



**INDOOR AIR QUALITY INVESTIGATION (IAQ)
& SUMP WATER SAMPLING**

**161-01/11 29TH AVENUE
AKA 161-01/11 BAYSIDE LANE
FLUSHING, QUEENS, NEW YORK 11358**

PREPARED FOR

FLUSHING BANK

FEBRUARY 2020

MECC PROJECT NO. M18982AA

MERRITT ENVIRONMENTAL CONSULTING CORP.

77 Arkay Drive, Suite D, Hauppauge, NY 11788
(631) 617-6200 . WWW.MERRITTEC.COM



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(631) 617-6200/Tel (631) 617-6201/Fax

February 18, 2020
Project: M18982A

Ms. Kim Gentile
Flushing Bank
220 RXR Plaza
Uniondale NY 11556

RE: IAQ & Sump Sampling
161-01/11 29th Avenue
Flushing, New York 11358

Dear Ms. Gentile:

As requested, Merritt Environmental Consulting Corp. ("MECC") has completed this Indoor Air Quality Investigation at the 161-01 to 161-11 29th Avenue property (the "Site"). The Site contains a series of six (6) attached two-story mixed-use residential/commercial buildings constructed in 1931. No dry cleaning currently takes place at the Site. The principal intent of this study was to determine if indoor air quality has been adversely affected by previously discovered perchloroethylene (PCE) contamination in groundwater under the Site building. The PCE release originated from a former dry cleaning operation that once occupied the ground floor commercial space currently occupied by a pharmacy (161-03 29th Avenue). MECC understands that this study is intended for use as an environmental due diligence instrument.

The planned intent of this study was also to determine if groundwater sump pits exist in each of the six (6) separate Site building basements and, if so, to collect water samples from each pit for laboratory analysis. MECC was denied access to the basements under the east half of the Site building (three basements total). Water samples were collected from three (3) basement sumps under two (2) of three (3) accessed basements in the remainder of the building (a sump was present under the third basement, but was found to be dry). This task was implemented to attempt to determine the lateral extent of previously discovered PCE contamination in the perched aquifer under the Site. Water samples were collected from the two (2) pharmacy sumps during MECC's previously completed subsurface study and elevated PCE concentrations were reported.

Laboratory analysis of the eight (8) collected indoor air samples identifies PCE vapor concentrations ranging from 1.9 micrograms per liter of air ($\mu\text{g}/\text{m}^3$) to 25.8 $\mu\text{g}/\text{m}^3$. The New York State Department of Health (NYSDH) has established a recommended Air Guideline Value of 30 $\mu\text{g}/\text{m}^3$ for PCE in indoor air whereby corrective action and tenant notification is necessary. The highest PCE vapor concentration is reported in an air sample collected from the basement under the dress shop (this shop is adjacent to the former dry cleaner space). Decision matrices included in NYCDH guidance documents recommends that, should PCE vapor concentrations in indoor air exceed 10 $\mu\text{g}/\text{m}^3$, "mitigation" should be implemented. Four (4) of the eight (8) collected indoor air samples are reported to contain PCE above 10 $\mu\text{g}/\text{m}^3$, and all four (4) samples are centered at and adjacent to the former dry cleaner tenant space. Again, MECC was denied access to the three (3) tenant spaces at the east half of the Site.

Laboratory analysis of the three (3) sump water samples indicates a PCE concentration of 120 micrograms per liter (ug/l) in one (1) of two (2) sumps under the former dry cleaner space. This value is similar in magnitude to that reported in previously collected water samples from these sumps. Aside from the two (2) sumps in the former dry cleaner space, a water sample was collected from a sump in the adjoining vacant commercial space and no PCE was detected.

While MECC believes that the PCE contamination in the perched aquifer under the Site can be qualified as localized, the condition has caused PCE vapor accumulation within the structure that warrants action. The source of the vapors (impacted groundwater) should be addressed to reduce contaminant concentrations under the building. Further, the basement of the former dry cleaner tenant space needs to be actively ventilated to the exterior to prevent migration of volatile organic vapors into the structure. Engineering controls, such as a sub-slab depressurization system, may not be possible due to the shallow water table that is assumed to be directly under the basement floors.

Background

The Site is located at the northeast corner of the intersection of 29th Avenue and 161st Street in an urban setting. The large majority of properties surrounding the Site are used for residential purposes. The Site contains six attached two-story buildings housing commercial and retail operations on the ground floors and residential apartments on the second floors. It appears that one apartment is located above each of the six commercial spaces. A shared rear yard is present at the rear (north sides) of the Site buildings. Each of the Site building sections contains discrete full basements. The size of the Site is approximately 13,100 square feet inclusive of the building footprints and rear yard. The aggregate footprint of the Site buildings is approximately 7,300 square feet. Site building construction consists of wood-frame floor and roof decks with brick and mortar exterior walls. The Site appears to have always been connected to the local sewer and drinking water supply systems.

A recently completed phase I environmental site assessment (ESA) indicates that a dry cleaner historically occupied the commercial space at the 161-03 29th Avenue portion of the Site (currently occupied by a small drug store). According to sources of historical information gathered by the ESA, a dry cleaner occupied this Site tenant space between 1973 and 2014 and was known as “Rose Garden Cleaners.” Further, regulatory agency databases reviewed by the ESA shows that spent PCE was generated in this tenant space in 2007.

MECC subsequently completed a subsurface investigation of the Site (see attached prior report). The prior study included installation of soil borings into the rear yard of the Site. Specifically, two borings were placed adjacent to an abandoned underground heating oil storage tanks. A third boring was placed directly north of the former dry cleaner tenant space. Groundwater samples were also collected from two sump pits in the basement of the former dry cleaner space.

The results of the prior investigation identified evidence of a petroleum release at the UST, and the attached report recommends that the UST be removed along with any impacted soil. The report also recommends that the condition be reported to regulators as required by New York State law. In addition, the prior report identifies elevated levels of PCE and PCE degradation products in the water samples collected from the two (2) sump pits; no PCE or PCE degradation products were detected in a groundwater sample collected from the exterior boring installed north of the dry cleaner space.

Topography and Geology

The elevation of the Site is approximately 70 feet above mean sea level. Local surface topography has little relief with a slight downward slope to the north-northeast. MECC's review of the attached USGS topographic map confirms an apparent slight downward slope to the northeast. Subsurface sediment encountered at the Site consists of clay with varying amounts of sand interspersed by water-bearing zones composed of fine to coarse sand. This unconsolidated sediment likely represents a glaciofluvial depositional environment. Two of these water-bearing zones were encountered to a depth of 15 feet bgs. United States Geological Survey (USGS) interactive maps of Long Island list the depth to the unconfined aquifer in the Site area at approximately 40 feet bgs. Therefore, MECC believes that the encountered shallower water-bearing zones represent perched groundwater conditions. The lateral extent of these water-bearing zones is unknown but it appears that they extend beyond Site borders (evidence of water intrusion was observed within the Site building basements). Based on contaminant concentration gradients identified by this FSSI, it appears that local groundwater flow is likely to the north-northeast. Depth to water at the Site ranged from five feet to seven feet bgs.

Scope of Work Completed (indoor air sampling)

MECC collected a total of eight (8) indoor air samples at the Site building to determine if elevated concentrations of chlorinated volatile organic vapors exist. The samples were collected from the three (3) structures that comprise the west half of the Site building. MECC was denied access into the eastern three (3) building sections. One (1) indoor air sample was collected from each of the three (3) western basements. In addition, one (1) indoor sample was collected from within each of the ground floor commercial spaces. The westernmost space was vacant during this study; the remaining two (2) spaces contain a pharmacy (former dry cleaner) and a dress shop. Further, two (2) stairways leading to residential apartments are located over the vacant commercial space and the pharmacy. One (1) indoor air sample was collected from each of these stairway landings at the second floor. One (1) outdoor air sample was collected as a control (total nine samples submitted to the laboratory). No sub-slab soil vapor samples were collected due to the high water table directly under the basement floor slabs.

All air samples were collected in accordance with the New York State Department of Health Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006 (the "Final Guidance"). All sampling was performed with a flow rate of no more than 0.2 liters of air per minute. All samples were collected under heating season conditions.

Indoor/Outdoor Air Sample Laboratory Analysis

The indoor and outdoor air samples were collected into six liter summa canisters certified clean by the laboratory. Each canister was equipped with a regulator set for a two hour sampling period. All samples were analyzed at Chemtech for Volatile Organic Compounds (VOCs) under EPA Method TO-15. All appropriate chain-of-custody documents were completed prior to sample shipment. Field sampling forms were also completed and are included as part of the chain-of-custody documentation. All samples were hand delivered to the laboratory within one business day of collection.

Table 1 summarizes the laboratory report of air sample analysis.

TABLE 1: AIR SAMPLE ANALYSIS RESULTS EPA Method TO-15, detected compounds only									
Compound	IA1 Vacant 1 st flr	IA2 Bsmnt. of vacant space	IA3 Pharmacy basement	IA4 Pharmacy 1 st flr.	IA5 Dress shop basement	IA6 Dress shop 1 st floor	IA7 2 nd flr. landing over vacant space	IA8 2 nd flr. Landing over pharmacy	OA1 Outdoor
Dichlorodifluoromethane	2.52	1.14J	2.72	2.47	2.42J	2.62	2.47	2.47	2.72
Chloromethane	0.89J	0.95J	0.91J	0.99J	0.87J	0.97J	1.07	0.93J	1.03
Trichlorofluoromethane	1.4J	1.4J	1.4J	1.4J	1.46J	1.46J	1.35J	1.29J	1.35J
tert-Butyl-alcohol	ND	ND	ND	ND	ND	ND	1.0J	ND	ND
Heptane	0.61J	ND	ND	ND	0.7J	0.61J	1.02J	0.82J	ND

Acetone	12.8B	8.79B	8.31B	25.6B	54.6B	38.2B	24.5B	52.7B	9.26B
Methylene Chloride	10.4B	2.4B	6.25B	3.2B	2.0B	18.1B	8.34B	6.25B	2.71B
2-Butanone (methyl ethyl ketone)	0.41B	0.41J	ND	0.38J	0.62J	0.41J	0.83J	0.56J	0.38
Carbon tetrachloride	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.38	ND
2,2,4-Trimethylpentane	0.65J	ND	ND	ND	0.7J	0.61J	0.51J	0.75J	ND
Chloroform	ND	ND	ND	0.54J	0.78J	ND	ND	0.73J	ND
Benzene	1.15J	0.61J	0.67J	0.86J	1.37J	1.41J	1.63	1.34J	0.48J
1,2-Dichloroethane	ND	ND	ND	ND	ND	0.49J	ND	ND	ND
Trichloroethene (TCE)	ND	ND	0.32	0.21	0.91	ND	ND	0.21	ND
Toluene	7.54	ND	2.3	2.15	9.42	7.16	6.41	9.04	0.72J
Tetrachloroethene (PCE)	2.44	2.31	19.7	10.8	25.8	1.9	2.1	12.9	ND
Ethylbenzene	0.61J	ND	ND	ND	0.69J	0.48	0.74J	0.65J	ND
Total Xylenes	2.6J	ND	ND	0.52J	2.69	1.65J	3.39J	3.13	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	0.54J	0.64	ND
Hexane	4.58	0.92	2.26	1.73J	3.52	5.99	3.52	3.42	1.02J

NOTES

1. All results are expressed in micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$)
2. J = Concentration is approximate and is less than the quantitation limit but greater than the method detection limit
3. B = Substance also detected in laboratory quality control method blank
4. "ND" Not Detected

All field work was completed on February 5, 2020. The Final Guidance was used to evaluate the laboratory data. Specifically, the Final Guidance was formulated by the State of New York to address certain specific VOCs, which include PCE, trichloroethene (TCE), carbon tetrachloride and methylene chloride all of which were variously detected in the samples. The Final Guidance includes AGVs for both PCE and TCE (AGVs are maximum recommended PCE/TCE concentrations in indoor air). The Final Guidance AGV for PCE is $30 \mu\text{g}/\text{m}^3$ and $2.0 \mu\text{g}/\text{m}^3$ for TCE. Neither the PCE AGV nor the TCE AGV was exceeded in any sample, although PCE was detected in Sample No. IA5 at a level approaching the AGV. IA5 was collected in the basement of the dress shop, which is adjacent to the former dry cleaner space.

The Final Guidance also contains decision matrices for various VOCs in indoor air. Generally, when PCE is detected at levels exceeding $10 \mu\text{g}/\text{m}^3$, "mitigation" is recommended by these matrices. Four of the eight indoor air samples are reported to contain PCE above $10 \mu\text{g}/\text{m}^3$. The Final Guidance also generally recommends "mitigation" when TCE is detected at levels exceeding $1.0 \mu\text{g}/\text{m}^3$; none of the TCE levels reported by the laboratory exceed this value.

Methylene chloride was detected at low concentrations in all samples. However, the laboratory flagged this detection by indicating that methylene chloride was reported in the quality control method blank, indicating that it was introduced into all samples by laboratory procedures. Further, methylene chloride is not a PCE degradation product. Accordingly, MECC concludes that the reported presence of methylene chloride in the samples is not representative of actual indoor air quality.

Carbon tetrachloride was detected at similarly low concentrations in all samples, inclusive of OA1 (outdoor air samples). Carbon tetrachloride is not a PCE degradation product. Since OA1 is reported to contain this substance at a concentration that is similar to those reported in the indoor air sample, MECC concludes that the presence of carbon tetrachloride is representative of ambient air quality and no further investigation is recommended.

PCE was not detected in the outdoor air sample (OA1), which eliminates an exterior source of PCE that was detected in indoor air within the Site building.

Sump Water Sampling and Laboratory Analysis

One (1) sump is present in the basement of the vacant commercial space, two (2) sumps are present in the pharmacy basement and one (1) sump is located under the basement of the dress shop. The dress shop sump was dry at the time field work was conducted. Water samples were collected from the sump in the vacant space and from the two (2) sumps under the pharmacy. All water samples were analyzed by Veritech, a New York State Department of Health-Certified environmental laboratory (NYSDOH Cert. No. 10982). All samples were analyzed under EPA Method 8260 –VOCs. All appropriate chain of custody documentation shall be completed before sample shipment to the laboratory. All samples were collected in laboratory-supplied containers and shipped on ice to the laboratory within one day of completion of field activities.

MECC noted that water levels within the two (2) sumps under the pharmacy were substantially lower than those observed during the prior subsurface investigation. Table 2 summarizes the laboratory data for the three (3) collected samples (table includes VOCs reported by in sumps by MECC's prior study):

TABLE 1: VOC RESULTS FOR SUMP SAMPLES (includes previous sampling round, detected compounds only)						
Compound	Sump1 12/12/19	Sump1A 2/5/20	Sump2 12/2/19	Sump 2A 2/5/20	Sump3	Standards
Acetone	ND	ND	140	24	ND	50
cis-1,2-Dichloroethene	8.2	ND	13	2.8	ND	5
Trichloroethene	40	ND	12	1.4	ND	5
Perchloroethylene	92	4.3	65	120	ND	5
Total VOCs	140.2	4.3	230	148.2	0.0	

NOTES

1. All results are expressed in micrograms per liter (ug/l), which can also be expressed as parts per billion (ppb).
2. Any result in bold exceeds New York State Department of Health Maximum Contaminant Level for drinking water, and the guidance values or standard listed in the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) or "TOGS" *Water Quality Standards and Guidance Values*.
3. ND: Parameter non-detected, below method detection limits.

Total chlorinated VOC concentrations in the Sump 1 under the pharmacy decreases from that detected by the initial round in December 2019. Since water levels in all sumps were observed to be substantially lower during this current sampling round, it is possible that a slightly lower water table may have been present. If this was the case, a lower volume of water may have been in contact with source material in overlying soil. Acetone was detected in Sump 2 in the previous and current sample. This substance is not a PCE degradation product and is commonly introduced into sample media by laboratory procedures. Accordingly, MECC concludes that the reported presence of acetone in these samples does not represent actual groundwater quality. No VOCs were detected in Sump 3 (under the vacant space adjoining the west side of the pharmacy). This data likely suggests that PCE impact in groundwater is localized to the immediate areas around the two sumps under the pharmacy. Further, laboratory analysis of groundwater sample collected from an exterior soil boring during MECC's initial subsurface investigation detected no PCE or PCE degradation products in groundwater. This soil boring (B3) was installed north of the pharmacy space at an estimated hydraulic downgradient position. This data also suggests that PCE contamination in the perched aquifer beneath the Site is a localized condition.

Conclusions/Recommendations

The elevated PCE concentrations in indoor air at the Site can be directly correlated with the presence of shallow groundwater impacted by PCE and PCE degradation products at the Site. The area of PCE impact in groundwater appears to be localized to the immediate vicinity of the two (2) sumps in the former dry cleaner basement. While all accumulated laboratory analytical data shows some reduction in VOC concentrations in Sump 1 over time (based on December 2019 sampling), it appears that this reduction is caused by slight changes in water table elevation under the building. It is therefore possible that fluctuating water table levels may cause groundwater to periodically come into contact with source material in overlying soil. Water levels in the two (2) sumps under the pharmacy space were observed to be lower than those noted during the initial sampling event in December 2019.

While MECC believes that the PCE contamination in the perched aquifer under the Site can be qualified as localized, the condition has caused PCE vapor accumulation within the structure that warrants action. The source of the vapors stemming from impacted groundwater should be addressed to reduce contaminant concentrations under the building. Further, the basement of the former dry cleaner tenant space needs to be actively ventilated to the exterior to prevent migration of volatile organic vapors into the structure. Engineering controls, such as a sub-slab depressurization system, may not be possible due to the shallow water table that is assumed to be directly under the basement floors.

Further, evidence of a petroleum release from the UST was identified in groundwater during MECC's December 2019 Investigation. Petroleum-related VOCs and semi-volatile organic compounds (SVOCs) were reported in two (2) groundwater samples collected from adjacent to the UST at concentrations that exceeded applicable regulatory limits. Regulatory reporting is required in the State of New York when a petroleum release is discovered. MECC recommended that the UST be removed along with any petroleum-contaminated soil that may be a continuing source of a release to local groundwater.

Limitations of the FSSI

The scope of the FSSI is intended to aid in evaluating whether additional investigation would be prudent. The tasks that comprise this FSSI are not exhaustive or definitive. MECC has made no independent investigation of the accuracy of these secondary sources and has assumed them to be accurate and complete. MECC does not warrant the accuracy or completeness of information provided by secondary sources (MECC has no reason to believe that the secondary sources provided or acquired during this study contain intentionally false or misleading information). MECC does not warrant that all contamination that may exist on the Site has been discovered, that the Site is suitable for any particular purpose or that the Site is clean or free of liability. This FSSI was conducted in accordance with generally accepted industry practice, is solely intended for use as an environmental due diligence instrument and shall not be assumed by any party to be a document intended for submittal to regulators or as meeting every regulatory standard and guideline for conducting such investigations.

The following attachments are included with this document:

Attachment 1: Site Location Map and Site Plan

Attachment 2: Laboratory Report of Air Sample Analysis

Attachment 3: Laboratory Report of Sump Water Analysis

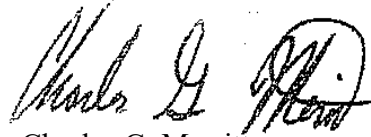
Attachment 4: MECC's Prior Subsurface Investigation Report

If you have any questions concerning this document, please feel free to call our office.

Sincerely,
MERRITT ENVIRONMENTAL CONSULTING CORP.

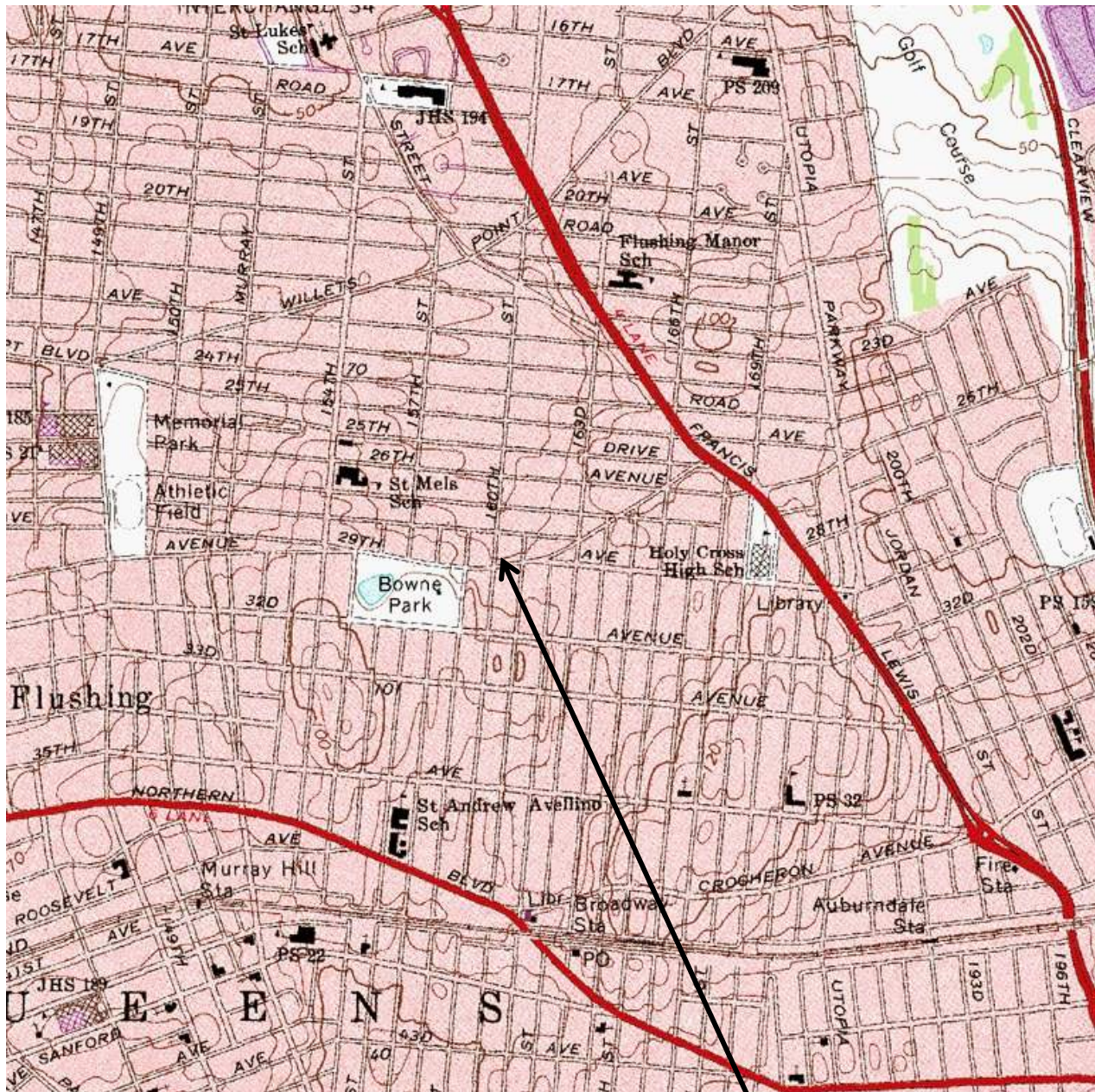
A handwritten signature in black ink, appearing to read "Frank Galdun". The signature is fluid and cursive, with the first name "Frank" written in a larger, more prominent script than the last name "Galdun".

Frank Galdun
Qualified Environmental Professional (QEP)

A handwritten signature in black ink, appearing to read "Charles G. Merritt". The signature is fluid and cursive, with the first name "Charles" written in a larger, more prominent script than the last name "Merritt".

Charles G. Merritt
President/LEED AP

Attachment 1: Site Location Map and Site Plan



SITE

FIGURE 1: SITE LOCATION MAP

Contour Interval: 10'

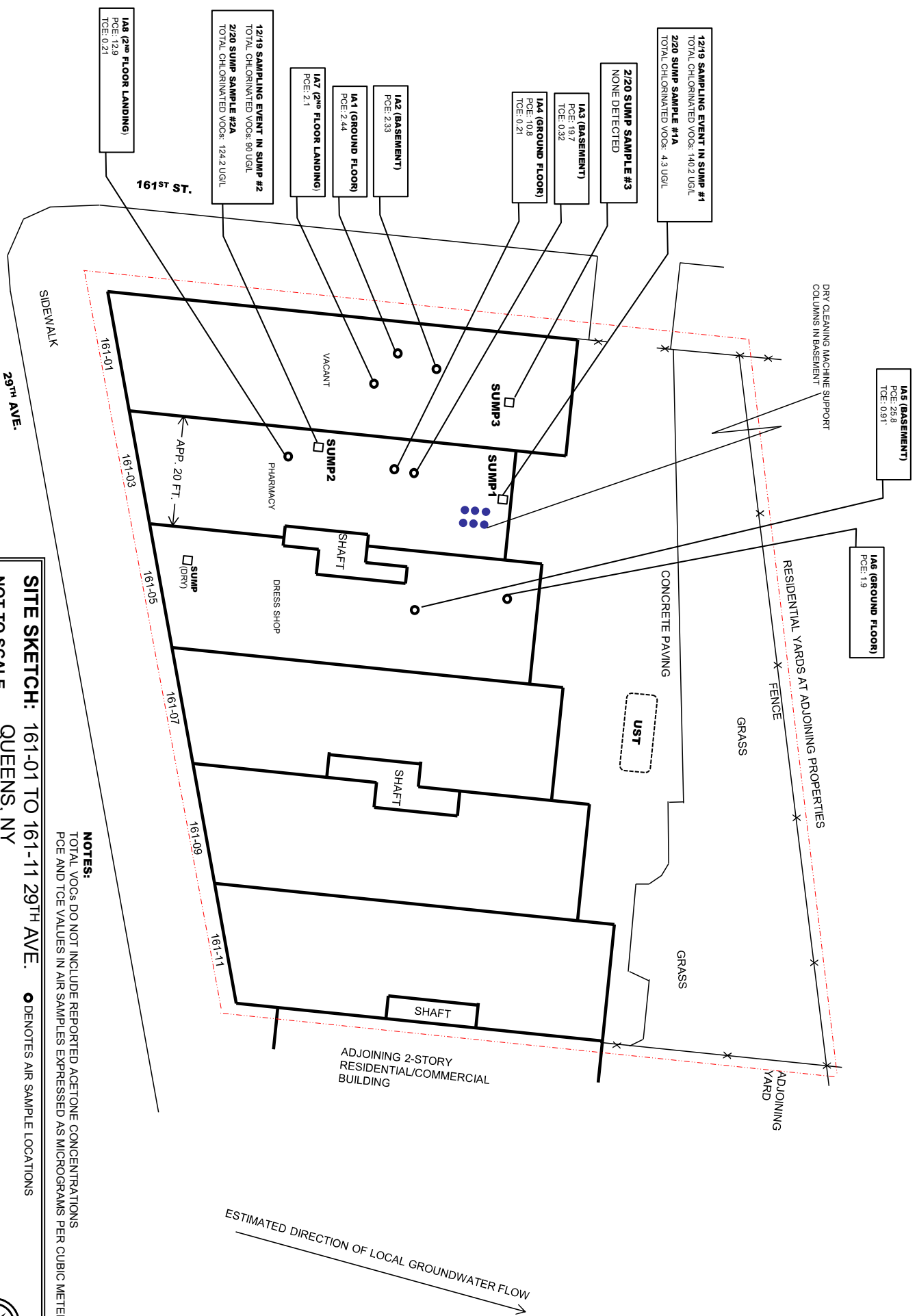
USGS 7.5" Quadrangle Map titled *Flushing, NY*, dated 1995

Site Address:

161-01 to 161-11 29th Ave.

Queens, NY





SITE SKETCH: 161-01 TO 161-11 29TH AVE. QUEENS, NY

NOT TO SCALE

PATTERNED LINES ENCLOSE THE SITE

INTERIOR DETAILS ARE APPROXIMATE AND BASED ON OBSERVATIONS ONLY

NOTES:

TOTAL VOCs DO NOT INCLUDE REPORTED ACETONE CONCENTRATIONS

PCE AND TCE VALUES IN AIR SAMPLES EXPRESSED AS MICROGRAMS PER CUBIC METER OF AIR



Attachment 2: Laboratory Report of Air Sample Analysis

**DATA FOR
VOLATILE ORGANICS**

PROJECT NAME : 161-01 29TH AVE.

**GFE LLC
58 Nokomis Ave**

**Lake Hiawatha, NJ - 07034
Phone No: 646-542-3465**

**ORDER ID : L1435
ATTENTION : Frank Galdun**





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 02/13/2020

Dear Frank Galdun,

9 air samples for the **161-01 29th Ave.** project were received on **02/06/2020**. The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

The invoice for this workorder is also attached to the e-mail.

Regards,

Samantha Beazley

Samantha@chemtech.net

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

L1435

Client Contact Information		Bottle Order ID : B2001079		Courier : <u>Handy</u>		Analysis		Matrix																	
Client ID : GFELO1		Project ID : All Projects		Sampler Name(s) : <u>Frank Galdun</u>																					
Customer Name : GFE LLC		Project Manager : Frank galdun		AIR ANALYSIS																					
Address : 58 Nokomis Ave		Phone Number : 646-542-3465		CHAIN-OF-CUSTODY																					
City : Lake Hiawatha		Fax Number : 973-334-1692		Batch Certified																					
State : NJ		Analysis Turnaround Time : <u>5 DAY</u>																							
Zip Code : 07034		Standard : 10-business days		Data Package Type : <u>Results only</u>																					
Country : 		Rush (Specify) : <u>5 Days</u>		EDD Type : <u>PIC</u>																					
Sample Identification	Sample Start Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can In Field ("Hg) (Start)	Can Vacuum In Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Control Readout	Can Cert ID	TO-15	Indoor/Amibnet Air	Soil Gas									
FA1	2/3/20	11:00	1:00	28.5	5	68	68	-30	-4.3	10550	10492	6 L	50	VL034527.D	1	1									
<p>Temperature (Fahrenheit)</p> <table border="1"> <tr> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> </tr> </table>																	Ambient	Maximum	Minimum	Start			Stop		
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Ambient	Maximum	Minimum																							
Start																									
Stop																									
<p>GC/MS Analyst Signature (TO-15)</p> <p><u>[Signature]</u></p>																									
<p>** Submittal of this COC indicates approval of the analysis based on existing conditio</p> <p>Please follow the instructions on the back of this CO</p>																									
<p>Special Instructions/QC Requirements & Comments :</p> <p>Suspected Contamination: High Medium Low (Low circled)</p> <p>PID Readings: 0.1</p> <p>Sampling site (State): </p> <p>Quick Connector required : NO</p> <p>Canisters Shipped by: <u>SAV</u> Date/Time: <u>2/18/20</u> Canisters Received by: <u>SAV</u> Date/Time: <u>2/18/20</u></p> <p>Samples Relinquished by: <u>SAV</u> Date/Time: <u>2/16/20</u> Received by: <u>SAV</u> Date/Time: <u>2/16/20</u></p> <p>Relinquished by: <u>SAV</u> Date/Time: <u>2/16/20</u> Received by: <u>SAV</u> Date/Time: <u>2/16/20</u></p>																									

B2001079 - 8

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8900

CHEMTECH Project No. :

١١٧

Client Contact Information						Bottle Order ID : B2001079	Courier : HAND		2	of	9	COCs				
Client ID : GFEI01						Project ID : All Projects	Sampler Name(s) : FRANK GAUDIN	Analysis								
Customer : GFE LLC						Project Manager : Frank gaudin	AIR ANALYSIS CHAIN-OF-CUSTODY									
Name :						Phone Number : 646-542-3465										
Address : 58 Nokomis Ave						Fax Number : 973-334-1692										
City : Lake Hiawatha						Site Details: 161-01 20TH AVE Queens NY	Batch Certified									
State : NJ						Analysis Turnaround Time : 5 DAY										
Zip Code : 07034						Standard : 10 BUSINESS DAYS OR	Data Package Type : RESULTS ONLY PDF									
Country :						Rush (Specify): 5 Days	EDD Type :									
Sample Identification n	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum In ("Hg) (Start)	Can Vacuum In ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controlle r Readout	Can Cert ID	TO-15	Indoor Ambient Air	Soil Gas
IAT2	2/5/20	11:09	1:09	930	0	66	66	-30	-3.1	10511	10597	6 L	50	VLO34527.D	/	/
															GC/MS Analyst Signature (TO-15) [Signature]	
															Please follow the instructions on the back of this CO	
															Special Instructions/QC Requirements & Comments : Suspected Contamination: High Medium Low Sampling site (State): No Quick Connector required : No Canisters Shipped by: [Signature] Samples Relinquished by: [Signature] Relinquished by:	
															PID Readings: 0.1	
															Date/Time: 2/6/20 12:30	
															B2001079 - 9	

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

L1435

Client Contact Information		Bottle Order ID : B2001079		Courier : <i>Frank Galdun</i>		Analysis		3 of 9 COCs								
Client ID : GFELO1		Project ID : All Projects		Sampler Name(s) : <i>Frank Galdun</i>		Matrix										
Customer Name : GFE LLC		Project Manager : Frank galdun		Phone Number : 646-542-3465		AIR ANALYSIS										
Address : 58 Nokomis Ave		Fax Number : 973-334-1692		Site Details: <i>161-01 29th Ave QUEENS NY</i>		CHAIN-OF-CUSTODY										
City : Lake Hiawatha		Analysis Turnaround Time : <i>5 DAY</i>		Batch Certified												
State : NJ		Standard : <i>ASTM D153</i>		Data Package Type : <i>Regress only</i>												
Zip Code : 07034		Rush (Specify): <i>5 Days</i>		EDD Type : <i>PDF</i>												
Country : 																
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum In Field ("Hg) (Start)	Can Vacuum In Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controller Readout	Can Cert ID	TO-15	Indoor Ambient Air	Soil Gas
<i>IR3</i>	<i>2/5/20</i>	<i>1:15</i>	<i>1:15</i>	<i>OVER 30</i>	<i>7</i>	<i>68</i>	<i>68</i>	<i>-30</i>	<i>-5.9</i>	<i>10524</i>	<i>10312</i>	<i>6 L</i>	<i>50</i>	<i>VL034528.D</i>	<i>1</i>	<i>1</i>
<div> <div>Temperature (Fahrenheit)</div> <div>Ambient</div> <div>Maximum</div> <div>Minimum</div> </div>																
<div> <div>GC/MS Analyst Signature (TO-15)</div> <div><i>[Signature]</i></div> </div>																
<div> <div>Pressure (Inches of Hg)</div> <div>Ambient</div> <div>Maximum</div> <div>Minimum</div> </div>																
<div> <div>Start</div> <div></div> </div>																
<div> <div>Stop</div> <div></div> </div>																
<div> <div>Special Instructions/QC Requirements & Comments :</div> <div> <p>Suspected Contamination: High Medium Low <i>(Low)</i></p> <p>Sampling site (State):</p> <p>Quick Connector required: <i>NJ</i></p> <p>Canisters Shipped by: <i>Sanyo</i></p> <p>Samples Relinquished by: <i>Frank</i></p> <p>Relinquished by:</p> </div> </div>																
<div> <div>PID Readings: <i>0.0</i></div> </div>																
<div> <div>Please follow the instructions on the back of this CO</div> </div>																
<div> <div>Canisters Received by:</div> <div>Date/Time: <i>2/6/20</i></div> </div>																
<div> <div>Received by: <i>CA</i></div> <div>Date/Time: <i>2-6-20 12:30</i></div> </div>																
<div> <div>B2001079 - 4</div> </div>																

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

L1435

Client Contact Information				Bottle Order ID : B2001079				Courier : Hand				Analysis				Matrix																																																																									
Client ID : GFEL01				Project ID : All Projects				Sampler Name(s) : FRANK GILDUN																																																																																	
Customer Name : GFE LLC				Project Manager : Frank galdun				Phone Number : 646-542-3465				AIR ANALYSIS																																																																													
Address : 58 Nokomis Ave				Fax Number : 973-334-1692				Site Details: 161-01 28TH AVE				CHAIN-OF-CUSTODY																																																																													
City : Lake Hiawatha				Analysis Turnaround Time : 5 DAY				Individual Certified																																																																																	
State : NJ				Standard : 10 business days				Data Package Type : Results Only																																																																																	
Zip Code : 07034				Rush (Specify): 5 Days				EDD Type : PDF																																																																																	
Country : 																																																																																									
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum In ("Hg) (Start)	Can Vacuum In ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Control Readout	Can Cert ID	TO-15				Indoor/ Ambient Air																																																																							
114	11/11/11	11:22	1:22	0.15	2	60	60	-30	-4.7	10185	10296	6 L	50	VL034294.D	1				1																																																																						
<table border="1"> <tr> <td colspan="2">Temperature (Fahrenheit)</td> <td colspan="2">Maximum</td> <td colspan="2">Minimum</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">Ambient</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">Start</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">Stop</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> </table>																		Temperature (Fahrenheit)		Maximum		Minimum														Ambient																		Start																		Stop																	
Temperature (Fahrenheit)		Maximum		Minimum																																																																																					
Ambient																																																																																									
Start																																																																																									
Stop																																																																																									
<table border="1"> <tr> <td colspan="2">Pressure (Inches of Hg)</td> <td colspan="2">Maximum</td> <td colspan="2">Minimum</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">Ambient</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">Start</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">Stop</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> </table>																		Pressure (Inches of Hg)		Maximum		Minimum														Ambient																		Start																		Stop																	
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Ambient																																																																																									
Start																																																																																									
Stop																																																																																									
<p>GC/MS Analyst Signature (TO-15)</p> <p>August</p>																																																																																									
<p>** Submittal of this COC indicates approval of the analysis based on existing conditio</p> <p>Please follow the instructions on the back of this CO</p>																																																																																									
<p>Special Instructions/QC Requirements & Comments :</p> <p>Suspected Contamination: High Medium Low</p> <p>PID Readings: 0.6</p>																																																																																									
<p>Quick Connector required : NO</p>																																																																																									
Canisters Shipped by: SAV				Date/Time: 11/28/11				Canisters Received by:				Date/Time: 11/28/11				B2001079 - 2																																																																									
Samples Relinquished by: SAV				Date/Time: 11/28/11				Received by: CP				Date/Time: 11/28/11																																																																													
Relinquished by:				Date/Time:				Received by:				Date/Time:																																																																													

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

11435

Client Contact Information				Bottle Order ID : B2001079				Courier : Hand				Analysis				Matrix									
Client ID : GFE101				Project ID : All Projects				Sampler Name(s) : Frank Galdun																	
Customer Name : GFE LLC				Project Manager : Frank galdun				Phone Number : 646-542-3465				AIR ANALYSIS CHAIN-OF-CUSTODY Batch Certified													
Address : 58 Nokomis Ave				Fax Number : 973-334-1692																					
City : Lake Hiawatha				Site Details: 161-01 29TH AVE QUEENS, NY																					
State : NJ				Analysis Turnaround Time : 5 DAY																					
Zip Code : 07034				Standard : \$0 business days				OR				Data Package Type : Permits only													
Country : 				Rush (Specify): 5 Days				EDD Type : 																	
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can In Field ("Hg) (Start)	Can Vacuum In Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controller Readout	Can Cert ID	TO-15	Indoor Ambient Air	Soil Gas									
1A15	2/6/20	11:11	1:11	30	5	70	70	-30	-5.5	10649	10279	6 L	50	VL034528.D	1	1									
<div>Temperature (Fahrenheit)</div> <table border="1"> <tr> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> </tr> </table>																	Ambient	Maximum	Minimum	Start			Stop		
Ambient	Maximum	Minimum																							
Start																									
Stop																									
<div>Pressure (Inches of Hg)</div> <table border="1"> <tr> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> </tr> </table>																	Ambient	Maximum	Minimum	Start			Stop		
Ambient	Maximum	Minimum																							
Start																									
Stop																									
<div>Special Instructions/QC Requirements & Comments :</div> <p>GC/MS Analyst Signature (TO-15) [Signature]</p> <p>** Submittal of this COC indicates approval of the analysis based on existing conditio</p> <p>Please follow the instructions on the back of this CO</p>																									
<div>Suspected Contamination:</div> <p>High Medium Low</p> <p>PID Readings: 0.0</p>																									
<div>Sampling site (State):</div> <p>Quick Connector required : NO</p>																									
Canisters Shipped by: Sam				Date/Time: 2/6/20				Canisters Received by:				Date/Time:													
Samples Relinquished by: [Signature]				Date/Time: 2/6/20				Received by: CR				Date/Time: 2-6-20 12:30													
Relinquished by:				Date/Time:				Received by:				Date/Time:													


B2001079 - 1

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

L1435

Client Contact Information				Bottle Order ID : B2001079				Courier : FRANK				Analysis				Matrix							
Client ID : GFELO1				Project ID : All Projects				Sampler Name(s) : FRANK Galdun															
Customer Name : GFE LLC				Project Manager : Frank galdun				AIR ANALYSIS															
Address : 58 Nokomis Ave				Phone Number : 646-542-3465				CHAIN-OF-CUSTODY															
City : Lake Hiawatha				Fax Number : 973-334-1692				Batch Certified															
State : NJ				Analysis Turnaround Time : 5 DAY																			
Zip Code : 07034				Standard : 40 business days				OR															
Country : 				Rush (Specify) : 5 Days				Data Package Type : RESULTS ONLY															
				EDD Type : PDF																			
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum In ("Hg) (Start)	Can Vacuum In ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controlle r Readout	Can Cert ID	TO-15				Indoor Ambient Air					
ITAB	2/20	11:12	1:12	30	4	70	70	-30	4.7	10616	10401	6 L	50	V1034527.D	1				1				
Temperature (Fahrenheit)																							
Ambient																							
Maximum																							
Minimum																							
Start																							
Stop																							
Pressure (Inches of Hg)																							
Ambient																							
Maximum																							
Minimum																							
Start																							
Stop																							
GC/MS Analyst Signature (TO-15)																							
<div style="border: 1px solid black; padding: 5px; display: inline-block;">  </div>																							
<p>** Submittal of this COC indicates approval of the analysis based on existing conditio</p> <p>Please follow the instructions on the back of this CO</p>																							
Special Instructions/QC Requirements & Comments :																							
Suspected Contamination: High Medium Low Low																							
Sampling site (State):																							
Quick Connector required : N																							
Canisters Shipped by: SEALED				Date/Time: 2/28/10				Canisters Received by:				Date/Time:											
Samples Relinquished by: SEALED				Date/Time: 2/6/20				Received by: CF				Date/Time: 2.6.20 12:30											
Relinquished by:				Date/Time:				Received by:				Date/Time:											

B2001079 - 7

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

L1435

Client Contact Information				Bottle Order ID : B2001079				Courier : FRANK				Analysis				Matrix			
Client ID : GFELO1				Project ID : All Projects				Sampler Name(s) : FRANK GARDUN				2 of 89				COCs			
Customer Name : GFE LLC				Project Manager : Frank galdun				AIR ANALYSIS CHAIN-OF-CUSTODY Batch Certified											
Address : 58 Nokomis Ave				Phone Number : 646-542-3465															
City : Lake Hiawatha				Fax Number : 973-334-1692															
State : NJ				Analysis Turnaround Time : 5 DAY															
Zip Code : 07034				Standard : 10 Business Days				OR				Data Package Type : PDF							
Country : USA				Rush (Specify) : 5 Days				EDD Type : PDF											
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum In Field ("Hg) (Start)	Can Vacuum In Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controller Readout	Can Cert ID	TO-15	Indoor/Ambient Air	Soil Gas			
IA7	2/19/20	11:48	1:48	30	41	70	70	-30	-5.1	10226	10297	6 L	50	VL034527.D	1	1	1		
Temperature (Fahrenheit) Ambient Maximum Minimum Start Stop																			
Pressure (Inches of Hg) Ambient Maximum Minimum Start Stop																			
GC/MS Analyst Signature (TO-15) Submittal of this COC indicates approval of the analysis based on existing conditions Please follow the instructions on the back of this CO																			
Special Instructions/QC Requirements & Comments : Suspected Contamination: High Medium Low Sampling site (State): Quick Connector required : N2 Canisters Shipped by: SAFARI Date/Time: 2/19/20 Canisters Received by: SA Date/Time: 2/19/20 Samples Relinquished by: SA Date/Time: 2/19/20 Received by: SA Date/Time: 2/19/20 Relinquished by: SA Date/Time: 2/19/20 Received by: SA Date/Time: 2/19/20																			

B2001079 - 3

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

1435

Client Contact Information				Bottle Order ID : B2001079				Courier : Hand				8 of 9 COCs				
Client ID : GFE101				Project ID : All Projects				Sampler Name(s) : Frank Galdun				Analysis				
Customer Name : GFE LLC				Project Manager : Frank galdun				AIR ANALYSIS CHAIN-OF-CUSTODY Batch Certified								
Address : 58 Nokomis Ave				Phone Number : 646-542-3465												
City : Lake Hiawatha				Fax Number : 973-334-1692												
State : NJ				Analysis Turnaround Time : 5 DAT												
Zip Code : 07034				Standard : ISO Business Days				OR				Data Package Type : RESULTS ONLY				
Country : 				Rush (Specify) : 5 Days				EDD Type : PDF								
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can In Field ("Hg) (Start)	Can Vacuum In Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controller Readout	Can Cert ID	TO-15	Indoor/Ambient Air	Soil Gas
IRB	2/10	11:50	1:50	0.25	5	60	60	-30	-4.7	10707	10315	6 L	50	VL034528.D	1	1
Temperature (Fahrenheit) Ambient Maximum Minimum Start Stop Stop																
Pressure (Inches of Hg) Ambient Maximum Minimum Start Stop Stop																
GC/MS Analyst Signature (TO-15) S. S. S.																
** Submittal of this COC indicates approval of the analysis based on existing conditions Please follow the instructions on the back of this CO																
Special Instructions/QC Requirements & Comments : Suspected Contamination: High Medium Low Sampling site (State): Quick Connector required: Yes																
Canisters Shipped by: S. S. S.				Date/Time: 2/18/20				Canisters Received by:				Date/Time:				
Samples Relinquished by: S. S. S.				Date/Time: 2/6/20				Received by:				Date/Time: 2/6/20 12:30				
Relinquished by:				Date/Time:				Received by:				Date/Time:				

B2001079 - 5

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. :

L1435

Client Contact Information				Bottle Order ID : B2001079				Courier : FRANK				Analysis				Matrix			
Client ID : GFELO1				Project ID : All Projects				Sampler Name(s) : FRANK GILDUN											
Customer Name : GFE LLC				Project Manager : Frank galdun				Phone Number : 646-542-3465				AIR ANALYSIS							
Address : 58 Nokomis Ave				Fax Number : 973-334-1692				Site Details: 161-01 29TH AVE QUEENS NY				CHAIN-OF-CUSTODY							
City : Lake Hiawatha				Analysis Turnaround Time : 5 DAY				Batch Certified											
State : NJ				Standard : 10 business days				OR											
Zip Code : 07034				Rush (Specify): 5 Days				Data Package Type : RESULTS ONLY											
Country : 				EDD Type : PDF															
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum In Field ("Hg) (Start)	Can Vacuum In Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controlle r Readout	Can Cert ID	TO-15	Indoor, Ambient Air	Soil Gas			
OA1	4/10/00	11:56	1:56	0.15	3.15	✓	✓	-30	-3.1	10613	10320	6 L	50	VL034527.D	✓	✓			
<div> <div>Temperature (Fahrenheit)</div> <div> <div>Ambient</div> <div>Maximum</div> <div>Minimum</div> </div> </div>																			
<div> <div>Start</div> <div>39</div> </div>																			
<div> <div>Stop</div> <div>41</div> </div>																			
<div> <div>Pressure (Inches of Hg)</div> <div> <div>Ambient</div> <div>Maximum</div> <div>Minimum</div> </div> </div>																			
<div> <div>Start</div> <div></div> </div>																			
<div> <div>Stop</div> <div></div> </div>																			
<div> <div>GC/MS Analyst Signature (TO-15)</div> <div>[Signature]</div> </div>																			
<div> <div>** Submittal of this COC indicates approval of the analysis based on existing conditio</div> <div>Please follow the instructions on the back of this CO</div> </div>																			
<div> <div>Special Instructions/QC Requirements & Comments :</div> <div></div> </div>																			
<div> <div>Suspected Contamination:</div> <div> <div>High</div> <div>Medium</div> <div>Low</div> </div> </div>																			
<div> <div>Sampling site (State):</div> <div></div> </div>																			
<div> <div>Quick Connector required :</div> <div>NO</div> </div>																			
<div> <div>Canisters Shipped by:</div> <div>SAV</div> </div>				<div> <div>Date/Time:</div> <div>4/28/00</div> </div>				<div> <div>Canisters Received by:</div> <div>FRANK</div> </div>				<div> <div>Date/Time:</div> <div>4/28/00</div> </div>							
<div> <div>Samples Relinquished by:</div> <div>FRANK</div> </div>				<div> <div>Date/Time:</div> <div>4/28/00</div> </div>				<div> <div>Received by:</div> <div>FRANK</div> </div>				<div> <div>Date/Time:</div> <div>4/28/00</div> </div>							
<div> <div>Relinquished by:</div> <div>FRANK</div> </div>				<div> <div>Date/Time:</div> <div>4/28/00</div> </div>				<div> <div>Received by:</div> <div>FRANK</div> </div>				<div> <div>Date/Time:</div> <div>4/28/00</div> </div>							

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-1	SDG No.:	L1435
Lab Sample ID:	L1435-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034604.D	1		02/06/20 18:11	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.51	2.52		0.49	2.47	ug/m3
74-87-3	Chloromethane	0.43	0.89	J	0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.25	1.40	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.15	0.61	J	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	5.40	12.8	B	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	3.00	10.4	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.14	0.41	J	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.020	0.10	U	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	J	0.14	2.34	ug/m3
71-43-2	Benzene	0.36	1.15	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	2.00	7.54		0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	0.36	2.44		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-1	SDG No.:	L1435
Lab Sample ID:	L1435-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034604.D	1		02/06/20 18:11	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.14	0.61	J	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.45	1.95	J	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.15	0.65	J	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.050	0.25	U	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	1.30	4.58		0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.3		65 - 135	103%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	903000	5.69
540-36-3	1,4-Difluorobenzene	1880000	7.21
3114-55-4	Chlorobenzene-d5	1820000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-2	SDG No.:	L1435
Lab Sample ID:	L1435-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034606.D	1		02/06/20 19:33	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.23	1.14	J	0.49	2.47	ug/m3
74-87-3	Chloromethane	0.46	0.95	J	0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.25	1.40	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.040	0.16	U	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	3.70	8.79	B	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	0.69	2.40	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.14	0.41	J	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.020	0.10	U	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.030	0.14	U	0.14	2.34	ug/m3
71-43-2	Benzene	0.19	0.61	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	0.25	0.94	J	0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	0.34	2.31		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-2	SDG No.:	L1435
Lab Sample ID:	L1435-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034606.D	1		02/06/20 19:33	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.040	0.17	U	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.10	0.43	U	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.050	0.22	U	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.050	0.25	U	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	0.26	0.92	J	0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.5		65 - 135	105%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	883000	5.69
540-36-3	1,4-Difluorobenzene	1830000	7.21
3114-55-4	Chlorobenzene-d5	1770000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-3	SDG No.:	L1435
Lab Sample ID:	L1435-03	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034607.D	1		02/06/20 20:14	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.55	2.72		0.49	2.47	ug/m3
74-87-3	Chloromethane	0.44	0.91	J	0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.25	1.40	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.040	0.16	U	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	3.50	8.31	B	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	1.80	6.25	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.040	0.12	U	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.020	0.10	U	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.030	0.14	U	0.14	2.34	ug/m3
71-43-2	Benzene	0.21	0.67	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.060	0.32		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	0.61	2.30		0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	2.90	19.7		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-3	SDG No.:	L1435
Lab Sample ID:	L1435-03	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034607.D	1		02/06/20 20:14	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.040	0.17	U	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.10	0.43	U	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.050	0.22	U	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.050	0.25	U	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	0.64	2.26		0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.4		65 - 135	104%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	852000	5.69
540-36-3	1,4-Difluorobenzene	1770000	7.21
3114-55-4	Chlorobenzene-d5	1700000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-4	SDG No.:	L1435
Lab Sample ID:	L1435-04	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034608.D	1		02/06/20 20:55	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.50	2.47		0.49	2.47	ug/m3
74-87-3	Chloromethane	0.48	0.99	J	0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.25	1.40	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.040	0.16	U	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	10.8	25.6	B	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	0.92	3.20	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.13	0.38	J	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.11	0.54	J	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.030	0.14	U	0.14	2.34	ug/m3
71-43-2	Benzene	0.27	0.86	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.040	0.21		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	0.57	2.15		0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	1.60	10.8		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-4	SDG No.:	L1435
Lab Sample ID:	L1435-04	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034608.D	1		02/06/20 20:55	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.040	0.17	U	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.12	0.52	J	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.050	0.22	U	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.050	0.25	U	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	0.49	1.73	J	0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.4		65 - 135	104%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	897000	5.69
540-36-3	1,4-Difluorobenzene	1840000	7.21
3114-55-4	Chlorobenzene-d5	1790000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-5	SDG No.:	L1435
Lab Sample ID:	L1435-05	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034609.D	1		02/06/20 21:36	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.49	2.42	J	0.49	2.47	ug/m3
74-87-3	Chloromethane	0.42	0.87	J	0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.26	1.46	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.17	0.70	J	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	21.5	51.1	EB	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	2.00	6.95	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.21	0.62	J	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.16	0.78	J	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.15	0.70	J	0.14	2.34	ug/m3
71-43-2	Benzene	0.43	1.37	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.17	0.91		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	2.50	9.42		0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	3.80	25.8		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-5	SDG No.:	L1435
Lab Sample ID:	L1435-05	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034609.D	1		02/06/20 21:36	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.16	0.69	J	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.47	2.04	J	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.15	0.65	J	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.050	0.25	U	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	1.00	3.52		0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.4		65 - 135	104%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	895000	5.69
540-36-3	1,4-Difluorobenzene	1860000	7.22
3114-55-4	Chlorobenzene-d5	1810000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-5DL	SDG No.:	L1435
Lab Sample ID:	L1435-05DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034614.D	4		02/07/20 09:33	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.40	1.98	UD	1.98	9.89	ug/m3
74-87-3	Chloromethane	0.15	0.31	UD	0.31	4.13	ug/m3
75-01-4	Vinyl Chloride	0.10	0.26	UD	0.26	0.31	ug/m3
74-83-9	Bromomethane	0.14	0.54	UD	0.54	7.77	ug/m3
75-00-3	Chloroethane	0.17	0.45	UD	0.45	5.28	ug/m3
109-99-9	Tetrahydrofuran	0.15	0.44	UD	0.44	5.90	ug/m3
75-69-4	Trichlorofluoromethane	0.19	1.07	UD	1.07	11.2	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.69	UD	1.69	15.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.13	0.91	UD	0.91	14.0	ug/m3
75-65-0	tert-Butyl alcohol	0.45	1.36	UD	1.36	6.06	ug/m3
142-82-5	Heptane	0.15	0.61	UD	0.61	8.20	ug/m3
75-35-4	1,1-Dichloroethene	0.21	0.83	UD	0.83	7.93	ug/m3
67-64-1	Acetone	23.0	54.6	DB	0.57	4.75	ug/m3
75-15-0	Carbon Disulfide	0.25	0.78	UD	0.78	6.23	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.18	0.65	UD	0.65	7.21	ug/m3
75-09-2	Methylene Chloride	0.49	1.70	UD	1.70	6.95	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	UD	0.87	7.93	ug/m3
75-34-3	1,1-Dichloroethane	0.17	0.69	UD	0.69	8.09	ug/m3
110-82-7	Cyclohexane	0.40	1.38	UD	1.38	6.88	ug/m3
78-93-3	2-Butanone	0.16	0.47	UD	0.47	5.90	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50	UD	0.50	0.75	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.20	0.79	UD	0.79	7.93	ug/m3
67-66-3	Chloroform	0.070	0.34	UD	0.34	9.77	ug/m3
71-55-6	1,1,1-Trichloroethane	0.060	0.33	UD	0.33	0.65	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	UD	0.65	9.34	ug/m3
71-43-2	Benzene	0.16	0.51	UD	0.51	6.39	ug/m3
107-06-2	1,2-Dichloroethane	0.13	0.53	UD	0.53	8.09	ug/m3
79-01-6	Trichloroethene	0.070	0.38	UD	0.38	0.64	ug/m3
78-87-5	1,2-Dichloropropane	0.13	0.60	UD	0.60	9.24	ug/m3
75-27-4	Bromodichloromethane	0.14	0.94	UD	0.94	13.4	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.060	0.25	UD	0.25	8.20	ug/m3
108-88-3	Toluene	1.50	5.65	JD	0.53	7.54	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.12	0.54	UD	0.54	9.08	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.13	0.59	UD	0.59	9.08	ug/m3
79-00-5	1,1,2-Trichloroethane	0.15	0.82	UD	0.82	10.9	ug/m3
124-48-1	Dibromochloromethane	0.15	1.28	UD	1.28	17.0	ug/m3
106-93-4	1,2-Dibromoethane	0.17	1.31	UD	1.31	15.4	ug/m3
127-18-4	Tetrachloroethene	2.90	19.7	D	0.20	0.81	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-5DL	SDG No.:	L1435
Lab Sample ID:	L1435-05DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034614.D	4		02/07/20 09:33	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.080	0.37	UD	0.37	9.21	ug/m3
100-41-4	Ethyl Benzene	0.17	0.74	UD	0.74	8.69	ug/m3
179601-23-1	m/p-Xylene	0.38	1.65	UD	1.65	17.4	ug/m3
95-47-6	o-Xylene	0.18	0.78	UD	0.78	8.69	ug/m3
100-42-5	Styrene	0.15	0.64	UD	0.64	8.52	ug/m3
75-25-2	Bromoform	0.18	1.86	UD	1.86	20.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.060	0.41	UD	0.41	0.82	ug/m3
95-49-8	2-Chlorotoluene	0.17	0.88	UD	0.88	10.4	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	UD	0.88	9.83	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.19	0.93	UD	0.93	9.83	ug/m3
541-73-1	1,3-Dichlorobenzene	0.11	0.66	UD	0.66	12.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.19	1.14	UD	1.14	12.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.13	0.78	UD	0.78	12.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.29	2.15	UD	2.15	14.8	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.30	3.20	UD	3.20	21.3	ug/m3
106-99-0	1,3-Butadiene	0.17	0.38	UD	0.38	4.42	ug/m3
91-20-3	Naphthalene	0.21	1.10	UD	1.10	10.5	ug/m3
622-96-8	4-Ethyltoluene	0.15	0.74	UD	0.74	9.83	ug/m3
110-54-3	Hexane	0.13	0.46	UD	0.46	7.05	ug/m3
107-05-1	Allyl Chloride	0.20	0.63	UD	0.63	6.26	ug/m3
123-91-1	1,4-Dioxane	0.49	1.77	UD	1.77	7.21	ug/m3
80-62-6	Methyl Methacrylate	0.080	0.33	UD	0.33	8.19	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.3		65 - 135	103%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	889000	5.72
540-36-3	1,4-Difluorobenzene	1860000	7.25
3114-55-4	Chlorobenzene-d5	1900000	12.19

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-6	SDG No.:	L1435
Lab Sample ID:	L1435-06	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034610.D	1		02/06/20 22:17	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.53	2.62		0.49	2.47	ug/m3
74-87-3	Chloromethane	0.47	0.97	J	0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.26	1.46	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.15	0.61	J	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	15.1	35.9	EB	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	5.20	18.1	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.14	0.41	J	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.020	0.10	U	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.13	0.61	J	0.14	2.34	ug/m3
71-43-2	Benzene	0.44	1.41	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.12	0.49	J	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	1.90	7.16		0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	0.28	1.90		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-6	SDG No.:	L1435
Lab Sample ID:	L1435-06	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034610.D	1		02/06/20 22:17	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.11	0.48	J	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.28	1.22	J	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.10	0.43	J	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.050	0.25	U	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	1.70	5.99		0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.4		65 - 135	104%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	895000	5.69
540-36-3	1,4-Difluorobenzene	1890000	7.21
3114-55-4	Chlorobenzene-d5	1820000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-6DL	SDG No.:	L1435
Lab Sample ID:	L1435-06DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034615.D	4		02/07/20 10:13	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.57	2.82	JD	1.98	9.89	ug/m3
74-87-3	Chloromethane	0.45	0.93	JD	0.31	4.13	ug/m3
75-01-4	Vinyl Chloride	0.10	0.26	UD	0.26	0.31	ug/m3
74-83-9	Bromomethane	0.14	0.54	UD	0.54	7.77	ug/m3
75-00-3	Chloroethane	0.17	0.45	UD	0.45	5.28	ug/m3
109-99-9	Tetrahydrofuran	0.15	0.44	UD	0.44	5.90	ug/m3
75-69-4	Trichlorofluoromethane	0.19	1.07	UD	1.07	11.2	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.69	UD	1.69	15.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.13	0.91	UD	0.91	14.0	ug/m3
75-65-0	tert-Butyl alcohol	0.45	1.36	UD	1.36	6.06	ug/m3
142-82-5	Heptane	0.15	0.61	UD	0.61	8.20	ug/m3
75-35-4	1,1-Dichloroethene	0.21	0.83	UD	0.83	7.93	ug/m3
67-64-1	Acetone	16.1	38.2	DB	0.57	4.75	ug/m3
75-15-0	Carbon Disulfide	0.25	0.78	UD	0.78	6.23	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.18	0.65	UD	0.65	7.21	ug/m3
75-09-2	Methylene Chloride	0.49	1.70	UD	1.70	6.95	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	UD	0.87	7.93	ug/m3
75-34-3	1,1-Dichloroethane	0.17	0.69	UD	0.69	8.09	ug/m3
110-82-7	Cyclohexane	0.40	1.38	UD	1.38	6.88	ug/m3
78-93-3	2-Butanone	0.16	0.47	UD	0.47	5.90	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50	UD	0.50	0.75	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.20	0.79	UD	0.79	7.93	ug/m3
67-66-3	Chloroform	0.070	0.34	UD	0.34	9.77	ug/m3
71-55-6	1,1,1-Trichloroethane	0.060	0.33	UD	0.33	0.65	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	UD	0.65	9.34	ug/m3
71-43-2	Benzene	0.16	0.51	UD	0.51	6.39	ug/m3
107-06-2	1,2-Dichloroethane	0.13	0.53	UD	0.53	8.09	ug/m3
79-01-6	Trichloroethene	0.070	0.38	UD	0.38	0.64	ug/m3
78-87-5	1,2-Dichloropropane	0.13	0.60	UD	0.60	9.24	ug/m3
75-27-4	Bromodichloromethane	0.14	0.94	UD	0.94	13.4	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.060	0.25	UD	0.25	8.20	ug/m3
108-88-3	Toluene	1.10	4.15	JD	0.53	7.54	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.12	0.54	UD	0.54	9.08	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.13	0.59	UD	0.59	9.08	ug/m3
79-00-5	1,1,2-Trichloroethane	0.15	0.82	UD	0.82	10.9	ug/m3
124-48-1	Dibromochloromethane	0.15	1.28	UD	1.28	17.0	ug/m3
106-93-4	1,2-Dibromoethane	0.17	1.31	UD	1.31	15.4	ug/m3
127-18-4	Tetrachloroethene	0.26	1.76	D	0.20	0.81	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-6DL	SDG No.:	L1435
Lab Sample ID:	L1435-06DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034615.D	4		02/07/20 10:13	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.080	0.37	UD	0.37	9.21	ug/m3
100-41-4	Ethyl Benzene	0.17	0.74	UD	0.74	8.69	ug/m3
179601-23-1	m/p-Xylene	0.38	1.65	UD	1.65	17.4	ug/m3
95-47-6	o-Xylene	0.18	0.78	UD	0.78	8.69	ug/m3
100-42-5	Styrene	0.15	0.64	UD	0.64	8.52	ug/m3
75-25-2	Bromoform	0.18	1.86	UD	1.86	20.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.060	0.41	UD	0.41	0.82	ug/m3
95-49-8	2-Chlorotoluene	0.17	0.88	UD	0.88	10.4	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	UD	0.88	9.83	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.19	0.93	UD	0.93	9.83	ug/m3
541-73-1	1,3-Dichlorobenzene	0.11	0.66	UD	0.66	12.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.19	1.14	UD	1.14	12.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.13	0.78	UD	0.78	12.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.29	2.15	UD	2.15	14.8	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.30	3.20	UD	3.20	21.3	ug/m3
106-99-0	1,3-Butadiene	0.17	0.38	UD	0.38	4.42	ug/m3
91-20-3	Naphthalene	0.21	1.10	UD	1.10	10.5	ug/m3
622-96-8	4-Ethyltoluene	0.15	0.74	UD	0.74	9.83	ug/m3
110-54-3	Hexane	1.90	6.70	JD	0.46	7.05	ug/m3
107-05-1	Allyl Chloride	0.20	0.63	UD	0.63	6.26	ug/m3
123-91-1	1,4-Dioxane	0.49	1.77	UD	1.77	7.21	ug/m3
80-62-6	Methyl Methacrylate	0.080	0.33	UD	0.33	8.19	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.1		65 - 135	101%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	854000	5.73
540-36-3	1,4-Difluorobenzene	1820000	7.25
3114-55-4	Chlorobenzene-d5	1840000	12.19

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-7	SDG No.:	L1435
Lab Sample ID:	L1435-07	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034611.D	1		02/06/20 22:58	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.50	2.47		0.49	2.47	ug/m3
74-87-3	Chloromethane	0.52	1.07		0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.24	1.35	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.33	1.00	J	0.33	1.52	ug/m3
142-82-5	Heptane	0.25	1.02	J	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	10.3	24.5	B	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	2.40	8.34	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.28	0.83	J	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.020	0.10	U	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.11	0.51	J	0.14	2.34	ug/m3
71-43-2	Benzene	0.51	1.63		0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	1.70	6.41		0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	0.31	2.10		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-7	SDG No.:	L1435
Lab Sample ID:	L1435-07	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034611.D	1		02/06/20 22:58	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.17	0.74	J	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.60	2.61	J	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.18	0.78	J	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.11	0.54	J	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	1.00	3.52		0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.4		65 - 135	104%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	928000	5.69
540-36-3	1,4-Difluorobenzene	1910000	7.21
3114-55-4	Chlorobenzene-d5	1870000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-8	SDG No.:	L1435
Lab Sample ID:	L1435-08	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034612.D	1		02/06/20 23:39	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.50	2.47		0.49	2.47	ug/m3
74-87-3	Chloromethane	0.45	0.93	J	0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.23	1.29	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.20	0.82	J	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	18.8	44.7	EB	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	1.80	6.25	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.19	0.56	J	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.060	0.38		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.15	0.73	J	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.16	0.75	J	0.14	2.34	ug/m3
71-43-2	Benzene	0.42	1.34	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.040	0.21		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	2.40	9.04		0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	1.90	12.9		0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-8	SDG No.:	L1435
Lab Sample ID:	L1435-08	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034612.D	1		02/06/20 23:39	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.15	0.65	J	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.54	2.35	J	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.18	0.78	J	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.13	0.64	J	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	0.97	3.42		0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.4		65 - 135	104%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	943000	5.69
540-36-3	1,4-Difluorobenzene	1940000	7.21
3114-55-4	Chlorobenzene-d5	1890000	12.15

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-8DL	SDG No.:	L1435
Lab Sample ID:	L1435-08DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034616.D	4		02/07/20 10:52	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.56	2.77	JD	1.98	9.89	ug/m3
74-87-3	Chloromethane	0.15	0.31	UD	0.31	4.13	ug/m3
75-01-4	Vinyl Chloride	0.10	0.26	UD	0.26	0.31	ug/m3
74-83-9	Bromomethane	0.14	0.54	UD	0.54	7.77	ug/m3
75-00-3	Chloroethane	0.17	0.45	UD	0.45	5.28	ug/m3
109-99-9	Tetrahydrofuran	0.15	0.44	UD	0.44	5.90	ug/m3
75-69-4	Trichlorofluoromethane	0.19	1.07	UD	1.07	11.2	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.69	UD	1.69	15.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.13	0.91	UD	0.91	14.0	ug/m3
75-65-0	tert-Butyl alcohol	0.45	1.36	UD	1.36	6.06	ug/m3
142-82-5	Heptane	0.15	0.61	UD	0.61	8.20	ug/m3
75-35-4	1,1-Dichloroethene	0.21	0.83	UD	0.83	7.93	ug/m3
67-64-1	Acetone	22.2	52.7	DB	0.57	4.75	ug/m3
75-15-0	Carbon Disulfide	0.25	0.78	UD	0.78	6.23	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.18	0.65	UD	0.65	7.21	ug/m3
75-09-2	Methylene Chloride	0.49	1.70	UD	1.70	6.95	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	UD	0.87	7.93	ug/m3
75-34-3	1,1-Dichloroethane	0.17	0.69	UD	0.69	8.09	ug/m3
110-82-7	Cyclohexane	0.40	1.38	UD	1.38	6.88	ug/m3
78-93-3	2-Butanone	0.16	0.47	UD	0.47	5.90	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50	UD	0.50	0.75	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.20	0.79	UD	0.79	7.93	ug/m3
67-66-3	Chloroform	0.070	0.34	UD	0.34	9.77	ug/m3
71-55-6	1,1,1-Trichloroethane	0.060	0.33	UD	0.33	0.65	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	UD	0.65	9.34	ug/m3
71-43-2	Benzene	0.16	0.51	UD	0.51	6.39	ug/m3
107-06-2	1,2-Dichloroethane	0.13	0.53	UD	0.53	8.09	ug/m3
79-01-6	Trichloroethene	0.070	0.38	UD	0.38	0.64	ug/m3
78-87-5	1,2-Dichloropropane	0.13	0.60	UD	0.60	9.24	ug/m3
75-27-4	Bromodichloromethane	0.14	0.94	UD	0.94	13.4	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.060	0.25	UD	0.25	8.20	ug/m3
108-88-3	Toluene	1.70	6.41	JD	0.53	7.54	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.12	0.54	UD	0.54	9.08	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.13	0.59	UD	0.59	9.08	ug/m3
79-00-5	1,1,2-Trichloroethane	0.15	0.82	UD	0.82	10.9	ug/m3
124-48-1	Dibromochloromethane	0.15	1.28	UD	1.28	17.0	ug/m3
106-93-4	1,2-Dibromoethane	0.17	1.31	UD	1.31	15.4	ug/m3
127-18-4	Tetrachloroethene	1.60	10.8	D	0.20	0.81	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	IA-8DL	SDG No.:	L1435
Lab Sample ID:	L1435-08DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034616.D	4		02/07/20 10:52	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.080	0.37	UD	0.37	9.21	ug/m3
100-41-4	Ethyl Benzene	0.17	0.74	UD	0.74	8.69	ug/m3
179601-23-1	m/p-Xylene	0.38	1.65	UD	1.65	17.4	ug/m3
95-47-6	o-Xylene	0.18	0.78	UD	0.78	8.69	ug/m3
100-42-5	Styrene	0.15	0.64	UD	0.64	8.52	ug/m3
75-25-2	Bromoform	0.18	1.86	UD	1.86	20.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.060	0.41	UD	0.41	0.82	ug/m3
95-49-8	2-Chlorotoluene	0.17	0.88	UD	0.88	10.4	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	UD	0.88	9.83	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.19	0.93	UD	0.93	9.83	ug/m3
541-73-1	1,3-Dichlorobenzene	0.11	0.66	UD	0.66	12.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.19	1.14	UD	1.14	12.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.13	0.78	UD	0.78	12.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.29	2.15	UD	2.15	14.8	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.30	3.20	UD	3.20	21.3	ug/m3
106-99-0	1,3-Butadiene	0.17	0.38	UD	0.38	4.42	ug/m3
91-20-3	Naphthalene	0.21	1.10	UD	1.10	10.5	ug/m3
622-96-8	4-Ethyltoluene	0.15	0.74	UD	0.74	9.83	ug/m3
110-54-3	Hexane	0.13	0.46	UD	0.46	7.05	ug/m3
107-05-1	Allyl Chloride	0.20	0.63	UD	0.63	6.26	ug/m3
123-91-1	1,4-Dioxane	0.49	1.77	UD	1.77	7.21	ug/m3
80-62-6	Methyl Methacrylate	0.080	0.33	UD	0.33	8.19	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.4		65 - 135	104%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	871000	5.73
540-36-3	1,4-Difluorobenzene	1820000	7.26
3114-55-4	Chlorobenzene-d5	1840000	12.2

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	OA-1	SDG No.:	L1435
Lab Sample ID:	L1435-09	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034613.D	1		02/07/20 00:20	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.55	2.72		0.49	2.47	ug/m3
74-87-3	Chloromethane	0.50	1.03		0.080	1.03	ug/m3
75-01-4	Vinyl Chloride	0.020	0.050	U	0.050	0.080	ug/m3
74-83-9	Bromomethane	0.040	0.16	U	0.16	1.94	ug/m3
75-00-3	Chloroethane	0.040	0.11	U	0.11	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.040	0.12	U	0.12	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.24	1.35	J	0.28	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.050	0.38	U	0.38	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.030	0.21	U	0.21	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.11	0.33	U	0.33	1.52	ug/m3
142-82-5	Heptane	0.040	0.16	U	0.16	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-64-1	Acetone	3.90	9.26	B	0.14	1.19	ug/m3
75-15-0	Carbon Disulfide	0.060	0.19	U	0.19	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.040	0.14	U	0.14	1.80	ug/m3
75-09-2	Methylene Chloride	0.78	2.71	B	0.42	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.060	0.24	U	0.24	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.040	0.16	U	0.16	2.02	ug/m3
110-82-7	Cyclohexane	0.10	0.34	U	0.34	1.72	ug/m3
78-93-3	2-Butanone	0.040	0.12	U	0.12	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.060	0.38		0.13	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.050	0.20	U	0.20	1.98	ug/m3
67-66-3	Chloroform	0.020	0.10	U	0.10	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.030	0.14	U	0.14	2.34	ug/m3
71-43-2	Benzene	0.15	0.48	J	0.13	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.030	0.12	U	0.12	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.030	0.14	U	0.14	2.31	ug/m3
75-27-4	Bromodichloromethane	0.040	0.27	U	0.27	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.010	0.040	U	0.040	2.05	ug/m3
108-88-3	Toluene	0.19	0.72	J	0.11	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.030	0.14	U	0.14	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.040	0.22	U	0.22	2.73	ug/m3
124-48-1	Dibromochloromethane	0.040	0.34	U	0.34	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.040	0.31	U	0.31	3.84	ug/m3
127-18-4	Tetrachloroethene	0.010	0.070	U	0.070	0.20	ug/m3

Report of Analysis

Client:	GFE LLC	Date Collected:	02/05/20
Project:	161-01 29th Ave.	Date Received:	02/06/20
Client Sample ID:	OA-1	SDG No.:	L1435
Lab Sample ID:	L1435-09	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL034613.D	1		02/07/20 00:20	VL020620

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
108-90-7	Chlorobenzene	0.020	0.090	U	0.090	2.30	ug/m3
100-41-4	Ethyl Benzene	0.040	0.17	U	0.17	2.17	ug/m3
179601-23-1	m/p-Xylene	0.10	0.43	U	0.43	4.34	ug/m3
95-47-6	o-Xylene	0.050	0.22	U	0.22	2.17	ug/m3
100-42-5	Styrene	0.040	0.17	U	0.17	2.13	ug/m3
75-25-2	Bromoform	0.040	0.41	U	0.41	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.040	0.21	U	0.21	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.040	0.20	U	0.20	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.050	0.25	U	0.25	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.030	0.18	U	0.18	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.070	0.52	U	0.52	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.070	0.75	U	0.75	5.33	ug/m3
106-99-0	1,3-Butadiene	0.040	0.090	U	0.090	1.11	ug/m3
91-20-3	Naphthalene	0.050	0.26	U	0.26	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.040	0.20	U	0.20	2.46	ug/m3
110-54-3	Hexane	0.29	1.02	J	0.11	1.76	ug/m3
107-05-1	Allyl Chloride	0.050	0.16	U	0.16	1.57	ug/m3
123-91-1	1,4-Dioxane	0.12	0.43	U	0.43	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.020	0.080	U	0.080	2.05	ug/m3

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	10.2		65 - 135	102%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	918000	5.69
540-36-3	1,4-Difluorobenzene	1900000	7.21
3114-55-4	Chlorobenzene-d5	1820000	12.16

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Attachment 3: Laboratory Report of Sump Water Analysis

Hampton-Clarke Report Of Analysis

Client: Merritt Environmental
Project: 161-01 29th Ave

HC Project #: 0020610

Sample ID: SUMP 1A
Lab#: AD15554-001
Matrix: Aqueous

Collection Date: 2/5/2020
Receipt Date: 2/6/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethene	1	ug/l	1.0	ND		
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND		
1,2-Dichlorobenzene	1	ug/l	1.0	ND		
1,2-Dichloroethane	1	ug/l	0.50	ND		
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND		
1,3-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dioxane	1	ug/l	50	ND		
2-Butanone	1	ug/l	1.0	ND		
4-Isopropyltoluene	1	ug/l	1.0	ND		
Acetone	1	ug/l	5.0	ND		
Benzene	1	ug/l	0.50	ND		
Carbon tetrachloride	1	ug/l	1.0	ND		
Chlorobenzene	1	ug/l	1.0	ND		
Chloroform	1	ug/l	1.0	ND		
cis-1,2-Dichloroethene	1	ug/l	1.0	ND		
Ethylbenzene	1	ug/l	1.0	ND		
Isopropylbenzene	1	ug/l	1.0	ND		
m&p-Xylenes	1	ug/l	1.0	ND		
Methylene chloride	1	ug/l	1.0	ND		
Methyl-t-butyl ether	1	ug/l	0.50	ND		
Naphthalene	1	ug/l	1.0	ND		
n-Butylbenzene	1	ug/l	1.0	ND		
n-Propylbenzene	1	ug/l	1.0	ND		
o-Xylene	1	ug/l	1.0	ND		
sec-Butylbenzene	1	ug/l	1.0	ND		
t-Butylbenzene	1	ug/l	1.0	ND		
Tetrachloroethene	1	ug/l	1.0	4.3		
Toluene	1	ug/l	1.0	ND		
trans-1,2-Dichloroethene	1	ug/l	1.0	ND		
Trichloroethene	1	ug/l	1.0	ND		
Vinyl chloride	1	ug/l	1.0	ND		
Xylenes (Total)	1	ug/l	1.0	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.89	30	79	111	96	
Dibromofluoromethane	31.03	30	73	131	103	
Bromofluorobenzene	30.86	30	82	112	103	
1,2-Dichloroethane-d4	29.89	30	78	128	100	

Sample ID: SUMP 2A
 Lab#: AD15554-002
 Matrix: Aqueous

Collection Date: 2/5/2020
 Receipt Date: 2/6/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethene	1	ug/l	1.0	ND		
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND		
1,2-Dichlorobenzene	1	ug/l	1.0	ND		
1,2-Dichloroethane	1	ug/l	0.50	ND		
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND		
1,3-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dioxane	1	ug/l	50	ND		
2-Butanone	1	ug/l	1.0	ND		
4-Isopropyltoluene	1	ug/l	1.0	ND		
Acetone	1	ug/l	5.0	24		
Benzene	1	ug/l	0.50	ND		
Carbon tetrachloride	1	ug/l	1.0	ND		
Chlorobenzene	1	ug/l	1.0	ND		
Chloroform	1	ug/l	1.0	ND		
cis-1,2-Dichloroethene	1	ug/l	1.0	2.8		
Ethylbenzene	1	ug/l	1.0	ND		
Isopropylbenzene	1	ug/l	1.0	ND		
m&p-Xylenes	1	ug/l	1.0	ND		
Methylene chloride	1	ug/l	1.0	ND		
Methyl-t-butyl ether	1	ug/l	0.50	ND		
Naphthalene	1	ug/l	1.0	ND		
n-Butylbenzene	1	ug/l	1.0	ND		
n-Propylbenzene	1	ug/l	1.0	ND		
o-Xylene	1	ug/l	1.0	ND		
sec-Butylbenzene	1	ug/l	1.0	ND		
t-Butylbenzene	1	ug/l	1.0	ND		
Tetrachloroethene	1	ug/l	1.0	120		
Toluene	1	ug/l	1.0	ND		
trans-1,2-Dichloroethene	1	ug/l	1.0	ND		
Trichloroethene	1	ug/l	1.0	1.4		
Vinyl chloride	1	ug/l	1.0	ND		
Xylenes (Total)	1	ug/l	1.0	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.78	30	79	111	96	
Dibromofluoromethane	30.52	30	73	131	102	
Bromofluorobenzene	31.00	30	82	112	103	
1,2-Dichloroethane-d4	28.94	30	78	128	96	

Sample ID: SUMP 3
 Lab#: AD15554-003
 Matrix: Aqueous

Collection Date: 2/5/2020
 Receipt Date: 2/6/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethene	1	ug/l	1.0	ND		
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND		
1,2-Dichlorobenzene	1	ug/l	1.0	ND		
1,2-Dichloroethane	1	ug/l	0.50	ND		
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND		
1,3-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dioxane	1	ug/l	50	ND		
2-Butanone	1	ug/l	1.0	ND		
4-Isopropyltoluene	1	ug/l	1.0	ND		
Acetone	1	ug/l	5.0	ND		
Benzene	1	ug/l	0.50	ND		
Carbon tetrachloride	1	ug/l	1.0	ND		
Chlorobenzene	1	ug/l	1.0	ND		
Chloroform	1	ug/l	1.0	ND		
cis-1,2-Dichloroethene	1	ug/l	1.0	ND		
Ethylbenzene	1	ug/l	1.0	ND		
Isopropylbenzene	1	ug/l	1.0	ND		
m&p-Xylenes	1	ug/l	1.0	ND		
Methylene chloride	1	ug/l	1.0	ND		
Methyl-t-butyl ether	1	ug/l	0.50	ND		
Naphthalene	1	ug/l	1.0	ND		
n-Butylbenzene	1	ug/l	1.0	ND		
n-Propylbenzene	1	ug/l	1.0	ND		
o-Xylene	1	ug/l	1.0	ND		
sec-Butylbenzene	1	ug/l	1.0	ND		
t-Butylbenzene	1	ug/l	1.0	ND		
Tetrachloroethene	1	ug/l	1.0	ND		
Toluene	1	ug/l	1.0	ND		
trans-1,2-Dichloroethene	1	ug/l	1.0	ND		
Trichloroethene	1	ug/l	1.0	ND		
Vinyl chloride	1	ug/l	1.0	ND		
Xylenes (Total)	1	ug/l	1.0	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.92	30	79	111	96	
Dibromofluoromethane	30.33	30	73	131	101	
Bromofluorobenzene	30.67	30	82	112	102	
1,2-Dichloroethane-d4	29.62	30	78	128	99	

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458

Service Center: 137-D Galtier Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved



CHAIN OF CUSTODY RECORD

Project # (Lab Use Only)

Page 1 of 1

3) Reporting Requirements (Please Circle)

Turnaround

When Available:

1 Business Day (100%)*
2 Business Days (75%)*
3 Business Days (50%)*
4 Business Days (25%)*
5 Business Days (25%)*
8 Business Days (Stand.)
Other:

Report Type

Summary
Results + QC (Waste)
Reduced:
[] NJ [] NY
[] PA [] Other

Electronic Data Deliv.

NJ HazSite
Excel Reg. NJ / NY / PA
EnviroData
EQS:
[] 4-File [] EZ
[] NYDEC
[] Region 2 or 5
Other: PDF

Customer Information

1a) Customer:

Address:

1b) Email/Cell/Fax/Ph:

1c) Send Invoice to:

1d) Send Report to:

Project Information

2a) Project:

2b) Project Mgr:

2c) Project Location (City/State):

2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

Batch #

ANUS54

Lab Sample #

001 SUMP 1A
002 SUMP 2A
003 SUMP 3

4) Customer Sample ID

5) Matrix

6) Sample

7) Analysis (specify methods & parameter lists)

8) # of Bottles

9) Comments

10) Relinquished by:

Accepted by:

Date

Time

11) Sampler (print name):

Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):

BN or BNA (8270D SIM)
VOC (8260C SIM or 8011)
SPLP (BN, BNA, Metals)
1,4 Dioxane

Check if applicable:

Project-Specific Reporting Limits
High Contaminant Concentrations
NJ LSRP Project (also check boxes above/right)

Internal use: sampling plan (check box) HC [] or client [] FSP#

Cooler Temperature

Attachment 4: MECC's Prior Subsurface Investigation Report



FOCUSED SUBSURFACE SITE INVESTIGATION (FSSI)

**161-01/11 29TH AVENUE
AKA 161-01/11 BAYSIDE LANE
FLUSHING, QUEENS, NEW YORK 11358**

PREPARED FOR

FLUSHING BANK

JANUARY 2020

MECC PROJECT NO. M18982A

MERRITT ENVIRONMENTAL CONSULTING CORP.

77 Arkay Drive, Suite D, Hauppauge, NY 11788
(631) 617-6200 . WWW.MERRITTEC.COM



77 Arkay Drive, Suite D, Hauppauge, NY 11788
(631) 617-6200/Tel (631) 617-6201/Fax

January 3, 2020
Project: M18982A

Ms. Kim Gentile
Flushing Bank
220 RXR Plaza
Uniondale NY 11556

RE: Focused Subsurface Site Investigation (FSSI)
161-01/11 29th Avenue
Flushing, New York

Dear Ms. Gentile:

Merritt Environmental Consulting Corp. ("MECC") has completed a Focused Subsurface Site Investigation (the "FSSI") at the 161-01 to 161-11 29th Avenue property (the "Site"). The Site contains a series of six attached two-story mixed-use residential/commercial buildings constructed in 1931. No dry cleaning currently takes place at the Site. The principal intent of this study was to determine if soil or groundwater quality was adversely affected by potential releases of perchloroethylene (PCE) by historical Site dry cleaning operations. In addition, one closed in-place underground #2 heating oil storage tank (UST) is present at the Site; the scope of this study also included the UST. Three exterior soil borings were installed at the Site and converted to temporary well points for groundwater sampling. Groundwater samples were also collected from two sump pits in the basement of the former dry cleaner tenant space.

This study identified elevated concentrations of PCE in groundwater, along with other chlorinated volatile organic compounds (VOCs) that are PCE degradation products. The highest total chlorinated VOC content reported in the five collected groundwater samples is 140.2 micrograms per liter (ug/l) as identified in a sample collected from one of the two groundwater sump pits. Specifically, PCE was detected at 92 ug/l in this sump sample (the regulatory limit for PCE in ground water is 5 ug/l). Lesser total chlorinated VOC levels were detected in two additional collected groundwater samples: 90 ug/l in the sample collected from the second basement sump; and 5.7 ug/l in a groundwater sample collected from the building exterior. While the horizontal extent of groundwater impacted by chlorinated VOCs currently appears to be limited, the detected concentrations are great enough to warrant a recommendation for regulatory reporting and additional investigation to better understand the horizontal and vertical extent of the impacted media, and to determine if a volatile organic vapor intrusion condition exists within the Site building.

Further, evidence of a petroleum release from the UST was identified in groundwater. Petroleum-related VOCs and semi-volatile organic compounds (SVOCs) are reported in two groundwater samples collected from adjacent to the UST at concentrations that exceed applicable regulatory limits. Regulatory reporting is required in the State of New York when a petroleum release is discovered. MECC recommends that the UST be removed along with any petroleum-contaminated soil that may be a continuing source of a release to local groundwater. Depth to the local water table was measured to be as shallow as five feet bgs at the Site.

Background

The Site is located at the northeast corner of the intersection of 29th Avenue and 161st Street in an urban setting. The large majority of properties surrounding the Site are used for residential purposes. The Site contains six attached two-story buildings housing commercial and retail operations on the ground floors and residential apartments on the second floors. A shared rear yard is present at the rear (north sides) of the Site buildings. Each of the Site building sections contains discrete full basements. The size of the Site is approximately 13,100 square feet inclusive of the building footprints and rear yard. The aggregate footprint of the Site buildings is approximately 7,300 square feet. Site building construction consists of wood-frame floor and roof decks with brick and mortar exterior walls. The Site appears to have always been connected to the local sewer and drinking water supply systems.

A recently completed phase I environmental site assessment (ESA) indicates that a dry cleaner historically occupied the commercial space at the 161-03 29th Avenue portion of the Site (currently occupied by a small drug store). According to sources of historical information gathered by the ESA, a dry cleaner occupied this Site tenant space between 1973 and 2014 and was known as “Rose Garden Cleaners.” Further, regulatory agency databases reviewed by the ESA shows that spent PCE was generated in this tenant space in 2007.

Topography and Geology

The elevation of the Site is approximately 70 feet above mean sea level. Local surface topography has little relief with a slight downward slope to the north-northeast. MECC’s review of the attached USGS topographic map confirms an apparent slight downward slope to the northeast. Subsurface sediment encountered at the Site consists of clay with varying amounts of sand interspersed by water-bearing zones consisting of fine to coarse sand. This unconsolidated sediment likely represents a glaciofluvial depositional environment. Two of these water-bearing zones were encountered to a depth of 15 feet bgs. United States Geological Survey (USGS) interactive maps of Long Island list the depth to the unconfined aquifer in the Site area at approximately 40 feet bgs. Therefore, MECC believes that the encountered shallower water-bearing zones represent perched groundwater conditions. The lateral extent of these water-bearing zones is unknown but it appears that they extend beyond Site borders (evidence of water intrusion was observed within the Site building basements). Based on contaminant concentration gradients identified by this FSSI, it appears that local groundwater flow is likely to the north-northeast. Depth to water at the Site ranged from five feet to seven feet bgs.

Scope of Work Completed

All field activities were conducted on December 12, 2019. A qualified contractor was retained to first conduct a ground-penetrating radar (GPR) survey of the rear yard at the Site. The GPR survey confirmed the location of the closed in-place heating oil UST. Please refer to the attached Site Sketch for the locations of the historical UST location. Based on the reported dimensions of the subsurface anomaly, MECC believes that the volume of the UST may be as great as 2,000 gallons.

The principal intent of this study was to determine if possible historical Site dry cleaning had adversely affected the environmental integrity of the Site. In addition, this FSSI was conducted to establish if the historical #2 heating UST released petroleum to the environment at actionable or reportable concentrations. A qualified contractor was retained to install a total of three exterior soil borings using a track-mount hydraulic direct-push drill rig (Soil Boring Nos. B1 through B3). B1 and B2 were installed directly adjacent to the UST and B3 was placed approximately 30 feet north of the rear entrance of the 161-03 29th Avenue Site address.

MECC originally proposed to install two soil borings into the basement floor of the 163-03 29th Avenue Site building for soil sample collection and laboratory analysis. However, two groundwater sump pits were observed in this basement. MECC therefore adjusted the scope of this project to collect a sample of the standing water

within each of these sumps. Since an unexpectedly shallow water-bearing deposit was encountered at the Site, this study was centered on establishing groundwater quality; no soil samples were submitted to the laboratory for analysis.

Mr. Frank Galdun, Qualified Environmental Professional (QEP) with MECC, conducted all field sampling activities and directed the drilling contractor.

All driller sampling tubes and rods were subjected to a water/alconox wash between soil boring locations to reduce the potential for cross contamination. All penetrations made by the drilling activities were filled and then patched with like surfacing material.

Soil Quality Field Screening Results

Soil samples were continuously subjected to field screening techniques as B1 through B3 were drilled. The field screening techniques consisted of using a portable photoionization detector (PID) for measuring volatile organic vapors and assessing each soil sample for physical evidence of contamination. Field screening activities were conducted to boring termination at 15 feet bgs. PID readings in soil ranged from undetect to up to 100 parts per million (ppm) in B1 in clay and sand below the first water-bearing deposit at five feet to seven feet bgs. In addition, physical evidence of petroleum contamination was observed in soil and groundwater at both B1 and B2. No free-phase product was observed on water extracted from B1 and B2, although a heavy petroleum sheen and strong petroleum odors were identified. B3 was installed north of the dry cleaner tenant space, at some distance from the UST. No field evidence of soil or groundwater contamination as identified in this boring.

Soil/Groundwater Sampling and Laboratory Analysis

Continuous soil sampling was accomplished by inserting a five-foot plastic sleeve into a casing at the end of the drill rods then driven into the subsurface. The sleeves were removed from the casings as they were extracted from the soil borings. Soil quality evaluation and soil sampling was conducted by cutting the sleeves longitudinally, exposing the collected soil.

Each of three exterior direct-push borings were converted to temporary well points by installing a ten-foot length of one-inch diameter PVC well screen to a depth of 15 feet bgs for groundwater sample collection. Unscreened riser extended to ground surface at each well point. Dedicated disposable one-quarter inch diameter flexible tubing fitted with a foot valve was then used to collect the groundwater samples. Groundwater was purged until apparent turbidity was visibly reduced and one groundwater sample was collected from the each well point for laboratory analysis. In addition, MECC collected one sample each from the standing water within the two sump pits in the basement of 161-03 29th Avenue for laboratory analysis.

The groundwater samples collected from the exterior temporary well points are identified on the attached laboratory report as B1GW through B3GW. The two water samples collected from the interior sumps are identified as Sump1 and Sump2. All samples (five groundwater) were analyzed at Veritech, a New York State Department of Health-Certified environmental laboratory (NYSDOH Cert. No. 10982). All samples were analyzed under EPA Method 8260 –VOCs. In addition, the two groundwater samples collected at B1 and B2 were further analyzed under EPA Method 8270 – SVOCs.

All appropriate chain of custody documentation shall be completed before sample shipment to the laboratory. All samples were collected in laboratory-supplied containers and shipped on ice to the laboratory within one day of completion of field activities.

VOCs were detected in the groundwater samples and the following table summarizes the laboratory report:

TABLE 1: VOC RESULTS FOR GROUNDWATER SAMPLES (detected compounds only)						
Compound	B1GW	B2GW	B3GW	Sump1	Sump2	Standards
Acetone	23	ND	ND	ND	140	50
Ethylbenzene	2.6	ND	ND	ND	ND	5
Isopropylbenzene	18	14	ND	ND	ND	5
Methyl-tert-butyl ether (MTBE)	3.6	2.0	ND	ND	ND	10
Naphthalene	300	79	ND	ND	ND	10
n-Propylbenzene	26	22	ND	ND	ND	5
n-Butylbenzene	ND	6.2	ND	ND	ND	5
sec-Butylbenzene	16	13	ND	ND	ND	5
tert-Butylbenzene	2.0	1.1	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	4.6	8.2	13	5
Trichloroethene	ND	ND	1.1	40	12	5
Perchloroethylene	ND	ND	ND	92	65	5
Total VOCs	391.2	137.3	5.7	140.2	230	

NOTES

All results are expressed in micrograms per liter (ug/l), which can also be expressed as parts per billion (ppb).

Any result in bold exceeds New York State Department of Health Maximum Contaminant Level for drinking water, and the guidance values or standard listed in the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) or "TOGS" Water Quality Standards and Guidance Values.

ND: Parameter non-detected, below method detection limits.

Acetone was detected in two samples. However, this substance is commonly introduced into sample media during analytical procedures and is not considered by MECC as a representative of actual groundwater quality. Further, acetone is not a degradation product of PCE, nor is it a constituent of petroleum fuels.

Laboratory analysis of the groundwater samples identifies PCE at elevated concentrations in both of the interior sump samples. Trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE) were also detected in both sump samples at concentrations exceeding the applicable regulatory limit (TCE and cis-1,2-DCE are PCE degradation products).

Aside from acetone, all detected VOCs in B1GW and B2GW are constituents of petroleum-related fuels. Naphthalene, which was detected in both B1GW and B2GW, is a common constituent of heavier petroleum fuels such as heating oil.

SVOCs were detected in B1GW and B2GW and Table 2 on the following page summarizes the laboratory data:

TABLE 2: SVOC RESULTS B1GW AND B2GW (detected compounds only)			
Compound	B1GW	B2GW	Standards
Acenaphthene	89	15	20
Anthracene	18	ND	50
Fluorene	93	21	50
Naphthalene	290	43	10
Phenanthrene	190	33	50
Pyrene	11	2.7	50
Total SVOCs	691	114.7	

NOTES

All results are expressed in micrograms per liter (ug/l), which can also be expressed as parts per billion (ppb).

Any result in bold exceeds New York State Department of Health Maximum Contaminant Level for drinking water, and the guidance values or standard listed in the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) or "TOGS" *Water Quality Standards and Guidance Values*.

ND: Parameter non-detected, below method detection limits.

As shown, several individual SVOC concentrations exceed applicable regulatory limits, confirming MECC's field observations of groundwater quality.

Conclusions/Recommendations

Based on the data gathered by this study, MECC believes that the lateral extent of chlorinated VOC contamination caused by the former dry cleaner is limited and moderate in severity. However, the contaminant concentrations are great enough to warrant a recommendation to notify regulators and to conduct further investigation to better establish the horizontal and vertical extent of groundwater impact, and to determine if a vapor intrusion condition exists inside the building.

Laboratory analysis of the two groundwater samples collected from B1 and B2 show that an actionable petroleum release has occurred at the Site heating oil UST. Although MECC concludes that the extent and severity of this release is likely limited to the immediate vicinity of the UST, this finding requires regulatory reporting and corrective action. It is recommended that the UST be removed along with any soil containing petroleum contamination which is the presumed source of the discovered groundwater contamination.

Limitations of the FSSI

The scope of the FSSI is intended to aid in evaluating whether additional investigation would be prudent. The tasks that comprise this FSSI are not exhaustive or definitive. MECC has made no independent investigation of the accuracy of these secondary sources and has assumed them to be accurate and complete. MECC does not warrant the accuracy or completeness of information provided by secondary sources (MECC has no reason to believe that the secondary sources provided or acquired during this study contain intentionally false or misleading information). MECC does not warrant that all contamination that may exist under the Site has been discovered, that the Site is suitable for any particular purpose or that the Site is clean or free of liability.

If you have any questions concerning this document, please feel free to call our office.

Sincerely,
MERRITT ENVIRONMENTAL CONSULTING CORP.



Frank Galdun
Qualified Environmental Professional (QEP)

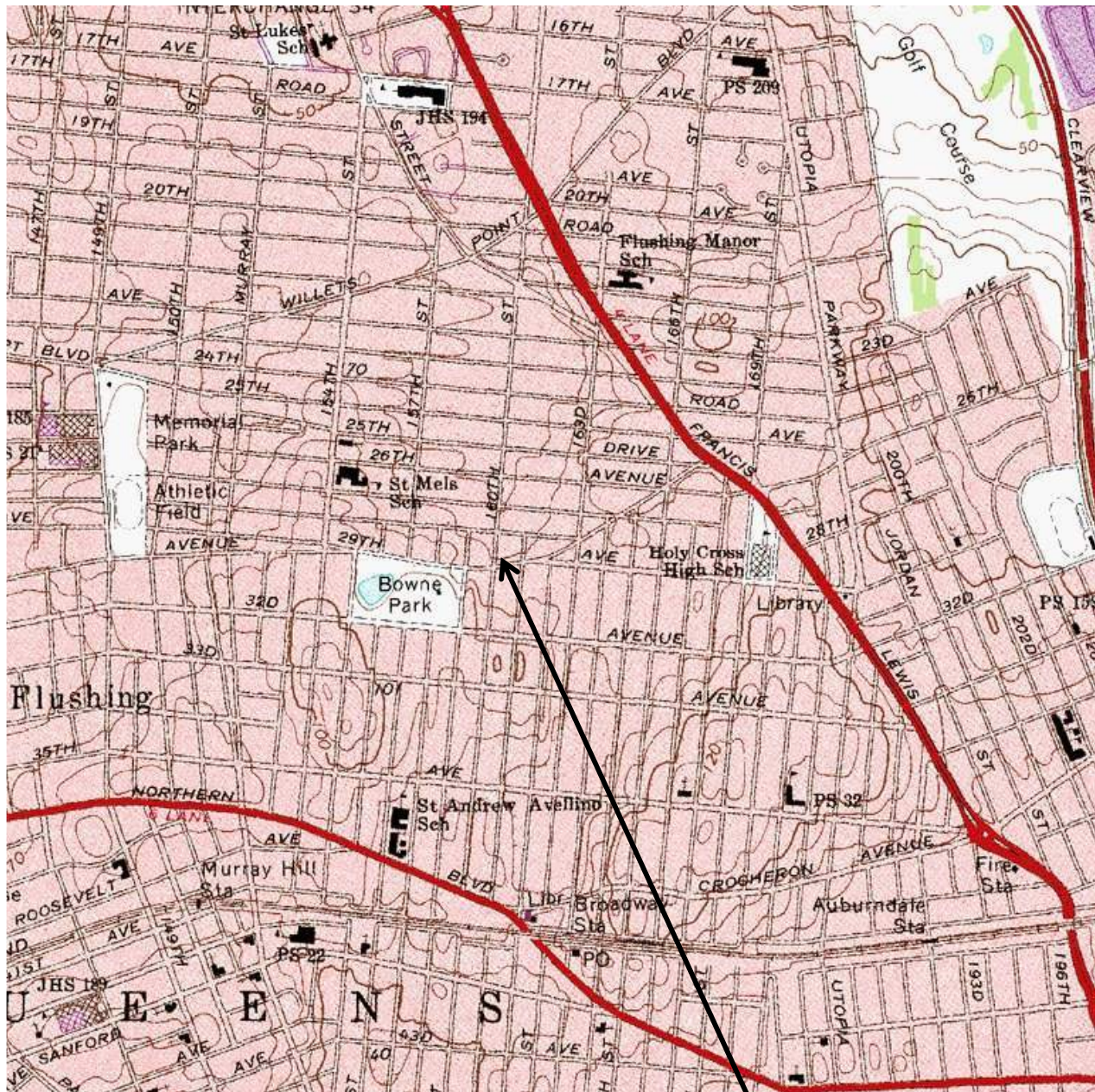


Charles G. Merritt
President/LEED AP

Attachments:

- Attachment 1: Site Location Map and Site Plan
- Attachment 2: Laboratory Report of Analysis
- Attachment 3: Site Photographs
- Attachment 4: Soil Boring Logs

Attachment 1: Site Location Map and Site Plan



SITE

FIGURE 1: SITE LOCATION MAP

Contour Interval: 10'

USGS 7.5" Quadrangle Map titled *Flushing, NY*, dated 1995

Site Address:

161-01 to 161-11 29th Ave.

Queens, NY



TOTAL CHLORINATED VOCs: 5.7 UG/L

TOTAL PETROLEUM FUEL VOCs: 137.7 UG/L
TOTAL SVOCs: 114.7 UG/L

TOTAL PETROLEUM FUEL VOCs: 368.2 UG/L
TOTAL SVOCs: 691 UG/L

TOTAL CHLORINATED VOCs: 140.2 UG/L

TOTAL CHLORINATED VOCs: 90 UG/L

DRY CLEANING MACHINE
SUPPORT POSTS IN BSMNT.

161ST ST.

SIDEWALK

29TH AVE.

RESIDENTIAL YARDS AT ADJOINING PROPERTIES

GRASS

CONCRETE PAVING

FENCE

GRASS

ADJOINING
YARD

⊕ B3

⊕ B2

UST

⊕ B1

SUMP1

SUMP2

SHAFT

SHAFT

SHAFT

ADJOINING 2-STORY
RESIDENTIAL/COMMERCIAL
BUILDING

ESTIMATED DIRECTION OF LOCAL GROUNDWATER FLOW

NOTE:
TOTAL VOCs AND SVOCs SHOWN FOR EACH GROUNDWATER SAMPLE. TOTAL VOCs DO NOT
INCLUDE REPORTED ACETONE CONCENTRATIONS

SITE SKETCH: 161-01 TO 161-11 29TH AVE.
NOT TO SCALE QUEENS, NY

⊕ DENOTES SOIL BORING LOCATIONS

PATTERNED LINES ENCLOSE THE SITE

INTERIOR DETAILS ARE APPROXIMATE AND BASED ON OBSERVATIONS ONLY



Attachment 2: Laboratory Report of Analysis

Hampton-Clarke Report Of Analysis

Client: Merritt Environmental
Project: 161-01 29th Ave

HC Project #: 9121307

Sample ID: B1GW
Lab#: AD14656-001
Matrix: Aqueous

Collection Date: 12/12/2019
Receipt Date: 12/13/2019

PAH Compounds 8270

Analyte	DF	Units	RL	Result		
Acenaphthene	5	ug/l	10	89		
Acenaphthylene	5	ug/l	10	ND		
Anthracene	5	ug/l	10	18		
Benzo[a]anthracene	5	ug/l	10	ND		
Benzo[a]pyrene	5	ug/l	10	ND		
Benzo[b]fluoranthene	5	ug/l	10	ND		
Benzo[g,h,i]perylene	5	ug/l	10	ND		
Benzo[k]fluoranthene	5	ug/l	10	ND		
Chrysene	5	ug/l	10	ND		
Dibenzo[a,h]anthracene	5	ug/l	10	ND		
Fluoranthene	5	ug/l	10	ND		
Fluorene	5	ug/l	10	93		
Indeno[1,2,3-cd]pyrene	5	ug/l	10	ND		
Naphthalene	5	ug/l	2.5	290		
Phenanthrene	5	ug/l	10	190		
Pyrene	5	ug/l	10	11		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	6.55	50	55	146	65	
Phenol-d5	0.47	100	27	115	2	
Nitrobenzene-d5	7.70	50	51	139	77	
2-Fluorophenol	0.00	100	29	113	0	
2-Fluorobiphenyl	5.96	50	53	129	60	
2,4,6-Tribromophenol	0.00	100	54	149	0	

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethene	1	ug/l	1.0	ND		
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND		
1,2-Dichlorobenzene	1	ug/l	1.0	ND		
1,2-Dichloroethane	1	ug/l	0.50	ND		
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND		
1,3-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dioxane	1	ug/l	50	ND		
2-Butanone	1	ug/l	1.0	ND		
4-Isopropyltoluene	1	ug/l	1.0	ND		
Acetone	1	ug/l	5.0	23		
Benzene	1	ug/l	0.50	ND		
Carbon tetrachloride	1	ug/l	1.0	ND		
Chlorobenzene	1	ug/l	1.0	ND		
Chloroform	1	ug/l	1.0	ND		
cis-1,2-Dichloroethene	1	ug/l	1.0	ND		
Ethylbenzene	1	ug/l	1.0	2.6		
Isopropylbenzene	1	ug/l	1.0	18		
m&p-Xylenes	1	ug/l	1.0	ND		
Methylene chloride	1	ug/l	1.0	ND		
Methyl-t-butyl ether	1	ug/l	0.50	3.6		
Naphthalene	1	ug/l	1.0	300		
n-Butylbenzene	1	ug/l	1.0	ND		
n-Propylbenzene	1	ug/l	1.0	26		
o-Xylene	1	ug/l	1.0	ND		
sec-Butylbenzene	1	ug/l	1.0	16		
t-Butylbenzene	1	ug/l	1.0	2.0		
Tetrachloroethene	1	ug/l	1.0	ND		
Toluene	1	ug/l	1.0	ND		

Sample ID: B1GW
Lab#: AD14656-001
Matrix: Aqueous

Collection Date: 12/12/2019
Receipt Date: 12/13/2019

trans-1,2-Dichloroethene	1	ug/l	1.0		ND	
Trichloroethene	1	ug/l	1.0		ND	
Vinyl chloride	1	ug/l	1.0		ND	
Xylenes (Total)	1	ug/l	1.0		ND	
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.53	30	79	111	98	
Dibromofluoromethane	35.50	30	73	131	118	
Bromofluorobenzene	27.55	30	82	112	92	
1,2-Dichloroethane-d4	35.92	30	78	128	120	

Sample ID: B2GW
 Lab#: AD14656-002
 Matrix: Aqueous

Collection Date: 12/12/2019
 Receipt Date: 12/13/2019

PAH Compounds 8270

Analyte	DF	Units	RL	Result		
Acenaphthene	1	ug/l	2.0	15		
Acenaphthylene	1	ug/l	2.0	ND		
Anthracene	1	ug/l	2.0	ND		
Benzo[a]anthracene	1	ug/l	2.0	ND		
Benzo[a]pyrene	1	ug/l	2.0	ND		
Benzo[b]fluoranthene	1	ug/l	2.0	ND		
Benzo[g,h,i]perylene	1	ug/l	2.0	ND		
Benzo[k]fluoranthene	1	ug/l	2.0	ND		
Chrysene	1	ug/l	2.0	ND		
Dibenzo[a,h]anthracene	1	ug/l	2.0	ND		
Fluoranthene	1	ug/l	2.0	ND		
Fluorene	1	ug/l	2.0	21		
Indeno[1,2,3-cd]pyrene	1	ug/l	2.0	ND		
Naphthalene	1	ug/l	0.50	43		
Phenanthrene	1	ug/l	2.0	33		
Pyrene	1	ug/l	2.0	2.7		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	45.22	50	55	146	90	
Phenol-d5	0.61	100	27	115	1	
Nitrobenzene-d5	50.89	50	51	139	102	
2-Fluorophenol	0.00	100	29	113	0	
2-Fluorobiphenyl	36.20	50	53	129	72	
2,4,6-Tribromophenol	0.00	100	54	149	0	

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	14
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	2.0
Naphthalene	1	ug/l	1.0	79
n-Butylbenzene	1	ug/l	1.0	6.2
n-Propylbenzene	1	ug/l	1.0	22
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	13
t-Butylbenzene	1	ug/l	1.0	1.1
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: B2GW
Lab#: AD14656-002
Matrix: Aqueous

Collection Date: 12/12/2019
Receipt Date: 12/13/2019

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.53	30	79	111	102	
Dibromofluoromethane	34.29	30	73	131	114	
Bromofluorobenzene	30.66	30	82	112	102	
1,2-Dichloroethane-d4	34.54	30	78	128	115	

Sample ID: B3GW
 Lab#: AD14656-003
 Matrix: Aqueous

Collection Date: 12/12/2019
 Receipt Date: 12/13/2019

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane		ug/l	1.0	ND		
1,1-Dichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethene	1	ug/l	1.0	ND		
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND		
1,2-Dichlorobenzene	1	ug/l	1.0	ND		
1,2-Dichloroethane	1	ug/l	0.50	ND		
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND		
1,3-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dioxane	1	ug/l	50	ND		
2-Butanone	1	ug/l	1.0	ND		
4-Isopropyltoluene	1	ug/l	1.0	ND		
Acetone	1	ug/l	5.0	ND		
Benzene	1	ug/l	0.50	ND		
Carbon tetrachloride	1	ug/l	1.0	ND		
Chlorobenzene	1	ug/l	1.0	ND		
Chloroform	1	ug/l	1.0	ND		
cis-1,2-Dichloroethene	1	ug/l	1.0	4.6		
Ethylbenzene	1	ug/l	1.0	ND		
Isopropylbenzene	1	ug/l	1.0	ND		
m&p-Xylenes	1	ug/l	1.0	ND		
Methylene chloride	1	ug/l	1.0	ND		
Methyl-t-butyl ether	1	ug/l	0.50	ND		
Naphthalene	1	ug/l	1.0	ND		
n-Butylbenzene	1	ug/l	1.0	ND		
n-Propylbenzene	1	ug/l	1.0	ND		
o-Xylene	1	ug/l	1.0	ND		
sec-Butylbenzene	1	ug/l	1.0	ND		
t-Butylbenzene	1	ug/l	1.0	ND		
Tetrachloroethene	1	ug/l	1.0	ND		
Toluene	1	ug/l	1.0	ND		
trans-1,2-Dichloroethene	1	ug/l	1.0	ND		
Trichloroethene	1	ug/l	1.0	1.1		
Vinyl chloride	1	ug/l	1.0	ND		
Xylenes (Total)	1	ug/l	1.0	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.53	30	79	111	95	
Dibromofluoromethane	36.01	30	73	131	120	
Bromofluorobenzene	29.54	30	82	112	98	
1,2-Dichloroethane-d4	36.69	30	78	128	122	

Sample ID: SUMP1
 Lab#: AD14656-004
 Matrix: Aqueous

Collection Date: 12/12/2019
 Receipt Date: 12/13/2019

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethene	1	ug/l	1.0	ND		
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND		
1,2-Dichlorobenzene	1	ug/l	1.0	ND		
1,2-Dichloroethane	1	ug/l	0.50	ND		
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND		
1,3-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dioxane	1	ug/l	50	ND		
2-Butanone	1	ug/l	1.0	ND		
4-Isopropyltoluene	1	ug/l	1.0	ND		
Acetone	1	ug/l	5.0	ND		
Benzene	1	ug/l	0.50	ND		
Carbon tetrachloride	1	ug/l	1.0	ND		
Chlorobenzene	1	ug/l	1.0	ND		
Chloroform	1	ug/l	1.0	ND		
cis-1,2-Dichloroethene	1	ug/l	1.0	8.2		
Ethylbenzene	1	ug/l	1.0	ND		
Isopropylbenzene	1	ug/l	1.0	ND		
m&p-Xylenes	1	ug/l	1.0	ND		
Methylene chloride	1	ug/l	1.0	ND		
Methyl-t-butyl ether	1	ug/l	0.50	ND		
Naphthalene	1	ug/l	1.0	ND		
n-Butylbenzene	1	ug/l	1.0	ND		
n-Propylbenzene	1	ug/l	1.0	ND		
o-Xylene	1	ug/l	1.0	ND		
sec-Butylbenzene	1	ug/l	1.0	ND		
t-Butylbenzene	1	ug/l	1.0	ND		
Tetrachloroethene	1	ug/l	1.0	92		
Toluene	1	ug/l	1.0	ND		
trans-1,2-Dichloroethene	1	ug/l	1.0	ND		
Trichloroethene	1	ug/l	1.0	40		
Vinyl chloride	1	ug/l	1.0	ND		
Xylenes (Total)	1	ug/l	1.0	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.12	30	79	111	97	
Dibromofluoromethane	36.19	30	73	131	121	
Bromofluorobenzene	29.10	30	82	112	97	
1,2-Dichloroethane-d4	32.98	30	78	128	110	

Sample ID: SUMP2
 Lab#: AD14656-005
 Matrix: Aqueous

Collection Date: 12/12/2019
 Receipt Date: 12/13/2019

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethane	1	ug/l	1.0	ND		
1,1-Dichloroethene	1	ug/l	1.0	ND		
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND		
1,2-Dichlorobenzene	1	ug/l	1.0	ND		
1,2-Dichloroethane	1	ug/l	0.50	ND		
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND		
1,3-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dichlorobenzene	1	ug/l	1.0	ND		
1,4-Dioxane	1	ug/l	50	ND		
2-Butanone	1	ug/l	1.0	ND		
4-Isopropyltoluene	1	ug/l	1.0	ND		
Acetone	1	ug/l	5.0	140		
Benzene	1	ug/l	0.50	ND		
Carbon tetrachloride	1	ug/l	1.0	ND		
Chlorobenzene	1	ug/l	1.0	ND		
Chloroform	1	ug/l	1.0	ND		
cis-1,2-Dichloroethene	1	ug/l	1.0	13		
Ethylbenzene	1	ug/l	1.0	ND		
Isopropylbenzene	1	ug/l	1.0	ND		
m&p-Xylenes	1	ug/l	2.0	ND		
Methylene chloride	1	ug/l	1.0	ND		
Methyl-t-butyl ether	1	ug/l	0.50	ND		
Naphthalene	1	ug/l	1.0	ND		
n-Butylbenzene	1	ug/l	1.0	ND		
n-Propylbenzene	1	ug/l	1.0	ND		
o-Xylene	1	ug/l	1.0	ND		
sec-Butylbenzene	1	ug/l	1.0	ND		
t-Butylbenzene	1	ug/l	1.0	ND		
Tetrachloroethene	1	ug/l	1.0	65		
Toluene	1	ug/l	1.0	ND		
trans-1,2-Dichloroethene	1	ug/l	1.0	ND		
Trichloroethene	1	ug/l	1.0	12		
Vinyl chloride	1	ug/l	1.0	ND		
Xylenes (Total)	1	ug/l	1.0	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.04	30	79	111	97	
Dibromofluoromethane	27.76	30	73	131	93	
Bromofluorobenzene	29.70	30	82	112	99	
1,2-Dichloroethane-d4	30.51	30	78	128	102	

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458

Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

NELACNU #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved



CHAIN OF CUSTODY RECORD

Project # (Lab Use Only)

Page 1 of 1

9121307

3) Reporting Requirements (Please Circle)

Turnaround

When Available:

1 Business Day (100%)*

2 Business Days (75%)*

3 Business Days (50%)*

4 Business Days (35%)*

5 Business Days (25%)*

8 Business Days (Stand.)

Other:

Report Type

Summary

Results + QC (Waste)

Reduced:

[] NJ [] NY

[] PA [] Other

NJ Full / NY ASP CatB

NY ASP CatA

Other:

Electronic Data Deliv.

NJ HazSite

Excel Reg. NJ / NY / PA

EnviroData

EQUIS:

[] 4-File [] EZ

[] NYDEC

[] Region 2 or 5

Other: PDF

Customer Information

1a) Customer: MELANIS

Address: 77 ARLY DR.

1b) Email/Cell/Fax/Pr: frankg@optonline.net

1c) Send Invoice to: frankg@optonline.net

1d) Send Report to: frankg@optonline.net

Project Information

2a) Project: 161-01 ZGTTH Ave

2b) Project Mgr: QUEEN'S UNIV

2c) Project Location (City/State): GAITHER NJ

2d) Quote/PO # (if applicable):

FOR LAB USE ONLY

Matrix Codes

DW - Drinking Water S - Soil A - Air

GW - Ground Water SL - Sludge

WW - Waste Water OL - Oil

OT - Other (please specify under item 9, Comments)

Batch #

AN4656

Lab Sample #

001

002

003

004

005

006

007

008

009

010

011

012

013

014

015

016

017

018

019

020

021

022

023

024

==== Check if Contingent ====

Sample Type

Grab (G)

Composite (C)

7) Analysis (specify methods & parameter lists)

8) # of Bottles

9) Comments

None

MeOH

En Core

NaOH

HCl

H2SO4

HNO3

Other:

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

Date: 12/19/02

Time: 12:00

12/19/02

12:00

12:00

12:00

12:00

12:00

12:00

12:00

12:00

12:00

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):

BN or BNA (8270D SIM)

VOC (8260C SIM or 8071)

SPLP (BN, BNA, Metals)

1,4 Dioxane

Check if applicable:

Project-Specific Reporting Limits

High Contaminant Concentrations

NJ LSRP Project (also check boxes above/right)

Please note NUMBERED items. If not completed your analytical work may be delayed.

A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [] or client [] FSP#

For NJ LSRP projects, indicate which standards need to be met:

NJ LSRP GWQS

NJ LSRP SRS

NJ LSRP SPLP

Other (specify):

Cooler Temperature

2.9

2.9

2.9

2.9

2.9

2.9

Attachment 3: Site Photographs



Photograph 1: General view of the rear Site yard looking east from 161st Street. Site buildings at right.



Photograph 2: Outline of the UST in red spray paint as established by the GPR survey. Photographer facing west.



Photograph 3: View of Sump1 in the basement of 161-03 29th Avenue (sump is under plywood cover at background). Support posts for former dry cleaning machine visible at right.



Photograph 4: Sump2 in the basement of 161-03 29th Avenue.



Photograph 5: Soil samples collected from B1. Discoloration by petroleum is evident (grey-colored material).

Attachment 4: Soil Boring Logs

[illegible]

ground surface to _____ft. used _____ casing then _____ casing to _____ft
A= auger ss: split spoon sampler mc: macrocore HSA: hollow stem auger HA: Hand Auger
Trace: 0-10% Little: 10-20% some: 20-10%
C= coarse M=medium F=fine

MERRITT ENVIRONMENTAL CONSULTING CORP. 77 Arkay Dr., Suite D Hauppauge, NY 11788 631.617.3200		Boring No. B2
	Project Number: 20030021	Boring location: see site plan
Driller: LEA Geologist: Frank Galdun	Location: 161-01 to 161-11 29 th Ave. Queens, NY	
Groundwater Observations: <u>Wet 5'</u>	Geoprobe with 5-foot casing sampler Type: track unit Size I.D. 2" Hammer wt. N/A Hammer Fall: N/A	Date Start : <u>12/12/19</u> Date Complete : <u>12/12/19</u> Surface Elev. : N/A Groundwater Elev.: N/A

[illegible]

ground surface to _____ ft. used _____ casing then _____ casing to _____ ft.

A= auger ss: split spoon sampler mc: macrocore HSA: hollow stem auger HA: Hand Auger

Trace: 0-10% Little: 10-20% some: 20-10%

C= coarse M=medium F=fine

MERRITT ENVIRONMENTAL CONSULTING CORP. 77 Arkay Dr., Suite D Hauppauge, NY 11788 631.617.3200		Boring No. B3
	Project Number: 20030021	Boring location: see site plan
Driller: LEA Geologist: Frank Galdun	Location: 161-01 to 161-11 29 th Ave. Queens, NY	
Groundwater Observations: <u>Wet 7'</u>	Geoprobe with 5-foot casing sampler Type: Track Size I.D. 2" Hammer wt. N/A Hammer Fall: N/A	Date Start : <u>12/12/19</u> Date Complete : <u>12/12/19</u> Surface Elev. : N/A Groundwater Elev.: N/A

Depth feet	Sample		Blows per 6 "			density moisture	PID	Field Identification of soil Remarks
	#	Type	0-6	6-12	12-18			
0'-5'	N/A	N/A	N/A	N/A	N/A	Dry	0.0	70% recovery. Brown fine sand, clay trace rock fragments. No odor.
							0.0	
5'-10'						Moist	0.0	80% recovery. Moist gray clay and fine sand. No odor.
							0.0	
10'-15'						Wet	24.0	80% recovery. Water-bearing medium brown sand 10'-12'. Brown clay 12'-15'. No odor.
							0.3	
	▼	▼	▼	▼	▼			End of boring 15'. Well screen installed 15' to 5' for groundwater sampling.

ground surface to _____ft. used _____ casing then _____ casing to _____ft

A= auger ss: split spoon sampler mc: macrocore HSA: hollow stem auger HA: Hand Auger

Trace: 0-10% Little: 10-20% some: 20-10%

C= coarse M=medium F=fine