

Semiannual Monitoring Report

U.S. Dredging Shipyard Site
Tax Block 612, Lot 130
Brooklyn, New York
NYSDEC –BCP Number C224043

Prepared for:

IKEA Property, Inc.
(formerly One Beard Street, LLC)
420 Alan Wood Road
Conshohocken, PA 19428

Time Period
6/22/22 through 1/10/23

Prepared by:

SOIL MECHANICS DRILLING CORP.

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I Introduction

The subject property (Site), located at 1 Beard Street, Brooklyn, N.Y. (Red Hook section – see Figure #1) was formerly occupied by the United States Dredging Shipyard (USDC). The Site was subject to remedial actions under the New York State Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC) under New York Environmental Conservation Law (ECL) Section 27-1401 et seq. (the “Brownfields Law”). The Site was remediated, to facilitate construction of new IKEA retail store, in accordance with the Brownfield Cleanup Agreement (BCA) between One Beard Street, LLC (the Volunteer), a wholly owned subsidiary of IKEA Property, Inc. (IKEA), and NYSDCE under Index #W2-1023-04-10, Site #C224043 (effective on January 11, 2005).

Upon completion of the remedial actions referenced above, a Site Management Plan (SMP, dated 5/08) was prepared to address long term site management issues. The SMP was prepared in accordance with the environmental easement executed by the Volunteer and recorded against the property with the Kings County Clerk pursuant to ECL Section 27-1419(2)(e) and in accordance with the Brownfields Regulations. The SMP was prepared on behalf of the Volunteer in accordance with the Brownfields Law, the Brownfields Regulations, guidelines contained in NYSDCE Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated December 2002, and other guidelines provided by NYSDCE. As required by the Brownfields Law and Regulations, the SMP, among other things, addresses the implementation of Site-specific engineering controls (ECs), which were identified in the Remedial Work Plan (RWP).

ECs identified in the SMP that require routine monitoring include:

- The composite site cap;
- The sub-slab vapor mitigation system (SSVMS) and associated perimeter soil-vapor monitoring system, which consists of 16 soil-vapor monitoring wells or implants.

The SMP mandates that the composite site cap be subject to yearly monitoring/inspection, the results of which will be reported in the Annual Site Management Report. The SMP further mandates that the SSVMS and associated perimeter monitoring wells be subject to monthly/quarterly monitoring and inspection. Notably, per the directive of the NYSDCE (dated 2/27/15) the monitoring period was reduced to semiannually because methane concentrations have been documented to be generally consistent. The results of required monitoring and inspection efforts for the time period 6/22/22 through 1/10/23 are presented herein and will also be incorporated into the Annual Site Management Report. All monitoring and inspection activities were conducted in conformance with the SMP.

II Sub-slab Vapor Mitigation System (SSVMS) Monitoring

The sub-slab vapor mitigation system associated with the IKEA retail store consists of: (i) a sub-slab network of horizontal slotted screen PVC piping in a gravel layer under selected portions of the building, which consists of two (2) separate manifolds or zones; (ii) two (2) separate riser pipes (one per manifold) that extend from the piping network to the roof; (iii) two (2) blower units (one per riser) mounted on the roof of the IKEA Building; and (iv) a Liquid Boot brand vapor barrier membrane, which was sprayed into the gravel layer and is attached to the underside of the building's structural slab. When operational, the blowers create negative air pressure or suction in the horizontal well network. As organic vapors naturally rise to the gravel layer, the vapors are captured and discharged through short stacks on top of the blowers to the atmosphere.

Visual inspection of accessible portions of the SSVMS was performed in conformance with Section 4.2 of the SMP. During the time period 6/22/22 through 1/10/23 there was no need for an unscheduled inspection or sampling due to: (i) suspected failure of the SSVMS; or (ii) other emergency other than that which is presented in Table A below.

a) System Start-Up and Testing

Prior to activation of the system, qualified Soil Mechanics Drilling Corp. (SMDC) professionals reviewed the status of the equipment and inspected/tested same to ensure all equipment meets performance requirements and were fully operational. The system was formally put into fulltime operation on 6/3/08.

b). Monthly System Operation/Monitoring

(i)	7/28/22	(July 2022 visit)
(ii)	9/6/22	(August 2022 visit)
(iii)	10/5/22	(September 2022 visit)
(iv)	11/10/22	(October 2022 visit)
(v)	12/13/22	(November 2022 visit)
(vi)	1/10/23	(December 2022 visit)

Regular monthly inspections were conducted by qualified SMDC professionals on 7/28/22, 9/6/22, 10/5/22, 11/10/22, 12/13/22, and 1/10/23. The inspections were conducted to: (i) ensure the SSVMS is operating properly; (ii) to document any unusual conditions; and (iii) make any necessary repairs/adjustments. During the time period 6/22/22 through 1/10/23, the SSVMS operated as designed; there were no system malfunctions or low vacuum pressure alarms with the exception of that which is cited below in Table A below. Repairs and/or adjustments were made as necessary to ensure proper operation of the SSVMS and protection of building occupants (see Monthly SSVMS Inspection Forms attached for complete summaries).

Table A

Date	Comments
8/12/22	Multiple low vacuum alarms received. Field technical personnel responding to site confirmed that both Blower #1 and Blower #2 were operating as designed. Inspection of both Blowers revealed that the roofing contractor, conducting roof repairs, had staged equipment/tools on dunnage supporting Blower #2, pinching the low vacuum tubing. The roofing contractor was instructed to remove their equipment/tools from the area of the Blowers. Field technical personnel departed Site with both Blowers operation as designed.

Visual inspection of vapor sampling ports revealed no evidence of any damage (e.g., broken valve, cracked piping). Vapor discharge sampling, utilizing a GEM 2000 Landfill Gas Analyzer, indicated non-detectable concentrations of methane during monitoring efforts conducted 7/28/22, 9/6/22, 10/5/22, 11/10/22, 12/13/22, and 1/10/23. at both blower locations (see Monthly SSVMS Inspection Forms attached for complete summary).

III Semiannually Soil Vapor Sampling – 6/22/22 through 1/10/23

A series of 16 permanent soil-vapor monitoring wells, identified as SVW-1 through SVW-16, have been installed along the perimeter of the Site in conformance with the SMP (see Figure #2). Inspection of all well locations on 12/13/22 revealed all monitoring wells to be in good condition. Accordingly, qualified SMDC professionals provided real-time monitoring of all well locations for methane and acquired samples for laboratory testing for volatile organic compounds (EPA method TO-15, including helium utilized as a tracer gas).

a) Methane Sampling

The wells were sampled, on 12/13/22, for the presence of methane, organic vapor, oxygen, and carbon dioxide utilizing a GEM 2000 Landfill Gas Analyzer and MiniRae 3000 organic vapor analyzer. Samples were collected via connection of the sampling equipment directly to dedicated valves at each well location. The sampling equipment was purged with ambient air between sample locations. Table #1 (Soil Vapor Sampling Form - see attached) provides a complete summary of all recorded measurements, including temperature, wind speed/direction, and barometric pressure. Chart #1 provides a graphic representation of methane monitoring results since commencement of data collection efforts. The results of monitoring activities for organic vapor and methane indicated:

- Non-detectable concentrations of methane at all monitoring well locations with the exception of SVW-14 (7.4%). The detected concentration of methane at monitoring well SVW-14 exceeded the lower explosive limit (LEL) for methane of 5% gas by volume (see Table #1). Concerned parties, including National Grid, were advised of the identified condition so that appropriate actions could be taken.

Notably, methane gas has been recorded at concentrations exceeding its lower explosive limit or LEL at this monitoring well location during prior reporting periods (see Chart #1).

- Non-detectable concentrations of organic vapor at all monitoring well locations with the exception of SVW-15 (0.2 parts/million) and SVW-16 (0.5 parts/million – see Table #1).

b) Volatile Organic Compound (VOC) Sampling

Organic vapor samples were collected directly from the sample port(s) all accessible well locations, utilizing 1-liter Summa canisters equipped with flow regulators to allow sample collection over a two-hour period (see Site Plan). The vapor samples were collected from all wells on the property on 12/13/22, utilizing the procedure detailed below.

Samples were collected as follows:

- Prior to sample collection, one to three probe volumes were purged.
- Flow rates for both purging and sample collection did not exceed 0.2 liters per minute.
- New, clean 1/8-inch inside diameter polyethylene tubing was attached to the sampling port and the sample port valve opened.
- The inlet on a labeled Tedlar bag was opened and attached to the discharge end of the tubing. The bag was allowed to fill approximately two-thirds full and the inlet valve closed. The bag was subsequently detached and the valve on the sampling port closed.
- The Tedlar bag was field screened for VOCs by attaching the sample port to the PID probe using a new section of polyethylene tubing. The PID pump was allowed to draw the soil gas sample into the meter. Once the readings stabilized measurements were recorded.
- The tubing on the stack sample port was connected to the inlet of a certified clean, labeled Summa canister equipped with a flow regulator and vacuum gauge. The vacuum reading from the vacuum gauge on the canister at the beginning of the sampling period was recorded. The valve of the canister was opened and then the valve on the system sample port to initiate sample collection. The initial vacuum reading and sampling start time was recorded.
- At the end of the sampling period and prior to the vacuum gauge returning to ambient pressure, the valve was closed and the flow-rate controller and vacuum gauge removed, canister cap was installed, and the time recorded.
- The canister was placed into the shipping container for transportation to the testing laboratory.
- Sample locations, measurements, weather conditions are recorded (see Table #1).

The results of VOC sampling are presented in Table #2 for all acquired samples. Standards, criteria, and/or guidance values for selected compounds presented in Table #2, i.e., carbon tetrachloride (CCl₄), tetrachloroethene (C₂Cl₄), 1, 1, 1-trichloroethane (C₂H₃Cl₃), trichloroethene (C₂HCl₃), 1, 1-dichloroethene (C₂H₃Cl₂), *cis*-1,2-dichloroethene (C₂H₃Cl₂), and vinyl chloride (C₂H₃Cl) are contained in decision making matrices provided by New York State Department of Health - Guidance for Evaluating Soil Vapor Intrusion in the State of New York (10/06). Notably, however, the noted matrices could not be utilized for comparative purposes since soil vapor samples acquired at the Site were not collected from wells located in the footprint of the IKEA building or from a sub-slab environment. As per the SMP (5/08), up and down wind ambient air samples were collected for laboratory analysis (EPA Method TO-15). The results of these samples are also presented in Table #2. As a quality assurance/quality control (QA/QC) measure, helium tracer was utilized to verify that soil vapor samples were not diluted by outdoor air infiltration during sampling efforts. Helium was used because: (i) it is readily available; (ii) has a low toxicity; (iii) can be monitored with portable measurement devices; and (iv) it can be included in the targeted suite of analytical parameters requested by the testing laboratory.

Helium was utilized to enrich the atmosphere in the immediate vicinity of the area where the probe intersects the ground during all sampling efforts. Appropriate measures were implemented to keep the tracer gas in contact with the probe during the testing as shown in pp. 28 of NYSDEC Guidance for Evaluating Soil Vapor Intrusion in New York State (10/06). The effectiveness of the probe seals at well locations were documented as follow:

- Prior to and after completion of sampling efforts, vapor samples were monitored for elevated concentrations of tracer gas (> 10% of helium) utilizing MGD 2002 Portable Helium Monitor equipped with a Tedlar bag. Tracer gas was not detected by the field monitoring instrument at any of the probe locations during this round of sampling activities. Accordingly, probe seals did not require enhancement to reduce/eliminate the infiltration of outdoor air.
- Helium was not detected in soil vapor samples subject to laboratory testing.

Appropriate QA/QC procedures were followed during all aspects of sample collection and analysis to ensure that sampling error is minimized and high-quality data are obtained. Sampling team members avoided actions (e.g., fueling vehicles, using permanent marking pens, wearing freshly dry-cleaned clothing or personal fragrances, etc.). Portable air monitoring equipment or field instrumentation was properly maintained, calibrated and tested to ensure validity of measurements. Air sampling equipment was stored, transported and between samples decontaminated in a manner consistent with the best environmental consulting practices to minimize problems such as field contamination and cross-contamination. Samples were collected using certified clean sample devices supplied by the testing laboratory. Gas used by the laboratory to clean the sample device was different from the gas used as a tracer during sampling (e.g., helium). Samples met holding times and temperatures and were delivered to the analytical laboratory (CENTEK Laboratories or Syracuse, N.Y. – NYS ELAP certified) as

soon as possible after collection. Further, laboratory accession procedures were followed, including field documentation (sample collection information and locations), chain of custody, field/trip blanks, field sample duplicates and laboratory duplicates, as appropriate to prepare a Category "B" deliverables package (see attached). Qualified Soil Mechanics personnel completed all sampling activities, in general compliance with appropriate sampling and decontamination protocols recognized by the NYSDEC/NYSDOH.

IV Residual Management Zone – Work Conducted Beneath Site Cap

Since the potential for residual contamination and methane exist beneath the Site Cap, certain engineering and institutional controls were employed at the subject property to ensure the long-term effectiveness of the remedy to protect human health and the environment. Accordingly, based on the aforementioned, all activities on the Site that in any way disturbed residual contamination must be conducted in accordance with the SMP.

During the time period of this report (6/22/22 through 1/10/23), no scheduled activities were conducted at the subject property that breached established site caps or that in any way disturbed Residual Management Zone (RMZ).

V Conclusion, Comments and Recommendations

The SSVMS was observed to be operating, as designed and in compliance with the SMP, during the time period of this report. The system operated continuously and did not require any shut downs or repairs.

Visual inspection of accessible portions of the SSVMS was performed in conformance with Section 4.2 of the SMP. During the time period of this report, there was no need for an unscheduled inspection or sampling due to: (i) suspected failure of the SSVMS; or (ii) other emergency. The only exception to the aforementioned was a low vacuum alarm on 8/12/22. Field technical personnel responded to site and observed that the alarm was due to accidental pinching of the low vacuum tubing associated with Blower #2 by a contractor working on the roof. The contractor was instructed to remove their equipment/tools from the area of the Blowers. Field technical personnel departed Site with both Blowers operation as designed.

Based on the results of real time monitoring and laboratory testing of acquired samples, presented in Tables #1 and 2, no modifications or adjustments to the system are, in our opinion, required. Accordingly, we recommend that monthly/semiannual monitoring activities continue as established with the SMP.

An elevated concentration of methane gas was detected at monitoring well location SVW-14 during this reporting period. Notably, methane gas has been recorded at concentrations exceeding its lower explosive limit or LEL at this monitoring well location during prior reporting periods (see Chart #1). Notably, monitoring well SVW-14 was by

design positioned along Beard St. to coincide with the location wherein utilities enter/exit the subject property, in this case, National Grid's natural gas supply line/valve, which is likely the source of the identified condition. Representatives of National Grid are routinely advised monitoring results so that appropriate actions may be taken. Implementation of mitigative measures has, however, to date, not been considered by National Grid. In any case, indoor air quality within the IKEA building is already protected with the subject property's SVMS. We, therefore, recommend that monitoring efforts continue as established with the SMP.

An oil-like substance was identified to be leaking from one of the four mothballed Gantry Cranes on the subject property during December of 2016 (see freestanding report, dated 6/20/17, and routine monitoring report for time period 12/20/16 to 6/27/17). As a result of mitigative measures established to be protective of human health and the environment, no evidence of any discharge(s) was observed in association with any of the mothballed Gantry Cranes during this reporting period. We, therefore, recommend that the Gantry Cranes continue to be subject to regular monitoring efforts for evidence of any discharges that would represent threat to human health or the environment.

Appendix

- A) Figures**
- B) Charts and Tables**
- C) Complete Laboratory Reports and Associated Chains of Custody**
- D) Monthly SSVMS Inspection Forms**
- E) QA/QC Samples**

Figures

**U.S. Dredging Shipyard Site
Tax Block 612, Lot 130
Brooklyn, New York
NYSDEC - BCP Number C224043**



Approximate
Footprint of Upland
Portion of Subject
Property



SOIL MECHANICS ENVIRONMENTAL SERVICES

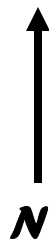
3770 Merrick Road, Seaford, NY 11783
P: 516.221.7500 Email: Soilmech@optonline.net

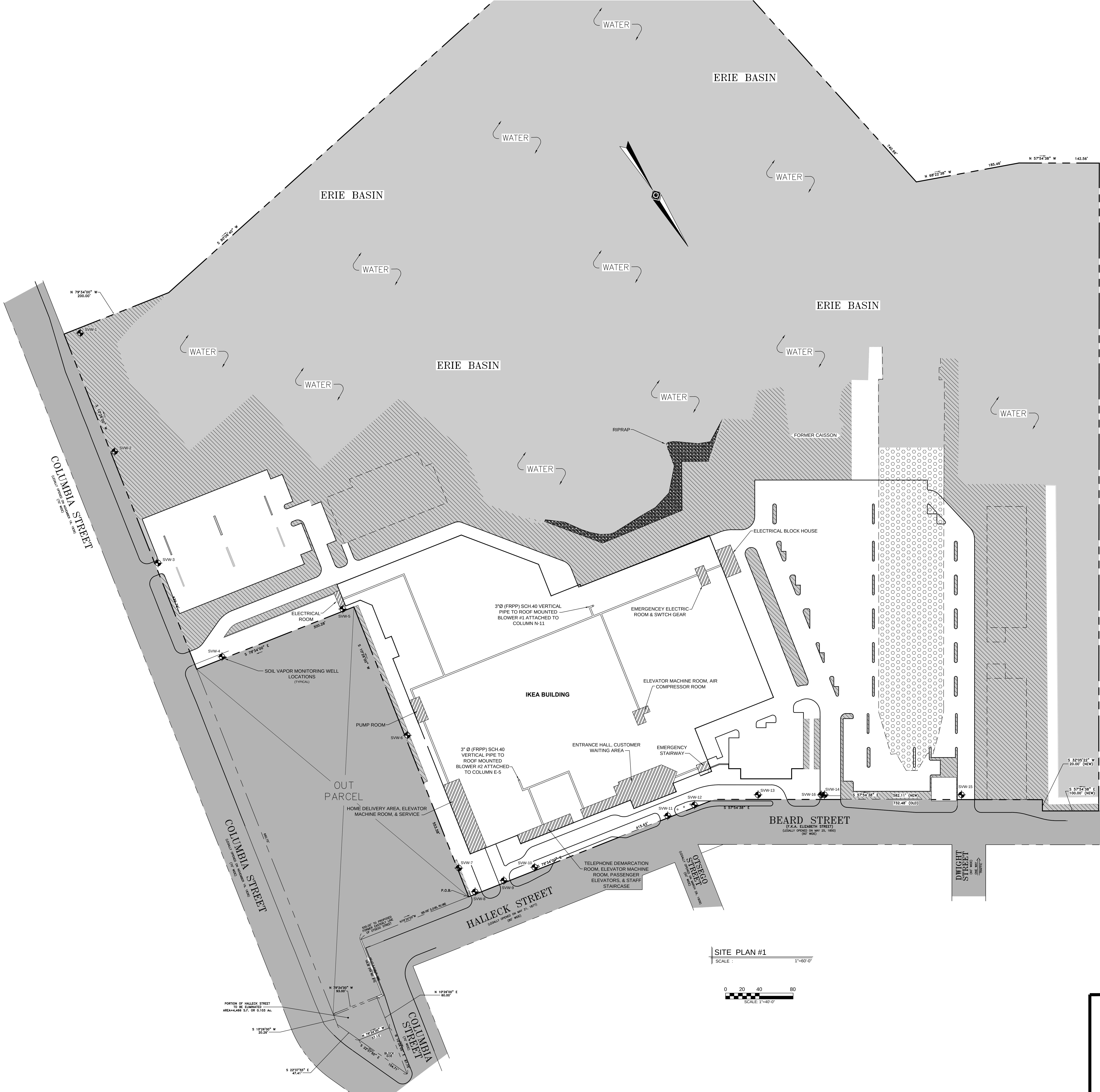
**Figure #1
Project Location Plan
Brooklyn, NY**

DATE: 6/17

SCALE: N.T.S.

JOB NO.: 08-387





LEGEND

PERIMETER SOIL-VAPOR MONITORING WELL(S)

OFF-SITE ROADS, OUT PARCELS, ETC...

WATER (ERIE BASIN)

6 MIL PLASTIC DEMARCATION BARRIER COVERED BY AT LEAST FOUR FEET OF CLEAN FILL

BACKFILLED PORTION OF FORMER DRYDOCK #1 (NOT ENVIRONMENTAL CONTROL AREA)

SUB-SLAB METHANE/ VOC VENTING SYSTEM PLUMBING, GRAVEL LAYER, ETC. ASSOCIATED WITH METHANE MITIGATION SYSTEM

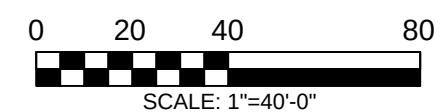
SITE CAP - NO LESS THAN ONE FOOT OF CLEAN FILL AND CONCRETE, ASPHALT OR BUILDING STRUCTURES

FOOTPRINT OF FUTURE BUILDINGS

3" DIAMETER PVC PIPE BELOW ASPHALT PAVEMENT TO METHANE MITIGATION SYSTEM BLOWER UNIT

***NOTE:**
WELLS SVW-3, 8, 9, 10, 11, 12, 13, 14, 15, & 16, ARE POSITIONED IN UTILITY TRENCHES ASSOCIATED WITH GAS, ELECTRIC, WASTE, & WATER LINES

SITE PLAN #1
SCALE : 1"=60'-0"



SOIL MECHANICS ENVIRONMENTAL SERVICES
subsoil investigations
3770 MERRICK ROAD * SEAFORD, NEW YORK 11783 * 516 - 221-7500

FIGURE #2 - ENGINEERING CONTROL LOCATION PLAN

IKEA BROOKLYN
BROOKLYN, NEW YORK

DRAWING DATE
AUGUST 11, 2020

REVISOR
JMR

DRAWING NUMBER
02L404
SHEET 1 OF 1

Charts and Tables

**U.S. Dredging Shipyard Site
Tax Block 612, Lot 130
Brooklyn, New York
NYSDEC - BCP Number C224043**

Table #1 – Soil Vapor Sampling Form
IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, N.Y.
Quarterly Methane Monitoring Results

Location/ID #	Leak Test (% He) ^	PID Readings**	CH ₄ *	CO ₂ *	O ₂ *	Lab Sample ID TO-15 Analysis
SVW-1	ND	0.1	0.0	6.5	13.0	C2212031-001A
SVW-2	ND	0.0	0.0	5.8	16.2	C2212031-002A
SVW-3	ND	0.1	0.0	3.5	5.8	C2212031-003A
SVW-4	ND	0.0	0.0	6.9	0.3	C2212031-004A
SVW-5	ND	0.0	0.0	0.3	22.0	C2212031-005A
SVW-6	ND	0.0	0.0	0.1	22.3	C2212031-006A
SVW-7	ND	0.0	0.0	0.3	20.6	C2212031-008A
SVW-8	ND	0.0	0.0	0.0	20.9	C2212031-009A
SVW-9	ND	0.0	0.0	0.5	20.9	C2212031-001A
SVW-10	ND	0.0	0.0	0.8	19.7	C2212031-010A
SVW-11	ND	0.0	0.0	0.5	12.4	C2212031-011A
SVW-12	ND	0.0	0.0	0.5	19.8	C2212031-012A
SVW-13	ND	0.0	0.0	0.1	2.1	C2212031-013A
SVW-14	ND	0.0	7.4	4.9	2.2	C2212031-014A
SVW-15	ND	0.2	0.0	1.5	14.5	C2212031-015A
SVW-16	ND	0.5	0.6	2.6	2.2	C2212031-016A

Date of work:

- 12/13/22
-

Weather:

- Partly cloudy with light snow, 34⁰ F.; barometric pressure 30.1" Hg; winds from N at ±9 MPH (no gusts reported)

Monitoring equipment utilized:

- (*) GEM 2000 Land fill Gas Analyzer; results reported in percent gas by volume
- (**) MiniRae 3000 Organic Vapor Analyzer; results reported in parts/million

Field Technicians:

- Dan Marzano, Dave Shencavitz and Steve Anderson

ND non-detect

PID photo ionization detector

^ Results of laboratory testing for the presence of helium (He) tracer gas

Table #2
IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, N.Y.
Quarterly VOC Analysis
EPA Method TO-15

EPA Method TO-15	SVW-1	SVW-2	SVW-3	SVW-4	SVW-5	SVW-6	SVW-7	SVW-8
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	-	-	-	0.69	-	-	1.1	-
1,2-Dibromoethane	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	-	-	-	-	-	-	054	-
1,3-butadiene	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	0.96	-	-	-	-
1,4-Dioxane	-	-	-	-	-	-	-	-
2,2,4-trimethylpentane	-	0.47	1.1	0.89	-	-	0.61	0.61
4-ethyltoluene	-	-	-	-	-	-	-	-
Acetone	3.5	14	26	19	4.6	4.6	4.7	6.9
Allyl chloride	-	-	-	-	-	-	-	-
Benzene	-	0.48	0.67	0.86	-	0.57	0.8	1.2
Benzyl chloride	-	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-	-
Bromofluorobenzene	-	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-	-
Carbon disulfide	-	-	3.2	4.3	0.65	0.37	7.-	-
Carbon tetrachloride	1.4	1.1	-	-	-	-	-	-
Chlorobenzene	-	-	-	1.1	-	-	-	-
Chloroethane	-	-	-	-	-	-	-	-
Chloroform	1.7	0.54	1.4	-	-	-	6.0	-
Chloromethane	-	0.39	-.41	1.1	-	1.1	-	1.2
cis-1,2-Dichloroethene	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-	-
Cyclohexane	-	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-	-
Ethyl acetate	0.54	-	2.6	0.47	-	0.47	-	2.3
Ethylbenzene	-	-	-	-.78	-	-	0.87	0.56
Freon 11	7.4	2.6	2.8	-.79	1.6	1.6	2.1	1.5
Freon 113	-	-	-	-	-	-	-	-
Freon 114	-	-	-	-	-	-	-	-
Freon 12	4.2	2.5	2.7	2.9	3.0	3.2	2.5	2.9
Heptane	-	-	0.66	-	-	-	0.57	-.53
Hexachloro-1,3-butadiene	-	-	-	-	-	-	-	-
Hexane	-	0.74	1.7	1.8	0.6	0.56	0.85	0.78
Isopropyl alcohol	-	0.52	2.0	0.76	0.61	0.91	-	1.9
m&p-Xylene	-	-	0.69	1.7	-	-	2.1	1.6
Methyl Butyl Ketone	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone	0.77	2.7	2.4	1.6	1.2	0.94	1.4	2.1
Methyl Isobutyl Ketone	-	-	-	-	-	-	1.-	-
Methyl tert-butyl ether	-	-	-	-	-	-	-	-
Methylene chloride	0.87	0.63	1.0	-	0.63	0.97	0.83	0.8-
o-Xylene	-	-	-	0.65	-	-	0.82	0.56
Propylene	-	-	-	-	-	-	-	-
Styrene	-	-	-	-	-	-	-	-
Tetrachloroethylene	0.75	1.2	0.88	0.68	0.75	0.81	-	1.8
Tetrahydrofuran	-	-	-	-	0.68	-	0.77	-
Toluene	1.0	1.2	5.5	3.7	1.1	1.4	3.7	5.0
trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-
Vinyl acetate	-	-	-	-	-	-	-	-
Vinyl Bromide	-	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-

Table #2 continued
IKEA (BCP Site No. C224043)

1 Beard Street, Brooklyn, N.Y.
Quarterly VOC Analysis
EPA Method TO-15

EPA Method TO-15	SVW-9	SVW-10	SVW-11	SVW-12	SVW-13	SVW-14	SVW-15	SVW-16	AS-1 up wind	AS-2 down wind
1,1,1-Trichloroethane	0.65	-	0.71	-	13	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	2.8	-	-	-	-	6.5	-	-	-	-
1,2-Dibromoethane	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	1.3	-	-	-	-	2.9	-	-	-	-
1,3-butadiene	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,4-Dioxane	-	-	-	-	-	-	-	-	-	-
2,2,4-trimethylpentane	0.65	-	-	0.47	5.5	47	1.2	8.9	0.51	0.56
4-ethyltoluene	0.64	-	-	-	-	1.4	-	-	-	-
Acetone	44	6.5	4.9	4.5	11	190	4.7	66	15	10
Allyl chloride	-	-	-	-	-	-	-	-	-	-
Benzene	2.2	0.42	0.45	0.51	33	13	0.64	1.2	0.89	0.93
Benzyl chloride	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene	-	-	-	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	81	-.87	-	3.4	6.3	55	0.62	2.6	-	-
Carbon tetrachloride	-	-	-	-	-	-	-	-	0.50	0.50
Chlorobenzene	-	-	-	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-.98	-	-	-	-
Chloroform	6.5	20	-.93	-	0.54	-	-	1.2	-	-
Chloromethane	-	-	-	-	-	-	0.56	-	0.97	1.0
cis-1,2-Dichloroethene	-	-	-	-	-	4.-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Cyclohexane	-	-	-	-	15	68	1.1	5.4	-	-
Dibromochloromethane	-	-	-	-	-	-	-	-	-	-
Ethyl acetate	-	-	-	-	5.6	-	1.2	-	-.65	-.65
Ethylbenzene	0.61	-	-	-	0.56	1.8	-	-	-	-
Freon 11	1.5	1.9	11	1.6	15	-	4.9	1.5	1.6	1.5
Freon 113	-	-	-	-	-	-	-	-	-	-
Freon 114	-	-	-	-	-	-	-	-	-	-
Freon 12	2.9	3.1	-	3.0	3.6	-	3.2	3.2	3.1	3.0
Heptane	0.45	-	-	-	0.70	23	2.9	0.57	0.49	0.49
Hexachloro-1,3-butadiene	-	-	-	-	-	-	-	-	-	-
Hexane	1.2	0.46	0.49	0.81	1.3	54	5.2	12	0.56	0.63
Isopropyl alcohol	-	-	-	-	-	-	-	2.6	1.2	2.6
m&p-Xylene	2.3	-	-	-	0.96	6.2	0.78	1.0	0.82	0.91
Methyl Butyl Ketone	-	-	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone	1.7	-	-	-	1.5	58	1.6	64	1.5	1.1
Methyl Isobutyl Ketone	36	-	-	-	-	410	0.57	-	-	2.1
Methyl tert-butyl ether	-	-	-	-	-	42	-	-	-	-
Methylene chloride	2.4	-.73	-.49	-.83	-	-	0.97	1.8	0.76	0.76
o-Xylene	1.6	-	-	-	-	4.3	-	-.48	-	-
Propylene	-	-	-	-	-	-	-	-	-	-
Styrene	-	-	-	-	-	0.98	-	-	-	-
Tetrachloroethylene	0.75	1.1	3.5	2.4	7.1	7.7	3.1	1.6	-	-
Tetrahydrofuran	3.7	-	-	-	-	-	-	55	-	-
Toluene	3.7	0.9	1.4	1.3	5.7	7.3	5.5	2.4	2.5	4.1
trans-1,2-Dichloroethene	-	-	-	-	-	2.2	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	2.2	4.0	-	0.64	-	-
Vinyl acetate	-	-	-	0.39	-	-	-	-	-	-
Vinyl Bromide	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-

All concentrations in ug/m³
AS ambient air sample
- below detection limit

Chart #1 - Methane Concentrations

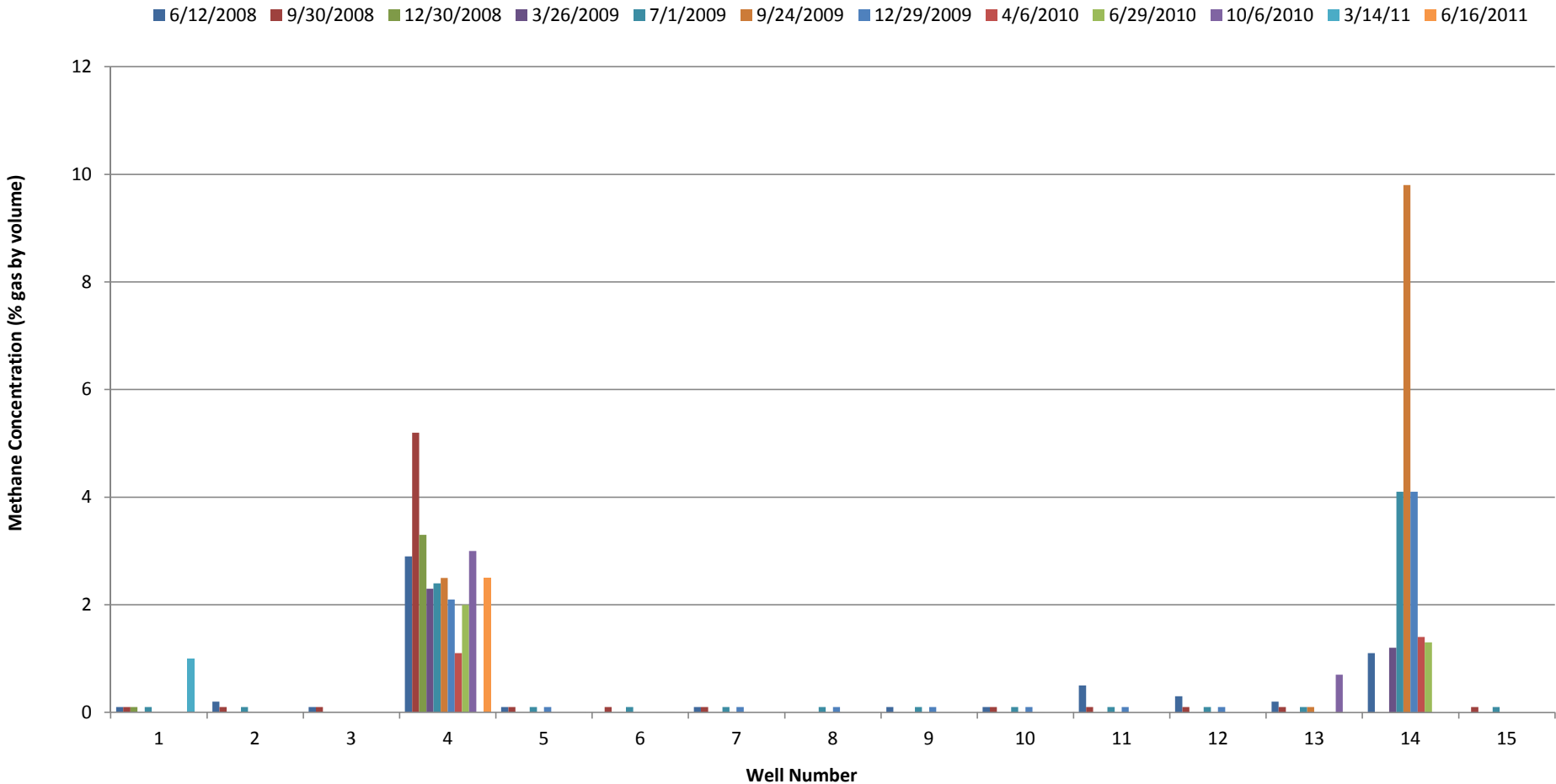


Chart #1 (Continued)- Methane Concentrations

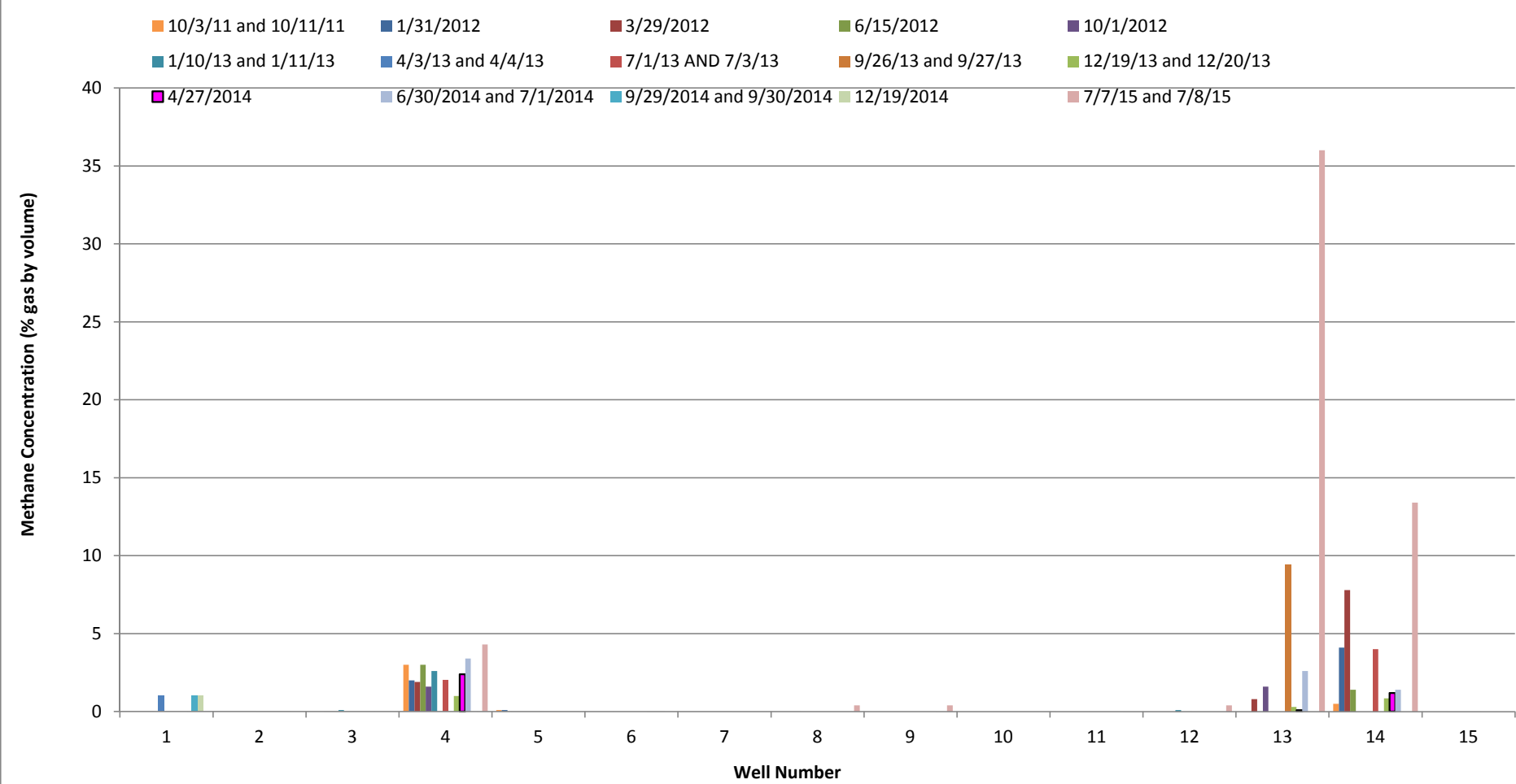
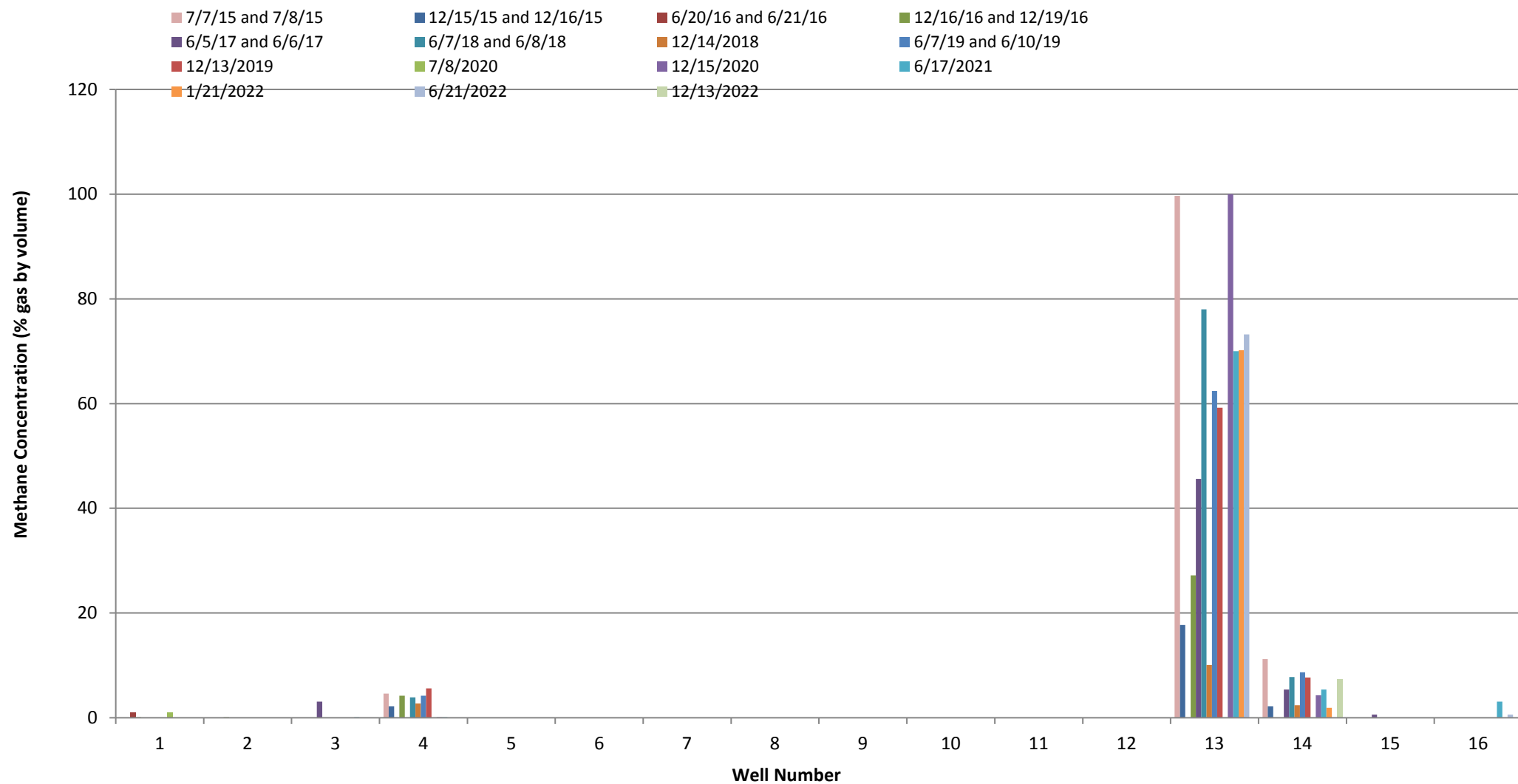


Chart #1 (Continued) - Methane Concentrations



Complete Laboratory Reports and Associated Chains of Custody

**U.S. Dredging Shipyard Site
Tax Block 612, Lot 130
Brooklyn, New York
NYSDEC - BCP Number C224043**

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-001A

Client Sample ID: SVW-1 MS/MSD
Tag Number: 1201,1149
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 4:05:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 4:05:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 4:05:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 4:05:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 4:05:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
Acetone	3.5	0.71		ug/m3	1	12/16/2022 4:05:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 4:05:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 4:05:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 4:05:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 4:05:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 4:05:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 4:05:00 PM
Carbon tetrachloride	1.4	0.94		ug/m3	1	12/16/2022 4:05:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 4:05:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 4:05:00 PM
Chloroform	1.7	0.73		ug/m3	1	12/16/2022 4:05:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 4:05:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 4:05:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 4:05:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 4:05:00 PM
Ethyl acetate	0.54	0.54		ug/m3	1	12/16/2022 4:05:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 4:05:00 PM
Freon 11	7.4	0.84		ug/m3	1	12/16/2022 4:05:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-001A

Client Sample ID: SVW-1 MS/MSD
Tag Number: 1201,1149
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	4.2	0.74		ug/m3	1	12/16/2022 4:05:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 4:05:00 PM
Hexane	< 0.53	0.53		ug/m3	1	12/16/2022 4:05:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 4:05:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 4:05:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
Methyl Ethyl Ketone	0.77	0.88	J	ug/m3	1	12/16/2022 4:05:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 4:05:00 PM
Methylene chloride	0.87	0.52		ug/m3	1	12/16/2022 4:05:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 4:05:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 4:05:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 4:05:00 PM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/16/2022 4:05:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 4:05:00 PM
Toluene	1.0	0.57		ug/m3	1	12/16/2022 4:05:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 4:05:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 4:05:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-002A

Client Sample ID: SVW-2
Tag Number: 465,1165
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 7:28:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 7:28:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 7:28:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 7:28:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
2,2,4-trimethylpentane	0.47	0.70	J	ug/m3	1	12/16/2022 7:28:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
Acetone	14	3.6		ug/m3	5	12/17/2022 2:05:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 7:28:00 PM
Benzene	0.48	0.48		ug/m3	1	12/16/2022 7:28:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 7:28:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 7:28:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 7:28:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 7:28:00 PM
Carbon tetrachloride	1.1	0.94		ug/m3	1	12/16/2022 7:28:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 7:28:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 7:28:00 PM
Chloroform	0.54	0.73	J	ug/m3	1	12/16/2022 7:28:00 PM
Chloromethane	0.39	0.31		ug/m3	1	12/16/2022 7:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 7:28:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 7:28:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 7:28:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 7:28:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 7:28:00 PM
Freon 11	2.6	0.84		ug/m3	1	12/16/2022 7:28:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-002A

Client Sample ID: SVW-2
Tag Number: 465,1165
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.5	0.74		ug/m3	1	12/16/2022 7:28:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 7:28:00 PM
Hexane	0.74	0.53		ug/m3	1	12/16/2022 7:28:00 PM
Isopropyl alcohol	0.52	0.37		ug/m3	1	12/16/2022 7:28:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Ethyl Ketone	2.7	0.88		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 7:28:00 PM
Methylene chloride	0.63	0.52		ug/m3	1	12/16/2022 7:28:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 7:28:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 7:28:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 7:28:00 PM
Tetrachloroethylene	1.2	1.0		ug/m3	1	12/16/2022 7:28:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 7:28:00 PM
Toluene	1.2	0.57		ug/m3	1	12/16/2022 7:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 7:28:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 7:28:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-003A

Client Sample ID: SVW-3
Tag Number: 1186,177
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:12:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:12:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:12:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 8:12:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 8:12:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
2,2,4-trimethylpentane	1.1	0.70		ug/m3	1	12/16/2022 8:12:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
Acetone	26	7.1		ug/m3	10	12/17/2022 2:48:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 8:12:00 PM
Benzene	0.67	0.48		ug/m3	1	12/16/2022 8:12:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 8:12:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 8:12:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 8:12:00 PM
Carbon disulfide	3.2	0.47		ug/m3	1	12/16/2022 8:12:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 8:12:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 8:12:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 8:12:00 PM
Chloroform	1.4	0.73		ug/m3	1	12/16/2022 8:12:00 PM
Chloromethane	0.41	0.31		ug/m3	1	12/16/2022 8:12:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:12:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 8:12:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 8:12:00 PM
Ethyl acetate	2.6	0.54		ug/m3	1	12/16/2022 8:12:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 8:12:00 PM
Freon 11	2.8	0.84		ug/m3	1	12/16/2022 8:12:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-003A

Client Sample ID: SVW-3
Tag Number: 1186,177
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.7	0.74		ug/m3	1	12/16/2022 8:12:00 PM
Heptane	0.66	0.61		ug/m3	1	12/16/2022 8:12:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 8:12:00 PM
Hexane	1.7	0.53		ug/m3	1	12/16/2022 8:12:00 PM
Isopropyl alcohol	2.0	0.37		ug/m3	1	12/16/2022 8:12:00 PM
m&p-Xylene	0.69	1.3	J	ug/m3	1	12/16/2022 8:12:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
Methyl Ethyl Ketone	2.4	0.88		ug/m3	1	12/16/2022 8:12:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 8:12:00 PM
Methylene chloride	1.0	0.52		ug/m3	1	12/16/2022 8:12:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 8:12:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 8:12:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 8:12:00 PM
Tetrachloroethylene	0.88	1.0	J	ug/m3	1	12/16/2022 8:12:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 8:12:00 PM
Toluene	5.5	0.57		ug/m3	1	12/16/2022 8:12:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:12:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 8:12:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-004A

Client Sample ID: SVW-4
Tag Number: 1178,117
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:56:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:56:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
1,2,4-Trimethylbenzene	0.69	0.74	J	ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 8:56:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:56:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 8:56:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,4-Dichlorobenzene	0.96	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
2,2,4-trimethylpentane	0.89	0.70		ug/m3	1	12/16/2022 8:56:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 8:56:00 PM
Acetone	19	7.1		ug/m3	10	12/17/2022 3:31:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 8:56:00 PM
Benzene	0.86	0.48		ug/m3	1	12/16/2022 8:56:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 8:56:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 8:56:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 8:56:00 PM
Carbon disulfide	4.3	0.47		ug/m3	1	12/16/2022 8:56:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 8:56:00 PM
Chlorobenzene	1.1	0.69		ug/m3	1	12/16/2022 8:56:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 8:56:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 8:56:00 PM
Chloromethane	1.1	0.31		ug/m3	1	12/16/2022 8:56:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:56:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 8:56:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 8:56:00 PM
Ethyl acetate	0.47	0.54	J	ug/m3	1	12/16/2022 8:56:00 PM
Ethylbenzene	0.78	0.65		ug/m3	1	12/16/2022 8:56:00 PM
Freon 11	0.79	0.84	J	ug/m3	1	12/16/2022 8:56:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-004A

Client Sample ID: SVW-4
Tag Number: 1178,117
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/16/2022 8:56:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 8:56:00 PM
Hexane	1.8	0.53		ug/m3	1	12/16/2022 8:56:00 PM
Isopropyl alcohol	0.76	0.37		ug/m3	1	12/16/2022 8:56:00 PM
m&p-Xylene	1.7	1.3		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Ethyl Ketone	1.6	0.88		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 8:56:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/16/2022 8:56:00 PM
o-Xylene	0.65	0.65		ug/m3	1	12/16/2022 8:56:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 8:56:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 8:56:00 PM
Tetrachloroethylene	0.68	1.0	J	ug/m3	1	12/16/2022 8:56:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 8:56:00 PM
Toluene	3.7	0.57		ug/m3	1	12/16/2022 8:56:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:56:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 8:56:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-005A

Client Sample ID: SVW-5
Tag Number: 129,1153
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 9:41:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 9:41:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 9:41:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 9:41:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 9:41:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
Acetone	4.6	0.71		ug/m3	1	12/16/2022 9:41:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 9:41:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 9:41:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 9:41:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 9:41:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 9:41:00 PM
Carbon disulfide	0.65	0.47		ug/m3	1	12/16/2022 9:41:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 9:41:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 9:41:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 9:41:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 9:41:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 9:41:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 9:41:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 9:41:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 9:41:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 9:41:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 9:41:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 9:41:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-005A

Client Sample ID: SVW-5
Tag Number: 129,1153
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/16/2022 9:41:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 9:41:00 PM
Hexane	0.60	0.53		ug/m3	1	12/16/2022 9:41:00 PM
Isopropyl alcohol	0.61	0.37		ug/m3	1	12/16/2022 9:41:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Ethyl Ketone	1.2	0.88		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 9:41:00 PM
Methylene chloride	0.63	0.52		ug/m3	1	12/16/2022 9:41:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 9:41:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 9:41:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 9:41:00 PM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/16/2022 9:41:00 PM
Tetrahydrofuran	0.68	0.44		ug/m3	1	12/16/2022 9:41:00 PM
Toluene	1.1	0.57		ug/m3	1	12/16/2022 9:41:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 9:41:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 9:41:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-006A

Client Sample ID: SVW-6
Tag Number: 101,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 10:25:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 10:25:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 10:25:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 10:25:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 10:25:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
Acetone	4.6	0.71		ug/m3	1	12/16/2022 10:25:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 10:25:00 PM
Benzene	0.57	0.48		ug/m3	1	12/16/2022 10:25:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 10:25:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 10:25:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 10:25:00 PM
Carbon disulfide	0.37	0.47	J	ug/m3	1	12/16/2022 10:25:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 10:25:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 10:25:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 10:25:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 10:25:00 PM
Chloromethane	1.1	0.31		ug/m3	1	12/16/2022 10:25:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 10:25:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 10:25:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 10:25:00 PM
Ethyl acetate	0.47	0.54	J	ug/m3	1	12/16/2022 10:25:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 10:25:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 10:25:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-006A

Client Sample ID: SVW-6
Tag Number: 101,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/16/2022 10:25:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 10:25:00 PM
Hexane	0.56	0.53		ug/m3	1	12/16/2022 10:25:00 PM
Isopropyl alcohol	0.91	0.37		ug/m3	1	12/16/2022 10:25:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Ethyl Ketone	0.94	0.88		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 10:25:00 PM
Methylene chloride	0.97	0.52		ug/m3	1	12/16/2022 10:25:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 10:25:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 10:25:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 10:25:00 PM
Tetrachloroethylene	0.81	1.0	J	ug/m3	1	12/16/2022 10:25:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 10:25:00 PM
Toluene	1.4	0.57		ug/m3	1	12/16/2022 10:25:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 10:25:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 10:25:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-007A

Client Sample ID: SVW-6 Dup
Tag Number: 1177,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:09:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:09:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 11:09:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 11:09:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 11:09:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
Acetone	7.1	3.6		ug/m3	5	12/17/2022 4:13:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 11:09:00 PM
Benzene	0.61	0.48		ug/m3	1	12/16/2022 11:09:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 11:09:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 11:09:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 11:09:00 PM
Carbon disulfide	0.34	0.47	J	ug/m3	1	12/16/2022 11:09:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 11:09:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 11:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 11:09:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 11:09:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 11:09:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:09:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 11:09:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 11:09:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 11:09:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 11:09:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 11:09:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-007A

Client Sample ID: SVW-6 Dup
Tag Number: 1177,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/16/2022 11:09:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 11:09:00 PM
Hexane	0.42	0.53	J	ug/m3	1	12/16/2022 11:09:00 PM
Isopropyl alcohol	1.4	0.37		ug/m3	1	12/16/2022 11:09:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Ethyl Ketone	0.88	0.88		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 11:09:00 PM
Methylene chloride	4.9	0.52		ug/m3	1	12/16/2022 11:09:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 11:09:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 11:09:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 11:09:00 PM
Tetrachloroethylene	0.88	1.0	J	ug/m3	1	12/16/2022 11:09:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 11:09:00 PM
Toluene	1.1	0.57		ug/m3	1	12/16/2022 11:09:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:09:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 11:09:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-008A

Client Sample ID: SVW-7
Tag Number: 545,146
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:53:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:53:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:53:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
1,2,4-Trimethylbenzene	1.1	0.74		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 11:53:00 PM
1,3,5-Trimethylbenzene	0.54	0.74	J	ug/m3	1	12/16/2022 11:53:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 11:53:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	12/16/2022 11:53:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 11:53:00 PM
Acetone	4.7	3.6		ug/m3	5	12/17/2022 4:56:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 11:53:00 PM
Benzene	0.80	0.48		ug/m3	1	12/16/2022 11:53:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 11:53:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 11:53:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 11:53:00 PM
Carbon disulfide	7.0	2.3		ug/m3	5	12/17/2022 4:56:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 11:53:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 11:53:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 11:53:00 PM
Chloroform	6.0	0.73		ug/m3	1	12/16/2022 11:53:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 11:53:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:53:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 11:53:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 11:53:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 11:53:00 PM
Ethylbenzene	0.87	0.65		ug/m3	1	12/16/2022 11:53:00 PM
Freon 11	2.1	0.84		ug/m3	1	12/16/2022 11:53:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-008A

Client Sample ID: SVW-7
Tag Number: 545,146
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.5	0.74		ug/m3	1	12/16/2022 11:53:00 PM
Heptane	0.57	0.61	J	ug/m3	1	12/16/2022 11:53:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 11:53:00 PM
Hexane	0.85	0.53		ug/m3	1	12/16/2022 11:53:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 11:53:00 PM
m&p-Xylene	2.1	1.3		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Ethyl Ketone	1.4	0.88		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Isobutyl Ketone	1.0	1.2	J	ug/m3	1	12/16/2022 11:53:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 11:53:00 PM
Methylene chloride	0.83	0.52		ug/m3	1	12/16/2022 11:53:00 PM
o-Xylene	0.82	0.65		ug/m3	1	12/16/2022 11:53:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 11:53:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 11:53:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
Tetrahydrofuran	0.77	0.44		ug/m3	1	12/16/2022 11:53:00 PM
Toluene	3.7	0.57		ug/m3	1	12/16/2022 11:53:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:53:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 11:53:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-009A

Client Sample ID: SVW-8
Tag Number: 561,147
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 12:38:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 12:38:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 12:38:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 12:38:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 12:38:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	12/17/2022 12:38:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
Acetone	6.9	3.6		ug/m3	5	12/17/2022 5:39:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 12:38:00 AM
Benzene	1.2	0.48		ug/m3	1	12/17/2022 12:38:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 12:38:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 12:38:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 12:38:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/17/2022 12:38:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 12:38:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 12:38:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 12:38:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 12:38:00 AM
Chloromethane	1.2	0.31		ug/m3	1	12/17/2022 12:38:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 12:38:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 12:38:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 12:38:00 AM
Ethyl acetate	2.3	0.54		ug/m3	1	12/17/2022 12:38:00 AM
Ethylbenzene	0.56	0.65	J	ug/m3	1	12/17/2022 12:38:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 12:38:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-009A

Client Sample ID: SVW-8
Tag Number: 561,147
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/17/2022 12:38:00 AM
Heptane	0.53	0.61	J	ug/m3	1	12/17/2022 12:38:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 12:38:00 AM
Hexane	0.78	0.53		ug/m3	1	12/17/2022 12:38:00 AM
Isopropyl alcohol	1.9	0.37		ug/m3	1	12/17/2022 12:38:00 AM
m&p-Xylene	1.6	1.3		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Ethyl Ketone	2.1	0.88		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 12:38:00 AM
Methylene chloride	0.80	0.52		ug/m3	1	12/17/2022 12:38:00 AM
o-Xylene	0.56	0.65	J	ug/m3	1	12/17/2022 12:38:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 12:38:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 12:38:00 AM
Tetrachloroethylene	1.8	1.0		ug/m3	1	12/17/2022 12:38:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 12:38:00 AM
Toluene	5.0	0.57		ug/m3	1	12/17/2022 12:38:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 12:38:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 12:38:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-010A

Client Sample ID: SVW-9
Tag Number: 347,120
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.65	0.82	J	ug/m3	1	12/17/2022 1:22:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 1:22:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 1:22:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
1,2,4-Trimethylbenzene	2.8	0.74		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 1:22:00 AM
1,3,5-Trimethylbenzene	1.3	0.74		ug/m3	1	12/17/2022 1:22:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 1:22:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
2,2,4-trimethylpentane	0.65	0.70	J	ug/m3	1	12/17/2022 1:22:00 AM
4-ethyltoluene	0.64	0.74	J	ug/m3	1	12/17/2022 1:22:00 AM
Acetone	44	7.1		ug/m3	10	12/17/2022 6:22:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 1:22:00 AM
Benzene	2.2	0.48		ug/m3	1	12/17/2022 1:22:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 1:22:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 1:22:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 1:22:00 AM
Carbon disulfide	81	19		ug/m3	40	12/17/2022 7:04:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 1:22:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 1:22:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 1:22:00 AM
Chloroform	6.5	0.73		ug/m3	1	12/17/2022 1:22:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 1:22:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 1:22:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 1:22:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 1:22:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 1:22:00 AM
Ethylbenzene	0.61	0.65	J	ug/m3	1	12/17/2022 1:22:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 1:22:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-010A

Client Sample ID: SVW-9
Tag Number: 347,120
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/17/2022 1:22:00 AM
Heptane	0.45	0.61	J	ug/m3	1	12/17/2022 1:22:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 1:22:00 AM
Hexane	1.2	0.53		ug/m3	1	12/17/2022 1:22:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 1:22:00 AM
m&p-Xylene	2.3	1.3		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Ethyl Ketone	1.7	0.88		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Isobutyl Ketone	36	12		ug/m3	10	12/17/2022 6:22:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 1:22:00 AM
Methylene chloride	2.4	0.52		ug/m3	1	12/17/2022 1:22:00 AM
o-Xylene	1.6	0.65		ug/m3	1	12/17/2022 1:22:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 1:22:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 1:22:00 AM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/17/2022 1:22:00 AM
Tetrahydrofuran	3.7	0.44		ug/m3	1	12/17/2022 1:22:00 AM
Toluene	3.7	0.57		ug/m3	1	12/17/2022 1:22:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 1:22:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 1:22:00 AM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-011A

Client Sample ID: SVW-10
Tag Number: 370,406
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15			TO-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:06:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 2:06:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 2:06:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/17/2022 2:06:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
Acetone	6.5	3.6		ug/m3	5	12/17/2022 7:46:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 2:06:00 AM
Benzene	0.42	0.48	J	ug/m3	1	12/17/2022 2:06:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 2:06:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 2:06:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 2:06:00 AM
Carbon disulfide	0.87	0.47		ug/m3	1	12/17/2022 2:06:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 2:06:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 2:06:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 2:06:00 AM
Chloroform	20	3.7		ug/m3	5	12/17/2022 7:46:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 2:06:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:06:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 2:06:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 2:06:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 2:06:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 2:06:00 AM
Freon 11	1.9	0.84		ug/m3	1	12/17/2022 2:06:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-011A

Client Sample ID: SVW-10
Tag Number: 370,406
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/17/2022 2:06:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 2:06:00 AM
Hexane	0.46	0.53	J	ug/m3	1	12/17/2022 2:06:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 2:06:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 2:06:00 AM
Methylene chloride	0.73	0.52		ug/m3	1	12/17/2022 2:06:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 2:06:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 2:06:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 2:06:00 AM
Tetrachloroethylene	1.1	1.0		ug/m3	1	12/17/2022 2:06:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 2:06:00 AM
Toluene	0.90	0.57		ug/m3	1	12/17/2022 2:06:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:06:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 2:06:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-012A

Client Sample ID: SVW-11
Tag Number: 571,184
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.71	0.82	J	ug/m3	1	12/17/2022 2:51:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:51:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 2:51:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 2:51:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/17/2022 2:51:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
Acetone	4.9	0.71		ug/m3	1	12/17/2022 2:51:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 2:51:00 AM
Benzene	0.45	0.48	J	ug/m3	1	12/17/2022 2:51:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 2:51:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 2:51:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 2:51:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/17/2022 2:51:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 2:51:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 2:51:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 2:51:00 AM
Chloroform	0.93	0.73		ug/m3	1	12/17/2022 2:51:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 2:51:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:51:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 2:51:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 2:51:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 2:51:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 2:51:00 AM
Freon 11	11	0.84		ug/m3	1	12/17/2022 2:51:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-012A

Client Sample ID: SVW-11
Tag Number: 571,184
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 2:51:00 AM
Hexane	0.49	0.53	J	ug/m3	1	12/17/2022 2:51:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 2:51:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 2:51:00 AM
Methylene chloride	0.49	0.52	J	ug/m3	1	12/17/2022 2:51:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 2:51:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 2:51:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 2:51:00 AM
Tetrachloroethylene	3.5	1.0		ug/m3	1	12/17/2022 2:51:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 2:51:00 AM
Toluene	1.4	0.57		ug/m3	1	12/17/2022 2:51:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:51:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 2:51:00 AM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-013A

Client Sample ID: SVW-12
Tag Number: 274,309
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 4:19:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 4:19:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 4:19:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 4:19:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
2,2,4-trimethylpentane	0.47	0.70	J	ug/m3	1	12/17/2022 4:19:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
Acetone	4.5	0.71		ug/m3	1	12/17/2022 4:19:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 4:19:00 AM
Benzene	0.51	0.48		ug/m3	1	12/17/2022 4:19:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 4:19:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 4:19:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 4:19:00 AM
Carbon disulfide	3.4	0.47		ug/m3	1	12/17/2022 4:19:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 4:19:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 4:19:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 4:19:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 4:19:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 4:19:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 4:19:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 4:19:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 4:19:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 4:19:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 4:19:00 AM
Freon 11	1.6	0.84		ug/m3	1	12/17/2022 4:19:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-013A

Client Sample ID: SVW-12
Tag Number: 274,309
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/17/2022 4:19:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 4:19:00 AM
Hexane	0.81	0.53		ug/m3	1	12/17/2022 4:19:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 4:19:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 4:19:00 AM
Methylene chloride	0.83	0.52		ug/m3	1	12/17/2022 4:19:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 4:19:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 4:19:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 4:19:00 AM
Tetrachloroethylene	2.4	1.0		ug/m3	1	12/17/2022 4:19:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 4:19:00 AM
Toluene	1.3	0.57		ug/m3	1	12/17/2022 4:19:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 4:19:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 4:19:00 AM
Vinyl acetate	0.39	0.53	J	ug/m3	1	12/17/2022 4:19:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 4:19:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 4:19:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-014A

Client Sample ID: SVW-13
Tag Number: 366,255
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	13	8.2		ug/m3	10	12/17/2022 8:29:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:03:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:03:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 5:03:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 5:03:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
2,2,4-trimethylpentane	5.5	0.70		ug/m3	1	12/17/2022 5:03:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
Acetone	11	7.1		ug/m3	10	12/17/2022 8:29:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 5:03:00 AM
Benzene	33	4.8		ug/m3	10	12/17/2022 8:29:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 5:03:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 5:03:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 5:03:00 AM
Carbon disulfide	6.3	0.47		ug/m3	1	12/17/2022 5:03:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 5:03:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 5:03:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 5:03:00 AM
Chloroform	0.54	0.73	J	ug/m3	1	12/17/2022 5:03:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 5:03:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:03:00 AM
Cyclohexane	15	5.2		ug/m3	10	12/17/2022 8:29:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 5:03:00 AM
Ethyl acetate	5.6	0.54		ug/m3	1	12/17/2022 5:03:00 AM
Ethylbenzene	0.56	0.65	J	ug/m3	1	12/17/2022 5:03:00 AM
Freon 11	15	8.4		ug/m3	10	12/17/2022 8:29:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-014A

Client Sample ID: SVW-13
Tag Number: 366,255
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15			TO-15			Analyst: RJP
Freon 12	3.6	0.74		ug/m3	1	12/17/2022 5:03:00 AM
Heptane	0.70	0.61		ug/m3	1	12/17/2022 5:03:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 5:03:00 AM
Hexane	1.3	0.53		ug/m3	1	12/17/2022 5:03:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 5:03:00 AM
m&p-Xylene	0.96	1.3	J	ug/m3	1	12/17/2022 5:03:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
Methyl Ethyl Ketone	1.5	0.88		ug/m3	1	12/17/2022 5:03:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 5:03:00 AM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/17/2022 5:03:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 5:03:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 5:03:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 5:03:00 AM
Tetrachloroethylene	7.1	1.0		ug/m3	1	12/17/2022 5:03:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 5:03:00 AM
Toluene	5.7	0.57		ug/m3	1	12/17/2022 5:03:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:03:00 AM
Trichloroethene	2.2	0.81		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 5:03:00 AM

Qualifiers:

. Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits
 B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-015A

Client Sample ID: SVW-14
Tag Number: 232,156
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:48:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:48:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:48:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:48:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
1,2,4-Trimethylbenzene	6.5	0.74		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 5:48:00 AM
1,3,5-Trimethylbenzene	2.9	0.74		ug/m3	1	12/17/2022 5:48:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 5:48:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
2,2,4-trimethylpentane	47	6.5		ug/m3	9	12/17/2022 9:13:00 PM
4-ethyltoluene	1.4	0.74		ug/m3	1	12/17/2022 5:48:00 AM
Acetone	190	64		ug/m3	90	12/17/2022 9:56:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 5:48:00 AM
Benzene	13	4.5		ug/m3	9	12/17/2022 9:13:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 5:48:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 5:48:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 5:48:00 AM
Carbon disulfide	55	4.4		ug/m3	9	12/17/2022 9:13:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 5:48:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 5:48:00 AM
Chloroethane	0.98	0.40		ug/m3	1	12/17/2022 5:48:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 5:48:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 5:48:00 AM
cis-1,2-Dichloroethene	4.0	0.59		ug/m3	1	12/17/2022 5:48:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:48:00 AM
Cyclohexane	68	48		ug/m3	90	12/17/2022 9:56:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 5:48:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 5:48:00 AM
Ethylbenzene	1.8	0.65		ug/m3	1	12/17/2022 5:48:00 AM
Freon 11	< 0.84	0.84		ug/m3	1	12/17/2022 5:48:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-015A

Client Sample ID: SVW-14
Tag Number: 232,156
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/17/2022 5:48:00 AM
Heptane	21	5.7		ug/m3	9	12/17/2022 9:13:00 PM
Heptane	23	0.61		ug/m3	1	12/17/2022 5:48:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 5:48:00 AM
Hexane	54	4.9		ug/m3	9	12/17/2022 9:13:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 5:48:00 AM
m&p-Xylene	6.2	1.3		ug/m3	1	12/17/2022 5:48:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:48:00 AM
Methyl Ethyl Ketone	58	80	J	ug/m3	90	12/17/2022 9:56:00 PM
Methyl Isobutyl Ketone	410	110		ug/m3	90	12/17/2022 9:56:00 PM
Methyl tert-butyl ether	42	5.0		ug/m3	9	12/17/2022 9:13:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/17/2022 5:48:00 AM
o-Xylene	4.3	0.65		ug/m3	1	12/17/2022 5:48:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 5:48:00 AM
Styrene	0.98	0.64		ug/m3	1	12/17/2022 5:48:00 AM
Tetrachloroethylene	7.7	1.0		ug/m3	1	12/17/2022 5:48:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 5:48:00 AM
Toluene	7.3	0.57		ug/m3	1	12/17/2022 5:48:00 AM
trans-1,2-Dichloroethene	2.2	0.59		ug/m3	1	12/17/2022 5:48:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:48:00 AM
Trichloroethene	4.0	0.81		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 5:48:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-016A

Client Sample ID: SVW-15
Tag Number: 350,295
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 6:32:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 6:32:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 6:32:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 6:32:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 6:32:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
2,2,4-trimethylpentane	1.2	0.70		ug/m3	1	12/17/2022 6:32:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
Acetone	4.7	3.6		ug/m3	5	12/17/2022 10:39:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 6:32:00 AM
Benzene	0.64	0.48		ug/m3	1	12/17/2022 6:32:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 6:32:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 6:32:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 6:32:00 AM
Carbon disulfide	0.62	0.47		ug/m3	1	12/17/2022 6:32:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 6:32:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 6:32:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 6:32:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 6:32:00 AM
Chloromethane	0.56	0.31		ug/m3	1	12/17/2022 6:32:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 6:32:00 AM
Cyclohexane	1.1	0.52		ug/m3	1	12/17/2022 6:32:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 6:32:00 AM
Ethyl acetate	1.2	0.54		ug/m3	1	12/17/2022 6:32:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 6:32:00 AM
Freon 11	4.9	0.84		ug/m3	1	12/17/2022 6:32:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-016A

Client Sample ID: SVW-15
Tag Number: 350,295
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/17/2022 6:32:00 AM
Heptane	2.9	0.61		ug/m3	1	12/17/2022 6:32:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 6:32:00 AM
Hexane	5.2	0.53		ug/m3	1	12/17/2022 6:32:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 6:32:00 AM
m&p-Xylene	0.78	1.3	J	ug/m3	1	12/17/2022 6:32:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 6:32:00 AM
Methyl Ethyl Ketone	1.6	0.88		ug/m3	1	12/17/2022 6:32:00 AM
Methyl Isobutyl Ketone	0.57	1.2	J	ug/m3	1	12/17/2022 6:32:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 6:32:00 AM
Methylene chloride	0.97	0.52		ug/m3	1	12/17/2022 6:32:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 6:32:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 6:32:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 6:32:00 AM
Tetrachloroethylene	3.1	1.0		ug/m3	1	12/17/2022 6:32:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 6:32:00 AM
Toluene	5.5	0.57		ug/m3	1	12/17/2022 6:32:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 6:32:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 6:32:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-017A

Client Sample ID: SVW-16
Tag Number: 93,111
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 7:16:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 7:16:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 7:16:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 7:16:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 7:16:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
2,2,4-trimethylpentane	8.9	7.0		ug/m3	10	12/17/2022 11:22:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
Acetone	66	28		ug/m3	40	12/18/2022 12:04:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 7:16:00 AM
Benzene	1.2	0.48		ug/m3	1	12/17/2022 7:16:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 7:16:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 7:16:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 7:16:00 AM
Carbon disulfide	2.6	0.47		ug/m3	1	12/17/2022 7:16:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 7:16:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 7:16:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 7:16:00 AM
Chloroform	1.2	0.73		ug/m3	1	12/17/2022 7:16:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 7:16:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 7:16:00 AM
Cyclohexane	5.4	0.52		ug/m3	1	12/17/2022 7:16:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 7:16:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 7:16:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 7:16:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 7:16:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-017A

Client Sample ID: SVW-16
Tag Number: 93,111
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/17/2022 7:16:00 AM
Heptane	0.57	0.61	J	ug/m3	1	12/17/2022 7:16:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 7:16:00 AM
Hexane	12	5.3		ug/m3	10	12/17/2022 11:22:00 PM
Isopropyl alcohol	2.6	0.37		ug/m3	1	12/17/2022 7:16:00 AM
m&p-Xylene	1.0	1.3	J	ug/m3	1	12/17/2022 7:16:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
Methyl Ethyl Ketone	64	35		ug/m3	40	12/18/2022 12:04:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 7:16:00 AM
Methylene chloride	1.8	0.52		ug/m3	1	12/17/2022 7:16:00 AM
o-Xylene	0.48	0.65	J	ug/m3	1	12/17/2022 7:16:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 7:16:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 7:16:00 AM
Tetrachloroethylene	1.6	1.0		ug/m3	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	38	0.44		ug/m3	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	55	4.4		ug/m3	10	12/17/2022 11:22:00 PM
Toluene	2.4	0.57		ug/m3	1	12/17/2022 7:16:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 7:16:00 AM
Trichloroethene	0.64	0.81	J	ug/m3	1	12/17/2022 7:16:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 7:16:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 7:16:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 7:16:00 AM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-018A

Client Sample ID: AS-1
Tag Number: 231,175
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:11:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:11:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:11:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 1:11:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 1:11:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
2,2,4-trimethylpentane	0.51	0.70	J	ug/m3	1	12/16/2022 1:11:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
Acetone	15	3.6		ug/m3	5	12/17/2022 12:42:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 1:11:00 PM
Benzene	0.89	0.48		ug/m3	1	12/16/2022 1:11:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 1:11:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 1:11:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 1:11:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 1:11:00 PM
Carbon tetrachloride	0.50	0.19		ug/m3	1	12/16/2022 1:11:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 1:11:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 1:11:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 1:11:00 PM
Chloromethane	0.97	0.31		ug/m3	1	12/16/2022 1:11:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:11:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 1:11:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 1:11:00 PM
Ethyl acetate	0.65	0.54		ug/m3	1	12/16/2022 1:11:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 1:11:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 1:11:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-018A

Client Sample ID: AS-1
Tag Number: 231,175
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/16/2022 1:11:00 PM
Heptane	0.49	0.61	J	ug/m3	1	12/16/2022 1:11:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 1:11:00 PM
Hexane	0.56	0.53		ug/m3	1	12/16/2022 1:11:00 PM
Isopropyl alcohol	1.2	0.37		ug/m3	1	12/16/2022 1:11:00 PM
m&p-Xylene	0.82	1.3	J	ug/m3	1	12/16/2022 1:11:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
Methyl Ethyl Ketone	1.5	0.88		ug/m3	1	12/16/2022 1:11:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 1:11:00 PM
Methylene chloride	0.76	0.52		ug/m3	1	12/16/2022 1:11:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 1:11:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 1:11:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 1:11:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 1:11:00 PM
Toluene	2.5	0.57		ug/m3	1	12/16/2022 1:11:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 1:11:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:11:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 1:11:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-019A

Client Sample ID: AS-2
Tag Number: 170,124
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:55:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:55:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:55:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 1:55:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 1:55:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
2,2,4-trimethylpentane	0.56	0.70	J	ug/m3	1	12/16/2022 1:55:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
Acetone	10	3.6		ug/m3	5	12/17/2022 1:24:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 1:55:00 PM
Benzene	0.93	0.48		ug/m3	1	12/16/2022 1:55:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 1:55:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 1:55:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 1:55:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 1:55:00 PM
Carbon tetrachloride	0.50	0.19		ug/m3	1	12/16/2022 1:55:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 1:55:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 1:55:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 1:55:00 PM
Chloromethane	1.0	0.31		ug/m3	1	12/16/2022 1:55:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:55:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 1:55:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 1:55:00 PM
Ethyl acetate	0.65	0.54		ug/m3	1	12/16/2022 1:55:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 1:55:00 PM
Freon 11	1.5	0.84		ug/m3	1	12/16/2022 1:55:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-019A

Client Sample ID: AS-2
Tag Number: 170,124
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/16/2022 1:55:00 PM
Heptane	0.49	0.61	J	ug/m3	1	12/16/2022 1:55:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 1:55:00 PM
Hexane	0.63	0.53		ug/m3	1	12/16/2022 1:55:00 PM
Isopropyl alcohol	2.6	0.37		ug/m3	1	12/16/2022 1:55:00 PM
m&p-Xylene	0.91	1.3	J	ug/m3	1	12/16/2022 1:55:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	1.1	0.88		ug/m3	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	2.1	4.4	J	ug/m3	5	12/17/2022 1:24:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 1:55:00 PM
Methylene chloride	0.76	0.52		ug/m3	1	12/16/2022 1:55:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 1:55:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 1:55:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 1:55:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 1:55:00 PM
Toluene	4.1	0.57		ug/m3	1	12/16/2022 1:55:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 1:55:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:55:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 1:55:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-020A

Client Sample ID: TB-1
Tag Number: 141
Collection Date:
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 12:26:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 12:26:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 12:26:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 12:26:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 12:26:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
Acetone	< 0.71	0.71		ug/m3	1	12/16/2022 12:26:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 12:26:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 12:26:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 12:26:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 12:26:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 12:26:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 12:26:00 PM
Carbon tetrachloride	< 0.19	0.19		ug/m3	1	12/16/2022 12:26:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 12:26:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 12:26:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 12:26:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 12:26:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 12:26:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 12:26:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 12:26:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 12:26:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 12:26:00 PM
Freon 11	< 0.84	0.84		ug/m3	1	12/16/2022 12:26:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-020A

Client Sample ID: TB-1
Tag Number: 141
Collection Date:
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 12:26:00 PM
Hexane	< 0.53	0.53		ug/m3	1	12/16/2022 12:26:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 12:26:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 12:26:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/16/2022 12:26:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 12:26:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 12:26:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 12:26:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 12:26:00 PM
Toluene	< 0.57	0.57		ug/m3	1	12/16/2022 12:26:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 12:26:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 12:26:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 12:26:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory - Chain of Custody

Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
315-431-5730
www.CentekLabs.us



Vapor Intrusion & IAQ

Site Name: **IKEA**
Project: **Red Hook**
PO#: **08-387**
Quote #: **Q-SP**
Canister Order #: **9575**

Detection Limit
☐ 5ppbv
☒ 1ugM3
☐ 1ugM3 ± 0.2 WTS

Report Level
☐ Level I
☐ Level II
☒ Cat "B" Like

TAT Turnaround Time: 5 Business Days 4 Business Days 3 Business Days 2 Business Days *Next Day by 5pm *Next Day by Noon *Same Day		Check One ☒ Rush TAT ☐ Surcharges: 0% ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ 150% ☐ 200% ☐		Company: Soil Mael Report to: Address: 3770 Merrick Rd City, State, Zip: Selden NY 11783 Email: Soilmael@earthlink.net Phone: 516 221-7500		Company: ☐ Check Here if Same: Invoice to: Address: City, State, Zip: Email: Phone:		Labs Vacuum** RecV/Analysis		Comments					
For Same and Next Day TAT Please Notify Lab		Sample ID		Date Sampled		Canister Number		Regulator Number		Analysis Request		Field Vacuum Start / Stop		Comments	
SVW-1		12-13-02		↑		1201		1149		To 15 + Helium		30 1 6		Matrix spiked Dup	
SVW-2						465		1165				29 1 5			
SVW-3						1186		177				29 1 5			
SVW-4						1178		177				30 1 5			
SVW-5						1153		189				30 1 7			
SVW-6						101		79				30 1 8			
SVW-6 Dup						1177		79				30 1 8		Duplicate	
SVW-7						545		146				29 1 7			
SVW-8						561		147				30 1 5			
SVW-9						347		180				30 1 6			
SVW-10				370 DM		471		406				30 1 2			
SVW-11						571		184				30 1 4			
SVW-12						274		309				30 1 6			
SVW-13						366		255				30 1 2			
SVW-14						232		156				30 1 5			
SVW-15						350		295				30 1 4			
SVW-16				↓		93		111		↓		30 1 3			
												1			
Chain of Custody		Print Name		Signature		Date/Time		Courier: CIRCLE ONE		FedEx		UPS		Pickup/Dropoff	
Sampled by:		Steve Anderson		54		12-13-02									
Relinquished by:		Steve Anderson		SR											
Received at Lab by:															

***Chain of Custody must be completed in full. Lack of any missing information will affect your Turn Around Times (TAT)
 *** By signing Centek/SanAir Labs Chain of Custody, you are accepting the Terms and Conditions listed on the reverse side.

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Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-001A

Client Sample ID: SVW-1 MS/MSD
Tag Number: 1201,1149
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Acetone	1.5	0.30		ppbV	1	12/16/2022 4:05:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Carbon tetrachloride	0.23	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloroform	0.35	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-001A

Client Sample ID: SVW-1 MS/MSD
Tag Number: 1201,1149
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Ethyl acetate	0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 11	1.3	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 12	0.84	0.15		ppbV	1	12/16/2022 4:05:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Hexane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl Ethyl Ketone	0.26	0.30	J	ppbV	1	12/16/2022 4:05:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Methylene chloride	0.25	0.15		ppbV	1	12/16/2022 4:05:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/16/2022 4:05:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Toluene	0.27	0.15		ppbV	1	12/16/2022 4:05:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 4:05:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-002A

Client Sample ID: SVW-2
Tag Number: 465,1165
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
2,2,4-trimethylpentane	0.10	0.15	J	ppbV	1	12/16/2022 7:28:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Acetone	6.0	1.5		ppbV	5	12/17/2022 2:05:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Benzene	0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Carbon tetrachloride	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chloroform	0.11	0.15	J	ppbV	1	12/16/2022 7:28:00 PM
Chloromethane	0.19	0.15		ppbV	1	12/16/2022 7:28:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-002A

Client Sample ID: SVW-2
Tag Number: 465,1165
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 11	0.47	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 12	0.50	0.15		ppbV	1	12/16/2022 7:28:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Hexane	0.21	0.15		ppbV	1	12/16/2022 7:28:00 PM
Isopropyl alcohol	0.21	0.15		ppbV	1	12/16/2022 7:28:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Ethyl Ketone	0.91	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Methylene chloride	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Tetrachloroethylene	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Toluene	0.33	0.15		ppbV	1	12/16/2022 7:28:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Surr: Bromofluorobenzene	92.0	46.7-129		%REC	1	12/16/2022 7:28:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-003A

Client Sample ID: SVW-3
Tag Number: 1186,177
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC				Analyst: RJP
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
2,2,4-trimethylpentane	0.24	0.15		ppbV	1	12/16/2022 8:12:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Acetone	11	3.0		ppbV	10	12/17/2022 2:48:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Benzene	0.21	0.15		ppbV	1	12/16/2022 8:12:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Carbon disulfide	1.0	0.15		ppbV	1	12/16/2022 8:12:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloroform	0.28	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloromethane	0.20	0.15		ppbV	1	12/16/2022 8:12:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-003A

Client Sample ID: SVW-3
Tag Number: 1186,177
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Ethyl acetate	0.73	0.15		ppbV	1	12/16/2022 8:12:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 11	0.49	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 12	0.54	0.15		ppbV	1	12/16/2022 8:12:00 PM
Heptane	0.16	0.15		ppbV	1	12/16/2022 8:12:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Hexane	0.49	0.15		ppbV	1	12/16/2022 8:12:00 PM
Isopropyl alcohol	0.82	0.15		ppbV	1	12/16/2022 8:12:00 PM
m&p-Xylene	0.16	0.30	J	ppbV	1	12/16/2022 8:12:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl Ethyl Ketone	0.80	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Methylene chloride	0.30	0.15		ppbV	1	12/16/2022 8:12:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Tetrachloroethylene	0.13	0.15	J	ppbV	1	12/16/2022 8:12:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Toluene	1.4	0.15		ppbV	1	12/16/2022 8:12:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 8:12:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-004A

Client Sample ID: SVW-4
Tag Number: 1178,117
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2,4-Trimethylbenzene	0.14	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,4-Dichlorobenzene	0.16	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
2,2,4-trimethylpentane	0.19	0.15		ppbV	1	12/16/2022 8:56:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Acetone	8.2	3.0		ppbV	10	12/17/2022 3:31:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Benzene	0.27	0.15		ppbV	1	12/16/2022 8:56:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Carbon disulfide	1.4	0.15		ppbV	1	12/16/2022 8:56:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chlorobenzene	0.23	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloromethane	0.52	0.15		ppbV	1	12/16/2022 8:56:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-004A

Client Sample ID: SVW-4
Tag Number: 1178,117
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Ethyl acetate	0.13	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Ethylbenzene	0.18	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 11	0.14	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 12	0.59	0.15		ppbV	1	12/16/2022 8:56:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Hexane	0.52	0.15		ppbV	1	12/16/2022 8:56:00 PM
Isopropyl alcohol	0.31	0.15		ppbV	1	12/16/2022 8:56:00 PM
m&p-Xylene	0.40	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Ethyl Ketone	0.54	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
o-Xylene	0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Tetrachloroethylene	0.10	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Toluene	0.98	0.15		ppbV	1	12/16/2022 8:56:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 8:56:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-005A

Client Sample ID: SVW-5
Tag Number: 129,1153
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Acetone	1.9	0.30		ppbV	1	12/16/2022 9:41:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Carbon disulfide	0.21	0.15		ppbV	1	12/16/2022 9:41:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-005A

Client Sample ID: SVW-5
Tag Number: 129,1153
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 11	0.29	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 12	0.60	0.15		ppbV	1	12/16/2022 9:41:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Hexane	0.17	0.15		ppbV	1	12/16/2022 9:41:00 PM
Isopropyl alcohol	0.25	0.15		ppbV	1	12/16/2022 9:41:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Ethyl Ketone	0.40	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Methylene chloride	0.18	0.15		ppbV	1	12/16/2022 9:41:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/16/2022 9:41:00 PM
Tetrahydrofuran	0.23	0.15		ppbV	1	12/16/2022 9:41:00 PM
Toluene	0.29	0.15		ppbV	1	12/16/2022 9:41:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 9:41:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-006A

Client Sample ID: SVW-6
Tag Number: 101,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Acetone	1.9	0.30		ppbV	1	12/16/2022 10:25:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Benzene	0.18	0.15		ppbV	1	12/16/2022 10:25:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Carbon disulfide	0.12	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloromethane	0.52	0.15		ppbV	1	12/16/2022 10:25:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-006A

Client Sample ID: SVW-6
Tag Number: 101,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Ethyl acetate	0.13	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 11	0.29	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 12	0.65	0.15		ppbV	1	12/16/2022 10:25:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Hexane	0.16	0.15		ppbV	1	12/16/2022 10:25:00 PM
Isopropyl alcohol	0.37	0.15		ppbV	1	12/16/2022 10:25:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Ethyl Ketone	0.32	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Methylene chloride	0.28	0.15		ppbV	1	12/16/2022 10:25:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Tetrachloroethylene	0.12	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Toluene	0.38	0.15		ppbV	1	12/16/2022 10:25:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 10:25:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-007A

Client Sample ID: SVW-6 Dup
Tag Number: 1177,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Acetone	3.0	1.5		ppbV	5	12/17/2022 4:13:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Benzene	0.19	0.15		ppbV	1	12/16/2022 11:09:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Carbon disulfide	0.11	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-007A

Client Sample ID: SVW-6 Dup
Tag Number: 1177,79
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 11	0.28	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 12	0.63	0.15		ppbV	1	12/16/2022 11:09:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Hexane	0.12	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Isopropyl alcohol	0.55	0.15		ppbV	1	12/16/2022 11:09:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Ethyl Ketone	0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Methylene chloride	1.4	0.15		ppbV	1	12/16/2022 11:09:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Tetrachloroethylene	0.13	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Toluene	0.28	0.15		ppbV	1	12/16/2022 11:09:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 11:09:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-008A

Client Sample ID: SVW-7
Tag Number: 545,146
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-5			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC				Analyst: RJP
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2,4-Trimethylbenzene	0.22	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,3,5-Trimethylbenzene	0.11	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 11:53:00 PM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Acetone	2.0	1.5		ppbV	5	12/17/2022 4:56:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Benzene	0.25	0.15		ppbV	1	12/16/2022 11:53:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Carbon disulfide	2.2	0.75		ppbV	5	12/17/2022 4:56:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloroform	1.2	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-008A

Client Sample ID: SVW-7
Tag Number: 545,146
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Ethylbenzene	0.20	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 11	0.37	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 12	0.51	0.15		ppbV	1	12/16/2022 11:53:00 PM
Heptane	0.14	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Hexane	0.24	0.15		ppbV	1	12/16/2022 11:53:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
m&p-Xylene	0.49	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Ethyl Ketone	0.46	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Isobutyl Ketone	0.25	0.30	J	ppbV	1	12/16/2022 11:53:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Methylene chloride	0.24	0.15		ppbV	1	12/16/2022 11:53:00 PM
o-Xylene	0.19	0.15		ppbV	1	12/16/2022 11:53:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Tetrahydrofuran	0.26	0.15		ppbV	1	12/16/2022 11:53:00 PM
Toluene	0.98	0.15		ppbV	1	12/16/2022 11:53:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Surr: Bromofluorobenzene	101	46.7-129		%REC	1	12/16/2022 11:53:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-009A

Client Sample ID: SVW-8
Tag Number: 561,147
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Acetone	2.9	1.5		ppbV	5	12/17/2022 5:39:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Benzene	0.38	0.15		ppbV	1	12/17/2022 12:38:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloromethane	0.56	0.15		ppbV	1	12/17/2022 12:38:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-009A

Client Sample ID: SVW-8
Tag Number: 561,147
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Ethyl acetate	0.64	0.15		ppbV	1	12/17/2022 12:38:00 AM
Ethylbenzene	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 12	0.58	0.15		ppbV	1	12/17/2022 12:38:00 AM
Heptane	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Hexane	0.22	0.15		ppbV	1	12/17/2022 12:38:00 AM
Isopropyl alcohol	0.78	0.15		ppbV	1	12/17/2022 12:38:00 AM
m&p-Xylene	0.38	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Ethyl Ketone	0.72	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Methylene chloride	0.23	0.15		ppbV	1	12/17/2022 12:38:00 AM
o-Xylene	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Tetrachloroethylene	0.26	0.15		ppbV	1	12/17/2022 12:38:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Toluene	1.3	0.15		ppbV	1	12/17/2022 12:38:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 12:38:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-010A

Client Sample ID: SVW-9
Tag Number: 347,120
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-3			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.12	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2,4-Trimethylbenzene	0.57	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3,5-Trimethylbenzene	0.27	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 1:22:00 AM
2,2,4-trimethylpentane	0.14	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
4-ethyltoluene	0.13	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Acetone	19	3.0		ppbV	10	12/17/2022 6:22:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Benzene	0.69	0.15		ppbV	1	12/17/2022 1:22:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Carbon disulfide	26	6.0		ppbV	40	12/17/2022 7:04:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloroform	1.3	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-010A

Client Sample ID: SVW-9
Tag Number: 347,120
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Ethylbenzene	0.14	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 12	0.58	0.15		ppbV	1	12/17/2022 1:22:00 AM
Heptane	0.11	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Hexane	0.35	0.15		ppbV	1	12/17/2022 1:22:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
m&p-Xylene	0.52	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Ethyl Ketone	0.58	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Isobutyl Ketone	8.9	3.0		ppbV	10	12/17/2022 6:22:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Methylene chloride	0.70	0.15		ppbV	1	12/17/2022 1:22:00 AM
o-Xylene	0.36	0.15		ppbV	1	12/17/2022 1:22:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Tetrahydrofuran	1.2	0.15		ppbV	1	12/17/2022 1:22:00 AM
Toluene	0.98	0.15		ppbV	1	12/17/2022 1:22:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Surr: Bromofluorobenzene	98.0	46.7-129		%REC	1	12/17/2022 1:22:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-011A

Client Sample ID: SVW-10
Tag Number: 370,406
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Acetone	2.8	1.5		ppbV	5	12/17/2022 7:46:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Benzene	0.13	0.15	J	ppbV	1	12/17/2022 2:06:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Carbon disulfide	0.28	0.15		ppbV	1	12/17/2022 2:06:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chloroform	4.0	0.75		ppbV	5	12/17/2022 7:46:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-011A

Client Sample ID: SVW-10
Tag Number: 370,406
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 11	0.34	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 12	0.63	0.15		ppbV	1	12/17/2022 2:06:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Hexane	0.13	0.15	J	ppbV	1	12/17/2022 2:06:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Methylene chloride	0.21	0.15		ppbV	1	12/17/2022 2:06:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Tetrachloroethylene	0.16	0.15		ppbV	1	12/17/2022 2:06:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Toluene	0.24	0.15		ppbV	1	12/17/2022 2:06:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 2:06:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-012A

Client Sample ID: SVW-11
Tag Number: 571,184
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.13	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Acetone	2.1	0.30		ppbV	1	12/17/2022 2:51:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Benzene	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloroform	0.19	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-012A

Client Sample ID: SVW-11
Tag Number: 571,184
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 11	2.0	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 12	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Hexane	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Methylene chloride	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Tetrachloroethylene	0.51	0.15		ppbV	1	12/17/2022 2:51:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Toluene	0.36	0.15		ppbV	1	12/17/2022 2:51:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Surr: Bromofluorobenzene	96.0	46.7-129		%REC	1	12/17/2022 2:51:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-013A

Client Sample ID: SVW-12
Tag Number: 274,309
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
2,2,4-trimethylpentane	0.10	0.15	J	ppbV	1	12/17/2022 4:19:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Acetone	1.9	0.30		ppbV	1	12/17/2022 4:19:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Benzene	0.16	0.15		ppbV	1	12/17/2022 4:19:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Carbon disulfide	1.1	0.15		ppbV	1	12/17/2022 4:19:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-013A

Client Sample ID: SVW-12
Tag Number: 274,309
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 11	0.28	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 12	0.60	0.15		ppbV	1	12/17/2022 4:19:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Hexane	0.23	0.15		ppbV	1	12/17/2022 4:19:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Methylene chloride	0.24	0.15		ppbV	1	12/17/2022 4:19:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Tetrachloroethylene	0.35	0.15		ppbV	1	12/17/2022 4:19:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Toluene	0.34	0.15		ppbV	1	12/17/2022 4:19:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Vinyl acetate	0.11	0.15	J	ppbV	1	12/17/2022 4:19:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/17/2022 4:19:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-014A

Client Sample ID: SVW-13
Tag Number: 366,255
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	2.3	1.5		ppbV	10	12/17/2022 8:29:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
2,2,4-trimethylpentane	1.2	0.15		ppbV	1	12/17/2022 5:03:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Acetone	4.5	3.0		ppbV	10	12/17/2022 8:29:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Benzene	10	1.5		ppbV	10	12/17/2022 8:29:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Carbon disulfide	2.0	0.15		ppbV	1	12/17/2022 5:03:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chloroform	0.11	0.15	J	ppbV	1	12/17/2022 5:03:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Cyclohexane	4.5	1.5		ppbV	10	12/17/2022 8:29:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-014A

Client Sample ID: SVW-13
Tag Number: 366,255
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Ethyl acetate	1.6	0.15		ppbV	1	12/17/2022 5:03:00 AM
Ethylbenzene	0.13	0.15	J	ppbV	1	12/17/2022 5:03:00 AM
Freon 11	2.7	1.5		ppbV	10	12/17/2022 8:29:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Freon 12	0.73	0.15		ppbV	1	12/17/2022 5:03:00 AM
Heptane	0.17	0.15		ppbV	1	12/17/2022 5:03:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Hexane	0.37	0.15		ppbV	1	12/17/2022 5:03:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
m&p-Xylene	0.22	0.30	J	ppbV	1	12/17/2022 5:03:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl Ethyl Ketone	0.51	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Methylene chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Tetrachloroethylene	1.0	0.15		ppbV	1	12/17/2022 5:03:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Toluene	1.5	0.15		ppbV	1	12/17/2022 5:03:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Trichloroethene	0.41	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Surr: Bromofluorobenzene	108	46.7-129		%REC	1	12/17/2022 5:03:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-015A

Client Sample ID: SVW-14
Tag Number: 232,156
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/17/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2,4-Trimethylbenzene	1.3	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3,5-Trimethylbenzene	0.58	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 5:48:00 AM
2,2,4-trimethylpentane	10	1.4		ppbV	9	12/17/2022 9:13:00 PM
4-ethyltoluene	0.29	0.15		ppbV	1	12/17/2022 5:48:00 AM
Acetone	80	27		ppbV	90	12/17/2022 9:56:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Benzene	4.1	1.4		ppbV	9	12/17/2022 9:13:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Carbon disulfide	18	1.4		ppbV	9	12/17/2022 9:13:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloroethane	0.37	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
cis-1,2-Dichloroethene	1.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Cyclohexane	20	14		ppbV	90	12/17/2022 9:56:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-015A

Client Sample ID: SVW-14
Tag Number: 232,156
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Ethylbenzene	0.42	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 11	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 12	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Heptane	5.2	1.4		ppbV	9	12/17/2022 9:13:00 PM
Heptane	5.6	0.15		ppbV	1	12/17/2022 5:48:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Hexane	15	1.4		ppbV	9	12/17/2022 9:13:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
m&p-Xylene	1.4	0.30		ppbV	1	12/17/2022 5:48:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:48:00 AM
Methyl Ethyl Ketone	20	27	J	ppbV	90	12/17/2022 9:56:00 PM
Methyl Isobutyl Ketone	100	27		ppbV	90	12/17/2022 9:56:00 PM
Methyl tert-butyl ether	12	1.4		ppbV	9	12/17/2022 9:13:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
o-Xylene	1.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Styrene	0.23	0.15		ppbV	1	12/17/2022 5:48:00 AM
Tetrachloroethylene	1.1	0.15		ppbV	1	12/17/2022 5:48:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Toluene	2.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
trans-1,2-Dichloroethene	0.55	0.15		ppbV	1	12/17/2022 5:48:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Trichloroethene	0.74	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Surr: Bromofluorobenzene	114	46.7-129		%REC	1	12/17/2022 5:48:00 AM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-016A

Client Sample ID: SVW-15
Tag Number: 350,295
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 6:32:00 AM
2,2,4-trimethylpentane	0.25	0.15		ppbV	1	12/17/2022 6:32:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Acetone	2.0	1.5		ppbV	5	12/17/2022 10:39:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Benzene	0.20	0.15		ppbV	1	12/17/2022 6:32:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Carbon disulfide	0.20	0.15		ppbV	1	12/17/2022 6:32:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloromethane	0.27	0.15		ppbV	1	12/17/2022 6:32:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Cyclohexane	0.31	0.15		ppbV	1	12/17/2022 6:32:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-016A

Client Sample ID: SVW-15
Tag Number: 350,295
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Ethyl acetate	0.32	0.15		ppbV	1	12/17/2022 6:32:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 11	0.88	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 12	0.64	0.15		ppbV	1	12/17/2022 6:32:00 AM
Heptane	0.70	0.15		ppbV	1	12/17/2022 6:32:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Hexane	1.5	0.15		ppbV	1	12/17/2022 6:32:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
m&p-Xylene	0.18	0.30	J	ppbV	1	12/17/2022 6:32:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 6:32:00 AM
Methyl Ethyl Ketone	0.55	0.30		ppbV	1	12/17/2022 6:32:00 AM
Methyl Isobutyl Ketone	0.14	0.30	J	ppbV	1	12/17/2022 6:32:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Methylene chloride	0.28	0.15		ppbV	1	12/17/2022 6:32:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Tetrachloroethylene	0.45	0.15		ppbV	1	12/17/2022 6:32:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Toluene	1.4	0.15		ppbV	1	12/17/2022 6:32:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 6:32:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-017A

Client Sample ID: SVW-16
Tag Number: 93,111
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
2,2,4-trimethylpentane	1.9	1.5		ppbV	10	12/17/2022 11:22:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Acetone	28	12		ppbV	40	12/18/2022 12:04:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Benzene	0.38	0.15		ppbV	1	12/17/2022 7:16:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Carbon disulfide	0.85	0.15		ppbV	1	12/17/2022 7:16:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloroform	0.25	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Cyclohexane	1.6	0.15		ppbV	1	12/17/2022 7:16:00 AM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-017A

Client Sample ID: SVW-16
Tag Number: 93,111
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 12	0.65	0.15		ppbV	1	12/17/2022 7:16:00 AM
Heptane	0.14	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Hexane	3.3	1.5		ppbV	10	12/17/2022 11:22:00 PM
Isopropyl alcohol	1.1	0.15		ppbV	1	12/17/2022 7:16:00 AM
m&p-Xylene	0.24	0.30	J	ppbV	1	12/17/2022 7:16:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
Methyl Ethyl Ketone	22	12		ppbV	40	12/18/2022 12:04:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Methylene chloride	0.53	0.15		ppbV	1	12/17/2022 7:16:00 AM
o-Xylene	0.11	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrachloroethylene	0.23	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	13	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	19	1.5		ppbV	10	12/17/2022 11:22:00 PM
Toluene	0.65	0.15		ppbV	1	12/17/2022 7:16:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Trichloroethene	0.12	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Surr: Bromofluorobenzene	85.0	46.7-129		%REC	1	12/17/2022 7:16:00 AM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-018A

Client Sample ID: AS-1
Tag Number: 231,175
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
2,2,4-trimethylpentane	0.11	0.15	J	ppbV	1	12/16/2022 1:11:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Acetone	6.2	1.5		ppbV	5	12/17/2022 12:42:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Benzene	0.28	0.15		ppbV	1	12/16/2022 1:11:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Carbon tetrachloride	0.080	0.030		ppbV	1	12/16/2022 1:11:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloromethane	0.47	0.15		ppbV	1	12/16/2022 1:11:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Ethyl acetate	0.18	0.15		ppbV	1	12/16/2022 1:11:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-018A

Client Sample ID: AS-1
Tag Number: 231,175
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 11	0.28	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 12	0.62	0.15		ppbV	1	12/16/2022 1:11:00 PM
Heptane	0.12	0.15	J	ppbV	1	12/16/2022 1:11:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Hexane	0.16	0.15		ppbV	1	12/16/2022 1:11:00 PM
Isopropyl alcohol	0.48	0.15		ppbV	1	12/16/2022 1:11:00 PM
m&p-Xylene	0.19	0.30	J	ppbV	1	12/16/2022 1:11:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl Ethyl Ketone	0.52	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Methylene chloride	0.22	0.15		ppbV	1	12/16/2022 1:11:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Toluene	0.66	0.15		ppbV	1	12/16/2022 1:11:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 1:11:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
Surr: Bromofluorobenzene	96.0	47-124		%REC	1	12/16/2022 1:11:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-019A

Client Sample ID: AS-2
Tag Number: 170,124
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-3			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
2,2,4-trimethylpentane	0.12	0.15	J	ppbV	1	12/16/2022 1:55:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Acetone	4.3	1.5		ppbV	5	12/17/2022 1:24:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Benzene	0.29	0.15		ppbV	1	12/16/2022 1:55:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Carbon tetrachloride	0.080	0.030		ppbV	1	12/16/2022 1:55:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloromethane	0.49	0.15		ppbV	1	12/16/2022 1:55:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Ethyl acetate	0.18	0.15		ppbV	1	12/16/2022 1:55:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-019A

Client Sample ID: AS-2
Tag Number: 170,124
Collection Date: 12/13/2022
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 11	0.27	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 12	0.60	0.15		ppbV	1	12/16/2022 1:55:00 PM
Heptane	0.12	0.15	J	ppbV	1	12/16/2022 1:55:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Hexane	0.18	0.15		ppbV	1	12/16/2022 1:55:00 PM
Isopropyl alcohol	1.0	0.15		ppbV	1	12/16/2022 1:55:00 PM
m&p-Xylene	0.21	0.30	J	ppbV	1	12/16/2022 1:55:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	0.39	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	0.70	1.5	J	ppbV	5	12/17/2022 1:24:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Methylene chloride	0.22	0.15		ppbV	1	12/16/2022 1:55:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Toluene	1.1	0.15		ppbV	1	12/16/2022 1:55:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 1:55:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
Surr: Bromofluorobenzene	97.0	47-124		%REC	1	12/16/2022 1:55:00 PM

Qualifiers:	.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
	DL	Detection Limit	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-020A

Client Sample ID: TB-1
Tag Number: 141
Collection Date:
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+30			"Hg		12/15/2022
Lab Vacuum Out	+30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Acetone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Carbon tetrachloride	< 0.030	0.030		ppbV	1	12/16/2022 12:26:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory

Date: 22-Dec-22

CLIENT: SOIL MECHANICS
Lab Order: C2212031
Project: IKEA Red Hook
Lab ID: C2212031-020A

Client Sample ID: TB-1
Tag Number: 141
Collection Date:
Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 11	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 12	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Hexane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Toluene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 12:26:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
Surr: Bromofluorobenzene	95.0	47-124		%REC	1	12/16/2022 12:26:00 PM

Qualifiers:

.	Results reported are not blank corrected	B	Analyte detected in the associated Method Blank
DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted

Centek/SanAir Technologies Laboratory - Chain of Custody

Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
315-431-5730
www.CentekLabs.us



Vapor Intrusion & IAQ

Site Name: **IKEA**
Project: **Red Hook**
PO#: **08-387**
Quote #: **Q-SP**
Canister Order #: **9575**

Detection Limit
☐ 5ppbv
☒ 1ugM3
☐ 1ugM3 ± 0.2 MTS

Report Level
☐ Level I
☐ Level II
☒ Cat "B" Like

TAT Turnaround Time: 5 Business Days 4 Business Days 3 Business Days 2 Business Days *Next Day by 5pm *Next Day by Noon *Same Day		Check One ☒ Rush TAT ☐ 0% ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ 150% ☐ 200%		Company: Soil Mael Check Here if Same: Invoice to: Address: City, State, Zip Email: Phone:		Company: Check Here if Same: Invoice to: Address: City, State, Zip Email: Phone:	
Report to: Address: 3770 Merrick Rd City, State, Zip: Selden NY 11783 Email: Soilmael@earthlink.net Phone: 516 221-7500		Canister Number Regulator Number Analysis Request		Field Vacuum Start / Stop Labs Vacuum** RecV/Analysis		Comments	
SVW-1 MS/ASH	12-13-22	1201	1149	To 15 + Helium	30 1 6	1	Makes spiked Dup
SVW-2	↑	465	1165	↑	29 1 5	1	
SVW-3		1186	177		29 1 5	1	
SVW-4		1178	177		30 1 5	1	
SVW-5		1153	189		30 1 7	1	
SVW-6		101	79		30 1 8	1	
SVW-6 Dup		1177	79		30 1 8	1	Duplicate
SVW-7		545	146		29 1 7	1	
SVW-8		561	147		30 1 5	1	
SVW-9		347	180		30 1 6	1	
SVW-10	370 → DM	471	406		30 1 2	1	
SVW-11		571	184		30 1 4	1	
SVW-12		274	309		30 1 6	1	
SVW-13		366	255		30 1 2	1	
SVW-14		232	156		30 1 5	1	
SVW-15		350	245		30 1 4	1	
SVW-16	↓	93	111	↓	30 1 3	1	
					1	1	

Chain of Custody	Print Name	Signature	Date/Time	Courier: CIRCLE ONE
Sampled by:	Steve Anderson	557		FedEx UPS Pickup/Dropoff
Relinquished by:	Steve Anderson	557	12-13-22	**For LAB USE ONLY
Received at Lab by:				Work Order #

***Chain of Custody must be completed in full. Lack of any missing information will affect your Turn Around Times (TAT)
 *** By signing Centek/SanAir Labs Chain of Custody, you are accepting the Terms and Conditions listed on the reverse side.

Monthly SSVMS Inspection Forms

**U.S. Dredging Shipyard Site
Tax Block 612, Lot 130
Brooklyn, New York
NYSDEC - BCP Number C224043**

METHANE MITIGATION SYSTEM MEASUREMENTS

DATE: <u>7/28/22</u> WEATHER Cldy <u>75°F</u> BARO. PRESS <u>29.84Hg</u> SMES #: <u>08-387</u>	BLOWER #1	BLOWER #2	COMMENTS
Electric Control Room			<u>July 2022</u>
Current hour meter reading	59302.5	1004.3	Both blowers operating normally.
Previous hour meter reading	58416.0	116.0	
Total elapsed motor run time (hr.) (Current monitoring period)	886.5	888.3	
Total days operational	Approx. 4897.1	Approx. 4964.6	
Alarm Condition	None	None	
Roof Top Blowers			
Filter inlet gauge reading	-55.0" H ₂ O	-46.0" H ₂ O	
Filter outlet gauge reading	-56.0" H ₂ O	-52.0" H ₂ O	
Magnehelic gauge reading	10.0" H ₂ O	8.0" H ₂ O	
Flow at stack	360 SCFM	300 SCFM	
Methane (CH ₄) concentration At exhaust stack *	0.0	0.0	
Dilution valve	CLOSED	CLOSED	

* = Percent Gas by Volume

Monthly Sub-Slab Vapor Mitigation System Inspection Form

IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, NY

Inspector: DANES
Date: 7-28-22
Weather: CLDY
Temp: 75 F°
Barometric
Pressure 29.89 in. Hg

1. "General"

- a). When was the last rain event? 7-16-22
- b). Are system fans operating? Yes
If no, please list: -
- c). Any evidence of system tampering or vandalism? No
- d). Were all cleanout and sampling port caps securely attached prior to system testing? Yes
- e). Please list caps that were not securely in place: -

2. Operations

- a). Attach Fan Operation Routine Checklist as per Manufacturer Specifications

3. Comments

BOTH BLOWERS OPERATING NORMALLY

METHANE MITIGATION SYSTEM MEASUREMENTS

DATE: <u>9/6/22</u> WEATHER Cldy <u>72°F</u> BARO. PRESS <u>29.94Hg</u> SMES #: <u>08-387</u>	BLOWER #1	BLOWER #2	COMMENTS
Electric Control Room			<u>August 2022</u>
Current hour meter reading	60263.0	1964.1	Both blowers operating normally.
Previous hour meter reading	59302.5	1004.3	
Total elapsed motor run time (hr.) (Current monitoring period)	960.5	959.8	
Total days operational	Approx. 4937.1	Approx. 5004.6	
Alarm Condition	None	None	
Roof Top Blowers			
Filter inlet gauge reading	-56.0" H ₂ O	-49.0" H ₂ O	
Filter outlet gauge reading	-58.0" H ₂ O	-53.0" H ₂ O	
Magnehelic gauge reading	10.0" H ₂ O	8.0" H ₂ O	
Flow at stack	360 SCFM	300 SCFM	
Methane (CH ₄) concentration At exhaust stack *	0.0	0.0	
Dilution valve	CLOSED	CLOSED	

* = Percent Gas by Volume

Monthly Sub-Slab Vapor Mitigation System Inspection Form

IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, NY

Inspector: DAVE S.
Date: 9-6-22
Weather: RAIN
Temp: 72 F°
Barometric
Pressure 29.94 in. Hg

1. General

- a). When was the last rain event? 9-6-22
- b). Are system fans operating? Yes
If no, please list: -0-
- c). Any evidence of system tampering or vandalism? No
- d). Were all cleanout and sampling port caps securely attached prior to system testing? Yes
- e). Please list caps that were not securely in place: -0-

2. Operations

- a). Attach Fan Operation Routine Checklist as per Manufacturer Specifications

3. Comments

BOTH ALLOWERS WERE OPERATING NORMALLY

METHANE MITIGATION SYSTEM MEASUREMENTS

DATE: 10/5/22 WEATHER Sunny 65°F BARO. PRESS 29.89Hg SMES #: 08-387	BLOWER #1	BLOWER #2	COMMENTS
Electric Control Room			<u>September 2022</u>
Current hour meter reading	60983.7	2684.7	Both blowers operating normally.
Previous hour meter reading	60263.0	1964.1	
Total elapsed motor run time (hr.) (Current monitoring period)	720.7	720.6	
Total days operational	Approx. 4967.1	Approx. 5034.6	
Alarm Condition	None	None	
Roof Top Blowers			
Filter inlet gauge reading	-56.0" H ₂ O	-48.0" H ₂ O	
Filter outlet gauge reading	-56.0" H ₂ O	-52.0" H ₂ O	
Magnehelic gauge reading	10.0" H ₂ O	8.0" H ₂ O	
Flow at stack	340 SCFM	300 SCFM	
Methane (CH ₄) concentration At exhaust stack *	0.0	0.0	
Dilution valve	CLOSED	CLOSED	

* = Percent Gas by Volume

**Monthly Sub-Slab Vapor Mitigation System
Inspection Form
IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, NY**

Inspector: DAN MARZANO
Date: 10-5-22
Weather: SUNNY
Temp: 65° F
Barometric
Pressure 29.89 in. Hg

1. General

- a). When was the last rain event? 10-4-22
- b). Are system fans operating? YES
If no, please list: -0-
- c). Any evidence of system tampering or vandalism? NO
- d). Were all cleanout and sampling port caps securely attached prior to system testing? YES
- e). Please list caps that were not securely in place: -0-

2. Operations

- a). Attach Fan Operation Routine Checklist as per Manufacturer Specifications

3. Comments

BOTH BLOWERS OPERATING NORMALLY

METHANE MITIGATION SYSTEM MEASUREMENTS

DATE: 11/10/22 WEATHER Sunny 65°F BARO. PRESS 30.07Hg SMES #: 08-387	BLOWER #1	BLOWER #2	COMMENTS
Electric Control Room			<u>October 2022</u>
Current hour meter reading	61824.0	3525.0	Both blowers operating normally.
Previous hour meter reading	60983.7	2684.7	
Total elapsed motor run time (hr.) (Current monitoring period)	840.3	840.3	
Total days operational	Approx. 5002.1	Approx. 5069.6	
Alarm Condition	None	None	
Roof Top Blowers			
Filter inlet gauge reading	-58.0" H ₂ O	-50.0" H ₂ O	
Filter outlet gauge reading	-60.0" H ₂ O	-54.0" H ₂ O	
Magnehelic gauge reading	11.0" H ₂ O	8.0" H ₂ O	
Flow at stack	360 SCFM	300 SCFM	
Methane (CH ₄) concentration At exhaust stack *	0.0	0.0	
Dilution valve	CLOSED	CLOSED	

* = Percent Gas by Volumn

**Monthly Sub-Slab Vapor Mitigation System
Inspection Form
IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, NY**

Inspector: DAN MARZANO
Date: 11-10-22
Weather: MTLY CLDY
Temp: 67 F°
Barometric
Pressure 30.07 in. Hg

1. General

- a). When was the last rain event? 11-1-22
- b). Are system fans operating? YES
If no, please list: -o-
- c). Any evidence of system tampering or vandalism? NO
- d). Were all cleanout and sampling port caps securely attached prior to system testing? YES
- e). Please list caps that were not securely in place: -o-

2. Operations

- a). Attach Fan Operation Routine Checklist as per Manufacturer Specifications

3. Comments

BOTH BLOWERS OPERATING NORMALLY

METHANE MITIGATION SYSTEM MEASUREMENTS

DATE: 12/13/22 WEATHER Sunny 28°F BARO. PRESS 30.3Hg SMES #: 08-387	BLOWER #1	BLOWER #2	COMMENTS
Electric Control Room			<u>November 2022</u>
Current hour meter reading	62617.1	4317.2	Both blowers operating normally.
Previous hour meter reading	61824.0	3525.0	
Total elapsed motor run time (hr.) (Current monitoring period)	840.3	840.3	
Total days operational	Approx. 5002.1	Approx. 5069.6	
Alarm Condition	None	None	
Roof Top Blowers			
Filter inlet gauge reading	-58.0" H ₂ O	-50.0" H ₂ O	
Filter outlet gauge reading	-60.0" H ₂ O	-54.0" H ₂ O	
Magnehelic gauge reading	11.0" H ₂ O	8.0" H ₂ O	
Flow at stack	360 SCFM	300 SCFM	
Methane (CH ₄) concentration At exhaust stack *	0.0	0.0	
Dilution valve	CLOSED	CLOSED	

* = Percent Gas by Volume

Monthly Sub-Slab Vapor Mitigation System Inspection Form

IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, NY

Inspector: Dan MARZANO
Date: 12-13-22
Weather: CLOUDY
Temp: 36 F°
Barometric
Pressure 30.3 in. Hg

1. General

- a). When was the last rain event? 12-12-22
- b). Are system fans operating? YES
If no, please list: NO
- c). Any evidence of system tampering or vandalism? NO
- d). Were all cleanout and sampling port caps securely attached prior to system testing? YES
- e). Please list caps that were not securely in place: NO

2. Operations

- a). Attach Fan Operation Routine Checklist as per Manufacturer Specifications

3. Comments

Both Blowers operating Normal

METHANE MITIGATION SYSTEM MEASUREMENTS

DATE: 1/10/22 WEATHER Sunny 40°F BARO. PRESS 30.13Hg SMES #: 08-387	BLOWER #1	BLOWER #2	COMMENTS
Electric Control Room			<u>December 2022</u>
Current hour meter reading	63288.5	4989.6	Both blowers operating normally.
Previous hour meter reading	62617.1	4317.2	
Total elapsed motor run time (hr.) (Current monitoring period)	671.4	672.4	
Total days operational	Approx. 5030.1	Approx. 5097.6	
Alarm Condition	None	None	
Roof Top Blowers			
Filter inlet gauge reading	-50.0" H ₂ O	-48.0" H ₂ O	
Filter outlet gauge reading	-60.0" H ₂ O	-54.0" H ₂ O	
Magnehelic gauge reading	10.0" H ₂ O	8.5" H ₂ O	
Flow at stack	350 SCFM	310 SCFM	
Methane (CH ₄) concentration At exhaust stack *	0.0	0.0	
Dilution valve	CLOSED	CLOSED	

* = Percent Gas by Volumn

**Monthly Sub-Slab Vapor Mitigation System
Inspection Form**

**IKEA (BCP Site No. C224043)
1 Beard Street, Brooklyn, NY**

Inspector: DAN MARZANO
Date: 1-10-23
Weather: CLDY
Temp: 40°F
Barometric
Pressure 30.13 in. Hg

1. General

- a). When was the last rain event? 1-9-23
- b). Are system fans operating? YES
If no, please list: -0-
- c). Any evidence of system tampering or vandalism? NO
- d). Were all cleanout and sampling port caps securely attached prior to system testing? YES
- e). Please list caps that were not securely in place: -0-

2. Operations

- a). Attach Fan Operation Routine Checklist as per Manufacturer Specifications

3. Comments

BOTH BLOWERS ARE OPERATING NORMALLY

QA/QC Samples

**U.S. Dredging Shipyard Site
Tax Block 612, Lot 130
Brooklyn, New York
NYSDEC - BCP Number C224043**



Centek/SanAir Laboratories TO-15 Package Review CheckList

Client: Soil Mechanics

Project: IKEA Red Hook

SDG: C2212031

		<u>YES</u>	<u>NO</u>	<u>NA</u>
Analytical Results	Present and Complete	☒	☐	☐
TIC's Present	Present and Complete	☒	☐	☐
	Holdin Times Met	☒	☐	☐

Comments:

Chain of Custody	Present and Complete	☒	☐	☐
Surrogate	Present and Complete	☒	☐	☐
	Recoveries within Limits	☒	☐	☐
	Sample(s) reanalyzed	☐	☐	☒
Internal Standards	Present and Complete	☒	☐	☐
Recovery	Recoveries within Limits	☒	☐	☐
	Sample(s) reanalyzed	☐	☐	☒

Comments:

Lab Control Sample (LCS)	Present and Complete	☒	☐	☐
	Recoveries within Limits	☒	☐	☐
Lab Control Sample Dupe (LCSD)	Present and Complete	☒	☐	☐
	Recoveries within Limits	☒	☐	☐
MS/MSD	Present and Complete	☒	☐	☐
	Recoveries within Limits	☒	☐	☐

Comments:

Sample Raw Data	Present and Complete	☒	☐	☐
	Spectra present	☒	☐	☐

Comments:

Centek/SanAir Laboratories TO-15 Package Review CheckList**Client:** Soil Mechanics**Project:** IKEA Red Hook**SDG:** C2212031

		<u>YES</u>	<u>NO</u>	<u>NA</u>
<u>Standards Data</u>				
Initial Calibration	Present and Complete	/		
	Calibration meets criteria	/		
Continuing Calibration	Present and Complete	/		
	Calibration meets criteria	/		
Standards Raw Data	Present and Complete	/		
Comments:				

Raw Quality Control Data

Tune Criteria Report	Present and Complete	/		
Method Blank Data	MB Results <PQL	/		
	Associated results flagged "B"			/
LCS Sample Data	Present and Complete	/		
LCSD Sample Data	Present and Complete	/		
MS/MSD Sample Data	Present and Complete	/		
Comments:				

Logbooks

Injection Log		/		
Standards Log		/		
Can Cleaning Log		/		
Calculation Sheet		/		
IDL's		/		
Canister Order Form		/		
Sample Tracking Form		/		

Additional Comments:

Section Supervisor:

[Signature]

Date:

11/26/23

QC Supervisor:

Walt Doble

Date:

1/31/2023



Centek/SanAir Technologies Laboratory

143 Midler Park Drive * Syracuse, NY 13206

Phone (315) 431-9730 * Emergency 24/7 (315) 416-2752

NYSDOH ELAP

Certificate No. 11830

Analytical Report

Dan Marzano
SOIL MECHANICS
3770 Merrick Road
Seaford, NY 11783

Thursday, December 22, 2022
Order No.: C2212031

TEL: 516-221-7500
FAX 516-679-1900
RE: IKEA Red Hook

Dear Dan Marzano:

Centek/SanAir Technologies Laboratory received 20 sample(s) on 12/15/2022 for the analyses presented in the following report.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

Centek/SanAir Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

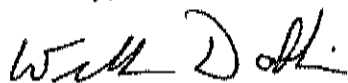
Centek/SanAir Laboratories SOP TS-80

Analytical results relate to samples as received at laboratory. We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services.

Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

This report cannot be reproduced except in its entirety, without prior written authorization.

Sincerely,



William Dobbin
Lead Technical Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek/SanAir as contained in this report are believed by Centek to be accurate and reliable for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. ELAP does not offer certification for the following parameters by this method at present time, they are: 4-ethyltoluene, ethyl acetate, propylene, tetrahydrofuran, 4-PCH, sulfur derived and silicon series compounds.

Centek/SanAir Laboratories - Terms and Conditions

Chain of Custody

Chain of Custody must be completed in full. Lack of any missing information will affect your

Turn Around Times (TAT)

Internal Chain of Custody provided when you notify Centek/SanAir Laboratories

Sample Submission

All samples sent to Centek/SanAir Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website

www.Centek/SanAirLabs.us. Samples received after 3:00pm are considered to be a part of the next day's business.

Sample Media

Samples can be collected in a canister or a Tedlar bag. Depending on your analytical needs, Centek/SanAir Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration.

The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Sampling Equipment

Centek/SanAir Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any damages of equipment.

****Any sampling equipment that exceeds holding times, cancellation of job or non-notice of rescheduling is subject to restocking fees****

Turn Around time (TAT)

Centek/SanAir Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis (add 10%/sample for Cat B). Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit application on file to extend credit. Purchase orders or checks information must be submitted for us to release results

Rush Turnaround Samples

Expedited turn around times is available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:

Same day TAT = 200%

Next business day TAT by Noon = 150%

Next business day TAT by 6:00pm = 100%

Second business day TAT by 6:00pm = 75%

Third business day TAT by 6:00pm = 50%

Fourth business day TAT by 6:00pm = 35%

Fifth business day = Standard

Statement of Confidentiality

Centek/SanAir Laboratories is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Limitation on Liability

Centek/SanAir Laboratories warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek/SanAir Laboratories. In no event shall Centek/SanAir Laboratories be liable for direct, indirect, special, punitive, incidental, exemplary

or consequential damages, or any damages whatsoever, even if Centek/SanAir Laboratories has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.

ASP CAT B DELIVERABLE PACKAGE Table of Contents

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Centek/SanAir Technologies Laboratory

Date: 28-Jan-23

CLIENT: SOIL MECHANICS

Project: IKEA Red Hook

Lab Order: C2212031

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

NYSDEC ASP samples:

Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg (± 2 ", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg (± 1 ", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg, ± 1 ". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek can not guarantee that this criteria can always be achieved.

Sample 11 SVW-10 canister 471 didn't work, used canister 370. Spoke to Dan and Steve. RG

Centek/SanAir Technologies Laboratory - Chain of Custody				Site Name: IKEA		Detection Limit		Report Level	
Centek Laboratories 143 Midler Park Drive Syracuse, NY 13206 315-431-9730 www.CentekLabs.us				Project: Red Hook PO#: 08-387 Quote #: Q-SP Canister Order #: 9375		☐ 5ppbv ☒ 1ug/M3 ☐ 1ug/M3 + 0.2 NYS		☐ Level I ☐ Level II ☒ Cat "B" Like	
Company: Soil Mech Check Here if Same: ☐				Invoice to: Address: City, State, Zip					
Report to: Address: City, State, Zip				Email: Phone:					
Company: Soil Mech Phone: 516-221-7500				Field Vacuum Start / Stop		Labs Vacuum** Recv/Analysis		Comments	
Canister Number Regulator Number Analysis Request				Date Sampled					
Sample ID				Date Sampled					
Turnaround Time: 5 Business Days 4 Business Days 3 Business Days 2 Business Days *Next Day by 5pm *Next Day by Noon *Same Day				Check One ☒ Rush TAT ☐ Surcharge % Date:					
For Same and Next Day TAT Please Notify Lab				Date Sampled					
SVW-1 MS/ASD				12-13-22					
SVW-2				12-13-22					
SVW-3				12-13-22					
SVW-4				12-13-22					
SVW-5				12-13-22					
SVW-6				12-13-22					
SVW-6 Dup				12-13-22					
SVW-7				12-13-22					
SVW-8				12-13-22					
SVW-9				12-13-22					
SVW-10				12-13-22					
SVW-11				12-13-22					
SVW-12				12-13-22					
SVW-13				12-13-22					
SVW-14				12-13-22					
SVW-15				12-13-22					
SVW-16				12-13-22					
Chain of Custody Sampled by:				Print Name Steve Anderson		Signature Steve Anderson		Date/Time 12-13-22	
Relinquished by:				Print Name Steve Anderson		Signature Steve Anderson		Date/Time 12-13-22	
Received at Lab by:				Print Name Robin Gushlaw		Signature Robin Gushlaw		Date/Time 12-13-22	
Counter: CIRCLE ONE FedEx UPS Pickup/Dropoff				**For LAB USE ONLY Work Order #		12-13-22		12-13-22	

***Chain of Custody must be completed in full. Lack of any missing information will affect your Turn Around Times (TAT)

*** By signing Centek/SanAir Labs Chain of Custody, you are accepting the Terms and Conditions listed on the reverse side.



Centek/SanAir Technologies Laboratory

Sample Receipt Checklist

Client Name SOIL MECHANICS

Date and Time Receive

12/15/2022

Work Order Number C2212031

Received by: RG

Checklist completed by

[Signature] 12/15/22
Signature Date

Reviewed by

WD 12/16/2022
Initials Date

Matrix:

Carrier name: UPS - Ground

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
COC signed when relinquished and received?	Yes ☒	No ☐	
COC agrees with sample labels?	Yes ☐	No ☒	
COC completely filled out?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☒	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

QC'd By: *WD*

DATE: 1/31/2023



Centek/SanAir Technologies Laboratory

Date: 28-Jan-23

CLIENT: SOIL MECHANICS
Project: IKEA Red Hook
Lab Order: C2212031

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C2212031-001A	SVW-1 MS/MSD	1201,1149	12/13/2022	12/15/2022
C2212031-002A	SVW-2	465,1165	12/13/2022	12/15/2022
C2212031-003A	SVW-3	1186,177	12/13/2022	12/15/2022
C2212031-004A	SVW-4	1178,117	12/13/2022	12/15/2022
C2212031-005A	SVW-5	129,1153	12/13/2022	12/15/2022
C2212031-006A	SVW-6	101,79	12/13/2022	12/15/2022
C2212031-007A	SVW-6 Dup	1177,79	12/13/2022	12/15/2022

CLIENT: SOIL MECHANICS

Project: IKEA Red Hook

Lab Order: C2212031

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C2212031-008A	SVW-7	545,146	12/13/2022	12/15/2022
C2212031-009A	SVW-8	561,147	12/13/2022	12/15/2022
C2212031-010A	SVW-9	347,120	12/13/2022	12/15/2022
C2212031-011A	SVW-10	370,406	12/13/2022	12/15/2022
C2212031-012A	SVW-11	571,184	12/13/2022	12/15/2022
C2212031-013A	SVW-12	274,309	12/13/2022	12/15/2022
C2212031-014A	SVW-13	366,255	12/13/2022	12/15/2022
C2212031-015A	SVW-14	232,156	12/13/2022	12/15/2022

CLIENT: SOIL MECHANICS
Project: IKEA Red Hook
Lab Order: C2212031

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C2212031-016A	SVW-15	350,295	12/13/2022	12/15/2022
C2212031-017A	SVW-16	93,111	12/13/2022	12/15/2022
C2212031-018A	AS-1	231,175	12/13/2022	12/15/2022
C2212031-019A	AS-2	170,124	12/13/2022	12/15/2022
C2212031-020A	TB-1	141		12/15/2022

Centek/SanAir Technologies Laboratory

28-Jan-23

Lab Order: C2212031
Client: SOIL MECHANICS
Project: IKEA Red Hook

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C2212031-001A	SVW-1 MS/MSD	12/13/2022	Air	1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/21/2022
C2212031-002A	SVW-2			1ug/M3 by Method TO15 1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/17/2022 12/21/2022
C2212031-003A	SVW-3			1ug/M3 by Method TO15 1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/17/2022 12/21/2022
C2212031-004A	SVW-4			1ug/M3 by Method TO15 1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/17/2022 12/21/2022
C2212031-005A	SVW-5			1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/21/2022
C2212031-006A	SVW-6			1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/21/2022
C2212031-007A	SVW-6 Dup			1ug/M3 by Method TO15 1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/17/2022 12/21/2022
C2212031-008A	SVW-7			1ug/M3 by Method TO15 1ug/M3 by Method TO15 Helium Leak Test			12/16/2022 12/17/2022 12/21/2022
C2212031-009A	SVW-8			1ug/M3 by Method TO15 1ug/M3 by Method TO15 Helium Leak Test			12/17/2022 12/17/2022 12/21/2022
C2212031-010A	SVW-9			1ug/M3 by Method TO15 1ug/M3 by Method TO15 Helium Leak Test			12/17/2022 12/17/2022 12/21/2022

Centek/SanAir Technologies Laboratory

28-Jan-23

DATES REPORT

Lab Order: C2212031

Client: SOIL MECHANICS

Project: IKEA Red Hook

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCDF Date	Prep Date	Analysis Date
C2212031-011A	SVW-10	12/13/2022	Air	1ug/M3 by Method TO15			12/17/2022
				1ug/M3 by Method TO15			12/17/2022
				Helium Leak Test			12/21/2022
C2212031-012A	SVW-11			1ug/M3 by Method TO15			12/17/2022
				Helium Leak Test			12/21/2022
C2212031-013A	SVW-12			1ug/M3 by Method TO15			12/17/2022
				Helium Leak Test			12/21/2022
C2212031-014A	SVW-13			1ug/M3 by Method TO15			12/17/2022
				1ug/M3 by Method TO15			12/17/2022
				Helium Leak Test			12/21/2022
C2212031-015A	SVW-14			1ug/M3 by Method TO15			12/17/2022
				1ug/M3 by Method TO15			12/17/2022
				1ug/M3 by Method TO15			12/17/2022
				Helium Leak Test			12/17/2022
C2212031-016A	SVW-15			1ug/M3 by Method TO15			12/17/2022
				1ug/M3 by Method TO15			12/17/2022
				Helium Leak Test			12/21/2022
C2212031-017A	SVW-16			1ug/M3 by Method TO15			12/17/2022
				1ug/M3 by Method TO15			12/17/2022
				1ug/M3 by Method TO15			12/18/2022
				Helium Leak Test			12/21/2022
C2212031-018A	AS-1			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			12/16/2022
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			12/17/2022
C2212031-019A	AS-2			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			12/16/2022
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			12/17/2022
C2212031-020A	TB-1			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			12/16/2022


Centek/SanAir Technologies Laboratory
Air Quality Testing...It's a Gas

143 Midler Park Drive * Syracuse, NY 1320

TEL: 315-431-9730 * FAX: 315-431-973

CANISTER ORDER
9575

30-Jan-23

SHIPPED TO:

Company: SOIL MECHANICS

Contact: Dan Marzano

Address: 3770 Merrick Road

Scaford, NY 11783

Phone: 516-221-7500

Quote ID: ()

Project:

PO:

Submitted By:

MadeBy: rjp

Ship Date: 12/7/2022

VIA: UPS - Ground

Due Date: 12/9/2022

Bottle Code	Bottle Type	TEST(s)	QTY
MC1400CC	1.4L Mini-Can	1ug/M3 by Method TO15	1
MC1000CC	1L Mini-Can	1ug/M3 by Method TO15	21

Can / Reg ID	Description
79	Time-Set Reg VI
93	1L Mini-Can - 1109 VI
101	1L Mini-Can - 1101 VI
111	Time-Set Reg - 586 VI
117	Time-Set Reg - 591 VI
120	Time-Set Reg - 624 VI
1153	Time-Set Reg-0745 VI
1165	Time-Set Reg-0678 VI
1177	1L Mini-Can - 1240 VI
1178	1L Mini-Can - 1236 VI
1186	1L Mini-Can - 1235 VI
1201	1.4L Mini-Can - 1362 VI
465	1L Mini-Can - 1369 VI
471	1L Mini-Can - 1368 VI
545	1L Mini-Can - 113 VI
561	1L Mini-Can - 130 VI
571	1L Mini-Can - 143 VI
1149	Time-Set Reg-2833 IAQ
309	Time-Set Reg - 732 VI
347	1L Mini-Can - 1269 VI
350	1L Mini-Can - 1272 VI
366	1L Mini-Can - 1315 VI
370	1L Mini-Can - 1319 VI
406	Time-Set Reg - 785 VI
232	1L Mini-Can - 1163 VI
236	1L Mini-Can - 1167 VI
255	Time-Set Reg - 693 VI
274	1L Mini-Can - 1189 VI
294	Time-Set Reg - 717R VI
295	Time-Set Reg - 718 VI
170	1L Mini-Can - 1141 VI
173	Time-Set Reg - 666 VI

SHIPPED TO:

Company: SOIL MECHANICS
 Contact: Dan Marzano
 Address: 3770 Merrick Road
 Seaford, NY 11783
 Phone: 516-221-7500
 Quote ID: 0
 Project:
 PO:

Submitted By:

MadeBy: rjp

Ship Date: 12/7/2022

VIA: UPS - Ground

Due Date: 12/9/2022

Bottle Code	Bottle Type	TEST(s)	QTY
175	Time-Set Reg - 658 VI		
177	Time-Set Reg - 660 VI		
184	Time-Set Reg - 810R VI		
231	1L Mini-Can - 1193 VI		
124	Time-Set Reg - 628 VI		
129	1L Mini-Can - 1077 VI		
141	1L Mini-Can - 1115 VI		
146	Time-Set Reg - 641 VI		
147	Time-Set Reg - 642 VI		
156	Time-Set Reg - 651 VI		

Comments: (19) 1L @ 2 hr. + (1) 1.4 @ 2hr + dupe + trip blank IKEA Site WAC 060222 E-F, 112922 A-F

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

ANALYTICAL RESULTS

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Acetone	1.5	0.30		ppbV	1	12/16/2022 4:05:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Carbon tetrachloride	0.23	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloroform	0.35	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Ethyl acetate	0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 11	1.3	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 12	0.84	0.15		ppbV	1	12/16/2022 4:05:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Hexane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl Ethyl Ketone	0.26	0.30	J	ppbV	1	12/16/2022 4:05:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Methylene chloride	0.25	0.15		ppbV	1	12/16/2022 4:05:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/16/2022 4:05:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Toluene	0.27	0.15		ppbV	1	12/16/2022 4:05:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 4:05:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 4:05:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 4:05:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 4:05:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 4:05:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 4:05:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
Acetone	3.5	0.71		ug/m3	1	12/16/2022 4:05:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 4:05:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 4:05:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 4:05:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 4:05:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 4:05:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 4:05:00 PM
Carbon tetrachloride	1.4	0.94		ug/m3	1	12/16/2022 4:05:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 4:05:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 4:05:00 PM
Chloroform	1.7	0.73		ug/m3	1	12/16/2022 4:05:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 4:05:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 4:05:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 4:05:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 4:05:00 PM
Ethyl acetate	0.54	0.54		ug/m3	1	12/16/2022 4:05:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 4:05:00 PM
Freon 11	7.4	0.84		ug/m3	1	12/16/2022 4:05:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	4.2	0.74		ug/m3	1	12/16/2022 4:05:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 4:05:00 PM
Hexane	< 0.53	0.53		ug/m3	1	12/16/2022 4:05:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 4:05:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 4:05:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
Methyl Ethyl Ketone	0.77	0.88	J	ug/m3	1	12/16/2022 4:05:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 4:05:00 PM
Methylene chloride	0.87	0.52		ug/m3	1	12/16/2022 4:05:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 4:05:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 4:05:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 4:05:00 PM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/16/2022 4:05:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 4:05:00 PM
Toluene	1.0	0.57		ug/m3	1	12/16/2022 4:05:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 4:05:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 4:05:00 PM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

Page 2 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
2,2,4-trimethylpentane	0.10	0.15	J	ppbV	1	12/16/2022 7:28:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Acetone	6.0	1.5		ppbV	5	12/17/2022 2:05:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Benzene	0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Carbon tetrachloride	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chloroform	0.11	0.15	J	ppbV	1	12/16/2022 7:28:00 PM
Chloromethane	0.19	0.15		ppbV	1	12/16/2022 7:28:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15			TO-15			Analyst: RJP
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 11	0.47	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 12	0.50	0.15		ppbV	1	12/16/2022 7:28:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Hexane	0.21	0.15		ppbV	1	12/16/2022 7:28:00 PM
Isopropyl alcohol	0.21	0.15		ppbV	1	12/16/2022 7:28:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Ethyl Ketone	0.91	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Methylene chloride	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Tetrachloroethylene	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Toluene	0.33	0.15		ppbV	1	12/16/2022 7:28:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Surr: Bromofluorobenzene	92.0	46.7-129		%REC	1	12/16/2022 7:28:00 PM

Qualifiers:

Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte, Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 7:28:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 7:28:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 7:28:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 7:28:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
2,2,4-trimethylpentane	0.47	0.70	J	ug/m3	1	12/16/2022 7:28:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
Acetone	14	3.6		ug/m3	5	12/17/2022 2:05:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 7:28:00 PM
Benzene	0.48	0.48		ug/m3	1	12/16/2022 7:28:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 7:28:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 7:28:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 7:28:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 7:28:00 PM
Carbon tetrachloride	1.1	0.94		ug/m3	1	12/16/2022 7:28:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 7:28:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 7:28:00 PM
Chloroform	0.54	0.73	J	ug/m3	1	12/16/2022 7:28:00 PM
Chloromethane	0.39	0.31		ug/m3	1	12/16/2022 7:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 7:28:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 7:28:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 7:28:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 7:28:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 7:28:00 PM
Freon 11	2.6	0.84		ug/m3	1	12/16/2022 7:28:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM

Qualifiers: . Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.5	0.74		ug/m3	1	12/16/2022 7:28:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 7:28:00 PM
Hexane	0.74	0.53		ug/m3	1	12/16/2022 7:28:00 PM
Isopropyl alcohol	0.52	0.37		ug/m3	1	12/16/2022 7:28:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Ethyl Ketone	2.7	0.88		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 7:28:00 PM
Methylene chloride	0.63	0.52		ug/m3	1	12/16/2022 7:28:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 7:28:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 7:28:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 7:28:00 PM
Tetrachloroethylene	1.2	1.0		ug/m3	1	12/16/2022 7:28:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 7:28:00 PM
Toluene	1.2	0.57		ug/m3	1	12/16/2022 7:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 7:28:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 7:28:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
2,2,4-trimethylpentane	0.24	0.15		ppbV	1	12/16/2022 8:12:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Acetone	11	3.0		ppbV	10	12/17/2022 2:48:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Benzene	0.21	0.15		ppbV	1	12/16/2022 8:12:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Carbon disulfide	1.0	0.15		ppbV	1	12/16/2022 8:12:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloroform	0.28	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloromethane	0.20	0.15		ppbV	1	12/16/2022 8:12:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM

Qualifiers:

Results reported are not blank corrected

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Ethyl acetate	0.73	0.15		ppbV	1	12/16/2022 8:12:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 11	0.49	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 12	0.54	0.15		ppbV	1	12/16/2022 8:12:00 PM
Heptane	0.16	0.15		ppbV	1	12/16/2022 8:12:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Hexane	0.49	0.15		ppbV	1	12/16/2022 8:12:00 PM
Isopropyl alcohol	0.82	0.15		ppbV	1	12/16/2022 8:12:00 PM
m&p-Xylene	0.16	0.30	J	ppbV	1	12/16/2022 8:12:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl Ethyl Ketone	0.80	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Methylene chloride	0.30	0.15		ppbV	1	12/16/2022 8:12:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Tetrachloroethylene	0.13	0.15	J	ppbV	1	12/16/2022 8:12:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Toluene	1.4	0.15		ppbV	1	12/16/2022 8:12:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 8:12:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15						
		TO-15				Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:12:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:12:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:12:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 8:12:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 8:12:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
2,2,4-trimethylpentane	1.1	0.70		ug/m3	1	12/16/2022 8:12:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
Acetone	26	7.1		ug/m3	10	12/17/2022 2:48:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 8:12:00 PM
Benzene	0.67	0.48		ug/m3	1	12/16/2022 8:12:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 8:12:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 8:12:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 8:12:00 PM
Carbon disulfide	3.2	0.47		ug/m3	1	12/16/2022 8:12:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 8:12:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 8:12:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 8:12:00 PM
Chloroform	1.4	0.73		ug/m3	1	12/16/2022 8:12:00 PM
Chloromethane	0.41	0.31		ug/m3	1	12/16/2022 8:12:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:12:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 8:12:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 8:12:00 PM
Ethyl acetate	2.6	0.54		ug/m3	1	12/16/2022 8:12:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 8:12:00 PM
Freon 11	2.8	0.84		ug/m3	1	12/16/2022 8:12:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.7	0.74		ug/m3	1	12/16/2022 8:12:00 PM
Heptane	0.66	0.61		ug/m3	1	12/16/2022 8:12:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 8:12:00 PM
Hexane	1.7	0.53		ug/m3	1	12/16/2022 8:12:00 PM
Isopropyl alcohol	2.0	0.37		ug/m3	1	12/16/2022 8:12:00 PM
m&p-Xylene	0.69	1.3	J	ug/m3	1	12/16/2022 8:12:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
Methyl Ethyl Ketone	2.4	0.88		ug/m3	1	12/16/2022 8:12:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 8:12:00 PM
Methylene chloride	1.0	0.52		ug/m3	1	12/16/2022 8:12:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 8:12:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 8:12:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 8:12:00 PM
Tetrachloroethylene	0.88	1.0	J	ug/m3	1	12/16/2022 8:12:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 8:12:00 PM
Toluene	5.5	0.57		ug/m3	1	12/16/2022 8:12:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:12:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 8:12:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2,4-Trimethylbenzene	0.14	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,4-Dichlorobenzene	0.16	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
2,2,4-trimethylpentane	0.19	0.15		ppbV	1	12/16/2022 8:56:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Acetone	8.2	3.0		ppbV	10	12/17/2022 3:31:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Benzene	0.27	0.15		ppbV	1	12/16/2022 8:56:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Carbon disulfide	1.4	0.15		ppbV	1	12/16/2022 8:56:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chlorobenzene	0.23	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloromethane	0.52	0.15		ppbV	1	12/16/2022 8:56:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Ethyl acetate	0.13	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Ethylbenzene	0.18	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 11	0.14	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 12	0.59	0.15		ppbV	1	12/16/2022 8:56:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Hexane	0.52	0.15		ppbV	1	12/16/2022 8:56:00 PM
Isopropyl alcohol	0.31	0.15		ppbV	1	12/16/2022 8:56:00 PM
m&p-Xylene	0.40	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Ethyl Ketone	0.54	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
o-Xylene	0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Tetrachloroethylene	0.10	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Toluene	0.98	0.15		ppbV	1	12/16/2022 8:56:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 8:56:00 PM

Qualifiers:

Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:56:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:56:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
1,2,4-Trimethylbenzene	0.69	0.74	J	ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 8:56:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:56:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 8:56:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,4-Dichlorobenzene	0.96	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
2,2,4-trimethylpentane	0.89	0.70		ug/m3	1	12/16/2022 8:56:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 8:56:00 PM
Acetone	19	7.1		ug/m3	10	12/17/2022 3:31:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 8:56:00 PM
Benzene	0.86	0.48		ug/m3	1	12/16/2022 8:56:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 8:56:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 8:56:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 8:56:00 PM
Carbon disulfide	4.3	0.47		ug/m3	1	12/16/2022 8:56:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 8:56:00 PM
Chlorobenzene	1.1	0.69		ug/m3	1	12/16/2022 8:56:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 8:56:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 8:56:00 PM
Chloromethane	1.1	0.31		ug/m3	1	12/16/2022 8:56:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:56:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 8:56:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 8:56:00 PM
Ethyl acetate	0.47	0.54	J	ug/m3	1	12/16/2022 8:56:00 PM
Ethylbenzene	0.78	0.65		ug/m3	1	12/16/2022 8:56:00 PM
Freon 11	0.79	0.84	J	ug/m3	1	12/16/2022 8:56:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/16/2022 8:56:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 8:56:00 PM
Hexane	1.8	0.53		ug/m3	1	12/16/2022 8:56:00 PM
Isopropyl alcohol	0.76	0.37		ug/m3	1	12/16/2022 8:56:00 PM
m&p-Xylene	1.7	1.3		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Ethyl Ketone	1.6	0.88		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 8:56:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/16/2022 8:56:00 PM
o-Xylene	0.65	0.65		ug/m3	1	12/16/2022 8:56:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 8:56:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 8:56:00 PM
Tetrachloroethylene	0.68	1.0	J	ug/m3	1	12/16/2022 8:56:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 8:56:00 PM
Toluene	3.7	0.57		ug/m3	1	12/16/2022 8:56:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:56:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 8:56:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-5

Lab Order: C2212031

Tag Number: 129,1153

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-005A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Acetone	1.9	0.30		ppbV	1	12/16/2022 9:41:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Carbon disulfide	0.21	0.15		ppbV	1	12/16/2022 9:41:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM

Qualifiers:

- .
- DL
- H
- JN
- S

Results reported are not blank corrected
Detection Limit
Holding times for preparation or analysis exceeded
Non-routine analyte. Quantitation estimated.
Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-5

Lab Order: C2212031

Tag Number: 129,1153

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-005A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 11	0.29	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 12	0.60	0.15		ppbV	1	12/16/2022 9:41:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Hexane	0.17	0.15		ppbV	1	12/16/2022 9:41:00 PM
Isopropyl alcohol	0.25	0.15		ppbV	1	12/16/2022 9:41:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Ethyl Ketone	0.40	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Methylene chloride	0.18	0.15		ppbV	1	12/16/2022 9:41:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/16/2022 9:41:00 PM
Tetrahydrofuran	0.23	0.15		ppbV	1	12/16/2022 9:41:00 PM
Toluene	0.29	0.15		ppbV	1	12/16/2022 9:41:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 9:41:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-5

Lab Order: C2212031

Tag Number: 129,1153

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-005A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 9:41:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 9:41:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 9:41:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 9:41:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 9:41:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
Acetone	4.6	0.71		ug/m3	1	12/16/2022 9:41:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 9:41:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 9:41:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 9:41:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 9:41:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 9:41:00 PM
Carbon disulfide	0.65	0.47		ug/m3	1	12/16/2022 9:41:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 9:41:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 9:41:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 9:41:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 9:41:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 9:41:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 9:41:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 9:41:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 9:41:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 9:41:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 9:41:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 9:41:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-5

Lab Order: C2212031

Tag Number: 129,1153

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-005A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/16/2022 9:41:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 9:41:00 PM
Hexane	0.60	0.53		ug/m3	1	12/16/2022 9:41:00 PM
Isopropyl alcohol	0.61	0.37		ug/m3	1	12/16/2022 9:41:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Ethyl Ketone	1.2	0.88		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 9:41:00 PM
Methylene chloride	0.63	0.52		ug/m3	1	12/16/2022 9:41:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 9:41:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 9:41:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 9:41:00 PM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/16/2022 9:41:00 PM
Tetrahydrofuran	0.68	0.44		ug/m3	1	12/16/2022 9:41:00 PM
Toluene	1.1	0.57		ug/m3	1	12/16/2022 9:41:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 9:41:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 9:41:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Acetone	1.9	0.30		ppbV	1	12/16/2022 10:25:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Benzene	0.18	0.15		ppbV	1	12/16/2022 10:25:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Carbon disulfide	0.12	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloromethane	0.52	0.15		ppbV	1	12/16/2022 10:25:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Ethyl acetate	0.13	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 11	0.29	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 12	0.65	0.15		ppbV	1	12/16/2022 10:25:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Hexane	0.16	0.15		ppbV	1	12/16/2022 10:25:00 PM
Isopropyl alcohol	0.37	0.15		ppbV	1	12/16/2022 10:25:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Ethyl Ketone	0.32	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Methylene chloride	0.28	0.15		ppbV	1	12/16/2022 10:25:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Tetrachloroethylene	0.12	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Toluene	0.38	0.15		ppbV	1	12/16/2022 10:25:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 10:25:00 PM

Qualifiers:

. Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 10:25:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 10:25:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
1,1-Dichloroethane	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 10:25:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 10:25:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 10:25:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
Acetone	4.6	0.71		ug/m3	1	12/16/2022 10:25:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 10:25:00 PM
Benzene	0.57	0.48		ug/m3	1	12/16/2022 10:25:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 10:25:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 10:25:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 10:25:00 PM
Carbon disulfide	0.37	0.47	J	ug/m3	1	12/16/2022 10:25:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 10:25:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 10:25:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 10:25:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 10:25:00 PM
Chloromethane	1.1	0.31		ug/m3	1	12/16/2022 10:25:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 10:25:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 10:25:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 10:25:00 PM
Ethyl acetate	0.47	0.54	J	ug/m3	1	12/16/2022 10:25:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 10:25:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 10:25:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated,
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/16/2022 10:25:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 10:25:00 PM
Hexane	0.56	0.53		ug/m3	1	12/16/2022 10:25:00 PM
Isopropyl alcohol	0.91	0.37		ug/m3	1	12/16/2022 10:25:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Ethyl Ketone	0.94	0.88		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 10:25:00 PM
Methylene chloride	0.97	0.52		ug/m3	1	12/16/2022 10:25:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 10:25:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 10:25:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 10:25:00 PM
Tetrachloroethylene	0.81	1.0	J	ug/m3	1	12/16/2022 10:25:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 10:25:00 PM
Toluene	1.4	0.57		ug/m3	1	12/16/2022 10:25:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 10:25:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 10:25:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Acetone	3.0	1.5		ppbV	5	12/17/2022 4:13:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Benzene	0.19	0.15		ppbV	1	12/16/2022 11:09:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Carbon disulfide	0.11	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 11	0.28	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 12	0.63	0.15		ppbV	1	12/16/2022 11:09:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Hexane	0.12	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Isopropyl alcohol	0.55	0.15		ppbV	1	12/16/2022 11:09:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Ethyl Ketone	0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Methylene chloride	1.4	0.15		ppbV	1	12/16/2022 11:09:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Tetrachloroethylene	0.13	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Toluene	0.28	0.15		ppbV	1	12/16/2022 11:09:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 11:09:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

Page 14 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:09:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:09:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 11:09:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 11:09:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 11:09:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
Acetone	7.1	3.6		ug/m3	5	12/17/2022 4:13:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 11:09:00 PM
Benzene	0.61	0.48		ug/m3	1	12/16/2022 11:09:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 11:09:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 11:09:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 11:09:00 PM
Carbon disulfide	0.34	0.47	J	ug/m3	1	12/16/2022 11:09:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 11:09:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 11:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 11:09:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 11:09:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 11:09:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:09:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 11:09:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 11:09:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 11:09:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 11:09:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 11:09:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/16/2022 11:09:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 11:09:00 PM
Hexane	0.42	0.53	J	ug/m3	1	12/16/2022 11:09:00 PM
Isopropyl alcohol	1.4	0.37		ug/m3	1	12/16/2022 11:09:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Ethyl Ketone	0.88	0.88		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 11:09:00 PM
Methylene chloride	4.9	0.52		ug/m3	1	12/16/2022 11:09:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 11:09:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 11:09:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 11:09:00 PM
Tetrachloroethylene	0.88	1.0	J	ug/m3	1	12/16/2022 11:09:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 11:09:00 PM
Toluene	1.1	0.57		ug/m3	1	12/16/2022 11:09:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:09:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 11:09:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-7

Lab Order: C2212031

Tag Number: 545,146

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-008A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-5			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2,4-Trimethylbenzene	0.22	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,3,5-Trimethylbenzene	0.11	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 11:53:00 PM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Acetone	2.0	1.5		ppbV	5	12/17/2022 4:56:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Benzene	0.25	0.15		ppbV	1	12/16/2022 11:53:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Carbon disulfide	2.2	0.75		ppbV	5	12/17/2022 4:56:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloroform	1.2	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-7

Lab Order: C2212031

Tag Number: 545,146

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-008A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Ethylbenzene	0.20	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 11	0.37	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 12	0.51	0.15		ppbV	1	12/16/2022 11:53:00 PM
Heptane	0.14	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Hexane	0.24	0.15		ppbV	1	12/16/2022 11:53:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
m&p-Xylene	0.49	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Ethyl Ketone	0.46	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Isobutyl Ketone	0.25	0.30	J	ppbV	1	12/16/2022 11:53:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Methylene chloride	0.24	0.15		ppbV	1	12/16/2022 11:53:00 PM
o-Xylene	0.19	0.15		ppbV	1	12/16/2022 11:53:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Tetrahydrofuran	0.26	0.15		ppbV	1	12/16/2022 11:53:00 PM
Toluene	0.98	0.15		ppbV	1	12/16/2022 11:53:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Surr: Bromofluorobenzene	101	46.7-129		%REC	1	12/16/2022 11:53:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-7

Lab Order: C2212031

Tag Number: 545,146

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-008A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:53:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:53:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:53:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
1,2,4-Trimethylbenzene	1.1	0.74		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 11:53:00 PM
1,3,5-Trimethylbenzene	0.54	0.74	J	ug/m3	1	12/16/2022 11:53:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 11:53:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	12/16/2022 11:53:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 11:53:00 PM
Acetone	4.7	3.6		ug/m3	5	12/17/2022 4:56:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 11:53:00 PM
Benzene	0.80	0.48		ug/m3	1	12/16/2022 11:53:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 11:53:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 11:53:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 11:53:00 PM
Carbon disulfide	7.0	2.3		ug/m3	5	12/17/2022 4:56:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 11:53:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 11:53:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 11:53:00 PM
Chloroform	6.0	0.73		ug/m3	1	12/16/2022 11:53:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 11:53:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:53:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 11:53:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 11:53:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 11:53:00 PM
Ethylbenzene	0.87	0.65		ug/m3	1	12/16/2022 11:53:00 PM
Freon 11	2.1	0.84		ug/m3	1	12/16/2022 11:53:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated,
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-7

Lab Order: C2212031

Tag Number: 545,146

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-008A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.5	0.74		ug/m3	1	12/16/2022 11:53:00 PM
Heptane	0.57	0.61	J	ug/m3	1	12/16/2022 11:53:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 11:53:00 PM
Hexane	0.85	0.53		ug/m3	1	12/16/2022 11:53:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 11:53:00 PM
m&p-Xylene	2.1	1.3		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Ethyl Ketone	1.4	0.88		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Isobutyl Ketone	1.0	1.2	J	ug/m3	1	12/16/2022 11:53:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 11:53:00 PM
Methylene chloride	0.83	0.52		ug/m3	1	12/16/2022 11:53:00 PM
o-Xylene	0.82	0.65		ug/m3	1	12/16/2022 11:53:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 11:53:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 11:53:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
Tetrahydrofuran	0.77	0.44		ug/m3	1	12/16/2022 11:53:00 PM
Toluene	3.7	0.57		ug/m3	1	12/16/2022 11:53:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:53:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 11:53:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-8

Lab Order: C2212031

Tag Number: 561,147

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-009A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Acetone	2.9	1.5		ppbV	5	12/17/2022 5:39:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Benzene	0.38	0.15		ppbV	1	12/17/2022 12:38:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloromethane	0.56	0.15		ppbV	1	12/17/2022 12:38:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-8

Lab Order: C2212031

Tag Number: 561,147

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-009A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Ethyl acetate	0.64	0.15		ppbV	1	12/17/2022 12:38:00 AM
Ethylbenzene	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 12	0.58	0.15		ppbV	1	12/17/2022 12:38:00 AM
Heptane	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Hexane	0.22	0.15		ppbV	1	12/17/2022 12:38:00 AM
Isopropyl alcohol	0.78	0.15		ppbV	1	12/17/2022 12:38:00 AM
m&p-Xylene	0.38	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Ethyl Ketone	0.72	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Methylene chloride	0.23	0.15		ppbV	1	12/17/2022 12:38:00 AM
o-Xylene	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Tetrachloroethylene	0.26	0.15		ppbV	1	12/17/2022 12:38:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Toluene	1.3	0.15		ppbV	1	12/17/2022 12:38:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 12:38:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-8

Lab Order: C2212031

Tag Number: 561,147

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-009A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 12:38:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 12:38:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 12:38:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 12:38:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 12:38:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	12/17/2022 12:38:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
Acetone	6.9	3.6		ug/m3	5	12/17/2022 5:39:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 12:38:00 AM
Benzene	1.2	0.48		ug/m3	1	12/17/2022 12:38:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 12:38:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 12:38:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 12:38:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/17/2022 12:38:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 12:38:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 12:38:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 12:38:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 12:38:00 AM
Chloromethane	1.2	0.31		ug/m3	1	12/17/2022 12:38:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 12:38:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 12:38:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 12:38:00 AM
Ethyl acetate	2.3	0.54		ug/m3	1	12/17/2022 12:38:00 AM
Ethylbenzene	0.56	0.65	J	ug/m3	1	12/17/2022 12:38:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 12:38:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM

Qualifiers: . Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-8

Lab Order: C2212031

Tag Number: 561,147

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-009A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/17/2022 12:38:00 AM
Heptane	0.53	0.61	J	ug/m3	1	12/17/2022 12:38:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 12:38:00 AM
Hexane	0.78	0.53		ug/m3	1	12/17/2022 12:38:00 AM
Isopropyl alcohol	1.9	0.37		ug/m3	1	12/17/2022 12:38:00 AM
m&p-Xylene	1.6	1.3		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Ethyl Ketone	2.1	0.88		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 12:38:00 AM
Methylene chloride	0.80	0.52		ug/m3	1	12/17/2022 12:38:00 AM
o-Xylene	0.56	0.65	J	ug/m3	1	12/17/2022 12:38:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 12:38:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 12:38:00 AM
Tetrachloroethylene	1.8	1.0		ug/m3	1	12/17/2022 12:38:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 12:38:00 AM
Toluene	5.0	0.57		ug/m3	1	12/17/2022 12:38:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 12:38:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 12:38:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347,120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-3			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.12	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2,4-Trimethylbenzene	0.57	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3,5-Trimethylbenzene	0.27	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 1:22:00 AM
2,2,4-trimethylpentane	0.14	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
4-ethyltoluene	0.13	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Acetone	19	3.0		ppbV	10	12/17/2022 6:22:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Benzene	0.69	0.15		ppbV	1	12/17/2022 1:22:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Carbon disulfide	26	6.0		ppbV	40	12/17/2022 7:04:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloroform	1.3	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347,120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Ethylbenzene	0.14	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 12	0.58	0.15		ppbV	1	12/17/2022 1:22:00 AM
Heptane	0.11	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Hexane	0.35	0.15		ppbV	1	12/17/2022 1:22:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
m&p-Xylene	0.52	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Ethyl Ketone	0.58	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Isobutyl Ketone	8.9	3.0		ppbV	10	12/17/2022 6:22:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Methylene chloride	0.70	0.15		ppbV	1	12/17/2022 1:22:00 AM
o-Xylene	0.36	0.15		ppbV	1	12/17/2022 1:22:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Tetrahydrofuran	1.2	0.15		ppbV	1	12/17/2022 1:22:00 AM
Toluene	0.98	0.15		ppbV	1	12/17/2022 1:22:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Surr: Bromofluorobenzene	98.0	46.7-129		%REC	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347,120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.65	0.82	J	ug/m3	1	12/17/2022 1:22:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 1:22:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 1:22:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
1,2,4-Trimethylbenzene	2.8	0.74		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 1:22:00 AM
1,3,5-Trimethylbenzene	1.3	0.74		ug/m3	1	12/17/2022 1:22:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 1:22:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
2,2,4-trimethylpentane	0.65	0.70	J	ug/m3	1	12/17/2022 1:22:00 AM
4-ethyltoluene	0.64	0.74	J	ug/m3	1	12/17/2022 1:22:00 AM
Acetone	44	7.1		ug/m3	10	12/17/2022 6:22:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 1:22:00 AM
Benzene	2.2	0.48		ug/m3	1	12/17/2022 1:22:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 1:22:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 1:22:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 1:22:00 AM
Carbon disulfide	81	19		ug/m3	40	12/17/2022 7:04:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 1:22:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 1:22:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 1:22:00 AM
Chloroform	6.5	0.73		ug/m3	1	12/17/2022 1:22:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 1:22:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 1:22:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 1:22:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 1:22:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 1:22:00 AM
Ethylbenzene	0.61	0.65	J	ug/m3	1	12/17/2022 1:22:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 1:22:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347,120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/17/2022 1:22:00 AM
Heptane	0.45	0.61	J	ug/m3	1	12/17/2022 1:22:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 1:22:00 AM
Hexane	1.2	0.53		ug/m3	1	12/17/2022 1:22:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 1:22:00 AM
m&p-Xylene	2.3	1.3		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Ethyl Ketone	1.7	0.88		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Isobutyl Ketone	36	12		ug/m3	10	12/17/2022 6:22:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 1:22:00 AM
Methylene chloride	2.4	0.52		ug/m3	1	12/17/2022 1:22:00 AM
o-Xylene	1.6	0.65		ug/m3	1	12/17/2022 1:22:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 1:22:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 1:22:00 AM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/17/2022 1:22:00 AM
Tetrahydrofuran	3.7	0.44		ug/m3	1	12/17/2022 1:22:00 AM
Toluene	3.7	0.57		ug/m3	1	12/17/2022 1:22:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 1:22:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Acetone	2.8	1.5		ppbV	5	12/17/2022 7:46:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Benzene	0.13	0.15	J	ppbV	1	12/17/2022 2:06:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Carbon disulfide	0.28	0.15		ppbV	1	12/17/2022 2:06:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chloroform	4.0	0.75		ppbV	5	12/17/2022 7:46:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 11	0.34	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 12	0.63	0.15		ppbV	1	12/17/2022 2:06:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Hexane	0.13	0.15	J	ppbV	1	12/17/2022 2:06:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Methylene chloride	0.21	0.15		ppbV	1	12/17/2022 2:06:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Tetrachloroethylene	0.16	0.15		ppbV	1	12/17/2022 2:06:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Toluene	0.24	0.15		ppbV	1	12/17/2022 2:06:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 2:06:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:06:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 2:06:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 2:06:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/17/2022 2:06:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
Acetone	6.5	3.6		ug/m3	5	12/17/2022 7:46:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 2:06:00 AM
Benzene	0.42	0.48	J	ug/m3	1	12/17/2022 2:06:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 2:06:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 2:06:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 2:06:00 AM
Carbon disulfide	0.87	0.47		ug/m3	1	12/17/2022 2:06:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 2:06:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 2:06:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 2:06:00 AM
Chloroform	20	3.7		ug/m3	5	12/17/2022 7:46:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 2:06:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:06:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 2:06:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 2:06:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 2:06:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 2:06:00 AM
Freon 11	1.9	0.84		ug/m3	1	12/17/2022 2:06:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/17/2022 2:06:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 2:06:00 AM
Hexane	0.46	0.53	J	ug/m3	1	12/17/2022 2:06:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 2:06:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 2:06:00 AM
Methylene chloride	0.73	0.52		ug/m3	1	12/17/2022 2:06:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 2:06:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 2:06:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 2:06:00 AM
Tetrachloroethylene	1.1	1.0		ug/m3	1	12/17/2022 2:06:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 2:06:00 AM
Toluene	0.90	0.57		ug/m3	1	12/17/2022 2:06:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:06:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 2:06:00 AM

Qualifiers:

. Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jun-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-11

Lab Order: C2212031

Tag Number: 571,184

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-012A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.13	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Acetone	2.1	0.30		ppbV	1	12/17/2022 2:51:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Benzene	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloroform	0.19	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS
 Lab Order: C2212031
 Project: IKEA Red Hook
 Lab ID: C2212031-012A

Client Sample ID: SVW-11
 Tag Number: 571,184
 Collection Date: 12/13/2022
 Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 11	2.0	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 12	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Hexane	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Methylene chloride	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Tetrachloroethylene	0.51	0.15		ppbV	1	12/17/2022 2:51:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Toluene	0.36	0.15		ppbV	1	12/17/2022 2:51:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Surr: Bromofluorobenzene	96.0	46.7-129		%REC	1	12/17/2022 2:51:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-11

Lab Order: C2212031

Tag Number: 571,184

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-012A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.71	0.82	J	ug/m3	1	12/17/2022 2:51:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:51:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 2:51:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 2:51:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/17/2022 2:51:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
Acetone	4.9	0.71		ug/m3	1	12/17/2022 2:51:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 2:51:00 AM
Benzene	0.45	0.48	J	ug/m3	1	12/17/2022 2:51:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 2:51:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 2:51:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 2:51:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/17/2022 2:51:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 2:51:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 2:51:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 2:51:00 AM
Chloroform	0.93	0.73		ug/m3	1	12/17/2022 2:51:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 2:51:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:51:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 2:51:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 2:51:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 2:51:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 2:51:00 AM
Freon 11	11	0.84		ug/m3	1	12/17/2022 2:51:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-11

Lab Order: C2212031

Tag Number: 571,184

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-012A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 2:51:00 AM
Hexane	0.49	0.53	J	ug/m3	1	12/17/2022 2:51:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 2:51:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 2:51:00 AM
Methylene chloride	0.49	0.52	J	ug/m3	1	12/17/2022 2:51:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 2:51:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 2:51:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 2:51:00 AM
Tetrachloroethylene	3.5	1.0		ug/m3	1	12/17/2022 2:51:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 2:51:00 AM
Toluene	1.4	0.57		ug/m3	1	12/17/2022 2:51:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:51:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 2:51:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-12

Lab Order: C2212031

Tag Number: 274,309

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-013A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
2,2,4-trimethylpentane	0.10	0.15	J	ppbV	1	12/17/2022 4:19:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Acetone	1.9	0.30		ppbV	1	12/17/2022 4:19:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Benzene	0.16	0.15		ppbV	1	12/17/2022 4:19:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Carbon disulfide	1.1	0.15		ppbV	1	12/17/2022 4:19:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-12

Lab Order: C2212031

Tag Number: 274,309

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-013A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 11	0.28	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 12	0.60	0.15		ppbV	1	12/17/2022 4:19:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Hexane	0.23	0.15		ppbV	1	12/17/2022 4:19:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Methylene chloride	0.24	0.15		ppbV	1	12/17/2022 4:19:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Tetrachloroethylene	0.35	0.15		ppbV	1	12/17/2022 4:19:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Toluene	0.34	0.15		ppbV	1	12/17/2022 4:19:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Vinyl acetate	0.11	0.15	J	ppbV	1	12/17/2022 4:19:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/17/2022 4:19:00 AM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated,
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-12

Lab Order: C2212031

Tag Number: 274,309

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-013A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 4:19:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 4:19:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 4:19:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 4:19:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
2,2,4-trimethylpentane	0.47	0.70	J	ug/m3	1	12/17/2022 4:19:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
Acetone	4.5	0.71		ug/m3	1	12/17/2022 4:19:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 4:19:00 AM
Benzene	0.51	0.48		ug/m3	1	12/17/2022 4:19:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 4:19:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 4:19:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 4:19:00 AM
Carbon disulfide	3.4	0.47		ug/m3	1	12/17/2022 4:19:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 4:19:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 4:19:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 4:19:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 4:19:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 4:19:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 4:19:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 4:19:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 4:19:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 4:19:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 4:19:00 AM
Freon 11	1.6	0.84		ug/m3	1	12/17/2022 4:19:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS**Client Sample ID:** SVW-12**Lab Order:** C2212031**Tag Number:** 274,309**Project:** IKEA Red Hook**Collection Date:** 12/13/2022**Lab ID:** C2212031-013A**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/17/2022 4:19:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 4:19:00 AM
Hexane	0.81	0.53		ug/m3	1	12/17/2022 4:19:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 4:19:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 4:19:00 AM
Methylene chloride	0.83	0.52		ug/m3	1	12/17/2022 4:19:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 4:19:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 4:19:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 4:19:00 AM
Tetrachloroethylene	2.4	1.0		ug/m3	1	12/17/2022 4:19:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 4:19:00 AM
Toluene	1.3	0.57		ug/m3	1	12/17/2022 4:19:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 4:19:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 4:19:00 AM
Vinyl acetate	0.39	0.53	J	ug/m3	1	12/17/2022 4:19:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 4:19:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 4:19:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-13

Lab Order: C2212031

Tag Number: 366,255

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-014A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	2.3	1.5		ppbV	10	12/17/2022 8:29:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
2,2,4-trimethylpentane	1.2	0.15		ppbV	1	12/17/2022 5:03:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Acetone	4.5	3.0		ppbV	10	12/17/2022 8:29:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Benzene	10	1.5		ppbV	10	12/17/2022 8:29:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Carbon disulfide	2.0	0.15		ppbV	1	12/17/2022 5:03:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chloroform	0.11	0.15	J	ppbV	1	12/17/2022 5:03:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
cis-1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Cyclohexane	4.5	1.5		ppbV	10	12/17/2022 8:29:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-13

Lab Order: C2212031

Tag Number: 366,255

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-014A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJF		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Ethyl acetate	1.6	0.15		ppbV	1	12/17/2022 5:03:00 AM
Ethylbenzene	0.13	0.15	J	ppbV	1	12/17/2022 5:03:00 AM
Freon 11	2.7	1.5		ppbV	10	12/17/2022 8:29:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Freon 12	0.73	0.15		ppbV	1	12/17/2022 5:03:00 AM
Heptane	0.17	0.15		ppbV	1	12/17/2022 5:03:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Hexane	0.37	0.15		ppbV	1	12/17/2022 5:03:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
m&p-Xylene	0.22	0.30	J	ppbV	1	12/17/2022 5:03:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl Ethyl Ketone	0.51	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Methylene chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Tetrachloroethylene	1.0	0.15		ppbV	1	12/17/2022 5:03:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Toluene	1.5	0.15		ppbV	1	12/17/2022 5:03:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Trichloroethene	0.41	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Surr: Bromofluorobenzene	108	46.7-129		%REC	1	12/17/2022 5:03:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-13

Lab Order: C2212031

Tag Number: 366,255

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-014A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	13	8.2		ug/m3	10	12/17/2022 8:29:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:03:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:03:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 5:03:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 5:03:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
2,2,4-trimethylpentane	5.5	0.70		ug/m3	1	12/17/2022 5:03:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
Acetone	11	7.1		ug/m3	10	12/17/2022 8:29:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 5:03:00 AM
Benzene	33	4.8		ug/m3	10	12/17/2022 8:29:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 5:03:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 5:03:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 5:03:00 AM
Carbon disulfide	6.3	0.47		ug/m3	1	12/17/2022 5:03:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 5:03:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 5:03:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 5:03:00 AM
Chloroform	0.54	0.73	J	ug/m3	1	12/17/2022 5:03:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 5:03:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:03:00 AM
Cyclohexane	15	5.2		ug/m3	10	12/17/2022 8:29:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 5:03:00 AM
Ethyl acetate	5.6	0.54		ug/m3	1	12/17/2022 5:03:00 AM
Ethylbenzene	0.56	0.65	J	ug/m3	1	12/17/2022 5:03:00 AM
Freon 11	15	8.4		ug/m3	10	12/17/2022 8:29:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jun-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-13

Lab Order: C2212031

Tag Number: 366,255

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-014A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.6	0.74		ug/m3	1	12/17/2022 5:03:00 AM
Heptane	0.70	0.61		ug/m3	1	12/17/2022 5:03:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 5:03:00 AM
Hexane	1.3	0.53		ug/m3	1	12/17/2022 5:03:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 5:03:00 AM
m&p-Xylene	0.96	1.3	J	ug/m3	1	12/17/2022 5:03:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
Methyl Ethyl Ketone	1.5	0.88		ug/m3	1	12/17/2022 5:03:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 5:03:00 AM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/17/2022 5:03:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 5:03:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 5:03:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 5:03:00 AM
Tetrachloroethylene	7.1	1.0		ug/m3	1	12/17/2022 5:03:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 5:03:00 AM
Toluene	5.7	0.57		ug/m3	1	12/17/2022 5:03:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:03:00 AM
Trichloroethene	2.2	0.81		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 5:03:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-14

Lab Order: C2212031

Tag Number: 232,156

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-015A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/17/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2,4-Trimethylbenzene	1.3	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3,5-Trimethylbenzene	0.58	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 5:48:00 AM
2,2,4-trimethylpentane	10	1.4		ppbV	9	12/17/2022 9:13:00 PM
4-ethyltoluene	0.29	0.15		ppbV	1	12/17/2022 5:48:00 AM
Acetone	80	27		ppbV	90	12/17/2022 9:56:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Benzene	4.1	1.4		ppbV	9	12/17/2022 9:13:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Carbon disulfide	18	1.4		ppbV	9	12/17/2022 9:13:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloroethane	0.37	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
cis-1,2-Dichloroethene	1.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Cyclohexane	20	14		ppbV	90	12/17/2022 9:56:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS
 Lab Order: C2212031
 Project: IKEA Red Hook
 Lab ID: C2212031-015A

Client Sample ID: SVW-14
 Tag Number: 232,156
 Collection Date: 12/13/2022
 Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Ethylbenzene	0.42	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 11	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 12	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Heptane	5.6	0.15		ppbV	1	12/17/2022 5:48:00 AM
Heptane	5.2	1.4		ppbV	9	12/17/2022 9:13:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Hexane	15	1.4		ppbV	9	12/17/2022 9:13:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
m&p-Xylene	1.4	0.30		ppbV	1	12/17/2022 5:48:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:48:00 AM
Methyl Ethyl Ketone	20	27	J	ppbV	90	12/17/2022 9:56:00 PM
Methyl Isobutyl Ketone	100	27		ppbV	90	12/17/2022 9:56:00 PM
Methyl tert-butyl ether	12	1.4		ppbV	9	12/17/2022 9:13:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
o-Xylene	1.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Styrene	0.23	0.15		ppbV	1	12/17/2022 5:48:00 AM
Tetrachloroethylene	1.1	0.15		ppbV	1	12/17/2022 5:48:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Toluene	2.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
trans-1,2-Dichloroethene	0.55	0.15		ppbV	1	12/17/2022 5:48:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Trichloroethene	0.74	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Surr: Bromofluorobenzene	114	46.7-129		%REC	1	12/17/2022 5:48:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-14

Lab Order: C2212031

Tag Number: 232,156

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-015A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:48:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:48:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:48:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:48:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
1,2,4-Trimethylbenzene	6.5	0.74		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 5:48:00 AM
1,3,5-Trimethylbenzene	2.9	0.74		ug/m3	1	12/17/2022 5:48:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 5:48:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
2,2,4-trimethylpentane	47	6.5		ug/m3	9	12/17/2022 9:13:00 PM
4-ethyltoluene	1.4	0.74		ug/m3	1	12/17/2022 5:48:00 AM
Acetone	190	64		ug/m3	90	12/17/2022 9:56:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 5:48:00 AM
Benzene	13	4.5		ug/m3	9	12/17/2022 9:13:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 5:48:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 5:48:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 5:48:00 AM
Carbon disulfide	55	4.4		ug/m3	9	12/17/2022 9:13:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 5:48:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 5:48:00 AM
Chloroethane	0.98	0.40		ug/m3	1	12/17/2022 5:48:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 5:48:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 5:48:00 AM
cis-1,2-Dichloroethene	4.0	0.59		ug/m3	1	12/17/2022 5:48:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:48:00 AM
Cyclohexane	68	48		ug/m3	90	12/17/2022 9:56:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 5:48:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 5:48:00 AM
Ethylbenzene	1.8	0.65		ug/m3	1	12/17/2022 5:48:00 AM
Freon 11	< 0.84	0.84		ug/m3	1	12/17/2022 5:48:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM

Qualifiers: , Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS**Client Sample ID:** SVW-14**Lab Order:** C2212031**Tag Number:** 232,156**Project:** IKEA Red Hook**Collection Date:** 12/13/2022**Lab ID:** C2212031-015A**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/17/2022 5:48:00 AM
Heptane	21	5.7		ug/m3	9	12/17/2022 9:13:00 PM
Heptane	23	0.61		ug/m3	1	12/17/2022 5:48:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 5:48:00 AM
Hexane	54	4.9		ug/m3	9	12/17/2022 9:13:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 5:48:00 AM
m&p-Xylene	6.2	1.3		ug/m3	1	12/17/2022 5:48:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:48:00 AM
Methyl Ethyl Ketone	58	80	J	ug/m3	90	12/17/2022 9:56:00 PM
Methyl Isobutyl Ketone	410	110		ug/m3	90	12/17/2022 9:56:00 PM
Methyl tert-butyl ether	42	5.0		ug/m3	9	12/17/2022 9:13:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/17/2022 5:48:00 AM
o-Xylene	4.3	0.65		ug/m3	1	12/17/2022 5:48:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 5:48:00 AM
Styrene	0.98	0.64		ug/m3	1	12/17/2022 5:48:00 AM
Tetrachloroethylene	7.7	1.0		ug/m3	1	12/17/2022 5:48:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 5:48:00 AM
Toluene	7.3	0.57		ug/m3	1	12/17/2022 5:48:00 AM
trans-1,2-Dichloroethene	2.2	0.59		ug/m3	1	12/17/2022 5:48:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:48:00 AM
Trichloroethene	4.0	0.81		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 5:48:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC				Analyst: RJP
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 6:32:00 AM
2,2,4-trimethylpentane	0.25	0.15		ppbV	1	12/17/2022 6:32:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Acetone	2.0	1.5		ppbV	5	12/17/2022 10:39:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Benzene	0.20	0.15		ppbV	1	12/17/2022 6:32:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Carbon disulfide	0.20	0.15		ppbV	1	12/17/2022 6:32:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloromethane	0.27	0.15		ppbV	1	12/17/2022 6:32:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Cyclohexane	0.31	0.15		ppbV	1	12/17/2022 6:32:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Ethyl acetate	0.32	0.15		ppbV	1	12/17/2022 6:32:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 11	0.88	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 12	0.64	0.15		ppbV	1	12/17/2022 6:32:00 AM
Heptane	0.70	0.15		ppbV	1	12/17/2022 6:32:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Hexane	1.5	0.15		ppbV	1	12/17/2022 6:32:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
m&p-Xylene	0.18	0.30	J	ppbV	1	12/17/2022 6:32:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 6:32:00 AM
Methyl Ethyl Ketone	0.55	0.30		ppbV	1	12/17/2022 6:32:00 AM
Methyl Isobutyl Ketone	0.14	0.30	J	ppbV	1	12/17/2022 6:32:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Methylene chloride	0.28	0.15		ppbV	1	12/17/2022 6:32:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Tetrachloroethylene	0.45	0.15		ppbV	1	12/17/2022 6:32:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Toluene	1.4	0.15		ppbV	1	12/17/2022 6:32:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 6:32:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 6:32:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 6:32:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 6:32:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 6:32:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 6:32:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
2,2,4-trimethylpentane	1.2	0.70		ug/m3	1	12/17/2022 6:32:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
Acetone	4.7	3.6		ug/m3	5	12/17/2022 10:39:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 6:32:00 AM
Benzene	0.64	0.48		ug/m3	1	12/17/2022 6:32:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 6:32:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 6:32:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 6:32:00 AM
Carbon disulfide	0.62	0.47		ug/m3	1	12/17/2022 6:32:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 6:32:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 6:32:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 6:32:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 6:32:00 AM
Chloromethane	0.56	0.31		ug/m3	1	12/17/2022 6:32:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 6:32:00 AM
Cyclohexane	1.1	0.52		ug/m3	1	12/17/2022 6:32:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 6:32:00 AM
Ethyl acetate	1.2	0.54		ug/m3	1	12/17/2022 6:32:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 6:32:00 AM
Freon 11	4.9	0.84		ug/m3	1	12/17/2022 6:32:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/17/2022 6:32:00 AM
Heptane	2.9	0.61		ug/m3	1	12/17/2022 6:32:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 6:32:00 AM
Hexane	5.2	0.53		ug/m3	1	12/17/2022 6:32:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 6:32:00 AM
m&p-Xylene	0.78	1.3	J	ug/m3	1	12/17/2022 6:32:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 6:32:00 AM
Methyl Ethyl Ketone	1.6	0.88		ug/m3	1	12/17/2022 6:32:00 AM
Methyl Isobutyl Ketone	0.57	1.2	J	ug/m3	1	12/17/2022 6:32:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 6:32:00 AM
Methylene chloride	0.97	0.52		ug/m3	1	12/17/2022 6:32:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 6:32:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 6:32:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 6:32:00 AM
Tetrachloroethylene	3.1	1.0		ug/m3	1	12/17/2022 6:32:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 6:32:00 AM
Toluene	5.5	0.57		ug/m3	1	12/17/2022 6:32:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 6:32:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 6:32:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-16

Lab Order: C2212031

Tag Number: 93,111

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-017A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
2,2,4-trimethylpentane	1.9	1.5		ppbV	10	12/17/2022 11:22:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Acetone	28	12		ppbV	40	12/18/2022 12:04:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Benzene	0.38	0.15		ppbV	1	12/17/2022 7:16:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Carbon disulfide	0.85	0.15		ppbV	1	12/17/2022 7:16:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloroform	0.25	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Cyclohexane	1.6	0.15		ppbV	1	12/17/2022 7:16:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-16

Lab Order: C2212031

Tag Number: 93,111

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-017A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 12	0.65	0.15		ppbV	1	12/17/2022 7:16:00 AM
Heptane	0.14	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Hexane	3.3	1.5		ppbV	10	12/17/2022 11:22:00 PM
Isopropyl alcohol	1.1	0.15		ppbV	1	12/17/2022 7:16:00 AM
m&p-Xylene	0.24	0.30	J	ppbV	1	12/17/2022 7:16:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
Methyl Ethyl Ketone	22	12		ppbV	40	12/18/2022 12:04:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Methylene chloride	0.53	0.15		ppbV	1	12/17/2022 7:16:00 AM
o-Xylene	0.11	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrachloroethylene	0.23	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	13	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	19	1.5		ppbV	10	12/17/2022 11:22:00 PM
Toluene	0.65	0.15		ppbV	1	12/17/2022 7:16:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Trichloroethene	0.12	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Surr: Bromofluorobenzene	85.0	46.7-129		%REC	1	12/17/2022 7:16:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-16

Lab Order: C2212031

Tag Number: 93,111

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-017A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 7:16:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 7:16:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 7:16:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 7:16:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 7:16:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
2,2,4-trimethylpentane	8.9	7.0		ug/m3	10	12/17/2022 11:22:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
Acetone	66	28		ug/m3	40	12/18/2022 12:04:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 7:16:00 AM
Benzene	1.2	0.48		ug/m3	1	12/17/2022 7:16:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 7:16:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 7:16:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 7:16:00 AM
Carbon disulfide	2.6	0.47		ug/m3	1	12/17/2022 7:16:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 7:16:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 7:16:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 7:16:00 AM
Chloroform	1.2	0.73		ug/m3	1	12/17/2022 7:16:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 7:16:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 7:16:00 AM
Cyclohexane	5.4	0.52		ug/m3	1	12/17/2022 7:16:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 7:16:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 7:16:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 7:16:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 7:16:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-16

Lab Order: C2212031

Tag Number: 93,111

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-017A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/17/2022 7:16:00 AM
Heptane	0.57	0.61	J	ug/m3	1	12/17/2022 7:16:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 7:16:00 AM
Hexane	12	5.3		ug/m3	10	12/17/2022 11:22:00 PM
Isopropyl alcohol	2.6	0.37		ug/m3	1	12/17/2022 7:16:00 AM
m&p-Xylene	1.0	1.3	J	ug/m3	1	12/17/2022 7:16:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
Methyl Ethyl Ketone	64	35		ug/m3	40	12/18/2022 12:04:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 7:16:00 AM
Methylene chloride	1.8	0.52		ug/m3	1	12/17/2022 7:16:00 AM
o-Xylene	0.48	0.65	J	ug/m3	1	12/17/2022 7:16:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 7:16:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 7:16:00 AM
Tetrachloroethylene	1.6	1.0		ug/m3	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	38	0.44		ug/m3	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	55	4.4		ug/m3	10	12/17/2022 11:22:00 PM
Toluene	2.4	0.57		ug/m3	1	12/17/2022 7:16:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 7:16:00 AM
Trichloroethene	0.64	0.81	J	ug/m3	1	12/17/2022 7:16:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 7:16:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 7:16:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 7:16:00 AM

Qualifiers:

- . Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte, Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
2,2,4-trimethylpentane	0.11	0.15	J	ppbV	1	12/16/2022 1:11:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Acetone	6.2	1.5		ppbV	5	12/17/2022 12:42:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Benzene	0.28	0.15		ppbV	1	12/16/2022 1:11:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Carbon tetrachloride	0.080	0.030		ppbV	1	12/16/2022 1:11:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloromethane	0.47	0.15		ppbV	1	12/16/2022 1:11:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Ethyl acetate	0.18	0.15		ppbV	1	12/16/2022 1:11:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 11	0.28	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 12	0.62	0.15		ppbV	1	12/16/2022 1:11:00 PM
Heptane	0.12	0.15	J	ppbV	1	12/16/2022 1:11:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Hexane	0.16	0.15		ppbV	1	12/16/2022 1:11:00 PM
Isopropyl alcohol	0.48	0.15		ppbV	1	12/16/2022 1:11:00 PM
m&p-Xylene	0.19	0.30	J	ppbV	1	12/16/2022 1:11:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl Ethyl Ketone	0.52	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Methylene chloride	0.22	0.15		ppbV	1	12/16/2022 1:11:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Toluene	0.66	0.15		ppbV	1	12/16/2022 1:11:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 1:11:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
Surr: Bromofluorobenzene	96.0	47-124		%REC	1	12/16/2022 1:11:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE			TO-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:11:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:11:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:11:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 1:11:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 1:11:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
2,2,4-trimethylpentane	0.51	0.70	J	ug/m3	1	12/16/2022 1:11:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
Acetone	15	3.6		ug/m3	6	12/17/2022 12:42:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 1:11:00 PM
Benzene	0.89	0.48		ug/m3	1	12/16/2022 1:11:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 1:11:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 1:11:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 1:11:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 1:11:00 PM
Carbon tetrachloride	0.50	0.19		ug/m3	1	12/16/2022 1:11:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 1:11:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 1:11:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 1:11:00 PM
Chloromethane	0.97	0.31		ug/m3	1	12/16/2022 1:11:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:11:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 1:11:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 1:11:00 PM
Ethyl acetate	0.65	0.54		ug/m3	1	12/16/2022 1:11:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 1:11:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 1:11:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
IN Non-routine analyte, Quantitation estimated,
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/16/2022 1:11:00 PM
Heptane	0.49	0.61	J	ug/m3	1	12/16/2022 1:11:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 1:11:00 PM
Hexane	0.56	0.53		ug/m3	1	12/16/2022 1:11:00 PM
Isopropyl alcohol	1.2	0.37		ug/m3	1	12/16/2022 1:11:00 PM
m&p-Xylene	0.82	1.3	J	ug/m3	1	12/16/2022 1:11:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
Methyl Ethyl Ketone	1.5	0.88		ug/m3	1	12/16/2022 1:11:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 1:11:00 PM
Methylene chloride	0.76	0.52		ug/m3	1	12/16/2022 1:11:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 1:11:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 1:11:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 1:11:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 1:11:00 PM
Toluene	2.5	0.57		ug/m3	1	12/16/2022 1:11:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 1:11:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:11:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 1:11:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-3			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
2,2,4-trimethylpentane	0.12	0.15	J	ppbV	1	12/16/2022 1:55:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Acetone	4.3	1.5		ppbV	5	12/17/2022 1:24:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Benzene	0.29	0.15		ppbV	1	12/16/2022 1:55:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Carbon tetrachloride	0.080	0.030		ppbV	1	12/16/2022 1:55:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloromethane	0.49	0.15		ppbV	1	12/16/2022 1:55:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Ethyl acetate	0.18	0.15		ppbV	1	12/16/2022 1:55:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 11	0.27	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 12	0.60	0.15		ppbV	1	12/16/2022 1:55:00 PM
Heptane	0.12	0.15	J	ppbV	1	12/16/2022 1:55:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Hexane	0.18	0.15		ppbV	1	12/16/2022 1:55:00 PM
Isopropyl alcohol	1.0	0.15		ppbV	1	12/16/2022 1:55:00 PM
m&p-Xylene	0.21	0.30	J	ppbV	1	12/16/2022 1:55:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	0.39	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	0.70	1.5	J	ppbV	5	12/17/2022 1:24:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Methylene chloride	0.22	0.15		ppbV	1	12/16/2022 1:55:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Toluene	1.1	0.15		ppbV	1	12/16/2022 1:55:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 1:55:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
Surr: Bromofluorobenzene	97.0	47-124		%REC	1	12/16/2022 1:55:00 PM

Qualifiers:

- . Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE			TO-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:55:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:55:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:55:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 1:55:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 1:55:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
2,2,4-trimethylpentane	0.56	0.70	J	ug/m3	1	12/16/2022 1:55:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
Acetone	10	3.6		ug/m3	5	12/17/2022 1:24:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 1:55:00 PM
Benzene	0.93	0.48		ug/m3	1	12/16/2022 1:55:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 1:55:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 1:55:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 1:55:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 1:55:00 PM
Carbon tetrachloride	0.50	0.19		ug/m3	1	12/16/2022 1:55:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 1:55:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 1:55:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 1:55:00 PM
Chloromethane	1.0	0.31		ug/m3	1	12/16/2022 1:55:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:55:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 1:55:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 1:55:00 PM
Ethyl acetate	0.65	0.54		ug/m3	1	12/16/2022 1:55:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 1:55:00 PM
Freon 11	1.5	0.84		ug/m3	1	12/16/2022 1:55:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/16/2022 1:55:00 PM
Heptane	0.49	0.61	J	ug/m3	1	12/16/2022 1:55:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 1:55:00 PM
Hexane	0.63	0.53		ug/m3	1	12/16/2022 1:55:00 PM
Isopropyl alcohol	2.6	0.37		ug/m3	1	12/16/2022 1:55:00 PM
m&p-Xylene	0.91	1.3	J	ug/m3	1	12/16/2022 1:55:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	1.1	0.88		ug/m3	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	2.1	4.4	J	ug/m3	5	12/17/2022 1:24:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 1:55:00 PM
Methylene chloride	0.76	0.52		ug/m3	1	12/16/2022 1:55:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 1:55:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 1:55:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 1:55:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 1:55:00 PM
Toluene	4.1	0.57		ug/m3	1	12/16/2022 1:55:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 1:55:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:55:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 1:55:00 PM

Qualifiers: Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+30			"Hg		12/15/2022
Lab Vacuum Out	+30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Acetone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Carbon tetrachloride	< 0.030	0.030		ppbV	1	12/16/2022 12:26:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 11	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 12	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Hexane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Toluene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 12:26:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
Surr: Bromofluorobenzene	95.0	47-124		%REC	1	12/16/2022 12:26:00 PM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 12:26:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 12:26:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 12:26:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 12:26:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 12:26:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
Acetone	< 0.71	0.71		ug/m3	1	12/16/2022 12:26:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 12:26:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 12:26:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 12:26:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 12:26:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 12:26:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 12:26:00 PM
Carbon tetrachloride	< 0.19	0.19		ug/m3	1	12/16/2022 12:26:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 12:26:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 12:26:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 12:26:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 12:26:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 12:26:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 12:26:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 12:26:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 12:26:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 12:26:00 PM
Freon 11	< 0.84	0.84		ug/m3	1	12/16/2022 12:26:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 12:26:00 PM
Hexane	< 0.53	0.53		ug/m3	1	12/16/2022 12:26:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 12:26:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 12:26:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/16/2022 12:26:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 12:26:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 12:26:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 12:26:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 12:26:00 PM
Toluene	< 0.57	0.57		ug/m3	1	12/16/2022 12:26:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 12:26:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 12:26:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 12:26:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

QUALITY CONTROL SUMMARY

Date: 09-Jan-23



Centek/SanAir Technologies Laboratory

QC SUMMARY REPORT
SURROGATE RECOVERIES

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

Test No: TO-15

Matrix: A

Sample ID	BR4FBZ								
ALCS1UG-121622	101								
ALCS1UG-121722	100								
ALCS1UGD-121622	99.0								
ALCS1UGD-121722	100								
AMB1UG-121622	89.0								
AMB1UG-121723	87.0								
C2212031-001A	95.0								
C2212031-001A MS	102								
C2212031-001A MSD	101								
C2212031-002A	92.0								
C2212031-003A	94.0								
C2212031-004A	95.0								
C2212031-005A	94.0								
C2212031-006A	95.0								
C2212031-007A	94.0								
C2212031-008A	101								
C2212031-009A	94.0								
C2212031-010A	98.0								
C2212031-011A	94.0								
C2212031-012A	96.0								
C2212031-013A	95.0								
C2212031-014A	108								
C2212031-015A	114								

Acronym	Surrogate	QC Limits
BR4FBZ	= Bromofluorobenzene	47-124
BR4FBZ	= Bromofluorobenzene	46.7-129

* Surrogate recovery outside acceptance limits

1

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

Test No: TO-15

Matrix: A

Sample ID BR4FBZ

C2212031-016A	94.0								
C2212031-017A	85.0								
C2212031-018A	96.0								
C2212031-019A	97.0								
C2212031-020A	95.0								

Acronym	Surrogate	QC Limits
BR4FBZ	= Bromofluorobenzene	47-124
BR4FBZ	= Bromofluorobenzene	46.7-129

* Surrogate recovery outside acceptance limits

Centek/SanAir Laboratories
GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\data2\2022DEC\AT121602.D

Tune Time : 16 Dec 2022 10:12 am

Daily Calibration File : C:\msdchem\1\data2\2022DEC\AT121602.D

File	Sample	(BFB)	(IS1)	(IS2)	(IS3)
			52954	338530	277505
AT121603.D	ALCS1UG-121622	101	53207	339284	282178
AT121604.D	AMB1UG-1211622	89	51842	322690	251214
AT121605.D	C2212031-020	95	51541	321586	254349
AT121606.D	C2212031-018	96	49926	318151	250251
AT121607.D	C2212031-019	97	49858	320436	255019
AT121608.D	C2212031-001	95	52263	316389	254602
AT121609.D	C2212031-001MS	102	54174	338607	283405
AT121610.D	C2212031-001MSD	101	53957	335717	282841
AT121611.D	C2212031-002	92	50081	313081	250013
AT121612.D	C2212031-003	94	50820	311668	254149
AT121613.D	C2212031-004	95	51956	317054	253435
AT121614.D	C2212031-005	94	49737	305798	244946
AT121615.D	C2212031-006	95	47403	304039	242088
AT121616.D	C2212031-007	94	48665	297360	239620
AT121617.D	C2212031-008	101	49121	300232	243720
AT121618.D	C2212031-009	94	48026	300680	242582
AT121619.D	C2212031-010	98	50356	307630	245598
AT121620.D	C2212031-011	94	47999	302916	236865
AT121621.D	C2212031-012	96	47319	298372	232980

Centek/SanAir Laboratories

```

-----
AT121622.D
      ALCS1UCD-121622    99                50171      306484      255883
-----
AT121623.D
      C2212031-013    95                47537      296062      230315
-----
AT121624.D
      C2212031-014   108                49063      304680      248575
-----
AT121625.D
      C2212031-015   114                51635      326262      273967
-----
AT121626.D
      C2212031-016    94                49282      311464      248083
-----
AT121627.D
      C2212031-017    85                50325      312153      250439
-----

```

(fails) ~ fails 24hr time check * - fails criteria

Created: Mon Jan 09 11:35:57 2023 Instrument 1

Centek/SanAir Laboratories
GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\data2\2022DEC\AT121702.D

Tune Time : 17 Dec 2022 10:29 am

Daily Calibration File : C:\msdchem\1\data2\2022DEC\AT121702.D

	(BFB)	(IS1)	(IS2)	(IS3)
		49920	302432	245756
File	Sample	Surrogate Recovery %	Internal Standard Responses	
=====				
AT121703.D	ALCS1UG-121722	100	49116	298802 247365
AT121704.D	AMB1UG-121722	87	47454	284817 220179
AT121705.D	C2212031-018 5X	88	46545	280647 216408
AT121706.D	C2212031-019 5X	91	45803	277975 218212
AT121707.D	C2212031-002 5X	87	46604	277837 217403
AT121708.D	C2212031-003 10X	88	45961	274104 211748
AT121709.D	C2212031-004 10X	88	45749	278079 219436
AT121710.D	C2212031-007 5X	89	46989	277445 219982
AT121711.D	C2212031-008 5X	89	45428	268447 212160
AT121712.D	C2212031-009 5X	89	45366	269155 207697
AT121713.D	C2212031-010 10X	90	44546	267512 205959
AT121714.D	C2212031-010 40X	88	44802	265462 203797
AT121715.D	C2212031-011 5X	87	45630	268494 208174
AT121716.D	C2212031-014 10X	87	45490	267860 213842
AT121717.D	C2212031-015 9X	89	47099	281822 228989
AT121718.D	C2212031-015 90X	88	44209	264323 211844
AT121719.D	C2212031-016 5X	86	44681	267690 210376
AT121720.D	C2212031-017 10X	88	45462	268654 213997
AT121721.D	C2212031-017 40X	84	45037	260080 202807

AT121723.D

ALCS1UGD-121722 100

46993

274892

228222

(fails) - fails 24hr time check * - fails criteria

Created: Mon Jan 09 11:58:13 2023 Instrument 1

Date: 09-Jan-23

CENTEK LABORATORIES, LLC

ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121622	Sample Type: MBLK	TestCode: 0.20_NYS	Units: ppbv	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226490						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	< 0.15	0.15									
1,1,2,2-Tetrachloroethane	< 0.15	0.15									
1,1,2-Trichloroethane	< 0.15	0.15									
1,1-Dichloroethane	< 0.15	0.15									
1,1-Dichloroethene	< 0.040	0.040									
1,2,4-Trichlorobenzene	< 0.15	0.15									
1,2,4-Trimethylbenzene	< 0.15	0.15									
1,2-Dibromoethane	< 0.15	0.15									
1,2-Dichlorobenzene	< 0.15	0.15									
1,2-Dichloroethane	< 0.15	0.15									
1,2-Dichloropropane	< 0.15	0.15									
1,3,5-Trimethylbenzene	< 0.15	0.15									
1,3-butadiene	< 0.15	0.15									
1,3-Dichlorobenzene	< 0.15	0.15									
1,4-Dichlorobenzene	< 0.15	0.15									
1,4-Dioxane	< 0.30	0.30									
2,2,4-trimethylpentane	< 0.15	0.15									
4-ethyltoluene	< 0.15	0.15									
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									

Qualifiers:	H	R	Results reported are not blank corrected	DL	Detection Limit	J	Analyte detected below quantitation limit	S	Spike Recovery outside accepted recovery limits	E	Estimated Value above quantitation range
			Holding times for preparation or analysis exceeded							ND	Not Detected at the Limit of Detection
			RPD outside accepted recovery limits								

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121622		SampType: MBLK		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: ZZZZZ		Batch ID: R19808		TestNo: TO-15				Analysis Date: 12/16/2022		SeqNo: 226490	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.030	0.030									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.040	0.040									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Dibromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.15	0.15									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									

Qualifiers:		Results reported are not blank corrected		DL		Detection Limit		E		Estimated Value above quantitation range	
H		Holding times for preparation or analysis exceeded		J		Analyte detected below quantitation limit		ND		Not Detected at the Limit of Detection	
R		RPD outside accepted recovery limits		S		Spike Recovery outside accepted recovery limits					

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121622	SampleType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226490						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.030	0.030									
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.040	0.040									

Sample ID: AMB1UG-121723	SampleType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	< 0.15	0.15									
1,1,2,2-Tetrachloroethane	< 0.15	0.15									
1,1,2-Trichloroethane	< 0.15	0.15									
1,1-Dichloroethane	< 0.15	0.15									
1,1-Dichloroethene	< 0.040	0.040									
1,2,4-Trichlorobenzene	< 0.15	0.15									
1,2,4-Trimethylbenzene	< 0.15	0.15									
1,2-Dibromoethane	< 0.15	0.15									
1,2-Dichlorobenzene	< 0.15	0.15									
1,2-Dichloroethane	< 0.15	0.15									
1,2-Dichloropropane	< 0.15	0.15									
1,3,5-Trimethylbenzene	< 0.15	0.15									
1,3-butadiene	< 0.15	0.15									
1,3-Dichlorobenzene	< 0.15	0.15									
1,4-Dichlorobenzene	< 0.15	0.15									
1,4-Dioxane	< 0.30	0.30									
2,2,4-trimethylpentane	< 0.15	0.15									
4-ethyltoluene	< 0.15	0.15									

Qualifiers:	H	R	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
			Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
			RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121723	SampType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.030	0.030									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.040	0.040									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Dibromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.15	0.15									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									

Qualifiers:	H	R	Results reported are not blank corrected	Holding times for preparation or analysis exceeded	RPD outside accepted recovery limits	DL	Detection Limit	J	Analyte detected below quantitation limit	S	Spike Recovery outside accepted recovery limits	E	Estimated Value above quantitation range	ND	Not Detected at the Limit of Detection

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121723	Sample Type: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									
Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.030	0.030									
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.040	0.040									

Qualifiers:	Results reported are not blank corrected		DL	Detection Limit		E	Estimated Value above quantitation range	
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limit		ND	Not Detected at the Limit of Detection
R		RPD outside accepted recovery limits	S		Spike Recovery outside accepted recovery limits			

Date: 09-Jan-23

CENTEK LABORATORIES, LLC

ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121622	Sample Type: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	1.050	0.15	1	0	105	63.7	152				
1,1,2,2-Tetrachloroethane	1.120	0.15	1	0	112	62.1	132				
1,1,2-Trichloroethane	1.100	0.15	1	0	110	64.3	132				
1,1-Dichloroethane	1.140	0.15	1	0	114	67.9	123				
1,1-Dichloroethene	1.060	0.040	1	0	106	59.4	122				
1,2,4-Trichlorobenzene	1.060	0.15	1	0	106	55	133				
1,2,4-Trimethylbenzene	1.020	0.15	1	0	102	64.1	128				
1,2-Dibromoethane	1.060	0.15	1	0	106	64.9	134				
1,2-Dichlorobenzene	1.060	0.15	1	0	106	57.8	158				
1,2-Dichloroethane	1.140	0.15	1	0	114	78.8	127				
1,2-Dichloropropane	1.150	0.15	1	0	115	59.9	128				
1,3,5-Trimethylbenzene	1.090	0.15	1	0	109	70	133				
1,3-butadiene	0.9400	0.15	1	0	94.0	71.1	138				
1,3-Dichlorobenzene	1.060	0.15	1	0	106	66.2	137				
1,4-Dichlorobenzene	1.060	0.15	1	0	106	68.2	139				
1,4-Dioxane	1.010	0.30	1	0	101	67.7	119				
2,2,4-trimethylpentane	1.140	0.15	1	0	114	57	127				
4-ethyltoluene	1.050	0.15	1	0	105	67.9	131				
Acetone	1.160	0.30	1	0	116	47.6	146				
Allyl chloride	1.010	0.15	1	0	101	56.1	116				
Benzene	1.120	0.15	1	0	112	66.2	126				
Benzyl chloride	0.5100	0.15	1	0	51.0	34.9	155				
Bromodichloromethane	1.020	0.15	1	0	102	69.6	133				
Bromoform	0.7800	0.15	1	0	78.0	44.1	152				
Bromomethane	1.100	0.15	1	0	110	64.9	155				

Qualifiers:	H	R	Results reported are not blank corrected	Holding times for preparation or analysis exceeded	RPD outside accepted recovery limits	DL	Detection Limit	J	Analyte detected below quantitation limit	S	Spike Recovery outside accepted recovery limits	E	Estimated Value above quantitation range	ND	Not Detected at the Limit of Detection

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121622		SampType: LCS		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: ZZZZZ		Batch ID: R19808		TestNo: TO-15				Analysis Date: 12/16/2022		SeqNo: 226491	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Quaf
Carbon disulfide	1.020	0.15	1	0	102	64	111				
Carbon tetrachloride	1.030	0.030	1	0	103	41.3	166				
Chlorobenzene	1.080	0.15	1	0	108	66.3	129				
Chloroethane	1.130	0.15	1	0	113	62.7	148				
Chloroform	1.140	0.15	1	0	114	77.1	126				
Chloromethane	1.060	0.15	1	0	106	74.9	146				
cis-1,2-Dichloroethene	0.9600	0.040	1	0	96.0	57.7	131				
cis-1,3-Dichloropropene	0.9200	0.15	1	0	92.0	57.4	136				
Cyclohexane	1.110	0.15	1	0	111	59.8	124				
Dibromochloromethane	0.8200	0.15	1	0	82.0	58.8	139				
Ethyl acetate	1.060	0.15	1	0	106	56.5	129				
Ethylbenzene	1.080	0.15	1	0	108	66.8	125				
Freon 11	1.130	0.15	1	0	113	75.5	146				
Freon 113	1.130	0.15	1	0	113	71.5	128				
Freon 114	1.150	0.15	1	0	115	71.3	151				
Freon 12	1.160	0.15	1	0	116	73	141				
Heptane	1.130	0.15	1	0	113	64.1	120				
Hexachloro-1,3-butadiene	1.050	0.15	1	0	105	67.9	135				
Hexane	1.150	0.15	1	0	115	57.3	125				
Isopropyl alcohol	1.030	0.15	1	0	103	60.3	139				
m&p-Xylene	2.130	0.30	2	0	106	71	127				
Methyl Butyl Ketone	1.070	0.30	1	0	107	42.5	149				
Methyl Ethyl Ketone	1.090	0.30	1	0	109	56	131				
Methyl Isobutyl Ketone	1.090	0.30	1	0	109	50.8	133				
Methyl tert-butyl ether	1.080	0.15	1	0	108	61.2	130				
Methylene chloride	1.080	0.15	1	0	108	58.2	125				
o-Xylene	1.070	0.15	1	0	107	72.4	129				
Propylene	1.140	0.15	1	0	114	45.7	127				
Styrene	1.040	0.15	1	0	104	67	132				
Tetrachloroethylene	1.060	0.15	1	0	106	65.6	133				
Tetrahydrofuran	1.000	0.15	1	0	100	54.4	120				

Qualifiers:		Results reported are not blank corrected		DL		Detection Limit		E		Estimated Value above quantitation range	
H	R	Holding times for preparation or analysis exceeded		J	S	Analyte detected below quantitation limit		ND	Not Detected at the Limit of Detection		
		RPD outside accepted recovery limits				Spike Recovery outside accepted recovery limits					

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121622	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Toluene	1.070	0.15	1	0	107	62.5	128				
trans-1,2-Dichloroethene	1.100	0.15	1	0	110	63.6	126				
trans-1,3-Dichloropropene	0.8300	0.15	1	0	83.0	41	155				
Trichloroethene	1.080	0.030	1	0	108	54.2	140				
Vinyl acetate	1.020	0.15	1	0	102	49	122				
Vinyl Bromide	1.090	0.15	1	0	109	65.8	150				
Vinyl chloride	1.120	0.040	1	0	112	62.7	146				

Sample ID: ALCS1UG-121722	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226516						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	1.110	0.15	1	0	111	63.7	152				
1,1,2,2-Tetrachloroethane	1.190	0.15	1	0	119	62.1	132				
1,1,2-Trichloroethane	1.170	0.15	1	0	117	64.3	132				
1,1-Dichloroethane	1.140	0.15	1	0	114	67.9	123				
1,1-Dichloroethane	1.130	0.040	1	0	113	59.4	122				
1,2,4-Trichlorobenzene	1.040	0.15	1	0	104	55	133				
1,2,4-Trimethylbenzene	1.020	0.15	1	0	102	64.1	128				
1,2-Dibromoethane	1.120	0.15	1	0	112	64.9	134				
1,2-Dichlorobenzene	1.100	0.15	1	0	110	57.8	158				
1,2-Dichloroethane	1.160	0.15	1	0	116	78.8	127				
1,2-Dichloropropene	1.180	0.15	1	0	118	59.9	128				
1,3,5-Trimethylbenzene	1.100	0.15	1	0	110	70	133				
1,3-butadiene	0.9500	0.15	1	0	95.0	71.1	138				
1,3-Dichlorobenzene	1.090	0.15	1	0	109	66.2	137				
1,4-Dichlorobenzene	1.110	0.15	1	0	111	68.2	139				
1,4-Dioxane	1.050	0.30	1	0	105	67.7	119				
2,2,4-trimethylpentane	1.150	0.15	1	0	115	57	127				
4-ethyltoluene	1.050	0.15	1	0	106	67.9	131				

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
 Work Order: C2212031
 Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121722	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226516						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	1.090	0.30	1	0	109	47.6	146				
Allyl chloride	0.9200	0.15	1	0	92.0	56.1	116				
Benzene	1.170	0.15	1	0	117	66.2	126				
Benzyl chloride	0.8800	0.15	1	0	88.0	34.9	155				
Bromodichloromethane	1.050	0.15	1	0	105	69.6	133				
Bromoform	0.7600	0.15	1	0	76.0	44.1	152				
Bromomethane	1.140	0.15	1	0	114	64.9	155				
Carbon disulfide	1.010	0.15	1	0	101	64	111				
Carbon tetrachloride	1.070	0.030	1	0	107	41.3	166				
Chlorobenzene	1.120	0.15	1	0	112	66.3	129				
Chloroethane	1.150	0.15	1	0	115	62.7	148				
Chloroform	1.170	0.15	1	0	117	77.1	126				
Chloromethane	1.170	0.15	1	0	117	74.9	146				
cis-1,2-Dichloroethene	1.130	0.040	1	0	113	57.7	131				
cis-1,3-Dichloropropene	0.8800	0.15	1	0	88.0	57.4	136				
Cyclohexane	1.110	0.15	1	0	111	59.8	124				
Dibromochloromethane	0.8400	0.15	1	0	84.0	58.8	139				
Ethyl acetate	1.030	0.15	1	0	103	56.5	129				
Ethylbenzene	1.100	0.15	1	0	110	65.8	125				
Freon 11	1.230	0.15	1	0	123	75.5	146				
Freon 113	1.170	0.15	1	0	117	71.5	128				
Freon 114	1.210	0.15	1	0	121	71.3	151				
Freon 12	1.230	0.15	1	0	123	73	141				
Heptane	1.110	0.15	1	0	111	64.1	120				
Hexachloro-1,3-butadiene	1.100	0.15	1	0	110	67.9	135				
Hexane	1.110	0.15	1	0	111	57.3	125				
Isopropyl alcohol	0.9000	0.15	1	0	90.0	60.3	139				
m&p-Xylene	2.190	0.30	2	0	110	71	127				
Methyl Butyl Ketone	1.070	0.30	1	0	107	42.5	149				
Methyl Ethyl Ketone	1.090	0.30	1	0	109	56	131				
Methyl Isobutyl Ketone	1.090	0.30	1	0	109	50.8	133				

Qualifiers: H Results reported are not blank corrected
 R Holding times for preparation or analysis exceeded
 J Detection Limit
 S Spike Recovery outside accepted recovery limits
 E Estimated Value above quantitation range
 ND Not Detected at the Limit of Detection

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121722		SampType: LCS		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19809			
Client ID: ZZZZZ		Batch ID: R19809		TestNo: TO-15		Analysis Date: 12/17/2022						SeqNo: 226516	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Methyl tert-butyl ether	1.050	0.15	1	0	105	61.2	130						
Methylene chloride	1.080	0.15	1	0	108	58.2	125						
o-Xylene	1.110	0.15	1	0	111	72.4	129						
Propylene	1.110	0.15	1	0	111	45.7	127						
Styrene	1.060	0.15	1	0	106	67	132						
Tetrachloroethylene	1.140	0.15	1	0	114	65.6	133						
Tetrahydrofuran	1.040	0.15	1	0	104	54.4	120						
Toluene	1.100	0.15	1	0	110	62.5	128						
trans-1,2-Dichloroethene	1.100	0.15	1	0	110	63.6	126						
trans-1,3-Dichloropropene	0.7500	0.15	1	0	75.0	41	155						
Trichloroethene	1.140	0.030	1	0	114	54.2	140						
Vinyl acetate	0.9500	0.15	1	0	95.0	49	122						
Vinyl Bromide	1.170	0.15	1	0	117	65.8	150						
Vinyl chloride	1.100	0.040	1	0	110	62.7	146						

Qualifiers:		Results reported are not blank corrected		DL		Detection Limit		E		Estimated Value above quantitation range	
H		Holding times for preparation or analysis exceeded		J		Analyte detected below quantitation limit		ND		Not Detected at the Limit of Detection	
R		RPD outside accepted recovery limits		S		Spike Recovery outside accepted recovery limits					

Date: 09-Jan-23



ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121622		SampType: LCSD		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: ZZZZZ		Batch ID: R19808		TestNo: TO-15				Analysis Date: 12/17/2022		SeqNo: 226492	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.070	0.15	1	0	107	64.3	142	1.05	1.89	20.6	
1,1,2,2-Tetrachloroethane	1.170	0.15	1	0	117	57.4	134	1.12	4.37	24.7	
1,1,2-Trichloroethane	1.150	0.15	1	0	115	62.8	133	1.1	4.44	22.5	
1,1-Dichloroethane	1.160	0.15	1	0	116	64.1	123	1.14	1.74	15.9	
1,1-Dichloroethene	1.150	0.040	1	0	115	55	126	1.06	8.14	19.1	
1,2,4-Trichlorobenzene	0.9400	0.15	1	0	94.0	56.6	129	1.06	12.0	34.6	
1,2,4-Trimethylbenzene	1.060	0.15	1	0	100	62.6	127	1.02	1.98	20.4	
1,2-Dibromoethane	1.100	0.15	1	0	110	62.7	134	1.06	3.70	16.3	
1,2-Dichlorobenzene	1.050	0.15	1	0	105	62.3	144	1.06	0.948	25	
1,2-Dichloroethane	1.140	0.15	1	0	114	64.2	134	1.14	0	19.5	
1,2-Dichloropropane	1.160	0.15	1	0	116	55	132	1.15	0.866	24.1	
1,3,5-Trimethylbenzene	1.050	0.15	1	0	105	71.3	133	1.09	3.74	26.9	
1,3-butadiene	0.9560	0.15	1	0	95.0	54.8	148	0.94	1.06	26.4	
1,3-Dichlorobenzene	1.050	0.15	1	0	105	68.1	134	1.06	0.948	19.7	
1,4-Dichlorobenzene	1.040	0.15	1	0	104	67.7	138	1.06	1.90	21.6	
1,4-Dioxane	1.020	0.30	1	0	102	51	144	1.01	0.985	22	
2,2,4-trimethylpentane	1.150	0.15	1	0	115	57.6	125	1.14	0.873	15.7	
4-ethyltoluene	1.020	0.15	1	0	102	67	131	1.05	2.90	26.5	
Acetone	1.230	0.30	1	0	123	50.4	148	1.16	5.86	49.5	
Allyl chloride	0.9200	0.15	1	0	92.0	50.7	120	1.01	9.33	20	
Benzene	1.160	0.15	1	0	116	65.4	124	1.12	3.51	12.8	
Benzyl chloride	0.7800	0.15	1	0	78.0	29.1	153	0.51	41.9	29.3	R
Bromodichloromethane	1.030	0.15	1	0	103	60.4	136	1.02	0.976	24	
Bromoform	0.7200	0.15	1	0	72.0	30.8	160	0.78	8.00	23.7	
Bromomethane	1.160	0.15	1	0	116	55.8	153	1.1	5.31	22.7	

Qualifiers:	Results reported are not blank corrected	DJL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121622		SampType: LCSD		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: ZZZZZ		Batch ID: R19808		TestNo: TO-15		Analysis Date: 12/17/2022		SeqNo: 226492			
Analyte	Result	POI	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	1.020	0.15	1	0	102	63.4	110	1.02	0	15.4	
Carbon tetrachloride	1.040	0.030	1	0	104	30	170	1.03	0.966	22.3	
Chlorobenzene	1.106	0.15	1	0	110	66.5	126	1.08	1.83	13.1	
Chloroethane	1.220	0.15	1	0	122	55.3	145	1.13	7.66	22.4	
Chloroform	1.160	0.15	1	0	116	68.2	128	1.14	1.74	14.2	
Chloromethane	1.170	0.15	1	0	117	60.2	146	1.06	9.87	20.6	
cis-1,2-Dichloroethene	0.9300	0.040	1	0	93.0	51.8	131	0.96	3.17	15.8	
cis-1,3-Dichloropropene	0.8500	0.15	1	0	85.0	54.7	139	0.92	7.91	20.3	
Cyclohexane	1.130	0.15	1	0	113	61.2	122	1.11	1.79	16.3	
Dibromochloromethane	0.7800	0.15	1	0	78.0	47.8	145	0.82	5.00	20.1	
Ethyl acetate	1.040	0.15	1	0	104	52.8	129	1.06	1.90	18.4	
Ethylbenzene	1.080	0.15	1	0	108	64.5	126	1.08	0	14.4	
Freon 11	1.210	0.15	1	0	121	60.7	152	1.13	6.84	21.8	
Freon 113	1.170	0.15	1	0	117	67.8	129	1.13	3.48	14.3	
Freon 114	1.220	0.15	1	0	122	58.6	153	1.15	5.91	23.2	
Freon 12	1.220	0.15	1	0	122	65.6	143	1.16	5.04	19.7	
Heptane	1.100	0.15	1	0	110	59.4	123	1.13	2.69	21.5	
Hexachloro-1,3-butadiene	1.060	0.15	1	0	106	53	155	1.05	0.948	24.6	
Hexane	1.090	0.15	1	0	109	55.4	123	1.15	5.36	22.5	
Isopropyl alcohol	0.9900	0.15	1	0	99.0	56.6	147	1.03	3.96	49.3	
m&p-Xylene	2.120	0.30	2	0	106	70.3	127	2.13	0.471	17.5	
Methyl Butyl Ketone	1.050	0.30	1	0	105	55.1	123	1.07	1.89	25.7	
Methyl Ethyl Ketone	1.050	0.30	1	0	105	51.5	132	1.09	3.74	18.3	
Methyl Isobutyl Ketone	1.090	0.30	1	0	109	41.6	137	1.09	0	26.8	
Methyl tert-butyl ether	1.040	0.15	1	0	104	52	138	1.08	3.77	21.9	
Methylene chloride	1.110	0.15	1	0	111	55.9	129	1.08	2.74	18.5	
o-Xylene	1.080	0.15	1	0	108	71	130	1.07	0.930	22.2	
Propylene	1.140	0.15	1	0	114	49.2	128	1.14	0	26.8	
Styrene	1.040	0.15	1	0	104	67.9	131	1.04	0	23.3	
Tetrachloroethylene	1.110	0.15	1	0	111	66.2	132	1.06	4.61	13.9	
Tetrahydrofuran	1.050	0.15	1	0	105	47	124	1	4.88	20.2	

Qualifiers: H Results reported are not blank corrected
R Holding times for preparation or analysis exceeded
DL Detection Limit
J Analyte detected below quantitation limit
S Spike Recovery outside accepted recovery limits
E Estimated Value above quantitation range
ND Not Detected at the Limit of Detection

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121622		SampType: LCSD	TestCode: 0.20_NYS		Units: ppbV	Prep Date:		RunNo: 19808			
Client ID: ZZZZZ		Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/17/2022				SeqNo: 226492		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	1.070	0.15	1	0	107	62.6	126	1.07	0	17.2	
trans-1,2-Dichloroethene	1.080	0.15	1	0	108	60.2	125	1.1	1.83	16.8	
trans-1,3-Dichloropropene	0.7600	0.15	1	0	76.0	34.2	157	0.83	8.81	21.5	
Trichloroethene	1.100	0.030	1	0	110	57.8	133	1.08	1.83	21.8	
Vinyl acetate	0.9400	0.15	1	0	94.0	42.5	127	1.02	8.16	23	
Vinyl Bromide	1.170	0.15	1	0	117	55.1	148	1.09	7.08	22	
Vinyl chloride	1.150	0.040	1	0	115	51.9	146	1.12	2.64	22	

Sample ID: ALCS1UGD-121722	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/18/2022	SeqNo: 226517						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.150	0.15	1	0	115	64.3	142	1.11	3.54	20.6	
1,1,2,2-Tetrachloroethane	1.230	0.15	1	0	123	57.4	134	1.19	3.31	24.7	
1,1,2-Trichloroethane	1.220	0.15	1	0	122	62.8	133	1.17	4.18	22.5	
1,1-Dichloroethane	1.170	0.15	1	0	117	64.1	123	1.14	2.60	15.9	
1,1-Dichloroethene	1.200	0.040	1	0	120	55	126	1.13	6.01	19.1	
1,2,4-Trichlorobenzene	0.9200	0.15	1	0	92.0	56.6	129	1.04	12.2	34.6	
1,2,4-Trimethylbenzene	1.010	0.15	1	0	101	62.6	127	1.02	0.985	20.4	
1,2-Dibromoethane	1.170	0.15	1	0	117	62.7	134	1.12	4.37	16.3	
1,2-Dichlorobenzene	1.070	0.15	1	0	107	62.3	144	1.1	2.76	25	
1,2-Dichloroethane	1.210	0.15	1	0	121	64.2	134	1.16	4.22	19.5	
1,2-Dichloropropane	1.250	0.15	1	0	125	55	132	1.18	5.76	24.1	
1,3,5-Trimethylbenzene	1.120	0.15	1	0	112	71.3	133	1.1	1.80	26.9	
1,3-butadiene	0.9400	0.15	1	0	94.0	54.8	148	0.95	1.06	26.4	
1,3-Dichlorobenzene	1.090	0.15	1	0	109	68.1	134	1.09	0	19.7	
1,4-Dichlorobenzene	1.040	0.15	1	0	104	67.7	138	1.11	6.51	21.6	
1,4-Dioxane	1.030	0.30	1	0	103	51	144	1.05	1.92	22	
2,2,4-trimethylpentane	1.180	0.15	1	0	118	57.6	125	1.15	2.58	15.7	
4-ethyltoluene	1.070	0.15	1	0	107	67	131	1.06	0.939	26.5	

Qualifiers:	H	R	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
			Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
			RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121722		Sample Type: LCSD	TestCode: 0.20_NYS		Units: ppbV	Prep Date:		RunNo: 19809			
Client ID: ZZZZZ		Batch ID: R19809	TestNo: TO-15			Analysis Date: 12/18/2022		SeqNo: 226517			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	1.280	0.30	1	0	128	50.4	148	1.09	16.0	49.5	
Allyl chloride	0.9700	0.15	1	0	97.0	50.7	120	0.92	5.29	20	
Benzene	1.230	0.15	1	0	123	65.4	124	1.17	5.00	12.8	
Benzyl chloride	0.7700	0.15	1	0	77.0	29.1	153	0.88	13.3	29.3	
Bromodichloromethane	1.140	0.15	1	0	114	60.4	138	1.05	8.22	24	
Bromoform	0.8500	0.15	1	0	85.0	30.8	160	0.76	11.2	23.7	
Bromomethane	1.210	0.15	1	0	121	55.8	153	1.14	5.96	22.7	
Carbon disulfide	1.020	0.15	1	0	102	63.4	110	1.01	0.985	15.4	
Carbon tetrachloride	1.140	0.030	1	0	114	30	170	1.07	6.33	22.3	
Chlorobenzene	1.140	0.15	1	0	114	66.5	126	1.12	1.77	13.1	
Chloroethane	1.180	0.15	1	0	118	55.3	145	1.15	2.58	22.4	
Chloroform	1.200	0.15	1	0	120	68.2	128	1.17	2.53	14.2	
Chloromethane	1.180	0.15	1	0	118	60.2	146	1.17	0.851	20.6	
cis-1,2-Dichloroethene	1.200	0.040	1	0	120	51.8	131	1.13	6.01	15.8	
cis-1,3-Dichloropropene	0.8900	0.15	1	0	89.0	54.7	139	0.88	1.13	20.3	
Cyclohexane	1.130	0.15	1	0	113	61.2	122	1.11	1.79	16.3	
Dibromochloromethane	0.8900	0.15	1	0	89.0	47.8	145	0.84	5.78	20.1	
Ethyl acetate	1.030	0.15	1	0	103	52.8	129	1.03	0	18.4	
Ethylbenzene	1.110	0.15	1	0	111	64.5	126	1.1	0.905	14.4	
Freon 11	1.180	0.15	1	0	118	60.7	152	1.23	4.15	21.8	
Freon 113	1.250	0.15	1	0	125	67.8	129	1.17	6.61	14.3	
Freon 114	1.240	0.15	1	0	124	58.6	153	1.21	2.45	23.2	
Freon 12	1.290	0.15	1	0	129	65.6	143	1.23	4.76	19.7	
Heptane	1.140	0.15	1	0	114	59.4	123	1.11	2.67	21.5	
Hexachloro-1,3-butadiene	1.140	0.15	1	0	114	53	155	1.1	3.57	24.6	
Hexane	1.090	0.15	1	0	109	55.4	123	1.11	1.82	22.5	
Isopropyl alcohol	1.190	0.15	1	0	119	56.6	147	0.9	27.8	49.3	
m,p-Xylene	2.230	0.30	2	0	112	70.3	127	2.19	1.81	17.5	
Methyl Butyl Ketone	1.050	0.30	1	0	105	55.1	123	1.07	1.89	25.7	
Methyl Ethyl Ketone	1.060	0.30	1	0	106	51.5	132	1.09	2.79	18.3	
Methyl Isobutyl Ketone	1.110	0.30	1	0	111	41.6	137	1.09	1.82	26.8	

Qualifiers:		Results reported are not blank corrected		DL		Detection Limit		E		Estimated Value above quantitation range	
H	R	Holding times for preparation or analysis exceeded	RPD outside accepted recovery limits	J	S	Analyte detected below quantitation limit	Spike Recovery outside accepted recovery limits	ND	Not Detected at the Limit of Detection		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121722		SampType: LCSD		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19809			
Client ID: ZZZZZ		Batch ID: R19809		TestNo: TO-15		Analysis Date: 12/18/2022						SeqNo: 226517	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Methyl tert-butyl ether	1.030	0.15	1	0	103	52	138	1.05	1.92	21.9			
Methylene chloride	1.140	0.15	1	0	114	55.9	129	1.08	5.41	18.5			
o-Xylene	1.140	0.15	1	0	114	71	130	1.11	2.67	22.2			
Propylene	1.100	0.15	1	0	110	49.2	128	1.11	0.905	26.8			
Styrene	1.070	0.15	1	0	107	67.9	131	1.06	0.939	23.3			
Tetrachloroethylene	1.170	0.15	1	0	117	66.2	132	1.14	2.60	13.9			
Tetrahydrofuran	1.040	0.15	1	0	104	47	124	1.04	0	20.2			
Toluene	1.110	0.15	1	0	111	62.6	126	1.1	0.905	17.2			
trans-1,2-Dichloroethene	1.130	0.15	1	0	113	60.2	125	1.1	2.69	16.8			
trans-1,3-Dichloropropene	0.7700	0.15	1	0	77.0	34.2	157	0.75	2.63	21.5			
Trichloroethene	1.180	0.030	1	0	118	57.8	133	1.14	3.45	21.8			
Vinyl acetate	0.8900	0.15	1	0	89.0	42.5	127	0.95	6.52	23			
Vinyl Bromide	1.200	0.15	1	0	120	55.1	148	1.17	2.53	22			
Vinyl chloride	1.180	0.040	1	0	118	51.9	146	1.1	7.02	22			

Qualifiers:		Results reported are not blank corrected		DL		Detection Limit		E		Estimated Value above quantitation range	
H		Holding times for preparation or analysis exceeded		J		Analyte detected below quantitation limit		ND		Not Detected at the Limit of Detection	
R		RPD outside accepted recovery limits		S		Spike Recovery outside accepted recovery limits					

Date: 09-Jan-23



ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS		SampType: MS		TestCode: 1ugM3_TO15		Units: ppbv		Prep Date:		RunNo: 19808	
Client ID: SVW-1 MS/MSD		Batch ID: R19808		TestNo: TO-15				Analysis Date: 12/16/2022		SeqNo: 226513	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.050	0.15	1	0	105	68.1	117				S
1,1,2,2-Tetrachloroethane	1.070	0.15	1	0	107	82.3	101				
1,1,2-Trichloroethane	1.070	0.15	1	0	107	61	128				
1,1,1-Dichloroethane	1.110	0.15	1	0	111	76.5	118				S
1,1-Dichloroethene	1.080	0.15	1	0	108	45.8	128				
1,2,4-Trichlorobenzene	1.110	0.15	1	0	111	70	262				
1,2,4-Trimethylbenzene	0.9900	0.15	1	0	99.0	81.5	155				S
1,2-Dibromoethane	1.040	0.15	1	0	104	78.7	107				
1,2-Dichlorobenzene	1.050	0.15	1	0	105	57.2	175				
1,2-Dichloroethane	1.120	0.15	1	0	112	65.1	130				S
1,2-Dichloropropane	1.110	0.15	1	0	111	69.9	116				
1,3,5-Trimethylbenzene	1.010	0.15	1	0	101	67.6	139				
1,3-butadiene	1.180	0.15	1	0	118	70	130				S
1,3-Dichlorobenzene	1.030	0.15	1	0	103	89.1	122				
1,4-Dichlorobenzene	1.040	0.15	1	0	104	86.8	114				
1,4-Dioxane	1.000	0.30	1	0	100	75.1	114				S
2,2,4-trimethylpentane	1.140	0.15	1	0	114	84.2	113				
4-ethyltoluene	0.9900	0.15	1	0	99.0	70	130				
Acetone	2.120	0.30	1	1.49	53.0	70	130				S
Allyl chloride	0.9200	0.15	1	0	92.0	49.7	155				
Benzene	1.170	0.15	1	0	117	72.7	133				
Benzyl chloride	0.7400	0.15	1	0	74.0	72.5	129				S
Bromodichloromethane	0.9900	0.15	1	0	99.0	69.4	112				
Bromoform	0.7100	0.15	1	0	71.0	42.5	110				
Bromomethane	1.150	0.15	1	0	115	68.6	121				

Qualifiers:	H	R	Results reported are not blank corrected	Holding times for preparation or analysis exceeded	RPD outside accepted recovery limits	DI	Detection Limit	J	Analyte detected below quantitation limit	S	Spike Recovery outside accepted recovery limits	E	Estimated Value above quantitation range	ND	Not Detected at the Limit of Detection

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS		SampType: MS		TestCode: 1ugM3_TO15		Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: SVW-1 MS/MSD		Batch ID: R19808		TestNo: TO-15				Analysis Date: 12/16/2022		SeqNo: 225513	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	1.050	0.15	1	0	105	20.1	143				
Carbon tetrachloride	1.210	0.15	1	0.23	98.0	61	107				
Chlorobenzene	1.040	0.15	1	0	104	76.1	111				
Chloroethane	1.270	0.15	1	0	127	62.6	119				S
Chloroform	1.430	0.15	1	0.35	108	6.54	173				
Chloromethane	1.140	0.15	1	0	114	54.4	125				
cis-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	60.1	121				
cis-1,3-Dichloropropene	0.8600	0.15	1	0	86.0	60.8	122				
Cyclohexane	1.070	0.15	1	0	107	59.4	148				
Dibromochloromethane	0.7600	0.15	1	0	76.0	71.6	102				
Ethyl acetate	1.160	0.15	1	0.15	101	70	130				
Ethylbenzene	1.050	0.15	1	0	105	68.5	129				
Freon 11	2.220	0.15	1	1.32	90.0	70	130				
Freon 113	1.180	0.15	1	0	118	80.3	125				
Freon 114	1.230	0.15	1	0	123	65.2	132				
Freon 12	1.800	0.15	1	0.84	96.0	67.4	103				
Heptane	1.110	0.15	1	0	111	80.8	124				
Hexachloro-1,3-butadiene	1.040	0.15	1	0	104	81.9	119				
Hexane	1.150	0.15	1	0	115	73.7	147				
Isopropyl alcohol	1.240	0.15	1	0	124	70	130				
m,p-Xylene	2.070	0.30	2	0	104	74.2	123				
Methyl Butyl Ketone	1.050	0.30	1	0	105	72.6	117				
Methyl Ethyl Ketone	1.390	0.30	1	0.26	113	59.4	135				
Methyl Isobutyl Ketone	1.020	0.30	1	0	102	61	120				
Methyl tert-butyl ether	0.9700	0.15	1	0	97.0	63.6	134				
Methylene chloride	1.420	0.15	1	0.25	117	53.4	125				
o-Xylene	1.030	0.15	1	0	103	74.3	132				
Propylene	1.590	0.15	1	0	159	70	130				S
Styrene	1.000	0.15	1	0	100	82.4	118				
Tetrachloroethylene	1.130	0.15	1	0.11	102	86.2	112				
Tetrahydrofuran	1.080	0.15	1	0	108	70	130				

Qualifiers:		Results reported are not blank corrected		DL		Detection limit		E		Estimated Value above quantitation range	
H	R	Holding times for preparation or analysis exceeded	R	J	S	Analyte detected below quantitation limit	S	ND	Not Detected at the Limit of Detection		
		RPD outside accepted recovery limits				Spike Recovery outside accepted recovery limits					

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS		SampType: MS	TestCode: 1ugM3_TO15		Units: ppbV	Prep Date:		RunNo: 19808			
Client ID: SVW-1 MS/MSD		Batch ID: R19808	TestNo: TO-15			Analysis Date: 12/16/2022		SeqNo: 226513			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	1.270	0.15	1	0.27	100	70	130				
trans-1,2-Dichloroethene	1.140	0.15	1	0	114	70.9	132				
trans-1,3-Dichloropropene	0.7800	0.15	1	0	78.0	51.9	133				
Trichloroethene	1.090	0.15	1	0	109	63.1	109				S
Vinyl acetate	1.000	0.15	1	0	100	70	130				
Vinyl Bromide	1.120	0.15	1	0	112	71.3	121				
Vinyl chloride	1.120	0.15	1	0	112	63.2	114				

Sample ID: C2212031-001A MS		SampType: MSD	TestCode: 1ugM3_TO15		Units: ppbV	Prep Date:		RunNo: 19808			
Client ID: SVW-1 MS/MSD		Batch ID: R19808	TestNo: TO-15			Analysis Date: 12/16/2022		SeqNo: 226514			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.050	0.15	1	0	105	68.1	117	1.05	0	0	
1,1,2,2-Tetrachloroethane	1.130	0.15	1	0	113	82.3	101	1.07	5.45	0	S
1,1,2-Trichloroethane	1.100	0.15	1	0	110	61	128	1.07	2.76	0	
1,1-Dichloroethane	1.140	0.15	1	0	114	76.5	118	1.11	2.67	0	
1,1-Dichloroethene	1.090	0.15	1	0	109	45.8	128	1.08	0.922	0	
1,2,4-Trichlorobenzene	1.090	0.15	1	0	109	70	130	1.11	1.82	0	
1,2,4-Trimethylbenzene	1.020	0.15	1	0	102	81.5	155	0.99	2.99	0	
1,2-Dibromoethane	1.040	0.15	1	0	104	78.7	107	1.04	0	0	
1,2-Dichlorobenzene	1.080	0.15	1	0	108	57.2	175	1.05	2.82	0	
1,2-Dichloroethane	1.130	0.15	1	0	113	65.1	130	1.12	0.889	0	
1,2-Dichloropropane	1.120	0.15	1	0	112	69.9	116	1.11	0.897	0	
1,3,5-Trimethylbenzene	1.040	0.15	1	0	104	67.6	139	1.01	2.93	0	
1,3-butadiene	1.130	0.15	1	0	113	70	130	1.18	4.33	0	
1,3-Dichlorobenzene	1.070	0.15	1	0	107	89.1	122	1.03	3.81	0	
1,4-Dichlorobenzene	1.090	0.15	1	0	109	86.8	114	1.04	4.69	0	
1,4-Dioxane	1.030	0.30	1	0	103	75.1	114	1	2.96	0	
2,2,4-trimethylpentane	1.130	0.15	1	0	113	84.2	113	1.14	0.881	0	
4-ethyltoluene	1.030	0.15	1	0	103	70	130	0.99	3.96	0	

Qualifiers:	H	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
	R	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
		RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS		SampleType: MSD	TestCode: 1ugM3_TO15		Units: ppbV	Prep Date:		RunNo: 19808			
Client ID: SVW-1 MS/MSD		Batch ID: R19808	TestNo: TO-15			Analysis Date: 12/16/2022		SeqNo: 226514			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	1.750	0.30	1	1.49	26.0	70	130	2.12	19.1	0	S
Allyl chloride	0.9300	0.15	1	0	93.0	49.7	155	0.92	1.08	0	
Benzene	1.140	0.15	1	0	114	72.7	133	1.17	2.60	0	
Benzyl chloride	0.4900	0.15	1	0	49.0	72.5	129	0.74	40.7	0	S
Bromodichloromethane	1.000	0.15	1	0	100	69.4	112	0.99	1.01	0	
Bromoform	0.7300	0.15	1	0	73.0	42.5	110	0.71	2.78	0	
Bromomethane	1.100	0.15	1	0	110	68.6	121	1.15	4.44	0	
Carbon disulfide	1.040	0.15	1	0	104	70	143	1.05	0.957	0	
Carbon tetrachloride	1.120	0.15	1	0.23	89.0	61	107	1.21	7.73	0	
Chlorobenzene	1.050	0.15	1	0	105	76.1	111	1.04	0.957	0	
Chloroethane	1.080	0.15	1	0	108	62.6	119	1.27	16.2	0	
Chloroform	1.280	0.15	1	0.35	93.0	70	130	1.43	11.1	0	
Chloromethane	1.030	0.15	1	0	103	54.4	125	1.14	10.1	0	
cis-1,2-Dichloroethene	0.9300	0.15	1	0	93.0	60.1	121	0.98	5.24	0	
cis-1,3-Dichloropropene	0.8700	0.15	1	0	87.0	60.8	122	0.86	1.16	0	
Cyclohexane	1.080	0.15	1	0	108	59.4	148	1.07	0.930	0	
Dibromochloromethane	0.8000	0.15	1	0	80.0	71.6	102	0.76	5.13	0	
Ethyl acetate	1.150	0.15	1	0.15	100	49.3	146	1.16	0.866	0	
Ethylbenzene	1.060	0.15	1	0	106	68.5	129	1.05	0.948	0	
Freon 11	1.720	0.15	1	1.32	40.0	44.8	143	2.22	25.4	0	S
Freon 113	1.140	0.15	1	0	114	80.3	125	1.18	3.45	0	
Freon 114	1.140	0.15	1	0	114	65.2	132	1.23	7.59	0	
Freon 12	1.510	0.15	1	0.84	67.0	67.4	103	1.8	17.5	0	S
Heptane	1.090	0.15	1	0	109	80.8	124	1.11	1.82	0	
Hexachloro-1,3-butadiene	1.040	0.15	1	0	104	81.9	119	1.04	0	0	
Hexane	1.100	0.15	1	0	110	73.7	147	1.15	4.44	0	
Isopropyl alcohol	1.110	0.15	1	0	111	70	130	1.24	11.1	0	
m&p-Xylene	2.100	0.30	2	0	105	74.2	123	2.07	1.44	0	
Methyl Butyl Ketone	1.090	0.30	1	0	109	72.6	117	1.05	3.74	0	
Methyl Ethyl Ketone	1.370	0.30	1	0.26	111	59.4	135	1.39	1.45	0	
Methyl Isobutyl Ketone	1.070	0.30	1	0	107	61	120	1.02	4.78	0	

Qualifiers:		Results reported are not blank corrected		DL		Detection Limit		E		Estimated Value above quantitation range	
H	R	Holding times for preparation or analysis exceeded	RPD outside accepted recovery limits	J	S	Analyte detected below quantitation limit	Spike Recovery outside accepted recovery limits	ND	Not Detected at the Limit of Detection		

CLIENT: SOIL MECHANICS
 Work Order: C2212031
 Project: IKEA Red Hook

TestCode: IugM3_TO15

Sample ID: C2212031-001A MS	SampType: MSD	TestCode: 1ugM3_TO15	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: SVW-1 MS/MSD	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	1.050	0.15	1	0	105	63.6	134	0.97	7.92	0	
Methylene chloride	1.390	0.15	1	0.25	114	53.4	125	1.42	2.14	0	
o-Xylene	1.050	0.15	1	0	105	74.3	132	1.03	1.92	0	
Propylene	1.340	0.15	1	0	134	70	130	1.59	17.1	0	S
Styrene	1.030	0.15	1	0	103	82.4	118	1	2.96	0	
Tetrachloroethylene	1.080	0.15	1	0.11	97.0	86.2	112	1.13	4.52	0	
Tetrahydrofuran	1.050	0.15	1	0	105	70	130	1.08	2.82	0	
Toluene	1.180	0.15	1	0.27	91.0	70	130	1.27	7.35	0	
trans-1,2-Dichloroethene	0.9000	0.15	1	0	90.0	70.9	132	1.14	23.5	0	
trans-1,3-Dichloropropene	0.7900	0.15	1	0	79.0	51.9	133	0.78	1.27	0	
Trichloroethene	1.090	0.15	1	0	109	63.1	109	1.09	0	0	S
Vinyl acetate	1.020	0.15	1	0	102	70	130	1	1.98	0	
Vinyl Bromide	1.110	0.15	1	0	111	71.3	121	1.12	0.897	0	
Vinyl chloride	1.100	0.15	1	0	110	63.2	114	1.12	1.80	0	

Qualifiers:		Results reported are not blank corrected		DL		Detection Limit		E		Estimated Value above quantitation range	
H		Holding times for preparation or analysis exceeded		J		Analyte detected below quantitation limit		ND		Not Detected at the Limit of Detection	
R		RPD outside accepted recovery limits		S		Spike Recovery outside accepted recovery limits					

Compound	Amt	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	AVG	StdDev	%Rec	IDL
Propylene	0.3	0.31	0.32	0.3	0.35	0.35	0.33	0.32	0.33	0.02	108.6%	0.060
Freon 12	0.3	0.3	0.33	0.3	0.34	0.34	0.35	0.35	0.33	0.02	110.0%	0.068
Chloromethane	0.3	0.33	0.35	0.3	0.36	0.36	0.35	0.37	0.35	0.02	115.2%	0.075
Freon 114	0.3	0.3	0.34	0.31	0.34	0.36	0.35	0.36	0.34	0.02	112.4%	0.074
Vinyl Chloride	0.3	0.31	0.35	0.31	0.34	0.36	0.35	0.35	0.34	0.02	112.9%	0.064
Butane	0.3	0.31	0.34	0.31	0.33	0.33	0.38	0.38	0.34	0.03	113.3%	0.093
1,3-butadiene	0.3	0.32	0.34	0.32	0.35	0.37	0.36	0.39	0.35	0.03	116.7%	0.081
Bromomethane	0.3	0.35	0.35	0.35	0.34	0.36	0.37	0.37	0.36	0.01	118.6%	0.036
Chloroethane	0.3	0.32	0.37	0.34	0.34	0.4	0.34	0.37	0.35	0.03	118.1%	0.085
Ethanol	0.3	0.36	0.41	0.37	0.34	0.39	0.33	0.38	0.37	0.03	122.9%	0.088
Acrolein	0.3	0.33	0.37	0.29	0.33	0.38	0.37	0.39	0.35	0.04	117.1%	0.112
Vinyl Bromide	0.3	0.3	0.33	0.32	0.35	0.35	0.35	0.37	0.34	0.02	112.9%	0.074
Freon 11	0.3	0.3	0.34	0.3	0.34	0.39	0.37	0.39	0.35	0.04	115.7%	0.120
Acetone	0.3	0.28	0.34	0.25	0.35	0.33	0.38	0.33	0.32	0.04	107.6%	0.138
Pentane	0.3	0.23	0.32	0.3	0.32	0.33	0.33	0.35	0.31	0.04	103.8%	0.122
Isopropyl alcohol	0.3	0.27	0.3	0.26	0.34	0.36	0.33	0.36	0.32	0.04	105.7%	0.129
1,1-dichloroethene	0.3	0.29	0.29	0.28	0.3	0.3	0.29	0.3	0.29	0.01	97.6%	0.024
Freon 113	0.3	0.3	0.32	0.29	0.33	0.33	0.32	0.34	0.32	0.02	106.2%	0.056
t-Butyl alcohol	0.3	0.31	0.29	0.32	0.34	0.35	0.35	0.37	0.33	0.03	111.0%	0.086
Methylene chloride	0.3	0.31	0.33	0.33	0.33	0.34	0.36	0.36	0.34	0.02	112.4%	0.057
Allyl chloride	0.3	0.29	0.34	0.32	0.31	0.36	0.34	0.33	0.33	0.02	109.0%	0.072
Carbon disulfide	0.3	0.33	0.35	0.33	0.35	0.35	0.36	0.37	0.35	0.01	116.2%	0.046
trans-1,2-dichloroethene	0.3	0.3	0.3	0.3	0.33	0.33	0.31	0.33	0.31	0.02	104.8%	0.048
methyl tert-butyl ether	0.3	0.31	0.31	0.31	0.34	0.35	0.34	0.36	0.33	0.02	110.5%	0.066
1,1-dichloroethane	0.3	0.3	0.33	0.3	0.34	0.34	0.33	0.35	0.33	0.02	109.0%	0.062
Vinyl acetate	0.3	0.28	0.3	0.3	0.33	0.33	0.32	0.34	0.31	0.02	104.8%	0.068
Methyl Ethyl Ketone	0.3	0.3	0.29	0.29	0.33	0.31	0.29	0.33	0.31	0.02	101.9%	0.057
cis-1,2-dichloroethene	0.3	0.28	0.3	0.29	0.31	0.31	0.3	0.32	0.30	0.01	100.5%	0.042
Hexane	0.3	0.27	0.29	0.3	0.3	0.28	0.3	0.31	0.29	0.01	97.6%	0.043
Ethyl acetate	0.3	0.3	0.3	0.32	0.33	0.34	0.33	0.34	0.32	0.02	107.6%	0.054
Chloroform	0.3	0.3	0.32	0.31	0.33	0.34	0.34	0.35	0.33	0.02	109.0%	0.057
Tetrahydrofuran	0.3	0.3	0.31	0.27	0.31	0.31	0.31	0.33	0.31	0.02	101.9%	0.057
1,2-dichloroethane	0.3	0.31	0.33	0.3	0.34	0.34	0.34	0.35	0.33	0.02	110.0%	0.057
1,1,1-trichloroethane	0.3	0.32	0.32	0.31	0.4	0.38	0.41	0.41	0.36	0.05	121.4%	0.144
Cyclohexane	0.3	0.27	0.29	0.28	0.31	0.3	0.31	0.31	0.30	0.02	98.6%	0.051
Carbon tetrachloride	0.3	0.29	0.31	0.29	0.38	0.38	0.4	0.42	0.35	0.05	117.6%	0.172
Benzene	0.3	0.3	0.3	0.3	0.33	0.32	0.31	0.32	0.31	0.01	103.8%	0.038
Methyl methacrylate	0.3	0.3	0.29	0.3	0.32	0.33	0.33	0.33	0.31	0.02	104.8%	0.054
1,4-dioxane	0.3	0.29	0.32	0.33	0.31	0.32	0.32	0.31	0.31	0.01	104.8%	0.040

Centek Laboratories IDL Study		1ug/m3 Detection Limit JULY 2021							Method TO-15 Units=ppb			
Compound	Amt	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	AVG	StdDev	%Rec	IDL
2,2,4-trimethylpentane	0.3	0.29	0.31	0.29	0.33	0.31	0.32	0.32	0.31	0.02	103.3%	0.048
Heptane	0.3	0.29	0.31	0.29	0.31	0.31	0.31	0.31	0.30	0.01	101.4%	0.031
Trichloroethene	0.3	0.26	0.27	0.25	0.29	0.28	0.3	0.3	0.28	0.02	92.9%	0.061
1,2-dichloropropane	0.3	0.32	0.32	0.3	0.34	0.34	0.35	0.35	0.33	0.02	110.5%	0.059
Bromodichloromethane	0.3	0.31	0.32	0.3	0.37	0.35	0.37	0.37	0.34	0.03	113.8%	0.097
cis-1,3-dichloropropene	0.3	0.29	0.31	0.31	0.36	0.34	0.37	0.38	0.34	0.03	112.4%	0.108
trans-1,3-dichloropropene	0.3	0.31	0.29	0.3	0.4	0.39	0.43	0.42	0.36	0.06	121.0%	0.190
1,1,2-trichloroethane	0.3	0.3	0.32	0.32	0.34	0.34	0.35	0.34	0.33	0.02	110.0%	0.054
Toluene	0.3	0.3	0.3	0.3	0.3	0.3	0.32	0.31	0.30	0.01	101.4%	0.025
Methyl Isobutyl Ketone	0.3	0.31	0.3	0.3	0.32	0.3	0.31	0.32	0.31	0.01	102.9%	0.028
Dibromochloromethane	0.3	0.31	0.31	0.31	0.36	0.35	0.37	0.37	0.34	0.03	113.3%	0.091
Methyl Butyl Ketone	0.3	0.3	0.27	0.28	0.3	0.29	0.3	0.31	0.29	0.01	97.6%	0.043
1,2-dibromoethane	0.3	0.31	0.31	0.29	0.35	0.35	0.36	0.35	0.33	0.03	110.5%	0.086
Tetrachloroethylene	0.3	0.3	0.31	0.3	0.32	0.32	0.32	0.33	0.31	0.01	104.8%	0.036
Chlorobenzene	0.3	0.29	0.31	0.29	0.33	0.32	0.34	0.33	0.32	0.02	105.2%	0.062
Ethylbenzene	0.3	0.28	0.3	0.28	0.3	0.3	0.3	0.31	0.30	0.01	98.6%	0.036
m&p-xylene	0.6	0.56	0.59	0.56	0.61	0.61	0.61	0.6	0.59	0.02	98.6%	0.071
Nonane	0.3	0.27	0.28	0.28	0.29	0.3	0.31	0.29	0.29	0.01	96.2%	0.042
Styrene	0.3	0.28	0.31	0.27	0.31	0.3	0.31	0.31	0.30	0.02	99.5%	0.053
Bromoform	0.3	0.3	0.31	0.3	0.37	0.36	0.38	0.38	0.34	0.04	114.3%	0.119
o-xylene	0.3	0.28	0.31	0.28	0.31	0.32	0.32	0.33	0.31	0.02	102.4%	0.062
Cumene	0.3	0.28	0.29	0.28	0.3	0.3	0.3	0.3	0.29	0.01	97.6%	0.030
Bromofluorobenzene	1	0.99	1.02	0.98	1.01	1	1.02	1.03	1.01	0.02	100.7%	0.057
1,1,2,2-tetrachloroethane	0.3	0.3	0.32	0.3	0.33	0.32	0.34	0.34	0.32	0.02	107.1%	0.053
Propylbenzene	0.3	0.27	0.28	0.26	0.3	0.29	0.28	0.3	0.28	0.01	94.3%	0.047
2-Chlorotoluene	0.3	0.29	0.3	0.27	0.31	0.32	0.32	0.32	0.30	0.02	101.4%	0.060
4-ethyltoluene	0.3	0.28	0.29	0.27	0.3	0.3	0.31	0.3	0.29	0.01	97.6%	0.043
1,3,5-trimethylbenzene	0.3	0.28	0.31	0.27	0.31	0.31	0.32	0.32	0.30	0.02	101.0%	0.062
1,2,4-trimethylbenzene	0.3	0.28	0.29	0.28	0.29	0.29	0.3	0.31	0.29	0.01	97.1%	0.034
1,3-dichlorobenzene	0.3	0.28	0.3	0.29	0.31	0.3	0.31	0.31	0.30	0.01	100.0%	0.036
benzyl chloride	0.3	0.28	0.29	0.29	0.34	0.35	0.39	0.38	0.33	0.05	110.5%	0.142
1,4-dichlorobenzene	0.3	0.28	0.29	0.28	0.31	0.3	0.31	0.31	0.30	0.01	99.0%	0.043
1,2,3-trimethylbenzene	0.3	0.28	0.29	0.28	0.3	0.29	0.3	0.3	0.29	0.01	97.1%	0.028
1,2-dichlorobenzene	0.3	0.28	0.28	0.28	0.31	0.3	0.31	0.31	0.30	0.02	98.6%	0.048
1,2,4-trichlorobenzene	0.3	0.25	0.28	0.25	0.27	0.27	0.27	0.26	0.26	0.01	88.1%	0.036
Naphthalene	0.3	0.23	0.26	0.24	0.25	0.26	0.27	0.27	0.25	0.02	84.8%	0.048
Hexachloro-1,3-butadiene	0.3	0.29	0.31	0.28	0.33	0.32	0.33	0.33	0.31	0.02	104.3%	0.065

Centek Laboratories
IDL Study0.04ug/m3 Detection Limit
JULY 2021Method TO-15
Units=ppb

Compound	Amt	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	AVG	StdDev	%Rec	IDL
Vinyl Chloride	0.15	0.17	0.18	0.18	0.15	0.16	0.16	0.17	0.17	0.01	111.4%	0.035
1,1-dichloroethene	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.17	0.01	115.2%	0.035
cis-1,2-dichloroethene	0.15	0.21	0.22	0.22	0.22	0.22	0.23	0.22	0.22	0.01	146.7%	0.018
Carbon tetrachloride	0.15	0.11	0.11	0.11	0.09	0.09	0.09	0.09	0.10	0.01	65.7%	0.034
Trichloroethene	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.18	0.16	0.01	108.6%	0.024
Tetrachloroethylene	0.15	0.16	0.16	0.16	0.15	0.14	0.15	0.15	0.15	0.01	101.9%	0.024
Naphthalene	0.15	0.13	0.13	0.13	0.16	0.19	0.17	0.17	0.15	0.02	102.9%	0.077

Confidential

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GC/MS-Whole Air Calculations

Relative Response Factor (RRF)

$$RRF = \frac{A_x * C_{is}}{A_{is} * C_x}$$

where: A_x = area of the characteristic ion for the compound being measured
 A_{is} = area of the characteristic ion for the specific internal standard of the compound being measured
 C_x = concentration of the compound being measured (ppbv)
 C_{is} = concentration of the internal standard (ppbv)

Percent Relative Standard Deviation (%RSD)

$$\% RSD = \frac{\text{Standard deviation of RRF values} * 100}{\text{mean RRF}}$$

Percent Difference (%D)

$$\% D = \frac{(RRF_c - \text{mean } RRF_i) * 100}{\text{mean } RRF_i}$$

where: RRF_c = relative response factor from the continuing calibration
 $\text{mean } RRF_i$ = mean relative response factor from the initial calibration

Sample Calculations

$$ppbv = \frac{A_x * I_s * D_f}{A_{is} * RRF}$$

where: A_x = area of the characteristic ion for the compound being measured
 A_{is} = area of the characteristic ion for the specific internal standard of the compound being measured
 I_s = Concentration of the internal standard injected (ppbv)
 RRF = relative response factor for the compound being measured
 D_f = Dilution factor

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

SAMPLE DATA

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC				Analyst: RJP
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Acetone	1.5	0.30		ppbV	1	12/16/2022 4:05:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Carbon tetrachloride	0.23	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloroform	0.35	0.15		ppbV	1	12/16/2022 4:05:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 1 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Ethyl acetate	0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 11	1.3	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Freon 12	0.84	0.15		ppbV	1	12/16/2022 4:05:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Hexane	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl Ethyl Ketone	0.26	0.30	J	ppbV	1	12/16/2022 4:05:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 4:05:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Methylene chloride	0.25	0.15		ppbV	1	12/16/2022 4:05:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/16/2022 4:05:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Toluene	0.27	0.15		ppbV	1	12/16/2022 4:05:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 4:05:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 4:05:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jun-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 4:05:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 4:05:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 4:05:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 4:05:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 4:05:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 4:05:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 4:05:00 PM
Acetone	3.5	0.71		ug/m3	1	12/16/2022 4:05:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 4:05:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 4:05:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 4:05:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 4:05:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 4:05:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 4:05:00 PM
Carbon tetrachloride	1.4	0.94		ug/m3	1	12/16/2022 4:05:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 4:05:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 4:05:00 PM
Chloroform	1.7	0.73		ug/m3	1	12/16/2022 4:05:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 4:05:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 4:05:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 4:05:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 4:05:00 PM
Ethyl acetate	0.54	0.54		ug/m3	1	12/16/2022 4:05:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 4:05:00 PM
Freon 11	7.4	0.84		ug/m3	1	12/16/2022 4:05:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 4:05:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 4:05:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 1 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-1 MS/MSD

Lab Order: C2212031

Tag Number: 1201,1149

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-001A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	4.2	0.74		ug/m3	1	12/16/2022 4:05:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 4:05:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 4:05:00 PM
Hexane	< 0.53	0.53		ug/m3	1	12/16/2022 4:05:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 4:05:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 4:05:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
Methyl Ethyl Ketone	0.77	0.88	J	ug/m3	1	12/16/2022 4:05:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 4:05:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 4:05:00 PM
Methylene chloride	0.87	0.52		ug/m3	1	12/16/2022 4:05:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 4:05:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 4:05:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 4:05:00 PM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/16/2022 4:05:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 4:05:00 PM
Toluene	1.0	0.57		ug/m3	1	12/16/2022 4:05:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 4:05:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 4:05:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 4:05:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 4:05:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

Page 2 of 40

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121608.D
 Acq On : 16 Dec 2022 4:05 pm
 Operator : RJP
 Sample : C2212031-001A
 Misc : AD12_1UG
 ALS Vial : 8 Sample Multiplier: 1

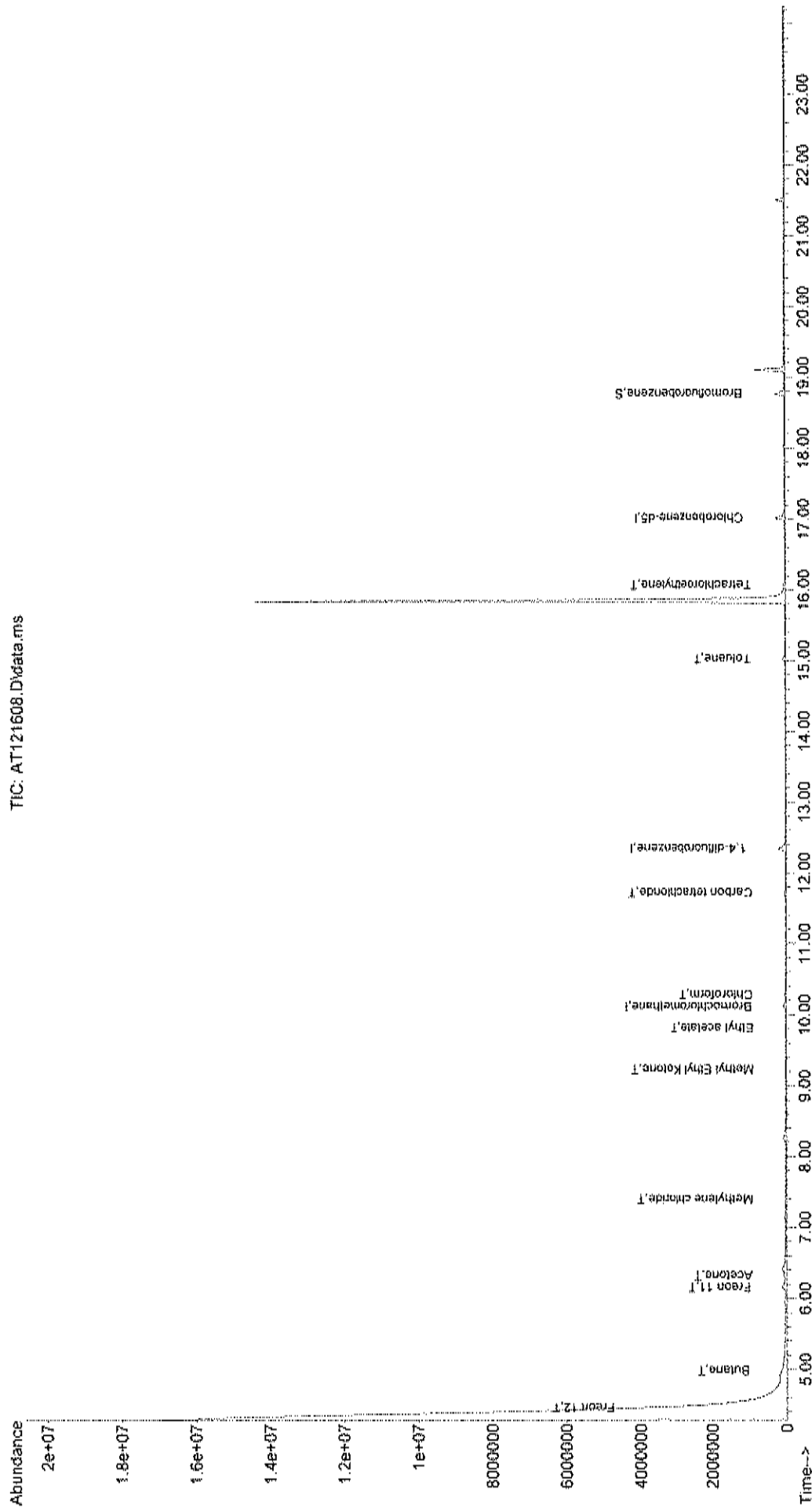
Quant Time: Dec 17 08:40:30 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

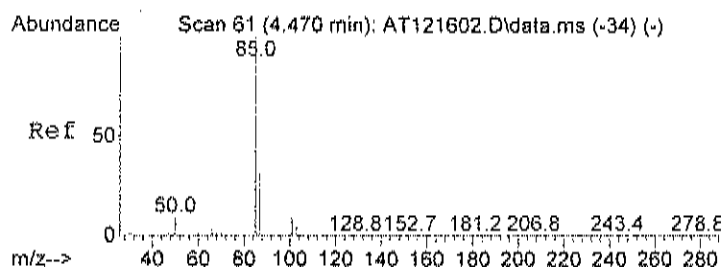
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.117	128	52263	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.347	114	316389	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	254602	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	163107	0.95	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	95.00%
Target Compounds						
3) Freon 12	4.464	85	147350	0.84	ppb	Qvalue 97
7) Butane	4.986	43	55577m	0.84	ppb	
14) Freon 11	6.157	101	192278m	1.32	ppb	
15) Acetone	6.322	58	40830	1.49	ppb	95
21) Methylene chloride	7.397	84	17782	0.25	ppb	97
28) Methyl Ethyl Ketone	9.231	72	11134m	0.26	ppb	
31) Ethyl acetate	9.813	43	32750	0.15	ppb	88
32) Chloroform	10.282	83	56368	0.35	ppb	98
38) Carbon tetrachloride	11.720	117	31721	0.23	ppb	93
51) Toluene	15.028	92	55481	0.27	ppb	98
56) Tetrachloroethylene	16.072	164	14028	0.11	ppb	90

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121608.D
Acq On : 16 Dec 2022 4:05 pm
Operator : RJP
Sample : C2212031-001A
Misc : AD12_1UG
ALS Vial : 8 Sample Multiplier: 1

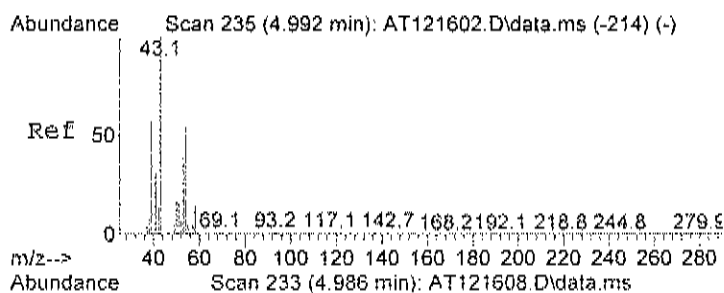
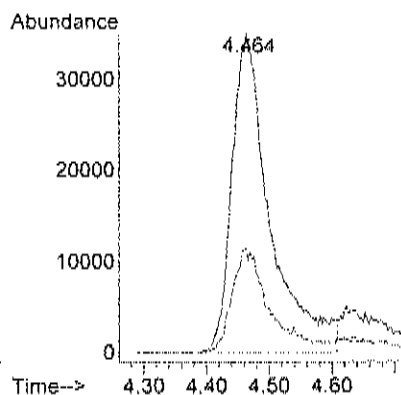
Quant Time: Dec 17 08:40:30 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





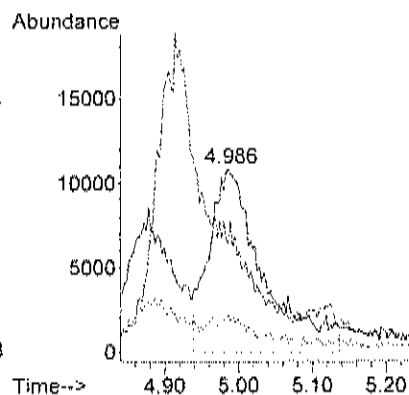
#3
Freon 12
Concen: 0.84 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

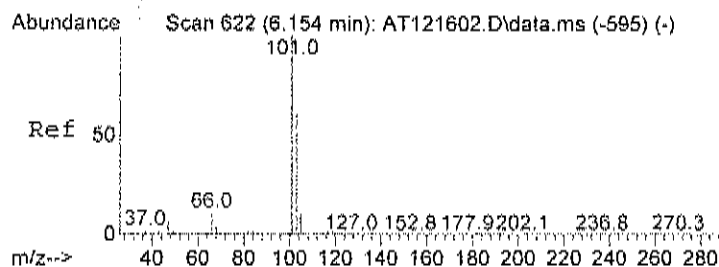
Tgt Ion:	85	Resp:	147350
Ion	Ratio	Lower	Upper
85	100		
87	32.6	14.3	54.3



#7
Butane
Concen: 0.84 ppb m
RT: 4.986 min Scan# 233
Delta R.T. -0.006 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

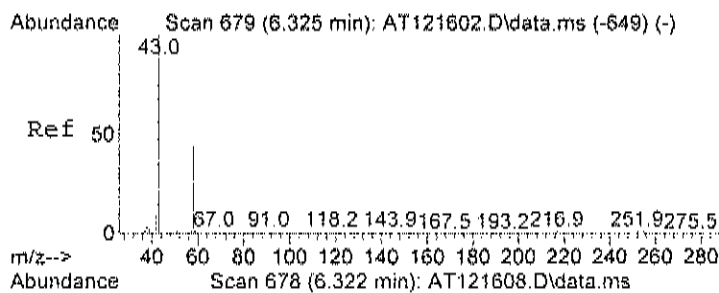
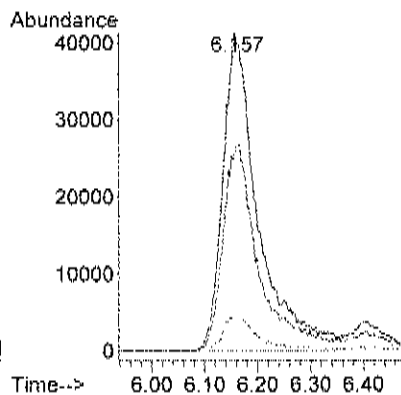
Tgt Ion:	43	Resp:	55577
Ion	Ratio	Lower	Upper
43	100		
41	0.0	27.2	50.4#
42	0.0	8.5	15.9#





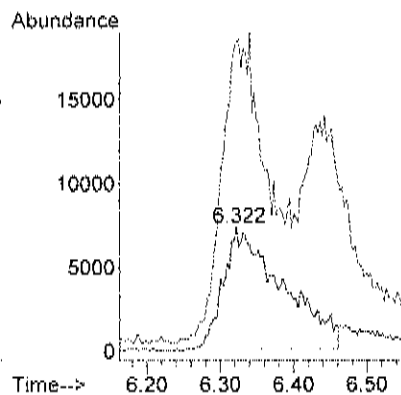
#14
Freon 11
Concen: 1.32 ppb m
RT: 6.157 min Scan# 623
Delta R.T. -0.009 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

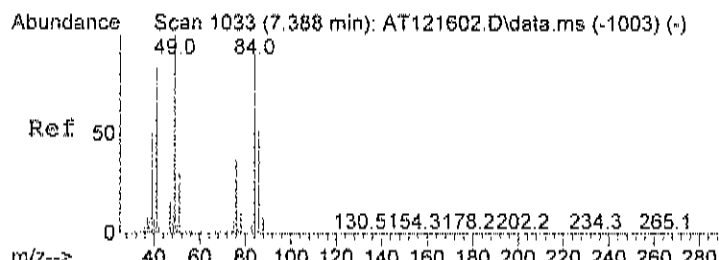
Tgt Ion	Ratio	Lower	Upper
101	100		
103	0.0	44.1	84.1#
105	0.0	0.0	32.0



#15
Acetone
Concen: 1.49 ppb
RT: 6.322 min Scan# 678
Delta R.T. -0.006 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

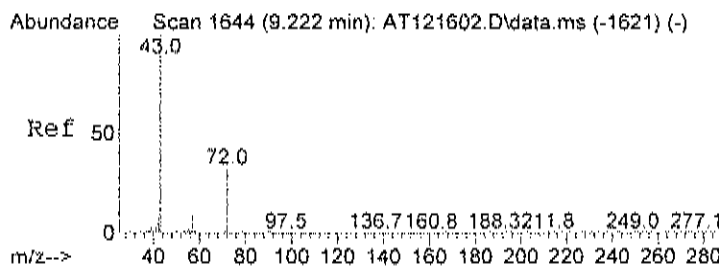
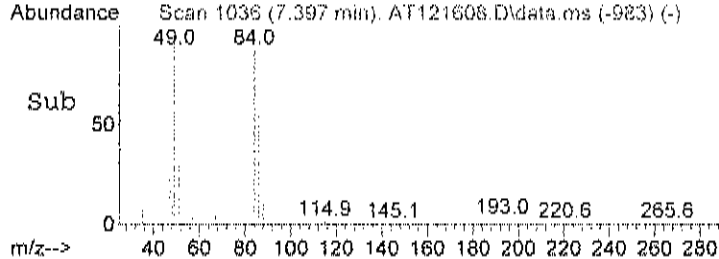
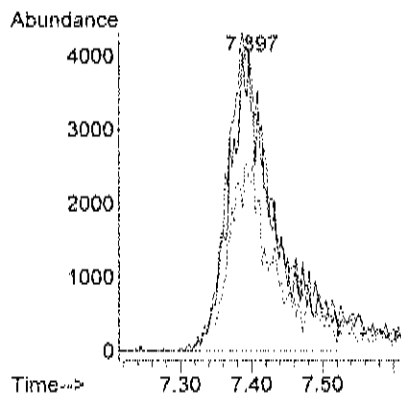
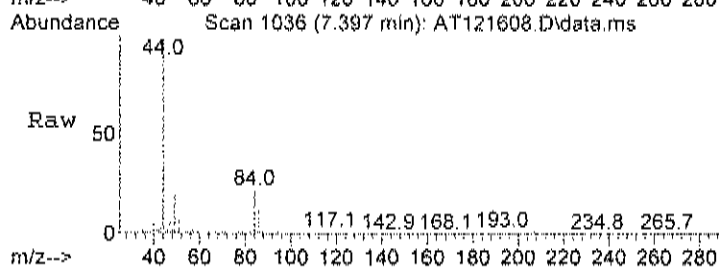
Tgt Ion	Ratio	Lower	Upper
58	100		
43	292.7	272.3	332.3





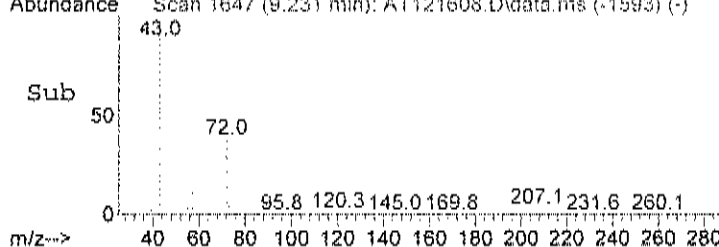
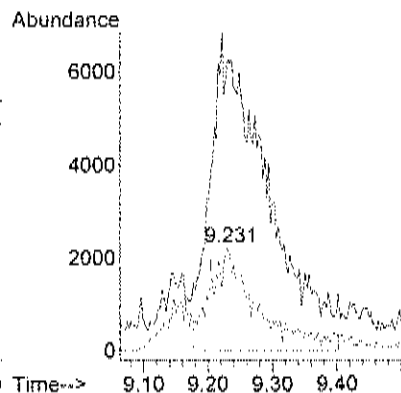
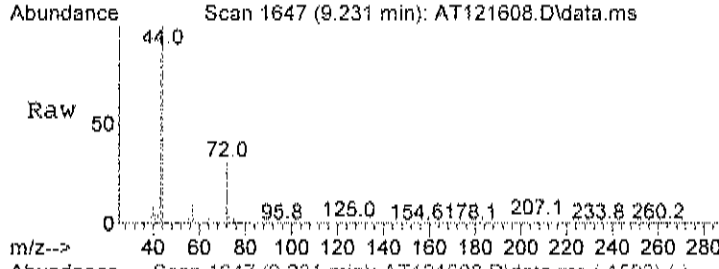
#21
Methylene chloride
Concen: 0.25 ppb
RT: 7.397 min Scan# 1036
Delta R.T. 0.009 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

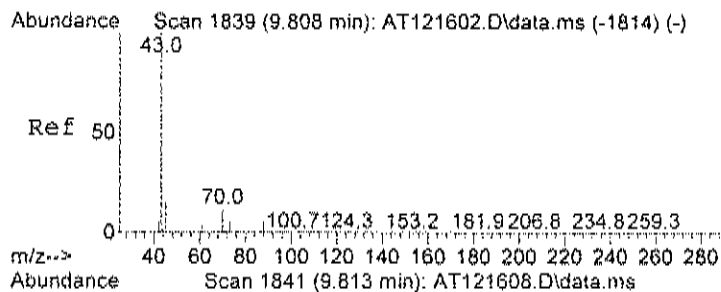
Tgt Ion	84	Resp	17782
Ion	Ratio	Lower	Upper
84	100		
49	108.3	84.2	124.2
86	63.7	42.9	82.9



#28
Methyl Ethyl Ketone
Concen: 0.26 ppb m
RT: 9.231 min Scan# 1647
Delta R.T. 0.012 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

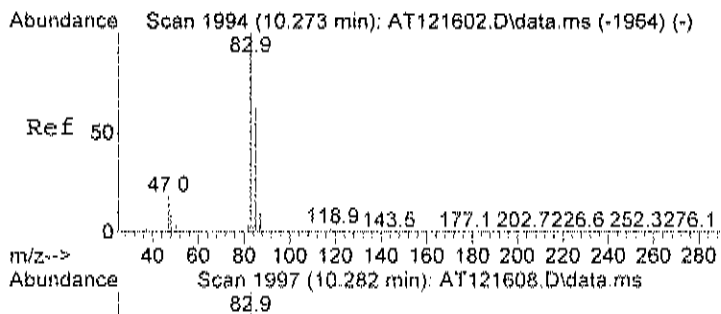
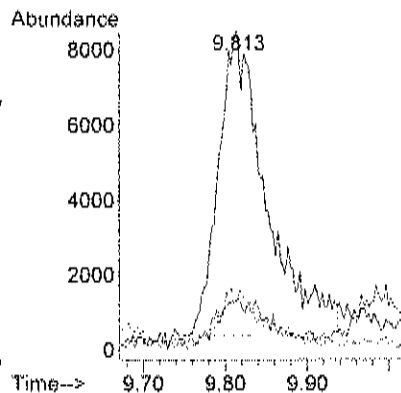
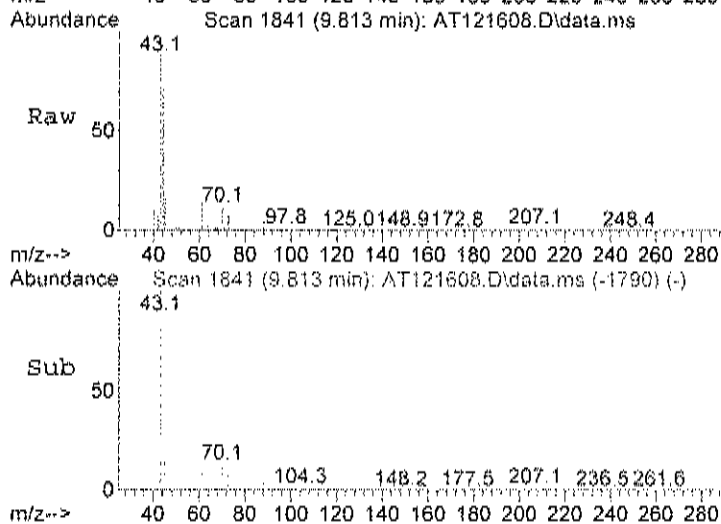
Tgt Ion	72	Resp	11134
Ion	Ratio	Lower	Upper
72	100		
43	293.4	333.7	373.7#
72	116.2	80.0	120.0





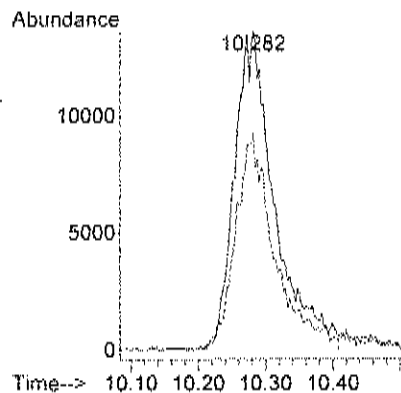
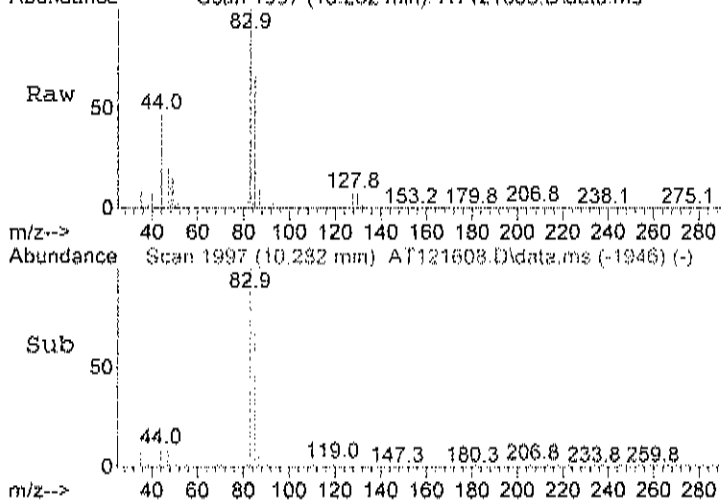
#31
Ethyl acetate
Concen: 0.15 ppb
RT: 9.813 min Scan# 1841
Delta R.T. 0.003 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

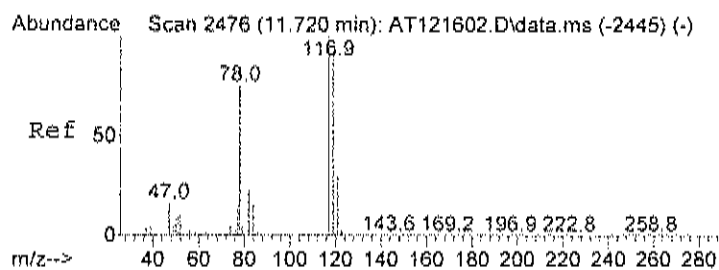
Tgt Ion:	43	Resp:	32750
Ion	Ratio	Lower	Upper
43	100		
45	16.9	0.0	32.9
61	18.8	0.0	33.0



#32
Chloroform
Concen: 0.35 ppb
RT: 10.282 min Scan# 1997
Delta R.T. 0.003 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

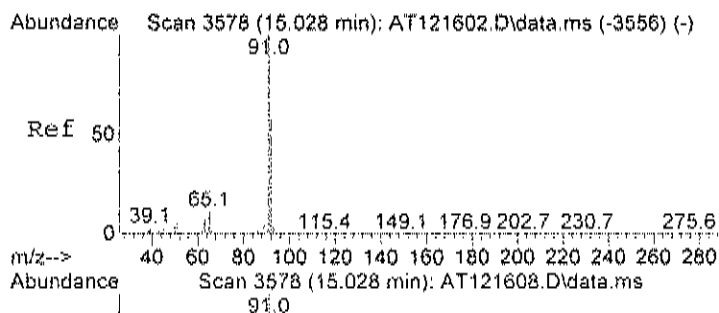
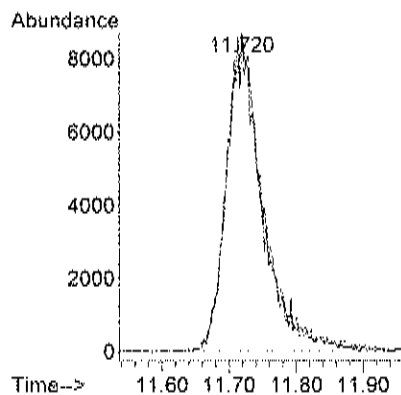
Tgt Ion:	83	Resp:	56368
Ion	Ratio	Lower	Upper
83	100		
85	64.8	46.4	86.4





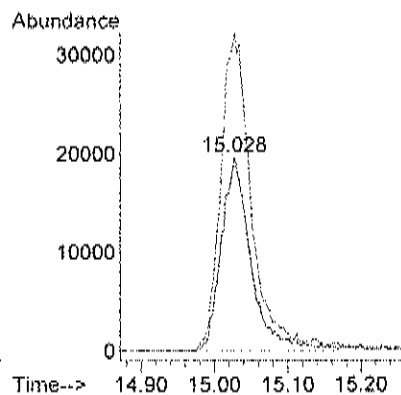
#38
Carbon tetrachloride
Concen: 0.23 ppb
RT: 11.720 min Scan# 2476
Delta R.T. -0.003 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

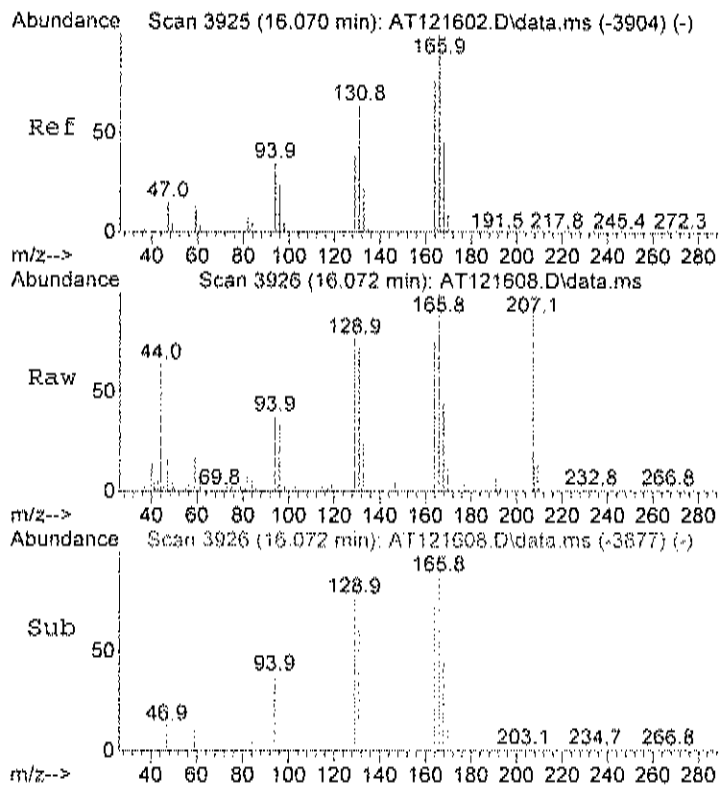
Tgt Ion	Ratio	Lower	Upper
117	100		
119	101.1	74.2	114.2



#51
Toluene
Concen: 0.27 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

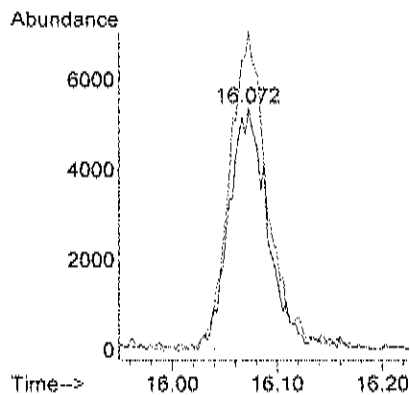
Tgt Ion	Ratio	Lower	Upper
92	100		
91	170.3	153.3	193.3





#56
Tetrachloroethylene
Concen: 0.11 ppb
RT: 16.072 min Scan# 3926
Delta R.T. -0.003 min
Lab File: AT121608.D
Acq: 16 Dec 2022 4:05 pm

Tgt Ion	164	Resp	14028
Ion Ratio	Lower	Upper	
164	100		
166	128.4	97.2	137.2



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
2,2,4-trimethylpentane	0.10	0.15	J	ppbV	1	12/16/2022 7:28:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Acetone	6.0	1.5		ppbV	5	12/17/2022 2:05:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Benzene	0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Carbon tetrachloride	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Chloroform	0.11	0.15	J	ppbV	1	12/16/2022 7:28:00 PM
Chloromethane	0.19	0.15		ppbV	1	12/16/2022 7:28:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 11	0.47	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Freon 12	0.50	0.15		ppbV	1	12/16/2022 7:28:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Hexane	0.21	0.15		ppbV	1	12/16/2022 7:28:00 PM
Isopropyl alcohol	0.21	0.15		ppbV	1	12/16/2022 7:28:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Ethyl Ketone	0.91	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 7:28:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Methylene chloride	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Tetrachloroethylene	0.18	0.15		ppbV	1	12/16/2022 7:28:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Toluene	0.33	0.15		ppbV	1	12/16/2022 7:28:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 7:28:00 PM
Surr: Bromofluorobenzene	92.0	46.7-129		%REC	1	12/16/2022 7:28:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jun-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 7:28:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 7:28:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 7:28:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 7:28:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 7:28:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
2,2,4-trimethylpentane	0.47	0.70	J	ug/m3	1	12/16/2022 7:28:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 7:28:00 PM
Acetone	14	3.6		ug/m3	5	12/17/2022 2:05:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 7:28:00 PM
Benzene	0.48	0.48		ug/m3	1	12/16/2022 7:28:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 7:28:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 7:28:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 7:28:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 7:28:00 PM
Carbon tetrachloride	1.1	0.94		ug/m3	1	12/16/2022 7:28:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 7:28:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 7:28:00 PM
Chloroform	0.54	0.73	J	ug/m3	1	12/16/2022 7:28:00 PM
Chloromethane	0.39	0.31		ug/m3	1	12/16/2022 7:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 7:28:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 7:28:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 7:28:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 7:28:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 7:28:00 PM
Freon 11	2.6	0.84		ug/m3	1	12/16/2022 7:28:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 7:28:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 7:28:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-2

Lab Order: C2212031

Tag Number: 465,1165

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-002A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.5	0.74		ug/m3	1	12/16/2022 7:28:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 7:28:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 7:28:00 PM
Hexane	0.74	0.53		ug/m3	1	12/16/2022 7:28:00 PM
Isopropyl alcohol	0.52	0.37		ug/m3	1	12/16/2022 7:28:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Ethyl Ketone	2.7	0.88		ug/m3	1	12/16/2022 7:28:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 7:28:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 7:28:00 PM
Methylene chloride	0.63	0.52		ug/m3	1	12/16/2022 7:28:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 7:28:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 7:28:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 7:28:00 PM
Tetrachloroethylene	1.2	1.0		ug/m3	1	12/16/2022 7:28:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 7:28:00 PM
Toluene	1.2	0.57		ug/m3	1	12/16/2022 7:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 7:28:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 7:28:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 7:28:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 7:28:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121611.D
 Acq On : 16 Dec 2022 7:28 pm
 Operator : RJP
 Sample : C2212031-002A
 Misc : AD12_1UG
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 17 08:40:36 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

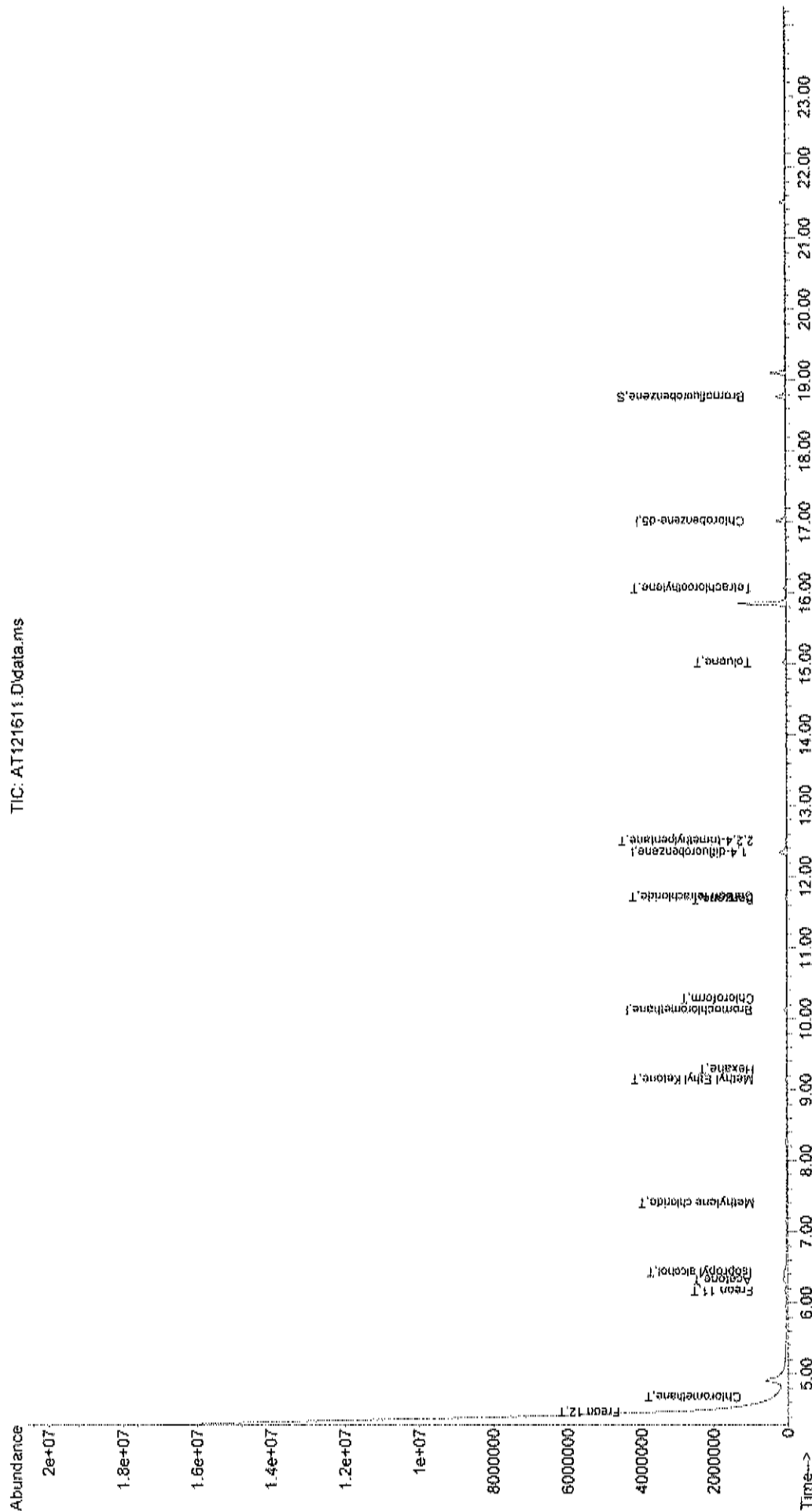
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

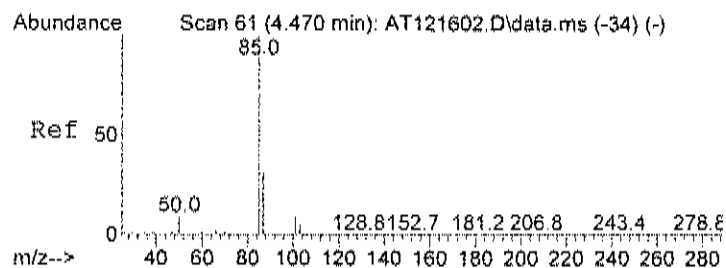
Internal Standards						
1) Bromochloromethane	10.126	128	50081	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	313081	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	250013	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	154858	0.92	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	92.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	83325	0.50	ppb	97
4) Chloromethane	4.680	50	10349	0.19	ppb	88
14) Freon 11	6.169	101	65828	0.47	ppb	98
15) Acetone	6.325	58	72164m	2.75	ppb	
17) Isopropyl alcohol	6.430	45	17192	0.21	ppb	# 1
21) Methylene chloride	7.403	84	12218	0.18	ppb	91
28) Methyl Ethyl Ketone	9.147	72	37662	0.91	ppb	# 1
30) Hexane	9.288	57	30541	0.21	ppb	# 34
32) Chloroform	10.285	83	17323	0.11	ppb	92
38) Carbon tetrachloride	11.717	117	24419m	0.18	ppb	
39) Benzene	11.684	78	42880	0.15	ppb	93
42) 2,2,4-trimethylpentane	12.506	57	44502	0.10	ppb	75
51) Toluene	15.025	92	66763	0.33	ppb	98
56) Tetrachloroethylene	16.069	164	22663	0.18	ppb	92

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121611.D
 Acq On : 16 Dec 2022 7:28 pm
 Operator : RJP
 Sample : C2212031-002A
 Misc : AD12_1UG
 ALS Vial : 11 Sample Multiplier: 1

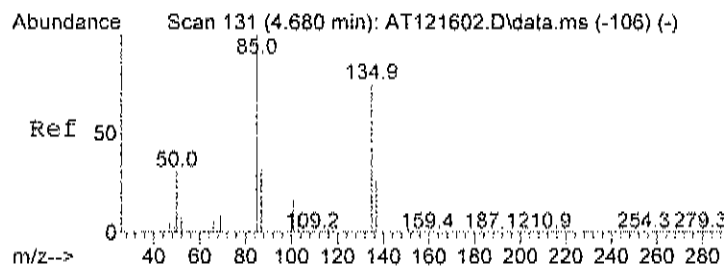
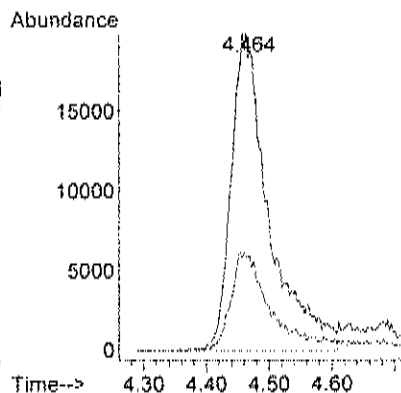
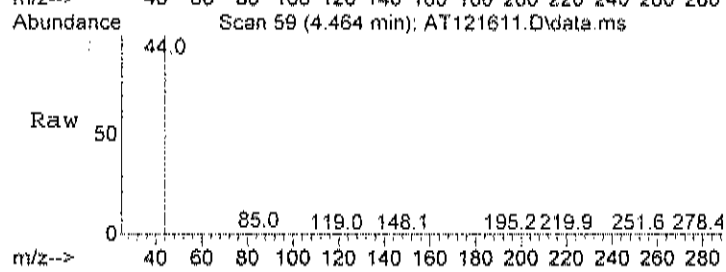
Quant Time: Dec 17 08:40:36 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 Qlast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





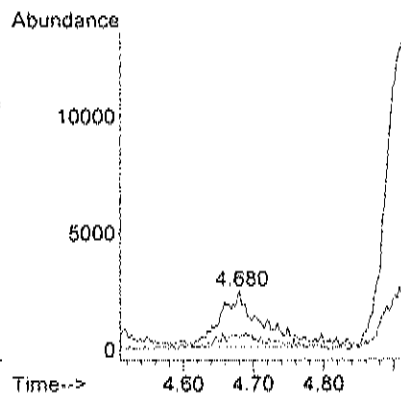
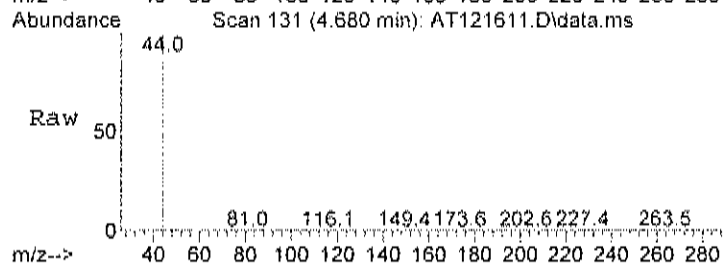
#3
Freon 12
Concen: 0.50 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

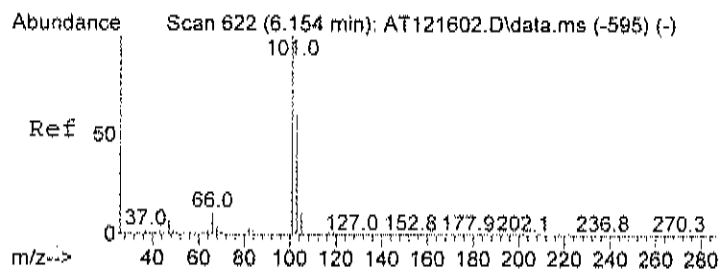
Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.6	14.3	54.3



#4
Chloromethane
Concen: 0.19 ppb
RT: 4.680 min Scan# 131
Delta R.T. -0.003 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

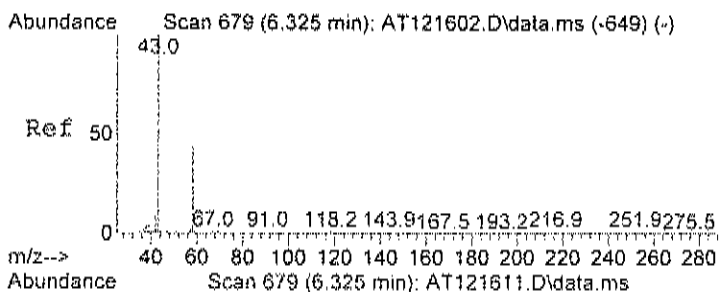
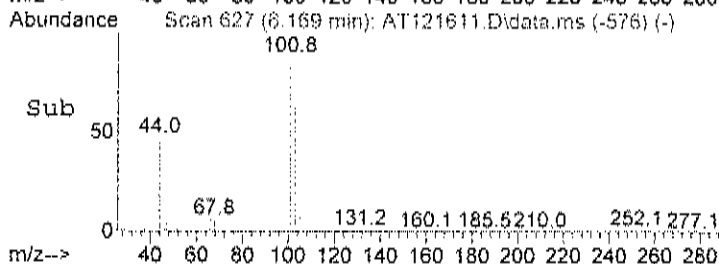
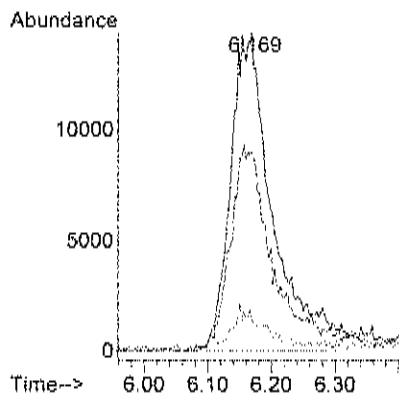
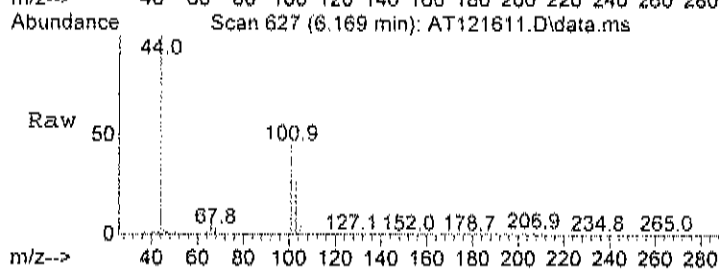
Tgt Ion	Ratio	Lower	Upper
50	100		
52	31.2	5.4	45.4





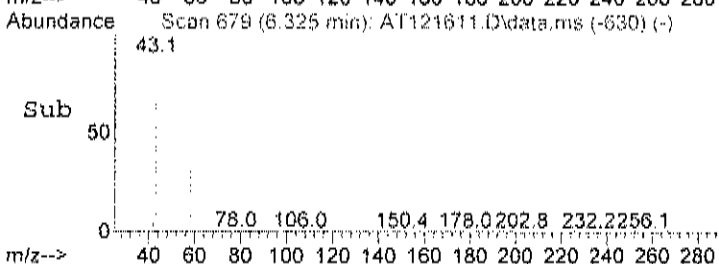
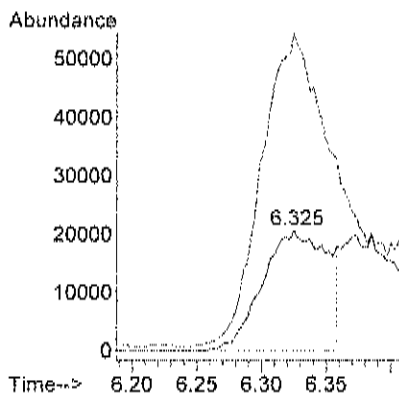
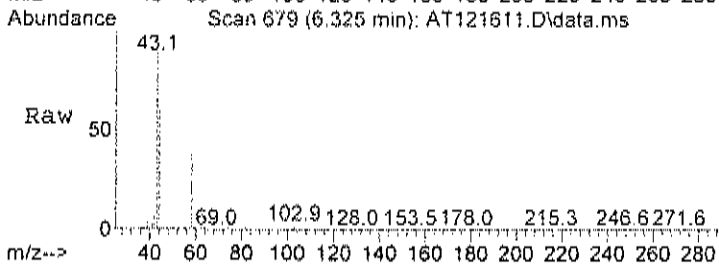
#14
Freon 11
Concen: 0.47 ppb
RT: 6.169 min Scan# 627
Delta R.T. 0.003 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

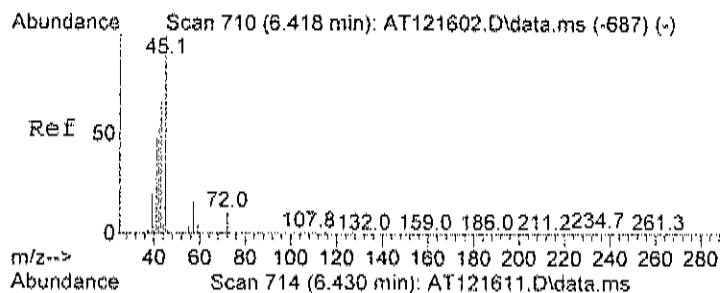
Tgt Ion	101	Resp	65828
Ion	Ratio	Lower	Upper
101	100		
103	62.6	44.1	84.1
105	10.3	0.0	32.0



#15
Acetone
Concen: 2.75 ppb m
RT: 6.325 min Scan# 679
Delta R.T. -0.003 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

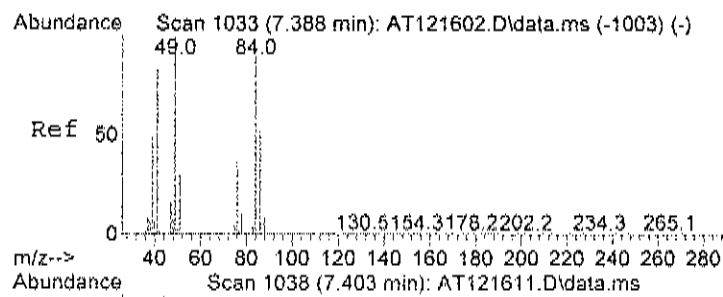
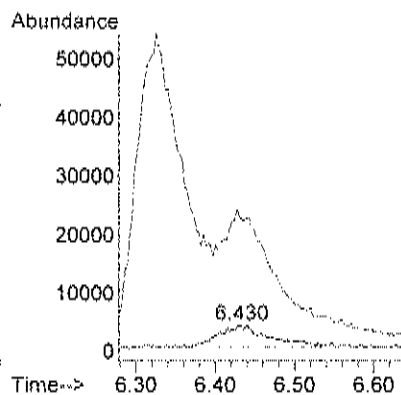
Tgt Ion	58	Resp	72164
Ion	Ratio	Lower	Upper
58	100		
43	430.0	272.3	332.3#





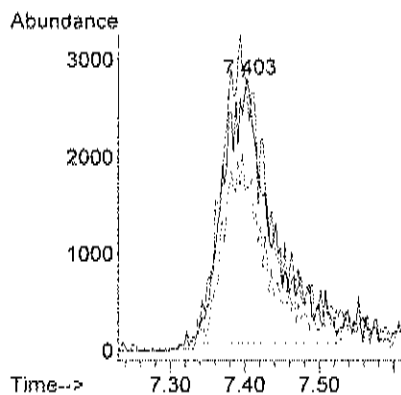
#17
Isopropyl alcohol
Concen: 0.21 ppb
RT: 6.430 min Scan# 714
Delta R.T. 0.012 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

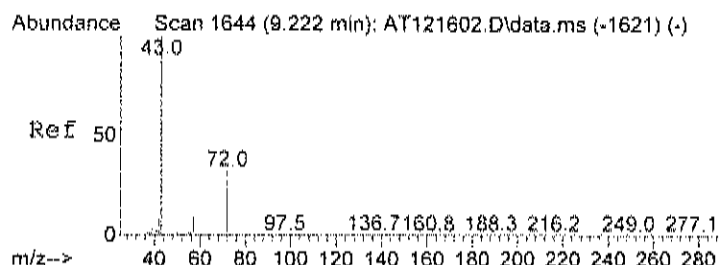
Tgt Ion: 45	Resp: 17192
Ion Ratio	Lower Upper
45 100	
43 0.0	91.9 131.9#



#21
Methylene chloride
Concen: 0.18 ppb
RT: 7.403 min Scan# 1038
Delta R.T. 0.015 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

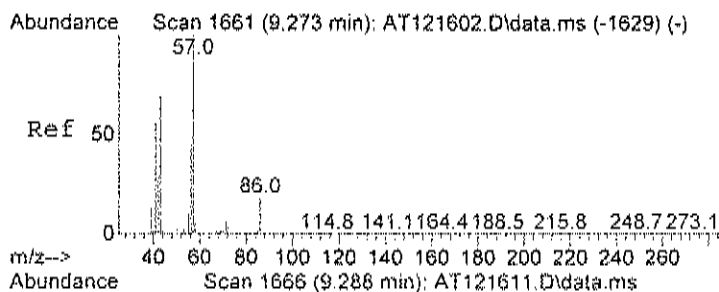
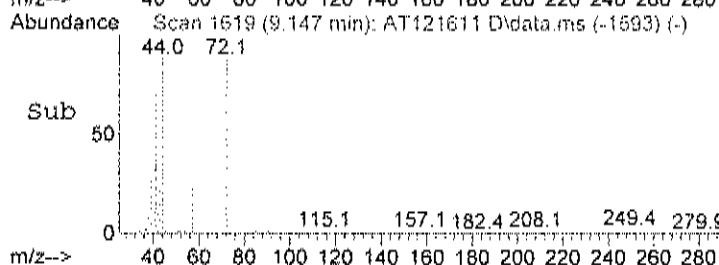
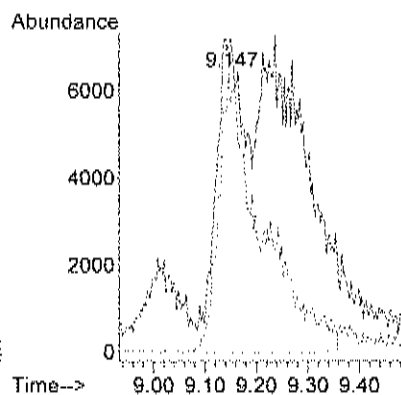
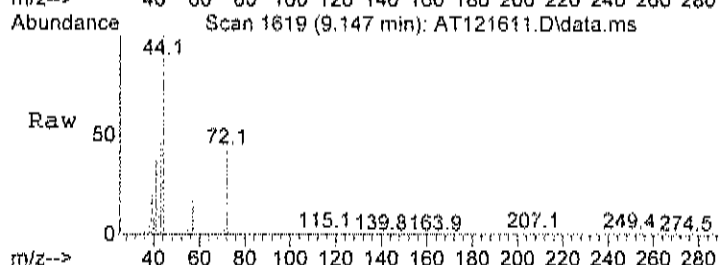
Tgt Ion: 84	Resp: 12218
Ion Ratio	Lower Upper
84 100	
49 119.3	84.2 124.2
86 63.4	42.9 82.9





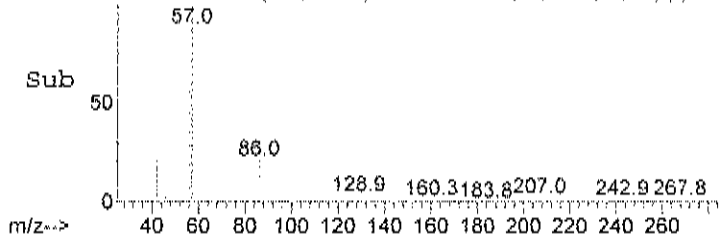
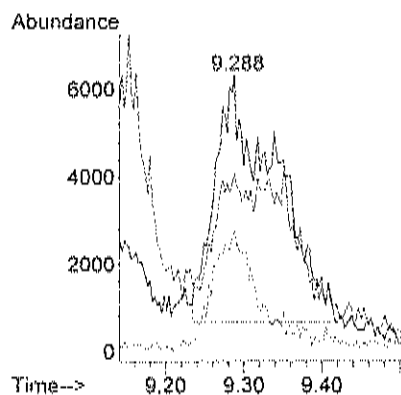
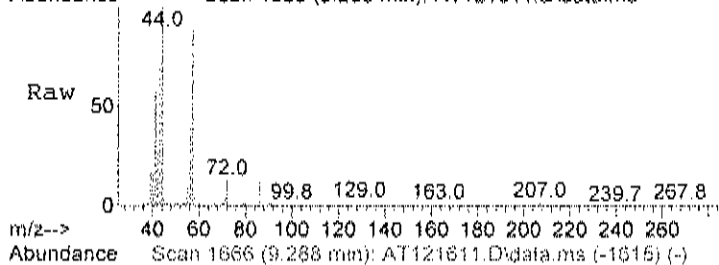
#28
Methyl Ethyl Ketone
Concen: 0.91 ppb
RT: 9.147 min Scan# 1619
Delta R.T. -0.072 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

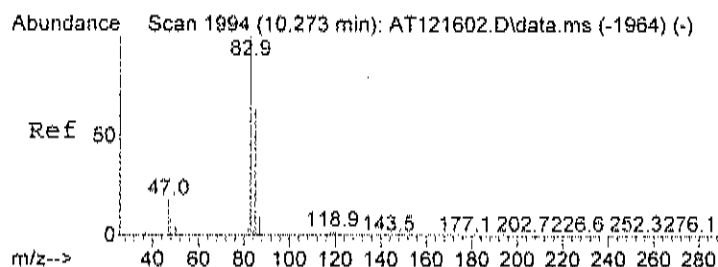
Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	333.7	373.7#
72	100.0	80.0	120.0



#30
Hexane
Concen: 0.21 ppb
RT: 9.288 min Scan# 1666
Delta R.T. 0.003 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

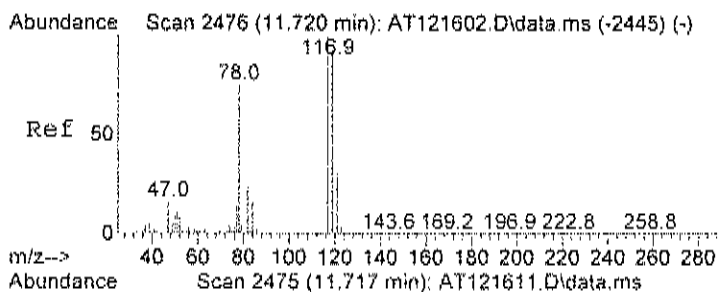
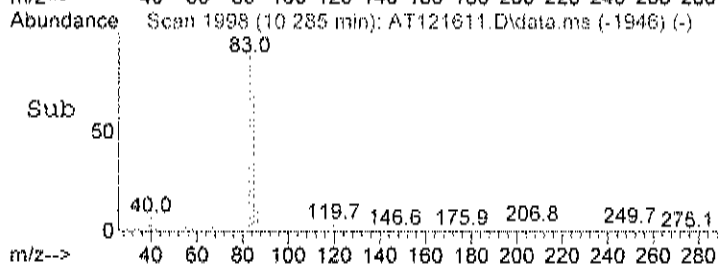
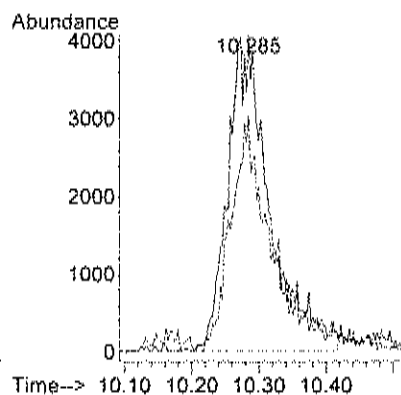
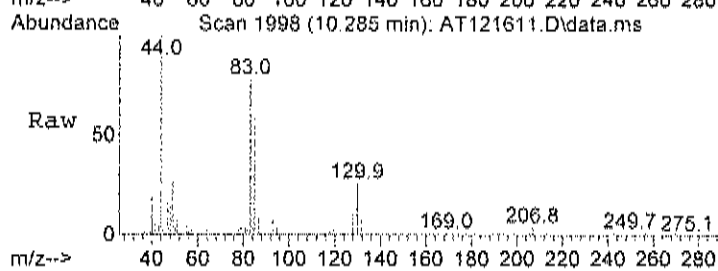
Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	62.0	102.0#
56	33.6	31.8	71.8





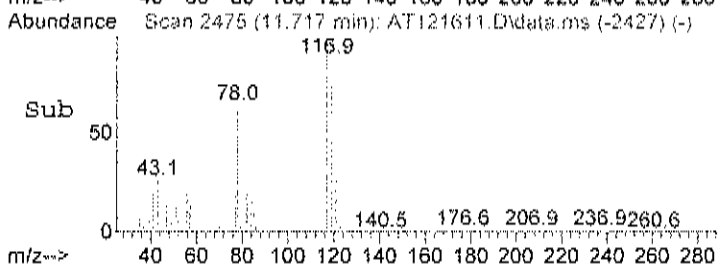
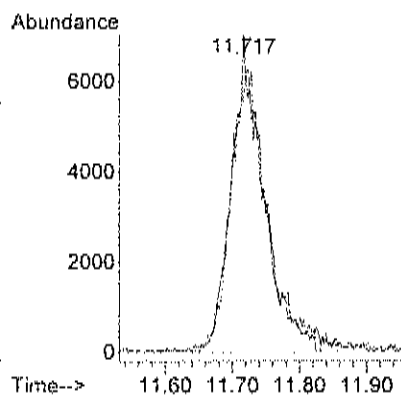
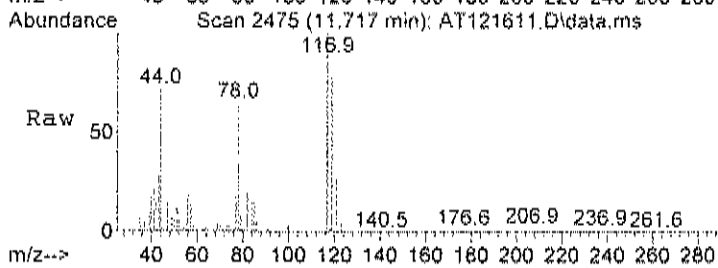
#32
Chloroform
Concen: 0.11 ppb
RT: 10.285 min Scan# 1998
Delta R.T. 0.006 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

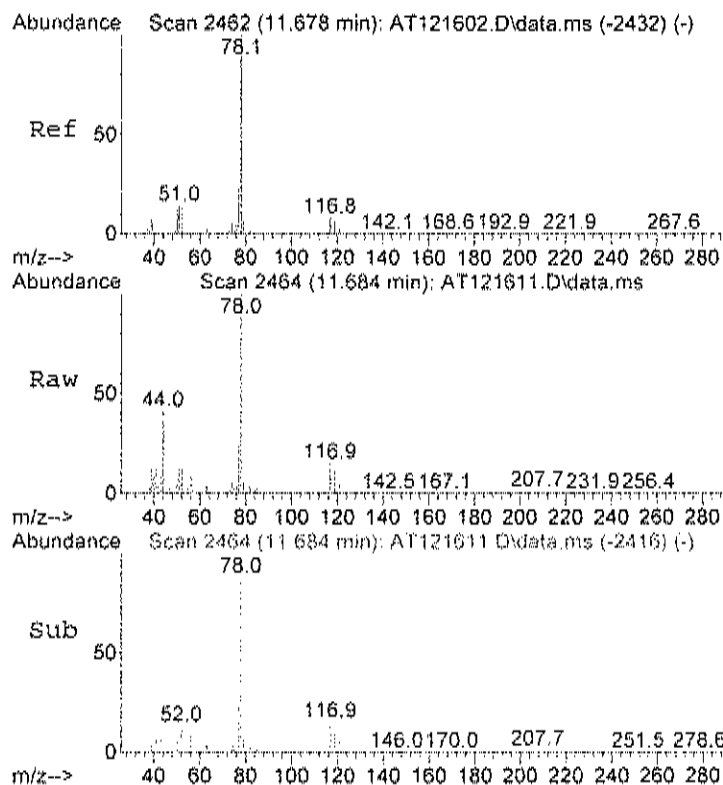
Tgt Ion:	83	Resp:	17323
Ion Ratio	Lower	Upper	
83	100		
85	72.5	46.4	86.4



#38
Carbon tetrachloride
Concen: 0.18 ppb m
RT: 11.717 min Scan# 2475
Delta R.T. -0.006 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

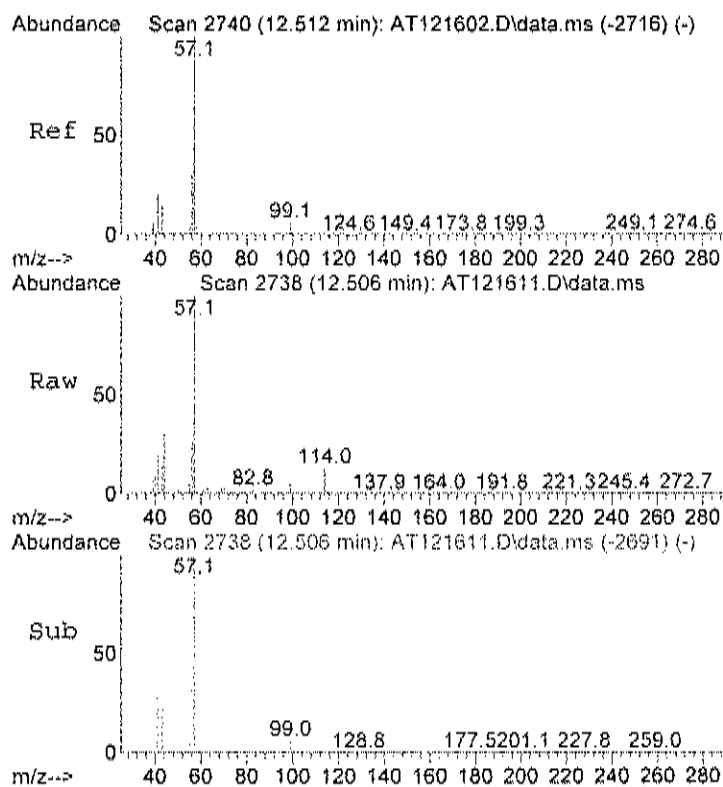
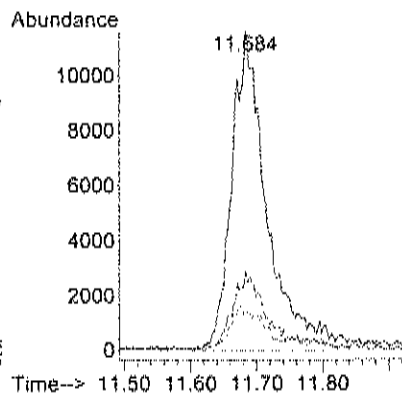
Tgt Ion:	117	Resp:	24419
Ion Ratio	Lower	Upper	
117	100		
119	94.7	74.2	114.2





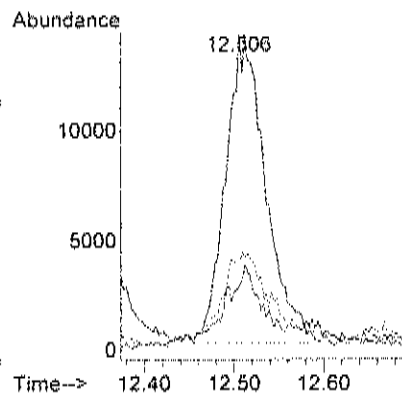
#39
Benzene
Concen: 0.15 ppb
RT: 11.684 min Scan# 2464
Delta R.T. -0.006 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

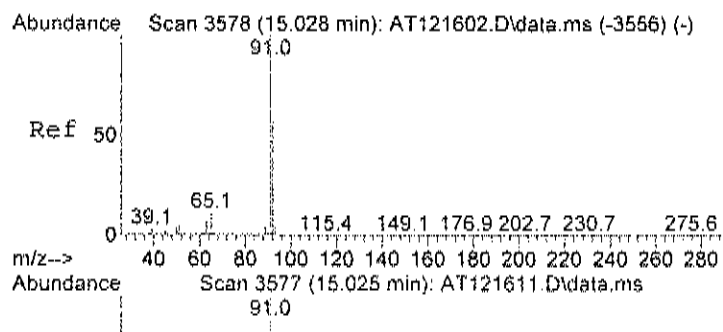
Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.6	2.5	42.5
51	14.8	0.5	40.5



#42
2,2,4-trimethylpentane
Concen: 0.10 ppb
RT: 12.506 min Scan# 2738
Delta R.T. -0.009 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

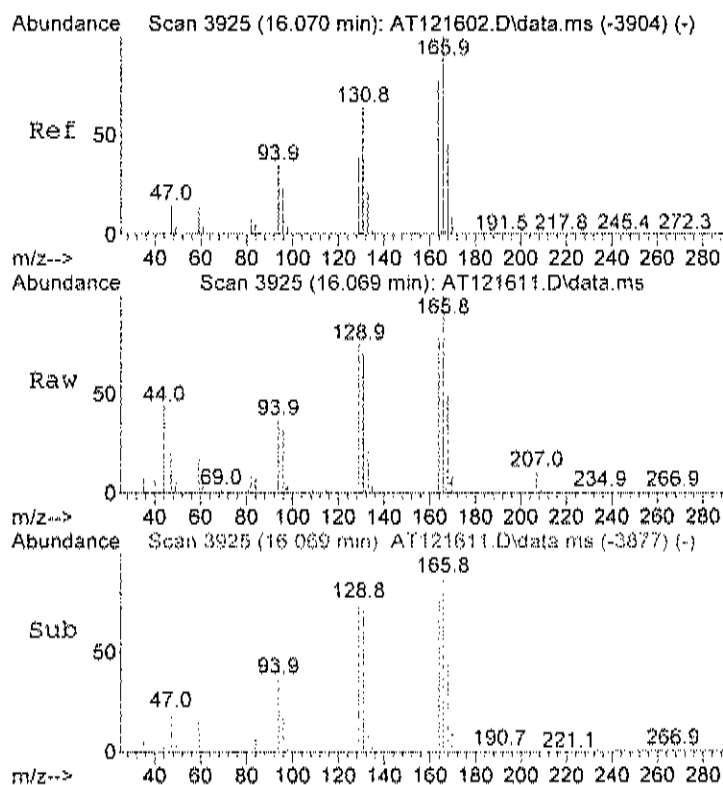
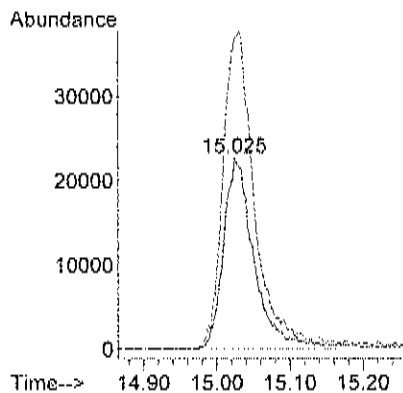
Tgt Ion	Ratio	Lower	Upper
57	100		
41	23.3	17.4	57.4
56	46.0	10.8	50.8





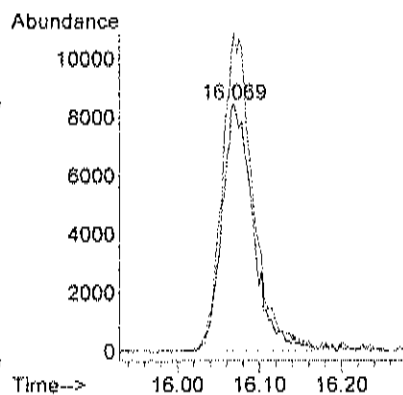
#51
Toluene
Concen: 0.33 ppb
RT: 15.025 min Scan# 3577
Delta R.T. -0.006 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

Tgt Ion: 92 Resp: 66763
Ion Ratio Lower Upper
92 100
91 170.9 153.3 193.3



#56
Tetrachloroethylene
Concen: 0.18 ppb
RT: 16.069 min Scan# 3925
Delta R.T. -0.006 min
Lab File: AT121611.D
Acq: 16 Dec 2022 7:28 pm

Tgt Ion: 164 Resp: 22663
Ion Ratio Lower Upper
164 100
166 126.5 97.2 137.2



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121707.D
Acq On : 17 Dec 2022 2:05 pm
Operator : RJP
Sample : C2212031-002A 5X
Misc : AD12_1UG
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 18 10:33:23 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

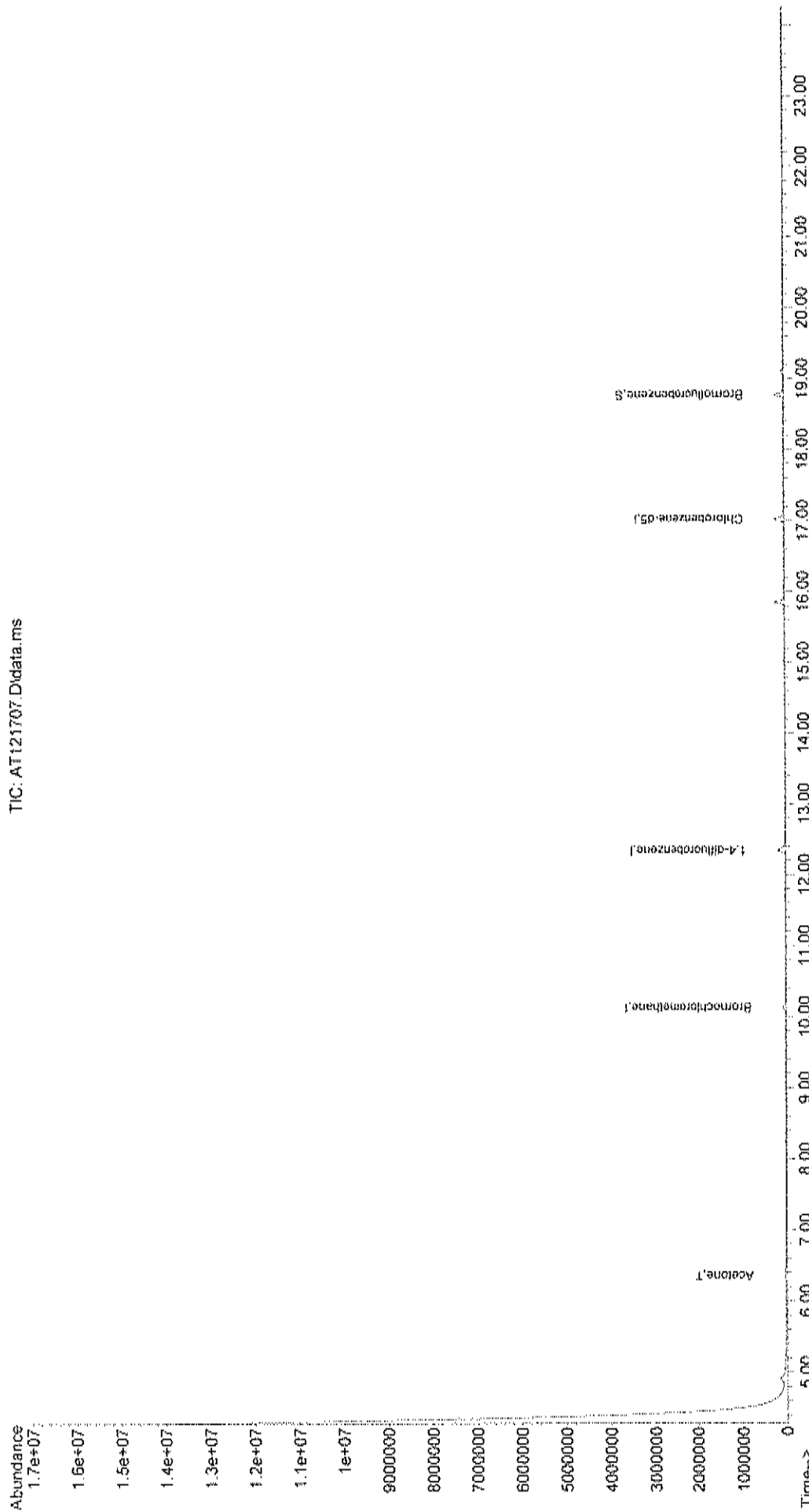
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.126	128	46604	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	277837	1.00	ppb	0.00
50) Chlorobenzene-d5	17.024	117	217403	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	127762	0.87	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	87.00%
Target Compounds						
15) Acetone	6.355	58	29148	1.19	ppb	# 61

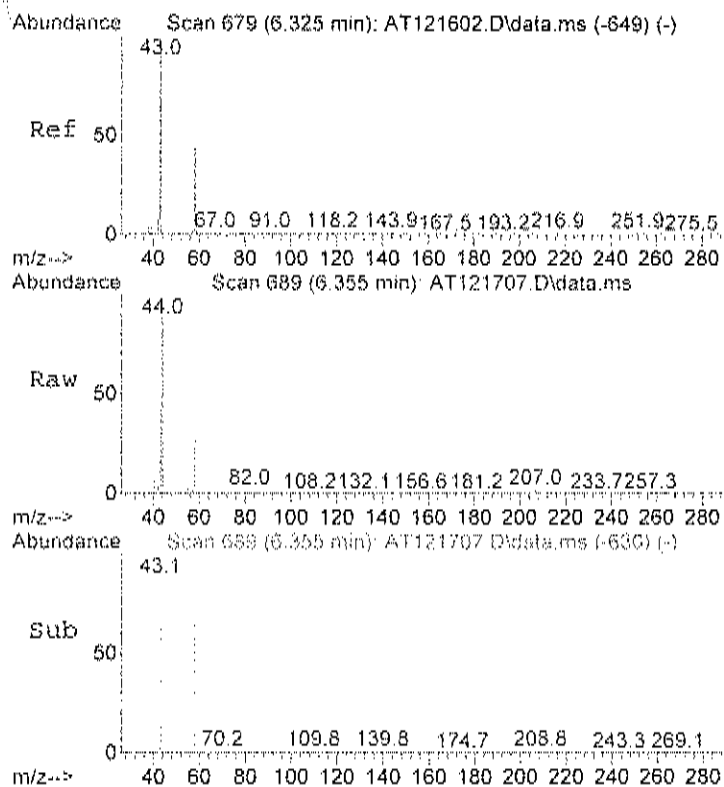
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121707.D
 Acq On : 17 Dec 2022 2:05 pm
 Operator : RJP
 Sample : C2212031-002A 5X
 Misc : AD12_LUG
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 18 10:33:23 2022
 Quant Method : C:\msdchem\1\methods\AD12_LUG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

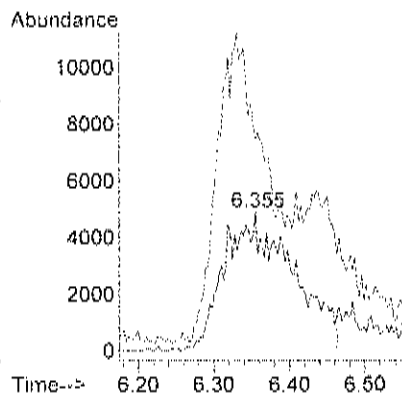
TIC: AT121707.D\data.ms





#15
Acetone
Concen: 1.19 ppb
RT: 6.355 min Scan# 689
Delta R.T. 0.027 min
Lab File: AT121707.D
Acq: 17 Dec 2022 2:05 pm

Tgt Ion: 58 Resp: 29148
Ion Ratio Lower Upper
58 100
43 225.4 272.3 332.3#



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
2,2,4-trimethylpentane	0.24	0.15		ppbV	1	12/16/2022 8:12:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Acetone	11	3.0		ppbV	10	12/17/2022 2:48:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Benzene	0.21	0.15		ppbV	1	12/16/2022 8:12:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Carbon disulfide	1.0	0.15		ppbV	1	12/16/2022 8:12:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloroform	0.28	0.15		ppbV	1	12/16/2022 8:12:00 PM
Chloromethane	0.20	0.15		ppbV	1	12/16/2022 8:12:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated,

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 5 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Ethyl acetate	0.73	0.15		ppbV	1	12/16/2022 8:12:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 11	0.49	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Freon 12	0.54	0.15		ppbV	1	12/16/2022 8:12:00 PM
Heptane	0.16	0.15		ppbV	1	12/16/2022 8:12:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Hexane	0.49	0.15		ppbV	1	12/16/2022 8:12:00 PM
Isopropyl alcohol	0.82	0.15		ppbV	1	12/16/2022 8:12:00 PM
m&p-Xylene	0.16	0.30	J	ppbV	1	12/16/2022 8:12:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl Ethyl Ketone	0.80	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:12:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Methylene chloride	0.30	0.15		ppbV	1	12/16/2022 8:12:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Tetrachloroethylene	0.13	0.15	J	ppbV	1	12/16/2022 8:12:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Toluene	1.4	0.15		ppbV	1	12/16/2022 8:12:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:12:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 8:12:00 PM

Qualifiers:

. Results reported are not blank corrected

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 6 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:12:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:12:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:12:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:12:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 8:12:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 8:12:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:12:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
2,2,4-trimethylpentane	1.1	0.70		ug/m3	1	12/16/2022 8:12:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 8:12:00 PM
Acetone	26	7.1		ug/m3	10	12/17/2022 2:48:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 8:12:00 PM
Benzene	0.67	0.48		ug/m3	1	12/16/2022 8:12:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 8:12:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 8:12:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 8:12:00 PM
Carbon disulfide	3.2	0.47		ug/m3	1	12/16/2022 8:12:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 8:12:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 8:12:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 8:12:00 PM
Chloroform	1.4	0.73		ug/m3	1	12/16/2022 8:12:00 PM
Chloromethane	0.41	0.31		ug/m3	1	12/16/2022 8:12:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:12:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 8:12:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 8:12:00 PM
Ethyl acetate	2.6	0.54		ug/m3	1	12/16/2022 8:12:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 8:12:00 PM
Freon 11	2.8	0.84		ug/m3	1	12/16/2022 8:12:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 8:12:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 8:12:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 5 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-3

Lab Order: C2212031

Tag Number: 1186,177

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-003A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.7	0.74		ug/m3	1	12/16/2022 8:12:00 PM
Heptane	0.66	0.61		ug/m3	1	12/16/2022 8:12:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 8:12:00 PM
Hexane	1.7	0.53		ug/m3	1	12/16/2022 8:12:00 PM
Isopropyl alcohol	2.0	0.37		ug/m3	1	12/16/2022 8:12:00 PM
m&p-Xylene	0.69	1.3	J	ug/m3	1	12/16/2022 8:12:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
Methyl Ethyl Ketone	2.4	0.88		ug/m3	1	12/16/2022 8:12:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:12:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 8:12:00 PM
Methylene chloride	1.0	0.52		ug/m3	1	12/16/2022 8:12:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 8:12:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 8:12:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 8:12:00 PM
Tetrachloroethylene	0.88	1.0	J	ug/m3	1	12/16/2022 8:12:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 8:12:00 PM
Toluene	5.5	0.57		ug/m3	1	12/16/2022 8:12:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:12:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:12:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 8:12:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 8:12:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 6 of 40

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121612.D
 Acq On : 16 Dec 2022 8:12 pm
 Operator : RJP
 Sample : C2212031-003A
 Misc : AD12_1UG
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 17 08:40:38 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

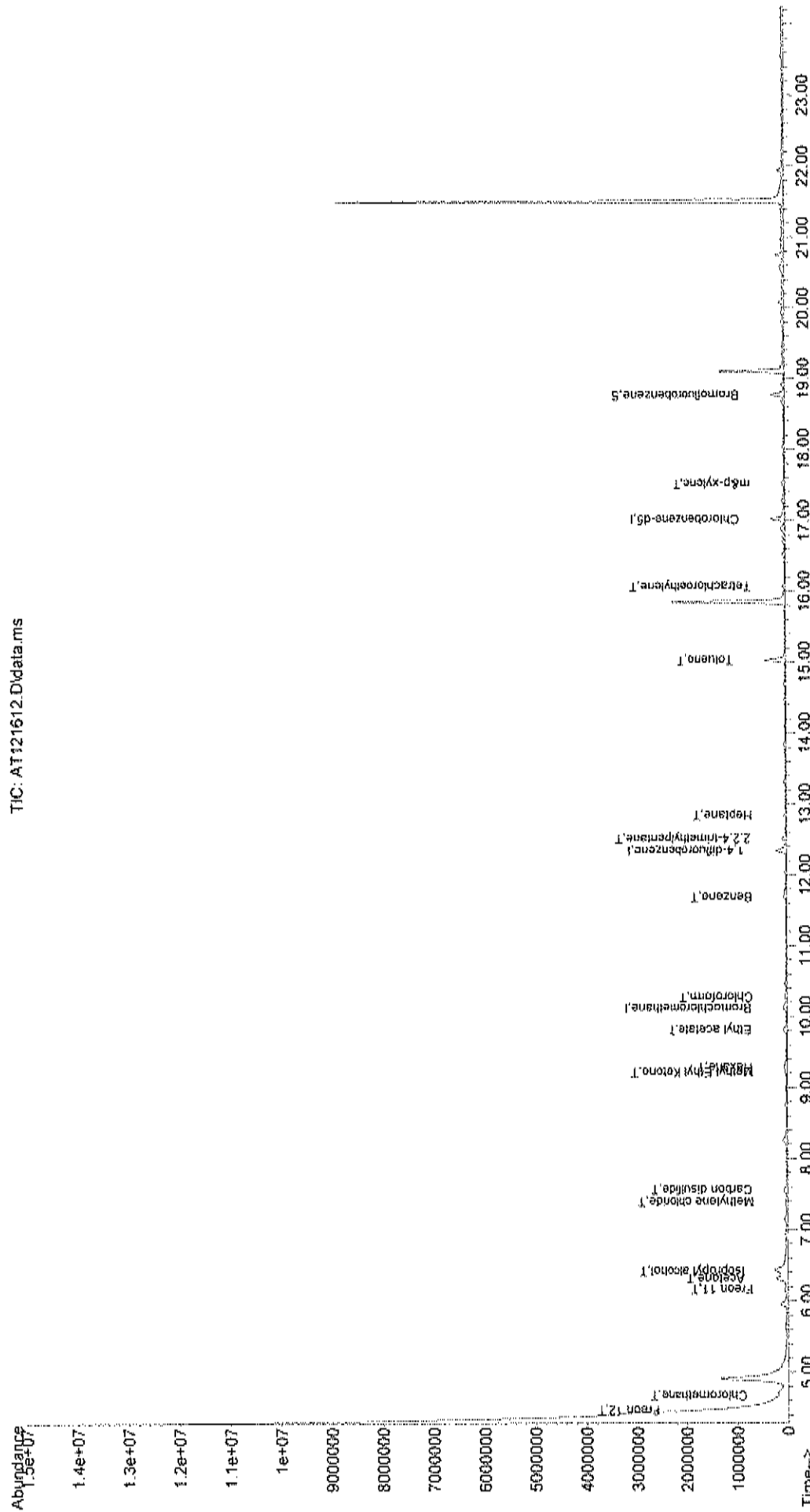
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

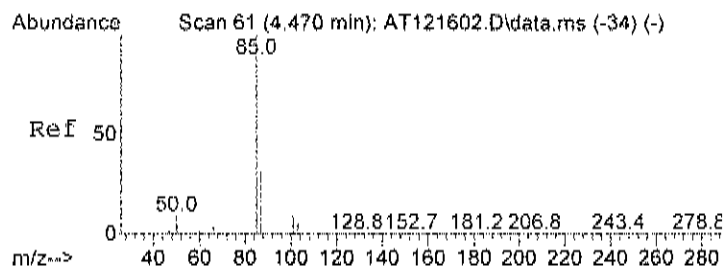
Internal Standards						
1) Bromochloromethane	10.120	128	50820	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	311668	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	254149	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.765	95	161858	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	92453	0.54	ppb	98
4) Chloromethane	4.674	50	11331	0.20	ppb	86
14) Freon 11	6.163	101	69229	0.49	ppb	97
15) Acetone	6.310	58	244721	9.19	ppb	89
17) Isopropyl alcohol	6.415	45	67223	0.82	ppb	# 1
21) Methylene chloride	7.388	84	20688	0.30	ppb	90
23) Carbon disulfide	7.559	76	207288	1.03	ppb	97
28) Methyl Ethyl Ketone	9.213	72	33400m	0.80	ppb	
30) Hexane	9.282	57	70934	0.49	ppb	78
31) Ethyl acetate	9.810	43	150454	0.73	ppb	91
32) Chloroform	10.273	83	43710	0.28	ppb	96
39) Benzene	11.687	78	57911	0.21	ppb	93
42) 2,2,4-trimethylpentane	12.512	57	104413	0.24	ppb	82
43) Heptane	12.842	43	24312	0.16	ppb	96
51) Toluene	15.028	92	294591	1.45	ppb	98
56) Tetrachloroethylene	16.070	164	15844	0.13	ppb	91
59) m&p-xylene	17.517	91	54637	0.16	ppb	88

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121612.D
 Acq On : 16 Dec 2022 8:12 pm
 Operator : RJP
 Sample : C2212031-003A
 Misc : AD12_1UG
 ALS Vial : 12 Sample Multiplier: 1

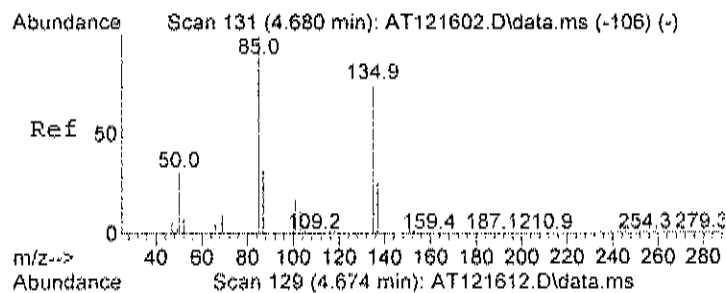
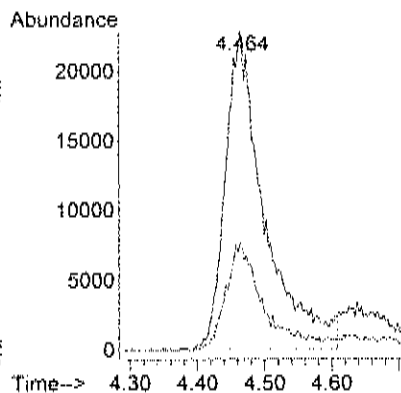
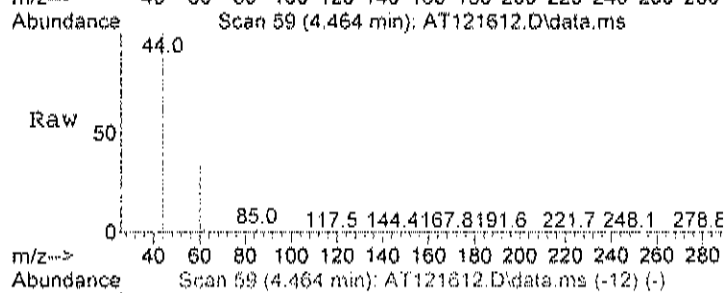
Quant Time: Dec 17 08:40:38 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QIast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





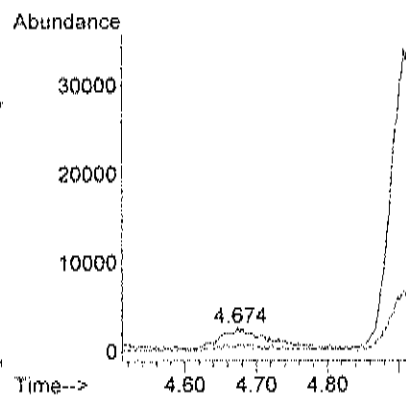
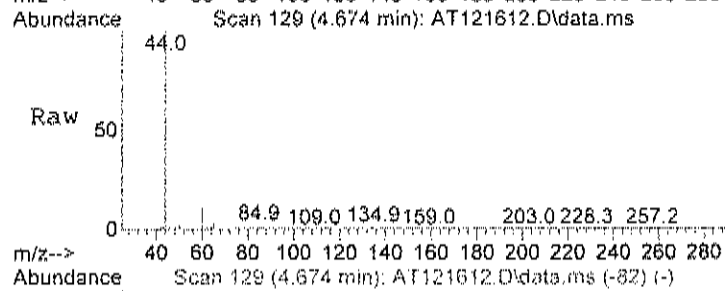
#3
Freon 12
Concen: 0.54 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

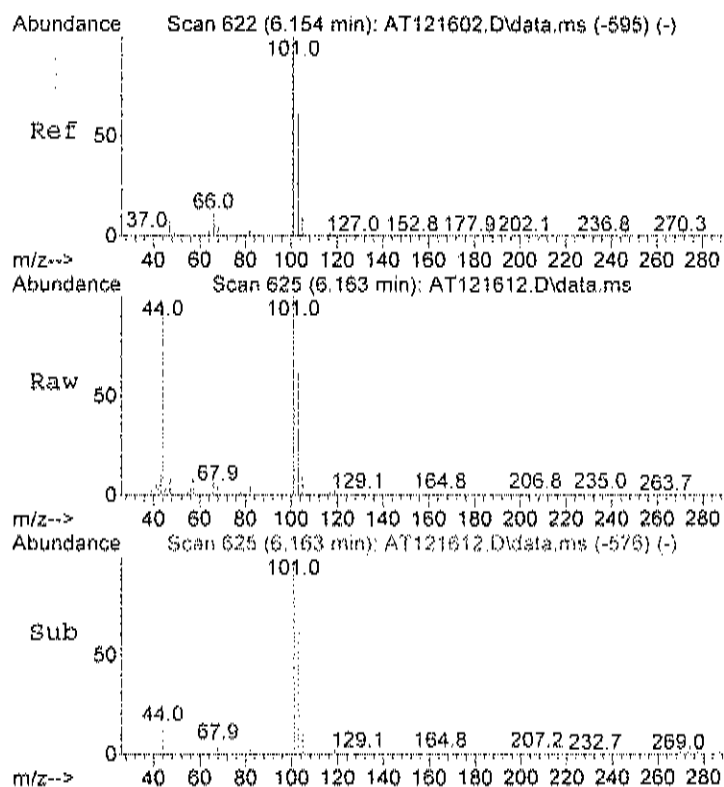
Tgt Ion: 85 Resp: 92453
Ion Ratio Lower Upper
85 100
87 32.9 14.3 54.3



#4
Chloromethane
Concen: 0.20 ppb
RT: 4.674 min Scan# 129
Delta R.T. -0.009 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

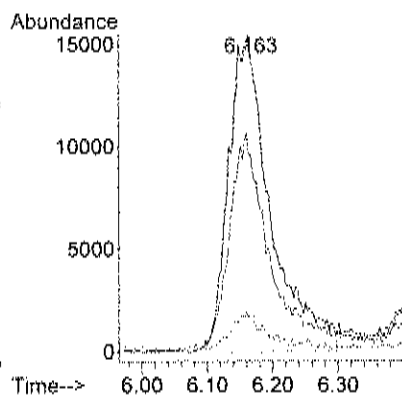
Tgt Ion: 50 Resp: 11331
Ion Ratio Lower Upper
50 100
52 32.4 5.4 45.4





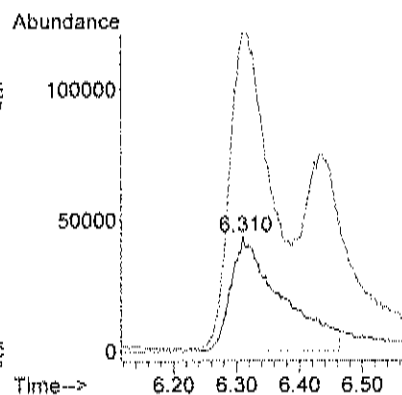
#14
Freon 11
Concen: 0.49 ppb
RT: 6.163 min Scan# 625
Delta R.T. -0.003 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

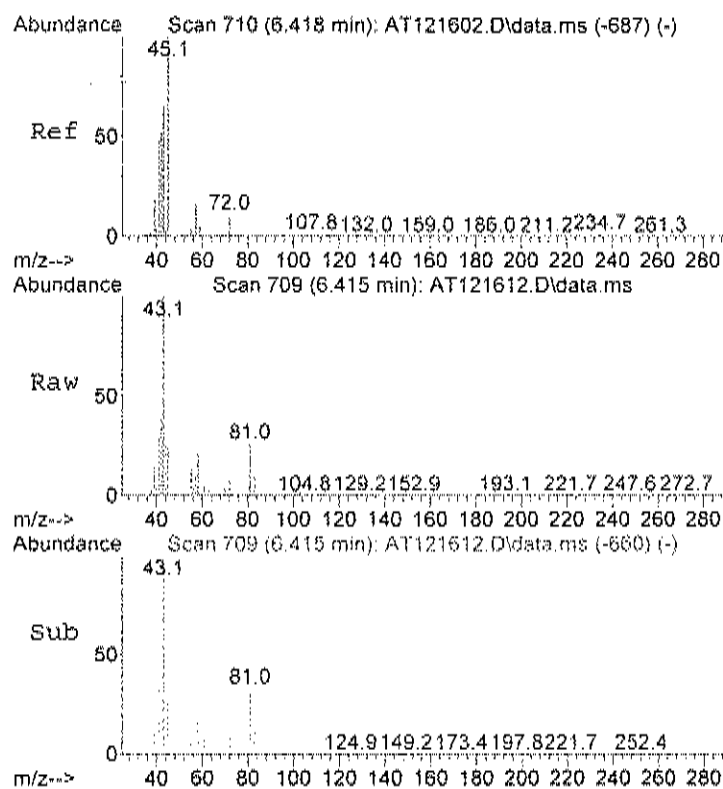
Tgt Ion	Ratio	Lower	Upper
101	100		
103	66.4	44.1	84.1
105	10.5	0.0	32.0



#15
Acetone
Concen: 9.19 ppb
RT: 6.310 min Scan# 674
Delta R.T. -0.018 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

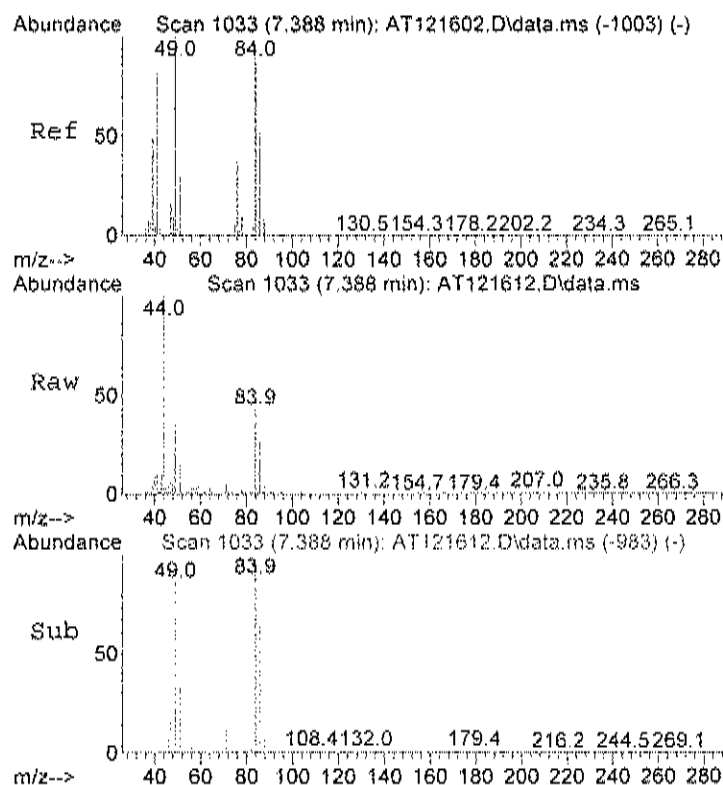
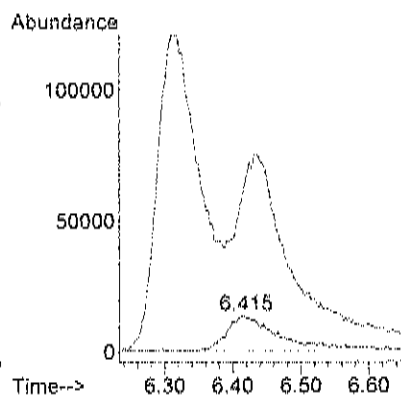
Tgt Ion	Ratio	Lower	Upper
58	100		
43	323.6	272.3	332.3





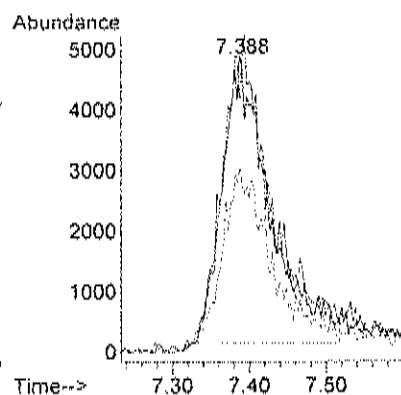
#17
Isopropyl alcohol
Concen: 0.82 ppb
RT: 6.415 min Scan# 709
Delta R.T. -0.003 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

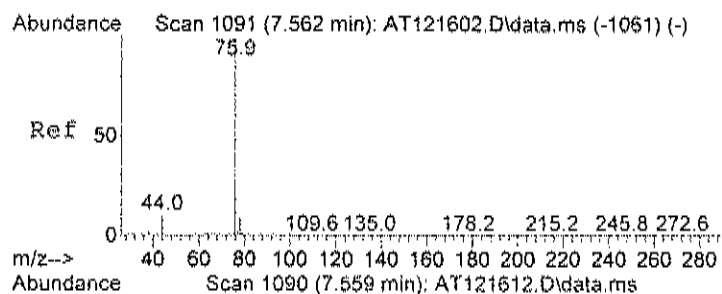
Tgt Ion	45	Resp	67223
Ion	Ratio	Lower	Upper
45	100		
43	0.0	91.9	131.9#



#21
Methylene chloride
Concen: 0.30 ppb
RT: 7.388 min Scan# 1033
Delta R.T. -0.000 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

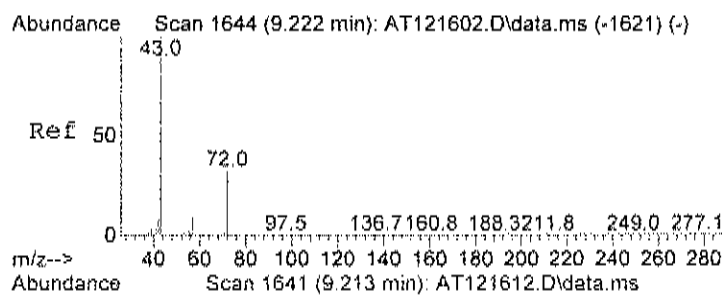
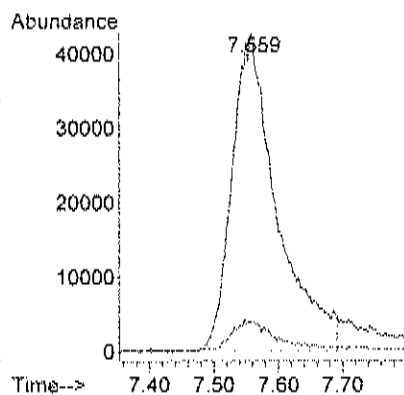
Tgt Ion	84	Resp	20688
Ion	Ratio	Lower	Upper
84	100		
49	114.9	84.2	124.2
86	69.4	42.9	82.9





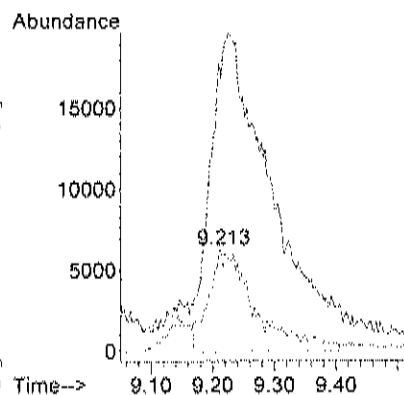
#23
Carbon disulfide
Concen: 1.03 ppb
RT: 7.559 min Scan# 1090
Delta R.T. 0.000 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

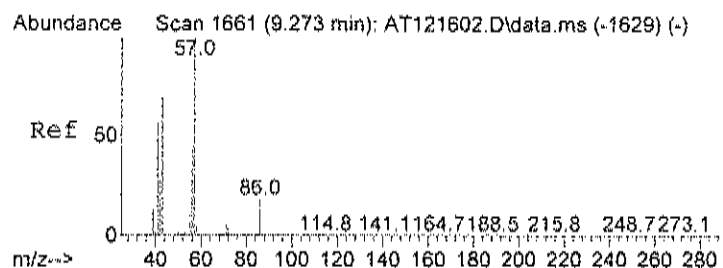
Tgt Ion	Ratio	Lower	Upper
76	100		
78	7.7	0.0	28.7



#28
Methyl Ethyl Ketone
Concen: 0.80 ppb m
RT: 9.213 min Scan# 1641
Delta R.T. -0.006 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	333.7	373.7#
72	109.5	80.0	120.0





#30

Hexane

Concen: 0.49 ppb

RT: 9.282 min Scan# 1664

Delta R.T. -0.003 min

Lab File: AT121612.D

Acq: 16 Dec 2022 8:12 pm

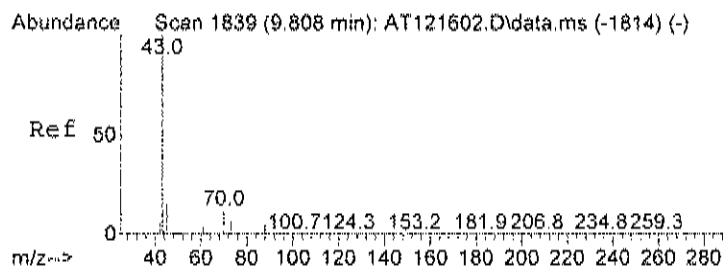
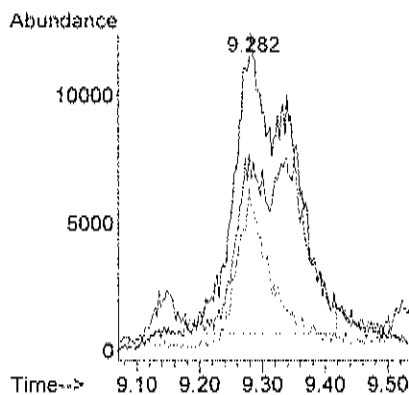
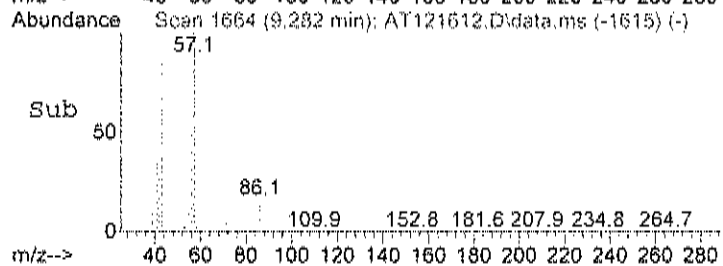
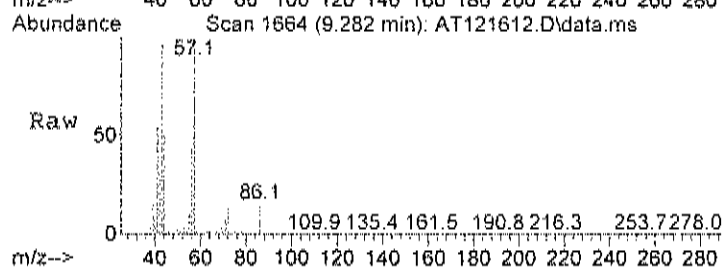
Tgt Ion: 57 Resp: 70934

Ion Ratio Lower Upper

57 100

41 64.9 62.0 102.0

56 33.7 31.8 71.8



#31

Ethyl acetate

Concen: 0.73 ppb

RT: 9.810 min Scan# 1840

Delta R.T. 0.000 min

Lab File: AT121612.D

Acq: 16 Dec 2022 8:12 pm

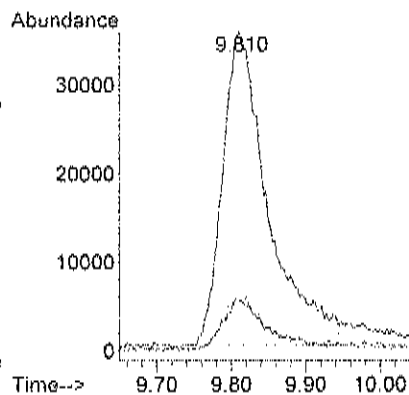
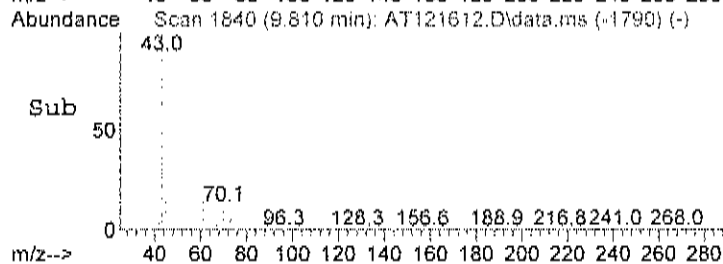
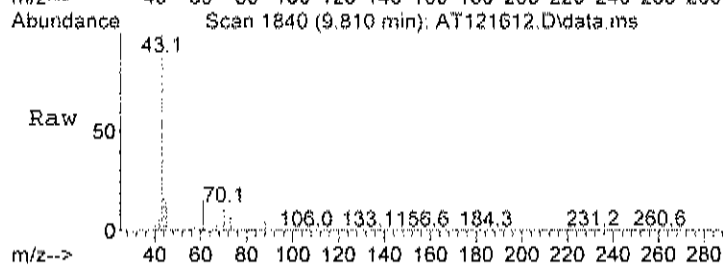
Tgt Ion: 43 Resp: 150454

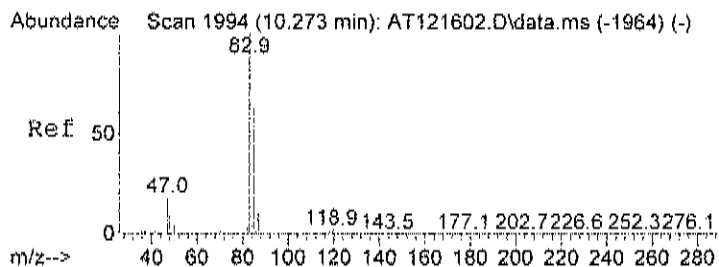
Ion Ratio Lower Upper

43 100

45 16.3 0.0 32.9

61 16.7 0.0 33.0





#32

Chloroform

Concen: 0.28 ppb

RT: 10.273 min Scan# 1994

Delta R.T. -0.006 min

Lab File: AT121612.D

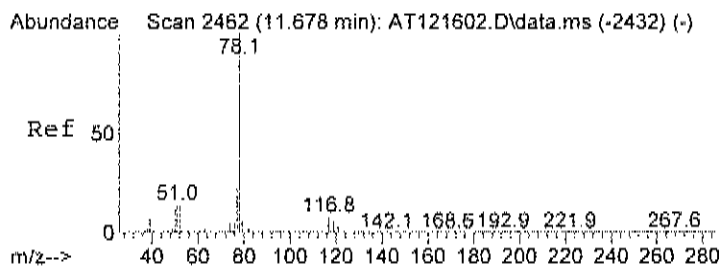
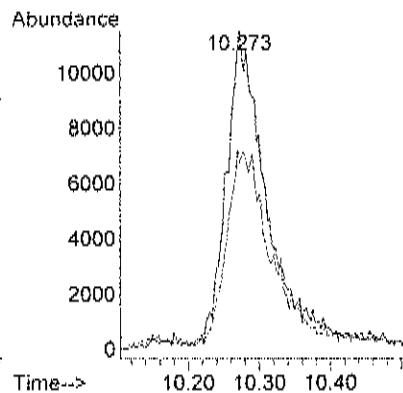
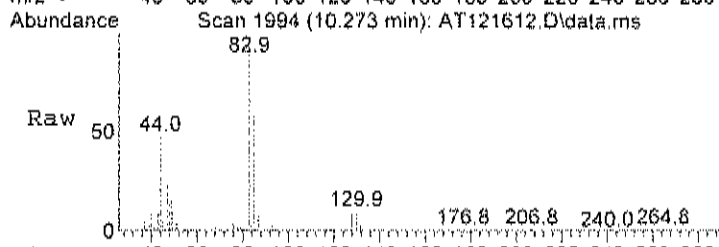
Acq: 16 Dec 2022 8:12 pm

Tgt Ion: 83 Resp: 43710

Ion Ratio Lower Upper

83 100

85 69.4 46.4 86.4



#39

Benzene

Concen: 0.21 ppb

RT: 11.687 min Scan# 2465

Delta R.T. -0.003 min

Lab File: AT121612.D

Acq: 16 Dec 2022 8:12 pm

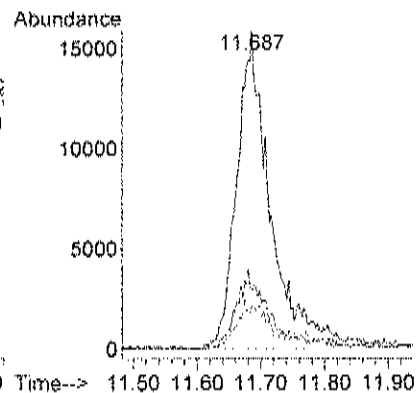
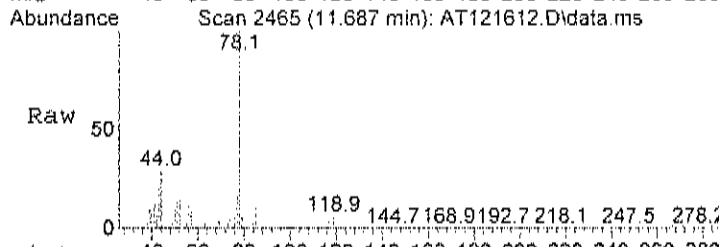
Tgt Ion: 78 Resp: 57911

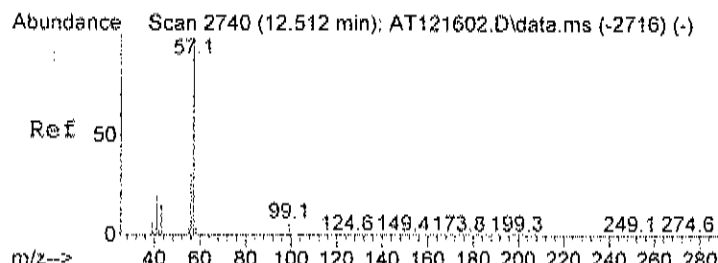
Ion Ratio Lower Upper

78 100

77 24.8 2.5 42.5

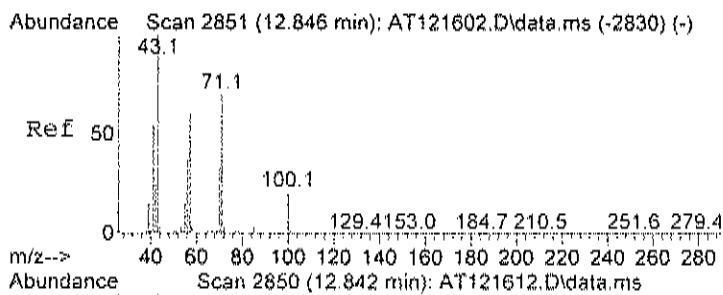
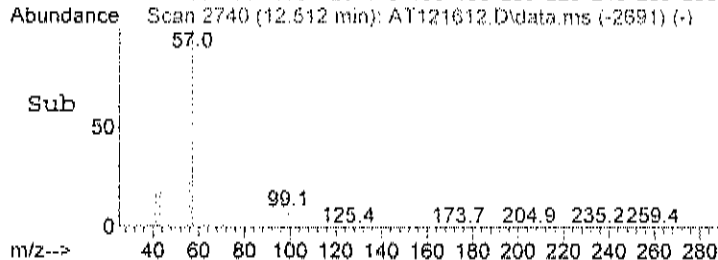
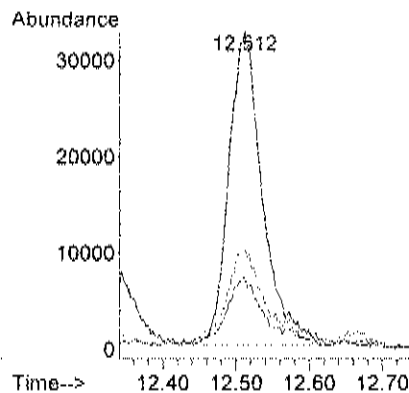
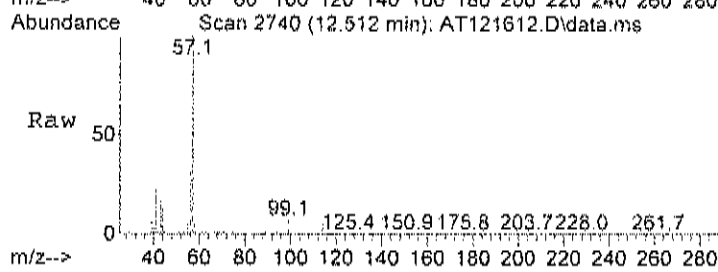
51 16.0 0.5 40.5





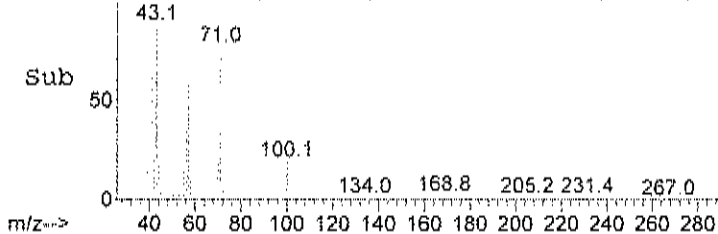
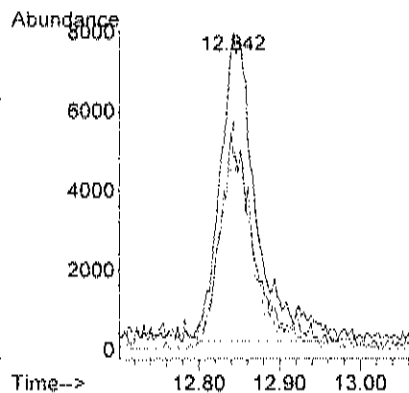
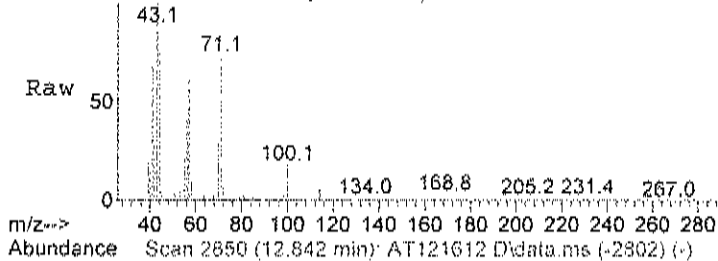
#42
2,2,4-trimethylpentane
Concen: 0.24 ppb
RT: 12.512 min Scan# 2740
Delta R.T. -0.003 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

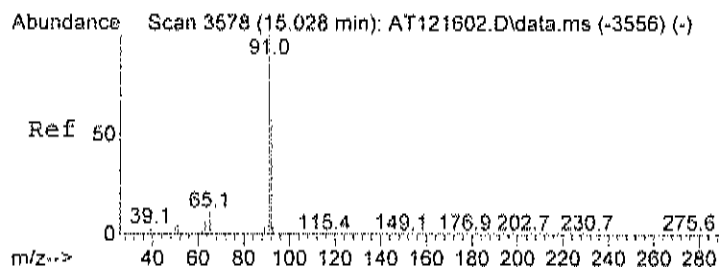
Tgt Ion:	57	Resp:	104413
Ion	Ratio	Lower	Upper
57	100		
41	26.0	17.4	57.4
56	40.1	10.8	50.8



#43
Heptane
Concen: 0.16 ppb
RT: 12.842 min Scan# 2850
Delta R.T. -0.006 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

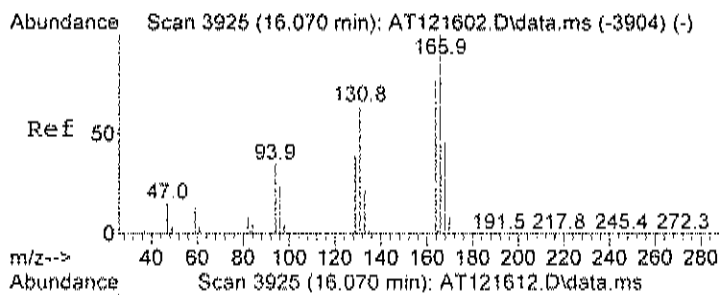
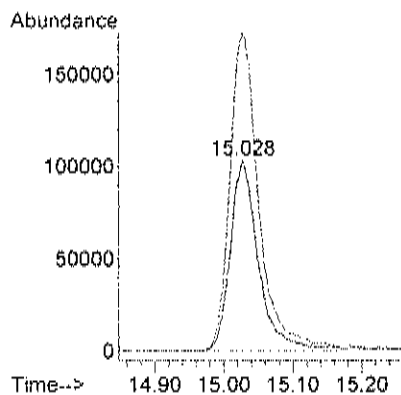
Tgt Ion:	43	Resp:	24312
Ion	Ratio	Lower	Upper
43	100		
57	61.9	42.3	82.3
71	64.7	38.8	78.8





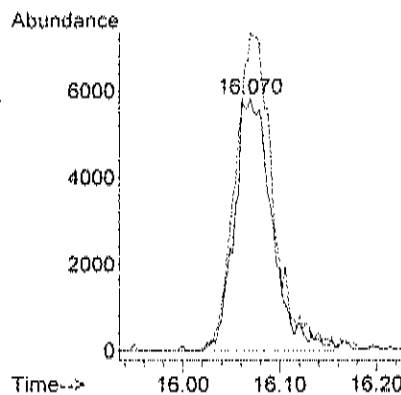
#51
Toluene
Concen: 1.45 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

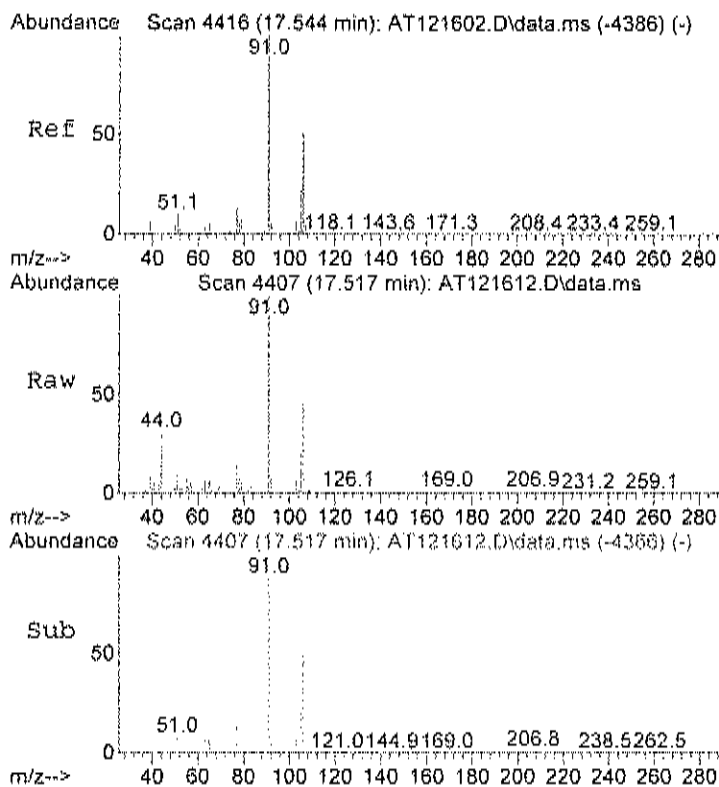
Tgt Ion: 92	Resp: 294591
Ion Ratio	Lower Upper
92 100	
91 171.0	153.3 193.3



#56
Tetrachloroethylene
Concen: 0.13 ppb
RT: 16.070 min Scan# 3925
Delta R.T. -0.005 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

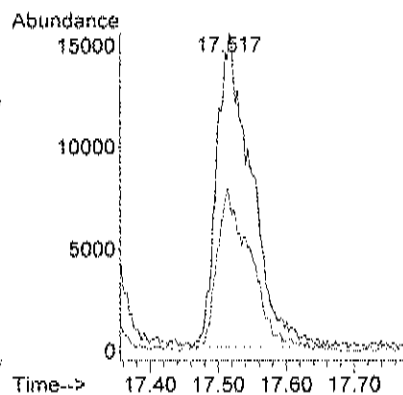
Tgt Ion: 164	Resp: 15844
Ion Ratio	Lower Upper
164 100	
166 126.9	97.2 137.2





#59
m&p-xylene
Concen: 0.16 ppb
RT: 17.517 min Scan# 4407
Delta R.T. -0.026 min
Lab File: AT121612.D
Acq: 16 Dec 2022 8:12 pm

Tgt Ion: 91 Resp: 54637
Ion Ratio Lower Upper
91 100
106 50.0 22.4 62.4



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121708.D
Acq On : 17 Dec 2022 2:48 pm
Operator : RJP
Sample : C2212031-003A 10X
Misc : AD12_1UG
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 18 10:33:37 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

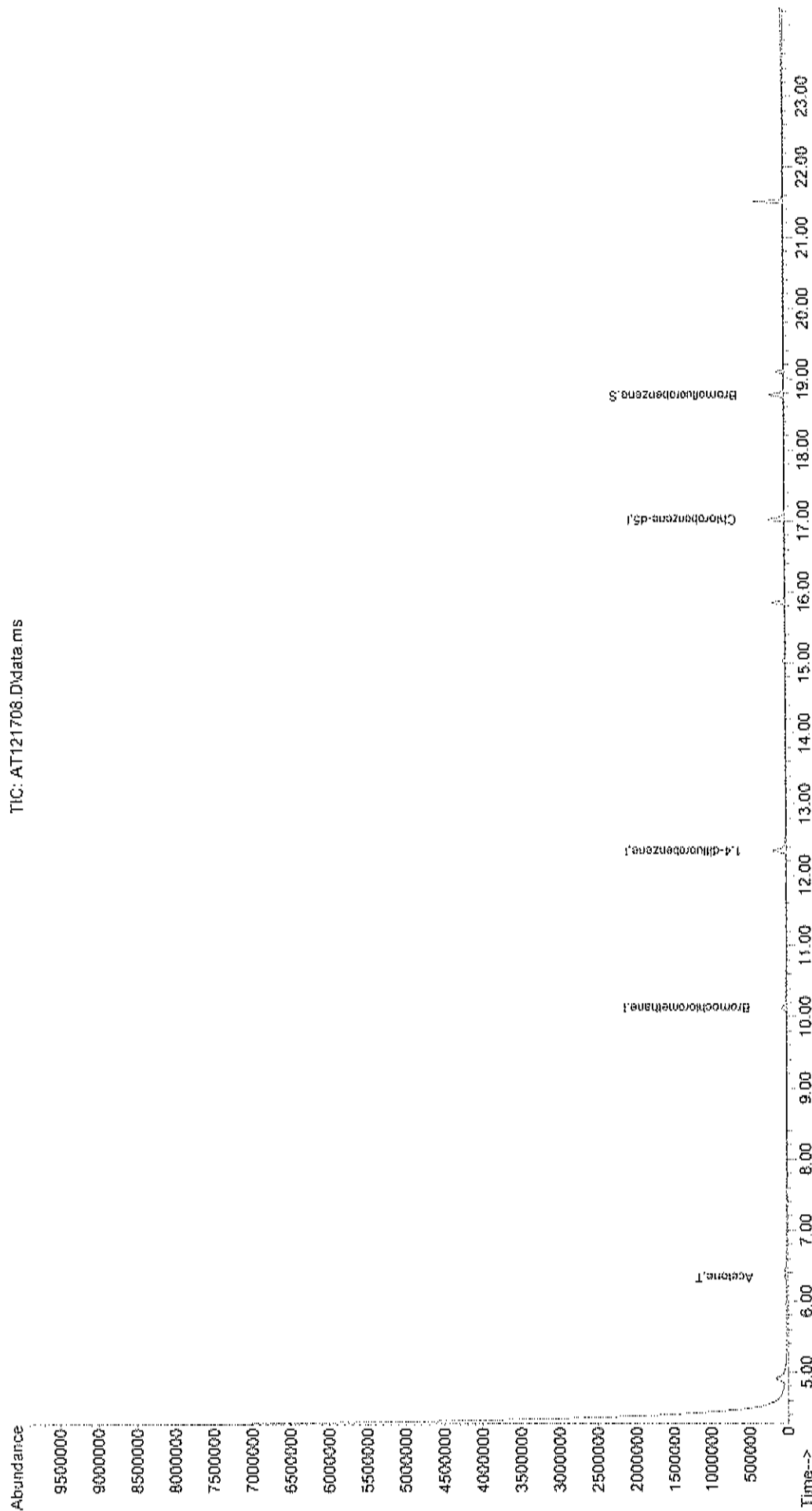
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

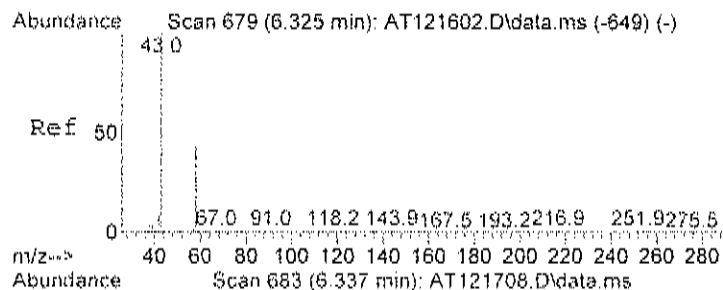
Internal Standards						
1) Bromochloromethane	10.126	128	45961	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.338	114	274104	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	211748	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	126379	0.88	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	88.00%
Target Compounds						
15) Acetone	6.337	58	25982	1.08	ppb	Qvalue 88

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121708.D
Acq On : 17 Dec 2022 2:48 pm
Operator : RJP
Sample : C2212031-003A 10X
Misc : AD12 1UG
ALS Vial : 6 Sample Multiplier: 1

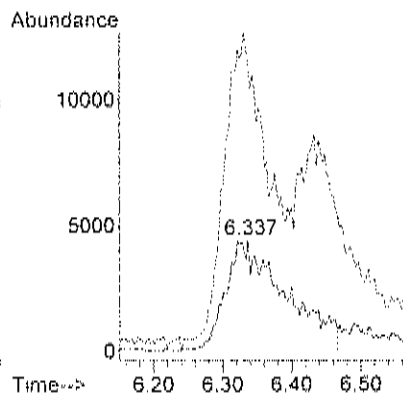
Quant Time: Dec 18 10:33:37 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





#15
Acetone
Concen: 1.08 ppb
RT: 6.337 min Scan# 683
Delta R.T. 0.009 min
Lab File: AT121708.D
Acq: 17 Dec 2022 2:48 pm

Tgt Ion	58	Resp	25982
Ion	Ratio	Lower	Upper
58	100		
43	278.5	272.3	332.3



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2,4-Trimethylbenzene	0.14	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,4-Dichlorobenzene	0.16	0.15		ppbV	1	12/16/2022 8:56:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
2,2,4-trimethylpentane	0.19	0.15		ppbV	1	12/16/2022 8:56:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Acetone	8.2	3.0		ppbV	10	12/17/2022 3:31:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Benzene	0.27	0.15		ppbV	1	12/16/2022 8:56:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Carbon disulfide	1.4	0.15		ppbV	1	12/16/2022 8:56:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chlorobenzene	0.23	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Chloromethane	0.52	0.15		ppbV	1	12/16/2022 8:56:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 7 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Ethyl acetate	0.13	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Ethylbenzene	0.18	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 11	0.14	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Freon 12	0.59	0.15		ppbV	1	12/16/2022 8:56:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Hexane	0.52	0.15		ppbV	1	12/16/2022 8:56:00 PM
Isopropyl alcohol	0.31	0.15		ppbV	1	12/16/2022 8:56:00 PM
m&p-Xylene	0.40	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Ethyl Ketone	0.54	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 8:56:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
o-Xylene	0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Tetrachloroethylene	0.10	0.15	J	ppbV	1	12/16/2022 8:56:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Toluene	0.98	0.15		ppbV	1	12/16/2022 8:56:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 8:56:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 8:56:00 PM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte, Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:56:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 8:56:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
1,2,4-Trimethylbenzene	0.69	0.74	J	ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 8:56:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 8:56:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 8:56:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,4-Dichlorobenzene	0.96	0.90		ug/m3	1	12/16/2022 8:56:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
2,2,4-trimethylpentane	0.89	0.70		ug/m3	1	12/16/2022 8:56:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 8:56:00 PM
Acetone	19	7.1		ug/m3	10	12/17/2022 3:31:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 8:56:00 PM
Benzene	0.86	0.48		ug/m3	1	12/16/2022 8:56:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 8:56:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 8:56:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 8:56:00 PM
Carbon disulfide	4.3	0.47		ug/m3	1	12/16/2022 8:56:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 8:56:00 PM
Chlorobenzene	1.1	0.69		ug/m3	1	12/16/2022 8:56:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 8:56:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 8:56:00 PM
Chloromethane	1.1	0.31		ug/m3	1	12/16/2022 8:56:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:56:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 8:56:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 8:56:00 PM
Ethyl acetate	0.47	0.54	J	ug/m3	1	12/16/2022 8:56:00 PM
Ethylbenzene	0.78	0.65		ug/m3	1	12/16/2022 8:56:00 PM
Freon 11	0.79	0.84	J	ug/m3	1	12/16/2022 8:56:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 8:56:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 8:56:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-4

Lab Order: C2212031

Tag Number: 1178,117

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-004A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/16/2022 8:56:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 8:56:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 8:56:00 PM
Hexane	1.8	0.53		ug/m3	1	12/16/2022 8:56:00 PM
Isopropyl alcohol	0.76	0.37		ug/m3	1	12/16/2022 8:56:00 PM
m&p-Xylene	1.7	1.3		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Ethyl Ketone	1.6	0.88		ug/m3	1	12/16/2022 8:56:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 8:56:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 8:56:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/16/2022 8:56:00 PM
o-Xylene	0.65	0.65		ug/m3	1	12/16/2022 8:56:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 8:56:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 8:56:00 PM
Tetrachloroethylene	0.68	1.0	J	ug/m3	1	12/16/2022 8:56:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 8:56:00 PM
Toluene	3.7	0.57		ug/m3	1	12/16/2022 8:56:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 8:56:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 8:56:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 8:56:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 8:56:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121613.D
 Acq On : 16 Dec 2022 8:56 pm
 Operator : RJP
 Sample : C2212031-004A
 Misc : AD12_1UG
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 17 08:40:40 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

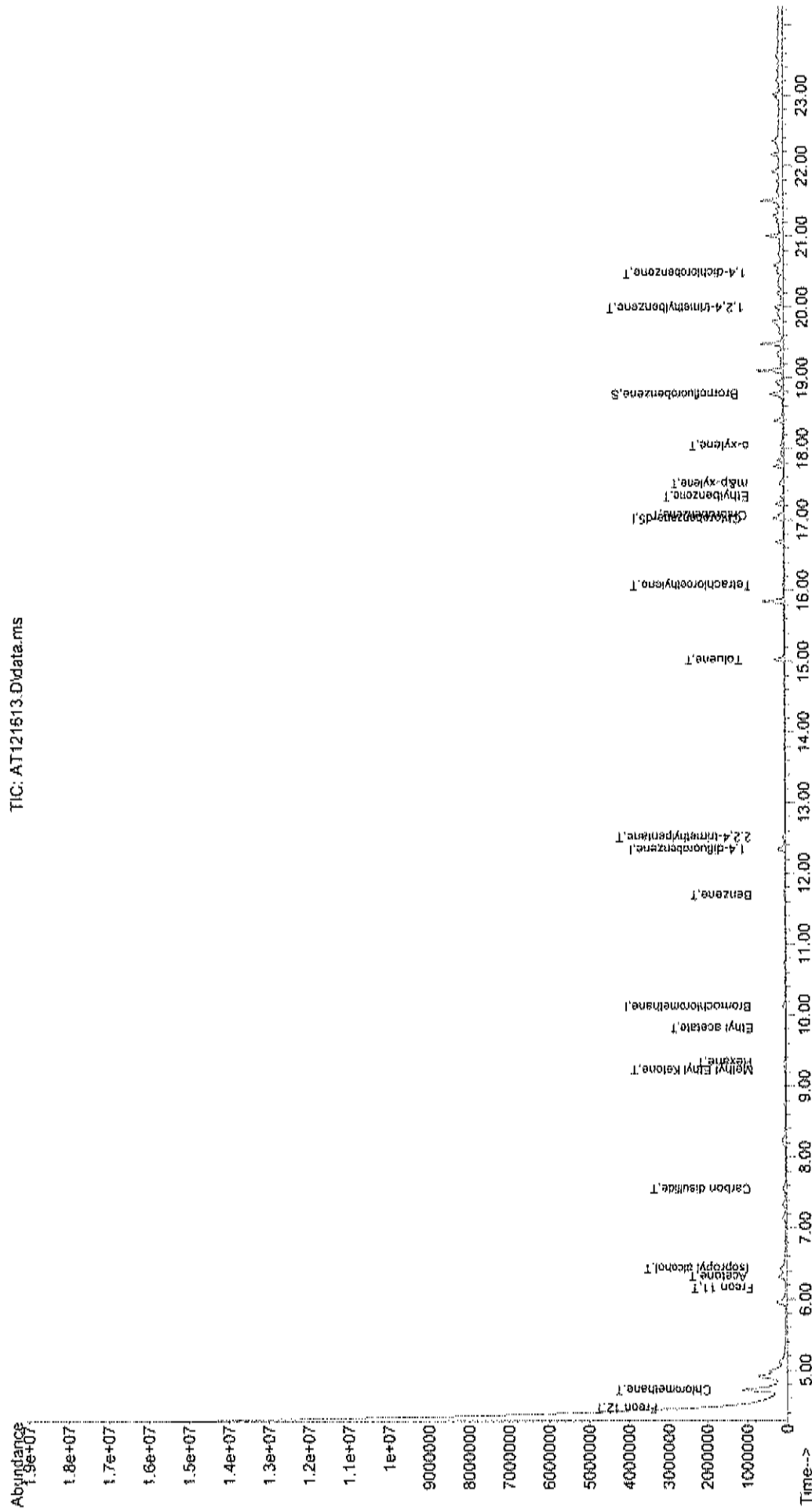
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

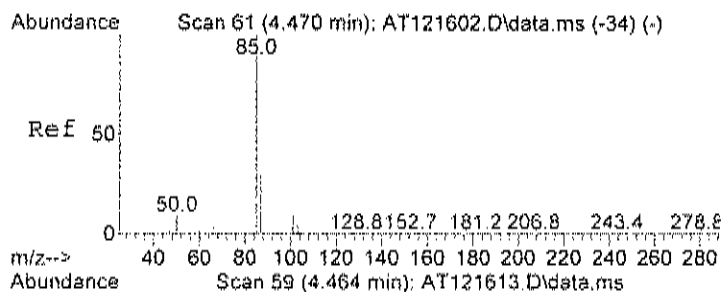
Internal Standards						
1) Bromochloromethane	10.117	128	51956	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	317054	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	253435	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	163019	0.95	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	95.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	103056	0.59	ppb	99
4) Chloromethane	4.719	50	29299	0.52	ppb	92
14) Freon 11	6.160	101	20260	0.14	ppb	98
15) Acetone	6.322	58	206322	7.58	ppb	89
17) Isopropyl alcohol	6.433	45	25614	0.31	ppb	# 1
23) Carbon disulfide	7.553	76	281299m	1.37	ppb	
28) Methyl Ethyl Ketone	9.225	72	23084	0.54	ppb	97
30) Hexane	9.336	57	77925	0.52	ppb	# 63
31) Ethyl acetate	9.816	43	28381	0.13	ppb	89
39) Benzene	11.690	78	75099	0.27	ppb	92
42) 2,2,4-trimethylpentane	12.512	57	86199	0.19	ppb	81
51) Toluene	15.025	92	198253	0.98	ppb	97
56) Tetrachloroethylene	16.076	164	12704	0.10	ppb	92
57) Chlorobenzene	17.069	112	69474	0.23	ppb	92
58) Ethylbenzene	17.333	91	78956	0.18	ppb	98
59) m&p-xylene	17.511	91	132476	0.40	ppb	82
63) o-xylene	18.045	91	55985	0.15	ppb	85
71) 1,2,4-trimethylbenzene	19.993	105	57416	0.14	ppb	95
74) 1,4-dichlorobenzene	20.482	146	32022	0.16	ppb	89

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121613.D
Acq On : 16 Dec 2022 8:56 pm
Operator : RJP
Sample : C2212031-004A
Misc : AD12_LUG
ALS Vial : 13 Sample Multiplier: 1

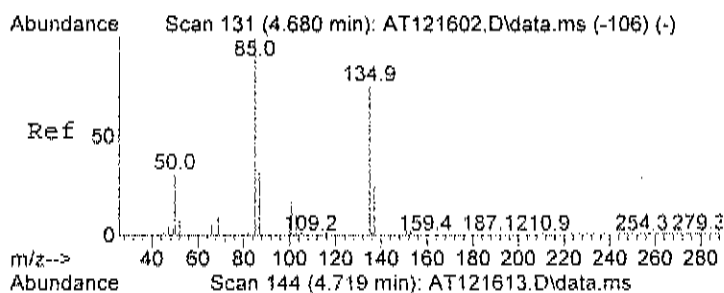
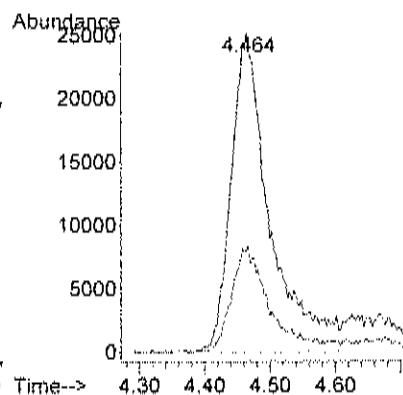
Quant Time: Dec 17 08:40:40 2022
Quant Method : C:\msdchem\1\methods\AD12_LUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





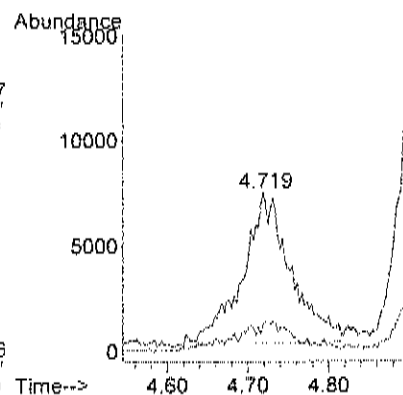
#3
Freon 12
Concen: 0.59 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

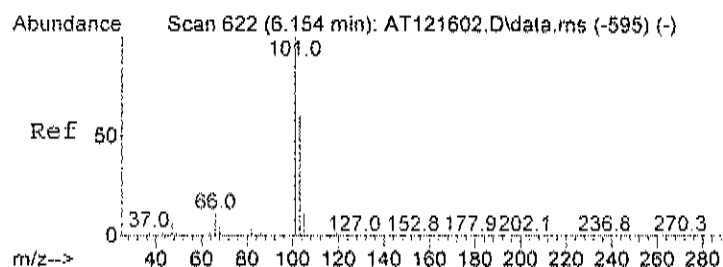
Tgt Ion: 85 Resp: 103056
Ion Ratio Lower Upper
85 100
87 33.4 14.3 54.3



#4
Chloromethane
Concen: 0.52 ppb
RT: 4.719 min Scan# 144
Delta R.T. 0.036 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

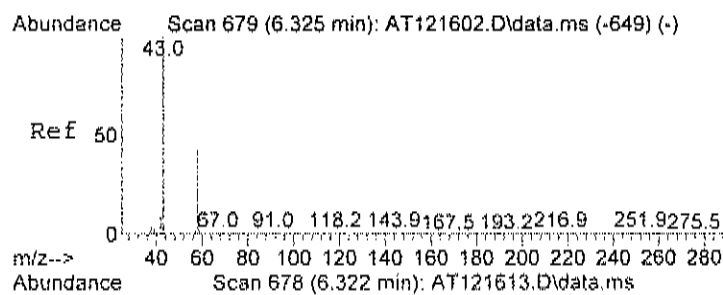
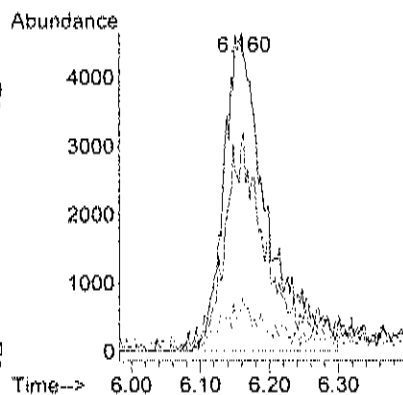
Tgt Ion: 50 Resp: 29299
Ion Ratio Lower Upper
50 100
52 21.5 5.4 45.4





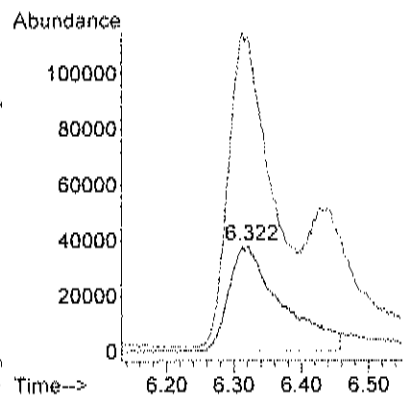
#14
Freon 11
Concen: 0.14 ppb
RT: 6.160 min Scan# 624
Delta R.T. -0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

Tgt Ion	Ratio	Lower	Upper
101	100		
103	62.5	44.1	84.1
105	11.1	0.0	32.0

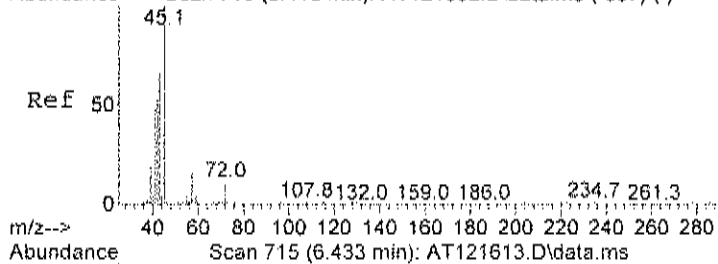


#15
Acetone
Concen: 7.58 ppb
RT: 6.322 min Scan# 678
Delta R.T. -0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

Tgt Ion	Ratio	Lower	Upper
58	100		
43	323.1	272.3	332.3



Abundance Scan 710 (6.418 min): AT121602.D\data.ms (-687) (-)



#17

Isopropyl alcohol

Concen: 0.31 ppb

RT: 6.433 min Scan# 715

Delta R.T. 0.015 min

Lab File: AT121613.D

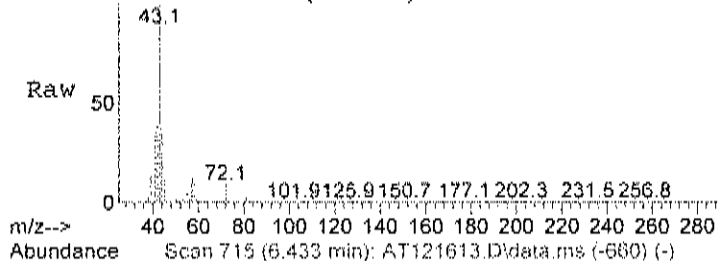
Acq: 16 Dec 2022 8:56 pm

Tgt Ion: 45 Resp: 25614

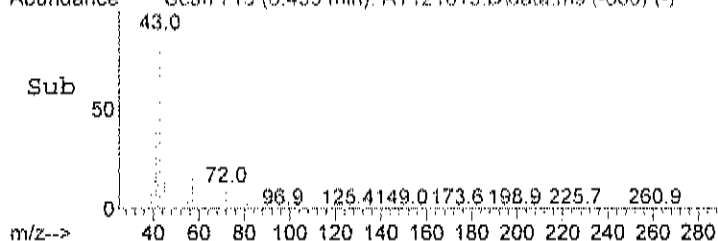
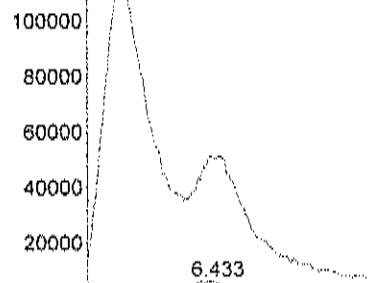
Ion Ratio Lower Upper

45 100

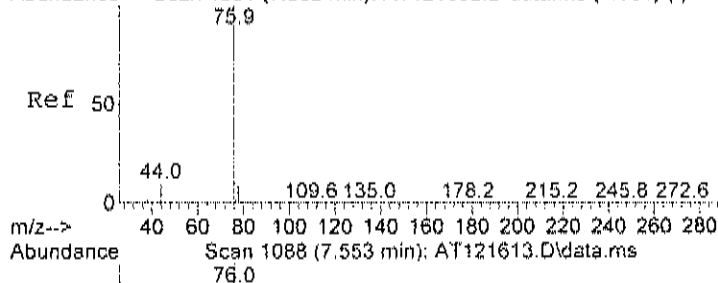
43 0.0 91.9 131.9#



Abundance



Abundance Scan 1091 (7.562 min): AT121602.D\data.ms (-1061) (-)



#23

Carbon disulfide

Concen: 1.37 ppb m

RT: 7.553 min Scan# 1088

Delta R.T. -0.006 min

Lab File: AT121613.D

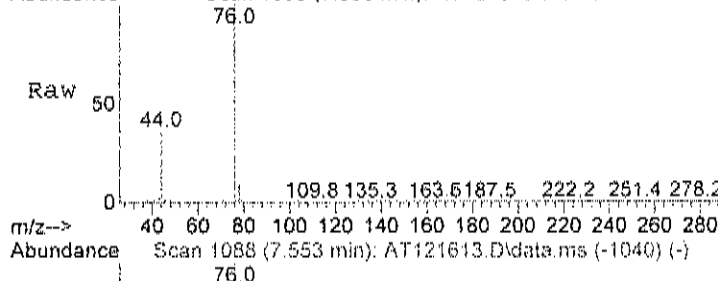
Acq: 16 Dec 2022 8:56 pm

Tgt Ion: 76 Resp: 281299

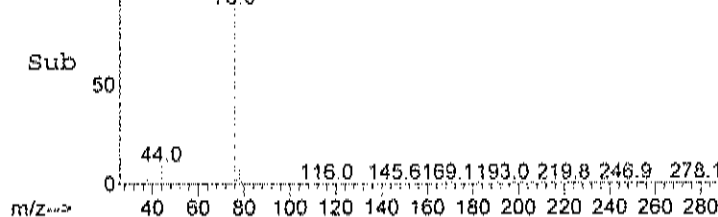
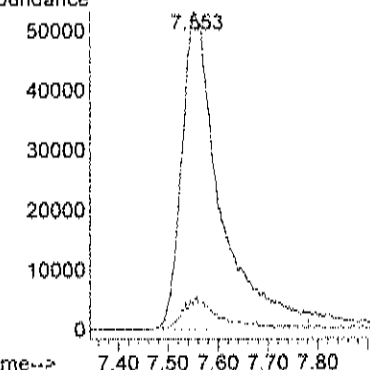
Ion Ratio Lower Upper

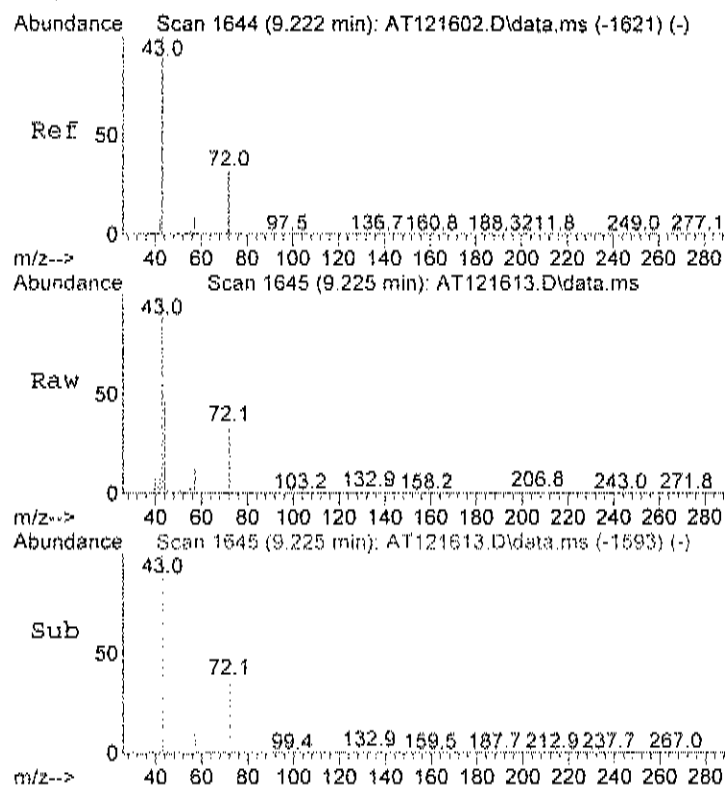
76 100

78 7.9 0.0 28.7



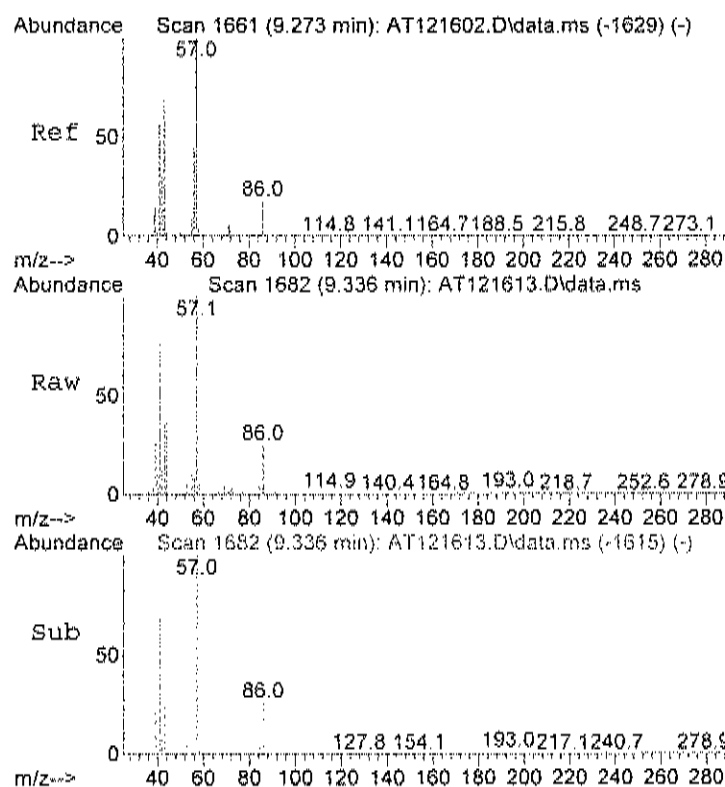
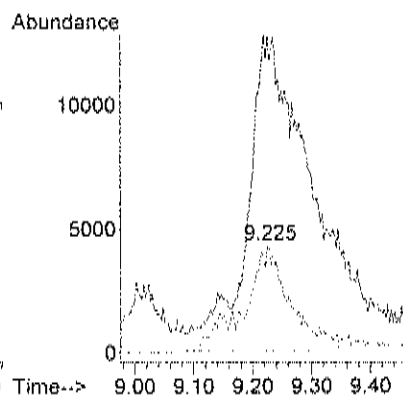
Abundance





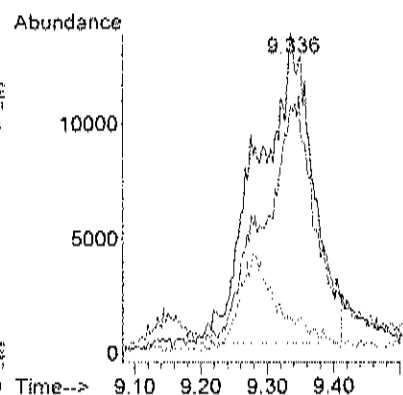
#28
Methyl Ethyl Ketone
Concen: 0.54 ppb
RT: 9.225 min Scan# 1645
Delta R.T. 0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

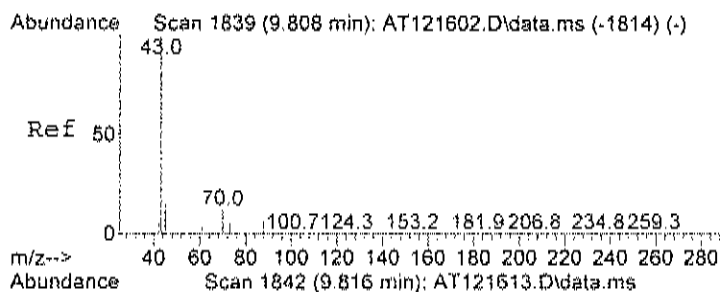
Tgt Ion	Ratio	Lower	Upper
72	100		
43	344.3	333.7	373.7
72	100.0	80.0	120.0



#30
Hexane
Concen: 0.52 ppb
RT: 9.336 min Scan# 1682
Delta R.T. 0.051 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

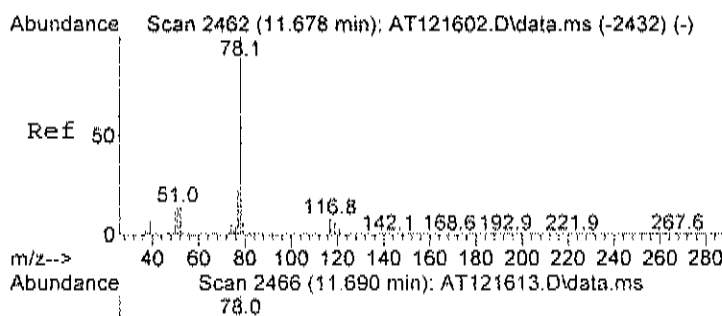
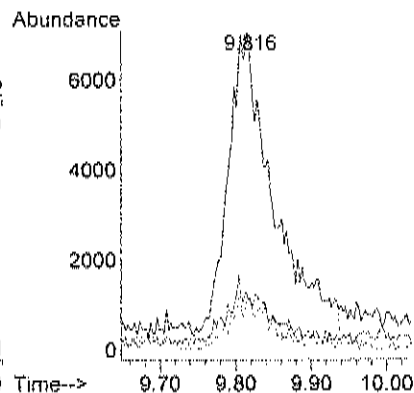
Tgt Ion	Ratio	Lower	Upper
57	100		
41	70.1	62.0	102.0
56	0.0	31.8	71.8#





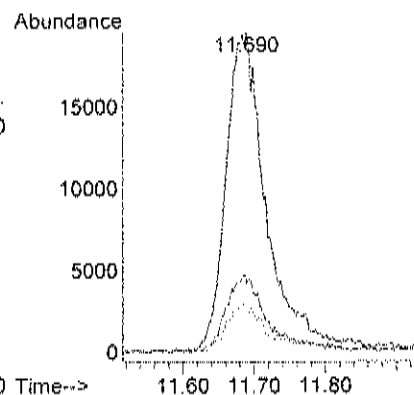
#31
Ethyl acetate
Concen: 0.13 ppb
RT: 9.816 min Scan# 1842
Delta R.T. 0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

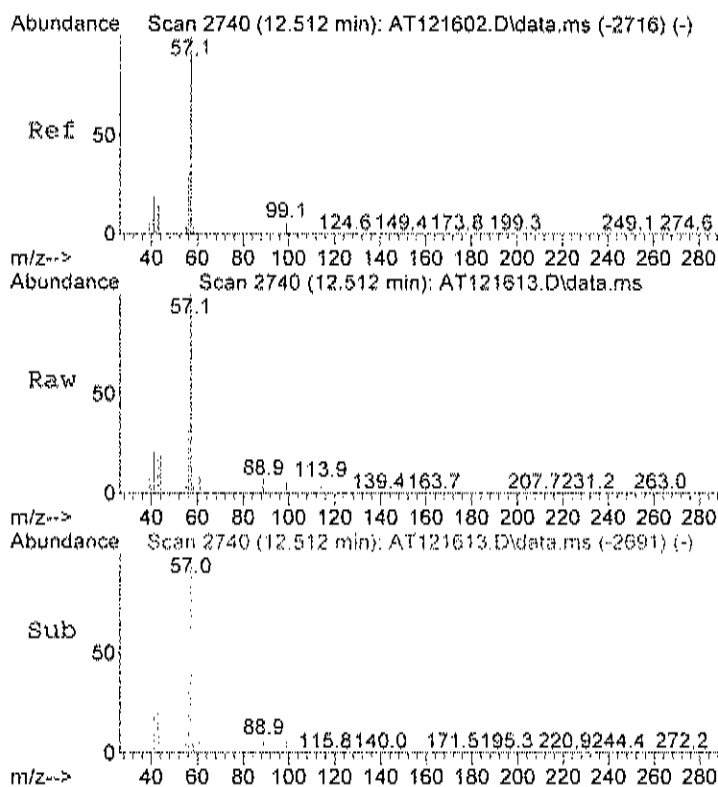
Tgt Ion: 43	Resp: 28381
Ion Ratio	Lower Upper
43 100	
45 18.8	0.0 32.9
61 15.5	0.0 33.0



#39
Benzene
Concen: 0.27 ppb
RT: 11.690 min Scan# 2466
Delta R.T. -0.000 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

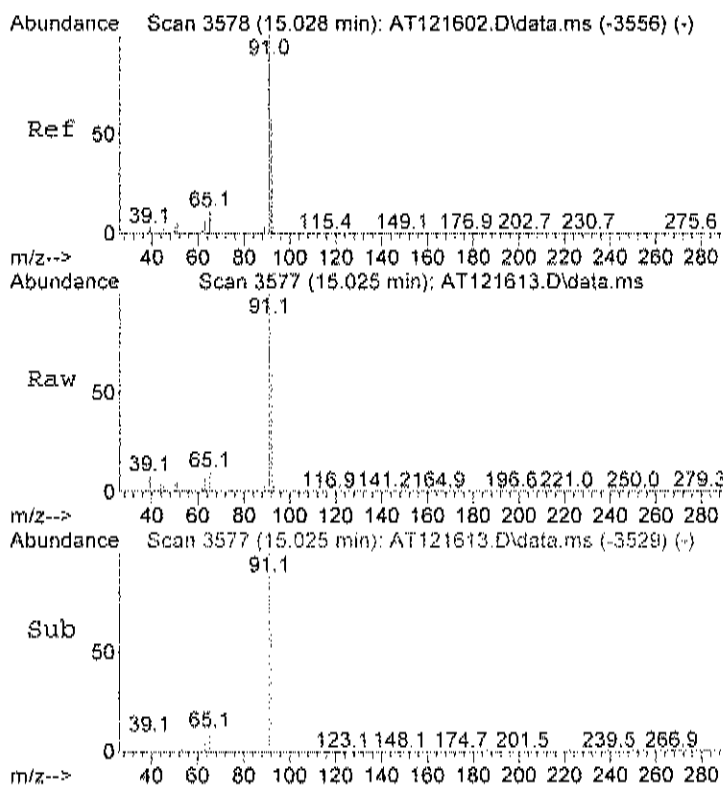
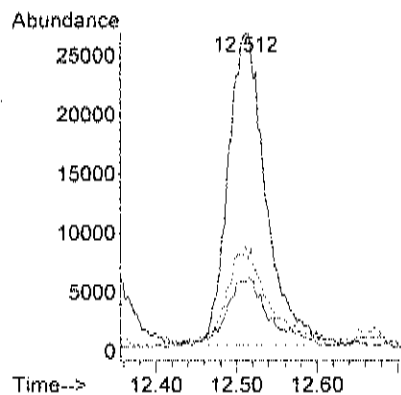
Tgt Ion: 78	Resp: 75099
Ion Ratio	Lower Upper
78 100	
77 25.2	2.5 42.5
51 16.0	0.5 40.5





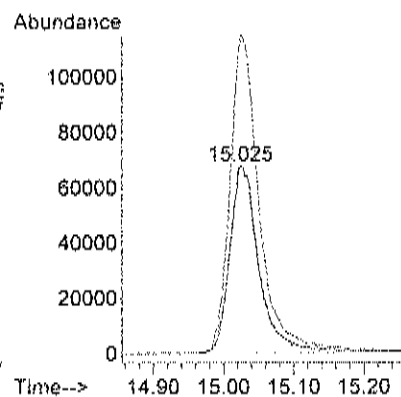
#42
2,2,4-trimethylpentane
Concen: 0.19 ppb
RT: 12.512 min Scan# 2740
Delta R.T. -0.003 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

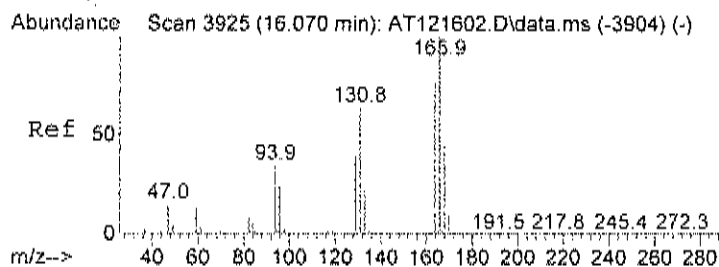
Tgt Ion:	57	Resp:	86199
Ion	Ratio	Lower	Upper
57	100		
41	25.6	17.4	57.4
56	40.7	10.8	50.8



#51
Toluene
Concen: 0.98 ppb
RT: 15.025 min Scan# 3577
Delta R.T. -0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

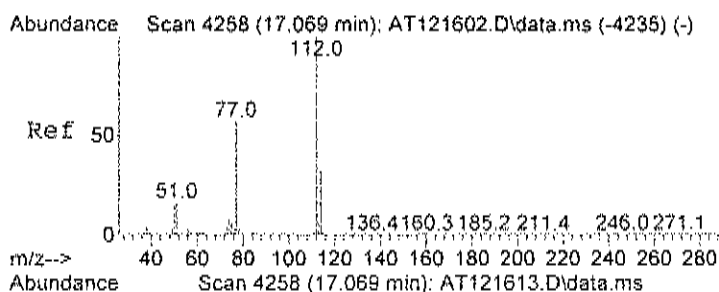
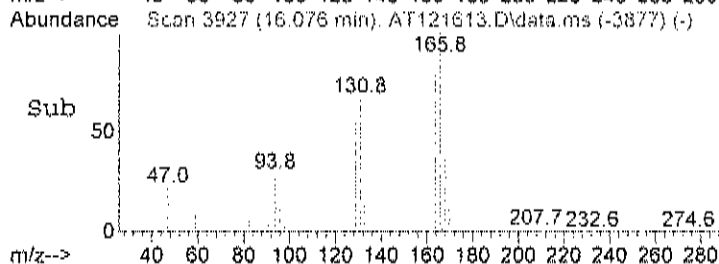
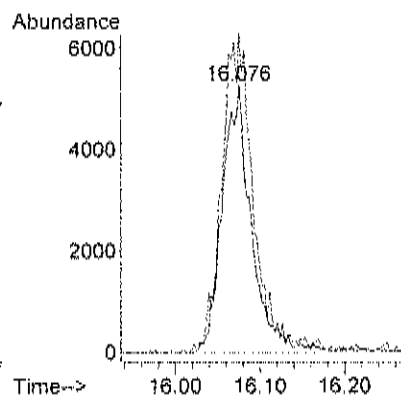
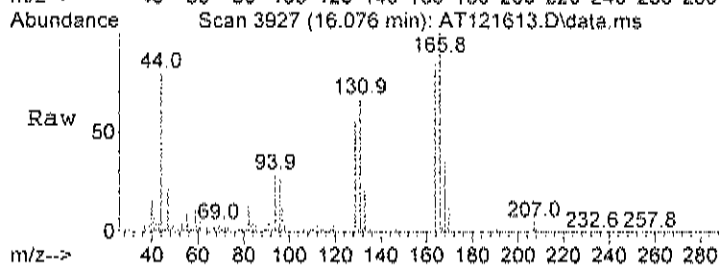
Tgt Ion:	92	Resp:	198253
Ion	Ratio	Lower	Upper
92	100		
91	168.9	153.3	193.3





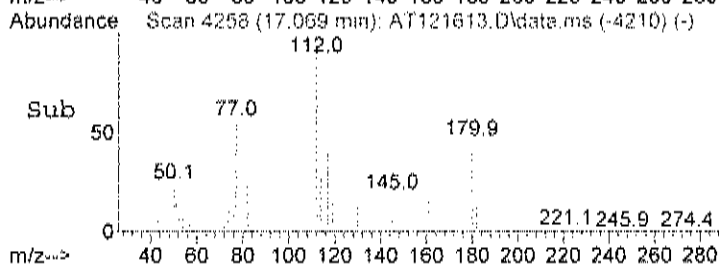
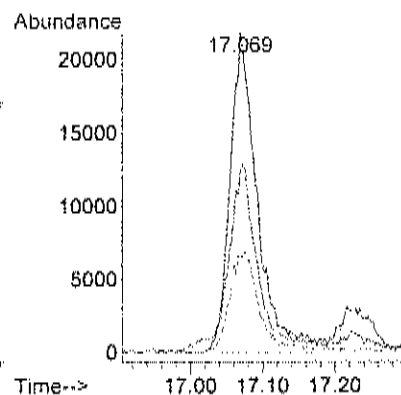
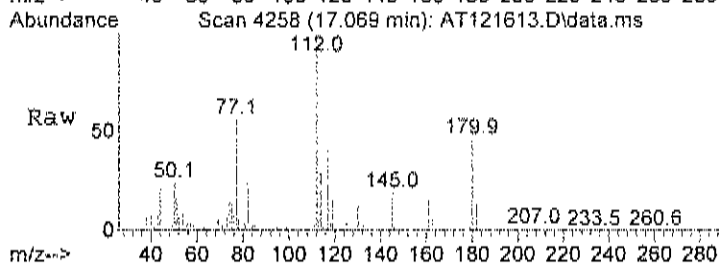
#56
Tetrachloroethylene
Concen: 0.10 ppb
RT: 16.076 min Scan# 3927
Delta R.T. 0.001 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

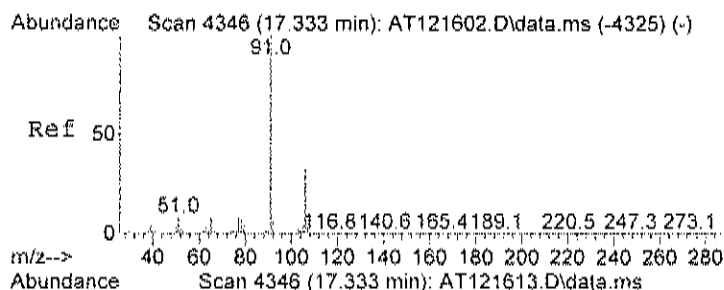
Tgt Ion	Ratio	Lower	Upper
164	100		
166	126.4	97.2	137.2



#57
Chlorobenzene
Concen: 0.23 ppb
RT: 17.069 min Scan# 4258
Delta R.T. -0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

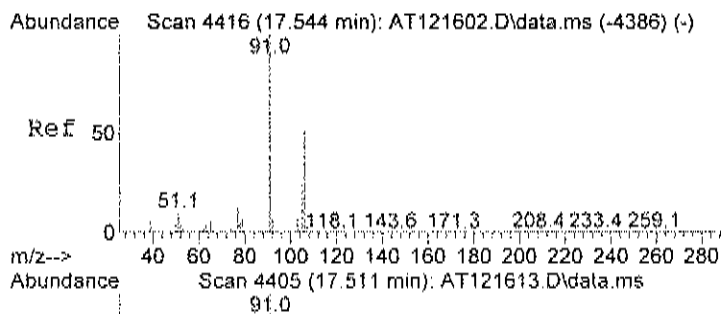
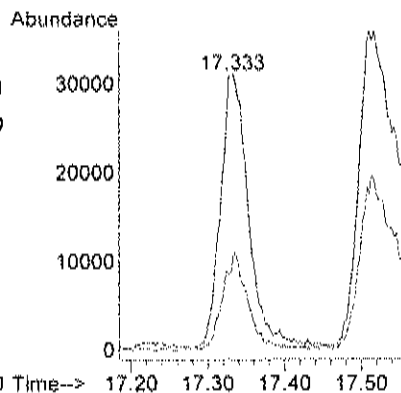
Tgt Ion	Ratio	Lower	Upper
112	100		
77	61.2	34.6	74.6
114	33.4	10.5	50.5





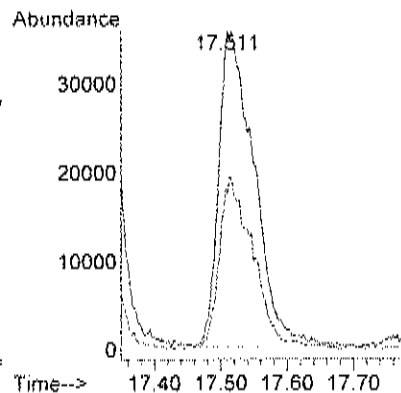
#58
Ethylbenzene
Concen: 0.18 ppb
RT: 17.333 min Scan# 4346
Delta R.T. -0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

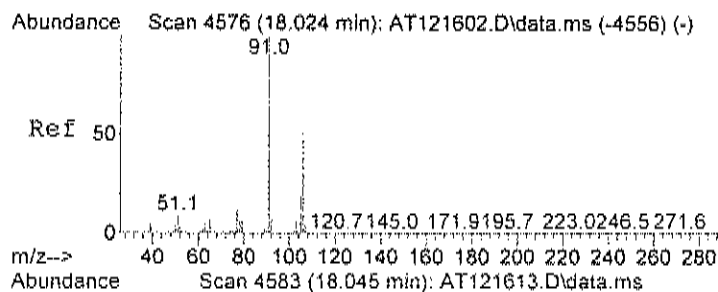
Tgt Ion: 91	Resp: 78956
Ion Ratio	Lower Upper
91 100	
106 32.9	13.9 53.9



#59
m&p-xylene
Concen: 0.40 ppb
RT: 17.511 min Scan# 4405
Delta R.T. -0.032 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

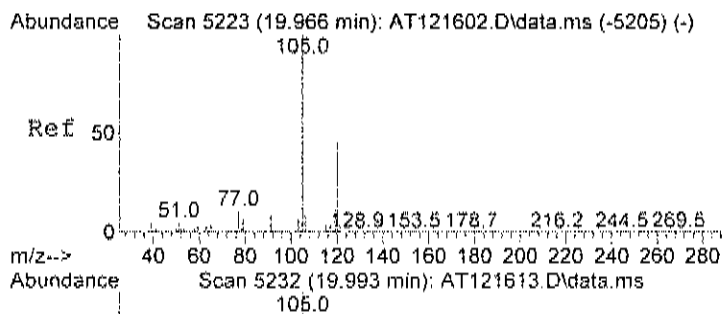
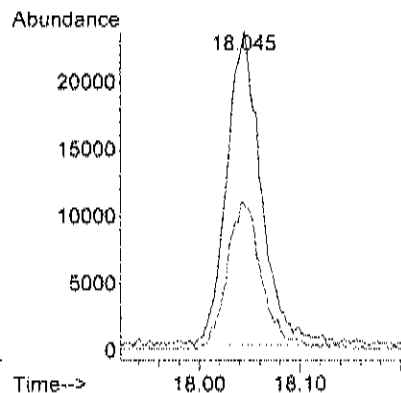
Tgt Ion: 91	Resp: 132476
Ion Ratio	Lower Upper
91 100	
106 53.5	22.4 62.4





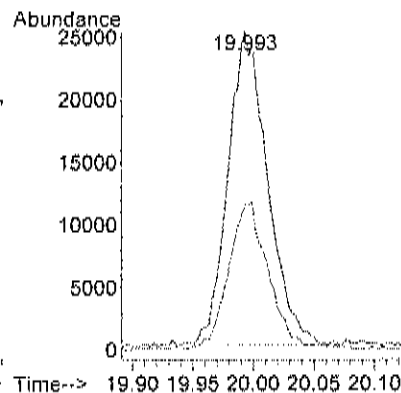
#63
o-xylene
Concen: 0.15 ppb
RT: 18.045 min Scan# 4583
Delta R.T. -0.003 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

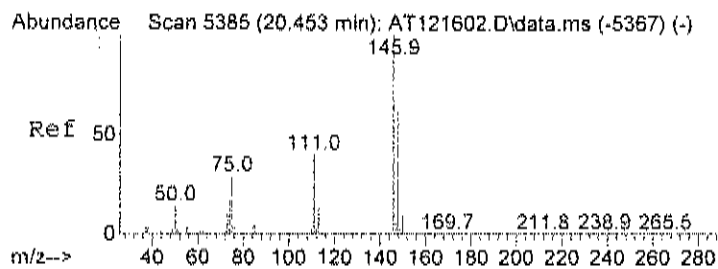
Tgt Ion:	91	Resp:	55985
Ion	Ratio	Lower	Upper
91	100		
106	50.0	20.7	60.7



#71
1,2,4-trimethylbenzene
Concen: 0.14 ppb
RT: 19.993 min Scan# 5232
Delta R.T. -0.003 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

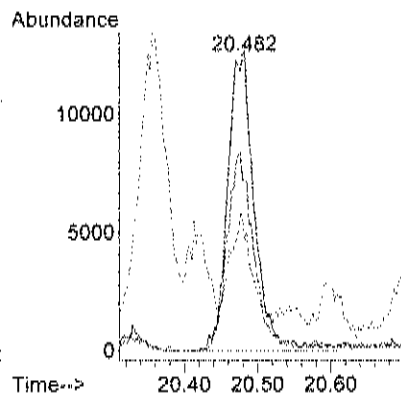
Tgt Ion:	105	Resp:	57416
Ion	Ratio	Lower	Upper
105	100		
120	48.1	24.9	64.9





#74
1,4-dichlorobenzene
Concen: 0.16 ppb
RT: 20.482 min Scan# 5395
Delta R.T. 0.006 min
Lab File: AT121613.D
Acq: 16 Dec 2022 8:56 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
148	67.2	41.5	81.5
111	28.8	19.1	59.1



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121709.D
Acq On : 17 Dec 2022 3:31 pm
Operator : RJP
Sample : C2212031-004A 10X
Misc : AD12 1UG
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 18 10:33:54 2022
Quant Method : C:\msdchem\1\methods\AD12 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

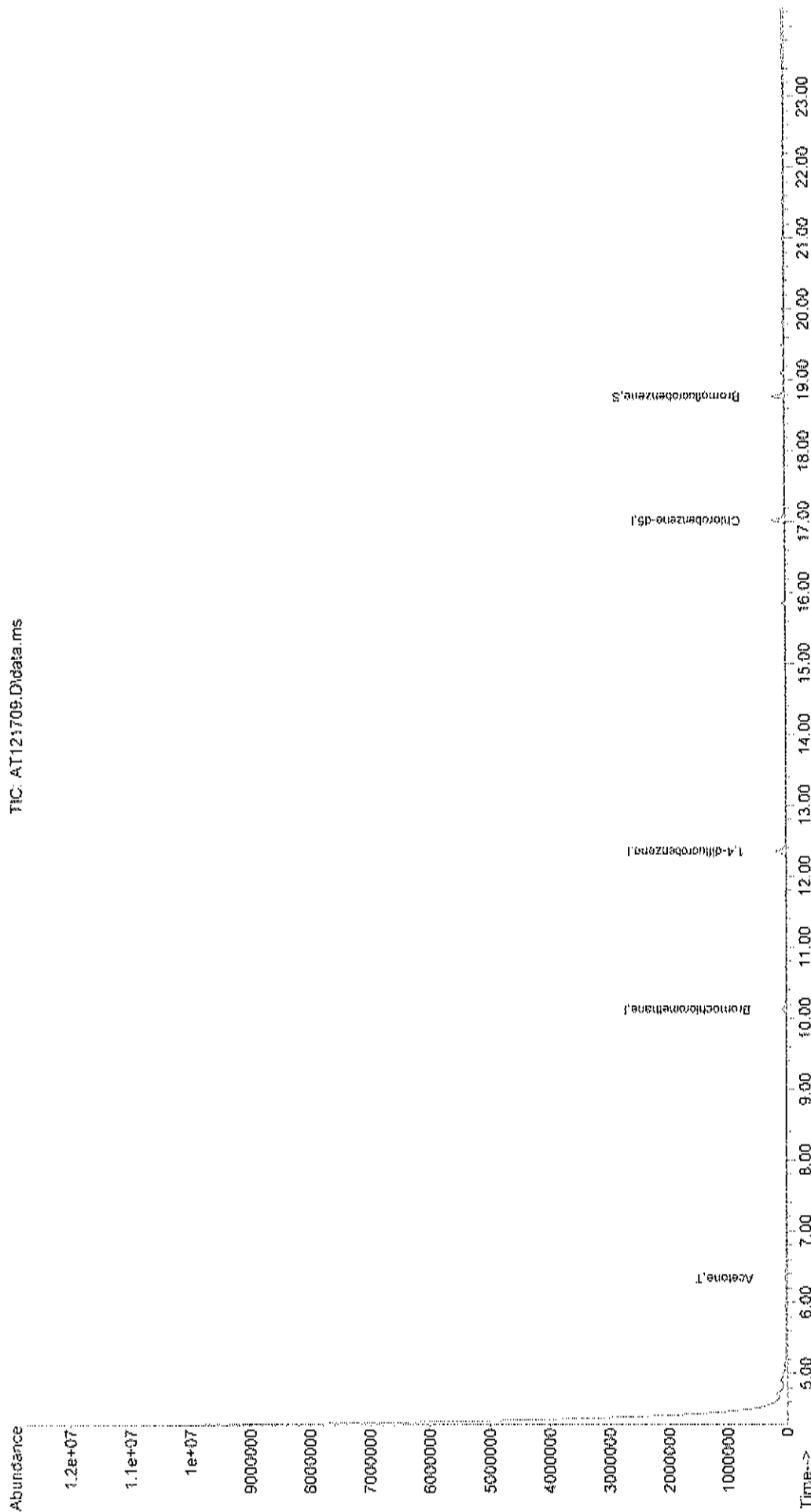
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

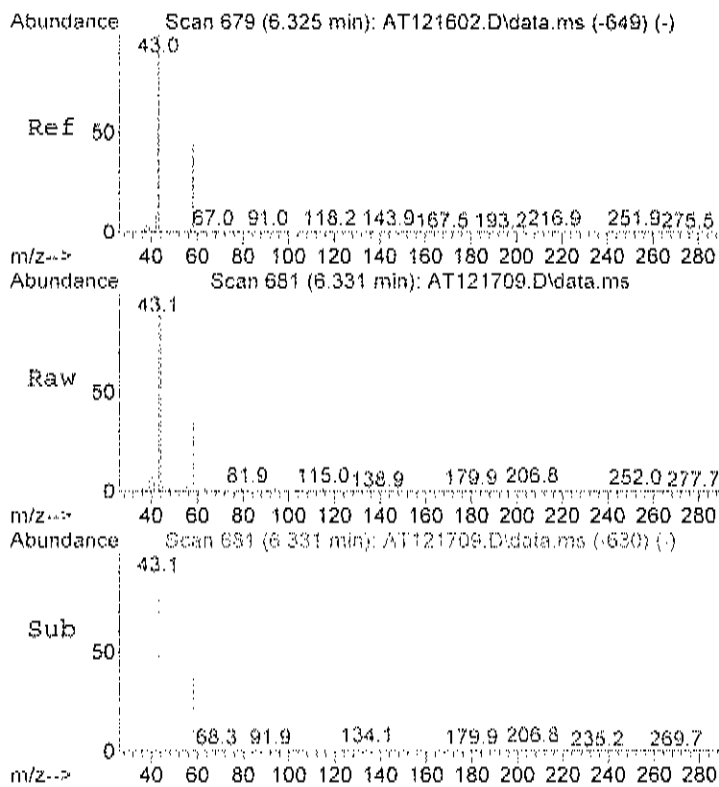
Internal Standards						
1) Bromochloromethane	10.120	128	45749	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	278079	1.00	ppb	0.00
50) Chlorobenzene-d5	17.015	117	219436	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	130054	0.88	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	88.00%
Target Compounds						
15) Acetone	6.331	58	19730	0.82	ppb	# 80

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121709.D
 Acq On : 17 Dec 2022 3:31 pm
 Operator : RJP
 Sample : C2212031-004A 10X
 Misc : AD12_1UG
 ALS Vial : 7 Sample Multiplier: 1

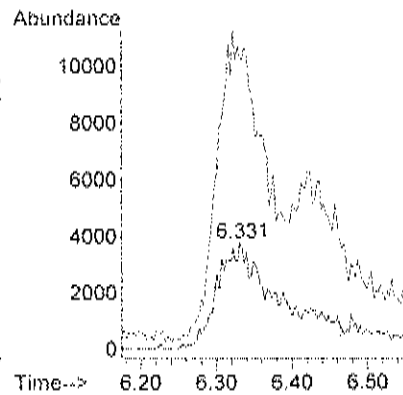
Quant Time: Dec 18 10:33:54 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 Qlast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





#15
Acetone
Concen: 0.82 ppb
RT: 6.331 min Scan# 681
Delta R.T. 0.003 min
Lab File: AT121709.D
Acq: 17 Dec 2022 3:31 pm

Tgt Ion:	58	Resp:	19730
Ion	Ratio	Lower	Upper
58	100		
43	342.3	272.3	332.3#



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-5

Lab Order: C2212031

Tag Number: 129,1153

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-005A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
2,2,4-Trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Acetone	1.9	0.30		ppbV	1	12/16/2022 9:41:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Carbon disulfide	0.21	0.15		ppbV	1	12/16/2022 9:41:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-5

Lab Order: C2212031

Tag Number: 129,1153

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-005A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 11	0.29	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Freon 12	0.60	0.15		ppbV	1	12/16/2022 9:41:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Hexane	0.17	0.15		ppbV	1	12/16/2022 9:41:00 PM
Isopropyl alcohol	0.25	0.15		ppbV	1	12/16/2022 9:41:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl Ethyl Ketone	0.40	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 9:41:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Methylene chloride	0.18	0.15		ppbV	1	12/16/2022 9:41:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/16/2022 9:41:00 PM
Tetrahydrofuran	0.23	0.15		ppbV	1	12/16/2022 9:41:00 PM
Toluene	0.29	0.15		ppbV	1	12/16/2022 9:41:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 9:41:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 9:41:00 PM

Qualifiers:

Results reported are not blank corrected

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-5

Lab Order: C2212031

Tag Number: 129,1153

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-005A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15			Analyst: RJP	
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 9:41:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 9:41:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 9:41:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 9:41:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 9:41:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 9:41:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 9:41:00 PM
Acetone	4.6	0.71		ug/m3	1	12/16/2022 9:41:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 9:41:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 9:41:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 9:41:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 9:41:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 9:41:00 PM
Carbon disulfide	0.65	0.47		ug/m3	1	12/16/2022 9:41:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 9:41:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 9:41:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 9:41:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 9:41:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 9:41:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 9:41:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 9:41:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 9:41:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 9:41:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 9:41:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 9:41:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 9:41:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 9:41:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS**Client Sample ID:** SVW-5**Lab Order:** C2212031**Tag Number:** 129,1153**Project:** IKEA Red Hook**Collection Date:** 12/13/2022**Lab ID:** C2212031-005A**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
Freon 12	3.0	0.74		ug/m3	1	12/16/2022 9:41:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 9:41:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 9:41:00 PM
Hexane	0.60	0.53		ug/m3	1	12/16/2022 9:41:00 PM
Isopropyl alcohol	0.61	0.37		ug/m3	1	12/16/2022 9:41:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Ethyl Ketone	1.2	0.88		ug/m3	1	12/16/2022 9:41:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 9:41:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 9:41:00 PM
Methylene chloride	0.63	0.52		ug/m3	1	12/16/2022 9:41:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 9:41:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 9:41:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 9:41:00 PM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/16/2022 9:41:00 PM
Tetrahydrofuran	0.68	0.44		ug/m3	1	12/16/2022 9:41:00 PM
Toluene	1.1	0.57		ug/m3	1	12/16/2022 9:41:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 9:41:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 9:41:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 9:41:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 9:41:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121614.D
 Acq On : 16 Dec 2022 9:41 pm
 Operator : RJP
 Sample : C2212031-005A
 Misc : AD12_1UG
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 17 08:40:42 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

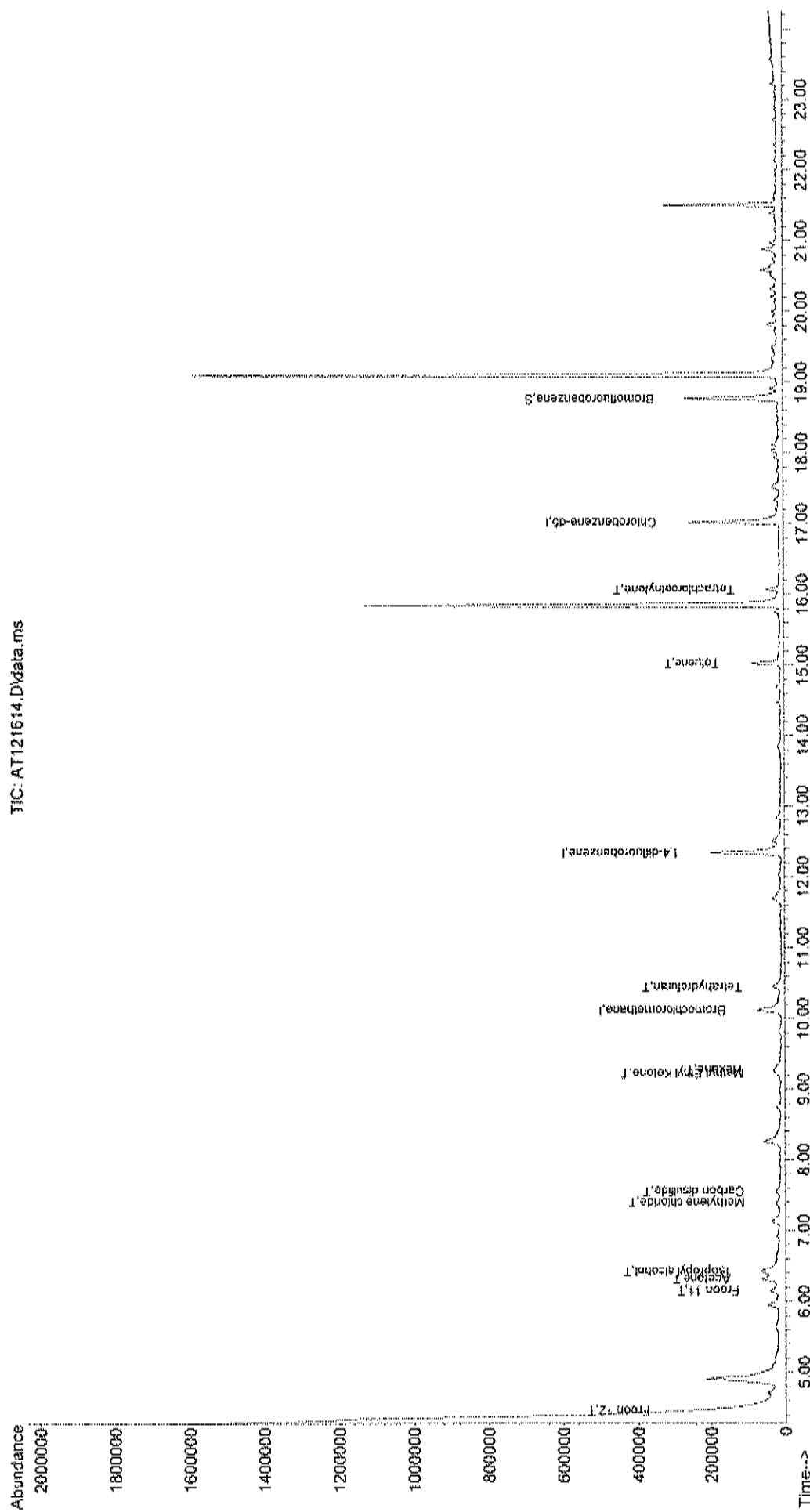
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

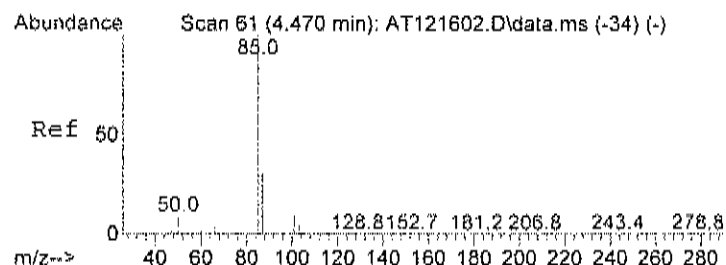
Internal Standards						
1) Bromochloromethane	10.117	128	49737	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	305798	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	244946	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	156053	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
						Qvalue
3) Freon 12	4.461	85	100016	0.60	ppb	99
14) Freon 11	6.154	101	40634	0.29	ppb	94
15) Acetone	6.319	58	50514	1.94	ppb	# 79
17) Isopropyl alcohol	6.424	45	19864	0.25	ppb	# 1
21) Methylene chloride	7.394	84	12249	0.18	ppb	94
23) Carbon disulfide	7.553	76	41879	0.21	ppb	99
28) Methyl Ethyl Ketone	9.225	72	16201m	0.40	ppb	
30) Hexane	9.273	57	24036	0.17	ppb	# 74
33) Tetrahydrofuran	10.444	42	18484	0.23	ppb	86
51) Toluene	15.028	92	57801	0.29	ppb	97
56) Tetrachloroethylene	16.070	164	13096	0.11	ppb	94

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121614.D
Acq On : 16 Dec 2022 9:41 pm
Operator : RJP
Sample : C2212031-005A
Misc : AD12_1UG
ALS Vial : 14 Sample Multiplier: 1

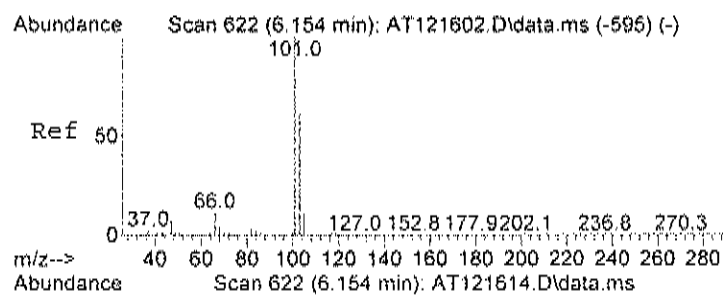
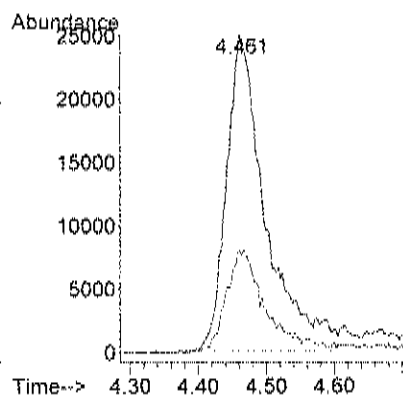
Quant Time: Dec 17 08:40:42 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





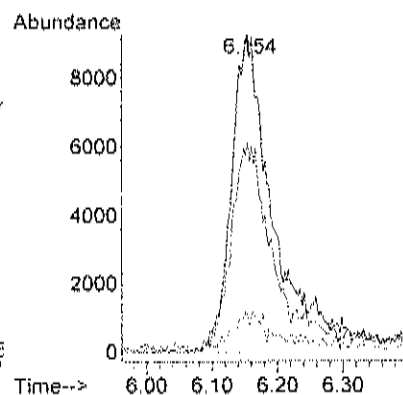
#3
Freon 12
Concen: 0.60 ppb
RT: 4.461 min Scan# 58
Delta R.T. -0.012 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

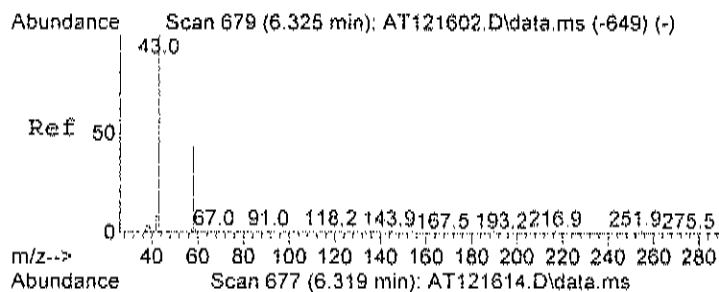
Tgt Ion: 85 Resp: 100016
Ion Ratio Lower Upper
85 100
87 33.7 14.3 54.3



#14
Freon 11
Concen: 0.29 ppb
RT: 6.154 min Scan# 622
Delta R.T. -0.012 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

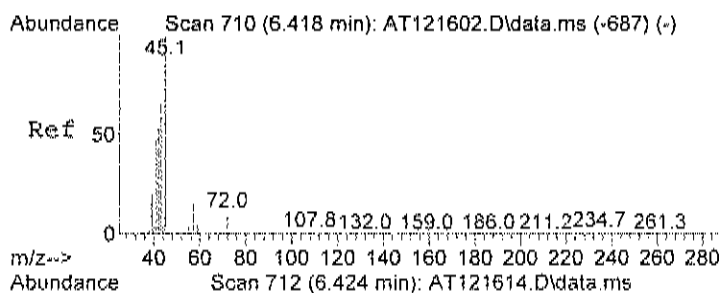
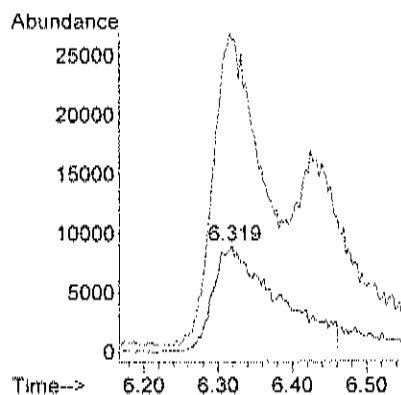
Tgt Ion: 101 Resp: 40634
Ion Ratio Lower Upper
101 100
103 68.5 44.1 84.1
105 7.9 0.0 32.0





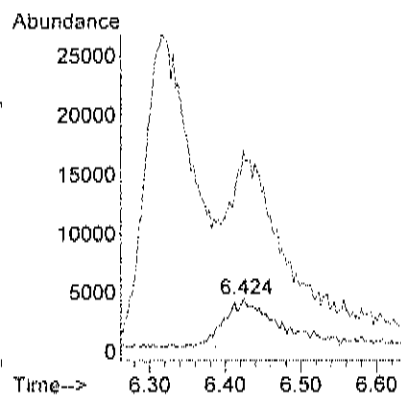
#15
Acetone
Concen: 1.94 ppb
RT: 6.319 min Scan# 677
Delta R.T. -0.009 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

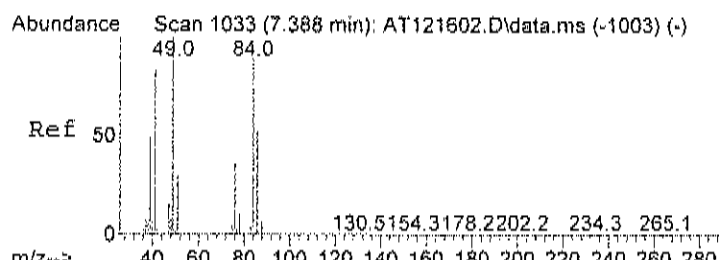
Tgt Ion: 58 Resp: 50514
Ion Ratio Lower Upper
58 100
43 343.7 272.3 332.3#



#17
Isopropyl alcohol
Concen: 0.25 ppb
RT: 6.424 min Scan# 712
Delta R.T. 0.006 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

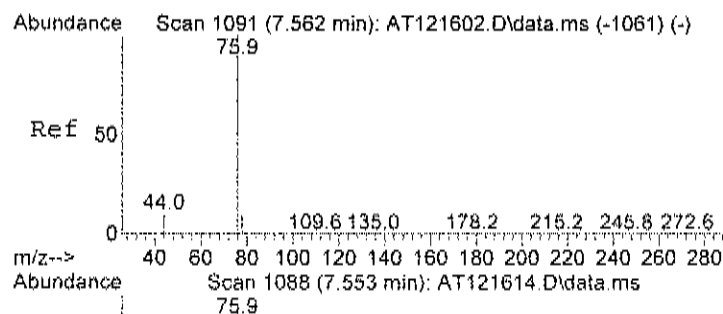
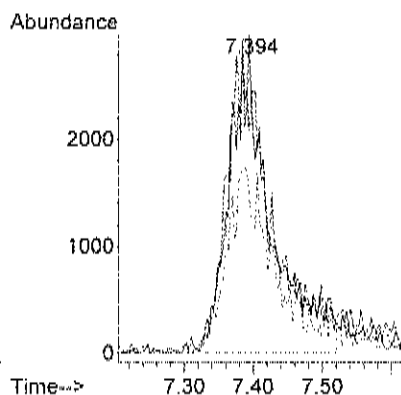
Tgt Ion: 45 Resp: 19864
Ion Ratio Lower Upper
45 100
43 0.0 91.9 131.9#





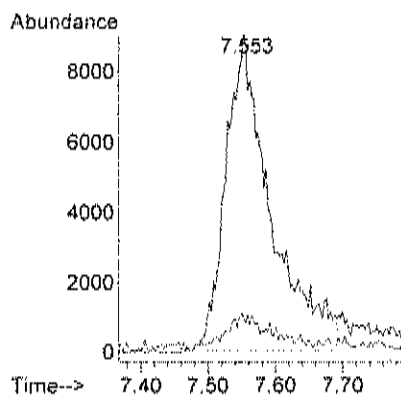
#21
Methylene chloride
Concen: 0.18 ppb
RT: 7.394 min Scan# 1035
Delta R.T. 0.006 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

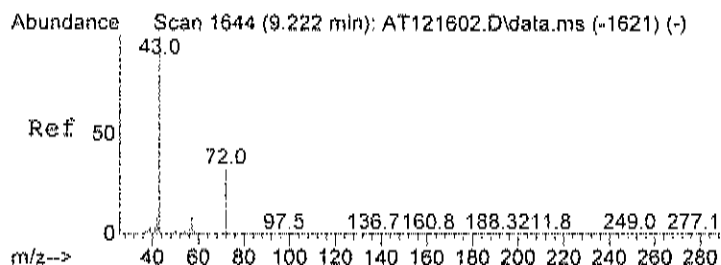
Tgt Ion:	84	Resp:	12249
Ion	Ratio	Lower	Upper
84	100		
49	95.4	84.2	124.2
86	65.2	42.9	82.9



#23
Carbon disulfide
Concen: 0.21 ppb
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

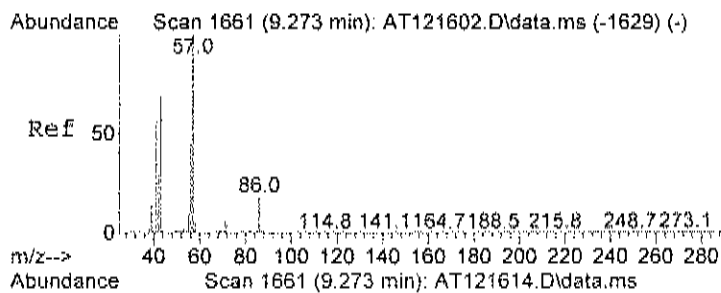
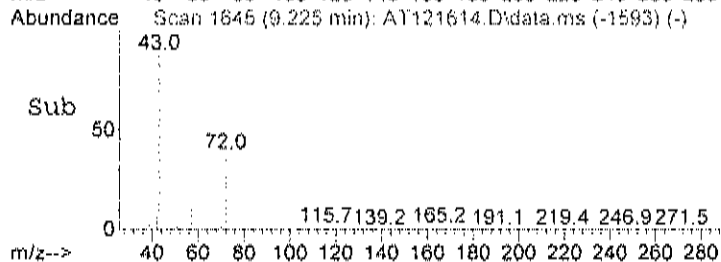
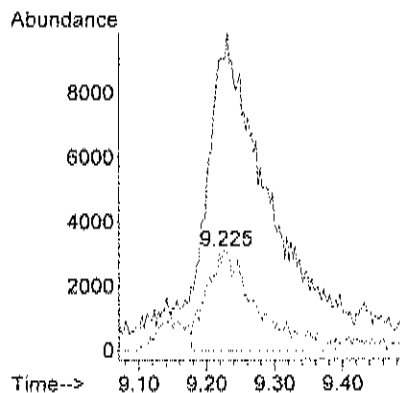
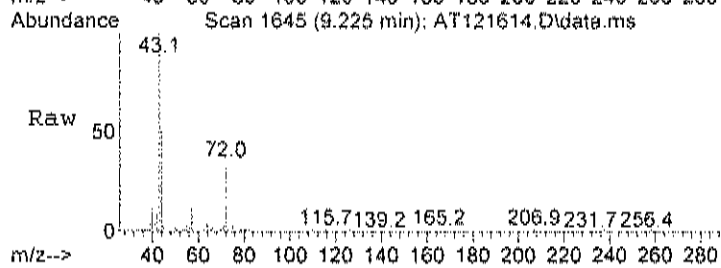
Tgt Ion:	76	Resp:	41879
Ion	Ratio	Lower	Upper
76	100		
78	9.2	0.0	28.7





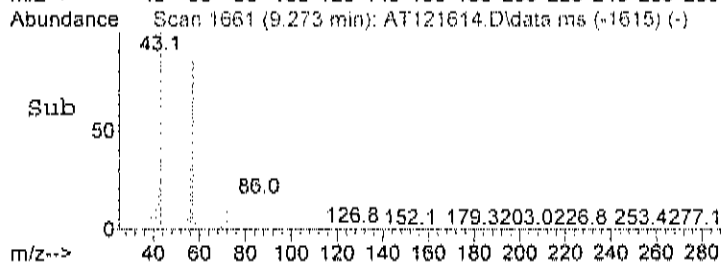
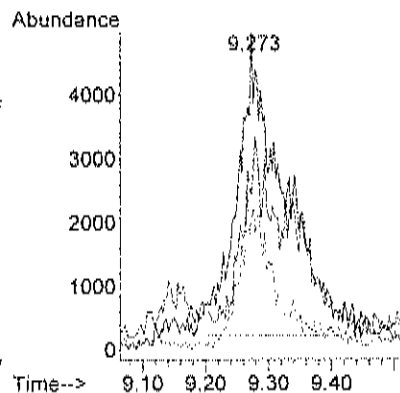
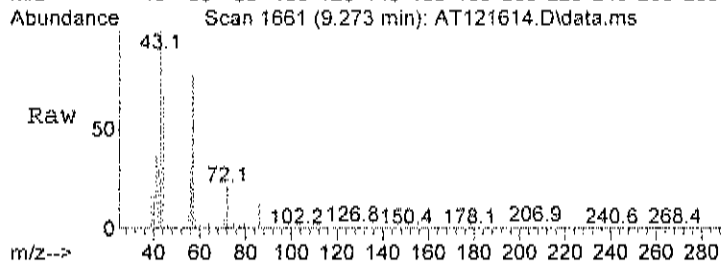
#28
Methyl Ethyl Ketone
Concen: 0.40 ppb m
RT: 9.225 min Scan# 1645
Delta R.T. 0.006 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

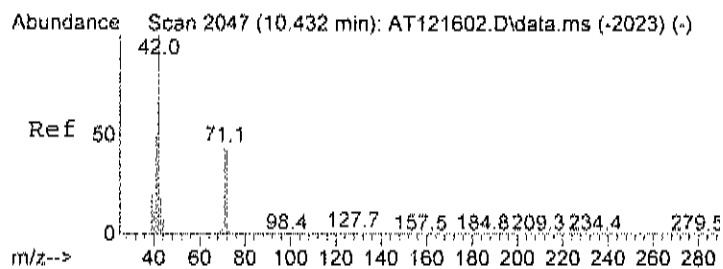
Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	333.7	373.7#
72	111.9	80.0	120.0



#30
Hexane
Concen: 0.17 ppb
RT: 9.273 min Scan# 1661
Delta R.T. -0.012 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

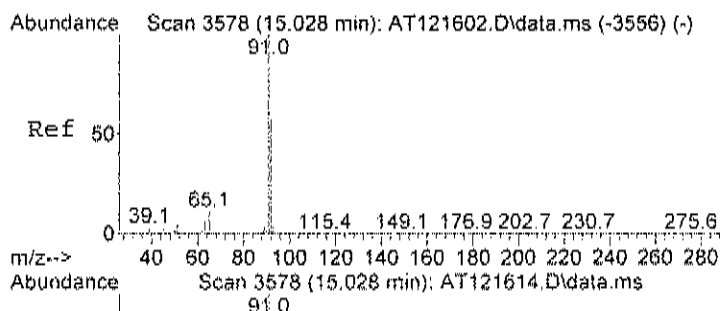
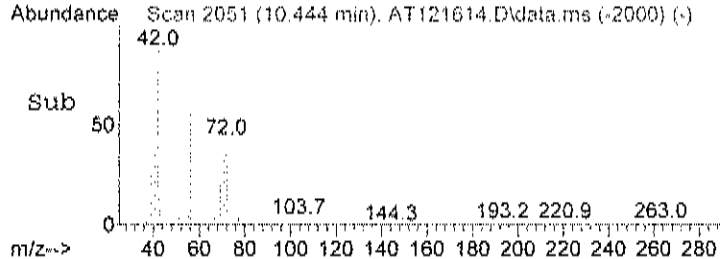
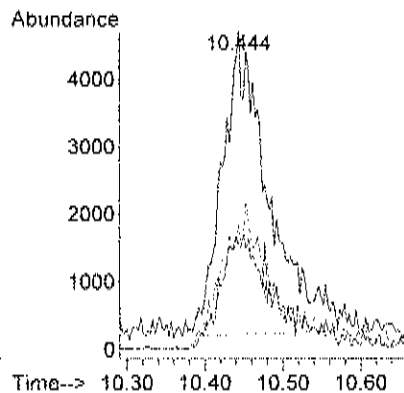
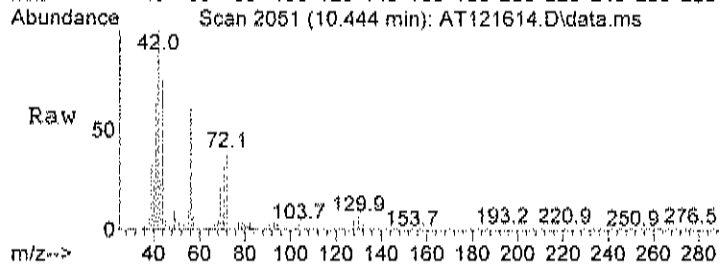
Tgt Ion	Ratio	Lower	Upper
57	100		
41	54.2	62.0	102.0#
56	38.5	31.8	71.8





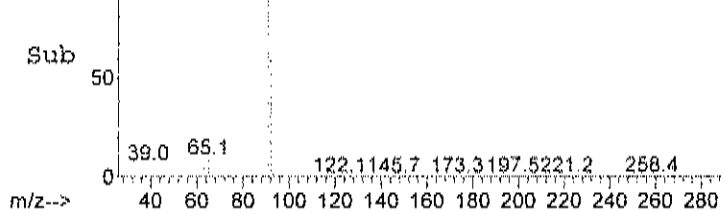
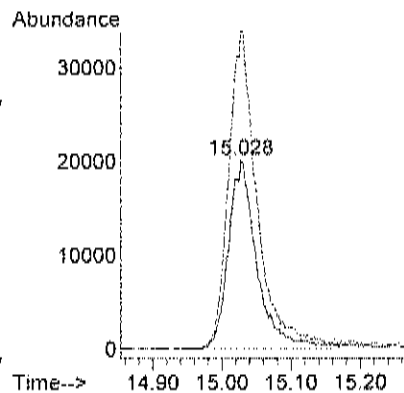
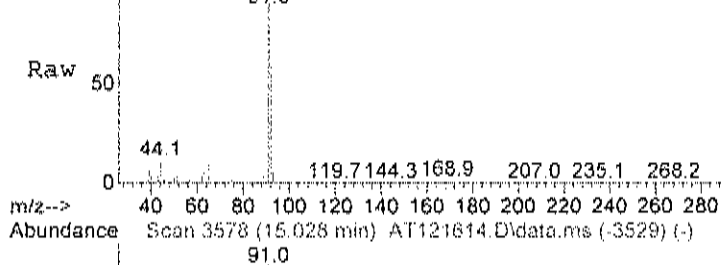
#33
Tetrahydrofuran
Concen: 0.23 ppb
RT: 10.444 min Scan# 2051
Delta R.T. 0.003 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

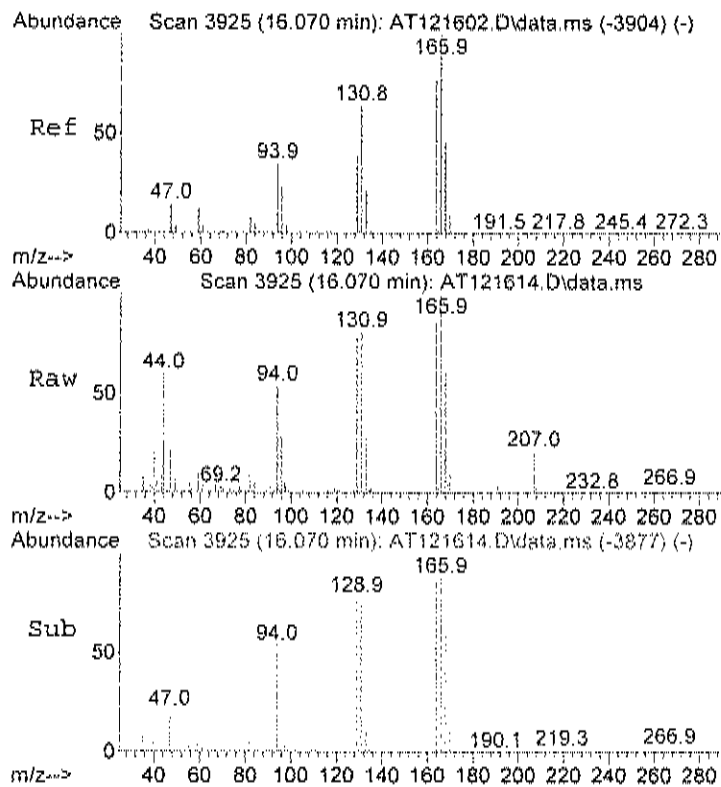
Tgt Ion	Ratio	Lower	Upper
42	100		
71	44.2	33.5	73.5
72	49.6	20.1	60.1



#51
Toluene
Concen: 0.29 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

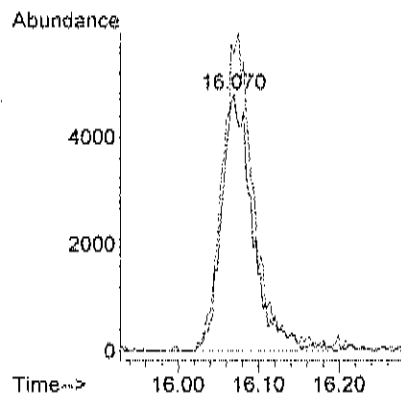
Tgt Ion	Ratio	Lower	Upper
92	100		
91	169.5	153.3	193.3





#56
Tetrachloroethylene
Concen: 0.11 ppb
RT: 16.070 min Scan# 3925
Delta R.T. -0.005 min
Lab File: AT121614.D
Acq: 16 Dec 2022 9:41 pm

Tgt Ion: 164 Resp: 13096
Ion Ratio Lower Upper
164 100
166 123.7 97.2 137.2



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Acetone	1.9	0.30		ppbV	1	12/16/2022 10:25:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Benzene	0.18	0.15		ppbV	1	12/16/2022 10:25:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Carbon disulfide	0.12	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Chloromethane	0.52	0.15		ppbV	1	12/16/2022 10:25:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 11 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Ethyl acetate	0.13	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 11	0.29	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Freon 12	0.65	0.15		ppbV	1	12/16/2022 10:25:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Hexane	0.16	0.15		ppbV	1	12/16/2022 10:25:00 PM
Isopropyl alcohol	0.37	0.15		ppbV	1	12/16/2022 10:25:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Ethyl Ketone	0.32	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 10:25:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Methylene chloride	0.28	0.15		ppbV	1	12/16/2022 10:25:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Tetrachloroethylene	0.12	0.15	J	ppbV	1	12/16/2022 10:25:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Toluene	0.38	0.15		ppbV	1	12/16/2022 10:25:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 10:25:00 PM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/16/2022 10:25:00 PM

Qualifiers: Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 10:25:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 10:25:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 10:25:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 10:25:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 10:25:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 10:25:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 10:25:00 PM
Acetone	4.6	0.71		ug/m3	1	12/16/2022 10:25:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 10:25:00 PM
Benzene	0.57	0.48		ug/m3	1	12/16/2022 10:25:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 10:25:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 10:25:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 10:25:00 PM
Carbon disulfide	0.37	0.47	J	ug/m3	1	12/16/2022 10:25:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 10:25:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 10:25:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 10:25:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 10:25:00 PM
Chloromethane	1.1	0.31		ug/m3	1	12/16/2022 10:25:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 10:25:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 10:25:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 10:25:00 PM
Ethyl acetate	0.47	0.54	J	ug/m3	1	12/16/2022 10:25:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 10:25:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 10:25:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 10:25:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 10:25:00 PM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte, Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6

Lab Order: C2212031

Tag Number: 101,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-006A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/16/2022 10:25:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 10:25:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 10:25:00 PM
Hexane	0.56	0.53		ug/m3	1	12/16/2022 10:25:00 PM
Isopropyl alcohol	0.91	0.37		ug/m3	1	12/16/2022 10:25:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Ethyl Ketone	0.94	0.88		ug/m3	1	12/16/2022 10:25:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 10:25:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 10:25:00 PM
Methylene chloride	0.97	0.52		ug/m3	1	12/16/2022 10:25:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 10:25:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 10:25:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 10:25:00 PM
Tetrachloroethylene	0.81	1.0	J	ug/m3	1	12/16/2022 10:25:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 10:25:00 PM
Toluene	1.4	0.57		ug/m3	1	12/16/2022 10:25:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 10:25:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 10:25:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 10:25:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 10:25:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121615.D
 Acq On : 16 Dec 2022 10:25 pm
 Operator : RJP
 Sample : C2212031-006A
 Misc : AD12_1UG
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 17 08:40:44 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

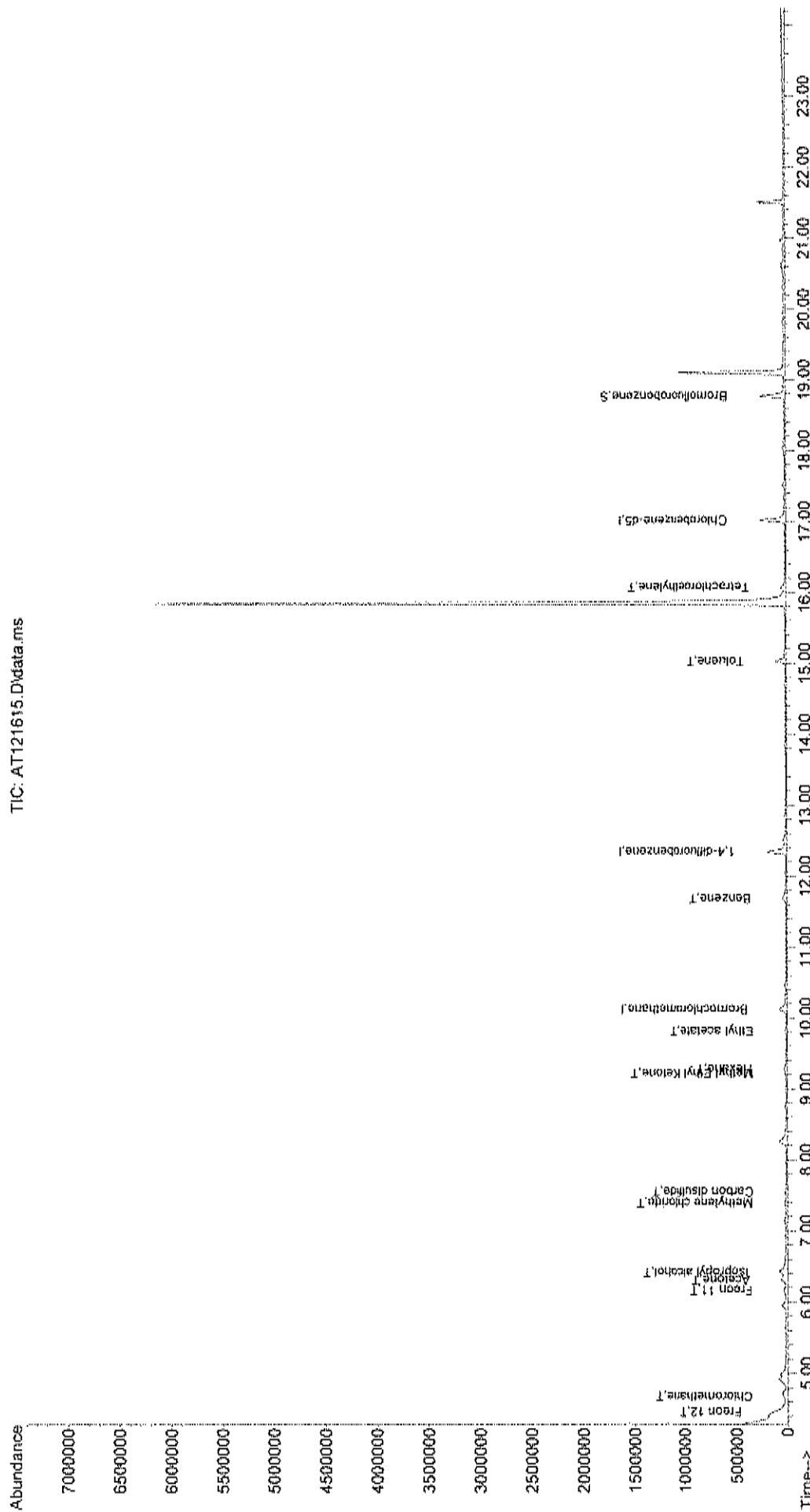
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

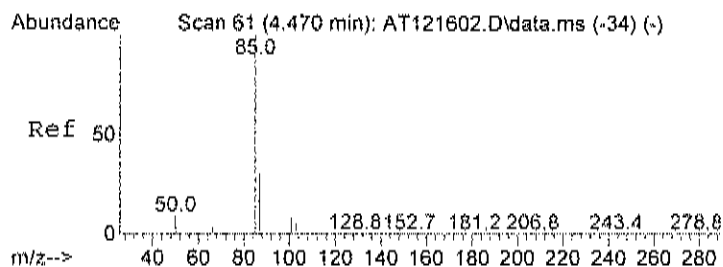
Internal Standards						
1) Bromochloromethane	10.120	128	47403	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.347	114	304039	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	242088	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	155879	0.95	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	95.00%
Target Compounds						
						Qvalue
3) Freon 12	4.461	85	103340	0.65	ppb	96
4) Chloromethane	4.677	50	26947	0.52	ppb	76
14) Freon 11	6.166	101	38360	0.29	ppb	99
15) Acetone	6.310	58	47616m	1.92	ppb	
17) Isopropyl alcohol	6.418	45	28223	0.37	ppb	# 1
21) Methylene chloride	7.394	84	18126m	0.28	ppb	
23) Carbon disulfide	7.550	76	22750	0.12	ppb	95
28) Methyl Ethyl Ketone	9.219	72	12595m	0.32	ppb	
30) Hexane	9.279	57	21704	0.16	ppb	# 80
31) Ethyl acetate	9.810	43	25096	0.13	ppb	93
39) Benzene	11.687	78	49043	0.18	ppb	92
51) Toluene	15.022	92	73265	0.38	ppb	98
56) Tetrachloroethylene	16.076	164	14644	0.12	ppb	98

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AF121615.D
 Acq On : 16 Dec 2022 10:25 pm
 Operator : RJP
 Sample : C2212031-006A
 Misc : AD12_1UG
 ALS Vial : 15 Sample Multiplier: 1

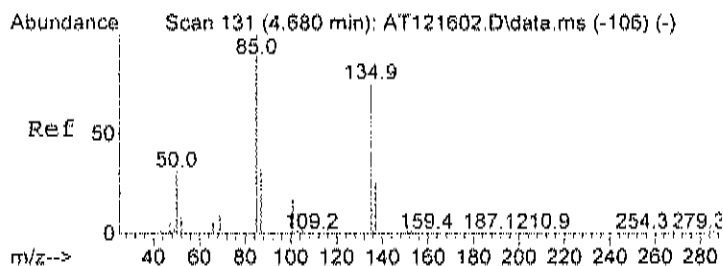
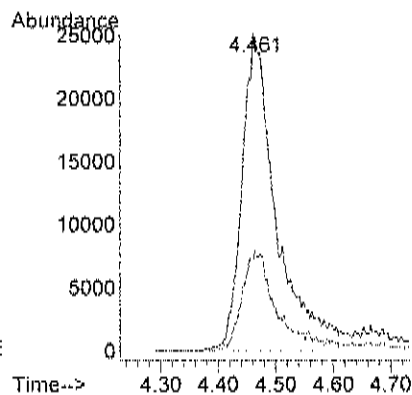
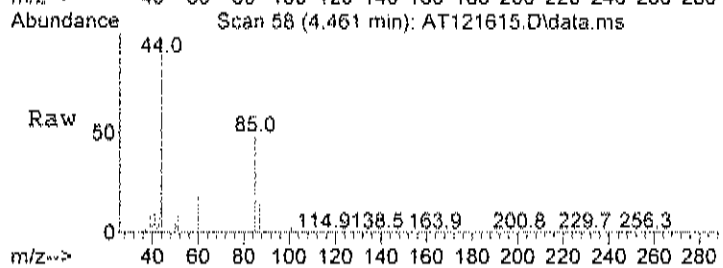
Quant Time: Dec 17 08:40:44 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 Qlast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





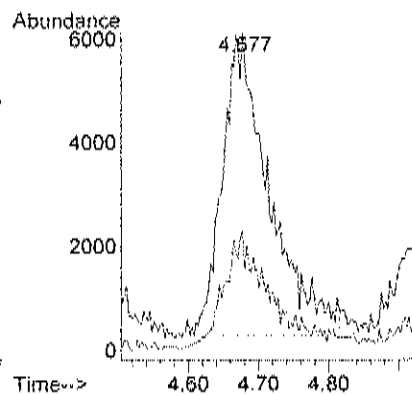
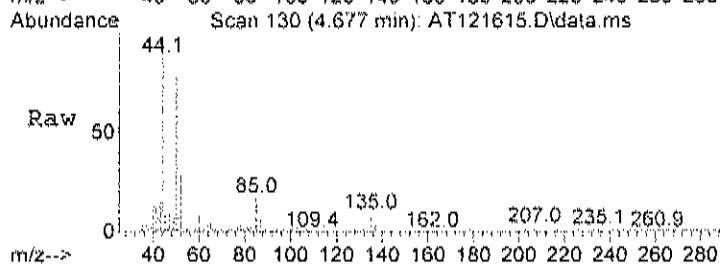
#3
Freon 12
Concen: 0.65 ppb
RT: 4.461 min Scan# 58
Delta R.T. -0.012 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

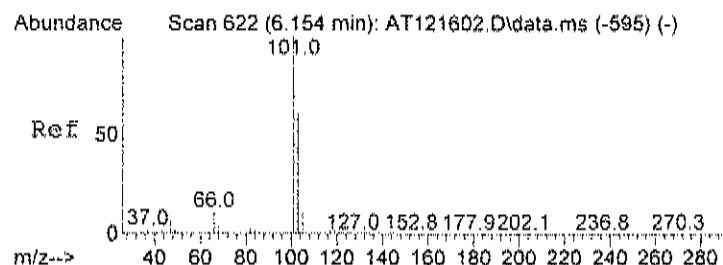
Tgt Ion:	85	Resp:	103340
Ion	Ratio	Lower	Upper
85	100		
87	32.1	14.3	54.3



#4
Chloromethane
Concen: 0.52 ppb
RT: 4.677 min Scan# 130
Delta R.T. -0.006 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

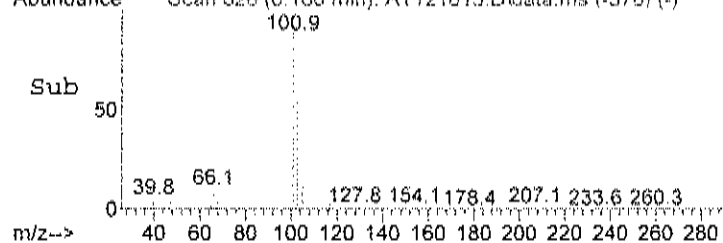
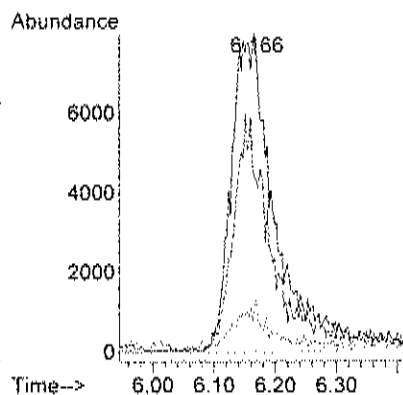
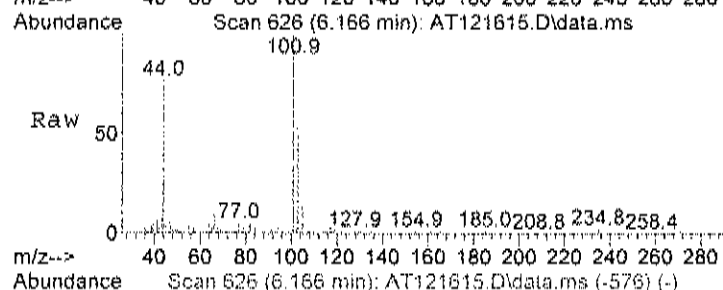
Tgt Ion:	50	Resp:	26947
Ion	Ratio	Lower	Upper
50	100		
52	37.3	5.4	45.4





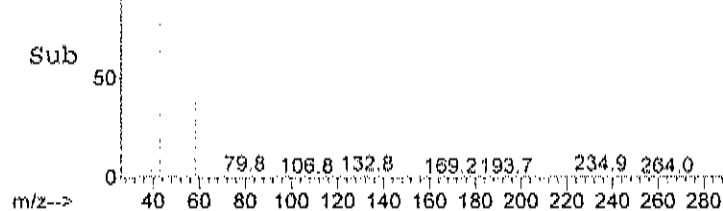
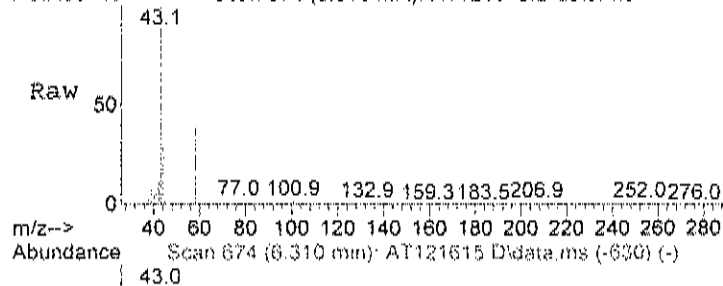
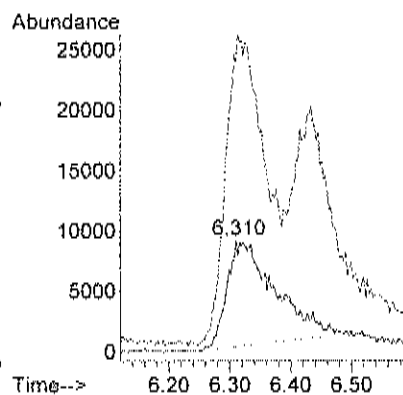
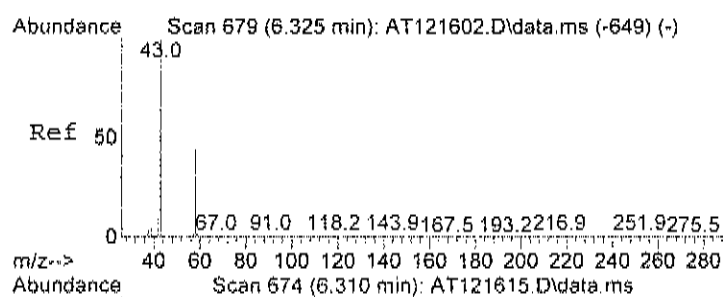
#14
Freon 11
Concen: 0.29 ppb
RT: 6.166 min Scan# 626
Delta R.T. 0.000 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

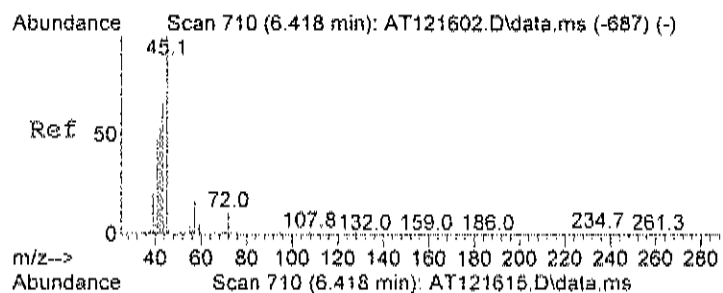
Tgt Ion	Ratio	Lower	Upper
101	100		
103	63.3	44.1	84.1
105	10.9	0.0	32.0



#15
Acetone
Concen: 1.92 ppb m
RT: 6.310 min Scan# 674
Delta R.T. -0.018 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

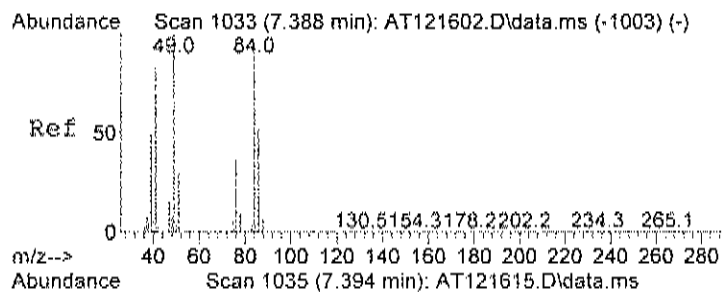
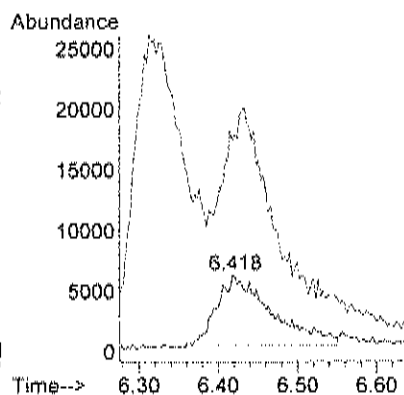
Tgt Ion	Ratio	Lower	Upper
58	100		
43	392.3	272.3	332.3#





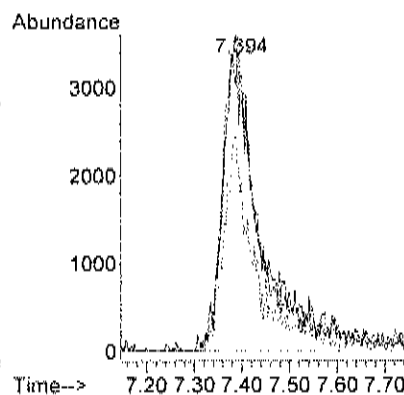
#17
Isopropyl alcohol
Concen: 0.37 ppb
RT: 6.418 min Scan# 710
Delta R.T. 0.000 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

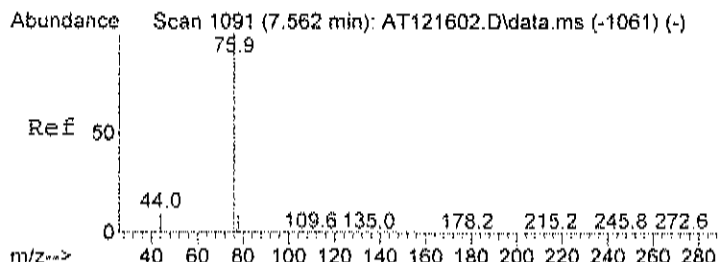
Tgt Ion	Ratio	Lower	Upper
45	100		
43	0.0	91.9	131.9#



#21
Methylene chloride
Concen: 0.28 ppb m
RT: 7.394 min Scan# 1035
Delta R.T. 0.006 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

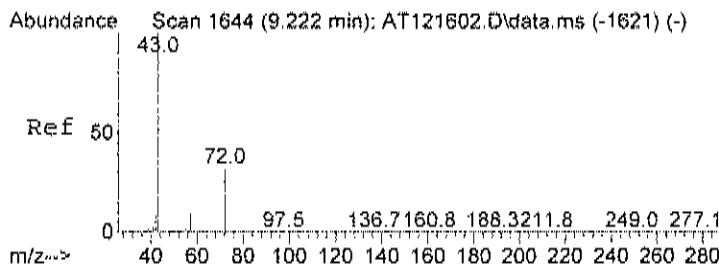
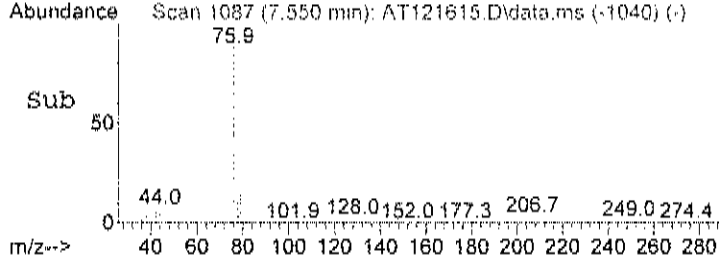
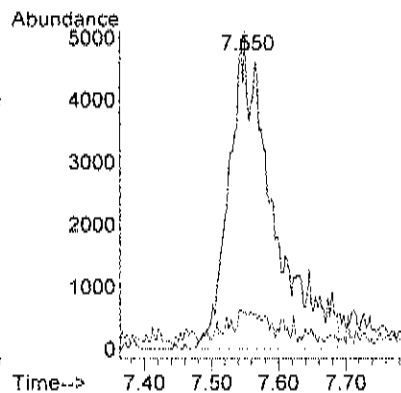
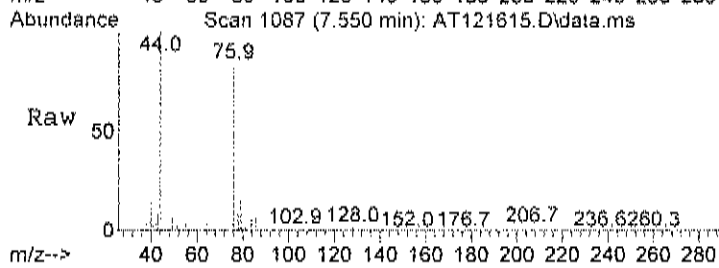
Tgt Ion	Ratio	Lower	Upper
84	100		
49	93.3	84.2	124.2
86	57.3	42.9	82.9





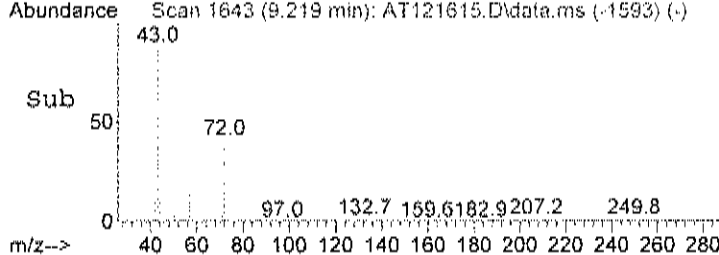
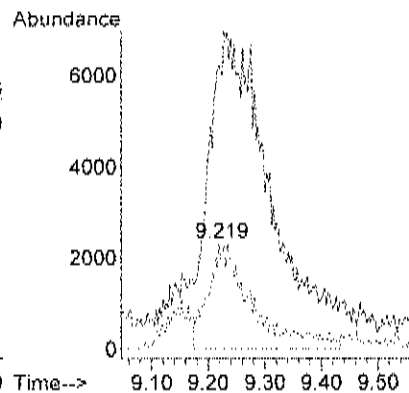
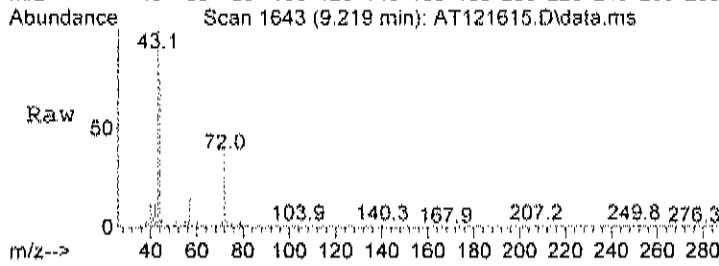
#23
Carbon disulfide
Concen: 0.12 ppb
RT: 7.550 min Scan# 1087
Delta R.T. -0.009 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

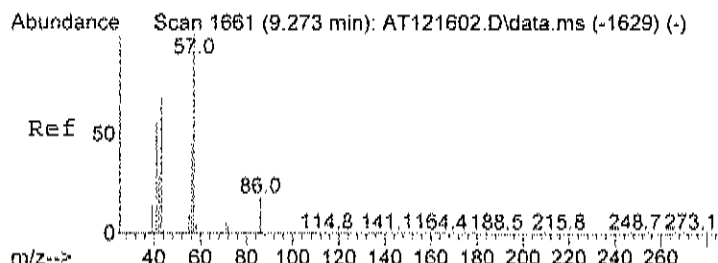
Tgt Ion	Ratio	Lower	Upper
76	100		
78	6.8	0.0	28.7



#28
Methyl Ethyl Ketone
Concen: 0.32 ppb m
RT: 9.219 min Scan# 1643
Delta R.T. 0.000 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	333.7	373.7#
72	106.2	80.0	120.0





#30

Hexane

Concen: 0.16 ppb

RT: 9.279 min Scan# 1663

Delta R.T. -0.006 min

Lab File: AT121615.D

Acq: 16 Dec 2022 10:25 pm

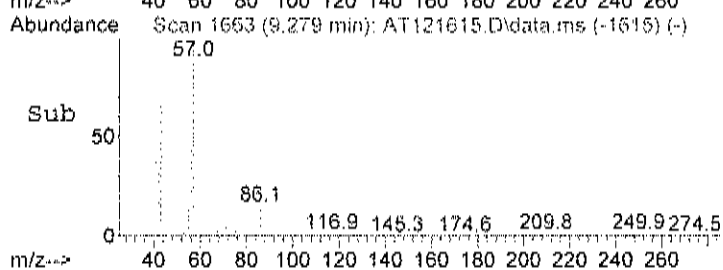
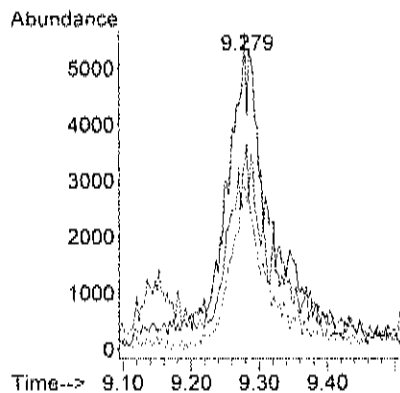
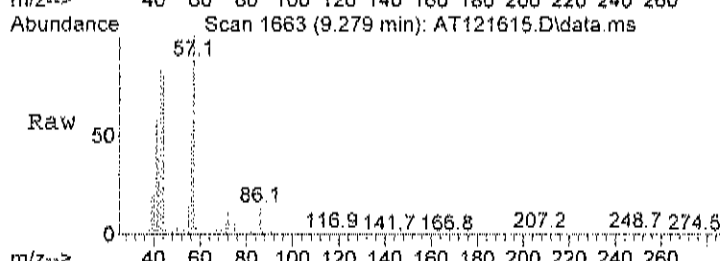
Tgt Ion: 57 Resp: 21704

Ion Ratio Lower Upper

57 100

41 54.5 62.0 102.0#

56 49.4 31.8 71.8



#31

Ethyl acetate

Concen: 0.13 ppb

RT: 9.810 min Scan# 1840

Delta R.T. 0.000 min

Lab File: AT121615.D

Acq: 16 Dec 2022 10:25 pm

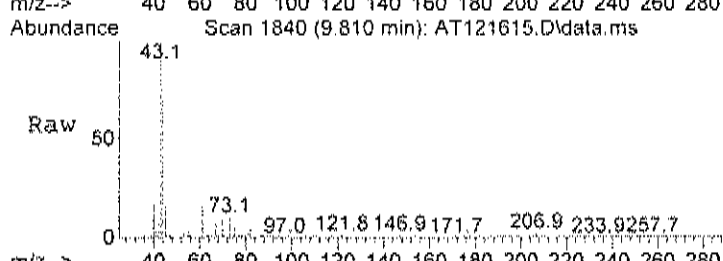
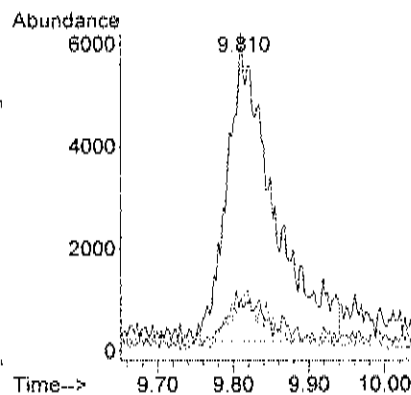
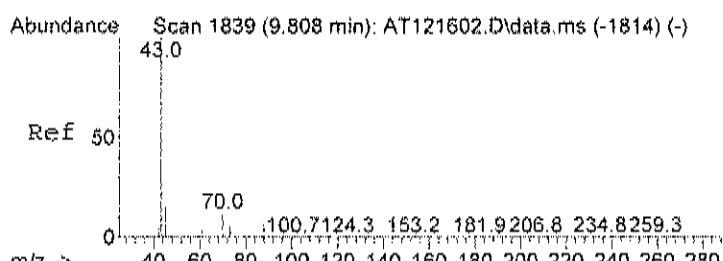
Tgt Ion: 43 Resp: 25096

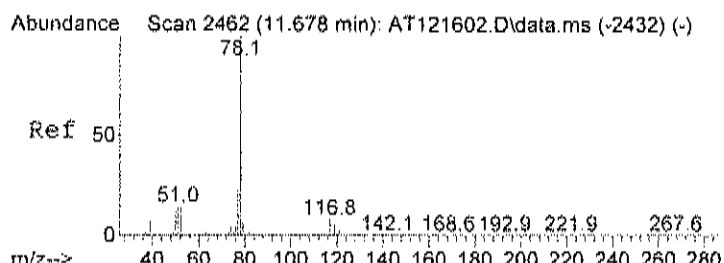
Ion Ratio Lower Upper

43 100

45 16.1 0.0 32.9

61 15.4 0.0 33.0





#39

Benzene

Concen: 0.18 ppb

RT: 11.687 min Scan# 2465

Delta R.T. -0.003 min

Lab File: AT121615.D

Acq: 16 Dec 2022 10:25 pm

Tgt Ion: 78 Resp: 49043

Ion Ratio Lower Upper

78 100

77 24.3

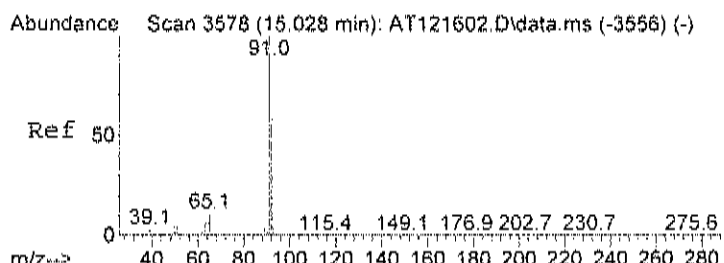
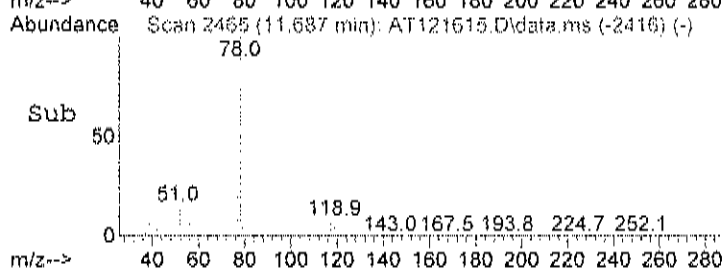
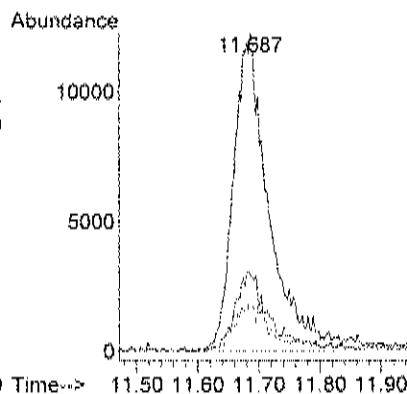
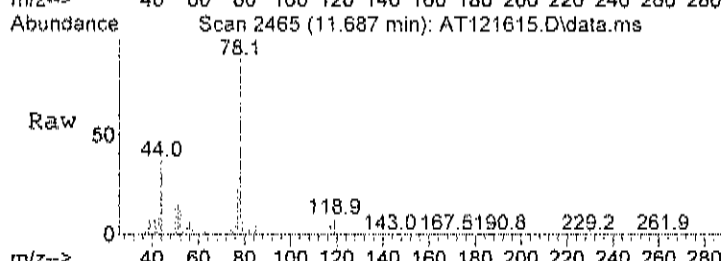
2.5

42.5

51 14.5

0.5

40.5



#51

Toluene

Concen: 0.38 ppb

RT: 15.022 min Scan# 3576

Delta R.T. -0.009 min

Lab File: AT121615.D

Acq: 16 Dec 2022 10:25 pm

Tgt Ion: 92 Resp: 73265

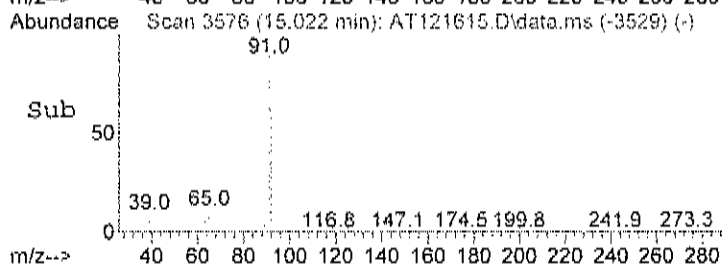
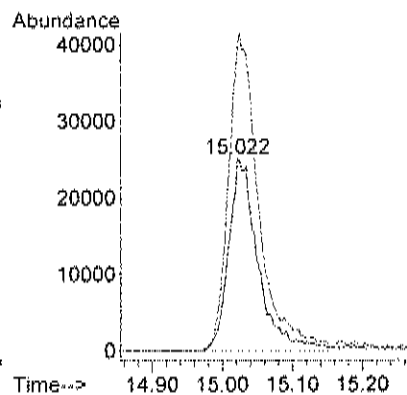
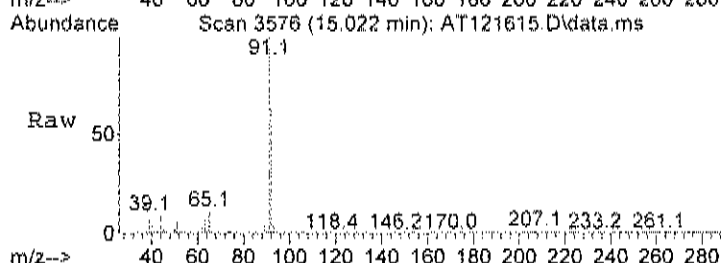
Ion Ratio Lower Upper

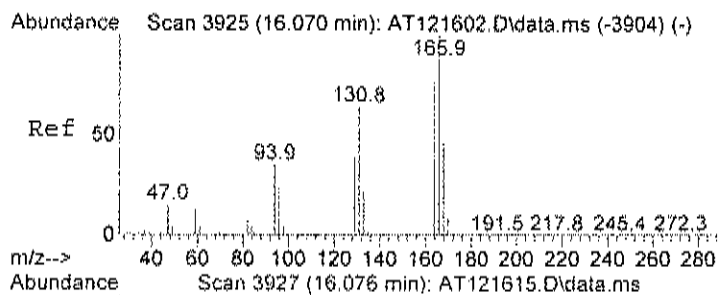
92 100

91 170.7

153.3

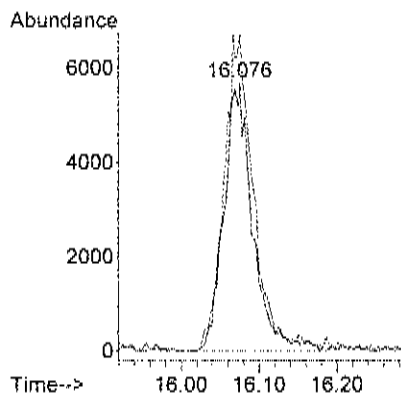
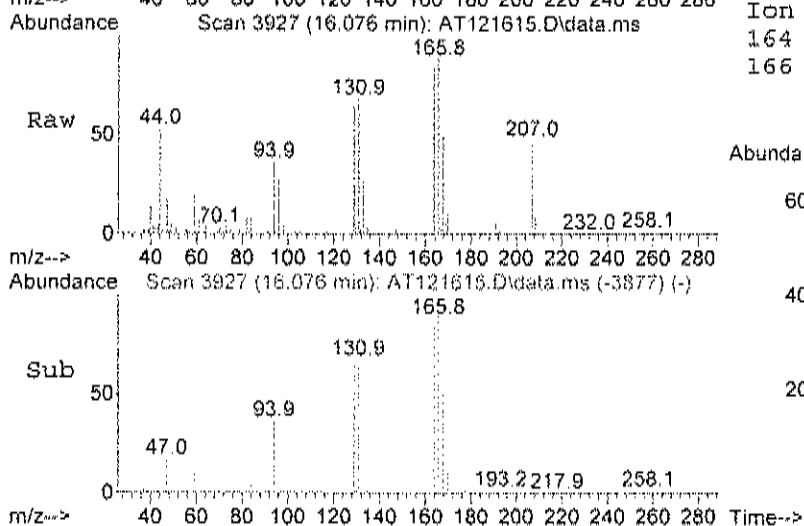
193.3





#56
Tetrachloroethylene
Concen: 0.12 ppb
RT: 16.076 min Scan# 3927
Delta R.T. 0.001 min
Lab File: AT121615.D
Acq: 16 Dec 2022 10:25 pm

Tgt Ion	Ratio	Lower	Upper
164	100		
166	119.0	97.2	137.2



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Acetone	3.0	1.5		ppbV	5	12/17/2022 4:13:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Benzene	0.19	0.15		ppbV	1	12/16/2022 11:09:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Carbon disulfide	0.11	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM

Qualifiers: Results reported are not blank corrected

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 11	0.28	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Freon 12	0.63	0.15		ppbV	1	12/16/2022 11:09:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Hexane	0.12	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Isopropyl alcohol	0.55	0.15		ppbV	1	12/16/2022 11:09:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Ethyl Ketone	0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:09:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Methylene chloride	1.4	0.15		ppbV	1	12/16/2022 11:09:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Tetrachloroethylene	0.13	0.15	J	ppbV	1	12/16/2022 11:09:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Toluene	0.28	0.15		ppbV	1	12/16/2022 11:09:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:09:00 PM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/16/2022 11:09:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:09:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:09:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 11:09:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 11:09:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:09:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 11:09:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 11:09:00 PM
Acetone	7.1	3.6		ug/m3	5	12/17/2022 4:13:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 11:09:00 PM
Benzene	0.61	0.48		ug/m3	1	12/16/2022 11:09:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 11:09:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 11:09:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 11:09:00 PM
Carbon disulfide	0.34	0.47	J	ug/m3	1	12/16/2022 11:09:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 11:09:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 11:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 11:09:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 11:09:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 11:09:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:09:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 11:09:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 11:09:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 11:09:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 11:09:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 11:09:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 11:09:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 11:09:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-6 Dup

Lab Order: C2212031

Tag Number: 1177,79

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-007A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/16/2022 11:09:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 11:09:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 11:09:00 PM
Hexane	0.42	0.53	J	ug/m3	1	12/16/2022 11:09:00 PM
Isopropyl alcohol	1.4	0.37		ug/m3	1	12/16/2022 11:09:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Ethyl Ketone	0.88	0.88		ug/m3	1	12/16/2022 11:09:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:09:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 11:09:00 PM
Methylene chloride	4.9	0.52		ug/m3	1	12/16/2022 11:09:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 11:09:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 11:09:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 11:09:00 PM
Tetrachloroethylene	0.88	1.0	J	ug/m3	1	12/16/2022 11:09:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 11:09:00 PM
Toluene	1.1	0.57		ug/m3	1	12/16/2022 11:09:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:09:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:09:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 11:09:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 11:09:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121616.D
 Acq On : 16 Dec 2022 11:09 pm
 Operator : RJP
 Sample : C2212031-007A
 Misc : AD12_1UG
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 17 08:40:46 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

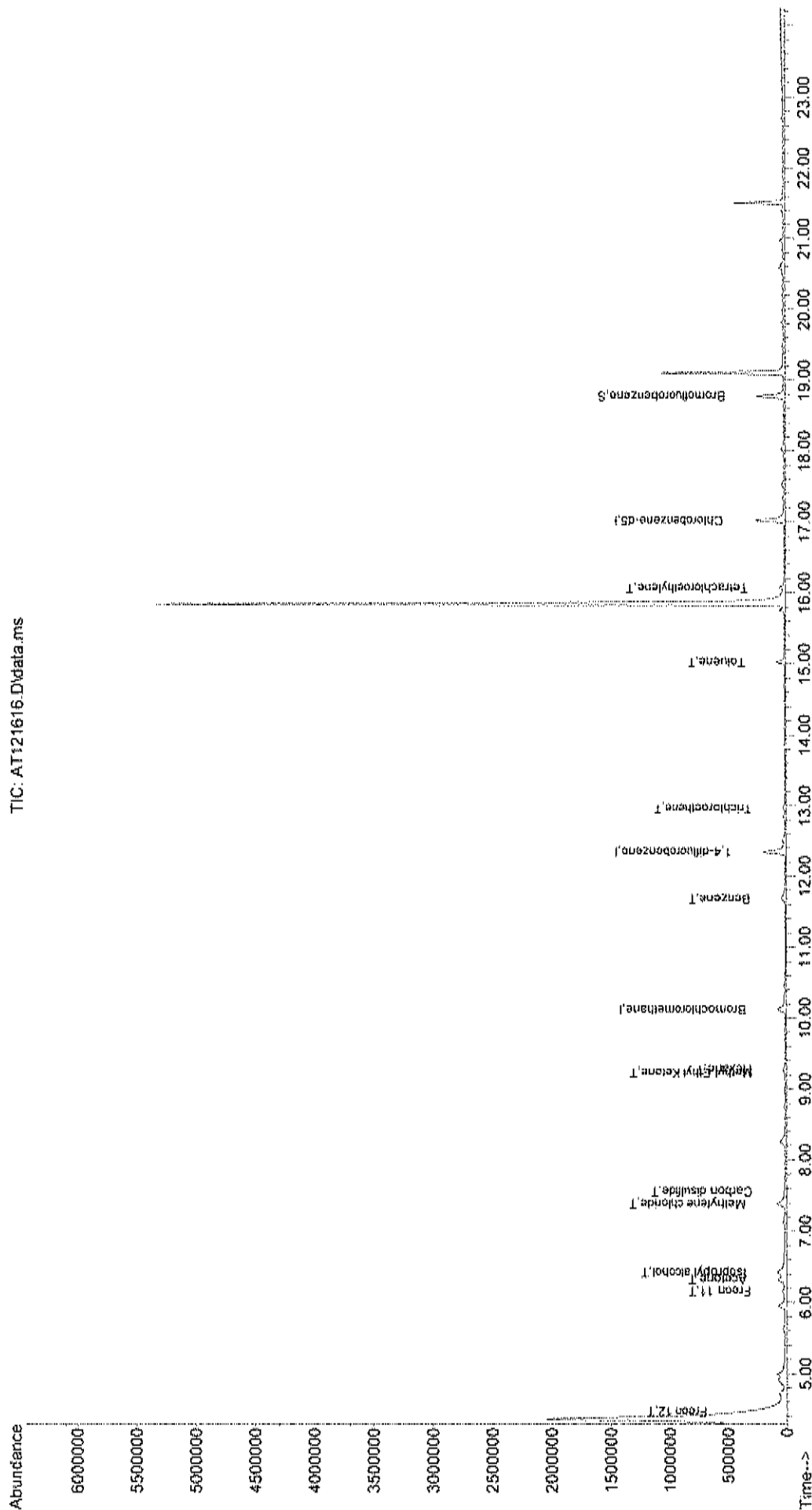
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

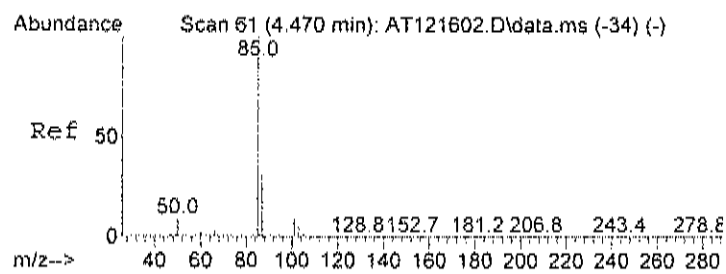
Internal Standards						
1) Bromochloromethane	10.117	128	48665	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	297360	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	239620	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.774	95	152617	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
						Qvalue
3) Freon 12	4.461	85	102394	0.63	ppb	98
14) Freon 11	6.160	101	38315	0.28	ppb	99
15) Acetone	6.325	58	71152	2.79	ppb	99
17) Isopropyl alcohol	6.418	45	42930	0.55	ppb	# 1
21) Methylene chloride	7.382	84	93573m	1.41	ppb	
23) Carbon disulfide	7.556	76	20537	0.11	ppb	99
28) Methyl Ethyl Ketone	9.228	72	12162	0.30	ppb	# 1
30) Hexane	9.273	57	16819	0.12	ppb	92
39) Benzene	11.681	78	51271	0.19	ppb	95
44) Trichloroethene	12.963	130	11193	0.10	ppb	90
51) Toluene	15.025	92	54612	0.28	ppb	97
56) Tetrachloroethylene	16.067	164	14749	0.13	ppb	92

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121616.D
 Acq On : 16 Dec 2022 11:09 pm
 Operator : RJP
 Sample : C2212031-007A
 Misc : AD12_1UG
 ALS Vial : 16 Sample Multiplier: 1

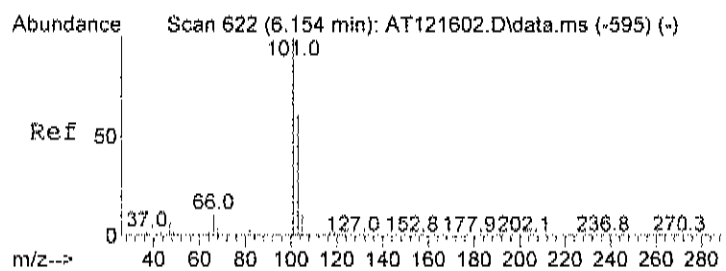
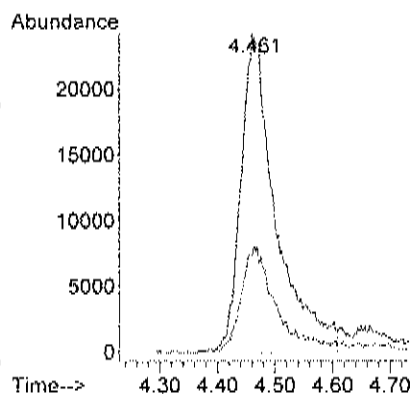
Quant Time: Dec 17 08:40:46 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





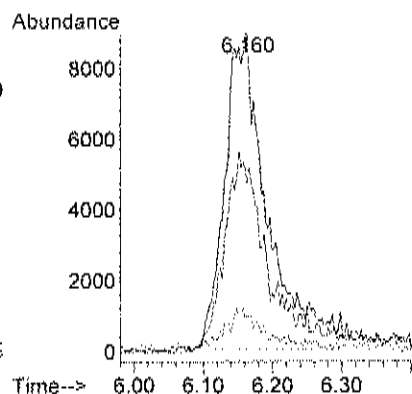
#3
Freon 12
Concen: 0.63 ppb
RT: 4.461 min Scan# 58
Delta R.T. -0.012 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

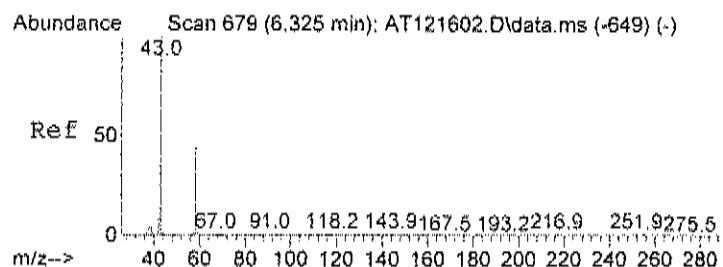
Tgt Ion:	85	Resp:	102394
Ion Ratio	Lower	Upper	
85	100		
87	33.2	14.3	54.3



#14
Freon 11
Concen: 0.28 ppb
RT: 6.160 min Scan# 624
Delta R.T. -0.006 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

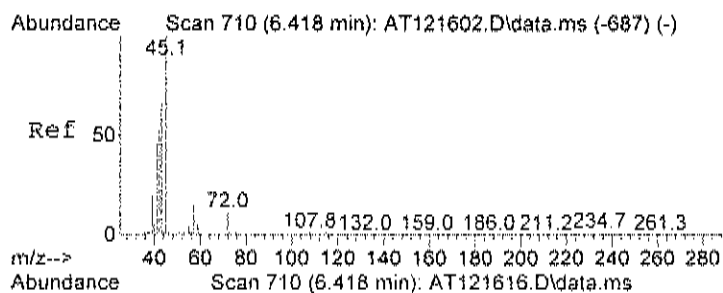
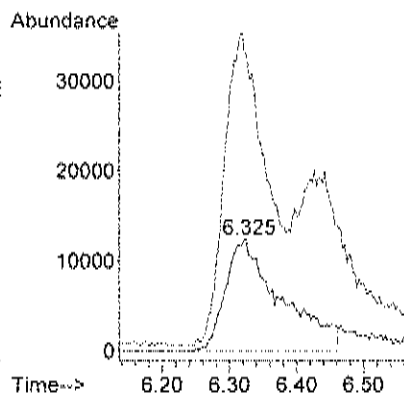
Tgt Ion:	101	Resp:	38315
Ion Ratio	Lower	Upper	
101	100		
103	65.0	44.1	84.1
105	11.4	0.0	32.0





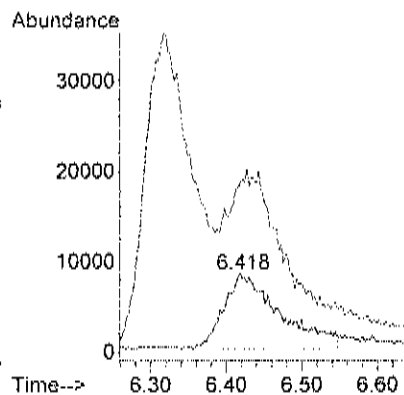
#15
Acetone
Concen: 2.79 ppb
RT: 6.325 min Scan# 679
Delta R.T. -0.003 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

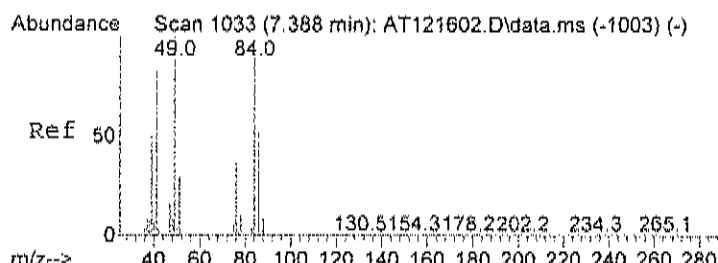
Tgt	Ion	Resp	Lower	Upper
58	100	71152		
43	304.6	272.3	332.3	



#17
Isopropyl alcohol
Concen: 0.55 ppb
RT: 6.418 min Scan# 710
Delta R.T. 0.000 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

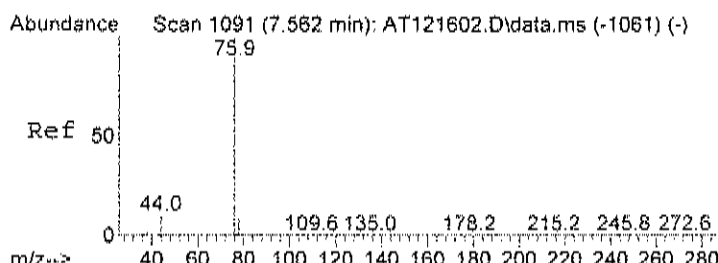
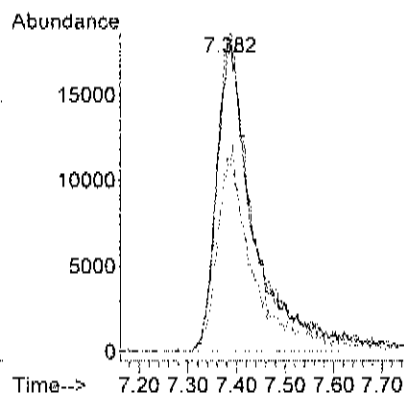
Tgt	Ion	Resp	Lower	Upper
45	100	42930		
43	0.0	91.9	131.9#	





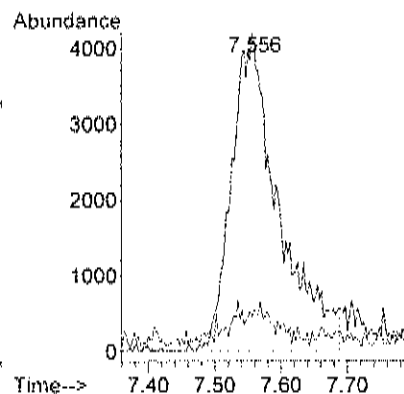
#21
Methylene chloride
Concen: 1.41 ppb m
RT: 7.382 min Scan# 1031
Delta R.T. -0.006 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

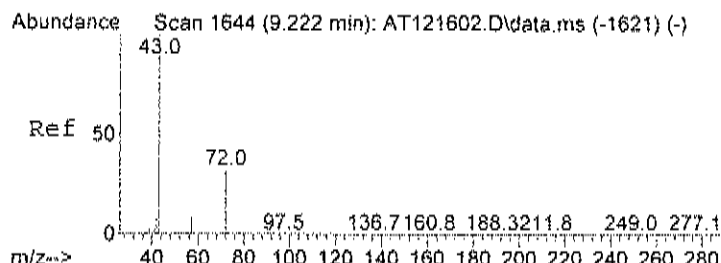
Tgt Ion:	84	Resp:	93573
Ion	Ratio	Lower	Upper
84	100		
49	96.7	84.2	124.2
86	58.9	42.9	82.9



#23
Carbon disulfide
Concen: 0.11 ppb
RT: 7.556 min Scan# 1089
Delta R.T. -0.003 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

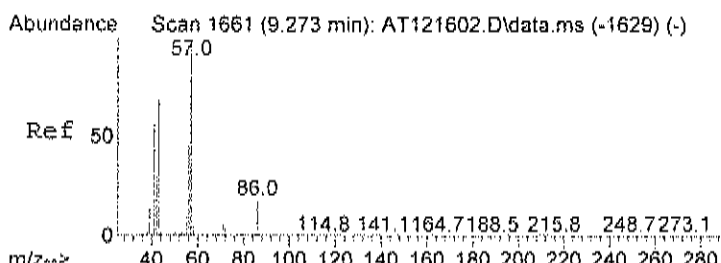
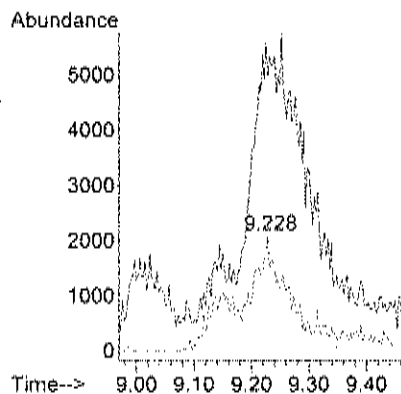
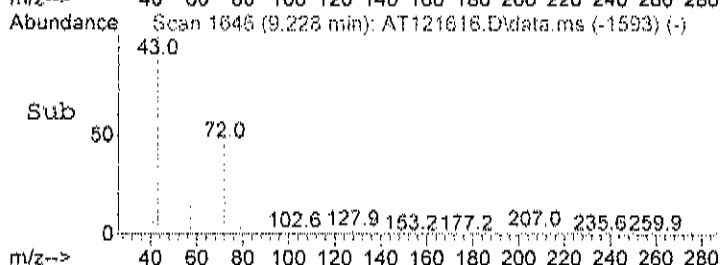
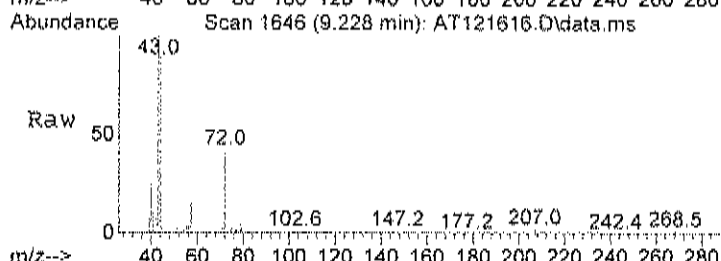
Tgt Ion:	76	Resp:	20537
Ion	Ratio	Lower	Upper
76	100		
78	9.0	0.0	28.7





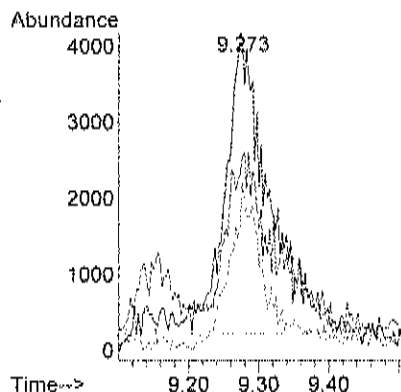
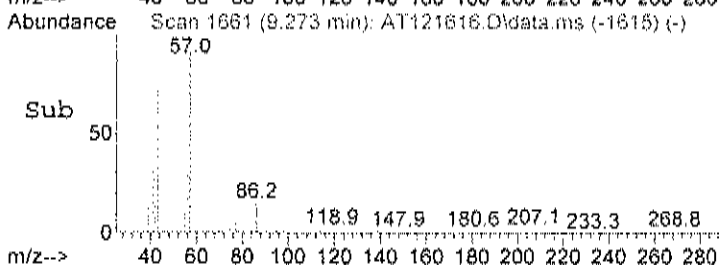
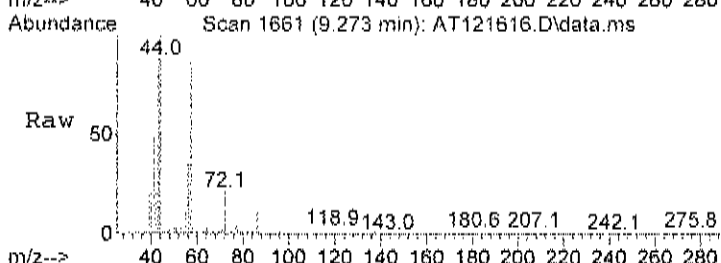
#28
Methyl Ethyl Ketone
Concen: 0.30 ppb
RT: 9.228 min Scan# 1646
Delta R.T. 0.009 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

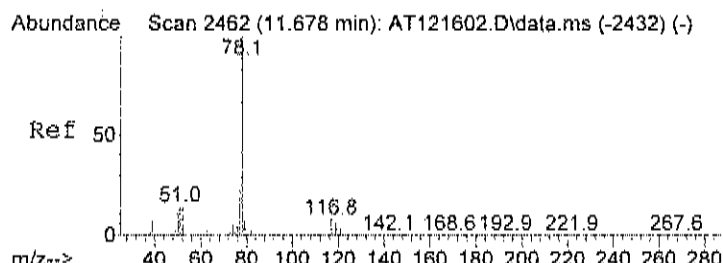
Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	333.7	373.7#
72	100.0	80.0	120.0



#30
Hexane
Concen: 0.12 ppb
RT: 9.273 min Scan# 1661
Delta R.T. -0.012 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

Tgt Ion	Ratio	Lower	Upper
57	100		
41	84.5	62.0	102.0
56	40.5	31.8	71.8





#39

Benzene

Concen: 0.19 ppb

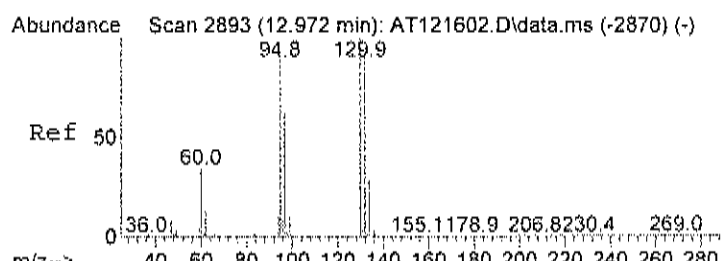
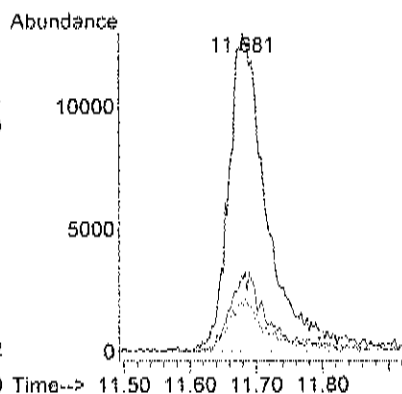
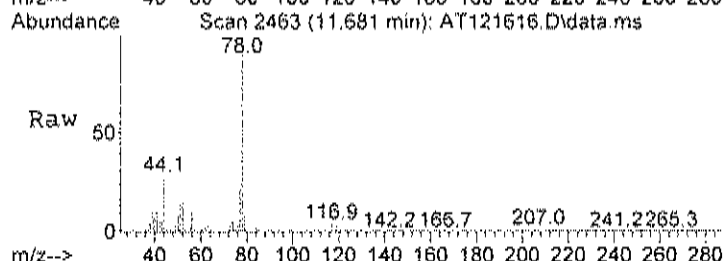
RT: 11.681 min Scan# 2463

Delta R.T. -0.009 min

Lab File: AT121616.D

Acq: 16 Dec 2022 11:09 pm

Tgt Ion: 78	Resp: 51271
Ion Ratio	Lower Upper
78 100	
77 23.9	2.5 42.5
51 16.7	0.5 40.5



#44

Trichloroethene

Concen: 0.10 ppb

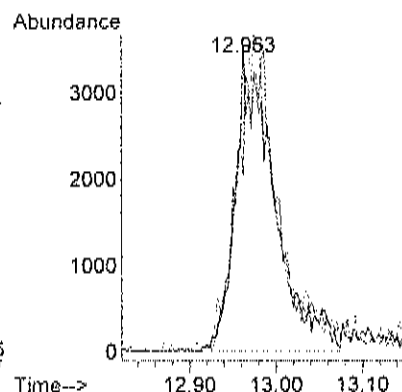
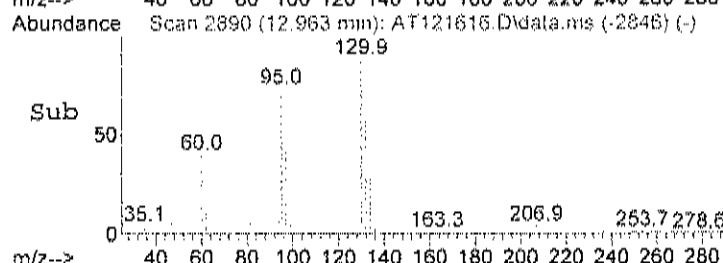
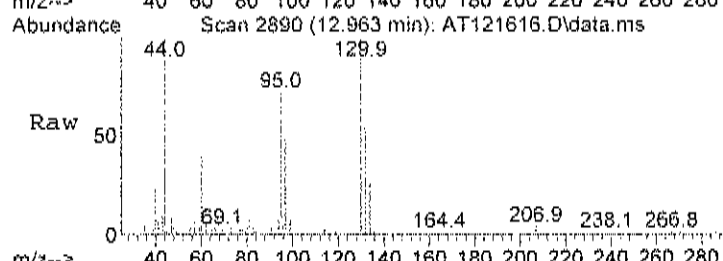
RT: 12.963 min Scan# 2890

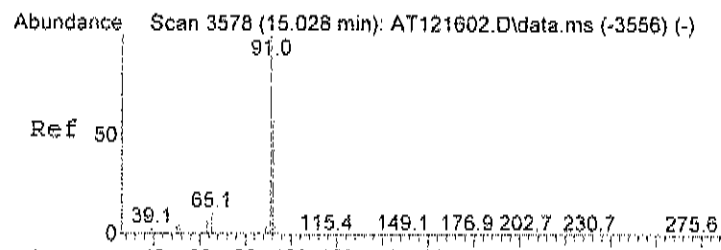
Delta R.T. -0.017 min

Lab File: AT121616.D

Acq: 16 Dec 2022 11:09 pm

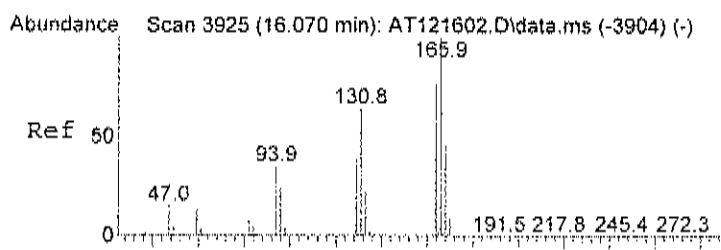
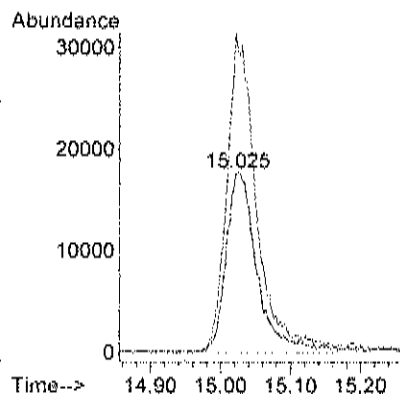
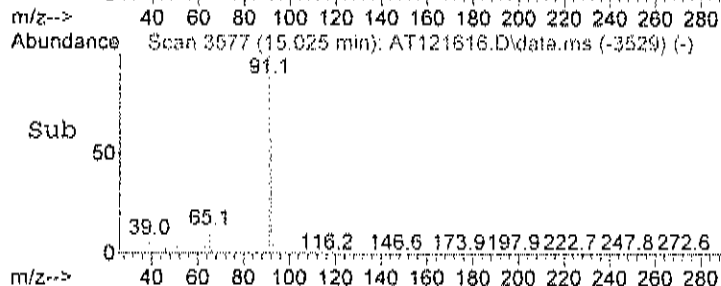
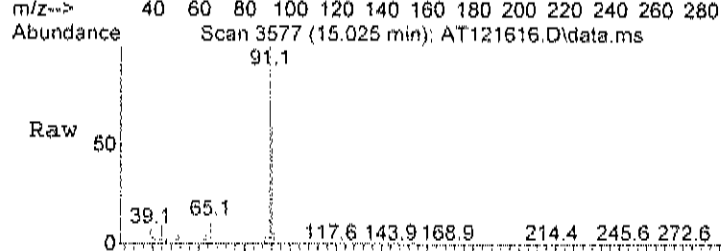
Tgt Ion: 130	Resp: 11193
Ion Ratio	Lower Upper
130 100	
132 101.4	79.7 119.7
95 107.1	69.3 109.3





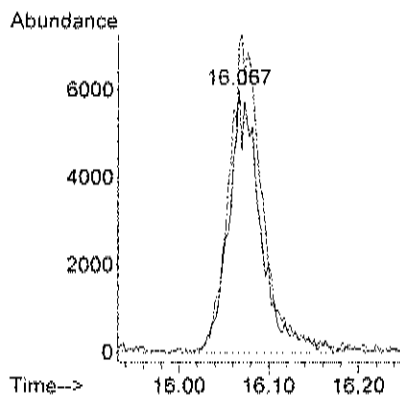
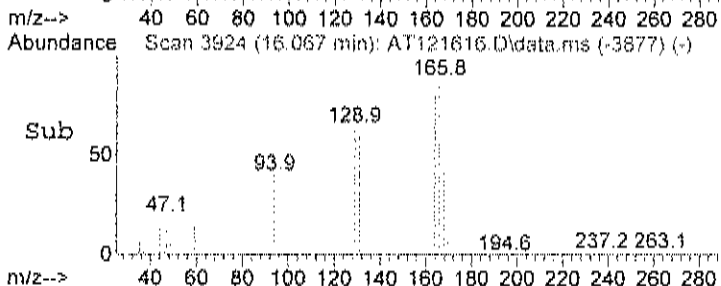
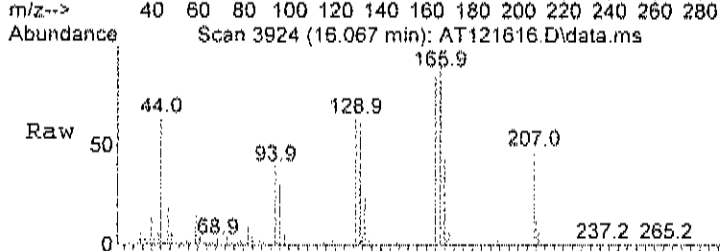
#51
Toluene
Concen: 0.28 ppb
RT: 15.025 min Scan# 3577
Delta R.T. -0.006 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

Tgt Ion	Ratio	Lower	Upper
92	100		
91	169.1	153.3	193.3



#56
Tetrachloroethylene
Concen: 0.13 ppb
RT: 16.067 min Scan# 3924
Delta R.T. -0.008 min
Lab File: AT121616.D
Acq: 16 Dec 2022 11:09 pm

Tgt Ion	Ratio	Lower	Upper
164	100		
166	125.7	97.2	137.2



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121710.D
Acq On : 17 Dec 2022 4:13 pm
Operator : RJP
Sample : C2212031-007A 5X
Misc : AD12_1UG
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 18 10:34:14 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

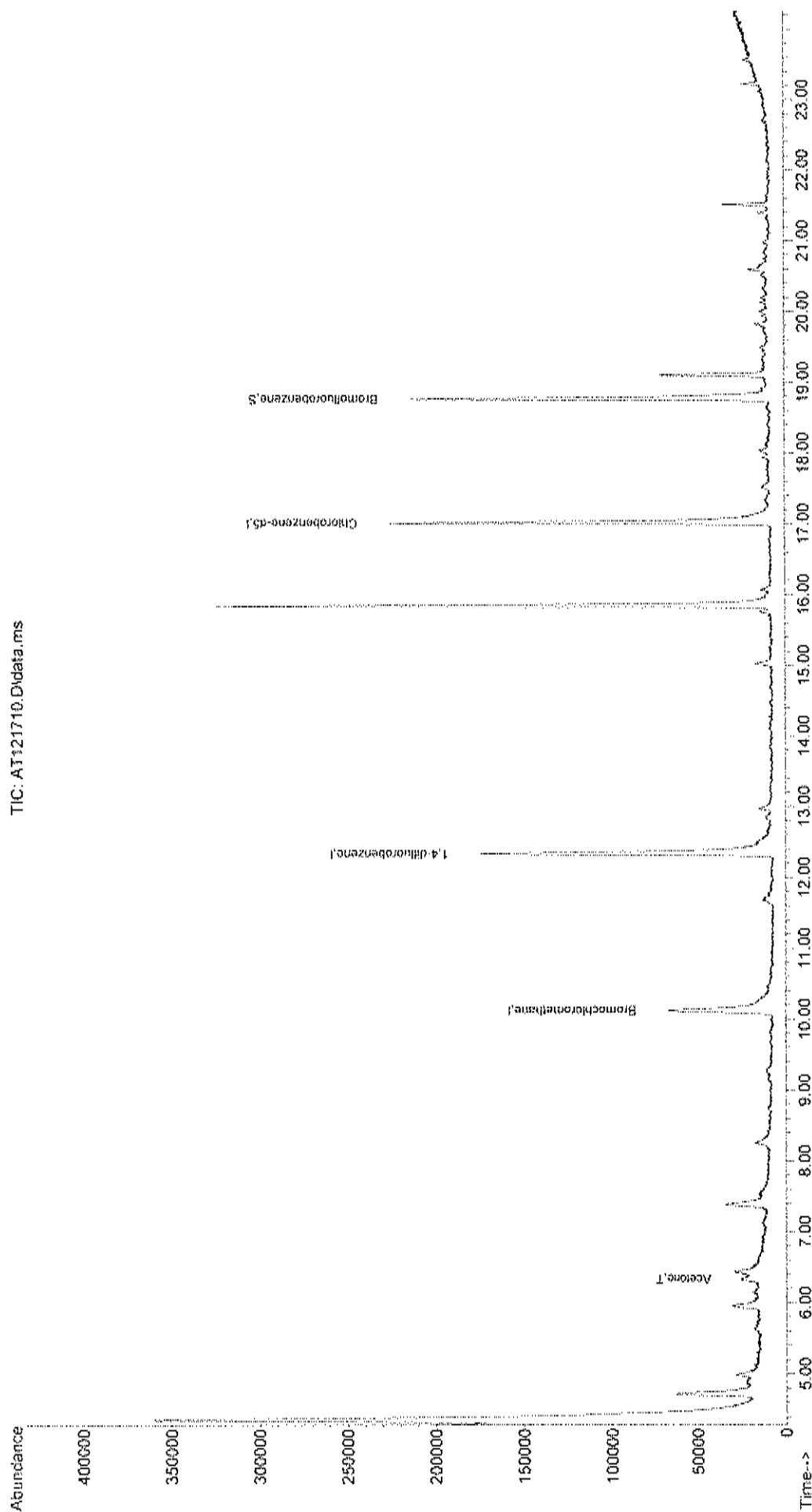
Internal Standards						
1) Bromochloromethane	10.123	128	46989	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	277445	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	219982	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	131704	0.89	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	89.00%
Target Compounds						
15) Acetone	6.331	58	14699m	0.60	ppb	Qvalue

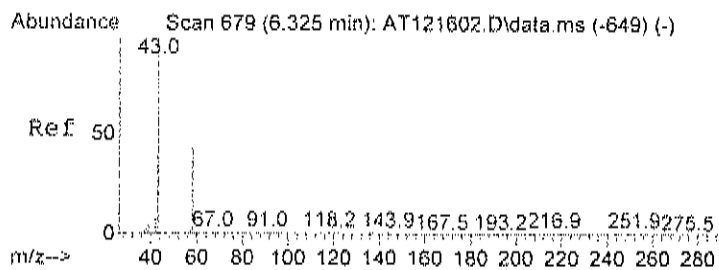
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121710.D
Acq On : 17 Dec 2022 4:13 pm
Operator : RJP
Sample : C2212031-007A 5X
Misc : AD12_1UG
ALS Vial : 8 Sample Multiplier: 1

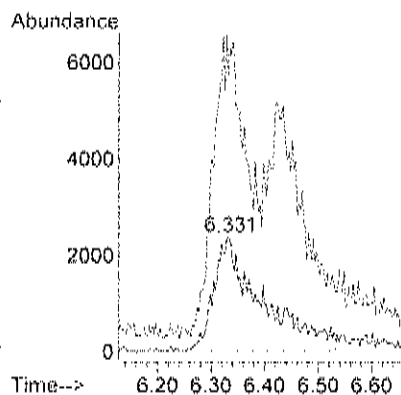
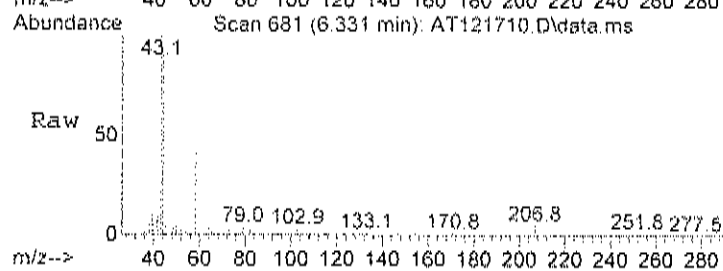
Quant Time: Dec 18 10:34:14 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





#15
Acetone
Concen: 0.60 ppb m
RT: 6.331 min Scan# 681
Delta R.T. 0.003 min
Lab File: AT121710.D
Acq: 17 Dec 2022 4:13 pm

Tgt Ion: 58 Resp: 14699
Ion Ratio Lower Upper
58 100
43 292.4 272.3 332.3



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-7

Lab Order: C2212031

Tag Number: 545,146

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-008A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-5			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2,4-Trimethylbenzene	0.22	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,3,5-Trimethylbenzene	0.11	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 11:53:00 PM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Acetone	2.0	1.5		ppbV	5	12/17/2022 4:56:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Benzene	0.25	0.15		ppbV	1	12/16/2022 11:53:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Carbon disulfide	2.2	0.75		ppbV	5	12/17/2022 4:56:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloroform	1.2	0.15		ppbV	1	12/16/2022 11:53:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-7

Lab Order: C2212031

Tag Number: 545,146

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-008A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Ethylbenzene	0.20	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 11	0.37	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Freon 12	0.51	0.15		ppbV	1	12/16/2022 11:53:00 PM
Heptane	0.14	0.15	J	ppbV	1	12/16/2022 11:53:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Hexane	0.24	0.15		ppbV	1	12/16/2022 11:53:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
m&p-Xylene	0.49	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Ethyl Ketone	0.46	0.30		ppbV	1	12/16/2022 11:53:00 PM
Methyl Isobutyl Ketone	0.25	0.30	J	ppbV	1	12/16/2022 11:53:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Methylene chloride	0.24	0.15		ppbV	1	12/16/2022 11:53:00 PM
o-Xylene	0.19	0.15		ppbV	1	12/16/2022 11:53:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Tetrahydrofuran	0.26	0.15		ppbV	1	12/16/2022 11:53:00 PM
Toluene	0.98	0.15		ppbV	1	12/16/2022 11:53:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 11:53:00 PM
Surr: Bromofluorobenzene	101	46.7-129		%REC	1	12/16/2022 11:53:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-7

Lab Order: C2212031

Tag Number: 545,146

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-008A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:53:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 11:53:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:53:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
1,2,4-Trimethylbenzene	1.1	0.74		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 11:53:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 11:53:00 PM
1,3,5-Trimethylbenzene	0.54	0.74	J	ug/m3	1	12/16/2022 11:53:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 11:53:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 11:53:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	12/16/2022 11:53:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 11:53:00 PM
Acetone	4.7	3.6		ug/m3	5	12/17/2022 4:56:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 11:53:00 PM
Benzene	0.80	0.48		ug/m3	1	12/16/2022 11:53:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 11:53:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 11:53:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 11:53:00 PM
Carbon disulfide	7.0	2.3		ug/m3	5	12/17/2022 4:56:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/16/2022 11:53:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 11:53:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 11:53:00 PM
Chloroform	6.0	0.73		ug/m3	1	12/16/2022 11:53:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 11:53:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:53:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 11:53:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 11:53:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 11:53:00 PM
Ethylbenzene	0.87	0.65		ug/m3	1	12/16/2022 11:53:00 PM
Freon 11	2.1	0.84		ug/m3	1	12/16/2022 11:53:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 11:53:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jun-23

CLIENT: SOIL MECHANICS**Client Sample ID:** SVW-7**Lab Order:** C2212031**Tag Number:** 545,146**Project:** IKEA Red Hook**Collection Date:** 12/13/2022**Lab ID:** C2212031-008A**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.5	0.74		ug/m3	1	12/16/2022 11:53:00 PM
Heptane	0.57	0.61	J	ug/m3	1	12/16/2022 11:53:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 11:53:00 PM
Hexane	0.85	0.53		ug/m3	1	12/16/2022 11:53:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 11:53:00 PM
m&p-Xylene	2.1	1.3		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Ethyl Ketone	1.4	0.88		ug/m3	1	12/16/2022 11:53:00 PM
Methyl Isobutyl Ketone	1.0	1.2	J	ug/m3	1	12/16/2022 11:53:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 11:53:00 PM
Methylene chloride	0.83	0.52		ug/m3	1	12/16/2022 11:53:00 PM
o-Xylene	0.82	0.65		ug/m3	1	12/16/2022 11:53:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 11:53:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 11:53:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 11:53:00 PM
Tetrahydrofuran	0.77	0.44		ug/m3	1	12/16/2022 11:53:00 PM
Toluene	3.7	0.57		ug/m3	1	12/16/2022 11:53:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 11:53:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 11:53:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 11:53:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/16/2022 11:53:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121617.D
 Acq On : 16 Dec 2022 11:53 pm
 Operator : RJP
 Sample : C2212031-008A
 Misc : AD12_1UG
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 17 08:40:48 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

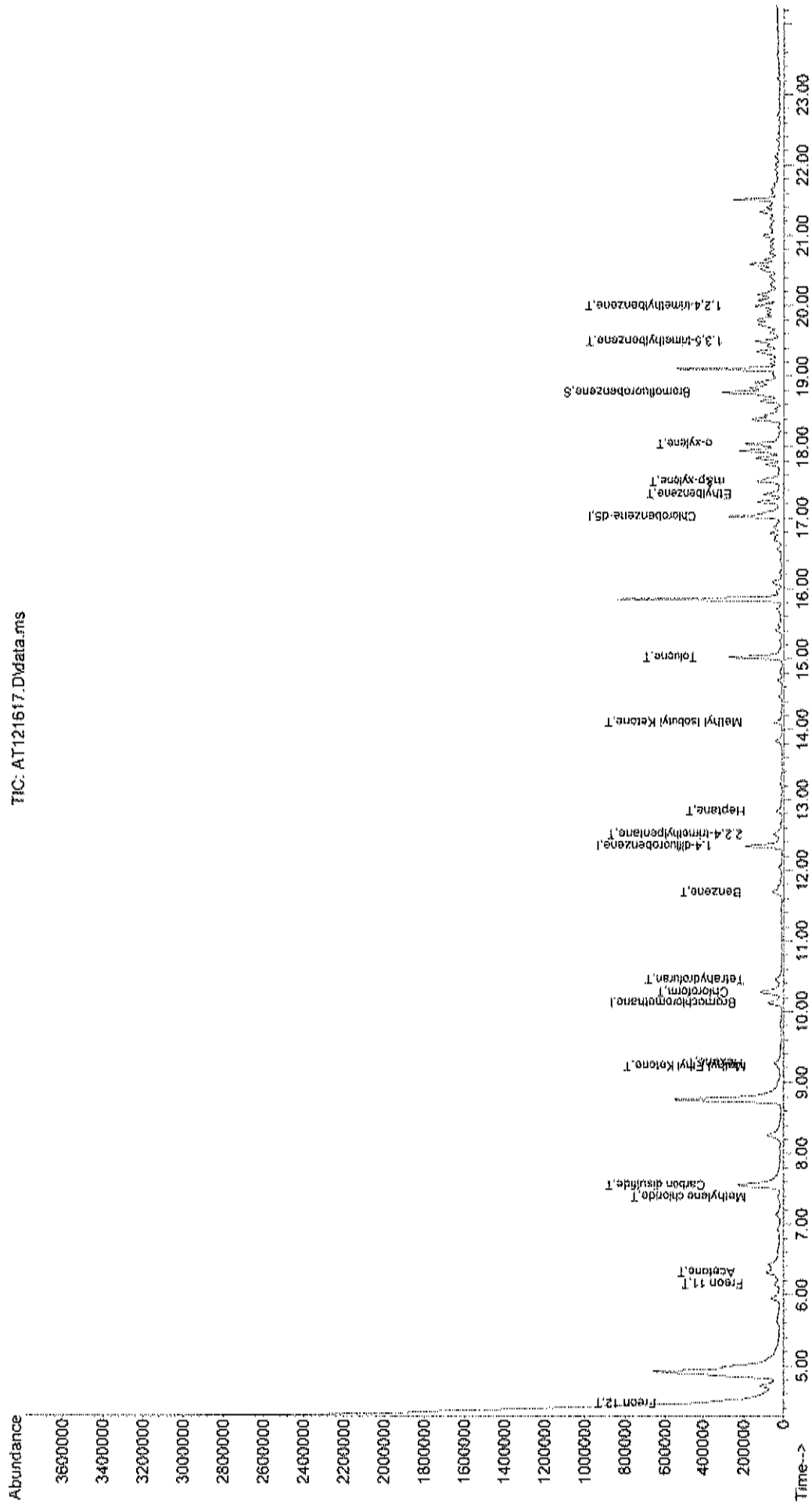
Internal Standards						
1) Bromochloromethane	10.123	128	49121	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	300232	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	243720	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	166542	1.01	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	101.00%
Target Compounds						
						Qvalue
3) Freon 12	4.467	85	83485	0.51	ppb	97
14) Freon 11	6.160	101	50441	0.37	ppb	99
15) Acetone	6.322	58	82949	3.22	ppb	94
21) Methylene chloride	7.385	84	15876	0.24	ppb	92
23) Carbon disulfide	7.553	76	817637	4.22	ppb	99
28) Methyl Ethyl Ketone	9.228	72	18454	0.46	ppb	# 83
30) Hexane	9.273	57	32995	0.24	ppb	# 82
32) Chloroform	10.276	83	183909	1.22	ppb	98
33) Tetrahydrofuran	10.450	42	20686	0.26	ppb	91
39) Benzene	11.687	78	65947	0.25	ppb	95
42) 2,2,4-trimethylpentane	12.509	57	54213	0.13	ppb	83
43) Heptane	12.842	43	19268	0.14	ppb	96
51) Toluene	15.028	92	191791	0.98	ppb	98
52) Methyl Isobutyl Ketone	14.106	43	43503	0.25	ppb	81
58) Ethylbenzene	17.333	91	83305	0.20	ppb	98
59) m&p-xylene	17.514	91	156981	0.49	ppb	86
63) o-xylene	18.042	91	69621	0.19	ppb	89
70) 1,3,5-trimethylbenzene	19.498	105	43793m	0.11	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	86470	0.22	ppb	97

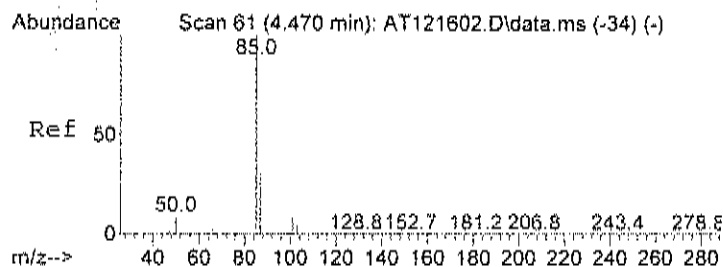
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121617.D
Acq On : 16 Dec 2022 11:53 pm
Operator : RJP
Sample : C2212031-008A
Misc : AD12_1UG
ALS Vial : 17 Sample Multiplier: 1

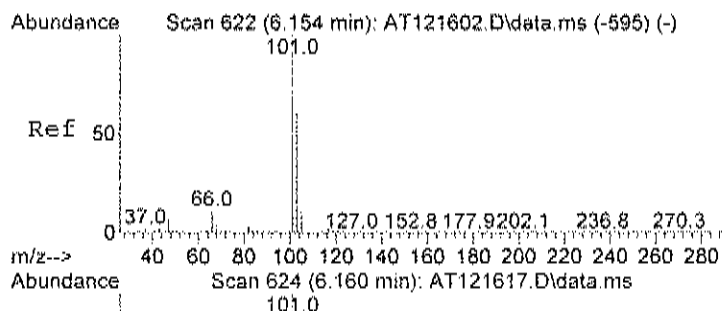
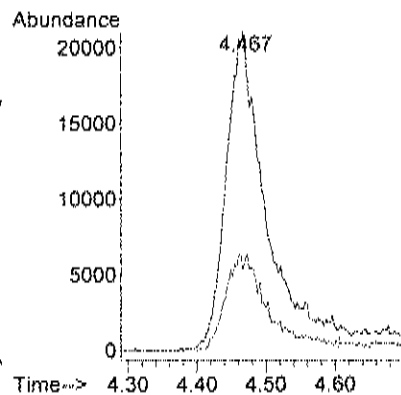
Quant Time: Dec 17 08:40:48 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : 10-15 VOA Standards for 5 point calibration
Quant Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





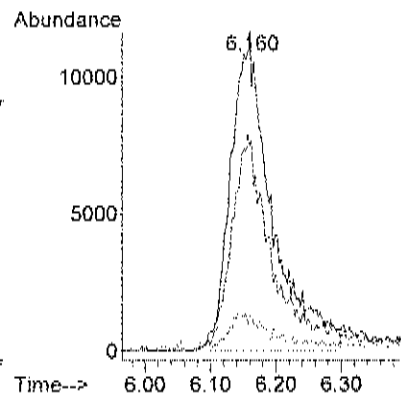
#3
Freon 12
Concen: 0.51 ppb
RT: 4.467 min Scan# 60
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

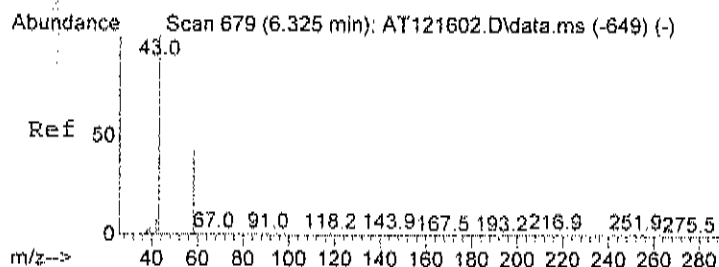
Tgt Ion:	85	Resp:	83485
Ion	Ratio	Lower	Upper
85	100		
87	32.8	14.3	54.3



#14
Freon 11
Concen: 0.37 ppb
RT: 6.160 min Scan# 624
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

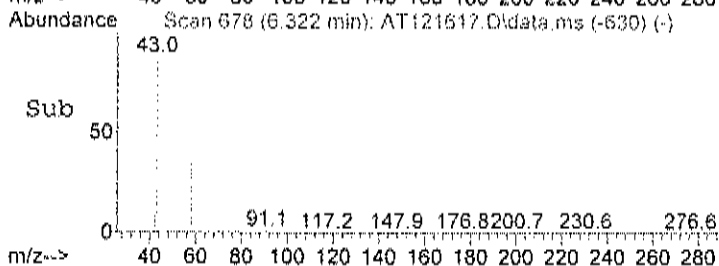
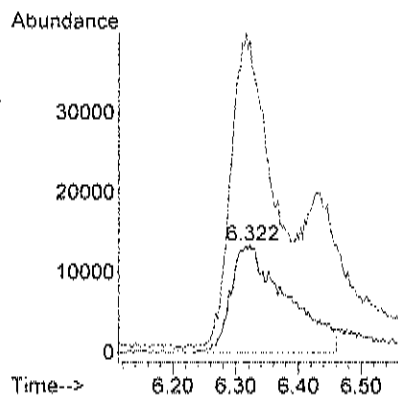
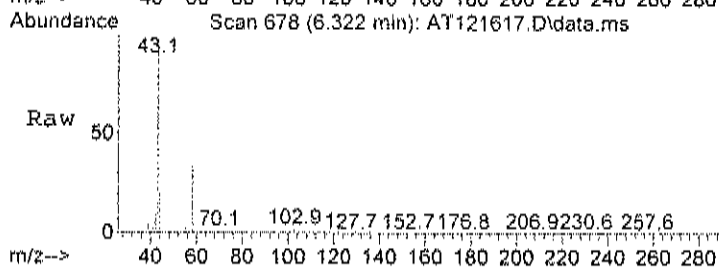
Tgt Ion:	101	Resp:	50441
Ion	Ratio	Lower	Upper
101	100		
103	63.7	44.1	84.1
105	10.7	0.0	32.0





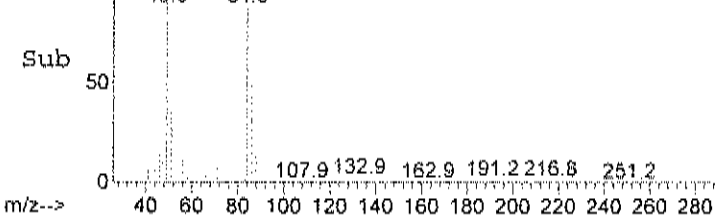
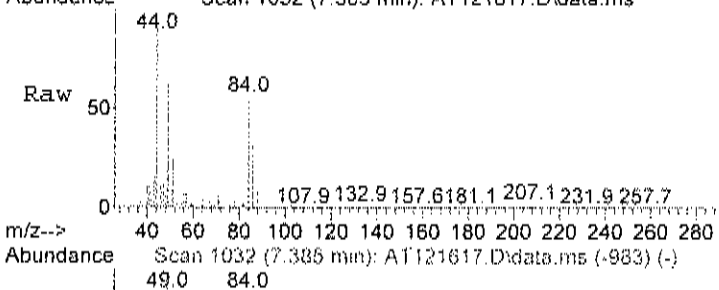
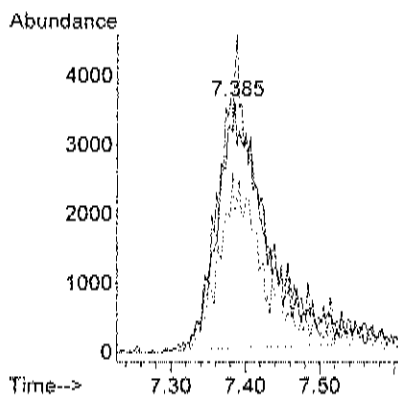
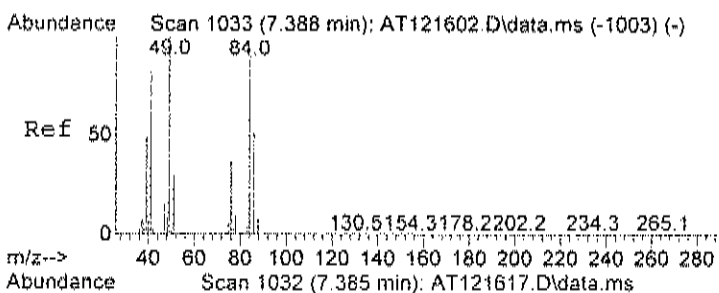
#15
Acetone
Concen: 3.22 ppb
RT: 6.322 min Scan# 678
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

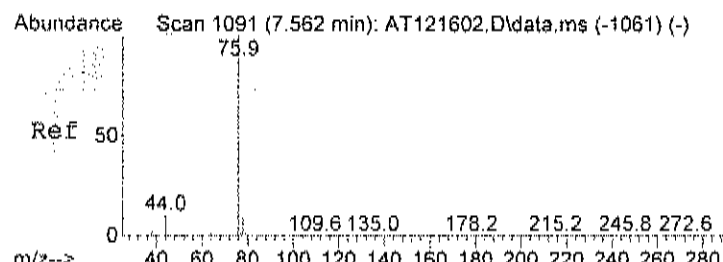
Tgt Ion	58	Resp	82949
Ion	Ratio	Lower	Upper
58	100		
43	290.2	272.3	332.3



#21
Methylene chloride
Concen: 0.24 ppb
RT: 7.385 min Scan# 1032
Delta R.T. -0.003 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

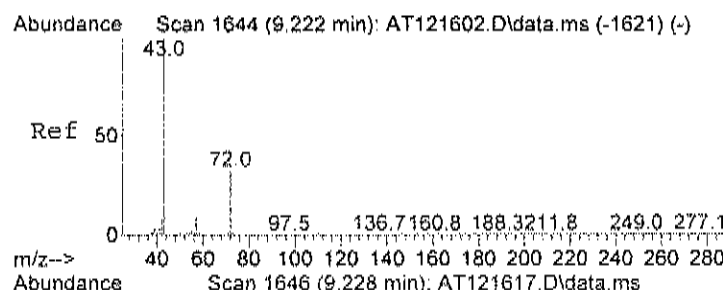
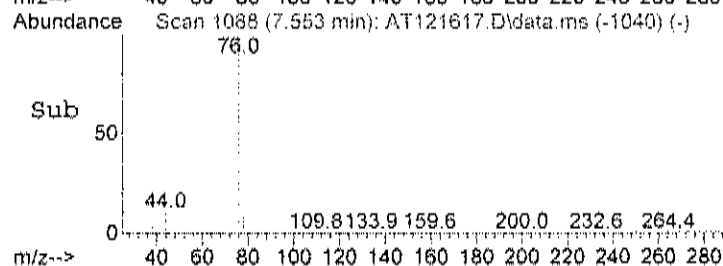
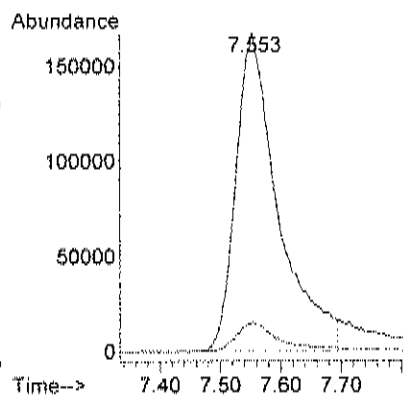
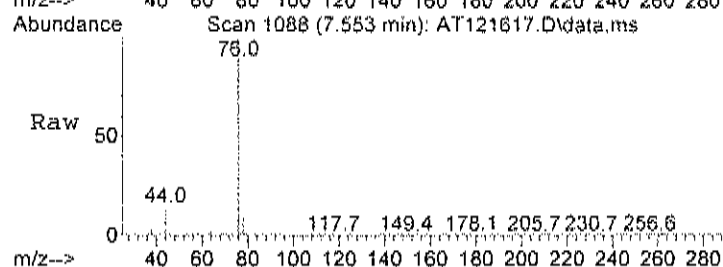
Tgt Ion	84	Resp	15876
Ion	Ratio	Lower	Upper
84	100		
49	112.7	84.2	124.2
86	56.4	42.9	82.9





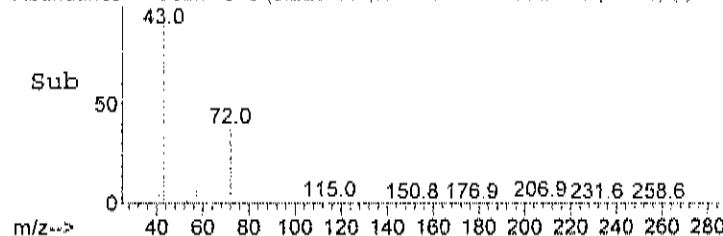
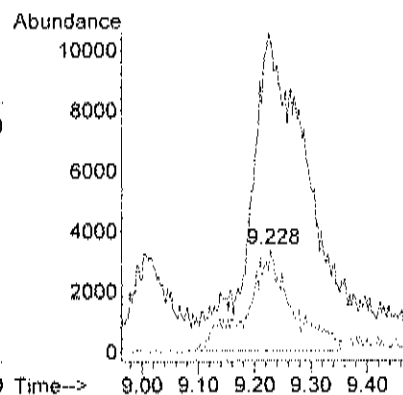
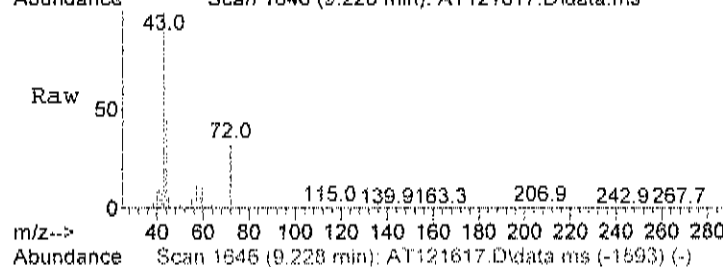
#23
Carbon disulfide
Concen: 4.22 ppb
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

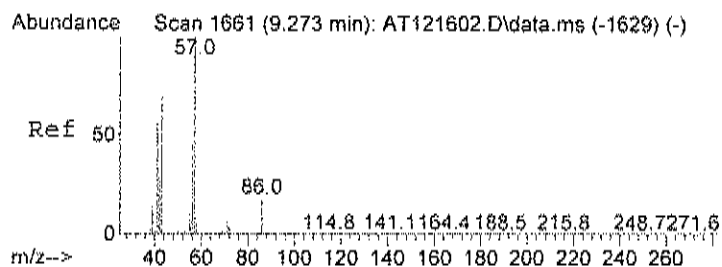
Tgt Ion	Ratio	Lower	Upper
76	100		
78	9.1	0.0	28.7



#28
Methyl Ethyl Ketone
Concen: 0.46 ppb
RT: 9.228 min Scan# 1646
Delta R.T. 0.009 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

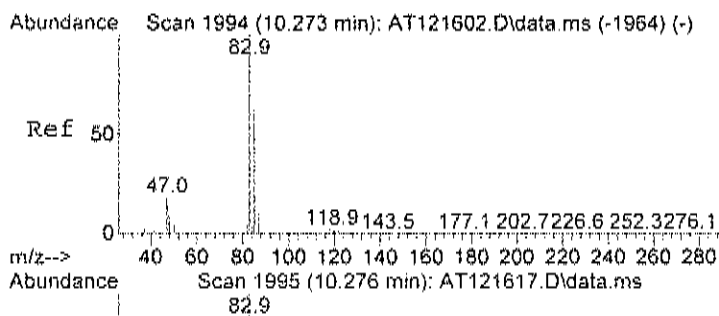
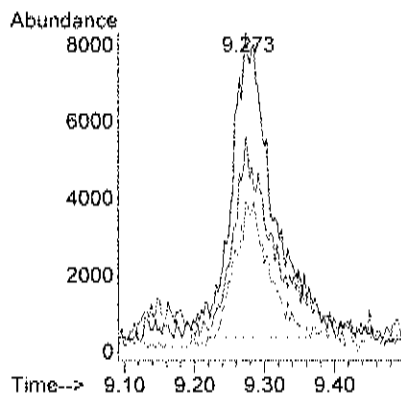
Tgt Ion	Ratio	Lower	Upper
72	100		
43	307.0	333.7	373.7#
72	100.0	80.0	120.0





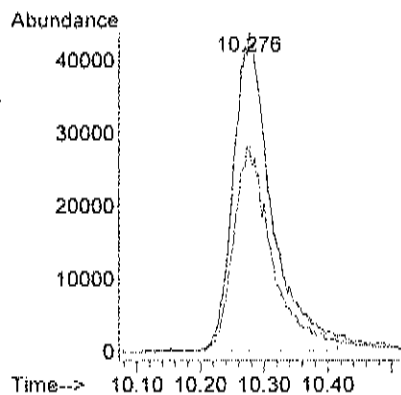
#30
Hexane
Concen: 0.24 ppb
RT: 9.273 min Scan# 1661
Delta R.T. -0.012 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

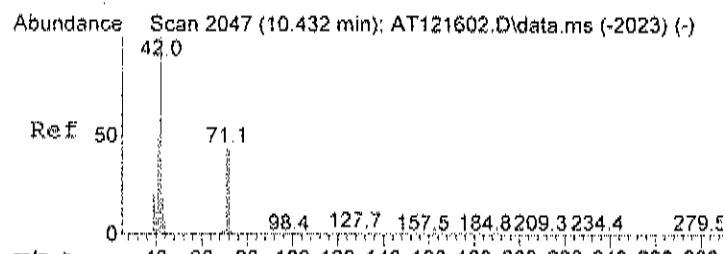
Tgt Ion	57	Resp	32995
Ion	Ratio	Lower	Upper
57	100		
41	59.2	62.0	102.0#
56	46.8	31.8	71.8



#32
Chloroform
Concen: 1.22 ppb
RT: 10.276 min Scan# 1995
Delta R.T. -0.003 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

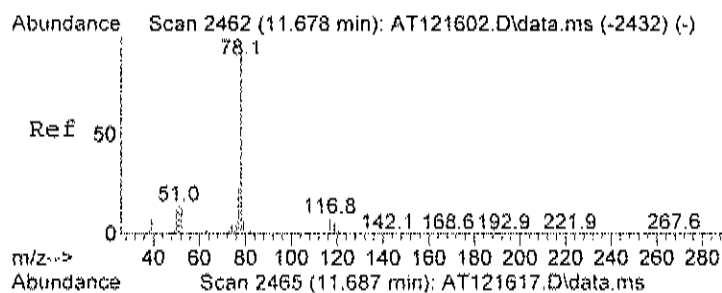
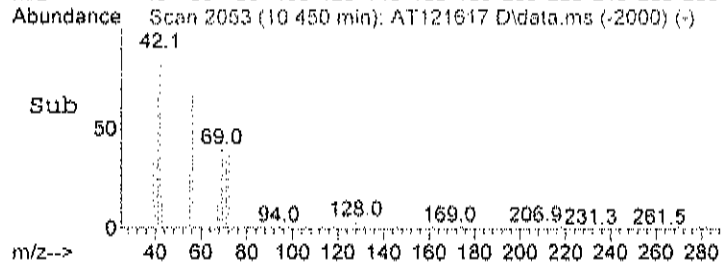
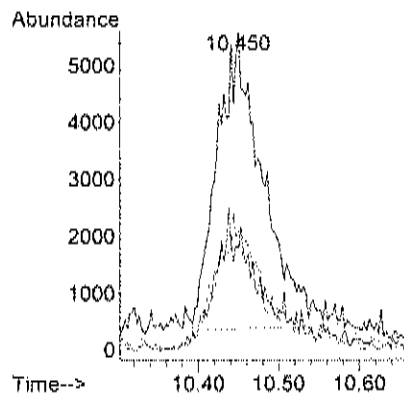
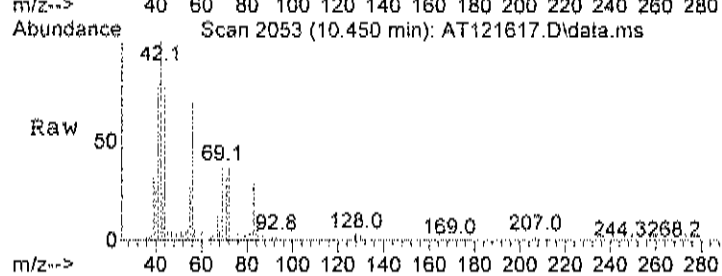
Tgt Ion	83	Resp	183909
Ion	Ratio	Lower	Upper
83	100		
85	65.1	46.4	86.4





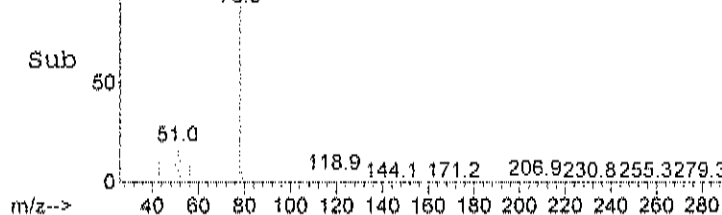
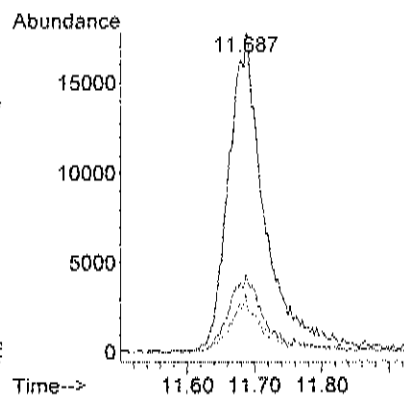
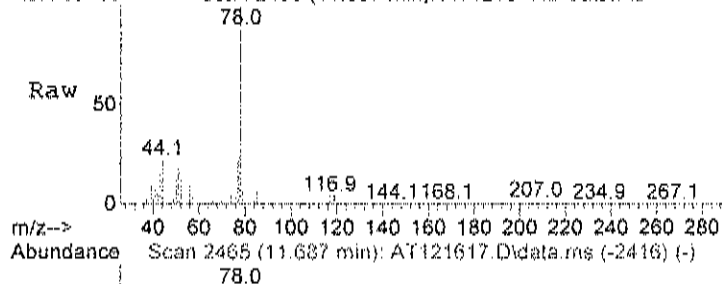
#33
Tetrahydrofuran
Concen: 0.26 ppb
RT: 10.450 min Scan# 2053
Delta R.T. 0.009 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

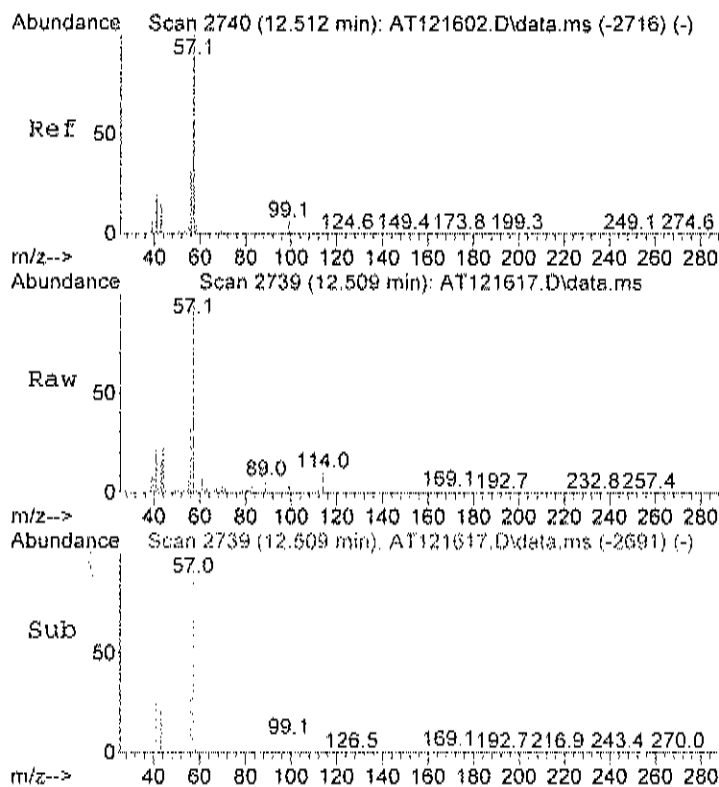
Tgt Ion	42	71	72	Resp	20686
Ion	42	71	72	Ratio	Lower Upper
	100	46.2	45.3		33.5 73.5 20.1 60.1



#39
Benzene
Concen: 0.25 ppb
RT: 11.687 min Scan# 2465
Delta R.T. -0.003 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

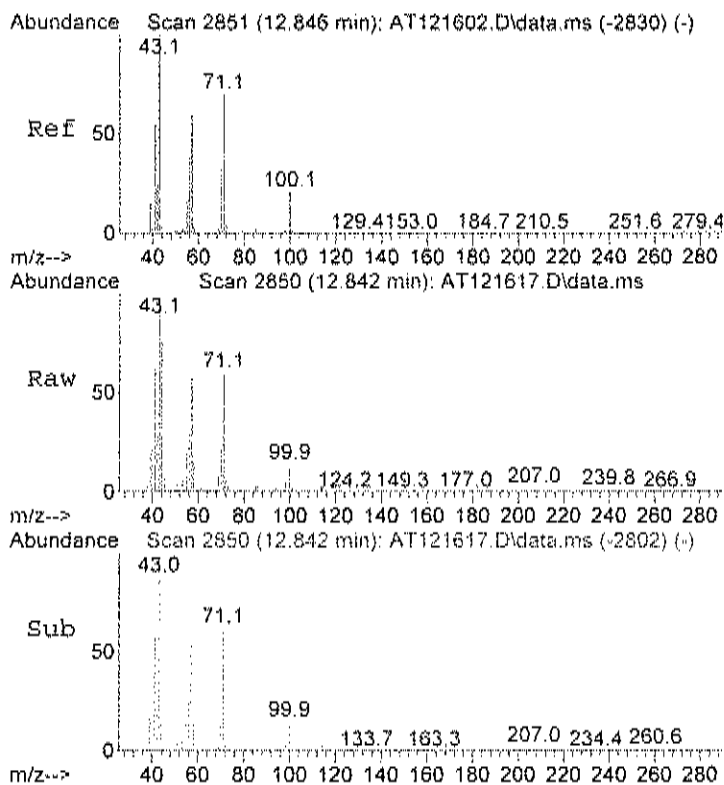
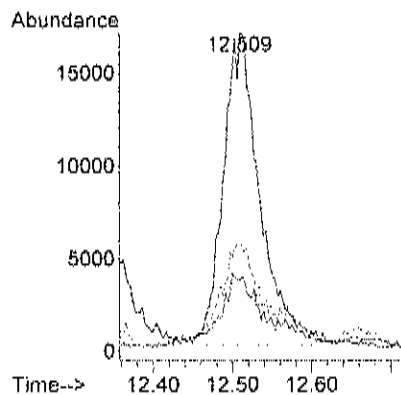
Tgt Ion	78	77	51	Resp	65947
Ion	78	77	51	Ratio	Lower Upper
	100	23.5	16.3		2.5 42.5 0.5 40.5





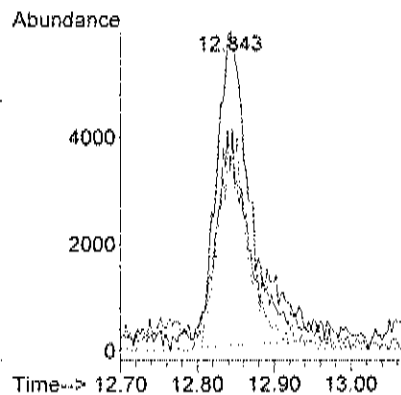
#42
2,2,4-trimethylpentane
Concen: 0.13 ppb
RT: 12.509 min Scan# 2739
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

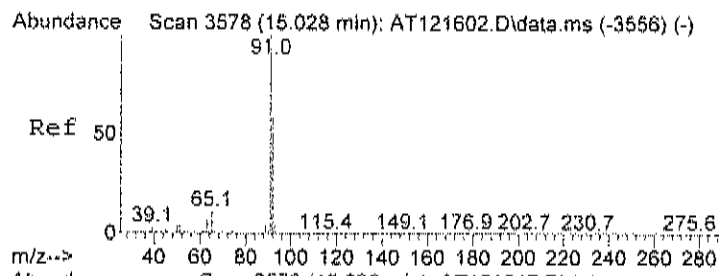
Tgt Ion:	57	Resp:	54213
Ion	Ratio	Lower	Upper
57	100		
41	29.1	17.4	57.4
56	42.3	10.8	50.8



#43
Heptane
Concen: 0.14 ppb
RT: 12.842 min Scan# 2850
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

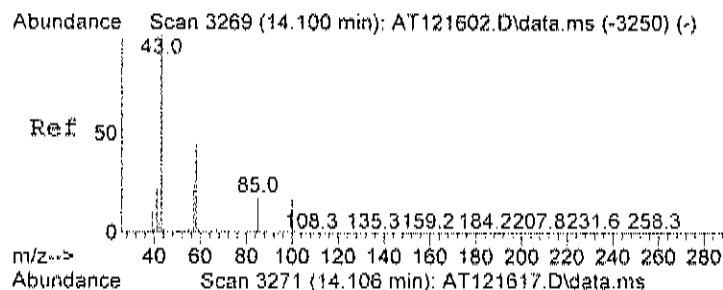
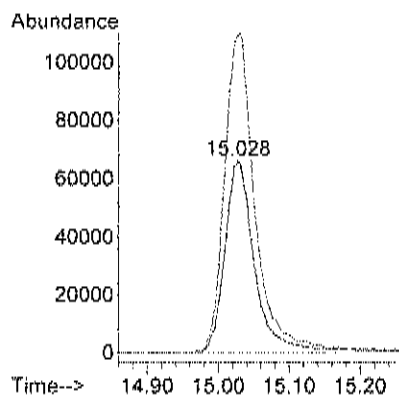
Tgt Ion:	43	Resp:	19268
Ion	Ratio	Lower	Upper
43	100		
57	66.3	42.3	82.3
71	57.4	38.8	78.8





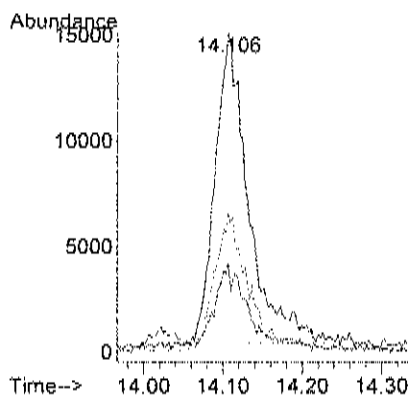
#51
Toluene
Concen: 0.98 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

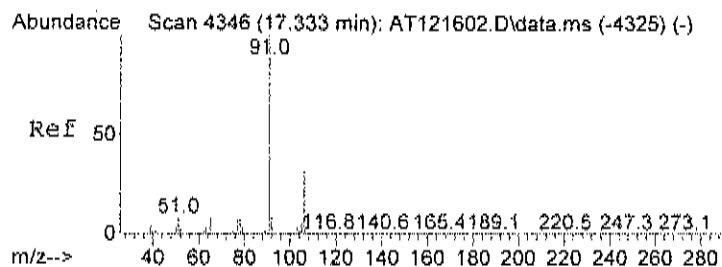
Tgt Ion:	92	Resp:	191791
Ion	Ratio	Lower	Upper
92	100		
91	171.1	153.3	193.3



#52
Methyl Isobutyl Ketone
Concen: 0.25 ppb
RT: 14.106 min Scan# 3271
Delta R.T. -0.003 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

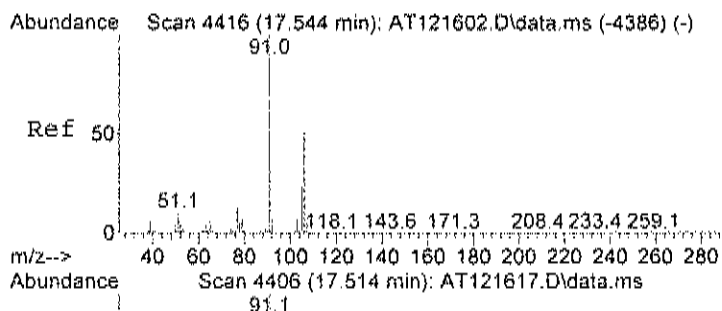
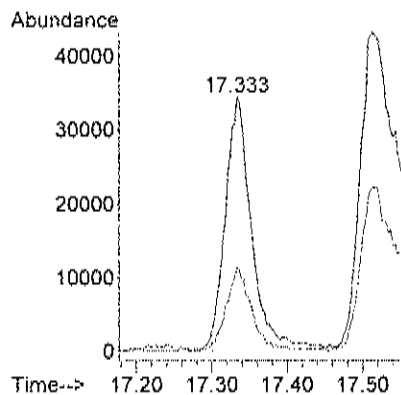
Tgt Ion:	43	Resp:	43503
Ion	Ratio	Lower	Upper
43	100		
57	29.0	7.7	47.7
58	46.5	7.6	47.6





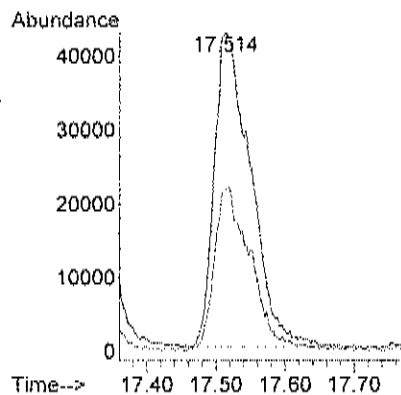
#58
Ethylbenzene
Concen: 0.20 ppb
RT: 17.333 min Scan# 4346
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

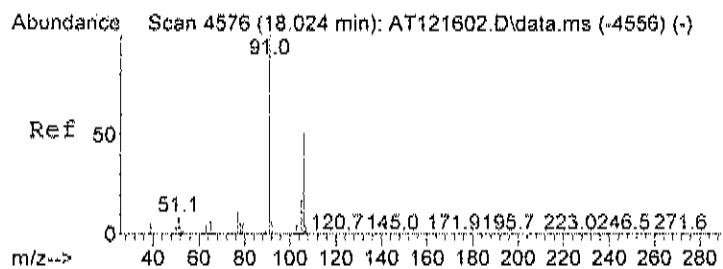
Tgt Ion: 91 Resp: 83305
Ion Ratio Lower Upper
91 100
106 32.8 13.9 53.9



#59
m&p-xylene
Concen: 0.49 ppb
RT: 17.514 min Scan# 4406
Delta R.T. -0.029 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

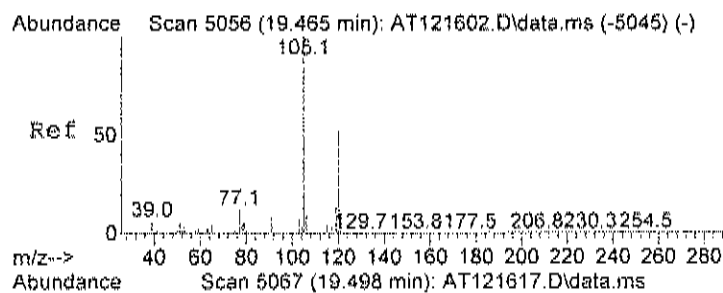
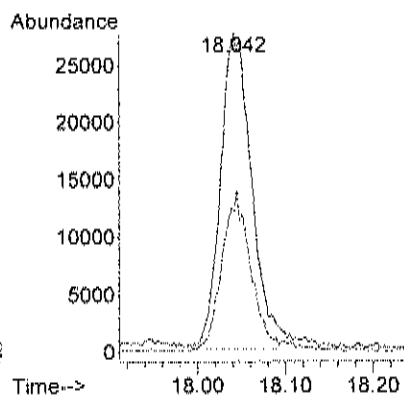
Tgt Ion: 91 Resp: 156981
Ion Ratio Lower Upper
91 100
106 51.5 22.4 62.4





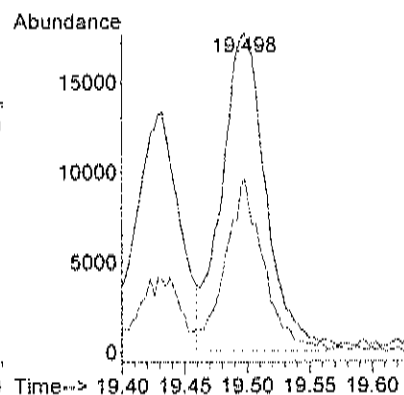
#63
o-xylene
Concen: 0.19 ppb
RT: 18.042 min Scan# 4582
Delta R.T. -0.006 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

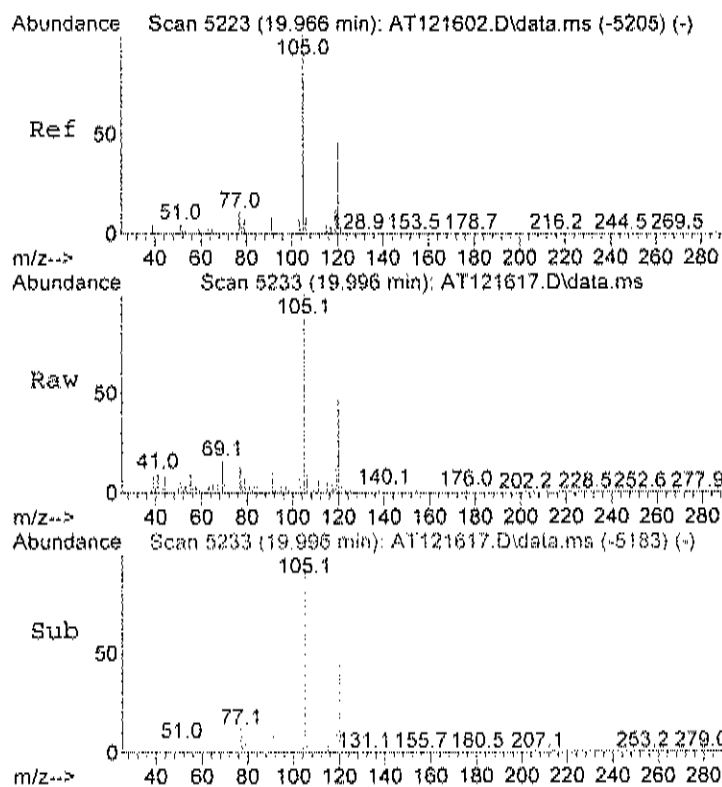
Tgt Ion: 91 Resp: 69621
Ion Ratio Lower Upper
91 100
106 47.5 20.7 60.7



#70
1,3,5-trimethylbenzene
Concen: 0.11 ppb m
RT: 19.498 min Scan# 5067
Delta R.T. -0.000 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

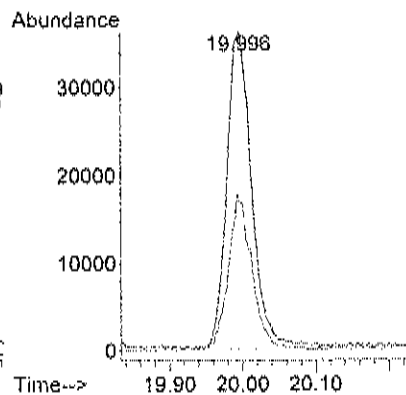
Tgt Ion: 105 Resp: 43793
Ion Ratio Lower Upper
105 100
120 70.5 22.0 62.0#





#71
1,2,4-trimethylbenzene
Concen: 0.22 ppb
RT: 19.996 min Scan# 5233
Delta R.T. 0.000 min
Lab File: AT121617.D
Acq: 16 Dec 2022 11:53 pm

Tgt Ion: 105 Resp: 86470
Ion Ratio Lower Upper
105 100
120 46.7 24.9 64.9



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121711.D
Acq On : 17 Dec 2022 4:56 pm
Operator : RJP
Sample : C2212031-008A 5X
Misc : AD12_1UG
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 18 10:34:31 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

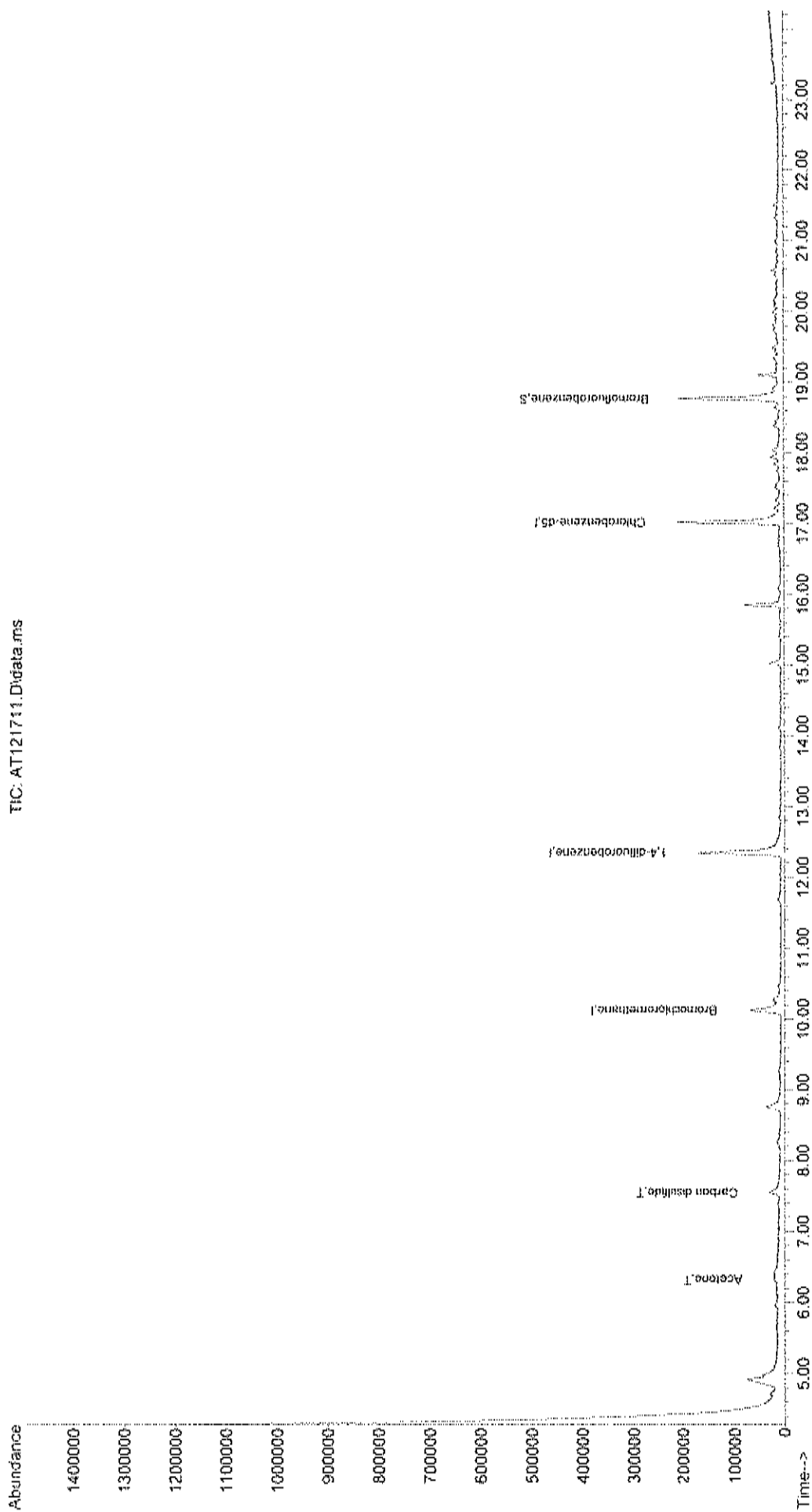
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

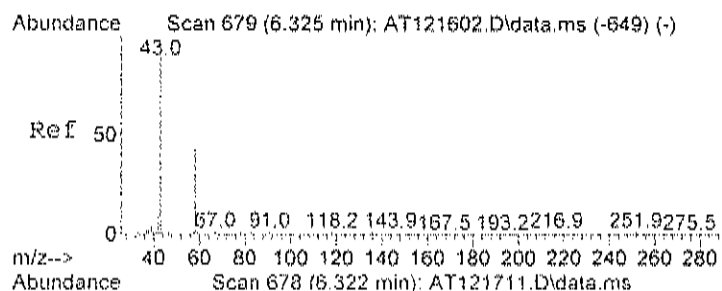
Internal Standards						
1) Bromochloromethane	10.123	128	45428	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	268447	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	212160	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	128114	0.89	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	89.00%
Target Compounds						
15) Acetone	6.322	58	9548	0.40	ppb	Qvalue 97
23) Carbon disulfide	7.544	76	80033m	0.45	ppb	

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121711.D
Acq On : 17 Dec 2022 4:56 pm
Operator : RJP
Sample : C2212031-008A 5X
Misc : AD12_1UG
ALS Vial : 9 Sample Multiplier: 1

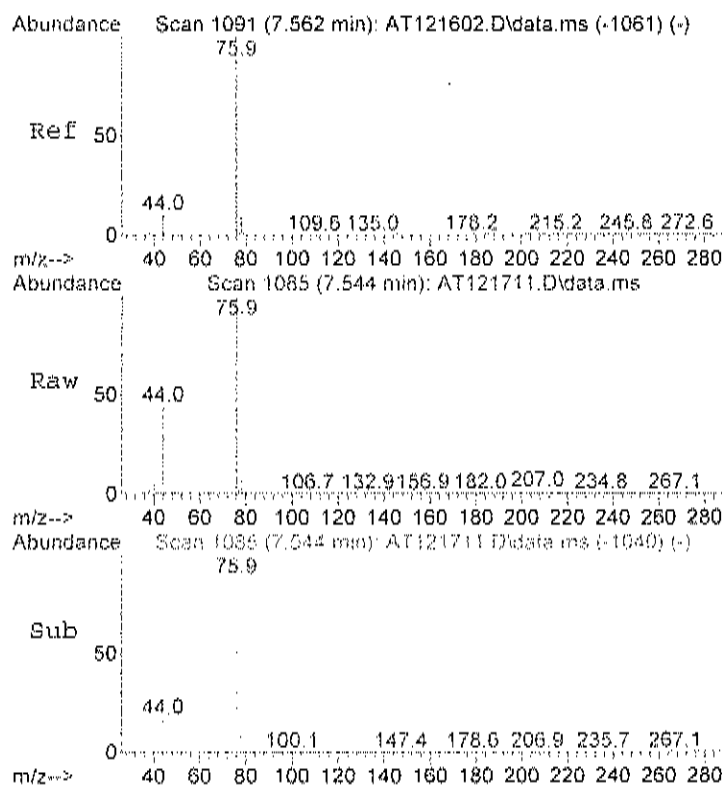
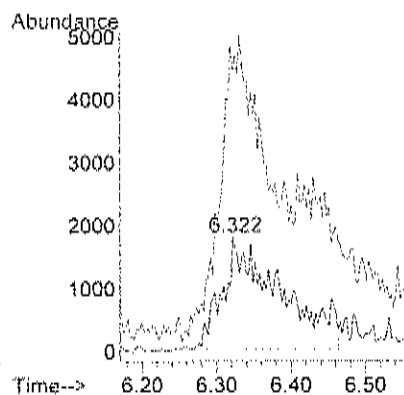
Quant Time: Dec 18 10:34:31 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





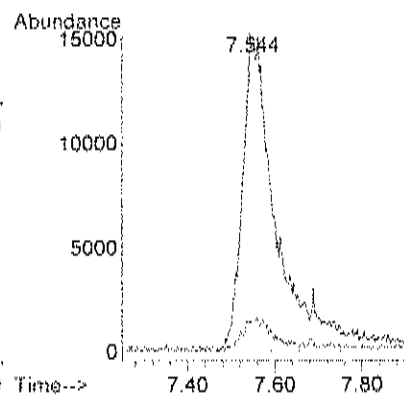
#15
Acetone
Concen: 0.40 ppb
RT: 6.322 min Scan# 678
Delta R.T. -0.006 min
Lab File: AT121711.D
Acq: 17 Dec 2022 4:56 pm

Tgt Ion: 58 Resp: 9548
Ion Ratio Lower Upper
58 100
43 295.7 272.3 332.3



#23
Carbon disulfide
Concen: 0.45 ppb m
RT: 7.544 min Scan# 1085
Delta R.T. -0.015 min
Lab File: AT121711.D
Acq: 17 Dec 2022 4:56 pm

Tgt Ion: 76 Resp: 80033
Ion Ratio Lower Upper
76 100
78 0.0 0.0 28.7



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-8

Lab Order: C2212031

Tag Number: 561,147

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-009A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Acetone	2.9	1.5		ppbV	5	12/17/2022 5:39:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Benzene	0.38	0.15		ppbV	1	12/17/2022 12:38:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Chloromethane	0.56	0.15		ppbV	1	12/17/2022 12:38:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM

Qualifiers:

Results reported are not blank corrected

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-8

Lab Order: C2212031

Tag Number: 561,147

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-009A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Ethyl acetate	0.64	0.15		ppbV	1	12/17/2022 12:38:00 AM
Ethylbenzene	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Freon 12	0.58	0.15		ppbV	1	12/17/2022 12:38:00 AM
Heptane	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Hexane	0.22	0.15		ppbV	1	12/17/2022 12:38:00 AM
Isopropyl alcohol	0.78	0.15		ppbV	1	12/17/2022 12:38:00 AM
m&p-Xylene	0.38	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Ethyl Ketone	0.72	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 12:38:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Methylene chloride	0.23	0.15		ppbV	1	12/17/2022 12:38:00 AM
o-Xylene	0.13	0.15	J	ppbV	1	12/17/2022 12:38:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Tetrachloroethylene	0.26	0.15		ppbV	1	12/17/2022 12:38:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Toluene	1.3	0.15		ppbV	1	12/17/2022 12:38:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 12:38:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 12:38:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-8

Lab Order: C2212031

Tag Number: 561,147

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-009A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 12:38:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 12:38:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 12:38:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 12:38:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 12:38:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 12:38:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 12:38:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	12/17/2022 12:38:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 12:38:00 AM
Acetone	6.9	3.6		ug/m3	5	12/17/2022 5:39:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 12:38:00 AM
Benzene	1.2	0.48		ug/m3	1	12/17/2022 12:38:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 12:38:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 12:38:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 12:38:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/17/2022 12:38:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 12:38:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 12:38:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 12:38:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 12:38:00 AM
Chloromethane	1.2	0.31		ug/m3	1	12/17/2022 12:38:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 12:38:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 12:38:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 12:38:00 AM
Ethyl acetate	2.3	0.54		ug/m3	1	12/17/2022 12:38:00 AM
Ethylbenzene	0.56	0.65	J	ug/m3	1	12/17/2022 12:38:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 12:38:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 12:38:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 12:38:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS**Client Sample ID:** SVW-8**Lab Order:** C2212031**Tag Number:** 561,147**Project:** IKEA Red Hook**Collection Date:** 12/13/2022**Lab ID:** C2212031-009A**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/17/2022 12:38:00 AM
Heptane	0.53	0.61	J	ug/m3	1	12/17/2022 12:38:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 12:38:00 AM
Hexane	0.78	0.53		ug/m3	1	12/17/2022 12:38:00 AM
Isopropyl alcohol	1.9	0.37		ug/m3	1	12/17/2022 12:38:00 AM
m&p-Xylene	1.6	1.3		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Ethyl Ketone	2.1	0.88		ug/m3	1	12/17/2022 12:38:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 12:38:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 12:38:00 AM
Methylene chloride	0.80	0.52		ug/m3	1	12/17/2022 12:38:00 AM
o-Xylene	0.56	0.65	J	ug/m3	1	12/17/2022 12:38:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 12:38:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 12:38:00 AM
Tetrachloroethylene	1.8	1.0		ug/m3	1	12/17/2022 12:38:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 12:38:00 AM
Toluene	5.0	0.57		ug/m3	1	12/17/2022 12:38:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 12:38:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 12:38:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 12:38:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 12:38:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121618.D
 Acq On : 17 Dec 2022 12:38 am
 Operator : RJP
 Sample : C2212031-009A
 Misc : AD12_1UG
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:40:50 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

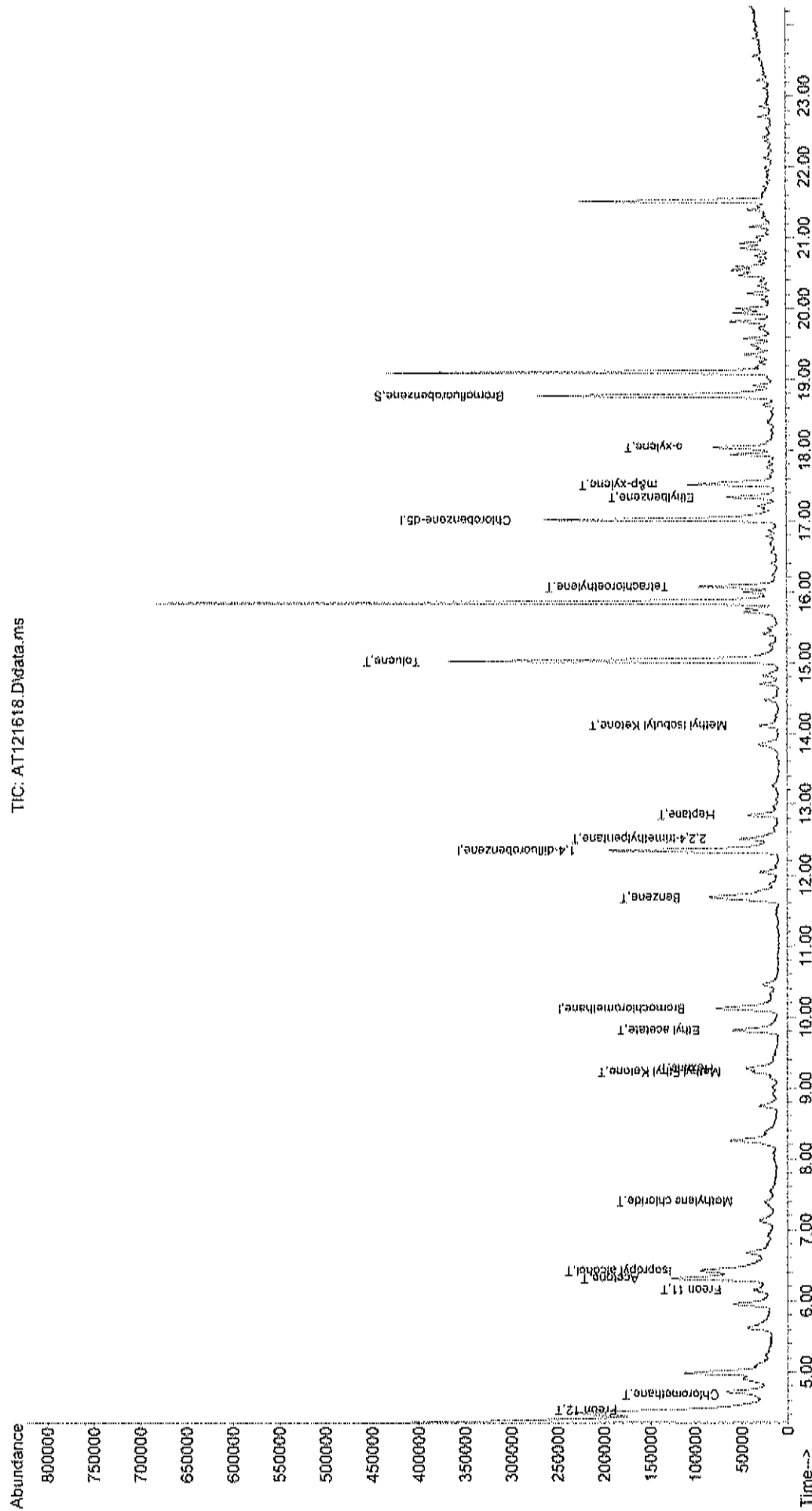
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

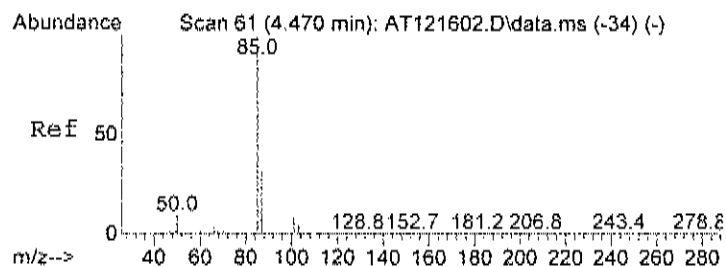
Internal Standards						
1) Bromochloromethane	10.117	128	48026	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.347	114	300680	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	242582	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	154824	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	93004	0.58	ppb	98
4) Chloromethane	4.680	50	29259	0.56	ppb	78
14) Freon 11	6.157	101	36669	0.27	ppb	97
15) Acetone	6.313	58	129269	5.14	ppb	99
17) Isopropyl alcohol	6.418	45	60508	0.78	ppb	# 1
21) Methylene chloride	7.397	84	15301m	0.23	ppb	
28) Methyl Ethyl Ketone	9.225	72	28322m	0.72	ppb	
30) Hexane	9.267	57	30055	0.22	ppb	# 79
31) Ethyl acetate	9.810	43	124426	0.64	ppb	91
39) Benzene	11.681	78	102017	0.38	ppb	93
42) 2,2,4-trimethylpentane	12.509	57	55666	0.13	ppb	89
43) Heptane	12.845	43	18947	0.13	ppb	# 86
51) Toluene	15.028	92	258687	1.33	ppb	98
52) Methyl Isobutyl Ketone	14.112	43	19388	0.11	ppb	83
56) Tetrachloroethylene	16.069	164	31570	0.26	ppb	92
58) Ethylbenzene	17.333	91	54272	0.13	ppb	97
59) m&p-xylene	17.513	91	119854	0.38	ppb	86
63) o-xylene	18.045	91	45200	0.13	ppb	86

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121618.D
 Acq On : 17 Dec 2022 12:38 am
 Operator : RJP
 Sample : C2212031-009A
 Misc : AD12_1UG
 ALS Vial : 18 Sample Multiplier: 1

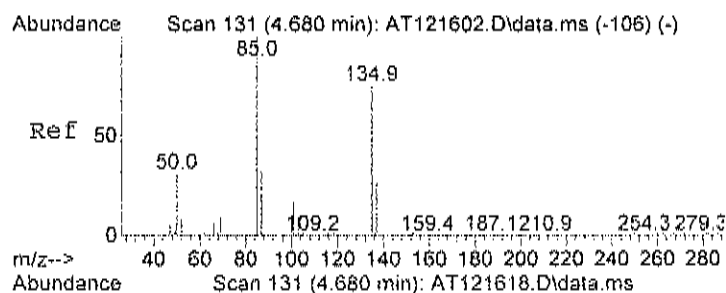
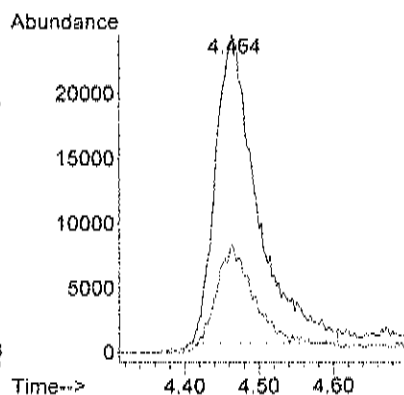
Quant Time: Dec 17 08:40:50 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : 70-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





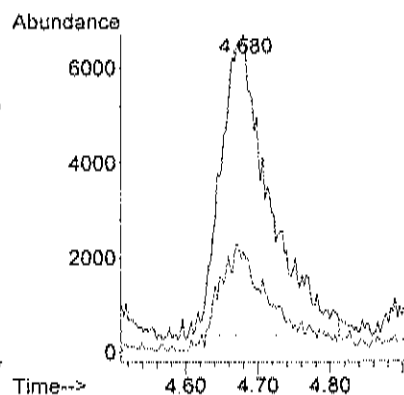
#3
Freon 12
Concen: 0.58 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

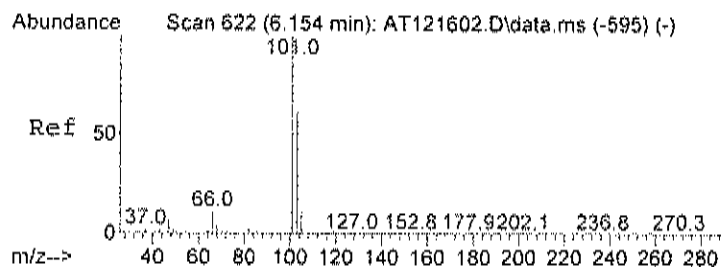
Tgt Ion: 85 Resp: 93004
Ion Ratio Lower Upper
85 100
87 35.5 14.3 54.3



#4
Chloromethane
Concen: 0.56 ppb
RT: 4.680 min Scan# 131
Delta R.T. -0.003 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

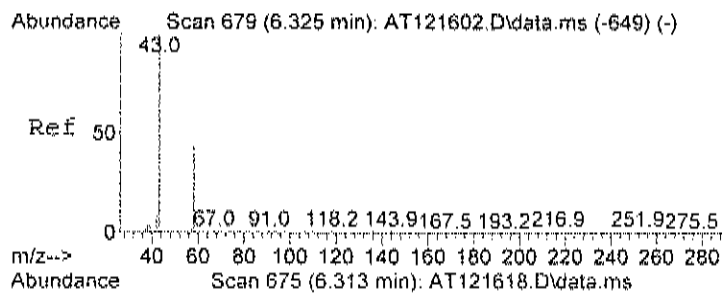
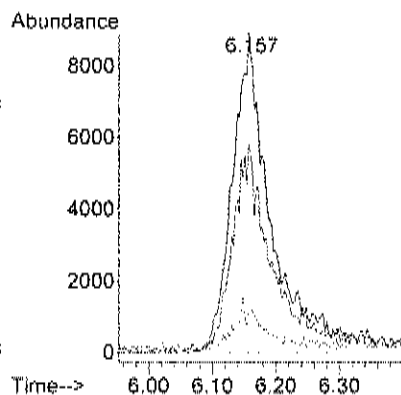
Tgt Ion: 50 Resp: 29259
Ion Ratio Lower Upper
50 100
52 36.3 5.4 45.4





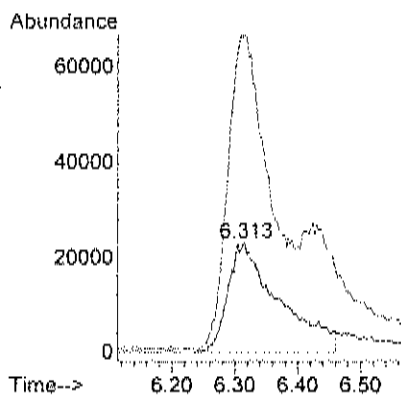
#14
Freon 11
Concen: 0.27 ppb
RT: 6.157 min Scan# 623
Delta R.T. -0.009 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

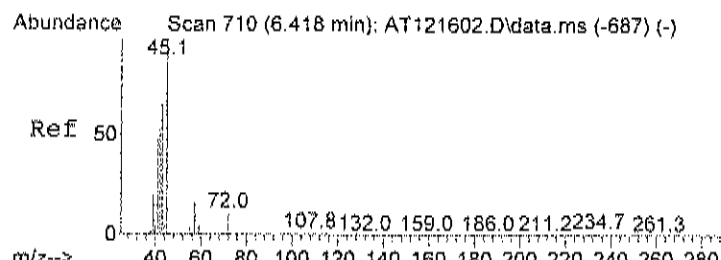
Tgt Ion:	101	Resp:	36669
Ion	Ratio	Lower	Upper
101	100		
103	67.2	44.1	84.1
105	11.6	0.0	32.0



#15
Acetone
Concen: 5.14 ppb
RT: 6.313 min Scan# 675
Delta R.T. -0.015 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

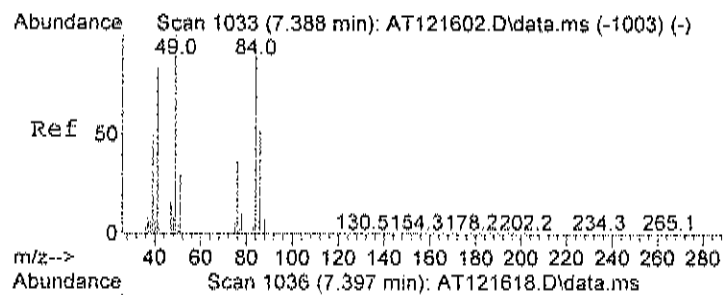
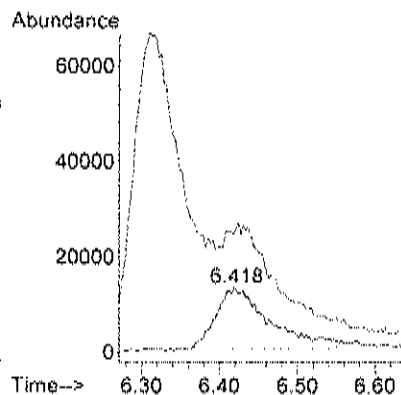
Tgt Ion:	58	Resp:	129269
Ion	Ratio	Lower	Upper
58	100		
43	304.4	272.3	332.3





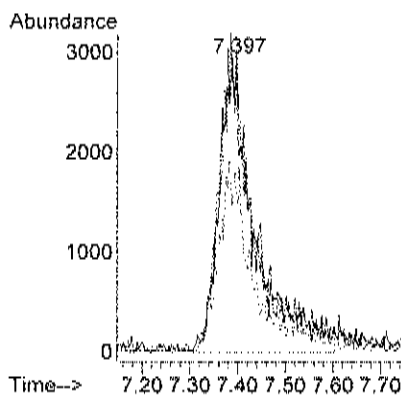
#17
Isopropyl alcohol
Concen: 0.78 ppb
RT: 6.418 min Scan# 710
Delta R.T. 0.000 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

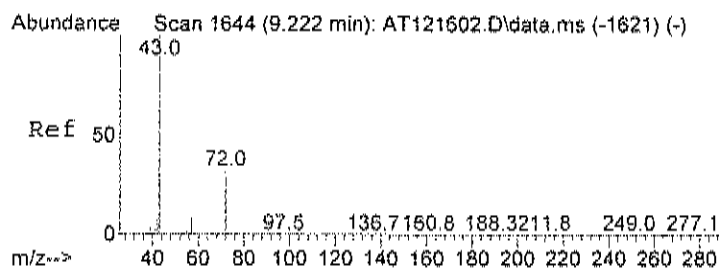
Tgt Ion:	45	Resp:	60508
Ion	Ratio	Lower	Upper
45	100		
43	0.0	91.9	131.9#



#21
Methylene chloride
Concen: 0.23 ppb m
RT: 7.397 min Scan# 1036
Delta R.T. 0.009 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

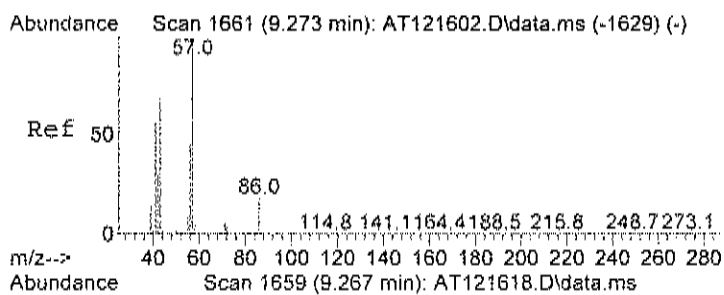
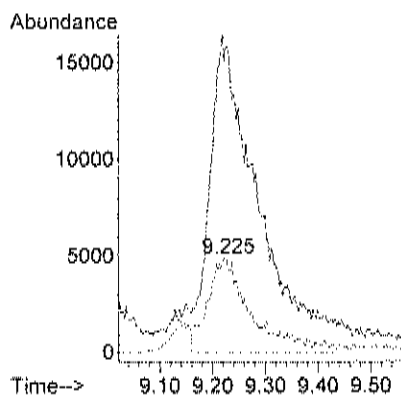
Tgt Ion:	84	Resp:	15301
Ion	Ratio	Lower	Upper
84	100		
49	93.9	84.2	124.2
86	57.3	42.9	82.9





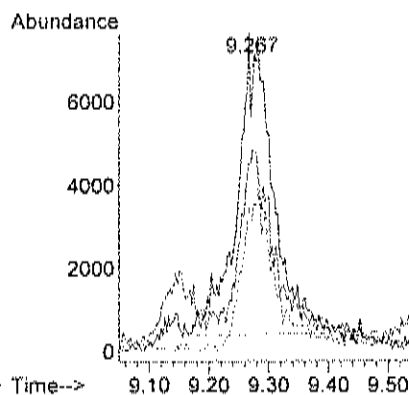
#28
Methyl Ethyl Ketone
Concen: 0.72 ppb m
RT: 9.225 min Scan# 1645
Delta R.T. 0.006 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

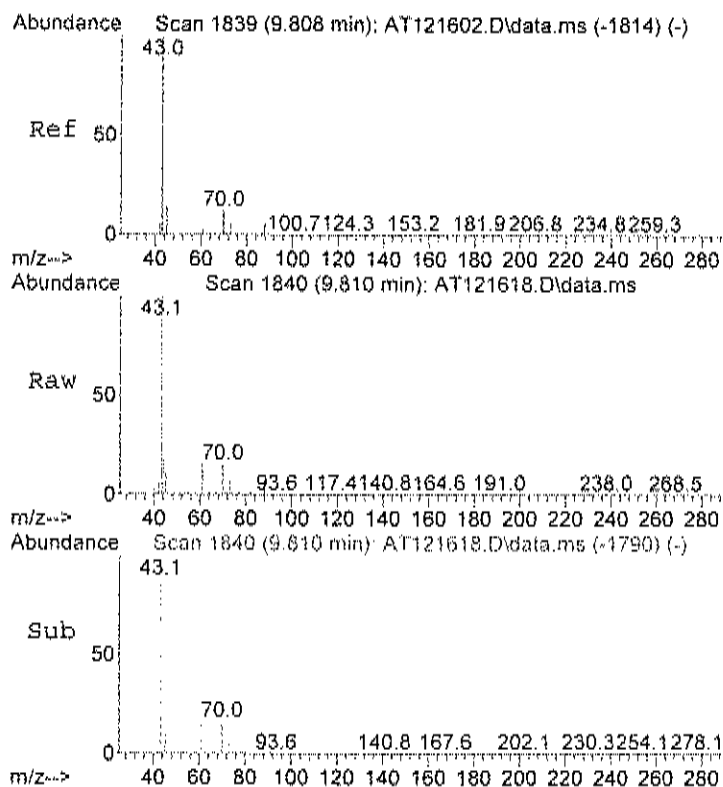
Tgt Ion	Ratio	Lower	Upper
72	100		
43	302.0	333.7	373.7#
72	101.9	80.0	120.0



#30
Hexane
Concen: 0.22 ppb
RT: 9.267 min Scan# 1659
Delta R.T. -0.018 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

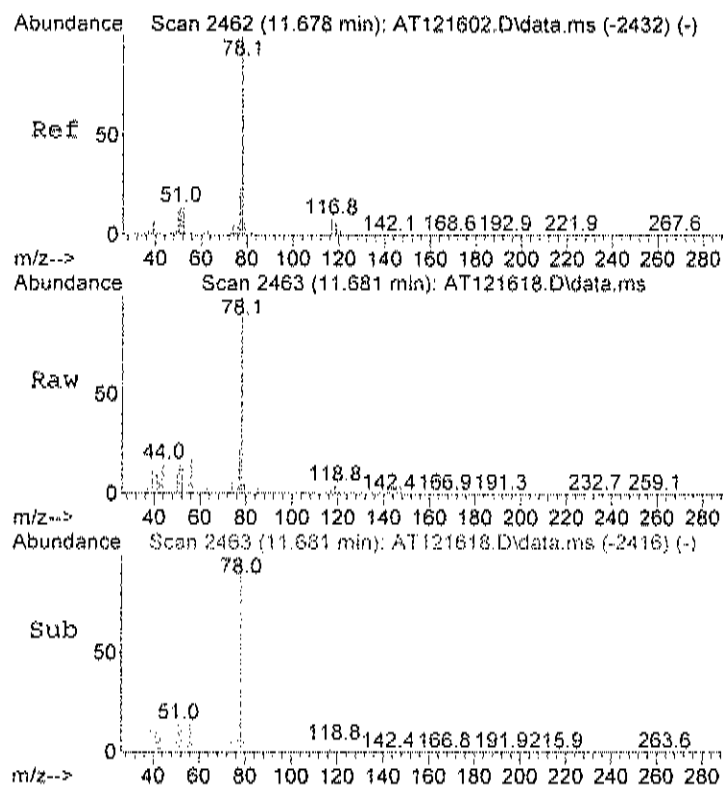
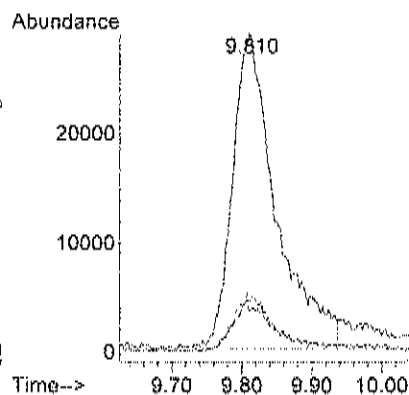
Tgt Ion	Ratio	Lower	Upper
57	100		
41	53.7	62.0	102.0#
56	48.8	31.8	71.8





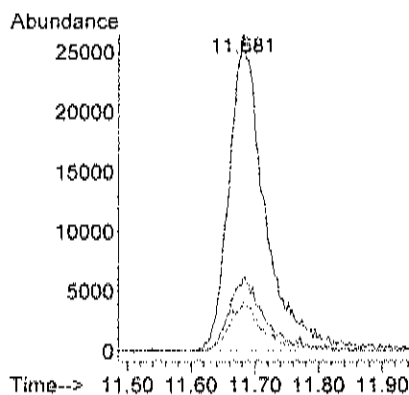
#31
Ethyl acetate
Concen: 0.64 ppb
RT: 9.810 min Scan# 1840
Delta R.T. 0.000 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

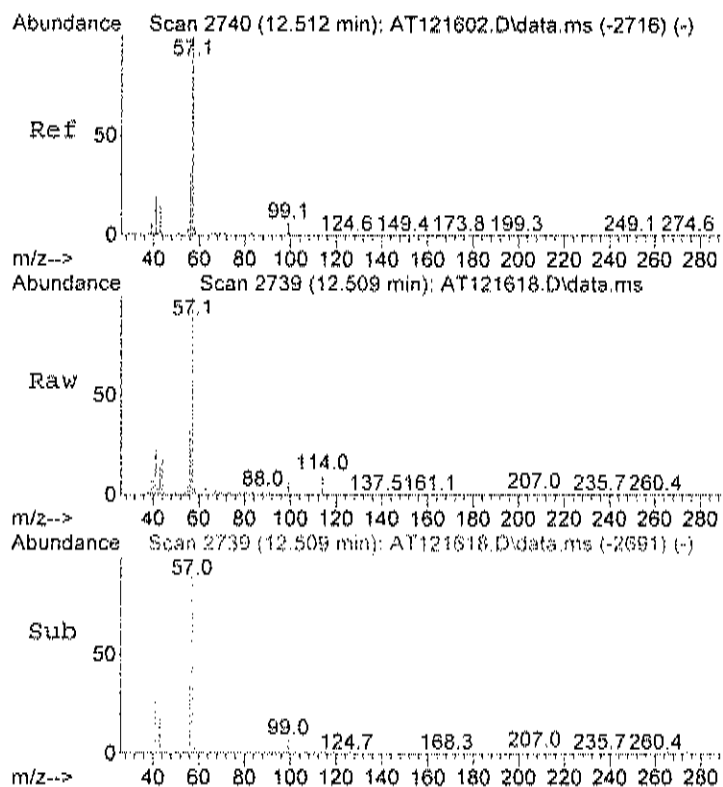
Tgt Ion: 43	Resp: 124426
Ion Ratio	Lower Upper
43 100	
45 15.2	0.0 32.9
61 17.6	0.0 33.0



#39
Benzene
Concen: 0.38 ppb
RT: 11.681 min Scan# 2463
Delta R.T. -0.009 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

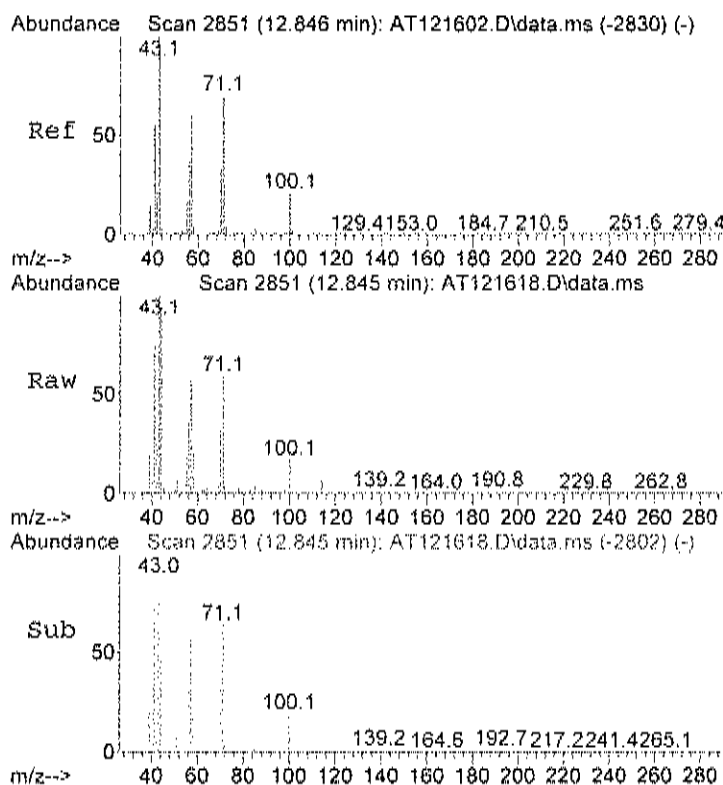
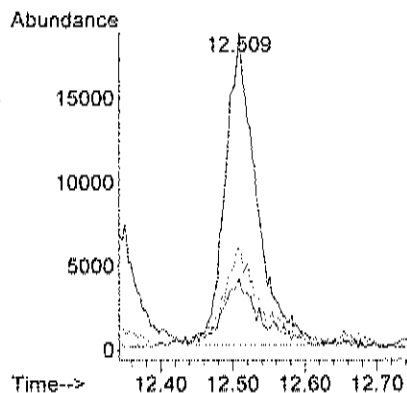
Tgt Ion: 78	Resp: 102017
Ion Ratio	Lower Upper
78 100	
77 23.5	2.5 42.5
51 15.0	0.5 40.5





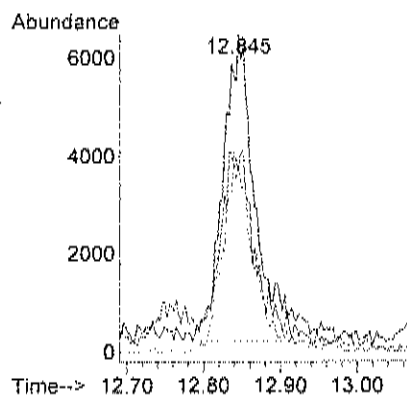
#42
2,2,4-trimethylpentane
Concen: 0.13 ppb
RT: 12.509 min Scan# 2739
Delta R.T. -0.006 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

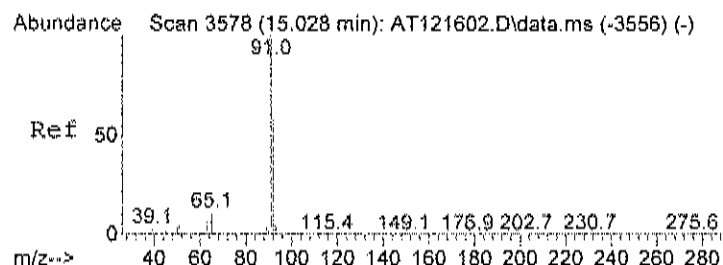
Tgt Ion	57	Resp	55666
Ion	Ratio	Lower	Upper
57	100		
41	29.5	17.4	57.4
56	35.3	10.8	50.8



#43
Heptane
Concen: 0.13 ppb
RT: 12.845 min Scan# 2851
Delta R.T. -0.003 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

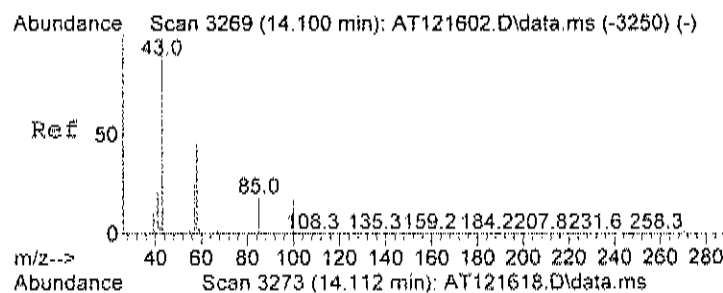
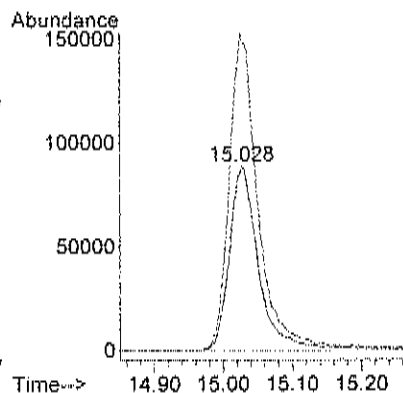
Tgt Ion	43	Resp	18947
Ion	Ratio	Lower	Upper
43	100		
57	82.9	42.3	82.3#
71	59.4	38.8	78.8





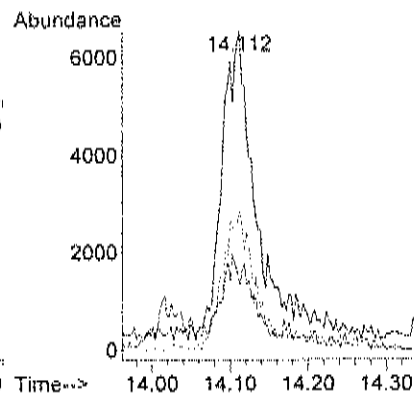
#51
Toluene
Concen: 1.33 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

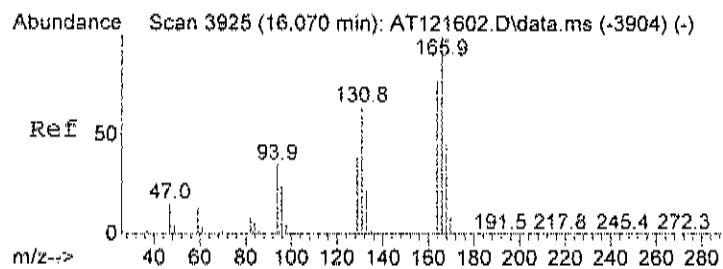
Tgt Ion	Ratio	Lower	Upper
92	100		
91	170.1	153.3	193.3



#52
Methyl Isobutyl Ketone
Concen: 0.11 ppb
RT: 14.112 min Scan# 3273
Delta R.T. 0.003 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

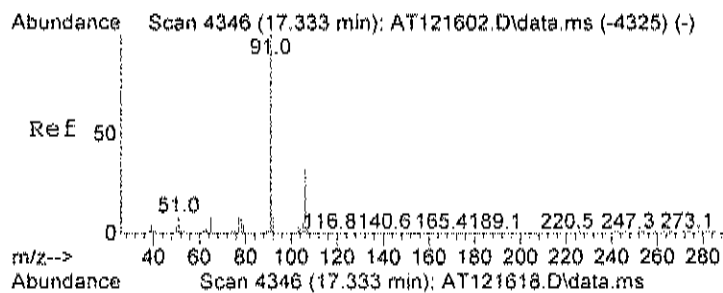
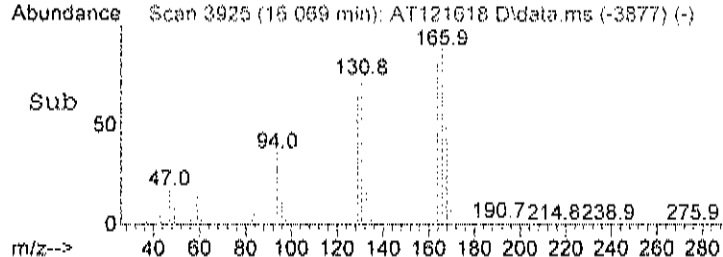
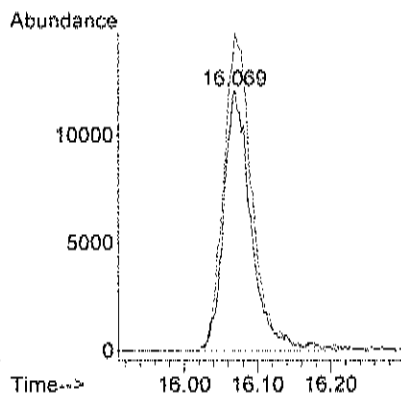
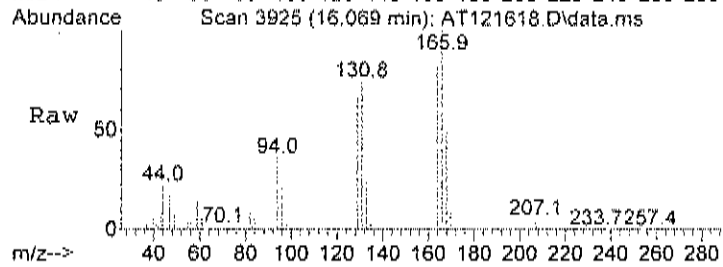
Tgt Ion	Ratio	Lower	Upper
43	100		
57	24.7	7.7	47.7
58	41.9	7.6	47.6





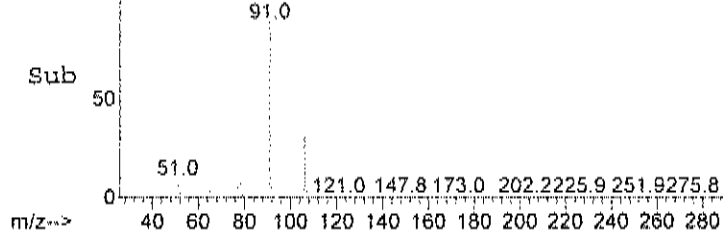
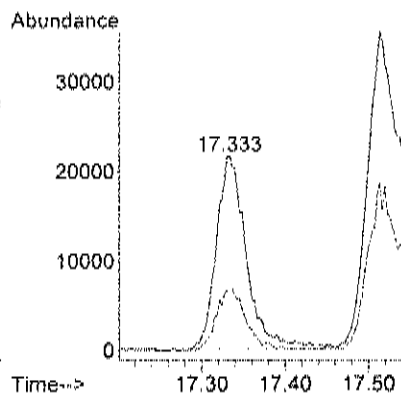
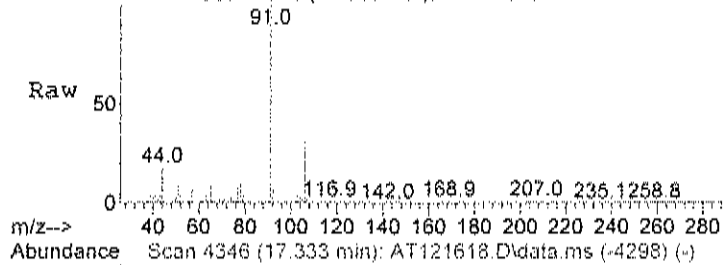
#56
Tetrachloroethylene
Concen: 0.26 ppb
RT: 16.069 min Scan# 3925
Delta R.T. -0.006 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

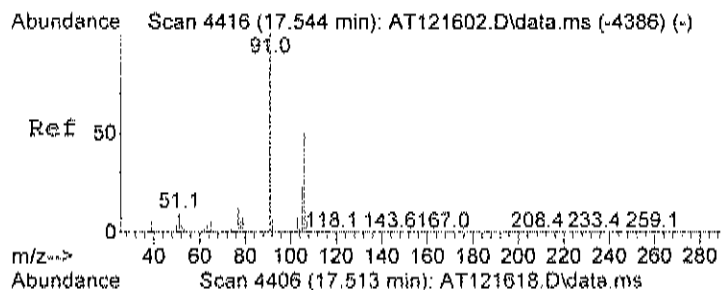
Tgt Ion	Ratio	Lower	Upper
164	100		
166	125.8	97.2	137.2



#58
Ethylbenzene
Concen: 0.13 ppb
RT: 17.333 min Scan# 4346
Delta R.T. -0.006 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

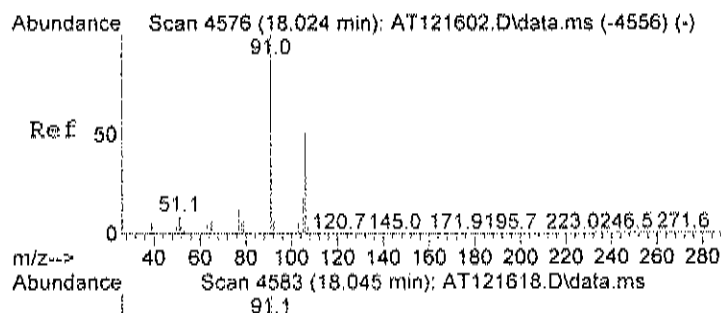
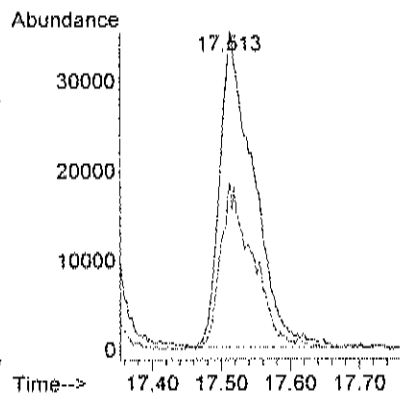
Tgt Ion	Ratio	Lower	Upper
91	100		
106	32.1	13.9	53.9





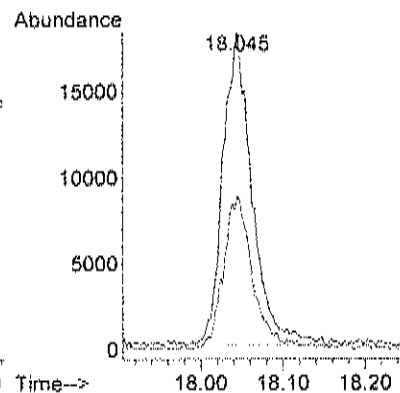
#59
m&p-xylene
Concen: 0.38 ppb
RT: 17.513 min Scan# 4406
Delta R.T. -0.030 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

Tgt Ion: 91 Resp: 119854
Ion Ratio Lower Upper
91 100
106 51.3 22.4 62.4



#63
o-xylene
Concen: 0.13 ppb
RT: 18.045 min Scan# 4583
Delta R.T. -0.003 min
Lab File: AT121618.D
Acq: 17 Dec 2022 12:38 am

Tgt Ion: 91 Resp: 45200
Ion Ratio Lower Upper
91 100
106 49.6 20.7 60.7



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121712.D
Acq On : 17 Dec 2022 5:39 pm
Operator : RJP
Sample : C2212031-009A 5X
Misc : AD12_1UG
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 18 10:34:42 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

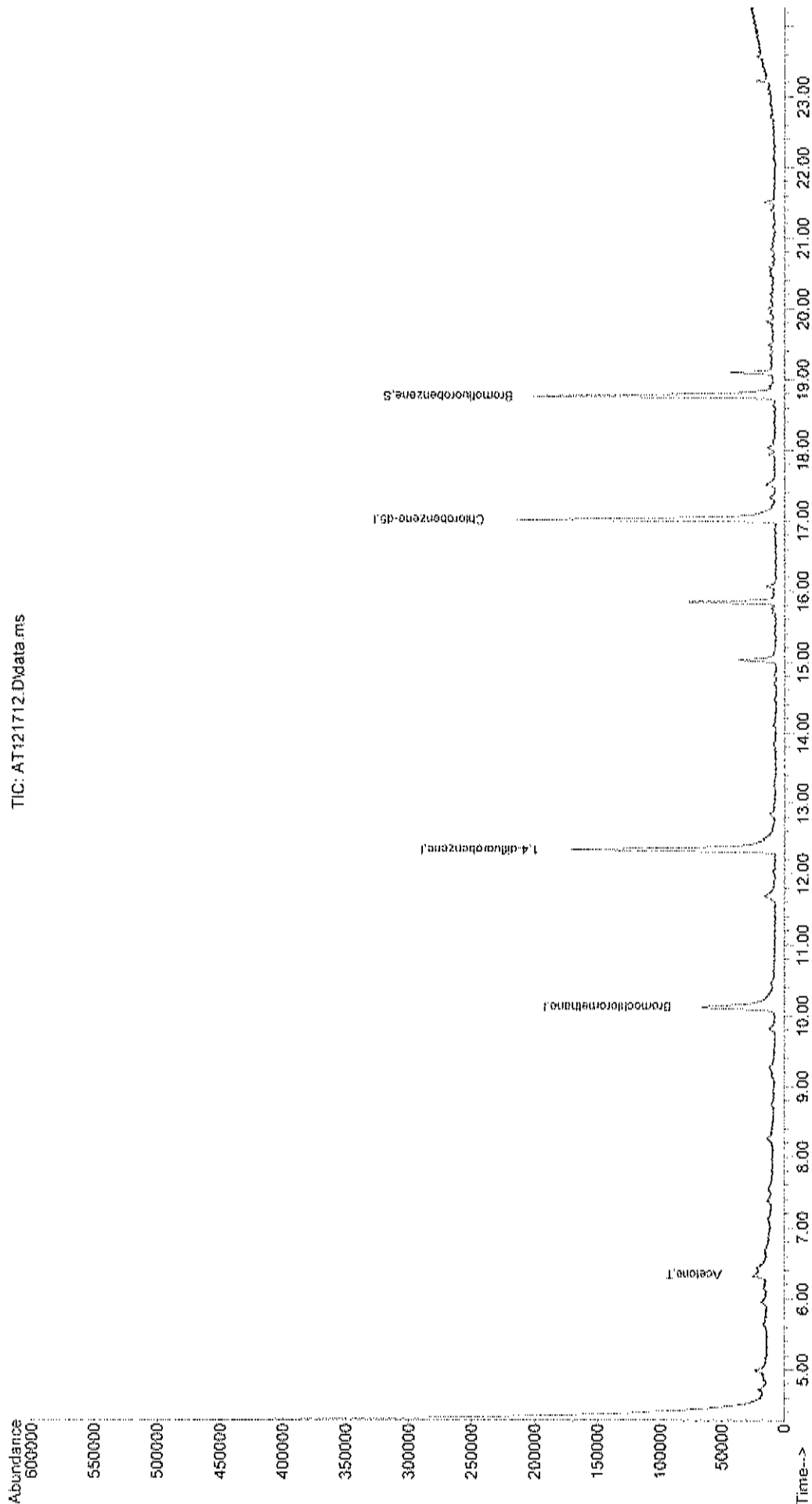
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

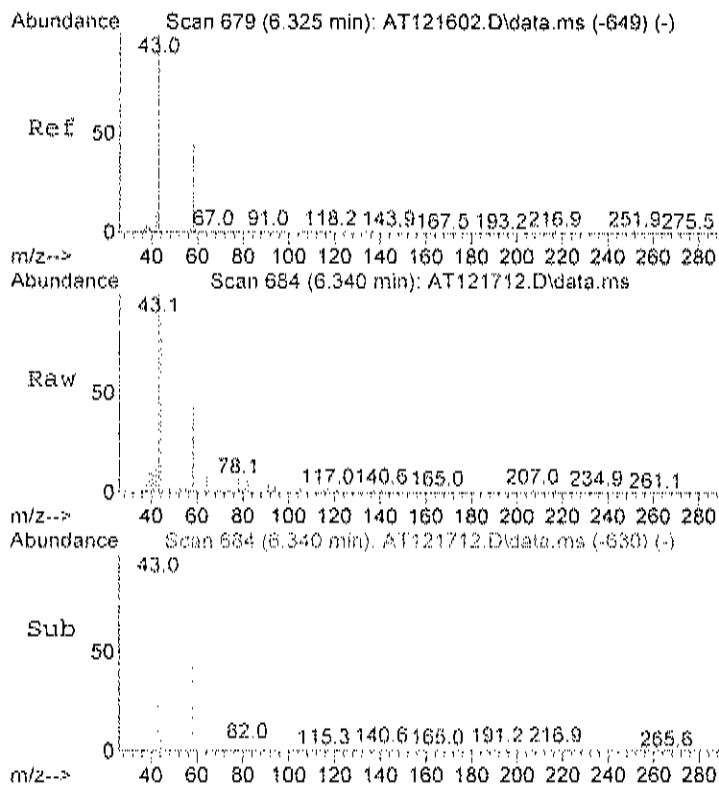
Internal Standards						
1) Bromochloromethane	10.123	128	45366	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	269155	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	207697	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.765	95	125107	0.89	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	89.00%
Target Compounds						
15) Acetone	6.340	58	13800	0.58	ppb	Qvalue 96

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121712.D
 Acq On : 17 Dec 2022 5:39 pm
 Operator : RJP
 Sample : C2212031-009A 5X
 Misc : AD12_LUG
 ALS Vial : 10 Sample Multiplier: 1

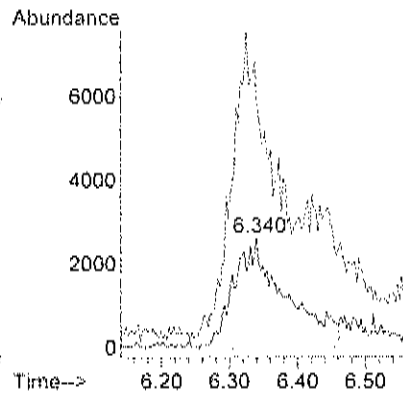
Quant Time: Dec 18 10:34:42 2022
 Quant Method : C:\msdchem\1\methods\AD12_LUG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 Qlast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





#15
Acetone
Concen: 0.58 ppb
RT: 6.340 min Scan# 684
Delta R.T. 0.012 min
Lab File: AT121712.D
Acq: 17 Dec 2022 5:39 pm

Tgt	Ion	Resp	
	58	13800	
Ion	Ratio	Lower	Upper
58	100		
43	293.5	272.3	332.3



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347,120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-3			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.12	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2,4-Trimethylbenzene	0.57	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3,5-Trimethylbenzene	0.27	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 1:22:00 AM
2,2,4-trimethylpentane	0.14	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
4-ethyltoluene	0.13	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Acetone	19	3.0		ppbV	10	12/17/2022 6:22:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Benzene	0.69	0.15		ppbV	1	12/17/2022 1:22:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Carbon disulfide	26	6.0		ppbV	40	12/17/2022 7:04:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloroform	1.3	0.15		ppbV	1	12/17/2022 1:22:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
cis-1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347.120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Ethylbenzene	0.14	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Freon 12	0.58	0.15		ppbV	1	12/17/2022 1:22:00 AM
Heptane	0.11	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Hexane	0.35	0.15		ppbV	1	12/17/2022 1:22:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
m&p-Xylene	0.52	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Ethyl Ketone	0.58	0.30		ppbV	1	12/17/2022 1:22:00 AM
Methyl Isobutyl Ketone	8.9	3.0		ppbV	10	12/17/2022 6:22:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Methylene chloride	0.70	0.15		ppbV	1	12/17/2022 1:22:00 AM
o-Xylene	0.36	0.15		ppbV	1	12/17/2022 1:22:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Tetrachloroethylene	0.11	0.15	J	ppbV	1	12/17/2022 1:22:00 AM
Tetrahydrofuran	1.2	0.15		ppbV	1	12/17/2022 1:22:00 AM
Toluene	0.98	0.15		ppbV	1	12/17/2022 1:22:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 1:22:00 AM
Surr: Bromofluorobenzene	98.0	46.7-129		%REC	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 20 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347,120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.65	0.82	J	ug/m3	1	12/17/2022 1:22:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 1:22:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 1:22:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
1,2,4-Trimethylbenzene	2.8	0.74		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 1:22:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 1:22:00 AM
1,3,5-Trimethylbenzene	1.3	0.74		ug/m3	1	12/17/2022 1:22:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 1:22:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 1:22:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
2,2,4-trimethylpentane	0.65	0.70	J	ug/m3	1	12/17/2022 1:22:00 AM
4-ethyltoluene	0.64	0.74	J	ug/m3	1	12/17/2022 1:22:00 AM
Acetone	44	7.1		ug/m3	10	12/17/2022 6:22:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 1:22:00 AM
Benzene	2.2	0.48		ug/m3	1	12/17/2022 1:22:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 1:22:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 1:22:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 1:22:00 AM
Carbon disulfide	81	19		ug/m3	40	12/17/2022 7:04:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 1:22:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 1:22:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 1:22:00 AM
Chloroform	6.5	0.73		ug/m3	1	12/17/2022 1:22:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 1:22:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 1:22:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 1:22:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 1:22:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 1:22:00 AM
Ethylbenzene	0.61	0.65	J	ug/m3	1	12/17/2022 1:22:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 1:22:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 1:22:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 19 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-9

Lab Order: C2212031

Tag Number: 347,120

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-010A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.9	0.74		ug/m3	1	12/17/2022 1:22:00 AM
Heptane	0.45	0.61	J	ug/m3	1	12/17/2022 1:22:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 1:22:00 AM
Hexane	1.2	0.53		ug/m3	1	12/17/2022 1:22:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 1:22:00 AM
m&p-Xylene	2.3	1.3		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Ethyl Ketone	1.7	0.88		ug/m3	1	12/17/2022 1:22:00 AM
Methyl Isobutyl Ketone	36	12		ug/m3	10	12/17/2022 6:22:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 1:22:00 AM
Methylene chloride	2.4	0.52		ug/m3	1	12/17/2022 1:22:00 AM
o-Xylene	1.6	0.65		ug/m3	1	12/17/2022 1:22:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 1:22:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 1:22:00 AM
Tetrachloroethylene	0.75	1.0	J	ug/m3	1	12/17/2022 1:22:00 AM
Tetrahydrofuran	3.7	0.44		ug/m3	1	12/17/2022 1:22:00 AM
Toluene	3.7	0.57		ug/m3	1	12/17/2022 1:22:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 1:22:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 1:22:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 1:22:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 1:22:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121619.D
 Acq On : 17 Dec 2022 1:22 am
 Operator : RJP
 Sample : C2212031-010A
 Misc : AD12_1UG
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 17 08:40:52 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

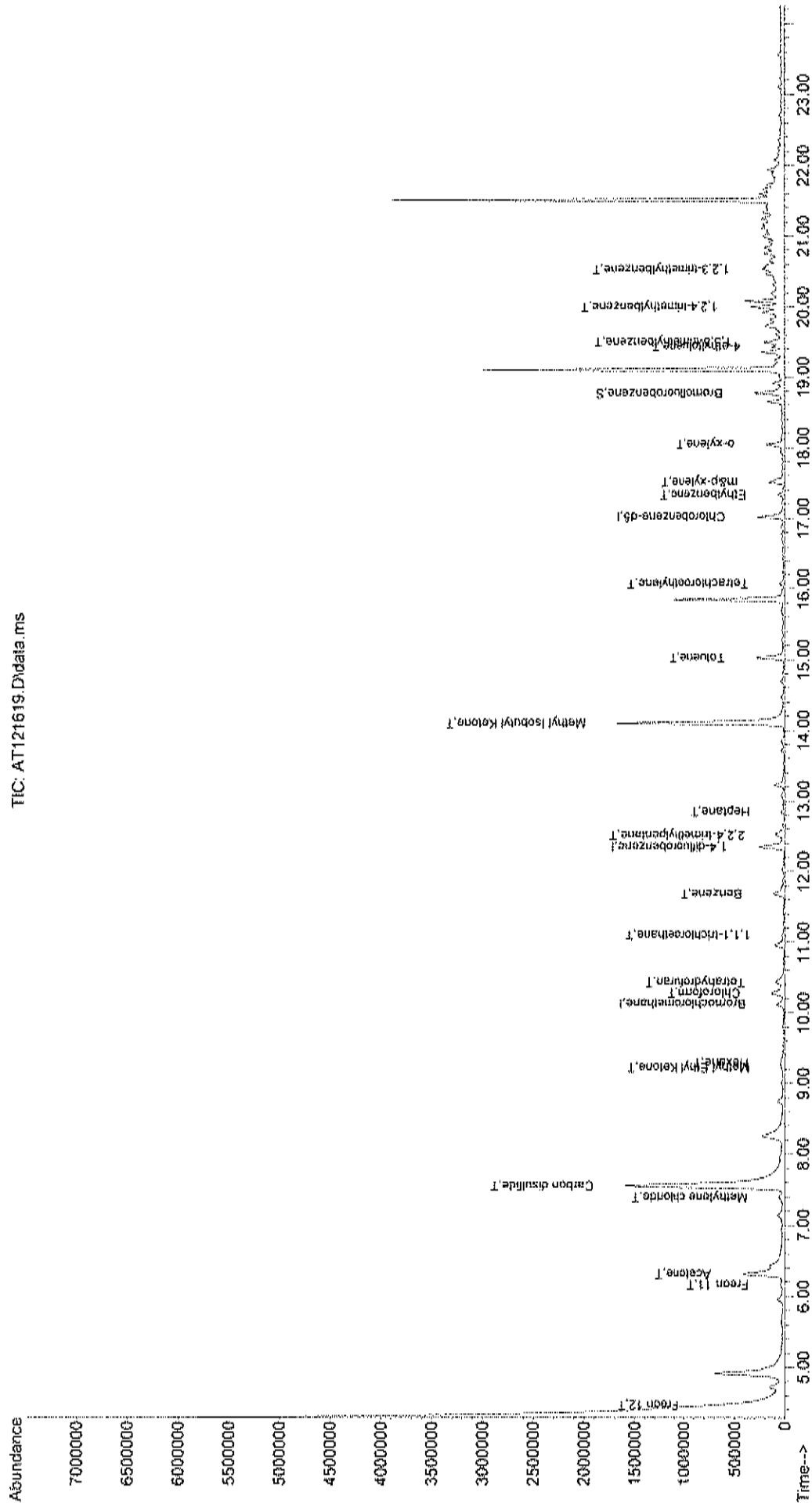
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

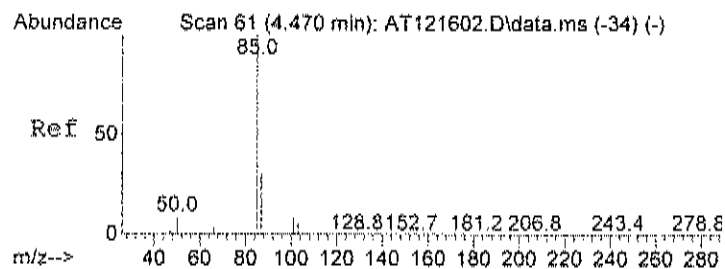
Internal Standards						
1) Bromochloromethane	10.126	128	50356	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.347	114	307630	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	245598	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.765	95	162303	0.98	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	98.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	97955	0.58	ppb	98
14) Freon 11	6.160	101	37202	0.27	ppb	98
15) Acetone	6.307	58	443914	16.82	ppb	98
21) Methylene chloride	7.391	84	48441	0.70	ppb	99
23) Carbon disulfide	7.553	76	6805945m	34.24	ppb	
28) Methyl Ethyl Ketone	9.222	72	23923	0.58	ppb	# 81
30) Hexane	9.288	57	50950	0.35	ppb	# 33
32) Chloroform	10.279	83	208543	1.34	ppb	97
33) Tetrahydrofuran	10.429	42	100493	1.24	ppb	87
36) 1,1,1-trichloroethane	11.098	97	17214	0.12	ppb	94
39) Benzene	11.684	78	188173	0.69	ppb	93
42) 2,2,4-trimethylpentane	12.512	57	59786	0.14	ppb	82
43) Heptane	12.845	43	15652	0.11	ppb	91
51) Toluene	15.025	92	193487	0.98	ppb	97
52) Methyl Isobutyl Ketone	14.100	43	1830705	10.36	ppb	82
56) Tetrachloroethylene	16.072	164	13658	0.11	ppb	89
58) Ethylbenzene	17.333	91	59665	0.14	ppb	98
59) m&p-xylene	17.510	91	166917	0.52	ppb	85
63) o-xylene	18.045	91	132170	0.36	ppb	90
69) 4-ethyltoluene	19.429	105	58862m	0.13	ppb	
70) 1,3,5-trimethylbenzene	19.495	105	111764m	0.27	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	224214	0.57	ppb	97
75) 1,2,3-trimethylbenzene	20.524	105	80933	0.21	ppb	90

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121619.D
Acq On : 17 Dec 2022 1:22 am
Operator : RJP
Sample : C2212031-010A
Misc : AD12_1UG
ALS Vial : 19 Sample Multiplier: 1

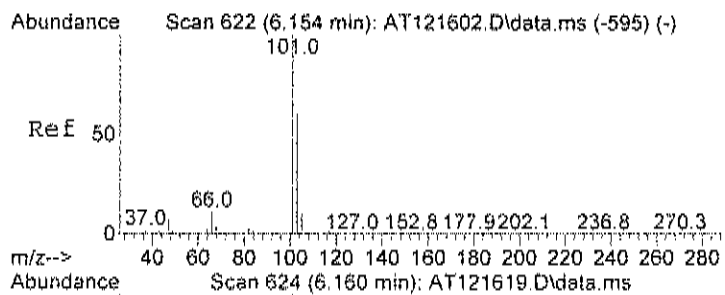
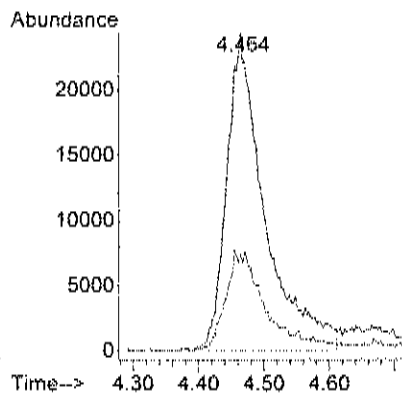
Quant Time: Dec 17 08:40:52 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





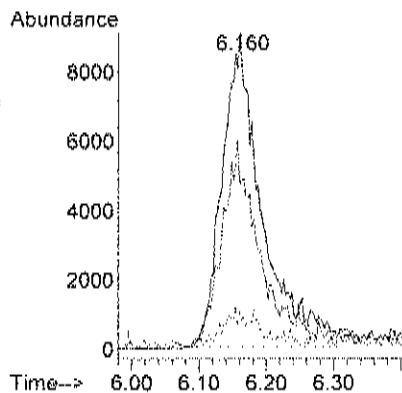
#3
Freon 12
Concen: 0.58 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

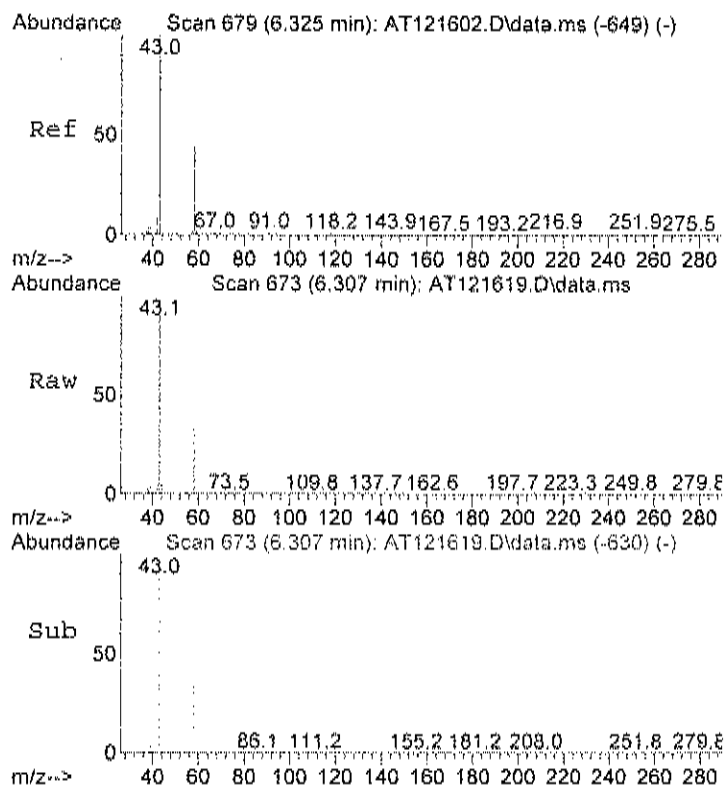
Tgt Ion:	85	Resp:	97955
Ion Ratio	Lower	Upper	
85	100		
87	33.0	14.3	54.3



#14
Freon 11
Concen: 0.27 ppb
RT: 6.160 min Scan# 624
Delta R.T. -0.006 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

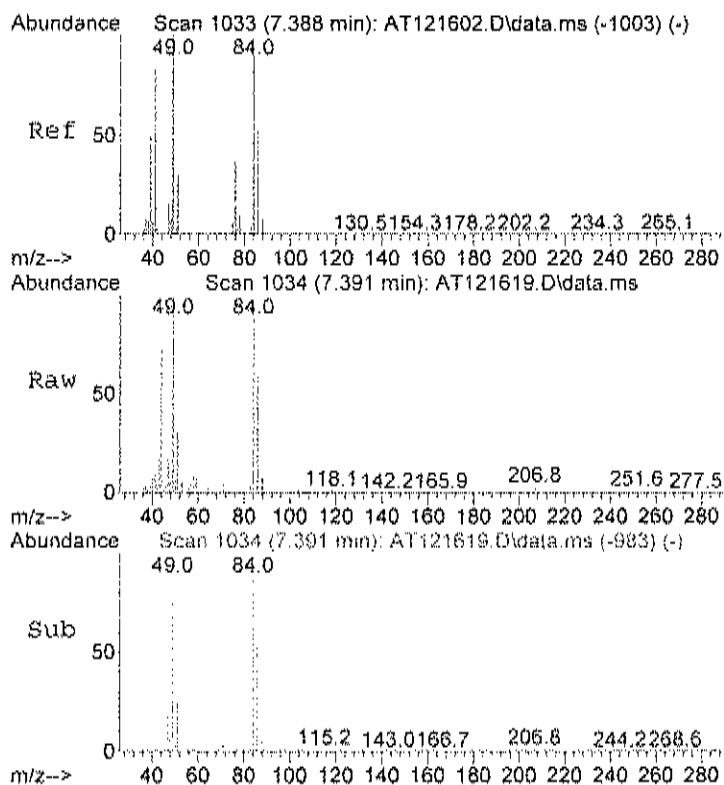
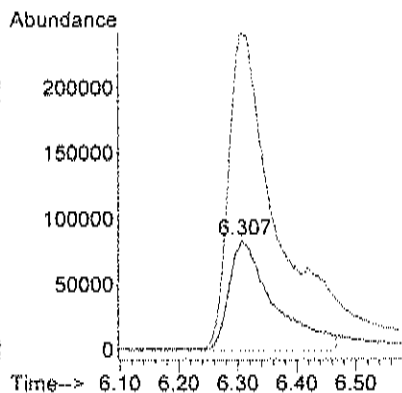
Tgt Ion:	101	Resp:	37202
Ion Ratio	Lower	Upper	
101	100		
103	62.5	44.1	84.1
105	10.5	0.0	32.0





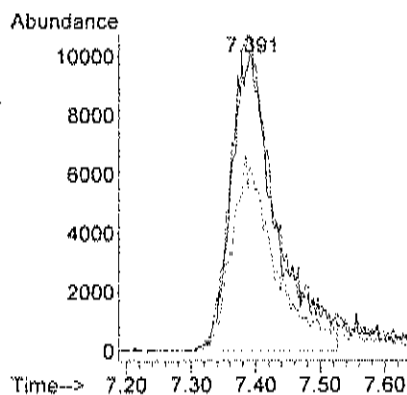
#15
Acetone
Concen: 16.82 ppb
RT: 6.307 min Scan# 673
Delta R.T. -0.021 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

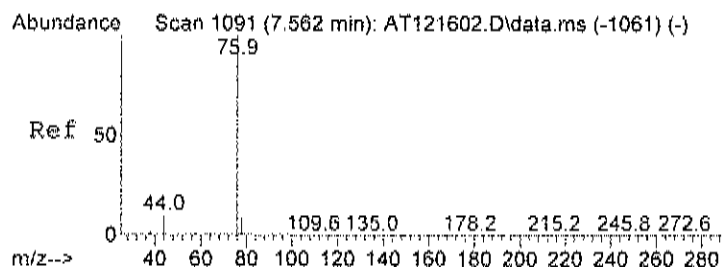
Tgt Ion: 58 Resp: 443914
Ion Ratio Lower Upper
58 100
43 298.5 272.3 332.3



#21
Methylene chloride
Concen: 0.70 ppb
RT: 7.391 min Scan# 1034
Delta R.T. 0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

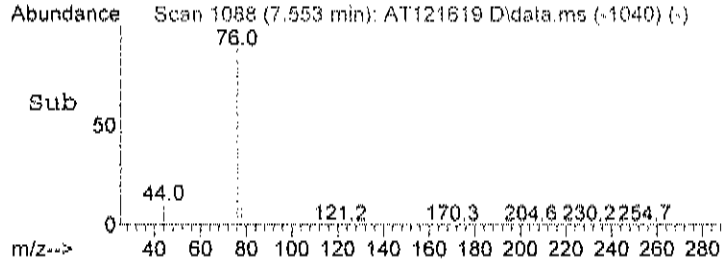
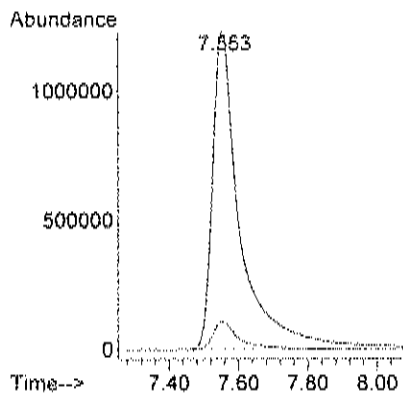
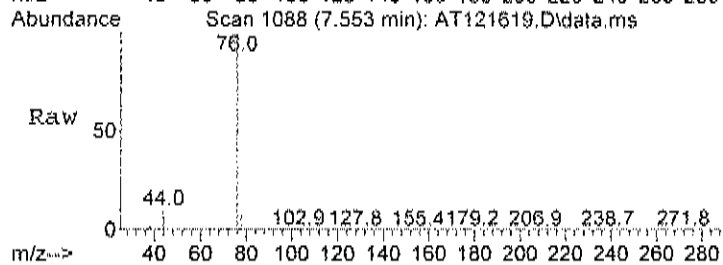
Tgt Ion: 84 Resp: 48441
Ion Ratio Lower Upper
84 100
49 106.1 84.2 124.2
86 63.5 42.9 82.9





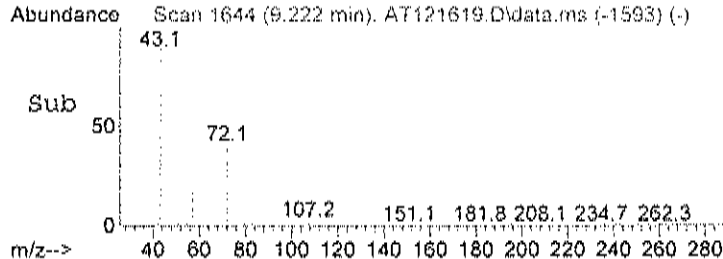
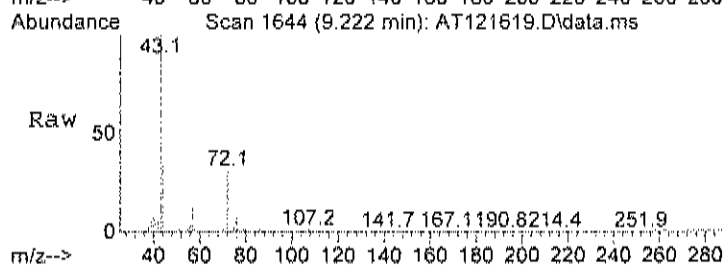
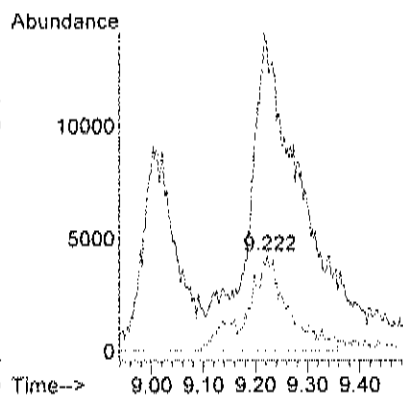
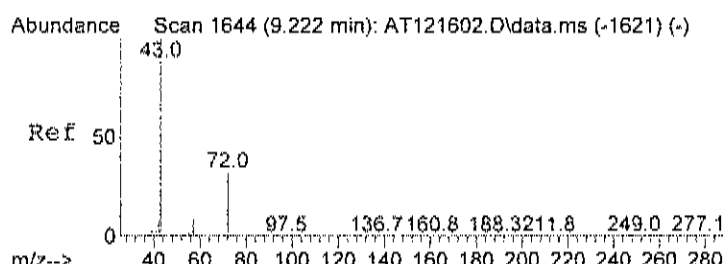
#23
Carbon disulfide
Concen: 34.24 ppb m
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

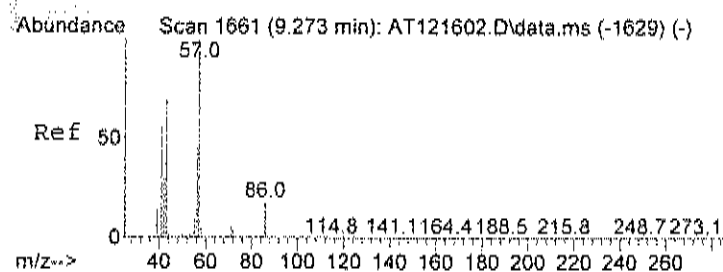
Tgt Ion	Ratio	Lower	Upper
76	100		
78	8.2	0.0	28.7



#28
Methyl Ethyl Ketone
Concen: 0.58 ppb
RT: 9.222 min Scan# 1644
Delta R.T. 0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

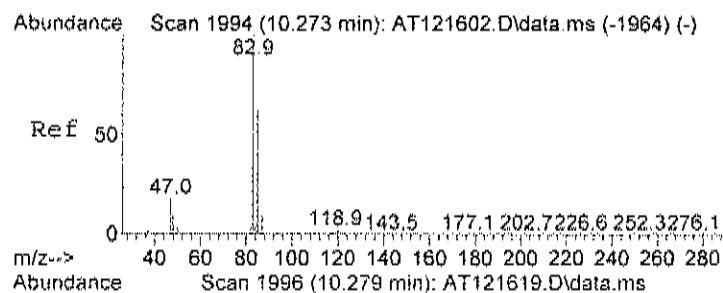
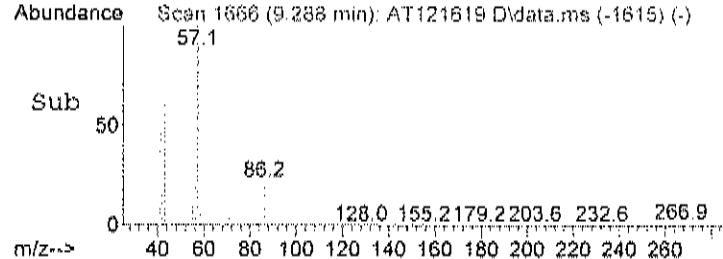
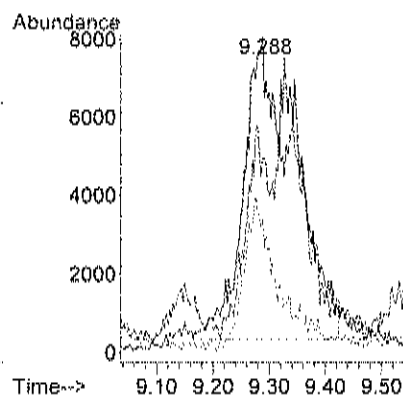
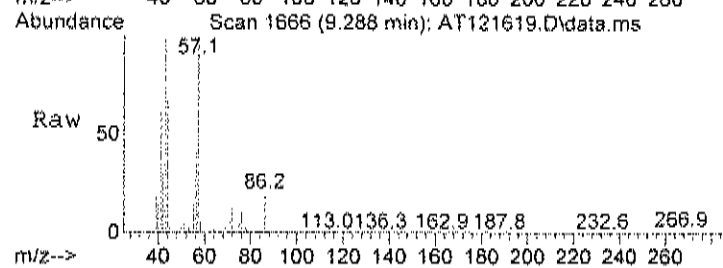
Tgt Ion	Ratio	Lower	Upper
72	100		
43	299.5	333.7	373.7#
72	100.0	80.0	120.0





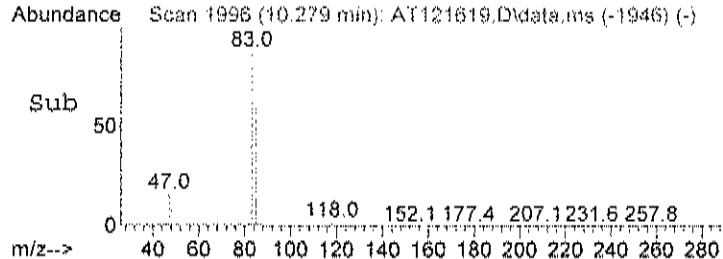
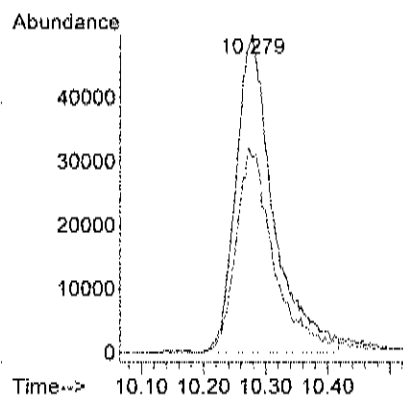
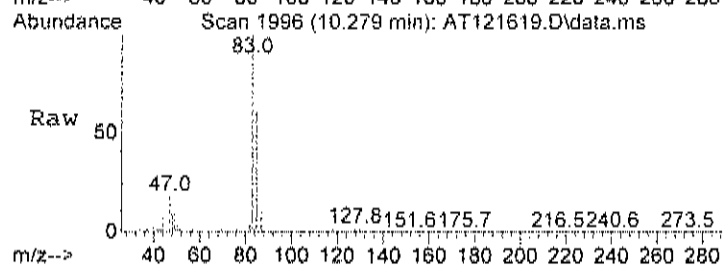
#30
Hexane
Concen: 0.35 ppb
RT: 9.288 min Scan# 1666
Delta R.T. 0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

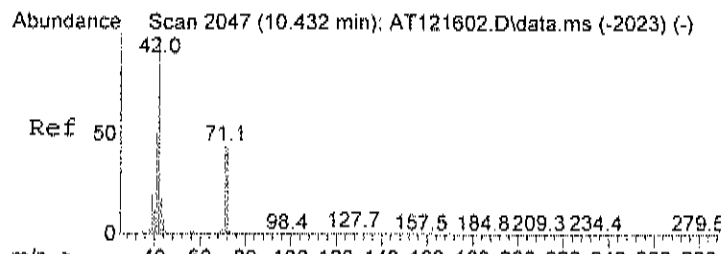
Tgt Ion	57	Resp	50950
Ion	Ratio	Lower	Upper
57	100		
41	0.0	62.0	102.0#
56	31.8	31.8	71.8



#32
Chloroform
Concen: 1.34 ppb
RT: 10.279 min Scan# 1996
Delta R.T. -0.000 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

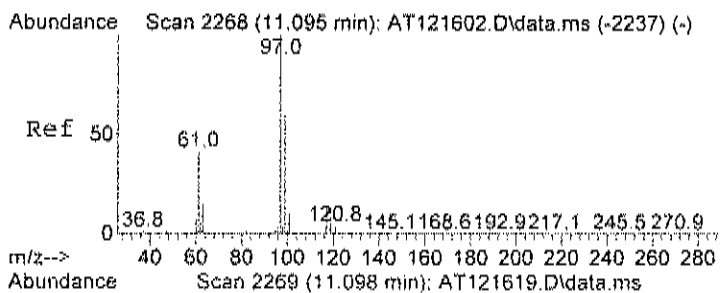
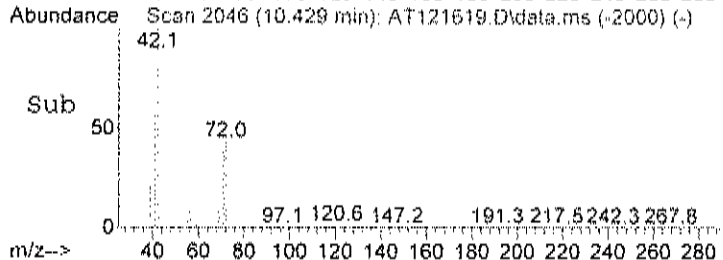
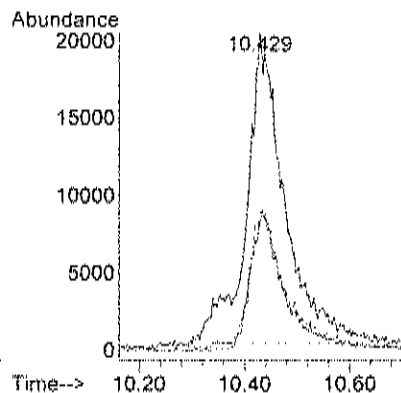
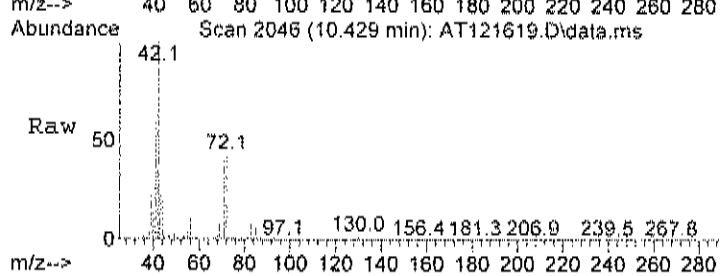
Tgt Ion	83	Resp	208543
Ion	Ratio	Lower	Upper
83	100		
85	64.2	46.4	86.4





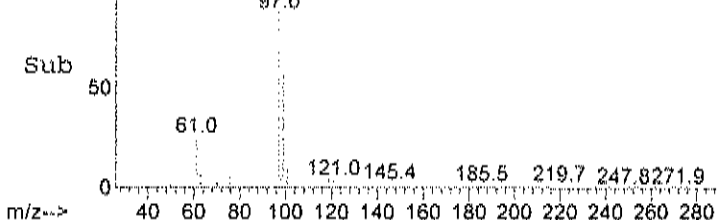
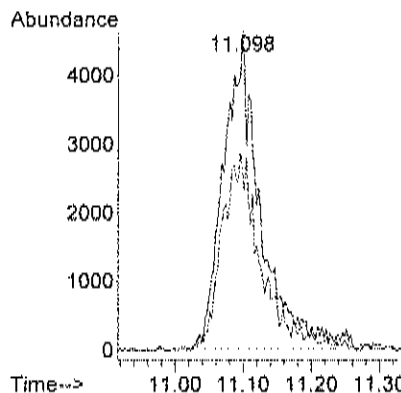
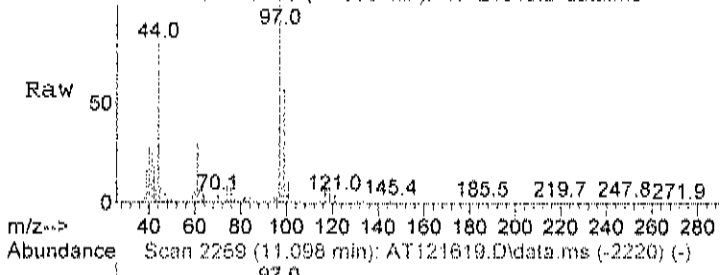
#33
Tetrahydrofuran
Concen: 1.24 ppb
RT: 10.429 min Scan# 2046
Delta R.T. -0.012 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

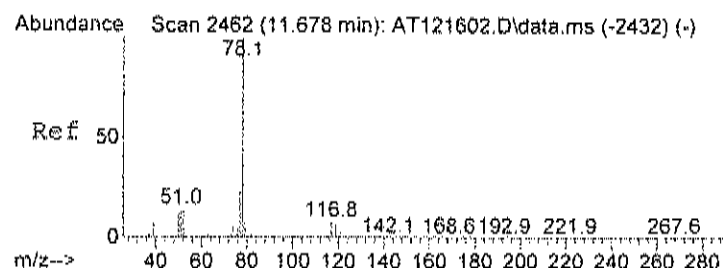
Tgt Ion:	42	Resp:	100493
Ion	Ratio	Lower	Upper
42	100		
71	38.7	33.5	73.5
72	38.8	20.1	60.1



#36
1,1,1-trichloroethane
Concen: 0.12 ppb
RT: 11.098 min Scan# 2269
Delta R.T. -0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

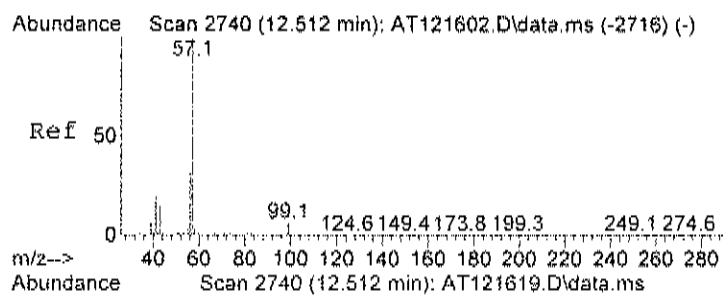
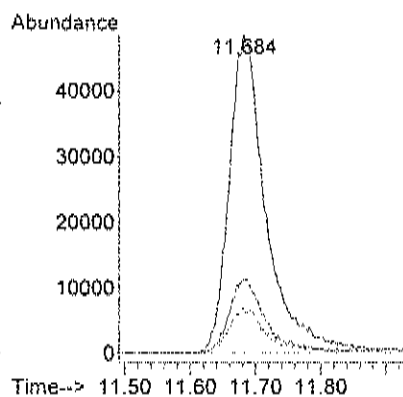
Tgt Ion:	97	Resp:	17214
Ion	Ratio	Lower	Upper
97	100		
99	66.6	41.6	81.6





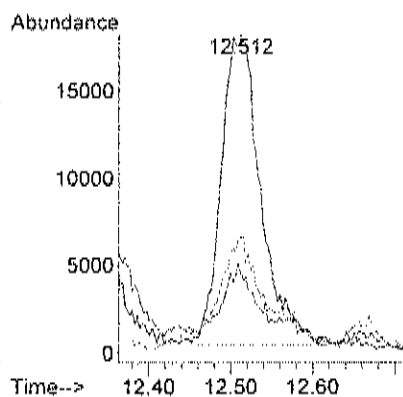
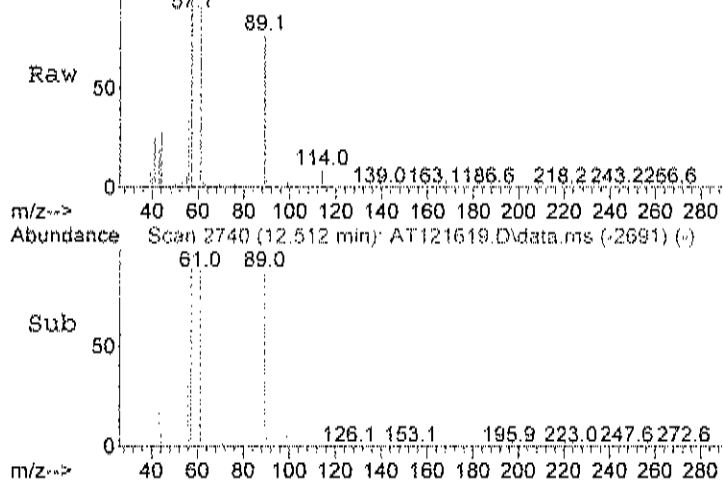
#39
Benzene
Concen: 0.69 ppb
RT: 11.684 min Scan# 2464
Delta R.T. -0.006 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

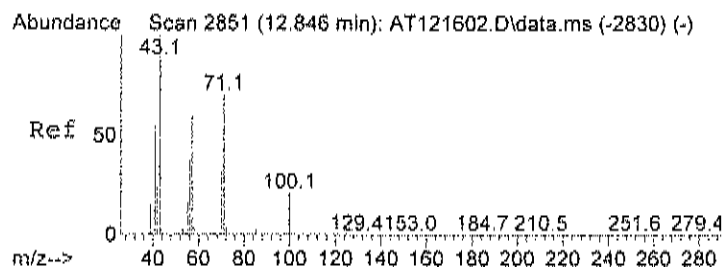
Tgt Ion: 78	Resp: 188173
Ion Ratio	Lower Upper
78 100	
77 23.4	2.5 42.5
51 14.3	0.5 40.5



#42
2,2,4-trimethylpentane
Concen: 0.14 ppb
RT: 12.512 min Scan# 2740
Delta R.T. -0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

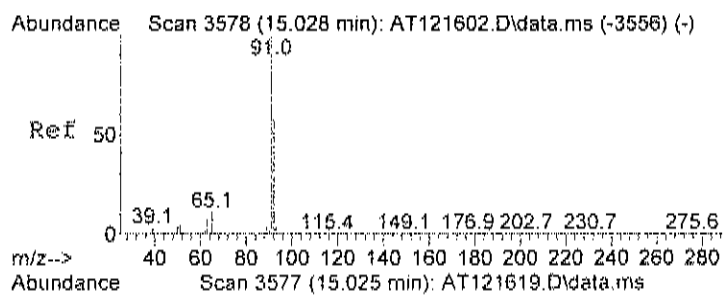
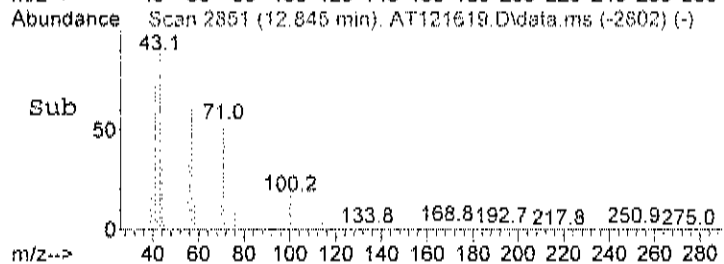
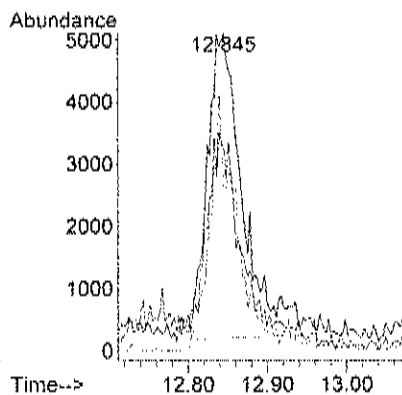
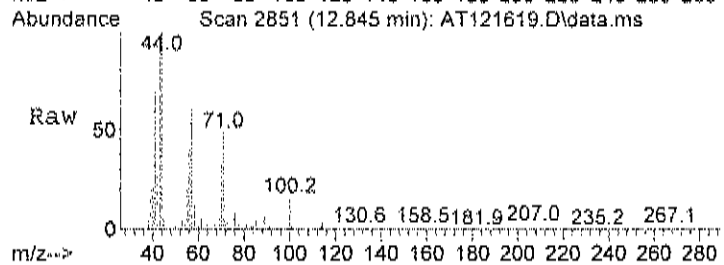
Tgt Ion: 57	Resp: 59786
Ion Ratio	Lower Upper
57 100	
41 33.1	17.4 57.4
56 47.5	10.8 50.8





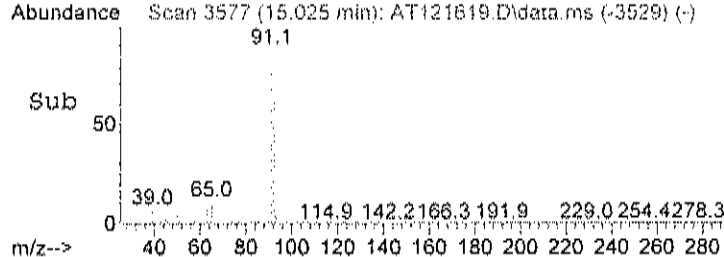
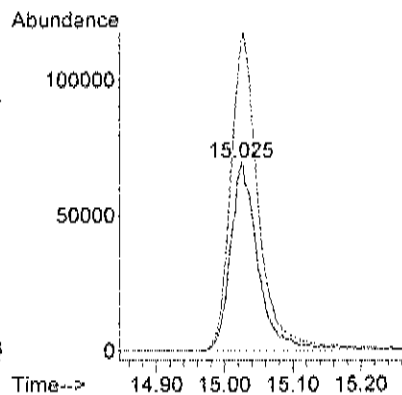
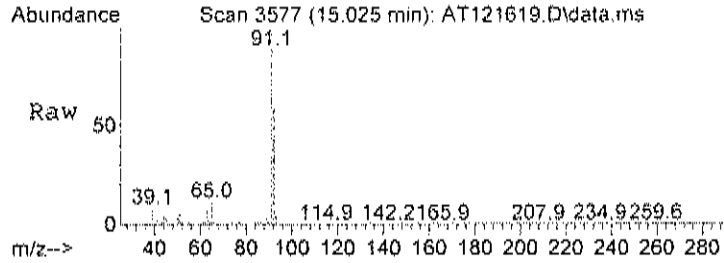
#43
Heptane
Concen: 0.11 ppb
RT: 12.845 min Scan# 2851
Delta R.T. -0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

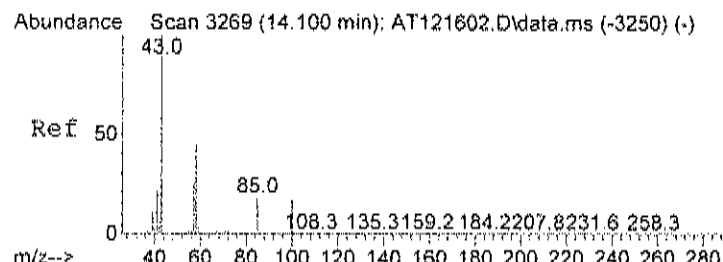
Tgt Ion	43	57	71
Ion	43	57	71
Ratio	100	70.1	64.3
Lower		42.3	38.8
Upper		82.3	78.8



#51
Toluene
Concen: 0.98 ppb
RT: 15.025 min Scan# 3577
Delta R.T. -0.006 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

Tgt Ion	92	91
Ion	92	91
Ratio	100	169.3
Lower		153.3
Upper		193.3

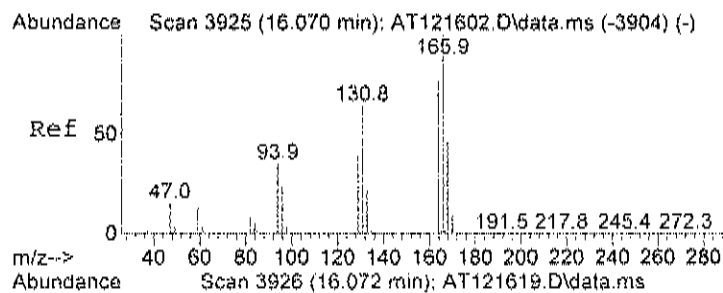
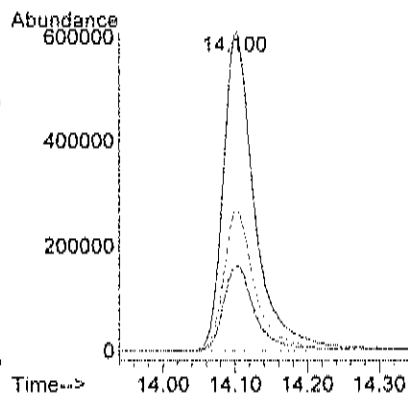
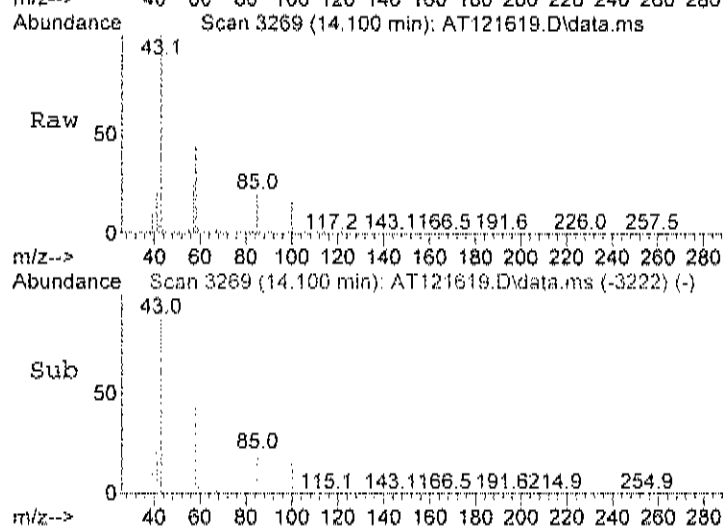




#52
Methyl Isobutyl Ketone
Concen: 10.36 ppb
RT: 14.100 min Scan# 3269
Delta R.T. -0.009 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

Tgt Ion: 43 Resp: 1830705

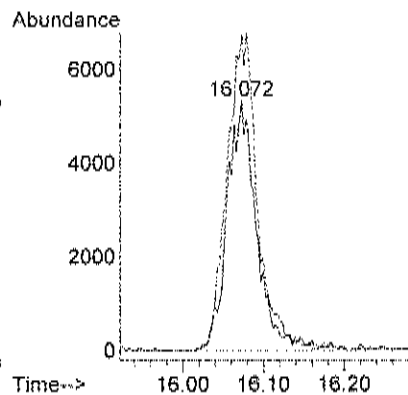
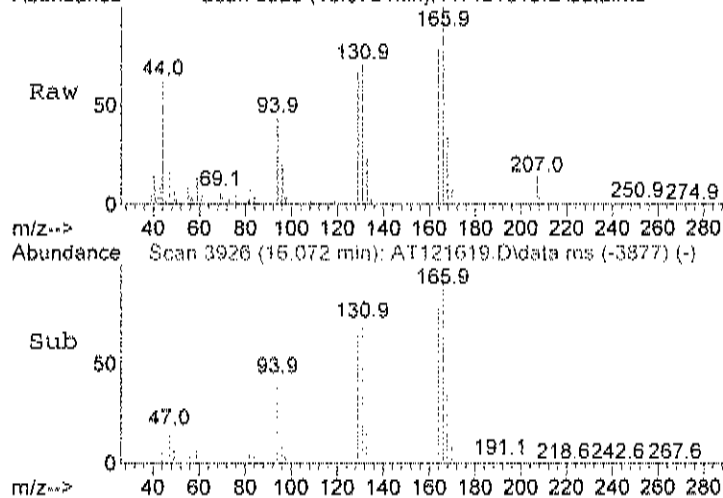
Ion	Ratio	Lower	Upper
43	100		
57	25.8	7.7	47.7
58	44.1	7.6	47.6

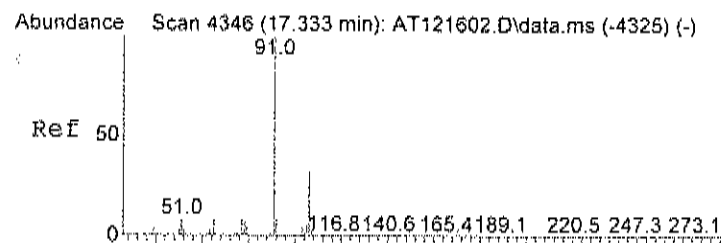


#56
Tetrachloroethylene
Concen: 0.11 ppb
RT: 16.072 min Scan# 3926
Delta R.T. -0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

Tgt Ion: 164 Resp: 13658

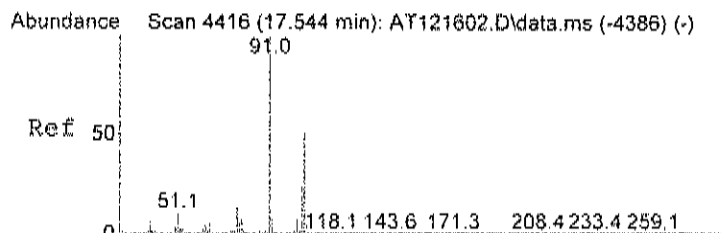
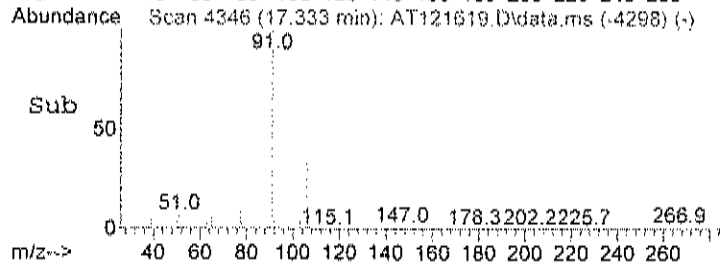
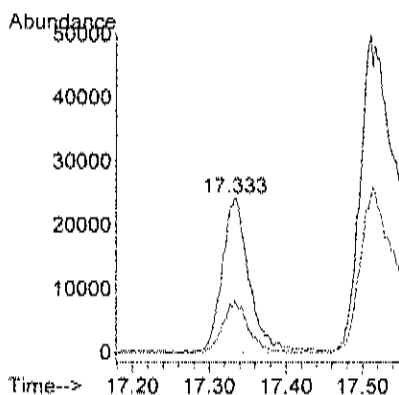
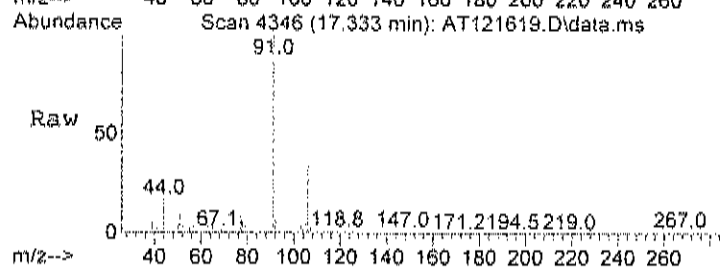
Ion	Ratio	Lower	Upper
164	100		
166	129.4	97.2	137.2





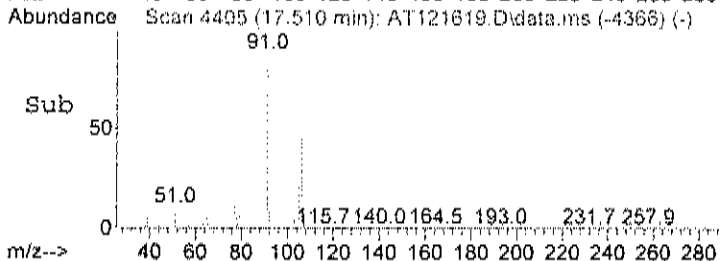
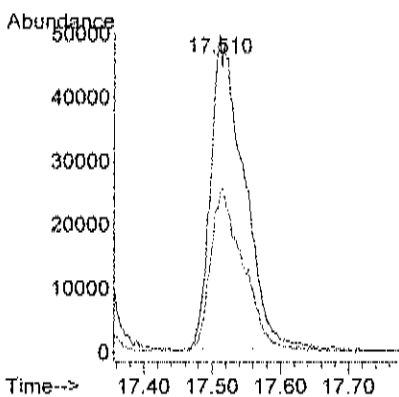
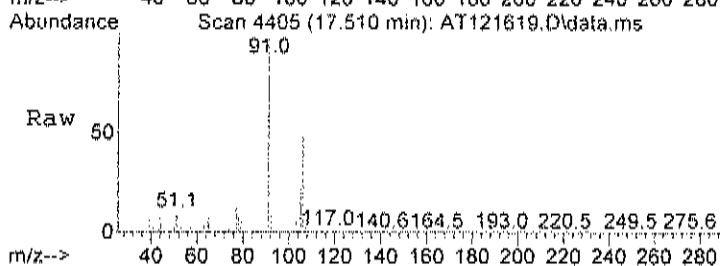
#58
Ethylbenzene
Concen: 0.14 ppb
RT: 17.333 min Scan# 4346
Delta R.T. -0.006 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

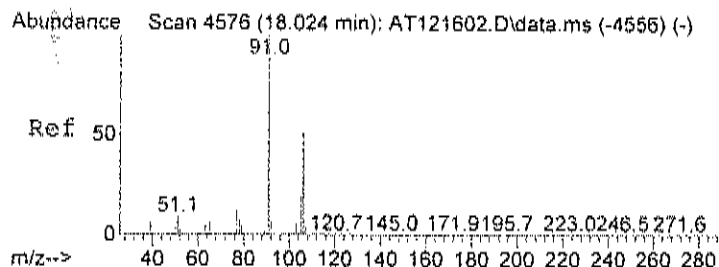
Tgt Ion:	91	Resp:	59665
Ion	Ratio	Lower	Upper
91	100		
106	32.7	13.9	53.9



#59
m&p-xylene
Concen: 0.52 ppb
RT: 17.510 min Scan# 4405
Delta R.T. -0.033 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

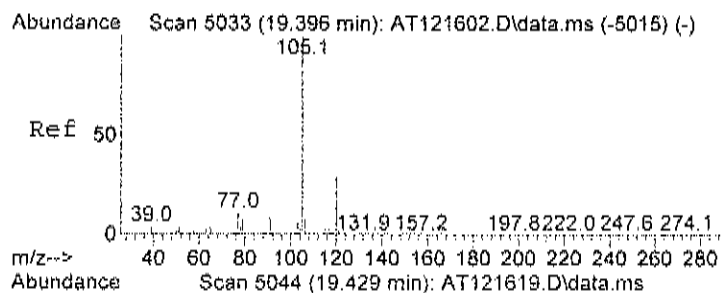
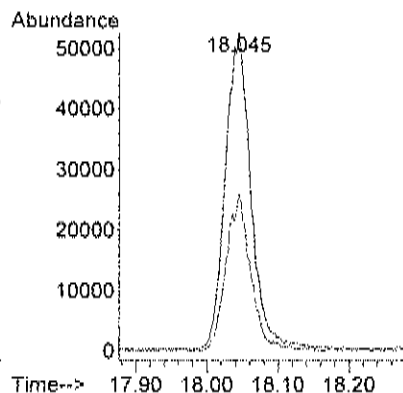
Tgt Ion:	91	Resp:	166917
Ion	Ratio	Lower	Upper
91	100		
106	52.1	22.4	62.4





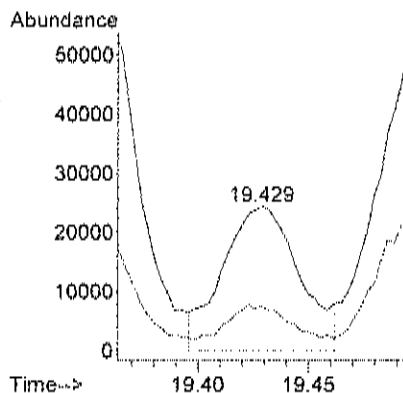
#63
o-xylene
Concen: 0.36 ppb
RT: 18.045 min Scan# 4583
Delta R.T. -0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

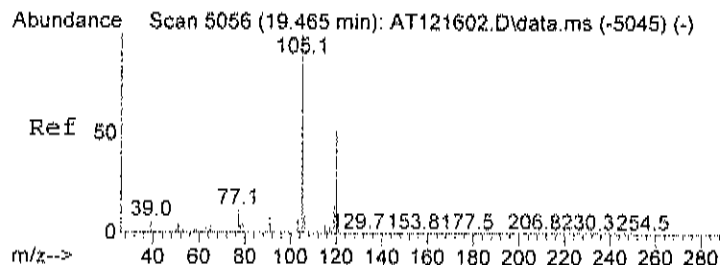
Tgt Ion: 91 Resp: 132170
Ion Ratio Lower Upper
91 100
106 47.1 20.7 60.7



#69
4-ethyltoluene
Concen: 0.13 ppb m
RT: 19.429 min Scan# 5044
Delta R.T. -0.000 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

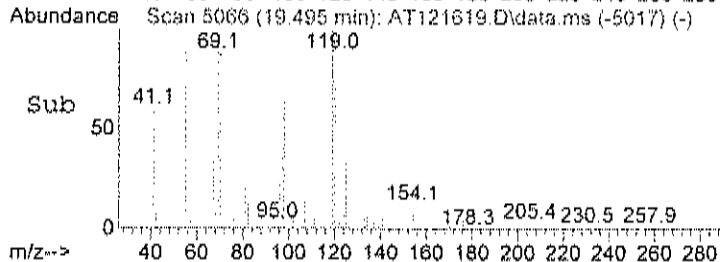
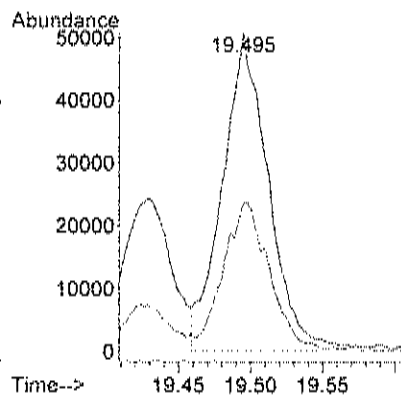
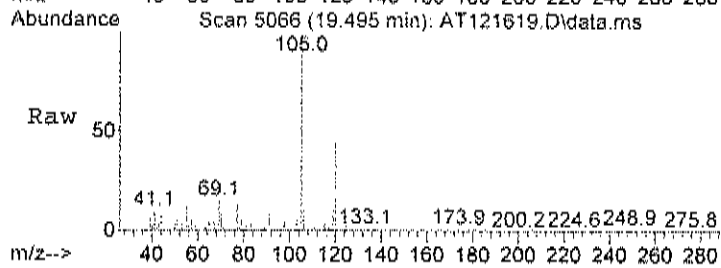
Tgt Ion: 105 Resp: 58862
Ion Ratio Lower Upper
105 100
120 88.7 11.9 51.9#





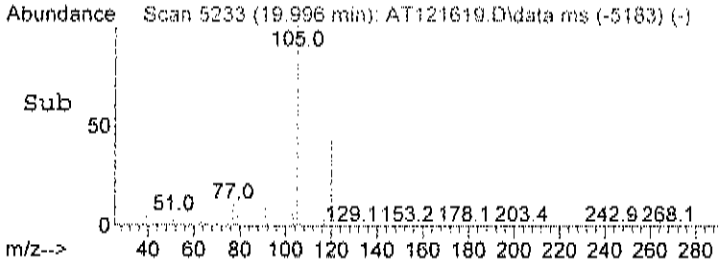
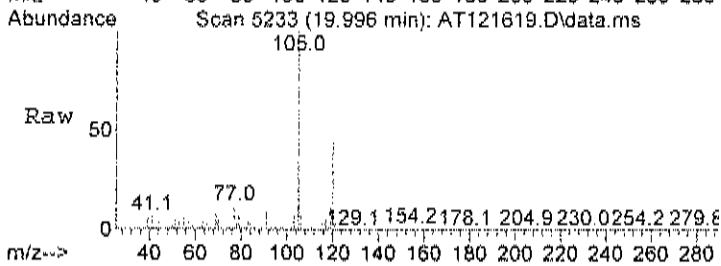
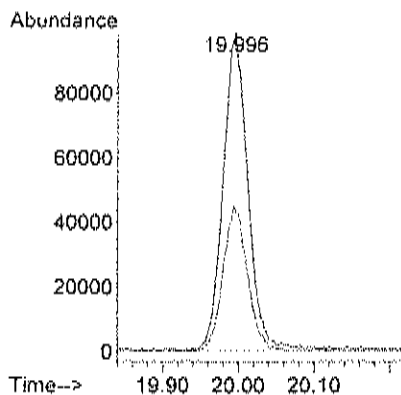
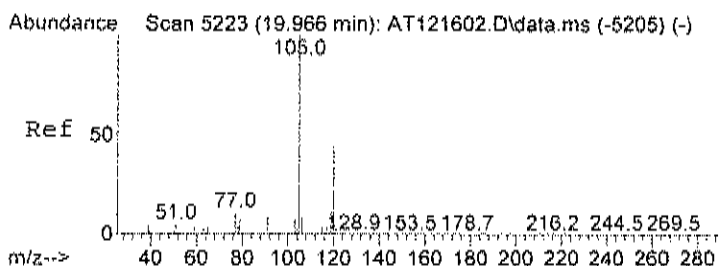
#70
1,3,5-trimethylbenzene
Concen: 0.27 ppb m
RT: 19.495 min Scan# 5066
Delta R.T. -0.003 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

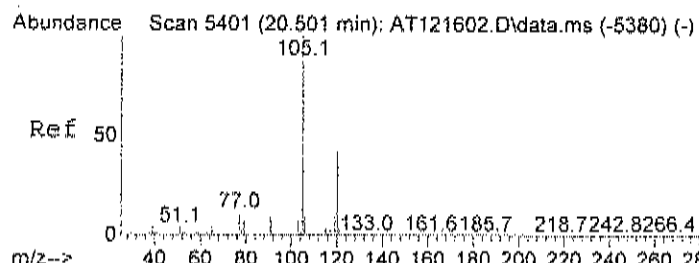
Tgt Ion	105	120
Ratio	100	47.6
Resp	111764	22.0
Lower		62.0
Upper		



#71
1,2,4-trimethylbenzene
Concen: 0.57 ppb
RT: 19.996 min Scan# 5233
Delta R.T. 0.000 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

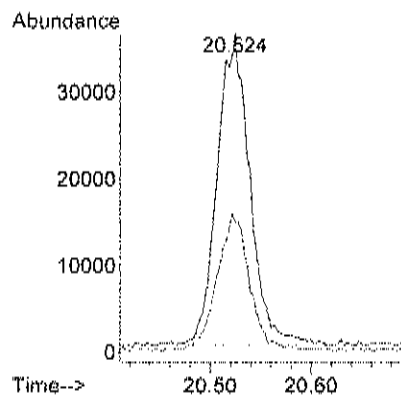
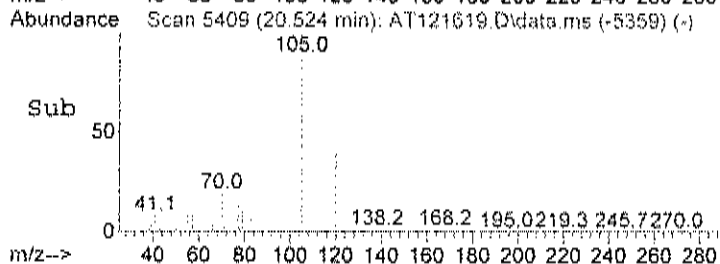
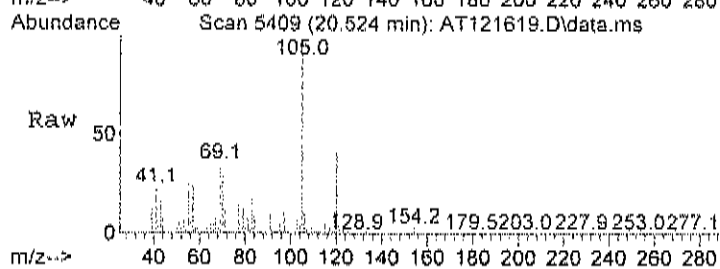
Tgt Ion	105	120
Ratio <td>100</td> <td>47.0</td>	100	47.0
Resp <td>224214</td> <td>24.9</td>	224214	24.9
Lower		64.9
Upper		





#75
1,2,3-trimethylbenzene
Concen: 0.21 ppb
RT: 20.524 min Scan# 5409
Delta R.T. 0.000 min
Lab File: AT121619.D
Acq: 17 Dec 2022 1:22 am

Tgt Ion:	105	Resp:	80933
Ion Ratio	Lower	Upper	
105	100		
120	46.1	30.1	50.3



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121713.D
Acq On : 17 Dec 2022 6:22 pm
Operator : RJP
Sample : C2212031-010A 10X
Misc : AD12_1UG
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 18 10:34:56 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.123	128	44546	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.338	114	267512	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	205959	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	125838	0.90	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	90.00%
Target Compounds						
15) Acetone	6.313	58	43558	1.87	ppb	Qvalue 90
23) Carbon disulfide	7.553	76	561780m	3.19	ppb	
52) Methyl Isobutyl Ketone	14.106	43	131489	0.89	ppb	84

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

Data Path : C:\msdchem\1\data2\2022DEC\

Data File : AT121713.D

Acq On : 17 Dec 2022 6:22 pm

Operator : RJP

Sample : C2212031-010A 10X

Misc : AD12 1UG

ALS Vial : 11 Sample Multiplier: 1

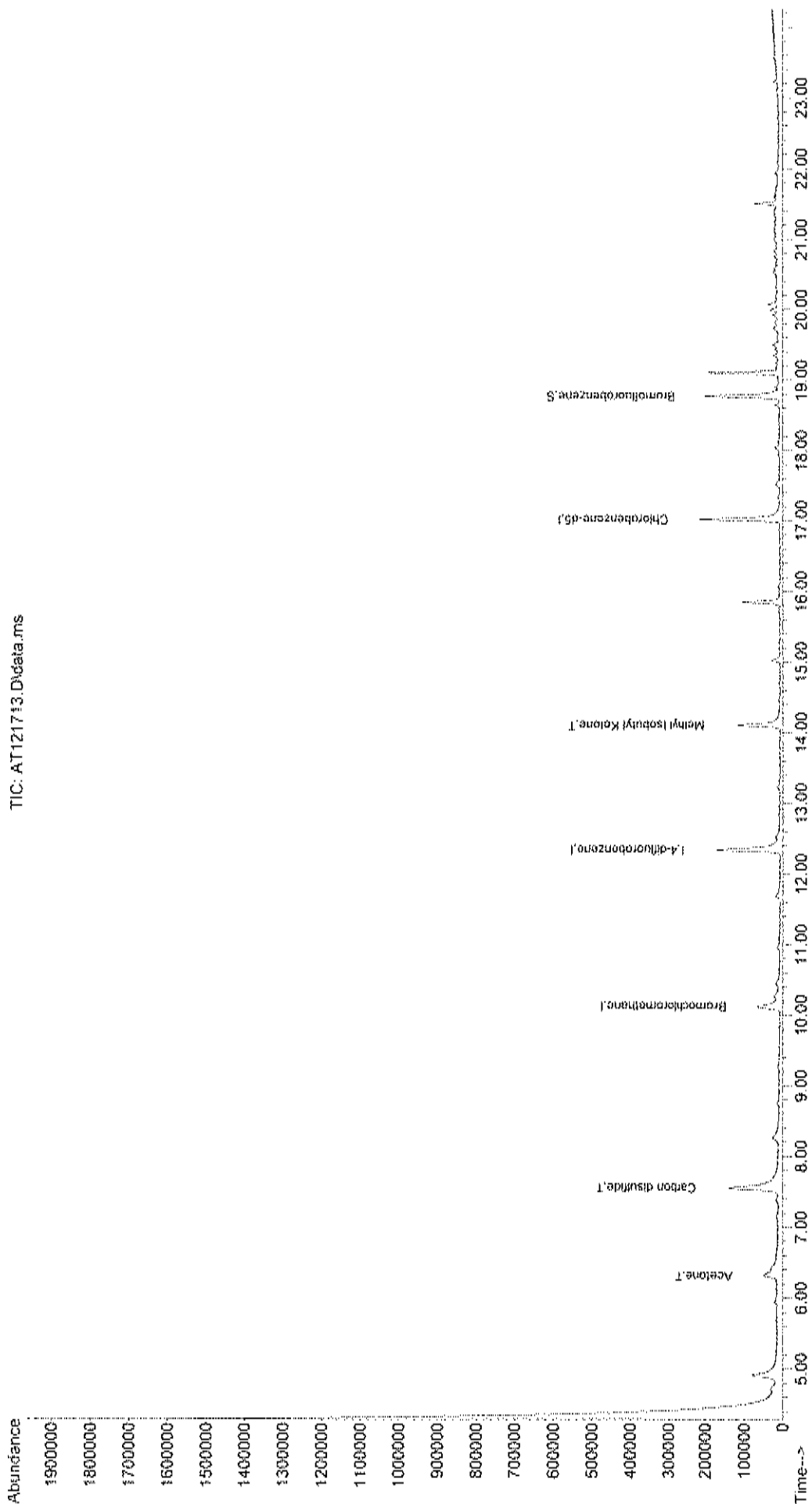
Quant Time: Dec 18 10:34:56 2022

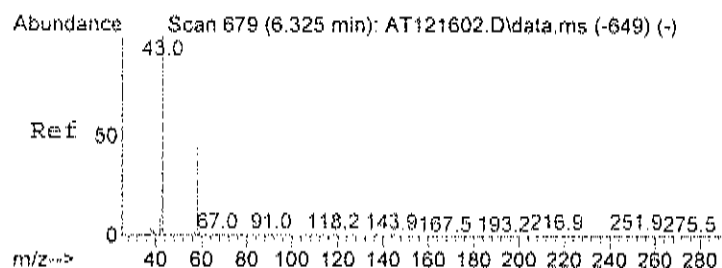
Quant Method : C:\msdchem\1\methods\AD12 1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 09:11:04 2022

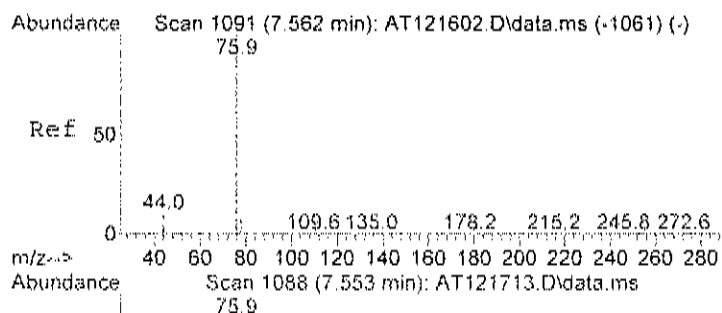
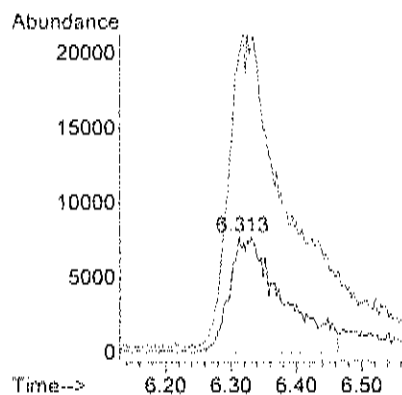
Response via : Initial Calibration





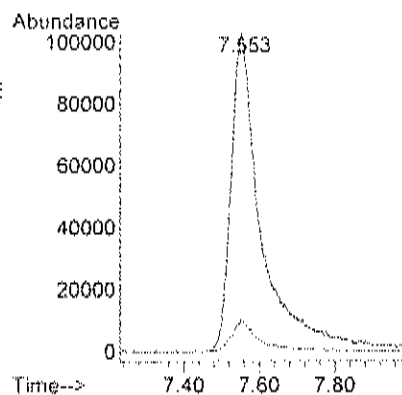
#15
Acetone
Concen: 1.87 ppb
RT: 6.313 min Scan# 675
Delta R.T. -0.015 min
Lab File: AT121713.D
Acq: 17 Dec 2022 6:22 pm

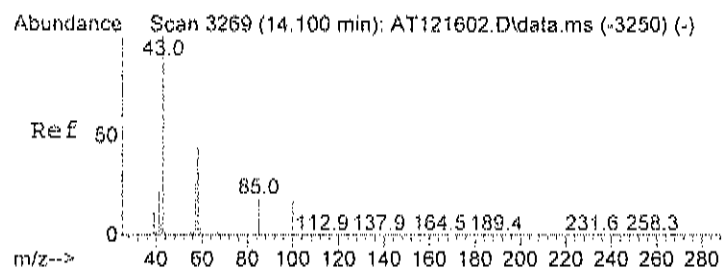
Tgt	Ion	Resp	
58	100	43558	
43	282.2	272.3	332.3



#23
Carbon disulfide
Concen: 3.19 ppb m
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121713.D
Acq: 17 Dec 2022 6:22 pm

Tgt	Ion	Resp	
76	100	561780	
78	7.9	0.0	28.7





#52

Methyl Isobutyl Ketone

Concen: 0.89 ppb

RT: 14.106 min Scan# 3271

Delta R.T. -0.003 min

Lab File: AT121713.D

Acq: 17 Dec 2022 6:22 pm

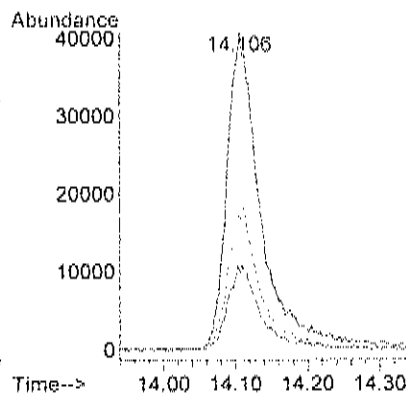
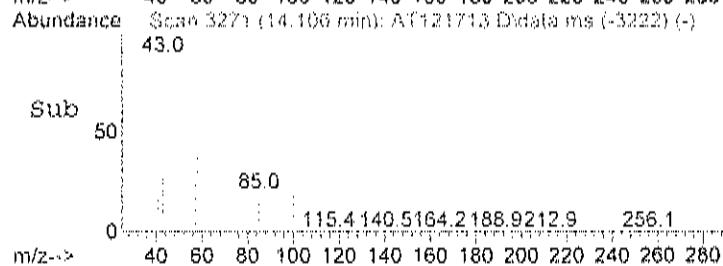
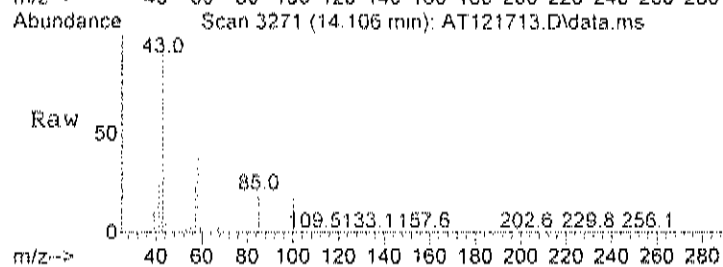
Tgt Ion: 43 Resp: 131489

Ion Ratio Lower Upper

43 100

57 26.5 7.7 47.7

58 43.3 7.6 47.6



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121714.D
 Acq On : 17 Dec 2022 7:04 pm
 Operator : RJP
 Sample : C2212031-010A 40X
 Misc : AD12_1UG
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 18 10:35:10 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

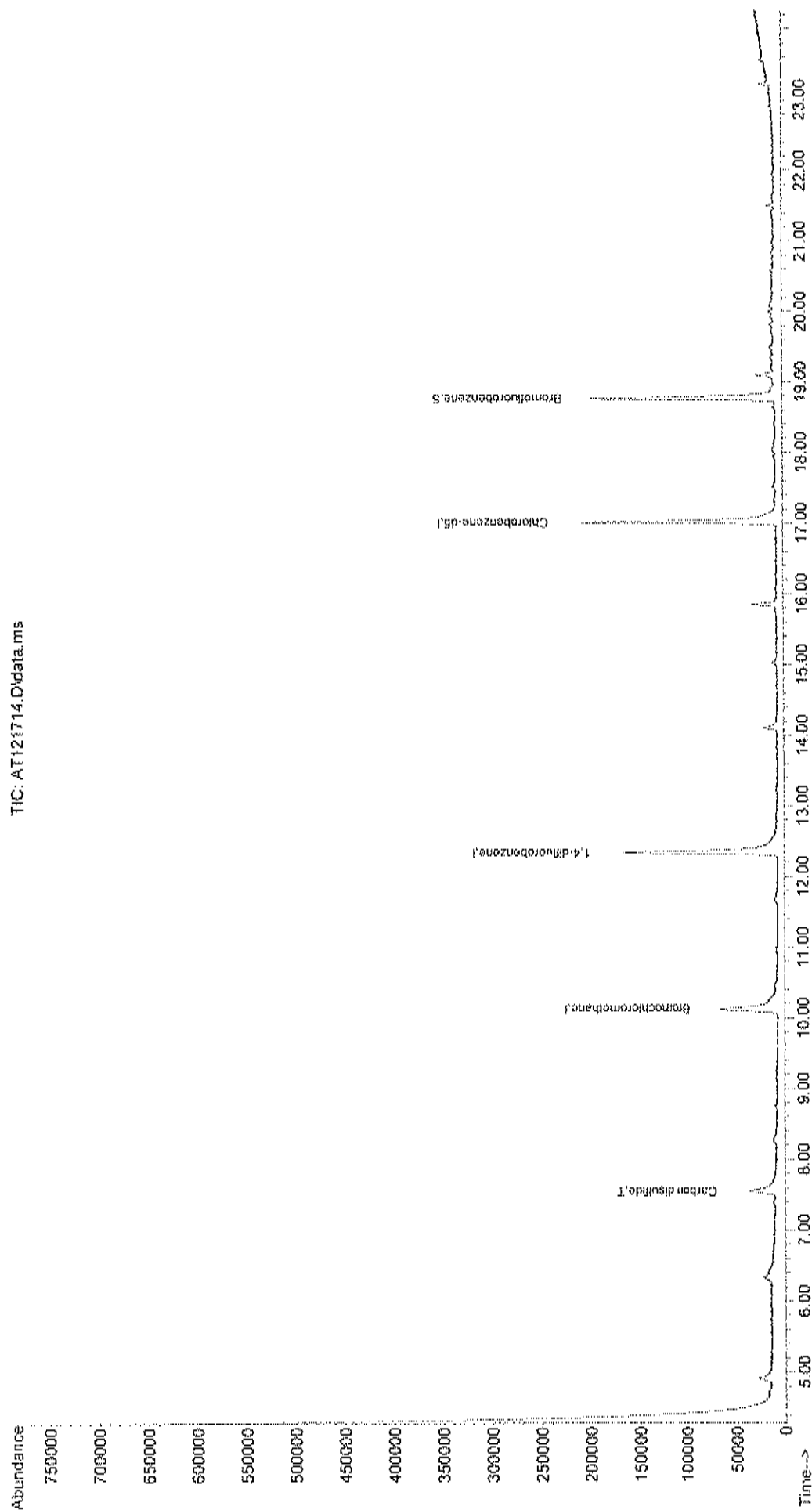
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

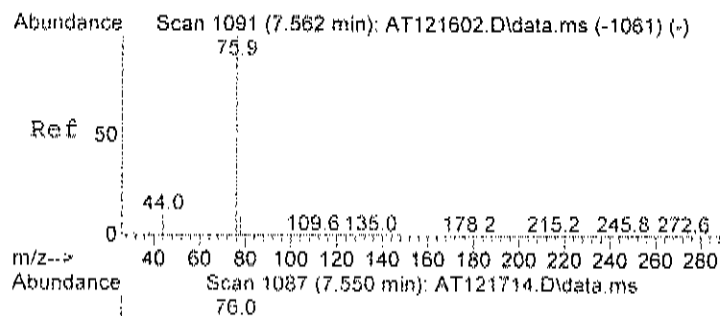
Internal Standards						
1) Bromochloromethane	10.129	128	44802	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	265462	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	203797	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.774	95	121034	0.88	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	88.00%
Target Compounds						
23) Carbon disulfide	7.550	76	115022m ~~10~~	0.65	ppb	Qvalue

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121714.D
Acq On : 17 Dec 2022 7:04 pm
Operator : RJP
Sample : C2212031-010A 40X
Misc : AD12_1UG
ALS Vial : 12 Sample Multiplier: 1

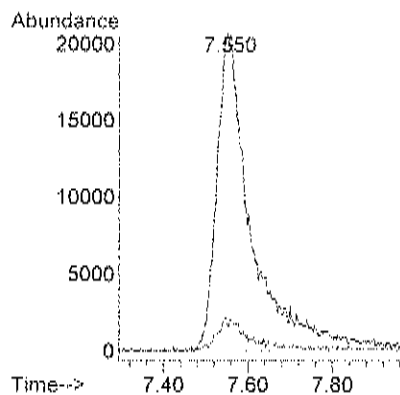
Quant Time: Dec 18 10:35:10 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





#23
Carbon disulfide
Concen: 0.65 ppb m
RT: 7.550 min Scan# 1087
Delta R.T. -0.009 min
Lab File: AT121714.D
Acq: 17 Dec 2022 7:04 pm

Tgt	Ion	Resp	Lower	Upper
76	100			
78	7.1	0.0	28.7	



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Acetone	2.8	1.5		ppbV	5	12/17/2022 7:46:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Benzene	0.13	0.15	J	ppbV	1	12/17/2022 2:06:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Carbon disulfide	0.28	0.15		ppbV	1	12/17/2022 2:06:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Chloroform	4.0	0.75		ppbV	5	12/17/2022 7:46:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
cis-1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM

Qualifiers:

Results reported are not blank corrected

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 11	0.34	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Freon 12	0.63	0.15		ppbV	1	12/17/2022 2:06:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Hexane	0.13	0.15	J	ppbV	1	12/17/2022 2:06:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:06:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Methylene chloride	0.21	0.15		ppbV	1	12/17/2022 2:06:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Tetrachloroethylene	0.16	0.15		ppbV	1	12/17/2022 2:06:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Toluene	0.24	0.15		ppbV	1	12/17/2022 2:06:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:06:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 2:06:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:06:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 2:06:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 2:06:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:06:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/17/2022 2:06:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 2:06:00 AM
Acetone	6.5	3.6		ug/m3	5	12/17/2022 7:46:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 2:06:00 AM
Benzene	0.42	0.48	J	ug/m3	1	12/17/2022 2:06:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 2:06:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 2:06:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 2:06:00 AM
Carbon disulfide	0.87	0.47		ug/m3	1	12/17/2022 2:06:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 2:06:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 2:06:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 2:06:00 AM
Chloroform	20	3.7		ug/m3	5	12/17/2022 7:46:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 2:06:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:06:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 2:06:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 2:06:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 2:06:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 2:06:00 AM
Freon 11	1.9	0.84		ug/m3	1	12/17/2022 2:06:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 2:06:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 2:06:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-10

Lab Order: C2212031

Tag Number: 370,406

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-011A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/17/2022 2:06:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 2:06:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 2:06:00 AM
Hexane	0.46	0.53	J	ug/m3	1	12/17/2022 2:06:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 2:06:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 2:06:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:06:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 2:06:00 AM
Methylene chloride	0.73	0.52		ug/m3	1	12/17/2022 2:06:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 2:06:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 2:06:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 2:06:00 AM
Tetrachloroethylene	1.1	1.0		ug/m3	1	12/17/2022 2:06:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 2:06:00 AM
Toluene	0.90	0.57		ug/m3	1	12/17/2022 2:06:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:06:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:06:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 2:06:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 2:06:00 AM

Qualifiers:

. Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

Page 22 of 40

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121620.D
 Acq On : 17 Dec 2022 2:06 am
 Operator : RJP
 Sample : C2212031-011A
 Misc : AD12_1UG
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 17 08:40:54 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

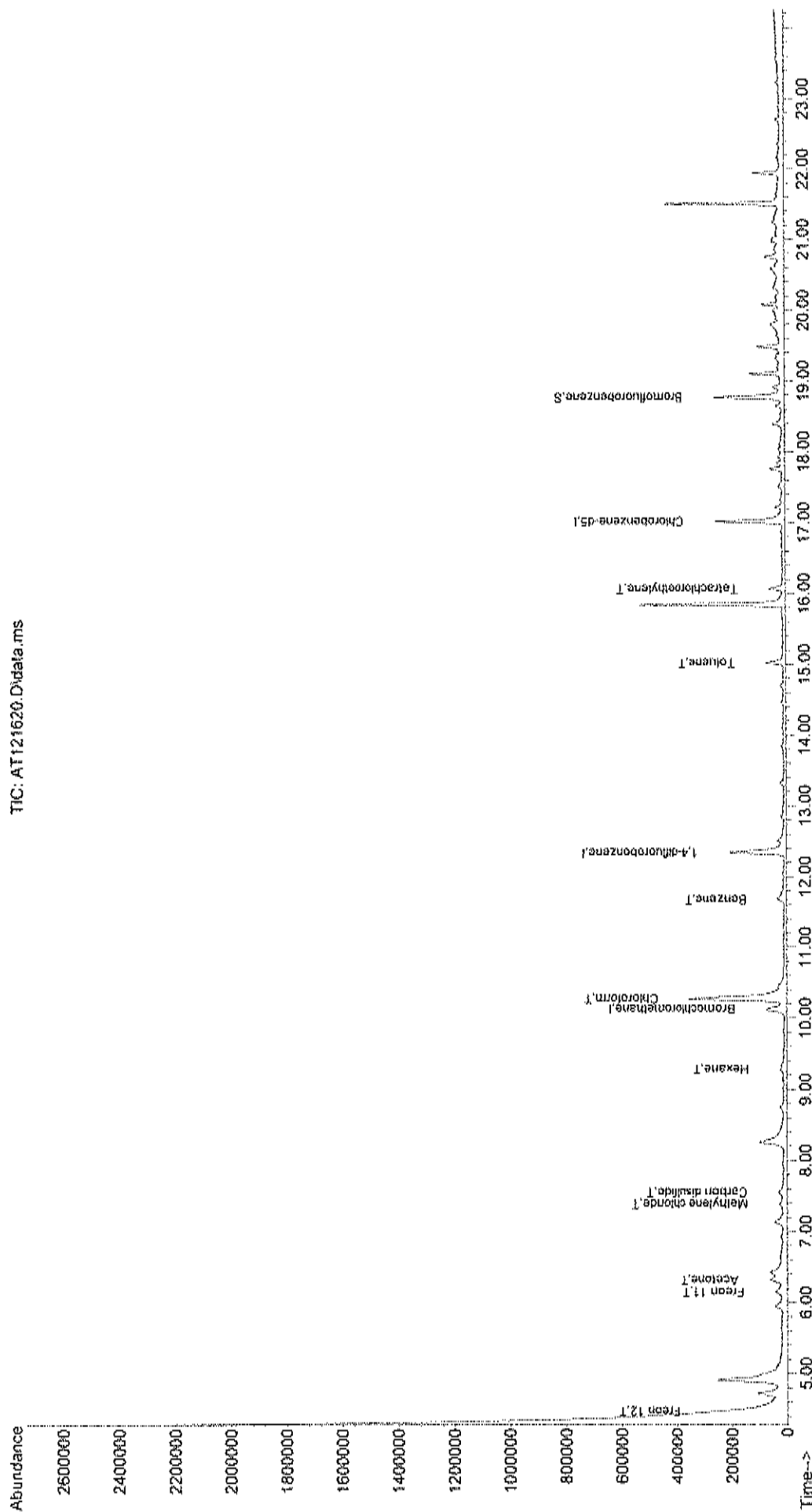
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

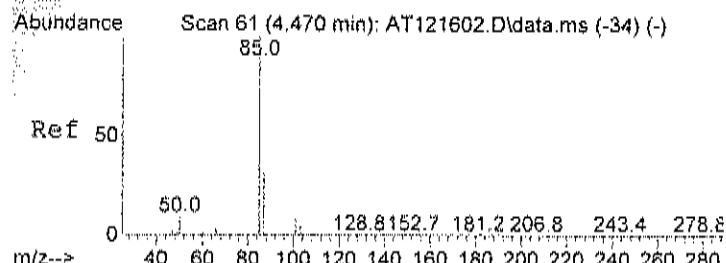
Internal Standards						
1) Bromochloromethane	10.129	128	47999	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.338	114	302916	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	236865	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	150304	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 ~ 130	Recovery	=	94.00%
Target Compounds						
						Qvalue
3) Freon 12	4.467	85	101459	0.63	ppb	96
14) Freon 11	6.148	101	45414	0.34	ppb	95
15) Acetone	6.319	58	53159	2.11	ppb	94
21) Methylene chloride	7.388	84	13667	0.21	ppb	91
23) Carbon disulfide	7.553	76	52896	0.28	ppb	98
30) Hexane	9.285	57	17613	0.13	ppb	# 37
32) Chloroform	10.273	83	615202	4.16	ppb	98
39) Benzene	11.675	78	35271	0.13	ppb	94
51) Toluene	15.025	92	44627	0.24	ppb	100
56) Tetrachloroethylene	16.069	164	18358	0.16	ppb	90

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121620.D
Acq On : 17 Dec 2022 2:06 am
Operator : RJP
Sample : C2212031-011A
Misc : AD12_1UG
ALS Vial : 20 Sample Multiplier: 1

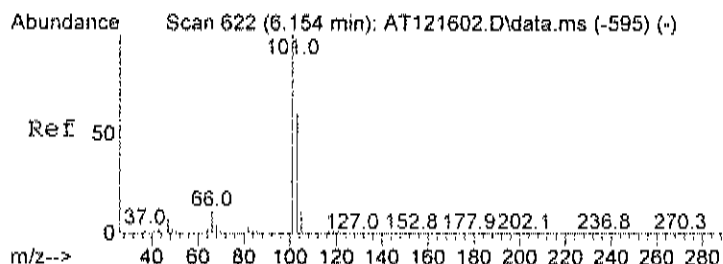
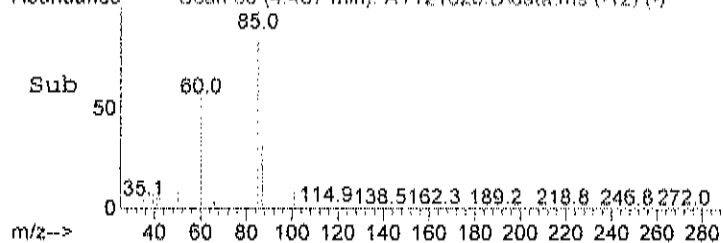
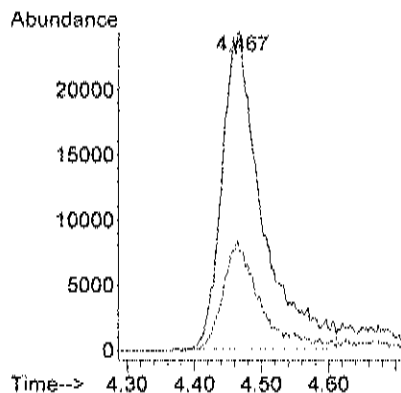
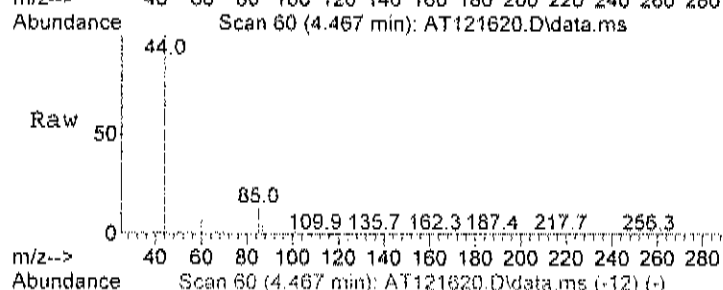
Quant Time: Dec 17 08:40:54 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





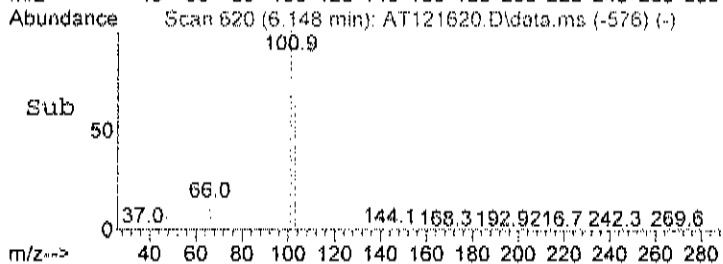
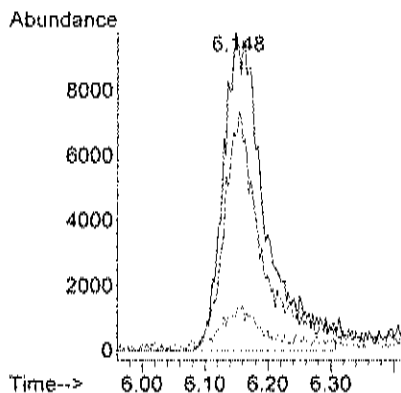
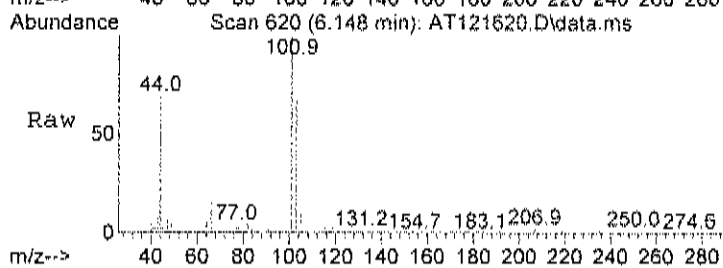
#3
Freon 12
Concen: 0.63 ppb
RT: 4.467 min Scan# 60
Delta R.T. -0.006 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

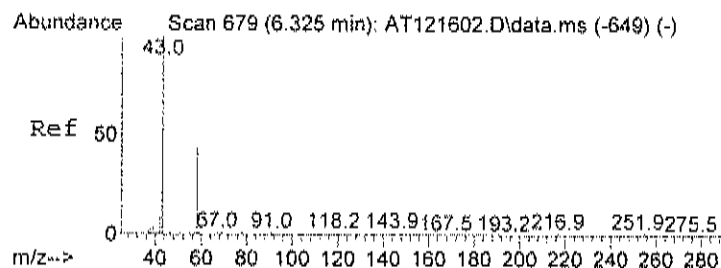
Tgt Ion:	85	Resp:	101459
Ion Ratio	Lower	Upper	
85	100		
87	32.1	14.3	54.3



#14
Freon 11
Concen: 0.34 ppb
RT: 6.148 min Scan# 620
Delta R.T. -0.018 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

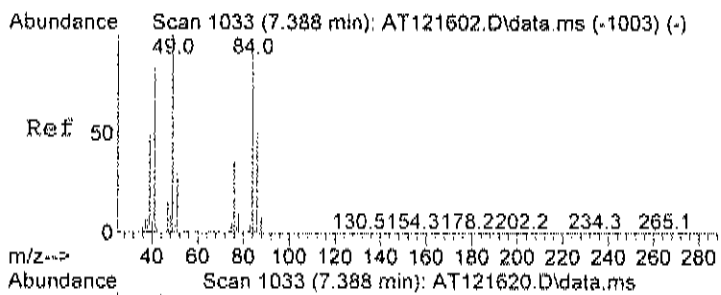
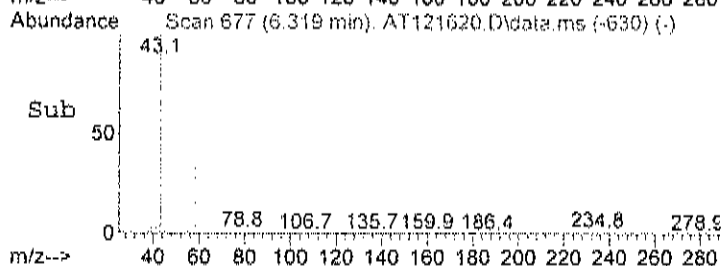
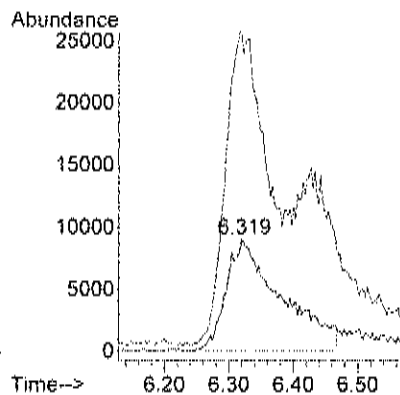
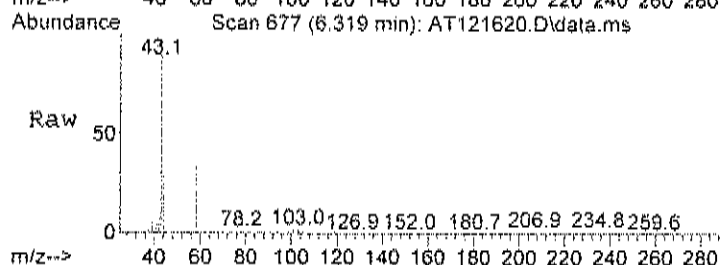
Tgt Ion:	101	Resp:	45414
Ion Ratio	Lower	Upper	
101	100		
103	68.7	44.1	84.1
105	10.7	0.0	32.0





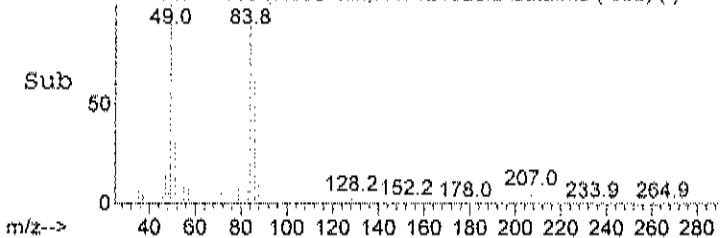
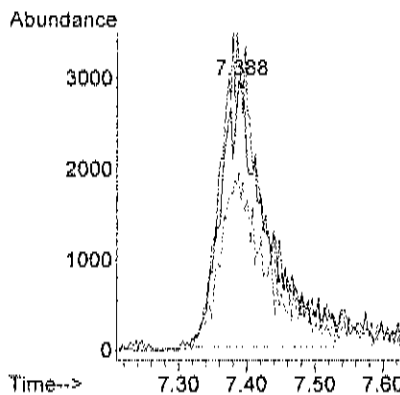
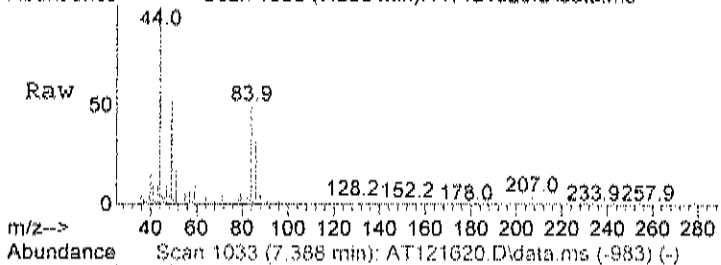
#15
Acetone
Concen: 2.11 ppb
RT: 6.319 min Scan# 677
Delta R.T. -0.009 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

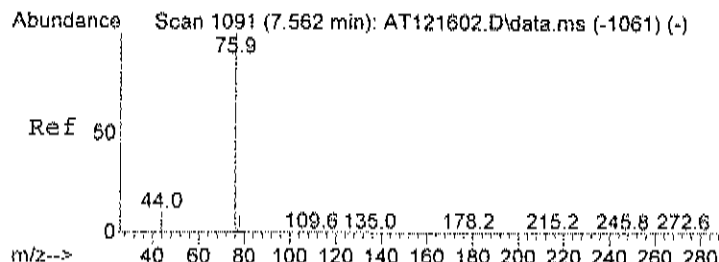
Tgt Ion	58	Ratio	100	Resp	53159
Ion	58	Ratio	100	Lower	Upper
43	313.2	272.3	332.3		



#21
Methylene chloride
Concen: 0.21 ppb
RT: 7.388 min Scan# 1033
Delta R.T. -0.000 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

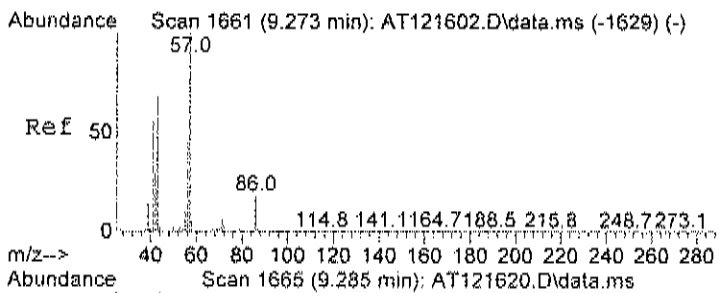
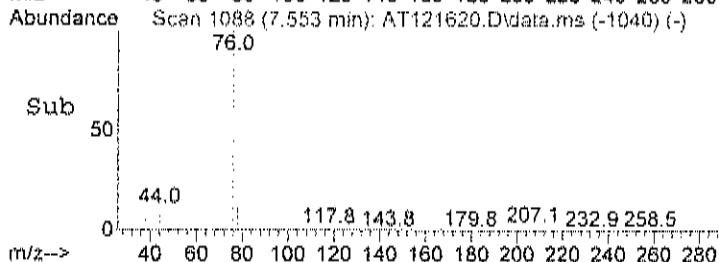
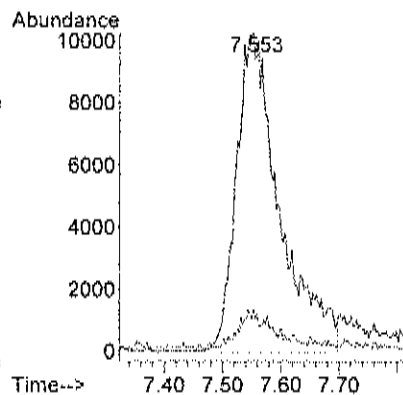
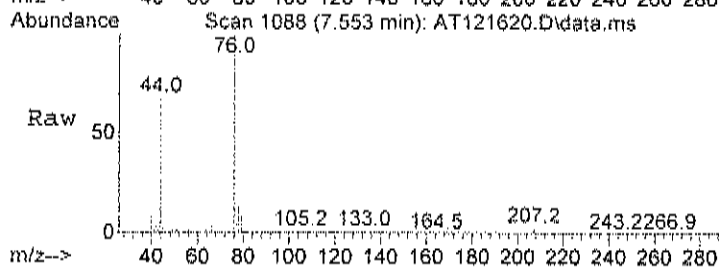
Tgt Ion	84	Ratio	100	Resp	13667
Ion	84	Ratio	100	Lower	Upper
49	113.8	84.2	124.2		
86	68.6	42.9	82.9		





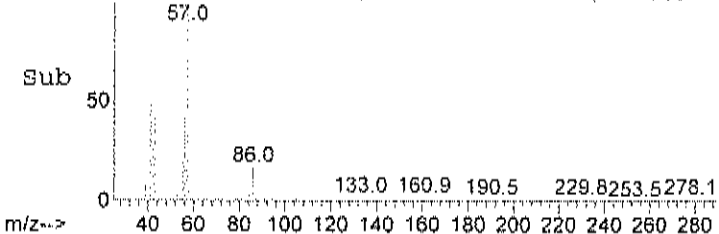
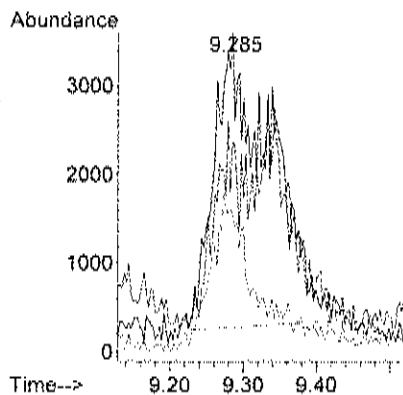
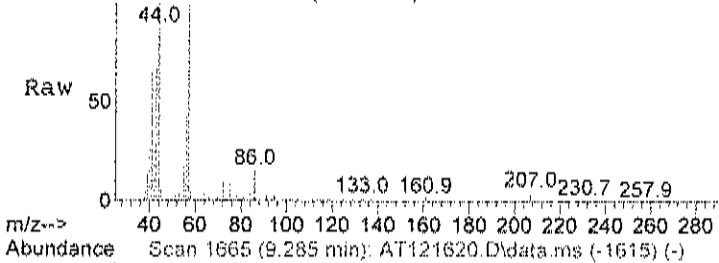
#23
Carbon disulfide
Concen: 0.28 ppb
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

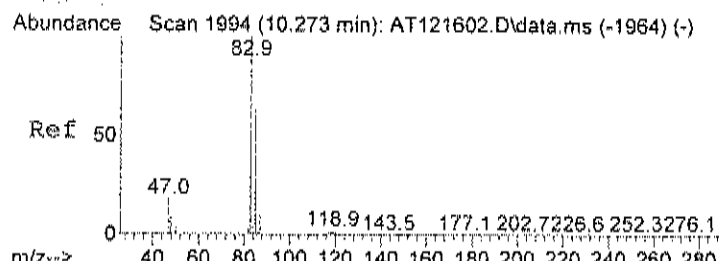
Tgt Ion	Ratio	Lower	Upper
76	100		
78	9.6	0.0	28.7



#30
Hexane
Concen: 0.13 ppb
RT: 9.285 min Scan# 1665
Delta R.T. 0.000 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

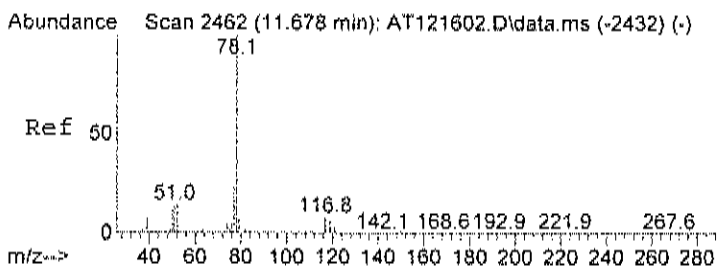
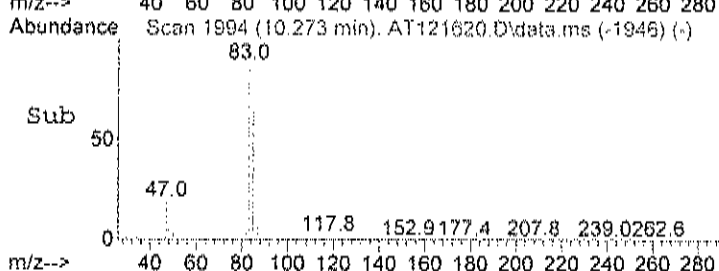
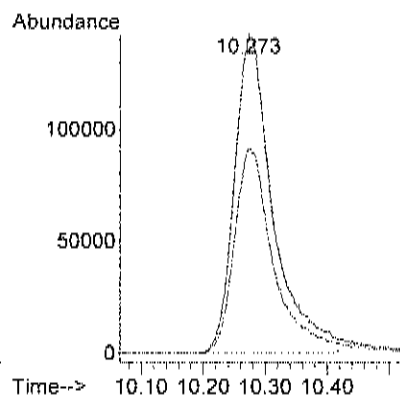
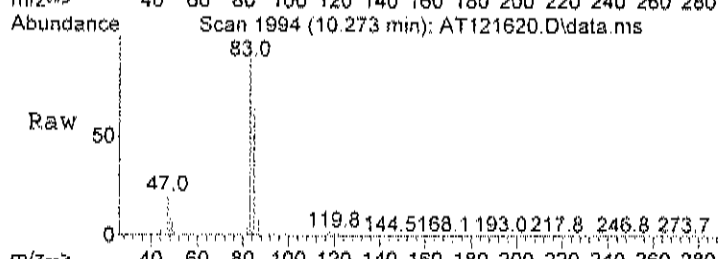
Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	62.0	102.0#
56	39.4	31.8	71.8





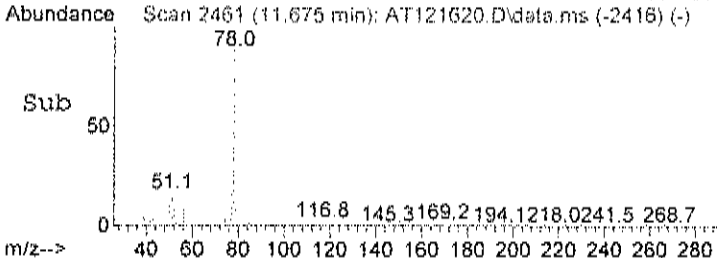
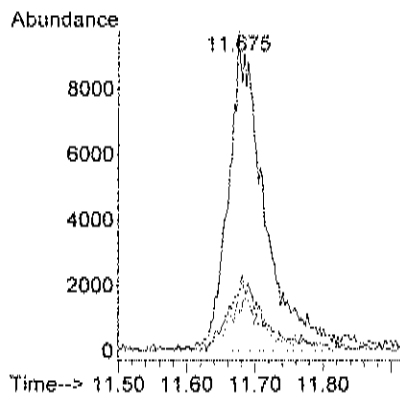
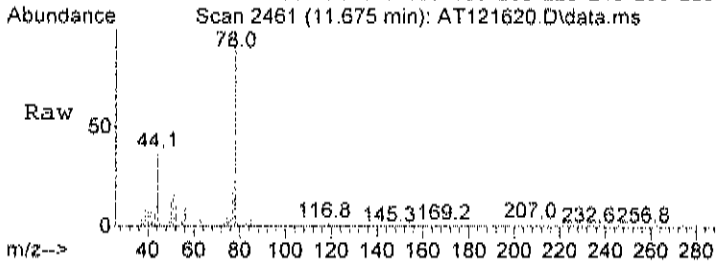
#32
Chloroform
Concen: 4.16 ppb
RT: 10.273 min Scan# 1994
Delta R.T. -0.006 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

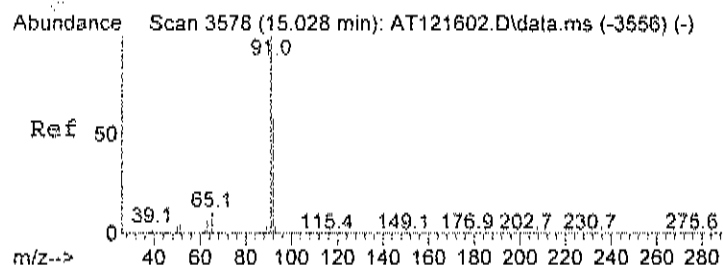
Tgt Ion	83	Resp	615202
Ion	Ratio	Lower	Upper
83	100		
85	65.0	46.4	86.4



#39
Benzene
Concen: 0.13 ppb
RT: 11.675 min Scan# 2461
Delta R.T. -0.015 min
Lab File: AT121620.D
Acq: 17 Dec 2022 2:06 am

Tgt Ion	78	Resp	35271
Ion	Ratio	Lower	Upper
78	100		
77	23.5	2.5	42.5
51	15.5	0.5	40.5





#51

Toluene

Concen: 0.24 ppb

RT: 15.025 min Scan# 3577

Delta R.T. -0.006 min

Lab File: AT121620.D

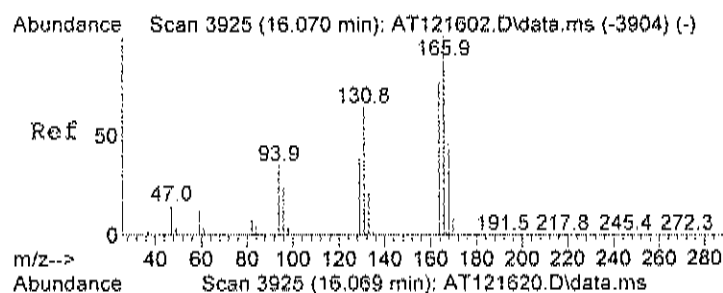
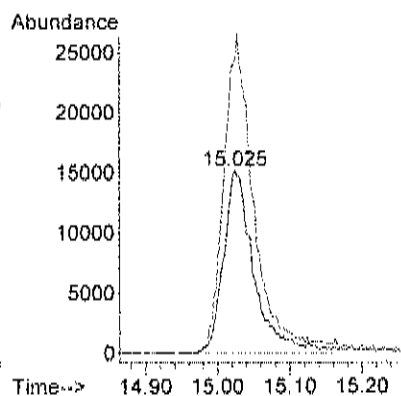
Acq: 17 Dec 2022 2:06 am

Tgt Ion: 92 Resp: 44627

Ion Ratio Lower Upper

92 100

91 173.7 153.3 193.3



#56

Tetrachloroethylene

Concen: 0.16 ppb

RT: 16.069 min Scan# 3925

Delta R.T. -0.006 min

Lab File: AT121620.D

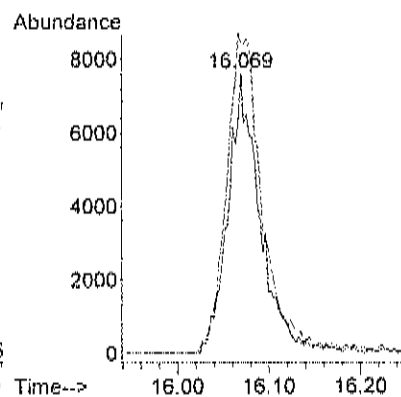
Acq: 17 Dec 2022 2:06 am

Tgt Ion: 164 Resp: 18358

Ion Ratio Lower Upper

164 100

166 128.4 97.2 137.2



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121715.D
Acq On : 17 Dec 2022 7:46 pm
Operator : RJP
Sample : C2212031-011A 5X
Misc : AD12_1UG
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 18 10:35:24 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

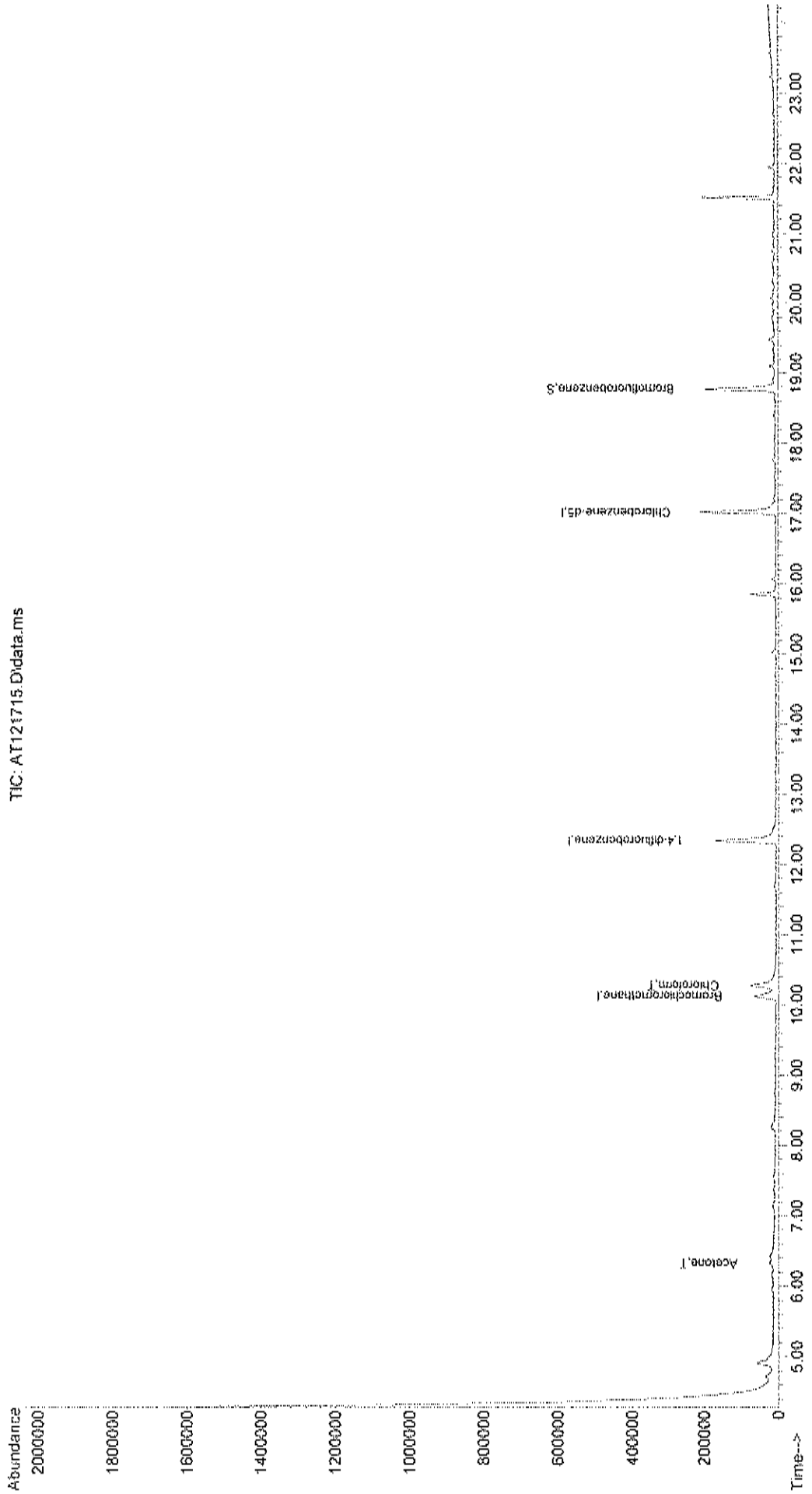
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

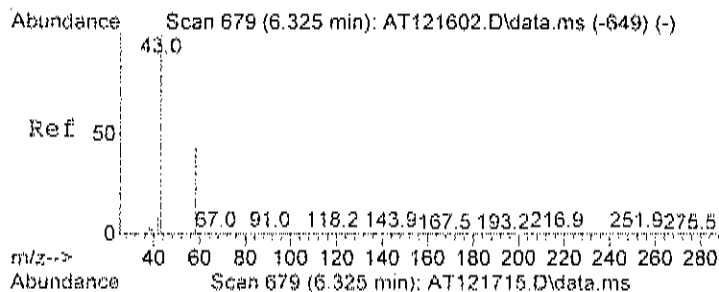
Internal Standards						
1) Bromochloromethane	10.123	128	45630	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	268494	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	208174	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	122850	0.87	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	87.00%
Target Compounds						
15) Acetone	6.325	58	13269	0.55	ppb	93
32) Chloroform	10.273	83	113872	0.81	ppb	99

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121715.D
 Acq On : 17 Dec 2022 7:46 pm
 Operator : RJP
 Sample : C2212031-011A 5X
 Misc : AD12_1UG
 ALS Vial : 13 Sample Multiplier: 1

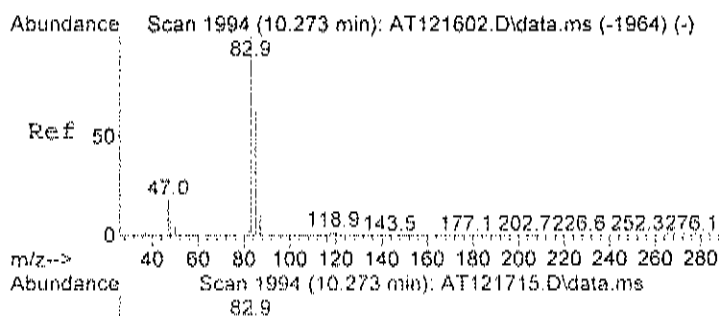
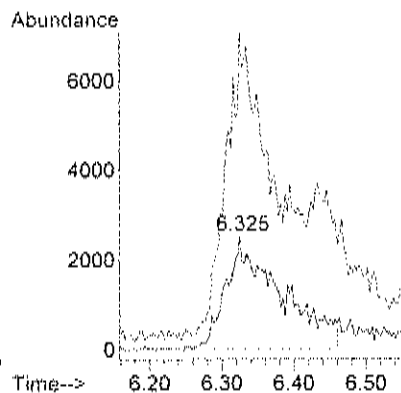
Quant Time: Dec 18 10:35:24 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





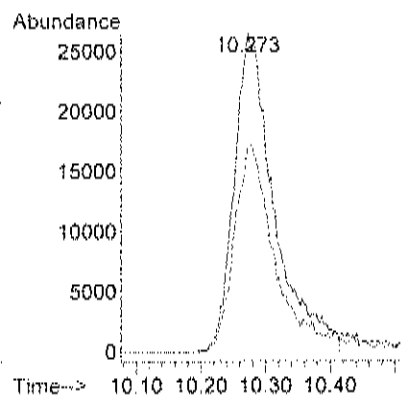
#15
Acetone
Concen: 0.55 ppb
RT: 6.325 min Scan# 679
Delta R.T. -0.003 min
Lab File: AT121715.D
Acq: 17 Dec 2022 7:46 pm

Tgt Ion	58	Resp	13269
Ion	Ratio	Lower	Upper
58	100		
43	288.5	272.3	332.3



#32
Chloroform
Concen: 0.81 ppb
RT: 10.273 min Scan# 1994
Delta R.T. -0.006 min
Lab File: AT121715.D
Acq: 17 Dec 2022 7:46 pm

Tgt Ion	83	Resp	113872
Ion	Ratio	Lower	Upper
83	100		
85	65.9	46.4	86.4



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-11

Lab Order: C2212031

Tag Number: 571,184

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-012A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS						
		FLD				Analyst:
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST						
		GC				Analyst: RJP
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15						
		TO-15				Analyst: RJP
1,1,1-Trichloroethane	0.13	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Acetone	2.1	0.30		ppbV	1	12/17/2022 2:51:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Benzene	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloroform	0.19	0.15		ppbV	1	12/17/2022 2:51:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-11

Lab Order: C2212031

Tag Number: 571,184

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-012A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 11	2.0	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Freon 12	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Hexane	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 2:51:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Methylene chloride	0.14	0.15	J	ppbV	1	12/17/2022 2:51:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Tetrachloroethylene	0.51	0.15		ppbV	1	12/17/2022 2:51:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Toluene	0.36	0.15		ppbV	1	12/17/2022 2:51:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 2:51:00 AM
Surr: Bromofluorobenzene	96.0	46.7-129		%REC	1	12/17/2022 2:51:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-11

Lab Order: C2212031

Tag Number: 571,184

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-012A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	0.71	0.82	J	ug/m3	1	12/17/2022 2:51:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 2:51:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 2:51:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 2:51:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 2:51:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/17/2022 2:51:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
Acetone	4.9	0.71		ug/m3	1	12/17/2022 2:51:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 2:51:00 AM
Benzene	0.45	0.48	J	ug/m3	1	12/17/2022 2:51:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 2:51:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 2:51:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 2:51:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/17/2022 2:51:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 2:51:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 2:51:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 2:51:00 AM
Chloroform	0.93	0.73		ug/m3	1	12/17/2022 2:51:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 2:51:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:51:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 2:51:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 2:51:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 2:51:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 2:51:00 AM
Freon 11	11	0.84		ug/m3	1	12/17/2022 2:51:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 2:51:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 2:51:00 AM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-11

Lab Order: C2212031

Tag Number: 571,184

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-012A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/17/2022 2:51:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 2:51:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 2:51:00 AM
Hexane	0.49	0.53	J	ug/m3	1	12/17/2022 2:51:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 2:51:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 2:51:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 2:51:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 2:51:00 AM
Methylene chloride	0.49	0.52	J	ug/m3	1	12/17/2022 2:51:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 2:51:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 2:51:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 2:51:00 AM
Tetrachloroethylene	3.5	1.0		ug/m3	1	12/17/2022 2:51:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 2:51:00 AM
Toluene	1.4	0.57		ug/m3	1	12/17/2022 2:51:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 2:51:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 2:51:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 2:51:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 2:51:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121621.D
 Acq On : 17 Dec 2022 2:51 am
 Operator : RJP
 Sample : C2212031-012A
 Misc : AD12_1UG
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 17 08:40:56 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

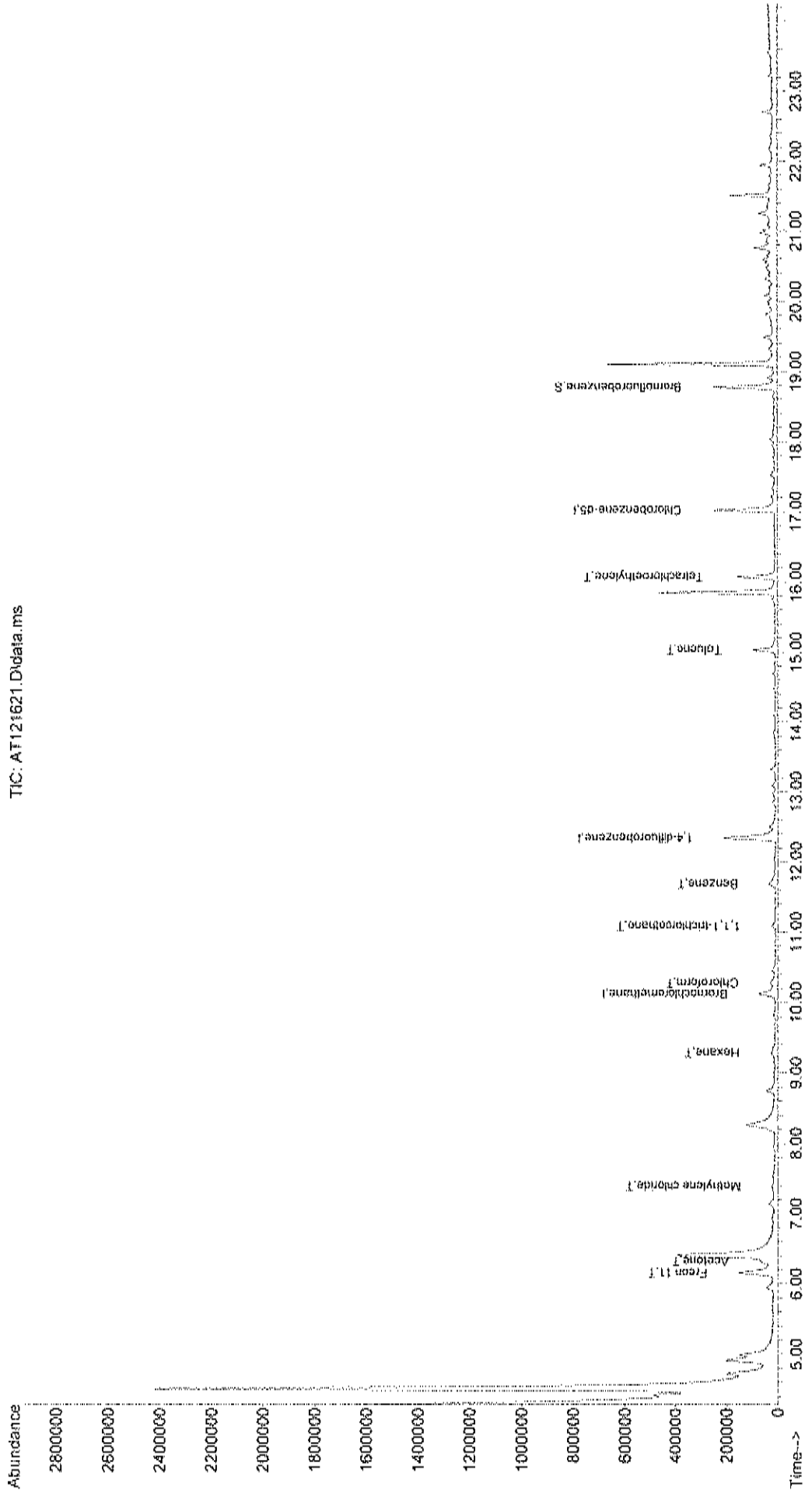
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

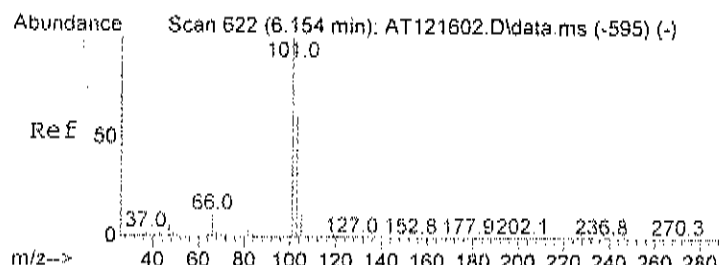
Internal Standards						
1) Bromochloromethane	10.120	128	47319	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.338	114	298372	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	232980	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	150320	0.96	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	96.00%
Target Compounds						
14) Freon 11	6.154	101	264855m	2.01	ppb	Qvalue
15) Acetone	6.322	58	51453m	2.08	ppb	
21) Methylene chloride	7.388	84	9353	0.14	ppb	99
30) Hexane	9.282	57	18989	0.14	ppb	85
32) Chloroform	10.276	83	27129	0.19	ppb	96
36) 1,1,1-trichloroethane	11.086	97	18575	0.13	ppb	97
39) Benzene	11.687	78	36172	0.14	ppb	92
51) Toluene	15.031	92	66373	0.36	ppb	95
56) Tetrachloroethylene	16.073	164	58172	0.51	ppb	91

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121621.D
 Acq On : 17 Dec 2022 2:51 am
 Operator : RJP
 Sample : C2212031-012A
 Misc : AD12 1UG
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 17 08:40:56 2022
 Quant Method : C:\msdchem\1\methods\AD12 1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





#14

Freon 11

Concen: 2.01 ppb m

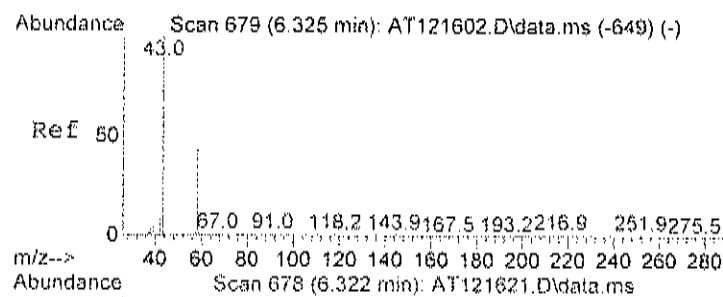
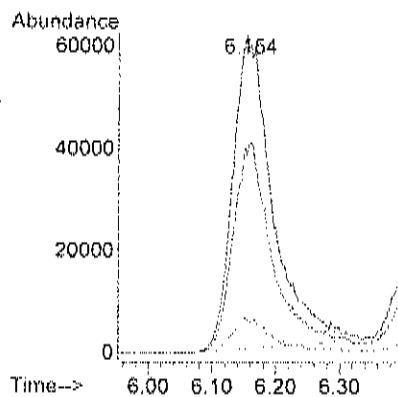
RT: 6.154 min Scan# 622

Delta R.T. -0.012 min

Lab File: AT121621.D

Acq: 17 Dec 2022 2:51 am

Tgt Ion:	101	Resp:	264855
Ion	Ratio	Lower	Upper
101	100		
103	69.3	44.1	84.1
105	10.3	0.0	32.0



#15

Acetone

Concen: 2.08 ppb m

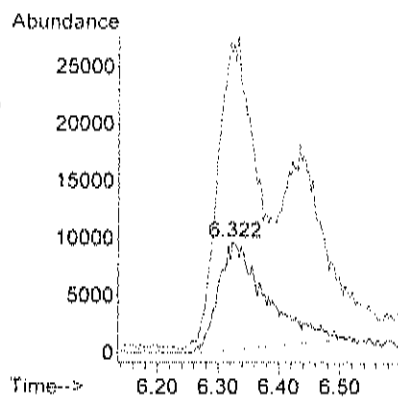
RT: 6.322 min Scan# 678

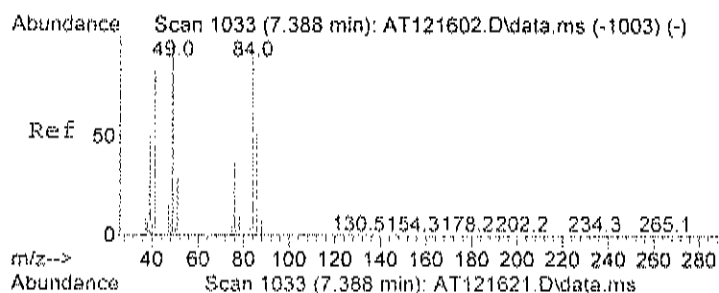
Delta R.T. -0.006 min

Lab File: AT121621.D

Acq: 17 Dec 2022 2:51 am

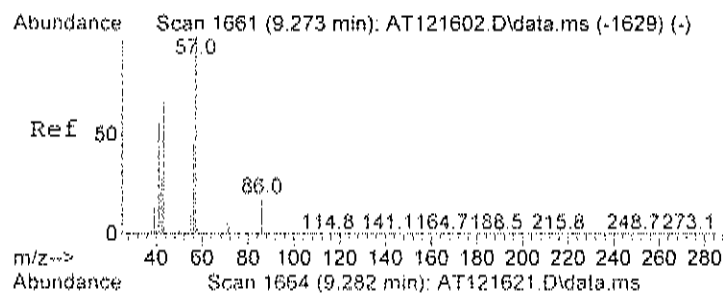
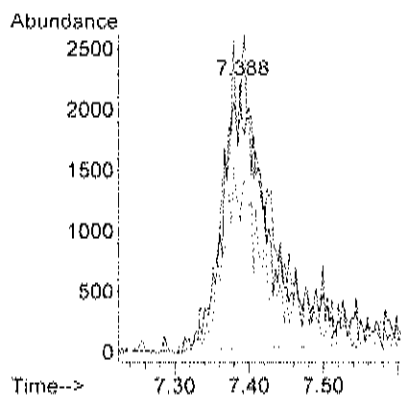
Tgt Ion:	58	Resp:	51453
Ion	Ratio	Lower	Upper
58	100		
43	356.5	272.3	332.3#





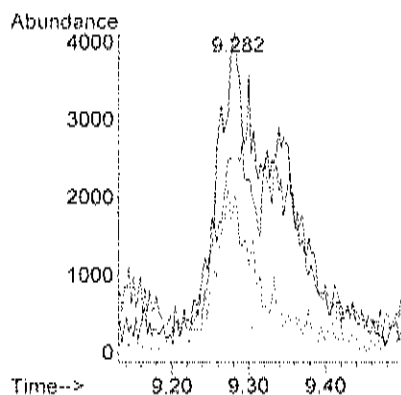
#21
Methylene chloride
Concen: 0.14 ppb
RT: 7.388 min Scan# 1033
Delta R.T. -0.000 min
Lab File: AT121621.D
Acq: 17 Dec 2022 2:51 am

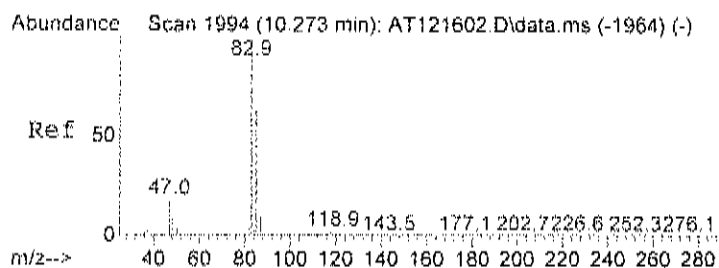
Tgt Ion:	84	Resp:	9353
Ion	Ratio	Lower	Upper
84	100		
49	104.6	84.2	124.2
86	63.5	42.9	82.9



#30
Hexane
Concen: 0.14 ppb
RT: 9.282 min Scan# 1664
Delta R.T. -0.003 min
Lab File: AT121621.D
Acq: 17 Dec 2022 2:51 am

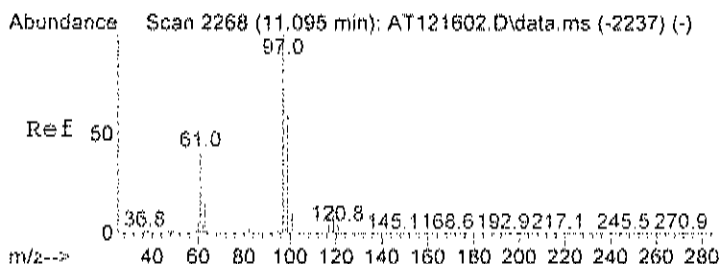
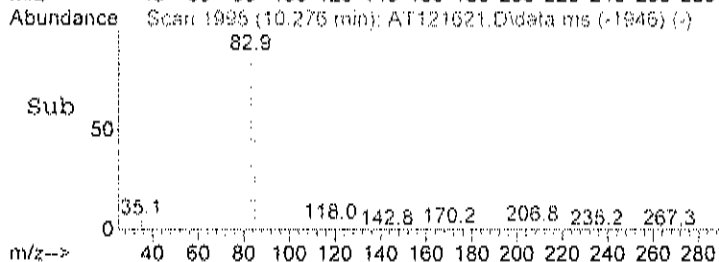
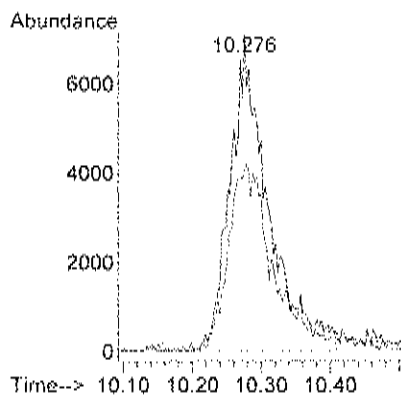
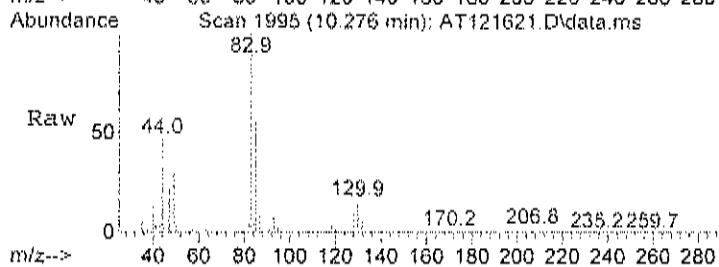
Tgt Ion:	57	Resp:	18989
Ion	Ratio	Lower	Upper
57	100		
41	70.7	62.0	102.0
56	38.2	31.8	71.8





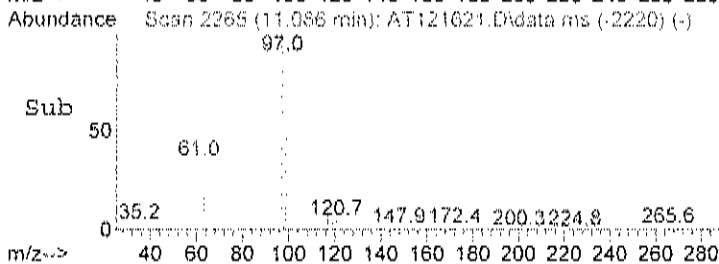
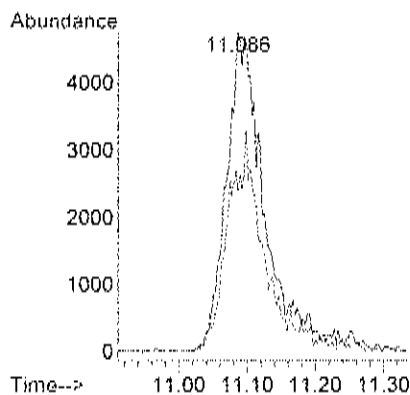
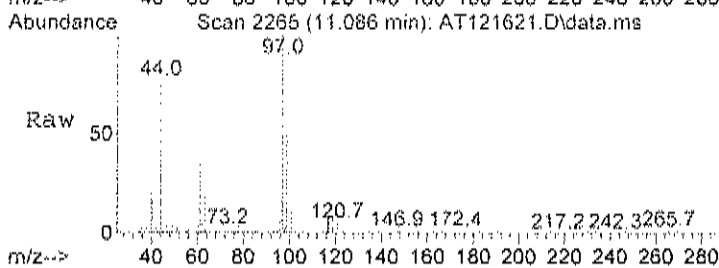
#32
Chloroform
Concen: 0.19 ppb
RT: 10.276 min Scan# 1995
Delta R.T. -0.003 min
Lab File: AT121621.D
Acq: 17 Dec 2022 2:51 am

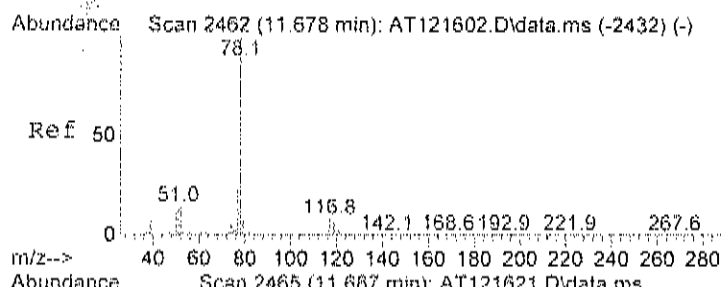
Tgt Ion	83	Resp	27129
Ion	Ratio	Lower	Upper
83	100		
85	69.8	46.4	86.4



#36
1,1,1-trichloroethane
Concen: 0.13 ppb
RT: 11.086 min Scan# 2265
Delta R.T. -0.015 min
Lab File: AT121621.D
Acq: 17 Dec 2022 2:51 am

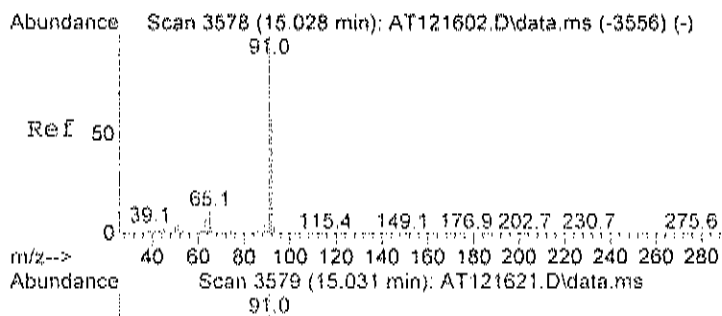
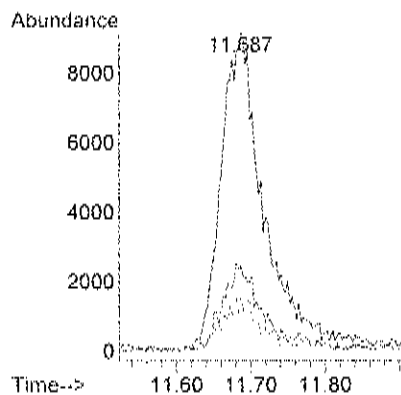
Tgt Ion	97	Resp	18575
Ion	Ratio	Lower	Upper
97	100		
99	64.2	41.6	81.6





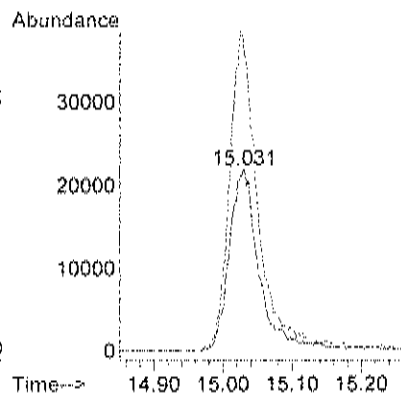
#39
Benzene
Concen: 0.14 ppb
RT: 11.687 min Scan# 2465
Delta R.T. -0.003 min
Lab File: AT121621.D
Acq: 17 Dec 2022 2:51 am

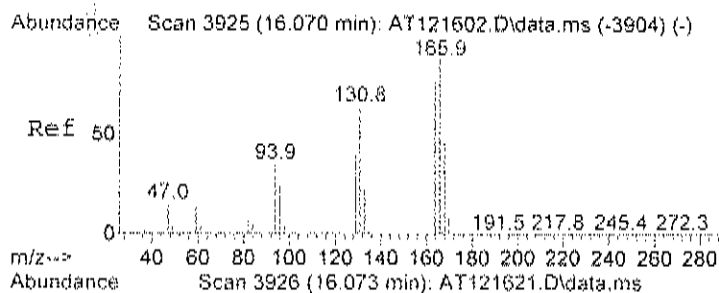
Tgt Ion	78	Resp	36172
Ion	Ratio	Lower	Upper
78	100		
77	25.7	2.5	42.5
51	16.5	0.5	40.5



#51
Toluene
Concen: 0.36 ppb
RT: 15.031 min Scan# 3579
Delta R.T. -0.000 min
Lab File: AT121621.D
Acq: 17 Dec 2022 2:51 am

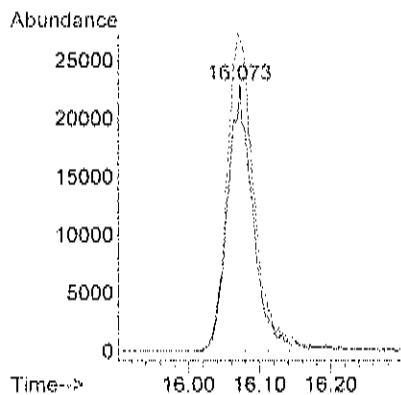
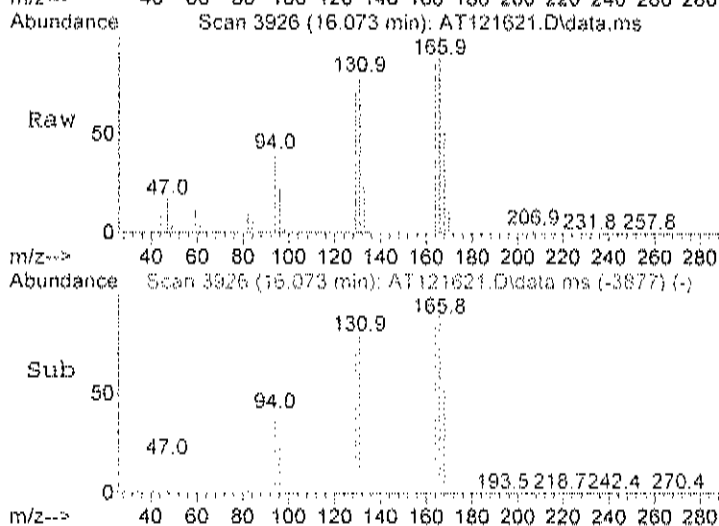
Tgt Ion	92	Resp	66373
Ion	Ratio	Lower	Upper
92	100		
91	166.6	153.3	193.3





#56
Tetrachloroethylene
Concen: 0.51 ppb
RT: 16.073 min Scan# 3926
Delta R.T. -0.002 min
Lab File: AT121621.D
Acq: 17 Dec 2022 2:51 am

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	58172		
166	127.2	97.2	137.2	



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-12

Lab Order: C2212031

Tag Number: 274,309

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-013A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
2,2,4-trimethylpentane	0.10	0.15	J	ppbV	1	12/17/2022 4:19:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Acetone	1.9	0.30		ppbV	1	12/17/2022 4:19:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Benzene	0.16	0.15		ppbV	1	12/17/2022 4:19:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Carbon disulfide	1.1	0.15		ppbV	1	12/17/2022 4:19:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-12

Lab Order: C2212031

Tag Number: 274,309

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-013A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 11	0.28	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Freon 12	0.60	0.15		ppbV	1	12/17/2022 4:19:00 AM
Heptane	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Hexane	0.23	0.15		ppbV	1	12/17/2022 4:19:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 4:19:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Methylene chloride	0.24	0.15		ppbV	1	12/17/2022 4:19:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Tetrachloroethylene	0.35	0.15		ppbV	1	12/17/2022 4:19:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Toluene	0.34	0.15		ppbV	1	12/17/2022 4:19:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Vinyl acetate	0.11	0.15	J	ppbV	1	12/17/2022 4:19:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 4:19:00 AM
Surr: Bromofluorobenzene	95.0	46.7-129		%REC	1	12/17/2022 4:19:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS
 Lab Order: C2212031
 Project: IKEA Red Hook
 Lab ID: C2212031-013A

Client Sample ID: SVW-12
 Tag Number: 274,309
 Collection Date: 12/13/2022
 Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 4:19:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 4:19:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 4:19:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 4:19:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 4:19:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
2,2,4-trimethylpentane	0.47	0.70	J	ug/m3	1	12/17/2022 4:19:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 4:19:00 AM
Acetone	4.5	0.71		ug/m3	1	12/17/2022 4:19:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 4:19:00 AM
Benzene	0.51	0.48		ug/m3	1	12/17/2022 4:19:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 4:19:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 4:19:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 4:19:00 AM
Carbon disulfide	3.4	0.47		ug/m3	1	12/17/2022 4:19:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 4:19:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 4:19:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 4:19:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 4:19:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 4:19:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 4:19:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/17/2022 4:19:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 4:19:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 4:19:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 4:19:00 AM
Freon 11	1.6	0.84		ug/m3	1	12/17/2022 4:19:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 4:19:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 4:19:00 AM

Qualifiers:
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-12

Lab Order: C2212031

Tag Number: 274,309

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-013A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/17/2022 4:19:00 AM
Heptane	< 0.61	0.61		ug/m3	1	12/17/2022 4:19:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 4:19:00 AM
Hexane	0.81	0.53		ug/m3	1	12/17/2022 4:19:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 4:19:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/17/2022 4:19:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 4:19:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 4:19:00 AM
Methylene chloride	0.83	0.52		ug/m3	1	12/17/2022 4:19:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 4:19:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 4:19:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 4:19:00 AM
Tetrachloroethylene	2.4	1.0		ug/m3	1	12/17/2022 4:19:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 4:19:00 AM
Toluene	1.3	0.57		ug/m3	1	12/17/2022 4:19:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 4:19:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 4:19:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 4:19:00 AM
Vinyl acetate	0.39	0.53	J	ug/m3	1	12/17/2022 4:19:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 4:19:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 4:19:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121623.D
 Acq On : 17 Dec 2022 4:19 am
 Operator : RJP
 Sample : C2212031-013A
 Misc : AD12_1UG
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 17 08:41:00 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

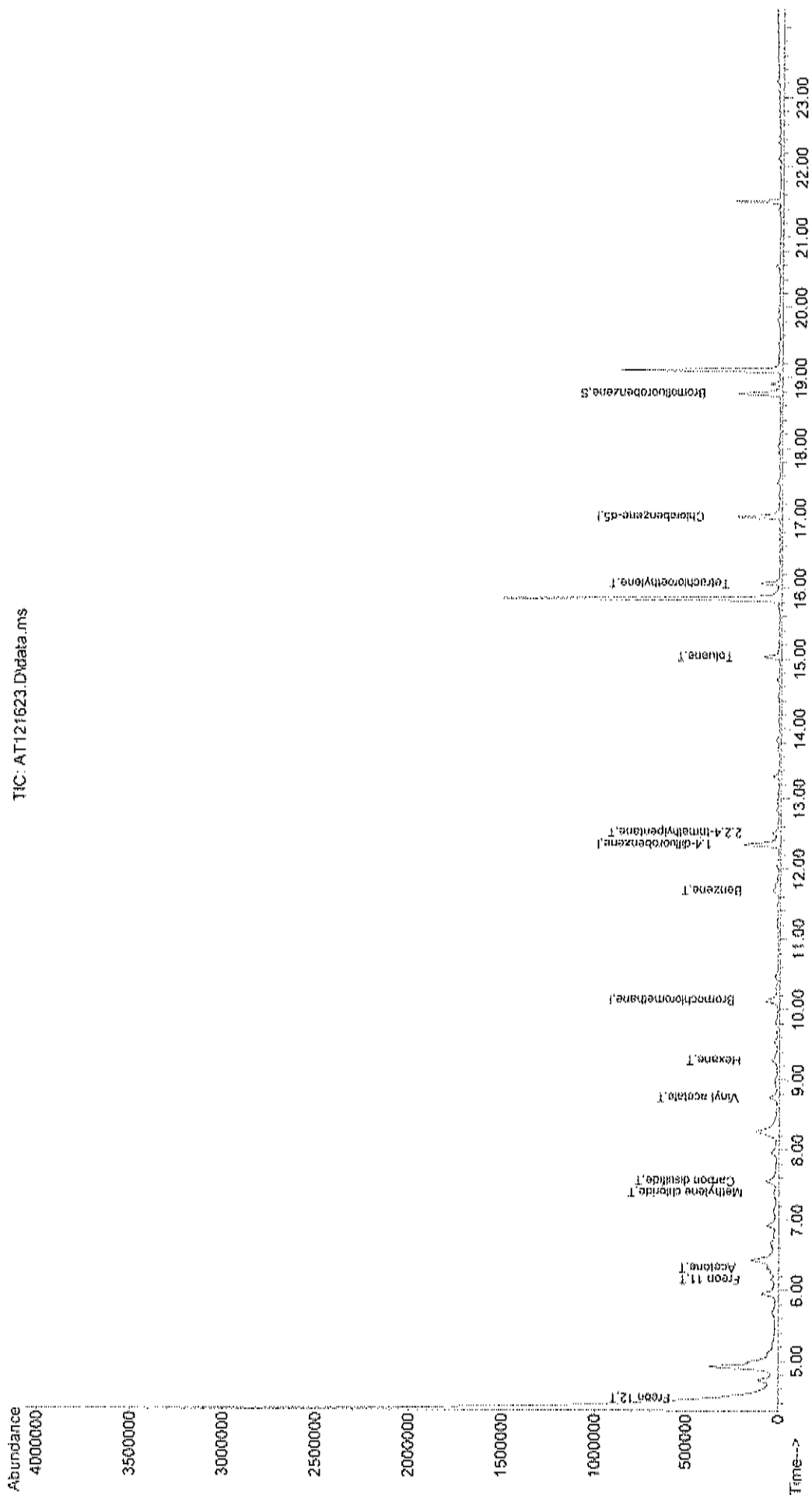
Internal Standards						
1) Bromochloromethane	10.126	128	47537	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	296062	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	230315	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	147251	0.95	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	95.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	94739	0.60	ppb	95
14) Freon 11	6.154	101	37158	0.28	ppb	91
15) Acetone	6.319	58	47698m	1.91	ppb	
21) Methylene chloride	7.391	84	15574	0.24	ppb	93
23) Carbon disulfide	7.553	76	206025	1.10	ppb	97
27) Vinyl acetate	8.745	43	10814	0.11	ppb	79
30) Hexane	9.276	57	31188	0.23	ppb	91
39) Benzene	11.687	78	42678	0.16	ppb	93
42) 2,2,4-trimethylpentane	12.512	57	41418	0.10	ppb	82
51) Toluene	15.028	92	61951	0.34	ppb	98
56) Tetrachloroethylene	16.067	164	39995	0.35	ppb	90

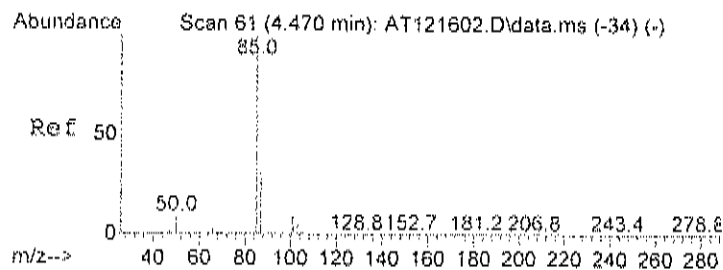
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121623.D
Acq On : 17 Dec 2022 4:19 am
Operator : RJP
Sample : C2212031-013A
Misc : AD12_1UG
ALS Vial : 23 Sample Multiplier: 1

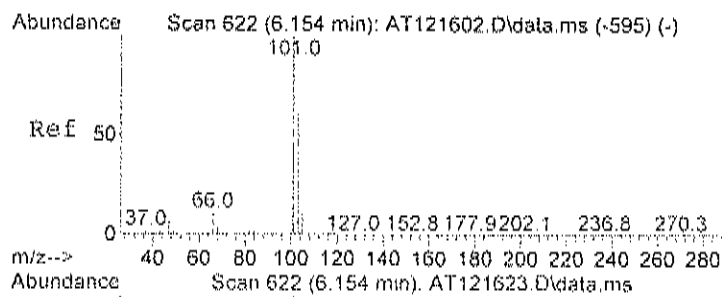
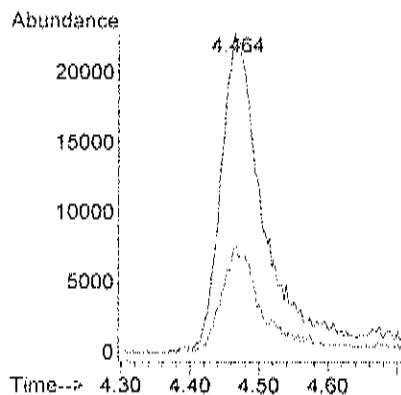
Quant Time: Dec 17 08:41:00 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QIast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





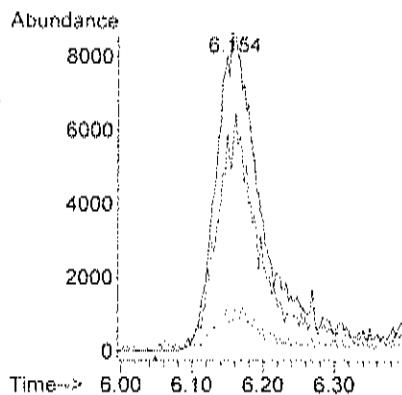
#3
Freon 12
Concen: 0.60 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

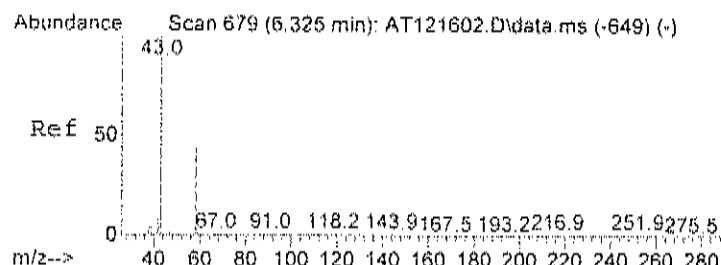
Tgt Ion:	85	Resp:	94739
Ion	Ratio	Lower	Upper
85	100		
87	31.5	14.3	54.3



#14
Freon 11
Concen: 0.28 ppb
RT: 6.154 min Scan# 622
Delta R.T. -0.012 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

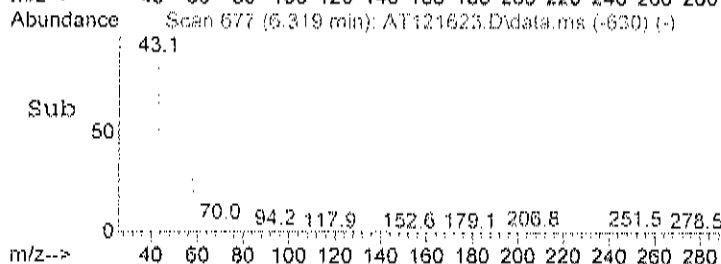
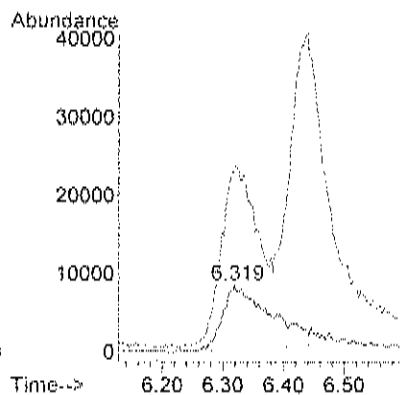
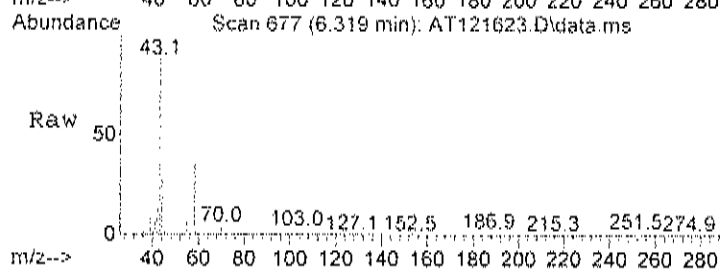
Tgt Ion:	101	Resp:	37158
Ion	Ratio	Lower	Upper
101	100		
103	72.4	44.1	84.1
105	12.6	0.0	32.0





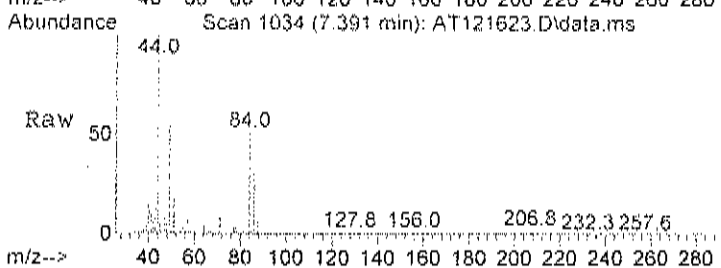
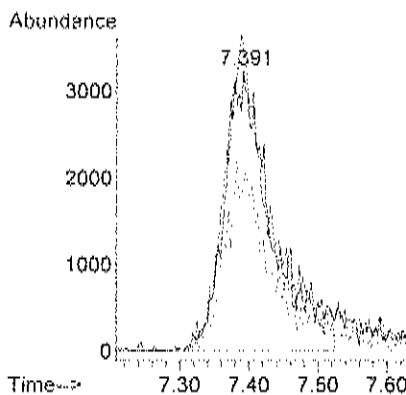
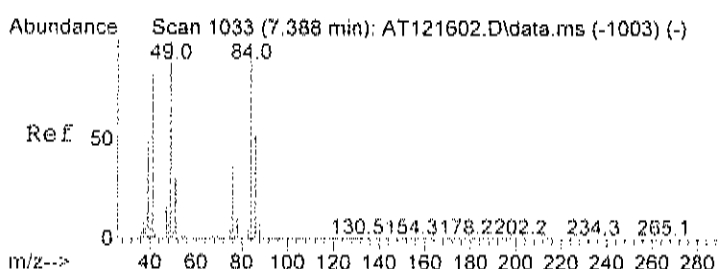
#15
Acetone
Concen: 1.91 ppb m
RT: 6.319 min Scan# 677
Delta R.T. -0.009 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

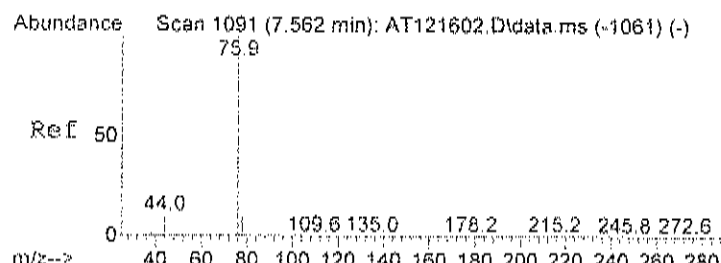
Tgt Ion	58	Resp	47698
Ion	Ratio	Lower	Upper
58	100		
43	0.0	272.3	332.3#



#21
Methylene chloride
Concen: 0.24 ppb
RT: 7.391 min Scan# 1034
Delta R.T. 0.003 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

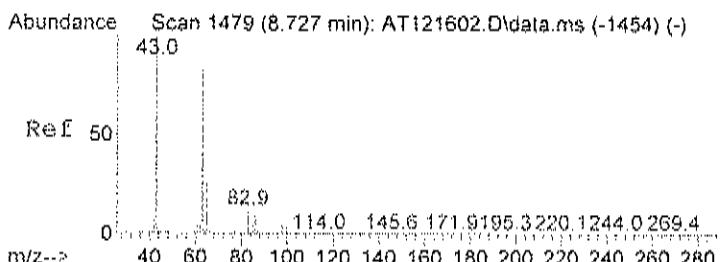
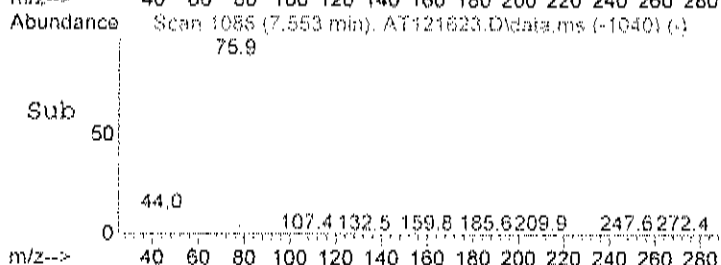
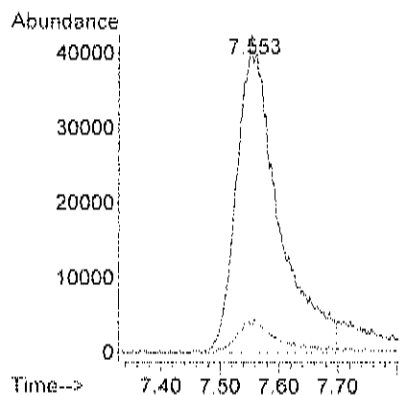
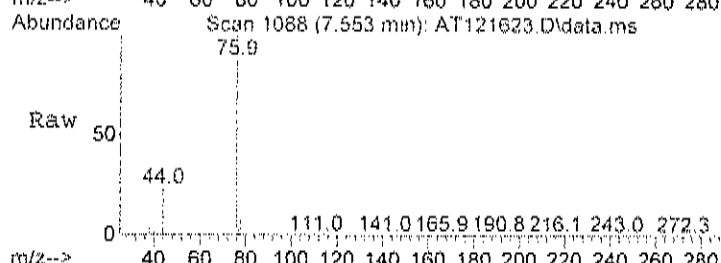
Tgt Ion	84	Resp	15574
Ion	Ratio	Lower	Upper
84	100		
49	93.2	84.2	124.2
86	63.3	42.9	82.9





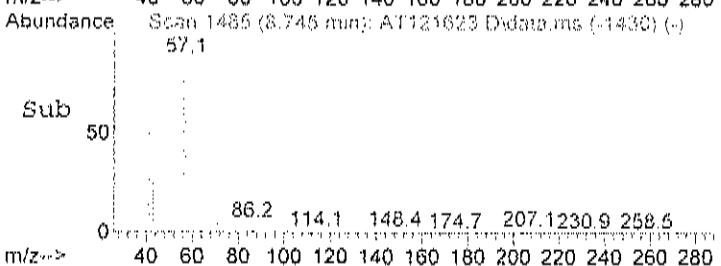
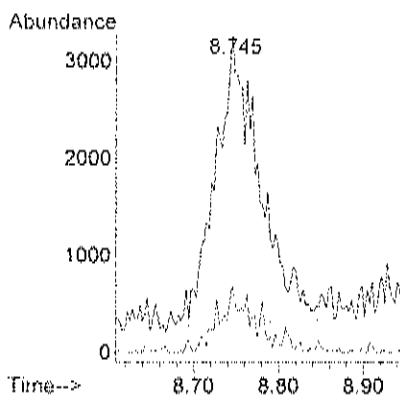
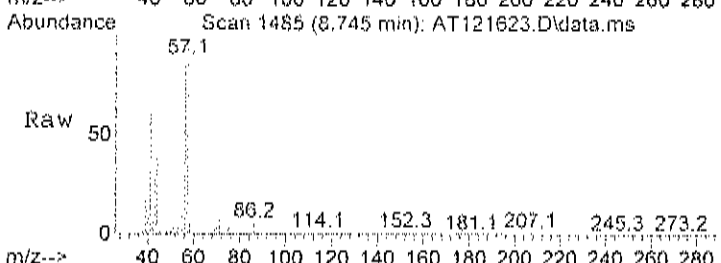
#23
Carbon disulfide
Concen: 1.10 ppb
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

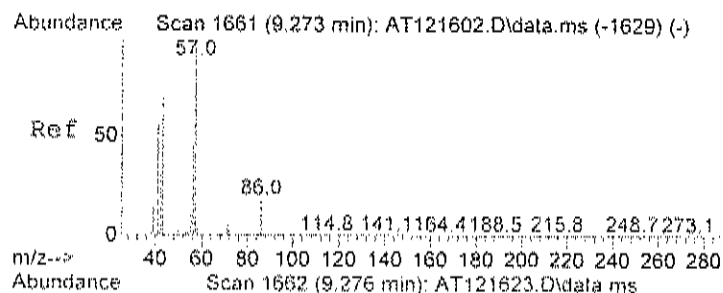
Tgt Ion	76	Resp	206025
Ion	Ratio	Lower	Upper
76	100		
78	9.8	0.0	28.7



#27
Vinyl acetate
Concen: 0.11 ppb
RT: 8.745 min Scan# 1485
Delta R.T. 0.015 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

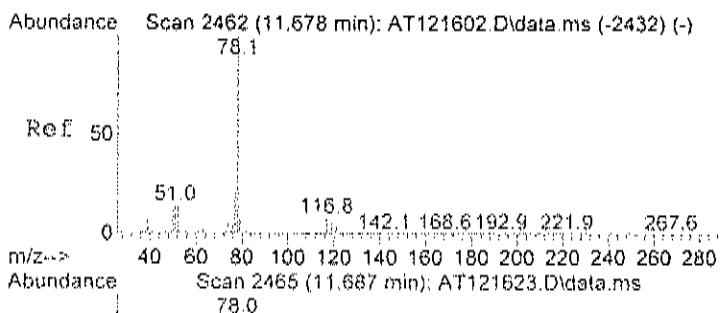
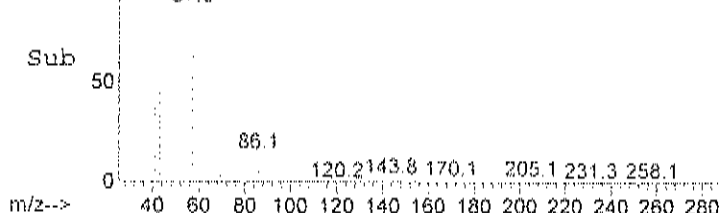
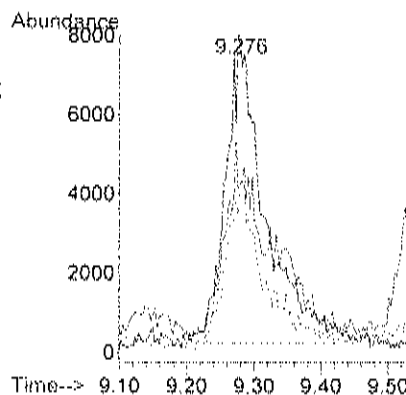
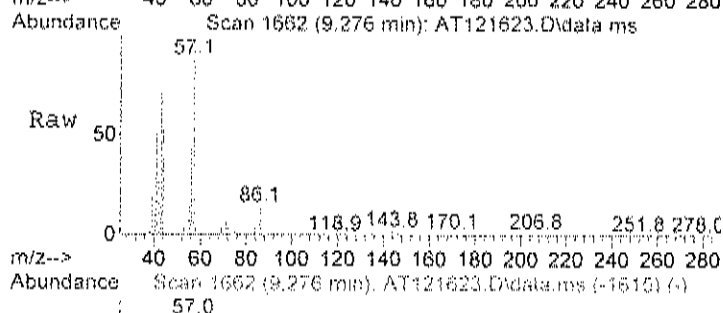
Tgt Ion	43	Resp	10814
Ion	Ratio	Lower	Upper
43	100		
86	16.2	0.0	28.6





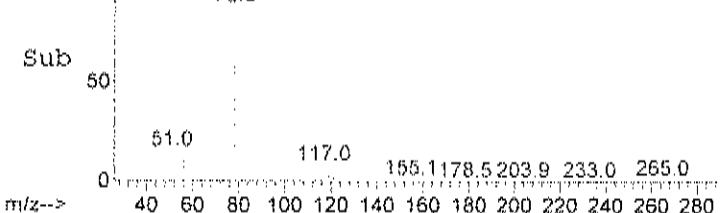
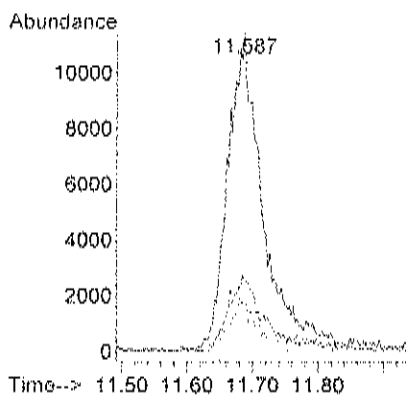
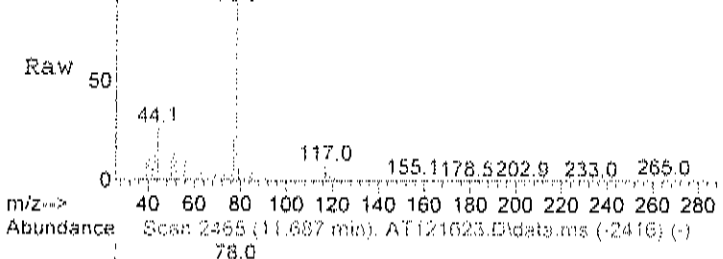
#30
Hexane
Concen: 0.23 ppb
RT: 9.276 min Scan# 1662
Delta R.T. -0.009 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

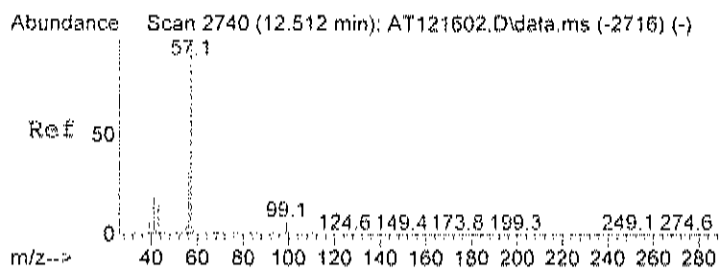
Tgt Ion: 57	Resp: 31188
Ion Ratio	Lower Upper
57 100	
41 68.9	62.0 102.0
56 51.5	31.8 71.8



#39
Benzene
Concen: 0.16 ppb
RT: 11.687 min Scan# 2465
Delta R.T. -0.003 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

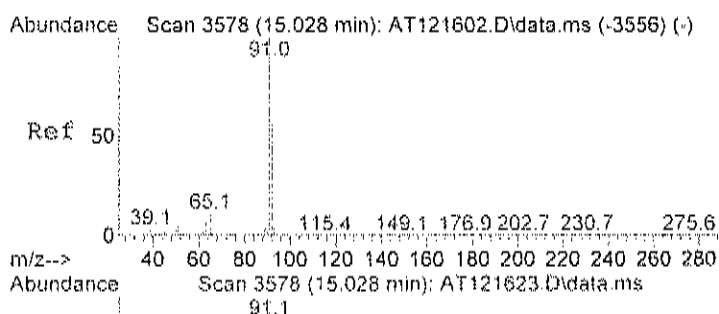
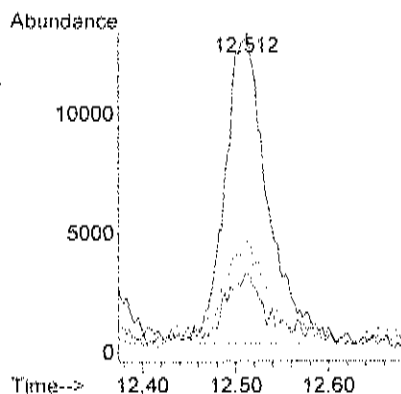
Tgt Ion: 78	Resp: 42678
Ion Ratio	Lower Upper
78 100	
77 25.3	2.5 42.5
51 16.7	0.5 40.5





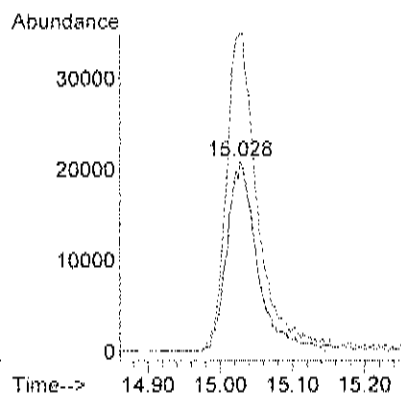
#42
2,2,4-trimethylpentane
Concen: 0.10 ppb
RT: 12.512 min Scan# 2740
Delta R.T. -0.003 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

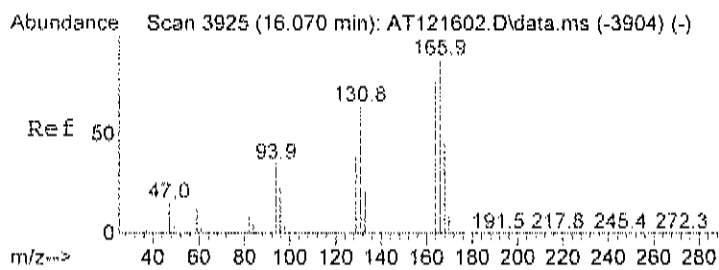
Tgt Ion	Ratio	Lower	Upper
57	100		
41	25.3	17.4	57.4
56	39.6	10.8	50.8



#51
Toluene
Concen: 0.34 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121623.D
Acq: 17 Dec 2022 4:19 am

Tgt Ion	Ratio	Lower	Upper
92	100		
91	170.8	153.3	193.3





#56

Tetrachloroethylene

Concen: 0.35 ppb

RT: 16.067 min Scan# 3924

Delta R.T. -0.008 min

Lab File: AT121623.D

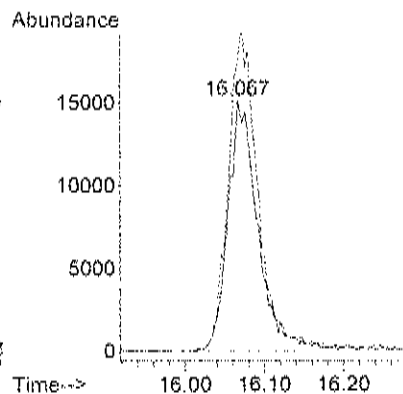
Acq: 17 Dec 2022 4:19 am

Tgt Ion:164 Resp: 39995

Ion Ratio Lower Upper

164 100

166 127.7 97.2 137.2



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-13

Lab Order: C2212031

Tag Number: 366,255

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-014A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	2.3	1.5		ppbV	10	12/17/2022 8:29:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
2,2,4-trimethylpentane	1.2	0.15		ppbV	1	12/17/2022 5:03:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Acetone	4.5	3.0		ppbV	10	12/17/2022 8:29:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Benzene	10	1.5		ppbV	10	12/17/2022 8:29:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Carbon disulfide	2.0	0.15		ppbV	1	12/17/2022 5:03:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Chloroform	0.11	0.15	J	ppbV	1	12/17/2022 5:03:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Cyclohexane	4.5	1.5		ppbV	10	12/17/2022 8:29:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS
 Lab Order: C2212031
 Project: IKEA Red Hook
 Lab ID: C2212031-014A

Client Sample ID: SVW-13
 Tag Number: 366,255
 Collection Date: 12/13/2022
 Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Ethyl acetate	1.6	0.15		ppbV	1	12/17/2022 5:03:00 AM
Ethylbenzene	0.13	0.15	J	ppbV	1	12/17/2022 5:03:00 AM
Freon 11	2.7	1.5		ppbV	10	12/17/2022 8:29:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Freon 12	0.73	0.15		ppbV	1	12/17/2022 5:03:00 AM
Heptane	0.17	0.15		ppbV	1	12/17/2022 5:03:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Hexane	0.37	0.15		ppbV	1	12/17/2022 5:03:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
m&p-Xylene	0.22	0.30	J	ppbV	1	12/17/2022 5:03:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl Ethyl Ketone	0.51	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:03:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Methylene chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Tetrachloroethylene	1.0	0.15		ppbV	1	12/17/2022 5:03:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Toluene	1.5	0.15		ppbV	1	12/17/2022 5:03:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Trichloroethene	0.41	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:03:00 AM
Surr: Bromofluorobenzene	108	46.7-129		%REC	1	12/17/2022 5:03:00 AM

Qualifiers:

- . Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-13

Lab Order: C2212031

Tag Number: 366,255

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-014A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	13	8.2		ug/m3	10	12/17/2022 8:29:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:03:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:03:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:03:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 5:03:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 5:03:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:03:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
2,2,4-trimethylpentane	5.5	0.70		ug/m3	1	12/17/2022 5:03:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 5:03:00 AM
Acetone	11	7.1		ug/m3	10	12/17/2022 8:29:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 5:03:00 AM
Benzene	33	4.8		ug/m3	10	12/17/2022 8:29:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 5:03:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 5:03:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 5:03:00 AM
Carbon disulfide	6.3	0.47		ug/m3	1	12/17/2022 5:03:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 5:03:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 5:03:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 5:03:00 AM
Chloroform	0.54	0.73	J	ug/m3	1	12/17/2022 5:03:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 5:03:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:03:00 AM
Cyclohexane	15	5.2		ug/m3	10	12/17/2022 8:29:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 5:03:00 AM
Ethyl acetate	5.6	0.54		ug/m3	1	12/17/2022 5:03:00 AM
Ethylbenzene	0.56	0.65	J	ug/m3	1	12/17/2022 5:03:00 AM
Freon 11	15	8.4		ug/m3	10	12/17/2022 8:29:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 5:03:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 5:03:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-13

Lab Order: C2212031

Tag Number: 366,255

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-014A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.6	0.74		ug/m3	1	12/17/2022 5:03:00 AM
Heptane	0.70	0.61		ug/m3	1	12/17/2022 5:03:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 5:03:00 AM
Hexane	1.3	0.53		ug/m3	1	12/17/2022 5:03:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 5:03:00 AM
m&p-Xylene	0.96	1.3	J	ug/m3	1	12/17/2022 5:03:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
Methyl Ethyl Ketone	1.5	0.88		ug/m3	1	12/17/2022 5:03:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:03:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 5:03:00 AM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/17/2022 5:03:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 5:03:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 5:03:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 5:03:00 AM
Tetrachloroethylene	7.1	1.0		ug/m3	1	12/17/2022 5:03:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 5:03:00 AM
Toluene	5.7	0.57		ug/m3	1	12/17/2022 5:03:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:03:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:03:00 AM
Trichloroethene	2.2	0.81		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 5:03:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 5:03:00 AM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

Page 28 of 40

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121624.D
 Acq On : 17 Dec 2022 5:03 am
 Operator : RJP
 Sample : C2212031-014A
 Misc : AD12_1UG
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 17 08:41:02 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

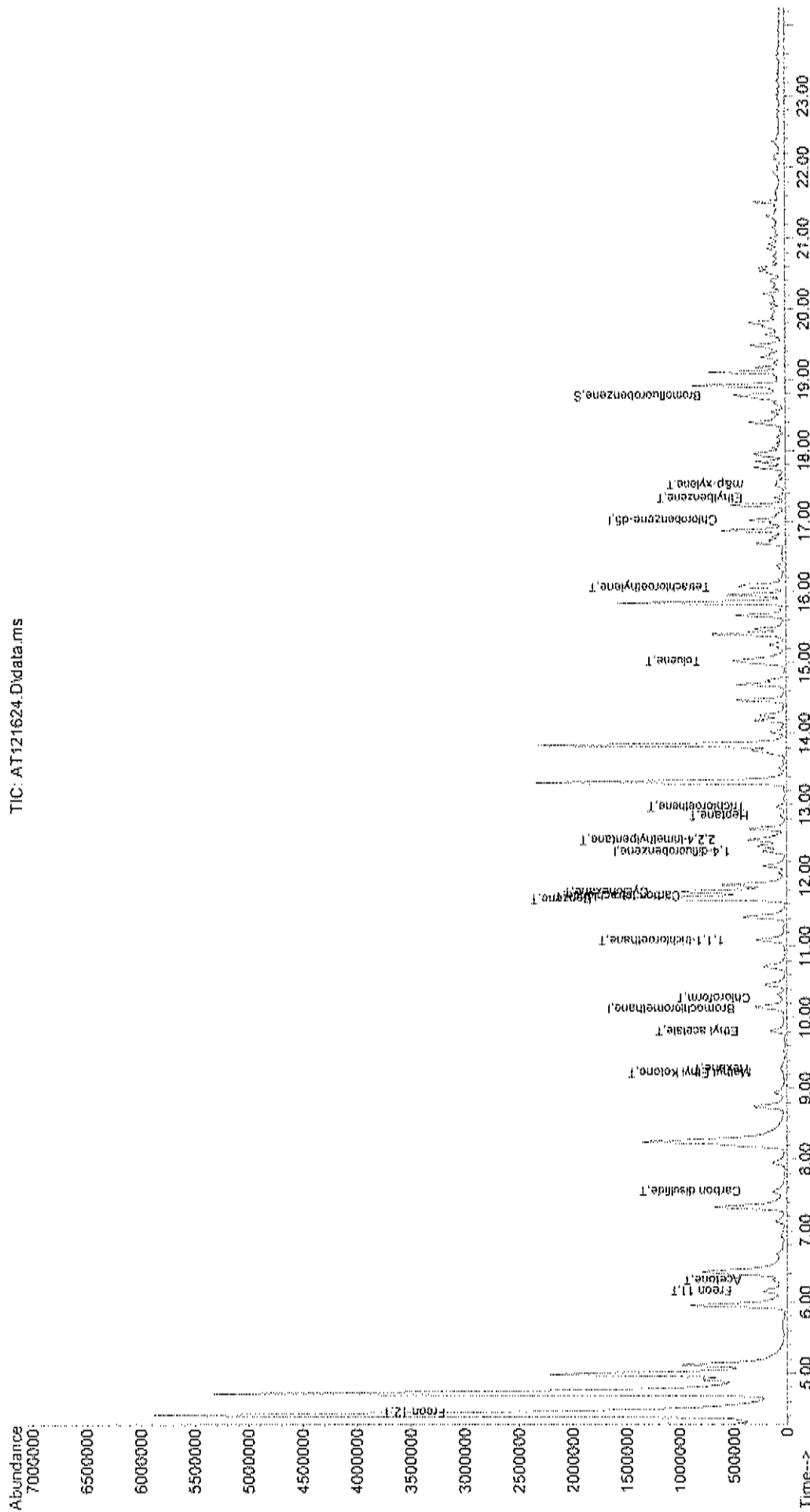
Compound	R.T. QIon		Response	Conc	Units	Dev(Min)

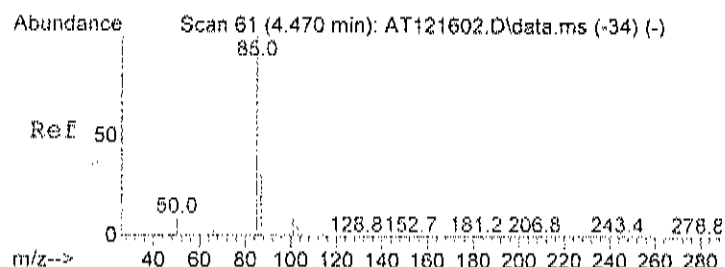
Internal Standards						
1) Bromochloromethane	10.123	128	49063	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	304680	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	248575	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	180565	1.08	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	108.00%
Target Compounds						
						Qvalue
3) Freon 12	4.461	85	120450	0.73	ppb	97
14) Freon 11	6.154	101	366673	2.69	ppb	99
15) Acetone	6.307	58	115439	4.49	ppb	# 1
23) Carbon disulfide	7.556	76	392421	2.03	ppb	99
28) Methyl Ethyl Ketone	9.225	72	20470m	0.51	ppb	
30) Hexane	9.276	57	52264	0.37	ppb	88
31) Ethyl acetate	9.808	43	307100	1.55	ppb	91
32) Chloroform	10.273	83	16373	0.11	ppb	# 17
36) 1,1,1-trichloroethane	11.089	97	351044	2.46	ppb	97
37) Cyclohexane	11.774	56	735643m	5.31	ppb	
38) Carbon tetrachloride	11.717	117	3621	0.03	ppb	95
39) Benzene	11.681	78	2897587	10.70	ppb	93
42) 2,2,4-trimethylpentane	12.509	57	498449	1.17	ppb	# 81
43) Heptane	12.849	43	24118	0.17	ppb	88
44) Trichloroethene	12.972	130	47923	0.41	ppb	95
51) Toluene	15.028	92	301071	1.51	ppb	99
56) Tetrachloroethylene	16.070	164	128784	1.05	ppb	90
58) Ethylbenzene	17.330	91	54031	0.13	ppb	100
59) m&p-xylene	17.517	91	70819	0.22	ppb	85

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121624.D
 Acq On : 17 Dec 2022 5:03 am
 Operator : RJP
 Sample : C2212031-014A
 Misc : AD12_1UG
 ALS Vial : 24 Sample Multiplier: 1

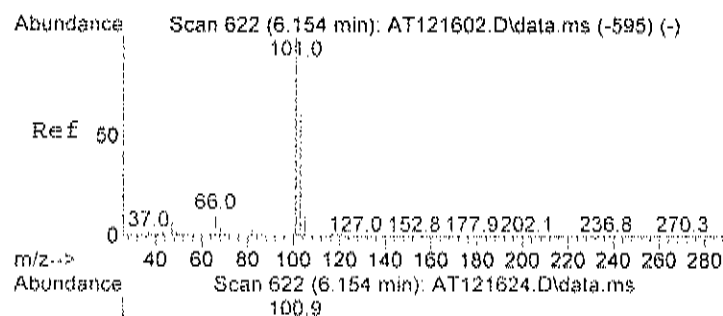
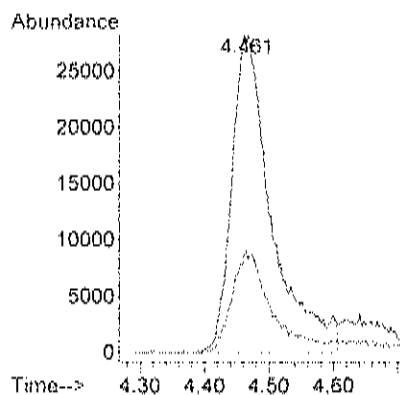
Quant Time: Dec 17 08:41:02 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





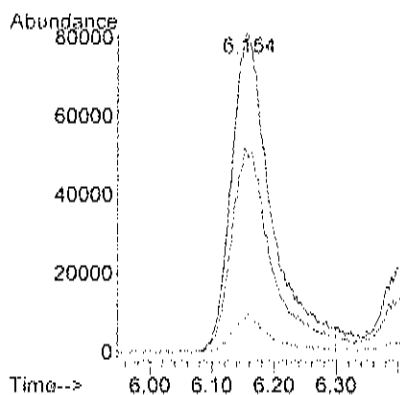
#3
Freon 12
Concen: 0.73 ppb
RT: 4.461 min Scan# 58
Delta R.T. -0.012 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

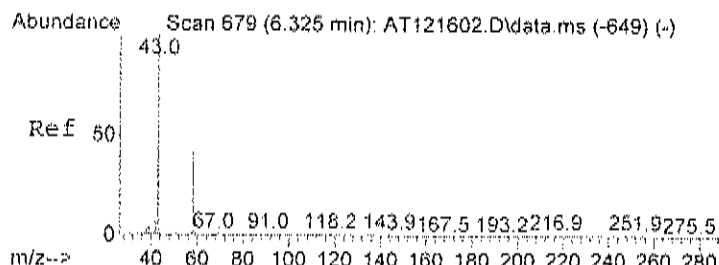
Tgt Ion:	85	Resp:	120450
Ion	Ratio	Lower	Upper
85	100		
87	32.3	14.3	54.3



#14
Freon 11
Concen: 2.69 ppb
RT: 6.154 min Scan# 622
Delta R.T. -0.012 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

Tgt Ion:	101	Resp:	366673
Ion	Ratio	Lower	Upper
101	100		
103	64.6	44.1	84.1
105	10.9	0.0	32.0





#15

Acetone

Concen: 4.49 ppb

RT: 6.307 min Scan# 673

Delta R.T. -0.021 min

Lab File: AT121624.D

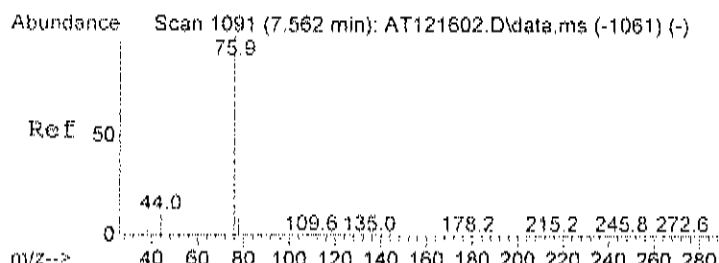
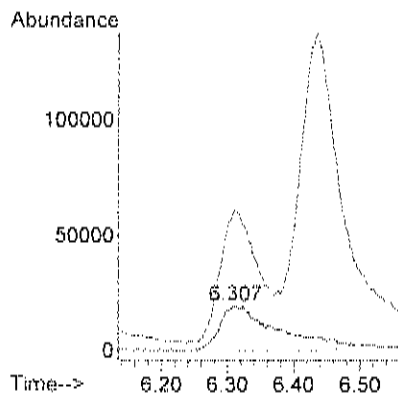
Acq: 17 Dec 2022 5:03 am

Tgt Ion: 58 Resp: 115439

Ion Ratio Lower Upper

58 100

43 0.0 272.3 332.3#



#23

Carbon disulfide

Concen: 2.03 ppb

RT: 7.556 min Scan# 1089

Delta R.T. -0.003 min

Lab File: AT121624.D

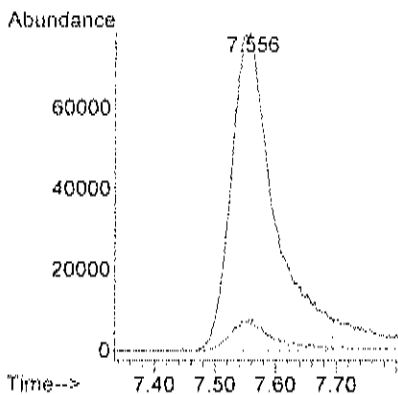
Acq: 17 Dec 2022 5:03 am

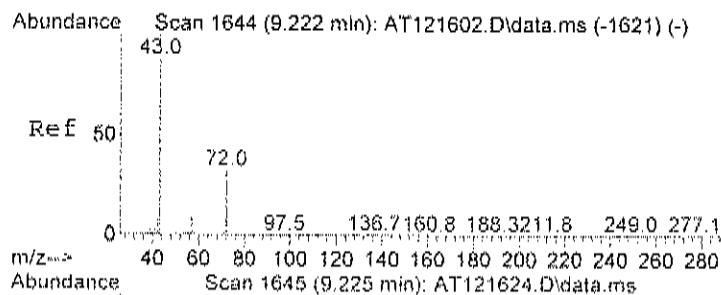
Tgt Ion: 76 Resp: 392421

Ion Ratio Lower Upper

76 100

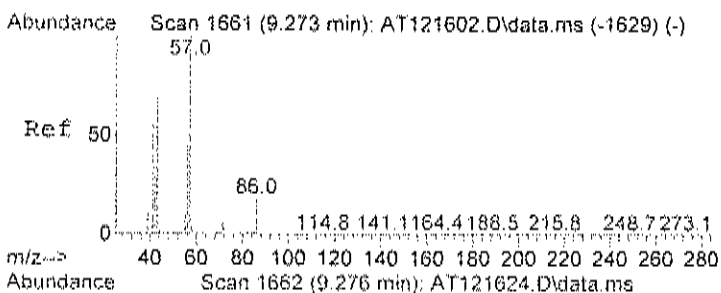
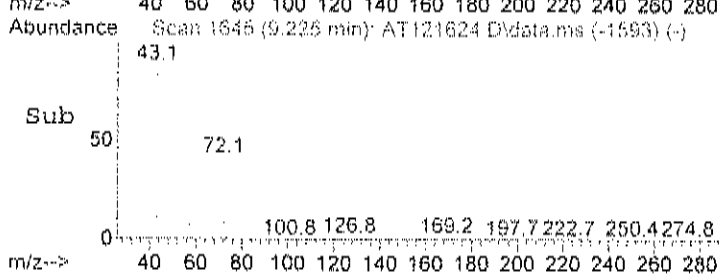
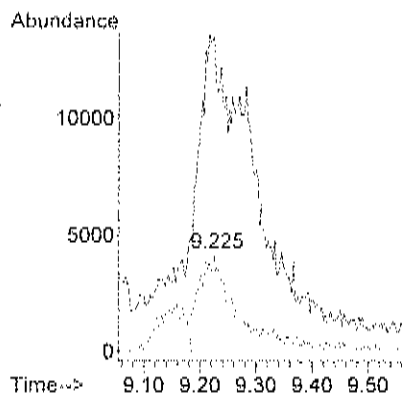
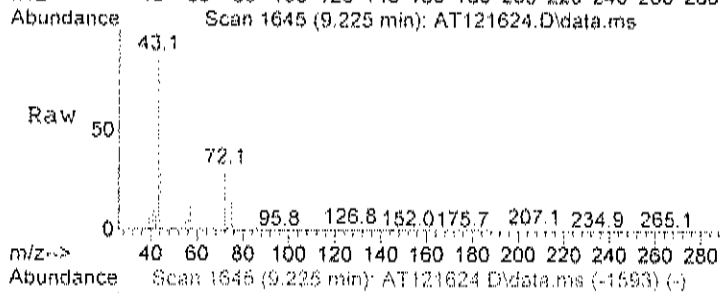
78 9.2 0.0 28.7





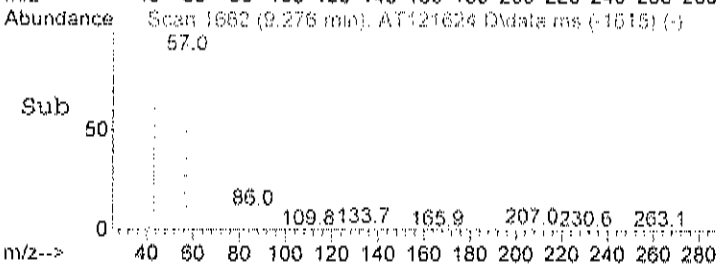
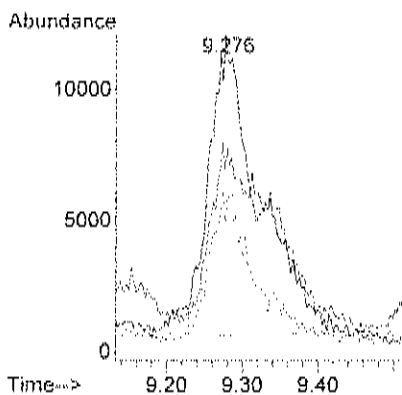
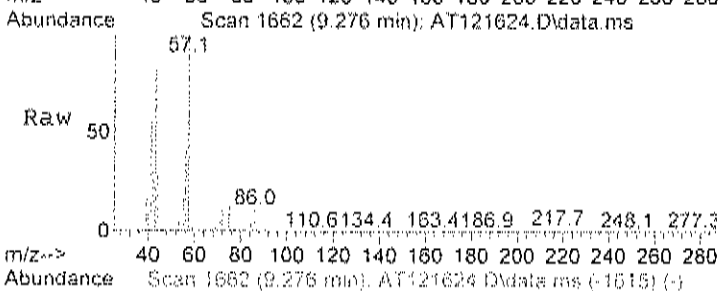
#28
Methyl Ethyl Ketone
Concen: 0.51 ppb m
RT: 9.225 min Scan# 1645
Delta R.T. 0.006 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

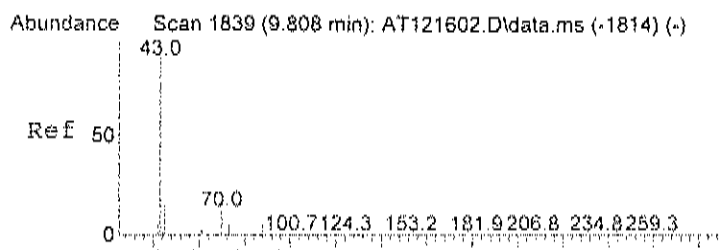
Tgt Ion:	72	Resp:	20470
Ion	Ratio	Lower	Upper
72	100		
43	281.3	333.7	373.7#
72	124.2	80.0	120.0#



#30
Hexane
Concen: 0.37 ppb
RT: 9.276 min Scan# 1662
Delta R.T. -0.009 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

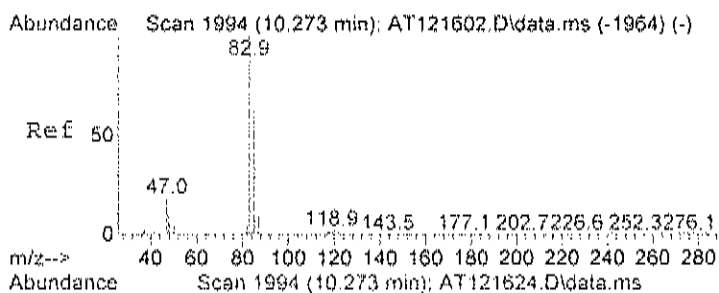
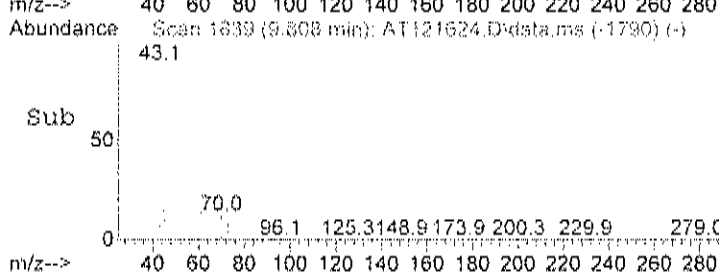
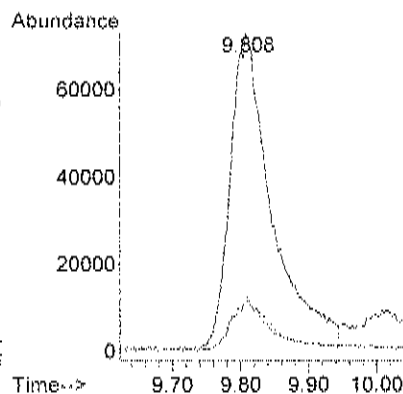
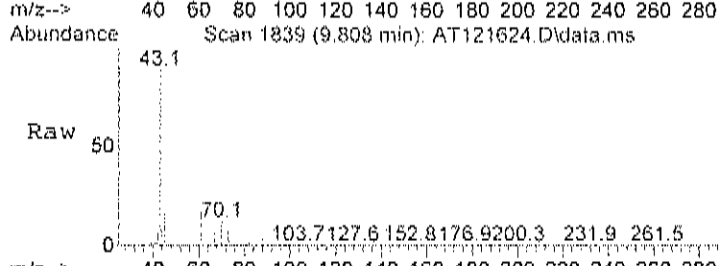
Tgt Ion:	57	Resp:	52264
Ion	Ratio	Lower	Upper
57	100		
41	70.5	62.0	102.0
56	44.9	31.8	71.8





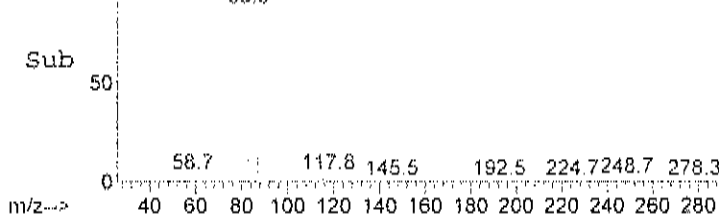
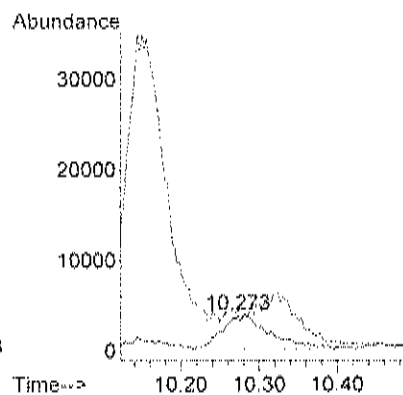
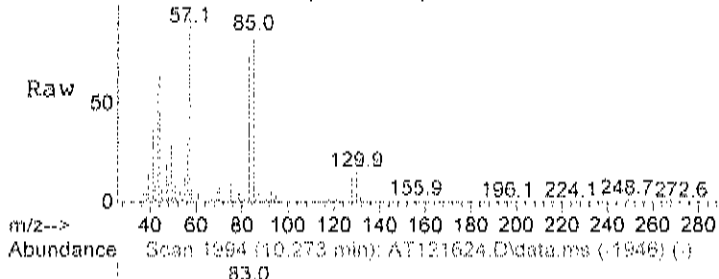
#31
Ethyl acetate
Concen: 1.55 ppb
RT: 9.808 min Scan# 1839
Delta R.T. -0.002 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

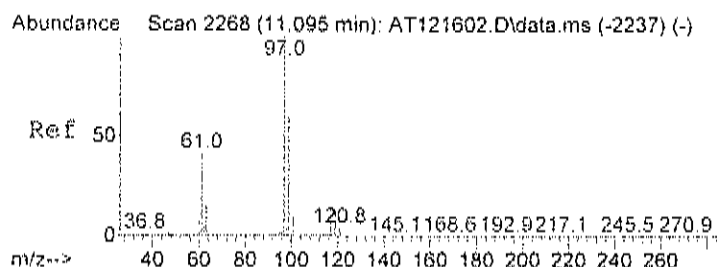
Tgt Ion	Ratio	Lower	Upper
43	100		
45	15.2	0.0	32.9
61	17.4	0.0	33.0



#32
Chloroform
Concen: 0.11 ppb
RT: 10.273 min Scan# 1994
Delta R.T. -0.006 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

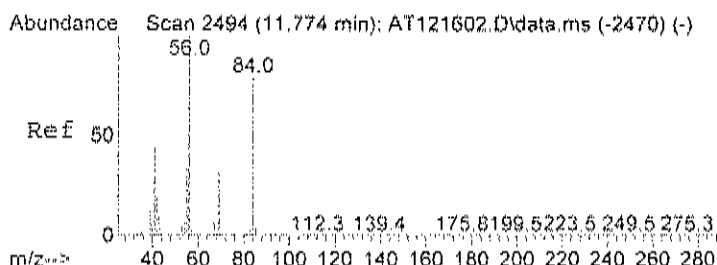
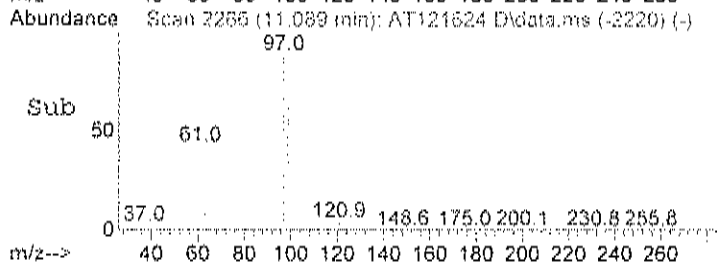
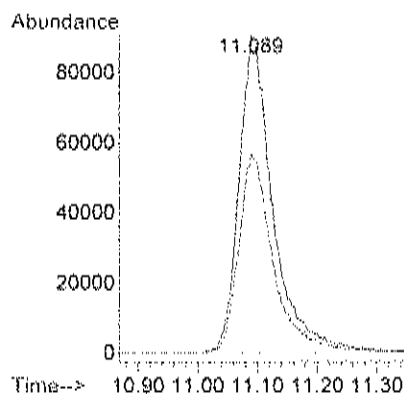
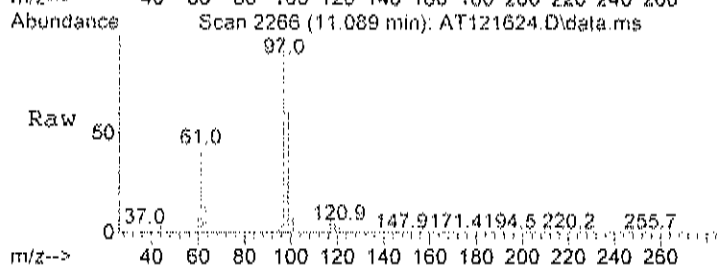
Tgt Ion	Ratio	Lower	Upper
83	100		
85	0.0	46.4	86.4#





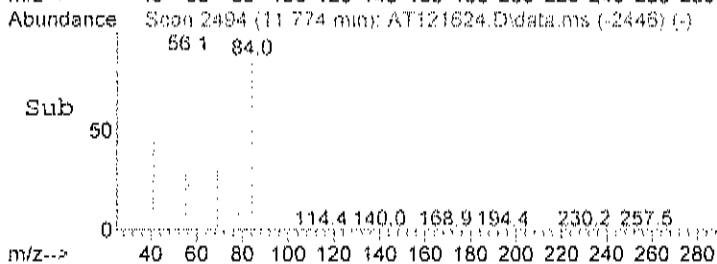
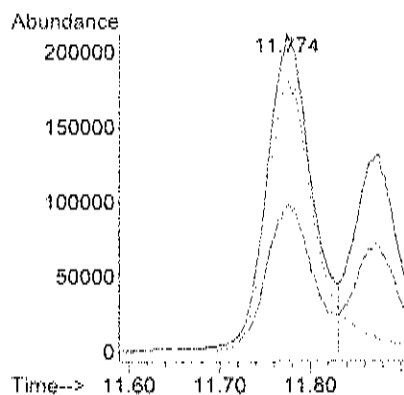
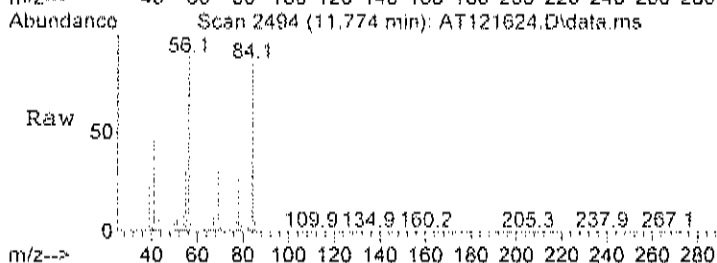
#36
1,1,1-trichloroethane
Concen: 2.46 ppb
RT: 11.089 min Scan# 2266
Delta R.T. -0.012 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

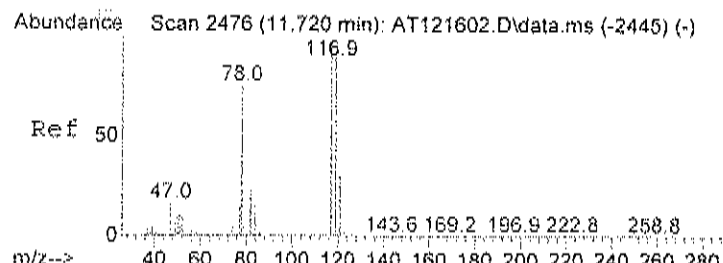
Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.1	41.6	81.6



#37
Cyclohexane
Concen: 5.31 ppb m
RT: 11.774 min Scan# 2494
Delta R.T. -0.006 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

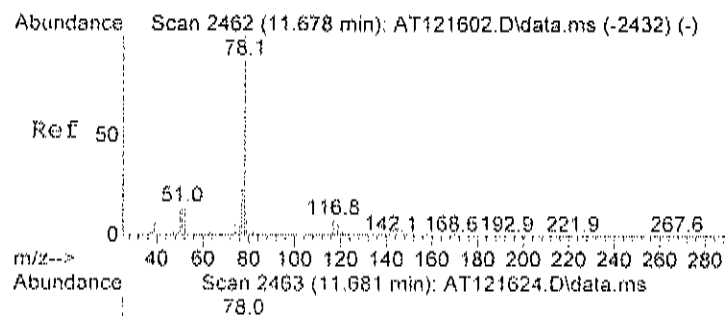
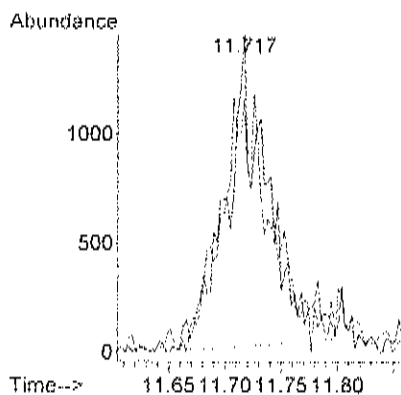
Tgt Ion	Ratio	Lower	Upper
56	100		
41	79.1	32.6	72.6#
84	92.0	18.2	58.2#





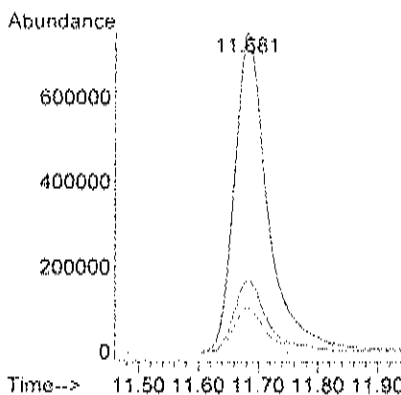
#38
Carbon tetrachloride
Concen: 0.03 ppb
RT: 11.717 min Scan# 2475
Delta R.T. -0.006 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

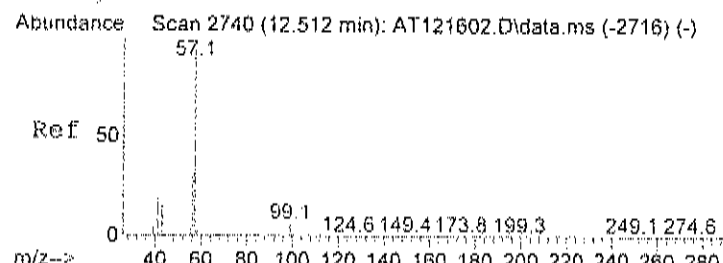
Tgt Ion	117	Resp	3621
Ion Ratio	100	Lower	Upper
117	100		
119	99.0	74.2	114.2



#39
Benzene
Concen: 10.70 ppb
RT: 11.681 min Scan# 2463
Delta R.T. -0.009 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

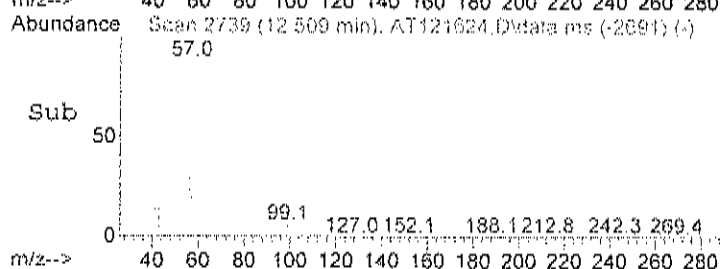
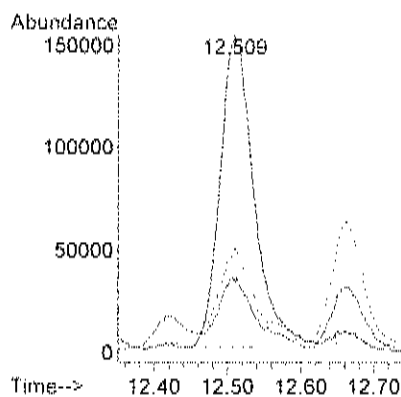
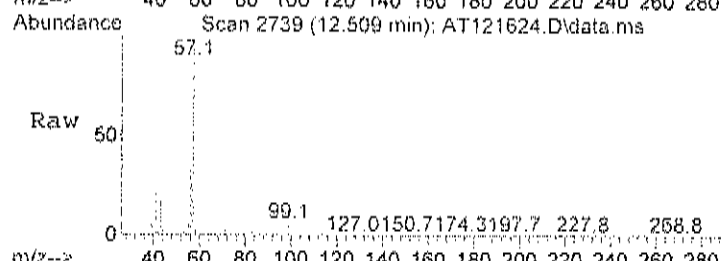
Tgt Ion	78	Resp	2897587
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
78	100		
77	23.2	2.5	42.5
51	14.7	0.5	40.5





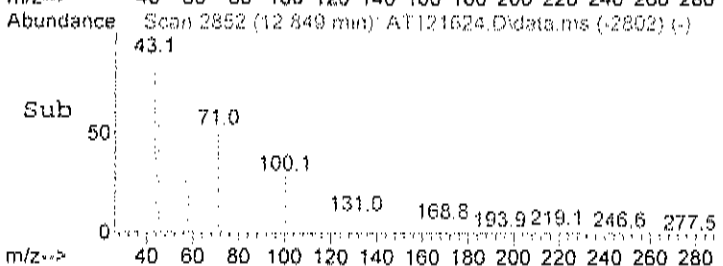
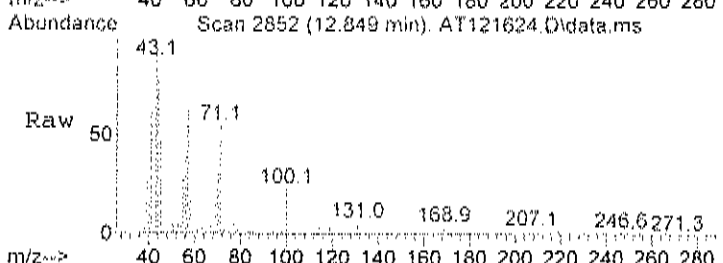
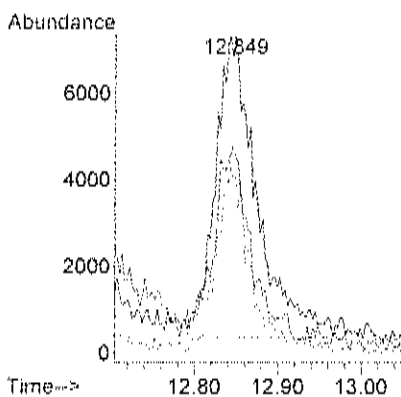
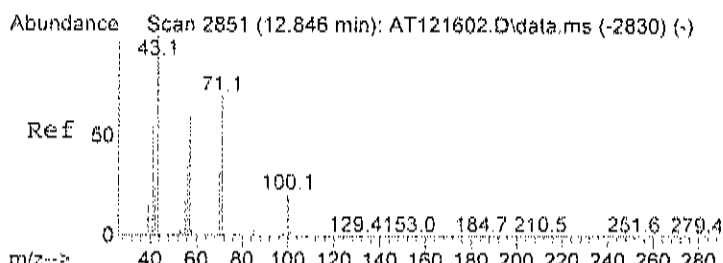
#42
2,2,4-trimethylpentane
Concen: 1.17 ppb
RT: 12.509 min Scan# 2739
Delta R.T. -0.006 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

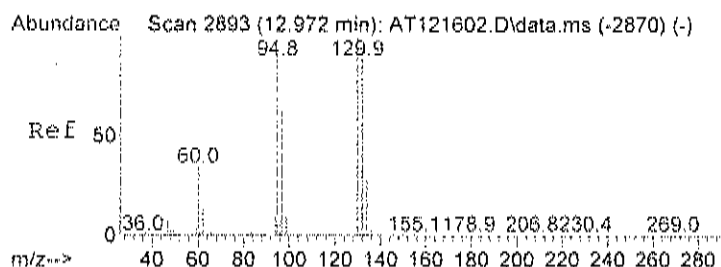
Tgt Ion	Ratio	Lower	Upper
57	100		
41	35.2	17.4	57.4
56	51.4	10.8	50.8#



#43
Heptane
Concen: 0.17 ppb
RT: 12.849 min Scan# 2852
Delta R.T. 0.001 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

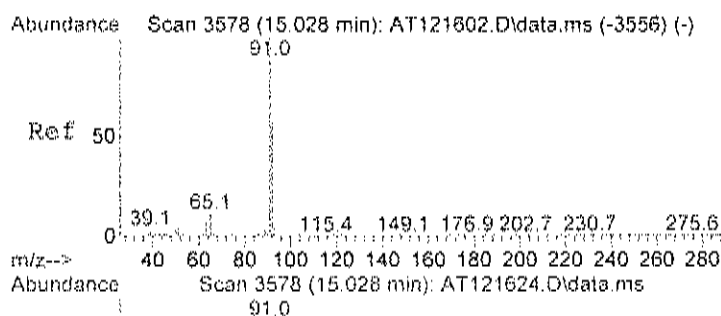
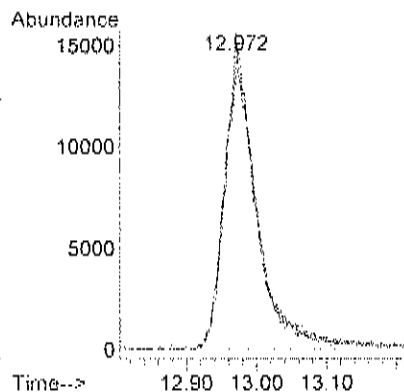
Tgt Ion	Ratio	Lower	Upper
43	100		
57	71.6	42.3	82.3
71	50.5	38.8	78.8





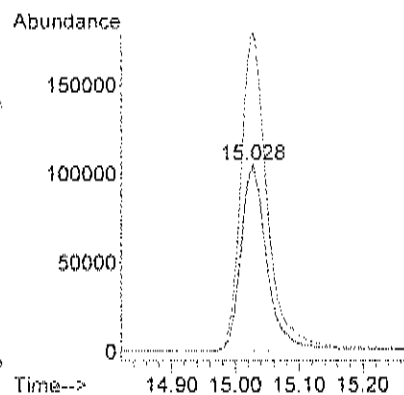
#44
Trichloroethene
Concen: 0.41 ppb
RT: 12.972 min Scan# 2893
Delta R.T. -0.008 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

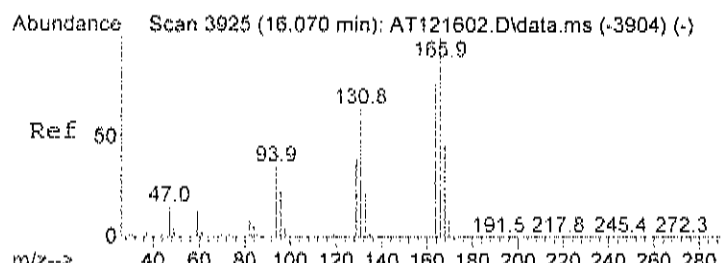
Tgt	Ion	Ratio	Lower	Upper
130	100			
132	96.9	79.7	119.7	
95	96.3	69.3	109.3	



#51
Toluene
Concen: 1.51 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

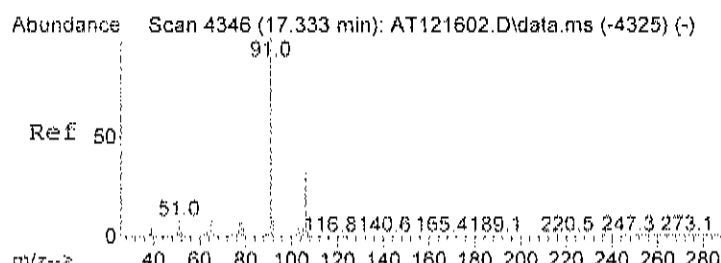
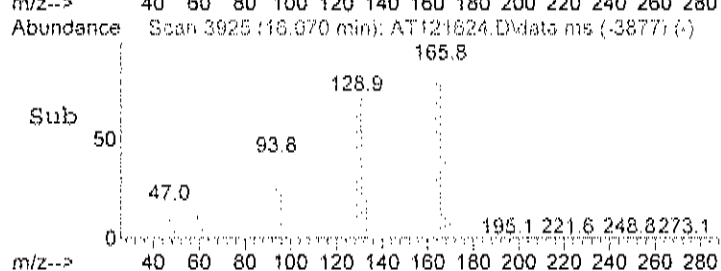
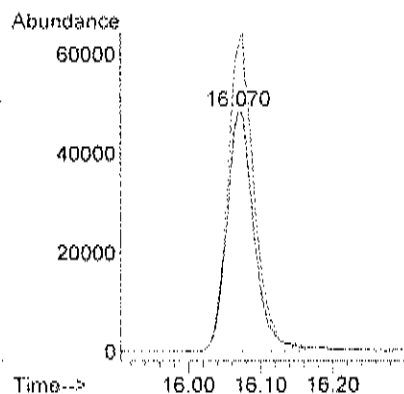
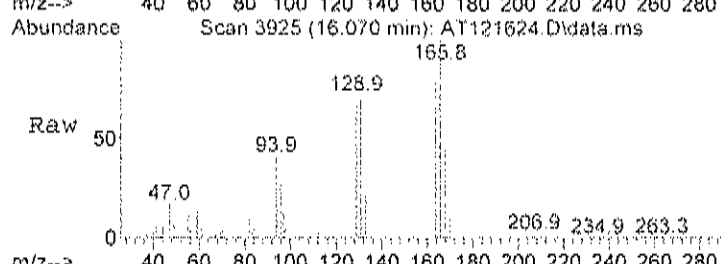
Tgt	Ion	Ratio	Lower	Upper
92	100			
91	172.5	153.3	193.3	





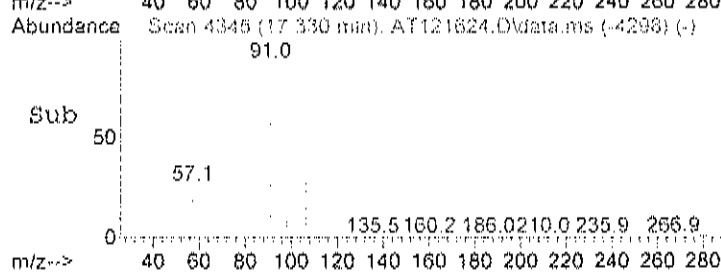
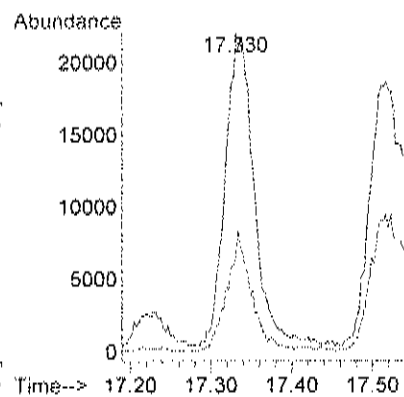
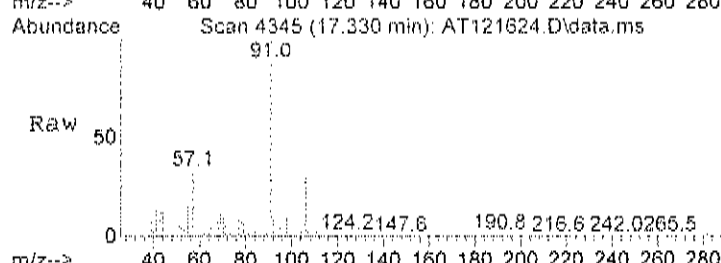
#56
Tetrachloroethylene
Concen: 1.05 ppb
RT: 16.070 min Scan# 3925
Delta R.T. -0.005 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

Tgt Ion	Ratio	Lower	Upper
164	100		
166	128.7	97.2	137.2

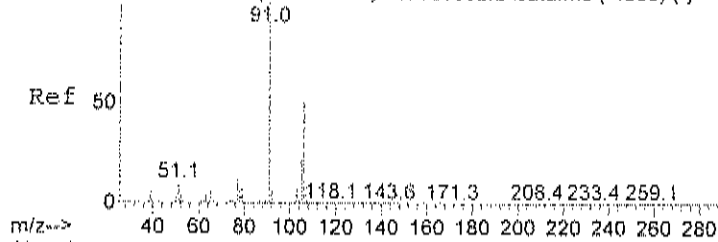


#58
Ethylbenzene
Concen: 0.13 ppb
RT: 17.330 min Scan# 4345
Delta R.T. -0.009 min
Lab File: AT121624.D
Acq: 17 Dec 2022 5:03 am

Tgt Ion	Ratio	Lower	Upper
91	100		
106	34.2	13.9	53.9



Abundance Scan 4416 (17.544 min): AT121602.D\data.ms (-4386) (-)



#59

m&p-xylene

Concen: 0.22 ppb

RT: 17.517 min Scan# 4407

Delta R.T. -0.026 min

Lab File: AT121624.D

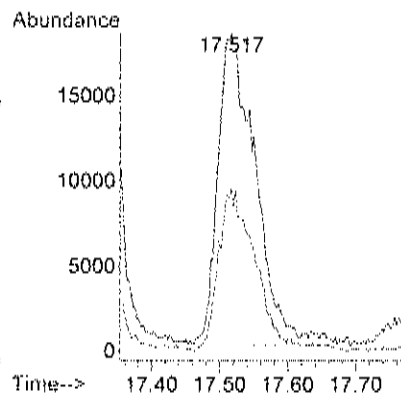
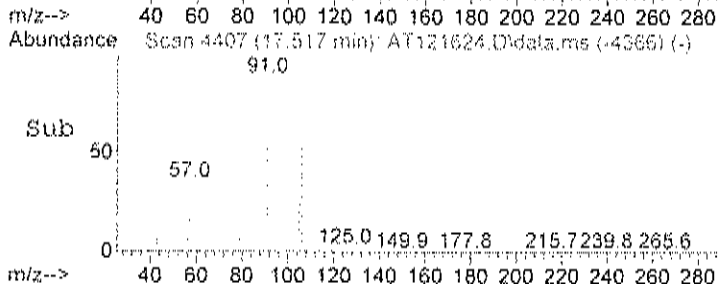
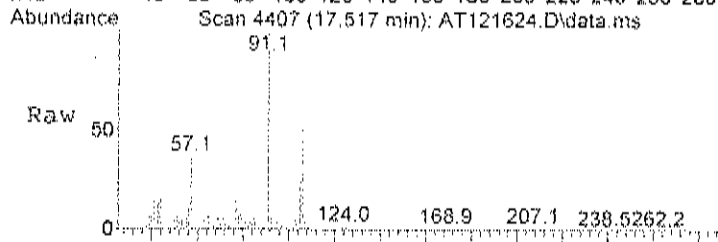
Acq: 17 Dec 2022 5:03 am

Tgt Ion: 91 Resp: 70819

Ion Ratio Lower Upper

91 100

106 51.9 22.4 62.4



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121716.D
 Acq On : 17 Dec 2022 8:29 pm
 Operator : RJP
 Sample : C2212031-014A 10X
 Misc : AD12_1UG
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 18 10:35:41 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

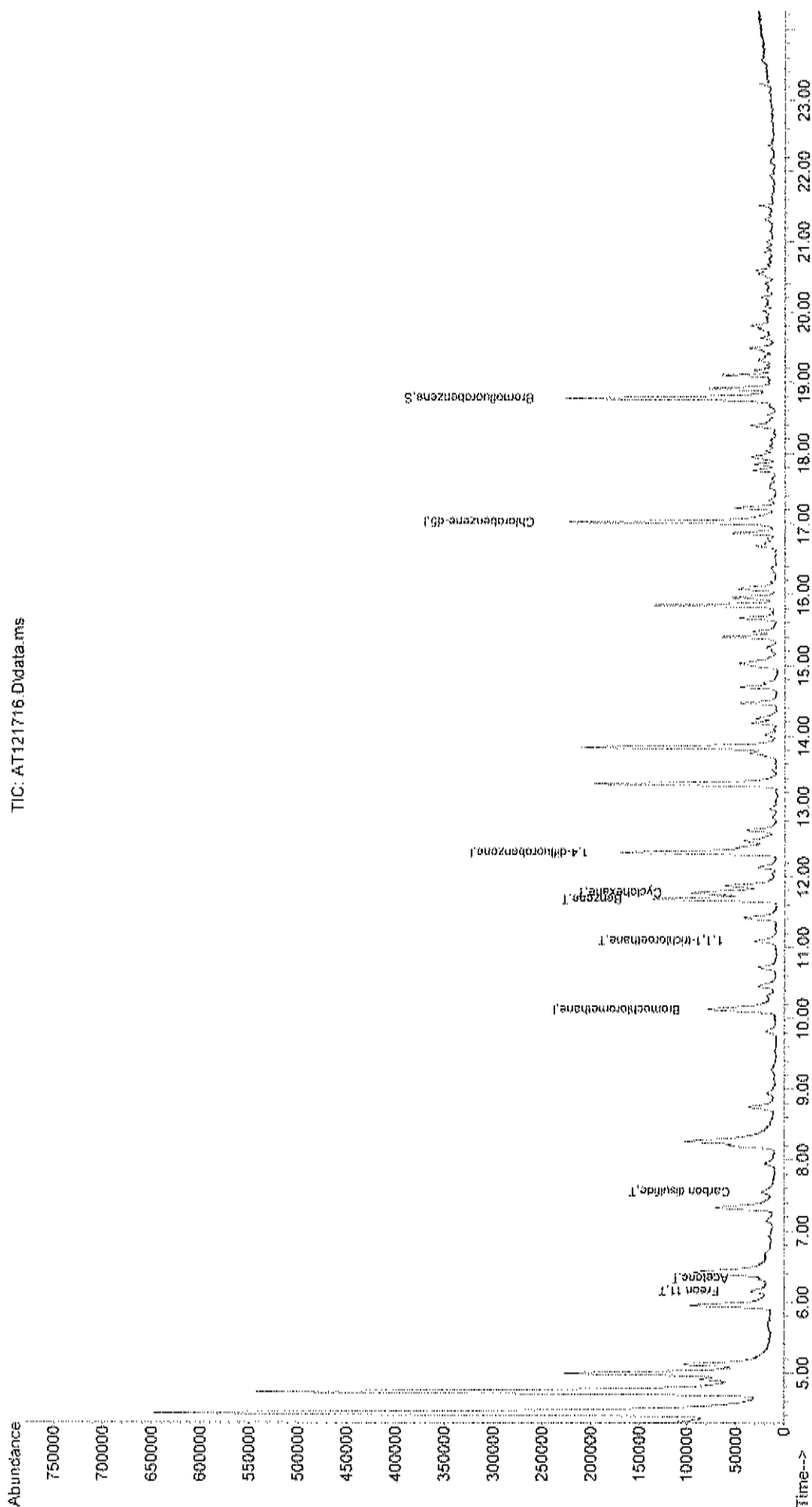
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

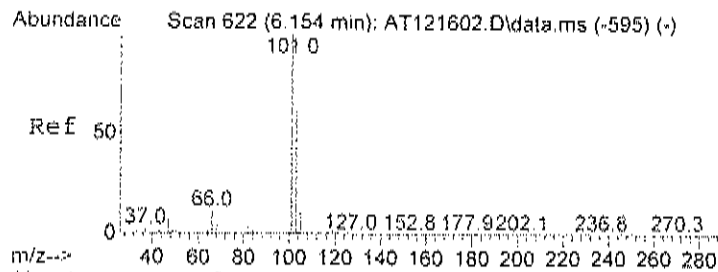
Internal Standards						
1) Bromochloromethane	10.120	128	45490	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.341	114	267860	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	213842	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	126172	0.87	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	87.00%
Target Compounds						
14) Freon 11	6.154	101	34409	0.27	ppb	Qvalue 95
15) Acetone	6.334	58	10639	0.45	ppb	# 1
23) Carbon disulfide	7.553	76	41146	0.23	ppb	91
36) 1,1,1-trichloroethane	11.092	97	29269	0.23	ppb	98
37) Cyclohexane	11.771	56	54910m	0.45	ppb	
39) Benzene	11.681	78	248462	1.04	ppb	94

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121716.D
Acq On : 17 Dec 2022 8:29 pm
Operator : RJP
Sample : C2212031-014A 10X
Misc : AD12 IUG
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 18 10:35:41 2022
Quant Method : C:\msdchem\1\methods\AD12_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





#14

Freon 11

Concen: 0.27 ppb

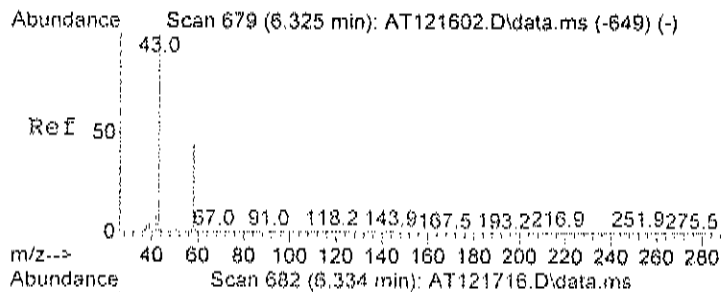
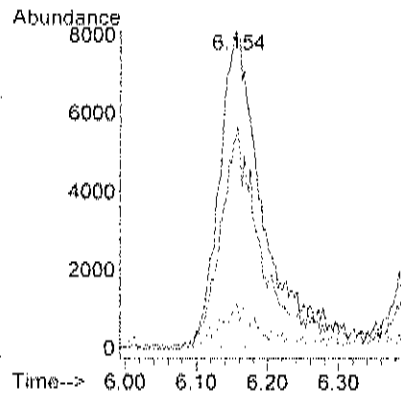
RT: 6.154 min Scan# 622

Delta R.T. -0.012 min

Lab File: AT121716.D

Acq: 17 Dec 2022 8:29 pm

Tgt Ion:	101	Resp:	34409
Ion	Ratio	Lower	Upper
101	100		
103	68.2	44.1	84.1
105	10.9	0.0	32.0



#15

Acetone

Concen: 0.45 ppb

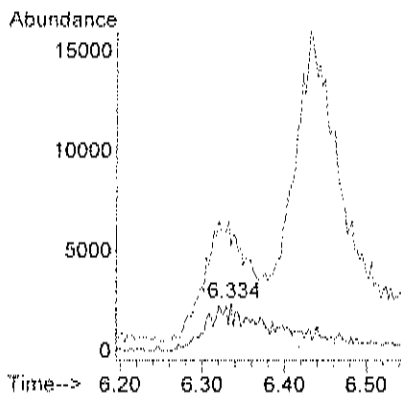
RT: 6.334 min Scan# 682

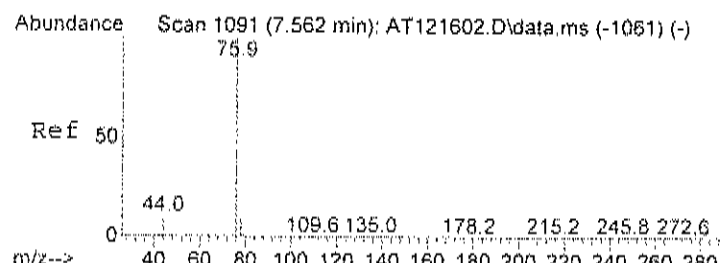
Delta R.T. 0.006 min

Lab File: AT121716.D

Acq: 17 Dec 2022 8:29 pm

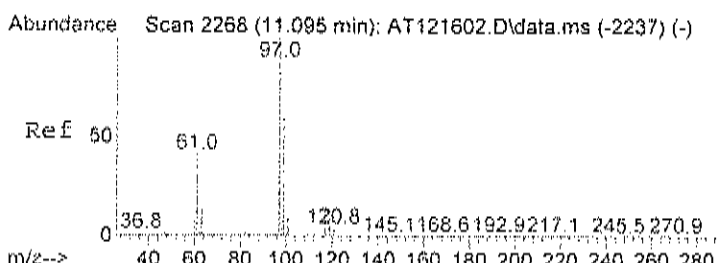
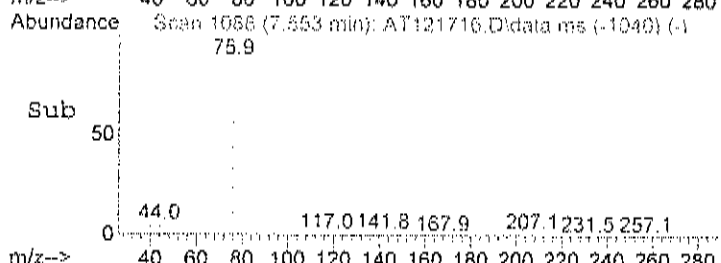
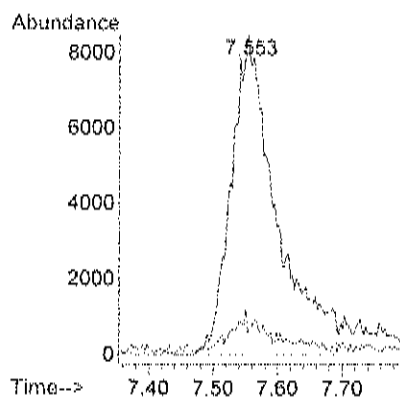
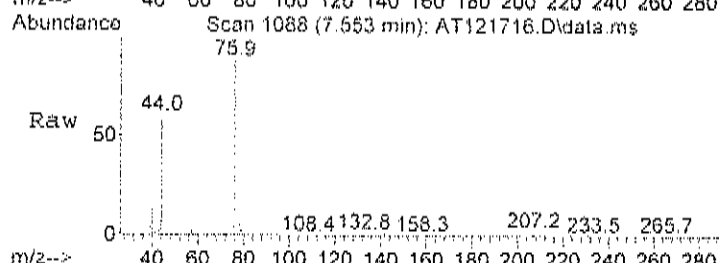
Tgt Ion:	58	Resp:	10639
Ion	Ratio	Lower	Upper
58	100		
43	0.0	272.3	332.3#





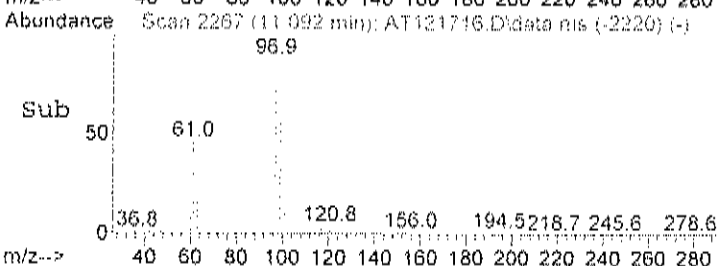
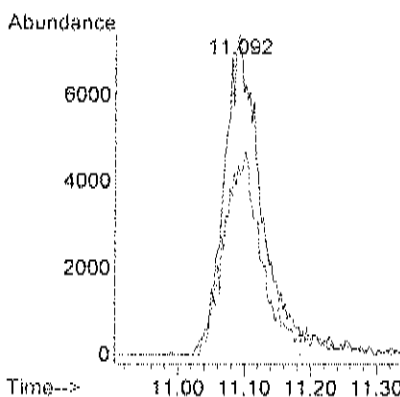
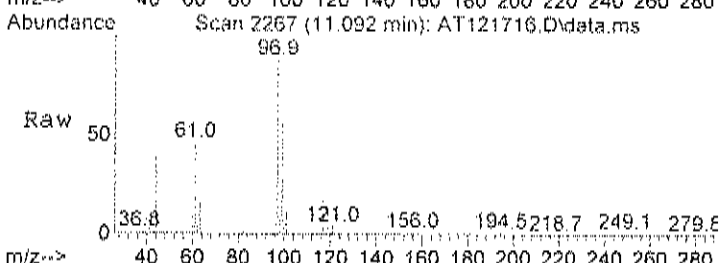
#23
Carbon disulfide
Concen: 0.23 ppb
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121716.D
Acq: 17 Dec 2022 8:29 pm

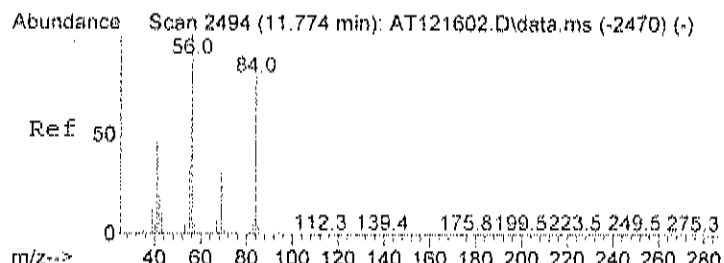
Tgt Ion	76	78
Ion	76	78
Ratio	100	12.0
Resp	41146	0.0
Lower		
Upper		28.7



#36
1,1,1-trichloroethane
Concen: 0.23 ppb
RT: 11.092 min Scan# 2267
Delta R.T. -0.009 min
Lab File: AT121716.D
Acq: 17 Dec 2022 8:29 pm

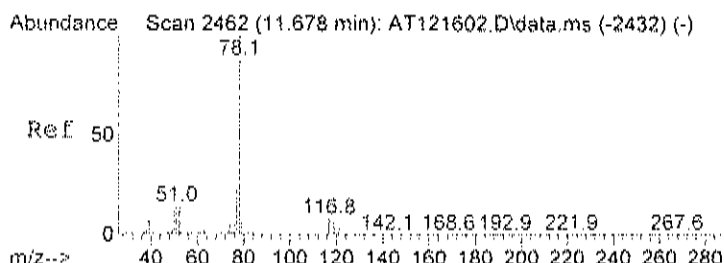
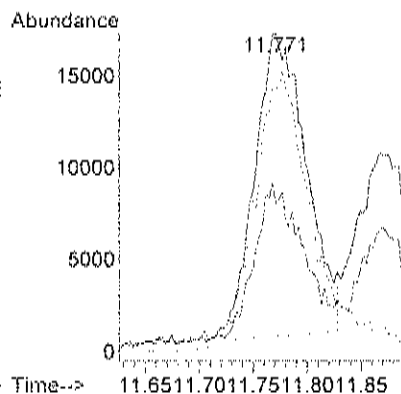
Tgt Ion	97	99
Ion	97	99
Ratio	100	63.0
Resp	29269	41.6
Lower		
Upper		81.6





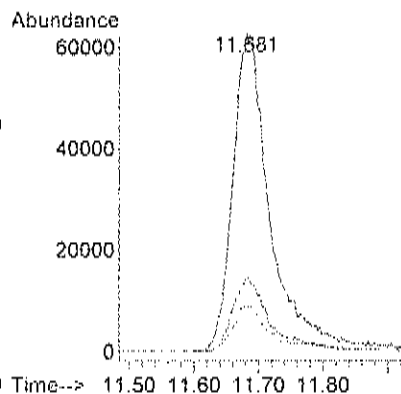
#37
Cyclohexane
Concen: 0.45 ppb m
RT: 11.771 min Scan# 2493
Delta R.T. -0.009 min
Lab File: AT121716.D
Acq: 17 Dec 2022 8:29 pm

Tgt Ion	56	Resp	54910
Ion	Ratio	Lower	Upper
56	100		
41	79.1	32.6	72.6#
84	102.7	18.2	58.2#



#39
Benzene
Concen: 1.04 ppb
RT: 11.681 min Scan# 2463
Delta R.T. -0.009 min
Lab File: AT121716.D
Acq: 17 Dec 2022 8:29 pm

Tgt Ion	78	Resp	248462
Ion	Ratio	Lower	Upper
78	100		
77	23.2	2.5	42.5
51	15.3	0.5	40.5



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-14

Lab Order: C2212031

Tag Number: 232,156

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-015A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/17/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2,4-Trimethylbenzene	1.3	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3,5-Trimethylbenzene	0.58	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 5:48:00 AM
2,2,4-trimethylpentane	10	1.4		ppbV	9	12/17/2022 9:13:00 PM
4-ethyltoluene	0.29	0.15		ppbV	1	12/17/2022 5:48:00 AM
Acetone	80	27		ppbV	90	12/17/2022 9:56:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Benzene	4.1	1.4		ppbV	9	12/17/2022 9:13:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Carbon disulfide	18	1.4		ppbV	9	12/17/2022 9:13:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloroethane	0.37	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
cis-1,2-Dichloroethene	1.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Cyclohexane	20	14		ppbV	90	12/17/2022 9:56:00 PM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated,
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-14

Lab Order: C2212031

Tag Number: 232,156

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-015A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Ethylbenzene	0.42	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 11	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Freon 12	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Heptane	5.6	0.15		ppbV	1	12/17/2022 5:48:00 AM
Heptane	5.2	1.4		ppbV	9	12/17/2022 9:13:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Hexane	15	1.4		ppbV	9	12/17/2022 9:13:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
m&p-Xylene	1.4	0.30		ppbV	1	12/17/2022 5:48:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 5:48:00 AM
Methyl Ethyl Ketone	20	27	J	ppbV	90	12/17/2022 9:56:00 PM
Methyl Isobutyl Ketone	100	27		ppbV	90	12/17/2022 9:56:00 PM
Methyl tert-butyl ether	12	1.4		ppbV	9	12/17/2022 9:13:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
o-Xylene	1.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Styrene	0.23	0.15		ppbV	1	12/17/2022 5:48:00 AM
Tetrachloroethylene	1.1	0.15		ppbV	1	12/17/2022 5:48:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Toluene	2.0	0.15		ppbV	1	12/17/2022 5:48:00 AM
trans-1,2-Dichloroethene	0.55	0.15		ppbV	1	12/17/2022 5:48:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Trichloroethene	0.74	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 5:48:00 AM
Surr: Bromofluorobenzene	114	46.7-129		%REC	1	12/17/2022 5:48:00 AM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-14

Lab Order: C2212031

Tag Number: 232,156

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-015A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:48:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 5:48:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:48:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 5:48:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
1,2,4-Trimethylbenzene	6.5	0.74		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 5:48:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 5:48:00 AM
1,3,5-Trimethylbenzene	2.9	0.74		ug/m3	1	12/17/2022 5:48:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 5:48:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 5:48:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
2,2,4-trimethylpentane	47	6.5		ug/m3	9	12/17/2022 9:13:00 PM
4-ethyltoluene	1.4	0.74		ug/m3	1	12/17/2022 5:48:00 AM
Acetone	190	64		ug/m3	90	12/17/2022 9:56:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 5:48:00 AM
Benzene	13	4.5		ug/m3	9	12/17/2022 9:13:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 5:48:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 5:48:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 5:48:00 AM
Carbon disulfide	55	4.4		ug/m3	9	12/17/2022 9:13:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 5:48:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 5:48:00 AM
Chloroethane	0.98	0.40		ug/m3	1	12/17/2022 5:48:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 5:48:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 5:48:00 AM
cis-1,2-Dichloroethene	4.0	0.59		ug/m3	1	12/17/2022 5:48:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:48:00 AM
Cyclohexane	68	48		ug/m3	90	12/17/2022 9:56:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 5:48:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 5:48:00 AM
Ethylbenzene	1.8	0.65		ug/m3	1	12/17/2022 5:48:00 AM
Freon 11	< 0.84	0.84		ug/m3	1	12/17/2022 5:48:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 5:48:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 5:48:00 AM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-14

Lab Order: C2212031

Tag Number: 232,156

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-015A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/17/2022 5:48:00 AM
Heptane	21	5.7		ug/m3	9	12/17/2022 9:13:00 PM
Heptane	23	0.61		ug/m3	1	12/17/2022 5:48:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 5:48:00 AM
Hexane	54	4.9		ug/m3	9	12/17/2022 9:13:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 5:48:00 AM
m&p-Xylene	6.2	1.3		ug/m3	1	12/17/2022 5:48:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 5:48:00 AM
Methyl Ethyl Ketone	58	80	J	ug/m3	90	12/17/2022 9:56:00 PM
Methyl Isobutyl Ketone	410	110		ug/m3	90	12/17/2022 9:56:00 PM
Methyl tert-butyl ether	42	5.0		ug/m3	9	12/17/2022 9:13:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/17/2022 5:48:00 AM
o-Xylene	4.3	0.65		ug/m3	1	12/17/2022 5:48:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 5:48:00 AM
Styrene	0.98	0.64		ug/m3	1	12/17/2022 5:48:00 AM
Tetrachloroethylene	7.7	1.0		ug/m3	1	12/17/2022 5:48:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 5:48:00 AM
Toluene	7.3	0.57		ug/m3	1	12/17/2022 5:48:00 AM
trans-1,2-Dichloroethene	2.2	0.59		ug/m3	1	12/17/2022 5:48:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 5:48:00 AM
Trichloroethene	4.0	0.81		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 5:48:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 5:48:00 AM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

Page 30 of 40

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121625.D
 Acq On : 17 Dec 2022 5:48 am
 Operator : RJP
 Sample : C2212031-015A
 Misc : AD12_1UG
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 17 08:41:04 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.120	128	51635	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	326262	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	273967	1.00	ppb	0.00

System Monitoring Compounds						
65) Bromofluorobenzene	18.765	95	211143m <i>P</i>	1.14	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	114.00%

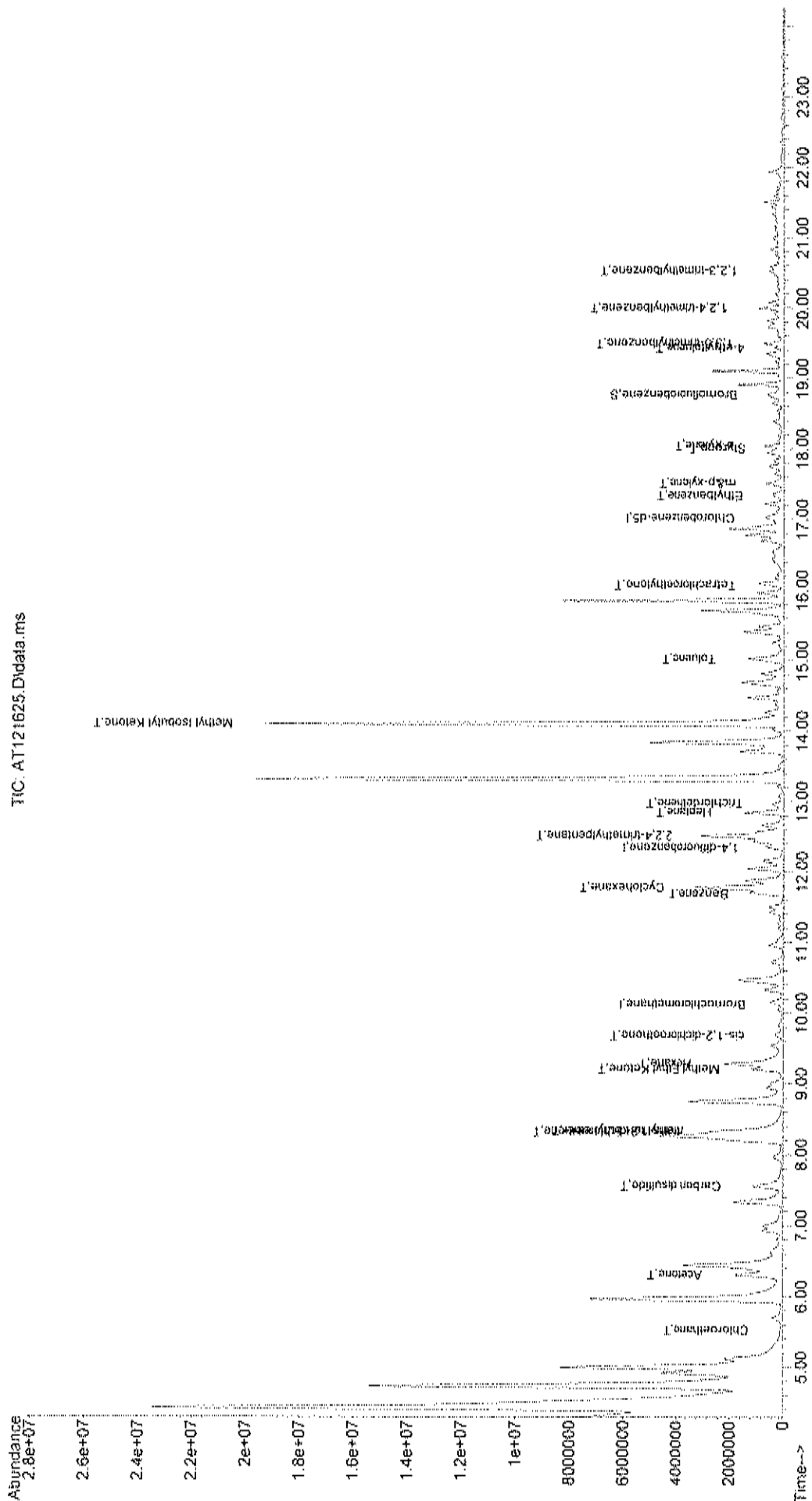
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
10) Chloroethane	5.524	64	9448	0.37	ppb	97
15) Acetone	6.301	58	1749999	64.68	ppb	# 1
23) Carbon disulfide	7.556	76	3994696m <i>P</i>	19.60	ppb	
24) trans-1,2-dichloroethene	8.322	61	57158m <i>b</i>	0.55	ppb	
25) methyl tert-butyl ether	8.331	73	2893365	12.22	ppb	# 59
28) Methyl Ethyl Ketone	9.204	72	950412	22.32	ppb	# 1
29) cis-1,2-dichloroethene	9.678	61	113292	1.02	ppb	93
30) Hexane	9.279	57	2343507	15.89	ppb	# 80
37) Cyclohexane	11.774	56	2951713m <i>P</i>	19.89	ppb	
39) Benzene	11.684	78	1066409	3.68	ppb	93
42) 2,2,4-trimethylpentane	12.512	57	4749638	10.42	ppb	77
43) Heptane	12.849	43	857330	5.55	ppb	80
44) Trichloroethene	12.978	130	92182	0.74	ppb	91
51) Toluene	15.025	92	427966	1.95	ppb	99
52) Methyl Isobutyl Ketone	14.103	43	20027867	101.57	ppb	81
56) Tetrachloroethylene	16.070	164	151502	1.13	ppb	90
58) Ethylbenzene	17.334	91	195189	0.42	ppb	95
59) m&p-xylene	17.514	91	513744	1.42	ppb	86
61) Styrene	18.006	104	62879	0.23	ppb	# 68
63) o-xylene	18.042	91	404536	1.00	ppb	88
69) 4-ethyltoluene	19.426	105	146618m <i>P</i>	0.29	ppb	
70) 1,3,5-trimethylbenzene	19.495	105	266567	0.58	ppb	87
71) 1,2,4-trimethylbenzene	19.993	105	578893	1.33	ppb	97
75) 1,2,3-trimethylbenzene	20.522	105	252489	0.58	ppb	90

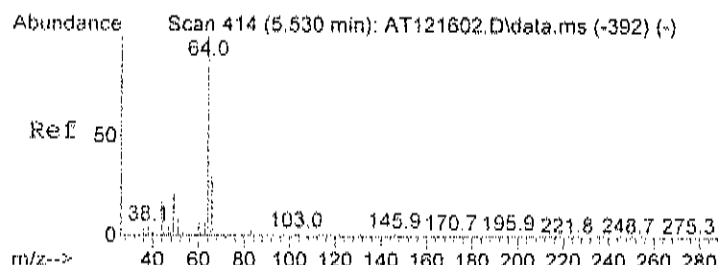
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121625.D
Acq On : 17 Dec 2022 5:48 am
Operator : RJP
Sample : C2212031-015A
Misc : AD12 IUG
ALS Vial : 25 Sample Multiplier: 1

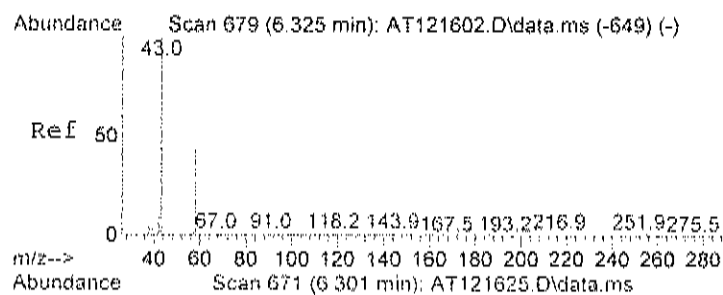
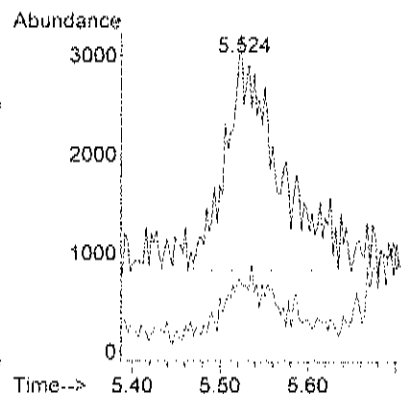
Quant Time: Dec 17 08:41:04 2022
Quant Method : C:\msdchem\1\methods\AD12 IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





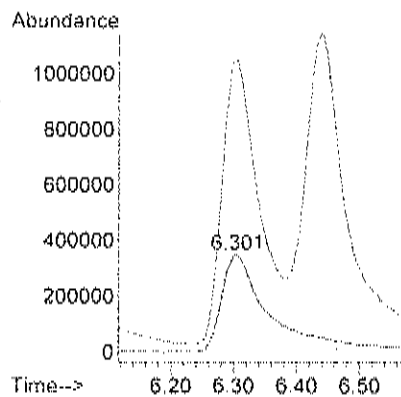
#10
Chloroethane
Concen: 0.37 ppb
RT: 5.524 min Scan# 412
Delta R.T. -0.009 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

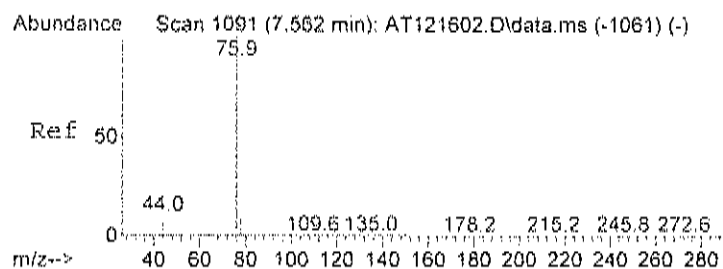
Tgt Ion: 64	Resp: 9448
Ion Ratio	Lower Upper
64	100
66	27.0 23.0 34.6



#15
Acetone
Concen: 64.68 ppb
RT: 6.301 min Scan# 671
Delta R.T. -0.027 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

Tgt Ion: 58	Resp: 1749999
Ion Ratio	Lower Upper
58	100
43	0.0 272.3 332.3#





#23

Carbon disulfide

Concen: 19.60 ppb m

RT: 7.556 min Scan# 1089

Delta R.T. -0.003 min

Lab File: AT121625.D

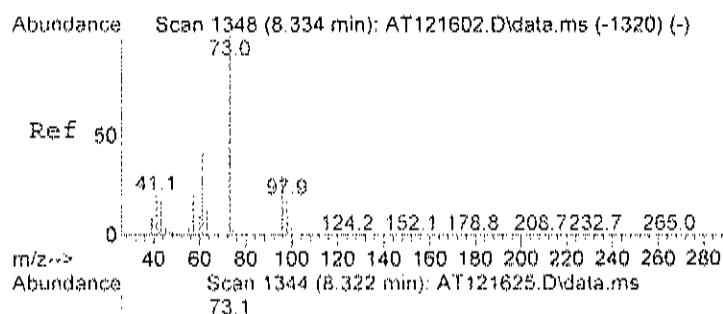
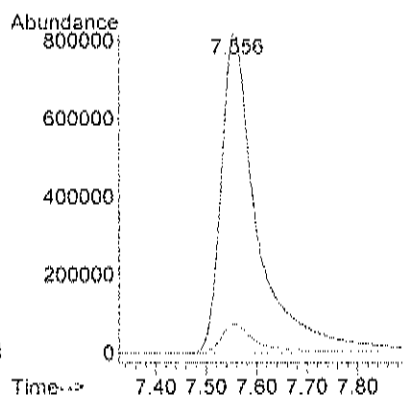
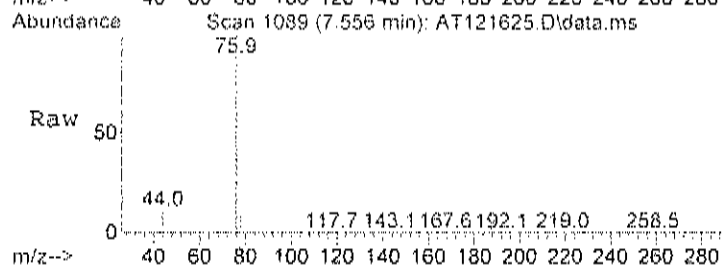
Acq: 17 Dec 2022 5:48 am

Tgt Ion: 76 Resp: 3994696

Ion Ratio Lower Upper

76 100

78 8.6 0.0 28.7



#24

trans-1,2-dichloroethene

Concen: 0.55 ppb m

RT: 8.322 min Scan# 1344

Delta R.T. -0.011 min

Lab File: AT121625.D

Acq: 17 Dec 2022 5:48 am

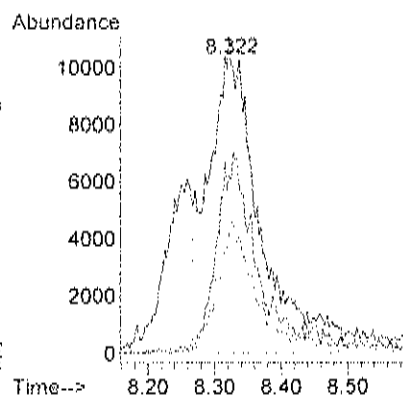
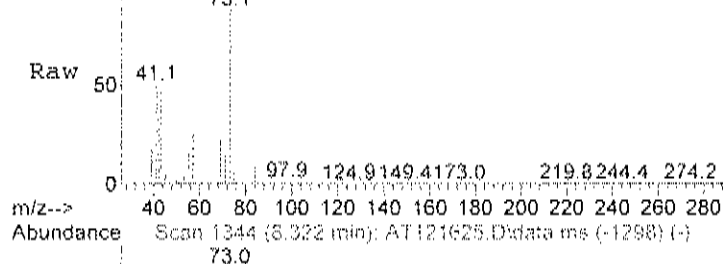
Tgt Ion: 61 Resp: 57158

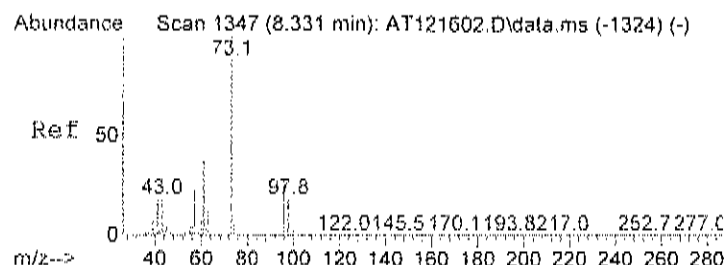
Ion Ratio Lower Upper

61 100

96 51.7 37.2 77.2

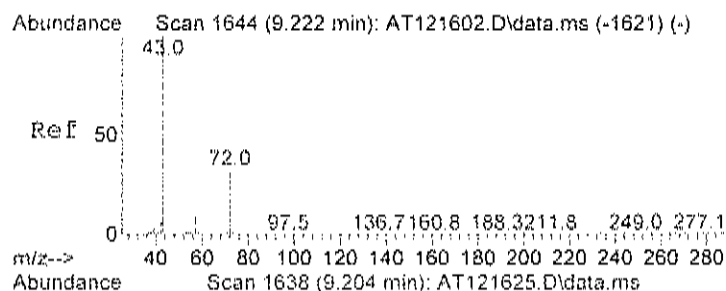
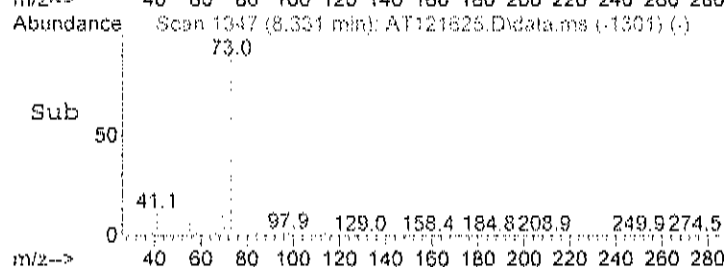
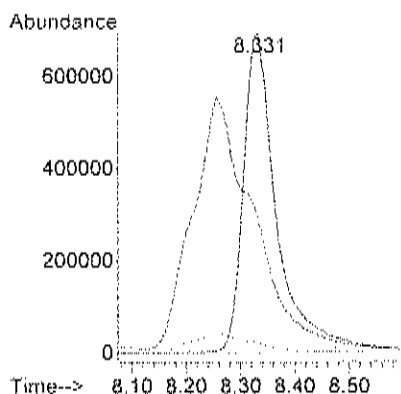
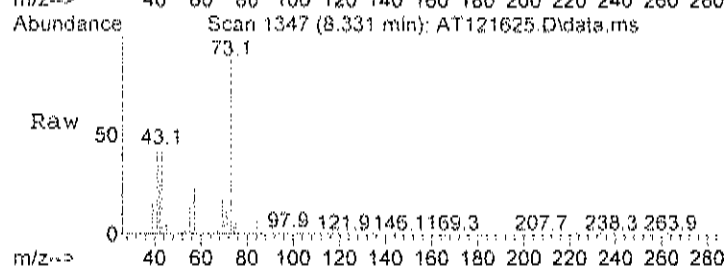
98 30.6 24.2 64.2





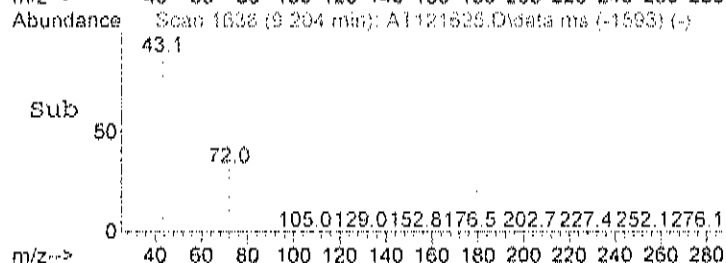
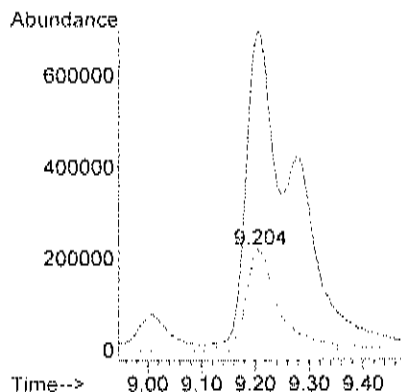
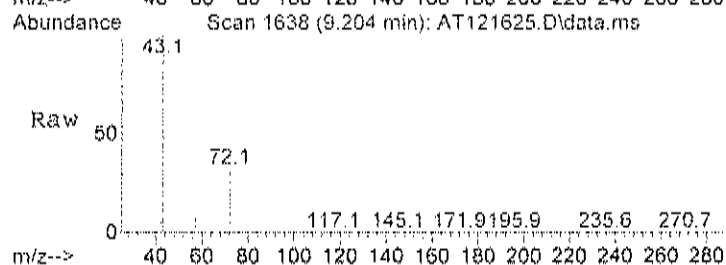
#25
methyl tert-butyl ether
Concen: 12.22 ppb
RT: 8.331 min Scan# 1347
Delta R.T. -0.011 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

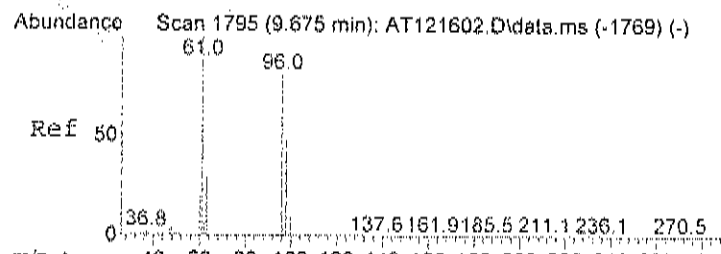
Tgt Ion: 73	Resp: 2893365
Ion Ratio	Lower Upper
73 100	
41 0.0	0.0 39.7
53 0.0	0.0 21.0



#28
Methyl Ethyl Ketone
Concen: 22.32 ppb
RT: 9.204 min Scan# 1638
Delta R.T. -0.015 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

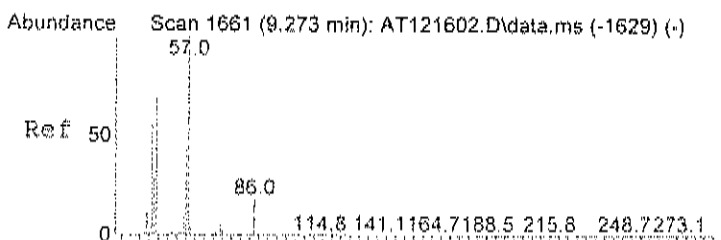
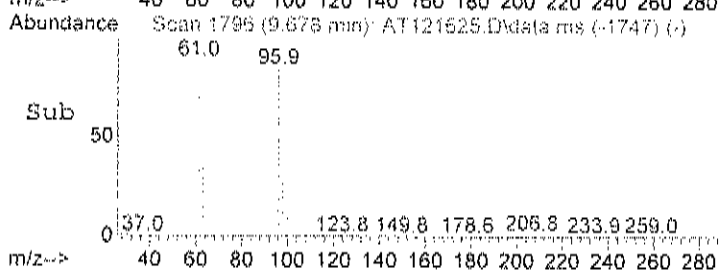
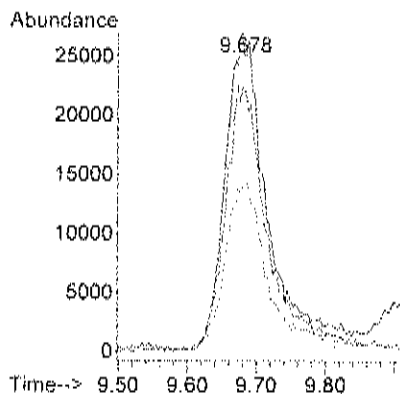
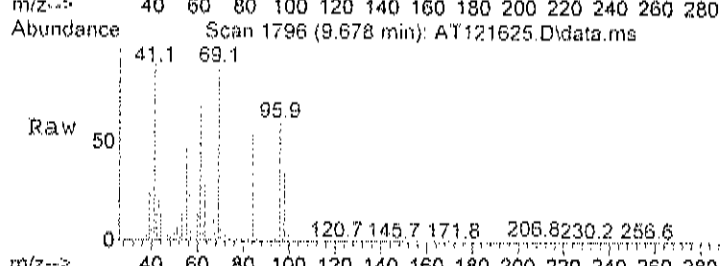
Tgt Ion: 72	Resp: 950412
Ion Ratio	Lower Upper
72 100	
43 0.0	333.7 373.7#
72 100.0	80.0 120.0





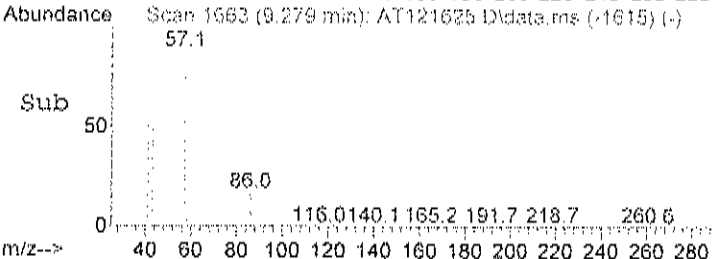
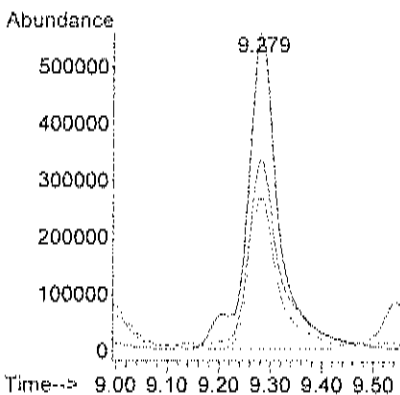
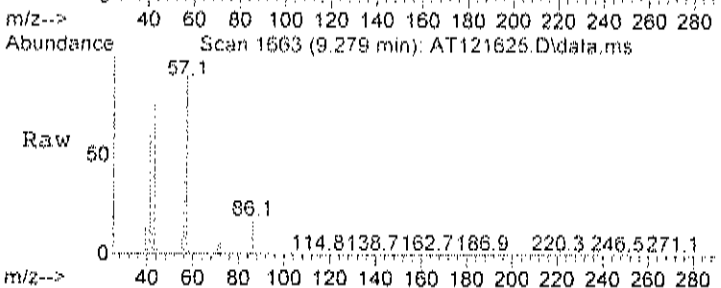
#29
cis-1,2-dichloroethene
Concen: 1.02 ppb
RT: 9.678 min Scan# 1796
Delta R.T. -0.003 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

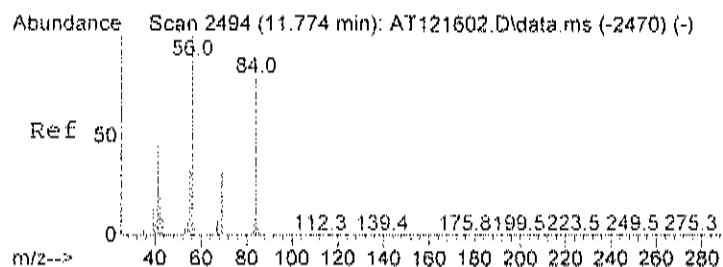
Tgt Ion	Ratio	Lower	Upper
61	100		
96	83.4	54.1	94.1
98	53.5	32.5	72.5



#30
Hexane
Concen: 15.89 ppb
RT: 9.279 min Scan# 1663
Delta R.T. -0.006 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

Tgt Ion	Ratio	Lower	Upper
57	100		
41	58.1	62.0	102.0#
56	45.5	31.8	71.8





#37

Cyclohexane

Concen: 19.89 ppb m

RT: 11.774 min Scan# 2494

Delta R.T. -0.006 min

Lab File: AT121625.D

Acq: 17 Dec 2022 5:48 am

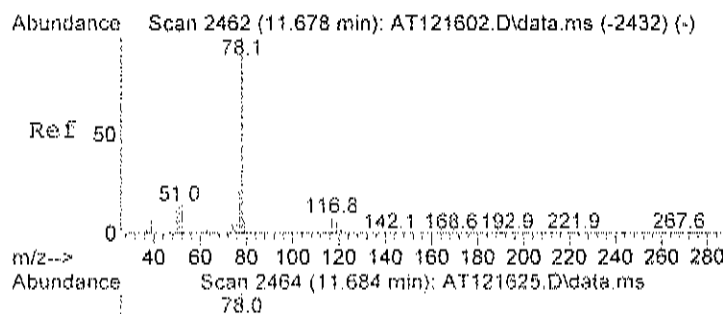
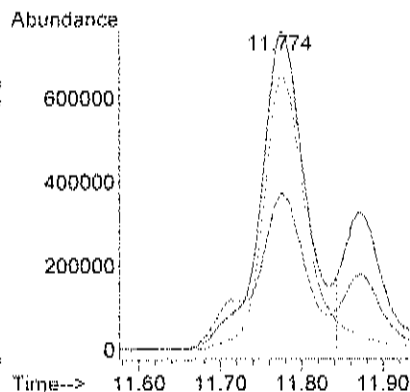
Tgt Ion: 56 Resp: 2951713

Ion Ratio Lower Upper

56 100

41 74.6 32.6 72.6#

84 82.9 18.2 58.2#



#39

Benzene

Concen: 3.68 ppb

RT: 11.684 min Scan# 2464

Delta R.T. -0.006 min

Lab File: AT121625.D

Acq: 17 Dec 2022 5:48 am

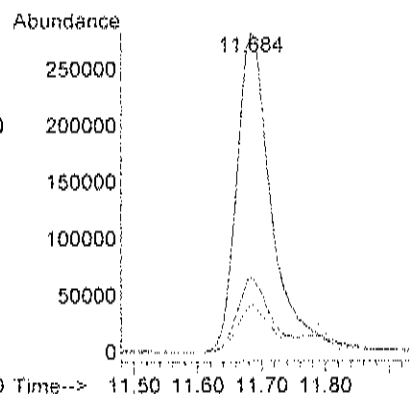
Tgt Ion: 78 Resp: 1066409

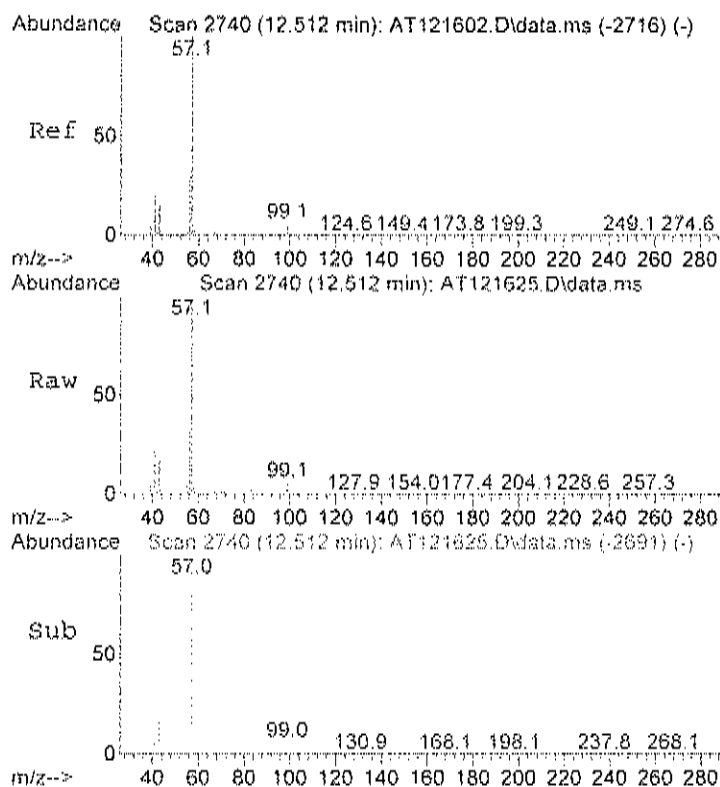
Ion Ratio Lower Upper

78 100

77 26.8 2.5 42.5

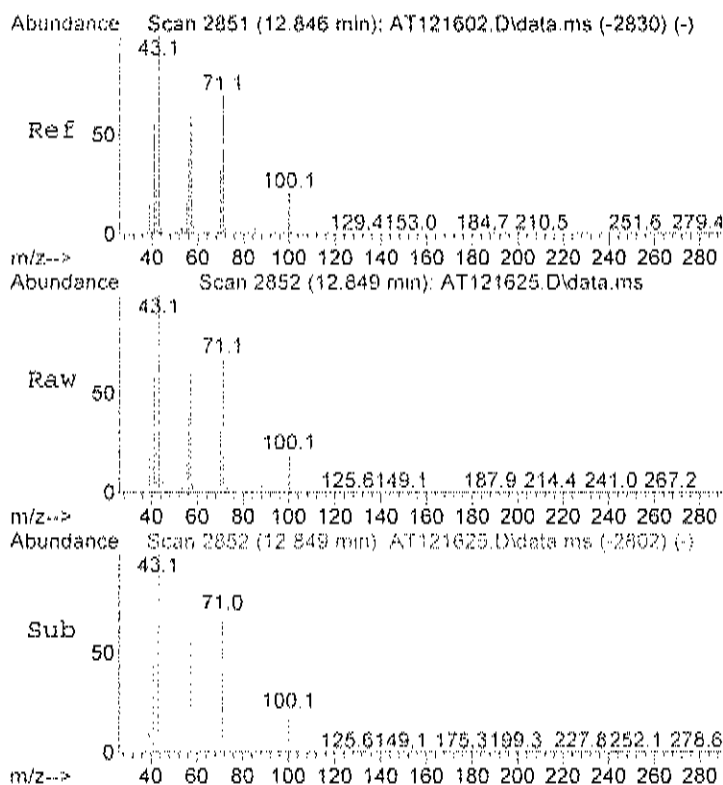
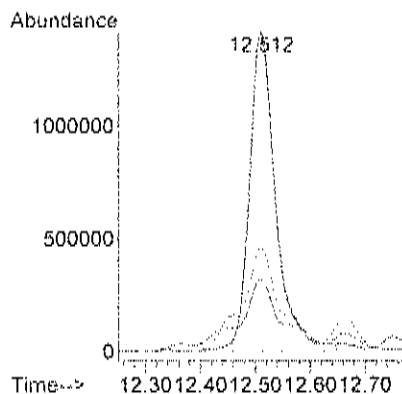
51 22.7 0.5 40.5





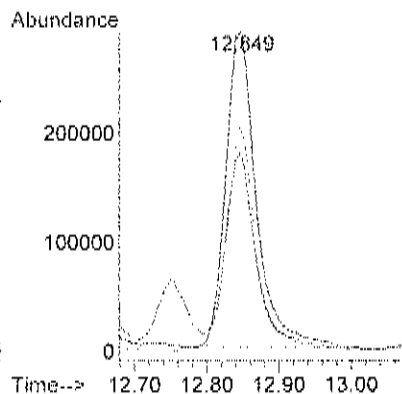
#42
2,2,4-trimethylpentane
Concen: 10.42 ppb
RT: 12.512 min Scan# 2740
Delta R.T. -0.003 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

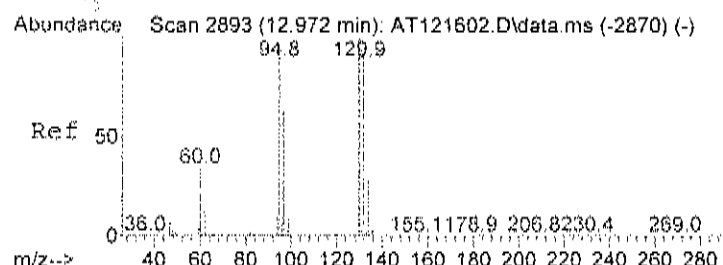
Tgt Ion	Ratio	Lower	Upper
57	100		
41	29.0	17.4	57.4
56	50.0	10.8	50.8



#43
Heptane
Concen: 5.55 ppb
RT: 12.849 min Scan# 2852
Delta R.T. 0.001 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

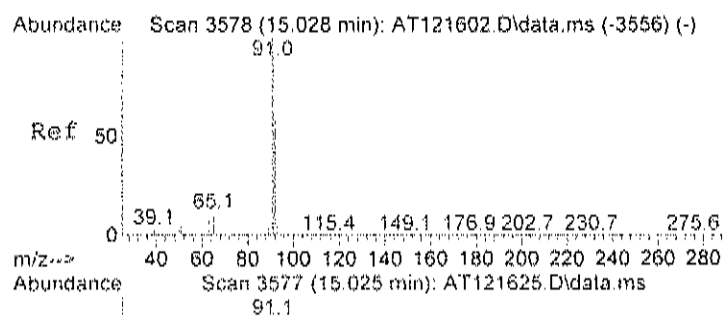
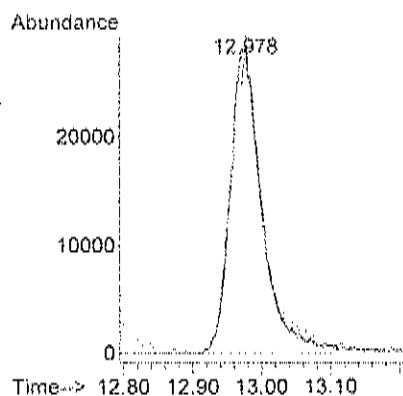
Tgt Ion	Ratio	Lower	Upper
43	100		
57	81.8	42.3	82.3
71	69.2	38.8	78.8





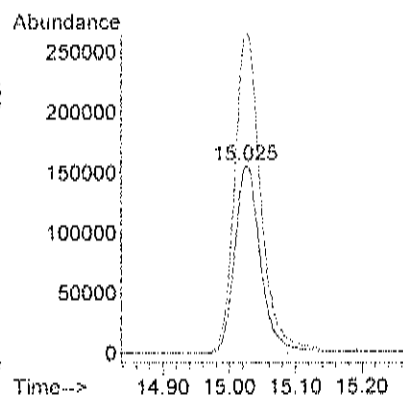
#44
Trichloroethene
Concen: 0.74 ppb
RT: 12.978 min Scan# 2895
Delta R.T. -0.002 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

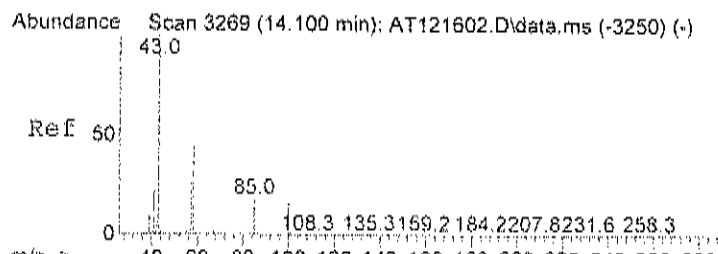
Tgt Ion: 130	Resp: 92182
Ion Ratio	Lower Upper
130	100
132	94.9 79.7 119.7
95	102.9 69.3 109.3



#51
Toluene
Concen: 1.95 ppb
RT: 15.025 min Scan# 3577
Delta R.T. -0.006 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

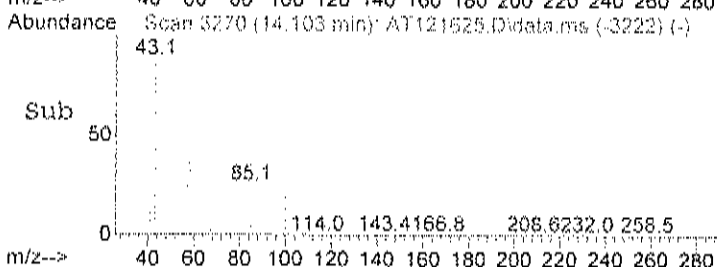
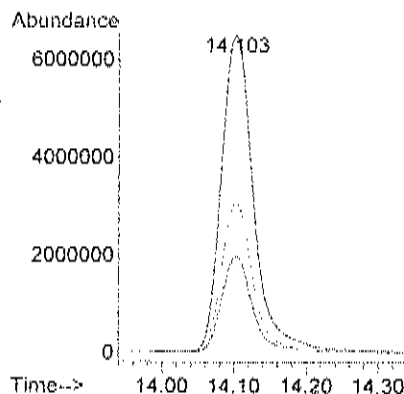
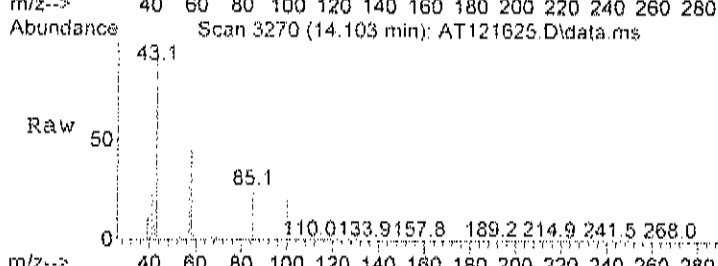
Tgt Ion: 92	Resp: 427966
Ion Ratio	Lower Upper
92	100
91	172.0 153.3 193.3





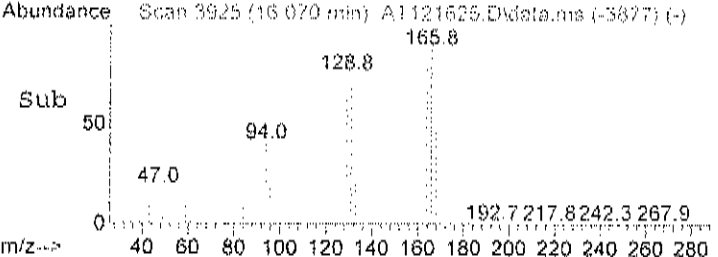
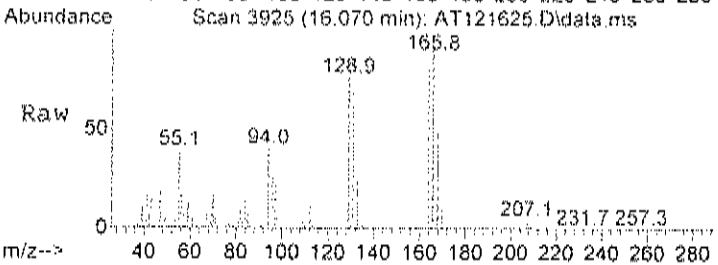
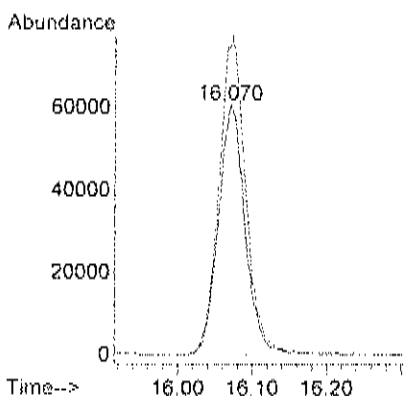
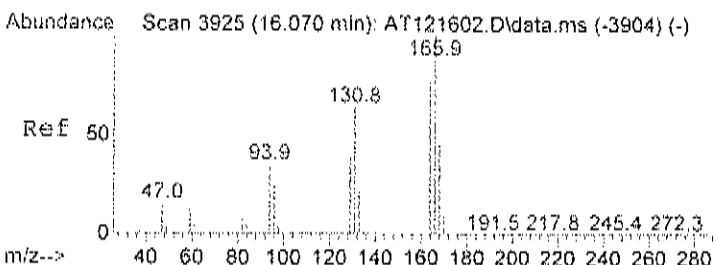
#52
Methyl Isobutyl Ketone
Concen: 101.57 ppb
RT: 14.103 min Scan# 3270
Delta R.T. -0.006 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

Tgt Ion:	43	Resp:	20027867
Ion	Ratio	Lower	Upper
43	100		
57	29.0	7.7	47.7
58	46.4	7.6	47.6

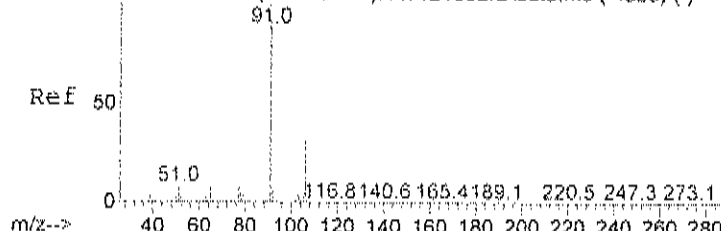


#56
Tetrachloroethylene
Concen: 1.13 ppb
RT: 16.070 min Scan# 3925
Delta R.T. -0.005 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

Tgt Ion:	164	Resp:	151502
Ion	Ratio	Lower	Upper
164	100		
166	127.9	97.2	137.2



Abundance Scan 4346 (17.333 min): AT121602.D\data.ms (-4325) (-)



#58

Ethylbenzene

Concen: 0.42 ppb

RT: 17.334 min Scan# 4346

Delta R.T. -0.005 min

Lab File: AT121625.D

Acq: 17 Dec 2022 5:48 am

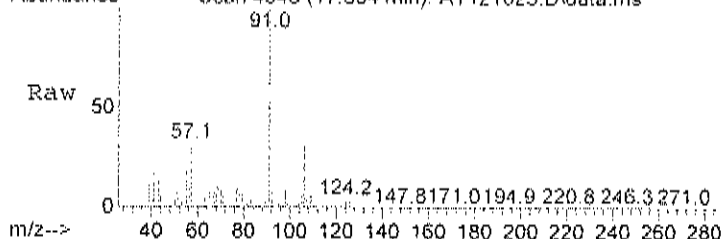
Tgt Ion: 91 Resp: 195189

Ion Ratio Lower Upper

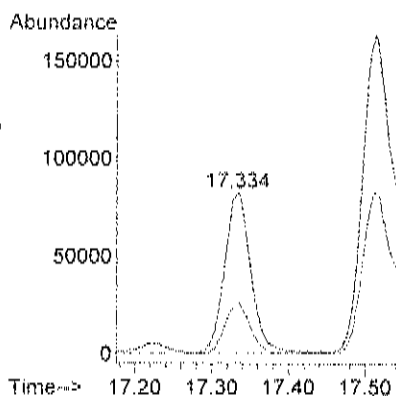
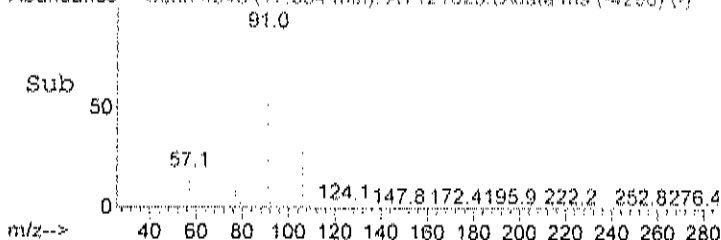
91 100

106 31.2 13.9 53.9

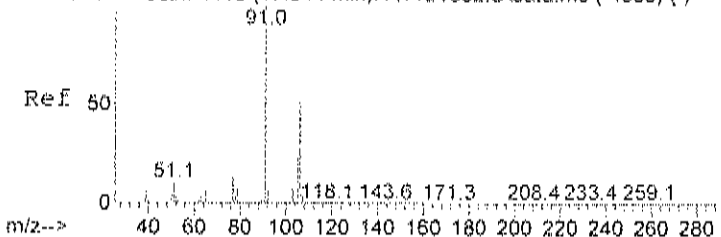
Abundance Scan 4346 (17.334 min): AT121625.D\data.ms



Abundance Scan 4346 (17.334 min): AT121625.D\data.ms (-4298) (-)



Abundance Scan 4416 (17.544 min): AT121602.D\data.ms (-4386) (-)



#59

m&p-xylene

Concen: 1.42 ppb

RT: 17.514 min Scan# 4406

Delta R.T. -0.029 min

Lab File: AT121625.D

Acq: 17 Dec 2022 5:48 am

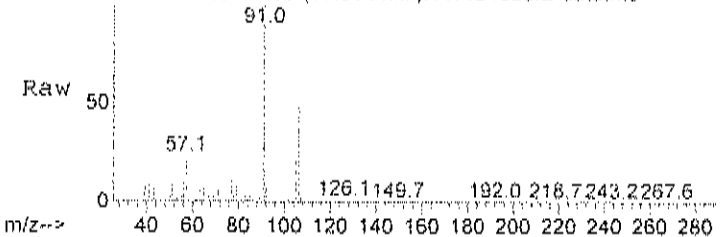
Tgt Ion: 91 Resp: 513744

Ion Ratio Lower Upper

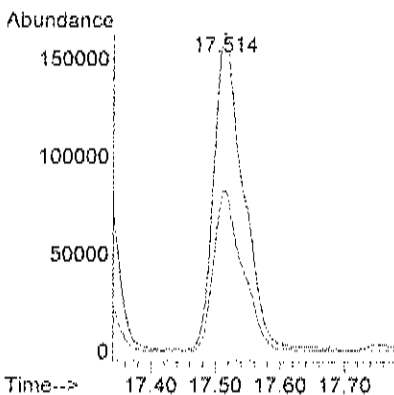
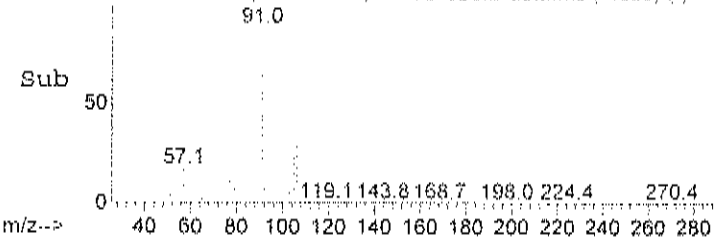
91 100

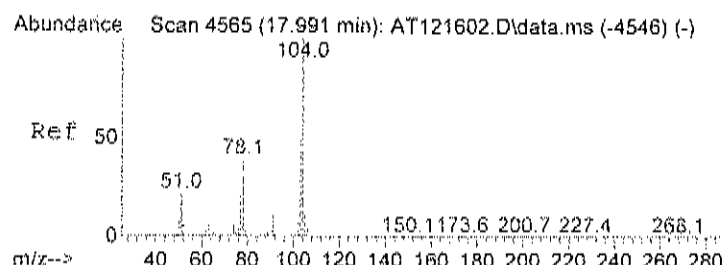
106 51.0 22.4 62.4

Abundance Scan 4406 (17.514 min): AT121625.D\data.ms



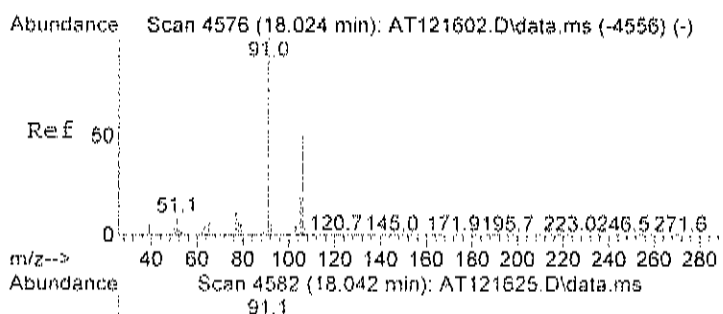
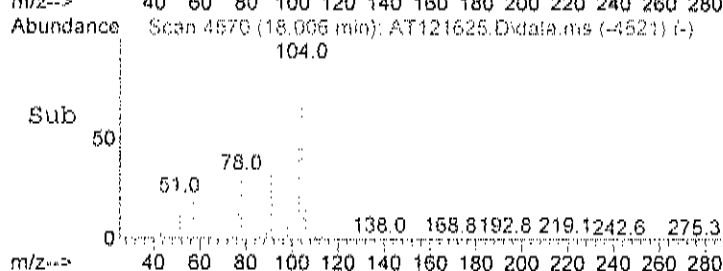
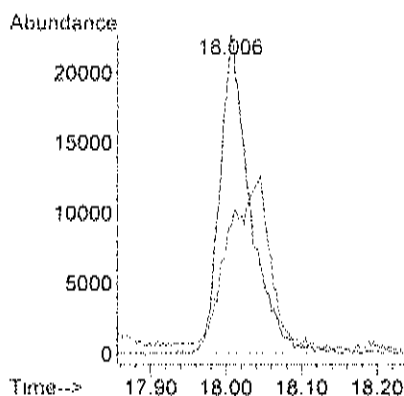
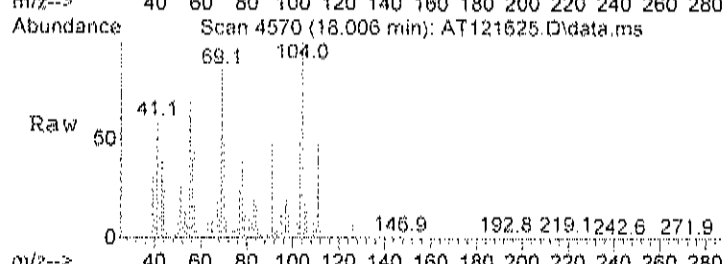
Abundance Scan 4406 (17.514 min): AT121625.D\data.ms (-4368) (-)





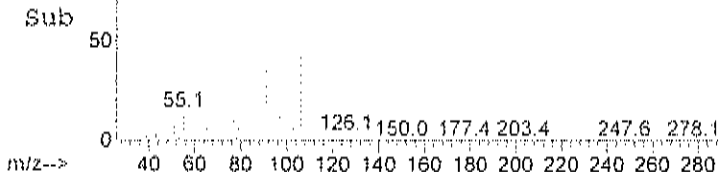
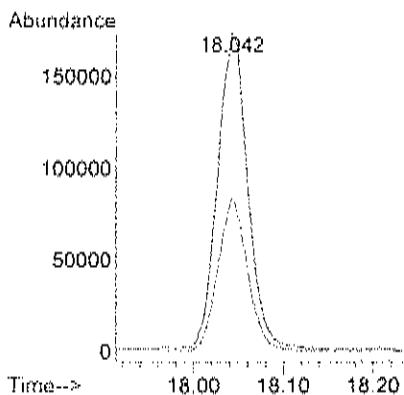
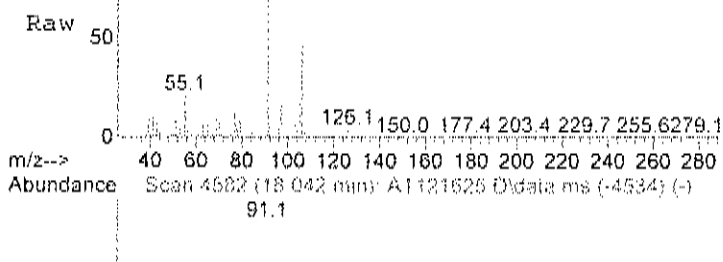
#61
Styrene
Concen: 0.23 ppb
RT: 18.006 min Scan# 4570
Delta R.T. -0.003 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

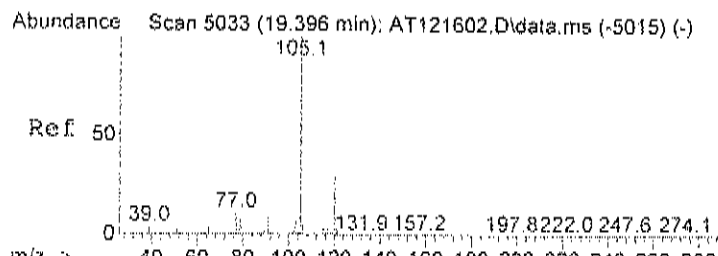
Tgt Ion	Ratio	Lower	Upper
104	100		
78	74.9	32.4	72.4#



#63
o-xylene
Concen: 1.00 ppb
RT: 18.042 min Scan# 4582
Delta R.T. -0.006 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

Tgt Ion	Ratio	Lower	Upper
91	100		
106	48.1	20.7	60.7





#69

4-ethyltoluene

Concen: 0.29 ppb m

RT: 19.426 min Scan# 5043

Delta R.T. -0.003 min

Lab File: AT121625.D

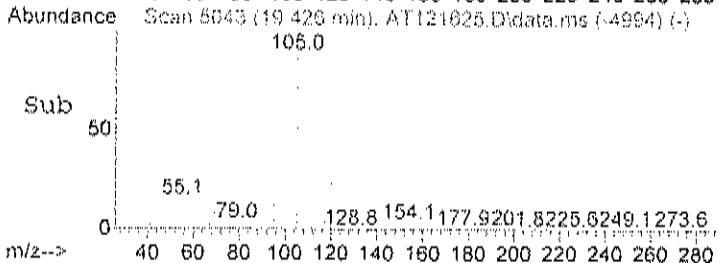
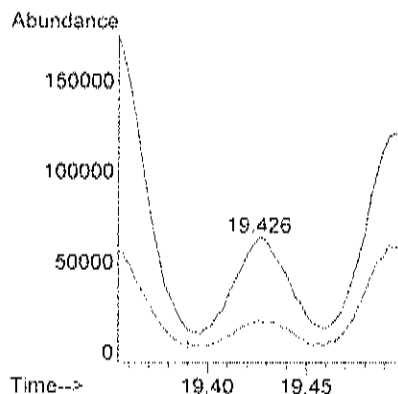
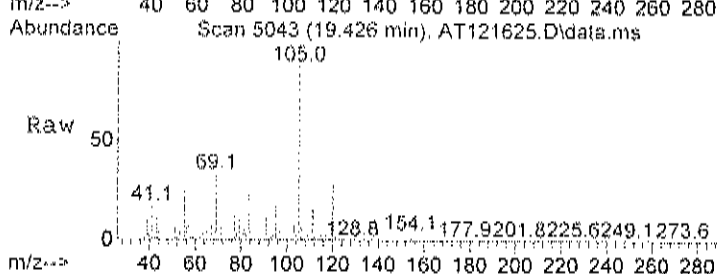
Acq: 17 Dec 2022 5:48 am

Tgt Ion:105 Resp: 146618

Ion Ratio Lower Upper

105 100

120 89.6 11.9 51.9#



#70

1,3,5-trimethylbenzene

Concen: 0.58 ppb

RT: 19.495 min Scan# 5066

Delta R.T. -0.003 min

Lab File: AT121625.D

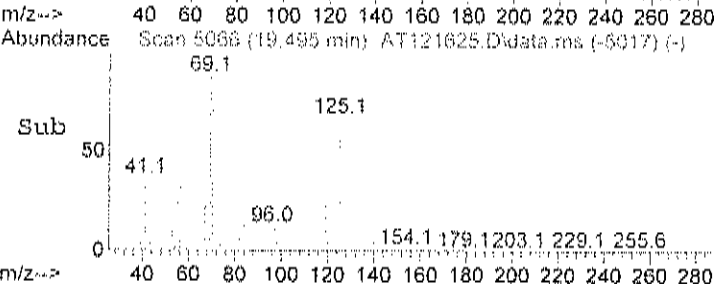
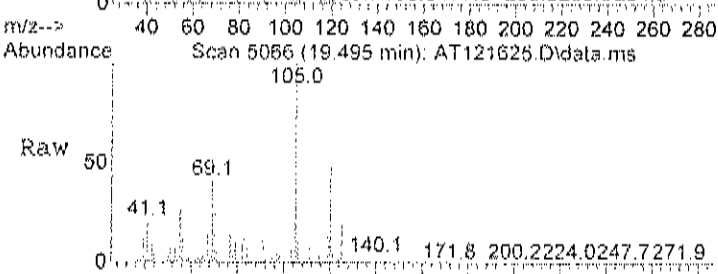
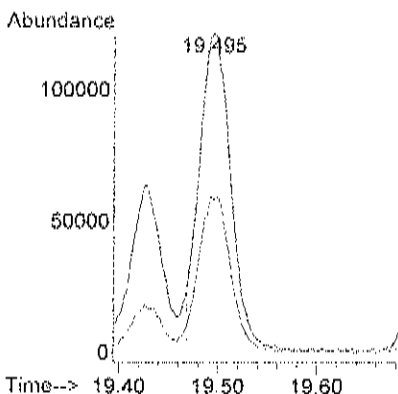
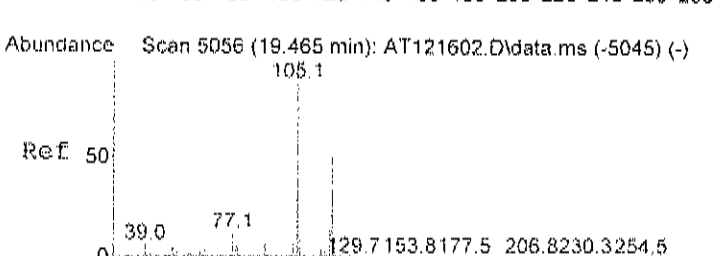
Acq: 17 Dec 2022 5:48 am

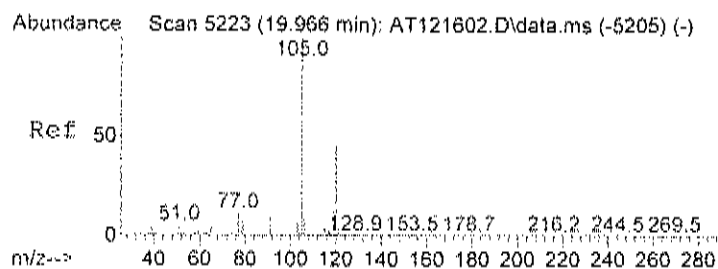
Tgt Ion:105 Resp: 266567

Ion Ratio Lower Upper

105 100

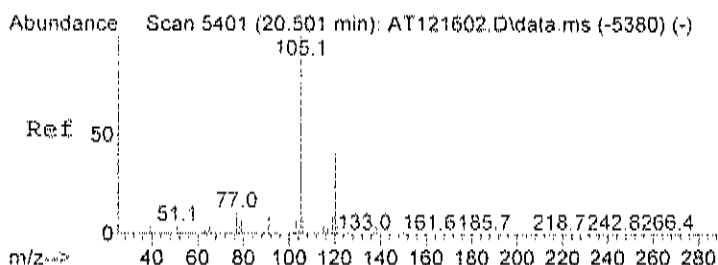
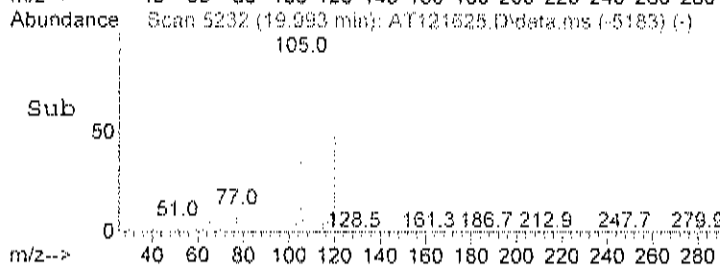
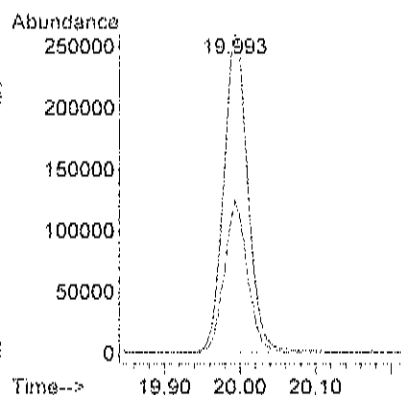
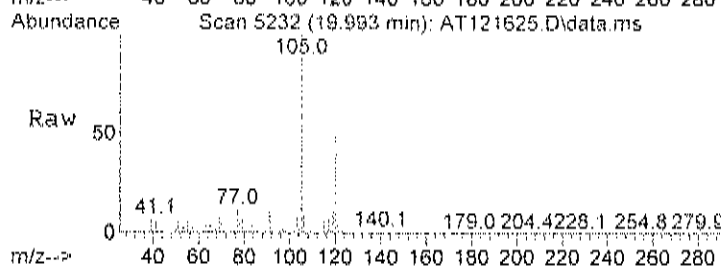
120 50.2 22.0 62.0





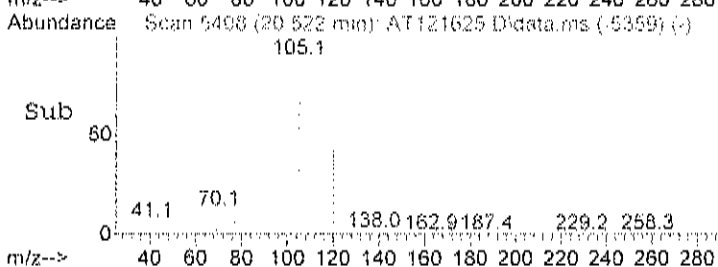
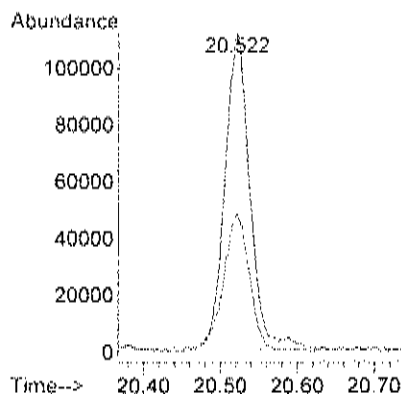
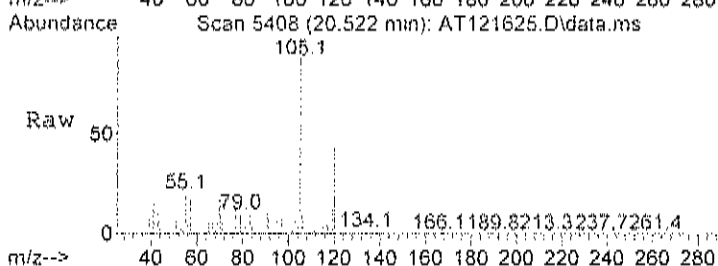
#71
1,2,4-trimethylbenzene
Concen: 1.33 ppb
RT: 19.993 min Scan# 5232
Delta R.T. -0.003 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

Tgt Ion	105	Resp	578893
Ion	Ratio	Lower	Upper
105	100		
120	46.8	24.9	64.9



#75
1,2,3-trimethylbenzene
Concen: 0.58 ppb
RT: 20.522 min Scan# 5408
Delta R.T. -0.002 min
Lab File: AT121625.D
Acq: 17 Dec 2022 5:48 am

Tgt Ion	105	Resp	252489
Ion	Ratio	Lower	Upper
105	100		
120	46.7	30.1	50.3



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121717.D
 Acq On : 17 Dec 2022 9:13 pm
 Operator : RJP
 Sample : C2212031~015A 9X
 Misc : AD12_1UG
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 18 10:35:58 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

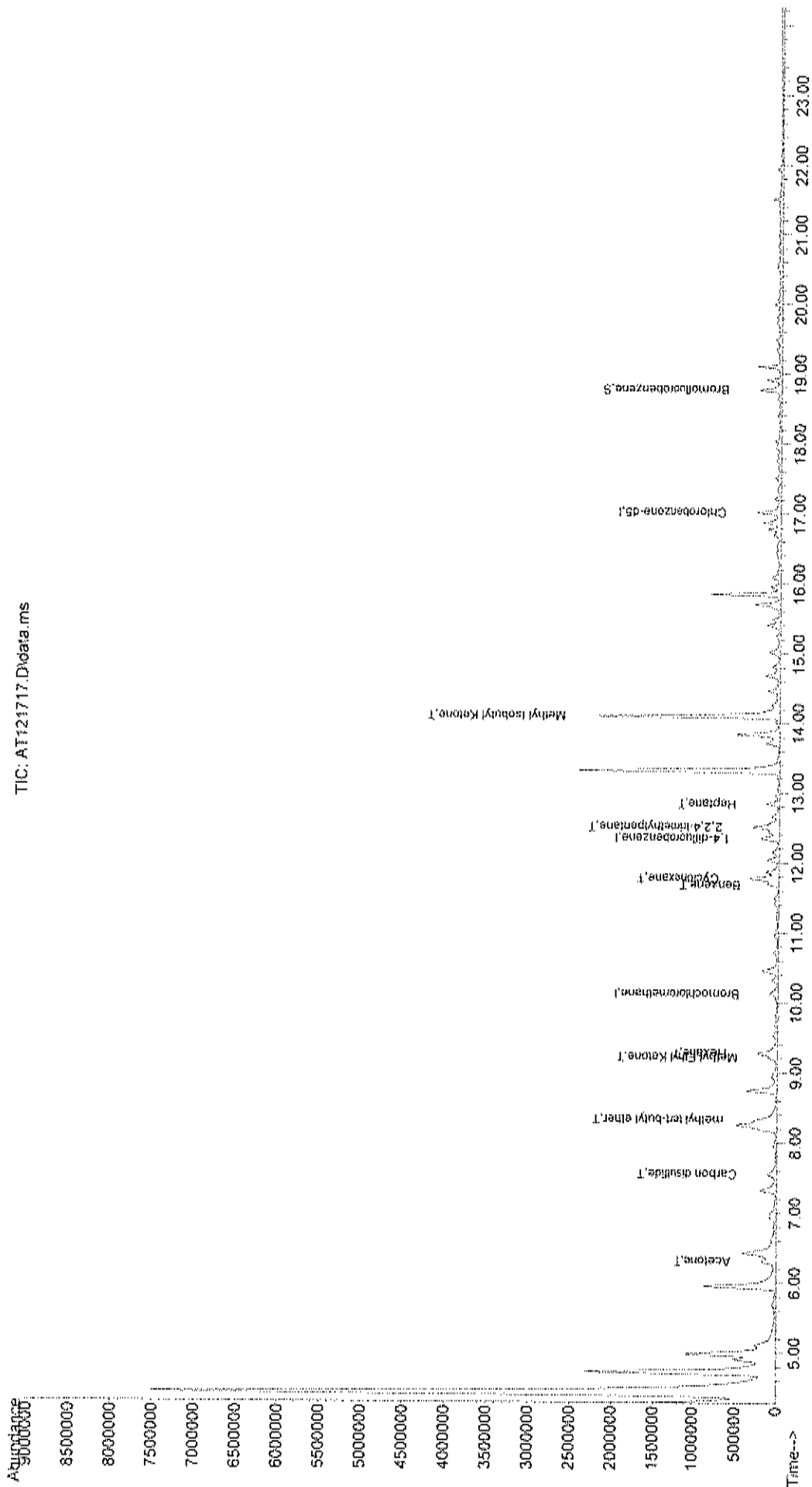
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

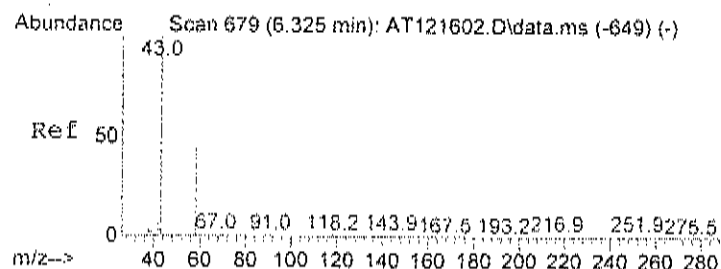
Internal Standards						
1) Bromochloromethane	10.123	128	47099	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.344	114	281822	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	228989	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	137836	0.89	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	89.00%
Target Compounds						
15) Acetone	6.310	58	175121	7.10	ppb	Qvalue # 1
23) Carbon disulfide	7.553	76	364505m	1.96	ppb	
25) methyl tert-butyl ether	8.328	73	283752	1.31	ppb	# 59
28) Methyl Ethyl Ketone	9.219	72	90791m	2.34	ppb	
30) Hexane	9.273	57	229188	1.70	ppb	84
37) Cyclohexane	11.771	56	296180m	2.31	ppb	
39) Benzene	11.678	78	114126	0.46	ppb	91
42) 2,2,4-trimethylpentane	12.506	57	439440	1.12	ppb	# 78
43) Heptane	12.839	43	77656	0.58	ppb	# 79
52) Methyl Isobutyl Ketone	14.100	43	2372988	14.40	ppb	83

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121717.D
 Acq On : 17 Dec 2022 9:13 pm
 Operator : RJP
 Sample : C2212031-015A 9X
 Misc : AD12_1UG
 ALS Vial : 15 Sample Multiplier: 1

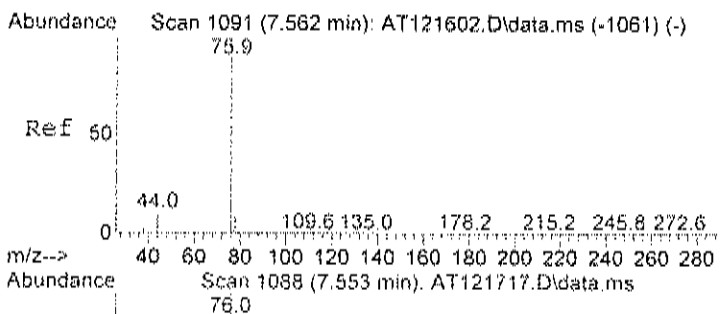
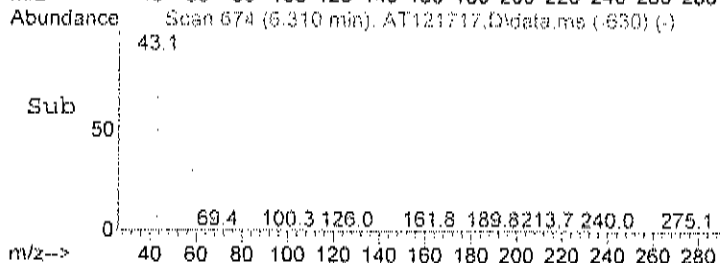
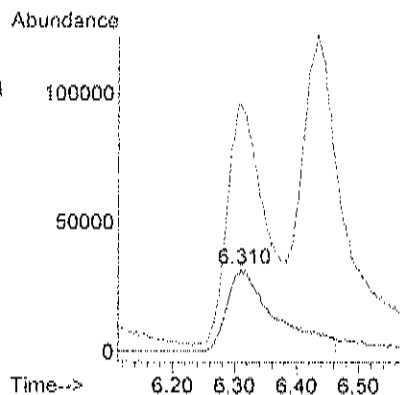
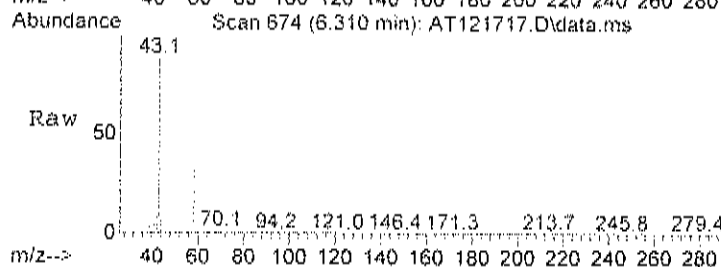
Quant Time: Dec 18 10:35:58 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





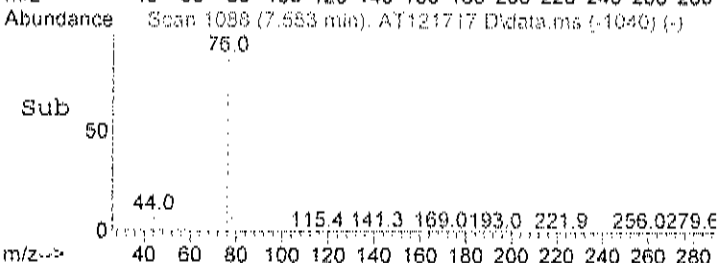
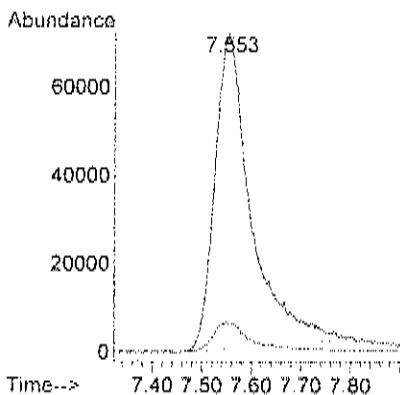
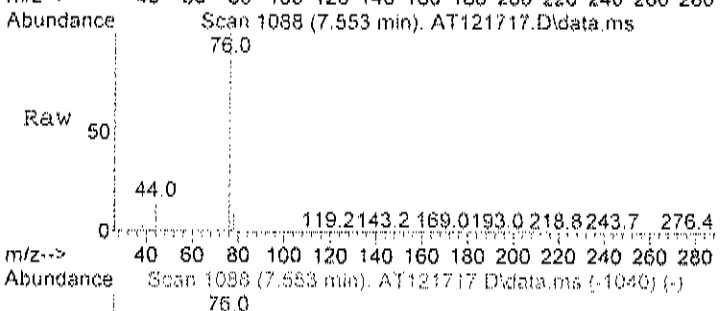
#15
Acetone
Concen: 7.10 ppb
RT: 6.310 min Scan# 674
Delta R.T. -0.018 min
Lab File: AT121717.D
Acq: 17 Dec 2022 9:13 pm

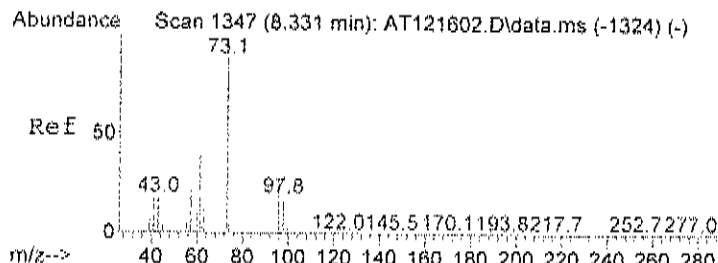
Tgt Ion: 58 Resp: 175121
Ion Ratio Lower Upper
58 100
43 0.0 272.3 332.3#



#23
Carbon disulfide
Concen: 1.96 ppb m
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121717.D
Acq: 17 Dec 2022 9:13 pm

Tgt Ion: 76 Resp: 364505
Ion Ratio Lower Upper
76 100
78 9.6 0.0 28.7





#25

methyl tert-butyl ether

Concen: 1.31 ppb

RT: 8.328 min Scan# 1346

Delta R.T. -0.014 min

Lab File: AT121717.D

Acq: 17 Dec 2022 9:13 pm

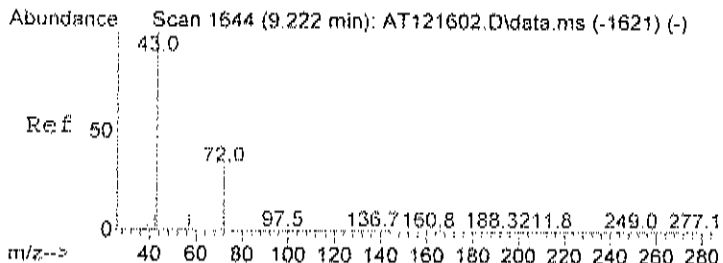
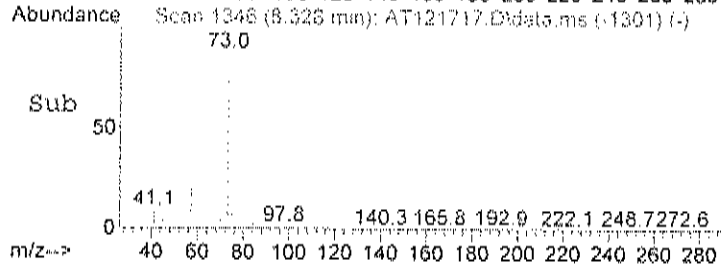
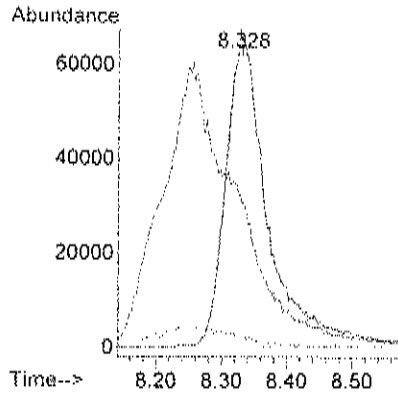
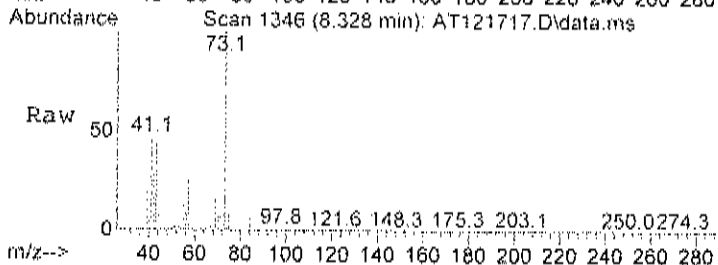
Tgt Ion: 73 Resp: 283752

Ion Ratio Lower Upper

73 100

41 0.0 0.0 39.7

53 0.0 0.0 21.0



#28

Methyl Ethyl Ketone

Concen: 2.34 ppb m

RT: 9.219 min Scan# 1643

Delta R.T. 0.000 min

Lab File: AT121717.D

Acq: 17 Dec 2022 9:13 pm

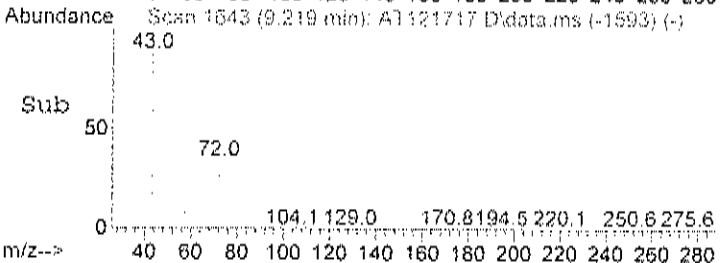
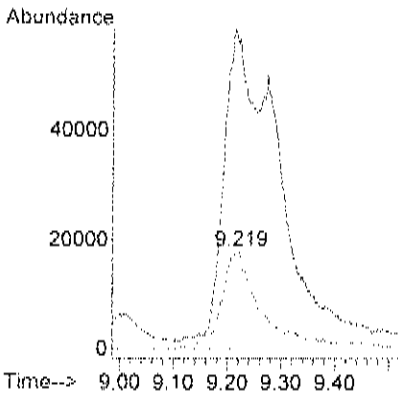
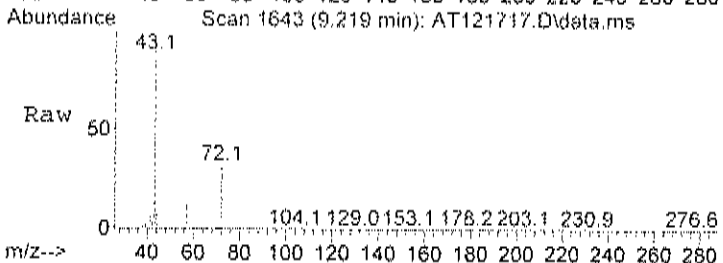
Tgt Ion: 72 Resp: 90791

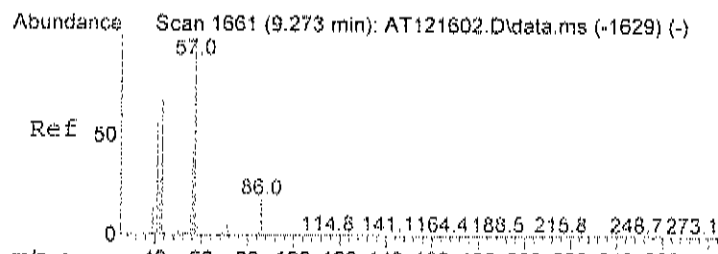
Ion Ratio Lower Upper

72 100

43 395.9 333.7 373.7#

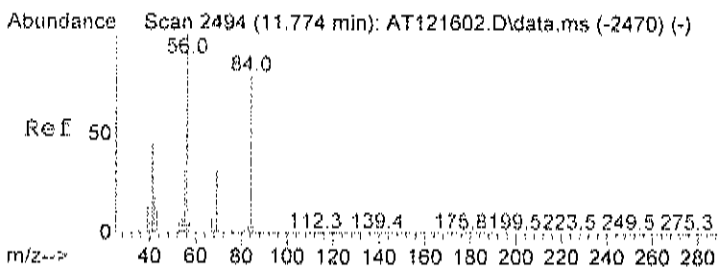
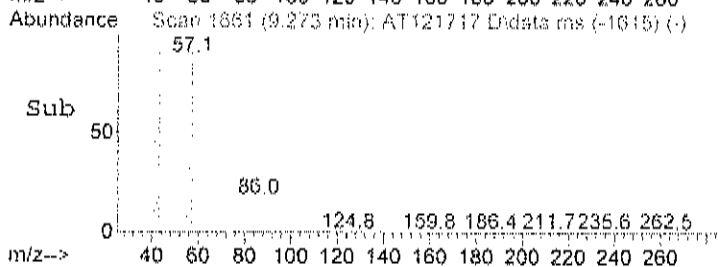
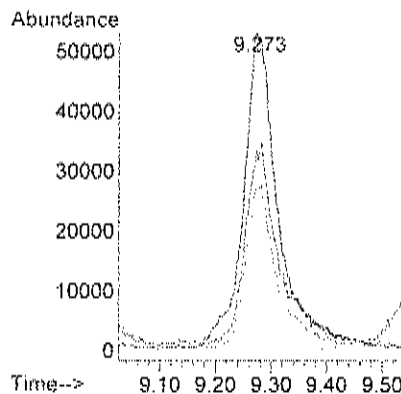
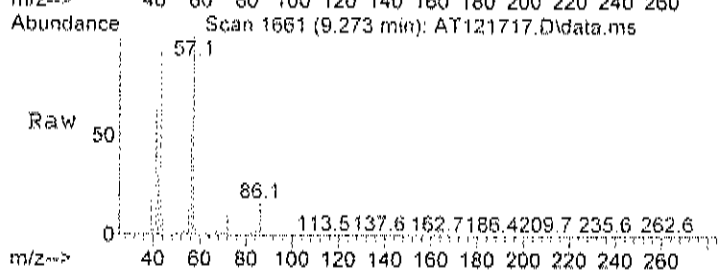
72 96.4 80.0 120.0





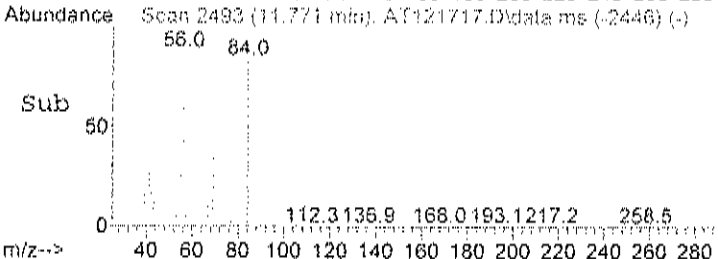
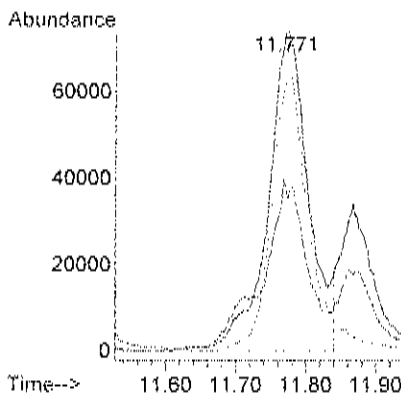
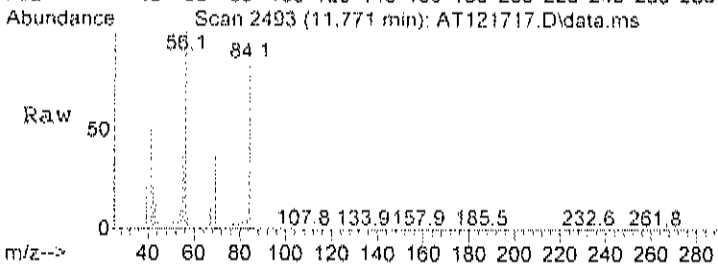
#30
Hexane
Concen: 1.70 ppb
RT: 9.273 min Scan# 1661
Delta R.T. -0.012 min
Lab File: AT121717.D
Acq: 17 Dec 2022 9:13 pm

Tgt	Ion	Resp	Lower	Upper
57	100			
41	62.2	62.0	102.0	
56	47.6	31.8	71.8	

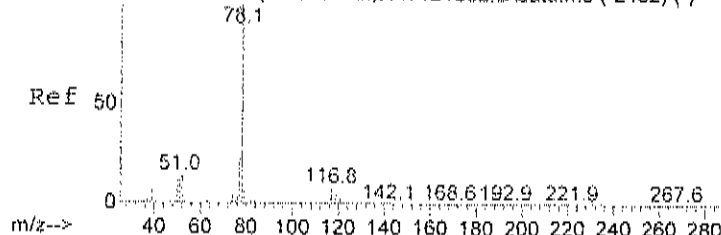


#37
Cyclohexane
Concen: 2.31 ppb m
RT: 11.771 min Scan# 2493
Delta R.T. -0.009 min
Lab File: AT121717.D
Acq: 17 Dec 2022 9:13 pm

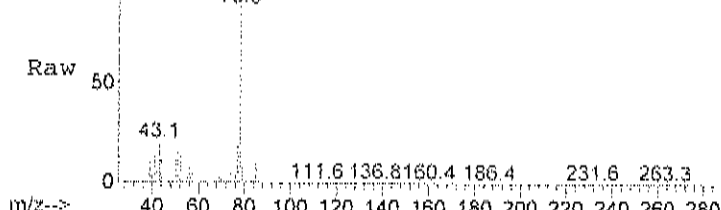
Tgt	Ion	Resp	Lower	Upper
56	100			
41	76.0	32.6	72.6#	
84	78.9	18.2	58.2#	



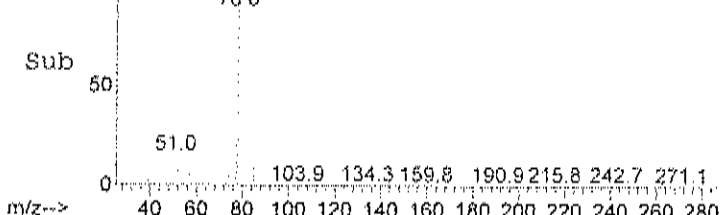
Abundance Scan 2462 (11.678 min): AT121602.D\data.ms (-2432) (-)



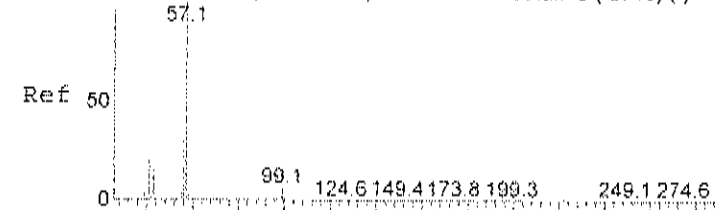
Abundance Scan 2462 (11.678 min): AT121717.D\data.ms



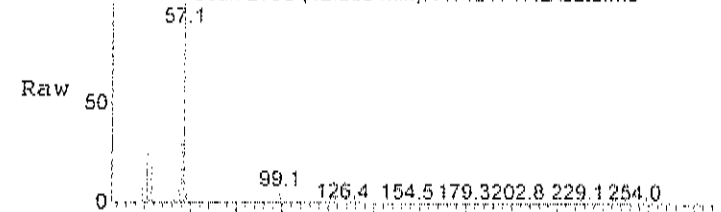
Abundance Scan 2462 (11.678 min): AT121717.D\data.ms (-2416) (-)



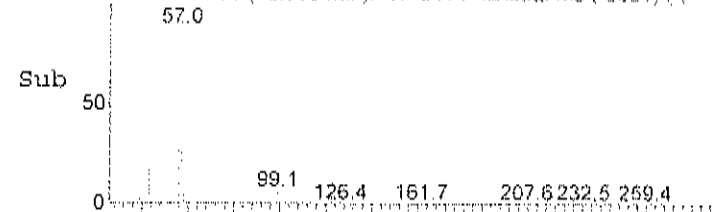
Abundance Scan 2740 (12.512 min): AT121602.D\data.ms (-2716) (-)



Abundance Scan 2738 (12.506 min): AT121717.D\data.ms



Abundance Scan 2738 (12.506 min): AT121717.D\data.ms (-2691) (-)



#39

Benzene

Concen: 0.46 ppb

RT: 11.678 min Scan# 2462

Delta R.T. -0.012 min

Lab File: AT121717.D

Acq: 17 Dec 2022 9:13 pm

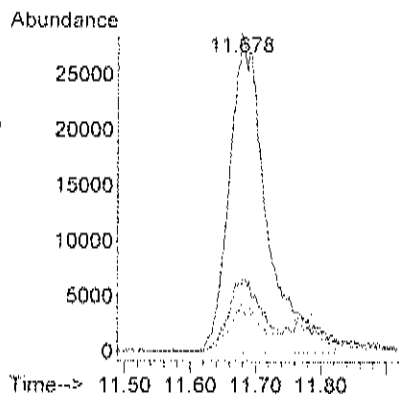
Tgt Ion: 78 Resp: 114126

Ion Ratio Lower Upper

78 100

77 28.8 2.5 42.5

51 23.0 0.5 40.5



#42

2,2,4-trimethylpentane

Concen: 1.12 ppb

RT: 12.506 min Scan# 2738

Delta R.T. -0.009 min

Lab File: AT121717.D

Acq: 17 Dec 2022 9:13 pm

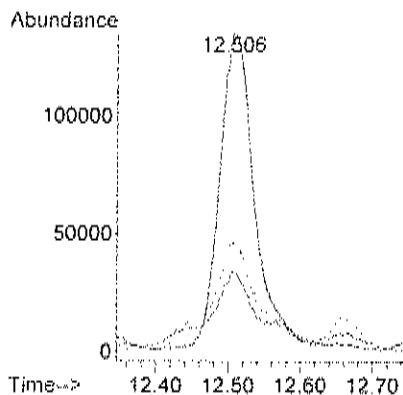
Tgt Ion: 57 Resp: 439440

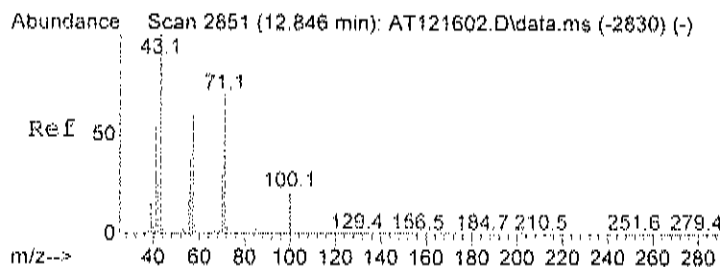
Ion Ratio Lower Upper

57 100

41 33.4 17.4 57.4

56 53.0 10.8 50.8#





#43

Heptane

Concen: 0.58 ppb

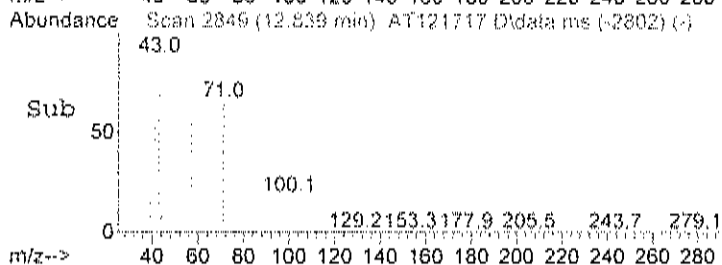
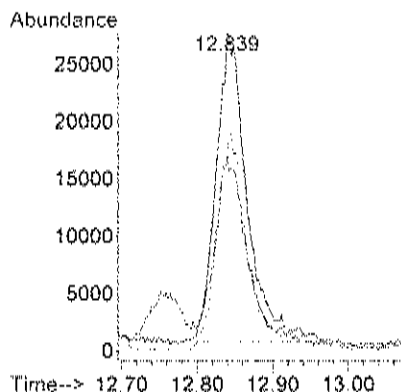
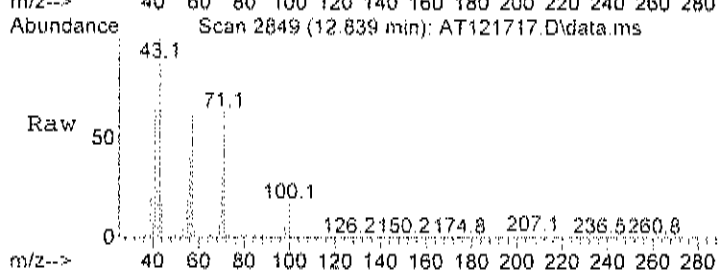
RT: 12.839 min Scan# 2849

Delta R.T. -0.009 min

Lab File: AT121717.D

Acq: 17 Dec 2022 9:13 pm

Tgt Ion: 43	Resp: 77656
Ion Ratio	Lower Upper
43 100	
57 84.0	42.3 82.3#
71 68.9	38.8 78.8



#52

Methyl Isobutyl Ketone

Concen: 14.40 ppb

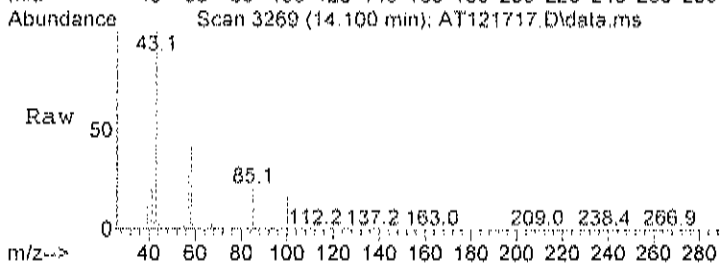
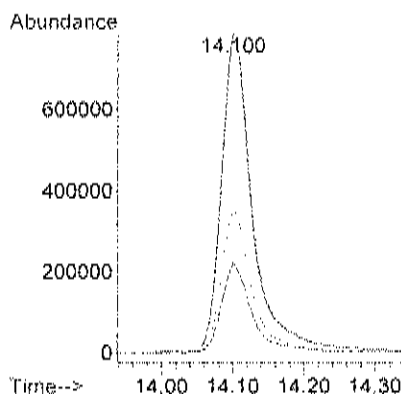
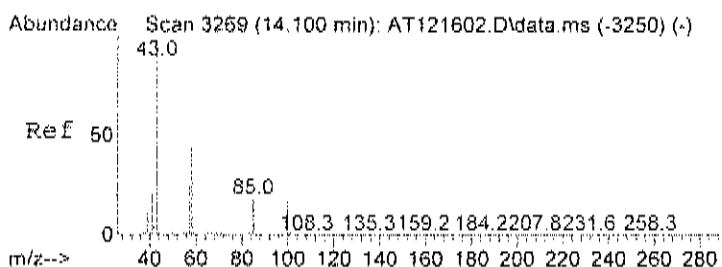
RT: 14.100 min Scan# 3269

Delta R.T. -0.009 min

Lab File: AT121717.D

Acq: 17 Dec 2022 9:13 pm

Tgt Ion: 43	Resp: 2372988
Ion Ratio	Lower Upper
43 100	
57 26.7	7.7 47.7
58 44.3	7.6 47.6



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121718.D
Acq On : 17 Dec 2022 9:56 pm
Operator : RJP
Sample : C2212031-015A 90X
Misc : AD12_1UG
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 18 10:36:13 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

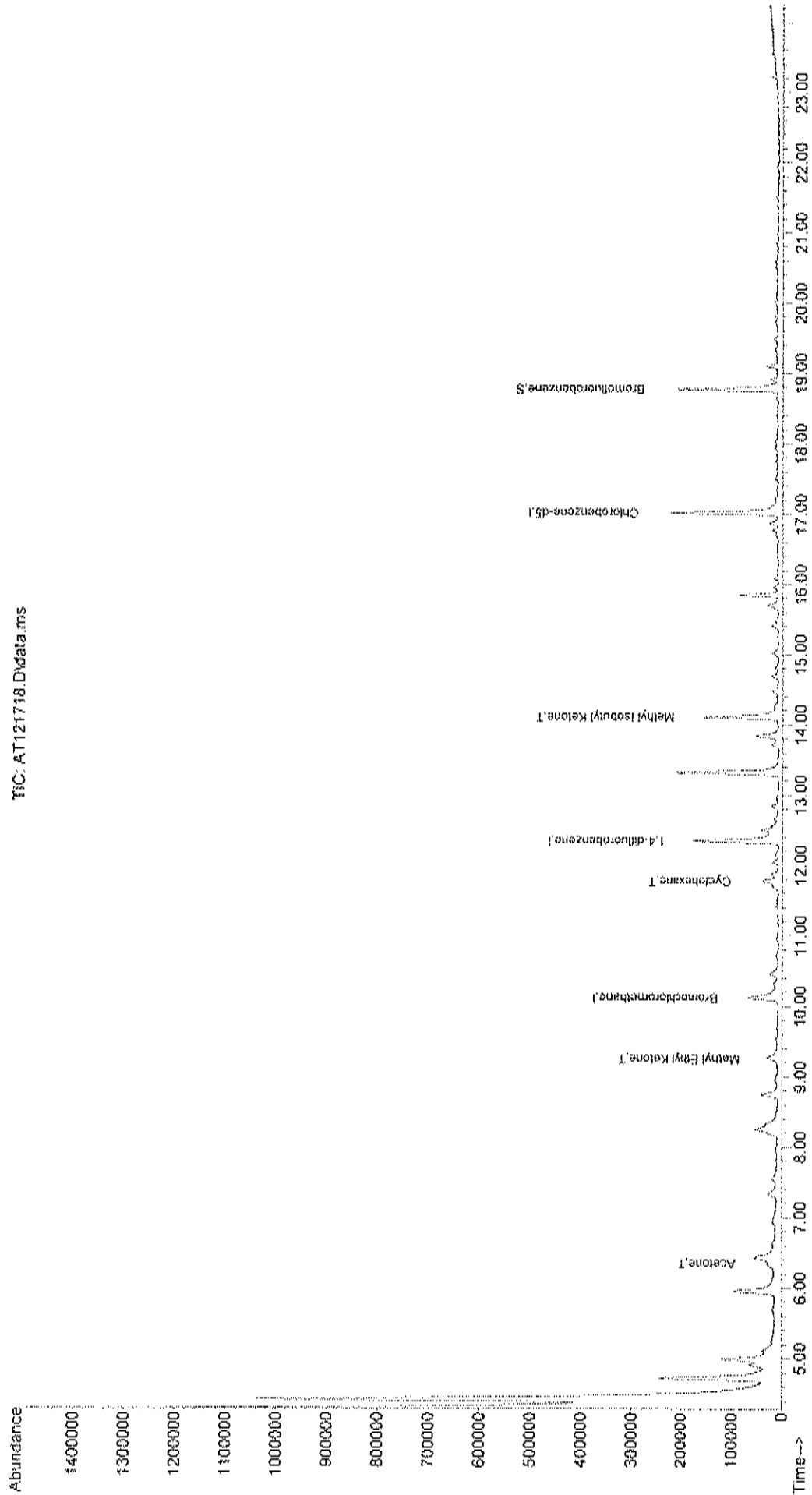
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

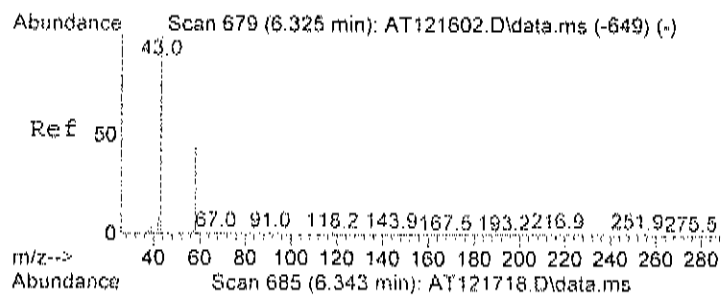
Internal Standards						
1) Bromochloromethane	10.114	128	44209	1.00	ppb	#-0.01
35) 1,4-difluorobenzene	12.341	114	264323	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	211844	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	125463	0.88	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	88.00%
Target Compounds						
15) Acetone	6.343	58	20698m <i>P</i>	0.89	ppb	Qvalue
28) Methyl Ethyl Ketone	9.249	72	8046m <i>L</i>	0.22	ppb	
37) Cyclohexane	11.768	56	26960m	0.22	ppb	
52) Methyl Isobutyl Ketone	14.106	43	169882	1.11	ppb	84

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121718.D
Acq On : 17 Dec 2022 9:56 pm
Operator : RJP
Sample : C2212031-015A 90X
Misc : AD12 1UG
ALS Vial : 16 Sample Multiplier: 1

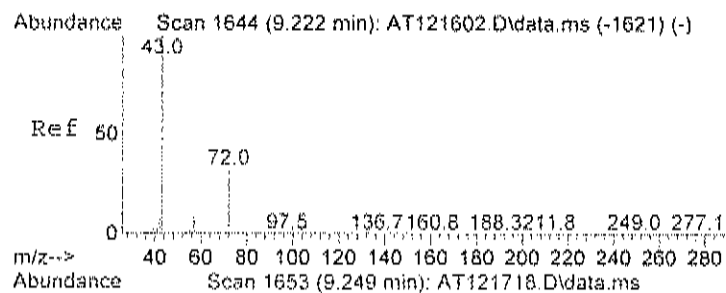
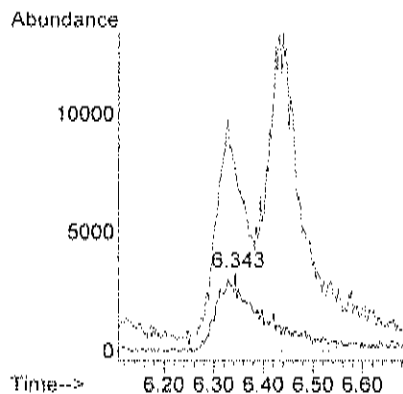
Quant Time: Dec 18 10:36:13 2022
Quant Method : C:\msdchem\1\methods\AD12 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





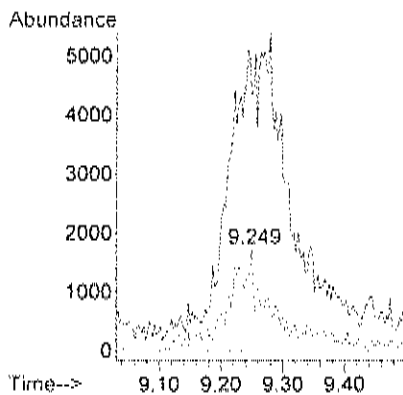
#15
Acetone
Concen: 0.89 ppb m
RT: 6.343 min Scan# 685
Delta R.T. 0.015 min
Lab File: AT121718.D
Acq: 17 Dec 2022 9:56 pm

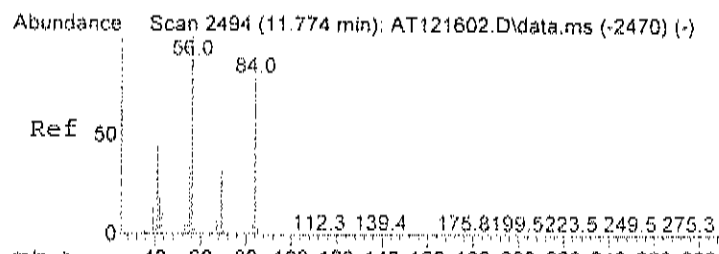
Tgt Ion: 58 Resp: 20698
Ion Ratio Lower Upper
58 100
43 0.0 272.3 332.3#



#28
Methyl Ethyl Ketone
Concen: 0.22 ppb m
RT: 9.249 min Scan# 1653
Delta R.T. 0.030 min
Lab File: AT121718.D
Acq: 17 Dec 2022 9:56 pm

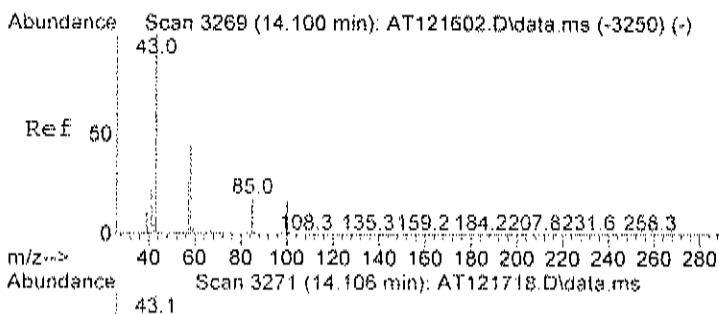
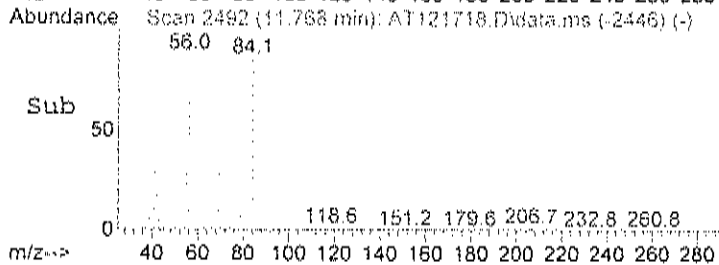
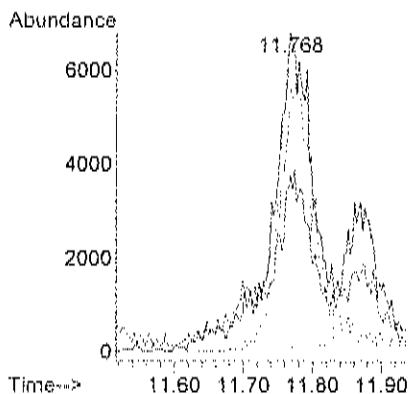
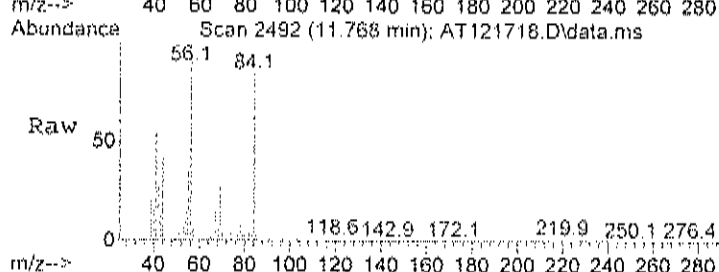
Tgt Ion: 72 Resp: 8046
Ion Ratio Lower Upper
72 100
43 16.8 333.7 373.7#
72 7.7 80.0 120.0#





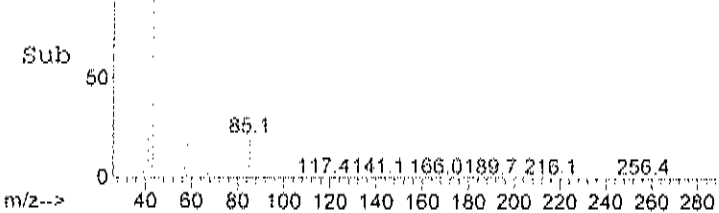
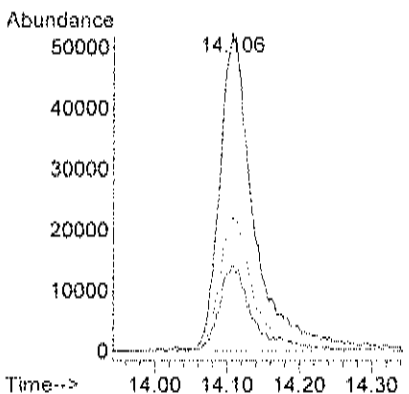
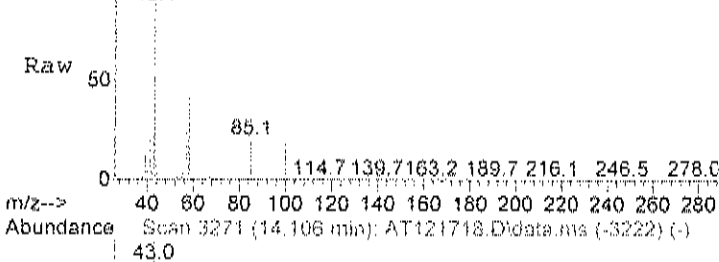
#37
Cyclohexane
Concen: 0.22 ppb m
RT: 11.768 min Scan# 2492
Delta R.T. -0.012 min
Lab File: AT121718.D
Acq: 17 Dec 2022 9:56 pm

Tgt Ion	Ratio	Lower	Upper
56	100		
41	65.9	32.6	72.6
84	74.8	18.2	58.2#



#52
Methyl Isobutyl Ketone
Concen: 1.11 ppb
RT: 14.106 min Scan# 3271
Delta R.T. -0.003 min
Lab File: AT121718.D
Acq: 17 Dec 2022 9:56 pm

Tgt Ion	Ratio	Lower	Upper
43	100		
57	26.4	7.7	47.7
58	42.6	7.6	47.6



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	+1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 6:32:00 AM
2,2,4-trimethylpentane	0.25	0.15		ppbV	1	12/17/2022 6:32:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Acetone	2.0	1.5		ppbV	5	12/17/2022 10:39:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Benzene	0.20	0.15		ppbV	1	12/17/2022 6:32:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Carbon disulfide	0.20	0.15		ppbV	1	12/17/2022 6:32:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloroform	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Chloromethane	0.27	0.15		ppbV	1	12/17/2022 6:32:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Cyclohexane	0.31	0.15		ppbV	1	12/17/2022 6:32:00 AM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte, Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Ethyl acetate	0.32	0.15		ppbV	1	12/17/2022 6:32:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 11	0.88	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Freon 12	0.64	0.15		ppbV	1	12/17/2022 6:32:00 AM
Heptane	0.70	0.15		ppbV	1	12/17/2022 6:32:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Hexane	1.5	0.15		ppbV	1	12/17/2022 6:32:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
m&p-Xylene	0.18	0.30	J	ppbV	1	12/17/2022 6:32:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 6:32:00 AM
Methyl Ethyl Ketone	0.55	0.30		ppbV	1	12/17/2022 6:32:00 AM
Methyl Isobutyl Ketone	0.14	0.30	J	ppbV	1	12/17/2022 6:32:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Methylene chloride	0.28	0.15		ppbV	1	12/17/2022 6:32:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Tetrachloroethylene	0.45	0.15		ppbV	1	12/17/2022 6:32:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Toluene	1.4	0.15		ppbV	1	12/17/2022 6:32:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 6:32:00 AM
Surr: Bromofluorobenzene	94.0	46.7-129		%REC	1	12/17/2022 6:32:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 6:32:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 6:32:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 6:32:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 6:32:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 6:32:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 6:32:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 6:32:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
2,2,4-trimethylpentane	1.2	0.70		ug/m3	1	12/17/2022 6:32:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 6:32:00 AM
Acetone	4.7	3.6		ug/m3	5	12/17/2022 10:39:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 6:32:00 AM
Benzene	0.64	0.48		ug/m3	1	12/17/2022 6:32:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 6:32:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 6:32:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 6:32:00 AM
Carbon disulfide	0.62	0.47		ug/m3	1	12/17/2022 6:32:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 6:32:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 6:32:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 6:32:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	12/17/2022 6:32:00 AM
Chloromethane	0.56	0.31		ug/m3	1	12/17/2022 6:32:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 6:32:00 AM
Cyclohexane	1.1	0.52		ug/m3	1	12/17/2022 6:32:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 6:32:00 AM
Ethyl acetate	1.2	0.54		ug/m3	1	12/17/2022 6:32:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 6:32:00 AM
Freon 11	4.9	0.84		ug/m3	1	12/17/2022 6:32:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 6:32:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 6:32:00 AM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-15

Lab Order: C2212031

Tag Number: 350,295

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-016A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.2	0.74		ug/m3	1	12/17/2022 6:32:00 AM
Heptane	2.9	0.61		ug/m3	1	12/17/2022 6:32:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 6:32:00 AM
Hexane	5.2	0.53		ug/m3	1	12/17/2022 6:32:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/17/2022 6:32:00 AM
m&p-Xylene	0.78	1.3	J	ug/m3	1	12/17/2022 6:32:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 6:32:00 AM
Methyl Ethyl Ketone	1.6	0.88		ug/m3	1	12/17/2022 6:32:00 AM
Methyl Isobutyl Ketone	0.57	1.2	J	ug/m3	1	12/17/2022 6:32:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 6:32:00 AM
Methylene chloride	0.97	0.52		ug/m3	1	12/17/2022 6:32:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	12/17/2022 6:32:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 6:32:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 6:32:00 AM
Tetrachloroethylene	3.1	1.0		ug/m3	1	12/17/2022 6:32:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/17/2022 6:32:00 AM
Toluene	5.5	0.57		ug/m3	1	12/17/2022 6:32:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 6:32:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 6:32:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 6:32:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 6:32:00 AM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

Page 32 of 40

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121626.D
 Acq On : 17 Dec 2022 6:32 am
 Operator : RJP
 Sample : C2212031-016A
 Misc : AD12_1UG
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 17 08:41:06 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

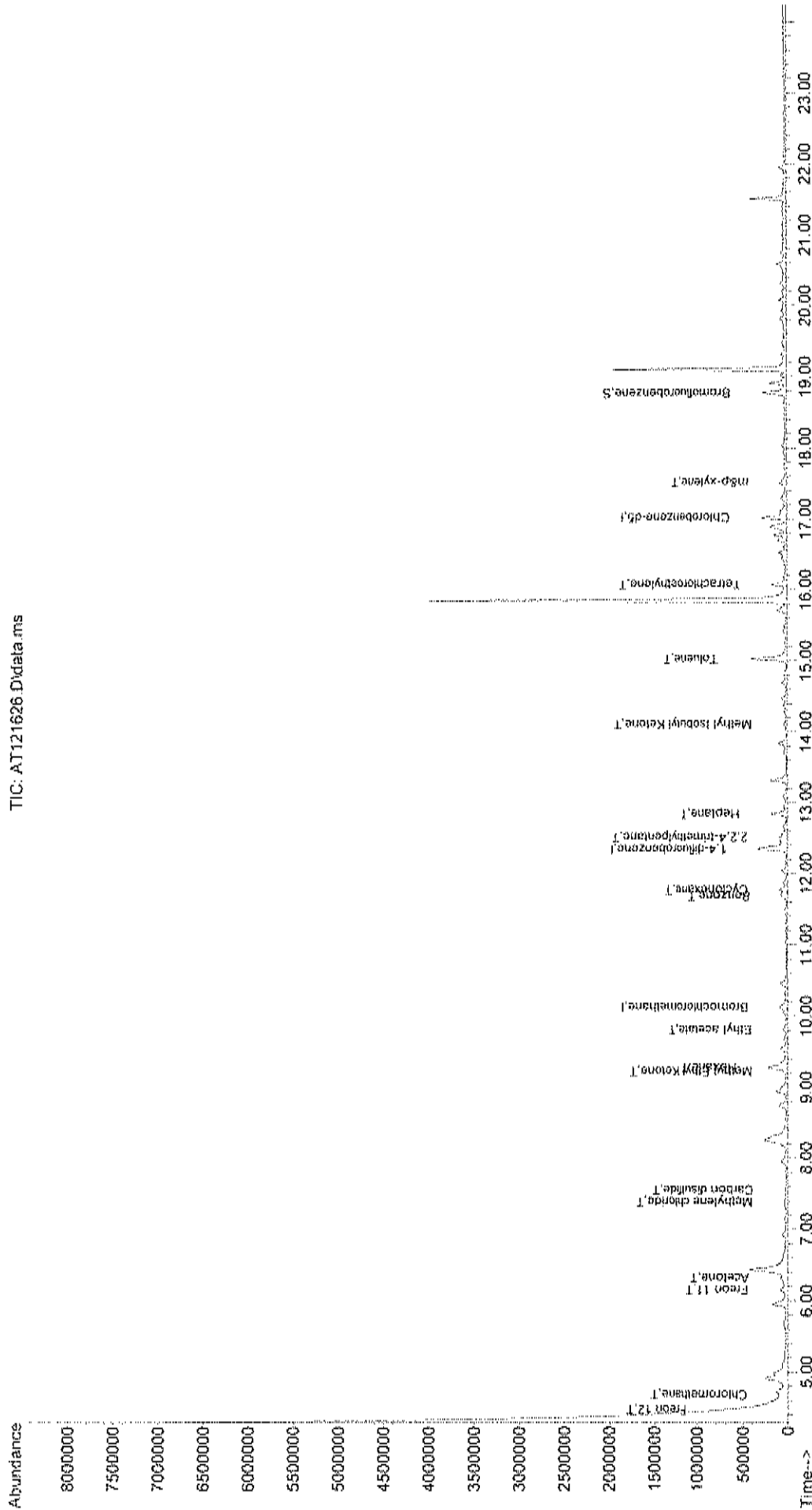
Internal Standards						
1) Bromochloromethane	10.126	128	49282	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	311464	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	248083	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	157570	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
						Qvalue
3) Freon 12	4.467	85	105298	0.64	ppb	98
4) Chloromethane	4.680	50	14313	0.27	ppb	82
14) Freon 11	6.154	101	120153	0.88	ppb	98
15) Acetone	6.322	58	72462	2.81	ppb	# 1
21) Methylene chloride	7.385	84	19127	0.28	ppb	97
23) Carbon disulfide	7.553	76	38157	0.20	ppb	96
28) Methyl Ethyl Ketone	9.225	72	22487	0.55	ppb	# 1
30) Hexane	9.279	57	208198	1.48	ppb	91
31) Ethyl acetate	9.810	43	63684	0.32	ppb	93
37) Cyclohexane	11.771	56	44239m	0.31	ppb	
39) Benzene	11.687	78	54710	0.20	ppb	96
42) 2,2,4-trimethylpentane	12.512	57	109084	0.25	ppb	# 63
43) Heptane	12.842	43	102981	0.70	ppb	92
51) Toluene	15.025	92	287886	1.45	ppb	98
52) Methyl Isobutyl Ketone	14.109	43	24489	0.14	ppb	81
56) Tetrachloroethylene	16.076	164	55336	0.45	ppb	91
59) m&p-xylene	17.516	91	60275	0.18	ppb	90

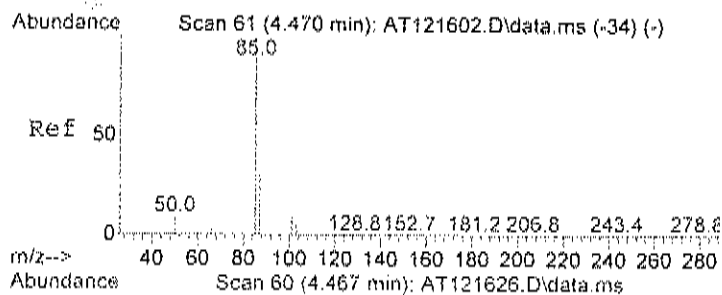
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121626.D
 Acq On : 17 Dec 2022 6:32 am
 Operator : RJP
 Sample : C2212031-016A
 Misc : AD12_IUG
 ALS Vial : 26 Sample Multiplier: 1

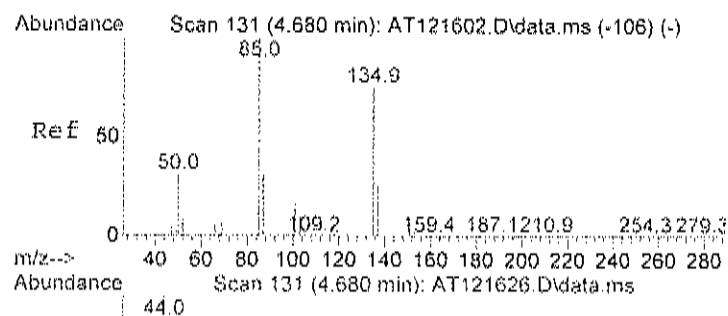
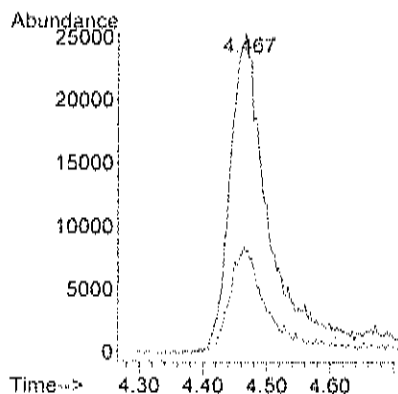
Quant Time: Dec 17 08:41:06 2022
 Quant Method : C:\msdchem\1\methods\AD12_IUG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 Qlast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





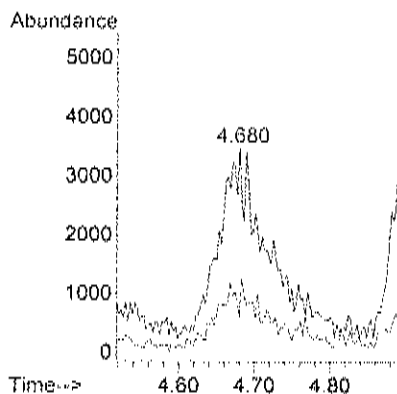
#3
Preon 12
Concen: 0.64 ppb
RT: 4.467 min Scan# 60
Delta R.T. -0.006 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

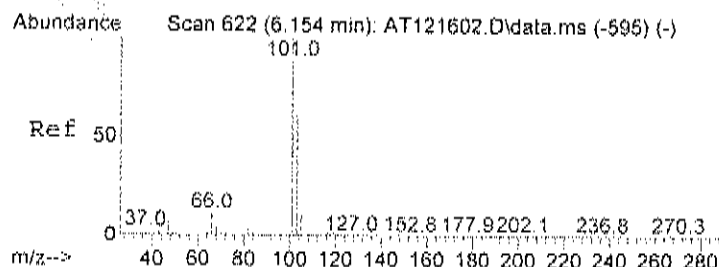
Tgt Ion	85	Resp	105298
Ion Ratio	100	Lower	Upper
85	100		
87	33.0	14.3	54.3



#4
Chloromethane
Concen: 0.27 ppb
RT: 4.680 min Scan# 131
Delta R.T. -0.003 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

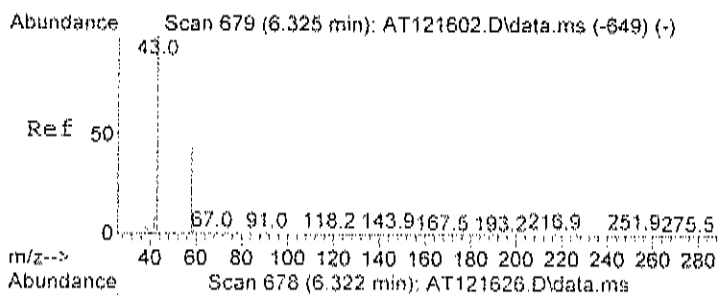
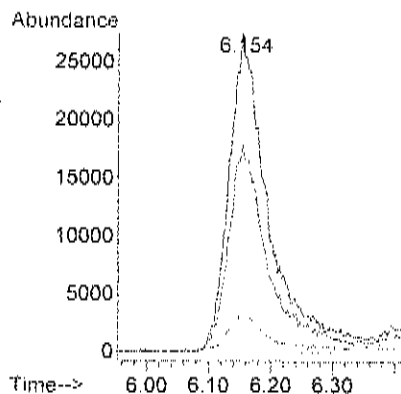
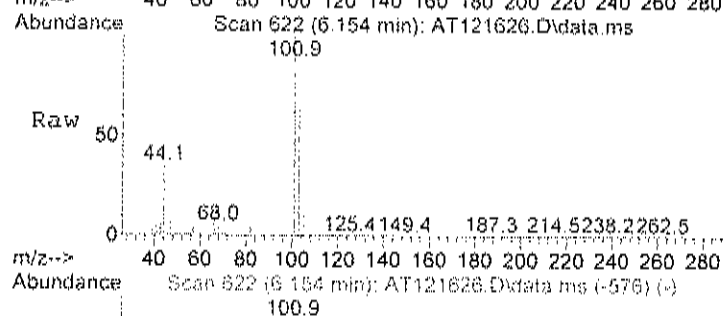
Tgt Ion	50	Resp	14313
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
50	100		
52	34.4	5.4	45.4





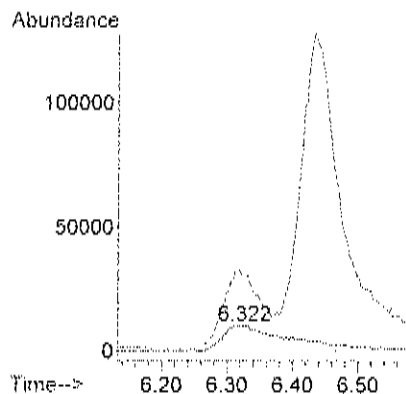
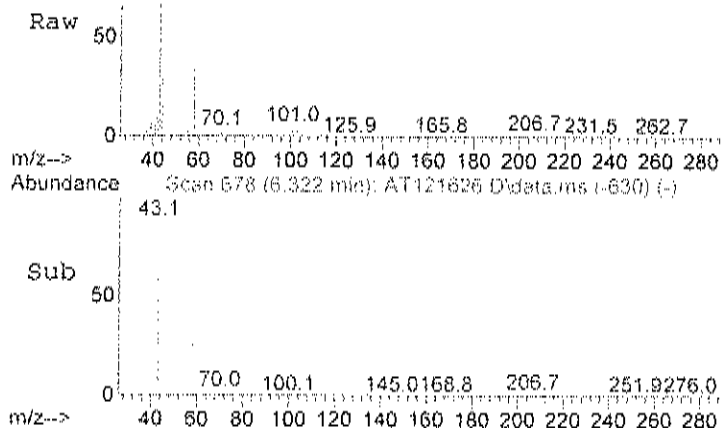
#14
Freon 11
Concen: 0.88 ppb
RT: 6.154 min Scan# 622
Delta R.T. -0.012 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

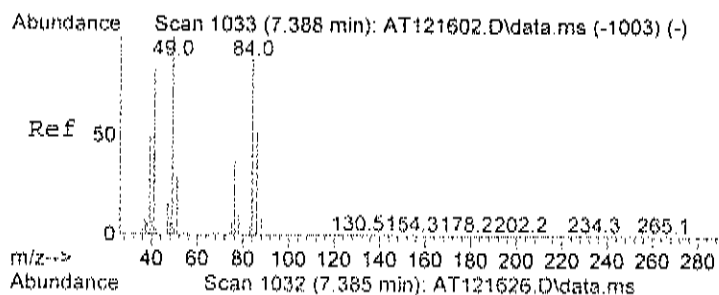
Tgt Ion	Ratio	Lower	Upper
101	100		
103	64.7	44.1	84.1
105	9.6	0.0	32.0



#15
Acetone
Concen: 2.81 ppb
RT: 6.322 min Scan# 678
Delta R.T. -0.006 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

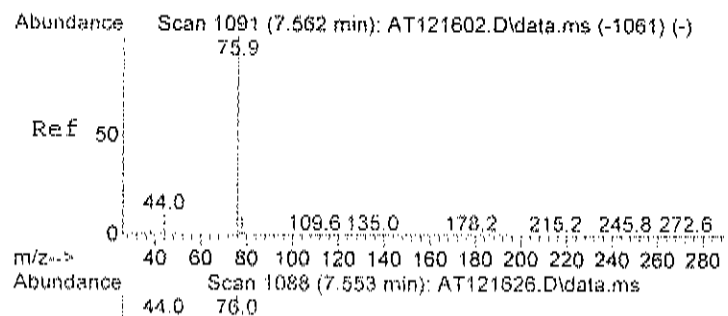
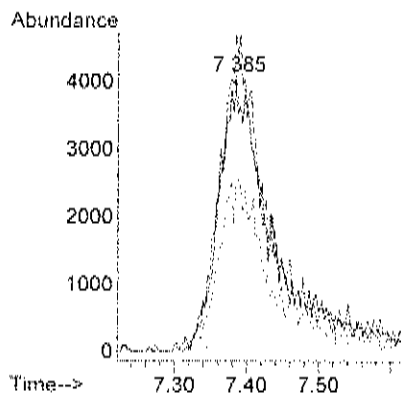
Tgt Ion	Ratio	Lower	Upper
58	100		
43	0.0	272.3	332.3#





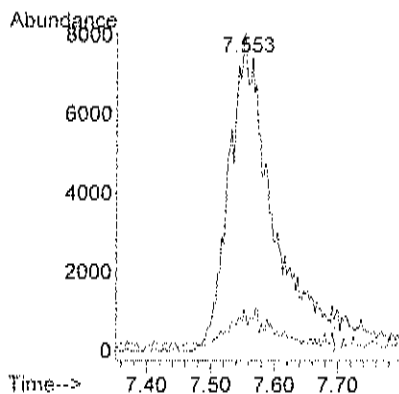
#21
Methylene chloride
Concen: 0.28 ppb
RT: 7.385 min Scan# 1032
Delta R.T. -0.003 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

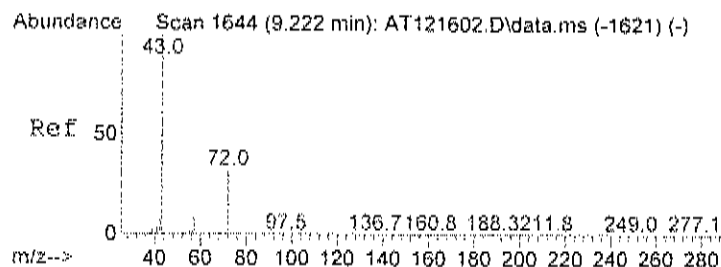
Tgt Ion:	84	Resp:	19127
Ion	Ratio	Lower	Upper
84	100		
49	109.3	84.2	124.2
86	62.9	42.9	82.9



#23
Carbon disulfide
Concen: 0.20 ppb
RT: 7.553 min Scan# 1088
Delta R.T. -0.006 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

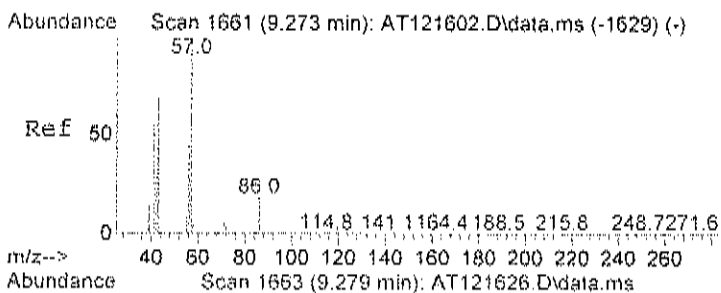
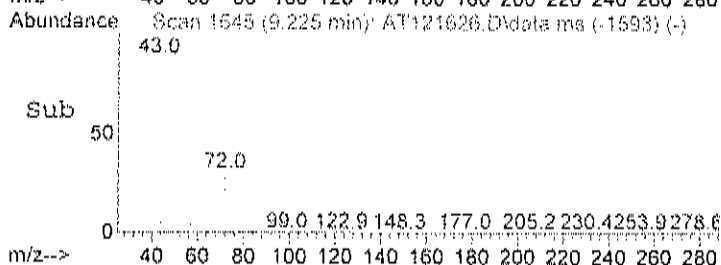
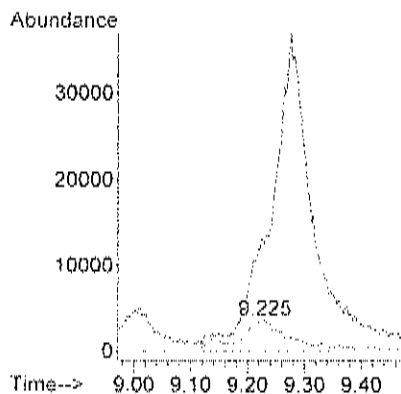
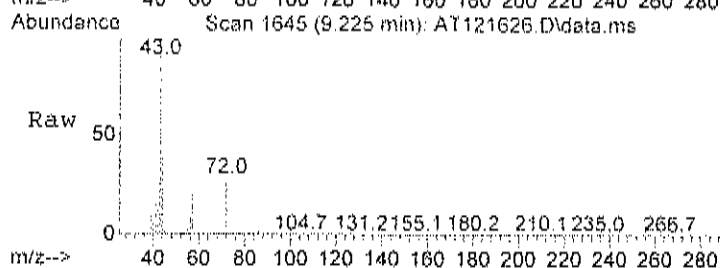
Tgt Ion:	76	Resp:	36157
Ion	Ratio	Lower	Upper
76	100		
78	10.2	0.0	28.7





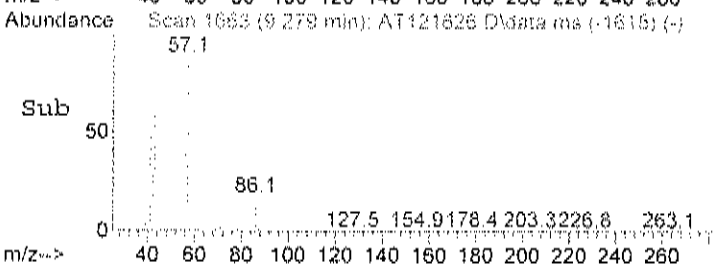
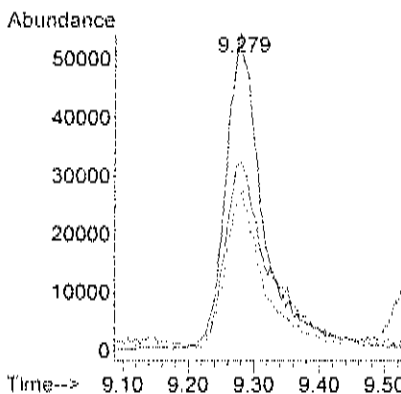
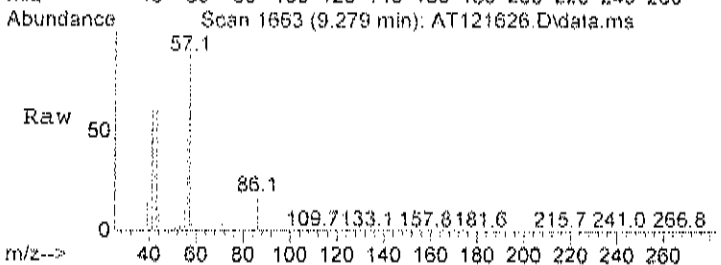
#28
Methyl Ethyl Ketone
Concen: 0.55 ppb
RT: 9.225 min Scan# 1645
Delta R.T. 0.006 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

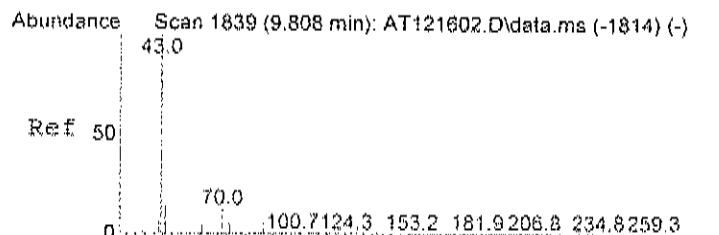
Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	333.7	373.7#
72	100.0	80.0	120.0



#30
Hexane
Concen: 1.48 ppb
RT: 9.279 min Scan# 1663
Delta R.T. -0.006 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

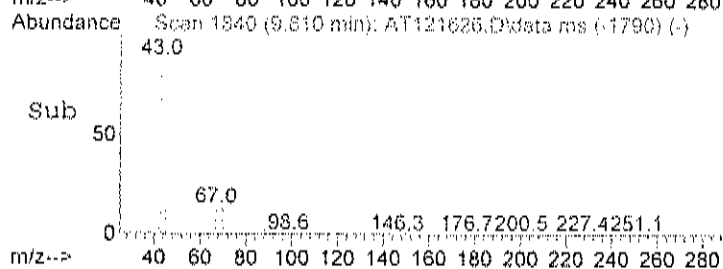
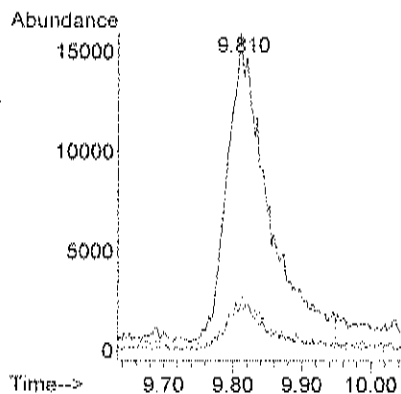
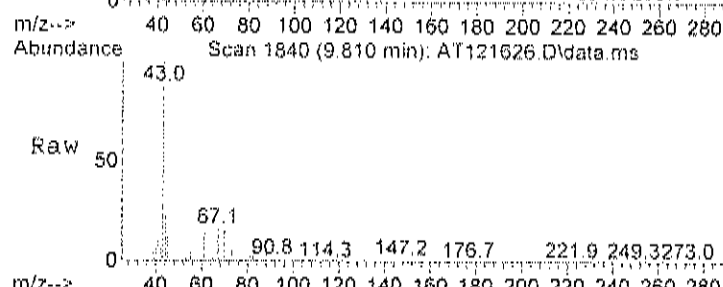
Tgt Ion	Ratio	Lower	Upper
57	100		
41	69.2	62.0	102.0
56	52.1	31.8	71.8





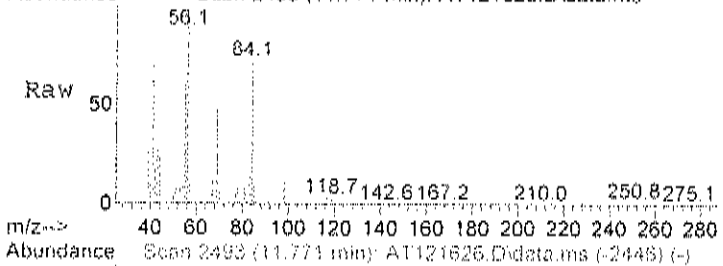
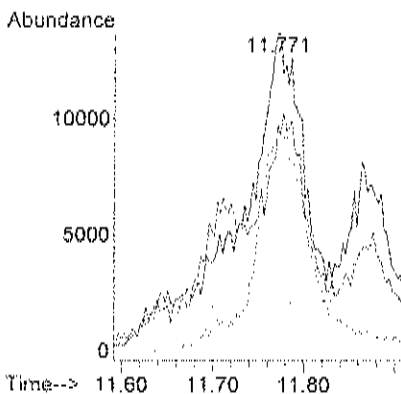
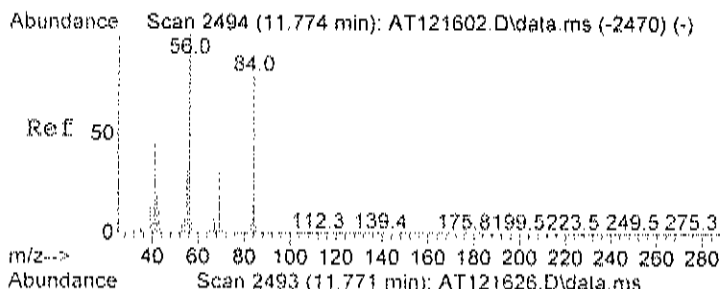
#31
Ethyl acetate
Concen: 0.32 ppb
RT: 9.810 min Scan# 1840
Delta R.T. 0.000 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

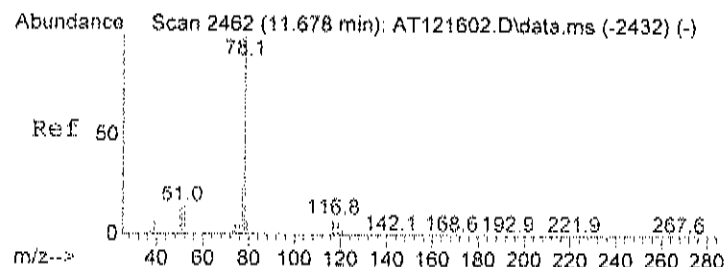
Tgt Ion:	43	Resp:	63684
Ion Ratio	Lower	Upper	
43	100		
45	15.5	0.0	32.9
61	16.2	0.0	33.0



#37
Cyclohexane
Concen: 0.31 ppb m
RT: 11.771 min Scan# 2493
Delta R.T. -0.009 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

Tgt Ion:	56	Resp:	44239
Ion Ratio	Lower	Upper	
56	100		
41	121.4	32.6	72.6#
84	76.5	18.2	58.2#





#39

Benzene

Concen: 0.20 ppb

RT: 11.687 min Scan# 2465

Delta R.T. -0.003 min

Lab File: AT121626.D

Acq: 17 Dec 2022 6:32 am

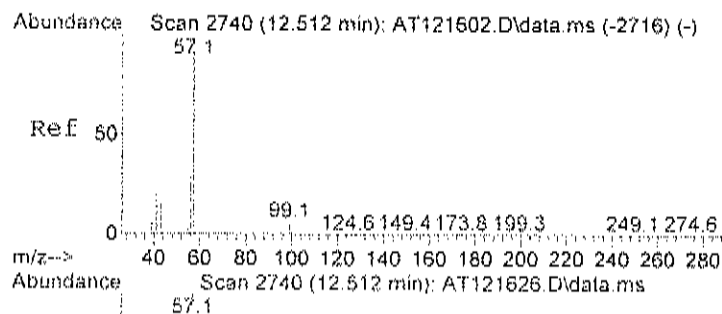
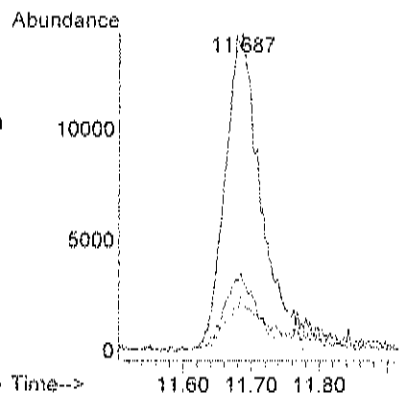
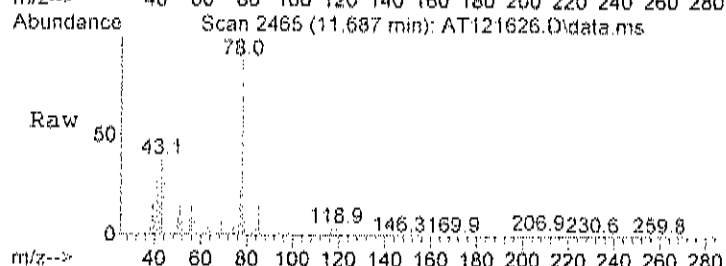
Tgt Ion: 78 Resp: 54710

Ion Ratio Lower Upper

78 100

77 24.4 2.5 42.5

51 18.2 0.5 40.5



#42

2,2,4-trimethylpentane

Concen: 0.25 ppb

RT: 12.512 min Scan# 2740

Delta R.T. -0.003 min

Lab File: AT121626.D

Acq: 17 Dec 2022 6:32 am

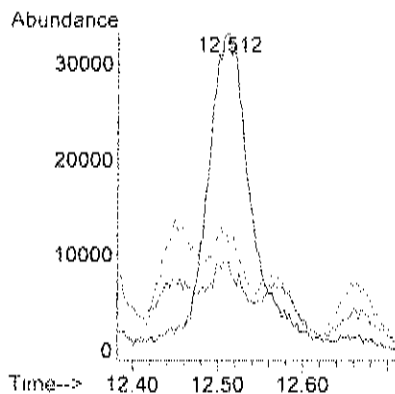
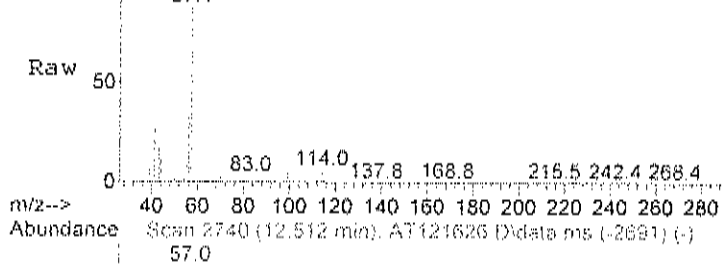
Tgt Ion: 57 Resp: 109084

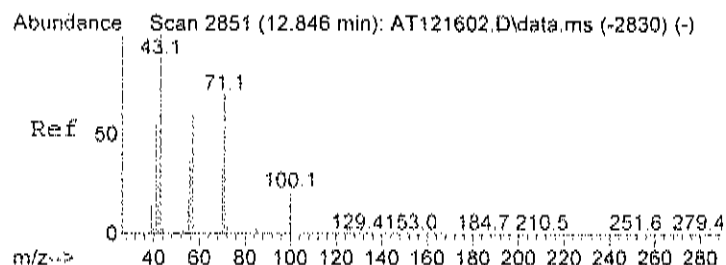
Ion Ratio Lower Upper

57 100

41 50.1 17.4 57.4

56 0.0 10.8 50.8#





#43

Heptane

Concen: 0.70 ppb

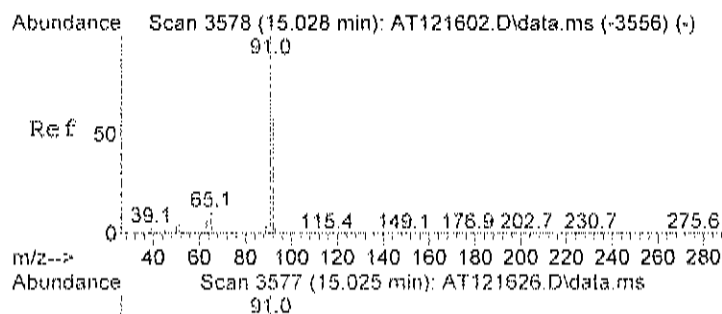
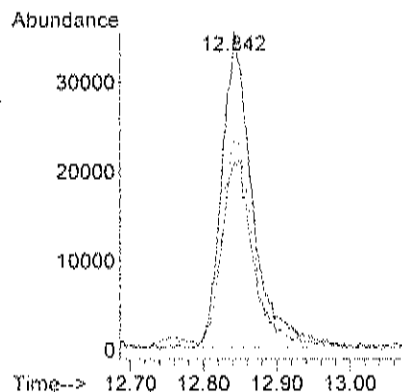
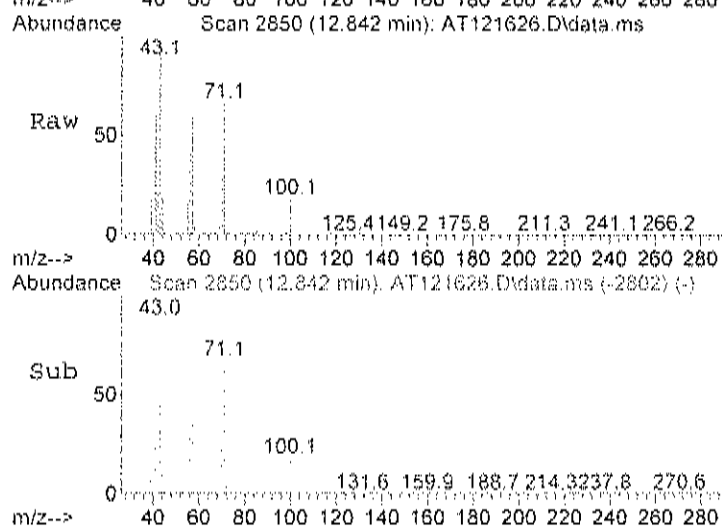
RT: 12.842 min Scan# 2850

Delta R.T. -0.006 min

Lab File: AT121626.D

Acq: 17 Dec 2022 6:32 am

Tgt Ion: 43	Resp: 102981
Ion Ratio	Lower Upper
43 100	
57 61.9	42.3 82.3
71 70.4	38.8 78.8



#51

Toluene

Concen: 1.45 ppb

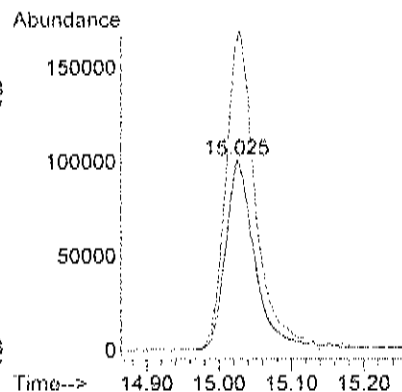
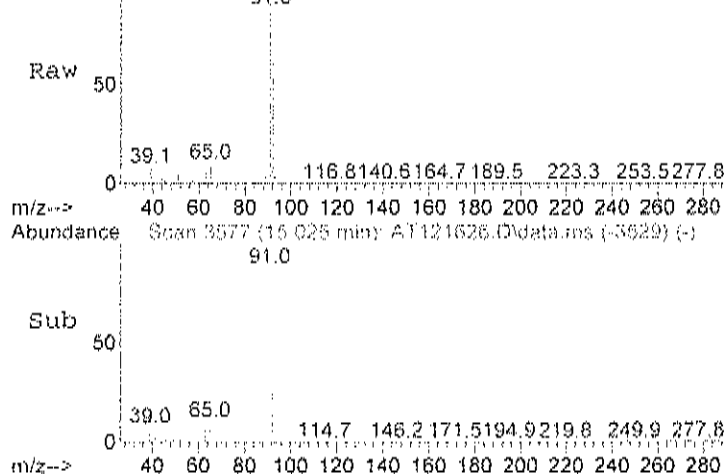
RT: 15.025 min Scan# 3577

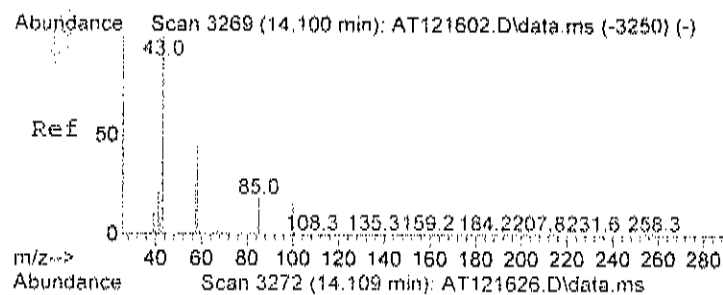
Delta R.T. -0.006 min

Lab File: AT121626.D

Acq: 17 Dec 2022 6:32 am

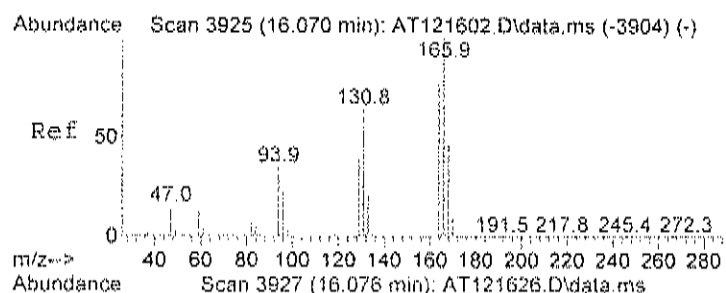
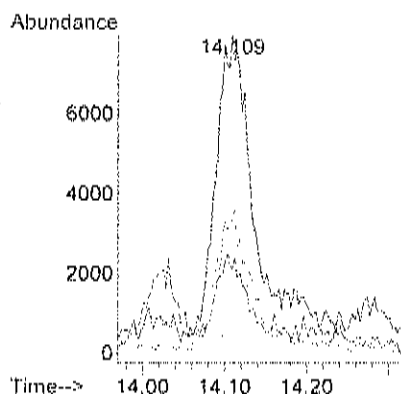
Tgt Ion: 92	Resp: 287886
Ion Ratio	Lower Upper
92 100	
91 170.0	153.3 193.3





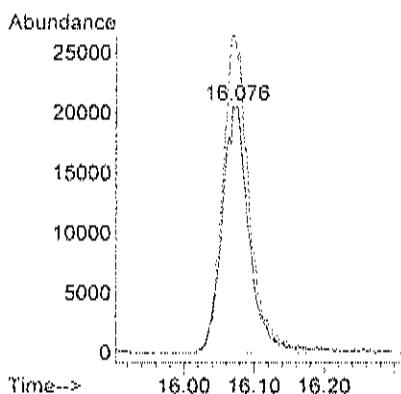
#52
Methyl Isobutyl Ketone
Concen: 0.14 ppb
RT: 14.109 min Scan# 3272
Delta R.T. 0.000 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

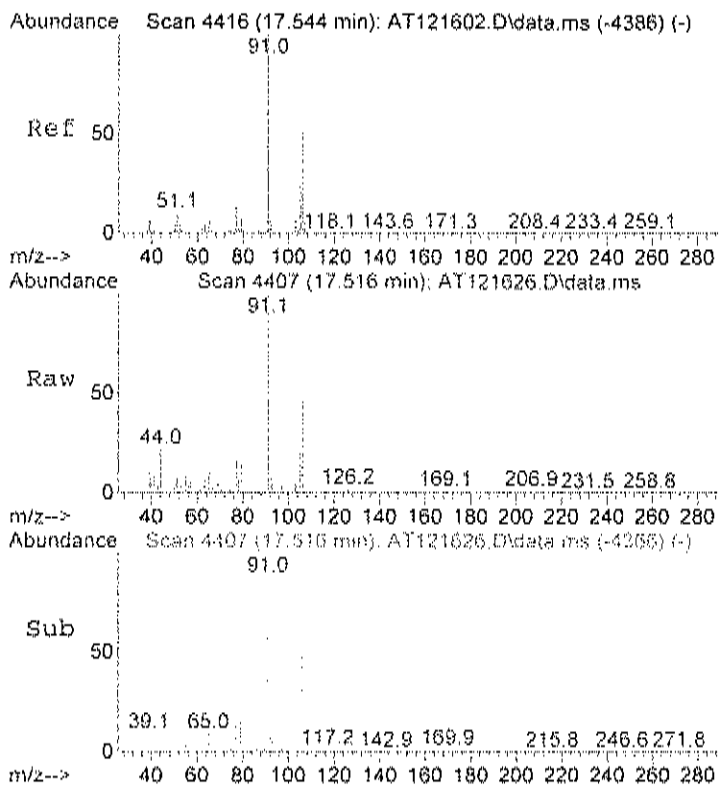
Tgt Ion:	43	Resp:	24489
Ion	Ratio	Lower	Upper
43	100		
57	24.8	7.7	47.7
58	44.4	7.6	47.6



#56
Tetrachloroethylene
Concen: 0.45 ppb
RT: 16.076 min Scan# 3927
Delta R.T. 0.001 min
Lab File: AT121626.D
Acq: 17 Dec 2022 6:32 am

Tgt Ion:	164	Resp:	55336
Ion	Ratio	Lower	Upper
164	100		
166	127.4	97.2	137.2





#59

m&p-xylene

Concen: 0.18 ppb

RT: 17.516 min Scan# 4407

Delta R.T. -0.027 min

Lab File: AT121626.D

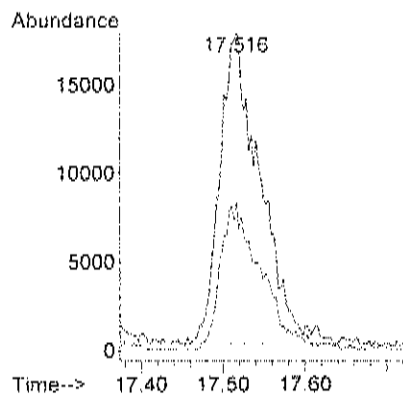
Acq: 17 Dec 2022 6:32 am

Tgt Ion: 91 Resp: 60275

Ion Ratio Lower Upper

91 100

106 49.0 22.4 62.4



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121719.D
Acq On : 17 Dec 2022 10:39 pm
Operator : RJP
Sample : C2212031-016A 5X
Misc : AD12_1UG
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 18 10:36:34 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.126	128	44681	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	267690	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	210376	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.774	95	122893	0.86	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	86.00%
Target Compounds						
15) Acetone	6.343	58	9470	0.40	ppb	# 1

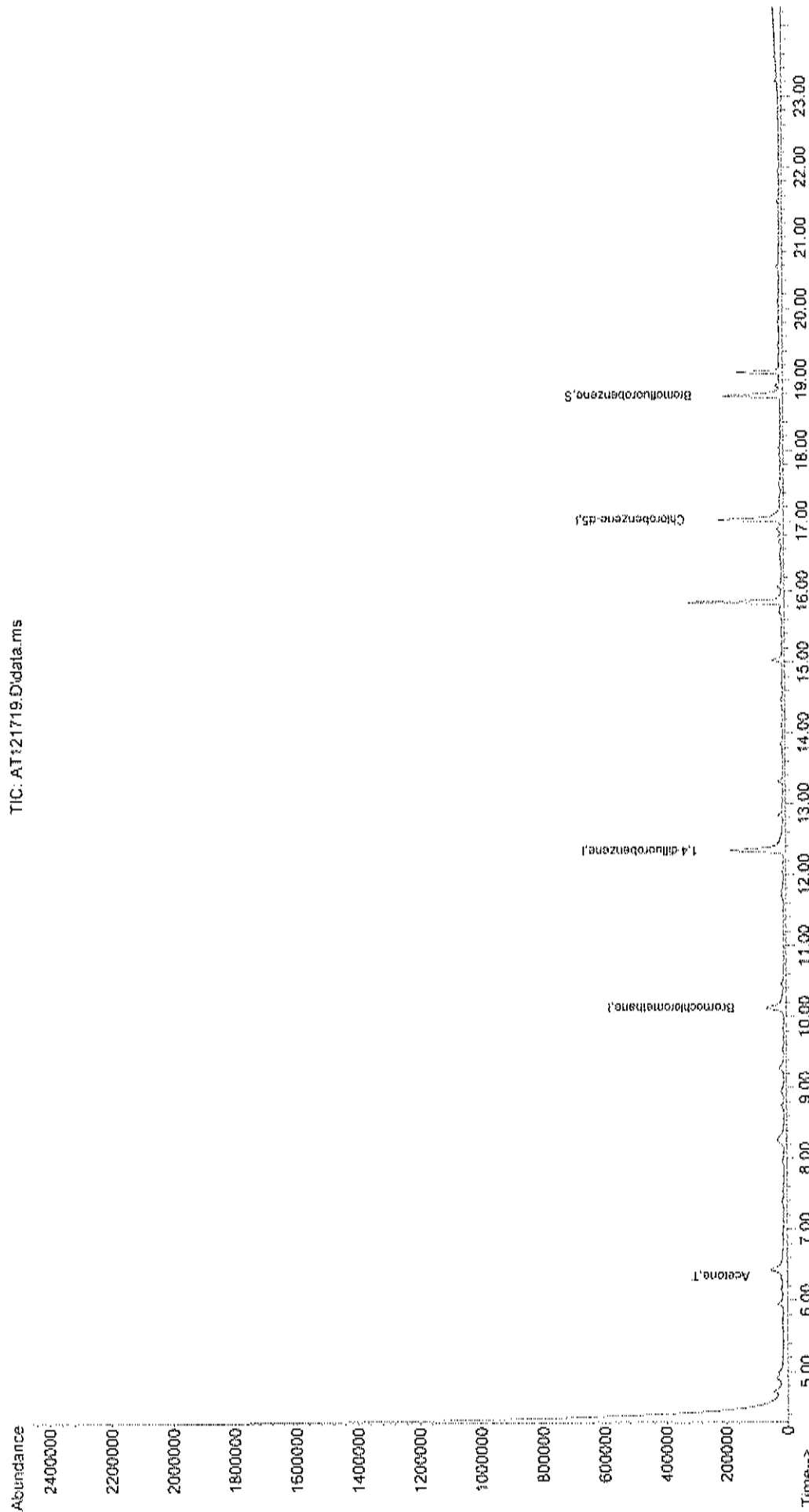
(#) = qualifier out of range (m) = manual integration (+) = signals summed

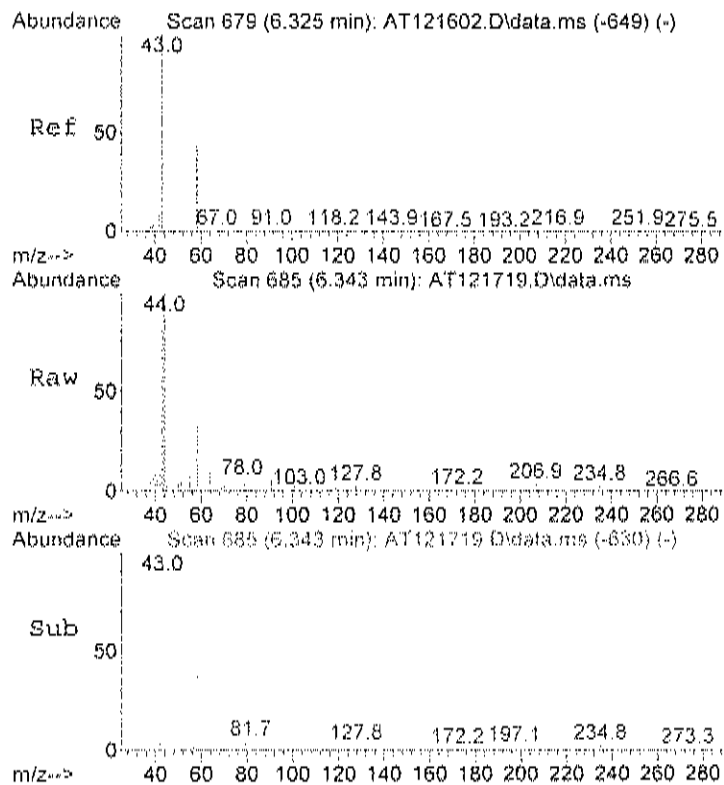
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121719.D
Acq On : 17 Dec 2022 10:39 pm
Operator : RJP
Sample : C2212031-016A 5X
Misc : AD12_1UG
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 18 10:36:34 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

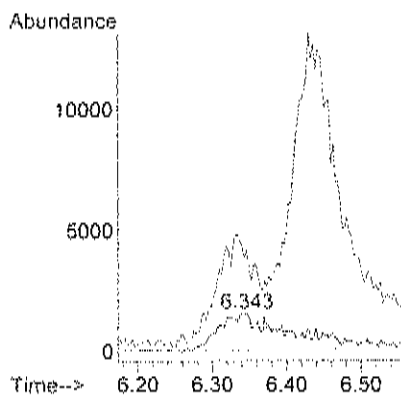
TIC: AT121719.D\data.ms





#15
Acetone
Concen: 0.40 ppb
RT: 6.343 min Scan# 685
Delta R.T. 0.015 min
Lab File: AT121719.D
Acq: 17 Dec 2022 10:39 pm

Tgt Ion	58	Resp	9470
Ion Ratio	Lower	Upper	
58	100		
43	0.0	272.3	332.3#



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: SVW-16

Lab Order: C2212031

Tag Number: 93,111

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-017A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-2			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
HELIUM LEAK TEST		GC		Analyst: RJP		
Helium	< 0.75	0.75		%	1	12/21/2022
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
2,2,4-trimethylpentane	1.9	1.5		ppbV	10	12/17/2022 11:22:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Acetone	28	12		ppbV	40	12/18/2022 12:04:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Benzene	0.38	0.15		ppbV	1	12/17/2022 7:16:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromoform	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Carbon disulfide	0.85	0.15		ppbV	1	12/17/2022 7:16:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloroform	0.25	0.15		ppbV	1	12/17/2022 7:16:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Cyclohexane	1.6	0.15		ppbV	1	12/17/2022 7:16:00 AM

Qualifiers:

- Results reported are not blank corrected
- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS
 Lab Order: C2212031
 Project: IKEA Red Hook
 Lab ID: C2212031-017A

Client Sample ID: SVW-16
 Tag Number: 93,111
 Collection Date: 12/13/2022
 Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Ethylbenzene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 11	0.27	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 113	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 114	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Freon 12	0.65	0.15		ppbV	1	12/17/2022 7:16:00 AM
Heptane	0.14	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Hexane	3.3	1.5		ppbV	10	12/17/2022 11:22:00 PM
Isopropyl alcohol	1.1	0.15		ppbV	1	12/17/2022 7:16:00 AM
m&p-Xylene	0.24	0.30	J	ppbV	1	12/17/2022 7:16:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
Methyl Ethyl Ketone	22	12		ppbV	40	12/18/2022 12:04:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/17/2022 7:16:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Methylene chloride	0.53	0.15		ppbV	1	12/17/2022 7:16:00 AM
o-Xylene	0.11	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Propylene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Styrene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrachloroethylene	0.23	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	13	0.15		ppbV	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	19	1.5		ppbV	10	12/17/2022 11:22:00 PM
Toluene	0.65	0.15		ppbV	1	12/17/2022 7:16:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Trichloroethene	0.12	0.15	J	ppbV	1	12/17/2022 7:16:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	12/17/2022 7:16:00 AM
Surr: Bromofluorobenzene	85.0	46.7-129		%REC	1	12/17/2022 7:16:00 AM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS
 Lab Order: C2212031
 Project: IKEA Red Hook
 Lab ID: C2212031-017A

Client Sample ID: SVW-16
 Tag Number: 93,111
 Collection Date: 12/13/2022
 Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 7:16:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/17/2022 7:16:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 7:16:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/17/2022 7:16:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/17/2022 7:16:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/17/2022 7:16:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/17/2022 7:16:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
2,2,4-trimethylpentane	8.9	7.0		ug/m3	10	12/17/2022 11:22:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/17/2022 7:16:00 AM
Acetone	66	28		ug/m3	40	12/18/2022 12:04:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/17/2022 7:16:00 AM
Benzene	1.2	0.48		ug/m3	1	12/17/2022 7:16:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/17/2022 7:16:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	12/17/2022 7:16:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	12/17/2022 7:16:00 AM
Carbon disulfide	2.6	0.47		ug/m3	1	12/17/2022 7:16:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	12/17/2022 7:16:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/17/2022 7:16:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	12/17/2022 7:16:00 AM
Chloroform	1.2	0.73		ug/m3	1	12/17/2022 7:16:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	12/17/2022 7:16:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 7:16:00 AM
Cyclohexane	5.4	0.52		ug/m3	1	12/17/2022 7:16:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/17/2022 7:16:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/17/2022 7:16:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/17/2022 7:16:00 AM
Freon 11	1.5	0.84		ug/m3	1	12/17/2022 7:16:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	12/17/2022 7:16:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	12/17/2022 7:16:00 AM

Qualifiers:

- DL Detection Limit
- H Holding times for preparation or analysis exceeded
- JN Non-routine analyte. Quantitation estimated.
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- J Analyte detected below quantitation limit
- ND Not Detected at the Limit of Detection
- SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS**Client Sample ID:** SVW-16**Lab Order:** C2212031**Tag Number:** 93,111**Project:** IKEA Red Hook**Collection Date:** 12/13/2022**Lab ID:** C2212031-017A**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15			TO-15			Analyst: RJP
Freon 12	3.2	0.74		ug/m3	1	12/17/2022 7:16:00 AM
Heptane	0.57	0.61	J	ug/m3	1	12/17/2022 7:16:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/17/2022 7:16:00 AM
Hexane	12	5.3		ug/m3	10	12/17/2022 11:22:00 PM
Isopropyl alcohol	2.6	0.37		ug/m3	1	12/17/2022 7:16:00 AM
m&p-Xylene	1.0	1.3	J	ug/m3	1	12/17/2022 7:16:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
Methyl Ethyl Ketone	64	35		ug/m3	40	12/18/2022 12:04:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/17/2022 7:16:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/17/2022 7:16:00 AM
Methylene chloride	1.8	0.52		ug/m3	1	12/17/2022 7:16:00 AM
o-Xylene	0.48	0.65	J	ug/m3	1	12/17/2022 7:16:00 AM
Propylene	< 0.26	0.26		ug/m3	1	12/17/2022 7:16:00 AM
Styrene	< 0.64	0.64		ug/m3	1	12/17/2022 7:16:00 AM
Tetrachloroethylene	1.6	1.0		ug/m3	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	38	0.44		ug/m3	1	12/17/2022 7:16:00 AM
Tetrahydrofuran	55	4.4		ug/m3	10	12/17/2022 11:22:00 PM
Toluene	2.4	0.57		ug/m3	1	12/17/2022 7:16:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/17/2022 7:16:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/17/2022 7:16:00 AM
Trichloroethene	0.64	0.81	J	ug/m3	1	12/17/2022 7:16:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/17/2022 7:16:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/17/2022 7:16:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	12/17/2022 7:16:00 AM

Qualifiers:

Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte, Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121627.D
 Acq On : 17 Dec 2022 7:16 am
 Operator : RJP
 Sample : C2212031-017A
 Misc : AD12_1UG
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 17 08:41:08 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

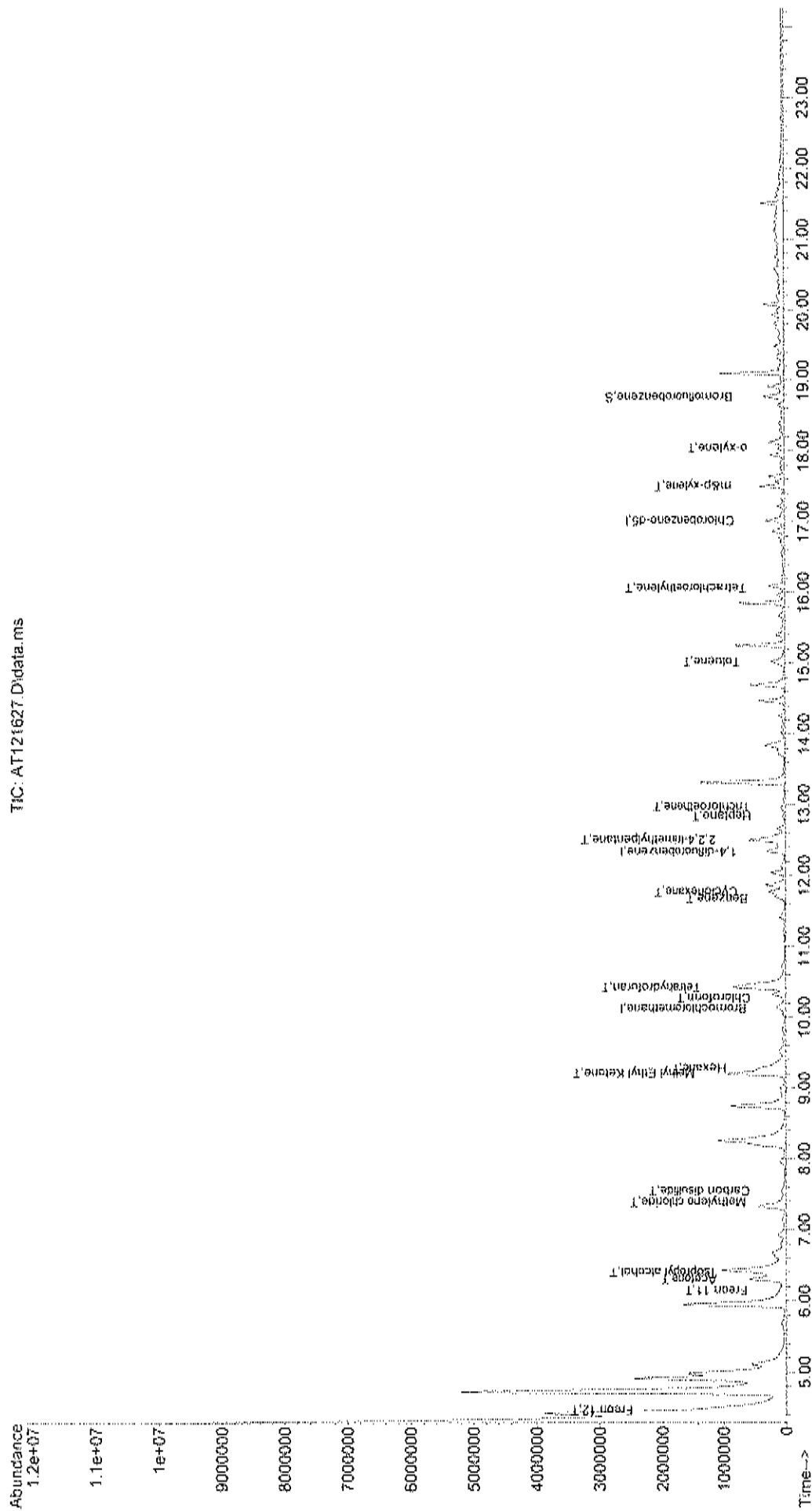
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

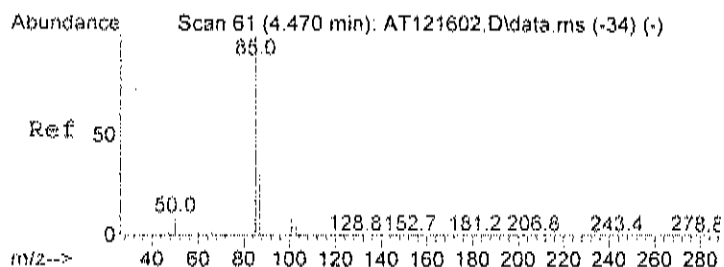
Internal Standards						
1) Bromochloromethane	10.123	128	50325	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	312153	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	250439	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.765	95	144186	0.85	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	85.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	108626	0.65	ppb	97
14) Freon 11	6.148	101	37229	0.27	ppb	96
15) Acetone	6.307	58	659101	24.99	ppb	# 1
17) Isopropyl alcohol	6.406	45	85941	1.06	ppb	# 1
21) Methylene chloride	7.391	84	36763	0.53	ppb	89
23) Carbon disulfide	7.550	76	168629	0.85	ppb	96
28) Methyl Ethyl Ketone	9.210	72	819403	19.75	ppb	94
30) Hexane	9.279	57	383894m	2.67	ppb	
32) Chloroform	10.276	83	39343	0.25	ppb	# 1
33) Tetrahydrofuran	10.420	42	1054075	13.00	ppb	87
37) Cyclohexane	11.774	56	223066m	1.57	ppb	
39) Benzene	11.681	78	105671	0.38	ppb	92
42) 2,2,4-trimethylpentane	12.509	57	896829	2.06	ppb	79
43) Heptane	12.842	43	20813	0.14	ppb	91
44) Trichloroethene	12.971	130	14702	0.12	ppb	90
51) Toluene	15.025	92	130636	0.65	ppb	100
56) Tetrachloroethylene	16.067	164	28755	0.23	ppb	93
59) m&p-xylene	17.507	91	80466	0.24	ppb	87
63) o-xylene	18.039	91	41557	0.11	ppb	91

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121627.D
Acq On : 17 Dec 2022 7:16 am
Operator : RJP
Sample : C2212031-017A
Misc : AD12_1UG
ALS Vial : 27 Sample Multiplier: 1

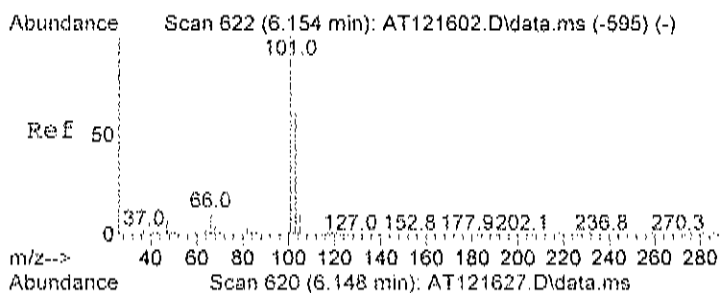
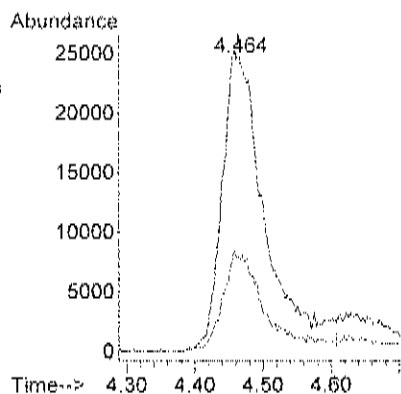
Quant Time: Dec 17 08:41:08 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





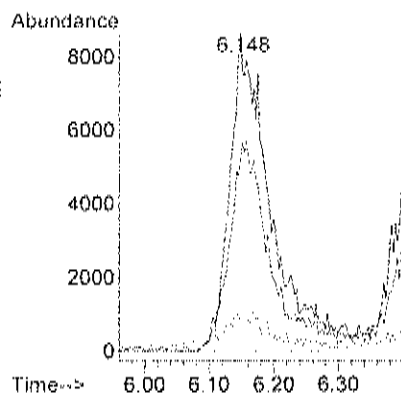
#3
Freon 12
Concen: 0.65 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

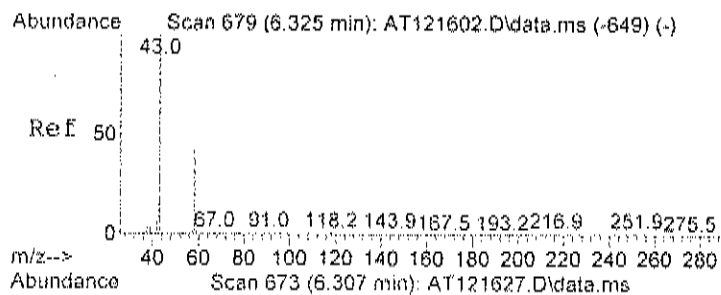
Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.7	14.3	54.3



#14
Freon 11
Concen: 0.27 ppb
RT: 6.148 min Scan# 620
Delta R.T. -0.018 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

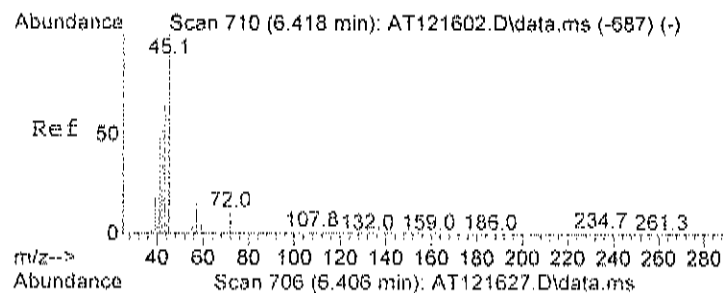
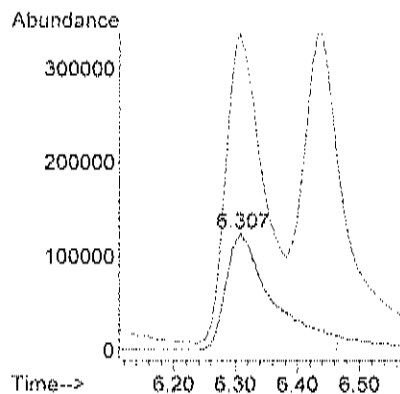
Tgt Ion	Ratio	Lower	Upper
101	100		
103	66.8	44.1	84.1
105	9.8	0.0	32.0





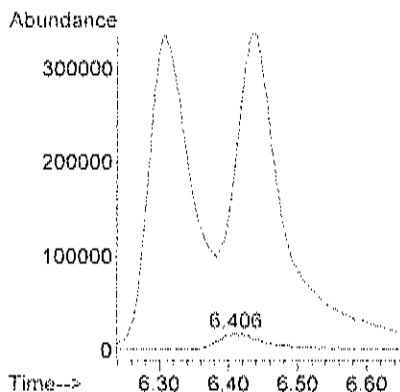
#15
Acetone
Concen: 24.99 ppb
RT: 6.307 min Scan# 673
Delta R.T. -0.021 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

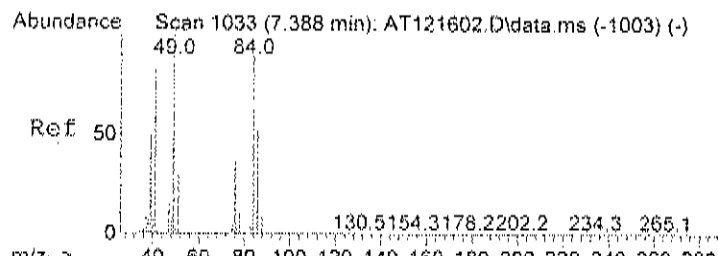
Tgt Ion	58	Resp	659101
Ion	Ratio	Lower	Upper
58	100		
43	0.0	272.3	332.3#



#17
Isopropyl alcohol
Concen: 1.06 ppb
RT: 6.406 min Scan# 706
Delta R.T. -0.012 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

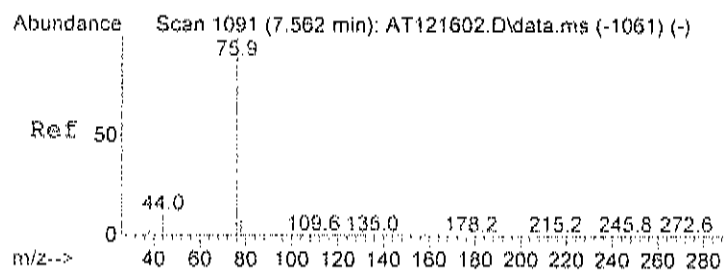
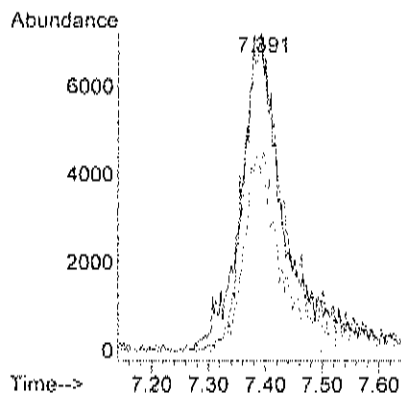
Tgt Ion	45	Resp	85941
Ion	Ratio	Lower	Upper
45	100		
43	2659.6	91.9	131.9#





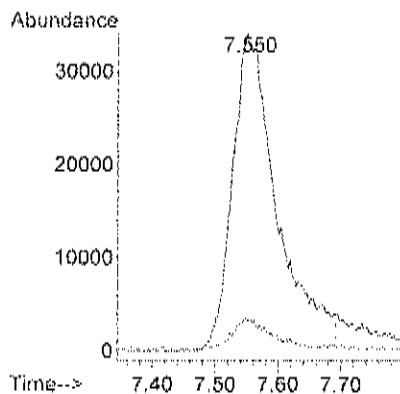
#21
Methylene chloride
Concen: 0.53 ppb
RT: 7.391 min Scan# 1034
Delta R.T. 0.003 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

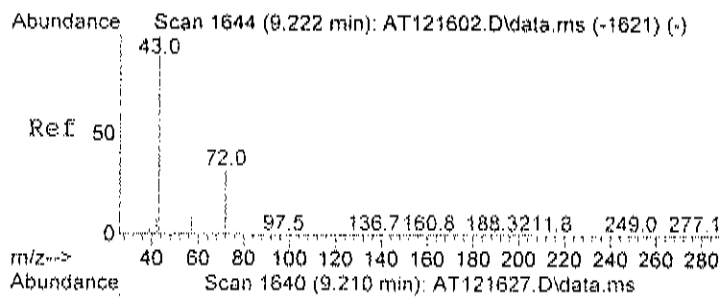
Tgt Ion	84	Resp	36763
Ion	Ratio	Lower	Upper
84	100		
49	92.3	84.2	124.2
86	54.8	42.9	82.9



#23
Carbon disulfide
Concen: 0.85 ppb
RT: 7.550 min Scan# 1087
Delta R.T. -0.009 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

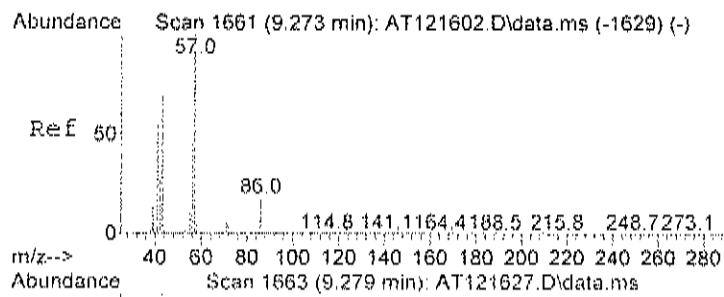
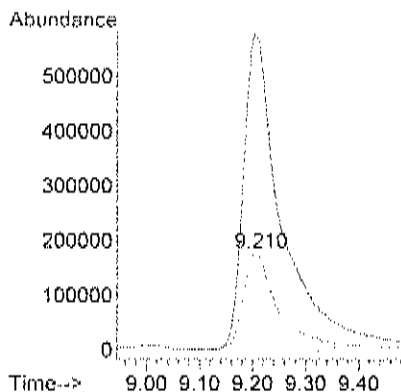
Tgt Ion	76	Resp	168629
Ion	Ratio	Lower	Upper
76	100		
78	10.1	0.0	28.7





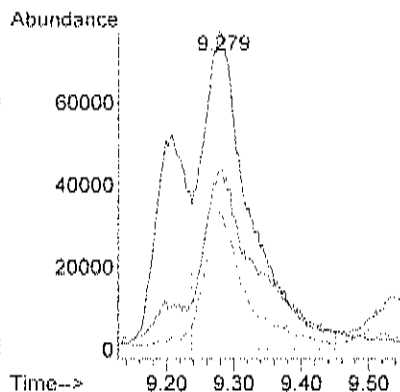
#28
Methyl Ethyl Ketone
Concen: 19.75 ppb
RT: 9.210 min Scan# 1640
Delta R.T. -0.009 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

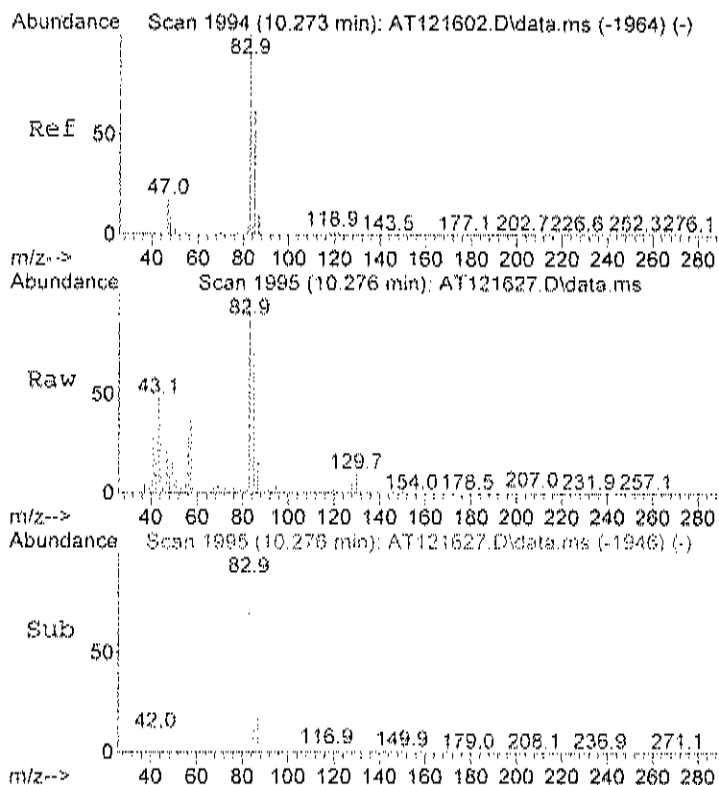
Tgt Ion	Ratio	Lower	Upper
72	100		
43	335.8	333.7	373.7
72	100.0	80.0	120.0



#30
Hexane
Concen: 2.67 ppb m
RT: 9.279 min Scan# 1663
Delta R.T. -0.006 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

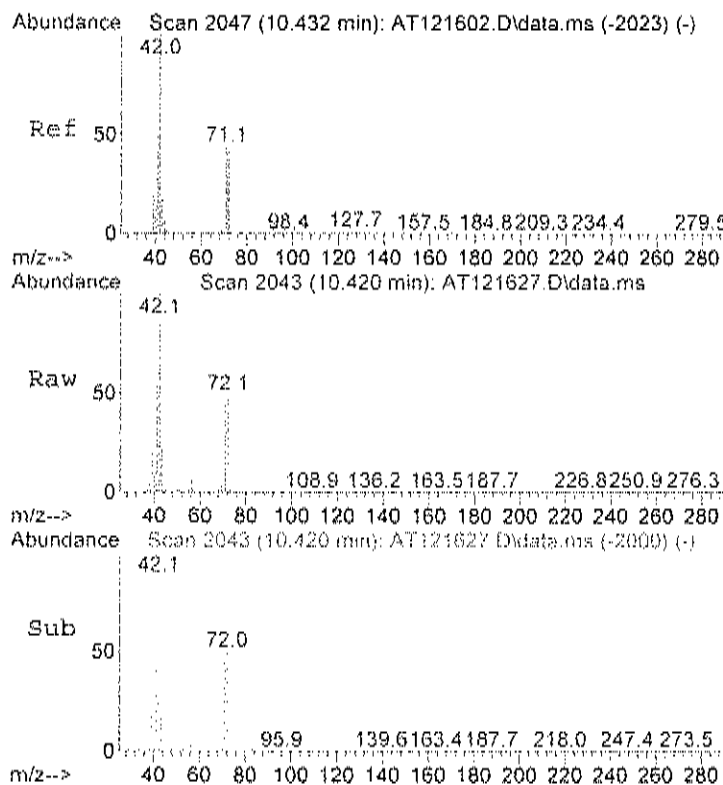
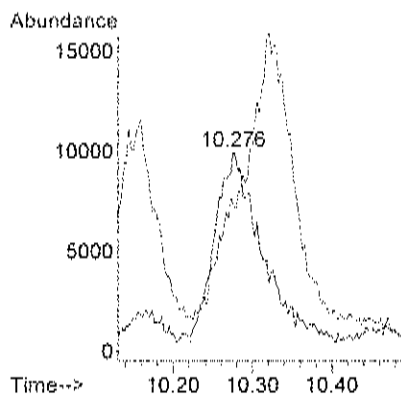
Tgt Ion	Ratio	Lower	Upper
57	100		
41	57.7	62.0	102.0#
S6	32.4	31.8	71.8





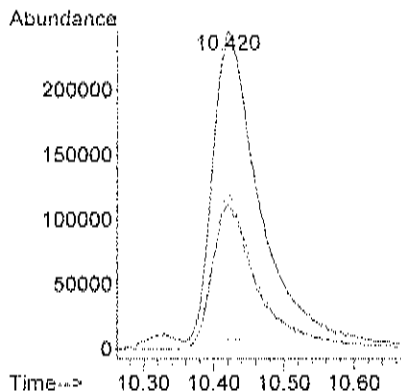
#32
Chloroform
Concen: 0.25 ppb
RT: 10.276 min Scan# 1995
Delta R.T. -0.003 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

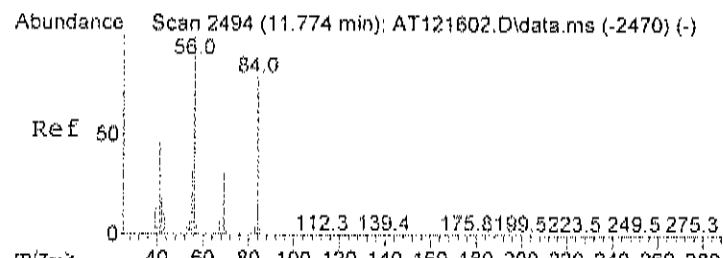
Tgt Ion	Ratio	Lower	Upper
83	100		
85	156.8	46.4	86.4#



#33
Tetrahydrofuran
Concen: 13.00 ppb
RT: 10.420 min Scan# 2043
Delta R.T. -0.021 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

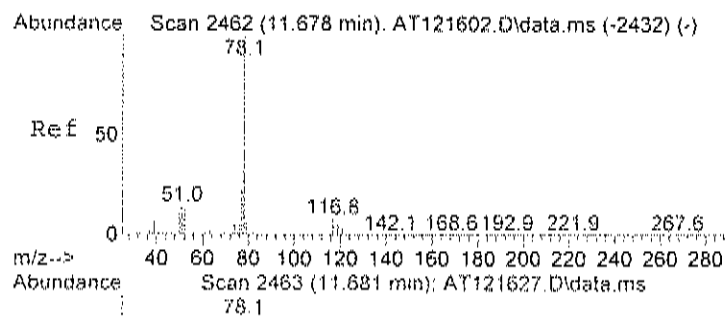
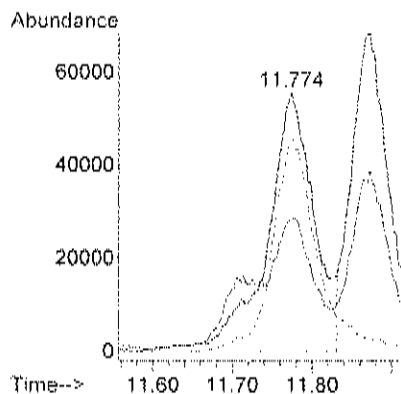
Tgt Ion	Ratio	Lower	Upper
42	100		
71	46.4	33.5	73.5
72	50.0	20.1	60.1





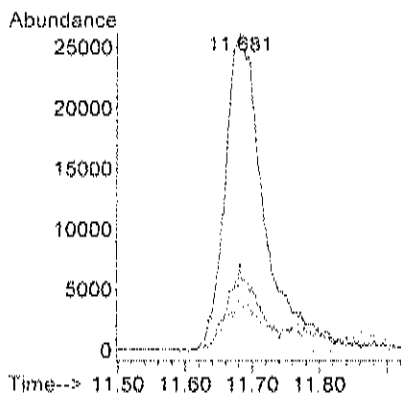
#37
Cyclohexane
Concen: 1.57 ppb m
RT: 11.774 min Scan# 2494
Delta R.T. -0.006 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

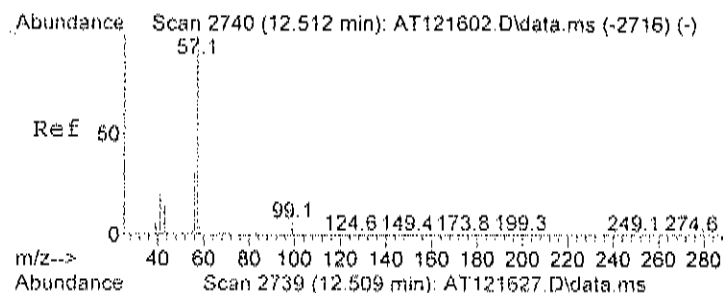
Tgt	Ion	Resp	Lower	Upper
56	100	223066		
41	114.9	32.6	72.6#	
84	0.0	18.2	58.2#	



#39
Benzene
Concen: 0.38 ppb
RT: 11.681 min Scan# 2463
Delta R.T. -0.009 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

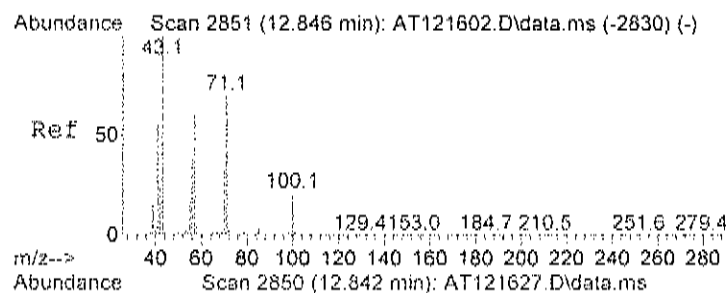
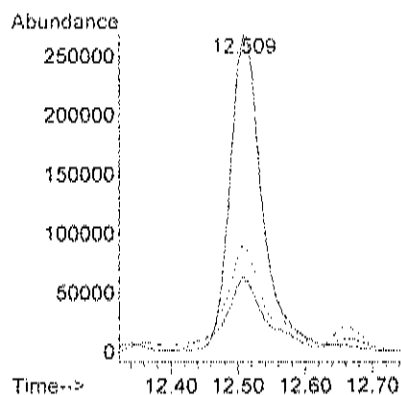
Tgt	Ion	Resp	Lower	Upper
78	100	105671		
77	27.4	2.5	42.5	
51	23.0	0.5	40.5	





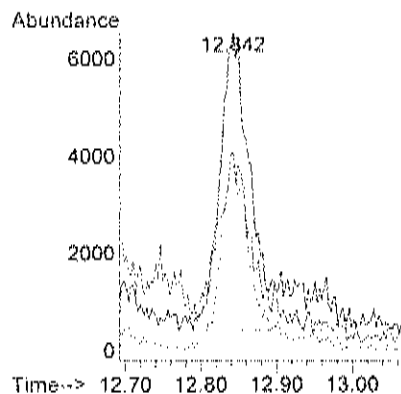
#42
2,2,4-trimethylpentane
Concen: 2.06 ppb
RT: 12.509 min Scan# 2739
Delta R.T. -0.006 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

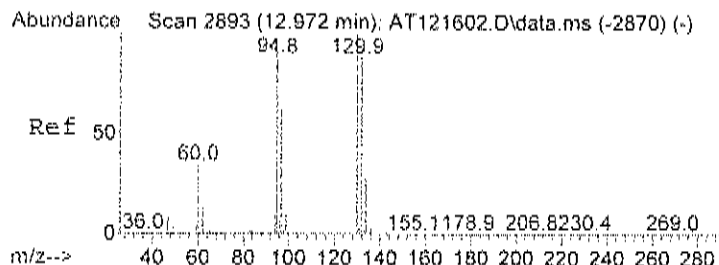
Tgt Ion: 57	Resp: 896829
Ion Ratio	Lower Upper
57 100	
41 27.0	17.4 57.4
56 45.1	10.8 50.8



#43
Heptane
Concen: 0.14 ppb
RT: 12.842 min Scan# 2850
Delta R.T. -0.006 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

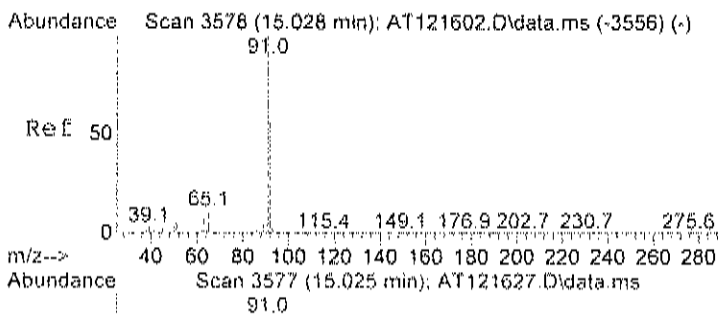
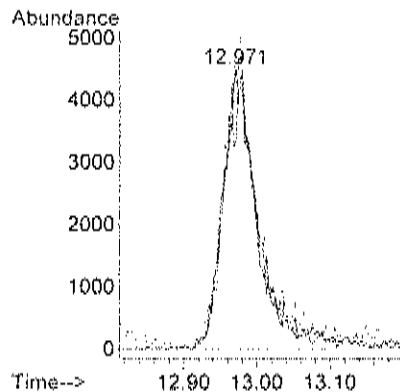
Tgt Ion: 43	Resp: 20813
Ion Ratio	Lower Upper
43 100	
57 55.4	42.3 82.3
71 52.6	38.8 78.8





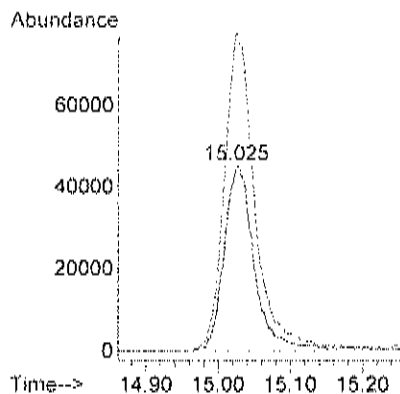
#44
Trichloroethene
Concen: 0.12 ppb
RT: 12.971 min Scan# 2893
Delta R.T. -0.009 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

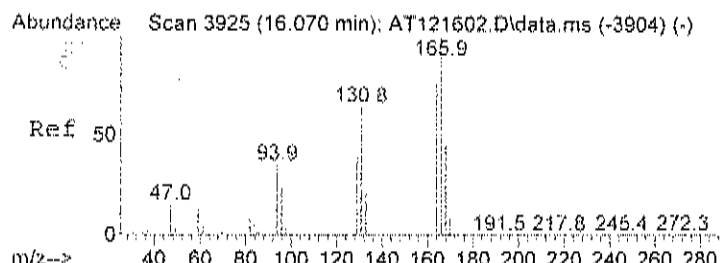
Tgt Ion	Ratio	Lower	Upper
130	100		
132	94.6	79.7	119.7
95	104.2	69.3	109.3



#51
Toluene
Concen: 0.65 ppb
RT: 15.025 min Scan# 3577
Delta R.T. -0.006 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

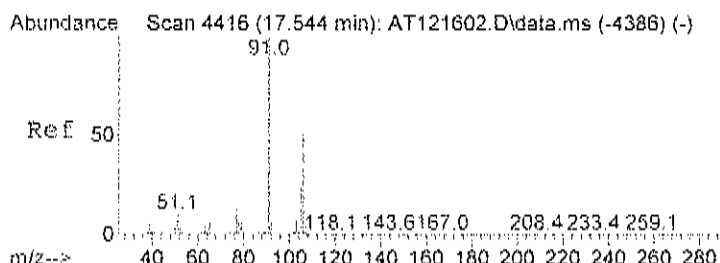
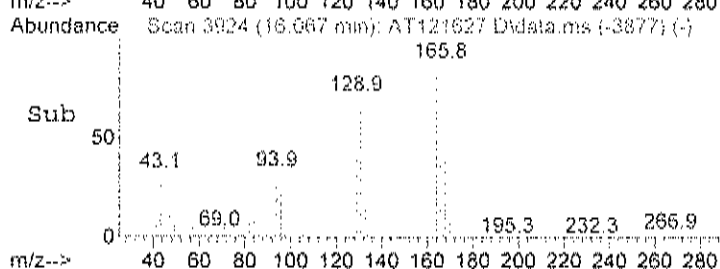
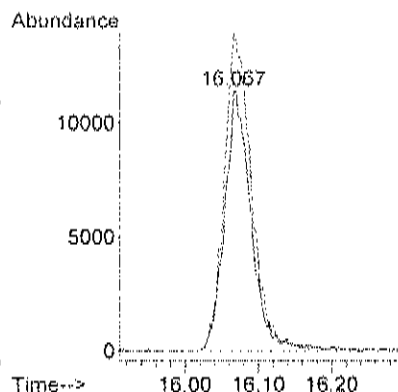
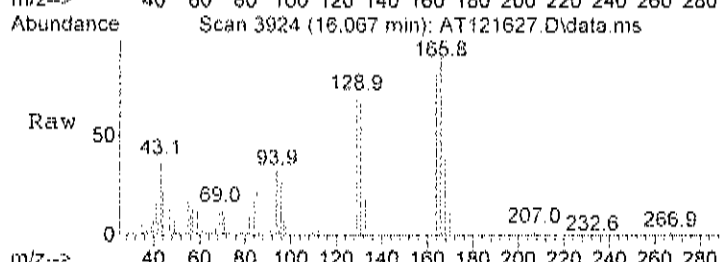
Tgt Ion	Ratio	Lower	Upper
92	100		
91	172.6	153.3	193.3





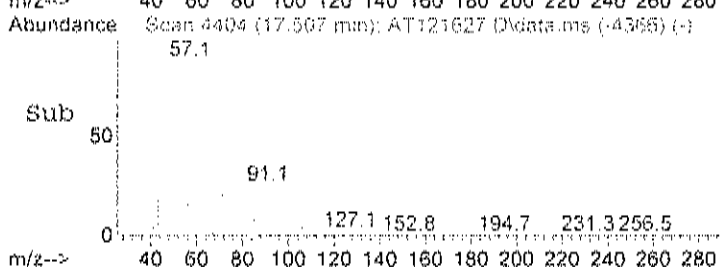
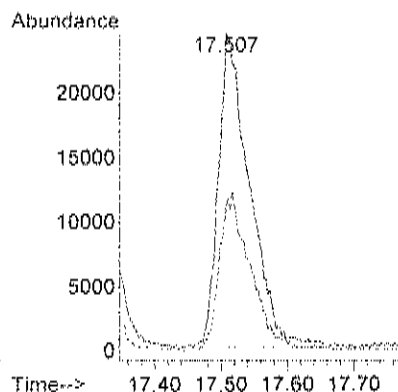
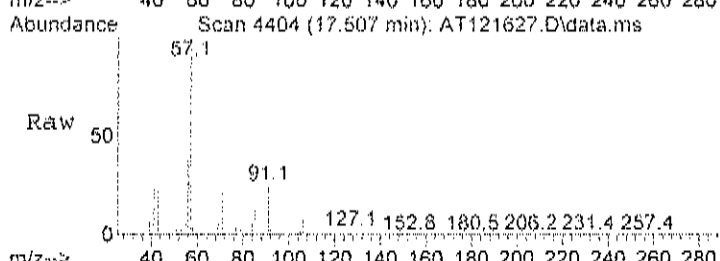
#56
Tetrachloroethylene
Concen: 0.23 ppb
RT: 16.067 min Scan# 3924
Delta R.T. -0.008 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

Tgt Ion: 164	Resp: 28755
Ion Ratio	Lower Upper
164	100
166	124.7 97.2 137.2

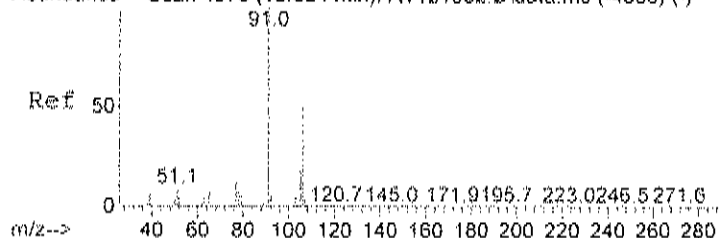


#59
m&p-xylene
Concen: 0.24 ppb
RT: 17.507 min Scan# 4404
Delta R.T. -0.036 min
Lab File: AT121627.D
Acq: 17 Dec 2022 7:16 am

Tgt Ion: 91	Resp: 80466
Ion Ratio	Lower Upper
91	100
106	50.4 22.4 62.4



Abundance Scan 4576 (18.024 min): AT121602.D\data.ms (-4556) (-)



#63

o-xylene

Concen: 0.11 ppb

RT: 18.039 min Scan# 4581

Delta R.T. -0.009 min

Lab File: AT121627.D

Acq: 17 Dec 2022 7:16 am

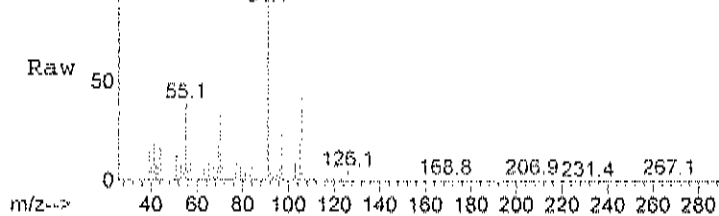
Tgt Ion: 91 Resp: 41557

Ion Ratio Lower Upper

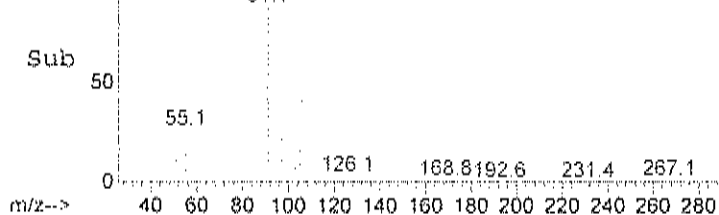
91 100

106 46.2 20.7 60.7

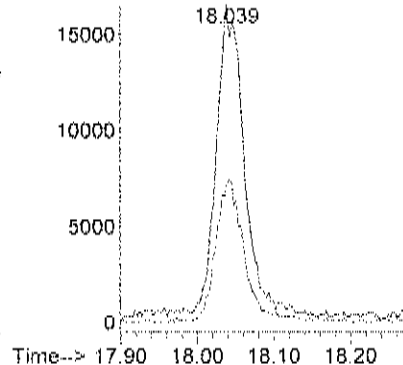
Abundance Scan 4581 (18.039 min): AT121627.D\data.ms



Abundance Scan 4581 (18.039 min): AT121627.D\data.ms (-4534) (-)



Abundance



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121720.D
 Acq On : 17 Dec 2022 11:22 pm
 Operator : RJP
 Sample : C2212031-017A 10X
 Misc : AD12_1UG
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 18 10:36:49 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

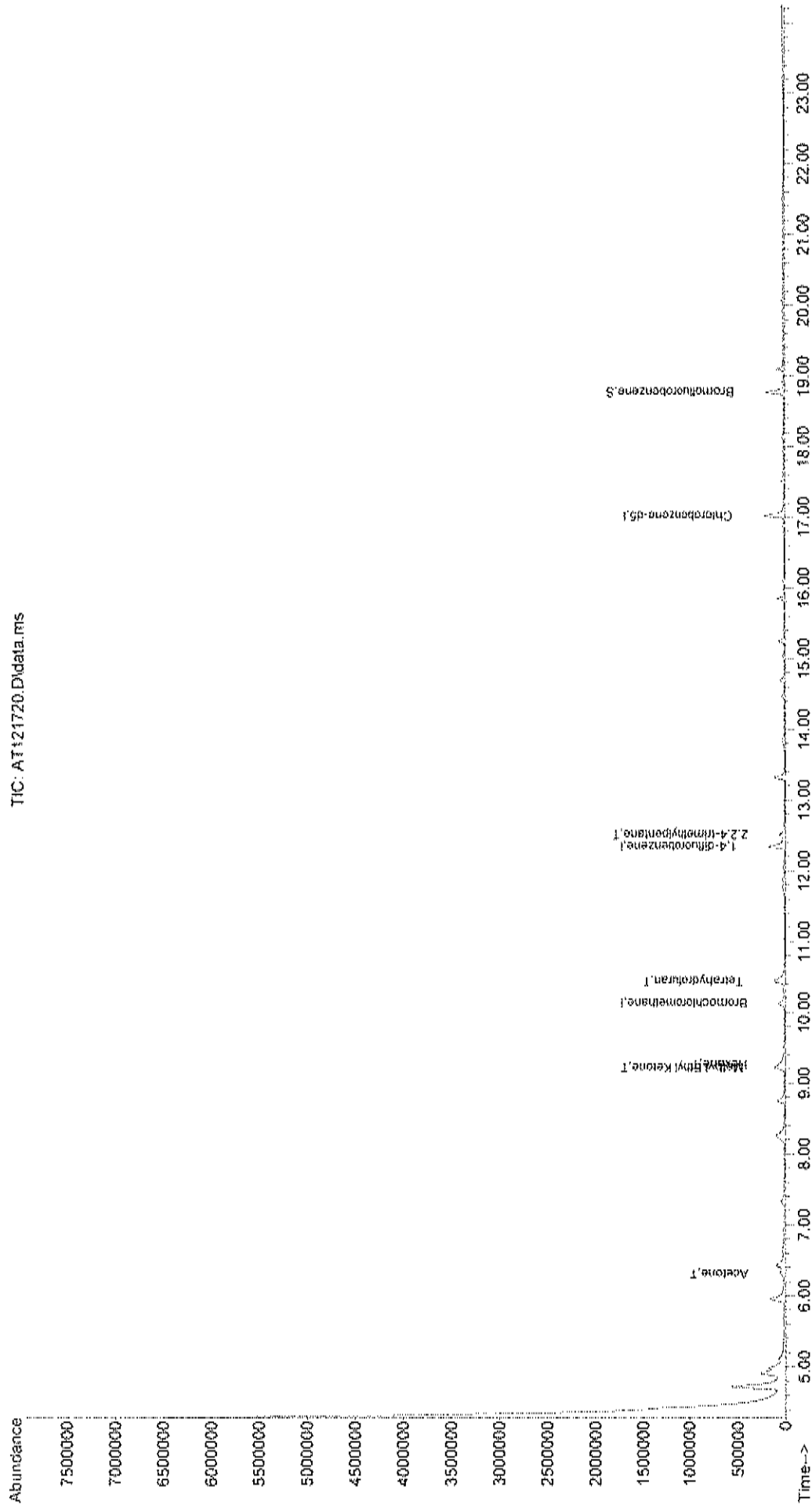
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

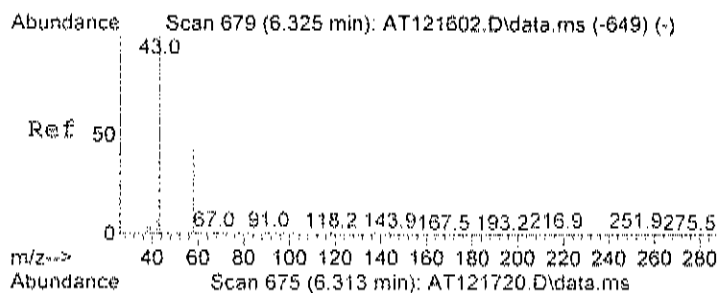
Internal Standards						
1) Bromochloromethane	10.129	128	45462	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	268654	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	213997	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.774	95	127555	0.88	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	88.00%
Target Compounds						
15) Acetone	6.313	58	53141	2.23	ppb	# 1
28) Methyl Ethyl Ketone	9.216	72	89850	2.40	ppb	100
30) Hexane	9.264	57	42673m	0.33	ppb	
33) Tetrahydrofuran	10.441	42	136874	1.87	ppb	87
42) 2,2,4-trimethylpentane	12.509	57	71996	0.19	ppb	85

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121720.D
Acq On : 17 Dec 2022 11:22 pm
Operator : RJP
Sample : C2212031-017A 10X
Misc : AD12 IUG
ALS Vial : 18 Sample Multiplier: 1

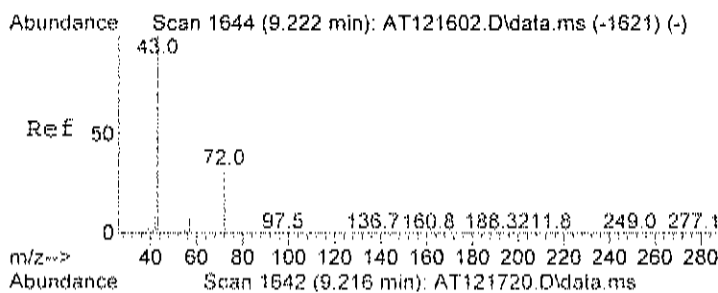
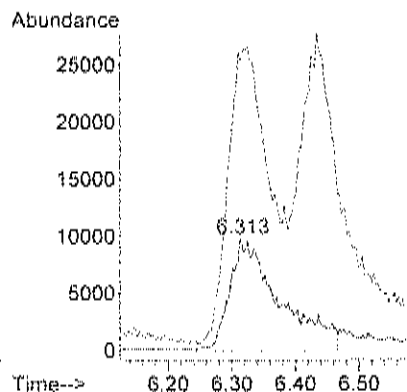
Quant Time: Dec 18 10:36:49 2022
Quant Method : C:\msdchem\1\methods\AD12_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





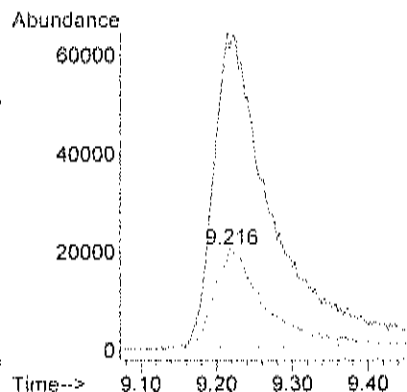
#15
Acetone
Concen: 2.23 ppb
RT: 6.313 min Scan# 675
Delta R.T. -0.015 min
Lab File: AT121720.D
Acq: 17 Dec 2022 11:22 pm

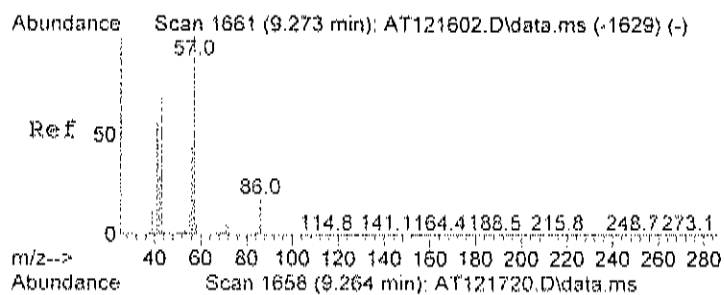
Tgt Ion:	58	Resp:	53141
Ion Ratio	Lower	Upper	
58	100		
43	0.0	272.3	332.3#



#28
Methyl Ethyl Ketone
Concen: 2.40 ppb
RT: 9.216 min Scan# 1642
Delta R.T. -0.003 min
Lab File: AT121720.D
Acq: 17 Dec 2022 11:22 pm

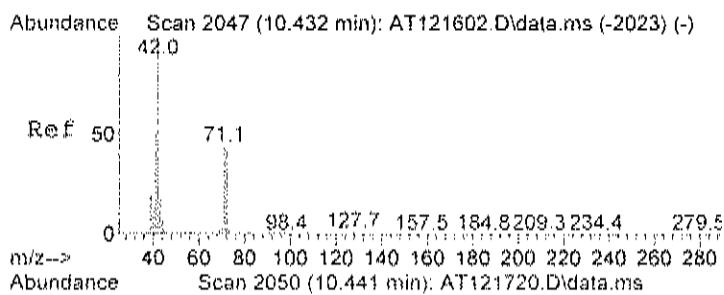
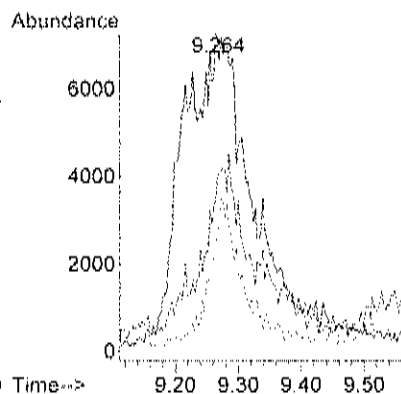
Tgt Ion:	72	Resp:	89850
Ion Ratio	Lower	Upper	
72	100		
43	352.8	333.7	373.7
72	100.0	80.0	120.0





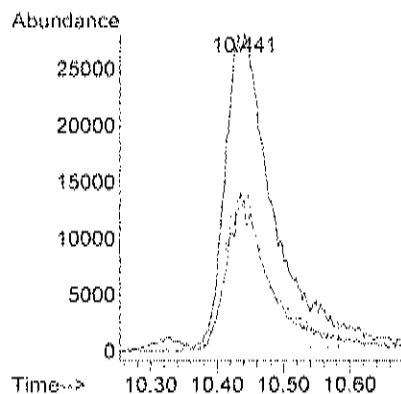
#30
Hexane
Concen: 0.33 ppb m
RT: 9.264 min Scan# 1658
Delta R.T. -0.021 min
Lab File: AT121720.D
Acq: 17 Dec 2022 11:22 pm

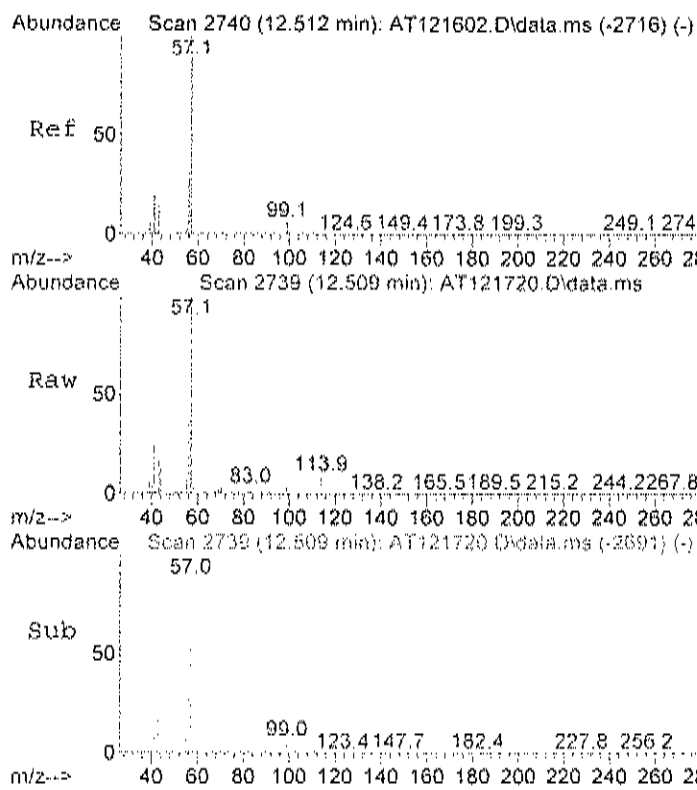
Tgt Ion: 57	Resp: 42673
Ion Ratio	Lower Upper
57 100	
41 49.7	62.0 102.0#
56 31.3	31.8 71.8#



#33
Tetrahydrofuran
Concen: 1.87 ppb
RT: 10.441 min Scan# 2050
Delta R.T. -0.000 min
Lab File: AT121720.D
Acq: 17 Dec 2022 11:22 pm

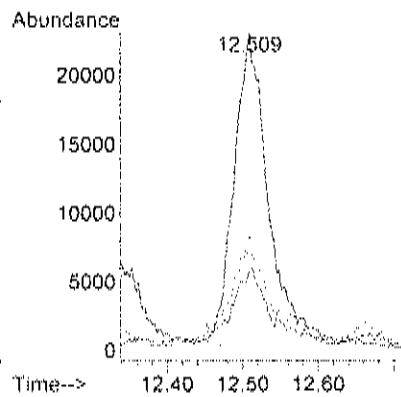
Tgt Ion: 42	Resp: 136874
Ion Ratio	Lower Upper
42 100	
71 44.4	33.5 73.5
72 47.6	20.1 60.1





#42
2,2,4-trimethylpentane
Concen: 0.19 ppb
RT: 12.509 min Scan# 2739
Delta R.T. -0.006 min
Lab File: AT121720.D
Acq: 17 Dec 2022 11:22 pm

Tgt Ion:	57	Resp:	71996
Ion Ratio	Lower	Upper	
57	100		
41	31.2	17.4	57.4
56	42.3	10.8	50.8



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121721.D
Acq On : 18 Dec 2022 12:04 am
Operator : RJP
Sample : C2212031-017A 40X
Misc : AD12_1UG
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 18 10:37:08 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

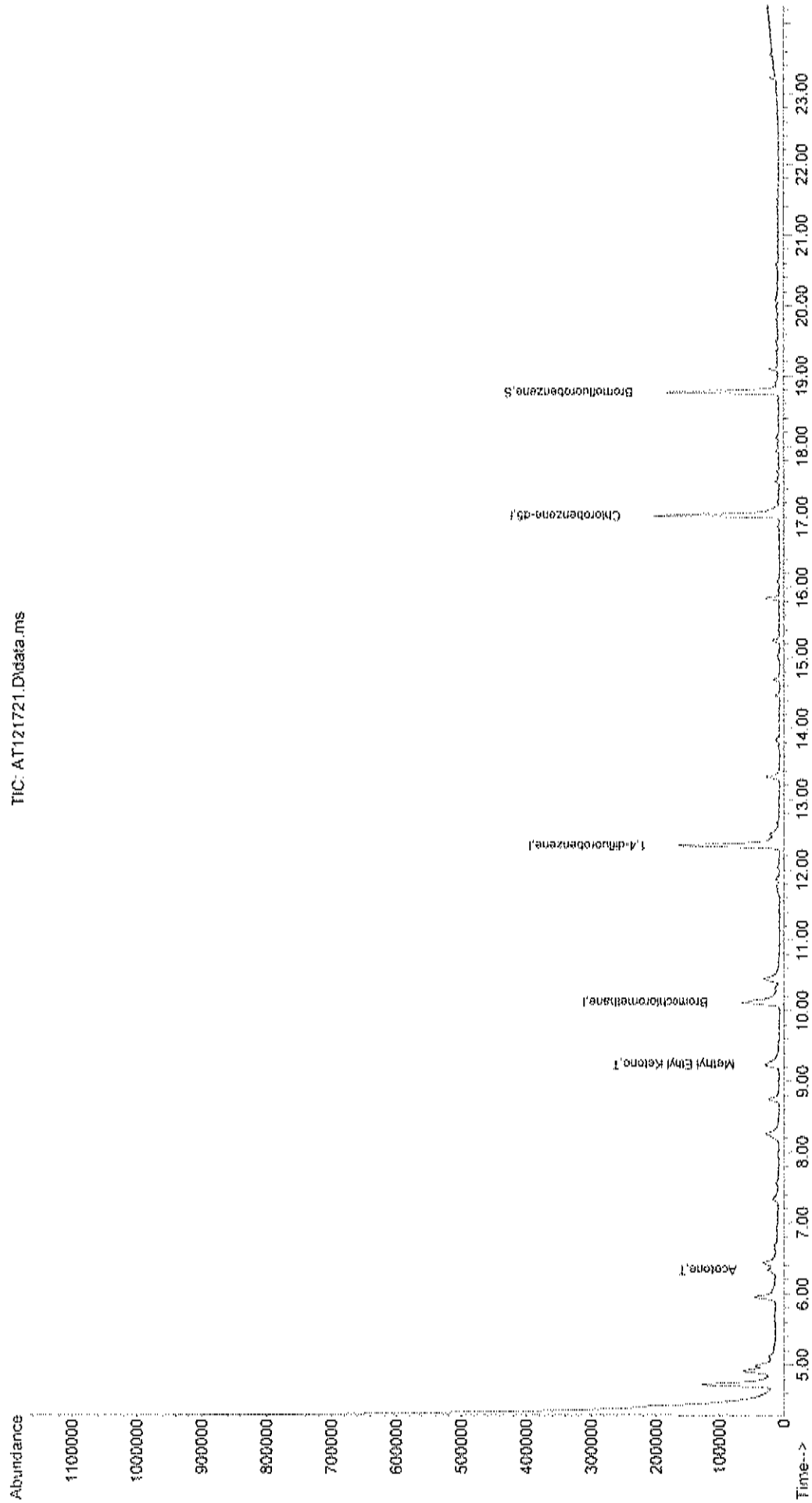
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

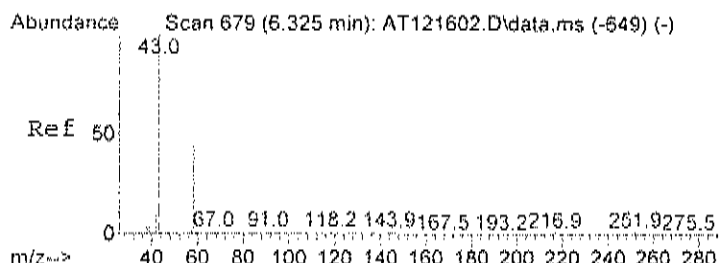
Internal Standards						
1) Bromochloromethane	10.120	128	45037	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	260080	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	202807	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	115023	0.84	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	84.00%
Target Compounds						
15) Acetone	6.331	58	16589	0.70	ppb	# 77
28) Methyl Ethyl Ketone	9.237	72	19882	0.54	ppb	# 78

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121721.D
Acq On : 18 Dec 2022 12:04 am
Operator : RJP
Sample : C2212031-017A 40X
Misc : AD12.1UG
ALS Vial : 19 Sample Multiplier: 1

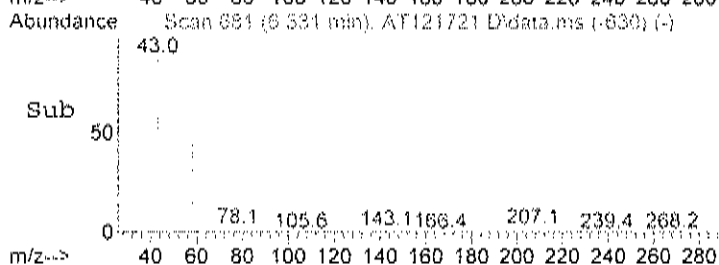
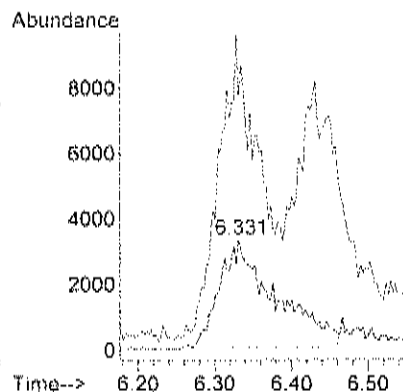
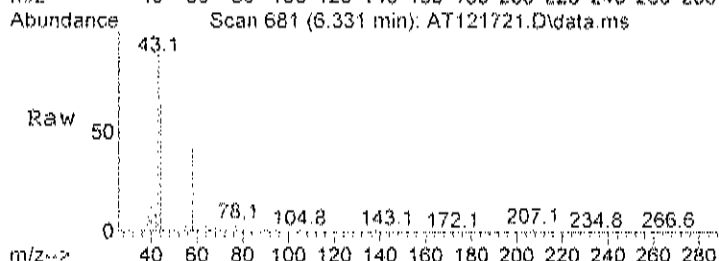
Quant Time: Dec 18 10:37:08 2022
Quant Method : C:\msdchem\1\methods\AD12.1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration





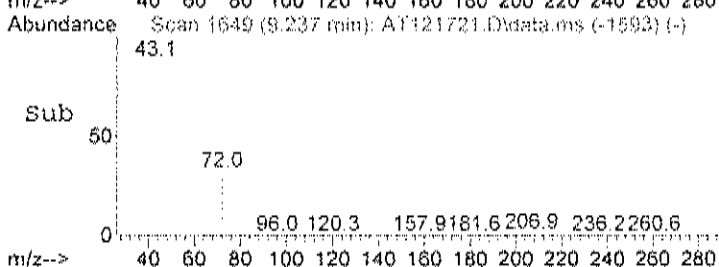
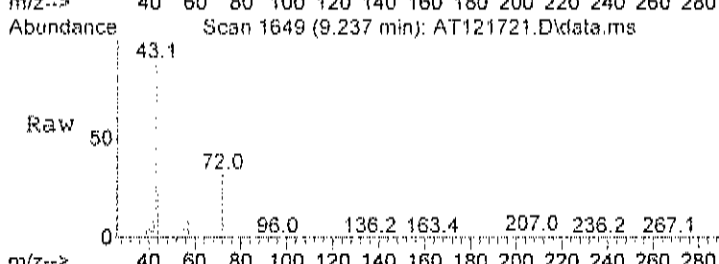
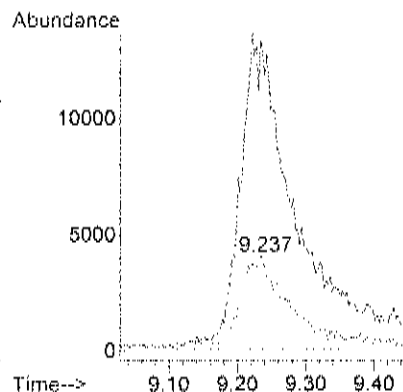
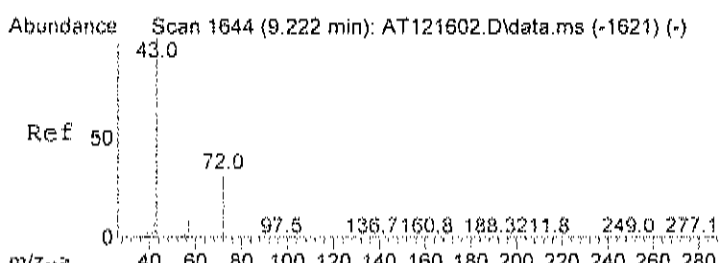
#15
Acetone
Concen: 0.70 ppb
RT: 6.331 min Scan# 681
Delta R.T. 0.003 min
Lab File: AT121721.D
Acq: 18 Dec 2022 12:04 am

Tgt Ion	Ratio	Lower	Upper
58	100		
43	346.7	272.3	332.3#



#28
Methyl Ethyl Ketone
Concen: 0.54 ppb
RT: 9.237 min Scan# 1649
Delta R.T. 0.018 min
Lab File: AT121721.D
Acq: 18 Dec 2022 12:04 am

Tgt Ion	Ratio	Lower	Upper
72	100		
43	292.7	333.7	373.7#
72	100.0	80.0	120.0



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-1			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
2,2,4-trimethylpentane	0.11	0.15	J	ppbV	1	12/16/2022 1:11:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Acetone	6.2	1.5		ppbV	5	12/17/2022 12:42:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Benzene	0.28	0.15		ppbV	1	12/16/2022 1:11:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Carbon tetrachloride	0.080	0.030		ppbV	1	12/16/2022 1:11:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Chloromethane	0.47	0.15		ppbV	1	12/16/2022 1:11:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Ethyl acetate	0.18	0.15		ppbV	1	12/16/2022 1:11:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 11	0.28	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Freon 12	0.62	0.15		ppbV	1	12/16/2022 1:11:00 PM
Heptane	0.12	0.15	J	ppbV	1	12/16/2022 1:11:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Hexane	0.16	0.15		ppbV	1	12/16/2022 1:11:00 PM
Isopropyl alcohol	0.48	0.15		ppbV	1	12/16/2022 1:11:00 PM
m&p-Xylene	0.19	0.30	J	ppbV	1	12/16/2022 1:11:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl Ethyl Ketone	0.52	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:11:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Methylene chloride	0.22	0.15		ppbV	1	12/16/2022 1:11:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Toluene	0.66	0.15		ppbV	1	12/16/2022 1:11:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 1:11:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 1:11:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 1:11:00 PM
Surr: Bromofluorobenzene	96.0	47-124		%REC	1	12/16/2022 1:11:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE			TO-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:11:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:11:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:11:00 PM
1,1-Dichloroethane	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:11:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 1:11:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 1:11:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:11:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
2,2,4-trimethylpentane	0.51	0.70	J	ug/m3	1	12/16/2022 1:11:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 1:11:00 PM
Acetone	15	3.6		ug/m3	5	12/17/2022 12:42:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 1:11:00 PM
Benzene	0.89	0.48		ug/m3	1	12/16/2022 1:11:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 1:11:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 1:11:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 1:11:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 1:11:00 PM
Carbon tetrachloride	0.50	0.19		ug/m3	1	12/16/2022 1:11:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 1:11:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 1:11:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 1:11:00 PM
Chloromethane	0.97	0.31		ug/m3	1	12/16/2022 1:11:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:11:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 1:11:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 1:11:00 PM
Ethyl acetate	0.65	0.54		ug/m3	1	12/16/2022 1:11:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 1:11:00 PM
Freon 11	1.6	0.84		ug/m3	1	12/16/2022 1:11:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 1:11:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-1

Lab Order: C2212031

Tag Number: 231,175

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-018A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	3.1	0.74		ug/m3	1	12/16/2022 1:11:00 PM
Heptane	0.49	0.61	J	ug/m3	1	12/16/2022 1:11:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 1:11:00 PM
Hexane	0.56	0.53		ug/m3	1	12/16/2022 1:11:00 PM
Isopropyl alcohol	1.2	0.37		ug/m3	1	12/16/2022 1:11:00 PM
m&p-Xylene	0.82	1.3	J	ug/m3	1	12/16/2022 1:11:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
Methyl Ethyl Ketone	1.5	0.88		ug/m3	1	12/16/2022 1:11:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:11:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 1:11:00 PM
Methylene chloride	0.76	0.52		ug/m3	1	12/16/2022 1:11:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 1:11:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 1:11:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 1:11:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 1:11:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 1:11:00 PM
Toluene	2.5	0.57		ug/m3	1	12/16/2022 1:11:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 1:11:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:11:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 1:11:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 1:11:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121606.D
 Acq On : 16 Dec 2022 1:11 pm
 Operator : RJP
 Sample : C2212031-018A
 Misc : AD12_1UG
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 17 08:40:26 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

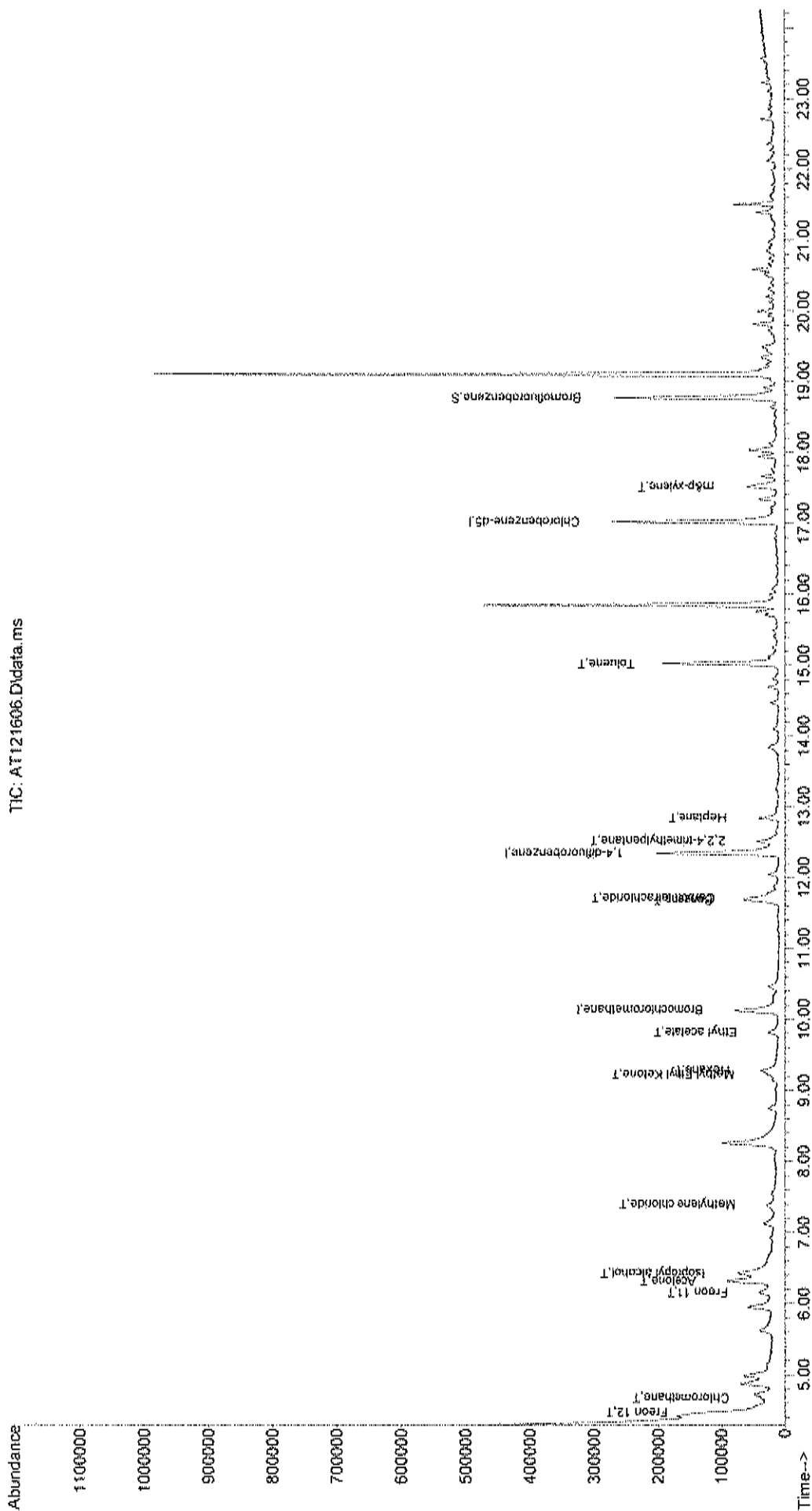
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

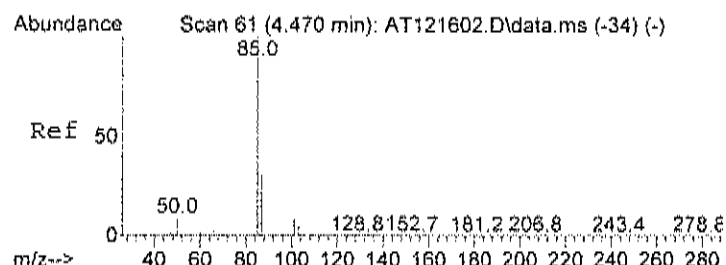
Internal Standards						
1) Bromochloromethane	10.129	128	49926	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	318151	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	250251	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	162432	0.96	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	96.00%
Target Compounds						
						Qvalue
3) Freon 12	4.464	85	102633	0.62	ppb	98
4) Chloromethane	4.671	50	25801	0.47	ppb	87
14) Freon 11	6.157	101	38565	0.28	ppb	98
15) Acetone	6.313	58	80586	3.08	ppb	92
17) Isopropyl alcohol	6.424	45	38537	0.48	ppb	# 1
21) Methylene chloride	7.394	84	15076m	0.22	ppb	
28) Methyl Ethyl Ketone	9.222	72	21330	0.52	ppb	# 1
30) Hexane	9.279	57	22419	0.16	ppb	88
31) Ethyl acetate	9.813	43	36971	0.18	ppb	95
38) Carbon tetrachloride	11.708	117	11115	0.08	ppb	98
39) Benzene	11.681	78	79037	0.28	ppb	92
42) 2,2,4-trimethylpentane	12.515	57	47231	0.11	ppb	87
43) Heptane	12.845	43	17438	0.12	ppb	90
51) Toluene	15.022	92	133122	0.66	ppb	98
59) m&p-xylene	17.514	91	63612	0.19	ppb	86

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121606.D
 Acq On : 16 Dec 2022 1:11 pm
 Operator : RJP
 Sample : C2212031-018A
 Misc : AD12 1UG
 ALS Vial : 6 Sample Multiplier: 1

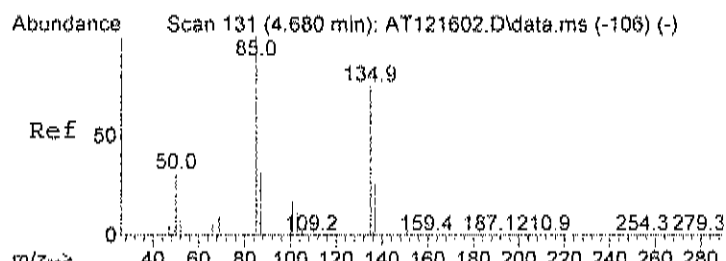
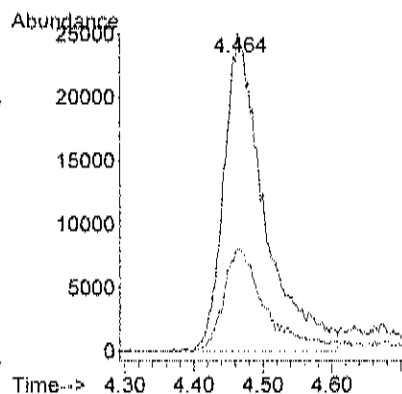
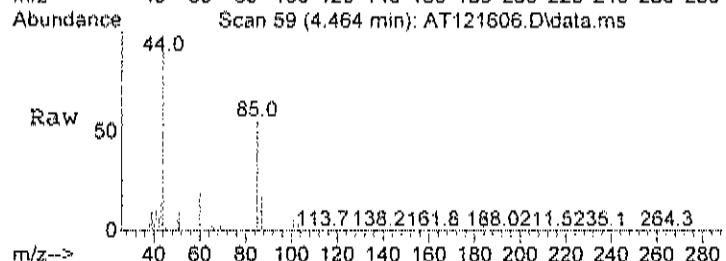
Quant Time: Dec 17 08:40:26 2022
 Quant Method : C:\msdchem\1\methods\AD12 1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





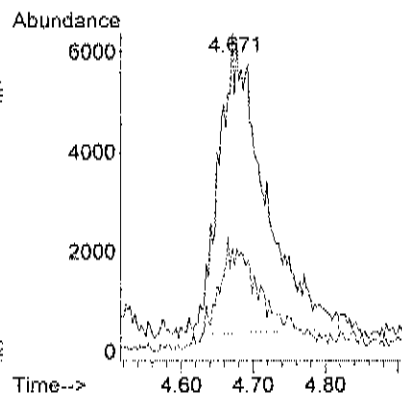
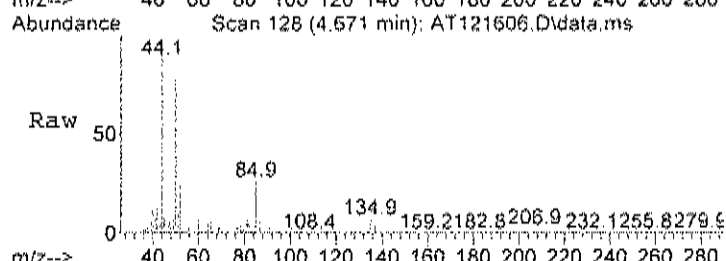
#3
Freon 12
Concen: 0.62 ppb
RT: 4.464 min Scan# 59
Delta R.T. -0.009 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

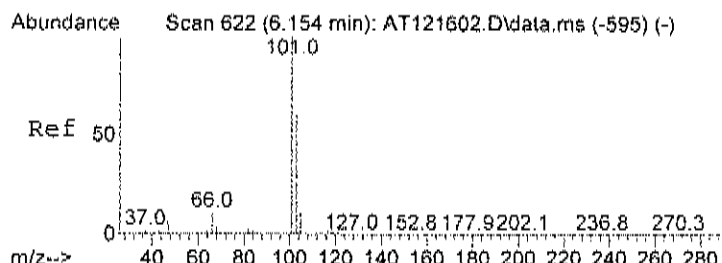
Tgt Ion	Ratio	Lower	Upper
85	100		
87	33.3	14.3	54.3



#4
Chloromethane
Concen: 0.47 ppb
RT: 4.671 min Scan# 128
Delta R.T. -0.012 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

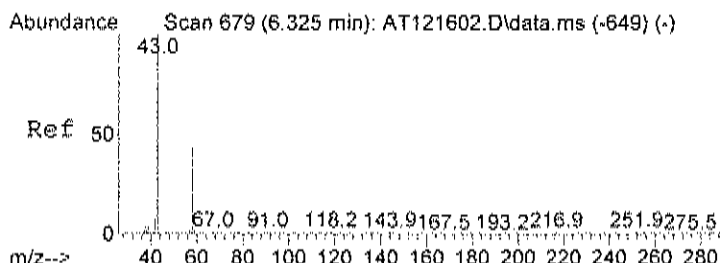
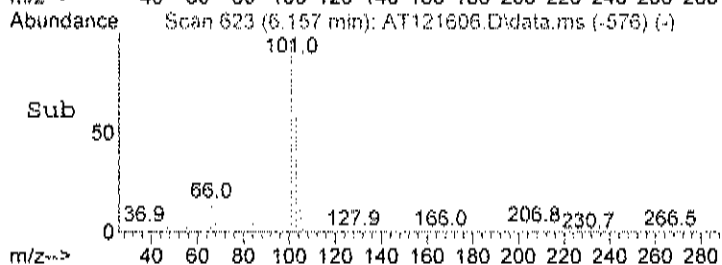
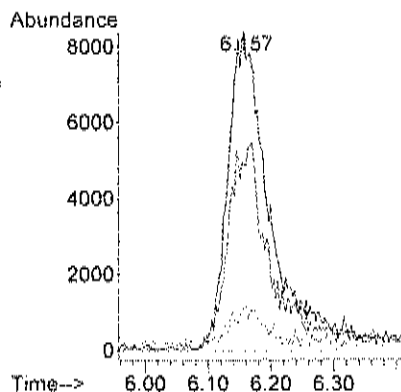
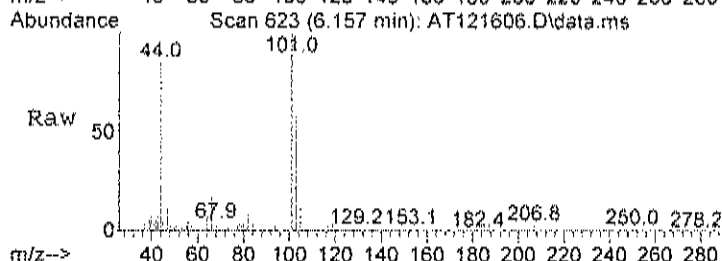
Tgt Ion	Ratio	Lower	Upper
50	100		
52	32.2	5.4	45.4





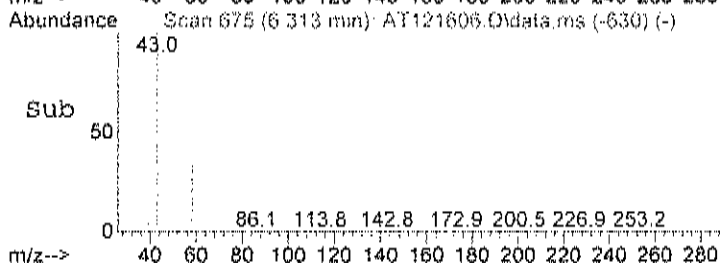
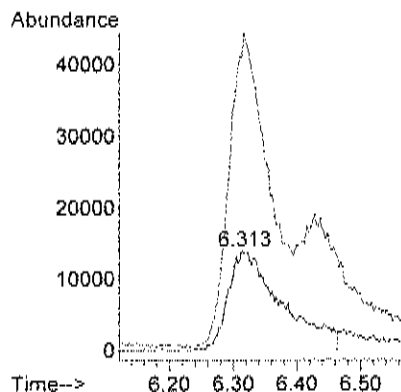
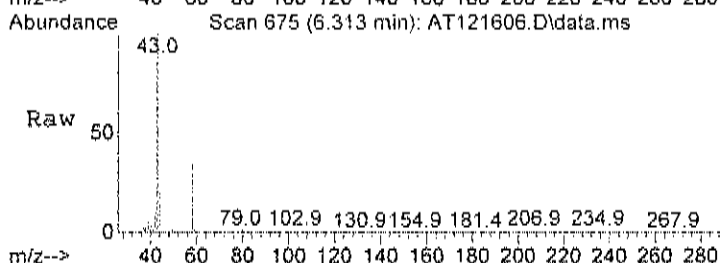
#14
Freon 11
Concen: 0.28 ppb
RT: 6.157 min Scan# 623
Delta R.T. -0.009 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

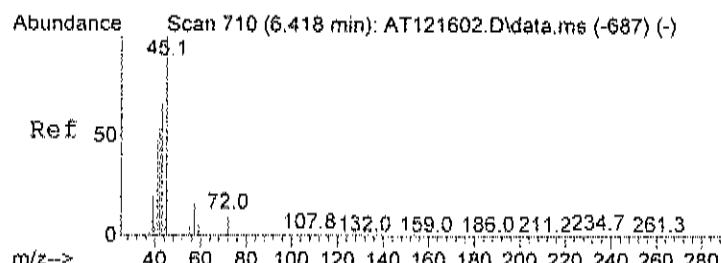
Tgt Ion	Ratio	Lower	Upper
101	100		
103	64.5	44.1	84.1
105	8.7	0.0	32.0



#15
Acetone
Concen: 3.08 ppb
RT: 6.313 min Scan# 675
Delta R.T. -0.015 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

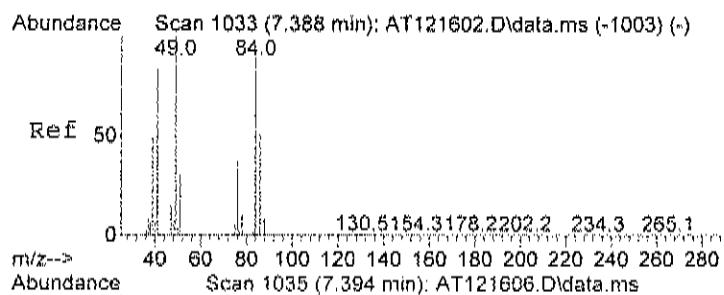
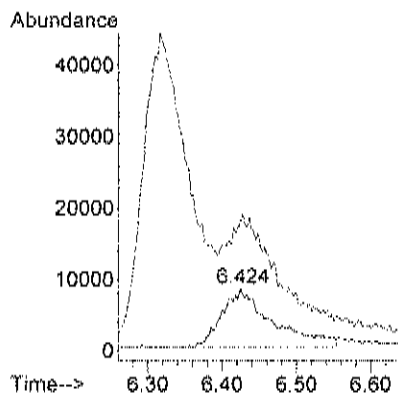
Tgt Ion	Ratio	Lower	Upper
58	100		
43	317.6	272.3	332.3





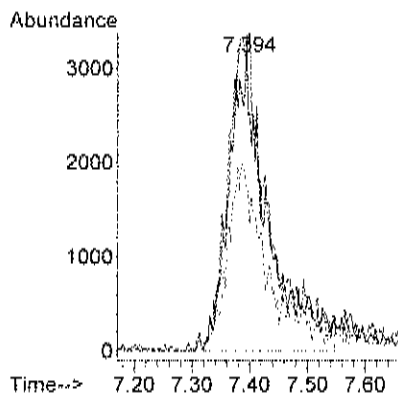
#17
Isopropyl alcohol
Concen: 0.48 ppb
RT: 6.424 min Scan# 712
Delta R.T. 0.006 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

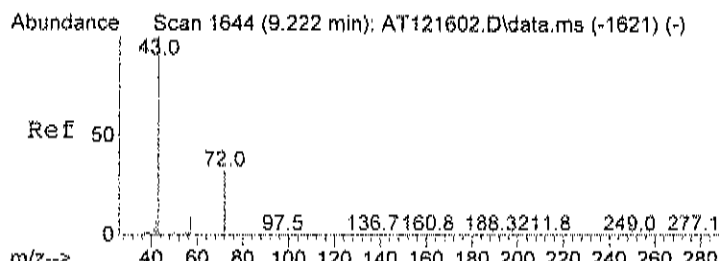
Tgt Ion:	45	Resp:	38537
Ion	Ratio	Lower	Upper
45	100		
43	0.0	91.9	131.9#



#21
Methylene chloride
Concen: 0.22 ppb m
RT: 7.394 min Scan# 1035
Delta R.T. 0.006 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

Tgt Ion:	84	Resp:	15076
Ion	Ratio	Lower	Upper
84	100		
49	106.2	84.2	124.2
86	61.1	42.9	82.9





#28

Methyl Ethyl Ketone

Concen: 0.52 ppb

RT: 9.222 min Scan# 1644

Delta R.T. 0.003 min

Lab File: AT121606.D

Acq: 16 Dec 2022 1:11 pm

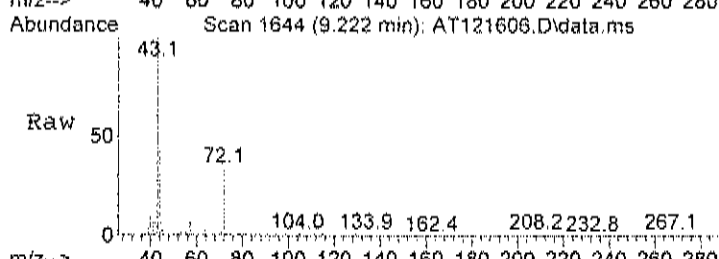
Tgt Ion: 72 Resp: 21330

Ion Ratio Lower Upper

72 100

43 0.0 333.7 373.7#

72 100.0 80.0 120.0



Abundance

10000

8000

6000

4000

2000

0

9.222

Time-->

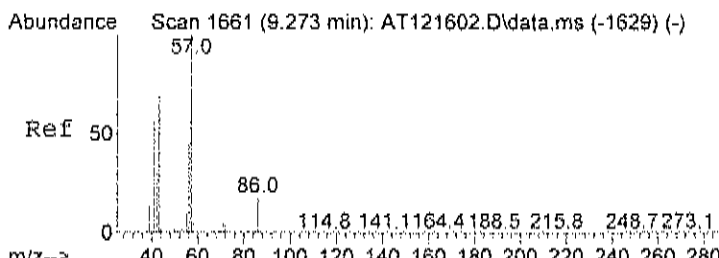
9.00

9.10

9.20

9.30

9.40



#30

Hexane

Concen: 0.16 ppb

RT: 9.279 min Scan# 1663

Delta R.T. -0.006 min

Lab File: AT121606.D

Acq: 16 Dec 2022 1:11 pm

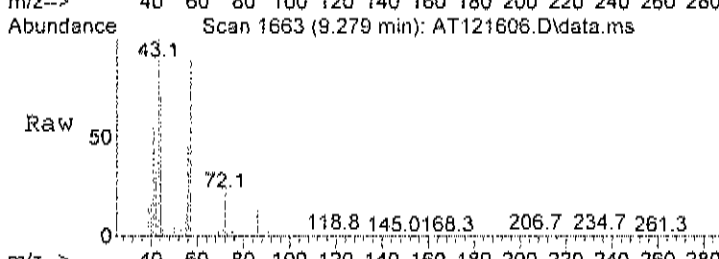
Tgt Ion: 57 Resp: 22419

Ion Ratio Lower Upper

57 100

41 66.0 62.0 102.0

56 49.0 31.8 71.8



Abundance

6000

4000

2000

0

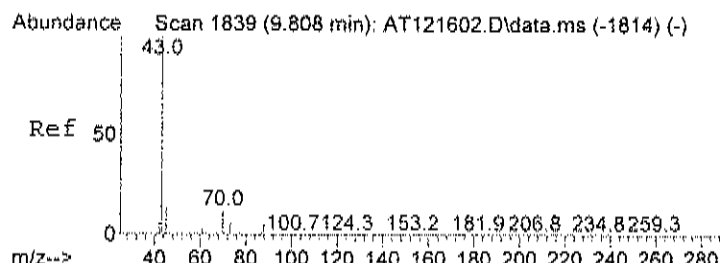
9.279

Time-->

9.20

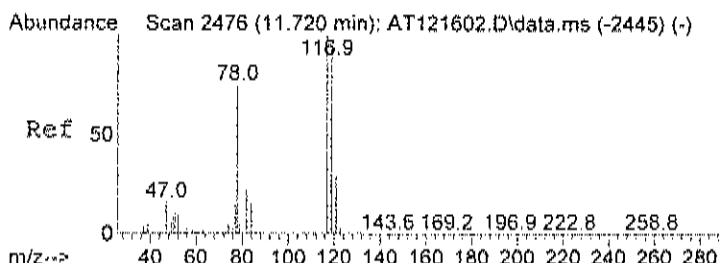
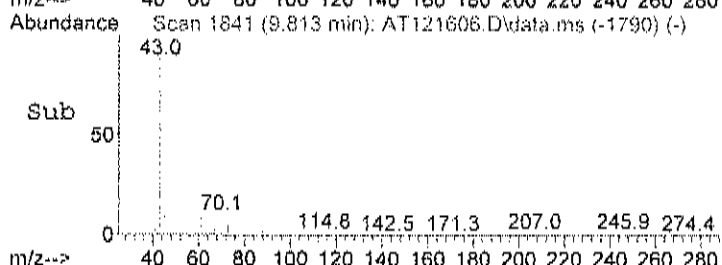
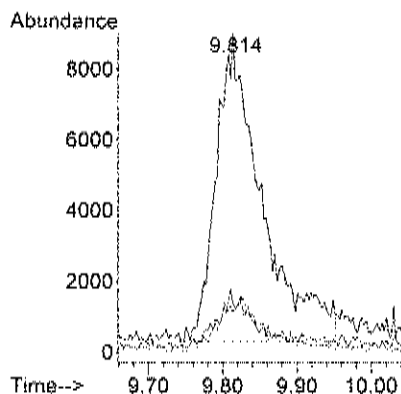
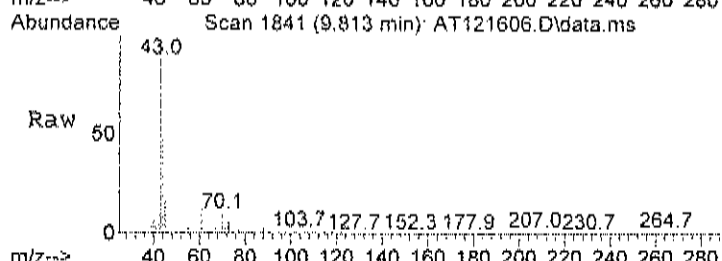
9.30

9.40



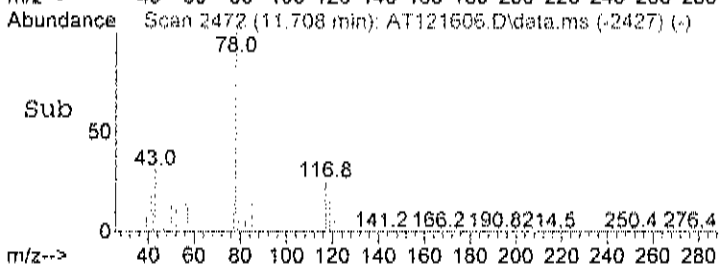
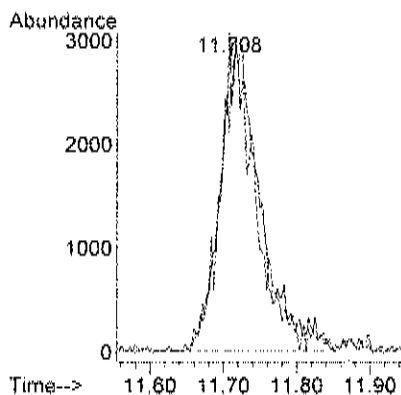
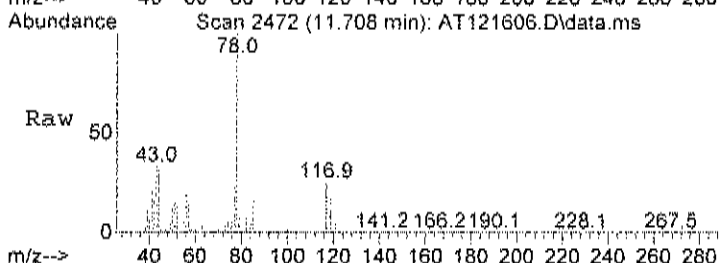
#31
Ethyl acetate
Concen: 0.18 ppb
RT: 9.813 min Scan# 1841
Delta R.T. 0.003 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

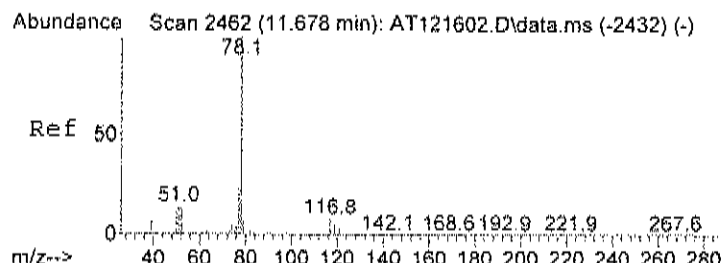
Tgt Ion:	43	Resp:	36971
Ion Ratio	Lower	Upper	
43	100		
45	14.5	0.0	32.9
61	15.3	0.0	33.0



#38
Carbon tetrachloride
Concen: 0.08 ppb
RT: 11.708 min Scan# 2472
Delta R.T. -0.015 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

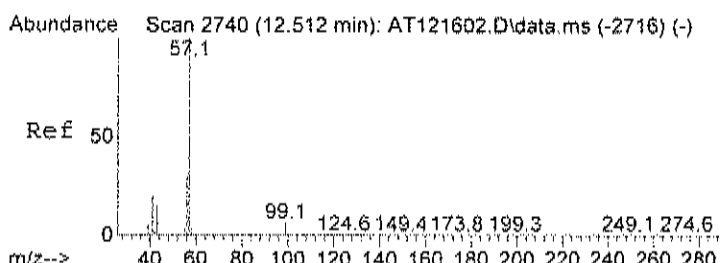
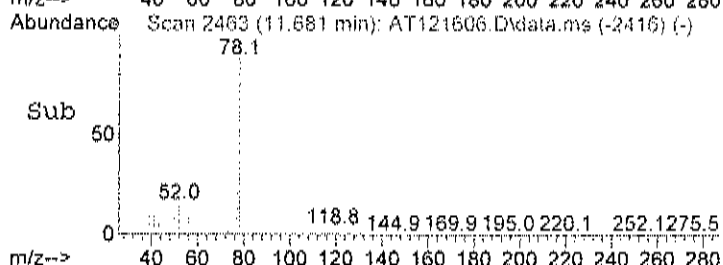
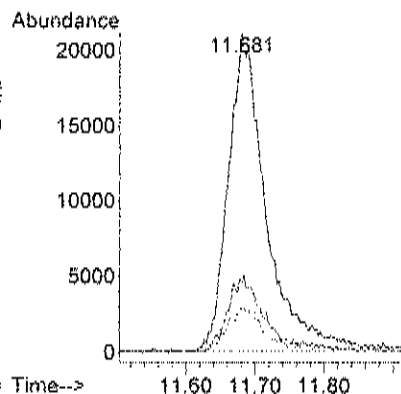
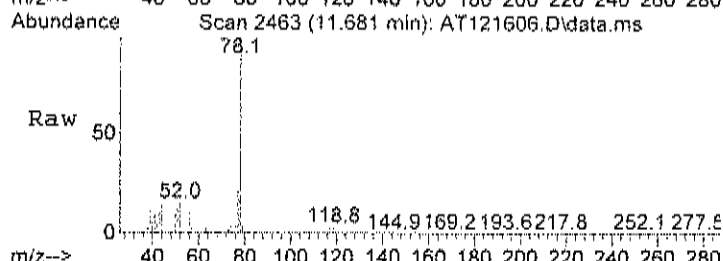
Tgt Ion:	117	Resp:	11115
Ion Ratio	Lower	Upper	
117	100		
119	92.4	74.2	114.2





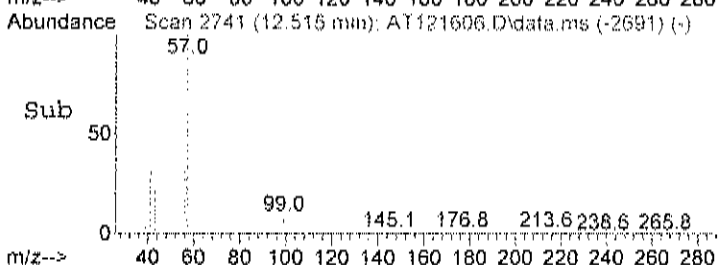
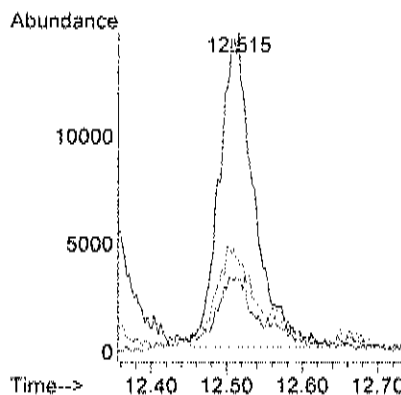
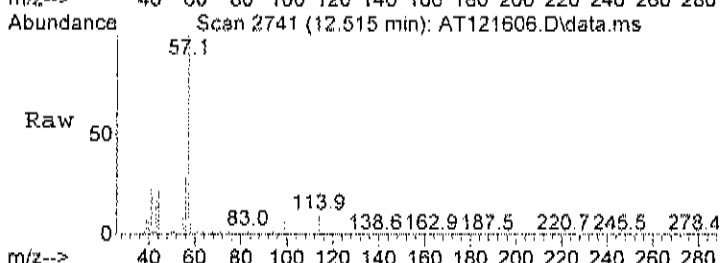
#39
Benzene
Concen: 0.28 ppb
RT: 11.681 min Scan# 2463
Delta R.T. -0.009 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

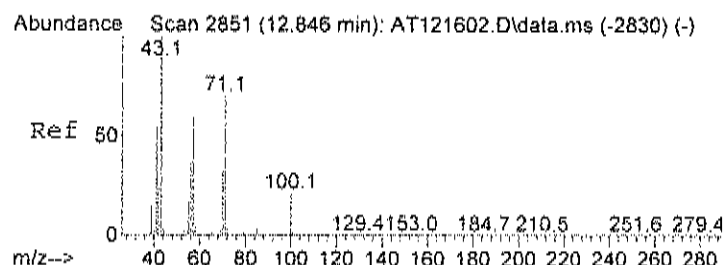
Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.8	2.5	42.5
51	14.5	0.5	40.5



#42
2,2,4-trimethylpentane
Concen: 0.11 ppb
RT: 12.515 min Scan# 2741
Delta R.T. 0.000 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

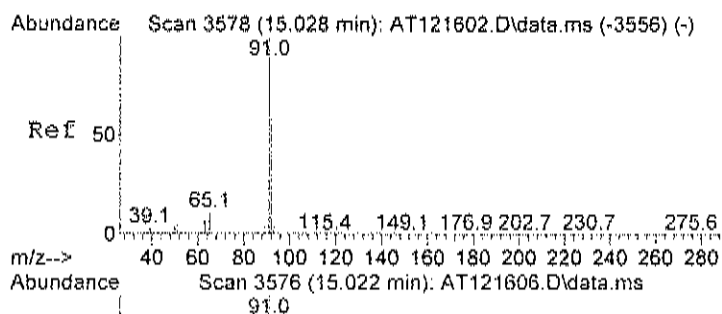
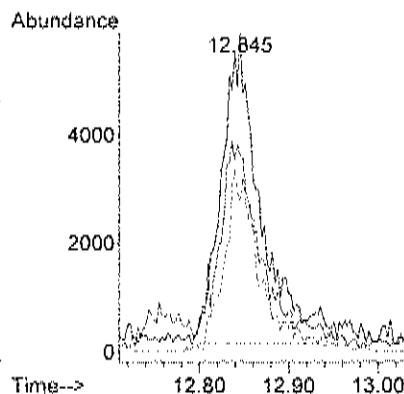
Tgt Ion	Ratio	Lower	Upper
57	100		
41	29.3	17.4	57.4
56	37.8	10.8	50.8





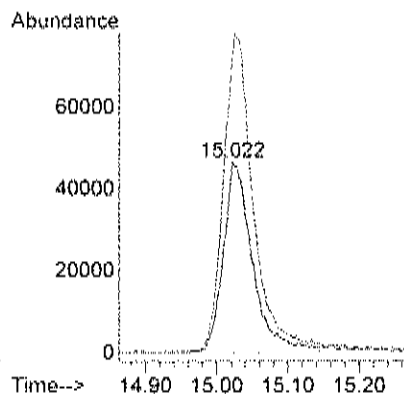
#43
Heptane
Concen: 0.12 ppb
RT: 12.845 min Scan# 2851
Delta R.T. -0.003 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

Tgt Ion	Ratio	Lower	Upper
43	100		
57	72.0	42.3	82.3
71	53.0	38.8	78.8

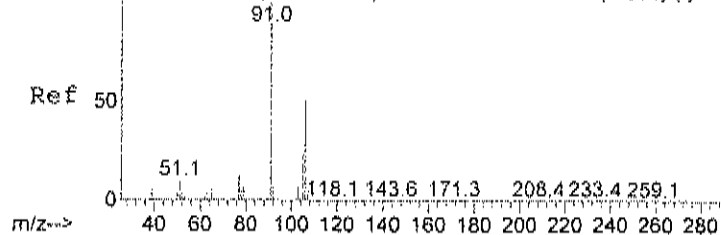


#51
Toluene
Concen: 0.66 ppb
RT: 15.022 min Scan# 3576
Delta R.T. -0.009 min
Lab File: AT121606.D
Acq: 16 Dec 2022 1:11 pm

Tgt Ion	Ratio	Lower	Upper
92	100		
91	170.6	153.3	193.3



Abundance Scan 4416 (17.544 min): AT121602.D\data.ms (-4386) (-)



#59

m&p-xylene

Concen: 0.19 ppb

RT: 17.514 min Scan# 4406

Delta R.T. -0.029 min

Lab File: AT121606.D

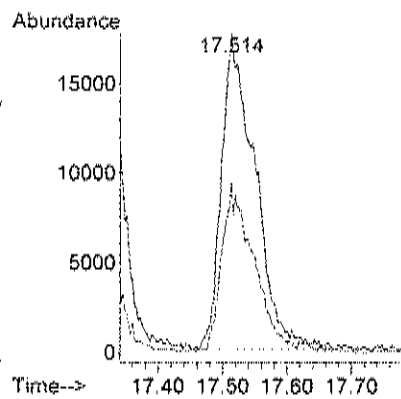
Acq: 16 Dec 2022 1:11 pm

Tgt Ion: 91 Resp: 63612

Ion Ratio Lower Upper

91 100

106 51.2 22.4 62.4



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121705.D
Acq On : 17 Dec 2022 12:42 pm
Operator : RJP
Sample : C2212031-018A 5X
Misc : AD12_1UG
ALS Vial : 3 Sample Multiplier: 1

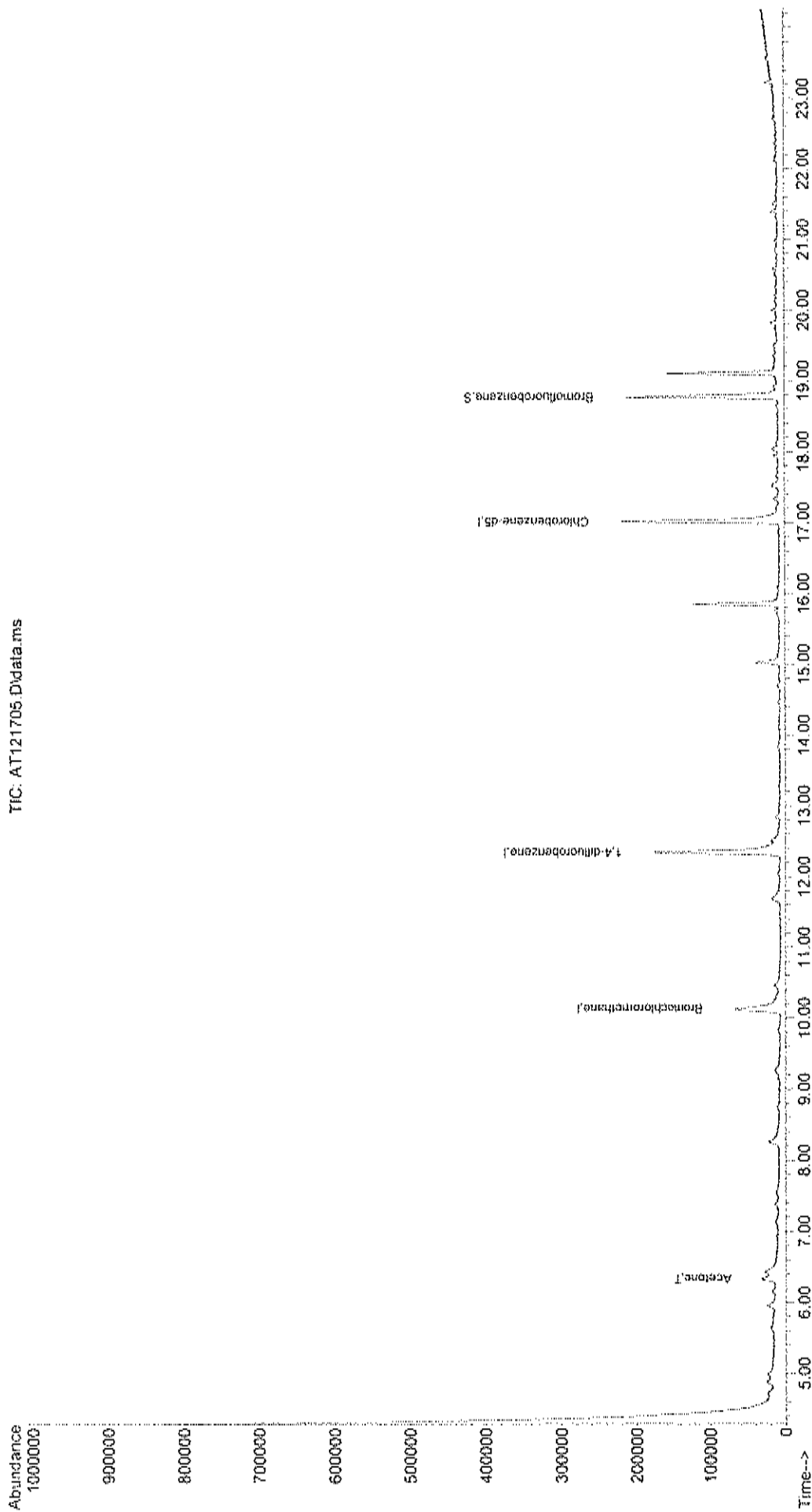
Quant Time: Dec 18 10:32:50 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.129	128	46545	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	280647	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	216408	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	128176	0.88	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	88.00%
Target Compounds						
15) Acetone	6.337	58	30292m <i>10</i>	1.24	ppb	Qvalue

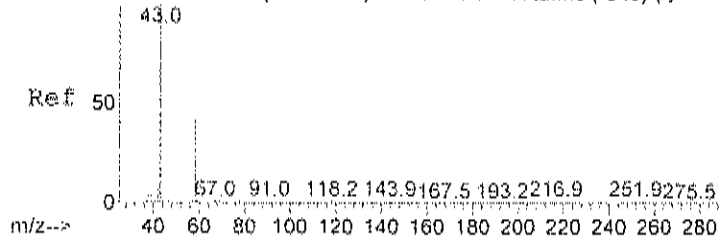
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121705.D
Acq On : 17 Dec 2022 12:42 pm
Operator : RJP
Sample : C2212031-018A 5X
Misc : AD12_IUG
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 18 10:32:50 2022
Quant Method : C:\msdchem\1\methods\AD12_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Abundance Scan 679 (6.325 min): AT121602.D\data.ms (-649) (-)



#15

Acetone

Concen: 1.24 ppb m

RT: 6.337 min Scan# 683

Delta R.T. 0.009 min

Lab File: AT121705.D

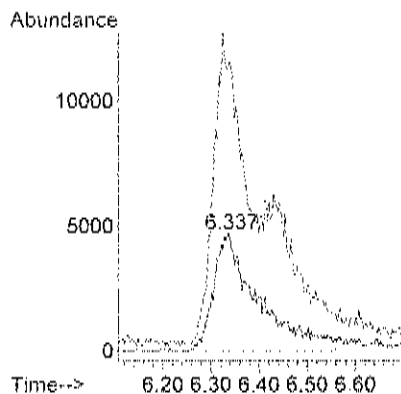
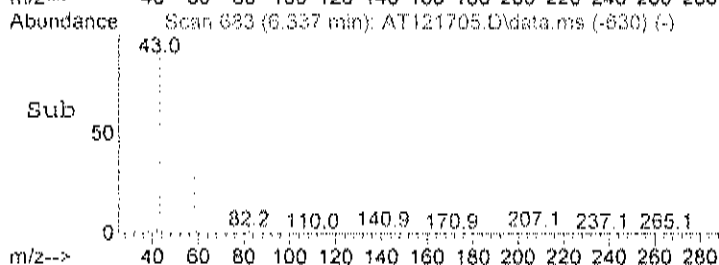
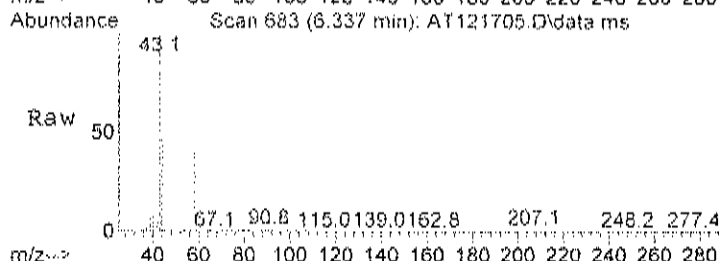
Acq: 17 Dec 2022 12:42 pm

Tgt Ion: 58 Resp: 30292

Ion Ratio Lower Upper

58 100

43 0.0 272.3 332.3#



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD		Analyst:		
Lab Vacuum In	-3			"Hg		12/15/2022
Lab Vacuum Out	-30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
2,2,4-trimethylpentane	0.12	0.15	J	ppbV	1	12/16/2022 1:55:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Acetone	4.3	1.5		ppbV	5	12/17/2022 1:24:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Benzene	0.29	0.15		ppbV	1	12/16/2022 1:55:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Carbon tetrachloride	0.080	0.030		ppbV	1	12/16/2022 1:55:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Chloromethane	0.49	0.15		ppbV	1	12/16/2022 1:55:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Ethyl acetate	0.18	0.15		ppbV	1	12/16/2022 1:55:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE			TO-15			Analyst: RJP
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 11	0.27	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Freon 12	0.60	0.15		ppbV	1	12/16/2022 1:55:00 PM
Heptane	0.12	0.15	J	ppbV	1	12/16/2022 1:55:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Hexane	0.18	0.15		ppbV	1	12/16/2022 1:55:00 PM
Isopropyl alcohol	1.0	0.15		ppbV	1	12/16/2022 1:55:00 PM
m&p-Xylene	0.21	0.30	J	ppbV	1	12/16/2022 1:55:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	0.39	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	0.70	1.5	J	ppbV	5	12/17/2022 1:24:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 1:55:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Methylene chloride	0.22	0.15		ppbV	1	12/16/2022 1:55:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Toluene	1.1	0.15		ppbV	1	12/16/2022 1:55:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
trans-1,3-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 1:55:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 1:55:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 1:55:00 PM
Surr: Bromofluorobenzene	97.0	47-124		%REC	1	12/16/2022 1:55:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:55:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 1:55:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:55:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 1:55:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 1:55:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 1:55:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 1:55:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
2,2,4-trimethylpentane	0.56	0.70	J	ug/m3	1	12/16/2022 1:55:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 1:55:00 PM
Acetone	10	3.6		ug/m3	5	12/17/2022 1:24:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 1:55:00 PM
Benzene	0.93	0.48		ug/m3	1	12/16/2022 1:55:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 1:55:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 1:55:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 1:55:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 1:55:00 PM
Carbon tetrachloride	0.50	0.19		ug/m3	1	12/16/2022 1:55:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 1:55:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 1:55:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 1:55:00 PM
Chloromethane	1.0	0.31		ug/m3	1	12/16/2022 1:55:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:55:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 1:55:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 1:55:00 PM
Ethyl acetate	0.65	0.54		ug/m3	1	12/16/2022 1:55:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 1:55:00 PM
Freon 11	1.5	0.84		ug/m3	1	12/16/2022 1:55:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 1:55:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM

Qualifiers: , Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: AS-2

Lab Order: C2212031

Tag Number: 170,124

Project: IKEA Red Hook

Collection Date: 12/13/2022

Lab ID: C2212031-019A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	3.0	0.74		ug/m3	1	12/16/2022 1:55:00 PM
Heptane	0.49	0.61	J	ug/m3	1	12/16/2022 1:55:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 1:55:00 PM
Hexane	0.63	0.53		ug/m3	1	12/16/2022 1:55:00 PM
Isopropyl alcohol	2.6	0.37		ug/m3	1	12/16/2022 1:55:00 PM
m&p-Xylene	0.91	1.3	J	ug/m3	1	12/16/2022 1:55:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	1.1	0.88		ug/m3	1	12/16/2022 1:55:00 PM
Methyl Ethyl Ketone	2.1	4.4	J	ug/m3	5	12/17/2022 1:24:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 1:55:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 1:55:00 PM
Methylene chloride	0.76	0.52		ug/m3	1	12/16/2022 1:55:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 1:55:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 1:55:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 1:55:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 1:55:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 1:55:00 PM
Toluene	4.1	0.57		ug/m3	1	12/16/2022 1:55:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 1:55:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 1:55:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 1:55:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 1:55:00 PM

Qualifiers: Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

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Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121607.D
 Acq On : 16 Dec 2022 1:55 pm
 Operator : RJP
 Sample : C2212031-019A
 Misc : AD12_1UG
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 17 08:40:28 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

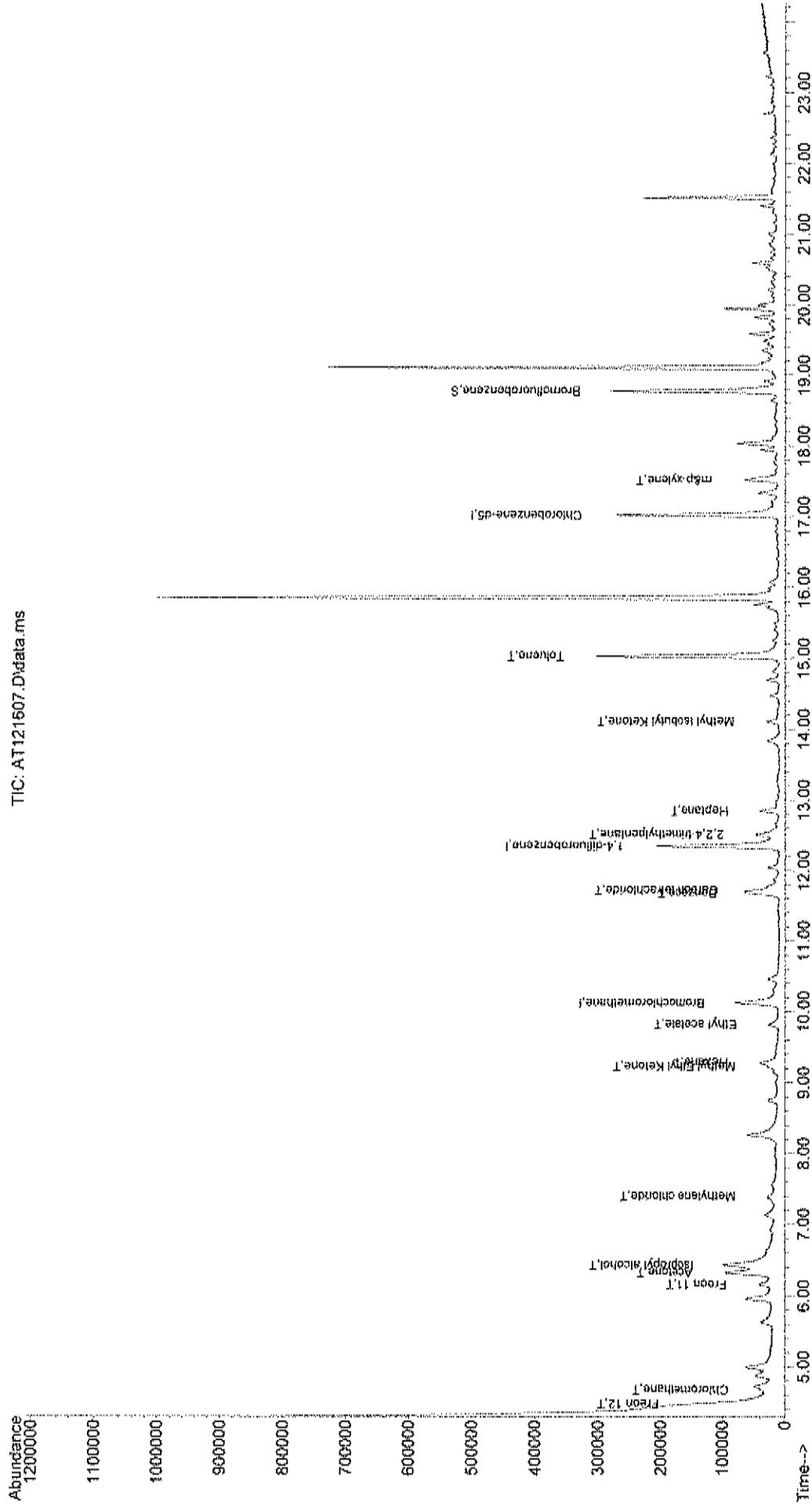
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

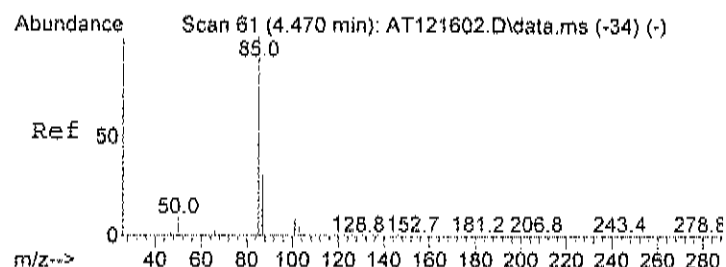
Internal Standards						
1) Bromochloromethane	10.117	128	49858	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	320436	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	255019	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	167085	0.97	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	97.00%
Target Compounds						
						Qvalue
3) Freon 12	4.470	85	99423	0.60	ppb	99
4) Chloromethane	4.671	50	26464	0.49	ppb	86
14) Freon 11	6.157	101	37314	0.27	ppb	98
15) Acetone	6.322	58	85692	3.28	ppb	85
17) Isopropyl alcohol	6.421	45	83987	1.05	ppb	# 1
21) Methylene chloride	7.388	84	14696	0.22	ppb	99
28) Methyl Ethyl Ketone	9.225	72	16203m	0.39	ppb	
30) Hexane	9.279	57	25188	0.18	ppb	# 77
31) Ethyl acetate	9.816	43	36167	0.18	ppb	92
38) Carbon tetrachloride	11.714	117	10986	0.08	ppb	99
39) Benzene	11.675	78	83975	0.29	ppb	92
42) 2,2,4-trimethylpentane	12.509	57	52596	0.12	ppb	86
43) Heptane	12.842	43	17866	0.12	ppb	91
51) Toluene	15.028	92	219545	1.08	ppb	96
52) Methyl Isobutyl Ketone	14.109	43	19708	0.11	ppb	80
59) m&p-xylene	17.514	91	69929	0.21	ppb	86

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121607.D
 Acq On : 16 Dec 2022 1:55 pm
 Operator : RJP
 Sample : C2212031-019A
 Misc : AD12_lUG
 ALS Vial : 7 Sample Multiplier: 1

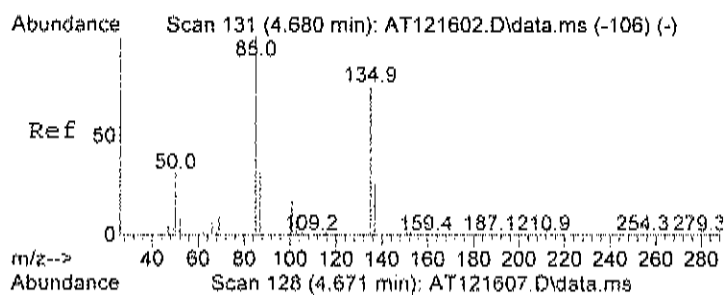
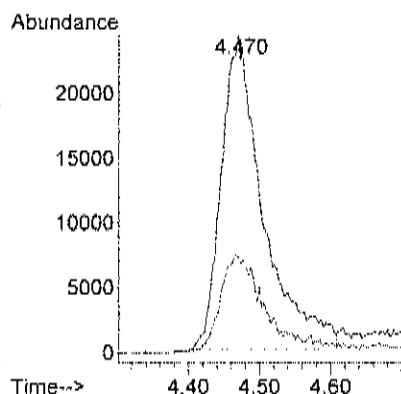
Quant Time: Dec 17 08:40:28 2022
 Quant Method : C:\msdchem\1\methods\AD12_lUG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration





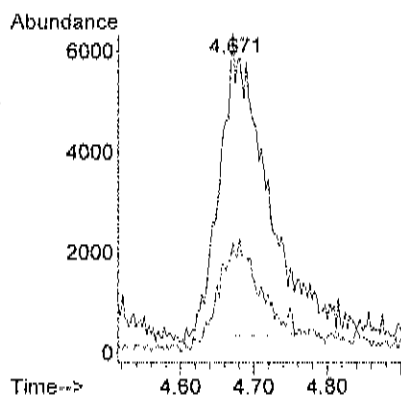
#3
Freon 12
Concen: 0.60 ppb
RT: 4.470 min Scan# 61
Delta R.T. -0.003 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

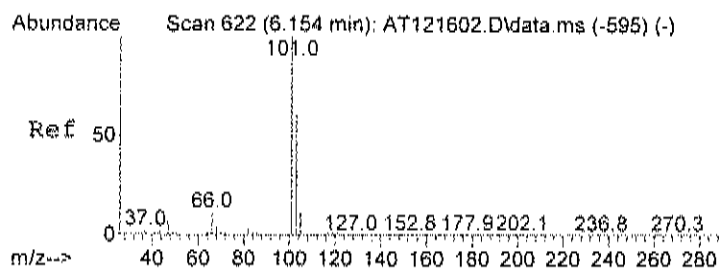
Tgt Ion: 85	Resp: 99423
Ion Ratio	Lower Upper
85 100	
87 33.7	14.3 54.3



#4
Chloromethane
Concen: 0.49 ppb
RT: 4.671 min Scan# 128
Delta R.T. -0.012 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

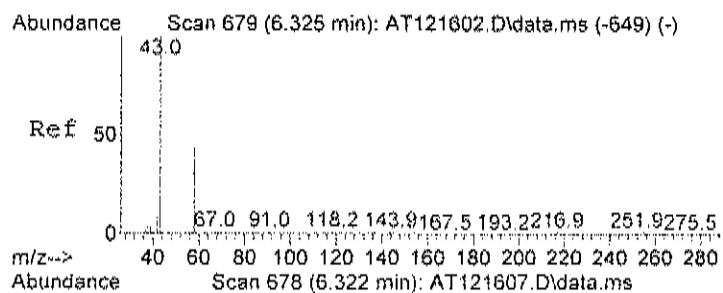
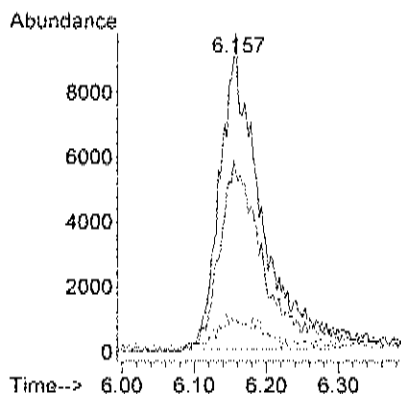
Tgt Ion: 50	Resp: 26464
Ion Ratio	Lower Upper
50 100	
52 32.7	5.4 45.4





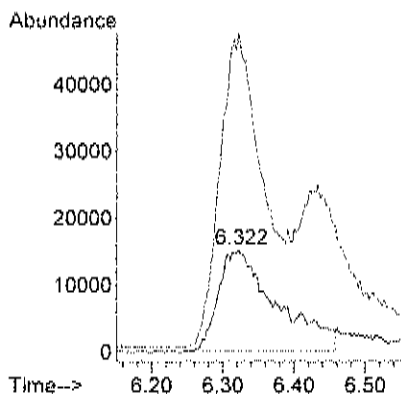
#14
Freon 11
Concen: 0.27 ppb
RT: 6.157 min Scan# 623
Delta R.T. -0.009 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

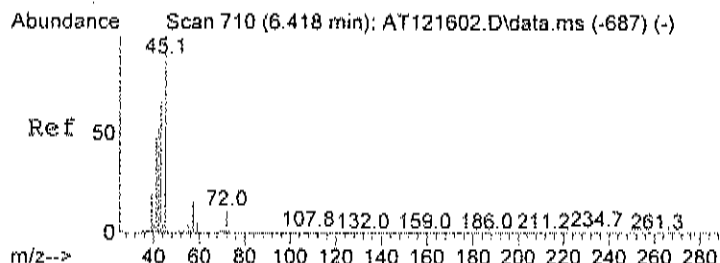
Tgt Ion	Ratio	Lower	Upper
101	100		
103	62.8	44.1	84.1
105	11.5	0.0	32.0



#15
Acetone
Concen: 3.28 ppb
RT: 6.322 min Scan# 678
Delta R.T. -0.006 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

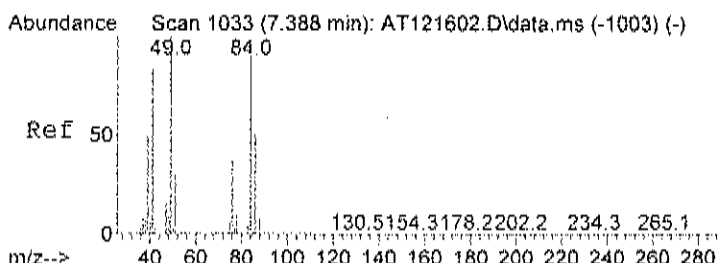
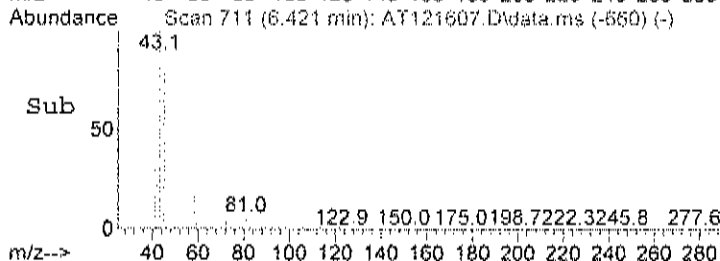
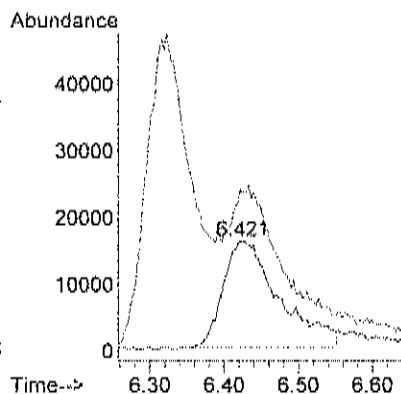
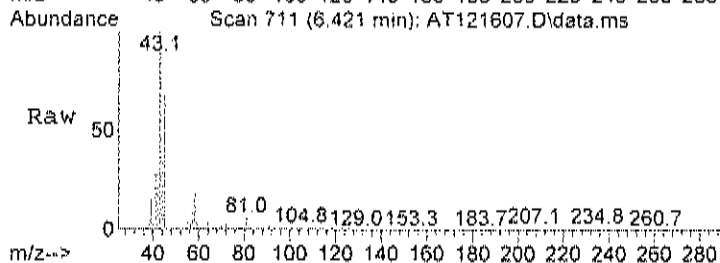
Tgt Ion	Ratio	Lower	Upper
58	100		
43	331.3	272.3	332.3





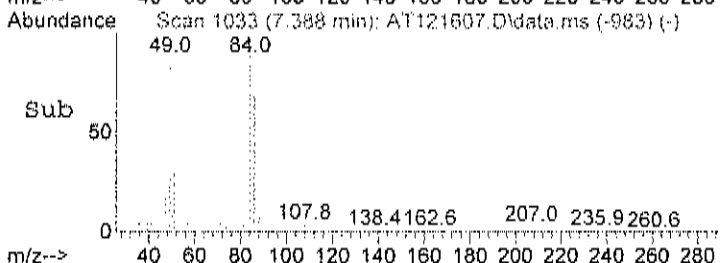
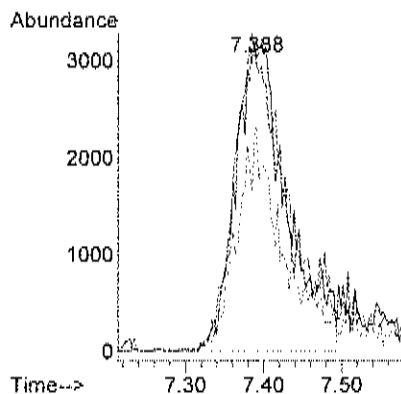
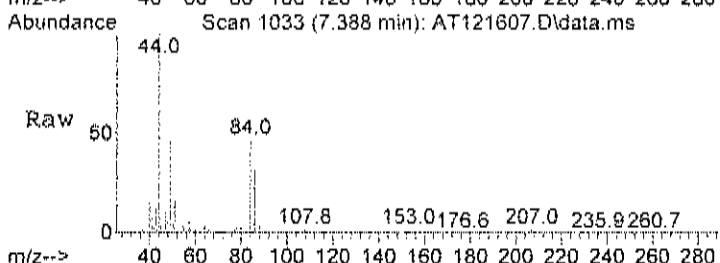
#17
Isopropyl alcohol
Concen: 1.05 ppb
RT: 6.421 min Scan# 711
Delta R.T. 0.003 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

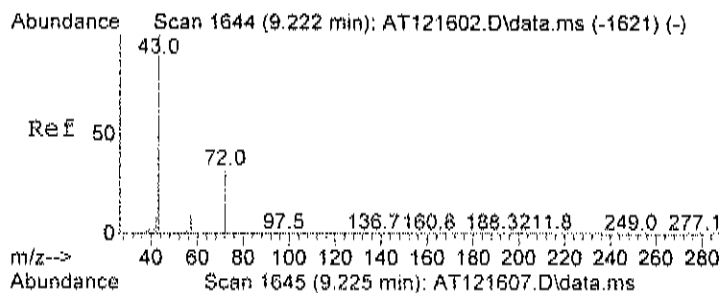
Tgt Ion:	45	Resp:	83987
Ion	Ratio	Lower	Upper
45	100		
43	0.0	91.9	131.9#



#21
Methylene chloride
Concen: 0.22 ppb
RT: 7.388 min Scan# 1033
Delta R.T. -0.000 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

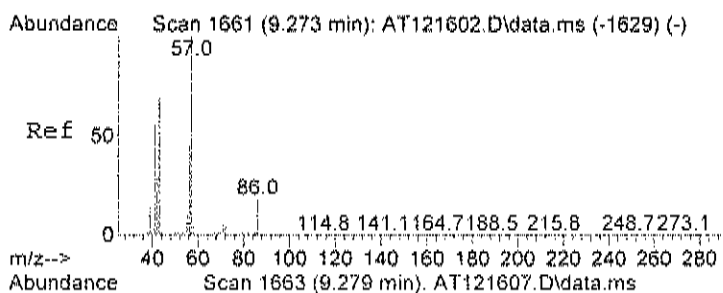
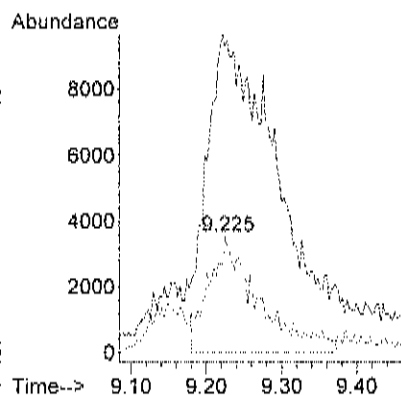
Tgt Ion:	84	Resp:	14696
Ion	Ratio	Lower	Upper
84	100		
49	104.4	84.2	124.2
86	63.9	42.9	82.9





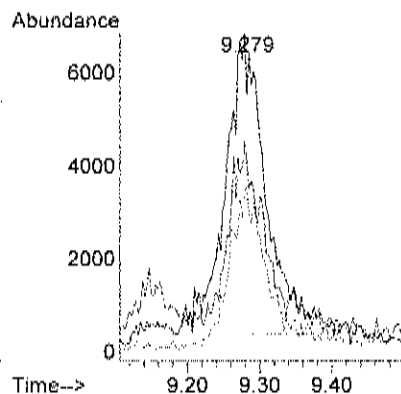
#28
Methyl Ethyl Ketone
Concen: 0.39 ppb m
RT: 9.225 min Scan# 1645
Delta R.T. 0.006 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

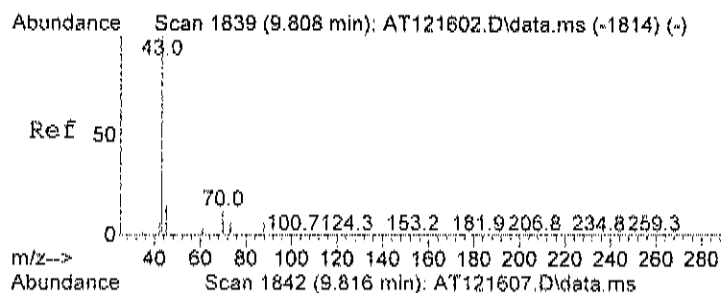
Tgt Ion	Ratio	Lower	Upper
72	100		
43	364.4	333.7	373.7
72	125.8	80.0	120.0#



#30
Hexane
Concen: 0.18 ppb
RT: 9.279 min Scan# 1663
Delta R.T. -0.006 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

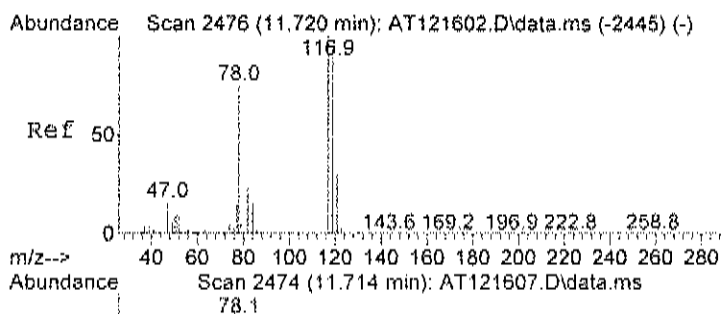
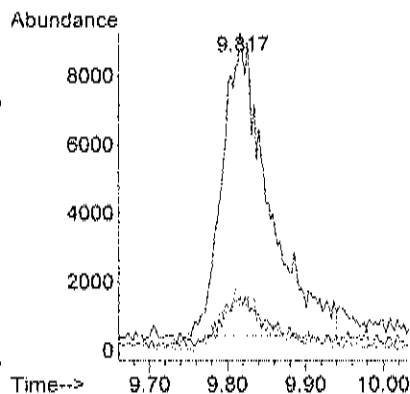
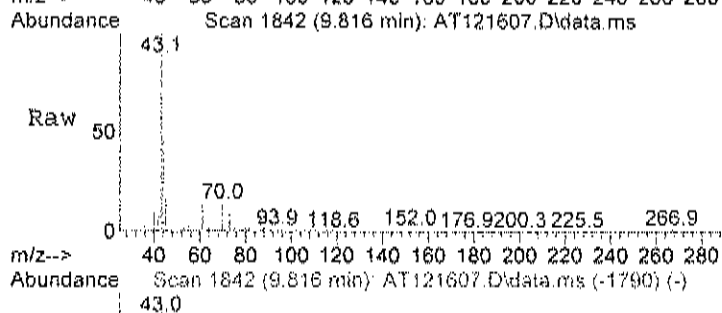
Tgt Ion	Ratio	Lower	Upper
57	100		
41	50.5	62.0	102.0#
56	49.8	31.8	71.8





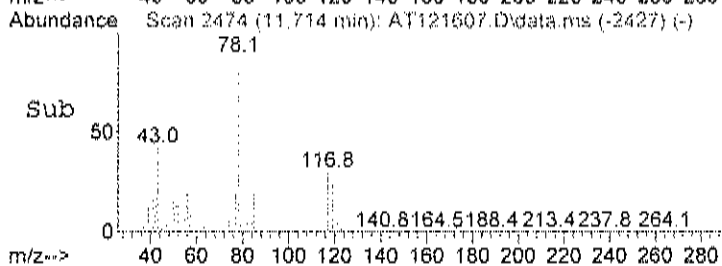
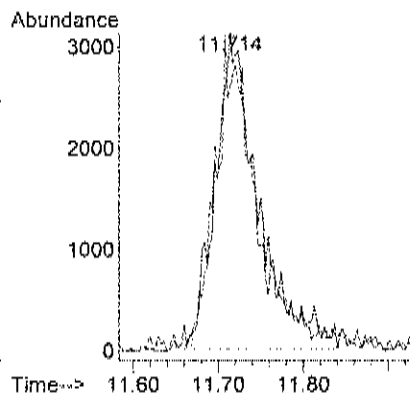
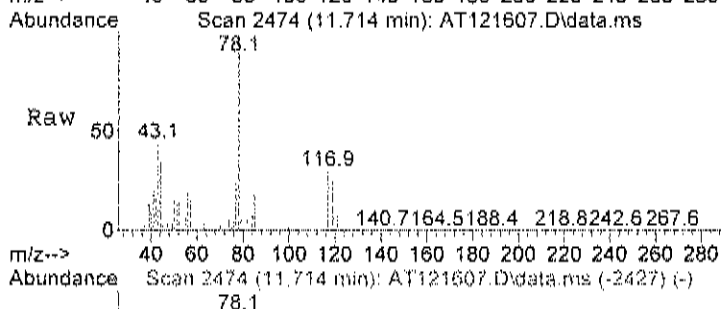
#31
Ethyl acetate
Concen: 0.18 ppb
RT: 9.816 min Scan# 1842
Delta R.T. 0.006 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

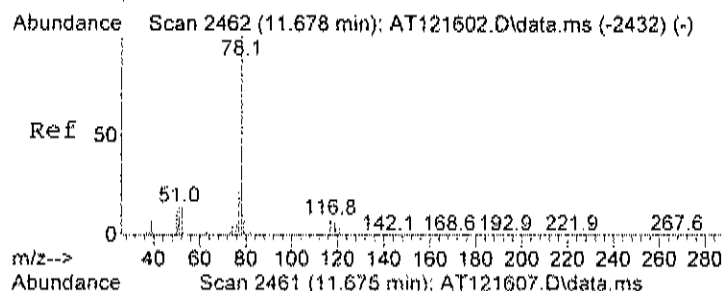
Tgt Ion	Ratio	Lower	Upper
43	100		
45	16.5	0.0	32.9
61	15.4	0.0	33.0



#38
Carbon tetrachloride
Concen: 0.08 ppb
RT: 11.714 min Scan# 2474
Delta R.T. -0.009 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

Tgt Ion	Ratio	Lower	Upper
117	100		
119	95.6	74.2	114.2





#39

Benzene

Concen: 0.29 ppb

RT: 11.675 min Scan# 2461

Delta R.T. -0.015 min

Lab File: AT121607.D

Acq: 16 Dec 2022 1:55 pm

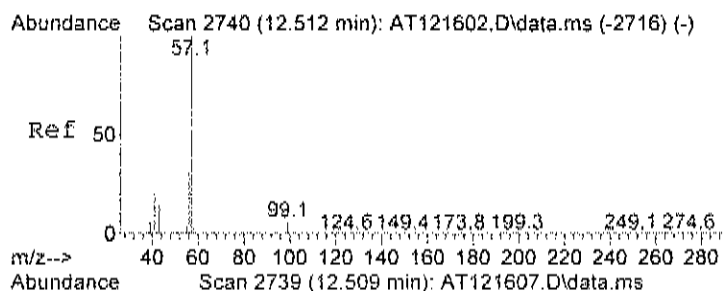
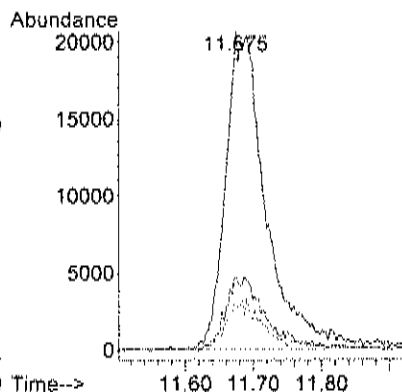
Tgt Ion: 78 Resp: 83975

Ion Ratio Lower Upper

78 100

77 23.7 2.5 42.5

51 14.4 0.5 40.5



#42

2,2,4-trimethylpentane

Concen: 0.12 ppb

RT: 12.509 min Scan# 2739

Delta R.T. -0.006 min

Lab File: AT121607.D

Acq: 16 Dec 2022 1:55 pm

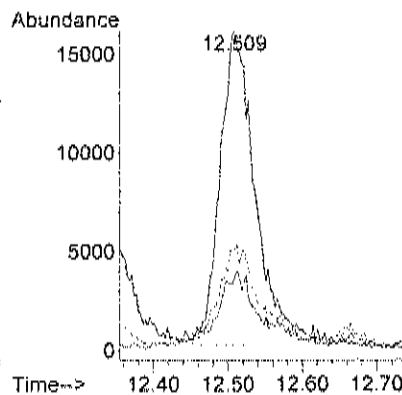
Tgt Ion: 57 Resp: 52596

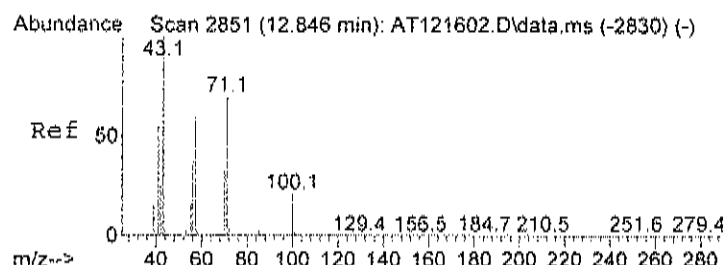
Ion Ratio Lower Upper

57 100

41 28.8 17.4 57.4

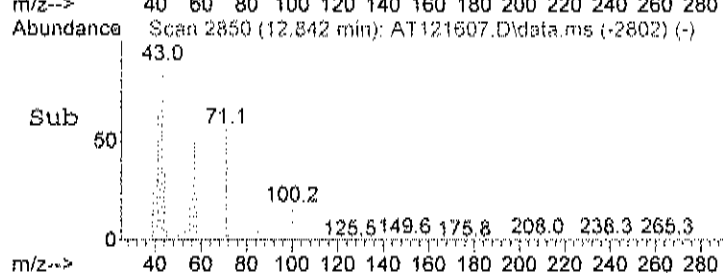
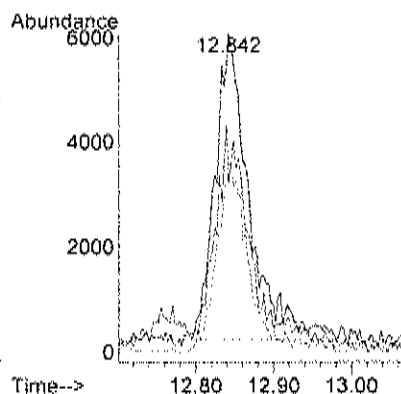
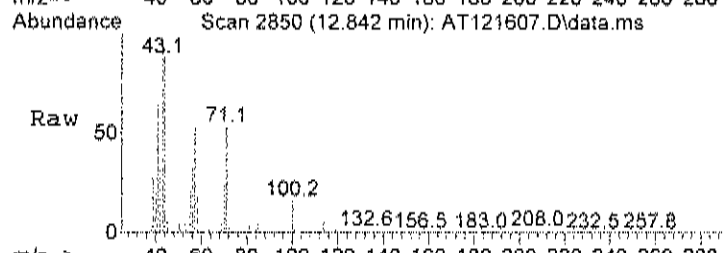
56 37.6 10.8 50.8





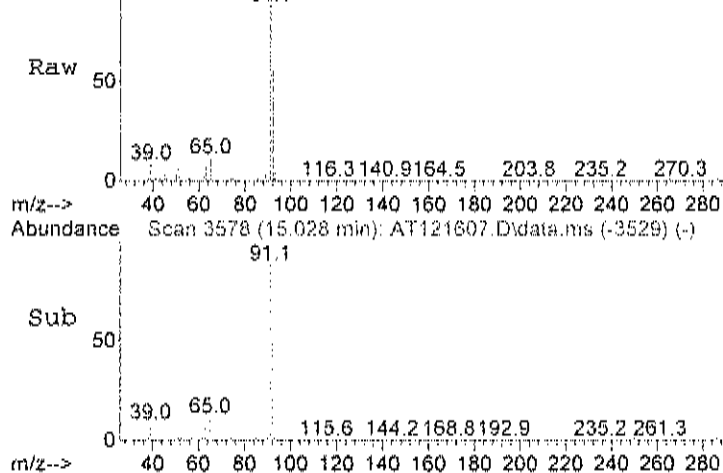
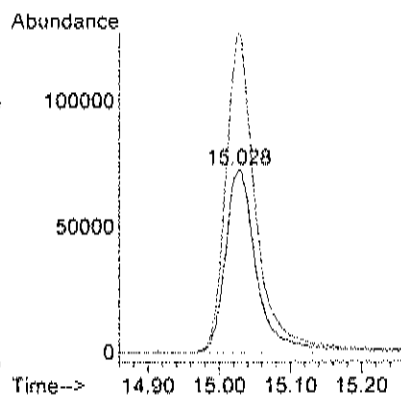
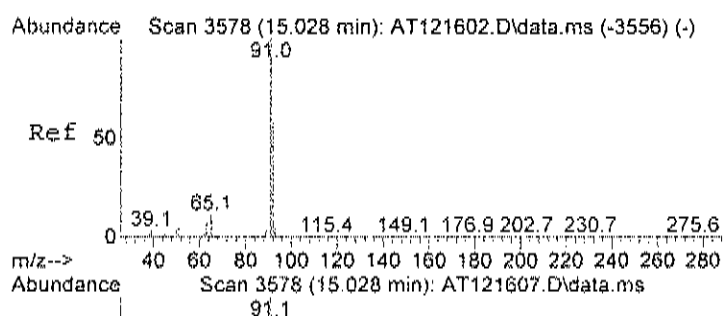
#43
Heptane
Concen: 0.12 ppb
RT: 12.842 min Scan# 2850
Delta R.T. -0.006 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

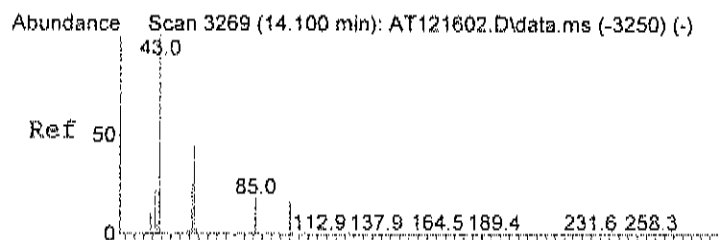
Tgt Ion	Ratio	Lower	Upper
43	100		
57	72.1	42.3	82.3
71	55.4	38.8	78.8



#51
Toluene
Concen: 1.08 ppb
RT: 15.028 min Scan# 3578
Delta R.T. -0.003 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

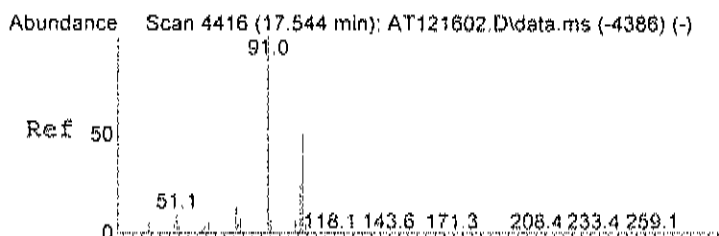
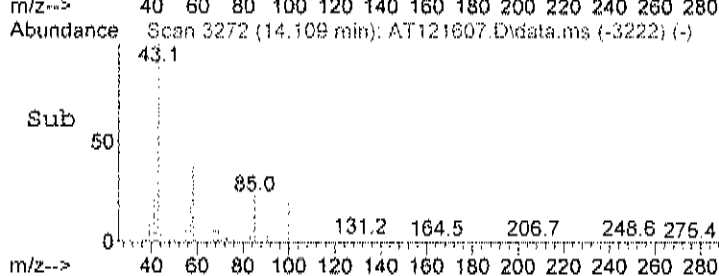
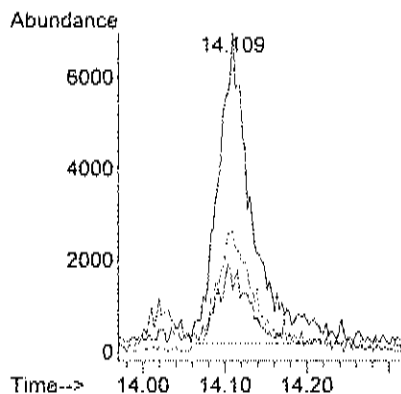
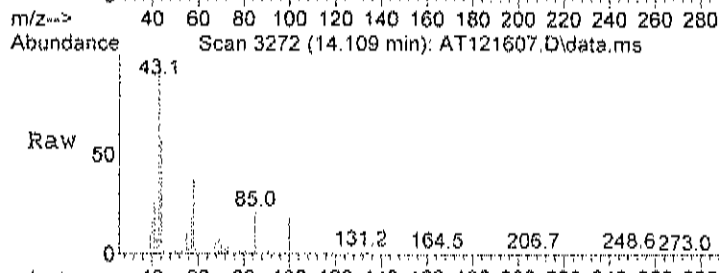
Tgt Ion	Ratio	Lower	Upper
92	100		
91	167.7	153.3	193.3





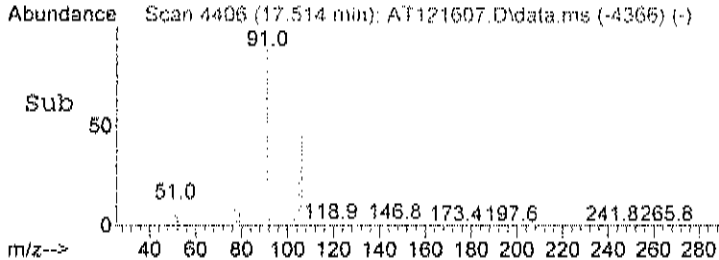
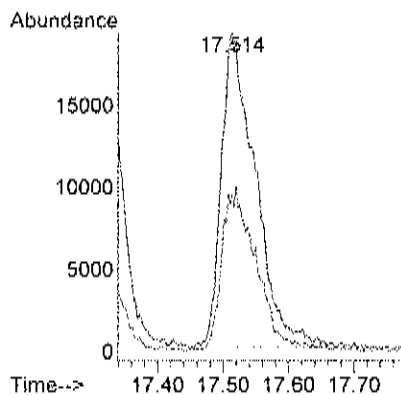
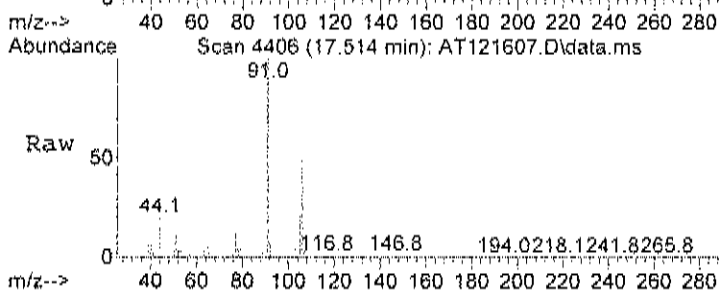
#52
Methyl Isobutyl Ketone
Concen: 0.11 ppb
RT: 14.109 min Scan# 3272
Delta R.T. 0.000 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

Tgt Ion	43	Resp	19708
Ion Ratio	Lower	Upper	
43	100		
57	31.8	7.7	47.7
58	44.3	7.6	47.6



#59
m&p-xylene
Concen: 0.21 ppb
RT: 17.514 min Scan# 4406
Delta R.T. -0.029 min
Lab File: AT121607.D
Acq: 16 Dec 2022 1:55 pm

Tgt Ion	91	Resp	69929
Ion Ratio	Lower	Upper	
91	100		
106	51.2	22.4	62.4



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121706.D
 Acq On : 17 Dec 2022 1:24 pm
 Operator : RJP
 Sample : C2212031-019A 5X
 Misc : AD12_1UG
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 18 10:33:04 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

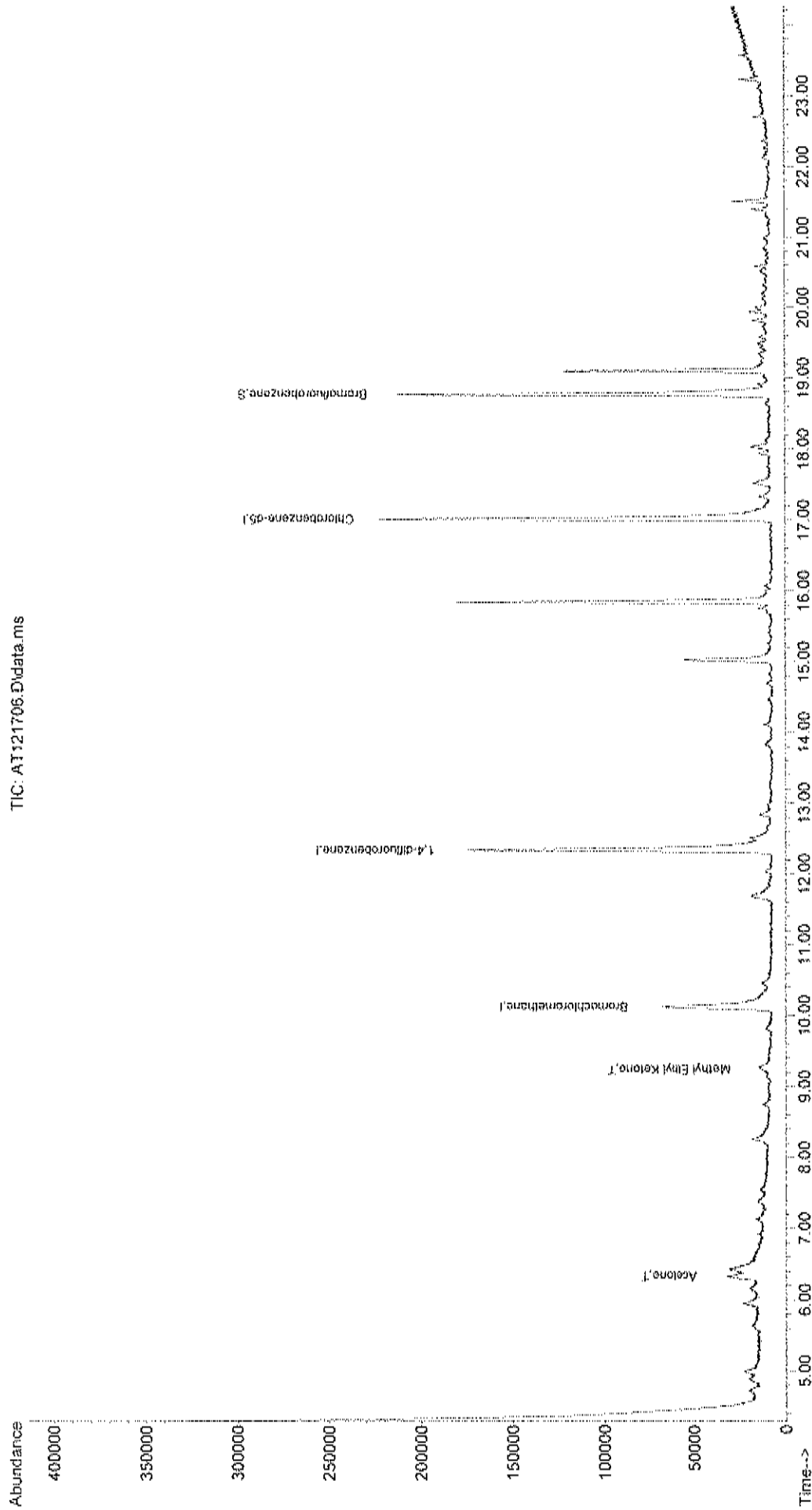
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.123	128	45803	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	277975	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	218212	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.774	95	134012	0.91	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	91.00%
Target Compounds						
15) Acetone	6.334	58	20688	0.86	ppb	99
28) Methyl Ethyl Ketone	9.237	72	5203	0.14	ppb	# 1

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121706.D
Acq On : 17 Dec 2022 1:24 pm
Operator : RJP
Sample : C2212031-019A 5X
Misc : AD12_1UG
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 18 10:33:04 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



#15

Acetone

Concen: 0.86 ppb

RT: 6.334 min Scan# 682

Delta R.T. 0.006 min

Lab File: AT121706.D

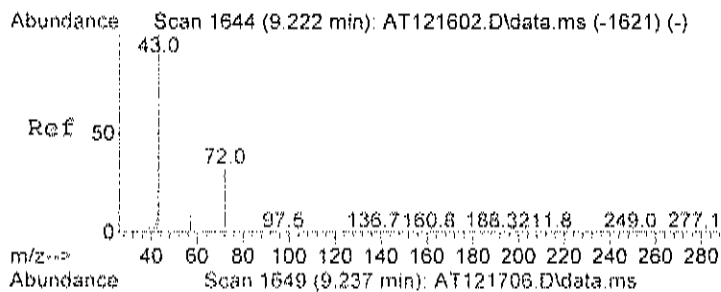
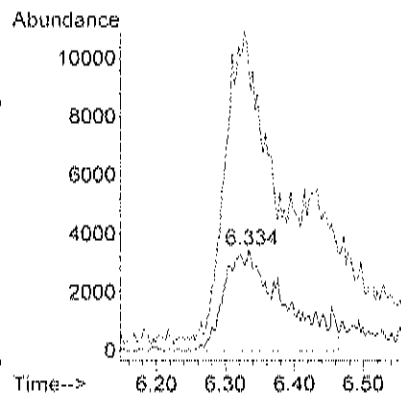
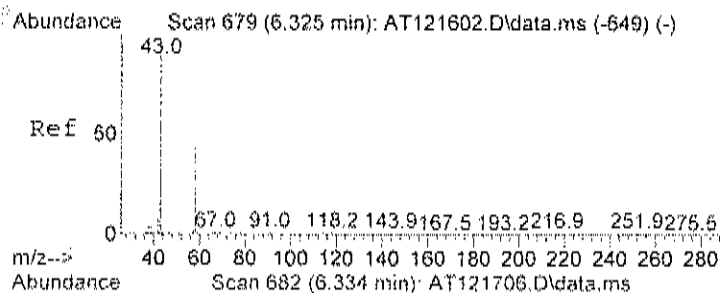
Acq: 17 Dec 2022 1:24 pm

Tgt Ion: 58 Resp: 20688

Ion Ratio Lower Upper

58 100

43 299.9 272.3 332.3



#28

Methyl Ethyl Ketone

Concen: 0.14 ppb

RT: 9.237 min Scan# 1649

Delta R.T. 0.018 min

Lab File: AT121706.D

Acq: 17 Dec 2022 1:24 pm

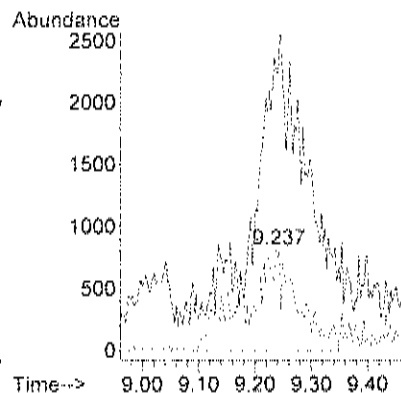
Tgt Ion: 72 Resp: 5203

Ion Ratio Lower Upper

72 100

43 0.0 333.7 373.7#

72 100.0 80.0 120.0



Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	+30			"Hg		12/15/2022
Lab Vacuum Out	+30			"Hg		12/15/2022
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15				Analyst: RJP
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Acetone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Benzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromoform	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Carbon tetrachloride	< 0.030	0.030		ppbV	1	12/16/2022 12:26:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloroform	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM

Qualifiers:

DL Detection Limit

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

SC Sub-Contracted

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Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE			TO-15			Analyst: RJP
Ethylbenzene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 11	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 113	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 114	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Freon 12	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Heptane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Hexane	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/16/2022 12:26:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Methylene chloride	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Propylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Styrene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Toluene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	12/16/2022 12:26:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/16/2022 12:26:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	12/16/2022 12:26:00 PM
Surr: Bromofluorobenzene	95.0	47-124		%REC	1	12/16/2022 12:26:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

Page 40 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 12:26:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/16/2022 12:26:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/16/2022 12:26:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/16/2022 12:26:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/16/2022 12:26:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	12/16/2022 12:26:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
Acetone	< 0.71	0.71		ug/m3	1	12/16/2022 12:26:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/16/2022 12:26:00 PM
Benzene	< 0.48	0.48		ug/m3	1	12/16/2022 12:26:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/16/2022 12:26:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/16/2022 12:26:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/16/2022 12:26:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/16/2022 12:26:00 PM
Carbon tetrachloride	< 0.19	0.19		ug/m3	1	12/16/2022 12:26:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/16/2022 12:26:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/16/2022 12:26:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/16/2022 12:26:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	12/16/2022 12:26:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 12:26:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	12/16/2022 12:26:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/16/2022 12:26:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/16/2022 12:26:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	12/16/2022 12:26:00 PM
Freon 11	< 0.84	0.84		ug/m3	1	12/16/2022 12:26:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/16/2022 12:26:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM

Qualifiers: . Results reported are not blank corrected
 DL Detection Limit
 H Holding times for preparation or analysis exceeded
 JN Non-routine analyte. Quantitation estimated.
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 E Estimated Value above quantitation range
 J Analyte detected below quantitation limit
 ND Not Detected at the Limit of Detection
 SC Sub-Contracted

Page 39 of 40

Centek/SanAir Technologies Laboratory

Date: 09-Jan-23

CLIENT: SOIL MECHANICS

Client Sample ID: TB-1

Lab Order: C2212031

Tag Number: 141

Project: IKEA Red Hook

Collection Date:

Lab ID: C2212031-020A

Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15		Analyst: RJP		
Freon 12	< 0.74	0.74		ug/m3	1	12/16/2022 12:26:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/16/2022 12:26:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/16/2022 12:26:00 PM
Hexane	< 0.53	0.53		ug/m3	1	12/16/2022 12:26:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	12/16/2022 12:26:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	12/16/2022 12:26:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/16/2022 12:26:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/16/2022 12:26:00 PM
Methylene chloride	< 0.52	0.52		ug/m3	1	12/16/2022 12:26:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/16/2022 12:26:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/16/2022 12:26:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/16/2022 12:26:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/16/2022 12:26:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/16/2022 12:26:00 PM
Toluene	< 0.57	0.57		ug/m3	1	12/16/2022 12:26:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/16/2022 12:26:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/16/2022 12:26:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/16/2022 12:26:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/16/2022 12:26:00 PM

Qualifiers: . Results reported are not blank corrected
DL Detection Limit
H Holding times for preparation or analysis exceeded
JN Non-routine analyte. Quantitation estimated.
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
J Analyte detected below quantitation limit
ND Not Detected at the Limit of Detection
SC Sub-Contracted

Page 40 of 40

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121605.D
Acq On : 16 Dec 2022 12:26 pm
Operator : RJP
Sample : C2212031-020A
Misc : AD12_1UG
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 17 08:40:24 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.117	128	51541	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	321586	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	254349	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	163854	0.95	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	95.00%

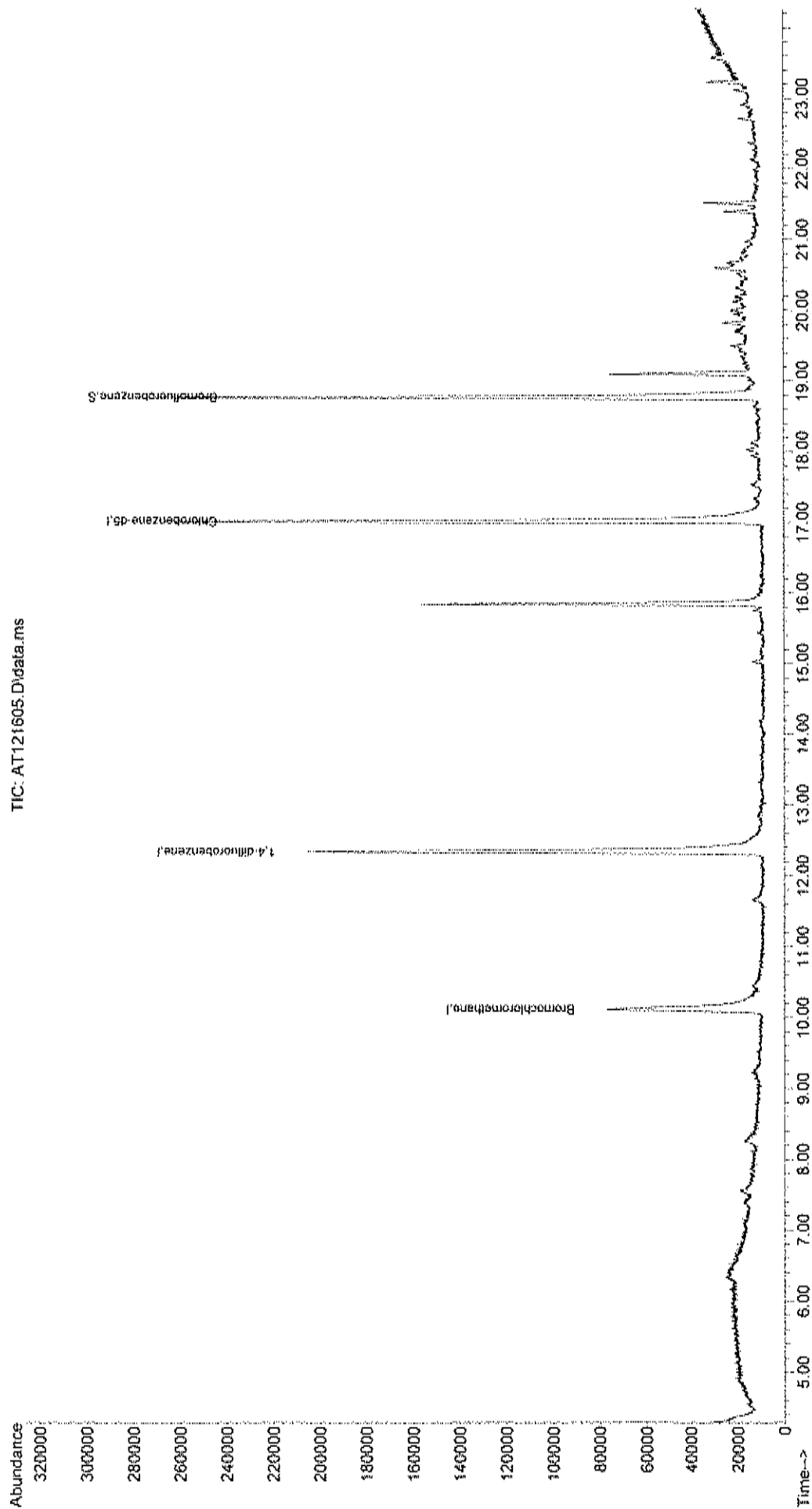
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121605.D
Acq On : 16 Dec 2022 12:26 pm
Operator : RJP
Sample : C2212031-020A
Misc : AD12_1UG
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 17 08:40:24 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS DATA

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INITIAL CALIBRATION

Method Path : C:\msdchem\1\methods\
 Method File : AD12.LUG.M
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Mon Jan 09 11:17:40 2023
 Response Via : Initial Calibration

Calibration Files

2.0 =AT121205.D 1.50=AT121206.D 1.25=AT121207.D 1.0 =AT121208.D 0.75=AT121209.D 0.50=AT121210.D 0.30=AT121211.D
 0.15=AT121212.D 0.1 =AT121213.D 0.04=AT121214.D 0.03=AT121215.D

Compound	2.0	1.50	1.25	1.0	0.75	0.50	0.30	0.15	0.1	0.04	0.03	Avg	%RSD
-----ISTD-----													
1) I Bromochloromethane													
2) T Propylene	1.078	0.945	1.034	1.048	1.129	1.098	1.081	1.309				1.090	9.55
3) T Freon 12	3.400	3.179	3.256	3.233	3.295	3.346	3.374	3.644				3.341	4.29
4) T Chloromethane	1.098	1.040	1.078	1.024	1.033	1.078	1.137	1.248				1.092	6.71
5) T Freon 114	2.859	2.718	2.729	2.739	2.781	2.745	2.854	3.030				2.807	3.75
6) T Vinyl Chloride	1.103	1.016	1.035	1.003	1.071	0.980	1.109	1.005	1.012	1.150		1.048	5.38
7) T Butane	1.228	1.144	1.218	1.314	1.206	1.202	1.226	1.583				1.265	10.81
8) T 1,3-butadiene	1.048	0.932	0.889	0.920	0.949	1.019	0.865	1.209				0.979	11.36
9) T Bromomethane	0.991	0.976	0.920	0.959	0.981	0.976	0.963	1.141				0.988	6.60
10) T Chloroethane	0.525	0.488	0.478	0.482	0.499	0.463	0.522	0.500				0.495	4.33
11) T Ethanol	0.258	0.232	0.239	0.219	0.229	0.213	0.280	0.148				0.227	17.00
12) T Acrolein	0.288	0.275	0.305	0.300	0.311	0.286	0.339	0.344				0.306	8.16
13) T Vinyl Bromide	1.009	0.946	0.910	0.917	0.870	1.035	1.081	0.838				0.951	8.84
14) T Freon 11	2.692	2.514	2.594	2.492	2.902	3.077	3.136	2.828				2.779	8.90
15) T Acetone	0.506	0.450	0.506	0.459	0.578	0.549	0.580	0.564				0.524	9.84
16) T Pentane	0.907	0.827	1.106	0.741	0.985	1.070	0.918	0.937				0.936	12.80
17) T Isopropyl alcohol	1.488	1.504	1.552	1.307	1.977	1.664	1.679	1.701				1.609	12.25
18) T 1,1-dichloroet...	1.467	1.394	1.440	1.332	1.470	1.469	1.431	1.463	1.338	1.395		1.420	3.74
19) T Freon 113	3.037	2.901	2.952	2.882	3.051	3.085	3.154	3.212				3.034	3.87
20) t t-Butyl alcohol	3.128	2.820	2.965	2.702	3.043	3.040	3.134	3.321				3.019	6.39
21) T Methylenec hlo...	1.317	1.278	1.247	1.266	1.361	1.369	1.509	1.578				1.366	8.75
22) T Allyl chloride	1.612	1.552	1.581	1.523	1.599	1.520	1.650	1.656				1.587	3.31
23) T Carbon disulfide	3.782	3.648	3.714	3.584	3.843	3.942	4.078	4.991				3.948	11.41
24) T trans-1,2-dich...	2.111	1.983	1.982	1.955	2.021	2.017	2.024	1.954				2.006	2.53
25) T methyl tert-bu...	4.719	4.442	4.466	4.432	4.641	4.587	4.641	4.767				4.587	2.80
26) T 1,1-dichloroet...	2.822	2.700	2.675	2.622	2.675	2.788	2.764	2.793				2.730	2.61
27) T Vinyl acetate	2.344	2.162	2.151	2.057	2.142	2.170	2.042	2.030				2.137	4.74
28) T Methyl Ethyl K...	0.862	0.795	0.856	0.794	0.843	0.841	0.745	0.860				0.825	5.12
29) T cis-1,2-dichlo...	1.948	2.379	1.816	2.316	1.864	2.340	2.346	2.399	2.284	1.854		2.155	11.54
30) T Hexane	3.026	2.870	2.736	2.846	2.937	2.949	2.895	2.597				2.857	4.72
31) T Ethyl acetate	4.227	3.989	3.972	3.936	4.012	3.940	4.010	4.308				4.049	3.44
32) T Chloroform	3.174	2.992	3.001	3.028	3.084	2.995	3.115	3.260				3.081	3.16
33) T Tetrahydrofuran	1.713	1.606	1.610	1.573	1.643	1.620	1.447	1.679				1.611	4.96
34) T 1,2-dichloroet...	1.888	1.776	1.809	1.737	1.804	1.772	1.781	1.883				1.806	2.98
-----ISTD-----													
35) I 1,4-difluorobenzene													
36) T 1,1,1-trichlor...	0.468	0.470	0.466	0.465	0.464	0.470	0.477	0.466				0.468	0.91
37) T Cyclohexane	0.450	0.453	0.453	0.451	0.447	0.459	0.457	0.469				0.455	1.55

Method Path : C:\msdchem\1\methods\

Method File : AD12_IUG.M

Title : TO-15 VOA Standards for 5 point calibration

38) T	Carbon tetrach...	0.454	0.474	0.462	0.466	0.462	0.448	0.461	0.446	0.414	0.393	0.394	0.444	6.68
39) T	Benzene	0.879	0.881	0.883	0.889	0.879	0.894	0.894	0.928	0.872			0.889	1.86
40) T	Methyl methacr...	0.336	0.336	0.328	0.333	0.318	0.327	0.319	0.313				0.326	2.71
41) T	1,4-dioxane	0.214	0.214	0.216	0.212	0.218	0.226	0.228	0.256				0.223	6.48
42) T	2,2,4-trimethy...	1.389	1.390	1.385	1.404	1.392	1.405	1.419	1.390				1.397	0.82
43) T	Heptane	0.461	0.475	0.458	0.475	0.470	0.474	0.478	0.498				0.474	2.61
44) T	Trichloroethene	0.385	0.388	0.382	0.390	0.385	0.394	0.392	0.398	0.377	0.367	0.364	0.384	2.79
45) T	1,2-dichloropr...	0.323	0.325	0.323	0.321	0.321	0.322	0.317	0.330				0.323	1.12
46) T	Bromodichlorom...	0.502	0.501	0.494	0.493	0.485	0.474	0.463	0.469				0.485	3.08
47) T	cis-1,3-dichlo...	0.433	0.437	0.429	0.433	0.408	0.402	0.393	0.389				0.415	4.73
48) T	trans-1,3-dich...	0.342	0.350	0.340	0.334	0.320	0.307	0.282	0.284				0.320	8.23
49) T	1,1,2-trichlor...	0.349	0.349	0.347	0.353	0.352	0.348	0.358	0.366				0.353	1.85
-----ISTD-----														
50) I	Chlorobenzene-d5													
51) T	Toluene	0.773	0.782	0.775	0.798	0.795	0.803	0.826	0.854				0.801	3.42
52) T	Methyl Isobuty...	0.696	0.706	0.713	0.709	0.711	0.718	0.733	0.770				0.720	3.19
53) T	Dibromochlorom...	0.602	0.606	0.593	0.590	0.576	0.596	0.532	0.935				0.629	20.06
54) T	Methyl Butyl K...	0.633	0.643	0.622	0.622	0.608	0.608	0.622	0.640				0.625	2.12
55) T	1,2-dibromoethane	0.587	0.588	0.583	0.591	0.577	0.586	0.587	0.584				0.585	0.70
56) T	Tetrachloroeth...	0.469	0.483	0.486	0.488	0.491	0.499	0.514	0.503				0.492	2.81
57) T	Chlorobenzene	1.000	1.017	1.014	1.021	1.016	1.026	1.029	1.064				1.024	1.79
58) T	Ethylbenzene	1.677	1.701	1.692	1.725	1.706	1.718	1.721	1.762				1.713	1.49
59) T	m&p-xylene	1.283	1.301	1.296	1.314	1.313	1.316	1.350	1.357				1.316	1.95
60) T	Nonane	0.858	0.875	0.869	0.871	0.877	0.878	0.885	0.965				0.885	3.76
61) T	Styrene	1.022	1.025	1.022	1.033	1.004	1.000	0.981	1.004				1.011	1.68
62) T	Bromoform	0.587	0.602	0.577	0.551	0.541	0.505	0.479	0.466				0.538	9.42
63) T	o-xylene	1.441	1.463	1.460	1.480	1.472	1.481	1.492	1.541				1.479	2.00
64) T	Cumene	1.946	1.986	1.984	2.030	1.996	2.051	2.043	2.079				2.014	2.16
65) S	Bromofluoroben...	0.711	0.700	0.699	0.702	0.682	0.670	0.658	0.650	0.661	0.644	0.654	0.675	3.59
66) T	1,1,2,2-tetrac...	0.924	0.927	0.922	0.930	0.930	0.934	0.914	0.926				0.926	0.67
67) T	Propylbenzene	0.545	0.562	0.545	0.563	0.569	0.560	0.555	0.563				0.558	1.56
68) T	2-Chlorotoluene	0.470	0.481	0.477	0.487	0.472	0.482	0.482	0.471				0.478	1.27
69) T	4-ethyltoluene	1.875	1.840	1.853	1.883	1.826	1.808	1.806	1.780				1.834	1.94
70) T	1,3,5-trimethy...	1.599	1.641	1.654	1.686	1.658	1.681	1.661	1.756				1.667	2.69
71) T	1,2,4-trimethy...	1.573	1.585	1.580	1.611	1.593	1.567	1.575	1.644				1.591	1.60
72) T	1,3-dichlorobe...	0.924	0.910	0.901	0.905	0.867	0.830	0.786	0.769				0.861	6.94
73) T	benzyl chloride	0.612	0.779	0.563	0.537	0.452	0.365	0.310	0.466				0.511	28.91
74) T	1,4-dichlorobe...	0.869	0.860	0.830	0.845	0.786	0.758	0.712	0.675				0.792	9.08
75) T	1,2,3-trimethy...	1.573	1.587	1.578	1.607	1.579	1.599	1.592	1.669				1.598	1.93
76) T	1,2-dichlorobe...	0.880	0.877	0.859	0.882	0.832	0.799	0.781	0.746				0.832	6.20
77) T	1,2,4-trichlor...	0.397	0.355	0.348	0.344	0.297	0.264	0.251	0.243				0.312	18.09
78) T	Naphthalene	0.973	0.931	0.895	0.916	0.778	0.792	0.658	0.651	0.737	0.675	0.837	0.804	14.34
79) T	Hexachloro-1,3...	0.698	0.711	0.709	0.730	0.713	0.706	0.712	0.756				0.717	2.54

(#)= Out of Range

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121208.D
 Acq On : 12 Dec 2022 4:13 pm
 Operator : RJP
 Sample : ALUG_2.0
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 07:55:44 2022
 Quant Method : C:\msdchem\1\methods\AD12_LUG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.132	128	45873	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	304343	1.00	ppb	0.00
50) Chlorobenzene-d5	17.024	117	259296	1.00	ppb	0.00

System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	184360	1.01	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	101.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.419	41	98880	2.05	ppb	100
3) Freon 12	4.473	85	311940	2.11	ppb	97
4) Chloromethane	4.686	50	100723	2.15	ppb	95
5) Freon 114	4.686	85	262269	2.08	ppb	90
6) Vinyl Chloride	4.890	62	101188	2.21	ppb	98
7) Butane	4.995	43	112666	2.05	ppb	# 95
8) 1,3-butadiene	4.995	39	96112m	2.09	ppb	
9) Bromomethane	5.364	94	90902	2.07	ppb	96
10) Chloroethane	5.527	64	48134m	2.18	ppb	
11) Ethanol	5.632	45	23652m	2.32	ppb	
12) Acrolein	6.214	56	26378m	1.92	ppb	
13) Vinyl Bromide	5.881	106	92539	2.19	ppb	95
14) Freon 11	6.160	101	246978	2.15	ppb	98
15) Acetone	6.316	58	46392	2.26	ppb	# 1
16) Pentane	6.439	42	83235	2.49	ppb	# 71
17) Isopropyl alcohol	6.418	45	136549	2.21	ppb	# 51
18) 1,1-dichloroethene	6.935	96	134626	2.19	ppb	# 83
19) Freon 113	7.133	101	278670	2.09	ppb	93
20) t-Butyl alcohol	7.145	59	286978	2.27	ppb	93
21) Methylene chloride	7.394	84	120841	2.05	ppb	93
22) Allyl chloride	7.376	41	147929	2.09	ppb	87
23) Carbon disulfide	7.556	76	347022	2.10	ppb	100
24) trans-1,2-dichloroethene	8.327	61	193670	2.16	ppb	86
25) methyl tert-butyl ether	8.336	73	432987	2.11	ppb	95
26) 1,1-dichloroethane	8.751	63	258930	2.14	ppb	93
27) Vinyl acetate	8.733	43	215058	2.25	ppb	90
28) Methyl Ethyl Ketone	9.216	72	79104	2.13	ppb	# 1
29) cis-1,2-dichloroethene	9.684	61	178730m	2.09	ppb	
30) Hexane	9.288	57	277619	2.11	ppb	# 77
31) Ethyl acetate	9.810	43	387856	2.12	ppb	89
32) Chloroform	10.282	83	291157	2.07	ppb	99
33) Tetrahydrofuran	10.429	42	157194	2.17	ppb	87
34) 1,2-dichloroethane	11.371	62	173257	2.16	ppb	97
36) 1,1,1-trichloroethane	11.101	97	284896	2.02	ppb	96
37) Cyclohexane	11.777	56	273694	2.00	ppb	# 49
38) Carbon tetrachloride	11.726	117	282660	2.00	ppb	97
39) Benzene	11.690	78	535072	1.98	ppb	94
40) Methyl methacrylate	13.191	41	204476	2.02	ppb	# 67
41) 1,4-dioxane	13.212	88	130423	2.02	ppb	83
42) 2,2,4-trimethylpentane	12.515	57	845691	1.98	ppb	85
43) Heptane	12.848	43	280774	1.95	ppb	90
44) Trichloroethene	12.980	130	234330	1.98	ppb	95

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121205.D
 Acq On : 12 Dec 2022 4:13 pm
 Operator : RJP
 Sample : ALUG_2.0
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 07:55:44 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.086	63	196815	2.02	ppb	98
46) Bromodichloromethane	13.413	83	305618	2.04	ppb	100
47) cis-1,3-dichloropropene	14.202	75	263609	2.00	ppb	91
48) trans-1,3-dichloropropene	14.950	75	208206	2.06	ppb	96
49) 1,1,2-trichloroethane	15.274	97	212200	1.98	ppb	97
51) Toluene	15.031	92	400749	1.94	ppb	97
52) Methyl Isobutyl Ketone	14.106	43	361177	1.96	ppb	83
53) Dibromochloromethane	15.988	129	312234m	2.01	ppb	
54) Methyl Butyl Ketone	15.433	43	328020	2.03	ppb	80
55) 1,2-dibromoethane	16.244	107	304180	1.98	ppb	93
56) Tetrachloroethylene	16.073	164	243055	1.92	ppb	91
57) Chlorobenzene	17.075	112	518764	1.96	ppb	97
58) Ethylbenzene	17.336	91	869752	1.94	ppb	98
59) m&p-xylene	17.549	91	1330423	3.90	ppb	85
60) Nonane	17.943	43	444911	1.97	ppb	94
61) Styrene	18.012	104	529874	1.98	ppb	91
62) Bromoform	18.138	173	304531	2.13	ppb	91
63) o-xylene	18.048	91	747199	1.95	ppb	93
64) Cumene	18.651	105	1009371	1.92	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.525	83	479275	1.99	ppb	99
67) Propylbenzene	19.246	120	282860m	1.94	ppb	
68) 2-Chlorotoluene	19.294	126	243832	1.93	ppb	# 100
69) 4-ethyltoluene	19.429	105	972462m	1.97	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	829410m	1.98	ppb	
71) 1,2,4-trimethylbenzene	19.999	105	815882	1.96	ppb	96
72) 1,3-dichlorobenzene	20.326	146	479095	2.04	ppb	98
73) benzyl chloride	20.404	91	317387	2.28	ppb	88
74) 1,4-dichlorobenzene	20.476	146	450827	2.06	ppb	97
75) 1,2,3-trimethylbenzene	20.524	105	815558	1.96	ppb	93
76) 1,2-dichlorobenzene	20.831	146	456481	2.00	ppb	94
77) 1,2,4-trichlorobenzene	22.911	180	205706	2.32	ppb	95
78) Naphthalene	23.112	128	504376m	2.14	ppb	
79) Hexachloro-1,3-butadiene	23.229	225	361861	1.91	ppb	98

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121206.D
 Acq On : 12 Dec 2022 4:59 pm
 Operator : RJP
 Sample : A1UG_1.50
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 13 07:55:22 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.132	128	49224	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.347	114	311199	1.00	ppb	0.00
50) Chlorobenzene-d5	17.024	117	262415	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	183650	1.00	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	= 100.00%	
Target Compounds						
						Qvalue
2) Propylene	4.419	41	69765	1.35	ppb	99
3) Freon 12	4.476	85	234715	1.48	ppb	97
4) Chloromethane	4.686	50	76809	1.53	ppb	92
5) Freon 114	4.683	85	200709	1.48	ppb	92
6) Vinyl Chloride	4.887	62	75020	1.53	ppb	97
7) Butane	4.995	43	84474	1.43	ppb	96
8) 1,3-butadiene	4.998	39	68842m	1.39	ppb	
9) Bromomethane	5.365	94	72036	1.53	ppb	96
10) Chloroethane	5.533	64	36042	1.52	ppb	94
11) Ethanol	5.635	45	17135m	1.56	ppb	
12) Acrolein	6.214	56	20300m	1.37	ppb	
13) Vinyl Bromide	5.887	106	69857	1.54	ppb	100
14) Freon 11	6.163	101	185639	1.51	ppb	100
15) Acetone	6.313	58	33242	1.51	ppb	# 1
16) Pentane	6.442	42	61043m	1.70	ppb	
17) Isopropyl alcohol	6.424	45	111032	1.68	ppb	# 42
18) 1,1-dichloroethene	6.935	96	102953	1.56	ppb	# 84
19) Freon 113	7.136	101	214222	1.49	ppb	92
20) t-Butyl alcohol	7.139	59	208253	1.54	ppb	95
21) Methylene chloride	7.397	84	94328	1.49	ppb	95
22) Allyl chloride	7.376	41	114603	1.51	ppb	79
23) Carbon disulfide	7.562	76	269351	1.52	ppb	100
24) trans-1,2-dichloroethene	8.327	61	146436	1.52	ppb	83
25) methyl tert-butyl ether	8.336	73	327986	1.49	ppb	97
26) 1,1-dichloroethane	8.754	63	199371	1.54	ppb	98
27) Vinyl acetate	8.733	43	159599	1.56	ppb	89
28) Methyl Ethyl Ketone	9.213	72	58699	1.48	ppb	# 49
29) cis-1,2-dichloroethene	9.681	61	175628	1.92	ppb	93
30) Hexane	9.282	57	211925	1.50	ppb	# 78
31) Ethyl acetate	9.813	43	294540	1.50	ppb	# 80
32) Chloroform	10.282	83	220905	1.46	ppb	99
33) Tetrahydrofuran	10.429	42	118596	1.52	ppb	92
34) 1,2-dichloroethane	11.374	62	131108	1.53	ppb	95
36) 1,1,1-trichloroethane	11.098	97	219574	1.52	ppb	96
37) Cyclohexane	11.783	56	211683	1.51	ppb	# 49
38) Carbon tetrachloride	11.723	117	221282	1.53	ppb	100
39) Benzene	11.687	78	411401	1.49	ppb	94
40) Methyl methacrylate	13.191	41	156886	1.52	ppb	# 66
41) 1,4-dioxane	13.212	88	99674	1.51	ppb	84
42) 2,2,4-trimethylpentane	12.515	57	648991	1.49	ppb	85
43) Heptane	12.848	43	221786	1.50	ppb	90
44) Trichloroethene	12.978	130	180887	1.49	ppb	96

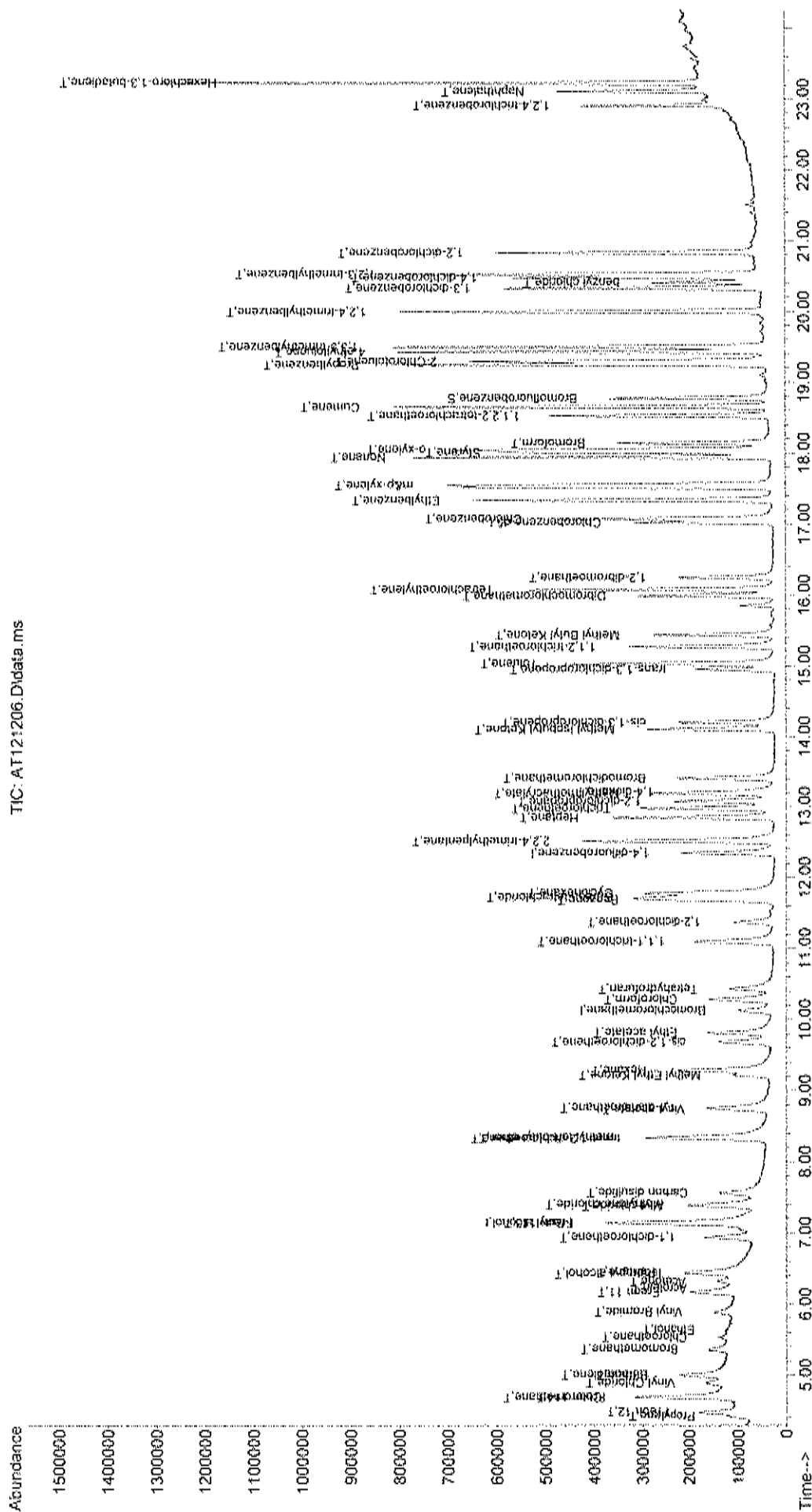
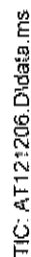
Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121206.D
 Acq On : 12 Dec 2022 4:59 pm
 Operator : RJP
 Sample : A1UG_1.50
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 13 07:55:22 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.080	63	151723	1.52	ppb	99
46) Bromodichloromethane	13.410	83	234066	1.53	ppb	99
47) cis-1,3-dichloropropene	14.202	75	203971	1.52	ppb	92
48) trans-1,3-dichloropropene	14.953	75	163290	1.58	ppb	98
49) 1,1,2-trichloroethane	15.271	97	162778	1.49	ppb	95
51) Toluene	15.034	92	307863	1.47	ppb	98
52) Methyl Isobutyl Ketone	14.106	43	277848	1.49	ppb	83
53) Dibromochloromethane	15.988	129	238714m	1.52	ppb	
54) Methyl Butyl Ketone	15.436	43	252929	1.55	ppb	81
55) 1,2-dibromoethane	16.247	107	231515	1.49	ppb	93
56) Tetrachloroethylene	16.076	164	190151	1.49	ppb	90
57) Chlorobenzene	17.075	112	400485	1.49	ppb	98
58) Ethylbenzene	17.336	91	669528	1.48	ppb	99
59) m&p-xylene	17.547	91	1023841	2.97	ppb	85
60) Nonane	17.940	43	344399	1.51	ppb	95
61) Styrene	18.012	104	403289	1.49	ppb	91
62) Bromoform	18.141	173	237108	1.64	ppb	91
63) o-xylene	18.048	91	576021	1.48	ppb	93
64) Cumene	18.648	105	781559	1.47	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.528	83	364778	1.49	ppb	98
67) Propylbenzene	19.246	120	221045	1.50	ppb	# 1
68) 2-Chlorotoluene	19.291	126	189437	1.48	ppb	# 100
69) 4-ethyltoluene	19.429	105	724369m	1.45	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	645854m	1.52	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	623883	1.48	ppb	96
72) 1,3-dichlorobenzene	20.326	146	358304	1.51	ppb	97
73) benzyl chloride	20.407	91	306577	2.18	ppb	80
74) 1,4-dichlorobenzene	20.479	146	338479	1.53	ppb	97
75) 1,2,3-trimethylbenzene	20.527	105	624556	1.48	ppb	94
76) 1,2-dichlorobenzene	20.831	146	345078	1.49	ppb	95
77) 1,2,4-trichlorobenzene	22.911	180	139664	1.55	ppb	94
78) Naphthalene	23.112	128	366424	1.53	ppb	94
79) Hexachloro-1,3-butadiene	23.229	225	279680	1.46	ppb	99

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

Quant Time: Dec 13 07:55:22 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121207.D
 Acq On : 12 Dec 2022 5:44 pm
 Operator : RJP
 Sample : ALUG_1.25
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 07:54:58 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.129	128	49150	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.347	114	309964	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	260250	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene 18.768 95 181926 1.00 ppb 0.00
 Spiked Amount 1.000 Range 70 - 130 Recovery = 100.00%

Target Compounds

						Qvalue
2) Propylene	4.416	41	63529	1.23	ppb	98
3) Freon 12	4.473	85	200042	1.26	ppb	97
4) Chloromethane	4.686	50	66253	1.32	ppb	97
5) Freon 114	4.686	85	167659	1.24	ppb	90
6) Vinyl Chloride	4.896	62	63585	1.30	ppb	97
7) Butane	4.995	43	74858	1.27	ppb	99
8) 1,3-butadiene	5.001	39	54626m	1.11	ppb	
9) Bromomethane	5.359	94	56519	1.20	ppb	83
10) Chloroethane	5.536	64	29373	1.24	ppb	# 84
11) Ethanol	5.635	45	14695m	1.34	ppb	
12) Acrolein	6.232	56	18743m	1.27	ppb	
13) Vinyl Bromide	5.884	106	55921	1.23	ppb	99
14) Freon 11	6.166	101	159394	1.29	ppb	97
15) Acetone	6.319	58	31057m	1.41	ppb	
16) Pentane	6.451	42	67964	1.90	ppb	# 70
17) Isopropyl alcohol	6.427	45	95349m	1.44	ppb	
18) 1,1-dichloroethene	6.932	96	88492	1.34	ppb	# 82
19) Freon 113	7.133	101	181339	1.27	ppb	92
20) t-Butyl alcohol	7.142	59	182192	1.34	ppb	94
21) Methylene chloride	7.397	84	76636	1.22	ppb	92
22) Allyl chloride	7.376	41	97111	1.28	ppb	92
23) Carbon disulfide	7.565	76	228153	1.29	ppb	100
24) trans-1,2-dichloroethene	8.330	61	121793	1.27	ppb	83
25) methyl tert-butyl ether	8.342	73	274378	1.25	ppb	97
26) 1,1-dichloroethane	8.760	63	164351	1.27	ppb	97
27) Vinyl acetate	8.730	43	132166	1.29	ppb	90
28) Methyl Ethyl Ketone	9.222	72	52614	1.32	ppb	# 1
29) cis-1,2-dichloroethene	9.678	61	111550m	1.22	ppb	
30) Hexane	9.288	57	168070	1.19	ppb	# 80
31) Ethyl acetate	9.810	43	244041	1.24	ppb	# 80
32) Chloroform	10.279	83	184383	1.22	ppb	99
33) Tetrahydrofuran	10.438	42	98923	1.27	ppb	88
34) 1,2-dichloroethane	11.374	62	111135	1.30	ppb	96
36) 1,1,1-trichloroethane	11.098	97	180459	1.25	ppb	97
37) Cyclohexane	11.777	56	175482	1.26	ppb	# 50
38) Carbon tetrachloride	11.726	117	178892	1.24	ppb	98
39) Benzene	11.687	78	341968	1.24	ppb	94
40) Methyl methacrylate	13.188	41	127042	1.23	ppb	# 66
41) 1,4-dioxane	13.209	88	83838	1.27	ppb	82
42) 2,2,4-trimethylpentane	12.515	57	536509	1.23	ppb	86
43) Heptane	12.851	43	177322	1.21	ppb	90
44) Trichloroethene	12.981	130	147848	1.22	ppb	96

Data Path : C:\msdchem\1\data2\2022DEC\

Data File : AT121207.D

Acq On : 12 Dec 2022 5:44 pm

Operator : RJP

Sample : AlUG_1.25

Misc :

ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 07:54:58 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.083	63	125024	1.26	ppb	96
46) Bromodichloromethane	13.410	83	191301	1.25	ppb	100
47) cis-1,3-dichloropropene	14.202	75	166198	1.24	ppb	91
48) trans-1,3-dichloropropene	14.980	75	131758	1.28	ppb	97
49) 1,1,2-trichloroethane	15.274	97	134417	1.23	ppb	97
51) Toluene	15.031	92	252188	1.21	ppb	98
52) Methyl Isobutyl Ketone	14.106	43	231995	1.26	ppb	84
53) Dibromochloromethane	15.989	129	192900m	1.23	ppb	
54) Methyl Butyl Ketone	15.436	43	202207	1.25	ppb	79
55) 1,2-dibromoethane	16.247	107	189657	1.23	ppb	93
56) Tetrachloroethylene	16.079	164	158228	1.25	ppb	90
57) Chlorobenzene	17.072	112	329998	1.24	ppb	97
58) Ethylbenzene	17.339	91	550558	1.23	ppb	98
59) m&p-xylene	17.547	91	842924	2.46	ppb	86
60) Nonane	17.940	43	282807	1.25	ppb	94
61) Styrene	18.012	104	332586	1.24	ppb	92
62) Bromoform	18.138	173	187652	1.31	ppb	91
63) o-xylene	18.045	91	474847	1.23	ppb	92
64) Cumene	18.651	105	645338	1.22	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.525	83	299907	1.24	ppb	99
67) Propylbenzene	19.246	120	177272m	1.21	ppb	
68) 2-Chlorotoluene	19.291	126	155162	1.23	ppb	# 100
69) 4-ethyltoluene	19.429	105	602696m	1.22	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	538076m	1.28	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	514052	1.23	ppb	95
72) 1,3-dichlorobenzene	20.326	146	293092	1.24	ppb	98
73) benzyl chloride	20.407	91	183265	1.31	ppb	88
74) 1,4-dichlorobenzene	20.473	146	269991	1.23	ppb	97
75) 1,2,3-trimethylbenzene	20.521	105	513476	1.23	ppb	93
76) 1,2-dichlorobenzene	20.831	146	279602	1.22	ppb	94
77) 1,2,4-trichlorobenzene	22.908	180	113286	1.27	ppb	93
78) Naphthalene	23.112	128	291122	1.23	ppb	95
79) Hexachloro-1,3-butadiene	23.229	225	230705	1.21	ppb	98

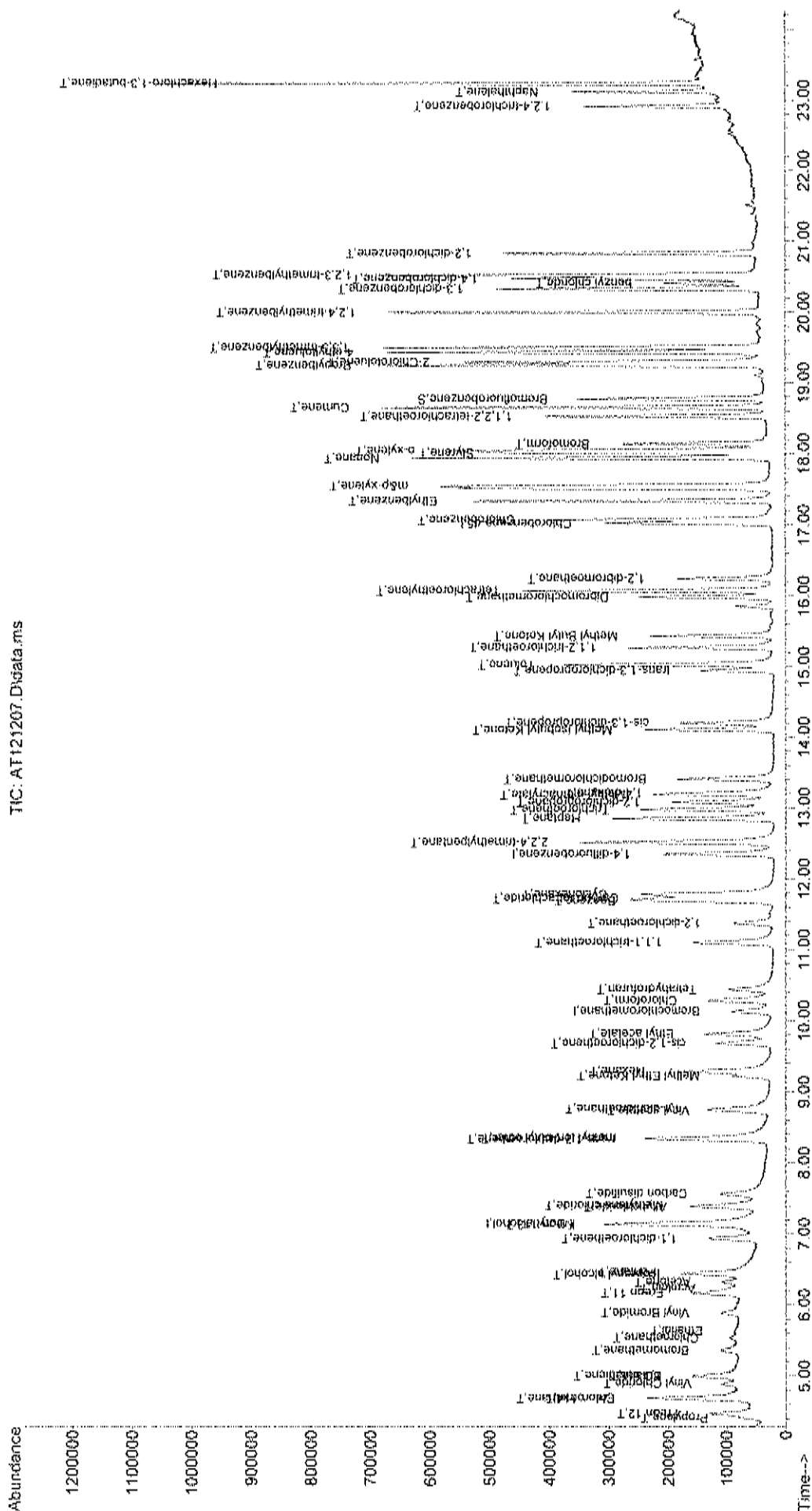
(#)=qualifier out of range (m)=manual integration (+)=signals summed

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Data Path      : C:\msdchem\1\data2\2022DEC\
Data File     : AT121207.D
Acq On       : 12 Dec 2022   5:44 pm
Operator      : RJP
Sample       : A1UG_1.25
Misc         :
ALS Vial     : 5   Sample Multiplier: 1

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Quant Time: Dec 13 07:54:58 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



Data Path : C:\msdchem\1\data2\2022DEC\

Data File : AT121208.D

Acq On : 12 Dec 2022 6:28 pm

Operator : RJP

Sample : A1UG_1.0

Misc :

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 13 07:54:40 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.126	128	49146	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.347	114	307090	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	258363	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.771	95	181444	1.00	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	100.00%

Target Compounds

						Qvalue
2) Propylene	4.416	41	51489	0.99	ppb	98
3) Freon 12	4.473	85	158879	1.00	ppb	96
4) Chloromethane	4.683	50	50329	1.00	ppb	91
5) Freon 114	4.683	85	134630	1.00	ppb	91
6) Vinyl Chloride	4.890	62	49282	1.01	ppb	93
7) Butane	4.992	43	64585	1.10	ppb	# 96
8) 1,3-butadiene	5.004	39	45208m	0.92	ppb	
9) Bromomethane	5.355	94	47119	1.00	ppb	98
10) Chloroethane	5.533	64	23706	1.00	ppb	91
11) Ethanol	5.617	45	10776	0.98	ppb	# 70
12) Acrolein	6.226	56	14764	1.00	ppb	# 68
13) Vinyl Bromide	5.881	106	45059	0.99	ppb	99
14) Freon 11	6.166	101	122449	0.99	ppb	100
15) Acetone	6.328	58	22569	1.03	ppb	# 1
16) Pentane	6.448	42	36406	1.02	ppb	# 40
17) Isopropyl alcohol	6.418	45	64229	0.97	ppb	# 22
18) 1,1-dichloroethene	6.937	96	65478	0.99	ppb	# 85
19) Freon 113	7.127	101	141654	0.99	ppb	92
20) t-Butyl alcohol	7.145	59	132813	0.98	ppb	90
21) Methylene chloride	7.388	84	62221	0.99	ppb	95
22) Allyl chloride	7.376	41	74861	0.99	ppb	84
23) Carbon disulfide	7.559	76	176135	0.99	ppb	99
24) trans-1,2-dichloroethene	8.333	61	96085	1.00	ppb	83
25) methyl tert-butyl ether	8.342	73	217798	0.99	ppb	96
26) 1,1-dichloroethane	8.757	63	128843	0.99	ppb	94
27) Vinyl acetate	8.730	43	101099	0.99	ppb	92
28) Methyl Ethyl Ketone	9.219	72	39036	0.98	ppb	# 1
29) cis-1,2-dichloroethene	9.681	61	113840	1.24	ppb	94
30) Hexane	9.285	57	139883	0.99	ppb	# 72
31) Ethyl acetate	9.810	43	193453	0.99	ppb	# 80
32) Chloroform	10.279	83	148797	0.99	ppb	97
33) Tetrahydrofuran	10.441	42	77308	0.99	ppb	87
34) 1,2-dichloroethane	11.377	62	85355	0.99	ppb	98
36) 1,1,1-trichloroethane	11.101	97	142817	1.00	ppb	95
37) Cyclohexane	11.780	56	138393	1.00	ppb	# 48
38) Carbon tetrachloride	11.723	117	143131	1.00	ppb	99
39) Benzene	11.690	78	273060	1.00	ppb	94
40) Methyl methacrylate	13.188	41	102326	1.00	ppb	# 67
41) 1,4-dioxane	13.215	88	65229	1.00	ppb	84
42) 2,2,4-trimethylpentane	12.515	57	431217	1.00	ppb	85
43) Heptane	12.848	43	145791	1.00	ppb	90
44) Trichloroethene	12.980	130	119839	1.00	ppb	96

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121208.D
 Acq On : 12 Dec 2022 6:28 pm
 Operator : RJP
 Sample : ALUG_1.0
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 13 07:54:40 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

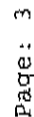
QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.079	63	98563	1.00	ppb	97
46) Bromodichloromethane	13.407	83	151283	1.00	ppb	98
47) cis-1,3-dichloropropene	14.199	75	132823	1.00	ppb	91
48) trans-1,3-dichloropropene	14.950	75	102573	1.00	ppb	99
49) 1,1,2-trichloroethane	15.271	97	108268	1.00	ppb	97
51) Toluene	15.031	92	206231	1.00	ppb	97
52) Methyl Isobutyl Ketone	14.109	43	183237	1.00	ppb	83
53) Dibromochloromethane	15.985	129	152436m	0.98	ppb	
54) Methyl Butyl Ketone	15.436	43	160706	1.00	ppb	79
55) 1,2-dibromoethane	16.244	107	152701	1.00	ppb	94
56) Tetrachloroethylene	16.075	164	125972	1.00	ppb	88
57) Chlorobenzene	17.075	112	263866	1.00	ppb	96
58) Ethylbenzene	17.339	91	445615	1.00	ppb	98
59) m&p-xylene	17.543	91	679134	2.00	ppb	84
60) Nonane	17.940	43	224923	1.00	ppb	94
61) Styrene	18.009	104	266973	1.00	ppb	91
62) Bromoform	18.141	173	142229	1.00	ppb	90
63) o-xylene	18.048	91	382359	1.00	ppb	92
64) Cumene	18.651	105	524453	1.00	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.525	83	240395	1.00	ppb	99
67) Propylbenzene	19.246	120	145497	1.00	ppb	# 1
68) 2-Chlorotoluene	19.291	126	125698	1.00	ppb	# 100
69) 4-ethyltoluene	19.429	105	486376m	0.99	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	435705m	1.04	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	416153	1.00	ppb	96
72) 1,3-dichlorobenzene	20.326	146	233822	1.00	ppb	97
73) benzyl chloride	20.407	91	138650	1.00	ppb	88
74) 1,4-dichlorobenzene	20.476	146	218436	1.00	ppb	97
75) 1,2,3-trimethylbenzene	20.524	105	415238	1.00	ppb	94
76) 1,2-dichlorobenzene	20.828	146	227918	1.00	ppb	94
77) 1,2,4-trichlorobenzene	22.905	180	88837	1.00	ppb	94
78) Naphthalene	23.112	128	236720	1.01	ppb	96
79) Hexachloro-1,3-butadiene	23.229	225	188677	1.00	ppb	99

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

Quant Time: Dec 13 07:54:40 2022
Quant Method : C:\msdchem\1\methods\AD12_10G.M
Quant Title : TO-15 VOA Standards for 5_point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121209.D
 Acq On : 12 Dec 2022 7:11 pm
 Operator : RJP
 Sample : ALUG_0.75
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 07:56:12 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.126	128	47683	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	307823	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	256261	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.768	95	174737	0.97	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	97.00%

Target Compounds

Compound	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.413	41	40391	0.80	ppb	97
3) Freon 12	4.470	85	117852	0.77	ppb	97
4) Chloromethane	4.686	50	36959	0.76	ppb	91
5) Freon 114	4.689	85	99453	0.76	ppb	91
6) Vinyl Chloride	4.884	62	38284	0.80	ppb	100
7) Butane	4.998	43	43126	0.75	ppb	# 95
8) 1,3-butadiene	4.992	39	33927	0.71	ppb	95
9) Bromomethane	5.365	94	35088	0.77	ppb	96
10) Chloroethane	5.536	64	17837	0.78	ppb	# 83
11) Ethanol	5.626	45	8198	0.77	ppb	# 66
12) Acrolein	6.232	56	11126	0.78	ppb	88
13) Vinyl Bromide	6.878	106	31130	0.71	ppb	99
14) Freon 11	6.169	101	103788	0.87	ppb	98
15) Acetone	6.331	58	20674m	0.97	ppb	
16) Pentane	6.448	42	35217m	1.01	ppb	
17) Isopropyl alcohol	6.430	45	70699	1.10	ppb	# 36
18) 1,1-dichloroethene	6.935	96	52560	0.82	ppb	# 80
19) Freon 113	7.133	101	109096	0.79	ppb	93
20) t-Butyl alcohol	7.142	59	108840	0.83	ppb	# 91
21) Methylene chloride	7.394	84	48676	0.80	ppb	94
22) Allyl chloride	7.385	41	57195	0.78	ppb	87
23) Carbon disulfide	7.559	76	137439	0.80	ppb	100
24) trans-1,2-dichloroethene	8.337	61	72293	0.78	ppb	83
25) methyl tert-butyl ether	8.340	73	165976	0.78	ppb	96
26) 1,1-dichloroethane	8.757	63	95651	0.76	ppb	97
27) Vinyl acetate	8.730	43	76610	0.77	ppb	86
28) Methyl Ethyl Ketone	9.219	72	30131	0.78	ppb	# 1
29) cis-1,2-dichloroethene	9.681	61	66649m	0.75	ppb	
30) Hexane	9.285	57	105037	0.77	ppb	# 73
31) Ethyl acetate	9.814	43	143493	0.75	ppb	# 79
32) Chloroform	10.279	83	110292	0.75	ppb	98
33) Tetrahydrofuran	10.438	42	58756	0.78	ppb	89
34) 1,2-dichloroethane	11.366	62	64509	0.77	ppb	97
36) 1,1,1-trichloroethane	11.101	97	107225	0.75	ppb	97
37) Cyclohexane	11.777	56	103204	0.75	ppb	# 49
38) Carbon tetrachloride	11.723	117	106553	0.75	ppb	99
39) Benzene	11.690	78	202871	0.74	ppb	93
40) Methyl methacrylate	13.191	41	73463	0.72	ppb	# 62
41) 1,4-dioxane	13.212	88	50380	0.77	ppb	83
42) 2,2,4-trimethylpentane	12.509	57	321313	0.74	ppb	86
43) Heptane	12.849	43	108416	0.74	ppb	90
44) Trichloroethene	12.978	130	88889	0.74	ppb	96

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121209.D
 Acq On : 12 Dec 2022 7:11 pm
 Operator : RJP
 Sample : A1UG_0.75
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 07:56:12 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

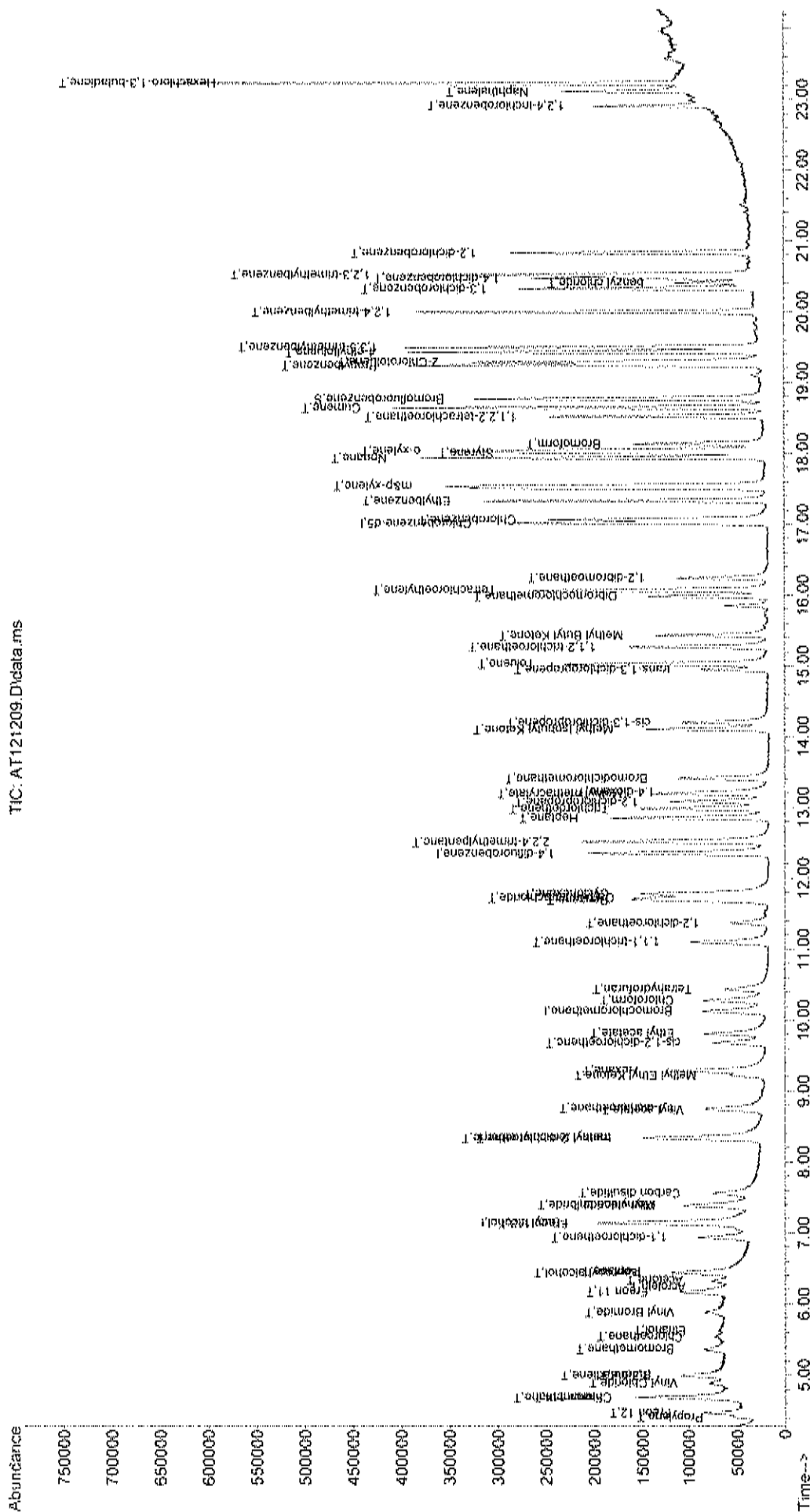
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
45) 1,2-dichloropropane	13.077	63	74151	0.75	ppb	97
46) Bromodichloromethane	13.407	83	111877	0.74	ppb	98
47) cis-1,3-dichloropropene	14.199	75	94103	0.71	ppb	91
48) trans-1,3-dichloropropene	14.953	75	73828	0.72	ppb	96
49) 1,1,2-trichloroethane	15.271	97	81210	0.75	ppb	95
51) Toluene	15.034	92	152723	0.75	ppb	99
52) Methyl Isobutyl Ketone	14.103	43	136704	0.75	ppb	83
53) Dibromochloromethane	15.992	129	110696m	0.72	ppb	
54) Methyl Butyl Ketone	15.433	43	116843	0.73	ppb	78
55) 1,2-dibromoethane	16.247	107	110938	0.73	ppb	92
56) Tetrachloroethylene	16.076	164	94292	0.75	ppb	92
57) Chlorobenzene	17.072	112	195327	0.75	ppb	97
58) Ethylbenzene	17.336	91	327943	0.74	ppb	98
59) m&p-xylene	17.547	91	504746	1.50	ppb	85
60) Nonane	17.943	43	168647	0.76	ppb	94
61) Styrene	18.012	104	192994	0.73	ppb	92
62) Bromoform	18.138	173	104027	0.74	ppb	91
63) o-xylene	18.045	91	282989	0.75	ppb	93
64) Cumene	18.648	105	383548	0.74	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.522	83	178694	0.75	ppb	97
67) Propylbenzene	19.243	120	109324	0.76	ppb	# 1
68) 2-Chlorotoluene	19.291	126	90710	0.73	ppb	# 100
69) 4-ethyltoluene	19.429	105	350905m	0.72	ppb	
70) 1,3,5-trimethylbenzene	19.501	105	318739m	0.77	ppb	
71) 1,2,4-trimethylbenzene	19.999	105	306232	0.74	ppb	97
72) 1,3-dichlorobenzene	20.323	146	166586	0.72	ppb	98
73) benzyl chloride	20.404	91	86927	0.63	ppb	88
74) 1,4-dichlorobenzene	20.474	146	151038	0.70	ppb	96
75) 1,2,3-trimethylbenzene	20.522	105	303393	0.74	ppb	93
76) 1,2-dichlorobenzene	20.828	146	159976	0.71	ppb	94
77) 1,2,4-trichlorobenzene	22.911	180	57028	0.65	ppb	94
78) Naphthalene	23.109	128	149618	0.64	ppb	96
79) Hexachloro-1,3-butadiene	23.229	225	137027	0.73	ppb	98

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

Quant Time: Dec 13 07:56:12 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

TIC: AF121209.D\data.ms



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121210.D
 Acq On : 12 Dec 2022 7:53 pm
 Operator : RJP
 Sample : ALUG_0.50
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 13 07:56:43 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.123	128	48272	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.344	114	306281	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	251774	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.771	95	168645	0.95	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	95.00%

Target Compounds

Compound	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.419	41	26490	0.52	ppb	93
3) Freon 12	4.476	85	80754	0.52	ppb	96
4) Chloromethane	4.692	50	26009	0.53	ppb	97
5) Freon 114	4.686	85	66242	0.50	ppb	89
6) Vinyl Chloride	4.887	62	23663	0.49	ppb	86
7) Butane	5.001	43	29000	0.50	ppb	# 85
8) 1,3-butadiene	4.998	39	24590	0.51	ppb	87
9) Bromomethane	5.362	94	23567	0.51	ppb	99
10) Chloroethane	5.536	64	11168	0.48	ppb	92
11) Ethanol	5.620	45	5149	0.48	ppb	81
12) Acrolein	6.229	56	6892	0.48	ppb	97
13) Vinyl Bromide	5.881	106	24969	0.56	ppb	99
14) Freon 11	6.157	101	74259	0.61	ppb	97
15) Acetone	6.328	58	13262m	0.61	ppb	
16) Pentane	6.442	42	25825m	0.73	ppb	
17) Isopropyl alcohol	6.424	45	40161m	0.62	ppb	
18) 1,1-dichloroethene	6.929	96	35464	0.55	ppb	# 83
19) Freon 113	7.133	101	74449	0.53	ppb	91
20) t-Butyl alcohol	7.151	59	73378	0.55	ppb	92
21) Methylene chloride	7.391	84	33045	0.53	ppb	92
22) Allyl chloride	7.379	41	36698	0.49	ppb	84
23) Carbon disulfide	7.559	76	95138	0.55	ppb	98
24) trans-1,2-dichloroethene	8.328	61	48676	0.52	ppb	87
25) methyl tert-butyl ether	8.340	73	110710	0.51	ppb	99
26) 1,1-dichloroethane	8.751	63	67283	0.53	ppb	88
27) Vinyl acetate	8.730	43	52381	0.52	ppb	89
28) Methyl Ethyl Ketone	9.216	72	20310	0.52	ppb	# 1
29) cis-1,2-dichloroethene	9.678	61	56479	0.63	ppb	95
30) Hexane	9.288	57	71173	0.51	ppb	# 76
31) Ethyl acetate	9.814	43	95098	0.49	ppb	# 81
32) Chloroform	10.279	83	72290	0.49	ppb	98
33) Tetrahydrofuran	10.438	42	39111	0.51	ppb	88
34) 1,2-dichloroethane	11.369	62	42762	0.51	ppb	99
36) 1,1,1-trichloroethane	11.098	97	71985	0.51	ppb	96
37) Cyclohexane	11.777	56	70303	0.51	ppb	# 50
38) Carbon tetrachloride	11.720	117	68558	0.48	ppb	97
39) Benzene	11.684	78	136865	0.50	ppb	93
40) Methyl methacrylate	13.188	41	50077	0.49	ppb	# 68
41) 1,4-dioxane	13.221	88	34674	0.53	ppb	84
42) 2,2,4-trimethylpentane	12.515	57	215087	0.50	ppb	85
43) Heptane	12.855	43	72654	0.50	ppb	91
44) Trichloroethene	12.981	130	60294	0.51	ppb	95

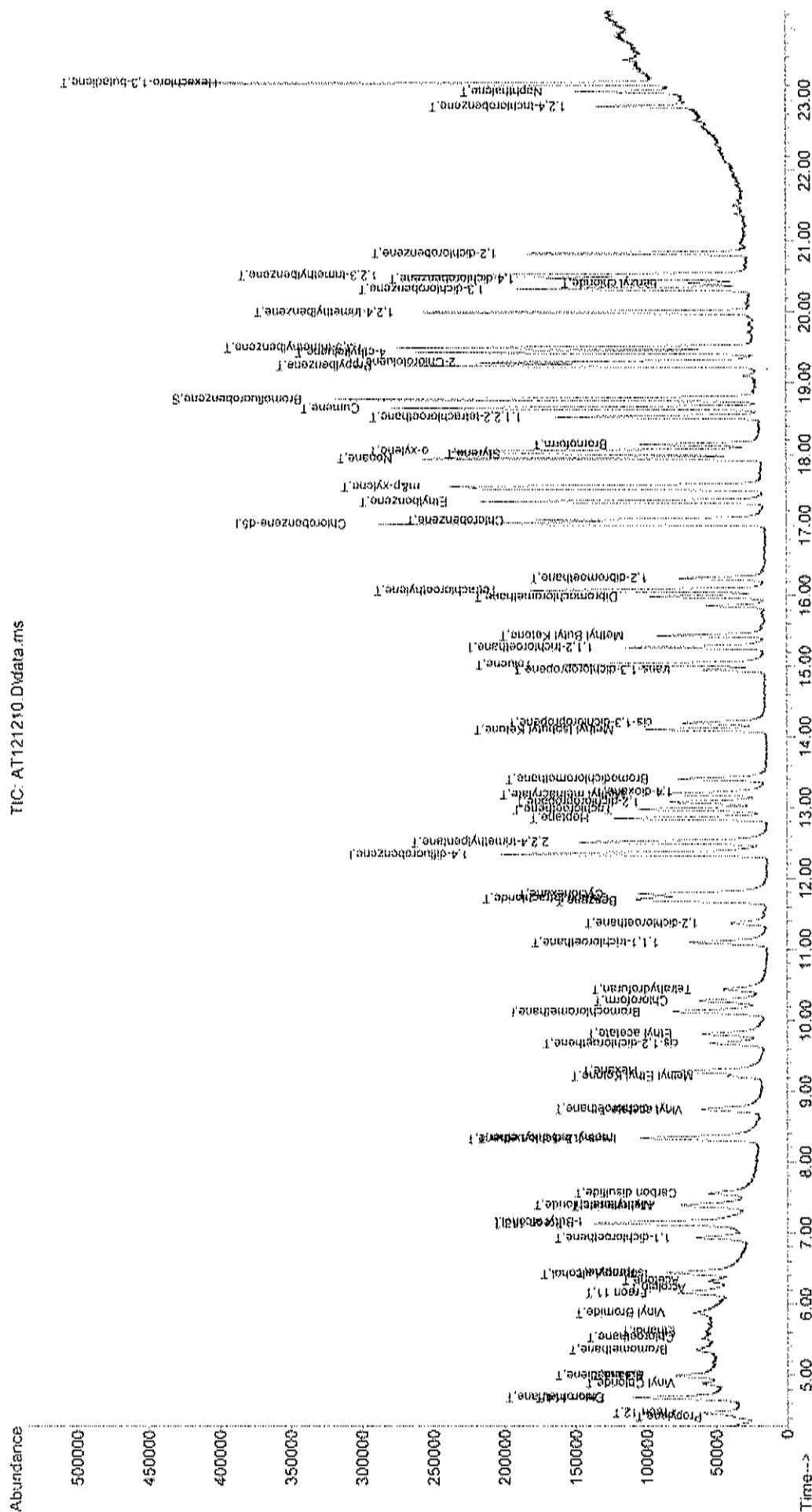
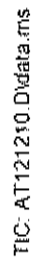
Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121210.D
 Acq On : 12 Dec 2022 7:53 pm
 Operator : RJP
 Sample : A1UG_0.50
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 13 07:56:43 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.083	63	49378	0.50	ppb	98
46) Bromodichloromethane	13.410	83	72641	0.48	ppb	98
47) cis-1,3-dichloropropene	14.202	75	61548	0.46	ppb	89
48) trans-1,3-dichloropropene	14.953	75	46986	0.46	ppb	99
49) 1,1,2-trichloroethane	15.271	97	53317	0.49	ppb	95
51) Toluene	15.028	92	101025	0.50	ppb	99
52) Methyl Isobutyl Ketone	14.103	43	90442	0.51	ppb	83
53) Dibromochloromethane	15.983	129	75043	0.50	ppb	99
54) Methyl Butyl Ketone	15.433	43	76488	0.49	ppb	78
55) 1,2-dibromoethane	16.247	107	73770	0.49	ppb	93
56) Tetrachloroethylene	16.073	164	62773	0.51	ppb	91
57) Chlorobenzene	17.072	112	129102	0.50	ppb	98
58) Ethylbenzene	17.336	91	216336	0.50	ppb	99
59) m&p-xylene	17.550	91	331363	1.00	ppb	83
60) Nonane	17.943	43	110477	0.50	ppb	94
61) Styrene	18.012	104	125876	0.48	ppb	92
62) Bromoform	18.138	173	63514	0.46	ppb	91
63) o-xylene	18.048	91	186407	0.50	ppb	92
64) Cumene	18.648	105	258175	0.51	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.525	83	117554	0.50	ppb	98
67) Propylbenzene	19.246	120	70472	0.50	ppb	# 1
68) 2-Chlorotoluene	19.297	126	60719	0.50	ppb	# 100
69) 4-ethyltoluene	19.432	105	227626m	0.48	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	211608m	0.52	ppb	
71) 1,2,4-trimethylbenzene	19.999	105	197307	0.49	ppb	95
72) 1,3-dichlorobenzene	20.326	146	104461	0.46	ppb	96
73) benzyl chloride	20.404	91	45949	0.34	ppb	88
74) 1,4-dichlorobenzene	20.474	146	95372	0.45	ppb	97
75) 1,2,3-trimethylbenzene	20.522	105	201247	0.50	ppb	95
76) 1,2-dichlorobenzene	20.828	146	100590	0.45	ppb	95
77) 1,2,4-trichlorobenzene	22.905	180	33214	0.39	ppb	93
78) Naphthalene	23.115	128	99657m	0.43	ppb	
79) Hexachloro-1,3-butadiene	23.229	225	88836	0.48	ppb	99

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

Quant Time: Dec 13 07:56:43 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121211.D
 Acq On : 12 Dec 2022 8:35 pm
 Operator : RJP
 Sample : A1UG_0.30
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 13 07:57:08 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.123	128	48518	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.347	114	303262	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	246840	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.774	95	162455	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
						Qvalue
2) Propylene	4.428	41	15734	0.31	ppb	92
3) Freon 12	4.470	85	49116	0.31	ppb	97
4) Chloromethane	4.680	50	16549	0.33	ppb	94
5) Freon 114	4.689	85	41537	0.31	ppb	91
6) Vinyl Chloride	4.887	62	16135	0.33	ppb	95
7) Butane	4.992	43	17840	0.31	ppb	# 96
8) 1,3-butadiene	4.992	39	12595	0.26	ppb	100
9) Bromomethane	5.376	94	14014	0.30	ppb	94
10) Chloroethane	5.532	64	7605	0.33	ppb	91
11) Ethanol	5.623	45	4076	0.38	ppb	# 68
12) Acrolein	6.229	56	4938m	0.34	ppb	
13) Vinyl Bromide	5.884	106	15738	0.35	ppb	96
14) Freon 11	6.166	101	45643	0.38	ppb	99
15) Acetone	6.328	58	8440m	0.39	ppb	
16) Pentane	6.439	42	13366m	0.38	ppb	
17) Isopropyl alcohol	6.421	45	24443m	0.37	ppb	
18) 1,1-dichloroethene	6.934	96	20828	0.32	ppb	# 85
19) Freon 113	7.130	101	45915	0.32	ppb	93
20) t-Butyl alcohol	7.145	59	45622	0.34	ppb	94
21) Methylene chloride	7.403	84	21967	0.35	ppb	96
22) Allyl chloride	7.379	41	24016	0.32	ppb	89
23) Carbon disulfide	7.559	76	59363	0.34	ppb	99
24) trans-1,2-dichloroethene	8.324	61	29460	0.31	ppb	84
25) methyl tert-butyl ether	8.339	73	67549	0.31	ppb	94
26) 1,1-dichloroethane	8.760	63	40235	0.31	ppb	97
27) Vinyl acetate	8.736	43	29717	0.29	ppb	89
28) Methyl Ethyl Ketone	9.216	72	10840	0.28	ppb	# 1
29) cis-1,2-dichloroethene	9.672	61	34153	0.38	ppb	95
30) Hexane	9.285	57	42141	0.30	ppb	# 79
31) Ethyl acetate	9.813	43	58360	0.30	ppb	# 78
32) Chloroform	10.282	83	45343	0.30	ppb	97
33) Tetrahydrofuran	10.426	42	21055	0.27	ppb	87
34) 1,2-dichloroethane	11.374	62	25918	0.31	ppb	99
36) 1,1,1-trichloroethane	11.095	97	43426	0.31	ppb	97
37) Cyclohexane	11.780	56	41576	0.30	ppb	# 51
38) Carbon tetrachloride	11.711	117	41922	0.30	ppb	98
39) Benzene	11.690	78	81362	0.30	ppb	94
40) Methyl methacrylate	13.188	41	29005	0.29	ppb	# 59
41) 1,4-dioxane	13.212	88	20720	0.32	ppb	81
42) 2,2,4-trimethylpentane	12.512	57	129098	0.30	ppb	86
43) Heptane	12.851	43	43519	0.30	ppb	91
44) Trichloroethene	12.974	130	35697	0.30	ppb	95

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121211.D
 Acq On : 12 Dec 2022 8:35 pm
 Operator : RJP
 Sample : A1UG_0.30
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 13 07:57:08 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

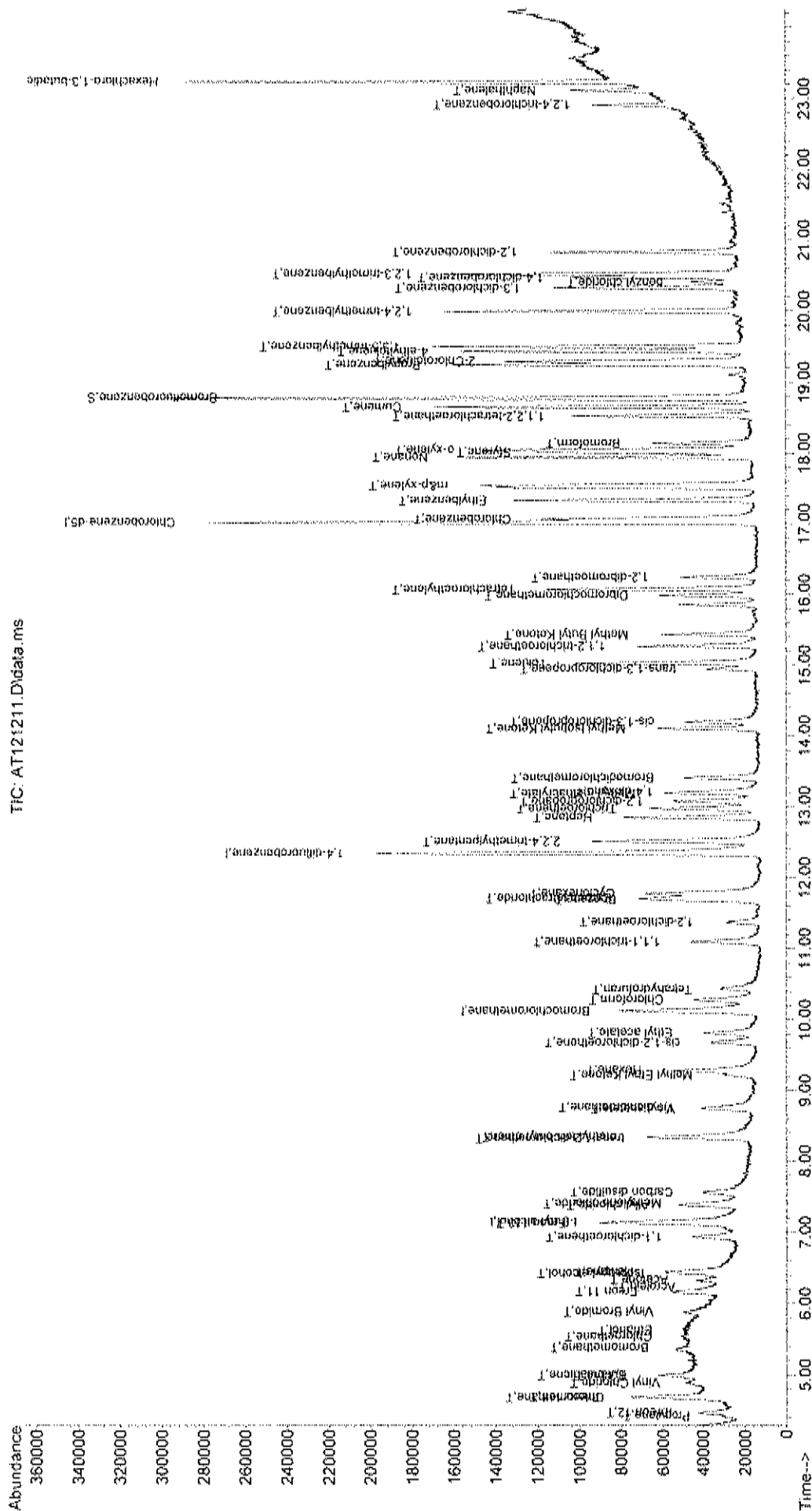
QLast Update : Tue Dec 13 07:52:10 2022

Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.076	63	28846	0.30	ppb	94
46) Bromodichloromethane	13.407	83	42092	0.28	ppb	97
47) cis-1,3-dichloropropene	14.199	75	35748	0.27	ppb	91
48) trans-1,3-dichloropropene	14.950	75	25684	0.25	ppb	97
49) 1,1,2-trichloroethane	15.268	97	32585	0.31	ppb	93
51) Toluene	15.028	92	61156	0.31	ppb	98
52) Methyl Isobutyl Ketone	14.106	43	54308	0.31	ppb	83
53) Dibromochloromethane	15.988	129	39363m	0.27	ppb	
54) Methyl Butyl Ketone	15.433	43	46025	0.30	ppb	80
55) 1,2-dibromoethane	16.244	107	43433	0.30	ppb	93
56) Tetrachloroethylene	16.072	164	38088	0.32	ppb	94
57) Chlorobenzene	17.072	112	76213	0.30	ppb	97
58) Ethylbenzene	17.333	91	127450	0.30	ppb	99
59) m&p-xylene	17.543	91	199910	0.62	ppb	86
60) Nonane	17.943	43	65516	0.30	ppb	94
61) Styrene	18.015	104	72678	0.28	ppb	94
62) Bromoform	18.138	173	35489	0.26	ppb	91
63) o-xylene	18.045	91	110511	0.30	ppb	90
64) Cumene	18.648	105	151260	0.30	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.519	83	67657	0.29	ppb	98
67) Propylbenzene	19.243	120	41087	0.30	ppb	# 1
68) 2-Chlorotoluene	19.291	126	35691	0.30	ppb	# 100
69) 4-ethyltoluene	19.429	105	133745m	0.28	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	122988m	0.31	ppb	
71) 1,2,4-trimethylbenzene	19.993	105	116636	0.29	ppb	95
72) 1,3-dichlorobenzene	20.323	146	58178	0.26	ppb	95
73) benzyl chloride	20.398	91	22961	0.17	ppb	89
74) 1,4-dichlorobenzene	20.473	146	52762	0.25	ppb	97
75) 1,2,3-trimethylbenzene	20.521	105	117913	0.30	ppb	94
76) 1,2-dichlorobenzene	20.828	146	57836	0.27	ppb	96
77) 1,2,4-trichlorobenzene	22.911	180	18582	0.22	ppb	91
78) Naphthalene	23.109	128	48754	0.22	ppb	94
79) Hexachloro-1,3-butadiene	23.229	225	52713	0.29	ppb	98

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

Quant Time: Dec 13 07:57:08 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121212.D
 Acq On : 12 Dec 2022 9:18 pm
 Operator : RJP
 Sample : ALUG_0.15
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 13 07:57:25 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.126	128	46174	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.347	114	299491	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	242839	1.00	ppb	0.00

System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	157732	0.92	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	92.00%

Target Compounds						Qvalue
2) Propylene	4.416	41	9068	0.19	ppb	90
3) Freon 12	4.482	85	25239	0.17	ppb	95
4) Chloromethane	4.683	50	8645	0.18	ppb	80
5) Freon 114	4.686	85	20985	0.17	ppb	92
6) Vinyl Chloride	4.896	62	6958	0.15	ppb	74
7) Butane	4.989	43	10966	0.20	ppb	# 74
8) 1,3-butadiene	4.998	39	8371	0.18	ppb	89
9) Bromomethane	5.359	94	7900	0.18	ppb	95
10) Chloroethane	5.524	64	3464	0.16	ppb	90
12) Acrolein	6.220	56	2385m	0.17	ppb	
13) Vinyl Bromide	5.881	106	5802	0.14	ppb	99
14) Freon 11	6.172	101	19590	0.17	ppb	93
15) Acetone	6.328	58	3906	0.19	ppb	# 1
16) Pentane	6.451	42	6487m	0.19	ppb	
17) Isopropyl alcohol	6.436	45	11779m	0.19	ppb	
18) 1,1-dichloroethene	6.932	96	10135	0.16	ppb	# 75
19) Freon 113	7.130	101	22247	0.17	ppb	92
20) t-Butyl alcohol	7.154	59	23005	0.18	ppb	92
21) Methylene chloride	7.388	84	10931	0.18	ppb	85
22) Allyl chloride	7.379	41	11470	0.16	ppb	76
23) Carbon disulfide	7.559	76	34568	0.21	ppb	100
24) trans-1,2-dichloroethene	8.336	61	13537	0.15	ppb	78
25) methyl tert-butyl ether	8.336	73	33018	0.16	ppb	97
26) 1,1-dichloroethane	8.769	63	19343	0.16	ppb	100
27) Vinyl acetate	8.733	43	14061	0.15	ppb	86
28) Methyl Ethyl Ketone	9.213	72	5958	0.16	ppb	# 81
29) cis-1,2-dichloroethene	9.681	61	16615	0.19	ppb	92
30) Hexane	9.291	57	17990	0.14	ppb	89
31) Ethyl acetate	9.816	43	29841	0.16	ppb	# 79
32) Chloroform	10.279	83	22580	0.16	ppb	99
33) Tetrahydrofuran	10.444	42	11630	0.16	ppb	89
34) 1,2-dichloroethane	11.365	62	13040	0.16	ppb	97
36) 1,1,1-trichloroethane	11.104	97	20923	0.15	ppb	98
37) Cyclohexane	11.783	56	21089	0.16	ppb	# 58
38) Carbon tetrachloride	11.726	117	20034	0.14	ppb	98
39) Benzene	11.693	78	41701	0.16	ppb	93
40) Methyl methacrylate	13.191	41	14043	0.14	ppb	# 53
41) 1,4-dioxane	13.224	88	11497	0.18	ppb	88
42) 2,2,4-trimethylpentane	12.512	57	62439	0.15	ppb	85
43) Heptane	12.842	43	22393	0.16	ppb	90
44) Trichloroethene	12.977	130	17888	0.15	ppb	95
45) 1,2-dichloropropane	13.089	63	14811	0.15	ppb	91

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121212.D
 Acq On : 12 Dec 2022 9:18 pm
 Operator : RJP
 Sample : ALUG_0.15
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

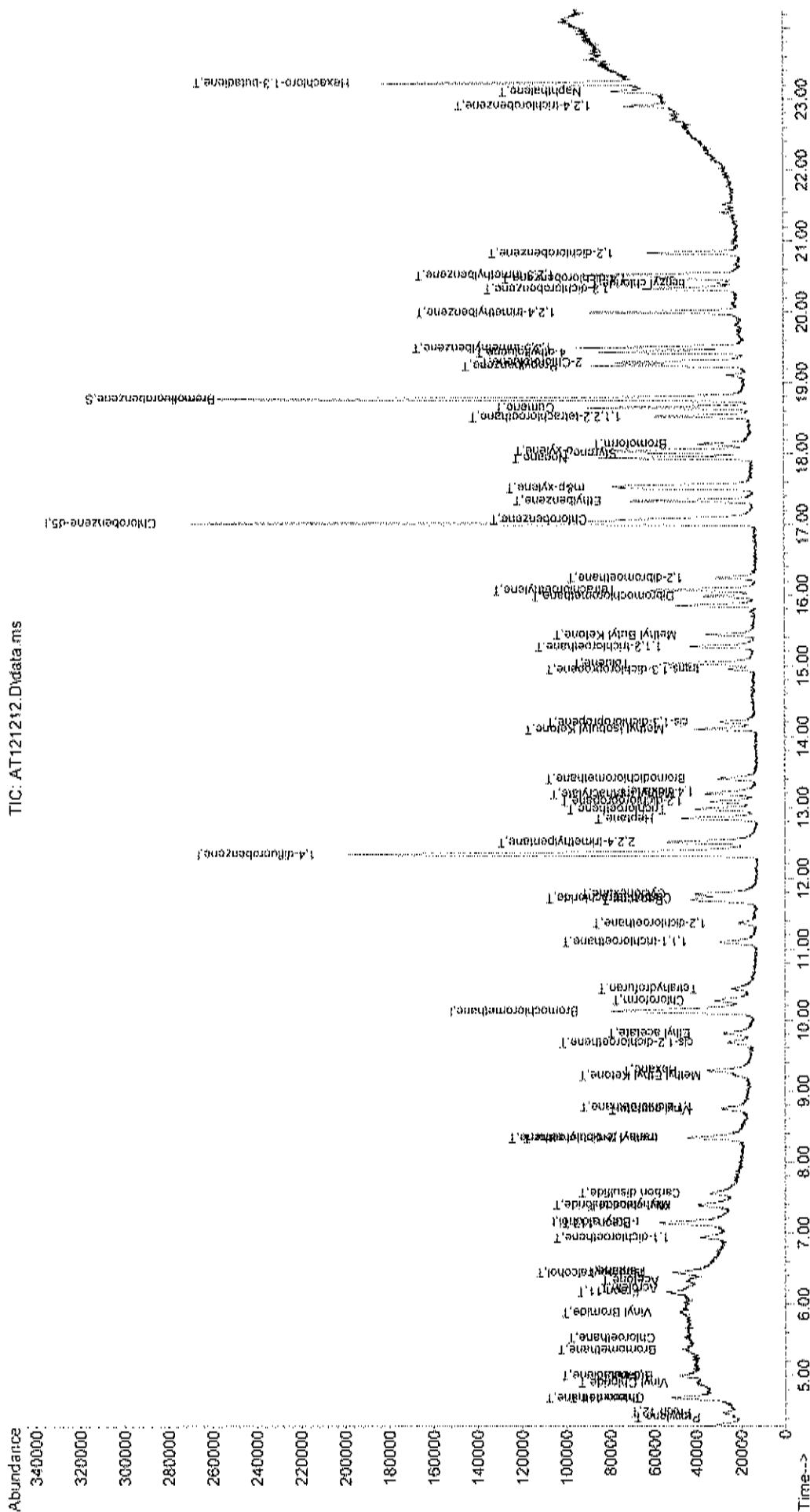
Quant Time: Dec 13 07:57:25 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Bromodichloromethane	13.407	83	21068	0.14	ppb	97
47) cis-1,3-dichloropropene	14.199	75	17469	0.13	ppb	86
48) trans-1,3-dichloropropene	14.944	75	12768	0.13	ppb	88
49) 1,1,2-trichloroethane	15.271	97	16448	0.16	ppb	92
51) Toluene	15.034	92	31091	0.16	ppb	96
52) Methyl Isobutyl Ketone	14.106	43	28053	0.16	ppb	83
53) Dibromochloromethane	15.988	129	34073	0.23	ppb	# 65
54) Methyl Butyl Ketone	15.436	43	23327	0.15	ppb	81
55) 1,2-dibromoethane	16.244	107	21262	0.15	ppb	96
56) Tetrachloroethylene	16.073	164	18316	0.15	ppb	93
57) Chlorobenzene	17.075	112	38743	0.16	ppb	97
58) Ethylbenzene	17.339	91	64193	0.15	ppb	99
59) m&p-xylene	17.519	91	98858	0.31	ppb	85
60) Nonane	17.943	43	35140	0.17	ppb	98
61) Styrene	18.009	104	36567	0.15	ppb	92
62) Bromoform	18.138	173	16969	0.13	ppb	96
63) o-xylene	18.045	91	56134	0.16	ppb	91
64) Cumene	18.648	105	75733	0.15	ppb	# 91
66) 1,1,2,2-tetrachloroethane	18.522	83	33718	0.15	ppb	99
67) Propylbenzene	19.246	120	20522	0.15	ppb	# 1
68) 2-Chlorotoluene	19.291	126	17171	0.15	ppb	# 100
69) 4-ethyltoluene	19.429	105	64835m	0.14	ppb	
70) 1,3,5-trimethylbenzene	19.495	105	63972m	0.16	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	59894	0.15	ppb	98
72) 1,3-dichlorobenzene	20.326	146	28026	0.13	ppb	98
73) benzyl chloride	20.401	91	16969m	0.13	ppb	
74) 1,4-dichlorobenzene	20.476	146	24578	0.12	ppb	97
75) 1,2,3-trimethylbenzene	20.521	105	60795	0.16	ppb	93
76) 1,2-dichlorobenzene	20.828	146	27188	0.13	ppb	93
77) 1,2,4-trichlorobenzene	22.911	180	8857	0.11	ppb	88
78) Naphthalene	23.115	128	23718	0.11	ppb	99
79) Hexachloro-1,3-butadiene	23.229	225	27529	0.16	ppb	99

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

Quant Time: Dec 13 07:57:25 2022
Quant Method : C:\msdchem\1\methods\AD12_IUG.M
Quant Title : T0-15 VOA Standards for 5 point calibration
Quant Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

TIC: AT121212.D\data.ms



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121213.D
 Acq On : 12 Dec 2022 10:00 pm
 Operator : RJP
 Sample : ALUG_0.10
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

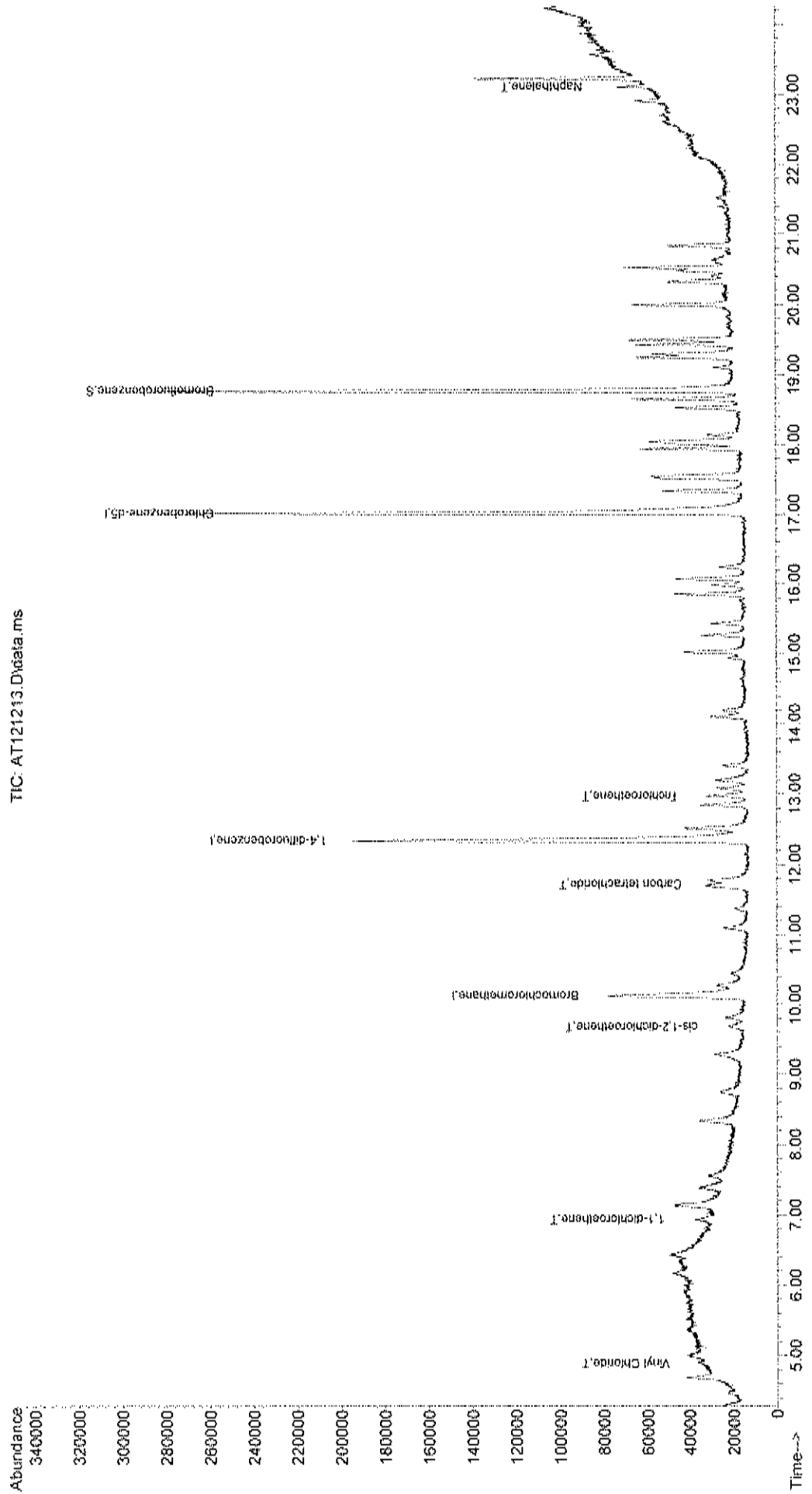
Quant Time: Dec 13 07:57:46 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.132	128	47057	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.350	114	299129	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	244135	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.774	95	161254	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
6) Vinyl Chloride	4.884	62	4764m/1	0.10	ppb	Qvalue
18) 1,1-dichloroethene	6.935	96	6294	0.10	ppb	93
29) cis-1,2-dichloroethene	9.678	61	10746	0.12	ppb	92
38) Carbon tetrachloride	11.720	117	12395	0.09	ppb	94
44) Trichloroethene	12.975	130	11291	0.10	ppb	93
78) Naphthalene	23.115	128	18004	0.08	ppb	92

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121213.D
 Acq On : 12 Dec 2022 10:00 pm
 Operator : RJP
 Sample : A1UG_0.10
 Misc :
 ALS Vial : 11 Sample Multiplier: 1
 Quant Time: Dec 13 07:57:46 2022
 Quant Method : C:\msdchem\1\methods\AD12.1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121214.D
 Acq On : 12 Dec 2022 10:42 pm
 Operator : RJP
 Sample : ALUG_0.04
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 13 07:58:04 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

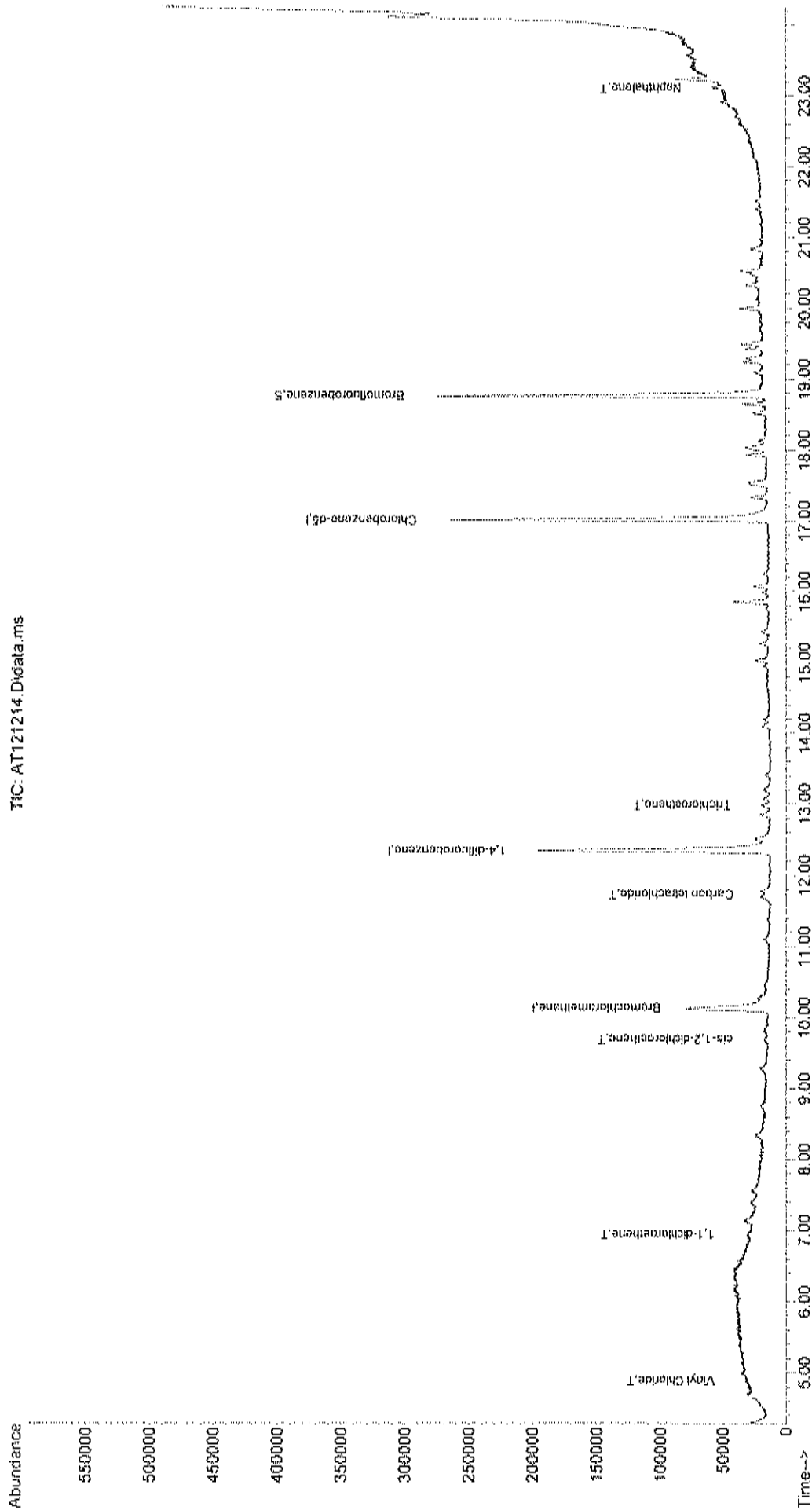
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.135	128	46646	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.347	114	300783	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	240334	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	154703	0.92	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	92.00%
Target Compounds						
6) Vinyl Chloride	4.884	62	2146	0.05	ppb	Qvalue 50
18) 1,1-dichloroethene	6.941	96	2603	0.04	ppb	# 1
29) cis-1,2-dichloroethene	9.690	61	3459	0.04	ppb	87
38) Carbon tetrachloride	11.732	117	4723m	0.03	ppb	
44) Trichloroethene	12.983	130	4414	0.04	ppb	86
78) Naphthalene	23.109	128	6488	0.03	ppb	90

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121214.D
 Acq On : 12 Dec 2022 10:42 pm
 Operator : RJP
 Sample : ALUG_0.04
 Misc :
 ALS Vial : 12 Sample Multiplier: 1
 Quant Time: Dec 13 07:58:04 2022
 Quant Method : C:\msdchem\1\methods\AD12 1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 07:52:10 2022
 Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121215.D
Acq On : 12 Dec 2022 11:24 pm
Operator : RJP
Sample : A1UG_0.03
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 13 07:58:21 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D

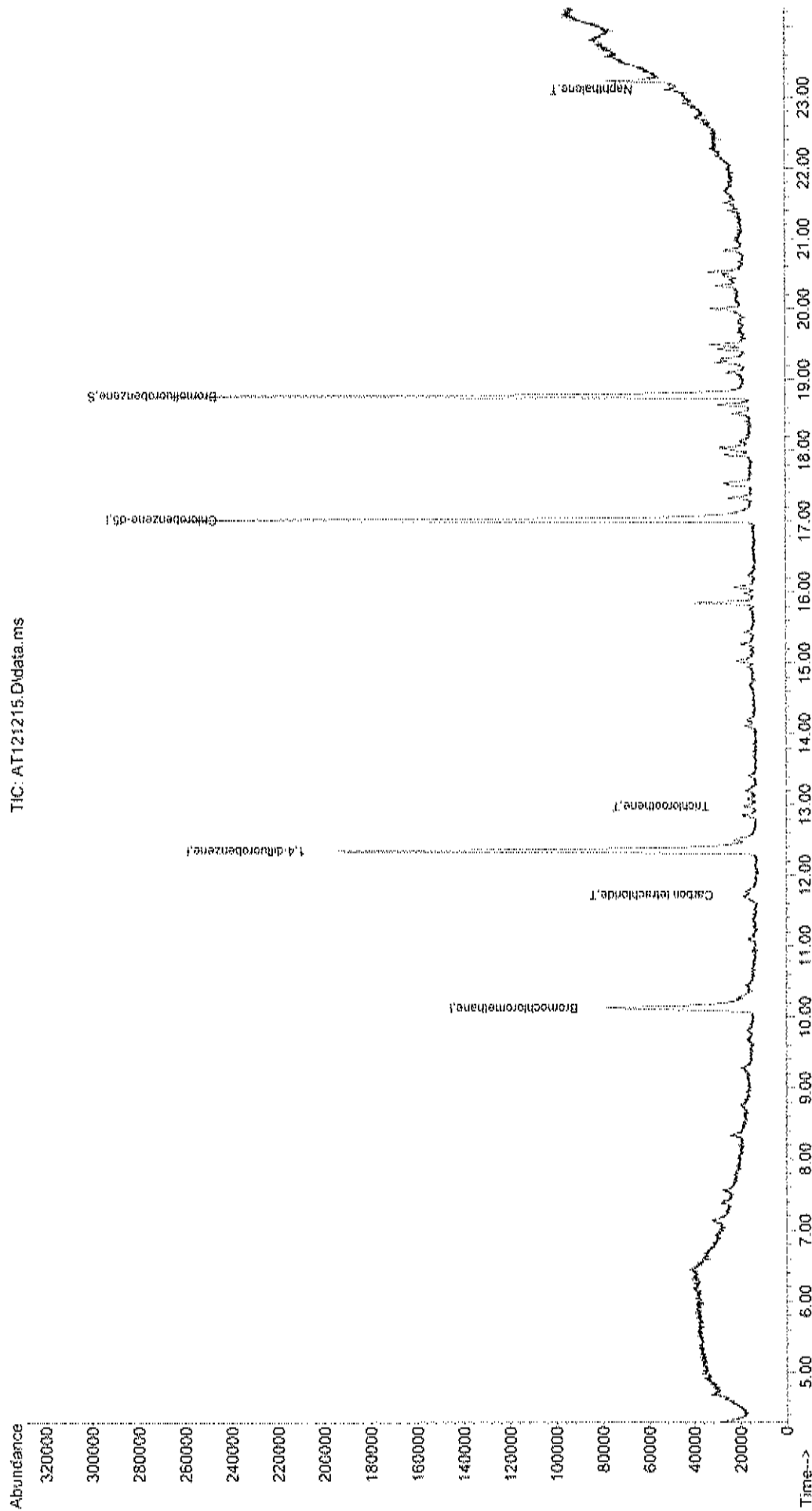
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.123	128	46289	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.347	114	295506	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	239126	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	156389	0.93	ppb	0.00
Spiked Amount	1.000	Range	70 ~ 130	Recovery	=	93.00%
Target Compounds						
38) Carbon tetrachloride	11.717	117	3489	0.03	ppb	Qvalue 96
44) Trichloroethene	12.975	130	3230	0.03	ppb	# 80
78) Naphthalene	23.109	128	6005	0.03	ppb	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121215.D
Acq On : 12 Dec 2022 11:24 pm
Operator : RJP
Sample : A1UG_0.03
Misc :
ALS Vial : 13 Sample Multiplier: 1
Quant Time: Dec 13 07:58:21 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 07:52:10 2022
Response via : Continuing Cal File: C:\msdchem\1\data\AT121208.D



GC/MS VOLATILES-WHOLE AIR
METHOD TO-15
CALIBRATION VERIFICATION

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121602.D
 Acq On : 16 Dec 2022 10:12 am
 Operator : RJP
 Sample : ALUG_1.0
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 08:40:18 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	108	0.00
2 T	Propylene	1.090	1.170	-7.3	120	0.00
3 T	Freon 12	3.341	3.962	-18.6	132	0.00
4 T	Chloromethane	1.092	1.252	-14.7	132	0.00
5 T	Freon 114	2.807	3.275	-16.7	129	0.00
6 T	Vinyl Chloride	1.048	1.186	-13.2	127	-0.01
7 T	Butane	1.265	1.367	-8.1	112	0.00
8 T	1,3-butadiene	0.979	0.973	0.6	114	-0.01
9 T	Bromomethane	0.988	1.123	-13.7	126	0.00
10 T	Chloroethane	0.495	0.579	-17.0	129	0.00
11 T	Ethanol	0.227	0.203	10.6	100	0.00
12 T	Acrolein	0.306	0.289	5.6	104	0.00
13 T	Vinyl Bromide	0.951	1.096	-15.2	129	0.00
14 T	Freon 11	2.779	3.221	-15.9	139	-0.01
15 T	Acetone	0.524	0.603	-15.1	141	0.00
16 T	Pentane	0.936	1.214	-29.7	177#	0.00
17 T	Isopropyl alcohol	1.609	1.887	-17.3	156#	0.00
18 T	1,1-dichloroethene	1.420	1.676	-18.0	136	0.00
19 T	Freon 113	3.034	3.553	-17.1	133	0.00
20 t	t-Butyl alcohol	3.019	3.275	-8.5	131	0.00
21 T	Methylene chloride	1.366	1.522	-11.4	130	0.00
22 T	Allyl chloride	1.587	1.622	-2.2	115	0.00
23 T	Carbon disulfide	3.948	4.328	-9.6	130	0.00
24 T	trans-1,2-dichloroethene	2.006	2.239	-11.6	123	0.00
25 T	methyl tert-butyl ether	4.587	5.102	-11.2	124	-0.01
26 T	1,1-dichloroethane	2.730	3.172	-16.2	130	0.00
27 T	Vinyl acetate	2.137	2.218	-3.8	116	0.00
28 T	Methyl Ethyl Ketone	0.825	0.896	-8.6	122	0.00
29 T	cis-1,2-dichloroethene	2.155	2.578	-19.6	120	0.00
30 T	Hexane	2.857	3.252	-13.8	123	-0.01
31 T	Ethyl acetate	4.049	4.462	-10.2	122	0.00
32 T	Chloroform	3.081	3.558	-15.5	127	0.00
33 T	Tetrahydrofuran	1.611	1.792	-11.2	123	0.00
34 T	1,2-dichloroethane	1.806	2.067	-14.5	128	-0.01
35 I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00
36 T	1,1,1-trichloroethane	0.468	0.499	-6.6	118	0.00
37 T	Cyclohexane	0.455	0.508	-11.6	124	0.00
38 T	Carbon tetrachloride	0.444	0.466	-5.0	110	0.00
39 T	Benzene	0.889	1.010	-13.6	125	-0.01
40 T	Methyl methacrylate	0.326	0.355	-8.9	118	0.00
41 T	1,4-dioxane	0.223	0.232	-4.0	120	0.00
42 T	2,2,4-trimethylpentane	1.397	1.607	-15.0	126	0.00
43 T	Heptane	0.474	0.533	-12.4	124	0.00
44 T	Trichloroethene	0.384	0.420	-9.4	119	0.00
45 T	1,2-dichloropropane	0.323	0.378	-17.0	130	0.00
46 T	Bromodichloromethane	0.485	0.508	-4.7	114	0.00
47 T	cis-1,3-dichloropropene	0.415	0.381	8.2	97	0.00

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121602.D
 Acq On : 16 Dec 2022 10:12 am
 Operator : RJP
 Sample : ALUG_1.0
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 08:40:18 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48 T	trans-1,3-dichloropropene	0.320	0.264	17.5	87	0.00
49 T	1,1,2-trichloroethane	0.353	0.398	-12.7	125	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
51 T	Toluene	0.801	0.886	-10.6	119	0.00
52 T	Methyl Isobutyl Ketone	0.720	0.796	-10.6	121	0.00
53 T	Dibromochloromethane	0.629	0.568	9.7	103	0.00
54 T	Methyl Butyl Ketone	0.625	0.675	-8.0	117	0.00
55 T	1,2-dibromoethane	0.585	0.647	-10.6	118	0.00
56 T	Tetrachloroethylene	0.492	0.543	-10.4	120	0.00
57 T	Chlorobenzene	1.024	1.131	-10.4	119	0.00
58 T	Ethylbenzene	1.713	1.892	-10.4	118	0.00
59 T	m&p-xylene	1.316	1.424	-8.2	116	0.00
60 T	Nonane	0.885	0.950	-7.3	117	-0.02
61 T	Styrene	1.011	1.073	-6.1	111	-0.02
62 T	Bromoform	0.538	0.465	13.6	91	-0.02
63 T	o-xylene	1.479	1.611	-8.9	117	-0.02
64 T	Cumene	2.014	2.177	-8.1	115	-0.03
65 S	Bromofluorobenzene	0.675	0.691	-2.4	106	-0.03
66 T	1,1,2,2-tetrachloroethane	0.926	1.067	-15.2	123	-0.03
67 T	Propylbenzene	0.558	0.598	-7.2	114	-0.03
68 T	2-Chlorotoluene	0.478	0.524	-9.6	116	-0.03
69 T	4-ethyltoluene	1.834	1.963	-7.0	112	-0.03
70 T	1,3,5-trimethylbenzene	1.667	1.798	-7.9	115	-0.03
71 T	1,2,4-trimethylbenzene	1.591	1.688	-6.1	113	-0.03
72 T	1,3-dichlorobenzene	0.861	0.937	-8.8	111	-0.02
73 T	benzyl chloride	0.511	0.434	15.1	87	-0.03
74 T	1,4-dichlorobenzene	0.792	0.880	-11.1	112	-0.02
75 T	1,2,3-trimethylbenzene	1.598	1.715	-7.3	115	-0.02
76 T	1,2-dichlorobenzene	0.832	0.912	-9.6	111	0.00
77 T	1,2,4-trichlorobenzene	0.312	0.354	-13.5	110	0.02
78 T	Naphthalene	0.804	0.889	-10.6	104	0.01
79 T	Hexachloro-1,3-butadiene	0.717	0.799	-11.4	118	0.01

(#) = Out of Range

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121602.D
 Acq On : 16 Dec 2022 10:12 am
 Operator : RJP
 Sample : ALUG_1.0
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 08:40:18 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 Qlast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.120	128	52954	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	338530	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	277505	1.00	ppb	0.00

System Monitoring Compounds						
65) Bromofluorobenzene	18.738	95	191867	1.02	ppb	-0.03
Spiked Amount	1.000	Range	70 - 130	Recovery	=	102.00%

Target Compounds						Qvalue
2) Propylene	4.419	41	61980	1.07	ppb	96
3) Freon 12	4.470	85	209788	1.19	ppb	96
4) Chloromethane	4.680	50	66302	1.15	ppb	97
5) Freon 114	4.680	85	173412	1.17	ppb	91
6) Vinyl Chloride	4.875	62	62811	1.13	ppb	90
7) Butane	4.992	43	72412	1.08	ppb	97
8) 1,3-butadiene	4.989	39	51520	0.99	ppb	100
9) Bromomethane	5.356	94	59476	1.14	ppb	95
10) Chloroethane	5.530	64	30686	1.17	ppb	# 82
11) Ethanol	5.623	45	10762	0.89	ppb	86
12) Acrolein	6.220	56	15307	0.94	ppb	82
13) Vinyl Bromide	5.887	106	58025	1.15	ppb	96
14) Freon 11	6.154	101	170564	1.16	ppb	99
15) Acetone	6.325	58	31917m	1.15	ppb	
16) Pentane	6.439	42	64268	1.30	ppb	# 67
17) Isopropyl alcohol	6.418	45	99941	1.17	ppb	# 3
18) 1,1-dichloroethene	6.935	96	88767	1.18	ppb	# 83
19) Freon 113	7.127	101	188160	1.17	ppb	94
20) t-Butyl alcohol	7.148	59	173415	1.08	ppb	96
21) Methylene chloride	7.388	84	80610	1.11	ppb	93
22) Allyl chloride	7.373	41	85896	1.02	ppb	82
23) Carbon disulfide	7.562	76	229193	1.10	ppb	99
24) trans-1,2-dichloroethene	8.334	61	118584	1.12	ppb	85
25) methyl tert-butyl ether	8.331	73	270166	1.11	ppb	100
26) 1,1-dichloroethane	8.748	63	167975	1.16	ppb	95
27) Vinyl acetate	8.727	43	117466	1.04	ppb	89
28) Methyl Ethyl Ketone	9.222	72	47440	1.09	ppb	# 45
29) cis-1,2-dichloroethene	9.675	61	136508	1.20	ppb	92
30) Hexane	9.273	57	172225	1.14	ppb	# 76
31) Ethyl acetate	9.808	43	236267	1.10	ppb	# 80
32) Chloroform	10.273	83	188406	1.15	ppb	98
33) Tetrahydrofuran	10.432	42	94884	1.11	ppb	87
34) 1,2-dichloroethane	11.363	62	109469	1.14	ppb	97
36) 1,1,1-trichloroethane	11.095	97	168976	1.07	ppb	98
37) Cyclohexane	11.774	56	172048	1.12	ppb	# 50
38) Carbon tetrachloride	11.720	117	157841	1.05	ppb	98
39) Benzene	11.678	78	341931	1.14	ppb	94
40) Methyl methacrylate	13.188	41	120248	1.09	ppb	# 67
41) 1,4-dioxane	13.209	88	78461	1.04	ppb	81
42) 2,2,4-trimethylpentane	12.512	57	544051	1.15	ppb	85
43) Heptane	12.846	43	180455	1.13	ppb	91
44) Trichloroethene	12.972	130	142304	1.10	ppb	95

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121602.D
 Acq On : 16 Dec 2022 10:12 am
 Operator : RJP
 Sample : A1UG_1.0
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 08:40:18 2022

Quant Method : C:\msdchem\1\methods\AD12_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

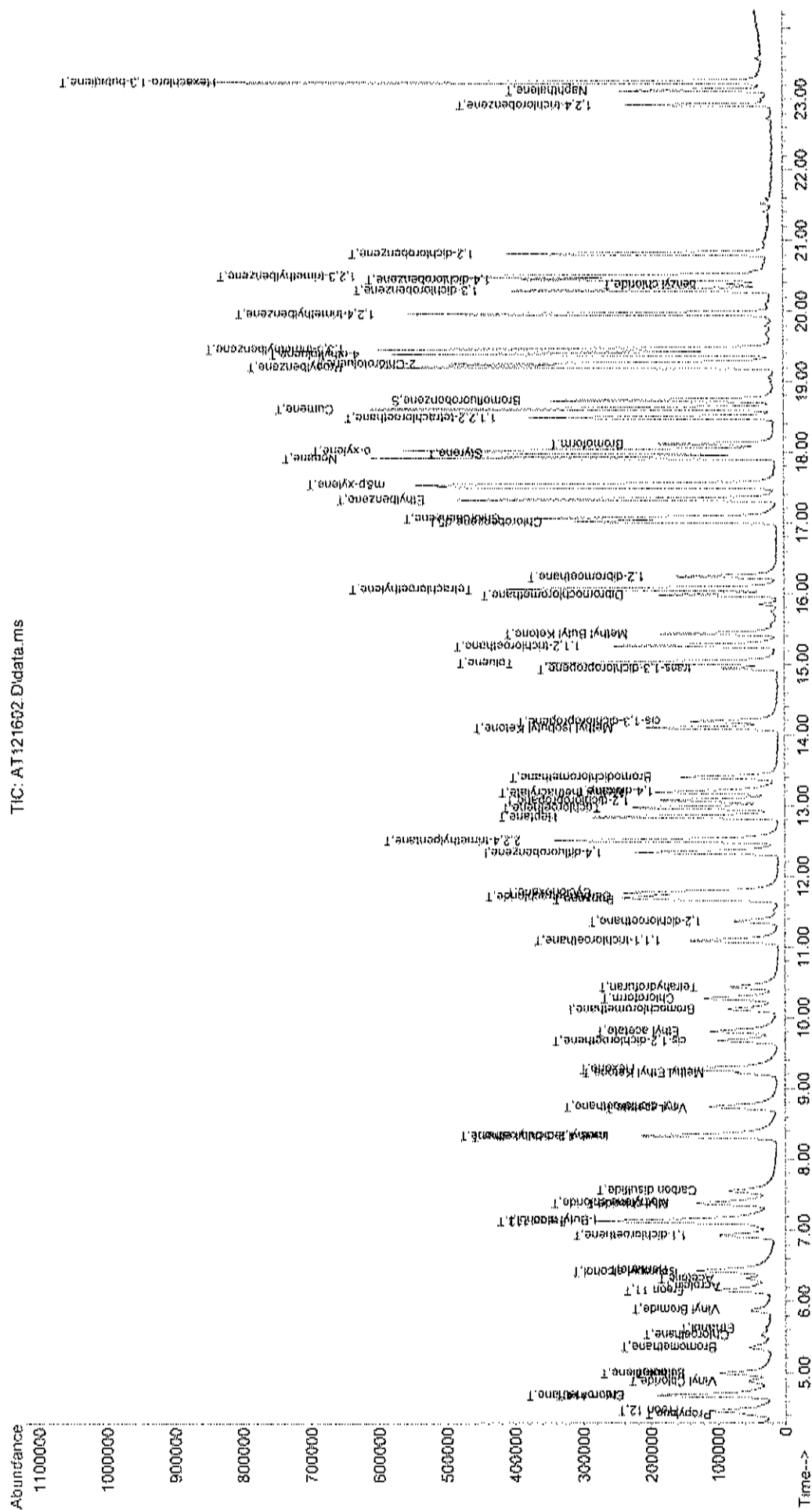
QLast Update : Tue Dec 13 09:11:04 2022

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.074	63	127903	1.17	ppb	99
46) Bromodichloromethane	13.410	83	171917	1.05	ppb	99
47) cis-1,3-dichloropropene	14.196	75	128948	0.92	ppb	92
48) trans-1,3-dichloropropene	14.944	75	89312	0.82	ppb	100
49) 1,1,2-trichloroethane	15.265	97	134848	1.13	ppb	95
51) Toluene	15.028	92	245792	1.11	ppb	98
52) Methyl Isobutyl Ketone	14.100	43	220880	1.11	ppb	84
53) Dibromochloromethane	15.986	129	157538m	0.90	ppb	
54) Methyl Butyl Ketone	15.433	43	187277	1.08	ppb	81
55) 1,2-dibromoethane	16.241	107	179570	1.11	ppb	94
56) Tetrachloroethylene	16.070	164	150643	1.10	ppb	91
57) Chlorobenzene	17.069	112	313770	1.10	ppb	96
58) Ethylbenzene	17.333	91	525108	1.10	ppb	97
59) m&p-xylene	17.544	91	790333	2.16	ppb	85
60) Nonane	17.922	43	263701	1.07	ppb	94
61) Styrene	17.991	104	297644	1.06	ppb	91
62) Bromoform	18.117	173	129069	0.86	ppb	92
63) o-xylene	18.024	91	447065	1.09	ppb	91
64) Cumene	18.618	105	604258	1.08	ppb	# 92
66) 1,1,2,2-tetrachloroethane	18.495	83	296170	1.15	ppb	98
67) Propylbenzene	19.213	120	166059	1.07	ppb	# 1
68) 2-Chlorotoluene	19.261	126	145432	1.10	ppb	# 100
69) 4-ethyltoluene	19.396	105	544627m	1.07	ppb	
70) 1,3,5-trimethylbenzene	19.465	105	498926m	1.08	ppb	
71) 1,2,4-trimethylbenzene	19.966	105	468543	1.06	ppb	97
72) 1,3-dichlorobenzene	20.302	146	260157	1.09	ppb	97
73) benzyl chloride	20.377	91	120436m	0.85	ppb	
74) 1,4-dichlorobenzene	20.453	146	244096	1.11	ppb	98
75) 1,2,3-trimethylbenzene	20.501	105	475856	1.07	ppb	96
76) 1,2-dichlorobenzene	20.819	146	253203	1.10	ppb	94
77) 1,2,4-trichlorobenzene	22.920	180	98118	1.13	ppb	95
78) Naphthalene	23.124	128	246581	1.11	ppb	94
79) Hexachloro-1,3-butadiene	23.241	225	221837	1.12	ppb	99

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

Quant Time: Dec 17 08:40:18 2022
Quant Method : C:\msdchem\1\methods\AD12.LUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121702.D
 Acq On : 17 Dec 2022 10:29 am
 Operator : RJP
 Sample : A1UG_1.0
 Misc : AD12_1UG
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 10:55:21 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	102	0.00
2 T	Propylene	1.090	1.199	-10.0	116	0.00
3 T	Freon 12	3.341	4.052	-21.3	127	0.00
4 T	Chloromethane	1.092	1.242	-13.7	123	0.00
5 T	Freon 114	2.807	3.407	-21.4	126	0.00
6 T	Vinyl Chloride	1.048	1.174	-12.0	119	-0.01
7 T	Butane	1.265	1.265	0.0	98	0.00
8 T	1,3-butadiene	0.979	0.955	2.5	105	-0.02
9 T	Bromomethane	0.988	1.132	-14.6	120	0.00
10 T	Chloroethane	0.495	0.579	-17.0	122	0.00
11 T	Ethanol	0.227	0.200	11.9	93	0.02
12 T	Acrolein	0.306	0.374	-22.2	126	0.00
13 T	Vinyl Bromide	0.951	1.158	-21.8	128	0.00
14 T	Freon 11	2.779	3.407	-22.6	139	-0.01
15 T	Acetone	0.524	0.674	-28.6	149	0.00
16 T	Pentane	0.936	1.400	-49.6#	192#	0.00
17 T	Isopropyl alcohol	1.609	1.939	-20.5	151#	0.00
18 T	1,1-dichloroethene	1.420	1.713	-20.6	131	-0.01
19 T	Freon 113	3.034	3.626	-19.5	128	0.00
20 t	t-Butyl alcohol	3.019	3.107	-2.9	117	0.00
21 T	Methylene chloride	1.366	1.512	-10.7	121	0.00
22 T	Allyl chloride	1.587	1.583	0.3	106	0.00
23 T	Carbon disulfide	3.948	4.009	-1.5	114	0.00
24 T	trans-1,2-dichloroethene	2.006	2.214	-10.4	115	0.00
25 T	methyl tert-butyl ether	4.587	4.826	-5.2	111	0.00
26 T	1,1-dichloroethane	2.730	3.159	-15.7	122	0.00
27 T	Vinyl acetate	2.137	1.994	6.7	98	0.00
28 T	Methyl Ethyl Ketone	0.825	0.913	-10.7	117	0.00
29 T	cis-1,2-dichloroethene	2.155	2.029	5.8	89	0.00
30 T	Hexane	2.857	3.167	-10.9	113	0.00
31 T	Ethyl acetate	4.049	4.189	-3.5	108	0.00
32 T	Chloroform	3.081	3.580	-16.2	120	0.00
33 T	Tetrahydrofuran	1.611	1.663	-3.2	107	-0.01
34 T	1,2-dichloroethane	1.806	2.106	-16.6	123	-0.01
35 I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00
36 T	1,1,1-trichloroethane	0.468	0.506	-8.1	107	-0.01
37 T	Cyclohexane	0.455	0.501	-10.1	109	0.00
38 T	Carbon tetrachloride	0.444	0.473	-6.5	100	0.00
39 T	Benzene	0.889	1.028	-15.6	114	0.00
40 T	Methyl methacrylate	0.326	0.338	-3.7	100	0.00
41 T	1,4-dioxane	0.223	0.225	-0.9	104	0.00
42 T	2,2,4-trimethylpentane	1.397	1.604	-14.8	113	0.00
43 T	Heptane	0.474	0.530	-11.8	110	0.00
44 T	Trichloroethene	0.384	0.432	-12.5	109	0.00
45 T	1,2-dichloropropane	0.323	0.380	-17.6	117	0.00
46 T	Bromodichloromethane	0.485	0.517	-6.6	103	0.00
47 T	cis-1,3-dichloropropene	0.415	0.359	13.5	82	0.00

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121702.D
 Acq On : 17 Dec 2022 10:29 am
 Operator : RJP
 Sample : ALUG_1.0
 Misc : AD12_1UG
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 10:55:21 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48 T	trans-1,3-dichloropropene	0.320	0.246	23.1	73	0.00
49 T	1,1,2-trichloroethane	0.353	0.403	-14.2	113	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
51 T	Toluene	0.801	0.890	-11.1	106	0.00
52 T	Methyl Isobutyl Ketone	0.720	0.793	-10.1	106	0.00
53 T	Dibromochloromethane	0.629	0.555	11.8	89	0.00
54 T	Methyl Butyl Ketone	0.625	0.659	-5.4	101	0.00
55 T	1,2-dibromoethane	0.585	0.653	-11.6	105	0.00
56 T	Tetrachloroethylene	0.492	0.559	-13.6	109	0.00
57 T	Chlorobenzene	1.024	1.141	-11.4	106	0.00
58 T	Ethylbenzene	1.713	1.877	-9.6	104	0.00
59 T	m&p-xylene	1.316	1.440	-9.4	104	0.00
60 T	Nonane	0.885	0.931	-5.2	102	-0.02
61 T	Styrene	1.011	1.065	-5.3	98	-0.02
62 T	Bromoform	0.538	0.434	19.3	75	-0.02
63 T	o-xylene	1.479	1.648	-11.4	106	-0.02
64 T	Cumene	2.014	2.149	-6.7	101	-0.04
65 S	Bromofluorobenzene	0.675	0.663	1.8	90	-0.05
66 T	1,1,2,2-tetrachloroethane	0.926	1.074	-16.0	110	-0.04
67 T	Propylbenzene	0.558	0.585	-4.8	99	-0.07
68 T	2-Chlorotoluene	0.478	0.529	-10.7	103	-0.07
69 T	4-ethyltoluene	1.834	1.916	-4.5	97	-0.07
70 T	1,3,5-trimethylbenzene	1.667	1.785	-7.1	101	-0.08
71 T	1,2,4-trimethylbenzene	1.591	1.597	-0.4	94	-0.09
72 T	1,3-dichlorobenzene	0.861	0.904	-5.0	95	-0.10
73 T	benzyl chloride	0.511	0.392	23.3	69	-0.10
74 T	1,4-dichlorobenzene	0.792	0.838	-5.8	94	-0.10
75 T	1,2,3-trimethylbenzene	1.598	1.647	-3.1	97	-0.10
76 T	1,2-dichlorobenzene	0.832	0.875	-5.2	94	-0.10
77 T	1,2,4-trichlorobenzene	0.312	0.306	1.9	85	-0.05
78 T	Naphthalene	0.804	0.736	8.5	76	-0.05
79 T	Hexachloro-1,3-butadiene	0.717	0.792	-10.5	103	-0.04

(#) = Out of Range

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

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121702.D
 Acq On : 17 Dec 2022 10:29 am
 Operator : RJP
 Sample : ALUG_1.0
 Misc : AD12_1UG
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 10:55:21 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.123	128	49920	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.338	114	302432	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	245756	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.720	95	162891	0.98	ppb	-0.05
Spiked Amount	1.000	Range	70 - 130	Recovery	=	98.00%
Target Compounds						
						Qvalue
2) Propylene	4.416	41	59848	1.10	ppb	96
3) Freon 12	4.470	85	202289	1.21	ppb	97
4) Chloromethane	4.674	50	62017	1.14	ppb	93
5) Freon 114	4.680	85	170060	1.21	ppb	94
6) Vinyl Chloride	4.875	62	58593	1.12	ppb	100
7) Butane	4.986	43	63138	1.00	ppb	98
8) 1,3-butadiene	4.986	39	47656	0.98	ppb	99
9) Bromomethane	5.350	94	56526	1.15	ppb	96
10) Chloroethane	5.530	64	28911	1.17	ppb	# 86
11) Ethanol	5.635	45	9993	0.88	ppb	92
12) Acrolein	6.217	56	18655m	1.22	ppb	
13) Vinyl Bromide	5.881	106	57792	1.22	ppb	99
14) Freon 11	6.151	101	170077m	1.23	ppb	
15) Acetone	6.319	58	33630m	1.29	ppb	
16) Pentane	6.442	42	69901	1.50	ppb	# 70
17) Isopropyl alcohol	6.427	45	96788	1.21	ppb	# 1
18) 1,1-dichloroethene	6.926	96	85496	1.21	ppb	# 84
19) Freon 113	7.127	101	181020	1.20	ppb	95
20) t-Butyl alcohol	7.136	59	155121	1.03	ppb	98
21) Methylene chloride	7.391	84	75456	1.11	ppb	91
22) Allyl chloride	7.376	41	79036	1.00	ppb	# 54
23) Carbon disulfide	7.550	76	200138	1.02	ppb	99
24) trans-1,2-dichloroethene	8.325	61	110538	1.10	ppb	85
25) methyl tert-butyl ether	8.337	73	240894	1.05	ppb	97
26) 1,1-dichloroethane	8.751	63	157673	1.16	ppb	98
27) Vinyl acetate	8.727	43	99545	0.93	ppb	89
28) Methyl Ethyl Ketone	9.216	72	45565	1.11	ppb	# 1
29) cis-1,2-dichloroethene	9.678	61	101304m	0.94	ppb	
30) Hexane	9.276	57	158119	1.11	ppb	# 81
31) Ethyl acetate	9.807	43	209139	1.03	ppb	# 81
32) Chloroform	10.279	83	178722	1.16	ppb	99
33) Tetrahydrofuran	10.429	42	83034	1.03	ppb	86
34) 1,2-dichloroethane	11.366	62	105116	1.17	ppb	94
36) 1,1,1-trichloroethane	11.089	97	152985	1.08	ppb	95
37) Cyclohexane	11.774	56	151378	1.10	ppb	# 50
38) Carbon tetrachloride	11.714	117	143055	1.07	ppb	98
39) Benzene	11.684	78	310958	1.16	ppb	94
40) Methyl methacrylate	13.182	41	102196	1.04	ppb	# 64
41) 1,4-dioxane	13.215	88	68115	1.01	ppb	81
42) 2,2,4-trimethylpentane	12.509	57	485144	1.15	ppb	86
43) Heptane	12.845	43	160189	1.12	ppb	91
44) Trichloroethene	12.975	130	130668	1.13	ppb	94

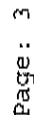
Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121702.D
 Acq On : 17 Dec 2022 10:29 am
 Operator : RJP
 Sample : ALUG_1.0
 Misc : AD12_1UG
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 17 10:55:21 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.080	63	114845	1.18	ppb	99
46) Bromodichloromethane	13.401	83	156314	1.07	ppb	98
47) cis-1,3-dichloropropene	14.199	75	108699	0.87	ppb	92
48) trans-1,3-dichloropropene	14.944	75	74503	0.77	ppb	99
49) 1,1,2-trichloroethane	15.268	97	121948	1.14	ppb	98
51) Toluene	15.028	92	218803	1.11	ppb	97
52) Methyl Isobutyl Ketone	14.103	43	194795	1.10	ppb	83
53) Dibromochloromethane	15.983	129	136426m	0.88	ppb	
54) Methyl Butyl Ketone	15.436	43	161873	1.05	ppb	84
55) 1,2-dibromoethane	16.241	107	160546	1.12	ppb	94
56) Tetrachloroethylene	16.070	164	137491	1.14	ppb	90
57) Chlorobenzene	17.072	112	280352	1.11	ppb	96
58) Ethylbenzene	17.333	91	461374	1.10	ppb	97
59) m&p-xylene	17.541	91	707565	2.19	ppb	86
60) Nonane	17.922	43	228845	1.05	ppb	94
61) Styrene	17.991	104	261733	1.05	ppb	93
62) Bromoform	18.117	173	106676	0.81	ppb	92
63) o-xylene	18.024	91	404908	1.11	ppb	91
64) Cumene	18.606	105	528174	1.07	ppb	# 92
66) 1,1,2,2-tetrachloroethane	18.483	83	263961	1.16	ppb	98
67) Propylbenzene	19.180	120	143838	1.05	ppb	# 1
68) 2-Chlorotoluene	19.222	126	130004	1.11	ppb	# 100
69) 4-ethyltoluene	19.357	105	470846m	1.04	ppb	
70) 1,3,5-trimethylbenzene	19.420	105	438772m	1.07	ppb	
71) 1,2,4-trimethylbenzene	19.903	105	392463	1.00	ppb	97
72) 1,3-dichlorobenzene	20.224	146	222127m	1.05	ppb	
73) benzyl chloride	20.302	91	96281m	0.77	ppb	
74) 1,4-dichlorobenzene	20.371	146	205842	1.06	ppb	97
75) 1,2,3-trimethylbenzene	20.419	105	404798	1.03	ppb	96
76) 1,2-dichlorobenzene	20.726	146	214962	1.05	ppb	95
77) 1,2,4-trichlorobenzene	22.854	180	75091	0.98	ppb	94
78) Naphthalene	23.064	128	180972	0.92	ppb	97
79) Hexachloro-1,3-butadiene	23.184	225	194599	1.10	ppb	99

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

TIC: AT121702.D\data.ms



GC/MS VOLATILES-WHOLE AIR

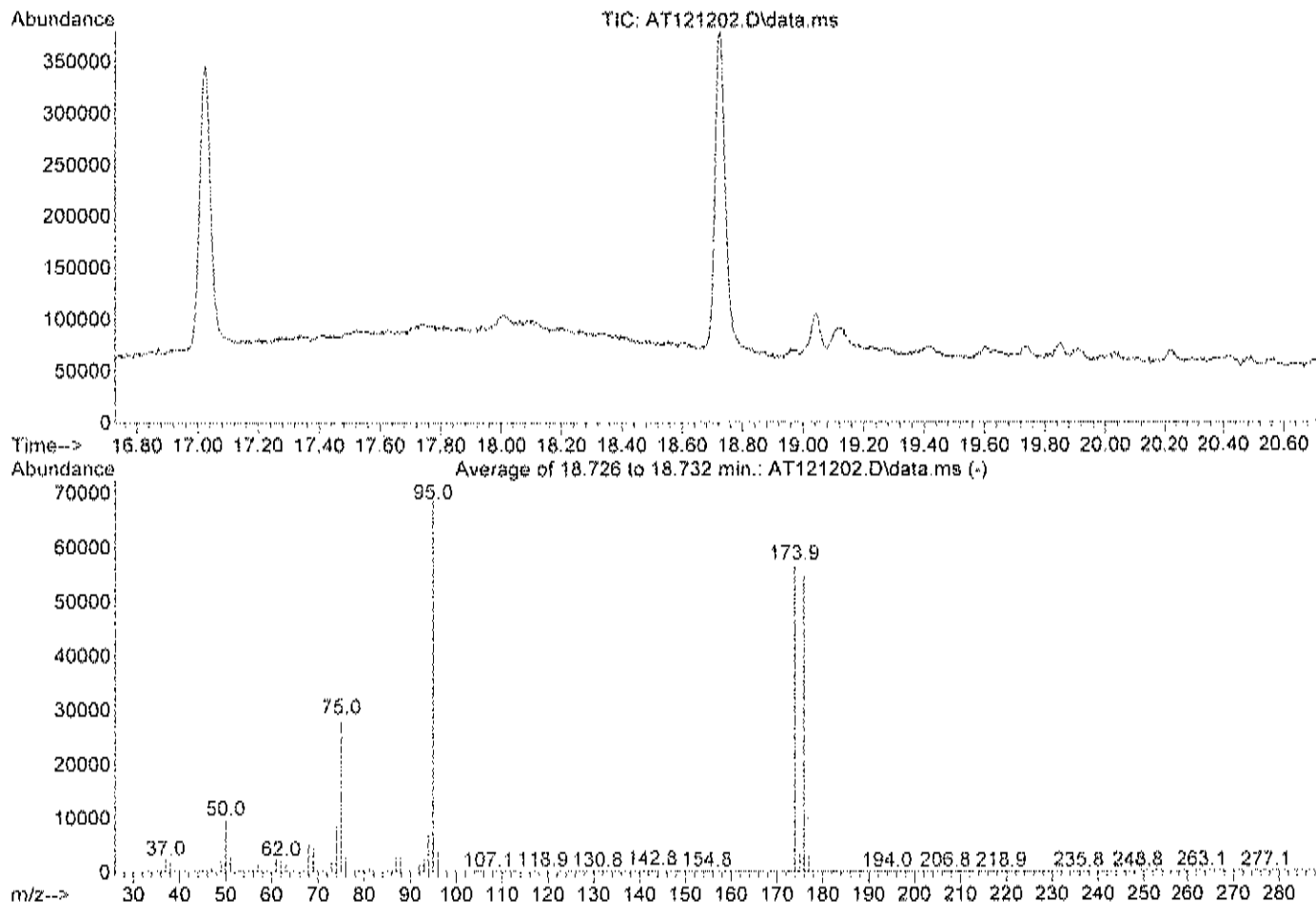
METHOD TO-15

RAW DATA

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121202.D
Acq On : 12 Dec 2022 1:22 pm
Operator :
Sample : BFB1UG
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\AD12_1UG.M
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 09 11:17:40 2023



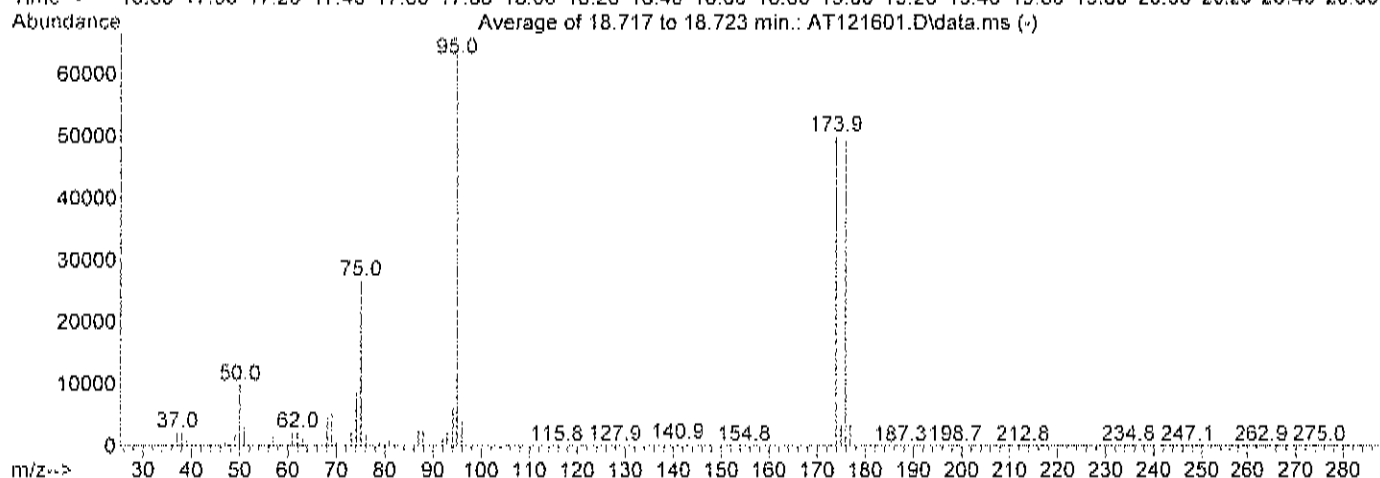
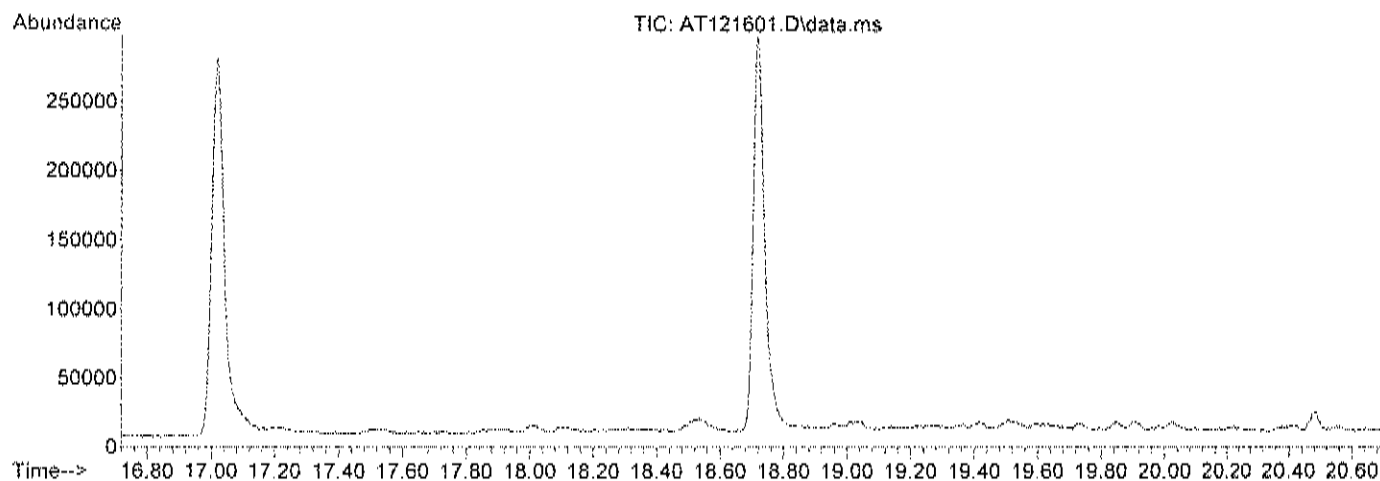
Spectrum Information: Average of 18.726 to 18.732 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.1	9679	PASS
75	95	30	66	41.3	28453	PASS
95	95	100	100	100.0	68883	PASS
96	95	5	9	5.9	4082	PASS
173	174	0.00	2	0.6	316	PASS
174	95	50	120	82.5	56799	PASS
175	174	4	9	6.7	3801	PASS
176	174	95	101	96.6	54848	PASS
177	176	5	9	6.3	3458	PASS

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121601.D
Acq On : 16 Dec 2022 9:25 am
Operator : RJP
Sample : BFB1UG
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\AD12_1UG.M
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 09 11:17:40 2023



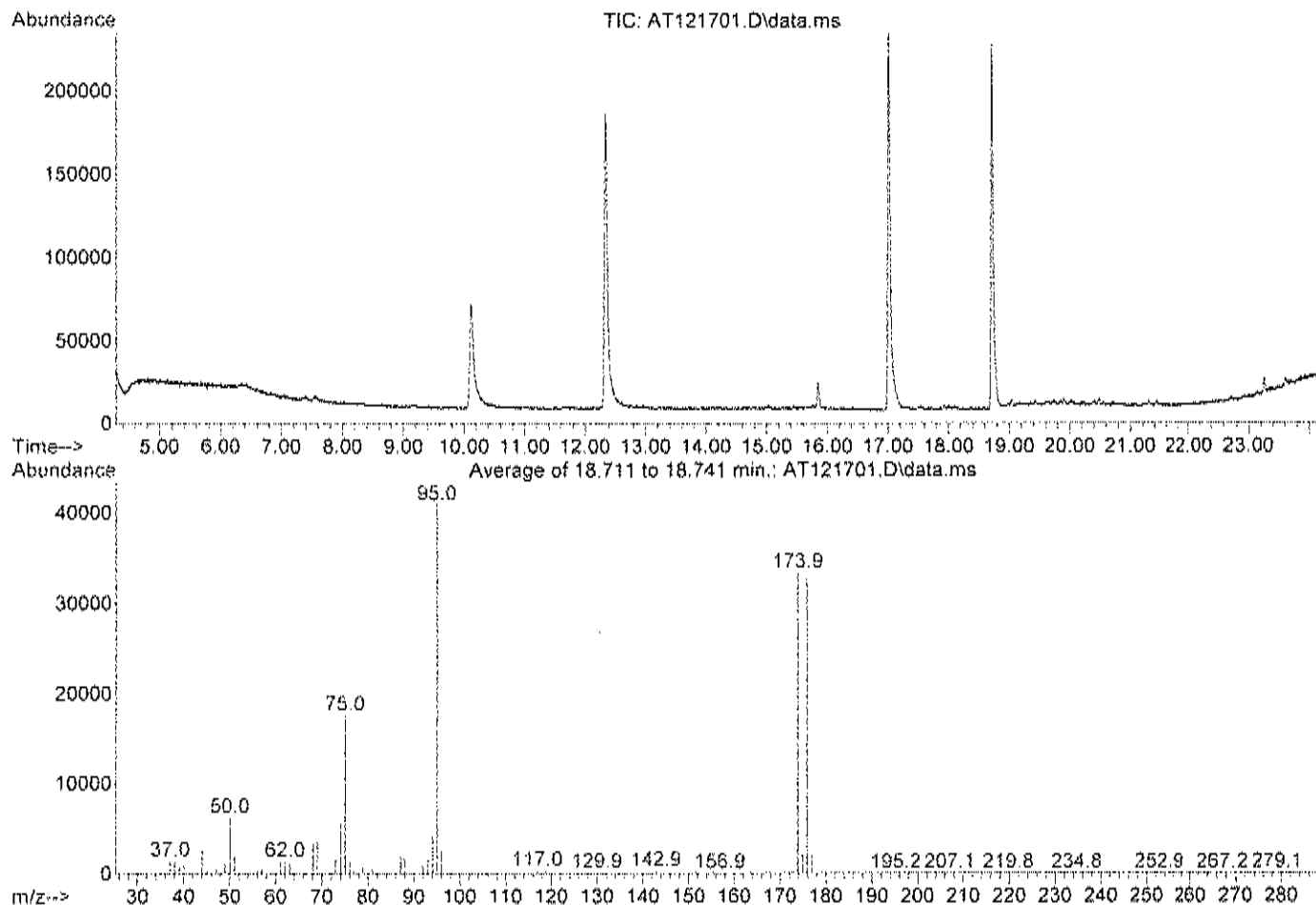
Spectrum Information: Average of 18.717 to 18.723 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.5	9824	PASS
75	95	30	66	42.1	26699	PASS
95	95	100	100	100.0	63356	PASS
96	95	5	9	6.7	4232	PASS
173	174	0.00	2	0.7	334	PASS
174	95	50	120	79.1	50105	PASS
175	174	4	9	6.8	3412	PASS
176	174	95	101	99.0	49611	PASS
177	176	5	9	7.1	3517	PASS

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121701.D
Acq On : 17 Dec 2022 9:41 am
Operator : RJP
Sample : BFB1UG
Misc : AD12_1UG
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\AD12_1UG.M
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 09 11:17:40 2023



Spectrum Information: Average of 18.711 to 18.741 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.0	6211	PASS
75	95	30	66	42.5	17585	PASS
95	95	100	100	100.0	41335	PASS
96	95	5	9	6.5	2678	PASS
173	174	0.00	2	0.5	156	PASS
174	95	50	120	80.7	33339	PASS
175	174	4	9	6.9	2295	PASS
176	174	95	101	98.4	32793	PASS
177	176	5	9	6.3	2064	PASS

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW QC DATA

Date: 09-Jan-23



ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121622	Sample Type: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226490						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	< 0.15	0.15									
1,1,2,2-Tetrachloroethane	< 0.15	0.15									
1,1,2-Trichloroethane	< 0.15	0.15									
1,1-Dichloroethane	< 0.15	0.15									
1,1-Dichloroethene	< 0.040	0.040									
1,2,4-Trichlorobenzene	< 0.15	0.15									
1,2,4-Trimethylbenzene	< 0.15	0.15									
1,2-Dibromoethane	< 0.15	0.15									
1,2-Dichlorobenzene	< 0.15	0.15									
1,2-Dichloroethane	< 0.15	0.15									
1,2-Dichloropropane	< 0.15	0.15									
1,3,5-Trimethylbenzene	< 0.15	0.15									
1,3-butadiene	< 0.15	0.15									
1,3-Dichlorobenzene	< 0.15	0.15									
1,4-Dichlorobenzene	< 0.15	0.15									
1,4-Dioxane	< 0.30	0.30									
2,2,4-trimethylpentane	< 0.15	0.15									
4-ethyltoluene	< 0.15	0.15									
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121622	SampleType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226490						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.030	0.030									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.040	0.040									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Di bromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.15	0.15									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121622	SampleType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226490						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.030	0.030									
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.040	0.040									

Sample ID: AMB1UG-121723	SampleType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:	H	R	.	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
	H			Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
	R			RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMB1UG-121723	SampType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.030	0.030									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.040	0.040									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Dibromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.15	0.15									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: AMBTUG-121723	SampleType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									
Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.030	0.030									
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.040	0.040									

Qualifiers:	Results reported are not blank corrected	D1	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121604.D
Acq On : 16 Dec 2022 11:36 am
Operator : RJP
Sample : AMB1UG-121622
Misc : AD12_1UG
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 17 08:40:22 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.123	128	51842	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	322690	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	251214	1.00	ppb	0.00

System Monitoring Compounds

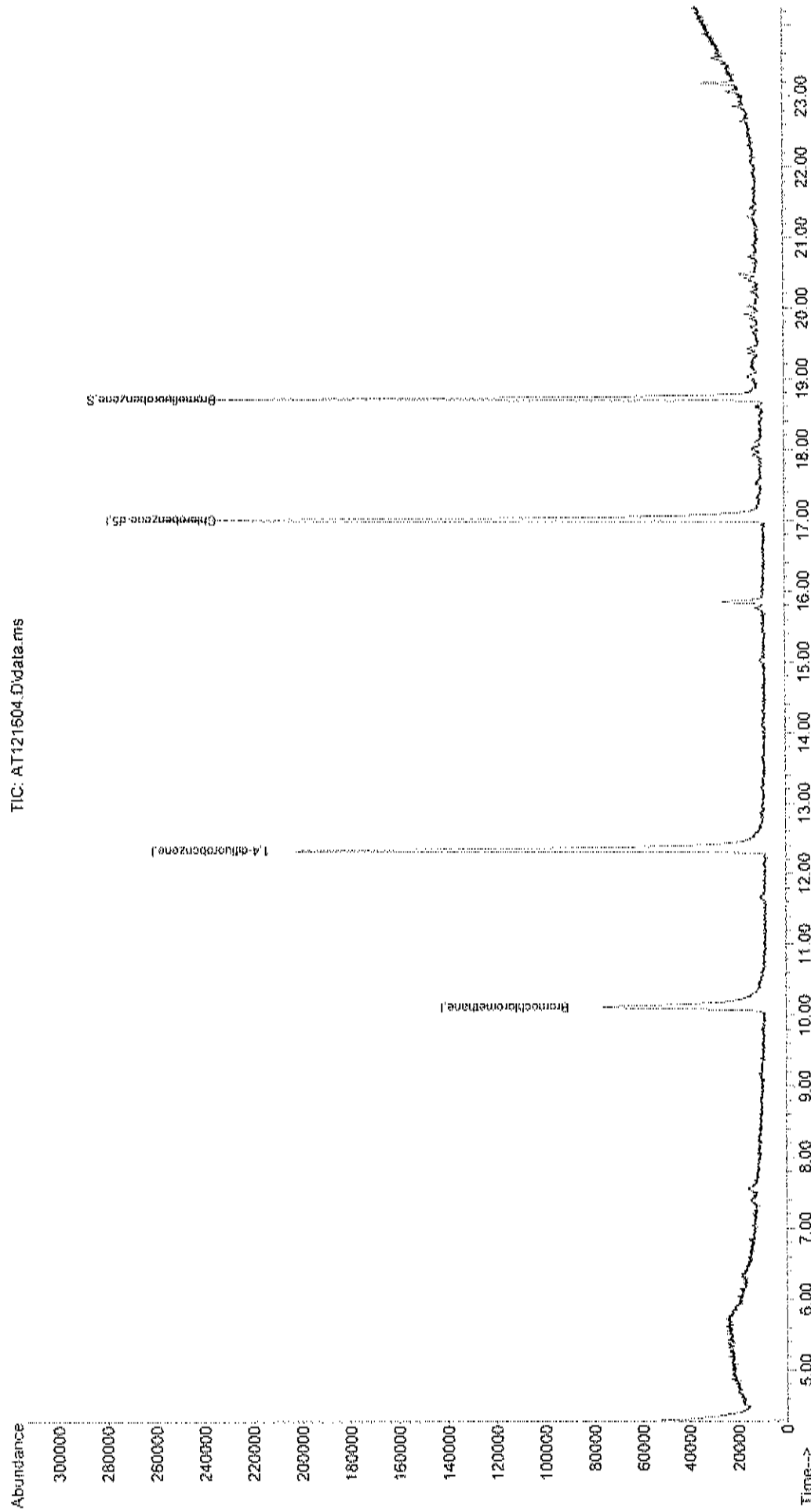
65) Bromofluorobenzene	18.723	95	151069	0.89	ppb	-0.05
Spiked Amount	1.000	Range	70 - 130	Recovery	=	89.00%

Target Compounds	Qvalue

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121604.D
Acq On : 16 Dec 2022 11:36 am
Operator : RJP
Sample : AMB1UG-121622
Misc : AD12_1UG
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 17 08:40:22 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121704.D
Acq On : 17 Dec 2022 12:01 pm
Operator : RJP
Sample : AMB1UG-121723
Misc : AD12_1UG
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 18 10:32:40 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.123	128	47454	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	284817	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	220179	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.768	95	128792	0.87	ppb	0.00
Spiked Amount	1.000	Range	70 ~ 130	Recovery	=	87.00%

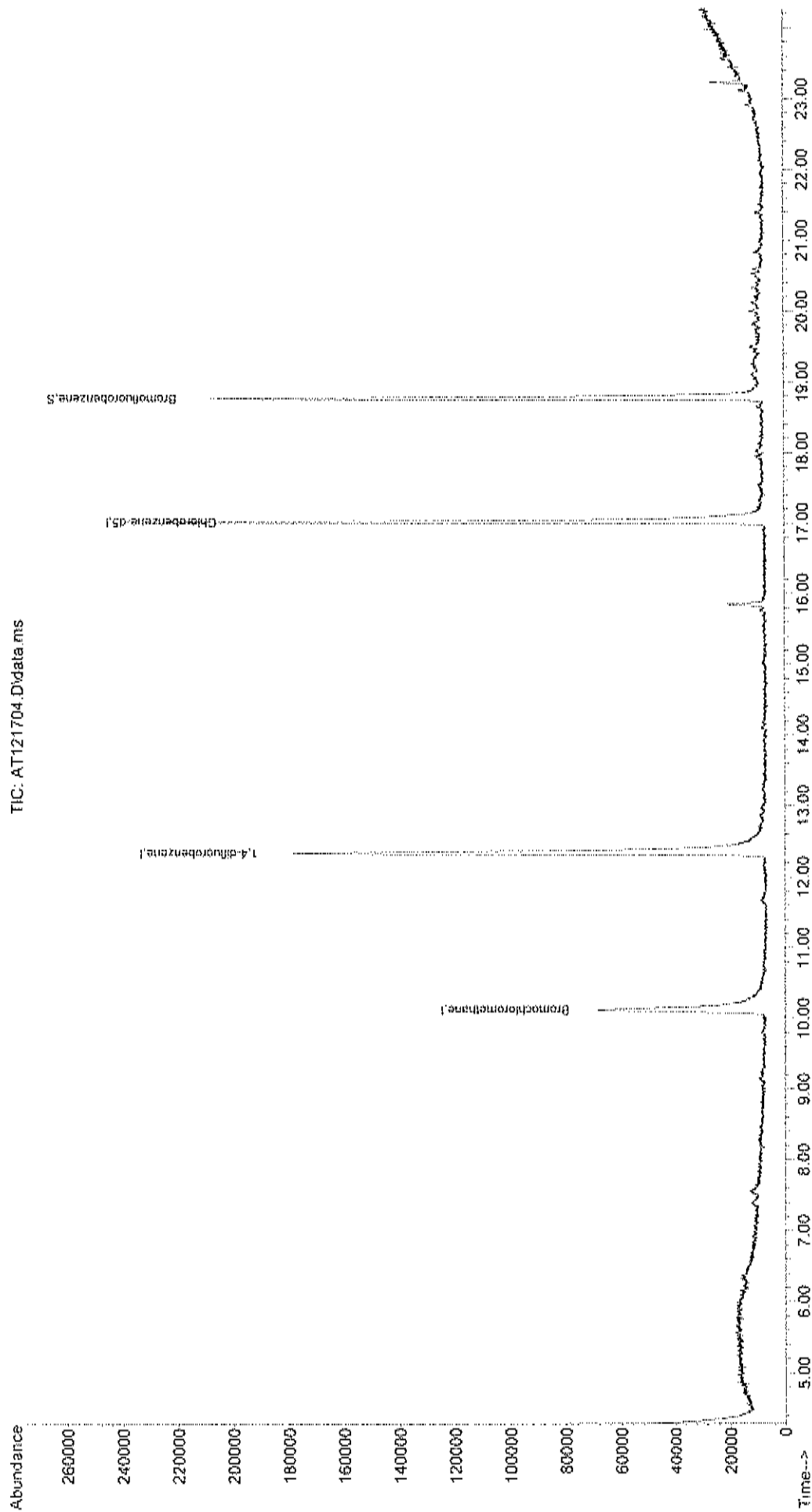
Target Compounds

Qvalue

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121704.D
Acq On : 17 Dec 2022 12:01 pm
Operator : RJP
Sample : AMB1UG-121723
Misc : AD12_1UG
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 18 10:32:40 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Date: 09-Jan-23



ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121622	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.050	0.15	1	0	105	63.7	152				
1,1,2,2-Tetrachloroethane	1.120	0.15	1	0	112	62.1	132				
1,1,2-Trichloroethane	1.100	0.15	1	0	110	64.3	132				
1,1-Dichloroethane	1.140	0.15	1	0	114	67.9	123				
1,1-Dichloroethene	1.060	0.040	1	0	106	59.4	122				
1,2,4-Trichlorobenzene	1.060	0.15	1	0	106	55	133				
1,2,4-Trimethylbenzene	1.020	0.15	1	0	102	64.1	128				
1,2-Dibromoethane	1.060	0.15	1	0	106	64.9	134				
1,2-Dichlorobenzene	1.060	0.15	1	0	106	57.8	158				
1,2-Dichloroethane	1.140	0.15	1	0	114	78.8	127				
1,2-Dichloropropane	1.150	0.15	1	0	115	59.9	128				
1,3,5-Trimethylbenzene	1.090	0.15	1	0	109	70	133				
1,3-butadiene	0.9400	0.15	1	0	94.0	71.1	138				
1,3-Dichlorobenzene	1.060	0.15	1	0	106	66.2	137				
1,4-Dichlorobenzene	1.060	0.15	1	0	106	68.2	139				
1,4-Dioxane	1.010	0.30	1	0	101	67.7	119				
2,2,4-trimethylpentane	1.140	0.15	1	0	114	57	127				
4-ethyltoluene	1.050	0.15	1	0	105	67.9	131				
Acetone	1.160	0.30	1	0	116	47.6	146				
Allyl chloride	1.010	0.15	1	0	101	56.1	116				
Benzene	1.120	0.15	1	0	112	66.2	126				
Benzyl chloride	0.5100	0.15	1	0	51.0	34.9	155				
Bromodichloromethane	1.020	0.15	1	0	102	69.6	133				
Bromoform	0.7800	0.15	1	0	78.0	44.1	152				
Bromomethane	1.100	0.15	1	0	110	64.9	155				

Qualifiers:	H	R	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
			Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
			RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121622		SampleType: LCS	TestCode: 0.20_NYS		Units: ppbV	Prep Date:		RunNo: 19808			
Client ID: ZZZZZ		Batch ID: R19808	TestNo: TO-15			Analysis Date: 12/16/2022		SeqNo: 226491			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	1.020	0.15	1	0	102	64	111				
Carbon tetrachloride	1.030	0.030	1	0	103	41.3	166				
Chlorobenzene	1.080	0.15	1	0	108	66.3	129				
Chloroethane	1.130	0.15	1	0	113	62.7	148				
Chloroform	1.140	0.15	1	0	114	77.1	126				
Chloromethane	1.060	0.15	1	0	106	74.9	146				
cis-1,2-Dichloroethene	0.9600	0.040	1	0	96.0	57.7	131				
cis-1,3-Dichloropropene	0.9200	0.15	1	0	92.0	57.4	136				
Cyclohexane	1.110	0.15	1	0	111	59.8	124				
Dibromochloromethane	0.8200	0.15	1	0	82.0	58.8	139				
Ethyl acetate	1.060	0.15	1	0	106	56.5	129				
Ethylbenzene	1.080	0.15	1	0	108	66.8	125				
Freon 11	1.130	0.15	1	0	113	75.5	146				
Freon 113	1.130	0.15	1	0	113	71.5	128				
Freon 114	1.150	0.15	1	0	115	71.3	151				
Freon 12	1.160	0.15	1	0	116	73	141				
Heptane	1.130	0.15	1	0	113	64.1	120				
Hexachloro-1,3-butadiene	1.050	0.15	1	0	105	67.9	135				
Hexane	1.150	0.15	1	0	115	57.3	125				
Isopropyl alcohol	1.030	0.15	1	0	103	60.3	139				
m&p-Xylene	2.130	0.30	2	0	106	71	127				
Methyl Butyl Ketone	1.070	0.30	1	0	107	42.5	149				
Methyl Ethyl Ketone	1.090	0.30	1	0	109	56	131				
Methyl Isobutyl Ketone	1.090	0.30	1	0	109	50.8	133				
Methyl tert-butyl ether	1.080	0.15	1	0	108	61.2	130				
Methylene chloride	1.080	0.15	1	0	108	58.2	125				
o-Xylene	1.070	0.15	1	0	107	72.4	129				
Propylene	1.140	0.15	1	0	114	45.7	127				
Styrene	1.040	0.15	1	0	104	67	132				
Tetrachloroethylene	1.060	0.15	1	0	106	65.6	133				
Tetrahydrofuran	1.000	0.15	1	0	100	54.4	120				

Qualifiers: . Results reported are not blank corrected
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

DL: Detection Limit
J Analyte detected below quantitation limit
S Spike Recovery outside accepted recovery limits

E: Estimated Value above quantitation range
ND Not Detected at the Limit of Detection

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121622	SampleType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Toluene	1.070	0.15	1	0	107	62.5	128				
trans-1,2-Dichloroethene	1.100	0.15	1	0	110	63.6	126				
trans-1,3-Dichloropropene	0.8300	0.15	1	0	83.0	41	155				
Trichloroethene	1.080	0.030	1	0	108	54.2	140				
Vinyl acetate	1.020	0.15	1	0	102	49	122				
Vinyl Bromide	1.090	0.15	1	0	109	65.8	150				
Vinyl chloride	1.120	0.040	1	0	112	62.7	146				

Sample ID: ALCS1UG-121722	SampleType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226516						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	1.110	0.15	1	0	111	63.7	152				
1,1,2,2-Tetrachloroethane	1.190	0.15	1	0	119	62.1	132				
1,1,2-Trichloroethane	1.170	0.15	1	0	117	64.3	132				
1,1-Dichloroethane	1.140	0.15	1	0	114	67.9	123				
1,1-Dichloroethene	1.130	0.040	1	0	113	59.4	122				
1,2,4-Trichlorobenzene	1.040	0.15	1	0	104	55	133				
1,2,4-Trimethylbenzene	1.020	0.15	1	0	102	64.1	128				
1,2-Dibromoethane	1.120	0.15	1	0	112	64.9	134				
1,2-Dichlorobenzene	1.100	0.15	1	0	110	57.8	158				
1,2-Dichloroethane	1.160	0.15	1	0	116	78.8	127				
1,2-Dichloropropane	1.180	0.15	1	0	118	59.9	128				
1,3,5-Trimethylbenzene	1.100	0.15	1	0	110	70	133				
1,3-butadiene	0.9500	0.15	1	0	95.0	71.1	138				
1,3-Dichlorobenzene	1.090	0.15	1	0	109	66.2	137				
1,4-Dichlorobenzene	1.110	0.15	1	0	111	68.2	139				
1,4-Dioxane	1.050	0.30	1	0	105	67.7	119				
2,2,4-trimethylpentane	1.150	0.15	1	0	115	57	127				
4-ethyltoluene	1.060	0.15	1	0	106	67.9	131				

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantification limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121722	SampType: LCS	TestCode: 0.20_NYS	Units: ppbv	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226516						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	1.090	0.30	1	0	109	47.6	146				
Allyl chloride	0.9200	0.15	1	0	92.0	56.1	116				
Benzene	1.170	0.15	1	0	117	66.2	126				
Benzyl chloride	0.8800	0.15	1	0	88.0	34.9	155				
Bromodichloromethane	1.050	0.15	1	0	105	69.6	133				
Bromoform	0.7600	0.15	1	0	76.0	44.1	152				
Bromomethane	1.140	0.15	1	0	114	64.9	155				
Carbon disulfide	1.010	0.15	1	0	101	64	111				
Carbon tetrachloride	1.070	0.030	1	0	107	41.3	166				
Chlorobenzene	1.120	0.15	1	0	112	66.3	129				
Chloroethane	1.150	0.15	1	0	115	62.7	148				
Chloroform	1.170	0.15	1	0	117	77.1	126				
Chloromethane	1.170	0.15	1	0	117	74.9	146				
cis-1,2-Dichloroethene	1.130	0.040	1	0	113	57.7	131				
cis-1,3-Dichloropropene	0.8800	0.15	1	0	88.0	57.4	136				
Cyclohexane	1.110	0.15	1	0	111	59.8	124				
Dibromochloromethane	0.8400	0.15	1	0	84.0	58.8	139				
Ethyl acetate	1.030	0.15	1	0	103	56.5	129				
Ethylbenzene	1.100	0.15	1	0	110	66.8	125				
Freon 11	1.230	0.15	1	0	123	75.5	146				
Freon 113	1.170	0.15	1	0	117	71.5	128				
Freon 114	1.210	0.15	1	0	121	71.3	151				
Freon 12	1.230	0.15	1	0	123	73	141				
Heptane	1.110	0.15	1	0	111	64.1	120				
Hexachloro-1,3-butadiene	1.100	0.15	1	0	110	67.9	135				
Hexane	1.110	0.15	1	0	111	57.3	125				
Isopropyl alcohol	0.9000	0.15	1	0	90.0	60.3	139				
m&p-Xylene	2.190	0.30	2	0	110	71	127				
Methyl Butyl Ketone	1.070	0.30	1	0	107	42.5	149				
Methyl Ethyl Ketone	1.090	0.30	1	0	109	56	131				
Methyl Isobutyl Ketone	1.090	0.30	1	0	109	50.8	133				

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UG-121722		SampType: LCS		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19809			
Client ID: ZZZZZ		Batch ID: R19809		TestNo: TO-15		Analysis Date: 12/17/2022						SeqNo: 226516	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Methyl tert-butyl ether	1.050	0.15	1	0	105	61.2	130						
Methylene chloride	1.080	0.15	1	0	108	58.2	125						
o-Xylene	1.110	0.15	1	0	111	72.4	129						
Propylene	1.110	0.15	1	0	111	45.7	127						
Styrene	1.060	0.15	1	0	106	67	132						
Tetrachloroethylene	1.140	0.15	1	0	114	65.6	133						
Tetrahydrofuran	1.040	0.15	1	0	104	54.4	120						
Toluene	1.100	0.15	1	0	110	62.5	128						
trans-1,2-Dichloroethene	1.100	0.15	1	0	110	63.6	126						
trans-1,3-Dichloropropene	0.7500	0.15	1	0	75.0	41	155						
Trichloroethene	1.140	0.030	1	0	114	54.2	140						
Vinyl acetate	0.9500	0.15	1	0	95.0	49	122						
Vinyl Bromide	1.170	0.15	1	0	117	65.8	150						
Vinyl chloride	1.100	0.040	1	0	110	62.7	146						

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121603.D
 Acq On : 16 Dec 2022 10:57 am
 Operator : RJP
 Sample : ALCS1UG-121622
 Misc : AD12_1UG
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 17 08:40:20 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.117	128	53207	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.341	114	339284	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	282178	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	191786	1.01	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	101.00%
Target Compounds						
						Qvalue
2) Propylene	4.413	41	66195	1.14	ppb	96
3) Freon 12	4.476	85	206135	1.16	ppb	97
4) Chloromethane	4.674	50	61695	1.06	ppb	88
5) Freon 114	4.677	85	171430	1.15	ppb	92
6) Vinyl Chloride	4.881	62	62568	1.12	ppb	94
7) Butane	4.995	43	70072	1.04	ppb	91
8) 1,3-butadiene	4.995	39	48923	0.94	ppb	97
9) Bromomethane	5.358	94	58061	1.10	ppb	99
10) Chloroethane	5.527	64	29734	1.13	ppb	94
11) Ethanol	5.626	48	12375	1.02	ppb	# 75
12) Acrolein	6.217	56	14423	0.89	ppb	# 76
13) Vinyl Bromide	5.878	106	55184	1.09	ppb	98
14) Freon 11	6.160	101	167044	1.13	ppb	99
15) Acetone	6.328	58	32475	1.16	ppb	# 1
16) Pentane	6.439	42	54370	1.09	ppb	# 63
17) Isopropyl alcohol	6.424	45	88559	1.03	ppb	# 1
18) 1,1-dichloroethene	6.929	96	80361	1.06	ppb	88
19) Freon 113	7.130	101	182273	1.13	ppb	94
20) t-Butyl alcohol	7.142	59	168202	1.05	ppb	97
21) Methylene chloride	7.400	84	78397	1.08	ppb	94
22) Allyl chloride	7.376	41	85215	1.01	ppb	92
23) Carbon disulfide	7.553	76	214349	1.02	ppb	99
24) trans-1,2-dichloroethene	8.321	61	117616	1.10	ppb	85
25) methyl tert-butyl ether	8.339	73	264611	1.08	ppb	100
26) 1,1-dichloroethane	8.751	63	165551	1.14	ppb	94
27) Vinyl acetate	8.727	43	116061	1.02	ppb	95
28) Methyl Ethyl Ketone	9.222	72	47612	1.09	ppb	# 1
29) cis-1,2-dichloroethene	9.681	61	109918m	0.96	ppb	
30) Hexane	9.285	57	174318	1.15	ppb	# 78
31) Ethyl acetate	9.816	43	227574	1.06	ppb	# 81
32) Chloroform	10.282	83	186754	1.14	ppb	97
33) Tetrahydrofuran	10.441	42	85898	1.00	ppb	88
34) 1,2-dichloroethane	11.368	62	109371	1.14	ppb	95
36) 1,1,1-trichloroethane	11.092	97	167356	1.05	ppb	97
37) Cyclohexane	11.780	56	171720	1.11	ppb	# 51
38) Carbon tetrachloride	11.723	117	155399	1.03	ppb	99
39) Benzene	11.684	78	337459	1.12	ppb	94
40) Methyl methacrylate	13.185	41	115639	1.04	ppb	# 64
41) 1,4-dioxane	13.209	88	76786	1.01	ppb	79
42) 2,2,4-trimethylpentane	12.509	57	541840	1.14	ppb	85
43) Heptane	12.842	43	182326	1.13	ppb	91
44) Trichloroethene	12.971	130	140849	1.08	ppb	93

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121603.D
 Acq On : 16 Dec 2022 10:57 am
 Operator : RJP
 Sample : ALCS1UG-121622
 Misc : AD12_1UG
 ALS Vial : 3 Sample Multiplier: 1

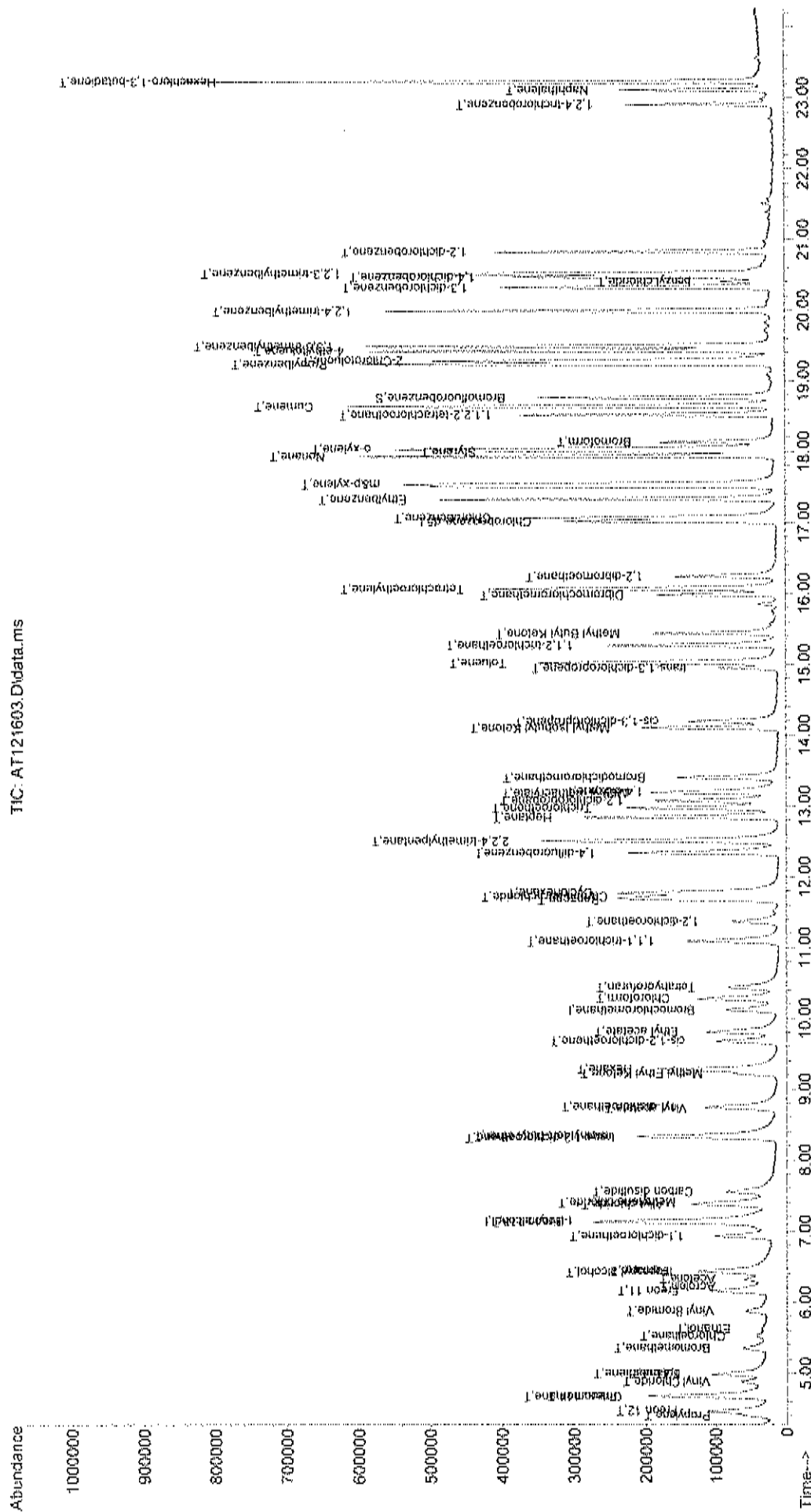
Quant Time: Dec 17 08:40:20 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.080	63	125476	1.15	ppb	98
46) Bromodichloromethane	13.407	83	168637	1.02	ppb	99
47) cis-1,3-dichloropropene	14.196	75	129558	0.92	ppb	91
48) trans-1,3-dichloropropene	14.950	75	90446	0.83	ppb	100
49) 1,1,2-trichloroethane	15.271	97	131304	1.10	ppb	97
51) Toluene	15.025	92	242273	1.07	ppb	98
52) Methyl Isobutyl Ketone	14.106	43	221620	1.09	ppb	84
53) Dibromochloromethane	15.982	129	145848m	0.82	ppb	
54) Methyl Butyl Ketone	15.433	43	189267	1.07	ppb	82
55) 1,2-dibromoethane	16.241	107	175317	1.06	ppb	93
56) Tetrachloroethylene	16.070	164	147551	1.06	ppb	90
57) Chlorobenzene	17.072	112	312706	1.08	ppb	97
58) Ethylbenzene	17.333	91	523360	1.08	ppb	97
59) m&p-xylene	17.546	91	791364	2.13	ppb	86
60) Nonane	17.940	43	269419	1.08	ppb	94
61) Styrene	18.006	104	297875	1.04	ppb	92
62) Bromoform	18.141	173	119120	0.78	ppb	91
63) o-xylene	18.042	91	447031	1.07	ppb	92
64) Cumene	18.645	105	596825	1.05	ppb	# 92
66) 1,1,2,2-tetrachloroethane	18.525	83	292508	1.12	ppb	98
67) Propylbenzene	19.243	120	161587	1.03	ppb	# 1
68) 2-Chlorotoluene	19.291	126	143517	1.06	ppb	# 100
69) 4-ethyltoluene	19.429	105	542743m	1.05	ppb	
70) 1,3,5-trimethylbenzene	19.495	105	513721m	1.09	ppb	
71) 1,2,4-trimethylbenzene	19.993	105	460198	1.02	ppb	98
72) 1,3-dichlorobenzene	20.323	146	258573	1.06	ppb	98
73) benzyl chloride	20.404	91	72973	0.51	ppb	78
74) 1,4-dichlorobenzene	20.473	146	236905	1.06	ppb	98
75) 1,2,3-trimethylbenzene	20.521	105	469738	1.04	ppb	95
76) 1,2-dichlorobenzene	20.831	146	249520	1.06	ppb	96
77) 1,2,4-trichlorobenzene	22.905	180	93774	1.06	ppb	95
78) Naphthalene	23.112	128	243800	1.07	ppb	95
79) Hexachloro-1,3-butadiene	23.226	225	211928	1.05	ppb	99

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121603.D
Acq On : 16 Dec 2022 10:57 am
Operator : RJP
Sample : ALCS1UG-121622
Misc : AD12_1UG
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 17 08:40:20 2022
Quant Method : C:\msdchem\1\methods\AD12_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121703.D
 Acq On : 17 Dec 2022 11:22 am
 Operator : RJP
 Sample : ALCS1UG-121722
 Misc : AD12_1UG
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 10:32:28 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.114	128	49116	1.00	ppb	#-0.01
35) 1,4-difluorobenzene	12.341	114	298802	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	247365	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	167598	1.00	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	= 100.00%	
Target Compounds						
						Qvalue
2) Propylene	4.413	41	59295	1.11	ppb	100
3) Freon 12	4.464	85	202382	1.23	ppb	97
4) Chloromethane	4.680	50	62652	1.17	ppb	97
5) Freon 114	4.674	85	166470	1.21	ppb	92
6) Vinyl Chloride	4.878	62	56796	1.10	ppb	89
7) Butane	4.986	43	65013	1.05	ppb	95
8) 1,3-butadiene	4.983	39	45686	0.95	ppb	98
9) Bromomethane	5.352	94	55154	1.14	ppb	95
10) Chloroethane	5.527	64	27990	1.15	ppb	90
11) Ethanol	5.614	45	9913	0.89	ppb	# 65
12) Acrolein	6.211	56	12807	0.85	ppb	# 76
13) Vinyl Bromide	5.878	106	54424	1.17	ppb	98
14) Freon 11	6.154	101	167910	1.23	ppb	100
15) Acetone	6.310	58	28058	1.09	ppb	# 1
16) Pentane	6.427	42	45605	0.99	ppb	# 58
17) Isopropyl alcohol	6.415	45	70829	0.90	ppb	# 1
18) 1,1-dichloroethene	6.919	96	79028	1.13	ppb	# 83
19) Freon 113	7.127	101	174998	1.17	ppb	94
20) t-Butyl alcohol	7.142	59	150930	1.02	ppb	98
21) Methylene chloride	7.385	84	72330	1.08	ppb	92
22) Allyl chloride	7.364	41	72008	0.92	ppb	85
23) Carbon disulfide	7.553	76	196670	1.01	ppb	99
24) trans-1,2-dichloroethene	8.318	61	108767	1.10	ppb	86
25) methyl tert-butyl ether	8.324	73	236593	1.05	ppb	99
26) 1,1-dichloroethane	8.745	63	153480	1.14	ppb	96
27) Vinyl acetate	8.721	43	99745	0.95	ppb	90
28) Methyl Ethyl Ketone	9.219	72	43951	1.09	ppb	# 1
29) cis-1,2-dichloroethene	9.672	61	120050	1.13	ppb	96
30) Hexane	9.282	57	155765	1.11	ppb	# 77
31) Ethyl acetate	9.807	43	204547	1.03	ppb	# 81
32) Chloroform	10.273	83	177681	1.17	ppb	97
33) Tetrahydrofuran	10.438	42	82175	1.04	ppb	90
34) 1,2-dichloroethane	11.365	62	103254	1.16	ppb	97
36) 1,1,1-trichloroethane	11.089	97	154652	1.11	ppb	97
37) Cyclohexane	11.771	56	151067	1.11	ppb	# 50
38) Carbon tetrachloride	11.714	117	141998	1.07	ppb	98
39) Benzene	11.687	78	309768	1.17	ppb	93
40) Methyl methacrylate	13.185	41	100013	1.03	ppb	# 62
41) 1,4-dioxane	13.209	88	69937	1.05	ppb	80
42) 2,2,4-trimethylpentane	12.509	57	480410	1.15	ppb	86
43) Heptane	12.842	43	157040	1.11	ppb	92
44) Trichloroethene	12.971	130	130526	1.14	ppb	94

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121703.D
 Acq On : 17 Dec 2022 11:22 am
 Operator : RJP
 Sample : ALCS1UG-121722
 Misc : AD12_1UG
 ALS Vial : 1 Sample Multiplier: 1

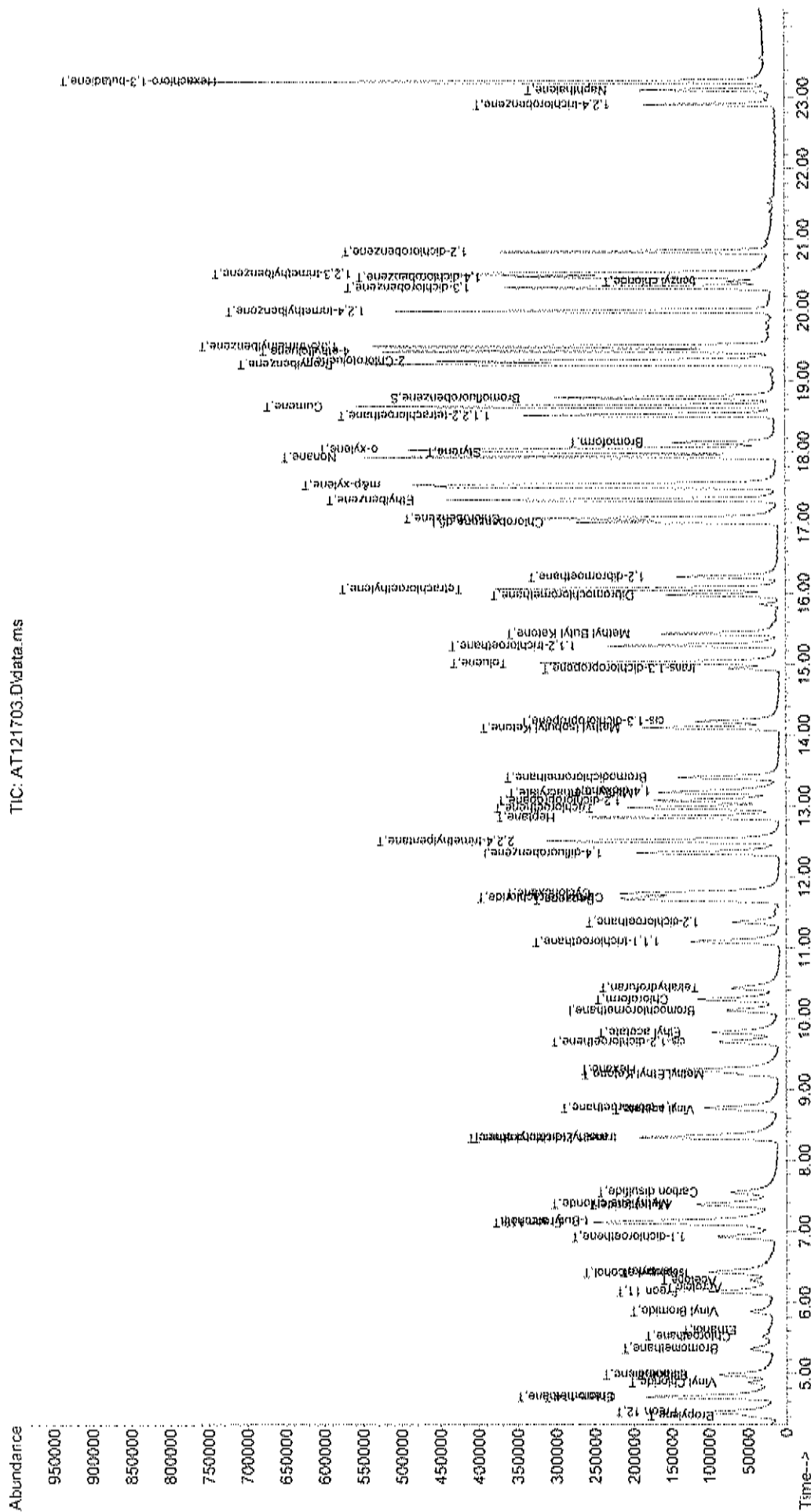
Quant Time: Dec 18 10:32:28 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.076	63	114237	1.18	ppb	99
46) Bromodichloromethane	13.404	83	152707	1.05	ppb	99
47) cis-1,3-dichloropropene	14.199	75	109188	0.88	ppb	92
48) trans-1,3-dichloropropene	14.947	75	72155	0.75	ppb	98
49) 1,1,2-trichloroethane	15.265	97	123787	1.17	ppb	95
51) Toluene	15.025	92	217990	1.10	ppb	98
52) Methyl Isobutyl Ketone	14.109	43	194709	1.09	ppb	84
53) Dibromochloromethane	15.982	129	130647m	0.84	ppb	
54) Methyl Butyl Ketone	15.436	43	165287	1.07	ppb	83
55) 1,2-dibromoethane	16.244	107	162361	1.12	ppb	94
56) Tetrachloroethylene	16.072	164	138238	1.14	ppb	92
57) Chlorobenzene	17.072	112	284779	1.12	ppb	99
58) Ethylbenzene	17.333	91	465164	1.10	ppb	97
59) m&p-xylene	17.543	91	713345	2.19	ppb	87
60) Nonane	17.937	43	236537	1.08	ppb	95
61) Styrene	18.009	104	266000	1.06	ppb	92
62) Bromoform	18.141	173	100933	0.76	ppb	92
63) o-xylene	18.042	91	405683	1.11	ppb	91
64) Cumene	18.648	105	535096	1.07	ppb	# 92
66) 1,1,2,2-tetrachloroethane	18.522	83	272755	1.19	ppb	# 98
67) Propylbenzene	19.246	120	146614	1.06	ppb	# 1
68) 2-Chlorotoluene	19.291	126	128887	1.09	ppb	# 100
69) 4-ethyltoluene	19.429	105	480573m	1.06	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	452713m	1.10	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	402134	1.02	ppb	97
72) 1,3-dichlorobenzene	20.326	146	233096	1.09	ppb	97
73) benzyl chloride	20.410	91	111001m	0.88	ppb	
74) 1,4-dichlorobenzene	20.473	146	217314	1.11	ppb	97
75) 1,2,3-trimethylbenzene	20.521	105	414444	1.05	ppb	94
76) 1,2-dichlorobenzene	20.828	146	226748	1.10	ppb	95
77) 1,2,4-trichlorobenzene	22.902	180	80080	1.04	ppb	96
78) Naphthalene	23.109	128	202786	1.02	ppb	92
79) Hexachloro-1,3-butadiene	23.226	225	194172	1.10	ppb	98

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

Data Path : C:\msdchem\1\data2\2022DEC\
Data File : AT121703.D
Acq On : 17 Dec 2022 11:22 am
Operator : RJP
Sample : ALCS1UG-121722
Misc : AD12 1UG
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 10:32:28 2022
Quant Method : C:\msdchem\1\methods\AD12 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Date: 09-Jan-23



ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121622	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226492						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.070	0.15	1	0	107	64.3	142	1.05	1.89	20.6	
1,1,2,2-Tetrachloroethane	1.170	0.15	1	0	117	57.4	134	1.12	4.37	24.7	
1,1,2-Trichloroethane	1.150	0.15	1	0	115	62.8	133	1.1	4.44	22.5	
1,1-Dichloroethane	1.160	0.15	1	0	116	64.1	123	1.14	1.74	15.9	
1,1-Dichloroethene	1.150	0.040	1	0	115	55	126	1.06	8.14	19.1	
1,2,4-Trichlorobenzene	0.9400	0.15	1	0	94.0	56.6	129	1.06	12.0	34.6	
1,2,4-Trimethylbenzene	1.000	0.15	1	0	100	62.6	127	1.02	1.98	20.4	
1,2-Dibromoethane	1.100	0.15	1	0	110	62.7	134	1.06	3.70	16.3	
1,2-Dichlorobenzene	1.050	0.15	1	0	105	62.3	144	1.06	0.948	25	
1,2-Dichloroethane	1.140	0.15	1	0	114	64.2	134	1.14	0	19.5	
1,2-Dichloropropane	1.160	0.15	1	0	116	55	132	1.15	0.866	24.1	
1,3,5-Trimethylbenzene	1.050	0.15	1	0	105	71.3	133	1.09	3.74	26.9	
1,3-butadiene	0.9500	0.15	1	0	95.0	54.8	148	0.94	1.06	26.4	
1,3-Dichlorobenzene	1.050	0.15	1	0	105	68.1	134	1.06	0.948	19.7	
1,4-Dichlorobenzene	1.040	0.15	1	0	104	67.7	138	1.06	1.90	21.6	
1,4-Dioxane	1.020	0.30	1	0	102	51	144	1.01	0.985	22	
2,2,4-trimethylpentane	1.150	0.15	1	0	115	57.6	125	1.14	0.873	15.7	
4-ethyltoluene	1.020	0.15	1	0	102	67	131	1.05	2.90	26.5	
Acetone	1.230	0.30	1	0	123	50.4	148	1.16	5.86	49.5	
Allyl chloride	0.9200	0.15	1	0	92.0	50.7	120	1.01	9.33	20	
Benzene	1.160	0.15	1	0	116	65.4	124	1.12	3.51	12.8	
Benzyl chloride	0.7800	0.15	1	0	78.0	29.1	153	0.51	41.9	29.3	R
Bromodichloromethane	1.030	0.15	1	0	103	60.4	138	1.02	0.976	24	
Bromoform	0.7200	0.15	1	0	72.0	30.8	160	0.78	8.00	23.7	
Bromomethane	1.160	0.15	1	0	116	55.8	153	1.1	5.31	22.7	

Qualifiers: - Results reported are not blank corrected
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

DL Detection Limit
J Analyte detected below quantitation limit
S Spike Recovery outside accepted recovery limits

E Estimated Value above quantitation range
ND Not Detected at the Limit of Detection

Page 1 of 5

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IEKA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121622			SampType: LCSD		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: ZZZZZ			Batch ID: R19808		TestNo: TO-15				Analysis Date: 12/17/2022		SeqNo: 226492	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Quat	
Carbon disulfide	1.020	0.15	1	0	102	63.4	110	1.02	0	15.4		
Carbon tetrachloride	1.040	0.030	1	0	104	30	170	1.03	0.966	22.3		
Chlorobenzene	1.100	0.15	1	0	110	66.5	126	1.08	1.83	13.1		
Chloroethane	1.220	0.15	1	0	122	55.3	145	1.13	7.66	22.4		
Chloroform	1.160	0.15	1	0	116	68.2	128	1.14	1.74	14.2		
Chloromethane	1.170	0.15	1	0	117	60.2	146	1.06	9.87	20.6		
cis-1,2-Dichloroethene	0.9300	0.040	1	0	93.0	51.8	131	0.96	3.17	15.8		
cis-1,3-Dichloropropene	0.8500	0.15	1	0	85.0	54.7	139	0.92	7.91	20.3		
Cyclohexane	1.130	0.15	1	0	113	61.2	122	1.11	1.79	16.3		
Dibromochloromethane	0.7800	0.15	1	0	78.0	47.8	145	0.82	5.00	20.1		
Ethyl acetate	1.040	0.15	1	0	104	52.8	129	1.06	1.90	18.4		
Ethylbenzene	1.080	0.15	1	0	108	64.5	126	1.08	0	14.4		
Freon 11	1.210	0.15	1	0	121	60.7	152	1.13	6.84	21.8		
Freon 113	1.170	0.15	1	0	117	67.8	129	1.13	3.48	14.3		
Freon 114	1.220	0.15	1	0	122	58.6	153	1.15	5.91	23.2		
Freon 12	1.220	0.15	1	0	122	65.6	143	1.16	5.04	19.7		
Heptane	1.100	0.15	1	0	110	59.4	123	1.13	2.69	21.5		
Hexachloro-1,3-butadiene	1.060	0.15	1	0	106	53	155	1.05	0.948	24.6		
Hexane	1.090	0.15	1	0	109	55.4	123	1.15	5.36	22.5		
Isopropyl alcohol	0.9900	0.15	1	0	99.0	56.6	147	1.03	3.96	49.3		
m&p-Xylene	2.120	0.30	2	0	106	70.3	127	2.13	0.471	17.5		
Methyl Butyl Ketone	1.050	0.30	1	0	105	55.1	123	1.07	1.89	25.7		
Methyl Ethyl Ketone	1.050	0.30	1	0	105	51.5	132	1.09	3.74	18.3		
Methyl Isobutyl Ketone	1.090	0.30	1	0	109	41.6	137	1.09	0	26.8		
Methyl tert-butyl ether	1.040	0.15	1	0	104	52	138	1.08	3.77	21.9		
Methylene chloride	1.110	0.15	1	0	111	55.9	129	1.08	2.74	18.5		
o-Xylene	1.080	0.15	1	0	108	71	130	1.07	0.930	22.2		
Propylene	1.140	0.15	1	0	114	49.2	128	1.14	0	26.8		
Styrene	1.040	0.15	1	0	104	67.9	131	1.04	0	23.3		
Tetrachloroethylene	1.110	0.15	1	0	111	66.2	132	1.06	4.61	13.9		
Tetrahydrofuran	1.050	0.15	1	0	105	47	124	1	4.88	20.2		

Qualifiers:

H	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
R	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
 Work Order: C2212031
 Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121622	SampType: LCSD	TestCode: 0.20_NVS	Units: ppbv	Prep Date:	RunNo: 19808						
Client ID: ZZZZZ	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/17/2022	SeqNo: 226492						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Toluene	1.070	0.15	1	0	107	62.6	126	1.07	0	17.2	
trans-1,2-Dichloroethene	1.080	0.15	1	0	108	60.2	125	1.1	1.83	16.8	
trans-1,3-Dichloropropene	0.7600	0.15	1	0	76.0	34.2	157	0.83	8.81	21.5	
Trichloroethene	1.100	0.030	1	0	110	57.8	133	1.08	1.83	21.8	
Vinyl acetate	0.9400	0.15	1	0	94.0	42.5	127	1.02	8.16	23	
Vinyl Bromide	1.170	0.15	1	0	117	55.1	148	1.09	7.08	22	
Vinyl chloride	1.150	0.040	1	0	115	51.9	146	1.12	2.54	22	

Sample ID: ALCS1UGD-121722	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbv	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/18/2022	SeqNo: 226517						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	1.150	0.15	1	0	115	64.3	142	1.11	3.54	20.6	
1,1,2,2-Tetrachloroethane	1.230	0.15	1	0	123	57.4	134	1.19	3.31	24.7	
1,1,2-Trichloroethane	1.220	0.15	1	0	122	62.8	133	1.17	4.18	22.5	
1,1-Dichloroethane	1.170	0.15	1	0	117	64.1	123	1.14	2.60	15.9	
1,1-Dichloroethene	1.200	0.040	1	0	120	55	126	1.13	6.01	19.1	
1,2,4-Trichlorobenzene	0.9200	0.15	1	0	92.0	56.6	129	1.04	12.2	34.6	
1,2,4-Trimethylbenzene	1.010	0.15	1	0	101	62.6	127	1.02	0.985	20.4	
1,2-Dibromoethane	1.170	0.15	1	0	117	62.7	134	1.12	4.37	16.3	
1,2-Dichlorobenzene	1.070	0.15	1	0	107	62.3	144	1.1	2.76	25	
1,2-Dichloroethane	1.210	0.15	1	0	121	64.2	134	1.16	4.22	19.5	
1,2-Dichloropropane	1.250	0.15	1	0	125	55	132	1.18	5.76	24.1	
1,3,5-Trimethylbenzene	1.120	0.15	1	0	112	71.3	133	1.1	1.80	26.9	
1,3-butadiene	0.9400	0.15	1	0	94.0	54.8	148	0.95	1.06	26.4	
1,3-Dichlorobenzene	1.090	0.15	1	0	109	68.1	134	1.09	0	19.7	
1,4-Dichlorobenzene	1.040	0.15	1	0	104	67.7	138	1.11	6.51	21.6	
1,4-Dioxane	1.030	0.30	1	0	103	51	144	1.05	1.92	22	
2,2,4-trimethylpentane	1.180	0.15	1	0	118	57.6	125	1.15	2.58	15.7	
4-ethyltoluene	1.070	0.15	1	0	107	67	131	1.06	0.939	26.5	

Qualifiers:	H	R	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
			Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
			RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121722		SampType: LCSD		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 19809	
Client ID: ZZZZZ		Batch ID: R19809		TestNo: TO-15		Analysis Date: 12/18/2022		SeqNo: 226517			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HightLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	1.280	0.30	1	0	128	50.4	148	1.09	16.0	49.5	
Allyl chloride	0.9700	0.15	1	0	97.0	50.7	120	0.92	5.29	20	
Benzene	1.230	0.15	1	0	123	65.4	124	1.17	5.00	12.8	
Benzyl chloride	0.7700	0.15	1	0	77.0	29.1	153	0.88	13.3	29.3	
Bromodichloromethane	1.140	0.15	1	0	114	60.4	138	1.05	8.22	24	
Bromoform	0.8500	0.15	1	0	85.0	30.8	160	0.76	11.2	23.7	
Bromomethane	1.210	0.15	1	0	121	55.8	153	1.14	5.96	22.7	
Carbon disulfide	1.020	0.15	1	0	102	63.4	110	1.01	0.985	15.4	
Carbon tetrachloride	1.140	0.30	1	0	114	30	170	1.07	6.33	22.3	
Chlorobenzene	1.140	0.15	1	0	114	66.5	126	1.12	1.77	13.1	
Chloroethane	1.180	0.15	1	0	118	55.3	145	1.15	2.58	22.4	
Chloroform	1.200	0.15	1	0	120	68.2	128	1.17	2.53	14.2	
Chloromethane	1.180	0.15	1	0	118	60.2	146	1.17	0.851	20.6	
cis-1,2-Dichloroethene	1.200	0.40	1	0	120	51.8	131	1.13	6.01	15.8	
cis-1,3-Dichloropropene	0.8900	0.15	1	0	89.0	54.7	139	0.88	1.13	20.3	
Cyclohexane	1.130	0.15	1	0	113	61.2	122	1.11	1.79	16.3	
Dibromochloromethane	0.8900	0.15	1	0	89.0	47.8	145	0.84	5.78	20.1	
Ethyl acetate	1.030	0.15	1	0	103	52.8	129	1.03	0	18.4	
Ethylbenzene	1.110	0.15	1	0	111	64.5	126	1.1	0.905	14.4	
Freon 11	1.180	0.15	1	0	118	60.7	152	1.23	4.15	21.8	
Freon 113	1.250	0.15	1	0	125	67.8	129	1.17	5.61	14.3	
Freon 114	1.240	0.15	1	0	124	58.6	153	1.21	2.45	23.2	
Freon 12	1.290	0.15	1	0	129	65.6	143	1.23	4.76	19.7	
Heptane	1.140	0.15	1	0	114	59.4	123	1.11	2.67	21.5	
Hexachloro-1,3-butadiene	1.140	0.15	1	0	114	53	155	1.1	3.57	24.6	
Hexane	1.090	0.15	1	0	109	55.4	123	1.11	1.82	22.5	
Isopropyl alcohol	1.190	0.15	1	0	119	56.6	147	0.9	27.8	49.3	
m&p-Xylene	2.230	0.30	2	0	112	70.3	127	2.19	1.81	17.5	
Methyl Butyl Ketone	1.050	0.30	1	0	105	55.1	123	1.07	1.89	25.7	
Methyl Ethyl Ketone	1.060	0.30	1	0	106	51.5	132	1.09	2.79	18.3	
Methyl Isobutyl Ketone	1.110	0.30	1	0	111	41.6	137	1.09	1.82	26.8	

Qualifiers:

H	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
R	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
 Work Order: C2212031
 Project: IKEA Red Hook

TestCode: 0.20_NYS

Sample ID: ALCS1UGD-121722	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 19809						
Client ID: ZZZZZ	Batch ID: R19809	TestNo: TO-15		Analysis Date: 12/18/2022	SeqNo: 226517						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	1.030	0.15	1	0	103	52	138	1.05	1.92	21.9	
Methylene chloride	1.140	0.15	1	0	114	55.9	129	1.08	5.41	18.5	
o-Xylene	1.140	0.15	1	0	114	71	130	1.11	2.67	22.2	
Propylene	1.100	0.15	1	0	110	49.2	128	1.11	0.905	26.8	
Styrene	1.070	0.15	1	0	107	67.9	131	1.06	0.939	23.3	
Tetrachloroethylene	1.170	0.15	1	0	117	66.2	132	1.14	2.60	13.9	
Tetrahydrofuran	1.040	0.15	1	0	104	47	124	1.04	0	20.2	
Toluene	1.110	0.15	1	0	111	62.6	126	1.1	0.905	17.2	
trans-1,2-Dichloroethene	1.130	0.15	1	0	113	60.2	125	1.1	2.69	16.8	
trans-1,3-Dichloropropene	0.7700	0.15	1	0	77.0	34.2	157	0.75	2.63	21.5	
Trichloroethene	1.180	0.030	1	0	118	57.8	133	1.14	3.45	21.8	
Vinyl acetate	0.8900	0.15	1	0	89.0	42.5	127	0.95	6.52	23	
Vinyl Bromide	1.200	0.15	1	0	120	55.1	148	1.17	2.53	22	
Vinyl chloride	1.180	0.040	1	0	118	51.9	146	1.1	7.02	22	

Qualifiers:

H	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
R	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
	RPO outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121622.D
 Acq On : 17 Dec 2022 3:35 am
 Operator : RJP
 Sample : ALCS1UGD-121622
 Misc : AD12_1UG
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 17 08:40:58 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.117	128	50171	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	306484	1.00	ppb	0.00
50) Chlorobenzene-d5	17.021	117	255883	1.00	ppb	0.00

System Monitoring Compounds						
65) Bromofluorobenzene	18.771	95	171173	0.99	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	99.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.419	41	62482	1.14	ppb	98
3) Freon 12	4.467	85	205122	1.22	ppb	96
4) Chloromethane	4.677	50	64067	1.17	ppb	95
5) Freon 114	4.680	85	172008	1.22	ppb	93
6) Vinyl Chloride	4.881	62	60456	1.15	ppb	99
7) Butane	4.980	43	64328	1.01	ppb	96
8) 1,3-butadiene	4.983	39	46704	0.95	ppb	91
9) Bromomethane	5.356	94	57592	1.16	ppb	98
10) Chloroethane	5.530	64	30166m	1.22	ppb	
11) Ethanol	5.617	45	9562	0.84	ppb	# 70
12) Acrolein	6.211	56	11505	0.75	ppb	91
13) Vinyl Bromide	5.875	106	55970	1.17	ppb	97
14) Freon 11	6.157	101	168882	1.21	ppb	99
15) Acetone	6.325	58	32243	1.23	ppb	# 1
16) Pentane	6.433	42	50489	1.07	ppb	# 58
17) Isopropyl alcohol	6.427	45	79649	0.99	ppb	# 1
18) 1,1-dichloroethene	6.926	96	82180	1.15	ppb	# 83
19) Freon 113	7.127	101	178512	1.17	ppb	95
20) t-Butyl alcohol	7.142	59	156677	1.03	ppb	97
21) Methylene chloride	7.391	84	76069	1.11	ppb	96
22) Allyl chloride	7.370	41	73421	0.92	ppb	77
23) Carbon disulfide	7.550	76	201767	1.02	ppb	100
24) trans-1,2-dichloroethene	8.328	61	108489	1.08	ppb	82
25) methyl tert-butyl ether	8.334	73	239593	1.04	ppb	98
26) 1,1-dichloroethane	8.745	63	158572	1.16	ppb	96
27) Vinyl acetate	8.724	43	100978	0.94	ppb	89
28) Methyl Ethyl Ketone	9.213	72	43636	1.05	ppb	# 1
29) cis-1,2-dichloroethene	9.672	61	100170m	0.93	ppb	
30) Hexane	9.285	57	156438	1.09	ppb	# 78
31) Ethyl acetate	9.804	43	210525	1.04	ppb	# 80
32) Chloroform	10.273	83	178782	1.16	ppb	98
33) Tetrahydrofuran	10.435	42	85274	1.05	ppb	88
34) 1,2-dichloroethane	11.366	62	103026	1.14	ppb	96
36) 1,1,1-trichloroethane	11.092	97	154147	1.07	ppb	97
37) Cyclohexane	11.777	56	157157	1.13	ppb	# 52
38) Carbon tetrachloride	11.717	117	140845	1.04	ppb	97
39) Benzene	11.681	78	314748	1.16	ppb	94
40) Methyl methacrylate	13.185	41	100063	1.00	ppb	# 61
41) 1,4-dioxane	13.209	88	69579	1.02	ppb	77
42) 2,2,4-trimethylpentane	12.512	57	490354	1.15	ppb	85
43) Heptane	12.842	43	159564	1.10	ppb	91
44) Trichloroethene	12.972	130	129853	1.10	ppb	94

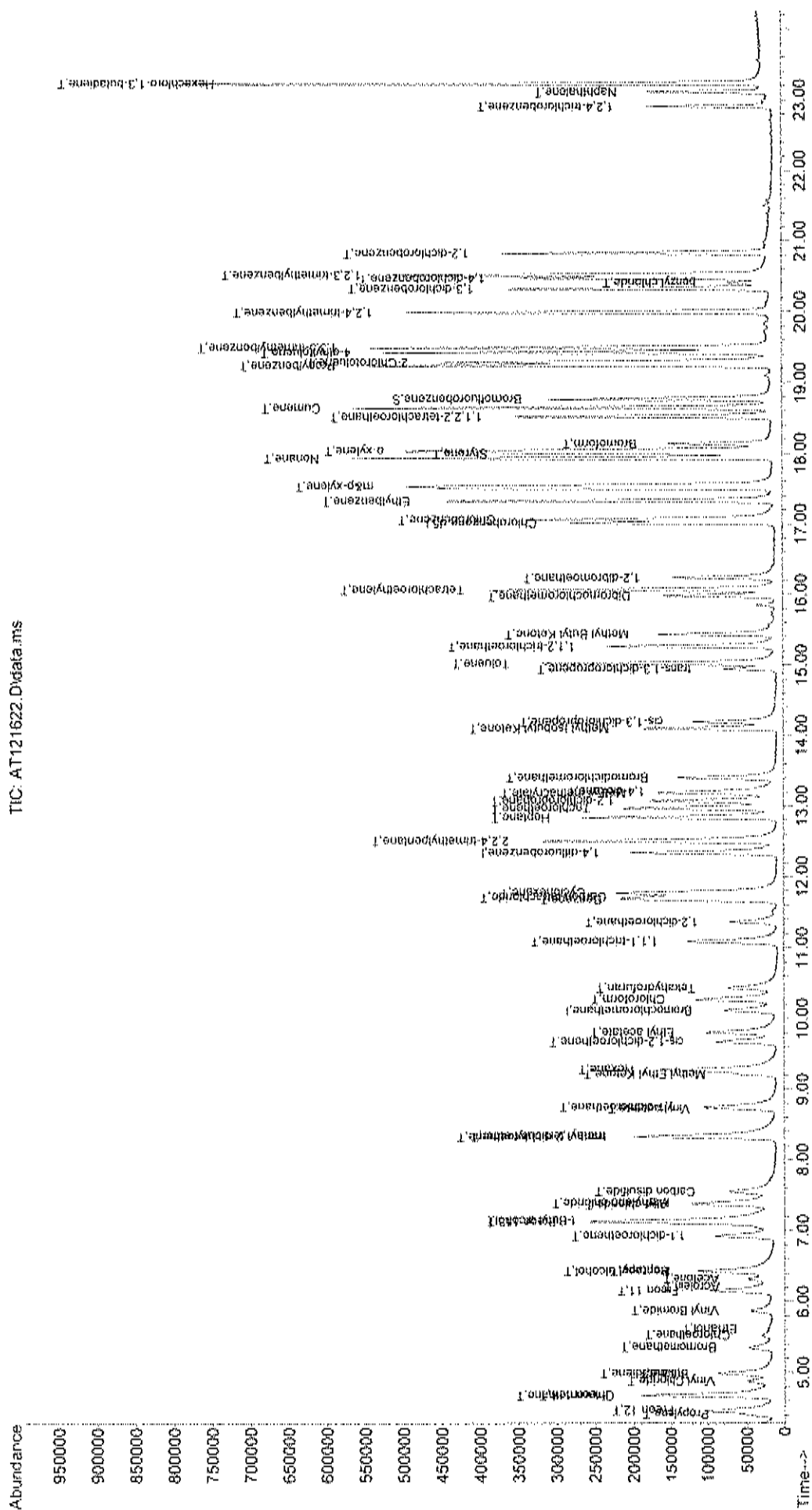
Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121622.D
 Acq On : 17 Dec 2022 3:35 am
 Operator : RJP
 Sample : ALCS1UGD-121622
 Misc : AD12_1UG
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 17 08:40:58 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.080	63	115114	1.16	ppb	96
46) Bromodichloromethane	13.410	83	152572	1.03	ppb	98
47) cis-1,3-dichloropropene	14.199	75	108413	0.85	ppb	92
48) trans-1,3-dichloropropene	14.947	75	74127	0.76	ppb	96
49) 1,1,2-trichloroethane	15.268	97	124043	1.15	ppb	99
51) Toluene	15.025	92	219768	1.07	ppb	99
52) Methyl Isobutyl Ketone	14.103	43	201072	1.09	ppb	84
53) Dibromochloromethane	15.983	129	124794m	0.78	ppb	
54) Methyl Butyl Ketone	15.439	43	168493	1.05	ppb	83
55) 1,2-dibromoethane	16.238	107	164769	1.10	ppb	94
56) Tetrachloroethylene	16.073	164	138989	1.11	ppb	90
57) Chlorobenzene	17.069	112	288136	1.10	ppb	96
58) Ethylbenzene	17.333	91	472623	1.08	ppb	97
59) m&p-xylene	17.544	91	712432	2.12	ppb	85
60) Nonane	17.937	43	242181	1.07	ppb	96
61) Styrene	18.006	104	269097	1.04	ppb	92
62) Bromoform	18.138	173	99566	0.72	ppb	91
63) o-xylene	18.045	91	407478	1.08	ppb	91
64) Cumene	18.648	105	543364	1.05	ppb	# 92
66) 1,1,2,2-tetrachloroethane	18.522	83	276140	1.17	ppb	98
67) Propylbenzene	19.246	120	147127	1.03	ppb	# 1
68) 2-Chlorotoluene	19.288	126	129619	1.06	ppb	# 100
69) 4-ethyltoluene	19.429	105	476514m	1.02	ppb	
70) 1,3,5-trimethylbenzene	19.498	105	448583m	1.05	ppb	
71) 1,2,4-trimethylbenzene	19.996	105	407209	1.00	ppb	97
72) 1,3-dichlorobenzene	20.326	146	231750	1.05	ppb	97
73) benzyl chloride	20.410	91	101963m	0.78	ppb	
74) 1,4-dichlorobenzene	20.473	146	211362	1.04	ppb	98
75) 1,2,3-trimethylbenzene	20.525	105	415383	1.02	ppb	95
76) 1,2-dichlorobenzene	20.828	146	223960	1.05	ppb	94
77) 1,2,4-trichlorobenzene	22.905	180	75132	0.94	ppb	93
78) Naphthalene	23.106	128	186724	0.91	ppb	94
79) Hexachloro-1,3-butadiene	23.226	225	195304	1.06	ppb	99

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

Quant Time: Dec 17 08:40:58 2022
Quant Method : C:\msdchem\1\methods\AD12 IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Quant Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121723.D
 Acq On : 18 Dec 2022 1:31 am
 Operator : RJP
 Sample : ALCS1UGD-121722
 Misc : AD12_1UG
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 21 13:33:21 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.126	128	46993	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	274892	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	228222	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.720	95	154154	1.00	ppb	-0.05
Spiked Amount	1.000	Range	70 - 130	Recovery	=	100.00%
Target Compounds						
						Qvalue
2) Propylene	4.413	41	56114	1.10	ppb	98
3) Freon 12	4.464	85	202148	1.29	ppb	97
4) Chloromethane	4.686	50	60333	1.18	ppb	100
5) Freon 114	4.680	85	163378	1.24	ppb	90
6) Vinyl Chloride	4.875	62	57992	1.18	ppb	98
7) Butane	4.992	43	64460	1.08	ppb	95
8) 1,3-butadiene	4.986	39	43179	0.94	ppb	91
9) Bromomethane	5.353	94	56236	1.21	ppb	96
10) Chloroethane	5.533	64	27316	1.18	ppb	# 88
11) Ethanol	5.617	45	11541	1.08	ppb	# 63
12) Acrolein	6.217	56	17863	1.24	ppb	83
13) Vinyl Bromide	5.878	106	53757	1.20	ppb	99
14) Freon 11	6.151	101	154145m	1.18	ppb	
15) Acetone	6.322	58	31565m	1.28	ppb	
16) Pentane	6.430	42	65451	1.49	ppb	# 65
17) Isopropyl alcohol	6.415	45	89757	1.19	ppb	# 1
18) 1,1-dichloroethene	6.926	96	80280	1.20	ppb	# 84
19) Freon 113	7.124	101	178180	1.25	ppb	96
20) t-Butyl alcohol	7.145	59	144576	1.02	ppb	98
21) Methylene chloride	7.385	84	73226	1.14	ppb	93
22) Allyl chloride	7.373	41	72693	0.97	ppb	# 53
23) Carbon disulfide	7.556	76	189381	1.02	ppb	100
24) trans-1,2-dichloroethene	8.328	61	106754	1.13	ppb	84
25) methyl tert-butyl ether	8.328	73	222333	1.03	ppb	95
26) 1,1-dichloroethane	8.754	63	149650	1.17	ppb	97
27) Vinyl acetate	8.733	43	89408	0.89	ppb	87
28) Methyl Ethyl Ketone	9.219	72	41267	1.06	ppb	# 1
29) cis-1,2-dichloroethene	9.681	61	121550	1.20	ppb	92
30) Hexane	9.279	57	146580	1.09	ppb	# 80
31) Ethyl acetate	9.807	43	195693	1.03	ppb	90
32) Chloroform	10.279	83	173881	1.20	ppb	99
33) Tetrahydrofuran	10.435	42	78878	1.04	ppb	87
34) 1,2-dichloroethane	11.369	62	102864	1.21	ppb	96
36) 1,1,1-trichloroethane	11.089	97	148200	1.15	ppb	96
37) Cyclohexane	11.771	56	141054	1.13	ppb	# 52
38) Carbon tetrachloride	11.714	117	138752	1.14	ppb	98
39) Benzene	11.678	78	301019	1.23	ppb	94
40) Methyl methacrylate	13.188	41	93885	1.05	ppb	# 62
41) 1,4-dioxane	13.206	88	63159	1.03	ppb	78
42) 2,2,4-trimethylpentane	12.509	57	453738	1.18	ppb	86
43) Heptane	12.842	43	148384	1.14	ppb	91
44) Trichloroethene	12.972	130	124615	1.18	ppb	93

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121723.D
 Acq On : 18 Dec 2022 1:31 am
 Operator : RJP
 Sample : ALCS1UGD-121722
 Misc : AD12 1UG
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 21 13:33:21 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.077	63	111085	1.25	ppb	99
46) Bromodichloromethane	13.404	83	152671	1.14	ppb	99
47) cis-1,3-dichloropropene	14.196	75	101880	0.89	ppb	92
48) trans-1,3-dichloropropene	14.944	75	67749	0.77	ppb	98
49) 1,1,2-trichloroethane	15.265	97	118373	1.22	ppb	98
51) Toluene	15.025	92	203232	1.11	ppb	99
52) Methyl Isobutyl Ketone	14.103	43	181520	1.11	ppb	84
53) Dibromochloromethane	15.983	129	127991m	0.89	ppb	
54) Methyl Butyl Ketone	15.436	43	149157	1.05	ppb	84
55) 1,2-dibromoethane	16.238	107	156171	1.17	ppb	94
56) Tetrachloroethylene	16.067	164	131649	1.17	ppb	91
57) Chlorobenzene	17.072	112	265359	1.14	ppb	98
58) Ethylbenzene	17.333	91	432507	1.11	ppb	96
59) m&p-xylene	17.541	91	671206	2.23	ppb	86
60) Nonane	17.922	43	213763	1.06	ppb	95
61) Styrene	17.994	104	247762	1.07	ppb	92
62) Bromoform	18.117	173	103857	0.85	ppb	93
63) o-xylene	18.024	91	383911	1.14	ppb	91
64) Cumene	18.606	105	494046	1.07	ppb	# 93
66) 1,1,2,2-tetrachloroethane	18.489	83	260146	1.23	ppb	97
67) Propylbenzene	19.183	120	134247	1.05	ppb	# 1
68) 2-Chlorotoluene	19.225	126	123417	1.13	ppb	# 100
69) 4-ethyltoluene	19.357	105	447574m	1.07	ppb	
70) 1,3,5-trimethylbenzene	19.423	105	427400m	1.12	ppb	
71) 1,2,4-trimethylbenzene	19.903	105	368100	1.01	ppb	98
72) 1,3-dichlorobenzene	20.227	146	213515m	1.09	ppb	
73) benzyl chloride	20.299	91	89369m	0.77	ppb	
74) 1,4-dichlorobenzene	20.368	146	187450	1.04	ppb	97
75) 1,2,3-trimethylbenzene	20.413	105	379502	1.04	ppb	93
76) 1,2-dichlorobenzene	20.723	146	202915	1.07	ppb	94
77) 1,2,4-trichlorobenzene	22.857	180	65910	0.92	ppb	95
78) Naphthalene	23.064	128	156332	0.85	ppb	94
79) Hexachloro-1,3-butadiene	23.184	225	186967	1.14	ppb	98

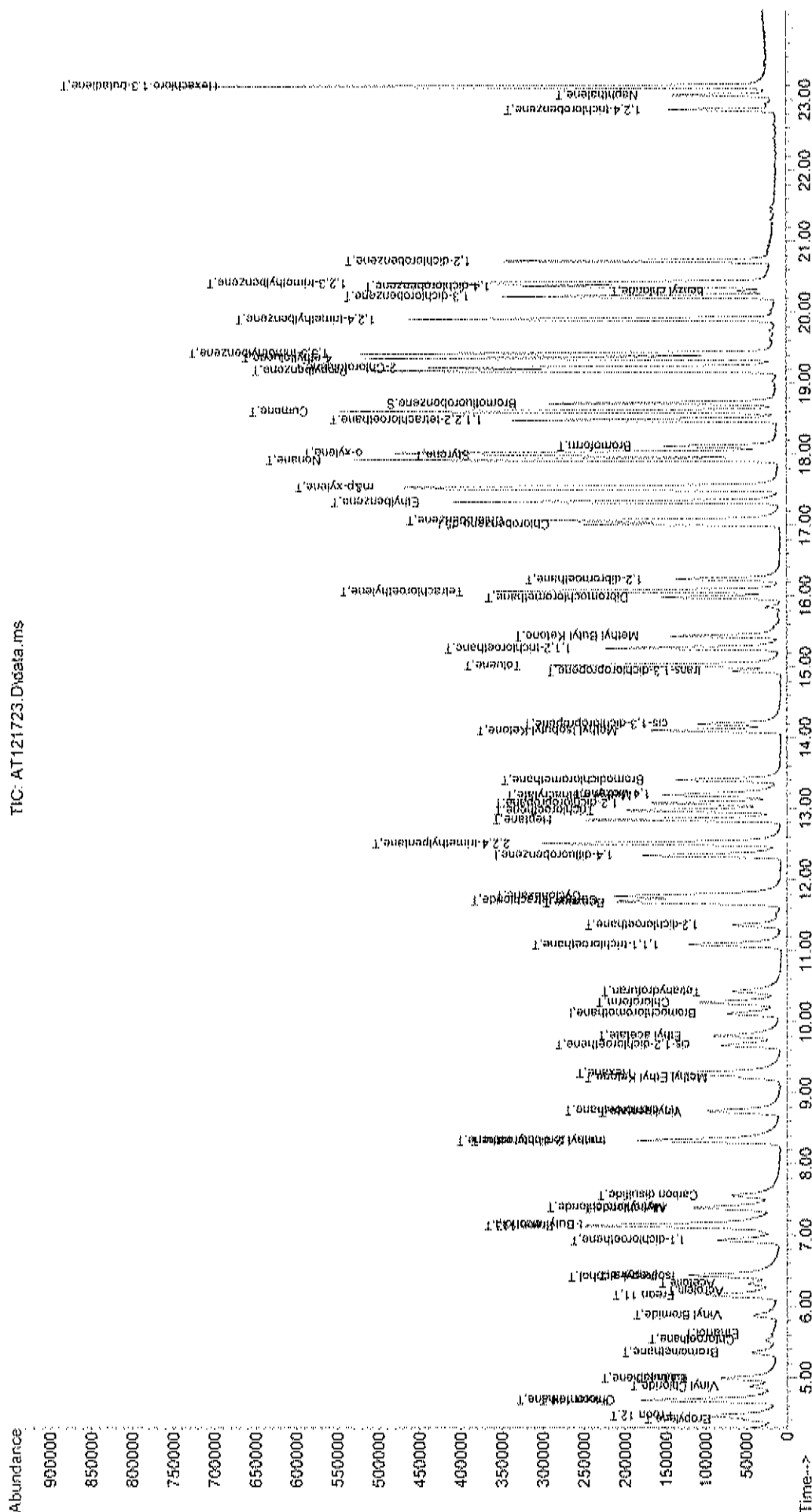
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data Path      : C:\msdchem\1\data2\2022DEC\
Data File      : AF121723.D
Acq On         : 18 Dec 2022   1:31 am
Operator       : RJP
Sample         : ALCS1UGD-121722
Misc           : AD12.LUG
ALS Vial       : 21 Sample Multiplier: 1

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Quant Time: Dec 21 13:33:21 2022
Quant Method : C:\msdchem\1\methods\AD12_LUG.M
Quant Title : TO-15 VOA standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



Date: 09-Jan-23



ANALYTICAL QC SUMMARY REPORT

CLIENT: SOIL MECHANICS

Work Order: C2212031

Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS		Sample Type: MS	TestCode: 1ugM3_TO15		Units: ppbV	Prep Date:		RunNo: 19808			
Client ID: SVW-1 MS/MSD		Batch ID: R19808	TestNo: TO-15			Analysis Date: 12/16/2022		SeqNo: 226513			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.050	0.15	1	0	105	68.1	117				S
1,1,1,2,2-Tetrachloroethane	1.070	0.15	1	0	107	82.3	101				
1,1,1,2-Trichloroethane	1.070	0.15	1	0	107	61	128				
1,1-Dichloroethane	1.110	0.15	1	0	111	76.5	118				
1,1-Dichloroethene	1.080	0.15	1	0	108	45.8	128				
1,2,4-Trichlorobenzene	1.110	0.15	1	0	111	70	262				
1,2,4-Trimethylbenzene	0.9900	0.15	1	0	99.0	81.5	155				
1,2-Dibromoethane	1.040	0.15	1	0	104	78.7	107				
1,2-Dichlorobenzene	1.050	0.15	1	0	105	57.2	175				
1,2-Dichloroethane	1.120	0.15	1	0	112	65.1	130				
1,2-Dichloropropane	1.110	0.15	1	0	111	69.9	116				
1,3,5-Trimethylbenzene	1.010	0.15	1	0	101	67.6	139				
1,3-butadiene	1.180	0.15	1	0	118	70	130				
1,3-Dichlorobenzene	1.030	0.15	1	0	103	89.1	122				
1,4-Dichlorobenzene	1.040	0.15	1	0	104	86.8	114				
1,4-Dioxane	1.000	0.30	1	0	100	75.1	114				S
2,2,4-trimethylpentane	1.140	0.15	1	0	114	84.2	113				
4-ethyltoluene	0.9900	0.15	1	0	99.0	70	130				S
Acetone	2.120	0.30	1	1.49	63.0	70	130				
Allyl chloride	0.9200	0.15	1	0	92.0	49.7	155				
Benzene	1.170	0.15	1	0	117	72.7	133				
Benzyl chloride	0.7400	0.15	1	0	74.0	72.5	129				
Bromodichloromethane	0.9900	0.15	1	0	99.0	69.4	112				
Bromoform	0.7100	0.15	1	0	71.0	42.5	110				
Bromomethane	1.150	0.15	1	0	115	68.6	121				

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS		SampType: MS		TestCode: 1ugM3_TO15		Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: SVW-1 MS/MSD		Batch ID: R19808		TestNo: TO-15				Analysis Date: 12/16/2022		SeqNo: 226513	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	1.050	0.15	1	0	105	20.1	143				
Carbon tetrachloride	1.210	0.15	1	0.23	98.0	61	107				
Chlorobenzene	1.040	0.15	1	0	104	76.1	111				
Chloroethane	1.270	0.15	1	0	127	62.6	119				
Chloroform	1.430	0.15	1	0.35	108	6.54	173				
Chloromethane	1.140	0.15	1	0	114	54.4	125				
cis-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	60.1	121				
cis-1,3-Dichloropropene	0.8600	0.15	1	0	86.0	60.8	122				
Cyclohexane	1.070	0.15	1	0	107	59.4	148				
Dibromochloromethane	0.7600	0.15	1	0	76.0	71.6	102				
Ethyl acetate	1.160	0.15	1	0.15	101	70	130				
Ethylbenzene	1.050	0.15	1	0	105	68.5	129				
Freon 11	2.220	0.15	1	1.32	90.0	70	130				
Freon 113	1.180	0.15	1	0	118	80.3	125				
Freon 114	1.230	0.15	1	0	123	65.2	132				
Freon 12	1.800	0.15	1	0.84	96.0	67.4	103				
Heptane	1.110	0.15	1	0	111	80.8	124				
Hexachloro-1,3-butadiene	1.040	0.15	1	0	104	81.9	119				
Hexane	1.150	0.15	1	0	115	73.7	147				
Isopropyl alcohol	1.240	0.15	1	0	124	70	130				
m&p-Xylene	2.070	0.30	2	0	104	74.2	123				
Methyl Butyl Ketone	1.050	0.30	1	0	105	72.6	117				
Methyl Ethyl Ketone	1.390	0.30	1	0.26	113	59.4	135				
Methyl Isobutyl Ketone	1.020	0.30	1	0	102	61	120				
Methyl tert-butyl ether	0.9700	0.15	1	0	97.0	63.6	134				
Methylene chloride	1.420	0.15	1	0.25	117	53.4	125				
o-Xylene	1.030	0.15	1	0	103	74.3	132				
Propylene	1.590	0.15	1	0	159	70	130				
Styrene	1.000	0.15	1	0	100	82.4	118				
Tetrachloroethylene	1.130	0.15	1	0.11	102	86.2	112				
Tetrahydrofuran	1.080	0.15	1	0	108	70	130				

Qualifiers:

H	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
R	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
Work Order: C2212031
Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS	SampType: MS	TestCode: 1ugM3_TO15	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: SVW-1 MS/MSD	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226513						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Toluene	1.270	0.15	1	0.27	100	70	130				
trans-1,2-Dichloroethene	1.140	0.15	1	0	114	70.9	132				
trans-1,3-Dichloropropene	0.7800	0.15	1	0	78.0	51.9	133				
Trichloroethene	1.090	0.15	1	0	109	63.1	109				S
Vinyl acetate	1.000	0.15	1	0	100	70	130				
Vinyl Bromide	1.120	0.15	1	0	112	71.3	121				
Vinyl chloride	1.120	0.15	1	0	112	63.2	114				

Sample ID: C2212031-001A MS	SampType: MSD	TestCode: 1ugM3_TO15	Units: ppbV	Prep Date:	RunNo: 19808						
Client ID: SVW-1 MS/MSD	Batch ID: R19808	TestNo: TO-15		Analysis Date: 12/16/2022	SeqNo: 226514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	1.050	0.15	1	0	105	68.1	117	1.05	0	0	
1,1,2,2-Tetrachloroethane	1.130	0.15	1	0	113	82.3	101	1.07	5.45	0	S
1,1,2-Trichloroethane	1.100	0.15	1	0	110	61	128	1.07	2.76	0	
1,1-Dichloroethane	1.140	0.15	1	0	114	76.5	118	1.11	2.67	0	
1,1-Dichloroethene	1.090	0.15	1	0	109	45.8	128	1.08	0.922	0	
1,2,4-Trichlorobenzene	1.090	0.15	1	0	109	70	130	1.11	1.82	0	
1,2,4-Trimethylbenzene	1.020	0.15	1	0	102	81.5	155	0.99	2.99	0	
1,2-Dibromoethane	1.040	0.15	1	0	104	78.7	107	1.04	0	0	
1,2-Dichlorobenzene	1.080	0.15	1	0	108	57.2	175	1.05	2.82	0	
1,2-Dichloroethane	1.130	0.15	1	0	113	65.1	130	1.12	0.889	0	
1,2-Dichloropropane	1.120	0.15	1	0	112	69.9	116	1.11	0.897	0	
1,3,5-Trimethylbenzene	1.040	0.15	1	0	104	67.6	139	1.01	2.93	0	
1,3-butadiene	1.130	0.15	1	0	113	70	130	1.18	4.33	0	
1,3-Dichlorobenzene	1.070	0.15	1	0	107	89.1	122	1.03	3.81	0	
1,4-Dichlorobenzene	1.090	0.15	1	0	109	86.8	114	1.04	4.69	0	
1,4-Dioxane	1.030	0.30	1	0	103	75.1	114	1	2.96	0	
2,2,4-trimethylpentane	1.130	0.15	1	0	113	84.2	113	1.14	0.881	0	
4-ethyltoluene	1.030	0.15	1	0	103	70	130	0.99	3.96	0	

Qualifiers:	H	R	DL	Detection Limit	E	Estimated Value above quantitation range
			J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
			S	Spike Recovery outside accepted recovery limits		

CLIENT: SOIL MECHANICS
 Work Order: C2212031
 Project: IKEA Red Hook

TestCode: 1ugM3_TO15

Sample ID: C2212031-001A MS			SampType: MSD		TestCode: 1ugM3_TO15			Units: ppbV		Prep Date:		RunNo: 19808	
Client ID: SVW-1 MS/MSD			Batch ID: R19808		TestNo: TO-15					Analysis Date: 12/16/2022		SeqNo: 226514	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Acetone	1.750	0.30	1	1.49	26.0	70	130	2.12	19.1	0	S		
Allyl chloride	0.9300	0.15	1	0	93.0	49.7	155	0.92	1.08	0			
Benzene	1.140	0.15	1	0	114	72.7	133	1.17	2.60	0			
Benzyl chloride	0.4900	0.15	1	0	49.0	72.5	129	0.74	40.7	0	S		
Bromodichloromethane	1.000	0.15	1	0	100	69.4	112	0.99	1.01	0			
Bromoform	0.7300	0.15	1	0	73.0	42.5	110	0.71	2.78	0			
Bromomethane	1.100	0.15	1	0	110	68.6	121	1.15	4.44	0			
Carbon disulfide	1.040	0.15	1	0	104	70	143	1.05	0.957	0			
Carbon tetrachloride	1.120	0.15	1	0.23	89.0	61	107	1.21	7.73	0			
Chlorobenzene	1.050	0.15	1	0	105	76.1	111	1.04	0.957	0			
Chloroethane	1.080	0.15	1	0	108	62.6	119	1.27	16.2	0			
Chloroform	1.280	0.15	1	0.35	93.0	70	130	1.43	11.1	0			
Chloromethane	1.030	0.15	1	0	103	54.4	125	1.14	10.1	0			
cis-1,2-Dichloroethene	0.9300	0.15	1	0	93.0	60.1	121	0.98	5.24	0			
cis-1,3-Dichloropropene	0.8700	0.15	1	0	87.0	60.8	122	0.86	1.16	0			
Cyclohexane	1.080	0.15	1	0	108	59.4	148	1.07	0.930	0			
Dibromochloromethane	0.8000	0.15	1	0	80.0	71.6	102	0.76	5.13	0			
Ethyl acetate	1.150	0.15	1	0.15	100	49.3	146	1.16	0.866	0			
Ethylbenzene	1.060	0.15	1	0	106	68.5	129	1.05	0.948	0			
Freon 11	1.720	0.15	1	1.32	40.0	44.8	143	2.22	25.4	0	S		
Freon 113	1.140	0.15	1	0	114	80.3	125	1.18	3.45	0			
Freon 114	1.140	0.15	1	0	114	65.2	132	1.23	7.59	0			
Freon 12	1.510	0.15	1	0.84	67.0	67.4	103	1.8	17.5	0	S		
Heptane	1.090	0.15	1	0	109	80.8	124	1.11	1.82	0			
Hexachloro-1,3-butadiene	1.040	0.15	1	0	104	81.9	119	1.04	0	0			
Hexane	1.100	0.15	1	0	110	73.7	147	1.15	4.44	0			
Isopropyl alcohol	1.110	0.15	1	0	111	70	130	1.24	11.1	0			
m&p-Xylene	2.100	0.30	2	0	105	74.2	123	2.07	1.44	0			
Methyl Butyl Ketone	1.090	0.30	1	0	109	72.6	117	1.05	3.74	0			
Methyl Ethyl Ketone	1.370	0.30	1	0.26	111	59.4	135	1.39	1.45	0			
Methyl Isobutyl Ketone	1.070	0.30	1	0	107	61	120	1.02	4.78	0			

Qualifiers: H Results reported are not blank corrected
 R Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 DL Detection Limit
 J Analyte detected below quantitation limit
 S Spike Recovery outside accepted recovery limits
 E Estimated Value above quantitation range
 ND Not Detected at the Limit of Detection

CLIENT: SOIL MECHANICS
 Work Order: C2212031
 Project: IKEA Red Hook

TestCode: IugM3_TO15

Sample ID: C2212031-001A MS		SampType: MSD	TestCode: 1ugM3_TO15		Units: ppbV	Prep Date:		RunNo: 19808			
Client ID: SVW-1 MS/MSD		Batch ID: R19808	TestNo: TO-15			Analysis Date: 12/16/2022		SeqNo: 226514			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	1.050	0.15	1	0	105	63.6	134	0.97	7.92	0	
Methylene chloride	1.390	0.15	1	0.25	114	53.4	125	1.42	2.14	0	
o-Xylene	1.050	0.15	1	0	105	74.3	132	1.03	1.92	0	
Propylene	1.340	0.15	1	0	134	70	130	1.59	17.1	0	S
Styrene	1.030	0.15	1	0	103	82.4	118	1	2.96	0	
Tetrachloroethylene	1.080	0.15	1	0.11	97.0	86.2	112	1.13	4.52	0	
Tetrahydrofuran	1.050	0.15	1	0	105	70	130	1.08	2.82	0	
Toluene	1.180	0.15	1	0.27	91.0	70	130	1.27	7.35	0	
trans-1,2-Dichloroethene	0.9000	0.15	1	0	90.0	70.9	132	1.14	23.5	0	
trans-1,3-Dichloropropene	0.7900	0.15	1	0	79.0	51.9	133	0.78	1.27	0	
Trichloroethene	1.090	0.15	1	0	109	63.1	109	1.09	0	0	S
Vinyl acetate	1.020	0.15	1	0	102	70	130	1	1.98	0	
Vinyl Bromide	1.110	0.15	1	0	111	71.3	121	1.12	0.897	0	
Vinyl chloride	1.100	0.15	1	0	110	63.2	114	1.12	1.80	0	

Qualifiers:	Results reported are not blank corrected	DL	Detection Limit	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	ND	Not Detected at the Limit of Detection
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121609.D
 Acq On : 16 Dec 2022 5:24 pm
 Operator : RJP
 Sample : C2212031-001A MS
 Misc : AD12_1UG
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 17 08:40:32 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	10.132	128	54174	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.347	114	338607	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	283405	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.765	95	195078	1.02	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	= 102.00%	
Target Compounds						
						Qvalue
2) Propylene	4.413	41	93864	1.59	ppb	87
3) Freon 12	4.461	85	325331	1.80	ppb	96
4) Chloromethane	4.671	50	67384	1.14	ppb	96
5) Freon 114	4.671	85	186514	1.23	ppb	95
6) Vinyl Chloride	4.875	62	63398	1.12	ppb	95
7) Butane	4.983	43	115312m	1.68	ppb	
8) 1,3-butadiene	4.989	39	62568m	1.18	ppb	
9) Bromomethane	5.352	94	61807	1.15	ppb	98
10) Chloroethane	5.530	64	34019	1.27	ppb	95
11) Ethanol	5.629	45	27300	2.22	ppb	# 77
12) Acrolein	6.229	56	14825	0.89	ppb	94
13) Vinyl Bromide	5.881	106	57508	1.12	ppb	100
14) Freon 11	6.160	101	334468	2.22	ppb	98
15) Acetone	6.328	58	60235	2.12	ppb	# 49
16) Pentane	6.445	42	60947	1.20	ppb	# 10
17) Isopropyl alcohol	6.424	45	108369	1.24	ppb	# 1
18) 1,1-dichloroethene	6.926	96	83073	1.08	ppb	# 84
19) Freon 113	7.130	101	194348	1.18	ppb	92
20) t-Butyl alcohol	7.145	59	191740	1.17	ppb	96
21) Methylene chloride	7.391	84	104786	1.42	ppb	95
22) Allyl chloride	7.376	41	78794	0.92	ppb	# 52
23) Carbon disulfide	7.556	76	224865	1.05	ppb	99
24) trans-1,2-dichloroethene	8.330	61	123951	1.14	ppb	88
25) methyl tert-butyl ether	8.339	73	241553	0.97	ppb	97
26) 1,1-dichloroethane	8.754	63	164543	1.11	ppb	98
27) Vinyl acetate	8.736	43	116178	1.00	ppb	89
28) Methyl Ethyl Ketone	9.219	72	61965	1.39	ppb	93
29) cis-1,2-dichloroethene	9.684	61	114021m	0.98	ppb	
30) Hexane	9.285	57	177423	1.15	ppb	# 78
31) Ethyl acetate	9.810	43	254900	1.16	ppb	90
32) Chloroform	10.282	83	239169	1.43	ppb	97
33) Tetrahydrofuran	10.438	42	94095	1.08	ppb	88
34) 1,2-dichloroethane	11.368	62	109505	1.12	ppb	96
36) 1,1,1-trichloroethane	11.095	97	166042	1.05	ppb	97
37) Cyclohexane	11.777	56	164911	1.07	ppb	# 48
38) Carbon tetrachloride	11.723	117	182022	1.21	ppb	98
39) Benzene	11.684	78	351872	1.17	ppb	93
40) Methyl methacrylate	13.191	41	99724	0.90	ppb	# 52
41) 1,4-dioxane	13.209	88	75600	1.00	ppb	85
42) 2,2,4-trimethylpentane	12.509	57	538332	1.14	ppb	85
43) Heptane	12.845	43	178519	1.11	ppb	91
44) Trichloroethene	12.974	130	141075	1.09	ppb	94

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121609.D
 Acq On : 16 Dec 2022 5:24 pm
 Operator : RJP
 Sample : C2212031-001A MS
 Misc : AD12_1UG
 ALS Vial : 9 Sample Multiplier: 1

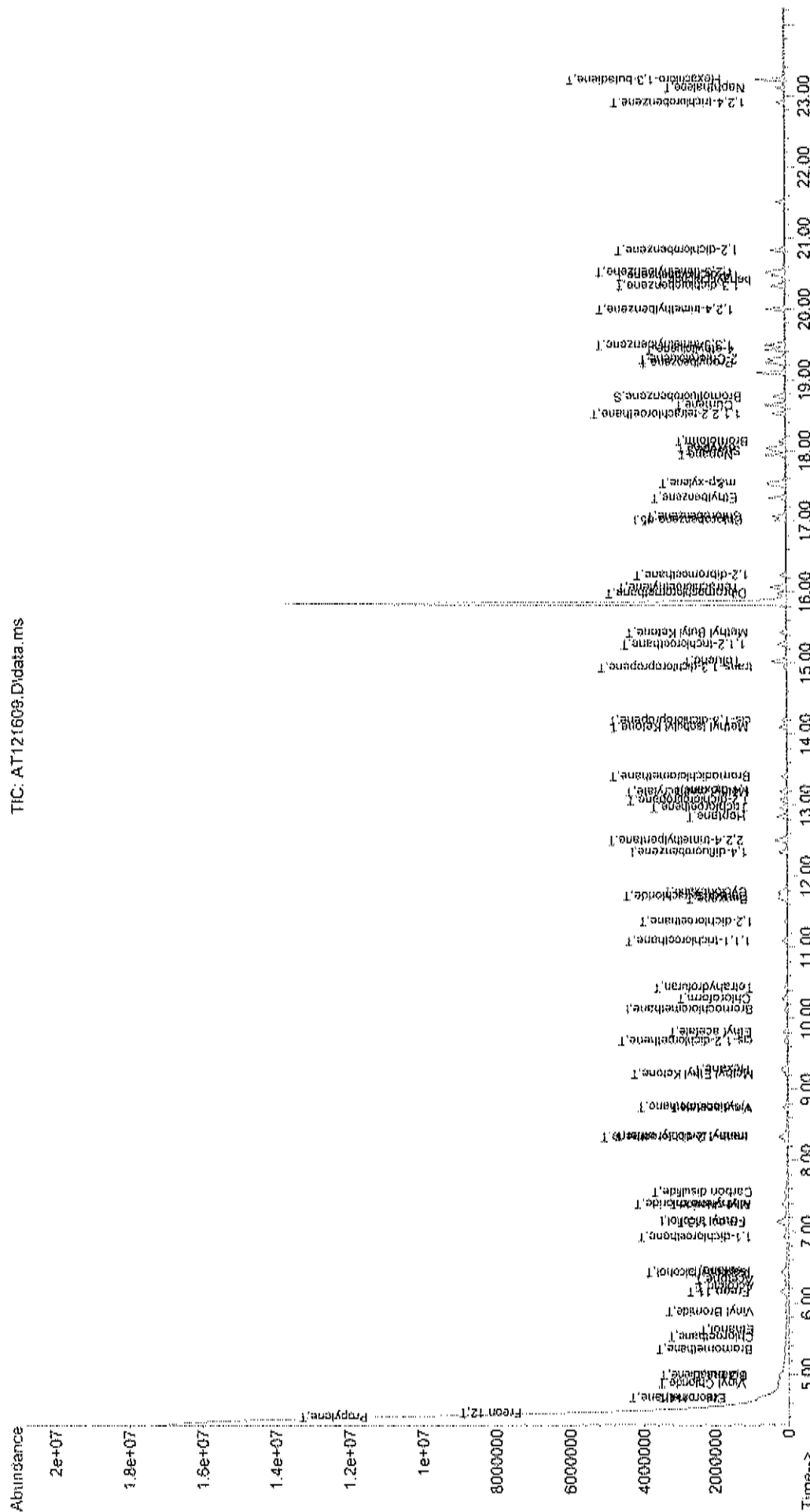
Quant Time: Dec 17 08:40:32 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.077	63	121342	1.11	ppb	97
46) Bromodichloromethane	13.410	83	162148	0.99	ppb	98
47) cis-1,3-dichloropropene	14.196	75	120878	0.86	ppb	92
48) trans-1,3-dichloropropene	14.944	75	84994	0.78	ppb	97
49) 1,1,2-trichloroethane	15.268	97	128178	1.07	ppb	96
51) Toluene	15.031	92	288273	1.27	ppb	98
52) Methyl Isobutyl Ketone	14.106	43	207055	1.02	ppb	83
53) Dibromochloromethane	15.988	129	135291m	0.76	ppb	
54) Methyl Butyl Ketone	15.433	43	186365	1.05	ppb	82
55) 1,2-dibromoethane	16.244	107	172823	1.04	ppb	94
56) Tetrachloroethylene	16.070	164	157822	1.13	ppb	91
57) Chlorobenzene	17.072	112	301138	1.04	ppb	98
58) Ethylbenzene	17.333	91	509482	1.05	ppb	97
59) m&p-xylene	17.540	91	771921	2.07	ppb	86
60) Nonane	17.940	43	257829	1.03	ppb	94
61) Styrene	18.009	104	286367	1.00	ppb	93
62) Bromoform	18.135	173	107861	0.71	ppb	91
63) o-xylene	18.045	91	431629	1.03	ppb	92
64) Cumene	18.648	105	564492	0.99	ppb	# 92
66) 1,1,2,2-tetrachloroethane	18.522	83	281489	1.07	ppb	98
67) Propylbenzene	19.243	120	157948	1.00	ppb	# 1
68) 2-Chlorotoluene	19.294	126	136244	1.01	ppb	# 100
69) 4-ethyltoluene	19.429	105	513370m	0.99	ppb	
70) 1,3,5-trimethylbenzene	19.495	105	477797m	1.01	ppb	
71) 1,2,4-trimethylbenzene	19.993	105	445631	0.99	ppb	97
72) 1,3-dichlorobenzene	20.326	146	251104	1.03	ppb	97
73) benzyl chloride	20.404	91	107527	0.74	ppb	66
74) 1,4-dichlorobenzene	20.473	146	232634	1.04	ppb	97
75) 1,2,3-trimethylbenzene	20.521	105	448847	0.99	ppb	94
76) 1,2-dichlorobenzene	20.828	146	247995	1.05	ppb	94
77) 1,2,4-trichlorobenzene	22.905	180	97897	1.11	ppb	94
78) Naphthalene	23.109	128	255859	1.12	ppb	97
79) Hexachloro-1,3-butadiene	23.226	225	211344	1.04	ppb	99

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

Quant Time: Dec 17 08:40:32 2022
Quant Method : C:\msdchem\1\methods\AD12_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration

TIC: AT121609.D\data.ms



Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121610.D
 Acq On : 16 Dec 2022 6:44 pm
 Operator : RJP
 Sample : C2212031-001A MSD
 Misc : AD12_1UG
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 17 08:40:34 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.123	128	53957	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.344	114	335717	1.00	ppb	0.00
50) Chlorobenzene-d5	17.018	117	282841	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.768	95	192351	1.01	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	101.00%
Target Compounds						
						Qvalue
2) Propylene	4.413	41	78891	1.34	ppb	93
3) Freon 12	4.461	85	272027	1.51	ppb	96
4) Chloromethane	4.671	50	60872	1.03	ppb	90
5) Freon 114	4.680	85	172624	1.14	ppb	90
6) Vinyl Chloride	4.881	62	62074	1.10	ppb	89
7) Butane	4.989	43	90717	1.33	ppb	# 44
8) 1,3-butadiene	4.992	39	59717m β	1.13	ppb	
9) Bromomethane	5.350	94	58665	1.10	ppb	99
10) Chloroethane	5.539	64	28940	1.08	ppb	99
11) Ethanol	5.620	45	24816	2.02	ppb	95
12) Acrolein	6.223	56	14764	0.89	ppb	# 62
13) Vinyl Bromide	5.881	106	56989	1.11	ppb	99
14) Freon 11	6.163	101	258492	1.72	ppb	98
15) Acetone	6.322	58	49464	1.75	ppb	# 1
16) Pentane	6.436	42	59034	1.17	ppb	# 35
17) Isopropyl alcohol	6.421	45	96651	1.11	ppb	# 1
18) 1,1-dichloroethene	6.935	96	83557	1.09	ppb	# 84
19) Freon 113	7.136	101	187397	1.14	ppb	95
20) t-Butyl alcohol	7.142	59	184163	1.13	ppb	96
21) Methylene chloride	7.388	84	102187	1.39	ppb	95
22) Allyl chloride	7.376	41	79469	0.93	ppb	88
23) Carbon disulfide	7.562	76	221382	1.04	ppb	100
24) trans-1,2-dichloroethene	8.331	61	97002	0.90	ppb	# 67
25) methyl tert-butyl ether	8.337	73	260528	1.05	ppb	99
26) 1,1-dichloroethane	8.751	63	167351	1.14	ppb	95
27) Vinyl acetate	8.724	43	117199	1.02	ppb	90
28) Methyl Ethyl Ketone	9.219	72	60865	1.37	ppb	# 87
29) cis-1,2-dichloroethene	9.675	61	108223m β	0.93	ppb	
30) Hexane	9.276	57	170051	1.10	ppb	# 78
31) Ethyl acetate	9.808	43	250542	1.15	ppb	# 80
32) Chloroform	10.282	83	211993	1.28	ppb	99
33) Tetrahydrofuran	10.435	42	91256	1.05	ppb	89
34) 1,2-dichloroethane	11.372	62	109662	1.13	ppb	99
36) 1,1,1-trichloroethane	11.095	97	164321	1.05	ppb	97
37) Cyclohexane	11.780	56	164823	1.08	ppb	# 49
38) Carbon tetrachloride	11.720	117	167232	1.12	ppb	98
39) Benzene	11.684	78	341526	1.14	ppb	94
40) Methyl methacrylate	13.188	41	106693	0.97	ppb	# 56
41) 1,4-dioxane	13.215	88	77376	1.03	ppb	80
42) 2,2,4-trimethylpentane	12.509	57	530861	1.13	ppb	85
43) Heptane	12.843	43	173666	1.09	ppb	91
44) Trichloroethene	12.981	130	140182	1.09	ppb	93

Data Path : C:\msdchem\1\data2\2022DEC\
 Data File : AT121610.D
 Acq On : 16 Dec 2022 6:44 pm
 Operator : RJP
 Sample : C2212031-001A MSD
 Misc : AD12_1UG
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 17 08:40:34 2022
 Quant Method : C:\msdchem\1\methods\AD12_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Dec 13 09:11:04 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	13.077	63	121445	1.12	ppb	98
46) Bromodichloromethane	13.404	83	163540	1.00	ppb	98
47) cis-1,3-dichloropropene	14.196	75	121166	0.87	ppb	92
48) trans-1,3-dichloropropene	14.950	75	84341	0.79	ppb	98
49) 1,1,2-trichloroethane	15.265	97	130672	1.10	ppb	95
51) Toluene	15.028	92	266912	1.18	ppb	99
52) Methyl Isobutyl Ketone	14.103	43	217486	1.07	ppb	83
53) Dibromochloromethane	15.983	129	141726	0.80	ppb	95
54) Methyl Butyl Ketone	15.436	43	191892	1.09	ppb	82
55) 1,2-dibromoethane	16.244	107	171903	1.04	ppb	93
56) Tetrachloroethylene	16.073	164	149772	1.08	ppb	90
57) Chlorobenzene	17.069	112	305113	1.05	ppb	97
58) Ethylbenzene	17.334	91	511715	1.06	ppb	97
59) m&p-xylene	17.541	91	782009	2.10	ppb	85
60) Nonane	17.937	43	268316	1.07	ppb	96
61) Styrene	18.006	104	294239	1.03	ppb	92
62) Bromoform	18.138	173	111584	0.73	ppb	90
63) o-xylene	18.045	91	439887	1.05	ppb	92
64) Cumene	18.648	105	589461	1.03	ppb	# 93
66) 1,1,2,2-tetrachloroethane	18.525	83	295426	1.13	ppb	98
67) Propylbenzene	19.246	120	163915	1.04	ppb	# 1
68) 2-Chlorotoluene	19.291	126	141275	1.05	ppb	# 100
69) 4-ethyltoluene	19.429	105	533508m	1.03	ppb	
70) 1,3,5-trimethylbenzene	19.495	105	491485m	1.04	ppb	
71) 1,2,4-trimethylbenzene	19.993	105	458234	1.02	ppb	97
72) 1,3-dichlorobenzene	20.326	146	261812	1.07	ppb	98
73) benzyl chloride	20.408	91	70985	0.49	ppb	76
74) 1,4-dichlorobenzene	20.477	146	244640	1.09	ppb	97
75) 1,2,3-trimethylbenzene	20.522	105	463972	1.03	ppb	95
76) 1,2-dichlorobenzene	20.831	146	254922	1.08	ppb	94
77) 1,2,4-trichlorobenzene	22.905	180	96017	1.09	ppb	95
78) Naphthalene	23.109	128	255389	1.12	ppb	97
79) Hexachloro-1,3-butadiene	23.226	225	211037	1.04	ppb	99

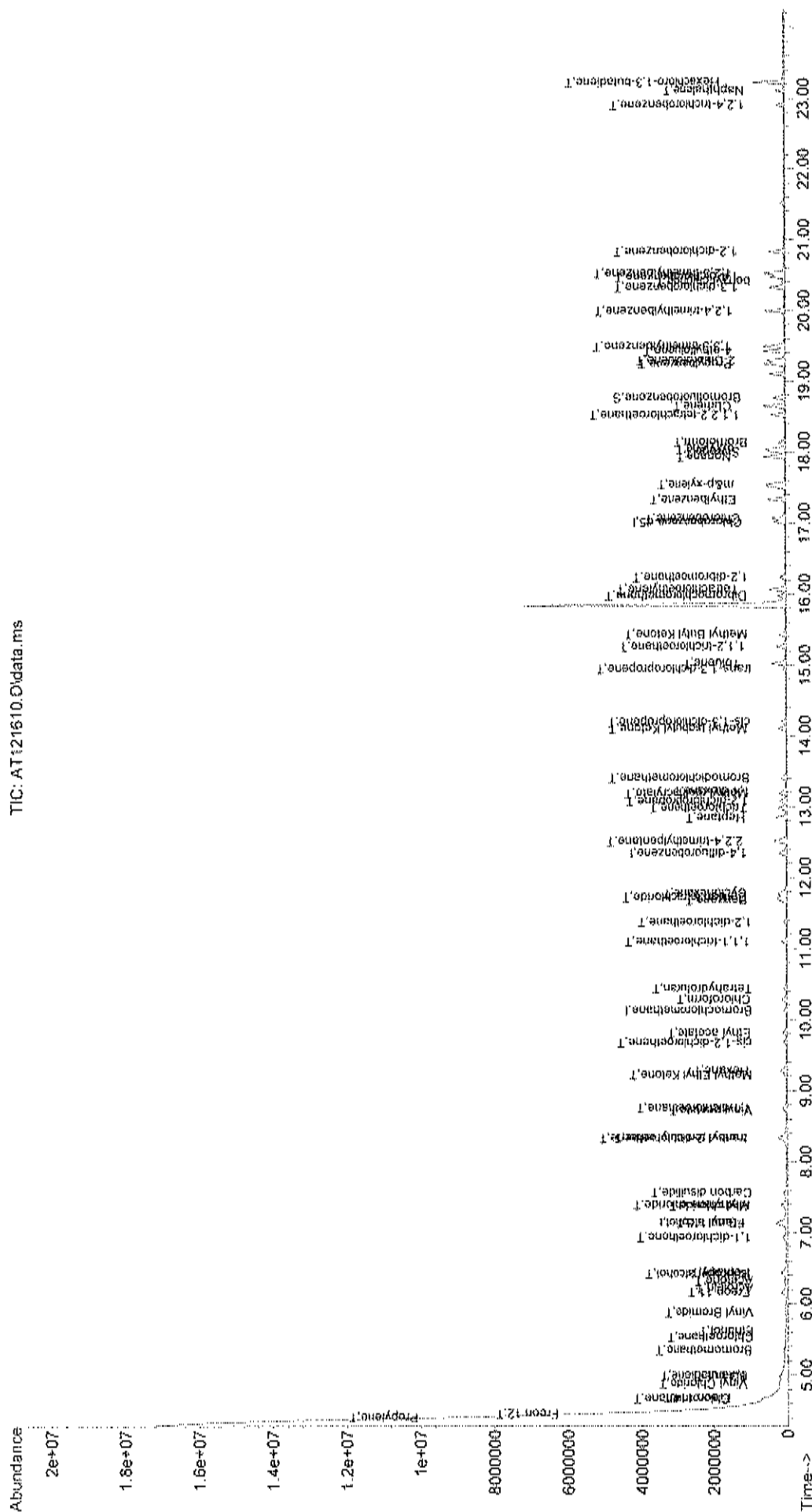
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data Path      : C:\msdchem\1\data2\2022DEC\
Data File     : AT121610.D
Acq On       : 16 Dec 2022   6:44 pm
Operator      : RJP
Sample        : C2212031-001A MSD
Misc          : AD12_1UG
ALS Vial      : 10
Sample Multiplier: 1

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Quant Time: Dec 17 08:40:34 2022
Quant Method : C:\msdchem\1\methods\AD12 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Dec 13 09:11:04 2022
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INJECTION LOG

Standard Stock # A5419
 Stock # 5420
 Stock # 5421
 EPA 70-15 / Jan. 1999

Stock # 5420
 Stock # 5421
 Stock # 5422
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 Stock # 5499
 Stock # 5500

107) AT121427.D				
C2212024-002A 10X	27	1.000	15 Dec 2022	3:15 am
108) AT121428.D				
C2212023-001A	28	1.000	15 Dec 2022	3:56 am
109) AT121429.D				
C2212023-001A 10X	29	1.000	15 Dec 2022	4:36 am
110) AT121430.D				
C2212015-001A 30X	30	1.000	15 Dec 2022	7:05 am
111) AT121431.D				
C2212006-001A 1860X	31	1.000	15 Dec 2022	8:26 am
112) AT121432.D				
C2212006-001A 5580X	32	1.000	15 Dec 2022	9:07 am
113) AT121501.D				
BFB	1	1.000	15 Dec 2022	11:29 am
114) AT121502.D				
ALEED	2	1.000	15 Dec 2022	12:16 pm
115) AT121503.D				
ALEED_100	3	1.000	15 Dec 2022	1:05 pm
116) AT121504.D				
ALEED_75	4	1.000	15 Dec 2022	1:50 pm
117) AT121505.D				
ALEED_50	5	1.000	15 Dec 2022	2:34 pm
118) AT121506.D				
ALEED_25	6	1.000	15 Dec 2022	3:15 pm
119) AT121507.D				
ALEED_10	7	1.000	15 Dec 2022	4:00 pm
120) AT121508.D				
ALEED_5	8	1.000	15 Dec 2022	4:43 pm
121) AT121509.D				
ALEED_1.5	9	1.000	15 Dec 2022	5:26 pm
122) AT121510.D				
ALEED_0.04	10	1.000	15 Dec 2022	6:06 pm
123) AT121511.D				
ALEED	11	1.000	15 Dec 2022	6:47 pm
124) AT121512.D				
ALEED	12	1.000	15 Dec 2022	7:26 pm
125) AT121601.D				
BFB1UG	1	1.000	16 Dec 2022	9:25 am
126) AT121602.D				
A1UG_1.0	2	1.000	16 Dec 2022	10:12 am
127) AT121603.D				
ALCS1UG-121622 AD12_1UG	3	1.000	16 Dec 2022	10:57 am
128) AT121604.D				
AMB1UG-121622 AD12_1UG	4	1.000	16 Dec 2022	11:36 am

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C2212031-016A	AD12_1UG	26	1.000	17 Dec 2022	6:32 am

151) AT121627.D					
C2212031-017A	AD12_1UG	27	1.000	17 Dec 2022	7:16 am

152) AT121628.D					
C2212034-001A	AD12_1UG	28	1.000	17 Dec 2022	8:00 am

153) AT121701.D					
BFB1UG	AD12_1UG	1	1.000	17 Dec 2022	9:41 am

154) AT121702.D					
ALUG_1.0	AD12_1UG	2	1.000	17 Dec 2022	10:29 am

155) AT121703.D					
ALCS1UG-121722	AD12_1UG	1	1.000	17 Dec 2022	11:22 am

156) AT121704.D					
AMB1UG-121723	AD12_1UG	2	1.000	17 Dec 2022	12:01 pm

157) AT121705.D					
C2212031-018A 5X	AD12_1UG	3	1.000	17 Dec 2022	12:42 pm

158) AT121706.D					
C2212031-019A 5X	AD12_1UG	4	1.000	17 Dec 2022	1:24 pm

159) AT121707.D					
C2212031-002A 5X	AD12_1UG	5	1.000	17 Dec 2022	2:05 pm

160) AT121708.D					
C2212031-003A 10X	AD12_1UG	6	1.000	17 Dec 2022	2:48 pm

161) AT121709.D					
C2212031-004A 10X	AD12_1UG	7	1.000	17 Dec 2022	3:31 pm

162) AT121710.D					
C2212031-007A 5X	AD12_1UG	8	1.000	17 Dec 2022	4:13 pm

163) AT121711.D					
C2212031-008A 5X	AD12_1UG	9	1.000	17 Dec 2022	4:56 pm

164) AT121712.D					
C2212031-009A 5X	AD12_1UG	10	1.000	17 Dec 2022	5:39 pm

165) AT121713.D					
C2212031-010A 10X	AD12_1UG	11	1.000	17 Dec 2022	6:22 pm

166) AT121714.D					
C2212031-010A 40X	AD12_1UG	12	1.000	17 Dec 2022	7:04 pm

167) AT121715.D					
C2212031-011A 5X	AD12_1UG	13	1.000	17 Dec 2022	7:46 pm

168) AT121716.D					
C2212031-014A 10X	AD12_1UG	14	1.000	17 Dec 2022	8:29 pm

169) AT121717.D					
C2212031-015A 9X	AD12_1UG	15	1.000	17 Dec 2022	9:13 pm

170) AT121718.D					
C2212031-015A 90X	AD12_1UG	16	1.000	17 Dec 2022	9:56 pm

171) AT121719.D					
C2212031-016A 5X	AD12_1UG	17	1.000	17 Dec 2022	10:39 pm

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 172) AT121720.D
 173) AT121721.D
 174) AT121722.D
 175) AT121723.D
 176) AT121901.D
 177) AT121902.D
 178) AT121903.D
 179) AT121904.D
 180) AT121905.D
 181) AT121906.D
 182) AT121907.D
 183) AT121908.D
 184) AT121909.D
 185) AT121910.D
 186) AT121911.D
 187) AT121912.D
 188) AT121913.D
 189) AT121914.D
 190) AT121915.D
 191) AT121916.D
 192) AT121917.D
 193) AT121918.D

172) AT121720.D	C2212031-017A 10X	AD12_1UG	18	1.000	17 Dec 2022	11:22 pm
173) AT121721.D	C2212031-017A 40X	AD12_1UG	19	1.000	18 Dec 2022	12:04 am
174) AT121722.D	C2212034-001A 10X	AD12_1UG	20	1.000	18 Dec 2022	12:47 am
175) AT121723.D	ALCS1UGD-121722	AD12_1UG	21	1.000	18 Dec 2022	1:31 am
176) AT121901.D	BFB		1	1.000	19 Dec 2022	8:57 am
177) AT121902.D	ASTD50_TO15		2	1.000	19 Dec 2022	9:42 am
178) AT121903.D	ALCSTO15-121922		3	1.000	19 Dec 2022	10:33 am
179) AT121904.D	ASTD50_SULF		4	1.000	19 Dec 2022	11:16 am
180) AT121905.D	ALCSSULF-121922		5	1.000	19 Dec 2022	11:59 am
181) AT121906.D	ASTD50_SLX		6	1.000	19 Dec 2022	12:39 pm
182) AT121907.D	ASTD50_SLX		7	1.000	19 Dec 2022	1:19 pm
183) AT121908.D	ALCSSLX-121922		8	1.000	19 Dec 2022	1:59 pm
184) AT121909.D	AMBT015-121922		9	1.000	19 Dec 2022	2:37 pm
185) AT121910.D	C2212019-001A 129X		10	1.000	19 Dec 2022	3:23 pm
186) AT121911.D	C2212019-001A 1290X		11	1.000	19 Dec 2022	4:03 pm
187) AT121912.D	C2212019-001A 2580X		12	1.000	19 Dec 2022	4:43 pm
188) AT121913.D	C2212023-001A 159X		13	1.000	19 Dec 2022	5:24 pm
189) AT121914.D	C2212023-001A 795X		14	1.000	19 Dec 2022	6:04 pm
190) AT121915.D	C2212026-001A		15	1.000	19 Dec 2022	6:45 pm
191) AT121916.D	C2212026-001A 10X		16	1.000	19 Dec 2022	7:25 pm
192) AT121917.D	C2212027-001A		17	1.000	19 Dec 2022	8:05 pm
193) AT121918.D	C2212028-001A		18	1.000	19 Dec 2022	8:46 pm

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS LOG

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Final Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A-4930	3/29/22	4/15/22	TO15 146 IS	A4920	50 ppb	0.9	45	1	WD	
A-4931			↓	A4921	↓	↓	↓	↓	↓	
A-4932			↓	A4922	↓	↓	↓	↓	↓	
A-4933	4/15/22	4/12/22	TO15 IS	A4266	1 ppm	1.5	30	50	WD	
A-4934			↓	A4267	↓	↓	↓	↓	↓	
A-4935			↓	A4268	↓	↓	↓	↓	↓	
A-4936			↓	A3992	1.025 ppm	1.47	30	50	↓	
A-4937			↓	A4936	50 ppb	3.0	30	5	↓	
A-4938			↓	A3792	10.3 ppm	0.22	45	50	↓	
A-4939			↓	A2574	444 ppb	3.34	30	50	↓	
A-4940			↓	A2623	500 ppb	3.0	30	50	↓	
A-4941			↓	A3926	1 ppm	1.5	30	50	↓	
A-4942			↓	A2572	10.2 ppm	1.47	30	500	↓	
A-4943			↓	A4941	500 ppb	3.0	30	50	↓	
A-4944			↓	A4933	50 ppb	0.9	45	1	↓	
A-4945			↓	A4934	↓	↓	↓	↓	↓	
A-4946	3/30/22	3/30/22	TO15 IS	FF-531165	↓	UNDE	2000 psig	1.0 ppm	WD	
A-4947	3/8/22	3/8/22	TO15 STD	FF-531157	↓	UNDE	2200 psig	1.0 ppm	WD	
A-4948	3/8/22	3/8/22	TO15 LCS	A4267	1 ppm	A4267 IS NOW	LCS	LCS	WD	
A-4949	4/12/22	4/19/22	TO15 IS	A4946	1 ppm	1.5	30	50	WD	
A-4950	↓	↓	↓	A4947	↓	↓	↓	↓	↓	

GC/MS Calibration Standards Logbook

Centek Laboratories, LLC

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Final Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A-5392	11/30/22	12/17/22	TD15 146 IS	A5383	50 ppb	0.9	45	1	W	
A-5393			STD	A5384						
A-5394			LCS	A5385						
A-5395	11/30/22	12/17/22	TD15 SULF	A5053	1 ppm	1.5	30	50		
A-5396	12/17/22	12/14/22	TD15 IS	A4946	1 ppm	1.5	30	50	W	
A-5397			STD	A4947						
A-5398			LCS	A4948						
A-5399			4PCH	A3992	1.025 ppm	1.47	30	50		
A-5400			4PCH	A5399	50 ppb	3.0	30	5		
A-5401			FORM	A3792	10.3 ppm	0.22	45	50		
A-5402			SILOX	A2574 A2623	449 ppb 500 ppb	3.34 3.0	30	50		
A-5403			SULF	A5053	1 ppm	1.5	30	50		
A-5404			H2S	A5054	8.05 ppm	1.87	30	500		
A-5405			H2S2O	A5404	500 ppb	3.0	30	50		
A-5406			TD15 146 IS	A5396	50 ppb	0.9	45	1		
A-5407			STD	A5397						
A-5408			LCS	A5398						
A-5409	12/14/22	12/24/22	TD15 IS	A4946	1 ppm	1.5	30	50	W	
A-5410			STD	A4947						
A-5411			LCS	A4948						
A-5412			4PCH	A3992	1.025	1.77				

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[illegible]

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CANISTER CLEANING LOG

QC Canister Cleaning Logbook

Centek Laboratories, LLC

Instrument: Entech 3100

Canister Number	Canister Size	QC Can Number	# of Cycles	Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr (psig/date)
317	4L	336	30	6/2/2022	WAC060221B	1494020	30+ + 30
561							30+ +
1176							30+ +
241							30+ +
336							30+ +
318	4L	101	30	6/2/2022	WAC060222C		30+ +
571							30+ +
201							30+ +
95							30+ +
101							30+ +
1195	4L	233	30	6/2/2022	WAC060222D		30+ +
239							30+ +
290							30+ +
555							30+ +
233							30+ +
1207	1.4L	1319	30	6/2/2022	WAC060222E		30+ +
209							30+ +
1201							30+ +
13021							30+ +
1319							30+ +
1204	1.4L	1203	30	6/2/2022	WAC060222F		30+ +
214							30+ +
487							30+ +
482							30+ +
1203							30+ +

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Form C151

QC Canister Cleaning Logbook

Centek Laboratories, LLC

Instrument: Entech 3100

Canister Number	Canister Size	QC Can Number	# of Cycles	Int & Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr Int & Date
137	1L	366	20	11/28/12	WAC112922A	17 ± 0.20	+ 30
221							+ 30
240							+ 30
459							+ 30
366							+ 30
496		1177					+ 30
231							+ 30
101							+ 30
568							+ 30
1177							+ 30
465		1186					+ 30
128							+ 30
563							+ 30
460							+ 30
1186							+ 30
370		127					+ 30
545							+ 30
236							+ 30
561							+ 30
129							+ 30
141		170					+ 30
350							+ 30
347							+ 30
274							+ 30
170							+ 30

Data File : C:\HPCHEM\1\DATA2\2022JUNE\AT060213.D Vial: 13
Acq On : 2 Jun 2022 7:02 pm Operator: RJP
Sample : WAC060222E Inst : MSD #1
Misc : A523_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 06 10:56:33 2022 Quant Results File: A523_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A523_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue May 24 09:26:44 2022
Response via : Initial Calibration
DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.74	128	23349	1.00	ppb	-0.03
35) 1,4-difluorobenzene	12.04	114	106539	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.86	117	88242	1.00	ppb	-0.02

System Monitoring Compounds

65) Bromofluorobenzene	18.65	95	54901	0.89	ppb	-0.02
Spiked Amount	1.000	Range	70 - 130	Recovery	=	89.00%

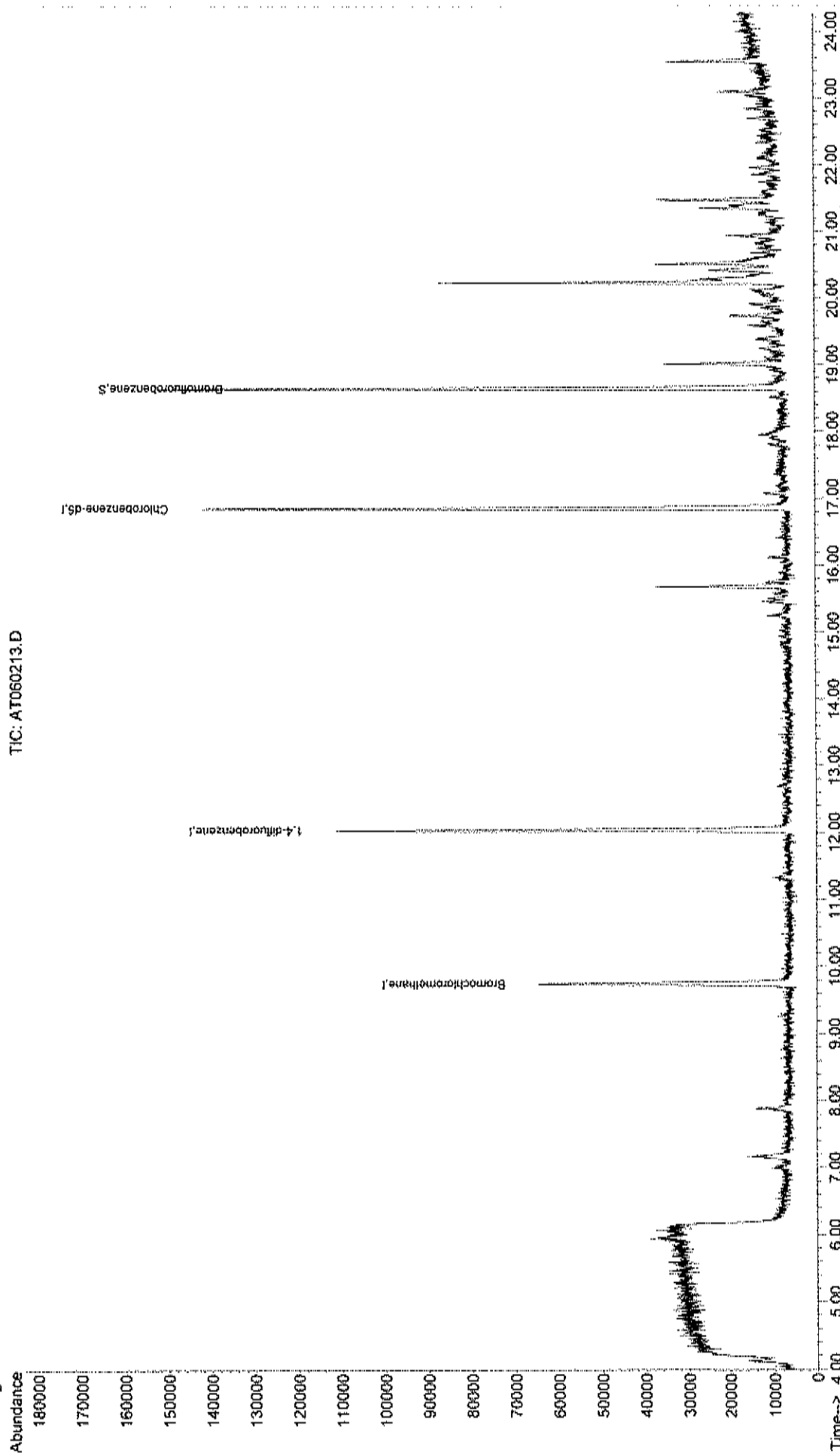
Target Compounds

Qvalue

Data File : C:\HPCHEM\1\DATA2\2022JUNE\AT060213.D Vial: 13
Acq On : 2 Jun 2022 7:02 PM Operator: RJP
Sample : WAC060222E Inst : MSD #1
Misc : A523_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 30 12:14 2022 Quant Results File: A523_1UG.RES

Method : C:\HPCHEM\1\METHODS\A420_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Jan 19 14:04:32 2023
Response via : Initial Calibration

TIC: AT060213.D



Data File : C:\HPCHEM\1\DATA2\2022JUNE\AT060214.D

Vial: 14

Acq On : 2 Jun 2022 7:46 pm

Operator: RJP

Sample : WAC060222F

Inst : MSD #1

Misc : A523_1UG

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jun 06 10:56:35 2022

Quant Results File: A523_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A523_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Tue May 24 09:26:44 2022

Response via : Initial Calibration

DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.74	128	22935	1.00	ppb	-0.03
35) 1,4-difluorobenzene	12.04	114	102229	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.86	117	89142	1.00	ppb	-0.02

System Monitoring Compounds

65) Bromofluorobenzene	18.65	95	56337	0.90	ppb	-0.02
Spiked Amount	1.000	Range	70 ~ 130	Recovery	=	90.00%

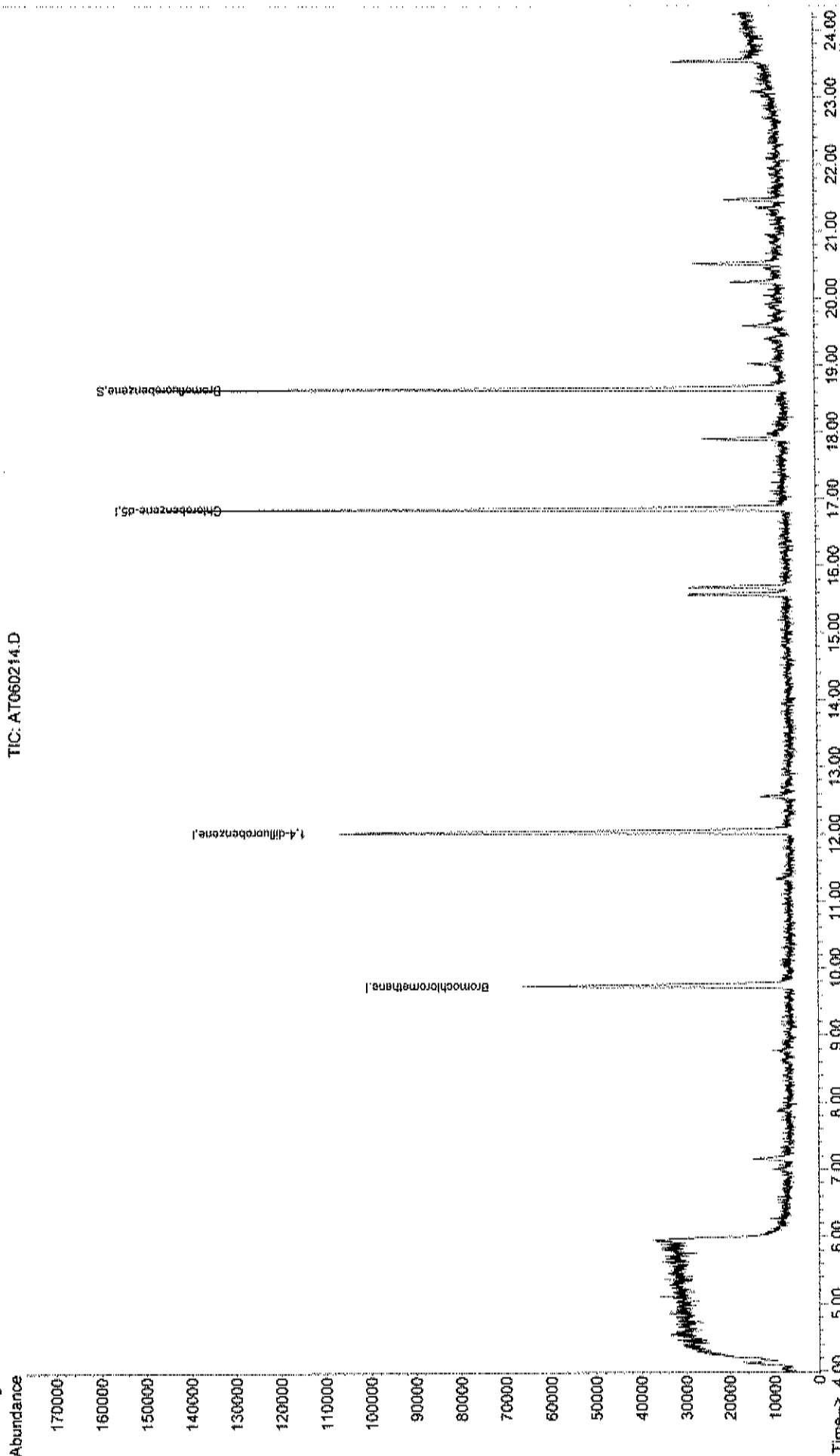
Target Compounds

Qvalue

Data File : C:\HPCHEM\1\DATA2\2022JUNE\AT060214.D Vial: 14
 Acq On : 2 Jun 2022 7:46 pm Operator: RJP
 Sample : WAC060222F Inst : MSD #1
 Misc : A523_IUG Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jul 30 12:15 2022 Quant Results File: A523_IUG.RES

Method : C:\HPCHEM\1\METHODS\A420_IUG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration

TIC: AT060214.D



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112911.D Vial: 11
Acq On : 29 Nov 2022 7:25 pm Operator: RJP
Sample : WAC112922A Inst : MSD #1
Misc : AO03_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 30 14:49:40 2022 Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Oct 27 07:15:52 2022
Response via : Initial Calibration
DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.42	128	14519	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.73	114	64987	1.00	ppb	0.00
50) Chlorobenzene-d5	16.59	117	58680	1.00	ppb	-0.01

System Monitoring Compounds

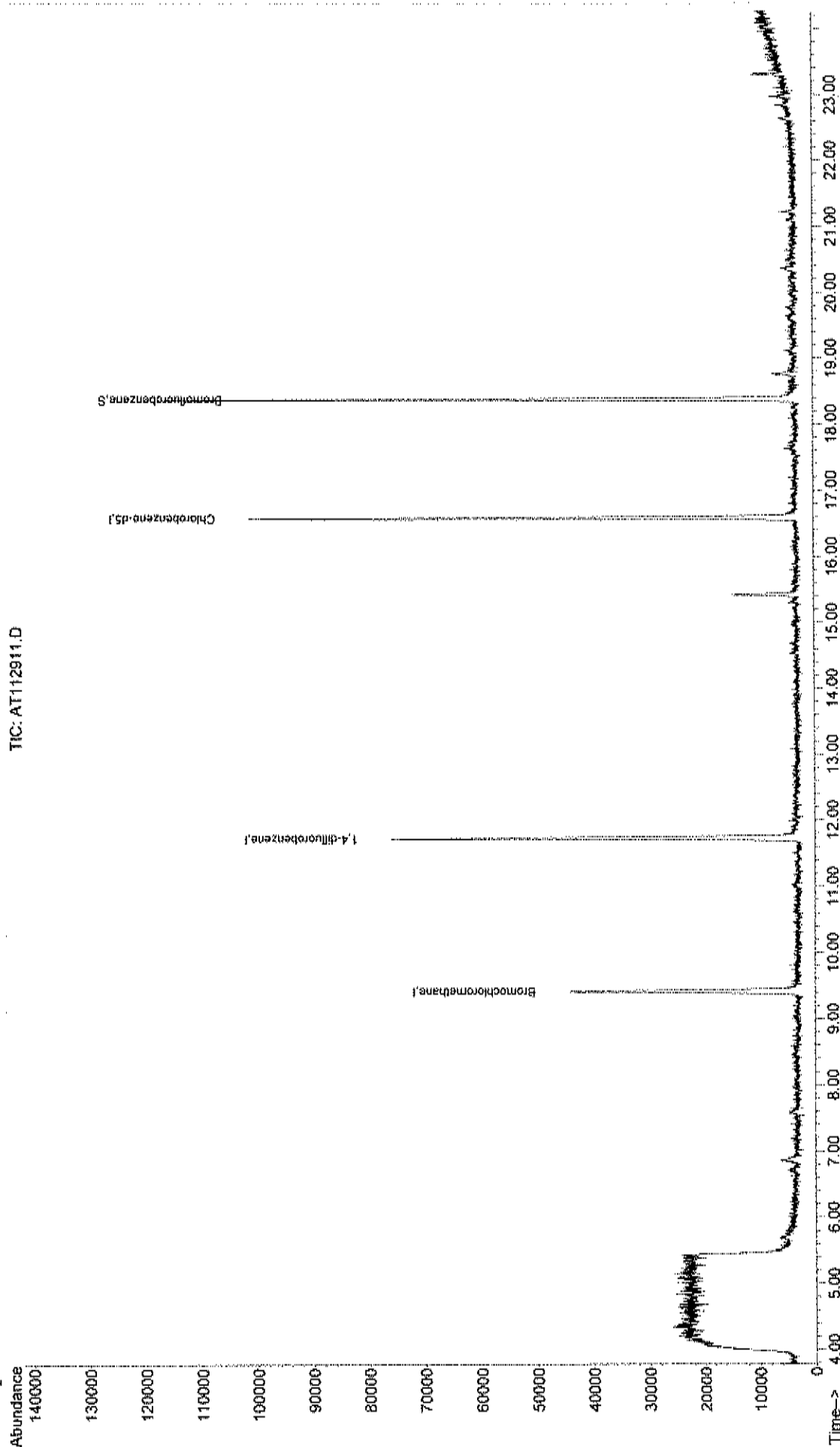
65) Bromofluorobenzene	18.37	95	37211	0.84	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	84.00%

Target Compounds

Qvalue

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112911.D
 Acq On : 29 Nov 2022 7:25 pm
 Sample : WAC112922A
 Misc : AO03 IUG
 MS Integration Params: RTEINT.P
 Quant Time: Nov 30 14:50 2022
 Vial: 11
 Operator: RJP
 Inst : MSD #1
 Multiplr: 1.00
 Quant Results File: AO03_IUG.RES

Method : C:\HPCHEM\1\METHODS\A420_IUG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112912.D

Vial: 12

Acq On : 29 Nov 2022 8:09 pm

Operator: RJP

Sample : WAC112922B

Inst : MSD #1

Misc : AO03_1UG

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 30 14:51:07 2022

Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Thu Oct 27 07:15:52 2022

Response via : Initial Calibration

DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.41	128	14232	1.00	ppb	-0.01
35) 1,4-difluorobenzene	11.73	114	60484	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.59	117	55092	1.00	ppb	-0.01

System Monitoring Compounds

65) Bromofluorobenzene	18.37	95	35775	0.86	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	86.00%

Target Compounds

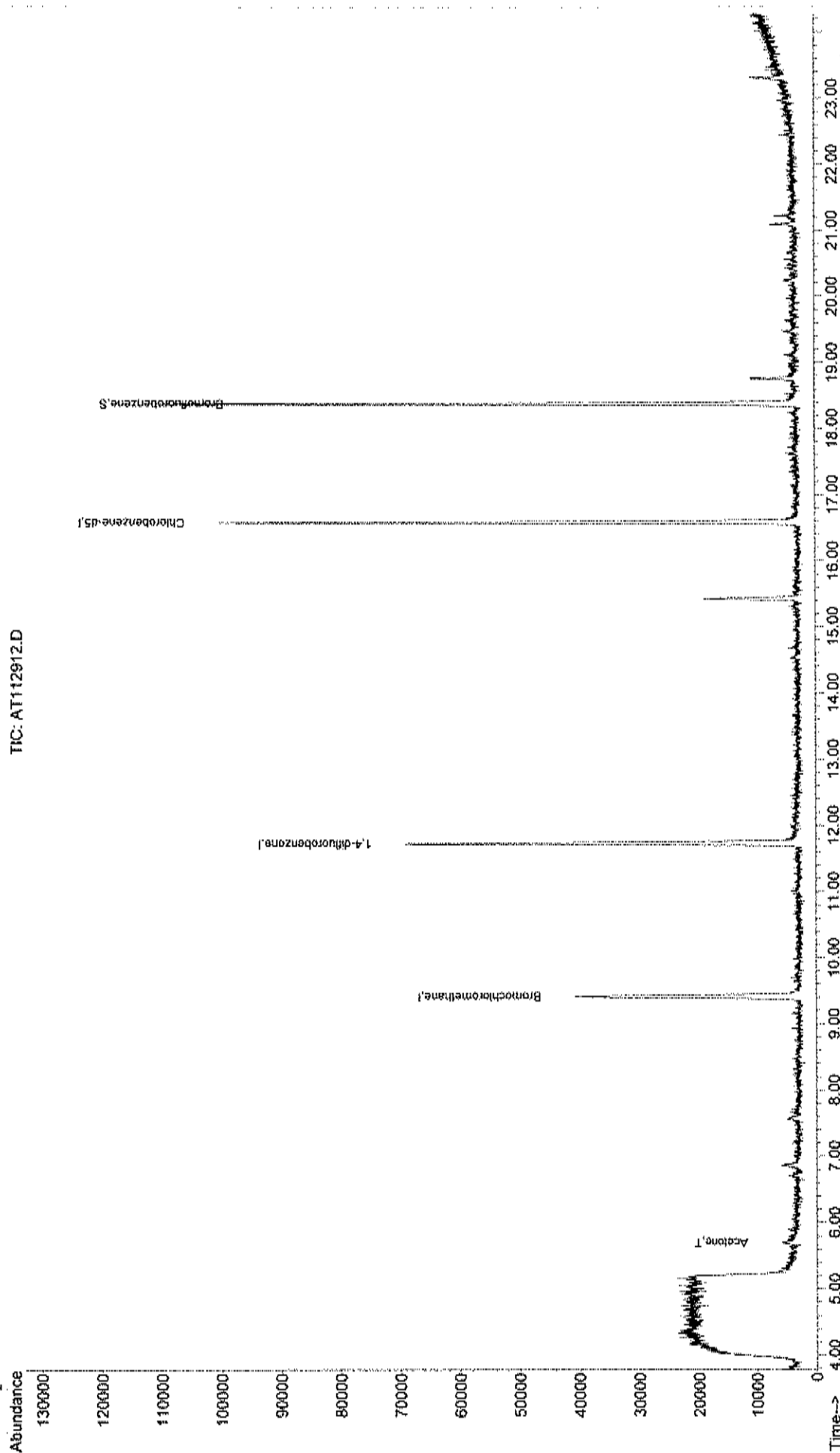
15) Acetone	5.70	58	1233m	0.13	ppb	Qvalue

Quantitation Report (Q1 Reviewed)

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112912.D
 Acq On : 29 Nov 2022 8:09 pm Vial: 12
 Sample : WAC112922B Operator: RJP
 Misc : A003 1UG Inst : MSD #1
 MS Integration Params: RTEINT.P Multiplr: 1.00
 Quant Time: Nov 30 14:51 2022 Quant Results File: A003_1UG.RES

Method : C:\HPCHEM\1\METHODS\A420_1UG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration

TIC: AT112912.D



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112913.D

Vial: 13

Acq On : 29 Nov 2022 8:53 pm

Operator: RJP

Sample : WAC112922C

Inst : MSD #1

Misc : AO03_1UG

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 30 14:52:25 2022

Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Thu Oct 27 07:15:52 2022

Response via : Initial Calibration

DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.41	128	13434	1.00	ppb	-0.01
35) 1,4-difluorobenzene	11.73	114	60228	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.59	117	54909	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.37	95	33464	0.80	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	80.00%

Target Compounds

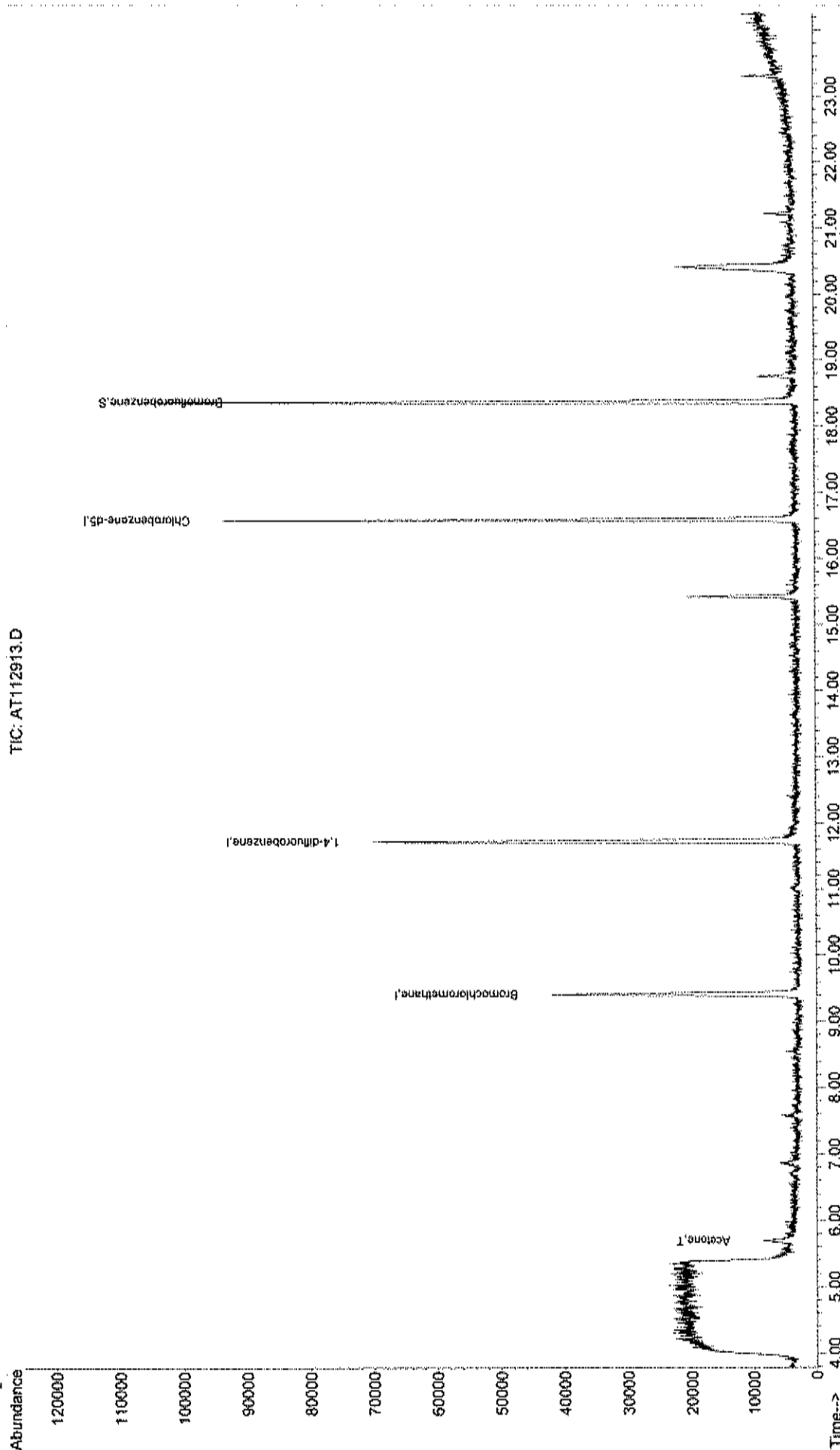
15) Acetone	5.69	58	1447m	0.16	ppb	Qvalue

Quantitation Report (QT reviewed)

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112913.D
 Acq On : 29 Nov 2022 8:53 pm
 Sample : WAC112922C
 Misc : AO03_1UG
 MS Integration Params: RTEINT.P
 Quant Time: Nov 30 14:53 2022
 Quant Results File: AO03_1UG.RES

Method : C:\HPCHEM\1\METHODS\A420_1UG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration

TIC: AT112913.D



MSD1

Sat Jan 28 09:58:32 2023

AT112913.D A420_1UG.M

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112914.D

Vial: 14

Acq On : 29 Nov 2022 9:38 pm

Operator: RJP

Sample : WAC112922D

Inst : MSD #1

Misc : AO03_1UG

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 30 14:54:09 2022

Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Thu Oct 27 07:15:52 2022

Response via : Initial Calibration

DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.42	128	13618	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.73	114	57004	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.59	117	52286	1.00	ppb	-0.01

System Monitoring Compounds

65) Bromofluorobenzene	18.37	95	34303	0.87	ppb	-0.01
Spiked Amount	1.000	Range	70 - 130	Recovery	=	87.00%

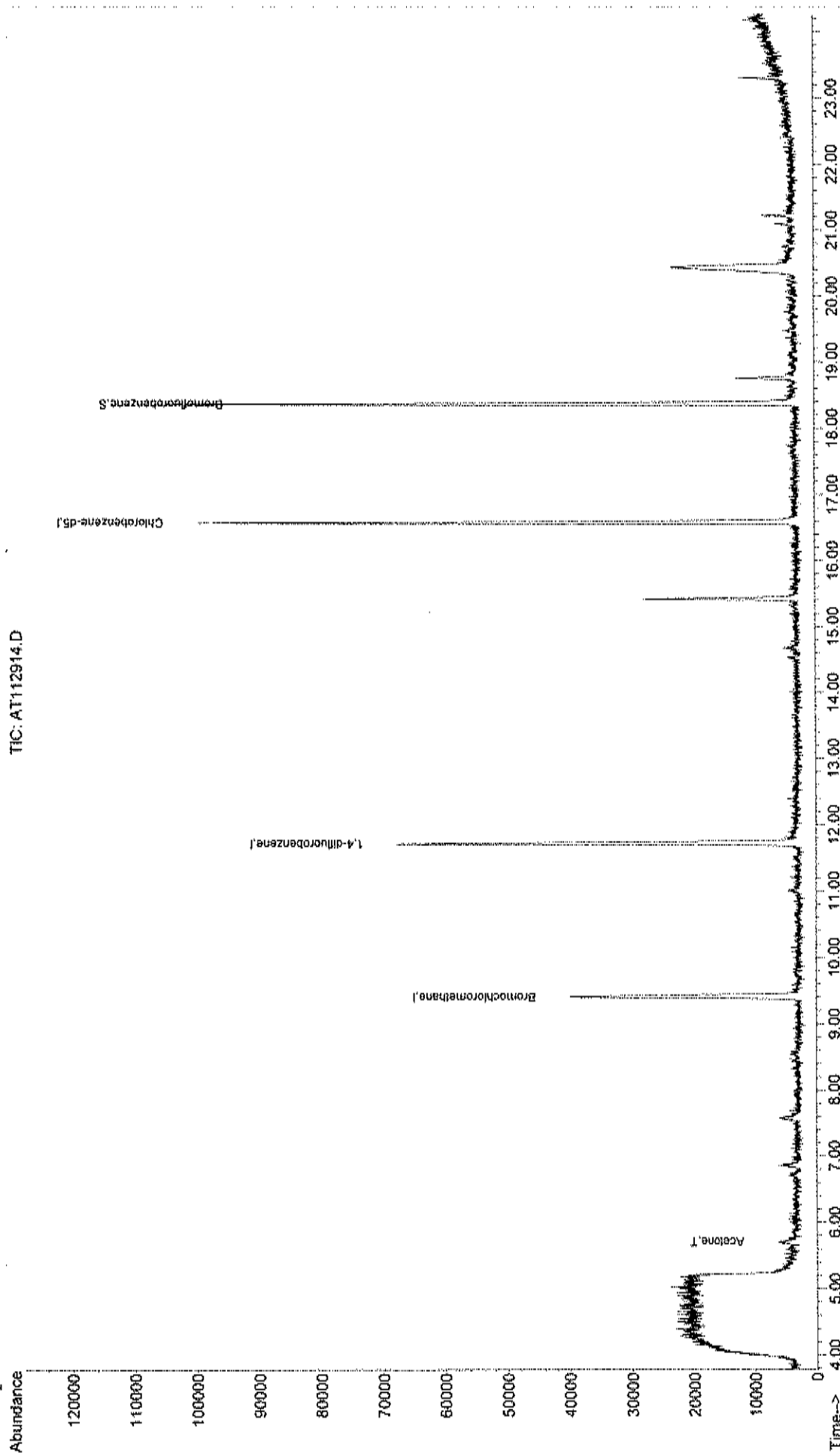
Target Compounds

15) Acetone	5.71	58	1290m	0.14	ppb	Qvalue

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112914.D
Acq On : 29 Nov 2022 9:38 pm
Sample : WAC112922D
Misc : AO03_IUG
MS Integration Params: RTEINT.P
Quant Time: Nov 30 14:55 2022
Quant Results File: AO03_IUG.RES

Method : C:\HPCHEM\1\METHODS\A420_IUG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Jan 19 14:04:32 2023
Response via : Initial Calibration

TIC: AT112914.D



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112915.D

Vial: 15

Acq On : 29 Nov 2022 10:22 pm

Operator: RJP

Sample : WAC112922E

Inst : MSD #1

Misc : AO03_1UG

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 30 15:02:52 2022

Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Thu Oct 27 07:15:52 2022

Response via : Initial Calibration

DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.42	128	13676	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.72	114	59328	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.59	117	53229	1.00	ppb	-0.01

System Monitoring Compounds

65) Bromofluorobenzene	18.38	95	32042	0.79	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	79.00%

Target Compounds

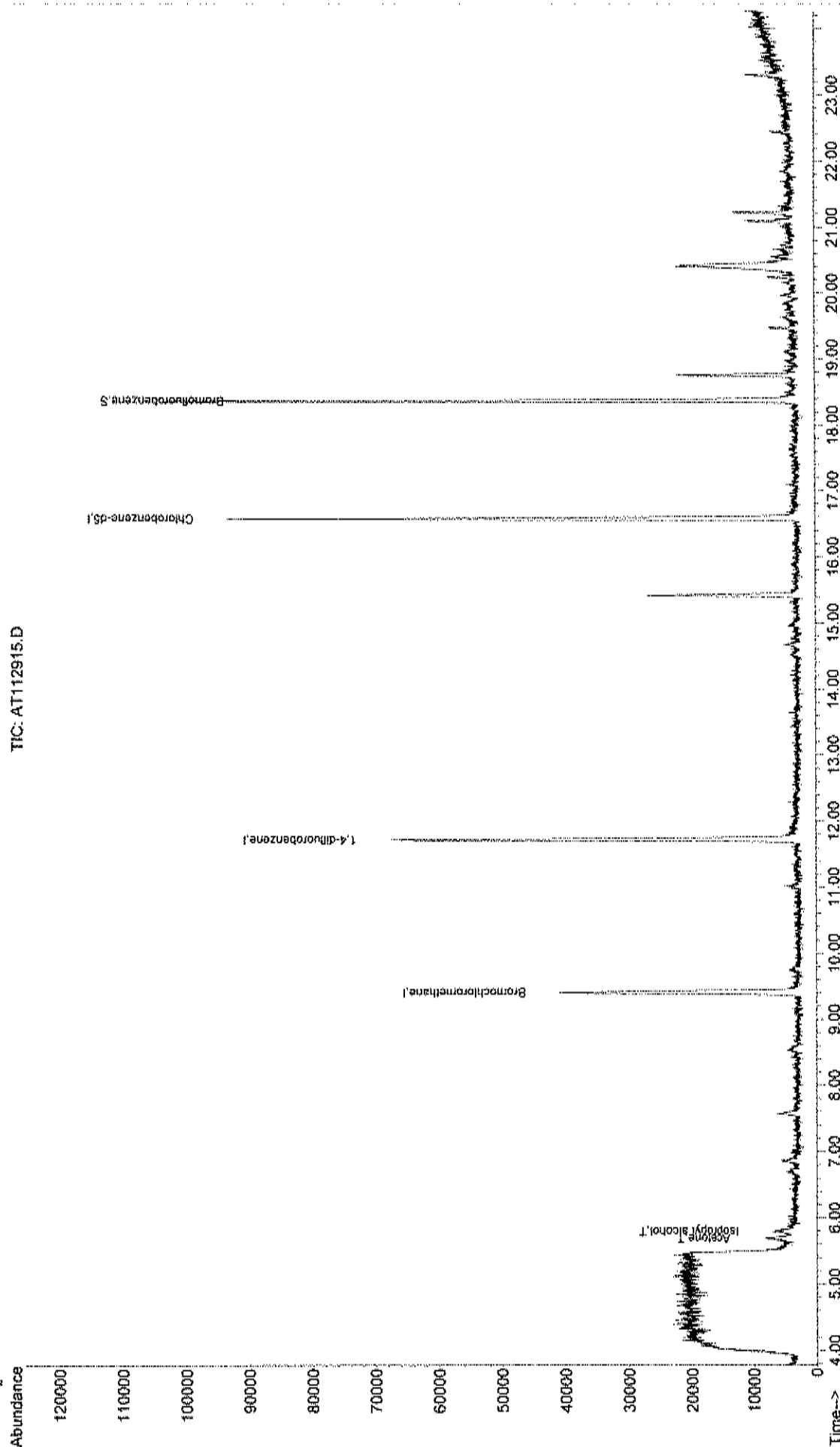
					Qvalue
15) Acetone	5.68	58	1512m	0.17	ppb
17) Isopropyl alcohol	5.80	45	3794	0.13	ppb # 37

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112915.D Vial: 15
 Acq On : 29 Nov 2022 10:22 pm Operator: RJP
 Sample : WAC112922E Inst : MSD #1
 Misc : AO03_1UG Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 30 15:04 2022 Quant Results File: AO03_1UG.RES

Method : C:\HPCHEM\1\METHODS\A420_1UG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration

TIC: AT112915.D



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112916.D Vial: 16
Acq On : 29 Nov 2022 11:06 pm Operator: RJP
Sample : WAC112922F Inst : MSD #1
Misc : AO03_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 01 08:08:18 2022 Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Oct 27 07:15:52 2022
Response via : Initial Calibration
DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.41	128	12935	1.00	ppb	-0.02
35) 1,4-difluorobenzene	11.73	114	58773	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.59	117	51814	1.00	ppb	-0.02

System Monitoring Compounds

65) Bromofluorobenzene	18.37	95	32590	0.83	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	83.00%

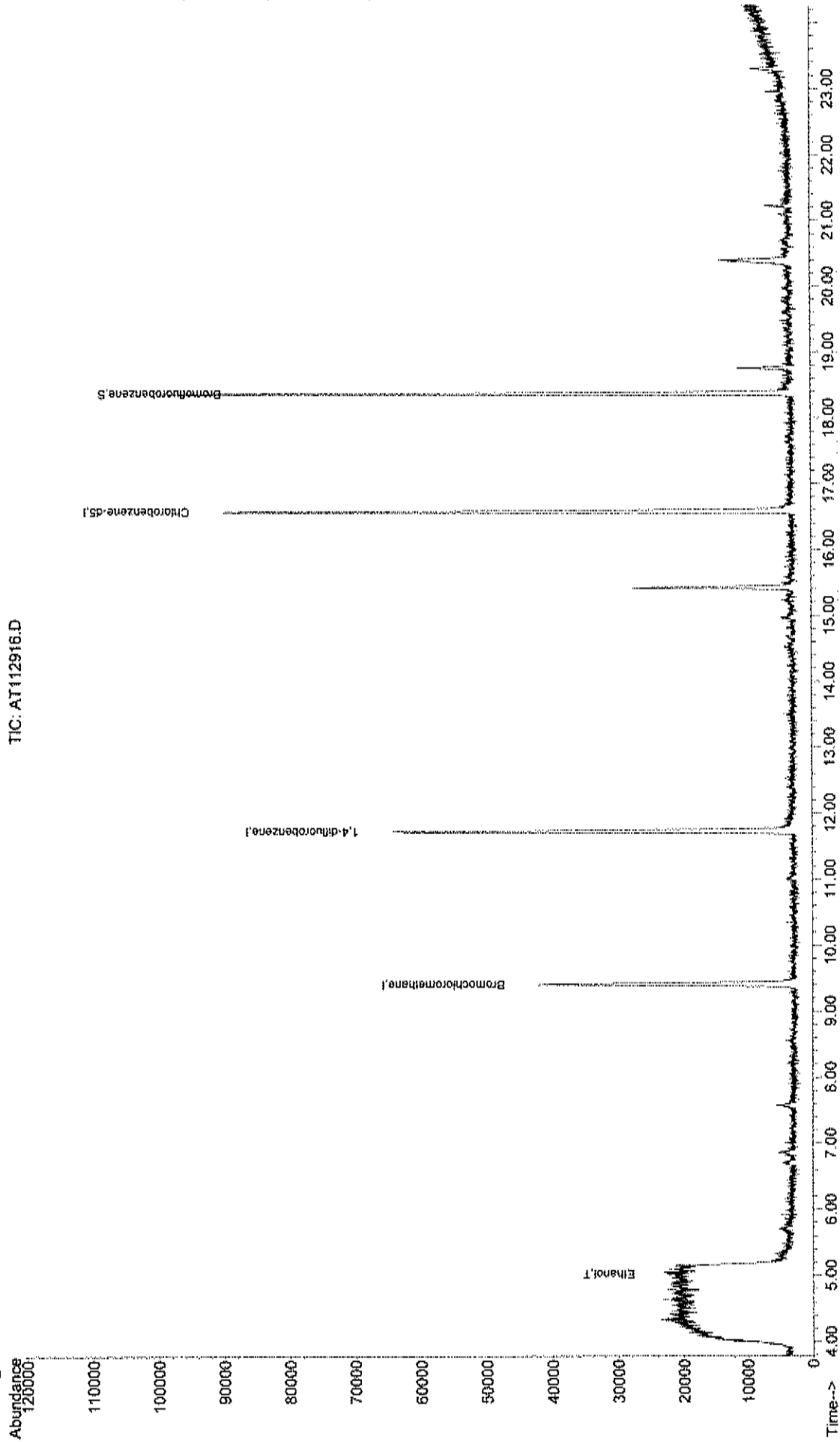
Target Compounds

						Qvalue
11) Ethanol	5.02	45	1852	0.27	ppb	# 61

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112916.D
 Acq On : 29 Nov 2022 11:06 pm Vial: 16
 Sample : WAC112922F Operator: RJP
 Misc : AO03_1UG Inst : MSD #1
 MS Integration Params: RTEINT.P Multiplr: 1.00
 Quant Time: Dec 1 8:08 2022 Quant Results File: AO03_1UG.RES

Method : C:\HPCHEM\1\METHODS\A420_1UG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112917.D Vial: 17
Acq On : 29 Nov 2022 11:50 pm Operator: RJP
Sample : WAC112922G Inst : MSD #1
Misc : AO03_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 01 08:10:35 2022 Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Oct 27 07:15:52 2022
Response via : Initial Calibration
DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.41	128	13036	1.00	ppb	-0.02
35) 1,4-difluorobenzene	11.72	114	55936	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.59	117	51762	1.00	ppb	-0.02

System Monitoring Compounds

65) Bromofluorobenzene	18.37	95	31282	0.80	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	80.00%

Target Compounds

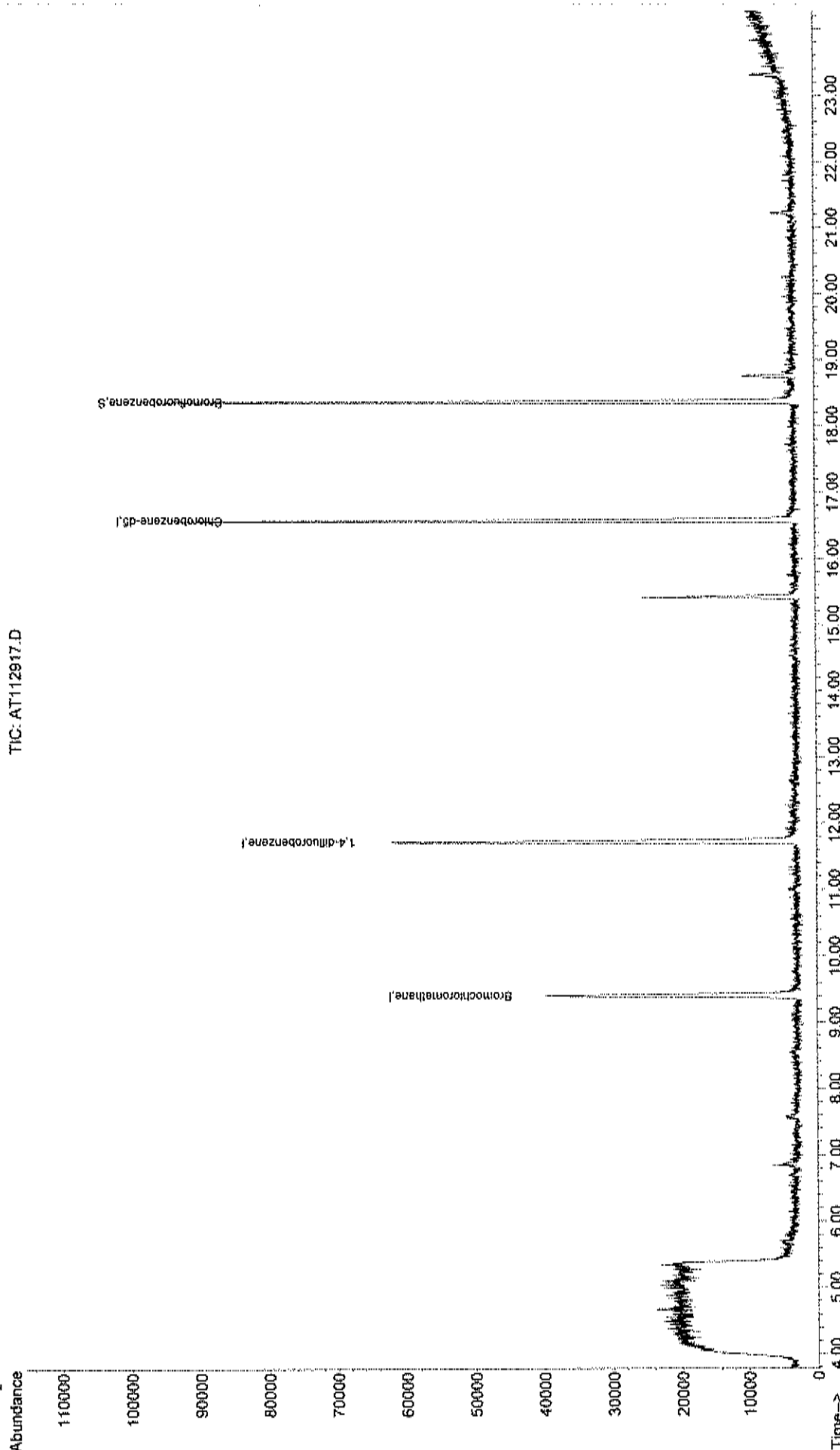
Qvalue

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112917.D Vial: 17
 Acq On : 29 Nov 2022 11:50 pm Operator: RJP
 Sample : WAC112922G Inst : MSD #1
 Misc : A003 IUG Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 1 8:10 2022 Quant Results File: A003_IUG.RES

Method : C:\HPCHEM\1\METHODS\A420_IUG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration

TIC: AT112917.D



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112918.D Vial: 19
Acq On : 30 Nov 2022 12:34 am Operator: RJP
Sample : WAC112922H Inst : MSD #1
Misc : AO03_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 30 07:51:19 2022 Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Oct 27 07:15:52 2022
Response via : Initial Calibration
DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.42	128	13785	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.73	114	56064	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.59	117	52570	1.00	ppb	-0.02

System Monitoring Compounds

65) Bromofluorobenzene	18.37	95	31738	0.80	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	80.00%

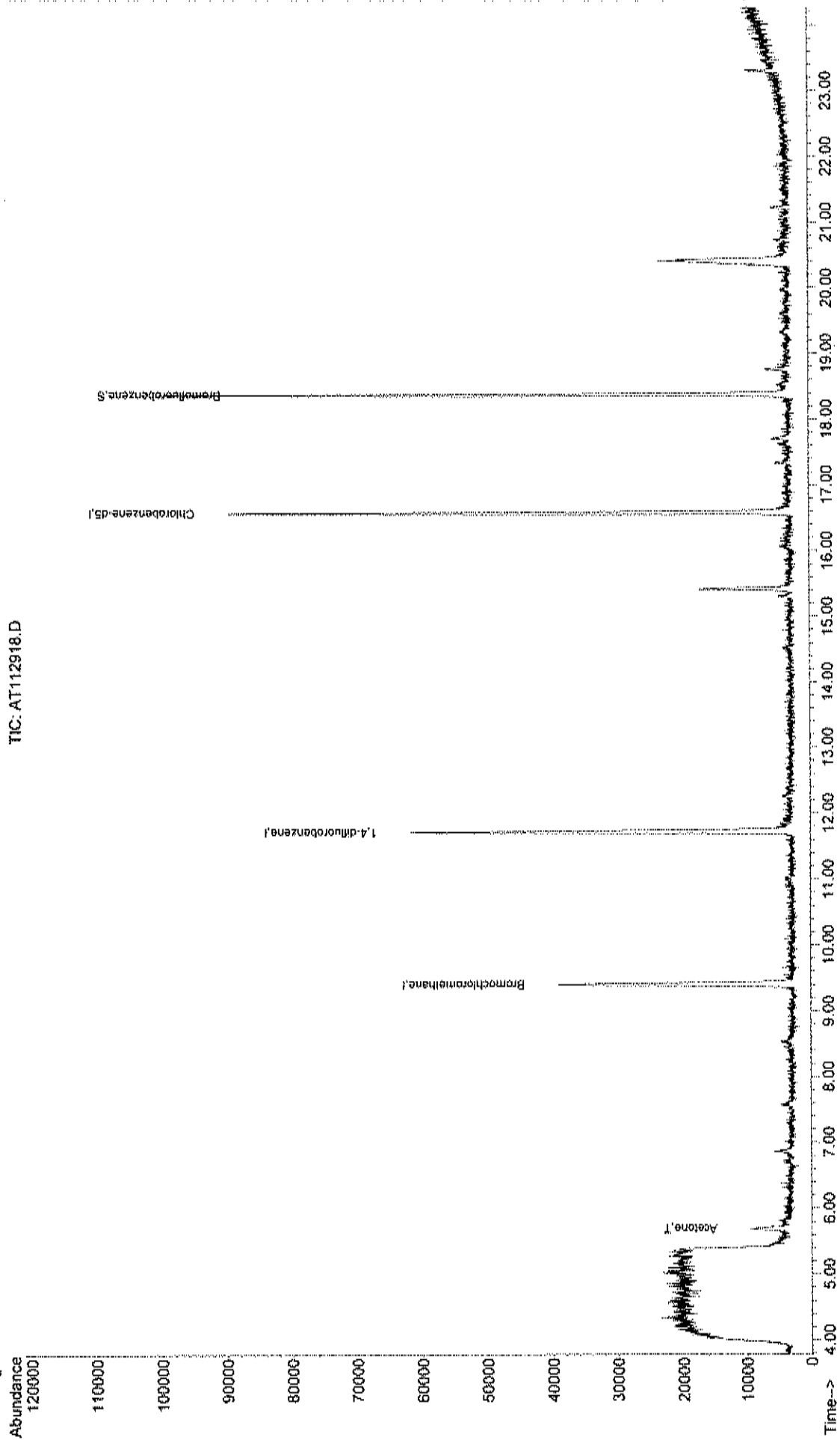
Target Compounds

						Qvalue
15) Acetone	5.70	58	2152	0.23	ppb	89

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112918.D
 Acq On : 30 Nov 2022 12:34 am Vial: 19
 Sample : WAC112922H Operator: RJP
 Misc : AO03_1UG Inst : MSD #1
 MS Integration Params: RTEINT.P Multiplr: 1.00
 Quant Time: Dec 1 8:12 2022 Quant Results File: AO03_1UG.RES

Method : C:\HPCHEM\1\METHODS\A420_1UG.M (RTE Integrator)
 Title : TO-15 VOA Standards for 5 point calibration
 last Update : Thu Jan 19 14:04:32 2023
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112919.D

Vial: 20

Acq On : 30 Nov 2022 1:18 am

Operator: RJP

Sample : WAC112922I

Inst : MSD #1

Misc : AO03_1UG

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 30 07:51:44 2022

Quant Results File: AO03_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO03_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Thu Oct 27 07:15:52 2022

Response via : Initial Calibration

DataAcq Meth : 1UG_ENT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.40	128	13488	1.00	ppb	-0.02
35) 1,4-difluorobenzene	11.72	114	53514	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.59	117	50348	1.00	ppb	-0.02

System Monitoring Compounds

65) Bromofluorobenzene	18.34	95	31255	0.82	ppb	-0.04
Spiked Amount	1.000	Range	70 - 130	Recovery	=	82.00%

Target Compounds

						Qvalue
11) Ethanol	5.02	45	3749	0.53	ppb	# 29

Data File : C:\HPCHEM\1\DATA2\2022NOV\AT112919.D
Acq On : 30 Nov 2022 1:18 am Vial: 20
Sample : WAC112922I Operator: RJP
Misc : AO03_1UG Inst : MSD #1
MS Integration Params: RTEINT.P Multiplr: 1.00
Quant Time: Dec 1 8:14 2022 Quant Results File: AO03_1UG.RES

Method : C:\HPCHEM\1\METHODS\A420_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Jan 19 14:04:32 2023
Response via : Initial Calibration

TIC: AT112919.D

