PS	n/a	n/a	VI8698
JC54428-2	I216599.D	1	11/03/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	JC54428-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	58.2		182	170	61	10-170
71-43-2	Benzene	ND		45.6	42.8	94	51-129
74-97-5	Bromochloromethane	ND		45.6	41.2	90	57-128
75-27-4	Bromodichloromethane	ND		45.6	48.1	106	48-134
75-25-2	Bromoform	ND		45.6	42.5	93	45-135
74-83-9	Bromomethane	ND		45.6	41.4	91	26-142
78-93-3	2-Butanone (MEK)	8.5	J	182	155	80	30-151
104-51-8	n-Butylbenzene	ND		45.6	41.9	92	14-154
135-98-8	sec-Butylbenzene	ND		45.6	42.7	94	25-151
98-06-6	tert-Butylbenzene	ND		45.6	44.1	97	32-150
75-15-0	Carbon disulfide	1.1	J	45.6	38.3	82	39-144
56-23-5	Carbon tetrachloride	ND		45.6	46.5	102	47-146
108-90-7	Chlorobenzene	ND		45.6	40.8	89	48-133
75-00-3	Chloroethane	ND		45.6	46.0	101	22-143
67-66-3	Chloroform	ND		45.6	42.9	94	56-133
74-87-3	Chloromethane	ND		45.6	42.4	93	41-137
110-82-7	Cyclohexane	ND		45.6	42.2	93	30-150
96-12-8	1,2-Dibromo-3-chloropropane	ND		45.6	42.0	92	40-131
124-48-1	Dibromochloromethane	ND		45.6	45.4	100	52-130
106-93-4	1,2-Dibromoethane	ND		45.6	44.2	97	50-124
95-50-1	1,2-Dichlorobenzene	ND		45.6	41.6	91	36-134
541-73-1	1,3-Dichlorobenzene	ND		45.6	40.6	89	35-133
106-46-7	1,4-Dichlorobenzene	ND		45.6	40.4	89	35-133
75-71-8	Dichlorodifluoromethane	ND		45.6	50.0	110	31-144
75-34-3	1,1-Dichloroethane	ND		45.6	44.4	97	54-133
107-06-2	1,2-Dichloroethane	ND		45.6	48.5	106	53-130
75-35-4	1,1-Dichloroethene	ND		45.6	46.9	103	48-141
156-59-2	cis-1,2-Dichloroethene	ND		45.6	39.8	87	47-127
156-60-5	trans-1,2-Dichloroethene	ND		45.6	45.6	100	47-134
78-87-5	1,2-Dichloropropane	ND		45.6	45.1	99	55-126
10061-01-5	cis-1,3-Dichloropropene	ND		45.6	47.7	105	49-128
10061-02-6	trans-1,3-Dichloropropene	ND		45.6	45.5	100	45-128
123-91-1	1,4-Dioxane	ND		1140	1320	116	56-138
100-41-4	Ethylbenzene	ND		45.6	42.5	93	40-136
76-13-1	Freon 113	ND		45.6	39.1	86	43-162
591-78-6	2-Hexanone	ND		182	181	99	21-156

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54428-2MS	I216623.D	1	11/04/17	PS	n/a	n/a	VI8698
JC54428-2	I216599.D	1	11/03/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	JC54428-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
98-82-8	Isopropylbenzene	ND		45.6	44.0	97	37-145
79-20-9	Methyl Acetate	ND		45.6	39.1	86	24-167
108-87-2	Methylcyclohexane	ND		45.6	40.3	88	15-155
1634-04-4	Methyl Tert Butyl Ether	ND		45.6	45.6	100	55-119
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		182	176	97	38-141
75-09-2	Methylene chloride	ND		45.6	41.4	91	51-125
103-65-1	n-Propylbenzene	ND		45.6	43.7	96	29-150
100-42-5	Styrene	ND		45.6	46.9	103	41-137
79-34-5	1,1,2,2-Tetrachloroethane	ND		45.6	43.1	95	35-136
127-18-4	Tetrachloroethene	ND		45.6	38.2	84	27-171
108-88-3	Toluene	ND		45.6	41.6	91	46-131
87-61-6	1,2,3-Trichlorobenzene	ND		45.6	43.6	96	12-148
120-82-1	1,2,4-Trichlorobenzene	ND		45.6	44.3	97	16-151
71-55-6	1,1,1-Trichloroethane	ND		45.6	46.2	101	54-144
79-00-5	1,1,2-Trichloroethane	ND		45.6	44.3	97	52-124
79-01-6	Trichloroethene	ND		45.6	43.9	96	45-145
75-69-4	Trichlorofluoromethane	ND		45.6	47.3	104	44-139
95-63-6	1,2,4-Trimethylbenzene	ND		45.6	43.8	96	31-146
108-67-8	1,3,5-Trimethylbenzene	ND		45.6	44.4	97	33-144
75-01-4	Vinyl chloride	ND		45.6	45.6	100	38-139
	m,p-Xylene	ND		91.2	85.7	94	39-138
95-47-6	o-Xylene	ND		45.6	44.9	98	42-139
1330-20-7	Xylene (total)	ND		137	131	96	40-139

CAS No.	Surrogate Recoveries	MS	JC54428-2	Limits
1868-53-7	Dibromofluoromethane	99%	108%	72-129%
17060-07-0	1,2-Dichloroethane-D4	111%	121%	73-132%
2037-26-5	Toluene-D8	98%	96%	80-120%
460-00-4	4-Bromofluorobenzene	101%	110%	77-125%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54422-1MS	I216652.D	1	11/06/17	PS	n/a	n/a	VI8700
JC54422-1	I216647.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	JC54422-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	13.9		211	261	117	10-170
71-43-2	Benzene	ND		52.7	59.3	113	51-129
74-97-5	Bromochloromethane	ND		52.7	60.1	114	57-128
75-27-4	Bromodichloromethane	ND		52.7	62.7	119	48-134
75-25-2	Bromoform	ND		52.7	62.2	118	45-135
74-83-9	Bromomethane	ND		52.7	53.6	102	26-142
78-93-3	2-Butanone (MEK)	ND		211	266	126	30-151
104-51-8	n-Butylbenzene	ND		52.7	68.4	130	14-154
135-98-8	sec-Butylbenzene	ND		52.7	66.3	126	25-151
98-06-6	tert-Butylbenzene	ND		52.7	65.2	124	32-150
75-15-0	Carbon disulfide	ND		52.7	57.0	108	39-144
56-23-5	Carbon tetrachloride	ND		52.7	66.9	127	47-146
108-90-7	Chlorobenzene	ND		52.7	58.1	110	48-133
75-00-3	Chloroethane	ND		52.7	68.4	130	22-143
67-66-3	Chloroform	ND		52.7	58.7	111	56-133
74-87-3	Chloromethane	ND		52.7	59.3	113	41-137
110-82-7	Cyclohexane	ND		52.7	51.6	98	30-150
96-12-8	1,2-Dibromo-3-chloropropane	ND		52.7	56.3	107	40-131
124-48-1	Dibromochloromethane	ND		52.7	62.4	119	52-130
106-93-4	1,2-Dibromoethane	ND		52.7	62.4	119	50-124
95-50-1	1,2-Dichlorobenzene	ND		52.7	59.4	113	36-134
541-73-1	1,3-Dichlorobenzene	ND		52.7	58.1	110	35-133
106-46-7	1,4-Dichlorobenzene	ND		52.7	57.1	108	35-133
75-71-8	Dichlorodifluoromethane	ND		52.7	70.4	134	31-144
75-34-3	1,1-Dichloroethane	ND		52.7	62.5	119	54-133
107-06-2	1,2-Dichloroethane	ND		52.7	62.8	119	53-130
75-35-4	1,1-Dichloroethene	ND		52.7	67.8	129	48-141
156-59-2	cis-1,2-Dichloroethene	0.46	J	52.7	58.2	110	47-127
156-60-5	trans-1,2-Dichloroethene	ND		52.7	64.4	122	47-134
78-87-5	1,2-Dichloropropane	ND		52.7	62.6	119	55-126
10061-01-5	cis-1,3-Dichloropropene	ND		52.7	63.3	120	49-128
10061-02-6	trans-1,3-Dichloropropene	ND		52.7	60.9	116	45-128
123-91-1	1,4-Dioxane	ND		1320	1310	100	56-138
100-41-4	Ethylbenzene	ND		52.7	59.4	113	40-136
76-13-1	Freon 113	ND		52.7	61.1	116	43-162
591-78-6	2-Hexanone	ND		211	260	123	21-156

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54422-1MS	I216652.D	1	11/06/17	PS	n/a	n/a	VI8700
JC54422-1	I216647.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	JC54422-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
98-82-8	Isopropylbenzene	ND		52.7	64.1	122	37-145
79-20-9	Methyl Acetate	ND		52.7	61.8	117	24-167
108-87-2	Methylcyclohexane	ND		52.7	66.0	125	15-155
1634-04-4	Methyl Tert Butyl Ether	ND		52.7	64.2	122* [a]	55-119
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		211	268	127	38-141
75-09-2	Methylene chloride	ND		52.7	63.3	120	51-125
103-65-1	n-Propylbenzene	ND		52.7	62.6	119	29-150
100-42-5	Styrene	ND		52.7	64.6	123	41-137
79-34-5	1,1,2,2-Tetrachloroethane	ND		52.7	61.3	116	35-136
127-18-4	Tetrachloroethene	ND		52.7	57.5	109	27-171
108-88-3	Toluene	ND		52.7	58.2	111	46-131
87-61-6	1,2,3-Trichlorobenzene	ND		52.7	67.9	129	12-148
120-82-1	1,2,4-Trichlorobenzene	ND		52.7	69.2	131	16-151
71-55-6	1,1,1-Trichloroethane	ND		52.7	65.0	123	54-144
79-00-5	1,1,2-Trichloroethane	ND		52.7	61.0	116	52-124
79-01-6	Trichloroethene	1.6		52.7	62.8	116	45-145
75-69-4	Trichlorofluoromethane	ND		52.7	68.8	131	44-139
95-63-6	1,2,4-Trimethylbenzene	ND		52.7	62.3	118	31-146
108-67-8	1,3,5-Trimethylbenzene	ND		52.7	64.0	122	33-144
75-01-4	Vinyl chloride	ND		52.7	64.3	122	38-139
	m,p-Xylene	ND		105	122	116	39-138
95-47-6	o-Xylene	ND		52.7	63.5	121	42-139
1330-20-7	Xylene (total)	ND		158	186	118	40-139

CAS No.	Surrogate Recoveries	MS	JC54422-1	Limits
1868-53-7	Dibromofluoromethane	102%	103%	72-129%
17060-07-0	1,2-Dichloroethane-D4	105%	109%	73-132%
2037-26-5	Toluene-D8	97%	98%	80-120%
460-00-4	4-Bromofluorobenzene	97%	106%	77-125%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54680-2MS	3C140210.D	1	11/06/17	PS	n/a	n/a	V3C6357
JC54680-2 [a]	3C140202.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	JC54680-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	ND		205	279	136	10-170
71-43-2	Benzene	ND		51.4	51.4	100	51-129
74-97-5	Bromochloromethane	ND		51.4	58.9	115	57-128
75-27-4	Bromodichloromethane	ND		51.4	59.5	116	48-134
75-25-2	Bromoform	ND		51.4	58.3	114	45-135
74-83-9	Bromomethane	ND		51.4	47.6	93	26-142
78-93-3	2-Butanone (MEK)	ND		205	240	117	30-151
104-51-8	n-Butylbenzene	ND		51.4	43.8	85	14-154
135-98-8	sec-Butylbenzene	ND		51.4	48.4	94	25-151
98-06-6	tert-Butylbenzene	ND		51.4	50.1	98	32-150
75-15-0	Carbon disulfide	ND		51.4	46.0	90	39-144
56-23-5	Carbon tetrachloride	ND		51.4	61.4	120	47-146
108-90-7	Chlorobenzene	ND		51.4	48.2	94	48-133
75-00-3	Chloroethane	ND		51.4	58.9	115	22-143
67-66-3	Chloroform	ND		51.4	57.4	112	56-133
74-87-3	Chloromethane	ND		51.4	52.1	101	41-137
110-82-7	Cyclohexane	ND		51.4	44.8	87	30-150
96-12-8	1,2-Dibromo-3-chloropropane	ND		51.4	52.6	102	40-131
124-48-1	Dibromochloromethane	ND		51.4	57.5	112	52-130
106-93-4	1,2-Dibromoethane	ND		51.4	50.7	99	50-124
95-50-1	1,2-Dichlorobenzene	ND		51.4	46.8	91	36-134
541-73-1	1,3-Dichlorobenzene	ND		51.4	44.7	87	35-133
106-46-7	1,4-Dichlorobenzene	ND		51.4	44.2	86	35-133
75-71-8	Dichlorodifluoromethane	ND		51.4	53.1	103	31-144
75-34-3	1,1-Dichloroethane	ND		51.4	60.5	118	54-133
107-06-2	1,2-Dichloroethane	ND		51.4	56.0	109	53-130
75-35-4	1,1-Dichloroethene	ND		51.4	57.0	111	48-141
156-59-2	cis-1,2-Dichloroethene	ND		51.4	57.2	111	47-127
156-60-5	trans-1,2-Dichloroethene	ND		51.4	56.2	109	47-134
78-87-5	1,2-Dichloropropane	ND		51.4	57.2	111	55-126
10061-01-5	cis-1,3-Dichloropropene	ND		51.4	56.8	111	49-128
10061-02-6	trans-1,3-Dichloropropene	ND		51.4	53.2	104	45-128
123-91-1	1,4-Dioxane	ND		1280	1710	133	56-138
100-41-4	Ethylbenzene	ND		51.4	48.0	93	40-136
76-13-1	Freon 113	ND		51.4	54.9	107	43-162
591-78-6	2-Hexanone	ND		205	229	111	21-156

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54680-2MS	3C140210.D	1	11/06/17	PS	n/a	n/a	V3C6357
JC54680-2 [a]	3C140202.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	JC54680-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
98-82-8	Isopropylbenzene	ND		51.4	48.9	95	37-145
79-20-9	Methyl Acetate	ND		51.4	100	195* [b]	24-167
108-87-2	Methylcyclohexane	ND		51.4	49.4	96	15-155
1634-04-4	Methyl Tert Butyl Ether	ND		51.4	57.2	111	55-119
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		205	226	110	38-141
75-09-2	Methylene chloride	ND		51.4	58.3	114	51-125
103-65-1	n-Propylbenzene	ND		51.4	48.7	95	29-150
100-42-5	Styrene	0.69	J	51.4	49.9	96	41-137
79-34-5	1,1,2,2-Tetrachloroethane	ND		51.4	54.2	106	35-136
127-18-4	Tetrachloroethene	ND		51.4	49.5	96	27-171
108-88-3	Toluene	ND		51.4	48.7	95	46-131
87-61-6	1,2,3-Trichlorobenzene	ND		51.4	40.5	79	12-148
120-82-1	1,2,4-Trichlorobenzene	ND		51.4	40.2	78	16-151
71-55-6	1,1,1-Trichloroethane	ND		51.4	58.8	114	54-144
79-00-5	1,1,2-Trichloroethane	ND		51.4	53.0	103	52-124
79-01-6	Trichloroethene	ND		51.4	52.1	101	45-145
75-69-4	Trichlorofluoromethane	ND		51.4	53.3	104	44-139
95-63-6	1,2,4-Trimethylbenzene	ND		51.4	47.9	93	31-146
108-67-8	1,3,5-Trimethylbenzene	ND		51.4	49.6	97	33-144
75-01-4	Vinyl chloride	ND		51.4	53.3	104	38-139
	m,p-Xylene	ND		103	96.2	94	39-138
95-47-6	o-Xylene	ND		51.4	48.0	93	42-139
1330-20-7	Xylene (total)	ND		154	144	93	40-139

CAS No.	Surrogate Recoveries	MS	JC54680-2	Limits
1868-53-7	Dibromofluoromethane	111%	112%	72-129%
17060-07-0	1,2-Dichloroethane-D4	105%	105%	73-132%
2037-26-5	Toluene-D8	98%	97%	80-120%
460-00-4	4-Bromofluorobenzene	105%	104%	77-125%

(a) Sample was not collected per 5035A specifications. Sample preserved from intact soil by laboratory.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54136-1MS	I216675.D	1	11/07/17	PS	n/a	n/a	VI8701
JC54136-1	I216672.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	JC54136-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	6.2	J	197	264	131	10-170
71-43-2	Benzene	ND		49.3	51.2	104	51-129
74-97-5	Bromochloromethane	ND		49.3	51.3	104	57-128
75-27-4	Bromodichloromethane	ND		49.3	56.3	114	48-134
75-25-2	Bromoform	ND		49.3	57.8	117	45-135
74-83-9	Bromomethane	ND		49.3	52.9	107	26-142
78-93-3	2-Butanone (MEK)	ND		197	238	121	30-151
104-51-8	n-Butylbenzene	ND		49.3	61.7	125	14-154
135-98-8	sec-Butylbenzene	ND		49.3	58.6	119	25-151
98-06-6	tert-Butylbenzene	ND		49.3	58.1	118	32-150
75-15-0	Carbon disulfide	ND		49.3	47.8	97	39-144
56-23-5	Carbon tetrachloride	ND		49.3	57.8	117	47-146
108-90-7	Chlorobenzene	ND		49.3	50.9	103	48-133
75-00-3	Chloroethane	ND		49.3	58.2	118	22-143
67-66-3	Chloroform	ND		49.3	50.8	103	56-133
74-87-3	Chloromethane	ND		49.3	51.7	105	41-137
110-82-7	Cyclohexane	ND		49.3	48.3	98	30-150
96-12-8	1,2-Dibromo-3-chloropropane	ND		49.3	49.5	101	40-131
124-48-1	Dibromochloromethane	ND		49.3	56.6	115	52-130
106-93-4	1,2-Dibromoethane	ND		49.3	57.0	116	50-124
95-50-1	1,2-Dichlorobenzene	ND		49.3	53.2	108	36-134
541-73-1	1,3-Dichlorobenzene	ND		49.3	52.6	107	35-133
106-46-7	1,4-Dichlorobenzene	ND		49.3	51.2	104	35-133
75-71-8	Dichlorodifluoromethane	ND		49.3	63.1	128	31-144
75-34-3	1,1-Dichloroethane	ND		49.3	52.3	106	54-133
107-06-2	1,2-Dichloroethane	ND		49.3	56.6	115	53-130
75-35-4	1,1-Dichloroethene	ND		49.3	56.6	115	48-141
156-59-2	cis-1,2-Dichloroethene	ND		49.3	48.9	99	47-127
156-60-5	trans-1,2-Dichloroethene	ND		49.3	54.8	111	47-134
78-87-5	1,2-Dichloropropane	ND		49.3	53.4	108	55-126
10061-01-5	cis-1,3-Dichloropropene	ND		49.3	56.4	115	49-128
10061-02-6	trans-1,3-Dichloropropene	ND		49.3	54.7	111	45-128
123-91-1	1,4-Dioxane	ND		1230	1390	113	56-138
100-41-4	Ethylbenzene	ND		49.3	52.2	106	40-136
76-13-1	Freon 113	ND		49.3	51.5	105	43-162
591-78-6	2-Hexanone	ND		197	261	132	21-156

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54136-1MS	I216675.D	1	11/07/17	PS	n/a	n/a	VI8701
JC54136-1	I216672.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	JC54136-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
98-82-8	Isopropylbenzene	ND		49.3	57.0	116	37-145
79-20-9	Methyl Acetate	ND		49.3	54.6	111	24-167
108-87-2	Methylcyclohexane	ND		49.3	57.0	116	15-155
1634-04-4	Methyl Tert Butyl Ether	ND		49.3	56.0	114	55-119
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		197	249	126	38-141
75-09-2	Methylene chloride	ND		49.3	50.6	103	51-125
103-65-1	n-Propylbenzene	ND		49.3	54.7	111	29-150
100-42-5	Styrene	ND		49.3	57.7	117	41-137
79-34-5	1,1,2,2-Tetrachloroethane	ND		49.3	54.8	111	35-136
127-18-4	Tetrachloroethene	ND		49.3	50.5	103	27-171
108-88-3	Toluene	ND		49.3	50.6	103	46-131
87-61-6	1,2,3-Trichlorobenzene	ND		49.3	62.8	128	12-148
120-82-1	1,2,4-Trichlorobenzene	ND		49.3	63.8	130	16-151
71-55-6	1,1,1-Trichloroethane	ND		49.3	56.0	114	54-144
79-00-5	1,1,2-Trichloroethane	ND		49.3	54.1	110	52-124
79-01-6	Trichloroethene	ND		49.3	53.5	109	45-145
75-69-4	Trichlorofluoromethane	ND		49.3	60.7	123	44-139
95-63-6	1,2,4-Trimethylbenzene	ND		49.3	55.0	112	31-146
108-67-8	1,3,5-Trimethylbenzene	ND		49.3	56.0	114	33-144
75-01-4	Vinyl chloride	ND		49.3	56.4	115	38-139
	m,p-Xylene	ND		98.5	108	110	39-138
95-47-6	o-Xylene	ND		49.3	55.9	113	42-139
1330-20-7	Xylene (total)	ND		148	164	111	40-139

CAS No.	Surrogate Recoveries	MS	JC54136-1	Limits
1868-53-7	Dibromofluoromethane	101%	103%	72-129%
17060-07-0	1,2-Dichloroethane-D4	109%	103%	73-132%
2037-26-5	Toluene-D8	96%	98%	80-120%
460-00-4	4-Bromofluorobenzene	95%	108%	77-125%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54047-72MS	1C153137.D	1	11/07/17	PS	n/a	n/a	V1C6761
JC54047-72	1C153132.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	JC54047-72 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	ND		215	216	101	10-170
71-43-2	Benzene	ND		53.7	56.8	106	51-129
74-97-5	Bromochloromethane	ND		53.7	64.0	119	57-128
75-27-4	Bromodichloromethane	ND		53.7	60.6	113	48-134
75-25-2	Bromoform	ND		53.7	65.7	122	45-135
74-83-9	Bromomethane	ND		53.7	58.5	109	26-142
78-93-3	2-Butanone (MEK)	ND		215	226	105	30-151
104-51-8	n-Butylbenzene	ND		53.7	58.3	109	14-154
135-98-8	sec-Butylbenzene	ND		53.7	64.0	119	25-151
98-06-6	tert-Butylbenzene	ND		53.7	66.8	124	32-150
75-15-0	Carbon disulfide	ND		53.7	59.3	110	39-144
56-23-5	Carbon tetrachloride	ND		53.7	57.9	108	47-146
108-90-7	Chlorobenzene	ND		53.7	59.3	110	48-133
75-00-3	Chloroethane	ND		53.7	62.0	115	22-143
67-66-3	Chloroform	ND		53.7	57.9	108	56-133
74-87-3	Chloromethane	ND		53.7	60.0	112	41-137
110-82-7	Cyclohexane	ND		53.7	54.4	101	30-150
96-12-8	1,2-Dibromo-3-chloropropane	ND		53.7	64.1	119	40-131
124-48-1	Dibromochloromethane	ND		53.7	66.5	124	52-130
106-93-4	1,2-Dibromoethane	ND		53.7	65.4	122	50-124
95-50-1	1,2-Dichlorobenzene	ND		53.7	61.9	115	36-134
541-73-1	1,3-Dichlorobenzene	ND		53.7	63.4	118	35-133
106-46-7	1,4-Dichlorobenzene	ND		53.7	62.0	115	35-133
75-71-8	Dichlorodifluoromethane	ND		53.7	54.8	102	31-144
75-34-3	1,1-Dichloroethane	ND		53.7	61.1	114	54-133
107-06-2	1,2-Dichloroethane	ND		53.7	61.8	115	53-130
75-35-4	1,1-Dichloroethene	ND		53.7	61.9	115	48-141
156-59-2	cis-1,2-Dichloroethene	ND		53.7	58.7	109	47-127
156-60-5	trans-1,2-Dichloroethene	ND		53.7	60.4	112	47-134
78-87-5	1,2-Dichloropropane	ND		53.7	60.9	113	55-126
10061-01-5	cis-1,3-Dichloropropene	ND		53.7	59.5	111	49-128
10061-02-6	trans-1,3-Dichloropropene	ND		53.7	59.8	111	45-128
123-91-1	1,4-Dioxane	ND		1340	1750	130	56-138
100-41-4	Ethylbenzene	ND		53.7	58.0	108	40-136
76-13-1	Freon 113	ND		53.7	63.4	118	43-162
591-78-6	2-Hexanone	ND		215	190	88	21-156

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54047-72MS	1C153137.D	1	11/07/17	PS	n/a	n/a	V1C6761
JC54047-72	1C153132.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	JC54047-72 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
98-82-8	Isopropylbenzene	ND		53.7	68.3	127	37-145
79-20-9	Methyl Acetate	ND		53.7	154	287* [a]	24-167
108-87-2	Methylcyclohexane	ND		53.7	52.2	97	15-155
1634-04-4	Methyl Tert Butyl Ether	ND		53.7	65.8	123* [a]	55-119
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		215	221	103	38-141
75-09-2	Methylene chloride	ND		53.7	59.7	111	51-125
103-65-1	n-Propylbenzene	ND		53.7	66.0	123	29-150
100-42-5	Styrene	ND		53.7	55.6	104	41-137
79-34-5	1,1,2,2-Tetrachloroethane	ND		53.7	69.6	130	35-136
127-18-4	Tetrachloroethene	ND		53.7	61.2	114	27-171
108-88-3	Toluene	ND		53.7	51.9	97	46-131
87-61-6	1,2,3-Trichlorobenzene	ND		53.7	44.2	82	12-148
120-82-1	1,2,4-Trichlorobenzene	ND		53.7	50.1	93	16-151
71-55-6	1,1,1-Trichloroethane	ND		53.7	60.1	112	54-144
79-00-5	1,1,2-Trichloroethane	ND		53.7	60.0	112	52-124
79-01-6	Trichloroethene	ND		53.7	58.0	108	45-145
75-69-4	Trichlorofluoromethane	ND		53.7	57.8	108	44-139
95-63-6	1,2,4-Trimethylbenzene	ND		53.7	61.6	115	31-146
108-67-8	1,3,5-Trimethylbenzene	ND		53.7	63.5	118	33-144
75-01-4	Vinyl chloride	ND		53.7	66.6	124	38-139
	m,p-Xylene	ND		107	115	107	39-138
95-47-6	o-Xylene	ND		53.7	57.7	107	42-139
1330-20-7	Xylene (total)	ND		161	172	107	40-139

CAS No.	Surrogate Recoveries	MS	JC54047-72	Limits
1868-53-7	Dibromofluoromethane	102%	104%	72-129%
17060-07-0	1,2-Dichloroethane-D4	103%	105%	73-132%
2037-26-5	Toluene-D8	94%	96%	80-120%
460-00-4	4-Bromofluorobenzene	110%	105%	77-125%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54507-3MS	1C153168.D	1	11/08/17	PS	n/a	n/a	V1C6762
JC54507-3	1C153155.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	JC54507-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	126		245	393	109	10-170
71-43-2	Benzene	ND		61.2	56.7	93	51-129
74-97-5	Bromochloromethane	ND		61.2	62.7	102	57-128
75-27-4	Bromodichloromethane	ND		61.2	59.5	97	48-134
75-25-2	Bromoform	ND		61.2	66.0	108	45-135
74-83-9	Bromomethane	ND		61.2	65.8	108	26-142
78-93-3	2-Butanone (MEK)	ND		245	273	112	30-151
104-51-8	n-Butylbenzene	ND		61.2	53.7	88	14-154
135-98-8	sec-Butylbenzene	ND		61.2	57.5	94	25-151
98-06-6	tert-Butylbenzene	ND		61.2	59.5	97	32-150
75-15-0	Carbon disulfide	ND		61.2	59.0	96	39-144
56-23-5	Carbon tetrachloride	ND		61.2	59.5	97	47-146
108-90-7	Chlorobenzene	ND		61.2	59.0	96	48-133
75-00-3	Chloroethane	ND		61.2	64.2	105	22-143
67-66-3	Chloroform	ND		61.2	56.2	92	56-133
74-87-3	Chloromethane	ND		61.2	60.7	99	41-137
110-82-7	Cyclohexane	ND		61.2	61.9	101	30-150
96-12-8	1,2-Dibromo-3-chloropropane	ND		61.2	56.8	93	40-131
124-48-1	Dibromochloromethane	ND		61.2	64.8	106	52-130
106-93-4	1,2-Dibromoethane	ND		61.2	63.1	103	50-124
95-50-1	1,2-Dichlorobenzene	ND		61.2	58.8	96	36-134
541-73-1	1,3-Dichlorobenzene	ND		61.2	59.0	96	35-133
106-46-7	1,4-Dichlorobenzene	ND		61.2	58.5	96	35-133
75-71-8	Dichlorodifluoromethane	ND		61.2	56.1	92	31-144
75-34-3	1,1-Dichloroethane	ND		61.2	59.6	97	54-133
107-06-2	1,2-Dichloroethane	ND		61.2	59.3	97	53-130
75-35-4	1,1-Dichloroethene	ND		61.2	60.3	99	48-141
156-59-2	cis-1,2-Dichloroethene	ND		61.2	57.3	94	47-127
156-60-5	trans-1,2-Dichloroethene	ND		61.2	58.8	96	47-134
78-87-5	1,2-Dichloropropane	ND		61.2	60.3	99	55-126
10061-01-5	cis-1,3-Dichloropropene	ND		61.2	61.2	100	49-128
10061-02-6	trans-1,3-Dichloropropene	ND		61.2	60.6	99	45-128
123-91-1	1,4-Dioxane	ND		1530	1540	101	56-138
100-41-4	Ethylbenzene	ND		61.2	57.3	94	40-136
76-13-1	Freon 113	ND		61.2	64.2	105	43-162
591-78-6	2-Hexanone	ND		245	239	98	21-156

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54507-3MS	1C153168.D	1	11/08/17	PS	n/a	n/a	V1C6762
JC54507-3	1C153155.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	JC54507-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
98-82-8	Isopropylbenzene	ND		61.2	57.7	94	37-145
79-20-9	Methyl Acetate	ND		61.2	56.9	93	24-167
108-87-2	Methylcyclohexane	ND		61.2	55.4	91	15-155
1634-04-4	Methyl Tert Butyl Ether	ND		61.2	61.3	100	55-119
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		245	214	87	38-141
75-09-2	Methylene chloride	ND		61.2	56.3	92	51-125
103-65-1	n-Propylbenzene	ND		61.2	56.7	93	29-150
100-42-5	Styrene	ND		61.2	57.2	93	41-137
79-34-5	1,1,2,2-Tetrachloroethane	ND		61.2	57.8	94	35-136
127-18-4	Tetrachloroethene	2.5		61.2	63.6	100	27-171
108-88-3	Toluene	ND		61.2	52.9	86	46-131
87-61-6	1,2,3-Trichlorobenzene	ND		61.2	59.5	97	12-148
120-82-1	1,2,4-Trichlorobenzene	ND		61.2	60.3	99	16-151
71-55-6	1,1,1-Trichloroethane	ND		61.2	59.0	96	54-144
79-00-5	1,1,2-Trichloroethane	ND		61.2	57.7	94	52-124
79-01-6	Trichloroethene	ND		61.2	59.4	97	45-145
75-69-4	Trichlorofluoromethane	ND		61.2	60.0	98	44-139
95-63-6	1,2,4-Trimethylbenzene	ND		61.2	54.2	89	31-146
108-67-8	1,3,5-Trimethylbenzene	ND		61.2	55.6	91	33-144
75-01-4	Vinyl chloride	ND		61.2	67.2	110	38-139
	m,p-Xylene	ND		122	114	93	39-138
95-47-6	o-Xylene	ND		61.2	57.5	94	42-139
1330-20-7	Xylene (total)	ND		184	172	94	40-139

CAS No.	Surrogate Recoveries	MS	JC54507-3	Limits
1868-53-7	Dibromofluoromethane	98%	99%	72-129%
17060-07-0	1,2-Dichloroethane-D4	97%	95%	73-132%
2037-26-5	Toluene-D8	94%	96%	80-120%
460-00-4	4-Bromofluorobenzene	99%	102%	77-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54405-5MS	E248825.D	1	11/09/17	TDN	n/a	n/a	VE10685
JC54405-5MSD	E248826.D	1	11/09/17	TDN	n/a	n/a	VE10685
JC54405-5 [a]	E248815.D	1	11/09/17	TDN	n/a	n/a	VE10685

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-2

CAS No.	Compound	JC54405-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethene	ND		5320	3880	73	5320	3900	73	1	27-171/19
79-01-6	Trichloroethene	ND		5320	4210	79	5320	4210	79	0	45-145/16

CAS No.	Surrogate Recoveries	MS	MSD	JC54405-5	Limits
1868-53-7	Dibromofluoromethane	98%	98%	95%	72-129%
17060-07-0	1,2-Dichloroethane-D4	92%	93%	89%	73-132%
2037-26-5	Toluene-D8	95%	96%	93%	80-120%
460-00-4	4-Bromofluorobenzene	99%	98%	97%	77-125%

(a) Diluted due to high concentration of target compound.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54428-3DUP	I216622.D	1	11/04/17	PS	n/a	n/a	VI8698
JC54428-3	I216600.D	1	11/04/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	JC54428-3 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	ND		9.6	J	200* [a]	30
71-43-2	Benzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
75-15-0	Carbon disulfide	0.78	J	ND		200* [a]	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
110-82-7	Cyclohexane	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
76-13-1	Freon 113	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54428-3DUP	I216622.D	1	11/04/17	PS	n/a	n/a	VI8698
JC54428-3	I216600.D	1	11/04/17	PS	n/a	n/a	VI8698

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54555-1, JC54555-3

CAS No.	Compound	JC54428-3 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
98-82-8	Isopropylbenzene	ND		ND		nc	11
79-20-9	Methyl Acetate	ND		ND		nc	30
108-87-2	Methylcyclohexane	ND		ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
75-09-2	Methylene chloride	6.9		ND		200* [a]	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
100-42-5	Styrene	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	30
108-88-3	Toluene	ND		ND		nc	30
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	30
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	ND		ND		nc	30
95-47-6	o-Xylene	ND		ND		nc	30
1330-20-7	Xylene (total)	ND		ND		nc	30

CAS No.	Surrogate Recoveries	DUP	JC54428-3	Limits
1868-53-7	Dibromofluoromethane	103%	106%	72-129%
17060-07-0	1,2-Dichloroethane-D4	116%	119%	73-132%
2037-26-5	Toluene-D8	99%	98%	80-120%
460-00-4	4-Bromofluorobenzene	108%	110%	77-125%

(a) High RPD due to possible sample nonhomogeneity.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54422-2DUP	I216653.D	1	11/06/17	PS	n/a	n/a	VI8700
JC54422-2	I216648.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	JC54422-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	65.5		163		85* [a]	30
71-43-2	Benzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
75-15-0	Carbon disulfide	ND		ND		nc	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
110-82-7	Cyclohexane	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	4.5		4.6		2	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
76-13-1	Freon 113	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54422-2DUP	I216653.D	1	11/06/17	PS	n/a	n/a	VI8700
JC54422-2	I216648.D	1	11/06/17	PS	n/a	n/a	VI8700

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-1, JC54422-2, JC54422-3

CAS No.	Compound	JC54422-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
98-82-8	Isopropylbenzene	ND		ND		nc	11
79-20-9	Methyl Acetate	ND		ND		nc	30
108-87-2	Methylcyclohexane	ND		ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
100-42-5	Styrene	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	8.2		11.2		31* [a]	30
108-88-3	Toluene	ND		ND		nc	30
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	23.9		24.1		1	30
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	ND		ND		nc	30
95-47-6	o-Xylene	ND		ND		nc	30
1330-20-7	Xylene (total)	ND		ND		nc	30

CAS No.	Surrogate Recoveries	DUP	JC54422-2	Limits
1868-53-7	Dibromofluoromethane	104%	106%	72-129%
17060-07-0	1,2-Dichloroethane-D4	103%	113%	73-132%
2037-26-5	Toluene-D8	100%	99%	80-120%
460-00-4	4-Bromofluorobenzene	113%	109%	77-125%

(a) High RPD due to possible sample nonhomogeneity.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54680-1DUP	3C140203.D	1	11/06/17	PS	n/a	n/a	V3C6357
JC54680-1 [a]	3C140201.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	JC54680-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	30
71-43-2	Benzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
75-15-0	Carbon disulfide	ND		ND		nc	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
110-82-7	Cyclohexane	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
76-13-1	Freon 113	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54680-1DUP	3C140203.D	1	11/06/17	PS	n/a	n/a	V3C6357
JC54680-1 [a]	3C140201.D	1	11/06/17	PS	n/a	n/a	V3C6357

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54277-1

CAS No.	Compound	JC54680-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
98-82-8	Isopropylbenzene	ND		ND		nc	11
79-20-9	Methyl Acetate	ND		ND		nc	30
108-87-2	Methylcyclohexane	ND		ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
100-42-5	Styrene	2.4		2.5		4	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	30
108-88-3	Toluene	ND		ND		nc	30
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	30
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	0.59	J	0.66	J	11	30
95-47-6	o-Xylene	ND		0.28	J	200* [b]	30
1330-20-7	Xylene (total)	0.59	J	0.94	J	46* [b]	30

CAS No.	Surrogate Recoveries	DUP	JC54680-1	Limits
1868-53-7	Dibromofluoromethane	113%	110%	72-129%
17060-07-0	1,2-Dichloroethane-D4	104%	103%	73-132%
2037-26-5	Toluene-D8	100%	99%	80-120%
460-00-4	4-Bromofluorobenzene	113%	112%	77-125%

(a) Sample was not collected per 5035A specifications. Sample preserved from intact soil by laboratory.
(b) High RPD due to low concentration of hit

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54136-2DUP	I216676.D	1	11/07/17	PS	n/a	n/a	VI8701
JC54136-2	I216673.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	JC54136-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	36.2		28.5		24	30
71-43-2	Benzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
75-15-0	Carbon disulfide	ND		ND		nc	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
110-82-7	Cyclohexane	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
76-13-1	Freon 113	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54136-2DUP	I216676.D	1	11/07/17	PS	n/a	n/a	VI8701
JC54136-2	I216673.D	1	11/07/17	PS	n/a	n/a	VI8701

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54422-4, JC54555-2

CAS No.	Compound	JC54136-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
98-82-8	Isopropylbenzene	ND		ND		nc	11
79-20-9	Methyl Acetate	ND		ND		nc	30
108-87-2	Methylcyclohexane	ND		ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
100-42-5	Styrene	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	30
108-88-3	Toluene	ND		ND		nc	30
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	30
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	ND		ND		nc	30
95-47-6	o-Xylene	ND		ND		nc	30
1330-20-7	Xylene (total)	ND		ND		nc	30

CAS No.	Surrogate Recoveries	DUP	JC54136-2	Limits
1868-53-7	Dibromofluoromethane	103%	105%	72-129%
17060-07-0	1,2-Dichloroethane-D4	109%	112%	73-132%
2037-26-5	Toluene-D8	98%	98%	80-120%
460-00-4	4-Bromofluorobenzene	106%	106%	77-125%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54047-74DUP	1C153138.D	1	11/07/17	PS	n/a	n/a	V1C6761
JC54047-74	1C153133.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	JC54047-74 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	30
71-43-2	Benzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
75-15-0	Carbon disulfide	ND		ND		nc	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
110-82-7	Cyclohexane	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
76-13-1	Freon 113	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54047-74DUP	1C153138.D	1	11/07/17	PS	n/a	n/a	V1C6761
JC54047-74	1C153133.D	1	11/07/17	PS	n/a	n/a	V1C6761

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54689-1

CAS No.	Compound	JC54047-74 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
98-82-8	Isopropylbenzene	ND		ND		nc	11
79-20-9	Methyl Acetate	ND		ND		nc	30
108-87-2	Methylcyclohexane	ND		ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
100-42-5	Styrene	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	30
108-88-3	Toluene	ND		ND		nc	30
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	0.78	J	ND		200* [a]	30
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	ND		ND		nc	30
95-47-6	o-Xylene	ND		ND		nc	30
1330-20-7	Xylene (total)	ND		ND		nc	30

CAS No.	Surrogate Recoveries	DUP	JC54047-74	Limits
1868-53-7	Dibromofluoromethane	105%	104%	72-129%
17060-07-0	1,2-Dichloroethane-D4	107%	107%	73-132%
2037-26-5	Toluene-D8	97%	97%	80-120%
460-00-4	4-Bromofluorobenzene	105%	104%	77-125%

(a) High RPD due to possible sample nonhomogeneity.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54507-2DUP	1C153167.D	1	11/08/17	PS	n/a	n/a	V1C6762
JC54507-2	1C153154.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	JC54507-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	53.4		183		110* [a]	30
71-43-2	Benzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
75-15-0	Carbon disulfide	ND		ND		nc	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
110-82-7	Cyclohexane	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
76-13-1	Freon 113	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54507-2DUP	1C153167.D	1	11/08/17	PS	n/a	n/a	V1C6762
JC54507-2	1C153154.D	1	11/08/17	PS	n/a	n/a	V1C6762

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC54803-1, JC54803-2, JC54803-3

CAS No.	Compound	JC54507-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
98-82-8	Isopropylbenzene	ND		ND		nc	11
79-20-9	Methyl Acetate	ND		ND		nc	30
108-87-2	Methylcyclohexane	ND		ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
100-42-5	Styrene	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	30
108-88-3	Toluene	ND		ND		nc	30
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	30
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	ND		ND		nc	30
95-47-6	o-Xylene	ND		ND		nc	30
1330-20-7	Xylene (total)	ND		ND		nc	30

CAS No.	Surrogate Recoveries	DUP	JC54507-2	Limits
1868-53-7	Dibromofluoromethane	99%	99%	72-129%
17060-07-0	1,2-Dichloroethane-D4	98%	94%	73-132%
2037-26-5	Toluene-D8	95%	96%	80-120%
460-00-4	4-Bromofluorobenzene	104%	101%	77-125%

(a) High RPD due to possible sample nonhomogeneity.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-BFB
Lab File ID: 1C151357.D
Instrument ID: GCMS1C
Injection Date: 08/22/17
Injection Time: 18:21

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	19877	18.3		Pass
75	30.0 - 60.0% of mass 95	49077	45.2		Pass
95	Base peak, 100% relative abundance	108546	100.0		Pass
96	5.0 - 9.0% of mass 95	7294	6.72		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	94312	86.9		Pass
175	5.0 - 9.0% of mass 174	7024	6.47	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	92592	85.3	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	6172	5.69	(6.67) [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
V1C6691-IC6691	1C151358.D	08/22/17	18:51	00:30	Initial cal 0.2
V1C6691-IC6691	1C151359.D	08/22/17	19:21	01:00	Initial cal 0.5
V1C6691-IC6691	1C151360.D	08/22/17	19:51	01:30	Initial cal 1
V1C6691-IC6691	1C151361.D	08/22/17	20:21	02:00	Initial cal 2
V1C6691-IC6691	1C151362.D	08/22/17	20:50	02:29	Initial cal 4
V1C6691-IC6691	1C151363.D	08/22/17	21:20	02:59	Initial cal 8
V1C6691-IC6691	1C151364.D	08/22/17	21:50	03:29	Initial cal 20
V1C6691-ICC6691	1C151365.D	08/22/17	22:20	03:59	Initial cal 50
V1C6691-IC6691	1C151366.D	08/22/17	22:49	04:28	Initial cal 100
V1C6691-IC6691	1C151367.D	08/22/17	23:19	04:58	Initial cal 200
V1C6691-ICV6691	1C151370.D	08/23/17	00:47	06:26	Initial cal verification 50
V1C6691-ICV6691	1C151371.D	08/23/17	01:17	06:56	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6761-BFB
Lab File ID: 1C153128A.D
Instrument ID: GCMS1C
Injection Date: 11/07/17
Injection Time: 12:02

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	19096	18.7		Pass
75	30.0 - 60.0% of mass 95	48000	47.0		Pass
95	Base peak, 100% relative abundance	102171	100.0		Pass
96	5.0 - 9.0% of mass 95	6929	6.78		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	90403	88.5		Pass
175	5.0 - 9.0% of mass 174	7386	7.23	(8.17) [a]	Pass
176	95.0 - 101.0% of mass 174	89413	87.5	(98.9) [a]	Pass
177	5.0 - 9.0% of mass 176	6048	5.92	(6.76) [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
V1C6761-CC6691	1C153128.D	11/07/17	12:02	00:00	Continuing cal 20
V1C6761-MB	1C153129.D	11/07/17	12:38	00:36	Method Blank
ZZZZZZ	1C153129A.D	11/07/17	12:38	00:36	(unrelated sample)
V1C6761-BS	1C153130.D	11/07/17	13:07	01:05	Blank Spike
ZZZZZZ	1C153131.D	11/07/17	14:00	01:58	(unrelated sample)
JC54047-72	1C153132.D	11/07/17	14:29	02:27	(used for QC only; not part of job JC54422)
JC54047-74	1C153133.D	11/07/17	14:58	02:56	(used for QC only; not part of job JC54422)
ZZZZZZ	1C153136.D	11/07/17	16:35	04:33	(unrelated sample)
JC54047-72MS	1C153137.D	11/07/17	17:04	05:02	Matrix Spike
JC54047-74DUP	1C153138.D	11/07/17	17:33	05:31	Duplicate
ZZZZZZ	1C153139.D	11/07/17	18:02	06:00	(unrelated sample)
ZZZZZZ	1C153140.D	11/07/17	18:31	06:29	(unrelated sample)
ZZZZZZ	1C153141.D	11/07/17	19:00	06:58	(unrelated sample)
ZZZZZZ	1C153141R.D	11/07/17	19:00	06:58	(unrelated sample)
ZZZZZZ	1C153142.D	11/07/17	19:29	07:27	(unrelated sample)
ZZZZZZ	1C153142R.D	11/07/17	19:29	07:27	(unrelated sample)
ZZZZZZ	1C153143.D	11/07/17	19:58	07:56	(unrelated sample)
ZZZZZZ	1C153143R.D	11/07/17	19:58	07:56	(unrelated sample)
ZZZZZZ	1C153144.D	11/07/17	20:27	08:25	(unrelated sample)
ZZZZZZ	1C153145.D	11/07/17	20:56	08:54	(unrelated sample)
JC54689-1	1C153146.D	11/07/17	21:26	09:24	TRC-S8(5')
ZZZZZZ	1C153148.D	11/07/17	22:24	10:22	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6762-BFB
Lab File ID: 1C153149A.D
Instrument ID: GCMS1C
Injection Date: 11/07/17
Injection Time: 22:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	17326	18.0		Pass
75	30.0 - 60.0% of mass 95	44819	46.6		Pass
95	Base peak, 100% relative abundance	96157	100.0		Pass
96	5.0 - 9.0% of mass 95	6232	6.48		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	90496	94.1		Pass
175	5.0 - 9.0% of mass 174	6900	7.18	(7.62) [a]	Pass
176	95.0 - 101.0% of mass 174	88157	91.7	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	5950	6.19	(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
V1C6762-CC6691	1C153149.D	11/07/17	22:53	00:00	Continuing cal 50
V1C6762-MB	1C153151.D	11/08/17	00:24	01:31	Method Blank
V1C6762-BS	1C153152.D	11/08/17	00:53	02:00	Blank Spike
ZZZZZZ	1C153153.D	11/08/17	01:22	02:29	(unrelated sample)
JC54507-2	1C153154.D	11/08/17	01:51	02:58	(used for QC only; not part of job JC54422)
JC54507-3	1C153155.D	11/08/17	02:20	03:27	(used for QC only; not part of job JC54422)
ZZZZZZ	1C153156.D	11/08/17	02:48	03:55	(unrelated sample)
ZZZZZZ	1C153157.D	11/08/17	03:17	04:24	(unrelated sample)
ZZZZZZ	1C153158.D	11/08/17	03:46	04:53	(unrelated sample)
ZZZZZZ	1C153159.D	11/08/17	04:15	05:22	(unrelated sample)
ZZZZZZ	1C153160.D	11/08/17	04:44	05:51	(unrelated sample)
ZZZZZZ	1C153161.D	11/08/17	05:13	06:20	(unrelated sample)
JC54803-1	1C153162.D	11/08/17	05:42	06:49	TRC-S9(13')
JC54803-3	1C153163.D	11/08/17	06:11	07:18	TRC-S11(5')
JC54803-2	1C153164.D	11/08/17	06:40	07:47	TRC-S10(5')
ZZZZZZ	1C153165.D	11/08/17	07:09	08:16	(unrelated sample)
ZZZZZZ	1C153166.D	11/08/17	07:38	08:45	(unrelated sample)
JC54507-2DUP	1C153167.D	11/08/17	08:40	09:47	Duplicate
JC54507-3MS	1C153168.D	11/08/17	09:09	10:16	Matrix Spike

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-BFB
Lab File ID: 3C139644.D
Instrument ID: GCMS3C
Injection Date: 10/19/17
Injection Time: 19:14

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15521	17.3		Pass
75	30.0 - 60.0% of mass 95	41677	46.4		Pass
95	Base peak, 100% relative abundance	89906	100.0		Pass
96	5.0 - 9.0% of mass 95	5768	6.42		Pass
173	Less than 2.0% of mass 174	486	0.54	(0.57) [a]	Pass
174	50.0 - 120.0% of mass 95	85570	95.2		Pass
175	5.0 - 9.0% of mass 174	6143	6.83	(7.18) [a]	Pass
176	95.0 - 101.0% of mass 174	83733	93.1	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	5724	6.37	(6.84) [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
V3C6336-IC6336	3C139645.D	10/19/17	19:52	00:38	Initial cal 0.2
V3C6336-IC6336	3C139646.D	10/19/17	20:19	01:05	Initial cal 0.5
V3C6336-IC6336	3C139647.D	10/19/17	20:46	01:32	Initial cal 1
V3C6336-IC6336	3C139648.D	10/19/17	21:14	02:00	Initial cal 2
V3C6336-IC6336	3C139649.D	10/19/17	21:41	02:27	Initial cal 4
V3C6336-IC6336	3C139650.D	10/19/17	22:08	02:54	Initial cal 8
V3C6336-IC6336	3C139651.D	10/19/17	22:35	03:21	Initial cal 20
V3C6336-ICC6336	3C139652.D	10/19/17	23:02	03:48	Initial cal 50
V3C6336-IC6336	3C139653.D	10/19/17	23:29	04:15	Initial cal 100
V3C6336-IC6336	3C139654.D	10/19/17	23:57	04:43	Initial cal 200
V3C6336-ICV6336	3C139657.D	10/20/17	01:18	06:04	Initial cal verification 50
V3C6336-ICV6336	3C139658.D	10/20/17	01:45	06:31	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6357-BFB
Lab File ID: 3C140182.D
Instrument ID: GCMS3C
Injection Date: 11/06/17
Injection Time: 08:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	21121	18.5		Pass
75	30.0 - 60.0% of mass 95	51996	45.5		Pass
95	Base peak, 100% relative abundance	114341	100.0		Pass
96	5.0 - 9.0% of mass 95	6910	6.04		Pass
173	Less than 2.0% of mass 174	210	0.18	(0.20) [a]	Pass
174	50.0 - 120.0% of mass 95	103405	90.4		Pass
175	5.0 - 9.0% of mass 174	7198	6.30	(6.96) [a]	Pass
176	95.0 - 101.0% of mass 174	101402	88.7	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	6551	5.73	(6.46) [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
V3C6357-CC6336	3C140182.D	11/06/17	08:03	00:00	Continuing cal 20
V3C6357-MB	3C140184.D	11/06/17	09:32	01:29	Method Blank
V3C6357-BS	3C140185.D	11/06/17	10:04	02:01	Blank Spike
JC54691-1	3C140187.D	11/06/17	11:25	03:22	(used for QC only; not part of job JC54422)
ZZZZZZ	3C140188.D	11/06/17	11:53	03:50	(unrelated sample)
JC54277-1	3C140191.D	11/06/17	13:14	05:11	TRC-S1(6')
ZZZZZZ	3C140192.D	11/06/17	13:42	05:39	(unrelated sample)
ZZZZZZ	3C140199.D	11/06/17	16:53	08:50	(unrelated sample)
ZZZZZZ	3C140200.D	11/06/17	17:20	09:17	(unrelated sample)
JC54680-1	3C140201.D	11/06/17	17:47	09:44	(used for QC only; not part of job JC54422)
JC54680-2	3C140202.D	11/06/17	18:14	10:11	(used for QC only; not part of job JC54422)
JC54680-1DUP	3C140203.D	11/06/17	20:01	11:58	Duplicate

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6357-BFB2
Lab File ID: 3C140206A.D
Instrument ID: GCMS3C
Injection Date: 11/06/17
Injection Time: 20:35

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20166	18.2		Pass
75	30.0 - 60.0% of mass 95	49310	44.6		Pass
95	Base peak, 100% relative abundance	110597	100.0		Pass
96	5.0 - 9.0% of mass 95	6913	6.25		Pass
173	Less than 2.0% of mass 174	424	0.38	(0.43) [a]	Pass
174	50.0 - 120.0% of mass 95	98813	89.3		Pass
175	5.0 - 9.0% of mass 174	7042	6.37	(7.13) [a]	Pass
176	95.0 - 101.0% of mass 174	99320	89.8	(100.5) [a]	Pass
177	5.0 - 9.0% of mass 176	6518	5.89	(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
V3C6357-CC6336	3C140206.D	11/06/17	20:35	00:00	Continuing cal 50
V3C6357-MB2	3C140208.D	11/06/17	21:42	01:07	Method Blank
V3C6357-BS2	3C140209.D	11/06/17	22:09	01:34	Blank Spike
JC54680-2MS	3C140210.D	11/06/17	22:36	02:01	Matrix Spike

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-BFB
Lab File ID: E247356.D
Instrument ID: GCMSE
Injection Date: 09/13/17
Injection Time: 18:22

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15721	18.5		Pass
75	30.0 - 60.0% of mass 95	39370	46.4		Pass
95	Base peak, 100% relative abundance	84930	100.0		Pass
96	5.0 - 9.0% of mass 95	5721	6.74		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	81549	96.0		Pass
175	5.0 - 9.0% of mass 174	6277	7.39	(7.70) [a]	Pass
176	95.0 - 101.0% of mass 174	78440	92.4	(96.2) [a]	Pass
177	5.0 - 9.0% of mass 176	5226	6.15	(6.66) [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
VE10636-IC10636	E247357.D	09/13/17	18:55	00:33	Initial cal 0.5
VE10636-IC10636	E247358.D	09/13/17	19:25	01:03	Initial cal 1
VE10636-IC10636	E247359.D	09/13/17	19:55	01:33	Initial cal 2
VE10636-IC10636	E247360.D	09/13/17	20:26	02:04	Initial cal 4
VE10636-IC10636	E247361.D	09/13/17	20:56	02:34	Initial cal 8
VE10636-IC10636	E247362.D	09/13/17	21:26	03:04	Initial cal 20
VE10636-ICC10636	E247363.D	09/13/17	21:57	03:35	Initial cal 50
VE10636-IC10636	E247364.D	09/13/17	22:28	04:06	Initial cal 100
VE10636-IC10636	E247365.D	09/13/17	22:58	04:36	Initial cal 200
VE10636-ICV10636	E247369.D	09/14/17	01:00	06:38	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10685-BFB
Lab File ID: E248810.D
Instrument ID: GCMSE
Injection Date: 11/09/17
Injection Time: 09:33

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12825	16.9		Pass
75	30.0 - 60.0% of mass 95	33610	44.3		Pass
95	Base peak, 100% relative abundance	75800	100.0		Pass
96	5.0 - 9.0% of mass 95	5190	6.85		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	68658	90.6		Pass
175	5.0 - 9.0% of mass 174	5191	6.85	(7.56) [a]	Pass
176	95.0 - 101.0% of mass 174	67488	89.0	(98.3) [a]	Pass
177	5.0 - 9.0% of mass 176	4559	6.01	(6.76) [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
VE10685-CC10636	E248810.D	11/09/17	09:33	00:00	Continuing cal 20
ZZZZZZ	E248812B.D	11/09/17	10:49	01:16	(unrelated sample)
VE10685-MB	E248812.D	11/09/17	10:49	01:16	Method Blank
VE10685-BS	E248813.D	11/09/17	11:20	01:47	Blank Spike
JC54405-5	E248815.D	11/09/17	12:20	02:47	(used for QC only; not part of job JC54422)
ZZZZZZ	E248816.D	11/09/17	12:50	03:17	(unrelated sample)
ZZZZZZ	E248817.D	11/09/17	13:20	03:47	(unrelated sample)
ZZZZZZ	E248818.D	11/09/17	13:50	04:17	(unrelated sample)
ZZZZZZ	E248819.D	11/09/17	14:20	04:47	(unrelated sample)
ZZZZZZ	E248820.D	11/09/17	14:51	05:18	(unrelated sample)
ZZZZZZ	E248821.D	11/09/17	15:21	05:48	(unrelated sample)
ZZZZZZ	E248822.D	11/09/17	15:51	06:18	(unrelated sample)
ZZZZZZ	E248823.D	11/09/17	16:22	06:49	(unrelated sample)
ZZZZZZ	E248824.D	11/09/17	16:51	07:18	(unrelated sample)
JC54405-5MS	E248825.D	11/09/17	17:21	07:48	Matrix Spike
JC54405-5MSD	E248826.D	11/09/17	17:52	08:19	Matrix Spike Duplicate
JC54803-2	E248828.D	11/09/17	18:52	09:19	TRC-S10(5')
ZZZZZZ	E248829.D	11/09/17	19:22	09:49	(unrelated sample)
ZZZZZZ	E248830.D	11/09/17	19:53	10:20	(unrelated sample)
ZZZZZZ	E248831.D	11/09/17	20:22	10:49	(unrelated sample)
ZZZZZZ	E248832.D	11/09/17	20:53	11:20	(unrelated sample)
ZZZZZZ	E248833.D	11/09/17	21:23	11:50	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-BFB
Lab File ID: I216441.D
Instrument ID: GCMSI
Injection Date: 10/26/17
Injection Time: 19:16

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	60442	19.5		Pass
75	30.0 - 60.0% of mass 95	157696	50.9		Pass
95	Base peak, 100% relative abundance	309632	100.0		Pass
96	5.0 - 9.0% of mass 95	20533	6.63		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	313493	101.2		Pass
175	5.0 - 9.0% of mass 174	22765	7.35	(7.26) [a]	Pass
176	95.0 - 101.0% of mass 174	304853	98.5	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	20416	6.59	(6.70) [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
VI8691-IC8691	I216442.D	10/26/17	20:39	01:23	Initial cal 0.2
VI8691-IC8691	I216443.D	10/26/17	21:06	01:50	Initial cal 0.5
VI8691-IC8691	I216444.D	10/26/17	21:32	02:16	Initial cal 1
VI8691-IC8691	I216445.D	10/26/17	21:59	02:43	Initial cal 2
VI8691-IC8691	I216446.D	10/26/17	22:26	03:10	Initial cal 4
VI8691-IC8691	I216447.D	10/26/17	22:52	03:36	Initial cal 8
VI8691-IC8691	I216448.D	10/26/17	23:19	04:03	Initial cal 20
VI8691-ICC8691	I216449.D	10/26/17	23:45	04:29	Initial cal 50
VI8691-IC8691	I216450.D	10/27/17	00:12	04:56	Initial cal 100
VI8691-IC8691	I216451.D	10/27/17	00:38	05:22	Initial cal 200
VI8691-ICV8691	I216454.D	10/27/17	01:58	06:42	Initial cal verification 50
VI8691-ICV8691	I216455.D	10/27/17	02:24	07:08	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8698-BFB
Lab File ID: I216593.D
Instrument ID: GCMSI
Injection Date: 11/03/17
Injection Time: 20:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	59291	19.4		Pass
75	30.0 - 60.0% of mass 95	159211	52.1		Pass
95	Base peak, 100% relative abundance	305771	100.0		Pass
96	5.0 - 9.0% of mass 95	19403	6.35		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	288448	94.3		Pass
175	5.0 - 9.0% of mass 174	21606	7.07	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	279019	91.3	(96.7) [a]	Pass
177	5.0 - 9.0% of mass 176	18758	6.13	(6.72) [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
VI8698-CC8691	I216593.D	11/03/17	20:53	00:00	Continuing cal 50
VI8698-MB	I216595.D	11/03/17	22:02	01:09	Method Blank
VI8698-BS	I216596.D	11/03/17	22:29	01:36	Blank Spike
ZZZZZZ	I216598.D	11/03/17	23:22	02:29	(unrelated sample)
JC54428-2	I216599.D	11/03/17	23:48	02:55	(used for QC only; not part of job JC54422)
JC54428-3	I216600.D	11/04/17	00:15	03:22	(used for QC only; not part of job JC54422)
ZZZZZZ	I216601.D	11/04/17	00:41	03:48	(unrelated sample)
ZZZZZZ	I216602.D	11/04/17	01:08	04:15	(unrelated sample)
ZZZZZZ	I216604.D	11/04/17	02:02	05:09	(unrelated sample)
ZZZZZZ	I216606.D	11/04/17	02:55	06:02	(unrelated sample)
ZZZZZZ	I216607.D	11/04/17	03:22	06:29	(unrelated sample)
ZZZZZZ	I216608.D	11/04/17	03:48	06:55	(unrelated sample)
ZZZZZZ	I216610.D	11/04/17	04:41	07:48	(unrelated sample)
JC54555-1	I216611.D	11/04/17	05:07	08:14	TRC-S6(4')
JC54555-3	I216613.D	11/04/17	06:00	09:07	TRC-DUP-1

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8699-BFB
Lab File ID: I216618.D
Instrument ID: GCMSI
Injection Date: 11/04/17
Injection Time: 13:45

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	55816	20.9		Pass
75	30.0 - 60.0% of mass 95	143989	53.8		Pass
95	Base peak, 100% relative abundance	267477	100.0		Pass
96	5.0 - 9.0% of mass 95	17510	6.55		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	243456	91.0		Pass
175	5.0 - 9.0% of mass 174	18115	6.77	(7.44) [a]	Pass
176	95.0 - 101.0% of mass 174	239488	89.5	(98.4) [a]	Pass
177	5.0 - 9.0% of mass 176	16099	6.02	(6.72) [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
VI8699-CC8691	I216618.D	11/04/17	13:45	00:00	Continuing cal 20
VI8699-MB	I216619.D	11/04/17	14:43	00:58	Method Blank
VI8699-BS	I216620.D	11/04/17	15:35	01:50	Blank Spike
JC54428-3DUP	I216622.D	11/04/17	16:31	02:46	Duplicate
JC54428-2MS	I216623.D	11/04/17	16:58	03:13	Matrix Spike
JC54614-1	I216625.D	11/04/17	17:50	04:05	(used for QC only; not part of job JC54422)
JC54614-2	I216626.D	11/04/17	18:17	04:32	(used for QC only; not part of job JC54422)
ZZZZZZ	I216627.D	11/04/17	18:43	04:58	(unrelated sample)
ZZZZZZ	I216628.D	11/04/17	19:09	05:24	(unrelated sample)
JC54614-1DUP	I216629.D	11/04/17	19:36	05:51	Duplicate
JC54614-2MS	I216630.D	11/04/17	20:02	06:17	Matrix Spike
ZZZZZZ	I216632.D	11/04/17	20:55	07:10	(unrelated sample)
ZZZZZZ	I216633.D	11/04/17	21:21	07:36	(unrelated sample)
ZZZZZZ	I216634.D	11/04/17	21:47	08:02	(unrelated sample)
ZZZZZZ	I216635.D	11/04/17	22:14	08:29	(unrelated sample)
ZZZZZZ	I216636.D	11/04/17	22:40	08:55	(unrelated sample)
ZZZZZZ	I216637.D	11/04/17	23:06	09:21	(unrelated sample)
ZZZZZZ	I216638.D	11/04/17	23:32	09:47	(unrelated sample)
ZZZZZZ	I216639.D	11/04/17	23:59	10:14	(unrelated sample)
ZZZZZZ	I216640.D	11/05/17	00:25	10:40	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8700-BFB
Lab File ID: I216644.D
Instrument ID: GCMSI
Injection Date: 11/06/17
Injection Time: 13:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	52944	19.6		Pass
75	30.0 - 60.0% of mass 95	142088	52.6		Pass
95	Base peak, 100% relative abundance	270272	100.0		Pass
96	5.0 - 9.0% of mass 95	17091	6.32		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	275819	102.1		Pass
175	5.0 - 9.0% of mass 174	20040	7.41	(7.27) [a]	Pass
176	95.0 - 101.0% of mass 174	268352	99.3	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	17044	6.31	(6.35) [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
VI8700-CC8691	I216644.D	11/06/17	13:07	00:00	Continuing cal 20
VI8700-MB	I216645.D	11/06/17	14:31	01:24	Method Blank
VI8700-BS	I216646.D	11/06/17	15:08	02:01	Blank Spike
JC54422-1	I216647.D	11/06/17	15:59	02:52	TRC-S2(19')
JC54422-2	I216648.D	11/06/17	16:25	03:18	TRC-S3(5')
ZZZZZZ	I216649.D	11/06/17	16:52	03:45	(unrelated sample)
ZZZZZZ	I216650.D	11/06/17	17:18	04:11	(unrelated sample)
ZZZZZZ	I216651.D	11/06/17	17:45	04:38	(unrelated sample)
JC54422-1MS	I216652.D	11/06/17	18:12	05:05	Matrix Spike
JC54422-2DUP	I216653.D	11/06/17	18:38	05:31	Duplicate
ZZZZZZ	I216654.D	11/06/17	19:05	05:58	(unrelated sample)
ZZZZZZ	I216655.D	11/06/17	19:31	06:24	(unrelated sample)
ZZZZZZ	I216656.D	11/06/17	19:58	06:51	(unrelated sample)
ZZZZZZ	I216657.D	11/06/17	20:24	07:17	(unrelated sample)
ZZZZZZ	I216659.D	11/06/17	21:17	08:10	(unrelated sample)
ZZZZZZ	I216660.D	11/06/17	21:44	08:37	(unrelated sample)
ZZZZZZ	I216661.D	11/06/17	22:10	09:03	(unrelated sample)
ZZZZZZ	I216662.D	11/06/17	22:37	09:30	(unrelated sample)
JC54422-3	I216663.D	11/06/17	23:04	09:57	TRC-S4(5')
ZZZZZZ	I216664.D	11/06/17	23:30	10:23	(unrelated sample)
ZZZZZZ	I216665.D	11/06/17	23:57	10:50	(unrelated sample)
ZZZZZZ	I216666.D	11/07/17	00:23	11:16	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8701-BFB
Lab File ID: I216669.D
Instrument ID: GCMSI
Injection Date: 11/07/17
Injection Time: 11:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	58384	18.6		Pass
75	30.0 - 60.0% of mass 95	160216	50.9		Pass
95	Base peak, 100% relative abundance	314731	100.0		Pass
96	5.0 - 9.0% of mass 95	20589	6.54		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	299755	95.2		Pass
175	5.0 - 9.0% of mass 174	21890	6.96	(7.30) [a]	Pass
176	95.0 - 101.0% of mass 174	290133	92.2	(96.8) [a]	Pass
177	5.0 - 9.0% of mass 176	19006	6.04	(6.55) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VI8701-CC8691	I216669.D	11/07/17	11:11	00:00	Continuing cal 20
VI8701-MB	I216670.D	11/07/17	11:46	00:35	Method Blank
VI8701-BS	I216671.D	11/07/17	12:19	01:08	Blank Spike
JC54136-1	I216672.D	11/07/17	12:46	01:35	(used for QC only; not part of job JC54422)
JC54136-2	I216673.D	11/07/17	13:12	02:01	(used for QC only; not part of job JC54422)
ZZZZZZ	I216674.D	11/07/17	13:39	02:28	(unrelated sample)
JC54136-1MS	I216675.D	11/07/17	14:17	03:06	Matrix Spike
JC54136-2DUP	I216676.D	11/07/17	14:43	03:32	Duplicate
JC54555-2	I216677.D	11/07/17	15:23	04:12	TRC-S7(4')
JC54422-4	I216678.D	11/07/17	15:49	04:38	TRC-S5(12')
ZZZZZZ	I216679.D	11/07/17	16:16	05:05	(unrelated sample)
ZZZZZZ	I216680.D	11/07/17	16:42	05:31	(unrelated sample)
ZZZZZZ	I216681.D	11/07/17	17:09	05:58	(unrelated sample)
ZZZZZZ	I216682.D	11/07/17	17:35	06:24	(unrelated sample)
ZZZZZZ	I216683.D	11/07/17	18:02	06:51	(unrelated sample)
ZZZZZZ	I216684.D	11/07/17	18:28	07:17	(unrelated sample)
ZZZZZZ	I216685.D	11/07/17	18:55	07:44	(unrelated sample)
ZZZZZZ	I216686.D	11/07/17	19:22	08:11	(unrelated sample)
ZZZZZZ	I216687.D	11/07/17	19:49	08:38	(unrelated sample)
ZZZZZZ	I216688.D	11/07/17	20:16	09:05	(unrelated sample)
ZZZZZZ	I216689.D	11/07/17	20:42	09:31	(unrelated sample)

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std: V1C6761-CC6691 **Injection Date:** 11/07/17
Lab File ID: 1C153128.D **Injection Time:** 12:02
Instrument ID: GCMS1C **Method:** SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	114536	7.56	288164	9.82	453235	10.75	369041	13.86	184886	16.18
Upper Limit [a]	229072	8.06	576328	10.32	906470	11.25	738082	14.36	369772	16.68
Lower Limit [b]	57268	7.06	144082	9.32	226618	10.25	184521	13.36	92443	15.68

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1C6761-MB	96968	7.56	284000	9.83	447599	10.75	354334	13.86	173323	16.18
ZZZZZZ	96968	7.56	284000	9.83	447599	10.75	354334	13.86	173323	16.18
V1C6761-BS	123905	7.57	286578	9.83	465411	10.75	364240	13.86	183248	16.18
ZZZZZZ	110155	7.56	257515	9.82	402638	10.75	317877	13.86	145590	16.18
JC54047-72	103652	7.56	253354	9.83	397329	10.75	319900	13.86	152560	16.18
JC54047-74	113070	7.56	258512	9.83	407975	10.75	329652	13.86	158770	16.18
ZZZZZZ	126219	7.57	272651	9.83	435824	10.75	353489	13.86	179999	16.18
JC54047-72MS	111718	7.57	258586	9.83	423028	10.75	318855	13.86	132190	16.18
JC54047-74DUP	117177	7.57	253276	9.83	397101	10.75	320071	13.86	152957	16.18
ZZZZZZ	92302	7.57	230298	9.83	374308	10.75	281830	13.86	127791	16.18
ZZZZZZ	96571	7.56	263636	9.83	409780	10.75	314981	13.86	125614	16.18
ZZZZZZ	92924	7.56	244383	9.83	385178	10.75	311784	13.86	157013	16.18
ZZZZZZ	92924	7.56	244383	9.83	385178	10.75	311784	13.86	157013	16.18
ZZZZZZ	102190	7.56	258475	9.83	404492	10.75	326452	13.86	165981	16.18
ZZZZZZ	102190	7.56	258475	9.83	404492	10.75	326452	13.86	165981	16.18
ZZZZZZ	124179	7.56	272362	9.83	428218	10.75	347457	13.86	175778	16.18
ZZZZZZ	124179	7.56	272362	9.83	428218	10.75	347457	13.86	175778	16.18
ZZZZZZ	106162	7.57	273076	9.83	424028	10.75	341414	13.86	162323	16.18
ZZZZZZ	112166	7.56	269921	9.83	417034	10.75	339584	13.86	157469	16.18
JC54689-1	102784	7.57	278325	9.83	429740	10.75	347000	13.86	168947	16.18
ZZZZZZ	147661	7.56	271654	9.83	424243	10.75	333259	13.86	160460	16.18

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std: V1C6762-CC6691 **Injection Date:** 11/07/17
Lab File ID: 1C153149.D **Injection Time:** 22:53
Instrument ID: GCMS1C **Method:** SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	125227	7.57	294446	9.83	472521	10.75	372845	13.86	184923	16.18
Upper Limit [a]	250454	8.07	588892	10.33	945042	11.25	745690	14.36	369846	16.68
Lower Limit [b]	62614	7.07	147223	9.33	236261	10.25	186423	13.36	92462	15.68

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1C6762-MB	94318	7.56	294314	9.83	456919	10.75	364976	13.86	176594	16.18
V1C6762-BS	125757	7.57	293052	9.83	470487	10.75	369373	13.86	183688	16.18
ZZZZZZ	106598	7.57	258022	9.83	398249	10.75	317968	13.86	123252	16.18
JC54507-2	112711	7.57	287862	9.83	446857	10.75	357188	13.86	176098	16.18
JC54507-3	114802	7.56	283245	9.83	437751	10.75	356509	13.86	171578	16.18
ZZZZZZ	104049	7.56	282477	9.83	436916	10.75	348077	13.86	172340	16.18
ZZZZZZ	103942	7.56	280436	9.83	433022	10.75	348815	13.86	169017	16.18
ZZZZZZ	109679	7.56	276338	9.83	433933	10.75	351111	13.86	176846	16.18
ZZZZZZ	102476	7.57	272764	9.83	420667	10.75	340181	13.86	165603	16.18
ZZZZZZ	97371	7.57	270252	9.83	416324	10.75	338387	13.86	164085	16.18
ZZZZZZ	93292	7.56	269268	9.83	419391	10.75	337659	13.86	162290	16.18
JC54803-1	106343	7.56	272354	9.83	423898	10.75	344479	13.86	170802	16.18
JC54803-3	104526	7.57	236096	9.83	362666	10.75	282575	13.86	129058	16.18
JC54803-2	97120	7.57	204281	9.83	345745	10.75	206784	13.86	62553*	16.18
ZZZZZZ	101914	7.56	245687	9.83	392283	10.75	302221	13.86	136624	16.18
ZZZZZZ	114565	7.56	273437	9.83	425266	10.75	347357	13.86	169161	16.18
JC54507-2DUP	105014	7.56	269189	9.83	416621	10.75	333352	13.86	157668	16.18
JC54507-3MS	109716	7.56	270631	9.83	433234	10.75	334415	13.86	166546	16.18

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std:	V3C6357-CC6336	**Injection Date:**	11/06/17
Lab File ID:	3C140182.D	**Injection Time:**	08:03
Instrument ID:	GCMS3C	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	85979	3.09	235370	5.74	348364	6.65	314349	9.85	170406	11.85
Upper Limit [a]	171958	3.59	470740	6.24	696728	7.15	628698	10.35	340812	12.35
Lower Limit [b]	42990	2.59	117685	5.24	174182	6.15	157175	9.35	85203	11.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3C6357-MB	61936	3.09	227242	5.74	345160	6.65	307617	9.85	161981	11.85
V3C6357-BS	82806	3.10	228840	5.74	342292	6.65	312434	9.85	171389	11.85
JC54691-1	59251	3.09	204419	5.74	316660	6.65	277266	9.85	124217	11.85
ZZZZZZ	69908	3.09	206339	5.74	319389	6.65	278209	9.85	141606	11.85
JC54277-1	70930	3.09	194571	5.74	301316	6.65	271434	9.85	138362	11.85
ZZZZZZ	73230	3.09	213739	5.74	333864	6.65	302560	9.85	157557	11.85
ZZZZZZ	77506	3.09	190609	5.74	297479	6.65	274129	9.85	151213	11.85
ZZZZZZ	69730	3.10	201950	5.74	316273	6.65	287739	9.85	153969	11.85
JC54680-1	66836	3.09	204883	5.74	317668	6.65	280410	9.85	135902	11.85
JC54680-2	65177	3.09	201157	5.74	313378	6.65	284058	9.85	147954	11.85
JC54680-1DUP	67969	3.09	214276	5.74	336929	6.65	292859	9.85	136909	11.85

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std:	V3C6357-CC6336	**Injection Date:**	11/06/17
Lab File ID:	3C140206.D	**Injection Time:**	20:35
Instrument ID:	GCMS3C	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	76635	3.10	224668	5.74	341958	6.65	316538	9.85	171823	11.85
Upper Limit [a]	153270	3.60	449336	6.24	683916	7.15	633076	10.35	343646	12.35
Lower Limit [b]	38318	2.60	112334	5.24	170979	6.15	158269	9.35	85912	11.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3C6357-MB2	63017	3.09	218040	5.74	335257	6.65	301648	9.85	162808	11.85
V3C6357-BS2	78964	3.10	214820	5.74	331681	6.65	307298	9.85	165254	11.85
JC54680-2MS	74149	3.10	211650	5.74	325429	6.65	296527	9.85	154657	11.85

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std:	VE10685-CC10636	**Injection Date:**	11/09/17
Lab File ID:	E248810.D	**Injection Time:**	09:33
Instrument ID:	GCMSE	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	107470	7.73	204342	9.96	314375	10.92	302783	14.32	169574	16.95
Upper Limit [a]	214940	8.23	408684	10.46	628750	11.42	605566	14.82	339148	17.45
Lower Limit [b]	53735	7.23	102171	9.46	157188	10.42	151392	13.82	84787	16.45

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
ZZZZZZ	103916	7.71	201776	9.96	307573	10.92	295741	14.32	165751	16.95
VE10685-MB	103916	7.71	201776	9.96	307573	10.92	295741	14.32	165751	16.95
VE10685-BS	99456	7.74	188446	9.96	296159	10.92	291414	14.32	167243	16.95
JC54405-5	98548	7.78	194413	9.95	301030	10.92	301804	14.31	175228	16.95
ZZZZZZ	103298	7.75	199732	9.96	305682	10.92	301514	14.32	167611	16.95
ZZZZZZ	104456	7.73	196349	9.96	298822	10.92	295933	14.32	168341	16.95
ZZZZZZ	107447	7.74	203737	9.96	308517	10.92	305615	14.32	172920	16.95
ZZZZZZ	106748	7.74	200884	9.96	304770	10.92	303599	14.32	171569	16.95
ZZZZZZ	109755	7.74	198003	9.96	299682	10.92	303420	14.32	173915	16.95
ZZZZZZ	109694	7.75	211859	9.96	330992	10.92	316322	14.32	173590	16.95
ZZZZZZ	112795	7.73	213922	9.96	330087	10.92	324582	14.32	183249	16.95
ZZZZZZ	111947	7.74	207415	9.96	322541	10.92	320740	14.32	178283	16.95
ZZZZZZ	102423	7.80	204491	9.96	337120	10.92	312838	14.32	181536	16.95
JC54405-5MS	99273	7.78	190935	9.95	302561	10.92	293554	14.32	171250	16.95
JC54405-5MSD	97824	7.77	186817	9.95	294805	10.91	289094	14.32	169715	16.95
JC54803-2	105143	7.76	203967	9.96	316062	10.92	313300	14.32	181076	16.95
ZZZZZZ	103237	7.77	206234	9.96	314068	10.92	309842	14.32	176612	16.95
ZZZZZZ	104966	7.75	194085	9.95	290358	10.92	290146	14.32	170965	16.95
ZZZZZZ	106845	7.76	193605	9.95	292998	10.91	296591	14.32	173866	16.95
ZZZZZZ	110605	7.79	194013	9.95	283650	10.92	293185	14.32	170992	16.95
ZZZZZZ	110445	7.77	210514	9.96	322889	10.91	314585	14.32	185037	16.95

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std:	VI8698-CC8691	**Injection Date:**	11/03/17
Lab File ID:	I216593.D	**Injection Time:**	20:53
Instrument ID:	GCMSI	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	298178	7.43	764994	9.76	1107911	10.71	934855	13.83	591355	16.17
Upper Limit [a]	596356	7.93	1529988	10.26	2215822	11.21	1869710	14.33	1182710	16.67
Lower Limit [b]	149089	6.93	382497	9.26	553956	10.21	467428	13.33	295678	15.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VI8698-MB	214708	7.43	664361	9.76	936552	10.71	784931	13.83	432056	16.17
VI8698-BS	286491	7.43	731443	9.76	1040680	10.71	916059	13.83	574622	16.17
ZZZZZZ	216744	7.42	649233	9.76	905068	10.71	770316	13.83	434650	16.17
JC54428-2	240700	7.42	625714	9.76	884159	10.70	771310	13.82	437699	16.17
JC54428-3	216144	7.42	621922	9.76	873461	10.70	742130	13.82	414205	16.17
ZZZZZZ	223523	7.43	629058	9.76	888965	10.71	746359	13.82	421158	16.17
ZZZZZZ	209915	7.43	591674	9.76	831312	10.70	695114	13.83	352242	16.17
ZZZZZZ	224990	7.42	536466	9.76	772932	10.70	604774	13.83	275078*	16.17
ZZZZZZ	232155	7.43	611613	9.76	866617	10.70	727778	13.82	405937	16.17
ZZZZZZ	190569	7.43	577537	9.76	817009	10.70	673541	13.82	351980	16.17
ZZZZZZ	186495	7.43	552148	9.76	788467	10.70	581891	13.82	244171[c]	16.17
ZZZZZZ	232461	7.43	619335	9.76	876816	10.70	748113	13.82	508930	16.17
JC54555-1	287717	7.42	921555	9.76	1275433	10.70	1063193	13.82	587383	16.17
JC54555-3	268963	7.42	817886	9.76	1138532	10.70	938187	13.82	514883	16.17

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std: VI8699-CC8691 **Injection Date:** 11/04/17
Lab File ID: I216618.D **Injection Time:** 13:45
Instrument ID: GCMSI **Method:** SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	255545	7.43	694203	9.76	968667	10.71	818682	13.83	495285	16.17
Upper Limit [a]	511090	7.93	1388406	10.26	1937334	11.21	1637364	14.33	990570	16.67
Lower Limit [b]	127773	6.93	347102	9.26	484334	10.21	409341	13.33	247643	15.67
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**
VI8699-MB	205595	7.42	673492	9.76	926803	10.70	767552	13.83	428619	16.17
VI8699-BS	275959	7.43	719662	9.76	1022099	10.70	881469	13.83	573097	16.17
JC54428-3DUP	234324	7.43	642259	9.76	909159	10.71	748923	13.83	425954	16.17
JC54428-2MS	202250	7.43	680185	9.76	954240	10.71	833234	13.83	513305	16.17
JC54614-1	168032	7.43	630040	9.76	884893	10.70	738245	13.82	396131	16.17
JC54614-2	222317	7.43	590862	9.76	819008	10.70	681521	13.82	358857	16.17
ZZZZZZ	227136	7.42	588038	9.76	828645	10.70	699519	13.82	390326	16.17
ZZZZZZ	217172	7.43	561148	9.76	787641	10.70	665437	13.82	366783	16.17
JC54614-1DUP	187933	7.43	494758	9.76	694078	10.70	583004	13.82	321490	16.17
JC54614-2MS	188874	7.43	586650	9.76	830416	10.70	718997	13.82	435668	16.17
ZZZZZZ	200881	7.43	597698	9.76	836518	10.70	690972	13.82	381403	16.17
ZZZZZZ	190459	7.42	580558	9.76	812203	10.70	677936	13.82	370146	16.17
ZZZZZZ	186729	7.42	544211	9.76	770621	10.70	652408	13.83	352011	16.17
ZZZZZZ	191282	7.42	501468	9.76	716629	10.70	601866	13.82	333628	16.17
ZZZZZZ	179002	7.42	525661	9.76	746242	10.70	619976	13.83	342153	16.17
ZZZZZZ	176226	7.43	526725	9.76	747809	10.70	622575	13.83	347572	16.17
ZZZZZZ	185771	7.43	530004	9.76	752658	10.70	629511	13.82	341680	16.17
ZZZZZZ	168856	7.43	510945	9.76	722803	10.70	602298	13.82	311631	16.17
ZZZZZZ	182236	7.42	518228	9.76	743724	10.70	612926	13.82	328882	16.17

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std: VI8700-CC8691 **Injection Date:** 11/06/17
Lab File ID: I216644.D **Injection Time:** 13:07
Instrument ID: GCMSI **Method:** SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	269607	7.43	715716	9.76	997472	10.71	847575	13.83	516815	16.17
Upper Limit [a]	539214	7.93	1431432	10.26	1994944	11.21	1695150	14.33	1033630	16.67
Lower Limit [b]	134804	6.93	357858	9.26	498736	10.21	423788	13.33	258408	15.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VI8700-MB	221943	7.43	713598	9.76	984105	10.71	803379	13.83	456693	16.17
VI8700-BS	277489	7.43	718660	9.76	1027188	10.71	906179	13.83	587471	16.17
JC54422-1	273567	7.43	747665	9.76	1046918	10.70	865798	13.83	476075	16.17
JC54422-2	253951	7.43	671842	9.76	948012	10.71	777571	13.83	425684	16.17
ZZZZZZ	207959	7.43	611883	9.76	875176	10.71	699384	13.83	332023	16.17
ZZZZZZ	234737	7.43	524656	9.76	768273	10.70	605972	13.83	262615	16.17
ZZZZZZ	192999	7.43	536124	9.76	780651	10.70	644232	13.82	335349	16.17
JC54422-1MS	327695	7.45	753603	9.76	1098484	10.70	957694	13.82	610142	16.17
JC54422-2DUP	280200	7.43	765028	9.76	1087953	10.70	878455	13.82	450176	16.17
ZZZZZZ	259049	7.43	691109	9.76	994066	10.70	853276	13.82	481520	16.17
ZZZZZZ	248317	7.43	698143	9.76	1002980	10.70	848966	13.83	470241	16.17
ZZZZZZ	223730	7.43	647557	9.76	933610	10.70	807435	13.82	453444	16.17
ZZZZZZ	211029	7.42	587457	9.76	848682	10.70	656877	13.82	285986	16.17
ZZZZZZ	223811	7.43	633780	9.76	929650	10.70	791522	13.83	444844	16.17
ZZZZZZ	166443	7.43	510453	9.76	650219	10.70	435478	13.82	142417[c]	16.17
ZZZZZZ	200820	7.43	564071	9.76	804005	10.70	681208	13.82	378896	16.17
ZZZZZZ	214850	7.43	575985	9.76	836965	10.70	714242	13.82	399203	16.17
JC54422-3	198318	7.42	567566	9.76	830696	10.70	697460	13.82	396584	16.17
ZZZZZZ	187015	7.42	552832	9.76	816612	10.70	680179	13.82	370856	16.17
ZZZZZZ	274696	7.43	897857	9.76	1295258	10.70	1100913	13.82	609448	16.17
ZZZZZZ	267908	7.43	829794	9.76	1186659	10.70	974485	13.82	540170	16.17

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

Internal Standard Area Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std:	VI8701-CC8691	**Injection Date:**	11/07/17
Lab File ID:	I216669.D	**Injection Time:**	11:11
Instrument ID:	GCMSI	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	320732	7.42	858372	9.76	1208556	10.70	1024786	13.83	608981	16.17
Upper Limit [a]	641464	7.92	1716744	10.26	2417112	11.20	2049572	14.33	1217962	16.67
Lower Limit [b]	160366	6.92	429186	9.26	604278	10.20	512393	13.33	304491	15.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VI8701-MB	249287	7.43	807183	9.77	1141784	10.71	942803	13.83	527666	16.17
VI8701-BS	305225	7.43	805959	9.76	1142706	10.71	1009165	13.83	639027	16.17
JC54136-1	286770	7.43	810274	9.76	1157060	10.71	952369	13.83	530936	16.17
JC54136-2	270160	7.43	747553	9.76	1041109	10.70	885468	13.83	503312	16.17
ZZZZZZ	248911	7.43	693182	9.76	980709	10.70	839939	13.83	473045	16.17
JC54136-1MS	302314	7.43	760298	9.76	1091377	10.70	962120	13.83	627954	16.17
JC54136-2DUP	279225	7.42	742673	9.76	1044559	10.70	862027	13.82	483931	16.17
JC54555-2	181507	7.43	576218	9.76	817290	10.70	682118	13.82	366747	16.17
JC54422-4	222438	7.43	632799	9.76	891779	10.70	759583	13.83	414659	16.17
ZZZZZZ	238745	7.42	656009	9.76	925765	10.70	795642	13.83	438272	16.17
ZZZZZZ	240787	7.43	644513	9.76	908210	10.70	773156	13.83	437384	16.17
ZZZZZZ	253485	7.42	657623	9.76	940790	10.70	799947	13.82	449676	16.17
ZZZZZZ	235049	7.43	590670	9.76	856439	10.70	722012	13.82	403987	16.17
ZZZZZZ	212644	7.43	599563	9.76	847324	10.70	710886	13.82	394965	16.17
ZZZZZZ	198766	7.43	591198	9.76	839270	10.70	712292	13.82	390506	16.17
ZZZZZZ	219942	7.43	575526	9.76	821633	10.70	712737	13.82	398400	16.17
ZZZZZZ	231370	7.43	601769	9.76	876934	10.70	732379	13.82	418562	16.17
ZZZZZZ	206362	7.43	565632	9.76	828678	10.70	699768	13.82	398429	16.17
ZZZZZZ	213950	7.43	574091	9.76	823516	10.70	696138	13.82	390556	16.17
ZZZZZZ	188233	7.43	523120	9.76	744469	10.70	629869	13.82	305542	16.17

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC54277-1	3C140191.D	113	111	98	108
JC54422-1	I216647.D	103	109	98	106
JC54422-2	I216648.D	106	113	99	109
JC54422-3	I216663.D	112	118	99	108
JC54422-4	I216678.D	107	117	97	111
JC54555-1	I216611.D	94	93	100	103
JC54555-2	I216677.D	106	113	99	111
JC54555-3	I216613.D	99	103	98	107
JC54689-1	1C153146.D	99	94	96	100
JC54803-1	1C153162.D	101	101	96	101
JC54803-2	E248828.D	94	88	94	97
JC54803-2	1C153164.D	116	122	82	133* [a]
JC54803-3	1C153163.D	102	103	96	106
JC54047-72MS	1C153137.D	102	103	94	110
JC54047-74DUP	1C153138.D	105	107	97	105
JC54136-1MS	I216675.D	101	109	96	95
JC54136-2DUP	I216676.D	103	109	98	106
JC54405-5MS	E248825.D	98	92	95	99
JC54405-5MSD	E248826.D	98	93	96	98
JC54422-1MS	I216652.D	102	105	97	97
JC54422-2DUP	I216653.D	104	103	100	113
JC54428-2MS	I216623.D	99	111	98	101
JC54428-3DUP	I216622.D	103	116	99	108
JC54507-2DUP	1C153167.D	99	98	95	104
JC54507-3MS	1C153168.D	98	97	94	99
JC54680-1DUP	3C140203.D	113	104	100	113
JC54680-2MS	3C140210.D	111	105	98	105
V1C6761-BS	1C153130.D	99	100	94	98
V1C6761-MB	1C153129.D	100	96	95	103
V1C6762-BS	1C153152.D	98	96	94	100
V1C6762-MB	1C153151.D	98	93	95	101
V3C6357-BS	3C140185.D	109	108	97	100
V3C6357-MB	3C140184.D	105	98	96	103
VE10685-BS	E248813.D	97	87	95	100
VE10685-MB	E248812.D	95	90	95	100
VI8698-BS	I216596.D	99	111	97	99
VI8698-MB	I216595.D	103	110	98	110
VI8700-BS	I216646.D	102	110	95	95
VI8700-MB	I216645.D	102	110	99	108
VI8701-BS	I216671.D	101	106	96	96

Surrogate Recovery Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
VI8701-MB	I216670.D	102	100	98	105
V3C6357-MB2	3C140208.D	110	99	98	102

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	72-129%
S2 = 1,2-Dichloroethane-D4	73-132%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	77-125%

(a) Outside control limits due to matrix interference.

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICC6691
Lab FileID: 1C151365.D

Response Factor Report GCMSI

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
Last Update : Fri Aug 25 11:34:20 2017
Response via : Initial Calibration

Calibration Files
0.2 =1C151358.D 0.5 =1C151359.D 1 =1C151360.D 2 =1C151361.D
8 =1C151363.D 4 =1C151362.D 20 =1C151364.D 50 =1C151365.D
100 =1C151366.D 200 =1C151367.D = =

Compound	0.2	0.5	1	2	8	4	20	50	100	200	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD											
2) tertiary butyl alcohol	1.213	1.223	1.298	1.267	1.261	1.306	1.295	1.277			1.267	2.71
3) 1,4-dioxane	0.103	0.105	0.122	0.121	0.123	0.121	0.115	0.108			0.115	7.20
4) I pentafluorobenzene	ISTD											
5) dichlorodifluoromethane	0.898	0.947	0.766	0.877	0.829	0.905	0.868	0.809	0.804	0.781	0.849	7.00
6) chlorodifluoromethane	0.721	0.764	0.821	0.785	0.767	0.776	0.723	0.731	0.680		0.752	5.61
7) chloromethane	1.039	0.823	0.898	0.828	0.874	0.830	0.773	0.769	0.759		0.844	10.33
8) vinyl chloride	0.768	0.680	0.829	0.797	0.839	0.822	0.775	0.785	0.764		0.784	6.07
9) bromomethane	0.444	0.454	0.410	0.416	0.414	0.388	0.406	0.412			0.418	5.06
10) chloroethane	0.402	0.343	0.432	0.384	0.417	0.402	0.382	0.382	0.374		0.391	6.64
11) trichlorofluoromethane	1.001	1.012	0.907	0.977	0.927	0.860	0.863	0.855			0.925	7.02
12) ethyl ether	0.182	0.225	0.224	0.237	0.231	0.242	0.240	0.239	0.232		0.228	8.06
13) 2-chloropropane	0.155	0.192	0.229	0.231	0.222	0.228	0.211	0.200	0.176		0.205	13.02
14) acrolein			0.072	0.071	0.084	0.083	0.083	0.085			0.080	7.74
15) freon 113	0.306	0.351	0.366	0.368	0.357	0.370	0.348	0.360	0.356		0.353	5.49
16) 1,1-dichloroethene	0.843	0.676	0.795	0.819	0.806	0.785	0.812	0.752	0.759	0.733	0.778	6.30
17) acetone	0.052	0.038	0.047	0.040	0.040	0.040	0.040	0.040	0.040		0.042	11.23
18) iodomethane	0.530	0.395	0.415	0.403	0.379	0.473	0.539	0.563	0.545		0.472	15.74
19) carbon disulfide	1.823	1.854	1.821	1.786	1.754	1.787	1.670	1.697	1.651		1.760	4.11
20) acetonitrile	0.070	0.071	0.070	0.074	0.071	0.071	0.069	0.067	0.065		0.070	3.46
21) allyl chloride											0.000	-1.00
22) methyl acetate			0.057	0.067	0.064	0.072	0.075	0.078	0.076		0.070	10.61
23) methylene chloride												

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICC6691
Lab FileID: 1C151365.D

			0.605	0.530	0.538	0.503	0.482	0.471	0.457	0.512	9.87
24)	acrylonitrile											
			0.133	0.171	0.151	0.177	0.172	0.173	0.170	0.164	9.78
25)	methyl tert butyl ether											
	1.269	1.007	1.059	1.097	1.109	1.091	1.172	1.168	1.170	1.129	1.127	6.42
26)	trans-1,2-dichloroethene											
	0.881	0.714	0.727	0.772	0.772	0.732	0.782	0.737	0.735	0.700	0.755	6.83
27)	hexane											
			0.901	0.884	0.818	0.799	0.828	0.798	0.818	0.804	0.831	4.77
28)	1,1-dichloroethane											
	1.033	0.848	0.918	0.922	0.935	0.917	0.942	0.896	0.887	0.847	0.914	5.81
29)	vinyl acetate											
					0.064	0.057	0.072	0.075	0.074	0.074	0.069	10.62
30)	di-isopropyl ether											
	1.880	1.374	1.486	1.492	1.555	1.513	1.654	1.634	1.631	1.556	1.578	8.60
31)	chloroprene											
	0.944	0.713	0.761	0.784	0.824	0.779	0.857	0.821	0.824	0.789	0.810	7.66
32)	ethyl tert-butyl ether											
	1.573	1.300	1.380	1.355	1.407	1.359	1.466	1.485	1.479	1.424	1.423	5.60
33)	2-butanone											
			0.037	0.039	0.047	0.049	0.046	0.055	0.054	0.056	0.056	0.049	14.85
34)	2,2-dichloropropane											
	0.997	0.795	0.756	0.781	0.750	0.760	0.773	0.731	0.734	0.711	0.779	10.35
35)	ethyl acetate											
			0.057	0.064	0.067	0.073	0.074	0.073	0.072	0.069	9.15
36)	cis-1,2-dichloroethene											
			0.562	0.549	0.568	0.558	0.548	0.562	0.536	0.533	0.516	0.548	3.07
37)	Methyl Acrylate											
					0.050	0.048	0.062	0.066	0.067	0.067	0.060	14.36
38)	propionitrile											
			0.062	0.065	0.069	0.074	0.072	0.077	0.075	0.074	0.073	0.071	7.07
39)	methacrylonitrile											
				0.145	0.147	0.177	0.164	0.188	0.190	0.192	0.189	0.174	11.33
40)	bromochloromethane											
			0.212	0.212	0.218	0.223	0.225	0.236	0.222	0.218	0.209	0.220	3.73
41)	tetrahydrofuran											
					0.058	0.061	0.059	0.062	0.059	0.060	0.060	0.060	1.91
42)	chloroform											
	1.153	0.947	0.899	0.914	0.890	0.867	0.918	0.870	0.867	0.831	0.915	9.78
43)	tert-Butyl Formate											
					0.093	0.107	0.103	0.115	0.118	0.122	0.119	0.111	9.40
44)	dibromofluoromethane (s)											
	0.510	0.510	0.513	0.517	0.514	0.510	0.521	0.517	0.511	0.504	0.513	0.91
45)	1,2-dichloroethane-d4 (s)											
	0.509	0.516	0.520	0.535	0.536	0.530	0.544	0.541	0.532	0.533	0.530	2.09
46)	1,1,1-trichloroethane											
	0.905	0.679	0.743	0.820	0.803	0.772	0.813	0.779	0.786	0.767	0.787	7.37
47)	cyclohexane											
	0.695	0.617	0.674	0.575	0.624	0.614	0.663	0.625	0.638	0.635	0.636	5.36
48)	I 1,4-difluorobenzene	----------ISTD----------										
49)	1,1-dichloropropene											
	0.564	0.396	0.434	0.459	0.446	0.437	0.454	0.438	0.449	0.429	0.450	9.67
50)	iso-butyl alcohol											
					0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	4.14
51)	carbon tetrachloride											
	0.571	0.409	0.412	0.455	0.451	0.442	0.435	0.421	0.429	0.414	0.444	10.71
52)	isopropyl acetate											
						0.138	0.172	0.115	0.110	0.106	0.103	0.124	21.38

----- Linear regression ----- Coefficient = 0.9999

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICC6691
Lab FileID: 1C151365.D

Response Ratio = 0.00664 + 0.10150 *A

53)	1,2-dichloroethane											
		0.348	0.351	0.374	0.374	0.371	0.375	0.361	0.352	0.324	0.359	4.74
54)	benzene											
		1.680	1.187	1.264	1.230	1.248	1.210	1.260	1.220	1.220	1.177	1.269	11.57
55)	2,2,4-trimethylpentane											
		1.840	1.243	1.272	1.362	1.355	1.300	1.342	1.313	1.355	1.331	1.371	12.35
56)	tert-amyl methyl ether											
		1.035	0.800	0.789	0.791	0.804	0.768	0.817	0.825	0.818	0.791	0.824	9.25
57)	heptane											
		0.294	0.266	0.268	0.260	0.285	0.270	0.275	0.268	0.275	0.268	0.273	3.66
58)	n-butyl alcohol											
				0.007	0.008	0.007	0.009	0.009	0.010	0.010	0.009	14.51
59)	trichloroethene											
		0.391	0.319	0.321	0.310	0.324	0.311	0.330	0.318	0.324	0.315	0.326	7.16
60)	methylcyclohexane											
		0.759	0.669	0.626	0.603	0.584	0.592	0.571	0.597	0.583	0.620	9.60
61)	1,2-dichloropropane											
		0.328	0.304	0.287	0.312	0.314	0.301	0.320	0.312	0.313	0.299	0.309	3.77
62)	methyl methacrylate											
				0.045	0.051	0.059	0.055	0.063	0.061	0.063	0.063	0.058	11.44
63)	dibromomethane											
		0.174	0.158	0.174	0.175	0.171	0.175	0.174	0.174	0.167	0.171	3.25
64)	bromodichloromethane											
		0.421	0.369	0.397	0.403	0.414	0.382	0.414	0.403	0.400	0.386	0.399	4.03
65)	2-nitropropane											
		0.086	0.103	0.115	0.105	0.102	0.108	0.107	0.105	0.098	0.103	7.77
66)	2-chloroethyl vinyl ether											
		0.145	0.118	0.127	0.124	0.131	0.125	0.137	0.137	0.137	0.133	0.131	6.01
67)	epichlorohydrin											
				0.025	0.030	0.030	0.028	0.031	0.031	0.032	0.031	0.030	8.12
68)	cis-1,3-dichloropropene											
		0.558	0.411	0.442	0.461	0.479	0.450	0.481	0.481	0.483	0.463	0.471	8.08
69)	4-methyl-2-pentanone											
		0.103	0.080	0.083	0.091	0.101	0.095	0.103	0.104	0.104	0.103	0.097	9.56
70)	3-methyl-1-butanol											
				0.006	0.006	0.007	0.006	0.008	0.008	0.008	0.009	0.007	16.39
71)	toluene											
		0.875	0.808	0.773	0.732	0.737	0.730	0.702	0.709	0.694	0.751	7.82
72)	trans-1,3-dichloropropene											
		0.460	0.340	0.381	0.388	0.404	0.378	0.408	0.409	0.405	0.387	0.396	7.65
73)	ethyl methacrylate											
		0.325	0.262	0.269	0.295	0.303	0.285	0.306	0.306	0.304	0.298	0.295	6.33
74)	1,1,2-trichloroethane											
		0.236	0.166	0.182	0.200	0.202	0.193	0.206	0.204	0.206	0.200	0.200	8.95
75)	1,3-dichloropropane											
		0.406	0.370	0.367	0.381	0.386	0.378	0.385	0.383	0.376	0.358	0.379	3.41
76)	2-hexanone											
		0.116	0.085	0.093	0.095	0.102	0.092	0.106	0.103	0.104	0.102	0.100	8.67
77)	toluene-d8 (s)											
		1.146	1.140	1.141	1.145	1.144	1.145	1.136	1.131	1.136	1.106	1.137	1.04
78)	I chlorobenzene-d5	----------				ISTD							
79)	tetrachloroethene											
		0.395	0.401	0.381	0.390	0.386	0.393	0.377	0.392	0.388	0.389	1.82
80)	butyl acetate											
		0.164	0.195	0.201	0.199	0.189	0.201	0.197	0.193	0.188	0.192	5.98
81)	3,3-Dimethyl-1-Butanol											
				0.017	0.019	0.020	0.019	0.022	0.023	0.024	0.025	0.021	13.91

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICC6691
Lab FileID: 1C151365.D

82) n-butyl ether
1.504 1.520 1.511 1.564 1.535 1.593 1.541 1.539 1.481 1.532 2.17
83) dibromochloromethane
0.369 0.303 0.321 0.326 0.335 0.326 0.352 0.348 0.354 0.346 0.338 5.74
84) 1,2-dibromoethane
0.350 0.253 0.277 0.271 0.301 0.285 0.301 0.300 0.304 0.300 0.294 8.70
85) chlorobenzene
1.193 0.863 0.903 0.882 0.895 0.883 0.901 0.872 0.884 0.866 0.914 10.81
86) 1,1,1,2-tetrachloroethane
0.340 0.246 0.288 0.292 0.314 0.310 0.325 0.318 0.326 0.320 0.308 8.67
87) ethylbenzene
1.676 1.687 1.692 1.662 1.628 1.657 1.589 1.609 1.575 1.642 2.62
88) m,p-xylene
0.628 0.636 0.622 0.615 0.602 0.617 0.596 0.598 0.582 0.611 2.86
89) o-xylene
0.609 0.602 0.599 0.594 0.587 0.592 0.580 0.583 0.567 0.590 2.13
90) styrene
1.064 1.048 1.000 0.996 0.996 1.007 0.970 0.978 0.953 1.001 3.56
91) amyl acetate
0.000 -1.00
92) bromoform
0.262 0.200 0.189 0.209 0.219 0.209 0.229 0.235 0.241 0.240 0.223 9.96

93) I 1,4-dichlorobenzene-d ----------ISTD----------
94) 4-bromofluorobenzene (s)
0.947 0.957 0.937 0.937 0.962 0.953 0.927 0.943 0.935 0.946 0.944 1.15
95) isopropylbenzene
3.192 3.120 3.114 3.182 3.043 3.133 3.059 3.124 3.150 3.124 1.58
96) cyclohexanone
0.000 -1.00
97) 1,1,2,2-tetrachloroethane
0.700 0.677 0.668 0.711 0.700 0.730 0.750 0.761 0.773 0.719 5.13
98) trans-1,4-dichloro-2-butene
0.180 0.196 0.221 0.199 0.228 0.224 0.218 0.220 0.211 8.00
99) 1,2,3-trichloropropane
0.151 0.168 0.171 0.161 0.170 0.177 0.177 0.182 0.170 5.84
100) bromobenzene
0.944 0.749 0.738 0.717 0.763 0.725 0.746 0.735 0.744 0.749 0.761 8.60
101) n-propylbenzene
3.917 3.942 3.938 4.032 3.970 3.992 3.898 3.950 3.942 3.954 1.01
102) 2-chlorotoluene
0.663 0.729 0.739 0.729 0.719 0.723 0.707 0.718 0.724 0.717 3.09
103) 4-chlorotoluene
2.298 2.367 2.225 2.255 2.185 2.235 2.194 2.190 2.164 2.235 2.88
104) 1,3,5-trimethylbenzene
2.351 2.510 2.486 2.504 2.445 2.529 2.488 2.556 2.580 2.494 2.68
105) tert-butylbenzene
0.556 0.444 0.471 0.474 0.475 0.461 0.478 0.460 0.473 0.485 0.478 6.22
106) pentachloroethane
0.000 -1.00
107) 1,2,4-trimethylbenzene
2.841 2.587 2.474 2.521 2.534 2.545 2.497 2.545 2.541 2.565 4.22
108) sec-butylbenzene
3.314 3.462 3.406 3.542 3.486 3.551 3.477 3.581 3.522 3.482 2.36
109) p-isopropyltoluene
2.708 2.694 2.757 2.800 2.758 2.795 2.753 2.810 2.772 2.761 1.44
110) benzyl chloride
1.402 1.372 1.386 1.394 1.344 1.367 1.412 1.378 1.344 1.378 1.72
111) 1,3-dichlorobenzene
1.477 1.472 1.437 1.431 1.443 1.426 1.423 1.420 1.414 1.438 1.55

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICC6691
Lab FileID: 1C151365.D

```
112)  1,4-dichlorobenzene
             1.569 1.505 1.474 1.453 1.481 1.437 1.420 1.412 1.400  1.461    3.64
113)  1,2-dichlorobenzene
             1.440 1.273 1.329 1.348 1.340 1.350 1.351 1.351 1.327  1.345    3.21
114)  n-butylbenzene
             1.503 1.549 1.480 1.582 1.547 1.582 1.574 1.595 1.568  1.553    2.48
115)  hexachloroethane
                   0.388 0.431 0.456 0.427 0.467 0.491 0.519 0.531  0.464   10.49
116)  1,2-dibromo-3-chloropropane
                   0.143 0.161 0.157 0.152 0.164 0.165 0.168 0.169  0.160    5.47
117)  1,3,5-Trichlorobenzene
             1.334 1.177 1.187 1.204 1.161 1.194 1.235 1.246 1.244  1.220    4.29
118)  1,2,4-trichlorobenzene
             1.061 1.066 0.974 0.994 0.989 0.958 0.999 0.998 0.987  1.003    3.65
119)  hexachlorobutadiene
             0.656 0.617 0.616 0.654 0.644 0.642 0.635 0.651 0.635  0.639    2.31
120)  naphthalene
             2.551 2.247 2.211 2.281 2.177 2.324 2.368 2.365 2.350  2.319    4.77
121)  1,2,3-trichlorobenzene
             1.027 0.893 0.950 0.938 0.928 0.931 0.956 0.964 0.947  0.948    3.81
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M1CS6691.M        Fri Aug 25 11:38:52 2017
```

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICV6691
Lab FileID: 1C151370.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\1C151370.D Vial: 16
Acq On : 23 Aug 2017 12:47 am Operator: juntaep
Sample : ICV6691-50 Inst : GCMSI
Misc : MS19345,V1C6691,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
Last Update : Fri Aug 25 11:34:20 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	104	-0.01	7.57
2		tertiary butyl alcohol	1.267	1.347	-6.3	108	0.00	7.69
3		1,4-dioxane	0.115	0.129	-12.2	111	0.00	11.47
4	I	pentafluorobenzene	1.000	1.000	0.0	110	0.00	9.83
5		dichlorodifluoromethane	0.849	0.720	15.2	98	0.00	3.90
6		chlorodifluoromethane	0.752	0.590	21.5	90	0.00	3.94
7		chloromethane	0.844	0.754	10.7	107	0.00	4.34
8		vinyl chloride	0.784	0.703	10.3	100	0.00	4.58
9		bromomethane	0.418	0.376	10.0	106	0.01	5.29
10		chloroethane	0.391	0.359	8.2	103	0.01	5.49
11		trichlorofluoromethane	0.925	0.776	16.1	99	0.00	5.94
12		ethyl ether	0.228	0.240	-5.3	109	0.00	6.42
13		2-chloropropane	0.205	0.206	-0.5	107	0.00	6.62
14		acrolein	0.080	0.082	-2.5	108	0.00	6.71
15		freon 113	0.353	0.392	-11.0	124	0.00	6.78
16		1,1-dichloroethene	0.778	0.703	9.6	103	0.00	6.85
17		acetone	0.042	0.039	7.1	106	0.00	6.94
18		iodomethane	0.472	0.457	3.2	93	0.00	7.14
19		carbon disulfide	1.760	1.627	7.6	107	0.00	7.26
20		acetonitrile	0.070	0.148	-111.4#	235#	0.00	7.41
21		allyl chloride		----------NA----------				
22		methyl acetate	0.070	0.071	-1.4	103	0.00	7.40
23		methylene chloride	0.512	0.485	5.3	110	0.00	7.61
24		acrylonitrile	0.164	0.170	-3.7	108	0.00	7.98
25		methyl tert butyl ether	1.127	1.174	-4.1	110	0.00	7.91
26		trans-1,2-dichloroethene	0.755	0.710	6.0	106	0.00	7.99
27		hexane	0.831	0.611	26.5	84	0.00	8.26
28		1,1-dichloroethane	0.914	0.897	1.9	110	0.00	8.57
29		vinyl acetate	0.069	0.076	-10.1	111	0.00	8.56
30		di-isopropyl ether	1.578	1.563	1.0	105	0.00	8.51
31		chloroprene	0.810	0.792	2.2	106	0.00	8.67
32		ethyl tert-butyl ether	1.423	1.394	2.0	103	0.00	8.98
33		2-butanone	0.049	0.052	-6.1	106	0.00	9.29
34		2,2-dichloropropane	0.779	0.739	5.1	111	0.00	9.30
35		ethyl acetate	0.069	0.070	-1.4	105	0.00	9.30
36		cis-1,2-dichloroethene	0.548	0.556	-1.5	114	0.00	9.32
37		Methyl Acrylate	0.060	0.065	-8.3	108	0.00	9.38
38		propionitrile	0.071	0.073	-2.8	107	0.00	9.42
39		methacrylonitrile	0.174	0.182	-4.6	105	0.00	9.59
40		bromochloromethane	0.220	0.225	-2.3	111	0.00	9.64
41		tetrahydrofuran	0.060	0.059	1.7	109	0.00	9.68

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICV6691
Lab FileID: 1C151370.D

42		chloroform	0.915	0.891	2.6	112	0.00	9.70
43		tert-Butyl Formate	0.111	0.129	-16.2	120	0.00	9.71
44	S	dibromofluoromethane (s)	0.513	0.502	2.1	107	0.00	9.90
45	S	1,2-dichloroethane-d4 (s)	0.530	0.505	4.7	103	0.00	10.32
46		1,1,1-trichloroethane	0.787	0.776	1.4	109	0.00	9.93
47		cyclohexane	0.636	0.700	-10.1	123	0.00	9.98
48	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	10.75
49		1,1-dichloropropene	0.450	0.437	2.9	109	0.00	10.11
50		iso-butyl alcohol	0.009	0.009	0.0	104	0.00	10.38
51		carbon tetrachloride	0.444	0.422	5.0	109	0.00	10.13
		----------	True	Calc.	% Drift	----------		
52		isopropyl acetate	50.000	48.990	2.0	105	0.00	10.29
		----------	AvgRF	CCRF	% Dev	----------		
53		1,2-dichloroethane	0.359	0.367	-2.2	111	0.00	10.41
54		benzene	1.269	1.225	3.5	109	0.00	10.38
55		2,2,4-trimethylpentane	1.371	1.232	10.1	102	0.00	10.33
56		tert-amyl methyl ether	0.824	0.780	5.3	103	0.00	10.39
57		heptane	0.273	0.271	0.7	110	0.00	10.51
58		n-butyl alcohol	0.009	0.009	0.0	109	0.00	10.89
59		trichloroethene	0.326	0.330	-1.2	113	0.00	11.09
60		methylcyclohexane	0.620	0.529	14.7	101	0.00	11.28
61		1,2-dichloropropane	0.309	0.322	-4.2	112	0.00	11.36
62		methyl methacrylate	0.058	0.062	-6.9	111	0.00	11.35
63		dibromomethane	0.171	0.177	-3.5	111	0.00	11.53
64		bromodichloromethane	0.399	0.417	-4.5	113	0.00	11.65
65		2-nitropropane	0.103	0.103	0.0	104	0.00	11.88
66		2-chloroethyl vinyl ether	0.131	0.142	-8.4	113	0.00	11.88
67		epichlorohydrin	0.030	0.029	3.3	101	0.00	12.01
68		cis-1,3-dichloropropene	0.471	0.487	-3.4	110	0.00	12.10
69		4-methyl-2-pentanone	0.097	0.095	2.1	100	0.00	12.18
70		3-methyl-1-butanol	0.007	0.008	-14.3	107	0.00	12.21
71		toluene	0.751	0.708	5.7	110	0.00	12.44
72		trans-1,3-dichloropropene	0.396	0.415	-4.8	111	0.00	12.65
73		ethyl methacrylate	0.295	0.293	0.7	104	0.00	12.62
74		1,1,2-trichloroethane	0.200	0.212	-6.0	113	0.00	12.87
75		1,3-dichloropropane	0.379	0.388	-2.4	110	0.00	13.04
76		2-hexanone	0.100	0.095	5.0	100	0.00	13.02
77	S	toluene-d8 (s)	1.137	1.113	2.1	107	0.00	12.37
78	I	chlorobenzene-d5	1.000	1.000	0.0	107	0.00	13.87
79		tetrachloroethene	0.389	0.413	-6.2	117	0.00	13.01
80		butyl acetate	0.192	0.192	0.0	104	0.00	13.08
81		3,3-Dimethyl-1-Butanol	0.021	0.023	-9.5	106	0.00	13.19
82		n-butyl ether	1.532	1.519	0.8	105	0.00	13.78
83		dibromochloromethane	0.338	0.375	-10.9	115	0.00	13.31
84		1,2-dibromoethane	0.294	0.317	-7.8	113	0.00	13.46
85		chlorobenzene	0.914	0.915	-0.1	112	0.00	13.90
86		1,1,1,2-tetrachloroethane	0.308	0.340	-10.4	114	0.00	13.96
87		ethylbenzene	1.642	1.619	1.4	109	0.00	13.94
88		m,p-xylene	0.611	0.608	0.5	109	0.00	14.05
89		o-xylene	0.590	0.593	-0.5	109	0.00	14.47
90		styrene	1.001	1.006	-0.5	111	0.00	14.48
91		amyl acetate		----------NA----------				
92		bromoform	0.223	0.249	-11.7	113	0.00	14.76
93	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	16.18
94	S	4-bromofluorobenzene (s)	0.944	0.929	1.6	105	0.00	15.02

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICV6691
Lab FileID: 1C151370.D

95	isopropylbenzene	3.124	3.157	-1.1	110	0.00	14.80
96	cyclohexanone		----------NA----------				
97	1,1,2,2-tetrachloroethane	0.719	0.780	-8.5	111	0.00	15.13
98	trans-1,4-dichloro-2-bute	0.211	0.232	-10.0	110	0.00	15.17
99	1,2,3-trichloropropane	0.170	0.184	-8.2	111	0.00	15.20
100	bromobenzene	0.761	0.782	-2.8	113	0.00	15.21
101	n-propylbenzene	3.954	3.940	0.4	108	0.00	15.20
102	2-chlorotoluene	0.717	0.732	-2.1	110	0.00	15.36
103	4-chlorotoluene	2.235	2.222	0.6	108	0.00	15.46
104	1,3,5-trimethylbenzene	2.494	2.523	-1.2	108	0.00	15.35
105	tert-butylbenzene	0.478	0.484	-1.3	112	0.00	15.70
106	pentachloroethane		----------NA----------				
107	1,2,4-trimethylbenzene	2.565	2.527	1.5	108	0.00	15.75
108	sec-butylbenzene	3.482	3.509	-0.8	108	0.00	15.91
109	p-isopropyltoluene	2.761	2.819	-2.1	109	0.00	16.04
110	benzyl chloride	1.378	1.146	16.8	87	0.00	16.33
111	1,3-dichlorobenzene	1.438	1.476	-2.6	111	0.00	16.12
112	1,4-dichlorobenzene	1.461	1.472	-0.8	110	0.00	16.21
113	1,2-dichlorobenzene	1.345	1.394	-3.6	110	0.00	16.62
114	n-butylbenzene	1.553	1.570	-1.1	106	0.00	16.46
115	hexachloroethane	0.464	0.501	-8.0	109	0.00	16.87
116	1,2-dibromo-3-chloropropa	0.160	0.172	-7.5	111	0.00	17.43
117	1,3,5-Trichlorobenzene	1.220	1.126	7.7	97	0.00	17.60
118	1,2,4-trichlorobenzene	1.003	1.012	-0.9	108	0.00	18.26
119	hexachlorobutadiene	0.639	0.655	-2.5	110	0.00	18.36
120	naphthalene	2.319	2.404	-3.7	108	0.00	18.55
121	1,2,3-trichlorobenzene	0.948	0.991	-4.5	110	0.00	18.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C151365.D M1CS6691.M Fri Aug 25 11:38:21 2017

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICV6691
Lab FileID: 1C151371.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\1C151371.D Vial: 17
Acq On : 23 Aug 2017 1:17 am Operator: juntaep
Sample : ICV6691-50 Inst : GCMSI
Misc : MS19345,V1C6691,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
Last Update : Fri Aug 25 11:34:20 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	92	-0.02	7.57
2		tertiary butyl alcohol		----------NA----------				
3		1,4-dioxane		----------NA----------				
4	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	9.83
5		dichlorodifluoromethane		----------NA----------				
6		chlorodifluoromethane		----------NA----------				
7		chloromethane		----------NA----------				
8		vinyl chloride		----------NA----------				
9		bromomethane		----------NA----------				
10		chloroethane		----------NA----------				
11		trichlorofluoromethane		----------NA----------				
12		ethyl ether		----------NA----------				
13		2-chloropropane		----------NA----------				
14		acrolein		----------NA----------				
15		freon 113		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		acetone		----------NA----------				
18		iodomethane		----------NA----------				
19		carbon disulfide		----------NA----------				
20		acetonitrile	0.070	0.066	5.7	105	0.00	7.41
21		allyl chloride		----------NA----------				
22		methyl acetate		----------NA----------				
23		methylene chloride		----------NA----------				
24		acrylonitrile		----------NA----------				
25		methyl tert butyl ether		----------NA----------				
26		trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28		1,1-dichloroethane		----------NA----------				
29		vinyl acetate		----------NA----------				
30		di-isopropyl ether		----------NA----------				
31		chloroprene		----------NA----------				
32		ethyl tert-butyl ether		----------NA----------				
33		2-butanone		----------NA----------				
34		2,2-dichloropropane		----------NA----------				
35		ethyl acetate		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		Methyl Acrylate		----------NA----------				
38		propionitrile		----------NA----------				
39		methacrylonitrile		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICV6691
Lab FileID: 1C151371.D

42		chloroform		----------NA----------					
43		tert-Butyl Formate		----------NA----------					
44	S	dibromofluoromethane (s)	0.513	0.505	1.6	106	0.00	9.90	
45	S	1,2-dichloroethane-d4 (s)	0.530	0.494	6.8	99	0.00	10.32	
46		1,1,1-trichloroethane		----------NA----------					
47		cyclohexane		----------NA----------					
48	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	10.75	
49		1,1-dichloropropene		----------NA----------					
50		iso-butyl alcohol		----------NA----------					
51		carbon tetrachloride		----------NA----------					
		----------	True	Calc.	% Drift	----------			
52		isopropyl acetate		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
53		1,2-dichloroethane		----------NA----------					
54		benzene		----------NA----------					
55		2,2,4-trimethylpentane		----------NA----------					
56		tert-amyl methyl ether		----------NA----------					
57		heptane		----------NA----------					
58		n-butyl alcohol		----------NA----------					
59		trichloroethene		----------NA----------					
60		methylcyclohexane		----------NA----------					
61		1,2-dichloropropane		----------NA----------					
62		methyl methacrylate		----------NA----------					
63		dibromomethane		----------NA----------					
64		bromodichloromethane		----------NA----------					
65		2-nitropropane		----------NA----------					
66		2-chloroethyl vinyl ether		----------NA----------					
67		epichlorohydrin		----------NA----------					
68		cis-1,3-dichloropropene		----------NA----------					
69		4-methyl-2-pentanone		----------NA----------					
70		3-methyl-1-butanol		----------NA----------					
71		toluene		----------NA----------					
72		trans-1,3-dichloropropene		----------NA----------					
73		ethyl methacrylate		----------NA----------					
74		1,1,2-trichloroethane		----------NA----------					
75		1,3-dichloropropane		----------NA----------					
76		2-hexanone		----------NA----------					
77	S	toluene-d8 (s)	1.137	1.141	-0.4	104	0.00	12.37	
78	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	13.87	
79		tetrachloroethene		----------NA----------					
80		butyl acetate		----------NA----------					
81		3,3-Dimethyl-1-Butanol		----------NA----------					
82		n-butyl ether		----------NA----------					
83		dibromochloromethane		----------NA----------					
84		1,2-dibromoethane		----------NA----------					
85		chlorobenzene		----------NA----------					
86		1,1,1,2-tetrachloroethane		----------NA----------					
87		ethylbenzene		----------NA----------					
88		m,p-xylene		----------NA----------					
89		o-xylene		----------NA----------					
90		styrene		----------NA----------					
91		amyl acetate		----------NA----------					
92		bromoform		----------NA----------					
93	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	16.18	
94	S	4-bromofluorobenzene (s)	0.944	0.932	1.3	106	0.00	15.02	

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6691-ICV6691
Lab FileID: 1C151371.D

95	isopropylbenzene	----------NA----------
96	cyclohexanone	----------NA----------
97	1,1,2,2-tetrachloroethane	----------NA----------
98	trans-1,4-dichloro-2-bute	----------NA----------
99	1,2,3-trichloropropane	----------NA----------
100	bromobenzene	----------NA----------
101	n-propylbenzene	----------NA----------
102	2-chlorotoluene	----------NA----------
103	4-chlorotoluene	----------NA----------
104	1,3,5-trimethylbenzene	----------NA----------
105	tert-butylbenzene	----------NA----------
106	pentachloroethane	----------NA----------
107	1,2,4-trimethylbenzene	----------NA----------
108	sec-butylbenzene	----------NA----------
109	p-isopropyltoluene	----------NA----------
110	benzyl chloride	----------NA----------
111	1,3-dichlorobenzene	----------NA----------
112	1,4-dichlorobenzene	----------NA----------
113	1,2-dichlorobenzene	----------NA----------
114	n-butylbenzene	----------NA----------
115	hexachloroethane	----------NA----------
116	1,2-dibromo-3-chloropropa	----------NA----------
117	1,3,5-Trichlorobenzene	----------NA----------
118	1,2,4-trichlorobenzene	----------NA----------
119	hexachlorobutadiene	----------NA----------
120	naphthalene	----------NA----------
121	1,2,3-trichlorobenzene	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C151365.D M1CS6691.M Fri Aug 25 11:41:38 2017

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6761-CC6691
Lab FileID: 1C153128.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\v1c6761\1c153128.d Vial: 1
Acq On : 7 Nov 2017 12:02 pm Operator: prashans
Sample : CC6691-20 Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	95	-0.03	7.56
2		tertiary butyl alcohol	1.267	1.330	-5.0	100	-0.02	7.68
3		1,4-dioxane	0.115	0.131	-13.9	100	0.00	11.47
4	I	pentafluorobenzene	1.000	1.000	0.0	114	-0.01	9.82
5		dichlorodifluoromethane	0.849	0.748	11.9	98	0.00	3.90
6		chlorodifluoromethane	0.752	0.731	2.8	107	0.00	3.94
7		chloromethane	0.844	0.880	-4.3	121	0.00	4.34
8		vinyl chloride	0.784	0.829	-5.7	115	0.00	4.58
9		bromomethane	0.418	0.452	-8.1	125	0.02	5.30
10		chloroethane	0.391	0.404	-3.3	115	0.00	5.49
11		trichlorofluoromethane	0.925	0.862	6.8	106	0.00	5.94
12		ethyl ether	0.228	0.255	-11.8	120	-0.01	6.40
13		2-chloropropane	0.205	0.221	-7.8	110	0.00	6.61
14		acrolein	0.080	0.080	0.0	108	0.00	6.71
15		freon 113	0.353	0.362	-2.5	112	0.00	6.77
16		1,1-dichloroethene	0.778	0.754	3.1	106	0.00	6.84
17		acetone	0.042	0.040	4.8	115	0.00	6.93
18		iodomethane	0.472	0.375	20.6#	91	0.00	7.14
19		carbon disulfide	1.760	1.669	5.2	107	0.00	7.25
20		acetonitrile	0.070	0.065	7.1	104	0.00	7.41
21		allyl chloride		----------NA----------				
22		methyl acetate	0.070	0.072	-2.9	113	0.00	7.40
23		methylene chloride	0.512	0.508	0.8	115	0.00	7.61
24		acrylonitrile	0.164	0.162	1.2	104	0.00	7.97
25		methyl tert butyl ether	1.127	1.207	-7.1	117	0.00	7.91
26		trans-1,2-dichloroethene	0.755	0.736	2.5	108	0.00	7.98
27		hexane	0.831	0.752	9.5	104	0.00	8.26
28		1,1-dichloroethane	0.914	0.927	-1.4	112	0.00	8.57
29		vinyl acetate	0.069	0.074	-7.2	118	-0.01	8.55
30		di-isopropyl ether	1.578	1.608	-1.9	111	0.00	8.51
31		chloroprene	0.810	0.744	8.1	99	-0.01	8.66
32		ethyl tert-butyl ether	1.423	1.415	0.6	110	0.00	8.98
33		2-butanone	0.049	0.048	2.0	99	0.00	9.29
34		2,2-dichloropropane	0.779	0.737	5.4	109	-0.01	9.29
35		ethyl acetate	0.069	0.067	2.9	106	-0.01	9.29
36		cis-1,2-dichloroethene	0.548	0.541	1.3	110	0.00	9.31
37		Methyl Acrylate	0.060	0.060	0.0	109	0.00	9.38
38		propionitrile	0.071	0.073	-2.8	108	0.00	9.41
39		methacrylonitrile	0.174	0.177	-1.7	107	-0.01	9.58
40		bromochloromethane	0.220	0.245	-11.4	119	-0.01	9.63
41		tetrahydrofuran	0.060	0.058	3.3	107	0.00	9.66

Continuing Calibration Summary

Job Number: JC54422 **Sample:** V1C6761-CC6691
Account: TRCNYNYB TRC **Lab FileID:** 1C153128.D
Project: K710, 168 8th Street, Brooklyn, NY

42		chloroform	0.915	0.885	3.3	110	-0.01	9.69
43		tert-Butyl Formate	0.111	0.134	-20.7#	134	0.00	9.70
44	S	dibromofluoromethane (s)	0.513	0.518	-1.0	114	-0.01	9.89
45	S	1,2-dichloroethane-d4 (s)	0.530	0.530	0.0	111	-0.01	10.31
46		1,1,1-trichloroethane	0.787	0.746	5.2	105	0.00	9.92
47		cyclohexane	0.636	0.601	5.5	104	0.00	9.98
48	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	10.75
49		1,1-dichloropropene	0.450	0.430	4.4	105	-0.01	10.10
50		iso-butyl alcohol	0.009	0.009	0.0	108	0.00	10.38
51		carbon tetrachloride	0.444	0.425	4.3	108	-0.01	10.11
			True	Calc.	% Drift			
52		isopropyl acetate	20.000	19.331	3.3	110	0.00	10.29
			AvgRF	CCRF	% Dev			
53		1,2-dichloroethane	0.359	0.387	-7.8	114	0.00	10.41
54		benzene	1.269	1.182	6.9	104	0.00	10.37
55		2,2,4-trimethylpentane	1.371	1.246	9.1	103	0.00	10.33
56		tert-amyl methyl ether	0.824	0.799	3.0	108	-0.01	10.38
57		heptane	0.273	0.266	2.6	107	0.00	10.51
58		n-butyl alcohol	0.009	0.008	11.1	100	-0.01	10.88
59		trichloroethene	0.326	0.307	5.8	103	0.00	11.08
60		methylcyclohexane	0.620	0.545	12.1	102	0.00	11.28
61		1,2-dichloropropane	0.309	0.328	-6.1	113	-0.01	11.35
62		methyl methacrylate	0.058	0.064	-10.3	113	0.00	11.34
63		dibromomethane	0.171	0.185	-8.2	117	0.00	11.52
64		bromodichloromethane	0.399	0.412	-3.3	110	0.00	11.65
65		2-nitropropane	0.103	0.094	8.7	96	0.00	11.87
66		2-chloroethyl vinyl ether	0.131	0.133	-1.5	107	0.00	11.87
67		epichlorohydrin	0.030	0.026	13.3	94	-0.01	12.01
68		cis-1,3-dichloropropene	0.471	0.487	-3.4	112	0.00	12.09
69		4-methyl-2-pentanone	0.097	0.096	1.0	103	0.00	12.18
70		3-methyl-1-butanol	0.007	0.007	0.0	100	0.00	12.20
71		toluene	0.751	0.672	10.5	102	0.00	12.44
72		trans-1,3-dichloropropene	0.396	0.415	-4.8	113	0.00	12.65
73		ethyl methacrylate	0.295	0.318	-7.8	115	0.00	12.61
74		1,1,2-trichloroethane	0.200	0.202	-1.0	109	0.00	12.86
75		1,3-dichloropropane	0.379	0.385	-1.6	110	0.00	13.04
76		2-hexanone	0.100	0.093	7.0	97	0.00	13.02
77	S	toluene-d8 (s)	1.137	1.098	3.4	107	0.00	12.36
78	I	chlorobenzene-d5	1.000	1.000	0.0	109	0.00	13.86
79		tetrachloroethene	0.389	0.364	6.4	101	0.00	13.01
80		butyl acetate	0.192	0.204	-6.2	110	0.00	13.08
81		3,3-Dimethyl-1-Butanol	0.021	0.022	-4.8	107	0.00	13.18
82		n-butyl ether	1.532	1.498	2.2	102	0.00	13.78
83		dibromochloromethane	0.338	0.359	-6.2	111	0.00	13.31
84		1,2-dibromoethane	0.294	0.308	-4.8	111	0.00	13.45
85		chlorobenzene	0.914	0.889	2.7	107	0.00	13.90
86		1,1,1,2-tetrachloroethane	0.308	0.323	-4.9	108	0.00	13.95
87		ethylbenzene	1.642	1.530	6.8	100	0.00	13.94
88		m,p-xylene	0.611	0.574	6.1	101	0.00	14.04
89		o-xylene	0.590	0.562	4.7	103	0.00	14.46
90		styrene	1.001	0.960	4.1	104	0.00	14.47
91		amyl acetate		----------NA----------				
92		bromoform	0.223	0.244	-9.4	116	0.00	14.76
93	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	16.18
94	S	4-bromofluorobenzene (s)	0.944	0.946	-0.2	110	0.00	15.01

Continuing Calibration Summary

Job Number: JC54422 **Sample:** V1C6761-CC6691
Account: TRCNYNYB TRC **Lab FileID:** 1C153128.D
Project: K710, 168 8th Street, Brooklyn, NY

95	isopropylbenzene	3.124	2.882	7.7	99	0.00	14.79
96	cyclohexanone		----------NA----------				
97	1,1,2,2-tetrachloroethane	0.719	0.718	0.1	106	0.00	15.13
98	trans-1,4-dichloro-2-bute	0.211	0.197	6.6	93	0.00	15.16
99	1,2,3-trichloropropane	0.170	0.169	0.6	107	0.00	15.20
100	bromobenzene	0.761	0.766	-0.7	110	0.00	15.21
101	n-propylbenzene	3.954	3.591	9.2	97	0.00	15.20
102	2-chlorotoluene	0.717	0.710	1.0	106	0.00	15.36
103	4-chlorotoluene	2.235	2.087	6.6	100	0.00	15.45
104	1,3,5-trimethylbenzene	2.494	2.196	11.9	93	0.00	15.34
105	tert-butylbenzene	0.478	0.452	5.4	102	0.00	15.70
106	pentachloroethane		----------NA----------				
107	1,2,4-trimethylbenzene	2.565	2.265	11.7	96	0.00	15.74
108	sec-butylbenzene	3.482	3.203	8.0	97	0.00	15.91
109	p-isopropyltoluene	2.761	2.547	7.8	98	0.00	16.03
110	benzyl chloride	1.378	1.437	-4.3	113	0.00	16.33
111	1,3-dichlorobenzene	1.438	1.453	-1.0	110	0.00	16.12
112	1,4-dichlorobenzene	1.461	1.440	1.4	108	0.00	16.21
113	1,2-dichlorobenzene	1.345	1.393	-3.6	111	0.00	16.61
114	n-butylbenzene	1.553	1.329	14.4	90	0.00	16.45
115	hexachloroethane	0.464	0.485	-4.5	112	0.00	16.87
116	1,2-dibromo-3-chloropropa	0.160	0.167	-4.4	110	0.00	17.43
117	1,3,5-Trichlorobenzene	1.220	1.145	6.1	103	0.00	17.59
118	1,2,4-trichlorobenzene	1.003	1.066	-6.3	120	0.00	18.25
119	hexachlorobutadiene	0.639	0.622	2.7	104	0.00	18.36
120	naphthalene	2.319	2.425	-4.6	112	0.00	18.55
121	1,2,3-trichlorobenzene	0.948	1.044	-10.1	121	0.00	18.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C151364.D M1CS6691.M Thu Nov 09 01:08:26 2017

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6761-ECC6691
Lab FileID: 1C153149.D

Evaluate Continuing Calibration Report

Data File : X:\complete\dayton20...em\v1c6762\1c153149.d Vial: 22
Acq On : 7 Nov 2017 10:53 pm Operator: prashans
Sample : CC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	-0.02	7.57
2		tertiary butyl alcohol	1.267	1.334	-5.3	103	-0.01	7.69
3		1,4-dioxane	0.115	0.128	-11.3	106	0.00	11.47
4	I	pentafluorobenzene	1.000	1.000	0.0	111	0.00	9.83
5		dichlorodifluoromethane	0.849	0.668	21.3#	92	0.00	3.90
6		chlorodifluoromethane	0.752	0.683	9.2	105	0.00	3.94
7		chloromethane	0.844	0.784	7.1	112	0.00	4.35
8		vinyl chloride	0.784	0.753	4.0	108	0.00	4.59
9		bromomethane	0.418	0.424	-1.4	121	0.02	5.30
10		chloroethane	0.391	0.374	4.3	109	0.01	5.49
11		trichlorofluoromethane	0.925	0.788	14.8	102	0.00	5.94
12		ethyl ether	0.228	0.261	-14.5	120	0.00	6.41
13		2-chloropropane	0.205	0.207	-1.0	109	0.00	6.62
14		acrolein	0.080	0.084	-5.0	111	0.00	6.70
15		freon 113	0.353	0.347	1.7	111	0.00	6.78
16		1,1-dichloroethene	0.778	0.717	7.8	106	0.00	6.85
17		acetone	0.042	0.038	9.5	104	0.00	6.93
18		iodomethane	0.472	0.433	8.3	89	0.00	7.14
19		carbon disulfide	1.760	1.617	8.1	107	0.00	7.25
20		acetonitrile	0.070	0.064	8.6	102	0.00	7.41
21		allyl chloride		----------NA----------				
22		methyl acetate	0.070	0.077	-10.0	113	0.00	7.40
23		methylene chloride	0.512	0.512	0.0	118	0.00	7.61
24		acrylonitrile	0.164	0.165	-0.6	106	0.00	7.98
25		methyl tert butyl ether	1.127	1.283	-13.8	122	0.00	7.91
26		trans-1,2-dichloroethene	0.755	0.716	5.2	108	0.00	7.98
27		hexane	0.831	0.744	10.5	103	0.00	8.26
28		1,1-dichloroethane	0.914	0.900	1.5	111	0.00	8.57
29		vinyl acetate	0.069	0.079	-14.5	117	0.00	8.56
30		di-isopropyl ether	1.578	1.675	-6.1	114	0.00	8.51
31		chloroprene	0.810	0.721	11.0	97	0.00	8.67
32		ethyl tert-butyl ether	1.423	1.512	-6.3	113	0.00	8.98
33		2-butanone	0.049	0.048	2.0	99	0.00	9.29
34		2,2-dichloropropane	0.779	0.711	8.7	108	0.00	9.30
35		ethyl acetate	0.069	0.070	-1.4	105	0.00	9.29
36		cis-1,2-dichloroethene	0.548	0.541	1.3	112	0.00	9.32
37		Methyl Acrylate	0.060	0.069	-15.0	116	0.00	9.38
38		propionitrile	0.071	0.071	0.0	106	0.00	9.41
39		methacrylonitrile	0.174	0.185	-6.3	108	0.00	9.59
40		bromochloromethane	0.220	0.243	-10.5	121	0.00	9.64
41		tetrahydrofuran	0.060	0.055	8.3	103	0.00	9.66

Continuing Calibration Summary

Job Number: JC54422 **Sample:** V1C6761-ECC6691
Account: TRCNYNYB TRC **Lab FileID:** 1C153149.D
Project: K710, 168 8th Street, Brooklyn, NY

42		chloroform	0.915	0.878	4.0	112	0.00	9.69
43		tert-Butyl Formate	0.111	0.143	-28.8#	134	0.00	9.70
44	S	dibromofluoromethane (s)	0.513	0.506	1.4	108	0.00	9.89
45	S	1,2-dichloroethane-d4 (s)	0.530	0.509	4.0	104	0.00	10.32
46		1,1,1-trichloroethane	0.787	0.734	6.7	105	0.00	9.92
47		cyclohexane	0.636	0.576	9.4	102	0.00	9.98
48	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	10.75
49		1,1-dichloropropene	0.450	0.423	6.0	106	0.00	10.10
50		iso-butyl alcohol	0.009	0.010	-11.1	110	0.00	10.38
51		carbon tetrachloride	0.444	0.403	9.2	105	0.00	10.12
		----------	True	Calc.	% Drift	----------		
52		isopropyl acetate	50.000	52.860	-5.7	113	0.00	10.29
		----------	AvgRF	CCRF	% Dev	----------		
53		1,2-dichloroethane	0.359	0.383	-6.7	116	0.00	10.41
54		benzene	1.269	1.204	5.1	108	0.00	10.38
55		2,2,4-trimethylpentane	1.371	1.181	13.9	99	0.00	10.33
56		tert-amyl methyl ether	0.824	0.836	-1.5	111	0.00	10.38
57		heptane	0.273	0.247	9.5	101	0.00	10.51
58		n-butyl alcohol	0.009	0.009	0.0	103	-0.01	10.88
59		trichloroethene	0.326	0.313	4.0	108	0.00	11.08
60		methylcyclohexane	0.620	0.536	13.5	103	0.00	11.28
61		1,2-dichloropropane	0.309	0.325	-5.2	114	0.00	11.36
62		methyl methacrylate	0.058	0.067	-15.5	120	0.00	11.35
63		dibromomethane	0.171	0.189	-10.5	119	0.00	11.53
64		bromodichloromethane	0.399	0.420	-5.3	114	0.00	11.65
65		2-nitropropane	0.103	0.096	6.8	97	0.00	11.88
66		2-chloroethyl vinyl ether	0.131	0.142	-8.4	114	0.00	11.87
67		epichlorohydrin	0.030	0.027	10.0	93	0.00	12.01
68		cis-1,3-dichloropropene	0.471	0.506	-7.4	115	0.00	12.09
69		4-methyl-2-pentanone	0.097	0.095	2.1	100	0.00	12.18
70		3-methyl-1-butanol	0.007	0.007	0.0	102	0.00	12.20
71		toluene	0.751	0.679	9.6	106	0.00	12.44
72		trans-1,3-dichloropropene	0.396	0.433	-9.3	116	0.00	12.65
73		ethyl methacrylate	0.295	0.312	-5.8	112	0.00	12.62
74		1,1,2-trichloroethane	0.200	0.216	-8.0	116	0.00	12.87
75		1,3-dichloropropane	0.379	0.395	-4.2	113	0.00	13.04
76		2-hexanone	0.100	0.089	11.0	95	0.00	13.02
77	S	toluene-d8 (s)	1.137	1.069	6.0	103	0.00	12.36
78	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	13.86
79		tetrachloroethene	0.389	0.381	2.1	106	0.00	13.01
80		butyl acetate	0.192	0.193	-0.5	102	0.00	13.08
81		3,3-Dimethyl-1-Butanol	0.021	0.023	-9.5	105	0.00	13.18
82		n-butyl ether	1.532	1.485	3.1	101	0.00	13.78
83		dibromochloromethane	0.338	0.394	-16.6	118	0.00	13.30
84		1,2-dibromoethane	0.294	0.336	-14.3	117	0.00	13.46
85		chlorobenzene	0.914	0.924	-1.1	111	0.00	13.90
86		1,1,1,2-tetrachloroethane	0.308	0.358	-16.2	118	0.00	13.96
87		ethylbenzene	1.642	1.534	6.6	101	0.00	13.94
88		m,p-xylene	0.611	0.573	6.2	101	0.00	14.04
89		o-xylene	0.590	0.567	3.9	102	0.00	14.46
90		styrene	1.001	0.967	3.4	104	0.00	14.48
91		amyl acetate		----------NA----------				
92		bromoform	0.223	0.270	-21.1#	120	0.00	14.76
93	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.18
94	S	4-bromofluorobenzene (s)	0.944	0.932	1.3	102	0.00	15.02

Continuing Calibration Summary

Job Number: JC54422 **Sample:** V1C6761-ECC6691
Account: TRCNYNYB TRC **Lab FileID:** 1C153149.D
Project: K710, 168 8th Street, Brooklyn, NY

95	isopropylbenzene	3.124	2.948	5.6	100	0.00	14.80
96	cyclohexanone		----------NA----------				
97	1,1,2,2-tetrachloroethane	0.719	0.776	-7.9	107	0.00	15.12
98	trans-1,4-dichloro-2-bute	0.211	0.212	-0.5	98	0.00	15.16
99	1,2,3-trichloropropane	0.170	0.181	-6.5	106	0.00	15.20
100	bromobenzene	0.761	0.795	-4.5	112	0.00	15.21
101	n-propylbenzene	3.954	3.624	8.3	96	0.00	15.20
102	2-chlorotoluene	0.717	0.726	-1.3	107	0.00	15.36
103	4-chlorotoluene	2.235	2.115	5.4	100	0.00	15.45
104	1,3,5-trimethylbenzene	2.494	2.323	6.9	97	0.00	15.35
105	tert-butylbenzene	0.478	0.463	3.1	104	0.00	15.70
106	pentachloroethane		----------NA----------				
107	1,2,4-trimethylbenzene	2.565	2.347	8.5	97	0.00	15.74
108	sec-butylbenzene	3.482	3.274	6.0	98	0.00	15.91
109	p-isopropyltoluene	2.761	2.624	5.0	99	0.00	16.03
110	benzyl chloride	1.378	1.307	5.2	96	0.00	16.33
111	1,3-dichlorobenzene	1.438	1.474	-2.5	107	0.00	16.12
112	1,4-dichlorobenzene	1.461	1.437	1.6	105	0.00	16.21
113	1,2-dichlorobenzene	1.345	1.414	-5.1	109	0.00	16.61
114	n-butylbenzene	1.553	1.358	12.6	89	0.00	16.46
115	hexachloroethane	0.464	0.520	-12.1	110	0.00	16.87
116	1,2-dibromo-3-chloropropa	0.160	0.172	-7.5	108	0.00	17.43
117	1,3,5-Trichlorobenzene	1.220	1.164	4.6	98	0.00	17.59
118	1,2,4-trichlorobenzene	1.003	1.088	-8.5	113	0.00	18.25
119	hexachlorobutadiene	0.639	0.652	-2.0	106	0.00	18.36
120	naphthalene	2.319	2.502	-7.9	110	0.00	18.55
121	1,2,3-trichlorobenzene	0.948	1.063	-12.1	115	0.00	18.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C151365.D M1CS6691.M Mon Nov 13 22:46:18 2017

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6762-CC6691
Lab FileID: 1C153149.D

Evaluate Continuing Calibration Report

Data File : X:\complete\dayton20...em\v1c6762\1c153149.d Vial: 22
Acq On : 7 Nov 2017 10:53 pm Operator: prashans
Sample : CC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	-0.02	7.57
2		tertiary butyl alcohol	1.267	1.334	-5.3	103	-0.01	7.69
3		1,4-dioxane	0.115	0.128	-11.3	106	0.00	11.47
4	I	pentafluorobenzene	1.000	1.000	0.0	111	0.00	9.83
5		dichlorodifluoromethane	0.849	0.668	21.3#	92	0.00	3.90
6		chlorodifluoromethane	0.752	0.683	9.2	105	0.00	3.94
7		chloromethane	0.844	0.784	7.1	112	0.00	4.35
8		vinyl chloride	0.784	0.753	4.0	108	0.00	4.59
9		bromomethane	0.418	0.424	-1.4	121	0.02	5.30
10		chloroethane	0.391	0.374	4.3	109	0.01	5.49
11		trichlorofluoromethane	0.925	0.788	14.8	102	0.00	5.94
12		ethyl ether	0.228	0.261	-14.5	120	0.00	6.41
13		2-chloropropane	0.205	0.207	-1.0	109	0.00	6.62
14		acrolein	0.080	0.084	-5.0	111	0.00	6.70
15		freon 113	0.353	0.347	1.7	111	0.00	6.78
16		1,1-dichloroethene	0.778	0.717	7.8	106	0.00	6.85
17		acetone	0.042	0.038	9.5	104	0.00	6.93
18		iodomethane	0.472	0.433	8.3	89	0.00	7.14
19		carbon disulfide	1.760	1.617	8.1	107	0.00	7.25
20		acetonitrile	0.070	0.064	8.6	102	0.00	7.41
21		allyl chloride		----------NA----------				
22		methyl acetate	0.070	0.077	-10.0	113	0.00	7.40
23		methylene chloride	0.512	0.512	0.0	118	0.00	7.61
24		acrylonitrile	0.164	0.165	-0.6	106	0.00	7.98
25		methyl tert butyl ether	1.127	1.283	-13.8	122	0.00	7.91
26		trans-1,2-dichloroethene	0.755	0.716	5.2	108	0.00	7.98
27		hexane	0.831	0.744	10.5	103	0.00	8.26
28		1,1-dichloroethane	0.914	0.900	1.5	111	0.00	8.57
29		vinyl acetate	0.069	0.079	-14.5	117	0.00	8.56
30		di-isopropyl ether	1.578	1.675	-6.1	114	0.00	8.51
31		chloroprene	0.810	0.721	11.0	97	0.00	8.67
32		ethyl tert-butyl ether	1.423	1.512	-6.3	113	0.00	8.98
33		2-butanone	0.049	0.048	2.0	99	0.00	9.29
34		2,2-dichloropropane	0.779	0.711	8.7	108	0.00	9.30
35		ethyl acetate	0.069	0.070	-1.4	105	0.00	9.29
36		cis-1,2-dichloroethene	0.548	0.541	1.3	112	0.00	9.32
37		Methyl Acrylate	0.060	0.069	-15.0	116	0.00	9.38
38		propionitrile	0.071	0.071	0.0	106	0.00	9.41
39		methacrylonitrile	0.174	0.185	-6.3	108	0.00	9.59
40		bromochloromethane	0.220	0.243	-10.5	121	0.00	9.64
41		tetrahydrofuran	0.060	0.055	8.3	103	0.00	9.66

Continuing Calibration Summary

Job Number: JC54422 **Sample:** V1C6762-CC6691
Account: TRCNYNYB TRC **Lab FileID:** 1C153149.D
Project: K710, 168 8th Street, Brooklyn, NY

42		chloroform	0.915	0.878	4.0	112	0.00	9.69
43		tert-Butyl Formate	0.111	0.143	-28.8#	134	0.00	9.70
44	S	dibromofluoromethane (s)	0.513	0.506	1.4	108	0.00	9.89
45	S	1,2-dichloroethane-d4 (s)	0.530	0.509	4.0	104	0.00	10.32
46		1,1,1-trichloroethane	0.787	0.734	6.7	105	0.00	9.92
47		cyclohexane	0.636	0.576	9.4	102	0.00	9.98
48	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	10.75
49		1,1-dichloropropene	0.450	0.423	6.0	106	0.00	10.10
50		iso-butyl alcohol	0.009	0.010	-11.1	110	0.00	10.38
51		carbon tetrachloride	0.444	0.403	9.2	105	0.00	10.12
		----------	True	Calc.	% Drift	----------		
52		isopropyl acetate	50.000	52.860	-5.7	113	0.00	10.29
		----------	AvgRF	CCRF	% Dev	----------		
53		1,2-dichloroethane	0.359	0.383	-6.7	116	0.00	10.41
54		benzene	1.269	1.204	5.1	108	0.00	10.38
55		2,2,4-trimethylpentane	1.371	1.181	13.9	99	0.00	10.33
56		tert-amyl methyl ether	0.824	0.836	-1.5	111	0.00	10.38
57		heptane	0.273	0.247	9.5	101	0.00	10.51
58		n-butyl alcohol	0.009	0.009	0.0	103	-0.01	10.88
59		trichloroethene	0.326	0.313	4.0	108	0.00	11.08
60		methylcyclohexane	0.620	0.536	13.5	103	0.00	11.28
61		1,2-dichloropropane	0.309	0.325	-5.2	114	0.00	11.36
62		methyl methacrylate	0.058	0.067	-15.5	120	0.00	11.35
63		dibromomethane	0.171	0.189	-10.5	119	0.00	11.53
64		bromodichloromethane	0.399	0.420	-5.3	114	0.00	11.65
65		2-nitropropane	0.103	0.096	6.8	97	0.00	11.88
66		2-chloroethyl vinyl ether	0.131	0.142	-8.4	114	0.00	11.87
67		epichlorohydrin	0.030	0.027	10.0	93	0.00	12.01
68		cis-1,3-dichloropropene	0.471	0.506	-7.4	115	0.00	12.09
69		4-methyl-2-pentanone	0.097	0.095	2.1	100	0.00	12.18
70		3-methyl-1-butanol	0.007	0.007	0.0	102	0.00	12.20
71		toluene	0.751	0.679	9.6	106	0.00	12.44
72		trans-1,3-dichloropropene	0.396	0.433	-9.3	116	0.00	12.65
73		ethyl methacrylate	0.295	0.312	-5.8	112	0.00	12.62
74		1,1,2-trichloroethane	0.200	0.216	-8.0	116	0.00	12.87
75		1,3-dichloropropane	0.379	0.395	-4.2	113	0.00	13.04
76		2-hexanone	0.100	0.089	11.0	95	0.00	13.02
77	S	toluene-d8 (s)	1.137	1.069	6.0	103	0.00	12.36
78	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	13.86
79		tetrachloroethene	0.389	0.381	2.1	106	0.00	13.01
80		butyl acetate	0.192	0.193	-0.5	102	0.00	13.08
81		3,3-Dimethyl-1-Butanol	0.021	0.023	-9.5	105	0.00	13.18
82		n-butyl ether	1.532	1.485	3.1	101	0.00	13.78
83		dibromochloromethane	0.338	0.394	-16.6	118	0.00	13.30
84		1,2-dibromoethane	0.294	0.336	-14.3	117	0.00	13.46
85		chlorobenzene	0.914	0.924	-1.1	111	0.00	13.90
86		1,1,1,2-tetrachloroethane	0.308	0.358	-16.2	118	0.00	13.96
87		ethylbenzene	1.642	1.534	6.6	101	0.00	13.94
88		m,p-xylene	0.611	0.573	6.2	101	0.00	14.04
89		o-xylene	0.590	0.567	3.9	102	0.00	14.46
90		styrene	1.001	0.967	3.4	104	0.00	14.48
91		amyl acetate		----------	NA	----------		
92		bromoform	0.223	0.270	-21.1#	120	0.00	14.76
93	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.18
94	S	4-bromofluorobenzene (s)	0.944	0.932	1.3	102	0.00	15.02

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V1C6762-CC6691
Lab FileID: 1C153149.D

95	isopropylbenzene	3.124	2.948	5.6	100	0.00	14.80
96	cyclohexanone		----------NA----------				
97	1,1,2,2-tetrachloroethane	0.719	0.776	-7.9	107	0.00	15.12
98	trans-1,4-dichloro-2-bute	0.211	0.212	-0.5	98	0.00	15.16
99	1,2,3-trichloropropane	0.170	0.181	-6.5	106	0.00	15.20
100	bromobenzene	0.761	0.795	-4.5	112	0.00	15.21
101	n-propylbenzene	3.954	3.624	8.3	96	0.00	15.20
102	2-chlorotoluene	0.717	0.726	-1.3	107	0.00	15.36
103	4-chlorotoluene	2.235	2.115	5.4	100	0.00	15.45
104	1,3,5-trimethylbenzene	2.494	2.323	6.9	97	0.00	15.35
105	tert-butylbenzene	0.478	0.463	3.1	104	0.00	15.70
106	pentachloroethane		----------NA----------				
107	1,2,4-trimethylbenzene	2.565	2.347	8.5	97	0.00	15.74
108	sec-butylbenzene	3.482	3.274	6.0	98	0.00	15.91
109	p-isopropyltoluene	2.761	2.624	5.0	99	0.00	16.03
110	benzyl chloride	1.378	1.307	5.2	96	0.00	16.33
111	1,3-dichlorobenzene	1.438	1.474	-2.5	107	0.00	16.12
112	1,4-dichlorobenzene	1.461	1.437	1.6	105	0.00	16.21
113	1,2-dichlorobenzene	1.345	1.414	-5.1	109	0.00	16.61
114	n-butylbenzene	1.553	1.358	12.6	89	0.00	16.46
115	hexachloroethane	0.464	0.520	-12.1	110	0.00	16.87
116	1,2-dibromo-3-chloropropa	0.160	0.172	-7.5	108	0.00	17.43
117	1,3,5-Trichlorobenzene	1.220	1.164	4.6	98	0.00	17.59
118	1,2,4-trichlorobenzene	1.003	1.088	-8.5	113	0.00	18.25
119	hexachlorobutadiene	0.639	0.652	-2.0	106	0.00	18.36
120	naphthalene	2.319	2.502	-7.9	110	0.00	18.55
121	1,2,3-trichlorobenzene	0.948	1.063	-12.1	115	0.00	18.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C151365.D M1CS6691.M Mon Nov 13 22:46:18 2017

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICC6336
Lab FileID: 3C139652.D

Response Factor Report MS3C

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
Last Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Calibration Files
4 =3C139649.D 8 =3C139650.D 0.5 =3C139646.D 50 =3C139652.D
100 =3C139653.D 1 =3C139647.D 200 =3C139654.D 20 =3C139651.D
2 =3C139648.D 0.2 =3C139645.D = =

Compound	4	8	0.5	50	100	1	200	20	2	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------											
2) ethanol----The compound does not meet initial criteria.	0.157	0.163		0.181	0.182	0.118	0.179	0.177	0.166		0.165	12.92
3) tertiary butyl alcohol--The compound does not meet initial criteria.	0.950	1.122		1.167	1.183		1.202	1.194	0.979		1.114	9.48
4) 1,4-dioxane	0.062	0.091		0.108	0.110		0.109	0.105			0.097	19.23
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.478	0.461		0.439	0.421		0.423	0.450	0.563		0.462	10.62
7) dichlorodifluoromethane	0.496	0.504		0.510	0.475	0.365	0.481	0.508	0.419		0.470	10.98
8) chloromethane	0.477	0.494		0.493	0.474	0.504	0.484	0.497	0.494		0.490	2.08
9) 1,3-butadiene											0.000	-1.00
10) vinyl chloride	0.477	0.492		0.487	0.456	0.348	0.463	0.478	0.461		0.458	10.05
11) bromomethane	0.243	0.243		0.217	0.193	0.203	0.192	0.226	0.231		0.219	9.54
12) chloroethane	0.214	0.263		0.261	0.247	0.165	0.218	0.252	0.208		0.229	14.74
13) vinyl Bromide----The compound does not meet initial criteria.	0.263	0.294		0.299	0.285	0.229	0.280	0.292	0.240		0.273	9.66
14) trichlorofluoromethane	0.544	0.576		0.574	0.535	0.566	0.547	0.572	0.530		0.556	3.35
15) ethyl ether	0.190	0.197		0.198	0.200		0.201	0.198	0.173		0.194	5.07
16) 2-chloropropane	0.134	0.148		0.142	0.130		0.113	0.134	0.128		0.133	8.44
17) acrolein	0.047	0.050		0.066	0.063		0.062	0.063			0.059	13.28
18) freon 113	0.273	0.269		0.279	0.269	0.229	0.273	0.278	0.259		0.266	6.12
19) 1,1-dichloroethene	0.289	0.323	0.234	0.310	0.298	0.293	0.310	0.302	0.307		0.296	8.56
20) acetone	0.020	0.025		0.027	0.029		0.032	0.027	0.021		0.026	16.90
21) acetonitrile	0.043	0.046		0.048	0.046	0.039	0.046	0.048	0.041		0.045	7.41
22) iodomethane	0.218	0.285		0.392	0.403		0.416	0.342	0.197		0.322	27.91
----- Linear regression ----- Coefficient = 0.9985												

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              Response Ratio = -0.01307 + 0.41170 *A

23)  carbon disulfide
      1.262 1.211       1.105 1.063       1.077 1.142 1.560        1.203   14.39
24)  methylene chloride
      0.323 0.343       0.334 0.329 0.247 0.333 0.338 0.328        0.322    9.60
25)  methyl acetate
      0.280 0.267       0.289 0.273       0.273 0.300 0.307        0.284    5.24
26)  methyl tert butyl ether
      0.922 0.902       0.939 0.926 0.720 0.925 0.937 0.974        0.906    8.61
27)  trans-1,2-dichloroethene
      0.355 0.351       0.349 0.349 0.314 0.347 0.355 0.366        0.348    4.27
28)  hexane
      0.612 0.623 0.548 0.595 0.564 0.577 0.575 0.600 0.627        0.591    4.58
29)  di-isopropyl ether
      1.114 1.159 0.946 1.198 1.180 1.095 1.185 1.213 1.184        1.141    7.24
30)  ethyl tert-butyl ether
      1.024 1.010       1.075 1.064 1.036 1.067 1.081 1.047        1.050    2.41
31)  2-butanone
      0.031 0.035       0.036 0.038       0.037 0.037 0.023        0.034   15.11
32)  1,1-dichloroethane
      0.608 0.616 0.447 0.621 0.614 0.540 0.614 0.621 0.601        0.587    9.90
33)  chloroprene
      0.540 0.604       0.583 0.561 0.555 0.573 0.584 0.597        0.575    3.77
34)  acrylonitrile
      0.086 0.106       0.113 0.114       0.115 0.115 0.088        0.105   12.18
35)  vinyl acetate
            0.061       0.085 0.080       0.081 0.092              0.080   14.45
36)  ethyl acetate----The compound does not meet initial criteria.
            0.047       0.055 0.054       0.054 0.056              0.053    6.26
37)  2,2-dichloropropane
      0.452 0.515       0.527 0.519 0.428 0.529 0.522 0.500        0.499    7.64
38)  cis-1,2-dichloroethene
      0.368 0.385       0.386 0.383 0.302 0.378 0.381 0.379        0.370    7.58
39)  propionitrile
      0.049 0.052       0.055 0.053 0.044 0.053 0.055 0.050        0.051    7.38
40)  bromochloromethane
      0.221 0.236       0.226 0.222 0.175 0.222 0.230 0.210        0.218    8.60
41)  tetrahydrofuran
            0.029       0.043 0.043       0.043 0.046              0.041   15.88
42)  chloroform
      0.606 0.598 0.552 0.599 0.588 0.606 0.582 0.605 0.660        0.600    4.75
43)  tert-Butyl Formate
      0.056 0.083       0.102 0.112       0.122 0.095              0.095   24.46
            ----- Linear regression -----  Coefficient =  0.9968
              Response Ratio = -0.00616 + 0.11869 *A

44)  isobutyl alcohol
      0.027 0.030       0.029 0.028       0.028 0.029 0.033        0.029    6.12
45)  dibromofluoromethane (s)
      0.403 0.409 0.410 0.415 0.411 0.398 0.410 0.407 0.399 0.401  0.406    1.42
46)  methacrylonitrile
      0.123 0.129       0.139 0.137       0.134 0.142 0.132        0.134    4.85
47)  1,1,1-trichloroethane
      0.526 0.571       0.551 0.543 0.473 0.550 0.560 0.532        0.538    5.57
48)  cyclohexane
      0.572 0.583 0.505 0.591 0.552 0.577 0.563 0.594 0.602        0.571    5.11
49)  1,1-dichloropropene----The compound does not meet initial criteria.
      0.258 0.225       0.193 0.184 0.442 0.183 0.202 0.352        0.255   37.07
            ----- Linear regression -----  Coefficient =  0.9996
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              Response Ratio = 0.00592 + 0.18224 *A

50)  tert-amyl alcohol----The compound does not meet initial criteria.
      0.209 0.209       0.220 0.219 0.199 0.221 0.226 0.212        0.214    4.06
51)  carbon tetrachloride
      0.429 0.474       0.498 0.480 0.420 0.514 0.473 0.471        0.470    6.76

52) I   1,4-difluorobenzene   ----------------ISTD---------------------
53)  1,2-dichloroethane-d4 (s)
      0.292 0.293 0.297 0.295 0.301 0.290 0.307 0.298 0.295 0.296  0.296    1.61
54)  2,2,4-trimethylpentane
      1.078 1.103 1.001 1.068 1.036 1.154 1.057 1.118 1.133        1.083    4.51
55)  tert-amyl methyl ether
      0.148 0.161       0.171 0.167       0.170 0.166 0.129        0.159    9.78
56)  n-butyl alcohol----The compound does not meet initial criteria.
      0.014 0.012       0.011 0.010       0.010 0.011              0.011   11.75
57)  benzene
      1.010 1.004 0.950 0.970 0.950 1.034 0.958 1.007 1.039        0.991    3.55
58)  heptane
      0.226 0.242       0.231 0.227 0.226 0.230 0.240 0.213        0.229    3.92
59)  isopropyl acetate
      0.039 0.046       0.056 0.057       0.056 0.055              0.051   14.01
60)  1,2-dichloroethane
      0.304 0.295 0.247 0.294 0.292 0.280 0.290 0.304 0.309        0.290    6.39
61)  trichloroethene
      0.267 0.263 0.226 0.252 0.244 0.250 0.248 0.258 0.272        0.254    5.50
62)  ethyl acrylate
      0.266 0.283       0.300 0.291 0.257 0.290 0.300 0.275        0.283    5.55
63)  2-nitropropane
            0.056       0.063 0.061       0.065 0.067              0.063    6.54
64)  2-chloroethyl vinyl ether
      0.143 0.146 0.118 0.148 0.144 0.153 0.142 0.153 0.151        0.144    7.40
65)  methyl methacrylate
      0.050 0.059       0.067 0.067       0.067 0.069              0.063   11.58
66)  1,2-dichloropropane
      0.232 0.243 0.180 0.250 0.241 0.222 0.241 0.251 0.248        0.234    9.57
67)  methylcyclohexane
      0.518 0.531 0.397 0.508 0.487 0.512 0.496 0.533 0.525        0.501    8.34
68)  dibromomethane
      0.129 0.136       0.136 0.133 0.087 0.134 0.139 0.121        0.127   13.41
69)  bromodichloromethane
      0.282 0.291 0.213 0.301 0.302 0.258 0.305 0.303 0.305        0.285   10.86
70)  epichlorohydrin
      0.023 0.023       0.027 0.026       0.027 0.027 0.020        0.025   10.99
71)  cis-1,3-dichloropropene
      0.378 0.379 0.263 0.406 0.407 0.363 0.409 0.409 0.381        0.377   12.21
72)  4-methyl-2-pentanone
      0.035 0.039       0.040 0.040 0.028 0.039 0.043 0.034        0.037   12.87
73)  3-methyl-1-butanol
      0.005 0.006       0.008 0.008       0.009 0.008 0.005        0.007   23.65
            ----- Linear regression -----  Coefficient =  0.9976
              Response Ratio = -0.00486 + 0.00866 *A


74) I   chlorobenzene-d5      ----------------ISTD---------------------
75)  toluene-d8 (s)
      1.333 1.311 1.311 1.325 1.326 1.326 1.296 1.340 1.317 1.324  1.321    0.94
76)  toluene
      0.747 0.737 0.803 0.715 0.702 0.774 0.691 0.749 0.796        0.746    5.29
77)  trans-1,3-dichloropropene
```

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICC6336
Lab FileID: 3C139652.D

```
      0.342 0.361       0.391 0.403 0.298 0.393 0.390 0.357        0.367    9.54
 78)  ethyl methacrylate
      0.332 0.326       0.346 0.350 0.291 0.342 0.351 0.330        0.333    5.89
 79)  1,1,2-trichloroethane
      0.187 0.197       0.193 0.188 0.185 0.183 0.205 0.203        0.193    4.24
 80)  2-hexanone
      0.095 0.097       0.103 0.103 0.080 0.102 0.107 0.095        0.098    8.45
 81)  tetrachloroethene
      0.370 0.369 0.268 0.348 0.338 0.323 0.329 0.370 0.360        0.342    9.61
 82)  1,3-dichloropropane
      0.425 0.404 0.339 0.407 0.401 0.418 0.392 0.425 0.456        0.408    7.78
 83)  butyl acetate
      0.184 0.171       0.181 0.181 0.129 0.183 0.183 0.199        0.176   11.63
 84)  dibromochloromethane
      0.241 0.243       0.269 0.277 0.214 0.274 0.263 0.241        0.253    8.58
 85)  1,2-dibromoethane
      0.236 0.242       0.246 0.244 0.224 0.236 0.251 0.248        0.241    3.64
 86)  3,3-Dimethyl-1-Butanol
      0.021 0.022       0.028 0.030       0.031 0.027 0.019        0.025   18.93
 87)  n-butyl ether
      1.282 1.301 1.039 1.288 1.273 1.279 1.272 1.334 1.382        1.272    7.43
 88)  chlorobenzene
      0.869 0.841 0.795 0.810 0.803 0.910 0.786 0.846 0.898        0.840    5.36
 89)  1,1,1,2-tetrachloroethane
      0.272 0.272       0.284 0.285 0.240 0.282 0.291 0.273        0.275    5.70
 90)  ethylbenzene
      1.422 1.428 1.364 1.349 1.327 1.463 1.292 1.424 1.523 1.659  1.425    7.49
 91)  m,p-xylene
      0.570 0.564 0.542 0.535 0.525 0.549 0.519 0.567 0.616 0.549  0.554    5.00
 92)  o-xylene
      1.102 1.098 1.103 1.054 1.041 1.180 1.040 1.111 1.160 1.251  1.114    6.01
 93)  styrene
      0.910 0.917 0.805 0.887 0.882 0.880 0.881 0.928 0.936        0.892    4.39
 94)  bromoform
      0.150 0.156       0.186 0.196       0.206 0.177 0.152        0.175   12.92
 95)  butyl acrylate
      0.450 0.471 0.343 0.500 0.510 0.431 0.528 0.496 0.448        0.464   11.98
 96)  isopropylbenzene
      1.396 1.446 1.353 1.392 1.359 1.389 1.367 1.447 1.533 1.495  1.418    4.29
 97)  cis-1,4-dichloro-2-butene----The compound does not meet initial criteria.
      0.075 0.100       0.136 0.137       0.141 0.158              0.124   24.83
           ----- Linear regression -----  Coefficient =  0.9971
             Response Ratio = -0.00462 + 0.14210 *A


 98) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 99)  4-bromofluorobenzene (s)
      0.888 0.879 0.880 0.861 0.841 0.879 0.823 0.894 0.885 0.875  0.870    2.58
100)  bromobenzene
      0.688 0.674       0.641 0.619 0.691 0.610 0.702 0.702        0.666    5.58
101)  1,1,2,2-tetrachloroethane
      0.553 0.555 0.402 0.560 0.549 0.541 0.549 0.590 0.550        0.539    9.87
102)  trans-1,4-dichloro-2-butene
      0.137 0.145       0.163 0.166       0.169 0.169              0.158    8.67
103)  1,2,3-trichloropropane
      0.160 0.169       0.178 0.173 0.122 0.173 0.191 0.190        0.170   12.83
104)  n-propylbenzene
      3.147 3.220 2.775 2.982 2.821 3.263 2.751 3.188 3.384        3.059    7.63
105)  2-chlorotoluene
      0.641 0.643 0.548 0.623 0.590 0.671 0.585 0.641 0.684        0.625    6.98
```

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICC6336
Lab FileID: 3C139652.D

```
106)  4-chlorotoluene
       0.647 0.667       0.636 0.625 0.702 0.615 0.706 0.771        0.671    7.80
107)  1,3,5-trimethylbenzene
       2.234 2.190 2.015 2.123 2.055 2.239 2.035 2.261 2.366        2.169    5.49
108)  tert-butylbenzene
       2.041 2.035 1.932 1.920 1.863 2.085 1.849 2.027 2.181 2.177  2.011    5.89
109)  1,2,4-trimethylbenzene
       2.254 2.201 2.239 2.161 2.125 2.355 2.091 2.291 2.329        2.227    4.07
110)  sec-butylbenzene
       3.005 3.016 2.854 2.871 2.789 3.025 2.727 3.043 3.150 3.142  2.962    4.88
111)  1,3-dichlorobenzene
       1.323 1.305 1.230 1.254 1.230 1.375 1.208 1.335 1.506        1.307    7.15
112)  p-isopropyltoluene
       2.614 2.601 2.490 2.506 2.443 2.620 2.397 2.647 2.738 2.801  2.586    4.94
113)  1,4-dichlorobenzene
       1.350 1.306 1.330 1.255 1.236 1.358 1.222 1.309 1.421        1.310    4.89
114)  1,2-dichlorobenzene
       1.188 1.216 1.077 1.173 1.174 1.253 1.150 1.241 1.327        1.200    5.91
115)  n-butylbenzene
       1.276 1.318 1.189 1.293 1.241 1.405 1.239 1.329 1.377        1.296    5.34
116)  1,2-dibromo-3-chloropropane
       0.114 0.135       0.151 0.158       0.156 0.149 0.119        0.140   12.86
117)  1,3,5-Trichlorobenzene
       1.184 1.154 1.005 1.133 1.113 1.246 1.066 1.180 1.246        1.147    6.91
118)  1,2,4-trichlorobenzene
       1.032 0.988 0.936 1.031 1.004 1.026 0.957 1.074 1.089 1.017  1.015    4.67
119)  hexachlorobutadiene
       0.584 0.594 0.433 0.606 0.578 0.563 0.552 0.617 0.583        0.568    9.61
120)  naphthalene
       2.216 2.191 2.289 2.301 2.217 2.278 2.065 2.405 2.402 2.403  2.277    4.82
121)  1,2,3-trichlorobenzene
       0.992 0.963 0.819 0.976 0.953 1.034 0.894 1.028 1.014 0.980  0.965    6.78
122)  hexachloroethane
       0.263 0.273       0.348 0.371       0.397 0.317              0.328   16.28
123)  Benzyl chloride
       0.803 0.861       1.099 1.143       1.167 1.071              1.024   14.99
124)  2-ethylhexyl acrylate----The compound does not meet initial criteria.
       0.580 0.573       0.698 0.714       0.700 0.645 0.602        0.645    9.36
125)  2-methylnaphthalene
       1.693 1.647 1.499 1.722 1.621 1.621 1.438 1.795 1.915        1.661    8.68
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M3C6336.M         Tue Oct 24 11:16:46 2017   MS3C
```

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICV6336
Lab FileID: 3C139657.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3C6336\3C139657.D Vial: 14
Acq On : 20 Oct 2017 1:18 am Operator: PrashanS
Sample : ICV6336-50 Inst : MS3C
Misc : MS19616,V3C6336,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
Last Update : Tue Oct 24 11:15:41 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	103	0.00	3.11
2		ethanol	0.165	0.184	-11.5	105	0.00	2.16
3		tertiary butyl alcohol	1.114	1.239	-11.2	110	0.00	3.22
4		1,4-dioxane	0.097	0.120	-23.7	115	0.00	7.45
5	I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	5.74
6		chlorodifluoromethane	0.462	0.416	10.0	97	0.00	1.11
7		dichlorodifluoromethane	0.470	0.423	10.0	85	0.00	1.08
8		chloromethane	0.490	0.468	4.5	97	0.00	1.25
9		1,3-butadiene		----------NA----------				
10		vinyl chloride	0.458	0.422	7.9	89	0.00	1.31
11		bromomethane	0.219	0.194	11.4	91	0.00	1.59
12		chloroethane	0.229	0.243	-6.1	95	0.00	1.67
13		vinyl Bromide	0.273	0.466	-70.7#	160	0.00	1.83
14		trichlorofluoromethane	0.556	0.534	4.0	95	0.00	1.86
15		ethyl ether	0.194	0.217	-11.9	112	0.00	2.16
16		2-chloropropane	0.133	0.151	-13.5	109	0.00	2.25
17		acrolein	0.059	0.071	-20.3	110	0.00	2.36
18		freon 113	0.266	0.308	-15.8	113	0.00	2.35
19		1,1-dichloroethene	0.296	0.327	-10.5	108	0.00	2.37
20		acetone	0.026	0.028	-7.7	105	0.00	2.54
21		acetonitrile	0.045	0.048	-6.7	101	0.00	2.94
		----------	True	Calc.	% Drift	----------		
22		iodomethane	50.000	45.573	8.9	95	0.00	2.55
		----------	AvgRF	CCRF	% Dev	----------		
23		carbon disulfide	1.203	1.193	0.8	111	0.00	2.57
24		methylene chloride	0.322	0.365	-13.4	112	0.00	3.00
25		methyl acetate	0.284	0.284	0.0	101	0.00	2.88
26		methyl tert butyl ether	0.906	1.012	-11.7	111	0.00	3.27
27		trans-1,2-dichloroethene	0.348	0.385	-10.6	113	0.00	3.29
28		hexane	0.591	0.523	11.5	90	0.00	3.57
29		di-isopropyl ether	1.141	1.286	-12.7	110	0.00	4.01
30		ethyl tert-butyl ether	1.050	1.142	-8.8	109	0.00	4.59
31		2-butanone	0.034	0.040	-17.6	115	0.00	5.00
32		1,1-dichloroethane	0.587	0.680	-15.8	112	0.00	3.97
33		chloroprene	0.575	0.650	-13.0	114	0.00	4.05
34		acrylonitrile	0.105	0.121	-15.2	110	0.00	3.45
35		vinyl acetate	0.080	0.083	-3.8	100	0.00	4.11
36		ethyl acetate	0.053	0.062	-17.0	116	0.00	5.06
37		2,2-dichloropropane	0.499	0.577	-15.6	112	0.00	4.82

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICV6336
Lab FileID: 3C139657.D

38		cis-1,2-dichloroethene	0.370	0.422	-14.1	112	0.00	4.89
39		propionitrile	0.051	0.054	-5.9	102	0.00	5.19
40		bromochloromethane	0.218	0.242	-11.0	110	0.00	5.25
41		tetrahydrofuran	0.041	0.047	-14.6	113	0.00	5.27
42		chloroform	0.600	0.649	-8.2	111	0.00	5.38
		----------	True	Calc.	% Drift	----------		
43		tert-Butyl Formate	50.000	44.808	10.4	100	0.00	5.41
		----------	AvgRF	CCRF	% Dev	----------		
44		isobutyl alcohol	0.029	0.031	-6.9	110	0.00	6.03
45	S	dibromofluoromethane (s)	0.406	0.408	-0.5	101	0.00	5.61
46		methacrylonitrile	0.134	0.145	-8.2	107	0.00	5.35
47		1,1,1-trichloroethane	0.538	0.606	-12.6	113	0.00	5.52
48		cyclohexane	0.571	0.582	-1.9	101	0.00	5.46
		----------	True	Calc.	% Drift	----------		
49		1,1-dichloropropene	50.000	56.559	-13.1	113	0.00	5.76
		----------	AvgRF	CCRF	% Dev	----------		
50		tert-amyl alcohol	0.214	0.237	-10.7	110	0.00	6.20
51		carbon tetrachloride	0.470	0.522	-11.1	107	0.00	5.68
52	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	6.66
53	S	1,2-dichloroethane-d4 (s)	0.296	0.294	0.7	103	0.00	6.08
54		2,2,4-trimethylpentane	1.083	1.152	-6.4	112	0.00	6.03
55		tert-amyl methyl ether	0.159	0.178	-11.9	108	0.00	6.20
56		n-butyl alcohol	0.011	0.011	0.0	112	0.00	5.71
57		benzene	0.991	1.035	-4.4	111	0.00	6.02
58		heptane	0.229	0.272	-18.8	122	0.00	6.34
59		isopropyl acetate	0.051	0.059	-15.7	109	0.00	6.28
60		1,2-dichloroethane	0.290	0.321	-10.7	113	0.00	6.19
61		trichloroethene	0.254	0.271	-6.7	111	0.00	6.91
62		ethyl acrylate	0.283	0.318	-12.4	110	0.00	7.18
63		2-nitropropane	0.063	0.069	-9.5	113	0.00	8.02
64		2-chloroethyl vinyl ether	0.144	0.153	-6.3	107	0.00	8.06
65		methyl methacrylate	0.063	0.072	-14.3	111	0.00	7.45
66		1,2-dichloropropane	0.234	0.269	-15.0	111	0.00	7.25
67		methylcyclohexane	0.501	0.497	0.8	101	0.00	7.02
68		dibromomethane	0.127	0.146	-15.0	111	0.00	7.40
69		bromodichloromethane	0.285	0.329	-15.4	113	0.00	7.62
70		epichlorohydrin	0.025	0.027	-8.0	105	0.00	8.14
71		cis-1,3-dichloropropene	0.377	0.440	-16.7	112	0.00	8.18
72		4-methyl-2-pentanone	0.037	0.041	-10.8	105	0.00	8.38
		----------	True	Calc.	% Drift	----------		
73		3-methyl-1-butanol	1000.000	985.165	1.5	107	0.00	8.51
		----------	AvgRF	CCRF	% Dev	----------		
74	I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	9.86
75	S	toluene-d8 (s)	1.321	1.336	-1.1	103	0.00	8.40
76		toluene	0.746	0.767	-2.8	110	0.00	8.47
77		trans-1,3-dichloropropene	0.367	0.428	-16.6	112	0.00	8.83
78		ethyl methacrylate	0.333	0.360	-8.1	106	0.00	8.89
79		1,1,2-trichloroethane	0.193	0.208	-7.8	110	0.00	9.00
80		2-hexanone	0.098	0.106	-8.2	106	0.00	9.25
81		tetrachloroethene	0.342	0.387	-13.2	114	0.00	9.00
82		1,3-dichloropropane	0.408	0.439	-7.6	110	0.00	9.16
83		butyl acetate	0.176	0.202	-14.8	114	0.00	9.36

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICV6336
Lab FileID: 3C139657.D

			True	Calc.	% Drift			
84		dibromochloromethane	0.253	0.299	-18.2	114	0.00	9.34
85		1,2-dibromoethane	0.241	0.268	-11.2	111	0.00	9.44
86		3,3-Dimethyl-1-Butanol	0.025	0.031	-24.0	112	0.00	9.46
87		n-butyl ether	1.272	1.367	-7.5	108	0.00	9.97
88		chlorobenzene	0.840	0.861	-2.5	109	0.00	9.89
89		1,1,1,2-tetrachloroethane	0.275	0.307	-11.6	110	0.00	9.98
90		ethylbenzene	1.425	1.450	-1.8	110	0.00	9.97
91		m,p-xylene	0.554	0.578	-4.3	110	0.00	10.08
92		o-xylene	1.114	1.116	-0.2	108	0.00	10.43
93		styrene	0.892	0.937	-5.0	108	0.00	10.46
94		bromoform	0.175	0.198	-13.1	109	0.00	10.63
95		butyl acrylate	0.464	0.541	-16.6	111	0.00	10.45
96		isopropylbenzene	1.418	1.472	-3.8	108	0.00	10.74
			True	Calc.	% Drift			
97		cis-1,4-dichloro-2-butene	50.000	52.065	-4.1	107	0.00	10.88
			AvgRF	CCRF	% Dev			
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	11.86
99	S	4-bromofluorobenzene (s)	0.870	0.870	0.0	103	0.00	10.91
100		bromobenzene	0.666	0.692	-3.9	109	0.00	11.02
101		1,1,2,2-tetrachloroethane	0.539	0.605	-12.2	110	0.00	11.08
102		trans-1,4-dichloro-2-bute	0.158	0.199	-25.9	124	0.00	11.13
103		1,2,3-trichloropropane	0.170	0.190	-11.8	108	0.00	11.11
104		n-propylbenzene	3.059	3.194	-4.4	109	0.00	11.09
105		2-chlorotoluene	0.625	0.660	-5.6	108	0.00	11.18
106		4-chlorotoluene	0.671	0.688	-2.5	110	0.00	11.28
107		1,3,5-trimethylbenzene	2.169	2.254	-3.9	108	0.00	11.25
108		tert-butylbenzene	2.011	2.105	-4.7	111	0.00	11.50
109		1,2,4-trimethylbenzene	2.227	2.314	-3.9	109	0.00	11.55
110		sec-butylbenzene	2.962	3.074	-3.8	109	0.00	11.68
111		1,3-dichlorobenzene	1.307	1.354	-3.6	110	0.00	11.79
112		p-isopropyltoluene	2.586	2.724	-5.3	110	0.00	11.81
113		1,4-dichlorobenzene	1.310	1.369	-4.5	111	0.00	11.87
114		1,2-dichlorobenzene	1.200	1.284	-7.0	111	0.00	12.18
115		n-butylbenzene	1.296	1.370	-5.7	108	0.00	12.13
116		1,2-dibromo-3-chloropropa	0.140	0.165	-17.9	111	0.00	12.81
117		1,3,5-Trichlorobenzene	1.147	1.262	-10.0	113	0.00	12.93
118		1,2,4-trichlorobenzene	1.015	1.080	-6.4	106	0.00	13.43
119		hexachlorobutadiene	0.568	0.657	-15.7	110	0.00	13.52
120		naphthalene	2.277	2.420	-6.3	107	0.00	13.63
121		1,2,3-trichlorobenzene	0.965	1.052	-9.0	109	0.00	13.81
122		hexachloroethane	0.328	0.377	-14.9	110	0.00	12.33
123		Benzyl chloride	1.024	1.016	0.8	94	0.00	12.00
124		2-ethylhexyl acrylate	0.645	0.880	-36.4#	128	0.00	13.57
125		2-methylnaphthalene	1.661	1.665	-0.2	98	0.00	14.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3C139652.D M3C6336.M Tue Oct 24 11:18:23 2017 MS3C

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICV6336
Lab FileID: 3C139658.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3C6336\3C139658.D Vial: 15
Acq On : 20 Oct 2017 1:45 am Operator: PrashanS
Sample : ICV6336-50 Inst : MS3C
Misc : MS19616,V3C6336,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
Last Update : Tue Oct 24 11:15:41 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	96	-0.01	3.09
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	5.74
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		1,3-butadiene		----------NA----------				
10		vinyl chloride		----------NA----------				
11		bromomethane		----------NA----------				
12		chloroethane		----------NA----------				
13		vinyl Bromide		----------NA----------				
14		trichlorofluoromethane		----------NA----------				
15		ethyl ether		----------NA----------				
16		2-chloropropane		----------NA----------				
17		acrolein		----------NA----------				
18		freon 113		----------NA----------				
19		1,1-dichloroethene		----------NA----------				
20		acetone		----------NA----------				
21		acetonitrile	0.045	0.049	-8.9	103	0.00	2.93
		----------	True	Calc.	% Drift	----------		
22		iodomethane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
23		carbon disulfide		----------NA----------				
24		methylene chloride		----------NA----------				
25		methyl acetate		----------NA----------				
26		methyl tert butyl ether		----------NA----------				
27		trans-1,2-dichloroethene		----------NA----------				
28		hexane		----------NA----------				
29		di-isopropyl ether		----------NA----------				
30		ethyl tert-butyl ether		----------NA----------				
31		2-butanone		----------NA----------				
32		1,1-dichloroethane		----------NA----------				
33		chloroprene		----------NA----------				
34		acrylonitrile		----------NA----------				
35		vinyl acetate		----------NA----------				
36		ethyl acetate		----------NA----------				
37		2,2-dichloropropane		----------NA----------				

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICV6336
Lab FileID: 3C139658.D

38		cis-1,2-dichloroethene		----------NA----------					
39		propionitrile		----------NA----------					
40		bromochloromethane		----------NA----------					
41		tetrahydrofuran		----------NA----------					
42		chloroform		----------NA----------					
		----------	True	Calc.	% Drift	----------			
43		tert-Butyl Formate		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
44		isobutyl alcohol		----------NA----------					
45	S	dibromofluoromethane (s)	0.406	0.402	1.0	99	0.00	5.61	
46		methacrylonitrile		----------NA----------					
47		1,1,1-trichloroethane		----------NA----------					
48		cyclohexane		----------NA----------					
		----------	True	Calc.	% Drift	----------			
49		1,1-dichloropropene		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
50		tert-amyl alcohol		----------NA----------					
51		carbon tetrachloride		----------NA----------					
52	I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	6.66	
53	S	1,2-dichloroethane-d4 (s)	0.296	0.294	0.7	101	0.00	6.08	
54		2,2,4-trimethylpentane		----------NA----------					
55		tert-amyl methyl ether		----------NA----------					
56		n-butyl alcohol		----------NA----------					
57		benzene		----------NA----------					
58		heptane		----------NA----------					
59		isopropyl acetate		----------NA----------					
60		1,2-dichloroethane		----------NA----------					
61		trichloroethene		----------NA----------					
62		ethyl acrylate		----------NA----------					
63		2-nitropropane		----------NA----------					
64		2-chloroethyl vinyl ether		----------NA----------					
65		methyl methacrylate		----------NA----------					
66		1,2-dichloropropane		----------NA----------					
67		methylcyclohexane		----------NA----------					
68		dibromomethane		----------NA----------					
69		bromodichloromethane		----------NA----------					
70		epichlorohydrin		----------NA----------					
71		cis-1,3-dichloropropene		----------NA----------					
72		4-methyl-2-pentanone		----------NA----------					
		----------	True	Calc.	% Drift	----------			
73		3-methyl-1-butanol		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
74	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	9.86	
75	S	toluene-d8 (s)	1.321	1.326	-0.4	100	0.00	8.40	
76		toluene		----------NA----------					
77		trans-1,3-dichloropropene		----------NA----------					
78		ethyl methacrylate		----------NA----------					
79		1,1,2-trichloroethane		----------NA----------					
80		2-hexanone		----------NA----------					
81		tetrachloroethene		----------NA----------					
82		1,3-dichloropropane		----------NA----------					
83		butyl acetate		----------NA----------					

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6336-ICV6336
Lab FileID: 3C139658.D

84		dibromochloromethane			----------NA----------				
85		1,2-dibromoethane			----------NA----------				
86		3,3-Dimethyl-1-Butanol			----------NA----------				
87		n-butyl ether			----------NA----------				
88		chlorobenzene			----------NA----------				
89		1,1,1,2-tetrachloroethane			----------NA----------				
90		ethylbenzene			----------NA----------				
91		m,p-xylene			----------NA----------				
92		o-xylene			----------NA----------				
93		styrene			----------NA----------				
94		bromoform			----------NA----------				
95		butyl acrylate			----------NA----------				
96		isopropylbenzene			----------NA----------				
		----------	True	Calc.	% Drift	----------			
97		cis-1,4-dichloro-2-butene			----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------			
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	11.86	
99	S	4-bromofluorobenzene (s)	0.870	0.873	-0.3	101	0.00	10.91	
100		bromobenzene			----------NA----------				
101		1,1,2,2-tetrachloroethane			----------NA----------				
102		trans-1,4-dichloro-2-bute			----------NA----------				
103		1,2,3-trichloropropane			----------NA----------				
104		n-propylbenzene			----------NA----------				
105		2-chlorotoluene			----------NA----------				
106		4-chlorotoluene			----------NA----------				
107		1,3,5-trimethylbenzene			----------NA----------				
108		tert-butylbenzene			----------NA----------				
109		1,2,4-trimethylbenzene			----------NA----------				
110		sec-butylbenzene			----------NA----------				
111		1,3-dichlorobenzene			----------NA----------				
112		p-isopropyltoluene			----------NA----------				
113		1,4-dichlorobenzene			----------NA----------				
114		1,2-dichlorobenzene			----------NA----------				
115		n-butylbenzene			----------NA----------				
116		1,2-dibromo-3-chloropropa			----------NA----------				
117		1,3,5-Trichlorobenzene			----------NA----------				
118		1,2,4-trichlorobenzene			----------NA----------				
119		hexachlorobutadiene			----------NA----------				
120		naphthalene			----------NA----------				
121		1,2,3-trichlorobenzene			----------NA----------				
122		hexachloroethane			----------NA----------				
123		Benzyl chloride			----------NA----------				
124		2-ethylhexyl acrylate			----------NA----------				
125		2-methylnaphthalene			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3C139652.D M3C6336.M Tue Oct 24 11:18:24 2017 MS3C

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6357-CC6336
Lab FileID: 3C140182.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3C6356\3C140182.D Vial: 2
Acq On : 6 Nov 2017 8:03 am Operator: PrashanS
Sample : CC6336-20 Inst : MS3C
Misc : MS21659,V3C6357,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
Last Update : Tue Oct 24 11:15:41 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	104	-0.01	3.09
2		ethanol	0.165	0.205	-24.2#	121	0.00	2.16
3		tertiary butyl alcohol	1.114	1.192	-7.0	104	0.00	3.21
4		1,4-dioxane	0.097	0.124	-27.8#	124	0.00	7.45
5	I	pentafluorobenzene	1.000	1.000	0.0	111	0.00	5.74
6		chlorodifluoromethane	0.462	0.452	2.2	111	0.00	1.11
7		dichlorodifluoromethane	0.470	0.424	9.8	93	0.00	1.08
8		chloromethane	0.490	0.448	8.6	100	0.00	1.24
9		1,3-butadiene		----------NA----------				
10		vinyl chloride	0.458	0.418	8.7	97	0.00	1.31
11		bromomethane	0.219	0.214	2.3	105	0.00	1.59
12		chloroethane	0.229	0.230	-0.4	101	0.00	1.67
13		vinyl Bromide	0.273	0.262	4.0	99	0.00	1.83
14		trichlorofluoromethane	0.556	0.509	8.5	99	0.00	1.86
15		ethyl ether	0.194	0.218	-12.4	122	0.00	2.16
16		2-chloropropane	0.133	0.144	-8.3	119	0.00	2.25
17		acrolein	0.059	0.073	-23.7#	129	0.00	2.36
18		freon 113	0.266	0.273	-2.6	109	0.00	2.35
19		1,1-dichloroethene	0.296	0.317	-7.1	116	0.00	2.37
20		acetone	0.026	0.029	-11.5	121	0.00	2.53
21		acetonitrile	0.045	0.053	-17.8	121	0.00	2.93
		----------	True	Calc.	% Drift	----------		
22		iodomethane	20.000	15.482	22.6#	93	0.00	2.54
		----------	AvgRF	CCRF	% Dev	----------		
23		carbon disulfide	1.203	1.113	7.5	108	0.00	2.56
24		methylene chloride	0.322	0.361	-12.1	118	0.00	3.00
25		methyl acetate	0.284	0.308	-8.5	114	0.00	2.88
26		methyl tert butyl ether	0.906	0.982	-8.4	116	-0.01	3.27
27		trans-1,2-dichloroethene	0.348	0.362	-4.0	113	0.00	3.28
28		hexane	0.591	0.579	2.0	107	0.00	3.56
29		di-isopropyl ether	1.141	1.309	-14.7	120	-0.01	4.01
30		ethyl tert-butyl ether	1.050	1.121	-6.8	115	0.00	4.58
31		2-butanone	0.034	0.040	-17.6	121	0.00	5.00
32		1,1-dichloroethane	0.587	0.668	-13.8	119	0.00	3.97
33		chloroprene	0.575	0.585	-1.7	111	0.00	4.04
34		acrylonitrile	0.105	0.123	-17.1	118	-0.01	3.43
35		vinyl acetate	0.080	0.074	7.5	89	0.00	4.10
36		ethyl acetate	0.053	0.061	-15.1	121	0.00	5.05
37		2,2-dichloropropane	0.499	0.463	7.2	98	0.00	4.82

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6357-CC6336
Lab FileID: 3C140182.D

38		cis-1,2-dichloroethene	0.370	0.398	-7.6	116	0.00	4.89
39		propionitrile	0.051	0.058	-13.7	116	-0.01	5.18
40		bromochloromethane	0.218	0.246	-12.8	119	0.00	5.24
41		tetrahydrofuran	0.041	0.042	-2.4	102	0.01	5.28
42		chloroform	0.600	0.628	-4.7	115	0.00	5.38
		----------	True	Calc.	% Drift	----------		
43		tert-Butyl Formate	20.000	4.777	76.1#	15	0.00	5.40
		----------	AvgRF	CCRF	% Dev	----------		
44		isobutyl alcohol	0.029	0.029	0.0	112	-0.02	6.02
45	S	dibromofluoromethane (s)	0.406	0.434	-6.9	118	-0.01	5.60
46		methacrylonitrile	0.134	0.144	-7.5	113	0.00	5.34
47		1,1,1-trichloroethane	0.538	0.560	-4.1	111	0.00	5.51
48		cyclohexane	0.571	0.542	5.1	101	0.00	5.46
		----------	True	Calc.	% Drift	----------		
49		1,1-dichloropropene	20.000	20.281	-1.4	109	-0.01	5.75
		----------	AvgRF	CCRF	% Dev	----------		
50		tert-amyl alcohol	0.214	0.221	-3.3	108	0.00	6.20
51		carbon tetrachloride	0.470	0.504	-7.2	118	0.00	5.68
52	I	1,4-difluorobenzene	1.000	1.000	0.0	115	0.00	6.65
53	S	1,2-dichloroethane-d4 (s)	0.296	0.310	-4.7	120	0.00	6.08
54		2,2,4-trimethylpentane	1.083	1.024	5.4	105	0.00	6.03
55		tert-amyl methyl ether	0.159	0.164	-3.1	113	0.00	6.20
56		n-butyl alcohol	0.011	0.011	0.0	111	-0.01	5.71
57		benzene	0.991	0.978	1.3	111	0.00	6.02
58		heptane	0.229	0.222	3.1	106	0.00	6.33
59		isopropyl acetate	0.051	0.056	-9.8	119	0.00	6.29
60		1,2-dichloroethane	0.290	0.318	-9.7	120	0.00	6.18
61		trichloroethene	0.254	0.253	0.4	112	0.00	6.90
62		ethyl acrylate	0.283	0.309	-9.2	118	0.00	7.17
63		2-nitropropane	0.063	0.059	6.3	101	0.00	8.01
64		2-chloroethyl vinyl ether	0.144	0.121	16.0	91	-0.01	8.05
65		methyl methacrylate	0.063	0.069	-9.5	116	0.00	7.45
66		1,2-dichloropropane	0.234	0.258	-10.3	118	0.00	7.25
67		methylcyclohexane	0.501	0.482	3.8	104	-0.01	7.01
68		dibromomethane	0.127	0.141	-11.0	117	0.00	7.40
69		bromodichloromethane	0.285	0.319	-11.9	121	0.00	7.62
70		epichlorohydrin	0.025	0.027	-8.0	114	0.00	8.13
71		cis-1,3-dichloropropene	0.377	0.400	-6.1	113	0.00	8.18
72		4-methyl-2-pentanone	0.037	0.041	-10.8	109	0.00	8.37
		----------	True	Calc.	% Drift	----------		
73		3-methyl-1-butanol	400.000	319.479	20.1#	93	0.00	8.50
		----------	AvgRF	CCRF	% Dev	----------		
74	I	chlorobenzene-d5	1.000	1.000	0.0	119	0.00	9.85
75	S	toluene-d8 (s)	1.321	1.277	3.3	114	0.00	8.40
76		toluene	0.746	0.685	8.2	109	0.00	8.46
77		trans-1,3-dichloropropene	0.367	0.380	-3.5	116	0.00	8.82
78		ethyl methacrylate	0.333	0.340	-2.1	116	0.00	8.89
79		1,1,2-trichloroethane	0.193	0.196	-1.6	114	0.00	9.00
80		2-hexanone	0.098	0.103	-5.1	115	0.00	9.25
81		tetrachloroethene	0.342	0.334	2.3	108	0.00	9.00
82		1,3-dichloropropane	0.408	0.416	-2.0	117	0.00	9.16
83		butyl acetate	0.176	0.182	-3.4	118	0.00	9.36

Continuing Calibration Summary

Job Number: JC54422 **Sample:** V3C6357-CC6336
Account: TRCNYNYB TRC **Lab FileID:** 3C140182.D
Project: K710, 168 8th Street, Brooklyn, NY

84		dibromochloromethane	0.253	0.292	-15.4	132	0.00	9.34
85		1,2-dibromoethane	0.241	0.248	-2.9	117	0.00	9.44
86		3,3-Dimethyl-1-Butanol	0.025	0.022	12.0	97	0.00	9.45
87		n-butyl ether	1.272	1.313	-3.2	117	0.00	9.97
88		chlorobenzene	0.840	0.813	3.2	115	0.00	9.88
89		1,1,1,2-tetrachloroethane	0.275	0.285	-3.6	117	0.00	9.97
90		ethylbenzene	1.425	1.324	7.1	111	0.00	9.96
91		m,p-xylene	0.554	0.527	4.9	111	0.00	10.08
92		o-xylene	1.114	1.036	7.0	111	0.00	10.42
93		styrene	0.892	0.877	1.7	113	0.00	10.46
94		bromoform	0.175	0.199	-13.7	134	0.00	10.63
95		butyl acrylate	0.464	0.511	-10.1	123	0.00	10.45
96		isopropylbenzene	1.418	1.345	5.1	111	0.00	10.74
		----------	True	Calc.	% Drift	----------		
97		cis-1,4-dichloro-2-butene	20.000	22.804	-14.0	114	0.00	10.88
		----------	AvgRF	CCRF	% Dev	----------		
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	122	0.00	11.85
99	S	4-bromofluorobenzene (s)	0.870	0.909	-4.5	124	0.00	10.91
100		bromobenzene	0.666	0.639	4.1	111	0.00	11.02
101		1,1,2,2-tetrachloroethane	0.539	0.571	-5.9	118	0.00	11.07
102		trans-1,4-dichloro-2-bute	0.158	0.162	-2.5	117	0.00	11.13
103		1,2,3-trichloropropane	0.170	0.185	-8.8	118	0.00	11.10
104		n-propylbenzene	3.059	2.899	5.2	111	0.00	11.09
105		2-chlorotoluene	0.625	0.603	3.5	115	0.00	11.17
106		4-chlorotoluene	0.671	0.636	5.2	110	0.00	11.27
107		1,3,5-trimethylbenzene	2.169	2.013	7.2	109	0.00	11.25
108		tert-butylbenzene	2.011	1.825	9.2	110	0.00	11.50
109		1,2,4-trimethylbenzene	2.227	2.113	5.1	113	0.00	11.55
110		sec-butylbenzene	2.962	2.757	6.9	111	0.00	11.68
111		1,3-dichlorobenzene	1.307	1.231	5.8	112	0.00	11.79
112		p-isopropyltoluene	2.586	2.386	7.7	110	0.00	11.80
113		1,4-dichlorobenzene	1.310	1.253	4.4	117	0.00	11.87
114		1,2-dichlorobenzene	1.200	1.163	3.1	114	0.00	12.17
115		n-butylbenzene	1.296	1.202	7.3	110	0.00	12.12
116		1,2-dibromo-3-chloropropa	0.140	0.148	-5.7	122	0.00	12.81
117		1,3,5-Trichlorobenzene	1.147	1.080	5.8	112	0.00	12.92
118		1,2,4-trichlorobenzene	1.015	1.010	0.5	115	0.00	13.43
119		hexachlorobutadiene	0.568	0.551	3.0	109	0.00	13.52
120		naphthalene	2.277	2.216	2.7	112	0.00	13.62
121		1,2,3-trichlorobenzene	0.965	0.987	-2.3	117	0.00	13.81
122		hexachloroethane	0.328	0.375	-14.3	144	0.00	12.33
123		Benzyl chloride	1.024	0.865	15.5	98	0.00	12.00
124		2-ethylhexyl acrylate	0.645	0.574	11.0	108	0.00	13.57
125		2-methylnaphthalene	1.661	1.734	-4.4	118	0.00	14.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3C139651.D M3C6336.M Mon Nov 06 15:11:02 2017 MS3C

6.9.10

6

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6357-CC6336
Lab FileID: 3C140206.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\v3c6357\3c140206.d Vial: 20
Acq On : 6 Nov 2017 8:35 pm Operator: PrashanS
Sample : cc6336-50 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	94	0.00	3.10
2		ethanol	0.165	0.213	-29.1#	111	0.00	2.16
3		tertiary butyl alcohol	1.114	1.182	-6.1	95	0.00	3.21
4		1,4-dioxane	0.097	0.134	-38.1#	117	0.00	7.44
5	I	pentafluorobenzene	1.000	1.000	0.0	108	0.00	5.74
6		chlorodifluoromethane	0.462	0.437	5.4	107	0.00	1.11
7		dichlorodifluoromethane	0.470	0.367	21.9#	77	0.00	1.08
8		chloromethane	0.490	0.404	17.6	88	0.00	1.25
9		1,3-butadiene		----------NA----------				
10		vinyl chloride	0.458	0.390	14.8	86	0.00	1.31
11		bromomethane	0.219	0.181	17.4	90	0.00	1.58
12		chloroethane	0.229	0.230	-0.4	95	0.00	1.67
13		vinyl Bromide	0.273	0.338	-23.8#	121	0.00	1.83
14		trichlorofluoromethane	0.556	0.505	9.2	95	0.00	1.86
15		ethyl ether	0.194	0.215	-10.8	116	0.00	2.16
16		2-chloropropane	0.133	0.146	-9.8	111	0.00	2.25
17		acrolein	0.059	0.065	-10.2	106	0.00	2.36
18		freon 113	0.266	0.269	-1.1	104	0.00	2.35
19		1,1-dichloroethene	0.296	0.317	-7.1	110	0.00	2.37
20		acetone	0.026	0.030	-15.4	117	0.00	2.53
21		acetonitrile	0.045	0.048	-6.7	107	-0.01	2.93
		----------	True	Calc.	% Drift	----------		
22		iodomethane	50.000	43.697	12.6	95	0.00	2.54
		----------	AvgRF	CCRF	% Dev	----------		
23		carbon disulfide	1.203	1.100	8.6	107	0.00	2.56
24		methylene chloride	0.322	0.355	-10.2	114	0.00	3.00
25		methyl acetate	0.284	0.287	-1.1	107	0.00	2.87
26		methyl tert butyl ether	0.906	0.968	-6.8	111	-0.01	3.27
27		trans-1,2-dichloroethene	0.348	0.369	-6.0	113	0.00	3.28
28		hexane	0.591	0.555	6.1	100	0.00	3.56
29		di-isopropyl ether	1.141	1.308	-14.6	117	-0.02	4.00
30		ethyl tert-butyl ether	1.050	1.124	-7.0	112	0.00	4.58
31		2-butanone	0.034	0.036	-5.9	108	0.00	4.99
32		1,1-dichloroethane	0.587	0.651	-10.9	113	0.00	3.96
33		chloroprene	0.575	0.593	-3.1	109	0.00	4.04
34		acrylonitrile	0.105	0.119	-13.3	113	0.00	3.44
35		vinyl acetate	0.080	0.066	17.5	84	-0.01	4.09
36		ethyl acetate	0.053	0.055	-3.8	107	0.00	5.05
37		2,2-dichloropropane	0.499	0.461	7.6	94	0.00	4.82

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6357-CC6336
Lab FileID: 3C140206.D

38		cis-1,2-dichloroethene	0.370	0.399	-7.8	111	0.00	4.89
39		propionitrile	0.051	0.053	-3.9	105	-0.01	5.18
40		bromochloromethane	0.218	0.240	-10.1	115	0.00	5.24
41		tetrahydrofuran	0.041	0.043	-4.9	107	0.00	5.26
42		chloroform	0.600	0.635	-5.8	114	-0.01	5.37
		----------	True	Calc.	% Drift	----------		
43		tert-Butyl Formate	50.000	11.103	77.8#	21	0.00	5.40
		----------	AvgRF	CCRF	% Dev	----------		
44		isobutyl alcohol	0.029	0.028	3.4	104	0.00	6.03
45	S	dibromofluoromethane (s)	0.406	0.449	-10.6	116	0.00	5.61
46		methacrylonitrile	0.134	0.136	-1.5	105	-0.01	5.34
47		1,1,1-trichloroethane	0.538	0.566	-5.2	110	0.00	5.51
48		cyclohexane	0.571	0.570	0.2	104	0.00	5.46
		----------	True	Calc.	% Drift	----------		
49		1,1-dichloropropene	50.000	50.822	-1.6	107	0.00	5.75
		----------	AvgRF	CCRF	% Dev	----------		
50		tert-amyl alcohol	0.214	0.221	-3.3	108	0.00	6.20
51		carbon tetrachloride	0.470	0.505	-7.4	109	0.00	5.68
52	I	1,4-difluorobenzene	1.000	1.000	0.0	113	0.00	6.65
53	S	1,2-dichloroethane-d4 (s)	0.296	0.313	-5.7	120	0.00	6.08
54		2,2,4-trimethylpentane	1.083	0.977	9.8	103	0.00	6.03
55		tert-amyl methyl ether	0.159	0.162	-1.9	107	0.00	6.20
56		n-butyl alcohol	0.011	0.010	9.1	110	0.00	5.71
57		benzene	0.991	0.958	3.3	112	0.00	6.02
58		heptane	0.229	0.208	9.2	101	0.00	6.33
59		isopropyl acetate	0.051	0.052	-2.0	106	0.00	6.28
60		1,2-dichloroethane	0.290	0.304	-4.8	117	0.00	6.18
61		trichloroethene	0.254	0.247	2.8	111	0.00	6.90
62		ethyl acrylate	0.283	0.285	-0.7	107	0.00	7.17
63		2-nitropropane	0.063	0.054	14.3	96	0.00	8.01
64		2-chloroethyl vinyl ether	0.144	0.115	20.1#	88	0.00	8.05
65		methyl methacrylate	0.063	0.063	0.0	105	0.00	7.45
66		1,2-dichloropropane	0.234	0.247	-5.6	111	0.00	7.25
67		methylcyclohexane	0.501	0.462	7.8	103	0.00	7.02
68		dibromomethane	0.127	0.140	-10.2	116	0.00	7.40
69		bromodichloromethane	0.285	0.309	-8.4	116	0.00	7.62
70		epichlorohydrin	0.025	0.025	0.0	104	0.00	8.13
71		cis-1,3-dichloropropene	0.377	0.406	-7.7	113	0.00	8.17
72		4-methyl-2-pentanone	0.037	0.037	0.0	104	0.00	8.37
		----------	True	Calc.	% Drift	----------		
73		3-methyl-1-butanol	1000.000	723.663	27.6#	85	0.00	8.50
		----------	AvgRF	CCRF	% Dev	----------		
74	I	chlorobenzene-d5	1.000	1.000	0.0	119	0.00	9.85
75	S	toluene-d8 (s)	1.321	1.280	3.1	115	0.00	8.39
76		toluene	0.746	0.659	11.7	110	0.00	8.46
77		trans-1,3-dichloropropene	0.367	0.367	0.0	112	0.00	8.82
78		ethyl methacrylate	0.333	0.325	2.4	112	0.00	8.89
79		1,1,2-trichloroethane	0.193	0.184	4.7	113	0.00	9.00
80		2-hexanone	0.098	0.099	-1.0	115	0.00	9.25
81		tetrachloroethene	0.342	0.314	8.2	107	0.00	9.00
82		1,3-dichloropropane	0.408	0.394	3.4	115	0.00	9.16
83		butyl acetate	0.176	0.167	5.1	110	0.00	9.36

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: V3C6357-CC6336
Lab FileID: 3C140206.D

			True	Calc.	% Drift			
84		dibromochloromethane	0.253	0.268	-5.9	119	0.00	9.34
85		1,2-dibromoethane	0.241	0.236	2.1	114	0.00	9.44
86		3,3-Dimethyl-1-Butanol	0.025	0.020	20.0#	86	0.00	9.45
87		n-butyl ether	1.272	1.251	1.7	116	0.00	9.97
88		chlorobenzene	0.840	0.762	9.3	112	0.00	9.88
89		1,1,1,2-tetrachloroethane	0.275	0.274	0.4	115	0.00	9.97
90		ethylbenzene	1.425	1.255	11.9	111	0.00	9.96
91		m,p-xylene	0.554	0.493	11.0	110	0.00	10.08
92		o-xylene	1.114	0.983	11.8	111	0.00	10.42
93		styrene	0.892	0.815	8.6	109	0.00	10.46
94		bromoform	0.175	0.188	-7.4	120	0.00	10.63
95		butyl acrylate	0.464	0.482	-3.9	115	0.00	10.45
96		isopropylbenzene	1.418	1.260	11.1	108	0.00	10.74
			True	Calc.	% Drift			
97		cis-1,4-dichloro-2-butene	50.000	43.768	12.5	104	0.00	10.88
			AvgRF	CCRF	% Dev			
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	120	0.00	11.85
99	S	4-bromofluorobenzene (s)	0.870	0.874	-0.5	122	0.00	10.91
100		bromobenzene	0.666	0.605	9.2	113	0.00	11.02
101		1,1,2,2-tetrachloroethane	0.539	0.513	4.8	110	0.00	11.07
102		trans-1,4-dichloro-2-bute	0.158	0.151	4.4	111	0.00	11.13
103		1,2,3-trichloropropane	0.170	0.158	7.1	106	0.00	11.11
104		n-propylbenzene	3.059	2.719	11.1	109	0.00	11.09
105		2-chlorotoluene	0.625	0.570	8.8	110	0.00	11.17
106		4-chlorotoluene	0.671	0.604	10.0	114	0.00	11.27
107		1,3,5-trimethylbenzene	2.169	1.930	11.0	109	0.00	11.25
108		tert-butylbenzene	2.011	1.748	13.1	109	0.00	11.50
109		1,2,4-trimethylbenzene	2.227	1.990	10.6	110	0.00	11.55
110		sec-butylbenzene	2.962	2.616	11.7	109	0.00	11.68
111		1,3-dichlorobenzene	1.307	1.177	9.9	112	0.00	11.79
112		p-isopropyltoluene	2.586	2.264	12.5	108	0.00	11.80
113		1,4-dichlorobenzene	1.310	1.162	11.3	111	0.00	11.87
114		1,2-dichlorobenzene	1.200	1.111	7.4	113	0.00	12.17
115		n-butylbenzene	1.296	1.172	9.6	109	0.00	12.13
116		1,2-dibromo-3-chloropropa	0.140	0.133	5.0	106	0.00	12.81
117		1,3,5-Trichlorobenzene	1.147	1.057	7.8	112	0.00	12.92
118		1,2,4-trichlorobenzene	1.015	0.968	4.6	112	0.00	13.43
119		hexachlorobutadiene	0.568	0.531	6.5	105	0.00	13.52
120		naphthalene	2.277	2.059	9.6	107	0.00	13.62
121		1,2,3-trichlorobenzene	0.965	0.922	4.5	113	0.00	13.81
122		hexachloroethane	0.328	0.372	-13.4	128	0.00	12.33
123		Benzyl chloride	1.024	0.840	18.0	92	0.00	12.00
124		2-ethylhexyl acrylate	0.645	0.582	9.8	100	0.00	13.57
125		2-methylnaphthalene	1.661	1.567	5.7	109	0.00	14.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3C139652.D M3C6336.M Wed Nov 08 00:44:22 2017

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-ICC10636
Lab FileID: E247363.D

Response Factor Report MSE

Method : C:\msdchem\1\METHODS\ME10636.M (RTE Integrator)
Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Calibration Files
1 =E247358.D 4 =E247360.D 100 =E247364.D 50 =E247363.D
20 =E247362.D 200 =E247365.D 8 =E247361.D 0.5 =E247357.D
2 =E247359.D =

Compound	1	4	100	50	20	200	8	0.5	2	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------											
2) ethanol										0.000	-1.00
3) tertiary butyl alcohol	1.544	1.526	1.501	1.569	1.492	1.575			1.712	1.560	4.74
4) 1,4-dioxane	0.108	0.118	0.117	0.120	0.094	0.118			0.099	0.111	9.43
5) I pentafluorobenzene ----------ISTD----------											
6) chlorodifluoromethane	0.583	0.751	0.720	0.742	0.749	0.690	0.713		0.830	0.722	9.65
7) dichlorodifluoromethane	0.600	0.479	0.850	0.898	0.896	0.853	0.842		0.847	0.783	19.86
8) chloromethane	1.065	0.611	1.108	1.134	1.111	1.100	1.086	1.283	1.114	1.068	17.07
9) vinyl chloride	1.014	0.608	1.084	1.156	1.153	1.064	1.099	0.903	1.097	1.020	16.89
10) 1,3-butadiene										0.000	-1.00
11) bromomethane	0.604	0.382	0.663	0.697	0.700	0.662	0.676	0.819	0.722	0.658	18.05
12) chloroethane	0.505	0.326	0.564	0.594	0.610	0.562	0.597	0.583	0.612	0.550	16.41
13) trichlorofluoromethane	0.888	0.545	0.984	1.056	1.074	0.976	1.030	0.809	1.049	0.934	18.17
14) vinyl bromide	0.689	0.434	0.786	0.822	0.829	0.783	0.795	0.692	0.787	0.735	16.81
15) ethyl ether	0.255	0.314	0.327	0.332	0.335	0.314	0.324		0.373	0.322	10.24
16) 2-chloropropane	1.325	1.338	1.120	1.185	1.224	1.076	1.260		1.543	1.259	11.67
17) acrolein	0.150	0.152	0.149	0.151	0.148	0.154			0.181	0.155	7.42
18) freon 113	0.536	0.481	0.511	0.526	0.464	0.517			0.562	0.514	6.43
19) 1,1-dichloroethene	0.481	0.638	0.564	0.604	0.624	0.537	0.618	0.679	0.720	0.607	11.92
20) acetone	0.056	0.054	0.053	0.055	0.051	0.055			0.056	0.055	3.09
21) acetonitrile	0.108	0.097	0.092	0.096	0.090	0.102			0.124	0.101	11.52
22) iodomethane	0.937	1.203	1.177	1.181	1.199	1.139	1.178	1.283	1.330	1.181	9.22
23) carbon disulfide											

1.923 2.412 2.167 2.275 2.368 2.081 2.311 2.518 2.634 2.299 9.54

24) methylene chloride
0.567 0.721 0.684 0.694 0.711 0.662 0.696 0.818 0.764 0.702 9.81

25) methyl acetate
0.570 0.517 0.490 0.489 0.521 0.456 0.514 0.637 0.524 10.71

26) methyl tert butyl ether
1.630 1.997 1.956 1.933 1.955 1.862 1.961 2.101 2.164 1.951 7.72

27) trans-1,2-dichloroethene
0.526 0.615 0.576 0.616 0.632 0.561 0.628 0.699 0.750 0.623 11.00

28) hexane
0.374 0.457 0.418 0.460 0.475 0.408 0.465 0.459 0.529 0.449 9.91

29) di-isopropyl ether
1.917 2.271 2.107 2.150 2.240 2.008 2.224 2.542 2.512 2.219 9.38

30) 2-butanone
0.046 0.064 0.070 0.068 0.071 0.067 0.068 0.068 0.065 12.35

31) 1,1-dichloroethane
0.936 1.089 1.006 1.056 1.114 0.971 1.112 1.206 1.262 1.083 9.78

32) chloroprene
0.820 0.953 0.865 0.945 0.973 0.846 0.953 0.936 1.127 0.935 9.65

33) acrylonitrile
0.166 0.255 0.273 0.264 0.266 0.266 0.251 0.287 0.254 14.53

34) vinyl acetate
0.100 0.106 0.106 0.100 0.102 0.100 0.098 0.102 2.92

35) ethyl tert-butyl ether
1.752 2.142 2.165 2.149 2.152 2.084 2.123 2.287 2.459 2.146 8.69

36) ethyl acetate
0.080 0.100 0.105 0.102 0.111 0.097 0.108 0.105 0.101 9.60

37) 2,2-dichloropropane
0.866 0.949 0.807 0.849 0.885 0.776 0.909 1.025 1.078 0.905 10.89

38) cis-1,2-dichloroethene
0.566 0.688 0.637 0.673 0.687 0.613 0.696 0.758 0.790 0.679 10.15

39) propionitrile
0.087 0.104 0.101 0.100 0.105 0.094 0.108 0.096 0.117 0.102 8.70

40) methyl acrylate
0.083 0.088 0.087 0.091 0.084 0.089 0.082 0.086 3.78

41) methacrylonitrile
0.196 0.255 0.269 0.259 0.265 0.260 0.265 0.276 0.256 9.73

42) bromochloromethane
0.270 0.339 0.336 0.339 0.349 0.321 0.332 0.324 0.379 0.332 8.71

43) tetrahydrofuran
0.218 0.207 0.207 0.213 0.191 0.222 0.233 0.213 6.24

44) chloroform
0.880 1.039 0.980 1.032 1.058 0.944 1.036 1.122 1.205 1.033 9.22

45) tert-Butyl Formate
0.337 0.399 0.415 0.405 0.407 0.412 0.393 0.444 0.402 7.51

46) dibromofluoromethane (s)
0.458 0.453 0.471 0.468 0.455 0.477 0.454 0.452 0.454 0.460 2.04

47) 1,1,1-trichloroethane
0.769 0.936 0.912 0.936 0.946 0.896 0.915 0.937 1.036 0.920 7.53

48) cyclohexane
0.927 1.087 0.955 1.004 1.051 0.954 1.079 0.940 1.238 1.026 9.75

49) isobutyl alcohol
0.000 -1.00

50) 1,1-dichloropropene
0.675 0.837 0.717 0.779 0.819 0.699 0.819 0.850 0.960 0.795 11.18

51) carbon tetrachloride
0.629 0.825 0.750 0.777 0.805 0.737 0.808 0.876 0.912 0.791 10.43

52) tert-amyl alcohol
0.039 0.041 0.036 0.041 0.040 0.038 0.051 0.041 11.35

53) isopropyl acetate

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-ICC10636
Lab FileID: E247363.D

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                0.132 0.131 0.129 0.132 0.125 0.130       0.134   0.130    2.16

54) I   1,4-difluorobenzene   ----------------ISTD---------------------
55)  1,2-dichloroethane-d4 (s)
          0.355 0.348 0.337 0.347 0.343 0.327 0.347 0.359 0.357   0.347    2.91
56)  n-butyl alcohol
          0.009 0.013 0.014 0.013 0.014 0.013 0.016 0.012 0.014   0.013   13.12
57)  2,2,4-Trimethylpentane
          1.291 1.566 1.485 1.541 1.541 1.429 1.518 1.634 1.766   1.530    8.58
58)  benzene
          1.395 1.636 1.510 1.605 1.643 1.434 1.655 1.795 1.954   1.625   10.69
59)  tert-amyl methyl ether
          1.145 1.328 1.270 1.265 1.309 1.196 1.309 1.443 1.552   1.313    9.34
60)  heptane
          0.258 0.327 0.274 0.296 0.317 0.256 0.317 0.315 0.373   0.304   12.26
61)  1,2-dichloroethane
          0.411 0.498 0.462 0.481 0.499 0.429 0.506 0.542 0.587   0.490   11.02
62)  ethyl acrylate
                0.531 0.543 0.527 0.533 0.482 0.532       0.623   0.538    7.77
63)  trichloroethene
          0.336 0.406 0.368 0.405 0.408 0.349 0.408 0.403 0.463   0.394    9.67
64)  2-chloroethyl vinyl ether
                0.152 0.160 0.154 0.155 0.146 0.153       0.173   0.156    5.43
65)  methyl methacrylate
                0.117 0.122 0.117 0.119 0.110 0.114       0.116   0.117    3.14
66)  methylcyclohexane
          0.732 0.889 0.769 0.824 0.857 0.728 0.861 0.948 1.009   0.846   11.26
67)  1,2-dichloropropane
          0.349 0.433 0.387 0.407 0.433 0.353 0.448 0.449 0.502   0.418   11.78
68)  dibromomethane
          0.200 0.253 0.247 0.243 0.255 0.232 0.256 0.268 0.299   0.251   10.63
69)  bromodichloromethane
          0.449 0.532 0.525 0.533 0.541 0.494 0.533 0.545 0.591   0.527    7.30
70)  2-nitropropane
          0.140 0.151 0.146 0.137 0.142 0.130 0.149       0.183   0.147   10.83
71)  epichlorohydrin
          0.035 0.044 0.046 0.043 0.044 0.042 0.044       0.052   0.044   10.30
72)  cis-1,3-dichloropropene
          0.556 0.711 0.689 0.686 0.725 0.620 0.714 0.767 0.766   0.693    9.79
73)  4-methyl-2-pentanone
          0.149 0.188 0.177 0.176 0.183 0.159 0.191 0.186 0.218   0.181   10.95
74)  isoamyl alcohol
          0.008 0.013 0.014 0.013 0.013 0.013 0.013 0.008 0.013   0.012   19.75

75) I   chlorobenzene-d5      ----------------ISTD---------------------
76)  toluene-d8 (s)
          1.214 1.267 1.322 1.288 1.276 1.343 1.257 1.251 1.243   1.273    3.12
77)  toluene
          0.855 1.058 1.014 1.047 1.085 0.990 1.034 1.141 1.191   1.046    9.09
78)  ethyl methacrylate
          0.496 0.607 0.610 0.609 0.620 0.594 0.591 0.548 0.694   0.597    8.96
79)  trans-1,3-dichloropropene
          0.509 0.630 0.609 0.609 0.635 0.580 0.610 0.591 0.689   0.607    7.94
80)  1,1,2-trichloroethane
          0.263 0.311 0.325 0.323 0.328 0.313 0.316 0.289 0.358   0.314    8.38
81)  tetrachloroethene
          0.324 0.423 0.373 0.395 0.416 0.360 0.400 0.410 0.461   0.396    9.99
82)  2-hexanone
          0.147 0.189 0.180 0.181 0.186 0.174 0.183 0.170 0.218   0.181   10.29
83)  1,3-dichloropropane
```

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-ICC10636
Lab FileID: E247363.D

```
           0.488 0.631 0.595 0.598 0.618 0.568 0.629 0.688 0.707   0.614   10.50
 84)  butyl acetate
           0.255 0.335 0.332 0.330 0.338 0.329 0.334 0.341 0.401   0.333   11.05
 85)  3,3-Dimethyl-1-Butanol
           0.024 0.032 0.042 0.035 0.033 0.044 0.031 0.036 0.035   0.035   17.24
 86)  dibromochloromethane
           0.323 0.420 0.457 0.451 0.453 0.446 0.431 0.425 0.474   0.431   10.19
 87)  1,2-dibromoethane
           0.327 0.401 0.432 0.423 0.422 0.422 0.402 0.419 0.457   0.412    8.71
 88)  n-butyl ether
           1.999 2.274 2.109 2.244 2.288 2.017 2.227 2.435 2.636   2.248    8.94
 89)  chlorobenzene
           1.016 1.171 1.145 1.176 1.182 1.117 1.170 1.230 1.388   1.177    8.39
 90)  1,1,1,2-tetrachloroethane
           0.362 0.453 0.414 0.421 0.433 0.419 0.426 0.480 0.499   0.434    9.21
 91)  ethylbenzene
           1.787 2.109 1.902 2.010 2.075 1.851 2.039 2.229 2.432   2.048    9.68
 92)  m,p-xylene
           0.660 0.836 0.765 0.796 0.815 0.758 0.808 0.861 0.938   0.804    9.50
 93)  o-xylene
           1.487 1.792 1.640 1.723 1.768 1.593 1.734 1.996 2.029   1.751   10.05
 94)  styrene
           1.208 1.479 1.353 1.409 1.452 1.329 1.418 1.531 1.710   1.432    9.80
 95)  butyl acrylate
           0.885 1.001 1.094 1.073 1.057 1.088 1.011 1.030 1.163   1.045    7.42
 96)  isopropylbenzene
           1.931 2.368 2.154 2.288 2.320 2.119 2.303 2.479 2.680   2.293    9.40
 97)  bromoform
           0.270 0.325 0.371 0.355 0.346 0.377 0.326 0.295 0.378   0.338   11.18
 98)  cis-1,4-dichloro-2-butene
           0.159 0.186 0.203 0.198 0.200 0.209 0.188 0.192 0.225   0.196    9.16

 99) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
100)  4-bromofluorobenzene (s)
           0.835 0.827 0.856 0.843 0.854 0.839 0.842 0.829 0.845   0.841    1.20
101)  1,1,2,2-tetrachloroethane
           0.770 0.901 0.921 0.928 0.951 0.865 0.931 0.972 1.060   0.922    8.52
102)  trans-1,4-dichloro-2-butene
           0.209 0.236 0.253 0.259 0.260 0.242 0.246       0.273   0.247    7.76
103)  1,2,3-trichloropropane
           0.177 0.244 0.244 0.240 0.250 0.228 0.249 0.270 0.262   0.241   11.11
104)  bromobenzene
           0.780 0.982 0.910 0.946 0.996 0.845 1.002 1.022 1.123   0.956   10.59
105)  n-propylbenzene
           3.763 4.519 3.859 4.194 4.454 3.580 4.480 4.637 5.215   4.300   11.82
106)  2-chlorotoluene
           0.723 0.921 0.832 0.874 0.906 0.784 0.902 0.940 0.983   0.874    9.31
107)  4-chlorotoluene
           2.210 2.709 2.452 2.572 2.685 2.292 2.697 2.871 3.121   2.623   10.77
108)  1,3,5-trimethylbenzene
           2.618 3.205 2.807 3.001 3.167 2.596 3.225 3.432 3.560   3.068   11.09
109)  tert-butylbenzene
           2.200 2.764 2.593 2.739 2.837 2.414 2.819 2.777 3.059   2.689    9.44
110)  1,2,4-trimethylbenzene
           2.776 3.303 2.954 3.175 3.320 2.743 3.347 3.582 3.832   3.226   11.15
111)  sec-butylbenzene
           3.604 4.347 3.968 4.254 4.405 3.662 4.358 4.667 4.907   4.241   10.19
112)  p-isopropyltoluene
           2.951 3.617 3.330 3.587 3.718 3.103 3.675 3.834 4.120   3.548   10.27
113)  1,3-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-ICC10636
Lab FileID: E247363.D

```
           1.654 1.939 1.765 1.855 1.934 1.665 1.970 2.139 2.251   1.908   10.54
114)  1,4-dichlorobenzene
           1.582 1.920 1.794 1.868 1.915 1.708 1.891 2.053 2.169   1.878    9.27
115)  1,2-dichlorobenzene
           1.572 1.902 1.792 1.856 1.923 1.678 1.909 2.098 2.156   1.876    9.81
116)  Benzyl Chloride
           1.426 1.772 1.880 1.877 1.869 1.787 1.792 1.897 1.984   1.809    8.75
117)  n-butylbenzene
           1.443 1.805 1.683 1.817 1.863 1.574 1.837 1.887 2.013   1.769    9.83
118)  2-ethylhexyl acrylate*****This compound did not meet initial calibration criteria.
                 0.637 1.017 0.870 0.716 1.090 0.574               0.817   25.62
              ----- Linear regression -----  Coefficient =  0.9979
                Response Ratio = -0.02606 + 1.10960 *A

119)  hexachloroethane
           0.439 0.577 0.652 0.658 0.659 0.627 0.621       0.643   0.610   12.11
120)  1,2-dibromo-3-chloropropane
                 0.161 0.176 0.168 0.163 0.168 0.164       0.154   0.165    4.27
121)  1,3,5-trichlorobenzene
           1.166 1.553 1.516 1.582 1.589 1.381 1.568       1.757   1.514   11.53
122)  Nitrobenzene*****This compound did not meet initial calibration criteria.
                 0.024 0.047 0.042 0.040 0.049 0.038               0.040   22.02
              ----- Linear regression -----  Coefficient =  0.9992
                Response Ratio = -0.00366 + 0.04932 *A

123)  1,2,4-trichlorobenzene
           0.964 1.167 1.245 1.271 1.259 1.139 1.216       1.290   1.194    8.90
124)  hexachlorobutadiene
           0.547 0.666 0.605 0.657 0.682 0.551 0.672       0.732   0.639   10.24
125)  naphthalene
           1.757 2.210 2.554 2.462 2.402 2.404 2.286       2.439   2.314   10.74
126)  1,2,3-trichlorobenzene
           0.687 0.898 0.974 0.955 0.929 0.904 0.924       0.969   0.905   10.23
127)  2-methylnaphthalene
                 0.567 0.872 0.732 0.638 0.888 0.601       0.570   0.696   19.82
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          ME10636.M         Fri Sep 15 08:58:39 2017   RPT1
```

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-ICV10636
Lab FileID: E247369.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E247369.D Vial: 14
Acq On : 14 Sep 2017 1:00 am Operator: ThienN
Sample : icv10636-50 Inst : MSE
Misc : MS19913,VE10636,5.0,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\ME10636.M (RTE Integrator)
Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Sep 15 08:57:07 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	0.00	7.76
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.560	1.551	0.6	103	0.02	7.88
4		1,4-dioxane	0.111	0.100	9.9	85	0.00	11.60
5	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	9.97
6		chlorodifluoromethane	0.722	0.721	0.1	96	0.00	4.53
7		dichlorodifluoromethane	0.783	0.783	0.0	86	0.00	4.51
8		chloromethane	1.068	1.018	4.7	88	0.00	4.82
9		vinyl chloride	1.020	1.013	0.7	86	0.00	5.09
10		1,3-butadiene		----------NA----------				
11		bromomethane	0.658	0.614	6.7	87	0.00	5.69
12		chloroethane	0.550	0.551	-0.2	91	0.01	5.87
13		trichlorofluoromethane	0.934	0.924	1.1	86	0.00	6.34
14		vinyl bromide	0.735	0.790	-7.5	95	0.00	6.20
15		ethyl ether	0.322	0.342	-6.2	101	0.00	6.65
16		2-chloropropane	1.259	1.193	5.2	99	-0.01	6.89
17		acrolein	0.155	0.152	1.9	100	0.00	6.91
18		freon 113	0.514	0.644	-25.3	124	0.00	7.12
19		1,1-dichloroethene	0.607	0.613	-1.0	100	0.00	7.10
20		acetone	0.055	0.056	-1.8	103	0.00	7.08
21		acetonitrile	0.101	0.075	25.7	80	0.00	7.51
22		iodomethane	1.181	1.224	-3.6	102	0.00	7.37
23		carbon disulfide	2.299	2.820	-22.7	122	0.00	7.51
24		methylene chloride	0.702	0.723	-3.0	102	0.00	7.79
25		methyl acetate	0.524	0.482	8.0	97	0.00	7.52
26		methyl tert butyl ether	1.951	2.006	-2.8	102	0.00	8.14
27		trans-1,2-dichloroethene	0.623	0.617	1.0	99	0.00	8.17
28		hexane	0.449	0.347	22.7	74	0.00	8.50
29		di-isopropyl ether	2.219	2.262	-1.9	104	0.00	8.71
30		2-butanone	0.065	0.070	-7.7	102	0.00	9.38
31		1,1-dichloroethane	1.083	1.108	-2.3	103	0.00	8.74
32		chloroprene	0.935	0.984	-5.2	102	0.00	8.84
33		acrylonitrile	0.254	0.291	-14.6	108	0.00	8.07
34		vinyl acetate	0.102	0.108	-5.9	100	0.00	8.65
35		ethyl tert-butyl ether	2.146	2.218	-3.4	102	0.00	9.17
36		ethyl acetate	0.101	0.105	-4.0	101	0.00	9.38
37		2,2-dichloropropane	0.905	0.859	5.1	100	0.00	9.50
38		cis-1,2-dichloroethene	0.679	0.698	-2.8	102	0.00	9.45
39		propionitrile	0.102	0.096	5.9	95	0.00	9.46
40		methyl acrylate	0.086	0.088	-2.3	100	0.00	9.47
41		methacrylonitrile	0.256	0.263	-2.7	100	0.00	9.66

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-ICV10636
Lab FileID: E247369.D

42		bromochloromethane	0.332	0.345	-3.9	100	0.00	9.75
43		tetrahydrofuran	0.213	0.219	-2.8	104	0.00	9.77
44		chloroform	1.033	1.056	-2.2	101	0.00	9.83
45		tert-Butyl Formate	0.402	0.356	11.4	87	0.00	9.87
46	S	dibromofluoromethane (s)	0.460	0.466	-1.3	98	0.00	10.02
47		1,1,1-trichloroethane	0.920	0.975	-6.0	103	0.00	10.11
48		cyclohexane	1.026	1.093	-6.5	107	0.00	10.23
49		isobutyl alcohol		----------NA----------				
50		1,1-dichloropropene	0.795	0.799	-0.5	101	0.00	10.27
51		carbon tetrachloride	0.791	0.808	-2.1	102	0.00	10.31
52		tert-amyl alcohol	0.041	0.040	2.4	107	0.00	10.39
53		isopropyl acetate	0.130	0.134	-3.1	102	0.00	10.40
54	I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	10.93
55	S	1,2-dichloroethane-d4 (s)	0.347	0.344	0.9	97	0.00	10.46
56		n-butyl alcohol	0.013	0.014	-7.7	102	0.00	10.97
57		2,2,4-Trimethylpentane	1.530	1.615	-5.6	102	0.00	10.61
58		benzene	1.625	1.657	-2.0	100	0.00	10.53
59		tert-amyl methyl ether	1.313	1.318	-0.4	101	0.00	10.59
60		heptane	0.304	0.326	-7.2	107	0.00	10.76
61		1,2-dichloroethane	0.490	0.505	-3.1	102	0.00	10.55
62		ethyl acrylate	0.538	0.558	-3.7	103	0.00	11.23
63		trichloroethene	0.394	0.417	-5.8	100	0.00	11.26
64		2-chloroethyl vinyl ether	0.156	0.196	-25.6	124	0.00	12.07
65		methyl methacrylate	0.117	0.118	-0.9	98	0.00	11.50
66		methylcyclohexane	0.846	0.780	7.8	92	0.00	11.57
67		1,2-dichloropropane	0.418	0.419	-0.2	100	0.00	11.56
68		dibromomethane	0.251	0.256	-2.0	102	0.00	11.68
69		bromodichloromethane	0.527	0.560	-6.3	102	0.00	11.83
70		2-nitropropane	0.147	0.152	-3.4	108	0.00	12.05
71		epichlorohydrin	0.044	0.046	-4.5	104	0.00	12.17
72		cis-1,3-dichloropropene	0.693	0.705	-1.7	100	0.00	12.32
73		4-methyl-2-pentanone	0.181	0.184	-1.7	102	0.00	12.42
74		isoamyl alcohol	0.012	0.013	-8.3	99	0.00	12.42
75	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	14.33
76	S	toluene-d8 (s)	1.273	1.263	0.8	98	0.00	12.65
77		toluene	1.046	1.060	-1.3	101	0.00	12.73
78		ethyl methacrylate	0.597	0.616	-3.2	101	0.00	12.91
79		trans-1,3-dichloropropene	0.607	0.628	-3.5	103	0.00	12.93
80		1,1,2-trichloroethane	0.314	0.335	-6.7	103	0.00	13.18
81		tetrachloroethene	0.396	0.406	-2.5	102	0.00	13.34
82		2-hexanone	0.181	0.182	-0.6	100	0.00	13.35
83		1,3-dichloropropane	0.614	0.620	-1.0	103	0.00	13.38
84		butyl acetate	0.333	0.349	-4.8	106	0.00	13.43
85		3,3-Dimethyl-1-Butanol	0.035	0.038	-8.6	106	0.00	13.55
86		dibromochloromethane	0.431	0.472	-9.5	105	0.00	13.65
87		1,2-dibromoethane	0.412	0.439	-6.6	104	0.00	13.83
88		n-butyl ether	2.248	2.225	1.0	99	0.00	14.30
89		chlorobenzene	1.177	1.215	-3.2	103	0.00	14.37
90		1,1,1,2-tetrachloroethane	0.434	0.433	0.2	103	0.00	14.44
91		ethylbenzene	2.048	2.069	-1.0	103	0.00	14.43
92		m,p-xylene	0.804	0.824	-2.5	103	0.00	14.56
93		o-xylene	1.751	1.746	0.3	101	0.00	15.02
94		styrene	1.432	1.439	-0.5	102	0.00	15.03
95		butyl acrylate	1.045	1.124	-7.6	105	0.00	14.82
96		isopropylbenzene	2.293	2.336	-1.9	102	0.00	15.41
97		bromoform	0.338	0.373	-10.4	105	0.00	15.30
98		cis-1,4-dichloro-2-butene	0.196	0.197	-0.5	99	0.00	15.46

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10636-ICV10636
Lab FileID: E247369.D

99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	16.96
100	S	4-bromofluorobenzene (s)	0.841	0.849	-1.0	103	0.00	15.65
101		1,1,2,2-tetrachloroethane	0.922	0.970	-5.2	107	0.00	15.73
102		trans-1,4-dichloro-2-bute	0.247	0.281	-13.8	111	0.00	15.77
103		1,2,3-trichloropropane	0.241	0.255	-5.8	108	0.00	15.83
104		bromobenzene	0.956	0.975	-2.0	105	0.00	15.86
105		n-propylbenzene	4.300	4.229	1.7	103	0.00	15.88
106		2-chlorotoluene	0.874	0.880	-0.7	103	0.00	16.04
107		4-chlorotoluene	2.623	2.616	0.3	104	0.00	16.16
108		1,3,5-trimethylbenzene	3.068	3.003	2.1	102	0.00	16.05
109		tert-butylbenzene	2.689	2.753	-2.4	103	0.00	16.44
110		1,2,4-trimethylbenzene	3.226	3.176	1.5	102	0.00	16.50
111		sec-butylbenzene	4.241	4.213	0.7	101	0.00	16.69
112		p-isopropyltoluene	3.548	3.637	-2.5	104	0.00	16.83
113		1,3-dichlorobenzene	1.908	1.907	0.1	105	0.00	16.89
114		1,4-dichlorobenzene	1.878	1.916	-2.0	105	0.00	16.99
115		1,2-dichlorobenzene	1.876	1.907	-1.7	105	0.00	17.41
116		Benzyl Chloride	1.809	1.537	15.0	84	0.00	17.10
117		n-butylbenzene	1.769	1.843	-4.2	104	0.00	17.29
			True	Calc.	% Drift			
118		2-ethylhexyl acrylate	10.000	10.137	-1.4	117	0.00	19.21
			AvgRF	CCRF	% Dev			
119		hexachloroethane	0.610	0.656	-7.5	102	0.00	17.74
120		1,2-dibromo-3-chloropropa	0.165	0.176	-6.7	107	0.00	18.27
121		1,3,5-trichlorobenzene	1.514	1.661	-9.7	107	0.00	18.48
			True	Calc.	% Drift			
122		Nitrobenzene	50.000	47.647	4.7	106	0.00	18.49
			AvgRF	CCRF	% Dev			
123		1,2,4-trichlorobenzene	1.194	1.292	-8.2	104	0.00	19.23
124		hexachlorobutadiene	0.639	0.654	-2.3	102	0.00	19.36
125		naphthalene	2.314	2.542	-9.9	105	0.00	19.59
126		1,2,3-trichlorobenzene	0.905	0.982	-8.5	105	0.00	19.87
127		2-methylnaphthalene	0.696	0.634	8.9	88	0.00	21.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E247363.D ME10636.M Fri Sep 15 08:59:17 2017 RPT1

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10685-CC10636
Lab FileID: E248810.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E248810.D Vial: 1
Acq On : 9 Nov 2017 9:33 am Operator: ThienN
Sample : cc10636-20 Inst : MSE
Misc : MS21663,VE10685,5,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\ME10636.M (RTE Integrator)
Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Sep 15 08:57:07 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	-0.03	7.73
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.560	1.424	8.7	81	-0.01	7.85
4		1,4-dioxane	0.111	0.121	-9.0	90	-0.01	11.60
5	I	pentafluorobenzene	1.000	1.000	0.0	92	-0.01	9.96
6		chlorodifluoromethane	0.722	0.576	20.2#	71	-0.02	4.52
7		dichlorodifluoromethane	0.783	0.588	24.9#	61	-0.01	4.51
8		chloromethane	1.068	0.838	21.5#	70	-0.01	4.81
9		vinyl chloride	1.020	0.832	18.4	67	0.00	5.10
10		1,3-butadiene		----------NA----------				
11		bromomethane	0.658	0.560	14.9	74	0.00	5.69
12		chloroethane	0.550	0.466	15.3	71	0.02	5.87
13		trichlorofluoromethane	0.934	0.749	19.8	65	-0.01	6.33
14		vinyl bromide	0.735	0.528	28.2#	59	0.00	6.20
15		ethyl ether	0.322	0.305	5.3	84	-0.01	6.64
16		2-chloropropane	1.259	1.016	19.3	77	-0.02	6.88
17		acrolein	0.155	0.128	17.4	78	0.00	6.90
18		freon 113	0.514	0.422	17.9	74	0.00	7.12
19		1,1-dichloroethene	0.607	0.547	9.9	81	-0.01	7.09
20		acetone	0.055	0.053	3.6	88	-0.02	7.07
21		acetonitrile	0.101	0.102	-1.0	98	-0.02	7.51
22		iodomethane	1.181	1.043	11.7	80	-0.01	7.36
23		carbon disulfide	2.299	2.091	9.0	82	-0.02	7.50
24		methylene chloride	0.702	0.647	7.8	84	-0.02	7.78
25		methyl acetate	0.524	0.480	8.4	85	-0.01	7.52
26		methyl tert butyl ether	1.951	1.713	12.2	81	-0.01	8.12
27		trans-1,2-dichloroethene	0.623	0.577	7.4	84	0.00	8.16
28		hexane	0.449	0.384	14.5	75	-0.02	8.49
29		di-isopropyl ether	2.219	1.891	14.8	78	-0.01	8.70
30		2-butanone	0.065	0.066	-1.5	86	-0.02	9.36
31		1,1-dichloroethane	1.083	0.991	8.5	82	-0.01	8.73
32		chloroprene	0.935	0.789	15.6	75	-0.01	8.83
33		acrylonitrile	0.254	0.247	2.8	86	0.00	8.06
34		vinyl acetate	0.102	0.093	8.8	86	0.00	8.65
35		ethyl tert-butyl ether	2.146	1.834	14.5	79	-0.01	9.16
36		ethyl acetate	0.101	0.093	7.9	77	-0.02	9.36
37		2,2-dichloropropane	0.905	0.768	15.1	80	-0.01	9.49
38		cis-1,2-dichloroethene	0.679	0.636	6.3	85	-0.01	9.44
39		propionitrile	0.102	0.102	0.0	89	-0.02	9.45
40		methyl acrylate	0.086	0.084	2.3	86	-0.01	9.46
41		methacrylonitrile	0.256	0.251	2.0	87	-0.02	9.64

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VE10685-CC10636
Lab FileID: E248810.D

42		bromochloromethane	0.332	0.313	5.7	83	-0.01	9.74
43		tetrahydrofuran	0.213	0.190	10.8	82	-0.01	9.76
44		chloroform	1.033	0.920	10.9	80	-0.02	9.82
45		tert-Butyl Formate	0.402	0.066	83.6#	15#	-0.01	9.86
46	S	dibromofluoromethane (s)	0.460	0.439	4.6	89	-0.02	10.01
47		1,1,1-trichloroethane	0.920	0.794	13.7	78	-0.02	10.09
48		cyclohexane	1.026	0.835	18.6	74	0.00	10.22
49		isobutyl alcohol		----------NA----------				
50		1,1-dichloropropene	0.795	0.709	10.8	80	0.00	10.26
51		carbon tetrachloride	0.791	0.674	14.8	77	-0.01	10.29
52		tert-amyl alcohol	0.041	0.035	14.6	80	-0.02	10.37
53		isopropyl acetate	0.130	0.118	9.2	82	-0.01	10.39
54	I	1,4-difluorobenzene	1.000	1.000	0.0	93	-0.01	10.92
55	S	1,2-dichloroethane-d4 (s)	0.347	0.319	8.1	86	-0.01	10.45
56		n-butyl alcohol	0.013	0.013	0.0	83	-0.02	10.95
57		2,2,4-Trimethylpentane	1.530	1.396	8.8	84	-0.01	10.60
58		benzene	1.625	1.481	8.9	84	-0.01	10.51
59		tert-amyl methyl ether	1.313	1.126	14.2	80	-0.01	10.58
60		heptane	0.304	0.272	10.5	80	-0.01	10.75
61		1,2-dichloroethane	0.490	0.418	14.7	78	-0.02	10.53
62		ethyl acrylate	0.538	0.452	16.0	79	-0.01	11.21
63		trichloroethene	0.394	0.358	9.1	81	0.00	11.25
64		2-chloroethyl vinyl ether	0.156	0.137	12.2	82	-0.02	12.06
65		methyl methacrylate	0.117	0.104	11.1	81	-0.01	11.49
66		methylcyclohexane	0.846	0.701	17.1	76	0.00	11.56
67		1,2-dichloropropane	0.418	0.384	8.1	82	-0.01	11.55
68		dibromomethane	0.251	0.224	10.8	82	-0.02	11.66
69		bromodichloromethane	0.527	0.470	10.8	81	-0.01	11.82
70		2-nitropropane	0.147	0.112	23.8#	73	-0.01	12.03
71		epichlorohydrin	0.044	0.040	9.1	84	-0.02	12.16
72		cis-1,3-dichloropropene	0.693	0.621	10.4	79	-0.01	12.30
73		4-methyl-2-pentanone	0.181	0.159	12.2	80	-0.01	12.41
74		isoamyl alcohol	0.012	0.012	0.0	84	-0.02	12.40
75	I	chlorobenzene-d5	1.000	1.000	0.0	93	-0.01	14.32
76	S	toluene-d8 (s)	1.273	1.214	4.6	88	-0.01	12.64
77		toluene	1.046	0.934	10.7	80	-0.01	12.72
78		ethyl methacrylate	0.597	0.516	13.6	77	-0.01	12.90
79		trans-1,3-dichloropropene	0.607	0.559	7.9	82	-0.01	12.92
80		1,1,2-trichloroethane	0.314	0.290	7.6	82	-0.01	13.16
81		tetrachloroethene	0.396	0.330	16.7	74	0.00	13.33
82		2-hexanone	0.181	0.157	13.3	78	-0.01	13.34
83		1,3-dichloropropane	0.614	0.554	9.8	83	-0.01	13.37
84		butyl acetate	0.333	0.278	16.5	76	0.00	13.42
85		3,3-Dimethyl-1-Butanol	0.035	0.030	14.3	84	-0.02	13.53
86		dibromochloromethane	0.431	0.396	8.1	81	-0.02	13.64
87		1,2-dibromoethane	0.412	0.367	10.9	81	-0.01	13.82
88		n-butyl ether	2.248	1.899	15.5	77	-0.01	14.29
89		chlorobenzene	1.177	1.045	11.2	82	-0.01	14.36
90		1,1,1,2-tetrachloroethane	0.434	0.377	13.1	81	-0.01	14.42
91		ethylbenzene	2.048	1.793	12.5	80	0.00	14.42
92		m,p-xylene	0.804	0.702	12.7	80	-0.01	14.55
93		o-xylene	1.751	1.526	12.8	80	-0.01	15.00
94		styrene	1.432	1.243	13.2	79	-0.01	15.02
95		butyl acrylate	1.045	0.835	20.1#	73	-0.01	14.80
96		isopropylbenzene	2.293	1.981	13.6	79	0.00	15.40
97		bromoform	0.338	0.308	8.9	82	-0.01	15.29
98		cis-1,4-dichloro-2-butene	0.196	0.170	13.3	79	-0.02	15.44

Continuing Calibration Summary

Job Number: JC54422 **Sample:** VE10685-CC10636
Account: TRCNYNYB TRC **Lab FileID:** E248810.D
Project: K710, 168 8th Street, Brooklyn, NY

99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	87	-0.02	16.95
100	S	4-bromofluorobenzene (s)	0.841	0.846	-0.6	86	-0.02	15.63
101		1,1,2,2-tetrachloroethane	0.922	0.906	1.7	83	-0.02	15.71
102		trans-1,4-dichloro-2-bute	0.247	0.231	6.5	77	-0.02	15.75
103		1,2,3-trichloropropane	0.241	0.237	1.7	83	-0.02	15.82
104		bromobenzene	0.956	0.895	6.4	78	-0.02	15.84
105		n-propylbenzene	4.300	4.020	6.5	79	0.00	15.87
106		2-chlorotoluene	0.874	0.824	5.7	79	-0.02	16.02
107		4-chlorotoluene	2.623	2.412	8.0	78	-0.02	16.15
108		1,3,5-trimethylbenzene	3.068	2.890	5.8	79	-0.02	16.04
109		tert-butylbenzene	2.689	2.508	6.7	77	-0.01	16.43
110		1,2,4-trimethylbenzene	3.226	3.011	6.7	79	-0.01	16.49
111		sec-butylbenzene	4.241	3.949	6.9	78	-0.01	16.68
112		p-isopropyltoluene	3.548	3.330	6.1	78	-0.01	16.82
113		1,3-dichlorobenzene	1.908	1.726	9.5	78	-0.01	16.88
114		1,4-dichlorobenzene	1.878	1.693	9.9	77	-0.02	16.98
115		1,2-dichlorobenzene	1.876	1.720	8.3	78	-0.02	17.40
116		Benzyl Chloride	1.809	1.796	0.7	84	-0.02	17.08
117		n-butylbenzene	1.769	1.700	3.9	79	-0.01	17.28
		----------	True	Calc.	% Drift	----------		
118		2-ethylhexyl acrylate	4.000	3.503	12.4	78	-0.02	19.20
		----------	AvgRF	CCRF	% Dev	----------		
119		hexachloroethane	0.610	0.615	-0.8	81	-0.01	17.73
120		1,2-dibromo-3-chloropropa	0.165	0.147	10.9	78	-0.01	18.26
121		1,3,5-trichlorobenzene	1.514	1.436	5.2	79	-0.01	18.46
		----------	True	Calc.	% Drift	----------		
122		Nitrobenzene	20.000	20.089	-0.4	88	-0.02	18.47
		----------	AvgRF	CCRF	% Dev	----------		
123		1,2,4-trichlorobenzene	1.194	1.112	6.9	77	-0.01	19.22
124		hexachlorobutadiene	0.639	0.682	-6.7	87	-0.02	19.34
125		naphthalene	2.314	2.196	5.1	80	-0.02	19.58
126		1,2,3-trichlorobenzene	0.905	0.872	3.6	82	-0.02	19.85
127		2-methylnaphthalene	0.696	0.512	26.4#	70	-0.02	20.98

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E247362.D ME10636.M Thu Nov 09 12:26:40 2017 RPT1

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICC8691
Lab FileID: I216449.D

Response Factor Report GCMSI

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
Last Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Calibration Files
0.2 =I216442.D 0.5 =I216443.D 1 =I216444.D 2 =I216445.D
8 =I216447.D 4 =I216446.D 20 =I216448.D 50 =I216449.D
100 =I216450.D 200 =I216451.D = =

Compound	0.2	0.5	1	2	8	4	20	50	100	200	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------												
2) tertiary butyl alcohol			0.993	1.209	1.079	1.074	1.064	1.117	1.128	1.148	1.101	5.87
3) 1,4-dioxane			0.115	0.083	0.103	0.110	0.107	0.106	0.106	0.109	0.111	0.106	8.84
4) I pentafluorobenzene ----------ISTD----------												
5) dichlorodifluoromethane		0.506	0.643	0.555	0.558	0.653	0.590	0.659	0.648	0.624	0.560	0.600	8.87
6) chlorodifluoromethane--The compound does not meet initial criteria.			0.575	0.424	0.548	0.567	0.522	0.534	0.525	0.498	0.458	0.517	9.60
7) chloromethane			0.418	0.413	0.421	0.397	0.410	0.398	0.385	0.361	0.401	5.00
8) vinyl chloride		0.371	0.469	0.378	0.361	0.432	0.378	0.413	0.412	0.411	0.380	0.401	8.29
9) bromomethane			0.352	0.324	0.303	0.305	0.300	0.293	0.307	0.313	0.302	0.311	5.73
10) chloroethane			0.200	0.191	0.194	0.245	0.211	0.236	0.236	0.239	0.226	0.220	9.56
11) trichlorofluoromethane		0.728	0.837	0.711	0.724	0.895	0.773	0.853	0.829	0.823	0.768	0.794	7.84
12) ethyl ether			0.122	0.158	0.152	0.142	0.157	0.162	0.169	0.164	0.153	9.86
13) 2-chloropropane			0.111	0.125	0.138	0.140	0.137	0.137	0.131	0.118	0.130	8.16
14) acrolein--The compound does not meet initial criteria.				0.041	0.042	0.042	0.048	0.049	0.053	0.051	0.046	10.76
15) freon 113		0.294	0.351	0.285	0.327	0.356	0.342	0.342	0.336	0.328	0.315	0.328	7.15
16) 1,1-dichloroethene		0.505	0.496	0.445	0.563	0.598	0.559	0.557	0.552	0.541	0.512	0.533	8.16
17) acetone				0.026	0.024	0.024	0.025	0.029	0.031	0.032	0.027	12.42
18) iodomethane						0.382	0.329	0.464	0.527	0.541	0.524	0.461	18.96
19) carbon disulfide			1.471	1.345	1.168	1.217	1.087	1.078	1.078	1.045	1.186	12.77
20) acetonitrile			0.049	0.039	0.039	0.036	0.036	0.035	0.036	0.037	0.036	0.038	11.43
21) methyl acetate				0.040	0.044	0.046	0.048	0.050	0.051	0.051	0.047	8.94
22) methylene chloride			0.354	0.362	0.353	0.369	0.326	0.332	0.334	0.328	0.345	4.80
23) acrylonitrile												

Initial Calibration Summary

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Sample: VI8691-ICC8691
Lab FileID: I216449.D

			0.087	0.084	0.083	0.086	0.090	0.094	0.092	0.088	4.74
24)	methyl tert butyl ether											
	0.863	0.943	0.799	0.891	0.918	0.883	0.945	0.977	0.980	0.930	0.913	6.07
25)	trans-1,2-dichloroethene											
	0.418	0.536	0.431	0.510	0.529	0.526	0.518	0.509	0.504	0.481	0.496	8.21
26)	hexane--The compound does not meet initial criteria.											
			0.562	0.517	0.500	0.450	0.456	0.457	0.451	0.485	8.91	
27)	1,1-dichloroethane											
	0.608	0.648	0.541	0.626	0.638	0.639	0.617	0.618	0.609	0.581	0.613	5.15
28)	vinyl acetate											
				0.047	0.037	0.049	0.052	0.053	0.052	0.048	12.19	
29)	di-isopropyl ether											
	0.789	0.856	0.706	0.901	0.891	0.886	0.908	0.954	0.972	0.932	0.880	9.05
30)	chloroprene											
		0.518	0.426	0.546	0.611	0.551	0.596	0.611	0.603	0.566	0.559	10.63
31)	ethyl tert-butyl ether											
	0.766	0.949	0.772	0.934	0.968	0.939	0.996	1.045	1.058	1.011	0.944	10.74
32)	2-butanone											
			0.027	0.031	0.030	0.031	0.035	0.038	0.036	0.033	11.74	
33)	2,2-dichloropropane											
	0.735	0.805	0.602	0.677	0.742	0.718	0.678	0.676	0.652	0.607	0.689	9.09
34)	ethyl acetate											
			0.053	0.040	0.045	0.039	0.044	0.044	0.044	0.042	0.044	10.31
35)	cis-1,2-dichloroethene											
		0.506	0.404	0.413	0.393	0.403	0.385	0.387	0.391	0.381	0.407	9.45
36)	propionitrile											
		0.046	0.040	0.046	0.044	0.044	0.044	0.046	0.047	0.046	0.045	4.86
37)	methyl acrylate											
				0.042	0.038	0.046	0.049	0.051	0.050	0.046	11.40	
38)	methacrylonitrile											
			0.099	0.105	0.107	0.105	0.111	0.120	0.124	0.120	0.112	7.88
39)	bromochloromethane											
	0.176	0.204	0.176	0.195	0.204	0.202	0.196	0.203	0.200	0.195	0.195	5.51
40)	tetrahydrofuran											
			0.040	0.045	0.036	0.038	0.037	0.038	0.039	0.039	0.039	7.57
41)	chloroform											
	0.941	0.905	0.671	0.802	0.783	0.800	0.746	0.757	0.732	0.692	0.783	10.94
42)	carbon tetrachloride											
	0.654	0.769	0.610	0.750	0.800	0.754	0.755	0.760	0.723	0.674	0.725	8.21
43)	1,1-dichloropropene											
	0.510	0.550	0.397	0.536	0.551	0.534	0.543	0.546	0.537	0.516	0.522	8.81
44)	isobutyl alcohol											
											0.000	-1.00
45)	dibromofluoromethane (s)											
	0.494	0.502	0.515	0.522	0.539	0.529	0.534	0.530	0.521	0.505	0.519	2.85
46)	1,1,1-trichloroethane											
	0.658	0.829	0.650	0.804	0.851	0.810	0.802	0.789	0.759	0.704	0.766	9.29
47)	cyclohexane											
			0.397	0.461	0.381	0.466	0.476	0.484	0.469	0.448	9.16	
48)	tert-amyl alcohol											
			0.012	0.014	0.014	0.016	0.015	0.015	0.015	0.015	0.015	9.38
49)	I 1,4-difluorobenzene	----------ISTD----------										
50)	1,2-dichloroethane-d4 (s)											
	0.402	0.409	0.419	0.422	0.419	0.426	0.418	0.407	0.385	0.364	0.407	4.76
51)	isopropyl acetate											
			0.036	0.044	0.042	0.040	0.044	0.046	0.045	0.043	8.69	
52)	1,2-dichloroethane											
	0.364	0.476	0.380	0.449	0.442	0.445	0.420	0.412	0.401	0.367	0.415	9.10
53)	benzene											

Initial Calibration Summary

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	1.024	1.104	0.770	0.930	0.936	0.935	0.890	0.902	0.907	0.883	0.928	9.48
54)	2,2,4-trimethylpentane											
	0.783	0.895	0.660	0.779	0.868	0.828	0.842	0.850	0.875	0.852	0.823	8.31
55)	tert-amyl methyl ether											
		0.179	0.135	0.161	0.160	0.161	0.170	0.177	0.181	0.174	0.166	8.69
56)	heptane											
			0.156	0.172	0.172	0.171	0.173	0.179	0.178	0.171	4.48	
57)	n-butyl alcohol											
			0.006	0.006	0.005	0.006	0.007	0.008	0.007	0.007	14.05	
58)	trichloroethene											
	0.278	0.298	0.247	0.287	0.287	0.291	0.277	0.277	0.277	0.270	0.279	5.01
59)	ethyl acrylate											
			0.197	0.209	0.194	0.219	0.241	0.248	0.245	0.222	10.37	
60)	methylcyclohexane											
		0.406	0.314	0.396	0.454	0.416	0.440	0.444	0.455	0.444	0.419	10.67
61)	1,2-dichloropropane											
	0.211	0.250	0.185	0.211	0.218	0.218	0.214	0.216	0.222	0.216	0.216	7.31
62)	methyl methacrylate											
					0.052	0.048	0.052	0.056	0.061	0.060	0.055	9.53
63)	dibromomethane											
	0.138	0.187	0.147	0.180	0.169	0.168	0.166	0.164	0.165	0.158	0.164	8.75
64)	bromodichloromethane											
	0.343	0.426	0.333	0.406	0.392	0.397	0.387	0.387	0.388	0.368	0.383	7.28
65)	2-nitropropane											
					0.075	0.079	0.077	0.077	0.078	0.072	0.076	3.30
66)	2-chloroethyl vinyl ether											
			0.093	0.095	0.092	0.102	0.108	0.110	0.106	0.101	7.40	
67)	epichlorohydrin											
		0.021	0.023	0.022	0.022	0.021	0.022	0.023	0.022	0.022	3.50	
68)	cis-1,3-dichloropropene											
	0.405	0.440	0.311	0.380	0.388	0.373	0.387	0.397	0.406	0.392	0.388	8.45
69)	4-methyl-2-pentanone											
		0.067	0.051	0.060	0.067	0.063	0.068	0.071	0.074	0.072	0.066	10.73
70)	3-methyl-1-butanol											
			0.005	0.005	0.005	0.006	0.007	0.007	0.007	0.006	15.32	
71)	I chlorobenzene-d5	----------ISTD----------										
72)	toluene-d8 (s)											
	1.263	1.258	1.266	1.265	1.257	1.255	1.270	1.251	1.255	1.234	1.257	0.80
73)	toluene											
			0.670	0.715	0.687	0.719	0.668	0.672	0.677	0.650	0.682	3.53
74)	trans-1,3-dichloropropene											
		0.566	0.409	0.457	0.463	0.446	0.445	0.457	0.453	0.423	0.458	9.68
75)	ethyl methacrylate											
		0.257	0.219	0.244	0.256	0.236	0.266	0.285	0.297	0.284	0.260	9.74
76)	1,1,2-trichloroethane											
	0.162	0.210	0.163	0.188	0.182	0.187	0.189	0.189	0.190	0.184	0.184	7.47
77)	1,3-dichloropropane											
	0.297	0.387	0.337	0.373	0.386	0.379	0.374	0.378	0.378	0.361	0.365	7.66
78)	tetrachloroethene											
			0.355	0.419	0.415	0.415	0.396	0.395	0.392	0.377	0.395	5.47
79)	2-hexanone											
			0.064	0.078	0.079	0.075	0.081	0.084	0.085	0.082	0.079	8.44
80)	butyl acetate											
				0.122	0.116	0.119	0.124	0.128	0.133	0.133	0.125	5.30
81)	3,3-dimethyl-1-Butanol											
			0.015	0.015	0.015	0.014	0.016	0.017	0.019	0.019	0.016	11.86
82)	n-butyl ether											
			0.763	0.871	0.893	0.884	0.902	0.939	0.957	0.938	0.893	6.79
83)	dibromochloromethane											

```
      0.315 0.375 0.309 0.373 0.380 0.373 0.375 0.378 0.380 0.361  0.362    7.41
 84)  1,2-dibromoethane
      0.212 0.280 0.240 0.264 0.262 0.264 0.270 0.276 0.277 0.265  0.261    7.86
 85)  chlorobenzene
      0.831 0.937 0.702 0.851 0.797 0.826 0.778 0.785 0.788 0.767  0.806    7.65
 86)  1,1,1,2-tetrachloroethane
      0.304 0.345 0.292 0.345 0.341 0.341 0.345 0.352 0.346 0.337  0.335    5.95
 87)  ethylbenzene
      1.387 1.490 1.113 1.283 1.298 1.294 1.284 1.302 1.300 1.234  1.299    7.42
 88)  m,p-xylene
      0.568 0.528 0.394 0.494 0.509 0.502 0.508 0.513 0.521 0.509  0.505    8.69
 89)  o-xylene
      0.490 0.525 0.372 0.458 0.480 0.473 0.485 0.510 0.515 0.510  0.482    9.13
 90)  styrene
      0.721 0.805 0.620 0.749 0.800 0.765 0.816 0.848 0.861 0.848  0.783    9.36
 91)  butyl acrylate
                          0.330 0.296 0.360 0.402 0.423 0.423  0.372   14.13
 92)  cis-1,4-dichloro-2-butene
                    0.147 0.155 0.148 0.159 0.167 0.170 0.163  0.158    5.65
 93)  bromoform
               0.210 0.266 0.256 0.242 0.259 0.276 0.282 0.279  0.259    9.13
 94)  isopropylbenzene
      1.321 1.287 0.961 1.203 1.291 1.205 1.294 1.381 1.376 1.332  1.265    9.70

 95) I   1,4-dichlorobenzene-d ----------------ISTD--------------------
 96)  4-bromofluorobenzene (s)
      0.816 0.826 0.828 0.820 0.812 0.819 0.788 0.764 0.752 0.735  0.796    4.26
 97)  1,1,2,2-tetrachloroethane
               0.436 0.480 0.439 0.451 0.444 0.432 0.449 0.441  0.446    3.38
 98)  trans-1,4-dichloro-2-butene
         0.170 0.145 0.157 0.144 0.144 0.147 0.145 0.147 0.141  0.149    6.17
 99)  1,2,3-trichloropropane
         0.168 0.142 0.154 0.150 0.154 0.152 0.145 0.147 0.142  0.151    5.35
100)  bromobenzene
      0.632 0.797 0.593 0.691 0.654 0.667 0.639 0.612 0.620 0.597  0.650    9.24
101)  n-propylbenzene
      2.292 2.752 1.948 2.389 2.516 2.431 2.441 2.416 2.401 2.270  2.386    8.52
102)  2-chlorotoluene
      0.541 0.581 0.448 0.557 0.529 0.524 0.539 0.529 0.540 0.529  0.532    6.36
103)  4-chlorotoluene
      1.592 1.746 1.266 1.530 1.556 1.569 1.543 1.502 1.518 1.452  1.527    7.87
104)  1,3,5-trimethylbenzene
      1.692 1.860 1.411 1.736 1.833 1.776 1.837 1.810 1.845 1.777  1.758    7.55
105)  tert-butylbenzene
      0.321 0.351 0.253 0.344 0.375 0.345 0.361 0.377 0.387 0.388  0.350   11.55
106)  1,2,4-trimethylbenzene
      2.048 2.129 1.526 1.742 1.866 1.731 1.840 1.873 1.899 1.821  1.848    9.06
107)  sec-butylbenzene
      2.003 2.329 1.785 2.157 2.367 2.221 2.372 2.405 2.446 2.335  2.242    9.29
108)  p-isopropyltoluene
      1.962 1.932 1.488 1.872 2.104 1.931 2.099 2.160 2.192 2.086  1.982   10.32
109)  benzyl chloride
               0.892 1.001 1.052 1.019 1.021 1.041 1.058 1.011  1.012    5.17
110)  1,3-dichlorobenzene
      1.382 1.450 1.112 1.260 1.214 1.229 1.190 1.184 1.200 1.170  1.239    8.25
111)  1,4-dichlorobenzene
      1.574 1.411 1.175 1.287 1.260 1.293 1.187 1.196 1.206 1.175  1.276   10.03
112)  1,2-dichlorobenzene
      1.295 1.372 0.978 1.160 1.138 1.155 1.138 1.144 1.169 1.128  1.168    8.94
113)  n-butylbenzene
```

Initial Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICC8691
Lab FileID: I216449.D

```
       0.889 0.987 0.802 0.921 1.041 0.976 1.059 1.091 1.097 1.049  0.991    9.68
114)  hexachloroethane
             0.522 0.370 0.450 0.476 0.480 0.467 0.470 0.480 0.477  0.466    8.74
115)  1,2-dibromo-3-chloropropane
                       0.050 0.048 0.046 0.047 0.046 0.046 0.044  0.047    3.84
116)  1,3,5-Trichlorobenzene
       1.032 1.150 0.895 1.049 1.000 0.977 0.970 0.988 0.966 0.918  0.994    7.20
117)  1,2,4-trichlorobenzene
                  0.757 0.823 0.800 0.805 0.795 0.806 0.795 0.740  0.790    3.48
118)  2-ethylhexyl acrylate
                       0.460 0.479 0.472 0.509 0.586 0.631 0.585  0.532   12.80
119)  hexachlorobutadiene
       0.518 0.586 0.475 0.583 0.590 0.551 0.546 0.550 0.531 0.491  0.542    7.22
120)  naphthalene
                  1.281 1.434 1.449 1.429 1.523 1.572 1.571 1.457  1.464    6.45
121)  1,2,3-trichlorobenzene
                  0.745 0.842 0.811 0.781 0.794 0.797 0.788 0.712  0.784    5.07
122)  2-methylnaphthalene
                  1.084 1.126 1.167 1.146 1.220 1.252 1.223 1.026  1.155    6.62
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MI8691.M          Fri Oct 27 11:16:58 2017
```

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICV8691
Lab FileID: I216454.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\I\VI8691FINAL\I216454.D Vial: 14
Acq On : 27 Oct 2017 1:58 am Operator: PrashanS
Sample : ICV8691-50 Inst : GCMSI
Misc : MS21115,VI8691,5.0,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	92	-0.01	7.43
2		tertiary butyl alcohol		----------NA----------				
3		1,4-dioxane		----------NA----------				
4	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	9.76
5		dichlorodifluoromethane		----------NA----------				
6		chlorodifluoromethane		----------NA----------				
7		chloromethane		----------NA----------				
8		vinyl chloride		----------NA----------				
9		bromomethane		----------NA----------				
10		chloroethane		----------NA----------				
11		trichlorofluoromethane		----------NA----------				
12		ethyl ether		----------NA----------				
13		2-chloropropane		----------NA----------				
14		acrolein		----------NA----------				
15		freon 113		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		acetone		----------NA----------				
18		iodomethane		----------NA----------				
19		carbon disulfide		----------NA----------				
20		acetonitrile	0.038	0.036	5.3	104	0.00	7.18
21		methyl acetate		----------NA----------				
22		methylene chloride		----------NA----------				
23		acrylonitrile		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		1,1-dichloroethane		----------NA----------				
28		vinyl acetate		----------NA----------				
29		di-isopropyl ether		----------NA----------				
30		chloroprene		----------NA----------				
31		ethyl tert-butyl ether		----------NA----------				
32		2-butanone		----------NA----------				
33		2,2-dichloropropane		----------NA----------				
34		ethyl acetate		----------NA----------				
35		cis-1,2-dichloroethene		----------NA----------				
36		propionitrile		----------NA----------				
37		methyl acrylate		----------NA----------				
38		methacrylonitrile		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICV8691
Lab FileID: I216454.D

42		carbon tetrachloride		----------NA----------				
43		1,1-dichloropropene		----------NA----------				
44		isobutyl alcohol		----------NA----------				
45	S	dibromofluoromethane (s)	0.519	0.524	-1.0	101	0.00	9.79
46		1,1,1-trichloroethane		----------NA----------				
47		cyclohexane		----------NA----------				
48		tert-amyl alcohol		----------NA----------				
49	I	1,4-difluorobenzene	1.000	1.000	0.0	96	0.00	10.71
50	S	1,2-dichloroethane-d4 (s)	0.407	0.416	-2.2	99	0.00	10.21
51		isopropyl acetate		----------NA----------				
52		1,2-dichloroethane		----------NA----------				
53		benzene		----------NA----------				
54		2,2,4-trimethylpentane		----------NA----------				
55		tert-amyl methyl ether		----------NA----------				
56		heptane		----------NA----------				
57		n-butyl alcohol		----------NA----------				
58		trichloroethene		----------NA----------				
59		ethyl acrylate		----------NA----------				
60		methylcyclohexane		----------NA----------				
61		1,2-dichloropropane		----------NA----------				
62		methyl methacrylate		----------NA----------				
63		dibromomethane		----------NA----------				
64		bromodichloromethane		----------NA----------				
65		2-nitropropane		----------NA----------				
66		2-chloroethyl vinyl ether		----------NA----------				
67		epichlorohydrin		----------NA----------				
68		cis-1,3-dichloropropene		----------NA----------				
69		4-methyl-2-pentanone		----------NA----------				
70		3-methyl-1-butanol		----------NA----------				
71	I	chlorobenzene-d5	1.000	1.000	0.0	98	0.00	13.83
72	S	toluene-d8 (s)	1.257	1.262	-0.4	99	0.00	12.32
73		toluene		----------NA----------				
74		trans-1,3-dichloropropene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		1,1,2-trichloroethane		----------NA----------				
77		1,3-dichloropropane		----------NA----------				
78		tetrachloroethene		----------NA----------				
79		2-hexanone		----------NA----------				
80		butyl acetate		----------NA----------				
81		3,3-dimethyl-1-Butanol		----------NA----------				
82		n-butyl ether		----------NA----------				
83		dibromochloromethane		----------NA----------				
84		1,2-dibromoethane		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		cis-1,4-dichloro-2-butene		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	85	0.00	16.17
96	S	4-bromofluorobenzene (s)	0.796	0.837	-5.2	94	0.00	14.99
97		1,1,2,2-tetrachloroethane		----------NA----------				
98		trans-1,4-dichloro-2-bute		----------NA----------				

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICV8691
Lab FileID: I216454.D

99	1,2,3-trichloropropane	----------NA----------	
100	bromobenzene	----------NA----------	
101	n-propylbenzene	----------NA----------	
102	2-chlorotoluene	----------NA----------	
103	4-chlorotoluene	----------NA----------	
104	1,3,5-trimethylbenzene	----------NA----------	
105	tert-butylbenzene	----------NA----------	
106	1,2,4-trimethylbenzene	----------NA----------	
107	sec-butylbenzene	----------NA----------	
108	p-isopropyltoluene	----------NA----------	
109	benzyl chloride	----------NA----------	
110	1,3-dichlorobenzene	----------NA----------	
111	1,4-dichlorobenzene	----------NA----------	
112	1,2-dichlorobenzene	----------NA----------	
113	n-butylbenzene	----------NA----------	
114	hexachloroethane	----------NA----------	
115	1,2-dibromo-3-chloropropa	----------NA----------	
116	1,3,5-Trichlorobenzene	----------NA----------	
117	1,2,4-trichlorobenzene	----------NA----------	
118	2-ethylhexyl acrylate	----------NA----------	
119	hexachlorobutadiene	----------NA----------	
120	naphthalene	----------NA----------	
121	1,2,3-trichlorobenzene	----------NA----------	
122	2-methylnaphthalene	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I216449.D MI8691.M Tue Oct 31 15:22:44 2017 11

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICV8691
Lab FileID: I216455.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\I216455.D Vial: 15
Acq On : 27 Oct 2017 2:24 am Operator: PrashanS
Sample : ICV8691-50 Inst : GCMSI
Misc : MS21115,VI8691,5.0,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
Last Update : Fri Oct 27 11:02:55 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	101	-0.01	7.43
2		tertiary butyl alcohol	1.101	1.074	2.5	97	-0.01	7.55
3		1,4-dioxane	0.106	0.114	-7.5	108	0.00	11.35
4	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	9.76
5		dichlorodifluoromethane	0.600	0.480	20.0	79	0.00	3.90
6		chlorodifluoromethane	0.517	0.308	40.4#	63	0.00	3.93
7		chloromethane	0.401	0.339	15.5	91	0.00	4.29
8		vinyl chloride	0.401	0.328	18.2	85	0.00	4.54
9		bromomethane	0.311	0.267	14.1	93	0.02	5.21
10		chloroethane	0.220	0.209	5.0	95	0.00	5.42
11		trichlorofluoromethane	0.794	0.721	9.2	93	0.00	5.89
12		ethyl ether	0.153	0.151	1.3	100	0.00	6.34
13		2-chloropropane	0.130	0.115	11.5	90	0.00	6.56
14		acrolein	0.046	0.012	73.9#	26#	0.00	6.56
15		freon 113	0.328	0.291	11.3	93	0.00	6.76
16		1,1-dichloroethene	0.533	0.459	13.9	89	0.00	6.76
17		acetone	0.027	0.024	11.1	90	0.00	6.76
18		iodomethane	0.461	0.400	13.2	81	0.00	7.02
19		carbon disulfide	1.186	0.899	24.2	89	0.00	7.16
20		acetonitrile	0.038	0.034	10.5	103	0.00	7.18
21		methyl acetate	0.047	0.045	4.3	97	0.00	7.25
22		methylene chloride	0.345	0.314	9.0	101	0.00	7.49
23		acrylonitrile	0.088	0.085	3.4	101	0.00	7.78
24		methyl tert butyl ether	0.913	0.934	-2.3	103	0.00	7.87
25		trans-1,2-dichloroethene	0.496	0.459	7.5	97	0.00	7.90
26		hexane	0.485	0.328	32.4#	77	0.00	8.28
27		1,1-dichloroethane	0.613	0.578	5.7	100	0.00	8.49
28		vinyl acetate	0.048	0.049	-2.1	102	0.00	8.43
29		di-isopropyl ether	0.880	0.905	-2.8	102	0.00	8.48
30		chloroprene	0.559	0.561	-0.4	99	0.00	8.59
31		ethyl tert-butyl ether	0.944	0.980	-3.8	100	0.00	8.95
32		2-butanone	0.033	0.033	0.0	101	0.00	9.14
33		2,2-dichloropropane	0.689	0.626	9.1	99	0.00	9.24
34		ethyl acetate	0.044	0.042	4.5	101	0.00	9.17
35		cis-1,2-dichloroethene	0.407	0.371	8.8	103	0.00	9.21
36		propionitrile	0.045	0.041	8.9	96	0.00	9.20
37		methyl acrylate	0.046	0.047	-2.2	103	0.00	9.25
38		methacrylonitrile	0.112	0.109	2.7	98	0.00	9.41
39		bromochloromethane	0.195	0.190	2.6	100	0.00	9.51
40		tetrahydrofuran	0.039	0.035	10.3	100	0.00	9.54
41		chloroform	0.783	0.714	8.8	101	0.00	9.60

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICV8691
Lab FileID: I216455.D

42		carbon tetrachloride	0.725	0.682	5.9	96	0.00	10.07
43		1,1-dichloropropene	0.522	0.499	4.4	98	0.00	10.04
44		isobutyl alcohol		----------NA----------				
45	S	dibromofluoromethane (s)	0.519	0.521	-0.4	105	0.00	9.79
46		1,1,1-trichloroethane	0.766	0.714	6.8	97	0.00	9.86
47		cyclohexane	0.448	0.442	1.3	99	0.00	9.98
48		tert-amyl alcohol	0.015	0.015	0.0	102	0.00	10.15
49	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	10.71
50	S	1,2-dichloroethane-d4 (s)	0.407	0.398	2.2	104	0.00	10.21
51		isopropyl acetate	0.043	0.043	0.0	104	0.00	10.19
52		1,2-dichloroethane	0.415	0.403	2.9	104	0.00	10.31
53		benzene	0.928	0.855	7.9	101	0.00	10.29
54		2,2,4-trimethylpentane	0.823	0.798	3.0	100	0.00	10.39
55		tert-amyl methyl ether	0.166	0.171	-3.0	103	0.00	10.37
56		heptane	0.171	0.176	-2.9	108	0.00	10.56
57		n-butyl alcohol	0.007	0.007	0.0	103	0.00	10.74
58		trichloroethene	0.279	0.268	3.9	103	0.00	11.02
59		ethyl acrylate	0.222	0.231	-4.1	102	0.00	11.00
60		methylcyclohexane	0.419	0.383	8.6	92	0.00	11.32
61		1,2-dichloropropane	0.216	0.217	-0.5	107	0.00	11.30
62		methyl methacrylate	0.055	0.058	-5.5	110	0.00	11.27
63		dibromomethane	0.164	0.161	1.8	105	0.00	11.41
64		bromodichloromethane	0.383	0.384	-0.3	106	0.00	11.56
65		2-nitropropane	0.076	0.073	3.9	101	0.00	11.75
66		2-chloroethyl vinyl ether	0.101	0.113	-11.9	112	0.00	11.79
67		epichlorohydrin	0.022	0.022	0.0	107	0.00	11.87
68		cis-1,3-dichloropropene	0.388	0.389	-0.3	104	0.00	12.01
69		4-methyl-2-pentanone	0.066	0.067	-1.5	101	0.00	12.11
70		3-methyl-1-butanol	0.006	0.006	0.0	99	0.00	12.11
71	I	chlorobenzene-d5	1.000	1.000	0.0	106	0.00	13.83
72	S	toluene-d8 (s)	1.257	1.254	0.2	106	0.00	12.33
73		toluene	0.682	0.648	5.0	103	0.00	12.40
74		trans-1,3-dichloropropene	0.458	0.447	2.4	104	0.00	12.58
75		ethyl methacrylate	0.260	0.267	-2.7	100	0.00	12.57
76		1,1,2-trichloroethane	0.184	0.189	-2.7	106	0.00	12.80
77		1,3-dichloropropane	0.365	0.376	-3.0	106	0.00	12.98
78		tetrachloroethene	0.395	0.460	-16.5	124	0.00	12.95
79		2-hexanone	0.079	0.075	5.1	95	0.00	12.95
80		butyl acetate	0.125	0.130	-4.0	108	0.00	13.04
81		3,3-dimethyl-1-Butanol	0.016	0.017	-6.3	106	0.00	13.13
82		n-butyl ether	0.893	0.853	4.5	97	0.00	13.82
83		dibromochloromethane	0.362	0.378	-4.4	106	0.00	13.22
84		1,2-dibromoethane	0.261	0.273	-4.6	105	0.00	13.38
85		chlorobenzene	0.806	0.770	4.5	104	0.00	13.86
86		1,1,1,2-tetrachloroethane	0.335	0.341	-1.8	103	0.00	13.92
87		ethylbenzene	1.299	1.246	4.1	102	0.00	13.92
88		m,p-xylene	0.505	0.489	3.2	101	0.00	14.04
89		o-xylene	0.482	0.479	0.6	100	0.00	14.44
90		styrene	0.783	0.812	-3.7	102	0.00	14.45
91		butyl acrylate	0.372	0.381	-2.4	101	0.00	14.27
92		cis-1,4-dichloro-2-butene	0.158	0.151	4.4	96	0.00	14.82
93		bromoform	0.259	0.273	-5.4	105	0.00	14.68
94		isopropylbenzene	1.265	1.289	-1.9	99	0.00	14.79
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	16.17
96	S	4-bromofluorobenzene (s)	0.796	0.760	4.5	103	0.00	14.99
97		1,1,2,2-tetrachloroethane	0.446	0.450	-0.9	108	0.00	15.06
98		trans-1,4-dichloro-2-bute	0.149	0.153	-2.7	109	0.00	15.09

Initial Calibration Verification

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8691-ICV8691
Lab FileID: I216455.D

99	1,2,3-trichloropropane	0.151	0.148	2.0	106	0.00	15.15
100	bromobenzene	0.650	0.620	4.6	105	0.00	15.17
101	n-propylbenzene	2.386	2.326	2.5	100	0.00	15.21
102	2-chlorotoluene	0.532	0.524	1.5	102	0.00	15.34
103	4-chlorotoluene	1.527	1.469	3.8	101	0.00	15.45
104	1,3,5-trimethylbenzene	1.758	1.773	-0.9	101	0.00	15.37
105	tert-butylbenzene	0.350	0.373	-6.6	102	0.00	15.71
106	1,2,4-trimethylbenzene	1.848	1.833	0.8	101	0.00	15.76
107	sec-butylbenzene	2.242	2.317	-3.3	100	0.00	15.93
108	p-isopropyltoluene	1.982	2.122	-7.1	102	0.00	16.07
109	benzyl chloride	1.012	0.873	13.7	87	0.00	16.29
110	1,3-dichlorobenzene	1.239	1.172	5.4	102	0.00	16.10
111	1,4-dichlorobenzene	1.276	1.170	8.3	101	0.00	16.20
112	1,2-dichlorobenzene	1.168	1.148	1.7	104	0.00	16.58
113	n-butylbenzene	0.991	1.041	-5.0	99	0.00	16.49
114	hexachloroethane	0.466	0.457	1.9	100	0.00	16.90
115	1,2-dibromo-3-chloropropa	0.047	0.045	4.3	101	0.00	15.17
116	1,3,5-Trichlorobenzene	0.994	0.984	1.0	103	0.00	17.53
117	1,2,4-trichlorobenzene	0.790	0.783	0.9	100	0.00	18.05
118	2-ethylhexyl acrylate	0.532	0.678	-27.4	120	0.00	18.06
119	hexachlorobutadiene	0.542	0.521	3.9	98	0.00	18.15
120	naphthalene	1.464	1.557	-6.4	102	0.00	18.28
121	1,2,3-trichlorobenzene	0.784	0.787	-0.4	102	0.00	18.46
122	2-methylnaphthalene	1.155	1.144	1.0	95	0.00	19.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0

I216449.D MI8691.M Fri Oct 27 11:17:18 2017

6.9.17

6

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8698-CC8691
Lab FileID: I216593.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\I-core\vi8698\i216593.d Vial: 27
Acq On : 3 Nov 2017 8:53 pm Operator: PrashanS
Sample : cc8691-50 Inst : GCMSI
Misc : MS21711,VI8698,5.0,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	97	-0.01	7.43
2		tertiary butyl alcohol	1.101	1.096	0.5	96	-0.01	7.55
3		1,4-dioxane	0.106	0.105	0.9	96	0.00	11.35
4	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	9.76
5		dichlorodifluoromethane	0.600	0.546	9.0	88	0.00	3.90
6		chlorodifluoromethane	0.517	0.453	12.4	90	0.00	3.93
7		chloromethane	0.401	0.336	16.2	88	0.00	4.30
8		vinyl chloride	0.401	0.357	11.0	91	0.00	4.54
9		bromomethane	0.311	0.264	15.1	90	0.02	5.22
10		chloroethane	0.220	0.204	7.3	91	0.00	5.42
11		trichlorofluoromethane	0.794	0.735	7.4	92	0.00	5.89
12		ethyl ether	0.153	0.153	0.0	98	0.00	6.34
13		2-chloropropane	0.130	0.123	5.4	94	0.00	6.55
14		acrolein	0.046	0.048	-4.3	102	0.00	6.56
15		freon 113	0.328	0.264	19.5	82	0.00	6.76
16		1,1-dichloroethene	0.533	0.496	6.9	94	0.00	6.77
17		acetone	0.027	0.028	-3.7	103	0.00	6.76
18		iodomethane	0.461	0.428	7.2	85	0.00	7.02
19		carbon disulfide	1.186	0.939	20.8#	91	0.00	7.16
20		acetonitrile	0.038	0.034	10.5	100	0.00	7.18
21		methyl acetate	0.047	0.046	2.1	98	0.00	7.25
22		methylene chloride	0.345	0.303	12.2	95	0.00	7.49
23		acrylonitrile	0.088	0.082	6.8	96	0.00	7.78
24		methyl tert butyl ether	0.913	0.905	0.9	97	0.00	7.87
25		trans-1,2-dichloroethene	0.496	0.461	7.1	95	0.00	7.90
26		hexane	0.485	0.382	21.2#	87	0.00	8.28
27		1,1-dichloroethane	0.613	0.554	9.6	94	0.00	8.48
28		vinyl acetate	0.048	0.049	-2.1	99	0.00	8.43
29		di-isopropyl ether	0.880	0.882	-0.2	97	0.00	8.48
30		chloroprene	0.559	0.542	3.0	93	0.00	8.59
31		ethyl tert-butyl ether	0.944	0.964	-2.1	96	0.00	8.95
32		2-butanone	0.033	0.033	0.0	99	0.00	9.14
33		2,2-dichloropropane	0.689	0.625	9.3	97	0.00	9.24
34		ethyl acetate	0.044	0.041	6.8	97	0.00	9.17
35		cis-1,2-dichloroethene	0.407	0.347	14.7	94	0.00	9.21
36		propionitrile	0.045	0.043	4.4	99	0.00	9.20
37		methyl acrylate	0.046	0.045	2.2	94	0.00	9.25
38		methacrylonitrile	0.112	0.110	1.8	96	0.00	9.41
39		bromochloromethane	0.195	0.178	8.7	91	0.00	9.51
40		tetrahydrofuran	0.039	0.035	10.3	97	0.00	9.53
41		chloroform	0.783	0.684	12.6	94	0.00	9.60

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8698-CC8691
Lab FileID: I216593.D

42		carbon tetrachloride	0.725	0.681	6.1	94	0.00	10.07
43		1,1-dichloropropene	0.522	0.490	6.1	94	0.00	10.04
44		isobutyl alcohol		----------NA----------				
45	S	dibromofluoromethane (s)	0.519	0.514	1.0	101	0.00	9.79
46		1,1,1-trichloroethane	0.766	0.706	7.8	93	0.00	9.86
47		cyclohexane	0.448	0.430	4.0	94	0.00	9.98
48		tert-amyl alcohol	0.015	0.015	0.0	100	0.00	10.15
49	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	10.71
50	S	1,2-dichloroethane-d4 (s)	0.407	0.430	-5.7	109	0.00	10.21
51		isopropyl acetate	0.043	0.042	2.3	99	0.00	10.20
52		1,2-dichloroethane	0.415	0.403	2.9	101	0.00	10.31
53		benzene	0.928	0.816	12.1	94	0.00	10.29
54		2,2,4-trimethylpentane	0.823	0.732	11.1	89	0.00	10.39
55		tert-amyl methyl ether	0.166	0.168	-1.2	98	0.00	10.37
56		heptane	0.171	0.150	12.3	90	0.00	10.56
57		n-butyl alcohol	0.007	0.007	0.0	98	0.00	10.74
58		trichloroethene	0.279	0.251	10.0	94	0.00	11.02
59		ethyl acrylate	0.222	0.230	-3.6	99	0.00	11.00
60		methylcyclohexane	0.419	0.381	9.1	89	0.00	11.32
61		1,2-dichloropropane	0.216	0.202	6.5	97	0.00	11.30
62		methyl methacrylate	0.055	0.054	1.8	99	0.00	11.27
63		dibromomethane	0.164	0.158	3.7	99	0.00	11.41
64		bromodichloromethane	0.383	0.369	3.7	99	0.00	11.56
65		2-nitropropane	0.076	0.072	5.3	96	0.00	11.75
66		2-chloroethyl vinyl ether	0.101	0.098	3.0	93	0.00	11.79
67		epichlorohydrin	0.022	0.022	0.0	102	0.00	11.87
68		cis-1,3-dichloropropene	0.388	0.381	1.8	99	0.00	12.01
69		4-methyl-2-pentanone	0.066	0.069	-4.5	100	0.00	12.11
70		3-methyl-1-butanol	0.006	0.006	0.0	99	0.00	12.11
71	I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	13.83
72	S	toluene-d8 (s)	1.257	1.244	1.0	102	0.00	12.32
73		toluene	0.682	0.614	10.0	94	0.00	12.40
74		trans-1,3-dichloropropene	0.458	0.447	2.4	100	0.00	12.58
75		ethyl methacrylate	0.260	0.275	-5.8	99	0.00	12.57
76		1,1,2-trichloroethane	0.184	0.181	1.6	98	0.00	12.80
77		1,3-dichloropropane	0.365	0.374	-2.5	101	0.00	12.98
78		tetrachloroethene	0.395	0.338	14.4	88	0.00	12.95
79		2-hexanone	0.079	0.090	-13.9	110	0.00	12.95
80		butyl acetate	0.125	0.125	0.0	100	0.00	13.04
81		3,3-dimethyl-1-Butanol	0.016	0.017	-6.3	102	0.00	13.13
82		n-butyl ether	0.893	0.876	1.9	96	0.00	13.82
83		dibromochloromethane	0.362	0.356	1.7	97	0.00	13.22
84		1,2-dibromoethane	0.261	0.262	-0.4	97	0.00	13.38
85		chlorobenzene	0.806	0.721	10.5	94	0.00	13.86
86		1,1,1,2-tetrachloroethane	0.335	0.327	2.4	95	0.00	13.92
87		ethylbenzene	1.299	1.193	8.2	94	0.00	13.92
88		m,p-xylene	0.505	0.477	5.5	95	0.00	14.04
89		o-xylene	0.482	0.474	1.7	95	0.00	14.44
90		styrene	0.783	0.797	-1.8	96	0.00	14.45
91		butyl acrylate	0.372	0.394	-5.9	100	0.00	14.27
92		cis-1,4-dichloro-2-butene	0.158	0.169	-7.0	104	0.00	14.82
93		bromoform	0.259	0.253	2.3	94	0.00	14.68
94		isopropylbenzene	1.265	1.250	1.2	93	0.00	14.79
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	16.17
96	S	4-bromofluorobenzene (s)	0.796	0.774	2.8	100	0.00	14.99
97		1,1,2,2-tetrachloroethane	0.446	0.443	0.7	102	0.00	15.06
98		trans-1,4-dichloro-2-bute	0.149	0.148	0.7	102	0.00	15.09

Continuing Calibration Summary

Job Number: JC54422 **Sample:** VI8698-CC8691
Account: TRCNYNYB TRC **Lab FileID:** I216593.D
Project: K710, 168 8th Street, Brooklyn, NY

99	1,2,3-trichloropropane	0.151	0.146	3.3	100	0.00	15.15
100	bromobenzene	0.650	0.567	12.8	92	0.00	15.17
101	n-propylbenzene	2.386	2.322	2.7	95	0.00	15.21
102	2-chlorotoluene	0.532	0.506	4.9	95	0.00	15.34
103	4-chlorotoluene	1.527	1.500	1.8	99	0.00	15.45
104	1,3,5-trimethylbenzene	1.758	1.746	0.7	96	0.00	15.37
105	tert-butylbenzene	0.350	0.351	-0.3	92	0.00	15.71
106	1,2,4-trimethylbenzene	1.848	1.798	2.7	95	0.00	15.76
107	sec-butylbenzene	2.242	2.262	-0.9	93	0.00	15.93
108	p-isopropyltoluene	1.982	2.038	-2.8	94	0.00	16.07
109	benzyl chloride	1.012	1.165	-15.1	111	0.00	16.29
110	1,3-dichlorobenzene	1.239	1.134	8.5	95	0.00	16.10
111	1,4-dichlorobenzene	1.276	1.166	8.6	97	0.00	16.20
112	1,2-dichlorobenzene	1.168	1.098	6.0	95	0.00	16.58
113	n-butylbenzene	0.991	1.039	-4.8	95	0.00	16.49
114	hexachloroethane	0.466	0.410	12.0	87	0.00	16.89
115	1,2-dibromo-3-chloropropa	0.047	0.043	8.5	92	0.00	15.17
116	1,3,5-Trichlorobenzene	0.994	1.011	-1.7	102	0.00	17.52
117	1,2,4-trichlorobenzene	0.790	0.888	-12.4	109	0.00	18.05
118	2-ethylhexyl acrylate	0.532	0.609	-14.5	103	0.00	18.06
119	hexachlorobutadiene	0.542	0.556	-2.6	100	0.00	18.15
120	naphthalene	1.464	1.656	-13.1	105	0.00	18.28
121	1,2,3-trichlorobenzene	0.784	0.865	-10.3	108	0.00	18.46
122	2-methylnaphthalene	1.155	1.352	-17.1	107	0.00	19.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I216449.D MI8691.M Mon Nov 06 12:33:37 2017

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8699-CC8691
Lab FileID: I216618.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\vi8699\i216618.d Vial: 1
Acq On : 4 Nov 2017 1:45 pm Operator: PrashanS
Sample : cc8691-20 Inst : GCMSI
Misc : MS21830,VI8699,5.0,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	-0.01	7.43
2		tertiary butyl alcohol	1.101	1.142	-3.7	96	-0.01	7.55
3		1,4-dioxane	0.106	0.112	-5.7	94	-0.01	11.34
4	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	9.76
5		dichlorodifluoromethane	0.600	0.679	-13.2	101	0.00	3.90
6		chlorodifluoromethane	0.517	0.526	-1.7	97	0.00	3.93
7		chloromethane	0.401	0.392	2.2	94	0.00	4.29
8		vinyl chloride	0.401	0.407	-1.5	97	0.00	4.54
9		bromomethane	0.311	0.284	8.7	95	0.02	5.22
10		chloroethane	0.220	0.222	-0.9	93	0.01	5.43
11		trichlorofluoromethane	0.794	0.847	-6.7	98	0.00	5.90
12		ethyl ether	0.153	0.158	-3.3	100	0.00	6.35
13		2-chloropropane	0.130	0.134	-3.1	96	0.00	6.56
14		acrolein	0.046	0.041	10.9	85	0.00	6.56
15		freon 113	0.328	0.295	10.1	85	0.00	6.77
16		1,1-dichloroethene	0.533	0.553	-3.8	98	0.00	6.77
17		acetone	0.027	0.024	11.1	95	0.00	6.77
18		iodomethane	0.461	0.390	15.4	83	0.00	7.02
19		carbon disulfide	1.186	1.020	14.0	92	0.00	7.16
20		acetonitrile	0.038	0.035	7.9	97	0.00	7.18
21		methyl acetate	0.047	0.046	2.1	93	0.00	7.25
22		methylene chloride	0.345	0.328	4.9	99	0.00	7.49
23		acrylonitrile	0.088	0.081	8.0	93	0.00	7.78
24		methyl tert butyl ether	0.913	0.950	-4.1	99	0.00	7.87
25		trans-1,2-dichloroethene	0.496	0.501	-1.0	95	0.00	7.90
26		hexane	0.485	0.407	16.1	89	0.00	8.28
27		1,1-dichloroethane	0.613	0.612	0.2	98	0.00	8.49
28		vinyl acetate	0.048	0.044	8.3	87	0.00	8.43
29		di-isopropyl ether	0.880	0.905	-2.8	98	0.00	8.48
30		chloroprene	0.559	0.573	-2.5	95	0.00	8.59
31		ethyl tert-butyl ether	0.944	0.987	-4.6	98	0.00	8.95
32		2-butanone	0.033	0.031	6.1	98	0.00	9.14
33		2,2-dichloropropane	0.689	0.692	-0.4	100	0.00	9.24
34		ethyl acetate	0.044	0.042	4.5	94	0.00	9.17
35		cis-1,2-dichloroethene	0.407	0.371	8.8	95	0.00	9.21
36		propionitrile	0.045	0.044	2.2	98	0.00	9.20
37		methyl acrylate	0.046	0.041	10.9	90	0.00	9.25
38		methacrylonitrile	0.112	0.107	4.5	94	0.00	9.41
39		bromochloromethane	0.195	0.187	4.1	94	0.00	9.51
40		tetrahydrofuran	0.039	0.035	10.3	94	0.00	9.53
41		chloroform	0.783	0.743	5.1	98	0.00	9.60

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8699-CC8691
Lab FileID: I216618.D

42		carbon tetrachloride	0.725	0.755	-4.1	98	0.00	10.07
43		1,1-dichloropropene	0.522	0.521	0.2	94	0.00	10.04
44		isobutyl alcohol		----------NA----------				
45	S	dibromofluoromethane (s)	0.519	0.514	1.0	95	0.00	9.79
46		1,1,1-trichloroethane	0.766	0.791	-3.3	97	0.00	9.86
47		cyclohexane	0.448	0.384	14.3	81	0.00	9.98
48		tert-amyl alcohol	0.015	0.014	6.7	96	0.00	10.15
49	I	1,4-difluorobenzene	1.000	1.000	0.0	95	0.00	10.71
50	S	1,2-dichloroethane-d4 (s)	0.407	0.460	-13.0	105	0.00	10.21
51		isopropyl acetate	0.043	0.043	0.0	104	0.00	10.20
52		1,2-dichloroethane	0.415	0.463	-11.6	105	0.00	10.31
53		benzene	0.928	0.891	4.0	96	0.00	10.29
54		2,2,4-trimethylpentane	0.823	0.828	-0.6	94	0.00	10.39
55		tert-amyl methyl ether	0.166	0.173	-4.2	97	0.00	10.37
56		heptane	0.171	0.166	2.9	93	0.00	10.56
57		n-butyl alcohol	0.007	0.006	14.3	96	0.00	10.74
58		trichloroethene	0.279	0.271	2.9	94	0.00	11.02
59		ethyl acrylate	0.222	0.230	-3.6	100	0.00	11.00
60		methylcyclohexane	0.419	0.420	-0.2	91	0.00	11.32
61		1,2-dichloropropane	0.216	0.219	-1.4	98	0.00	11.30
62		methyl methacrylate	0.055	0.054	1.8	99	0.00	11.27
63		dibromomethane	0.164	0.173	-5.5	99	0.00	11.41
64		bromodichloromethane	0.383	0.412	-7.6	102	0.00	11.56
65		2-nitropropane	0.076	0.081	-6.6	100	0.00	11.75
66		2-chloroethyl vinyl ether	0.101	0.115	-13.9	108	0.00	11.79
67		epichlorohydrin	0.022	0.024	-9.1	108	0.00	11.87
68		cis-1,3-dichloropropene	0.388	0.395	-1.8	97	0.00	12.01
69		4-methyl-2-pentanone	0.066	0.072	-9.1	101	0.00	12.11
70		3-methyl-1-butanol	0.006	0.006	0.0	97	0.00	12.11
71	I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	13.83
72	S	toluene-d8 (s)	1.257	1.254	0.2	95	0.00	12.32
73		toluene	0.682	0.663	2.8	95	0.00	12.40
74		trans-1,3-dichloropropene	0.458	0.474	-3.5	102	0.00	12.57
75		ethyl methacrylate	0.260	0.273	-5.0	98	0.00	12.57
76		1,1,2-trichloroethane	0.184	0.190	-3.3	97	0.00	12.80
77		1,3-dichloropropane	0.365	0.394	-7.9	101	0.00	12.98
78		tetrachloroethene	0.395	0.354	10.4	86	0.00	12.95
79		2-hexanone	0.079	0.080	-1.3	95	0.00	12.95
80		butyl acetate	0.125	0.129	-3.2	99	0.00	13.04
81		3,3-dimethyl-1-Butanol	0.016	0.016	0.0	96	0.00	13.13
82		n-butyl ether	0.893	0.879	1.6	93	0.00	13.82
83		dibromochloromethane	0.362	0.381	-5.2	97	0.00	13.22
84		1,2-dibromoethane	0.261	0.278	-6.5	99	0.00	13.38
85		chlorobenzene	0.806	0.761	5.6	94	0.00	13.86
86		1,1,1,2-tetrachloroethane	0.335	0.343	-2.4	95	0.00	13.92
87		ethylbenzene	1.299	1.245	4.2	93	0.00	13.92
88		m,p-xylene	0.505	0.485	4.0	92	0.00	14.04
89		o-xylene	0.482	0.476	1.2	94	0.00	14.44
90		styrene	0.783	0.790	-0.9	93	0.00	14.45
91		butyl acrylate	0.372	0.373	-0.3	99	0.00	14.27
92		cis-1,4-dichloro-2-butene	0.158	0.177	-12.0	106	0.00	14.82
93		bromoform	0.259	0.260	-0.4	96	0.00	14.68
94		isopropylbenzene	1.265	1.240	2.0	92	0.00	14.79
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	16.17
96	S	4-bromofluorobenzene (s)	0.796	0.814	-2.3	97	0.00	14.99
97		1,1,2,2-tetrachloroethane	0.446	0.485	-8.7	103	0.00	15.06
98		trans-1,4-dichloro-2-bute	0.149	0.161	-8.1	103	0.00	15.09

Continuing Calibration Summary

Job Number: JC54422 **Sample:** VI8699-CC8691
Account: TRCNYNYB TRC **Lab FileID:** I216618.D
Project: K710, 168 8th Street, Brooklyn, NY

99	1,2,3-trichloropropane	0.151	0.162	-7.3	101	0.00	15.15
100	bromobenzene	0.650	0.614	5.5	91	0.00	15.17
101	n-propylbenzene	2.386	2.464	-3.3	95	0.00	15.21
102	2-chlorotoluene	0.532	0.529	0.6	93	0.00	15.34
103	4-chlorotoluene	1.527	1.570	-2.8	96	0.00	15.45
104	1,3,5-trimethylbenzene	1.758	1.818	-3.4	93	0.00	15.37
105	tert-butylbenzene	0.350	0.356	-1.7	93	0.00	15.71
106	1,2,4-trimethylbenzene	1.848	1.827	1.1	94	0.00	15.76
107	sec-butylbenzene	2.242	2.292	-2.2	91	0.00	15.93
108	p-isopropyltoluene	1.982	2.022	-2.0	91	0.00	16.07
109	benzyl chloride	1.012	1.101	-8.8	102	0.00	16.29
110	1,3-dichlorobenzene	1.239	1.161	6.3	92	0.00	16.10
111	1,4-dichlorobenzene	1.276	1.180	7.5	94	0.00	16.20
112	1,2-dichlorobenzene	1.168	1.126	3.6	93	0.00	16.58
113	n-butylbenzene	0.991	1.025	-3.4	91	0.00	16.49
114	hexachloroethane	0.466	0.433	7.1	87	0.00	16.89
115	1,2-dibromo-3-chloropropa	0.047	0.047	0.0	93	0.00	15.17
116	1,3,5-Trichlorobenzene	0.994	0.954	4.0	93	0.00	17.52
117	1,2,4-trichlorobenzene	0.790	0.839	-6.2	100	0.00	18.05
118	2-ethylhexyl acrylate	0.532	0.530	0.4	98	0.00	18.06
119	hexachlorobutadiene	0.542	0.566	-4.4	98	0.00	18.15
120	naphthalene	1.464	1.643	-12.2	102	0.00	18.28
121	1,2,3-trichlorobenzene	0.784	0.847	-8.0	100	0.00	18.46
122	2-methylnaphthalene	1.155	1.262	-9.3	97	0.00	19.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I216448.D MI8691.M Tue Nov 07 07:57:00 2017

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8700-CC8691
Lab FileID: I216644.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\I-core\vi8700\i216644.d Vial: 1
Acq On : 6 Nov 2017 1:07 pm Operator: PrashanS
Sample : cc8691-20 Inst : GCMSI
Misc : MS21850,VI8700,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	95	-0.01	7.43
2		tertiary butyl alcohol	1.101	1.083	1.6	96	-0.01	7.55
3		1,4-dioxane	0.106	0.113	-6.6	100	0.00	11.35
4	I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	9.76
5		dichlorodifluoromethane	0.600	0.741	-23.5#	114	0.00	3.90
6		chlorodifluoromethane	0.517	0.517	0.0	98	0.00	3.93
7		chloromethane	0.401	0.412	-2.7	102	0.01	4.30
8		vinyl chloride	0.401	0.420	-4.7	103	0.01	4.55
9		bromomethane	0.311	0.306	1.6	106	0.02	5.22
10		chloroethane	0.220	0.231	-5.0	99	0.01	5.43
11		trichlorofluoromethane	0.794	0.892	-12.3	106	0.00	5.90
12		ethyl ether	0.153	0.149	2.6	96	0.00	6.34
13		2-chloropropane	0.130	0.128	1.5	95	0.00	6.55
14		acrolein	0.046	0.045	2.2	97	0.00	6.56
15		freon 113	0.328	0.300	8.5	89	0.00	6.76
16		1,1-dichloroethene	0.533	0.515	3.4	94	0.00	6.77
17		acetone	0.027	0.025	7.4	100	0.00	6.77
18		iodomethane	0.461	0.401	13.0	88	0.00	7.02
19		carbon disulfide	1.186	0.981	17.3	92	0.00	7.16
20		acetonitrile	0.038	0.032	15.8	92	0.00	7.18
21		methyl acetate	0.047	0.048	-2.1	101	0.00	7.25
22		methylene chloride	0.345	0.314	9.0	98	0.00	7.49
23		acrylonitrile	0.088	0.089	-1.1	105	0.00	7.78
24		methyl tert butyl ether	0.913	0.877	3.9	94	0.00	7.87
25		trans-1,2-dichloroethene	0.496	0.481	3.0	94	0.00	7.90
26		hexane	0.485	0.367	24.3#	83	0.00	8.28
27		1,1-dichloroethane	0.613	0.594	3.1	98	0.00	8.49
28		vinyl acetate	0.048	0.048	0.0	99	0.00	8.43
29		di-isopropyl ether	0.880	0.829	5.8	93	0.00	8.48
30		chloroprene	0.559	0.536	4.1	91	0.00	8.60
31		ethyl tert-butyl ether	0.944	0.887	6.0	90	0.00	8.95
32		2-butanone	0.033	0.032	3.0	103	0.00	9.14
33		2,2-dichloropropane	0.689	0.673	2.3	101	0.00	9.24
34		ethyl acetate	0.044	0.039	11.4	88	0.00	9.17
35		cis-1,2-dichloroethene	0.407	0.351	13.8	93	0.00	9.21
36		propionitrile	0.045	0.043	4.4	98	0.00	9.20
37		methyl acrylate	0.046	0.042	8.7	94	0.00	9.25
38		methacrylonitrile	0.112	0.099	11.6	90	0.00	9.41
39		bromochloromethane	0.195	0.186	4.6	96	0.00	9.51
40		tetrahydrofuran	0.039	0.032	17.9	88	0.00	9.53
41		chloroform	0.783	0.739	5.6	100	0.00	9.60

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8700-CC8691
Lab FileID: I216644.D

42		carbon tetrachloride	0.725	0.749	-3.3	101	0.00	10.07
43		1,1-dichloropropene	0.522	0.488	6.5	91	0.00	10.04
44		isobutyl alcohol		----------NA----------				
45	S	dibromofluoromethane (s)	0.519	0.513	1.2	97	0.00	9.79
46		1,1,1-trichloroethane	0.766	0.763	0.4	97	0.00	9.86
47		cyclohexane	0.448	0.374	16.5	81	0.00	9.98
48		tert-amyl alcohol	0.015	0.015	0.0	106	0.00	10.15
49	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	10.71
50	S	1,2-dichloroethane-d4 (s)	0.407	0.457	-12.3	108	0.00	10.21
51		isopropyl acetate	0.043	0.039	9.3	97	0.00	10.20
52		1,2-dichloroethane	0.415	0.447	-7.7	105	0.00	10.31
53		benzene	0.928	0.845	8.9	93	0.00	10.29
54		2,2,4-trimethylpentane	0.823	0.775	5.8	90	0.00	10.39
55		tert-amyl methyl ether	0.166	0.166	0.0	96	0.00	10.37
56		heptane	0.171	0.155	9.4	89	0.00	10.56
57		n-butyl alcohol	0.007	0.008	-14.3	115	0.00	10.74
58		trichloroethene	0.279	0.269	3.6	96	0.00	11.02
59		ethyl acrylate	0.222	0.214	3.6	96	0.00	11.00
60		methylcyclohexane	0.419	0.401	4.3	90	0.00	11.32
61		1,2-dichloropropane	0.216	0.211	2.3	97	0.00	11.30
62		methyl methacrylate	0.055	0.049	10.9	93	0.00	11.27
63		dibromomethane	0.164	0.170	-3.7	101	0.00	11.41
64		bromodichloromethane	0.383	0.405	-5.7	103	0.00	11.56
65		2-nitropropane	0.076	0.076	0.0	96	0.00	11.75
66		2-chloroethyl vinyl ether	0.101	0.104	-3.0	101	0.00	11.79
67		epichlorohydrin	0.022	0.022	0.0	104	0.00	11.87
68		cis-1,3-dichloropropene	0.388	0.385	0.8	98	0.00	12.01
69		4-methyl-2-pentanone	0.066	0.067	-1.5	97	0.00	12.11
70		3-methyl-1-butanol	0.006	0.006	0.0	106	0.00	12.11
71	I	chlorobenzene-d5	1.000	1.000	0.0	99	0.00	13.83
72	S	toluene-d8 (s)	1.257	1.224	2.6	96	0.00	12.33
73		toluene	0.682	0.624	8.5	93	0.00	12.40
74		trans-1,3-dichloropropene	0.458	0.467	-2.0	104	0.00	12.58
75		ethyl methacrylate	0.260	0.258	0.8	96	0.00	12.57
76		1,1,2-trichloroethane	0.184	0.182	1.1	96	0.00	12.80
77		1,3-dichloropropane	0.365	0.386	-5.8	102	0.00	12.98
78		tetrachloroethene	0.395	0.354	10.4	89	0.00	12.95
79		2-hexanone	0.079	0.077	2.5	95	0.00	12.95
80		butyl acetate	0.125	0.113	9.6	91	0.00	13.04
81		3,3-dimethyl-1-Butanol	0.016	0.016	0.0	100	0.00	13.13
82		n-butyl ether	0.893	0.816	8.6	90	0.00	13.82
83		dibromochloromethane	0.362	0.388	-7.2	103	0.00	13.22
84		1,2-dibromoethane	0.261	0.266	-1.9	98	0.00	13.38
85		chlorobenzene	0.806	0.759	5.8	97	0.00	13.86
86		1,1,1,2-tetrachloroethane	0.335	0.348	-3.9	100	0.00	13.92
87		ethylbenzene	1.299	1.214	6.5	94	0.00	13.92
88		m,p-xylene	0.505	0.469	7.1	92	0.00	14.04
89		o-xylene	0.482	0.458	5.0	94	0.00	14.45
90		styrene	0.783	0.775	1.0	94	0.00	14.46
91		butyl acrylate	0.372	0.341	8.3	94	0.00	14.27
92		cis-1,4-dichloro-2-butene	0.158	0.180	-13.9	112	0.00	14.82
93		bromoform	0.259	0.266	-2.7	102	0.00	14.68
94		isopropylbenzene	1.265	1.207	4.6	93	0.00	14.80
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	16.17
96	S	4-bromofluorobenzene (s)	0.796	0.796	0.0	99	0.00	14.99
97		1,1,2,2-tetrachloroethane	0.446	0.481	-7.8	107	0.00	15.06
98		trans-1,4-dichloro-2-bute	0.149	0.155	-4.0	103	0.00	15.09

Continuing Calibration Summary

Job Number: JC54422 **Sample:** VI8700-CC8691
Account: TRCNYNYB TRC **Lab FileID:** I216644.D
Project: K710, 168 8th Street, Brooklyn, NY

99	1,2,3-trichloropropane	0.151	0.163	-7.9	105	0.00	15.15
100	bromobenzene	0.650	0.620	4.6	95	0.00	15.17
101	n-propylbenzene	2.386	2.326	2.5	94	0.00	15.21
102	2-chlorotoluene	0.532	0.517	2.8	94	0.00	15.34
103	4-chlorotoluene	1.527	1.524	0.2	97	0.00	15.45
104	1,3,5-trimethylbenzene	1.758	1.748	0.6	94	0.00	15.37
105	tert-butylbenzene	0.350	0.341	2.6	93	0.00	15.71
106	1,2,4-trimethylbenzene	1.848	1.807	2.2	97	0.00	15.76
107	sec-butylbenzene	2.242	2.208	1.5	92	0.00	15.93
108	p-isopropyltoluene	1.982	1.967	0.8	92	0.00	16.07
109	benzyl chloride	1.012	1.129	-11.6	109	0.00	16.29
110	1,3-dichlorobenzene	1.239	1.172	5.4	97	0.00	16.10
111	1,4-dichlorobenzene	1.276	1.190	6.7	99	0.00	16.20
112	1,2-dichlorobenzene	1.168	1.125	3.7	97	0.00	16.58
113	n-butylbenzene	0.991	0.980	1.1	91	0.00	16.49
114	hexachloroethane	0.466	0.460	1.3	97	0.00	16.90
115	1,2-dibromo-3-chloropropa	0.047	0.046	2.1	96	0.00	15.17
116	1,3,5-Trichlorobenzene	0.994	0.999	-0.5	101	0.00	17.53
117	1,2,4-trichlorobenzene	0.790	0.858	-8.6	106	0.00	18.05
118	2-ethylhexyl acrylate	0.532	0.541	-1.7	105	0.00	18.06
119	hexachlorobutadiene	0.542	0.612	-12.9	110	0.00	18.15
120	naphthalene	1.464	1.651	-12.8	107	0.00	18.28
121	1,2,3-trichlorobenzene	0.784	0.878	-12.0	109	0.00	18.46
122	2-methylnaphthalene	1.155	1.224	-6.0	99	0.00	19.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I216448.D MI8691.M Tue Nov 07 12:36:22 2017

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8701-CC8691
Lab FileID: I216669.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\I\i216669.d Vial: 1
Acq On : 7 Nov 2017 11:11 am Operator: PrashanS
Sample : cc8691-20 Inst : GCMSI
Misc : MS21829,VI8701,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
Last Update : Mon Sep 13 11:48:20 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	112	-0.02	7.42
2		tertiary butyl alcohol	1.101	1.106	-0.5	117	-0.01	7.55
3		1,4-dioxane	0.106	0.111	-4.7	117	-0.01	11.34
4	I	pentafluorobenzene	1.000	1.000	0.0	122	0.00	9.76
5		dichlorodifluoromethane	0.600	0.623	-3.8	115	0.00	3.90
6		chlorodifluoromethane	0.517	0.472	8.7	108	0.00	3.93
7		chloromethane	0.401	0.373	7.0	110	0.00	4.30
8		vinyl chloride	0.401	0.389	3.0	115	0.01	4.55
9		bromomethane	0.311	0.271	12.9	112	0.02	5.22
10		chloroethane	0.220	0.213	3.2	110	0.01	5.43
11		trichlorofluoromethane	0.794	0.761	4.2	109	0.00	5.90
12		ethyl ether	0.153	0.157	-2.6	122	0.00	6.34
13		2-chloropropane	0.130	0.125	3.8	111	0.00	6.55
14		acrolein	0.046	0.043	6.5	110	0.00	6.56
15		freon 113	0.328	0.295	10.1	105	0.00	6.76
16		1,1-dichloroethene	0.533	0.489	8.3	107	0.00	6.76
17		acetone	0.027	0.024	11.1	117	0.00	6.76
18		iodomethane	0.461	0.395	14.3	103	0.00	7.02
19		carbon disulfide	1.186	0.980	17.4	110	0.00	7.16
20		acetonitrile	0.038	0.034	10.5	116	0.00	7.18
21		methyl acetate	0.047	0.047	0.0	119	0.00	7.25
22		methylene chloride	0.345	0.317	8.1	118	0.00	7.49
23		acrylonitrile	0.088	0.080	9.1	114	0.00	7.78
24		methyl tert butyl ether	0.913	0.865	5.3	111	0.00	7.87
25		trans-1,2-dichloroethene	0.496	0.461	7.1	108	0.00	7.90
26		hexane	0.485	0.379	21.9#	102	0.00	8.28
27		1,1-dichloroethane	0.613	0.559	8.8	110	0.00	8.49
28		vinyl acetate	0.048	0.049	-2.1	120	0.00	8.43
29		di-isopropyl ether	0.880	0.825	6.3	111	0.00	8.48
30		chloroprene	0.559	0.508	9.1	104	0.00	8.59
31		ethyl tert-butyl ether	0.944	0.892	5.5	109	0.00	8.95
32		2-butanone	0.033	0.029	12.1	112	0.00	9.14
33		2,2-dichloropropane	0.689	0.629	8.7	113	0.00	9.24
34		ethyl acetate	0.044	0.040	9.1	111	0.00	9.17
35		cis-1,2-dichloroethene	0.407	0.347	14.7	110	0.00	9.21
36		propionitrile	0.045	0.043	4.4	120	0.00	9.20
37		methyl acrylate	0.046	0.043	6.5	115	0.00	9.25
38		methacrylonitrile	0.112	0.102	8.9	112	0.00	9.41
39		bromochloromethane	0.195	0.186	4.6	116	0.00	9.51
40		tetrahydrofuran	0.039	0.033	15.4	109	0.00	9.53
41		chloroform	0.783	0.682	12.9	111	0.00	9.60

Continuing Calibration Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VI8701-CC8691
Lab FileID: I216669.D

42		carbon tetrachloride	0.725	0.689	5.0	111	0.00	10.07
43		1,1-dichloropropene	0.522	0.477	8.6	107	0.00	10.04
44		isobutyl alcohol		----------NA----------				
45	S	dibromofluoromethane (s)	0.519	0.509	1.9	116	0.00	9.79
46		1,1,1-trichloroethane	0.766	0.712	7.0	108	0.00	9.86
47		cyclohexane	0.448	0.364	18.8	95	0.00	9.98
48		tert-amyl alcohol	0.015	0.015	0.0	122	0.00	10.15
49	I	1,4-difluorobenzene	1.000	1.000	0.0	119	0.00	10.70
50	S	1,2-dichloroethane-d4 (s)	0.407	0.414	-1.7	118	0.00	10.21
51		isopropyl acetate	0.043	0.042	2.3	126	0.00	10.20
52		1,2-dichloroethane	0.415	0.406	2.2	115	0.00	10.31
53		benzene	0.928	0.843	9.2	113	0.00	10.29
54		2,2,4-trimethylpentane	0.823	0.792	3.8	112	0.00	10.39
55		tert-amyl methyl ether	0.166	0.160	3.6	112	0.00	10.37
56		heptane	0.171	0.158	7.6	111	0.00	10.55
57		n-butyl alcohol	0.007	0.006	14.3	119	0.00	10.74
58		trichloroethene	0.279	0.256	8.2	110	0.00	11.01
59		ethyl acrylate	0.222	0.209	5.9	113	0.00	11.00
60		methylcyclohexane	0.419	0.398	5.0	108	0.00	11.32
61		1,2-dichloropropane	0.216	0.204	5.6	113	0.00	11.30
62		methyl methacrylate	0.055	0.049	10.9	112	0.00	11.26
63		dibromomethane	0.164	0.161	1.8	115	0.00	11.41
64		bromodichloromethane	0.383	0.377	1.6	116	0.00	11.56
65		2-nitropropane	0.076	0.065	14.5	101	0.00	11.75
66		2-chloroethyl vinyl ether	0.101	0.102	-1.0	120	0.00	11.79
67		epichlorohydrin	0.022	0.022	0.0	123	0.00	11.87
68		cis-1,3-dichloropropene	0.388	0.370	4.6	114	0.00	12.01
69		4-methyl-2-pentanone	0.066	0.067	-1.5	118	0.00	12.11
70		3-methyl-1-butanol	0.006	0.006	0.0	125	0.00	12.10
71	I	chlorobenzene-d5	1.000	1.000	0.0	120	0.00	13.83
72	S	toluene-d8 (s)	1.257	1.219	3.0	115	0.00	12.32
73		toluene	0.682	0.620	9.1	111	0.00	12.40
74		trans-1,3-dichloropropene	0.458	0.436	4.8	118	0.00	12.58
75		ethyl methacrylate	0.260	0.254	2.3	115	0.00	12.57
76		1,1,2-trichloroethane	0.184	0.177	3.8	112	0.00	12.80
77		1,3-dichloropropane	0.365	0.367	-0.5	118	0.00	12.98
78		tetrachloroethene	0.395	0.345	12.7	105	0.00	12.95
79		2-hexanone	0.079	0.073	7.6	109	0.00	12.95
80		butyl acetate	0.125	0.115	8.0	111	0.00	13.04
81		3,3-dimethyl-1-Butanol	0.016	0.016	0.0	116	0.00	13.13
82		n-butyl ether	0.893	0.800	10.4	106	0.00	13.82
83		dibromochloromethane	0.362	0.363	-0.3	116	0.00	13.23
84		1,2-dibromoethane	0.261	0.264	-1.1	117	0.00	13.38
85		chlorobenzene	0.806	0.732	9.2	113	0.00	13.86
86		1,1,1,2-tetrachloroethane	0.335	0.332	0.9	115	0.00	13.92
87		ethylbenzene	1.299	1.160	10.7	109	0.00	13.92
88		m,p-xylene	0.505	0.460	8.9	109	0.00	14.04
89		o-xylene	0.482	0.445	7.7	110	0.00	14.45
90		styrene	0.783	0.748	4.5	110	0.00	14.46
91		butyl acrylate	0.372	0.332	10.8	111	0.00	14.27
92		cis-1,4-dichloro-2-butene	0.158	0.162	-2.5	122	0.00	14.82
93		bromoform	0.259	0.257	0.8	119	0.00	14.68
94		isopropylbenzene	1.265	1.160	8.3	108	0.00	14.79
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	16.17
96	S	4-bromofluorobenzene (s)	0.796	0.793	0.4	117	0.00	14.99
97		1,1,2,2-tetrachloroethane	0.446	0.458	-2.7	120	0.00	15.06
98		trans-1,4-dichloro-2-bute	0.149	0.141	5.4	111	0.00	15.09

Continuing Calibration Summary

Job Number: JC54422 **Sample:** VI8701-CC8691
Account: TRCNYNYB TRC **Lab FileID:** I216669.D
Project: K710, 168 8th Street, Brooklyn, NY

99	1,2,3-trichloropropane	0.151	0.155	-2.6	118	0.00	15.15
100	bromobenzene	0.650	0.605	6.9	110	0.00	15.17
101	n-propylbenzene	2.386	2.285	4.2	108	0.00	15.21
102	2-chlorotoluene	0.532	0.510	4.1	110	0.00	15.34
103	4-chlorotoluene	1.527	1.465	4.1	110	0.00	15.45
104	1,3,5-trimethylbenzene	1.758	1.708	2.8	108	0.00	15.37
105	tert-butylbenzene	0.350	0.338	3.4	108	0.00	15.71
106	1,2,4-trimethylbenzene	1.848	1.763	4.6	111	0.00	15.76
107	sec-butylbenzene	2.242	2.158	3.7	105	0.00	15.93
108	p-isopropyltoluene	1.982	1.930	2.6	107	0.00	16.07
109	benzyl chloride	1.012	1.075	-6.2	122	0.00	16.29
110	1,3-dichlorobenzene	1.239	1.150	7.2	112	0.00	16.10
111	1,4-dichlorobenzene	1.276	1.156	9.4	113	0.00	16.20
112	1,2-dichlorobenzene	1.168	1.116	4.5	114	0.00	16.58
113	n-butylbenzene	0.991	0.979	1.2	107	0.00	16.49
114	hexachloroethane	0.466	0.430	7.7	107	0.00	16.90
115	1,2-dibromo-3-chloropropa	0.047	0.046	2.1	114	0.00	15.17
116	1,3,5-Trichlorobenzene	0.994	0.981	1.3	117	0.00	17.52
117	1,2,4-trichlorobenzene	0.790	0.854	-8.1	124	0.00	18.05
118	2-ethylhexyl acrylate	0.532	0.491	7.7	112	0.00	18.06
119	hexachlorobutadiene	0.542	0.606	-11.8	129	0.00	18.15
120	naphthalene	1.464	1.620	-10.7	123	0.00	18.28
121	1,2,3-trichlorobenzene	0.784	0.856	-9.2	125	0.00	18.46
122	2-methylnaphthalene	1.155	1.250	-8.2	119	0.00	19.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I216448.D MI8691.M Wed Nov 08 17:42:19 2017

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140191.D
Acq On : 6 Nov 2017 1:14 pm
Operator : PrashanS
Sample : jc54277-1
Misc : MS21702,V3C6357,6.5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 06 15:31:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

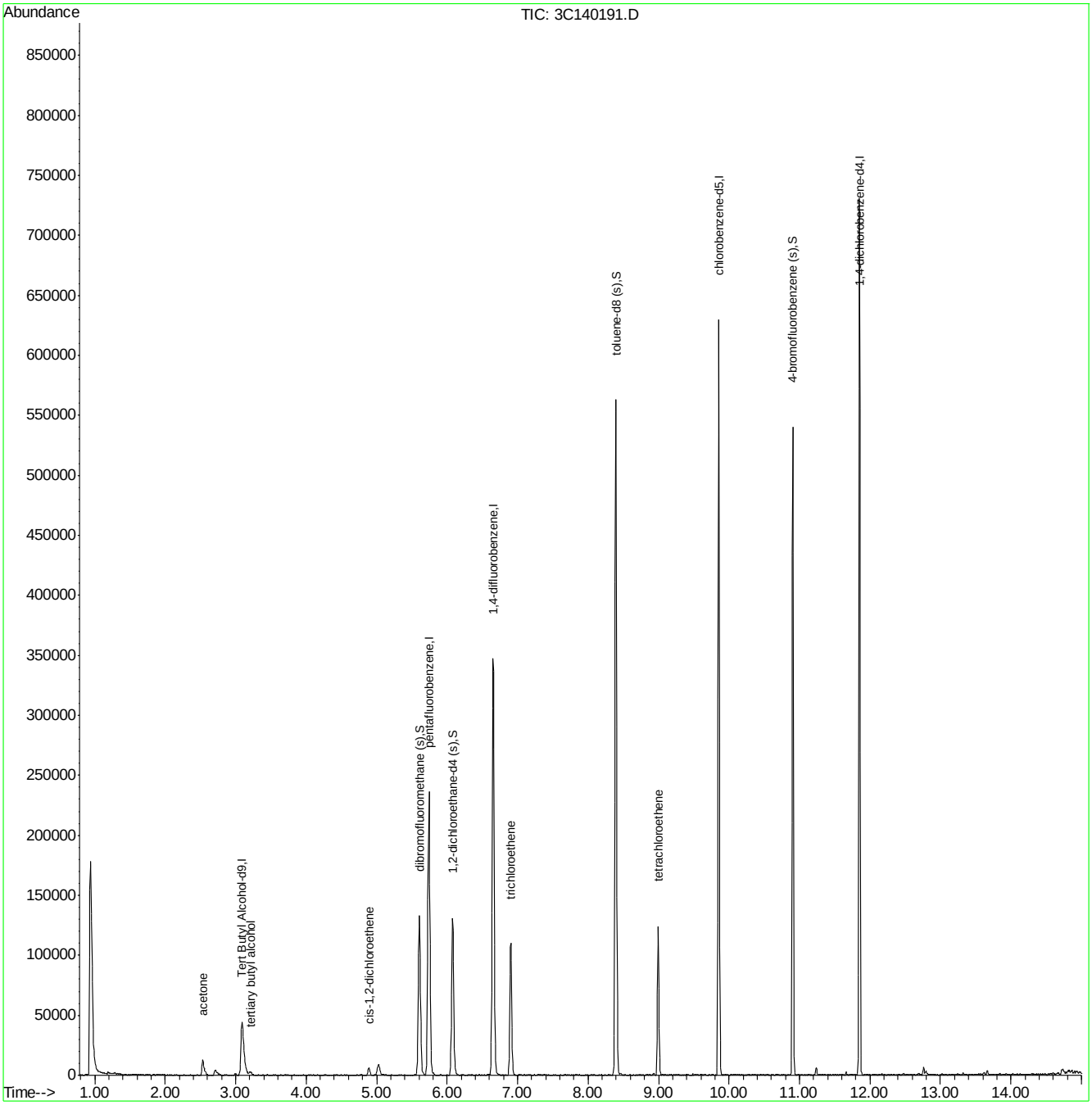
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.09	65	70930	500.00	ug/L	-0.01
5) pentafluorobenzene	5.74	168	194571	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.65	114	301316	50.00	ug/L	0.00
74) chlorobenzene-d5	9.85	117	271434	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.85	152	138362	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	89386	56.54	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 113.08%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	98728	55.25	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 110.50%			
75) toluene-d8 (s)	8.39	98	352114	49.10	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.20%			
99) 4-bromofluorobenzene (s)	10.91	95	130431	54.15	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 108.30%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	3.22	59	3627	22.96	ug/L	74
20) acetone	2.54	58	4998	49.61	ug/L	95
38) cis-1,2-dichloroethene	4.89	96	3098	2.15	ug/L	94
61) trichloroethene	6.90	95	36006	23.56	ug/L	97
81) tetrachloroethene	9.00	166	34206	18.44	ug/L	97

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

Quantitation Report (QT Reviewed)

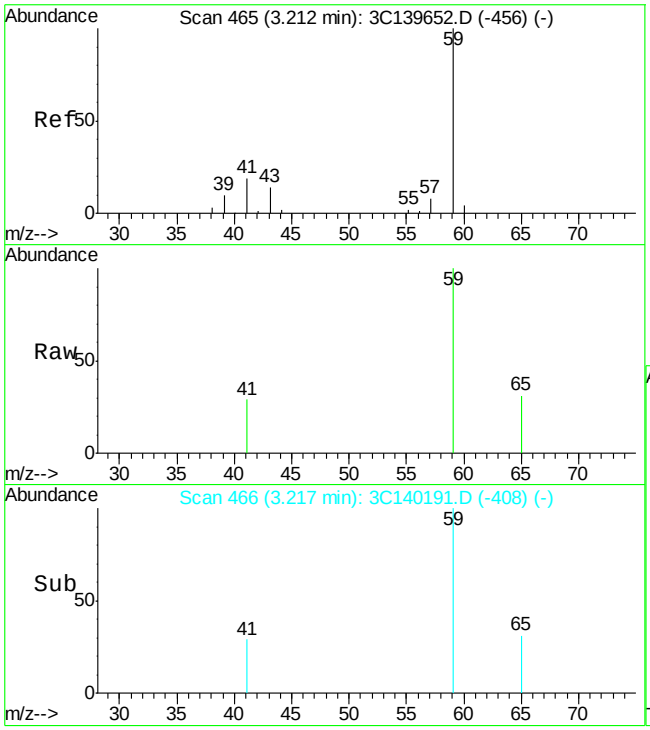
Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140191.D
Acq On : 6 Nov 2017 1:14 pm
Operator : PrashanS
Sample : jc54277-1
Misc : MS21702,V3C6357,6.5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 06 15:31:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



M3C6336.M Mon Nov 06 15:32:16 2017 MS3C

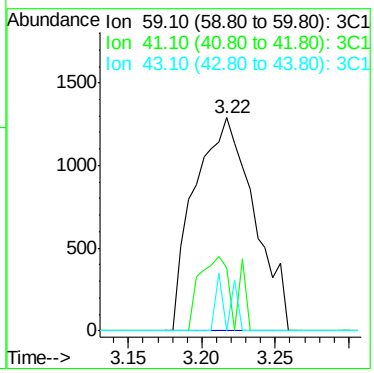
SGS ACCUTEST JC54422

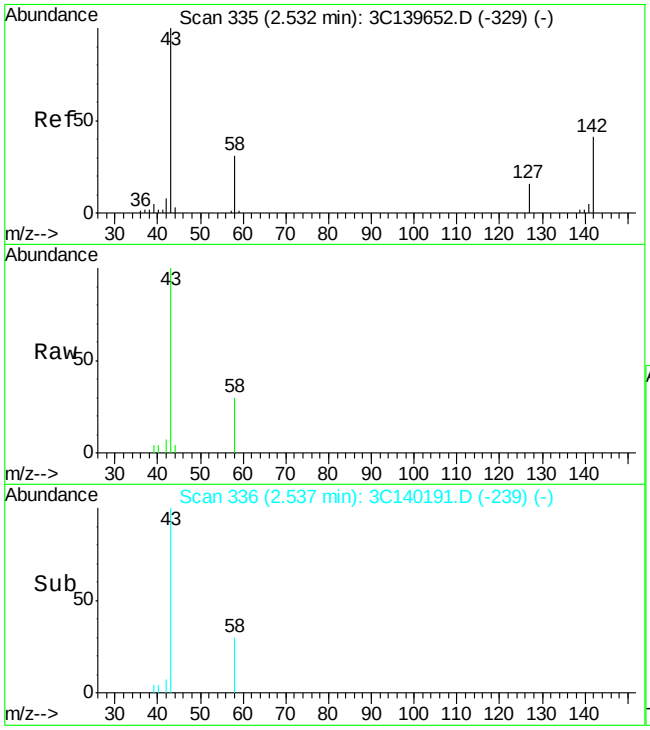


#3
tertiary butyl alcohol
Concen: 22.96 ug/L
RT: 3.22 min Scan# 466
Delta R.T. 0.01 min
Lab File: 3C140191.D
Acq: 6 Nov 2017 1:14 pm

Tgt Ion: 59 Resp: 3627

Ion	Ratio	Lower	Upper
59	100		
41	29.4	0.0	50.0
43	0.0	0.0	44.1

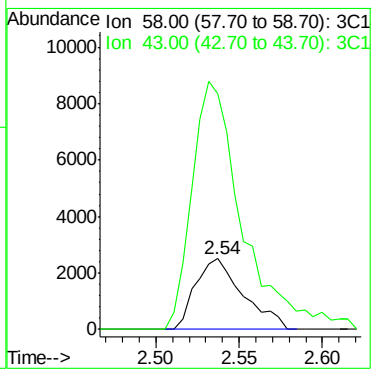


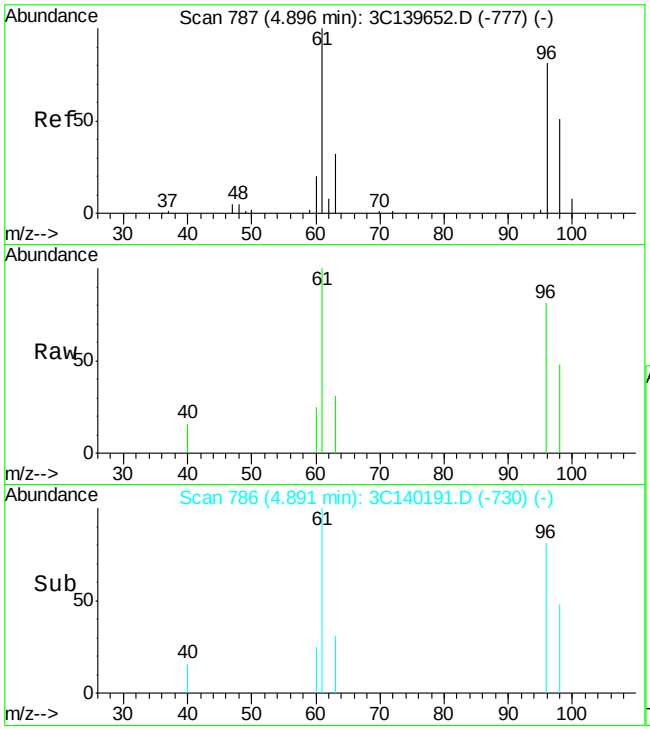


#20
acetone
Concen: 49.61 ug/L
RT: 2.54 min Scan# 336
Delta R.T. 0.01 min
Lab File: 3C140191.D
Acq: 6 Nov 2017 1:14 pm

Tgt Ion: 58 Resp: 4998

Ion	Ratio	Lower	Upper
58	100		
43	332.8	291.6	351.6

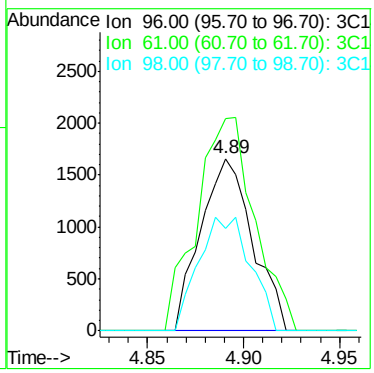


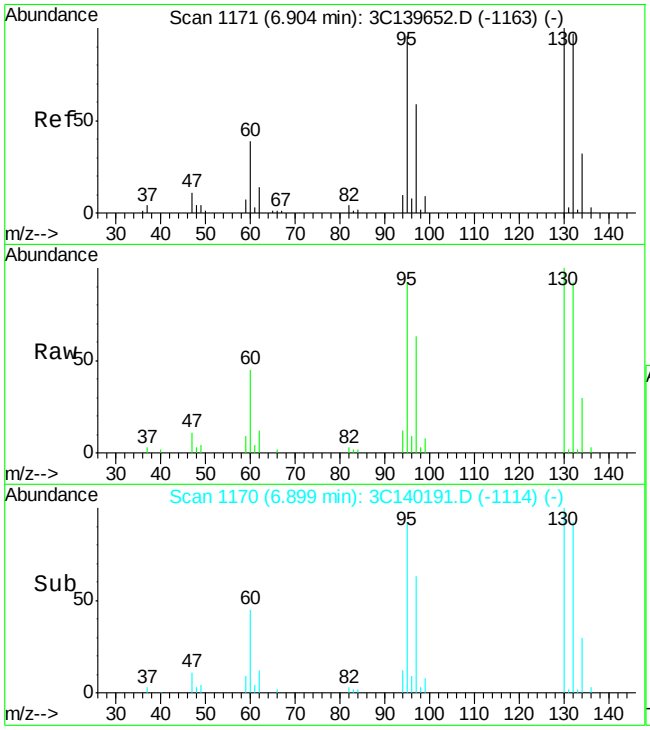


#38
cis-1,2-dichloroethene
Concen: 2.15 ug/L
RT: 4.89 min Scan# 786
Delta R.T. -0.01 min
Lab File: 3C140191.D
Acq: 6 Nov 2017 1:14 pm

Tgt Ion: 96 Resp: 3098

Ion	Ratio	Lower	Upper
96	100		
61	123.1	101.8	161.8
98	59.7	33.2	93.2

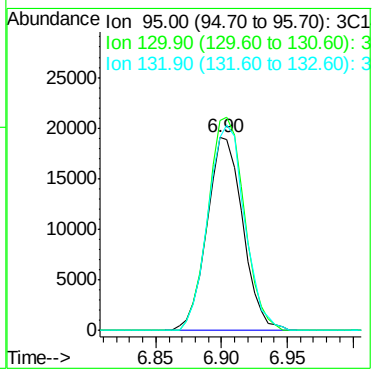


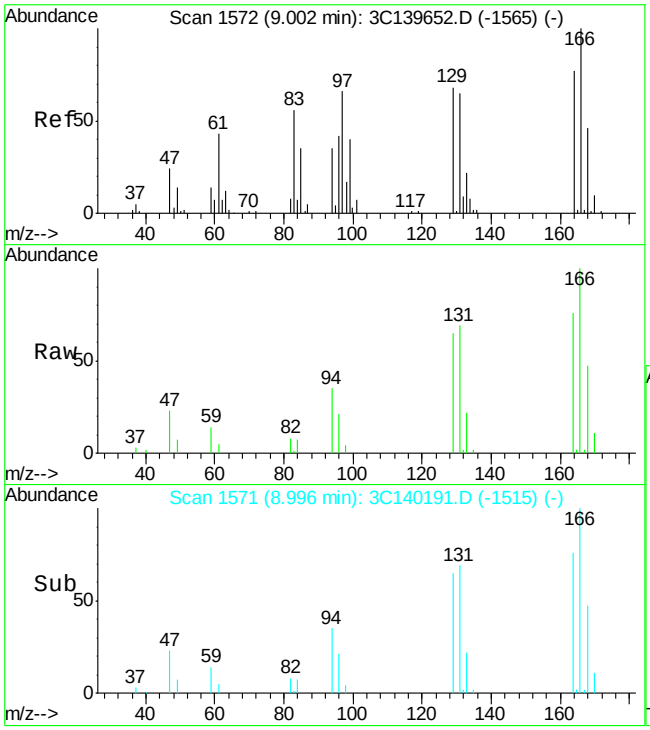


#61
trichloroethene
Concen: 23.56 ug/L
RT: 6.90 min Scan# 1170
Delta R.T. -0.01 min
Lab File: 3C140191.D
Acq: 6 Nov 2017 1:14 pm

Tgt Ion: 95 Resp: 36006

Ion	Ratio	Lower	Upper
95	100		
130	108.3	74.3	134.3
132	99.8	71.6	131.6

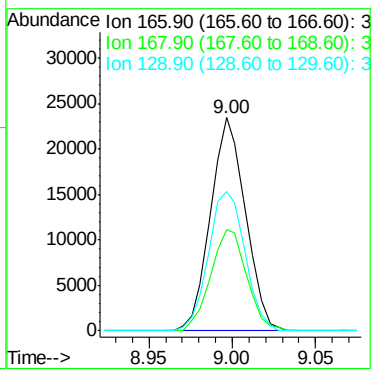




#81
tetrachloroethene
Concen: 18.44 ug/L
RT: 9.00 min Scan# 1571
Delta R.T. -0.01 min
Lab File: 3C140191.D
Acq: 6 Nov 2017 1:14 pm

Tgt Ion:166 Resp: 34206

Ion	Ratio	Lower	Upper
166	100		
168	47.3	16.2	76.2
129	65.3	38.2	98.2



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 11/08/17 22:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216647.d
Acq On : 6 Nov 2017 3:59 pm
Operator : PrashanS
Sample : JC54422-1
Misc : MS21774,VI8700,6.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 08 19:01:28 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

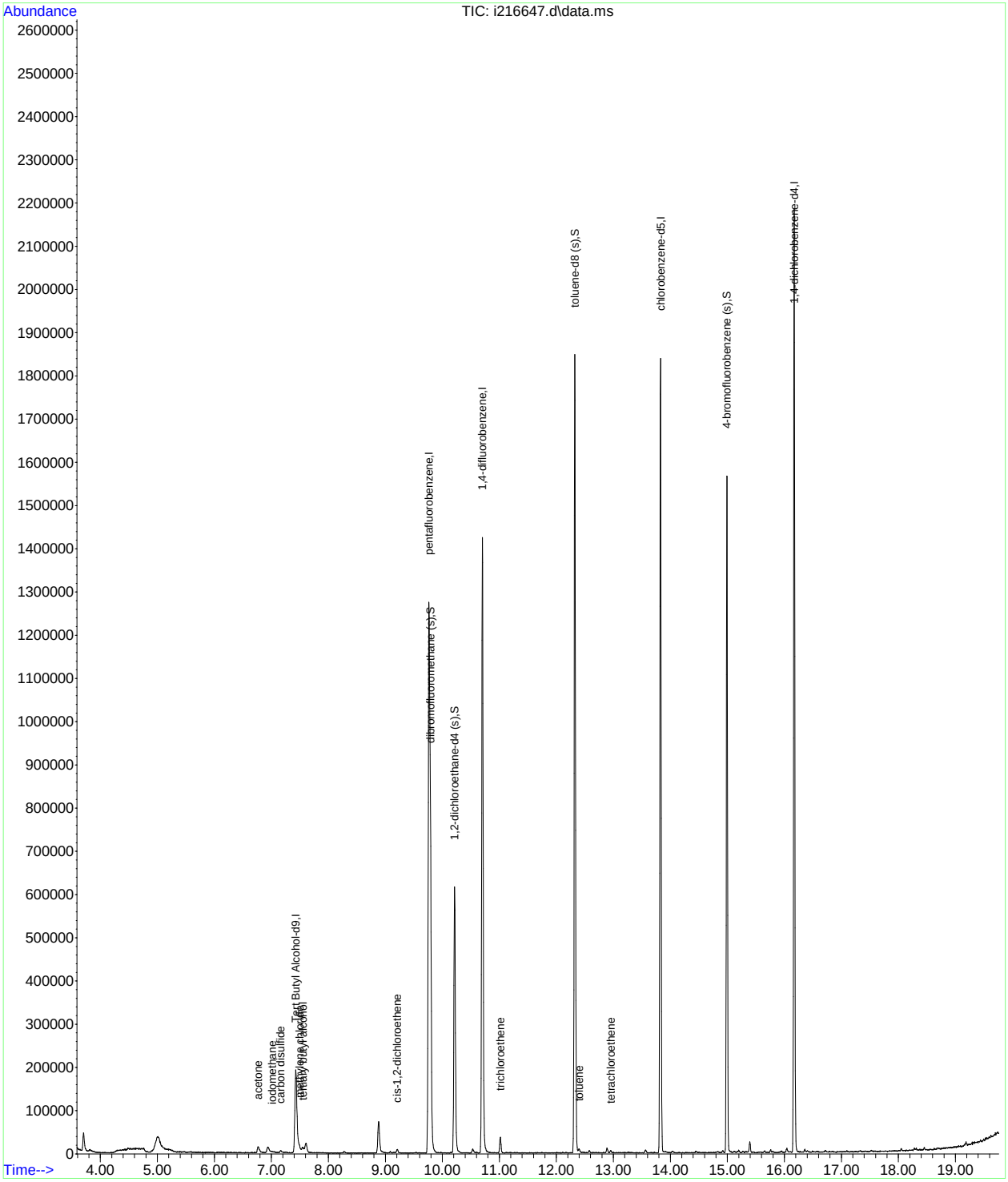
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	273567	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	747665	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	1046918	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	865798	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	476075	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	399845	51.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 103.06%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	463635	54.41	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 108.82%			
72) toluene-d8 (s)	12.322	98	1064324	48.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.76%			
96) 4-bromofluorobenzene (s)	14.989	95	403145	53.19	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 106.38%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.552	59	14423m	23.93	ug/L	
17) acetone	6.767	58	6230	15.27	ug/L #	84
18) iodomethane	7.013	142	2919	0.42	ug/L	74
19) carbon disulfide	7.159	76	7417	0.42	ug/L	94
22) methylene chloride	7.494	84	4249	0.82	ug/L #	80
35) cis-1,2-dichloroethene	9.204	96	3071	0.50	ug/L #	81
58) trichloroethene	11.014	95	10522	1.80	ug/L	87
73) toluene	12.395	92	2931	0.25	ug/L	96
78) tetrachloroethene	12.955	166	1240	0.18	ug/L	85

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

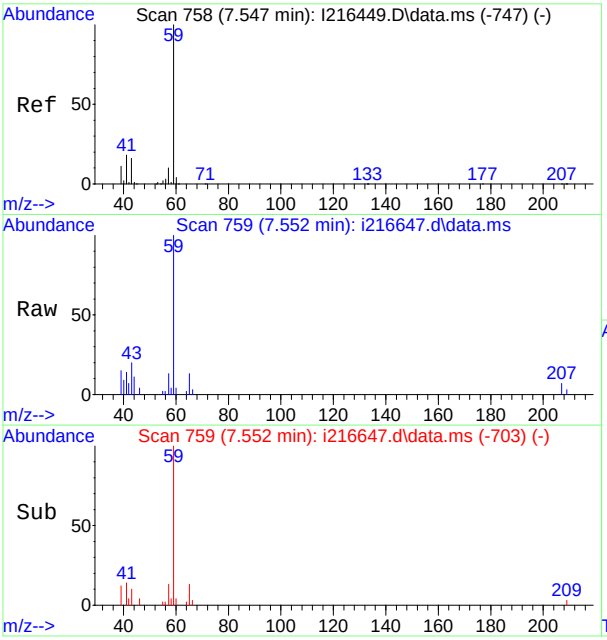
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216647.d
Acq On : 6 Nov 2017 3:59 pm
Operator : PrashanS
Sample : JC54422-1
Misc : MS21774,VI8700,6.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 08 19:01:28 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



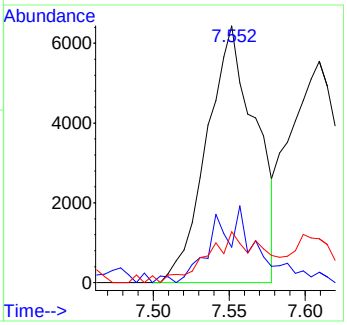
MI8691.M Wed Nov 08 22:12:12 2017 Page: 2

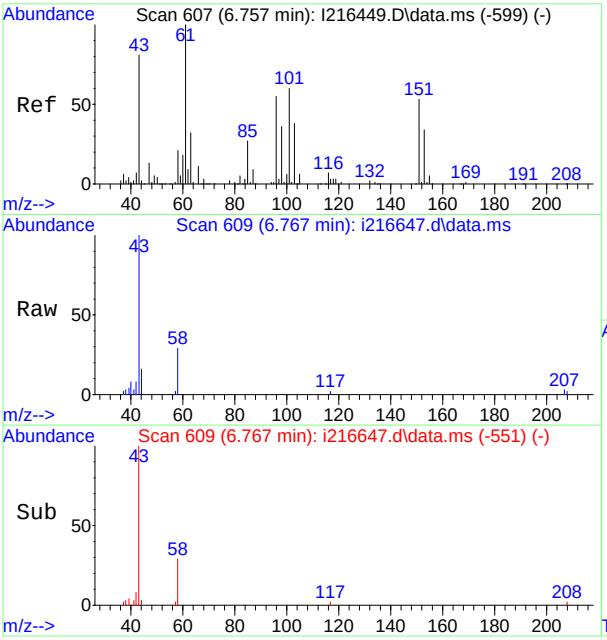


#2
tertiary butyl alcohol
Concen: 23.93 ug/L m
RT: 7.552 min Scan# 759
Delta R.T. -0.005 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion: 59 Resp: 14423

Ion	Ratio	Lower	Upper
59	100		
41	13.8	0.0	51.4
43	19.8	0.0	46.9

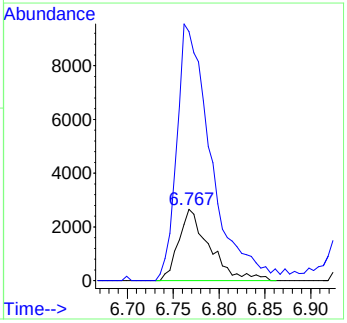


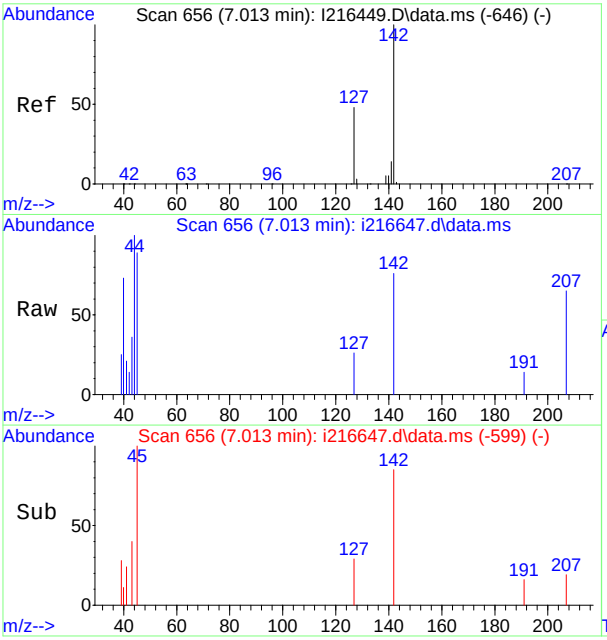


#17
acetone
Concen: 15.27 ug/L
RT: 6.767 min Scan# 609
Delta R.T. 0.005 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion: 58 Resp: 6230

Ion	Ratio	Lower	Upper
58	100		
43	349.4	357.6	417.6#

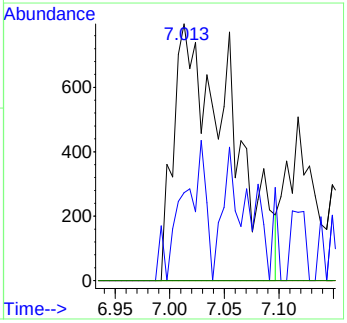


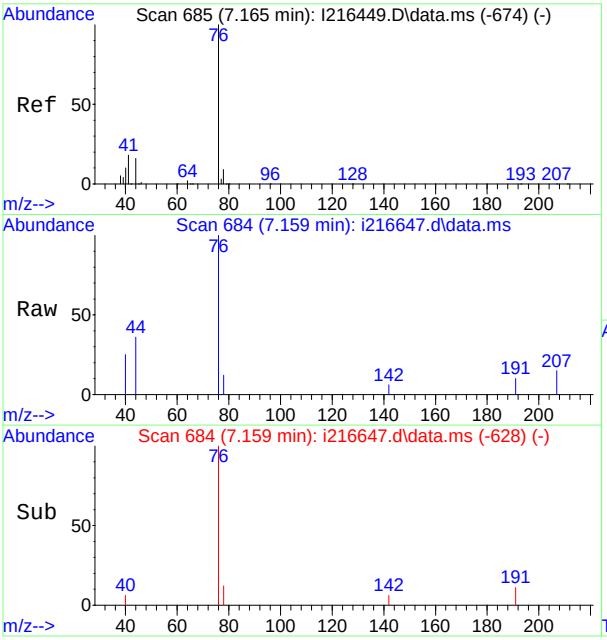


#18
iodomethane
Concen: 0.42 ug/L
RT: 7.013 min Scan# 656
Delta R.T. -0.000 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion:142 Resp: 2919

Ion	Ratio	Lower	Upper
142	100		
127	34.3	27.8	67.8
141	0.0	0.0	34.3
141	0.0	0.0	34.3

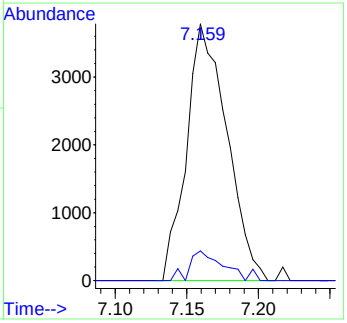


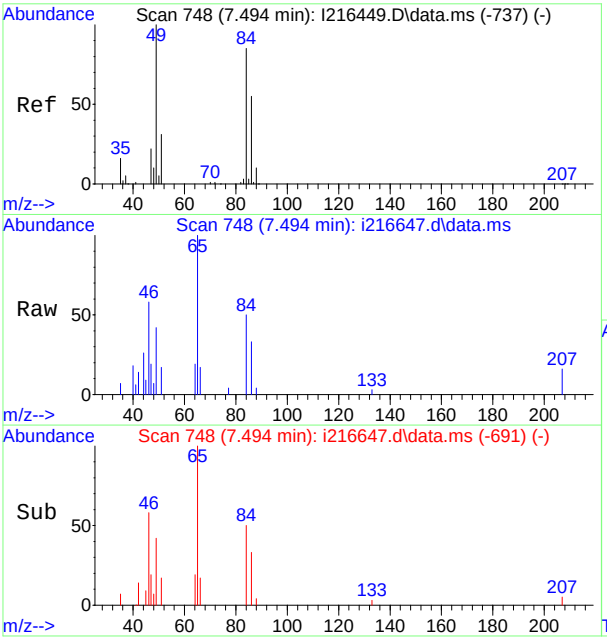


#19
carbon disulfide
Concen: 0.42 ug/L
RT: 7.159 min Scan# 684
Delta R.T. -0.005 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion: 76 Resp: 7417

Ion	Ratio	Lower	Upper
76	100		
78	11.5	0.0	29.4

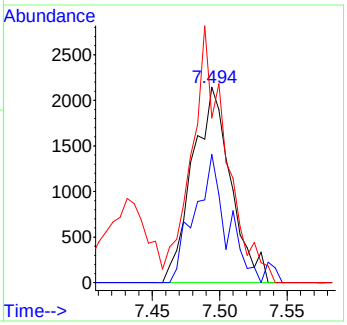


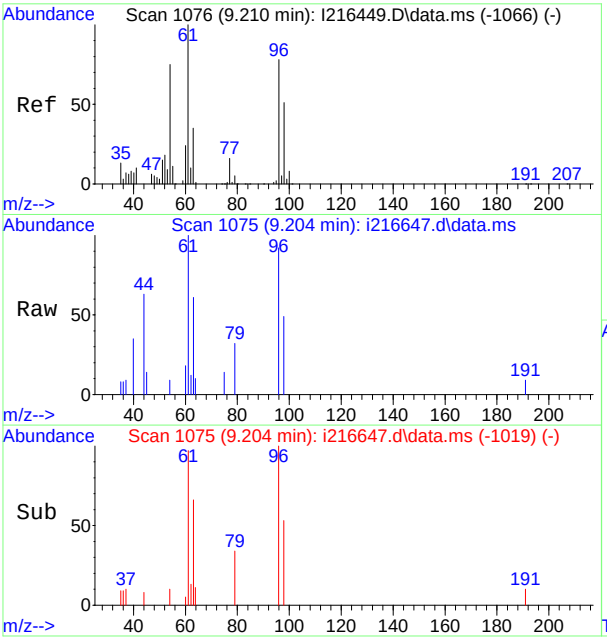


#22
methylene chloride
Concen: 0.82 ug/L
RT: 7.494 min Scan# 748
Delta R.T. -0.000 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion: 84 Resp: 4249

Ion	Ratio	Lower	Upper
84	100		
86	65.5	35.0	95.0
49	84.1	88.4	148.4#

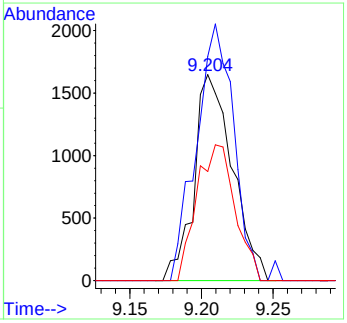


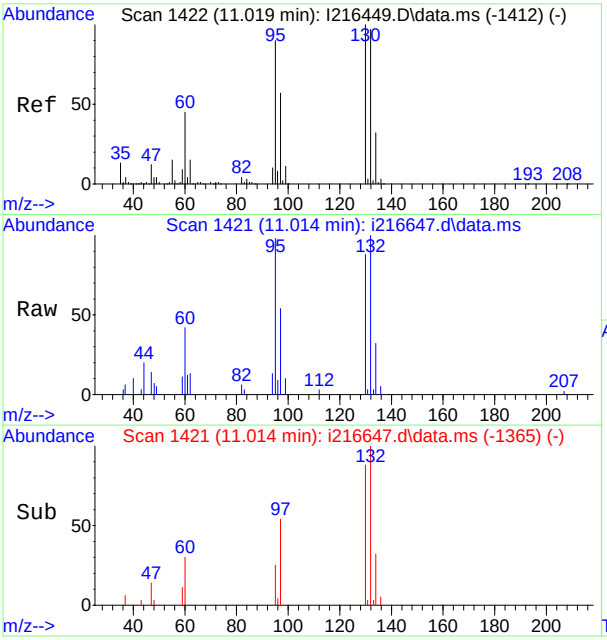


#35
cis-1,2-dichloroethene
Concen: 0.50 ug/L
RT: 9.204 min Scan# 1075
Delta R.T. -0.005 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion: 96 Resp: 3071

Ion	Ratio	Lower	Upper
96	100		
61	108.8	113.6	153.6#
98	53.0	44.8	84.8

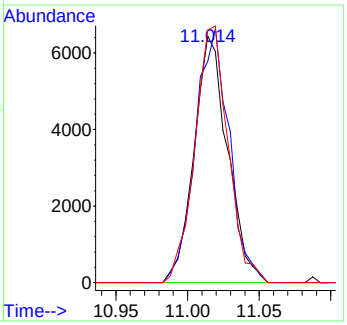


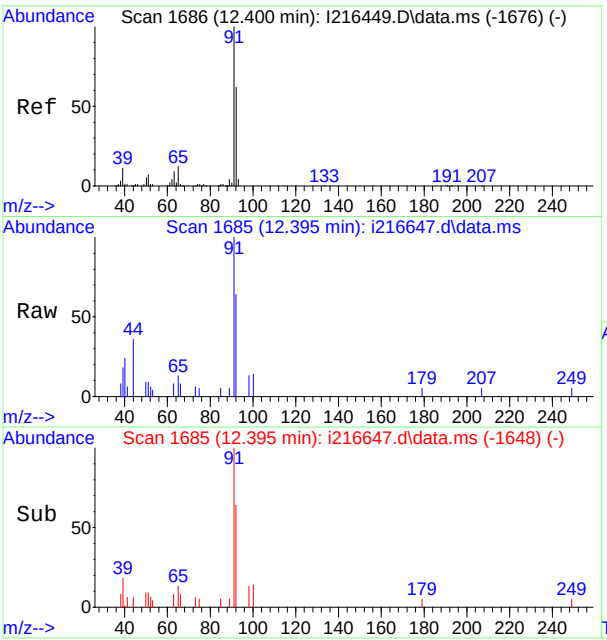


#58
trichloroethene
Concen: 1.80 ug/L
RT: 11.014 min Scan# 1421
Delta R.T. -0.005 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion: 95 Resp: 10522

Ion	Ratio	Lower	Upper
95	100		
130	89.7	81.5	141.5
132	102.4	78.2	138.2

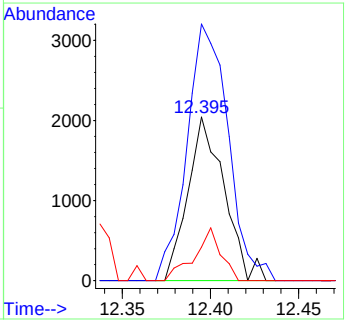


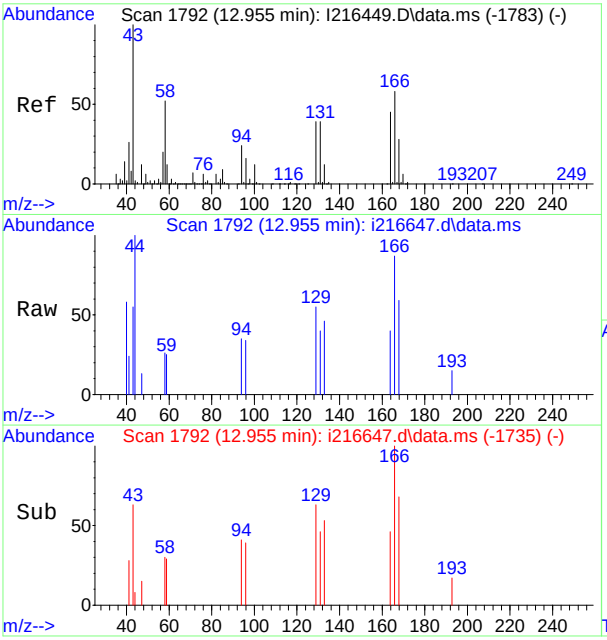


#73
toluene
Concen: 0.25 ug/L
RT: 12.395 min Scan# 1685
Delta R.T. -0.005 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion: 92 Resp: 2931

Ion	Ratio	Lower	Upper
92	100		
91	157.0	142.6	182.6
65	20.5	0.0	40.0

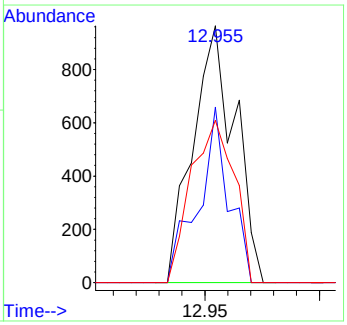




#78
tetrachloroethene
Concen: 0.18 ug/L
RT: 12.955 min Scan# 1792
Delta R.T. -0.000 min
Lab File: i216647.d
Acq: 6 Nov 2017 3:59 pm

Tgt Ion:166 Resp: 1240

Ion	Ratio	Lower	Upper
166	100		
168	68.3	18.9	78.9
129	63.2	37.5	97.5



Manual Integration Approval Summary

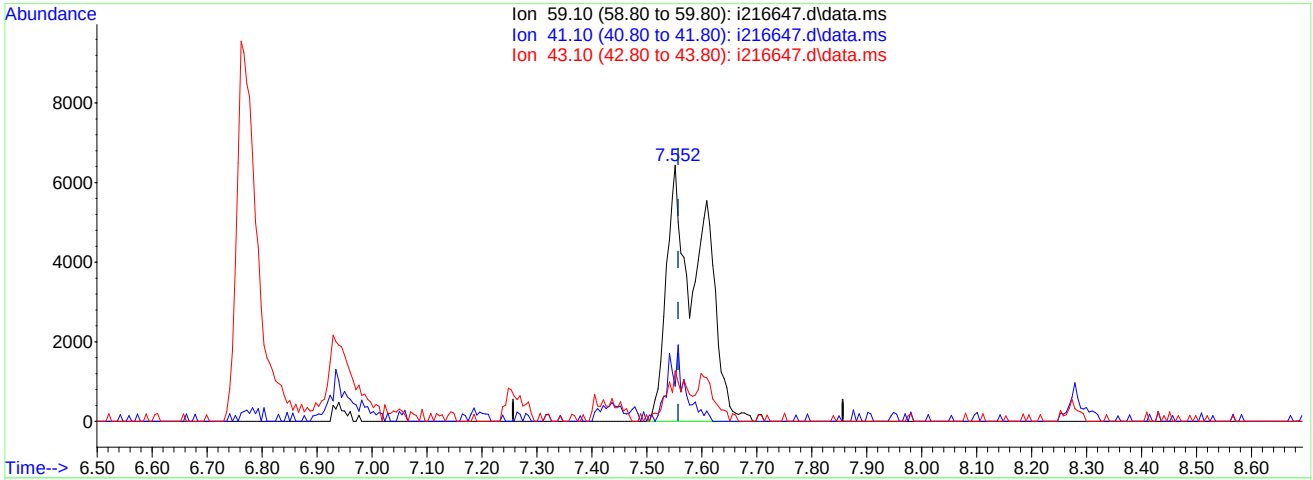
Sample Number:	JC54422-1	**Method:**	SW846 8260C
Lab FileID:	I216647.D	**Analyst approved:**	11/08/17 22:13 Maricela Delgaolillo
Injection Time:	11/06/17 15:59	**Supervisor approved:**	11/08/17 22:25 Kanya Veerawat

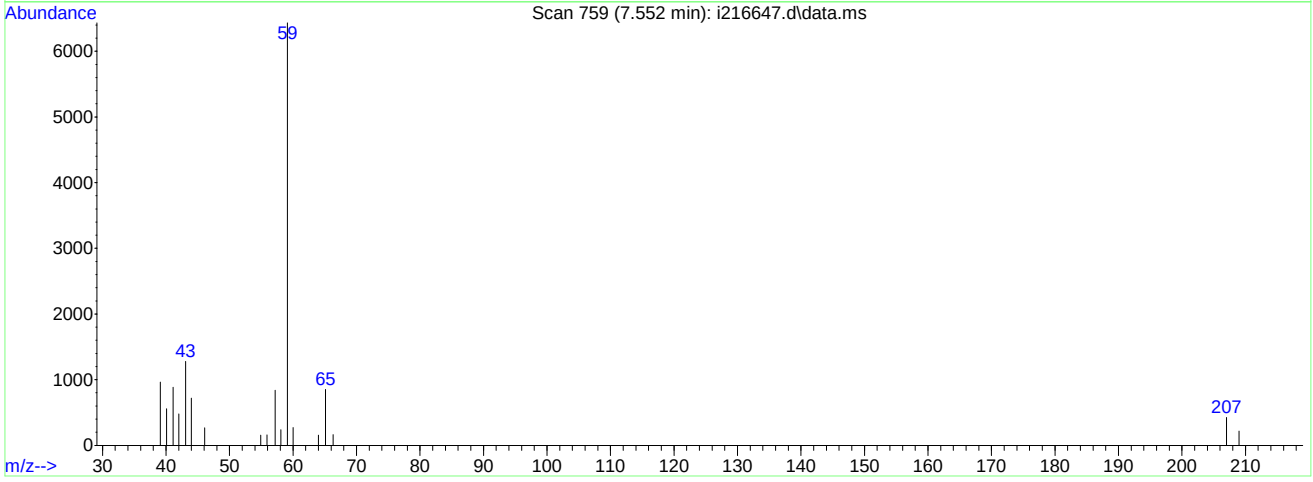
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tert Butyl Alcohol	75-65-0		7.55	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216647.d
Acq On : 6 Nov 2017 3:59 pm
Operator : PrashanS
Sample : JC54422-1
Misc : MS21774,VI8700,6.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 07 12:43:49 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration





TIC: i216647.d\data.ms

(2) tertiary butyl alcohol

7.552min (-0.005) 47.38ug/L

response 28554

Ion	Exp%	Act%
59.10	100	100
41.10	21.40	13.76
43.10	16.90	19.85
0.00	0.00	0.00

I216647.D edits: tertiary butyl alcohol

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216648.d
Acq On : 6 Nov 2017 4:25 pm
Operator : PrashanS
Sample : JC54422-2
Misc : MS21774,VI8700,4.9,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 07 12:46:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

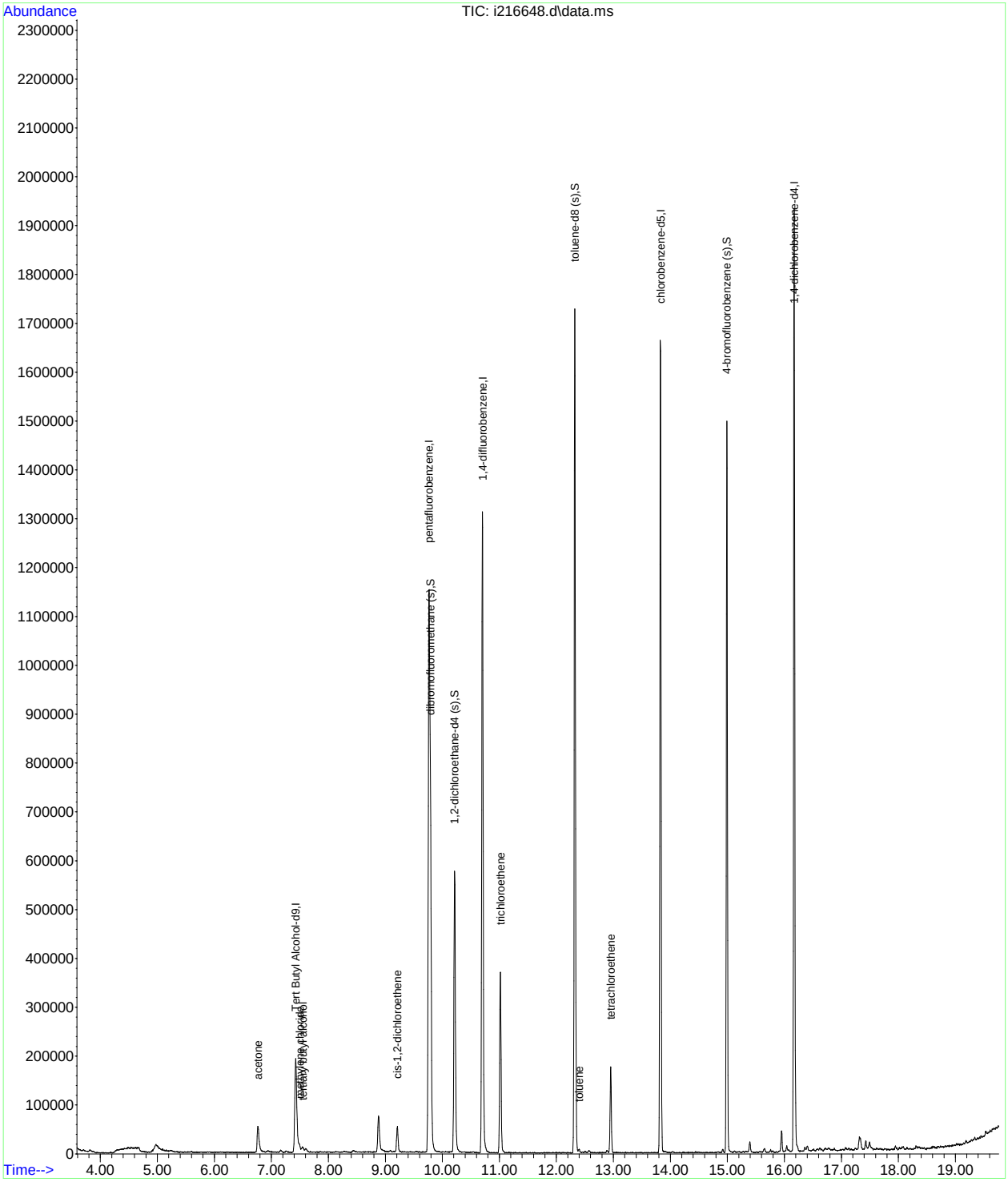
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	253951	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	671842	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.706	114	948012	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	777571	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	425684	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	369148	52.94	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 105.88%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	434571	56.32	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 112.64%			
72) toluene-d8 (s)	12.322	98	972823	49.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.50%			
96) 4-bromofluorobenzene (s)	14.989	95	370929	54.73	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 109.46%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.552	59	10455	18.69	ug/L	85
17) acetone	6.767	58	20748	56.58	ug/L #	83
22) methylene chloride	7.500	84	3374	0.73	ug/L	85
35) cis-1,2-dichloroethene	9.210	96	21086	3.86	ug/L	94
58) trichloroethene	11.020	95	109113	20.63	ug/L	92
73) toluene	12.400	92	2230	0.21	ug/L	97
78) tetrachloroethene	12.955	166	43614	7.10	ug/L	98

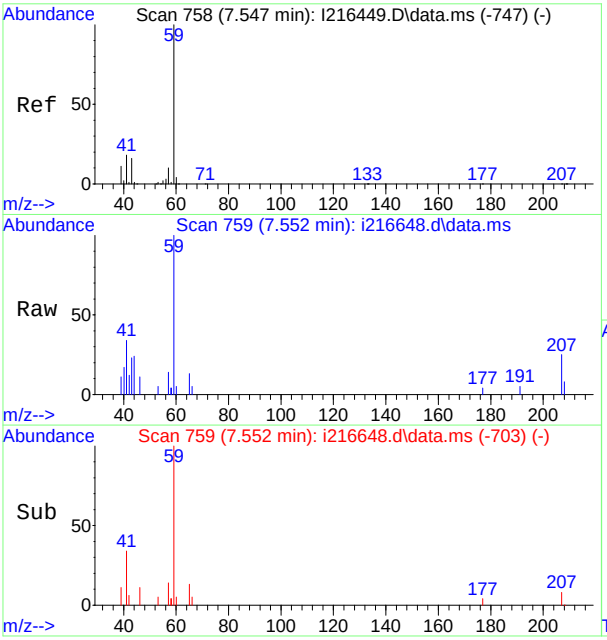
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216648.d
Acq On : 6 Nov 2017 4:25 pm
Operator : PrashanS
Sample : JC54422-2
Misc : MS21774,VI8700,4.9,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 07 12:46:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

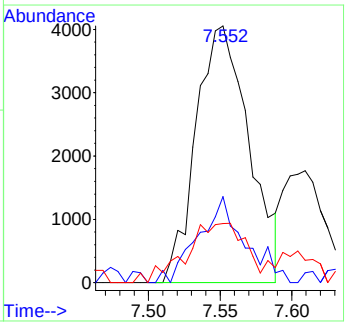


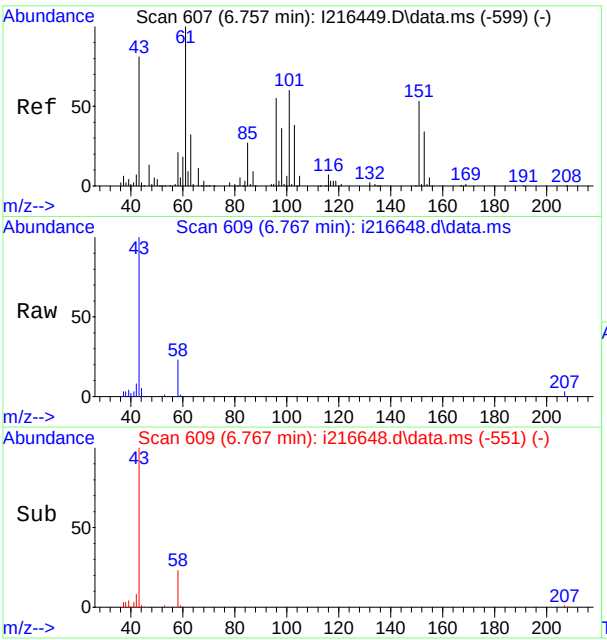


#2
tertiary butyl alcohol
Concen: 18.69 ug/L
RT: 7.552 min Scan# 759
Delta R.T. -0.005 min
Lab File: i216648.d
Acq: 6 Nov 2017 4:25 pm

Tgt Ion: 59 Resp: 10455

Ion	Ratio	Lower	Upper
59	100		
41	33.5	0.0	51.4
43	17.1	0.0	46.9

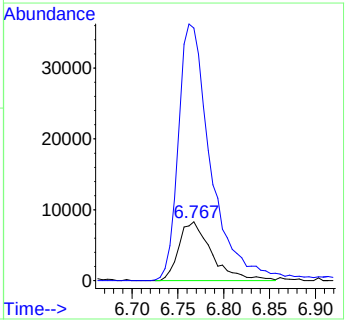




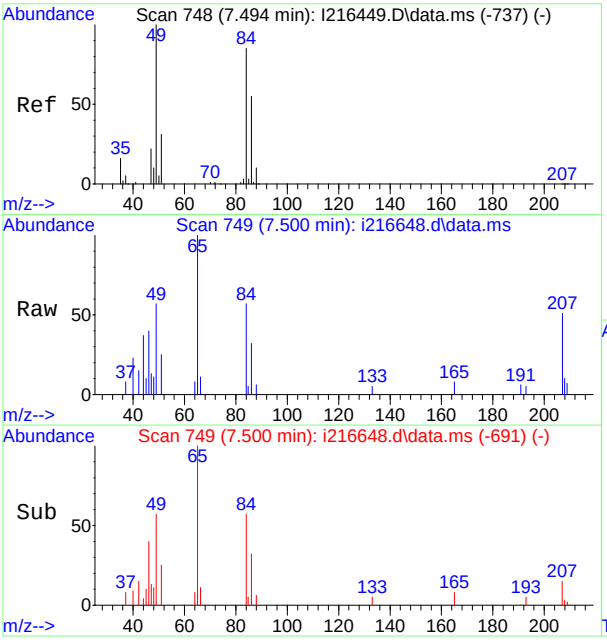
#17
acetone
Concen: 56.58 ug/L
RT: 6.767 min Scan# 609
Delta R.T. 0.005 min
Lab File: i216648.d
Acq: 6 Nov 2017 4:25 pm

Tgt Ion: 58 Resp: 20748

Ion	Ratio	Lower	Upper
58	100		
43	427.7	357.6	417.6#



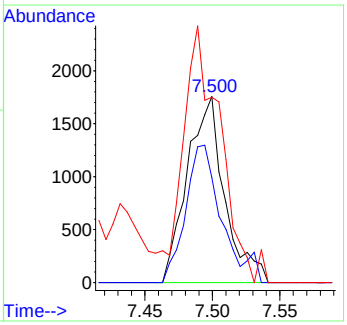
SGS ACCUTEST JC54422

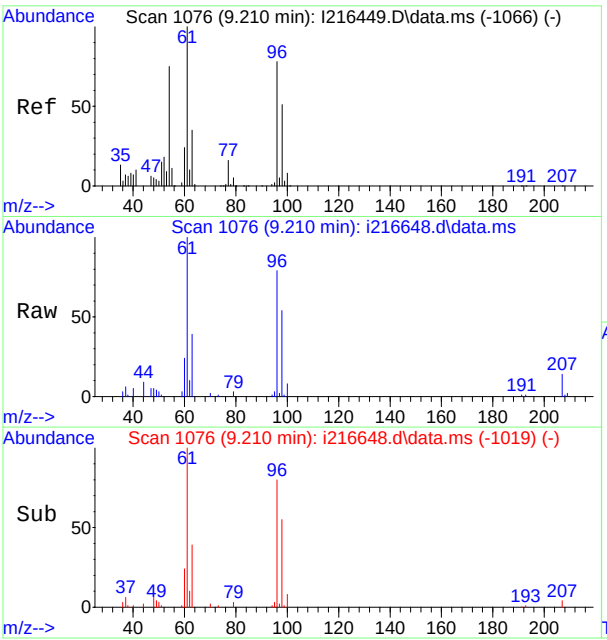


#22
methylene chloride
Concen: 0.73 ug/L
RT: 7.500 min Scan# 749
Delta R.T. 0.005 min
Lab File: i216648.d
Acq: 6 Nov 2017 4:25 pm

Tgt Ion: 84 Resp: 3374

Ion	Ratio	Lower	Upper
84	100		
86	56.4	35.0	95.0
49	99.6	88.4	148.4

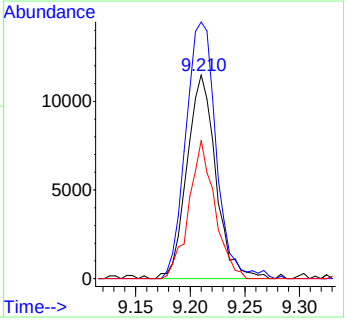


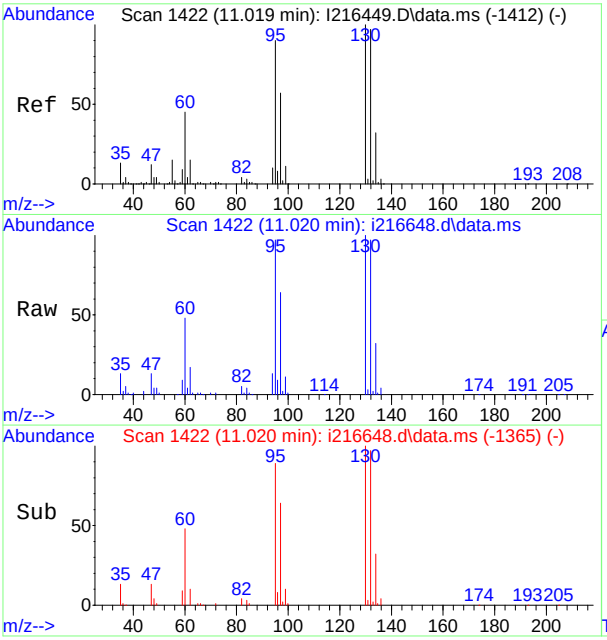


#35
cis-1,2-dichloroethene
Concen: 3.86 ug/L
RT: 9.210 min Scan# 1076
Delta R.T. 0.000 min
Lab File: i216648.d
Acq: 6 Nov 2017 4:25 pm

Tgt Ion: 96 Resp: 21086

Ion	Ratio	Lower	Upper
96	100		
61	126.0	113.6	153.6
98	67.8	44.8	84.8

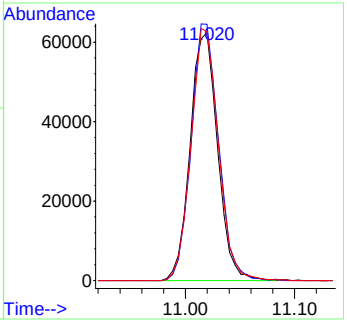


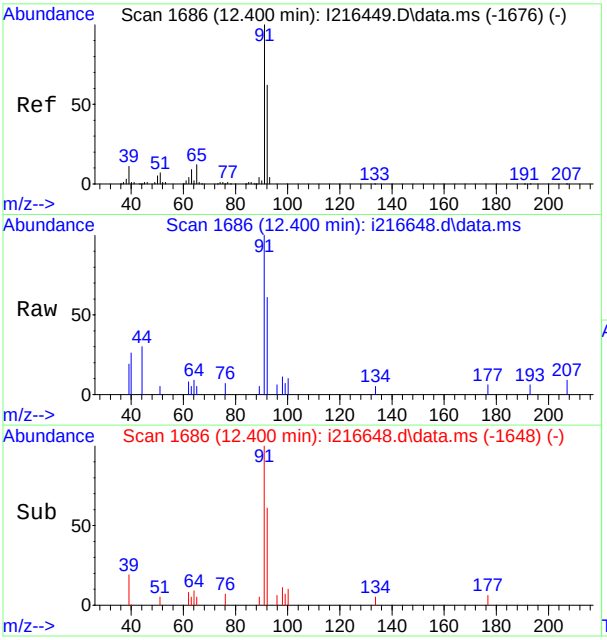


#58
trichloroethene
Concen: 20.63 ug/L
RT: 11.020 min Scan# 1422
Delta R.T. 0.000 min
Lab File: i216648.d
Acq: 6 Nov 2017 4:25 pm

Tgt Ion: 95 Resp: 109113

Ion	Ratio	Lower	Upper
95	100		
130	103.4	81.5	141.5
132	100.4	78.2	138.2

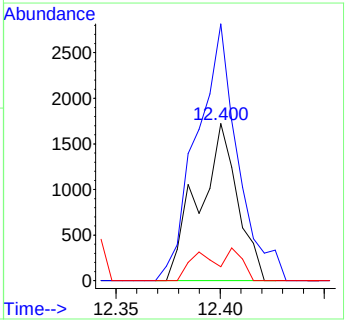


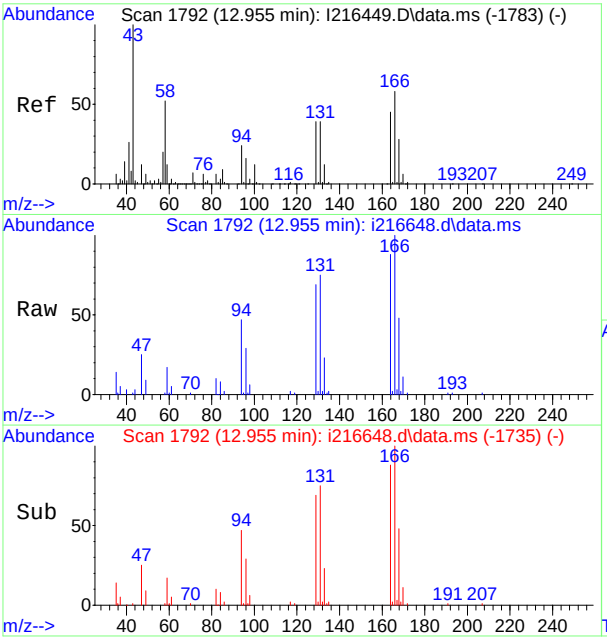


#73
toluene
Concen: 0.21 ug/L
RT: 12.400 min Scan# 1686
Delta R.T. 0.000 min
Lab File: i216648.d
Acq: 6 Nov 2017 4:25 pm

Tgt Ion: 92 Resp: 2230

Ion	Ratio	Lower	Upper
92	100		
91	163.5	142.6	182.6
65	8.8	0.0	40.0

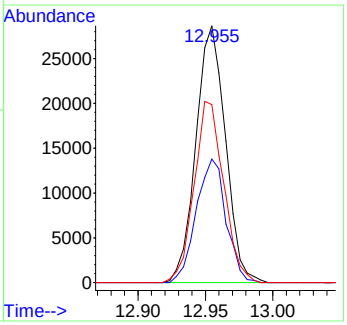




#78
tetrachloroethene
Concen: 7.10 ug/L
RT: 12.955 min Scan# 1792
Delta R.T. 0.000 min
Lab File: i216648.d
Acq: 6 Nov 2017 4:25 pm

Tgt Ion:166 Resp: 43614

Ion	Ratio	Lower	Upper
166	100		
168	48.1	18.9	78.9
129	69.4	37.5	97.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216663.d
Acq On : 6 Nov 2017 11:04 pm
Operator : PrashanS
Sample : JC54422-3
Misc : MS21774,VI8700,5.8,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 07 13:12:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

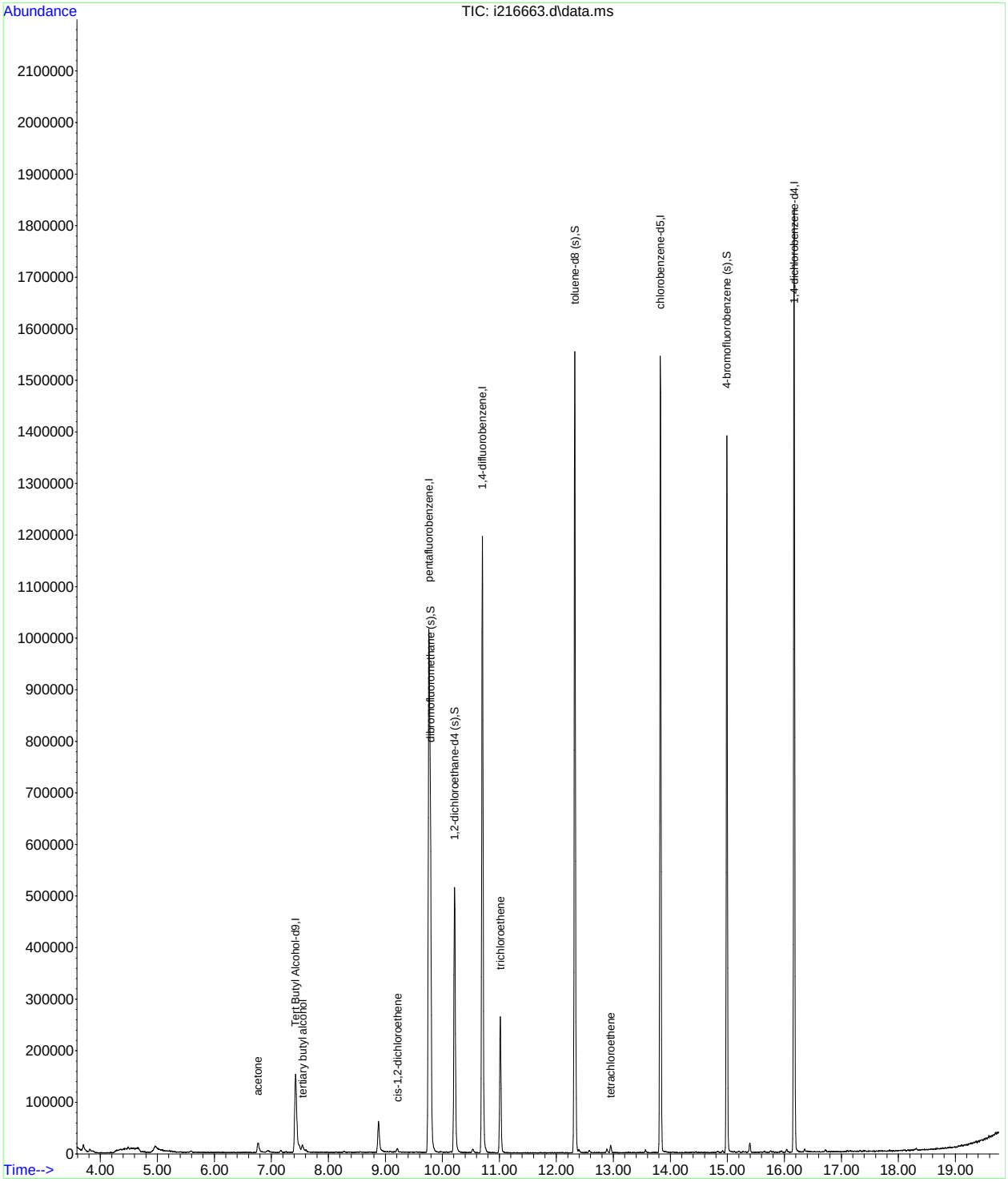
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.421	65	198318	500.00	ug/L	-0.02
4) pentafluorobenzene	9.764	168	567566	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	830696	50.00	ug/L	0.00
71) chlorobenzene-d5	13.823	117	697460	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	396584	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	328766	55.81	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 111.62%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	397507	58.79	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 117.58%			
72) toluene-d8 (s)	12.322	98	870206	49.61	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.22%			
96) 4-bromofluorobenzene (s)	14.989	95	342360	54.22	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 108.44%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.547	59	15891	36.37	ug/L	79
17) acetone	6.762	58	7027	22.68	ug/L	88
35) cis-1,2-dichloroethene	9.215	96	3031	0.66	ug/L #	65
58) trichloroethene	11.014	95	76723	16.55	ug/L	91
78) tetrachloroethene	12.949	166	3800	0.69	ug/L	82

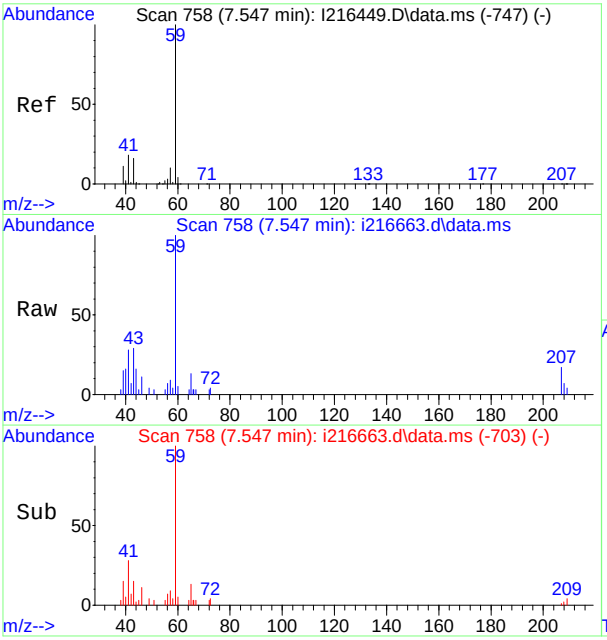
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216663.d
Acq On : 6 Nov 2017 11:04 pm
Operator : PrashanS
Sample : JC54422-3
Misc : MS21774,VI8700,5.8,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 07 13:12:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

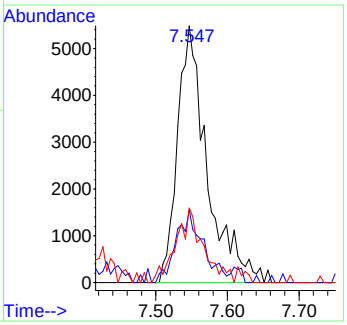


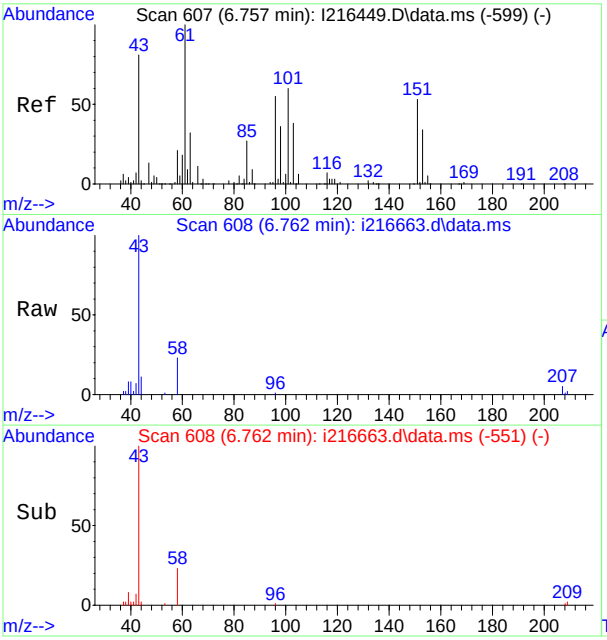


#2
tertiary butyl alcohol
Concen: 36.37 ug/L
RT: 7.547 min Scan# 758
Delta R.T. -0.011 min
Lab File: i216663.d
Acq: 6 Nov 2017 11:04 pm

Tgt Ion: 59 Resp: 15891

Ion	Ratio	Lower	Upper
59	100		
41	28.3	0.0	51.4
43	29.1	0.0	46.9

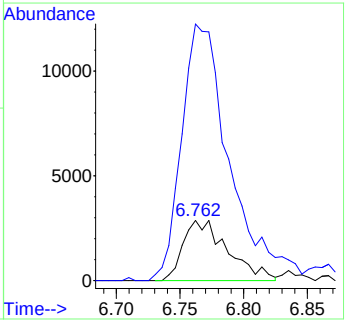


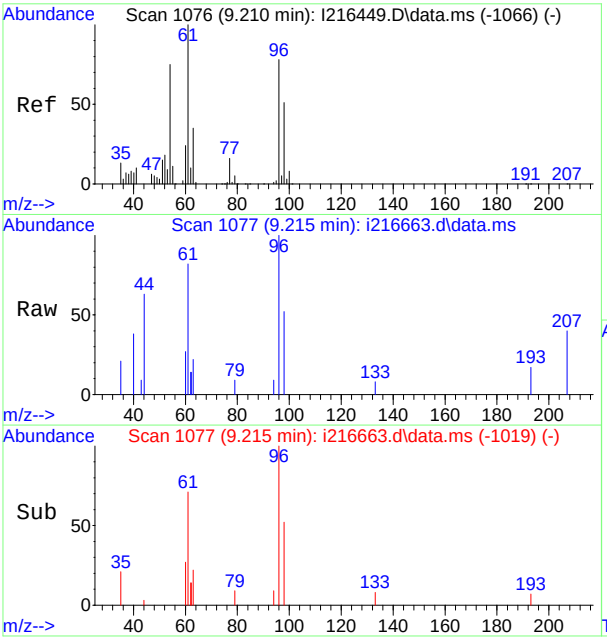


#17
acetone
Concen: 22.68 ug/L
RT: 6.762 min Scan# 608
Delta R.T. -0.000 min
Lab File: i216663.d
Acq: 6 Nov 2017 11:04 pm

Tgt Ion: 58 Resp: 7027

Ion	Ratio	Lower	Upper
58	100		
43	415.9	357.6	417.6

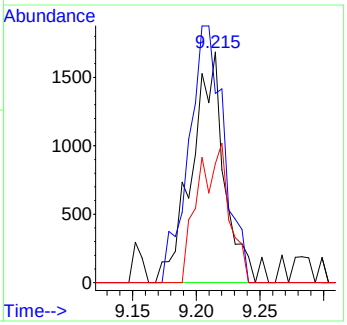


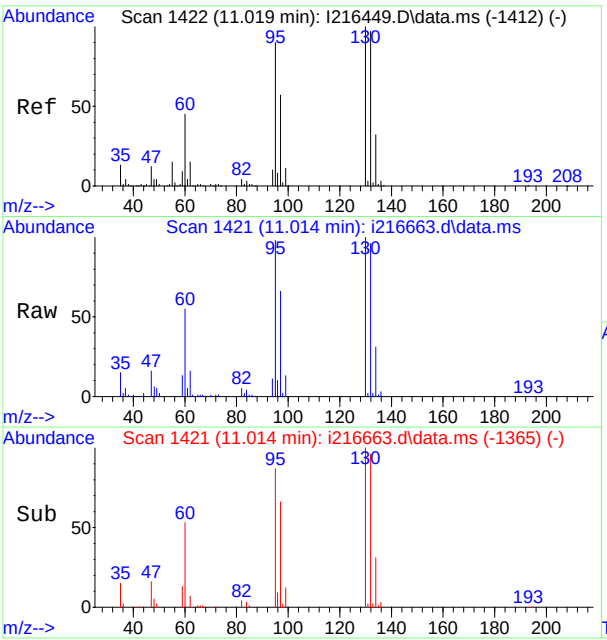


#35
cis-1,2-dichloroethene
Concen: 0.66 ug/L
RT: 9.215 min Scan# 1077
Delta R.T. 0.005 min
Lab File: i216663.d
Acq: 6 Nov 2017 11:04 pm

Tgt Ion: 96 Resp: 3031

Ion	Ratio	Lower	Upper
96	100		
61	82.1	113.6	153.6#
98	51.6	44.8	84.8

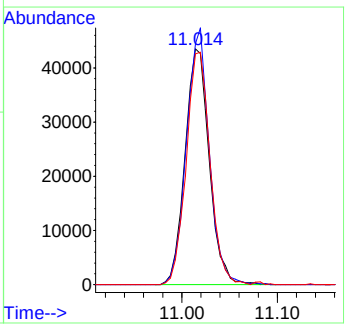


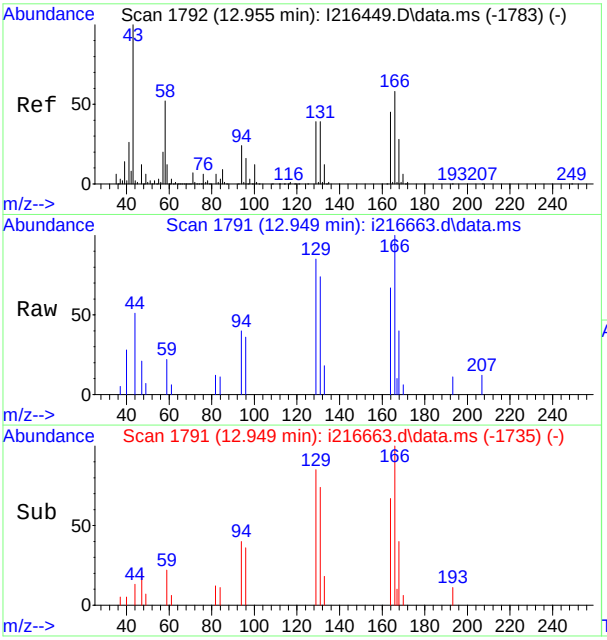


#58
trichloroethene
Concen: 16.55 ug/L
RT: 11.014 min Scan# 1421
Delta R.T. -0.005 min
Lab File: i216663.d
Acq: 6 Nov 2017 11:04 pm

Tgt Ion: 95 Resp: 76723

Ion	Ratio	Lower	Upper
95	100		
130	102.4	81.5	141.5
132	97.9	78.2	138.2

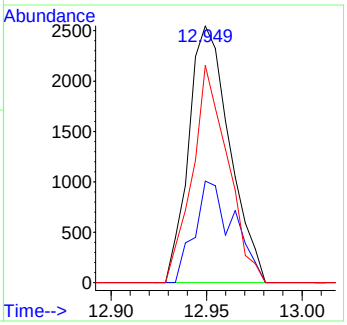




#78
tetrachloroethene
Concen: 0.69 ug/L
RT: 12.949 min Scan# 1791
Delta R.T. -0.005 min
Lab File: i216663.d
Acq: 6 Nov 2017 11:04 pm

Tgt Ion:166 Resp: 3800

Ion	Ratio	Lower	Upper
166	100		
168	39.5	18.9	78.9
129	84.6	37.5	97.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216678.d
Acq On : 7 Nov 2017 3:49 pm
Operator : PrashanS
Sample : jc54422-4
Misc : MS21774,VI8701,6.8,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 17:46:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

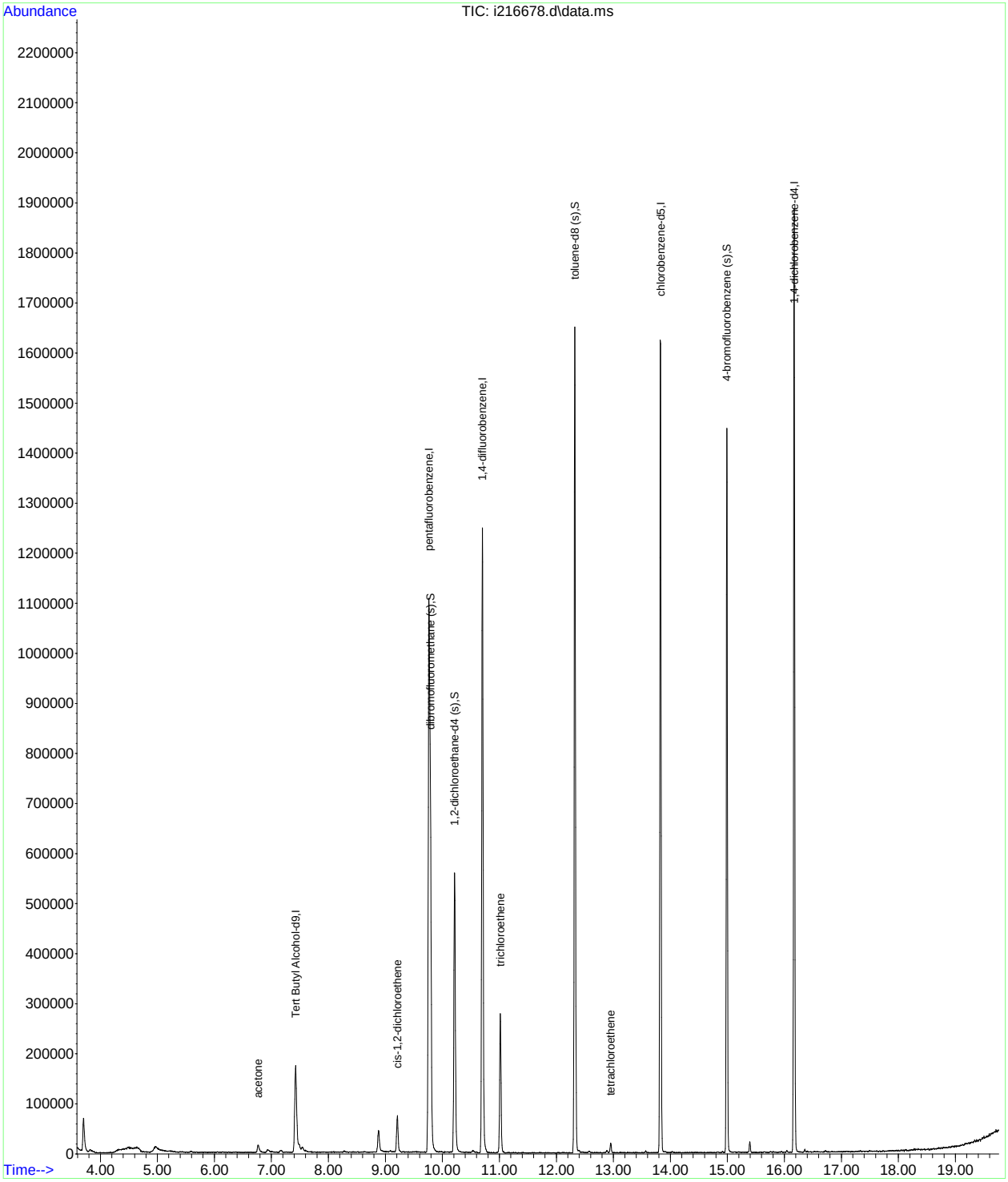
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	222438	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	632799	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	891779	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	759583	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	414659	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	349961	53.28	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 106.56%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	423067	58.28	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 116.56%			
72) toluene-d8 (s)	12.322	98	928866	48.63	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.26%			
96) 4-bromofluorobenzene (s)	14.989	95	365248	55.32	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 110.64%			
Target Compounds						Qvalue
17) acetone	6.767	58	5394	15.62	ug/L	93
35) cis-1,2-dichloroethene	9.210	96	29719	5.77	ug/L	93
58) trichloroethene	11.014	95	78130	15.70	ug/L	86
78) tetrachloroethene	12.949	166	5774	0.96	ug/L	89

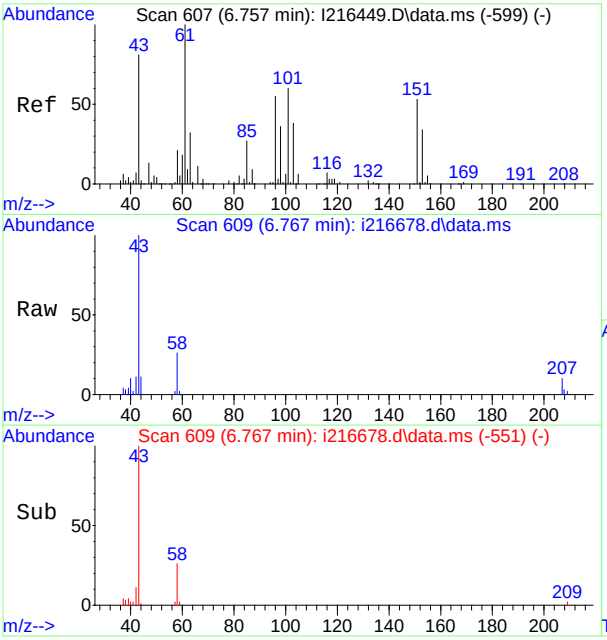
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216678.d
Acq On : 7 Nov 2017 3:49 pm
Operator : PrashanS
Sample : jc54422-4
Misc : MS21774,VI8701,6.8,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 17:46:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

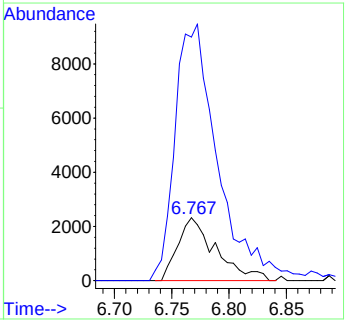


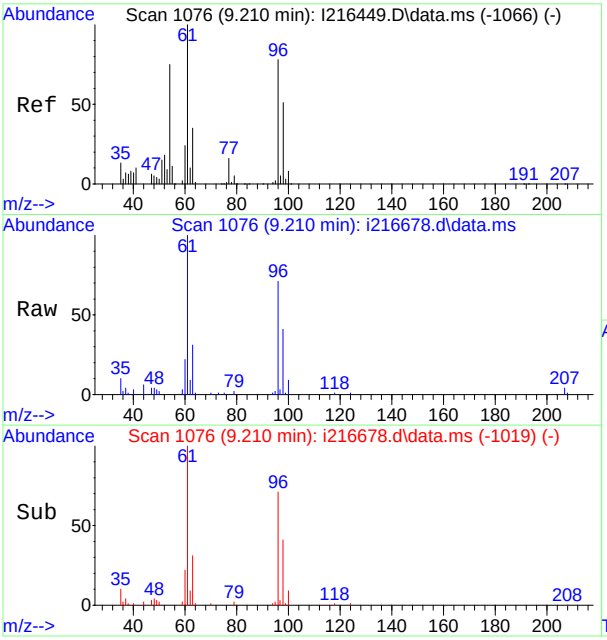


#17
acetone
Concen: 15.62 ug/L
RT: 6.767 min Scan# 609
Delta R.T. 0.005 min
Lab File: i216678.d
Acq: 7 Nov 2017 3:49 pm

Tgt Ion: 58 Resp: 5394

Ion	Ratio	Lower	Upper
58	100		
43	370.4	357.6	417.6

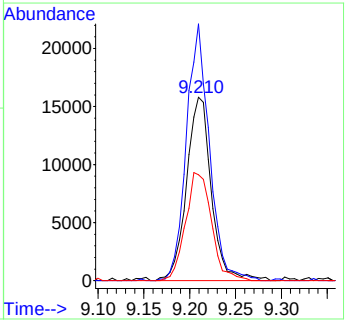


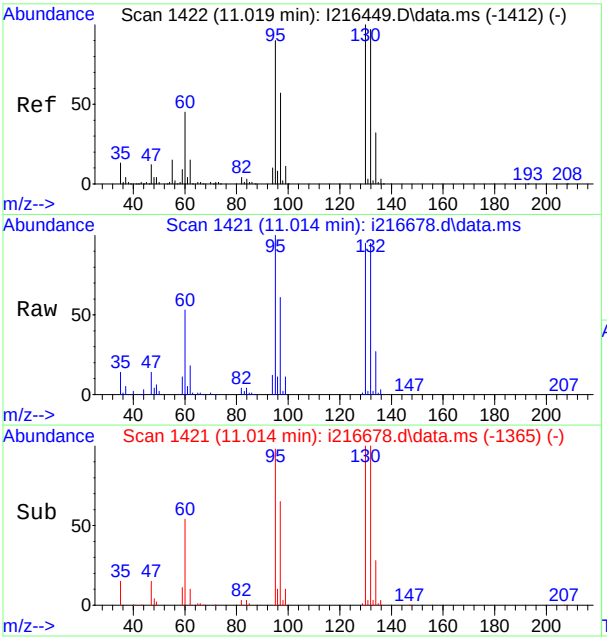


#35
cis-1,2-dichloroethene
Concen: 5.77 ug/L
RT: 9.210 min Scan# 1076
Delta R.T. -0.000 min
Lab File: i216678.d
Acq: 7 Nov 2017 3:49 pm

Tgt Ion: 96 Resp: 29719

Ion	Ratio	Lower	Upper
96	100		
61	140.0	113.6	153.6
98	57.7	44.8	84.8

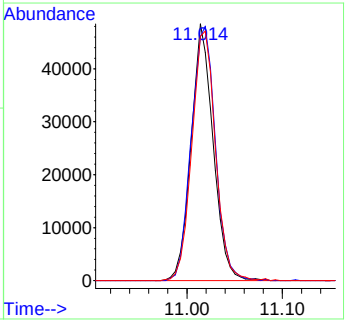


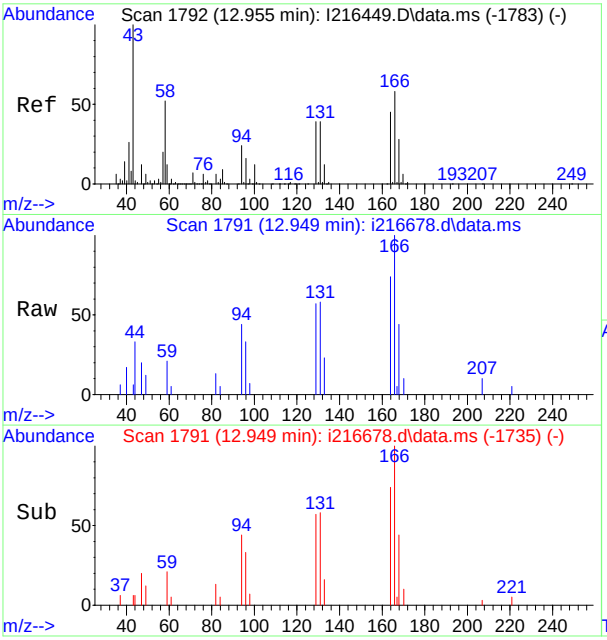


#58
trichloroethene
Concen: 15.70 ug/L
RT: 11.014 min Scan# 1421
Delta R.T. -0.005 min
Lab File: i216678.d
Acq: 7 Nov 2017 3:49 pm

Tgt Ion: 95 Resp: 78130

Ion	Ratio	Lower	Upper
95	100		
130	94.9	81.5	141.5
132	95.2	78.2	138.2

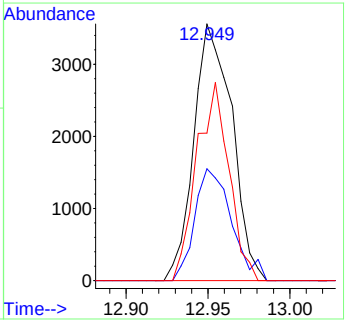




#78
tetrachloroethene
Concen: 0.96 ug/L
RT: 12.949 min Scan# 1791
Delta R.T. -0.005 min
Lab File: i216678.d
Acq: 7 Nov 2017 3:49 pm

Tgt Ion:166 Resp: 5774

Ion	Ratio	Lower	Upper
166	100		
168	43.6	18.9	78.9
129	57.4	37.5	97.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216611.d
Acq On : 4 Nov 2017 5:07 am
Operator : PrashanS
Sample : jc54555-1
Misc : MS21830,VI8698,6.5,,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Nov 06 13:02:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

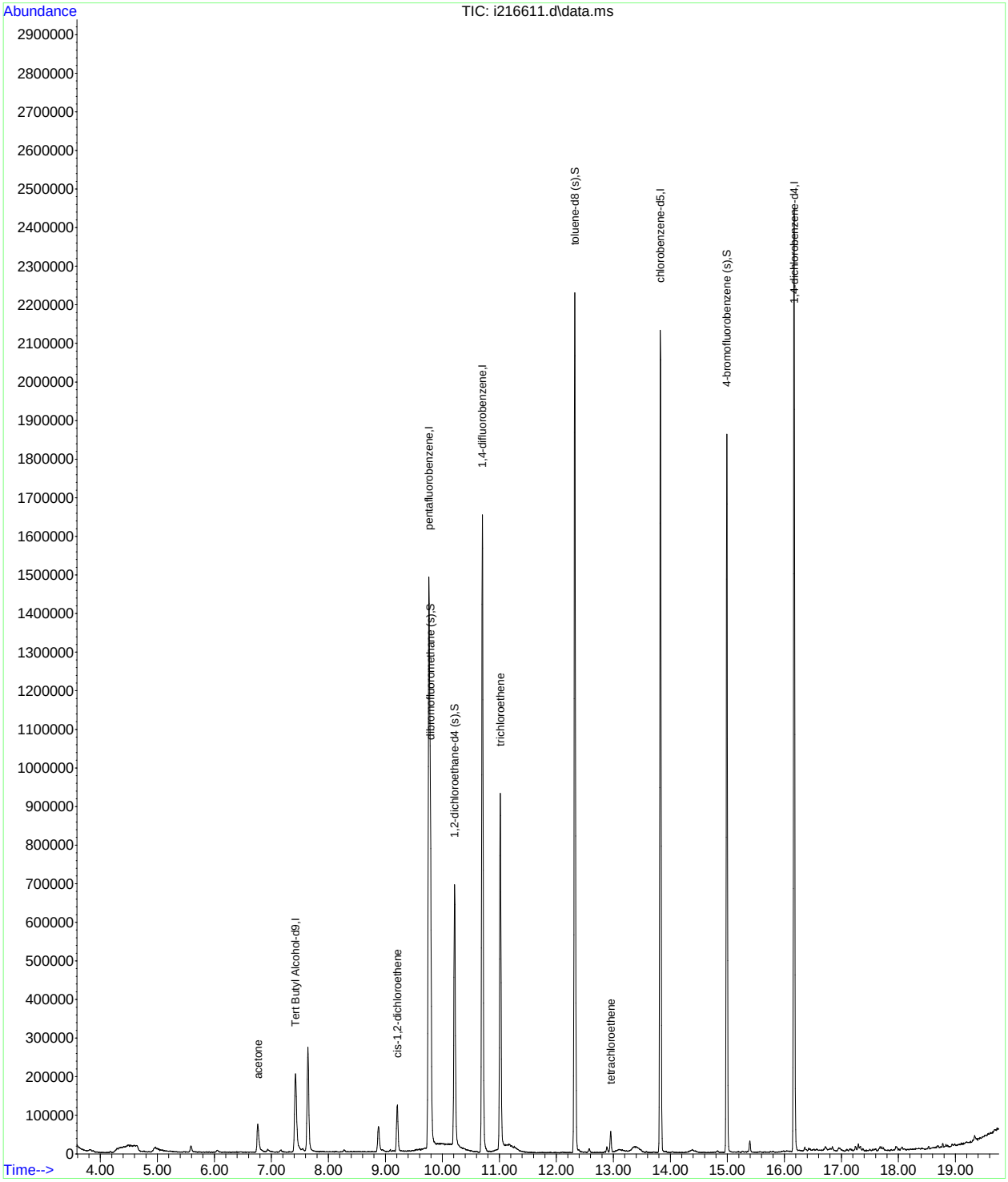
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.421	65	287717	500.00	ug/L	-0.02
4) pentafluorobenzene	9.764	168	921555	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	1275433	50.00	ug/L	0.00
71) chlorobenzene-d5	13.823	117	1063193	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	587383	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	448681	46.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 93.82%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	484047	46.62	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 93.24%			
72) toluene-d8 (s)	12.322	98	1331155	49.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.58%			
96) 4-bromofluorobenzene (s)	14.989	95	483831	51.74	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 103.48%			
Target Compounds						Qvalue
17) acetone	6.767	58	30583	60.80	ug/L	92
35) cis-1,2-dichloroethene	9.210	96	52115	6.95	ug/L	98
58) trichloroethene	11.014	95	268890	37.79	ug/L	96
78) tetrachloroethene	12.955	166	14590	1.74	ug/L	93

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

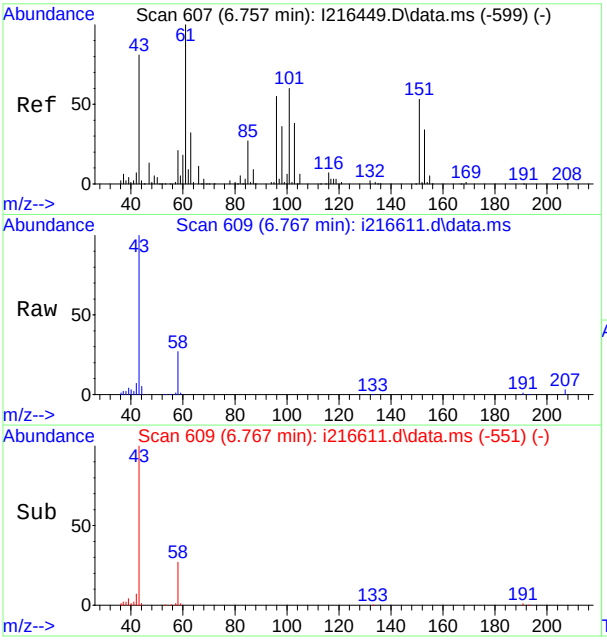
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216611.d
Acq On : 4 Nov 2017 5:07 am
Operator : PrashanS
Sample : jc54555-1
Misc : MS21830,VI8698,6.5,,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Nov 06 13:02:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



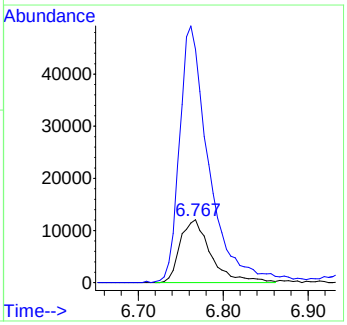
SGS ACCUTEST JC54422

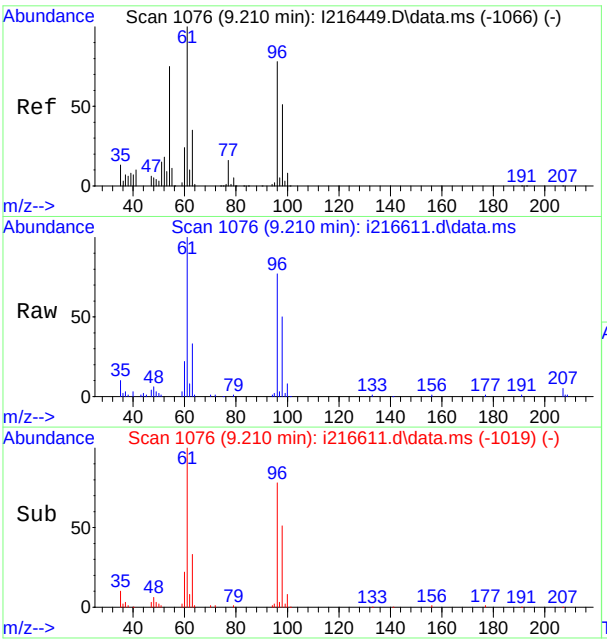


#17
acetone
Concen: 60.80 ug/L
RT: 6.767 min Scan# 609
Delta R.T. 0.005 min
Lab File: i216611.d
Acq: 4 Nov 2017 5:07 am

Tgt Ion: 58 Resp: 30583

Ion	Ratio	Lower	Upper
58	100		
43	369.1	357.6	417.6

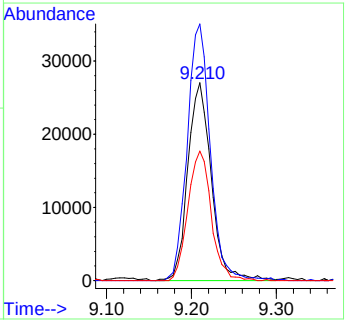


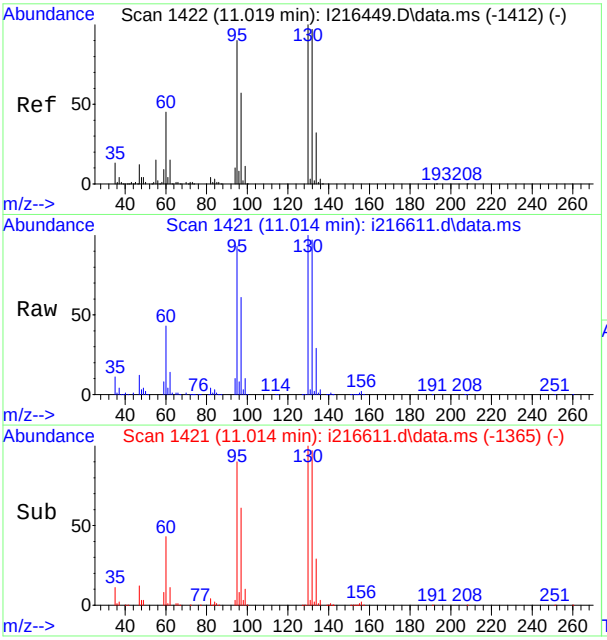


#35
cis-1,2-dichloroethene
Concen: 6.95 ug/L
RT: 9.210 min Scan# 1076
Delta R.T. 0.000 min
Lab File: i216611.d
Acq: 4 Nov 2017 5:07 am

Tgt Ion: 96 Resp: 52115

Ion	Ratio	Lower	Upper
96	100		
61	129.7	113.6	153.6
98	65.4	44.8	84.8

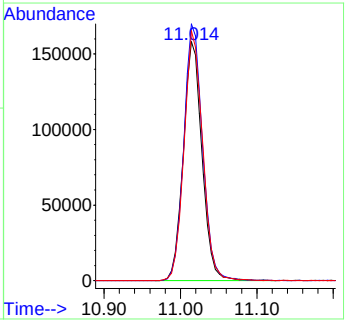


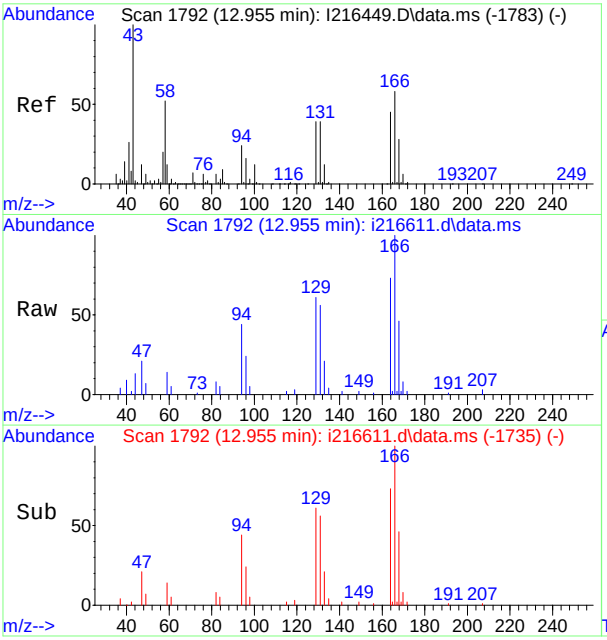


#58
trichloroethene
Concen: 37.79 ug/L
RT: 11.014 min Scan# 1421
Delta R.T. -0.005 min
Lab File: i216611.d
Acq: 4 Nov 2017 5:07 am

Tgt Ion: 95 Resp: 268890

Ion	Ratio	Lower	Upper
95	100		
130	107.5	81.5	141.5
132	104.6	78.2	138.2

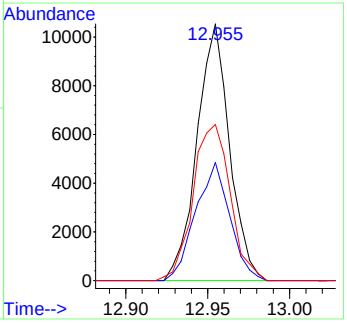




#78
tetrachloroethene
Concen: 1.74 ug/L
RT: 12.955 min Scan# 1792
Delta R.T. 0.000 min
Lab File: i216611.d
Acq: 4 Nov 2017 5:07 am

Tgt Ion:166 Resp: 14590

Ion	Ratio	Lower	Upper
166	100		
168	46.0	18.9	78.9
129	60.8	37.5	97.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216677.d
Acq On : 7 Nov 2017 3:23 pm
Operator : PrashanS
Sample : jc54555-2 Inst : GCMSI
Misc : MS21830,VI8701,6.2,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 01:46:41 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

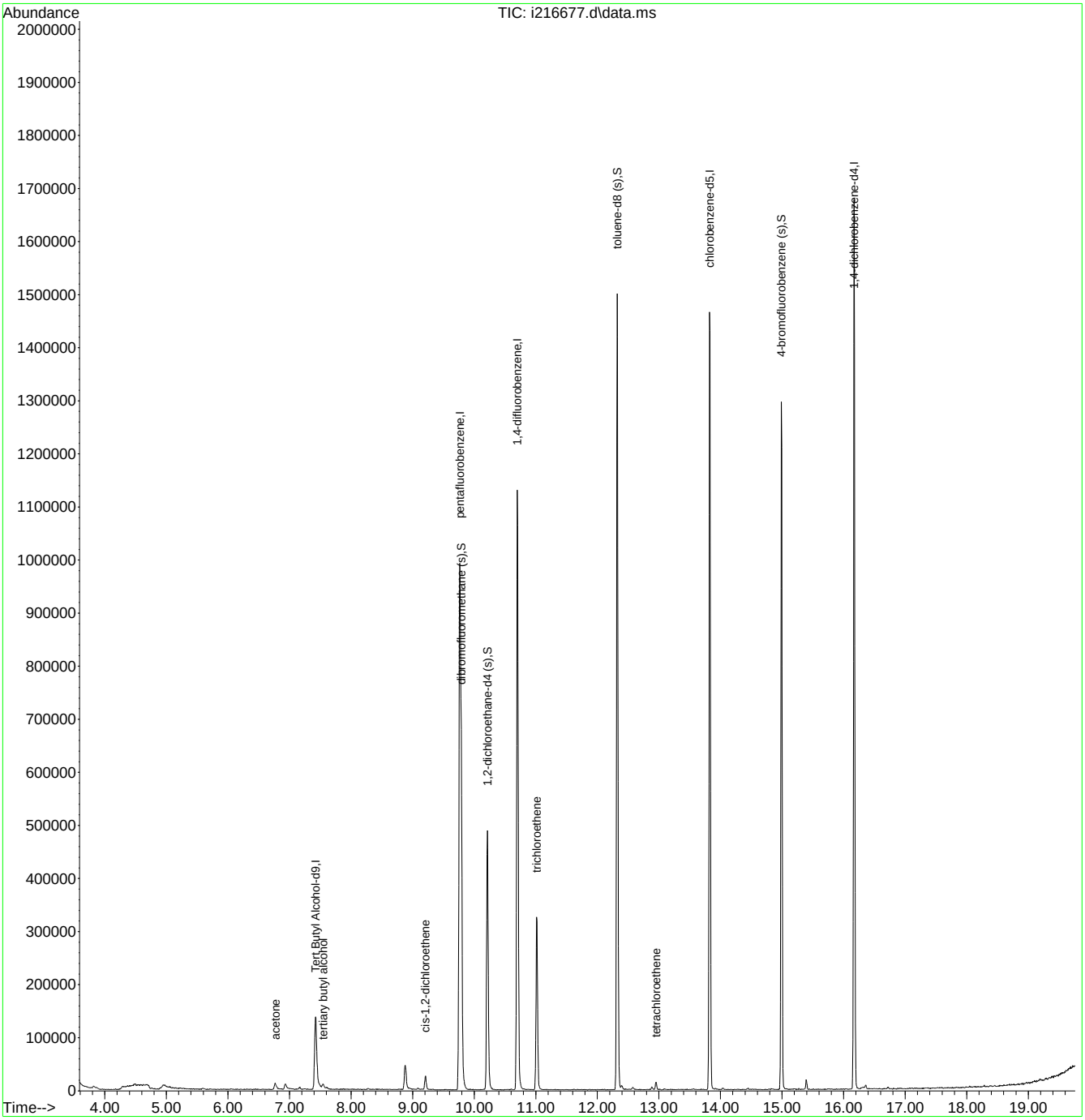
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	181507	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	576218	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	817290	50.00	ug/L	0.00
71) chlorobenzene-d5	13.823	117	682118	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	366747	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	317588	53.10	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 106.20%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	377043	56.68	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 113.36%			
72) toluene-d8 (s)	12.322	98	852331	49.69	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.38%			
96) 4-bromofluorobenzene (s)	14.989	95	322711	55.27	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 110.54%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.547	59	10724	26.82	ug/L	94
17) acetone	6.772	58	4671	14.85	ug/L #	73
35) cis-1,2-dichloroethene	9.204	96	11079	2.36	ug/L #	82
58) trichloroethene	11.014	95	96109	21.08	ug/L	91
78) tetrachloroethene	12.955	166	3527	0.65	ug/L	93

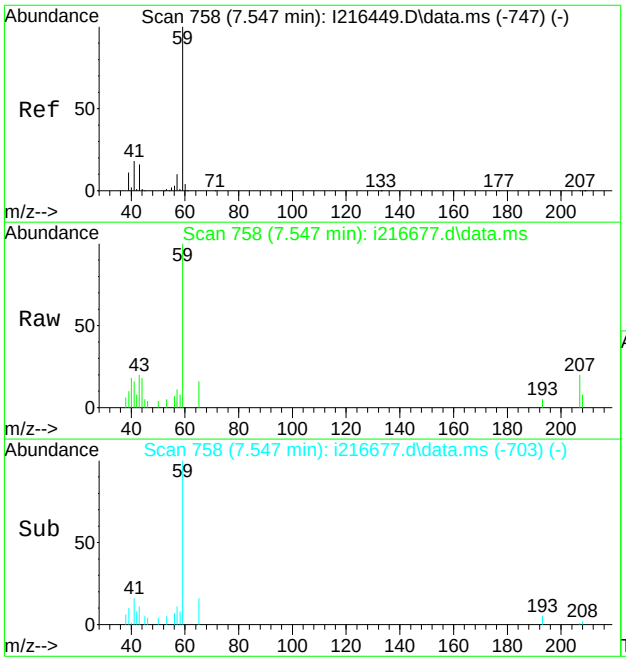
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216677.d
Acq On : 7 Nov 2017 3:23 pm
Operator : PrashanS
Sample : jc54555-2 Inst : GCMSI
Misc : MS21830,VI8701,6.2,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 01:46:41 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

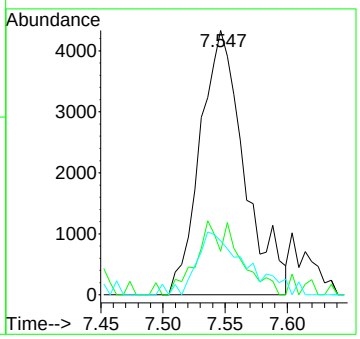


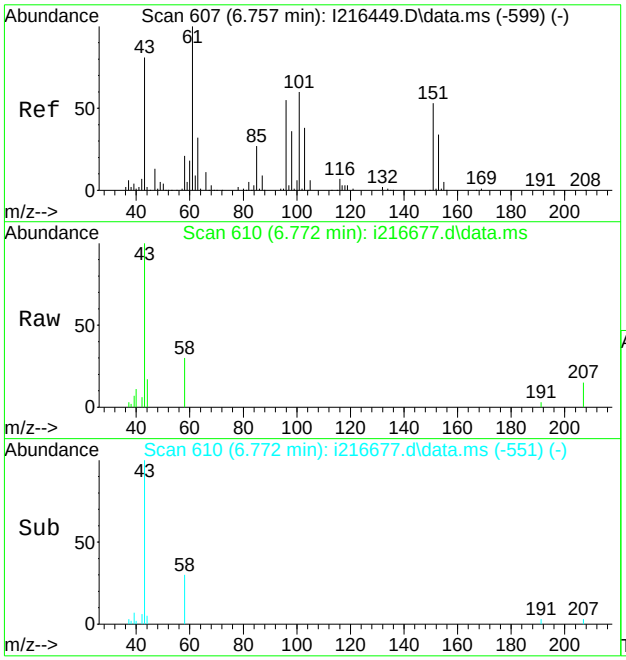


#2
tertiary butyl alcohol
Concen: 26.82 ug/L
RT: 7.547 min Scan# 758
Delta R.T. -0.011 min
Lab File: i216677.d
Acq: 7 Nov 2017 3:23 pm

Tgt Ion: 59 Resp: 10724

Ion	Ratio	Lower	Upper
59	100		
41	16.4	0.0	51.4
43	16.3	0.0	46.9

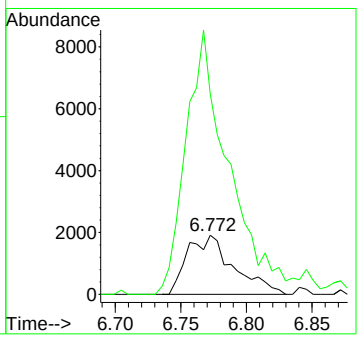


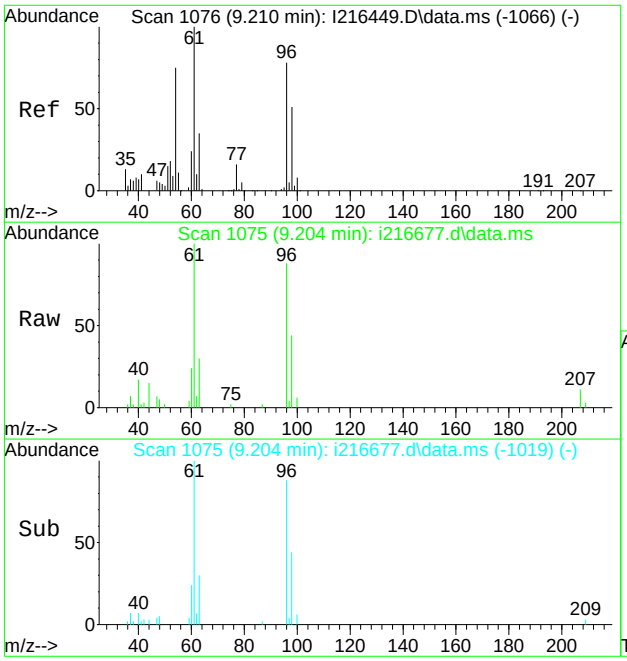


#17
acetone
Concen: 14.85 ug/L
RT: 6.772 min Scan# 610
Delta R.T. 0.010 min
Lab File: i216677.d
Acq: 7 Nov 2017 3:23 pm

Tgt Ion: 58 Resp: 4671

Ion	Ratio	Lower	Upper
58	100		
43	324.7	357.6	417.6#

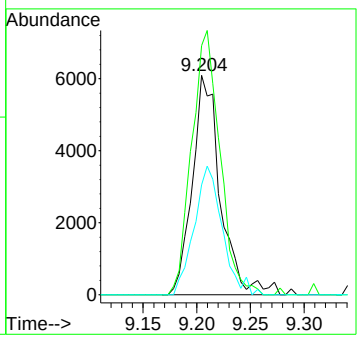


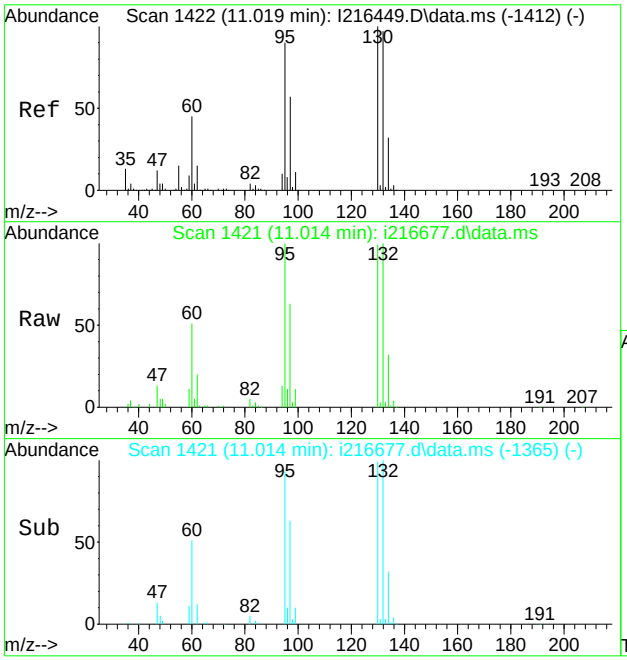


#35
cis-1,2-dichloroethene
Concen: 2.36 ug/L
RT: 9.204 min Scan# 1075
Delta R.T. -0.005 min
Lab File: i216677.d
Acq: 7 Nov 2017 3:23 pm

Tgt Ion: 96 Resp: 11079

Ion	Ratio	Lower	Upper
96	100		
61	113.4	113.6	153.6#
98	50.0	44.8	84.8

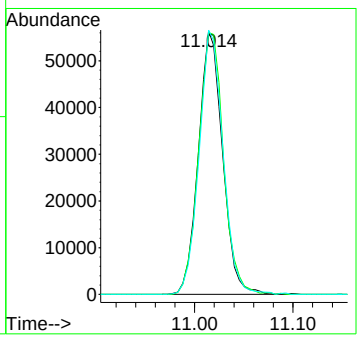




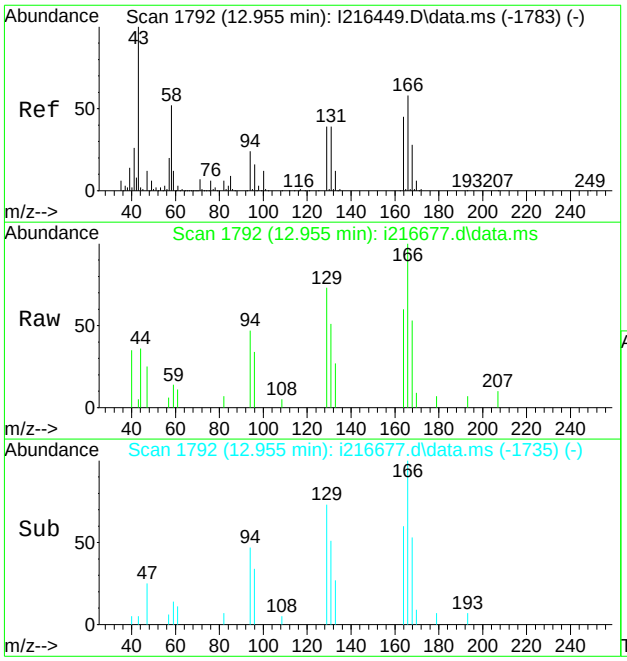
#58
trichloroethene
Concen: 21.08 ug/L
RT: 11.014 min Scan# 1421
Delta R.T. -0.005 min
Lab File: i216677.d
Acq: 7 Nov 2017 3:23 pm

Tgt Ion: 95 Resp: 96109

Ion	Ratio	Lower	Upper
95	100		
130	99.4	81.5	141.5
132	100.4	78.2	138.2



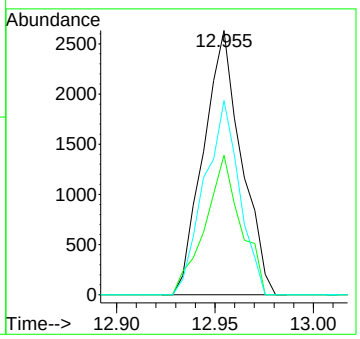
SGS ACCUTEST
JC54422



#78
tetrachloroethene
Concen: 0.65 ug/L
RT: 12.955 min Scan# 1792
Delta R.T. -0.000 min
Lab File: i216677.d
Acq: 7 Nov 2017 3:23 pm

Tgt Ion:166 Resp: 3527

Ion	Ratio	Lower	Upper
166	100		
168	52.8	18.9	78.9
129	73.5	37.5	97.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216613.d
Acq On : 4 Nov 2017 6:00 am
Operator : PrashanS
Sample : jc54555-3
Misc : MS21830,VI8698,6.8,,,,,1
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Nov 06 13:04:29 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

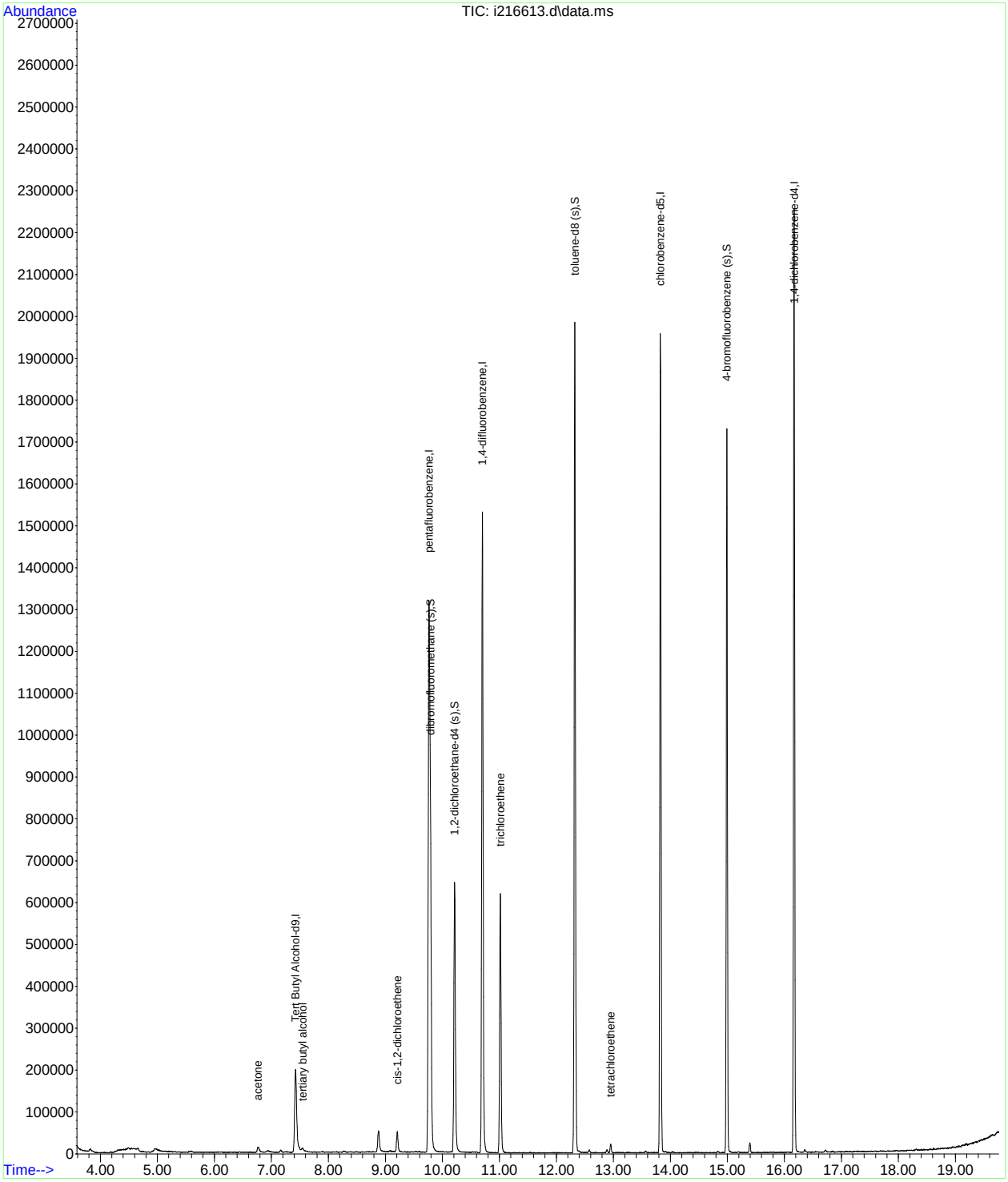
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.421	65	268963	500.00	ug/L	-0.02
4) pentafluorobenzene	9.764	168	817886	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	1138532	50.00	ug/L	0.00
71) chlorobenzene-d5	13.823	117	938187	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	514883	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	418952	49.35	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.70%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	475114	51.27	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.54%			
72) toluene-d8 (s)	12.322	98	1160713	49.20	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.40%			
96) 4-bromofluorobenzene (s)	14.989	95	438654	53.51	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 107.02%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.546	59	11427	19.29	ug/L	87
17) acetone	6.762	58	5699	12.77	ug/L #	60
35) cis-1,2-dichloroethene	9.210	96	21858	3.28	ug/L	91
58) trichloroethene	11.014	95	183506	28.89	ug/L	94
78) tetrachloroethene	12.949	166	5587	0.75	ug/L	86

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

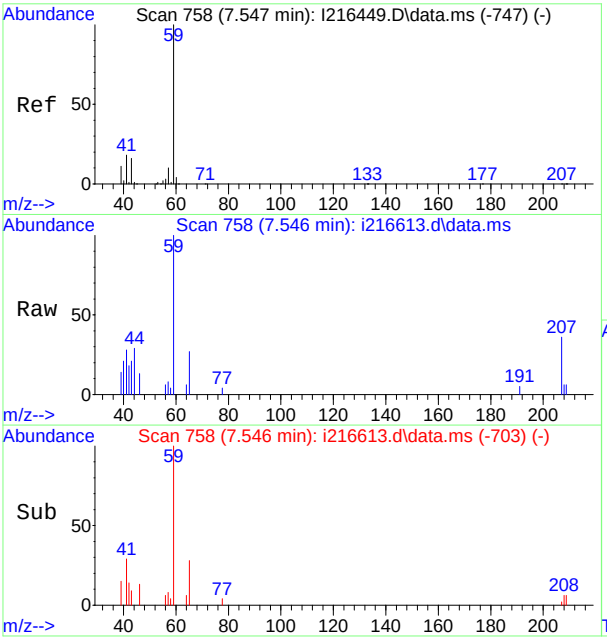
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216613.d
Acq On : 4 Nov 2017 6:00 am
Operator : PrashanS
Sample : jc54555-3
Misc : MS21830,VI8698,6.8,,,,,1
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Nov 06 13:04:29 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



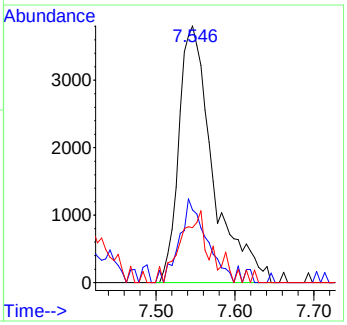
SGS ACCUTEST JC54422

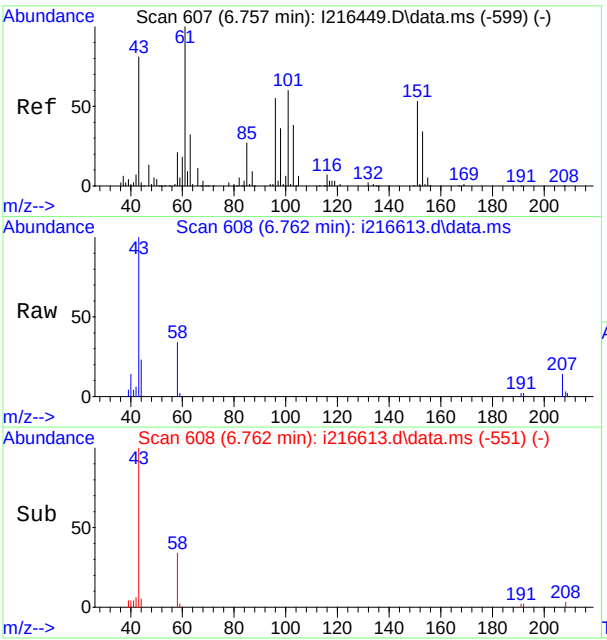


#2
tertiary butyl alcohol
Concen: 19.29 ug/L
RT: 7.546 min Scan# 758
Delta R.T. -0.011 min
Lab File: i216613.d
Acq: 4 Nov 2017 6:00 am

Tgt Ion: 59 Resp: 11427

Ion	Ratio	Lower	Upper
59	100		
41	28.3	0.0	51.4
43	21.5	0.0	46.9

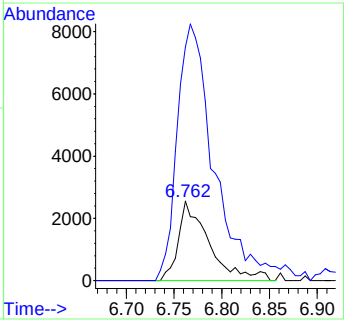




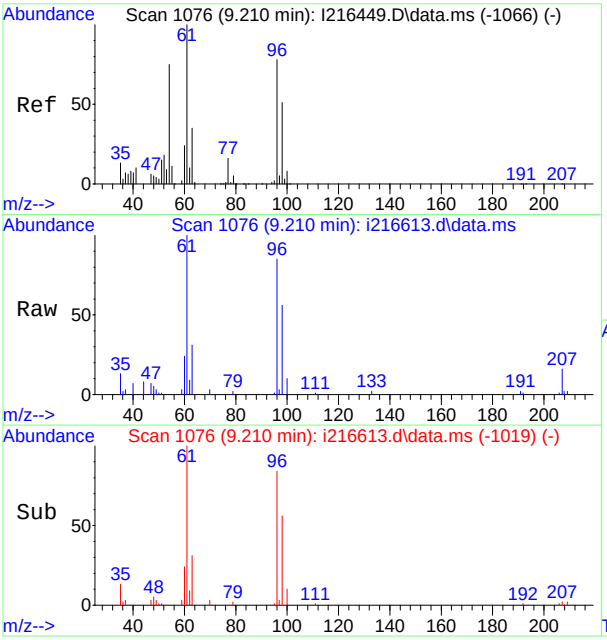
#17
acetone
Concen: 12.77 ug/L
RT: 6.762 min Scan# 608
Delta R.T. -0.000 min
Lab File: i216613.d
Acq: 4 Nov 2017 6:00 am

Tgt Ion: 58 Resp: 5699

Ion	Ratio	Lower	Upper
58	100		
43	294.2	357.6	417.6#



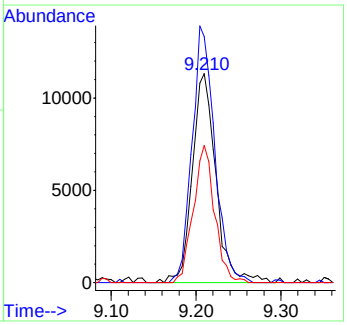
SGS ACCUTEST JC54422

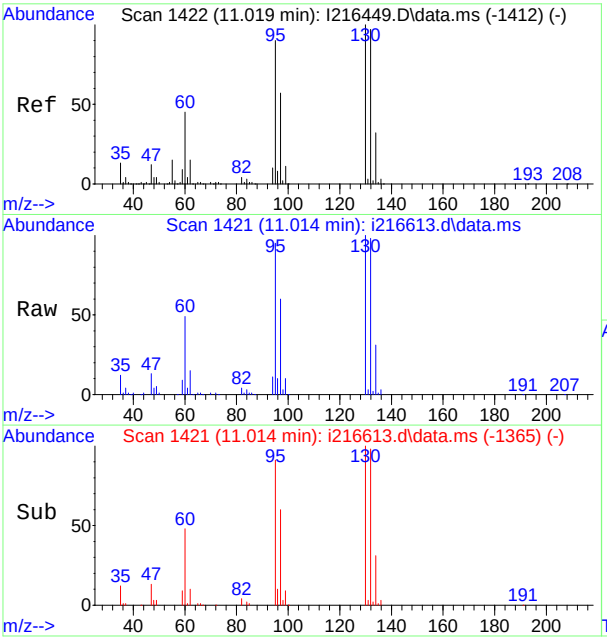


#35
cis-1,2-dichloroethene
Concen: 3.28 ug/L
RT: 9.210 min Scan# 1076
Delta R.T. -0.000 min
Lab File: i216613.d
Acq: 4 Nov 2017 6:00 am

Tgt Ion: 96 Resp: 21858

Ion	Ratio	Lower	Upper
96	100		
61	117.8	113.6	153.6
98	65.6	44.8	84.8

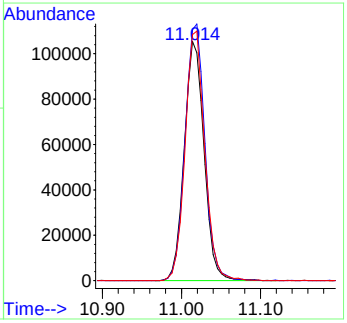


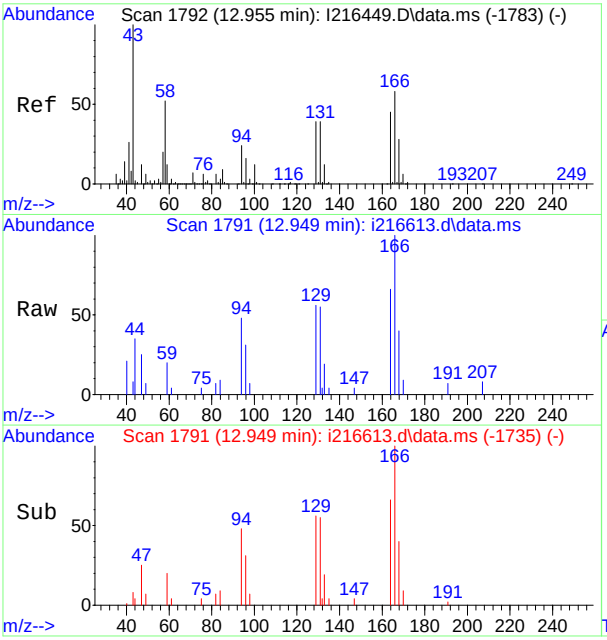


#58
trichloroethene
Concen: 28.89 ug/L
RT: 11.014 min Scan# 1421
Delta R.T. -0.005 min
Lab File: i216613.d
Acq: 4 Nov 2017 6:00 am

Tgt Ion: 95 Resp: 183506

Ion	Ratio	Lower	Upper
95	100		
130	104.9	81.5	141.5
132	102.8	78.2	138.2

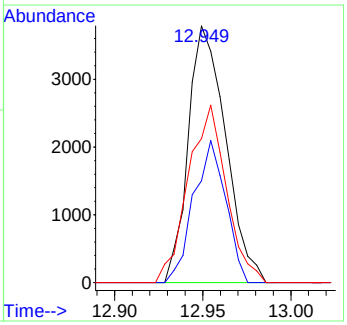




#78
tetrachloroethene
Concen: 0.75 ug/L
RT: 12.949 min Scan# 1791
Delta R.T. -0.005 min
Lab File: i216613.d
Acq: 4 Nov 2017 6:00 am

Tgt Ion:166 Resp: 5587

Ion	Ratio	Lower	Upper
166	100		
168	39.7	18.9	78.9
129	56.1	37.5	97.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153146.d
Acq On : 7 Nov 2017 9:26 pm
Operator : prashans
Sample : JC54689-1 Inst : GCMS1C
Misc : MS21881,V1C6761,6.4,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 03:22:16 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

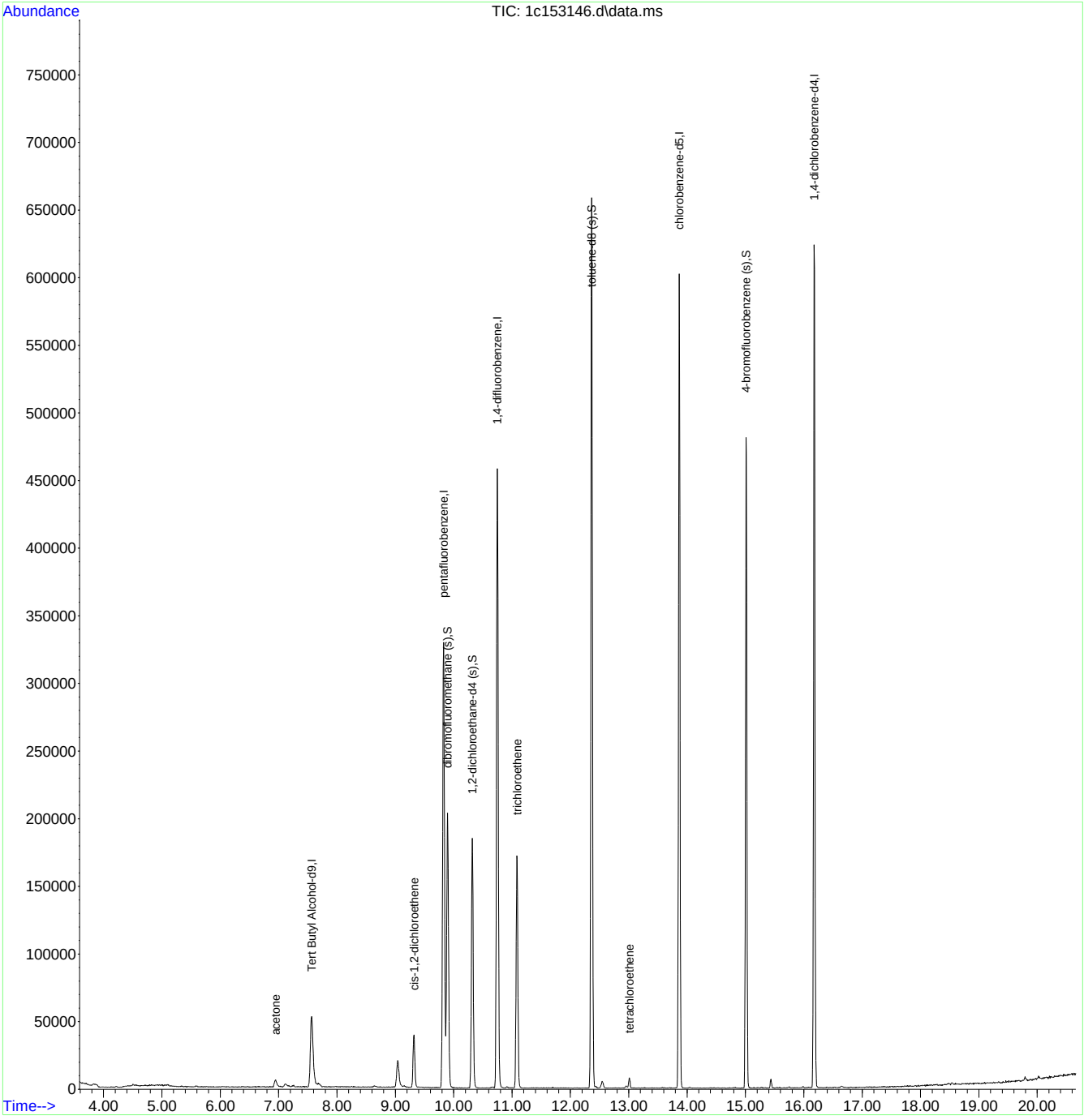
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.567	65	102784	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	278325	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	429740	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	347000	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.176	152	168947	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	141774	49.67	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.34%			
45) 1,2-dichloroethane-d4 (s)	10.319	65	138764	47.07	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 94.14%			
77) toluene-d8 (s)	12.364	98	466613	47.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.50%			
94) 4-bromofluorobenzene (s)	15.010	95	159131	49.87	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 99.74%			
Target Compounds						Qvalue
17) acetone	6.950	58	3091	13.23	ug/L #	74
36) cis-1,2-dichloroethene	9.320	96	20170	6.61	ug/L	93
59) trichloroethene	11.087	95	64217	22.89	ug/L	96
79) tetrachloroethene	13.012	166	2730	1.01	ug/L	91

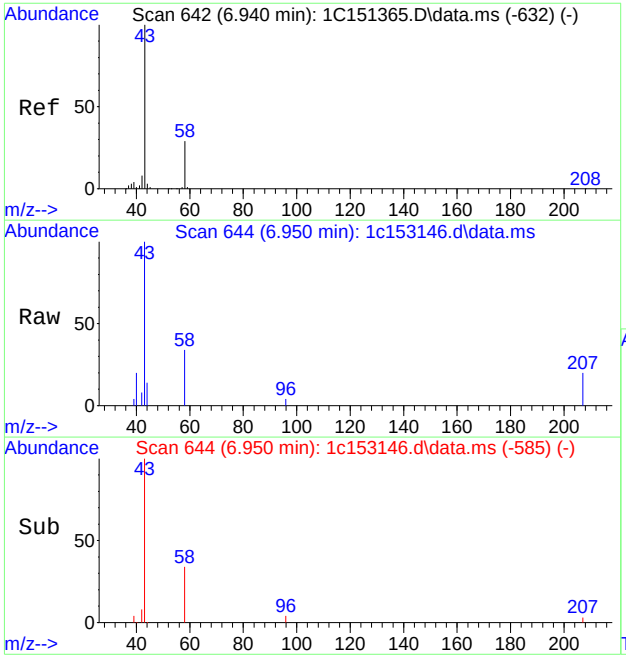
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153146.d
Acq On : 7 Nov 2017 9:26 pm
Operator : prashans
Sample : JC54689-1 Inst : GCMS1C
Misc : MS21881,V1C6761,6.4,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 03:22:16 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

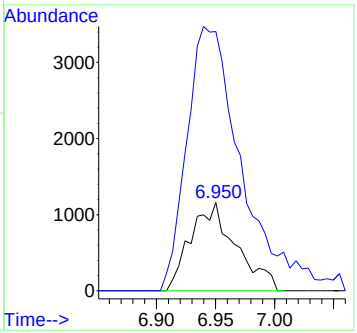


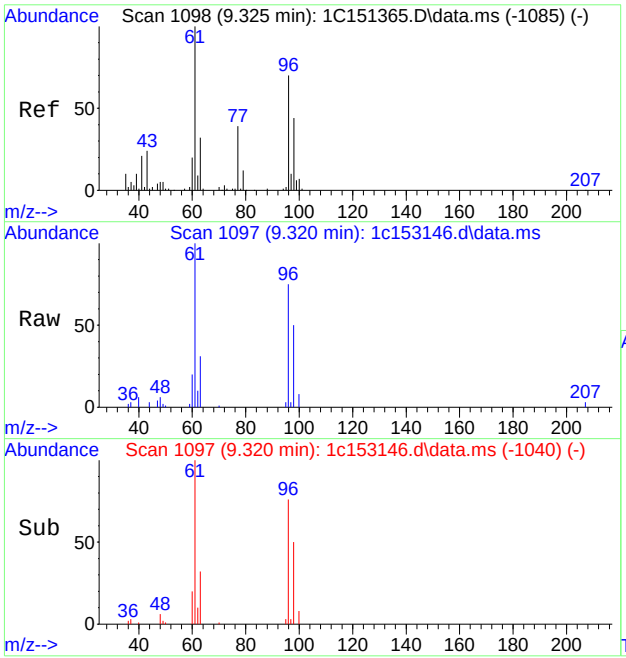


#17
acetone
Concen: 13.23 ug/L
RT: 6.950 min Scan# 644
Delta R.T. 0.010 min
Lab File: 1c153146.d
Acq: 7 Nov 2017 9:26 pm

Tgt Ion: 58 Resp: 3091

Ion	Ratio	Lower	Upper
58	100		
43	293.6	320.5	380.5#

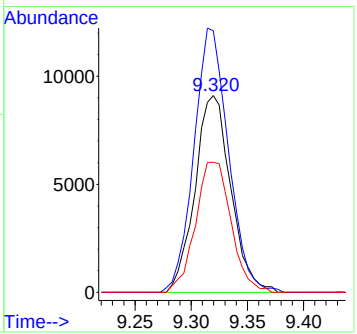


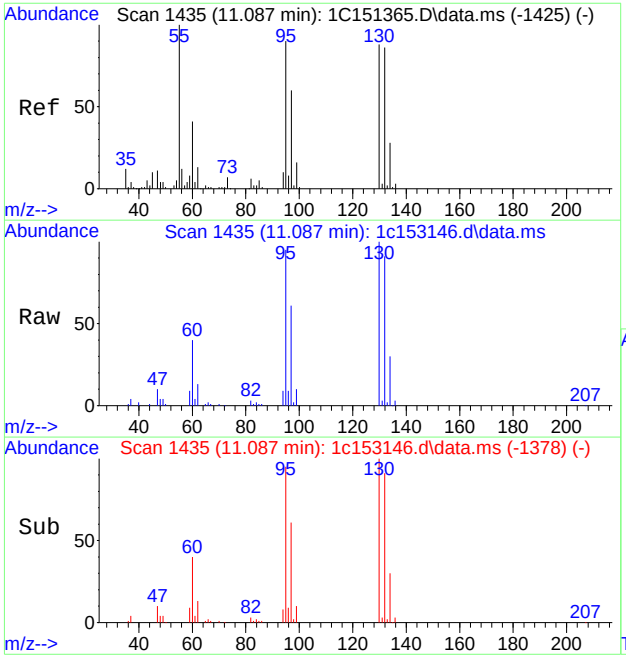


#36
cis-1,2-dichloroethene
Concen: 6.61 ug/L
RT: 9.320 min Scan# 1097
Delta R.T. -0.000 min
Lab File: 1c153146.d
Acq: 7 Nov 2017 9:26 pm

Tgt Ion: 96 Resp: 20170

Ion	Ratio	Lower	Upper
96	100		
61	132.9	124.0	164.0
98	66.0	43.0	83.0

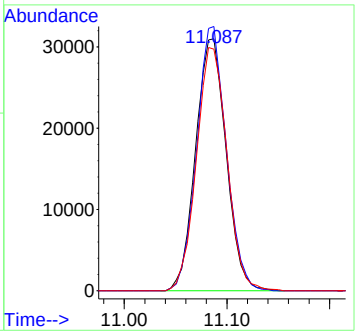


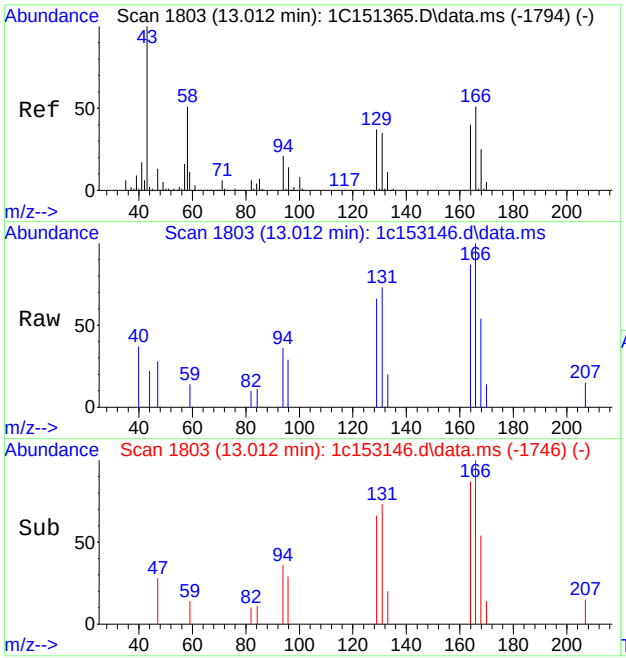


#59
trichloroethene
Concen: 22.89 ug/L
RT: 11.087 min Scan# 1435
Delta R.T. -0.000 min
Lab File: 1c153146.d
Acq: 7 Nov 2017 9:26 pm

Tgt Ion: 95 Resp: 64217

Ion	Ratio	Lower	Upper
95	100		
130	105.0	67.4	127.4
132	95.9	65.5	125.5

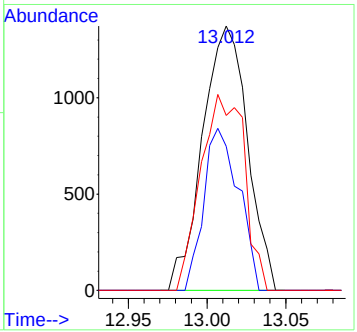




#79
tetrachloroethene
Concen: 1.01 ug/L
RT: 13.012 min Scan# 1803
Delta R.T. 0.000 min
Lab File: 1c153146.d
Acq: 7 Nov 2017 9:26 pm

Tgt Ion:166 Resp: 2730

Ion	Ratio	Lower	Upper
166	100		
168	54.5	18.5	78.5
129	66.1	43.5	103.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153162.d
Acq On : 8 Nov 2017 5:42 am
Operator : prashans
Sample : jc54803-1 Inst : GCMS1C
Misc : MS21933,V1C6762,5.4,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:33:52 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.562	65	106343	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	272354	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	423898	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	344479	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.176	152	170802	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	140889	50.44	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.88%			
45) 1,2-dichloroethane-d4 (s)	10.319	65	145687	50.50	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 101.00%			
77) toluene-d8 (s)	12.364	98	462127	47.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.88%			
94) 4-bromofluorobenzene (s)	15.010	95	162976	50.52	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.04%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.703	59	5405	20.05	ug/L	87
17) acetone	6.945	58	2064	9.03	ug/L #	82
36) cis-1,2-dichloroethene	9.320	96	1568	0.53	ug/L	89
59) trichloroethene	11.087	95	6098	2.20	ug/L	89
79) tetrachloroethene	13.007	166	2528	0.94	ug/L	90

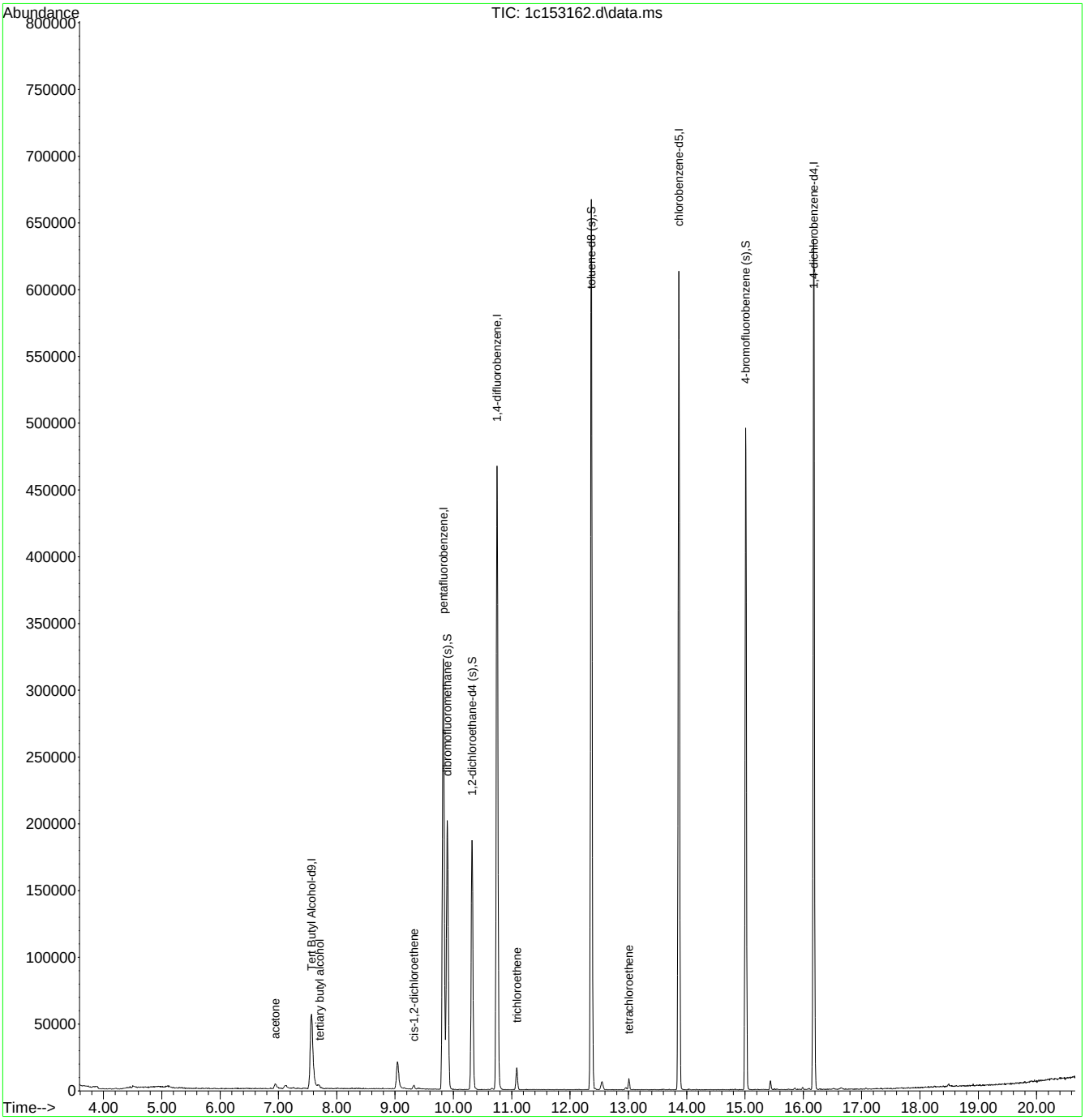
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

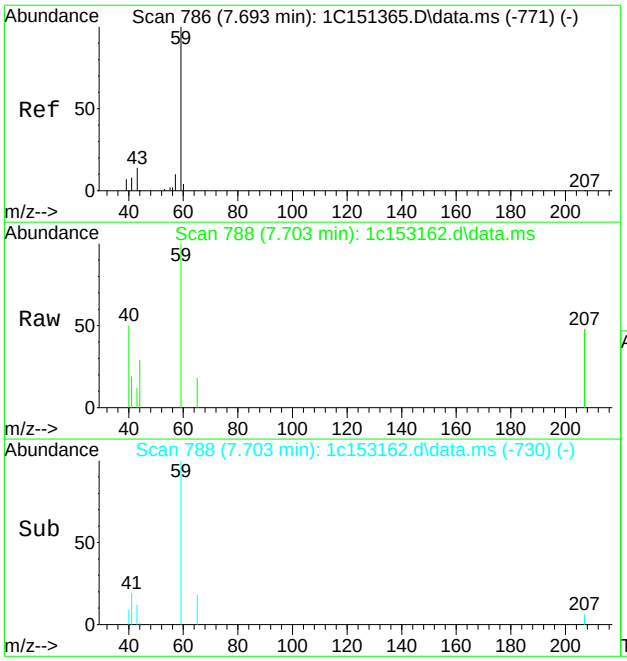
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153162.d
Acq On : 8 Nov 2017 5:42 am
Operator : prashans
Sample : jc54803-1 Inst : GCMS1C
Misc : MS21933,V1C6762,5.4,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:33:52 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



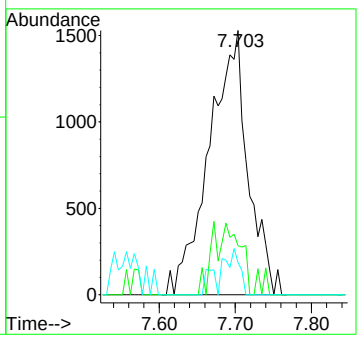
SGS ACCUTEST JC54422

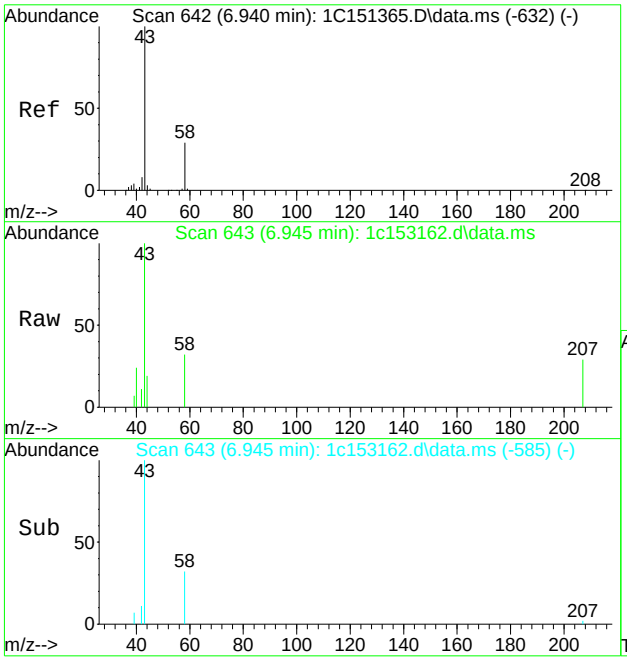


#2
tertiary butyl alcohol
Concen: 20.05 ug/L
RT: 7.703 min Scan# 788
Delta R.T. 0.005 min
Lab File: 1c153162.d
Acq: 8 Nov 2017 5:42 am

Tgt Ion: 59 Resp: 5405

Ion	Ratio	Lower	Upper
59	100		
41	18.6	0.0	38.3
43	12.2	0.0	43.8

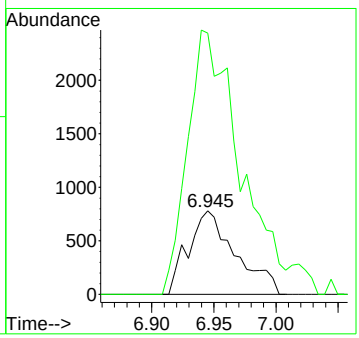




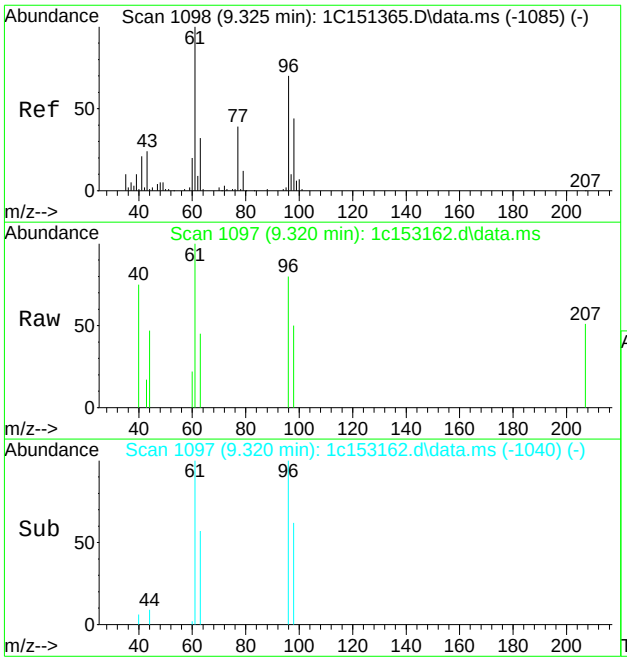
#17
acetone
Concen: 9.03 ug/L
RT: 6.945 min Scan# 643
Delta R.T. 0.005 min
Lab File: 1c153162.d
Acq: 8 Nov 2017 5:42 am

Tgt Ion: 58 Resp: 2064

Ion	Ratio	Lower	Upper
58	100		
43	312.1	320.5	380.5#



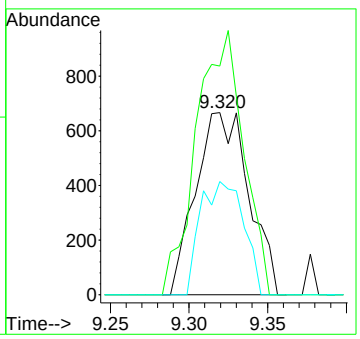
SGS ACCUTEST JC54422

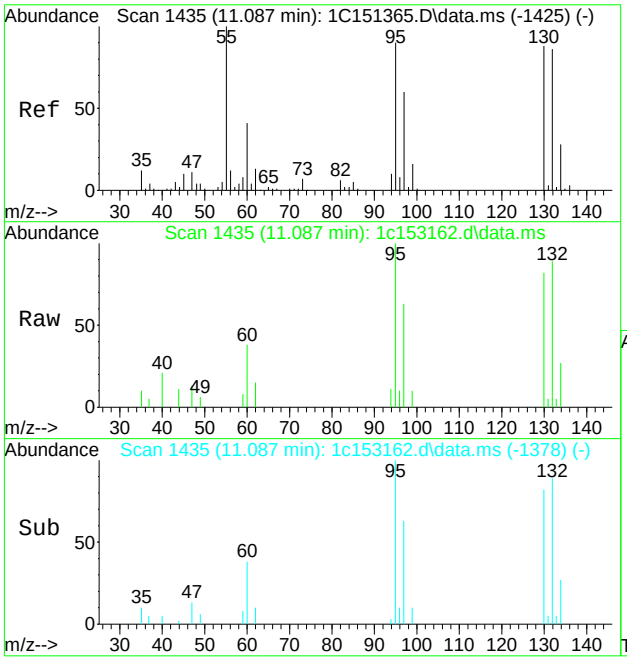


#36
cis-1,2-dichloroethene
Concen: 0.53 ug/L
RT: 9.320 min Scan# 1097
Delta R.T. -0.000 min
Lab File: 1c153162.d
Acq: 8 Nov 2017 5:42 am

Tgt Ion: 96 Resp: 1568

Ion	Ratio	Lower	Upper
96	100		
61	125.5	124.0	164.0
98	62.2	43.0	83.0

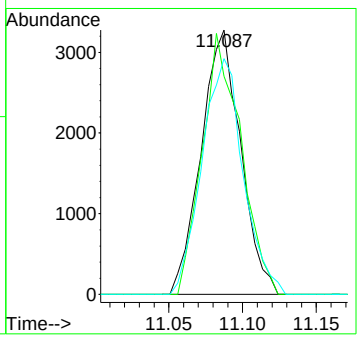


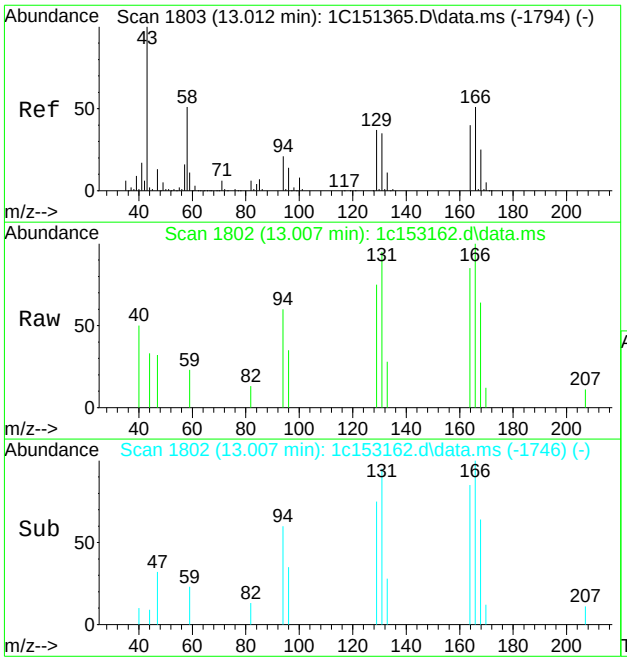


#59
trichloroethene
Concen: 2.20 ug/L
RT: 11.087 min Scan# 1435
Delta R.T. -0.000 min
Lab File: 1c153162.d
Acq: 8 Nov 2017 5:42 am

Tgt Ion: 95 Resp: 6098

Ion	Ratio	Lower	Upper
95	100		
130	82.5	67.4	127.4
132	89.1	65.5	125.5

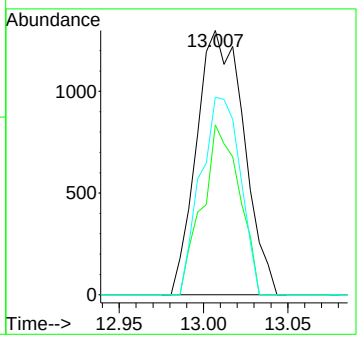




#79
tetrachloroethene
Concen: 0.94 ug/L
RT: 13.007 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 1c153162.d
Acq: 8 Nov 2017 5:42 am

Tgt Ion:166 Resp: 2528

Ion	Ratio	Lower	Upper
166	100		
168	64.2	18.5	78.5
129	74.8	43.5	103.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153164.d
Acq On : 8 Nov 2017 6:40 am
Operator : prashans
Sample : jc54803-2 Inst : GCMS1C
Misc : MS21933,V1C6762,5.7,,,,1
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:37:28 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

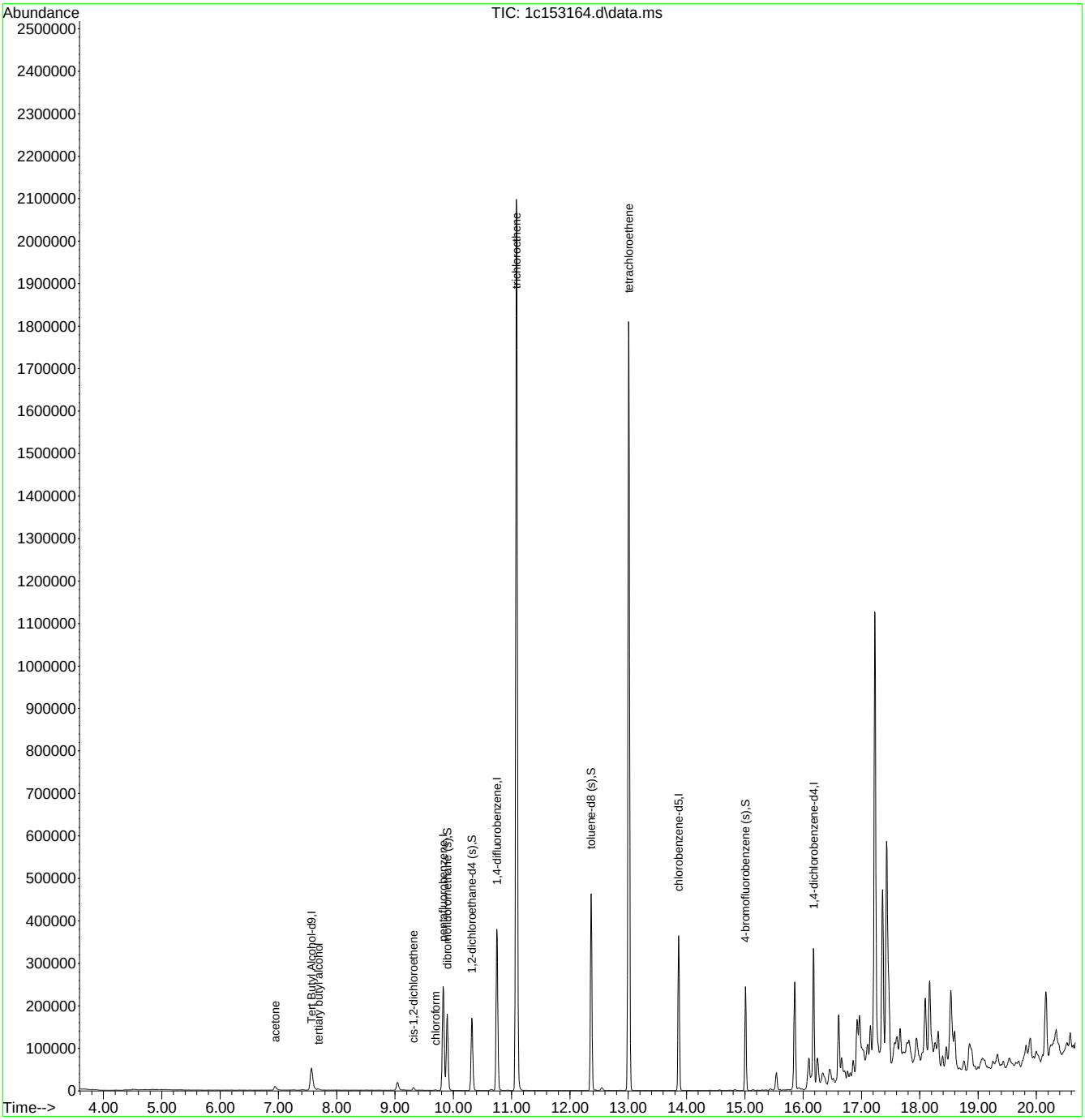
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.567	65	97120	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	204281	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	345745	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	206784	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	62553	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	121164	57.83	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 115.66%			
45) 1,2-dichloroethane-d4 (s)	10.318	65	131759	60.89	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 121.78%			
77) toluene-d8 (s)	12.363	98	320493	40.77	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 81.54%			
94) 4-bromofluorobenzene (s)	15.010	95	78328	66.30	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 132.60%#			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.688	59	5498	22.33	ug/L	85
17) acetone	6.945	58	5390	31.44	ug/L #	83
36) cis-1,2-dichloroethene	9.314	96	3178	1.42	ug/L	90
42) chloroform	9.696	83	1196	0.32	ug/L	71
59) trichloroethene	11.082	95	778557	344.92	ug/L	99
79) tetrachloroethene	13.012	166	581114	360.91	ug/L	99

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

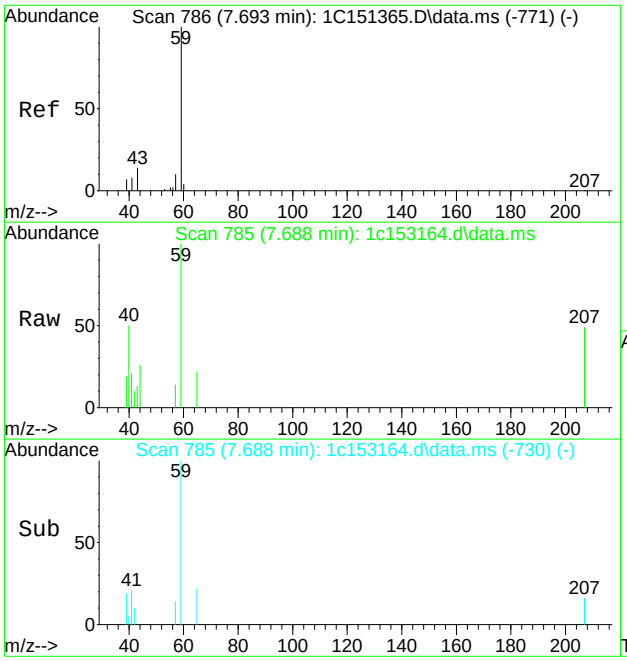
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153164.d
Acq On : 8 Nov 2017 6:40 am
Operator : prashans
Sample : jc54803-2 Inst : GCMS1C
Misc : MS21933,V1C6762,5.7,,,,1
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:37:28 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



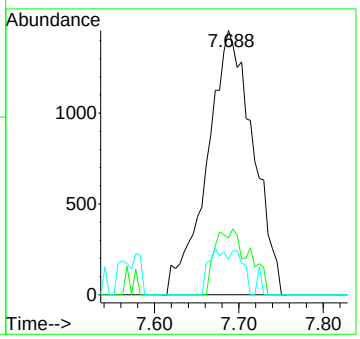
SGS ACCUTEST JC54422

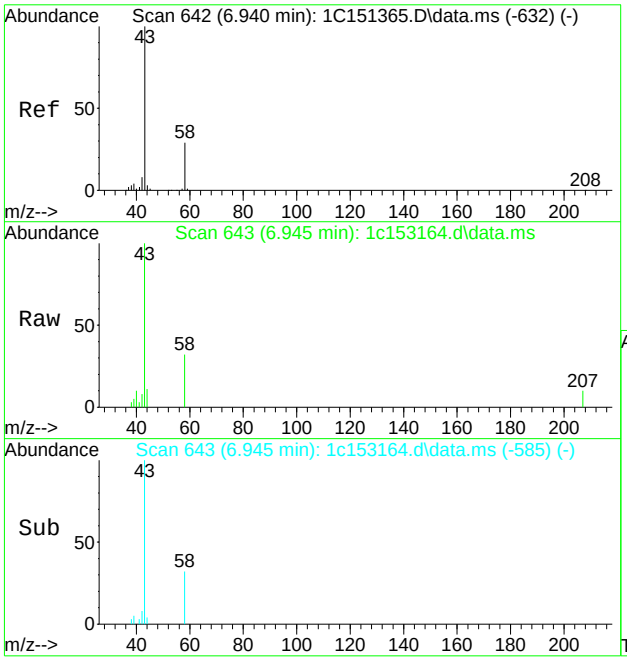


#2
tertiary butyl alcohol
Concen: 22.33 ug/L
RT: 7.688 min Scan# 785
Delta R.T. -0.011 min
Lab File: 1c153164.d
Acq: 8 Nov 2017 6:40 am

Tgt Ion: 59 Resp: 5498

Ion	Ratio	Lower	Upper
59	100		
41	21.4	0.0	38.3
43	13.3	0.0	43.8

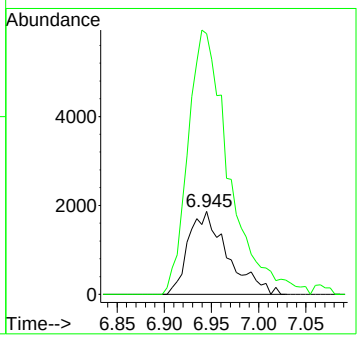


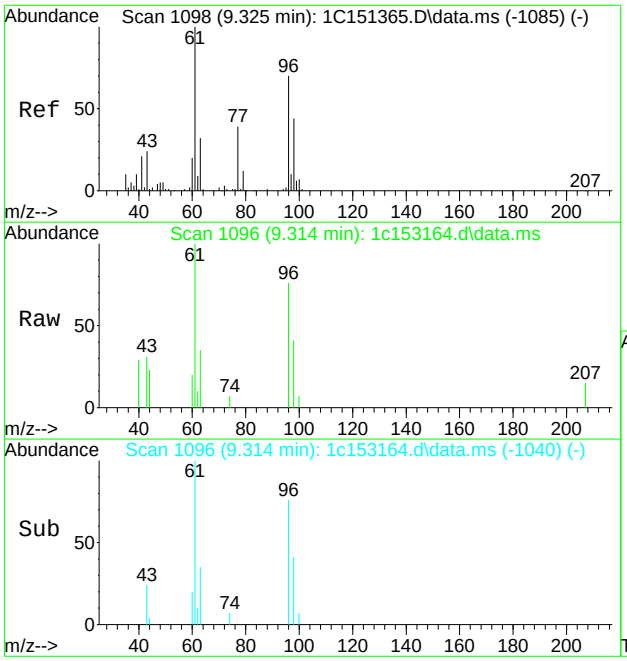


#17
acetone
Concen: 31.44 ug/L
RT: 6.945 min Scan# 643
Delta R.T. 0.005 min
Lab File: 1c153164.d
Acq: 8 Nov 2017 6:40 am

Tgt Ion: 58 Resp: 5390

Ion	Ratio	Lower	Upper
58	100		
43	314.0	320.5	380.5#

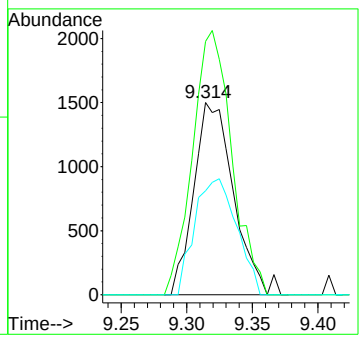


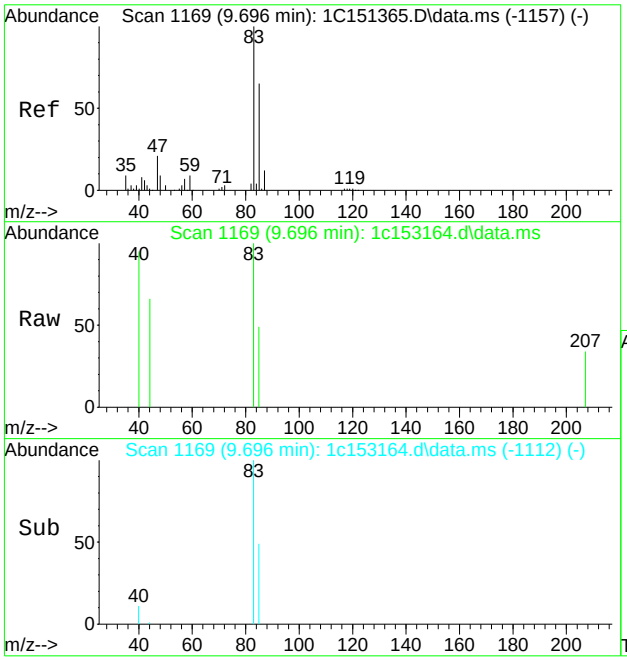


#36
cis-1,2-dichloroethene
Concen: 1.42 ug/L
RT: 9.314 min Scan# 1096
Delta R.T. -0.005 min
Lab File: 1c153164.d
Acq: 8 Nov 2017 6:40 am

Tgt Ion: 96 Resp: 3178

Ion	Ratio	Lower	Upper
96	100		
61	131.9	124.0	164.0
98	54.1	43.0	83.0

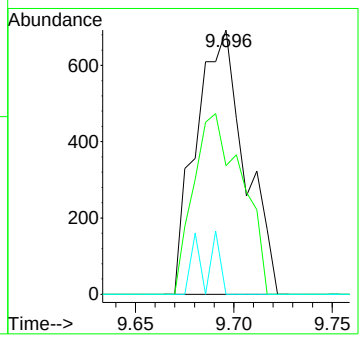


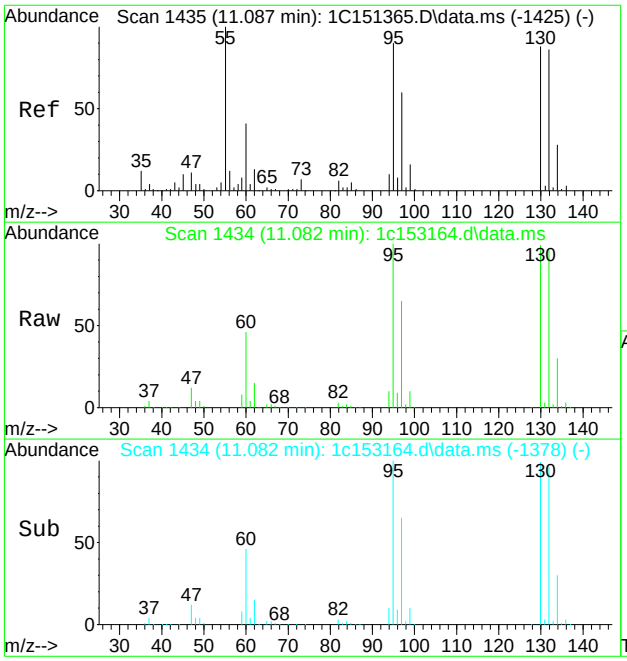


#42
chloroform
Concen: 0.32 ug/L
RT: 9.696 min Scan# 1169
Delta R.T. -0.000 min
Lab File: 1c153164.d
Acq: 8 Nov 2017 6:40 am

Tgt Ion: 83 Resp: 1196

Ion	Ratio	Lower	Upper
83	100		
85	48.6	35.1	95.1
47	0.0	0.0	54.7

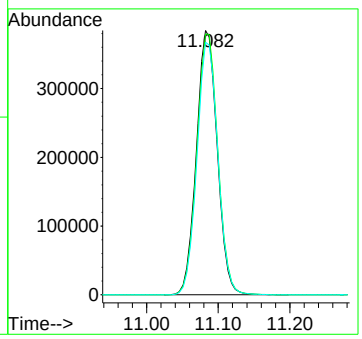


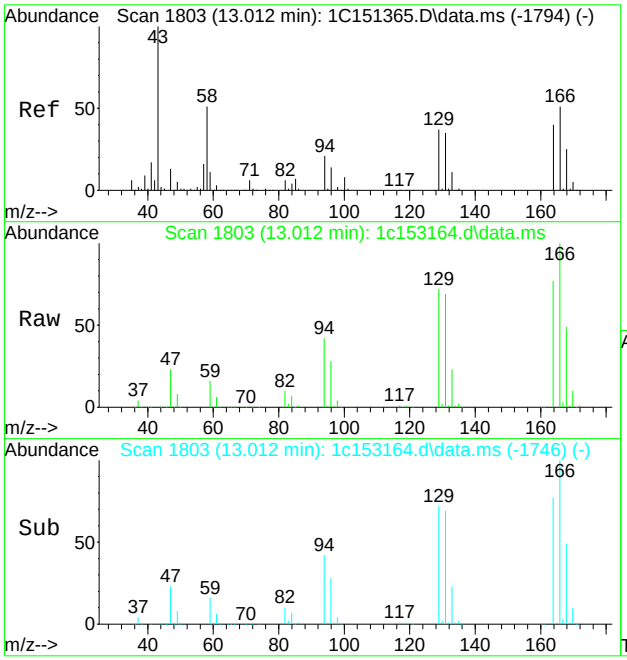


#59
trichloroethene
Concen: 344.92 ug/L
RT: 11.082 min Scan# 1434
Delta R.T. -0.005 min
Lab File: 1c153164.d
Acq: 8 Nov 2017 6:40 am

Tgt Ion: 95 Resp: 778557

Ion	Ratio	Lower	Upper
95	100		
130	98.7	67.4	127.4
132	95.5	65.5	125.5

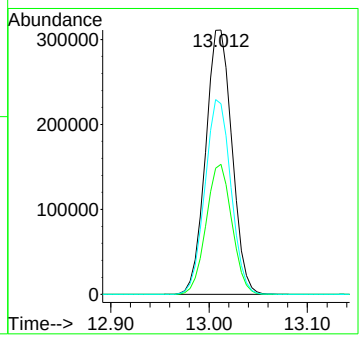




#79
tetrachloroethene
Concen: 360.91 ug/L
RT: 13.012 min Scan# 1803
Delta R.T. 0.000 min
Lab File: 1c153164.d
Acq: 8 Nov 2017 6:40 am

Tgt Ion:166 Resp: 581114

Ion	Ratio	Lower	Upper
166	100		
168	49.2	18.5	78.5
129	72.1	43.5	103.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248828.D
Acq On : 9 Nov 2017 6:52 pm
Operator : ThienN
Sample : jc54803-2
Misc : MS21933,VE10685,5.1,,100,10,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 10 11:30:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

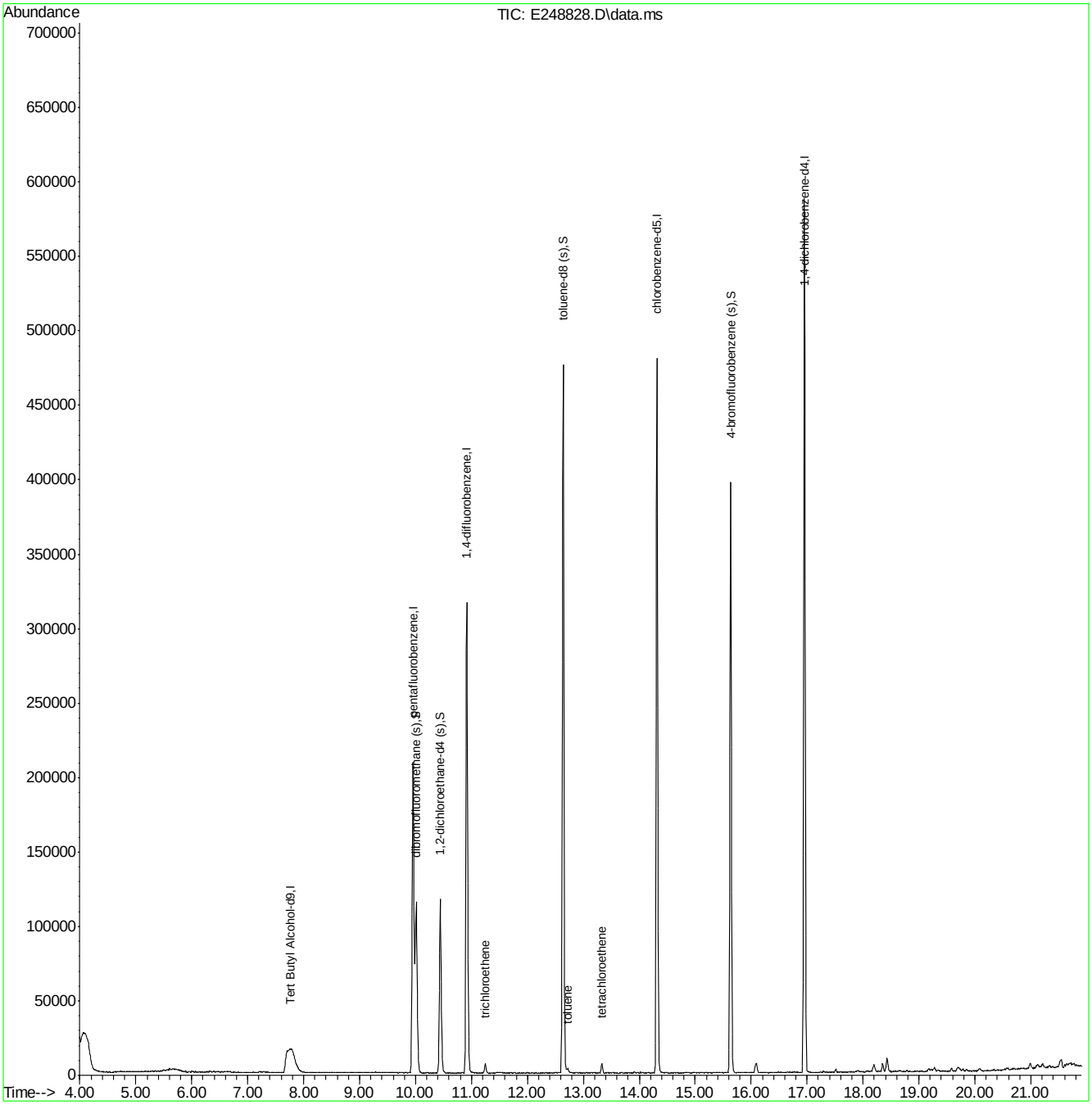
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.757	65	105143	500.00	ug/L	0.00
5) pentafluorobenzene	9.958	168	203967	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.915	114	316062	50.00	ug/L	-0.02
75) chlorobenzene-d5	14.319	117	313300	50.00	ug/L	-0.01
99) 1,4-dichlorobenzene-d4	16.954	152	181076	50.00	ug/L	-0.01
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.011	113	88597	47.21	ug/L	-0.02
Spiked Amount 50.000	Range 72 - 129		Recovery = 94.42%			
55) 1,2-dichloroethane-d4 (s)	10.439	65	96858	44.20	ug/L	-0.02
Spiked Amount 50.000	Range 73 - 132		Recovery = 88.40%			
76) toluene-d8 (s)	12.640	98	374689	46.96	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.92%			
100) 4-bromofluorobenzene (s)	15.631	95	148150	48.63	ug/L	-0.02
Spiked Amount 50.000	Range 77 - 125		Recovery = 97.26%			
Target Compounds						Qvalue
63) trichloroethene	11.245	95	2816	1.13	ug/L	88
77) toluene	12.724	92	1553	0.24	ug/L	85
81) tetrachloroethene	13.331	164	1929	0.78	ug/L	98

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

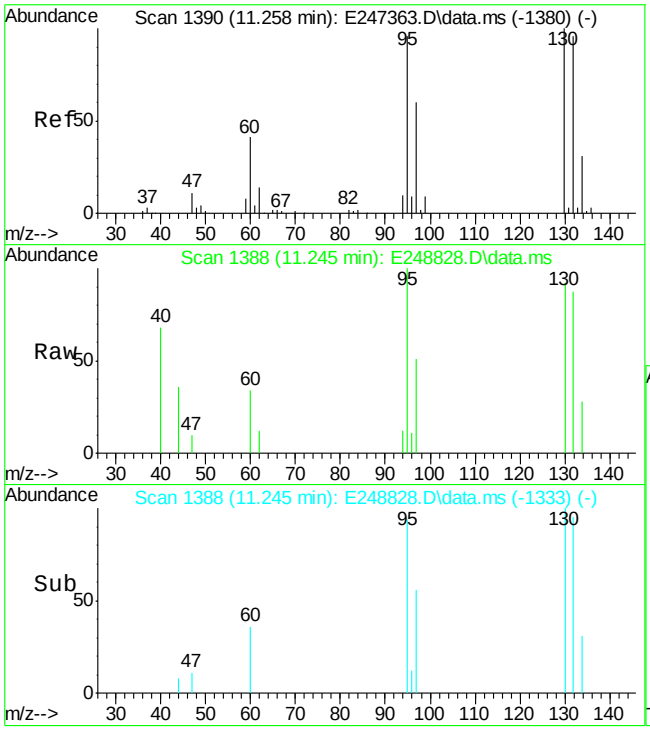
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248828.D
Acq On : 9 Nov 2017 6:52 pm
Operator : ThienN
Sample : jc54803-2
Misc : MS21933,VE10685,5.1,,100,10,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 10 11:30:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration



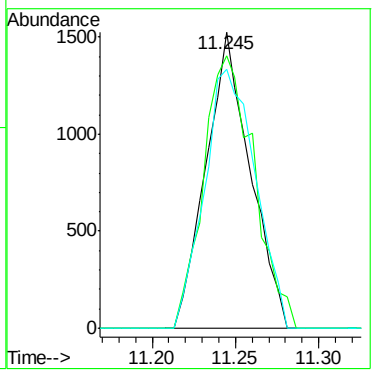
SGS ACCUTEST JC54422

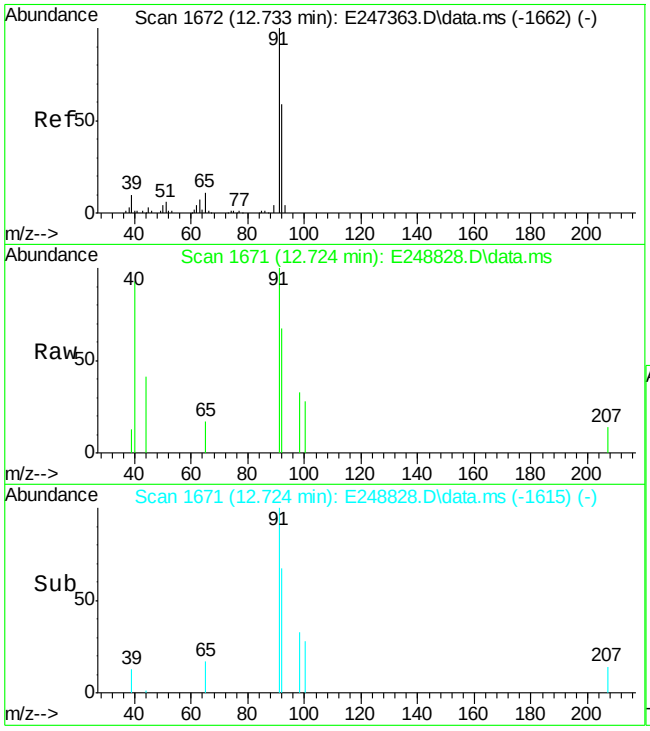


#63
trichloroethene
Concen: 1.13 ug/L
RT: 11.245 min Scan# 1388
Delta R.T. -0.014 min
Lab File: E248828.D
Acq: 9 Nov 2017 6:52 pm

Tgt Ion: 95 Resp: 2816

Ion	Ratio	Lower	Upper
95	100		
130	92.2	74.0	134.0
132	87.3	70.3	130.3

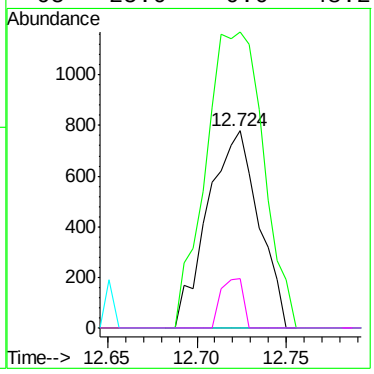


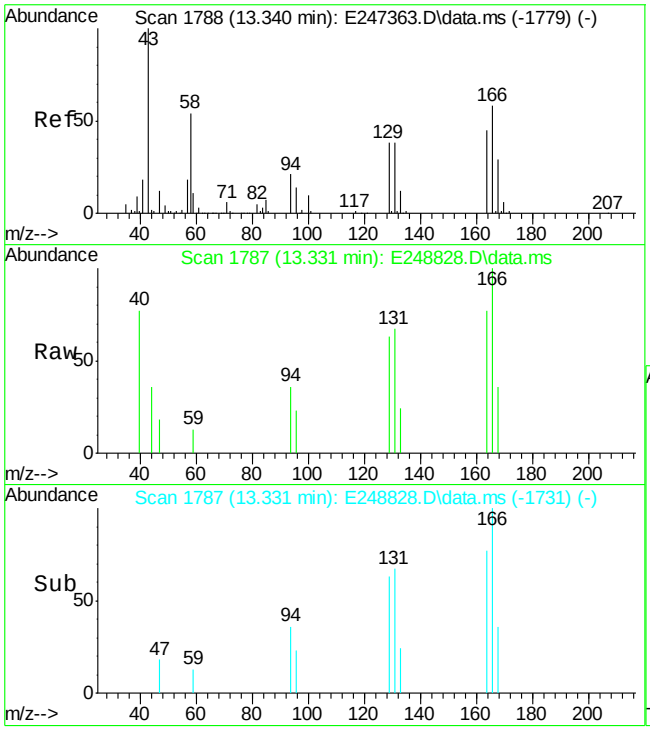


#77
toluene
Concen: 0.24 ug/L
RT: 12.724 min Scan# 1671
Delta R.T. -0.009 min
Lab File: E248828.D
Acq: 9 Nov 2017 6:52 pm

Tgt Ion: 92 Resp: 1553

Ion	Ratio	Lower	Upper
92	100		
91	150.1	148.8	188.8
51	0.0	0.0	40.9
65	25.0	0.0	48.2

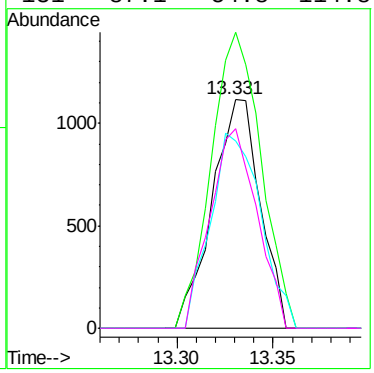




#81
tetrachloroethene
Concen: 0.78 ug/L
RT: 13.331 min Scan# 1787
Delta R.T. -0.009 min
Lab File: E248828.D
Acq: 9 Nov 2017 6:52 pm

Tgt Ion:164 Resp: 1929

Ion	Ratio	Lower	Upper
164	100		
166	129.3	99.6	159.6
129	82.0	54.5	114.5
131	87.1	54.8	114.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153163.d
Acq On : 8 Nov 2017 6:11 am
Operator : prashans
Sample : jc54803-3 Inst : GCMS1C
Misc : MS21933,V1C6762,5.6,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:35:55 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.567	65	104526	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	236096	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.753	114	362666	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	282575	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	129058	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	123261	50.90	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.80%			
45) 1,2-dichloroethane-d4 (s)	10.319	65	128881	51.53	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 103.06%			
77) toluene-d8 (s)	12.364	98	396374	48.06	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.12%			
94) 4-bromofluorobenzene (s)	15.010	95	128889	52.87	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 105.74%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.688	59	6777	25.58	ug/L	89
17) acetone	6.945	58	3728	18.81	ug/L	90
36) cis-1,2-dichloroethene	9.325	96	9659	3.73	ug/L	90
59) trichloroethene	11.082	95	79720	33.67	ug/L	97
79) tetrachloroethene	13.007	166	7044	3.20	ug/L	92

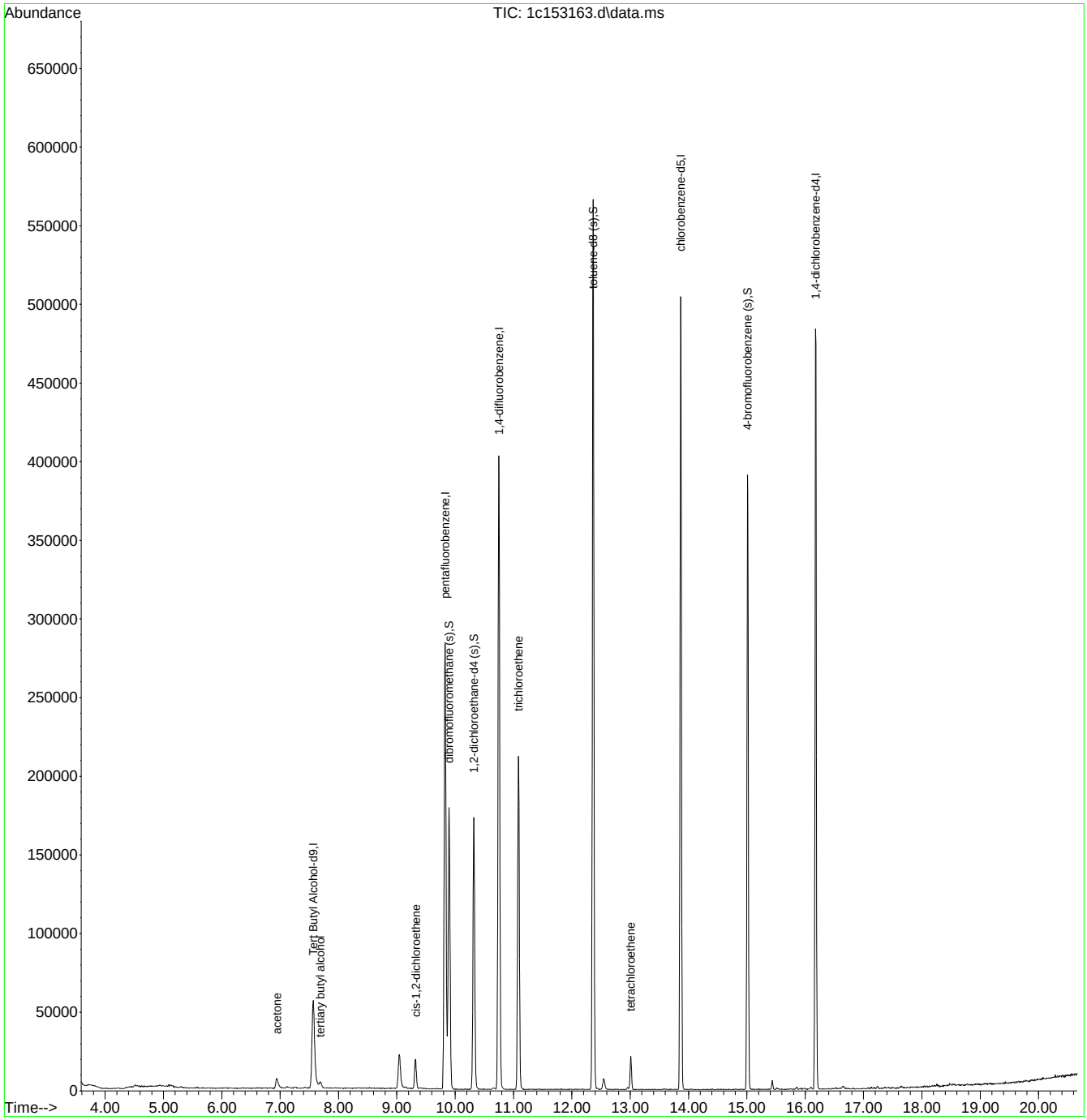
(#) = qualifier out of range (m) = manual integration (+) = signals summed

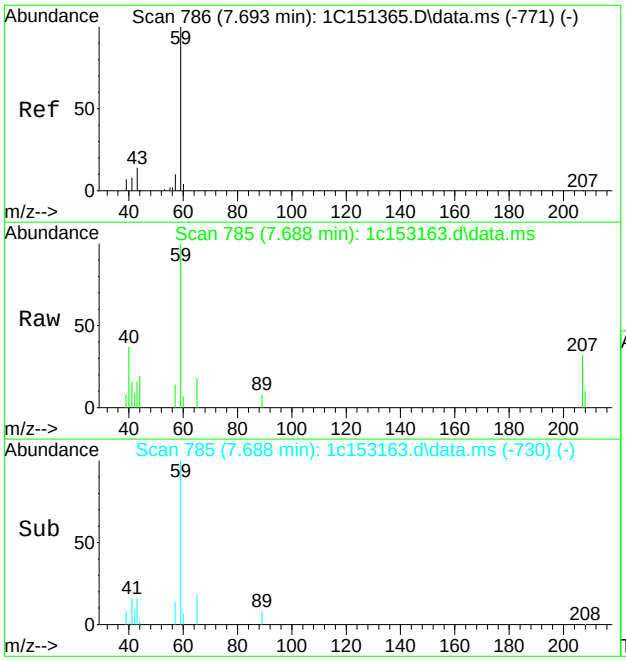
SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153163.d
Acq On : 8 Nov 2017 6:11 am
Operator : prashans
Sample : jc54803-3 Inst : GCMS1C
Misc : MS21933,V1C6762,5.6,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:35:55 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

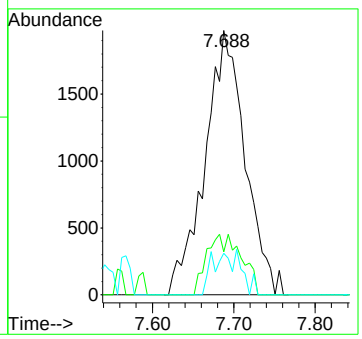


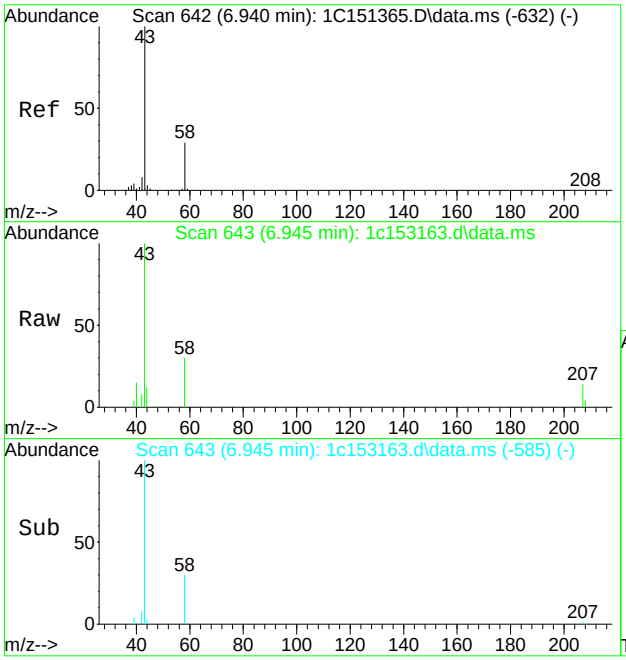


#2
tertiary butyl alcohol
Concen: 25.58 ug/L
RT: 7.688 min Scan# 785
Delta R.T. -0.011 min
Lab File: 1c153163.d
Acq: 8 Nov 2017 6:11 am

Tgt Ion: 59 Resp: 6777

Ion	Ratio	Lower	Upper
59	100		
41	16.2	0.0	38.3
43	15.7	0.0	43.8

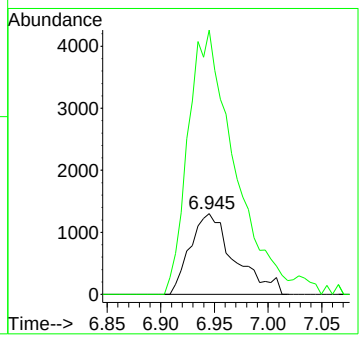


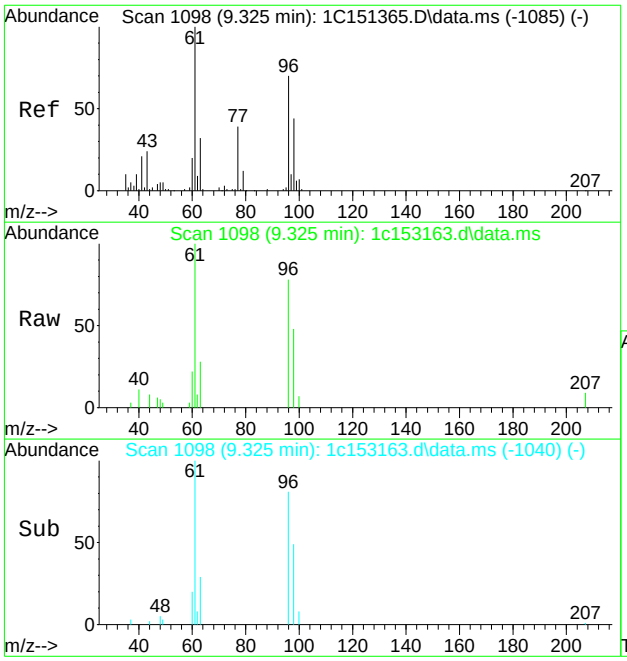


#17
acetone
Concen: 18.81 ug/L
RT: 6.945 min Scan# 643
Delta R.T. 0.005 min
Lab File: 1c153163.d
Acq: 8 Nov 2017 6:11 am

Tgt Ion: 58 Resp: 3728

Ion	Ratio	Lower	Upper
58	100		
43	327.9	320.5	380.5

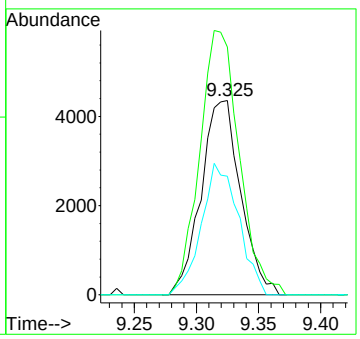


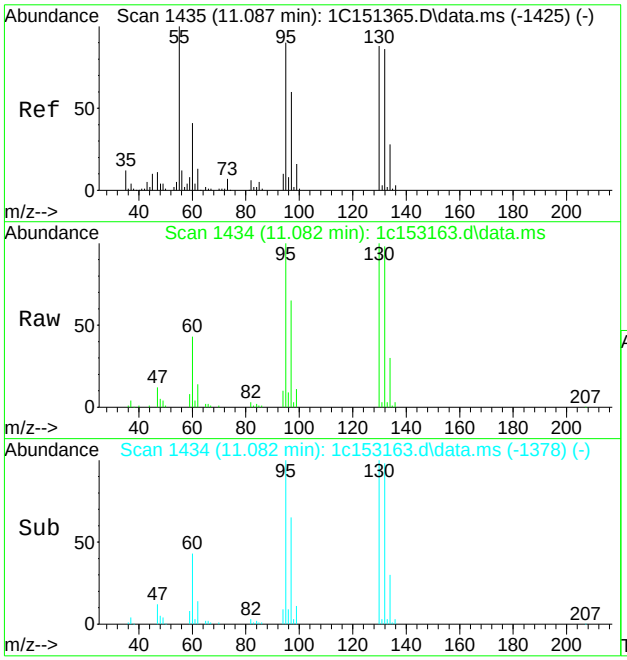


#36
cis-1,2-dichloroethene
Concen: 3.73 ug/L
RT: 9.325 min Scan# 1098
Delta R.T. 0.005 min
Lab File: 1c153163.d
Acq: 8 Nov 2017 6:11 am

Tgt Ion: 96 Resp: 9659

Ion	Ratio	Lower	Upper
96	100		
61	127.6	124.0	164.0
98	61.0	43.0	83.0

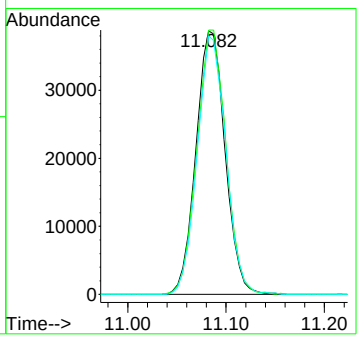


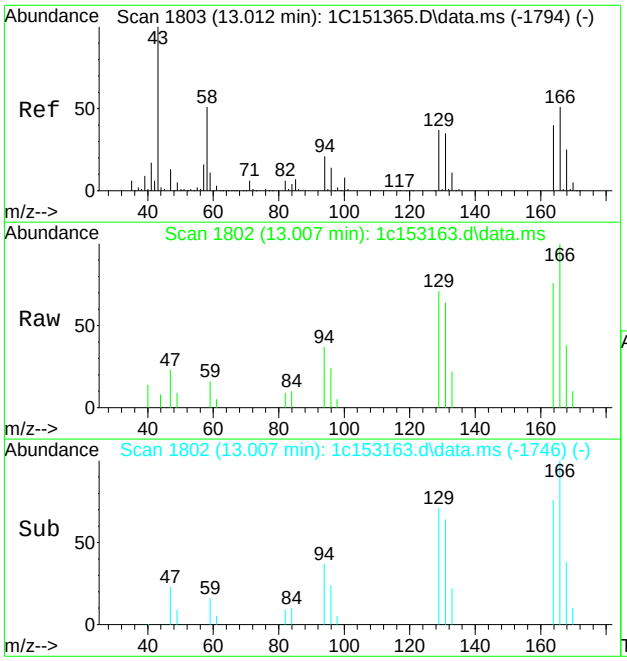


#59
trichloroethene
Concen: 33.67 ug/L
RT: 11.082 min Scan# 1434
Delta R.T. -0.005 min
Lab File: 1c153163.d
Acq: 8 Nov 2017 6:11 am

Tgt Ion: 95 Resp: 79720

Ion	Ratio	Lower	Upper
95	100		
130	100.4	67.4	127.4
132	98.2	65.5	125.5

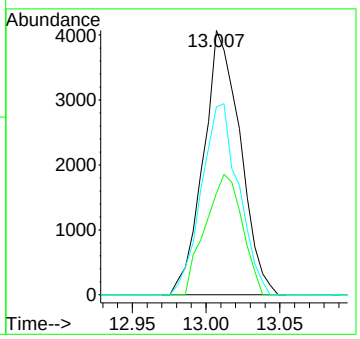




#79
tetrachloroethene
Concen: 3.20 ug/L
RT: 13.007 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 1c153163.d
Acq: 8 Nov 2017 6:11 am

Tgt Ion:166 Resp: 7044

Ion	Ratio	Lower	Upper
166	100		
168	38.4	18.5	78.5
129	71.0	43.5	103.5



SGS ACCUTEST
JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216595.d
Acq On : 3 Nov 2017 10:02 pm
Operator : PrashanS
Sample : mb
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 06 12:40:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

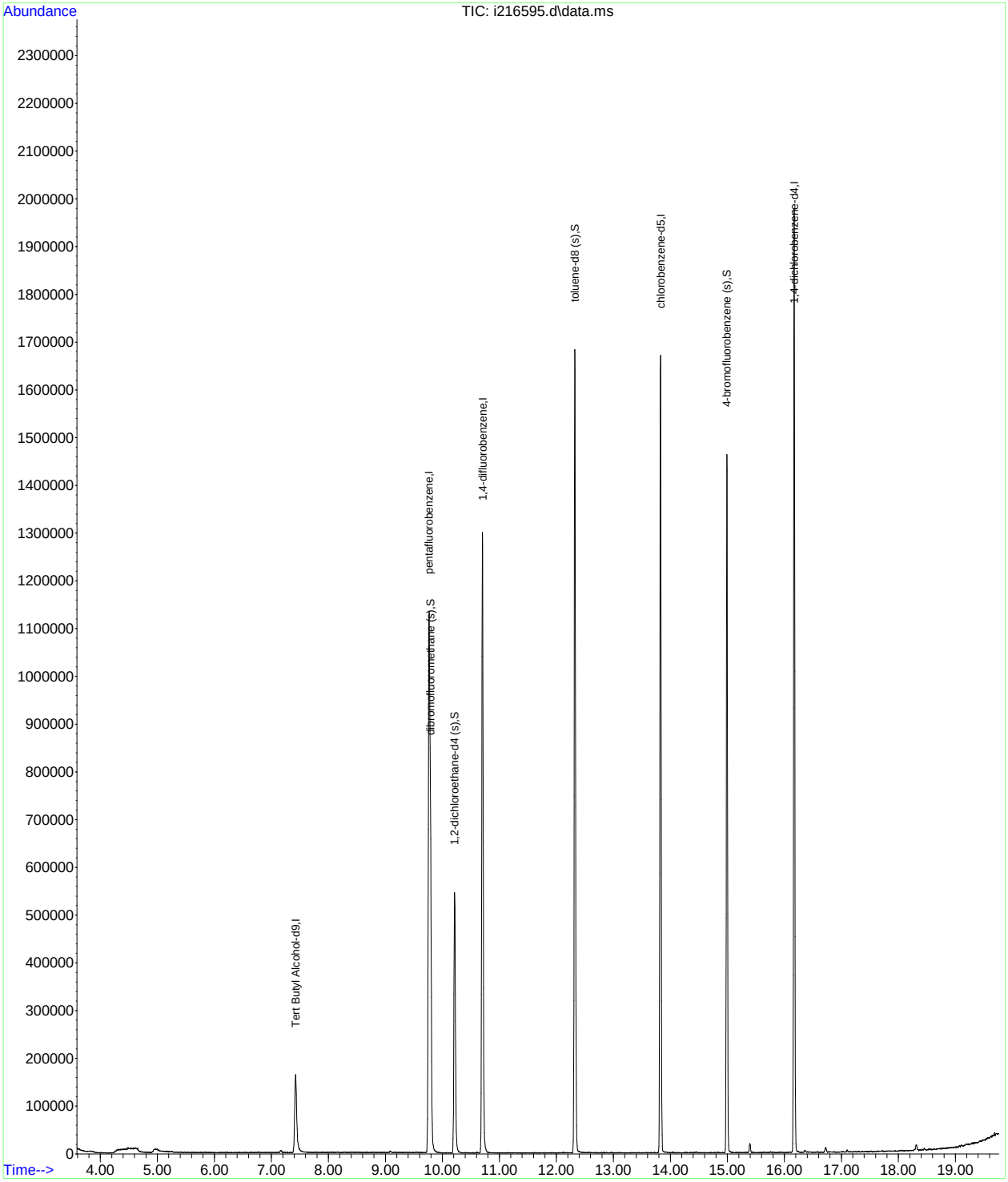
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	214708	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	664361	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.706	114	936552	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	784931	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	432056	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	355779	51.60	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 103.20%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	419116	54.98	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 109.96%			
72) toluene-d8 (s)	12.322	98	968278	49.05	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.10%			
96) 4-bromofluorobenzene (s)	14.989	95	378626	55.04	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 110.08%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216595.d
Acq On : 3 Nov 2017 10:02 pm
Operator : PrashanS
Sample : mb
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 06 12:40:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140184.D
Acq On : 6 Nov 2017 9:32 am
Operator : PrashanS
Sample : MB
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 06 15:12:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.09	65	61936	500.00	ug/L	-0.01
5) pentafluorobenzene	5.74	168	227242	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.65	114	345160	50.00	ug/L	0.00
74) chlorobenzene-d5	9.85	117	307617	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.85	152	161981	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	97116	52.60	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 105.20%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	100162	48.94	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 97.88%			
75) toluene-d8 (s)	8.39	98	391496	48.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.34%			
99) 4-bromofluorobenzene (s)	10.91	95	145436	51.57	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 103.14%			

Target Compounds	Qvalue

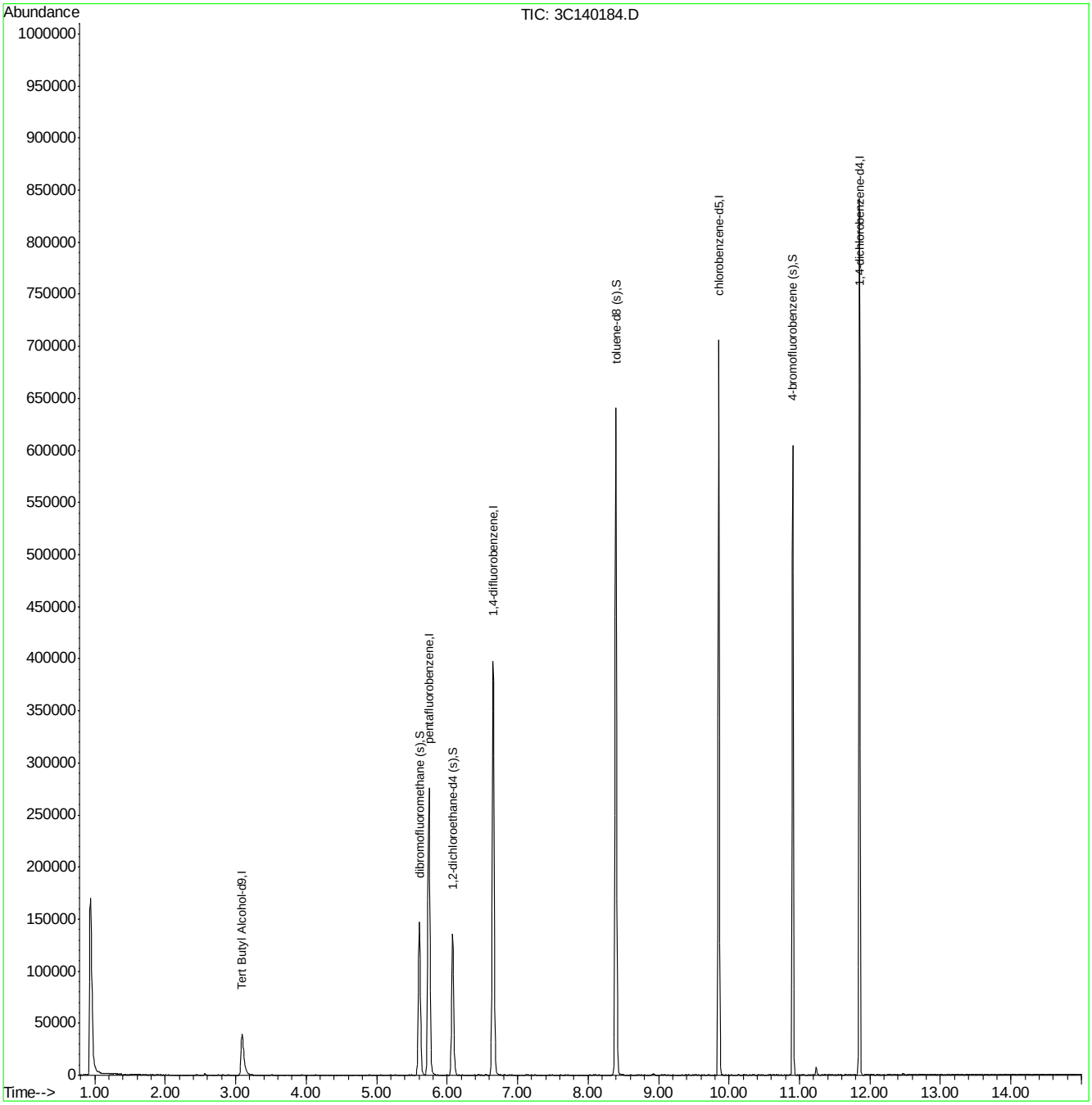
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140184.D
Acq On : 6 Nov 2017 9:32 am
Operator : PrashanS
Sample : MB
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 06 15:12:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216645.d
Acq On : 6 Nov 2017 2:31 pm
Operator : PrashanS
Sample : MB
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 07 12:39:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	221943	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	713598	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.706	114	984105	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	803379	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	456693	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	379319	51.21	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.42%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	441249	55.08	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 110.16%			
72) toluene-d8 (s)	12.327	98	1001850	49.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.18%			
96) 4-bromofluorobenzene (s)	14.994	95	391453	53.84	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 107.68%			

Target Compounds	Qvalue

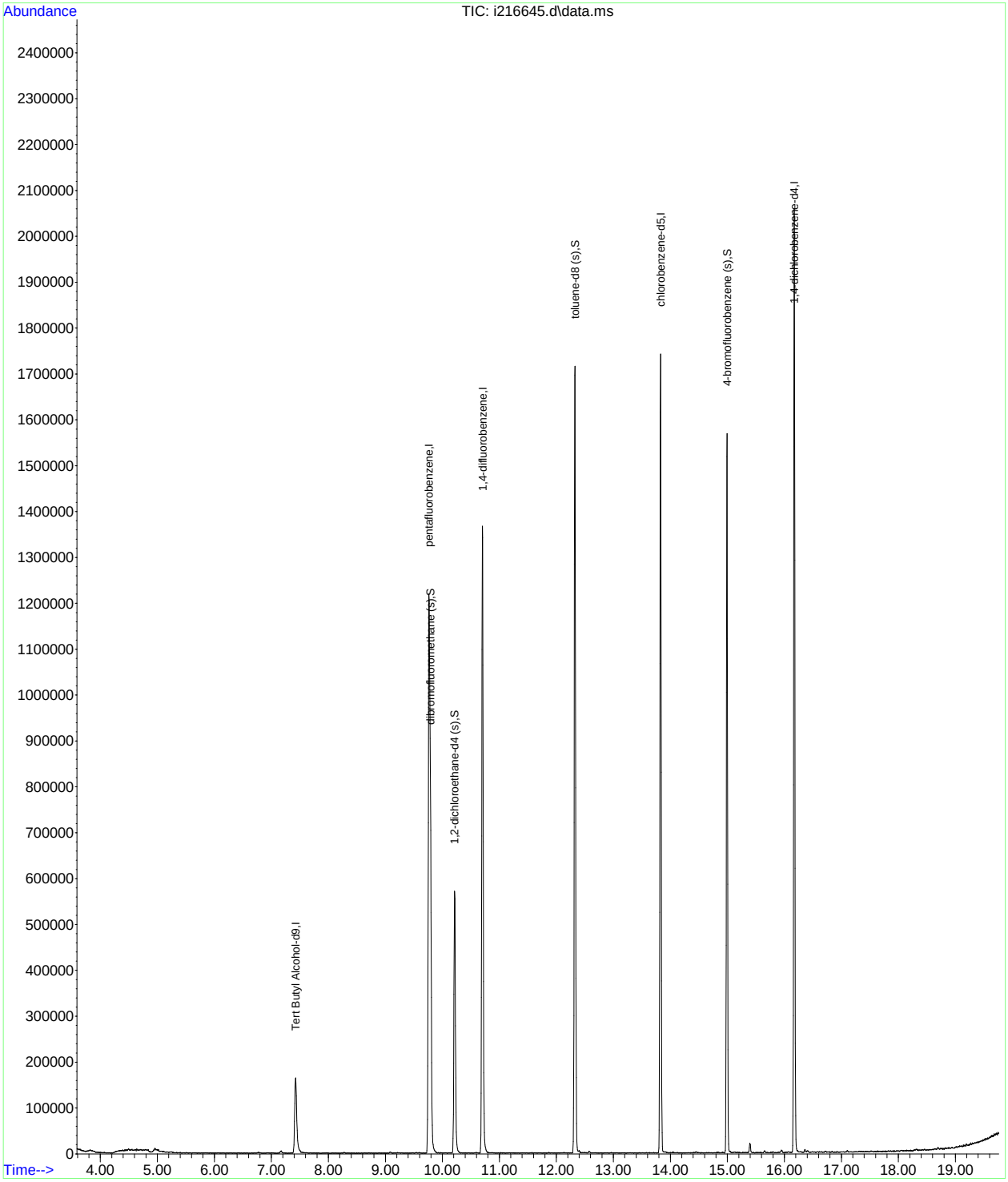
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216645.d
Acq On : 6 Nov 2017 2:31 pm
Operator : PrashanS
Sample : MB
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 07 12:39:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216670.d
Acq On : 7 Nov 2017 11:46 am
Operator : PrashanS
Sample : mb
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 08 17:44:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	249287	500.00	ug/L	-0.01
4) pentafluorobenzene	9.769	168	807183	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.706	114	1141784	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	942803	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	527666	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	427961	51.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.16%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	464936	50.03	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.06%			
72) toluene-d8 (s)	12.327	98	1163023	49.05	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.10%			
96) 4-bromofluorobenzene (s)	14.989	95	438983	52.25	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.50%			

Target Compounds Qvalue

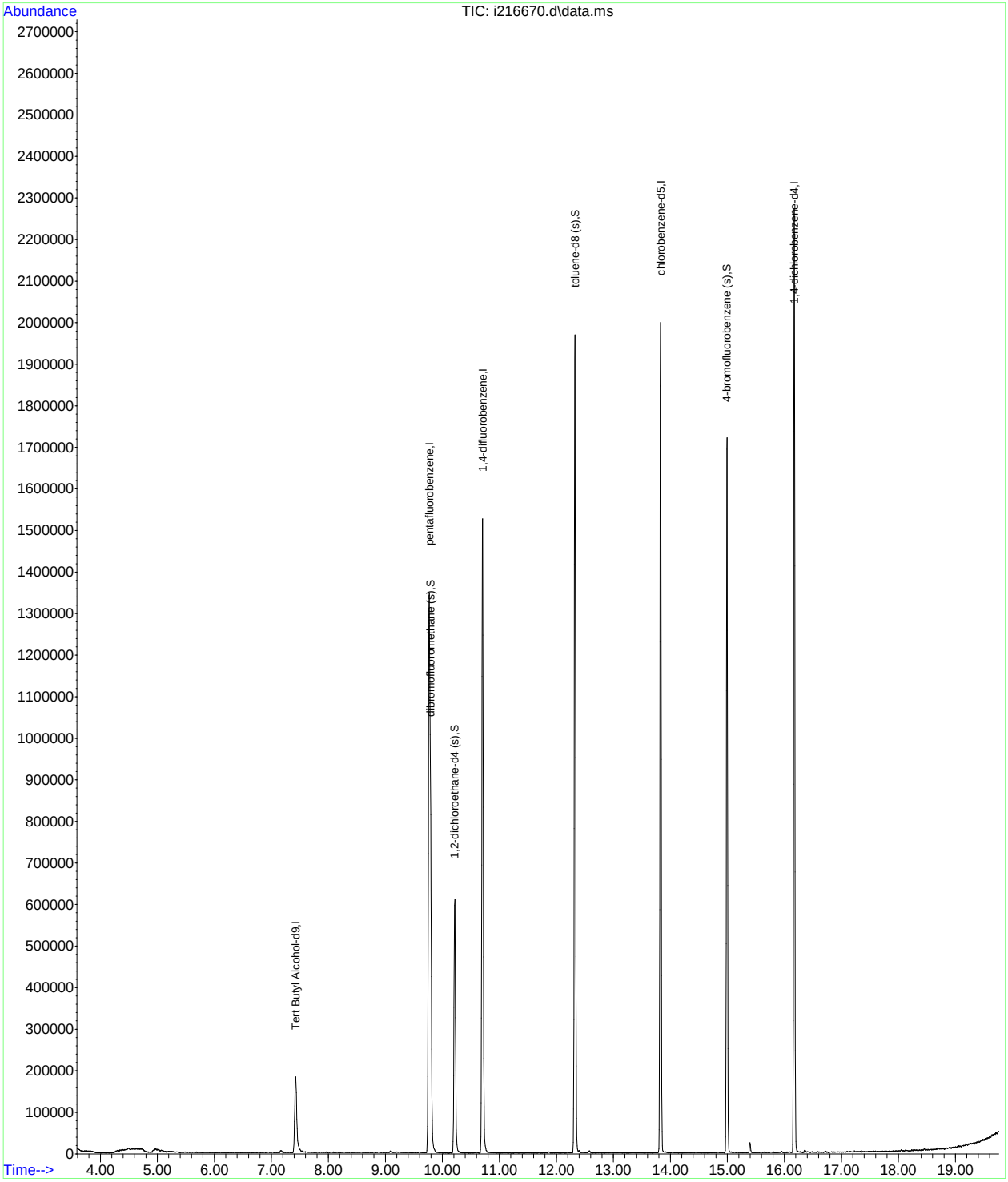
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216670.d
Acq On : 7 Nov 2017 11:46 am
Operator : PrashanS
Sample : mb
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 08 17:44:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153129.d
Acq On : 7 Nov 2017 12:38 pm
Operator : prashans
Sample : MB Inst : GCMS1C
Misc : MS21756,V1C6761,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:33:47 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration

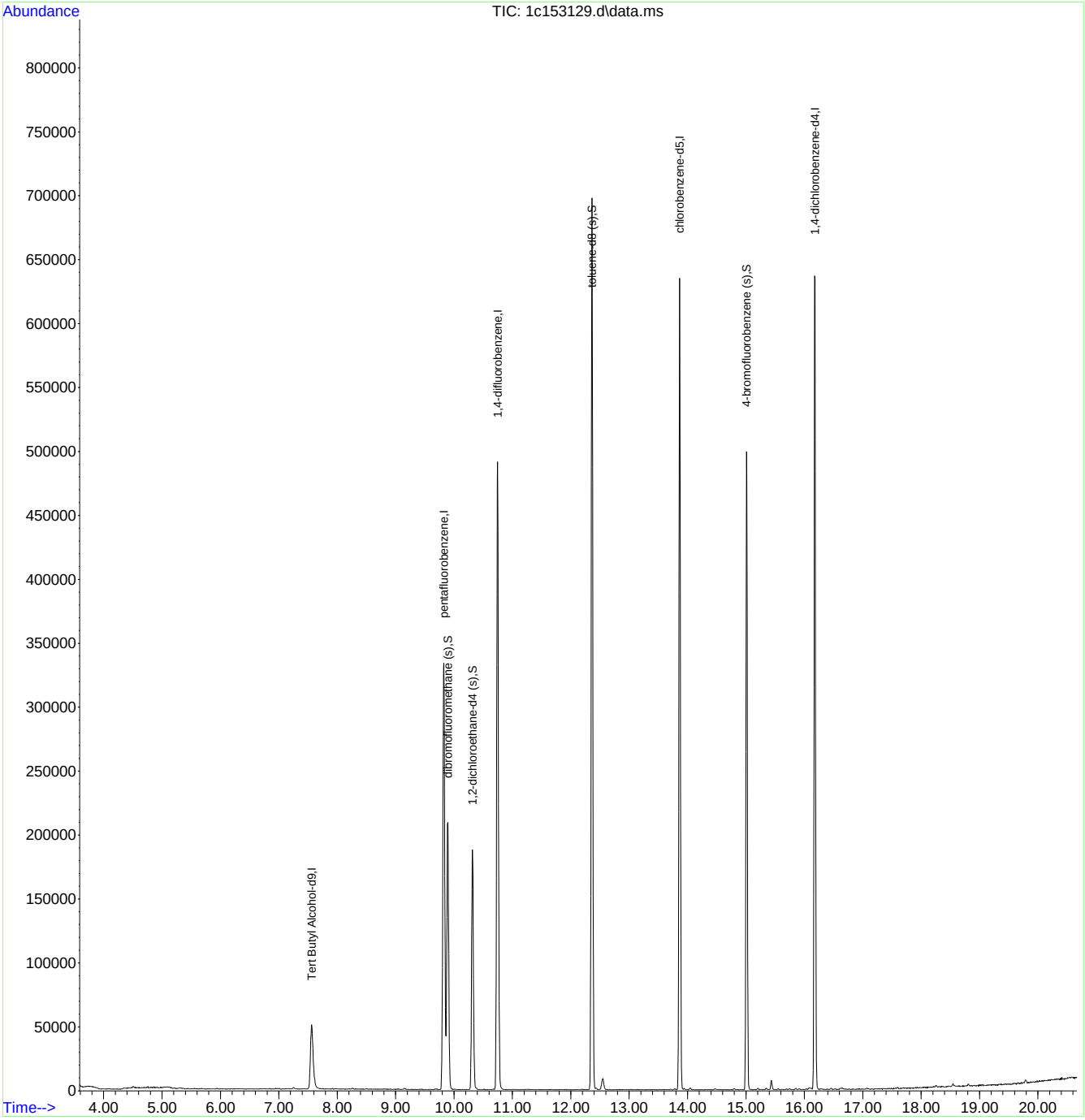
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.562	65	96968	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	284000	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	447599	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	354334	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	173323	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	145090	49.81	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.62%			
45) 1,2-dichloroethane-d4 (s)	10.319	65	144100	47.90	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 95.80%			
77) toluene-d8 (s)	12.364	98	483952	47.55	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.10%			
94) 4-bromofluorobenzene (s)	15.010	95	168777	51.55	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 103.10%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153129.d
Acq On : 7 Nov 2017 12:38 pm
Operator : prashans
Sample : MB Inst : GCMS1C
Misc : MS21756,V1C6761,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:33:47 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153151.d
Acq On : 8 Nov 2017 12:24 am
Operator : prashans
Sample : mb Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 08 23:45:41 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

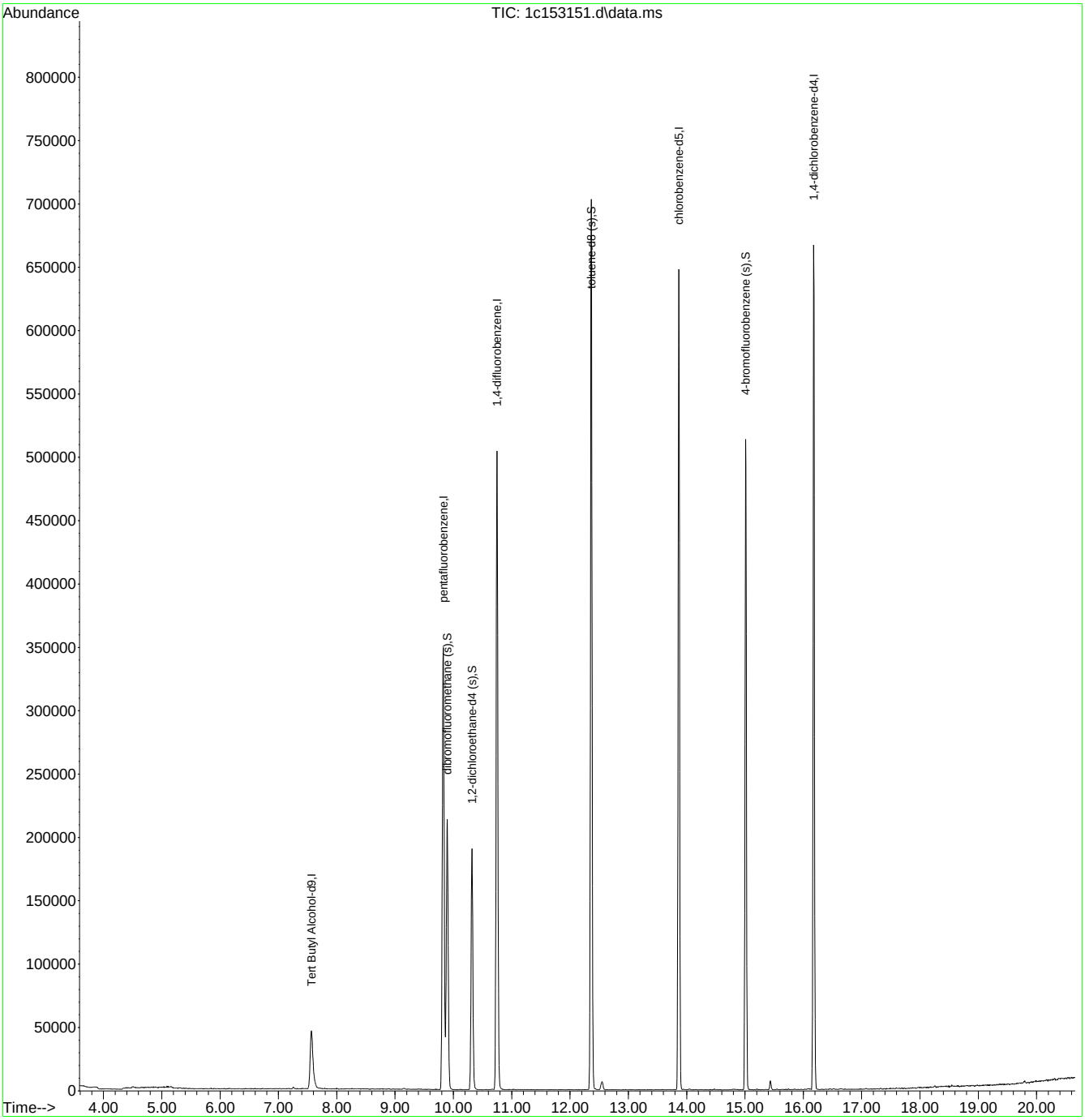
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.562	65	94318	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	294314	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	456919	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	364976	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.176	152	176594	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	147323	48.81	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 97.62%			
45) 1,2-dichloroethane-d4 (s)	10.319	65	144914	46.48	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 92.96%			
77) toluene-d8 (s)	12.364	98	494836	47.63	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.26%			
94) 4-bromofluorobenzene (s)	15.010	95	168692	50.57	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.14%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153151.d
Acq On : 8 Nov 2017 12:24 am
Operator : prashans
Sample : mb Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 08 23:45:41 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248812.D
Acq On : 9 Nov 2017 10:49 am
Operator : ThienN
Sample : mb
Misc : MS16698,VE10685,5,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 09 12:31:43 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.708	65	103916	500.00	ug/L	-0.05
5) pentafluorobenzene	9.961	168	201776	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.923	114	307573	50.00	ug/L	-0.01
75) chlorobenzene-d5	14.316	117	295741	50.00	ug/L	-0.02
99) 1,4-dichlorobenzene-d4	16.951	152	165751	50.00	ug/L	-0.01
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.013	113	88254	47.53	ug/L	-0.02
Spiked Amount 50.000	Range 72 - 129		Recovery = 95.06%			
55) 1,2-dichloroethane-d4 (s)	10.447	65	96046	45.04	ug/L	-0.01
Spiked Amount 50.000	Range 73 - 132		Recovery = 90.08%			
76) toluene-d8 (s)	12.638	98	357160	47.42	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.84%			
100) 4-bromofluorobenzene (s)	15.633	95	139493	50.03	ug/L	-0.01
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.06%			

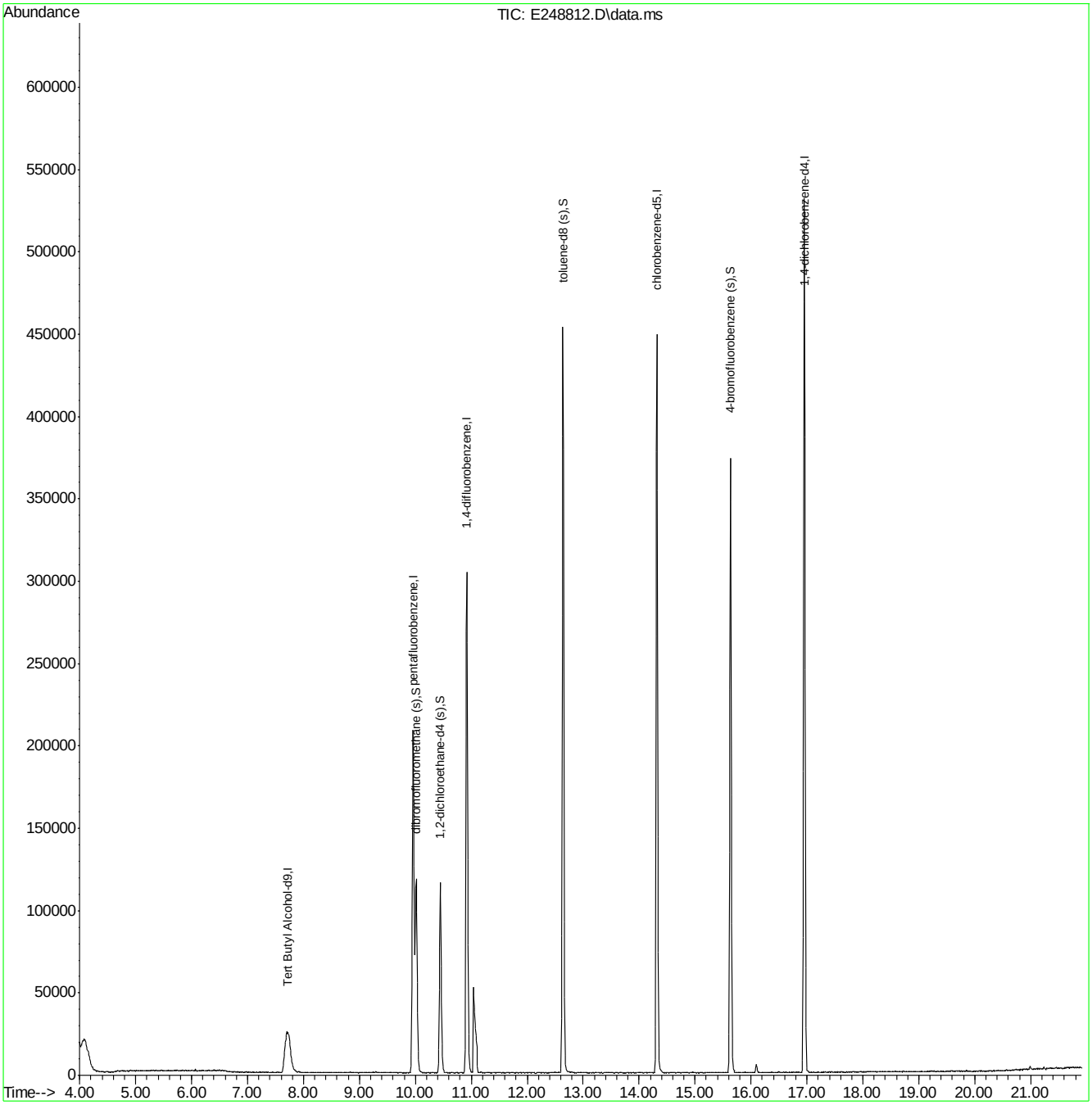
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248812.D
Acq On : 9 Nov 2017 10:49 am
Operator : ThienN
Sample : mb
Misc : MS16698,VE10685,5,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 09 12:31:43 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140208.d
Acq On : 6 Nov 2017 9:42 pm
Operator : PrashanS
Sample : mb2 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 08 00:37:39 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	3.092	65	63017	500.00	ug/L	-0.01
5) pentafluorobenzene	5.743	168	218040	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.653	114	335257	50.00	ug/L	0.00
74) chlorobenzene-d5	9.854	117	301648	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.852	152	162808	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.607	113	97523	55.05	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 110.10%			
53) 1,2-dichloroethane-d4 (s)	6.078	65	98818	49.71	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.42%			
75) toluene-d8 (s)	8.395	98	391172	49.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.16%			
99) 4-bromofluorobenzene (s)	10.905	95	144723	51.06	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.12%			
Target Compounds						Qvalue

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

7.2.8

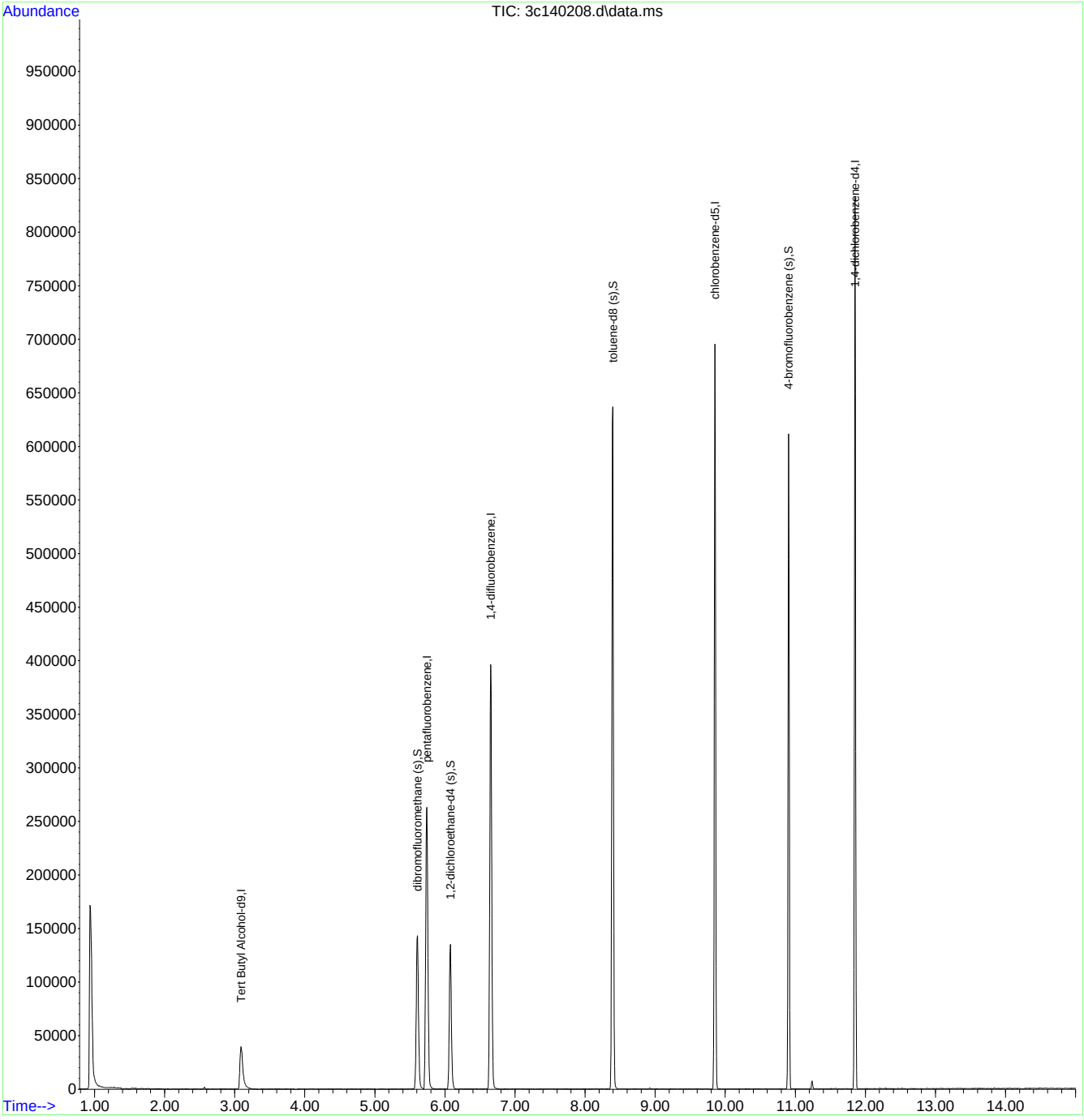
7

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140208.d
Acq On : 6 Nov 2017 9:42 pm
Operator : PrashanS
Sample : mb2 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 08 00:37:39 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216596.d
Acq On : 3 Nov 2017 10:29 pm
Operator : PrashanS
Sample : bs
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Nov 06 12:42:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	286491	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	731443	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1040680	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	916059	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	574622	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	376854	49.64	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.28%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	471623	55.67	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 111.34%				
72) toluene-d8 (s)	12.322	98	1118710	48.56	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.12%				
96) 4-bromofluorobenzene (s)	14.989	95	454683	49.70	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 99.40%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.552	59	155199	245.91	ug/L		97
3) 1,4-dioxane	11.354	88	74694	1233.34	ug/L		99
5) dichlorodifluoromethane	3.896	85	356610	40.65	ug/L		98
6) chlorodifluoromethane	3.927	51	302136	39.97	ug/L		99
7) chloromethane	4.293	50	218637	37.32	ug/L		99
8) vinyl chloride	4.544	62	235272	40.15	ug/L		100
9) bromomethane	5.214	94	173957	38.24	ug/L		92
10) chloroethane	5.423	64	136555	42.50	ug/L		97
11) trichlorofluoromethane	5.894	101	498833	42.94	ug/L		99
12) ethyl ether	6.344	74	104184	46.52	ug/L		94
13) 2-chloropropane	6.553	63	79958	42.16	ug/L	#	83
14) acrolein	6.558	56	34181	50.28	ug/L		98
15) freon 113	6.762	151	179607	37.46	ug/L		99
16) 1,1-dichloroethene	6.762	61	333693	42.80	ug/L		92
17) acetone	6.762	58	78276	196.07	ug/L	#	83
18) iodomethane	7.018	142	272214	40.33	ug/L		95
19) carbon disulfide	7.165	76	605734	34.91	ug/L		100
20) acetonitrile	7.175	41	237929	427.19	ug/L		95
21) methyl acetate	7.248	74	32519	47.13	ug/L		98
22) methylene chloride	7.489	84	202003	40.05	ug/L		94
23) acrylonitrile	7.777	53	59953	46.64	ug/L		89
24) methyl tert butyl ether	7.866	73	647544	48.49	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	313652	43.20	ug/L		96
26) hexane	8.279	57	246770	34.81	ug/L		99
27) 1,1-dichloroethane	8.483	63	380389	42.45	ug/L		98
28) vinyl acetate	8.430	86	33015	46.72	ug/L	#	94
29) di-isopropyl ether	8.483	45	606824	47.16	ug/L		95
30) chloroprene	8.593	53	364809	44.62	ug/L		98
31) ethyl tert-butyl ether	8.953	59	682358	49.43	ug/L		99
32) 2-butanone	9.136	72	92867	194.20	ug/L		92
33) 2,2-dichloropropane	9.236	77	429954	42.65	ug/L		99
34) ethyl acetate	9.168	45	29360	45.68	ug/L	#	80
35) cis-1,2-dichloroethene	9.210	96	239394	40.21	ug/L		95
36) propionitrile	9.204	54	309582	473.93	ug/L		98
37) methyl acrylate	9.246	85	31789	47.24	ug/L		90
38) methacrylonitrile	9.408	67	77234	47.31	ug/L		95
39) bromochloromethane	9.508	128	122584	42.96	ug/L		93
40) tetrahydrofuran	9.534	71	24411	42.91	ug/L		94
41) chloroform	9.602	83	477358	41.68	ug/L		100
42) carbon tetrachloride	10.067	117	472798	44.59	ug/L		99
43) 1,1-dichloropropene	10.041	75	327540	42.88	ug/L		99
46) 1,1,1-trichloroethane	9.858	97	490559	43.80	ug/L		99
47) cyclohexane	9.979	84	275183	42.02	ug/L		96
48) tert-amyl alcohol	10.151	55	54520	255.14	ug/L		93
51) isopropyl acetate	10.198	87	42409	47.93	ug/L	#	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216596.d
Acq On : 3 Nov 2017 10:29 pm
Operator : PrashanS
Sample : bs
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Nov 06 12:42:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	1,2-dichloroethane	10.308	62	423543	48.98	ug/L		98
53)	benzene	10.287	78	799212	41.37	ug/L		99
54)	2,2,4-trimethylpentane	10.392	57	719985	42.02	ug/L		98
55)	tert-amyl methyl ether	10.371	87	170200	49.14	ug/L		98
56)	heptane	10.554	57	146474	41.05	ug/L		97
57)	n-butyl alcohol	10.742	56	364402	2673.08	ug/L		97
58)	trichloroethene	11.014	95	245035	42.20	ug/L		91
59)	ethyl acrylate	10.998	55	236082	51.10	ug/L		98
60)	methylcyclohexane	11.318	83	363636	41.73	ug/L		96
61)	1,2-dichloropropane	11.297	63	201115	44.71	ug/L		99
62)	methyl methacrylate	11.265	100	53854	47.31	ug/L		97
63)	dibromomethane	11.406	93	162935	47.67	ug/L		91
64)	bromodichloromethane	11.558	83	381911	47.93	ug/L		98
65)	2-nitropropane	11.746	41	77999	49.12	ug/L		91
66)	2-chloroethyl vinyl ether	11.793	63	505465	240.79	ug/L		99
67)	epichlorohydrin	11.872	57	113531	247.58	ug/L		99
68)	cis-1,3-dichloropropene	12.013	75	384509	47.63	ug/L		97
69)	4-methyl-2-pentanone	12.107	58	286224	208.71	ug/L		99
70)	3-methyl-1-butanol	12.107	70	133611	1064.74	ug/L		93
73)	toluene	12.400	92	508165	40.65	ug/L		97
74)	trans-1,3-dichloropropene	12.573	75	391531	46.70	ug/L		98
75)	ethyl methacrylate	12.568	69	241864	50.70	ug/L		94
76)	1,1,2-trichloroethane	12.798	83	157083	46.55	ug/L		98
77)	1,3-dichloropropane	12.976	76	321680	48.10	ug/L		98
78)	tetrachloroethene	12.955	166	276343	38.16	ug/L		95
79)	2-hexanone	12.955	58	297877	206.98	ug/L		100
80)	butyl acetate	13.038	56	110534	48.26	ug/L		90
81)	3,3-dimethyl-1-Butanol	13.127	69	156269	518.97	ug/L		99
82)	n-butyl ether	13.823	57	730273	44.62	ug/L		99
83)	dibromochloromethane	13.221	129	313087	47.24	ug/L		99
84)	1,2-dibromoethane	13.378	107	228834	47.88	ug/L		97
85)	chlorobenzene	13.859	112	614548	41.60	ug/L		99
86)	1,1,1,2-tetrachloroethane	13.922	131	282861	46.13	ug/L		96
87)	ethylbenzene	13.922	91	1007508	42.35	ug/L		100
88)	m,p-xylene	14.042	106	795352	86.02	ug/L		98
89)	o-xylene	14.440	106	394436	44.68	ug/L		97
90)	styrene	14.450	104	671172	46.78	ug/L		98
91)	butyl acrylate	14.267	55	346053	50.72	ug/L		99
92)	cis-1,4-dichloro-2-butene	14.817	88	152075	52.37	ug/L		97
93)	bromoform	14.675	173	225973	47.65	ug/L		98
94)	isopropylbenzene	14.790	105	1043940	45.04	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.062	83	251268	48.97	ug/L		97
98)	trans-1,4-dichloro-2-b...	15.094	53	85492	50.01	ug/L		95
99)	1,2,3-trichloropropane	15.146	110	82568	47.74	ug/L		98
100)	bromobenzene	15.172	156	312638	41.84	ug/L		97
101)	n-propylbenzene	15.209	91	1231657	44.92	ug/L		98
102)	2-chlorotoluene	15.340	126	269777	44.14	ug/L		97
103)	4-chlorotoluene	15.449	91	798818	45.51	ug/L		99
104)	1,3,5-trimethylbenzene	15.366	105	932934	46.18	ug/L		99
105)	tert-butylbenzene	15.706	134	184863	45.93	ug/L		92
106)	1,2,4-trimethylbenzene	15.758	105	958498	45.14	ug/L		100
107)	sec-butylbenzene	15.931	105	1197644	46.48	ug/L		99
108)	p-isopropyltoluene	16.067	119	1074031	47.14	ug/l		99
109)	benzyl chloride	16.286	91	631367	54.29	ug/L		98
110)	1,3-dichlorobenzene	16.098	146	603405	42.37	ug/L		95
111)	1,4-dichlorobenzene	16.197	146	615681	41.98	ug/L		99
112)	1,2-dichlorobenzene	16.579	146	592685	44.17	ug/L		98
113)	n-butylbenzene	16.490	92	546860	48.01	ug/L		98
114)	hexachloroethane	16.893	201	224996	42.03	ug/L		86
115)	1,2-dibromo-3-chloropr...	15.172	157	22960	42.72	ug/L	#	72
116)	1,3,5-Trichlorobenzene	17.521	180	525289	45.96	ug/L		99
117)	1,2,4-trichlorobenzene	18.049	180	468412	51.59	ug/L		98
118)	2-ethylhexyl acrylate	18.065	55	66154	10.83	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216596.d
Acq On : 3 Nov 2017 10:29 pm
Operator : PrashanS
Sample : bs
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Nov 06 12:42:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

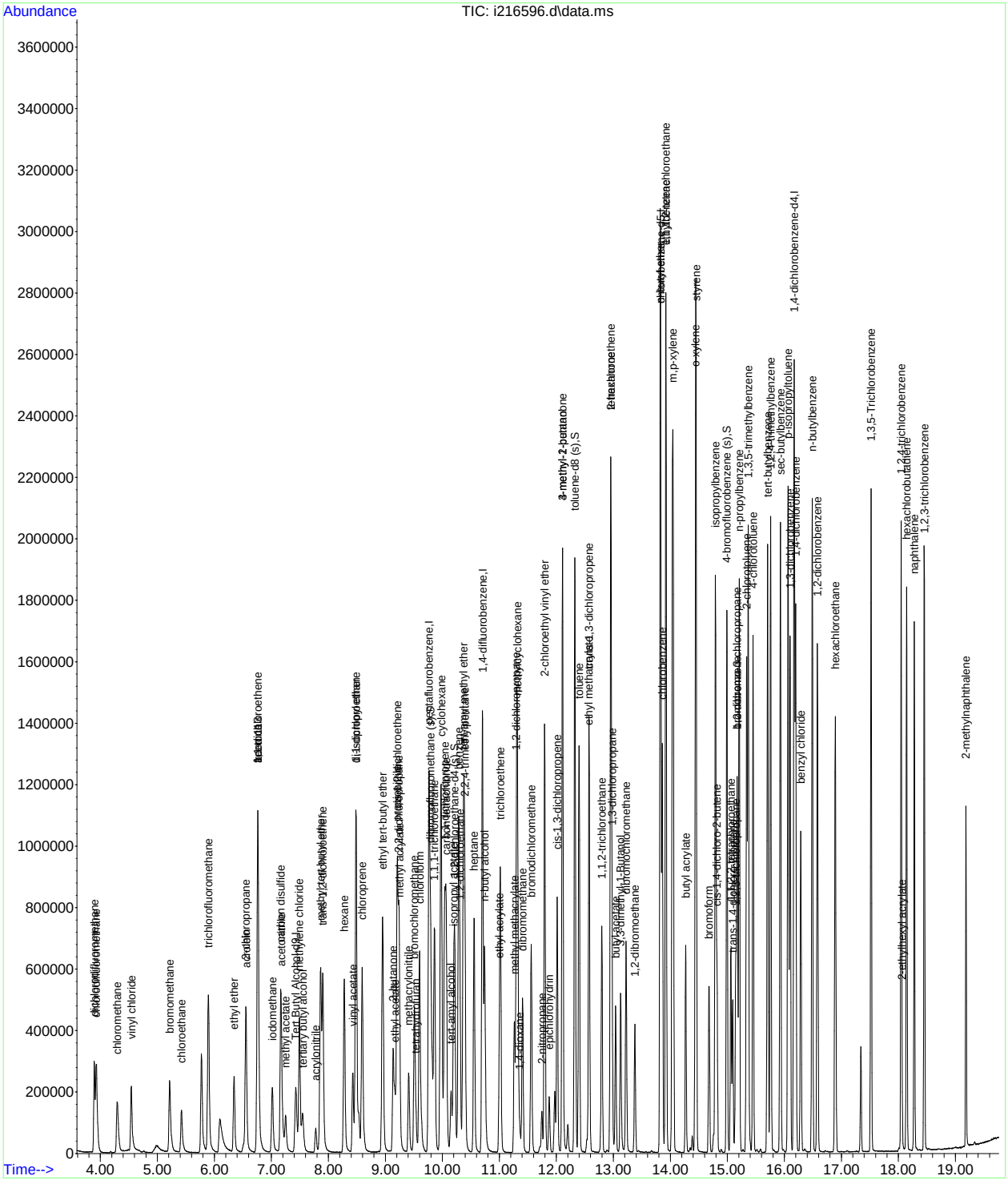
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.143	225	294645	47.30	ug/L	98
120) naphthalene	18.279	128	916931	54.48	ug/L	100
121) 1,2,3-trichlorobenzene	18.457	180	467009	51.83	ug/L	99
122) 2-methylnaphthalene	19.184	142	361673	27.24	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216596.d
Acq On : 3 Nov 2017 10:29 pm
Operator : PrashanS
Sample : bs
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Nov 06 12:42:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140185.D
Acq On : 6 Nov 2017 10:04 am
Operator : PrashanS
Sample : BS
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 06 10:19:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	3.10	65	82806	500.00	ug/L		0.00
5) pentafluorobenzene	5.74	168	228840	50.00	ug/L		0.00
52) 1,4-difluorobenzene	6.65	114	342292	50.00	ug/L		0.00
74) chlorobenzene-d5	9.85	117	312434	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	11.85	152	171389	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	5.61	113	101066	54.35	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 108.70%				
53) 1,2-dichloroethane-d4 (s)	6.08	65	109561	53.98	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 107.96%				
75) toluene-d8 (s)	8.40	98	398553	48.28	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.56%				
99) 4-bromofluorobenzene (s)	10.91	95	149778	50.20	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.40%				
Target Compounds							Qvalue
2) ethanol	2.16	45	168647	6154.36	ug/L		99
3) tertiary butyl alcohol	3.20	59	48234	261.50	ug/L		89
4) 1,4-dioxane	7.45	88	25956	1607.47	ug/L		96
6) chlorodifluoromethane	1.11	51	103755	49.05	ug/L		94
7) dichlorodifluoromethane	1.08	85	100042	46.54	ug/L		100
8) chloromethane	1.25	50	109045	48.67	ug/L		100
10) vinyl chloride	1.31	62	101005	48.21	ug/L		97
11) bromomethane	1.58	94	46099	46.08	ug/L		98
12) chloroethane	1.67	64	58047	55.47	ug/L		97
13) vinyl Bromide	1.83	106	66518	53.29	ug/L		93
14) trichlorofluoromethane	1.86	101	120036	47.21	ug/L		99
15) ethyl ether	2.16	74	48923	55.11	ug/L		88
16) 2-chloropropane	2.25	63	33718	55.54	ug/L		91
17) acrolein	2.36	56	14808	55.24	ug/L		84
18) freon 113	2.35	151	61629	50.61	ug/L		97
19) 1,1-dichloroethene	2.38	96	71762	52.93	ug/L		99
20) acetone	2.54	58	25697	216.89	ug/L		98
21) acetonitrile	2.93	41	115901	566.17	ug/L		95
22) iodomethane	2.54	142	81019	44.58	ug/L		97
23) carbon disulfide	2.56	76	250004	45.41	ug/L		97
24) methylene chloride	3.00	84	80611	54.70	ug/L		98
25) methyl acetate	2.88	43	67530	51.91	ug/L		94
26) methyl tert butyl ether	3.27	73	222896	53.77	ug/L		97
27) trans-1,2-dichloroethene	3.28	96	81147	50.91	ug/L		100
28) hexane	3.56	57	131458	48.59	ug/L		98
29) di-isopropyl ether	4.01	45	293215	56.13	ug/L		97
30) ethyl tert-butyl ether	4.58	59	257177	53.50	ug/L		99
31) 2-butanone	4.99	72	36050	232.67	ug/L		96
32) 1,1-dichloroethane	3.97	63	146510	54.55	ug/L		99
33) chloroprene	4.05	53	134429	51.11	ug/L		96
34) acrylonitrile	3.44	53	28091	58.40	ug/L		98
35) vinyl acetate	4.10	86	16495	45.15	ug/L	#	65
36) ethyl acetate	5.06	45	13023	53.52	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140185.D
Acq On : 6 Nov 2017 10:04 am
Operator : PrashanS
Sample : BS
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 06 10:19:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
37) 2,2-dichloropropane	4.82	77	108214	47.38 ug/L		98
38) cis-1,2-dichloroethene	4.89	96	90205	53.23 ug/L		99
39) propionitrile	5.19	54	126321	537.46 ug/L		100
40) bromochloromethane	5.24	130	54944	55.14 ug/L		95
41) tetrahydrofuran	5.26	72	10332	55.56 ug/L		91
42) chloroform	5.38	83	140478	51.18 ug/L		96
43) tert-Butyl Formate	5.41	59	3114	8.33 ug/L	#	21
44) isobutyl alcohol	6.03	43	65187	487.79 ug/L		96
46) methacrylonitrile	5.34	67	32708	53.44 ug/L		94
47) 1,1,1-trichloroethane	5.51	97	126707	51.43 ug/L		99
48) cyclohexane	5.46	84	120202	45.98 ug/L		98
49) 1,1-dichloropropene	5.75	110	43242	50.22 ug/L		95
50) tert-amyl alcohol	6.20	73	253771	258.63 ug/L		92
51) carbon tetrachloride	5.68	117	116034	53.95 ug/L		96
54) 2,2,4-trimethylpentane	6.03	57	340686	45.94 ug/L		98
55) tert-amyl methyl ether	6.20	87	55351	50.88 ug/L		92
56) n-butyl alcohol	5.71	56	175876	2266.62 ug/L		97
57) benzene	6.02	78	326121	48.06 ug/L		100
58) heptane	6.33	57	73236	46.63 ug/L		94
59) isopropyl acetate	6.28	87	17999	51.15 ug/L	#	82
60) 1,2-dichloroethane	6.18	62	107762	54.19 ug/L		99
61) trichloroethene	6.90	95	84287	48.56 ug/L		95
62) ethyl acrylate	7.17	55	104516	53.97 ug/L		100
63) 2-nitropropane	8.01	41	19566	45.72 ug/L		87
64) 2-chloroethyl vinyl ether	8.06	63	194754	197.37 ug/L		99
65) methyl methacrylate	7.45	100	21849	50.40 ug/L		93
66) 1,2-dichloropropane	7.25	63	84975	52.99 ug/L		100
67) methylcyclohexane	7.02	83	160106	46.69 ug/L		98
68) dibromomethane	7.40	93	47650	54.84 ug/L		97
69) bromodichloromethane	7.62	83	108282	55.59 ug/L		97
70) epichlorohydrin	8.13	57	40771	241.18 ug/L		97
71) cis-1,3-dichloropropene	8.18	75	138991	53.84 ug/L		98
72) 4-methyl-2-pentanone	8.37	85	53636	209.87 ug/L	#	95
73) 3-methyl-1-butanol	8.50	70	46629	814.29 ug/L		97
76) toluene	8.47	92	207456	44.50 ug/L		99
77) trans-1,3-dichloropropene	8.82	75	117204	51.12 ug/L		99
78) ethyl methacrylate	8.89	69	107315	51.52 ug/L		97
79) 1,1,2-trichloroethane	9.00	83	59025	49.05 ug/L		98
80) 2-hexanone	9.25	58	121988	199.94 ug/L		98
81) tetrachloroethene	9.00	166	100271	46.97 ug/L		95
82) 1,3-dichloropropane	9.16	76	127033	49.88 ug/L		99
83) butyl acetate	9.36	56	55305	50.20 ug/L		97
84) dibromochloromethane	9.34	129	87271	55.21 ug/L		96
85) 1,2-dibromoethane	9.44	107	74801	49.68 ug/L		98
86) 3,3-Dimethyl-1-Butanol	9.45	57	71921	454.08 ug/L		96
87) n-butyl ether	9.97	57	399097	50.20 ug/L		98
88) chlorobenzene	9.88	112	241460	46.01 ug/L		98
89) 1,1,1,2-tetrachloroethane	9.97	131	86843	50.51 ug/L		99
90) ethylbenzene	9.96	91	394569	44.31 ug/L		98
91) m,p-xylene	10.08	106	315982	91.33 ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140185.D
Acq On : 6 Nov 2017 10:04 am
Operator : PrashanS
Sample : BS
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 06 10:19:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
92) o-xylene	10.43	91	313341	45.01 ug/L	98
93) styrene	10.46	104	264505	47.47 ug/L	100
94) bromoform	10.63	173	62319	57.08 ug/L	98
95) butyl acrylate	10.45	55	156905	54.10 ug/L	100
96) isopropylbenzene	10.74	105	402487	45.43 ug/L	98
97) cis-1,4-dichloro-2-butene	10.88	88	40725	47.49 ug/L	96
100) bromobenzene	11.02	156	104503	45.79 ug/L	95
101) 1,1,2,2-tetrachloroethane	11.07	83	90902	49.22 ug/L	100
102) trans-1,4-dichloro-2-buten	11.13	53	27194	50.16 ug/L	96
103) 1,2,3-trichloropropane	11.11	110	29317	50.43 ug/L	90
104) n-propylbenzene	11.09	91	473499	45.16 ug/L	99
105) 2-chlorotoluene	11.17	126	99965	46.67 ug/L	98
106) 4-chlorotoluene	11.27	126	104693	45.50 ug/L	97
107) 1,3,5-trimethylbenzene	11.25	105	336685	45.29 ug/L	98
108) tert-butylbenzene	11.50	119	304950	44.24 ug/L	99
109) 1,2,4-trimethylbenzene	11.55	105	347534	45.52 ug/L	99
110) sec-butylbenzene	11.68	105	453511	44.67 ug/L	98
111) 1,3-dichlorobenzene	11.79	146	204835	45.71 ug/L	96
112) p-isopropyltoluene	11.80	119	400810	45.22 ug/L	99
113) 1,4-dichlorobenzene	11.87	146	205693	45.82 ug/L	99
114) 1,2-dichlorobenzene	12.17	146	193751	47.11 ug/L	98
115) n-butylbenzene	12.13	92	202362	45.55 ug/L	93
116) 1,2-dibromo-3-chloropropan	12.81	157	24768	51.54 ug/L	94
117) 1,3,5-Trichlorobenzene	12.92	180	182872	46.49 ug/L	99
118) 1,2,4-trichlorobenzene	13.43	180	169397	48.67 ug/L	97
119) hexachlorobutadiene	13.52	225	94458	48.54 ug/L	98
120) naphthalene	13.62	128	366422	46.95 ug/L	99
121) 1,2,3-trichlorobenzene	13.81	180	161942	48.95 ug/L	99
122) hexachloroethane	12.33	201	63700	56.62 ug/L	94
123) Benzyl chloride	12.00	91	160016	45.59 ug/L	99
124) 2-ethylhexyl acrylate	13.57	70	21151	9.57 ug/L	96
125) 2-methylnaphthalene	14.49	142	140759	24.72 ug/L	99

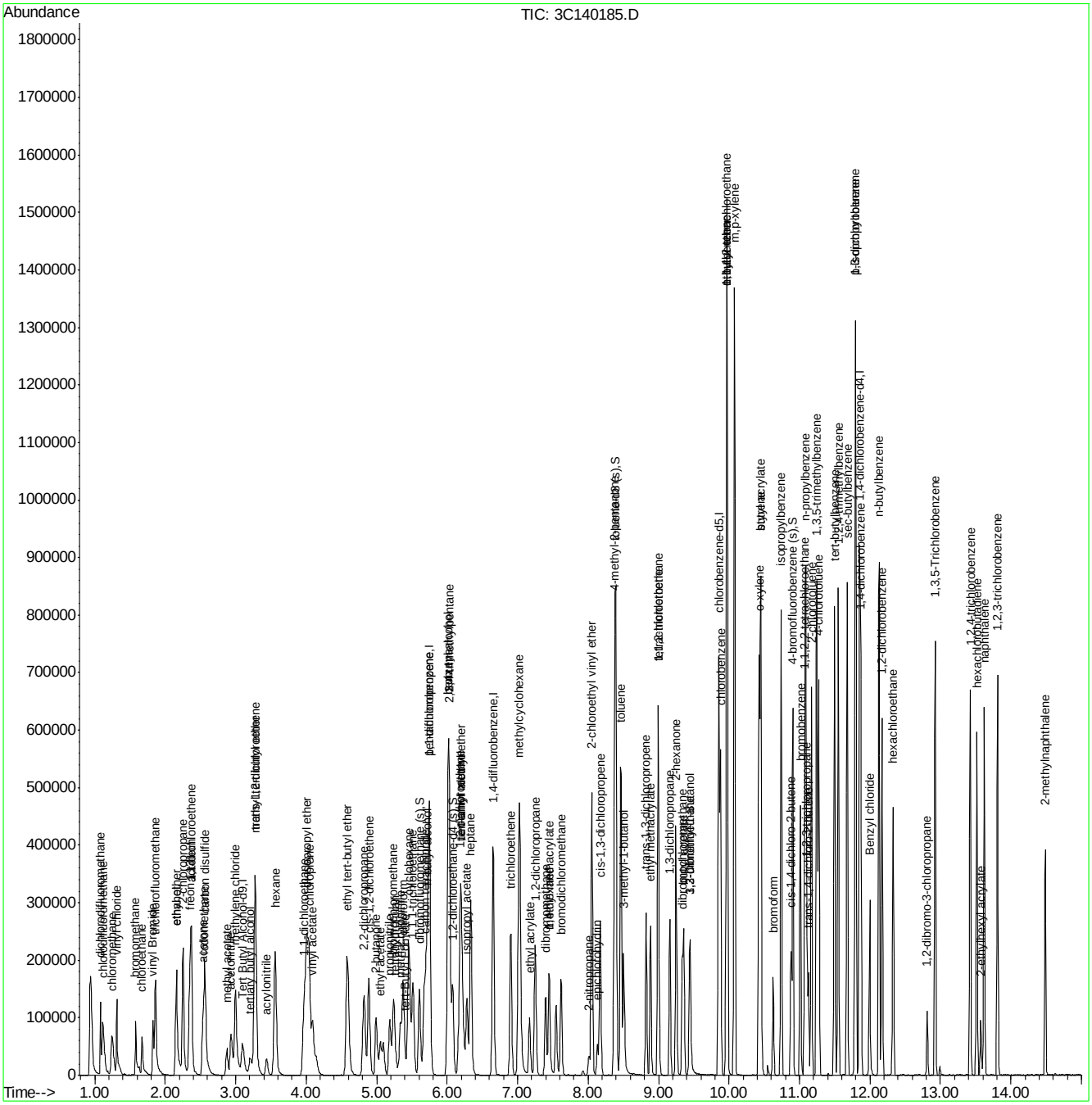
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140185.D
Acq On : 6 Nov 2017 10:04 am
Operator : PrashanS
Sample : BS
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 06 10:19:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216646.d
Acq On : 6 Nov 2017 3:08 pm
Operator : PrashanS
Sample : BS
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 07 12:40:27 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	277489	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	718660	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1027188	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	906179	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	587471	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	380543	51.02	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.04%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	461926	55.25	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 110.50%				
72) toluene-d8 (s)	12.327	98	1084782	47.60	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.20%				
96) 4-bromofluorobenzene (s)	14.989	95	444364	47.51	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 95.02%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.547	59	162209	265.36	ug/L		97
3) 1,4-dioxane	11.354	88	83180	1418.01	ug/L		98
5) dichlorodifluoromethane	3.896	85	497768	57.75	ug/L		99
6) chlorodifluoromethane	3.933	51	356274	47.97	ug/L		96
7) chloromethane	4.299	50	270202	46.94	ug/L		99
8) vinyl chloride	4.545	62	287590	49.95	ug/L		98
9) bromomethane	5.219	94	213401	47.74	ug/L		96
10) chloroethane	5.423	64	164323	52.05	ug/L		99
11) trichlorofluoromethane	5.899	101	627589	54.98	ug/L		99
12) ethyl ether	6.349	74	110201	50.08	ug/L		97
13) 2-chloropropane	6.558	63	92558	49.67	ug/L		95
14) acrolein	6.558	56	32853	49.18	ug/L		97
15) freon 113	6.762	151	218021	46.28	ug/L		96
16) 1,1-dichloroethene	6.767	61	389595	50.86	ug/L		96
17) acetone	6.762	58	72063	183.72	ug/L	#	82
18) iodomethane	7.018	142	322478	48.63	ug/L		92
19) carbon disulfide	7.165	76	720755	42.28	ug/L		99
20) acetonitrile	7.175	41	247839	452.90	ug/L		99
21) methyl acetate	7.254	74	34611	51.06	ug/L	#	84
22) methylene chloride	7.494	84	229815	46.38	ug/L		95
23) acrylonitrile	7.777	53	60394	47.82	ug/L		94
24) methyl tert butyl ether	7.866	73	676404	51.55	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	358199	50.22	ug/L		95
26) hexane	8.279	57	289968	41.63	ug/L		99
27) 1,1-dichloroethane	8.488	63	431212	48.98	ug/L		99
28) vinyl acetate	8.425	86	38594	55.58	ug/L	#	91
29) di-isopropyl ether	8.488	45	639101	50.55	ug/L		99
30) chloroprene	8.593	53	418761	52.13	ug/L		96
31) ethyl tert-butyl ether	8.954	59	707299	52.15	ug/L		98
32) 2-butanone	9.137	72	100745	214.42	ug/L		100
33) 2,2-dichloropropane	9.236	77	501106	50.59	ug/L		100
34) ethyl acetate	9.168	45	29904	47.35	ug/L	#	88
35) cis-1,2-dichloroethene	9.210	96	262034	44.79	ug/L		95
36) propionitrile	9.205	54	324939	506.29	ug/L		99
37) methyl acrylate	9.246	85	33308	50.38	ug/L	#	87
38) methacrylonitrile	9.414	67	81367	50.73	ug/L		99
39) bromochloromethane	9.513	128	136703	48.76	ug/L		89
40) tetrahydrofuran	9.534	71	24220	43.34	ug/L		96
41) chloroform	9.597	83	538660	47.87	ug/L		98
42) carbon tetrachloride	10.068	117	557759	53.54	ug/L		99
43) 1,1-dichloropropene	10.041	75	371004	49.44	ug/L		99
46) 1,1,1-trichloroethane	9.864	97	569852	51.78	ug/L		98
47) cyclohexane	9.979	84	275058	42.75	ug/L		84
48) tert-amyl alcohol	10.157	55	59108	281.53	ug/L		97
51) isopropyl acetate	10.198	87	44568	51.03	ug/L	#	93

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216646.d
Acq On : 6 Nov 2017 3:08 pm
Operator : PrashanS
Sample : BS
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 07 12:40:27 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,2-dichloroethane	10.308	62	464755	54.45	ug/L		99
53) benzene	10.287	78	894002	46.88	ug/L		98
54) 2,2,4-trimethylpentane	10.392	57	837237	49.50	ug/L		99
55) tert-amyl methyl ether	10.371	87	182256	53.32	ug/L	#	91
56) heptane	10.559	57	169441	48.11	ug/L		99
57) n-butyl alcohol	10.742	56	395596	2940.02	ug/L		99
58) trichloroethene	11.020	95	280106	48.87	ug/L		92
59) ethyl acrylate	10.999	55	246869	54.14	ug/L		98
60) methylcyclohexane	11.318	83	424710	49.38	ug/L		98
61) 1,2-dichloropropane	11.302	63	216859	48.85	ug/L		90
62) methyl methacrylate	11.265	100	56151	49.98	ug/L		99
63) dibromomethane	11.407	93	177464	52.60	ug/L		90
64) bromodichloromethane	11.558	83	420509	53.46	ug/L		98
65) 2-nitropropane	11.747	41	83927	53.55	ug/L		88
66) 2-chloroethyl vinyl ether	11.794	63	576597	278.28	ug/L		98
67) epichlorohydrin	11.872	57	118401	261.59	ug/L		99
68) cis-1,3-dichloropropene	12.013	75	409382	51.38	ug/L		96
69) 4-methyl-2-pentanone	12.107	58	301041	222.39	ug/L		95
70) 3-methyl-1-butanol	12.107	70	144372	1165.61	ug/L		97
73) toluene	12.400	92	573722	46.39	ug/L		97
74) trans-1,3-dichloropropene	12.578	75	419170	50.54	ug/L		98
75) ethyl methacrylate	12.573	69	248897	52.75	ug/L		99
76) 1,1,2-trichloroethane	12.798	83	169165	50.68	ug/L		95
77) 1,3-dichloropropane	12.976	76	343463	51.92	ug/L		98
78) tetrachloroethene	12.955	166	317781	44.36	ug/L		96
79) 2-hexanone	12.955	58	280613	197.11	ug/L		100
80) butyl acetate	13.044	56	112176	49.51	ug/L		89
81) 3,3-dimethyl-1-Butanol	13.127	69	168475	565.61	ug/L		98
82) n-butyl ether	13.823	57	785134	48.49	ug/L		99
83) dibromochloromethane	13.221	129	345070	52.63	ug/L		98
84) 1,2-dibromoethane	13.378	107	240185	50.80	ug/L		97
85) chlorobenzene	13.860	112	677311	46.35	ug/L		96
86) 1,1,1,2-tetrachloroethane	13.922	131	319595	52.69	ug/L		96
87) ethylbenzene	13.922	91	1123552	47.74	ug/L		100
88) m,p-xylene	14.043	106	891588	97.48	ug/L		97
89) o-xylene	14.440	106	440474	50.44	ug/L		98
90) styrene	14.451	104	742913	52.34	ug/L		98
91) butyl acrylate	14.268	55	352906	52.29	ug/L		99
92) cis-1,4-dichloro-2-butene	14.817	88	170735	59.44	ug/L		94
93) bromoform	14.681	173	254894	54.34	ug/L		99
94) isopropylbenzene	14.791	105	1164825	50.81	ug/L		99
97) 1,1,2,2-tetrachloroethane	15.063	83	263334	50.20	ug/L		96
98) trans-1,4-dichloro-2-b...	15.094	53	88711	50.76	ug/L		92
99) 1,2,3-trichloropropane	15.151	110	90834	51.37	ug/L		95
100) bromobenzene	15.172	156	352515	46.15	ug/L		98
101) n-propylbenzene	15.209	91	1383262	49.35	ug/L		98
102) 2-chlorotoluene	15.340	126	302425	48.40	ug/L		97
103) 4-chlorotoluene	15.450	91	895314	49.89	ug/L		100
104) 1,3,5-trimethylbenzene	15.366	105	1060605	51.35	ug/L		97
105) tert-butylbenzene	15.706	134	211263	51.34	ug/L		97
106) 1,2,4-trimethylbenzene	15.758	105	1081019	49.80	ug/L		100
107) sec-butylbenzene	15.931	105	1377845	52.31	ug/L		99
108) p-isopropyltoluene	16.067	119	1230624	52.83	ug/l		99
109) benzyl chloride	16.286	91	647950	54.50	ug/L		98
110) 1,3-dichlorobenzene	16.103	146	684967	47.05	ug/L		99
111) 1,4-dichlorobenzene	16.197	146	693441	46.24	ug/L		96
112) 1,2-dichlorobenzene	16.579	146	666357	48.57	ug/L		98
113) n-butylbenzene	16.490	92	623013	53.50	ug/L		99
114) hexachloroethane	16.893	201	267361	48.85	ug/L		88
115) 1,2-dibromo-3-chloropr...	15.172	157	25094	45.67	ug/L		83
116) 1,3,5-Trichlorobenzene	17.521	180	604889	51.77	ug/L		100
117) 1,2,4-trichlorobenzene	18.049	180	510863	55.03	ug/L		99
118) 2-ethylhexyl acrylate	18.065	55	70754	11.33	ug/L		98

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216646.d
Acq On : 6 Nov 2017 3:08 pm
Operator : PrashanS
Sample : BS
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 07 12:40:27 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

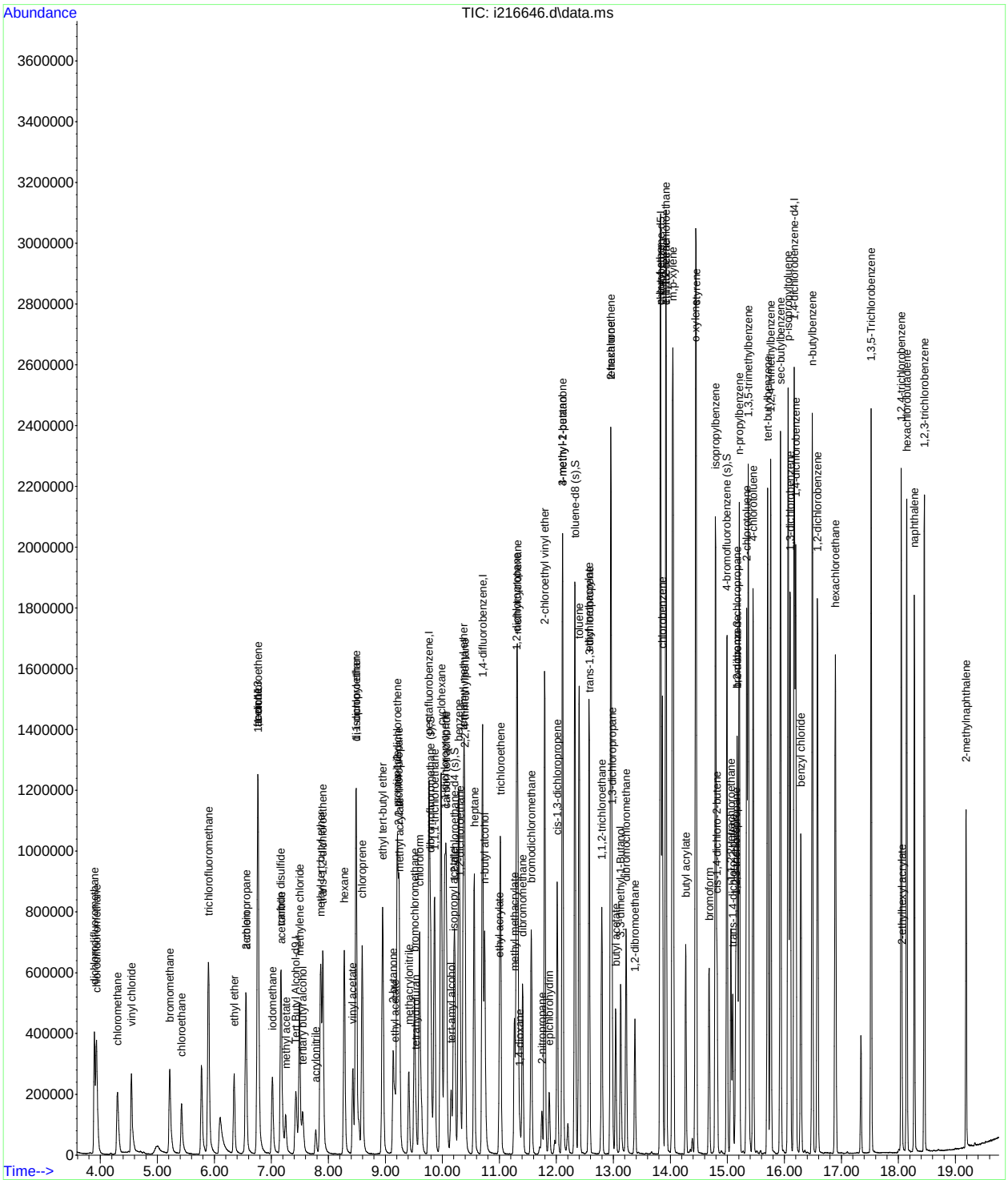
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	363527	57.08	ug/L	97
120) naphthalene	18.279	128	998217	58.02	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	515101	55.92	ug/L	99
122) 2-methylnaphthalene	19.189	142	387822	28.57	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216646.d
Acq On : 6 Nov 2017 3:08 pm
Operator : PrashanS
Sample : BS
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 07 12:40:27 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216671.d
Acq On : 7 Nov 2017 12:19 pm
Operator : PrashanS
Sample : bs
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 08 17:44:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.431	65	305225	500.00	ug/L		0.00
4) pentafluorobenzene	9.764	168	805959	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1142706	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	1009165	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	639027	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	420416	50.26	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.52%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	495259	53.24	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 106.48%				
72) toluene-d8 (s)	12.327	98	1218851	48.03	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.06%				
96) 4-bromofluorobenzene (s)	14.989	95	489878	48.15	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 96.30%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.547	59	171431	254.96	ug/L		96
3) 1,4-dioxane	11.349	88	88160	1366.34	ug/L		100
5) dichlorodifluoromethane	3.896	85	528604	54.69	ug/L		100
6) chlorodifluoromethane	3.932	51	379792	45.59	ug/L		99
7) chloromethane	4.299	50	308141	47.73	ug/L		97
8) vinyl chloride	4.544	62	327609	50.74	ug/L		99
9) bromomethane	5.219	94	244628	48.80	ug/L		94
10) chloroethane	5.423	64	187020	52.82	ug/L		97
11) trichlorofluoromethane	5.899	101	672558	52.54	ug/L		99
12) ethyl ether	6.344	74	132748	53.79	ug/L		98
13) 2-chloropropane	6.553	63	102708	49.14	ug/L		92
14) acrolein	6.558	56	36604	48.86	ug/L		90
15) freon 113	6.762	151	239193	45.28	ug/L		99
16) 1,1-dichloroethene	6.762	61	418901	48.76	ug/L		94
17) acetone	6.762	58	76005	172.78	ug/L		99
18) iodomethane	7.018	142	376144	50.58	ug/L		97
19) carbon disulfide	7.165	76	796800	41.68	ug/L		100
20) acetonitrile	7.175	41	270538	440.83	ug/L		98
21) methyl acetate	7.254	74	38578	50.75	ug/L		96
22) methylene chloride	7.494	84	262552	47.25	ug/L		97
23) acrylonitrile	7.782	53	65897	46.53	ug/L		97
24) methyl tert butyl ether	7.866	73	771454	52.43	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	389868	48.74	ug/L		97
26) hexane	8.279	57	324828	41.59	ug/L		98
27) 1,1-dichloroethane	8.488	63	479057	48.52	ug/L		96
28) vinyl acetate	8.430	86	43098	55.35	ug/L	#	94
29) di-isopropyl ether	8.488	45	732012	51.63	ug/L		97
30) chloroprene	8.593	53	446770	49.59	ug/L		98
31) ethyl tert-butyl ether	8.953	59	812470	53.41	ug/L		99
32) 2-butanone	9.137	72	103022	195.52	ug/L		97
33) 2,2-dichloropropane	9.236	77	526261	47.37	ug/L		97
34) ethyl acetate	9.173	45	33008	46.60	ug/L	#	89
35) cis-1,2-dichloroethene	9.210	96	300429	45.79	ug/L		94
36) propionitrile	9.205	54	354200	492.10	ug/L		98
37) methyl acrylate	9.252	85	37848	51.04	ug/L		98
38) methacrylonitrile	9.409	67	89196	49.59	ug/L		95
39) bromochloromethane	9.508	128	156714	49.84	ug/L		95
40) tetrahydrofuran	9.534	71	27171	43.35	ug/L		92
41) chloroform	9.597	83	593764	47.05	ug/L		99
42) carbon tetrachloride	10.068	117	588818	50.40	ug/L		98
43) 1,1-dichloropropene	10.041	75	407514	48.42	ug/L		99
46) 1,1,1-trichloroethane	9.864	97	605437	49.06	ug/L		99
47) cyclohexane	9.984	84	317928	44.06	ug/L		88
48) tert-amyl alcohol	10.151	55	60307	256.13	ug/L		93
51) isopropyl acetate	10.193	87	50405	51.88	ug/L	#	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216671.d
Acq On : 7 Nov 2017 12:19 pm
Operator : PrashanS
Sample : bs
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 08 17:44:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	1,2-dichloroethane	10.308	62	494058	52.03	ug/L		98
53)	benzene	10.287	78	1006577	47.45	ug/L		99
54)	2,2,4-trimethylpentane	10.392	57	938327	49.87	ug/L		99
55)	tert-amyl methyl ether	10.371	87	204284	53.72	ug/L		96
56)	heptane	10.559	57	191001	48.75	ug/L		97
57)	n-butyl alcohol	10.742	56	410977	2745.56	ug/L		98
58)	trichloroethene	11.019	95	311168	48.81	ug/L		95
59)	ethyl acrylate	10.998	55	273841	53.99	ug/L		99
60)	methylcyclohexane	11.318	83	480421	50.21	ug/L		99
61)	1,2-dichloropropane	11.302	63	251613	50.95	ug/L		100
62)	methyl methacrylate	11.265	100	65042	52.04	ug/L	#	92
63)	dibromomethane	11.406	93	198785	52.96	ug/L		93
64)	bromodichloromethane	11.558	83	461371	52.73	ug/L		99
65)	2-nitropropane	11.746	41	86641	49.69	ug/L		92
66)	2-chloroethyl vinyl ether	11.793	63	644044	279.41	ug/L		99
67)	epichlorohydrin	11.872	57	127495	253.20	ug/L		99
68)	cis-1,3-dichloropropene	12.013	75	462467	52.17	ug/L		99
69)	4-methyl-2-pentanone	12.113	58	324971	215.80	ug/L		91
70)	3-methyl-1-butanol	12.107	70	151280	1097.91	ug/L		96
73)	toluene	12.400	92	648864	47.12	ug/L		98
74)	trans-1,3-dichloropropene	12.578	75	460786	49.89	ug/L		99
75)	ethyl methacrylate	12.573	69	281396	53.55	ug/L		98
76)	1,1,2-trichloroethane	12.798	83	187920	50.55	ug/L		99
77)	1,3-dichloropropane	12.976	76	387610	52.62	ug/L		99
78)	tetrachloroethene	12.955	166	354479	44.43	ug/L		96
79)	2-hexanone	12.955	58	307819	194.16	ug/L		94
80)	butyl acetate	13.038	56	126176	50.01	ug/L		92
81)	3,3-dimethyl-1-Butanol	13.127	69	171818	517.97	ug/L		98
82)	n-butyl ether	13.823	57	874447	48.50	ug/L		99
83)	dibromochloromethane	13.221	129	384612	52.68	ug/L		98
84)	1,2-dibromoethane	13.378	107	272717	51.80	ug/L		98
85)	chlorobenzene	13.859	112	768289	47.21	ug/L		98
86)	1,1,1,2-tetrachloroethane	13.922	131	348515	51.59	ug/L		96
87)	ethylbenzene	13.922	91	1226880	46.81	ug/L		99
88)	m,p-xylene	14.042	106	985357	96.74	ug/L		100
89)	o-xylene	14.445	106	491537	50.54	ug/L		94
90)	styrene	14.450	104	830700	52.55	ug/L		98
91)	butyl acrylate	14.267	55	387899	51.61	ug/L		97
92)	cis-1,4-dichloro-2-butene	14.817	88	176098	55.05	ug/L		98
93)	bromoform	14.681	173	272280	52.12	ug/L		100
94)	isopropylbenzene	14.790	105	1266767	49.61	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.062	83	292415	51.24	ug/L		96
98)	trans-1,4-dichloro-2-b...	15.094	53	95603	50.29	ug/L		97
99)	1,2,3-trichloropropane	15.146	110	97793	50.84	ug/L		98
100)	bromobenzene	15.172	156	389142	46.83	ug/L		97
101)	n-propylbenzene	15.209	91	1477130	48.45	ug/L		99
102)	2-chlorotoluene	15.340	126	336067	49.45	ug/L		98
103)	4-chlorotoluene	15.449	91	962594	49.31	ug/L		99
104)	1,3,5-trimethylbenzene	15.366	105	1140057	50.75	ug/L		99
105)	tert-butylbenzene	15.706	134	229560	51.29	ug/L		97
106)	1,2,4-trimethylbenzene	15.758	105	1177612	49.87	ug/L		99
107)	sec-butylbenzene	15.931	105	1470233	51.31	ug/L		99
108)	p-isopropyltoluene	16.067	119	1313643	51.85	ug/l		98
109)	benzyl chloride	16.291	91	710524	54.94	ug/L		99
110)	1,3-dichlorobenzene	16.103	146	744415	47.01	ug/L		98
111)	1,4-dichlorobenzene	16.197	146	754903	46.28	ug/L		97
112)	1,2-dichlorobenzene	16.584	146	732282	49.07	ug/L		98
113)	n-butylbenzene	16.490	92	661076	52.19	ug/L		99
114)	hexachloroethane	16.898	201	285145	47.90	ug/L		95
115)	1,2-dibromo-3-chloropr...	15.172	157	28532	47.74	ug/L		80
116)	1,3,5-Trichlorobenzene	17.521	180	648267	51.01	ug/L		100
117)	1,2,4-trichlorobenzene	18.049	180	560746	55.53	ug/L		99
118)	2-ethylhexyl acrylate	18.065	55	74047	10.90	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216671.d
Acq On : 7 Nov 2017 12:19 pm
Operator : PrashanS
Sample : bs
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 08 17:44:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	387635	55.96	ug/L	95
120) naphthalene	18.279	128	1081560	57.79	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	573736	57.26	ug/L	99
122) 2-methylnaphthalene	19.189	142	418645	28.35	ug/L	97

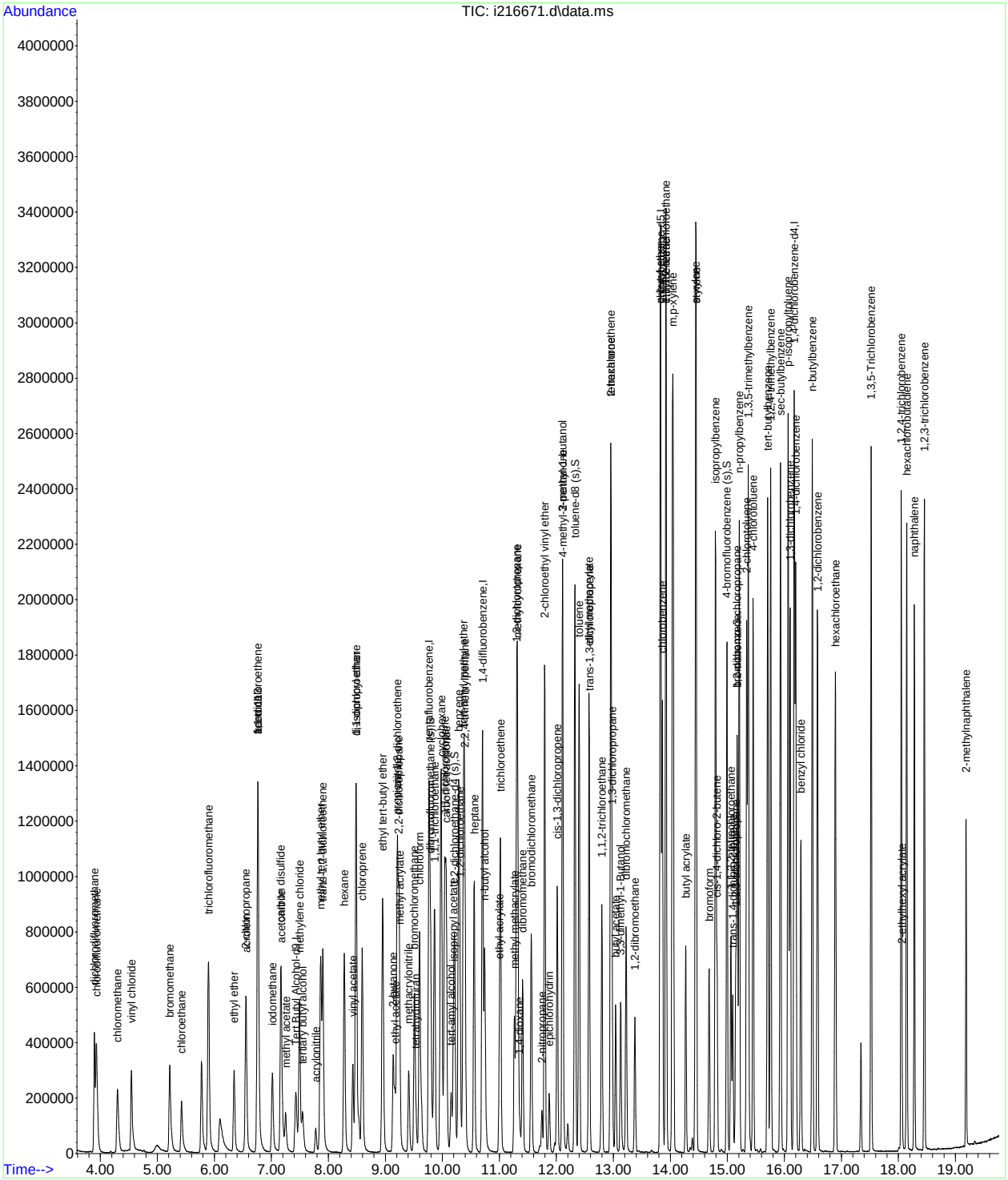
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216671.d
Acq On : 7 Nov 2017 12:19 pm
Operator : PrashanS
Sample : bs
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 08 17:44:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153130.d
Acq On : 7 Nov 2017 1:07 pm
Operator : prashans
Sample : BS Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:34:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.567	65	123905	500.00	ug/L		-0.02
4) pentafluorobenzene	9.827	168	286578	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.747	114	465411	50.00	ug/L		0.00
78) chlorobenzene-d5	13.865	117	364240	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	183248	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.895	113	145931	49.65	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.30%				
45) 1,2-dichloroethane-d4 (s)	10.319	65	152247	50.15	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.30%				
77) toluene-d8 (s)	12.364	98	497139	46.98	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.96%				
94) 4-bromofluorobenzene (s)	15.010	95	169100	48.86	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 97.72%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.688	59	81856	260.62	ug/L		84
3) 1,4-dioxane	11.474	88	39136	1375.24	ug/L		99
5) dichlorodifluoromethane	3.896	85	203586	41.86	ug/L		98
6) chlorodifluoromethane	3.938	51	200680	46.55	ug/L		99
7) chloromethane	4.340	50	230524	47.67	ug/L		98
8) vinyl chloride	4.586	62	224204	49.87	ug/L		98
9) bromomethane	5.298	94	119289	49.79	ug/L		97
10) chloroethane	5.491	64	109594	48.93	ug/L		98
11) trichlorofluoromethane	5.941	101	235086	44.33	ug/L		98
12) ethyl ether	6.406	74	75028	57.38	ug/L		99
13) 2-chloropropane	6.610	63	60291	51.37	ug/L		93
14) acrolein	6.704	56	25040	54.79	ug/L		94
15) freon 113	6.778	151	99228	48.99	ug/L		98
16) 1,1-dichloroethene	6.846	61	207237	46.48	ug/L		99
17) acetone	6.929	58	47276	196.57	ug/L		92
18) iodomethane	7.144	142	133861	49.53	ug/L		96
19) carbon disulfide	7.254	76	464808	46.07	ug/L		100
20) acetonitrile	7.405	41	189715	475.08	ug/L		98
22) methyl acetate	7.400	74	22428	55.97	ug/L		99
23) methylene chloride	7.609	84	144284	49.14	ug/L		96
24) acrylonitrile	7.970	53	47706	50.76	ug/L		93
25) methyl tert butyl ether	7.907	73	369253	57.16	ug/L		98
26) trans-1,2-dichloroethene	7.981	61	205710	47.53	ug/L		98
27) hexane	8.263	57	218066	45.77	ug/L		96
28) 1,1-dichloroethane	8.572	63	258026	49.23	ug/L		99
29) vinyl acetate	8.551	86	22135	55.92	ug/L	#	94
30) di-isopropyl ether	8.509	45	489690	54.16	ug/L		99
31) chloroprene	8.666	53	208346	44.90	ug/L		96
32) ethyl tert-butyl ether	8.980	59	439825	53.94	ug/L		99
33) 2-butanone	9.288	72	59446	212.85	ug/L		99
34) 2,2-dichloropropane	9.299	77	206971	46.36	ug/L		97
35) ethyl acetate	9.293	45	20855	53.10	ug/L		97
36) cis-1,2-dichloroethene	9.320	96	153163	48.76	ug/L		99
37) Methyl Acrylate	9.377	85	19703	57.09	ug/L		95
38) propionitrile	9.414	54	215939	528.54	ug/L		99
39) methacrylonitrile	9.586	67	54349	54.51	ug/L		100
40) bromochloromethane	9.639	128	70126	55.73	ug/L		97
41) tetrahydrofuran	9.670	71	16983	49.52	ug/L		99
42) chloroform	9.691	83	252112	48.05	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153130.d
Acq On : 7 Nov 2017 1:07 pm
Operator : prashans
Sample : BS Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:34:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) tert-Butyl Formate	9.701	59	43300	68.07	ug/L		87
46) 1,1,1-trichloroethane	9.921	97	209178	46.38	ug/L		98
47) cyclohexane	9.979	84	173204	47.52	ug/L		98
49) 1,1-dichloropropene	10.104	75	195722	46.68	ug/L		98
50) iso-butyl alcohol	10.376	74	42933	504.88	ug/L	#	86
51) carbon tetrachloride	10.120	117	188468	45.60	ug/L		98
52) isopropyl acetate	10.292	61	54073	53.96	ug/L		94
53) 1,2-dichloroethane	10.407	62	177649	53.14	ug/L		98
54) benzene	10.376	78	554154	46.90	ug/L		99
55) 2,2,4-trimethylpentane	10.334	57	561060	43.95	ug/L		98
56) tert-amyl methyl ether	10.381	73	390491	50.92	ug/L		98
57) heptane	10.512	57	116511	45.86	ug/L		98
58) n-butyl alcohol	10.883	56	203189	2536.80	ug/L		99
59) trichloroethene	11.082	95	142721	46.97	ug/L		98
60) methylcyclohexane	11.276	83	251370	43.53	ug/L		98
61) 1,2-dichloropropane	11.359	63	151434	52.66	ug/L		97
62) methyl methacrylate	11.349	100	31145	58.07	ug/L	#	94
63) dibromomethane	11.527	93	87001	54.51	ug/L		96
64) bromodichloromethane	11.647	83	193480	52.11	ug/L		98
65) 2-nitropropane	11.872	41	46275	48.14	ug/L	#	85
66) 2-chloroethyl vinyl ether	11.872	63	336118	274.91	ug/L		98
67) epichlorohydrin	12.013	57	64845	233.84	ug/L		100
68) cis-1,3-dichloropropene	12.092	75	236197	53.90	ug/L		97
69) 4-methyl-2-pentanone	12.175	58	179014	198.99	ug/L		94
70) 3-methyl-1-butanol	12.201	70	68170	1023.51	ug/L		99
71) toluene	12.437	92	306352	43.82	ug/L		97
72) trans-1,3-dichloropropene	12.646	75	198216	53.77	ug/L		97
73) ethyl methacrylate	12.620	69	143773	52.29	ug/L		98
74) 1,1,2-trichloroethane	12.866	83	98340	52.93	ug/L		97
75) 1,3-dichloropropane	13.043	76	182330	51.69	ug/L		99
76) 2-hexanone	13.017	58	167152	179.84	ug/L		97
79) tetrachloroethene	13.012	166	136630	48.17	ug/L		99
80) butyl acetate	13.080	56	72301	51.71	ug/L		99
81) 3,3-Dimethyl-1-Butanol	13.185	69	83527	537.62	ug/L		99
82) n-butyl ether	13.776	57	541233	48.50	ug/L		100
83) dibromochloromethane	13.305	129	142215	57.76	ug/L		99
84) 1,2-dibromoethane	13.457	107	121490	56.68	ug/L		99
85) chlorobenzene	13.896	112	330842	49.68	ug/L		99
86) 1,1,1,2-tetrachloroethane	13.959	131	126900	56.59	ug/L		98
87) ethylbenzene	13.938	91	551795	46.14	ug/L		99
88) m,p-xylene	14.042	106	413563	92.96	ug/L		97
89) o-xylene	14.461	106	205057	47.69	ug/L		97
90) styrene	14.477	104	350605	48.07	ug/L		99
92) bromoform	14.759	173	98007	60.24	ug/L		98
95) isopropylbenzene	14.796	105	524104	45.78	ug/L		99
97) 1,1,2,2-tetrachloroethane	15.125	83	139960	53.13	ug/L		97
98) trans-1,4-dichloro-2-b...	15.167	53	39335	50.88	ug/L		92
99) 1,2,3-trichloropropane	15.198	110	33226	53.47	ug/L		99
100) bromobenzene	15.209	156	142123	50.95	ug/L	#	89
101) n-propylbenzene	15.198	91	649465	44.82	ug/L		98
102) 2-chlorotoluene	15.355	126	128783	49.03	ug/L		99
103) 4-chlorotoluene	15.455	91	380665	46.47	ug/L		100
104) 1,3,5-trimethylbenzene	15.350	105	418373	45.77	ug/L		100
105) tert-butylbenzene	15.695	134	81784	46.71	ug/L		97
107) 1,2,4-trimethylbenzene	15.748	105	424303	45.14	ug/L		100
108) sec-butylbenzene	15.910	105	587655	46.05	ug/L		99
109) p-isopropyltoluene	16.030	119	473412	46.79	ug/l		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153130.d
Acq On : 7 Nov 2017 1:07 pm
Operator : prashans
Sample : BS Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:34:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration

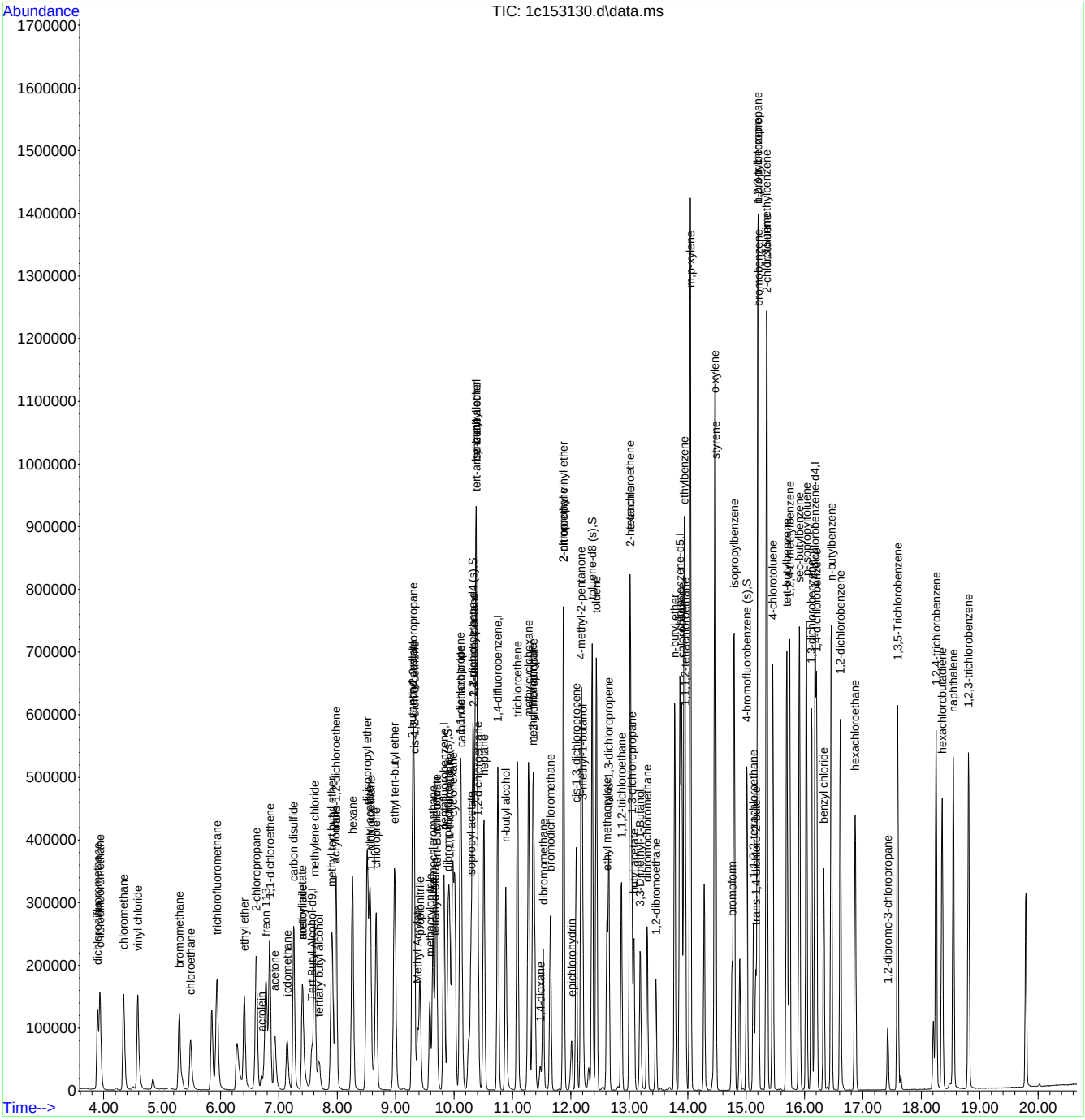
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) benzyl chloride	16.328	91	260055	51.50	ug/L	98
111) 1,3-dichlorobenzene	16.119	146	263539	50.00	ug/L	98
112) 1,4-dichlorobenzene	16.208	146	262071	48.94	ug/L	98
113) 1,2-dichlorobenzene	16.610	146	257134	52.15	ug/L	99
114) n-butylbenzene	16.459	92	246825	43.36	ug/L	96
115) hexachloroethane	16.867	201	92217	54.26	ug/L	96
116) 1,2-dibromo-3-chloropr...	17.426	157	32044	54.70	ug/L	95
117) 1,3,5-Trichlorobenzene	17.594	180	212980	47.62	ug/L	98
118) 1,2,4-trichlorobenzene	18.253	180	200037	54.43	ug/L	99
119) hexachlorobutadiene	18.357	225	117703	50.27	ug/L	98
120) naphthalene	18.546	128	450588	53.01	ug/L	100
121) 1,2,3-trichlorobenzene	18.807	180	193786	55.77	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153130.d
Acq On : 7 Nov 2017 1:07 pm
Operator : prashans
Sample : BS Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:34:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153152.d
Acq On : 8 Nov 2017 12:53 am
Operator : prashans
Sample : bs Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 08 23:47:07 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.568	65	125757	500.00	ug/L		-0.02
4) pentafluorobenzene	9.827	168	293052	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.748	114	470487	50.00	ug/L		0.00
78) chlorobenzene-d5	13.865	117	369373	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	183688	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.895	113	147790	49.17	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.34%				
45) 1,2-dichloroethane-d4 (s)	10.319	65	149736	48.23	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 96.46%				
77) toluene-d8 (s)	12.364	98	500353	46.77	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.54%				
94) 4-bromofluorobenzene (s)	15.010	95	172820	49.81	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 99.62%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.693	59	85496	268.20	ug/L		86
3) 1,4-dioxane	11.475	88	40772	1411.63	ug/L		100
5) dichlorodifluoromethane	3.896	85	244559	49.18	ug/L		100
6) chlorodifluoromethane	3.938	51	214344	48.62	ug/L		100
7) chloromethane	4.341	50	270736	54.75	ug/L		99
8) vinyl chloride	4.581	62	261235	56.82	ug/L		99
9) bromomethane	5.292	94	138463	56.52	ug/L		98
10) chloroethane	5.486	64	128553	56.13	ug/L		98
11) trichlorofluoromethane	5.941	101	276134	50.92	ug/L		97
12) ethyl ether	6.406	74	76116	56.92	ug/L		96
13) 2-chloropropane	6.610	63	62676	52.22	ug/L		94
14) acrolein	6.705	56	26281	56.23	ug/L		97
15) freon 113	6.778	151	108085	52.18	ug/L		96
16) 1,1-dichloroethene	6.846	61	216264	47.43	ug/L		99
17) acetone	6.929	58	46470	188.95	ug/L		90
18) iodomethane	7.144	142	138764	50.21	ug/L		94
19) carbon disulfide	7.254	76	491559	47.64	ug/L		100
20) acetonitrile	7.405	41	190406	466.28	ug/L		99
22) methyl acetate	7.405	74	22369	54.59	ug/L	#	90
23) methylene chloride	7.615	84	145418	48.43	ug/L		98
24) acrylonitrile	7.976	53	47970	49.91	ug/L		97
25) methyl tert butyl ether	7.908	73	374391	56.67	ug/L		97
26) trans-1,2-dichloroethene	7.981	61	213018	48.13	ug/L		98
27) hexane	8.258	57	264931	54.38	ug/L		98
28) 1,1-dichloroethane	8.567	63	264579	49.37	ug/L		99
29) vinyl acetate	8.551	86	21817	53.90	ug/L		99
30) di-isopropyl ether	8.509	45	488113	52.79	ug/L		99
31) chloroprene	8.666	53	216944	45.72	ug/L		98
32) ethyl tert-butyl ether	8.980	59	440565	52.83	ug/L		98
33) 2-butanone	9.288	72	58800	205.89	ug/L		91
34) 2,2-dichloropropane	9.299	77	200603	43.94	ug/L		98
35) ethyl acetate	9.294	45	20720	51.59	ug/L		98
36) cis-1,2-dichloroethene	9.320	96	157586	49.06	ug/L		98
37) Methyl Acrylate	9.377	85	19969	56.59	ug/L		97
38) propionitrile	9.414	54	213221	510.36	ug/L		96
39) methacrylonitrile	9.586	67	54244	53.20	ug/L		100
40) bromochloromethane	9.639	128	71461	55.54	ug/L		98
41) tetrahydrofuran	9.665	71	17205	49.06	ug/L		99
42) chloroform	9.691	83	258050	48.09	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153152.d
Acq On : 8 Nov 2017 12:53 am
Operator : prashans
Sample : bs Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 08 23:47:07 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-Butyl Formate	9.707	59	17348	26.67	ug/L	#	81
46)	1,1,1-trichloroethane	9.921	97	218287	47.33	ug/L		97
47)	cyclohexane	9.979	84	198164	53.16	ug/L		96
49)	1,1-dichloropropene	10.104	75	206626	48.75	ug/L		98
50)	iso-butyl alcohol	10.376	74	44988	523.34	ug/L		92
51)	carbon tetrachloride	10.120	117	194714	46.61	ug/L		99
52)	isopropyl acetate	10.287	61	53481	52.73	ug/L		98
53)	1,2-dichloroethane	10.408	62	179951	53.25	ug/L		97
54)	benzene	10.376	78	573207	47.98	ug/L		99
55)	2,2,4-trimethylpentane	10.329	57	632330	49.00	ug/L		98
56)	tert-amyl methyl ether	10.381	73	395206	50.97	ug/L		98
57)	heptane	10.512	57	144519	56.27	ug/L		98
58)	n-butyl alcohol	10.884	56	209858	2591.79	ug/L		96
59)	trichloroethene	11.088	95	150948	49.14	ug/L		99
60)	methylcyclohexane	11.276	83	266449	45.65	ug/L		96
61)	1,2-dichloropropane	11.360	63	151859	52.24	ug/L		96
62)	methyl methacrylate	11.344	100	31323	57.77	ug/L	#	79
63)	dibromomethane	11.522	93	88309	54.73	ug/L		97
64)	bromodichloromethane	11.647	83	197259	52.55	ug/L		99
65)	2-nitropropane	11.872	41	44716	46.02	ug/L	#	92
66)	2-chloroethyl vinyl ether	11.872	63	310500	251.21	ug/L		98
67)	epichlorohydrin	12.013	57	64855	231.36	ug/L		98
68)	cis-1,3-dichloropropene	12.092	75	240496	54.28	ug/L		96
69)	4-methyl-2-pentanone	12.181	58	181571	199.66	ug/L		94
70)	3-methyl-1-butanol	12.202	70	71623	1063.75	ug/L		98
71)	toluene	12.437	92	317767	44.96	ug/L		98
72)	trans-1,3-dichloropropene	12.646	75	200635	53.84	ug/L		96
73)	ethyl methacrylate	12.620	69	148736	53.52	ug/L		95
74)	1,1,2-trichloroethane	12.866	83	102135	54.38	ug/L		99
75)	1,3-dichloropropane	13.044	76	182057	51.05	ug/L		99
76)	2-hexanone	13.017	58	170286	181.24	ug/L		97
79)	tetrachloroethene	13.007	166	151425	52.65	ug/L		97
80)	butyl acetate	13.080	56	73578	51.90	ug/L		95
81)	3,3-Dimethyl-1-Butanol	13.185	69	87613	556.08	ug/L		98
82)	n-butyl ether	13.776	57	564212	49.85	ug/L		99
83)	dibromochloromethane	13.305	129	145159	58.13	ug/L		99
84)	1,2-dibromoethane	13.457	107	124045	57.07	ug/L		97
85)	chlorobenzene	13.896	112	347628	51.47	ug/L		99
86)	1,1,1,2-tetrachloroethane	13.959	131	130412	57.35	ug/L		99
87)	ethylbenzene	13.938	91	584603	48.21	ug/L		99
88)	m,p-xylene	14.043	106	440030	97.54	ug/L		99
89)	o-xylene	14.461	106	215495	49.42	ug/L		98
90)	styrene	14.477	104	371115	50.17	ug/L		99
92)	bromoform	14.759	173	101115	61.28	ug/L		97
95)	isopropylbenzene	14.796	105	558644	48.67	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.125	83	142772	54.07	ug/L		98
98)	trans-1,4-dichloro-2-b...	15.162	53	38755	50.01	ug/L		96
99)	1,2,3-trichloropropane	15.198	110	33158	53.23	ug/L		98
100)	bromobenzene	15.209	156	148653	53.16	ug/L	#	88
101)	n-propylbenzene	15.198	91	705457	48.57	ug/L		99
102)	2-chlorotoluene	15.355	126	138337	52.54	ug/L		93
103)	4-chlorotoluene	15.455	91	411077	50.07	ug/L		99
104)	1,3,5-trimethylbenzene	15.345	105	446089	48.68	ug/L		99
105)	tert-butylbenzene	15.695	134	88687	50.53	ug/L		97
107)	1,2,4-trimethylbenzene	15.742	105	458622	48.67	ug/L		100
108)	sec-butylbenzene	15.915	105	629001	49.17	ug/L		99
109)	p-isopropyltoluene	16.030	119	517119	50.99	ug/l		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153152.d
Acq On : 8 Nov 2017 12:53 am
Operator : prashans
Sample : bs Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 08 23:47:07 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) benzyl chloride	16.328	91	248779	49.15	ug/L	99
111) 1,3-dichlorobenzene	16.119	146	283864	53.73	ug/L	99
112) 1,4-dichlorobenzene	16.208	146	285669	53.22	ug/L	98
113) 1,2-dichlorobenzene	16.611	146	270263	54.68	ug/L	99
114) n-butylbenzene	16.459	92	282416	49.49	ug/L	98
115) hexachloroethane	16.867	201	98797	57.99	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.427	157	32521	55.38	ug/L	93
117) 1,3,5-Trichlorobenzene	17.594	180	243655	54.35	ug/L	98
118) 1,2,4-trichlorobenzene	18.253	180	221313	60.07	ug/L	97
119) hexachlorobutadiene	18.358	225	132124	56.29	ug/L	99
120) naphthalene	18.546	128	466435	54.75	ug/L	100
121) 1,2,3-trichlorobenzene	18.807	180	209079	60.02	ug/L	99

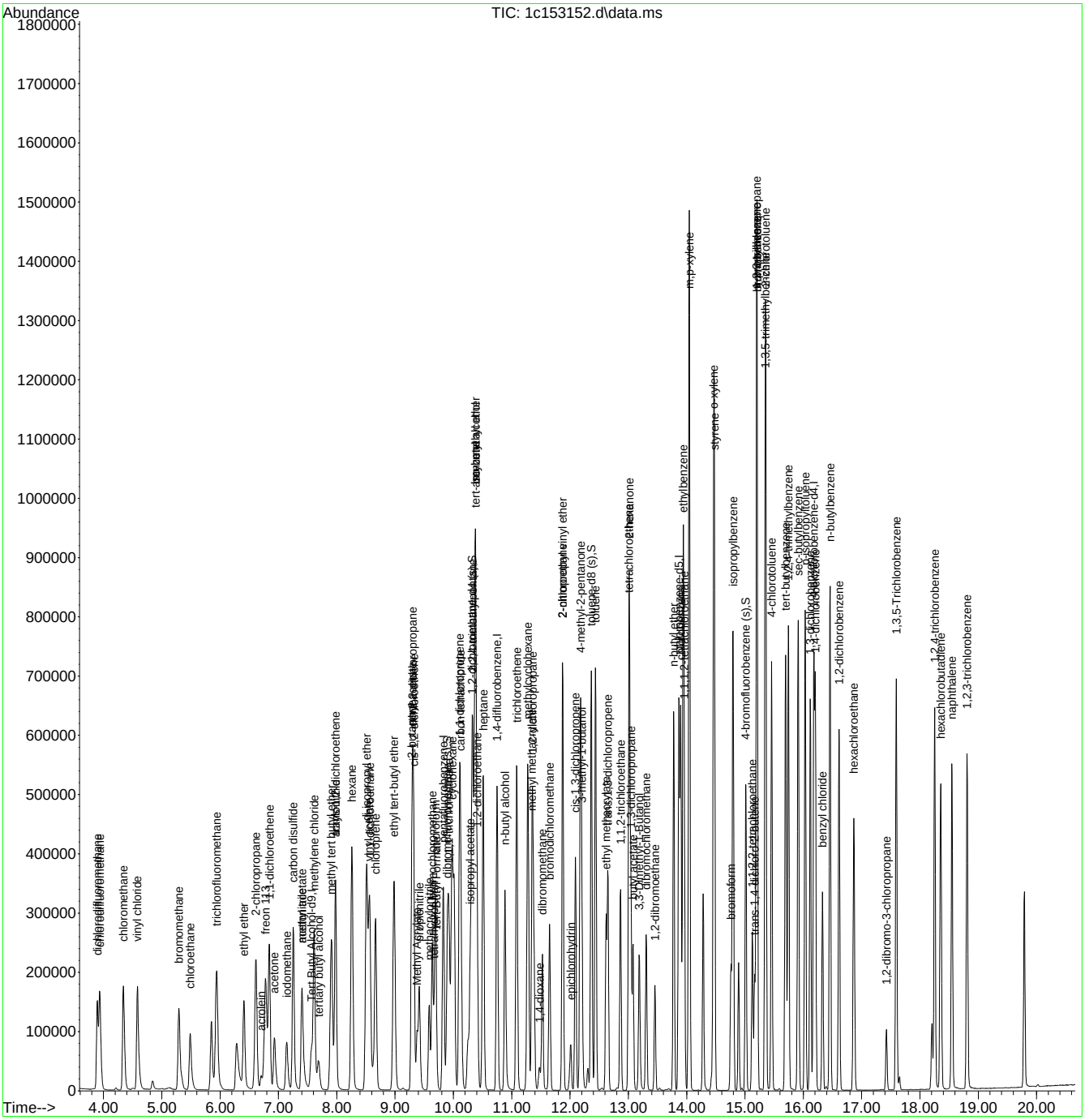
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153152.d
Acq On : 8 Nov 2017 12:53 am
Operator : prashans
Sample : bs Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 08 23:47:07 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248813.D
Acq On : 9 Nov 2017 11:20 am
Operator : ThienN
Sample : bs
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 09 12:32:14 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.744	65	99456	500.00	ug/L	-0.02
5) pentafluorobenzene	9.960	168	188446	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.917	114	296159	50.00	ug/L	-0.02
75) chlorobenzene-d5	14.315	117	291414	50.00	ug/L	-0.02
99) 1,4-dichlorobenzene-d4	16.950	152	167243	50.00	ug/L	-0.01
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.013	113	84106	48.50	ug/L	-0.02
Spiked Amount 50.000	Range 72 - 129		Recovery = 97.00%			
55) 1,2-dichloroethane-d4 (s)	10.441	65	89202	43.44	ug/L	-0.02
Spiked Amount 50.000	Range 73 - 132		Recovery = 86.88%			
76) toluene-d8 (s)	12.637	98	352920	47.56	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.12%			
100) 4-bromofluorobenzene (s)	15.633	95	141332	50.23	ug/L	-0.01
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.46%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.853	59	72147	232.52	ug/L	99
4) 1,4-dioxane	11.597	88	30555	1389.81	ug/L	97
6) chlorodifluoromethane	4.518	51	123525	45.38	ug/L	98
7) dichlorodifluoromethane	4.507	85	125592	42.55	ug/L	99
8) chloromethane	4.816	50	178729	44.41	ug/L	96
9) vinyl chloride	5.093	62	177534	46.19	ug/L	100
11) bromomethane	5.694	94	114154	46.00	ug/L	95
12) chloroethane	5.856	64	95963	46.27	ug/L	95
13) trichlorofluoromethane	6.337	101	157588	44.75	ug/L	99
14) vinyl bromide	6.201	106	109960	39.69	ug/L	98
15) ethyl ether	6.646	74	57072	47.07	ug/L	99
16) 2-chloropropane	6.886	43	188839	39.80	ug/L	98
17) acrolein	6.891	56	27887	47.72	ug/L	97
18) freon 113	7.111	151	81097	41.88	ug/L	96
19) 1,1-dichloroethene	7.090	96	105625	46.16	ug/L	95
20) acetone	7.074	58	39729	193.33	ug/L	86
21) acetonitrile	7.514	41	192117	502.68	ug/L	98
22) iodomethane	7.357	142	203945	45.83	ug/L	98
23) carbon disulfide	7.503	76	404448	46.68	ug/L	100
24) methylene chloride	7.780	84	123622	46.73	ug/L	98
25) methyl acetate	7.514	43	87898	44.49	ug/L	94
26) methyl tert butyl ether	8.120	73	329700	44.84	ug/L	97
27) trans-1,2-dichloroethene	8.157	96	109047	46.47	ug/L	99
28) hexane	8.491	56	70495	41.62	ug/L	95
29) di-isopropyl ether	8.700	45	358727	42.89	ug/L	97
30) 2-butanone	9.359	72	50059	203.36	ug/L #	75
31) 1,1-dichloroethane	8.732	63	183777	45.01	ug/L	98
32) chloroprene	8.826	53	147267	41.77	ug/L	93
33) acrylonitrile	8.052	53	47885	50.10	ug/L	99
34) vinyl acetate	8.638	86	18661	48.68	ug/L #	73
35) ethyl tert-butyl ether	9.160	59	358725	44.36	ug/L	99
36) ethyl acetate	9.364	45	16985	44.64	ug/L	98
37) 2,2-dichloropropane	9.490	77	141600	41.52	ug/L	94

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248813.D
Acq On : 9 Nov 2017 11:20 am
Operator : ThienN
Sample : bs
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 09 12:32:14 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.438	96	118458	46.29	ug/L		98
39) propionitrile	9.443	54	188371	492.39	ug/L		86
40) methyl acrylate	9.458	85	15899	48.93	ug/L	#	88
41) methacrylonitrile	9.641	67	47041	48.80	ug/L		87
42) bromochloromethane	9.741	128	58645	46.86	ug/L		98
43) tetrahydrofuran	9.762	42	35363	44.09	ug/L		96
44) chloroform	9.819	83	171362	44.01	ug/L		97
45) tert-Butyl Formate	9.861	59	13276	8.77	ug/L		100
47) 1,1,1-trichloroethane	10.101	97	153925	44.38	ug/L		98
48) cyclohexane	10.216	84	180175	46.59	ug/L		91
50) 1,1-dichloropropene	10.258	75	131803	43.99	ug/L		98
51) carbon tetrachloride	10.295	117	127279	42.69	ug/L		99
52) tert-amyl alcohol	10.368	73	31860	207.07	ug/L	#	83
53) isopropyl acetate	10.389	87	22850	46.47	ug/L	#	90
56) n-butyl alcohol	10.954	56	182786	2343.56	ug/L		94
57) 2,2,4-Trimethylpentane	10.603	57	414954	45.78	ug/L		96
58) benzene	10.514	78	429423	44.62	ug/L		100
59) tert-amyl methyl ether	10.582	73	328162	42.19	ug/L		100
60) heptane	10.750	57	78657	43.74	ug/L		97
61) 1,2-dichloroethane	10.535	62	118599	40.82	ug/L		96
62) ethyl acrylate	11.210	55	136655	42.84	ug/L		99
63) trichloroethene	11.246	95	104851	44.92	ug/L		97
64) 2-chloroethyl vinyl ether	12.057	63	206612	223.60	ug/L		99
65) methyl methacrylate	11.487	100	31168	45.14	ug/L	#	83
66) methylcyclohexane	11.560	83	203939	40.68	ug/L		98
67) 1,2-dichloropropane	11.550	63	110450	44.61	ug/L		99
68) dibromomethane	11.665	93	65499	44.14	ug/L		97
69) bromodichloromethane	11.816	83	138325	44.31	ug/L		97
70) 2-nitropropane	12.031	41	34090	39.17	ug/L		98
71) epichlorohydrin	12.161	57	60340	232.01	ug/L		98
72) cis-1,3-dichloropropene	12.302	75	183605	44.74	ug/L		94
73) 4-methyl-2-pentanone	12.407	58	184954	172.76	ug/L		91
74) isoamyl alcohol	12.397	70	70982	1002.00	ug/L	#	82
77) toluene	12.721	92	268235	44.00	ug/L		99
78) ethyl methacrylate	12.893	69	151879	43.69	ug/L		92
79) trans-1,3-dichloropropene	12.914	75	157954	44.65	ug/L		98
80) 1,1,2-trichloroethane	13.165	83	84267	46.06	ug/L		95
81) tetrachloroethene	13.332	164	96057	41.63	ug/L		98
82) 2-hexanone	13.332	58	181044	171.74	ug/L		93
83) 1,3-dichloropropane	13.364	76	156709	43.82	ug/L		92
84) butyl acetate	13.416	56	78842	40.65	ug/L		93
85) 3,3-Dimethyl-1-Butanol	13.531	69	90906	450.13	ug/L		97
86) dibromochloromethane	13.641	129	115935	46.14	ug/L		98
87) 1,2-dibromoethane	13.819	107	109594	45.68	ug/L		97
88) n-butyl ether	14.289	57	552982	42.21	ug/L		99
89) chlorobenzene	14.352	112	301941	44.00	ug/L		98
90) 1,1,1,2-tetrachloroethane	14.425	131	106860	42.22	ug/L		99
91) ethylbenzene	14.415	91	508383	42.59	ug/L		99
92) m,p-xylene	14.550	106	402148	85.81	ug/L		100
93) o-xylene	15.005	91	438866	43.00	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248813.D
Acq On : 9 Nov 2017 11:20 am
Operator : ThienN
Sample : bs
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 09 12:32:14 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) styrene	15.021	104	358963	43.00	ug/L	99
95) butyl acrylate	14.801	55	249994	41.06	ug/L	98
96) isopropylbenzene	15.397	105	570888	42.71	ug/L	100
97) bromoform	15.288	173	92436	46.91	ug/L	99
98) cis-1,4-dichloro-2-butene	15.439	88	48623	42.66	ug/L	94
101) 1,1,2,2-tetrachloroethane	15.716	83	149111	48.35	ug/L	98
102) trans-1,4-dichloro-2-b...	15.748	53	38059	46.02	ug/L	94
103) 1,2,3-trichloropropane	15.816	110	38278	47.58	ug/L	100
104) bromobenzene	15.842	156	145025	45.34	ug/L	100
105) n-propylbenzene	15.868	91	643114	44.71	ug/L	100
106) 2-chlorotoluene	16.025	126	132517	45.34	ug/L	98
107) 4-chlorotoluene	16.150	91	393569	44.85	ug/L	98
108) 1,3,5-trimethylbenzene	16.046	105	461945	45.02	ug/L	99
109) tert-butylbenzene	16.427	119	410592	45.65	ug/L	100
110) 1,2,4-trimethylbenzene	16.485	105	481009	44.58	ug/L	100
111) sec-butylbenzene	16.678	105	651839	45.95	ug/L	100
112) p-isopropyltoluene	16.819	119	542848	45.74	ug/L	100
113) 1,3-dichlorobenzene	16.872	146	279092	43.73	ug/L	99
114) 1,4-dichlorobenzene	16.982	146	280156	44.60	ug/L	99
115) 1,2-dichlorobenzene	17.400	146	281655	44.88	ug/L	99
116) Benzyl Chloride	17.081	91	293116	48.43	ug/L	100
117) n-butylbenzene	17.279	92	282909	47.81	ug/L	100
118) 2-ethylhexyl acrylate	19.198	55	21008	6.83	ug/L	97
119) hexachloroethane	17.734	201	103502	50.77	ug/L	97
120) 1,2-dibromo-3-chloropr...	18.252	75	26069	47.24	ug/L	93
121) 1,3,5-trichlorobenzene	18.466	180	244093	48.20	ug/L	99
122) Nitrobenzene	18.477	77	7002	46.15	ug/L	97
123) 1,2,4-trichlorobenzene	19.219	180	194389	48.68	ug/L	98
124) hexachlorobutadiene	19.345	225	110598	51.75	ug/L	99
125) naphthalene	19.575	128	377425	48.76	ug/L	99
126) 1,2,3-trichlorobenzene	19.852	180	150705	49.79	ug/L	99
127) 2-methylnaphthalene	20.986	142	41361	17.78	ug/L	95

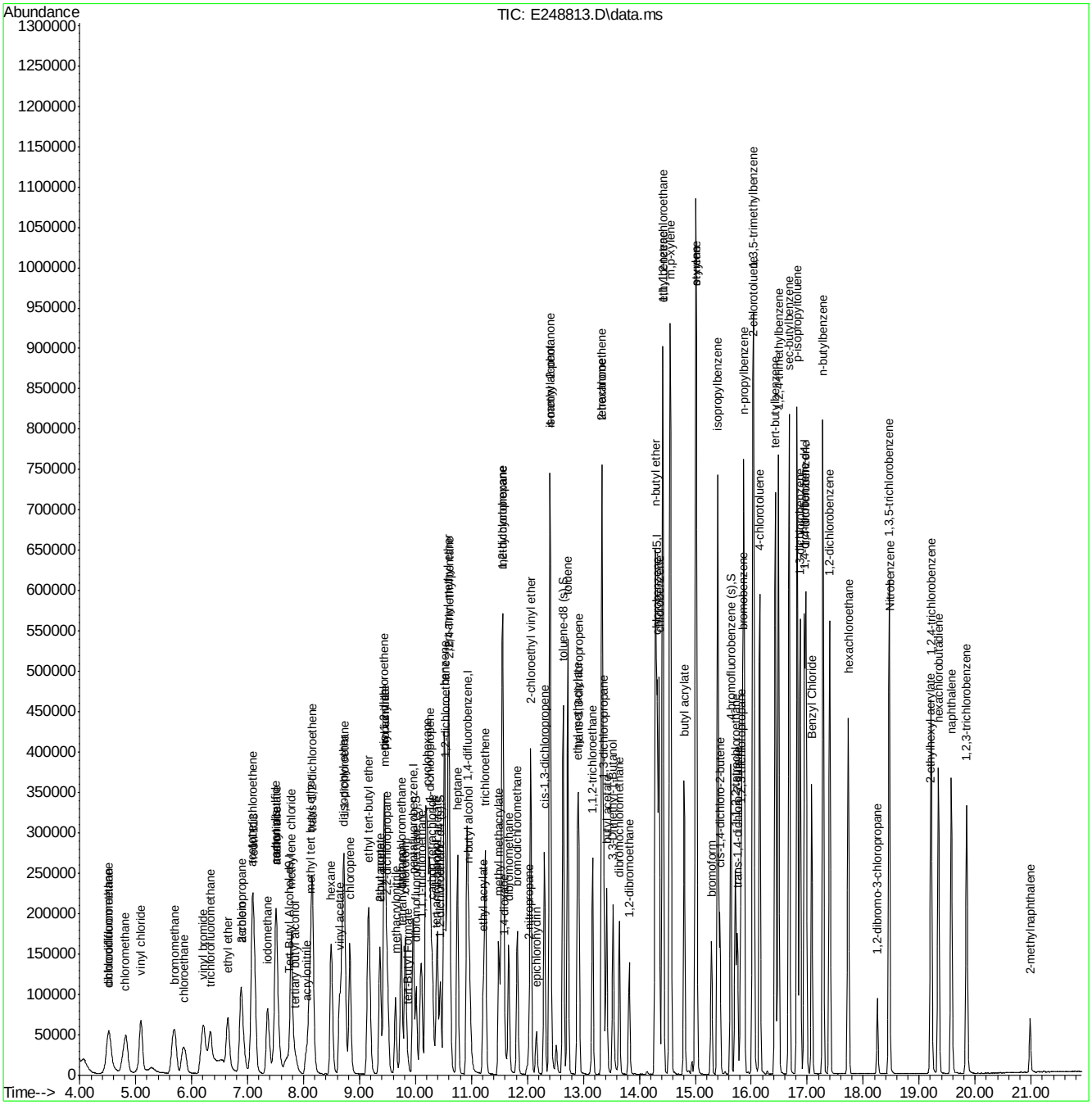
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248813.D
Acq On : 9 Nov 2017 11:20 am
Operator : ThienN
Sample : bs
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 09 12:32:14 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216623.d
Acq On : 4 Nov 2017 4:58 pm
Operator : PrashanS
Sample : JC54428-2MS Inst : GCMSI
Misc : MS21772,VI8698,6.1,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 08:05:26 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	202250	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	680185	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	954240	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	833234	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	513305	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	348869	49.42	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.84%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	432073	55.63	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 111.26%				
72) toluene-d8 (s)	12.322	98	1028160	49.07	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.14%				
96) 4-bromofluorobenzene (s)	14.989	95	411775	50.39	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.78%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.546	59	118347	265.63	ug/L		96
3) 1,4-dioxane	11.349	88	62114	1452.81	ug/L		99
5) dichlorodifluoromethane	3.896	85	447282	54.83	ug/L		98
6) chlorodifluoromethane	3.932	51	349584	49.73	ug/L		99
7) chloromethane	4.298	50	253563	46.54	ug/L		97
8) vinyl chloride	4.544	62	272528	50.01	ug/L		100
9) bromomethane	5.219	94	192128	45.42	ug/L		95
10) chloroethane	5.423	64	150769	50.45	ug/L		98
11) trichlorofluoromethane	5.899	101	559864	51.82	ug/L		100
12) ethyl ether	6.344	74	104875	50.35	ug/L		96
13) 2-chloropropane	6.553	63	90980	51.58	ug/L	#	86
14) acrolein	6.558	56	25162	39.80	ug/L		91
15) freon 113	6.767	151	191418	42.94	ug/L		97
16) 1,1-dichloroethene	6.762	61	372726	51.41	ug/L		94
17) acetone	6.762	58	69043	185.98	ug/L	#	71
18) iodomethane	7.018	142	290070	46.22	ug/L		94
19) carbon disulfide	7.165	76	677361	41.98	ug/L		98
20) acetonitrile	7.180	41	195875	378.19	ug/L		99
21) methyl acetate	7.254	74	27516	42.89	ug/L		99
22) methylene chloride	7.494	84	212826	45.38	ug/L		93
23) acrylonitrile	7.777	53	48430	40.52	ug/L		97
24) methyl tert butyl ether	7.866	73	621309	50.03	ug/L		97
25) trans-1,2-dichloroethene	7.902	61	337409	49.98	ug/L		94
26) hexane	8.279	57	226343	34.34	ug/L		97
27) 1,1-dichloroethane	8.488	63	405758	48.70	ug/L		99
28) vinyl acetate	8.430	86	28567	43.47	ug/L	#	96
29) di-isopropyl ether	8.483	45	621421	51.93	ug/L		98
30) chloroprene	8.593	53	399765	52.58	ug/L		96
31) ethyl tert-butyl ether	8.953	59	679007	52.89	ug/L		100
32) 2-butanone	9.136	72	75786	170.42	ug/L	#	86
33) 2,2-dichloropropane	9.236	77	461512	49.23	ug/L		98
34) ethyl acetate	9.168	45	24978	41.79	ug/L		99
35) cis-1,2-dichloroethene	9.210	96	241624	43.64	ug/L		95
36) propionitrile	9.204	54	253472	417.28	ug/L		97
37) methyl acrylate	9.246	85	27014	43.17	ug/L	#	82
38) methacrylonitrile	9.414	67	66177	43.60	ug/L		99
39) bromochloromethane	9.508	128	119986	45.21	ug/L		94
40) tetrahydrofuran	9.539	71	20939	39.58	ug/L		90
41) chloroform	9.597	83	500708	47.02	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216623.d
Acq On : 4 Nov 2017 4:58 pm
Operator : PrashanS
Sample : JC54428-2MS Inst : GCMSI
Misc : MS21772,VI8698,6.1,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 08:05:26 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) carbon tetrachloride	10.067	117	502776	50.99	ug/L		99
43) 1,1-dichloropropene	10.041	75	346042	48.72	ug/L		98
46) 1,1,1-trichloroethane	9.858	97	528239	50.72	ug/L		99
47) cyclohexane	9.984	84	281673	46.25	ug/L	#	84
48) tert-amyl alcohol	10.151	55	41350	208.09	ug/L		95
51) isopropyl acetate	10.198	87	37247	45.91	ug/L	#	86
52) 1,2-dichloroethane	10.308	62	421819	53.20	ug/L		99
53) benzene	10.287	78	830773	46.90	ug/L		99
54) 2,2,4-trimethylpentane	10.392	57	540022	34.37	ug/L		97
55) tert-amyl methyl ether	10.371	87	166394	52.40	ug/L		95
56) heptane	10.559	57	106305	32.49	ug/L		95
57) n-butyl alcohol	10.742	56	286248	2289.99	ug/L		98
58) trichloroethene	11.014	95	256264	48.13	ug/L		86
59) ethyl acrylate	10.998	55	207848	49.07	ug/L		99
60) methylcyclohexane	11.317	83	353016	44.19	ug/L		98
61) 1,2-dichloropropane	11.302	63	203826	49.42	ug/L		98
62) methyl methacrylate	11.265	100	45878	43.96	ug/L		97
63) dibromomethane	11.406	93	155060	49.47	ug/L		90
64) bromodichloromethane	11.558	83	385099	52.71	ug/L		98
65) 2-nitropropane	11.746	41	65688	45.11	ug/L		93
66) 2-chloroethyl vinyl ether	11.793	63	528627	274.63	ug/L		99
67) epichlorohydrin	11.872	57	90189	214.49	ug/L		97
68) cis-1,3-dichloropropene	12.013	75	387556	52.36	ug/L		98
69) 4-methyl-2-pentanone	12.107	58	242893	193.15	ug/L		99
70) 3-methyl-1-butanol	12.107	70	103227	897.13	ug/L		95
73) toluene	12.400	92	518683	45.62	ug/L		97
74) trans-1,3-dichloropropene	12.573	75	380490	49.89	ug/L		99
75) ethyl methacrylate	12.568	69	218715	50.41	ug/L		95
76) 1,1,2-trichloroethane	12.798	83	149212	48.61	ug/L		98
77) 1,3-dichloropropane	12.975	76	308205	50.67	ug/L		99
78) tetrachloroethene	12.955	166	276159	41.92	ug/L		98
79) 2-hexanone	12.955	58	259889	198.54	ug/L		99
80) butyl acetate	13.038	56	94616	45.42	ug/L		98
81) 3,3-dimethyl-1-Butanol	13.127	69	113687	415.09	ug/L		96
82) n-butyl ether	13.823	57	733893	49.29	ug/L		97
83) dibromochloromethane	13.221	129	300126	49.78	ug/L		99
84) 1,2-dibromoethane	13.378	107	210594	48.44	ug/L		98
85) chlorobenzene	13.859	112	601699	44.78	ug/L		98
86) 1,1,1,2-tetrachloroethane	13.922	131	279586	50.13	ug/L		96
87) ethylbenzene	13.922	91	1008907	46.62	ug/L		98
88) m,p-xylene	14.042	106	790808	94.03	ug/L		97
89) o-xylene	14.440	106	395268	49.22	ug/L		99
90) styrene	14.450	104	670903	51.41	ug/L		98
91) butyl acrylate	14.267	55	312183	50.30	ug/L		99
92) cis-1,4-dichloro-2-butene	14.817	88	133400	50.51	ug/L		96
93) bromoform	14.681	173	201220	46.65	ug/L		99
94) isopropylbenzene	14.790	105	1017401	48.26	ug/L		99
97) 1,1,2,2-tetrachloroethane	15.062	83	216691	47.27	ug/L		96
98) trans-1,4-dichloro-2-b...	15.094	53	73292	47.99	ug/L		92
99) 1,2,3-trichloropropane	15.146	110	72223	46.74	ug/L		100
100) bromobenzene	15.172	156	299045	44.80	ug/L		97
101) n-propylbenzene	15.209	91	1173918	47.93	ug/L		99
102) 2-chlorotoluene	15.340	126	259750	47.58	ug/L		94
103) 4-chlorotoluene	15.449	91	770939	49.17	ug/L		99
104) 1,3,5-trimethylbenzene	15.366	105	879304	48.73	ug/L		99
105) tert-butylbenzene	15.706	134	173996	48.39	ug/L		92
106) 1,2,4-trimethylbenzene	15.758	105	910568	48.00	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216623.d
Acq On : 4 Nov 2017 4:58 pm
Operator : PrashanS
Sample : JC54428-2MS Inst : GCMSI
Misc : MS21772,VI8698,6.1,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 08:05:26 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

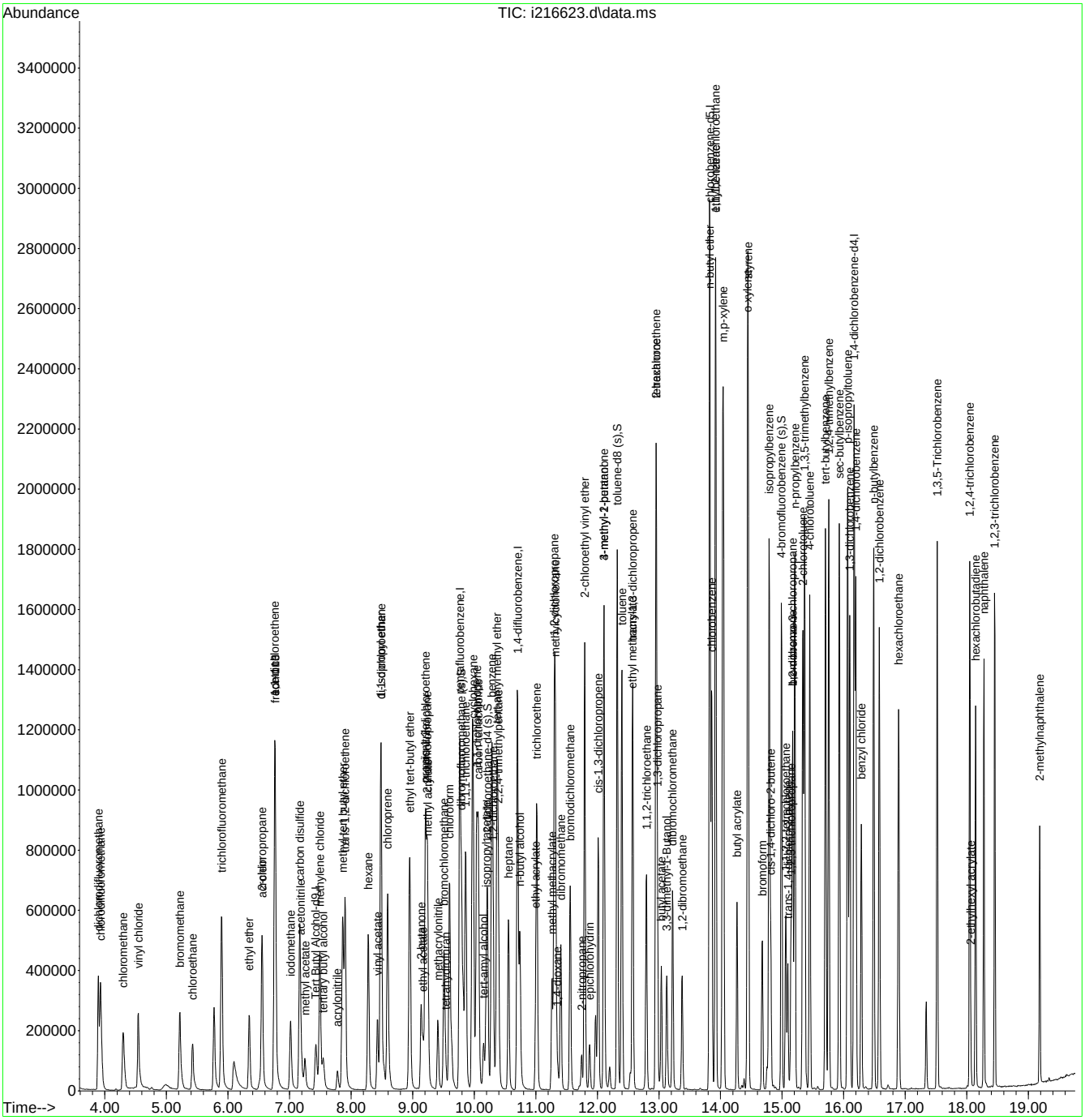
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) sec-butylbenzene	15.931	105	1076844	46.79	ug/L		99
108) p-isopropyltoluene	16.067	119	982003	48.25	ug/l		99
109) benzyl chloride	16.286	91	539268	51.91	ug/L		96
110) 1,3-dichlorobenzene	16.098	146	565899	44.48	ug/L		96
111) 1,4-dichlorobenzene	16.197	146	580174	44.28	ug/L		98
112) 1,2-dichlorobenzene	16.579	146	546978	45.63	ug/L		97
113) n-butylbenzene	16.490	92	467381	45.94	ug/L		98
114) hexachloroethane	16.893	201	197870	41.38	ug/L		85
115) 1,2-dibromo-3-chloropr...	15.172	157	22099	46.03	ug/L	#	71
116) 1,3,5-Trichlorobenzene	17.521	180	449875	44.07	ug/L		100
117) 1,2,4-trichlorobenzene	18.049	180	394504	48.64	ug/L		100
118) 2-ethylhexyl acrylate	18.064	55	54931	10.06	ug/L		95
119) hexachlorobutadiene	18.143	225	200841	36.09	ug/L		97
120) naphthalene	18.279	128	758167	50.43	ug/L		100
121) 1,2,3-trichlorobenzene	18.452	180	384435	47.77	ug/L		97
122) 2-methylnaphthalene	19.184	142	278775	23.50	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216623.d
Acq On : 4 Nov 2017 4:58 pm
Operator : PrashanS
Sample : JC54428-2MS Inst : GCMSI
Misc : MS21772,VI8698,6.1,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 08:05:26 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216652.d
Acq On : 6 Nov 2017 6:12 pm
Operator : PrashanS
Sample : JC54422-1MS
Misc : MS21774,VI8700,5.2,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 07 12:53:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.447	65	327695	500.00	ug/L		0.01
4) pentafluorobenzene	9.764	168	753603	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.700	114	1098484	50.00	ug/L		0.00
71) chlorobenzene-d5	13.823	117	957694	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	610142	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	398330	50.93	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.86%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	470805	52.65	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 105.30%				
72) toluene-d8 (s)	12.322	98	1166456	48.43	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.86%				
96) 4-bromofluorobenzene (s)	14.989	95	469047	48.28	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 96.56%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.567	59	250932	347.61	ug/L		98
3) 1,4-dioxane	11.349	88	86492	1248.57	ug/L		93
5) dichlorodifluoromethane	3.891	85	604436	66.88	ug/L		100
6) chlorodifluoromethane	3.927	51	447596	57.47	ug/L		98
7) chloromethane	4.299	50	339874	56.30	ug/L		98
8) vinyl chloride	4.544	62	368316	61.01	ug/L		96
9) bromomethane	5.183	94	238477	50.88	ug/L		90
10) chloroethane	5.397	64	214891	64.91	ug/L		99
11) trichlorofluoromethane	5.883	101	782027	65.34	ug/L		99
12) ethyl ether	6.349	74	145925	63.24	ug/L		96
13) 2-chloropropane	6.548	63	116840	59.79	ug/L		93
14) acrolein	6.563	56	40262	57.48	ug/L		95
15) freon 113	6.757	151	286380	57.98	ug/L		97
16) 1,1-dichloroethene	6.757	61	517081	64.37	ug/L		97
17) acetone	6.773	58	101927	247.81	ug/L		89
18) iodomethane	7.013	142	430094	61.85	ug/L		94
19) carbon disulfide	7.160	76	968258	54.16	ug/L		99
20) acetonitrile	7.186	41	320101	557.82	ug/L		99
21) methyl acetate	7.254	74	41746	58.73	ug/L		99
22) methylene chloride	7.489	84	312278	60.10	ug/L		96
23) acrylonitrile	7.782	53	78911	59.59	ug/L		93
24) methyl tert butyl ether	7.871	73	838184	60.92	ug/L		98
25) trans-1,2-dichloroethene	7.902	61	457580	61.17	ug/L		97
26) hexane	8.274	57	405066	55.46	ug/L		98
27) 1,1-dichloroethane	8.483	63	547526	59.31	ug/L		98
28) vinyl acetate	8.436	86	45122	61.97	ug/L	#	69
29) di-isopropyl ether	8.488	45	811032	61.17	ug/L		99
30) chloroprene	8.587	53	541528	64.29	ug/L		98
31) ethyl tert-butyl ether	8.954	59	885072	62.23	ug/L		100
32) 2-butanone	9.142	72	124619	252.93	ug/L		97
33) 2,2-dichloropropane	9.236	77	636864	61.31	ug/L		99
34) ethyl acetate	9.173	45	38676	58.40	ug/L		97
35) cis-1,2-dichloroethene	9.210	96	338770	55.22	ug/L		97
36) propionitrile	9.210	54	414188	615.42	ug/L		99
37) methyl acrylate	9.246	85	42596	61.44	ug/L		89
38) methacrylonitrile	9.414	67	100108	59.52	ug/L		94
39) bromochloromethane	9.508	128	167898	57.11	ug/L		91
40) tetrahydrofuran	9.534	71	31919	54.46	ug/L		87
41) chloroform	9.597	83	657163	55.70	ug/L		98
42) carbon tetrachloride	10.062	117	693500	63.48	ug/L		99
43) 1,1-dichloropropene	10.036	75	491691	62.48	ug/L		97
46) 1,1,1-trichloroethane	9.858	97	712128	61.71	ug/L		98
47) cyclohexane	9.979	84	330296	48.95	ug/L		94
48) tert-amyl alcohol	10.162	55	74712	339.35	ug/L		89
51) isopropyl acetate	10.198	87	54301	58.14	ug/L	#	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216652.d
Acq On : 6 Nov 2017 6:12 pm
Operator : PrashanS
Sample : JC54422-1MS
Misc : MS21774,VI8700,5.2,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 07 12:53:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,2-dichloroethane	10.308	62	544161	59.61	ug/L		100
53) benzene	10.282	78	1147981	56.29	ug/L		99
54) 2,2,4-trimethylpentane	10.387	57	1114595	61.62	ug/L		99
55) tert-amyl methyl ether	10.371	87	219895	60.15	ug/L		95
56) heptane	10.554	57	231080	61.35	ug/L		98
57) n-butyl alcohol	10.753	56	433057	3009.53	ug/L		97
58) trichloroethene	11.014	95	365557	59.64	ug/L		91
59) ethyl acrylate	10.999	55	300830	61.69	ug/L		98
60) methylcyclohexane	11.318	83	576537	62.69	ug/L		99
61) 1,2-dichloropropane	11.297	63	282016	59.40	ug/L		98
62) methyl methacrylate	11.265	100	71439	59.46	ug/L	#	90
63) dibromomethane	11.406	93	210275	58.28	ug/L		95
64) bromodichloromethane	11.558	83	500484	59.50	ug/L		98
65) 2-nitropropane	11.746	41	93118	55.55	ug/L		98
66) 2-chloroethyl vinyl ether	11.794	63	710046	320.44	ug/L		99
67) epichlorohydrin	11.872	57	145850	301.32	ug/L		100
68) cis-1,3-dichloropropene	12.013	75	512371	60.13	ug/L		99
69) 4-methyl-2-pentanone	12.107	58	368149	254.32	ug/L		99
70) 3-methyl-1-butanol	12.113	70	179918	1358.32	ug/L		95
73) toluene	12.395	92	722050	55.25	ug/L		98
74) trans-1,3-dichloropropene	12.573	75	507190	57.86	ug/L		97
75) ethyl methacrylate	12.568	69	310894	62.34	ug/L		99
76) 1,1,2-trichloroethane	12.798	83	204312	57.91	ug/L		96
77) 1,3-dichloropropane	12.976	76	417010	59.65	ug/L		99
78) tetrachloroethene	12.955	166	413488	54.61	ug/L		98
79) 2-hexanone	12.955	58	371017	246.60	ug/L		96
80) butyl acetate	13.038	56	140990	58.89	ug/L		88
81) 3,3-dimethyl-1-Butanol	13.132	69	207889	660.39	ug/L		99
82) n-butyl ether	13.823	57	989227	57.81	ug/L		99
83) dibromochloromethane	13.221	129	410433	59.23	ug/L		100
84) 1,2-dibromoethane	13.378	107	296176	59.28	ug/L		99
85) chlorobenzene	13.854	112	851918	55.16	ug/L		98
86) 1,1,1,2-tetrachloroethane	13.922	131	381945	59.58	ug/L		98
87) ethylbenzene	13.922	91	1401650	56.35	ug/L		99
88) m,p-xylene	14.043	106	1122135	116.09	ug/L		100
89) o-xylene	14.440	106	556860	60.33	ug/L		100
90) styrene	14.451	104	919976	61.33	ug/L		99
91) butyl acrylate	14.267	55	434481	60.91	ug/L		98
92) cis-1,4-dichloro-2-butene	14.817	88	195691	64.47	ug/L		94
93) bromoform	14.675	173	292603	59.02	ug/L		99
94) isopropylbenzene	14.790	105	1474298	60.85	ug/L		99
97) 1,1,2,2-tetrachloroethane	15.057	83	317222	58.22	ug/L		95
98) trans-1,4-dichloro-2-b...	15.094	53	108027	59.51	ug/L		97
99) 1,2,3-trichloropropane	15.146	110	107470	58.52	ug/L		99
100) bromobenzene	15.172	156	424924	53.56	ug/L		98
101) n-propylbenzene	15.209	91	1729277	59.40	ug/L		99
102) 2-chlorotoluene	15.340	126	380188	58.59	ug/L		98
103) 4-chlorotoluene	15.449	91	1088334	58.39	ug/L		99
104) 1,3,5-trimethylbenzene	15.366	105	1304153	60.80	ug/L		99
105) tert-butylbenzene	15.706	134	264710	61.94	ug/L		99
106) 1,2,4-trimethylbenzene	15.758	105	1334193	59.17	ug/L		99
107) sec-butylbenzene	15.931	105	1722367	62.96	ug/L		99
108) p-isopropyltoluene	16.067	119	1540581	63.68	ug/l		99
109) benzyl chloride	16.286	91	828916	67.13	ug/L		100
110) 1,3-dichlorobenzene	16.098	146	834606	55.20	ug/L		98
111) 1,4-dichlorobenzene	16.197	146	843688	54.17	ug/L		97
112) 1,2-dichlorobenzene	16.579	146	803870	56.42	ug/L		98
113) n-butylbenzene	16.485	92	785831	64.98	ug/L		98
114) hexachloroethane	16.893	201	326715	57.48	ug/L		93
115) 1,2-dibromo-3-chloropr...	15.172	157	30493	53.44	ug/L		94
116) 1,3,5-Trichlorobenzene	17.521	180	746026	61.48	ug/L		99
117) 1,2,4-trichlorobenzene	18.049	180	633936	65.75	ug/L		99
118) 2-ethylhexyl acrylate	18.065	55	82839	12.77	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216652.d
Acq On : 6 Nov 2017 6:12 pm
Operator : PrashanS
Sample : JC54422-1MS
Misc : MS21774,VI8700,5.2,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 07 12:53:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

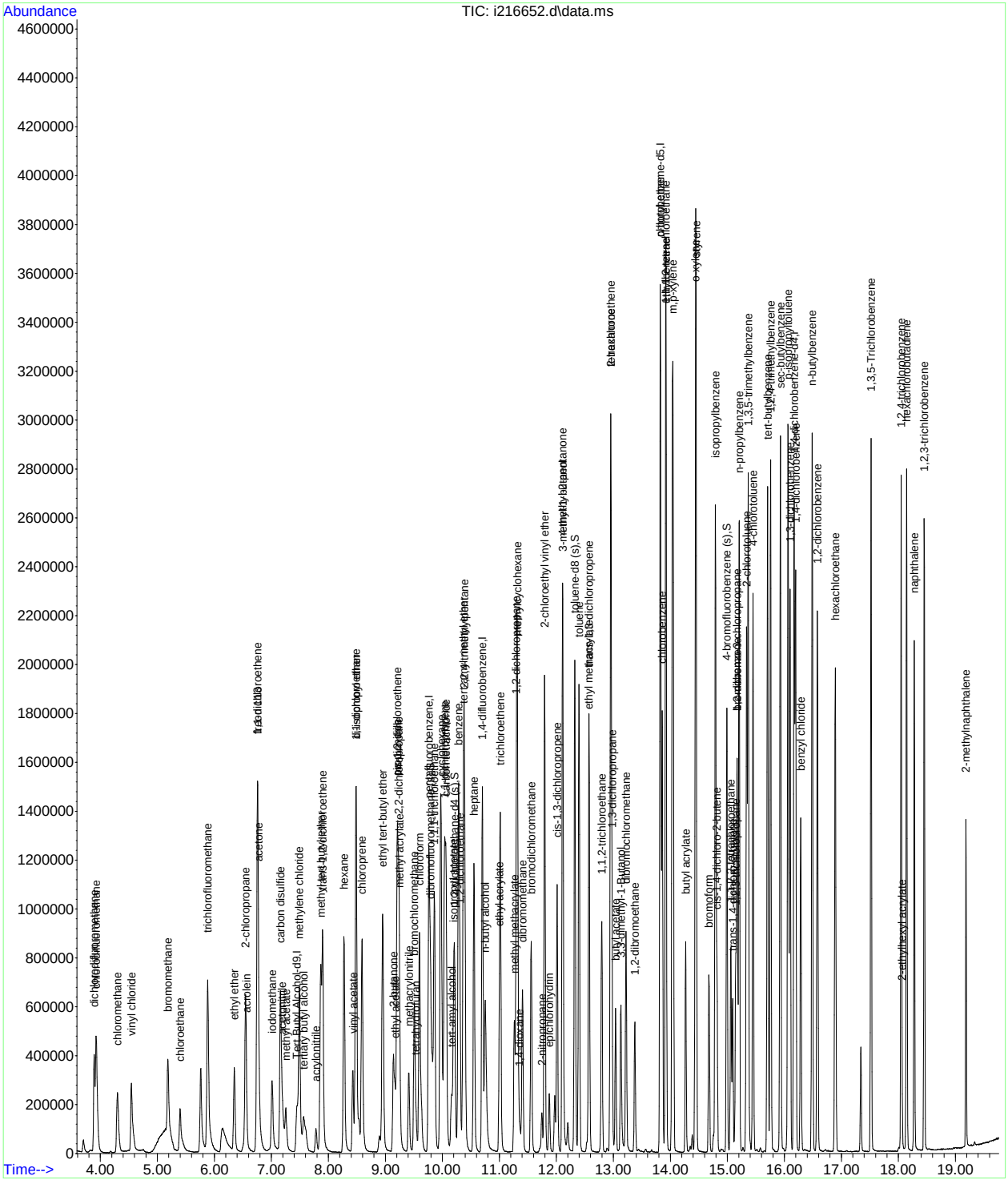
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.143	225	454824	68.76	ug/L	97
120) naphthalene	18.279	128	1160118	64.92	ug/L	99
121) 1,2,3-trichlorobenzene	18.452	180	616808	64.48	ug/L	99
122) 2-methylnaphthalene	19.184	142	454825	32.26	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216652.d
Acq On : 6 Nov 2017 6:12 pm
Operator : PrashanS
Sample : JC54422-1MS
Misc : MS21774,VI8700,5.2,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 07 12:53:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140210.d
Acq On : 6 Nov 2017 10:36 pm
Operator : PrashanS
Sample : jc54680-2ms Inst : MS3C
Misc : MS21891,V3C6357,5.5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:54 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	3.102	65	74149	500.00	ug/L	0.00
5) pentafluorobenzene	5.743	168	211650	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.653	114	325429	50.00	ug/L	0.00
74) chlorobenzene-d5	9.854	117	296527	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.852	152	154657	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.607	113	95833	55.73	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 111.46%			
53) 1,2-dichloroethane-d4 (s)	6.078	65	101437	52.56	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 105.12%			
75) toluene-d8 (s)	8.395	98	384468	49.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.16%			
99) 4-bromofluorobenzene (s)	10.905	95	141639	52.61	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 105.22%			
Target Compounds						Qvalue
2) ethanol	2.155	45	162806	6634.85	ug/L	88
3) tertiary butyl alcohol	3.207	59	47998	290.60	ug/L	92
4) 1,4-dioxane	7.448	88	24110	1667.47	ug/L	90
6) chlorodifluoromethane	1.114	51	85717	43.81	ug/L	96
7) dichlorodifluoromethane	1.078	85	102826	51.72	ug/L	98
8) chloromethane	1.245	50	105121	50.73	ug/L	98
10) vinyl chloride	1.313	62	100457	51.84	ug/L	98
11) bromomethane	1.580	94	42879	46.34	ug/L	100
12) chloroethane	1.669	64	55489	57.33	ug/L	98
13) vinyl Bromide	1.826	106	61721	53.46	ug/L	94
14) trichlorofluoromethane	1.862	101	122132	51.93	ug/L	97
15) ethyl ether	2.160	74	45467	55.38	ug/L	92
16) 2-chloropropane	2.255	63	31297	55.74	ug/L	98
17) acrolein	2.354	56	16619	67.03	ug/L	90
18) freon 113	2.349	151	60189	53.44	ug/L	97
19) 1,1-dichloroethene	2.370	96	69617	55.52	ug/L	100
20) acetone	2.527	58	29807	272.02	ug/L	96
21) acetonitrile	2.935	41	103196	545.05	ug/L	97
22) iodomethane	2.542	142	76498	45.48	ug/L	99
23) carbon disulfide	2.563	76	227891	44.76	ug/L	97
24) methylene chloride	2.997	84	77365	56.76	ug/L	95
25) methyl acetate	2.872	43	117337	97.52	ug/L	98
26) methyl tert butyl ether	3.275	73	213360	55.65	ug/L	98
27) trans-1,2-dichloroethene	3.280	96	80721	54.75	ug/L	98
28) hexane	3.562	57	111833	44.69	ug/L	95
29) di-isopropyl ether	4.007	45	289433	59.90	ug/L	98
30) ethyl tert-butyl ether	4.587	59	251847	56.64	ug/L	99
31) 2-butanone	4.990	72	33462	233.51	ug/L	99
32) 1,1-dichloroethane	3.965	63	146339	58.91	ug/L	100
33) chloroprene	4.038	53	133425	54.85	ug/L	99
34) acrylonitrile	3.437	53	25660	57.68	ug/L	96
35) vinyl acetate	4.090	86	3895	11.53	ug/L #	25
36) ethyl acetate	5.053	45	7754	34.45	ug/L	89
37) 2,2-dichloropropane	4.817	77	111201	52.64	ug/L	99
38) cis-1,2-dichloroethene	4.891	96	87258	55.68	ug/L	97
39) propionitrile	5.189	54	117799	541.91	ug/L	97
40) bromochloromethane	5.241	130	52807	57.30	ug/L	92
41) tetrahydrofuran	5.262	72	9245	53.75	ug/L	97
42) chloroform	5.372	83	141790	55.86	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140210.d
Acq On : 6 Nov 2017 10:36 pm
Operator : PrashanS
Sample : jc54680-2ms Inst : MS3C
Misc : MS21891,V3C6357,5.5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:54 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-Butyl Formate	5.414	59	1709	6.00	ug/L	#	1
44)	isobutyl alcohol	6.026	43	55971	452.84	ug/L		95
46)	methacrylonitrile	5.330	67	29808	52.66	ug/L		99
47)	1,1,1-trichloroethane	5.513	97	130391	57.23	ug/L		99
48)	cyclohexane	5.456	84	105413	43.60	ug/L		96
49)	1,1-dichloropropene	5.748	110	42451	53.41	ug/L		95
50)	tert-amyl alcohol	6.198	73	247568	272.80	ug/L		92
51)	carbon tetrachloride	5.675	117	118875	59.76	ug/L		96
54)	2,2,4-trimethylpentane	6.026	57	289949	41.13	ug/L		98
55)	tert-amyl methyl ether	6.198	87	54668	52.86	ug/L		95
56)	n-butyl alcohol	5.712	56	176658	2394.67	ug/L		97
57)	benzene	6.015	78	322715	50.02	ug/L		100
58)	heptane	6.334	57	59802	40.05	ug/L		93
59)	isopropyl acetate	6.282	87	13224	39.53	ug/L	#	67
60)	1,2-dichloroethane	6.183	62	103077	54.52	ug/L		97
61)	trichloroethene	6.904	95	83696	50.72	ug/L		95
62)	ethyl acrylate	7.171	55	56707	30.80	ug/L		97
63)	2-nitropropane	8.013	41	17756	43.64	ug/L		93
64)	2-chloroethyl vinyl ether	8.055	63	209883	223.72	ug/L		98
65)	methyl methacrylate	7.448	100	26785	64.99	ug/L		91
66)	1,2-dichloropropane	7.250	63	84822	55.64	ug/L		98
67)	methylcyclohexane	7.019	83	156729	48.07	ug/L		97
68)	dibromomethane	7.401	93	46703	56.54	ug/L		100
69)	bromodichloromethane	7.616	83	107256	57.91	ug/L		98
70)	epichlorohydrin	8.133	57	41679	259.33	ug/L		90
71)	cis-1,3-dichloropropene	8.175	75	135649	55.27	ug/L		98
72)	4-methyl-2-pentanone	8.374	85	53349	219.57	ug/L		93
73)	3-methyl-1-butanol	8.505	70	42854	788.08	ug/L		94
76)	toluene	8.463	92	209578	47.37	ug/L		99
77)	trans-1,3-dichloropropene	8.824	75	112697	51.79	ug/L		97
78)	ethyl methacrylate	8.887	69	73097	36.97	ug/L		98
79)	1,1,2-trichloroethane	8.996	83	58933	51.60	ug/L		98
80)	2-hexanone	9.247	58	128937	222.67	ug/L		97
81)	tetrachloroethene	8.996	166	97703	48.22	ug/L		98
82)	1,3-dichloropropane	9.159	76	120737	49.96	ug/L		100
83)	butyl acetate	9.357	56	27312	26.12	ug/L		95
84)	dibromochloromethane	9.336	129	83926	55.95	ug/L		98
85)	1,2-dibromoethane	9.436	107	70521	49.35	ug/L		99
86)	3,3-Dimethyl-1-Butanol	9.451	57	68516	455.79	ug/L		97
87)	n-butyl ether	9.974	57	388014	51.42	ug/L		100
88)	chlorobenzene	9.880	112	233475	46.88	ug/L		99
89)	1,1,1,2-tetrachloroethane	9.974	131	86096	52.76	ug/L		96
90)	ethylbenzene	9.964	91	395043	46.74	ug/L		99
91)	m,p-xylene	10.079	106	307387	93.61	ug/L		97
92)	o-xylene	10.429	91	308818	46.74	ug/L		98
93)	styrene	10.456	104	256815	48.56	ug/L		100
94)	bromoform	10.628	173	58812	56.75	ug/L		99
95)	butyl acrylate	10.445	55	86139	31.29	ug/L		98
96)	isopropylbenzene	10.738	105	399862	47.56	ug/L		98
97)	cis-1,4-dichloro-2-butene	10.879	88	35840	44.15	ug/L		95
100)	bromobenzene	11.015	156	98499	47.83	ug/L		94
101)	1,1,2,2-tetrachloroethane	11.073	83	87865	52.72	ug/L		99
102)	trans-1,4-dichloro-2-b...	11.130	53	24444	49.97	ug/L		84
103)	1,2,3-trichloropropane	11.104	110	27532	52.49	ug/L		99
104)	n-propylbenzene	11.089	91	448327	47.38	ug/L		100
105)	2-chlorotoluene	11.172	126	94153	48.71	ug/L		99
106)	4-chlorotoluene	11.272	126	93910	45.23	ug/L		98

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140210.d
Acq On : 6 Nov 2017 10:36 pm
Operator : PrashanS
Sample : jc54680-2ms Inst : MS3C
Misc : MS21891,V3C6357,5.5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:54 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,3,5-trimethylbenzene	11.245	105	323585	48.24	ug/L	99
108) tert-butylbenzene	11.496	119	303280	48.76	ug/L	99
109) 1,2,4-trimethylbenzene	11.549	105	321277	46.63	ug/L	98
110) sec-butylbenzene	11.680	105	431692	47.12	ug/L	99
111) 1,3-dichlorobenzene	11.789	146	175893	43.49	ug/L	98
112) p-isopropyltoluene	11.800	119	365243	45.67	ug/L	98
113) 1,4-dichlorobenzene	11.873	146	174317	43.03	ug/L	98
114) 1,2-dichlorobenzene	12.171	146	169021	45.54	ug/L	99
115) n-butylbenzene	12.124	92	171017	42.66	ug/L	97
116) 1,2-dibromo-3-chloropr...	12.814	157	22223	51.25	ug/L	94
117) 1,3,5-Trichlorobenzene	12.924	180	144714	40.77	ug/L	98
118) 1,2,4-trichlorobenzene	13.426	180	122832	39.11	ug/L	98
119) hexachlorobutadiene	13.515	225	72759	41.43	ug/L	98
120) naphthalene	13.620	128	298245	42.35	ug/L	98
121) 1,2,3-trichlorobenzene	13.808	180	117736	39.44	ug/L	97
122) hexachloroethane	12.328	201	61628	60.70	ug/L	95
123) Benzyl chloride	11.999	91	135889	42.91	ug/L	99
124) 2-ethylhexyl acrylate	13.568	70	10958	5.50	ug/L	98
125) 2-methylnaphthalene	14.488	142	96599	18.80	ug/L	99

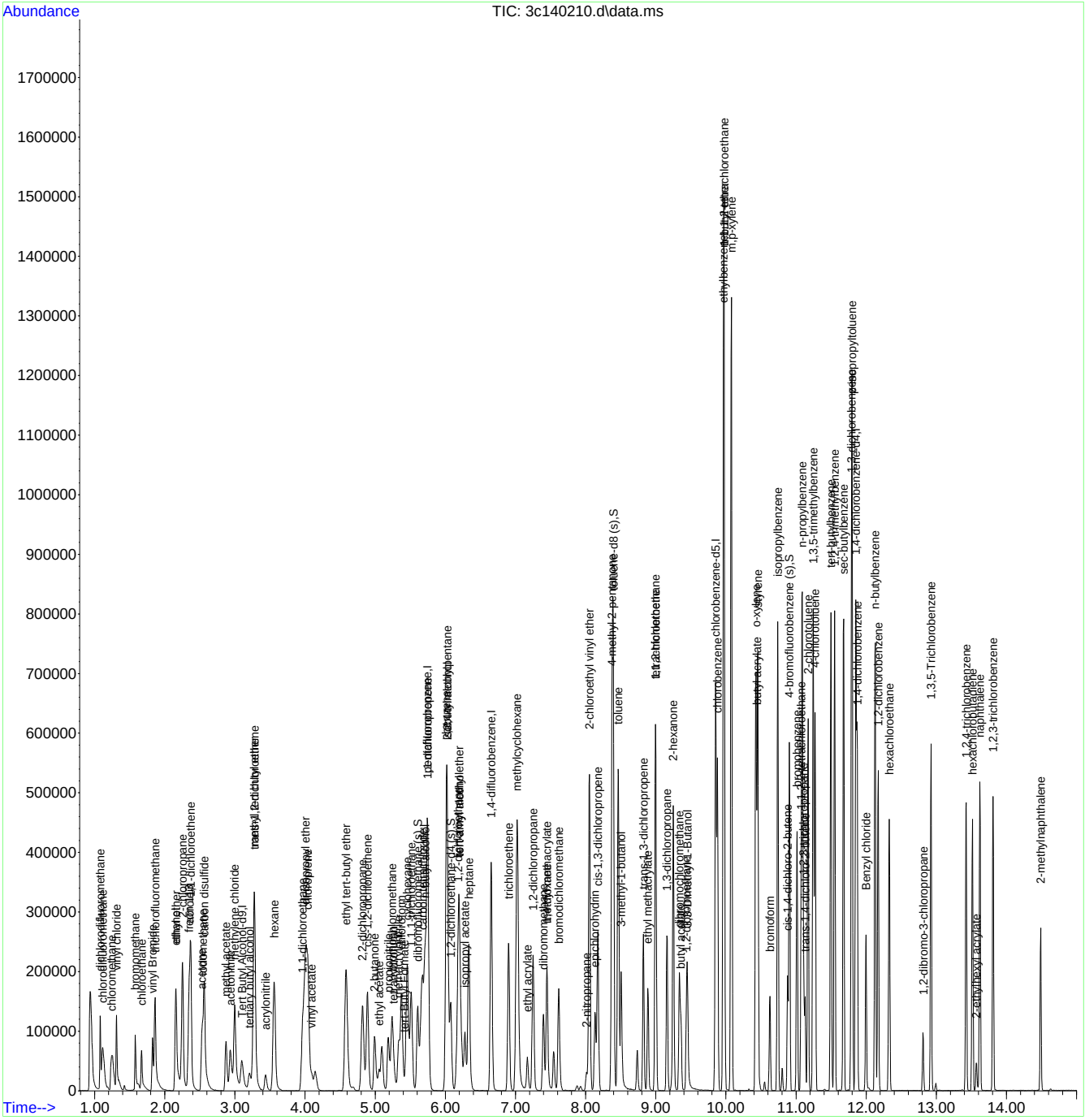
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140210.d
Acq On : 6 Nov 2017 10:36 pm
Operator : PrashanS
Sample : jc54680-2ms Inst : MS3C
Misc : MS21891,V3C6357,5.5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:54 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216675.d
Acq On : 7 Nov 2017 2:17 pm
Operator : PrashanS
Sample : jc54136-1ms Inst : GCMSI
Misc : MS21656,VI8701,5.4,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 01:32:31 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	302314	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	760298	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	1091377	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	962120	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	627954	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	397870	50.42	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.84%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	483511	54.43	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 108.86%			
72) toluene-d8 (s)	12.322	98	1159492	47.92	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.84%			
96) 4-bromofluorobenzene (s)	14.989	95	475109	47.52	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 95.04%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.547	59	180639	271.24	ug/L	93
3) 1,4-dioxane	11.354	88	90071	1409.40	ug/L	97
5) dichlorodifluoromethane	3.891	85	583865	64.03	ug/L	97
6) chlorodifluoromethane	3.927	51	418187	53.22	ug/L	98
7) chloromethane	4.299	50	319423	52.45	ug/L	98
8) vinyl chloride	4.544	62	348490	57.21	ug/L	99
9) bromomethane	5.214	94	254095	53.74	ug/L	92
10) chloroethane	5.423	64	197205	59.04	ug/L	98
11) trichlorofluoromethane	5.894	101	743511	61.57	ug/L	98
12) ethyl ether	6.344	74	133589	57.38	ug/L	96
13) 2-chloropropane	6.553	63	112813	57.22	ug/L	96
14) acrolein	6.558	56	38784	54.88	ug/L	99
15) freon 113	6.762	151	260602	52.29	ug/L	97
16) 1,1-dichloroethene	6.762	61	465567	57.45	ug/L	99
17) acetone	6.762	58	111128	267.80	ug/L	99
18) iodomethane	7.018	142	377461	53.80	ug/L	94
19) carbon disulfide	7.165	76	875301	48.53	ug/L	99
20) acetonitrile	7.175	41	287000	495.74	ug/L	99
21) methyl acetate	7.248	74	39723	55.39	ug/L #	89
22) methylene chloride	7.494	84	269344	51.38	ug/L	98
23) acrylonitrile	7.777	53	69529	52.04	ug/L	95
24) methyl tert butyl ether	7.866	73	789222	56.86	ug/L	99
25) trans-1,2-dichloroethene	7.902	61	419924	55.65	ug/L	97
26) hexane	8.279	57	363496	49.33	ug/L	99
27) 1,1-dichloroethane	8.483	63	494604	53.10	ug/L	97
28) vinyl acetate	8.430	86	41556	56.57	ug/L #	90
29) di-isopropyl ether	8.483	45	744799	55.68	ug/L	97
30) chloroprene	8.593	53	496503	58.42	ug/L	100
31) ethyl tert-butyl ether	8.948	59	819894	57.14	ug/L	99
32) 2-butanone	9.137	72	119911	241.23	ug/L	95
33) 2,2-dichloropropane	9.236	77	593055	56.59	ug/L	100
34) ethyl acetate	9.168	45	35986	53.86	ug/L	98
35) cis-1,2-dichloroethene	9.210	96	307477	49.68	ug/L	97
36) propionitrile	9.199	54	375599	553.17	ug/L	97
37) methyl acrylate	9.252	85	39224	56.08	ug/L	95
38) methacrylonitrile	9.409	67	93077	54.86	ug/L	97
39) bromochloromethane	9.508	128	154547	52.10	ug/L	97
40) tetrahydrofuran	9.534	71	30608	51.77	ug/L	85
41) chloroform	9.597	83	613703	51.55	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216675.d
Acq On : 7 Nov 2017 2:17 pm
Operator : PrashanS
Sample : jc54136-1ms Inst : GCMSI
Misc : MS21656,VI8701,5.4,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 01:32:31 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) carbon tetrachloride	10.062	117	646278	58.64	ug/L		99
43) 1,1-dichloropropene	10.036	75	447258	56.33	ug/L		100
46) 1,1,1-trichloroethane	9.858	97	661380	56.81	ug/L		100
47) cyclohexane	9.979	84	333806	49.04	ug/L		93
48) tert-amyl alcohol	10.156	55	62195	280.01	ug/L		96
51) isopropyl acetate	10.198	87	52170	56.22	ug/L	#	88
52) 1,2-dichloroethane	10.308	62	521030	57.45	ug/L		99
53) benzene	10.287	78	1053644	52.00	ug/L		99
54) 2,2,4-trimethylpentane	10.387	57	1010127	56.21	ug/L		98
55) tert-amyl methyl ether	10.371	87	209923	57.80	ug/L	#	93
56) heptane	10.554	57	213548	57.07	ug/L		98
57) n-butyl alcohol	10.742	56	437445	3059.83	ug/L		99
58) trichloroethene	11.014	95	330964	54.35	ug/L		92
59) ethyl acrylate	10.999	55	290037	59.87	ug/L		100
60) methylcyclohexane	11.318	83	528487	57.84	ug/L		98
61) 1,2-dichloropropane	11.297	63	255528	54.17	ug/L		98
62) methyl methacrylate	11.260	100	67426	56.49	ug/L		96
63) dibromomethane	11.406	93	204230	56.97	ug/L		96
64) bromodichloromethane	11.558	83	477213	57.11	ug/L		96
65) 2-nitropropane	11.746	41	91984	55.23	ug/L		95
66) 2-chloroethyl vinyl ether	11.794	63	677569	307.78	ug/L		99
67) epichlorohydrin	11.872	57	137487	285.89	ug/L		96
68) cis-1,3-dichloropropene	12.013	75	484762	57.26	ug/L		98
69) 4-methyl-2-pentanone	12.107	58	363428	252.69	ug/L		98
70) 3-methyl-1-butanol	12.107	70	163006	1238.65	ug/L		99
73) toluene	12.400	92	674477	51.37	ug/L		99
74) trans-1,3-dichloropropene	12.573	75	489105	55.54	ug/L		100
75) ethyl methacrylate	12.568	69	299527	59.79	ug/L		97
76) 1,1,2-trichloroethane	12.798	83	194568	54.90	ug/L		99
77) 1,3-dichloropropane	12.976	76	401064	57.10	ug/L		99
78) tetrachloroethene	12.955	166	389981	51.27	ug/L		96
79) 2-hexanone	12.955	58	400643	265.06	ug/L		98
80) butyl acetate	13.038	56	136789	56.87	ug/L		99
81) 3,3-dimethyl-1-Butanol	13.127	69	189314	598.62	ug/L		98
82) n-butyl ether	13.823	57	945392	54.99	ug/L		99
83) dibromochloromethane	13.221	129	400251	57.50	ug/L		99
84) 1,2-dibromoethane	13.378	107	290409	57.86	ug/L		99
85) chlorobenzene	13.859	112	801179	51.64	ug/L		99
86) 1,1,1,2-tetrachloroethane	13.922	131	368380	57.20	ug/L		97
87) ethylbenzene	13.922	91	1325092	53.03	ug/L		100
88) m,p-xylene	14.043	106	1065298	109.70	ug/L		99
89) o-xylene	14.440	106	526614	56.79	ug/L		98
90) styrene	14.450	104	883179	58.61	ug/L		98
91) butyl acrylate	14.267	55	414031	57.78	ug/L		98
92) cis-1,4-dichloro-2-butene	14.817	88	197580	64.79	ug/L		96
93) bromoform	14.681	173	292280	58.68	ug/L		100
94) isopropylbenzene	14.790	105	1407556	57.82	ug/L		99
97) 1,1,2,2-tetrachloroethane	15.062	83	311969	55.63	ug/L		98
98) trans-1,4-dichloro-2-b...	15.094	53	107546	57.57	ug/L		97
99) 1,2,3-trichloropropane	15.146	110	104819	55.45	ug/L		96
100) bromobenzene	15.172	156	411564	50.40	ug/L		99
101) n-propylbenzene	15.209	91	1662662	55.49	ug/L		100
102) 2-chlorotoluene	15.340	126	367285	54.99	ug/L		100
103) 4-chlorotoluene	15.449	91	1059993	55.26	ug/L		99
104) 1,3,5-trimethylbenzene	15.366	105	1255134	56.85	ug/L		100
105) tert-butylbenzene	15.706	134	259227	58.93	ug/L		97
106) 1,2,4-trimethylbenzene	15.758	105	1294843	55.80	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216675.d
Acq On : 7 Nov 2017 2:17 pm
Operator : PrashanS
Sample : jc54136-1ms Inst : GCMSI
Misc : MS21656,VI8701,5.4,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 01:32:31 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

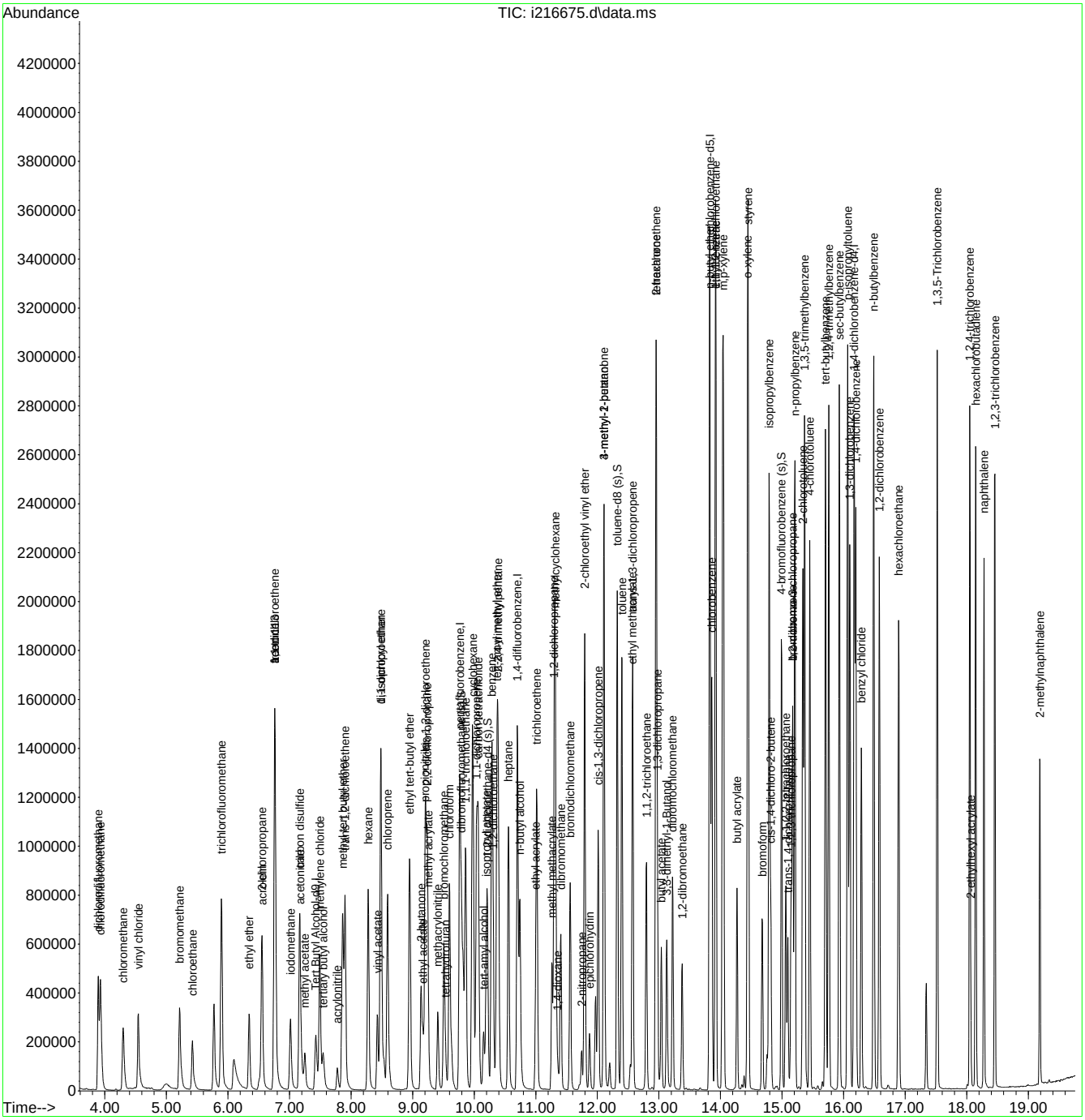
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) sec-butylbenzene	15.931	105	1675092	59.49	ug/L		99
108) p-isopropyltoluene	16.067	119	1503126	60.37	ug/l		99
109) benzyl chloride	16.286	91	854492	67.24	ug/L		98
110) 1,3-dichlorobenzene	16.098	146	831122	53.41	ug/L		97
111) 1,4-dichlorobenzene	16.197	146	833440	52.00	ug/L		96
112) 1,2-dichlorobenzene	16.579	146	792390	54.04	ug/L		97
113) n-butylbenzene	16.490	92	779648	62.64	ug/L		99
114) hexachloroethane	16.893	201	314159	53.70	ug/L		88
115) 1,2-dibromo-3-chloropr...	15.172	157	29497	50.23	ug/L	#	59
116) 1,3,5-Trichlorobenzene	17.521	180	762493	61.05	ug/L		99
117) 1,2,4-trichlorobenzene	18.049	180	643073	64.81	ug/L		100
118) 2-ethylhexyl acrylate	18.065	55	82576	12.37	ug/L		96
119) hexachlorobutadiene	18.148	225	448959	65.95	ug/L		94
120) naphthalene	18.279	128	1165490	63.37	ug/L		100
121) 1,2,3-trichlorobenzene	18.457	180	628127	63.80	ug/L		99
122) 2-methylnaphthalene	19.189	142	467340	32.21	ug/L		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216675.d
Acq On : 7 Nov 2017 2:17 pm
Operator : PrashanS
Sample : jc54136-1ms Inst : GCMSI
Misc : MS21656,VI8701,5.4,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 01:32:31 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153137.d
Acq On : 7 Nov 2017 5:04 pm
Operator : prashans
Sample : JC54047-72MS Inst : GCMS1C
Misc : MS21756,V1C6761,5.4,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 02:52:27 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.568	65	111718	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	258586	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.748	114	423028	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	318855	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	132190	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	135428	51.06	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.12%			
45) 1,2-dichloroethane-d4 (s)	10.319	65	141450	51.64	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 103.28%			
77) toluene-d8 (s)	12.364	98	450797	46.86	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.72%			
94) 4-bromofluorobenzene (s)	15.010	95	137345	55.01	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 110.02%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.683	59	84744	299.25	ug/L	85
3) 1,4-dioxane	11.475	88	41861	1631.47	ug/L	100
5) dichlorodifluoromethane	3.896	85	224059	51.06	ug/L	98
6) chlorodifluoromethane	3.938	51	229770	59.07	ug/L	99
7) chloromethane	4.340	50	243692	55.85	ug/L	98
8) vinyl chloride	4.586	62	251475	61.99	ug/L	99
9) bromomethane	5.292	94	117645	54.42	ug/L	99
10) chloroethane	5.486	64	116684	57.74	ug/L	97
11) trichlorofluoromethane	5.941	101	257704	53.86	ug/L	100
12) ethyl ether	6.406	74	74057	62.77	ug/L	99
13) 2-chloropropane	6.616	63	65643	61.98	ug/L	98
14) acrolein	6.715	56	2867	6.95	ug/L	79
15) freon 113	6.783	151	107866	59.02	ug/L	97
16) 1,1-dichloroethene	6.841	61	231965	57.65	ug/L	98
17) acetone	6.929	58	43588	200.85	ug/L	94
18) iodomethane	7.144	142	116946	47.96	ug/L	96
19) carbon disulfide	7.254	76	502248	55.17	ug/L	99
20) acetonitrile	7.405	41	172918	479.90	ug/L	99
22) methyl acetate	7.400	74	51742	143.11	ug/L	93
23) methylene chloride	7.615	84	147178	55.55	ug/L	94
24) acrylonitrile	7.976	53	42001	49.52	ug/L	93
25) methyl tert butyl ether	7.907	73	357026	61.25	ug/L	99
26) trans-1,2-dichloroethene	7.981	61	219465	56.20	ug/L	99
27) hexane	8.258	57	224677	52.26	ug/L	99
28) 1,1-dichloroethane	8.572	63	268819	56.84	ug/L	99
29) vinyl acetate	8.556	86	2490	6.97	ug/L #	71
30) di-isopropyl ether	8.514	45	479466	58.77	ug/L	98
31) chloroprene	8.666	53	224985	53.73	ug/L	99
32) ethyl tert-butyl ether	8.985	59	421198	57.24	ug/L	97
33) 2-butanone	9.288	72	53042	210.48	ug/L #	56
34) 2,2-dichloropropane	9.299	77	224915	55.83	ug/L	99
35) ethyl acetate	9.288	45	6013	16.97	ug/L #	1
36) cis-1,2-dichloroethene	9.320	96	154773	54.61	ug/L	98
37) Methyl Acrylate	9.382	85	31194	100.18	ug/L	97
38) propionitrile	9.414	54	191348	519.05	ug/L	97
39) methacrylonitrile	9.586	67	45623	50.71	ug/L	98
40) bromochloromethane	9.639	128	67641	59.58	ug/L	94
41) tetrahydrofuran	9.665	71	15486	50.04	ug/L	95
42) chloroform	9.691	83	255006	53.86	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153137.d
Acq On : 7 Nov 2017 5:04 pm
Operator : prashans
Sample : JC54047-72MS Inst : GCMS1C
Misc : MS21756,V1C6761,5.4,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 02:52:27 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-Butyl Formate	9.701	59	13903	24.22	ug/L	#	37
46)	1,1,1-trichloroethane	9.921	97	227603	55.93	ug/L		99
47)	cyclohexane	9.979	84	166691	50.68	ug/L		97
49)	1,1-dichloropropene	10.104	75	210149	55.15	ug/L		99
50)	iso-butyl alcohol	10.376	74	43469	562.40	ug/L	#	90
51)	carbon tetrachloride	10.120	117	202481	53.90	ug/L		98
52)	isopropyl acetate	10.293	61	22465	22.89	ug/L		93
53)	1,2-dichloroethane	10.408	62	174680	57.49	ug/L		99
54)	benzene	10.376	78	568153	52.90	ug/L		100
55)	2,2,4-trimethylpentane	10.334	57	473981	40.85	ug/L		98
56)	tert-amyl methyl ether	10.381	73	375500	53.87	ug/L		97
57)	heptane	10.512	57	105704	45.78	ug/L		97
58)	n-butyl alcohol	10.884	56	195475	2685.00	ug/L		100
59)	trichloroethene	11.082	95	149051	53.97	ug/L		97
60)	methylcyclohexane	11.276	83	254976	48.58	ug/L		99
61)	1,2-dichloropropane	11.359	63	148154	56.68	ug/L		94
62)	methyl methacrylate	11.349	100	37823	77.59	ug/L	#	88
63)	dibromomethane	11.527	93	83211	57.36	ug/L		95
64)	bromodichloromethane	11.647	83	190349	56.40	ug/L		99
65)	2-nitropropane	11.877	41	44419	50.84	ug/L		94
66)	2-chloroethyl vinyl ether	11.872	63	317555	285.75	ug/L		98
67)	epichlorohydrin	12.013	57	61087	242.36	ug/L		97
68)	cis-1,3-dichloropropene	12.092	75	220568	55.37	ug/L		97
69)	4-methyl-2-pentanone	12.181	58	167854	205.28	ug/L		95
70)	3-methyl-1-butanol	12.202	70	61949	1023.29	ug/L		94
71)	toluene	12.437	92	307138	48.34	ug/L		99
72)	trans-1,3-dichloropropene	12.646	75	186554	55.68	ug/L		97
73)	ethyl methacrylate	12.620	69	46226	18.50	ug/L		97
74)	1,1,2-trichloroethane	12.866	83	94353	55.87	ug/L		96
75)	1,3-dichloropropane	13.044	76	174032	54.28	ug/L		99
76)	2-hexanone	13.017	58	149038	176.42	ug/L		98
79)	tetrachloroethene	13.012	166	141365	56.94	ug/L		98
80)	butyl acetate	13.080	56	14468	11.82	ug/L		99
81)	3,3-Dimethyl-1-Butanol	13.185	69	76548	562.83	ug/L		99
82)	n-butyl ether	13.776	57	547614	56.05	ug/L		99
83)	dibromochloromethane	13.305	129	133468	61.92	ug/L		99
84)	1,2-dibromoethane	13.452	107	114201	60.86	ug/L		95
85)	chlorobenzene	13.896	112	321690	55.18	ug/L		100
86)	1,1,1,2-tetrachloroethane	13.959	131	121261	61.77	ug/L		97
87)	ethylbenzene	13.938	91	564985	53.97	ug/L		100
88)	m,p-xylene	14.043	106	415793	106.77	ug/L		99
89)	o-xylene	14.461	106	202058	53.68	ug/L		98
90)	styrene	14.477	104	330611	51.78	ug/L		98
92)	bromoform	14.759	173	87079	61.14	ug/L		98
95)	isopropylbenzene	14.796	105	524929	63.56	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.125	83	123060	64.76	ug/L		97
98)	trans-1,4-dichloro-2-b...	15.162	53	31617	56.69	ug/L		96
99)	1,2,3-trichloropropane	15.198	110	29630	66.10	ug/L		98
100)	bromobenzene	15.209	156	127702	63.46	ug/L	#	89
101)	n-propylbenzene	15.198	91	642233	61.44	ug/L		99
102)	2-chlorotoluene	15.355	126	120011	63.34	ug/L		97
103)	4-chlorotoluene	15.455	91	355383	60.15	ug/L		99
104)	1,3,5-trimethylbenzene	15.345	105	389803	59.11	ug/L		99
105)	tert-butylbenzene	15.695	134	78573	62.21	ug/L		99
107)	1,2,4-trimethylbenzene	15.742	105	389159	57.39	ug/L		99
108)	sec-butylbenzene	15.915	105	548896	59.62	ug/L		99
109)	p-isopropyltoluene	16.030	119	432623	59.27	ug/l		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153137.d
Acq On : 7 Nov 2017 5:04 pm
Operator : prashans
Sample : JC54047-72MS Inst : GCMS1C
Misc : MS21756,V1C6761,5.4,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 02:52:27 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) benzyl chloride	16.328	91	213570	58.64	ug/L	98
111) 1,3-dichlorobenzene	16.119	146	224407	59.02	ug/L	100
112) 1,4-dichlorobenzene	16.208	146	223105	57.75	ug/L	99
113) 1,2-dichlorobenzene	16.611	146	205066	57.65	ug/L	99
114) n-butylbenzene	16.454	92	222803	54.25	ug/L	99
115) hexachloroethane	16.867	201	80280	65.48	ug/L	96
116) 1,2-dibromo-3-chloropr...	17.427	157	25230	59.71	ug/L	93
117) 1,3,5-Trichlorobenzene	17.594	180	157041	48.68	ug/L	99
118) 1,2,4-trichlorobenzene	18.253	180	123604	46.62	ug/L	99
119) hexachlorobutadiene	18.352	225	84983	50.31	ug/L	100
120) naphthalene	18.546	128	260043	42.41	ug/L	99
121) 1,2,3-trichlorobenzene	18.807	180	103125	41.14	ug/L	99

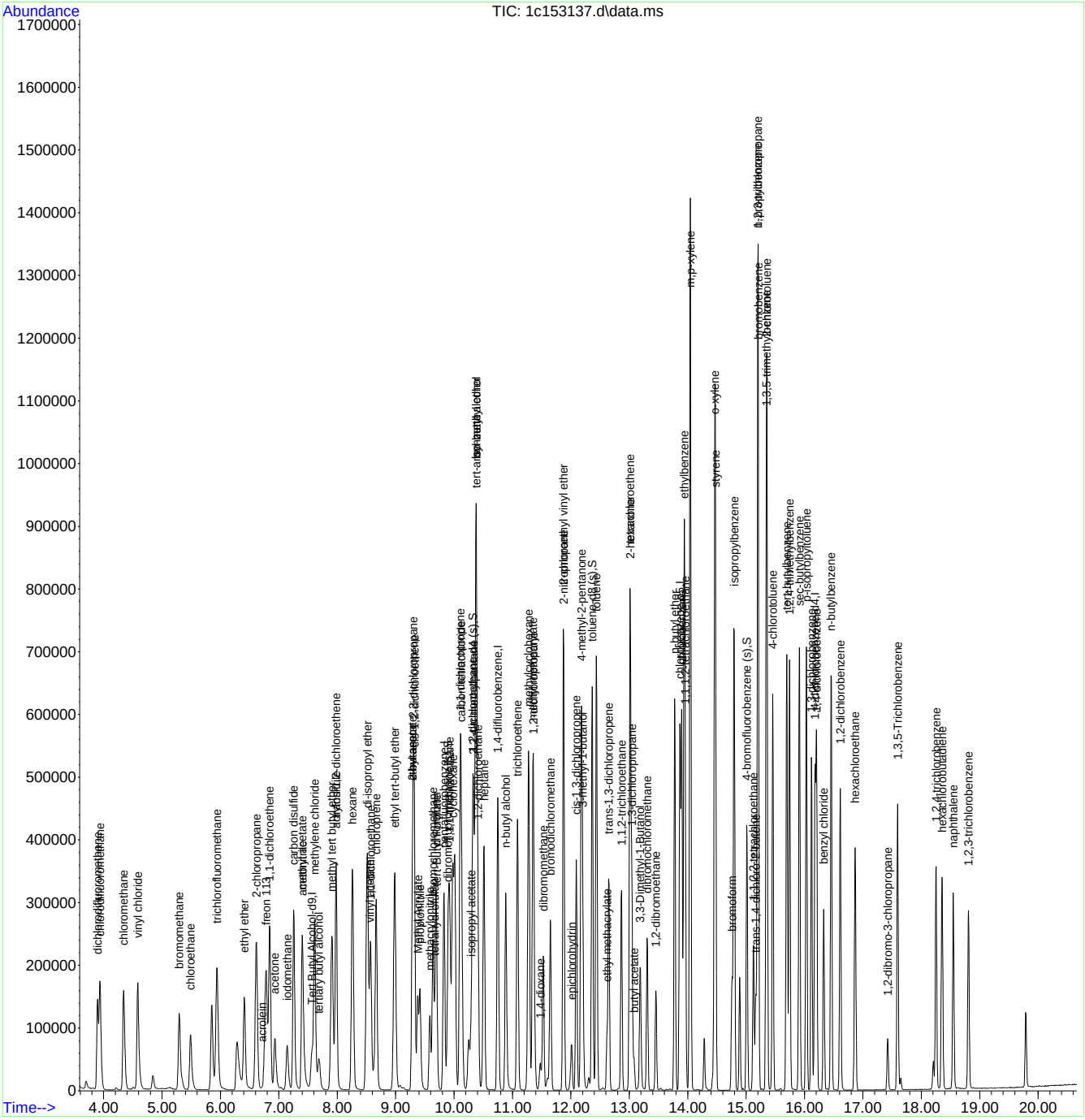
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153137.d
Acq On : 7 Nov 2017 5:04 pm
Operator : prashans
Sample : JC54047-72MS Inst : GCMS1C
Misc : MS21756,V1C6761,5.4,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 02:52:27 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153168.d
Acq On : 8 Nov 2017 9:09 am
Operator : prashans
Sample : jc54507-3ms Inst : GCMS1C
Misc : MS21823,V1C6762,5.0,,,,1
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:15:46 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.562	65	109716	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	270631	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	433234	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	334415	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	166546	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	136380	49.13	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.26%			
45) 1,2-dichloroethane-d4 (s)	10.319	65	138931	48.46	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 96.92%			
77) toluene-d8 (s)	12.364	98	463116	47.01	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.02%			
94) 4-bromofluorobenzene (s)	15.010	95	155158	49.32	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.64%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.688	59	84923	305.35	ug/L	85
3) 1,4-dioxane	11.474	88	31622	1254.91	ug/L	97
5) dichlorodifluoromethane	3.891	85	210478	45.83	ug/L	100
6) chlorodifluoromethane	3.932	51	199024	48.89	ug/L	99
7) chloromethane	4.340	50	226400	49.58	ug/L	99
8) vinyl chloride	4.581	62	233110	54.90	ug/L	99
9) bromomethane	5.292	94	121685	53.79	ug/L	99
10) chloroethane	5.486	64	110951	52.46	ug/L	98
11) trichlorofluoromethane	5.941	101	245371	49.00	ug/L	97
12) ethyl ether	6.406	74	62072	50.27	ug/L	97
13) 2-chloropropane	6.610	63	58976	53.21	ug/L	98
14) acrolein	6.705	56	19432	45.02	ug/L	97
15) freon 113	6.783	151	100281	52.42	ug/L	97
16) 1,1-dichloroethene	6.840	61	207350	49.24	ug/L	98
17) acetone	6.929	58	72895	320.95	ug/L	89
18) iodomethane	7.139	142	114204	44.75	ug/L	96
19) carbon disulfide	7.254	76	459381	48.21	ug/L	100
20) acetonitrile	7.405	41	151301	401.21	ug/L	99
22) methyl acetate	7.400	74	17580	46.46	ug/L	100
23) methylene chloride	7.609	84	127577	46.01	ug/L	96
24) acrylonitrile	7.975	53	38906	43.83	ug/L	100
25) methyl tert butyl ether	7.907	73	305652	50.10	ug/L	99
26) trans-1,2-dichloroethene	7.975	61	196497	48.08	ug/L	99
27) hexane	8.258	57	207659	46.15	ug/L	98
28) 1,1-dichloroethane	8.566	63	241089	48.71	ug/L	98
29) vinyl acetate	8.551	86	16417	43.92	ug/L	98
30) di-isopropyl ether	8.509	45	415330	48.64	ug/L	100
31) chloroprene	8.666	53	208671	47.62	ug/L	97
32) ethyl tert-butyl ether	8.980	59	370959	48.17	ug/L	98
33) 2-butanone	9.288	72	58761	222.79	ug/L #	84
34) 2,2-dichloropropane	9.299	77	206552	48.99	ug/L	99
35) ethyl acetate	9.293	45	17099	46.10	ug/L #	65
36) cis-1,2-dichloroethene	9.314	96	138757	46.78	ug/L	97
37) Methyl Acrylate	9.372	85	16237	49.82	ug/L #	91
38) propionitrile	9.414	54	170705	442.45	ug/L	97
39) methacrylonitrile	9.581	67	47021	49.93	ug/L	98
40) bromochloromethane	9.639	128	60868	51.23	ug/L	97
41) tetrahydrofuran	9.670	71	16068	49.61	ug/L	97
42) chloroform	9.691	83	227426	45.90	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153168.d
Acq On : 8 Nov 2017 9:09 am
Operator : prashans
Sample : jc54507-3ms Inst : GCMS1C
Misc : MS21823,V1C6762,5.0,,,,1
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:15:46 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-Butyl Formate	9.707	59	27349	45.53	ug/L		90
46)	1,1,1-trichloroethane	9.921	97	205365	48.22	ug/L		100
47)	cyclohexane	9.973	84	174015	50.55	ug/L		97
49)	1,1-dichloropropene	10.104	75	193751	49.65	ug/L		99
50)	iso-butyl alcohol	10.376	74	38659	488.39	ug/L		93
51)	carbon tetrachloride	10.120	117	186934	48.59	ug/L		98
52)	isopropyl acetate	10.287	61	44035	46.80	ug/L	#	92
53)	1,2-dichloroethane	10.408	62	150649	48.41	ug/L		99
54)	benzene	10.376	78	509128	46.29	ug/L		99
55)	2,2,4-trimethylpentane	10.329	57	509783	42.90	ug/L		99
56)	tert-amyl methyl ether	10.381	73	320328	44.87	ug/L		97
57)	heptane	10.507	57	105337	44.54	ug/L		99
58)	n-butyl alcohol	10.883	56	161313	2163.56	ug/L		99
59)	trichloroethene	11.082	95	137373	48.57	ug/L		99
60)	methylcyclohexane	11.276	83	243326	45.27	ug/L		98
61)	1,2-dichloropropane	11.359	63	131951	49.29	ug/L		98
62)	methyl methacrylate	11.349	100	24788	49.65	ug/L	#	93
63)	dibromomethane	11.522	93	73266	49.31	ug/L		97
64)	bromodichloromethane	11.647	83	167954	48.59	ug/L		99
65)	2-nitropropane	11.872	41	36709	41.03	ug/L	#	72
66)	2-chloroethyl vinyl ether	11.872	63	277829	244.11	ug/L		100
67)	epichlorohydrin	12.013	57	53120	205.79	ug/L		98
68)	cis-1,3-dichloropropene	12.092	75	203853	49.97	ug/L		96
69)	4-methyl-2-pentanone	12.175	58	146284	174.69	ug/L		94
70)	3-methyl-1-butanol	12.201	70	54608	880.78	ug/L		98
71)	toluene	12.437	92	281032	43.19	ug/L		97
72)	trans-1,3-dichloropropene	12.646	75	169894	49.51	ug/L		96
73)	ethyl methacrylate	12.615	69	117495	45.91	ug/L		98
74)	1,1,2-trichloroethane	12.866	83	81526	47.14	ug/L		97
75)	1,3-dichloropropane	13.044	76	151603	46.17	ug/L		99
76)	2-hexanone	13.017	58	169282	195.66	ug/L		97
79)	tetrachloroethene	13.007	166	135351	51.98	ug/L		98
80)	butyl acetate	13.075	56	57630	44.90	ug/L		92
81)	3,3-Dimethyl-1-Butanol	13.190	69	69729	488.84	ug/L		98
82)	n-butyl ether	13.776	57	481861	47.03	ug/L		99
83)	dibromochloromethane	13.305	129	119601	52.90	ug/L		99
84)	1,2-dibromoethane	13.452	107	101525	51.59	ug/L		98
85)	chlorobenzene	13.896	112	294684	48.20	ug/L		100
86)	1,1,1,2-tetrachloroethane	13.959	131	111399	54.11	ug/L		98
87)	ethylbenzene	13.938	91	514104	46.82	ug/L		98
88)	m,p-xylene	14.043	106	381495	93.40	ug/L		99
89)	o-xylene	14.461	106	185598	47.01	ug/L		98
90)	styrene	14.477	104	312789	46.71	ug/L		99
92)	bromoform	14.759	173	80605	53.96	ug/L		98
95)	isopropylbenzene	14.796	105	490467	47.13	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.125	83	113042	47.22	ug/L		99
98)	trans-1,4-dichloro-2-b...	15.162	53	32698	46.53	ug/L		96
99)	1,2,3-trichloropropane	15.198	110	27053	47.90	ug/L		97
100)	bromobenzene	15.209	156	124468	49.10	ug/L	#	85
101)	n-propylbenzene	15.198	91	610434	46.35	ug/L		98
102)	2-chlorotoluene	15.355	126	118057	49.45	ug/L		94
103)	4-chlorotoluene	15.455	91	348563	46.82	ug/L		99
104)	1,3,5-trimethylbenzene	15.345	105	377304	45.41	ug/L		99
105)	tert-butylbenzene	15.695	134	77288	48.57	ug/L		99
107)	1,2,4-trimethylbenzene	15.742	105	378326	44.28	ug/L		99
108)	sec-butylbenzene	15.910	105	544454	46.94	ug/L		99
109)	p-isopropyltoluene	16.030	119	430475	46.81	ug/l		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153168.d
Acq On : 8 Nov 2017 9:09 am
Operator : prashans
Sample : jc54507-3ms Inst : GCMS1C
Misc : MS21823,V1C6762,5.0,,,,1
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:15:46 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) benzyl chloride	16.328	91	235959	51.42	ug/L	98
111) 1,3-dichlorobenzene	16.119	146	230877	48.20	ug/L	99
112) 1,4-dichlorobenzene	16.203	146	232575	47.78	ug/L	100
113) 1,2-dichlorobenzene	16.611	146	215363	48.06	ug/L	100
114) n-butylbenzene	16.459	92	226969	43.87	ug/L	95
115) hexachloroethane	16.867	201	83124	53.81	ug/L	93
116) 1,2-dibromo-3-chloropr...	17.427	157	24713	46.42	ug/L	95
117) 1,3,5-Trichlorobenzene	17.594	180	188468	46.37	ug/L	100
118) 1,2,4-trichlorobenzene	18.253	180	164618	49.28	ug/L	98
119) hexachlorobutadiene	18.357	225	97952	46.03	ug/L	98
120) naphthalene	18.546	128	355401	46.01	ug/L	99
121) 1,2,3-trichlorobenzene	18.807	180	153396	48.57	ug/L	98

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

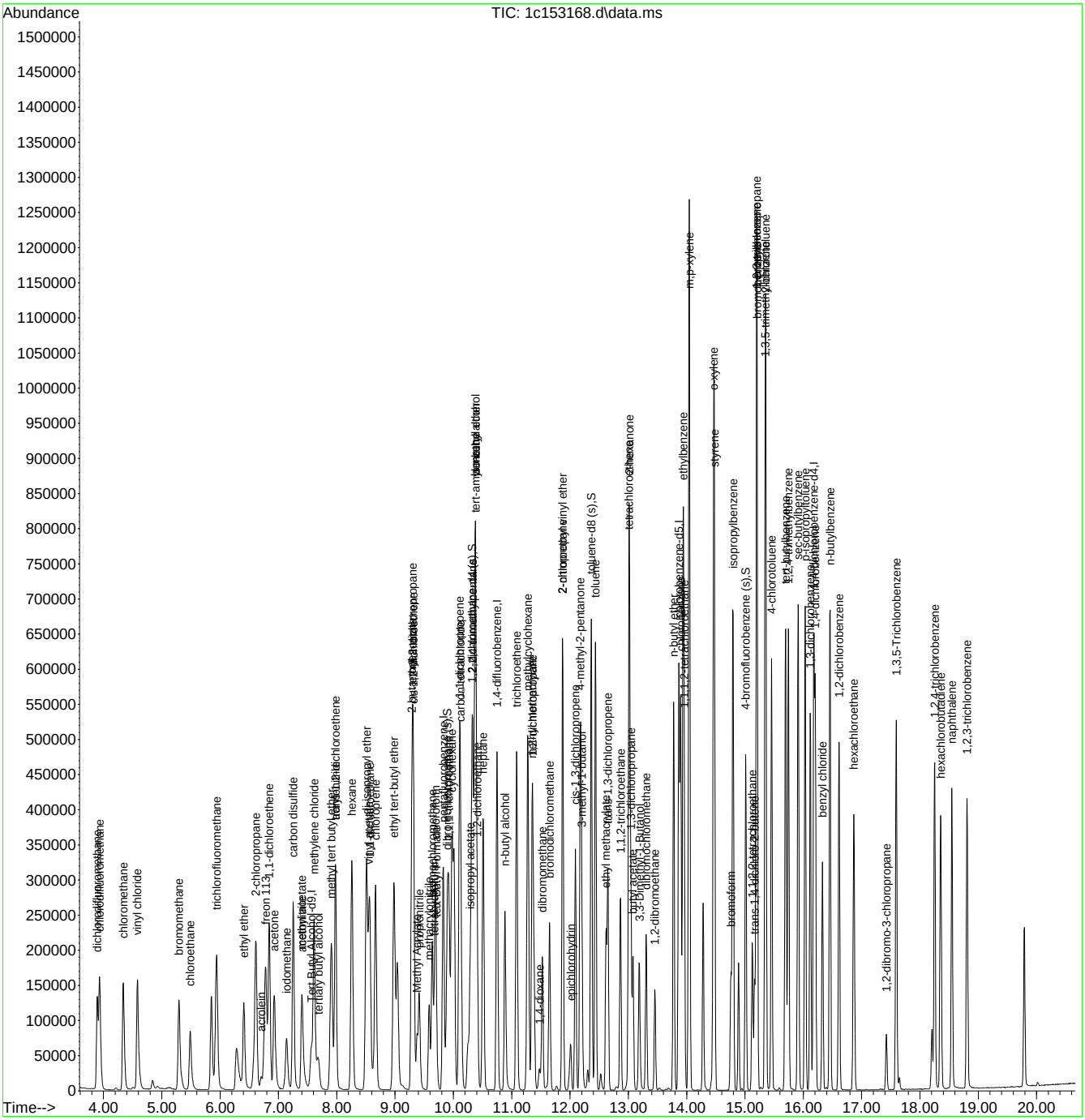
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153168.d
Acq On : 8 Nov 2017 9:09 am
Operator : prashans
Sample : jc54507-3ms Inst : GCMS1C
Misc : MS21823,V1C6762,5.0,,,,1
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 00:15:46 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248825.D
Acq On : 9 Nov 2017 5:21 pm
Operator : ThienN
Sample : jc54405-5MS
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 10 11:28:55 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.778	65	99273	500.00	ug/L	0.02
5) pentafluorobenzene	9.953	168	190935	50.00	ug/L	-0.02
54) 1,4-difluorobenzene	10.915	114	302561	50.00	ug/L	-0.02
75) chlorobenzene-d5	14.319	117	293554	50.00	ug/L	-0.01
99) 1,4-dichlorobenzene-d4	16.954	152	171250	50.00	ug/L	-0.01
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.011	113	85849	48.86	ug/L	-0.02
Spiked Amount 50.000	Range 72 - 129		Recovery = 97.72%			
55) 1,2-dichloroethane-d4 (s)	10.440	65	96093	45.80	ug/L	-0.02
Spiked Amount 50.000	Range 73 - 132		Recovery = 91.60%			
76) toluene-d8 (s)	12.635	98	354485	47.42	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.84%			
100) 4-bromofluorobenzene (s)	15.631	95	142495	49.46	ug/L	-0.02
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.92%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.899	59	66612	215.07	ug/L	98
4) 1,4-dioxane	11.590	88	26342	1200.39	ug/L	86
6) chlorodifluoromethane	4.511	51	110373	40.02	ug/L	98
7) dichlorodifluoromethane	4.511	85	121844	40.74	ug/L	97
8) chloromethane	4.809	50	181631	44.54	ug/L	99
9) vinyl chloride	5.081	62	189035	48.54	ug/L	99
11) bromomethane	5.656	94	69767	27.75	ug/L	96
12) chloroethane	5.834	64	61560	29.29	ug/L	98
13) trichlorofluoromethane	6.309	101	155191	43.49	ug/L	99
14) vinyl bromide	6.173	106	101154	36.04	ug/L	96
15) ethyl ether	6.644	74	48163	39.21	ug/L	94
16) 2-chloropropane	6.864	43	164473	34.21	ug/L	96
17) acrolein	6.895	56	22038	37.22	ug/L	92
18) freon 113	7.099	151	73226	37.32	ug/L	97
19) 1,1-dichloroethene	7.078	96	91806	39.60	ug/L	94
20) acetone	7.078	58	38953	187.08	ug/L	89
21) acetonitrile	7.501	41	168501	435.14	ug/L	100
22) iodomethane	7.339	142	178981	39.69	ug/L	97
23) carbon disulfide	7.491	76	352009	40.10	ug/L	99
24) methylene chloride	7.773	84	108802	40.59	ug/L	99
25) methyl acetate	7.517	43	77202	38.57	ug/L	99
26) methyl tert butyl ether	8.118	73	287318	38.57	ug/L	97
27) trans-1,2-dichloroethene	8.150	96	97767	41.12	ug/L	98
28) hexane	8.484	56	66146	38.54	ug/L	96
29) di-isopropyl ether	8.699	45	321084	37.89	ug/L	97
30) 2-butanone	9.363	72	46096	184.82	ug/L #	72
31) 1,1-dichloroethane	8.725	63	166019	40.13	ug/L	100
32) chloroprene	8.819	53	130828	36.63	ug/L	94
33) acrylonitrile	8.056	53	41468	42.82	ug/L	97
34) vinyl acetate	8.641	86	15627	40.23	ug/L #	74
35) ethyl tert-butyl ether	9.159	59	317813	38.79	ug/L	99
36) ethyl acetate	9.363	45	15410	39.97	ug/L #	92
37) 2,2-dichloropropane	9.483	77	128845	37.28	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248825.D
Acq On : 9 Nov 2017 5:21 pm
Operator : ThienN
Sample : jc54405-5MS
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 10 11:28:55 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.436	96	106894	41.23	ug/L		98
39) propionitrile	9.446	54	164223	423.68	ug/L		98
40) methyl acrylate	9.462	85	14090	42.80	ug/L	#	77
41) methacrylonitrile	9.640	67	40621	41.59	ug/L		92
42) bromochloromethane	9.739	128	51691	40.77	ug/L		97
43) tetrahydrofuran	9.760	42	31230	38.43	ug/L		97
44) chloroform	9.817	83	153595	38.94	ug/L		97
45) tert-Butyl Formate	9.859	59	9672	6.31	ug/L		94
47) 1,1,1-trichloroethane	10.094	97	137466	39.12	ug/L		97
48) cyclohexane	10.209	84	164595	42.01	ug/L		93
50) 1,1-dichloropropene	10.257	75	118525	39.04	ug/L		97
51) carbon tetrachloride	10.293	117	114806	38.00	ug/L		97
52) tert-amyl alcohol	10.382	73	27810	178.39	ug/L	#	83
53) isopropyl acetate	10.392	87	19353	38.85	ug/L	#	86
56) n-butyl alcohol	10.957	56	153660	1928.44	ug/L		97
57) 2,2,4-Trimethylpentane	10.602	57	394283	42.58	ug/L		96
58) benzene	10.507	78	384875	39.14	ug/L		99
59) tert-amyl methyl ether	10.581	73	292738	36.84	ug/L		100
60) heptane	10.748	57	73136	39.81	ug/L		96
61) 1,2-dichloroethane	10.534	62	104632	35.25	ug/L		98
62) ethyl acrylate	11.213	55	118506	36.37	ug/L		99
63) trichloroethene	11.239	95	94254	39.53	ug/L		94
64) 2-chloroethyl vinyl ether	12.055	63	163544	173.24	ug/L		98
65) methyl methacrylate	11.490	100	26721	37.88	ug/L		92
66) methylcyclohexane	11.558	83	189702	37.04	ug/L		98
67) 1,2-dichloropropane	11.548	63	99046	39.16	ug/L		98
68) dibromomethane	11.663	93	57289	37.79	ug/L		96
69) bromodichloromethane	11.820	83	121555	38.11	ug/L		98
70) 2-nitropropane	12.034	41	30513	34.31	ug/L		100
71) epichlorohydrin	12.160	57	52708	198.38	ug/L		97
72) cis-1,3-dichloropropene	12.301	75	162862	38.85	ug/L		93
73) 4-methyl-2-pentanone	12.405	58	159268	145.62	ug/L		94
74) isoamyl alcohol	12.400	70	61477	849.46	ug/L		98
77) toluene	12.719	92	713167	116.14	ug/L		98
78) ethyl methacrylate	12.897	69	128709	36.75	ug/L		93
79) trans-1,3-dichloropropene	12.918	75	137655	38.63	ug/L		93
80) 1,1,2-trichloroethane	13.163	83	72354	39.26	ug/L		98
81) tetrachloroethene	13.331	164	84707	36.44	ug/L		99
82) 2-hexanone	13.336	58	158714	149.46	ug/L		93
83) 1,3-dichloropropane	13.362	76	134958	37.46	ug/L		89
84) butyl acetate	13.419	56	70035	35.85	ug/L		91
85) 3,3-Dimethyl-1-Butanol	13.534	69	81530	400.76	ug/L		98
86) dibromochloromethane	13.639	129	99811	39.44	ug/L		98
87) 1,2-dibromoethane	13.817	107	94345	39.04	ug/L		95
88) n-butyl ether	14.287	57	499098	37.82	ug/L		100
89) chlorobenzene	14.355	112	267640	38.72	ug/L		99
90) 1,1,1,2-tetrachloroethane	14.423	131	95692	37.53	ug/L		99
91) ethylbenzene	14.418	91	456679	37.98	ug/L		100
92) m,p-xylene	14.554	106	358837	76.01	ug/L		99
93) o-xylene	15.004	91	387326	37.67	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248825.D
Acq On : 9 Nov 2017 5:21 pm
Operator : ThienN
Sample : jc54405-5MS
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 10 11:28:55 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

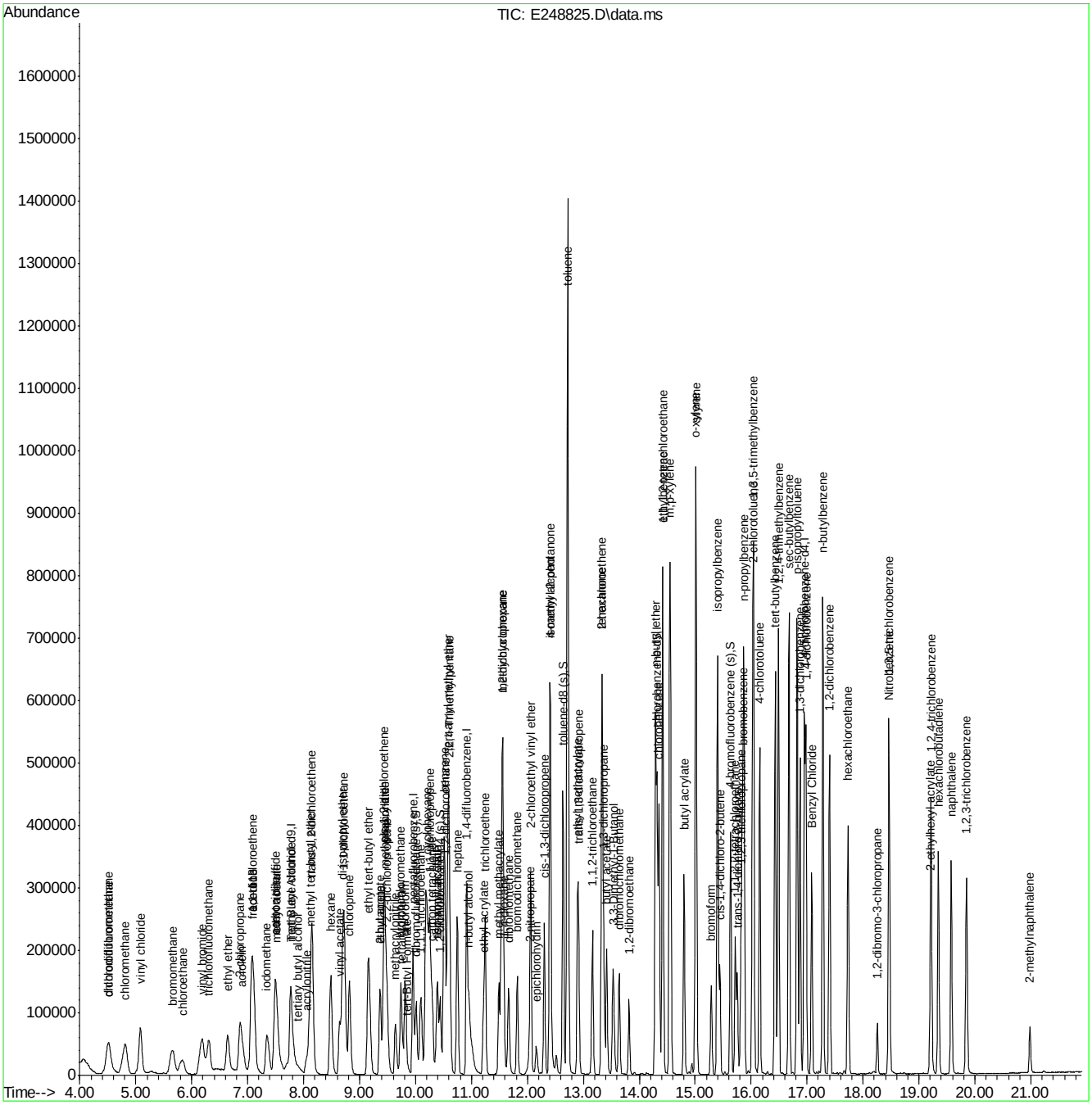
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) styrene	15.019	104	319161	37.96	ug/L	98
95) butyl acrylate	14.800	55	226767	36.97	ug/L	100
96) isopropylbenzene	15.401	105	513570	38.14	ug/L	99
97) bromoform	15.286	173	78452	39.52	ug/L	98
98) cis-1,4-dichloro-2-butene	15.437	88	42388	36.92	ug/L	90
101) 1,1,2,2-tetrachloroethane	15.715	83	128750	40.77	ug/L	98
102) trans-1,4-dichloro-2-b...	15.751	53	33545	39.61	ug/L	90
103) 1,2,3-trichloropropane	15.819	110	33263	40.38	ug/L	93
104) bromobenzene	15.845	156	129413	39.51	ug/L	96
105) n-propylbenzene	15.871	91	581436	39.48	ug/L	99
106) 2-chlorotoluene	16.023	126	120319	40.20	ug/L	99
107) 4-chlorotoluene	16.148	91	352638	39.25	ug/L	97
108) 1,3,5-trimethylbenzene	16.044	105	416577	39.64	ug/L	99
109) tert-butylbenzene	16.431	119	371769	40.36	ug/L	100
110) 1,2,4-trimethylbenzene	16.488	105	441403	39.95	ug/L	100
111) sec-butylbenzene	16.677	105	586129	40.35	ug/L	100
112) p-isopropyltoluene	16.823	119	493703	40.62	ug/L	100
113) 1,3-dichlorobenzene	16.875	146	251218	38.44	ug/L	99
114) 1,4-dichlorobenzene	16.980	146	253295	39.38	ug/L	99
115) 1,2-dichlorobenzene	17.403	146	254891	39.67	ug/L	99
116) Benzyl Chloride	17.079	91	269234	43.45	ug/L	99
117) n-butylbenzene	17.283	92	259740	42.87	ug/L	98
118) 2-ethylhexyl acrylate	19.196	55	30611	9.23	ug/L	95
119) hexachloroethane	17.733	201	92088	44.11	ug/L	99
120) 1,2-dibromo-3-chloropr...	18.255	75	22079	39.08	ug/L	86
121) 1,3,5-trichlorobenzene	18.464	180	225844	43.55	ug/L	99
122) Nitrobenzene	18.475	77	6049	39.52	ug/L	99
123) 1,2,4-trichlorobenzene	19.217	180	180525	44.15	ug/L	97
124) hexachlorobutadiene	19.348	225	103378	47.24	ug/L	99
125) naphthalene	19.578	128	344083	43.41	ug/L	99
126) 1,2,3-trichlorobenzene	19.850	180	141023	45.50	ug/L	99
127) 2-methylnaphthalene	20.984	142	47138	19.79	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248825.D
Acq On : 9 Nov 2017 5:21 pm
Operator : ThienN
Sample : jc54405-5MS
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 10 11:28:55 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248826.D
Acq On : 9 Nov 2017 5:52 pm
Operator : ThienN
Sample : jc54405-5MSD
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 10 11:29:17 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.767	65	97824	500.00	ug/L	0.00
5) pentafluorobenzene	9.953	168	186817	50.00	ug/L	-0.02
54) 1,4-difluorobenzene	10.915	114	294805	50.00	ug/L	-0.02
75) chlorobenzene-d5	14.318	117	289094	50.00	ug/L	-0.02
99) 1,4-dichlorobenzene-d4	16.953	152	169715	50.00	ug/L	-0.01
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.010	113	84194	48.98	ug/L	-0.02
Spiked Amount 50.000	Range 72 - 129		Recovery = 97.96%			
55) 1,2-dichloroethane-d4 (s)	10.439	65	94905	46.43	ug/L	-0.02
Spiked Amount 50.000	Range 73 - 132		Recovery = 92.86%			
76) toluene-d8 (s)	12.635	98	352222	47.84	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.68%			
100) 4-bromofluorobenzene (s)	15.630	95	140092	49.07	ug/L	-0.02
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.14%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.882	59	66478	217.82	ug/L	96
4) 1,4-dioxane	11.589	88	27127	1254.48	ug/L	93
6) chlorodifluoromethane	4.516	51	111419	41.29	ug/L	98
7) dichlorodifluoromethane	4.500	85	121573	41.55	ug/L	98
8) chloromethane	4.814	50	186188	46.66	ug/L	98
9) vinyl chloride	5.080	62	192708	50.57	ug/L	99
11) bromomethane	5.655	94	72898	29.63	ug/L	97
12) chloroethane	5.828	64	63723	30.99	ug/L	97
13) trichlorofluoromethane	6.304	101	155850	44.64	ug/L	100
14) vinyl bromide	6.178	106	102886	37.46	ug/L	98
15) ethyl ether	6.643	74	47269	39.33	ug/L	95
16) 2-chloropropane	6.863	43	163800	34.82	ug/L	96
17) acrolein	6.889	56	22098	38.14	ug/L	99
18) freon 113	7.104	151	72098	37.56	ug/L	97
19) 1,1-dichloroethene	7.077	96	91631	40.40	ug/L	94
20) acetone	7.072	58	38174	187.38	ug/L #	81
21) acetonitrile	7.490	41	168364	444.37	ug/L	98
22) iodomethane	7.339	142	178011	40.35	ug/L	96
23) carbon disulfide	7.490	76	356577	41.52	ug/L	99
24) methylene chloride	7.773	84	109998	41.95	ug/L	99
25) methyl acetate	7.511	43	75951	38.78	ug/L	96
26) methyl tert butyl ether	8.118	73	286647	39.33	ug/L	96
27) trans-1,2-dichloroethene	8.149	96	97814	42.05	ug/L	99
28) hexane	8.478	56	64610	38.48	ug/L	96
29) di-isopropyl ether	8.703	45	325570	39.27	ug/L	96
30) 2-butanone	9.357	72	44100	180.72	ug/L #	76
31) 1,1-dichloroethane	8.724	63	165972	41.00	ug/L	99
32) chloroprene	8.818	53	129373	37.02	ug/L	94
33) acrylonitrile	8.045	53	40897	43.16	ug/L	99
34) vinyl acetate	8.635	86	15275	40.19	ug/L #	91
35) ethyl tert-butyl ether	9.158	59	320449	39.97	ug/L	99
36) ethyl acetate	9.367	45	14751	39.11	ug/L #	67
37) 2,2-dichloropropane	9.487	77	127785	37.79	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248826.D
Acq On : 9 Nov 2017 5:52 pm
Operator : ThienN
Sample : jc54405-5MSD
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 10 11:29:17 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.435	96	105011	41.39	ug/L		99
39) propionitrile	9.440	54	161987	427.12	ug/L		88
40) methyl acrylate	9.456	85	13455	41.77	ug/L		97
41) methacrylonitrile	9.644	67	40010	41.87	ug/L		88
42) bromochloromethane	9.738	128	51194	41.27	ug/L		97
43) tetrahydrofuran	9.754	42	30014	37.74	ug/L		95
44) chloroform	9.817	83	152972	39.63	ug/L		98
45) tert-Butyl Formate	9.859	59	9642	6.43	ug/L		96
47) 1,1,1-trichloroethane	10.094	97	136053	39.57	ug/L		99
48) cyclohexane	10.214	84	163800	42.73	ug/L		88
50) 1,1-dichloropropene	10.251	75	115992	39.05	ug/L		99
51) carbon tetrachloride	10.293	117	114138	38.62	ug/L		99
52) tert-amyl alcohol	10.376	73	26717	175.16	ug/L		91
53) isopropyl acetate	10.392	87	19235	39.46	ug/L	#	88
56) n-butyl alcohol	10.957	56	154966	1996.00	ug/L		98
57) 2,2,4-Trimethylpentane	10.596	57	393064	43.57	ug/L		96
58) benzene	10.507	78	377536	39.41	ug/L		99
59) tert-amyl methyl ether	10.580	73	291446	37.64	ug/L		100
60) heptane	10.742	57	72897	40.73	ug/L		98
61) 1,2-dichloroethane	10.533	62	102338	35.39	ug/L		97
62) ethyl acrylate	11.213	55	115897	36.50	ug/L		99
63) trichloroethene	11.244	95	92017	39.61	ug/L		99
64) 2-chloroethyl vinyl ether	12.054	63	160242	174.21	ug/L		99
65) methyl methacrylate	11.485	100	26605	38.71	ug/L	#	83
66) methylcyclohexane	11.558	83	187740	37.62	ug/L		100
67) 1,2-dichloropropane	11.547	63	97598	39.60	ug/L		98
68) dibromomethane	11.662	93	56231	38.07	ug/L		99
69) bromodichloromethane	11.819	83	120154	38.66	ug/L		98
70) 2-nitropropane	12.028	41	30406	35.09	ug/L		93
71) epichlorohydrin	12.159	57	52111	201.29	ug/L		96
72) cis-1,3-dichloropropene	12.300	75	160355	39.26	ug/L		95
73) 4-methyl-2-pentanone	12.405	58	157456	147.75	ug/L		92
74) isoamyl alcohol	12.399	70	61086	866.26	ug/L		97
77) toluene	12.718	92	696373	115.16	ug/L		97
78) ethyl methacrylate	12.896	69	127580	36.99	ug/L		92
79) trans-1,3-dichloropropene	12.912	75	134676	38.37	ug/L		99
80) 1,1,2-trichloroethane	13.163	83	71851	39.59	ug/L		97
81) tetrachloroethene	13.330	164	83910	36.66	ug/L		98
82) 2-hexanone	13.335	58	157106	150.23	ug/L		92
83) 1,3-dichloropropane	13.361	76	134100	37.80	ug/L		93
84) butyl acetate	13.414	56	69042	35.88	ug/L		92
85) 3,3-Dimethyl-1-Butanol	13.534	69	82677	412.67	ug/L		99
86) dibromochloromethane	13.639	129	97678	39.19	ug/L		100
87) 1,2-dibromoethane	13.816	107	94733	39.80	ug/L		97
88) n-butyl ether	14.287	57	496836	38.23	ug/L		100
89) chlorobenzene	14.355	112	264070	38.79	ug/L		99
90) 1,1,1,2-tetrachloroethane	14.423	131	95206	37.92	ug/L		98
91) ethylbenzene	14.417	91	449136	37.93	ug/L		99
92) m,p-xylene	14.548	106	354805	76.32	ug/L		98
93) o-xylene	15.008	91	387054	38.22	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248826.D
Acq On : 9 Nov 2017 5:52 pm
Operator : ThienN
Sample : jc54405-5MSD
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 10 11:29:17 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

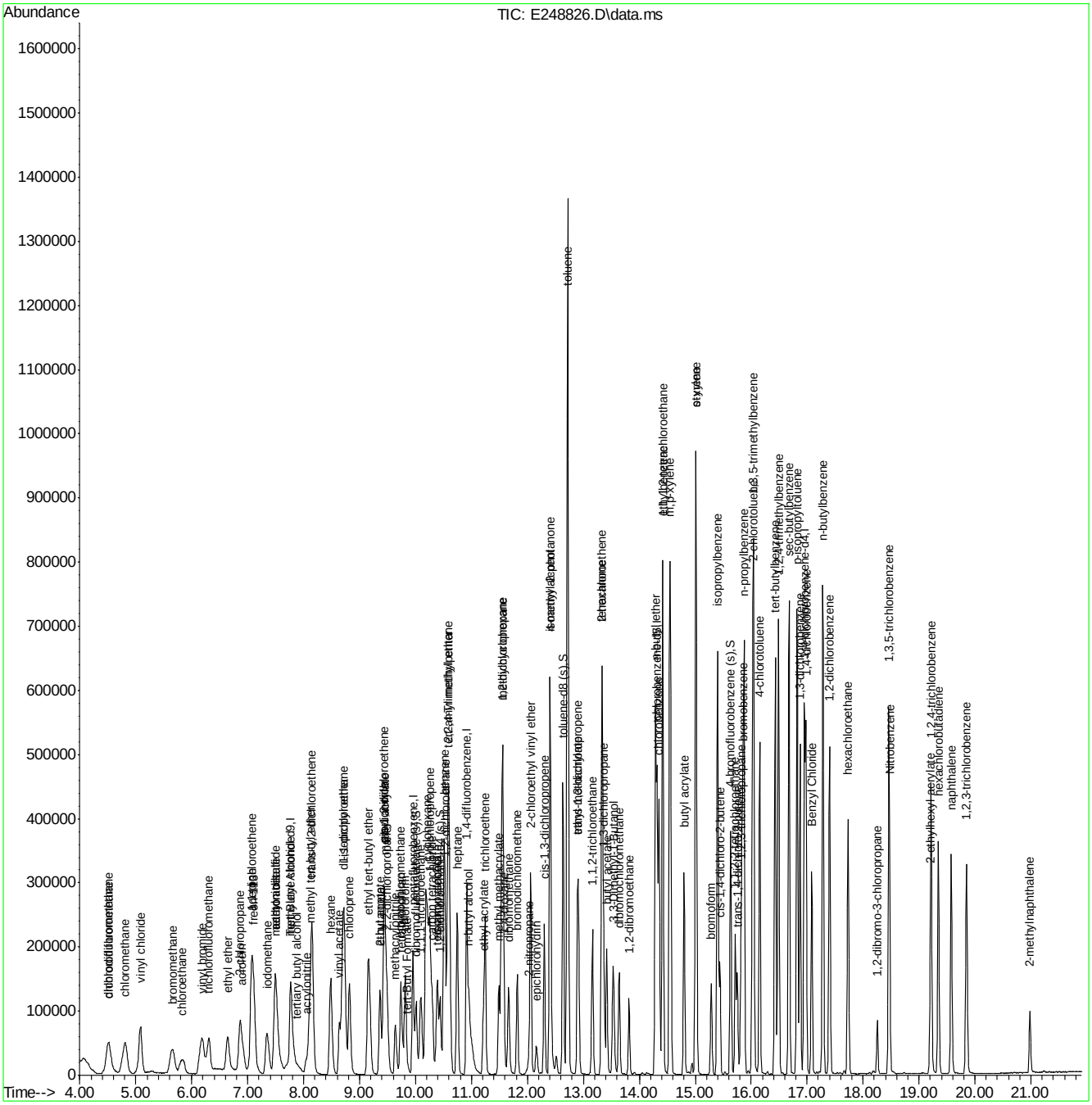
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) styrene	15.019	104	316892	38.27	ug/L	99
95) butyl acrylate	14.799	55	225277	37.30	ug/L	99
96) isopropylbenzene	15.400	105	507326	38.26	ug/L	99
97) bromoform	15.285	173	78060	39.93	ug/L	98
98) cis-1,4-dichloro-2-butene	15.442	88	42375	37.48	ug/L	92
101) 1,1,2,2-tetrachloroethane	15.714	83	128272	40.98	ug/L	98
102) trans-1,4-dichloro-2-b...	15.751	53	33781	40.25	ug/L	91
103) 1,2,3-trichloropropane	15.819	110	32754	40.12	ug/L	97
104) bromobenzene	15.845	156	128071	39.46	ug/L	98
105) n-propylbenzene	15.871	91	572313	39.21	ug/L	99
106) 2-chlorotoluene	16.022	126	118966	40.11	ug/L	96
107) 4-chlorotoluene	16.153	91	346939	38.96	ug/L	99
108) 1,3,5-trimethylbenzene	16.043	105	412937	39.65	ug/L	99
109) tert-butylbenzene	16.430	119	370962	40.64	ug/L	98
110) 1,2,4-trimethylbenzene	16.488	105	435297	39.76	ug/L	99
111) sec-butylbenzene	16.676	105	585648	40.68	ug/L	99
112) p-isopropyltoluene	16.822	119	488065	40.52	ug/L	99
113) 1,3-dichlorobenzene	16.875	146	252744	39.03	ug/L	98
114) 1,4-dichlorobenzene	16.979	146	252091	39.55	ug/L	98
115) 1,2-dichlorobenzene	17.403	146	255347	40.10	ug/L	99
116) Benzyl Chloride	17.084	91	265979	43.31	ug/L	99
117) n-butylbenzene	17.282	92	259627	43.23	ug/L	100
118) 2-ethylhexyl acrylate	19.196	55	30878	9.37	ug/L	95
119) hexachloroethane	17.732	201	90746	43.86	ug/L	97
120) 1,2-dibromo-3-chloropr...	18.255	75	22543	40.26	ug/L	90
121) 1,3,5-trichlorobenzene	18.464	180	227037	44.18	ug/L	99
122) Nitrobenzene	18.480	77	6748	44.02	ug/L	95
123) 1,2,4-trichlorobenzene	19.217	180	183707	45.34	ug/L	98
124) hexachlorobutadiene	19.347	225	105302	48.55	ug/L	99
125) naphthalene	19.578	128	353681	45.03	ug/L	99
126) 1,2,3-trichlorobenzene	19.849	180	147230	47.93	ug/L	98
127) 2-methylnaphthalene	20.984	142	59241	25.09	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248826.D
Acq On : 9 Nov 2017 5:52 pm
Operator : ThienN
Sample : jc54405-5MSD
Misc : MS21775,VE10685,5.3,,100,10,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 10 11:29:17 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216622.d
Acq On : 4 Nov 2017 4:31 pm
Operator : PrashanS
Sample : JC54428-3DUP Inst : GCMSI
Misc : MS21772,VI8698,5.9,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 08:05:13 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

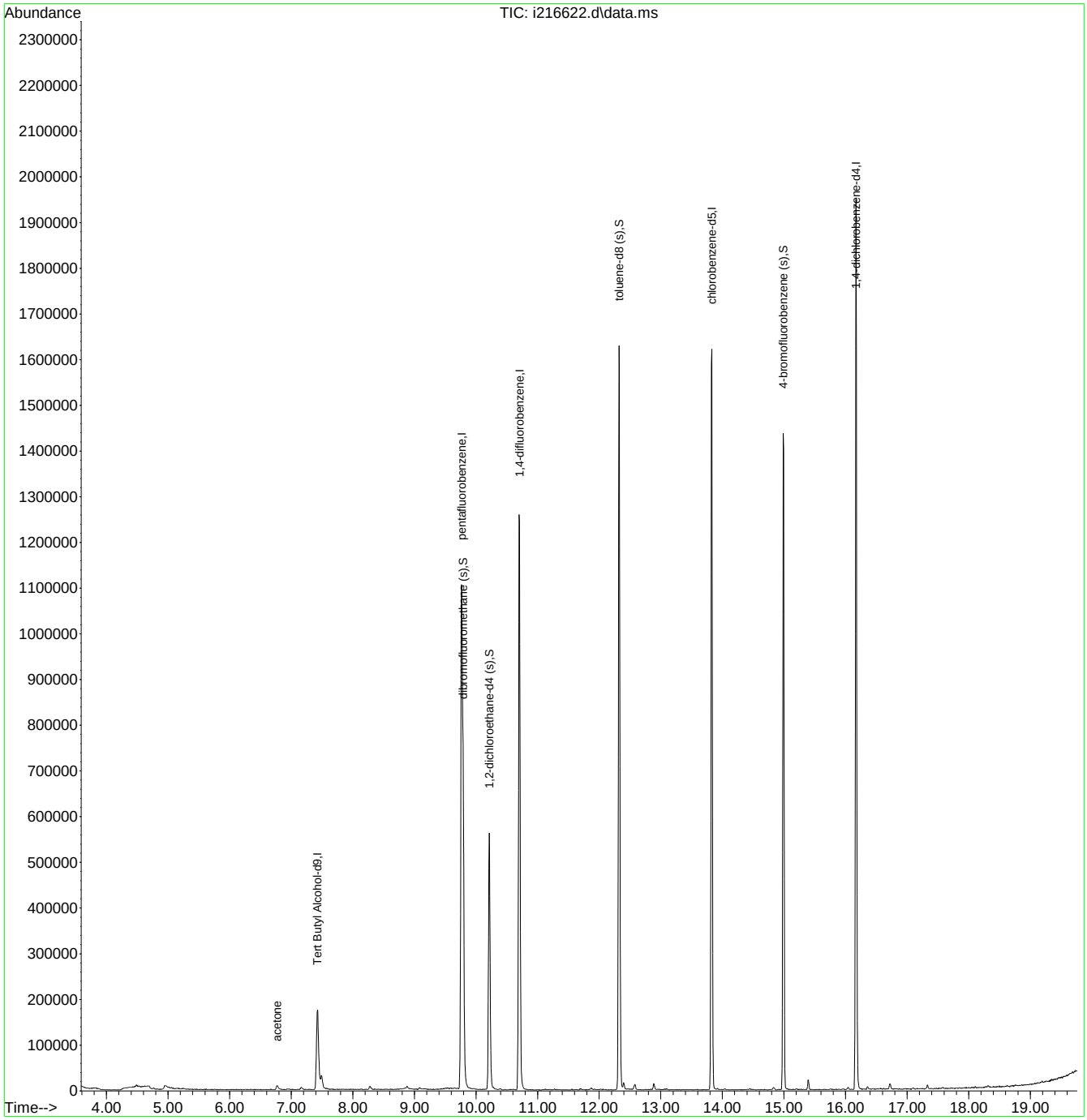
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	234324	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	642259	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.706	114	909159	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	748923	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	425954	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	343506	51.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 103.06%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	428431	57.89	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 115.78%			
72) toluene-d8 (s)	12.322	98	929571	49.36	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.72%			
96) 4-bromofluorobenzene (s)	14.989	95	366260	54.01	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 108.02%			
Target Compounds						Qvalue
17) acetone	6.767	58	3026	8.63	ug/L	# 61

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

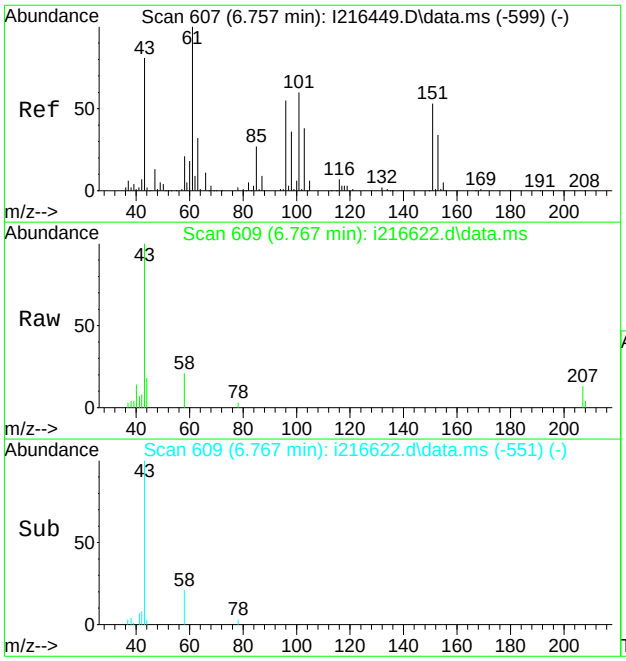
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216622.d
Acq On : 4 Nov 2017 4:31 pm
Operator : PrashanS
Sample : JC54428-3DUP Inst : GCMSI
Misc : MS21772,VI8698,5.9,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 08:05:13 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



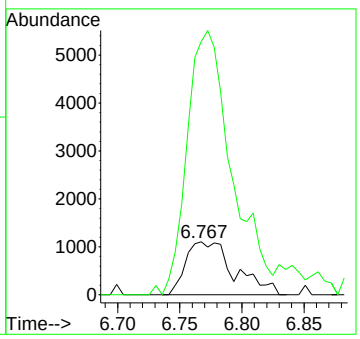
SGS ACCUTEST JC54422



#17
acetone
Concen: 8.63 ug/L
RT: 6.767 min Scan# 609
Delta R.T. 0.005 min
Lab File: i216622.d
Acq: 4 Nov 2017 4:31 pm

Tgt Ion: 58 Resp: 3026

Ion	Ratio	Lower	Upper
58	100		
43	478.4	357.6	417.6#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216653.d
Acq On : 6 Nov 2017 6:38 pm
Operator : PrashanS
Sample : JC54422-2DUP
Misc : MS21774,VI8700,4.7,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 07 12:55:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

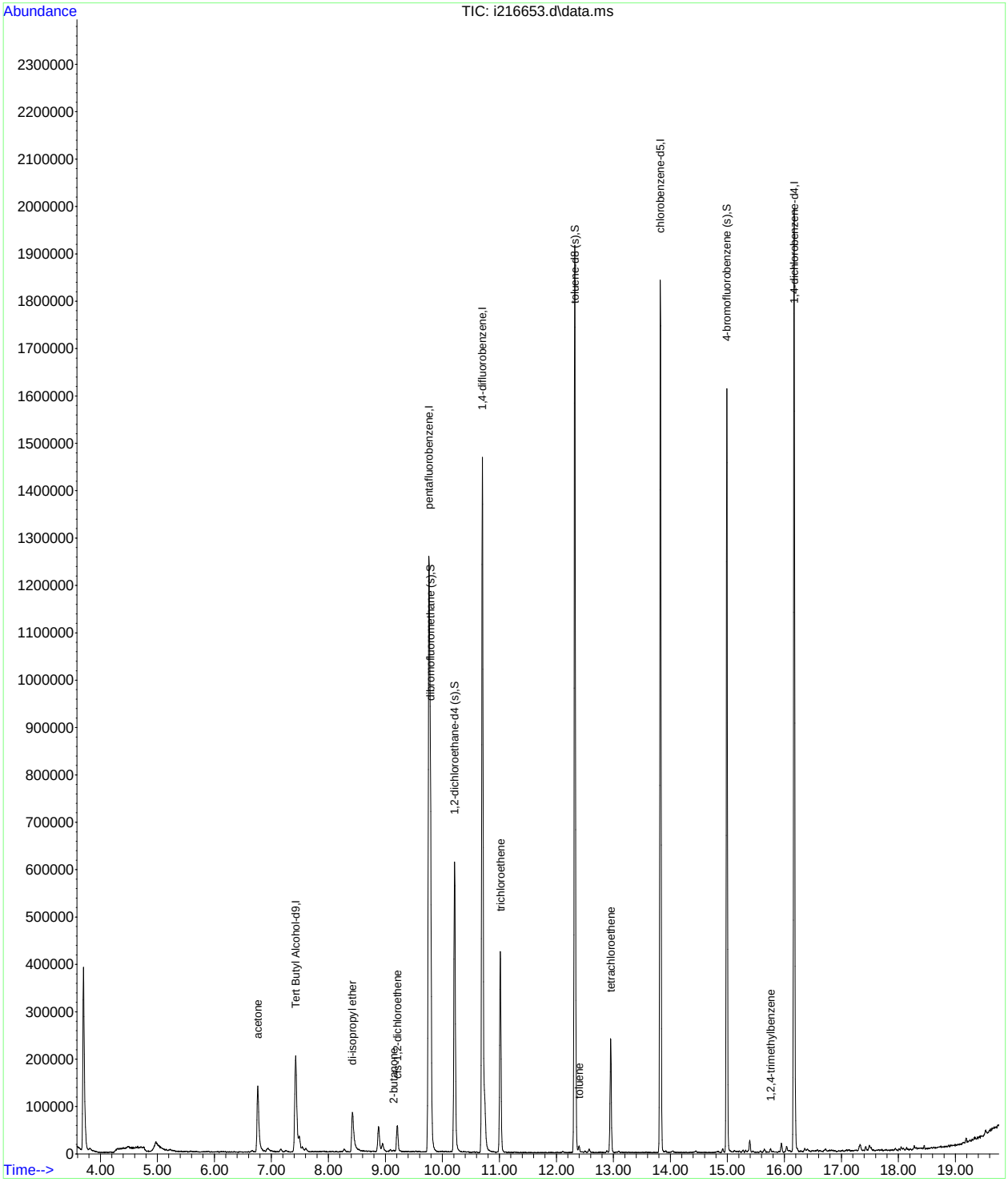
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	280200	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	765028	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.700	114	1087953	50.00	ug/L		0.00
71) chlorobenzene-d5	13.823	117	878455	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	450176	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	412206	51.91	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 103.82%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	457878	51.70	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 103.40%				
72) toluene-d8 (s)	12.322	98	1101933	49.88	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.76%				
96) 4-bromofluorobenzene (s)	14.989	95	403691	56.32	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 112.64%				
Target Compounds							Qvalue
17) acetone	6.762	58	56473	135.25	ug/L		99
29) di-isopropyl ether	8.420	45	6319	0.47	ug/L	#	1
32) 2-butanone	9.142	72	680	1.36	ug/L	#	49
35) cis-1,2-dichloroethene	9.210	96	23673	3.80	ug/L		89
58) trichloroethene	11.019	95	121109	19.95	ug/L		92
73) toluene	12.400	92	4710	0.39	ug/L		95
78) tetrachloroethene	12.955	166	64147	9.24	ug/L		99
106) 1,2,4-trimethylbenzene	15.758	105	3926	0.24	ug/L		86

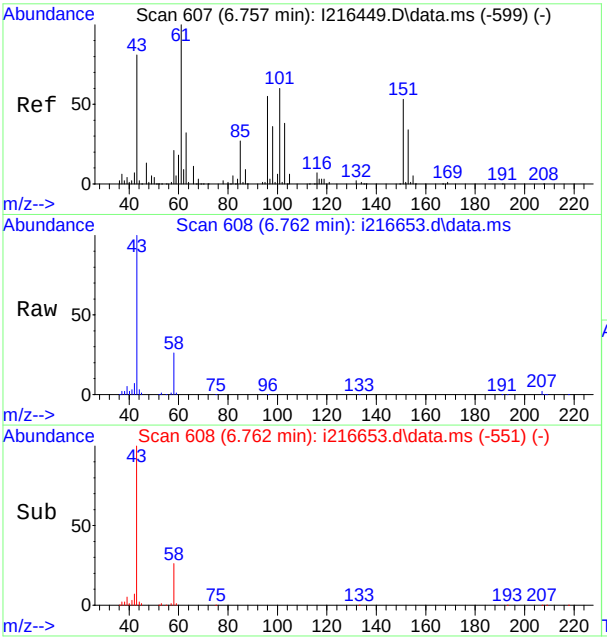
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216653.d
Acq On : 6 Nov 2017 6:38 pm
Operator : PrashanS
Sample : JC54422-2DUP
Misc : MS21774,VI8700,4.7,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 07 12:55:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

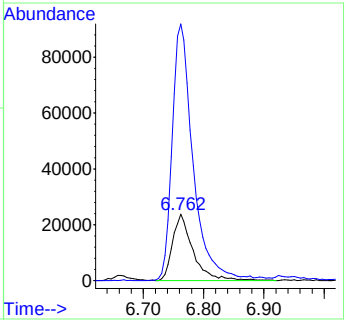


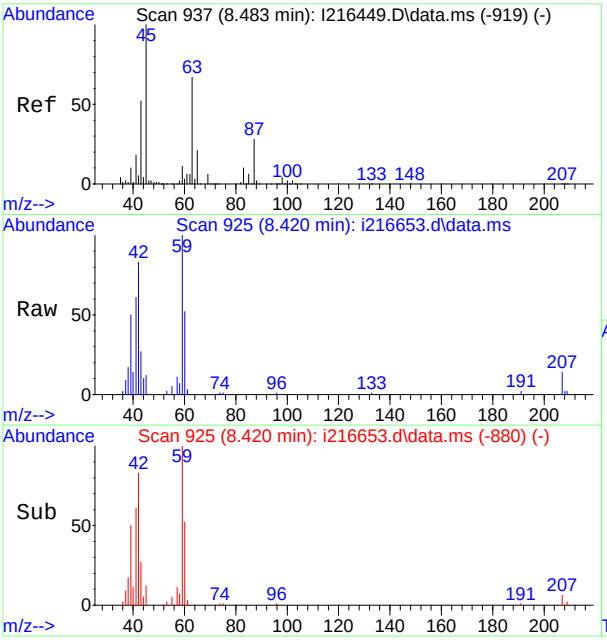


#17
acetone
Concen: 135.25 ug/L
RT: 6.762 min Scan# 608
Delta R.T. -0.000 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion: 58 Resp: 56473

Ion	Ratio	Lower	Upper
58	100		
43	386.3	357.6	417.6

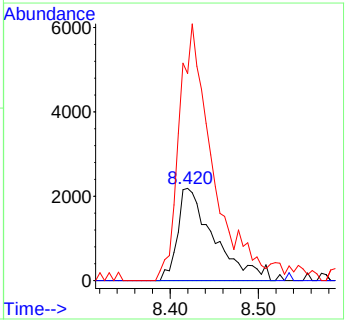


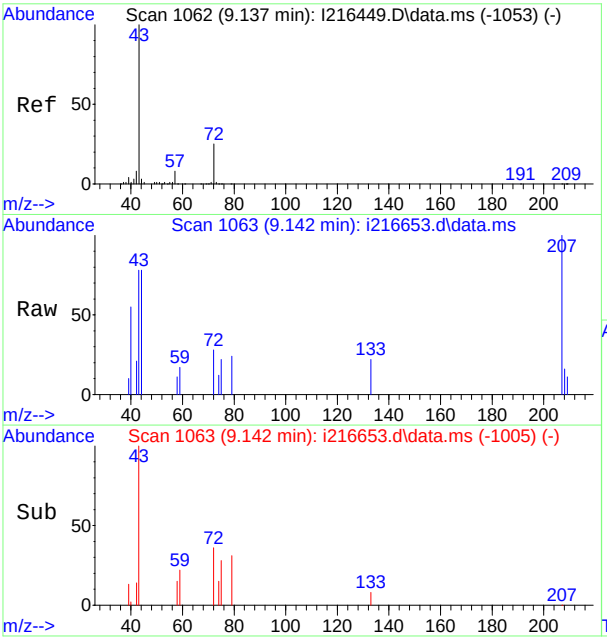


#29
di-isopropyl ether
Concen: 0.47 ug/L
RT: 8.420 min Scan# 925
Delta R.T. -0.063 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion: 45 Resp: 6319

Ion	Ratio	Lower	Upper
45	100		
87	0.0	0.0	57.7
43	224.2	21.8	81.8#

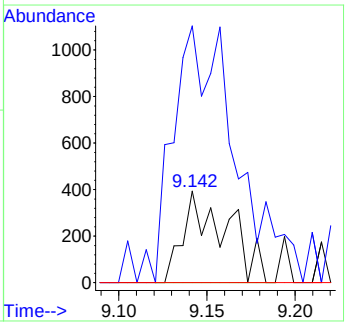


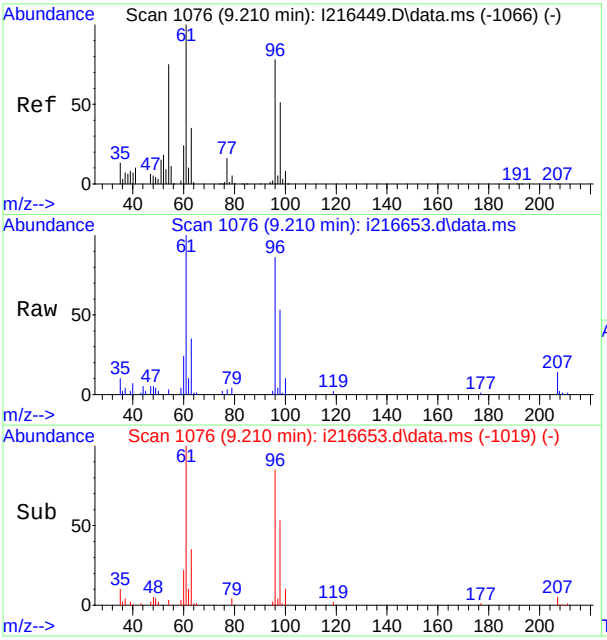


#32
2-butanone
Concen: 1.36 ug/L
RT: 9.142 min Scan# 1063
Delta R.T. 0.005 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion: 72 Resp: 680

Ion	Ratio	Lower	Upper
72	100		
43	280.9	370.5	430.5#
57	0.0	1.5	61.5#

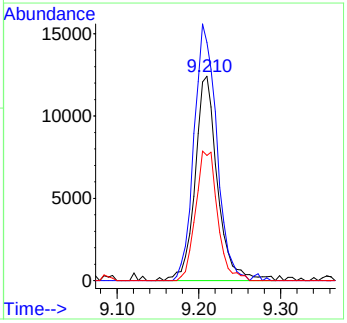


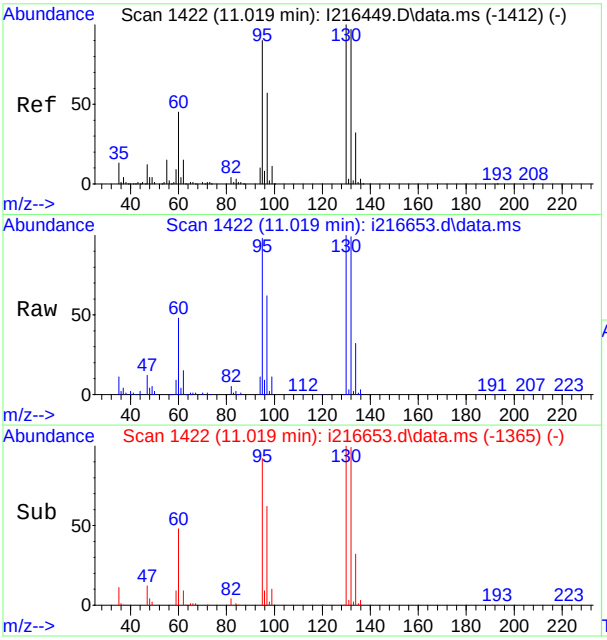


#35
cis-1,2-dichloroethene
Concen: 3.80 ug/L
RT: 9.210 min Scan# 1076
Delta R.T. -0.000 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion: 96 Resp: 23673

Ion	Ratio	Lower	Upper
96	100		
61	116.5	113.6	153.6
98	61.3	44.8	84.8

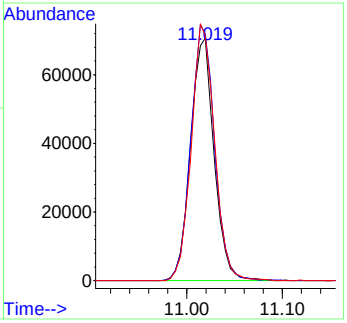


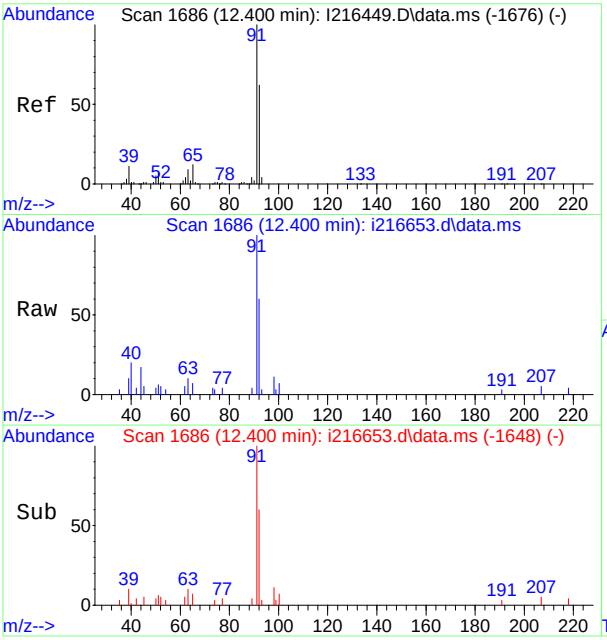


#58
trichloroethene
Concen: 19.95 ug/L
RT: 11.019 min Scan# 1422
Delta R.T. -0.000 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion: 95 Resp: 121109

Ion	Ratio	Lower	Upper
95	100		
130	101.7	81.5	141.5
132	100.9	78.2	138.2

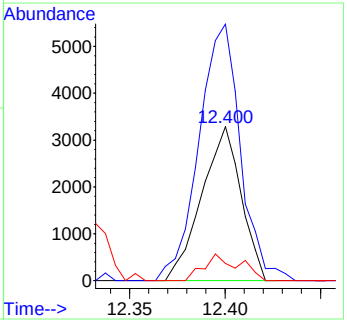


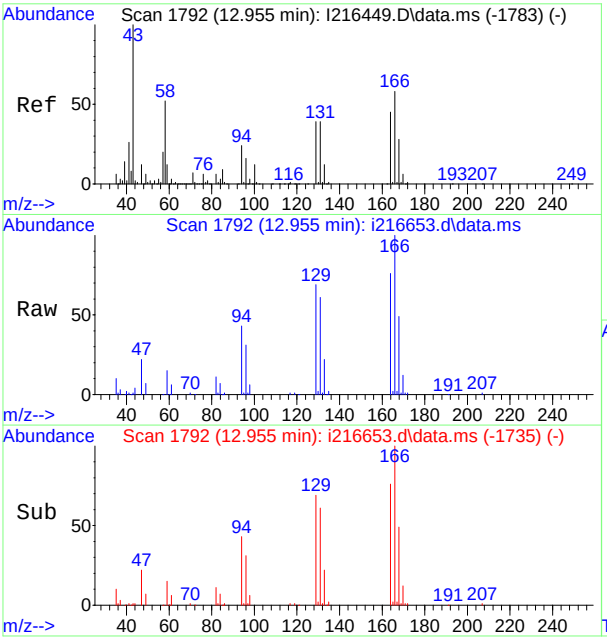


#73
toluene
Concen: 0.39 ug/L
RT: 12.400 min Scan# 1686
Delta R.T. -0.000 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion: 92 Resp: 4710

Ion	Ratio	Lower	Upper
92	100		
91	166.7	142.6	182.6
65	11.3	0.0	40.0

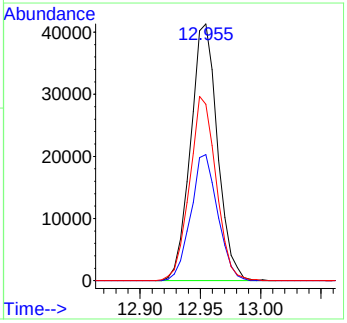


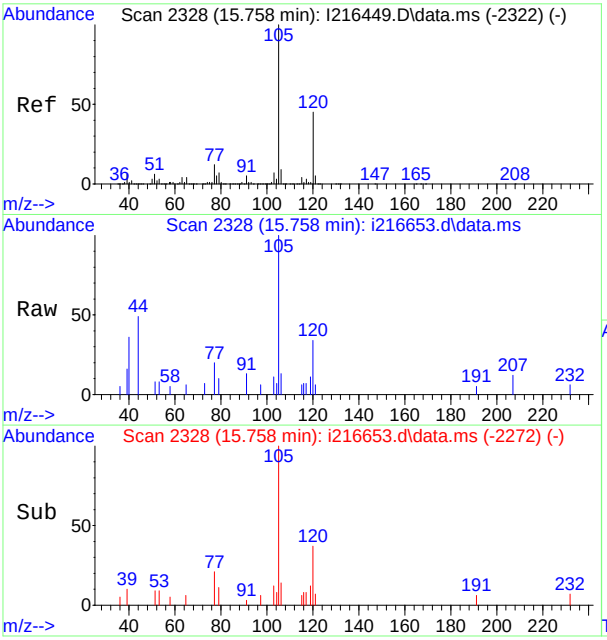


#78
tetrachloroethene
Concen: 9.24 ug/L
RT: 12.955 min Scan# 1792
Delta R.T. -0.000 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion:166 Resp: 64147

Ion	Ratio	Lower	Upper
166	100		
168	49.1	18.9	78.9
129	68.7	37.5	97.5

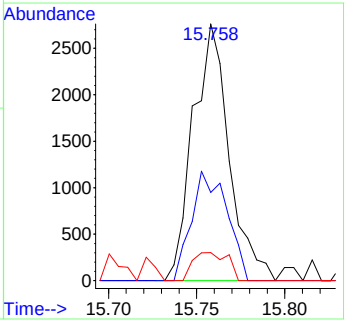




#106
1,2,4-trimethylbenzene
Concen: 0.24 ug/L
RT: 15.758 min Scan# 2328
Delta R.T. -0.005 min
Lab File: i216653.d
Acq: 6 Nov 2017 6:38 pm

Tgt Ion:105 Resp: 3926

Ion	Ratio	Lower	Upper
105	100		
120	34.3	15.9	75.9
119	10.9	0.0	41.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140203.d
Acq On : 6 Nov 2017 8:01 pm
Operator : PrashanS
Sample : JC54680-1dup Inst : MS3C
Misc : MS21898,V3C6357,5.3,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 08 00:01:37 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

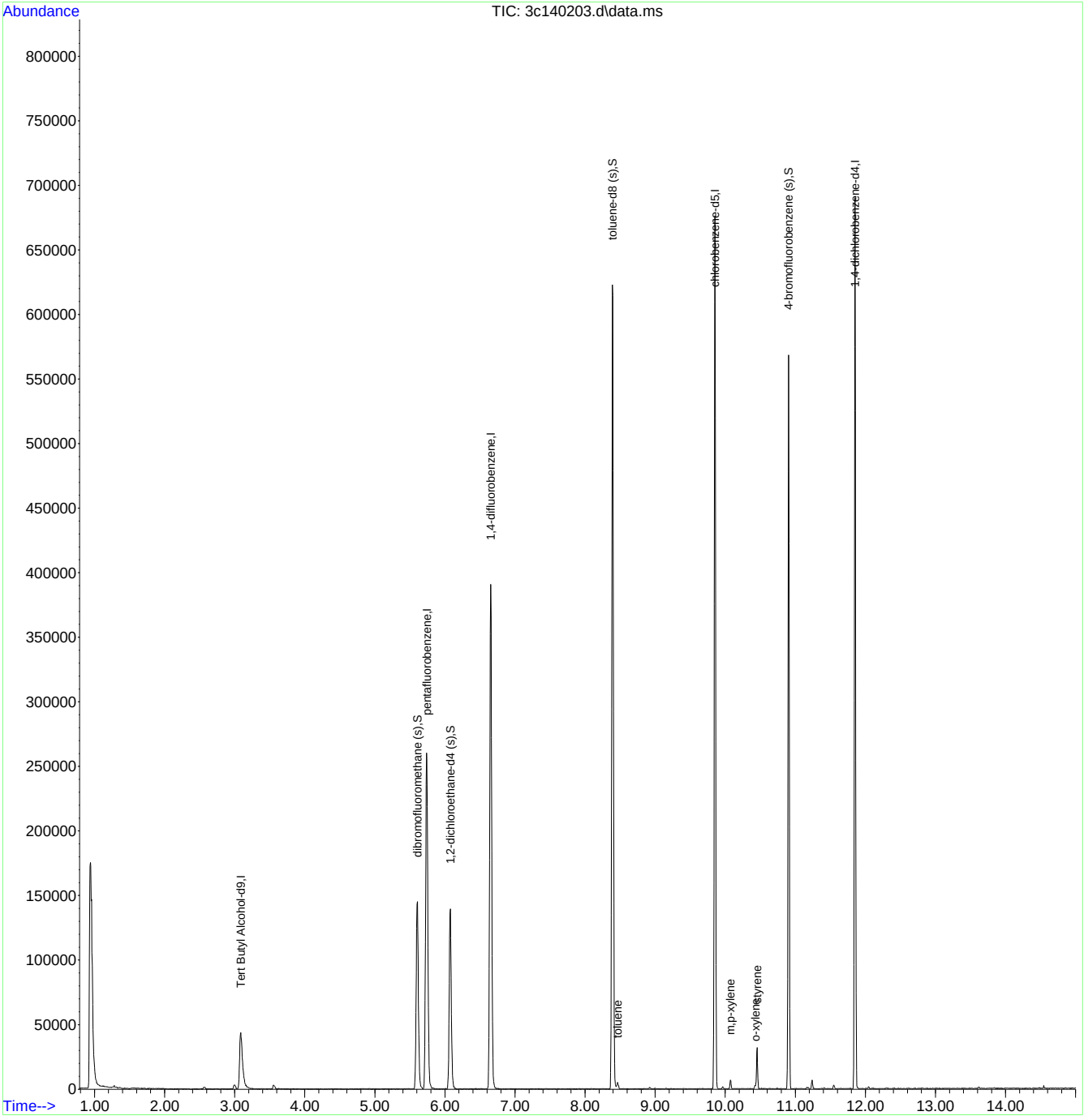
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	3.086	65	67969	500.00	ug/L	-0.02
5) pentafluorobenzene	5.743	168	214276	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.653	114	336929	50.00	ug/L	0.00
74) chlorobenzene-d5	9.854	117	292859	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.852	152	136909	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.607	113	97971	56.27	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 112.54%			
53) 1,2-dichloroethane-d4 (s)	6.078	65	103494	51.80	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 103.60%			
75) toluene-d8 (s)	8.390	98	388381	50.20	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.40%			
99) 4-bromofluorobenzene (s)	10.905	95	134753	56.54	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 113.08%			
Target Compounds						Qvalue
76) toluene	8.463	92	2255	0.52	ug/L	88
91) m,p-xylene	10.074	106	2001	0.62	ug/L	96
92) o-xylene	10.429	91	1718	0.26	ug/L	83
93) styrene	10.456	104	12202	2.34	ug/L	94

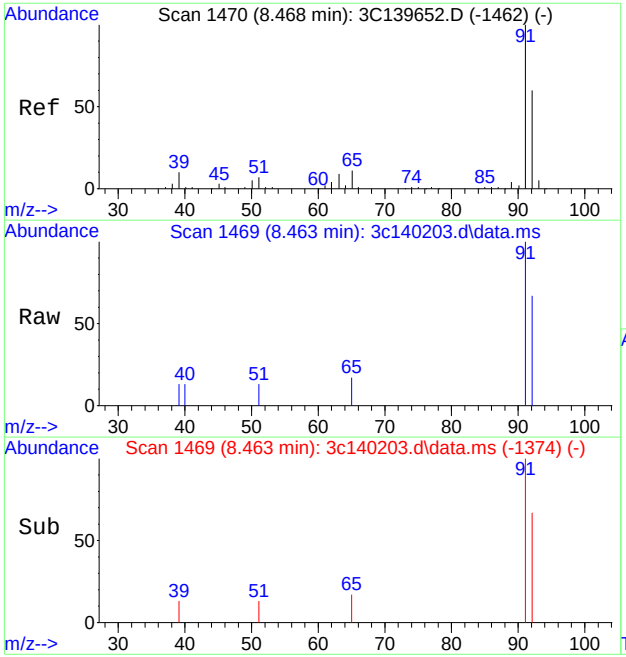
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140203.d
Acq On : 6 Nov 2017 8:01 pm
Operator : PrashanS
Sample : JC54680-1dup Inst : MS3C
Misc : MS21898,V3C6357,5.3,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 08 00:01:37 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

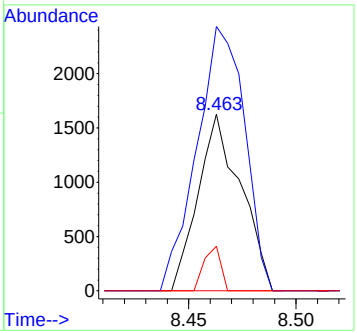


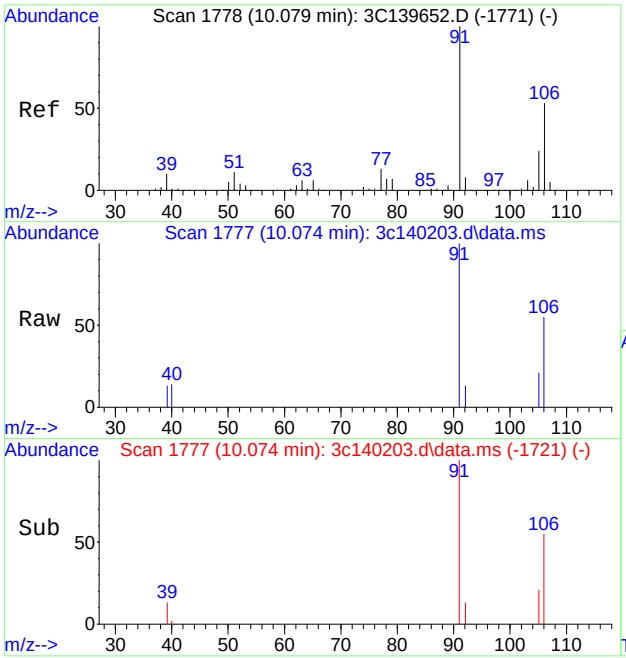


#76
toluene
Concen: 0.52 ug/L
RT: 8.463 min Scan# 1469
Delta R.T. -0.005 min
Lab File: 3c140203.d
Acq: 6 Nov 2017 8:01 pm

Tgt Ion: 92 Resp: 2255

Ion	Ratio	Lower	Upper
92	100		
91	149.8	146.0	186.0
65	25.2	0.0	38.5

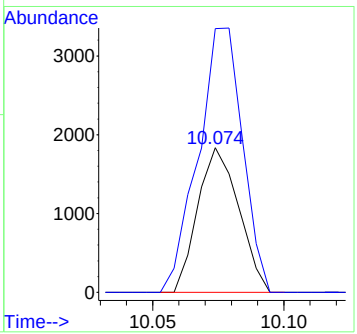


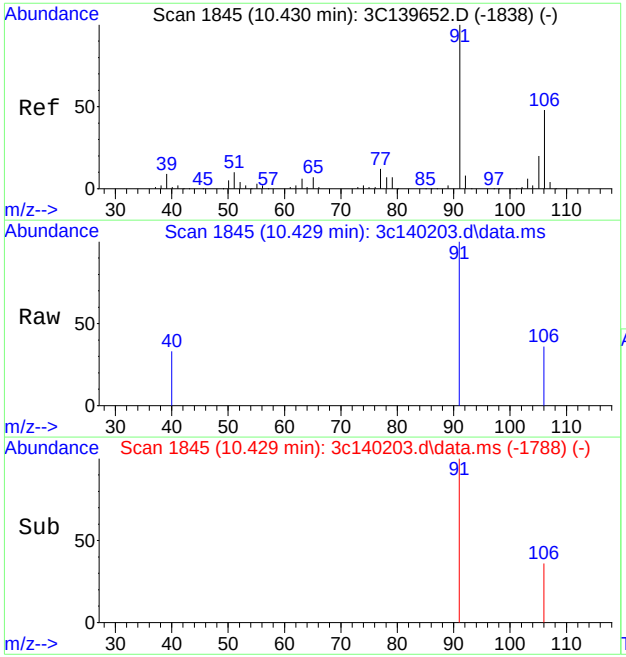


#91
m,p-xylene
Concen: 0.62 ug/L
RT: 10.074 min Scan# 1777
Delta R.T. -0.005 min
Lab File: 3c140203.d
Acq: 6 Nov 2017 8:01 pm

Tgt Ion:106 Resp: 2001

Ion	Ratio	Lower	Upper
106	100		
91	182.4	158.8	218.8

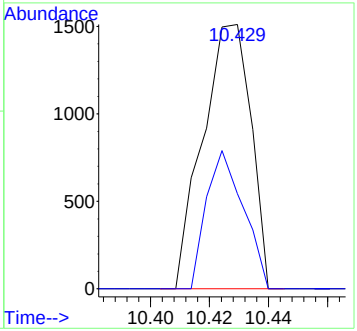


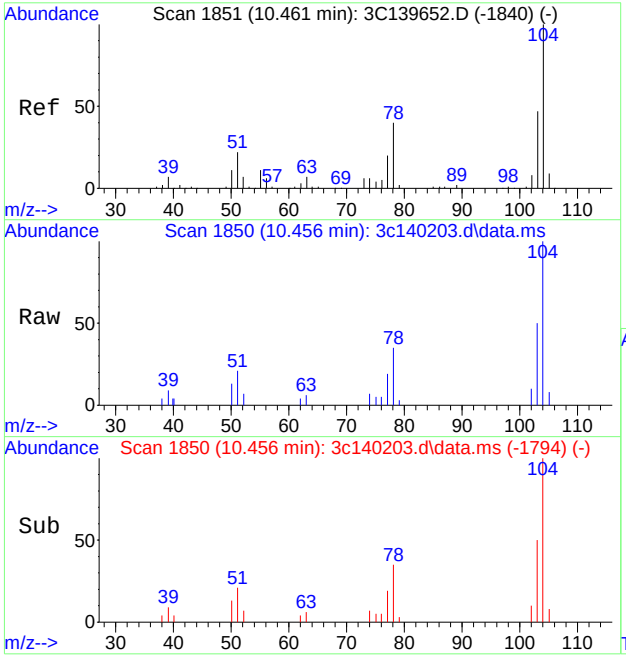


#92
o-xylene
Concen: 0.26 ug/L
RT: 10.429 min Scan# 1845
Delta R.T. -0.000 min
Lab File: 3c140203.d
Acq: 6 Nov 2017 8:01 pm

Tgt Ion: 91 Resp: 1718

Ion	Ratio	Lower	Upper
91	100		
106	35.9	17.6	77.6

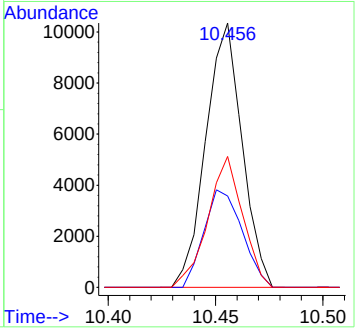




#93
styrene
Concen: 2.34 ug/L
RT: 10.456 min Scan# 1850
Delta R.T. -0.005 min
Lab File: 3c140203.d
Acq: 6 Nov 2017 8:01 pm

Tgt Ion:104 Resp: 12202

Ion	Ratio	Lower	Upper
104	100		
78	34.6	10.0	70.0
103	49.6	16.7	76.7



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216676.d
Acq On : 7 Nov 2017 2:43 pm
Operator : PrashanS
Sample : jc54136-2dup Inst : GCMSI
Misc : MS21656,VI8701,5.9,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 02:43:27 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

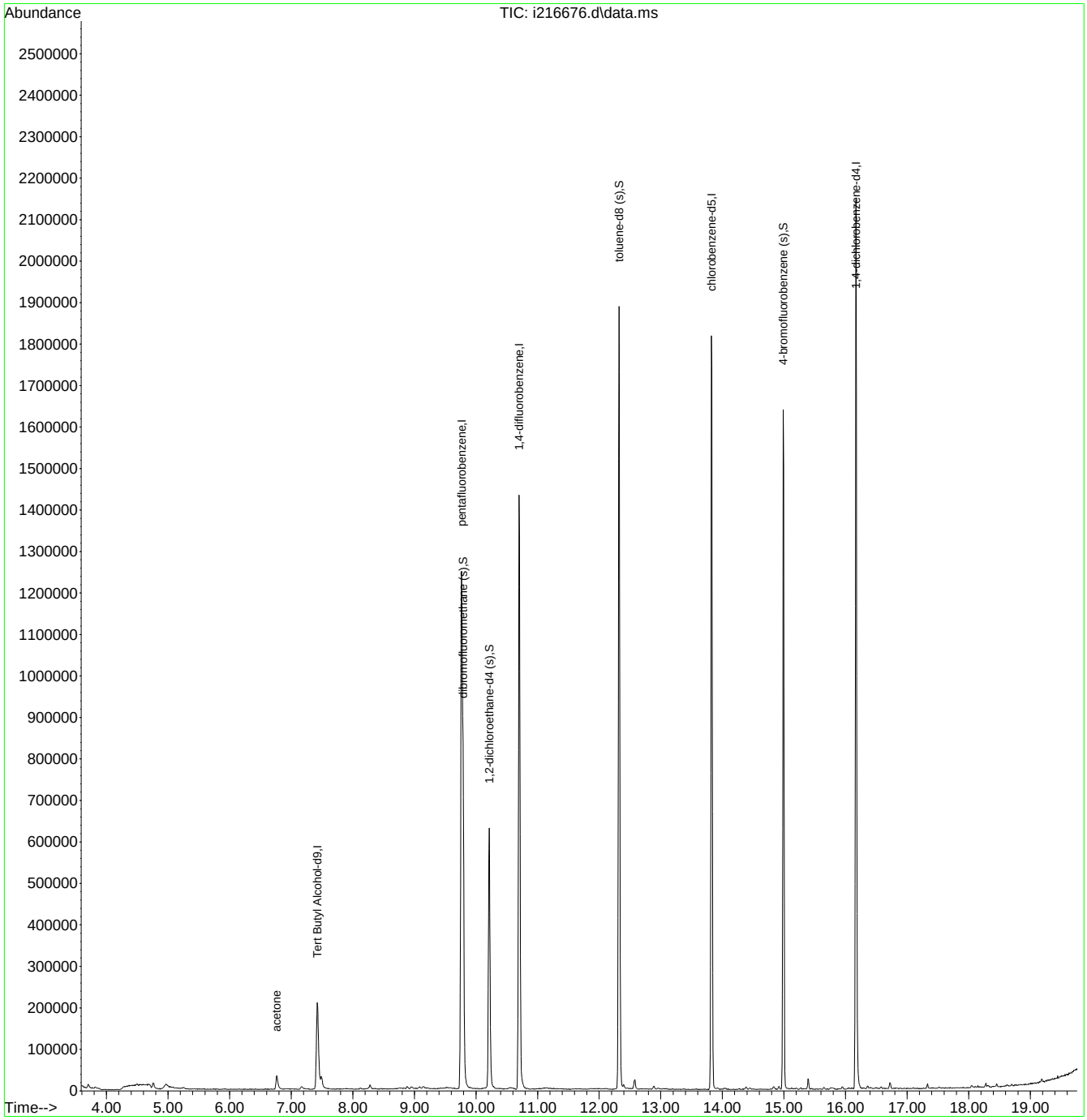
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.421	65	279225	500.00	ug/L	-0.02
4) pentafluorobenzene	9.764	168	742673	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	1044559	50.00	ug/L	0.00
71) chlorobenzene-d5	13.823	117	862027	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	483931	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	396086	51.38	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.76%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	464926	54.68	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 109.36%			
72) toluene-d8 (s)	12.322	98	1067509	49.24	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.48%			
96) 4-bromofluorobenzene (s)	14.989	95	407060	52.83	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 105.66%			
Target Compounds						Qvalue
17) acetone	6.762	58	12551	30.96	ug/L	90

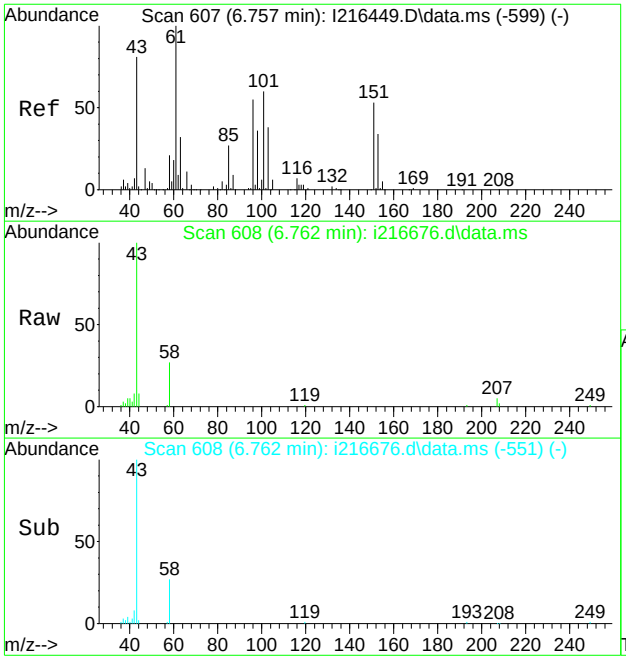
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8701\
Data File : i216676.d
Acq On : 7 Nov 2017 2:43 pm
Operator : PrashanS
Sample : jc54136-2dup Inst : GCMSI
Misc : MS21656,VI8701,5.9,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 09 02:43:27 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

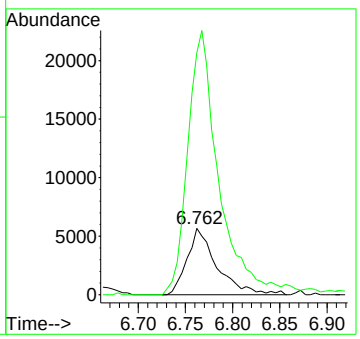




#17
acetone
Concen: 30.96 ug/L
RT: 6.762 min Scan# 608
Delta R.T. 0.000 min
Lab File: i216676.d
Acq: 7 Nov 2017 2:43 pm

Tgt Ion: 58 Resp: 12551

Ion	Ratio	Lower	Upper
58	100		
43	364.7	357.6	417.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153138.d
Acq On : 7 Nov 2017 5:33 pm
Operator : prashans
Sample : JC54047-74DUP Inst : GCMS1C
Misc : MS21756,V1C6761,6.2,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 02:54:18 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

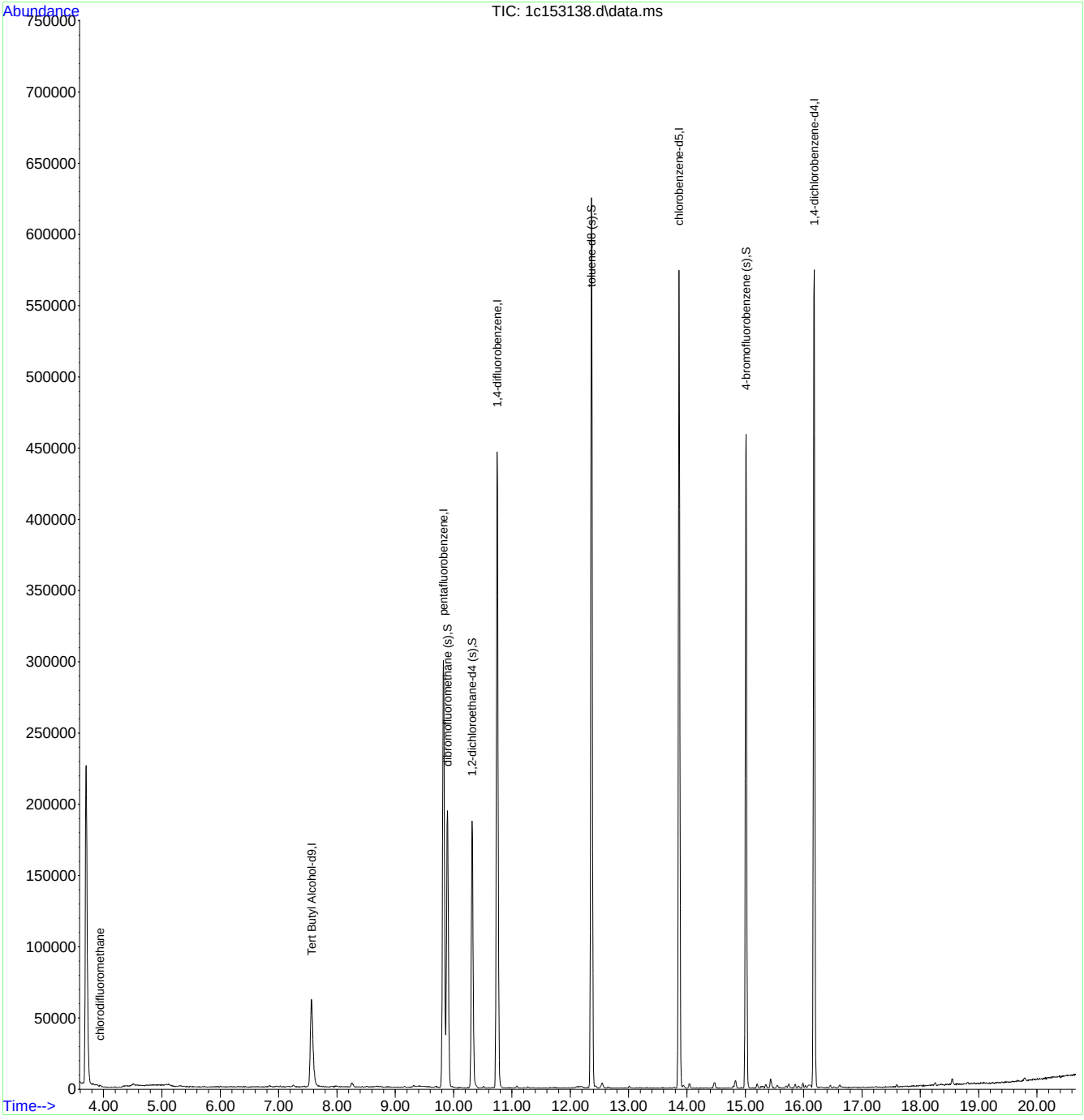
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.567	65	117177	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	253276	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	397101	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	320071	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	152957	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	136031	52.37	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 104.74%			
45) 1,2-dichloroethane-d4 (s)	10.318	65	143514	53.49	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 106.98%			
77) toluene-d8 (s)	12.363	98	437272	48.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.86%			
94) 4-bromofluorobenzene (s)	15.015	95	151208	52.34	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.68%			
Target Compounds						Qvalue
6) chlorodifluoromethane	3.938	51	2477	0.65	ug/L	92

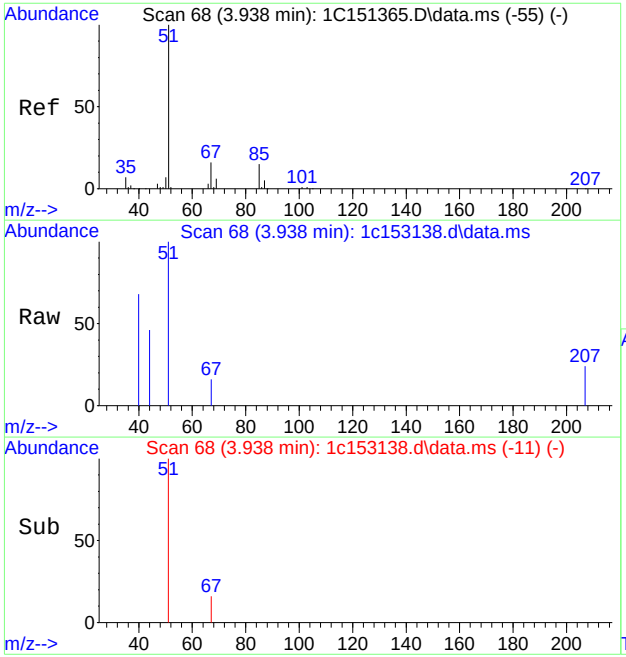
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153138.d
Acq On : 7 Nov 2017 5:33 pm
Operator : prashans
Sample : JC54047-74DUP Inst : GCMS1C
Misc : MS21756,V1C6761,6.2,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 02:54:18 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

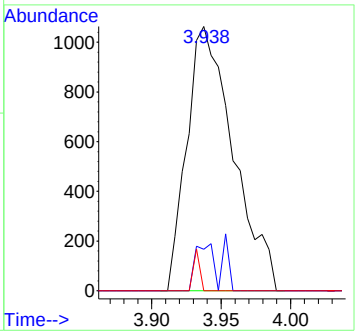




#6
chlorodifluoromethane
Concen: 0.65 ug/L
RT: 3.938 min Scan# 68
Delta R.T. -0.000 min
Lab File: 1c153138.d
Acq: 7 Nov 2017 5:33 pm

Tgt Ion: 51 Resp: 2477

Ion	Ratio	Lower	Upper
51	100		
67	15.7	0.0	45.7
50	0.0	0.0	38.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153167.d
Acq On : 8 Nov 2017 8:40 am
Operator : prashans
Sample : jc54507-2dup Inst : GCMS1C
Misc : MS21823,V1C6762,5.0,,,,1
ALS Vial : 40 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:21:02 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

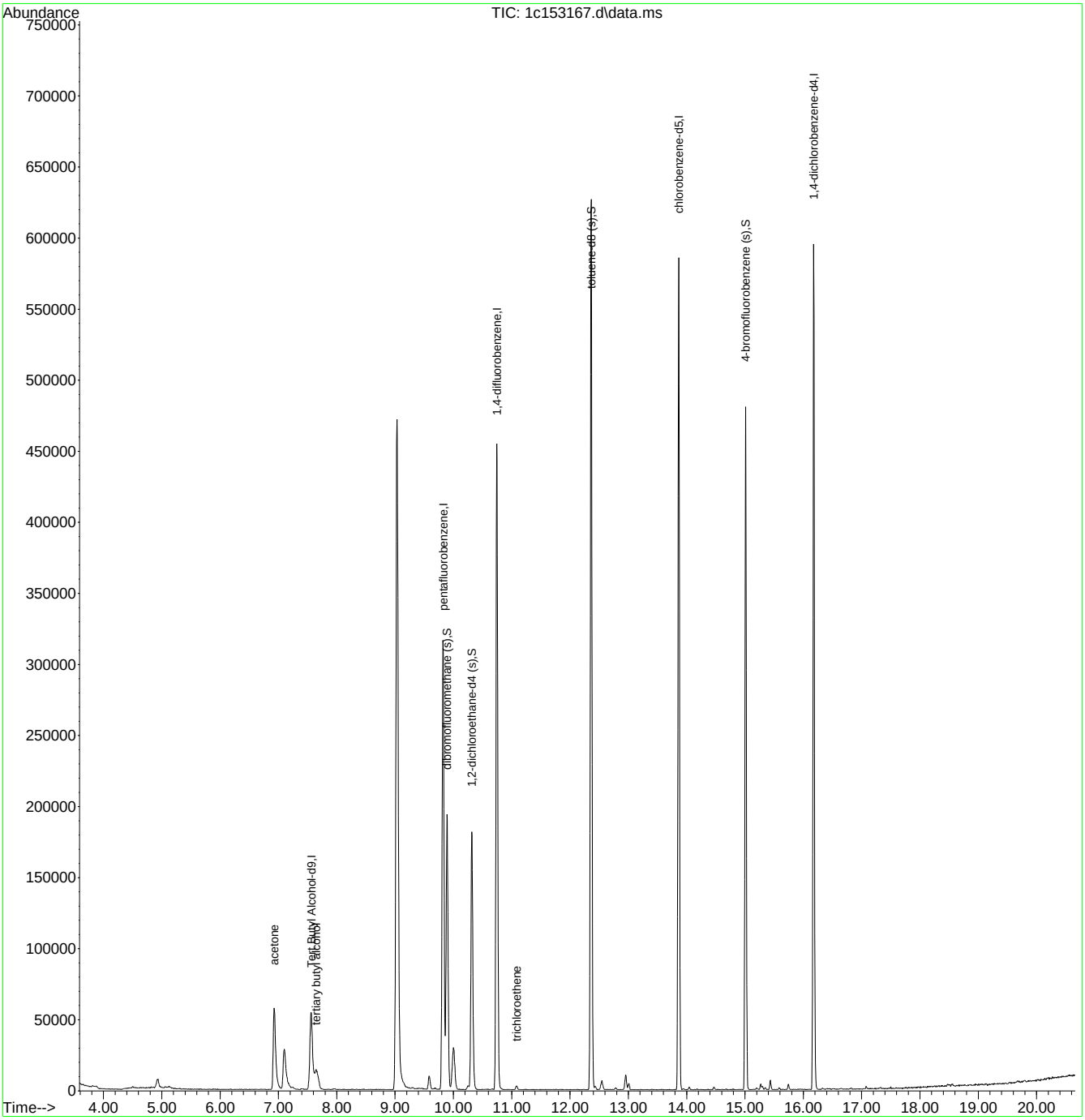
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.562	65	105014	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	269189	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	416621	50.00	ug/L	0.00
78) chlorobenzene-d5	13.865	117	333352	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.176	152	157668	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.890	113	136218	49.34	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.68%			
45) 1,2-dichloroethane-d4 (s)	10.313	65	139790	49.02	ug/L	-0.01
Spiked Amount 50.000	Range 73 - 132		Recovery = 98.04%			
77) toluene-d8 (s)	12.364	98	450461	47.55	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.10%			
94) 4-bromofluorobenzene (s)	15.010	95	154957	52.03	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.06%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.646	59	18266	68.62	ug/L	97
17) acetone	6.929	58	34249	151.60	ug/L #	82
59) trichloroethene	11.082	95	1227	0.45	ug/L	89

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

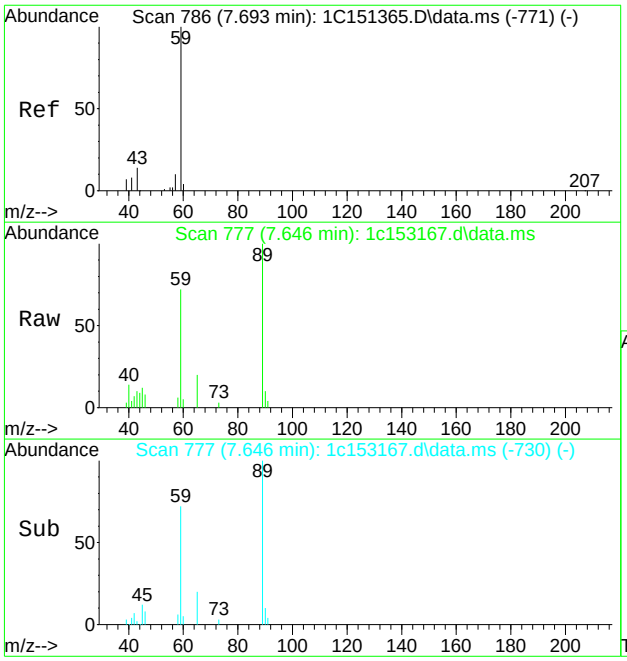
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6762\
Data File : 1c153167.d
Acq On : 8 Nov 2017 8:40 am
Operator : prashans
Sample : jc54507-2dup Inst : GCMS1C
Misc : MS21823,V1C6762,5.0,,,,1
ALS Vial : 40 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:21:02 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



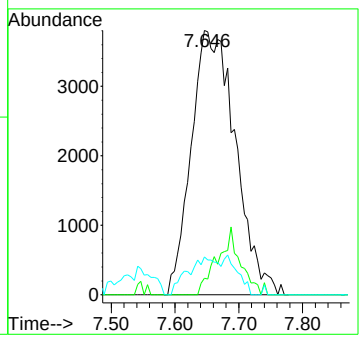
SGS ACCUTEST JC54422

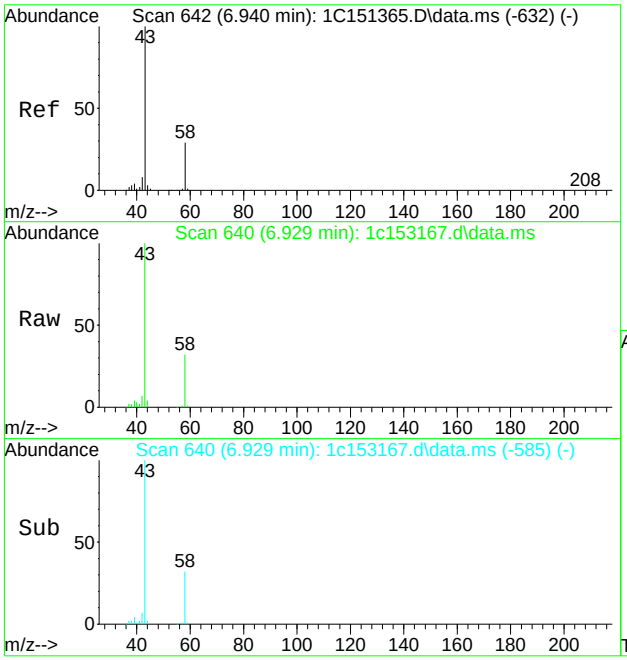


#2
tertiary butyl alcohol
Concen: 68.62 ug/L
RT: 7.646 min Scan# 777
Delta R.T. -0.052 min
Lab File: 1c153167.d
Acq: 8 Nov 2017 8:40 am

Tgt Ion: 59 Resp: 18266

Ion	Ratio	Lower	Upper
59	100		
41	6.2	0.0	38.3
43	14.4	0.0	43.8

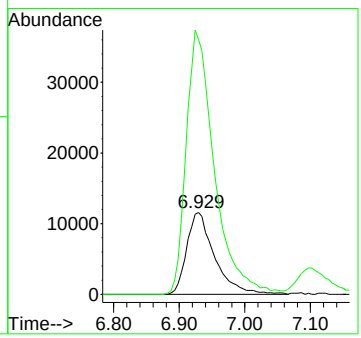




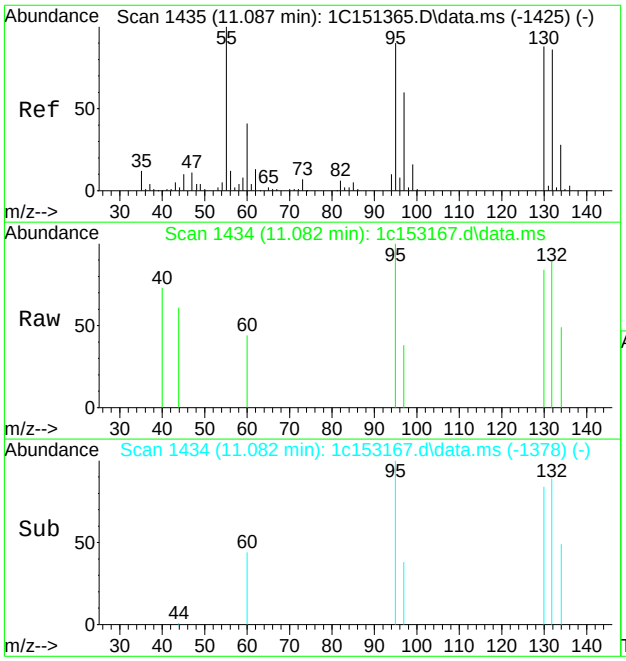
#17
acetone
Concen: 151.60 ug/L
RT: 6.929 min Scan# 640
Delta R.T. -0.011 min
Lab File: 1c153167.d
Acq: 8 Nov 2017 8:40 am

Tgt Ion: 58 Resp: 34249

Ion	Ratio	Lower	Upper
58	100		
43	311.5	320.5	380.5#



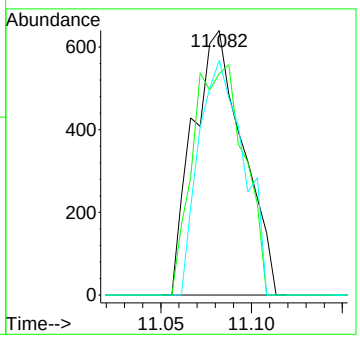
SGS ACCUTEST
JC54422



#59
trichloroethene
Concen: 0.45 ug/L
RT: 11.082 min Scan# 1434
Delta R.T. -0.005 min
Lab File: 1c153167.d
Acq: 8 Nov 2017 8:40 am

Tgt Ion: 95 Resp: 1227

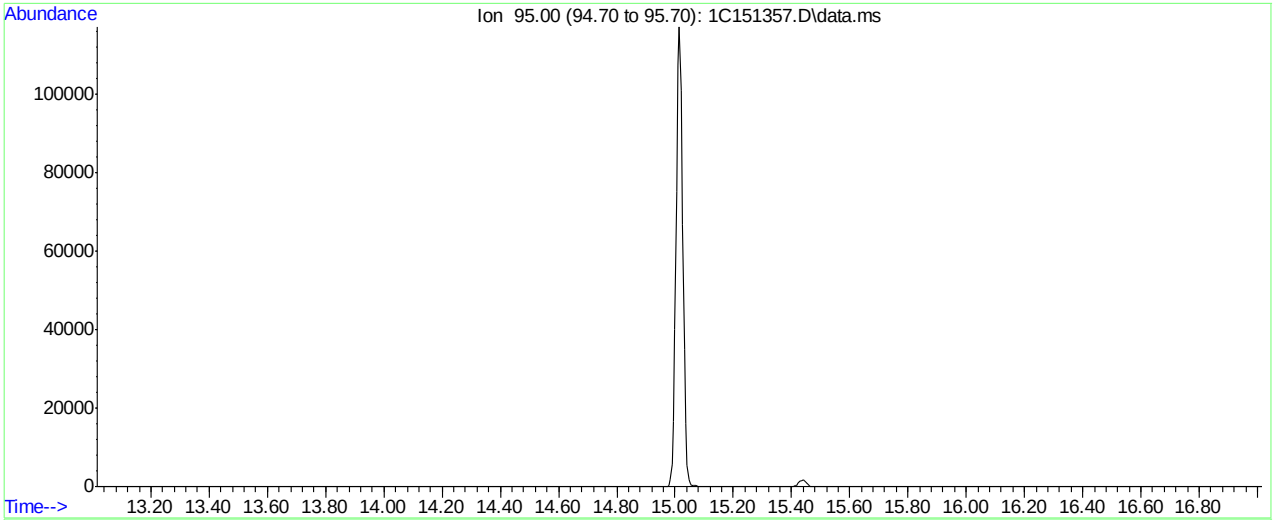
Ion	Ratio	Lower	Upper
95	100		
130	83.6	67.4	127.4
132	88.6	65.5	125.5

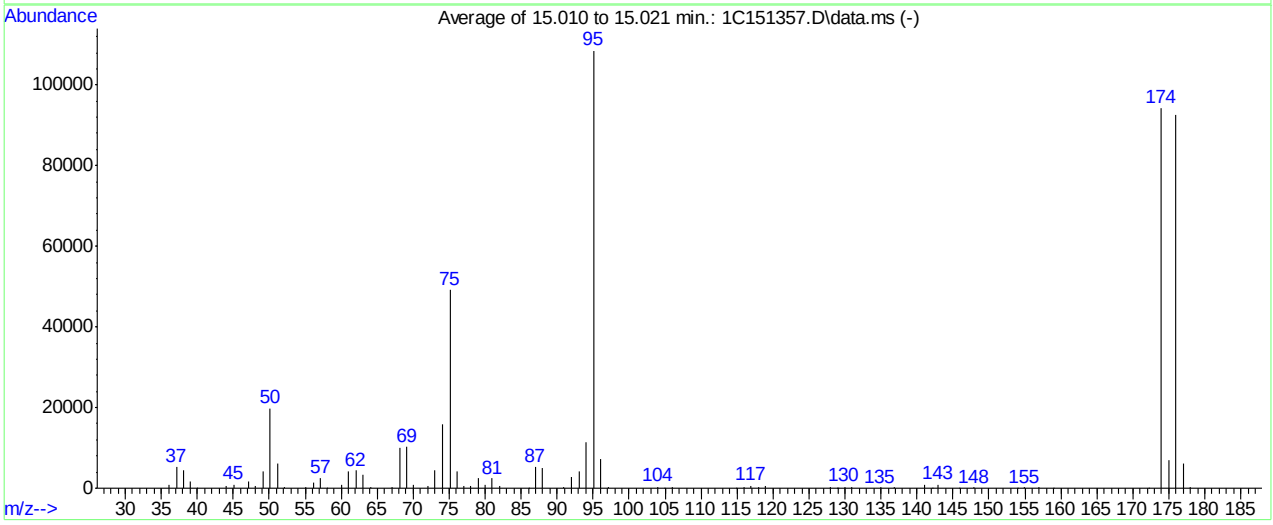


SW-846 Method 8260

Data File : C:\msdchem\1\DATA\1C151357.D Vial: 3
Acq On : 22 Aug 2017 6:21 pm Operator:
Sample : BFB Inst : GCMSI
Misc : MS19345,V1C6691,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um





AutoFind: Scans 2185, 2186, 2187; Background Corrected with Scan 2176

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	19877	PASS
75	95	30	60	45.2	49077	PASS
95	95	100	100	100.0	108546	PASS
96	95	5	9	6.7	7294	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.9	94312	PASS
175	174	5	9	7.4	7024	PASS
176	174	95	101	98.2	92592	PASS
177	176	5	9	6.7	6172	PASS

1C151357.D M1CS6691.M Fri Aug 25 09:15:26 2017

Average of 15.010 to 15.021 min.: 1C151357.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	914	51.10	6092	67.05	251	79.00	2463
37.10	5268	52.05	281	68.10	10125	79.95	766
38.10	4440	55.05	322	69.10	10243	81.00	2423
39.10	1706	56.10	1404	70.05	782	82.00	554
40.00	67	57.10	2625	72.05	486	86.00	53
44.00	481	58.00	53	73.05	4356	87.00	5191
45.10	962	60.05	890	74.10	15801	88.00	5106
47.10	1650	61.05	4234	75.10	49077	90.95	356
48.05	629	62.05	4355	76.10	4136	92.05	2745
49.10	4046	63.05	3387	77.05	701	93.05	4115
50.10	19877	64.05	309	78.00	555	94.05	11498

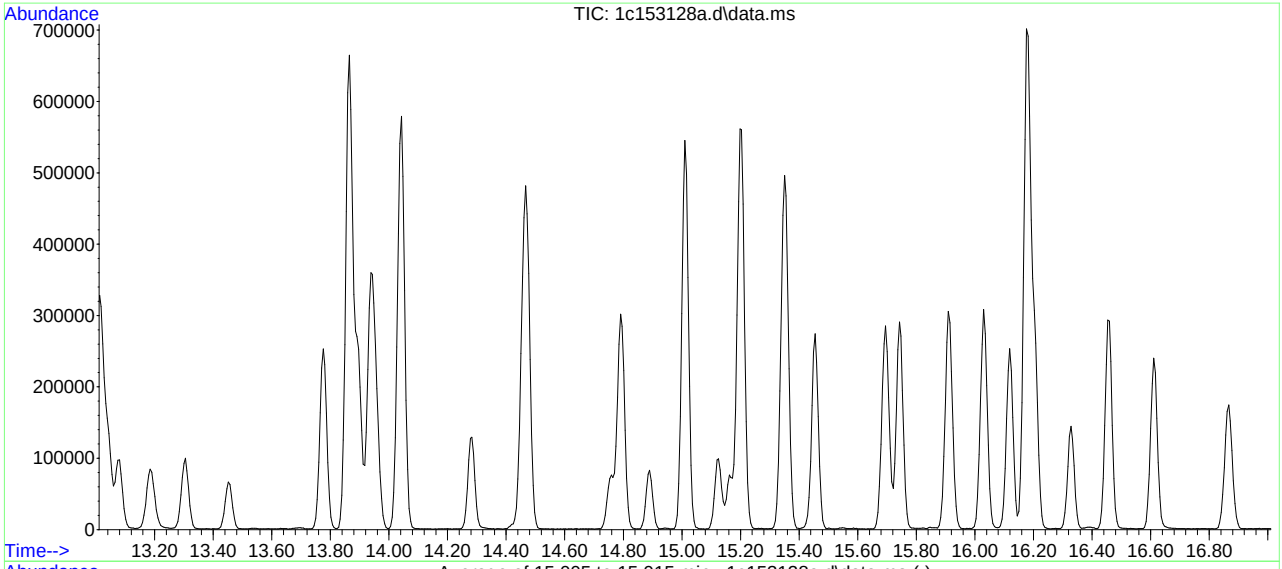
Average of 15.010 to 15.021 min.: 1C151357.D\data.ms
BFB
Modified:subtracted

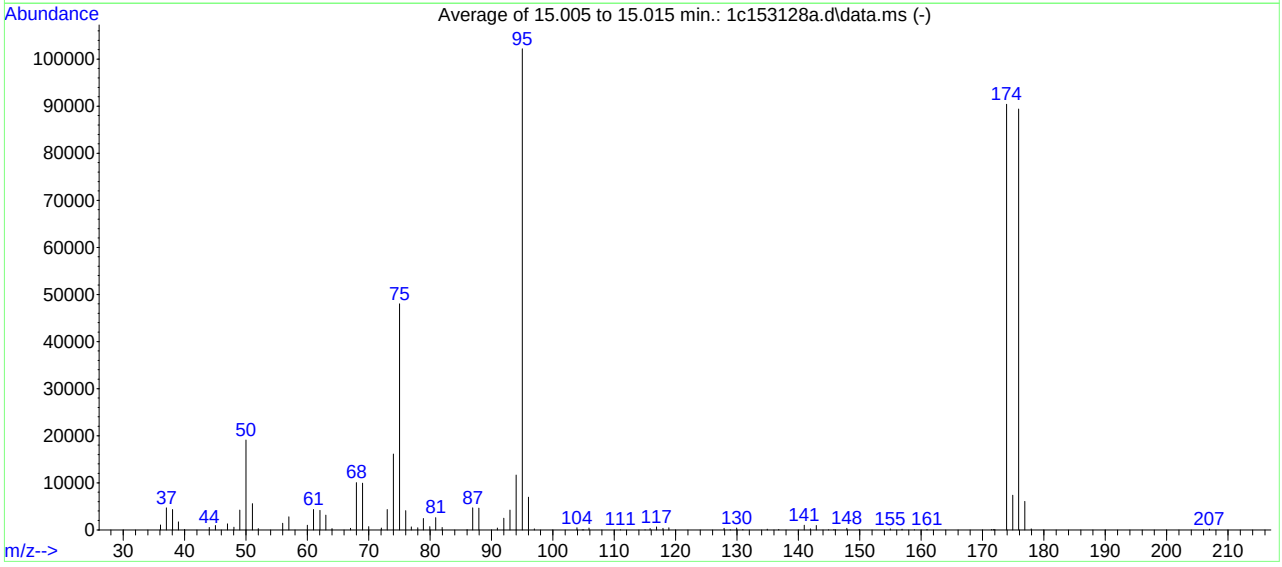
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.10	108546	127.95	361	147.95	276		
96.10	7294	128.90	71	154.00	48		
97.15	198	129.10	52	154.95	268		
104.00	420	129.95	377	157.00	190		
104.95	105	130.90	177	158.90	100		
105.95	393	134.95	193	172.20	81		
114.90	58	136.90	185	174.00	94312		
115.95	343	141.00	816	175.00	7024		
116.95	675	142.10	56	176.00	92592		
117.95	374	143.00	921	177.00	6172		
118.95	485	145.95	117	177.95	196		

SW-846 Method 8260

Data File : C:\msdchem\1\data\v1c6761\1c153128a.d Vial: 1
Acq On : 7 Nov 2017 12:02 pm Operator: prashans
Sample : bfb Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um





AutoFind: Scans 2184, 2185, 2186; Background Corrected with Scan 2175

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	19096	PASS
75	95	30	60	47.0	48000	PASS
95	95	100	100	100.0	102171	PASS
96	95	5	9	6.8	6929	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	88.5	90403	PASS
175	174	5	9	8.2	7386	PASS
176	174	95	101	98.9	89413	PASS
177	176	5	9	6.8	6048	PASS

1c153128a.d M1CS6691.M Thu Nov 09 00:57:29 2017

Average of 15.005 to 15.015 min.: 1c153128a.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1052	51.05	5554	69.00	9937	80.90	2604
37.05	4685	52.00	299	70.00	690	81.95	493
38.05	4312	56.00	1407	72.05	412	86.00	61
39.00	1712	57.00	2752	73.00	4338	86.95	4672
40.00	111	60.00	977	74.00	16132	87.95	4641
44.00	536	61.00	4326	75.00	48000	90.95	395
45.00	900	62.05	4167	76.00	4103	92.00	2498
47.00	1308	63.00	3136	76.95	612	93.00	4179
48.05	550	64.00	293	78.00	466	94.00	11651
49.00	4179	67.05	323	78.90	2424	95.00	102171
50.00	19096	68.00	10054	79.95	668	96.00	6929

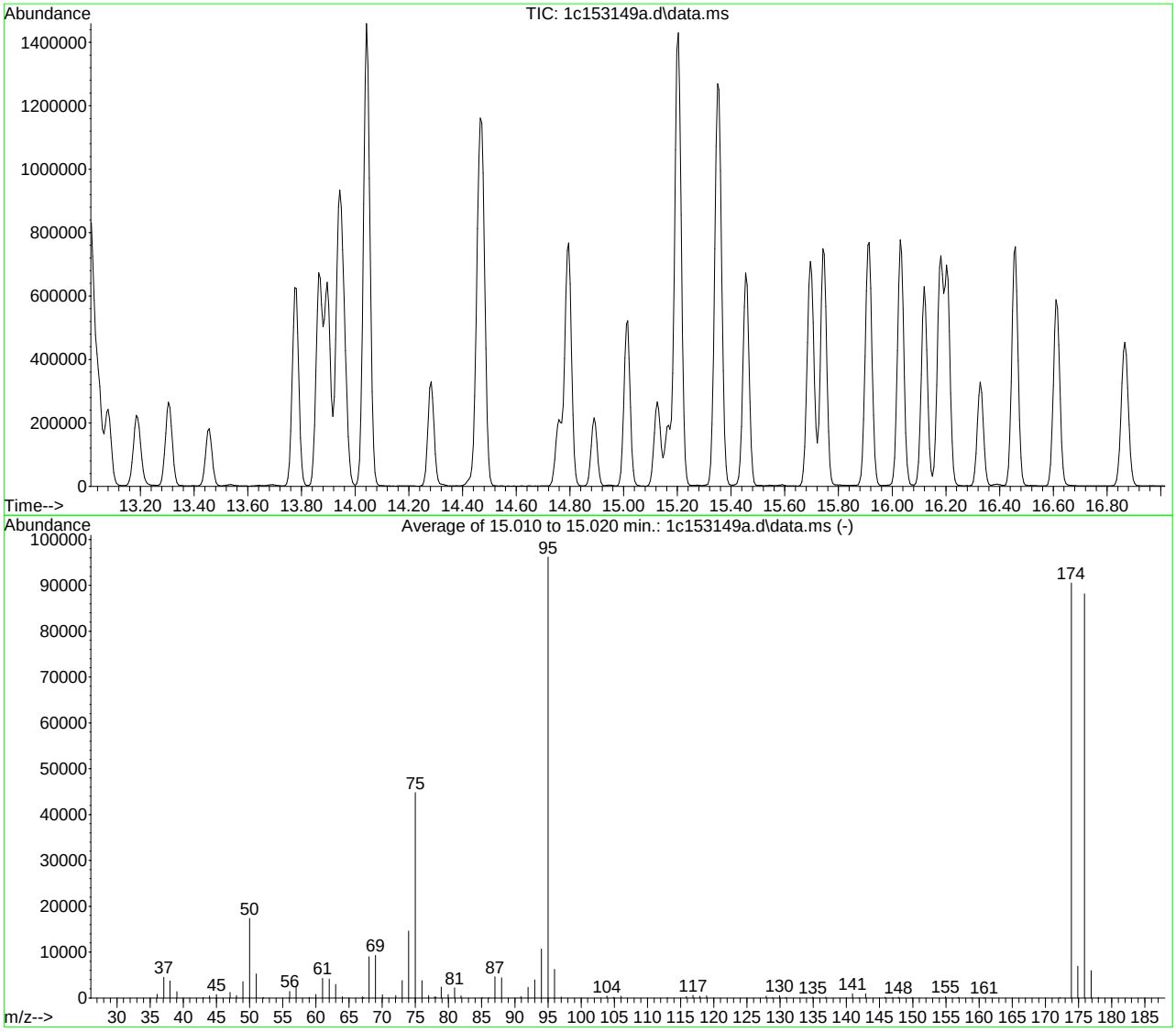
Average of 15.005 to 15.015 min.: 1c153128a.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.00	229	127.90	350	146.00	48	174.90	7386
103.90	427	128.90	60	147.90	344	175.90	89413
104.80	47	129.95	401	149.90	101	176.90	6048
105.00	54	130.95	117	154.95	211	177.95	186
105.90	377	134.90	140	156.90	137	206.95	157
111.00	49	136.80	110	158.90	48		
115.00	55	140.95	967	160.95	121		
115.85	298	141.95	193	171.50	66		
116.90	635	142.90	953	171.80	76		
117.95	342	144.90	49	172.00	70		
118.90	460	145.80	69	173.90	90403		

SW-846 Method 8260

Data File : C:\msdchem\1\data\v1c6762\1c153149a.d Vial: 22
Acq On : 7 Nov 2017 10:53 pm Operator: prashans
Sample : bfb Inst : GCMS1C
Misc : MS21701,V1C6762,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1CS6691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um



AutoFind: Scans 2185, 2186, 2187; Background Corrected with Scan 2176

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	17326	PASS
75	95	30	60	46.6	44819	PASS
95	95	100	100	100.0	96157	PASS
96	95	5	9	6.5	6232	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	94.1	90496	PASS
175	174	5	9	7.6	6900	PASS
176	174	95	101	97.4	88157	PASS
177	176	5	9	6.7	5950	PASS

1c153149a.d M1CS6691.M Thu Nov 09 00:44:29 2017

SGS ACCUTEST JC54422

Average of 15.010 to 15.020 min.: 1c153149a.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	804	51.00	5261	67.20	95	78.10	181
37.05	4515	52.10	99	68.00	8999	78.90	2409
38.00	3754	56.05	1434	69.00	9254	79.95	765
39.05	1359	57.00	2470	70.05	703	80.90	2241
43.05	108	59.05	162	72.05	552	81.90	468
43.95	443	60.00	733	73.00	3806	85.10	51
45.00	747	61.00	4267	74.00	14594	86.10	53
47.05	1235	62.00	4102	75.00	44819	87.00	4629
48.05	546	63.00	2928	76.00	3803	88.00	4417
49.00	3552	64.00	275	77.00	555	90.90	335
50.00	17326	67.00	245	77.90	259	92.00	2351

Average of 15.010 to 15.020 min.: 1c153149a.d\data.ms
bfb
Modified:subtracted

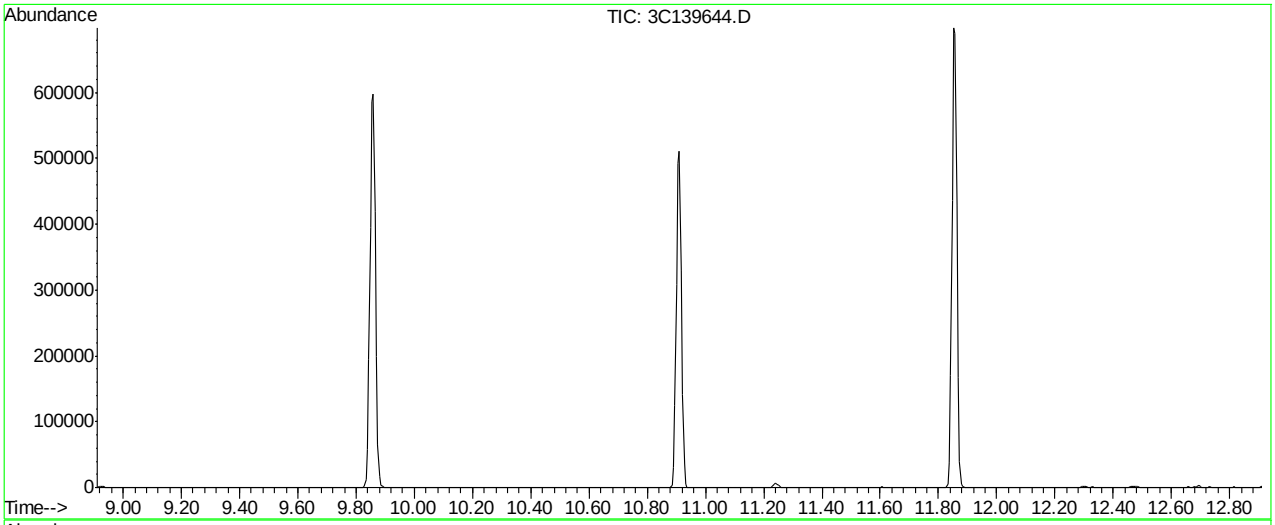
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	3970	117.90	369	142.90	919	174.90	6900
94.00	10695	118.90	480	145.85	126	175.90	88157
95.00	96157	127.90	417	147.00	57	176.90	5950
96.00	6232	128.80	50	147.85	209	178.00	126
97.00	226	129.90	461	149.90	71		
103.90	425	130.85	133	154.95	233		
104.90	117	134.95	185	156.90	143		
106.00	349	136.90	202	158.90	57		
113.00	50	140.00	48	160.80	61		
115.85	312	140.90	925	172.20	112		
116.85	573	141.90	52	173.90	90496		

SGS ACCUTEST
JC54422

SW-846 Method 8260

Data File : C:\MSDChem\1\DATA\V3C6336\3C139644.D Vial: 1
Acq On : 19 Oct 2017 7:14 pm Operator: PrashanS
Sample : BFB Inst : MS3C
Misc : MS19616,V3C6336,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um



AutoFind: Scans 1936, 1937, 1938; Background Corrected with Scan 1929

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	15521	PASS
75	95	30	60	46.4	41677	PASS
95	95	100	100	100.0	89906	PASS
96	95	5	9	6.4	5768	PASS
173	174	0.00	2	0.6	486	PASS
174	95	50	120	95.2	85570	PASS
175	174	5	9	7.2	6143	PASS
176	174	95	101	97.9	83733	PASS
177	176	5	9	6.8	5724	PASS

3C139644.D M3C6336.M Fri Oct 20 12:19:39 2017 MS3C

Average of 10.906 to 10.916 min.: 3C139644.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	935	50.10	15521	70.00	584	81.95	358
37.10	4431	51.10	5056	72.05	355	87.00	3458
38.10	3890	56.00	1217	73.05	3712	88.00	3450
39.10	1327	57.05	2011	74.05	13858	91.00	103
40.00	56	60.00	798	75.00	41677	92.00	2275
44.00	228	61.05	4080	76.05	3452	93.00	3675
45.10	712	62.10	3757	77.05	387	94.00	10332
47.05	1024	63.10	2919	78.00	256	95.00	89906
47.90	179	64.10	129	78.90	1885	96.00	5768
48.05	323	68.00	8162	80.00	507	97.00	108
49.05	3524	69.00	8559	80.95	2146	103.90	262

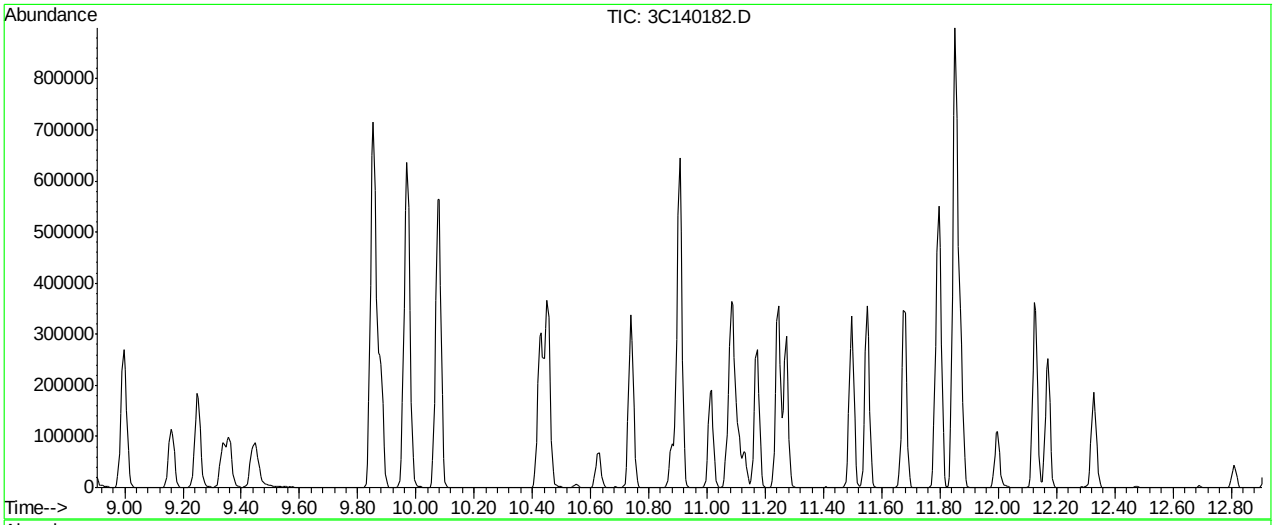
Average of 10.906 to 10.916 min.: 3C139644.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.90	305	173.90	85570				
115.90	293	174.95	6143				
116.90	591	175.90	83733				
117.95	216	176.90	5724				
118.90	513						
127.90	311						
129.90	277						
140.90	984						
142.90	1056						
147.90	105						
172.90	486						

SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\V3C6356\3C140182.D Vial: 2
Acq On : 6 Nov 2017 8:03 am Operator: PrashanS
Sample : bfb CC6336-20 Inst : MS3C
Misc : MS21659,V3C6357,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um



AutoFind: Scans 1935, 1936, 1937; Background Corrected with Scan 1928

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	21121	PASS
75	95	30	60	45.5	51996	PASS
95	95	100	100	100.0	114341	PASS
96	95	5	9	6.0	6910	PASS
173	174	0.00	2	0.2	210	PASS
174	95	50	120	90.4	103405	PASS
175	174	5	9	7.0	7198	PASS
176	174	95	101	98.1	101402	PASS
177	176	5	9	6.5	6551	PASS

3C140182.D M3C6336.M Mon Nov 06 15:11:22 2017 MS3C

Average of 10.900 to 10.911 min.: 3C140182.D
bfb CC6336-20
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1249	55.05	640	70.05	729	81.90	517
37.10	6097	56.05	1569	72.05	555	87.00	4425
38.10	4920	57.05	2642	73.00	5104	88.00	1887
39.05	565	60.00	1153	74.00	17884	92.00	3115
44.05	843	61.00	5030	75.00	51996	93.00	4594
45.05	1048	62.00	4496	76.00	4584	94.00	12845
47.05	1422	63.05	4147	76.95	90	95.00	114341
47.95	707	64.00	367	77.95	374	96.00	6910
49.05	4688	67.05	261	78.90	2581	97.10	114
50.05	21121	68.00	10599	79.95	661	103.90	509
51.10	6056	69.00	10682	80.95	2811	105.90	440

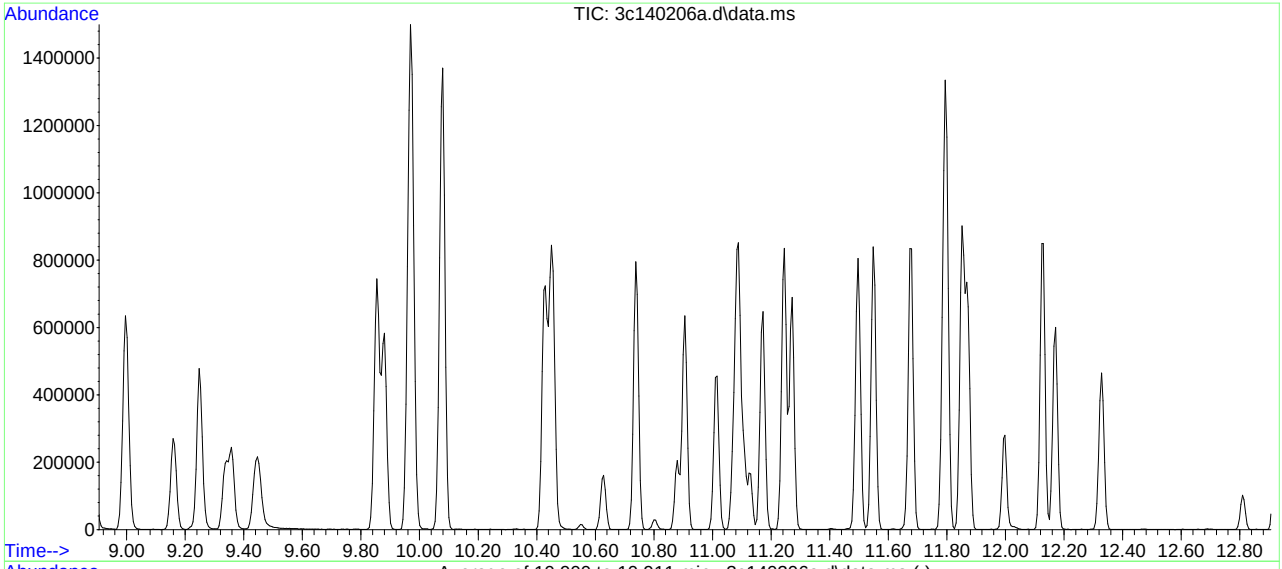
Average of 10.900 to 10.911 min.: 3C140182.D
bfb CC6336-20
Modified:subtracted

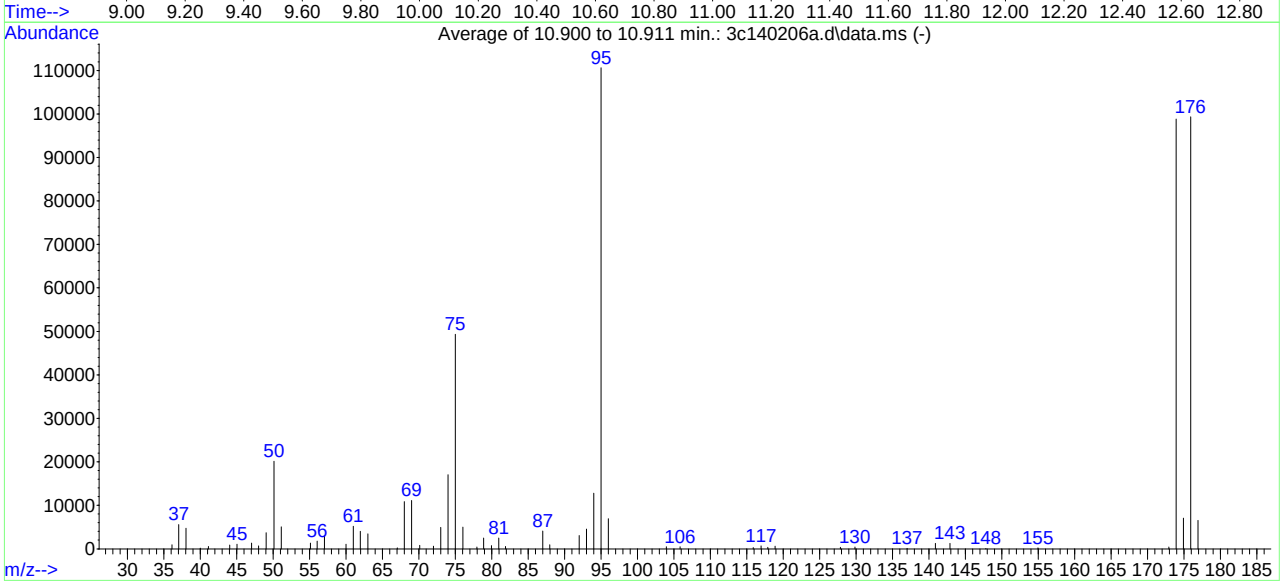
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.90	637	173.00	210				
117.95	410	173.90	103405				
118.85	451	174.90	7198				
127.85	474	175.90	101402				
129.90	251	176.90	6551				
134.90	117						
140.90	1377						
142.90	1276						
147.90	174						
154.90	104						
156.90	117						

SW-846 Method 8260

Data File : C:\msdchem\1\data\v3c6357\3c140206a.d Vial: 20
Acq On : 6 Nov 2017 8:35 pm Operator: PrashanS
Sample : bfb2 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um





AutoFind: Scans 1935, 1936, 1937; Background Corrected with Scan 1928

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	20166	PASS
75	95	30	60	44.6	49310	PASS
95	95	100	100	100.0	110597	PASS
96	95	5	9	6.3	6913	PASS
173	174	0.00	2	0.4	424	PASS
174	95	50	120	89.3	98813	PASS
175	174	5	9	7.1	7042	PASS
176	174	95	101	100.5	99320	PASS
177	176	5	9	6.6	6518	PASS

3c140206a.d M3C6336.M Wed Nov 08 00:34:36 2017

SGS ACCUTEST JC54422

Average of 10.900 to 10.911 min.: 3c140206a.d\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	968	51.10	5091	70.10	790	87.00	4122
37.05	5573	55.10	1342	72.00	601	87.95	965
38.05	4735	56.05	1768	73.00	4908	92.00	3054
40.00	147	57.05	3009	74.00	17038	93.00	4533
41.10	527	60.00	1063	75.00	49310	94.00	12786
44.05	858	61.00	5190	76.05	4986	95.00	110597
45.05	1050	61.95	4044	77.95	415	96.00	6913
47.05	1313	63.00	3462	78.90	2506	103.95	481
48.00	681	67.05	246	79.95	729	105.85	500
49.05	3734	68.00	10839	80.95	2502	115.90	292
50.10	20166	69.00	11133	81.90	579	116.95	696

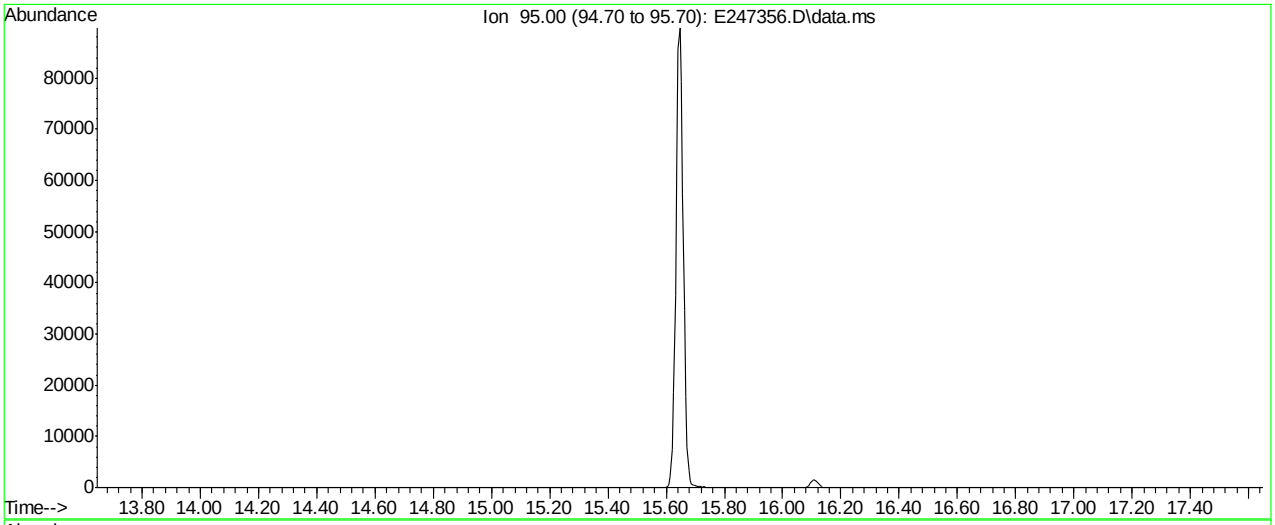
Average of 10.900 to 10.911 min.: 3c140206a.d\data.ms
bfb2
Modified:subtracted

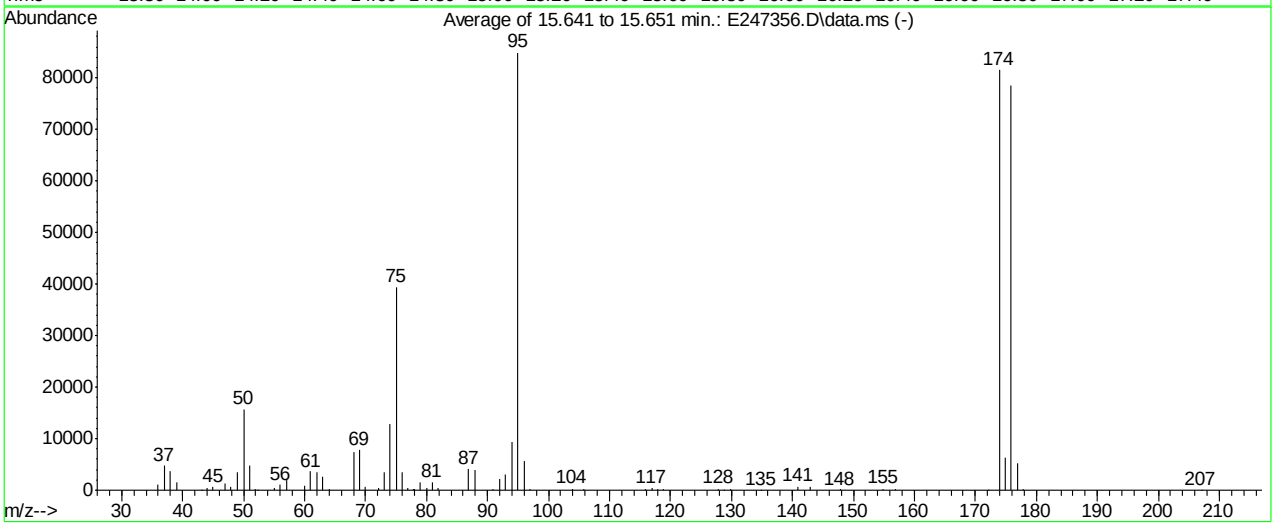
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.90	384	174.90	7042				
118.90	595	175.90	99320				
127.85	360	176.90	6518				
129.85	412						
137.00	102						
140.90	1234						
142.90	1284						
147.80	125						
154.95	250						
172.90	424						
173.90	98813						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E247356.D Vial: 1
Acq On : 13 Sep 2017 6:22 pm Operator: ThienN
Sample : bfb Inst : MSE
Misc : MS19913,VE10636,5.0,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\ME10636.M (RTE Integrator)
Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um





AutoFind: Scans 2228, 2229, 2230; Background Corrected with Scan 2218

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	15721	PASS
75	95	30	60	46.4	39370	PASS
95	95	100	100	100.0	84930	PASS
96	95	5	9	6.7	5721	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	96.0	81549	PASS
175	174	5	9	7.7	6277	PASS
176	174	95	101	96.2	78440	PASS
177	176	5	9	6.7	5226	PASS

E247356.D ME10636.M Thu Sep 14 09:34:33 2017 RPT1

Average of 15.641 to 15.651 min.: E247356.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	992	51.00	4779	68.00	7491	78.90	1548
37.00	4762	52.00	166	69.00	7820	79.95	475
38.00	3670	52.20	85	70.00	590	80.90	1586
39.00	1425	55.05	336	72.05	469	81.85	370
43.00	54	56.00	1056	73.00	3570	86.90	4084
44.00	375	57.00	1906	74.00	12841	87.90	3990
45.00	646	59.95	807	75.00	39370	90.95	244
47.00	1309	61.00	3696	76.00	3451	91.95	2102
47.95	562	62.00	3520	76.95	538	93.00	3152
49.00	3496	63.00	2640	77.85	288	94.00	9336
50.00	15721	64.00	263	78.05	324	95.00	84930

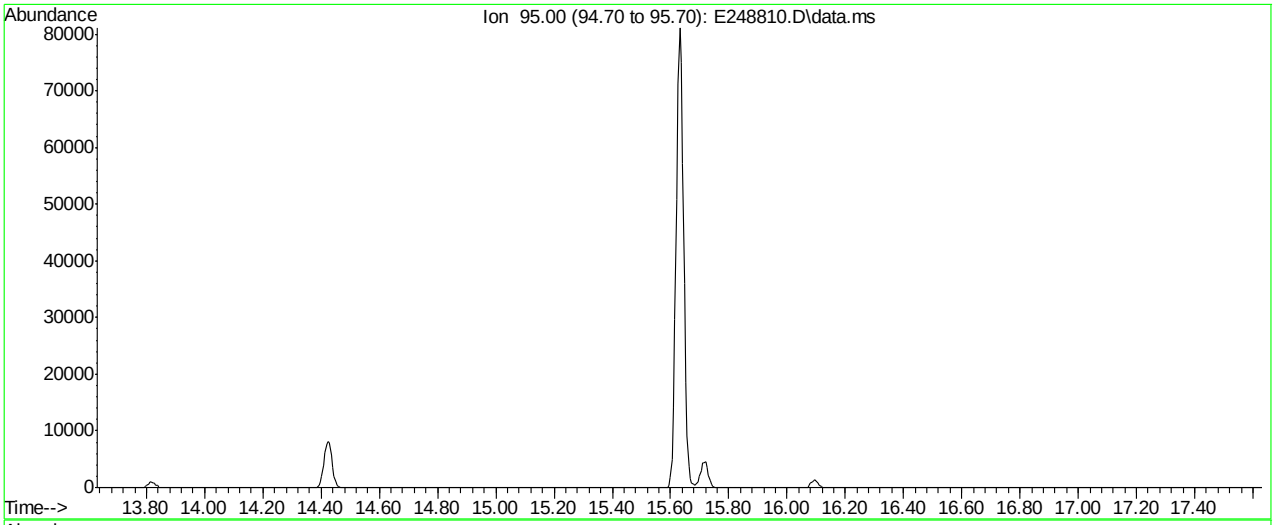
Average of 15.641 to 15.651 min.: E247356.D\data.ms
bfb
Modified:subtracted

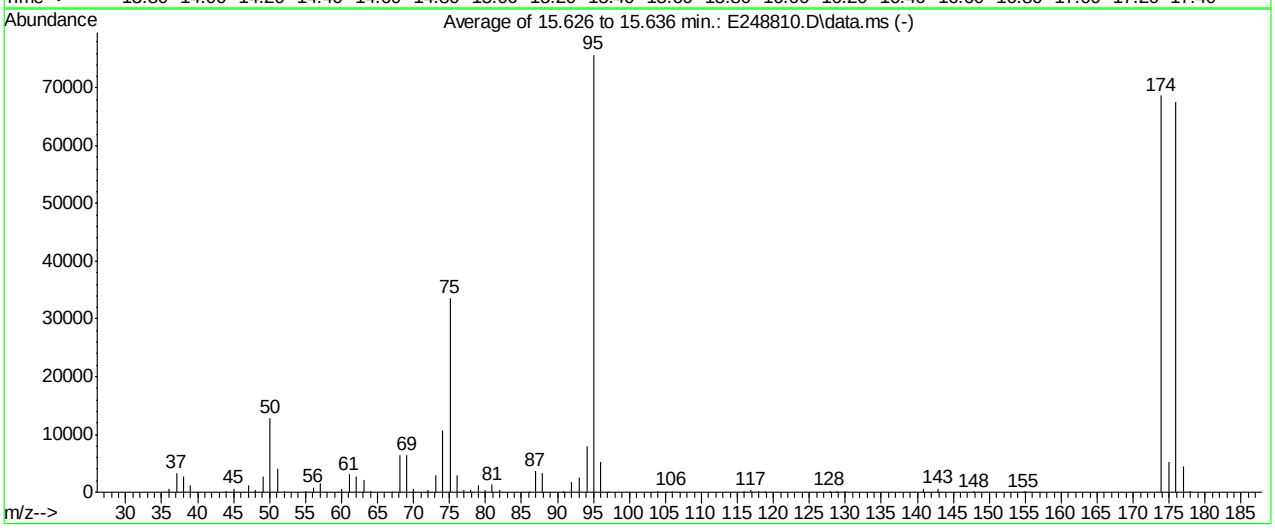
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	5721	134.90	50	177.85	124		
96.95	205	140.90	671	207.00	94		
103.90	315	142.85	626				
105.85	307	147.85	208				
115.85	220	154.90	220				
116.90	391	156.85	185				
117.85	245	172.10	52				
118.85	320	173.90	81549				
127.85	307	174.90	6277				
128.80	51	175.90	78440				
129.85	277	176.90	5226				

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E248810.D Vial: 1
Acq On : 9 Nov 2017 9:33 am Operator: ThienN
Sample : bfb Inst : MSE
Misc : MS21663,VE10685,5,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\ME10636.M (RTE Integrator)
Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um





AutoFind: Scans 2226, 2227, 2228; Background Corrected with Scan 2217

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	12825	PASS
75	95	30	60	44.3	33610	PASS
95	95	100	100	100.0	75800	PASS
96	95	5	9	6.8	5190	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	90.6	68658	PASS
175	174	5	9	7.6	5191	PASS
176	174	95	101	98.3	67488	PASS
177	176	5	9	6.8	4559	PASS

E248810.D ME10636.M Thu Nov 09 12:24:59 2017 RPT1

SGS ACCUTEST JC54422

Average of 15.626 to 15.636 min.: E248810.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	658	51.05	4081	68.05	6357	79.95	330
37.05	3323	52.10	203	69.05	6419	80.95	1296
38.05	2802	55.00	184	70.05	521	81.95	327
39.05	1129	56.05	809	72.00	372	86.05	57
39.95	62	57.00	1567	73.05	2825	86.95	3610
44.00	244	60.05	653	74.05	10693	87.95	3382
45.05	585	61.05	3028	75.05	33610	90.90	243
47.00	1198	62.05	2816	76.05	2835	92.00	1763
48.05	436	63.05	2125	77.00	429	93.00	2617
49.05	2703	64.00	199	77.90	386	94.05	8000
50.05	12825	66.95	90	78.95	1210	95.05	75800

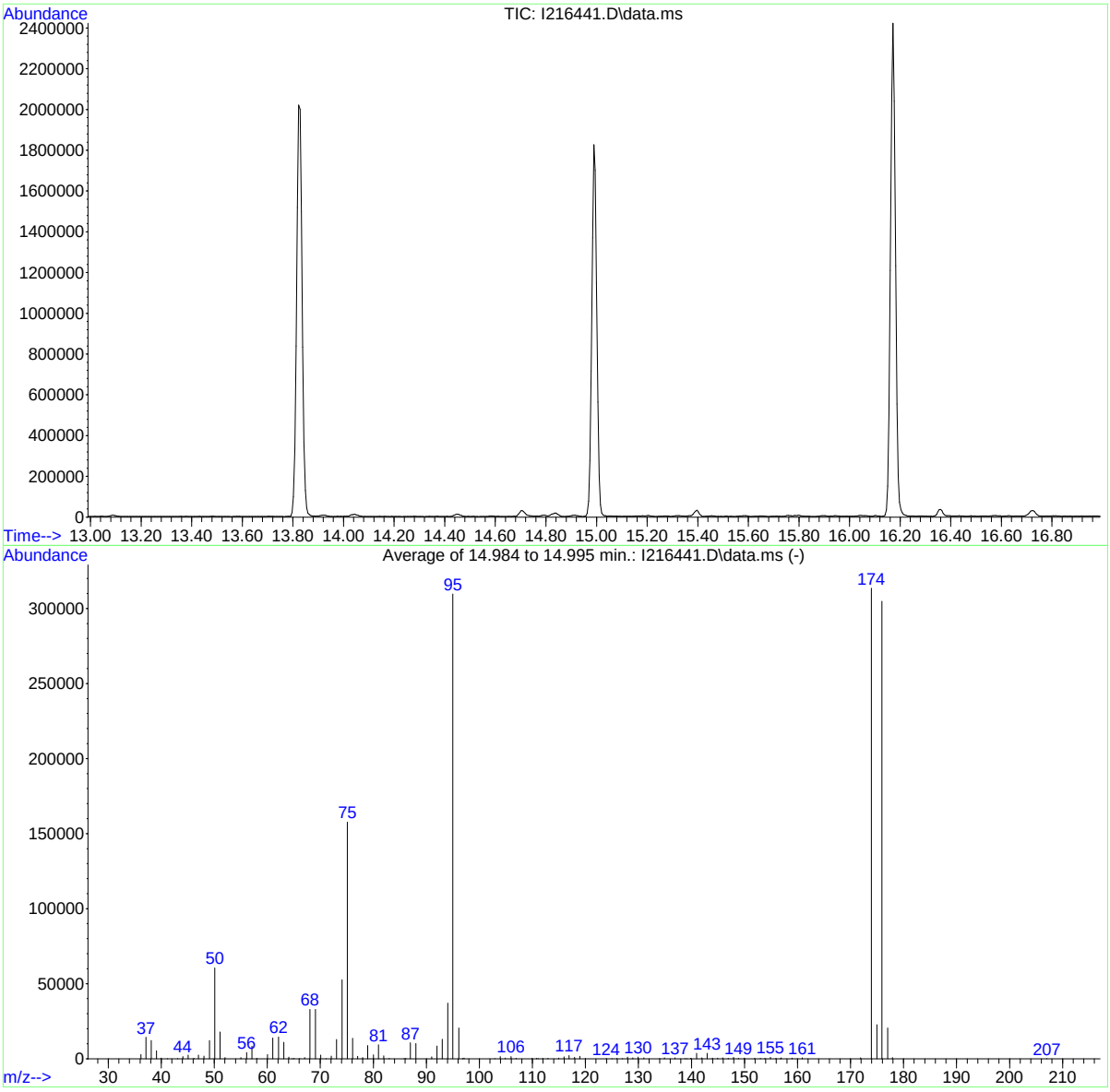
Average of 15.626 to 15.636 min.: E248810.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	5190	129.90	231				
97.05	55	140.90	528				
103.90	240	142.90	620				
104.95	50	147.90	117				
105.95	259	154.85	116				
115.85	223	155.05	78				
116.90	372	173.95	68658				
117.90	129	174.95	5191				
118.95	287	175.95	67488				
127.90	254	176.95	4559				
128.85	112	177.90	104				

SW-846 Method 8260

Data File : C:\msdchem\1\data\I\VI8691FINAL\I216441.D Vial: 1
Acq On : 26 Oct 2017 7:16 pm Operator: PrashanS
Sample : BFB Inst : GCMSI
Misc : MS21115,VI8691,5.0,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um



AutoFind: Scans 2180, 2181, 2182; Background Corrected with Scan 2171

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	60443	PASS
75	95	30	60	50.9	157696	PASS
95	95	100	100	100.0	309632	PASS
96	95	5	9	6.6	20533	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	101.2	313493	PASS
175	174	5	9	7.3	22765	PASS
176	174	95	101	97.2	304853	PASS
177	176	5	9	6.7	20416	PASS

I216441.D MI8691.M Tue Oct 31 15:21:50 2017 11

SGS ACCUTEST JC54422

Average of 14.984 to 14.995 min.: I216441.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.15	2768	48.05	1774	62.10	14435	72.05	1691
37.10	14331	49.10	12223	63.10	10898	73.05	12894
38.10	12140	50.10	60443	64.05	1071	74.10	52624
39.10	5276	51.10	17843	64.70	70	75.10	157696
40.00	404	52.05	720	65.05	244	76.10	13704
41.20	64	55.00	737	66.10	71	77.05	1670
43.10	82	56.10	4094	67.05	792	78.00	759
44.05	1465	57.10	8306	68.05	32899	78.95	8709
45.05	2495	58.05	346	69.10	32805	80.00	2567
46.15	220	60.05	2726	70.05	2364	80.95	9226
47.00	2526	61.05	13863	71.05	105	81.95	1978

Average of 14.984 to 14.995 min.: I216441.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.00	226	96.90	219	112.95	233	127.95	1032
85.80	47	97.10	399	114.95	440	128.95	555
86.15	198	102.90	65	115.95	1200	129.95	1155
87.00	10715	103.95	1380	116.90	2167	131.00	584
88.00	10146	104.90	447	117.95	1020	134.00	109
91.00	1212	105.95	1405	118.95	1641	134.90	630
92.00	8543	106.90	326	120.00	52	136.90	668
93.00	13014	109.90	187	123.90	136	138.80	84
94.05	37032	110.80	185	125.00	56	139.10	54
95.00	309632	111.10	56	125.90	82	139.85	268
96.10	20533	111.95	205	127.00	52	140.95	3559

Average of 14.984 to 14.995 min.: I216441.D\data.ms
BFB
Modified:subtracted

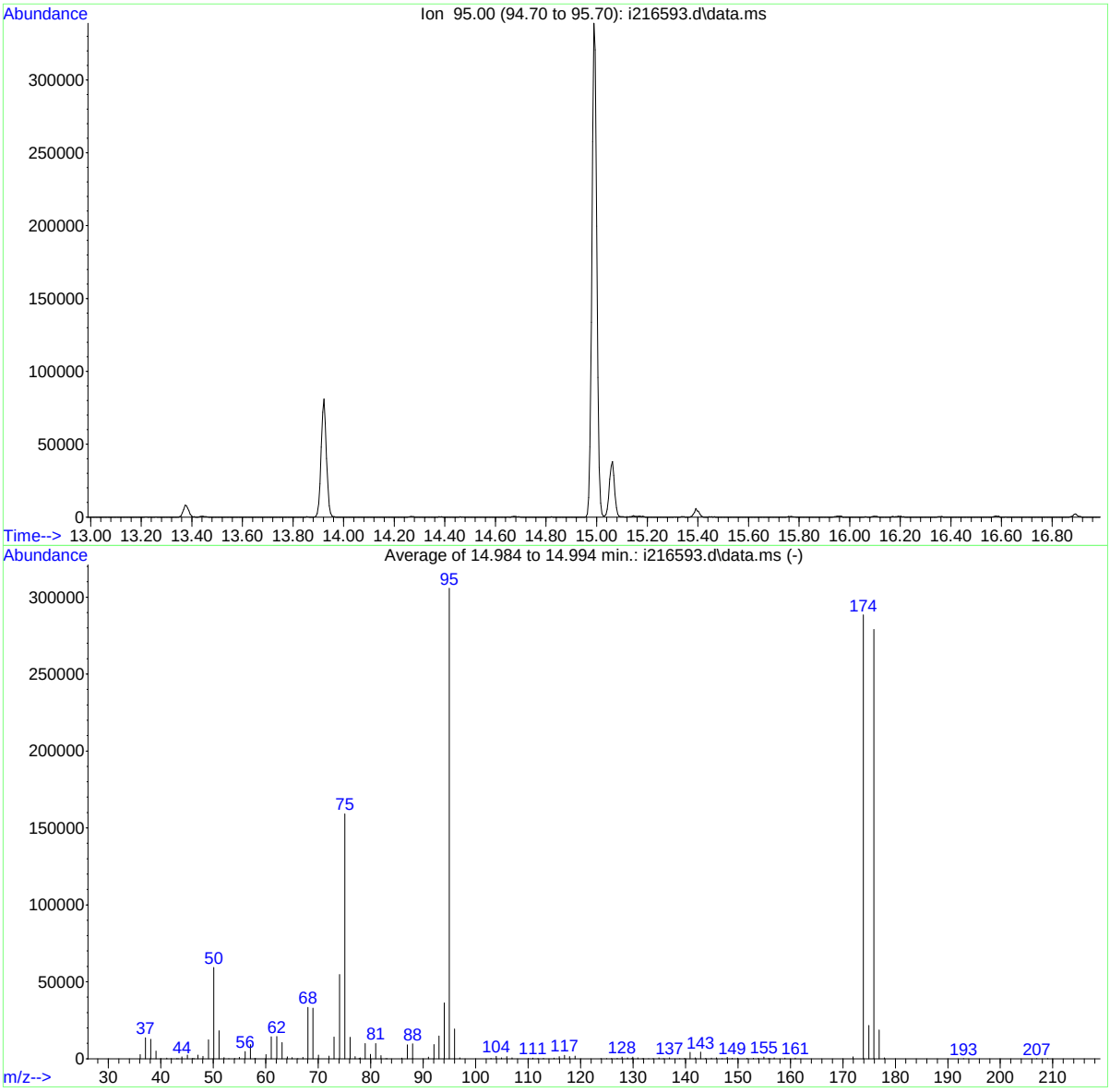
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.95	540	153.85	262	177.00	20416		
142.95	3600	154.90	869	177.90	725		
143.95	411	155.95	214	207.05	52		
144.95	377	156.80	107				
145.90	512	156.95	655				
146.95	278	158.95	448				
147.95	884	160.90	560				
148.90	326	171.90	642				
149.95	390	173.95	313493				
151.90	260	174.95	22765				
153.00	225	175.90	304853				

SGS ACCUTEST
JC54422

SW-846 Method 8260

Data File : C:\msdchem\1\data\I-core\vi8698\i216593.d Vial: 27
Acq On : 3 Nov 2017 8:53 pm Operator: PrashanS
Sample : bfb Inst : GCMSI
Misc : MS21711,VI8698,5.0,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um



AutoFind: Scans 2180, 2181, 2182; Background Corrected with Scan 2172

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	59291	PASS
75	95	30	60	52.1	159211	PASS
95	95	100	100	100.0	305771	PASS
96	95	5	9	6.3	19403	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	94.3	288448	PASS
175	174	5	9	7.5	21606	PASS
176	174	95	101	96.7	279019	PASS
177	176	5	9	6.7	18758	PASS

i216593.d MI8691.M Mon Nov 06 12:29:58 2017

SGS ACCUTEST JC54422

Average of 14.984 to 14.994 min.: i216593.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	2768	46.10	220	56.10	4581	67.10	950
37.10	13651	46.30	61	57.10	9207	68.05	33333
38.10	12631	47.10	2365	57.90	121	69.00	32837
39.10	5032	48.05	1605	58.05	242	70.05	2373
40.00	82	49.10	12376	60.05	2699	72.05	1651
41.15	349	50.10	59291	61.05	14360	73.00	14092
42.00	47	51.10	18277	62.10	14432	74.05	54680
43.05	122	52.05	778	63.10	10579	75.10	159211
43.30	161	52.95	102	64.10	1168	76.10	13965
44.00	1268	54.10	57	65.05	800	77.05	1441
45.05	2355	55.00	862	66.15	161	77.80	280

Average of 14.984 to 14.994 min.: i216593.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.00	648	92.05	9173	110.05	158	125.90	60
78.95	9822	93.00	14763	110.90	395	127.00	245
79.95	2890	94.05	36344	111.90	82	127.90	1076
80.95	9870	95.00	305771	112.95	313	128.95	578
81.95	2056	96.00	19403	114.95	398	129.80	373
82.90	122	97.00	581	115.95	1448	129.95	995
83.10	52	102.95	242	116.95	2175	130.90	618
85.95	397	103.95	1541	117.90	1369	131.80	49
87.00	9108	104.95	607	118.95	1700	132.00	76
88.00	9684	105.95	1424	123.90	96	133.00	57
91.00	1098	106.95	542	125.00	50	133.85	116

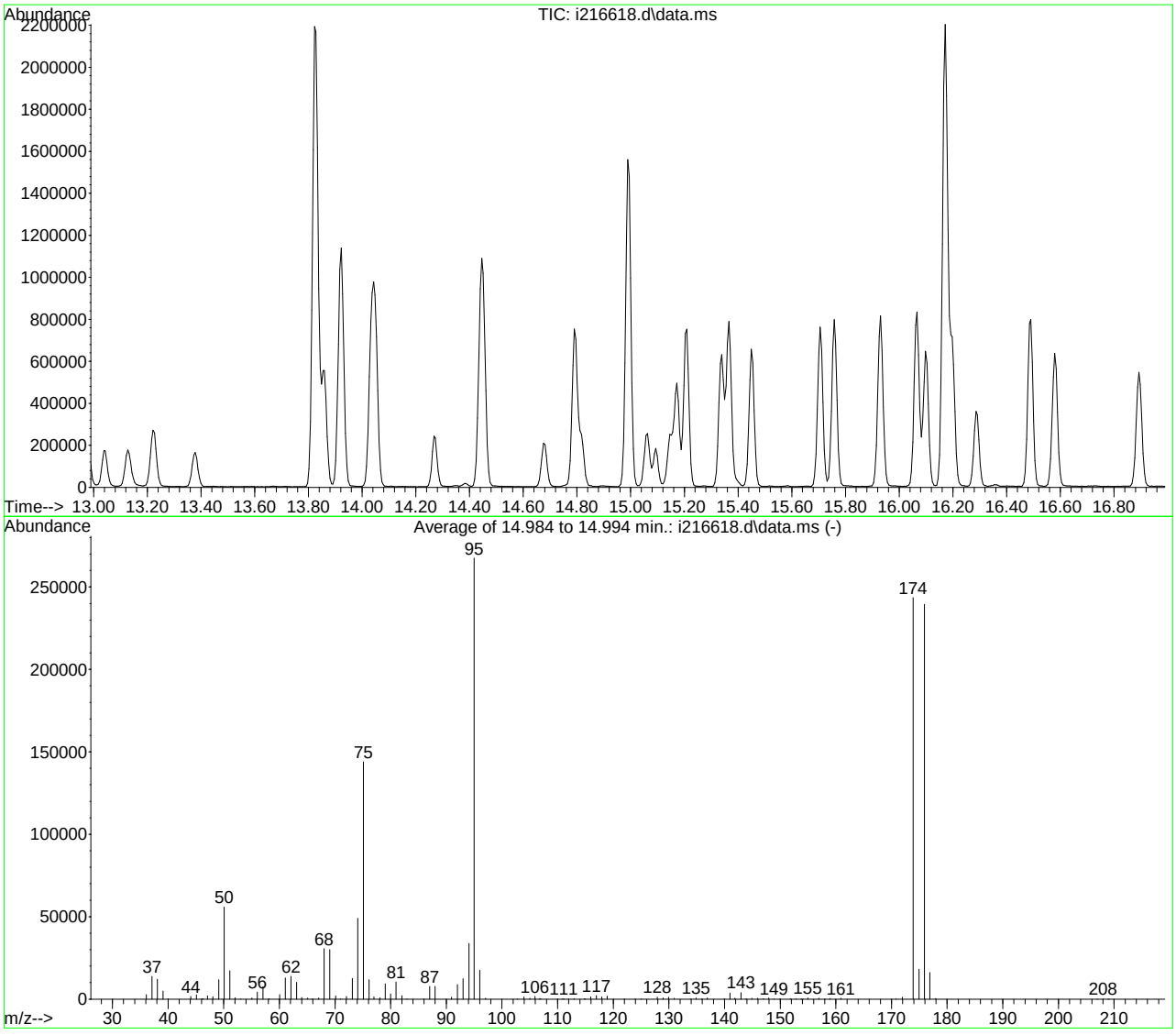
Average of 14.984 to 14.994 min.: i216593.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.95	566	147.00	94	158.95	475		
135.80	56	147.95	888	160.95	377		
136.95	661	148.90	327	171.95	1161		
138.90	77	149.95	444	173.90	288448		
139.80	257	151.75	258	174.95	21606		
140.90	4191	152.95	226	175.90	279019		
141.90	567	153.90	199	176.90	18758		
142.90	4382	154.95	1048	177.90	551		
143.85	311	155.80	47	193.00	110		
144.95	421	156.05	167	206.95	69		
145.90	544	156.90	664	209.00	50		

SW-846 Method 8260

Data File : C:\msdchem\1\data\vi8699\i216618.d Vial: 1
Acq On : 4 Nov 2017 1:45 pm Operator: PrashanS
Sample : bfb Inst : GCMSI
Misc : MS21830,VI8699,5.0,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um



AutoFind: Scans 2180, 2181, 2182; Background Corrected with Scan 2172

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	55816	PASS
75	95	30	60	53.8	143989	PASS
95	95	100	100	100.0	267477	PASS
96	95	5	9	6.5	17510	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.0	243456	PASS
175	174	5	9	7.4	18115	PASS
176	174	95	101	98.4	239488	PASS
177	176	5	9	6.7	16099	PASS

i216618.d MI8691.M Tue Nov 07 07:54:20 2017

ACCUTEST JC54422

Average of 14.984 to 14.994 min.: i216618.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	2675	49.10	11740	62.10	13810	73.10	12623
37.10	13743	50.10	55816	63.10	10280	74.10	48944
38.10	12073	51.10	17201	64.00	952	75.10	143989
39.10	4859	52.05	837	65.10	724	76.10	11750
40.00	194	53.10	90	65.90	48	77.00	1384
44.10	1577	55.05	768	67.05	796	78.05	817
45.10	2545	56.05	4371	68.05	30699	79.00	9271
46.05	211	57.05	7577	69.05	30080	80.00	3210
46.30	99	58.15	319	70.10	1919	80.95	10335
47.10	1909	60.05	2666	71.00	71	82.00	2091
48.05	1501	61.05	12933	72.05	1591	82.95	121

Average of 14.984 to 14.994 min.: i216618.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.95	171	103.95	1359	114.95	254	130.95	529
87.00	7799	105.00	595	115.95	1281	133.95	114
88.00	7741	105.95	1717	116.95	2093	134.90	796
90.95	1230	106.70	70	117.95	1281	135.90	59
92.00	8893	106.95	370	118.90	1825	136.90	793
93.00	12345	110.00	59	122.00	57	139.95	246
94.05	33765	110.90	226	123.95	121	140.95	3732
95.00	267477	111.10	78	125.00	67	141.85	487
96.00	17510	112.00	112	127.90	1261	142.95	3975
97.05	634	112.95	281	128.95	730	143.90	294
102.80	144	114.80	107	129.95	1245	144.90	517

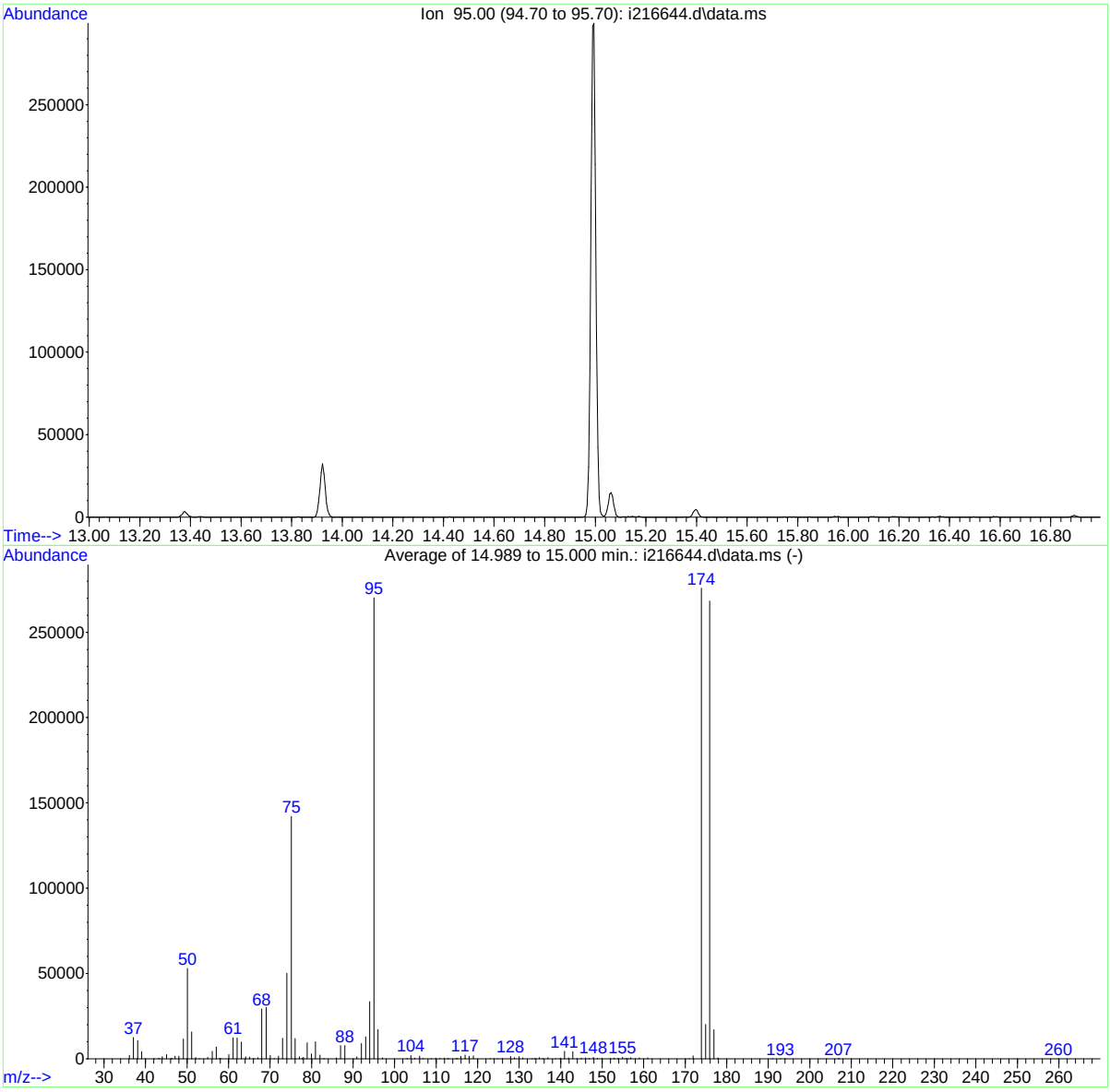
Average of 14.984 to 14.994 min.: i216618.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.95	498	158.00	79	208.05	119		
146.95	246	158.95	432	208.90	48		
147.95	734	160.90	535	209.10	49		
148.90	77	170.80	63				
149.95	300	171.95	1250				
151.90	222	173.90	243456				
152.85	124	174.95	18115				
153.80	70	175.90	239488				
154.10	60	176.90	16099				
154.95	788	177.95	437				
156.95	607	207.00	50				

SW-846 Method 8260

Data File : C:\msdchem\1\data\I-core\vi8700\i216644.d Vial: 1
Acq On : 6 Nov 2017 1:07 pm Operator: PrashanS
Sample : bfb Inst : GCMSI
Misc : MS21850,VI8700,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um



AutoFind: Scans 2181, 2182, 2183; Background Corrected with Scan 2171

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	52944	PASS
75	95	30	60	52.6	142088	PASS
95	95	100	100	100.0	270272	PASS
96	95	5	9	6.3	17091	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	102.1	275819	PASS
175	174	5	9	7.3	20040	PASS
176	174	95	101	97.3	268352	PASS
177	176	5	9	6.4	17044	PASS

i216644.d MI8691.M Tue Nov 07 12:33:14 2017

SGS ACCUTEST JC54422

Average of 14.989 to 15.000 min.: i216644.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1983	46.30	165	57.80	70	69.05	30144
37.10	12470	47.10	1619	58.05	249	70.05	2058
38.10	10659	48.05	1501	60.05	2397	71.00	55
39.05	4158	49.10	11620	61.10	12350	72.05	1588
40.00	117	50.10	52944	62.05	12134	73.00	12042
42.10	111	51.10	15655	63.10	9858	74.05	50117
43.10	163	52.05	732	64.10	1099	75.10	142088
43.40	49	53.00	101	65.05	934	76.00	11889
44.05	1237	55.00	814	66.05	239	77.05	1079
45.05	2465	56.05	4325	67.05	713	77.70	237
46.10	89	57.05	6814	68.00	29173	78.05	786

Average of 14.989 to 15.000 min.: i216644.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.95	9379	94.00	33515	110.95	282	123.90	144
79.95	2871	95.00	270272	111.95	307	124.80	59
80.95	9928	96.00	17091	112.80	144	125.90	168
82.00	2120	97.05	507	113.00	144	127.90	1451
83.00	182	103.00	162	114.90	258	128.90	677
85.95	479	103.90	1836	115.10	104	129.95	1340
87.00	7684	104.90	435	115.95	1427	130.90	516
88.00	7751	106.00	1539	117.00	2161	133.10	55
90.90	1081	106.85	243	117.95	1462	133.70	56
92.00	8901	108.80	53	118.95	1772	134.00	140
93.00	12932	109.90	313	123.00	133	134.85	726

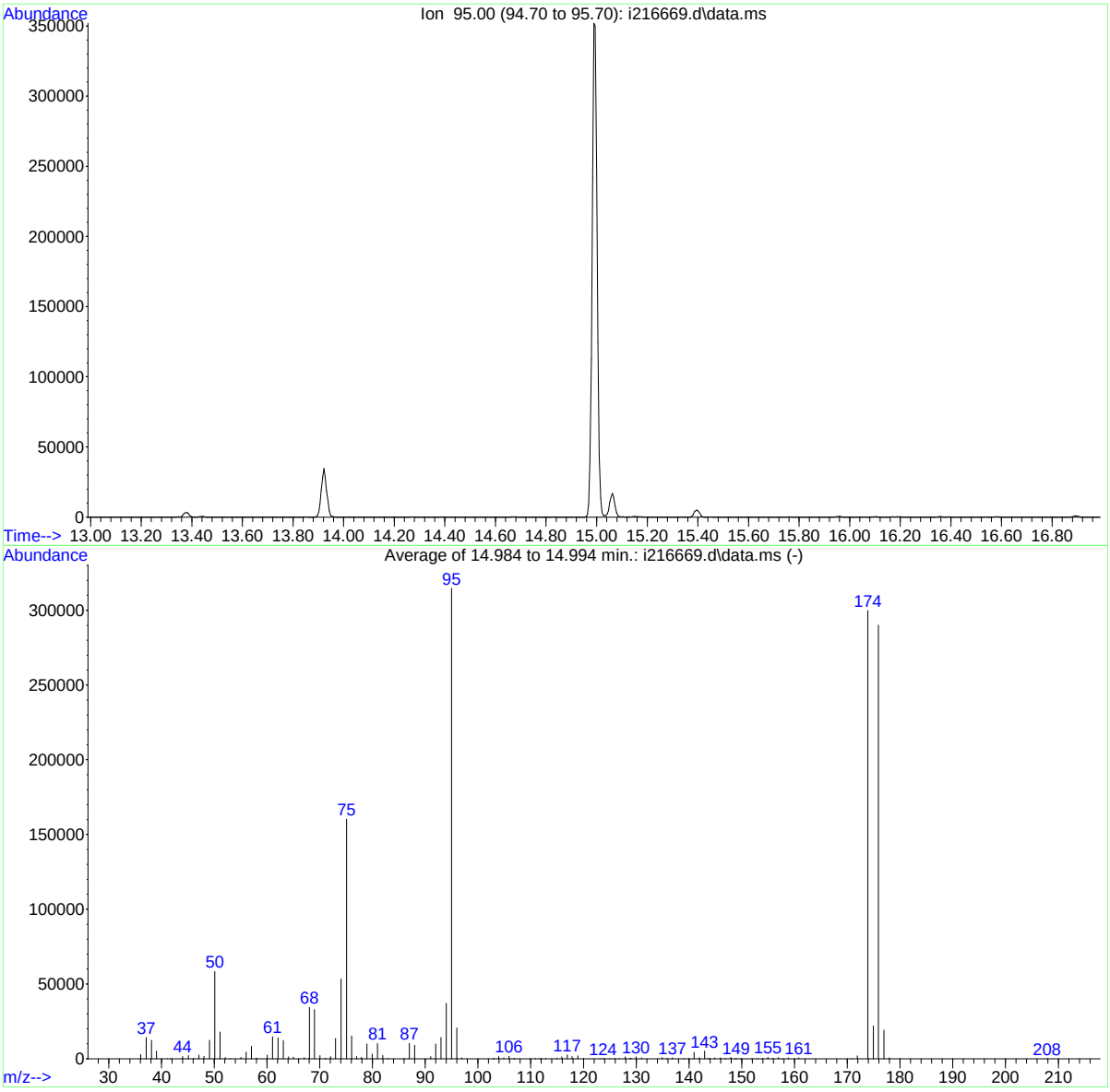
Average of 14.989 to 15.000 min.: i216644.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.70	56	147.85	778	156.90	643	191.00	55
136.95	636	148.85	179	157.95	108	192.95	138
138.80	122	149.95	409	158.95	477	194.10	63
139.90	337	151.90	257	160.95	528	206.90	133
140.95	4380	152.85	313	171.00	54	207.10	103
141.90	464	153.80	228	171.90	1775	259.90	59
142.90	4246	154.00	65	173.90	275819		
143.90	237	154.90	767	174.90	20040		
144.95	433	155.70	65	175.90	268352		
146.00	601	155.95	126	176.90	17044		
146.85	294	156.30	49	177.85	601		

SW-846 Method 8260

Data File : C:\msdchem\1\data\I\i216669.d Vial: 1
Acq On : 7 Nov 2017 11:11 am Operator: PrashanS
Sample : bfb Inst : GCMSI
Misc : MS21829,VI8701,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MI8691.M (RTE Integrator)
Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um



AutoFind: Scans 2180, 2181, 2182; Background Corrected with Scan 2172

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	58384	PASS
75	95	30	60	50.9	160216	PASS
95	95	100	100	100.0	314731	PASS
96	95	5	9	6.5	20589	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	95.2	299755	PASS
175	174	5	9	7.3	21890	PASS
176	174	95	101	96.8	290133	PASS
177	176	5	9	6.6	19006	PASS

i216669.d MI8691.M Wed Nov 08 17:41:03 2017

SGS ACCUTEST JC54422

Average of 14.984 to 14.994 min.: i216669.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	2725	49.10	12280	62.10	13926	72.05	1402
37.10	14255	50.10	58384	63.10	12168	73.00	13611
38.10	12398	51.10	17925	64.10	1314	74.05	53288
39.05	5061	52.10	810	65.00	1059	75.10	160216
41.10	133	53.05	102	66.00	80	76.05	15156
41.80	48	55.05	881	67.05	789	77.00	1514
44.00	1492	56.05	4444	68.05	34296	77.90	944
45.10	2142	57.05	8343	69.00	32779	78.95	9915
46.10	266	58.05	435	70.05	2147	79.95	3146
47.10	2478	60.05	2497	71.00	48	80.95	10168
48.05	1689	61.05	14625	71.20	54	81.95	2266

Average of 14.984 to 14.994 min.: i216669.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.00	217	102.90	67	112.85	285	125.95	179
86.00	118	103.10	130	114.95	386	126.80	105
87.00	10431	103.95	1416	115.90	1343	127.90	1248
88.00	8959	104.90	534	116.95	2629	128.80	128
91.05	1373	105.90	1619	117.85	1390	128.95	440
92.00	9883	106.80	123	118.95	1913	129.95	1278
93.00	14122	107.00	226	120.00	75	131.00	667
94.00	37093	109.95	141	123.10	82	134.90	731
95.00	314731	110.90	276	123.75	135	135.80	80
96.00	20589	111.80	134	124.00	125	136.85	606
96.95	576	112.00	97	125.00	55	139.00	103

Average of 14.984 to 14.994 min.: i216669.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.90	260	148.95	206	170.80	65		
140.95	4253	149.85	343	171.90	1889		
141.90	576	151.90	129	173.90	299755		
142.95	5075	152.95	170	174.95	21890		
143.70	135	153.90	332	175.90	290133		
143.90	184	154.95	946	176.95	19006		
144.85	521	155.90	68	177.95	587		
145.95	632	156.95	717	207.90	71		
146.90	344	157.60	59				
147.90	862	158.85	512				
148.70	72	160.80	562				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151358.D
Acq On : 22 Aug 2017 6:51 pm
Operator :
Sample : IC6691-0.2
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 11:30:23 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:41:18 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.573	65	121928	500.00	ug/L		0.00
4) pentafluorobenzene	9.832	168	292838	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.753	114	452475	50.00	ug/L		0.00
78) chlorobenzene-d5	13.870	117	379772	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	192602	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.900	113	149487	49.35	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.70%				
45) 1,2-dichloroethane-d4 (s)	10.324	65	149109	47.06	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 94.12%				
77) toluene-d8 (s)	12.369	98	518489	50.66	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.32%				
94) 4-bromofluorobenzene (s)	15.015	95	182407	50.22	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.44%				
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.896	85	1052	0.22	ug/L		87
16) 1,1-dichloroethene	6.856	61	987	0.22	ug/L	#	65
25) methyl tert butyl ether	7.908	73	1486	0.22	ug/L		65
26) trans-1,2-dichloroethene	7.981	61	1032	0.24	ug/L		71
28) 1,1-dichloroethane	8.577	63	1210	0.23	ug/L		89
30) di-isopropyl ether	8.525	45	2202	0.23	ug/L		76
31) chloroprene	8.676	53	1106	0.23	ug/L		79
32) ethyl tert-butyl ether	8.985	59	1842	0.21	ug/L		93
34) 2,2-dichloropropane	9.299	77	1168	0.27	ug/L	#	81
42) chloroform	9.691	83	1350	0.26	ug/L		88
46) 1,1,1-trichloroethane	9.921	97	1060	0.23	ug/L	#	74
47) cyclohexane	9.984	84	814	0.22	ug/L	#	70
49) 1,1-dichloropropene	10.115	75	1021	0.26	ug/L		98
51) carbon tetrachloride	10.115	117	1034	0.27	ug/L	#	84
54) benzene	10.376	78	3040	0.28	ug/L		94
55) 2,2,4-trimethylpentane	10.340	57	3331	0.28	ug/L		86
56) tert-amyl methyl ether	10.381	73	1874	0.25	ug/L	#	57
57) heptane	10.512	57	532	0.22	ug/L	#	80
59) trichloroethene	11.093	95	707	0.25	ug/L		81
61) 1,2-dichloropropane	11.365	63	593	0.21	ug/L	#	41
64) bromodichloromethane	11.652	83	762	0.21	ug/L		97
66) 2-chloroethyl vinyl ether	11.877	63	1312	1.06	ug/L		93
68) cis-1,3-dichloropropene	12.102	75	1010	0.23	ug/L		91
69) 4-methyl-2-pentanone	12.186	58	747	0.80	ug/L	#	69
72) trans-1,3-dichloropropene	12.657	75	832	0.22	ug/L		91
73) ethyl methacrylate	12.636	69	589	0.21	ug/L		78
74) 1,1,2-trichloroethane	12.866	83	427	0.23	ug/L	#	65
75) 1,3-dichloropropane	13.044	76	735	0.21	ug/L	#	50
76) 2-hexanone	13.023	58	839	0.90	ug/L		84
83) dibromochloromethane	13.316	129	560	0.21	ug/L	#	87
84) 1,2-dibromoethane	13.457	107	531	0.23	ug/L	#	74
85) chlorobenzene	13.901	112	1812	0.27	ug/L		71

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151358.D
Acq On : 22 Aug 2017 6:51 pm
Operator :
Sample : IC6691-0.2
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 11:30:23 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:41:18 2017
Response via : Initial Calibration

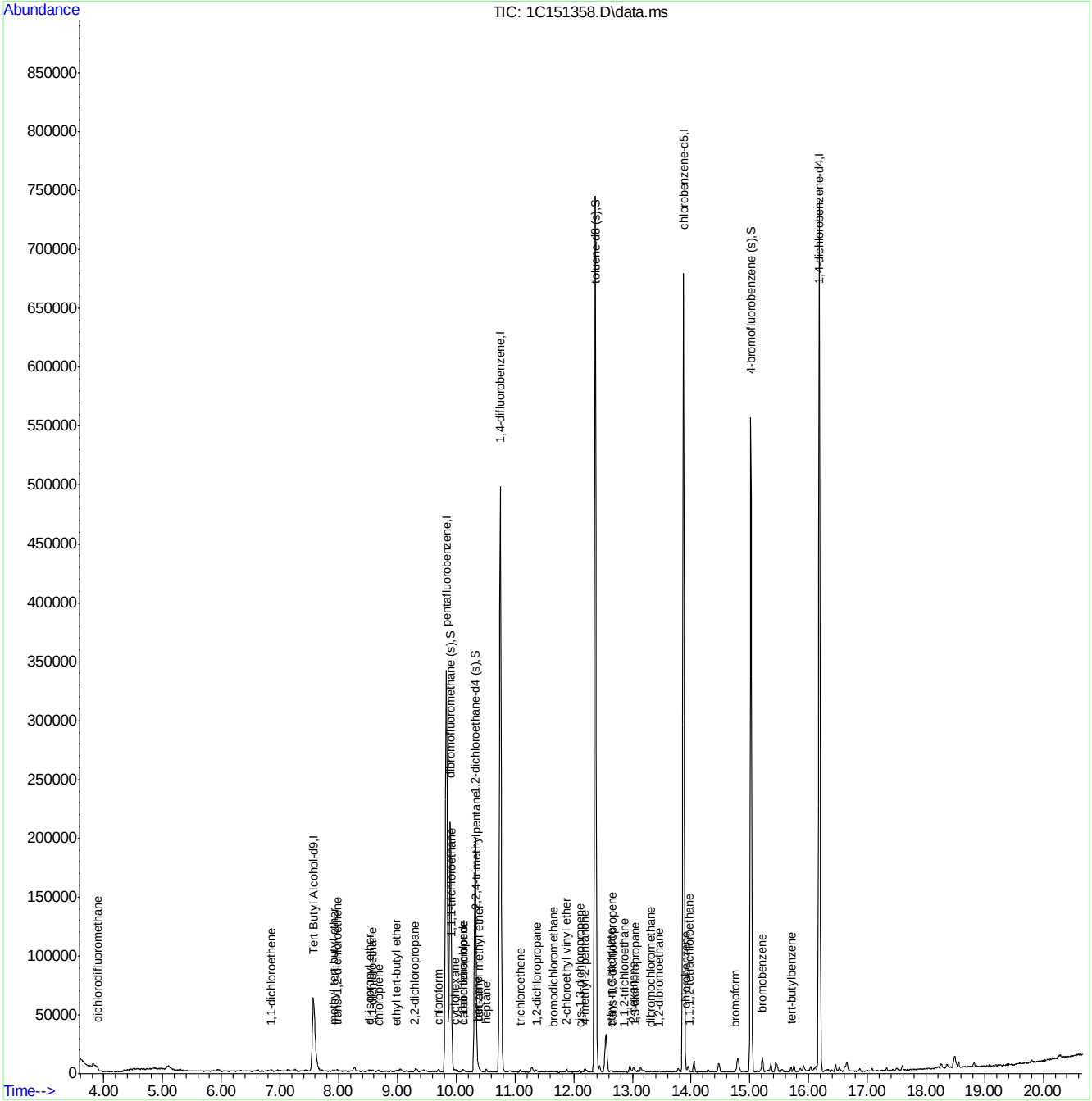
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
86) 1,1,1,2-tetrachloroethane	13.964	131	517	0.21	ug/L		93
92) bromoform	14.759	173	398	0.22	ug/L	#	61
100) bromobenzene	15.209	156	727	0.26	ug/L	#	83
105) tert-butylbenzene	15.706	134	428	0.24	ug/L	#	61

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151358.D
Acq On : 22 Aug 2017 6:51 pm
Operator :
Sample : IC6691-0.2
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 11:30:23 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:41:18 2017
Response via : Initial Calibration



SGS 400 of 640 ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151359.D
Acq On : 22 Aug 2017 7:21 pm
Operator :
Sample : IC6691-0.5
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 10:36:31 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:48:00 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.573	65	122885	500.00	ug/L		0.00
4) pentafluorobenzene	9.832	168	289185	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.753	114	456429	50.00	ug/L		0.00
78) chlorobenzene-d5	13.870	117	379356	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	190901	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.900	113	147529	49.64	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.28%				
45) 1,2-dichloroethane-d4 (s)	10.324	65	149258	49.15	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 98.30%				
77) toluene-d8 (s)	12.369	98	520103	50.05	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.10%				
94) 4-bromofluorobenzene (s)	15.015	95	182621	50.61	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.22%				
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.901	85	2739	0.55	ug/L		93
6) chlorodifluoromethane	3.938	51	2086	0.50	ug/L		91
7) chloromethane	4.346	50	3006	0.67	ug/L		90
8) vinyl chloride	4.591	62	2222	0.50	ug/L		84
10) chloroethane	5.501	64	1162	0.53	ug/L	#	66
12) ethyl ether	6.432	74	527	0.38	ug/L	#	38
13) 2-chloropropane	6.631	63	447	0.37	ug/L	#	8
15) freon 113	6.783	151	884	0.44	ug/L		94
16) 1,1-dichloroethene	6.851	61	1955	0.42	ug/L		79
17) acetone	6.966	58	606	2.60	ug/L	#	70
18) iodomethane	7.149	142	1534	0.49	ug/L		82
19) carbon disulfide	7.259	76	5273	0.55	ug/L		98
20) acetonitrile	7.431	41	2019	5.06	ug/L		85
25) methyl tert butyl ether	7.918	73	2913	0.41	ug/L		99
26) trans-1,2-dichloroethene	7.981	61	2065	0.44	ug/L		89
28) 1,1-dichloroethane	8.572	63	2452	0.44	ug/L		83
30) di-isopropyl ether	8.519	45	3973	0.39	ug/L		93
31) chloroprene	8.666	53	2061	0.40	ug/L		84
32) ethyl tert-butyl ether	8.985	59	3759	0.43	ug/L		95
33) 2-butanone	9.309	72	425	1.35	ug/L	#	5
34) 2,2-dichloropropane	9.304	77	2299	0.46	ug/L	#	81
36) cis-1,2-dichloroethene	9.325	96	1625	0.52	ug/L	#	70
38) propionitrile	9.435	54	1779	4.12	ug/L		63
40) bromochloromethane	9.644	128	613	0.48	ug/L	#	66
42) chloroform	9.696	83	2738	0.47	ug/L		89
46) 1,1,1-trichloroethane	9.926	97	1963	0.40	ug/L		90
47) cyclohexane	9.989	84	1785	0.47	ug/L		94
49) 1,1-dichloropropene	10.109	75	1808	0.40	ug/L		93
51) carbon tetrachloride	10.125	117	1869	0.41	ug/L		92
53) 1,2-dichloroethane	10.413	62	1590	0.48	ug/L		83
54) benzene	10.381	78	5417	0.41	ug/L		98
55) 2,2,4-trimethylpentane	10.339	57	5675	0.39	ug/L		95

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151359.D
Acq On : 22 Aug 2017 7:21 pm
Operator :
Sample : IC6691-0.5
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 10:36:31 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:48:00 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56)	tert-amyl methyl ether	10.381	73	3653	0.43	ug/L		87
57)	heptane	10.507	57	1213	0.47	ug/L		87
59)	trichloroethene	11.087	95	1458	0.45	ug/L		83
60)	methylcyclohexane	11.286	83	3463	0.66	ug/L	#	77
61)	1,2-dichloropropane	11.365	63	1386	0.47	ug/L		99
63)	dibromomethane	11.527	93	793	0.50	ug/L		85
64)	bromodichloromethane	11.652	83	1684	0.45	ug/L		93
65)	2-nitropropane	11.888	41	391	0.40	ug/L	#	8
66)	2-chloroethyl vinyl ether	11.882	63	2696	2.10	ug/L		96
68)	cis-1,3-dichloropropene	12.097	75	1877	0.40	ug/L		96
69)	4-methyl-2-pentanone	12.191	58	1460	1.55	ug/L	#	76
71)	toluene	12.442	92	3993	0.62	ug/L		97
72)	trans-1,3-dichloropropene	12.651	75	1554	0.39	ug/L		91
73)	ethyl methacrylate	12.620	69	1198	0.42	ug/L		78
74)	1,1,2-trichloroethane	12.866	83	759	0.38	ug/L		87
75)	1,3-dichloropropane	13.049	76	1690	0.47	ug/L		83
76)	2-hexanone	13.023	58	1553	1.56	ug/L	#	68
79)	tetrachloroethene	13.012	166	1497	0.42	ug/L		88
80)	butyl acetate	13.096	56	622	0.42	ug/L	#	23
82)	n-butyl ether	13.781	57	5706	0.41	ug/L		93
83)	dibromochloromethane	13.310	129	1148	0.42	ug/L		90
84)	1,2-dibromoethane	13.462	107	961	0.39	ug/L		98
85)	chlorobenzene	13.901	112	3273	0.42	ug/L		97
86)	1,1,1,2-tetrachloroethane	13.964	131	933	0.37	ug/L		84
87)	ethylbenzene	13.943	91	6358	0.42	ug/L		98
88)	m,p-xylene	14.048	106	4768	0.82	ug/L		98
89)	o-xylene	14.466	106	2309	0.41	ug/L		91
90)	styrene	14.482	104	4037	0.55	ug/L		98
92)	bromoform	14.759	173	758	0.40	ug/L		86
95)	isopropylbenzene	14.796	105	6093	0.52	ug/L		91
97)	1,1,2,2-tetrachloroethane	15.130	83	1337	0.40	ug/L		87
100)	bromobenzene	15.214	156	1430	0.45	ug/L	#	78
101)	n-propylbenzene	15.204	91	7477	0.41	ug/L		96
102)	2-chlorotoluene	15.360	126	1265	0.40	ug/L		96
103)	4-chlorotoluene	15.460	91	4387	0.52	ug/L		98
104)	1,3,5-trimethylbenzene	15.350	105	4488	0.47	ug/L		97
105)	tert-butylbenzene	15.706	134	847	0.44	ug/L	#	24
107)	1,2,4-trimethylbenzene	15.748	105	5423	0.57	ug/L		95
108)	sec-butylbenzene	15.915	105	6327	0.48	ug/L		96
109)	p-isopropyltoluene	16.035	119	5169	0.49	ug/l		95
110)	benzyl chloride	16.333	91	2677	0.50	ug/L		92
111)	1,3-dichlorobenzene	16.124	146	2819	0.52	ug/L		97
112)	1,4-dichlorobenzene	16.208	146	2995	0.55	ug/L		95
113)	1,2-dichlorobenzene	16.610	146	2749	0.53	ug/L		86
114)	n-butylbenzene	16.459	92	2870	0.48	ug/L		96
117)	1,3,5-Trichlorobenzene	17.594	180	2547	0.54	ug/L		94
118)	1,2,4-trichlorobenzene	18.258	180	2025	0.53	ug/L		93
119)	hexachlorobutadiene	18.357	225	1253	0.52	ug/L		93
120)	naphthalene	18.556	128	4870	0.54	ug/L		96
121)	1,2,3-trichlorobenzene	18.812	180	1961	0.54	ug/L		93

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151359.D
Acq On : 22 Aug 2017 7:21 pm
Operator :
Sample : IC6691-0.5
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 10:36:31 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:48:00 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

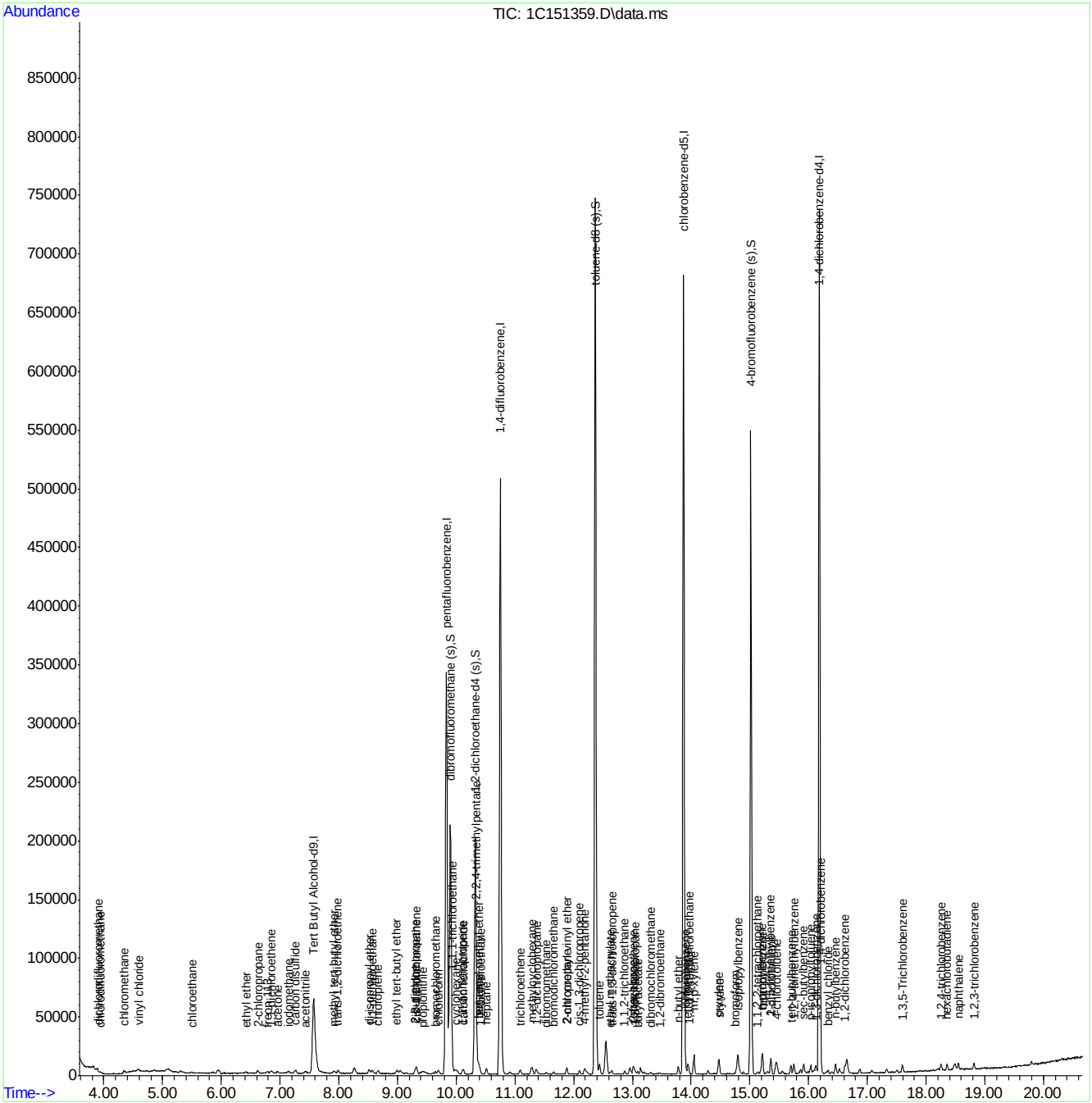
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151359.D
Acq On : 22 Aug 2017 7:21 pm
Operator :
Sample : IC6691-0.5
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 10:36:31 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:48:00 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151360.D
Acq On : 22 Aug 2017 7:51 pm
Operator :
Sample : IC6691-1
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:34:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:52:04 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.567	65	117744	500.00	ug/L		0.00
4) pentafluorobenzene	9.832	168	278436	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.753	114	435055	50.00	ug/L		0.00
78) chlorobenzene-d5	13.870	117	364893	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	185239	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.900	113	142794	50.02	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.04%				
45) 1,2-dichloroethane-d4 (s)	10.324	65	144887	49.83	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.66%				
77) toluene-d8 (s)	12.369	98	496257	50.08	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.16%				
94) 4-bromofluorobenzene (s)	15.015	95	173515	49.36	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.72%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.693	59	1428	4.64	ug/L		55
3) 1,4-dioxane	11.485	88	606	21.24	ug/L		82
5) dichlorodifluoromethane	3.896	85	4266	0.87	ug/L		93
6) chlorodifluoromethane	3.938	51	4254	1.06	ug/L		93
7) chloromethane	4.340	50	4581	0.91	ug/L		93
8) vinyl chloride	4.581	62	3789	0.88	ug/L		98
9) bromomethane	5.308	94	2472	0.89	ug/L		81
10) chloroethane	5.491	64	1910	0.88	ug/L		84
11) trichlorofluoromethane	5.946	101	5576	0.90	ug/L		96
12) ethyl ether	6.417	74	1252	1.06	ug/L	#	72
13) 2-chloropropane	6.621	63	1068	1.05	ug/L	#	56
15) freon 113	6.783	151	1953	1.07	ug/L		86
16) 1,1-dichloroethene	6.846	61	4429	1.05	ug/L		89
17) acetone	6.961	58	841	3.26	ug/L	#	53
18) iodomethane	7.154	142	2199	0.74	ug/L		80
19) carbon disulfide	7.259	76	10322	1.06	ug/L		99
20) acetonitrile	7.437	41	3935	10.18	ug/L		91
25) methyl tert butyl ether	7.918	73	5898	0.92	ug/L		94
26) trans-1,2-dichloroethene	7.986	61	4051	0.94	ug/L		96
27) hexane	8.263	57	5020	0.96	ug/L		95
28) 1,1-dichloroethane	8.572	63	5110	0.99	ug/L		94
30) di-isopropyl ether	8.514	45	8274	0.91	ug/L		86
31) chloroprene	8.671	53	4240	0.92	ug/L		96
32) ethyl tert-butyl ether	8.985	59	7685	0.95	ug/L		91
33) 2-butanone	9.309	72	874	3.45	ug/L	#	46
34) 2,2-dichloropropane	9.304	77	4210	0.90	ug/L		97
36) cis-1,2-dichloroethene	9.325	96	3058	1.00	ug/L		95
38) propionitrile	9.429	54	3628	9.57	ug/L		88
39) methacrylonitrile	9.592	67	806	0.76	ug/L	#	61
40) bromochloromethane	9.639	128	1183	0.98	ug/L	#	65
42) chloroform	9.696	83	5007	0.91	ug/L		88
46) 1,1,1-trichloroethane	9.932	97	4139	0.94	ug/L		87

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151360.D
Acq On : 22 Aug 2017 7:51 pm
Operator :
Sample : IC6691-1
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:34:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:52:04 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47)	cyclohexane	9.973	84	3753	1.04	ug/L		87
49)	1,1-dichloropropene	10.109	75	3773	0.93	ug/L		92
51)	carbon tetrachloride	10.130	117	3586	0.88	ug/L		95
53)	1,2-dichloroethane	10.408	62	3057	0.99	ug/L		90
54)	benzene	10.381	78	10998	0.93	ug/L		99
55)	2,2,4-trimethylpentane	10.334	57	11065	0.87	ug/L		97
56)	tert-amyl methyl ether	10.387	73	6868	0.89	ug/L		94
57)	heptane	10.512	57	2330	0.97	ug/L		96
59)	trichloroethene	11.087	95	2789	0.94	ug/L		94
60)	methylcyclohexane	11.276	83	5822	1.01	ug/L		92
61)	1,2-dichloropropane	11.359	63	2496	0.91	ug/L		95
62)	methyl methacrylate	11.344	100	391	0.73	ug/L	#	1
63)	dibromomethane	11.532	93	1379	0.91	ug/L		93
64)	bromodichloromethane	11.652	83	3455	1.00	ug/L		92
65)	2-nitropropane	11.877	41	896	1.07	ug/L	#	54
66)	2-chloroethyl vinyl ether	11.877	63	5529	4.77	ug/L		97
67)	epichlorohydrin	12.024	57	1068	3.90	ug/L		89
68)	cis-1,3-dichloropropene	12.097	75	3842	0.91	ug/L		90
69)	4-methyl-2-pentanone	12.186	58	2877	3.46	ug/L	#	84
70)	3-methyl-1-butanol	12.212	70	993	17.65	ug/L	#	67
71)	toluene	12.442	92	7032	1.03	ug/L		97
72)	trans-1,3-dichloropropene	12.657	75	3315	0.95	ug/L		96
73)	ethyl methacrylate	12.625	69	2341	0.90	ug/L		89
74)	1,1,2-trichloroethane	12.866	83	1587	0.90	ug/L		84
75)	1,3-dichloropropane	13.044	76	3189	0.95	ug/L		94
76)	2-hexanone	13.023	58	3247	3.68	ug/L		97
79)	tetrachloroethene	13.017	166	2924	0.89	ug/L		93
80)	butyl acetate	13.085	56	1422	1.08	ug/L	#	75
81)	3,3-Dimethyl-1-Butanol	13.200	69	1249	7.03	ug/L		84
82)	n-butyl ether	13.781	57	11095	0.88	ug/L		98
83)	dibromochloromethane	13.305	129	2342	0.94	ug/L		91
84)	1,2-dibromoethane	13.462	107	2022	0.92	ug/L		96
85)	chlorobenzene	13.901	112	6590	0.93	ug/L		97
86)	1,1,1,2-tetrachloroethane	13.964	131	2103	0.96	ug/L		97
87)	ethylbenzene	13.943	91	12312	0.89	ug/L		97
88)	m,p-xylene	14.048	106	9281	1.76	ug/L		100
89)	o-xylene	14.461	106	4391	0.87	ug/L		92
90)	styrene	14.482	104	7651	1.03	ug/L		88
92)	bromoform	14.759	173	1380	0.81	ug/L		87
95)	isopropylbenzene	14.801	105	11559	1.00	ug/L		97
97)	1,1,2,2-tetrachloroethane	15.130	83	2507	0.83	ug/L		92
98)	trans-1,4-dichloro-2-b...	15.172	53	668	0.80	ug/L		90
99)	1,2,3-trichloropropane	15.209	110	559	0.85	ug/L		91
100)	bromobenzene	15.214	156	2733	0.91	ug/L	#	80
101)	n-propylbenzene	15.204	91	14606	0.88	ug/L		98
102)	2-chlorotoluene	15.361	126	2701	0.94	ug/L		90
103)	4-chlorotoluene	15.460	91	8769	1.05	ug/L		99
104)	1,3,5-trimethylbenzene	15.350	105	9298	1.04	ug/L		96
105)	tert-butylbenzene	15.701	134	1744	0.97	ug/L	#	84
107)	1,2,4-trimethylbenzene	15.748	105	9585	0.97	ug/L		97

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151360.D
Acq On : 22 Aug 2017 7:51 pm
Operator :
Sample : IC6691-1
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:34:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:52:04 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) sec-butylbenzene	15.915	105	12827	1.02	ug/L	97
109) p-isopropyltoluene	16.035	119	9981	0.99	ug/l	95
110) benzyl chloride	16.333	91	5083	0.98	ug/L	95
111) 1,3-dichlorobenzene	16.124	146	5453	1.02	ug/L	88
112) 1,4-dichlorobenzene	16.208	146	5575	1.01	ug/L	88
113) 1,2-dichlorobenzene	16.611	146	4715	0.91	ug/L	95
114) n-butylbenzene	16.459	92	5738	1.01	ug/L	94
115) hexachloroethane	16.867	201	1439	0.94	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.432	157	529	0.87	ug/L	85
117) 1,3,5-Trichlorobenzene	17.594	180	4361	0.92	ug/L	97
118) 1,2,4-trichlorobenzene	18.253	180	3948	1.03	ug/L	91
119) hexachlorobutadiene	18.352	225	2285	0.95	ug/L	87
120) naphthalene	18.551	128	8323	0.91	ug/L	99
121) 1,2,3-trichlorobenzene	18.813	180	3308	0.90	ug/L	86

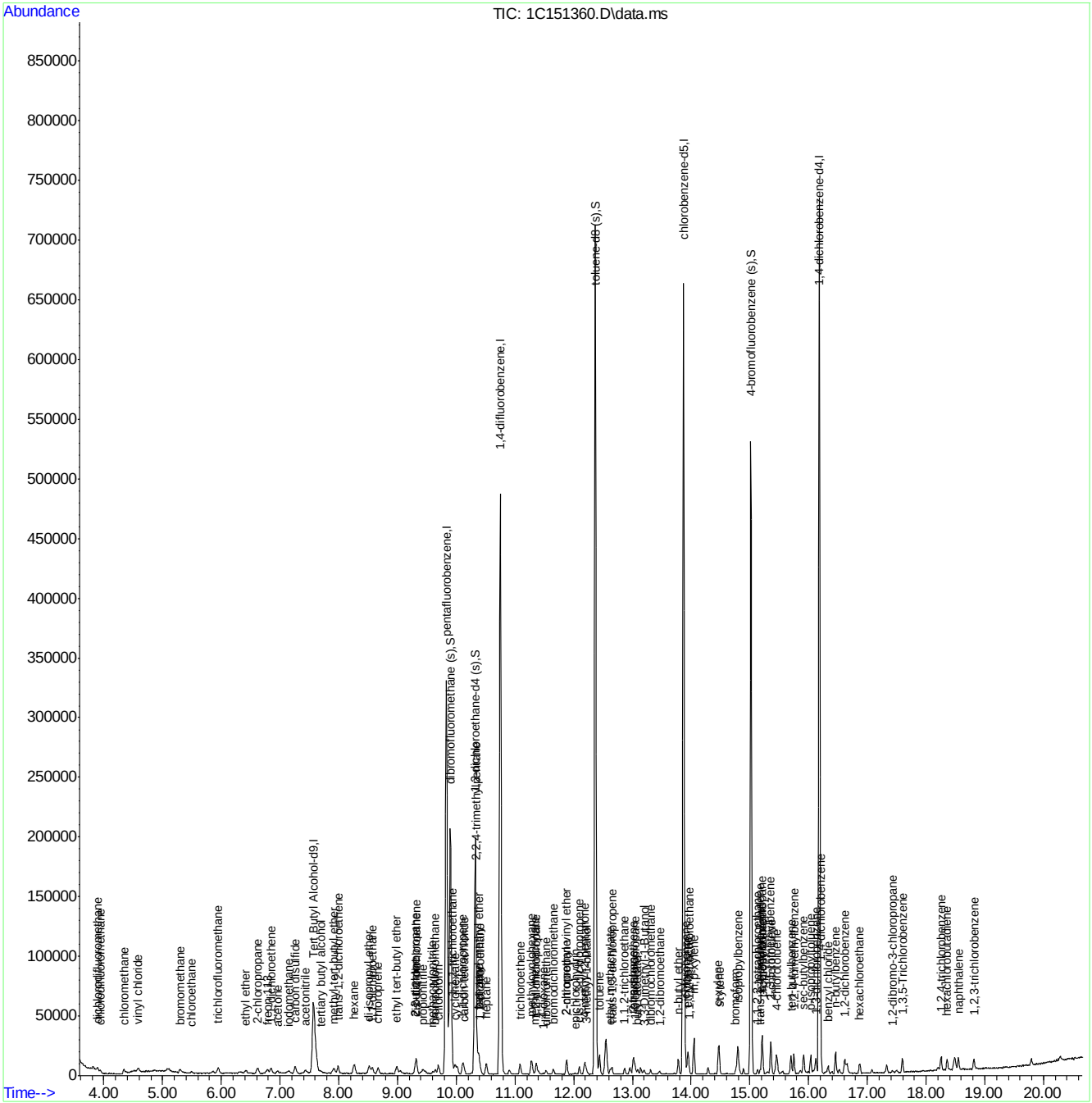
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151360.D
Acq On : 22 Aug 2017 7:51 pm
Operator :
Sample : IC6691-1
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:34:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:52:04 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151361.D
Acq On : 22 Aug 2017 8:21 pm
Operator :
Sample : IC6691-2
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:33:01 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:56:13 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.573	65	116368	500.00	ug/L		0.00
4) pentafluorobenzene	9.832	168	257595	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.753	114	407627	50.00	ug/L		0.00
78) chlorobenzene-d5	13.870	117	342838	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	174070	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.900	113	133252	50.45	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.90%				
45) 1,2-dichloroethane-d4 (s)	10.324	65	137938	51.32	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.64%				
77) toluene-d8 (s)	12.369	98	466847	50.26	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.52%				
94) 4-bromofluorobenzene (s)	15.015	95	163164	49.55	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 99.10%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.693	59	2846	9.71	ug/L		81
3) 1,4-dioxane	11.485	88	1223	46.89	ug/L		97
5) dichlorodifluoromethane	3.896	85	9036	2.05	ug/L		95
6) chlorodifluoromethane	3.938	51	8464	2.23	ug/L		99
7) chloromethane	4.341	50	9254	2.04	ug/L		95
8) vinyl chloride	4.586	62	8538	2.24	ug/L		100
9) bromomethane	5.303	94	4679	1.90	ug/L		97
10) chloroethane	5.496	64	4449	2.30	ug/L		92
11) trichlorofluoromethane	5.946	101	10427	1.88	ug/L		100
12) ethyl ether	6.422	74	2312	2.08	ug/L		93
13) 2-chloropropane	6.616	63	2358	2.46	ug/L	#	50
15) freon 113	6.783	151	3769	2.19	ug/L	#	83
16) 1,1-dichloroethene	6.851	61	8435	2.14	ug/L		99
17) acetone	6.956	58	1950	8.71	ug/L	#	84
18) iodomethane	7.144	142	4281	1.70	ug/L		92
19) carbon disulfide	7.259	76	18767	2.04	ug/L		96
20) acetonitrile	7.426	41	7175	19.95	ug/L		95
22) methyl acetate	7.416	74	587	1.52	ug/L	#	82
23) methylene chloride	7.615	84	6236	1.84	ug/L		94
24) acrylonitrile	7.991	53	1373	1.90	ug/L	#	76
25) methyl tert butyl ether	7.913	73	11300	1.95	ug/L		96
26) trans-1,2-dichloroethene	7.986	61	7954	2.02	ug/L		95
27) hexane	8.263	57	9112	1.92	ug/L		94
28) 1,1-dichloroethane	8.572	63	9499	2.00	ug/L		99
30) di-isopropyl ether	8.514	45	15375	1.87	ug/L		98
31) chloroprene	8.666	53	8083	1.94	ug/L		96
32) ethyl tert-butyl ether	8.990	59	13960	1.89	ug/L		96
33) 2-butanone	9.304	72	1921	8.59	ug/L	#	50
34) 2,2-dichloropropane	9.304	77	8050	1.91	ug/L		92
35) ethyl acetate	9.314	45	583	1.54	ug/L	#	1
36) cis-1,2-dichloroethene	9.325	96	5857	2.07	ug/L		94
38) propionitrile	9.424	54	7149	20.68	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151361.D
Acq On : 22 Aug 2017 8:21 pm
Operator :
Sample : IC6691-2
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:33:01 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:56:13 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) methacrylonitrile	9.597	67	1512	1.75	ug/L	#	68
40) bromochloromethane	9.639	128	2250	2.03	ug/L		93
41) tetrahydrofuran	9.675	71	602	1.97	ug/L	#	76
42) chloroform	9.691	83	9415	1.89	ug/L		98
43) tert-Butyl Formate	9.702	59	960	1.57	ug/L		78
46) 1,1,1-trichloroethane	9.932	97	8453	2.11	ug/L		95
47) cyclohexane	9.979	84	5920	1.76	ug/L		91
49) 1,1-dichloropropene	10.109	75	7479	2.00	ug/L		99
50) iso-butyl alcohol	10.381	74	1388	17.93	ug/L	#	62
51) carbon tetrachloride	10.125	117	7422	2.01	ug/L		95
53) 1,2-dichloroethane	10.418	62	6097	2.11	ug/L		95
54) benzene	10.376	78	20056	1.84	ug/L		97
55) 2,2,4-trimethylpentane	10.340	57	22208	1.92	ug/L		95
56) tert-amyl methyl ether	10.392	73	12903	1.83	ug/L		94
57) heptane	10.512	57	4241	1.90	ug/L		99
58) n-butyl alcohol	10.899	56	5778	97.54	ug/L		96
59) trichloroethene	11.088	95	5062	1.84	ug/L		91
60) methylcyclohexane	11.281	83	10202	1.88	ug/L		90
61) 1,2-dichloropropane	11.360	63	5084	2.03	ug/L		90
62) methyl methacrylate	11.360	100	839	1.94	ug/L	#	71
63) dibromomethane	11.527	93	2840	2.06	ug/L		99
64) bromodichloromethane	11.647	83	6570	2.03	ug/L		84
65) 2-nitropropane	11.877	41	1868	2.32	ug/L	#	61
66) 2-chloroethyl vinyl ether	11.877	63	10090	9.40	ug/L		97
67) epichlorohydrin	12.019	57	2419	10.59	ug/L		91
68) cis-1,3-dichloropropene	12.097	75	7516	1.95	ug/L		93
69) 4-methyl-2-pentanone	12.186	58	5911	7.85	ug/L		97
70) 3-methyl-1-butanol	12.212	70	1870	36.92	ug/L		88
71) toluene	12.442	92	12609	1.95	ug/L		95
72) trans-1,3-dichloropropene	12.657	75	6325	1.95	ug/L		97
73) ethyl methacrylate	12.625	69	4802	2.03	ug/L		88
74) 1,1,2-trichloroethane	12.871	83	3267	2.03	ug/L		96
75) 1,3-dichloropropane	13.049	76	6212	2.00	ug/L		98
76) 2-hexanone	13.023	58	6218	7.68	ug/L		97
79) tetrachloroethene	13.012	166	5229	1.75	ug/L		98
80) butyl acetate	13.085	56	2751	2.16	ug/L		89
81) 3,3-Dimethyl-1-Butanol	13.195	69	2541	16.44	ug/L		89
82) n-butyl ether	13.781	57	20727	1.80	ug/L		96
83) dibromochloromethane	13.310	129	4471	1.95	ug/L		86
84) 1,2-dibromoethane	13.457	107	3723	1.84	ug/L		90
85) chlorobenzene	13.896	112	12094	1.84	ug/L		91
86) 1,1,1,2-tetrachloroethane	13.959	131	4006	1.96	ug/L		87
87) ethylbenzene	13.943	91	23199	1.84	ug/L		95
88) m,p-xylene	14.048	106	17062	3.55	ug/L		94
89) o-xylene	14.461	106	8214	1.79	ug/L		90
90) styrene	14.482	104	13717	1.95	ug/L		95
92) bromoform	14.759	173	2862	1.88	ug/L		97
95) isopropylbenzene	14.796	105	21680	1.99	ug/L		95
97) 1,1,2,2-tetrachloroethane	15.131	83	4650	1.71	ug/L		94
98) trans-1,4-dichloro-2-b...	15.167	53	1368	1.94	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151361.D
Acq On : 22 Aug 2017 8:21 pm
Operator :
Sample : IC6691-2
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:33:01 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:56:13 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) 1,2,3-trichloropropane	15.204	110	1169	2.05	ug/L		81
100) bromobenzene	15.209	156	4994	1.81	ug/L		96
101) n-propylbenzene	15.204	91	27421	1.81	ug/L		97
102) 2-chlorotoluene	15.361	126	5145	1.93	ug/L		98
103) 4-chlorotoluene	15.460	91	15495	1.95	ug/L		98
104) 1,3,5-trimethylbenzene	15.350	105	17310	2.03	ug/L		98
105) tert-butylbenzene	15.695	134	3302	1.97	ug/L	#	79
107) 1,2,4-trimethylbenzene	15.748	105	17227	1.87	ug/L		100
108) sec-butylbenzene	15.915	105	23716	1.99	ug/L		96
109) p-isopropyltoluene	16.035	119	19194	2.03	ug/l		95
110) benzyl chloride	16.333	91	9652	1.99	ug/L		99
111) 1,3-dichlorobenzene	16.124	146	10006	1.97	ug/L		97
112) 1,4-dichlorobenzene	16.208	146	10265	1.97	ug/L		90
113) 1,2-dichlorobenzene	16.616	146	9253	1.96	ug/L		98
114) n-butylbenzene	16.459	92	10307	1.92	ug/L		94
115) hexachloroethane	16.872	201	2999	2.13	ug/L		91
116) 1,2-dibromo-3-chloropr...	17.427	157	1123	2.10	ug/L		84
117) 1,3,5-Trichlorobenzene	17.594	180	8266	1.90	ug/L		96
118) 1,2,4-trichlorobenzene	18.258	180	6784	1.87	ug/L		92
119) hexachlorobutadiene	18.358	225	4288	1.94	ug/L		92
120) naphthalene	18.551	128	15396	1.85	ug/L		99
121) 1,2,3-trichlorobenzene	18.813	180	6614	1.98	ug/L		94

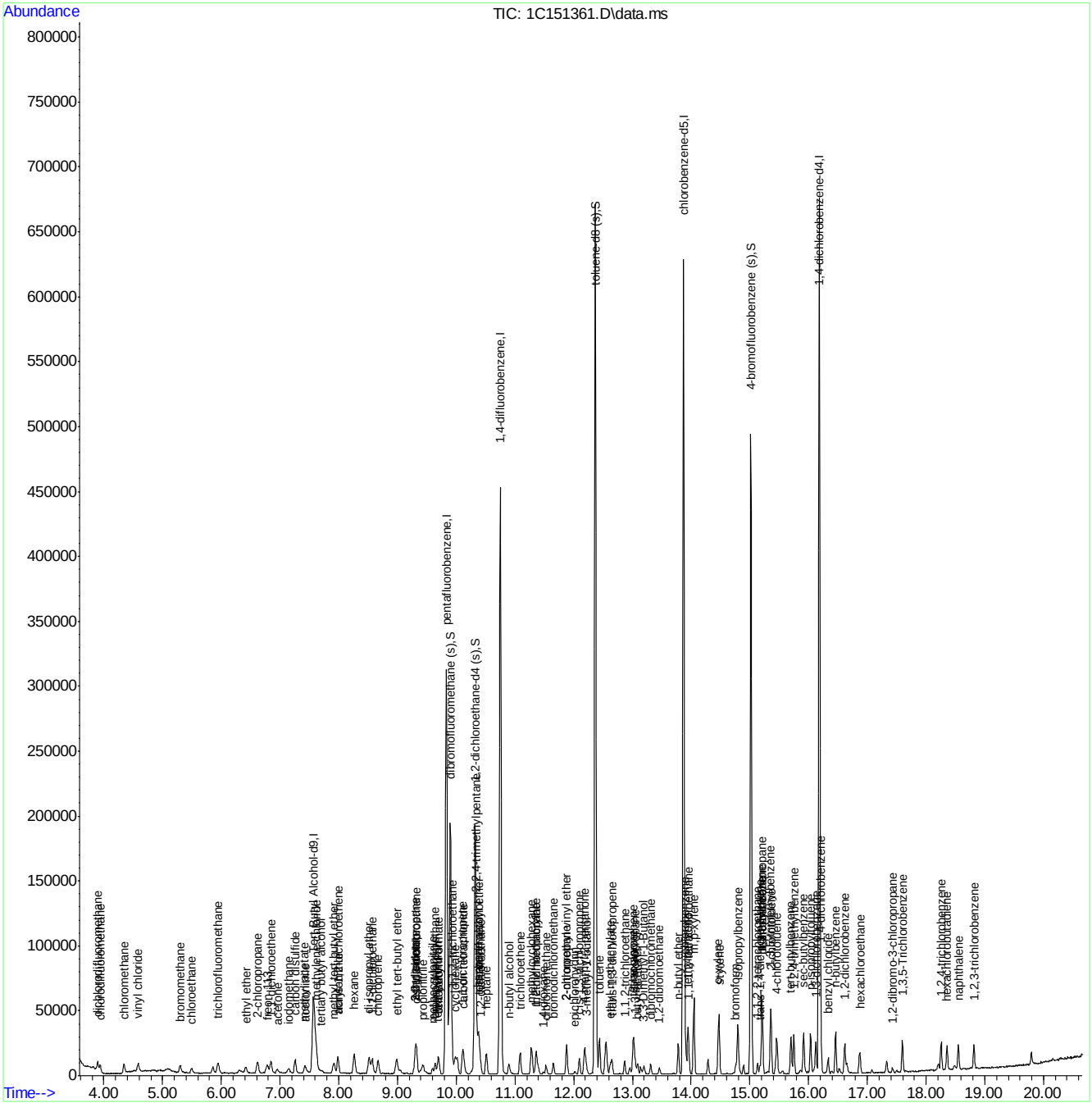
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151361.D
Acq On : 22 Aug 2017 8:21 pm
Operator :
Sample : IC6691-2
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:33:01 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:56:13 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151362.D
Acq On : 22 Aug 2017 8:50 pm
Operator :
Sample : IC6691-4
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 10:02:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:59:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.567	65	114115	500.00	ug/L		0.00
4) pentafluorobenzene	9.832	168	261411	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.753	114	415345	50.00	ug/L		0.00
78) chlorobenzene-d5	13.870	117	343774	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	173134	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.900	113	133438	49.70	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.40%				
45) 1,2-dichloroethane-d4 (s)	10.324	65	138476	50.50	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 101.00%				
77) toluene-d8 (s)	12.369	98	475537	50.20	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.40%				
94) 4-bromofluorobenzene (s)	15.015	95	164992	50.47	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.94%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.698	59	5785	20.32	ug/L		85
3) 1,4-dioxane	11.485	88	2755	110.00	ug/L		97
5) dichlorodifluoromethane	3.901	85	18936	4.21	ug/L		98
6) chlorodifluoromethane	3.943	51	16032	4.05	ug/L		97
7) chloromethane	4.340	50	18276	3.96	ug/L		99
8) vinyl chloride	4.586	62	17552	4.40	ug/L		100
9) bromomethane	5.303	94	8692	3.52	ug/L		97
10) chloroethane	5.491	64	8719	4.28	ug/L		95
11) trichlorofluoromethane	5.941	101	20436	3.68	ug/L		98
12) ethyl ether	6.417	74	4824	4.23	ug/L		81
13) 2-chloropropane	6.616	63	4639	4.51	ug/L		95
14) acrolein	6.710	56	1491	4.04	ug/L		72
15) freon 113	6.778	151	7469	4.17	ug/L		92
16) 1,1-dichloroethene	6.846	61	16422	4.04	ug/L		97
17) acetone	6.950	58	3330	14.33	ug/L	#	85
18) iodomethane	7.149	142	7928	3.23	ug/L		91
19) carbon disulfide	7.259	76	36678	3.91	ug/L		98
20) acetonitrile	7.426	41	14779	40.52	ug/L		95
22) methyl acetate	7.416	74	1346	3.90	ug/L	#	62
23) methylene chloride	7.620	84	11258	3.35	ug/L		97
24) acrylonitrile	7.986	53	3149	4.36	ug/L		99
25) methyl tert butyl ether	7.918	73	22826	3.90	ug/L		98
26) trans-1,2-dichloroethene	7.986	61	15302	3.82	ug/L		95
27) hexane	8.263	57	16712	3.50	ug/L		93
28) 1,1-dichloroethane	8.572	63	19169	3.97	ug/L		99
29) vinyl acetate	8.556	86	1185	3.76	ug/L	#	45
30) di-isopropyl ether	8.514	45	31635	3.85	ug/L		99
31) chloroprene	8.671	53	16281	3.87	ug/L		96
32) ethyl tert-butyl ether	8.990	59	28429	3.83	ug/L		98
33) 2-butanone	9.299	72	3849	16.65	ug/L	#	81
34) 2,2-dichloropropane	9.304	77	15885	3.74	ug/L		95
35) ethyl acetate	9.309	45	1408	4.14	ug/L	#	1

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151362.D
Acq On : 22 Aug 2017 8:50 pm
Operator :
Sample : IC6691-4
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 10:02:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:59:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	9.320	96	11457	3.96	ug/L		99
37) Methyl Acrylate	9.388	85	1011	2.91	ug/L	#	63
38) propionitrile	9.424	54	15133	42.77	ug/L		95
39) methacrylonitrile	9.597	67	3432	4.09	ug/L		94
40) bromochloromethane	9.639	128	4709	4.16	ug/L		89
41) tetrahydrofuran	9.675	71	1228	3.99	ug/L		73
42) chloroform	9.696	83	18123	3.62	ug/L		99
43) tert-Butyl Formate	9.712	59	2148	3.88	ug/L	#	77
46) 1,1,1-trichloroethane	9.926	97	16144	3.93	ug/L		97
47) cyclohexane	9.979	84	12847	3.86	ug/L		94
49) 1,1-dichloropropene	10.109	75	14505	3.81	ug/L		95
50) iso-butyl alcohol	10.387	74	2901	38.78	ug/L	#	79
51) carbon tetrachloride	10.125	117	14678	3.89	ug/L		97
52) isopropyl acetate	10.303	61	5702	6.22	ug/L	#	47
53) 1,2-dichloroethane	10.418	62	12344	4.14	ug/L		96
54) benzene	10.376	78	40212	3.68	ug/L		98
55) 2,2,4-trimethylpentane	10.339	57	43185	3.70	ug/L		98
56) tert-amyl methyl ether	10.392	73	25519	3.62	ug/L		95
57) heptane	10.517	57	8981	3.99	ug/L		98
58) n-butyl alcohol	10.899	56	11821	197.06	ug/L		96
59) trichloroethene	11.087	95	10340	3.75	ug/L		96
60) methylcyclohexane	11.281	83	19400	3.56	ug/L		92
61) 1,2-dichloropropane	11.365	63	9996	3.90	ug/L		94
62) methyl methacrylate	11.359	100	1839	4.21	ug/L	#	84
63) dibromomethane	11.527	93	5694	4.03	ug/L		97
64) bromodichloromethane	11.652	83	12686	3.83	ug/L		99
65) 2-nitropropane	11.882	41	3378	3.96	ug/L	#	84
66) 2-chloroethyl vinyl ether	11.877	63	20835	19.28	ug/L		97
67) epichlorohydrin	12.013	57	4680	19.73	ug/L		99
68) cis-1,3-dichloropropene	12.097	75	14960	3.83	ug/L		98
69) 4-methyl-2-pentanone	12.186	58	12588	16.47	ug/L		93
70) 3-methyl-1-butanol	12.207	70	4064	80.30	ug/L		91
71) toluene	12.442	92	24483	3.73	ug/L		99
72) trans-1,3-dichloropropene	12.651	75	12566	3.82	ug/L		94
73) ethyl methacrylate	12.620	69	9485	3.92	ug/L		93
74) 1,1,2-trichloroethane	12.871	83	6424	3.91	ug/L		97
75) 1,3-dichloropropane	13.049	76	12550	3.96	ug/L		96
76) 2-hexanone	13.028	58	12200	14.91	ug/L		95
79) tetrachloroethene	13.012	166	10628	3.64	ug/L		96
80) butyl acetate	13.085	56	5196	3.99	ug/L	#	79
81) 3,3-Dimethyl-1-Butanol	13.190	69	5297	35.43	ug/L		99
82) n-butyl ether	13.781	57	42229	3.74	ug/L		98
83) dibromochloromethane	13.310	129	8978	3.92	ug/L		96
84) 1,2-dibromoethane	13.462	107	7831	3.92	ug/L		92
85) chlorobenzene	13.901	112	24297	3.75	ug/L		92
86) 1,1,1,2-tetrachloroethane	13.959	131	8513	4.17	ug/L		97
87) ethylbenzene	13.943	91	44783	3.59	ug/L		96
88) m,p-xylene	14.048	106	33123	7.03	ug/L		99
89) o-xylene	14.466	106	16144	3.58	ug/L		98
90) styrene	14.477	104	27383	3.90	ug/L		100

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151362.D
Acq On : 22 Aug 2017 8:50 pm
Operator :
Sample : IC6691-4
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 10:02:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:59:41 2017
Response via : Initial Calibration

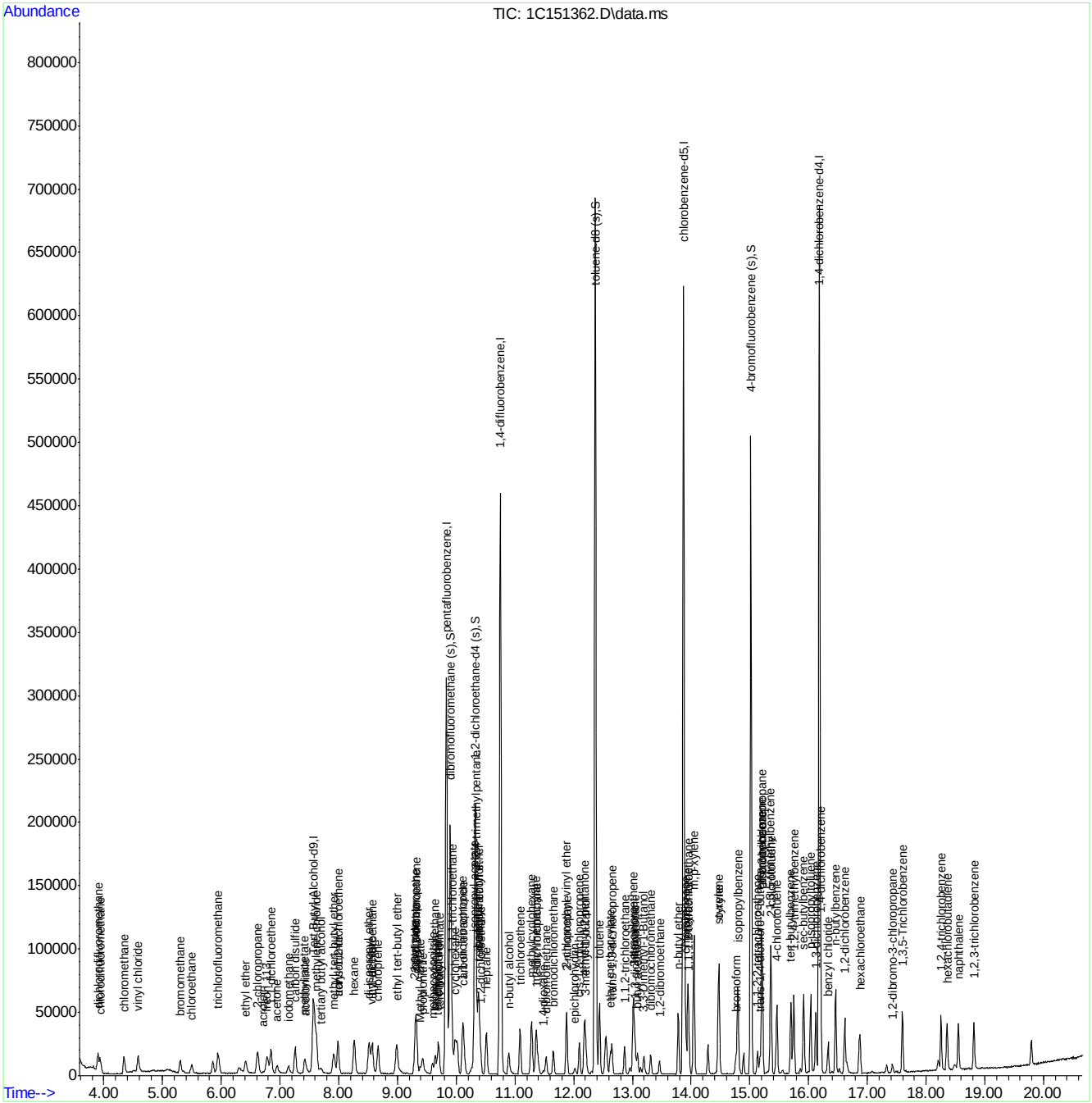
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) bromoform	14.764	173	5738	3.81	ug/L		98
95) isopropylbenzene	14.796	105	42152	3.90	ug/L		97
97) 1,1,2,2-tetrachloroethane	15.130	83	9696	3.69	ug/L		97
98) trans-1,4-dichloro-2-b...	15.167	53	2762	3.98	ug/L		85
99) 1,2,3-trichloropropane	15.204	110	2231	3.90	ug/L		89
100) bromobenzene	15.209	156	10047	3.74	ug/L		98
101) n-propylbenzene	15.204	91	54994	3.71	ug/L		99
102) 2-chlorotoluene	15.361	126	9959	3.79	ug/L		88
103) 4-chlorotoluene	15.460	91	30265	3.85	ug/L		100
104) 1,3,5-trimethylbenzene	15.350	105	33863	3.98	ug/L		98
105) tert-butylbenzene	15.695	134	6390	3.84	ug/L	#	91
107) 1,2,4-trimethylbenzene	15.748	105	35104	3.90	ug/L		98
108) sec-butylbenzene	15.915	105	48278	4.08	ug/L		99
109) p-isopropyltoluene	16.035	119	38194	4.04	ug/l		99
110) benzyl chloride	16.333	91	18622	3.86	ug/L		97
111) 1,3-dichlorobenzene	16.124	146	19985	3.97	ug/L		94
112) 1,4-dichlorobenzene	16.208	146	20512	3.97	ug/L		96
113) 1,2-dichlorobenzene	16.616	146	18557	3.98	ug/L		97
114) n-butylbenzene	16.459	92	21431	4.05	ug/L		97
115) hexachloroethane	16.872	201	5910	4.15	ug/L		95
116) 1,2-dibromo-3-chloropr...	17.426	157	2110	3.90	ug/L		93
117) 1,3,5-Trichlorobenzene	17.599	180	16077	3.76	ug/L		97
118) 1,2,4-trichlorobenzene	18.253	180	13696	3.86	ug/L		98
119) hexachlorobutadiene	18.363	225	8922	4.08	ug/L		97
120) naphthalene	18.551	128	30152	3.71	ug/L		97
121) 1,2,3-trichlorobenzene	18.812	180	12847	3.88	ug/L		92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151362.D
Acq On : 22 Aug 2017 8:50 pm
Operator :
Sample : IC6691-4
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 10:02:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:59:41 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151363.D
Acq On : 22 Aug 2017 9:20 pm
Operator :
Sample : IC6691-8
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 10:04:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:03:39 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.573	65	116229	500.00	ug/L		0.00
4) pentafluorobenzene	9.832	168	259389	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.753	114	408741	50.00	ug/L		0.00
78) chlorobenzene-d5	13.870	117	342134	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	171820	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.900	113	133261	50.07	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.14%				
45) 1,2-dichloroethane-d4 (s)	10.324	65	138950	50.99	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 101.98%				
77) toluene-d8 (s)	12.369	98	467511	50.11	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.22%				
94) 4-bromofluorobenzene (s)	15.015	95	165335	50.88	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.76%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.693	59	12067	41.45	ug/L		84
3) 1,4-dioxane	11.485	88	5684	217.39	ug/L		86
5) dichlorodifluoromethane	3.896	85	34418	7.65	ug/L		96
6) chlorodifluoromethane	3.938	51	32597	8.28	ug/L		99
7) chloromethane	4.340	50	34368	7.52	ug/L		97
8) vinyl chloride	4.586	62	33078	8.19	ug/L		93
9) bromomethane	5.298	94	17036	7.12	ug/L		96
10) chloroethane	5.496	64	15925	7.77	ug/L		98
11) trichlorofluoromethane	5.946	101	37652	6.95	ug/L		99
12) ethyl ether	6.417	74	9845	8.61	ug/L		91
13) 2-chloropropane	6.621	63	9572	9.15	ug/L	#	86
14) acrolein	6.715	56	3002	8.17	ug/L		89
15) freon 113	6.783	151	15259	8.52	ug/L		94
16) 1,1-dichloroethene	6.851	61	33471	8.29	ug/L		98
17) acetone	6.940	58	6618	29.32	ug/L	#	75
18) iodomethane	7.144	142	16735	7.14	ug/L		98
19) carbon disulfide	7.259	76	74141	8.01	ug/L		98
20) acetonitrile	7.416	41	30549	84.19	ug/L		99
22) methyl acetate	7.416	74	2792	8.22	ug/L	#	79
23) methylene chloride	7.615	84	21976	6.80	ug/L		98
24) acrylonitrile	7.986	53	7113	9.71	ug/L		98
25) methyl tert butyl ether	7.918	73	46010	7.95	ug/L		99
26) trans-1,2-dichloroethene	7.986	61	32057	8.13	ug/L		94
27) hexane	8.263	57	33953	7.35	ug/L		98
28) 1,1-dichloroethane	8.577	63	38802	8.11	ug/L		99
29) vinyl acetate	8.561	86	2638	8.61	ug/L	#	70
30) di-isopropyl ether	8.519	45	64552	7.96	ug/L		97
31) chloroprene	8.671	53	34207	8.24	ug/L		96
32) ethyl tert-butyl ether	8.985	59	58390	7.99	ug/L		97
33) 2-butanone	9.294	72	8114	35.09	ug/L	#	81
34) 2,2-dichloropropane	9.304	77	31141	7.47	ug/L		96
35) ethyl acetate	9.304	45	2675	7.83	ug/L	#	6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151363.D
Acq On : 22 Aug 2017 9:20 pm
Operator :
Sample : IC6691-8
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 10:04:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:03:39 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	9.325	96	23138	8.07	ug/L		98
37) Methyl Acrylate	9.382	85	2085	7.00	ug/L	#	84
38) propionitrile	9.424	54	30661	86.14	ug/L		97
39) methacrylonitrile	9.586	67	7333	8.76	ug/L		92
40) bromochloromethane	9.639	128	9261	8.19	ug/L		93
41) tetrahydrofuran	9.675	71	2512	8.23	ug/L		98
42) chloroform	9.696	83	36929	7.56	ug/L		99
43) tert-Butyl Formate	9.707	59	4445	8.18	ug/L		84
46) 1,1,1-trichloroethane	9.932	97	33345	8.21	ug/L		99
47) cyclohexane	9.984	84	25896	7.88	ug/L		95
49) 1,1-dichloropropene	10.109	75	29139	7.84	ug/L		99
50) iso-butyl alcohol	10.381	74	6076	83.39	ug/L	#	79
51) carbon tetrachloride	10.125	117	29499	7.99	ug/L		97
52) isopropyl acetate	10.298	61	9050	7.85	ug/L	#	91
53) 1,2-dichloroethane	10.413	62	24482	8.29	ug/L		100
54) benzene	10.376	78	81606	7.69	ug/L		97
55) 2,2,4-trimethylpentane	10.334	57	88618	7.81	ug/L		97
56) tert-amyl methyl ether	10.387	73	52611	7.71	ug/L		93
57) heptane	10.517	57	18646	8.42	ug/L		98
58) n-butyl alcohol	10.894	56	25971	441.24	ug/L		98
59) trichloroethene	11.087	95	21210	7.90	ug/L		98
60) methylcyclohexane	11.281	83	39450	7.52	ug/L		97
61) 1,2-dichloropropane	11.365	63	20510	8.17	ug/L		98
62) methyl methacrylate	11.354	100	3873	8.90	ug/L	#	80
63) dibromomethane	11.532	93	11472	8.24	ug/L		99
64) bromodichloromethane	11.652	83	27052	8.36	ug/L		99
65) 2-nitropropane	11.882	41	6895	8.23	ug/L		94
66) 2-chloroethyl vinyl ether	11.877	63	42743	40.43	ug/L		97
67) epichlorohydrin	12.018	57	9951	42.77	ug/L		94
68) cis-1,3-dichloropropene	12.097	75	31314	8.20	ug/L		99
69) 4-methyl-2-pentanone	12.186	58	26385	34.91	ug/L		91
70) 3-methyl-1-butanol	12.207	70	9207	184.72	ug/L		96
71) toluene	12.442	92	47860	7.52	ug/L		91
72) trans-1,3-dichloropropene	12.651	75	26451	8.24	ug/L		98
73) ethyl methacrylate	12.625	69	19809	8.34	ug/L		99
74) 1,1,2-trichloroethane	12.866	83	13229	8.22	ug/L		97
75) 1,3-dichloropropane	13.049	76	25243	8.11	ug/L		96
76) 2-hexanone	13.023	58	26799	33.67	ug/L		99
79) tetrachloroethene	13.012	166	21370	7.46	ug/L		97
80) butyl acetate	13.080	56	10917	8.43	ug/L		89
81) 3,3-Dimethyl-1-Butanol	13.195	69	11177	76.58	ug/L		96
82) n-butyl ether	13.781	57	85598	7.70	ug/L		99
83) dibromochloromethane	13.310	129	18360	8.08	ug/L		93
84) 1,2-dibromoethane	13.457	107	16459	8.31	ug/L		93
85) chlorobenzene	13.901	112	49017	7.68	ug/L		99
86) 1,1,1,2-tetrachloroethane	13.959	131	17172	8.39	ug/L		95
87) ethylbenzene	13.943	91	90956	7.46	ug/L		99
88) m,p-xylene	14.048	106	67372	14.66	ug/L		98
89) o-xylene	14.466	106	32502	7.36	ug/L		99
90) styrene	14.477	104	54499	7.84	ug/L		98

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151363.D
Acq On : 22 Aug 2017 9:20 pm
Operator :
Sample : IC6691-8
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 10:04:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:03:39 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.764	173	12011	8.08	ug/L	95
95) isopropylbenzene	14.796	105	87467	8.20	ug/L	99
97) 1,1,2,2-tetrachloroethane	15.130	83	19535	7.59	ug/L	96
98) trans-1,4-dichloro-2-b...	15.167	53	6083	8.85	ug/L	98
99) 1,2,3-trichloropropane	15.204	110	4695	8.33	ug/L	97
100) bromobenzene	15.209	156	20978	7.95	ug/L	99
101) n-propylbenzene	15.204	91	110855	7.63	ug/L	100
102) 2-chlorotoluene	15.361	126	20050	7.75	ug/L	96
103) 4-chlorotoluene	15.460	91	61990	8.00	ug/L	97
104) 1,3,5-trimethylbenzene	15.350	105	68828	8.16	ug/L	98
105) tert-butylbenzene	15.701	134	13071	7.96	ug/L	98
107) 1,2,4-trimethylbenzene	15.748	105	69300	7.80	ug/L	97
108) sec-butylbenzene	15.915	105	97371	8.26	ug/L	99
109) p-isopropyltoluene	16.035	119	76974	8.19	ug/l	99
110) benzyl chloride	16.333	91	38325	8.06	ug/L	100
111) 1,3-dichlorobenzene	16.124	146	39346	7.90	ug/L	98
112) 1,4-dichlorobenzene	16.208	146	39954	7.80	ug/L	98
113) 1,2-dichlorobenzene	16.616	146	37052	8.01	ug/L	99
114) n-butylbenzene	16.459	92	43490	8.27	ug/L	96
115) hexachloroethane	16.872	201	12526	8.79	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.432	157	4326	8.11	ug/L	88
117) 1,3,5-Trichlorobenzene	17.599	180	33089	7.90	ug/L	99
118) 1,2,4-trichlorobenzene	18.258	180	27320	7.81	ug/L	98
119) hexachlorobutadiene	18.358	225	17972	8.25	ug/L	95
120) naphthalene	18.551	128	62705	7.90	ug/L	99
121) 1,2,3-trichlorobenzene	18.813	180	25797	7.90	ug/L	99

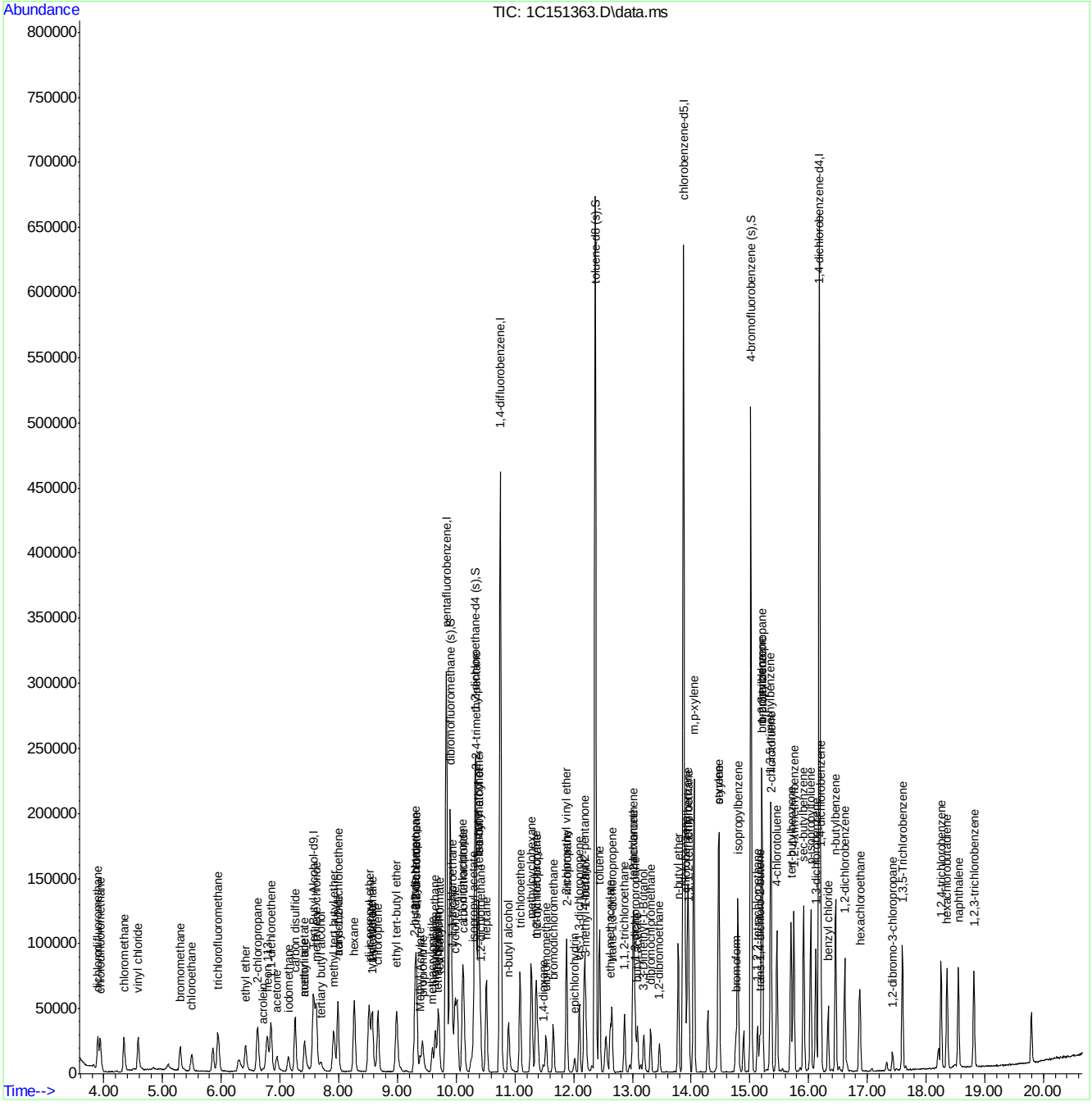
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151363.D
Acq On : 22 Aug 2017 9:20 pm
Operator :
Sample : IC6691-8
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 10:04:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:03:39 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151364.D
Acq On : 22 Aug 2017 9:50 pm
Operator :
Sample : IC6691-20
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 10:04:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:04:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.568	65	120745	500.00	ug/L	0.00
4) pentafluorobenzene	9.832	168	252478	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.753	114	410174	50.00	ug/L	0.00
78) chlorobenzene-d5	13.870	117	339448	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	171968	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.900	113	131480	50.74	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.48%			
45) 1,2-dichloroethane-d4 (s)	10.324	65	137263	51.60	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 103.20%			
77) toluene-d8 (s)	12.369	98	465875	49.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.50%			
94) 4-bromofluorobenzene (s)	15.015	95	159405	48.89	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 97.78%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.698	59	30442	99.94	ug/L	87
3) 1,4-dioxane	11.480	88	14884	538.59	ug/L	93
5) dichlorodifluoromethane	3.896	85	87612	20.13	ug/L	99
6) chlorodifluoromethane	3.938	51	78381	20.33	ug/L	99
7) chloromethane	4.340	50	83783	19.01	ug/L	98
8) vinyl chloride	4.586	62	83018	21.04	ug/L	100
9) bromomethane	5.303	94	41774	18.26	ug/L	98
10) chloroethane	5.496	64	40596	20.45	ug/L	98
11) trichlorofluoromethane	5.946	101	93633	18.16	ug/L	98
12) ethyl ether	6.412	74	24454	21.69	ug/L	97
13) 2-chloropropane	6.616	63	23059	22.12	ug/L	93
14) acrolein	6.720	56	8449	23.51	ug/L	87
15) freon 113	6.788	151	37371	21.20	ug/L	95
16) 1,1-dichloroethene	6.846	61	82005	20.76	ug/L	96
17) acetone	6.940	58	16185	74.71	ug/L	96
18) iodomethane	7.149	142	47783	21.33	ug/L	96
19) carbon disulfide	7.259	76	180428	20.02	ug/L	99
20) acetonitrile	7.416	41	72045	202.22	ug/L	98
22) methyl acetate	7.411	74	7316	21.97	ug/L #	83
23) methylene chloride	7.615	84	50768	16.56	ug/L	94
24) acrylonitrile	7.976	53	17908	24.09	ug/L	97
25) methyl tert butyl ether	7.913	73	118389	21.04	ug/L	99
26) trans-1,2-dichloroethene	7.986	61	78942	20.51	ug/L	99
27) hexane	8.263	57	83603	18.84	ug/L	98
28) 1,1-dichloroethane	8.577	63	95153	20.39	ug/L	99
29) vinyl acetate	8.556	86	7245	23.84	ug/L #	74
30) di-isopropyl ether	8.514	45	167069	21.18	ug/L	100
31) chloroprene	8.671	53	86502	21.31	ug/L	96
32) ethyl tert-butyl ether	8.985	59	148022	20.81	ug/L	97
33) 2-butanone	9.294	72	22218	97.15	ug/L	97
34) 2,2-dichloropropane	9.304	77	78026	19.42	ug/L	99
35) ethyl acetate	9.304	45	7366	22.28	ug/L #	31

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151364.D
Acq On : 22 Aug 2017 9:50 pm
Operator :
Sample : IC6691-20
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 10:04:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:04:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	9.320	96	56748	20.31	ug/L		96
37) Methyl Acrylate	9.382	85	6305	22.70	ug/L		91
38) propionitrile	9.419	54	78032	222.38	ug/L		98
39) methacrylonitrile	9.592	67	19031	22.92	ug/L		90
40) bromochloromethane	9.644	128	23788	21.52	ug/L		99
41) tetrahydrofuran	9.675	71	6238	20.84	ug/L		91
42) chloroform	9.696	83	92705	19.65	ug/L		98
43) tert-Butyl Formate	9.712	59	11575	21.76	ug/L		88
46) 1,1,1-trichloroethane	9.926	97	82139	20.70	ug/L		99
47) cyclohexane	9.984	84	66915	20.97	ug/L		95
49) 1,1-dichloropropene	10.109	75	74461	20.03	ug/L		97
50) iso-butyl alcohol	10.381	74	15445	209.01	ug/L	#	90
51) carbon tetrachloride	10.125	117	71380	19.26	ug/L		97
52) isopropyl acetate	10.298	61	18857	16.41	ug/L		97
53) 1,2-dichloroethane	10.413	62	61581	20.65	ug/L		98
54) benzene	10.376	78	206661	19.51	ug/L		99
55) 2,2,4-trimethylpentane	10.334	57	220171	19.40	ug/L		99
56) tert-amyl methyl ether	10.387	73	134002	19.67	ug/L		99
57) heptane	10.512	57	45174	20.18	ug/L		98
58) n-butyl alcohol	10.889	56	72494	1206.61	ug/L		98
59) trichloroethene	11.088	95	54187	20.15	ug/L		99
60) methylcyclohexane	11.281	83	97056	18.63	ug/L		96
61) 1,2-dichloropropane	11.365	63	52563	20.80	ug/L		98
62) methyl methacrylate	11.354	100	10327	23.13	ug/L	#	89
63) dibromomethane	11.532	93	28772	20.48	ug/L		96
64) bromodichloromethane	11.652	83	67906	20.78	ug/L		98
65) 2-nitropropane	11.883	41	17787	21.06	ug/L		95
66) 2-chloroethyl vinyl ether	11.877	63	112175	105.57	ug/L		98
67) epichlorohydrin	12.013	57	25332	107.01	ug/L		96
68) cis-1,3-dichloropropene	12.097	75	78860	20.50	ug/L		97
69) 4-methyl-2-pentanone	12.181	58	67871	88.33	ug/L		99
70) 3-methyl-1-butanol	12.207	70	25673	500.39	ug/L		94
71) toluene	12.442	92	119732	18.93	ug/L		99
72) trans-1,3-dichloropropene	12.651	75	66859	20.67	ug/L		98
73) ethyl methacrylate	12.620	69	50150	20.92	ug/L		98
74) 1,1,2-trichloroethane	12.866	83	33827	20.85	ug/L		97
75) 1,3-dichloropropane	13.049	76	63189	20.19	ug/L		99
76) 2-hexanone	13.023	58	69256	86.06	ug/L		98
79) tetrachloroethene	13.012	166	53396	18.97	ug/L		98
80) butyl acetate	13.080	56	27277	21.05	ug/L		98
81) 3,3-Dimethyl-1-Butanol	13.190	69	30509	211.99	ug/L		99
82) n-butyl ether	13.781	57	216260	19.71	ug/L		100
83) dibromochloromethane	13.310	129	47747	21.15	ug/L		97
84) 1,2-dibromoethane	13.457	107	40860	20.68	ug/L		100
85) chlorobenzene	13.901	112	122276	19.42	ug/L		99
86) 1,1,1,2-tetrachloroethane	13.959	131	44148	21.60	ug/L		95
87) ethylbenzene	13.943	91	224920	18.77	ug/L		100
88) m,p-xylene	14.048	106	167557	37.19	ug/L		97
89) o-xylene	14.461	106	80399	18.57	ug/L		97
90) styrene	14.477	104	136706	19.89	ug/L		98

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151364.D
Acq On : 22 Aug 2017 9:50 pm
Operator :
Sample : IC6691-20
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 10:04:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:04:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.759	173	31085	21.05	ug/L	98
95) isopropylbenzene	14.796	105	215516	20.09	ug/L	99
97) 1,1,2,2-tetrachloroethane	15.130	83	50248	19.65	ug/L	97
98) trans-1,4-dichloro-2-b...	15.167	53	15701	22.34	ug/L	94
99) 1,2,3-trichloropropane	15.204	110	11721	20.60	ug/L	98
100) bromobenzene	15.209	156	51325	19.45	ug/L	98
101) n-propylbenzene	15.204	91	274580	19.01	ug/L	100
102) 2-chlorotoluene	15.361	126	49713	19.30	ug/L	100
103) 4-chlorotoluene	15.460	91	153754	19.83	ug/L	99
104) 1,3,5-trimethylbenzene	15.350	105	173972	20.53	ug/L	99
105) tert-butylbenzene	15.701	134	32859	20.02	ug/L	99
107) 1,2,4-trimethylbenzene	15.748	105	175041	19.76	ug/L	98
108) sec-butylbenzene	15.915	105	244236	20.60	ug/L	99
109) p-isopropyltoluene	16.035	119	192227	20.36	ug/l	99
110) benzyl chloride	16.333	91	94017	19.74	ug/L	99
111) 1,3-dichlorobenzene	16.124	146	98096	19.71	ug/L	100
112) 1,4-dichlorobenzene	16.208	146	98840	19.37	ug/L	99
113) 1,2-dichlorobenzene	16.616	146	92883	20.05	ug/L	98
114) n-butylbenzene	16.459	92	108802	20.55	ug/L	100
115) hexachloroethane	16.872	201	32148	22.18	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.432	157	11263	21.03	ug/L	92
117) 1,3,5-Trichlorobenzene	17.599	180	82143	19.64	ug/L	98
118) 1,2,4-trichlorobenzene	18.253	180	65888	18.90	ug/L	99
119) hexachlorobutadiene	18.358	225	44156	20.15	ug/L	97
120) naphthalene	18.551	128	159842	20.16	ug/L	100
121) 1,2,3-trichlorobenzene	18.813	180	64043	19.63	ug/L	99

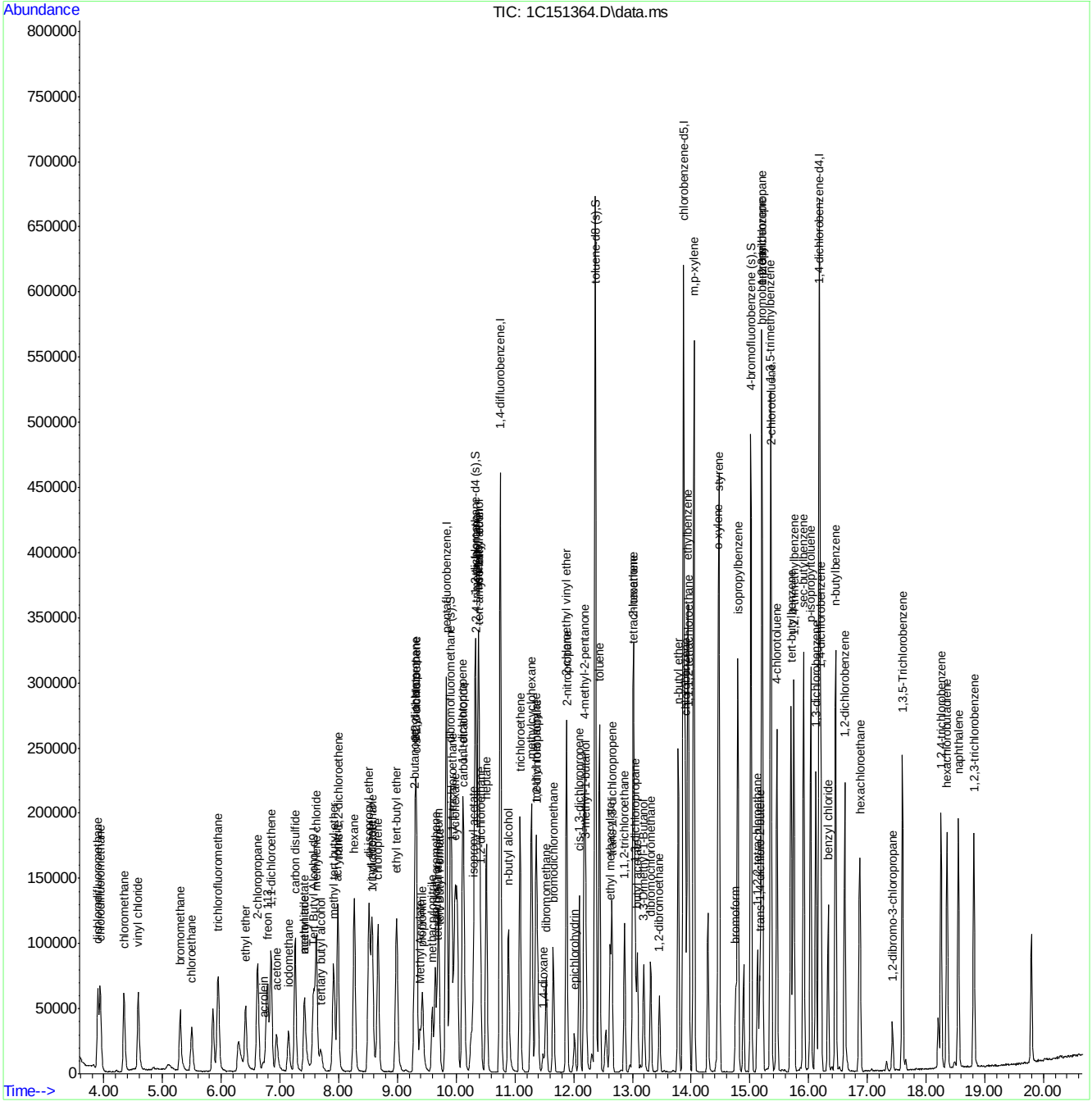
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151364.D
Acq On : 22 Aug 2017 9:50 pm
Operator :
Sample : IC6691-20
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 10:04:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:04:23 2017
Response via : Initial Calibration



M1CS6691.M Fri Aug 25 15:35:25 2017 Page: 4

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151365.D
Acq On : 22 Aug 2017 10:20 pm
Operator :
Sample : ICC6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 09:40:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:36:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.573	65	124827	500.00	ug/L	0.00
4) pentafluorobenzene	9.832	168	265631	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.753	114	431346	50.00	ug/L	0.00
78) chlorobenzene-d5	13.870	117	356696	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	178339	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.900	113	137373	50.00	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.00%			
45) 1,2-dichloroethane-d4 (s)	10.324	65	143704	50.00	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.00%			
77) toluene-d8 (s)	12.369	98	487852	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
94) 4-bromofluorobenzene (s)	15.015	95	168174	50.00	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.00%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.693	59	81505	250.00	ug/L	100
3) 1,4-dioxane	11.475	88	37816	1250.00	ug/L	100
5) dichlorodifluoromethane	3.896	85	214884	50.00	ug/L	100
6) chlorodifluoromethane	3.938	51	192100	50.00	ug/L	100
7) chloromethane	4.340	50	205422	49.98	ug/L	100
8) vinyl chloride	4.586	62	205890	50.00	ug/L	100
9) bromomethane	5.298	94	103096	50.00	ug/L	100
10) chloroethane	5.491	64	101371	50.00	ug/L	100
11) trichlorofluoromethane	5.946	101	228332	50.00	ug/L	100
12) ethyl ether	6.412	74	63840	50.00	ug/L	100
13) 2-chloropropane	6.621	63	56029	50.00	ug/L	100
14) acrolein	6.715	56	22085	50.00	ug/L	100
15) freon 113	6.788	151	92389	50.00	ug/L	100
16) 1,1-dichloroethene	6.846	61	199770	50.00	ug/L	100
17) acetone	6.940	58	42799	200.00	ug/L	100
18) iodomethane	7.144	142	143099	50.00	ug/L	100
19) carbon disulfide	7.259	76	443689	50.00	ug/L	100
20) acetonitrile	7.416	41	183141	500.00	ug/L	100
22) methyl acetate	7.411	74	19967	50.00	ug/L	100
23) methylene chloride	7.620	84	128018	50.00	ug/L	100
24) acrylonitrile	7.975	53	45744	50.00	ug/L	100
25) methyl tert butyl ether	7.913	73	310193	50.00	ug/L	100
26) trans-1,2-dichloroethene	7.986	61	195696	50.00	ug/L	100
27) hexane	8.263	57	211894	50.00	ug/L	100
28) 1,1-dichloroethane	8.577	63	238017	50.00	ug/L	100
29) vinyl acetate	8.556	86	19799	50.00	ug/L	100
30) di-isopropyl ether	8.514	45	434137	50.00	ug/L	100
31) chloroprene	8.671	53	218164	50.00	ug/L	100
32) ethyl tert-butyl ether	8.985	59	394460	50.00	ug/L	100
33) 2-butanone	9.293	72	57661	200.00	ug/L	100
34) 2,2-dichloropropane	9.304	77	194283	50.00	ug/L	100
35) ethyl acetate	9.299	45	19537	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151365.D
Acq On : 22 Aug 2017 10:20 pm
Operator :
Sample : ICC6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 09:40:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:36:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) cis-1,2-dichloroethene	9.325	96	142326	50.00	ug/L	100
37) Methyl Acrylate	9.382	85	17640	50.00	ug/L	100
38) propionitrile	9.419	54	198307	500.00	ug/L	100
39) methacrylonitrile	9.592	67	50448	50.00	ug/L	100
40) bromochloromethane	9.644	128	59061	50.00	ug/L	100
41) tetrahydrofuran	9.675	71	15781	50.00	ug/L	100
42) chloroform	9.696	83	231178	50.00	ug/L	100
43) tert-Butyl Formate	9.707	59	31463	50.00	ug/L	100
46) 1,1,1-trichloroethane	9.926	97	206817	50.00	ug/L	100
47) cyclohexane	9.979	84	166143	50.00	ug/L	100
49) 1,1-dichloropropene	10.109	75	188945	50.00	ug/L	100
50) iso-butyl alcohol	10.376	74	40966	500.00	ug/L	95
51) carbon tetrachloride	10.125	117	181606	50.00	ug/L	100
52) isopropyl acetate	10.292	61	47579	50.00	ug/L	100
53) 1,2-dichloroethane	10.413	62	155858	50.00	ug/L	100
54) benzene	10.376	78	526133	50.00	ug/L	100
55) 2,2,4-trimethylpentane	10.334	57	566435	50.00	ug/L	100
56) tert-amyl methyl ether	10.387	73	355944	50.00	ug/L	100
57) heptane	10.512	57	115432	50.00	ug/L	100
58) n-butyl alcohol	10.889	56	199446	2500.00	ug/L	100
59) trichloroethene	11.087	95	137135	50.00	ug/L	100
60) methylcyclohexane	11.276	83	246118	50.00	ug/L	100
61) 1,2-dichloropropane	11.365	63	134708	50.00	ug/L	100
62) methyl methacrylate	11.349	100	26393	50.00	ug/L	100
63) dibromomethane	11.527	93	75137	50.00	ug/L	100
64) bromodichloromethane	11.652	83	173946	50.00	ug/L	100
65) 2-nitropropane	11.877	41	46355	50.00	ug/L	100
66) 2-chloroethyl vinyl ether	11.877	63	294590	250.00	ug/L	100
67) epichlorohydrin	12.013	57	67859	250.00	ug/L	100
68) cis-1,3-dichloropropene	12.097	75	207639	50.00	ug/L	100
69) 4-methyl-2-pentanone	12.181	58	178836	200.00	ug/L	100
70) 3-methyl-1-butanol	12.207	70	68359	1000.00	ug/L	100
71) toluene	12.442	92	302682	50.00	ug/L	100
72) trans-1,3-dichloropropene	12.651	75	176307	50.00	ug/L	100
73) ethyl methacrylate	12.620	69	132046	50.00	ug/L	100
74) 1,1,2-trichloroethane	12.866	83	87813	50.00	ug/L	100
75) 1,3-dichloropropane	13.049	76	165057	50.00	ug/L	100
76) 2-hexanone	13.023	58	177487	200.00	ug/L	100
79) tetrachloroethene	13.012	166	134570	50.00	ug/L	100
80) butyl acetate	13.080	56	70425	50.00	ug/L	100
81) 3,3-Dimethyl-1-Butanol	13.190	69	81471	500.00	ug/L	100
82) n-butyl ether	13.781	57	549698	50.00	ug/L	100
83) dibromochloromethane	13.310	129	124104	50.00	ug/L	100
84) 1,2-dibromoethane	13.457	107	107021	50.00	ug/L	100
85) chlorobenzene	13.901	112	311095	50.00	ug/L	100
86) 1,1,1,2-tetrachloroethane	13.959	131	113467	50.00	ug/L	100
87) ethylbenzene	13.943	91	566804	50.00	ug/L	100
88) m,p-xylene	14.048	106	424946	100.00	ug/L	100
89) o-xylene	14.461	106	206897	50.00	ug/L	100
90) styrene	14.477	104	345939	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151365.D
Acq On : 22 Aug 2017 10:20 pm
Operator :
Sample : ICC6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 09:40:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:36:57 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92)	bromoform	14.759	173	83866	50.00	ug/L	100
95)	isopropylbenzene	14.796	105	545586	50.00	ug/L	100
97)	1,1,2,2-tetrachloroethane	15.130	83	133666	50.00	ug/L	100
98)	trans-1,4-dichloro-2-b...	15.167	53	39993	50.00	ug/L	100
99)	1,2,3-trichloropropane	15.204	110	31478	50.00	ug/L	100
100)	bromobenzene	15.209	156	131149	50.00	ug/L	100
101)	n-propylbenzene	15.204	91	695204	50.00	ug/L	100
102)	2-chlorotoluene	15.361	126	126058	50.00	ug/L	100
103)	4-chlorotoluene	15.460	91	391327	50.00	ug/L	100
104)	1,3,5-trimethylbenzene	15.350	105	443669	50.00	ug/L	100
105)	tert-butylbenzene	15.701	134	82045	50.00	ug/L	100
107)	1,2,4-trimethylbenzene	15.748	105	445267	50.00	ug/L	100
108)	sec-butylbenzene	15.915	105	620070	50.00	ug/L	100
109)	p-isopropyltoluene	16.035	119	491050	50.00	ug/l	100
110)	benzyl chloride	16.333	91	251727	50.00	ug/L	100
111)	1,3-dichlorobenzene	16.124	146	253710	50.00	ug/L	100
112)	1,4-dichlorobenzene	16.208	146	253245	50.00	ug/L	100
113)	1,2-dichlorobenzene	16.616	146	240881	50.00	ug/L	100
114)	n-butylbenzene	16.459	92	280736	50.00	ug/L	100
115)	hexachloroethane	16.872	201	87580	50.00	ug/L	100
116)	1,2-dibromo-3-chloropr...	17.427	157	29384	50.00	ug/L	100
117)	1,3,5-Trichlorobenzene	17.599	180	220219	50.00	ug/L	100
118)	1,2,4-trichlorobenzene	18.258	180	178204	50.00	ug/L	100
119)	hexachlorobutadiene	18.358	225	113304	50.00	ug/L	100
120)	naphthalene	18.551	128	422244	50.00	ug/L	100
121)	1,2,3-trichlorobenzene	18.813	180	170441	50.00	ug/L	100

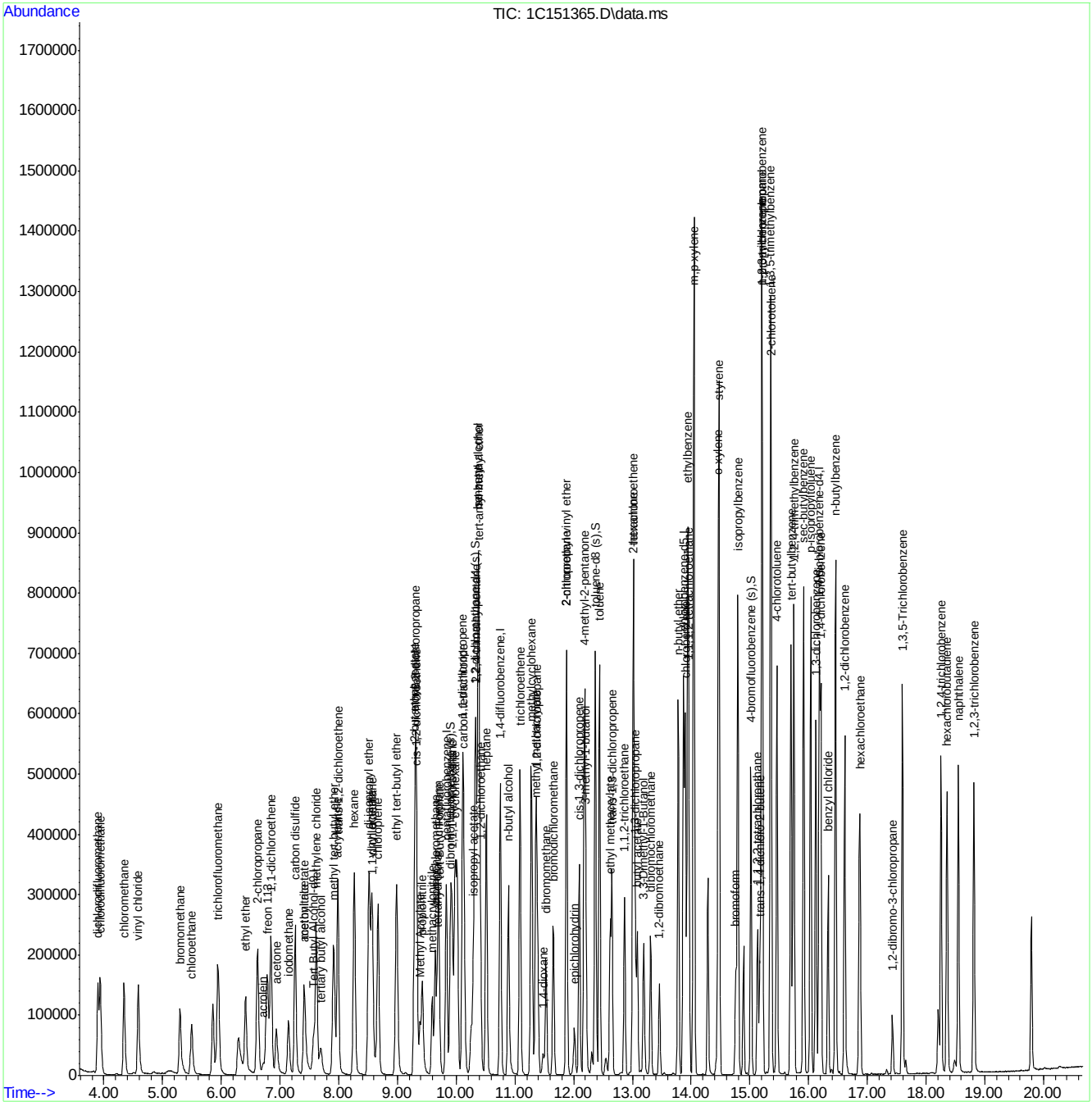
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151365.D
Acq On : 22 Aug 2017 10:20 pm
Operator :
Sample : ICC6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 09:40:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 09:36:57 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151366.D
Acq On : 22 Aug 2017 10:49 pm
Operator :
Sample : IC6691-100
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 25 10:05:52 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:05:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.573	65	134843	500.00	ug/L	0.00
4) pentafluorobenzene	9.832	168	275083	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.753	114	445611	50.00	ug/L	0.00
78) chlorobenzene-d5	13.870	117	367607	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	183791	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.900	113	140507	49.68	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.36%			
45) 1,2-dichloroethane-d4 (s)	10.324	65	146334	50.29	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.58%			
77) toluene-d8 (s)	12.369	98	506355	49.80	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.60%			
94) 4-bromofluorobenzene (s)	15.015	95	171786	49.43	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.86%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.693	59	174637	513.44	ug/L	91
3) 1,4-dioxane	11.480	88	77383	2475.55	ug/L	99
5) dichlorodifluoromethane	3.896	85	442450	93.25	ug/L	99
6) chlorodifluoromethane	3.938	51	402052	95.47	ug/L	99
7) chloromethane	4.340	50	423094	88.76	ug/L	98
8) vinyl chloride	4.586	62	431947	99.73	ug/L	100
9) bromomethane	5.292	94	223177	90.68	ug/L	100
10) chloroethane	5.491	64	210189	96.87	ug/L	99
11) trichlorofluoromethane	5.941	101	474572	85.59	ug/L	99
12) ethyl ether	6.412	74	131521	105.79	ug/L	98
13) 2-chloropropane	6.616	63	110181	95.57	ug/L	94
14) acrolein	6.710	56	45844	113.10	ug/L	98
15) freon 113	6.778	151	197898	102.15	ug/L	96
16) 1,1-dichloroethene	6.846	61	417370	96.51	ug/L	99
17) acetone	6.940	58	88567	378.81	ug/L	95
18) iodomethane	7.144	142	309864	125.76	ug/L	98
19) carbon disulfide	7.259	76	933439	95.05	ug/L	100
20) acetonitrile	7.411	41	368839	948.68	ug/L	99
22) methyl acetate	7.405	74	42641	115.26	ug/L	97
23) methylene chloride	7.614	84	259139	79.55	ug/L	96
24) acrylonitrile	7.981	53	95235	113.71	ug/L	97
25) methyl tert butyl ether	7.913	73	643820	104.35	ug/L	98
26) trans-1,2-dichloroethene	7.981	61	404151	96.07	ug/L	99
27) hexane	8.263	57	449840	93.84	ug/L	98
28) 1,1-dichloroethane	8.572	63	488016	95.76	ug/L	100
29) vinyl acetate	8.551	86	40468	117.69	ug/L #	87
30) di-isopropyl ether	8.514	45	897510	103.67	ug/L	99
31) chloroprene	8.671	53	453481	101.71	ug/L	99
32) ethyl tert-butyl ether	8.985	59	813483	104.46	ug/L	100
33) 2-butanone	9.293	72	122592	477.37	ug/L	96
34) 2,2-dichloropropane	9.304	77	404013	92.61	ug/L	99
35) ethyl acetate	9.299	45	40029	108.64	ug/L	92

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151366.D
Acq On : 22 Aug 2017 10:49 pm
Operator :
Sample : IC6691-100
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 25 10:05:52 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:05:06 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	cis-1,2-dichloroethene	9.320	96	293507	96.18	ug/L		97
37)	Methyl Acrylate	9.382	85	37000	118.29	ug/L		98
38)	propionitrile	9.419	54	406672	1046.98	ug/L		99
39)	methacrylonitrile	9.592	67	105447	113.79	ug/L		99
40)	bromochloromethane	9.644	128	119946	98.52	ug/L		99
41)	tetrahydrofuran	9.675	71	33179	100.90	ug/L		98
42)	chloroform	9.696	83	477136	93.04	ug/L		99
43)	tert-Butyl Formate	9.707	59	67092	113.75	ug/L		92
46)	1,1,1-trichloroethane	9.926	97	432418	99.57	ug/L		99
47)	cyclohexane	9.979	84	350918	100.31	ug/L		99
49)	1,1-dichloropropene	10.109	75	399740	98.94	ug/L		99
50)	iso-butyl alcohol	10.381	74	83836	1034.97	ug/L		93
51)	carbon tetrachloride	10.125	117	382603	95.48	ug/L		98
52)	isopropyl acetate	10.292	61	94522	79.26	ug/L	#	88
53)	1,2-dichloroethane	10.413	62	313475	96.32	ug/L		99
54)	benzene	10.376	78	1087385	94.79	ug/L		100
55)	2,2,4-trimethylpentane	10.334	57	1208036	98.34	ug/L		100
56)	tert-amyl methyl ether	10.387	73	728630	98.64	ug/L		99
57)	heptane	10.512	57	245219	100.70	ug/L		97
58)	n-butyl alcohol	10.889	56	440905	6561.29	ug/L		99
59)	trichloroethene	11.087	95	289164	98.89	ug/L		99
60)	methylcyclohexane	11.281	83	532158	94.94	ug/L		97
61)	1,2-dichloropropane	11.365	63	279256	101.20	ug/L		99
62)	methyl methacrylate	11.349	100	56432	113.38	ug/L		96
63)	dibromomethane	11.527	93	154969	101.20	ug/L		98
64)	bromodichloromethane	11.652	83	356669	99.97	ug/L		98
65)	2-nitropropane	11.882	41	93457	101.08	ug/L		95
66)	2-chloroethyl vinyl ether	11.877	63	609425	524.28	ug/L		99
67)	epichlorohydrin	12.018	57	141264	542.94	ug/L		99
68)	cis-1,3-dichloropropene	12.097	75	430246	102.64	ug/L		99
69)	4-methyl-2-pentanone	12.181	58	371978	439.88	ug/L		97
70)	3-methyl-1-butanol	12.207	70	149003	2580.70	ug/L		98
71)	toluene	12.442	92	631964	92.67	ug/L		97
72)	trans-1,3-dichloropropene	12.651	75	360959	102.28	ug/L		99
73)	ethyl methacrylate	12.620	69	271300	103.56	ug/L		98
74)	1,1,2-trichloroethane	12.866	83	183722	103.70	ug/L		99
75)	1,3-dichloropropane	13.049	76	334983	98.42	ug/L		100
76)	2-hexanone	13.023	58	370042	419.29	ug/L		99
79)	tetrachloroethene	13.012	166	288309	95.18	ug/L		99
80)	butyl acetate	13.080	56	141648	100.19	ug/L		97
81)	3,3-Dimethyl-1-Butanol	13.190	69	180078	1146.80	ug/L		97
82)	n-butyl ether	13.781	57	1131185	95.37	ug/L		99
83)	dibromochloromethane	13.310	129	260443	105.76	ug/L		100
84)	1,2-dibromoethane	13.457	107	223654	104.10	ug/L		98
85)	chlorobenzene	13.901	112	649664	95.63	ug/L		99
86)	1,1,1,2-tetrachloroethane	13.959	131	239342	107.04	ug/L		99
87)	ethylbenzene	13.943	91	1183265	91.90	ug/L		99
88)	m,p-xylene	14.048	106	878859	181.74	ug/L		99
89)	o-xylene	14.466	106	428502	92.23	ug/L		99
90)	styrene	14.477	104	719376	96.73	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151366.D
Acq On : 22 Aug 2017 10:49 pm
Operator :
Sample : IC6691-100
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 25 10:05:52 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:05:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.764	173	177391	110.19	ug/L	98
95) isopropylbenzene	14.796	105	1148355	100.12	ug/L	99
97) 1,1,2,2-tetrachloroethane	15.130	83	279638	102.57	ug/L	99
98) trans-1,4-dichloro-2-b...	15.167	53	80011	104.48	ug/L	97
99) 1,2,3-trichloropropane	15.204	110	64923	106.23	ug/L	98
100) bromobenzene	15.209	156	273621	97.34	ug/L	100
101) n-propylbenzene	15.204	91	1451923	94.65	ug/L	99
102) 2-chlorotoluene	15.360	126	263942	96.28	ug/L	99
103) 4-chlorotoluene	15.460	91	804928	97.26	ug/L	100
104) 1,3,5-trimethylbenzene	15.350	105	939484	103.34	ug/L	100
105) tert-butylbenzene	15.700	134	173910	99.11	ug/L	100
107) 1,2,4-trimethylbenzene	15.748	105	935371	98.97	ug/L	99
108) sec-butylbenzene	15.915	105	1316284	103.42	ug/L	100
109) p-isopropyltoluene	16.035	119	1033035	102.12	ug/l	100
110) benzyl chloride	16.333	91	506377	99.65	ug/L	98
111) 1,3-dichlorobenzene	16.124	146	522072	98.35	ug/L	100
112) 1,4-dichlorobenzene	16.208	146	518928	95.58	ug/L	99
113) 1,2-dichlorobenzene	16.616	146	496601	100.28	ug/L	99
114) n-butylbenzene	16.459	92	586183	103.19	ug/L	99
115) hexachloroethane	16.872	201	190648	121.19	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.426	157	61586	106.68	ug/L	96
117) 1,3,5-Trichlorobenzene	17.599	180	458137	102.74	ug/L	98
118) 1,2,4-trichlorobenzene	18.258	180	366964	99.26	ug/L	99
119) hexachlorobutadiene	18.357	225	239116	102.00	ug/L	98
120) naphthalene	18.551	128	869150	102.44	ug/L	100
121) 1,2,3-trichlorobenzene	18.812	180	354354	101.89	ug/L	99

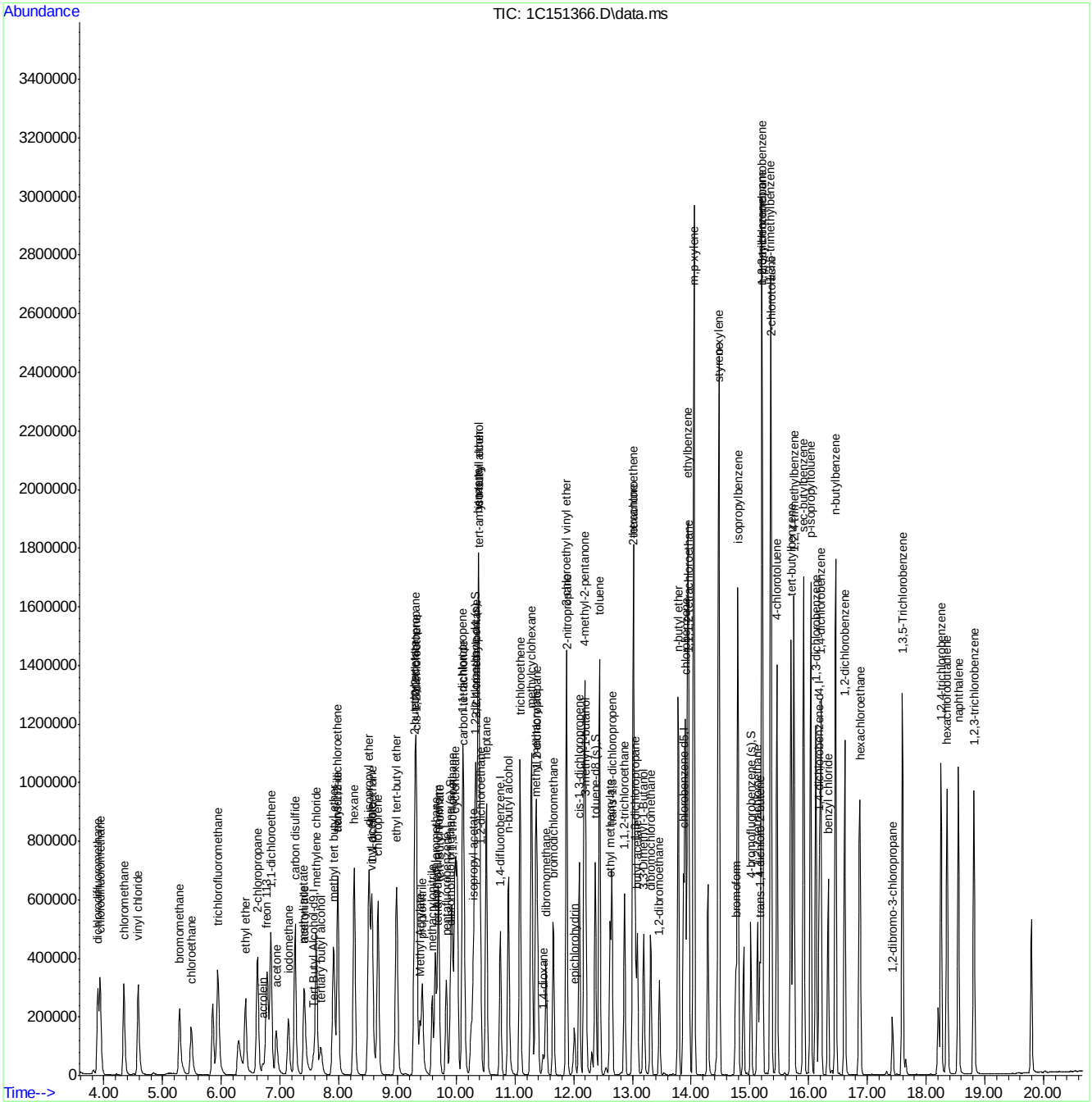
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151366.D
Acq On : 22 Aug 2017 10:49 pm
Operator :
Sample : IC6691-100
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 25 10:05:52 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:05:06 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151367.D
Acq On : 22 Aug 2017 11:19 pm
Operator :
Sample : IC6691-200
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 10:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:06:13 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.583	65	142687	500.00	ug/L	0.01
4) pentafluorobenzene	9.832	168	280084	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.753	114	456863	50.00	ug/L	0.00
78) chlorobenzene-d5	13.870	117	374603	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	182305	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.900	113	141289	49.10	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.20%			
45) 1,2-dichloroethane-d4 (s)	10.324	65	149396	50.39	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.78%			
77) toluene-d8 (s)	12.369	98	505430	48.51	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.02%			
94) 4-bromofluorobenzene (s)	15.015	95	172537	50.12	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.24%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.698	59	364434	1008.68	ug/L	97
3) 1,4-dioxane	11.480	88	154764	4685.41	ug/L	100
5) dichlorodifluoromethane	3.896	85	875491	182.59	ug/L	100
6) chlorodifluoromethane	3.938	51	762032	178.74	ug/L	99
7) chloromethane	4.341	50	850645	177.76	ug/L	98
8) vinyl chloride	4.586	62	856153	194.21	ug/L	98
9) bromomethane	5.282	94	462021	186.55	ug/L	99
10) chloroethane	5.481	64	418861	190.33	ug/L	98
11) trichlorofluoromethane	5.941	101	957865	172.78	ug/L	100
12) ethyl ether	6.412	74	260408	204.24	ug/L	97
13) 2-chloropropane	6.616	63	196893	168.66	ug/L	96
14) acrolein	6.710	56	94872	224.97	ug/L	98
15) freon 113	6.778	151	399028	201.76	ug/L	97
16) 1,1-dichloroethene	6.846	61	820915	187.16	ug/L	99
17) acetone	6.940	58	178961	756.78	ug/L	89
18) iodomethane	7.144	142	611009	235.95	ug/L	96
19) carbon disulfide	7.259	76	1849894	186.15	ug/L	100
20) acetonitrile	7.411	41	731934	1860.92	ug/L	99
22) methyl acetate	7.405	74	84760	219.44	ug/L	99
23) methylene chloride	7.615	84	512479	158.56	ug/L	99
24) acrylonitrile	7.976	53	190530	219.14	ug/L	98
25) methyl tert butyl ether	7.913	73	1264972	200.39	ug/L	98
26) trans-1,2-dichloroethene	7.981	61	783941	183.83	ug/L	98
27) hexane	8.263	57	900727	185.97	ug/L	99
28) 1,1-dichloroethane	8.572	63	948599	183.68	ug/L	99
29) vinyl acetate	8.556	86	83260	231.00	ug/L	99
30) di-isopropyl ether	8.514	45	1743012	196.94	ug/L	99
31) chloroprene	8.671	53	883634	194.28	ug/L	99
32) ethyl tert-butyl ether	8.985	59	1595772	200.26	ug/L	99
33) 2-butanone	9.294	72	251400	938.77	ug/L	92
34) 2,2-dichloropropane	9.304	77	796969	180.92	ug/L	99
35) ethyl acetate	9.299	45	80778	212.27	ug/L #	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151367.D
Acq On : 22 Aug 2017 11:19 pm
Operator :
Sample : IC6691-200
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 10:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:06:13 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	9.320	96	578244	187.00	ug/L		97
37) Methyl Acrylate	9.382	85	74601	225.97	ug/L		95
38) propionitrile	9.419	54	822393	2067.30	ug/L		99
39) methacrylonitrile	9.592	67	212280	220.64	ug/L		96
40) bromochloromethane	9.644	128	233885	189.03	ug/L		99
41) tetrahydrofuran	9.670	71	66871	199.43	ug/L		98
42) chloroform	9.696	83	930498	179.60	ug/L		99
43) tert-Butyl Formate	9.707	59	133200	216.83	ug/L		94
46) 1,1,1-trichloroethane	9.926	97	859800	194.55	ug/L		99
47) cyclohexane	9.979	84	711286	199.62	ug/L		98
49) 1,1-dichloropropene	10.109	75	784024	189.51	ug/L		98
50) iso-butyl alcohol	10.381	74	166244	1990.17	ug/L	#	20
51) carbon tetrachloride	10.125	117	755783	184.89	ug/L		98
52) isopropyl acetate	10.293	61	187782	160.24	ug/L	#	91
53) 1,2-dichloroethane	10.413	62	592626	178.43	ug/L		98
54) benzene	10.376	78	2150758	183.93	ug/L		99
55) 2,2,4-trimethylpentane	10.334	57	2431624	193.42	ug/L		98
56) tert-amyl methyl ether	10.387	73	1445581	191.16	ug/L		96
57) heptane	10.512	57	490287	196.22	ug/L		98
58) n-butyl alcohol	10.894	56	923834	12905.62	ug/L		97
59) trichloroethene	11.088	95	575754	192.29	ug/L		99
60) methylcyclohexane	11.281	83	1065840	186.64	ug/L		97
61) 1,2-dichloropropane	11.365	63	546503	192.91	ug/L		99
62) methyl methacrylate	11.349	100	114293	219.77	ug/L	#	92
63) dibromomethane	11.527	93	304512	193.67	ug/L		99
64) bromodichloromethane	11.652	83	705910	192.99	ug/L		98
65) 2-nitropropane	11.877	41	179725	189.35	ug/L	#	87
66) 2-chloroethyl vinyl ether	11.877	63	1218448	1016.91	ug/L		98
67) epichlorohydrin	12.019	57	287468	1064.59	ug/L		99
68) cis-1,3-dichloropropene	12.097	75	845309	196.11	ug/L		97
69) 4-methyl-2-pentanone	12.181	58	753092	859.11	ug/L		92
70) 3-methyl-1-butanol	12.207	70	312171	5088.89	ug/L		98
71) toluene	12.442	92	1267862	183.01	ug/L		100
72) trans-1,3-dichloropropene	12.651	75	707956	195.17	ug/L		97
73) ethyl methacrylate	12.620	69	543924	201.71	ug/L		97
74) 1,1,2-trichloroethane	12.866	83	364624	199.92	ug/L		98
75) 1,3-dichloropropane	13.049	76	654997	188.03	ug/L		99
76) 2-hexanone	13.023	58	749161	823.54	ug/L		96
79) tetrachloroethene	13.012	166	581215	189.31	ug/L		99
80) butyl acetate	13.080	56	282404	195.97	ug/L		99
81) 3,3-Dimethyl-1-Butanol	13.190	69	381987	2348.89	ug/L		98
82) n-butyl ether	13.781	57	2218652	184.52	ug/L		98
83) dibromochloromethane	13.310	129	518793	205.42	ug/L		100
84) 1,2-dibromoethane	13.457	107	449936	204.58	ug/L		99
85) chlorobenzene	13.901	112	1297907	188.40	ug/L		99
86) 1,1,1,2-tetrachloroethane	13.959	131	478905	208.55	ug/L		99
87) ethylbenzene	13.943	91	2359592	181.46	ug/L		99
88) m,p-xylene	14.048	106	1743241	357.38	ug/L		99
89) o-xylene	14.466	106	849884	181.07	ug/L		100
90) styrene	14.477	104	1427362	189.12	ug/L		100

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151367.D
Acq On : 22 Aug 2017 11:19 pm
Operator :
Sample : IC6691-200
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 10:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:06:13 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.764	173	360250	217.14	ug/L	99
95) isopropylbenzene	14.796	105	2296859	201.85	ug/L	99
97) 1,1,2,2-tetrachloroethane	15.131	83	563441	207.75	ug/L	98
98) trans-1,4-dichloro-2-b...	15.167	53	160445	209.88	ug/L	95
99) 1,2,3-trichloropropane	15.204	110	132940	217.37	ug/L	99
100) bromobenzene	15.209	156	546150	196.46	ug/L	98
101) n-propylbenzene	15.204	91	2874831	190.06	ug/L	98
102) 2-chlorotoluene	15.361	126	527743	194.88	ug/L	98
103) 4-chlorotoluene	15.460	91	1578290	192.93	ug/L	99
104) 1,3,5-trimethylbenzene	15.350	105	1881178	207.75	ug/L	99
105) tert-butylbenzene	15.701	134	353837	203.50	ug/L	96
107) 1,2,4-trimethylbenzene	15.748	105	1852694	197.88	ug/L	100
108) sec-butylbenzene	15.915	105	2567970	202.54	ug/L	100
109) p-isopropyltoluene	16.035	119	2021481	200.93	ug/l	100
110) benzyl chloride	16.333	91	980161	194.54	ug/L	98
111) 1,3-dichlorobenzene	16.124	146	1031102	196.24	ug/L	99
112) 1,4-dichlorobenzene	16.208	146	1020804	190.60	ug/L	99
113) 1,2-dichlorobenzene	16.616	146	967842	196.97	ug/L	99
114) n-butylbenzene	16.459	92	1143275	202.10	ug/L	100
115) hexachloroethane	16.872	201	387565	241.97	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.432	157	123139	213.02	ug/L	94
117) 1,3,5-Trichlorobenzene	17.599	180	907091	204.38	ug/L	98
118) 1,2,4-trichlorobenzene	18.258	180	719401	196.36	ug/L	99
119) hexachlorobutadiene	18.363	225	463381	198.79	ug/L	99
120) naphthalene	18.551	128	1713702	203.00	ug/L	99
121) 1,2,3-trichlorobenzene	18.813	180	690259	199.63	ug/L	100

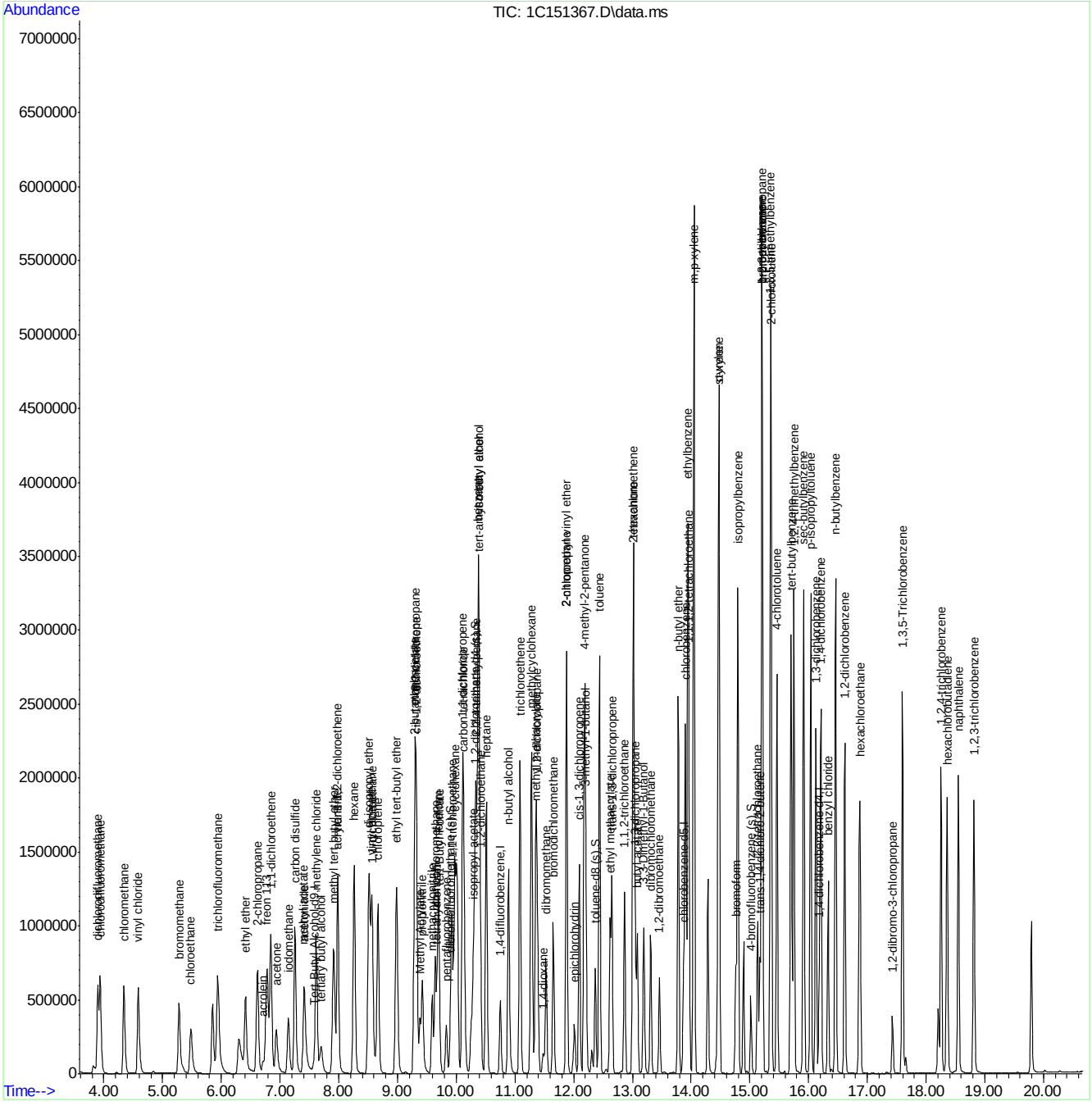
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151367.D
Acq On : 22 Aug 2017 11:19 pm
Operator :
Sample : IC6691-200
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 10:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 10:06:13 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151370.D
Acq On : 23 Aug 2017 12:47 am
Operator :
Sample : ICV6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:37:13 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 11:34:20 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.573	65	130382	500.00	ug/L		-0.01
4) pentafluorobenzene	9.832	168	291467	50.00	ug/L		0.00
48) 1,4-difluorobenzene	10.753	114	469878	50.00	ug/L		0.00
78) chlorobenzene-d5	13.870	117	380548	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.182	152	190036	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.900	113	146394	48.97	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 97.94%				
45) 1,2-dichloroethane-d4 (s)	10.324	65	147313	47.71	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 95.42%				
77) toluene-d8 (s)	12.369	98	522840	48.93	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.86%				
94) 4-bromofluorobenzene (s)	15.015	95	176556	49.19	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.38%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.693	59	87829	265.75	ug/L		96
3) 1,4-dioxane	11.474	88	42115	1406.41	ug/L		97
5) dichlorodifluoromethane	3.896	85	209937	42.44	ug/L		99
6) chlorodifluoromethane	3.938	51	172005	39.23	ug/L		98
7) chloromethane	4.340	50	219690	44.67	ug/L		98
8) vinyl chloride	4.581	62	205006	44.83	ug/L		100
9) bromomethane	5.292	94	109705	45.02	ug/L		99
10) chloroethane	5.491	64	104610	45.93	ug/L		99
11) trichlorofluoromethane	5.941	101	226164	41.93	ug/L		98
12) ethyl ether	6.417	74	69872	52.54	ug/L		94
13) 2-chloropropane	6.616	63	60131	50.37	ug/L		95
14) acrolein	6.710	56	23943	51.51	ug/L		97
15) freon 113	6.783	151	114345	55.50	ug/L		96
16) 1,1-dichloroethene	6.846	61	204874	45.18	ug/L		97
17) acetone	6.940	58	45266	185.05	ug/L	#	84
18) iodomethane	7.144	142	133251	48.48	ug/L		98
19) carbon disulfide	7.259	76	474319	46.22	ug/L		100
20) acetonitrile	7.411	41	431055	1061.34	ug/L	#	54
22) methyl acetate	7.400	74	20633	50.63	ug/L		99
23) methylene chloride	7.615	84	141439	47.36	ug/L		99
24) acrylonitrile	7.981	53	49622	51.91	ug/L		98
25) methyl tert butyl ether	7.913	73	683932	104.09	ug/L		96
26) trans-1,2-dichloroethene	7.986	61	206940	47.01	ug/L		97
27) hexane	8.263	57	178091	36.75	ug/L		99
28) 1,1-dichloroethane	8.572	63	261303	49.02	ug/L		98
29) vinyl acetate	8.556	86	22064	54.81	ug/L	#	95
30) di-isopropyl ether	8.514	45	455576	49.54	ug/L		99
31) chloroprene	8.671	53	577155	122.29	ug/L		99
32) ethyl tert-butyl ether	8.985	59	406369	49.00	ug/L		99
33) 2-butanone	9.293	72	60910	214.43	ug/L		95
34) 2,2-dichloropropane	9.304	77	215351	47.43	ug/L		99
35) ethyl acetate	9.299	45	20513	51.35	ug/L	#	83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151370.D
Acq On : 23 Aug 2017 12:47 am
Operator :
Sample : ICV6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:37:13 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 11:34:20 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	9.320	96	162047	50.73	ug/L		99
37) Methyl Acrylate	9.377	85	19015	54.18	ug/L		95
38) propionitrile	9.419	54	212893	512.35	ug/L		99
39) methacrylonitrile	9.592	67	52972	52.23	ug/L		97
40) bromochloromethane	9.644	128	65515	51.20	ug/L		97
41) tetrahydrofuran	9.675	71	17189	49.28	ug/L		91
42) chloroform	9.696	83	259648	48.65	ug/L		98
43) tert-Butyl Formate	9.707	59	37624	58.15	ug/L		95
46) 1,1,1-trichloroethane	9.926	97	226035	49.28	ug/L		99
47) cyclohexane	9.979	84	203884	55.00	ug/L		98
49) 1,1-dichloropropene	10.109	75	205157	48.47	ug/L		97
50) iso-butyl alcohol	10.381	74	42738	497.81	ug/L	#	90
51) carbon tetrachloride	10.125	117	198452	47.56	ug/L		99
52) isopropyl acetate	10.292	61	49849	48.99	ug/L		96
53) 1,2-dichloroethane	10.413	62	172369	51.07	ug/L		99
54) benzene	10.376	78	575742	48.26	ug/L		99
55) 2,2,4-trimethylpentane	10.334	57	578761	44.91	ug/L		98
56) tert-amyl methyl ether	10.387	73	366326	47.31	ug/L		99
57) heptane	10.512	57	127445	49.69	ug/L		99
58) n-butyl alcohol	10.889	56	217011	2683.61	ug/L		99
59) trichloroethene	11.087	95	154908	50.50	ug/L		99
60) methylcyclohexane	11.281	83	248422	42.61	ug/L		97
61) 1,2-dichloropropane	11.365	63	151445	52.16	ug/L		99
62) methyl methacrylate	11.354	100	29267	54.05	ug/L	#	91
63) dibromomethane	11.527	93	83402	51.76	ug/L		98
64) bromodichloromethane	11.652	83	195753	52.22	ug/L		98
65) 2-nitropropane	11.877	41	48418	49.89	ug/L	#	80
66) 2-chloroethyl vinyl ether	11.877	63	333261	269.98	ug/L		99
67) epichlorohydrin	12.013	57	68199	243.60	ug/L		97
68) cis-1,3-dichloropropene	12.097	75	228976	51.75	ug/L		97
69) 4-methyl-2-pentanone	12.181	58	178640	196.69	ug/L		97
70) 3-methyl-1-butanol	12.207	70	72898	1084.09	ug/L		98
71) toluene	12.437	92	332846	47.16	ug/L		99
72) trans-1,3-dichloropropene	12.651	75	194828	52.35	ug/L		98
73) ethyl methacrylate	12.620	69	137718	49.62	ug/L		99
74) 1,1,2-trichloroethane	12.866	83	99558	53.08	ug/L		99
75) 1,3-dichloropropane	13.044	76	182256	51.18	ug/L		99
76) 2-hexanone	13.023	58	177712	189.39	ug/L		99
79) tetrachloroethene	13.012	166	157133	53.03	ug/L		100
80) butyl acetate	13.080	56	73008	49.98	ug/L		96
81) 3,3-Dimethyl-1-Butanol	13.190	69	86635	533.73	ug/L		99
82) n-butyl ether	13.781	57	578214	49.59	ug/L		99
83) dibromochloromethane	13.310	129	142778	55.50	ug/L		99
84) 1,2-dibromoethane	13.457	107	120646	53.88	ug/L		98
85) chlorobenzene	13.901	112	348071	50.03	ug/L		99
86) 1,1,1,2-tetrachloroethane	13.959	131	129539	55.29	ug/L		99
87) ethylbenzene	13.943	91	616060	49.31	ug/L		99
88) m,p-xylene	14.048	106	462428	99.49	ug/L		100
89) o-xylene	14.466	106	225547	50.21	ug/L		99
90) styrene	14.477	104	382699	50.22	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151370.D
Acq On : 23 Aug 2017 12:47 am
Operator :
Sample : ICV6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:37:13 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 11:34:20 2017
Response via : Initial Calibration

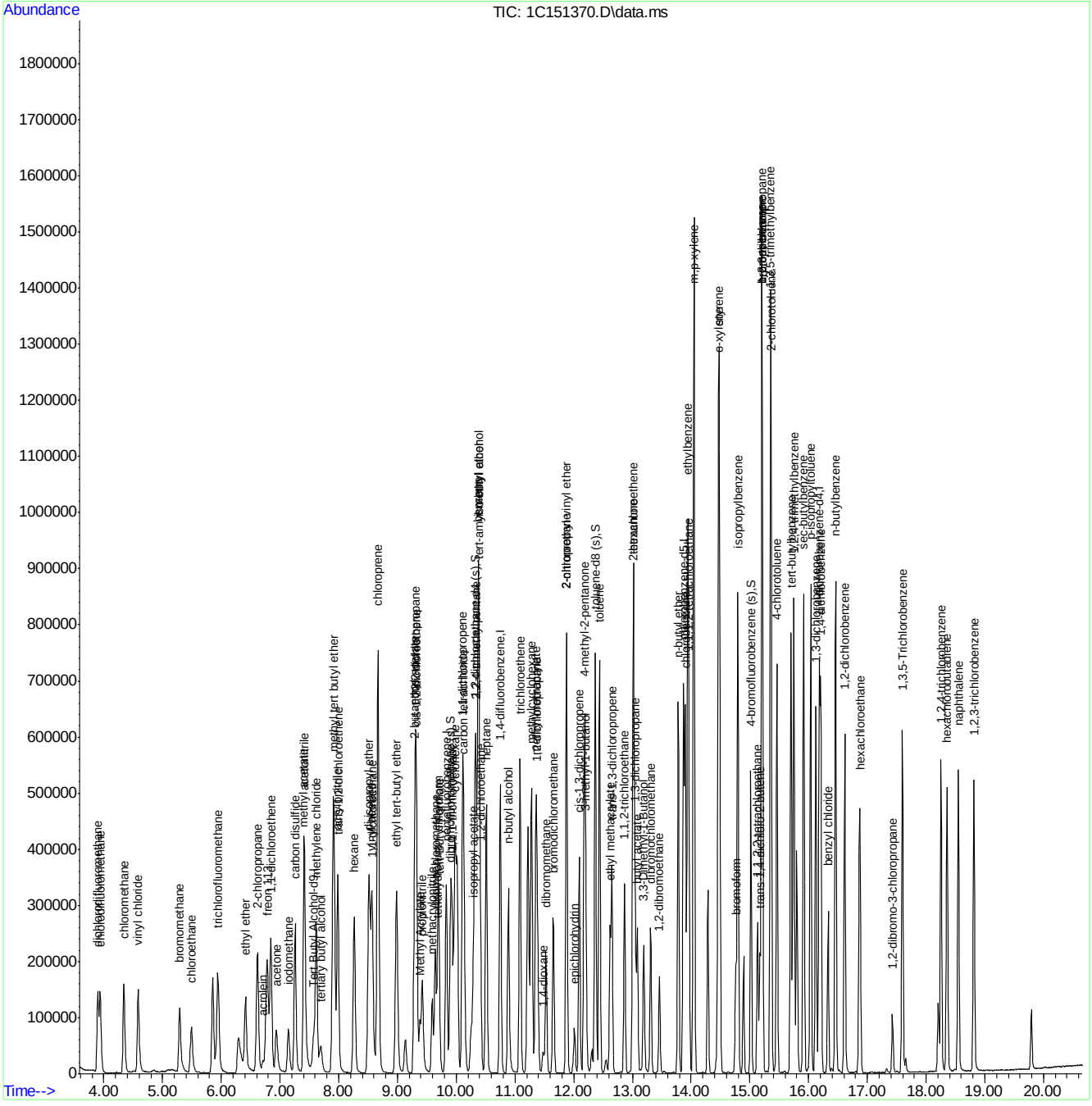
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.764	173	94680	55.70	ug/L	98
95) isopropylbenzene	14.796	105	599931	50.53	ug/L	99
97) 1,1,2,2-tetrachloroethane	15.130	83	148244	54.27	ug/L	99
98) trans-1,4-dichloro-2-b...	15.167	53	44129	55.04	ug/L	92
99) 1,2,3-trichloropropane	15.204	110	34890	54.14	ug/L	97
100) bromobenzene	15.209	156	148673	51.40	ug/L	97
101) n-propylbenzene	15.204	91	748805	49.83	ug/L	100
102) 2-chlorotoluene	15.361	126	139090	51.06	ug/L	99
103) 4-chlorotoluene	15.460	91	422310	49.72	ug/L	99
104) 1,3,5-trimethylbenzene	15.350	105	479397	50.57	ug/L	99
105) tert-butylbenzene	15.701	134	91910	50.62	ug/L	96
107) 1,2,4-trimethylbenzene	15.748	105	480306	49.27	ug/L	99
108) sec-butylbenzene	15.915	105	666810	50.38	ug/L	99
109) p-isopropyltoluene	16.035	119	535756	51.06	ug/l	100
110) benzyl chloride	16.333	91	217855	41.61	ug/L	99
111) 1,3-dichlorobenzene	16.124	146	280520	51.32	ug/L	98
112) 1,4-dichlorobenzene	16.208	146	279772	50.38	ug/L	99
113) 1,2-dichlorobenzene	16.616	146	264994	51.82	ug/L	99
114) n-butylbenzene	16.459	92	298352	50.54	ug/L	98
115) hexachloroethane	16.872	201	95128	53.97	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.427	157	32616	53.69	ug/L	95
117) 1,3,5-Trichlorobenzene	17.599	180	213915	46.12	ug/L	99
118) 1,2,4-trichlorobenzene	18.258	180	192245	50.44	ug/L	99
119) hexachlorobutadiene	18.357	225	124549	51.29	ug/L	97
120) naphthalene	18.551	128	456880	51.83	ug/L	99
121) 1,2,3-trichlorobenzene	18.813	180	188275	52.25	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151370.D
Acq On : 23 Aug 2017 12:47 am
Operator :
Sample : ICV6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:37:13 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 11:34:20 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151371.D
Acq On : 23 Aug 2017 1:17 am
Operator :
Sample : ICV6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 25 11:41:12 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 11:34:20 2017
Response via : Initial Calibration

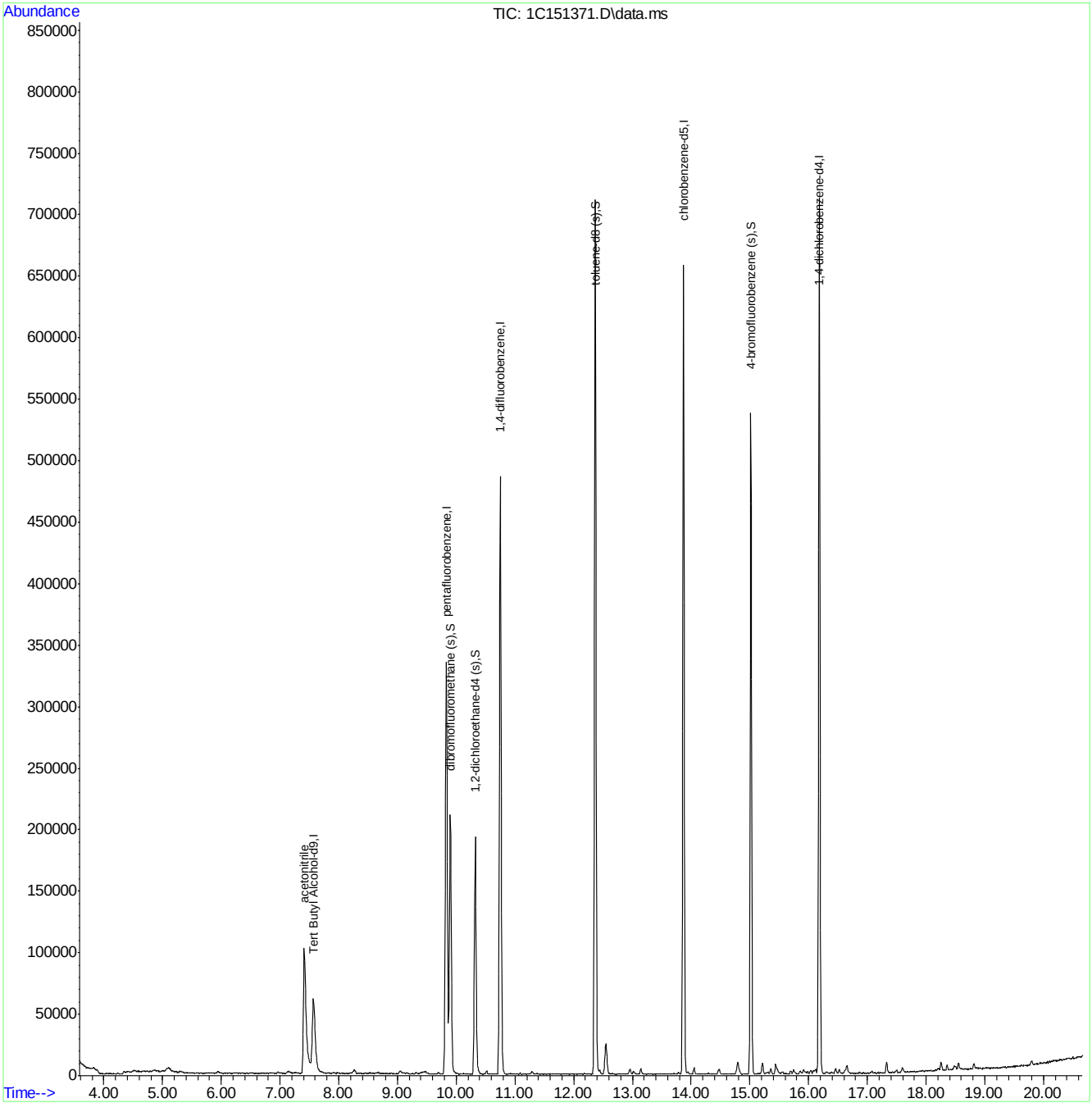
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.568	65	115238	500.00	ug/L	-0.02
4) pentafluorobenzene	9.832	168	288711	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.753	114	443580	50.00	ug/L	0.00
78) chlorobenzene-d5	13.870	117	372978	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.182	152	190934	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.900	113	145711	49.21	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.42%			
45) 1,2-dichloroethane-d4 (s)	10.324	65	142639	46.64	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 93.28%			
77) toluene-d8 (s)	12.369	98	506064	50.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.34%			
94) 4-bromofluorobenzene (s)	15.015	95	177997	49.36	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.72%			
Target Compounds						Qvalue
20) acetonitrile	7.411	41	191734	476.59	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 1C151371.D
Acq On : 23 Aug 2017 1:17 am
Operator :
Sample : ICV6691-50
Misc : MS19345,V1C6691,5.0,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 25 11:41:12 2017
Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 11:34:20 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153128.d
Acq On : 7 Nov 2017 12:02 pm
Operator : prashans
Sample : CC6691-20 Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:07:14 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.557	65	114536	500.00	ug/L		-0.03
4) pentafluorobenzene	9.822	168	288164	50.00	ug/L		-0.01
48) 1,4-difluorobenzene	10.748	114	453235	50.00	ug/L		0.00
78) chlorobenzene-d5	13.865	117	369041	50.00	ug/L		0.00
93) 1,4-dichlorobenzene-d4	16.177	152	184886	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	9.890	113	149287	50.51	ug/L		-0.01
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.02%				
45) 1,2-dichloroethane-d4 (s)	10.313	65	152732	50.03	ug/L		-0.01
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.06%				
77) toluene-d8 (s)	12.364	98	497659	48.29	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.58%				
94) 4-bromofluorobenzene (s)	15.010	95	174969	50.10	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.20%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.683	59	30457	104.90	ug/L		81
3) 1,4-dioxane	11.475	88	14952	568.39	ug/L		94
5) dichlorodifluoromethane	3.896	85	86185	17.62	ug/L		98
6) chlorodifluoromethane	3.938	51	84202	19.43	ug/L		99
7) chloromethane	4.341	50	101478	20.87	ug/L		99
8) vinyl chloride	4.581	62	95523	21.13	ug/L		100
9) bromomethane	5.298	94	52110	21.63	ug/L		99
10) chloroethane	5.486	64	46587	20.69	ug/L		96
11) trichlorofluoromethane	5.936	101	99404	18.64	ug/L		100
12) ethyl ether	6.401	74	29339	22.31	ug/L		97
13) 2-chloropropane	6.610	63	25476	21.59	ug/L		99
14) acrolein	6.710	56	9165	19.94	ug/L		96
15) freon 113	6.773	151	41711	20.48	ug/L		97
16) 1,1-dichloroethene	6.841	61	86957	19.39	ug/L		99
17) acetone	6.935	58	18663	77.17	ug/L	#	84
18) iodomethane	7.139	142	43271	15.92	ug/L		93
19) carbon disulfide	7.254	76	192348	18.96	ug/L		100
20) acetonitrile	7.405	41	74607	185.80	ug/L		99
22) methyl acetate	7.400	74	8263	20.51	ug/L	#	90
23) methylene chloride	7.609	84	58558	19.83	ug/L		93
24) acrylonitrile	7.970	53	18660	19.74	ug/L		99
25) methyl tert butyl ether	7.908	73	139081	21.41	ug/L		98
26) trans-1,2-dichloroethene	7.976	61	84872	19.50	ug/L		99
27) hexane	8.258	57	86635	18.08	ug/L		98
28) 1,1-dichloroethane	8.567	63	106818	20.27	ug/L		98
29) vinyl acetate	8.546	86	8518	21.40	ug/L	#	90
30) di-isopropyl ether	8.509	45	185397	20.39	ug/L		99
31) chloroprene	8.661	53	85805	18.39	ug/L		99
32) ethyl tert-butyl ether	8.980	59	163092	19.89	ug/L		97
33) 2-butanone	9.288	72	22019	78.41	ug/L	#	91
34) 2,2-dichloropropane	9.294	77	84936	18.92	ug/L		97
35) ethyl acetate	9.288	45	7773	19.68	ug/L	#	83
36) cis-1,2-dichloroethene	9.314	96	62415	19.76	ug/L		99
37) Methyl Acrylate	9.377	85	6867	19.79	ug/L		94
38) propionitrile	9.414	54	83895	204.22	ug/L		99
39) methacrylonitrile	9.581	67	20418	20.36	ug/L		97
40) bromochloromethane	9.634	128	28288	22.36	ug/L		97
41) tetrahydrofuran	9.665	71	6648	19.28	ug/L		85
42) chloroform	9.686	83	102062	19.34	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153128.d
Acq On : 7 Nov 2017 12:02 pm
Operator : prashans
Sample : CC6691-20 Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:07:14 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-Butyl Formate	9.701	59	15475	24.19	ug/L		85
46)	1,1,1-trichloroethane	9.921	97	85940	18.95	ug/L		98
47)	cyclohexane	9.979	84	69311	18.91	ug/L		96
49)	1,1-dichloropropene	10.099	75	77964	19.10	ug/L		98
50)	iso-butyl alcohol	10.376	74	16701	201.68	ug/L		92
51)	carbon tetrachloride	10.115	117	77115	19.16	ug/L		97
52)	isopropyl acetate	10.287	61	20796	19.33	ug/L	#	88
53)	1,2-dichloroethane	10.408	62	70235	21.57	ug/L		99
54)	benzene	10.371	78	214215	18.62	ug/L		99
55)	2,2,4-trimethylpentane	10.329	57	225874	18.17	ug/L		98
56)	tert-amyl methyl ether	10.376	73	144879	19.40	ug/L		99
57)	heptane	10.507	57	48246	19.50	ug/L		97
58)	n-butyl alcohol	10.884	56	72587	930.59	ug/L		98
59)	trichloroethene	11.082	95	55661	18.81	ug/L		96
60)	methylcyclohexane	11.276	83	98840	17.58	ug/L		98
61)	1,2-dichloropropane	11.354	63	59451	21.23	ug/L		96
62)	methyl methacrylate	11.344	100	11620	22.25	ug/L	#	80
63)	dibromomethane	11.522	93	33590	21.61	ug/L		95
64)	bromodichloromethane	11.647	83	74778	20.68	ug/L		99
65)	2-nitropropane	11.872	41	17048	18.21	ug/L	#	83
66)	2-chloroethyl vinyl ether	11.872	63	120535	101.23	ug/L		98
67)	epichlorohydrin	12.008	57	23869	88.39	ug/L		96
68)	cis-1,3-dichloropropene	12.092	75	88266	20.68	ug/L		99
69)	4-methyl-2-pentanone	12.175	58	69588	79.43	ug/L		96
70)	3-methyl-1-butanol	12.202	70	25593	394.58	ug/L		93
71)	toluene	12.437	92	121802	17.89	ug/L		98
72)	trans-1,3-dichloropropene	12.646	75	75305	20.98	ug/L		96
73)	ethyl methacrylate	12.615	69	57675	21.54	ug/L		99
74)	1,1,2-trichloroethane	12.861	83	36710	20.29	ug/L		98
75)	1,3-dichloropropane	13.044	76	69779	20.31	ug/L		99
76)	2-hexanone	13.017	58	67366	74.43	ug/L		97
79)	tetrachloroethene	13.007	166	53752	18.71	ug/L		99
80)	butyl acetate	13.080	56	30072	21.23	ug/L		89
81)	3,3-Dimethyl-1-Butanol	13.185	69	32512	206.54	ug/L		97
82)	n-butyl ether	13.776	57	221084	19.55	ug/L		99
83)	dibromochloromethane	13.305	129	53059	21.27	ug/L		99
84)	1,2-dibromoethane	13.452	107	45496	20.95	ug/L		98
85)	chlorobenzene	13.896	112	131184	19.44	ug/L		99
86)	1,1,1,2-tetrachloroethane	13.954	131	47633	20.97	ug/L		98
87)	ethylbenzene	13.938	91	225847	18.64	ug/L		98
88)	m,p-xylene	14.043	106	169478	37.60	ug/L		98
89)	o-xylene	14.461	106	82988	19.05	ug/L		95
90)	styrene	14.471	104	141759	19.18	ug/L		96
92)	bromoform	14.759	173	36066	21.88	ug/L		95
95)	isopropylbenzene	14.791	105	213168	18.45	ug/L		98
97)	1,1,2,2-tetrachloroethane	15.125	83	53126	19.99	ug/L		97
98)	trans-1,4-dichloro-2-b...	15.162	53	14589	18.70	ug/L		93
99)	1,2,3-trichloropropane	15.198	110	12518	19.97	ug/L		97
100)	bromobenzene	15.209	156	56670	20.14	ug/L	#	85
101)	n-propylbenzene	15.198	91	265550	18.16	ug/L		98
102)	2-chlorotoluene	15.355	126	52516	19.82	ug/L		93
103)	4-chlorotoluene	15.455	91	154314	18.67	ug/L		99
104)	1,3,5-trimethylbenzene	15.345	105	162394	17.61	ug/L		97
105)	tert-butylbenzene	15.695	134	33429	18.92	ug/L		94
107)	1,2,4-trimethylbenzene	15.742	105	167489	17.66	ug/L		98
108)	sec-butylbenzene	15.910	105	236842	18.39	ug/L		98
109)	p-isopropyltoluene	16.030	119	188394	18.45	ug/l		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153128.d
Acq On : 7 Nov 2017 12:02 pm
Operator : prashans
Sample : CC6691-20 Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:07:14 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) benzyl chloride	16.328	91	106258	20.86	ug/L	99
111) 1,3-dichlorobenzene	16.119	146	107480	20.21	ug/L	99
112) 1,4-dichlorobenzene	16.208	146	106459	19.70	ug/L	99
113) 1,2-dichlorobenzene	16.611	146	103053	20.71	ug/L	100
114) n-butylbenzene	16.454	92	98255	17.11	ug/L	95
115) hexachloroethane	16.867	201	35898	20.93	ug/L	94
116) 1,2-dibromo-3-chloropr...	17.427	157	12384	20.95	ug/L	94
117) 1,3,5-Trichlorobenzene	17.594	180	84658	18.76	ug/L	98
118) 1,2,4-trichlorobenzene	18.253	180	78854	21.27	ug/L	97
119) hexachlorobutadiene	18.358	225	45971	19.46	ug/L	98
120) naphthalene	18.546	128	179339	20.91	ug/L	98
121) 1,2,3-trichlorobenzene	18.807	180	77188	22.02	ug/L	98

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

7.7.13

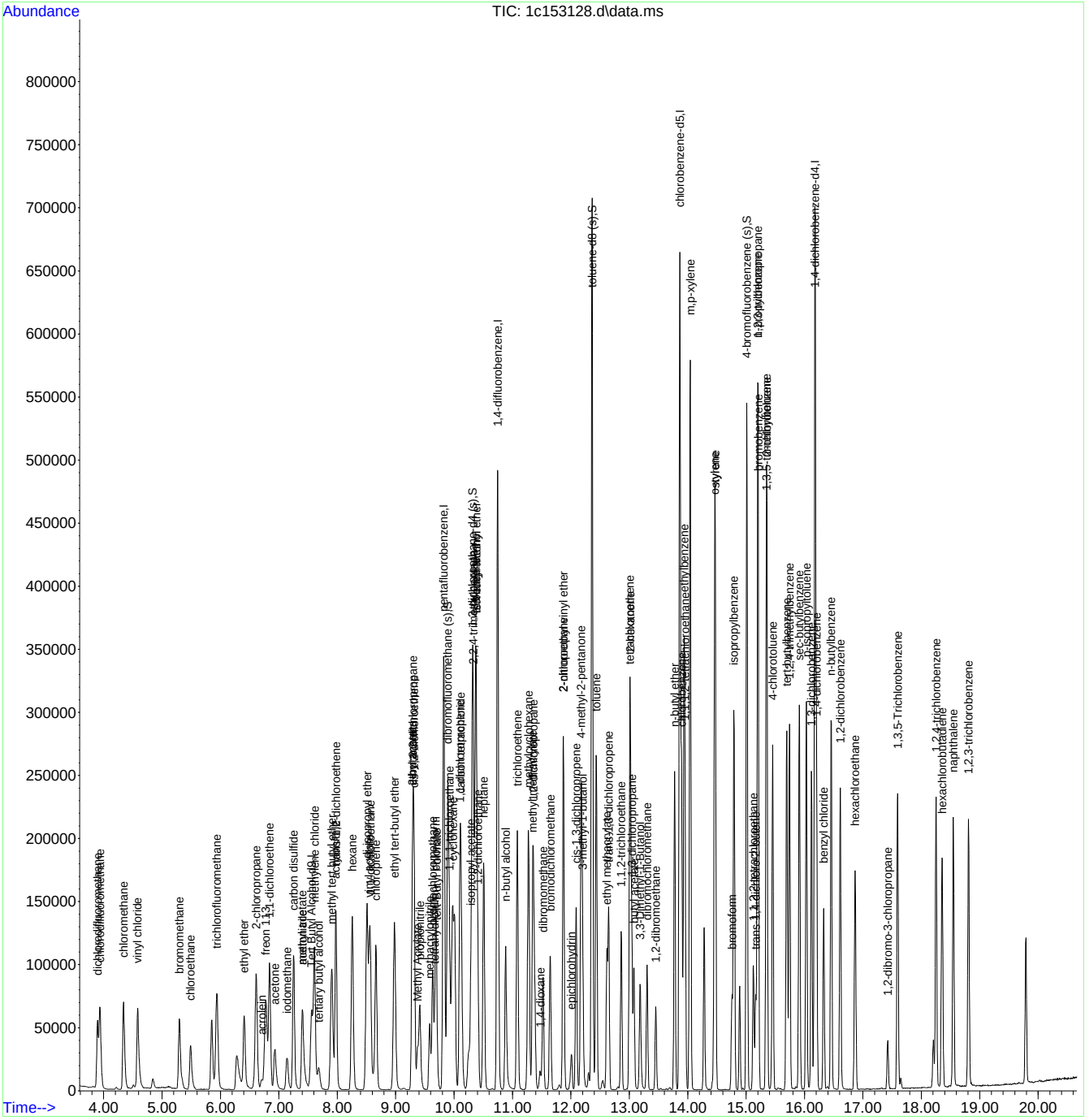
7

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153128.d
Acq On : 7 Nov 2017 12:02 pm
Operator : prashans
Sample : CC6691-20 Inst : GCMS1C
Misc : MS21882,V1C6761,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:07:14 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 13 11:48:20 2010
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.567	65	125227	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	294446	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	472521	50.00	ug/L	0.00
78) chlorobenzene-d5	13.864	117	372845	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.181	152	184923	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	148868	49.30	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.60%			
45) 1,2-dichloroethane-d4 (s)	10.318	65	149807	48.03	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 96.06%			
77) toluene-d8 (s)	12.363	98	504889	46.99	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.98%			
94) 4-bromofluorobenzene (s)	15.015	95	172276	49.32	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.64%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.688	59	83557	263.23	ug/L	85
3) 1,4-dioxane	11.474	88	40218	1398.34	ug/L	99
5) dichlorodifluoromethane	3.896	85	196823	39.39	ug/L	99
6) chlorodifluoromethane	3.937	51	201145	45.41	ug/L	99
7) chloromethane	4.345	50	230756	46.44	ug/L	100
8) vinyl chloride	4.586	62	221822	48.02	ug/L	98
9) bromomethane	5.297	94	124870	50.73	ug/L	98
10) chloroethane	5.491	64	110139	47.86	ug/L	97
11) trichlorofluoromethane	5.941	101	231916	42.56	ug/L	100
12) ethyl ether	6.411	74	76892	57.23	ug/L	97
13) 2-chloropropane	6.615	63	61026	50.61	ug/L	99
14) acrolein	6.704	56	24600	52.39	ug/L	92
15) freon 113	6.777	151	102170	49.09	ug/L	97
16) 1,1-dichloroethene	6.845	61	211226	46.10	ug/L	98
17) acetone	6.934	58	44570	180.37	ug/L	88
18) iodomethane	7.144	142	127505	45.92	ug/L	96
19) carbon disulfide	7.253	76	476039	45.92	ug/L	99
20) acetonitrile	7.410	41	187620	457.28	ug/L	98
22) methyl acetate	7.400	74	22612	54.92	ug/L	97
23) methylene chloride	7.614	84	150614	49.92	ug/L	98
24) acrylonitrile	7.975	53	48667	50.39	ug/L	98
25) methyl tert butyl ether	7.907	73	377634	56.89	ug/L	97
26) trans-1,2-dichloroethene	7.980	61	210847	47.41	ug/L	97
27) hexane	8.258	57	218949	44.73	ug/L	96
28) 1,1-dichloroethane	8.571	63	264918	49.20	ug/L	99
29) vinyl acetate	8.556	86	23213	57.08	ug/L #	87
30) di-isopropyl ether	8.514	45	493302	53.10	ug/L	98
31) chloroprene	8.666	53	212389	44.55	ug/L	98
32) ethyl tert-butyl ether	8.985	59	445240	53.14	ug/L	98
33) 2-butanone	9.288	72	56798	197.93	ug/L	98
34) 2,2-dichloropropane	9.298	77	209373	45.65	ug/L	98
35) ethyl acetate	9.293	45	20489	50.77	ug/L #	88
36) cis-1,2-dichloroethene	9.319	96	159408	49.39	ug/L	97
37) Methyl Acrylate	9.377	85	20454	57.69	ug/L	99
38) propionitrile	9.414	54	210383	501.18	ug/L	99
39) methacrylonitrile	9.586	67	54478	53.17	ug/L	96
40) bromochloromethane	9.638	128	71622	55.40	ug/L	97
41) tetrahydrofuran	9.665	71	16294	46.24	ug/L	99
42) chloroform	9.691	83	258441	47.94	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-Butyl Formate	9.701	59	42068	64.37	ug/L		93
46)	1,1,1-trichloroethane	9.921	97	216164	46.65	ug/L		99
47)	cyclohexane	9.978	84	169639	45.30	ug/L		97
49)	1,1-dichloropropene	10.104	75	199991	46.98	ug/L		99
50)	iso-butyl alcohol	10.376	74	45070	522.04	ug/L		95
51)	carbon tetrachloride	10.120	117	190594	45.42	ug/L		98
52)	isopropyl acetate	10.292	61	53841	52.86	ug/L		97
53)	1,2-dichloroethane	10.407	62	180836	53.28	ug/L		100
54)	benzene	10.376	78	569140	47.44	ug/L		99
55)	2,2,4-trimethylpentane	10.334	57	558093	43.06	ug/L		97
56)	tert-amyl methyl ether	10.381	73	394929	50.72	ug/L		95
57)	heptane	10.512	57	116612	45.21	ug/L		99
58)	n-butyl alcohol	10.883	56	205218	2523.58	ug/L		97
59)	trichloroethene	11.082	95	148119	48.01	ug/L		99
60)	methylcyclohexane	11.275	83	253086	43.17	ug/L		96
61)	1,2-dichloropropane	11.359	63	153563	52.60	ug/L		95
62)	methyl methacrylate	11.349	100	31581	58.00	ug/L	#	87
63)	dibromomethane	11.527	93	89496	55.23	ug/L		96
64)	bromodichloromethane	11.647	83	198379	52.62	ug/L		100
65)	2-nitropropane	11.877	41	45157	46.27	ug/L	#	88
66)	2-chloroethyl vinyl ether	11.872	63	335563	270.32	ug/L		98
67)	epichlorohydrin	12.013	57	63298	224.83	ug/L		99
68)	cis-1,3-dichloropropene	12.091	75	239163	53.75	ug/L		95
69)	4-methyl-2-pentanone	12.180	58	178676	195.63	ug/L		96
70)	3-methyl-1-butanol	12.201	70	69809	1032.34	ug/L		98
71)	toluene	12.437	92	320667	45.18	ug/L		99
72)	trans-1,3-dichloropropene	12.646	75	204549	54.65	ug/L		95
73)	ethyl methacrylate	12.620	69	147308	52.77	ug/L		98
74)	1,1,2-trichloroethane	12.865	83	101865	54.00	ug/L		98
75)	1,3-dichloropropane	13.043	76	186497	52.07	ug/L		99
76)	2-hexanone	13.017	58	168493	178.56	ug/L		98
79)	tetrachloroethene	13.012	166	142136	48.96	ug/L		98
80)	butyl acetate	13.080	56	72140	50.41	ug/L		99
81)	3,3-Dimethyl-1-Butanol	13.185	69	85851	539.82	ug/L		98
82)	n-butyl ether	13.776	57	553847	48.48	ug/L		99
83)	dibromochloromethane	13.305	129	147027	58.33	ug/L		97
84)	1,2-dibromoethane	13.456	107	125271	57.10	ug/L		98
85)	chlorobenzene	13.896	112	344524	50.54	ug/L		98
86)	1,1,1,2-tetrachloroethane	13.959	131	133367	58.10	ug/L		99
87)	ethylbenzene	13.938	91	571800	46.71	ug/L		100
88)	m,p-xylene	14.042	106	427148	93.80	ug/L		99
89)	o-xylene	14.461	106	211372	48.02	ug/L		100
90)	styrene	14.476	104	360694	48.31	ug/L		99
92)	bromoform	14.759	173	100760	60.50	ug/L		98
95)	isopropylbenzene	14.795	105	545101	47.18	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.125	83	143529	53.99	ug/L		97
98)	trans-1,4-dichloro-2-b...	15.162	53	39177	50.21	ug/L		94
99)	1,2,3-trichloropropane	15.198	110	33490	53.40	ug/L		99
100)	bromobenzene	15.209	156	147063	52.24	ug/L	#	86
101)	n-propylbenzene	15.198	91	670149	45.83	ug/L		99
102)	2-chlorotoluene	15.360	126	134338	50.68	ug/L		88
103)	4-chlorotoluene	15.454	91	391042	47.31	ug/L		99
104)	1,3,5-trimethylbenzene	15.350	105	429510	46.56	ug/L		100
105)	tert-butylbenzene	15.695	134	85562	48.43	ug/L		97
107)	1,2,4-trimethylbenzene	15.742	105	433934	45.74	ug/L		100
108)	sec-butylbenzene	15.915	105	605426	47.01	ug/L		98
109)	p-isopropyltoluene	16.030	119	485249	47.53	ug/l		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) benzyl chloride	16.328	91	241701	47.44	ug/L	98
111) 1,3-dichlorobenzene	16.119	146	272589	51.25	ug/L	98
112) 1,4-dichlorobenzene	16.208	146	265683	49.16	ug/L	98
113) 1,2-dichlorobenzene	16.610	146	261428	52.54	ug/L	98
114) n-butylbenzene	16.459	92	251088	43.71	ug/L	99
115) hexachloroethane	16.867	201	96085	56.02	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.426	157	31815	53.82	ug/L	90
117) 1,3,5-Trichlorobenzene	17.594	180	215294	47.71	ug/L	99
118) 1,2,4-trichlorobenzene	18.253	180	201111	54.22	ug/L	98
119) hexachlorobutadiene	18.357	225	120510	51.00	ug/L	98
120) naphthalene	18.545	128	462741	53.95	ug/L	99
121) 1,2,3-trichlorobenzene	18.807	180	196524	56.04	ug/L	98

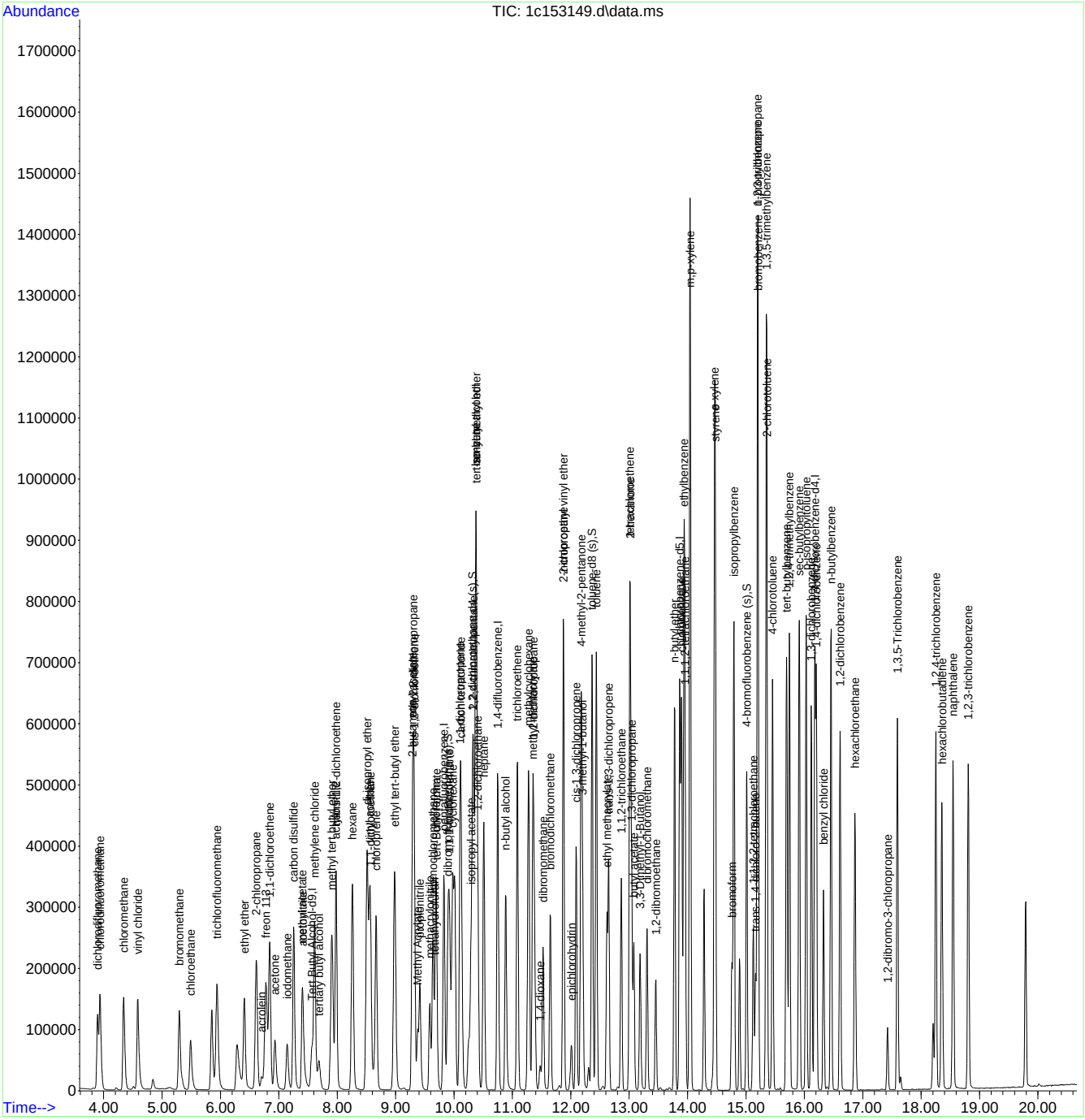
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
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Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.567	65	125227	500.00	ug/L	-0.02
4) pentafluorobenzene	9.827	168	294446	50.00	ug/L	0.00
48) 1,4-difluorobenzene	10.747	114	472521	50.00	ug/L	0.00
78) chlorobenzene-d5	13.864	117	372845	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.181	152	184923	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	9.895	113	148868	49.30	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.60%			
45) 1,2-dichloroethane-d4 (s)	10.318	65	149807	48.03	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 96.06%			
77) toluene-d8 (s)	12.363	98	504889	46.99	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.98%			
94) 4-bromofluorobenzene (s)	15.015	95	172276	49.32	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.64%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.688	59	83557	263.23	ug/L	85
3) 1,4-dioxane	11.474	88	40218	1398.34	ug/L	99
5) dichlorodifluoromethane	3.896	85	196823	39.39	ug/L	99
6) chlorodifluoromethane	3.937	51	201145	45.41	ug/L	99
7) chloromethane	4.345	50	230756	46.44	ug/L	100
8) vinyl chloride	4.586	62	221822	48.02	ug/L	98
9) bromomethane	5.297	94	124870	50.73	ug/L	98
10) chloroethane	5.491	64	110139	47.86	ug/L	97
11) trichlorofluoromethane	5.941	101	231916	42.56	ug/L	100
12) ethyl ether	6.411	74	76892	57.23	ug/L	97
13) 2-chloropropane	6.615	63	61026	50.61	ug/L	99
14) acrolein	6.704	56	24600	52.39	ug/L	92
15) freon 113	6.777	151	102170	49.09	ug/L	97
16) 1,1-dichloroethene	6.845	61	211226	46.10	ug/L	98
17) acetone	6.934	58	44570	180.37	ug/L	88
18) iodomethane	7.144	142	127505	45.92	ug/L	96
19) carbon disulfide	7.253	76	476039	45.92	ug/L	99
20) acetonitrile	7.410	41	187620	457.28	ug/L	98
22) methyl acetate	7.400	74	22612	54.92	ug/L	97
23) methylene chloride	7.614	84	150614	49.92	ug/L	98
24) acrylonitrile	7.975	53	48667	50.39	ug/L	98
25) methyl tert butyl ether	7.907	73	377634	56.89	ug/L	97
26) trans-1,2-dichloroethene	7.980	61	210847	47.41	ug/L	97
27) hexane	8.258	57	218949	44.73	ug/L	96
28) 1,1-dichloroethane	8.571	63	264918	49.20	ug/L	99
29) vinyl acetate	8.556	86	23213	57.08	ug/L #	87
30) di-isopropyl ether	8.514	45	493302	53.10	ug/L	98
31) chloroprene	8.666	53	212389	44.55	ug/L	98
32) ethyl tert-butyl ether	8.985	59	445240	53.14	ug/L	98
33) 2-butanone	9.288	72	56798	197.93	ug/L	98
34) 2,2-dichloropropane	9.298	77	209373	45.65	ug/L	98
35) ethyl acetate	9.293	45	20489	50.77	ug/L #	88
36) cis-1,2-dichloroethene	9.319	96	159408	49.39	ug/L	97
37) Methyl Acrylate	9.377	85	20454	57.69	ug/L	99
38) propionitrile	9.414	54	210383	501.18	ug/L	99
39) methacrylonitrile	9.586	67	54478	53.17	ug/L	96
40) bromochloromethane	9.638	128	71622	55.40	ug/L	97
41) tetrahydrofuran	9.665	71	16294	46.24	ug/L	99
42) chloroform	9.691	83	258441	47.94	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-Butyl Formate	9.701	59	42068	64.37	ug/L		93
46)	1,1,1-trichloroethane	9.921	97	216164	46.65	ug/L		99
47)	cyclohexane	9.978	84	169639	45.30	ug/L		97
49)	1,1-dichloropropene	10.104	75	199991	46.98	ug/L		99
50)	iso-butyl alcohol	10.376	74	45070	522.04	ug/L		95
51)	carbon tetrachloride	10.120	117	190594	45.42	ug/L		98
52)	isopropyl acetate	10.292	61	53841	52.86	ug/L		97
53)	1,2-dichloroethane	10.407	62	180836	53.28	ug/L		100
54)	benzene	10.376	78	569140	47.44	ug/L		99
55)	2,2,4-trimethylpentane	10.334	57	558093	43.06	ug/L		97
56)	tert-amyl methyl ether	10.381	73	394929	50.72	ug/L		95
57)	heptane	10.512	57	116612	45.21	ug/L		99
58)	n-butyl alcohol	10.883	56	205218	2523.58	ug/L		97
59)	trichloroethene	11.082	95	148119	48.01	ug/L		99
60)	methylcyclohexane	11.275	83	253086	43.17	ug/L		96
61)	1,2-dichloropropane	11.359	63	153563	52.60	ug/L		95
62)	methyl methacrylate	11.349	100	31581	58.00	ug/L	#	87
63)	dibromomethane	11.527	93	89496	55.23	ug/L		96
64)	bromodichloromethane	11.647	83	198379	52.62	ug/L		100
65)	2-nitropropane	11.877	41	45157	46.27	ug/L	#	88
66)	2-chloroethyl vinyl ether	11.872	63	335563	270.32	ug/L		98
67)	epichlorohydrin	12.013	57	63298	224.83	ug/L		99
68)	cis-1,3-dichloropropene	12.091	75	239163	53.75	ug/L		95
69)	4-methyl-2-pentanone	12.180	58	178676	195.63	ug/L		96
70)	3-methyl-1-butanol	12.201	70	69809	1032.34	ug/L		98
71)	toluene	12.437	92	320667	45.18	ug/L		99
72)	trans-1,3-dichloropropene	12.646	75	204549	54.65	ug/L		95
73)	ethyl methacrylate	12.620	69	147308	52.77	ug/L		98
74)	1,1,2-trichloroethane	12.865	83	101865	54.00	ug/L		98
75)	1,3-dichloropropane	13.043	76	186497	52.07	ug/L		99
76)	2-hexanone	13.017	58	168493	178.56	ug/L		98
79)	tetrachloroethene	13.012	166	142136	48.96	ug/L		98
80)	butyl acetate	13.080	56	72140	50.41	ug/L		99
81)	3,3-Dimethyl-1-Butanol	13.185	69	85851	539.82	ug/L		98
82)	n-butyl ether	13.776	57	553847	48.48	ug/L		99
83)	dibromochloromethane	13.305	129	147027	58.33	ug/L		97
84)	1,2-dibromoethane	13.456	107	125271	57.10	ug/L		98
85)	chlorobenzene	13.896	112	344524	50.54	ug/L		98
86)	1,1,1,2-tetrachloroethane	13.959	131	133367	58.10	ug/L		99
87)	ethylbenzene	13.938	91	571800	46.71	ug/L		100
88)	m,p-xylene	14.042	106	427148	93.80	ug/L		99
89)	o-xylene	14.461	106	211372	48.02	ug/L		100
90)	styrene	14.476	104	360694	48.31	ug/L		99
92)	bromoform	14.759	173	100760	60.50	ug/L		98
95)	isopropylbenzene	14.795	105	545101	47.18	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.125	83	143529	53.99	ug/L		97
98)	trans-1,4-dichloro-2-b...	15.162	53	39177	50.21	ug/L		94
99)	1,2,3-trichloropropane	15.198	110	33490	53.40	ug/L		99
100)	bromobenzene	15.209	156	147063	52.24	ug/L	#	86
101)	n-propylbenzene	15.198	91	670149	45.83	ug/L		99
102)	2-chlorotoluene	15.360	126	134338	50.68	ug/L		88
103)	4-chlorotoluene	15.454	91	391042	47.31	ug/L		99
104)	1,3,5-trimethylbenzene	15.350	105	429510	46.56	ug/L		100
105)	tert-butylbenzene	15.695	134	85562	48.43	ug/L		97
107)	1,2,4-trimethylbenzene	15.742	105	433934	45.74	ug/L		100
108)	sec-butylbenzene	15.915	105	605426	47.01	ug/L		98
109)	p-isopropyltoluene	16.030	119	485249	47.53	ug/l		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) benzyl chloride	16.328	91	241701	47.44	ug/L	98
111) 1,3-dichlorobenzene	16.119	146	272589	51.25	ug/L	98
112) 1,4-dichlorobenzene	16.208	146	265683	49.16	ug/L	98
113) 1,2-dichlorobenzene	16.610	146	261428	52.54	ug/L	98
114) n-butylbenzene	16.459	92	251088	43.71	ug/L	99
115) hexachloroethane	16.867	201	96085	56.02	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.426	157	31815	53.82	ug/L	90
117) 1,3,5-Trichlorobenzene	17.594	180	215294	47.71	ug/L	99
118) 1,2,4-trichlorobenzene	18.253	180	201111	54.22	ug/L	98
119) hexachlorobutadiene	18.357	225	120510	51.00	ug/L	98
120) naphthalene	18.545	128	462741	53.95	ug/L	99
121) 1,2,3-trichlorobenzene	18.807	180	196524	56.04	ug/L	98

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

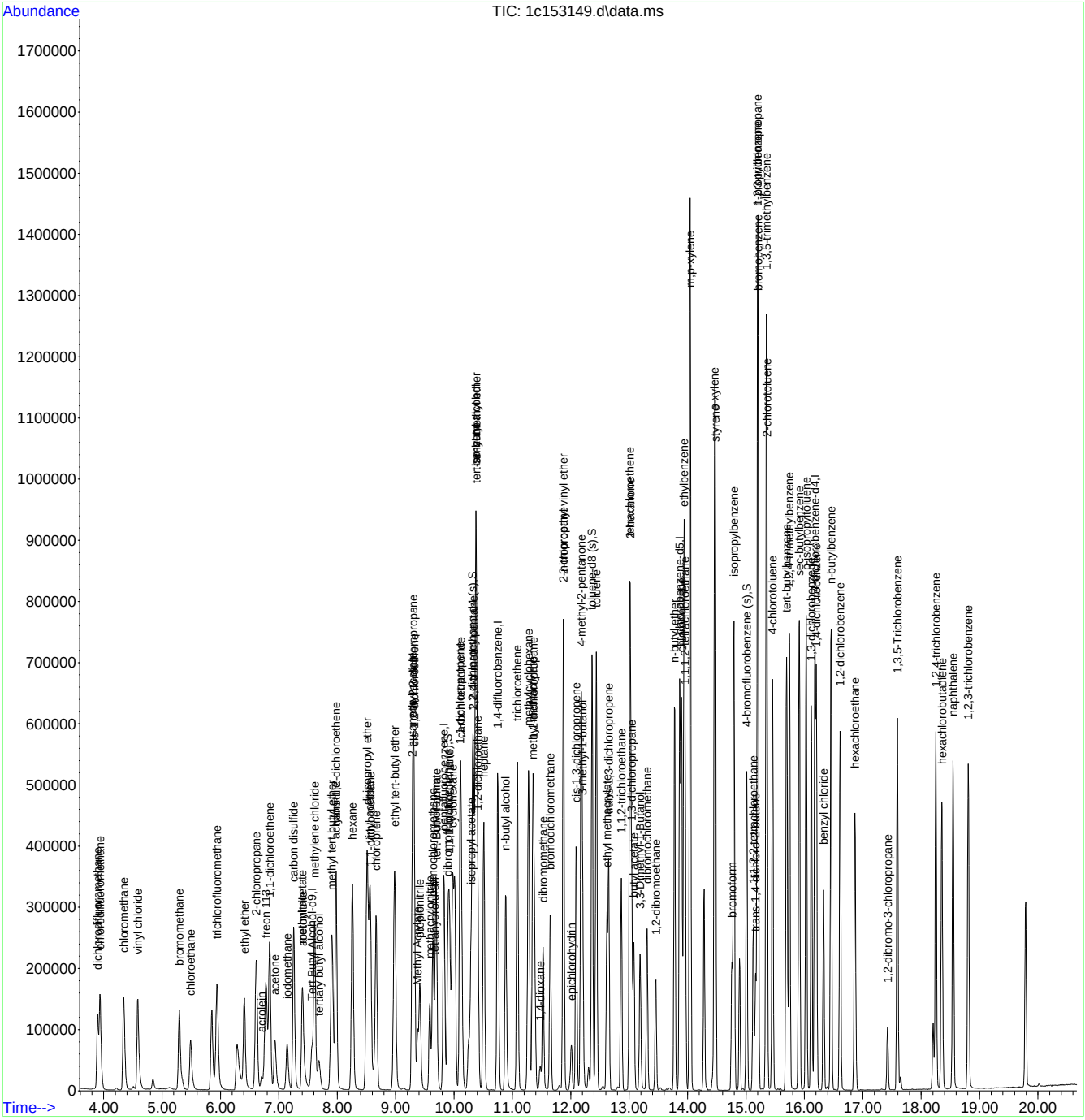
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v1c6761\
Data File : 1c153149.d
Acq On : 7 Nov 2017 10:53 pm
Operator : prashans
Sample : ECC6691-50 Inst : GCMS1C
Misc : MS21701,V1C6761,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS6691.M
Quant Results File: M1CS6691.RES
Quant Time: Nov 09 01:31:34 2017
Quant Title : Method SW846 8260C, Rxi-624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 26 10:43:06 2017
Response via : Initial Calibration



SGS 454 of 640 ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139645.D
Acq On : 19 Oct 2017 7:52 pm
Operator : PrashanS
Sample : IC6336-0.2
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 12:09:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.09	65	79573	500.00	ug/L	-0.01
5) pentafluorobenzene	5.74	168	208588	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	300618	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	258143	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	139079	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	83643	49.35	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.70%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	88958	49.90	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.80%			
75) toluene-d8 (s)	8.40	98	341908	50.13	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.26%			
99) 4-bromofluorobenzene (s)	10.91	95	121716	50.27	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.54%			
Target Compounds						Qvalue
90) ethylbenzene	9.97	91	1713	0.23	ug/L	80
91) m,p-xylene	10.07	106	1134	0.40	ug/L	85
92) o-xylene	10.43	91	1292	0.22	ug/L	94
96) isopropylbenzene	10.74	105	1544	0.21	ug/L	79
108) tert-butylbenzene	11.50	119	1211	0.22	ug/L	80
110) sec-butylbenzene	11.68	105	1748	0.21	ug/L	81
112) p-isopropyltoluene	11.80	119	1558	0.22	ug/L	90
118) 1,2,4-trichlorobenzene	13.43	180	566	0.20	ug/L	67
120) naphthalene	13.62	128	1337	0.21	ug/L	70
121) 1,2,3-trichlorobenzene	13.81	180	545	0.20	ug/L #	72

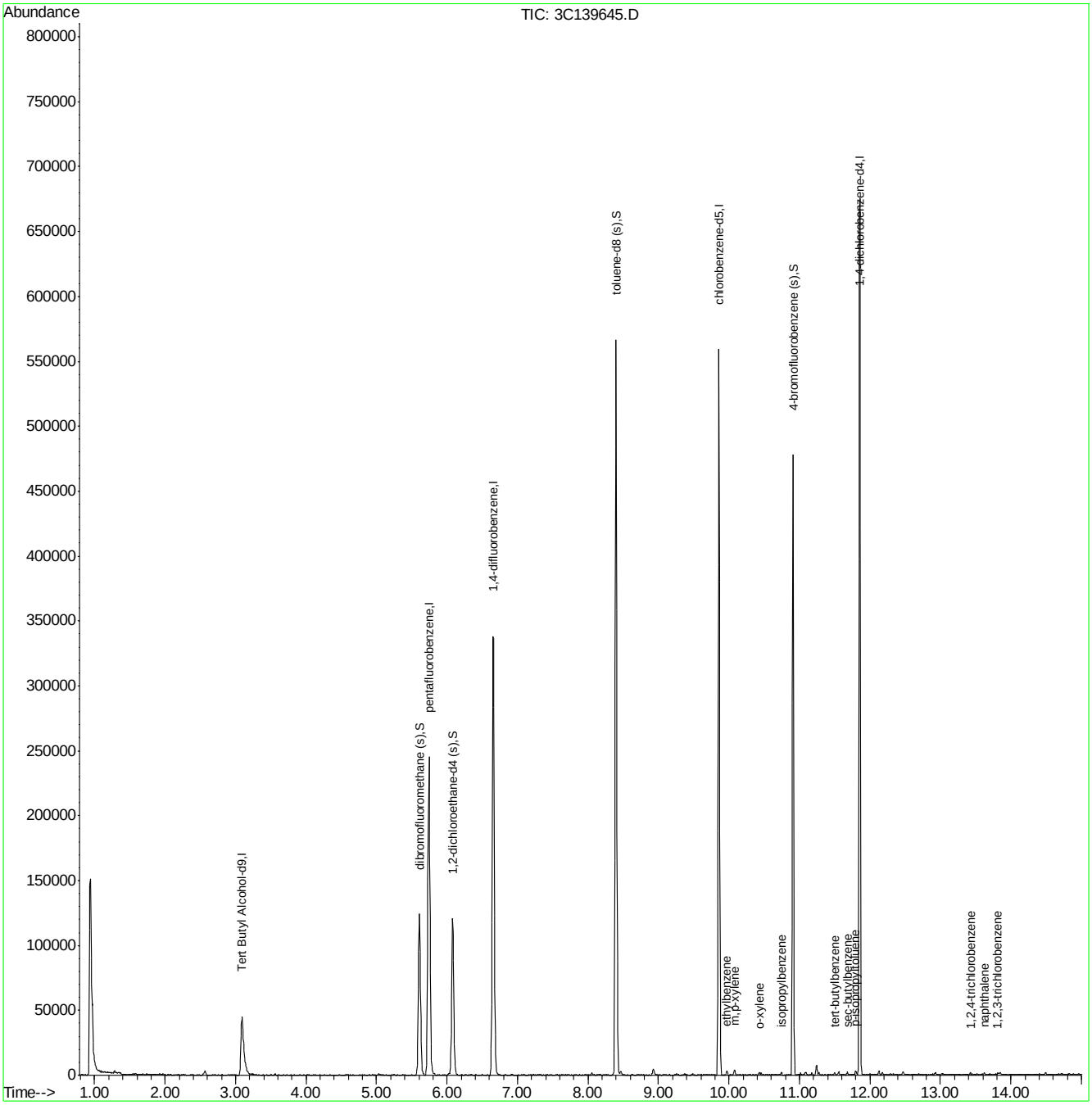
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139645.D
Acq On : 19 Oct 2017 7:52 pm
Operator : PrashanS
Sample : IC6336-0.2
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 20 12:09:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139646.D
Acq On : 19 Oct 2017 8:19 pm
Operator : PrashanS
Sample : IC6336-0.5
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 20 12:09:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.09	65	79943	500.00	ug/L	-0.01
5) pentafluorobenzene	5.75	168	213132	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	306206	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	266837	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	140342	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	87375	50.45	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.90%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	90991	50.11	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.22%			
75) toluene-d8 (s)	8.39	98	349848	49.63	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.26%			
99) 4-bromofluorobenzene (s)	10.91	95	123435	50.52	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.04%			
Target Compounds						Qvalue
19) 1,1-dichloroethene	2.37	96	499	0.40	ug/L #	67
28) hexane	3.56	57	1168	0.46	ug/L #	64
29) di-isopropyl ether	4.03	45	2017	0.41	ug/L #	37
32) 1,1-dichloroethane	3.97	63	953	0.37	ug/L #	50
42) chloroform	5.38	83	1177	0.46	ug/L	79
48) cyclohexane	5.46	84	1077	0.45	ug/L #	28
54) 2,2,4-trimethylpentane	6.03	57	3064	0.46	ug/L	87
57) benzene	6.02	78	2909	0.48	ug/L	79
60) 1,2-dichloroethane	6.19	62	755	0.42	ug/L #	50
61) trichloroethene	6.90	95	692	0.45	ug/L #	56
64) 2-chloroethyl vinyl ether	8.06	63	1804	2.04	ug/L	93
66) 1,2-dichloropropane	7.25	63	550	0.37	ug/L #	40
67) methylcyclohexane	7.02	83	1217	0.40	ug/L	95
69) bromodichloromethane	7.62	83	652	0.36	ug/L #	26
71) cis-1,3-dichloropropene	8.18	75	805	0.35	ug/L #	75
76) toluene	8.47	92	2142	0.54	ug/L	94
81) tetrachloroethene	9.00	166	716	0.39	ug/L	89
82) 1,3-dichloropropane	9.16	76	905	0.42	ug/L #	49
87) n-butyl ether	9.97	57	2773	0.41	ug/L	97
88) chlorobenzene	9.89	112	2121	0.47	ug/L	88
90) ethylbenzene	9.96	91	3640	0.48	ug/L	91
91) m,p-xylene	10.08	106	2894	0.98	ug/L	89
92) o-xylene	10.43	91	2943	0.50	ug/L	92
93) styrene	10.46	104	2147	0.45	ug/L	97
95) butyl acrylate	10.45	55	916	0.37	ug/L	96
96) isopropylbenzene	10.74	105	3610	0.48	ug/L	89
101) 1,1,2,2-tetrachloroethane	11.08	83	564	0.37	ug/L	91
104) n-propylbenzene	11.09	91	3894	0.45	ug/L	85
105) 2-chlorotoluene	11.17	126	769	0.44	ug/L	88
107) 1,3,5-trimethylbenzene	11.25	105	2828	0.47	ug/L	89
108) tert-butylbenzene	11.50	119	2712	0.48	ug/L	90
109) 1,2,4-trimethylbenzene	11.55	105	3142	0.50	ug/L	80
110) sec-butylbenzene	11.68	105	4005	0.48	ug/L	95

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139646.D
Acq On : 19 Oct 2017 8:19 pm
Operator : PrashanS
Sample : IC6336-0.5
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 20 12:09:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
111) 1,3-dichlorobenzene	11.79	146	1726	0.47	ug/L		80
112) p-isopropyltoluene	11.81	119	3494	0.48	ug/L		85
113) 1,4-dichlorobenzene	11.87	146	1866	0.51	ug/L		97
114) 1,2-dichlorobenzene	12.18	146	1511	0.45	ug/L		83
115) n-butylbenzene	12.13	92	1668	0.46	ug/L		88
117) 1,3,5-Trichlorobenzene	12.93	180	1410	0.44	ug/L		91
118) 1,2,4-trichlorobenzene	13.43	180	1313	0.46	ug/L		89
119) hexachlorobutadiene	13.52	225	607	0.38	ug/L	#	82
120) naphthalene	13.63	128	3213	0.50	ug/L		84
121) 1,2,3-trichlorobenzene	13.81	180	1150	0.43	ug/L	#	85
125) 2-methylnaphthalene	14.49	142	1052	0.23	ug/L	#	81

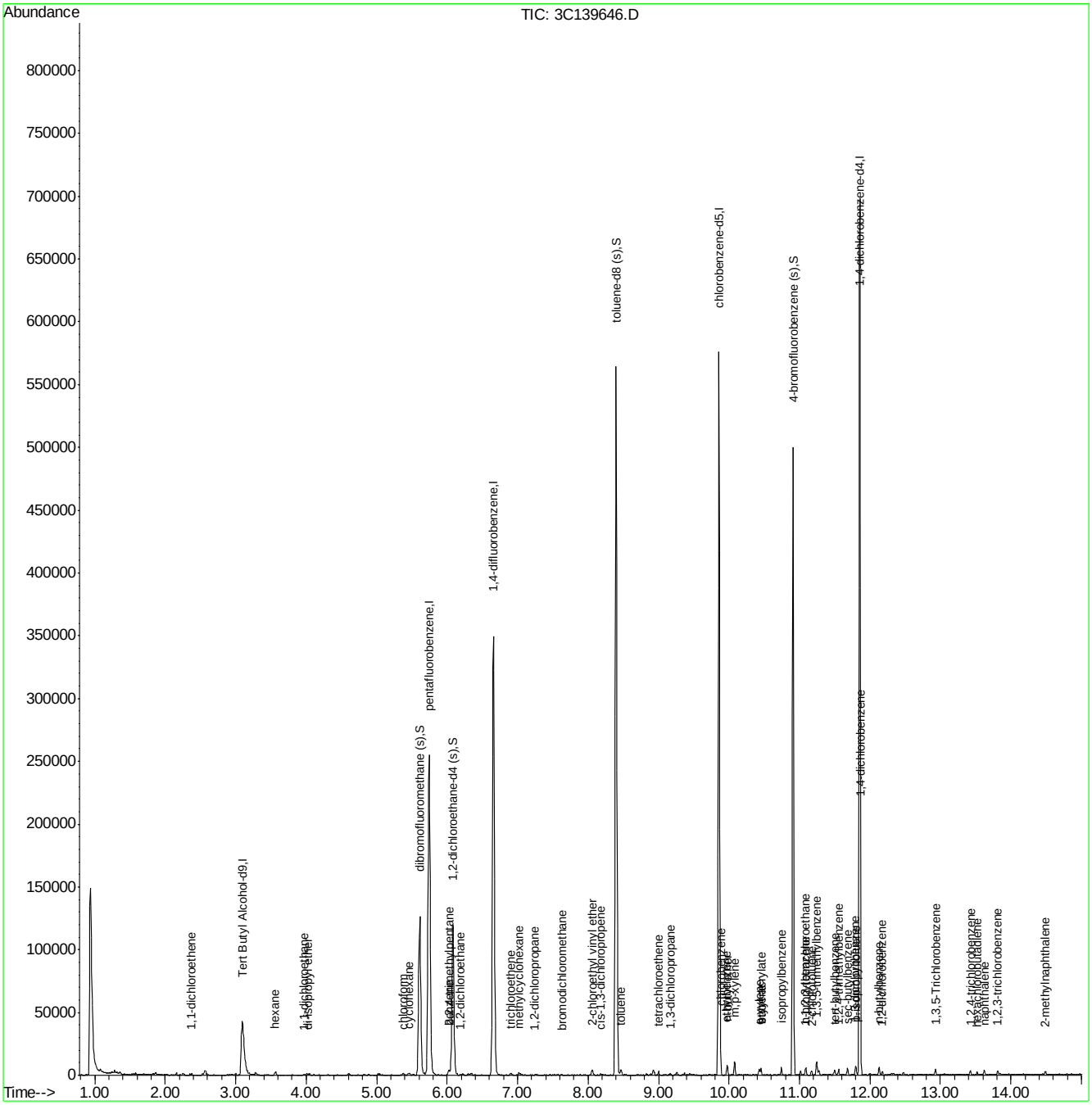
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139646.D
Acq On : 19 Oct 2017 8:19 pm
Operator : PrashanS
Sample : IC6336-0.5
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 20 12:09:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139647.D
Acq On : 19 Oct 2017 8:46 pm
Operator : PrashanS
Sample : IC6336-1
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 12:02:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	3.10	65	77415	500.00	ug/L		0.00
5) pentafluorobenzene	5.75	168	208531	50.00	ug/L		0.00
52) 1,4-difluorobenzene	6.66	114	300158	50.00	ug/L		0.00
74) chlorobenzene-d5	9.86	117	259521	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	11.86	152	137927	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	5.61	113	83032	49.00	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.00%				
53) 1,2-dichloroethane-d4 (s)	6.08	65	87070	48.92	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 97.84%				
75) toluene-d8 (s)	8.40	98	344033	50.18	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%				
99) 4-bromofluorobenzene (s)	10.91	95	121275	50.51	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.02%				
Target Compounds							Qvalue
2) ethanol	2.16	45	1825	71.07	ug/L		59
7) dichlorodifluoromethane	1.08	85	1523	0.75	ug/L		79
8) chloromethane	1.25	50	2103	1.03	ug/L		87
10) vinyl chloride	1.31	62	1453	0.76	ug/L		85
11) bromomethane	1.59	94	846	0.93	ug/L		83
12) chloroethane	1.67	64	688	0.72	ug/L	#	46
13) vinyl Bromide	1.83	106	953	0.84	ug/L		91
14) trichlorofluoromethane	1.86	101	2361	1.02	ug/L		78
18) freon 113	2.35	151	955	0.86	ug/L		90
19) 1,1-dichloroethene	2.38	96	1223	0.99	ug/L		91
21) acetonitrile	2.95	41	1645	8.70	ug/L		74
24) methylene chloride	3.01	84	1030	0.77	ug/L		84
26) methyl tert butyl ether	3.29	73	3001	0.79	ug/L		78
27) trans-1,2-dichloroethene	3.28	96	1311	0.95	ug/L		95
28) hexane	3.57	57	2406	0.98	ug/L		88
29) di-isopropyl ether	4.03	45	4566	0.96	ug/L		94
30) ethyl tert-butyl ether	4.60	59	4320	1.02	ug/L		92
32) 1,1-dichloroethane	3.97	63	2252	0.89	ug/L		89
33) chloroprene	4.04	53	2313	0.97	ug/L		75
37) 2,2-dichloropropane	4.82	77	1784	0.86	ug/L	#	48
38) cis-1,2-dichloroethene	4.91	96	1260	0.82	ug/L	#	52
39) propionitrile	5.20	54	1827	8.53	ug/L		66
40) bromochloromethane	5.25	130	731	0.81	ug/L	#	57
42) chloroform	5.37	83	2527	1.01	ug/L		74
47) 1,1,1-trichloroethane	5.51	97	1973	0.88	ug/L		85
48) cyclohexane	5.46	84	2406	1.02	ug/L		86
49) 1,1-dichloropropene	5.75	110	1844	0.57	ug/L	#	1
50) tert-amyl alcohol	6.22	73	4159	4.65	ug/L		95
51) carbon tetrachloride	5.68	117	1751	0.89	ug/L	#	71
54) 2,2,4-trimethylpentane	6.04	57	6930	1.07	ug/L		91
57) benzene	6.02	78	6208	1.04	ug/L		95
58) heptane	6.33	57	1354	0.99	ug/L	#	63
60) 1,2-dichloroethane	6.19	62	1682	0.95	ug/L	#	50

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139647.D
Acq On : 19 Oct 2017 8:46 pm
Operator : PrashanS
Sample : IC6336-1
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 12:02:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
61) trichloroethene	6.90	95	1503	0.99 ug/L #	77
62) ethyl acrylate	7.18	55	1544	0.91 ug/L	70
64) 2-chloroethyl vinyl ether	8.06	63	4598	5.31 ug/L	96
66) 1,2-dichloropropane	7.24	63	1333	0.92 ug/L #	40
67) methylcyclohexane	7.03	83	3072	1.02 ug/L	71
68) dibromomethane	7.40	93	523	0.69 ug/L #	52
69) bromodichloromethane	7.62	83	1551	0.88 ug/L	91
71) cis-1,3-dichloropropene	8.18	75	2181	0.96 ug/L	91
72) 4-methyl-2-pentanone	8.38	85	670	1.05 ug/L #	1
76) toluene	8.47	92	4019	1.04 ug/L #	77
77) trans-1,3-dichloropropene	8.83	75	1548	0.81 ug/L	83
78) ethyl methacrylate	8.89	69	1508	0.87 ug/L #	53
79) 1,1,2-trichloroethane	9.00	83	958	0.96 ug/L #	76
80) 2-hexanone	9.26	58	1660	3.28 ug/L #	87
81) tetrachloroethene	9.00	166	1676	0.95 ug/L	85
82) 1,3-dichloropropane	9.16	76	2172	1.03 ug/L	84
83) butyl acetate	9.37	56	671	0.73 ug/L #	60
84) dibromochloromethane	9.34	129	1112	0.85 ug/L	82
85) 1,2-dibromoethane	9.44	107	1162	0.93 ug/L	90
87) n-butyl ether	9.97	57	6640	1.01 ug/L	96
88) chlorobenzene	9.89	112	4722	1.08 ug/L	92
89) 1,1,1,2-tetrachloroethane	9.98	131	1248	0.87 ug/L	93
90) ethylbenzene	9.96	91	7594	1.03 ug/L	97
91) m,p-xylene	10.08	106	5700	1.98 ug/L #	77
92) o-xylene	10.43	91	6124	1.06 ug/L	94
93) styrene	10.46	104	4567	0.99 ug/L	95
95) butyl acrylate	10.45	55	2237	0.93 ug/L	96
96) isopropylbenzene	10.74	105	7208	0.98 ug/L	95
100) bromobenzene	11.02	156	1905	1.07 ug/L	96
101) 1,1,2,2-tetrachloroethane	11.07	83	1492	1.00 ug/L	88
103) 1,2,3-trichloropropane	11.11	110	337	0.69 ug/L #	34
104) n-propylbenzene	11.09	91	9002	1.05 ug/L	96
105) 2-chlorotoluene	11.18	126	1851	1.07 ug/L	98
106) 4-chlorotoluene	11.28	126	1936	0.37 ug/L	97
107) 1,3,5-trimethylbenzene	11.25	105	6176	1.03 ug/L	95
108) tert-butylbenzene	11.50	119	5752	1.04 ug/L	92
109) 1,2,4-trimethylbenzene	11.55	105	6497	1.06 ug/L	97
110) sec-butylbenzene	11.68	105	8344	1.02 ug/L	97
111) 1,3-dichlorobenzene	11.79	146	3793	1.05 ug/L	86
112) p-isopropyltoluene	11.80	119	7226	1.01 ug/L	91
113) 1,4-dichlorobenzene	11.87	146	3747	1.04 ug/L	96
114) 1,2-dichlorobenzene	12.17	146	3456	1.04 ug/L	95
115) n-butylbenzene	12.13	92	3875	1.09 ug/L	93
117) 1,3,5-Trichlorobenzene	12.93	180	3438	1.09 ug/L	88
118) 1,2,4-trichlorobenzene	13.43	180	2831	1.01 ug/L	87
119) hexachlorobutadiene	13.52	225	1552	0.99 ug/L	88
120) naphthalene	13.63	128	6285	1.00 ug/L	99
121) 1,2,3-trichlorobenzene	13.81	180	2851	1.07 ug/L	85
125) 2-methylnaphthalene	14.49	142	2236	0.49 ug/L #	83

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139647.D
Acq On : 19 Oct 2017 8:46 pm
Operator : PrashanS
Sample : IC6336-1
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 12:02:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

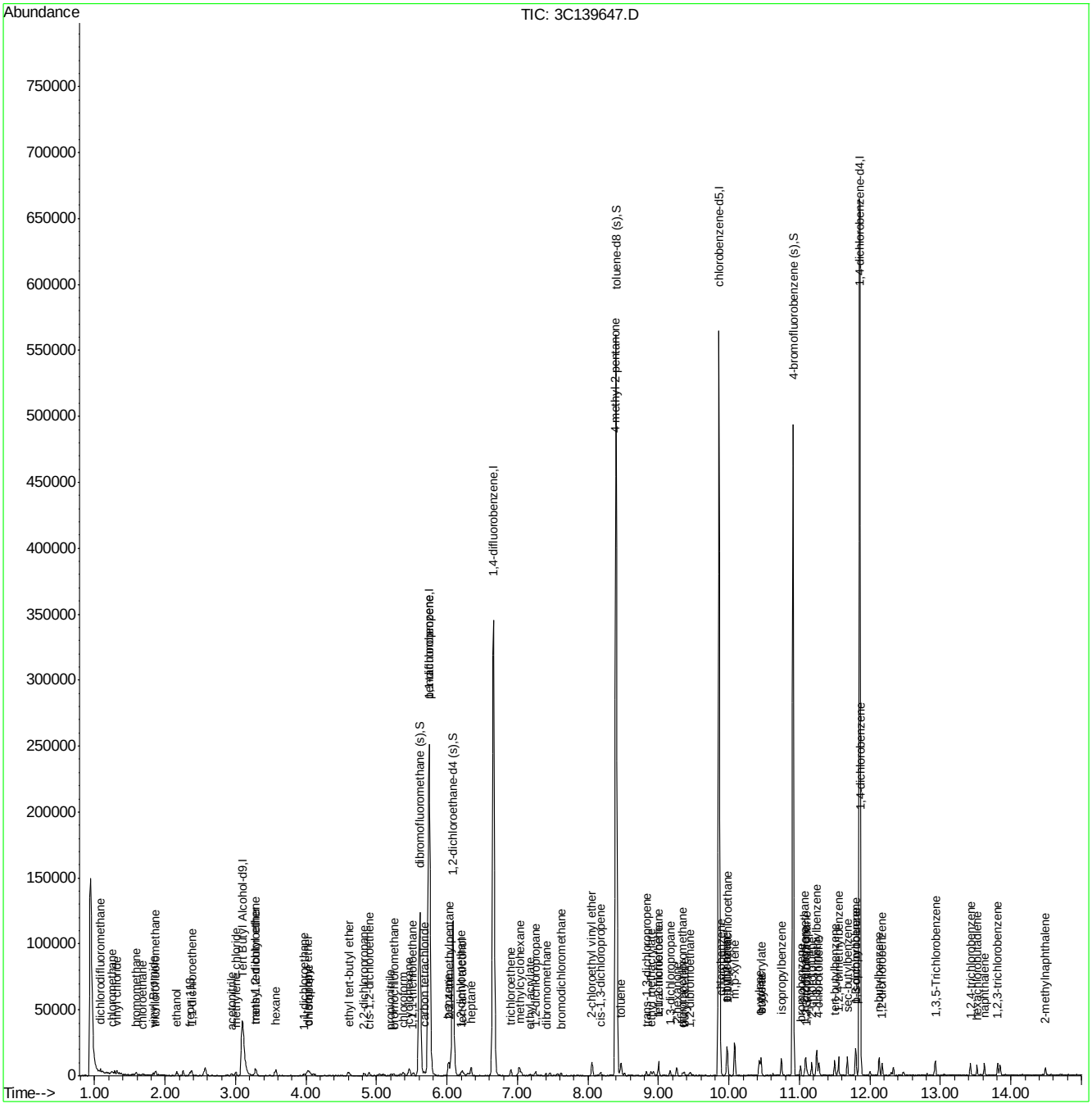
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139647.D
Acq On : 19 Oct 2017 8:46 pm
Operator : PrashanS
Sample : IC6336-1
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 12:02:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 10/24/17 13:53

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139648.D
Acq On : 19 Oct 2017 9:14 pm
Operator : PrashanS
Sample : IC6336-2
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 11:14:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	3.09	65	75924	500.00	ug/L		-0.01
5) pentafluorobenzene	5.74	168	210975	50.00	ug/L		0.00
52) 1,4-difluorobenzene	6.66	114	302752	50.00	ug/L		0.00
74) chlorobenzene-d5	9.86	117	260350	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	11.86	152	137338	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	5.61	113	84095	49.06	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.12%				
53) 1,2-dichloroethane-d4 (s)	6.08	65	89445	49.82	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.64%				
75) toluene-d8 (s)	8.40	98	342992	49.87	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.74%				
99) 4-bromofluorobenzene (s)	10.91	95	121548	50.84	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.68%				
Target Compounds							Qvalue
2) ethanol	2.16	45	5036	199.95	ug/L		97
3) tertiary butyl alcohol	3.21	59	1487	8.79	ug/L		60
6) chlorodifluoromethane	1.11	51	4755	2.51	ug/L		66
7) dichlorodifluoromethane	1.08	85	3535	1.73	ug/L		93
8) chloromethane	1.25	50	4165	2.02	ug/L		93
10) vinyl chloride	1.31	62	3894	2.02	ug/L		93
11) bromomethane	1.59	94	1951	2.12	ug/L		94
12) chloroethane	1.67	64	1757	1.82	ug/L		92
13) vinyl Bromide	1.83	106	2026	1.76	ug/L		83
14) trichlorofluoromethane	1.87	101	4472	1.91	ug/L		94
15) ethyl ether	2.17	74	1463	1.79	ug/L	#	55
16) 2-chloropropane	2.26	63	1077	1.92	ug/L	#	84
18) freon 113	2.35	151	2183	1.94	ug/L		94
19) 1,1-dichloroethene	2.37	96	2589	2.07	ug/L		94
20) acetone	2.54	58	701	6.42	ug/L	#	38
21) acetonitrile	2.94	41	3447	18.01	ug/L		87
22) iodomethane	2.55	142	1663	3.13	ug/L		88
23) carbon disulfide	2.57	76	13166	2.61	ug/L		94
24) methylene chloride	3.00	84	2772	2.04	ug/L		90
25) methyl acetate	2.89	43	2588	2.16	ug/L		61
26) methyl tert butyl ether	3.29	73	8223	2.15	ug/L		98
27) trans-1,2-dichloroethene	3.28	96	3085	2.21	ug/L		77
28) hexane	3.56	57	5289	2.12	ug/L		86
29) di-isopropyl ether	4.02	45	9988	2.07	ug/L		98
30) ethyl tert-butyl ether	4.60	59	8839	2.06	ug/L		94
31) 2-butanone	5.02	72	786	5.50	ug/L	#	89
32) 1,1-dichloroethane	3.97	63	5070	1.99	ug/L		93
33) chloroprene	4.04	53	5039	2.08	ug/L		89
34) acrylonitrile	3.46	53	739	1.67	ug/L	#	17
37) 2,2-dichloropropane	4.83	77	4216	2.00	ug/L		83
38) cis-1,2-dichloroethene	4.90	96	3202	2.05	ug/L		83
39) propionitrile	5.20	54	4193	19.35	ug/L		91
40) bromochloromethane	5.24	130	1775	1.93	ug/L		84

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139648.D
Acq On : 19 Oct 2017 9:14 pm
Operator : PrashanS
Sample : IC6336-2
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 11:14:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) chloroform	5.38	83	5573	2.20	ug/L		97
44) isobutyl alcohol	6.04	43	2759	22.39	ug/L	#	70
46) methacrylonitrile	5.35	67	1117	1.98	ug/L	#	84
47) 1,1,1-trichloroethane	5.52	97	4493	1.98	ug/L		96
48) cyclohexane	5.47	84	5082	2.13	ug/L		89
49) 1,1-dichloropropene	5.75	110	2971	2.02	ug/L	#	23
50) tert-amyl alcohol	6.21	73	8949	9.89	ug/L		92
51) carbon tetrachloride	5.69	117	3975	2.00	ug/L		93
54) 2,2,4-trimethylpentane	6.03	57	13716	2.09	ug/L		96
55) tert-amyl methyl ether	6.21	87	1557	1.62	ug/L	#	69
57) benzene	6.02	78	12586	2.10	ug/L		98
58) heptane	6.34	57	2585	1.86	ug/L		97
60) 1,2-dichloroethane	6.18	62	3742	2.09	ug/L		91
61) trichloroethene	6.90	95	3299	2.15	ug/L		87
62) ethyl acrylate	7.18	55	3329	1.94	ug/L		70
64) 2-chloroethyl vinyl ether	8.06	63	9115	10.44	ug/L		99
66) 1,2-dichloropropane	7.25	63	3000	2.06	ug/L		98
67) methylcyclohexane	7.02	83	6362	2.10	ug/L		93
68) dibromomethane	7.40	93	1461	1.90	ug/L		94
69) bromodichloromethane	7.62	83	3695	2.08	ug/L		75
70) epichlorohydrin	8.14	57	1212	8.11	ug/L	#	57
71) cis-1,3-dichloropropene	8.18	75	4611	2.02	ug/L		94
72) 4-methyl-2-pentanone	8.38	85	1654	2.57	ug/L	#	1
73) 3-methyl-1-butanol	8.52	70	1167	79.48	ug/L	#	78
76) toluene	8.47	92	8286	2.13	ug/L	#	85
77) trans-1,3-dichloropropene	8.83	75	3721	1.95	ug/L		92
78) ethyl methacrylate	8.89	69	3439	1.98	ug/L		92
79) 1,1,2-trichloroethane	9.00	83	2114	2.11	ug/L		93
80) 2-hexanone	9.26	58	3971	7.81	ug/L		89
81) tetrachloroethene	9.00	166	3748	2.11	ug/L		94
82) 1,3-dichloropropane	9.16	76	4748	2.24	ug/L		90
83) butyl acetate	9.36	56	2073	2.26	ug/L	#	74
84) dibromochloromethane	9.34	129	2513	1.91	ug/L		98
85) 1,2-dibromoethane	9.45	107	2583	2.06	ug/L		76
86) 3,3-Dimethyl-1-Butanol	9.46	57	1989	15.07	ug/L		89
87) n-butyl ether	9.97	57	14391	2.17	ug/L		98
88) chlorobenzene	9.88	112	9348	2.14	ug/L		95
89) 1,1,1,2-tetrachloroethane	9.98	131	2844	1.98	ug/L		94
90) ethylbenzene	9.97	91	15861	2.14	ug/L		99
91) m,p-xylene	10.08	106	12822	4.45	ug/L		99
92) o-xylene	10.43	91	12085	2.08	ug/L		99
93) styrene	10.46	104	9749	2.10	ug/L		92
94) bromoform	10.63	173	1587	1.74	ug/L		77
95) butyl acrylate	10.45	55	4670	1.93	ug/L		93
96) isopropylbenzene	10.74	105	15963	2.16	ug/L		95
100) bromobenzene	11.02	156	3855	2.17	ug/L		89
101) 1,1,2,2-tetrachloroethane	11.08	83	3023	2.04	ug/L		96
103) 1,2,3-trichloropropane	11.11	110	1046	2.16	ug/L		90
104) n-propylbenzene	11.09	91	18591	2.18	ug/L		97
105) 2-chlorotoluene	11.18	126	3757	2.19	ug/L		96

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139648.D
Acq On : 19 Oct 2017 9:14 pm
Operator : PrashanS
Sample : IC6336-2
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 11:14:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
106) 4-chlorotoluene	11.28	126	4235m	0.82 ug/L	
107) 1,3,5-trimethylbenzene	11.25	105	12996	2.18 ug/L	94
108) tert-butylbenzene	11.50	119	11980	2.17 ug/L	91
109) 1,2,4-trimethylbenzene	11.55	105	12795	2.09 ug/L	93
110) sec-butylbenzene	11.68	105	17302	2.13 ug/L	98
111) 1,3-dichlorobenzene	11.79	146	8275	2.30 ug/L	96
112) p-isopropyltoluene	11.80	119	15044	2.12 ug/L	95
113) 1,4-dichlorobenzene	11.87	146	7804	2.17 ug/L	92
114) 1,2-dichlorobenzene	12.18	146	7291	2.21 ug/L	96
115) n-butylbenzene	12.13	92	7567	2.13 ug/L	96
116) 1,2-dibromo-3-chloropropan	12.81	157	652	1.69 ug/L #	56
117) 1,3,5-Trichlorobenzene	12.93	180	6845	2.17 ug/L	97
118) 1,2,4-trichlorobenzene	13.43	180	5983	2.15 ug/L	97
119) hexachlorobutadiene	13.52	225	3204	2.05 ug/L	90
120) naphthalene	13.63	128	13197	2.11 ug/L	98
121) 1,2,3-trichlorobenzene	13.81	180	5572	2.11 ug/L	98
124) 2-ethylhexyl acrylate	13.58	70	661	0.37 ug/L #	49
125) 2-methylnaphthalene	14.49	142	5259	1.15 ug/L	87

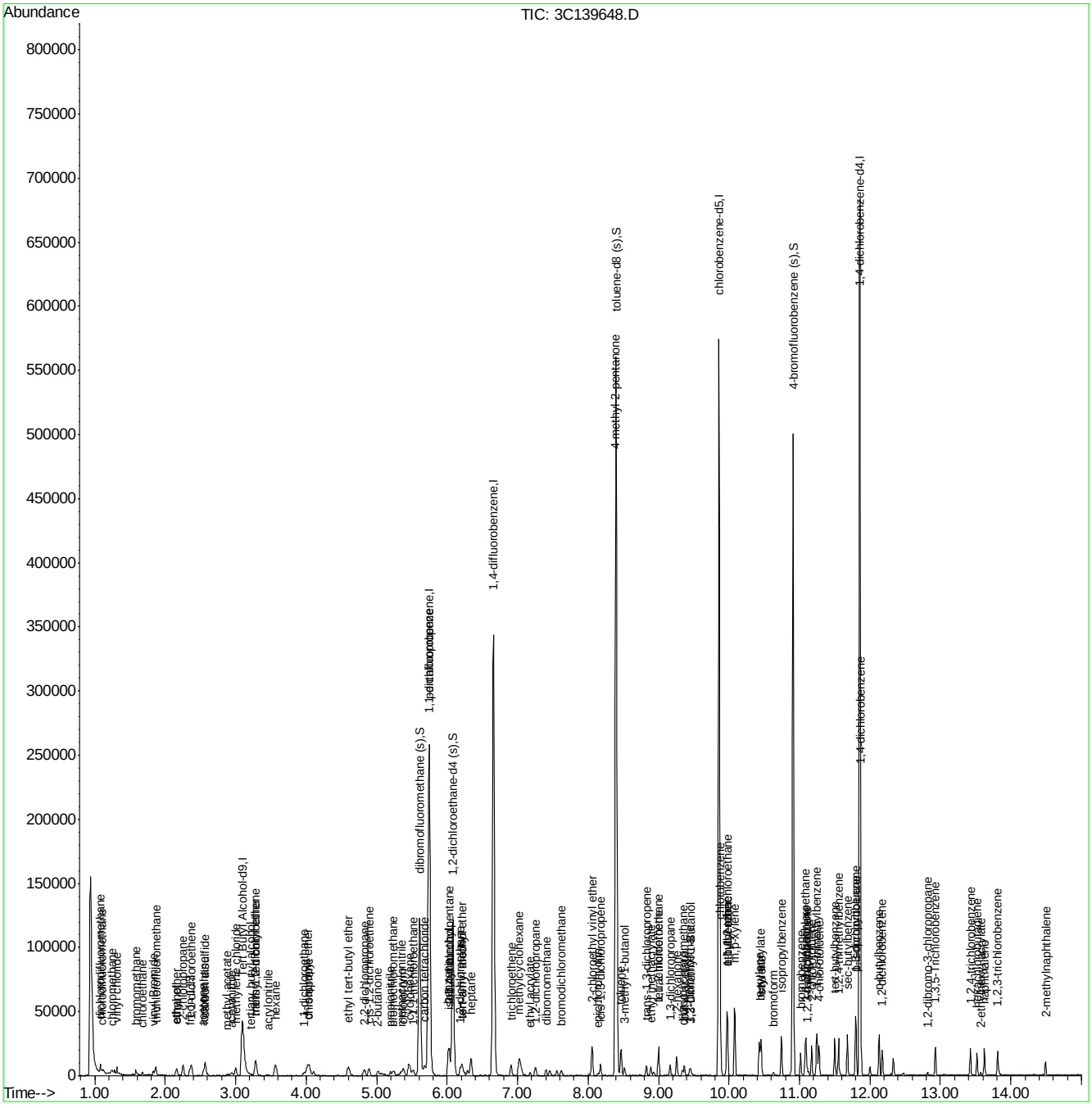
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139648.D
Acq On : 19 Oct 2017 9:14 pm
Operator : PrashanS
Sample : IC6336-2
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 11:14:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V3C6336-IC6336
Lab FileID: 3C139648.D
Injection Time: 10/19/17 21:14
Method: SW846 8260C
Analyst approved: 10/24/17 11:30 Dong, Mei
Supervisor approved: 10/24/17 13:53 Kanya Veerawat

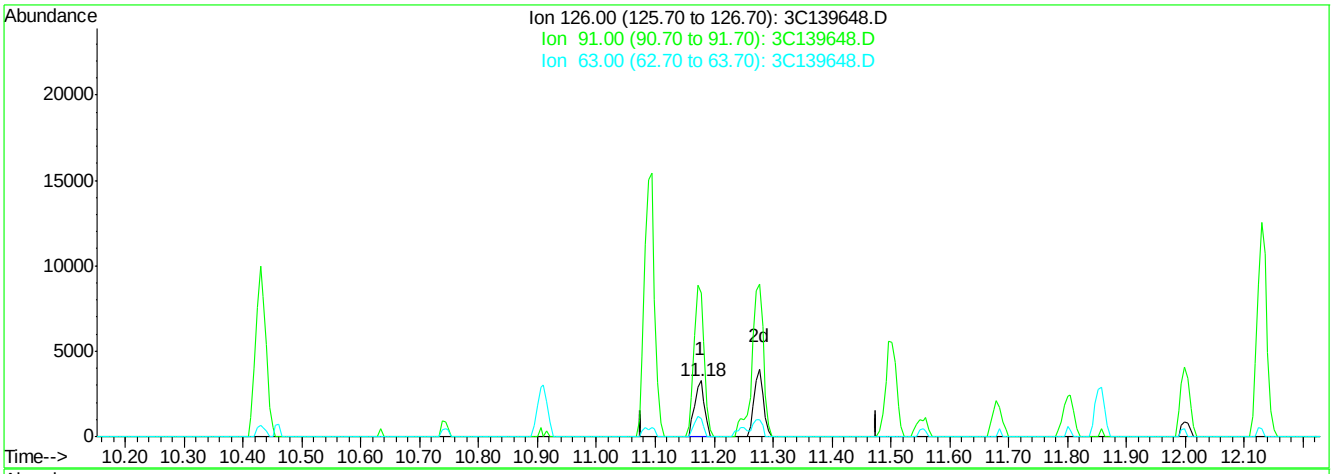
Parameter	CAS	Sig#	R.T. (min.)	Reason
p-Chlorotoluene	106-43-4		11.28	Missed peak

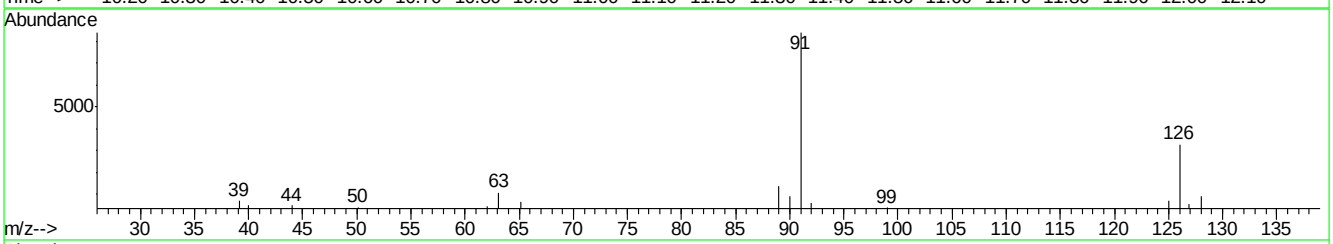
Quantitation Report (Qedit)

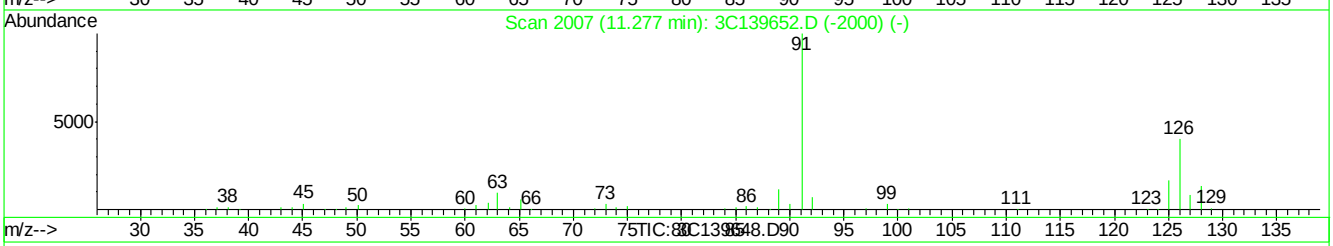
Data File : C:\MSDChem\1\DATA\V3C6336\3C139648.D Vial: 5
Acq On : 19 Oct 2017 9:14 pm Operator: PrashanS
Sample : IC6336-2 Inst : MS3C
Misc : MS19616,V3C6336,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Quant Time: Oct 20 12:22:58 2017 Results File: M3C6336.RES

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
Last Update : Fri Oct 20 12:22:29 2017
Response via : Multiple Level Calibration







(106) 4-chlorotoluene

11.18min 0.73ug/L

response 3757

Ion	Exp%	Act%
126.00	100	100
91.00	271.80	256.61
63.00	32.00	32.45
0.00	0.00	0.00

3C139648.D M3C6336.M Tue Oct 24 11:14:05 2017 MS3C

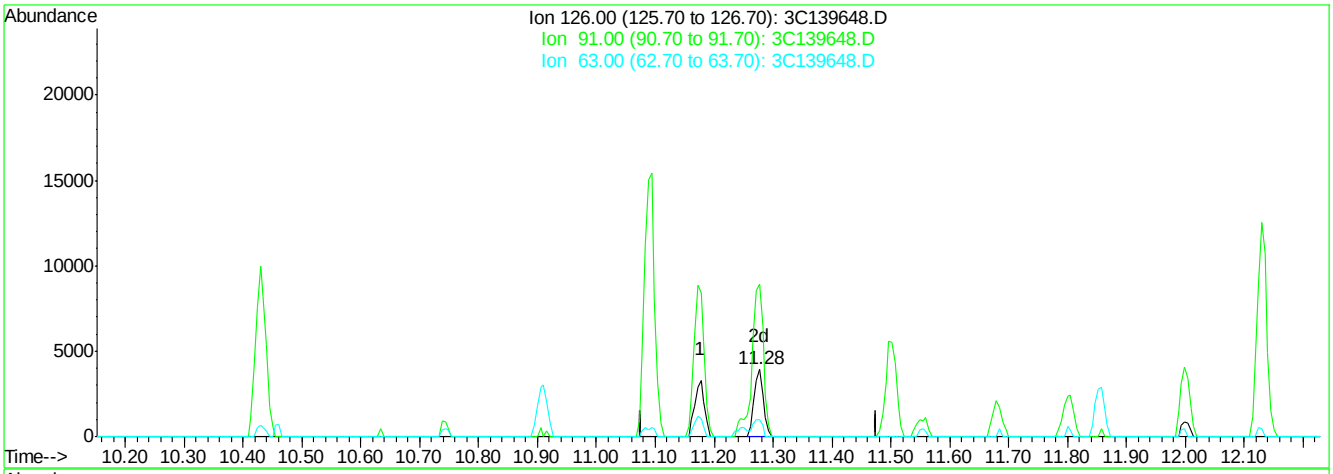
SGS ACCUTEST JC54422

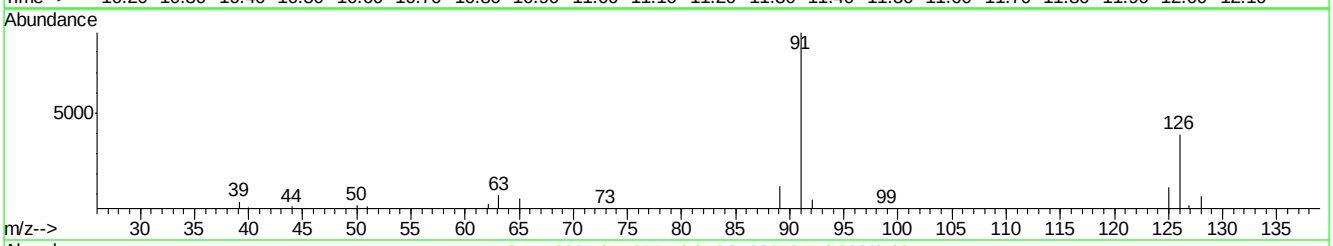
Quantitation Report (Qedit)

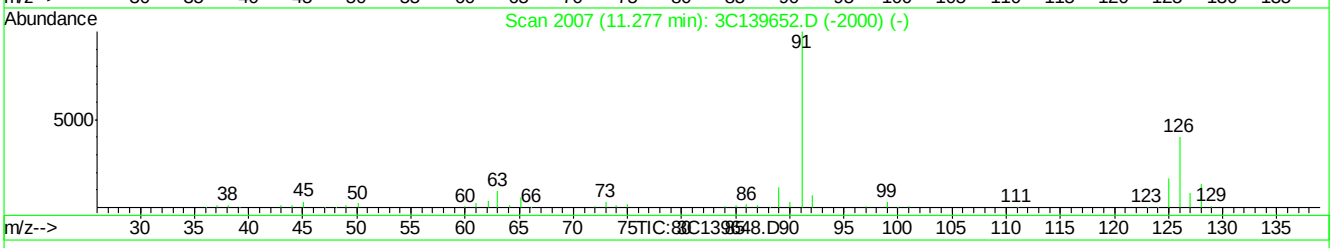
Data File : C:\MSDChem\1\DATA\V3C6336\3C139648.D Vial: 5
Acq On : 19 Oct 2017 9:14 pm Operator: PrashanS
Sample : IC6336-2 Inst : MS3C
Misc : MS19616,V3C6336,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Quant Time: Oct 20 12:22:58 2017 Results File: M3C6336.RES

Method : C:\MSDCHEM\1\METHODS\M3C6336.M (RTE Integrator)
Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
Last Update : Fri Oct 20 12:22:29 2017
Response via : Multiple Level Calibration







(106) 4-chlorotoluene

11.28min 0.82ug/L m

response 4235

Ion	Exp%	Act%
126.00	100	100
91.00	271.80	226.50#
63.00	32.00	25.01
0.00	0.00	0.00

3C139648.D M3C6336.M Tue Oct 24 11:14:36 2017 MS3C

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139649.D
Acq On : 19 Oct 2017 9:41 pm
Operator : PrashanS
Sample : IC6336-4
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 20 12:04:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	3.10	65	79278	500.00	ug/L		0.00
5) pentafluorobenzene	5.75	168	214998	50.00	ug/L		0.00
52) 1,4-difluorobenzene	6.66	114	304894	50.00	ug/L		0.00
74) chlorobenzene-d5	9.86	117	266091	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	11.86	152	141724	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	5.61	113	86587	49.57	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.14%				
53) 1,2-dichloroethane-d4 (s)	6.08	65	89085	49.27	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 98.54%				
75) toluene-d8 (s)	8.40	98	354719	50.46	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.92%				
99) 4-bromofluorobenzene (s)	10.91	95	125852	51.01	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.02%				
Target Compounds							Qvalue
2) ethanol	2.16	45	9984	379.64	ug/L		93
3) tertiary butyl alcohol	3.22	59	3012	17.06	ug/L		60
4) 1,4-dioxane	7.46	88	986	63.78	ug/L	#	15
6) chlorodifluoromethane	1.11	51	8226	4.26	ug/L		97
7) dichlorodifluoromethane	1.08	85	8531	4.09	ug/L		98
8) chloromethane	1.25	50	8203	3.90	ug/L		92
10) vinyl chloride	1.31	62	8197	4.16	ug/L		100
11) bromomethane	1.59	94	4178	4.44	ug/L		90
12) chloroethane	1.67	64	3685	3.75	ug/L		90
13) vinyl Bromide	1.83	106	4519	3.85	ug/L		88
14) trichlorofluoromethane	1.87	101	9364	3.92	ug/L		98
15) ethyl ether	2.16	74	3260	3.91	ug/L	#	65
16) 2-chloropropane	2.25	63	2301	4.03	ug/L	#	86
17) acrolein	2.36	56	811	3.22	ug/L		90
18) freon 113	2.35	151	4702	4.11	ug/L		91
19) 1,1-dichloroethene	2.38	96	4970	3.90	ug/L		86
20) acetone	2.55	58	1398	12.56	ug/L	#	56
21) acetonitrile	2.94	41	7385	37.86	ug/L		95
22) iodomethane	2.55	142	3756	4.27	ug/L		76
23) carbon disulfide	2.57	76	21710	4.22	ug/L		97
24) methylene chloride	3.00	84	5554	4.01	ug/L		97
25) methyl acetate	2.89	43	4821	3.96	ug/L		91
26) methyl tert butyl ether	3.28	73	15852	4.07	ug/L		96
27) trans-1,2-dichloroethene	3.29	96	6101	4.28	ug/L		87
28) hexane	3.57	57	10523	4.14	ug/L		96
29) di-isopropyl ether	4.01	45	19162	3.90	ug/L		94
30) ethyl tert-butyl ether	4.60	59	17614	4.04	ug/L		99
31) 2-butanone	5.01	72	2166	14.88	ug/L	#	79
32) 1,1-dichloroethane	3.97	63	10456	4.02	ug/L		99
33) chloroprene	4.04	53	9294	3.76	ug/L		95
34) acrylonitrile	3.45	53	1484	3.28	ug/L	#	78
37) 2,2-dichloropropane	4.82	77	7781	3.63	ug/L		91
38) cis-1,2-dichloroethene	4.89	96	6332	3.98	ug/L		97

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139649.D
Acq On : 19 Oct 2017 9:41 pm
Operator : PrashanS
Sample : IC6336-4
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 20 12:04:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) propionitrile	5.20	54	8372	37.91	ug/L		90
40) bromochloromethane	5.25	130	3801	4.06	ug/L		84
42) chloroform	5.38	83	10431	4.05	ug/L		97
43) tert-Butyl Formate	5.42	59	971	4.50	ug/L		69
44) isobutyl alcohol	6.04	43	4670	37.19	ug/L		97
46) methacrylonitrile	5.35	67	2111	3.67	ug/L		86
47) 1,1,1-trichloroethane	5.52	97	9046	3.91	ug/L		92
48) cyclohexane	5.46	84	9834	4.04	ug/L		96
49) 1,1-dichloropropene	5.75	110	4437	3.82	ug/L	#	42
50) tert-amyl alcohol	6.21	73	17944	19.47	ug/L		96
51) carbon tetrachloride	5.68	117	7383	3.65	ug/L		94
54) 2,2,4-trimethylpentane	6.04	57	26298	3.98	ug/L		94
55) tert-amyl methyl ether	6.20	87	3603	3.72	ug/L	#	53
56) n-butyl alcohol	5.72	56	16653	225.53	ug/L		94
57) benzene	6.02	78	24624	4.07	ug/L		95
58) heptane	6.34	57	5512	3.95	ug/L		88
59) isopropyl acetate	6.29	87	956	2.93	ug/L	#	82
60) 1,2-dichloroethane	6.18	62	7406	4.10	ug/L		82
61) trichloroethene	6.90	95	6520	4.22	ug/L		96
62) ethyl acrylate	7.18	55	6486	3.76	ug/L		99
64) 2-chloroethyl vinyl ether	8.06	63	17455	19.86	ug/L		97
65) methyl methacrylate	7.46	100	1221	3.34	ug/L	#	90
66) 1,2-dichloropropane	7.25	63	5666	3.85	ug/L		96
67) methylcyclohexane	7.02	83	12646	4.14	ug/L		88
68) dibromomethane	7.40	93	3157	4.08	ug/L		96
69) bromodichloromethane	7.62	83	6884	3.85	ug/L		90
70) epichlorohydrin	8.14	57	2775	18.43	ug/L		79
71) cis-1,3-dichloropropene	8.18	75	9210	4.01	ug/L		95
72) 4-methyl-2-pentanone	8.38	85	3393	5.23	ug/L	#	1
73) 3-methyl-1-butanol	8.51	70	2409	102.22	ug/L		93
76) toluene	8.47	92	15901	4.00	ug/L		99
77) trans-1,3-dichloropropene	8.83	75	7271	3.72	ug/L		93
78) ethyl methacrylate	8.89	69	7064	3.98	ug/L		94
79) 1,1,2-trichloroethane	9.00	83	3984	3.89	ug/L		97
80) 2-hexanone	9.26	58	8099	15.59	ug/L		96
81) tetrachloroethene	9.00	166	7884	4.34	ug/L		94
82) 1,3-dichloropropane	9.16	76	9053	4.17	ug/L		93
83) butyl acetate	9.36	56	3921	4.18	ug/L		96
84) dibromochloromethane	9.34	129	5122	3.80	ug/L		94
85) 1,2-dibromoethane	9.45	107	5025	3.92	ug/L		91
86) 3,3-Dimethyl-1-Butanol	9.46	57	4369	32.39	ug/L		95
87) n-butyl ether	9.97	57	27286	4.03	ug/L		98
88) chlorobenzene	9.89	112	18496	4.14	ug/L		92
89) 1,1,1,2-tetrachloroethane	9.98	131	5800	3.96	ug/L		86
90) ethylbenzene	9.97	91	30276	3.99	ug/L		97
91) m,p-xylene	10.08	106	24275	8.24	ug/L		98
92) o-xylene	10.43	91	23467	3.96	ug/L		90
93) styrene	10.46	104	19376	4.08	ug/L		97
94) bromoform	10.63	173	3183	3.42	ug/L		91
95) butyl acrylate	10.45	55	9574	3.88	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139649.D
Acq On : 19 Oct 2017 9:41 pm
Operator : PrashanS
Sample : IC6336-4
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 20 12:04:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
96) isopropylbenzene	10.74	105	29718	3.94	ug/L		95
97) cis-1,4-dichloro-2-butene	10.88	88	1587	1.40	ug/L	#	86
100) bromobenzene	11.02	156	7798	4.25	ug/L		89
101) 1,1,2,2-tetrachloroethane	11.07	83	6268	4.10	ug/L		97
102) trans-1,4-dichloro-2-buten	11.13	53	1557	3.63	ug/L		87
103) 1,2,3-trichloropropane	11.11	110	1812	3.62	ug/L		94
104) n-propylbenzene	11.09	91	35677	4.06	ug/L		99
105) 2-chlorotoluene	11.18	126	7267	4.10	ug/L		93
106) 4-chlorotoluene	11.28	126	7337	1.38	ug/L		96
107) 1,3,5-trimethylbenzene	11.25	105	25328	4.12	ug/L		94
108) tert-butylbenzene	11.50	119	23145	4.06	ug/L		97
109) 1,2,4-trimethylbenzene	11.55	105	25560	4.05	ug/L		98
110) sec-butylbenzene	11.68	105	34067	4.06	ug/L		98
111) 1,3-dichlorobenzene	11.79	146	15005	4.05	ug/L		91
112) p-isopropyltoluene	11.80	119	29633	4.04	ug/L		98
113) 1,4-dichlorobenzene	11.87	146	15305	4.12	ug/L		98
114) 1,2-dichlorobenzene	12.17	146	13469	3.96	ug/L		99
115) n-butylbenzene	12.13	92	14462	3.95	ug/L		93
116) 1,2-dibromo-3-chloropropan	12.81	157	1288	3.24	ug/L		81
117) 1,3,5-Trichlorobenzene	12.93	180	13429	4.13	ug/L		94
118) 1,2,4-trichlorobenzene	13.43	180	11699	4.07	ug/L		98
119) hexachlorobutadiene	13.52	225	6623	4.12	ug/L		96
120) naphthalene	13.63	128	25125	3.89	ug/L		97
121) 1,2,3-trichlorobenzene	13.81	180	11246	4.12	ug/L		97
122) hexachloroethane	12.33	201	2986	3.31	ug/L	#	61
123) Benzyl chloride	12.00	91	9099	3.23	ug/L		95
124) 2-ethylhexyl acrylate	13.57	70	1315	0.72	ug/L		84
125) 2-methylnaphthalene	14.49	142	9598	2.04	ug/L		91

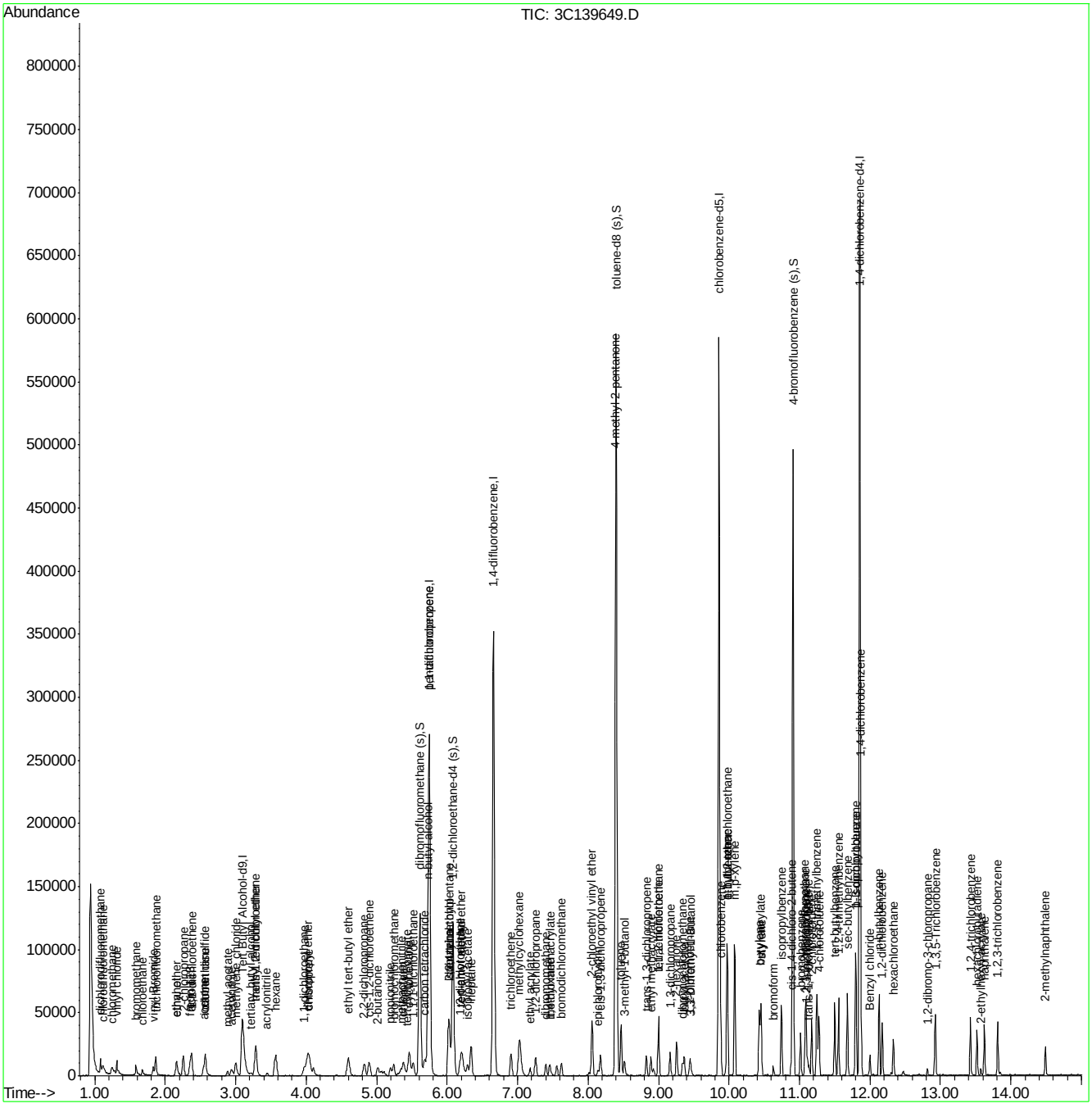
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139649.D
Acq On : 19 Oct 2017 9:41 pm
Operator : PrashanS
Sample : IC6336-4
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 20 12:04:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:28:11 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139650.D
Acq On : 19 Oct 2017 10:08 pm
Operator : PrashanS
Sample : IC6336-8
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 20 11:26:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	3.10	65	82231	500.00	ug/L		0.00
5) pentafluorobenzene	5.75	168	211452	50.00	ug/L		0.00
52) 1,4-difluorobenzene	6.66	114	305687	50.00	ug/L		0.00
74) chlorobenzene-d5	9.86	117	266708	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	11.86	152	143081	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	5.61	113	86491	50.34	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.68%				
53) 1,2-dichloroethane-d4 (s)	6.08	65	89641	49.45	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 98.90%				
75) toluene-d8 (s)	8.40	98	349613	49.62	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.24%				
99) 4-bromofluorobenzene (s)	10.91	95	125701	50.46	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.92%				
Target Compounds							Qvalue
2) ethanol	2.16	45	21392	784.22	ug/L		96
3) tertiary butyl alcohol	3.21	59	7378	40.28	ug/L		74
4) 1,4-dioxane	7.46	88	2979	185.78	ug/L		77
6) chlorodifluoromethane	1.11	51	15603	8.22	ug/L		95
7) dichlorodifluoromethane	1.08	85	17061	8.32	ug/L		99
8) chloromethane	1.24	50	16700	8.07	ug/L		98
10) vinyl chloride	1.31	62	16641	8.60	ug/L		94
11) bromomethane	1.59	94	8238	8.91	ug/L		95
12) chloroethane	1.67	64	8907	9.21	ug/L		98
13) vinyl Bromide	1.83	106	9956	8.63	ug/L		89
14) trichlorofluoromethane	1.87	101	19471	8.29	ug/L		99
15) ethyl ether	2.17	74	6666	8.13	ug/L	#	67
16) 2-chloropropane	2.26	63	5015	8.94	ug/L	#	86
17) acrolein	2.36	56	1705	6.88	ug/L		82
18) freon 113	2.35	151	9090	8.08	ug/L		95
19) 1,1-dichloroethene	2.37	96	10924	8.72	ug/L		94
20) acetone	2.54	58	3328	30.40	ug/L		93
21) acetonitrile	2.94	41	15643	81.55	ug/L		90
22) iodomethane	2.55	142	9656	7.64	ug/L		98
23) carbon disulfide	2.57	76	40955	8.09	ug/L		97
24) methylene chloride	3.01	84	11607	8.52	ug/L		90
25) methyl acetate	2.88	43	9041	7.55	ug/L		94
26) methyl tert butyl ether	3.28	73	30520	7.97	ug/L		97
27) trans-1,2-dichloroethene	3.29	96	11870	8.47	ug/L		96
28) hexane	3.57	57	21092	8.44	ug/L		96
29) di-isopropyl ether	4.02	45	39214	8.12	ug/L		97
30) ethyl tert-butyl ether	4.60	59	34164	7.96	ug/L		98
31) 2-butanone	5.01	72	4694	32.79	ug/L	#	80
32) 1,1-dichloroethane	3.97	63	20841	8.16	ug/L		95
33) chloroprene	4.05	53	20434	8.41	ug/L		97
34) acrylonitrile	3.44	53	3575	8.04	ug/L		81
35) vinyl acetate	4.11	86	2070	6.13	ug/L	#	31
36) ethyl acetate	5.07	45	1604	7.13	ug/L	#	74

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139650.D
Acq On : 19 Oct 2017 10:08 pm
Operator : PrashanS
Sample : IC6336-8
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 20 11:26:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 2,2-dichloropropane	4.82	77	17438	8.26	ug/L		97
38) cis-1,2-dichloroethene	4.89	96	13028	8.32	ug/L		97
39) propionitrile	5.19	54	17712	81.56	ug/L		96
40) bromochloromethane	5.25	130	8000	8.69	ug/L		85
41) tetrahydrofuran	5.30	72	992	5.77	ug/L		90
42) chloroform	5.38	83	20217	7.97	ug/L		98
43) tert-Butyl Formate	5.41	59	2793	8.16	ug/L		75
44) isobutyl alcohol	6.04	43	10188	82.50	ug/L		90
46) methacrylonitrile	5.35	67	4352	7.70	ug/L		95
47) 1,1,1-trichloroethane	5.52	97	19310	8.48	ug/L		93
48) cyclohexane	5.46	84	19734	8.25	ug/L		97
49) 1,1-dichloropropene	5.76	110	7597	8.03	ug/L	#	81
50) tert-amyl alcohol	6.21	73	35314	38.95	ug/L		97
51) carbon tetrachloride	5.68	117	16042	8.07	ug/L		97
54) 2,2,4-trimethylpentane	6.04	57	53951	8.15	ug/L		95
55) tert-amyl methyl ether	6.21	87	7890	8.12	ug/L		93
56) n-butyl alcohol	5.72	56	29592	399.73	ug/L		97
57) benzene	6.02	78	49105	8.10	ug/L		99
58) heptane	6.33	57	11849	8.47	ug/L		91
59) isopropyl acetate	6.29	87	2248	6.67	ug/L		89
60) 1,2-dichloroethane	6.18	62	14415	7.97	ug/L		97
61) trichloroethene	6.90	95	12880	8.31	ug/L		97
62) ethyl acrylate	7.18	55	13849	8.01	ug/L		97
63) 2-nitropropane	8.02	41	2760	7.64	ug/L		94
64) 2-chloroethyl vinyl ether	8.06	63	35707	40.52	ug/L		97
65) methyl methacrylate	7.46	100	2898	7.90	ug/L		94
66) 1,2-dichloropropane	7.26	63	11904	8.08	ug/L		86
67) methylcyclohexane	7.02	83	25985	8.49	ug/L		94
68) dibromomethane	7.40	93	6675	8.60	ug/L		94
69) bromodichloromethane	7.62	83	14218	7.92	ug/L		97
70) epichlorohydrin	8.14	57	5698	37.74	ug/L		97
71) cis-1,3-dichloropropene	8.18	75	18545	8.04	ug/L		96
72) 4-methyl-2-pentanone	8.38	85	7658	11.77	ug/L	#	1
73) 3-methyl-1-butanol	8.51	70	6116	170.26	ug/L		92
76) toluene	8.47	92	31453	7.90	ug/L		99
77) trans-1,3-dichloropropene	8.83	75	15407	7.87	ug/L		96
78) ethyl methacrylate	8.89	69	13918	7.83	ug/L		94
79) 1,1,2-trichloroethane	9.00	83	8390	8.17	ug/L		97
80) 2-hexanone	9.25	58	16523	31.73	ug/L	#	88
81) tetrachloroethene	9.00	166	15735	8.63	ug/L		95
82) 1,3-dichloropropane	9.16	76	17229	7.93	ug/L		95
83) butyl acetate	9.36	56	7291	7.75	ug/L		87
84) dibromochloromethane	9.34	129	10390	7.70	ug/L		96
85) 1,2-dibromoethane	9.44	107	10327	8.03	ug/L		91
86) 3,3-Dimethyl-1-Butanol	9.46	57	9354	69.18	ug/L		94
87) n-butyl ether	9.97	57	55531	8.18	ug/L		100
88) chlorobenzene	9.88	112	35904	8.02	ug/L		97
89) 1,1,1,2-tetrachloroethane	9.98	131	11627	7.92	ug/L		98
90) ethylbenzene	9.97	91	60920	8.01	ug/L		100
91) m,p-xylene	10.08	106	48123	16.29	ug/L		96

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139650.D
Acq On : 19 Oct 2017 10:08 pm
Operator : PrashanS
Sample : IC6336-8
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 20 11:26:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) o-xylene	10.43	91	46861	7.89	ug/L		100
93) styrene	10.46	104	39131	8.23	ug/L		99
94) bromoform	10.63	173	6663	7.15	ug/L		90
95) butyl acrylate	10.45	55	20088	8.11	ug/L		91
96) isopropylbenzene	10.74	105	61723	8.16	ug/L		99
97) cis-1,4-dichloro-2-butene	10.88	88	4262	3.76	ug/L		94
100) bromobenzene	11.02	156	15425	8.33	ug/L		94
101) 1,1,2,2-tetrachloroethane	11.08	83	12702	8.24	ug/L		98
102) trans-1,4-dichloro-2-buten	11.13	53	3309	7.64	ug/L		89
103) 1,2,3-trichloropropane	11.11	110	3878	7.68	ug/L		95
104) n-propylbenzene	11.09	91	73721	8.31	ug/L		98
105) 2-chlorotoluene	11.18	126	14718	8.23	ug/L		97
106) 4-chlorotoluene	11.28	126	15279	2.84	ug/L		94
107) 1,3,5-trimethylbenzene	11.25	105	50142	8.09	ug/L		96
108) tert-butylbenzene	11.50	119	46583	8.09	ug/L		97
109) 1,2,4-trimethylbenzene	11.55	105	50383	7.90	ug/L		97
110) sec-butylbenzene	11.68	105	69037	8.14	ug/L		97
111) 1,3-dichlorobenzene	11.79	146	29885	7.99	ug/L		99
112) p-isopropyltoluene	11.80	119	59540	8.05	ug/L		98
113) 1,4-dichlorobenzene	11.87	146	29903	7.96	ug/L		99
114) 1,2-dichlorobenzene	12.18	146	27838	8.11	ug/L		98
115) n-butylbenzene	12.13	92	30169	8.16	ug/L		93
116) 1,2-dibromo-3-chloropropan	12.81	157	3099	7.72	ug/L		99
117) 1,3,5-Trichlorobenzene	12.93	180	26418	8.05	ug/L		96
118) 1,2,4-trichlorobenzene	13.43	180	22613	7.78	ug/L		96
119) hexachlorobutadiene	13.52	225	13596	8.37	ug/L		97
120) naphthalene	13.63	128	50154	7.70	ug/L		98
121) 1,2,3-trichlorobenzene	13.81	180	22042	7.99	ug/L		100
122) hexachloroethane	12.33	201	6257	6.87	ug/L	#	76
123) Benzyl chloride	12.00	91	19718	6.93	ug/L		99
124) 2-ethylhexyl acrylate	13.57	70	2625	1.42	ug/L		85
125) 2-methylnaphthalene	14.49	142	18854	3.97	ug/L		98

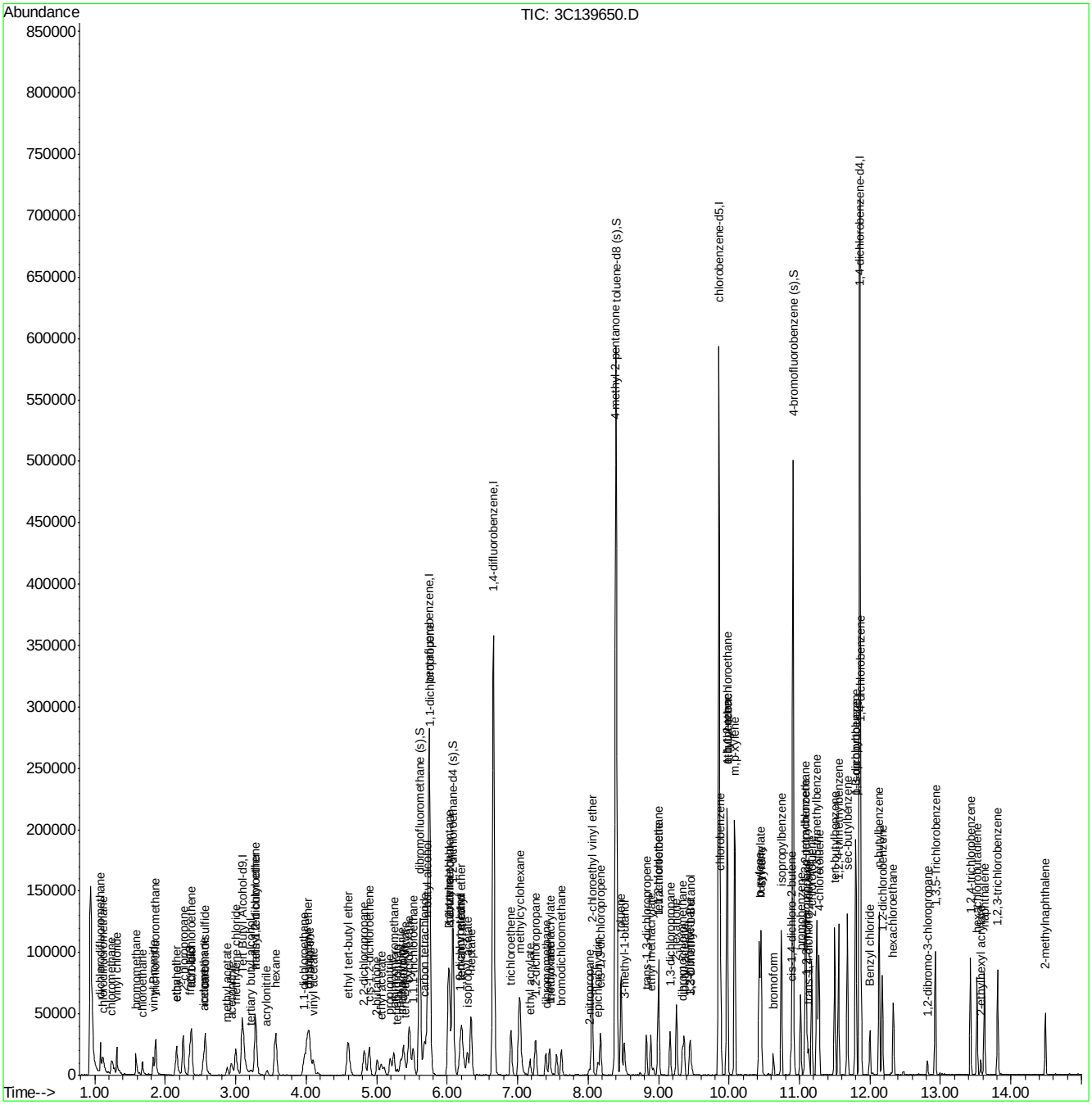
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139650.D
Acq On : 19 Oct 2017 10:08 pm
Operator : PrashanS
Sample : IC6336-8
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 20 11:26:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration



SGS 478 of 640 ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139651.D
Acq On : 19 Oct 2017 10:35 pm
Operator : PrashanS
Sample : IC6336-20
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 20 11:25:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.10	65	82458	500.00	ug/L	0.00
5) pentafluorobenzene	5.74	168	212487	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	303280	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	263805	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	139700	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	86575	50.14	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.28%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	90363	50.25	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.50%			
75) toluene-d8 (s)	8.40	98	353367	50.70	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.40%			
99) 4-bromofluorobenzene (s)	10.91	95	124869	51.34	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.68%			
Target Compounds						Qvalue
2) ethanol	2.16	45	58460	2137.20	ug/L	96
3) tertiary butyl alcohol	3.21	59	19687	107.18	ug/L	97
4) 1,4-dioxane	7.46	88	8638	537.21	ug/L	98
6) chlorodifluoromethane	1.11	51	38252	20.06	ug/L	97
7) dichlorodifluoromethane	1.08	85	43159	20.95	ug/L	98
8) chloromethane	1.24	50	42212	20.29	ug/L	97
10) vinyl chloride	1.31	62	40632	20.89	ug/L	98
11) bromomethane	1.59	94	19245	20.72	ug/L	95
12) chloroethane	1.67	64	21446	22.07	ug/L	97
13) vinyl Bromide	1.83	106	24788	21.39	ug/L	88
14) trichlorofluoromethane	1.86	101	48629	20.60	ug/L	99
15) ethyl ether	2.16	74	16831	20.42	ug/L	87
16) 2-chloropropane	2.26	63	11358	20.15	ug/L	99
17) acrolein	2.36	56	5340	21.45	ug/L	96
18) freon 113	2.35	151	23603	20.87	ug/L	92
19) 1,1-dichloroethene	2.38	96	25709	20.42	ug/L	89
20) acetone	2.54	58	9055	82.31	ug/L	99
21) acetonitrile	2.94	41	40896	212.15	ug/L	96
22) iodomethane	2.55	142	29097	18.56	ug/L	98
23) carbon disulfide	2.57	76	97062	19.09	ug/L	98
24) methylene chloride	3.00	84	28735	21.00	ug/L	97
25) methyl acetate	2.88	43	25521	21.19	ug/L	94
26) methyl tert butyl ether	3.28	73	79646	20.69	ug/L	98
27) trans-1,2-dichloroethene	3.29	96	30197	21.43	ug/L	96
28) hexane	3.56	57	50956	20.28	ug/L	97
29) di-isopropyl ether	4.01	45	103064	21.25	ug/L	99
30) ethyl tert-butyl ether	4.59	59	91837	21.30	ug/L	97
31) 2-butanone	5.00	72	12477	86.73	ug/L	96
32) 1,1-dichloroethane	3.97	63	52786	20.56	ug/L	99
33) chloroprene	4.05	53	49650	20.33	ug/L	97
34) acrylonitrile	3.44	53	9741	21.81	ug/L	94
35) vinyl acetate	4.11	86	7853	23.15	ug/L #	72
36) ethyl acetate	5.06	45	4728	20.92	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139651.D
Acq On : 19 Oct 2017 10:35 pm
Operator : PrashanS
Sample : IC6336-20
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 20 11:25:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 2,2-dichloropropane	4.82	77	44351	20.91	ug/L		94
38) cis-1,2-dichloroethene	4.90	96	32361	20.57	ug/L		94
39) propionitrile	5.19	54	46952	215.14	ug/L		98
40) bromochloromethane	5.25	130	19512	21.09	ug/L		92
41) tetrahydrofuran	5.28	72	3881	22.48	ug/L	#	74
42) chloroform	5.38	83	51438	20.18	ug/L		97
43) tert-Butyl Formate	5.41	59	8111	18.67	ug/L		88
44) isobutyl alcohol	6.03	43	24529	197.67	ug/L		98
46) methacrylonitrile	5.34	67	12049	21.20	ug/L		97
47) 1,1,1-trichloroethane	5.51	97	47607	20.81	ug/L		98
48) cyclohexane	5.46	84	50484	20.99	ug/L		99
49) 1,1-dichloropropene	5.75	110	17183	20.41	ug/L	#	85
50) tert-amyl alcohol	6.20	73	96194	105.58	ug/L		98
51) carbon tetrachloride	5.68	117	40172	20.12	ug/L		94
54) 2,2,4-trimethylpentane	6.03	57	135685	20.65	ug/L		98
55) tert-amyl methyl ether	6.21	87	20191	20.95	ug/L		97
56) n-butyl alcohol	5.71	56	67611	920.54	ug/L		96
57) benzene	6.02	78	122216	20.33	ug/L		99
58) heptane	6.34	57	29100	20.96	ug/L		94
59) isopropyl acetate	6.29	87	6612	19.49	ug/L		90
60) 1,2-dichloroethane	6.18	62	36860	20.53	ug/L		98
61) trichloroethene	6.90	95	31350	20.38	ug/L		81
62) ethyl acrylate	7.18	55	36438	21.24	ug/L		96
63) 2-nitropropane	8.01	41	8120	22.66	ug/L		91
64) 2-chloroethyl vinyl ether	8.06	63	92616	105.93	ug/L		96
65) methyl methacrylate	7.46	100	8314	22.85	ug/L		92
66) 1,2-dichloropropane	7.25	63	30416	20.80	ug/L		94
67) methylcyclohexane	7.02	83	64706	21.30	ug/L		99
68) dibromomethane	7.41	93	16840	21.88	ug/L		95
69) bromodichloromethane	7.62	83	36744	20.64	ug/L		93
70) epichlorohydrin	8.14	57	16343	109.11	ug/L		99
71) cis-1,3-dichloropropene	8.18	75	49578	21.67	ug/L		96
72) 4-methyl-2-pentanone	8.38	85	20882	32.36	ug/L	#	75
73) 3-methyl-1-butanol	8.51	70	18941	408.82	ug/L		90
76) toluene	8.47	92	79051	20.08	ug/L		94
77) trans-1,3-dichloropropene	8.83	75	41165	21.26	ug/L		98
78) ethyl methacrylate	8.89	69	37017	21.05	ug/L		98
79) 1,1,2-trichloroethane	9.00	83	21588	21.24	ug/L		94
80) 2-hexanone	9.25	58	45003	87.36	ug/L		94
81) tetrachloroethene	9.00	166	39019	21.65	ug/L		97
82) 1,3-dichloropropane	9.16	76	44838	20.85	ug/L		95
83) butyl acetate	9.36	56	19308	20.76	ug/L		95
84) dibromochloromethane	9.34	129	27792	20.82	ug/L		95
85) 1,2-dibromoethane	9.44	107	26536	20.87	ug/L		97
86) 3,3-Dimethyl-1-Butanol	9.46	57	28280	211.46	ug/L		95
87) n-butyl ether	9.97	57	140800	20.97	ug/L		98
88) chlorobenzene	9.89	112	89222	20.14	ug/L		97
89) 1,1,1,2-tetrachloroethane	9.98	131	30759	21.19	ug/L		99
90) ethylbenzene	9.97	91	150232	19.98	ug/L		99
91) m,p-xylene	10.08	106	119680	40.97	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139651.D
Acq On : 19 Oct 2017 10:35 pm
Operator : PrashanS
Sample : IC6336-20
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 20 11:25:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

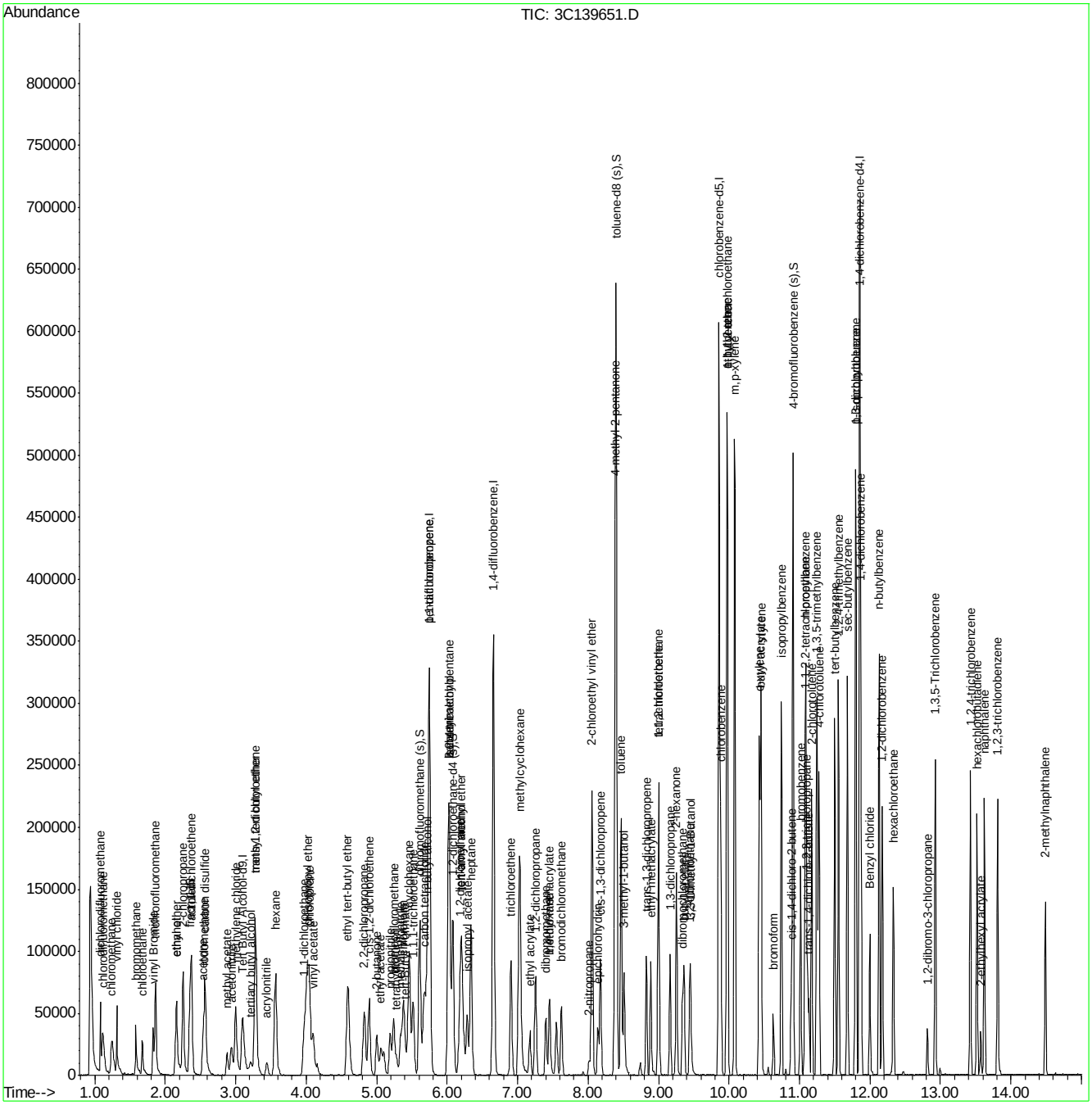
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) o-xylene	10.43	91	117201	19.94	ug/L		99
93) styrene	10.46	104	97951	20.82	ug/L		98
94) bromoform	10.63	173	18681	20.26	ug/L		98
95) butyl acrylate	10.45	55	52306	21.36	ug/L		96
96) isopropylbenzene	10.74	105	152736	20.42	ug/L		100
97) cis-1,4-dichloro-2-butene	10.88	88	16652	14.87	ug/L		92
100) bromobenzene	11.02	156	39228	21.71	ug/L		90
101) 1,1,2,2-tetrachloroethane	11.08	83	32975	21.90	ug/L		95
102) trans-1,4-dichloro-2-buten	11.14	53	9446	22.33	ug/L		94
103) 1,2,3-trichloropropane	11.11	110	10652	21.62	ug/L		92
104) n-propylbenzene	11.09	91	178142	20.56	ug/L		99
105) 2-chlorotoluene	11.18	126	35807	20.51	ug/L		94
106) 4-chlorotoluene	11.28	126	39454	7.51	ug/L		97
107) 1,3,5-trimethylbenzene	11.25	105	126317	20.87	ug/L		100
108) tert-butylbenzene	11.50	119	113274	20.16	ug/L		98
109) 1,2,4-trimethylbenzene	11.55	105	128006	20.57	ug/L		100
110) sec-butylbenzene	11.68	105	170036	20.55	ug/L		99
111) 1,3-dichlorobenzene	11.79	146	74588	20.42	ug/L		93
112) p-isopropyltoluene	11.80	119	147897	20.47	ug/L		99
113) 1,4-dichlorobenzene	11.87	146	73165	19.96	ug/L		98
114) 1,2-dichlorobenzene	12.18	146	69371	20.69	ug/L		99
115) n-butylbenzene	12.13	92	74243	20.57	ug/L		91
116) 1,2-dibromo-3-chloropropan	12.81	157	8300	21.19	ug/L		97
117) 1,3,5-Trichlorobenzene	12.93	180	65920	20.56	ug/L		98
118) 1,2,4-trichlorobenzene	13.43	180	60009	21.16	ug/L		99
119) hexachlorobutadiene	13.52	225	34483	21.74	ug/L		97
120) naphthalene	13.63	128	134383	21.13	ug/L		99
121) 1,2,3-trichlorobenzene	13.81	180	57426	21.33	ug/L		99
122) hexachloroethane	12.33	201	17708	19.92	ug/L	#	87
123) Benzyl chloride	12.00	91	59867	21.56	ug/L		97
124) 2-ethylhexyl acrylate	13.57	70	7210	4.00	ug/L		95
125) 2-methylnaphthalene	14.49	142	50140	10.80	ug/L		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139651.D
Acq On : 19 Oct 2017 10:35 pm
Operator : PrashanS
Sample : IC6336-20
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 20 11:25:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139652.D
Acq On : 19 Oct 2017 11:02 pm
Operator : PrashanS
Sample : ICC6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 20 11:22:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.10	65	81486	500.00	ug/L	0.00
5) pentafluorobenzene	5.74	168	208943	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	302854	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	266012	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	143496	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	86745	51.09	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.18%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	89421	49.79	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.58%			
75) toluene-d8 (s)	8.40	98	352527	50.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.32%			
99) 4-bromofluorobenzene (s)	10.91	95	123616	49.48	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 98.96%			
Target Compounds						Qvalue
2) ethanol	2.16	45	147581	5459.67	ug/L	100
3) tertiary butyl alcohol	3.21	59	47536	261.89	ug/L	100
4) 1,4-dioxane	7.45	88	22040	1387.06	ug/L	100
6) chlorodifluoromethane	1.11	51	91686	48.90	ug/L	100
7) dichlorodifluoromethane	1.08	85	106521	52.60	ug/L	100
8) chloromethane	1.25	50	102973	50.33	ug/L	100
10) vinyl chloride	1.31	62	101792	53.21	ug/L	100
11) bromomethane	1.59	94	45350	49.64	ug/L	100
12) chloroethane	1.67	64	54595	57.14	ug/L	100
13) vinyl Bromide	1.83	106	62545	54.88	ug/L	100
14) trichlorofluoromethane	1.87	101	120028	51.70	ug/L	100
15) ethyl ether	2.16	74	41457	51.15	ug/L	100
16) 2-chloropropane	2.25	63	29731	53.63	ug/L	100
17) acrolein	2.36	56	13802	56.39	ug/L	100
18) freon 113	2.35	151	58368	52.49	ug/L	100
19) 1,1-dichloroethene	2.38	96	64672	52.25	ug/L	100
20) acetone	2.53	58	22815	210.91	ug/L	100
21) acetonitrile	2.94	41	101247	534.14	ug/L	100
22) iodomethane	2.55	142	81985	49.10	ug/L	100
23) carbon disulfide	2.57	76	230951	46.19	ug/L	100
24) methylene chloride	3.00	84	69743	51.83	ug/L	100
25) methyl acetate	2.88	43	60371	50.99	ug/L	100
26) methyl tert butyl ether	3.28	73	196282	51.86	ug/L	100
27) trans-1,2-dichloroethene	3.29	96	72989	52.68	ug/L	100
28) hexane	3.57	57	124223	50.29	ug/L	100
29) di-isopropyl ether	4.02	45	250252	52.46	ug/L	100
30) ethyl tert-butyl ether	4.59	59	224533	52.96	ug/L	100
31) 2-butanone	5.00	72	29851	211.01	ug/L	100
32) 1,1-dichloroethane	3.97	63	129726	51.37	ug/L	100
33) chloroprene	4.05	53	121770	50.71	ug/L	100
34) acrylonitrile	3.44	53	23627	53.80	ug/L	100
35) vinyl acetate	4.10	86	17715	53.11	ug/L	100
36) ethyl acetate	5.06	45	11536	51.92	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139652.D
Acq On : 19 Oct 2017 11:02 pm
Operator : PrashanS
Sample : ICC6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 20 11:22:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 2,2-dichloropropane	4.83	77	110197	52.84 ug/L	100
38) cis-1,2-dichloroethene	4.90	96	80640	52.12 ug/L	100
39) propionitrile	5.19	54	113928	530.89 ug/L	100
40) bromochloromethane	5.25	130	47138	51.81 ug/L	100
41) tetrahydrofuran	5.27	72	8930	52.59 ug/L	100
42) chloroform	5.38	83	125112	49.93 ug/L	100
43) tert-Butyl Formate	5.41	59	21371	45.68 ug/L	100
44) isobutyl alcohol	6.04	43	60759	497.95 ug/L	100
46) methacrylonitrile	5.35	67	29016	51.93 ug/L	100
47) 1,1,1-trichloroethane	5.52	97	115187	51.21 ug/L	100
48) cyclohexane	5.46	84	123501	52.23 ug/L	100
49) 1,1-dichloropropene	5.76	110	40232	51.16 ug/L	100
50) tert-amyl alcohol	6.20	73	229982	256.71 ug/L	100
51) carbon tetrachloride	5.68	117	104108	53.01 ug/L	100
54) 2,2,4-trimethylpentane	6.03	57	323356	49.28 ug/L	100
55) tert-amyl methyl ether	6.20	87	51759	53.78 ug/L	100
56) n-butyl alcohol	5.72	56	159961	2180.97 ug/L	100
57) benzene	6.02	78	293671	48.91 ug/L	100
58) heptane	6.34	57	70031	50.50 ug/L	100
59) isopropyl acetate	6.28	87	16858	49.53 ug/L	100
60) 1,2-dichloroethane	6.18	62	88901	49.59 ug/L	100
61) trichloroethene	6.90	95	76384	49.74 ug/L	100
62) ethyl acrylate	7.18	55	90718	52.95 ug/L	100
63) 2-nitropropane	8.01	41	19183	53.60 ug/L	100
64) 2-chloroethyl vinyl ether	8.06	63	223837	256.38 ug/L	100
65) methyl methacrylate	7.45	100	20438	56.25 ug/L	100
66) 1,2-dichloropropane	7.25	63	75780	51.90 ug/L	100
67) methylcyclohexane	7.02	83	153777	50.68 ug/L	100
68) dibromomethane	7.40	93	41139	53.52 ug/L	100
69) bromodichloromethane	7.62	83	91209	51.31 ug/L	100
70) epichlorohydrin	8.14	57	40864	273.21 ug/L	100
71) cis-1,3-dichloropropene	8.18	75	122967	53.83 ug/L	100
72) 4-methyl-2-pentanone	8.38	85	49007	76.05 ug/L	100
73) 3-methyl-1-butanol	8.51	70	48740	962.31 ug/L	100
76) toluene	8.47	92	190223	47.93 ug/L	100
77) trans-1,3-dichloropropene	8.83	75	104048	53.30 ug/L	100
78) ethyl methacrylate	8.89	69	92039	51.89 ug/L	100
79) 1,1,2-trichloroethane	9.00	83	51429	50.19 ug/L	100
80) 2-hexanone	9.25	58	109104	210.04 ug/L	100
81) tetrachloroethene	9.00	166	92543	50.92 ug/L	100
82) 1,3-dichloropropane	9.16	76	108294	49.95 ug/L	100
83) butyl acetate	9.36	56	48091	51.27 ug/L	100
84) dibromochloromethane	9.34	129	71452	53.09 ug/L	100
85) 1,2-dibromoethane	9.44	107	65567	51.14 ug/L	100
86) 3,3-Dimethyl-1-Butanol	9.46	57	74606	553.23 ug/L	100
87) n-butyl ether	9.97	57	342610	50.61 ug/L	100
88) chlorobenzene	9.89	112	215594	48.26 ug/L	100
89) 1,1,1,2-tetrachloroethane	9.98	131	75601	51.64 ug/L	100
90) ethylbenzene	9.97	91	358730	47.31 ug/L	100
91) m,p-xylene	10.08	106	284726	96.66 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139652.D
Acq On : 19 Oct 2017 11:02 pm
Operator : PrashanS
Sample : ICC6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 20 11:22:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

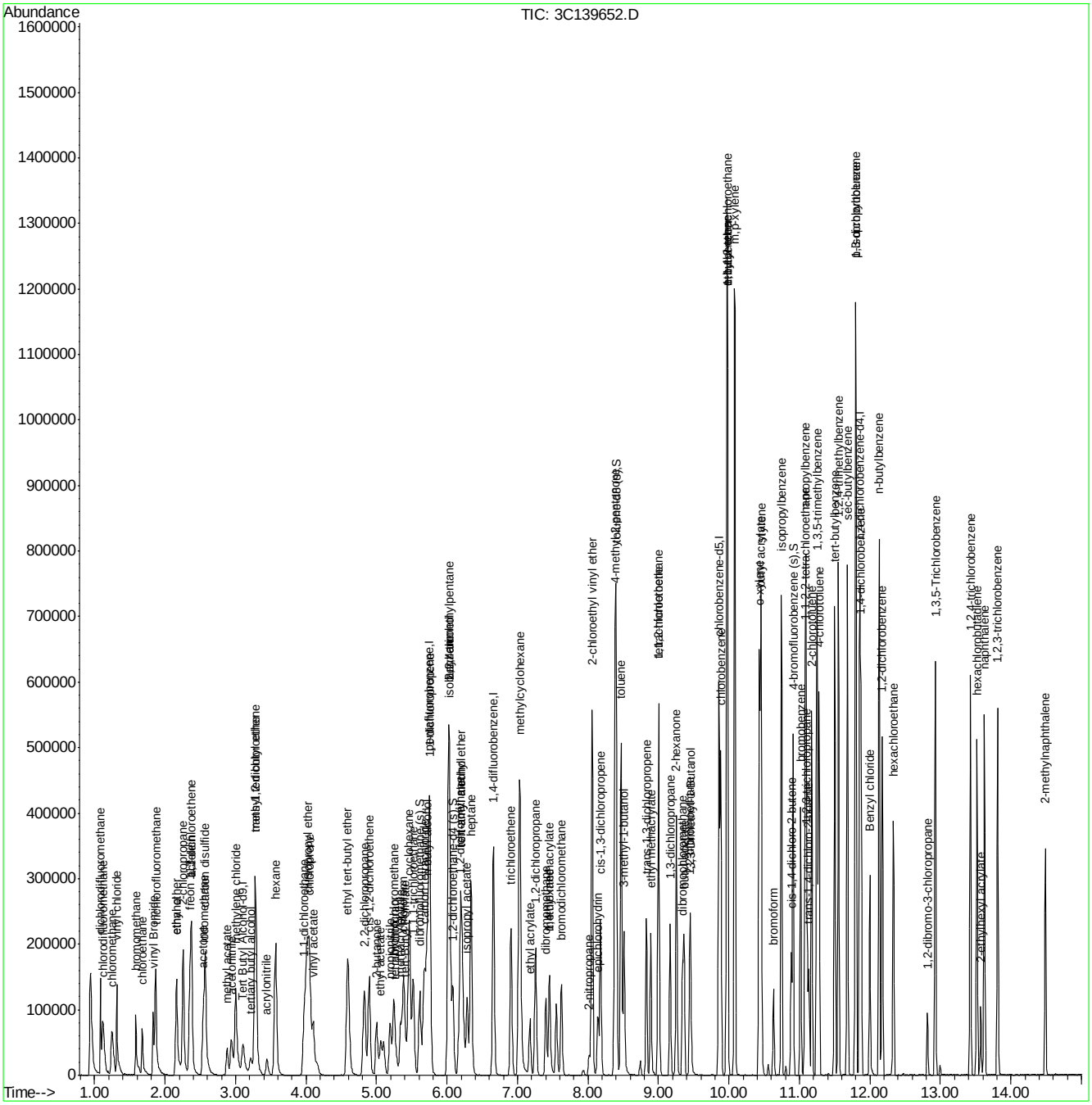
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	10.43	91	280270	47.29	ug/L	100
93) styrene	10.46	104	235875	49.72	ug/L	100
94) bromoform	10.63	173	49437	53.18	ug/L	100
95) butyl acrylate	10.45	55	133109	53.90	ug/L	100
96) isopropylbenzene	10.74	105	370204	49.08	ug/L	100
97) cis-1,4-dichloro-2-butene	10.88	88	36298	32.14	ug/L	100
100) bromobenzene	11.02	156	92014	49.57	ug/L	100
101) 1,1,2,2-tetrachloroethane	11.08	83	80390	51.99	ug/L	100
102) trans-1,4-dichloro-2-buten	11.13	53	23362	53.77	ug/L	100
103) 1,2,3-trichloropropane	11.11	110	25524	50.43	ug/L	100
104) n-propylbenzene	11.09	91	427900	48.07	ug/L	100
105) 2-chlorotoluene	11.18	126	89350	49.82	ug/L	100
106) 4-chlorotoluene	11.28	126	91284	16.93	ug/L	100
107) 1,3,5-trimethylbenzene	11.25	105	304656	48.99	ug/L	100
108) tert-butylbenzene	11.50	119	275512	47.74	ug/L	100
109) 1,2,4-trimethylbenzene	11.55	105	310109	48.51	ug/L	100
110) sec-butylbenzene	11.68	105	411926	48.46	ug/L	100
111) 1,3-dichlorobenzene	11.79	146	179956	47.96	ug/L	100
112) p-isopropyltoluene	11.80	119	359656	48.47	ug/L	100
113) 1,4-dichlorobenzene	11.87	146	180156	47.84	ug/L	100
114) 1,2-dichlorobenzene	12.18	146	168332	48.88	ug/L	100
115) n-butylbenzene	12.13	92	185486	50.03	ug/L	100
116) 1,2-dibromo-3-chloropropan	12.81	157	21691	53.91	ug/L	100
117) 1,3,5-Trichlorobenzene	12.93	180	162596	49.38	ug/L	100
118) 1,2,4-trichlorobenzene	13.43	180	147968	50.79	ug/L	100
119) hexachlorobutadiene	13.52	225	87015	53.41	ug/L	100
120) naphthalene	13.63	128	330144	50.53	ug/L	100
121) 1,2,3-trichlorobenzene	13.81	180	140045	50.64	ug/L	100
122) hexachloroethane	12.33	201	49907	54.66	ug/L	100
123) Benzyl chloride	12.00	91	157693	55.29	ug/L	100
124) 2-ethylhexyl acrylate	13.57	70	20028	10.83	ug/L	100
125) 2-methylnaphthalene	14.49	142	123516	25.91	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139652.D
Acq On : 19 Oct 2017 11:02 pm
Operator : PrashanS
Sample : ICC6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 20 11:22:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139653.D
Acq On : 19 Oct 2017 11:29 pm
Operator : PrashanS
Sample : IC6336-100
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 20 11:25:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.11	65	82101	500.00	ug/L	0.00
5) pentafluorobenzene	5.75	168	215578	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	310489	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	269556	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	151906	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	88502	50.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.06%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	93343	50.70	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 101.40%			
75) toluene-d8 (s)	8.40	98	357491	50.20	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.40%			
99) 4-bromofluorobenzene (s)	10.91	95	127761	48.31	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 96.62%			
Target Compounds						Qvalue
2) ethanol	2.16	45	299398	10993.09	ug/L	97
3) tertiary butyl alcohol	3.21	59	97111	531.01	ug/L	97
4) 1,4-dioxane	7.45	88	45142	2819.67	ug/L	97
6) chlorodifluoromethane	1.11	51	181376	93.76	ug/L	97
7) dichlorodifluoromethane	1.08	85	204837	98.03	ug/L	99
8) chloromethane	1.25	50	204582	96.92	ug/L	98
10) vinyl chloride	1.31	62	196395	99.51	ug/L	98
11) bromomethane	1.58	94	83191	88.26	ug/L	98
12) chloroethane	1.67	64	106409	107.94	ug/L	99
13) vinyl Bromide	1.83	106	122980	104.59	ug/L	94
14) trichlorofluoromethane	1.86	101	230636	96.29	ug/L	99
15) ethyl ether	2.16	74	86384	103.30	ug/L	95
16) 2-chloropropane	2.25	63	55992	97.90	ug/L	94
17) acrolein	2.36	56	27001	106.91	ug/L	99
18) freon 113	2.35	151	115985	101.10	ug/L	96
19) 1,1-dichloroethene	2.37	96	128605	100.70	ug/L	98
20) acetone	2.53	58	50340	451.03	ug/L	90
21) acetonitrile	2.93	41	196182	1003.12	ug/L	97
22) iodomethane	2.54	142	173889	98.62	ug/L	98
23) carbon disulfide	2.56	76	458523	88.88	ug/L	98
24) methylene chloride	3.00	84	141901	102.22	ug/L	99
25) methyl acetate	2.88	43	117692	96.34	ug/L	98
26) methyl tert butyl ether	3.27	73	399325	102.26	ug/L	98
27) trans-1,2-dichloroethene	3.28	96	150405	105.22	ug/L	97
28) hexane	3.56	57	243338	95.47	ug/L	96
29) di-isopropyl ether	4.01	45	508729	103.37	ug/L	96
30) ethyl tert-butyl ether	4.59	59	458718	104.87	ug/L	98
31) 2-butanone	5.00	72	64875	444.48	ug/L	94
32) 1,1-dichloroethane	3.97	63	264609	101.56	ug/L	99
33) chloroprene	4.05	53	241994	97.67	ug/L	99
34) acrylonitrile	3.44	53	49040	108.23	ug/L	95
35) vinyl acetate	4.10	86	34318	99.72	ug/L	97
36) ethyl acetate	5.05	45	23088	100.71	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139653.D
Acq On : 19 Oct 2017 11:29 pm
Operator : PrashanS
Sample : IC6336-100
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 20 11:25:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 2,2-dichloropropane	4.82	77	223678	103.95	ug/L		98
38) cis-1,2-dichloroethene	4.90	96	164924	103.32	ug/L		97
39) propionitrile	5.19	54	229497	1036.52	ug/L		99
40) bromochloromethane	5.25	130	95649	101.90	ug/L		93
41) tetrahydrofuran	5.26	72	18334	104.66	ug/L		90
42) chloroform	5.38	83	253687	98.12	ug/L		97
43) tert-Butyl Formate	5.41	59	48200	96.78	ug/L		87
44) isobutyl alcohol	6.03	43	121707	966.74	ug/L		97
46) methacrylonitrile	5.34	67	59150	102.59	ug/L		93
47) 1,1,1-trichloroethane	5.52	97	233976	100.82	ug/L		99
48) cyclohexane	5.46	84	238113	97.60	ug/L		98
49) 1,1-dichloropropene	5.76	110	79195	99.30	ug/L		99
50) tert-amyl alcohol	6.20	73	472159	510.81	ug/L		99
51) carbon tetrachloride	5.68	117	206936	102.13	ug/L		99
54) 2,2,4-trimethylpentane	6.03	57	643530	95.67	ug/L		98
55) tert-amyl methyl ether	6.20	87	103766	105.16	ug/L		99
56) n-butyl alcohol	5.72	56	318164	4231.30	ug/L		99
57) benzene	6.02	78	589647	95.79	ug/L		99
58) heptane	6.34	57	140865	99.09	ug/L		96
59) isopropyl acetate	6.28	87	35276	100.94	ug/L	#	80
60) 1,2-dichloroethane	6.19	62	181568	98.80	ug/L		98
61) trichloroethene	6.90	95	151611	96.29	ug/L		92
62) ethyl acrylate	7.18	55	181013	103.05	ug/L		97
63) 2-nitropropane	8.02	41	37729	102.84	ug/L		95
64) 2-chloroethyl vinyl ether	8.06	63	447044	499.45	ug/L		99
65) methyl methacrylate	7.45	100	41758	112.10	ug/L		97
66) 1,2-dichloropropane	7.25	63	149509	99.88	ug/L		99
67) methylcyclohexane	7.02	83	302182	97.15	ug/L		99
68) dibromomethane	7.40	93	82656	104.88	ug/L		99
69) bromodichloromethane	7.62	83	187597	102.93	ug/L		98
70) epichlorohydrin	8.14	57	80931	527.79	ug/L		100
71) cis-1,3-dichloropropene	8.18	75	252639	107.88	ug/L		97
72) 4-methyl-2-pentanone	8.38	85	98807	149.55	ug/L	#	86
73) 3-methyl-1-butanol	8.51	70	101717	1899.02	ug/L		93
76) toluene	8.47	92	378549	94.12	ug/L		98
77) trans-1,3-dichloropropene	8.83	75	217231	109.82	ug/L		96
78) ethyl methacrylate	8.89	69	188462	104.86	ug/L		98
79) 1,1,2-trichloroethane	9.00	83	101414	97.67	ug/L		98
80) 2-hexanone	9.25	58	222631	422.96	ug/L		98
81) tetrachloroethene	9.00	166	181955	98.79	ug/L		98
82) 1,3-dichloropropane	9.16	76	216360	98.48	ug/L		99
83) butyl acetate	9.36	56	97390	102.46	ug/L		98
84) dibromochloromethane	9.34	129	149597	109.70	ug/L		97
85) 1,2-dibromoethane	9.44	107	131438	101.17	ug/L		98
86) 3,3-Dimethyl-1-Butanol	9.46	57	160370	1173.58	ug/L		99
87) n-butyl ether	9.97	57	686392	100.07	ug/L		98
88) chlorobenzene	9.89	112	433074	95.66	ug/L		99
89) 1,1,1,2-tetrachloroethane	9.98	131	153720	103.62	ug/L		99
90) ethylbenzene	9.97	91	715441	93.12	ug/L		100
91) m,p-xylene	10.08	106	566236	189.70	ug/L		100

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139653.D
Acq On : 19 Oct 2017 11:29 pm
Operator : PrashanS
Sample : IC6336-100
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 20 11:25:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	10.43	91	561100	93.43	ug/L	98
93) styrene	10.46	104	475435	98.89	ug/L	99
94) bromoform	10.63	173	105524	112.02	ug/L	99
95) butyl acrylate	10.45	55	274858	109.84	ug/L	100
96) isopropylbenzene	10.74	105	732405	95.83	ug/L	99
97) cis-1,4-dichloro-2-butene	10.88	88	73842	64.53	ug/L	93
100) bromobenzene	11.02	156	188099	95.73	ug/L	92
101) 1,1,2,2-tetrachloroethane	11.08	83	166755	101.87	ug/L	98
102) trans-1,4-dichloro-2-buten	11.13	53	50511	109.82	ug/L	100
103) 1,2,3-trichloropropane	11.11	110	52671	98.30	ug/L	91
104) n-propylbenzene	11.09	91	856942	90.94	ug/L	99
105) 2-chlorotoluene	11.18	126	179124	94.35	ug/L	98
106) 4-chlorotoluene	11.28	126	189924	33.27	ug/L	99
107) 1,3,5-trimethylbenzene	11.25	105	624233	94.83	ug/L	99
108) tert-butylbenzene	11.50	119	565966	92.63	ug/L	99
109) 1,2,4-trimethylbenzene	11.55	105	645539	95.40	ug/L	99
110) sec-butylbenzene	11.68	105	847306	94.16	ug/L	99
111) 1,3-dichlorobenzene	11.79	146	373753	94.09	ug/L	97
112) p-isopropyltoluene	11.81	119	742073	94.47	ug/L	98
113) 1,4-dichlorobenzene	11.87	146	375378	94.17	ug/L	99
114) 1,2-dichlorobenzene	12.18	146	356545	97.81	ug/L	99
115) n-butylbenzene	12.13	92	377014	96.05	ug/L	94
116) 1,2-dibromo-3-chloropropan	12.81	157	47917	112.50	ug/L	96
117) 1,3,5-Trichlorobenzene	12.93	180	338052	96.97	ug/L	98
118) 1,2,4-trichlorobenzene	13.43	180	305099	98.92	ug/L	97
119) hexachlorobutadiene	13.52	225	175512	101.76	ug/L	100
120) naphthalene	13.63	128	673574	97.38	ug/L	99
121) 1,2,3-trichlorobenzene	13.81	180	289440	98.87	ug/L	99
122) hexachloroethane	12.33	201	112795	116.69	ug/L	97
123) Benzyl chloride	12.00	91	347202	114.99	ug/L	99
124) 2-ethylhexyl acrylate	13.57	70	43384	22.16	ug/L	97
125) 2-methylnaphthalene	14.49	142	246187	48.78	ug/L	99

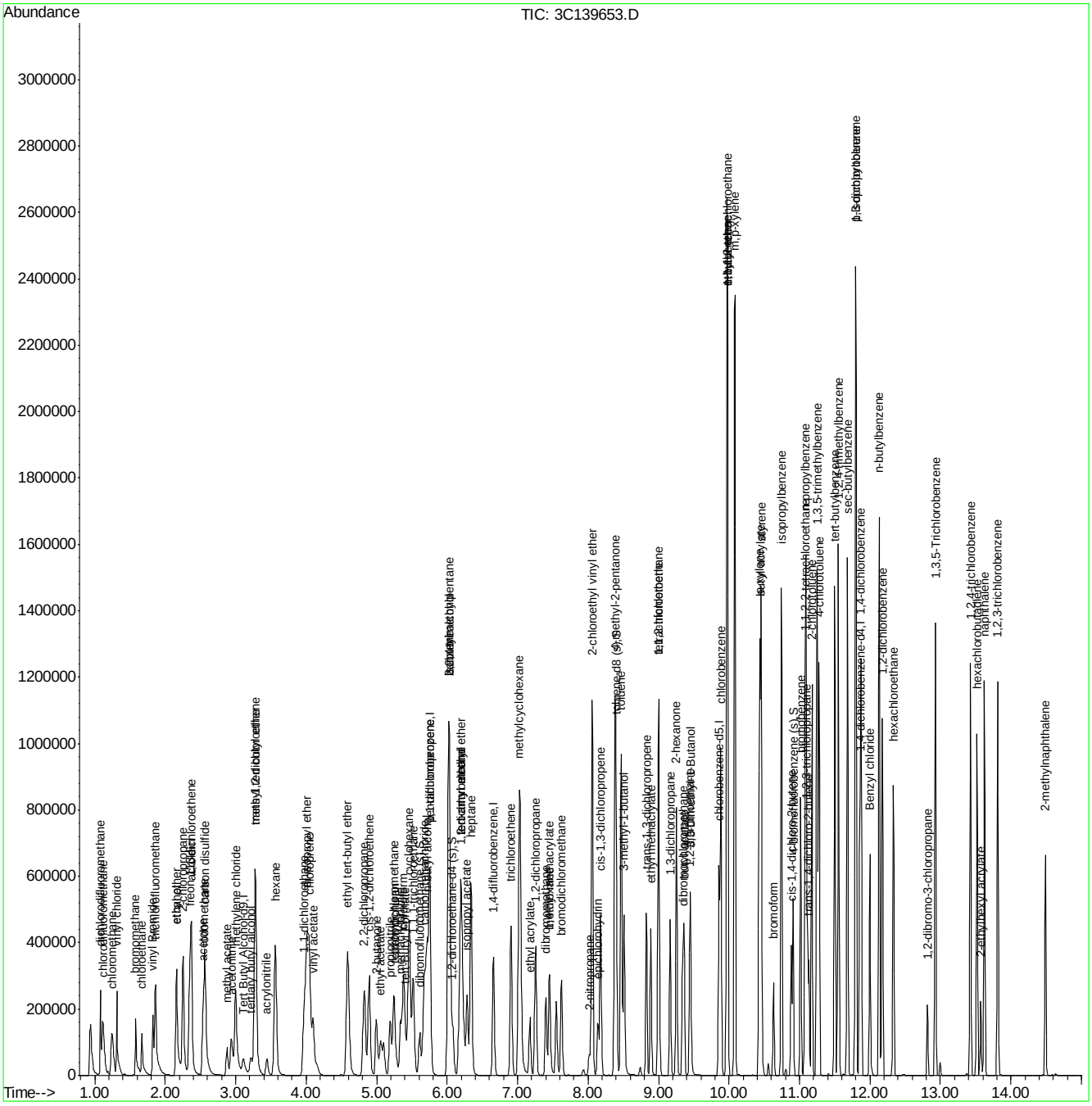
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139653.D
Acq On : 19 Oct 2017 11:29 pm
Operator : PrashanS
Sample : IC6336-100
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 20 11:25:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139654.D
Acq On : 19 Oct 2017 11:57 pm
Operator : PrashanS
Sample : IC6336-200
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 20 11:25:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.13	65	85986	500.00	ug/L	0.03
5) pentafluorobenzene	5.75	168	219040	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	313400	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	277662	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	161101	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	89814	50.46	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.92%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	96252	51.79	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 103.58%			
75) toluene-d8 (s)	8.40	98	359912	49.06	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.12%			
99) 4-bromofluorobenzene (s)	10.91	95	132566	47.27	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 94.54%			
Target Compounds						Qvalue
2) ethanol	2.17	45	616754	21622.38	ug/L	90
3) tertiary butyl alcohol	3.23	59	206760	1079.50	ug/L	93
4) 1,4-dioxane	7.45	88	94009	5606.71	ug/L	98
6) chlorodifluoromethane	1.11	51	370691	188.60	ug/L	97
7) dichlorodifluoromethane	1.08	85	421134	198.36	ug/L	99
8) chloromethane	1.25	50	424246	197.81	ug/L	99
10) vinyl chloride	1.31	62	405660	202.29	ug/L	97
11) bromomethane	1.58	94	168204	175.64	ug/L	98
12) chloroethane	1.66	64	191057	190.74	ug/L	95
13) vinyl Bromide	1.82	106	245325	205.33	ug/L	98
14) trichlorofluoromethane	1.86	101	479263	196.92	ug/L	100
15) ethyl ether	2.17	74	176114	207.27	ug/L #	87
16) 2-chloropropane	2.25	63	99115	170.56	ug/L #	87
17) acrolein	2.36	56	54668	213.04	ug/L	93
18) freon 113	2.35	151	239064	205.09	ug/L	96
19) 1,1-dichloroethene	2.37	96	271321	209.08	ug/L	99
20) acetone	2.54	58	113574	1001.50	ug/L	98
21) acetonitrile	2.95	41	405538	2040.83	ug/L	98
22) iodomethane	2.55	142	364356	201.05	ug/L	94
23) carbon disulfide	2.56	76	943392	179.99	ug/L	98
24) methylene chloride	3.00	84	292093	207.08	ug/L	97
25) methyl acetate	2.88	43	239468	192.92	ug/L	99
26) methyl tert butyl ether	3.28	73	810722	204.33	ug/L	96
27) trans-1,2-dichloroethene	3.29	96	304273	209.50	ug/L	98
28) hexane	3.56	57	503805	194.54	ug/L	98
29) di-isopropyl ether	4.02	45	1038350	207.65	ug/L	97
30) ethyl tert-butyl ether	4.59	59	934544	210.27	ug/L	98
31) 2-butanone	5.00	72	131364	885.79	ug/L	100
32) 1,1-dichloroethane	3.97	63	537847	203.18	ug/L	99
33) chloroprene	4.05	53	501977	199.40	ug/L	98
34) acrylonitrile	3.45	53	100481	218.26	ug/L	98
35) vinyl acetate	4.10	86	71102	203.33	ug/L	97
36) ethyl acetate	5.06	45	47355	203.31	ug/L	99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139654.D
Acq On : 19 Oct 2017 11:57 pm
Operator : PrashanS
Sample : IC6336-200
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 20 11:25:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 2,2-dichloropropane	4.82	77	463883	212.17	ug/L		98
38) cis-1,2-dichloroethene	4.90	96	331111	204.15	ug/L		97
39) propionitrile	5.20	54	467074	2076.19	ug/L		99
40) bromochloromethane	5.25	130	194116	203.54	ug/L		97
41) tetrahydrofuran	5.26	72	37598	211.23	ug/L		100
42) chloroform	5.38	83	510025	194.14	ug/L		98
43) tert-Butyl Formate	5.41	59	106908	208.21	ug/L		92
44) isobutyl alcohol	6.03	43	247683	1936.30	ug/L		97
46) methacrylonitrile	5.35	67	117840	201.16	ug/L		92
47) 1,1,1-trichloroethane	5.52	97	481719	204.29	ug/L		99
48) cyclohexane	5.46	84	493690	199.15	ug/L		97
49) 1,1-dichloropropene	5.76	110	159967	199.26	ug/L		99
50) tert-amyl alcohol	6.20	73	966547	1029.14	ug/L		99
51) carbon tetrachloride	5.68	117	450665	218.91	ug/L		98
54) 2,2,4-trimethylpentane	6.04	57	1325638	195.25	ug/L		98
55) tert-amyl methyl ether	6.20	87	213447	214.30	ug/L		95
56) n-butyl alcohol	5.72	56	645240	8501.42	ug/L		99
57) benzene	6.03	78	1200906	193.28	ug/L		99
58) heptane	6.34	57	288754	201.23	ug/L		97
59) isopropyl acetate	6.29	87	70515	199.75	ug/L		96
60) 1,2-dichloroethane	6.19	62	363894	196.17	ug/L		99
61) trichloroethene	6.91	95	310644	195.46	ug/L		90
62) ethyl acrylate	7.18	55	364147	205.37	ug/L		98
63) 2-nitropropane	8.02	41	81587	220.31	ug/L		95
64) 2-chloroethyl vinyl ether	8.07	63	890590	985.74	ug/L		99
65) methyl methacrylate	7.45	100	84465	224.64	ug/L		91
66) 1,2-dichloropropane	7.26	63	302512	200.21	ug/L		97
67) methylcyclohexane	7.02	83	621983	198.10	ug/L		96
68) dibromomethane	7.41	93	167844	210.99	ug/L		95
69) bromodichloromethane	7.63	83	382902	208.14	ug/L		100
70) epichlorohydrin	8.14	57	167908	1084.83	ug/L		96
71) cis-1,3-dichloropropene	8.18	75	512399	216.77	ug/L		97
72) 4-methyl-2-pentanone	8.38	85	197640	296.36	ug/L	#	83
73) 3-methyl-1-butanol	8.52	70	223731	4070.01	ug/L		96
76) toluene	8.47	92	767817	185.33	ug/L		99
77) trans-1,3-dichloropropene	8.83	75	436420	214.19	ug/L		98
78) ethyl methacrylate	8.89	69	379628	205.06	ug/L		99
79) 1,1,2-trichloroethane	9.00	83	203693	190.45	ug/L		96
80) 2-hexanone	9.25	58	451064	831.93	ug/L		99
81) tetrachloroethene	9.00	166	365783	192.80	ug/L		97
82) 1,3-dichloropropane	9.16	76	435261	192.33	ug/L		99
83) butyl acetate	9.36	56	202853	207.19	ug/L		97
84) dibromochloromethane	9.34	129	304861	217.03	ug/L		99
85) 1,2-dibromoethane	9.45	107	262233	195.96	ug/L		98
86) 3,3-Dimethyl-1-Butanol	9.46	57	347578	2469.29	ug/L		99
87) n-butyl ether	9.98	57	1412606	199.93	ug/L		99
88) chlorobenzene	9.89	112	873077	187.22	ug/L		98
89) 1,1,1,2-tetrachloroethane	9.98	131	313307	205.03	ug/L		98
90) ethylbenzene	9.97	91	1435378	181.38	ug/L		98
91) m,p-xylene	10.08	106	1153349	375.11	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139654.D
Acq On : 19 Oct 2017 11:57 pm
Operator : PrashanS
Sample : IC6336-200
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 20 11:25:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	10.43	91	1155138	186.72	ug/L	94
93) styrene	10.46	104	978506	197.59	ug/L	98
94) bromoform	10.63	173	229313	236.32	ug/L	99
95) butyl acrylate	10.45	55	586769	227.64	ug/L	99
96) isopropylbenzene	10.74	105	1518252	192.85	ug/L	98
97) cis-1,4-dichloro-2-butene	10.88	88	156178	132.50	ug/L	95
100) bromobenzene	11.02	156	392993	188.60	ug/L	93
101) 1,1,2,2-tetrachloroethane	11.08	83	354070	203.96	ug/L	99
102) trans-1,4-dichloro-2-buten	11.14	53	108844	223.14	ug/L	93
103) 1,2,3-trichloropropane	11.11	110	111508	196.23	ug/L	94
104) n-propylbenzene	11.09	91	1772707	177.39	ug/L	98
105) 2-chlorotoluene	11.18	126	376692	187.08	ug/L	97
106) 4-chlorotoluene	11.28	126	396402	65.47	ug/L	99
107) 1,3,5-trimethylbenzene	11.25	105	1311280	187.83	ug/L	99
108) tert-butylbenzene	11.50	119	1191539	183.89	ug/L	98
109) 1,2,4-trimethylbenzene	11.55	105	1347388	187.75	ug/L	98
110) sec-butylbenzene	11.68	105	1757495	184.15	ug/L	98
111) 1,3-dichlorobenzene	11.79	146	778223	184.74	ug/L	95
112) p-isopropyltoluene	11.81	119	1544642	185.42	ug/L	98
113) 1,4-dichlorobenzene	11.88	146	787525	186.28	ug/L	100
114) 1,2-dichlorobenzene	12.18	146	741247	191.73	ug/L	99
115) n-butylbenzene	12.13	92	798180	191.75	ug/L	95
116) 1,2-dibromo-3-chloropropan	12.81	157	100706	222.95	ug/L	98
117) 1,3,5-Trichlorobenzene	12.93	180	686979	185.82	ug/L	99
118) 1,2,4-trichlorobenzene	13.43	180	616510	188.48	ug/L	98
119) hexachlorobutadiene	13.52	225	355590	194.40	ug/L	99
120) naphthalene	13.63	128	1330399	181.36	ug/L	98
121) 1,2,3-trichlorobenzene	13.81	180	575858	185.49	ug/L	99
122) hexachloroethane	12.33	201	255679	249.41	ug/L	94
123) Benzyl chloride	12.00	91	751721	234.76	ug/L	99
124) 2-ethylhexyl acrylate	13.57	70	90199	43.43	ug/L	98
125) 2-methylnaphthalene	14.49	142	463199	86.55	ug/L	99

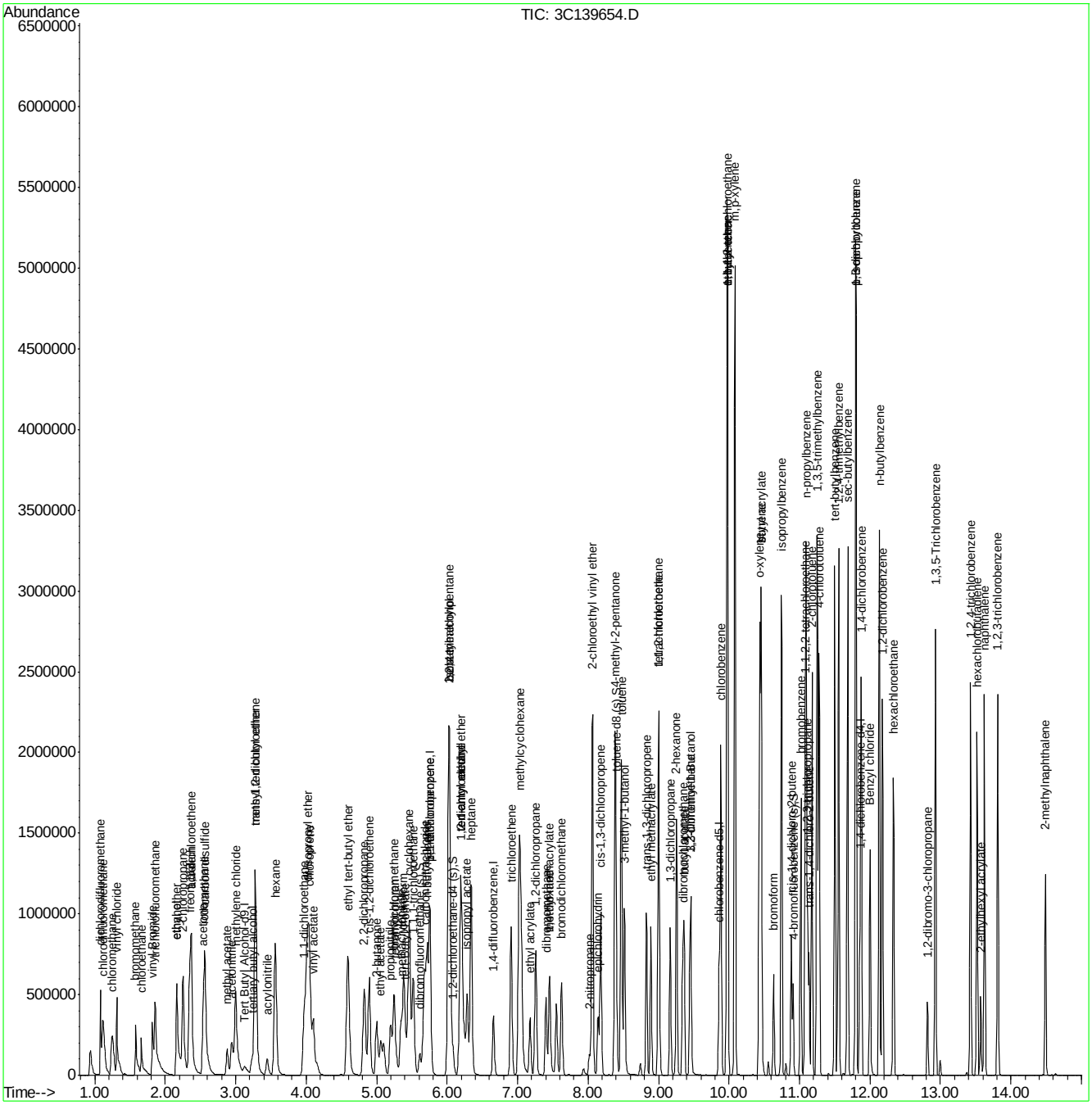
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139654.D
Acq On : 19 Oct 2017 11:57 pm
Operator : PrashanS
Sample : IC6336-200
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 20 11:25:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Fri Oct 20 11:22:46 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139657.D
Acq On : 20 Oct 2017 1:18 am
Operator : PrashanS
Sample : ICV6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 11:15:45 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.11	65	84155	500.00	ug/L	0.00
5) pentafluorobenzene	5.74	168	214107	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	313449	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	271798	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	145623	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	87411	50.25	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.50%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	92229	49.62	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.24%			
75) toluene-d8 (s)	8.40	98	363120	50.57	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.14%			
99) 4-bromofluorobenzene (s)	10.91	95	126745	49.99	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 99.98%			
Target Compounds						Qvalue
2) ethanol	2.16	45	154964	5564.38	ug/L	98
3) tertiary butyl alcohol	3.22	59	52144	278.17	ug/L	91
4) 1,4-dioxane	7.45	88	25297	1541.54	ug/L	100
6) chlorodifluoromethane	1.11	51	88993	44.96	ug/L	96
7) dichlorodifluoromethane	1.08	85	90637	45.06	ug/L	99
8) chloromethane	1.25	50	100160	47.78	ug/L	99
10) vinyl chloride	1.31	62	90295	46.07	ug/L	98
11) bromomethane	1.59	94	41468	44.30	ug/L	98
12) chloroethane	1.67	64	52047	53.16	ug/L	96
13) vinyl Bromide	1.83	106	99833	85.48	ug/L	95
14) trichlorofluoromethane	1.86	101	114398	48.09	ug/L	99
15) ethyl ether	2.16	74	46389	55.85	ug/L	93
16) 2-chloropropane	2.25	63	32281	56.83	ug/L	93
17) acrolein	2.36	56	15137	60.35	ug/L	96
18) freon 113	2.35	151	65855	57.80	ug/L	97
19) 1,1-dichloroethene	2.37	96	70107	55.27	ug/L	96
20) acetone	2.54	58	23854	215.19	ug/L	100
21) acetonitrile	2.94	41	101790	531.46	ug/L	98
22) iodomethane	2.55	142	77545	45.57	ug/L	95
23) carbon disulfide	2.57	76	255432	49.59	ug/L	99
24) methylene chloride	3.00	84	78088	56.64	ug/L	94
25) methyl acetate	2.88	43	60803	49.96	ug/L	97
26) methyl tert butyl ether	3.27	73	436561	112.56	ug/L	98
27) trans-1,2-dichloroethene	3.29	96	82397	55.25	ug/L	95
28) hexane	3.57	57	111894	44.20	ug/L	96
29) di-isopropyl ether	4.01	45	275281	56.32	ug/L	96
30) ethyl tert-butyl ether	4.59	59	244488	54.36	ug/L	98
31) 2-butanone	5.00	72	34367	237.08	ug/L	93
32) 1,1-dichloroethane	3.97	63	145572	57.93	ug/L	97
33) chloroprene	4.05	53	139064	56.51	ug/L	98
34) acrylonitrile	3.45	53	25875	57.50	ug/L	90
35) vinyl acetate	4.11	86	17697	51.77	ug/L #	62
36) ethyl acetate	5.06	45	13359	58.68	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139657.D
Acq On : 20 Oct 2017 1:18 am
Operator : PrashanS
Sample : ICV6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 11:15:45 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 2,2-dichloropropane	4.82	77	123543	57.81	ug/L		98
38) cis-1,2-dichloroethene	4.89	96	90448	57.05	ug/L		93
39) propionitrile	5.19	54	116670	530.56	ug/L		99
40) bromochloromethane	5.25	130	51783	55.55	ug/L		96
41) tetrahydrofuran	5.27	72	10102	58.06	ug/L		93
42) chloroform	5.38	83	138918	54.10	ug/L		97
43) tert-Butyl Formate	5.41	59	21455	44.81	ug/L		92
44) isobutyl alcohol	6.03	43	66742	533.79	ug/L		96
46) methacrylonitrile	5.35	67	31080	54.28	ug/L		90
47) 1,1,1-trichloroethane	5.52	97	129694	56.27	ug/L		99
48) cyclohexane	5.46	84	124509	50.91	ug/L		98
49) 1,1-dichloropropene	5.76	110	45404	56.56	ug/L		99
50) tert-amyl alcohol	6.20	73	253494	276.13	ug/L		98
51) carbon tetrachloride	5.68	117	111858	55.59	ug/L		100
54) 2,2,4-trimethylpentane	6.03	57	361186	53.19	ug/L		99
55) tert-amyl methyl ether	6.20	87	55731	55.95	ug/L		96
56) n-butyl alcohol	5.71	56	179262	2522.84	ug/L		99
57) benzene	6.02	78	324529	52.22	ug/L		99
58) heptane	6.34	57	85258	59.27	ug/L		96
59) isopropyl acetate	6.28	87	18422	57.17	ug/L	#	85
60) 1,2-dichloroethane	6.19	62	100557	55.22	ug/L		99
61) trichloroethene	6.91	95	84989	53.47	ug/L		97
62) ethyl acrylate	7.18	55	99636	56.18	ug/L		97
63) 2-nitropropane	8.02	41	21665	55.29	ug/L		86
64) 2-chloroethyl vinyl ether	8.06	63	240392	266.03	ug/L		98
65) methyl methacrylate	7.45	100	22615	56.97	ug/L		94
66) 1,2-dichloropropane	7.25	63	84294	57.41	ug/L		100
67) methylcyclohexane	7.02	83	155853	49.63	ug/L		95
68) dibromomethane	7.40	93	45752	57.50	ug/L		99
69) bromodichloromethane	7.62	83	103162	57.83	ug/L		98
70) epichlorohydrin	8.14	57	42725	276.00	ug/L		96
71) cis-1,3-dichloropropene	8.18	75	137784	58.28	ug/L		96
72) 4-methyl-2-pentanone	8.38	85	51580	220.40	ug/L		95
73) 3-methyl-1-butanol	8.51	70	51980	985.17	ug/L		97
76) toluene	8.47	92	208354	51.38	ug/L		97
77) trans-1,3-dichloropropene	8.83	75	116422	58.37	ug/L		98
78) ethyl methacrylate	8.89	69	97931	54.04	ug/L		98
79) 1,1,2-trichloroethane	9.00	83	56583	54.05	ug/L		95
80) 2-hexanone	9.25	58	115421	217.46	ug/L		98
81) tetrachloroethene	9.00	166	105140	56.61	ug/L		98
82) 1,3-dichloropropane	9.16	76	119371	53.88	ug/L		99
83) butyl acetate	9.36	56	54829	57.21	ug/L		98
84) dibromochloromethane	9.34	129	81223	59.07	ug/L		99
85) 1,2-dibromoethane	9.44	107	72727	55.52	ug/L		99
86) 3,3-Dimethyl-1-Butanol	9.46	57	83298	604.54	ug/L		98
87) n-butyl ether	9.97	57	371488	53.71	ug/L		99
88) chlorobenzene	9.89	112	234065	51.27	ug/L		99
89) 1,1,1,2-tetrachloroethane	9.98	131	83513	55.83	ug/L		98
90) ethylbenzene	9.97	91	394112	50.88	ug/L		98
91) m,p-xylene	10.08	106	314428	104.47	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139657.D
Acq On : 20 Oct 2017 1:18 am
Operator : PrashanS
Sample : ICV6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 11:15:45 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	10.43	91	303261	50.08	ug/L	99
93) styrene	10.46	104	254644	52.53	ug/L	99
94) bromoform	10.63	173	53878	56.72	ug/L	99
95) butyl acrylate	10.45	55	147163	58.33	ug/L	98
96) isopropylbenzene	10.74	105	399989	51.90	ug/L	98
97) cis-1,4-dichloro-2-butene	10.88	88	38962	52.06	ug/L	92
100) bromobenzene	11.02	156	100743	51.96	ug/L	97
101) 1,1,2,2-tetrachloroethane	11.08	83	88132	56.16	ug/L	100
102) trans-1,4-dichloro-2-buten	11.13	53	28923	62.79	ug/L	96
103) 1,2,3-trichloropropane	11.11	110	27654	55.99	ug/L	99
104) n-propylbenzene	11.09	91	465069	52.20	ug/L	99
105) 2-chlorotoluene	11.18	126	96155	52.83	ug/L	95
106) 4-chlorotoluene	11.28	126	100146	51.23	ug/L	96
107) 1,3,5-trimethylbenzene	11.25	105	328277	51.98	ug/L	97
108) tert-butylbenzene	11.50	119	306560	52.34	ug/L	99
109) 1,2,4-trimethylbenzene	11.55	105	336954	51.94	ug/L	95
110) sec-butylbenzene	11.68	105	447694	51.90	ug/L	100
111) 1,3-dichlorobenzene	11.79	146	197114	51.77	ug/L	96
112) p-isopropyltoluene	11.81	119	396638	52.67	ug/L	98
113) 1,4-dichlorobenzene	11.87	146	199291	52.25	ug/L	98
114) 1,2-dichlorobenzene	12.18	146	186982	53.51	ug/L	99
115) n-butylbenzene	12.13	92	199471	52.84	ug/L	94
116) 1,2-dibromo-3-chloropropan	12.81	157	23980	58.73	ug/L	97
117) 1,3,5-Trichlorobenzene	12.93	180	183803	55.00	ug/L	99
118) 1,2,4-trichlorobenzene	13.43	180	157307	53.19	ug/L	98
119) hexachlorobutadiene	13.52	225	95603	57.82	ug/L	99
120) naphthalene	13.63	128	352440	53.15	ug/L	99
121) 1,2,3-trichlorobenzene	13.81	180	153192	54.50	ug/L	99
122) hexachloroethane	12.33	201	54859	57.39	ug/L	97
123) Benzyl chloride	12.00	91	147937	49.61	ug/L	99
124) 2-ethylhexyl acrylate	13.57	70	25616	13.65	ug/L	97
125) 2-methylnaphthalene	14.49	142	121205	25.05	ug/L	100

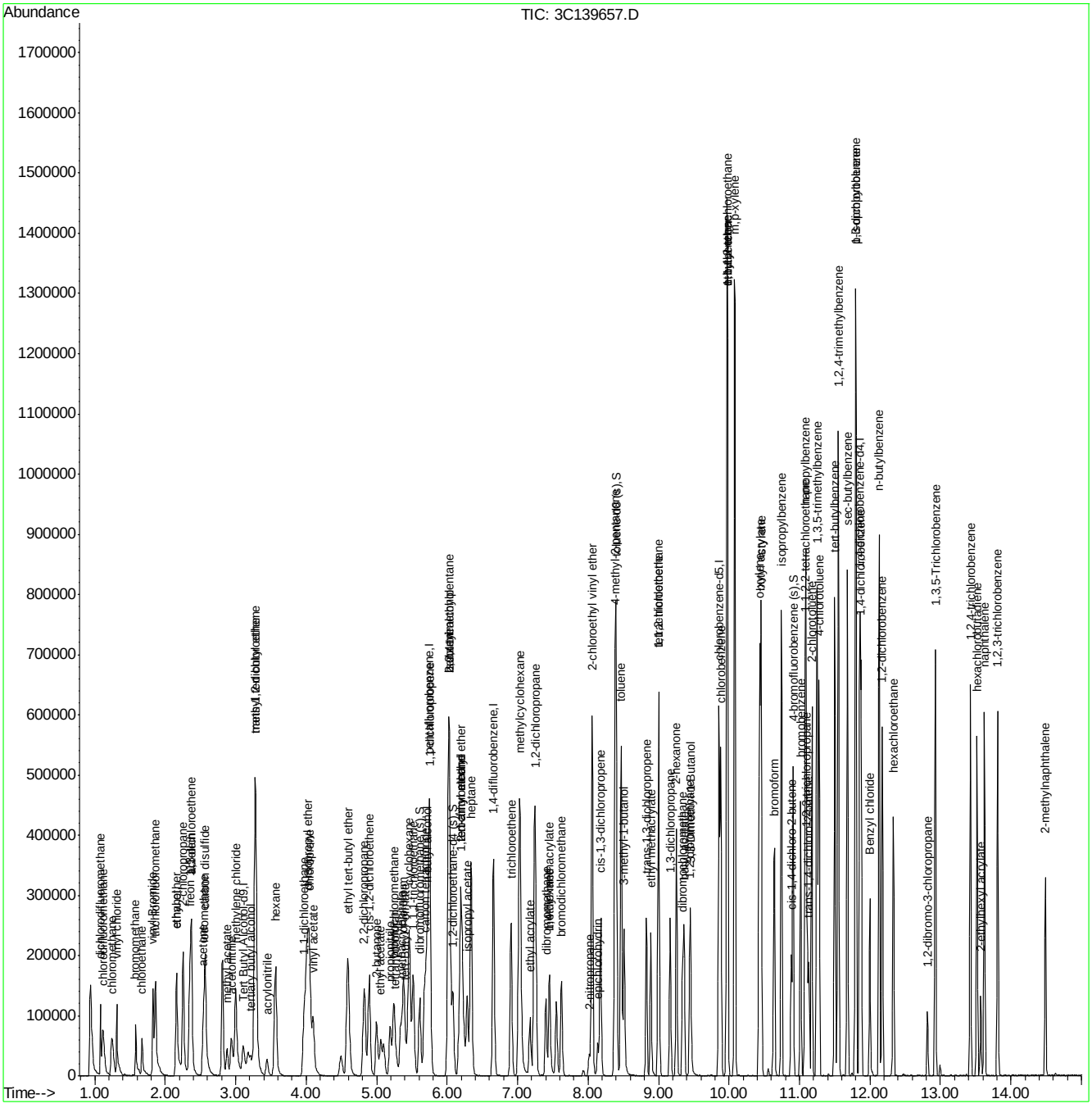
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139657.D
Acq On : 20 Oct 2017 1:18 am
Operator : PrashanS
Sample : ICV6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 11:15:45 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139658.D
Acq On : 20 Oct 2017 1:45 am
Operator : PrashanS
Sample : ICV6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 11:18:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.09	65	78438	500.00	ug/L	-0.01
5) pentafluorobenzene	5.74	168	213993	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.66	114	307524	50.00	ug/L	0.00
74) chlorobenzene-d5	9.86	117	266388	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.86	152	143727	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.61	113	86096	49.52	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.04%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	90331	49.53	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.06%			
75) toluene-d8 (s)	8.40	98	353127	50.18	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%			
99) 4-bromofluorobenzene (s)	10.91	95	125431	50.13	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.26%			
Target Compounds						Qvalue
21) acetonitrile	2.93	41	104430	545.53	ug/L	96

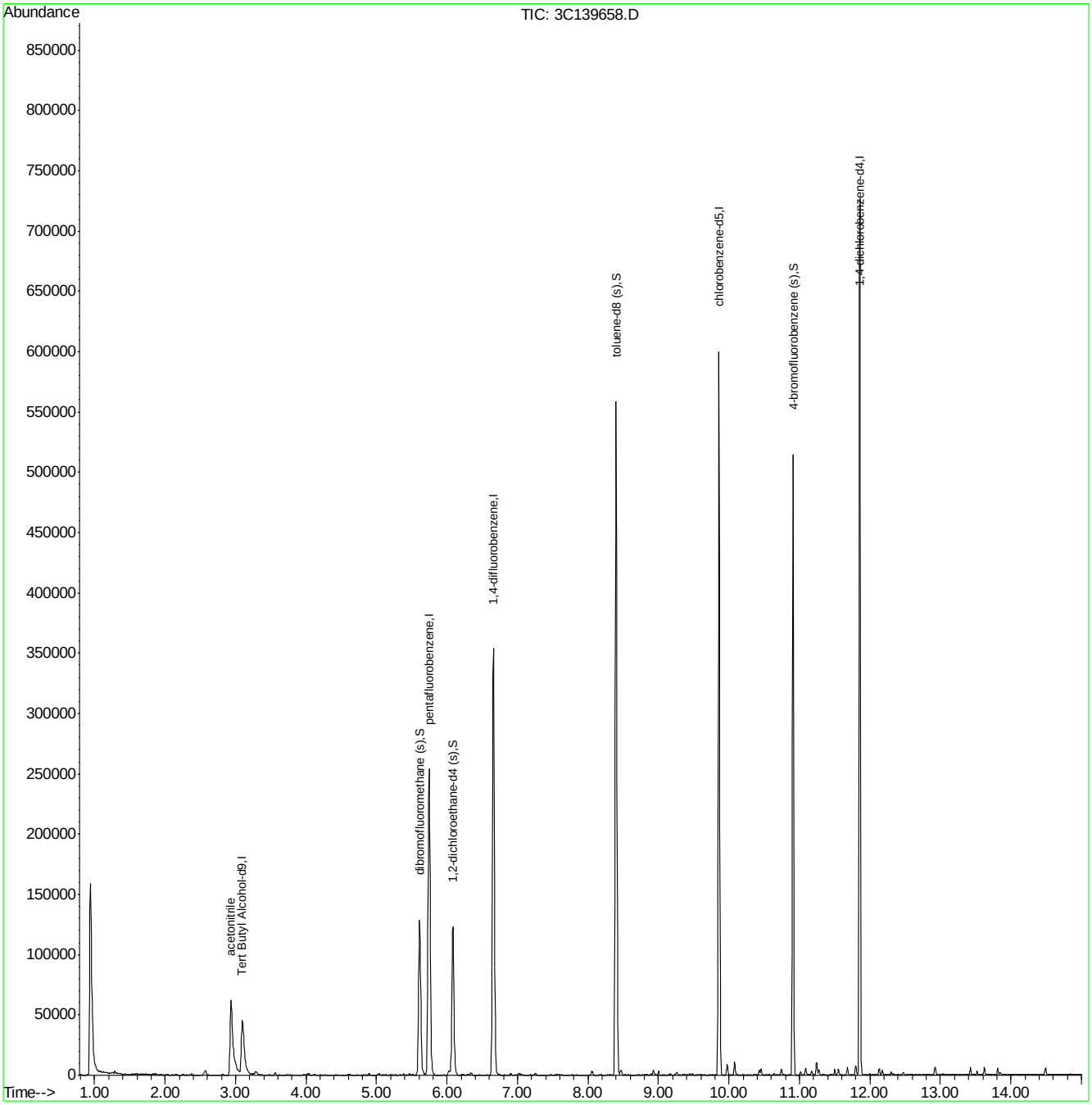
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6336\
Data File : 3C139658.D
Acq On : 20 Oct 2017 1:45 am
Operator : PrashanS
Sample : ICV6336-50
Misc : MS19616,V3C6336,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 11:18:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140182.D
Acq On : 6 Nov 2017 8:03 am
Operator : PrashanS
Sample : CC6336-20
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 06 08:18:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	3.09	65	85979	500.00	ug/L	-0.01
5) pentafluorobenzene	5.74	168	235370	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.65	114	348364	50.00	ug/L	0.00
74) chlorobenzene-d5	9.85	117	314349	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.85	152	170406	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.60	113	102124	53.40	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 129		Recovery = 106.80%			
53) 1,2-dichloroethane-d4 (s)	6.08	65	108041	52.30	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 104.60%			
75) toluene-d8 (s)	8.40	98	401337	48.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.66%			
99) 4-bromofluorobenzene (s)	10.91	95	154899	52.21	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.42%			
Target Compounds						Qvalue
2) ethanol	2.16	45	70639	2482.67	ug/L	99
3) tertiary butyl alcohol	3.21	59	20501	107.04	ug/L	83
4) 1,4-dioxane	7.45	88	10689	637.55	ug/L	90
6) chlorodifluoromethane	1.11	51	42581	19.57	ug/L	97
7) dichlorodifluoromethane	1.08	85	39961	18.07	ug/L	100
8) chloromethane	1.24	50	42160	18.29	ug/L	97
10) vinyl chloride	1.31	62	39400	18.28	ug/L	99
11) bromomethane	1.59	94	20122	19.55	ug/L	92
12) chloroethane	1.67	64	21618	20.09	ug/L	99
13) vinyl Bromide	1.83	106	24632	19.19	ug/L	98
14) trichlorofluoromethane	1.86	101	47924	18.32	ug/L	100
15) ethyl ether	2.16	74	20544	22.50	ug/L	97
16) 2-chloropropane	2.25	63	13532	21.67	ug/L	94
17) acrolein	2.36	56	6883	24.96	ug/L	95
18) freon 113	2.35	151	25735	20.55	ug/L	94
19) 1,1-dichloroethene	2.37	96	29803	21.37	ug/L	98
20) acetone	2.53	58	10912	89.55	ug/L	96
21) acetonitrile	2.93	41	49488	235.04	ug/L	99
22) iodomethane	2.54	142	26930	15.48	ug/L	97
23) carbon disulfide	2.56	76	104803	18.51	ug/L	98
24) methylene chloride	3.00	84	33983	22.42	ug/L	95
25) methyl acetate	2.88	43	28978	21.66	ug/L	98
26) methyl tert butyl ether	3.27	73	92443	21.68	ug/L	96
27) trans-1,2-dichloroethene	3.28	96	34092	20.79	ug/L	93
28) hexane	3.56	57	54499	19.58	ug/L	98
29) di-isopropyl ether	4.01	45	123197	22.93	ug/L	98
30) ethyl tert-butyl ether	4.58	59	105515	21.34	ug/L	96
31) 2-butanone	5.00	72	15120	94.88	ug/L	91
32) 1,1-dichloroethane	3.97	63	62889	22.77	ug/L	96
33) chloroprene	4.04	53	55084	20.36	ug/L	97
34) acrylonitrile	3.43	53	11537	23.32	ug/L	93
35) vinyl acetate	4.10	86	7002	18.63	ug/L #	71
36) ethyl acetate	5.05	45	5714	22.83	ug/L #	76

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140182.D
Acq On : 6 Nov 2017 8:03 am
Operator : PrashanS
Sample : CC6336-20
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 06 08:18:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 2,2-dichloropropane	4.82	77	43579	18.55	ug/L		97
38) cis-1,2-dichloroethene	4.89	96	37474	21.50	ug/L		94
39) propionitrile	5.18	54	54268	224.49	ug/L		97
40) bromochloromethane	5.24	130	23199	22.64	ug/L		94
41) tetrahydrofuran	5.28	72	3971	20.76	ug/L	#	81
42) chloroform	5.38	83	59099	20.94	ug/L		98
43) tert-Butyl Formate	5.40	59	1220	4.78	ug/L	#	59
44) isobutyl alcohol	6.02	43	27420	199.49	ug/L		97
46) methacrylonitrile	5.34	67	13579	21.57	ug/L		99
47) 1,1,1-trichloroethane	5.51	97	52695	20.80	ug/L		99
48) cyclohexane	5.46	84	50992	18.97	ug/L		97
49) 1,1-dichloropropene	5.75	110	18791	20.28	ug/L	#	85
50) tert-amyl alcohol	6.20	73	104256	103.31	ug/L		92
51) carbon tetrachloride	5.68	117	47472	21.46	ug/L		99
54) 2,2,4-trimethylpentane	6.03	57	142726	18.91	ug/L		99
55) tert-amyl methyl ether	6.20	87	22893	20.68	ug/L	#	77
56) n-butyl alcohol	5.71	56	74862	947.97	ug/L		99
57) benzene	6.02	78	136211	19.72	ug/L		98
58) heptane	6.33	57	30926	19.35	ug/L		96
59) isopropyl acetate	6.29	87	7850	21.92	ug/L	#	85
60) 1,2-dichloroethane	6.18	62	44337	21.91	ug/L		95
61) trichloroethene	6.90	95	35186	19.92	ug/L		93
62) ethyl acrylate	7.17	55	43000	21.82	ug/L		97
63) 2-nitropropane	8.01	41	8222	18.88	ug/L		85
64) 2-chloroethyl vinyl ether	8.05	63	84102	83.74	ug/L		98
65) methyl methacrylate	7.45	100	9615	21.79	ug/L		94
66) 1,2-dichloropropane	7.25	63	35928	22.02	ug/L		99
67) methylcyclohexane	7.01	83	67101	19.23	ug/L		98
68) dibromomethane	7.40	93	19663	22.24	ug/L		99
69) bromodichloromethane	7.62	83	44466	22.43	ug/L		99
70) epichlorohydrin	8.13	57	18634	108.31	ug/L		94
71) cis-1,3-dichloropropene	8.18	75	55788	21.23	ug/L		97
72) 4-methyl-2-pentanone	8.37	85	22829	87.77	ug/L	#	77
73) 3-methyl-1-butanol	8.50	70	17590	319.48	ug/L		94
76) toluene	8.46	92	86088	18.35	ug/L		91
77) trans-1,3-dichloropropene	8.82	75	47728	20.69	ug/L		98
78) ethyl methacrylate	8.89	69	42767	20.41	ug/L		93
79) 1,1,2-trichloroethane	9.00	83	24643	20.35	ug/L		89
80) 2-hexanone	9.25	58	51729	84.27	ug/L		92
81) tetrachloroethene	9.00	166	42039	19.57	ug/L		97
82) 1,3-dichloropropane	9.16	76	52286	20.41	ug/L		99
83) butyl acetate	9.36	56	22846	20.61	ug/L		91
84) dibromochloromethane	9.34	129	36660	23.05	ug/L		98
85) 1,2-dibromoethane	9.44	107	31146	20.56	ug/L		99
86) 3,3-Dimethyl-1-Butanol	9.45	57	27391	171.88	ug/L		97
87) n-butyl ether	9.97	57	165074	20.64	ug/L		97
88) chlorobenzene	9.88	112	102207	19.36	ug/L		98
89) 1,1,1,2-tetrachloroethane	9.97	131	35864	20.73	ug/L		98
90) ethylbenzene	9.96	91	166423	18.58	ug/L		99
91) m,p-xylene	10.08	106	132501	38.06	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140182.D
Acq On : 6 Nov 2017 8:03 am
Operator : PrashanS
Sample : CC6336-20
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 06 08:18:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	10.42	91	130252	18.60	ug/L	98
93) styrene	10.46	104	110277	19.67	ug/L	97
94) bromoform	10.63	173	25045	22.80	ug/L	99
95) butyl acrylate	10.45	55	64307	22.04	ug/L	99
96) isopropylbenzene	10.74	105	169103	18.97	ug/L	98
97) cis-1,4-dichloro-2-butene	10.88	88	18920	22.80	ug/L	93
100) bromobenzene	11.02	156	43543	19.19	ug/L	90
101) 1,1,2,2-tetrachloroethane	11.07	83	38947	21.21	ug/L	99
102) trans-1,4-dichloro-2-buten	11.13	53	11012	20.43	ug/L	88
103) 1,2,3-trichloropropane	11.10	110	12612	21.82	ug/L	90
104) n-propylbenzene	11.09	91	197622	18.96	ug/L	97
105) 2-chlorotoluene	11.17	126	41090	19.29	ug/L	99
106) 4-chlorotoluene	11.27	126	43321	18.94	ug/L	98
107) 1,3,5-trimethylbenzene	11.25	105	137187	18.56	ug/L	99
108) tert-butylbenzene	11.50	119	124415	18.15	ug/L	99
109) 1,2,4-trimethylbenzene	11.55	105	144048	18.98	ug/L	98
110) sec-butylbenzene	11.68	105	187947	18.62	ug/L	99
111) 1,3-dichlorobenzene	11.79	146	83892	18.83	ug/L	98
112) p-isopropyltoluene	11.80	119	162607	18.45	ug/L	99
113) 1,4-dichlorobenzene	11.87	146	85379	19.13	ug/L	99
114) 1,2-dichlorobenzene	12.17	146	79250	19.38	ug/L	98
115) n-butylbenzene	12.12	92	81924	18.55	ug/L	92
116) 1,2-dibromo-3-chloropropan	12.81	157	10113	21.17	ug/L	93
117) 1,3,5-Trichlorobenzene	12.92	180	73601	18.82	ug/L	97
118) 1,2,4-trichlorobenzene	13.43	180	68813	19.88	ug/L	99
119) hexachlorobutadiene	13.52	225	37559	19.41	ug/L	98
120) naphthalene	13.62	128	151077	19.47	ug/L	98
121) 1,2,3-trichlorobenzene	13.81	180	67304	20.46	ug/L	97
122) hexachloroethane	12.33	201	25538	22.83	ug/L	97
123) Benzyl chloride	12.00	91	58954	16.89	ug/L	98
124) 2-ethylhexyl acrylate	13.57	70	7821	3.56	ug/L	95
125) 2-methylnaphthalene	14.49	142	59093	10.44	ug/L	99

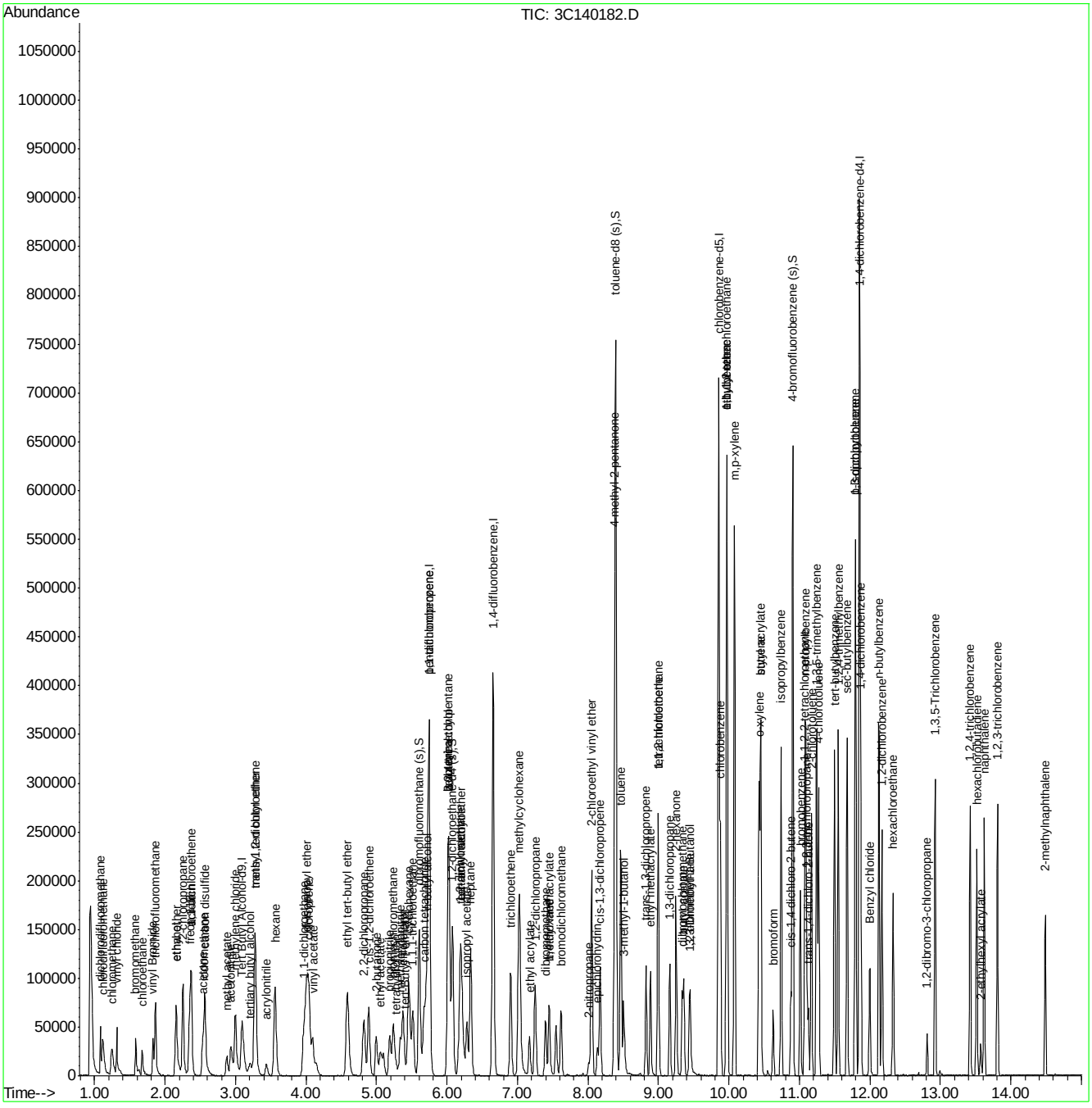
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3C6356\
Data File : 3C140182.D
Acq On : 6 Nov 2017 8:03 am
Operator : PrashanS
Sample : CC6336-20
Misc : MS21659,V3C6357,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 06 08:18:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140206.d
Acq On : 6 Nov 2017 8:35 pm
Operator : PrashanS
Sample : cc6336-50 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:46 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	3.097	65	76635	500.00	ug/L	0.00
5) pentafluorobenzene	5.743	168	224668	50.00	ug/L	0.00
52) 1,4-difluorobenzene	6.653	114	341958	50.00	ug/L	0.00
74) chlorobenzene-d5	9.854	117	316538	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	11.852	152	171823	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	5.607	113	100882	55.26	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 110.52%			
53) 1,2-dichloroethane-d4 (s)	6.078	65	106880	52.71	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 105.42%			
75) toluene-d8 (s)	8.395	98	405217	48.45	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.90%			
99) 4-bromofluorobenzene (s)	10.905	95	150236	50.22	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.44%			
Target Compounds						Qvalue
2) ethanol	2.155	45	163281	6438.35	ug/L	92
3) tertiary butyl alcohol	3.207	59	45300	265.37	ug/L	88
4) 1,4-dioxane	7.443	88	25759	1723.73	ug/L	100
6) chlorodifluoromethane	1.114	51	98142	47.25	ug/L	96
7) dichlorodifluoromethane	1.083	85	82534	39.11	ug/L	99
8) chloromethane	1.245	50	90763	41.26	ug/L	95
10) vinyl chloride	1.313	62	87656	42.62	ug/L	97
11) bromomethane	1.580	94	40603	41.34	ug/L	99
12) chloroethane	1.669	64	51696	50.32	ug/L	97
13) vinyl Bromide	1.826	106	75906	61.94	ug/L	95
14) trichlorofluoromethane	1.862	101	113503	45.47	ug/L	98
15) ethyl ether	2.160	74	48227	55.34	ug/L	96
16) 2-chloropropane	2.255	63	32875	55.16	ug/L	98
17) acrolein	2.359	56	14641	55.63	ug/L	90
18) freon 113	2.349	151	60449	50.56	ug/L	92
19) 1,1-dichloroethene	2.370	96	71237	53.52	ug/L	98
20) acetone	2.527	58	26612	228.79	ug/L	89
21) acetonitrile	2.929	41	108577	540.24	ug/L	99
22) iodomethane	2.542	142	77900	43.70	ug/L	99
23) carbon disulfide	2.563	76	247028	45.70	ug/L	97
24) methylene chloride	2.997	84	79710	55.10	ug/L	99
25) methyl acetate	2.872	43	64490	50.49	ug/L	99
26) methyl tert butyl ether	3.269	73	217566	53.46	ug/L	97
27) trans-1,2-dichloroethene	3.280	96	82811	52.92	ug/L	98
28) hexane	3.562	57	124669	46.93	ug/L	100
29) di-isopropyl ether	4.002	45	293941	57.31	ug/L	97
30) ethyl tert-butyl ether	4.582	59	252550	53.51	ug/L	99
31) 2-butanone	4.990	72	32219	211.81	ug/L	90
32) 1,1-dichloroethane	3.965	63	146280	55.48	ug/L	100
33) chloroprene	4.043	53	133263	51.61	ug/L	99
34) acrylonitrile	3.437	53	26789	56.73	ug/L	97
35) vinyl acetate	4.090	86	14812	41.30	ug/L #	67
36) ethyl acetate	5.053	45	12389	51.86	ug/L	94
37) 2,2-dichloropropane	4.823	77	103478	46.14	ug/L	96
38) cis-1,2-dichloroethene	4.891	96	89678	53.91	ug/L	96
39) propionitrile	5.184	54	119140	516.32	ug/L	96
40) bromochloromethane	5.241	130	54021	55.22	ug/L	96
41) tetrahydrofuran	5.262	72	9583	52.49	ug/L	96
42) chloroform	5.372	83	142604	52.92	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140206.d
Acq On : 6 Nov 2017 8:35 pm
Operator : PrashanS
Sample : cc6336-50 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:46 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) tert-Butyl Formate	5.403	59	4538	11.10	ug/L	#	32
44) isobutyl alcohol	6.031	43	63072	480.72	ug/L		96
46) methacrylonitrile	5.335	67	30493	50.75	ug/L		89
47) 1,1,1-trichloroethane	5.513	97	127057	52.53	ug/L		99
48) cyclohexane	5.455	84	128171	49.94	ug/L		97
49) 1,1-dichloropropene	5.754	110	42946	50.82	ug/L		94
50) tert-amyl alcohol	6.198	73	248018	257.46	ug/L		91
51) carbon tetrachloride	5.675	117	113527	53.76	ug/L		97
54) 2,2,4-trimethylpentane	6.026	57	334044	45.09	ug/L		98
55) tert-amyl methyl ether	6.198	87	55286	50.87	ug/L	#	91
56) n-butyl alcohol	5.712	56	175358	2262.15	ug/L		99
57) benzene	6.015	78	327516	48.31	ug/L		99
58) heptane	6.334	57	70985	45.24	ug/L		96
59) isopropyl acetate	6.277	87	17808	50.66	ug/L	#	79
60) 1,2-dichloroethane	6.183	62	103901	52.30	ug/L		99
61) trichloroethene	6.904	95	84629	48.80	ug/L		93
62) ethyl acrylate	7.171	55	97500	50.40	ug/L		98
63) 2-nitropropane	8.013	41	18511	43.30	ug/L		91
64) 2-chloroethyl vinyl ether	8.055	63	196935	199.77	ug/L		99
65) methyl methacrylate	7.448	100	21552	49.76	ug/L	#	85
66) 1,2-dichloropropane	7.249	63	84409	52.69	ug/L		99
67) methylcyclohexane	7.019	83	157977	46.11	ug/L		96
68) dibromomethane	7.396	93	47910	55.20	ug/L		92
69) bromodichloromethane	7.616	83	105735	54.33	ug/L		99
70) epichlorohydrin	8.133	57	42530	251.83	ug/L		91
71) cis-1,3-dichloropropene	8.170	75	138910	53.86	ug/L		98
72) 4-methyl-2-pentanone	8.374	85	51003	199.77	ug/L		93
73) 3-methyl-1-butanol	8.505	70	41214	723.66	ug/L		92
76) toluene	8.463	92	208672	44.18	ug/L		95
77) trans-1,3-dichloropropene	8.824	75	116153	50.00	ug/L		97
78) ethyl methacrylate	8.887	69	102802	48.71	ug/L		98
79) 1,1,2-trichloroethane	8.996	83	58151	47.69	ug/L		97
80) 2-hexanone	9.247	58	124967	202.17	ug/L		97
81) tetrachloroethene	8.996	166	99451	45.98	ug/L		99
82) 1,3-dichloropropane	9.159	76	124588	48.29	ug/L		98
83) butyl acetate	9.357	56	52924	47.42	ug/L		96
84) dibromochloromethane	9.336	129	84774	52.94	ug/L		97
85) 1,2-dibromoethane	9.436	107	74711	48.97	ug/L		100
86) 3,3-Dimethyl-1-Butanol	9.451	57	64486	401.86	ug/L		92
87) n-butyl ether	9.974	57	396139	49.18	ug/L		99
88) chlorobenzene	9.880	112	241243	45.38	ug/L		98
89) 1,1,1,2-tetrachloroethane	9.974	131	86667	49.75	ug/L		98
90) ethylbenzene	9.964	91	397097	44.02	ug/L		100
91) m,p-xylene	10.079	106	312178	89.06	ug/L		99
92) o-xylene	10.424	91	311094	44.11	ug/L		98
93) styrene	10.456	104	257980	45.70	ug/L		99
94) bromoform	10.628	173	59477	53.77	ug/L		99
95) butyl acrylate	10.445	55	152530	51.91	ug/L		99
96) isopropylbenzene	10.738	105	398827	44.44	ug/L		99
97) cis-1,4-dichloro-2-butene	10.879	88	37911	43.77	ug/L		94
100) bromobenzene	11.015	156	103997	45.46	ug/L		94
101) 1,1,2,2-tetrachloroethane	11.073	83	88071	47.56	ug/L		97
102) trans-1,4-dichloro-2-b...	11.130	53	26022	47.88	ug/L		87
103) 1,2,3-trichloropropane	11.109	110	27097	46.50	ug/L		97
104) n-propylbenzene	11.088	91	467120	44.44	ug/L		100
105) 2-chlorotoluene	11.172	126	98023	45.64	ug/L		95
106) 4-chlorotoluene	11.272	126	103830	45.01	ug/L		99

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140206.d
Acq On : 6 Nov 2017 8:35 pm
Operator : PrashanS
Sample : cc6336-50 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:46 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,3,5-trimethylbenzene	11.245	105	331574	44.49	ug/L	99
108) tert-butylbenzene	11.496	119	300295	43.45	ug/L	99
109) 1,2,4-trimethylbenzene	11.549	105	341842	44.66	ug/L	99
110) sec-butylbenzene	11.679	105	449553	44.17	ug/L	100
111) 1,3-dichlorobenzene	11.789	146	202212	45.01	ug/L	96
112) p-isopropyltoluene	11.800	119	388966	43.78	ug/L	99
113) 1,4-dichlorobenzene	11.873	146	199685	44.37	ug/L	99
114) 1,2-dichlorobenzene	12.171	146	190874	46.29	ug/L	99
115) n-butylbenzene	12.129	92	201440	45.23	ug/L	95
116) 1,2-dibromo-3-chloropr...	12.809	157	22886	47.50	ug/L	94
117) 1,3,5-Trichlorobenzene	12.924	180	181650	46.07	ug/L	99
118) 1,2,4-trichlorobenzene	13.426	180	166361	47.68	ug/L	97
119) hexachlorobutadiene	13.515	225	91304	46.80	ug/L	98
120) naphthalene	13.620	128	353818	45.22	ug/L	99
121) 1,2,3-trichlorobenzene	13.808	180	158472	47.78	ug/L	97
122) hexachloroethane	12.328	201	63845	56.60	ug/L	94
123) Benzyl chloride	11.999	91	144380	41.03	ug/L	98
124) 2-ethylhexyl acrylate	13.568	70	20001	9.03	ug/L	94
125) 2-methylnaphthalene	14.488	142	134664	23.59	ug/L	99

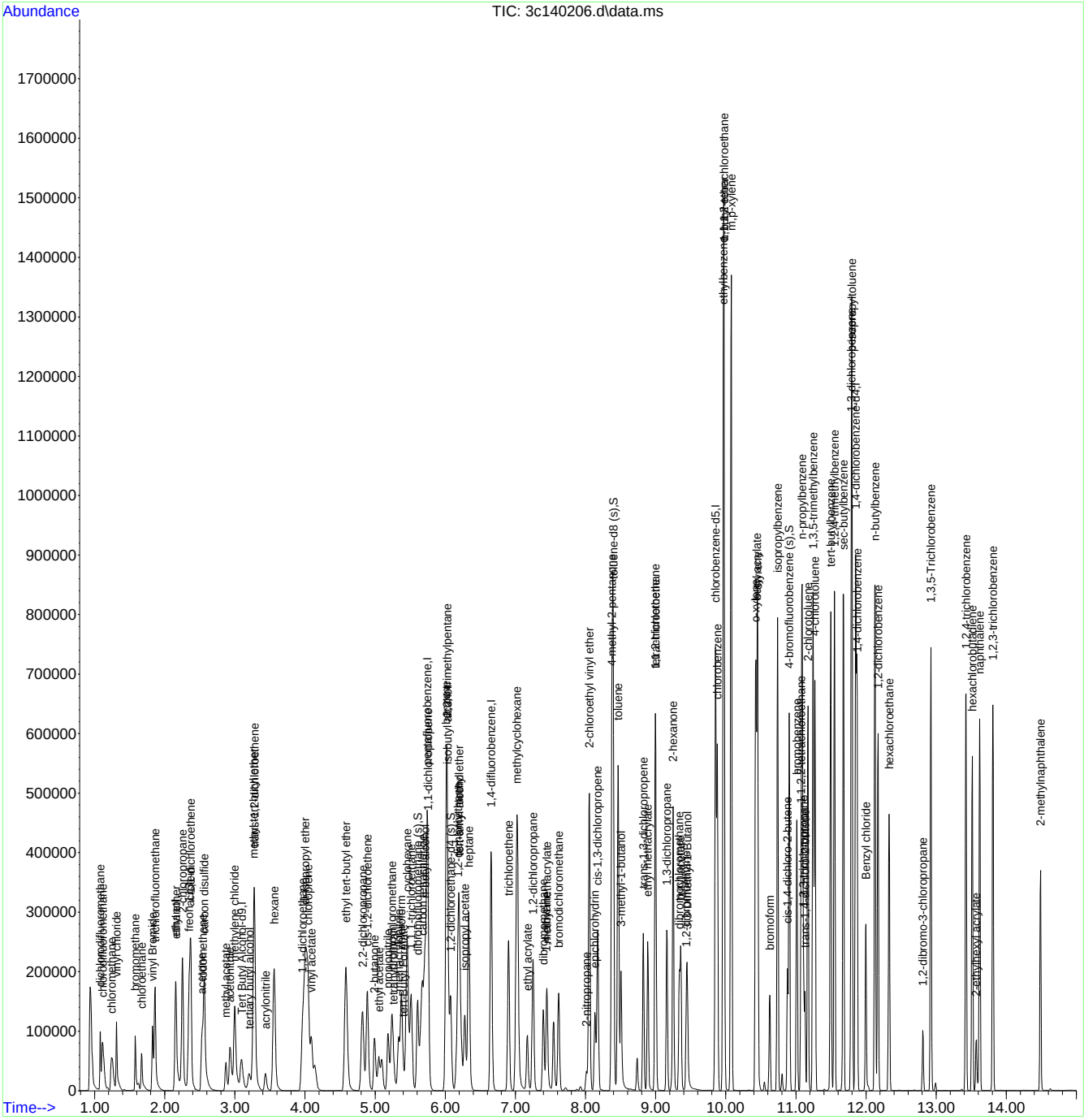
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v3c6357\
Data File : 3c140206.d
Acq On : 6 Nov 2017 8:35 pm
Operator : PrashanS
Sample : cc6336-50 Inst : MS3C
Misc : MS21871,V3C6357,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3C6336.M
Quant Results File: M3C6336.RES
Quant Time: Nov 07 08:12:46 2017
Quant Title : Method SW846 8260C, Rxi624 20m x 0.18mm x 1.0um
QLast Update : Tue Oct 24 11:15:41 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247357.D
Acq On : 13 Sep 2017 6:55 pm
Operator : ThienN
Sample : ic10636-0.5
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 14 09:29:25 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:53:25 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.732	65	121037	500.00	ug/L	-0.03
5) pentafluorobenzene	9.971	168	220885	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.933	114	321944	50.00	ug/L	0.00
75) chlorobenzene-d5	14.333	117	315673	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.964	152	192931	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.028	113	99795	49.03	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.06%			
55) 1,2-dichloroethane-d4 (s)	10.463	65	115558	52.96	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 105.92%			
76) toluene-d8 (s)	12.654	98	395012	49.74	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.48%			
100) 4-bromofluorobenzene (s)	15.646	95	159870	50.68	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.36%			
Target Compounds						Qvalue
8) chloromethane	4.788	50	2833	0.67	ug/L #	53
9) vinyl chloride	5.091	62	1994	0.49	ug/L	96
11) bromomethane	5.672	94	1810	0.63	ug/L	77
12) chloroethane	5.865	64	1288	0.59	ug/L #	46
13) trichlorofluoromethane	6.346	101	1786	0.43	ug/L	77
14) vinyl bromide	6.205	106	1528	0.61	ug/L	84
19) 1,1-dichloroethene	7.105	96	1500	0.61	ug/L #	80
22) iodomethane	7.372	142	2834	0.57	ug/L	87
23) carbon disulfide	7.513	76	5561	0.66	ug/L	88
24) methylene chloride	7.795	84	1806	0.61	ug/L	84
26) methyl tert butyl ether	8.140	73	4640	0.63	ug/L	92
27) trans-1,2-dichloroethene	8.172	96	1544	0.57	ug/L	88
28) hexane	8.496	56	1014	0.57	ug/L #	44
29) di-isopropyl ether	8.710	45	5614	0.65	ug/L	94
31) 1,1-dichloroethane	8.742	63	2663	0.59	ug/L	86
32) chloroprene	8.841	53	2067	0.53	ug/L	86
35) ethyl tert-butyl ether	9.171	59	5051	0.61	ug/L	95
37) 2,2-dichloropropane	9.495	77	2264	0.67	ug/L	93
38) cis-1,2-dichloroethene	9.453	96	1675	0.57	ug/L	88
39) propionitrile	9.469	54	2119	5.34	ug/L	87
42) bromochloromethane	9.756	128	715	0.49	ug/L #	71
44) chloroform	9.835	83	2479	0.52	ug/L	89
47) 1,1,1-trichloroethane	10.107	97	2069	0.53	ug/L	91
48) cyclohexane	10.238	84	2076	0.57	ug/L #	71
50) 1,1-dichloropropene	10.269	75	1878	0.54	ug/L	90
51) carbon tetrachloride	10.316	117	1935	0.59	ug/L	80
56) n-butyl alcohol	10.991	56	1991	24.39	ug/L	84
57) 2,2,4-Trimethylpentane	10.609	57	5261	0.54	ug/L	90
58) benzene	10.525	78	5778	0.56	ug/L	96
59) tert-amyl methyl ether	10.588	73	4647	0.61	ug/L	91
60) heptane	10.761	57	1013	0.53	ug/L	84
61) 1,2-dichloroethane	10.551	62	1745	0.55	ug/L	91
63) trichloroethene	11.252	95	1299	0.50	ug/L	91

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247357.D
Acq On : 13 Sep 2017 6:55 pm
Operator : ThienN
Sample : ic10636-0.5
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 14 09:29:25 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:53:25 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) methylcyclohexane	11.577	83	3052	0.67 ug/L	98
67) 1,2-dichloropropane	11.566	63	1447	0.55 ug/L	84
68) dibromomethane	11.686	93	864	0.54 ug/L #	72
69) bromodichloromethane	11.833	83	1756	0.50 ug/L	90
72) cis-1,3-dichloropropene	12.314	75	2470	0.57 ug/L	80
73) 4-methyl-2-pentanone	12.419	58	2392	2.33 ug/L #	70
74) isoamyl alcohol	12.419	70	520	6.98 ug/L #	31
77) toluene	12.732	92	3602	0.54 ug/L	88
78) ethyl methacrylate	12.910	69	1731	0.50 ug/L	87
79) trans-1,3-dichloropropene	12.936	75	1866	0.47 ug/L	91
80) 1,1,2-trichloroethane	13.177	83	912	0.45 ug/L #	85
81) tetrachloroethene	13.344	164	1293	0.49 ug/L	76
82) 2-hexanone	13.355	58	2151	2.10 ug/L	92
83) 1,3-dichloropropane	13.381	76	2171	0.56 ug/L	96
84) butyl acetate	13.444	56	1077	0.60 ug/L #	50
85) 3,3-Dimethyl-1-Butanol	13.559	69	1141	5.76 ug/L #	72
86) dibromochloromethane	13.658	129	1342	0.46 ug/L	87
87) 1,2-dibromoethane	13.831	107	1322	0.51 ug/L	84
88) n-butyl ether	14.307	57	7688	0.64 ug/L	87
89) chlorobenzene	14.364	112	3884	0.52 ug/L	96
90) 1,1,1,2-tetrachloroethane	14.437	131	1516	0.54 ug/L	88
91) ethylbenzene	14.437	91	7035	0.57 ug/L	98
92) m,p-xylene	14.563	106	5433	1.13 ug/L	89
93) o-xylene	15.023	91	6301	0.61 ug/L	93
94) styrene	15.039	104	4833	0.59 ug/L	87
95) butyl acrylate	14.830	55	3250	0.57 ug/L	94
96) isopropylbenzene	15.415	105	7824	0.57 ug/L	95
97) bromoform	15.300	173	930	0.40 ug/L	82
98) cis-1,4-dichloro-2-butene	15.457	88	606	0.54 ug/L #	82
101) 1,1,2,2-tetrachloroethane	15.735	83	1875	0.51 ug/L	94
103) 1,2,3-trichloropropane	15.844	110	521	0.55 ug/L #	46
104) bromobenzene	15.855	156	1971	0.50 ug/L	88
105) n-propylbenzene	15.886	91	8947	0.53 ug/L	94
106) 2-chlorotoluene	16.038	126	1813	0.53 ug/L	90
107) 4-chlorotoluene	16.169	91	5540	0.55 ug/L	93
108) 1,3,5-trimethylbenzene	16.059	105	6622	0.55 ug/L	95
109) tert-butylbenzene	16.441	119	5357	0.49 ug/L	96
110) 1,2,4-trimethylbenzene	16.503	105	6911	0.57 ug/L	96
111) sec-butylbenzene	16.692	105	9005	0.53 ug/L	99
112) p-isopropyltoluene	16.838	119	7397	0.52 ug/L	98
113) 1,3-dichlorobenzene	16.885	146	4127	0.54 ug/L	96
114) 1,4-dichlorobenzene	16.995	146	3961	0.53 ug/L	89
115) 1,2-dichlorobenzene	17.413	146	4048	0.55 ug/L	94
116) Benzyl Chloride	17.094	91	3659	0.54 ug/L	91
117) n-butylbenzene	17.298	92	3640	0.51 ug/L	95

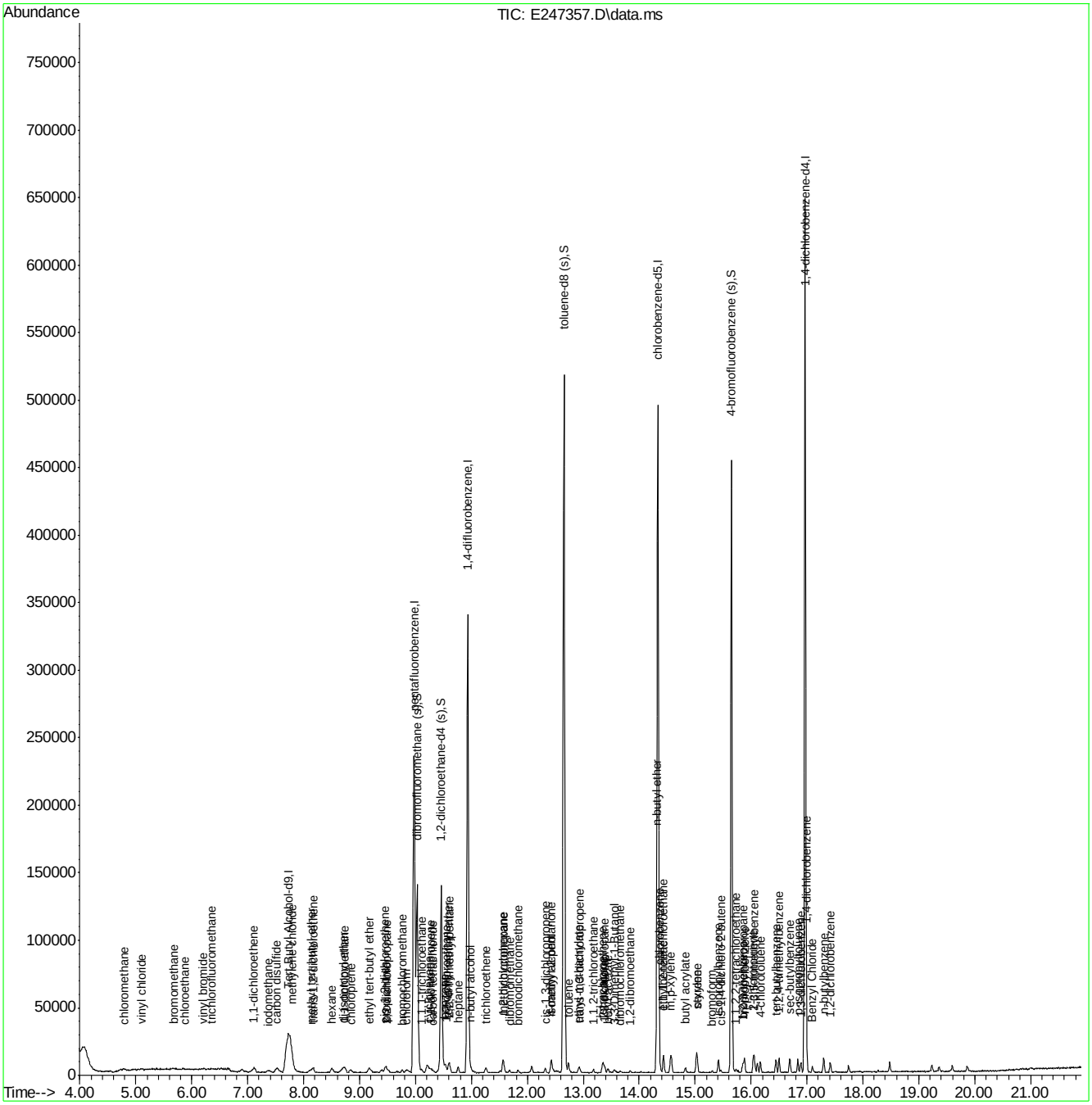
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247357.D
Acq On : 13 Sep 2017 6:55 pm
Operator : ThienN
Sample : ic10636-0.5
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 14 09:29:25 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:53:25 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247358.D
Acq On : 13 Sep 2017 7:25 pm
Operator : ThienN
Sample : ic10636-1
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 08:55:19 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:53:25 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.760	65	122437	500.00	ug/L		0.00
5) pentafluorobenzene	9.972	168	227458	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.929	114	336544	50.00	ug/L		0.00
75) chlorobenzene-d5	14.329	117	335376	50.00	ug/L		0.00
99) 1,4-dichlorobenzene-d4	16.965	152	204332	50.00	ug/L		0.00
System Monitoring Compounds							
46) dibromofluoromethane (s)	10.025	113	104095	49.66	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.32%				
55) 1,2-dichloroethane-d4 (s)	10.459	65	119530	52.40	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 104.80%				
76) toluene-d8 (s)	12.650	98	407070	48.25	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.50%				
100) 4-bromofluorobenzene (s)	15.647	95	170518	51.04	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.08%				
Target Compounds							Qvalue
6) chlorodifluoromethane	4.533	51	2652	1.00	ug/L		72
7) dichlorodifluoromethane	4.517	85	2728	0.84	ug/L		90
8) chloromethane	4.779	50	4843	1.11	ug/L		76
9) vinyl chloride	5.082	62	4615	1.11	ug/L		96
11) bromomethane	5.668	94	2748	0.92	ug/L		77
12) chloroethane	5.846	64	2297	1.01	ug/L		69
13) trichlorofluoromethane	6.332	101	4038	0.95	ug/L		90
14) vinyl bromide	6.196	106	3133	1.21	ug/L		82
15) ethyl ether	6.641	74	1158	0.86	ug/L		83
16) 2-chloropropane	6.881	43	6027	1.28	ug/L		94
19) 1,1-dichloroethene	7.101	96	2187	0.86	ug/L		89
22) iodomethane	7.368	142	4261	0.83	ug/L		93
23) carbon disulfide	7.514	76	8746	1.00	ug/L		86
24) methylene chloride	7.786	84	2579	0.84	ug/L		76
25) methyl acetate	7.525	43	2594	1.27	ug/L		63
26) methyl tert butyl ether	8.131	73	7414	0.98	ug/L		89
27) trans-1,2-dichloroethene	8.173	96	2391	0.86	ug/L		98
28) hexane	8.503	56	1703	0.93	ug/L	#	79
29) di-isopropyl ether	8.712	45	8721	0.98	ug/L		85
30) 2-butanone	9.392	72	836	2.81	ug/L	#	17
31) 1,1-dichloroethane	8.748	63	4257	0.91	ug/L		91
32) chloroprene	8.843	53	3730	0.93	ug/L		97
33) acrylonitrile	8.069	53	757	0.71	ug/L	#	63
35) ethyl tert-butyl ether	9.167	59	7969	0.94	ug/L		95
36) ethyl acetate	9.381	45	362	0.88	ug/L	#	1
37) 2,2-dichloropropane	9.491	77	3940	1.13	ug/L		94
38) cis-1,2-dichloroethene	9.449	96	2575	0.85	ug/L		83
39) propionitrile	9.470	54	3949	9.66	ug/L		78
41) methacrylonitrile	9.674	67	893	0.82	ug/L	#	43
42) bromochloromethane	9.753	128	1228	0.81	ug/L		97
44) chloroform	9.836	83	4004	0.81	ug/L		97
45) tert-Butyl Formate	9.873	59	1534	0.81	ug/L		73
47) 1,1,1-trichloroethane	10.103	97	3498	0.87	ug/L		85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247358.D
Acq On : 13 Sep 2017 7:25 pm
Operator : ThienN
Sample : ic10636-1
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 08:55:19 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:53:25 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) cyclohexane	10.223	84	4217	1.12	ug/L		91
50) 1,1-dichloropropene	10.270	75	3070	0.86	ug/L		94
51) carbon tetrachloride	10.307	117	2863	0.84	ug/L		94
56) n-butyl alcohol	10.992	56	3157	36.99	ug/L	#	70
57) 2,2,4-Trimethylpentane	10.605	57	8688	0.86	ug/L		96
58) benzene	10.527	78	9387	0.88	ug/L		94
59) tert-amyl methyl ether	10.600	73	7709	0.96	ug/L		97
60) heptane	10.752	57	1739	0.87	ug/L	#	74
61) 1,2-dichloroethane	10.553	62	2764	0.84	ug/L		91
63) trichloroethene	11.259	95	2259	0.84	ug/L		92
66) methylcyclohexane	11.567	83	4926	1.03	ug/L		88
67) 1,2-dichloropropane	11.567	63	2351	0.86	ug/L		98
68) dibromomethane	11.683	93	1349	0.81	ug/L		97
69) bromodichloromethane	11.834	83	3022	0.82	ug/L		92
70) 2-nitropropane	12.054	41	940	0.96	ug/L		79
71) epichlorohydrin	12.179	57	1192	4.26	ug/L		53
72) cis-1,3-dichloropropene	12.321	75	3745	0.83	ug/L		96
73) 4-methyl-2-pentanone	12.425	58	4005	3.74	ug/L		91
74) isoamyl alcohol	12.436	70	1035	13.28	ug/L	#	75
77) toluene	12.734	92	5736	0.81	ug/L		94
78) ethyl methacrylate	12.917	69	3329	0.91	ug/L		94
79) trans-1,3-dichloropropene	12.938	75	3416	0.81	ug/L		95
80) 1,1,2-trichloroethane	13.178	83	1764	0.81	ug/L		87
81) tetrachloroethene	13.335	164	2175	0.78	ug/L		83
82) 2-hexanone	13.361	58	3942	3.63	ug/L	#	81
83) 1,3-dichloropropane	13.382	76	3274	0.79	ug/L		96
84) butyl acetate	13.435	56	1708	0.90	ug/L		85
85) 3,3-Dimethyl-1-Butanol	13.550	69	1579	7.51	ug/L		92
86) dibromochloromethane	13.654	129	2166	0.70	ug/L		82
87) 1,2-dibromoethane	13.832	107	2193	0.79	ug/L		96
88) n-butyl ether	14.303	57	13411	1.06	ug/L		94
89) chlorobenzene	14.371	112	6817	0.85	ug/L		96
90) 1,1,1,2-tetrachloroethane	14.444	131	2427	0.82	ug/L		93
91) ethylbenzene	14.428	91	11984	0.91	ug/L		93
92) m,p-xylene	14.564	106	8853	1.74	ug/L		98
93) o-xylene	15.019	91	9975	0.91	ug/L		93
94) styrene	15.030	104	8102	0.93	ug/L		100
95) butyl acrylate	14.821	55	5936	0.98	ug/L		94
96) isopropylbenzene	15.412	105	12949	0.89	ug/L		98
97) bromoform	15.302	173	1809	0.73	ug/L		98
98) cis-1,4-dichloro-2-butene	15.453	88	1068	0.89	ug/L	#	76
101) 1,1,2,2-tetrachloroethane	15.736	83	3147	0.80	ug/L		96
102) trans-1,4-dichloro-2-b...	15.767	53	855	0.80	ug/L		92
103) 1,2,3-trichloropropane	15.830	110	724	0.72	ug/L	#	60
104) bromobenzene	15.856	156	3188	0.77	ug/L		93
105) n-propylbenzene	15.888	91	15379	0.86	ug/L		98
106) 2-chlorotoluene	16.039	126	2955	0.82	ug/L		91
107) 4-chlorotoluene	16.165	91	9030	0.85	ug/L		99
108) 1,3,5-trimethylbenzene	16.055	105	10697	0.83	ug/L		93
109) tert-butylbenzene	16.442	119	8991	0.78	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247358.D
Acq On : 13 Sep 2017 7:25 pm
Operator : ThienN
Sample : ic10636-1
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 08:55:19 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:53:25 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) 1,2,4-trimethylbenzene	16.499	105	11343	0.88	ug/L	98
111) sec-butylbenzene	16.693	105	14728	0.82	ug/L	97
112) p-isopropyltoluene	16.834	119	12059	0.80	ug/L	97
113) 1,3-dichlorobenzene	16.887	146	6759	0.84	ug/L	97
114) 1,4-dichlorobenzene	16.996	146	6465	0.82	ug/L	96
115) 1,2-dichlorobenzene	17.415	146	6424	0.83	ug/L	86
116) Benzyl Chloride	17.096	91	5827	0.81	ug/L	96
117) n-butylbenzene	17.294	92	5899	0.78	ug/L	97
119) hexachloroethane	17.744	201	1796	0.62	ug/L	91
121) 1,3,5-trichlorobenzene	18.482	180	4763	0.64	ug/L	97
123) 1,2,4-trichlorobenzene	19.235	180	3941	0.67	ug/L	98
124) hexachlorobutadiene	19.355	225	2236	0.61	ug/L	89
125) naphthalene	19.601	128	7182	0.64	ug/L	99
126) 1,2,3-trichlorobenzene	19.862	180	2806	0.57	ug/L	98

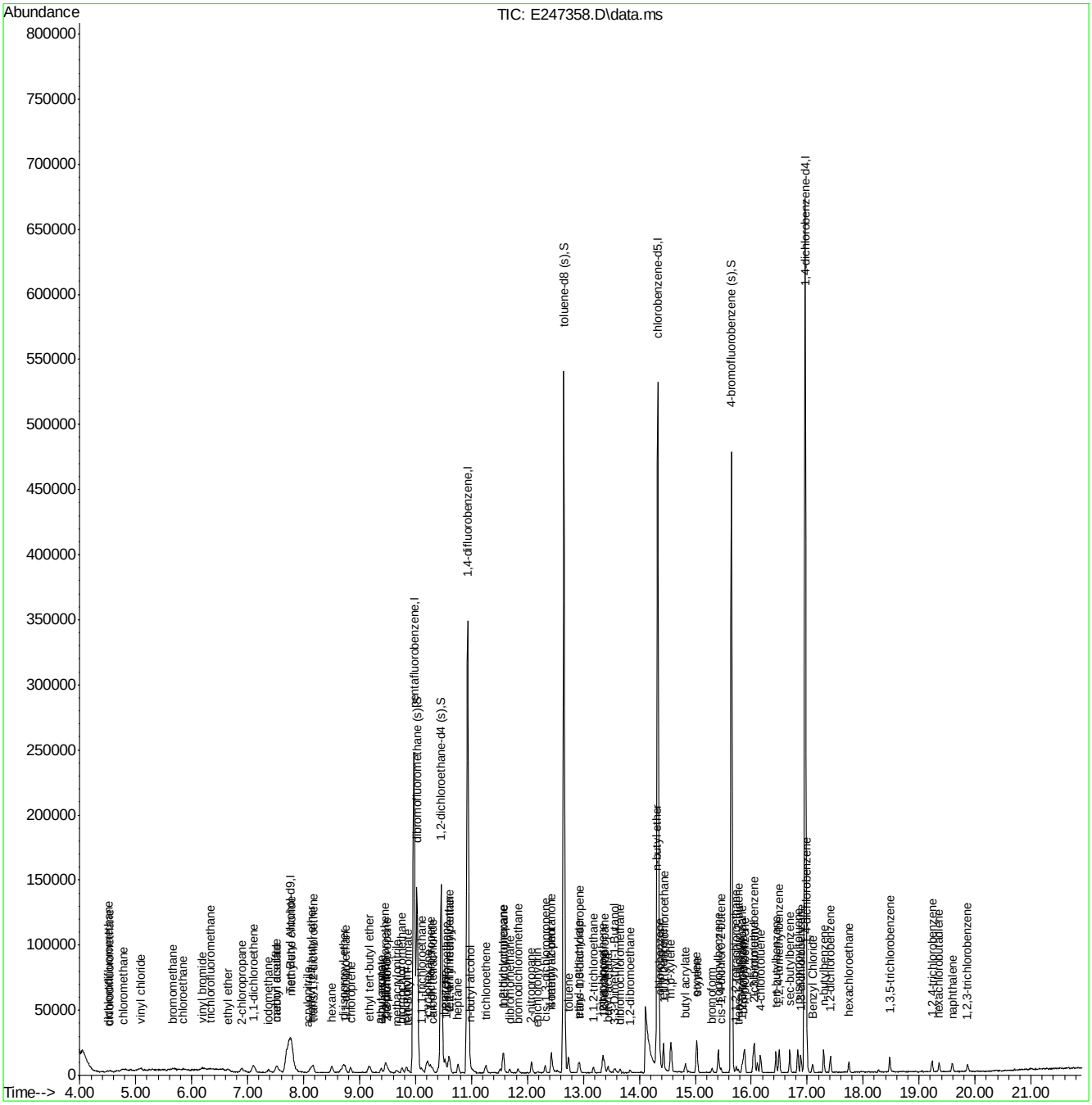
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247358.D
Acq On : 13 Sep 2017 7:25 pm
Operator : ThienN
Sample : ic10636-1
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 08:55:19 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:53:25 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 09/15/17 12:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 08:56:43 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.759	65	125959	500.00	ug/L		0.00
5) pentafluorobenzene	9.972	168	228705	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.934	114	339054	50.00	ug/L		0.00
75) chlorobenzene-d5	14.328	117	331662	50.00	ug/L		0.00
99) 1,4-dichlorobenzene-d4	16.964	152	204289	50.00	ug/L		0.00
System Monitoring Compounds							
46) dibromofluoromethane (s)	10.029	113	103894	49.29	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.58%				
55) 1,2-dichloroethane-d4 (s)	10.463	65	120912	52.61	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 105.22%				
76) toluene-d8 (s)	12.649	98	412272	49.41	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.82%				
100) 4-bromofluorobenzene (s)	15.646	95	172575	51.66	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 103.32%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.885	59	4312	12.08	ug/L		78
4) 1,4-dioxane	11.619	88	1252m	37.08	ug/L		
6) chlorodifluoromethane	4.548	51	7590	2.84	ug/L		92
7) dichlorodifluoromethane	4.537	85	7753	2.37	ug/L		89
8) chloromethane	4.799	50	10188	2.31	ug/L		97
9) vinyl chloride	5.092	62	10039	2.40	ug/L		94
11) bromomethane	5.667	94	6602	2.21	ug/L		93
12) chloroethane	5.855	64	5600	2.46	ug/L		87
13) trichlorofluoromethane	6.342	101	9596	2.24	ug/L		98
14) vinyl bromide	6.195	106	7202	2.76	ug/L		91
15) ethyl ether	6.656	74	3414	2.52	ug/L		85
16) 2-chloropropane	6.901	43	14119	2.97	ug/L		94
17) acrolein	6.901	56	1654	2.84	ug/L		77
18) freon 113	7.137	151	5142	2.43	ug/L	#	79
19) 1,1-dichloroethene	7.105	96	6583	2.57	ug/L		86
20) acetone	7.095	58	2056	8.57	ug/L	#	82
21) acetonitrile	7.524	41	11335	25.73	ug/L		88
22) iodomethane	7.377	142	12165	2.36	ug/L		92
23) carbon disulfide	7.513	76	24093	2.75	ug/L		98
24) methylene chloride	7.791	84	6989	2.28	ug/L		95
25) methyl acetate	7.524	43	5828	2.83	ug/L		90
26) methyl tert butyl ether	8.131	73	19798	2.61	ug/L		94
27) trans-1,2-dichloroethene	8.172	96	6859	2.46	ug/L		89
28) hexane	8.507	56	4843	2.63	ug/L		89
29) di-isopropyl ether	8.711	45	22983	2.58	ug/L		98
30) 2-butanone	9.375	72	2483	8.31	ug/L	#	63
31) 1,1-dichloroethane	8.742	63	11545	2.46	ug/L		95
32) chloroprene	8.842	53	10314	2.57	ug/L		98
33) acrylonitrile	8.073	53	2623	2.45	ug/L		79
34) vinyl acetate	8.664	86	899	1.96	ug/L	#	25
35) ethyl tert-butyl ether	9.177	59	22497	2.63	ug/L		95
36) ethyl acetate	9.381	45	956	2.30	ug/L	#	71
37) 2,2-dichloropropane	9.496	77	9865	2.81	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 08:56:43 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.454	96	7231	2.38	ug/L		94
39) propionitrile	9.464	54	10739	26.12	ug/L		85
40) methyl acrylate	9.480	85	746	1.91	ug/L	#	15
41) methacrylonitrile	9.668	67	2528	2.32	ug/L	#	81
42) bromochloromethane	9.757	128	3469	2.28	ug/L		84
43) tetrahydrofuran	9.768	42	2129	2.10	ug/L		85
44) chloroform	9.836	83	11028	2.23	ug/L		97
45) tert-Butyl Formate	9.883	59	4060	2.14	ug/L		94
47) 1,1,1-trichloroethane	10.113	97	9480	2.34	ug/L		94
48) cyclohexane	10.233	84	11328	2.99	ug/L		81
50) 1,1-dichloropropene	10.275	75	8781	2.46	ug/L		94
51) carbon tetrachloride	10.312	117	8344	2.44	ug/L		92
52) tert-amyl alcohol	10.411	73	2322	15.21	ug/L	#	63
53) isopropyl acetate	10.406	87	1225	2.29	ug/L	#	69
56) n-butyl alcohol	10.981	56	9438m	109.76	ug/L		
57) 2,2,4-Trimethylpentane	10.610	57	23954	2.35	ug/L		98
58) benzene	10.526	78	26494	2.46	ug/L		96
59) tert-amyl methyl ether	10.594	73	21054	2.61	ug/L		99
60) heptane	10.761	57	5055	2.51	ug/L		96
61) 1,2-dichloroethane	10.552	62	7961	2.39	ug/L		94
62) ethyl acrylate	11.232	55	8443	2.57	ug/L		99
63) trichloroethene	11.258	95	6283	2.32	ug/L		92
64) 2-chloroethyl vinyl ether	12.074	63	11708	7.63	ug/L		98
65) methyl methacrylate	11.509	100	1574	2.22	ug/L	#	77
66) methylcyclohexane	11.572	83	13687	2.85	ug/L		94
67) 1,2-dichloropropane	11.567	63	6806	2.47	ug/L		95
68) dibromomethane	11.677	93	4061	2.41	ug/L		88
69) bromodichloromethane	11.833	83	8010	2.16	ug/L		98
70) 2-nitropropane	12.043	41	2476	2.50	ug/L		88
71) epichlorohydrin	12.184	57	3510	12.46	ug/L		93
72) cis-1,3-dichloropropene	12.320	75	10393	2.29	ug/L		97
73) 4-methyl-2-pentanone	12.424	58	11841	10.96	ug/L		98
74) isoamyl alcohol	12.424	70	3479	44.31	ug/L	#	71
77) toluene	12.733	92	15796	2.24	ug/L		91
78) ethyl methacrylate	12.916	69	9203	2.54	ug/L		95
79) trans-1,3-dichloropropene	12.932	75	9142	2.20	ug/L		94
80) 1,1,2-trichloroethane	13.183	83	4746	2.21	ug/L		93
81) tetrachloroethene	13.345	164	6115	2.21	ug/L		100
82) 2-hexanone	13.355	58	11554	10.76	ug/L		98
83) 1,3-dichloropropane	13.382	76	9385	2.30	ug/L		87
84) butyl acetate	13.439	56	5314	2.82	ug/L		91
85) 3,3-Dimethyl-1-Butanol	13.570	69	4591	22.07	ug/L		92
86) dibromochloromethane	13.659	129	6288	2.06	ug/L		98
87) 1,2-dibromoethane	13.837	107	6068	2.21	ug/L		97
88) n-butyl ether	14.302	57	34968	2.79	ug/L		98
89) chlorobenzene	14.365	112	18418	2.33	ug/L		94
90) 1,1,1,2-tetrachloroethane	14.438	131	6622	2.25	ug/L		89
91) ethylbenzene	14.433	91	32268	2.48	ug/L		100
92) m,p-xylene	14.564	106	24887	4.93	ug/L		91
93) o-xylene	15.019	91	26924	2.49	ug/L		100

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 08:56:43 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
94) styrene	15.034	104	22692	2.64	ug/L		99
95) butyl acrylate	14.820	55	15430	2.56	ug/L		97
96) isopropylbenzene	15.411	105	35555	2.46	ug/L		97
97) bromoform	15.301	173	5021	2.05	ug/L		91
98) cis-1,4-dichloro-2-butene	15.453	88	2980	2.52	ug/L		96
101) 1,1,2,2-tetrachloroethane	15.730	83	8664	2.21	ug/L		94
102) trans-1,4-dichloro-2-b...	15.761	53	2228	2.09	ug/L	#	74
103) 1,2,3-trichloropropane	15.835	110	2144	2.13	ug/L		88
104) bromobenzene	15.855	156	9177	2.21	ug/L		93
105) n-propylbenzene	15.882	91	42612	2.39	ug/L		98
106) 2-chlorotoluene	16.038	126	8034	2.23	ug/L	#	84
107) 4-chlorotoluene	16.164	91	25505	2.40	ug/L		99
108) 1,3,5-trimethylbenzene	16.059	105	29093	2.26	ug/L		96
109) tert-butylbenzene	16.441	119	25000	2.16	ug/L		97
110) 1,2,4-trimethylbenzene	16.499	105	31311	2.44	ug/L		99
111) sec-butylbenzene	16.692	105	40099	2.25	ug/L		96
112) p-isopropyltoluene	16.833	119	33663	2.24	ug/L		98
113) 1,3-dichlorobenzene	16.891	146	18395	2.28	ug/L		97
114) 1,4-dichlorobenzene	16.996	146	17728	2.25	ug/L		100
115) 1,2-dichlorobenzene	17.414	146	17617	2.27	ug/L		95
116) Benzyl Chloride	17.100	91	16216	2.26	ug/L		100
117) n-butylbenzene	17.299	92	16452	2.18	ug/L		92
118) 2-ethylhexyl acrylate	19.218	55	1239	0.27	ug/L	#	66
119) hexachloroethane	17.749	201	5257	1.82	ug/L		92
120) 1,2-dibromo-3-chloropr...	18.267	75	1257	1.72	ug/L		91
121) 1,3,5-trichlorobenzene	18.476	180	14361	1.92	ug/L		96
122) Nitrobenzene	18.502	77	116	5.64	ug/L	#	20
123) 1,2,4-trichlorobenzene	19.234	180	10542	1.80	ug/L		97
124) hexachlorobutadiene	19.354	225	5982	1.64	ug/L		96
125) naphthalene	19.595	128	19934	1.78	ug/L		99
126) 1,2,3-trichlorobenzene	19.867	180	7922	1.62	ug/L		97
127) 2-methylnaphthalene	21.002	142	2330	0.54	ug/L		90

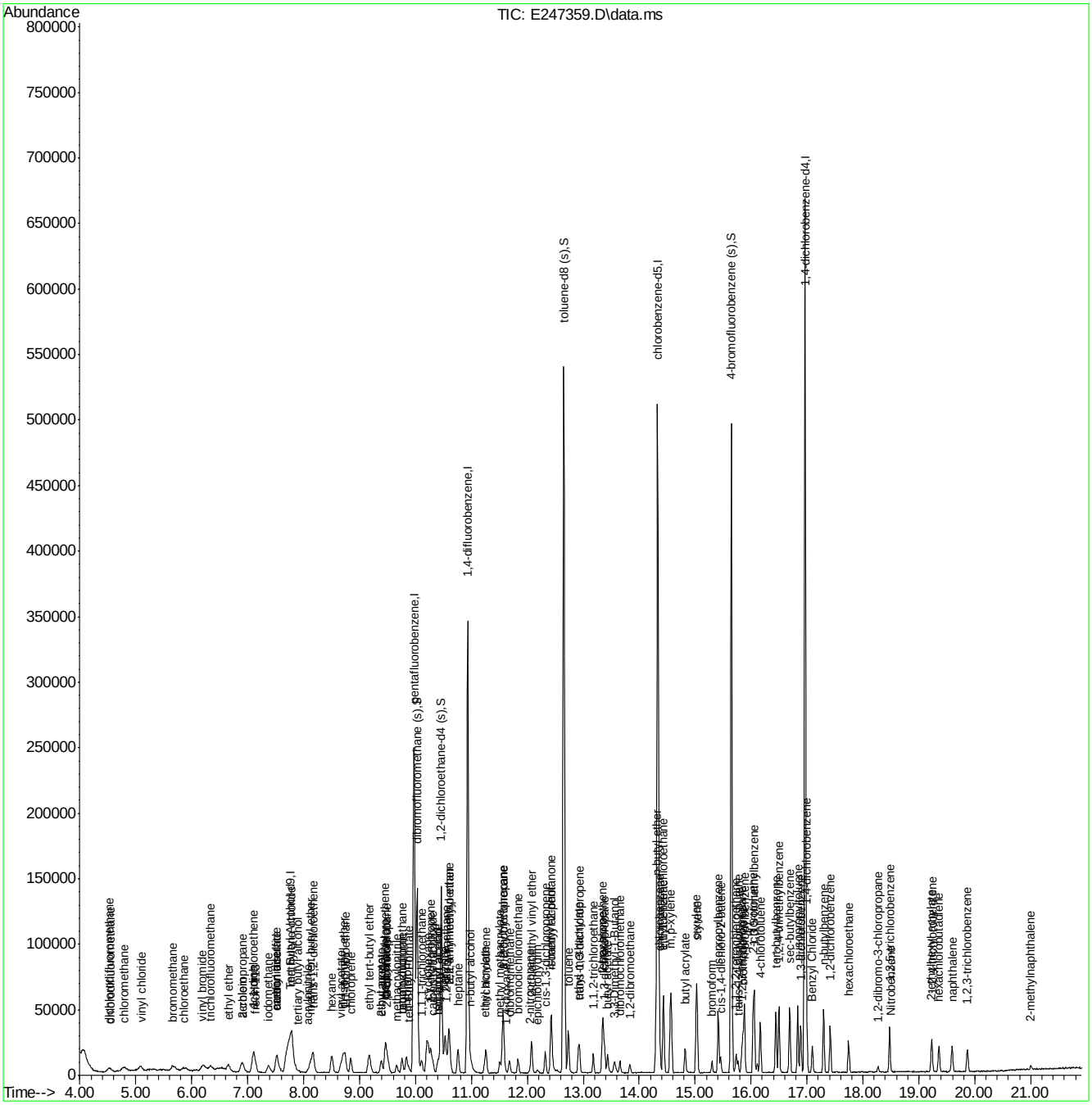
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 08:56:43 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Manual Integration Approval Summary

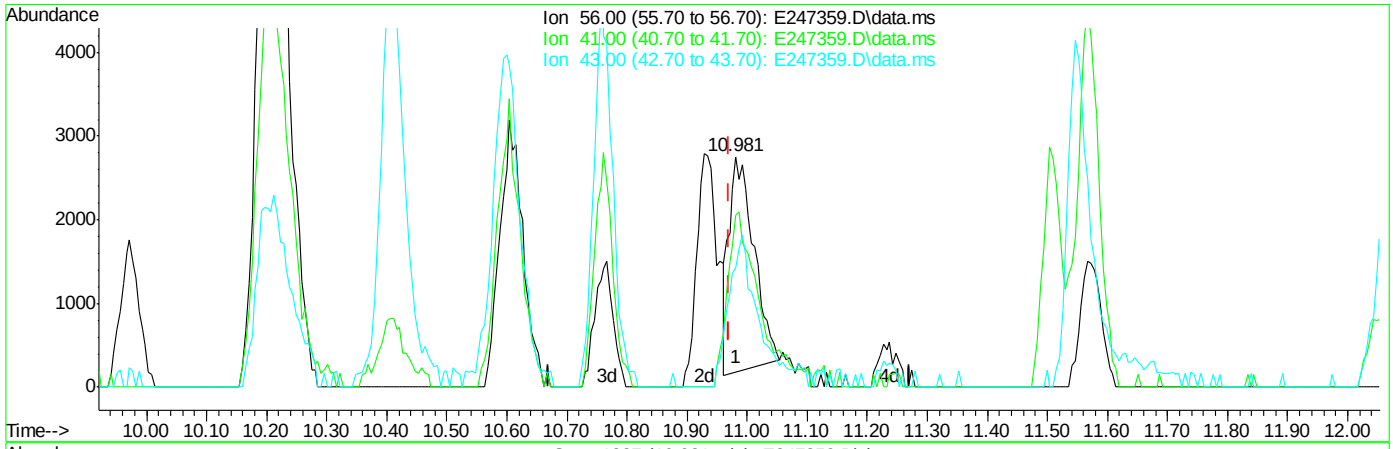
Sample Number: VE10636-IC10636 **Method:** SW846 8260C
Lab FileID: E247359.D **Analyst approved:** 09/15/17 09:03 Ying Li
Injection Time: 09/13/17 19:55 **Supervisor approved:** 09/15/17 12:21 Kanya Veerawat

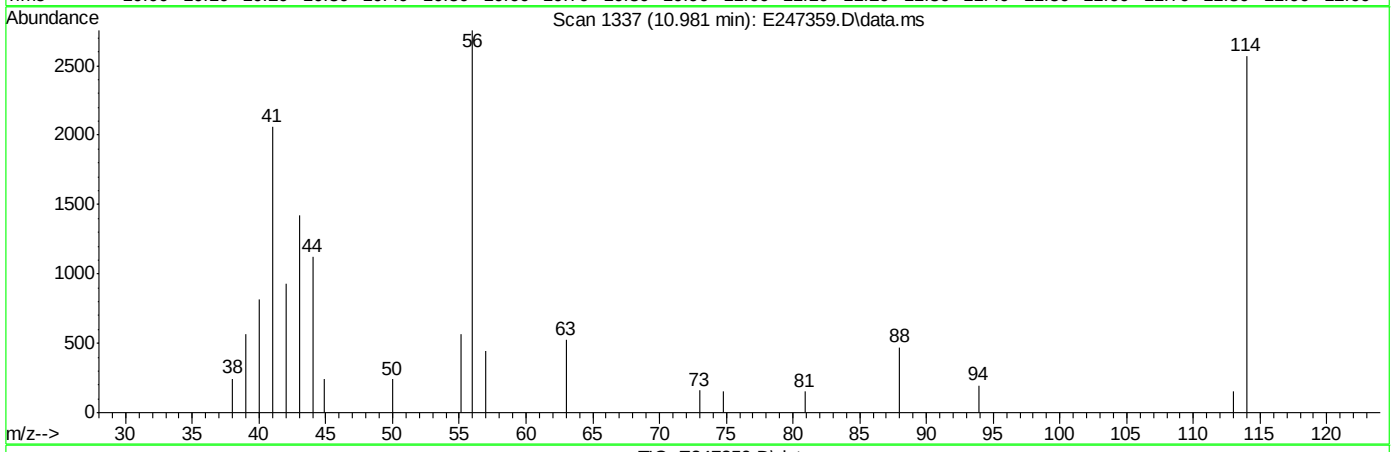
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Butyl Alcohol	71-36-3		10.98	Split peak
1,4-Dioxane	123-91-1		11.62	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 08:46:46 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration





TIC: E247359.D\data.ms

(56) n-butyl alcohol

10.981min (+0.010) 85.49ug/L

response 7351

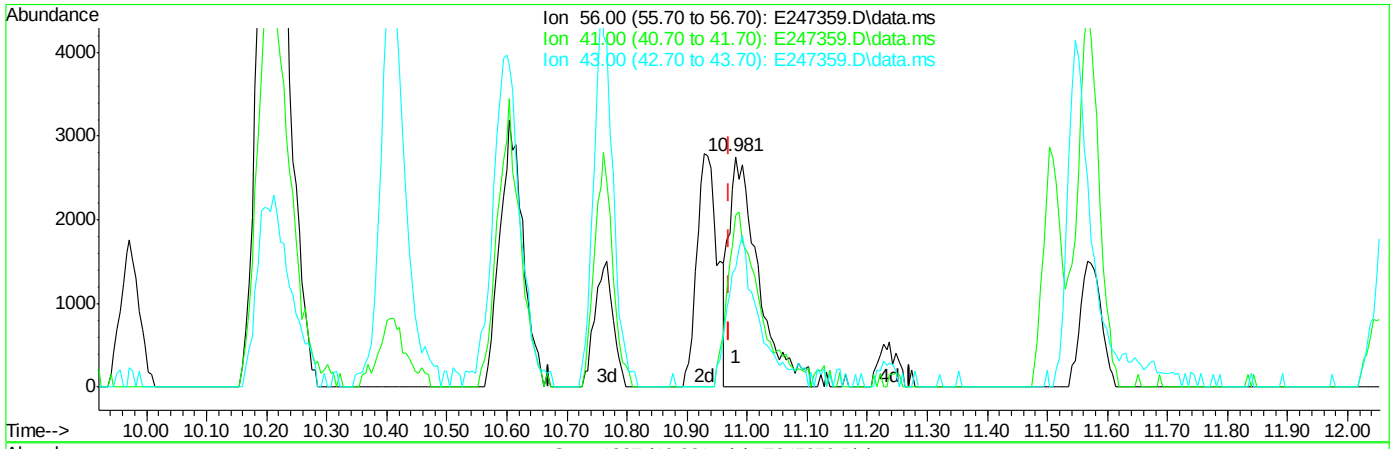
Ion	Exp%	Act%
56.00	100	100
41.00	72.80	66.08
43.00	56.40	47.99
0.00	0.00	0.00

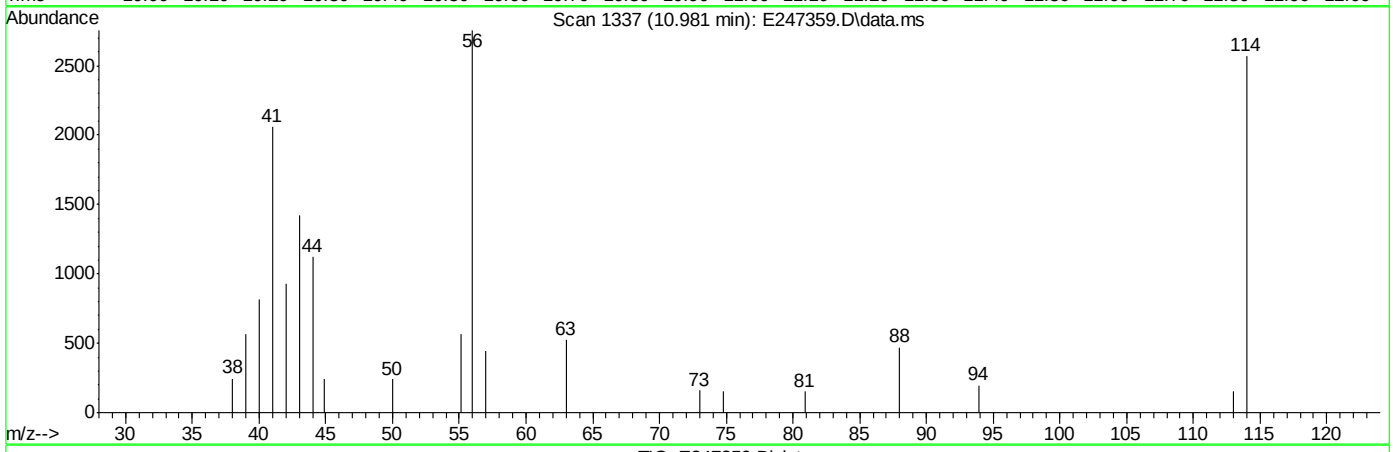
SGS ACCUTEST JC54422

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 08:46:46 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration





TIC: E247359.D\data.ms

(56) n-butyl alcohol

10.981min (+0.010) 109.76ug/L m

response 9438

Ion	Exp%	Act%
56.00	100	100
41.00	72.80	74.66
43.00	56.40	51.54
0.00	0.00	0.00

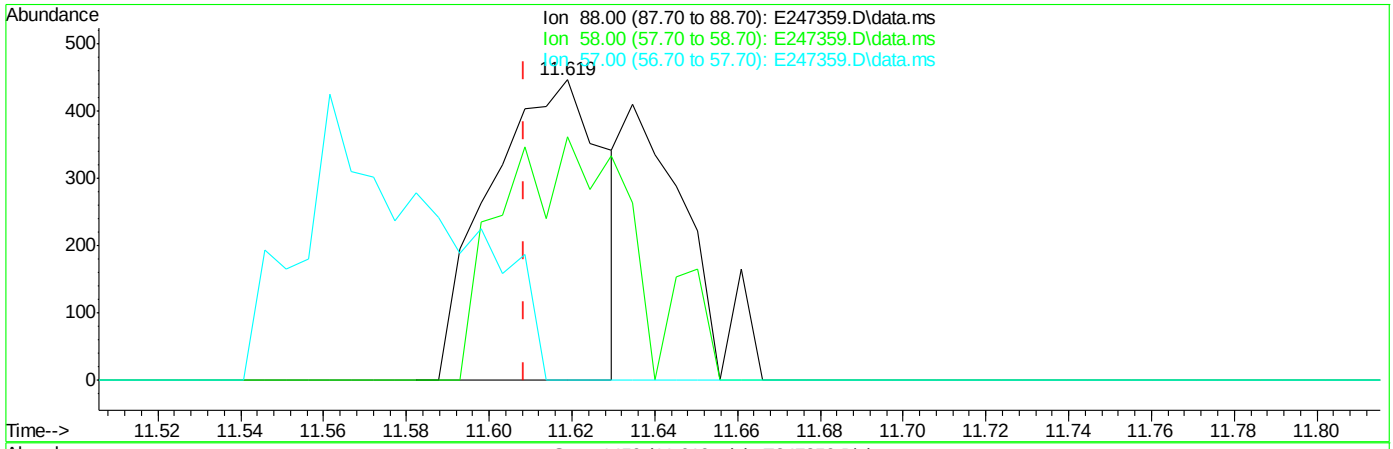
E247359.D edits: n-butyl alcohol

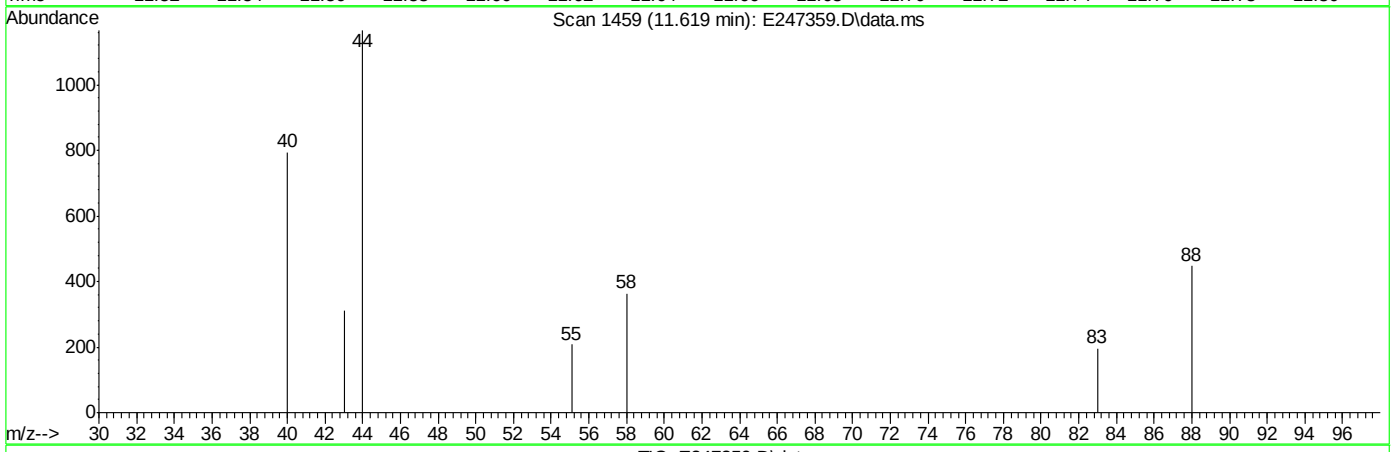
SGS ACCUTEST JC54422

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 08:47:52 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration





TIC: E247359.D\data.ms

(4) 1,4-dioxane

11.619min (+0.011) 25.41ug/L

response 858

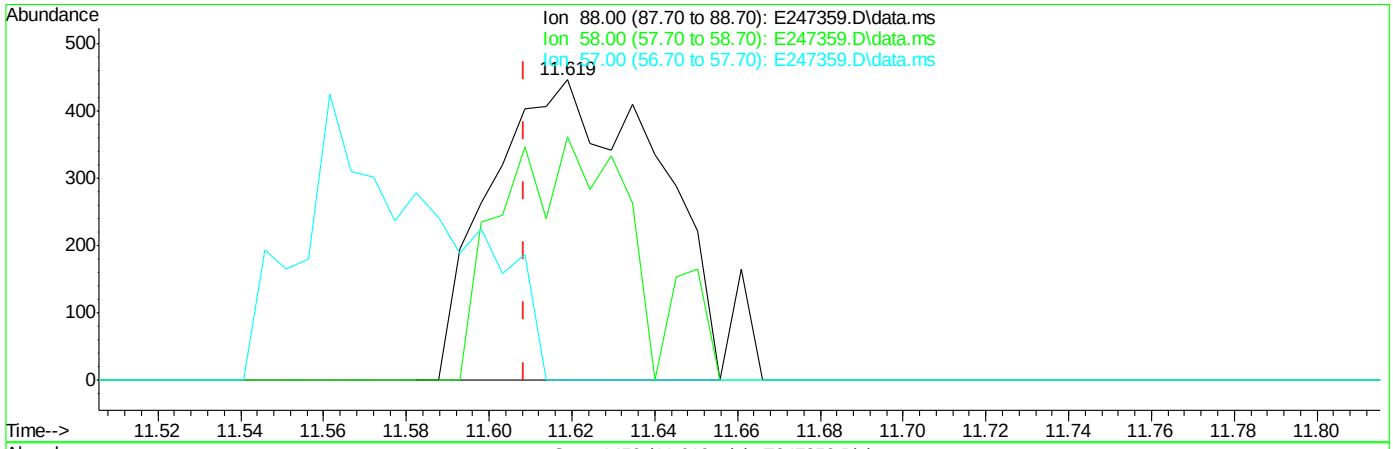
Ion	Exp%	Act%
88.00	100	100
58.00	67.10	81.21
57.00	26.80	0.00
0.00	0.00	0.00

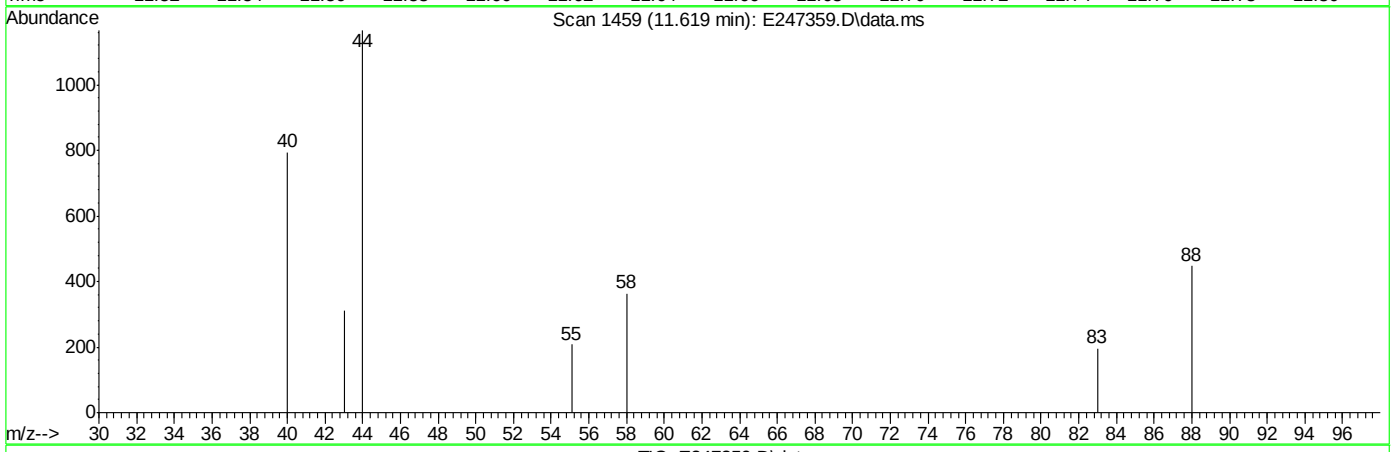
SGS ACCUTEST JC54422

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E247359.D
Acq On : 13 Sep 2017 7:55 pm
Operator : ThienN
Sample : ic10636-2
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 08:47:52 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:46:42 2017
Response via : Initial Calibration





TIC: E247359.D\data.ms

(4) 1,4-dioxane

11.619min (+0.011) 37.08ug/L m

response 1252

Ion	Exp%	Act%
88.00	100	100
58.00	67.10	81.21
57.00	26.80	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247360.D
Acq On : 13 Sep 2017 8:26 pm
Operator : ThienN
Sample : ic10636-4
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:45:21 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:45:03 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.759	65	124168	500.00	ug/L		0.00
5) pentafluorobenzene	9.971	168	222527	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.933	114	335303	50.00	ug/L		0.00
75) chlorobenzene-d5	14.328	117	328222	50.00	ug/L		0.00
99) 1,4-dichlorobenzene-d4	16.964	152	201201	50.00	ug/L		0.00
System Monitoring Compounds							
46) dibromofluoromethane (s)	10.023	113	100700	49.11	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.22%				
55) 1,2-dichloroethane-d4 (s)	10.457	65	116816	51.40	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.80%				
76) toluene-d8 (s)	12.649	98	415700	50.35	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.70%				
100) 4-bromofluorobenzene (s)	15.646	95	166443	50.59	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 101.18%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.863	59	7667	21.79	ug/L		78
4) 1,4-dioxane	11.613	88	2692	80.87	ug/L		92
6) chlorodifluoromethane	4.542	51	13364	5.15	ug/L		89
7) dichlorodifluoromethane	4.521	85	8521	2.68	ug/L		92
8) chloromethane	4.793	50	10884	2.54	ug/L		86
9) vinyl chloride	5.081	62	10832	2.66	ug/L		98
11) bromomethane	5.672	94	6799	2.34	ug/L		95
12) chloroethane	5.850	64	5802	2.62	ug/L		93
13) trichlorofluoromethane	6.331	101	9697	2.33	ug/L		87
14) vinyl bromide	6.184	106	7725	3.04	ug/L		89
15) ethyl ether	6.655	74	5583	4.23	ug/L		93
16) 2-chloropropane	6.890	43	23827	5.15	ug/L		94
17) acrolein	6.917	56	2673	4.72	ug/L		77
18) freon 113	7.126	151	9535	4.64	ug/L		91
19) 1,1-dichloroethene	7.094	96	11353	4.55	ug/L		90
20) acetone	7.094	58	3990	17.10	ug/L		87
21) acetonitrile	7.518	41	19283	44.99	ug/L		95
22) iodomethane	7.366	142	21411	4.28	ug/L		97
23) carbon disulfide	7.518	76	42940	5.03	ug/L		99
24) methylene chloride	7.795	84	12837	4.30	ug/L		88
25) methyl acetate	7.513	43	9196	4.59	ug/L		98
26) methyl tert butyl ether	8.130	73	35544	4.81	ug/L		96
27) trans-1,2-dichloroethene	8.161	96	10954	4.04	ug/L		89
28) hexane	8.501	56	8127	4.54	ug/L		93
29) di-isopropyl ether	8.716	45	40435	4.67	ug/L		97
30) 2-butanone	9.380	72	4592	15.80	ug/L	#	90
31) 1,1-dichloroethane	8.742	63	19380	4.25	ug/L		96
32) chloroprene	8.836	53	16960	4.34	ug/L		98
33) acrylonitrile	8.067	53	4542	4.36	ug/L		94
34) vinyl acetate	8.663	86	1779	3.99	ug/L	#	46
35) ethyl tert-butyl ether	9.166	59	38130	4.58	ug/L		96
36) ethyl acetate	9.390	45	1778	4.40	ug/L	#	48
37) 2,2-dichloropropane	9.500	77	16896	4.94	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247360.D
Acq On : 13 Sep 2017 8:26 pm
Operator : ThienN
Sample : ic10636-4
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:45:21 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:45:03 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.458	96	12253	4.14	ug/L		97
39) propionitrile	9.464	54	18560	46.40	ug/L		88
40) methyl acrylate	9.479	85	1485	3.92	ug/L	#	44
41) methacrylonitrile	9.662	67	4543	4.28	ug/L		97
42) bromochloromethane	9.751	128	6028	4.07	ug/L		92
43) tetrahydrofuran	9.772	42	3882	3.93	ug/L		81
44) chloroform	9.830	83	18490	3.84	ug/L		98
45) tert-Butyl Formate	9.872	59	7102	3.84	ug/L		96
47) 1,1,1-trichloroethane	10.107	97	16661	4.23	ug/L		97
48) cyclohexane	10.222	84	19346	5.24	ug/L		99
50) 1,1-dichloropropene	10.269	75	14900	4.29	ug/L		94
51) carbon tetrachloride	10.311	117	14690	4.41	ug/L		98
52) tert-amyl alcohol	10.400	73	3512	23.65	ug/L		91
53) isopropyl acetate	10.405	87	2344	4.51	ug/L		92
56) n-butyl alcohol	10.980	56	17483	205.60	ug/L		95
57) 2,2,4-Trimethylpentane	10.604	57	42018	4.16	ug/L		98
58) benzene	10.525	78	43876	4.11	ug/L		100
59) tert-amyl methyl ether	10.588	73	35635	4.47	ug/L		96
60) heptane	10.761	57	8769	4.41	ug/L		96
61) 1,2-dichloroethane	10.552	62	13347	4.06	ug/L		98
62) ethyl acrylate	11.226	55	14234	4.38	ug/L		100
63) trichloroethene	11.252	95	10894	4.06	ug/L		91
64) 2-chloroethyl vinyl ether	12.074	63	20348	13.40	ug/L		99
65) methyl methacrylate	11.503	100	3141	4.49	ug/L	#	84
66) methylcyclohexane	11.577	83	23859	5.02	ug/L		97
67) 1,2-dichloropropane	11.566	63	11625	4.26	ug/L		99
68) dibromomethane	11.681	93	6784	4.07	ug/L		95
69) bromodichloromethane	11.828	83	14277	3.89	ug/L		92
70) 2-nitropropane	12.047	41	4052	4.13	ug/L		97
71) epichlorohydrin	12.178	57	5898	21.17	ug/L		97
72) cis-1,3-dichloropropene	12.319	75	19059	4.24	ug/L		97
73) 4-methyl-2-pentanone	12.424	58	20195	18.91	ug/L		93
74) isoamyl alcohol	12.429	70	6727	86.64	ug/L	#	76
77) toluene	12.733	92	27773	3.98	ug/L		95
78) ethyl methacrylate	12.910	69	15930	4.45	ug/L		95
79) trans-1,3-dichloropropene	12.931	75	16550	4.02	ug/L		97
80) 1,1,2-trichloroethane	13.177	83	8178	3.86	ug/L		98
81) tetrachloroethene	13.339	164	11120	4.06	ug/L		94
82) 2-hexanone	13.355	58	19875	18.70	ug/L		99
83) 1,3-dichloropropane	13.381	76	16579	4.11	ug/L		93
84) butyl acetate	13.433	56	8796	4.71	ug/L		99
85) 3,3-Dimethyl-1-Butanol	13.554	69	8503	41.30	ug/L		94
86) dibromochloromethane	13.653	129	11033	3.65	ug/L		95
87) 1,2-dibromoethane	13.831	107	10520	3.88	ug/L		100
88) n-butyl ether	14.302	57	59719	4.81	ug/L		99
89) chlorobenzene	14.370	112	30760	3.93	ug/L		93
90) 1,1,1,2-tetrachloroethane	14.438	131	11891	4.08	ug/L		88
91) ethylbenzene	14.427	91	55373	4.30	ug/L		99
92) m,p-xylene	14.563	106	43910	8.80	ug/L		94
93) o-xylene	15.018	91	47043	4.40	ug/L		98

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247360.D
Acq On : 13 Sep 2017 8:26 pm
Operator : ThienN
Sample : ic10636-4
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:45:21 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:45:03 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
94) styrene	15.034	104	38824	4.56	ug/L		97
95) butyl acrylate	14.819	55	26291	4.41	ug/L		98
96) isopropylbenzene	15.416	105	62169	4.34	ug/L		99
97) bromoform	15.301	173	8543	3.53	ug/L		100
98) cis-1,4-dichloro-2-butene	15.452	88	4894	4.18	ug/L		95
101) 1,1,2,2-tetrachloroethane	15.729	83	14495	3.76	ug/L		99
102) trans-1,4-dichloro-2-b...	15.766	53	3805	3.63	ug/L		93
103) 1,2,3-trichloropropane	15.829	110	3929	3.97	ug/L	#	82
104) bromobenzene	15.860	156	15803	3.86	ug/L		87
105) n-propylbenzene	15.886	91	72737	4.14	ug/L		99
106) 2-chlorotoluene	16.038	126	14824	4.17	ug/L		96
107) 4-chlorotoluene	16.163	91	43603	4.16	ug/L		99
108) 1,3,5-trimethylbenzene	16.059	105	51594	4.07	ug/L		98
109) tert-butylbenzene	16.441	119	44492	3.90	ug/L		98
110) 1,2,4-trimethylbenzene	16.498	105	53160	4.20	ug/L		100
111) sec-butylbenzene	16.686	105	69967	3.98	ug/L		99
112) p-isopropyltoluene	16.833	119	58224	3.93	ug/L		99
113) 1,3-dichlorobenzene	16.890	146	31206	3.94	ug/L		98
114) 1,4-dichlorobenzene	16.995	146	30898	3.99	ug/L		98
115) 1,2-dichlorobenzene	17.419	146	30619	4.00	ug/L		99
116) Benzyl Chloride	17.094	91	28521	4.04	ug/L		94
117) n-butylbenzene	17.298	92	29052	3.91	ug/L		98
118) 2-ethylhexyl acrylate	19.228	55	2052	0.45	ug/L	#	81
119) hexachloroethane	17.748	201	9286	3.27	ug/L		95
120) 1,2-dibromo-3-chloropr...	18.266	75	2587	3.60	ug/L		87
121) 1,3,5-trichlorobenzene	18.480	180	24993	3.39	ug/L		98
122) Nitrobenzene	18.496	77	390	6.72	ug/L	#	54
123) 1,2,4-trichlorobenzene	19.234	180	18777	3.26	ug/L		91
124) hexachlorobutadiene	19.359	225	10717	2.99	ug/L		97
125) naphthalene	19.594	128	35566	3.22	ug/L		96
126) 1,2,3-trichlorobenzene	19.866	180	14451	3.00	ug/L		97
127) 2-methylnaphthalene	21.001	142	4563	1.08	ug/L		88

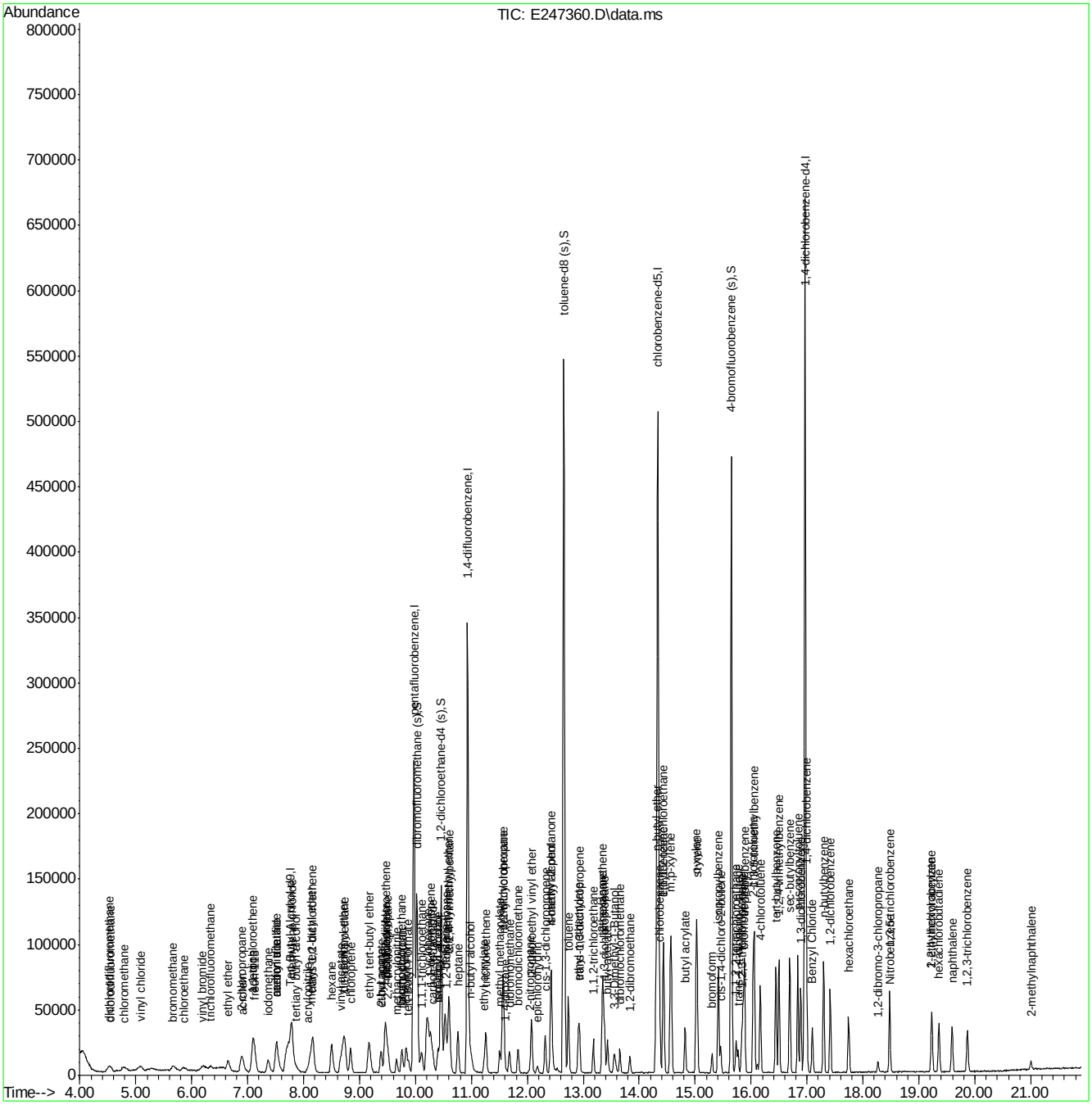
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247360.D
Acq On : 13 Sep 2017 8:26 pm
Operator : ThienN
Sample : ic10636-4
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:45:21 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:45:03 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247361.D
Acq On : 13 Sep 2017 8:56 pm
Operator : ThienN
Sample : ic10636-8
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:26:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:25:34 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.744	65	123212	500.00	ug/L	-0.02
5) pentafluorobenzene	9.972	168	225772	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.934	114	340340	50.00	ug/L	0.00
75) chlorobenzene-d5	14.329	117	338078	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.965	152	198304	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.024	113	102404	49.22	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.44%			
55) 1,2-dichloroethane-d4 (s)	10.458	65	118165	51.22	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.44%			
76) toluene-d8 (s)	12.650	98	425051	49.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%			
100) 4-bromofluorobenzene (s)	15.647	95	166894	51.47	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.94%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.864	59	15528	44.47	ug/L	95
4) 1,4-dioxane	11.625	88	5803	175.69	ug/L	88
6) chlorodifluoromethane	4.533	51	25745	9.77	ug/L	96
7) dichlorodifluoromethane	4.512	85	30434	9.43	ug/L	95
8) chloromethane	4.799	50	39233	9.03	ug/L	97
9) vinyl chloride	5.087	62	39699	9.61	ug/L	98
11) bromomethane	5.657	94	24417	8.27	ug/L	97
12) chloroethane	5.861	64	21549	9.59	ug/L	96
13) trichlorofluoromethane	6.332	101	37217	8.80	ug/L	98
14) vinyl bromide	6.191	106	28721	11.15	ug/L	95
15) ethyl ether	6.656	74	11704	8.74	ug/L	91
16) 2-chloropropane	6.891	43	45523	9.70	ug/L	96
17) acrolein	6.912	56	5552	9.66	ug/L	96
18) freon 113	7.127	151	18685	8.96	ug/L	98
19) 1,1-dichloroethene	7.095	96	22316	8.82	ug/L	94
20) acetone	7.080	58	7972	33.67	ug/L	85
21) acetonitrile	7.524	41	36925	84.91	ug/L	96
22) iodomethane	7.367	142	42552	8.38	ug/L	97
23) carbon disulfide	7.514	76	83494	9.64	ug/L	98
24) methylene chloride	7.786	84	25133	8.29	ug/L	95
25) methyl acetate	7.530	43	18553	9.13	ug/L	95
26) methyl tert butyl ether	8.136	73	70846	9.46	ug/L	97
27) trans-1,2-dichloroethene	8.168	96	22670	8.24	ug/L	93
28) hexane	8.502	56	16810	9.26	ug/L	95
29) di-isopropyl ether	8.717	45	80346	9.14	ug/L	99
30) 2-butanone	9.376	72	9851	33.41	ug/L #	87
31) 1,1-dichloroethane	8.743	63	40161	8.68	ug/L	95
32) chloroprene	8.842	53	34426	8.68	ug/L	99
33) acrylonitrile	8.068	53	9084	8.60	ug/L	90
34) vinyl acetate	8.664	86	3600	7.96	ug/L #	87
35) ethyl tert-butyl ether	9.172	59	76698	9.08	ug/L	99
36) ethyl acetate	9.386	45	3905	9.53	ug/L #	76
37) 2,2-dichloropropane	9.501	77	32851	9.47	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247361.D
Acq On : 13 Sep 2017 8:56 pm
Operator : ThienN
Sample : ic10636-8
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:26:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:25:34 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.454	96	25154	8.39	ug/L		99
39) propionitrile	9.465	54	39135	96.44	ug/L		94
40) methyl acrylate	9.475	85	3213	8.35	ug/L	#	75
41) methacrylonitrile	9.663	67	9584	8.90	ug/L		92
42) bromochloromethane	9.758	128	11996	7.98	ug/L		99
43) tetrahydrofuran	9.768	42	8019	8.01	ug/L		92
44) chloroform	9.831	83	37435	7.67	ug/L		98
45) tert-Butyl Formate	9.873	59	14188	7.57	ug/L		90
47) 1,1,1-trichloroethane	10.113	97	33060	8.28	ug/L		94
48) cyclohexane	10.228	84	38983	10.41	ug/L		97
50) 1,1-dichloropropene	10.270	75	29598	8.40	ug/L		96
51) carbon tetrachloride	10.307	117	29179	8.63	ug/L		98
52) tert-amyl alcohol	10.401	73	6881	45.67	ug/L	#	89
53) isopropyl acetate	10.406	87	4687	8.89	ug/L	#	79
56) n-butyl alcohol	10.981	56	42540	492.86	ug/L		97
57) 2,2,4-Trimethylpentane	10.605	57	82645	8.07	ug/L		95
58) benzene	10.526	78	90104	8.32	ug/L		98
59) tert-amyl methyl ether	10.594	73	71262	8.82	ug/L		98
60) heptane	10.757	57	17242	8.54	ug/L		98
61) 1,2-dichloroethane	10.547	62	27568	8.26	ug/L		97
62) ethyl acrylate	11.227	55	28954	8.78	ug/L		97
63) trichloroethene	11.259	95	22196	8.16	ug/L		98
64) 2-chloroethyl vinyl ether	12.075	63	41721	27.07	ug/L		98
65) methyl methacrylate	11.499	100	6233	8.77	ug/L		96
66) methylcyclohexane	11.572	83	46860	9.71	ug/L		99
67) 1,2-dichloropropane	11.567	63	24386	8.80	ug/L		95
68) dibromomethane	11.682	93	13930	8.24	ug/L		94
69) bromodichloromethane	11.834	83	29039	7.80	ug/L		97
70) 2-nitropropane	12.054	41	8094	8.13	ug/L		89
71) epichlorohydrin	12.174	57	12005	42.45	ug/L		95
72) cis-1,3-dichloropropene	12.320	75	38901	8.52	ug/L		99
73) 4-methyl-2-pentanone	12.425	58	41621	38.39	ug/L		96
74) isoamyl alcohol	12.425	70	14082	178.68	ug/L	#	80
77) toluene	12.733	92	55911	7.79	ug/L		97
78) ethyl methacrylate	12.911	69	31960	8.67	ug/L		97
79) trans-1,3-dichloropropene	12.932	75	33022	7.78	ug/L		96
80) 1,1,2-trichloroethane	13.178	83	17080	7.82	ug/L		96
81) tetrachloroethene	13.340	164	21649	7.68	ug/L		92
82) 2-hexanone	13.356	58	39557	36.14	ug/L		95
83) 1,3-dichloropropane	13.382	76	34006	8.19	ug/L		89
84) butyl acetate	13.429	56	18064	9.39	ug/L		98
85) 3,3-Dimethyl-1-Butanol	13.549	69	16639	78.46	ug/L		97
86) dibromochloromethane	13.654	129	23317	7.48	ug/L		99
87) 1,2-dibromoethane	13.832	107	21736	7.78	ug/L		96
88) n-butyl ether	14.303	57	120454	9.43	ug/L		99
89) chlorobenzene	14.365	112	63296	7.84	ug/L		99
90) 1,1,1,2-tetrachloroethane	14.439	131	23069	7.69	ug/L		96
91) ethylbenzene	14.428	91	110274	8.31	ug/L		98
92) m,p-xylene	14.564	106	87380	17.00	ug/L		97
93) o-xylene	15.019	91	93811	8.52	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247361.D
Acq On : 13 Sep 2017 8:56 pm
Operator : ThienN
Sample : ic10636-8
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:26:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:25:34 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) styrene	15.035	104	76723	8.74	ug/L	99
95) butyl acrylate	14.815	55	54685	8.91	ug/L	98
96) isopropylbenzene	15.411	105	124571	8.45	ug/L	97
97) bromoform	15.302	173	17637	7.07	ug/L	97
98) cis-1,4-dichloro-2-butene	15.453	88	10194	8.45	ug/L	96
101) 1,1,2,2-tetrachloroethane	15.730	83	29536	7.77	ug/L	99
102) trans-1,4-dichloro-2-b...	15.767	53	7804	7.55	ug/L	94
103) 1,2,3-trichloropropane	15.835	110	7911	8.10	ug/L	92
104) bromobenzene	15.856	156	31806	7.89	ug/L	95
105) n-propylbenzene	15.882	91	142133	8.21	ug/L	98
106) 2-chlorotoluene	16.039	126	28632	8.18	ug/L	93
107) 4-chlorotoluene	16.164	91	85563	8.28	ug/L	99
108) 1,3,5-trimethylbenzene	16.060	105	102316	8.20	ug/L	97
109) tert-butylbenzene	16.442	119	89431	7.95	ug/L	98
110) 1,2,4-trimethylbenzene	16.499	105	106180	8.51	ug/L	99
111) sec-butylbenzene	16.687	105	138262	7.98	ug/L	99
112) p-isopropyltoluene	16.834	119	116617	7.98	ug/L	98
113) 1,3-dichlorobenzene	16.886	146	62497	8.00	ug/L	97
114) 1,4-dichlorobenzene	16.996	146	60004	7.85	ug/L	98
115) 1,2-dichlorobenzene	17.414	146	60557	8.03	ug/L	99
116) Benzyl Chloride	17.095	91	56855	8.17	ug/L	98
117) n-butylbenzene	17.294	92	58282	7.96	ug/L	100
118) 2-ethylhexyl acrylate	19.214	55	3641	0.81	ug/L	92
119) hexachloroethane	17.749	201	19693	7.03	ug/L	97
120) 1,2-dibromo-3-chloropr...	18.272	75	5212	7.35	ug/L	99
121) 1,3,5-trichlorobenzene	18.476	180	49758	6.85	ug/L	97
122) Nitrobenzene	18.497	77	1191	9.91	ug/L	93
123) 1,2,4-trichlorobenzene	19.229	180	38596	6.79	ug/L	98
124) hexachlorobutadiene	19.360	225	21314	6.03	ug/L	95
125) naphthalene	19.595	128	72541	6.66	ug/L	99
126) 1,2,3-trichlorobenzene	19.862	180	29302	6.16	ug/L	93
127) 2-methylnaphthalene	21.002	142	9533	2.30	ug/L	99

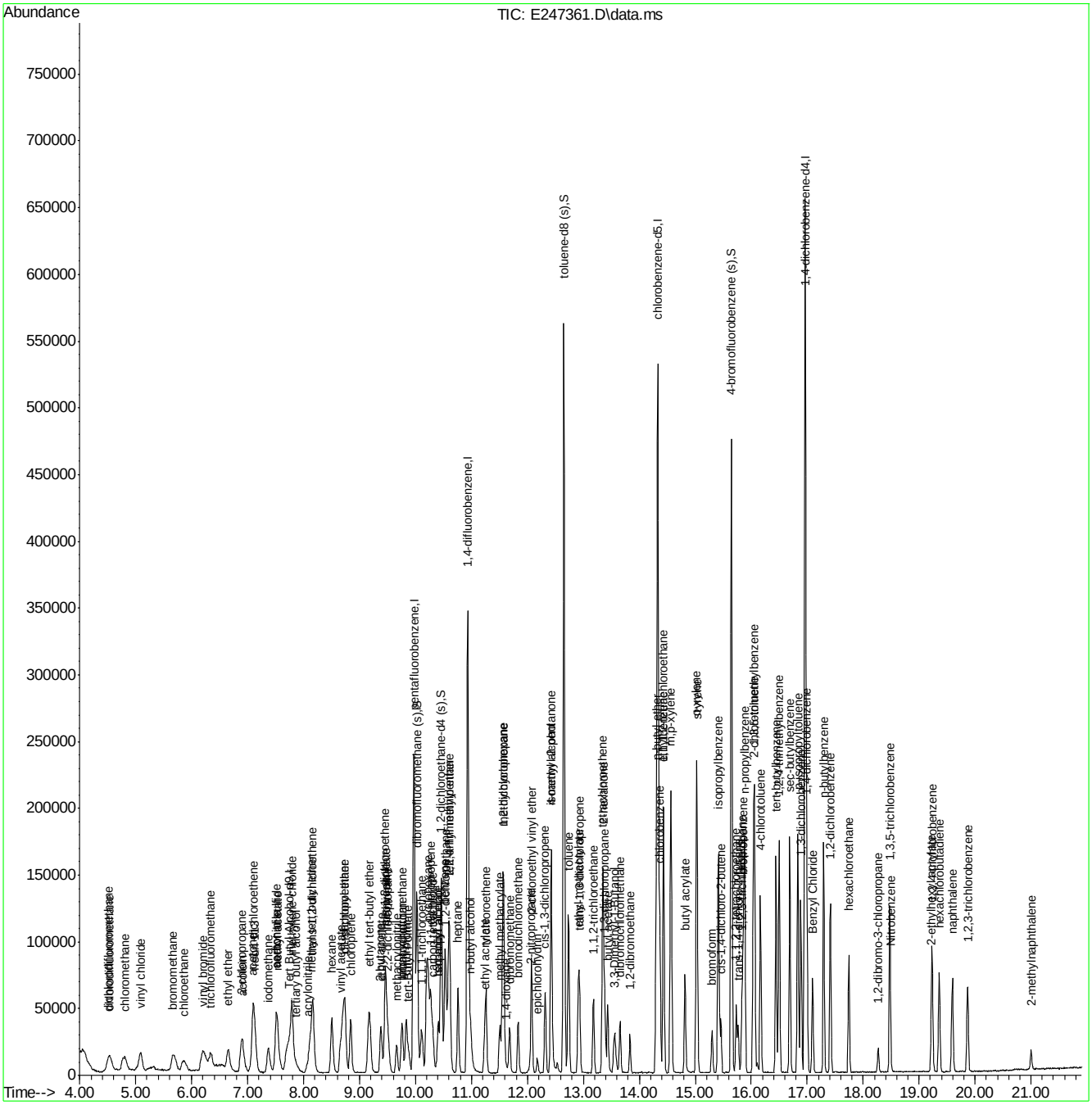
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247361.D
Acq On : 13 Sep 2017 8:56 pm
Operator : ThienN
Sample : ic10636-8
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:26:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:25:34 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247362.D
Acq On : 13 Sep 2017 9:26 pm
Operator : ThienN
Sample : ic10636-20
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:22:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.759	65	120052	500.00	ug/L	0.00
5) pentafluorobenzene	9.971	168	220965	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.933	114	338817	50.00	ug/L	0.00
75) chlorobenzene-d5	14.328	117	326693	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.964	152	194941	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.029	113	100546	49.38	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.76%			
55) 1,2-dichloroethane-d4 (s)	10.457	65	116340	50.66	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 101.32%			
76) toluene-d8 (s)	12.654	98	416748	50.71	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.42%			
100) 4-bromofluorobenzene (s)	15.646	95	166538	52.25	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.50%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.858	59	37682	110.75	ug/L	95
4) 1,4-dioxane	11.613	88	14379	446.79	ug/L	91
6) chlorodifluoromethane	4.526	51	66209	25.67	ug/L	98
7) dichlorodifluoromethane	4.532	85	79228	25.08	ug/L	95
8) chloromethane	4.809	50	98223	23.09	ug/L	97
9) vinyl chloride	5.097	62	101877	25.20	ug/L	97
11) bromomethane	5.693	94	61896	21.43	ug/L	95
12) chloroethane	5.855	64	53906	24.51	ug/L	95
13) trichlorofluoromethane	6.347	101	94900	22.94	ug/L	97
14) vinyl bromide	6.200	106	73234	29.05	ug/L	99
15) ethyl ether	6.650	74	29589	22.57	ug/L	86
16) 2-chloropropane	6.896	43	108209	23.57	ug/L	98
17) acrolein	6.906	56	13363	23.75	ug/L	86
18) freon 113	7.126	151	46486	22.78	ug/L	94
19) 1,1-dichloroethene	7.105	96	55173	22.28	ug/L	97
20) acetone	7.094	58	19531	84.28	ug/L	96
21) acetonitrile	7.529	41	85086	199.92	ug/L	98
22) iodomethane	7.372	142	105936	21.31	ug/L	98
23) carbon disulfide	7.518	76	209299	24.69	ug/L	100
24) methylene chloride	7.795	84	62872	21.20	ug/L	99
25) methyl acetate	7.518	43	46052	23.15	ug/L	99
26) methyl tert butyl ether	8.135	73	172754	23.57	ug/L	99
27) trans-1,2-dichloroethene	8.172	96	55877	20.76	ug/L	96
28) hexane	8.496	56	41940	23.60	ug/L	95
29) di-isopropyl ether	8.711	45	197995	23.01	ug/L	98
30) 2-butanone	9.380	72	25128	87.08	ug/L	99
31) 1,1-dichloroethane	8.742	63	98452	21.74	ug/L	98
32) chloroprene	8.841	53	85987	22.14	ug/L	98
33) acrylonitrile	8.073	53	23473	22.72	ug/L	93
34) vinyl acetate	8.653	86	8876	20.05	ug/L	97
35) ethyl tert-butyl ether	9.171	59	190191	23.00	ug/L	99
36) ethyl acetate	9.375	45	9811	24.47	ug/L	97
37) 2,2-dichloropropane	9.495	77	78212	23.04	ug/L	99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247362.D
Acq On : 13 Sep 2017 9:26 pm
Operator : ThienN
Sample : ic10636-20
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:22:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.459	96	60763	20.70	ug/L		99
39) propionitrile	9.464	54	93171	234.60	ug/L		100
40) methyl acrylate	9.479	85	8007	21.26	ug/L	#	82
41) methacrylonitrile	9.662	67	23411	22.21	ug/L		97
42) bromochloromethane	9.757	128	30880	20.99	ug/L		94
43) tetrahydrofuran	9.772	42	18805	19.18	ug/L		92
44) chloroform	9.835	83	93528	19.58	ug/L		99
45) tert-Butyl Formate	9.872	59	36001	19.62	ug/L		97
47) 1,1,1-trichloroethane	10.107	97	83597	21.39	ug/L		99
48) cyclohexane	10.227	84	92850	25.34	ug/L		97
50) 1,1-dichloropropene	10.269	75	72385	20.99	ug/L		99
51) carbon tetrachloride	10.311	117	71162	21.51	ug/L		96
52) tert-amyl alcohol	10.400	73	17977	121.92	ug/L		96
53) isopropyl acetate	10.405	87	11701	22.67	ug/L	#	87
56) n-butyl alcohol	10.975	56	95258	1108.61	ug/L		98
57) 2,2,4-Trimethylpentane	10.609	57	208850	20.48	ug/L		97
58) benzene	10.525	78	222612	20.65	ug/L		98
59) tert-amyl methyl ether	10.593	73	177445	22.05	ug/L		98
60) heptane	10.761	57	43012	21.39	ug/L		97
61) 1,2-dichloroethane	10.552	62	67610	20.35	ug/L		99
62) ethyl acrylate	11.226	55	72172	21.99	ug/L		99
63) trichloroethene	11.258	95	55328	20.42	ug/L		97
64) 2-chloroethyl vinyl ether	12.074	63	105085	68.49	ug/L		99
65) methyl methacrylate	11.503	100	16155	22.84	ug/L		97
66) methylcyclohexane	11.571	83	116106	24.16	ug/L		98
67) 1,2-dichloropropane	11.566	63	58687	21.28	ug/L		97
68) dibromomethane	11.681	93	34534	20.52	ug/L		97
69) bromodichloromethane	11.833	83	73295	19.77	ug/L		100
70) 2-nitropropane	12.053	41	19185	19.36	ug/L		97
71) epichlorohydrin	12.178	57	30038	106.69	ug/L		98
72) cis-1,3-dichloropropene	12.319	75	98313	21.64	ug/L		99
73) 4-methyl-2-pentanone	12.424	58	99378	92.07	ug/L		100
74) isoamyl alcohol	12.419	70	35155	448.07	ug/L		89
77) toluene	12.733	92	141740	20.43	ug/L		99
78) ethyl methacrylate	12.910	69	80982	22.73	ug/L		98
79) trans-1,3-dichloropropene	12.931	75	82975	20.24	ug/L		98
80) 1,1,2-trichloroethane	13.177	83	42826	20.29	ug/L		98
81) tetrachloroethene	13.339	164	54358	19.95	ug/L		99
82) 2-hexanone	13.350	58	97346	92.04	ug/L		98
83) 1,3-dichloropropane	13.381	76	80726	20.12	ug/L		89
84) butyl acetate	13.433	56	44155	23.76	ug/L		97
85) 3,3-Dimethyl-1-Butanol	13.548	69	43506	212.29	ug/L		95
86) dibromochloromethane	13.658	129	59148	19.64	ug/L		98
87) 1,2-dibromoethane	13.831	107	55160	20.44	ug/L		100
88) n-butyl ether	14.302	57	298929	24.21	ug/L		100
89) chlorobenzene	14.364	112	154431	19.81	ug/L		98
90) 1,1,1,2-tetrachloroethane	14.438	131	56612	19.52	ug/L		99
91) ethylbenzene	14.427	91	271217	21.15	ug/L		99
92) m,p-xylene	14.563	106	212880	42.85	ug/L		99
93) o-xylene	15.018	91	231015	21.72	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247362.D
Acq On : 13 Sep 2017 9:26 pm
Operator : ThienN
Sample : ic10636-20
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:22:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) styrene	15.034	104	189736	22.37	ug/L	100
95) butyl acrylate	14.814	55	138119	23.29	ug/L	98
96) isopropylbenzene	15.410	105	303167	21.27	ug/L	99
97) bromoform	15.301	173	45240	18.77	ug/L	97
98) cis-1,4-dichloro-2-butene	15.457	88	26131	22.42	ug/L	99
101) 1,1,2,2-tetrachloroethane	15.729	83	74187	19.85	ug/L	99
102) trans-1,4-dichloro-2-b...	15.766	53	20287	19.95	ug/L	98
103) 1,2,3-trichloropropane	15.834	110	19492	20.30	ug/L	93
104) bromobenzene	15.860	156	77650	19.60	ug/L	93
105) n-propylbenzene	15.881	91	347275	20.41	ug/L	99
106) 2-chlorotoluene	16.038	126	70659	20.54	ug/L	98
107) 4-chlorotoluene	16.164	91	209401	20.62	ug/L	100
108) 1,3,5-trimethylbenzene	16.059	105	246971	20.13	ug/L	100
109) tert-butylbenzene	16.441	119	221251	20.00	ug/L	99
110) 1,2,4-trimethylbenzene	16.498	105	258861	21.11	ug/L	98
111) sec-butylbenzene	16.687	105	343505	20.16	ug/L	99
112) p-isopropyltoluene	16.833	119	289891	20.18	ug/L	99
113) 1,3-dichlorobenzene	16.885	146	150780	19.63	ug/L	99
114) 1,4-dichlorobenzene	16.995	146	149340	19.89	ug/L	100
115) 1,2-dichlorobenzene	17.414	146	149923	20.22	ug/L	99
116) Benzyl Chloride	17.095	91	145763	21.30	ug/L	99
117) n-butylbenzene	17.293	92	145307	20.19	ug/L	98
118) 2-ethylhexyl acrylate	19.213	55	11167	2.54	ug/L	97
119) hexachloroethane	17.743	201	51394	18.67	ug/L	98
120) 1,2-dibromo-3-chloropr...	18.271	75	12720	18.25	ug/L	94
121) 1,3,5-trichlorobenzene	18.475	180	123935	17.36	ug/L	99
122) Nitrobenzene	18.491	77	3102	17.69	ug/L	94
123) 1,2,4-trichlorobenzene	19.234	180	98143	17.57	ug/L	99
124) hexachlorobutadiene	19.359	225	53163	15.31	ug/L	99
125) naphthalene	19.595	128	187313	17.50	ug/L	99
126) 1,2,3-trichlorobenzene	19.866	180	72424	15.50	ug/L	97
127) 2-methylnaphthalene	21.001	142	24877	6.09	ug/L	93

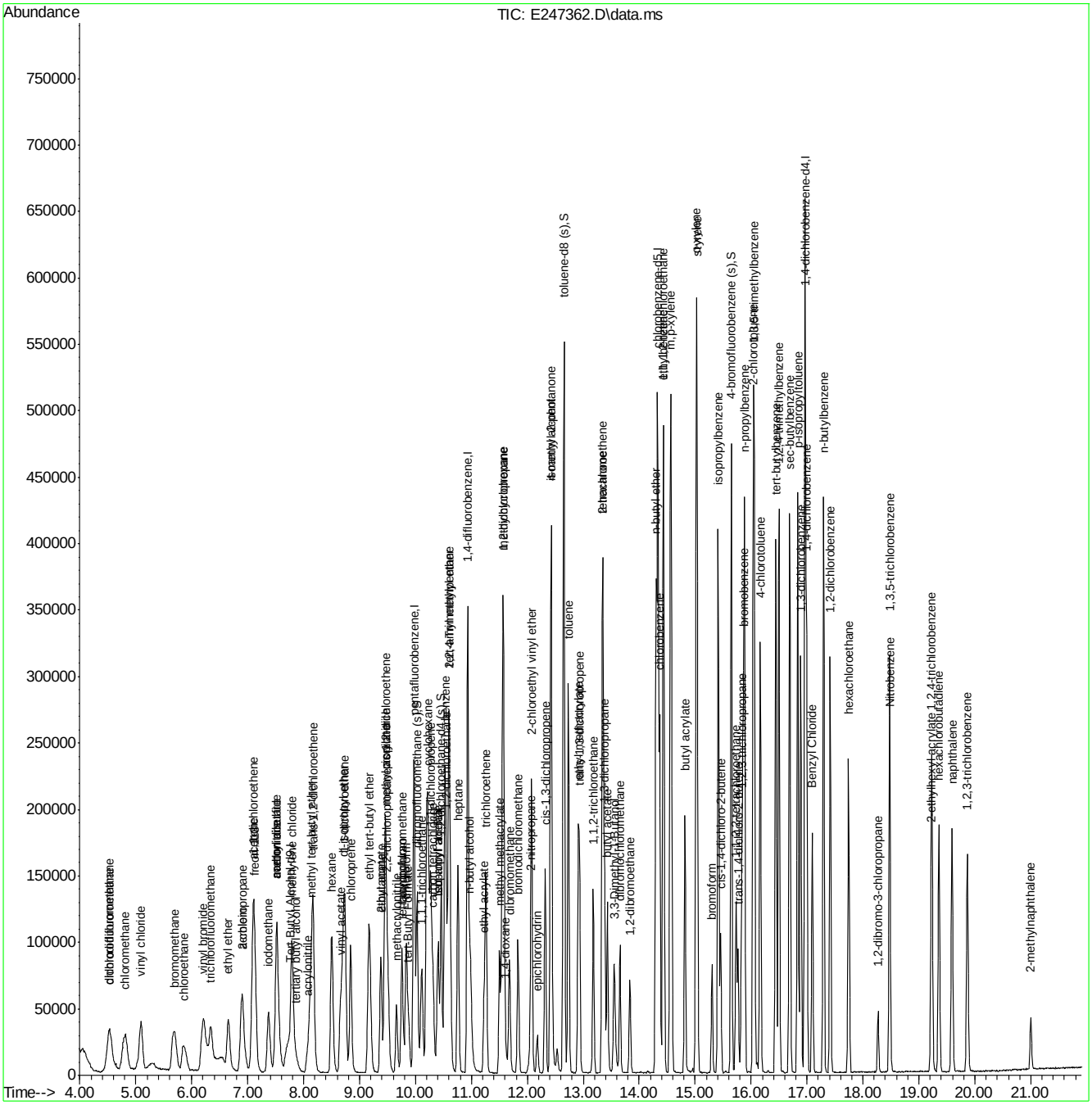
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247362.D
Acq On : 13 Sep 2017 9:26 pm
Operator : ThienN
Sample : ic10636-20
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:22:11 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247363.D
Acq On : 13 Sep 2017 9:57 pm
Operator : ThienN
Sample : icc10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:14:51 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:14:19 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.759	65	115567	500.00	ug/L	0.00
5) pentafluorobenzene	9.972	168	216760	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.934	114	329905	50.00	ug/L	0.00
75) chlorobenzene-d5	14.333	117	315884	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.964	152	193504	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.029	113	101366	50.75	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.50%			
55) 1,2-dichloroethane-d4 (s)	10.458	65	114323	51.13	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.26%			
76) toluene-d8 (s)	12.655	98	406787	51.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.38%			
100) 4-bromofluorobenzene (s)	15.646	95	163213	51.58	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 103.16%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.859	59	86751	264.87	ug/L	100
4) 1,4-dioxane	11.609	88	33790	1090.69	ug/L	100
6) chlorodifluoromethane	4.537	51	160908	63.60	ug/L	100
7) dichlorodifluoromethane	4.516	85	194590	62.80	ug/L	100
8) chloromethane	4.820	50	245828	58.92	ug/L	100
9) vinyl chloride	5.097	62	250591	63.20	ug/L	100
11) bromomethane	5.693	94	151152	53.34	ug/L	100
12) chloroethane	5.855	64	128806	59.70	ug/L	100
13) trichlorofluoromethane	6.342	101	228972	56.41	ug/L	100
14) vinyl bromide	6.206	106	178150	72.03	ug/L	100
15) ethyl ether	6.656	74	72009	56.01	ug/L	100
16) 2-chloropropane	6.901	43	256849	57.02	ug/L	100
17) acrolein	6.907	56	32334	58.58	ug/L	100
18) freon 113	7.121	151	110786	55.35	ug/L	100
19) 1,1-dichloroethene	7.105	96	130825	53.85	ug/L	100
20) acetone	7.084	58	46242	203.42	ug/L	100
21) acetonitrile	7.524	41	198875	476.34	ug/L	100
22) iodomethane	7.367	142	256018	52.49	ug/L	100
23) carbon disulfide	7.519	76	493212	59.32	ug/L	100
24) methylene chloride	7.796	84	150471	51.72	ug/L	100
25) methyl acetate	7.529	43	105927	54.27	ug/L	100
26) methyl tert butyl ether	8.136	73	418920	58.26	ug/L	100
27) trans-1,2-dichloroethene	8.167	96	133552	50.59	ug/L	100
28) hexane	8.507	56	99648	57.17	ug/L	100
29) di-isopropyl ether	8.711	45	466019	55.21	ug/L	100
30) 2-butanone	9.380	72	58578	206.93	ug/L	100
31) 1,1-dichloroethane	8.742	63	228800	51.49	ug/L	100
32) chloroprene	8.842	53	204897	53.78	ug/L	100
33) acrylonitrile	8.068	53	57300	56.53	ug/L	100
34) vinyl acetate	8.654	86	22893	52.72	ug/L	100
35) ethyl tert-butyl ether	9.171	59	465728	57.41	ug/L	100
36) ethyl acetate	9.380	45	22151	56.32	ug/L	100
37) 2,2-dichloropropane	9.501	77	183944	55.23	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247363.D
Acq On : 13 Sep 2017 9:57 pm
Operator : ThienN
Sample : icc10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:14:51 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:14:19 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) cis-1,2-dichloroethene	9.454	96	145952	50.68	ug/L	100
39) propionitrile	9.464	54	216934	556.82	ug/L	100
40) methyl acrylate	9.469	85	18858	51.05	ug/L	100
41) methacrylonitrile	9.658	67	56116	54.26	ug/L	100
42) bromochloromethane	9.757	128	73453	50.90	ug/L	100
43) tetrahydrofuran	9.773	42	44803	46.59	ug/L	100
44) chloroform	9.836	83	223766	47.74	ug/L	100
45) tert-Butyl Formate	9.877	59	87765	48.75	ug/L	100
47) 1,1,1-trichloroethane	10.113	97	202896	52.93	ug/L	100
48) cyclohexane	10.228	84	217632	60.55	ug/L	100
50) 1,1-dichloropropene	10.270	75	168780	49.89	ug/L	100
51) carbon tetrachloride	10.306	117	168425	51.90	ug/L	100
52) tert-amyl alcohol	10.390	73	39436	272.64	ug/L	100
53) isopropyl acetate	10.406	87	28005	55.30	ug/L	100
56) n-butyl alcohol	10.970	56	221080	2642.42	ug/L	100
57) 2,2,4-Trimethylpentane	10.610	57	508500	51.21	ug/L	100
58) benzene	10.526	78	529393	50.44	ug/L	100
59) tert-amyl methyl ether	10.594	73	417351	53.26	ug/L	100
60) heptane	10.761	57	97596	49.85	ug/L	100
61) 1,2-dichloroethane	10.552	62	158617	49.02	ug/L	100
62) ethyl acrylate	11.227	55	173823	54.40	ug/L	100
63) trichloroethene	11.258	95	133537	50.62	ug/L	100
64) 2-chloroethyl vinyl ether	12.074	63	253230	169.50	ug/L	100
65) methyl methacrylate	11.504	100	38699	56.19	ug/L	100
66) methylcyclohexane	11.572	83	271866	58.10	ug/L	100
67) 1,2-dichloropropane	11.561	63	134338	50.02	ug/L	100
68) dibromomethane	11.682	93	80269	48.98	ug/L	100
69) bromodichloromethane	11.833	83	175965	48.75	ug/L	100
70) 2-nitropropane	12.048	41	45184	46.84	ug/L	100
71) epichlorohydrin	12.179	57	71629	261.28	ug/L	100
72) cis-1,3-dichloropropene	12.315	75	226219	51.13	ug/L	100
73) 4-methyl-2-pentanone	12.419	58	231645	220.40	ug/L	100
74) isoamyl alcohol	12.419	70	86343	1130.23	ug/L	100
77) toluene	12.733	92	330645	49.29	ug/L	100
78) ethyl methacrylate	12.911	69	192516	55.88	ug/L	100
79) trans-1,3-dichloropropene	12.932	75	192310	48.52	ug/L	100
80) 1,1,2-trichloroethane	13.178	83	101919	49.93	ug/L	100
81) tetrachloroethene	13.340	164	124817	47.38	ug/L	100
82) 2-hexanone	13.350	58	228640	223.57	ug/L	100
83) 1,3-dichloropropane	13.382	76	188904	48.68	ug/L	100
84) butyl acetate	13.429	56	104307	58.05	ug/L	100
85) 3,3-Dimethyl-1-Butanol	13.549	69	111902	564.71	ug/L	100
86) dibromochloromethane	13.659	129	142353	48.90	ug/L	100
87) 1,2-dibromoethane	13.831	107	133732	51.25	ug/L	100
88) n-butyl ether	14.302	57	708835	59.38	ug/L	100
89) chlorobenzene	14.370	112	371419	49.27	ug/L	100
90) 1,1,1,2-tetrachloroethane	14.438	131	133068	47.44	ug/L	100
91) ethylbenzene	14.428	91	635038	51.22	ug/L	100
92) m,p-xylene	14.564	106	502864	104.68	ug/L	100
93) o-xylene	15.019	91	544373	52.93	ug/L	100

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247363.D
Acq On : 13 Sep 2017 9:57 pm
Operator : ThienN
Sample : icc10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:14:51 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:14:19 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
94) styrene	15.034	104	445212	54.29 ug/L	100
95) butyl acrylate	14.815	55	339015	59.12 ug/L	100
96) isopropylbenzene	15.411	105	722607	52.44 ug/L	100
97) bromoform	15.301	173	112014	48.05 ug/L	100
98) cis-1,4-dichloro-2-butene	15.458	88	62442	55.41 ug/L	100
101) 1,1,2,2-tetrachloroethane	15.730	83	179493	48.38 ug/L	100
102) trans-1,4-dichloro-2-b...	15.767	53	50052	49.60 ug/L	100
103) 1,2,3-trichloropropane	15.834	110	46504	48.80 ug/L	100
104) bromobenzene	15.855	156	183099	46.56 ug/L	100
105) n-propylbenzene	15.882	91	811484	48.05 ug/L	100
106) 2-chlorotoluene	16.038	126	169133	49.52 ug/L	100
107) 4-chlorotoluene	16.164	91	497678	49.37 ug/L	100
108) 1,3,5-trimethylbenzene	16.059	105	580785	47.69 ug/L	100
109) tert-butylbenzene	16.441	119	530046	48.26 ug/L	100
110) 1,2,4-trimethylbenzene	16.499	105	614462	50.47 ug/L	100
111) sec-butylbenzene	16.687	105	823148	48.66 ug/L	100
112) p-isopropyltoluene	16.833	119	694018	48.68 ug/L	100
113) 1,3-dichlorobenzene	16.886	146	358911	47.07 ug/L	100
114) 1,4-dichlorobenzene	16.996	146	361519	48.50 ug/L	100
115) 1,2-dichlorobenzene	17.414	146	359057	48.78 ug/L	100
116) Benzyl Chloride	17.095	91	363237	53.48 ug/L	100
117) n-butylbenzene	17.294	92	351586	49.22 ug/L	100
118) 2-ethylhexyl acrylate	19.213	55	33666	7.70 ug/L	100
119) hexachloroethane	17.743	201	127317	46.59 ug/L	100
120) 1,2-dibromo-3-chloropr...	18.267	75	32506	46.99 ug/L	100
121) 1,3,5-trichlorobenzene	18.476	180	306097	43.19 ug/L	100
122) Nitrobenzene	18.491	77	8094	38.04 ug/L	100
123) 1,2,4-trichlorobenzene	19.229	180	245915	44.34 ug/L	100
124) hexachlorobutadiene	19.360	225	127221	36.91 ug/L	100
125) naphthalene	19.595	128	476334	44.83 ug/L	100
126) 1,2,3-trichlorobenzene	19.867	180	184822	39.84 ug/L	100
127) 2-methylnaphthalene	21.002	142	70862	17.48 ug/L	100

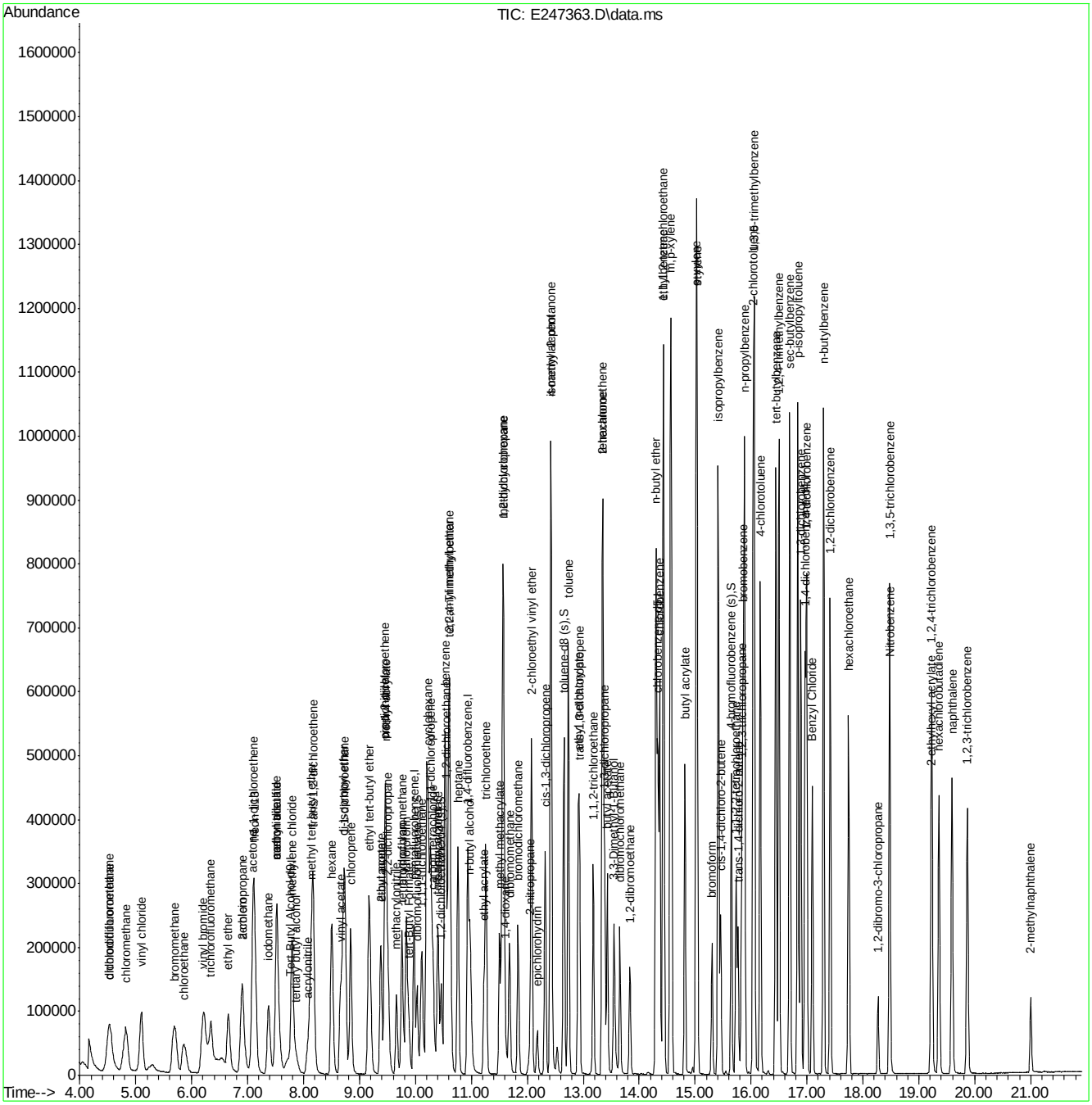
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247363.D
Acq On : 13 Sep 2017 9:57 pm
Operator : ThienN
Sample : icc10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:14:51 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:14:19 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247364.D
Acq On : 13 Sep 2017 10:28 pm
Operator : ThienN
Sample : ic10636-100
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:15:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:15:10 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.765	65	116989	500.00	ug/L		0.00
5) pentafluorobenzene	9.972	168	206267	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.929	114	316615	50.00	ug/L		0.00
75) chlorobenzene-d5	14.329	117	306085	50.00	ug/L		0.00
99) 1,4-dichlorobenzene-d4	16.965	152	190910	50.00	ug/L		0.00
System Monitoring Compounds							
46) dibromofluoromethane (s)	10.024	113	97154	51.11	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.22%				
55) 1,2-dichloroethane-d4 (s)	10.458	65	106658	49.70	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.40%				
76) toluene-d8 (s)	12.650	98	404507	52.53	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.06%				
100) 4-bromofluorobenzene (s)	15.647	95	163494	52.38	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.76%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.880	59	178569	538.59	ug/L		99
4) 1,4-dioxane	11.609	88	68965	2199.03	ug/L		97
6) chlorodifluoromethane	4.538	51	296976	123.36	ug/L		98
7) dichlorodifluoromethane	4.517	85	350471	118.87	ug/L		96
8) chloromethane	4.836	50	457047	115.11	ug/L		100
9) vinyl chloride	5.103	62	447203	118.52	ug/L		99
11) bromomethane	5.694	94	273522	101.43	ug/L		96
12) chloroethane	5.861	64	232753	113.36	ug/L		99
13) trichlorofluoromethane	6.337	101	406037	105.12	ug/L		100
14) vinyl bromide	6.206	106	324058	137.69	ug/L		98
15) ethyl ether	6.651	74	134799	110.17	ug/L		89
16) 2-chloropropane	6.897	43	462201	107.83	ug/L		99
17) acrolein	6.902	56	62803	119.57	ug/L		96
18) freon 113	7.122	151	198294	104.11	ug/L		98
19) 1,1-dichloroethene	7.101	96	232737	100.68	ug/L		97
20) acetone	7.090	58	89570	414.07	ug/L		91
21) acetonitrile	7.524	41	400993	1009.30	ug/L		98
22) iodomethane	7.367	142	485742	104.66	ug/L		100
23) carbon disulfide	7.514	76	893847	112.97	ug/L		99
24) methylene chloride	7.791	84	282007	101.85	ug/L		97
25) methyl acetate	7.519	43	202132	108.83	ug/L		98
26) methyl tert butyl ether	8.131	73	806770	117.90	ug/L		98
27) trans-1,2-dichloroethene	8.168	96	237776	94.65	ug/L		100
28) hexane	8.502	56	172331	103.89	ug/L		97
29) di-isopropyl ether	8.706	45	869414	108.25	ug/L		98
30) 2-butanone	9.376	72	115637	429.27	ug/L		95
31) 1,1-dichloroethane	8.743	63	414813	98.11	ug/L		98
32) chloroprene	8.837	53	357027	98.48	ug/L		98
33) acrylonitrile	8.068	53	112743	116.89	ug/L		98
34) vinyl acetate	8.654	86	43638	105.60	ug/L	#	86
35) ethyl tert-butyl ether	9.172	59	893008	115.67	ug/L		99
36) ethyl acetate	9.381	45	43426	116.03	ug/L	#	82
37) 2,2-dichloropropane	9.506	77	332972	105.06	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247364.D
Acq On : 13 Sep 2017 10:28 pm
Operator : ThienN
Sample : ic10636-100
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:15:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:15:10 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.454	96	262967	95.96	ug/L		99
39) propionitrile	9.465	54	417009	1124.82	ug/L		95
40) methyl acrylate	9.470	85	36243	103.10	ug/L		96
41) methacrylonitrile	9.658	67	110878	112.67	ug/L		99
42) bromochloromethane	9.752	128	138582	100.91	ug/L		99
43) tetrahydrofuran	9.773	42	85204	93.10	ug/L		99
44) chloroform	9.831	83	404242	90.64	ug/L		98
45) tert-Butyl Formate	9.878	59	171384	100.04	ug/L		99
47) 1,1,1-trichloroethane	10.113	97	376047	103.09	ug/L		99
48) cyclohexane	10.228	84	393857	115.15	ug/L		97
50) 1,1-dichloropropene	10.270	75	295901	91.91	ug/L		99
51) carbon tetrachloride	10.307	117	309336	100.18	ug/L		96
52) tert-amyl alcohol	10.396	73	83539	606.93	ug/L		95
53) isopropyl acetate	10.406	87	54092	112.25	ug/L		97
56) n-butyl alcohol	10.971	56	449221	5594.61	ug/L		99
57) 2,2,4-Trimethylpentane	10.615	57	940414	98.68	ug/L		98
58) benzene	10.526	78	955926	94.90	ug/L		99
59) tert-amyl methyl ether	10.594	73	804510	106.98	ug/L		99
60) heptane	10.756	57	173493	92.34	ug/L		99
61) 1,2-dichloroethane	10.547	62	292501	94.20	ug/L		99
62) ethyl acrylate	11.222	55	343674	112.07	ug/L		99
63) trichloroethene	11.259	95	232957	92.01	ug/L		99
64) 2-chloroethyl vinyl ether	12.074	63	506701	353.39	ug/L		99
65) methyl methacrylate	11.499	100	77085	116.63	ug/L		98
66) methylcyclohexane	11.572	83	487169	108.48	ug/L		98
67) 1,2-dichloropropane	11.562	63	244846	95.00	ug/L		99
68) dibromomethane	11.682	93	156631	99.59	ug/L		97
69) bromodichloromethane	11.834	83	332175	95.88	ug/L		99
70) 2-nitropropane	12.048	41	92178	99.56	ug/L		99
71) epichlorohydrin	12.174	57	146388	556.40	ug/L		98
72) cis-1,3-dichloropropene	12.315	75	436579	102.81	ug/L		100
73) 4-methyl-2-pentanone	12.420	58	447119	443.28	ug/L		99
74) isoamyl alcohol	12.414	70	180489	2461.77	ug/L	#	86
77) toluene	12.733	92	620458	95.45	ug/L		98
78) ethyl methacrylate	12.906	69	373405	111.86	ug/L		98
79) trans-1,3-dichloropropene	12.932	75	372722	97.05	ug/L		99
80) 1,1,2-trichloroethane	13.178	83	198999	100.61	ug/L		98
81) tetrachloroethene	13.340	164	228455	89.50	ug/L		98
82) 2-hexanone	13.351	58	440051	444.07	ug/L		97
83) 1,3-dichloropropane	13.382	76	364547	96.95	ug/L		98
84) butyl acetate	13.429	56	203293	116.77	ug/L		99
85) 3,3-Dimethyl-1-Butanol	13.549	69	255197	1329.07	ug/L		97
86) dibromochloromethane	13.654	129	279779	99.18	ug/L		99
87) 1,2-dibromoethane	13.832	107	264202	104.49	ug/L		98
88) n-butyl ether	14.297	57	1291058	111.62	ug/L		99
89) chlorobenzene	14.365	112	700959	95.95	ug/L		99
90) 1,1,1,2-tetrachloroethane	14.438	131	253534	93.29	ug/L		99
91) ethylbenzene	14.428	91	1164647	96.94	ug/L		99
92) m,p-xylene	14.564	106	937225	201.34	ug/L		99
93) o-xylene	15.019	91	1003806	100.73	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247364.D
Acq On : 13 Sep 2017 10:28 pm
Operator : ThienN
Sample : ic10636-100
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:15:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:15:10 2017
Response via : Initial Calibration

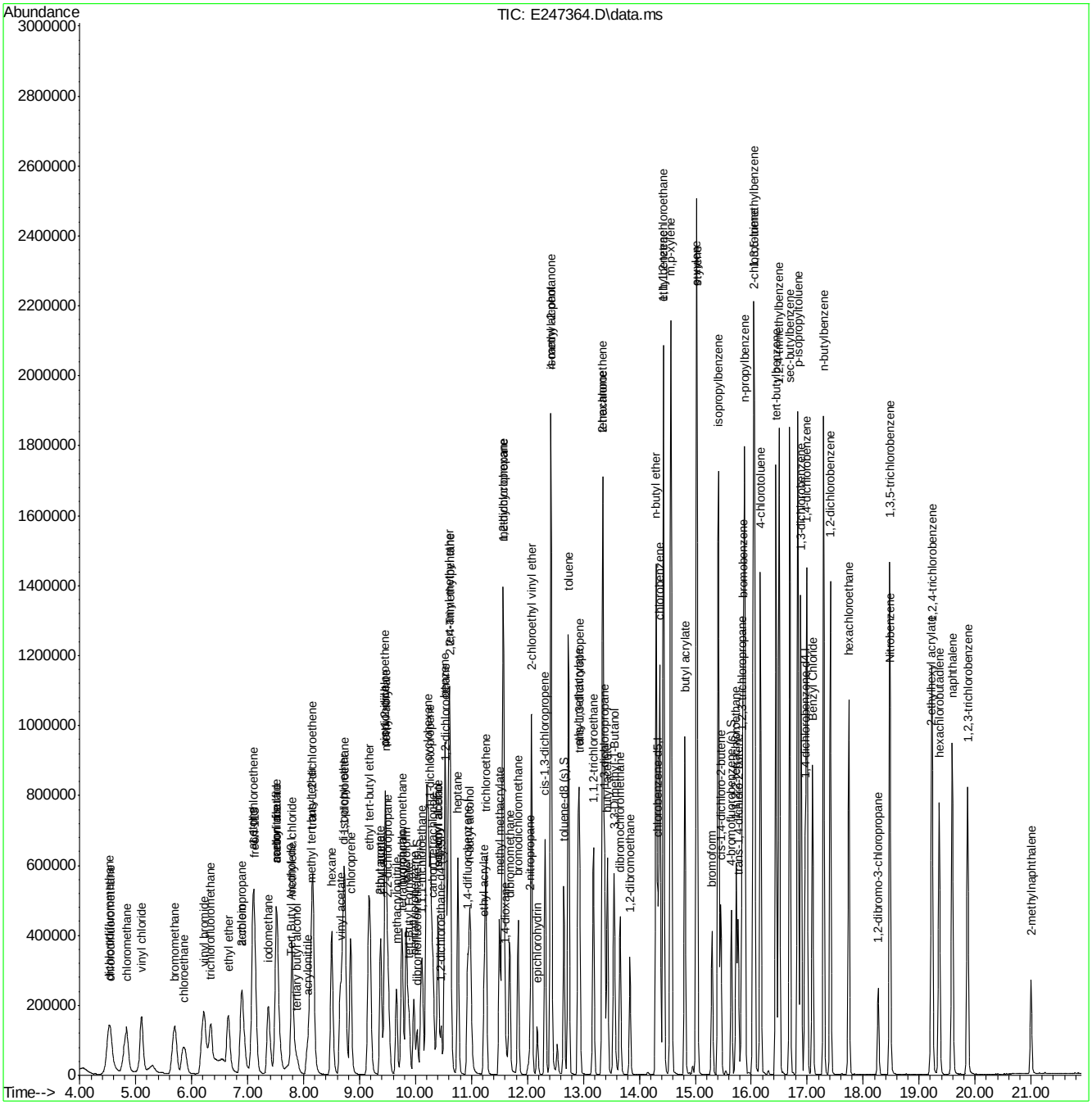
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
94) styrene	15.035	104	828196	104.23 ug/L	98
95) butyl acrylate	14.815	55	669475	120.49 ug/L	99
96) isopropylbenzene	15.411	105	1318374	98.73 ug/L	99
97) bromoform	15.301	173	227056	100.52 ug/L	99
98) cis-1,4-dichloro-2-butene	15.453	88	124348	113.87 ug/L	98
101) 1,1,2,2-tetrachloroethane	15.730	83	351725	96.08 ug/L	99
102) trans-1,4-dichloro-2-b...	15.767	53	96723	97.15 ug/L	98
103) 1,2,3-trichloropropane	15.835	110	92974	98.89 ug/L	99
104) bromobenzene	15.856	156	347546	89.58 ug/L	98
105) n-propylbenzene	15.882	91	1473443	88.43 ug/L	99
106) 2-chlorotoluene	16.039	126	317514	94.23 ug/L	99
107) 4-chlorotoluene	16.164	91	936266	94.14 ug/L	99
108) 1,3,5-trimethylbenzene	16.060	105	1071860	89.21 ug/L	98
109) tert-butylbenzene	16.442	119	989933	91.35 ug/L	99
110) 1,2,4-trimethylbenzene	16.499	105	1127936	93.91 ug/L	99
111) sec-butylbenzene	16.687	105	1514980	90.77 ug/L	100
112) p-isopropyltoluene	16.834	119	1271441	90.39 ug/L	99
113) 1,3-dichlorobenzene	16.886	146	674093	89.60 ug/L	99
114) 1,4-dichlorobenzene	16.996	146	684985	93.14 ug/L	98
115) 1,2-dichlorobenzene	17.414	146	684119	94.20 ug/L	98
116) Benzyl Chloride	17.095	91	717695	107.11 ug/L	99
117) n-butylbenzene	17.294	92	642552	91.18 ug/L	97
118) 2-ethylhexyl acrylate	19.214	55	77690	18.01 ug/L	96
119) hexachloroethane	17.744	201	248817	92.29 ug/L	99
120) 1,2-dibromo-3-chloropr...	18.272	75	67339	98.67 ug/L	89
121) 1,3,5-trichlorobenzene	18.476	180	578783	82.78 ug/L	99
122) Nitrobenzene	18.492	77	18018	79.30 ug/L	98
123) 1,2,4-trichlorobenzene	19.229	180	475234	86.85 ug/L	97
124) hexachlorobutadiene	19.360	225	230829	67.88 ug/L	98
125) naphthalene	19.590	128	974998	93.00 ug/L	100
126) 1,2,3-trichlorobenzene	19.867	180	371754	81.22 ug/L	98
127) 2-methylnaphthalene	21.002	142	166490	41.64 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247364.D
Acq On : 13 Sep 2017 10:28 pm
Operator : ThienN
Sample : ic10636-100
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:15:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:15:10 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247365.D
Acq On : 13 Sep 2017 10:58 pm
Operator : ThienN
Sample : ic10636-200
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:20:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.759	65	113436	500.00	ug/L		0.00
5) pentafluorobenzene	9.971	168	207087	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.934	114	328189	50.00	ug/L		0.00
75) chlorobenzene-d5	14.333	117	296460	50.00	ug/L		0.00
99) 1,4-dichlorobenzene-d4	16.964	152	197949	50.00	ug/L		0.00
System Monitoring Compounds							
46) dibromofluoromethane (s)	10.024	113	98817	51.78	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 103.56%				
55) 1,2-dichloroethane-d4 (s)	10.458	65	107371	48.27	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 96.54%				
76) toluene-d8 (s)	12.654	98	398149	53.39	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.78%				
100) 4-bromofluorobenzene (s)	15.646	95	166162	51.34	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.68%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.879	59	338425	1052.70	ug/L		99
4) 1,4-dioxane	11.614	88	106076	3488.29	ug/L		94
6) chlorodifluoromethane	4.532	51	571969	236.65	ug/L		99
7) dichlorodifluoromethane	4.511	85	706868	238.80	ug/L		98
8) chloromethane	4.840	50	911029	228.54	ug/L		100
9) vinyl chloride	5.107	62	881077	232.59	ug/L		99
11) bromomethane	5.698	94	548343	202.53	ug/L		96
12) chloroethane	5.850	64	465251	225.70	ug/L		97
13) trichlorofluoromethane	6.336	101	808125	208.39	ug/L		99
14) vinyl bromide	6.206	106	648707	274.53	ug/L		98
15) ethyl ether	6.650	74	260480	212.05	ug/L		93
16) 2-chloropropane	6.891	43	890955	207.04	ug/L		99
17) acrolein	6.912	56	122725	232.72	ug/L		94
18) freon 113	7.121	151	384334	201.00	ug/L		96
19) 1,1-dichloroethene	7.095	96	444800	191.66	ug/L		99
20) acetone	7.095	58	170390	784.58	ug/L		98
21) acetonitrile	7.524	41	746919	1872.55	ug/L		98
22) iodomethane	7.367	142	943897	202.56	ug/L		99
23) carbon disulfide	7.513	76	1723593	216.98	ug/L		99
24) methylene chloride	7.790	84	548596	197.36	ug/L		99
25) methyl acetate	7.524	43	378120	202.78	ug/L		98
26) methyl tert butyl ether	8.135	73	1542144	224.48	ug/L		98
27) trans-1,2-dichloroethene	8.172	96	464926	184.33	ug/L		99
28) hexane	8.502	56	338109	203.02	ug/L		98
29) di-isopropyl ether	8.711	45	1663153	206.26	ug/L		98
30) 2-butanone	9.375	72	223056	824.76	ug/L		97
31) 1,1-dichloroethane	8.742	63	804723	189.57	ug/L		99
32) chloroprene	8.836	53	701029	192.60	ug/L		98
33) acrylonitrile	8.067	53	220317	227.52	ug/L		98
34) vinyl acetate	8.653	86	84783	204.36	ug/L		95
35) ethyl tert-butyl ether	9.171	59	1726366	222.73	ug/L		99
36) ethyl acetate	9.380	45	80438	214.06	ug/L	#	94
37) 2,2-dichloropropane	9.506	77	642735	202.00	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247365.D
Acq On : 13 Sep 2017 10:58 pm
Operator : ThienN
Sample : ic10636-200
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:20:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.453	96	507880	184.59	ug/L		99
39) propionitrile	9.464	54	780624	2097.28	ug/L		95
40) methyl acrylate	9.469	85	69723	197.55	ug/L		97
41) methacrylonitrile	9.657	67	215619	218.23	ug/L		98
42) bromochloromethane	9.752	128	265527	192.58	ug/L		99
43) tetrahydrofuran	9.773	42	158235	172.22	ug/L		99
44) chloroform	9.830	83	781832	174.60	ug/L		98
45) tert-Butyl Formate	9.877	59	341620	198.62	ug/L		98
47) 1,1,1-trichloroethane	10.112	97	742504	202.74	ug/L		97
48) cyclohexane	10.233	84	790588	230.23	ug/L		87
50) 1,1-dichloropropene	10.269	75	578874	179.09	ug/L		98
51) carbon tetrachloride	10.311	117	610796	197.02	ug/L		98
52) tert-amyl alcohol	10.390	73	165178	1195.31	ug/L		99
53) isopropyl acetate	10.405	87	103667	214.28	ug/L		97
56) n-butyl alcohol	10.970	56	822759	9885.30	ug/L		98
57) 2,2,4-Trimethylpentane	10.620	57	1876411	189.95	ug/L		98
58) benzene	10.526	78	1882360	180.28	ug/L		100
59) tert-amyl methyl ether	10.594	73	1570326	201.45	ug/L		98
60) heptane	10.756	57	335726	172.39	ug/L		99
61) 1,2-dichloroethane	10.552	62	563587	175.09	ug/L		99
62) ethyl acrylate	11.221	55	633348	199.25	ug/L		100
63) trichloroethene	11.258	95	458705	174.77	ug/L		99
64) 2-chloroethyl vinyl ether	12.074	63	957005	643.90	ug/L		98
65) methyl methacrylate	11.504	100	144599	211.06	ug/L		91
66) methylcyclohexane	11.577	83	955087	205.17	ug/L		97
67) 1,2-dichloropropane	11.566	63	463641	173.55	ug/L		99
68) dibromomethane	11.682	93	304729	186.92	ug/L		99
69) bromodichloromethane	11.833	83	648864	180.69	ug/L		99
70) 2-nitropropane	12.048	41	170134	177.28	ug/L		98
71) epichlorohydrin	12.178	57	275870	1011.56	ug/L		97
72) cis-1,3-dichloropropene	12.320	75	813319	184.78	ug/L		97
73) 4-methyl-2-pentanone	12.419	58	836093	799.68	ug/L		94
74) isoamyl alcohol	12.414	70	348460	4585.19	ug/L	#	80
77) toluene	12.733	92	1173731	186.42	ug/L		96
78) ethyl methacrylate	12.905	69	703955	217.72	ug/L		96
79) trans-1,3-dichloropropene	12.931	75	688066	184.97	ug/L		98
80) 1,1,2-trichloroethane	13.177	83	371043	193.68	ug/L		98
81) tetrachloroethene	13.339	164	427368	172.85	ug/L		99
82) 2-hexanone	13.350	58	824924	859.48	ug/L		95
83) 1,3-dichloropropane	13.381	76	673832	185.03	ug/L		97
84) butyl acetate	13.428	56	390594	231.64	ug/L		97
85) 3,3-Dimethyl-1-Butanol	13.549	69	521970	2806.70	ug/L		98
86) dibromochloromethane	13.658	129	529118	193.65	ug/L		99
87) 1,2-dibromoethane	13.831	107	500657	204.44	ug/L		95
88) n-butyl ether	14.302	57	2391996	213.51	ug/L		99
89) chlorobenzene	14.365	112	1323994	187.13	ug/L		98
90) 1,1,1,2-tetrachloroethane	14.438	131	496889	188.77	ug/L		99
91) ethylbenzene	14.427	91	2194801	188.61	ug/L		98
92) m,p-xylene	14.563	106	1798841	398.99	ug/L		96
93) o-xylene	15.018	91	1888538	195.66	ug/L		98

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247365.D
Acq On : 13 Sep 2017 10:58 pm
Operator : ThienN
Sample : ic10636-200
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:20:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) styrene	15.034	104	1576512	204.86	ug/L	99
95) butyl acrylate	14.814	55	1290251	239.75	ug/L	98
96) isopropylbenzene	15.411	105	2513360	194.33	ug/L	99
97) bromoform	15.301	173	446987	204.32	ug/L	98
98) cis-1,4-dichloro-2-butene	15.458	88	247389	233.90	ug/L	100
101) 1,1,2,2-tetrachloroethane	15.730	83	684755	180.41	ug/L	100
102) trans-1,4-dichloro-2-b...	15.766	53	191369	185.37	ug/L	98
103) 1,2,3-trichloropropane	15.834	110	180395	185.06	ug/L	96
104) bromobenzene	15.855	156	669364	166.39	ug/L	99
105) n-propylbenzene	15.881	91	2834731	164.08	ug/L	98
106) 2-chlorotoluene	16.038	126	620638	177.65	ug/L	98
107) 4-chlorotoluene	16.164	91	1814890	175.99	ug/L	99
108) 1,3,5-trimethylbenzene	16.059	105	2055176	164.98	ug/L	97
109) tert-butylbenzene	16.441	119	1911325	170.11	ug/L	98
110) 1,2,4-trimethylbenzene	16.498	105	2171879	174.39	ug/L	98
111) sec-butylbenzene	16.692	105	2899268	167.53	ug/L	98
112) p-isopropyltoluene	16.833	119	2456822	168.44	ug/L	99
113) 1,3-dichlorobenzene	16.891	146	1318090	168.97	ug/L	99
114) 1,4-dichlorobenzene	16.995	146	1352708	177.39	ug/L	99
115) 1,2-dichlorobenzene	17.414	146	1328706	176.45	ug/L	98
116) Benzyl Chloride	17.095	91	1414807	203.64	ug/L	98
117) n-butylbenzene	17.293	92	1246369	170.57	ug/L	95
118) 2-ethylhexyl acrylate	19.208	55	172674	38.61	ug/L	95
119) hexachloroethane	17.743	201	496393	177.57	ug/L	98
120) 1,2-dibromo-3-chloropr...	18.266	75	133409	188.52	ug/L	94
121) 1,3,5-trichlorobenzene	18.481	180	1093195	150.80	ug/L	98
122) Nitrobenzene	18.496	77	38559	158.14	ug/L	94
123) 1,2,4-trichlorobenzene	19.234	180	901483	158.89	ug/L	97
124) hexachlorobutadiene	19.359	225	436315	123.74	ug/L	99
125) naphthalene	19.595	128	1903181	175.09	ug/L	100
126) 1,2,3-trichlorobenzene	19.867	180	715895	150.85	ug/L	99
127) 2-methylnaphthalene	21.002	142	351513	84.79	ug/L	99

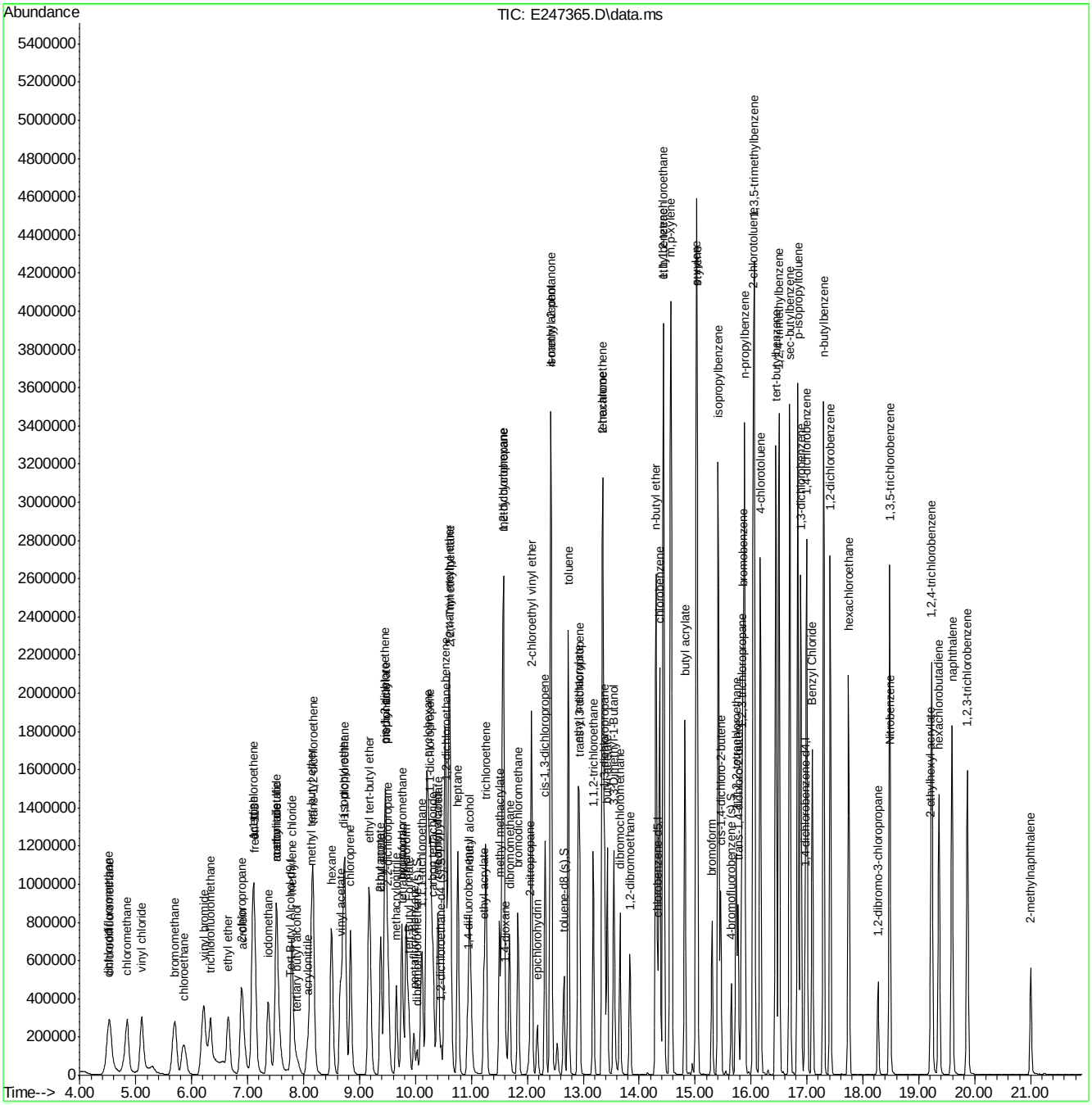
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247365.D
Acq On : 13 Sep 2017 10:58 pm
Operator : ThienN
Sample : ic10636-200
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:20:34 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Sep 14 08:20:15 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247369.D
Acq On : 14 Sep 2017 1:00 am
Operator : ThienN
Sample : icv10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 08:58:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.760	65	115589	500.00	ug/L	0.00
5) pentafluorobenzene	9.972	168	213319	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.929	114	320831	50.00	ug/L	0.00
75) chlorobenzene-d5	14.329	117	315178	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.965	152	197524	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	10.024	113	99380	50.63	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.26%			
55) 1,2-dichloroethane-d4 (s)	10.458	65	110526	49.68	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.36%			
76) toluene-d8 (s)	12.650	98	398050	49.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.18%			
100) 4-bromofluorobenzene (s)	15.647	95	167671	50.46	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.92%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.880	59	89612	248.49	ug/L	98
4) 1,4-dioxane	11.604	88	28830	1128.32	ug/L	97
6) chlorodifluoromethane	4.527	51	153884	49.94	ug/L	96
7) dichlorodifluoromethane	4.512	85	166992	49.98	ug/L	97
8) chloromethane	4.820	50	217099	47.65	ug/L	92
9) vinyl chloride	5.092	62	216102	49.67	ug/L	100
11) bromomethane	5.694	94	130898	46.60	ug/L	97
12) chloroethane	5.866	64	117612	50.10	ug/L	98
13) trichlorofluoromethane	6.342	101	197171	49.46	ug/L	99
14) vinyl bromide	6.201	106	168532	53.74	ug/L	100
15) ethyl ether	6.651	74	72874	53.10	ug/L	94
16) 2-chloropropane	6.891	43	254437	47.37	ug/L	99
17) acrolein	6.912	56	32328	48.87	ug/L	97
18) freon 113	7.122	151	137366	62.66	ug/L	96
19) 1,1-dichloroethene	7.101	96	130764	50.49	ug/L	98
20) acetone	7.085	58	47632	204.76	ug/L	98
21) acetonitrile	7.514	41	159765	369.29	ug/L	99
22) iodomethane	7.367	142	261185	51.85	ug/L	98
23) carbon disulfide	7.514	76	601646	61.35	ug/L	99
24) methylene chloride	7.791	84	154146	51.48	ug/L	99
25) methyl acetate	7.519	43	102924	46.02	ug/L	97
26) methyl tert butyl ether	8.136	73	855611	102.80	ug/L	98
27) trans-1,2-dichloroethene	8.168	96	131616	49.55	ug/L	96
28) hexane	8.497	56	73982	38.58	ug/L	97
29) di-isopropyl ether	8.706	45	482470	50.96	ug/L	99
30) 2-butanone	9.381	72	59953	215.16	ug/L	94
31) 1,1-dichloroethane	8.738	63	236453	51.16	ug/L	99
32) chloroprene	8.837	53	209912	52.60	ug/L	99
33) acrylonitrile	8.068	53	61992	57.29	ug/L	96
34) vinyl acetate	8.654	86	22939	52.86	ug/L	95
35) ethyl tert-butyl ether	9.172	59	473140	51.68	ug/L	99
36) ethyl acetate	9.376	45	22426	52.07	ug/L #	95
37) 2,2-dichloropropane	9.501	77	183325	47.48	ug/L	96

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247369.D
Acq On : 14 Sep 2017 1:00 am
Operator : ThienN
Sample : icv10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 08:58:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.454	96	148939	51.42	ug/L		99
39) propionitrile	9.459	54	205755	475.12	ug/L		99
40) methyl acrylate	9.470	85	18877	51.32	ug/L	#	89
41) methacrylonitrile	9.658	67	56167	51.48	ug/L		97
42) bromochloromethane	9.752	128	73600	51.96	ug/L		97
43) tetrahydrofuran	9.773	42	46809	51.55	ug/L		98
44) chloroform	9.831	83	225164	51.09	ug/L		98
45) tert-Butyl Formate	9.873	59	75938	44.32	ug/L		100
47) 1,1,1-trichloroethane	10.113	97	208059	52.99	ug/L		97
48) cyclohexane	10.228	84	233141	53.26	ug/L		97
50) 1,1-dichloropropene	10.270	75	170382	50.23	ug/L		98
51) carbon tetrachloride	10.307	117	172297	51.05	ug/L		99
52) tert-amyl alcohol	10.390	73	42149	242.00	ug/L		98
53) isopropyl acetate	10.401	87	28599	51.38	ug/L		95
56) n-butyl alcohol	10.971	56	225303	2666.54	ug/L		99
57) 2,2,4-Trimethylpentane	10.610	57	518154	52.77	ug/L		99
58) benzene	10.526	78	531524	50.98	ug/L		99
59) tert-amyl methyl ether	10.594	73	422990	50.20	ug/L		99
60) heptane	10.756	57	104631	53.71	ug/L		99
61) 1,2-dichloroethane	10.547	62	162172	51.53	ug/L		99
62) ethyl acrylate	11.227	55	178970	51.80	ug/L		100
63) trichloroethene	11.259	95	133927	52.97	ug/L		99
64) 2-chloroethyl vinyl ether	12.074	63	314269	313.95	ug/L		99
65) methyl methacrylate	11.499	100	37903	50.67	ug/L	#	76
66) methylcyclohexane	11.572	83	250388	46.11	ug/L		100
67) 1,2-dichloropropane	11.562	63	134475	50.14	ug/L		98
68) dibromomethane	11.677	93	82151	51.11	ug/L		100
69) bromodichloromethane	11.834	83	179772	53.16	ug/L		99
70) 2-nitropropane	12.048	41	48821	51.78	ug/L		99
71) epichlorohydrin	12.174	57	74210	263.40	ug/L		100
72) cis-1,3-dichloropropene	12.315	75	226219	50.89	ug/L		99
73) 4-methyl-2-pentanone	12.420	58	236513	203.93	ug/L		98
74) isoamyl alcohol	12.420	70	85505	1114.19	ug/L		99
77) toluene	12.733	92	334067	50.67	ug/L		98
78) ethyl methacrylate	12.906	69	194238	51.66	ug/L		99
79) trans-1,3-dichloropropene	12.932	75	198032	51.75	ug/L		99
80) 1,1,2-trichloroethane	13.178	83	105442	53.29	ug/L		98
81) tetrachloroethene	13.340	164	127853	51.23	ug/L		97
82) 2-hexanone	13.351	58	229743	201.50	ug/L		100
83) 1,3-dichloropropane	13.382	76	195450	50.53	ug/L		98
84) butyl acetate	13.429	56	110077	52.48	ug/L		96
85) 3,3-Dimethyl-1-Butanol	13.549	69	118660	543.26	ug/L		100
86) dibromochloromethane	13.654	129	148818	54.77	ug/L		99
87) 1,2-dibromoethane	13.832	107	138433	53.35	ug/L		96
88) n-butyl ether	14.297	57	701138	49.49	ug/L		99
89) chlorobenzene	14.365	112	382990	51.61	ug/L		97
90) 1,1,1,2-tetrachloroethane	14.438	131	136512	49.87	ug/L		99
91) ethylbenzene	14.428	91	651994	50.50	ug/L		100
92) m,p-xylene	14.564	106	519307	102.46	ug/L		99
93) o-xylene	15.019	91	550304	49.85	ug/L		100

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247369.D
Acq On : 14 Sep 2017 1:00 am
Operator : ThienN
Sample : icv10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 08:58:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

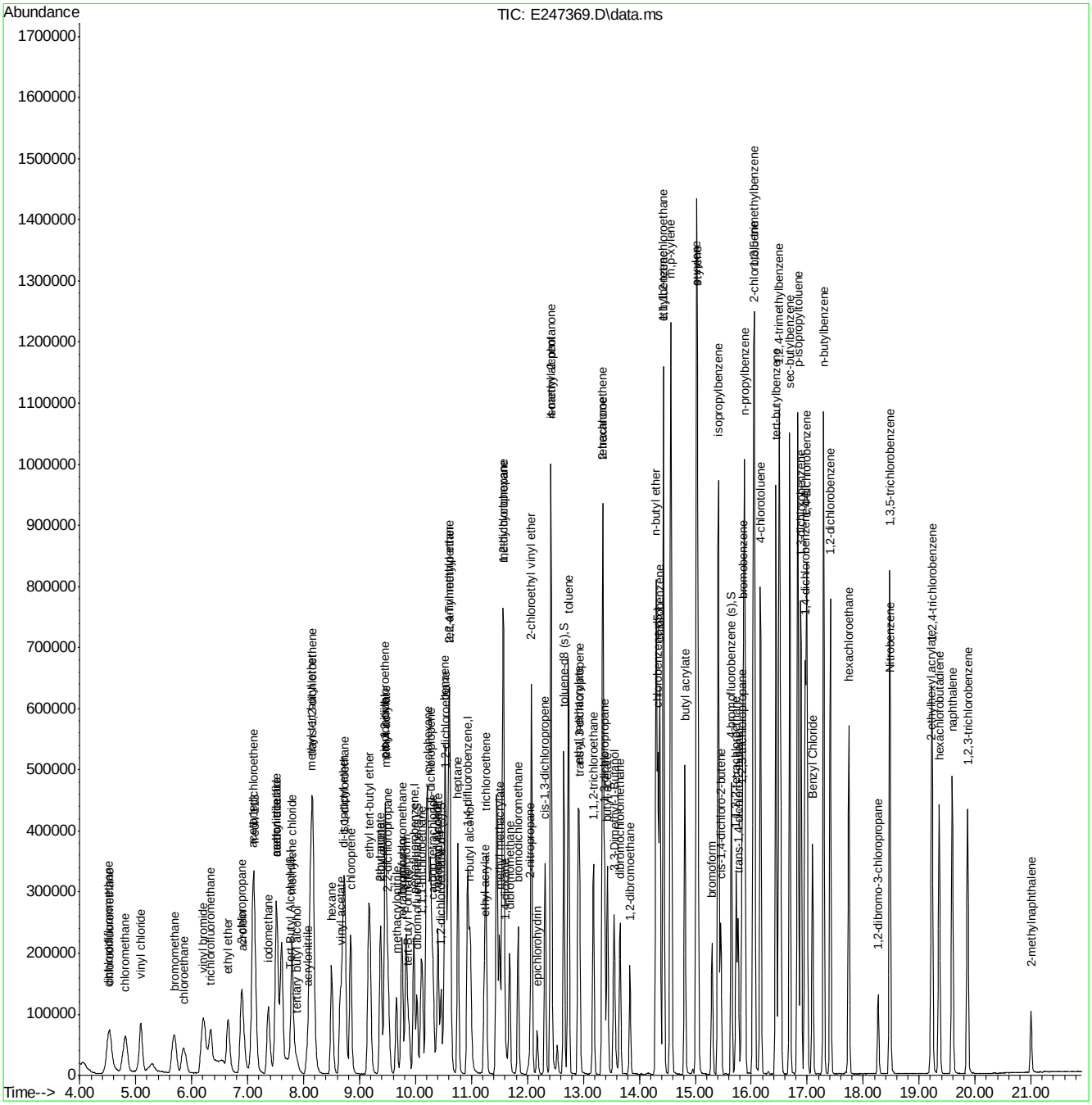
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
94) styrene	15.035	104	453464	50.23 ug/L	99
95) butyl acrylate	14.815	55	354315	53.81 ug/L	99
96) isopropylbenzene	15.411	105	736177	50.92 ug/L	100
97) bromoform	15.301	173	117577	55.17 ug/L	99
98) cis-1,4-dichloro-2-butene	15.458	88	62074	50.35 ug/L	99
101) 1,1,2,2-tetrachloroethane	15.730	83	191538	52.58 ug/L	97
102) trans-1,4-dichloro-2-b...	15.767	53	55432	56.75 ug/L	98
103) 1,2,3-trichloropropane	15.830	110	50424	53.07 ug/L	98
104) bromobenzene	15.856	156	192556	50.97 ug/L	97
105) n-propylbenzene	15.882	91	835364	49.18 ug/L	100
106) 2-chlorotoluene	16.039	126	173781	50.34 ug/L	97
107) 4-chlorotoluene	16.164	91	516716	49.86 ug/L	100
108) 1,3,5-trimethylbenzene	16.055	105	593201	48.94 ug/L	99
109) tert-butylbenzene	16.442	119	543877	51.20 ug/L	99
110) 1,2,4-trimethylbenzene	16.499	105	627432	49.24 ug/L	100
111) sec-butylbenzene	16.687	105	832094	49.66 ug/L	99
112) p-isopropyltoluene	16.834	119	718431	51.25 ug/L	99
113) 1,3-dichlorobenzene	16.886	146	376618	49.97 ug/L	99
114) 1,4-dichlorobenzene	16.991	146	378493	51.02 ug/L	100
115) 1,2-dichlorobenzene	17.414	146	376598	50.81 ug/L	100
116) Benzyl Chloride	17.095	91	303631	42.48 ug/L	100
117) n-butylbenzene	17.294	92	364011	52.08 ug/L	99
118) 2-ethylhexyl acrylate	19.214	55	39289	10.14 ug/L	96
119) hexachloroethane	17.744	201	129523	53.79 ug/L	99
120) 1,2-dibromo-3-chloropr...	18.267	75	34748	53.32 ug/L	94
121) 1,3,5-trichlorobenzene	18.476	180	328160	54.87 ug/L	99
122) Nitrobenzene	18.492	77	8561	47.65 ug/L	97
123) 1,2,4-trichlorobenzene	19.229	180	255182	54.11 ug/L	97
124) hexachlorobutadiene	19.360	225	129194	51.18 ug/L	98
125) naphthalene	19.590	128	502130	54.92 ug/L	99
126) 1,2,3-trichlorobenzene	19.867	180	193948	54.26 ug/L	99
127) 2-methylnaphthalene	21.002	142	62623	22.79 ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E247369.D
Acq On : 14 Sep 2017 1:00 am
Operator : ThienN
Sample : icv10636-50
Misc : MS19913,VE10636,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 08:58:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248810.D
Acq On : 9 Nov 2017 9:33 am
Operator : ThienN
Sample : cc10636-20
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 09 12:25:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.732	65	107470	500.00	ug/L		-0.03
5) pentafluorobenzene	9.959	168	204342	50.00	ug/L		-0.01
54) 1,4-difluorobenzene	10.921	114	314375	50.00	ug/L		-0.01
75) chlorobenzene-d5	14.319	117	302783	50.00	ug/L		-0.01
99) 1,4-dichlorobenzene-d4	16.949	152	169574	50.00	ug/L		-0.02
System Monitoring Compounds							
46) dibromofluoromethane (s)	10.011	113	89787	47.75	ug/L		-0.02
Spiked Amount 50.000	Range 72 - 129		Recovery = 95.50%				
55) 1,2-dichloroethane-d4 (s)	10.445	65	100200	45.97	ug/L		-0.01
Spiked Amount 50.000	Range 73 - 132		Recovery = 91.94%				
76) toluene-d8 (s)	12.641	98	367710	47.69	ug/L		-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.38%				
100) 4-bromofluorobenzene (s)	15.631	95	143418	50.27	ug/L		-0.02
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.54%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.847	59	30613	91.30	ug/L		96
4) 1,4-dioxane	11.595	88	13000	547.22	ug/L		92
6) chlorodifluoromethane	4.516	51	47058	15.94	ug/L		98
7) dichlorodifluoromethane	4.506	85	48092	15.03	ug/L		93
8) chloromethane	4.809	50	68469	15.69	ug/L		98
9) vinyl chloride	5.097	62	68029	16.32	ug/L		97
11) bromomethane	5.693	94	45757	17.01	ug/L		99
12) chloroethane	5.870	64	38113	16.95	ug/L		96
13) trichlorofluoromethane	6.331	101	61229	16.03	ug/L		98
14) vinyl bromide	6.200	106	43130	14.36	ug/L		99
15) ethyl ether	6.644	74	24959	18.98	ug/L		94
16) 2-chloropropane	6.885	43	83033	16.14	ug/L		96
17) acrolein	6.900	56	10462	16.51	ug/L		96
18) freon 113	7.120	151	34454	16.41	ug/L		98
19) 1,1-dichloroethene	7.094	96	44701	18.02	ug/L		92
20) acetone	7.068	58	17256	77.44	ug/L	#	81
21) acetonitrile	7.507	41	83720	202.02	ug/L		97
22) iodomethane	7.355	142	85259	17.67	ug/L		99
23) carbon disulfide	7.502	76	170946	18.20	ug/L		99
24) methylene chloride	7.779	84	52852	18.43	ug/L		99
25) methyl acetate	7.517	43	39193	18.29	ug/L		97
26) methyl tert butyl ether	8.124	73	140000	17.56	ug/L		96
27) trans-1,2-dichloroethene	8.160	96	47198	18.55	ug/L		98
28) hexane	8.490	56	31376	17.08	ug/L		94
29) di-isopropyl ether	8.699	45	154587	17.05	ug/L		98
30) 2-butanone	9.363	72	21603	80.94	ug/L	#	74
31) 1,1-dichloroethane	8.730	63	80996	18.29	ug/L		98
32) chloroprene	8.830	53	64481	16.87	ug/L		94
33) acrylonitrile	8.061	53	20185	19.47	ug/L		98
34) vinyl acetate	8.647	86	7601	18.28	ug/L	#	70
35) ethyl tert-butyl ether	9.159	59	149893	17.09	ug/L		99
36) ethyl acetate	9.363	45	7599	18.42	ug/L	#	91
37) 2,2-dichloropropane	9.488	77	62777	16.97	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248810.D
Acq On : 9 Nov 2017 9:33 am
Operator : ThienN
Sample : cc10636-20
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 09 12:25:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) cis-1,2-dichloroethene	9.441	96	51951	18.72	ug/L		96
39) propionitrile	9.446	54	83125	200.38	ug/L		87
40) methyl acrylate	9.457	85	6874	19.51	ug/L	#	84
41) methacrylonitrile	9.640	67	20479	19.59	ug/L		92
42) bromochloromethane	9.744	128	25549	18.83	ug/L		96
43) tetrahydrofuran	9.760	42	15508	17.83	ug/L		98
44) chloroform	9.818	83	75228	17.82	ug/L		98
45) tert-Butyl Formate	9.865	59	5369	3.27	ug/L		91
47) 1,1,1-trichloroethane	10.095	97	64866	17.25	ug/L		97
48) cyclohexane	10.220	84	68275	16.28	ug/L		86
50) 1,1-dichloropropene	10.262	75	57990	17.85	ug/L		98
51) carbon tetrachloride	10.293	117	55102	17.04	ug/L		98
52) tert-amyl alcohol	10.372	73	14314	85.80	ug/L	#	77
53) isopropyl acetate	10.393	87	9606	18.02	ug/L	#	73
56) n-butyl alcohol	10.952	56	78654	950.02	ug/L		97
57) 2,2,4-Trimethylpentane	10.597	57	175609	18.25	ug/L		96
58) benzene	10.513	78	186281	18.23	ug/L		99
59) tert-amyl methyl ether	10.581	73	141546	17.14	ug/L		98
60) heptane	10.748	57	34218	17.93	ug/L		99
61) 1,2-dichloroethane	10.534	62	52548	17.04	ug/L		99
62) ethyl acrylate	11.214	55	56870	16.80	ug/L		99
63) trichloroethene	11.250	95	45028	18.17	ug/L		99
64) 2-chloroethyl vinyl ether	12.055	63	86037	87.71	ug/L		99
65) methyl methacrylate	11.491	100	13027	17.77	ug/L	#	79
66) methylcyclohexane	11.564	83	88213	16.58	ug/L		98
67) 1,2-dichloropropane	11.548	63	48328	18.39	ug/L		98
68) dibromomethane	11.663	93	28216	17.91	ug/L		91
69) bromodichloromethane	11.820	83	59090	17.83	ug/L		97
70) 2-nitropropane	12.034	41	14062	15.22	ug/L		100
71) epichlorohydrin	12.160	57	25350	91.82	ug/L		95
72) cis-1,3-dichloropropene	12.301	75	78133	17.94	ug/L		94
73) 4-methyl-2-pentanone	12.406	58	79922	70.33	ug/L		91
74) isoamyl alcohol	12.400	70	29562	393.12	ug/L		92
77) toluene	12.719	92	113079	17.85	ug/L		99
78) ethyl methacrylate	12.897	69	62479	17.30	ug/L		94
79) trans-1,3-dichloropropene	12.918	75	67673	18.41	ug/L		94
80) 1,1,2-trichloroethane	13.164	83	35112	18.47	ug/L		97
81) tetrachloroethene	13.331	164	39976	16.67	ug/L		97
82) 2-hexanone	13.336	58	76151	69.52	ug/L		94
83) 1,3-dichloropropane	13.367	76	67069	18.05	ug/L		85
84) butyl acetate	13.420	56	33636	16.69	ug/L		87
85) 3,3-Dimethyl-1-Butanol	13.530	69	36604	174.44	ug/L		96
86) dibromochloromethane	13.639	129	47960	18.37	ug/L		98
87) 1,2-dibromoethane	13.817	107	44472	17.84	ug/L		98
88) n-butyl ether	14.288	57	230016	16.90	ug/L		100
89) chlorobenzene	14.356	112	126563	17.75	ug/L		99
90) 1,1,1,2-tetrachloroethane	14.424	131	45715	17.38	ug/L		97
91) ethylbenzene	14.418	91	217130	17.51	ug/L		100
92) m,p-xylene	14.549	106	170079	34.93	ug/L		100
93) o-xylene	15.004	91	184814	17.43	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248810.D
Acq On : 9 Nov 2017 9:33 am
Operator : ThienN
Sample : cc10636-20
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 09 12:25:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) styrene	15.020	104	150603	17.36	ug/L	99
95) butyl acrylate	14.800	55	101157	15.99	ug/L	98
96) isopropylbenzene	15.401	105	239966	17.28	ug/L	99
97) bromoform	15.286	173	37308	18.22	ug/L	97
98) cis-1,4-dichloro-2-butene	15.438	88	20643	17.43	ug/L	91
101) 1,1,2,2-tetrachloroethane	15.715	83	61434	19.65	ug/L	99
102) trans-1,4-dichloro-2-b...	15.751	53	15702	18.72	ug/L	93
103) 1,2,3-trichloropropane	15.819	110	16105	19.74	ug/L	91
104) bromobenzene	15.840	156	60739	18.73	ug/L	97
105) n-propylbenzene	15.872	91	272664	18.70	ug/L	99
106) 2-chlorotoluene	16.023	126	55906	18.86	ug/L	97
107) 4-chlorotoluene	16.149	91	163630	18.39	ug/L	98
108) 1,3,5-trimethylbenzene	16.044	105	196054	18.84	ug/L	100
109) tert-butylbenzene	16.431	119	170117	18.65	ug/L	98
110) 1,2,4-trimethylbenzene	16.489	105	204257	18.67	ug/L	99
111) sec-butylbenzene	16.677	105	267865	18.62	ug/L	100
112) p-isopropyltoluene	16.823	119	225867	18.77	ug/L	99
113) 1,3-dichlorobenzene	16.875	146	117048	18.09	ug/L	98
114) 1,4-dichlorobenzene	16.980	146	114862	18.03	ug/L	100
115) 1,2-dichlorobenzene	17.398	146	116659	18.33	ug/L	98
116) Benzyl Chloride	17.079	91	121796	19.85	ug/L	99
117) n-butylbenzene	17.283	92	115325	19.22	ug/L	97
118) 2-ethylhexyl acrylate	19.197	55	8761	3.50	ug/L	99
119) hexachloroethane	17.733	201	41689	20.17	ug/L	98
120) 1,2-dibromo-3-chloropr...	18.256	75	9968	17.82	ug/L	97
121) 1,3,5-trichlorobenzene	18.465	180	97406	18.97	ug/L	98
122) Nitrobenzene	18.470	77	2740	20.09	ug/L	98
123) 1,2,4-trichlorobenzene	19.218	180	75402	18.62	ug/L	98
124) hexachlorobutadiene	19.343	225	46234	21.34	ug/L	98
125) naphthalene	19.578	128	148934	18.98	ug/L	100
126) 1,2,3-trichlorobenzene	19.850	180	59146	19.27	ug/L	97
127) 2-methylnaphthalene	20.985	142	17353	7.36	ug/L	95

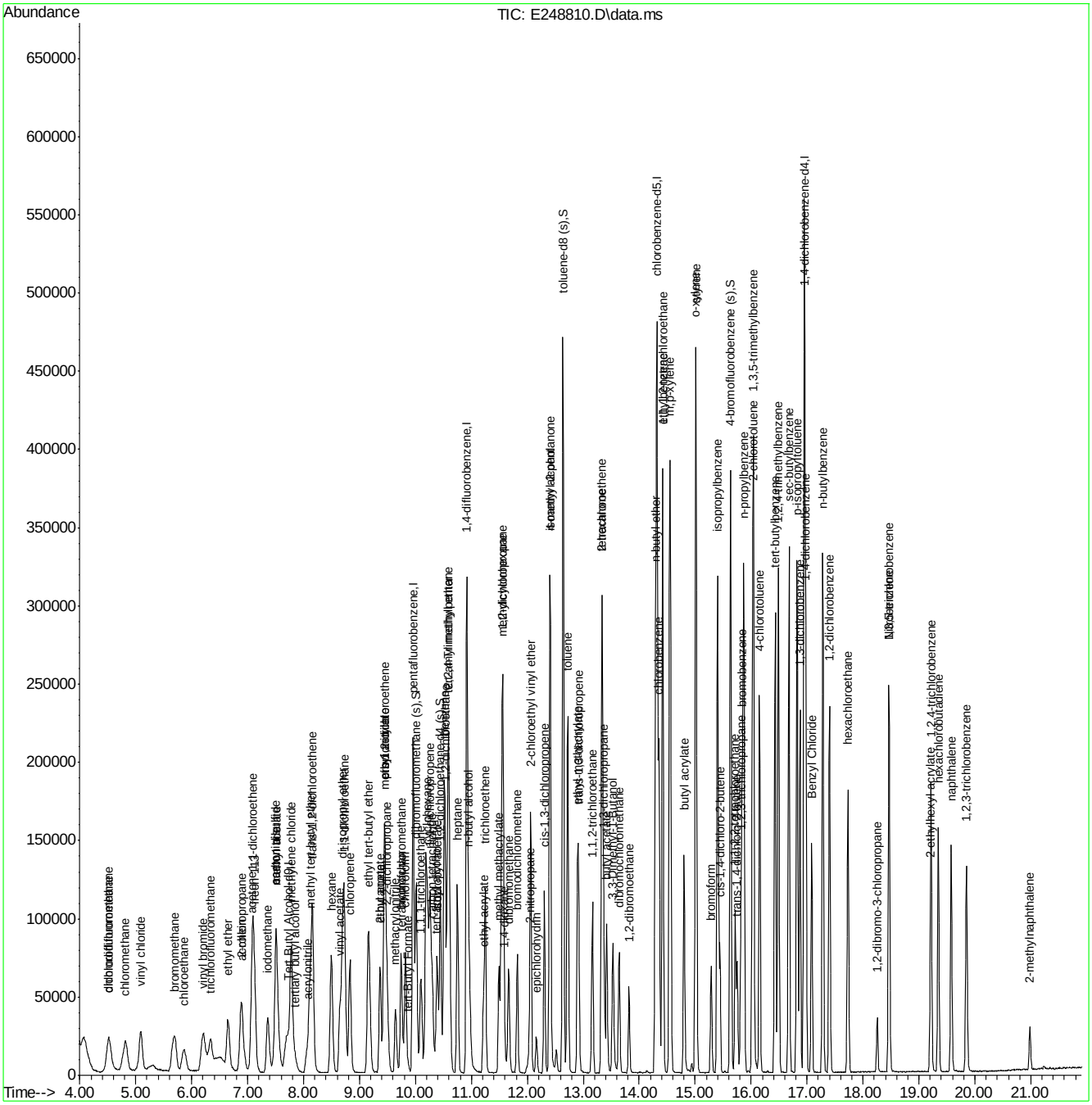
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E248810.D
Acq On : 9 Nov 2017 9:33 am
Operator : ThienN
Sample : cc10636-20
Misc : MS21663,VE10685,5,,100,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 09 12:25:18 2017
Quant Method : C:\msdchem\1\METHODS\ME10636.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Fri Sep 15 08:57:07 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216442.D
Acq On : 26 Oct 2017 8:39 pm
Operator : PrashanS
Sample : IC8691-0.2
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 27 10:51:09 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.421	65	314899	500.00	ug/L		0.00
4) pentafluorobenzene	9.764	168	830951	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.700	114	1139431	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	936288	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.176	152	539572	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	410571	47.35	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 94.70%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	457802	49.30	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 98.60%				
72) toluene-d8 (s)	12.322	98	1182442	50.24	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.48%				
96) 4-bromofluorobenzene (s)	14.994	95	440458	51.42	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.84%				
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.891	85	1681	0.17	ug/L		93
8) vinyl chloride	4.550	62	1234	0.18	ug/L		83
11) trichlorofluoromethane	5.899	101	2419	0.18	ug/L		80
15) freon 113	6.751	151	976	0.18	ug/L	#	68
16) 1,1-dichloroethene	6.767	61	1679	0.19	ug/L		91
24) methyl tert butyl ether	7.860	73	2867	0.19	ug/L		75
25) trans-1,2-dichloroethene	7.902	61	1391	0.17	ug/L		82
27) 1,1-dichloroethane	8.488	63	2020	0.20	ug/L		86
29) di-isopropyl ether	8.488	45	2624	0.18	ug/L		84
31) ethyl tert-butyl ether	8.953	59	2545	0.16	ug/L		72
33) 2,2-dichloropropane	9.225	77	2442	0.21	ug/L	#	44
39) bromochloromethane	9.508	128	584	0.18	ug/L		93
41) chloroform	9.602	83	3127	0.25	ug/L		79
42) carbon tetrachloride	10.062	117	2175	0.18	ug/L		96
43) 1,1-dichloropropene	10.041	75	1696	0.19	ug/L	#	66
46) 1,1,1-trichloroethane	9.863	97	2188	0.17	ug/L	#	62
52) 1,2-dichloroethane	10.308	62	1657	0.17	ug/L		76
53) benzene	10.287	78	4668	0.22	ug/L		89
54) 2,2,4-trimethylpentane	10.392	57	3570	0.19	ug/L		76
58) trichloroethene	11.014	95	1266	0.20	ug/L		85
61) 1,2-dichloropropane	11.297	63	961	0.19	ug/L		64
63) dibromomethane	11.401	93	627	0.16	ug/L		76
64) bromodichloromethane	11.558	83	1565	0.18	ug/L		84
68) cis-1,3-dichloropropene	12.013	75	1845	0.21	ug/L		82
76) 1,1,2-trichloroethane	12.792	83	605	0.17	ug/L	#	51
77) 1,3-dichloropropane	12.975	76	1113	0.16	ug/L	#	65
83) dibromochloromethane	13.221	129	1179	0.17	ug/L		96
84) 1,2-dibromoethane	13.383	107	794	0.16	ug/L	#	75
85) chlorobenzene	13.859	112	3111	0.21	ug/L		90
86) 1,1,1,2-tetrachloroethane	13.917	131	1138	0.18	ug/L		77
87) ethylbenzene	13.922	91	5195	0.22	ug/L		89
88) m,p-xylene	14.037	106	4258	0.46	ug/L		87
89) o-xylene	14.440	106	1835	0.20	ug/L		88
90) styrene	14.456	104	2700	0.18	ug/L		73
94) isopropylbenzene	14.790	105	4946	0.21	ug/L		94
100) bromobenzene	15.172	156	1364	0.19	ug/L	#	79
101) n-propylbenzene	15.209	91	4946	0.19	ug/L		92
102) 2-chlorotoluene	15.340	126	1168	0.20	ug/L	#	71
103) 4-chlorotoluene	15.449	91	3436	0.21	ug/L		93
104) 1,3,5-trimethylbenzene	15.366	105	3651	0.19	ug/L		92
105) tert-butylbenzene	15.700	134	692	0.18	ug/L	#	41
106) 1,2,4-trimethylbenzene	15.758	105	4421	0.22	ug/L		96
107) sec-butylbenzene	15.931	105	4323	0.18	ug/L		97
108) p-isopropyltoluene	16.067	119	4234	0.20	ug/l		88
110) 1,3-dichlorobenzene	16.103	146	2983	0.23	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216442.D
Acq On : 26 Oct 2017 8:39 pm
Operator : PrashanS
Sample : IC8691-0.2
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 27 10:51:09 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
111) 1,4-dichlorobenzene	16.197	146	3397	0.25	ug/L	90
112) 1,2-dichlorobenzene	16.579	146	2794	0.22	ug/L	89
113) n-butylbenzene	16.495	92	1919	0.18	ug/L	86
116) 1,3,5-Trichlorobenzene	17.526	180	2227	0.21	ug/L	83
119) hexachlorobutadiene	18.148	225	1119	0.19	ug/L #	62

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

7.7.41

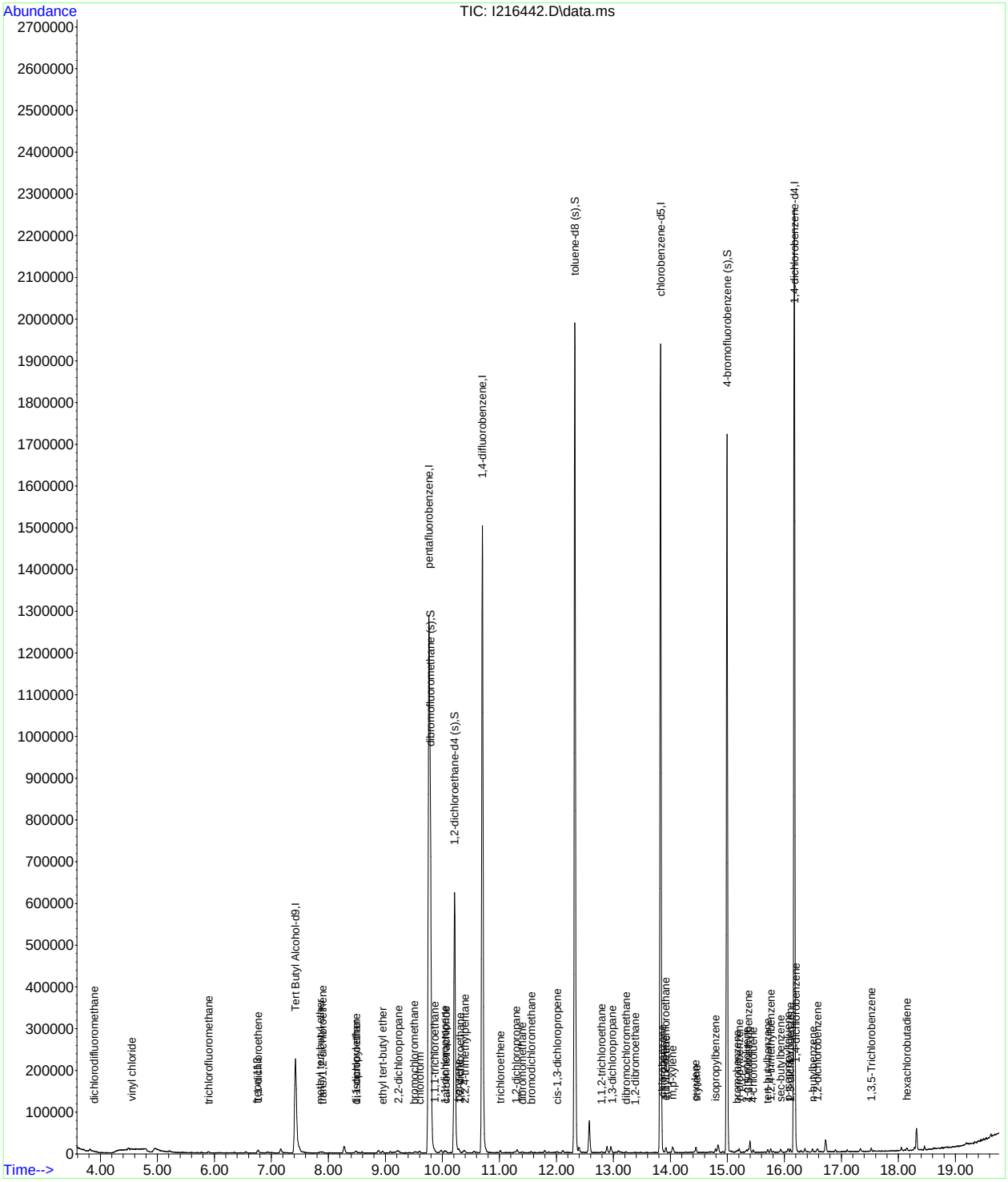
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SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216442.D
Acq On : 26 Oct 2017 8:39 pm
Operator : PrashanS
Sample : IC8691-0.2
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 27 10:51:09 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216443.D
Acq On : 26 Oct 2017 9:06 pm
Operator : PrashanS
Sample : IC8691-0.5
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 27 11:00:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	265700	500.00	ug/L		0.00
4) pentafluorobenzene	9.764	168	734737	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.705	114	1001550	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	833344	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	481905	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	368554	48.07	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 96.14%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	409622	50.18	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 100.36%				
72) toluene-d8 (s)	12.327	98	1048320	50.05	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.10%				
96) 4-bromofluorobenzene (s)	14.994	95	398264	52.05	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.10%				
Target Compounds							Qvalue
3) 1,4-dioxane	11.354	88	766	2.28	ug/L		83
5) dichlorodifluoromethane	3.896	85	4721	0.53	ug/L		86
6) chlorodifluoromethane	3.932	51	4222	0.56	ug/L		99
8) vinyl chloride	4.539	62	3443	0.58	ug/L		88
9) bromomethane	5.219	94	2589	0.57	ug/L		74
10) chloroethane	5.428	64	1471	0.46	ug/L		84
11) trichlorofluoromethane	5.894	101	6150	0.52	ug/L		94
15) freon 113	6.762	151	2580	0.53	ug/L	#	81
16) 1,1-dichloroethene	6.762	61	3646	0.46	ug/L		90
20) acetonitrile	7.180	41	3614	6.46	ug/L		86
24) methyl tert butyl ether	7.871	73	6928	0.51	ug/L		91
25) trans-1,2-dichloroethene	7.907	61	3938	0.53	ug/L		91
27) 1,1-dichloroethane	8.493	63	4759	0.53	ug/L		90
29) di-isopropyl ether	8.488	45	6293	0.48	ug/L		88
30) chloroprene	8.592	53	3809	0.46	ug/L		90
31) ethyl tert-butyl ether	8.948	59	6969	0.49	ug/L		81
33) 2,2-dichloropropane	9.236	77	5917	0.59	ug/L		78
35) cis-1,2-dichloroethene	9.215	96	3716	0.62	ug/L	#	81
36) propionitrile	9.215	54	3406	1.77	ug/L		93
39) bromochloromethane	9.518	128	1498	0.52	ug/L		85
41) chloroform	9.597	83	6651	0.59	ug/L		92
42) carbon tetrachloride	10.062	117	5647	0.52	ug/L	#	76
43) 1,1-dichloropropene	10.036	75	4039	0.53	ug/L		92
46) 1,1,1-trichloroethane	9.863	97	6092	0.53	ug/L		92
52) 1,2-dichloroethane	10.313	62	4772	0.57	ug/L		83
53) benzene	10.282	78	11054	0.60	ug/L		93
54) 2,2,4-trimethylpentane	10.392	57	8966	0.54	ug/L		91
55) tert-amyl methyl ether	10.371	87	1791	0.54	ug/L	#	77
58) trichloroethene	11.019	95	2988	0.53	ug/L		94
60) methylcyclohexane	11.317	83	4064	0.48	ug/L	#	78
61) 1,2-dichloropropane	11.296	63	2507	0.58	ug/L		79
63) dibromomethane	11.401	93	1875	0.56	ug/L		83
64) bromodichloromethane	11.558	83	4270	0.55	ug/L		83
68) cis-1,3-dichloropropene	12.018	75	4407	0.57	ug/L		93
69) 4-methyl-2-pentanone	12.112	58	2690	2.04	ug/L		92
74) trans-1,3-dichloropropene	12.578	75	4718	0.62	ug/L		85
75) ethyl methacrylate	12.578	69	2144	0.49	ug/L		83
76) 1,1,2-trichloroethane	12.797	83	1748	0.56	ug/L		84
77) 1,3-dichloropropane	12.975	76	3227	0.52	ug/L		89
83) dibromochloromethane	13.221	129	3123	0.51	ug/L		97
84) 1,2-dibromoethane	13.378	107	2332	0.53	ug/L		81
85) chlorobenzene	13.859	112	7812	0.58	ug/L		96
86) 1,1,1,2-tetrachloroethane	13.922	131	2873	0.51	ug/L		85
87) ethylbenzene	13.922	91	12418	0.58	ug/L		98
88) m,p-xylene	14.042	106	8801	1.06	ug/L		97

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216443.D
Acq On : 26 Oct 2017 9:06 pm
Operator : PrashanS
Sample : IC8691-0.5
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 27 11:00:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

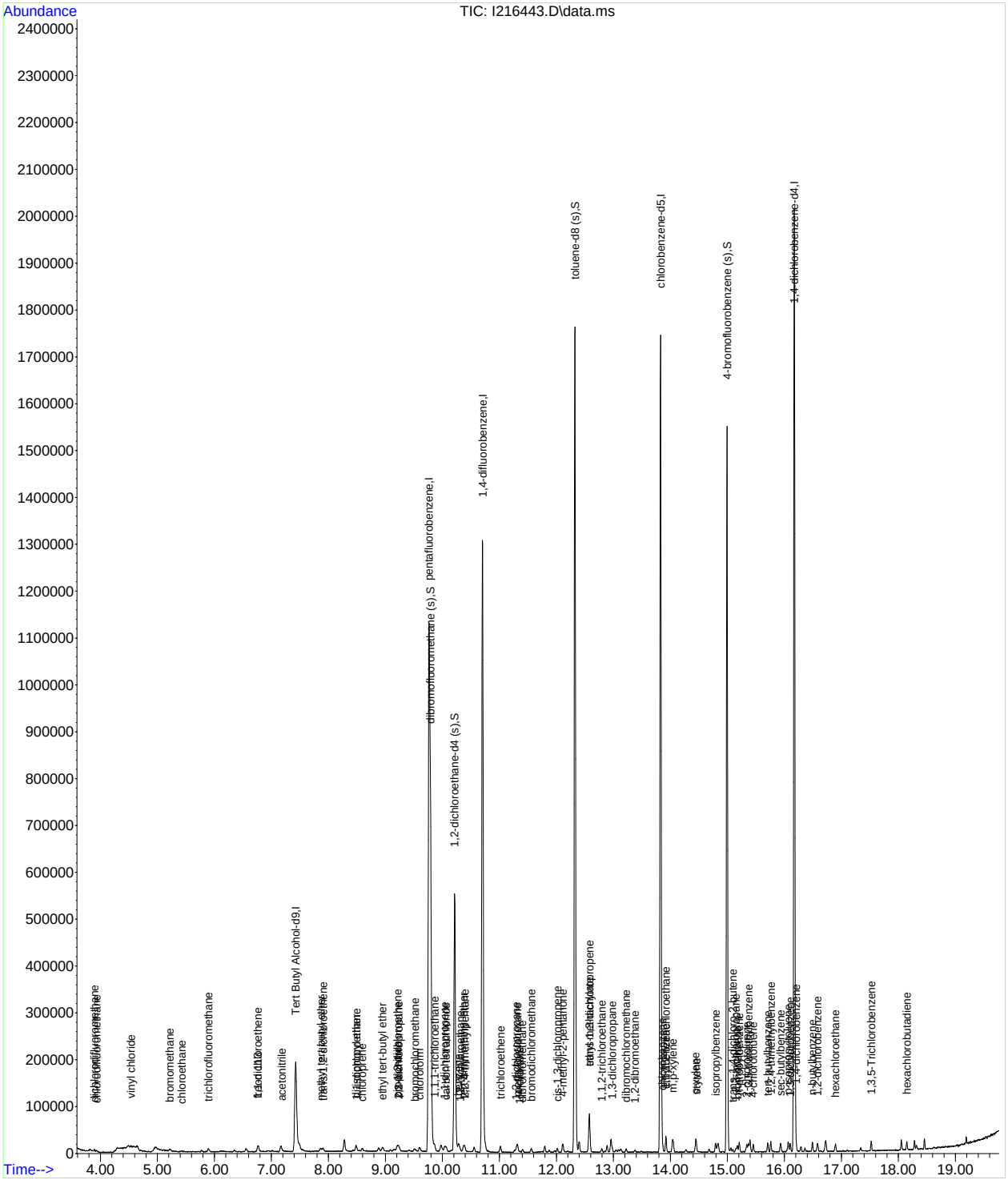
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
89)	o-xylene	14.440	106	4378	0.55	ug/L	#	65
90)	styrene	14.455	104	6708	0.51	ug/L		96
94)	isopropylbenzene	14.795	105	10729	0.51	ug/L		98
98)	trans-1,4-dichloro-2-b...	15.094	53	819	0.57	ug/L		83
99)	1,2,3-trichloropropane	15.146	110	810	0.56	ug/L		86
100)	bromobenzene	15.177	156	3841	0.61	ug/L	#	79
101)	n-propylbenzene	15.209	91	13263	0.57	ug/L		95
102)	2-chlorotoluene	15.339	126	2798	0.55	ug/L	#	68
103)	4-chlorotoluene	15.449	91	8416	0.57	ug/L		96
104)	1,3,5-trimethylbenzene	15.371	105	8964	0.53	ug/L		94
105)	tert-butylbenzene	15.706	134	1691	0.50	ug/L	#	81
106)	1,2,4-trimethylbenzene	15.763	105	10261	0.58	ug/L		92
107)	sec-butylbenzene	15.930	105	11223	0.51	ug/L		88
108)	p-isopropyltoluene	16.066	119	9311	0.49	ug/l		94
110)	1,3-dichlorobenzene	16.098	146	6990	0.59	ug/L		88
111)	1,4-dichlorobenzene	16.202	146	6800	0.57	ug/L		96
112)	1,2-dichlorobenzene	16.579	146	6613	0.59	ug/L		93
113)	n-butylbenzene	16.490	92	4758	0.49	ug/L		91
114)	hexachloroethane	16.893	201	2516	0.56	ug/L		94
116)	1,3,5-Trichlorobenzene	17.526	180	5543	0.58	ug/L		97
119)	hexachlorobutadiene	18.148	225	2822	0.54	ug/L		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216443.D
Acq On : 26 Oct 2017 9:06 pm
Operator : PrashanS
Sample : IC8691-0.5
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 27 11:00:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216444.D
Acq On : 26 Oct 2017 9:32 pm
Operator : PrashanS
Sample : IC8691-1
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 27 10:54:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	283682	500.00	ug/L		0.00
4) pentafluorobenzene	9.764	168	724368	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1004682	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	832270	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.176	152	483417	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	373194	49.38	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.76%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	420737	51.38	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.76%				
72) toluene-d8 (s)	12.327	98	1053921	50.38	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.76%				
96) 4-bromofluorobenzene (s)	14.994	95	400036	52.12	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 104.24%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.541	59	2816	2.11	ug/L		88
3) 1,4-dioxane	11.349	88	1171	3.26	ug/L	#	54
5) dichlorodifluoromethane	3.896	85	8042	0.91	ug/L		98
6) chlorodifluoromethane	3.927	51	6140	0.82	ug/L		94
7) chloromethane	4.293	50	6062	0.99	ug/L		94
8) vinyl chloride	4.539	62	5478	0.94	ug/L		94
9) bromomethane	5.224	94	4701	1.04	ug/L		90
10) chloroethane	5.423	64	2761	0.87	ug/L		90
11) trichlorofluoromethane	5.904	101	10301	0.89	ug/L		95
12) ethyl ether	6.349	74	1764	0.78	ug/L		96
13) 2-chloropropane	6.553	63	1611	0.83	ug/L	#	51
15) freon 113	6.757	151	4135	0.86	ug/L	#	80
16) 1,1-dichloroethene	6.767	61	6454	0.83	ug/L		92
19) carbon disulfide	7.165	76	21304	1.12	ug/L		97
20) acetonitrile	7.186	41	5639	10.22	ug/L		96
22) methylene chloride	7.494	84	5134	0.96	ug/L		94
24) methyl tert butyl ether	7.866	73	11580	0.87	ug/L		90
25) trans-1,2-dichloroethene	7.907	61	6247	0.85	ug/L		89
27) 1,1-dichloroethane	8.488	63	7840	0.88	ug/L		94
29) di-isopropyl ether	8.488	45	10234	0.79	ug/L		88
30) chloroprene	8.593	53	6176	0.76	ug/L		92
31) ethyl tert-butyl ether	8.953	59	11183	0.80	ug/L		86
33) 2,2-dichloropropane	9.236	77	8717	0.88	ug/L		87
34) ethyl acetate	9.178	45	775	1.14	ug/L	#	37
35) cis-1,2-dichloroethene	9.210	96	5858	0.99	ug/L	#	82
36) propionitrile	9.210	54	5766	3.04	ug/L		80
38) methacrylonitrile	9.408	67	1435	0.91	ug/L	#	46
39) bromochloromethane	9.508	128	2550	0.89	ug/L	#	74
40) tetrahydrofuran	9.539	71	577	1.02	ug/L	#	57
41) chloroform	9.597	83	9714	0.88	ug/L		83
42) carbon tetrachloride	10.067	117	8841	0.83	ug/L		89
43) 1,1-dichloropropene	10.036	75	5751	0.76	ug/L		89
46) 1,1,1-trichloroethane	9.863	97	9416	0.84	ug/L		77
48) tert-amyl alcohol	10.156	55	855	3.90	ug/L		91
52) 1,2-dichloroethane	10.308	62	7639	0.90	ug/L		93
53) benzene	10.287	78	15477	0.84	ug/L		95
54) 2,2,4-trimethylpentane	10.392	57	13261	0.80	ug/L		93
55) tert-amyl methyl ether	10.376	87	2707	0.81	ug/L	#	58
58) trichloroethene	11.014	95	4968	0.89	ug/L		88
60) methylcyclohexane	11.317	83	6308	0.75	ug/L		97
61) 1,2-dichloropropane	11.302	63	3711	0.85	ug/L		88
63) dibromomethane	11.406	93	2953	0.88	ug/L		89
64) bromodichloromethane	11.563	83	6701	0.86	ug/L		98
67) epichlorohydrin	11.877	57	2120	2.25	ug/L		72
68) cis-1,3-dichloropropene	12.013	75	6244	0.81	ug/L		80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216444.D
Acq On : 26 Oct 2017 9:32 pm
Operator : PrashanS
Sample : IC8691-1
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 27 10:54:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
69) 4-methyl-2-pentanone	12.112	58	4132	3.12	ug/L		97
73) toluene	12.400	92	11154	0.94	ug/L		86
74) trans-1,3-dichloropropene	12.578	75	6805	0.89	ug/L		92
75) ethyl methacrylate	12.573	69	3644	0.84	ug/L		84
76) 1,1,2-trichloroethane	12.798	83	2716	0.87	ug/L		89
77) 1,3-dichloropropane	12.970	76	5605	0.90	ug/L		93
78) tetrachloroethene	12.955	166	5911	0.86	ug/L		95
79) 2-hexanone	12.960	58	4281	3.17	ug/L		96
81) 3,3-dimethyl-1-Butanol	13.127	69	2496	8.83	ug/L	#	63
82) n-butyl ether	13.823	57	12702	0.96	ug/L	#	16
83) dibromochloromethane	13.227	129	5147	0.84	ug/L		92
84) 1,2-dibromoethane	13.373	107	3993	0.90	ug/L	#	63
85) chlorobenzene	13.859	112	11690	0.87	ug/L		93
86) 1,1,1,2-tetrachloroethane	13.922	131	4864	0.86	ug/L		77
87) ethylbenzene	13.922	91	18532	0.86	ug/L		96
88) m,p-xylene	14.042	106	13129	1.59	ug/L		98
89) o-xylene	14.445	106	6188	0.77	ug/L		97
90) styrene	14.456	104	10312	0.78	ug/L		94
93) bromoform	14.681	173	3503	0.79	ug/L		82
94) isopropylbenzene	14.796	105	15992	0.76	ug/L		97
97) 1,1,2,2-tetrachloroethane	15.062	83	4213	0.94	ug/L		98
98) trans-1,4-dichloro-2-b...	15.094	53	1398	0.97	ug/L	#	79
99) 1,2,3-trichloropropane	15.151	110	1376	0.95	ug/L		84
100) bromobenzene	15.177	156	5734	0.91	ug/L	#	73
101) n-propylbenzene	15.209	91	18830	0.81	ug/L		95
102) 2-chlorotoluene	15.340	126	4334	0.84	ug/L	#	80
103) 4-chlorotoluene	15.455	91	12236	0.83	ug/L		97
104) 1,3,5-trimethylbenzene	15.366	105	13644	0.80	ug/L		90
105) tert-butylbenzene	15.706	134	2444	0.72	ug/L		94
106) 1,2,4-trimethylbenzene	15.758	105	14753	0.84	ug/L		94
107) sec-butylbenzene	15.931	105	17261	0.79	ug/L		91
108) p-isopropyltoluene	16.067	119	14388	0.75	ug/l		95
109) benzyl chloride	16.291	91	8626	0.85	ug/L		98
110) 1,3-dichlorobenzene	16.103	146	10751	0.91	ug/L		95
111) 1,4-dichlorobenzene	16.203	146	11364	0.95	ug/L		86
112) 1,2-dichlorobenzene	16.584	146	9456	0.85	ug/L		90
113) n-butylbenzene	16.490	92	7754	0.80	ug/L		95
114) hexachloroethane	16.898	201	3577	0.79	ug/L		95
116) 1,3,5-Trichlorobenzene	17.521	180	8654	0.90	ug/L		94
117) 1,2,4-trichlorobenzene	18.054	180	7315	0.92	ug/L		95
119) hexachlorobutadiene	18.148	225	4592	0.87	ug/L		92
120) naphthalene	18.284	128	12381	0.83	ug/L		98
121) 1,2,3-trichlorobenzene	18.457	180	7206	0.92	ug/L		93
122) 2-methylnaphthalene	19.189	142	5241	0.45	ug/L		92

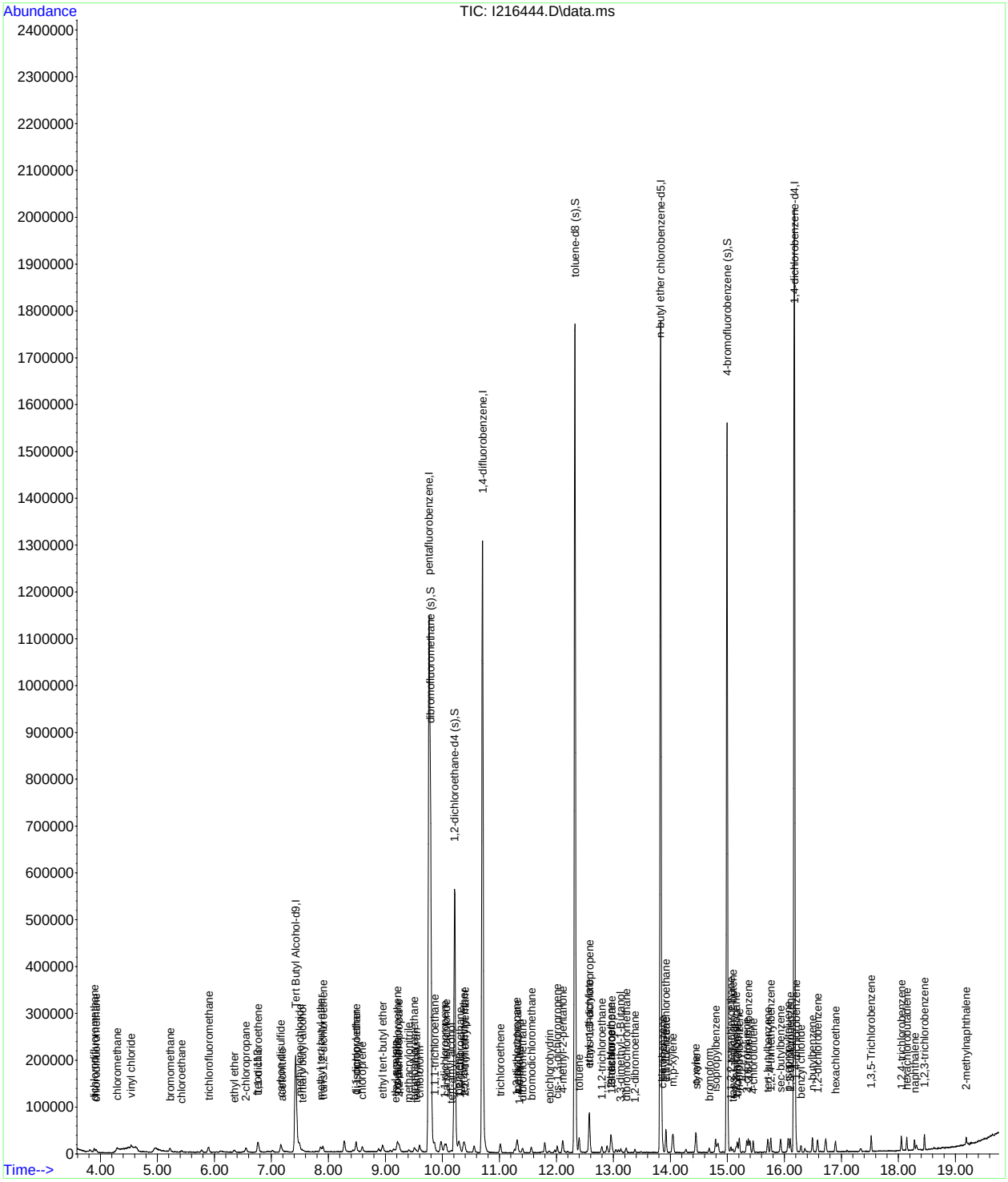
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216444.D
Acq On : 26 Oct 2017 9:32 pm
Operator : PrashanS
Sample : IC8691-1
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 27 10:54:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216445.D
Acq On : 26 Oct 2017 9:59 pm
Operator : PrashanS
Sample : IC8691-2
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 27 10:55:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	264638	500.00	ug/L		0.00
4) pentafluorobenzene	9.764	168	681862	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	947506	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	793076	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	461283	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	355827	50.01	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.02%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	400101	51.81	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 103.62%				
72) toluene-d8 (s)	12.322	98	1003225	50.33	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.66%				
96) 4-bromofluorobenzene (s)	14.994	95	378098	51.63	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 103.26%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.557	59	6399	5.14	ug/L		95
3) 1,4-dioxane	11.349	88	2724	8.13	ug/L		98
5) dichlorodifluoromethane	3.891	85	15215	1.83	ug/L		94
6) chlorodifluoromethane	3.927	51	14938	2.12	ug/L		89
7) chloromethane	4.293	50	11258	1.95	ug/L		89
8) vinyl chloride	4.539	62	9838	1.79	ug/L		94
9) bromomethane	5.219	94	8267	1.95	ug/L		97
10) chloroethane	5.423	64	5291	1.77	ug/L		86
11) trichlorofluoromethane	5.894	101	19744	1.81	ug/L		99
12) ethyl ether	6.349	74	4321	2.03	ug/L		85
13) 2-chloropropane	6.553	63	3398	1.86	ug/L		92
14) acrolein	6.563	56	1105	1.78	ug/L		70
15) freon 113	6.762	151	8930	1.98	ug/L		89
16) 1,1-dichloroethene	6.762	61	15344	2.10	ug/L		98
17) acetone	6.767	58	2862	7.67	ug/L		90
19) carbon disulfide	7.165	76	36681	2.05	ug/L		99
20) acetonitrile	7.186	41	10502	20.23	ug/L		86
21) methyl acetate	7.269	74	1088	1.77	ug/L	#	25
22) methylene chloride	7.494	84	9868	1.95	ug/L		96
23) acrylonitrile	7.787	53	2366	2.03	ug/L		95
24) methyl tert butyl ether	7.866	73	24290	1.94	ug/L		94
25) trans-1,2-dichloroethene	7.907	61	13912	2.02	ug/L		96
26) hexane	8.284	57	15324	2.09	ug/L		96
27) 1,1-dichloroethane	8.483	63	17079	2.04	ug/L		94
29) di-isopropyl ether	8.488	45	24577	2.03	ug/L		98
30) chloroprene	8.598	53	14898	1.95	ug/L		93
31) ethyl tert-butyl ether	8.953	59	25475	1.94	ug/L		94
32) 2-butanone	9.147	72	2910	6.67	ug/L	#	72
33) 2,2-dichloropropane	9.236	77	18462	1.98	ug/L		97
34) ethyl acetate	9.178	45	1080	1.68	ug/L	#	17
35) cis-1,2-dichloroethene	9.210	96	11276	2.03	ug/L		96
36) propionitrile	9.215	54	12564	7.04	ug/L		91
38) methacrylonitrile	9.419	67	2875	1.94	ug/L		87
39) bromochloromethane	9.513	128	5312	1.98	ug/L		94
40) tetrahydrofuran	9.539	71	1236	2.33	ug/L		76
41) chloroform	9.597	83	21868	2.10	ug/L		98
42) carbon tetrachloride	10.067	117	20459	2.05	ug/L		96
43) 1,1-dichloropropene	10.041	75	14620	2.05	ug/L		93
46) 1,1,1-trichloroethane	9.863	97	21938	2.07	ug/L		95
47) cyclohexane	9.984	84	10818	1.87	ug/L	#	78
48) tert-amyl alcohol	10.151	55	1953	9.47	ug/L		90
51) isopropyl acetate	10.198	87	1350	1.27	ug/L	#	46
52) 1,2-dichloroethane	10.313	62	17008	2.13	ug/L		94
53) benzene	10.287	78	35262	2.03	ug/L		97
54) 2,2,4-trimethylpentane	10.392	57	29508	1.88	ug/L		95

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216445.D
Acq On : 26 Oct 2017 9:59 pm
Operator : PrashanS
Sample : IC8691-2
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 27 10:55:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
55) tert-amyl methyl ether	10.371	87	6095	1.93 ug/L		95
56) heptane	10.559	57	5902	1.86 ug/L	#	86
57) n-butyl alcohol	10.747	56	10885	1.97 ug/L		85
58) trichloroethene	11.019	95	10862	2.05 ug/L		97
59) ethyl acrylate	11.004	55	7469	1.81 ug/L		88
60) methylcyclohexane	11.317	83	14993	1.89 ug/L		94
61) 1,2-dichloropropane	11.302	63	8014	1.95 ug/L		96
63) dibromomethane	11.401	93	6808	2.15 ug/L	#	76
64) bromodichloromethane	11.563	83	15402	2.10 ug/L		96
66) 2-chloroethyl vinyl ether	11.793	63	17672	9.66 ug/L		98
67) epichlorohydrin	11.877	57	4435	4.99 ug/L		97
68) cis-1,3-dichloropropene	12.018	75	14405	1.97 ug/L		94
69) 4-methyl-2-pentanone	12.112	58	9050	7.25 ug/L		96
70) 3-methyl-1-butanol	12.107	70	3868	32.81 ug/L		95
73) toluene	12.400	92	22697	2.01 ug/L		89
74) trans-1,3-dichloropropene	12.578	75	14502	2.00 ug/L		96
75) ethyl methacrylate	12.573	69	7727	1.87 ug/L		86
76) 1,1,2-trichloroethane	12.798	83	5965	2.01 ug/L	#	82
77) 1,3-dichloropropane	12.981	76	11831	2.00 ug/L		95
78) tetrachloroethene	12.955	166	13279	2.04 ug/L		95
79) 2-hexanone	12.960	58	9899	7.68 ug/L		97
80) butyl acetate	13.043	56	3871	2.22 ug/L	#	78
81) 3,3-dimethyl-1-Butanol	13.127	69	4855	18.02 ug/L		99
82) n-butyl ether	13.823	57	27630	2.18 ug/L	#	66
83) dibromochloromethane	13.227	129	11836	2.03 ug/L		92
84) 1,2-dibromoethane	13.378	107	8361	1.98 ug/L		93
85) chlorobenzene	13.859	112	26997	2.12 ug/L		95
86) 1,1,1,2-tetrachloroethane	13.922	131	10938	2.04 ug/L		89
87) ethylbenzene	13.922	91	40688	1.99 ug/L		96
88) m,p-xylene	14.042	106	31326	3.97 ug/L		94
89) o-xylene	14.445	106	14527	1.90 ug/L		95
90) styrene	14.456	104	23748	1.90 ug/L		94
92) cis-1,4-dichloro-2-butene	14.817	88	4660	1.89 ug/L		95
93) bromoform	14.675	173	8427	2.01 ug/L		89
94) isopropylbenzene	14.790	105	38156	1.91 ug/L		99
97) 1,1,2,2-tetrachloroethane	15.062	83	8863	2.07 ug/L		95
98) trans-1,4-dichloro-2-b...	15.094	53	2902	2.11 ug/L		89
99) 1,2,3-trichloropropane	15.146	110	2846	2.05 ug/L		91
100) bromobenzene	15.172	156	12751	2.12 ug/L		94
101) n-propylbenzene	15.209	91	44077	1.99 ug/L		99
102) 2-chlorotoluene	15.340	126	10281	2.10 ug/L		99
103) 4-chlorotoluene	15.449	91	28229	2.01 ug/L		95
104) 1,3,5-trimethylbenzene	15.366	105	32036	1.97 ug/L		96
105) tert-butylbenzene	15.711	134	6345	1.95 ug/L	#	88
106) 1,2,4-trimethylbenzene	15.763	105	32133	1.91 ug/L		95
107) sec-butylbenzene	15.931	105	39793	1.90 ug/L		97
108) p-isopropyltoluene	16.067	119	34535	1.89 ug/l		99
109) benzyl chloride	16.291	91	18465	1.91 ug/L		95
110) 1,3-dichlorobenzene	16.103	146	23243	2.06 ug/L		93
111) 1,4-dichlorobenzene	16.203	146	23738	2.07 ug/L		94
112) 1,2-dichlorobenzene	16.584	146	21396	2.01 ug/L		96
113) n-butylbenzene	16.490	92	16988	1.84 ug/L		93
114) hexachloroethane	16.898	201	8308	1.93 ug/L		98
115) 1,2-dibromo-3-chloropr...	15.172	157	917	1.40 ug/L		79
116) 1,3,5-Trichlorobenzene	17.521	180	19348	2.12 ug/L		88
117) 1,2,4-trichlorobenzene	18.049	180	15180	2.00 ug/L		97
118) 2-ethylhexyl acrylate	18.064	55	1697	0.36 ug/L		90
119) hexachlorobutadiene	18.148	225	10765	2.14 ug/L		93
120) naphthalene	18.284	128	26462	1.86 ug/L		98
121) 1,2,3-trichlorobenzene	18.457	180	15540	2.07 ug/L		95
122) 2-methylnaphthalene	19.194	142	10384	0.93 ug/L		95

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216445.D
Acq On : 26 Oct 2017 9:59 pm
Operator : PrashanS
Sample : IC8691-2
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 27 10:55:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

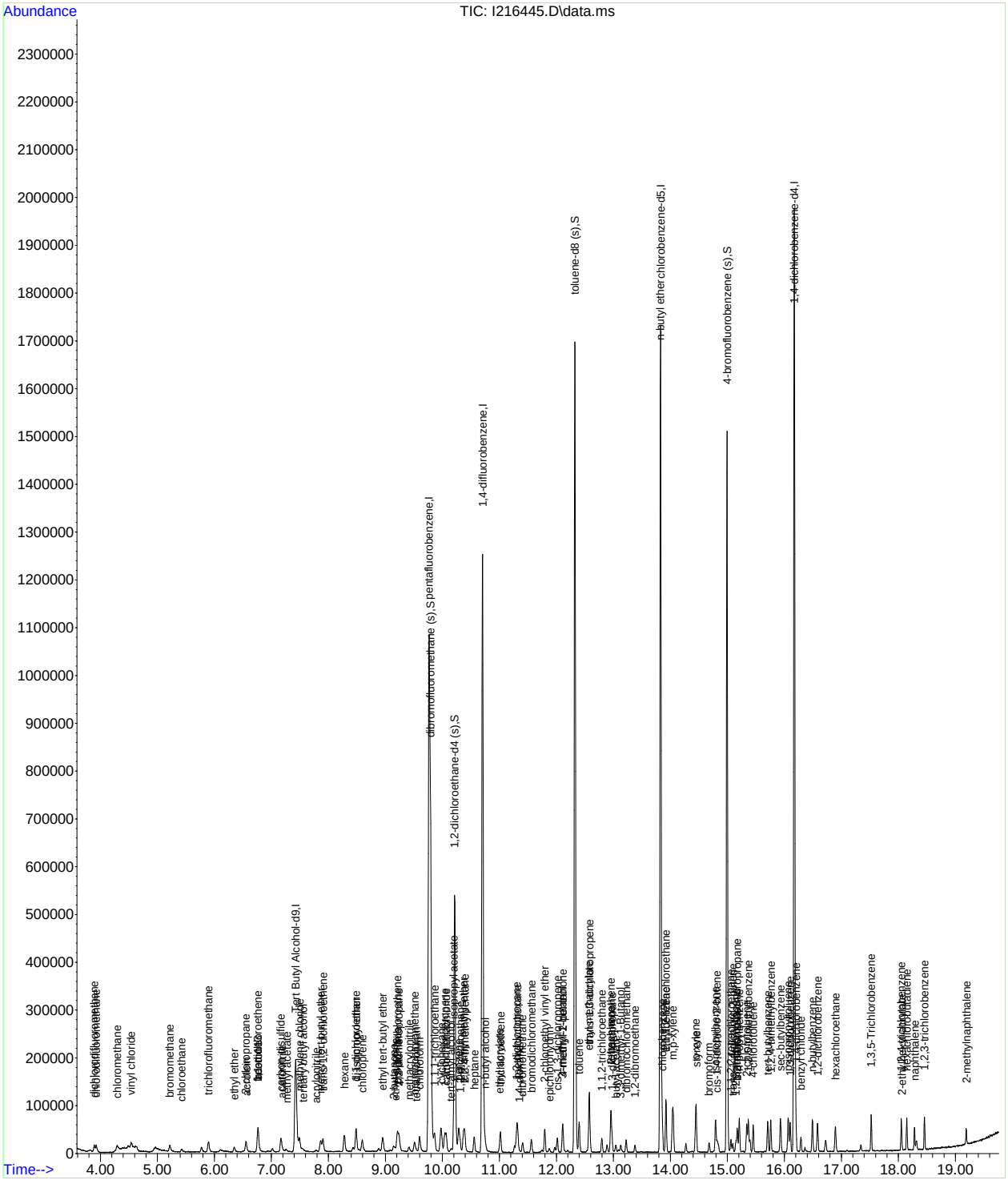
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216445.D
Acq On : 26 Oct 2017 9:59 pm
Operator : PrashanS
Sample : IC8691-2
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 27 10:55:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 09:16:15 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216446.D
Acq On : 26 Oct 2017 10:26 pm
Operator : PrashanS
Sample : IC8691-4
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 27 10:09:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	275268	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	690532	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	979690	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	820379	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	484035	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	365006	50.93	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.86%				
50) 1,2-dichloroethane-d4 (s)	10.219	65	417246	52.32	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 104.64%				
72) toluene-d8 (s)	12.327	98	1029586	49.90	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.80%				
96) 4-bromofluorobenzene (s)	14.994	95	396332	51.43	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.86%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.547	59	11823	9.12	ug/L		97
3) 1,4-dioxane	11.354	88	5909	16.95	ug/L		93
5) dichlorodifluoromethane	3.896	85	32592	3.94	ug/L		97
6) chlorodifluoromethane	3.927	51	28864	3.97	ug/L		99
7) chloromethane	4.293	50	21944	3.39	ug/L		98
8) vinyl chloride	4.544	62	20901	3.78	ug/L		99
9) bromomethane	5.219	94	16551	3.67	ug/L		89
10) chloroethane	5.428	64	11651	3.96	ug/L		98
11) trichlorofluoromethane	5.894	101	42728	3.90	ug/L		97
12) ethyl ether	6.349	74	7835	3.64	ug/L		95
13) 2-chloropropane	6.553	63	7755	4.18	ug/L	#	77
14) acrolein	6.563	56	2314	3.77	ug/L		96
15) freon 113	6.762	151	18872	4.17	ug/L		96
16) 1,1-dichloroethene	6.762	61	30869	4.19	ug/L		92
17) acetone	6.767	58	5265	6.78	ug/L	#	86
18) iodomethane	7.013	142	18198	3.17	ug/L		96
19) carbon disulfide	7.165	76	67257	3.07	ug/L		99
20) acetonitrile	7.180	41	20106	38.24	ug/L		97
21) methyl acetate	7.259	74	2556	4.11	ug/L	#	73
22) methylene chloride	7.494	84	20366	3.66	ug/L		98
23) acrylonitrile	7.782	53	4574	3.90	ug/L		98
24) methyl tert butyl ether	7.866	73	48791	3.87	ug/L		96
25) trans-1,2-dichloroethene	7.902	61	29081	4.24	ug/L		96
26) hexane	8.279	57	27625	2.82	ug/L		97
27) 1,1-dichloroethane	8.488	63	35293	4.17	ug/L		98
28) vinyl acetate	8.436	86	2051	3.21	ug/L	#	43
29) di-isopropyl ether	8.483	45	48918	4.03	ug/L		96
30) chloroprene	8.593	53	30460	4.00	ug/L		96
31) ethyl tert-butyl ether	8.953	59	51865	3.98	ug/L		93
32) 2-butanone	9.142	72	6712	15.20	ug/L		90
33) 2,2-dichloropropane	9.241	77	39640	4.16	ug/L		97
34) ethyl acetate	9.178	45	2143	3.53	ug/L	#	31
35) cis-1,2-dichloroethene	9.215	96	22247	4.06	ug/L		98
36) propionitrile	9.204	54	24041	13.31	ug/L		97
37) methyl acrylate	9.252	85	2076	3.35	ug/L	#	77
38) methacrylonitrile	9.408	67	5828	3.78	ug/L		85
39) bromochloromethane	9.513	128	11174	4.15	ug/L		95
40) tetrahydrofuran	9.534	71	2107	3.92	ug/L	#	78
41) chloroform	9.602	83	44203	4.09	ug/L		95
42) carbon tetrachloride	10.068	117	41637	4.16	ug/L		93
43) 1,1-dichloropropene	10.036	75	29508	4.09	ug/L		93
46) 1,1,1-trichloroethane	9.858	97	44731	4.23	ug/L		96
47) cyclohexane	9.984	84	21069	3.53	ug/L		87
48) tert-amyl alcohol	10.151	55	4522	22.42	ug/L		82
51) isopropyl acetate	10.193	87	3301	3.96	ug/L	#	88

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216446.D
Acq On : 26 Oct 2017 10:26 pm
Operator : PrashanS
Sample : IC8691-4
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 27 10:09:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,2-dichloroethane	10.308	62	34838	4.28	ug/L		98
53) benzene	10.287	78	73285	4.03	ug/L		99
54) 2,2,4-trimethylpentane	10.392	57	64914	4.02	ug/L		97
55) tert-amyl methyl ether	10.371	87	12604	4.01	ug/L	#	80
56) heptane	10.554	57	13463	4.16	ug/L		97
57) n-butyl alcohol	10.742	56	21203	30.57	ug/L		96
58) trichloroethene	11.019	95	22833	4.18	ug/L		83
59) ethyl acrylate	11.004	55	15182	3.62	ug/L		89
60) methylcyclohexane	11.318	83	32596	4.05	ug/L		96
61) 1,2-dichloropropane	11.302	63	17100	4.04	ug/L		90
62) methyl methacrylate	11.265	100	3723	3.58	ug/L	#	73
63) dibromomethane	11.406	93	13205	4.10	ug/L		92
64) bromodichloromethane	11.558	83	31130	4.15	ug/L		95
65) 2-nitropropane	11.746	41	6163	4.12	ug/L	#	76
66) 2-chloroethyl vinyl ether	11.793	63	35879	14.30	ug/L		97
67) epichlorohydrin	11.877	57	8627	13.51	ug/L		93
68) cis-1,3-dichloropropene	12.013	75	29231	3.85	ug/L		96
69) 4-methyl-2-pentanone	12.113	58	19724	12.90	ug/L		97
70) 3-methyl-1-butanol	12.107	70	7746	63.54	ug/L		97
73) toluene	12.400	92	47208	3.81	ug/L		97
74) trans-1,3-dichloropropene	12.578	75	29244	3.78	ug/L		97
75) ethyl methacrylate	12.578	69	15487	3.63	ug/L		96
76) 1,1,2-trichloroethane	12.798	83	12248	4.05	ug/L		91
77) 1,3-dichloropropane	12.976	76	24858	4.15	ug/L		98
78) tetrachloroethene	12.955	166	27210	3.75	ug/L		100
79) 2-hexanone	12.960	58	19683	11.83	ug/L		94
80) butyl acetate	13.038	56	7818	3.81	ug/L	#	81
81) 3,3-dimethyl-1-Butanol	13.127	69	9354	33.57	ug/L		98
82) n-butyl ether	13.823	57	58040	3.97	ug/L		85
83) dibromochloromethane	13.221	129	24466	4.12	ug/L		100
84) 1,2-dibromoethane	13.378	107	17340	4.05	ug/L		96
85) chlorobenzene	13.859	112	54239	4.10	ug/L		89
86) 1,1,1,2-tetrachloroethane	13.922	131	22396	4.08	ug/L		95
87) ethylbenzene	13.922	91	84946	3.99	ug/L		96
88) m,p-xylene	14.048	106	65906	7.96	ug/L		97
89) o-xylene	14.440	106	31060	3.93	ug/L		94
90) styrene	14.456	104	50232	3.91	ug/L		95
91) butyl acrylate	14.273	55	19409	3.53	ug/L		93
92) cis-1,4-dichloro-2-butene	14.822	88	9734	3.82	ug/L		89
93) bromoform	14.681	173	15914	3.63	ug/L		97
94) isopropylbenzene	14.790	105	79077	3.81	ug/L		99
97) 1,1,2,2-tetrachloroethane	15.057	83	17479	3.89	ug/L		94
98) trans-1,4-dichloro-2-b...	15.099	53	5569	3.87	ug/L		85
99) 1,2,3-trichloropropane	15.146	110	5966	4.09	ug/L		91
100) bromobenzene	15.172	156	25829	4.10	ug/L		93
101) n-propylbenzene	15.209	91	94128	4.08	ug/L		99
102) 2-chlorotoluene	15.340	126	20283	3.94	ug/L		97
103) 4-chlorotoluene	15.449	91	60762	4.11	ug/L		99
104) 1,3,5-trimethylbenzene	15.366	105	68771	4.04	ug/L		98
105) tert-butylbenzene	15.711	134	13360	3.94	ug/L		94
106) 1,2,4-trimethylbenzene	15.763	105	67040	3.75	ug/L		99
107) sec-butylbenzene	15.931	105	86022	3.96	ug/L		98
108) p-isopropyltoluene	16.067	119	74766	3.90	ug/l		99
109) benzyl chloride	16.291	91	39450	3.90	ug/L		99
110) 1,3-dichlorobenzene	16.103	146	47575	3.97	ug/L		98
111) 1,4-dichlorobenzene	16.203	146	50084	4.05	ug/L		97
112) 1,2-dichlorobenzene	16.584	146	44711	3.96	ug/L		98
113) n-butylbenzene	16.490	92	37791	3.94	ug/L		95
114) hexachloroethane	16.898	201	18581	4.27	ug/L		86
115) 1,2-dibromo-3-chloropr...	15.172	157	1791	3.54	ug/L	#	72
116) 1,3,5-Trichlorobenzene	17.521	180	37814	3.93	ug/L		96
117) 1,2,4-trichlorobenzene	18.049	180	31180	3.85	ug/L		94
118) 2-ethylhexyl acrylate	18.065	55	3652	0.73	ug/L		91

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216446.D
Acq On : 26 Oct 2017 10:26 pm
Operator : PrashanS
Sample : IC8691-4
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 27 10:09:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	21318	4.06	ug/L	95
120) naphthalene	18.284	128	55326	3.62	ug/L	97
121) 1,2,3-trichlorobenzene	18.457	180	30261	3.86	ug/L	99
122) 2-methylnaphthalene	19.189	142	22185	1.96	ug/L	97

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

7.7.45

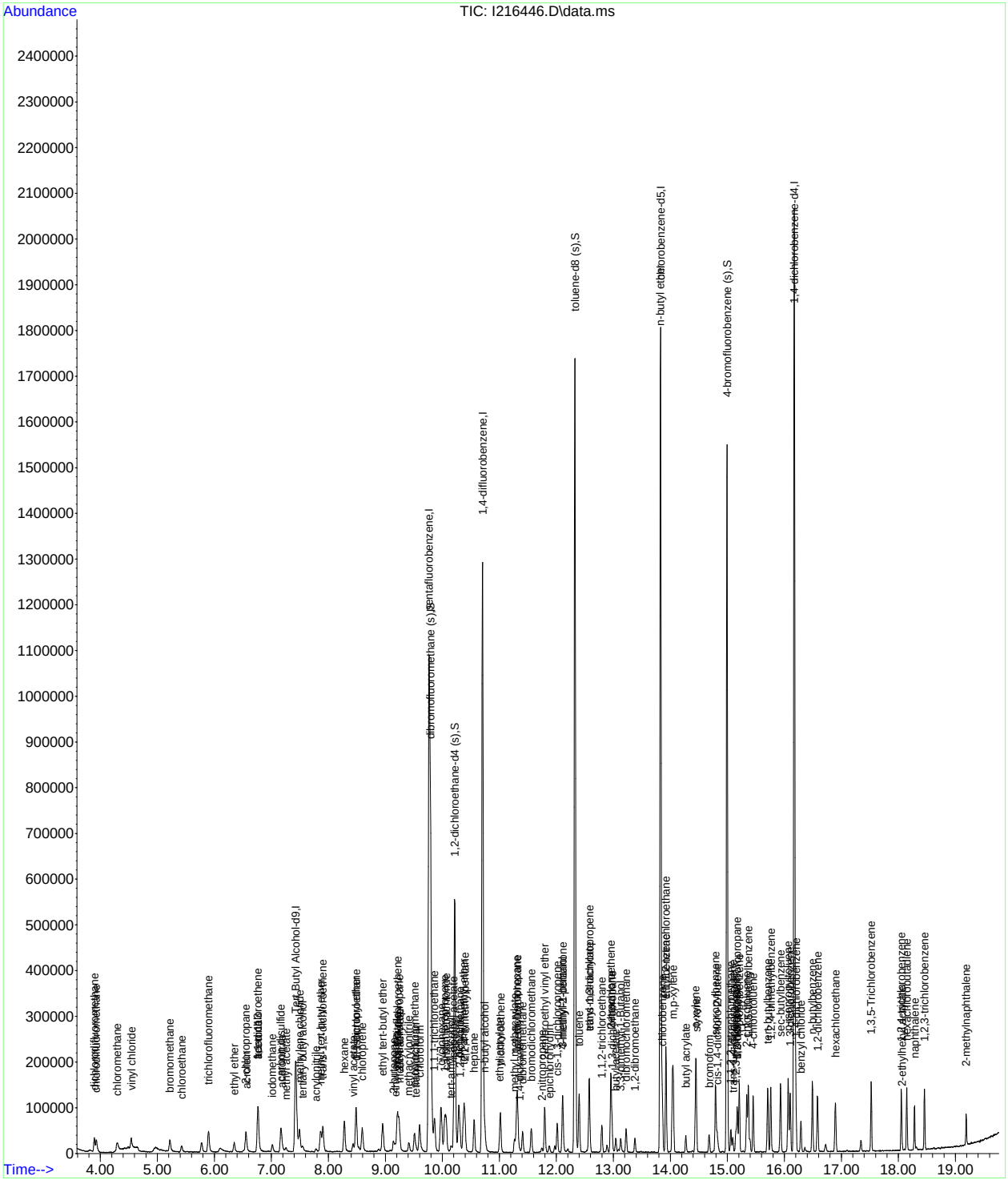
7

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

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Data File : I216446.D
Acq On : 26 Oct 2017 10:26 pm
Operator : PrashanS
Sample : IC8691-4
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 27 10:09:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216447.D
Acq On : 26 Oct 2017 10:52 pm
Operator : PrashanS
Sample : IC8691-8
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 27 10:08:44 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	277587	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	675432	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.701	114	972436	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	814713	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	489040	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	363807	51.90	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 103.80%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	407526	51.48	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.96%			
72) toluene-d8 (s)	12.322	98	1023926	49.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%			
96) 4-bromofluorobenzene (s)	14.989	95	397246	51.02	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.04%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.547	59	23955	18.33	ug/L	94
3) 1,4-dioxane	11.344	88	12234	34.79	ug/L	85
5) dichlorodifluoromethane	3.891	85	70619	8.72	ug/L	98
6) chlorodifluoromethane	3.927	51	61304	8.62	ug/L	95
7) chloromethane	4.293	50	45519	7.20	ug/L	96
8) vinyl chloride	4.539	62	46732	8.64	ug/L	100
9) bromomethane	5.219	94	32919	7.45	ug/L	93
10) chloroethane	5.423	64	26463	9.20	ug/L	89
11) trichlorofluoromethane	5.894	101	96751	9.02	ug/L	91
12) ethyl ether	6.349	74	16381	7.79	ug/L	95
13) 2-chloropropane	6.558	63	14912	8.22	ug/L	89
14) acrolein	6.558	56	4542	7.57	ug/L	89
15) freon 113	6.762	151	38507	8.70	ug/L	97
16) 1,1-dichloroethene	6.762	61	64642	8.98	ug/L	95
17) acetone	6.767	58	10333	13.60	ug/L	88
18) iodomethane	7.018	142	41312	7.36	ug/L	97
19) carbon disulfide	7.165	76	126255	5.88	ug/L	99
20) acetonitrile	7.186	41	39234	76.28	ug/L	94
21) methyl acetate	7.254	74	4711	7.74	ug/L #	79
22) methylene chloride	7.494	84	38114	7.01	ug/L	93
23) acrylonitrile	7.782	53	9086	7.92	ug/L	87
24) methyl tert butyl ether	7.866	73	99238	8.05	ug/L	97
25) trans-1,2-dichloroethene	7.902	61	57158	8.53	ug/L	99
26) hexane	8.279	57	55836	5.84	ug/L	90
27) 1,1-dichloroethane	8.488	63	68989	8.34	ug/L	99
28) vinyl acetate	8.425	86	5059	8.09	ug/L #	73
29) di-isopropyl ether	8.483	45	96243	8.10	ug/L	95
30) chloroprene	8.593	53	66049	8.87	ug/L	97
31) ethyl tert-butyl ether	8.954	59	104581	8.20	ug/L	96
32) 2-butanone	9.137	72	13546	31.36	ug/L #	85
33) 2,2-dichloropropane	9.236	77	80171	8.61	ug/L	96
34) ethyl acetate	9.163	45	4886	8.23	ug/L #	77
35) cis-1,2-dichloroethene	9.210	96	42472	7.93	ug/L	94
36) propionitrile	9.199	54	47318	26.78	ug/L	96
37) methyl acrylate	9.252	85	4575	7.54	ug/L	96
38) methacrylonitrile	9.414	67	11604	7.70	ug/L	90
39) bromochloromethane	9.508	128	22026	8.36	ug/L	90
40) tetrahydrofuran	9.534	71	3847	7.32	ug/L	93
41) chloroform	9.597	83	84603	8.00	ug/L	98
42) carbon tetrachloride	10.068	117	86434	8.83	ug/L	95
43) 1,1-dichloropropene	10.036	75	59592	8.45	ug/L	98
46) 1,1,1-trichloroethane	9.864	97	92019	8.90	ug/L	99
47) cyclohexane	9.979	84	49787	8.52	ug/L	97
48) tert-amyl alcohol	10.151	55	7467	37.84	ug/L	90
51) isopropyl acetate	10.193	87	6905	8.35	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216447.D
Acq On : 26 Oct 2017 10:52 pm
Operator : PrashanS
Sample : IC8691-8
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 27 10:08:44 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,2-dichloroethane	10.308	62	68698	8.50	ug/L		97
53) benzene	10.287	78	145693	8.07	ug/L		98
54) 2,2,4-trimethylpentane	10.392	57	135090	8.44	ug/L		99
55) tert-amyl methyl ether	10.371	87	24851	7.97	ug/L	#	96
56) heptane	10.559	57	26803	8.35	ug/L		93
57) n-butyl alcohol	10.742	56	45252	65.73	ug/L		97
58) trichloroethene	11.014	95	44720	8.24	ug/L		92
59) ethyl acrylate	10.999	55	32559	7.81	ug/L		95
60) methylcyclohexane	11.318	83	70577	8.83	ug/L		99
61) 1,2-dichloropropane	11.297	63	33863	8.06	ug/L		98
62) methyl methacrylate	11.265	100	8042	7.79	ug/L	#	85
63) dibromomethane	11.407	93	26229	8.21	ug/L		98
64) bromodichloromethane	11.558	83	60993	8.19	ug/L		98
65) 2-nitropropane	11.747	41	11618	7.83	ug/L		87
66) 2-chloroethyl vinyl ether	11.794	63	74276	29.83	ug/L		98
67) epichlorohydrin	11.877	57	16764	26.45	ug/L		98
68) cis-1,3-dichloropropene	12.013	75	60376	8.00	ug/L		95
69) 4-methyl-2-pentanone	12.107	58	41408	27.29	ug/L		94
70) 3-methyl-1-butanol	12.107	70	16652	137.61	ug/L	#	75
73) toluene	12.400	92	89585	7.28	ug/L		96
74) trans-1,3-dichloropropene	12.573	75	60383	7.85	ug/L		96
75) ethyl methacrylate	12.568	69	33319	7.85	ug/L		98
76) 1,1,2-trichloroethane	12.798	83	23691	7.89	ug/L		93
77) 1,3-dichloropropane	12.976	76	50305	8.46	ug/L		99
78) tetrachloroethene	12.955	166	54071	7.49	ug/L		96
79) 2-hexanone	12.955	58	41302	25.00	ug/L		90
80) butyl acetate	13.044	56	15083	7.41	ug/L		98
81) 3,3-dimethyl-1-Butanol	13.127	69	19402	70.12	ug/L		97
82) n-butyl ether	13.823	57	116395	8.01	ug/L		93
83) dibromochloromethane	13.222	129	49479	8.39	ug/L		98
84) 1,2-dibromoethane	13.378	107	34110	8.02	ug/L		100
85) chlorobenzene	13.860	112	103848	7.90	ug/L		96
86) 1,1,1,2-tetrachloroethane	13.922	131	44444	8.15	ug/L		90
87) ethylbenzene	13.922	91	169223	8.00	ug/L		99
88) m,p-xylene	14.043	106	132715	16.14	ug/L		99
89) o-xylene	14.440	106	62612	7.97	ug/L		96
90) styrene	14.451	104	104261	8.17	ug/L		96
91) butyl acrylate	14.273	55	43065	7.89	ug/L		96
92) cis-1,4-dichloro-2-butene	14.817	88	20175	7.98	ug/L		96
93) bromoform	14.681	173	33339	7.67	ug/L		95
94) isopropylbenzene	14.791	105	168286	8.16	ug/L		100
97) 1,1,2,2-tetrachloroethane	15.063	83	34332	7.55	ug/L		99
98) trans-1,4-dichloro-2-b...	15.094	53	11270	7.75	ug/L		96
99) 1,2,3-trichloropropane	15.146	110	11726	7.97	ug/L		99
100) bromobenzene	15.178	156	51206	8.05	ug/L		90
101) n-propylbenzene	15.209	91	196845	8.44	ug/L		100
102) 2-chlorotoluene	15.340	126	41397	7.96	ug/L		93
103) 4-chlorotoluene	15.450	91	121758	8.15	ug/L		99
104) 1,3,5-trimethylbenzene	15.366	105	143461	8.34	ug/L		97
105) tert-butylbenzene	15.711	134	29352	8.57	ug/L		95
106) 1,2,4-trimethylbenzene	15.758	105	146035	8.08	ug/L		98
107) sec-butylbenzene	15.931	105	185183	8.45	ug/L		99
108) p-isopropyltoluene	16.067	119	164632	8.49	ug/l		99
109) benzyl chloride	16.292	91	82297	8.05	ug/L		98
110) 1,3-dichlorobenzene	16.103	146	95012	7.84	ug/L		99
111) 1,4-dichlorobenzene	16.198	146	98566	7.90	ug/L		99
112) 1,2-dichlorobenzene	16.579	146	89071	7.80	ug/L		97
113) n-butylbenzene	16.490	92	81468	8.40	ug/L		95
114) hexachloroethane	16.898	201	37213	8.46	ug/L		99
115) 1,2-dibromo-3-chloropr...	15.178	157	3766	7.37	ug/L		82
116) 1,3,5-Trichlorobenzene	17.521	180	78271	8.05	ug/L		97
117) 1,2,4-trichlorobenzene	18.054	180	62622	7.66	ug/L		96
118) 2-ethylhexyl acrylate	18.065	55	7503	1.48	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216447.D
Acq On : 26 Oct 2017 10:52 pm
Operator : PrashanS
Sample : IC8691-8
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 27 10:08:44 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	46142	8.70	ug/L	99
120) naphthalene	18.284	128	113377	7.34	ug/L	97
121) 1,2,3-trichlorobenzene	18.457	180	63482	8.00	ug/L	98
122) 2-methylnaphthalene	19.189	142	45642	3.99	ug/L	96

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

7.7.46

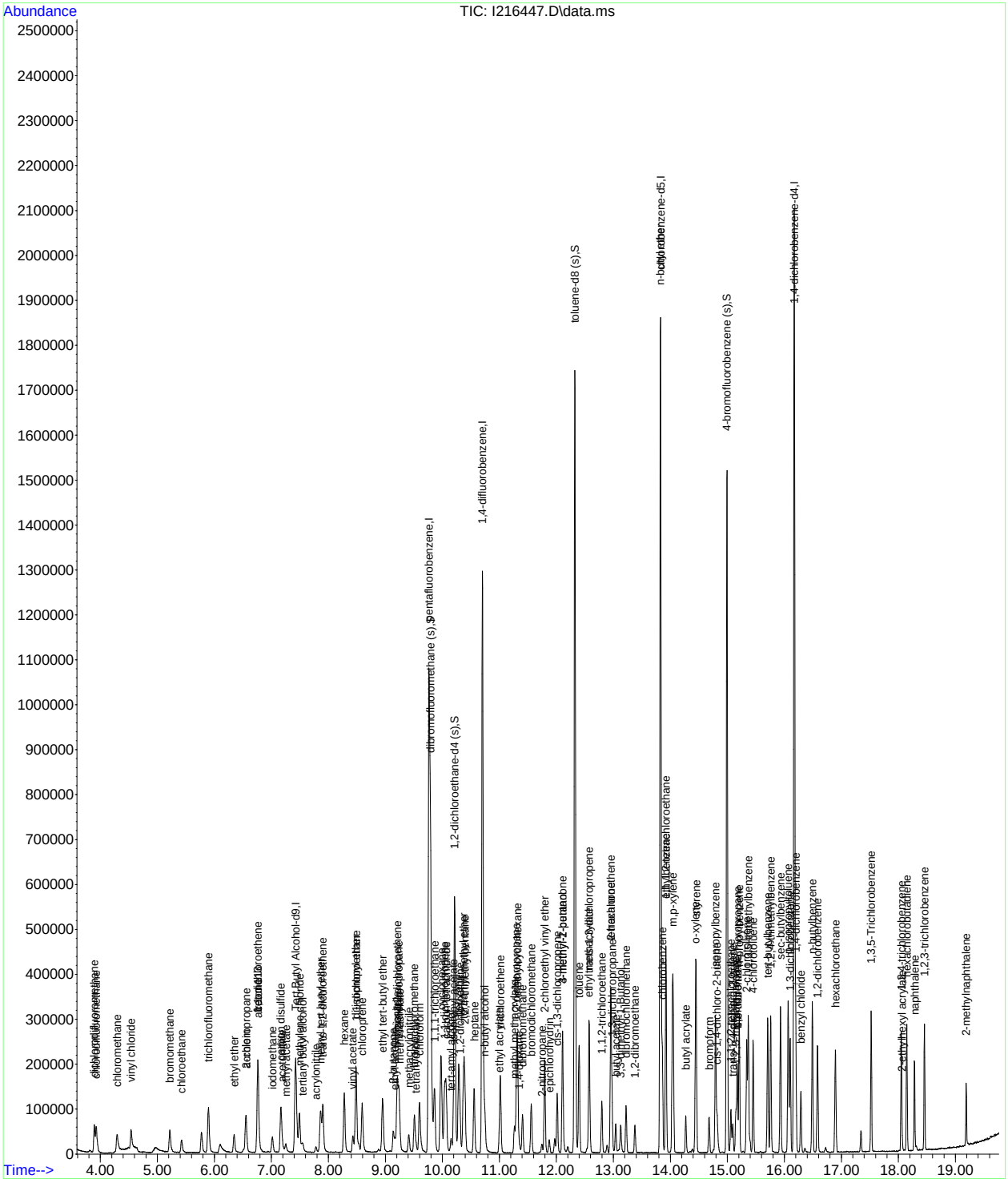
7

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216447.D
Acq On : 26 Oct 2017 10:52 pm
Operator : PrashanS
Sample : IC8691-8
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 27 10:08:44 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216448.D
Acq On : 26 Oct 2017 11:19 pm
Operator : PrashanS
Sample : IC8691-20
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 27 10:07:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	285296	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	705223	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1014446	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	853637	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	525537	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	376506	51.44	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.88%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	423733	51.31	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.62%				
72) toluene-d8 (s)	12.327	98	1083821	50.49	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.98%				
96) 4-bromofluorobenzene (s)	14.989	95	414249	49.51	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 99.02%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.552	59	60712	45.21	ug/L		95
3) 1,4-dioxane	11.349	88	30379	84.06	ug/L		99
5) dichlorodifluoromethane	3.896	85	185978	21.99	ug/L		99
6) chlorodifluoromethane	3.927	51	150525	20.27	ug/L		99
7) chloromethane	4.298	50	115769	17.53	ug/L		96
8) vinyl chloride	4.539	62	116634	20.64	ug/L		93
9) bromomethane	5.219	94	82791	17.95	ug/L		92
10) chloroethane	5.423	64	66664	22.19	ug/L		95
11) trichlorofluoromethane	5.899	101	240555	21.48	ug/L		99
12) ethyl ether	6.343	74	44158	20.11	ug/L		96
13) 2-chloropropane	6.553	63	38683	20.43	ug/L		95
14) acrolein	6.558	56	13422	21.44	ug/L		93
15) freon 113	6.762	151	96476	20.87	ug/L		99
16) 1,1-dichloroethene	6.762	61	157140	20.90	ug/L		97
17) acetone	6.762	58	28282	35.66	ug/L	#	79
18) iodomethane	7.018	142	131024	22.37	ug/L		99
19) carbon disulfide	7.165	76	306679	13.69	ug/L		100
20) acetonitrile	7.175	41	99763	185.78	ug/L		97
21) methyl acetate	7.259	74	13631	21.44	ug/L	#	85
22) methylene chloride	7.494	84	92074	16.22	ug/L		97
23) acrylonitrile	7.782	53	24158	20.16	ug/L		86
24) methyl tert butyl ether	7.865	73	266641	20.71	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	146056	20.87	ug/L		96
26) hexane	8.279	57	126963	12.71	ug/L		97
27) 1,1-dichloroethane	8.488	63	173984	20.14	ug/L		99
28) vinyl acetate	8.430	86	13941	21.35	ug/L	#	93
29) di-isopropyl ether	8.483	45	256172	20.65	ug/L		97
30) chloroprene	8.592	53	168255	21.65	ug/L		98
31) ethyl tert-butyl ether	8.953	59	280983	21.11	ug/L		100
32) 2-butanone	9.136	72	35444	78.58	ug/L		94
33) 2,2-dichloropropane	9.236	77	191372	19.69	ug/L		98
34) ethyl acetate	9.168	45	12496	20.16	ug/L	#	86
35) cis-1,2-dichloroethene	9.210	96	108473	19.40	ug/L		97
36) propionitrile	9.204	54	124500	67.48	ug/L		97
37) methyl acrylate	9.246	85	12858	20.30	ug/L		89
38) methacrylonitrile	9.414	67	31437	19.97	ug/L		95
39) bromochloromethane	9.508	128	55350	20.12	ug/L		92
40) tetrahydrofuran	9.539	71	10330	18.83	ug/L		90
41) chloroform	9.597	83	210539	19.07	ug/L		100
42) carbon tetrachloride	10.067	117	213115	20.85	ug/L		99
43) 1,1-dichloropropene	10.041	75	153227	20.81	ug/L		98
46) 1,1,1-trichloroethane	9.863	97	226162	20.94	ug/L		99
47) cyclohexane	9.984	84	131458	21.54	ug/L	#	81
48) tert-amyl alcohol	10.151	55	20802	100.97	ug/L		95
51) isopropyl acetate	10.198	87	16221	18.81	ug/L	#	81

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216448.D
Acq On : 26 Oct 2017 11:19 pm
Operator : PrashanS
Sample : IC8691-20
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 27 10:07:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	1,2-dichloroethane	10.308	62	170474	20.22	ug/L		97
53)	benzene	10.287	78	361136	19.18	ug/L		99
54)	2,2,4-trimethylpentane	10.392	57	341688	20.46	ug/L		99
55)	tert-amyl methyl ether	10.371	87	69090	21.23	ug/L	#	90
56)	heptane	10.559	57	69205	20.67	ug/L		96
57)	n-butyl alcohol	10.742	56	130790	182.11	ug/L		97
58)	trichloroethene	11.019	95	112279	19.84	ug/L		99
59)	ethyl acrylate	10.998	55	88959	20.46	ug/L		98
60)	methylcyclohexane	11.317	83	178548	21.41	ug/L		97
61)	1,2-dichloropropane	11.297	63	86955	19.83	ug/L		99
62)	methyl methacrylate	11.265	100	21155	19.65	ug/L		95
63)	dibromomethane	11.406	93	67429	20.24	ug/L		90
64)	bromodichloromethane	11.558	83	156952	20.21	ug/L		96
65)	2-nitropropane	11.746	41	31404	20.29	ug/L		92
66)	2-chloroethyl vinyl ether	11.793	63	206990	79.69	ug/L		98
67)	epichlorohydrin	11.877	57	43158	65.28	ug/L		100
68)	cis-1,3-dichloropropene	12.013	75	156970	19.95	ug/L		98
69)	4-methyl-2-pentanone	12.107	58	109940	69.46	ug/L		98
70)	3-methyl-1-butanol	12.107	70	48778	386.41	ug/L		94
73)	toluene	12.400	92	228144	17.71	ug/L		98
74)	trans-1,3-dichloropropene	12.578	75	151818	18.84	ug/L		99
75)	ethyl methacrylate	12.567	69	90934	20.46	ug/L		98
76)	1,1,2-trichloroethane	12.798	83	64375	20.47	ug/L		99
77)	1,3-dichloropropane	12.975	76	127673	20.49	ug/L		98
78)	tetrachloroethene	12.954	166	135058	17.87	ug/L		99
79)	2-hexanone	12.954	58	110053	63.57	ug/L		100
80)	butyl acetate	13.043	56	42430	19.88	ug/L		87
81)	3,3-dimethyl-1-Butanol	13.127	69	55692	192.08	ug/L		97
82)	n-butyl ether	13.823	57	308010	20.24	ug/L		96
83)	dibromochloromethane	13.221	129	128215	20.76	ug/L		99
84)	1,2-dibromoethane	13.378	107	92162	20.69	ug/L		98
85)	chlorobenzene	13.859	112	265792	19.31	ug/L		98
86)	1,1,1,2-tetrachloroethane	13.922	131	117852	20.62	ug/L		96
87)	ethylbenzene	13.922	91	438337	19.77	ug/L		99
88)	m,p-xylene	14.042	106	346612	40.23	ug/L		100
89)	o-xylene	14.440	106	165688	20.14	ug/L		100
90)	styrene	14.456	104	278524	20.83	ug/L		97
91)	butyl acrylate	14.267	55	122903	21.48	ug/L		99
92)	cis-1,4-dichloro-2-butene	14.816	88	54407	20.53	ug/L		99
93)	bromoform	14.680	173	88488	19.42	ug/L		98
94)	isopropylbenzene	14.790	105	441869	20.46	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.062	83	93303	19.11	ug/L		96
98)	trans-1,4-dichloro-2-b...	15.094	53	30862	19.74	ug/L		98
99)	1,2,3-trichloropropane	15.146	110	31876	20.15	ug/L		95
100)	bromobenzene	15.172	156	134231	19.64	ug/L		97
101)	n-propylbenzene	15.209	91	513189	20.47	ug/L		99
102)	2-chlorotoluene	15.339	126	113243	20.26	ug/L		97
103)	4-chlorotoluene	15.449	91	324446	20.21	ug/L		99
104)	1,3,5-trimethylbenzene	15.366	105	386259	20.91	ug/L		98
105)	tert-butylbenzene	15.706	134	75938	20.63	ug/L		95
106)	1,2,4-trimethylbenzene	15.758	105	386818	19.92	ug/L		100
107)	sec-butylbenzene	15.931	105	498633	21.16	ug/L		99
108)	p-isopropyltoluene	16.067	119	441169	21.17	ug/l		99
109)	benzyl chloride	16.291	91	214559	19.52	ug/L		98
110)	1,3-dichlorobenzene	16.103	146	250248	19.21	ug/L		97
111)	1,4-dichlorobenzene	16.197	146	249447	18.60	ug/L		99
112)	1,2-dichlorobenzene	16.584	146	239297	19.50	ug/L		99
113)	n-butylbenzene	16.490	92	222528	21.36	ug/L		99
114)	hexachloroethane	16.898	201	98097	20.75	ug/L		96
115)	1,2-dibromo-3-chloropr...	15.177	157	9903	18.04	ug/L		83
116)	1,3,5-Trichlorobenzene	17.526	180	203887	19.51	ug/L		99
117)	1,2,4-trichlorobenzene	18.049	180	167107	19.01	ug/L		98
118)	2-ethylhexyl acrylate	18.064	55	21386	3.94	ug/L		92

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216448.D
Acq On : 26 Oct 2017 11:19 pm
Operator : PrashanS
Sample : IC8691-20
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 27 10:07:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

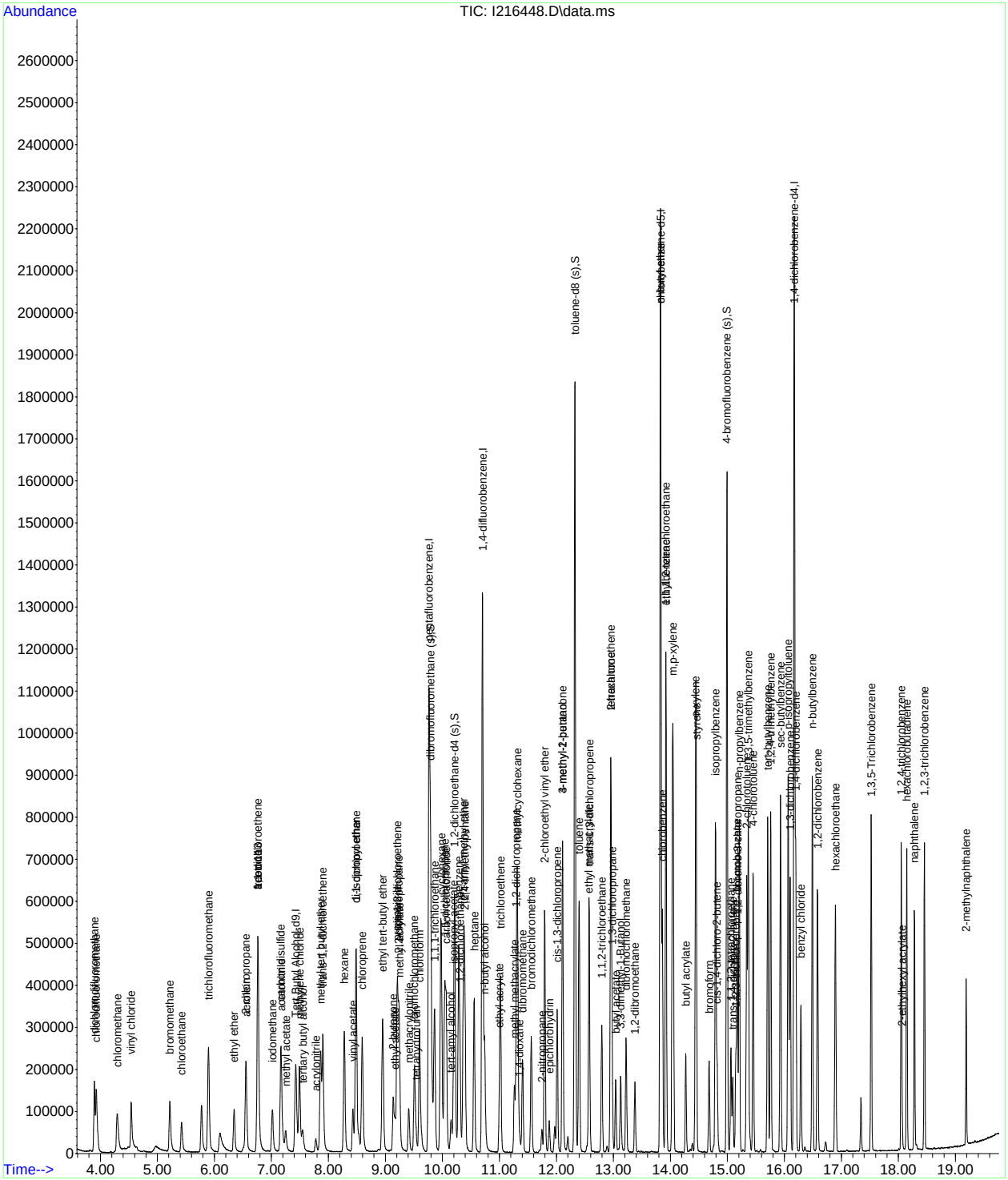
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	114797	20.15	ug/L	98
120) naphthalene	18.279	128	320181	19.29	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	166952	19.59	ug/L	97
122) 2-methylnaphthalene	19.189	142	128261	10.44	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216448.D
Acq On : 26 Oct 2017 11:19 pm
Operator : PrashanS
Sample : IC8691-20
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 27 10:07:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216449.D
Acq On : 26 Oct 2017 11:45 pm
Operator : PrashanS
Sample : ICC8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 27 10:03:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	306193	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	732662	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	1071934	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	912630	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	595780	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	388351	51.07	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 102.14%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	436068	49.98	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 99.96%			
72) toluene-d8 (s)	12.327	98	1141984	49.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.52%			
96) 4-bromofluorobenzene (s)	14.989	95	455283	48.00	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 96.00%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.547	59	170973	118.62	ug/L	100
3) 1,4-dioxane	11.349	88	81343	209.72	ug/L	100
5) dichlorodifluoromethane	3.891	85	475030	54.06	ug/L	100
6) chlorodifluoromethane	3.927	51	384726	49.87	ug/L	100
7) chloromethane	4.293	50	291375	42.47	ug/L	100
8) vinyl chloride	4.539	62	301694	51.40	ug/L	100
9) bromomethane	5.214	94	224708	46.90	ug/L	100
10) chloroethane	5.423	64	172596	55.30	ug/L	100
11) trichlorofluoromethane	5.894	101	607659	52.22	ug/L	100
12) ethyl ether	6.344	74	118709	52.02	ug/L	100
13) 2-chloropropane	6.553	63	100058	50.86	ug/L	100
14) acrolein	6.558	56	36089	55.48	ug/L	100
15) freon 113	6.762	151	246484	51.33	ug/L	100
16) 1,1-dichloroethene	6.762	61	404791	51.83	ug/L	100
17) acetone	6.757	58	84511	102.56	ug/L	100
18) iodomethane	7.013	142	386262	63.48	ug/L	100
19) carbon disulfide	7.165	76	789972	33.94	ug/L	100
20) acetonitrile	7.175	41	261077	467.97	ug/L	100
21) methyl acetate	7.248	74	36407	55.12	ug/L	100
22) methylene chloride	7.494	84	243170	41.23	ug/L	100
23) acrylonitrile	7.777	53	65846	52.88	ug/L	100
24) methyl tert butyl ether	7.866	73	715857	53.52	ug/L	100
25) trans-1,2-dichloroethene	7.902	61	372724	51.25	ug/L	100
26) hexane	8.279	57	334052	32.18	ug/L	100
27) 1,1-dichloroethane	8.488	63	452894	50.46	ug/L	100
28) vinyl acetate	8.425	86	38004	56.02	ug/L	100
29) di-isopropyl ether	8.483	45	699180	54.24	ug/L	100
30) chloroprene	8.593	53	447402	55.42	ug/L	100
31) ethyl tert-butyl ether	8.954	59	765700	55.37	ug/L	100
32) 2-butanone	9.137	72	103492	220.85	ug/L	100
33) 2,2-dichloropropane	9.236	77	495166	49.03	ug/L	100
34) ethyl acetate	9.168	45	32372	50.28	ug/L	100
35) cis-1,2-dichloroethene	9.210	96	283613	48.83	ug/L	100
36) propionitrile	9.205	54	333666	174.08	ug/L	100
37) methyl acrylate	9.252	85	36220	55.03	ug/L	100
38) methacrylonitrile	9.409	67	87744	53.66	ug/L	100
39) bromochloromethane	9.508	128	148938	52.11	ug/L	100
40) tetrahydrofuran	9.534	71	27608	48.45	ug/L	100
41) chloroform	9.597	83	554630	48.35	ug/L	100
42) carbon tetrachloride	10.068	117	556501	52.40	ug/L	100
43) 1,1-dichloropropene	10.041	75	399871	52.26	ug/L	100
46) 1,1,1-trichloroethane	9.864	97	578278	51.54	ug/L	100
47) cyclohexane	9.979	84	348592	54.99	ug/L	100
48) tert-amyl alcohol	10.156	55	56324	263.14	ug/L	100
51) isopropyl acetate	10.198	87	46975	51.54	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216449.D
Acq On : 26 Oct 2017 11:45 pm
Operator : PrashanS
Sample : ICC8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 27 10:03:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) 1,2-dichloroethane	10.308	62	441310	49.54	ug/L	100
53) benzene	10.287	78	966494	48.57	ug/L	100
54) 2,2,4-trimethylpentane	10.392	57	911224	51.62	ug/L	100
55) tert-amyl methyl ether	10.371	87	189333	55.06	ug/L	100
56) heptane	10.559	57	184951	52.27	ug/L	100
57) n-butyl alcohol	10.742	56	396320	522.23	ug/L	100
58) trichloroethene	11.019	95	297060	49.67	ug/L	100
59) ethyl acrylate	10.999	55	257966	56.16	ug/L	100
60) methylcyclohexane	11.318	83	475678	53.99	ug/L	100
61) 1,2-dichloropropane	11.302	63	231206	49.91	ug/L	100
62) methyl methacrylate	11.265	100	59865	52.63	ug/L	100
63) dibromomethane	11.406	93	176227	50.05	ug/L	100
64) bromodichloromethane	11.558	83	414859	50.54	ug/L	100
65) 2-nitropropane	11.746	41	82680	50.55	ug/L	100
66) 2-chloroethyl vinyl ether	11.794	63	578439	210.76	ug/L	100
67) epichlorohydrin	11.872	57	117517	168.23	ug/L	100
68) cis-1,3-dichloropropene	12.013	75	425850	51.21	ug/L	100
69) 4-methyl-2-pentanone	12.107	58	305255	182.51	ug/L	100
70) 3-methyl-1-butanol	12.107	70	141467	1060.58	ug/L	100
73) toluene	12.400	92	612881	44.49	ug/L	100
74) trans-1,3-dichloropropene	12.573	75	416717	48.36	ug/L	100
75) ethyl methacrylate	12.573	69	259922	54.69	ug/L	100
76) 1,1,2-trichloroethane	12.798	83	172335	51.26	ug/L	100
77) 1,3-dichloropropane	12.976	76	345309	51.83	ug/L	100
78) tetrachloroethene	12.955	166	360687	44.63	ug/L	100
79) 2-hexanone	12.955	58	307750	166.28	ug/L	100
80) butyl acetate	13.038	56	117071	51.31	ug/L	100
81) 3,3-dimethyl-1-Butanol	13.127	69	158653	511.83	ug/L	100
82) n-butyl ether	13.823	57	857016	52.67	ug/L	100
83) dibromochloromethane	13.221	129	344679	52.20	ug/L	100
84) 1,2-dibromoethane	13.378	107	251913	52.91	ug/L	100
85) chlorobenzene	13.859	112	716281	48.67	ug/L	100
86) 1,1,1,2-tetrachloroethane	13.922	131	321031	52.55	ug/L	100
87) ethylbenzene	13.922	91	1188096	50.13	ug/L	100
88) m,p-xylene	14.043	106	936385	101.66	ug/L	100
89) o-xylene	14.440	106	465855	52.97	ug/L	100
90) styrene	14.450	104	773677	54.12	ug/L	100
91) butyl acrylate	14.267	55	366775	59.97	ug/L	100
92) cis-1,4-dichloro-2-butene	14.817	88	152472	53.82	ug/L	100
93) bromoform	14.681	173	252068	51.76	ug/L	100
94) isopropylbenzene	14.790	105	1260514	54.59	ug/L	100
97) 1,1,2,2-tetrachloroethane	15.062	83	257425	46.50	ug/L	100
98) trans-1,4-dichloro-2-b...	15.094	53	86337	48.71	ug/L	100
99) 1,2,3-trichloropropane	15.151	110	86443	48.20	ug/L	100
100) bromobenzene	15.172	156	364625	47.07	ug/L	100
101) n-propylbenzene	15.209	91	1439642	50.65	ug/L	100
102) 2-chlorotoluene	15.340	126	315456	49.78	ug/L	100
103) 4-chlorotoluene	15.449	91	894909	49.17	ug/L	100
104) 1,3,5-trimethylbenzene	15.366	105	1078492	51.49	ug/L	100
105) tert-butylbenzene	15.706	134	224859	53.88	ug/L	100
106) 1,2,4-trimethylbenzene	15.758	105	1116098	50.69	ug/L	100
107) sec-butylbenzene	15.931	105	1432615	53.63	ug/L	100
108) p-isopropyltoluene	16.067	119	1286787	54.47	ug/l	100
109) benzyl chloride	16.292	91	620350	49.79	ug/L	100
110) 1,3-dichlorobenzene	16.103	146	705145	47.76	ug/L	100
111) 1,4-dichlorobenzene	16.197	146	712433	46.85	ug/L	100
112) 1,2-dichlorobenzene	16.584	146	681326	48.97	ug/L	100
113) n-butylbenzene	16.490	92	649709	55.02	ug/L	100
114) hexachloroethane	16.898	201	280076	52.25	ug/L	100
115) 1,2-dibromo-3-chloropr...	15.172	157	27498	44.18	ug/L	100
116) 1,3,5-Trichlorobenzene	17.521	180	588659	49.68	ug/L	100
117) 1,2,4-trichlorobenzene	18.049	180	480125	48.19	ug/L	100
118) 2-ethylhexyl acrylate	18.065	55	69807	11.33	ug/L	100

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216449.D
Acq On : 26 Oct 2017 11:45 pm
Operator : PrashanS
Sample : ICC8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 27 10:03:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	327470	50.70	ug/L	100
120) naphthalene	18.279	128	936289	49.76	ug/L	100
121) 1,2,3-trichlorobenzene	18.457	180	474591	49.12	ug/L	100
122) 2-methylnaphthalene	19.189	142	372896	26.78	ug/L	100

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

7.7.48

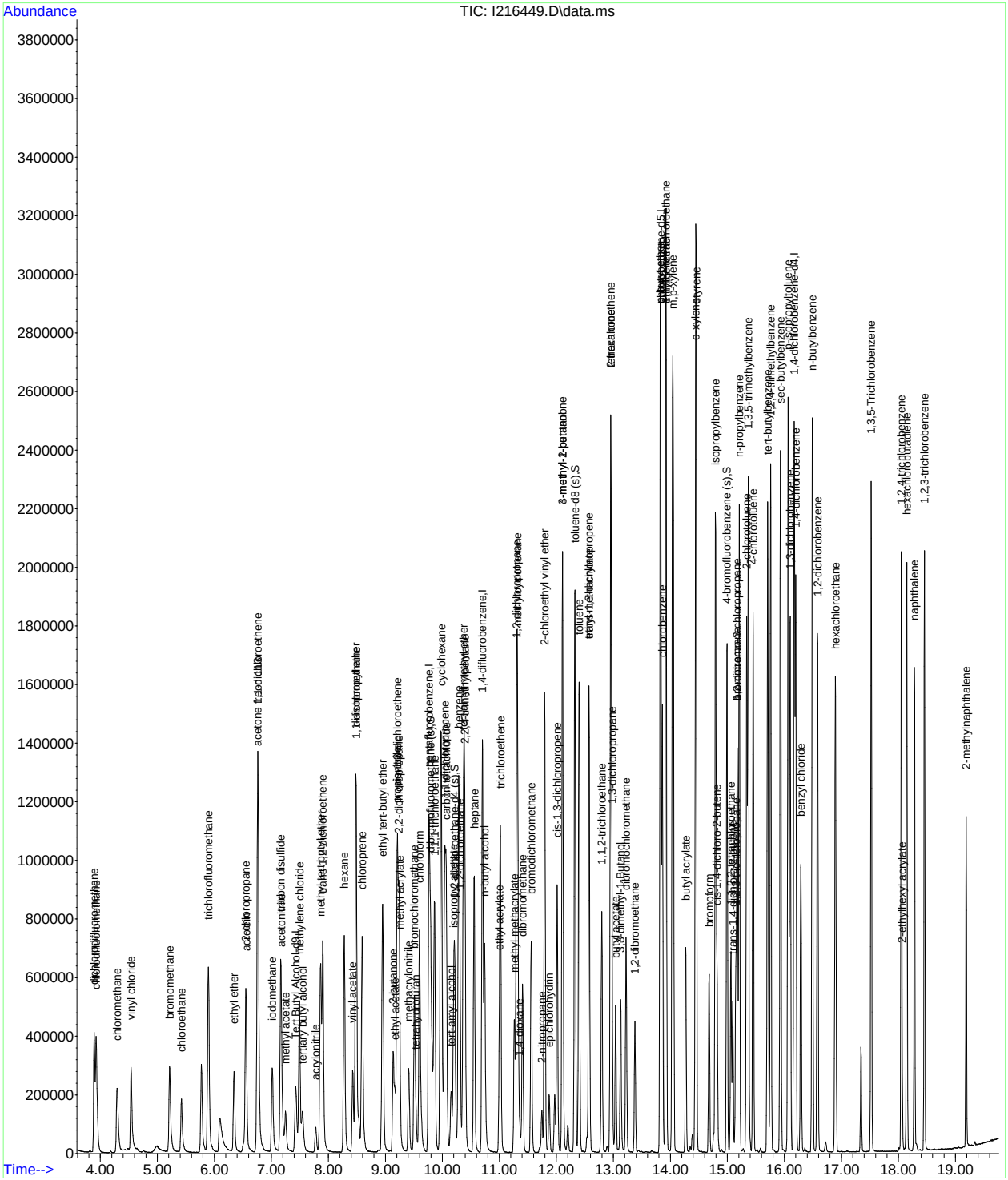
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SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216449.D
Acq On : 26 Oct 2017 11:45 pm
Operator : PrashanS
Sample : ICC8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 27 10:03:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216450.D
Acq On : 27 Oct 2017 12:12 am
Operator : PrashanS
Sample : IC8691-100
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 27 10:04:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.432	65	343862	500.00	ug/L		0.00
4) pentafluorobenzene	9.764	168	810588	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1179517	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	1018553	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	665771	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	422132	50.18	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.36%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	453858	47.27	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 94.54%				
72) toluene-d8 (s)	12.322	98	1278186	49.90	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.80%				
96) 4-bromofluorobenzene (s)	14.989	95	500543	47.22	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 94.44%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.552	59	388013	239.71	ug/L		98
3) 1,4-dioxane	11.354	88	188179	432.02	ug/L		96
5) dichlorodifluoromethane	3.896	85	1011270	104.03	ug/L		99
6) chlorodifluoromethane	3.927	51	807588	94.62	ug/L		99
7) chloromethane	4.293	50	624643	82.29	ug/L		100
8) vinyl chloride	4.539	62	666389	102.62	ug/L		98
9) bromomethane	5.214	94	507054	95.65	ug/L		94
10) chloroethane	5.423	64	387267	112.16	ug/L		98
11) trichlorofluoromethane	5.894	101	1333627	103.59	ug/L		99
12) ethyl ether	6.349	74	273962	108.52	ug/L		97
13) 2-chloropropane	6.553	63	212364	97.57	ug/L		97
14) acrolein	6.558	56	86357	119.99	ug/L		98
15) freon 113	6.762	151	531730	100.08	ug/L		98
16) 1,1-dichloroethene	6.762	61	877736	101.59	ug/L		100
17) acetone	6.762	58	203133	222.81	ug/L		93
18) iodomethane	7.018	142	876574	130.22	ug/L		100
19) carbon disulfide	7.165	76	1747213	67.84	ug/L		99
20) acetonitrile	7.175	41	595175	964.27	ug/L		100
21) methyl acetate	7.254	74	83037	113.64	ug/L		96
22) methylene chloride	7.494	84	542193	83.09	ug/L		99
23) acrylonitrile	7.777	53	152308	110.56	ug/L		94
24) methyl tert butyl ether	7.866	73	1587988	107.30	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	817671	101.63	ug/L		99
26) hexane	8.279	57	740209	64.46	ug/L		99
27) 1,1-dichloroethane	8.488	63	987514	99.45	ug/L		99
28) vinyl acetate	8.425	86	85422	113.80	ug/L		100
29) di-isopropyl ether	8.483	45	1575644	110.49	ug/L		98
30) chloroprene	8.593	53	977356	109.42	ug/L		99
31) ethyl tert-butyl ether	8.954	59	1714763	112.08	ug/L		100
32) 2-butanone	9.142	72	245159	472.87	ug/L		98
33) 2,2-dichloropropane	9.236	77	1057016	94.61	ug/L		99
34) ethyl acetate	9.168	45	71748	100.72	ug/L		94
35) cis-1,2-dichloroethene	9.210	96	634272	98.71	ug/L		99
36) propionitrile	9.205	54	759003	357.91	ug/L		99
37) methyl acrylate	9.246	85	82023	112.64	ug/L	#	86
38) methacrylonitrile	9.409	67	200527	110.85	ug/L		97
39) bromochloromethane	9.508	128	324541	102.62	ug/L		93
40) tetrahydrofuran	9.534	71	63837	101.27	ug/L		91
41) chloroform	9.602	83	1186186	93.46	ug/L		99
42) carbon tetrachloride	10.068	117	1171355	99.68	ug/L		99
43) 1,1-dichloropropene	10.041	75	870985	102.90	ug/L		98
46) 1,1,1-trichloroethane	9.864	97	1229847	99.08	ug/L		99
47) cyclohexane	9.979	84	785128	111.95	ug/L		97
48) tert-amyl alcohol	10.151	55	125385	529.47	ug/L		91
51) isopropyl acetate	10.198	87	109202	108.88	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216450.D
Acq On : 27 Oct 2017 12:12 am
Operator : PrashanS
Sample : IC8691-100
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 27 10:04:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,2-dichloroethane	10.308	62	945432	96.46	ug/L		100
53) benzene	10.287	78	2140620	97.76	ug/L		99
54) 2,2,4-trimethylpentane	10.392	57	2064934	106.32	ug/L		99
55) tert-amyl methyl ether	10.371	87	427753	113.05	ug/L		97
56) heptane	10.554	57	423091	108.66	ug/L		97
57) n-butyl alcohol	10.742	56	889110	1064.73	ug/L		98
58) trichloroethene	11.020	95	653741	99.34	ug/L		100
59) ethyl acrylate	10.999	55	586071	115.95	ug/L		98
60) methylcyclohexane	11.318	83	1074519	110.83	ug/L		99
61) 1,2-dichloropropane	11.297	63	522823	102.56	ug/L		92
62) methyl methacrylate	11.265	100	143431	114.60	ug/L	#	88
63) dibromomethane	11.407	93	390365	100.76	ug/L		99
64) bromodichloromethane	11.558	83	914617	101.27	ug/L		99
65) 2-nitropropane	11.747	41	183971	102.22	ug/L		94
66) 2-chloroethyl vinyl ether	11.794	63	1300091	430.49	ug/L		99
67) epichlorohydrin	11.872	57	268639	349.50	ug/L		96
68) cis-1,3-dichloropropene	12.013	75	956656	104.55	ug/L		99
69) 4-methyl-2-pentanone	12.107	58	702100	381.48	ug/L		97
70) 3-methyl-1-butanol	12.107	70	333931	2275.14	ug/L		99
73) toluene	12.400	92	1379441	89.72	ug/L		98
74) trans-1,3-dichloropropene	12.578	75	923206	95.99	ug/L		99
75) ethyl methacrylate	12.573	69	604115	113.90	ug/L		99
76) 1,1,2-trichloroethane	12.798	83	386194	102.93	ug/L		97
77) 1,3-dichloropropane	12.976	76	770628	103.64	ug/L		97
78) tetrachloroethene	12.955	166	798075	88.48	ug/L		99
79) 2-hexanone	12.955	58	692908	335.46	ug/L		97
80) butyl acetate	13.038	56	270981	106.41	ug/L		95
81) 3,3-dimethyl-1-Butanol	13.127	69	385496	1114.32	ug/L		98
82) n-butyl ether	13.823	57	1949809	107.37	ug/L		99
83) dibromochloromethane	13.221	129	773139	104.91	ug/L		99
84) 1,2-dibromoethane	13.378	107	563458	106.03	ug/L		100
85) chlorobenzene	13.860	112	1604902	97.71	ug/L		99
86) 1,1,1,2-tetrachloroethane	13.922	131	704175	103.28	ug/L		98
87) ethylbenzene	13.922	91	2648089	100.11	ug/L		100
88) m,p-xylene	14.043	106	2123347	206.54	ug/L		97
89) o-xylene	14.440	106	1048363	106.80	ug/L		96
90) styrene	14.451	104	1753653	109.92	ug/L		99
91) butyl acrylate	14.268	55	862226	126.32	ug/L		99
92) cis-1,4-dichloro-2-butene	14.817	88	346634	109.63	ug/L		97
93) bromoform	14.681	173	574307	105.66	ug/L		99
94) isopropylbenzene	14.791	105	2802935	108.77	ug/L		100
97) 1,1,2,2-tetrachloroethane	15.063	83	597644	96.60	ug/L		97
98) trans-1,4-dichloro-2-b...	15.094	53	195434	98.67	ug/L		96
99) 1,2,3-trichloropropane	15.151	110	196317	97.96	ug/L		96
100) bromobenzene	15.172	156	825137	95.31	ug/L		99
101) n-propylbenzene	15.209	91	3197529	100.66	ug/L		100
102) 2-chlorotoluene	15.340	126	719370	101.59	ug/L		99
103) 4-chlorotoluene	15.450	91	2021149	99.38	ug/L		98
104) 1,3,5-trimethylbenzene	15.366	105	2456699	104.96	ug/L		99
105) tert-butylbenzene	15.706	134	515193	110.47	ug/L		98
106) 1,2,4-trimethylbenzene	15.758	105	2528700	102.78	ug/L		98
107) sec-butylbenzene	15.931	105	3257365	109.12	ug/L		100
108) p-isopropyltoluene	16.067	119	2918403	110.56	ug/l		99
109) benzyl chloride	16.292	91	1409123	101.20	ug/L		100
110) 1,3-dichlorobenzene	16.103	146	1597739	96.83	ug/L		98
111) 1,4-dichlorobenzene	16.197	146	1605384	94.47	ug/L		98
112) 1,2-dichlorobenzene	16.584	146	1556060	100.09	ug/L		99
113) n-butylbenzene	16.490	92	1460070	110.64	ug/L		98
114) hexachloroethane	16.898	201	639779	106.81	ug/L		99
115) 1,2-dibromo-3-chloropr...	15.172	157	61199	88.00	ug/L		94
116) 1,3,5-Trichlorobenzene	17.526	180	1286362	97.14	ug/L		99
117) 1,2,4-trichlorobenzene	18.054	180	1058712	95.09	ug/L		97
118) 2-ethylhexyl acrylate	18.065	55	168136	24.43	ug/L		95

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216450.D
Acq On : 27 Oct 2017 12:12 am
Operator : PrashanS
Sample : IC8691-100
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 27 10:04:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	706493	97.89	ug/L	98
120) naphthalene	18.279	128	2091783	99.47	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	1049608	97.22	ug/L	99
122) 2-methylnaphthalene	19.189	142	813996	52.32	ug/L	99

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

7.7.49

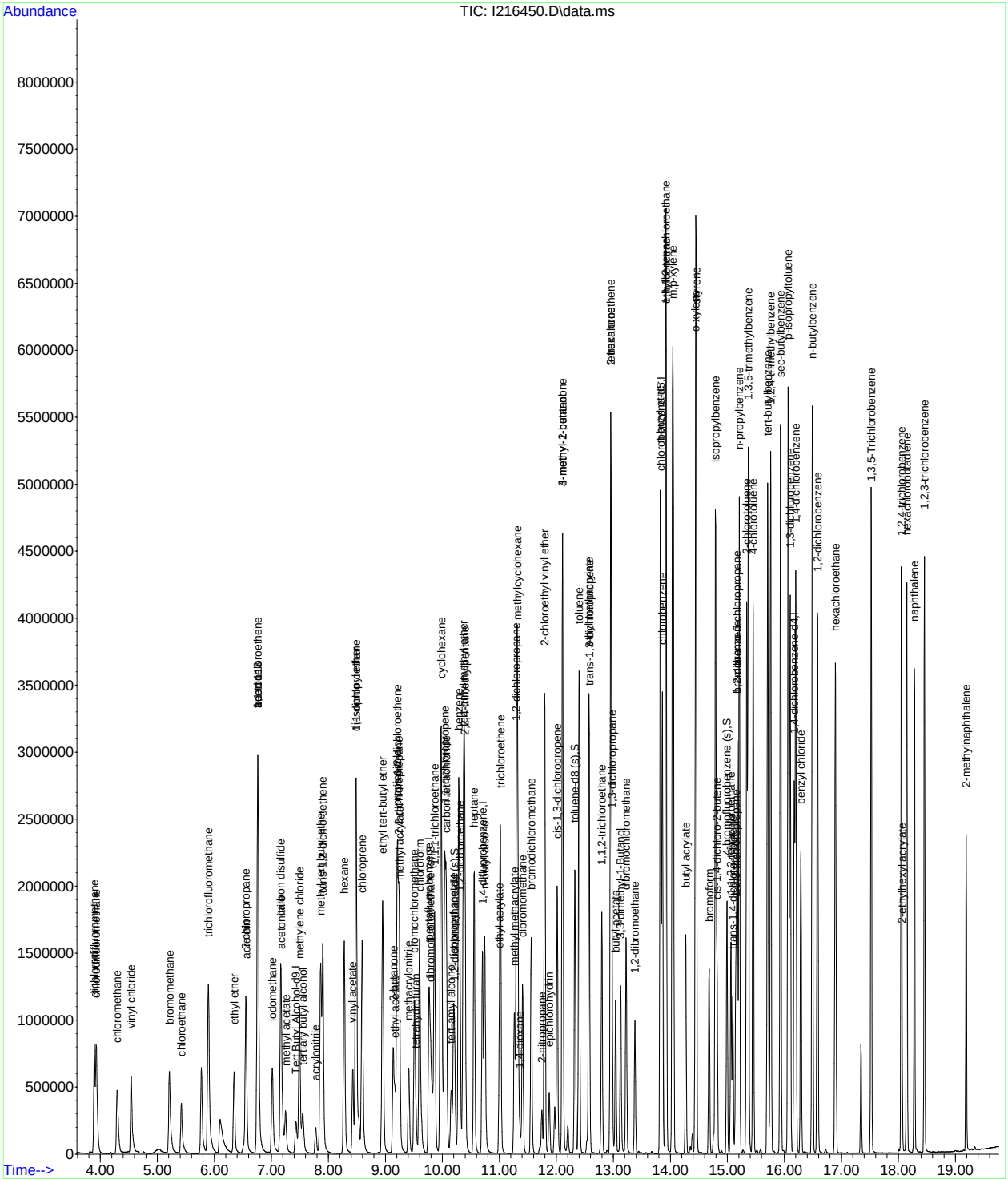
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SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216450.D
Acq On : 27 Oct 2017 12:12 am
Operator : PrashanS
Sample : IC8691-100
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 27 10:04:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216451.D
Acq On : 27 Oct 2017 12:38 am
Operator : PrashanS
Sample : IC8691-200
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 27 10:05:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.437	65	373144	500.00	ug/L		0.00
4) pentafluorobenzene	9.764	168	913202	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.700	114	1331775	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	1170317	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	782172	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	461013	48.64	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 97.28%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	484609	44.70	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 89.40%				
72) toluene-d8 (s)	12.327	98	1444436	49.08	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.16%				
96) 4-bromofluorobenzene (s)	14.994	95	575212	46.19	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 92.38%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.557	59	856910	487.85	ug/L		99
3) 1,4-dioxane	11.354	88	413279	874.35	ug/L		98
5) dichlorodifluoromethane	3.891	85	2046947	186.90	ug/L		99
6) chlorodifluoromethane	3.927	51	1673318	174.03	ug/L		99
7) chloromethane	4.293	50	1318765	154.22	ug/L		99
8) vinyl chloride	4.539	62	1387497	189.66	ug/L		99
9) bromomethane	5.198	94	1101790	184.49	ug/L		93
10) chloroethane	5.418	64	824126	211.87	ug/L		98
11) trichlorofluoromethane	5.894	101	2805408	193.42	ug/L		100
12) ethyl ether	6.344	74	597880	210.22	ug/L		98
13) 2-chloropropane	6.553	63	432442	176.36	ug/L		98
14) acrolein	6.558	56	185521	228.81	ug/L		96
15) freon 113	6.762	151	1151636	192.40	ug/L		98
16) 1,1-dichloroethene	6.762	61	1871098	192.22	ug/L		97
17) acetone	6.762	58	465226	452.96	ug/L		100
18) iodomethane	7.013	142	1914896	252.49	ug/L		97
19) carbon disulfide	7.165	76	3815480	131.50	ug/L		100
20) acetonitrile	7.175	41	1301423	1871.56	ug/L		99
21) methyl acetate	7.248	74	186863	226.99	ug/L		96
22) methylene chloride	7.494	84	1197147	162.85	ug/L		98
23) acrylonitrile	7.777	53	336013	216.50	ug/L		95
24) methyl tert butyl ether	7.866	73	3397292	203.76	ug/L		98
25) trans-1,2-dichloroethene	7.902	61	1756589	193.80	ug/L		97
26) hexane	8.279	57	1646252	127.24	ug/L		99
27) 1,1-dichloroethane	8.483	63	2122257	189.71	ug/L		98
28) vinyl acetate	8.431	86	189693	224.32	ug/L	#	83
29) di-isopropyl ether	8.483	45	3405880	212.00	ug/L		99
30) chloroprene	8.593	53	2069017	205.62	ug/L		96
31) ethyl tert-butyl ether	8.954	59	3694161	214.33	ug/L		98
32) 2-butanone	9.137	72	524679	898.29	ug/L		96
33) 2,2-dichloropropane	9.236	77	2219080	176.30	ug/L		98
34) ethyl acetate	9.168	45	152256	189.72	ug/L	#	85
35) cis-1,2-dichloroethene	9.210	96	1391424	192.22	ug/L		98
36) propionitrile	9.205	54	1675020	701.10	ug/L		98
37) methyl acrylate	9.246	85	184396	224.76	ug/L		91
38) methacrylonitrile	9.409	67	439945	215.87	ug/L		99
39) bromochloromethane	9.513	128	710734	199.49	ug/L		90
40) tetrahydrofuran	9.534	71	140696	198.11	ug/L		89
41) chloroform	9.597	83	2528104	176.82	ug/L		99
42) carbon tetrachloride	10.068	117	2461203	185.92	ug/L		99
43) 1,1-dichloropropene	10.036	75	1886540	197.83	ug/L		99
46) 1,1,1-trichloroethane	9.858	97	2570671	183.84	ug/L		99
47) cyclohexane	9.979	84	1712153	216.70	ug/L		96
48) tert-amyl alcohol	10.156	55	273079	1023.58	ug/L		80
51) isopropyl acetate	10.198	87	241847	213.57	ug/L		99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216451.D
Acq On : 27 Oct 2017 12:38 am
Operator : PrashanS
Sample : IC8691-200
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 27 10:05:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	1,2-dichloroethane	10.308	62	1956856	176.82	ug/L		99
53)	benzene	10.287	78	4706247	190.35	ug/L		98
54)	2,2,4-trimethylpentane	10.392	57	4539703	207.01	ug/L		98
55)	tert-amyl methyl ether	10.371	87	929396	217.54	ug/L		97
56)	heptane	10.554	57	947511	215.53	ug/L		99
57)	n-butyl alcohol	10.747	56	1997046	2118.09	ug/L		98
58)	trichloroethene	11.019	95	1438674	193.62	ug/L		99
59)	ethyl acrylate	10.999	55	1306637	228.95	ug/L		99
60)	methylcyclohexane	11.318	83	2363098	215.87	ug/L		98
61)	1,2-dichloropropane	11.302	63	1151912	200.13	ug/L		93
62)	methyl methacrylate	11.265	100	320425	226.76	ug/L	#	81
63)	dibromomethane	11.406	93	840656	192.18	ug/L		99
64)	bromodichloromethane	11.558	83	1961491	192.35	ug/L		100
65)	2-nitropropane	11.746	41	383332	188.63	ug/L		99
66)	2-chloroethyl vinyl ether	11.799	63	2811436	824.51	ug/L		97
67)	epichlorohydrin	11.877	57	591756	681.86	ug/L		93
68)	cis-1,3-dichloropropene	12.013	75	2090221	202.32	ug/L		99
69)	4-methyl-2-pentanone	12.113	58	1533804	738.11	ug/L		93
70)	3-methyl-1-butanol	12.107	70	758670	4578.01	ug/L		95
73)	toluene	12.400	92	3040917	172.14	ug/L		100
74)	trans-1,3-dichloropropene	12.578	75	1982094	179.37	ug/L		97
75)	ethyl methacrylate	12.573	69	1330631	218.35	ug/L		98
76)	1,1,2-trichloroethane	12.798	83	861688	199.87	ug/L		100
77)	1,3-dichloropropane	12.976	76	1688083	197.59	ug/L		99
78)	tetrachloroethene	12.955	166	1762976	170.12	ug/L		100
79)	2-hexanone	12.955	58	1535242	646.87	ug/L		93
80)	butyl acetate	13.038	56	620790	212.17	ug/L		91
81)	3,3-dimethyl-1-Butanol	13.127	69	909423	2287.89	ug/L		98
82)	n-butyl ether	13.823	57	4388883	210.34	ug/L		98
83)	dibromochloromethane	13.227	129	1688149	199.37	ug/L		99
84)	1,2-dibromoethane	13.378	107	1240086	203.10	ug/L		99
85)	chlorobenzene	13.859	112	3592196	190.34	ug/L		100
86)	1,1,1,2-tetrachloroethane	13.922	131	1575770	201.14	ug/L		99
87)	ethylbenzene	13.922	91	5777020	190.07	ug/L		98
88)	m,p-xylene	14.043	106	4766315	403.51	ug/L		92
89)	o-xylene	14.445	106	2386275	211.57	ug/L		91
90)	styrene	14.456	104	3969289	216.54	ug/L		96
91)	butyl acrylate	14.267	55	1981438	252.64	ug/L		98
92)	cis-1,4-dichloro-2-butene	14.817	88	762308	209.84	ug/L		94
93)	bromoform	14.681	173	1306607	209.21	ug/L		99
94)	isopropylbenzene	14.796	105	6233515	210.52	ug/L		97
97)	1,1,2,2-tetrachloroethane	15.062	83	1379304	189.77	ug/L		97
98)	trans-1,4-dichloro-2-b...	15.094	53	439953	189.06	ug/L		94
99)	1,2,3-trichloropropane	15.151	110	443703	188.45	ug/L		98
100)	bromobenzene	15.172	156	1867444	183.61	ug/L		99
101)	n-propylbenzene	15.209	91	7102385	190.32	ug/L		97
102)	2-chlorotoluene	15.340	126	1655769	199.04	ug/L		97
103)	4-chlorotoluene	15.455	91	4541864	190.08	ug/L		95
104)	1,3,5-trimethylbenzene	15.366	105	5559477	202.17	ug/L		98
105)	tert-butylbenzene	15.711	134	1215236	221.81	ug/L	#	88
106)	1,2,4-trimethylbenzene	15.763	105	5698802	197.16	ug/L		95
107)	sec-butylbenzene	15.931	105	7304064	208.26	ug/L		98
108)	p-isopropyltoluene	16.067	119	6526719	210.45	ug/l		97
109)	benzyl chloride	16.292	91	3163466	193.38	ug/L		99
110)	1,3-dichlorobenzene	16.103	146	3661587	188.89	ug/L		99
111)	1,4-dichlorobenzene	16.203	146	3675147	184.08	ug/L		98
112)	1,2-dichlorobenzene	16.584	146	3528672	193.19	ug/L		100
113)	n-butylbenzene	16.490	92	3282216	211.70	ug/L		95
114)	hexachloroethane	16.898	201	1493107	212.17	ug/L		98
115)	1,2-dibromo-3-chloropr...	15.172	157	137754	168.60	ug/L	#	68
116)	1,3,5-Trichlorobenzene	17.526	180	2872183	184.63	ug/L		99
117)	1,2,4-trichlorobenzene	18.054	180	2315878	177.05	ug/L		98
118)	2-ethylhexyl acrylate	18.065	55	366309	45.31	ug/L		95

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216451.D
Acq On : 27 Oct 2017 12:38 am
Operator : PrashanS
Sample : IC8691-200
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 27 10:05:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	1536902	181.26	ug/L	98
120) naphthalene	18.284	128	4559597	184.56	ug/L	98
121) 1,2,3-trichlorobenzene	18.457	180	2228631	175.70	ug/L	98
122) 2-methylnaphthalene	19.189	142	1604937	87.80	ug/L	100

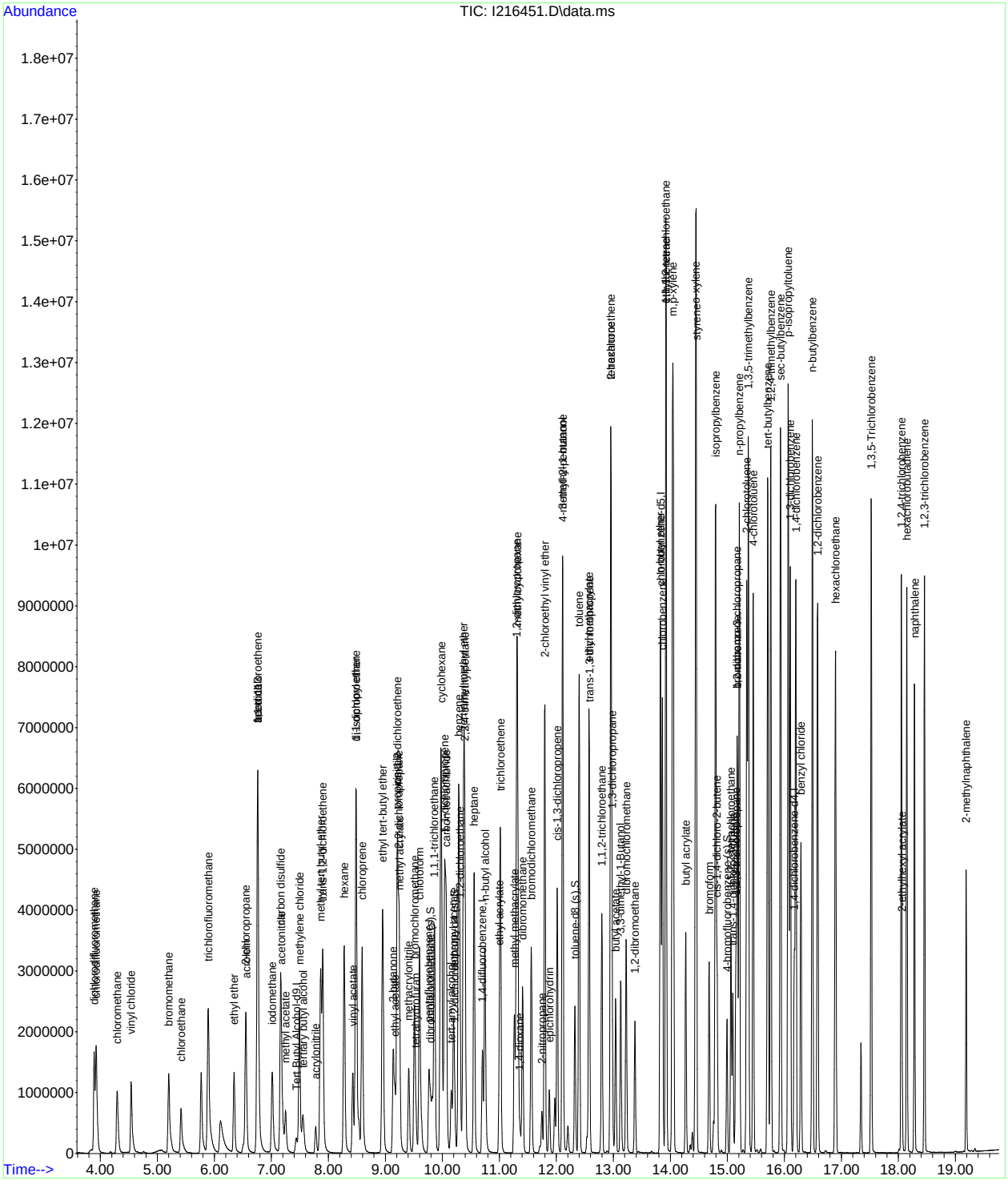
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216451.D
Acq On : 27 Oct 2017 12:38 am
Operator : PrashanS
Sample : IC8691-200
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 27 10:05:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 10:01:23 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216454.D
Acq On : 27 Oct 2017 1:58 am
Operator : PrashanS
Sample : ICV8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 31 15:22:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	282896	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	751335	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.706	114	1032316	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	898251	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	509274	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	394027	50.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 101.06%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	429946	51.17	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 102.34%			
72) toluene-d8 (s)	12.322	98	1133622	50.18	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%			
96) 4-bromofluorobenzene (s)	14.989	95	426372	52.58	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 105.16%			
Target Compounds						Qvalue
20) acetonitrile	7.175	41	272323	476.00	ug/L	99

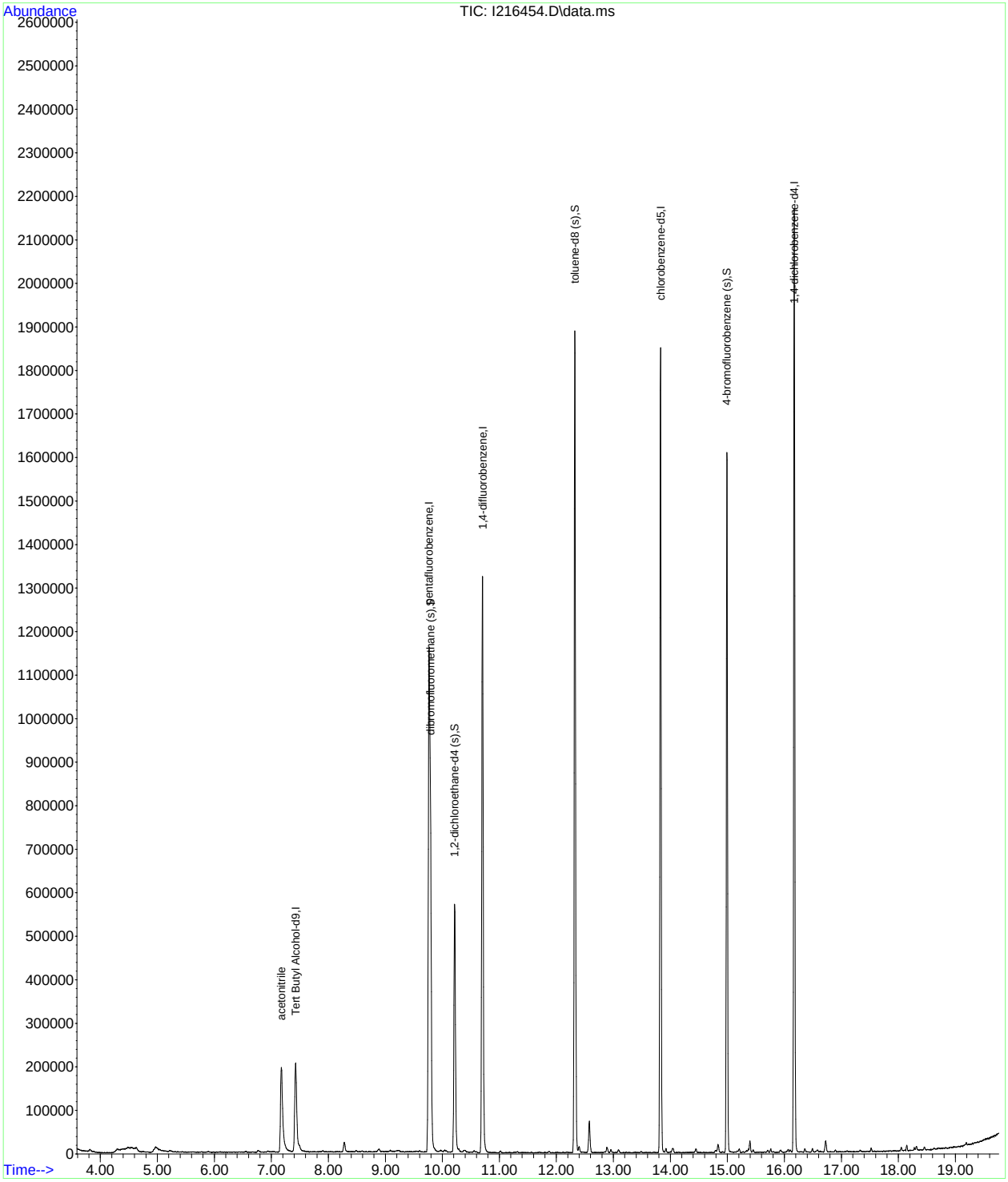
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216454.D
Acq On : 27 Oct 2017 1:58 am
Operator : PrashanS
Sample : ICV8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 31 15:22:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216455.D
Acq On : 27 Oct 2017 2:24 am
Operator : PrashanS
Sample : ICV8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 27 11:13:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	308388	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	785070	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1141113	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	969742	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	616077	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	408887	50.18	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 100.36%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	454519	48.93	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 97.86%				
72) toluene-d8 (s)	12.327	98	1215753	49.85	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.70%				
96) 4-bromofluorobenzene (s)	14.989	95	468275	47.74	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 95.48%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.547	59	165574	243.73	ug/L		96
3) 1,4-dioxane	11.354	88	87532	1342.69	ug/L		94
5) dichlorodifluoromethane	3.896	85	376657	40.00	ug/L		98
6) chlorodifluoromethane	3.927	51	242143	29.84	ug/L		99
7) chloromethane	4.293	50	266468	42.37	ug/L		99
8) vinyl chloride	4.544	62	257111	40.88	ug/L		98
9) bromomethane	5.214	94	209824	42.97	ug/L		92
10) chloroethane	5.423	64	163786	47.49	ug/L		97
11) trichlorofluoromethane	5.894	101	565652	45.37	ug/L		100
12) ethyl ether	6.344	74	118715	49.38	ug/L		98
13) 2-chloropropane	6.558	63	90105	44.26	ug/L		92
14) acrolein	6.563	56	9445	12.94	ug/L		74
15) freon 113	6.762	151	228183	44.34	ug/L		98
16) 1,1-dichloroethene	6.762	61	360515	43.08	ug/L		97
17) acetone	6.757	58	76329	178.13	ug/L		94
18) iodomethane	7.018	142	314334	43.39	ug/L		98
19) carbon disulfide	7.165	76	705461	37.88	ug/L		99
20) acetonitrile	7.175	41	268004	448.32	ug/L		98
21) methyl acetate	7.254	74	35195	47.53	ug/L		93
22) methylene chloride	7.494	84	246657	45.57	ug/L		98
23) acrylonitrile	7.782	53	66597	48.27	ug/L		98
24) methyl tert butyl ether	7.866	73	1465702	102.26	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	360529	46.27	ug/L		98
26) hexane	8.279	57	257740	33.88	ug/L		98
27) 1,1-dichloroethane	8.488	63	453815	47.19	ug/L		98
28) vinyl acetate	8.431	86	38576	50.86	ug/L	#	94
29) di-isopropyl ether	8.483	45	710546	51.45	ug/L		98
30) chloroprene	8.593	53	440742	50.23	ug/L		99
31) ethyl tert-butyl ether	8.954	59	769176	51.91	ug/L		99
32) 2-butanone	9.137	72	104082	202.78	ug/L		98
33) 2,2-dichloropropane	9.236	77	491251	45.40	ug/L		99
34) ethyl acetate	9.168	45	32708	47.41	ug/L	#	88
35) cis-1,2-dichloroethene	9.210	96	290941	45.53	ug/L		98
36) propionitrile	9.205	54	318745	454.63	ug/L		99
37) methyl acrylate	9.252	85	37155	51.44	ug/L		96
38) methacrylonitrile	9.414	67	85822	48.98	ug/L		100
39) bromochloromethane	9.513	128	148891	48.61	ug/L		90
40) tetrahydrofuran	9.539	71	27545	45.12	ug/L		99
41) chloroform	9.602	83	560204	45.58	ug/L		99
42) carbon tetrachloride	10.068	117	535641	47.07	ug/L		98
43) 1,1-dichloropropene	10.041	75	391926	47.81	ug/L		99
46) 1,1,1-trichloroethane	9.864	97	560648	46.64	ug/L		98
47) cyclohexane	9.984	84	346825	49.34	ug/L	#	81
48) tert-amyl alcohol	10.151	55	57448	250.48	ug/L		98
51) isopropyl acetate	10.193	87	49007	50.51	ug/L	#	79

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216455.D
Acq On : 27 Oct 2017 2:24 am
Operator : PrashanS
Sample : ICV8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 27 11:13:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	1,2-dichloroethane	10.308	62	459412	48.45	ug/L		99
53)	benzene	10.287	78	975345	46.04	ug/L		98
54)	2,2,4-trimethylpentane	10.392	57	910668	48.47	ug/L		99
55)	tert-amyl methyl ether	10.371	87	194689	51.27	ug/L		92
56)	heptane	10.559	57	200299	51.19	ug/L		98
57)	n-butyl alcohol	10.742	56	407909	2728.87	ug/L		98
58)	trichloroethene	11.020	95	305390	47.97	ug/L		96
59)	ethyl acrylate	10.999	55	263997	52.12	ug/L		99
60)	methylcyclohexane	11.318	83	437133	45.75	ug/L		99
61)	1,2-dichloropropane	11.302	63	248028	50.29	ug/L		97
62)	methyl methacrylate	11.265	100	65684	52.63	ug/L	#	84
63)	dibromomethane	11.407	93	184226	49.15	ug/L		98
64)	bromodichloromethane	11.558	83	437809	50.11	ug/L		100
65)	2-nitropropane	11.746	41	83772	48.11	ug/L		99
66)	2-chloroethyl vinyl ether	11.794	63	646448	280.84	ug/L		99
67)	epichlorohydrin	11.872	57	125271	249.13	ug/L		99
68)	cis-1,3-dichloropropene	12.013	75	444429	50.21	ug/L		98
69)	4-methyl-2-pentanone	12.107	58	307553	204.52	ug/L		98
70)	3-methyl-1-butanol	12.107	70	140440	1020.66	ug/L		98
73)	toluene	12.400	92	628283	47.48	ug/L		97
74)	trans-1,3-dichloropropene	12.578	75	433027	48.79	ug/L		98
75)	ethyl methacrylate	12.573	69	258955	51.28	ug/L		99
76)	1,1,2-trichloroethane	12.798	83	183124	51.26	ug/L		96
77)	1,3-dichloropropane	12.976	76	364511	51.49	ug/L		100
78)	tetrachloroethene	12.955	166	445772	58.15	ug/L		99
79)	2-hexanone	12.955	58	292405	191.93	ug/L		99
80)	butyl acetate	13.038	56	125931	51.94	ug/L		95
81)	3,3-dimethyl-1-Butanol	13.127	69	168604	528.94	ug/L		98
82)	n-butyl ether	13.823	57	827417	47.75	ug/L		100
83)	dibromochloromethane	13.221	129	366436	52.23	ug/L		99
84)	1,2-dibromoethane	13.378	107	264291	52.24	ug/L		99
85)	chlorobenzene	13.860	112	746287	47.72	ug/L		100
86)	1,1,1,2-tetrachloroethane	13.922	131	330316	50.88	ug/L		98
87)	ethylbenzene	13.922	91	1208291	47.98	ug/L		100
88)	m,p-xylene	14.043	106	947951	96.85	ug/L		99
89)	o-xylene	14.440	106	464488	49.70	ug/L		99
90)	styrene	14.451	104	787740	51.86	ug/L		99
91)	butyl acrylate	14.267	55	369511	51.16	ug/L		99
92)	cis-1,4-dichloro-2-butene	14.817	88	146656	47.71	ug/L		97
93)	bromoform	14.681	173	264590	52.71	ug/L		98
94)	isopropylbenzene	14.791	105	1249708	50.94	ug/L		100
97)	1,1,2,2-tetrachloroethane	15.062	83	276937	50.34	ug/L		98
98)	trans-1,4-dichloro-2-b...	15.094	53	94006	51.29	ug/L		93
99)	1,2,3-trichloropropane	15.146	110	91400	49.29	ug/L		98
100)	bromobenzene	15.172	156	382181	47.71	ug/L		97
101)	n-propylbenzene	15.209	91	1432698	48.74	ug/L		100
102)	2-chlorotoluene	15.340	126	322826	49.27	ug/L		99
103)	4-chlorotoluene	15.450	91	904928	48.08	ug/L		99
104)	1,3,5-trimethylbenzene	15.366	105	1092050	50.42	ug/L		99
105)	tert-butylbenzene	15.711	134	229770	53.24	ug/L		91
106)	1,2,4-trimethylbenzene	15.758	105	1129398	49.61	ug/L		97
107)	sec-butylbenzene	15.931	105	1427310	51.67	ug/L		99
108)	p-isopropyltoluene	16.067	119	1307279	53.52	ug/l		100
109)	benzyl chloride	16.292	91	537737	43.13	ug/L		99
110)	1,3-dichlorobenzene	16.103	146	721851	47.28	ug/L		99
111)	1,4-dichlorobenzene	16.197	146	720838	45.84	ug/L		99
112)	1,2-dichlorobenzene	16.584	146	706961	49.14	ug/L		97
113)	n-butylbenzene	16.490	92	641463	52.53	ug/L		100
114)	hexachloroethane	16.898	201	281409	49.03	ug/L		98
115)	1,2-dibromo-3-chloropr...	15.172	157	27699	48.07	ug/L		79
116)	1,3,5-Trichlorobenzene	17.526	180	606244	49.48	ug/L		99
117)	1,2,4-trichlorobenzene	18.049	180	482432	49.55	ug/L		98
118)	2-ethylhexyl acrylate	18.065	55	83484	12.74	ug/L		94

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216455.D
Acq On : 27 Oct 2017 2:24 am
Operator : PrashanS
Sample : ICV8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 27 11:13:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	321091	48.08	ug/L	99
120) naphthalene	18.279	128	959287	53.16	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	484976	50.21	ug/L	98
122) 2-methylnaphthalene	19.189	142	352472	24.76	ug/L	96

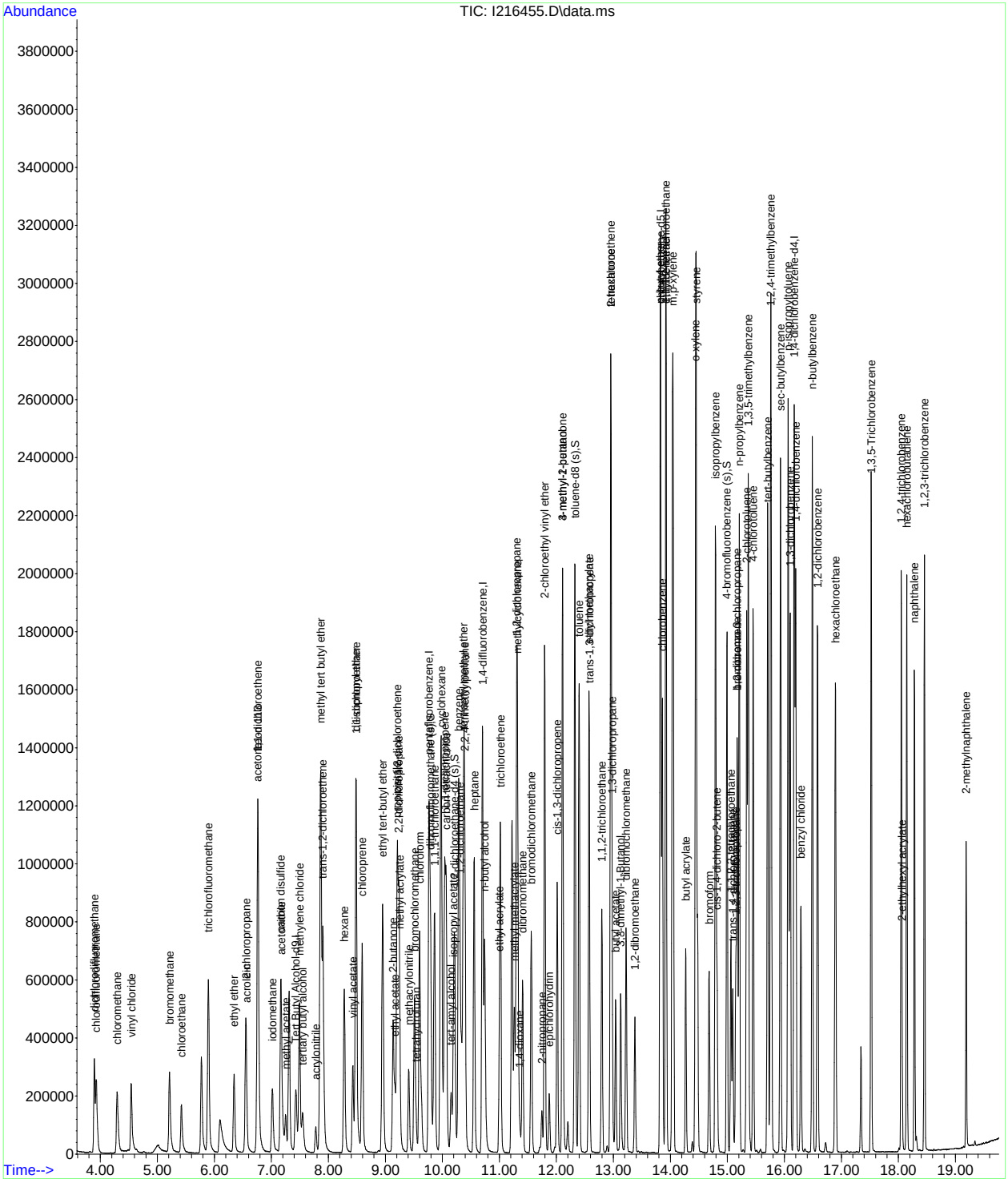
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\VI8691FINAL\
Data File : I216455.D
Acq On : 27 Oct 2017 2:24 am
Operator : PrashanS
Sample : ICV8691-50
Misc : MS21115,VI8691,5.0,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 27 11:13:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216593.d
Acq On : 3 Nov 2017 8:53 pm
Operator : PrashanS
Sample : cc8691-50
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 06 12:32:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	298178	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	764994	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	1107911	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	934855	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	591355	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	393155	49.52	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.04%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	476105	52.79	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 105.58%				
72) toluene-d8 (s)	12.322	98	1162528	49.45	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.90%				
96) 4-bromofluorobenzene (s)	14.989	95	457544	48.60	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 97.20%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.547	59	163447	248.83	ug/L		98
3) 1,4-dioxane	11.349	88	77947	1236.60	ug/L		94
5) dichlorodifluoromethane	3.896	85	417632	45.52	ug/L		98
6) chlorodifluoromethane	3.927	51	346294	43.80	ug/L		98
7) chloromethane	4.299	50	256860	41.92	ug/L		98
8) vinyl chloride	4.544	62	273050	44.55	ug/L		98
9) bromomethane	5.219	94	201870	42.43	ug/L		94
10) chloroethane	5.423	64	156222	46.48	ug/L		98
11) trichlorofluoromethane	5.894	101	561915	46.25	ug/L		98
12) ethyl ether	6.344	74	116676	49.81	ug/L		96
13) 2-chloropropane	6.553	63	93891	47.33	ug/L		98
14) acrolein	6.563	56	36902	51.90	ug/L		97
15) freon 113	6.762	151	202034	40.29	ug/L		96
16) 1,1-dichloroethene	6.767	61	379074	46.49	ug/L		97
17) acetone	6.762	58	87172	208.78	ug/L		98
18) iodomethane	7.018	142	327554	46.40	ug/L		96
19) carbon disulfide	7.165	76	718131	39.57	ug/L		99
20) acetonitrile	7.175	41	261356	448.67	ug/L		99
21) methyl acetate	7.248	74	35569	49.29	ug/L	#	91
22) methylene chloride	7.494	84	232138	44.01	ug/L		98
23) acrylonitrile	7.777	53	62964	46.84	ug/L		92
24) methyl tert butyl ether	7.866	73	692401	49.57	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	352460	46.42	ug/L		98
26) hexane	8.279	57	292138	39.41	ug/L		100
27) 1,1-dichloroethane	8.483	63	424171	45.26	ug/L		99
28) vinyl acetate	8.430	86	37768	51.10	ug/L	#	83
29) di-isopropyl ether	8.483	45	674788	50.14	ug/L		99
30) chloroprene	8.593	53	414677	48.50	ug/L		98
31) ethyl tert-butyl ether	8.953	59	737824	51.10	ug/L		98
32) 2-butanone	9.136	72	102438	204.82	ug/L		97
33) 2,2-dichloropropane	9.236	77	477992	45.33	ug/L		99
34) ethyl acetate	9.168	45	31548	46.93	ug/L		99
35) cis-1,2-dichloroethene	9.210	96	265388	42.62	ug/L		92
36) propionitrile	9.204	54	330856	484.29	ug/L		99
37) methyl acrylate	9.246	85	34044	48.37	ug/L		90
38) methacrylonitrile	9.414	67	83941	49.17	ug/L		100
39) bromochloromethane	9.513	128	135889	45.53	ug/L		90
40) tetrahydrofuran	9.534	71	26708	44.89	ug/L		95
41) chloroform	9.602	83	523516	43.71	ug/L		99
42) carbon tetrachloride	10.067	117	521311	47.01	ug/L		100
43) 1,1-dichloropropene	10.036	75	375102	46.96	ug/L		97
46) 1,1,1-trichloroethane	9.864	97	540310	46.12	ug/L		99
47) cyclohexane	9.984	84	328949	48.03	ug/L	#	79
48) tert-amyl alcohol	10.151	55	56293	251.88	ug/L		95
51) isopropyl acetate	10.198	87	46624	49.49	ug/L	#	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216593.d
Acq On : 3 Nov 2017 8:53 pm
Operator : PrashanS
Sample : cc8691-50
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 06 12:32:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	1,2-dichloroethane	10.308	62	446797	48.53	ug/L		100
53)	benzene	10.287	78	904532	43.98	ug/L		99
54)	2,2,4-trimethylpentane	10.392	57	810756	44.44	ug/L		99
55)	tert-amyl methyl ether	10.371	87	185687	50.36	ug/L		96
56)	heptane	10.559	57	165743	43.63	ug/L		96
57)	n-butyl alcohol	10.742	56	389159	2681.45	ug/L		96
58)	trichloroethene	11.019	95	277874	44.95	ug/L		94
59)	ethyl acrylate	10.998	55	255226	51.90	ug/L		97
60)	methylcyclohexane	11.318	83	422641	45.56	ug/L		97
61)	1,2-dichloropropane	11.297	63	223766	46.73	ug/L		98
62)	methyl methacrylate	11.265	100	59287	48.93	ug/L	#	86
63)	dibromomethane	11.406	93	175006	48.09	ug/L		87
64)	bromodichloromethane	11.558	83	409171	48.23	ug/L		99
65)	2-nitropropane	11.746	41	79353	46.94	ug/L		93
66)	2-chloroethyl vinyl ether	11.793	63	540666	241.93	ug/L		99
67)	epichlorohydrin	11.872	57	119968	245.74	ug/L		100
68)	cis-1,3-dichloropropene	12.013	75	421804	49.08	ug/L		99
69)	4-methyl-2-pentanone	12.107	58	306300	209.79	ug/L		98
70)	3-methyl-1-butanol	12.107	70	140488	1051.61	ug/L		97
73)	toluene	12.400	92	574435	45.03	ug/L		96
74)	trans-1,3-dichloropropene	12.578	75	417588	48.80	ug/L		99
75)	ethyl methacrylate	12.568	69	256738	52.74	ug/L		97
76)	1,1,2-trichloroethane	12.798	83	169560	49.24	ug/L		97
77)	1,3-dichloropropane	12.976	76	349876	51.27	ug/L		98
78)	tetrachloroethene	12.955	166	316365	42.81	ug/L		95
79)	2-hexanone	12.955	58	337153	229.57	ug/L		95
80)	butyl acetate	13.038	56	116569	49.88	ug/L		91
81)	3,3-dimethyl-1-Butanol	13.127	69	162511	528.85	ug/L		98
82)	n-butyl ether	13.823	57	819255	49.05	ug/L		98
83)	dibromochloromethane	13.221	129	332948	49.23	ug/L		98
84)	1,2-dibromoethane	13.378	107	244835	50.20	ug/L		100
85)	chlorobenzene	13.859	112	673732	44.69	ug/L		99
86)	1,1,1,2-tetrachloroethane	13.922	131	305234	48.78	ug/L		99
87)	ethylbenzene	13.922	91	1115145	45.93	ug/L		99
88)	m,p-xylene	14.042	106	891494	94.48	ug/L		97
89)	o-xylene	14.440	106	443562	49.23	ug/L		98
90)	styrene	14.450	104	744678	50.86	ug/L		99
91)	butyl acrylate	14.267	55	368050	52.86	ug/L		100
92)	cis-1,4-dichloro-2-butene	14.817	88	158093	53.35	ug/L		97
93)	bromoform	14.681	173	236832	48.94	ug/L		98
94)	isopropylbenzene	14.790	105	1168899	49.42	ug/L		99
97)	1,1,2,2-tetrachloroethane	15.062	83	261743	49.57	ug/L		97
98)	trans-1,4-dichloro-2-b...	15.094	53	87768	49.89	ug/L		95
99)	1,2,3-trichloropropane	15.146	110	86194	48.42	ug/L		98
100)	bromobenzene	15.172	156	335319	43.61	ug/L		95
101)	n-propylbenzene	15.209	91	1373050	48.66	ug/L		99
102)	2-chlorotoluene	15.340	126	299023	47.54	ug/L		99
103)	4-chlorotoluene	15.449	91	887011	49.10	ug/L		100
104)	1,3,5-trimethylbenzene	15.366	105	1032436	49.66	ug/L		99
105)	tert-butylbenzene	15.706	134	207273	50.04	ug/L		98
106)	1,2,4-trimethylbenzene	15.758	105	1063191	48.65	ug/L		99
107)	sec-butylbenzene	15.931	105	1337408	50.44	ug/L		99
108)	p-isopropyltoluene	16.067	119	1205288	51.40	ug/l		99
109)	benzyl chloride	16.286	91	688940	57.57	ug/L		98
110)	1,3-dichlorobenzene	16.098	146	670627	45.76	ug/L		97
111)	1,4-dichlorobenzene	16.197	146	689604	45.69	ug/L		97
112)	1,2-dichlorobenzene	16.579	146	649176	47.01	ug/L		96
113)	n-butylbenzene	16.490	92	614664	52.44	ug/L		98
114)	hexachloroethane	16.893	201	242473	44.01	ug/L		82
115)	1,2-dibromo-3-chloropr...	15.172	157	25250	45.66	ug/L		85
116)	1,3,5-Trichlorobenzene	17.521	180	598083	50.85	ug/L		100
117)	1,2,4-trichlorobenzene	18.049	180	525011	56.18	ug/L		100
118)	2-ethylhexyl acrylate	18.065	55	72042	11.46	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216593.d
Acq On : 3 Nov 2017 8:53 pm
Operator : PrashanS
Sample : cc8691-50
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 06 12:32:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

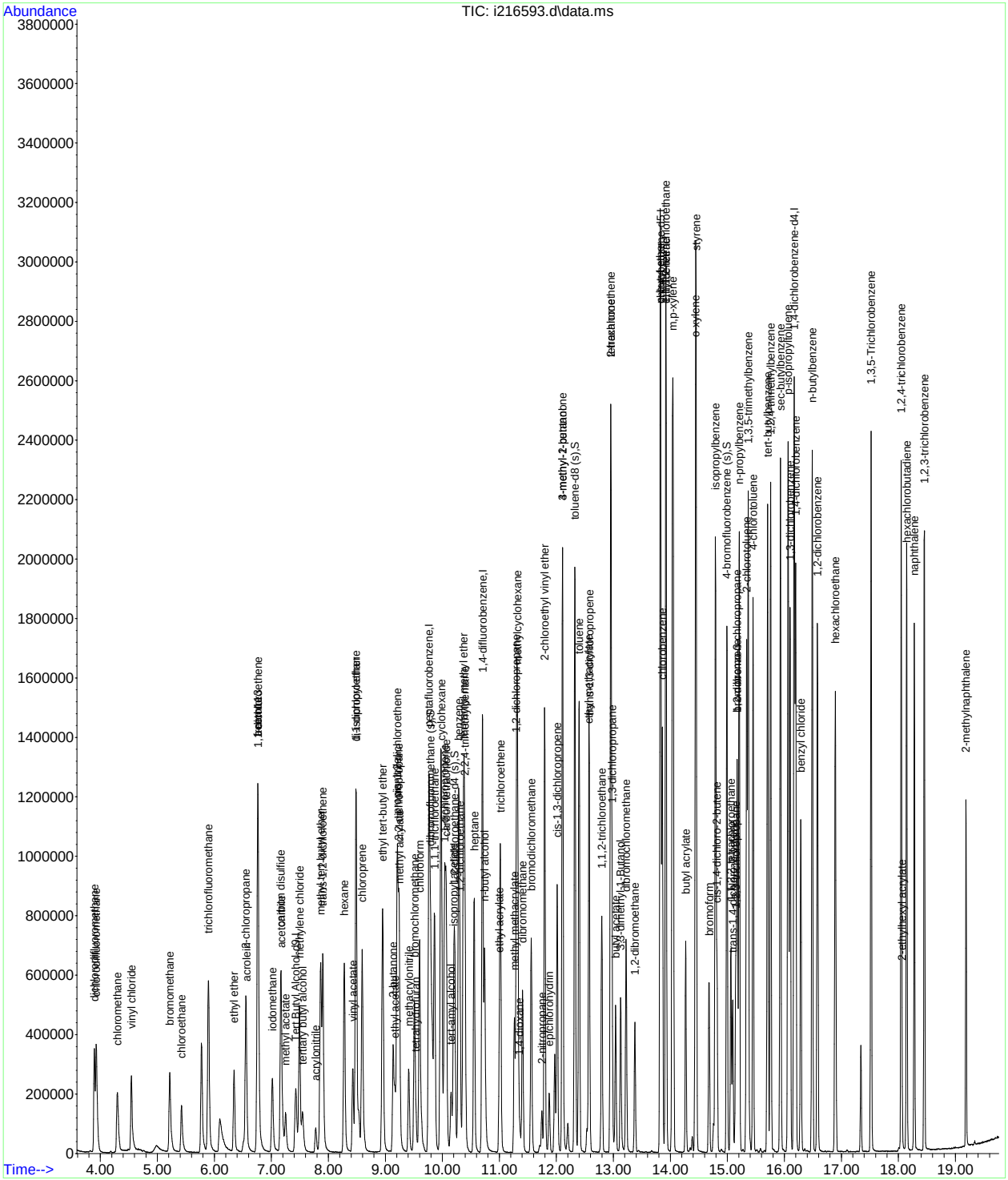
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	329064	51.33	ug/L	97
120) naphthalene	18.279	128	979368	56.55	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	511581	55.17	ug/L	99
122) 2-methylnaphthalene	19.184	142	399678	29.25	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8698\
Data File : i216593.d
Acq On : 3 Nov 2017 8:53 pm
Operator : PrashanS
Sample : cc8691-50
Misc : MS21711,VI8698,5.0,,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 06 12:32:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216618.d
Acq On : 4 Nov 2017 1:45 pm
Operator : PrashanS
Sample : cc8691-20 Inst : GCMSI
Misc : MS21830,VI8699,5.0,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 07:56:14 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.426	65	255545	500.00	ug/L	-0.01
4) pentafluorobenzene	9.764	168	694203	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.706	114	968667	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	818682	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	495285	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	356855	49.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 99.06%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	445778	56.54	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 113.08%			
72) toluene-d8 (s)	12.322	98	1026619	49.86	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.72%			
96) 4-bromofluorobenzene (s)	14.989	95	403122	51.12	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 102.24%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.546	59	58361	103.67	ug/L	99
3) 1,4-dioxane	11.344	88	28691	531.11	ug/L	90
5) dichlorodifluoromethane	3.896	85	188453	22.64	ug/L	98
6) chlorodifluoromethane	3.932	51	146091	20.36	ug/L	97
7) chloromethane	4.293	50	108926	19.59	ug/L	99
8) vinyl chloride	4.544	62	112969	20.31	ug/L	95
9) bromomethane	5.219	94	78726	18.23	ug/L	96
10) chloroethane	5.428	64	61672	20.22	ug/L	97
11) trichlorofluoromethane	5.899	101	235247	21.34	ug/L	97
12) ethyl ether	6.349	74	43939	20.67	ug/L	90
13) 2-chloropropane	6.558	63	37296	20.72	ug/L	95
14) acrolein	6.563	56	11370	17.62	ug/L	96
15) freon 113	6.767	151	81945	18.01	ug/L	96
16) 1,1-dichloroethene	6.767	61	153645	20.76	ug/L	94
17) acetone	6.767	58	26884	70.95	ug/L	89
18) iodomethane	7.018	142	108412	16.92	ug/L	92
19) carbon disulfide	7.165	76	283322	17.20	ug/L	99
20) acetonitrile	7.175	41	96684	182.90	ug/L	98
21) methyl acetate	7.254	74	12637	19.30	ug/L	99
22) methylene chloride	7.494	84	91170	19.05	ug/L	96
23) acrylonitrile	7.777	53	22377	18.34	ug/L	96
24) methyl tert butyl ether	7.866	73	263660	20.80	ug/L	99
25) trans-1,2-dichloroethene	7.902	61	139202	20.20	ug/L	89
26) hexane	8.284	57	112991	16.80	ug/L	97
27) 1,1-dichloroethane	8.488	63	169817	19.97	ug/L	99
28) vinyl acetate	8.430	86	12144	18.11	ug/L #	90
29) di-isopropyl ether	8.483	45	251376	20.58	ug/L	95
30) chloroprene	8.593	53	159019	20.49	ug/L	96
31) ethyl tert-butyl ether	8.953	59	274034	20.91	ug/L	98
32) 2-butanone	9.136	72	34736	76.53	ug/L	98
33) 2,2-dichloropropane	9.236	77	192128	20.08	ug/L	96
34) ethyl acetate	9.168	45	11711	19.20	ug/L #	73
35) cis-1,2-dichloroethene	9.210	96	103100	18.24	ug/L	92
36) propionitrile	9.204	54	122315	197.29	ug/L	98
37) methyl acrylate	9.252	85	11510	18.02	ug/L #	84
38) methacrylonitrile	9.408	67	29630	19.13	ug/L	93
39) bromochloromethane	9.513	128	51803	19.13	ug/L	93
40) tetrahydrofuran	9.534	71	9690	17.95	ug/L	86
41) chloroform	9.602	83	206261	18.98	ug/L	99

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216618.d
Acq On : 4 Nov 2017 1:45 pm
Operator : PrashanS
Sample : cc8691-20 Inst : GCMSI
Misc : MS21830,VI8699,5.0,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 07:56:14 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) carbon tetrachloride	10.067	117	209788	20.85	ug/L		99
43) 1,1-dichloropropene	10.036	75	144561	19.94	ug/L		94
46) 1,1,1-trichloroethane	9.858	97	219716	20.67	ug/L		98
47) cyclohexane	9.984	84	106622	17.16	ug/L		92
48) tert-amyl alcohol	10.151	55	20020	98.71	ug/L		96
51) isopropyl acetate	10.198	87	16812	20.41	ug/L	#	93
52) 1,2-dichloroethane	10.308	62	179350	22.28	ug/L		98
53) benzene	10.287	78	345090	19.19	ug/L		99
54) 2,2,4-trimethylpentane	10.392	57	320650	20.10	ug/L		99
55) tert-amyl methyl ether	10.371	87	67016	20.79	ug/L		98
56) heptane	10.559	57	64472	19.41	ug/L		99
57) n-butyl alcohol	10.742	56	125441	988.58	ug/L		96
58) trichloroethene	11.019	95	105121	19.45	ug/L		86
59) ethyl acrylate	10.998	55	89111	20.72	ug/L		98
60) methylcyclohexane	11.317	83	162784	20.07	ug/L		94
61) 1,2-dichloropropane	11.297	63	84959	20.29	ug/L		95
62) methyl methacrylate	11.265	100	20997	19.82	ug/L		97
63) dibromomethane	11.406	93	66928	21.04	ug/L		92
64) bromodichloromethane	11.558	83	159628	21.52	ug/L		98
65) 2-nitropropane	11.746	41	31508	21.32	ug/L		96
66) 2-chloroethyl vinyl ether	11.793	63	223326	114.29	ug/L		99
67) epichlorohydrin	11.872	57	46617	109.21	ug/L		95
68) cis-1,3-dichloropropene	12.013	75	152900	20.35	ug/L		95
69) 4-methyl-2-pentanone	12.112	58	111308	87.20	ug/L		95
70) 3-methyl-1-butanol	12.107	70	47191	404.02	ug/L		85
73) toluene	12.400	92	216995	19.42	ug/L		100
74) trans-1,3-dichloropropene	12.573	75	155198	20.71	ug/L		97
75) ethyl methacrylate	12.573	69	89401	20.97	ug/L		95
76) 1,1,2-trichloroethane	12.798	83	62207	20.63	ug/L		96
77) 1,3-dichloropropane	12.975	76	129024	21.59	ug/L		99
78) tetrachloroethene	12.955	166	115981	17.92	ug/L		96
79) 2-hexanone	12.955	58	104503	81.25	ug/L		98
80) butyl acetate	13.038	56	42088	20.56	ug/L		94
81) 3,3-dimethyl-1-Butanol	13.127	69	53210	197.73	ug/L		98
82) n-butyl ether	13.823	57	287698	19.67	ug/L		94
83) dibromochloromethane	13.221	129	124783	21.07	ug/L		98
84) 1,2-dibromoethane	13.378	107	91103	21.33	ug/L		96
85) chlorobenzene	13.859	112	249169	18.87	ug/L		98
86) 1,1,1,2-tetrachloroethane	13.922	131	112298	20.49	ug/L		94
87) ethylbenzene	13.922	91	407851	19.18	ug/L		100
88) m,p-xylene	14.042	106	317474	38.42	ug/L		93
89) o-xylene	14.440	106	156010	19.77	ug/L		96
90) styrene	14.450	104	258714	20.18	ug/L		98
91) butyl acrylate	14.267	55	122057	20.02	ug/L		97
92) cis-1,4-dichloro-2-butene	14.817	88	57822	22.28	ug/L		94
93) bromoform	14.675	173	85073	20.07	ug/L		98
94) isopropylbenzene	14.790	105	406149	19.61	ug/L		98
97) 1,1,2,2-tetrachloroethane	15.062	83	96044	21.72	ug/L		95
98) trans-1,4-dichloro-2-b...	15.094	53	31798	21.58	ug/L		94
99) 1,2,3-trichloropropane	15.146	110	32172	21.58	ug/L		94
100) bromobenzene	15.172	156	121612	18.88	ug/L		93
101) n-propylbenzene	15.209	91	488117	20.66	ug/L		98
102) 2-chlorotoluene	15.340	126	104811	19.90	ug/L		94
103) 4-chlorotoluene	15.449	91	311077	20.56	ug/L		99
104) 1,3,5-trimethylbenzene	15.366	105	360182	20.69	ug/L		98
105) tert-butylbenzene	15.706	134	70611	20.35	ug/L		97
106) 1,2,4-trimethylbenzene	15.758	105	361906	19.77	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216618.d
Acq On : 4 Nov 2017 1:45 pm
Operator : PrashanS
Sample : cc8691-20 Inst : GCMSI
Misc : MS21830,VI8699,5.0,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 07:56:14 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) sec-butylbenzene	15.931	105	454131	20.45	ug/L	100
108) p-isopropyltoluene	16.067	119	400512	20.39	ug/l	98
109) benzyl chloride	16.286	91	218079	21.76	ug/L	96
110) 1,3-dichlorobenzene	16.098	146	229940	18.73	ug/L	97
111) 1,4-dichlorobenzene	16.197	146	233779	18.49	ug/L	96
112) 1,2-dichlorobenzene	16.579	146	223126	19.29	ug/L	98
113) n-butylbenzene	16.490	92	203059	20.68	ug/L	97
114) hexachloroethane	16.893	201	85786	18.59	ug/L	87
115) 1,2-dibromo-3-chloropr...	15.172	157	9226	19.92	ug/L	82
116) 1,3,5-Trichlorobenzene	17.521	180	188948	19.18	ug/L	99
117) 1,2,4-trichlorobenzene	18.049	180	166288	21.25	ug/L	99
118) 2-ethylhexyl acrylate	18.064	55	20995	3.99	ug/L	91
119) hexachlorobutadiene	18.148	225	112169	20.89	ug/L	97
120) naphthalene	18.279	128	325585	22.44	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	167780	21.61	ug/L	99
122) 2-methylnaphthalene	19.184	142	124974	10.92	ug/L	96

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

7.7.54

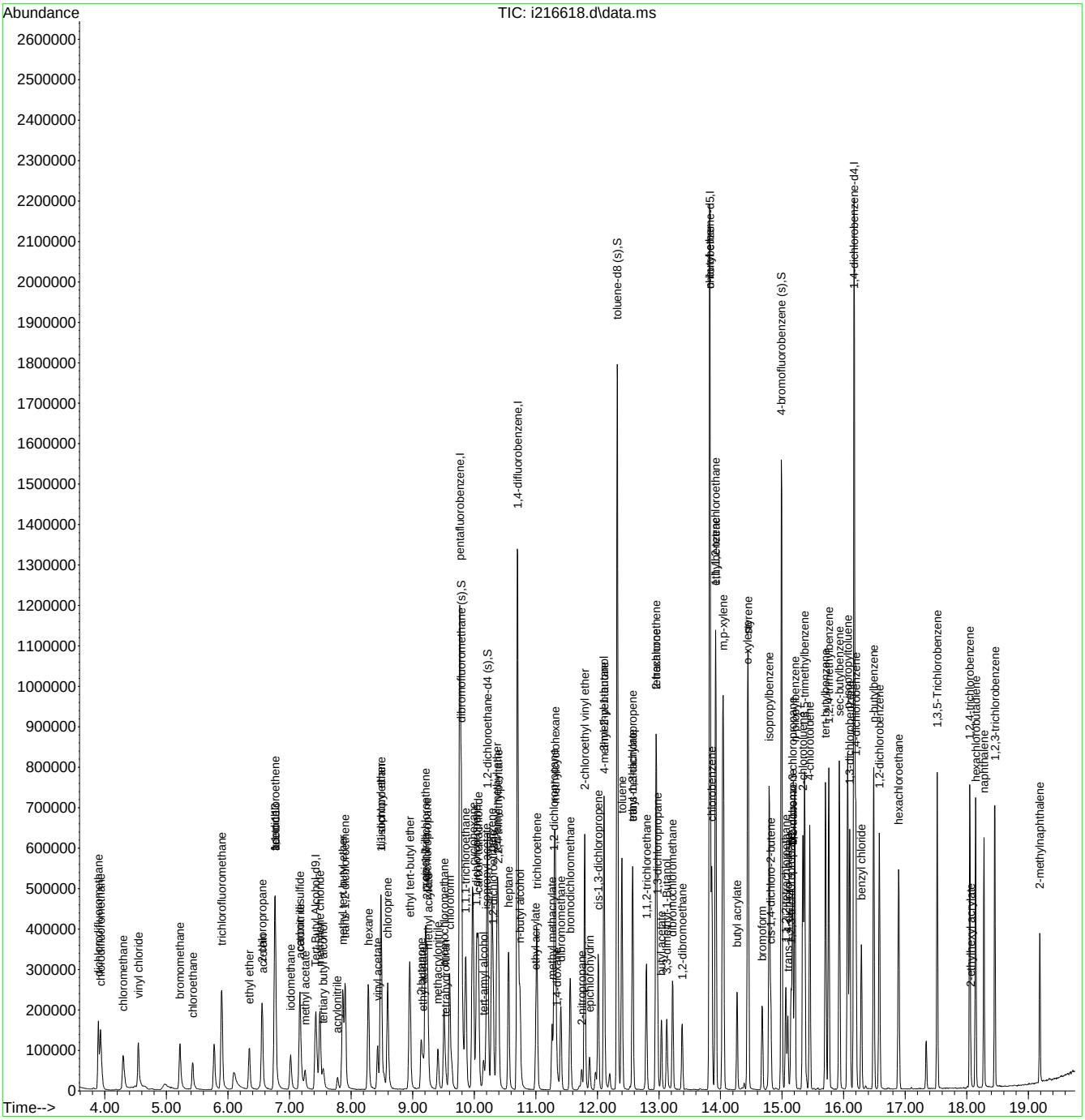
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SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\vi8699\
Data File : i216618.d
Acq On : 4 Nov 2017 1:45 pm
Operator : PrashanS
Sample : cc8691-20 Inst : GCMSI
Misc : MS21830,VI8699,5.0,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Results File: MI8691.RES
Quant Time: Nov 07 07:56:14 2017
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216644.d
Acq On : 6 Nov 2017 1:07 pm
Operator : PrashanS
Sample : cc8691-20
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 07 12:34:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.426	65	269607	500.00	ug/L		-0.01
4) pentafluorobenzene	9.764	168	715716	50.00	ug/L		0.00
49) 1,4-difluorobenzene	10.706	114	997472	50.00	ug/L		0.00
71) chlorobenzene-d5	13.828	117	847575	50.00	ug/L		0.00
95) 1,4-dichlorobenzene-d4	16.171	152	516815	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	9.790	113	367075	49.41	ug/L		0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.82%				
50) 1,2-dichloroethane-d4 (s)	10.214	65	456070	56.17	ug/L		0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 112.34%				
72) toluene-d8 (s)	12.327	98	1037142	48.66	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.32%				
96) 4-bromofluorobenzene (s)	14.994	95	411435	50.00	ug/L		0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 100.00%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.546	59	58385	98.31	ug/L		93
3) 1,4-dioxane	11.354	88	30428	533.89	ug/L		94
5) dichlorodifluoromethane	3.896	85	211999	24.70	ug/L		98
6) chlorodifluoromethane	3.932	51	148075	20.02	ug/L		99
7) chloromethane	4.304	50	118009	20.58	ug/L		98
8) vinyl chloride	4.550	62	120241	20.97	ug/L		97
9) bromomethane	5.219	94	87604	19.68	ug/L		98
10) chloroethane	5.428	64	66195	21.05	ug/L		94
11) trichlorofluoromethane	5.899	101	255393	22.47	ug/L		98
12) ethyl ether	6.343	74	42582	19.43	ug/L		93
13) 2-chloropropane	6.553	63	36629	19.74	ug/L		96
14) acrolein	6.558	56	13025	19.58	ug/L		99
15) freon 113	6.762	151	85930	18.32	ug/L		97
16) 1,1-dichloroethene	6.767	61	147536	19.34	ug/L		96
17) acetone	6.767	58	28267	72.36	ug/L	#	82
18) iodomethane	7.018	142	114820	17.39	ug/L		91
19) carbon disulfide	7.165	76	280930	16.55	ug/L		99
20) acetonitrile	7.175	41	92072	168.94	ug/L		97
21) methyl acetate	7.248	74	13745	20.36	ug/L	#	82
22) methylene chloride	7.494	84	89860	18.21	ug/L		94
23) acrylonitrile	7.782	53	25378	20.18	ug/L		88
24) methyl tert butyl ether	7.865	73	250960	19.21	ug/L		99
25) trans-1,2-dichloroethene	7.902	61	137589	19.37	ug/L		94
26) hexane	8.279	57	105106	15.15	ug/L		98
27) 1,1-dichloroethane	8.488	63	170143	19.41	ug/L		95
28) vinyl acetate	8.425	86	13747	19.88	ug/L	#	66
29) di-isopropyl ether	8.483	45	237393	18.85	ug/L		97
30) chloroprene	8.598	53	153461	19.18	ug/L		96
31) ethyl tert-butyl ether	8.953	59	253907	18.80	ug/L		97
32) 2-butanone	9.136	72	36476	77.95	ug/L		97
33) 2,2-dichloropropane	9.236	77	192619	19.53	ug/L		99
34) ethyl acetate	9.168	45	11033	17.54	ug/L	#	75
35) cis-1,2-dichloroethene	9.210	96	100499	17.25	ug/L		94
36) propionitrile	9.204	54	122322	191.37	ug/L		98
37) methyl acrylate	9.246	85	12042	18.29	ug/L	#	79
38) methacrylonitrile	9.414	67	28308	17.72	ug/L		98
39) bromochloromethane	9.508	128	53388	19.12	ug/L		95
40) tetrahydrofuran	9.534	71	9058	16.27	ug/L		89
41) chloroform	9.597	83	211496	18.87	ug/L		97
42) carbon tetrachloride	10.067	117	214414	20.67	ug/L		100
43) 1,1-dichloropropene	10.036	75	139736	18.70	ug/L		97
46) 1,1,1-trichloroethane	9.863	97	218387	19.93	ug/L		98
47) cyclohexane	9.984	84	107047	16.71	ug/L		86
48) tert-amyl alcohol	10.151	55	21991	105.17	ug/L		85
51) isopropyl acetate	10.198	87	15658	18.46	ug/L	#	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216644.d
Acq On : 6 Nov 2017 1:07 pm
Operator : PrashanS
Sample : cc8691-20
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 07 12:34:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52)	1,2-dichloroethane	10.308	62	178396	21.52	ug/L	99
53)	benzene	10.287	78	337288	18.21	ug/L	99
54)	2,2,4-trimethylpentane	10.392	57	309179	18.82	ug/L	99
55)	tert-amyl methyl ether	10.371	87	66203	19.94	ug/L	95
56)	heptane	10.559	57	61738	18.05	ug/L	95
57)	n-butyl alcohol	10.742	56	150956	1155.31	ug/L	99
58)	trichloroethene	11.019	95	107281	19.28	ug/L	89
59)	ethyl acrylate	10.998	55	85389	19.28	ug/L	96
60)	methylcyclohexane	11.317	83	159918	19.15	ug/L	98
61)	1,2-dichloropropane	11.302	63	84133	19.52	ug/L	92
62)	methyl methacrylate	11.265	100	19738	18.09	ug/L	95
63)	dibromomethane	11.406	93	67977	20.75	ug/L	90
64)	bromodichloromethane	11.558	83	161429	21.14	ug/L	96
65)	2-nitropropane	11.746	41	30232	19.86	ug/L	93
66)	2-chloroethyl vinyl ether	11.793	63	208456	103.60	ug/L	99
67)	epichlorohydrin	11.872	57	44835	102.01	ug/L	97
68)	cis-1,3-dichloropropene	12.013	75	153631	19.85	ug/L	97
69)	4-methyl-2-pentanone	12.107	58	106367	80.92	ug/L	95
70)	3-methyl-1-butanol	12.107	70	51646	429.39	ug/L	94
73)	toluene	12.400	92	211477	18.28	ug/L	95
74)	trans-1,3-dichloropropene	12.578	75	158311	20.41	ug/L	97
75)	ethyl methacrylate	12.573	69	87404	19.80	ug/L	97
76)	1,1,2-trichloroethane	12.798	83	61615	19.73	ug/L	98
77)	1,3-dichloropropane	12.975	76	130834	21.15	ug/L	98
78)	tetrachloroethene	12.955	166	119874	17.89	ug/L	95
79)	2-hexanone	12.955	58	104749	78.67	ug/L	98
80)	butyl acetate	13.043	56	38406	18.12	ug/L	92
81)	3,3-dimethyl-1-Butanol	13.127	69	55493	199.19	ug/L	96
82)	n-butyl ether	13.823	57	276489	18.26	ug/L	93
83)	dibromochloromethane	13.221	129	131484	21.44	ug/L	98
84)	1,2-dibromoethane	13.378	107	90134	20.38	ug/L	98
85)	chlorobenzene	13.859	112	257436	18.84	ug/L	98
86)	1,1,1,2-tetrachloroethane	13.922	131	118064	20.81	ug/L	96
87)	ethylbenzene	13.922	91	411658	18.70	ug/L	97
88)	m,p-xylene	14.042	106	318045	37.18	ug/L	93
89)	o-xylene	14.445	106	155386	19.02	ug/L	94
90)	styrene	14.456	104	262615	19.78	ug/L	98
91)	butyl acrylate	14.273	55	115581	18.31	ug/L	95
92)	cis-1,4-dichloro-2-butene	14.822	88	61031	22.72	ug/L	89
93)	bromoform	14.681	173	90049	20.52	ug/L	97
94)	isopropylbenzene	14.796	105	409117	19.08	ug/L	99
97)	1,1,2,2-tetrachloroethane	15.062	83	99427	21.54	ug/L	97
98)	trans-1,4-dichloro-2-b...	15.094	53	31940	20.77	ug/L	92
99)	1,2,3-trichloropropane	15.151	110	33598	21.60	ug/L	90
100)	bromobenzene	15.172	156	128133	19.07	ug/L	97
101)	n-propylbenzene	15.209	91	480913	19.50	ug/L	98
102)	2-chlorotoluene	15.339	126	106856	19.44	ug/L	92
103)	4-chlorotoluene	15.449	91	315087	19.96	ug/L	99
104)	1,3,5-trimethylbenzene	15.366	105	361256	19.88	ug/L	99
105)	tert-butylbenzene	15.711	134	70539	19.49	ug/L	97
106)	1,2,4-trimethylbenzene	15.758	105	373606	19.56	ug/L	99
107)	sec-butylbenzene	15.931	105	456360	19.69	ug/L	99
108)	p-isopropyltoluene	16.067	119	406615	19.84	ug/l	97
109)	benzyl chloride	16.291	91	233376	22.31	ug/L	98
110)	1,3-dichlorobenzene	16.103	146	242189	18.91	ug/L	96
111)	1,4-dichlorobenzene	16.197	146	245921	18.64	ug/L	100
112)	1,2-dichlorobenzene	16.584	146	232477	19.26	ug/L	98
113)	n-butylbenzene	16.490	92	202658	19.78	ug/L	98
114)	hexachloroethane	16.898	201	95135	19.76	ug/L	98
115)	1,2-dibromo-3-chloropr...	15.172	157	9556	19.77	ug/L	78
116)	1,3,5-Trichlorobenzene	17.526	180	206585	20.10	ug/L	98
117)	1,2,4-trichlorobenzene	18.049	180	177469	21.73	ug/L	98
118)	2-ethylhexyl acrylate	18.064	55	22372	4.07	ug/L	97

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216644.d
Acq On : 6 Nov 2017 1:07 pm
Operator : PrashanS
Sample : cc8691-20
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 07 12:34:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

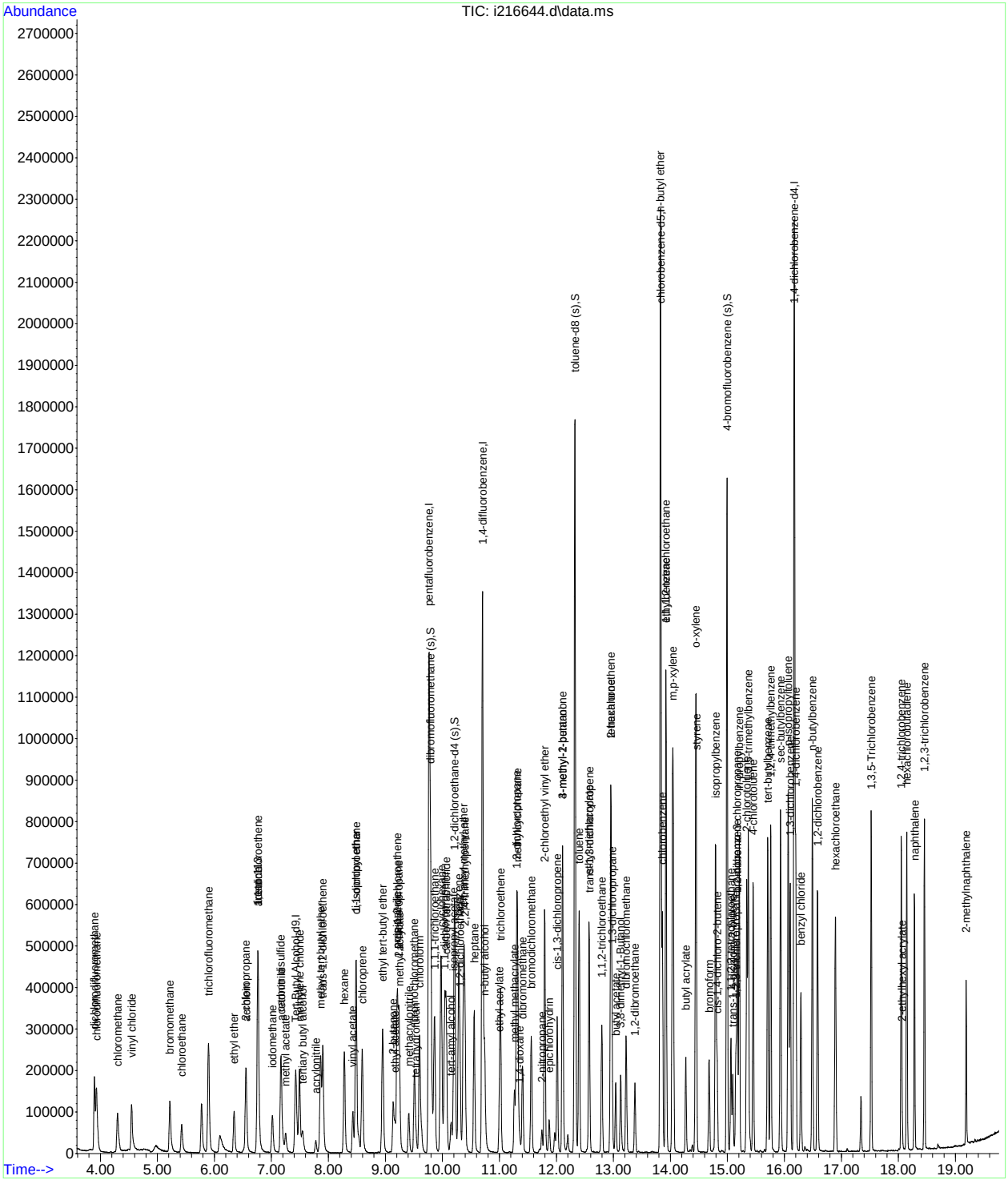
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	126466	22.57	ug/L	97
120) naphthalene	18.284	128	341338	22.55	ug/L	100
121) 1,2,3-trichlorobenzene	18.457	180	181483	22.40	ug/L	98
122) 2-methylnaphthalene	19.189	142	126534	10.60	ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I-core\vi8700\
Data File : i216644.d
Acq On : 6 Nov 2017 1:07 pm
Operator : PrashanS
Sample : cc8691-20
Misc : MS21850,VI8700,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 07 12:34:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216669.d
Acq On : 7 Nov 2017 11:11 am
Operator : PrashanS
Sample : cc8691-20
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 08 17:41:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.421	65	320732	500.00	ug/L	-0.02
4) pentafluorobenzene	9.764	168	858372	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.700	114	1208556	50.00	ug/L	0.00
71) chlorobenzene-d5	13.828	117	1024786	50.00	ug/L	0.00
95) 1,4-dichlorobenzene-d4	16.171	152	608981	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	9.790	113	437037	49.06	ug/L	0.00
Spiked Amount 50.000	Range 72 - 129		Recovery = 98.12%			
50) 1,2-dichloroethane-d4 (s)	10.214	65	499997	50.83	ug/L	0.00
Spiked Amount 50.000	Range 73 - 132		Recovery = 101.66%			
72) toluene-d8 (s)	12.322	98	1249320	48.48	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.96%			
96) 4-bromofluorobenzene (s)	14.989	95	482910	49.81	ug/L	0.00
Spiked Amount 50.000	Range 77 - 125		Recovery = 99.62%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.546	59	70930	100.39	ug/L	99
3) 1,4-dioxane	11.344	88	35452	522.88	ug/L	93
5) dichlorodifluoromethane	3.896	85	214043	20.79	ug/L	97
6) chlorodifluoromethane	3.927	51	162150	18.28	ug/L	99
7) chloromethane	4.298	50	127901	18.60	ug/L	98
8) vinyl chloride	4.550	62	133693	19.44	ug/L	97
9) bromomethane	5.219	94	92969	17.41	ug/L	94
10) chloroethane	5.428	64	73282	19.43	ug/L	94
11) trichlorofluoromethane	5.899	101	261349	19.17	ug/L	95
12) ethyl ether	6.344	74	53981	20.54	ug/L	93
13) 2-chloropropane	6.553	63	42815	19.24	ug/L	94
14) acrolein	6.558	56	14726	18.46	ug/L	92
15) freon 113	6.762	151	101318	18.01	ug/L	97
16) 1,1-dichloroethene	6.762	61	168024	18.36	ug/L	100
17) acetone	6.762	58	32975	70.38	ug/L	99
18) iodomethane	7.018	142	135472	17.10	ug/L	99
19) carbon disulfide	7.165	76	336517	16.53	ug/L	100
20) acetonitrile	7.180	41	115503	176.71	ug/L	93
21) methyl acetate	7.254	74	16265	20.09	ug/L #	73
22) methylene chloride	7.494	84	108746	18.37	ug/L	99
23) acrylonitrile	7.777	53	27548	18.26	ug/L	98
24) methyl tert butyl ether	7.866	73	296845	18.94	ug/L	99
25) trans-1,2-dichloroethene	7.902	61	158136	18.56	ug/L	98
26) hexane	8.279	57	130033	15.63	ug/L	99
27) 1,1-dichloroethane	8.488	63	191998	18.26	ug/L	97
28) vinyl acetate	8.430	86	16764	20.21	ug/L #	78
29) di-isopropyl ether	8.483	45	283411	18.77	ug/L	94
30) chloroprene	8.593	53	174342	18.17	ug/L	97
31) ethyl tert-butyl ether	8.948	59	306392	18.91	ug/L	99
32) 2-butanone	9.136	72	39645	70.64	ug/L	93
33) 2,2-dichloropropane	9.236	77	215944	18.25	ug/L	100
34) ethyl acetate	9.168	45	13865	18.38	ug/L #	73
35) cis-1,2-dichloroethene	9.210	96	118990	17.03	ug/L	93
36) propionitrile	9.199	54	149347	194.82	ug/L	94
37) methyl acrylate	9.252	85	14821	18.77	ug/L	89
38) methacrylonitrile	9.414	67	35149	18.35	ug/L	93
39) bromochloromethane	9.508	128	64022	19.12	ug/L	93
40) tetrahydrofuran	9.529	71	11306	16.94	ug/L	88
41) chloroform	9.597	83	234122	17.42	ug/L	98
42) carbon tetrachloride	10.067	117	236514	19.01	ug/L	97
43) 1,1-dichloropropene	10.041	75	163720	18.27	ug/L	98
46) 1,1,1-trichloroethane	9.858	97	244322	18.59	ug/L	98
47) cyclohexane	9.984	84	124848	16.25	ug/L #	82
48) tert-amyl alcohol	10.151	55	25309	100.92	ug/L	99
51) isopropyl acetate	10.198	87	20513	19.96	ug/L #	91

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216669.d
Acq On : 7 Nov 2017 11:11 am
Operator : PrashanS
Sample : cc8691-20
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 08 17:41:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) 1,2-dichloroethane	10.308	62	196437	19.56	ug/L		96
53) benzene	10.287	78	407706	18.17	ug/L		99
54) 2,2,4-trimethylpentane	10.392	57	383107	19.25	ug/L		99
55) tert-amyl methyl ether	10.371	87	77287	19.22	ug/L		98
56) heptane	10.554	57	76559	18.48	ug/L		98
57) n-butyl alcohol	10.742	56	155003	979.09	ug/L		99
58) trichloroethene	11.014	95	123626	18.33	ug/L		92
59) ethyl acrylate	10.998	55	100832	18.80	ug/L		99
60) methylcyclohexane	11.317	83	192369	19.01	ug/L		99
61) 1,2-dichloropropane	11.297	63	98684	18.89	ug/L		96
62) methyl methacrylate	11.260	100	23777	17.99	ug/L	#	87
63) dibromomethane	11.406	93	77596	19.55	ug/L		95
64) bromodichloromethane	11.558	83	182129	19.68	ug/L		97
65) 2-nitropropane	11.746	41	31619	17.15	ug/L		99
66) 2-chloroethyl vinyl ether	11.793	63	247702	101.61	ug/L		98
67) epichlorohydrin	11.872	57	53279	100.05	ug/L		93
68) cis-1,3-dichloropropene	12.013	75	178753	19.07	ug/L		98
69) 4-methyl-2-pentanone	12.107	58	129216	81.13	ug/L		97
70) 3-methyl-1-butanol	12.102	70	61042	418.87	ug/L		98
73) toluene	12.400	92	254183	18.18	ug/L		95
74) trans-1,3-dichloropropene	12.578	75	178718	19.05	ug/L		99
75) ethyl methacrylate	12.573	69	104228	19.53	ug/L		97
76) 1,1,2-trichloroethane	12.798	83	72389	19.18	ug/L		99
77) 1,3-dichloropropane	12.975	76	150610	20.13	ug/L		100
78) tetrachloroethene	12.955	166	141585	17.48	ug/L		96
79) 2-hexanone	12.955	58	120359	74.76	ug/L		97
80) butyl acetate	13.043	56	47164	18.41	ug/L		87
81) 3,3-dimethyl-1-Butanol	13.127	69	64521	191.54	ug/L		97
82) n-butyl ether	13.823	57	327743	17.90	ug/L		97
83) dibromochloromethane	13.227	129	148645	20.05	ug/L		95
84) 1,2-dibromoethane	13.378	107	108192	20.24	ug/L		95
85) chlorobenzene	13.859	112	299934	18.15	ug/L		100
86) 1,1,1,2-tetrachloroethane	13.922	131	135960	19.82	ug/L		97
87) ethylbenzene	13.922	91	475703	17.87	ug/L		99
88) m,p-xylene	14.042	106	377244	36.47	ug/L		100
89) o-xylene	14.445	106	182500	18.48	ug/L		96
90) styrene	14.456	104	306652	19.10	ug/L		97
91) butyl acrylate	14.267	55	136106	17.83	ug/L		98
92) cis-1,4-dichloro-2-butene	14.817	88	66447	20.46	ug/L		97
93) bromoform	14.681	173	105436	19.87	ug/L		98
94) isopropylbenzene	14.790	105	475621	18.34	ug/L		99
97) 1,1,2,2-tetrachloroethane	15.062	83	111545	20.51	ug/L		97
98) trans-1,4-dichloro-2-b...	15.094	53	34311	18.94	ug/L		94
99) 1,2,3-trichloropropane	15.151	110	37641	20.53	ug/L		95
100) bromobenzene	15.172	156	147394	18.61	ug/L		95
101) n-propylbenzene	15.209	91	556540	19.15	ug/L		98
102) 2-chlorotoluene	15.340	126	124285	19.19	ug/L		91
103) 4-chlorotoluene	15.449	91	356840	19.18	ug/L		99
104) 1,3,5-trimethylbenzene	15.366	105	416143	19.44	ug/L		100
105) tert-butylbenzene	15.706	134	82333	19.30	ug/L		94
106) 1,2,4-trimethylbenzene	15.758	105	429348	19.08	ug/L		98
107) sec-butylbenzene	15.931	105	525627	19.25	ug/L		100
108) p-isopropyltoluene	16.067	119	470121	19.47	ug/l		98
109) benzyl chloride	16.291	91	261784	21.24	ug/L		98
110) 1,3-dichlorobenzene	16.103	146	280065	18.56	ug/L		98
111) 1,4-dichlorobenzene	16.197	146	281646	18.12	ug/L		99
112) 1,2-dichlorobenzene	16.584	146	271944	19.12	ug/L		98
113) n-butylbenzene	16.490	92	238512	19.76	ug/L		98
114) hexachloroethane	16.898	201	104796	18.47	ug/L		97
115) 1,2-dibromo-3-chloropr...	15.172	157	11259	19.77	ug/L	#	64
116) 1,3,5-Trichlorobenzene	17.521	180	238874	19.72	ug/L		98
117) 1,2,4-trichlorobenzene	18.049	180	208007	21.61	ug/L		100
118) 2-ethylhexyl acrylate	18.064	55	23927	3.69	ug/L		94

SGS ACCUTEST JC54422

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216669.d
Acq On : 7 Nov 2017 11:11 am
Operator : PrashanS
Sample : cc8691-20
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 08 17:41:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration

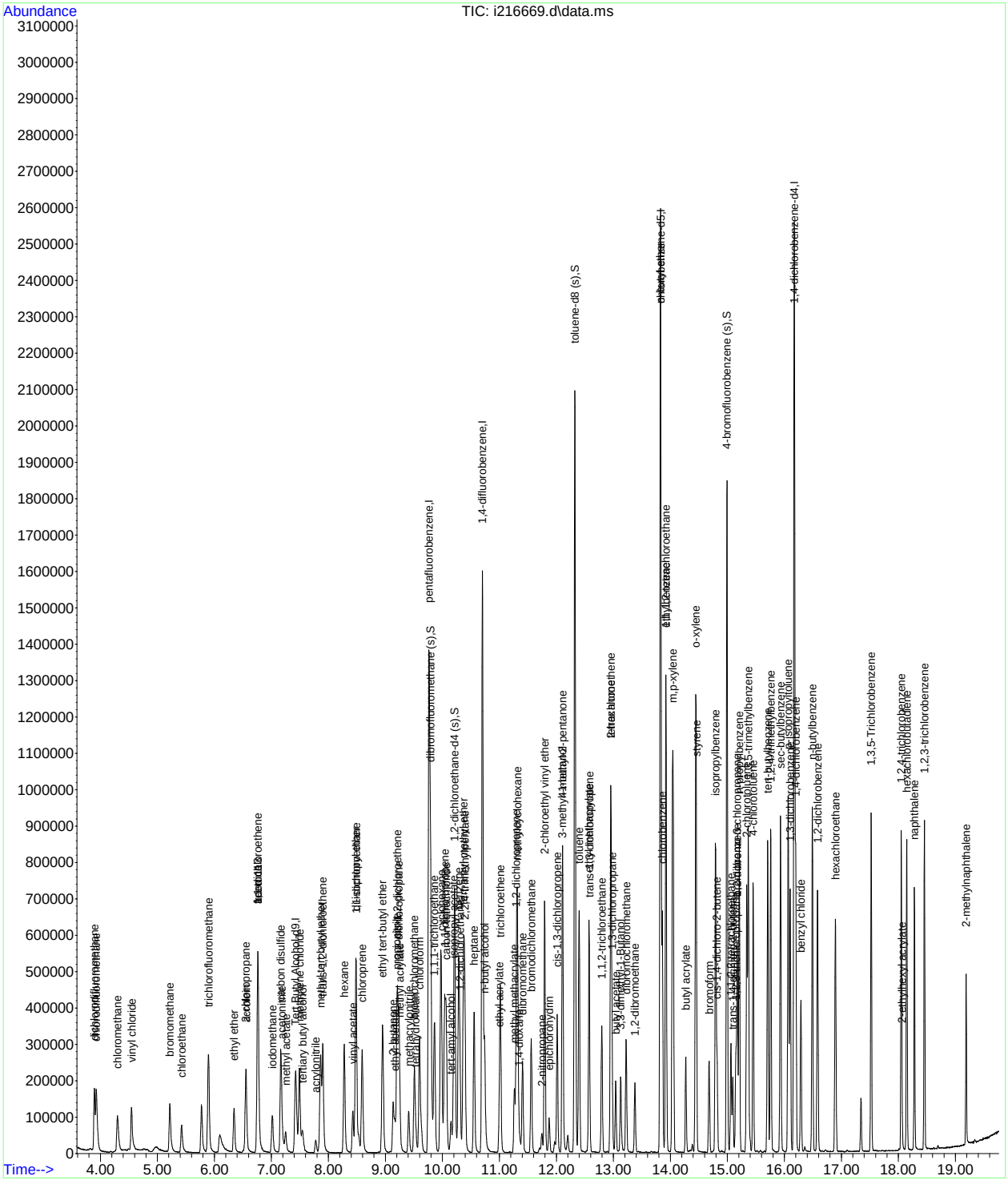
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) hexachlorobutadiene	18.148	225	147568	22.35	ug/L	96
120) naphthalene	18.279	128	394654	22.13	ug/L	99
121) 1,2,3-trichlorobenzene	18.457	180	208621	21.85	ug/L	97
122) 2-methylnaphthalene	19.189	142	152292	10.82	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\I\
Data File : i216669.d
Acq On : 7 Nov 2017 11:11 am
Operator : PrashanS
Sample : cc8691-20
Misc : MS21829,VI8701,5.0,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 08 17:41:34 2017
Quant Method : C:\MSDCHEM\1\METHODS\MI8691.M
Quant Title : Method SW846 8260C, Rxi-624 30m x 0.25mm x 1.4um
QLast Update : Fri Oct 27 11:02:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC54422

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V1C6691-

Date: 8/22/2017

Print Analyst Name: AUSTIN PARK

Analyst Signature:

Columns: ZB624(60mx0.Xmmx1.4um)

Method VB260C

Initial Cal. Method MICS6691

Standard Data

Lot #	Description	Conc.
017-2530-53. (10)	A/B/K	100/10,000ppm
017-2530-66. (6)	C	1000ppm
017-2530-55 (7)	E	1000ppm
017-2530-52 (4)	EXT ACETONITRILE	1000ppm
017-2530-36	INT/SUR	200/2000ppm

Standard Data

Lot #	Description	Conc.
017-2530-32. (5)	EXT. A/B	100/10,000ppm
017-2530-69 (2)	EXT. C	1000ppm
017-2530-41. (5)	EXT-E	1000ppm
017-2530-51 (3)	EXT. HEXANE.	1000ppm.
017-2530-50 (2)	EXT. KETONS.	2000ppm.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Mal. JR ✓ Date: 8/25/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	1C151357	BFB.				1							PK	6.21 pa	
	151358	1C6691-0.2	8260C Initial calibration	AQ SO		2	5				-	✓	PK	0.2ml A/B/K.C.E/100ml D.I.H2O	
	151359	1C6691-0.5	✓	AQ SO		3	5				-	✓	PK	0.5ml A/B/K.C.E/100ml D.I.H2O	
	151360	1C6691-1	✓	AQ SO		4	5				-	✓	PK	1ml A/B/K.C.E/100ml D.I.H2O	
	151361	1C6691-2	✓	AQ SO		5	5				-	✓	PK	2ml A/B/K.C.E/100ml D.I.H2O.	
	151362	1C6691-4	✓	SO		6	5				-	✓	PK	4ml A/B/K.C.E/100ml D.I.H2O	
	151363	1C6691-8	✓	SO		7	5				-	✓	PK	8ml A/B/K.C.E/100ml D.I.H2O	
	151364	1C6691-20	✓	SO		8	5				-	✓	PK	20ml A/B/K.C.E/100ml D.I.H2O	
	151365	1CC6691-50	✓	SO		9	5				-	✓	PK	50ml A/B/K.C.E/100ml D.I.H2O	
	151366	1C6691-100	✓	SO		10	5				-	✓	PK	100ml A/B/K.C.E/100ml D.I.H2O	
	151367	1C6691-200	✓	SO		11	5				-	✓	PK	200ml A/B/K.C.E/100ml D.I.H2O.	
	151368	IB				12							/		
	151369	IB				13							/		
	151370	ICV6691-50.	✓	SO		14	5				-	✓	PK	50ml EXT.A/B, EXT.C EXT.E EXT.HEXANE EXT.KETONE / 100ml D.I.H2O	
	151371	ICV6691-50	✓	SO		15	5				-	✓	PK	50ml EXT.ACETONITRILE / 100ml D.I.H2O. For acetonitrile only	
	151372	IB.				16.									

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

31

SGS

VOLATILE ANALYSIS LOG

Batch ID: V1C6761

Date: 11/7/17

Print Analyst Name: Robert Szot

Analyst Signature:

Columns: 2 B-624 (60mx0.25mmx1.4um)

Method V8260C

Initial Cal. Method M1C5664.1

Standard Data

Lot #	Description	Conc.
V17-2574-2	2 ABK	
V17-2574-2.5	C	
V17-2574-2.7	E	
V17-2574-29	8260 IAT/SUR	

Standard Data

Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 11/8/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	1C153128	CC6691-20				1	5						OK	10 mL ABK, C, E 25 mL 12-02 PM. H2O	
	1C153129	JC34416BK-7P MB	MS 16697 DB			2	5						OK		
	1C153130	BS				3	5						OK	25 mL ABK, C, E 5 mL H2O	
R	1C153131	JC54161-34	21658 TCL20+	SL	5	4	4.8						OK		
	1C153132	JC54047-72	21756 TCL20+	SL	5	5	5.5						OK		
	1C153133	JC54047-74	✓	SL	6	6	6.0						OK		
	1C153134	JC53350-7P 11/7/17	21497 PATCL20+	SO	1	7	3.8						OK	pf. as MB	
	1C153135	JC53350-7P	✓	SO	1	8	1.0 ✓						OK		
	1C153136	JC53350-7P	✓	SO	1	9	5.0 ✓						OK		
	1C153137	JC54047-72MS JC53350 11/7/17	21756 TCL20+	SL	4	10	5.4						OK		
	1C153138	JC54047-74DUP	✓	SL	5	11	6.2						OK		
R	1C153139	JC53961-1	21611 CPS16	SL	4	12	6.7						OK		
	1C153140	JC53999-8	21611 TBA	SL	5	13	5.7						OK		
R	1C153141	JC54728-1	21882 PADETMS MTBE	SL	3	14	6.2						OK		
R	1C153142	JC54728-2	✓	SL	3	15	6.1						OK		
R	1C153143	JC54728-3	✓	SL	3	16	6.4						OK		
	1C153144	JC54687-1	21881 TCL20+	SL	9	17	6.5						OK		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: V1C6761

Date: 11/7/17

Print Analyst Name: Robert Scott

Analyst Signature:

Columns: 28-624(60m×0.25mm×1.4um

Method V8260C

Initial Cal. Method mk5669

Standard Data		
Lot #	Description	Conc.
	See page	

Standard Data		
Lot #	Description	Conc.
11		

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/13/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	1C153145	JC54687-2	21881 TCL20+	SLC	9	18	5.4				✓	✓	OK		
	1C153146	JC54689-1	21881 8260TCL20+ 14D19JUNE	SLC	4	19	6.4				✓	✓	OK		
	1C153147	JC54212-1	21701 TCL20+	SLC	4	20	5.0							Bkl purge	
	1C153148	JC54262-1 ~~JC54262-2B~~	21701 TCL20+ TBA	SLC	6	21	2.6				✓	✓	OK		
	1C153149	ECC6694-50 ~~JC54262-3B~~	✓	SLC	4	22	5.0				✓	✓	OK	25mLABK.IS-50mL 10:32 pm. H2O	
	1C153150	~~JC54262-4B~~	✓	SLC	4	23									
	1C153151	ECC6691-50				24									

RS 11/7/17

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: SR01-10
Rev. Date: 1/19/16

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SGS

VOLATILE ANALYSIS LOG

Batch ID: VIC 6762

Print Analyst Name: Tam Pham

Date: 11/11/17

Analyst Signature:

Columns: 2x624 60mx0.25mmx1.4µm

Method 8260C

Initial Cal. Method VIC6691

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
VOA-1574-28.2	A1B1C	100 ppm
VOA-1574-42.5	C	100 ppm
VOA-1574-27.7	E	100 ppm
VOA-1574-24	IS1 S1	1580 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Bradley Date: 11/9/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	V153149	VC 6691-50/MFB					5				✓		ok	10-33 ppb 25µl spike A1B1C, C, E For #5 1µl 100ml	
	153150	VC6691-1					5				✓		ok		
	153151	MB					5				✓		ok		
	153152	LCS					5				✓		ok	A1B1C, C, E 25µl 10ml	
		IB					5						NR		
	153153	R254507-1	21823 STD,MTBE	½	4		5.0				✓		ok		
	153154	R254507-2	✓	½	4		5.1				✓		ok		
	153155	R254507-3	✓	½	4		5.2				✓		ok		
	153156	R254507-4	✓	½	3		5.4				✓		ok		
	153157	R254507-5	✓	½	4		5.3				✓		ok		
	153158	R254507-6	✓	½	9		5.2				✓		ok		
	153159	R254507-7	✓	½	3		5.0				✓		ok		
	153160	R254507-8	✓	½	3		5.4				✓		ok		
	153161	R254507-9	✓	½	4		5.4				✓		ok		
	153162	R254803-1	21932 Styrene MDIOXANE	½	4		5.4				✓		ok		
	153163	R254803-3	✓	½	3		5.6				✓		ok		
	153164	R254803-2	✓	½	4		5.7				✓		DL	SME	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
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Form: OR001-10
Rev. Date: 1/19/16

GBS

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SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: V1C 6762

Date: 11/7/17

Print Analyst Name: Doan Pham

Analyst Signature:

Columns: ~~ZB624 60m x0.25mm x1.4um~~

Method 8260

Initial Cal. Method MIC6691

Standard Data		
Lot #	Description	Conc.
	See Page # 15	

Standard Data		
Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: BKelly Date: 11/9/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	IC153165	IC 548504-1	8434 SL	S	4		5-1				✓	✓	RR	use as CFS	
	153166	IC548504-3	✓	S	5		4.1				✓		ok		
	153167	IC548507-2DUP			3		5.0				✓		ok		
	153168	IC548507-3MS			3		5.0				✓		ok	2-5 mix A/B/C, E in sample 9.09 Am	
	153169	IB									✓		CW		
	153170	IB											ok		

11/8/17

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: V3C6336.

Date: 10/19/2017.

Print Analyst Name: AUSTIN PARK

Analyst Signature:

Columns: RX1624 (60m x 0.25mm x 1.4µm)

Method VB260C

Initial Cal. Method M3C6336.

Standard Data

Lot #	Description	Conc.
017-2394.12-7	A/B/K.	100 - 10,000ppm
017-2394-13-4	C	100ppm
017-2330-143-9	E	100ppm
017-2330-141	INT/SUR	50/100/2000ppm
017-2394.5-3	EXT. Acetonitrile.	1000ppm.

Standard Data

Lot #	Description	Conc.
017-2330142-8	EXT-A/B.	100 - 10,000ppm
017-2394-14-9	EXT-C	100ppm
017-2394-3-4	EXT-E	100ppm
017-2330-138-7	EXT. Ketones	300ppm
017-2394.4-3	EXT. Hexane.	1000ppm.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: **Date:** 10/20/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	3C139644	BFB.				1									
	139645	IC6336-0.2	8260 initial calibration	SO		2	5							0.2µl A/B/K.C.E/100ml D.I.H2O	
	139646	IC6336-0.5	✓	SO		3	5							0.5µl A/B/K.C.E/100ml D.I.H2O	
	139647	IC6336-1	✓	SO		4	5							1µl A/B/K.C.E/100ml D.I.H2O	
	139648	IC6336-2	✓	SO		5	5							2µl A/B/K.C.E/100ml D.I.H2O	
	139649	IC6336-5	✓ (Equal)	SO		6	5							5µl A/B/K.C.E/100ml D.I.H2O 10/20/17	
	139650	IC6336-10	✓	SO		7	5							10µl A/B/K.C.E/100ml D.I.H2O	
	139651	IC6336-20	✓	SO		8	5							20µl A/B/K.C.E/100ml D.I.H2O.	
	139652	IC6336-50	✓	SO		9	5							50µl A/B/K.C.E/100ml D.I.H2O	
	139653	IC6336-100	✓	SO		10	5							100µl A/B/K.C.E/100ml D.I.H2O.	
	139654	IC6336-200	✓	SO		11	5							200µl A/B/K.C.E/100ml D.I.H2O	
	139655	IB				12	5.								
	139656	IB				13	5								
	139657	IOV6336-50	✓	SO		14	5							50µl EXT-A/B.EXT.C.EXT.E EXT.Ketones EXT.Hexanes/100ml D.I.H2O	
	139658	IOV6336-50	✓	SO		15	5							50µl EXT.Acetonitrile/100ml D.I.H2O	
	139659	IB.				16	5								

10/19/2017.

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: V3C 6357

Print Analyst Name: Henry Jolin

Date: 11/6/17

Analyst Signature: HJ

Columns: RXi624 (60m x 0.18mm x 1.4um) Restek

Method V8260C

Initial Cal. Method M3C 6336

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
VO193774	10.1 ABK	100 ppm
VO193774	38.9 C	100 ppm
VO193774	22.35 E	100 ppm
VO193774	29 IJ	~~100~~ 1000 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/15/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	3C140180	BFB/CCB336	00			1	5						ok	10 ABK, C, E / 50 mL & 93 CPM	
	140183	IB				3	5								
	140184	MB				4	5						ok		
	140185	BS				5	5						ok	21 ABK, C, E / 50 mL	
	140186	IB				6	5							per TBA from I 216664	
	140187	IC54691-1	21671 TCLEST,T	SLL	4	1	5.5						~~ok~~ RR	IC failed to TBA prep Intact soil	
	140188	IC54691-2	✓		5	2	5.8						~~ok~~ RR	report only 3 butanol ~~RR 6 SHS~~	
	140189	IC54691-3	✓		4	3	5.6						RR	RR	
	140190	IB				4	5								
R	140191	IC54677-1	21703 TCLEST,T 140190	SLL	3	5	6.5 ✓						ok		
	140192	IC54674-2	PPL(1201	SLL	7	6	5.0 ✓						ok		
	140193	IC54655-5	21671 TCLEST,T	SLL	6	7	6						RR	IC failed for TBA	
	140194	IC54655-6			6	8	6.1								
	140195	IC54655-7			7	9	6								
	140196	IC54655-8			7	10	6								
	140197	IC54691-1 RE	21671 TCLEST,T	SLL	5	11	5.5						MG	21 ABK, C, E / 10 mL	
	140198	IB				12	5								

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Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
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Form: OR001-10
Rev. Date: 1/19/16

ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: V3C6357

Date: 11/6/2017

Print Analyst Name: Henry Salim

Analyst Signature: HS

Columns: RXI 624

Method V8260C

Initial Cal. Method M3C-6335 6336 11/1/16

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	see page 9	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/15/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
R	3C140199	JC54474-2 JC54691-1	21767 21871 TCL502.T	SL	4 8	13	5.5						OK		
R	140300	JC54474-9	✓	SL	5	14	3.8						OK		
R	140301	JC54691-3D	21871 TCL502.T	SL	5	15	5.5						NOT LOAD	IC failed for TBA	
	140302	JC54655-1	21871 TCL502.T	SL	5 6	16	5.9								
	140303	JC54617-3	✓		5	17	5.3								
	140304	JC54617-3	✓		6	18	5.4								
	140305	JC54617-4	✓		6	19	5.6								
	140306	JC54680-1	21896 CL516	SL	4		5.3						OK		
	140307	JC54680-2			4		5.2						OK		
	140308	JC54680-1DP			5		5.5						OK	8:01 pm	
	140309	NO DATA													
	140310														
														HS 11/7/17	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: V3C 6357 ~~V3C 6357B 1:7~~ HLL 11/7

Date: 111617

Print Analyst Name: Henry Salim

Analyst Signature: HLJ

Columns: RXi 624 (20m x 0.18mm x 1.0um)

Method V8260C

Initial Cal. Method V3C 6326

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
V017374 10.15	ABC	100 ppm
V017374 38.9	C	100 ppm
V017374 22.35	E	100 ppm
V017374 29	IJ	~~200/100~~ 100 ppm
		19585

HLL 11/7

Columns: RXi 624 (20m x 0.18mm x 1.0um)

Method V8260C

Initial Cal. Method V3C 6326

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/8/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	3C140206	BFB/CC6326-10				20	5						OK	8:35 pm 2PM ABK, C, E/ 10mL	
	140207	IB				21	5								
	140208	MB2				22	5						WOC		
	140209	BS2				23	5						WOC	2PM ABK, C, E / 10mL	
	140210	JC54820-2 MS			5		5.5						WOC	↓	
	140210A	IB				24	5								
	140211	JC54134-1	2166 TU001	S	10	25	4.8						WNG	DCBFM L in CCV	
	140212	JC54155-3	✓		5	26	3.7						NOT Run	Autosampler # set up.	
	140213	JC54155-4	✓		5	27	4.5								
	140214	JC54155-5	✓		5	28	5.2								
	140215	JC54173-1	✓		6	29	5								
	140216	JC54754-1	21870 RCP		3	30	5.1							CTRCP	
	140217	JC54754-2	✓		3	31	6.6							CTRCP.	
	140218	JC54128-1	2165 TU004		10	32	5								
	140219	JC54128-2	✓		10	33	4.8								
	140220	JC54130-1	✓		9	34	5.5								
	140221	JC54133-3	✓		10	35	6								
	140222	JC54133-4	✓		10	36	5.2								

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Form: SR001-10
Rev. Date: 1/19/16

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SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: ~~V3C6358~~ 11/14/17 V3C6357

Date: 11/6/17

Print Analyst Name: Henry Salim

Analyst Signature: HS

Columns: RXI

Method V8260C

Initial Cal. Method M3C6336

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 3	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: BKelly Date: 11/15/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	~~V3C~~140223	JC54133-5	~~21611~~ 8260T	S	10	37	5.8						NOT RUN		
	140224	JC54133-6	✓		10	38	5								
	140225	JC54133-7	✓		10	39	5.9								
	140226	JC54133-8	✓		9	40	6.5								
	140227	JC54133-9	✓		9	41	6.2								
	~~140228~~	~~JC54680-1~~	~~21611~~ 8260T		~~4~~	~~42~~	~~5.3~~	~~HW 11/6~~							
	~~140229~~	~~JC54680-2~~	✓		~~4~~	~~43~~	~~5.2~~								
	~~140230~~	~~JC54680-3~~	✓		~~4~~	~~44~~	~~5.5~~								
	~~140231~~	~~JC54680-4~~	✓		~~4~~	~~45~~	~~4.8~~								
					4										

HW 11/6/17

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VE10636

Date: 9/13/17

Print Analyst Name: Prashant B Shah

Analyst Signature:

Columns: 12X16x4x160mmX0.25mmX1.4µm

Method 8260C

Initial Cal. Method VE10635

Standard Data

Lot #	Description	Conc.
OA-25736	80.3 Ext A/B	100 ppm
OA-25736	97.1 Ext C	100 ppm
OA-25736	94.5 Ext E	100 ppm
OA-25736	99.2 Ext K	100 ppm
OA-25736	100.3 Hexe	100 ppm

Standard Data

Lot #	Description	Conc.
OA-25736	102.1 A/B/C	100 ppm
OA-25736	105.6 C	100 ppm
OA-25736	103.6 E	100 ppm
OA-25736	IS	40,000 ppm
OA-25736	101.2 Acetonitrile	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 9/12/2017

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	A247356	BFB											OK	6:22 pm	
	247357	IC10636 0.2	8260 initial	SME			5/5	100					Not OK	@ 17:13 Prog A/B/C, E out of range	
	247358	IC10636-0.5	✓	SME			5/5	100					OK	A/B/C, E 2.5 µl/5ml	
	247359	IC10636-1	✓	SME			5/5	100					OK	A/B/C, E 5µl/10ml	
	247360	IC10636-2	✓	SME			5/5	100					OK	A/B/C, E 10µl/10ml	
	247361	IC10636-4	✓	SME			5/5	100					OK	A/B/C, E 20µl/10ml	
	247362	IC10636-8	✓	SME			5/5	100					OK	A/B/C, E 40µl/10ml	
	247363	IC10636-20	✓	SME			5/5	100					OK	A/B/C, E 80µl/10ml	
	247364	IC10636-50	✓	SME			5/5	100					OK	A/B/C, E 100µl/10ml	
	247365	IC10636-100	✓	SME			5/5	100					OK	A/B/C, E 50µl/5ml	
	247366	IC10636-200	✓	SME			5/5	100					OK	A/B/C, E 100µl/5ml	
	247366	IB											clip		
	247367	IB											clip		
	247368	IC10636-50	✓	SME			5/5	100					Not OK	Ext Acetonitrile Hexe 25µl/10ml sp. recovery.	
	247369	IC10636-50 IB	✓	SME			5/5	100					OK	Ext A/B/C, E, K, Hexe 25µl/10ml	
	247371	IB @17:13											clip		

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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VE10685

Print Analyst Name: Helen

Date: 11/9/2017

Analyst Signature:

Columns: Rxi 624 (60m x0.25mm x 1.4µm)

Method 8260C

Initial Cal. Method ME10636

Standard Data

Lot #	Description	Conc.
167-254-8820	OBK	100 ppm
167-254-427	C	100 ppm
167-254-2236	G	100 ppm
167-254-465	I/S	250/200 ppm
173662	mcap	

Standard Data

Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: **Date:** 11/10/2017

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	E248810	ccl0636-20	PBMS			1	5/5	100					ok	9.33am ABK,GE 1µg/5ml 7.8 ↓	
	248811	ccl0636-1				2	5/5	100			W		ok	ABK,GE 1µg/5ml For #7.8	
	248812	JC344612-913 MB	16698 DB			3	5/5	100		W	W		ok	DB Disp# 54 lot 173862	
	248813	BS				4	5/5	100			W		ok	ABK,GE 25µg/5ml ok for REP+MCP	
	248814	BSD				5	5/5	100					ok		
R	248815	JC54405-5	21775 PBMS/Toluene	S	3	6	5.3/10	100			W		ok	Due to toluene ↑	
DL	248816	JC54947-1	21970 REP	S	2	7	9.2/10	10			W		ok	+Done	
DL	248817	JC54947-5	V	S	2	8	9.3/10	5			W		ok	+Done	
DL	248818	JC54232-1	21663 CP516	S	3	9	10.1/10	10			W		ok	+E+3V	
DL	248819	JC54232-3	V	S	3	10	10.4/10	5			W		ok	+E	
DL	248820	JC54232-2	V	S	3	11	10.1/10	5			W		ok	+E	
	248821	JC54730-1	21884 PADFTMB MTBE	S	2	12	5.9/10	10			W		ok/R	1X +E 248833	
DL	248822	JC54405-2	21775 PBMS/Toluene	S	2	13	6.3/10	1			W		ok	+Done.	
DL	248823	JC54405-3	V	S	2	14	6.3/10	1			W		ok		
	248824	JC54405-6	V	S	2	15	4.4/10	100			W		ok/DL	200X	
	248825	JC54405-5mspl	V	S	3	16	5.3/10	100			W		ok	ABK,GE 25µg/5ml	
	248826	JC54405-5MSD	V	S	3	17	5.3/10	100			W		ok		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VE10685

Print Analyst Name: Tien

Date: 11/9/2017

Analyst Signature:

Columns: Rtx-624 (60m x 0.25mm x 1.4µm)

Method 8260C

Initial Cal. Method VE10636

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.

See page 55

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/10/2017

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	62488 27	IB				18							wdw		
R	62488 28	1254503-2	21933 SCOTT TCL/ Tentatively identified compounds	S	2	19	5.1/10	100					wdw	+IC	
	62488 29	1254503-1	21801 CCS16	S	3	20	6.3/5	100					wdw	Automatic	
	62488 30	1254503-2	V	S	3	21	6.7/5	100					wdw	✓	
	62488 31	1254503-3	V	S	3	22	5/5	100					wdw/dk	LOX	
	62488 32	1254322-3	21717 BFB VE	S	3	23	5.5/5	100					dk/wdw	~~LOX~~ TDW 11/10/17	
R	62488 33	1254330-1	21934 PROPOSED MTBE	S	2	24	5.9/10	100					wdw	9.23 pm +E2488-21	
	62488 34	IB				25									
	62488 35	IB				26									
	62488 36	IB				27									
	62488 37	IB				28									
	62488 38	IB				29									
	62488 39	IB				30									
	62488 40	IB				31									

TDW 11/9/2017

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V18691

Date: 10/26/2017

Print Analyst Name: Dynnedra Fatheree

Analyst Signature: Dynnedra Fatheree

Columns: Rtx624 60m x .25mm x 1.4um

Method V8260C

Initial Cal. Method MT8691

Standard Data

Lot #	Description	Conc.
V0172574-12.37	ABK	100-1000 ppm
V0172574-22.2	E	100ppm
V0172574-27.3	C	100ppm
V0172574-05.1	ext. acetonitrile	1000ppm
V0172530-11.22	ext. AB	100-1000 ppm

Standard Data

Lot #	Description	Conc.
V0172574-26.2	ext. K	300ppm
V0172574-04.8	ext. hexane	1000ppm
V0172574-3.9	ext. E	100ppm
V0172574-21.3	ext. C	100ppm
V0172530-14.1	I/S	250/2500ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ **Date:** 11/10/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	I216441	BFB				1	5							7.16PM	
	216442	IC8691-0.2	8260C Initial Calibration			2	5							1uL ABK,C,E / 500mL DI H2O	
	216443	IC8691-0.5	✓			3	5							2.5uL ABK,CE / 500mL H2O	
	216444	IC8691-1	✓			4	5							1uL ABK, C,E / 100mL H2O	
	216445	IC8691-2	✓			5	5							2uL ABK, C,E / 100mL H2O	
	216446	IC8691-4	✓			6	5							4uL ABK,C,E / 100mL H2O	
	216447	IC8691-8	✓			7	5							8uL ABK,C,E / 100mL H2O	
	216448	IC8691-20	✓			8	5							20uL ABK, C,E / 100 mL H2O	
	216449	IC8691-50	✓			9	5							50uL ABK, C,E / 100mL H2O	
	216450	IC8691-100	✓			10	5							100uL ABK,C,E / 100mL H2O	
	216451	IC8691-200	✓			11	5							200uL ABK,C / 100mL E H2O	
	216452	IB				12	5								
	216453	IB				13	5								
	216454	ICV8691-50	✓			14	5							50uL ext. Acetonitrile / 100mL H2O	
	216455	ICV8691-50	✓			15	5							50uL ext. AB, ext. K, ext. hexane, ext. E, ext. C / 100mL H2O	
	216456	IB				16	5							10/27/17	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

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SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI 8698

Print Analyst Name: Doan Pham

Date: 11/3/17

Analyst Signature:

Columns: RXI 624 (30m x 0.25mm x 1.4µm

Method 8260C

Initial Cal. Method MI 8691

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
VMI-5734-28.2	+1911C	100 ppm
VMI-5734-29.3	C	100 ppm
VMI-5734-22.7	E	100 ppm
VMI-5734-29	IS 25/12500	ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/6/2017

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments 8.5	pH* <2
	I216592	CC 8691-10											INC	A/B/C, E 12, 25 ul/10mL	
	216593	CC8691-10/12FB											OK	8.53 ppm	
	216594	CC 8691-1											OK	Int Std A/B/C, E / 100ml Dilute For 19	
	216595	MB											OK		
	216596	LCS											OK	Std A/B/C, E / 100 Dilute	
	216597	LB											CLO		
	216598	I534428-1	2172 RLP	S	4		5.4						OK	Int of #19 Below MDL	
	216599	I534428-2	V	S	5		4.7						NC/RR	Int of #19	
	216600	I534428-3	V	S	4		5.6						OK/RR	Int of #19	
	216601	I534428-4	V	S	5		4.6						OK	Int of #19 Below MDL	
	216602	I534428-5	V	S	5		5.3						OK	Int of #19 Below MDL	
	216603	I534603-1	2141 RLP	S	3		8.4						NC/RR	Int of #19	
	216604	I534603-2CFS	V	S	3		4.7						211/19 OK/RR	Int of #19	
	216605	I534603-3	V	S	3		9.7						NC/RR	Int of #19	
	216606	I534603-4	V	S	3		8.7						OK	Int of #19 Below MDL	
	216607	I534602-1	V	S	11		8.2						OK	Int of #19 Below MDL	
	216608	I534531-1	2109 PPTW2-1	S	8		5.3						NC/RR	Int of #19	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI 8698

Print Analyst Name: Thom Pham

Date: 11/3/17

Analyst Signature:

Columns: RXi 624 30m x 0.25mm x 1.4 um

Method 8260

Initial Cal. Method VI 8691

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/6/2017

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	I216609	254531-2	8260 PPTMW1+	S	6		5.8				W		NC/RR	Lot of #19	
	216610	254538 -5	V TUNE	S	5		5.0				W		OK	Lot of #19 Below MDL	
	216611	254535 -1	8260 SCOTCH 10 14 DIOXANE	S	4		6.5				W		OK	Lot of #19 Below MDL	
	216612	254535 -2	V	S	4		6.0				W		OK/R	RR IX CFL- Lot of #19 Below MDL	
	216613	254535 -3	V	S	4		6.8				W		OK	1.0 Am. Lot of #19 Below MDL	

11/6/2017

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI 8699

Date: 11/14/17

Print Analyst Name: Prashant B Shukla

Analyst Signature:

Columns: Rxi 624 (30m x 0.25mm x 1.4 µm)

Method V8260C

Initial Cal. Method M18691

Standard Data		
Lot #	Description	Conc.
2853h28 (2)	SS2 A B K	100 ppm
2853h28 (3)	SS1 C	100 ppm
2853h22 (4)	SS2 E	100 ppm
2853h29	Int Surr	50 / 50 ppm

Standard Data		
Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/7/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	J														
	216618	BFB / CC8691.20				1					✓		ok	1.45 PM. m/l SS1 A B K, C, E / 50ml DI H2O	
	216619	MB				2					✓		ok		
	216620	BS				3					✓		ok	25ml SS1 A B K, C, E / 50ml DI H2O.	
	216621	IB				4					✓		—		
	216622	JC5h428-3 DUP	MS21732 RCP	S	5	5	5.9				✓		ok	VI 8698	
	216623	JC5h428-2MS	✓	S	6	6	6.1				✓		ok	2.5ml SS1 A B K, C, E in sample	
	216624	IB				7					✓		Clo		
	216625	JC5h614-1	MS21850 RCP	S	4	8	7.8				✓		ok	VI 8699	
	216626	JC5h614-2	✓	S	4	9	7.2				✓		ok		
	216627	JC5h614-3	✓	S	4	10	8.1				✓		ok		
	216628	JC5h614-4	✓	S	4	11	8.1				✓		ok		
ⓡ 11/14/17	216629	JC5h614-1DUP	✓		5	12	7.8				✓		ok		
11/14/17	216630	JC5h614-2MS	✓		5	13	7.1				✓		ok	2.5ml SS1 A B K, C, E in sample	
	216631	IB				14					✓		Clo		
	216632	JC5h614-5	✓		4	15	7.2				✓		ok		
	216633	JC5h614-6	✓		4	16	7.5				✓		ok		
	216634	JC5h614-7	✓		4	17	7.2				✓		ok		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

GBS

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Form: OR001-10
Rev. Date: 1/19/16

7.8.10

7

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI 8699

Date: 11/11/17

Print Analyst Name: Prashant B. Shukla

Analyst Signature:

Columns: Rxi 624 (30m x 0.25mm x 1.4μm)

Method V8260C

Initial Cal. Method M16691

Standard Data		
Lot #	Description	Conc.
	See Page # 11	

Standard Data		
Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/11/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	216635	1254614-8	8260 RCP	S	4	18	8.2				✓	✓	ok		
	216636	1254614-9	✓	S	4	19	7.1				✓	✓	ok		
	216637	1254614-10	✓	S	4	20	6.6				✓	✓	ok		
	216638	1254614-11	✓	S	4	21	7.2				✓	✓	ok		
	216639	1254614-12	✓	S	4	22	7.6				✓	✓	ok		
	216640	1254614-13	✓	S	4	23	6.7				✓	✓	ok	11:25AM	
	216641	IB				9n							—		

11/11/17

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: FRM-1-10
Rev. Date: 1/19/16

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SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI8700

Print Analyst Name: Robert Szot

Date: 11/6/17

Analyst Signature:

Columns: Rx.-624(30mx0.25mmx1.4um)

Method V8260C

Initial Cal. Method MI8691

Standard Data

Lot #	Description	Conc.
I017-257428-2	ABK	100-10,000ppm
I017-257429-5	C	100ppm
I017-257429-7	E	100ppm
I017-257429	8260 Int/Surr	250/2500ppm

Standard Data

Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/7/2017

R	Data File I216642 I216643	Sample ID FB CC8691-20	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	I216644	BFB/CC8691-20				1	5						ok	107pm	
	I216645	MB				2	5			✓	✓	✓	ok		
	I216646	BS				3	5				✓	✓	ok		
	I216647	JC54422-1	21774 SCOTCL20 14Dfox.	S	4	4	6.0				✓	✓	ok		
	I216648	JC54422-2	✓	S	4	5	4.9				✓	✓	ok		
R	I216649 AS 11/6/17	JC54603-1	21891 RCP	S	4	6	8.1				✓	✓	ok		
R	I216650	JC54603-2	✓	S	4	7	8.1				✓	↑	ok	+I216604	
R	I216651	JC54603-3	✓	S	4	8	10.2				✓	✓	ok		
	I216652	JC54422-1MS	21774 SCOTCL20 14Dfox.	S	3	9	5.2				✓	✓	ok		
	I216653 ~~AS 11/6/17~~	JC54422-2DUP	✓	S	3	10	4.7				✓	✓	ok		
R	AS 11/6/17 I216654	~~JC54135-1~~	21656 TCL20+	S	9 to AS 11/6/17	11	4.5			✓	✓	✓	ok		
R	AS 11/6/17 I216655	JC54135-2	✓	S	9 to AS 11/6/17	12	5.5			✓	✓	✓	ok		
R	I216656	JC54025-1	21614 TCL20+	S	10	13	5.7			✓	✓	✓	ok		
R	I216657	JC54027-1	✓	S	10	14	6.6			✓	✓	✓	ok		
R	I216658	JC54027-3CF	✓	S	10	15	3.7				↓	↑	ok/RR	RLSME for CF	
R	I216659	JC54038-1	✓	S	10	16	5.8			✓	✓	✓	ok		
R	I216660	JC54296-3	21741 NHF	S	5	17	5.0				↓	↑	ok/RR	RLSME for CF	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

7.8.11

7

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI8700

Print Analyst Name: Robert Szot

Date: 11/6/17

Analyst Signature: [signature]

Columns: Rx-624 (30m x 0.25mm x 1.4um)

Method: VBL60C

Initial Cal. Method: MI8691

Standard Data			Standard Data		
Lot #	Description	Conc.	Lot #	Description	Conc.
	See page 15				

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/7/2017

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	I216661	JC54296-1	21711 NHF	SL	5	18	5.0				✓	✓	ok		
	I216662	JC53890-24	21551 TBA	SL	4	19 ~~14~~ RS 11/6/17	5.5				✓	✓	ok		
	I216663	JC54412-3 ~~JC53~~ RS 11/6/17	21774 SC6.TCL20 14Dioxane	SL	4	20	5.8				✓	✓	ok		
2 RS 11/6	I216664	JC54691-1 ~~JC54422-4~~	21871 TCL 704 V.T.	SL	1 ~~4~~	21	5.7 ~~6.8~~			✓	✓	✓	ok	intact Soil	
	I216665	JC53854-1	21546 TCL20+	SL	4	22	5.1			✓	✓	✓	ok		
	I216666	JC53855-1	✓	SL	4	23	5.7			✓	✓	✓	ok	11:23AM	

RS 11/7/17

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI8701

Print Analyst Name: Robert Scott

Date: 11/7/17

Analyst Signature:

Columns: Rxi-624 (Restek)

Method VB260C

Initial Cal. Method MI8691

Standard Data

Lot #	Description	Conc.
VOPV2574-28-2	ABK	100 ppm
VOPV2574-42	C	100 ppm
VOPV2574-22	E	100 ppm
VOPV2574-9	8260 INT/SURR	2000 ppm

Standard Data

Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/15/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	I216669	CC8691-20				1	5							10uL ABK,C,E → 50mL H2O 11:11AM	
	I216670	MB				2	5								
	I216671	BS				3	5							25uL ABK,C,E → 50mL H2O	
	I216672	JCS4136-1	21656 TCL20+	S	9	4	5.6								
	I216673	JCS4136-2	✓	S	9	5	6.2								
	I216674	JCS4136-3	✓	S	9	6	5.8								
	I216675	JCS4136-1MS	✓	S	10	7	5.4							25uL ABK,C,E → 5.4g Sample	
	I216676	JCS4136-2DUP	✓	S	10	8	5.9								
	I216677	JCS4555-2	21830 SL6TCL20 14Dioc	S	3	9	6.2								
	I216678	JCS4422-4	21774 SL6TCL20 14Dioc	S	4	10	6.8								
	I216679	JCS4137-1	21656 TCL20+	S	10	11	5.2								
	I216680	JCS4138-1	✓	S	9	12	5.3								
	I216681	JCS4138-2	✓	S	9	13	6.4								
	I216682	JCS4139-1	✓	S	9	14	5.5								
	I216683	JCS4139-2	✓	S	9	15	6.0								
	I216684	JCS4141-1	✓	S	9	16	6.0								
	I216685	JCS4142-1	✓	S	9	17	4.6								

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

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7.8.12

7

SGS ACCUTEST JC54422

SGS

VOLATILE ANALYSIS LOG

Batch ID: VI8701

Print Analyst Name: Robert Scot

Date: 11/7/17

Analyst Signature:

Columns: Rx.-624 (30m x 0.25mm

Method 8260C

Initial Cal. Method MI 8691

Standard Data

Lot #	Description	Conc.
	See page	

Standard Data

Lot #	Description	Conc.
19		

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: BKelly Date: 11/15/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	I216686	JC54142-2	21656 TCL20+	SLC	9	18	3.9								
	I216687	JC54144-1	✓	SLC	9	19	5.2								
	I216688	JC54144-2	✓	SLC	9	20	3.8								
	I216689	JC54145-1	✓	SLC	9	21	5.4								
	I216690	JC54145-2	✓	SLC	9	22	4.0							RRL int+surr out	
	I216691	JC54145-3	✓	SLC	9	23	4.6							RRL 9:36pm	

RJ 11/7/17

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, 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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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC54422

7.8.12

7

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: JC54277-1 **Analyzed:** 01-NOV-17 by MH **Method:** SM2540 G-97
ClientID: TRC-S1(6')

Wet Weight (Total)	34.09	g
Tare Weight	27.69	g
Dry Weight (Total)	33.5	g
Solids, Percent	90.8	%

Sample: JC54422-1 **Analyzed:** 06-NOV-17 by PN **Method:** SM2540 G-97
ClientID: TRC-S2(19')

Wet Weight (Total)	33.7	g
Tare Weight	24	g
Dry Weight (Total)	32.86	g
Solids, Percent	91.3	%

Sample: JC54422-2 **Analyzed:** 06-NOV-17 by PN **Method:** SM2540 G-97
ClientID: TRC-S3(5')

Wet Weight (Total)	28.27	g
Tare Weight	19.71	g
Dry Weight (Total)	27.25	g
Solids, Percent	88.1	%

Sample: JC54422-3 **Analyzed:** 06-NOV-17 by PN **Method:** SM2540 G-97
ClientID: TRC-S4(5')

Wet Weight (Total)	24.77	g
Tare Weight	16.07	g
Dry Weight (Total)	23.33	g
Solids, Percent	83.4	%

Sample: JC54422-4 **Analyzed:** 06-NOV-17 by PN **Method:** SM2540 G-97
ClientID: TRC-S5(12')

Wet Weight (Total)	25.99	g
Tare Weight	18.95	g
Dry Weight (Total)	25.43	g
Solids, Percent	92	%

Sample: JC54555-1 **Analyzed:** 06-NOV-17 by PN **Method:** SM2540 G-97
ClientID: TRC-S6(4')

Wet Weight (Total)	29.74	g
Tare Weight	20.85	g
Dry Weight (Total)	28.16	g
Solids, Percent	82.2	%

Percent Solids Raw Data Summary

Job Number: JC54422
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: JC54555-2 **Analyzed:** 06-NOV-17 by PN **Method:** SM2540 G-97
ClientID: TRC-S7(4')

Wet Weight (Total)	30.33	g
Tare Weight	21.36	g
Dry Weight (Total)	28.77	g
Solids, Percent	82.6	%

Sample: JC54555-3 **Analyzed:** 06-NOV-17 by PN **Method:** SM2540 G-97
ClientID: TRC-DUP-1

Wet Weight (Total)	25.75	g
Tare Weight	17.56	g
Dry Weight (Total)	24.33	g
Solids, Percent	82.7	%

Sample: JC54689-1 **Analyzed:** 07-NOV-17 by LV **Method:** SM2540 G-97
ClientID: TRC-S8(5')

Wet Weight (Total)	31.61	g
Tare Weight	25.02	g
Dry Weight (Total)	31.15	g
Solids, Percent	93	%

Sample: JC54803-1 **Analyzed:** 08-NOV-17 by LV **Method:** SM2540 G-97
ClientID: TRC-S9(13')

Wet Weight (Total)	31.59	g
Tare Weight	24.52	g
Dry Weight (Total)	31.29	g
Solids, Percent	95.8	%

Sample: JC54803-2 **Analyzed:** 08-NOV-17 by LV **Method:** SM2540 G-97
ClientID: TRC-S10(5')

Wet Weight (Total)	32.25	g
Tare Weight	23.3	g
Dry Weight (Total)	30.59	g
Solids, Percent	81.5	%

Sample: JC54803-3 **Analyzed:** 08-NOV-17 by LV **Method:** SM2540 G-97
ClientID: TRC-S11(5')

Wet Weight (Total)	27.52	g
Tare Weight	19.81	g
Dry Weight (Total)	26.55	g
Solids, Percent	87.4	%

ATTACHMENT G

Data Usability Summary Reports (DUSRs)

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
168 8th STREET, BROOKLYN, NEW YORK

Client: TRC Engineering, Inc., New York, New York
SDG: JC54277
Laboratory: Accutest, Dayton, New Jersey
Site: 168 8th Street, Brooklyn, New York
Date: November 21, 2017

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	TRC-S1(6')	JC54277-1	Soil
2	TRC-S2(19')	JC54422-1	Soil
2MS	TRC-S2(19')MS	JC54422-1MS	Soil
3	TRC-S3(5')	JC54422-2	Soil
4	TRC-S4(5')	JC54422-3	Soil
5	TRC-S5(12')	JC54422-4	Soil
6	TRC-S6(4')	JC54555-1	Soil
7	TRC-S7(4')	JC54555-2	Soil
8	TRC-DUP-1	JC54555-3	Soil
9	TRC-S8(5')	JC54689-1	Soil
10	TRC-S9(13')	JC54803-1	Soil
11	TRC-S10(5')	JC54803-2	Soil
12	TRC-S11(5')	JC54803-3	Soil

A Data Usability Summary Review was performed on the analytical data for twelve soil samples collected on October 30-November 6, 2017 by TRC at the 8th Street site in Brooklyn, New York. The samples were analyzed under the *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"*.

Specific method references are as follows:

Analysis	*Method References*
VOC	USEPA SW-846 Method 8260C

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 0, July 2015: Low/Medium Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

Overall the data are acceptable for the intended purposes as qualified for the following deficiencies.

- Two compounds were qualified as estimated in one sample due to a high surrogate recovery.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOC)

Holding Times

- All samples were analyzed within 14 days for soil samples.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- All %RSD and/or correlation coefficients and mean RRF criteria were met.

Continuing Calibration

- All %D and RRF criteria were met.

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC samples were not collected.

Surrogate Spike Recoveries

- The following table presents surrogate percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

Sample ID	Surrogate	%R	Qualifier
11	4-Bromofluorobenzene	133%	J - Positive Results (Run #1)

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

MS/MSD Sample ID	Compound	MS %R	Qualifier
2	MTBE	122%	None - Sample ND

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- All criteria were met.

Tentatively Identified Compounds (TICs)

- TICs were not reported.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

VOCs				
Compound	TRC-S7(4') ug/kg	TRC-DUP-1 ug/kg	RPD	Qualifier
Acetone	14.5	11.4	24%	None
Cis-1,2-Dichloroeothene	2.3	2.9	23%	
Tetrachloroethene	0.64	0.67	5%	
Trichloroethene	20.6	25.7	22%	

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 11/21/17

Nancy Weaver
Senior Chemist

Data Qualifiers

U	=	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
UJ	=	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
J	=	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
J+	=	The result is an estimated quantity, but the result may be biased high.
J-	=	The result is an estimated quantity, but the result may be biased low.
R	=	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
NJ	=	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

Raw Data: 3C140191.D

SGS Accutest

1

Report of Analysis

4.1.4

Client Sample ID:	TRC-S1(6')		
Lab Sample ID:	JC54277-1	Date Sampled:	10/30/17
Matrix:	SO - Soil	Date Received:	10/30/17
Method:	SW846 8260C	Percent Solids:	90.8
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140191.D	1	11/06/17 13:14	PS	n/a	n/a	V3C6357
Run #2							

	Initial Weight
Run #1	6.5 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	42.0	8.5	5.4	ug/kg	
71-43-2	Benzene	ND	0.42	0.091	ug/kg	
74-97-5	Bromochloromethane	ND	4.2	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	0.21	ug/kg	
75-25-2	Bromoform	ND	4.2	0.26	ug/kg	
74-83-9	Bromomethane	ND	4.2	0.59	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.5	4.4	ug/kg	
104-51-8	n-Butylbenzene	ND	1.7	0.31	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.7	0.20	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.7	0.37	ug/kg	
75-15-0	Carbon disulfide	ND	1.7	0.52	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.55	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.24	ug/kg	
75-00-3	Chloroethane	ND	4.2	0.76	ug/kg	
67-66-3	Chloroform	ND	1.7	0.27	ug/kg	
74-87-3	Chloromethane	ND	4.2	0.83	ug/kg	
110-82-7	Cyclohexane	ND	1.7	0.29	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	0.57	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.32	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.85	0.21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.85	0.44	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.85	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.85	0.41	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.2	0.52	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.85	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.85	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.85	0.60	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.8	0.85	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.85	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.34	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.33	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.20	ug/kg	

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

NW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S1(6')		
Lab Sample ID:	JC54277-1	Date Sampled:	10/30/17
Matrix:	SO - Soil	Date Received:	10/30/17
Method:	SW846 8260C	Percent Solids:	90.8
Project:	K710, 168 8th Street, Brooklyn, NY		

4.1.4

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	ND	110	40	ug/kg	
100-41-4	Ethylbenzene	ND	0.85	0.24	ug/kg	
76-13-1	Freon 113	ND	4.2	0.57	ug/kg	
591-78-6	2-Hexanone	ND	4.2	2.4	ug/kg	
98-82-8	Isopropylbenzene	ND	1.7	0.21	ug/kg	
79-20-9	Methyl Acetate	ND	4.2	2.1	ug/kg	
108-87-2	Methylcyclohexane	ND	1.7	0.46	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.85	0.36	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.2	1.5	ug/kg	
75-09-2	Methylene chloride	ND	4.2	2.1	ug/kg	
103-65-1	n-Propylbenzene	ND	1.7	0.19	ug/kg	
100-42-5	Styrene	ND	1.7	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.22	ug/kg	
127-18-4	Tetrachloroethene	15.6	1.7	0.54	ug/kg	
108-88-3	Toluene	ND	0.85	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.2	0.85	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.85	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.36	ug/kg	
79-01-6	Trichloroethene	20.0	0.85	0.46	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.2	0.41	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.7	0.85	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.7	0.85	ug/kg	
75-01-4	Vinyl chloride	ND	1.7	0.65	ug/kg	
	m,p-Xylene	ND	0.85	0.46	ug/kg	
95-47-6	o-Xylene	ND	0.85	0.21	ug/kg	
1330-20-7	Xylene (total)	ND	0.85	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-129%
17060-07-0	1,2-Dichloroethane-D4	111%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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

11/21/17

Raw Data: I216647.D

SGS Accutest

2

Report of Analysis

4.2 4

Client Sample ID:	TRC-S2(19')		
Lab Sample ID:	JC54422-1	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	91.3
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216647.D	1	11/06/17 15:59	PS	n/a	n/a	VI8700
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.9	9.1	5.9	ug/kg	
71-43-2	Benzene	ND	0.46	0.098	ug/kg	
74-97-5	Bromochloromethane	ND	4.6	0.40	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.22	ug/kg	
75-25-2	Bromoform	ND	4.6	0.28	ug/kg	
74-83-9	Bromomethane	ND	4.6	0.64	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.1	4.8	ug/kg	
104-51-8	n-Butylbenzene	ND	1.8	0.33	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.8	0.21	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.8	0.40	ug/kg	
75-15-0	Carbon disulfide	ND	1.8	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.59	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.26	ug/kg	
75-00-3	Chloroethane	ND	4.6	0.82	ug/kg	
67-66-3	Chloroform	ND	1.8	0.29	ug/kg	
74-87-3	Chloromethane	ND	4.6	0.90	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.31	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.61	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.35	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.91	0.22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.91	0.47	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.91	0.26	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.91	0.44	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	4.6	0.55	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.91	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.91	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.91	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.46	0.91	0.37	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.91	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.36	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.35	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.22	ug/kg	

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

NW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S2(19')		
Lab Sample ID:	JC54422-1	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	91.3
Project:	K710, 168 8th Street, Brooklyn, NY		

4.2
4

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	110	43	ug/kg	
100-41-4	Ethylbenzene	ND	0.91	0.26	ug/kg	
76-13-1	Freon 113	ND	4.6	0.62	ug/kg	
591-78-6	2-Hexanone	ND	4.6	2.5	ug/kg	
98-82-8	Isopropylbenzene	ND	1.8	0.23	ug/kg	
79-20-9	Methyl Acetate	ND	4.6	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.91	0.39	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.6	1.6	ug/kg	
75-09-2	Methylene chloride	ND	4.6	2.3	ug/kg	
103-65-1	n-Propylbenzene	ND	1.8	0.21	ug/kg	
100-42-5	Styrene	ND	1.8	0.45	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.23	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.58	ug/kg	
108-88-3	Toluene	ND	0.91	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.6	0.91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	0.91	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.38	ug/kg	
79-01-6	Trichloroethene	1.6	0.91	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.6	0.44	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.8	0.91	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.8	0.91	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.70	ug/kg	
	m,p-Xylene	ND	0.91	0.50	ug/kg	
95-47-6	o-Xylene	ND	0.91	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	0.91	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	109%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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

NW 11/2/17

Raw Data: I216648.D

SGS Accutest

3

Report of Analysis

4.3 4

Client Sample ID:	TRC-S3(5')		
Lab Sample ID:	JC54422-2	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	88.1
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216648.D	1	11/06/17 16:25	PS	n/a	n/a	VI8700
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	65.5	12	7.4	ug/kg	
71-43-2	Benzene	ND	0.58	0.12	ug/kg	
74-97-5	Bromochloromethane	ND	5.8	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	0.28	ug/kg	
75-25-2	Bromoform	ND	5.8	0.36	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.81	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	6.1	ug/kg	
104-51-8	n-Butylbenzene	ND	2.3	0.42	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.3	0.27	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.3	0.51	ug/kg	
75-15-0	Carbon disulfide	ND	2.3	0.71	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.3	0.75	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	0.33	ug/kg	
75-00-3	Chloroethane	ND	5.8	1.0	ug/kg	
67-66-3	Chloroform	ND	2.3	0.37	ug/kg	
74-87-3	Chloromethane	ND	5.8	1.1	ug/kg	
110-82-7	Cyclohexane	ND	2.3	0.40	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.3	0.78	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	0.44	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.2	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.2	0.33	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.2	0.55	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.8	0.70	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.2	0.30	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.2	0.82	ug/kg	
156-59-2	cis-1,2-Dichloroethene	4.5	1.2	0.47	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.2	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.3	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.27	ug/kg	

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

NW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S3(5')		
Lab Sample ID:	JC54422-2	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	88.1
Project:	K710, 168 8th Street, Brooklyn, NY		

4.3
4

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	140	55	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.33	ug/kg	
76-13-1	Freon 113	ND	5.8	0.78	ug/kg	
591-78-6	2-Hexanone	ND	5.8	3.2	ug/kg	
98-82-8	Isopropylbenzene	ND	2.3	0.29	ug/kg	
79-20-9	Methyl Acetate	ND	5.8	2.9	ug/kg	
108-87-2	Methylcyclohexane	ND	2.3	0.63	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	2.1	ug/kg	
75-09-2	Methylene chloride	ND	5.8	2.9	ug/kg	
103-65-1	n-Propylbenzene	ND	2.3	0.27	ug/kg	
100-42-5	Styrene	ND	2.3	0.57	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.29	ug/kg	
127-18-4	Tetrachloroethene	8.2	2.3	0.74	ug/kg	
108-88-3	Toluene	ND	1.2	0.63	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.8	1.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	1.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.67	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.49	ug/kg	
79-01-6	Trichloroethene	23.9	1.2	0.63	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	0.56	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	1.2	ug/kg	
75-01-4	Vinyl chloride	ND	2.3	0.89	ug/kg	
	m,p-Xylene	ND	1.2	0.63	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.29	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	113%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	109%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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

NW 11/21/17

Raw Data: I216663.D

SGS Accutest

4

Report of Analysis

4.4 4

Client Sample ID:	TRC-S4(5')		
Lab Sample ID:	JC54422-3	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	83.4
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216663.D	1	11/06/17 23:04	PS	n/a	n/a	VI8700
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	23.4	10	6.6	ug/kg	
71-43-2	Benzene	ND	0.52	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.45	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.25	ug/kg	
75-25-2	Bromoform	ND	5.2	0.32	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.73	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.4	ug/kg	
104-51-8	n-Butylbenzene	ND	2.1	0.38	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.1	0.24	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.1	0.46	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.63	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.30	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.93	ug/kg	
67-66-3	Chloroform	ND	2.1	0.33	ug/kg	
74-87-3	Chloromethane	ND	5.2	1.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.35	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.39	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.2	0.63	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.73	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.68	1.0	0.42	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.41	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.40	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.24	ug/kg	

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

NW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S4(5')		
Lab Sample ID:	JC54422-3	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	83.4
Project:	K710, 168 8th Street, Brooklyn, NY		

4.4

4

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	130	49	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
76-13-1	Freon 113	ND	5.2	0.70	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.9	ug/kg	
98-82-8	Isopropylbenzene	ND	2.1	0.26	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	2.6	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.56	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	1.9	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.6	ug/kg	
103-65-1	n-Propylbenzene	ND	2.1	0.24	ug/kg	
100-42-5	Styrene	ND	2.1	0.51	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.26	ug/kg	
127-18-4	Tetrachloroethene	0.71	2.1	0.66	ug/kg	J
108-88-3	Toluene	ND	1.0	0.57	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.60	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.43	ug/kg	
79-01-6	Trichloroethene	17.1	1.0	0.57	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.79	ug/kg	
	m,p-Xylene	ND	1.0	0.57	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.26	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		72-129%
17060-07-0	1,2-Dichloroethane-D4	118%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

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

MW 11/21/17

Raw Data: I216678.D

SGS Accutest

5

Report of Analysis

4.5
4

Client Sample ID:	TRC-S5(12')		
Lab Sample ID:	JC54422-4	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	92.0
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216678.D	1	11/07/17 15:49	PS	n/a	n/a	VI8701
Run #2							

	Initial Weight
Run #1	6.8 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.5	8.0	5.1	ug/kg	
71-43-2	Benzene	ND	0.40	0.086	ug/kg	
74-97-5	Bromochloromethane	ND	4.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	1.6	0.19	ug/kg	
75-25-2	Bromoform	ND	4.0	0.25	ug/kg	
74-83-9	Bromomethane	ND	4.0	0.56	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.0	4.2	ug/kg	
104-51-8	n-Butylbenzene	ND	1.6	0.29	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.6	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.6	0.35	ug/kg	
75-15-0	Carbon disulfide	ND	1.6	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.6	0.52	ug/kg	
108-90-7	Chlorobenzene	ND	1.6	0.23	ug/kg	
75-00-3	Chloroethane	ND	4.0	0.72	ug/kg	
67-66-3	Chloroform	ND	1.6	0.26	ug/kg	
74-87-3	Chloromethane	ND	4.0	0.79	ug/kg	
110-82-7	Cyclohexane	ND	1.6	0.27	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.6	0.54	ug/kg	
124-48-1	Dibromochloromethane	ND	1.6	0.30	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.80	0.20	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.80	0.41	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.80	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.80	0.38	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.0	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.80	0.21	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.80	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.80	0.57	ug/kg	
156-59-2	cis-1,2-Dichloroethene	4.6	0.80	0.32	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.80	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.6	0.32	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.6	0.31	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.6	0.19	ug/kg	

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

MW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S5(12')		
Lab Sample ID:	JC54422-4	Date Sampled:	11/01/17
Matrix:	SO - Soil	Date Received:	11/01/17
Method:	SW846 8260C	Percent Solids:	92.0
Project:	K710, 168 8th Street, Brooklyn, NY		

4.5 4

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	100	38	ug/kg	
100-41-4	Ethylbenzene	ND	0.80	0.23	ug/kg	
76-13-1	Freon 113	ND	4.0	0.54	ug/kg	
591-78-6	2-Hexanone	ND	4.0	2.2	ug/kg	
98-82-8	Isopropylbenzene	ND	1.6	0.20	ug/kg	
79-20-9	Methyl Acetate	ND	4.0	2.0	ug/kg	
108-87-2	Methylcyclohexane	ND	1.6	0.44	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.80	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.0	1.4	ug/kg	
75-09-2	Methylene chloride	ND	4.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	1.6	0.18	ug/kg	
100-42-5	Styrene	ND	1.6	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.6	0.20	ug/kg	
127-18-4	Tetrachloroethene	0.77	1.6	0.51	ug/kg	J
108-88-3	Toluene	ND	0.80	0.44	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.0	0.80	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	0.80	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.6	0.46	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.6	0.34	ug/kg	
79-01-6	Trichloroethene	12.6	0.80	0.44	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.0	0.38	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.6	0.80	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.6	0.80	ug/kg	
75-01-4	Vinyl chloride	ND	1.6	0.61	ug/kg	
	m,p-Xylene	ND	0.80	0.44	ug/kg	
95-47-6	o-Xylene	ND	0.80	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	0.80	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	117%		73-132%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	111%		77-125%

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

MW 11/21/17

Raw Data: I216611.D

SGS Accutest

6

Report of Analysis

4.6 4

Client Sample ID:	TRC-S6(4')		
Lab Sample ID:	JC54555-1	Date Sampled:	11/02/17
Matrix:	SO - Soil	Date Received:	11/02/17
Method:	SW846 8260C	Percent Solids:	82.2
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216611.D	1	11/04/17 05:07	PS	n/a	n/a	VI8698
Run #2							

	Initial Weight
Run #1	6.5 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	56.9	9.4	6.0	ug/kg	
71-43-2	Benzene	ND	0.47	0.10	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.41	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.23	ug/kg	
75-25-2	Bromoform	ND	4.7	0.29	ug/kg	
74-83-9	Bromomethane	ND	4.7	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.4	4.9	ug/kg	
104-51-8	n-Butylbenzene	ND	1.9	0.34	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.9	0.22	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.9	0.41	ug/kg	
75-15-0	Carbon disulfide [a]	ND	1.9	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.27	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.85	ug/kg	
67-66-3	Chloroform	ND	1.9	0.30	ug/kg	
74-87-3	Chloromethane	ND	4.7	0.92	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.32	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.63	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.36	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.94	0.23	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.94	0.48	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.94	0.27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.94	0.45	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.57	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.94	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.94	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.94	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	6.5	0.94	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.94	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.37	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.36	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.22	ug/kg	

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

MW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S6(4')		
Lab Sample ID:	JC54555-1	Date Sampled:	11/02/17
Matrix:	SO - Soil	Date Received:	11/02/17
Method:	SW846 8260C	Percent Solids:	82.2
Project:	K710, 168 8th Street, Brooklyn, NY		

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VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	120	44	ug/kg	
100-41-4	Ethylbenzene	ND	0.94	0.27	ug/kg	
76-13-1	Freon 113	ND	4.7	0.63	ug/kg	
591-78-6	2-Hexanone	ND	4.7	2.6	ug/kg	
98-82-8	Isopropylbenzene	ND	1.9	0.23	ug/kg	
79-20-9	Methyl Acetate	ND	4.7	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.51	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.94	0.40	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	1.7	ug/kg	
75-09-2	Methylene chloride	ND	4.7	2.3	ug/kg	
103-65-1	n-Propylbenzene	ND	1.9	0.21	ug/kg	
100-42-5	Styrene	ND	1.9	0.46	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.24	ug/kg	
127-18-4	Tetrachloroethene	1.6	1.9	0.60	ug/kg	J
108-88-3	Toluene	ND	0.94	0.51	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	0.94	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.94	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.54	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.39	ug/kg	
79-01-6	Trichloroethene	35.4	0.94	0.51	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.45	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.9	0.94	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	0.94	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.72	ug/kg	
	m,p-Xylene	ND	0.94	0.51	ug/kg	
95-47-6	o-Xylene	ND	0.94	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	0.94	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		72-129%
17060-07-0	1,2-Dichloroethane-D4	93%		73-132%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

(a) Associated CCV outside of control limits low.

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

NW 11/21/17

SGS Accutest

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Report of Analysis

Client Sample ID:	TRC-S7(4')		
Lab Sample ID:	JC54555-2	Date Sampled:	11/02/17
Matrix:	SO - Soil	Date Received:	11/02/17
Method:	SW846 8260C	Percent Solids:	82.6
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216677.D	1	11/07/17 15:23	PS	n/a	n/a	VI8701
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	14.5	9.8	6.3	ug/kg	
71-43-2	Benzene	ND	0.49	0.10	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.42	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.24	ug/kg	
75-25-2	Bromoform	ND	4.9	0.30	ug/kg	
74-83-9	Bromomethane	ND	4.9	0.69	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.8	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.36	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.23	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.43	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.60	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.28	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.88	ug/kg	
67-66-3	Chloroform	ND	2.0	0.32	ug/kg	
74-87-3	Chloromethane	ND	4.9	0.96	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.66	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.37	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.98	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.98	0.50	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.98	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.98	0.47	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.59	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.98	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.98	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.98	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	2.3	0.98	0.39	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.98	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.39	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.37	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	

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

nw 11/21/17

Report of Analysis

Client Sample ID:	TRC-S7(4')		
Lab Sample ID:	JC54555-2	Date Sampled:	11/02/17
Matrix:	SO - Soil	Date Received:	11/02/17
Method:	SW846 8260C	Percent Solids:	82.6
Project:	K710, 168 8th Street, Brooklyn, NY		

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VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	120	46	ug/kg	
100-41-4	Ethylbenzene	ND	0.98	0.28	ug/kg	
76-13-1	Freon 113	ND	4.9	0.66	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	0.24	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.53	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.98	0.42	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	1.8	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.4	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.22	ug/kg	
100-42-5	Styrene	ND	2.0	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.25	ug/kg	
127-18-4	Tetrachloroethene	0.64	2.0	0.62	ug/kg	J
108-88-3	Toluene	ND	0.98	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.98	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.98	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.57	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.41	ug/kg	
79-01-6	Trichloroethene	20.6	0.98	0.53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.47	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.98	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.98	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.75	ug/kg	
	m,p-Xylene	ND	0.98	0.54	ug/kg	
95-47-6	o-Xylene	ND	0.98	0.25	ug/kg	
1330-20-7	Xylene (total)	ND	0.98	0.25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	113%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	111%		77-125%

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

NW 11/21/17

Raw Data: I216613.D

SGS Accutest

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Report of Analysis

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4

Client Sample ID:	TRC-DUP-1		
Lab Sample ID:	JC54555-3	Date Sampled:	11/02/17
Matrix:	SO - Soil	Date Received:	11/02/17
Method:	SW846 8260C	Percent Solids:	82.7
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I216613.D	1	11/04/17 06:00	PS	n/a	n/a	VI8698
Run #2							

	Initial Weight
Run #1	6.8 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.4	8.9	5.7	ug/kg	
71-43-2	Benzene	ND	0.44	0.095	ug/kg	
74-97-5	Bromochloromethane	ND	4.4	0.39	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.22	ug/kg	
75-25-2	Bromoform	ND	4.4	0.28	ug/kg	
74-83-9	Bromomethane	ND	4.4	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.9	4.7	ug/kg	
104-51-8	n-Butylbenzene	ND	1.8	0.32	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.8	0.21	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.8	0.39	ug/kg	
75-15-0	Carbon disulfide [a]	ND	1.8	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.58	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.26	ug/kg	
75-00-3	Chloroethane	ND	4.4	0.80	ug/kg	
67-66-3	Chloroform	ND	1.8	0.29	ug/kg	
74-87-3	Chloromethane	ND	4.4	0.88	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.30	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.60	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.34	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.89	0.22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.89	0.46	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.89	0.26	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.89	0.43	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	0.54	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.89	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.89	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.89	0.63	ug/kg	
156-59-2	cis-1,2-Dichloroethene	2.9	0.89	0.36	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.89	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.35	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.34	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.21	ug/kg	

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

NW 11/21/17

Report of Analysis

Client Sample ID:	TRC-DUP-1		
Lab Sample ID:	JC54555-3	Date Sampled:	11/02/17
Matrix:	SO - Soil	Date Received:	11/02/17
Method:	SW846 8260C	Percent Solids:	82.7
Project:	K710, 168 8th Street, Brooklyn, NY		

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VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	110	42	ug/kg	
100-41-4	Ethylbenzene	ND	0.89	0.26	ug/kg	
76-13-1	Freon 113	ND	4.4	0.60	ug/kg	
591-78-6	2-Hexanone	ND	4.4	2.5	ug/kg	
98-82-8	Isopropylbenzene	ND	1.8	0.22	ug/kg	
79-20-9	Methyl Acetate	ND	4.4	2.2	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.49	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.89	0.38	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.4	1.6	ug/kg	
75-09-2	Methylene chloride	ND	4.4	2.2	ug/kg	
103-65-1	n-Propylbenzene	ND	1.8	0.20	ug/kg	
100-42-5	Styrene	ND	1.8	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.23	ug/kg	
127-18-4	Tetrachloroethene	0.67	1.8	0.57	ug/kg	J
108-88-3	Toluene	ND	0.89	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.4	0.89	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.89	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.37	ug/kg	
79-01-6	Trichloroethene	25.7	0.89	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.4	0.43	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.8	0.89	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.8	0.89	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.68	ug/kg	
	m,p-Xylene	ND	0.89	0.49	ug/kg	
95-47-6	o-Xylene	ND	0.89	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	0.89	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	107%		77-125%

(a) Associated CCV outside of control limits low.

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

NW 11/21/17

Raw Data: 1C153146.D

SGS Accutest

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Report of Analysis

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4

Client Sample ID:	TRC-S8(5')		
Lab Sample ID:	JC54689-1	Date Sampled:	11/03/17
Matrix:	SO - Soil	Date Received:	11/03/17
Method:	SW846 8260C	Percent Solids:	93.0
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153146.D	1	11/07/17 21:26	PS	n/a	n/a	V1C6761
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.1	8.4	5.4	ug/kg	
71-43-2	Benzene	ND	0.42	0.090	ug/kg	
74-97-5	Bromochloromethane	ND	4.2	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	0.20	ug/kg	
75-25-2	Bromoform	ND	4.2	0.26	ug/kg	
74-83-9	Bromomethane	ND	4.2	0.59	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.4	4.4	ug/kg	
104-51-8	n-Butylbenzene	ND	1.7	0.31	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.7	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.7	0.37	ug/kg	
75-15-0	Carbon disulfide	ND	1.7	0.51	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.55	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.24	ug/kg	
75-00-3	Chloroethane	ND	4.2	0.76	ug/kg	
67-66-3	Chloroform	ND	1.7	0.27	ug/kg	
74-87-3	Chloromethane	ND	4.2	0.83	ug/kg	
110-82-7	Cyclohexane	ND	1.7	0.29	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	0.57	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.32	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.84	0.21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.84	0.43	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.84	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.84	0.40	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.2	0.51	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.84	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.84	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.84	0.59	ug/kg	
156-59-2	cis-1,2-Dichloroethene	5.6	0.84	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.84	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.33	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.32	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.20	ug/kg	

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

MW11/21/17

Report of Analysis

Client Sample ID:	TRC-S8(5')		
Lab Sample ID:	JC54689-1	Date Sampled:	11/03/17
Matrix:	SO - Soil	Date Received:	11/03/17
Method:	SW846 8260C	Percent Solids:	93.0
Project:	K710, 168 8th Street, Brooklyn, NY		

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VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	110	40	ug/kg	
100-41-4	Ethylbenzene	ND	0.84	0.24	ug/kg	
76-13-1	Freon 113	ND	4.2	0.57	ug/kg	
591-78-6	2-Hexanone	ND	4.2	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	1.7	0.21	ug/kg	
79-20-9	Methyl Acetate	ND	4.2	2.1	ug/kg	
108-87-2	Methylcyclohexane	ND	1.7	0.46	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.84	0.36	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.2	1.5	ug/kg	
75-09-2	Methylene chloride	ND	4.2	2.1	ug/kg	
103-65-1	n-Propylbenzene	ND	1.7	0.19	ug/kg	
100-42-5	Styrene	ND	1.7	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.21	ug/kg	
127-18-4	Tetrachloroethene	0.85	1.7	0.54	ug/kg	J
108-88-3	Toluene	ND	0.84	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.2	0.84	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.84	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.35	ug/kg	
79-01-6	Trichloroethene	19.2	0.84	0.46	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.2	0.40	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.7	0.84	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.7	0.84	ug/kg	
75-01-4	Vinyl chloride	ND	1.7	0.64	ug/kg	
	m,p-Xylene	ND	0.84	0.46	ug/kg	
95-47-6	o-Xylene	ND	0.84	0.21	ug/kg	
1330-20-7	Xylene (total)	ND	0.84	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		72-129%
17060-07-0	1,2-Dichloroethane-D4	94%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	100%		77-125%

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

11/21/17

Raw Data: 1C153162.D

SGS Accutest

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Report of Analysis

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Client Sample ID:	TRC-S9(13')		
Lab Sample ID:	JC54803-1	Date Sampled:	11/06/17
Matrix:	SO - Soil	Date Received:	11/06/17
Method:	SW846 8260C	Percent Solids:	95.8
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153162.D	1	11/08/17 05:42	PS	n/a	n/a	V1C6762
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.7	9.7	6.2	ug/kg	J
71-43-2	Benzene	ND	0.48	0.10	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	0.42	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.23	ug/kg	
75-25-2	Bromoform [a]	ND	4.8	0.30	ug/kg	
74-83-9	Bromomethane	ND	4.8	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.7	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	1.9	0.35	ug/kg	
135-98-8	sec-Butylbenzene	ND	1.9	0.22	ug/kg	
98-06-6	tert-Butylbenzene	ND	1.9	0.43	ug/kg	
75-15-0	Carbon disulfide	ND	1.9	0.59	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.28	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.87	ug/kg	
67-66-3	Chloroform	ND	1.9	0.31	ug/kg	
74-87-3	Chloromethane	ND	4.8	0.95	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.65	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.37	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.97	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.97	0.50	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.97	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.97	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	4.8	0.59	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.97	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.97	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.97	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.51	0.97	0.39	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.97	0.56	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.38	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.37	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.23	ug/kg	

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

MW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S9(13')		
Lab Sample ID:	JC54803-1	Date Sampled:	11/06/17
Matrix:	SO - Soil	Date Received:	11/06/17
Method:	SW846 8260C	Percent Solids:	95.8
Project:	K710, 168 8th Street, Brooklyn, NY		

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VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	120	46	ug/kg	
100-41-4	Ethylbenzene	ND	0.97	0.28	ug/kg	
76-13-1	Freon 113	ND	4.8	0.65	ug/kg	
591-78-6	2-Hexanone	ND	4.8	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	1.9	0.24	ug/kg	
79-20-9	Methyl Acetate	ND	4.8	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.53	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.97	0.41	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.8	1.7	ug/kg	
75-09-2	Methylene chloride	ND	4.8	2.4	ug/kg	
103-65-1	n-Propylbenzene	ND	1.9	0.22	ug/kg	
100-42-5	Styrene	ND	1.9	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.25	ug/kg	
127-18-4	Tetrachloroethene	0.91	1.9	0.62	ug/kg	J
108-88-3	Toluene	ND	0.97	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	0.97	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.97	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.56	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.41	ug/kg	
79-01-6	Trichloroethene	2.1	0.97	0.53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.46	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1.9	0.97	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	0.97	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.74	ug/kg	
	m,p-Xylene	ND	0.97	0.53	ug/kg	
95-47-6	o-Xylene	ND	0.97	0.24	ug/kg	
1330-20-7	Xylene (total)	ND	0.97	0.24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		72-129%
17060-07-0	1,2-Dichloroethane-D4	101%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	101%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.

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

MW 11/21/17

SGS Accutest

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Report of Analysis

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Client Sample ID:	TRC-S10(5')		
Lab Sample ID:	JC54803-2	Date Sampled:	11/06/17
Matrix:	SO - Soil	Date Received:	11/06/17
Method:	SW846 8260C	Percent Solids:	81.5
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153164.D	1	11/08/17 06:40	PS	n/a	n/a	V1C6762
Run #2	E248828.D	1	11/09/17 18:52	TDN	n/a	n/a	VE10685

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.7 g		
Run #2	5.1 g	10.0 ml	100 ul

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	33.8 J	11	6.9	ug/kg	
71-43-2	Benzene	ND	0.54	0.12	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.47	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.26	ug/kg	
75-25-2	Bromoform [a]	ND	5.4	0.34	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.76	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	5.6	ug/kg	
104-51-8	n-Butylbenzene	ND	2.2	0.39	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.2	0.25	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.2	0.48	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.66	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.70	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.31	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.97	ug/kg	
67-66-3	Chloroform	ND	2.2	0.35	ug/kg	
74-87-3	Chloromethane	ND	5.4	1.1	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.37	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.41	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.56	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	5.4	0.65	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.28	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.76	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.5 J	1.1	0.43	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.41	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.26	ug/kg	

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

MW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S10(5')		
Lab Sample ID:	JC54803-2	Date Sampled:	11/06/17
Matrix:	SO - Soil	Date Received:	11/06/17
Method:	SW846 8260C	Percent Solids:	81.5
Project:	K710, 168 8th Street, Brooklyn, NY		

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	130	51	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.31	ug/kg	
76-13-1	Freon 113	ND	5.4	0.73	ug/kg	
591-78-6	2-Hexanone	ND	5.4	3.0	ug/kg	
98-82-8	Isopropylbenzene	ND	2.2	0.27	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	2.7	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.59	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	1.9	ug/kg	
75-09-2	Methylene chloride	ND	5.4	2.7	ug/kg	
103-65-1	n-Propylbenzene	ND	2.2	0.25	ug/kg	
100-42-5	Styrene	ND	2.2	0.53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.27	ug/kg	
127-18-4	Tetrachloroethene	102 [c]	260	84	ug/kg	J
108-88-3	Toluene	ND	1.1	0.59	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.63	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.45	ug/kg	
79-01-6	Trichloroethene	149 [c]	130	72	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.2	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.2	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.82	ug/kg	
	m,p-Xylene	ND	1.1	0.59	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.27	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%	94%	72-129%
17060-07-0	1,2-Dichloroethane-D4	122%	88%	73-132%
2037-26-5	Toluene-D8	82%	94%	80-120%
460-00-4	4-Bromofluorobenzene	133% [d]	97%	77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.
(c) Result is from Run# 2
(d) Outside control limits due to matrix interference.

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

NW 11/21/17

Raw Data: 1C153163.D

SGS Accutest

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Report of Analysis

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4

Client Sample ID:	TRC-S11(5')		
Lab Sample ID:	JC54803-3	Date Sampled:	11/06/17
Matrix:	SO - Soil	Date Received:	11/06/17
Method:	SW846 8260C	Percent Solids:	87.4
Project:	K710, 168 8th Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C153163.D	1	11/08/17 06:11	PS	n/a	n/a	V1C6762
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.2	10	6.5	ug/kg	
71-43-2	Benzene	ND	0.51	0.11	ug/kg	
74-97-5	Bromochloromethane	ND	5.1	0.44	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.25	ug/kg	
75-25-2	Bromoform [a]	ND	5.1	0.32	ug/kg	
74-83-9	Bromomethane	ND	5.1	0.72	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	5.3	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.37	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.24	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.45	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.29	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.92	ug/kg	
67-66-3	Chloroform	ND	2.0	0.33	ug/kg	
74-87-3	Chloromethane	ND	5.1	1.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.35	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.39	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	5.1	0.62	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	3.8	1.0	0.41	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.41	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.39	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.24	ug/kg	

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

MW 11/21/17

Report of Analysis

Client Sample ID:	TRC-S11(5')		
Lab Sample ID:	JC54803-3	Date Sampled:	11/06/17
Matrix:	SO - Soil	Date Received:	11/06/17
Method:	SW846 8260C	Percent Solids:	87.4
Project:	K710, 168 8th Street, Brooklyn, NY		

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VOA SCO+ TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	130	48	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
76-13-1	Freon 113	ND	5.1	0.69	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.9	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	0.25	ug/kg	
79-20-9	Methyl Acetate	ND	5.1	2.6	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.56	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	1.8	ug/kg	
75-09-2	Methylene chloride	ND	5.1	2.6	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.23	ug/kg	
100-42-5	Styrene	ND	2.0	0.51	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.26	ug/kg	
127-18-4	Tetrachloroethene	3.3	2.0	0.65	ug/kg	
108-88-3	Toluene	ND	1.0	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.1	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.59	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.43	ug/kg	
79-01-6	Trichloroethene	34.4	1.0	0.56	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.78	ug/kg	
	m,p-Xylene	ND	1.0	0.56	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.26	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.

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

11/21/17