

From: [Benjamin Haith](#)
To: [Spellman, John \(DEC\)](#)
Cc: [Paul Fornaby](#); [Walsh, Thomas F.](#)
Subject: Office Depot Shopping Plaza report
Date: Monday, January 18, 2021 4:29:55 PM
Attachments: [image001.png](#)
[Office Depot Pilot Study Update 01-18-2021.pdf](#)

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Good afternoon John, apologies I couldn't get this out on Friday – the engineer didn't have his stamp on hand.

I've attached the update report on the Office Depot Shopping Plaza. We have sampling, including the emerging contaminants, scheduled for next Wednesday/Thursday.

Thanks.

-Ben

Ben Haith, P.G.^{PA}

Senior Project Manager / District Office Manager

GZA | 6296 Fly Road | East Syracuse, NY 13057

o: 315.800.1809 | c: 315.663.4538 | benjamin.haith@gza.com | www.gza.com | [LinkedIn](#)

GEOTECHNICAL | ENVIRONMENTAL | ECOLOGICAL | WATER | CONSTRUCTION MANAGEMENT

Known for excellence. Built on trust.

This electronic message is intended to be viewed only by the individual or entity to which it is addressed and may contain privileged and/or confidential information intended for the exclusive use of the addressee(s). If you are not the intended recipient, please be aware that any disclosure, printing, copying, distribution or use of this information is prohibited. If you have received this message in error, please notify the sender immediately and destroy this message and its attachments from your system.

For information about GZA GeoEnvironmental, Inc. and its services, please visit our website at www.gza.com.



Known for excellence.
Built on trust.

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
CONSTRUCTION
MANAGEMENT

GZA GeoEnvironmental of NY
6296 Fly Road
East Syracuse, NY 13057
T: 315.800.1800
F: 315.437.5444
www.gza.com



January 15, 2021

Mr. John Spellman, P.E.
New York State Department of Environmental Conservation
625 Broadway
11th Floor
Albany, NY 12233-7014

Re: Office Depot Shopping Center
1-29 Boices Lane, Kingston, Ulster County, New York
Site No. 356048

Dear Mr. Spellman:

GZA GeoEnvironmental of New York (GZA) has prepared the attached Pilot Study Injection Update Report for the Office Depot Shopping Plaza Site at the above-referenced address on behalf of the site's owner, Rt. 9W/Boices Lane, LLC.

The work summarized in this report is in accordance with the April, 2018 Pilot Study Workplan approved on May 15, 2018.

Sincerely,

GZA GEOENVIRONMENTAL of NEW YORK

Benjamin Haith
Senior Project Manager

James Richert, P.G.
Consultant Reviewer

Bart Klettke, P.E.
Principal



1.0 Introduction and Background

GZA GeoEnvironmental, Inc. (GZA) proposed on behalf of Rt. 9W/Boices Lane, LLC that enhanced biological degradation (EBD) of the chlorinated volatile organic compounds (CVOCs) of concern would be an effective interim remedial measure (IRM) at the Office Depot Shopping Plaza site located at the corner of Route 9W and Boices Lane in Kingston, Ulster County, New York ("Site"). The New York Department of Environmental Conservation (NYSDEC) in its letter dated May 15, 2013 requested that a pilot study be performed to demonstrate the feasibility of an EBD IRM. GZA submitted a Pilot Study Workplan in April 2018 which was subsequently approved by NYSDEC on May 15, 2018.

1.1 Site Description

The Site is situated on the southwest corner of the intersection of Route 9 West and Boices Lane as depicted in the attached **Figure 1 "Locus Plan"**. A single slab-on-grade masonry block building consisting of a 33,000-square foot space and attached 11,400-square foot wing is located on the Site. Office Depot formerly anchored the plaza and occupied the 33,000-square foot space, while a liquor store, Miracle Ear, Empire Vision Center, and H&R Block occupied the attached 11,400-square foot wing. The surrounding area is mostly commercial with a residential area approximately 500 feet west of the Site. Railroad tracks owned and operated by CSX Transportation border the Site to the west. The topography of the Site is generally flat with a one to two percent slope towards the south. The elevation of the Site is approximately 180 to 190 feet above mean sea level.

1.2 Site Conditions

Surface Conditions/Vegetation

The Site and surrounding area are largely paved and occupied by commercial buildings, with the adjacent railroad bed and limited areas of vegetation between individual properties.

Site Geology

Subsurface conditions in the pilot study area consist of 6-9 inches of asphalt in the paved areas and 0-6 inches of topsoil in the non-paved areas. Fill material is encountered at most locations and ranges in thickness from 0.5 to 4 feet thick. The immediate subsurface conditions below the fill material is composed of a well-graded fine to medium sand and silt to a depth of approximately 13-17 feet below ground surface (bgs). A gray-brown clayey silt of glacial lacustrine origin with some narrow clay layers was observed below the sand and silt layer.

The gray-brown clayey silt of glacial lacustrine origin acts as a confining layer at the Site, and is found to start at a depth between 13 and 16 feet bgs within the Pilot Study area. GZA further confirmed that this confining layer extends to at least 115 feet bgs in the Pilot Study area. A 20-22 feet bgs sample of the confining unit had an average water content of 23.9 percent and was composed of 88 percent silt and 12 percent clay. A 30-32 feet bgs sample had an average water content of 24.3 percent and was composed of 92 percent silt and 8 percent clay. The average hydraulic conductivity of the 20-22 feet bgs sample was 8.1×10^{-7} cm/sec. and the average hydraulic conductivity of the 30-32 feet bgs sample was 5.3×10^{-7} cm/sec. The low hydraulic conductivity and deep extension of this layer demonstrates the unit's ability to act as a confining layer.



Site Hydrogeology

The saturated water zone in the Site's subsurface soils in the vicinity of the Pilot Study area is contacted approximately 6-8 feet bgs, as observed in borings and permanent monitoring wells. GZA mapped the groundwater elevation and determined flow direction at the Site based on the December 2014 groundwater sampling event. In general, groundwater at the Site, including the Pilot Study area, flows south and west toward the former Bear Ghatt Creek (which used to run along the Site's property boundary with Hoffman's Car Wash to the south) with a gradient of approximately one foot per 170 feet (0.006) under the building. The gradient becomes steeper south and west of the building, still trending southwestwardly, with a magnitude of approximately one foot per 30 feet (0.03).

Contaminants of Concern

Multiple investigations conclude that the CVOC Tetrachloroethylene (PCE) related to the operations of a former dry cleaner that was once located in the 11,400-square foot wing next to the Office Depot space is the primary constituent of concern in soil and groundwater at the Site.

The maximum soil concentration of PCE detected in the source area at 14-17 feet bgs inside the former dry cleaner space is 330,000 µg/kg. Groundwater concentrations of PCE from the December 2014 sampling event in five (5) exterior monitoring wells immediately south of the former dry cleaner area near the Pilot Study Location were as follows:

- MW-4: 830 µg/L;
- MW-5: 16 µg/L;
- MW-14: 1,700 µg/L;
- MW-18S: 2,600 µg/L; and
- MW-18M: 0.76 µg/L

2.0 PILOT STUDY

Soil and groundwater sampling data illustrate that the confining layer of clayey silt retards the vertical migration of PCE. Thus, the Pilot Study treatment zone can be limited to a maximum depth of approximately 16 feet bgs. Five microwells were installed in this area and fifteen exterior injection points were placed in the area adjacent to the rear of the former location of the dry cleaners (southern edge of plaza) down-gradient of the source area (See Figure 2). The pilot study area is approximately 2,740 ft² and the approximate volume to be affected by the pilot study is 21,920 ft³ (approximately 0.5 acre). The plan called for 10-foot spaces between the injection points.

2.1 Subsurface Utility Survey

Due to the proximity of the Pilot Study area to known subsurface utilities, including gas, water, and sewer lines, GZA contracted Blood Hound Underground Utility Locators (Blood Hound) to scan the area for subsurface utilities using ground penetrating radar and electromagnetic methods.

On August 22, 2018, GZA supervised a Blood Hound technician performing the scan. In addition to identifying subsurface electric and telecommunications lines, Blood Hound identified an anomaly through the approximate center of the Pilot Study area. While the nature of this anomaly has not been determined, it is likely a storm sewer line. Fortunately, the presence of the anomaly did not affect the placement of the new micro wells. However, GZA obtained NYSDEC's approval by letter dated November 20, 2018 to offset several of the injection points, as discussed below, by less than five feet to avoid this anomaly.



2.2 Additional Micro Monitoring Wells

On November 27, 2018, GZA supervised the installation of the five micro monitoring wells in the Pilot Study area as depicted in the attached **Figure 2**. Prior to mobilization, GZA's drilling contractor, Nothnagle Drilling, Inc. of Rochester, NY notified New York Dig Safe, requesting mark out of public utilities. MW-19 through MW-23 were installed to 16 feet bgs via direct push methods. As depicted in the Drilling Logs, attached as **Appendix A**, the wells were constructed with 1-inch diameter Schedule 40 PVC and screened from the bottom to between 4.5 and 5.5 feet bgs, the annular space of which was filled with #1 QROK sand. Blank pipe continued to the surface with a 2-foot thick bentonite seal above the well screen. Each well was finished with a flush-mount steel cover in a concrete pad.

Each boring was continuously screened with a photoionization detector (PID) equipped with a 11.7 eV lamp. No PID concentrations above background were recorded with the exception of soil from MW-19 at 14 feet bgs, which registered 8 parts per million (ppm). Geology encountered during the drilling was consistent with historic observations. Three to four feet of asphalt and subbase material was above alternating layers of silt and sand. Clay was encountered at the bottoms of MW-19, MW-22, and MW-23.

After well installation, each well was developed, purging of at least three well volumes of groundwater.

GZA performed ambient air monitoring for dust and volatile organic compounds in and downwind of the work area as specified in the Site's Community Air Monitoring Program (CAMP). No concentrations above background were recorded.

2.3 Baseline Groundwater Sampling

On March 5, 2019, GZA mobilized to the Site to collect a round of groundwater samples from wells in the Pilot Study area. Wells were purged via low-flow methods while monitoring groundwater conditions including temperature, pH, oxidation reduction potential (ORP), and turbidity. Once parameters stabilized, samples were collected and placed into laboratory-supplied bottleware and submitted under chain of custody to Paradigm Environmental Services of Rochester, New York for analysis for volatile organic compounds (VOCs), total organic carbon, alkalinity, dissolved gases, iron, manganese, sulfate, and nitrate. Results are presented in the attached **Table I**, Groundwater Analytical Results. Laboratory analytical reports are attached as **Appendix B**. Groundwater conditions were generally consistent with historic results, the highest concentration of PCE reported was 3,700 µg/L in MW-19 (compared to 2,600 µg/L in MW-18S in 2014).

In accordance with the Quality Assurance/Quality Control (QA/QC) procedures of the Pilot Study Work Plan, a field duplicate, matrix spike/matrix spike duplicate, and equipment blank were collected in addition to one trip blank per sample cooler. Results from these QA/QC samples are included in **Table I**.

2.4 Groundwater Injections

On September 30, 2019, GZA supervised the injection of approximately 4,300 pounds of Redox Anerobic BioChem+ (ABC+), 1,100 pounds of zero valent iron (ZVI), and 100 pounds of guar (necessary for suspending the ZVI in solution) into 15 injection points in the Pilot Study area by Cascade Technical Services (Cascade). Prior to mobilization, Cascade contacted New York Dig Safe, requesting mark out of public utilities.

For each point, Cascade mixed 287 gallons of fresh water, 287 pounds of ABC+, 73 pounds of ZVI, and 6.67 pounds of guar. This mixture was then injected using direct push technology into the groundwater in four two-foot increments each to a maximum depth of 16 feet, the approximate depth of the confining clay layer. During the



injections, the area around each point was observed for flowback of the injected material, which occurred several times along the curb lines on the north and west side of the Pilot Study area. When flow back was observed, injection was halted until the pressure subsided. Any remaining injection product on the surface was cleaned up.

Upon completion of each injection sequence, the points were monitored for additional flowback of material and filled with bentonite. Injection points in the landscaped areas in the north and west sides of the area were reclaimed with the native landscape material including topsoil and mulch. Injection points in the asphalt were repaired using cold-patch asphalt.

The injections were completed as EPA Class V injection wells. While not requiring permitting, they have been cataloged and reported for inventory purposes, as shown in **Appendix C**.

Each point was spaced on an approximate 10-foot grid. With NYSDEC approval, several locations were adjusted one way or the other by approximately five feet to account for the subsurface anomaly detected during the subsurface utility scan. Refer to the attached **Figure 3**, Injection Point Plan.

GZA performed ambient air monitoring for dust and volatile organic compounds in and downwind of the work area as specified in the Site's CAMP. No concentrations above background were recorded.

3.0 SUMMARY

On behalf of Rt. 9W/Boices Lane, LLC, GZA completed groundwater well installation, groundwater sampling, and groundwater injection activities at the Office Depot Shopping Center, 1-29 Boices Lane, Kingston, New York. Additional activities will include quarterly and annual groundwater sampling and reporting to assess the effectiveness of enhanced biological degradation of the CVOCs as an interim remedial measure. The first quarterly groundwater sampling and reporting is scheduled for January 27, 2021.

CERTIFICATION

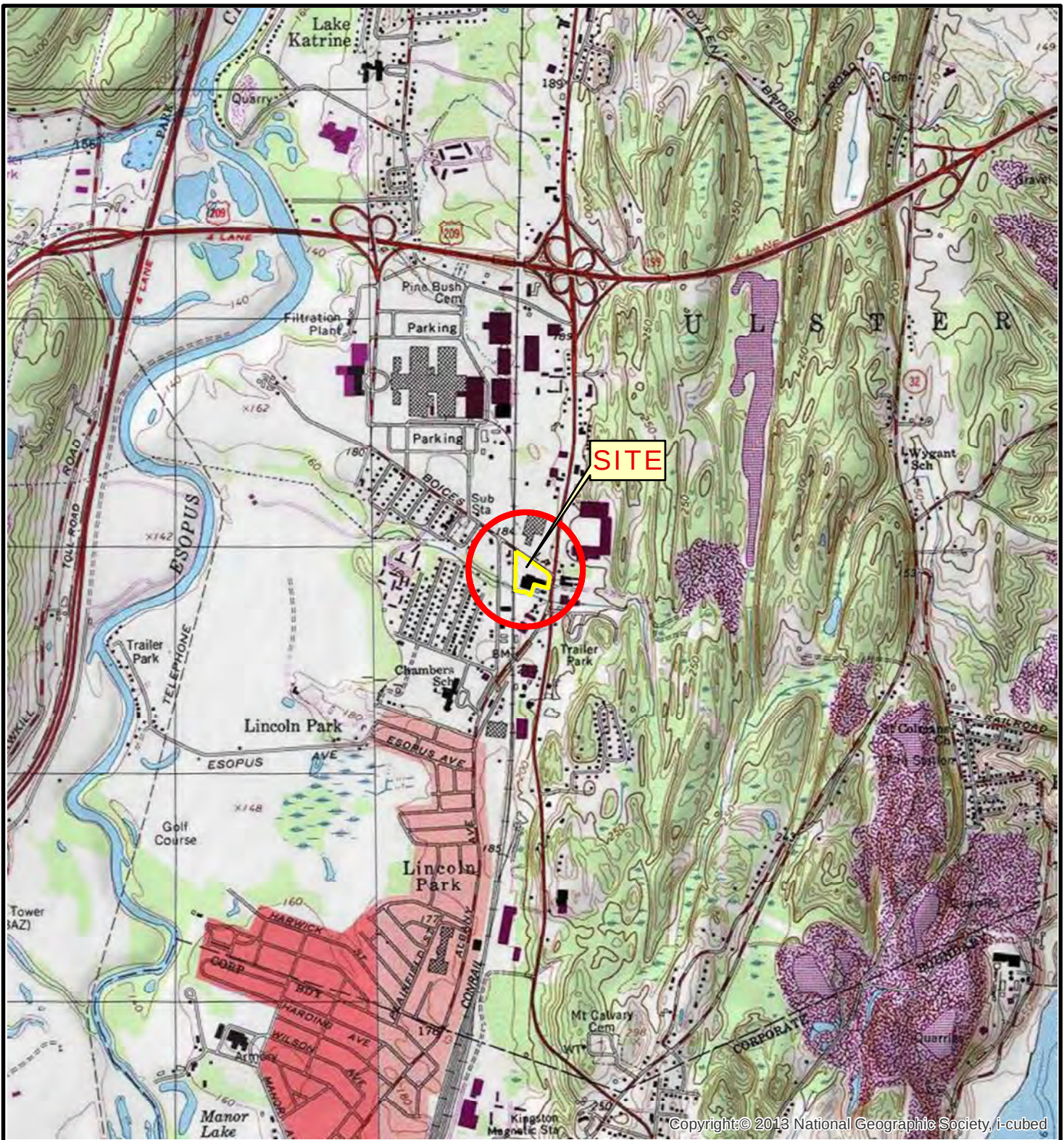
I, Bart A. Klettke, P.E., certify that I am currently a NYS registered Professional Engineer and that this Injection Pilot Study Update Report was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Bart A. Klettke, P.E.



Table 1: Baseline Groundwater Analytical Data
Office Depot Shopping Center
1-29 Boices Lane, Kingston, Ulster County, New York

Sample ID		MW-1	MW-2	MW-3	MW-5	MW-9	MW-11	MW-13	MW-15M	MW-15S	MW-16S	MW-16M	MW-17S	MW-17M	MW-19	MW-22	MW-23	Field Dup 1 (MW-5)	Field Dup 2 (MW-22)	Equip Blank 1	Equip Blank 2
Date:		3/5/2019	3/5/2019	3/5/2019	3/6/2019	3/5/2019	3/5/2019	3/5/2019	3/5/2019	3/5/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019	3/6/2019
Tetrachloroethene	ug/l	< 2.00	100	1.38	< 2.00	9.35	28	2.37	< 2.00	1300	< 2.00	< 2.00	31.4	< 2.00	3700	165	2390	1.15	1550	< 2.00	< 2.00
Toluene	ug/l	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 100	< 2.00	< 40.0	< 2.00	< 40.0	< 2.00	< 2.00
trans-1,2-Dichloroethene	ug/l	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 100	< 2.00	< 40.0	< 2.00	< 40.0	< 2.00	< 2.00
trans-1,3-Dichloropropene	ug/l	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 100	< 2.00	< 40.0	< 2.00	< 40.0	< 2.00	< 2.00
Trichloroethene	ug/l	< 2.00	2.52	< 2.00	< 2.00	< 2.00	1.48	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 100	< 2.00	< 40.0	< 2.00	< 40.0	< 2.00	< 2.00
Trichlorofluoromethane	ug/l	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 100	< 2.00	< 40.0	< 2.00	< 40.0	< 2.00	< 2.00
Vinyl chloride	ug/l	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 100	< 2.00	< 40.0	< 2.00	< 40.0	< 2.00	< 2.00
Metals																					
Iron	mg/l	<0.100	<0.100	<0.100	<0.100	0.499	0.0909	1.22	0.268	<0.100	< 0.100	< 0.100	<0.100	< 0.100	<0.100	<0.100	0.685	<0.100	< 0.100	<0.100	<0.100
Manganese	mg/l	<0.0150	0.185	0.406	<0.0150	1.43	0.0127	0.0821	1.49	<0.0150	0.188	0.245	<0.0150	0.0221	<0.0150	<0.0150	0.125	<0.0150	0.0695	<0.0150	<0.0150
Other Parameters																					
Nitrate, Nitrogen (As N)	mg/l	2.36	1.27	0.62	3.18	2.12	1.86	3.14	ND	2.76	0.76	ND	3.07	0.07	2.2	2.49	1.91	3.14	1.9	ND	ND
Sulfate	mg/l	89.5	44.5	37.6	85.2	60	19.9	76.2	97.9	32.7	6.63	20.6	102	28.5	67	108	45.4	82.7	45.6	ND	ND
Alkalinity, Total (As CaCO3)	mg/l	230	220	150	280	260	120	340	160	130	52	200	190	130	200	230	160	290	160	3	2
Total Organic Carbon	mg/l	2.9	1.6	1.4	2.4	2	ND	3.7	1.6	1.2	1.5	1.1	1.8	ND	2.2	2.5	3.8	3.2	3.9	ND	ND
Ethane, Dissolved	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethene, Dissolved	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methane, Dissolved	ug/l	<1.0	<1.0	2.9	<1.0	121	<1.0	<1.0	2	<1.0	111	<1.0	114	5.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0



SOURCE : THIS MAP CONTAINS THE ESRI ARCGIS ONLINE WORLD TOPOGRAPHIC MAP SERVICE, PUBLISHED FEBRUARY 2011 BY ESRI ARCMIS SERVICES. THE SERVICE WAS COMPILED TO UNIFORM CARTOGRAPHY USING A VARIETY OF BEST AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

Data Supplied by :



0 1,000 2,000 4,000 6,000
FEET
1:24,000 | 1 INCH = 2,000 FEET



PROJ MGR: BFH	REVIEWED BY: MJZ	ROUTE 9W BOICES LANE KINGSTON, NEW YORK 12401	JOB NO. 31.0180004.00
DESIGNED BY: MJZ	DRAWN BY: PCF		FIGURE NO. 1
GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		SITE LOCUS	

© 2021 - GZA GeoEnvironmental, Inc. T:\Clients\Kingston\RemediationPlan\MXDs\Figure2_MicroMonitoringWellLocations.mxd, 1/15/2021, 5:01:32 PM, rachel.radicello

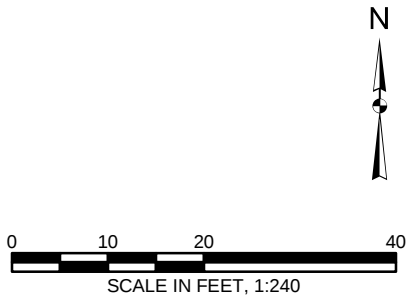


LEGEND

-  MONITORING WELL
-  MICROWELLS INSTALLED ON NOVEMBER 27, 2018
-  PILOT STUDY AREA

NOTES

- 1) THIS MAP CONTAINS THE ESRI ARCGIS ONLINE BING MAPS AERIAL LAYER PACKAGE, PUBLISHED DECEMBER 1, 2010 BY ESRI ARCIMS SERVICES AND UPDATED MONTHLY. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.
- 2) ALL EXTERIOR SOIL BORING LOCATIONS WERE TAKEN USING A HIGH-ACCURACY GPS UNIT. INTERIOR SOIL BORING POSITIONS WERE DETERMINED BY MEASURING TAPE. ALL FEATURES SHOULD BE CONSIDERED APPROXIMATE.



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

ROUTE 9W BOICES LANE
KINGSTON, NEW YORK 12401

MICRO MONITORING WELL INSTALLATION LOCATIONS

			PREPARED FOR: ROUTE 9W BOICES LANE, LLC 84 BUSINESS PARK DRIVE SUITE 208 ARMONK, NY 10504
PROJ MGR: BFH	REVIEWED BY: TGB	CHECKED BY: DLP	FIGURE 2
DESIGNED BY: TGB	DRAWN BY: RMR	SCALE: 1 in = 20 ft	
DATE: JANUARY 2021	PROJECT NO. 31.0180004.00	REVISION NO.	

© 2015 - GZA GeoEnvironmental, Inc. \\gza\yracuse\GIS\Clients\Kingston Boices Lane\KingstonRemediationPlan\MXD\Figure2_Phase1_InjectionPlan.mxd, 11/2/2015, 2:19:34 PM, aimee.mountain



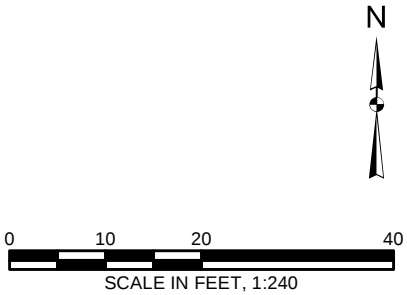
LEGEND

- MONITORING WELL
- PROPOSED MONITORING WELL
- INJECTION POINT
- PILOT STUDY AREA

NOTES

1) THIS MAP CONTAINS THE ESRI ARCGIS ONLINE BING MAPS AERIAL LAYER PACKAGE, PUBLISHED DECEMBER 1, 2010 BY ESRI ARCIMS SERVICES AND UPDATED MONTHLY. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

2) ALL EXTERIOR SOIL BORING LOCATIONS WERE TAKEN USING A HIGH-ACCURACY GPS UNIT. INTERIOR SOIL BORING POSITIONS WERE DETERMINED BY MEASURING TAPE. ALL FEATURES SHOULD BE CONSIDERED APPROXIMATE.



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

ROUTE 9W BOICES LANE
KINGSTON, NEW YORK 12401

PREPARED BY:  GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: ROUTE 9W BOICES LANE, LLC 84 BUSINESS PARK DRIVE SUITE 208 ARMONK, NY 10504	
PROJ MGR: BFH	REVIEWED BY: TGB	CHECKED BY: DLP	FIGURE 3
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 20 ft	
DATE: NOVEMBER 2015	PROJECT NO. 31.0180004.00	REVISION NO.	



APPENDIX A

Drilling Logs – November 27, 2018

**Office Depot Shopping Plaza
Subsurface Investigation
Kingston, NY**

Boring No. MW-19
File No. 31.0180004.00
Checked By: BH

CONTRACTOR		Nothnagle Drilling		BORING LOCATION		MW-19	
DRILLER				GROUND SURFACE ELEVATION		DATUM	
START DATE: 11/27/18		END DATE: 11/27/18		GZA GEOENVIRONMENTAL REPRESENTATIVE		DFP	

WATER LEVEL DATA					TYPE OF DRILL RIG		
DATE	TIME	WATER	CASING	NOTES	CASING SIZE AND DIAMETER	NA	
					OVERBURDEN SAMPLING METHOD	Direct Push	
					ROCK DRILLING METHOD	NA	

DEPTH	SAMPLE				SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	Sample Number	DEPTH (FT)	REC. (FT)	SOIL UNIT				
1	S-1	0-2.6			No recovery through asphalt subbase gravel.			0
2								
3		2.6-4			Fine to medium-grained brown Sand, trace light brown Silty material.			0
4	S-2	4-6.5			No recovery.			0
5								
6								
7		6.5-8			Fine to medium-grained brown Sand, trace light brown Silty material, trace coarse Sand.			0
8								
9	S-3	8-10			Fine to medium-grained brown Sand, trace coarse material.			0
10								
11		10-11.5			Fine to medium-grained brown Sand, little coarse Sand.			0
12		11.5-12			Fine to medium-grained brown Sand, trace coarse Sand, trace Silty material.			1
13	S-4	12-14			Fine to medium-grained brown Sand, trace coarse Sand, some Silty material.			
14								
15		14-16			Medium brown Sand, some Silty/coarse Sand.			8
16					Brown Clay, moderately stiff.			
17					End of Boring #1 at approximately 16 feet bgs.			
18								
19								
20								

S - Split Spoon Sample C - Rock Core Sample	NOTES: bgs = below ground surface. Water level readings measured with the use of an electronic water level indicator. MiniRAE 3000 Organic Vapor Meter (OVM) was used to field screen soil samples. ppm = parts per million
--	--

General Notes:	1) Stratification lines represent approximate boundary between soil types; transitions may be gradual. 2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.
----------------	--

**Office Depot Shopping Plaza
Subsurface Investigation
Kingston, NY**

Boring No. MW-20
File No. 31.0180004.00
Checked By: BH

CONTRACTOR		Nothnagle Drilling		BORING LOCATION		MW-20	
DRILLER				GROUND SURFACE ELEVATION		DATUM	
START DATE: 11/27/18		END DATE: 11/27/18		GZA GEOENVIRONMENTAL REPRESENTATIVE		DFP	

WATER LEVEL DATA					TYPE OF DRILL RIG		
DATE	TIME	WATER	CASING	NOTES	CASING SIZE AND DIAMETER	NA	
					OVERBURDEN SAMPLING METHOD	Direct Push	
					ROCK DRILLING METHOD	NA	

D E P T H	SAMPLE				SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	Sample Number	DEPTH (FT)	REC. (FT)	SOIL UNIT				
1	S-1	0-2.9			No recovery.			0
2								
3								
4		2.9-4			Fine to medium-grained brown Sand.			0
5	S-2	4-5.1			No recovery.			0
6		5.1-8			Fine to medium-grained brown Sand, some coarse Sand.			0
7								
8								
9	S-3	8-8.6			No recovery.			0
10		8.6-12			Fine to medium-grained brown Sand, some Silty material, trace coarse Sand.			0
11								
12								
13	S-4	12-14.5			No recovery.			0
14								
15		14.5-16			Fine to medium-grained brown Sand, trace Silty material, some coarse Sand.			0.6
16								
17					End of Boring #2 at approximately 16 feet bgs.			
18								
19								
20								

S - Split Spoon Sample

C - Rock Core Sample

NOTES: bgs = below ground surface.

 Water level readings measured with the use of an electronic water level indicator.

 MiniRAE 3000 Organic Vapor Meter (OVM) was used to field screen soil samples.

 ppm = parts per million

General 1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.

Notes: 2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**Office Depot Shopping Plaza
Subsurface Investigation
Kingston, NY**

Boring No. MW-21
File No. 31.0180004.00
Checked By: BH

CONTRACTOR		Nothnagle Drilling		BORING LOCATION		MW-21	
DRILLER				GROUND SURFACE ELEVATION		DATUM	
START DATE: 11/27/18		END DATE: 11/27/18		GZA GEOENVIRONMENTAL REPRESENTATIVE		DFP	

WATER LEVEL DATA					TYPE OF DRILL RIG		
DATE	TIME	WATER	CASING	NOTES	CASING SIZE AND DIAMETER	NA	
					OVERBURDEN SAMPLING METHOD	Direct Push	
					ROCK DRILLING METHOD	NA	

DEPTH	SAMPLE				SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	Sample Number	DEPTH (FT)	REC. (FT)	SOIL UNIT				
1	S-1	0-2			No recovery.			0
2								
3		2-2.3			Asphalt and subbase stone.			0
4		2.3-4			Fine to medium-grained brown Sand.			0
5	S-2	4-5			No recovery.			0
6		5-8			Fine to medium-grained brown Sand, some coarse Sand.			0
7								
8								
9	S-3	8-8.4			No recovery.			0
10		9.2-10.7			Fine to medium-grained brown Sand, some coarse Sand.			0
11		10.7-11.1			Soft to moderately stiff, light brown Clay.			0
12		11.1-12			Fine to medium-grained brown Sand, some coarse Sand.			0
13	S-4	12-14.8			No recovery.			0
14								
15		14.8-15.5			Light brown Clay, moderately stiff, some Silty soil.			0
16		15.5-16			Gray stiff Clay.			0
17					End of Boring #4 at approximately 16 feet bgs.			
18								
19								
20								

S - Split Spoon Sample

C - Rock Core Sample

NOTES: bgs = below ground surface.

Water level readings measured with the use of an electronic water level indicator.

MiniRAE 3000 Organic Vapor Meter (OVM) was used to field screen soil samples.

ppm = parts per million

General Notes: 1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.

2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**Office Depot Shopping Plaza
Subsurface Investigation
Kingston, NY**

Boring No. MW-22
File No. 31.0180004.00
Checked By: BH

CONTRACTOR		Nothnagle Drilling		BORING LOCATION		MW-22	
DRILLER				GROUND SURFACE ELEVATION		DATUM	
START DATE: 11/27/18		END DATE: 11/27/18		GZA GEOENVIRONMENTAL REPRESENTATIVE		DFP	

WATER LEVEL DATA					TYPE OF DRILL RIG		
DATE	TIME	WATER	CASING	NOTES	CASING SIZE AND DIAMETER	NA	
					OVERBURDEN SAMPLING METHOD	Direct Push	
					ROCK DRILLING METHOD	NA	

DEPTH	SAMPLE				SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	Sample Number	DEPTH (FT)	REC. (FT)	SOIL UNIT				
1	S-1	0-2.2			No recovery.			0
2								
3		2.6-4			Fine to medium-grained brown Sand.			0
4	S-2	4-5.9			No recovery.			0
5		5-5.3			Fine to medium-grained brown Sand.			0
6		6.2-8			Fine to medium-grained brown Sand, some coarse Sand.			0
7								
8								
9	S-3	8-8.6			No recovery.			0
10		8.6-9.6			Fine to medium-grained brown Sand, some coarse Sand.			0
11		9.6-11			Fine to medium-grained brown Sand, trace Silty material, little coarse Sand.			0
12		11-12			Fine to medium-grained brown Sand, trace coarse Sand, little Silty material.			0
13	S-4	12-14.5			Fine to medium-grained brown Sand, some Silty material.			0.2
14								
15		12.5-16			Moderately stiff, light brown Clay, some Silty material.			0.1
16								
17					End of Boring #3 at approximately 16 feet bgs.			
18								
19								
20								

S - Split Spoon Sample C - Rock Core Sample	NOTES: bgs = below ground surface. Water level readings measured with the use of an electronic water level indicator. MiniRAE 3000 Organic Vapor Meter (OVM) was used to field screen soil samples. ppm = parts per million
--	--

General Notes:	1) Stratification lines represent approximate boundary between soil types; transitions may be gradual. 2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.
----------------	--

**Office Depot Shopping Plaza
Subsurface Investigation
Kingston, NY**

Boring No. MW-23
File No. 31.0180004.00
Checked By: BH

CONTRACTOR		Nothnagle Drilling		BORING LOCATION		MW-23	
DRILLER				GROUND SURFACE ELEVATION		DATUM	
START DATE: 11/27/18		END DATE: 11/27/18		GZA GEOENVIRONMENTAL REPRESENTATIVE		DFP	

WATER LEVEL DATA					TYPE OF DRILL RIG		
DATE	TIME	WATER	CASING	NOTES	CASING SIZE AND DIAMETER	NA	
					OVERBURDEN SAMPLING METHOD	Direct Push	
					ROCK DRILLING METHOD	NA	

DEPTH T H	SAMPLE				SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	Sample Number	DEPTH (FT)	REC. (FT)	SOIL UNIT				
1	S-1	0-1.8			No recovery.			0
2								
3		1.8-2.3			Asphalt and subbase stone.			0
4		2.3-4			Fine to medium-grained brown Sand.			0
5	S-2	4-4.8			No recovery.			0
6		4.8-8			Fine to medium-grained brown Sand, some coarse grained Sand.			0
7								
8								
9	S-3	8-8.8			No recovery.			0
10		8.8-12			Fine to medium-grained brown Sand.			0
11								
12								
13	S-4	12-13.3			Fine to medium-grained brown Sand, some coarse Sand, little Silty material.			0
14		13.3-13.8			Light brown, soft Clay, some Silty material.			0.5
15		13.8-14.7			Light brown and gray, moderately stiff Clay.			0.8
16		14.7-16			Moderately stiff, gray Clay.			0
17					End of Boring #5 at approximately 16 feet bgs.			
18								
19								
20								

S - Split Spoon Sample

C - Rock Core Sample

NOTES: bgs = below ground surface.

Water level readings measured with the use of an electronic water level indicator.

MiniRAE 3000 Organic Vapor Meter (OVM) was used to field screen soil samples.

ppm = parts per million

General Notes: 1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.

2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

APPENDIX B

Laboratory Analytical Reports



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-1

Lab Sample ID: 190884-01

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/8/2019 16:55
Manganese	< 0.0150	mg/L		3/8/2019 16:55

Method Reference(s): EPA 6010C
EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-1

Lab Sample ID: 190884-01

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/6/2019 14:41
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/6/2019 14:41
1,1,2-Trichloroethane	< 2.00	ug/L		3/6/2019 14:41
1,1-Dichloroethane	< 2.00	ug/L		3/6/2019 14:41
1,1-Dichloroethene	< 2.00	ug/L		3/6/2019 14:41
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/6/2019 14:41
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/6/2019 14:41
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/6/2019 14:41
1,2-Dibromoethane	< 2.00	ug/L		3/6/2019 14:41
1,2-Dichlorobenzene	< 2.00	ug/L		3/6/2019 14:41
1,2-Dichloroethane	< 2.00	ug/L		3/6/2019 14:41
1,2-Dichloropropane	< 2.00	ug/L		3/6/2019 14:41
1,3-Dichlorobenzene	< 2.00	ug/L		3/6/2019 14:41
1,4-Dichlorobenzene	< 2.00	ug/L		3/6/2019 14:41
1,4-Dioxane	< 20.0	ug/L		3/6/2019 14:41
2-Butanone	< 10.0	ug/L		3/6/2019 14:41
2-Hexanone	< 5.00	ug/L		3/6/2019 14:41
4-Methyl-2-pentanone	< 5.00	ug/L		3/6/2019 14:41
Acetone	< 10.0	ug/L		3/6/2019 14:41
Benzene	< 1.00	ug/L		3/6/2019 14:41
Bromochloromethane	< 5.00	ug/L		3/6/2019 14:41
Bromodichloromethane	< 2.00	ug/L		3/6/2019 14:41
Bromoform	< 5.00	ug/L		3/6/2019 14:41
Bromomethane	< 2.00	ug/L		3/6/2019 14:41
Carbon disulfide	< 2.00	ug/L		3/6/2019 14:41
Carbon Tetrachloride	< 2.00	ug/L		3/6/2019 14:41
Chlorobenzene	< 2.00	ug/L		3/6/2019 14:41

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-1

Lab Sample ID: 190884-01

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 2.00	ug/L	3/6/2019 14:41
Chloroform	< 2.00	ug/L	3/6/2019 14:41
Chloromethane	< 2.00	ug/L	3/6/2019 14:41
cis-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 14:41
cis-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 14:41
Cyclohexane	< 10.0	ug/L	3/6/2019 14:41
Dibromochloromethane	< 2.00	ug/L	3/6/2019 14:41
Dichlorodifluoromethane	< 2.00	ug/L	3/6/2019 14:41
Ethylbenzene	< 2.00	ug/L	3/6/2019 14:41
Freon 113	< 2.00	ug/L	3/6/2019 14:41
Isopropylbenzene	< 2.00	ug/L	3/6/2019 14:41
m,p-Xylene	< 2.00	ug/L	3/6/2019 14:41
Methyl acetate	< 2.00	ug/L	3/6/2019 14:41
Methyl tert-butyl Ether	< 2.00	ug/L	3/6/2019 14:41
Methylcyclohexane	< 2.00	ug/L	3/6/2019 14:41
Methylene chloride	< 5.00	ug/L	3/6/2019 14:41
o-Xylene	< 2.00	ug/L	3/6/2019 14:41
Styrene	< 5.00	ug/L	3/6/2019 14:41
Tetrachloroethene	< 2.00	ug/L	3/6/2019 14:41
Toluene	< 2.00	ug/L	3/6/2019 14:41
trans-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 14:41
trans-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 14:41
Trichloroethene	< 2.00	ug/L	3/6/2019 14:41
Trichlorofluoromethane	< 2.00	ug/L	3/6/2019 14:41
Vinyl chloride	< 2.00	ug/L	3/6/2019 14:41

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-1

Lab Sample ID: 190884-01

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	105	75.3 - 127		3/6/2019	14:41
4-Bromofluorobenzene	81.6	67.4 - 122		3/6/2019	14:41
Pentafluorobenzene	94.5	86.8 - 110		3/6/2019	14:41
Toluene-D8	87.2	85 - 112		3/6/2019	14:41

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59062.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-2

Lab Sample ID: 190884-02

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/8/2019 16:59
Manganese	0.185	mg/L		3/8/2019 16:59

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-2

Lab Sample ID: 190884-02

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/6/2019 15:04
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/6/2019 15:04
1,1,2-Trichloroethane	< 2.00	ug/L		3/6/2019 15:04
1,1-Dichloroethane	< 2.00	ug/L		3/6/2019 15:04
1,1-Dichloroethene	< 2.00	ug/L		3/6/2019 15:04
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/6/2019 15:04
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/6/2019 15:04
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/6/2019 15:04
1,2-Dibromoethane	< 2.00	ug/L		3/6/2019 15:04
1,2-Dichlorobenzene	< 2.00	ug/L		3/6/2019 15:04
1,2-Dichloroethane	< 2.00	ug/L		3/6/2019 15:04
1,2-Dichloropropane	< 2.00	ug/L		3/6/2019 15:04
1,3-Dichlorobenzene	< 2.00	ug/L		3/6/2019 15:04
1,4-Dichlorobenzene	< 2.00	ug/L		3/6/2019 15:04
1,4-Dioxane	< 20.0	ug/L		3/6/2019 15:04
2-Butanone	< 10.0	ug/L		3/6/2019 15:04
2-Hexanone	< 5.00	ug/L		3/6/2019 15:04
4-Methyl-2-pentanone	< 5.00	ug/L		3/6/2019 15:04
Acetone	< 10.0	ug/L		3/6/2019 15:04
Benzene	< 1.00	ug/L		3/6/2019 15:04
Bromochloromethane	< 5.00	ug/L		3/6/2019 15:04
Bromodichloromethane	< 2.00	ug/L		3/6/2019 15:04
Bromoform	< 5.00	ug/L		3/6/2019 15:04
Bromomethane	< 2.00	ug/L		3/6/2019 15:04
Carbon disulfide	< 2.00	ug/L		3/6/2019 15:04
Carbon Tetrachloride	< 2.00	ug/L		3/6/2019 15:04
Chlorobenzene	< 2.00	ug/L		3/6/2019 15:04

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-2

Lab Sample ID: 190884-02

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 2.00	ug/L	3/6/2019 15:04
Chloroform	< 2.00	ug/L	3/6/2019 15:04
Chloromethane	< 2.00	ug/L	3/6/2019 15:04
cis-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 15:04
cis-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 15:04
Cyclohexane	< 10.0	ug/L	3/6/2019 15:04
Dibromochloromethane	< 2.00	ug/L	3/6/2019 15:04
Dichlorodifluoromethane	< 2.00	ug/L	3/6/2019 15:04
Ethylbenzene	< 2.00	ug/L	3/6/2019 15:04
Freon 113	< 2.00	ug/L	3/6/2019 15:04
Isopropylbenzene	< 2.00	ug/L	3/6/2019 15:04
m,p-Xylene	< 2.00	ug/L	3/6/2019 15:04
Methyl acetate	< 2.00	ug/L	3/6/2019 15:04
Methyl tert-butyl Ether	< 2.00	ug/L	3/6/2019 15:04
Methylcyclohexane	< 2.00	ug/L	3/6/2019 15:04
Methylene chloride	< 5.00	ug/L	3/6/2019 15:04
o-Xylene	< 2.00	ug/L	3/6/2019 15:04
Styrene	< 5.00	ug/L	3/6/2019 15:04
Tetrachloroethene	100	ug/L	3/6/2019 15:04
Toluene	< 2.00	ug/L	3/6/2019 15:04
trans-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 15:04
trans-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 15:04
Trichloroethene	2.52	ug/L	3/6/2019 15:04
Trichlorofluoromethane	< 2.00	ug/L	3/6/2019 15:04
Vinyl chloride	< 2.00	ug/L	3/6/2019 15:04

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-2

Lab Sample ID: 190884-02

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	107	75.3 - 127		3/6/2019	15:04
4-Bromofluorobenzene	76.2	67.4 - 122		3/6/2019	15:04
Pentafluorobenzene	94.6	86.8 - 110		3/6/2019	15:04
Toluene-D8	88.6	85 - 112		3/6/2019	15:04

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59063.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-3

Lab Sample ID: 190884-03

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/8/2019 17:12
Manganese	0.406	mg/L		3/8/2019 17:12

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-3

Lab Sample ID: 190884-03

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/6/2019 15:27
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/6/2019 15:27
1,1,2-Trichloroethane	< 2.00	ug/L		3/6/2019 15:27
1,1-Dichloroethane	< 2.00	ug/L		3/6/2019 15:27
1,1-Dichloroethene	< 2.00	ug/L		3/6/2019 15:27
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/6/2019 15:27
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/6/2019 15:27
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/6/2019 15:27
1,2-Dibromoethane	< 2.00	ug/L		3/6/2019 15:27
1,2-Dichlorobenzene	< 2.00	ug/L		3/6/2019 15:27
1,2-Dichloroethane	< 2.00	ug/L		3/6/2019 15:27
1,2-Dichloropropane	< 2.00	ug/L		3/6/2019 15:27
1,3-Dichlorobenzene	< 2.00	ug/L		3/6/2019 15:27
1,4-Dichlorobenzene	< 2.00	ug/L		3/6/2019 15:27
1,4-Dioxane	< 20.0	ug/L		3/6/2019 15:27
2-Butanone	< 10.0	ug/L		3/6/2019 15:27
2-Hexanone	< 5.00	ug/L		3/6/2019 15:27
4-Methyl-2-pentanone	< 5.00	ug/L		3/6/2019 15:27
Acetone	< 10.0	ug/L		3/6/2019 15:27
Benzene	< 1.00	ug/L		3/6/2019 15:27
Bromochloromethane	< 5.00	ug/L		3/6/2019 15:27
Bromodichloromethane	< 2.00	ug/L		3/6/2019 15:27
Bromoform	< 5.00	ug/L		3/6/2019 15:27
Bromomethane	< 2.00	ug/L		3/6/2019 15:27
Carbon disulfide	< 2.00	ug/L		3/6/2019 15:27
Carbon Tetrachloride	< 2.00	ug/L		3/6/2019 15:27
Chlorobenzene	< 2.00	ug/L		3/6/2019 15:27

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-3

Lab Sample ID: 190884-03

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 2.00	ug/L		3/6/2019 15:27
Chloroform	< 2.00	ug/L		3/6/2019 15:27
Chloromethane	< 2.00	ug/L		3/6/2019 15:27
cis-1,2-Dichloroethene	< 2.00	ug/L		3/6/2019 15:27
cis-1,3-Dichloropropene	< 2.00	ug/L		3/6/2019 15:27
Cyclohexane	< 10.0	ug/L		3/6/2019 15:27
Dibromochloromethane	< 2.00	ug/L		3/6/2019 15:27
Dichlorodifluoromethane	< 2.00	ug/L		3/6/2019 15:27
Ethylbenzene	< 2.00	ug/L		3/6/2019 15:27
Freon 113	< 2.00	ug/L		3/6/2019 15:27
Isopropylbenzene	< 2.00	ug/L		3/6/2019 15:27
m,p-Xylene	< 2.00	ug/L		3/6/2019 15:27
Methyl acetate	< 2.00	ug/L		3/6/2019 15:27
Methyl tert-butyl Ether	< 2.00	ug/L		3/6/2019 15:27
Methylcyclohexane	< 2.00	ug/L		3/6/2019 15:27
Methylene chloride	< 5.00	ug/L		3/6/2019 15:27
o-Xylene	< 2.00	ug/L		3/6/2019 15:27
Styrene	< 5.00	ug/L		3/6/2019 15:27
Tetrachloroethene	1.38	ug/L	J	3/6/2019 15:27
Toluene	< 2.00	ug/L		3/6/2019 15:27
trans-1,2-Dichloroethene	< 2.00	ug/L		3/6/2019 15:27
trans-1,3-Dichloropropene	< 2.00	ug/L		3/6/2019 15:27
Trichloroethene	< 2.00	ug/L		3/6/2019 15:27
Trichlorofluoromethane	< 2.00	ug/L		3/6/2019 15:27
Vinyl chloride	< 2.00	ug/L		3/6/2019 15:27

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-3

Lab Sample ID: 190884-03

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	111	75.3 - 127		3/6/2019	15:27
4-Bromofluorobenzene	78.3	67.4 - 122		3/6/2019	15:27
Pentafluorobenzene	93.4	86.8 - 110		3/6/2019	15:27
Toluene-D8	90.1	85 - 112		3/6/2019	15:27

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59064.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-15S

Lab Sample ID: 190884-04

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/8/2019 17:16
Manganese	< 0.0150	mg/L		3/8/2019 17:16

Method Reference(s): EPA 6010C
EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-15S

Lab Sample ID: 190884-04

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 20.0	ug/L		3/6/2019 19:18
1,1,2,2-Tetrachloroethane	< 20.0	ug/L		3/6/2019 19:18
1,1,2-Trichloroethane	< 20.0	ug/L		3/6/2019 19:18
1,1-Dichloroethane	< 20.0	ug/L		3/6/2019 19:18
1,1-Dichloroethene	< 20.0	ug/L		3/6/2019 19:18
1,2,3-Trichlorobenzene	< 50.0	ug/L		3/6/2019 19:18
1,2,4-Trichlorobenzene	< 50.0	ug/L		3/6/2019 19:18
1,2-Dibromo-3-Chloropropane	< 100	ug/L		3/6/2019 19:18
1,2-Dibromoethane	< 20.0	ug/L		3/6/2019 19:18
1,2-Dichlorobenzene	< 20.0	ug/L		3/6/2019 19:18
1,2-Dichloroethane	< 20.0	ug/L		3/6/2019 19:18
1,2-Dichloropropane	< 20.0	ug/L		3/6/2019 19:18
1,3-Dichlorobenzene	< 20.0	ug/L		3/6/2019 19:18
1,4-Dichlorobenzene	< 20.0	ug/L		3/6/2019 19:18
1,4-Dioxane	< 200	ug/L		3/6/2019 19:18
2-Butanone	< 100	ug/L		3/6/2019 19:18
2-Hexanone	< 50.0	ug/L		3/6/2019 19:18
4-Methyl-2-pentanone	< 50.0	ug/L		3/6/2019 19:18
Acetone	< 100	ug/L		3/6/2019 19:18
Benzene	< 10.0	ug/L		3/6/2019 19:18
Bromochloromethane	< 50.0	ug/L		3/6/2019 19:18
Bromodichloromethane	< 20.0	ug/L		3/6/2019 19:18
Bromoform	< 50.0	ug/L		3/6/2019 19:18
Bromomethane	< 20.0	ug/L		3/6/2019 19:18
Carbon disulfide	< 20.0	ug/L		3/6/2019 19:18
Carbon Tetrachloride	< 20.0	ug/L		3/6/2019 19:18
Chlorobenzene	< 20.0	ug/L		3/6/2019 19:18

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-15S

Lab Sample ID: 190884-04

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 20.0	ug/L	3/6/2019 19:18
Chloroform	< 20.0	ug/L	3/6/2019 19:18
Chloromethane	< 20.0	ug/L	3/6/2019 19:18
cis-1,2-Dichloroethene	< 20.0	ug/L	3/6/2019 19:18
cis-1,3-Dichloropropene	< 20.0	ug/L	3/6/2019 19:18
Cyclohexane	< 100	ug/L	3/6/2019 19:18
Dibromochloromethane	< 20.0	ug/L	3/6/2019 19:18
Dichlorodifluoromethane	< 20.0	ug/L	3/6/2019 19:18
Ethylbenzene	< 20.0	ug/L	3/6/2019 19:18
Freon 113	< 20.0	ug/L	3/6/2019 19:18
Isopropylbenzene	< 20.0	ug/L	3/6/2019 19:18
m,p-Xylene	< 20.0	ug/L	3/6/2019 19:18
Methyl acetate	< 20.0	ug/L	3/6/2019 19:18
Methyl tert-butyl Ether	< 20.0	ug/L	3/6/2019 19:18
Methylcyclohexane	< 20.0	ug/L	3/6/2019 19:18
Methylene chloride	< 50.0	ug/L	3/6/2019 19:18
o-Xylene	< 20.0	ug/L	3/6/2019 19:18
Styrene	< 50.0	ug/L	3/6/2019 19:18
Tetrachloroethene	1300	ug/L	3/6/2019 19:18
Toluene	< 20.0	ug/L	3/6/2019 19:18
trans-1,2-Dichloroethene	< 20.0	ug/L	3/6/2019 19:18
trans-1,3-Dichloropropene	< 20.0	ug/L	3/6/2019 19:18
Trichloroethene	< 20.0	ug/L	3/6/2019 19:18
Trichlorofluoromethane	< 20.0	ug/L	3/6/2019 19:18
Vinyl chloride	< 20.0	ug/L	3/6/2019 19:18

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-15S

Lab Sample ID: 190884-04

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	113	75.3 - 127		3/6/2019 19:18
4-Bromofluorobenzene	85.6	67.4 - 122		3/6/2019 19:18
Pentafluorobenzene	92.1	86.8 - 110		3/6/2019 19:18
Toluene-D8	86.3	85 - 112		3/6/2019 19:18

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59074.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-15M

Lab Sample ID: 190884-05

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	0.268	mg/L		3/8/2019 17:21
Manganese	1.49	mg/L		3/8/2019 17:21

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-15M

Lab Sample ID: 190884-05

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/6/2019 19:41
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/6/2019 19:41
1,1,2-Trichloroethane	< 2.00	ug/L		3/6/2019 19:41
1,1-Dichloroethane	< 2.00	ug/L		3/6/2019 19:41
1,1-Dichloroethene	< 2.00	ug/L		3/6/2019 19:41
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/6/2019 19:41
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/6/2019 19:41
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/6/2019 19:41
1,2-Dibromoethane	< 2.00	ug/L		3/6/2019 19:41
1,2-Dichlorobenzene	< 2.00	ug/L		3/6/2019 19:41
1,2-Dichloroethane	< 2.00	ug/L		3/6/2019 19:41
1,2-Dichloropropane	< 2.00	ug/L		3/6/2019 19:41
1,3-Dichlorobenzene	< 2.00	ug/L		3/6/2019 19:41
1,4-Dichlorobenzene	< 2.00	ug/L		3/6/2019 19:41
1,4-Dioxane	< 20.0	ug/L		3/6/2019 19:41
2-Butanone	< 10.0	ug/L		3/6/2019 19:41
2-Hexanone	< 5.00	ug/L		3/6/2019 19:41
4-Methyl-2-pentanone	< 5.00	ug/L		3/6/2019 19:41
Acetone	< 10.0	ug/L		3/6/2019 19:41
Benzene	< 1.00	ug/L		3/6/2019 19:41
Bromochloromethane	< 5.00	ug/L		3/6/2019 19:41
Bromodichloromethane	< 2.00	ug/L		3/6/2019 19:41
Bromoform	< 5.00	ug/L		3/6/2019 19:41
Bromomethane	< 2.00	ug/L		3/6/2019 19:41
Carbon disulfide	< 2.00	ug/L		3/6/2019 19:41
Carbon Tetrachloride	< 2.00	ug/L		3/6/2019 19:41
Chlorobenzene	< 2.00	ug/L		3/6/2019 19:41

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-15M

Lab Sample ID: 190884-05

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 2.00	ug/L	3/6/2019 19:41
Chloroform	< 2.00	ug/L	3/6/2019 19:41
Chloromethane	< 2.00	ug/L	3/6/2019 19:41
cis-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 19:41
cis-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 19:41
Cyclohexane	< 10.0	ug/L	3/6/2019 19:41
Dibromochloromethane	< 2.00	ug/L	3/6/2019 19:41
Dichlorodifluoromethane	< 2.00	ug/L	3/6/2019 19:41
Ethylbenzene	< 2.00	ug/L	3/6/2019 19:41
Freon 113	< 2.00	ug/L	3/6/2019 19:41
Isopropylbenzene	< 2.00	ug/L	3/6/2019 19:41
m,p-Xylene	< 2.00	ug/L	3/6/2019 19:41
Methyl acetate	< 2.00	ug/L	3/6/2019 19:41
Methyl tert-butyl Ether	< 2.00	ug/L	3/6/2019 19:41
Methylcyclohexane	< 2.00	ug/L	3/6/2019 19:41
Methylene chloride	< 5.00	ug/L	3/6/2019 19:41
o-Xylene	< 2.00	ug/L	3/6/2019 19:41
Styrene	< 5.00	ug/L	3/6/2019 19:41
Tetrachloroethene	< 2.00	ug/L	3/6/2019 19:41
Toluene	< 2.00	ug/L	3/6/2019 19:41
trans-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 19:41
trans-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 19:41
Trichloroethene	< 2.00	ug/L	3/6/2019 19:41
Trichlorofluoromethane	< 2.00	ug/L	3/6/2019 19:41
Vinyl chloride	< 2.00	ug/L	3/6/2019 19:41

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-15M

Lab Sample ID: 190884-05

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	113	75.3 - 127		3/6/2019	19:41
4-Bromofluorobenzene	81.2	67.4 - 122		3/6/2019	19:41
Pentafluorobenzene	92.6	86.8 - 110		3/6/2019	19:41
Toluene-D8	86.6	85 - 112		3/6/2019	19:41

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59075.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-9

Lab Sample ID: 190884-06

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	0.499	mg/L		3/8/2019 17:25
Manganese	1.43	mg/L		3/8/2019 17:25

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-9

Lab Sample ID: 190884-06

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/6/2019 16:36
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/6/2019 16:36
1,1,2-Trichloroethane	< 2.00	ug/L		3/6/2019 16:36
1,1-Dichloroethane	< 2.00	ug/L		3/6/2019 16:36
1,1-Dichloroethene	< 2.00	ug/L		3/6/2019 16:36
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/6/2019 16:36
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/6/2019 16:36
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/6/2019 16:36
1,2-Dibromoethane	< 2.00	ug/L		3/6/2019 16:36
1,2-Dichlorobenzene	< 2.00	ug/L		3/6/2019 16:36
1,2-Dichloroethane	< 2.00	ug/L		3/6/2019 16:36
1,2-Dichloropropane	< 2.00	ug/L		3/6/2019 16:36
1,3-Dichlorobenzene	< 2.00	ug/L		3/6/2019 16:36
1,4-Dichlorobenzene	< 2.00	ug/L		3/6/2019 16:36
1,4-Dioxane	< 20.0	ug/L		3/6/2019 16:36
2-Butanone	< 10.0	ug/L		3/6/2019 16:36
2-Hexanone	< 5.00	ug/L		3/6/2019 16:36
4-Methyl-2-pentanone	< 5.00	ug/L		3/6/2019 16:36
Acetone	< 10.0	ug/L		3/6/2019 16:36
Benzene	< 1.00	ug/L		3/6/2019 16:36
Bromochloromethane	< 5.00	ug/L		3/6/2019 16:36
Bromodichloromethane	< 2.00	ug/L		3/6/2019 16:36
Bromoform	< 5.00	ug/L		3/6/2019 16:36
Bromomethane	< 2.00	ug/L		3/6/2019 16:36
Carbon disulfide	< 2.00	ug/L		3/6/2019 16:36
Carbon Tetrachloride	< 2.00	ug/L		3/6/2019 16:36
Chlorobenzene	< 2.00	ug/L		3/6/2019 16:36

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-9

Lab Sample ID: 190884-06

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 2.00	ug/L	3/6/2019 16:36
Chloroform	< 2.00	ug/L	3/6/2019 16:36
Chloromethane	< 2.00	ug/L	3/6/2019 16:36
cis-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 16:36
cis-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 16:36
Cyclohexane	< 10.0	ug/L	3/6/2019 16:36
Dibromochloromethane	< 2.00	ug/L	3/6/2019 16:36
Dichlorodifluoromethane	< 2.00	ug/L	3/6/2019 16:36
Ethylbenzene	< 2.00	ug/L	3/6/2019 16:36
Freon 113	< 2.00	ug/L	3/6/2019 16:36
Isopropylbenzene	< 2.00	ug/L	3/6/2019 16:36
m,p-Xylene	< 2.00	ug/L	3/6/2019 16:36
Methyl acetate	< 2.00	ug/L	3/6/2019 16:36
Methyl tert-butyl Ether	< 2.00	ug/L	3/6/2019 16:36
Methylcyclohexane	< 2.00	ug/L	3/6/2019 16:36
Methylene chloride	< 5.00	ug/L	3/6/2019 16:36
o-Xylene	< 2.00	ug/L	3/6/2019 16:36
Styrene	< 5.00	ug/L	3/6/2019 16:36
Tetrachloroethene	9.35	ug/L	3/6/2019 16:36
Toluene	< 2.00	ug/L	3/6/2019 16:36
trans-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 16:36
trans-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 16:36
Trichloroethene	< 2.00	ug/L	3/6/2019 16:36
Trichlorofluoromethane	< 2.00	ug/L	3/6/2019 16:36
Vinyl chloride	< 2.00	ug/L	3/6/2019 16:36

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-9

Lab Sample ID: 190884-06

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	114	75.3 - 127		3/6/2019	16:36
4-Bromofluorobenzene	82.9	67.4 - 122		3/6/2019	16:36
Pentafluorobenzene	93.0	86.8 - 110		3/6/2019	16:36
Toluene-D8	87.5	85 - 112		3/6/2019	16:36

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59067.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-11

Lab Sample ID: 190884-07

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	0.0909	mg/L	J	3/8/2019 17:29
Manganese	0.0127	mg/L	J	3/8/2019 17:29

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-11

Lab Sample ID: 190884-07

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/6/2019 16:59
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/6/2019 16:59
1,1,2-Trichloroethane	< 2.00	ug/L		3/6/2019 16:59
1,1-Dichloroethane	< 2.00	ug/L		3/6/2019 16:59
1,1-Dichloroethene	< 2.00	ug/L		3/6/2019 16:59
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/6/2019 16:59
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/6/2019 16:59
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/6/2019 16:59
1,2-Dibromoethane	< 2.00	ug/L		3/6/2019 16:59
1,2-Dichlorobenzene	< 2.00	ug/L		3/6/2019 16:59
1,2-Dichloroethane	< 2.00	ug/L		3/6/2019 16:59
1,2-Dichloropropane	< 2.00	ug/L		3/6/2019 16:59
1,3-Dichlorobenzene	< 2.00	ug/L		3/6/2019 16:59
1,4-Dichlorobenzene	< 2.00	ug/L		3/6/2019 16:59
1,4-Dioxane	< 20.0	ug/L		3/6/2019 16:59
2-Butanone	< 10.0	ug/L		3/6/2019 16:59
2-Hexanone	< 5.00	ug/L		3/6/2019 16:59
4-Methyl-2-pentanone	< 5.00	ug/L		3/6/2019 16:59
Acetone	< 10.0	ug/L		3/6/2019 16:59
Benzene	< 1.00	ug/L		3/6/2019 16:59
Bromochloromethane	< 5.00	ug/L		3/6/2019 16:59
Bromodichloromethane	< 2.00	ug/L		3/6/2019 16:59
Bromoform	< 5.00	ug/L		3/6/2019 16:59
Bromomethane	< 2.00	ug/L		3/6/2019 16:59
Carbon disulfide	< 2.00	ug/L		3/6/2019 16:59
Carbon Tetrachloride	< 2.00	ug/L		3/6/2019 16:59
Chlorobenzene	< 2.00	ug/L		3/6/2019 16:59

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-11

Lab Sample ID: 190884-07

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 2.00	ug/L	3/6/2019 16:59
Chloroform	< 2.00	ug/L	3/6/2019 16:59
Chloromethane	< 2.00	ug/L	3/6/2019 16:59
cis-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 16:59
cis-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 16:59
Cyclohexane	< 10.0	ug/L	3/6/2019 16:59
Dibromochloromethane	< 2.00	ug/L	3/6/2019 16:59
Dichlorodifluoromethane	< 2.00	ug/L	3/6/2019 16:59
Ethylbenzene	< 2.00	ug/L	3/6/2019 16:59
Freon 113	< 2.00	ug/L	3/6/2019 16:59
Isopropylbenzene	< 2.00	ug/L	3/6/2019 16:59
m,p-Xylene	< 2.00	ug/L	3/6/2019 16:59
Methyl acetate	< 2.00	ug/L	3/6/2019 16:59
Methyl tert-butyl Ether	< 2.00	ug/L	3/6/2019 16:59
Methylcyclohexane	< 2.00	ug/L	3/6/2019 16:59
Methylene chloride	< 5.00	ug/L	3/6/2019 16:59
o-Xylene	< 2.00	ug/L	3/6/2019 16:59
Styrene	< 5.00	ug/L	3/6/2019 16:59
Tetrachloroethene	28.0	ug/L	3/6/2019 16:59
Toluene	< 2.00	ug/L	3/6/2019 16:59
trans-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 16:59
trans-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 16:59
Trichloroethene	1.48	ug/L	J 3/6/2019 16:59
Trichlorofluoromethane	< 2.00	ug/L	3/6/2019 16:59
Vinyl chloride	< 2.00	ug/L	3/6/2019 16:59

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-11

Lab Sample ID: 190884-07

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	117	75.3 - 127		3/6/2019	16:59
4-Bromofluorobenzene	79.8	67.4 - 122		3/6/2019	16:59
Pentafluorobenzene	92.3	86.8 - 110		3/6/2019	16:59
Toluene-D8	88.9	85 - 112		3/6/2019	16:59

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59068.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-13

Lab Sample ID: 190884-08

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	1.22	mg/L		3/8/2019 17:34
Manganese	0.0821	mg/L		3/8/2019 17:34

Method Reference(s): EPA 6010C
EPA 3005A

Preparation Date: 3/7/2019

Data File: 190308B

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-13

Lab Sample ID: 190884-08

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/6/2019 17:22
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/6/2019 17:22
1,1,2-Trichloroethane	< 2.00	ug/L		3/6/2019 17:22
1,1-Dichloroethane	< 2.00	ug/L		3/6/2019 17:22
1,1-Dichloroethene	< 2.00	ug/L		3/6/2019 17:22
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/6/2019 17:22
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/6/2019 17:22
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/6/2019 17:22
1,2-Dibromoethane	< 2.00	ug/L		3/6/2019 17:22
1,2-Dichlorobenzene	< 2.00	ug/L		3/6/2019 17:22
1,2-Dichloroethane	< 2.00	ug/L		3/6/2019 17:22
1,2-Dichloropropane	< 2.00	ug/L		3/6/2019 17:22
1,3-Dichlorobenzene	< 2.00	ug/L		3/6/2019 17:22
1,4-Dichlorobenzene	< 2.00	ug/L		3/6/2019 17:22
1,4-Dioxane	< 20.0	ug/L		3/6/2019 17:22
2-Butanone	< 10.0	ug/L		3/6/2019 17:22
2-Hexanone	< 5.00	ug/L		3/6/2019 17:22
4-Methyl-2-pentanone	< 5.00	ug/L		3/6/2019 17:22
Acetone	< 10.0	ug/L		3/6/2019 17:22
Benzene	< 1.00	ug/L		3/6/2019 17:22
Bromochloromethane	< 5.00	ug/L		3/6/2019 17:22
Bromodichloromethane	< 2.00	ug/L		3/6/2019 17:22
Bromoform	< 5.00	ug/L		3/6/2019 17:22
Bromomethane	< 2.00	ug/L		3/6/2019 17:22
Carbon disulfide	< 2.00	ug/L		3/6/2019 17:22
Carbon Tetrachloride	< 2.00	ug/L		3/6/2019 17:22
Chlorobenzene	< 2.00	ug/L		3/6/2019 17:22

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-13

Lab Sample ID: 190884-08

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Chloroethane	< 2.00	ug/L	3/6/2019 17:22
Chloroform	< 2.00	ug/L	3/6/2019 17:22
Chloromethane	< 2.00	ug/L	3/6/2019 17:22
cis-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 17:22
cis-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 17:22
Cyclohexane	< 10.0	ug/L	3/6/2019 17:22
Dibromochloromethane	< 2.00	ug/L	3/6/2019 17:22
Dichlorodifluoromethane	< 2.00	ug/L	3/6/2019 17:22
Ethylbenzene	< 2.00	ug/L	3/6/2019 17:22
Freon 113	< 2.00	ug/L	3/6/2019 17:22
Isopropylbenzene	< 2.00	ug/L	3/6/2019 17:22
m,p-Xylene	< 2.00	ug/L	3/6/2019 17:22
Methyl acetate	< 2.00	ug/L	3/6/2019 17:22
Methyl tert-butyl Ether	< 2.00	ug/L	3/6/2019 17:22
Methylcyclohexane	< 2.00	ug/L	3/6/2019 17:22
Methylene chloride	< 5.00	ug/L	3/6/2019 17:22
o-Xylene	< 2.00	ug/L	3/6/2019 17:22
Styrene	< 5.00	ug/L	3/6/2019 17:22
Tetrachloroethene	2.37	ug/L	3/6/2019 17:22
Toluene	< 2.00	ug/L	3/6/2019 17:22
trans-1,2-Dichloroethene	< 2.00	ug/L	3/6/2019 17:22
trans-1,3-Dichloropropene	< 2.00	ug/L	3/6/2019 17:22
Trichloroethene	< 2.00	ug/L	3/6/2019 17:22
Trichlorofluoromethane	< 2.00	ug/L	3/6/2019 17:22
Vinyl chloride	< 2.00	ug/L	3/6/2019 17:22

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Lab Project ID: 190884

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-13

Lab Sample ID: 190884-08

Date Sampled: 3/5/2019

Matrix: Groundwater

Date Received: 3/6/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	120	75.3 - 127		3/6/2019 17:22
4-Bromofluorobenzene	77.2	67.4 - 122		3/6/2019 17:22
Pentafluorobenzene	90.1	86.8 - 110		3/6/2019 17:22
Toluene-D8	87.4	85 - 112		3/6/2019 17:22

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59069.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, March 20, 2019



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

"(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 26, 2018

GENERAL TERMS AND CONDITIONS

LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation.

LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure.

Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling.

Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility.

LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment.

LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure.

LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law.

This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 26, 2018

CHAIN OF CUSTODY

REPORT TO:

INVOICE TO:

LAB PROJECT ID

190884

1/4

CLIENT: **GZA GeoEnvironmental**
ADDRESS: **6296 Fly Road**
CITY: **East Syr** STATE: **NY** ZIP: **13057**CLIENT: **Same**
ADDRESS:
CITY: STATE: ZIP:PHONE: **315-800-1809**

PHONE:

Quotation #:

Email: **benjamin.haith@gza.com**

PROJECT REFERENCE

Boices Lane

ATTN: **Ben Haith**

ATTN:

Matrix Codes:

AQ - Aqueous Liquid
NQ - Non-Aqueous LiquidWA - Water
WG - GroundwaterDW - Drinking Water
WW - WastewaterSO - Soil
SL - SludgeSD - Solid
PT - PaintWP - Wipe
CK - CaulkOL - Oil
AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRADES	SAMPLE IDENTIFIER	MOISTURE	NO. OF	TCL VOCs 8260	TOC 9060	Alkalinity 310.1	Dis. Gas. RSK-175	Fe, Mn 6010	Sulfate, Nitrate 300.0	REMARKS	PARADIGM LAB SAMPLE NUMBER
3/5	16:40	X	MMW-1	WG	918	X	X	X	X	X	X	X	Run MS/MSD	01
3/5	14:25	X	MMW-2	WG	9	X	X	X	X	X	X	X	3/7/19 in soil	02
3/5	13:10	X	MMW-3	WG	9	X	X	X	X	X	X	X	1100 in soil	03
		X	MMW-4	WG	9	X	X	X	X	X	X	X	Crossed off	04
		X	MMW-5	WG	18	X	X	X	X	X	X	X	not need	05
		X	MMW-6	WG	9	X	X	X	X	X	X	X		
3/5	15:20	X	MMW-16S	WG	9	X	X	X	X	X	X	X		
3/5	15:30	X	MMW-15M	WG	9	X	X	X	X	X	X	X		
		X	MMW-16S	WG	9	X	X	X	X	X	X	X		
		X	MMW-16M	WG	9	X	X	X	X	X	X	X		

Turnaround Time

Report Supplements

Availability contingent upon lab approval; additional fees may apply.

Standard 5 day ☐None Required ☐None Required ☐10 day ☒Batch QC ☐Basic EDD ☐Rush 3 day ☐Category A ☐NVSDEC EDD ☒Rush 2 day ☐Category B ☒Rush 1 day ☒Other ☐Other ☐Other EDD ☐

please indicate date needed:

please indicate package needed:

please indicate EDD needed:

Sampled By **Dustin Fletcher**Date/Time **3/5 17:00**

Total Cost:

Relinquished By

Date/Time

Received By

Date/Time

P.L.F.

Received @ Lab By

Date/Time

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.



179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

253

3/4

REPORT TO:

INVOICE TO:

LAB PROJECT ID

CLIENT:	GZA GeoEnvironmental	CLIENT:	Same	LAB PROJECT ID	190884		
ADDRESS:	6296 Fly Road	ADDRESS:		Quotation #:			
CITY:	East Syr	CITY:		Email:	benjamin.haith@gza.com		
STATE:	NY	STATE:					
ZIP:	13057	ZIP:					
PHONE:	315-800-1809	PHONE:					
ATTN:	Ben Haith	ATTN:					
MATRIX CODES:	AQ - Aqueous Liquid NA - Non-Aqueous Liquid	WA - Water WG - Groundwater	DW - Drinking Water WW - Wastewater	SO - Soil SL - Sludge	SD - Solid PT - Paint	WP - Wipe CK - Caulk	OL - Oil AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	G R A B	SAMPLE IDENTIFIER	M C A D T R E X	N O U N T A B A I R N O E F S	TCL VOCs 8260	TOC 9060	Alkalinity 310.1	Dis. Gas. RSK-175	Fe, Mn 6010	Sulfate, Nitrate 300.0	REMARKS	PARADIGM LAB SAMPLE NUMBER
3/5/19	13:20		X	MMW-7	WG	9	X	X	X	X	X	X	Crossed off	
			X	MMW-8	WG	9	X	X	X	X	X	X	Samples not rec'd	
			X	MMW-9	WG	9	X	X	X	X	X	X	SD 3/7/19	06
			X	MMW-10	WG	9	X	X	X	X	X	X		
3/5	14:25		X	MMW-11	WG	9	X	X	X	X	X	X		07
			X	MMW-12	WG	9	X	X	X	X	X	X		
3/5	17:00		X	MMW-13	WG	9	X	X	X	X	X	X		08
			X	MMW-14	WG	9	X	X	X	X	X	X		
			X	Equipment Blank 1	WG	9	X	X	X	X	X	X		
			X	Equipment Blank 2	WG	9	X	X	X	X	X	X		

Turnaround Time	Report Supplements	
Availability contingent upon lab approval; additional fees may apply.		
Standard 5 day	None Required	None Required
10 day	Batch QC	Basic EDD
Rush 3 day	Category A	NYSDEC EDD
Rush 2 day	Category B	
Rush 1 day		
Other	Other	Other EDD
Please indicate date needed:		Please indicate EDD needed:

Sampled By	Date/Time	Total Cost:
Dustin Fletcher	3/5 17:00	

Relinquished By	Date/Time
Received By	Date/Time
Received @ Lab By	Date/Time

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).
See additional page for sample conditions.



Chain of Custody Supplement

3.F.3

Client:

GZA Geo Environmental

Completed by:

Glen Pezzullo

Lab Project ID:

190884

Date:

3/6/19

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	Yes	No	N/A
Container Type	☒	☐	☐
Comments			
Transferred to method-compliant container	☐	☐	☒
Headspace (<1 mL)	☒ vOA	☐	☒
Comments			
Preservation	☒	☐	☒ Alkalinity, Sulfate, Nitrate
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☒
Comments			
Holding Time	☒	☐	☐
Comments			
Temperature	☒	☐	☒ metals
Comments	2°C iced 3/6/19 08:24		
Sufficient Sample Quantity	☒	☐	☐
Comments			

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental**Client Sample ID:** MW-1**Work Order:** 190306074**Collection Date:** 3/5/2019 4:40:00 PM**Reference:** Sample Analysis / Boices Lane**Lab Sample ID:** 190306074-001**PO#:****Matrix:** GROUNDWATER**SDG# :** MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	2.36	0.04		mg/L	2	3/7/2019 3:59:56 AM
Sulfate	89.5	2.00		mg/L	2	3/7/2019 3:59:56 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	230	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	2.9	1.0		mg/L	1	3/11/2019 1:31:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental**Client Sample ID:** MW-2**Work Order:** 190306074**Collection Date:** 3/5/2019 2:25:00 PM**Reference:** Sample Analysis / Boices Lane**Lab Sample ID:** 190306074-002**PO#:****Matrix:** GROUNDWATER**SDG# :** MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	1.27	0.04		mg/L	2	3/7/2019 4:57:30 AM
Sulfate	44.5	2.00		mg/L	2	3/7/2019 4:57:30 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	220	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	1.6	1.0		mg/L	1	3/11/2019 1:48:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental**Client Sample ID:** MW-3**Work Order:** 190306074**Collection Date:** 3/5/2019 1:10:00 PM**Reference:** Sample Analysis / Boices Lane**Lab Sample ID:** 190306074-003**PO#:****Matrix:** GROUNDWATER**SDG# :** MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	0.62	0.04		mg/L	2	3/7/2019 5:16:36 AM
Sulfate	37.6	2.00		mg/L	2	3/7/2019 5:16:36 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	150	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	1.4	1.0		mg/L	1	3/11/2019 2:03:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental**Client Sample ID:** MW-15S**Work Order:** 190306074**Collection Date:** 3/5/2019 3:20:00 PM**Reference:** Sample Analysis / Boices Lane**Lab Sample ID:** 190306074-004**PO#:****Matrix:** GROUNDWATER**SDG# :** MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	2.76	0.04		mg/L	2	3/7/2019 5:35:42 AM
Sulfate	32.7	2.00		mg/L	2	3/7/2019 5:35:42 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	130	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	1.2	1.0		mg/L	1	3/11/2019 2:19:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentatively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-15M
Collection Date: 3/5/2019 3:30:00 PM
Lab Sample ID: 190306074-005
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	ND	0.04		mg/L	2	3/7/2019 5:54:47 AM
Sulfate	97.9	2.00		mg/L	2	3/7/2019 5:54:47 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	160	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	1.6	1.0		mg/L	1	3/11/2019 2:35:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-9
Collection Date: 3/5/2019 1:20:00 PM
Lab Sample ID: 190306074-006
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	2.12	0.04		mg/L	2	3/7/2019 6:13:53 AM
Sulfate	60.0	2.00		mg/L	2	3/7/2019 6:13:53 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	260	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	2.0	1.0		mg/L	1	3/11/2019 2:51:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank X - Value exceeds Maximum Contaminant Level E - Value above quantitation range-Estimate	S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits N - Matrix Spike below accepted limits (+ above) T - Tentitively Identified Compound-Estimated Conc.
--------------------	---	--

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-11
Collection Date: 3/5/2019 2:25:00 PM
Lab Sample ID: 190306074-007
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	1.86	0.04		mg/L	2	3/7/2019 6:32:58 AM
Sulfate	19.9	2.00		mg/L	2	3/7/2019 6:32:58 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	120	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	ND	1.0		mg/L	1	3/11/2019 3:07:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank X - Value exceeds Maximum Contaminant Level E - Value above quantitation range-Estimate	S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits N - Matrix Spike below accepted limits (+ above) T - Tentitively Identified Compound-Estimated Conc.
--------------------	---	--

Adirondack Environmental Services, Inc

Date: 20-Mar-19

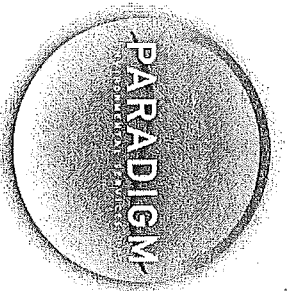
CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-13
Collection Date: 3/5/2019 5:00:00 PM
Lab Sample ID: 190306074-008
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	3.14	0.04		mg/L	2	3/7/2019 6:52:03 AM
Sulfate	76.2	2.00		mg/L	2	3/7/2019 6:52:03 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	340	10		mg/L CaCO3	1	3/7/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	3.7	1.0		mg/L	1	3/11/2019 3:23:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank X - Value exceeds Maximum Contaminant Level E - Value above quantitation range-Estimate	S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits N - Matrix Spike below accepted limits (+ above) T - Tentitively Identified Compound-Estimated Conc.
--------------------	---	--



190306074

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2630 Fax (585) 647-3311

CHAIN OF CUSTODY

ADIRONDACK: ELAP ID:

REPORT TO:

INVOICE TO:

COMPANY: Paradigm Environmental	COMPANY: Same	LAB PROJECT #:	CLIENT PROJ:
ADDRESS:	ADDRESS:		
CITY: STATE: ZIP:	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:	PHONE: FAX:		
ATTN: Reporting	ATTN: Accounts Payable	STD 1 2 3 5	
COMMENTS: Please email results to reporting@paradigmenv.com		Date Due: 3/13/19	

REQUESTED ANALYSIS

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R	Alkalinity	Sulfate 300.0	Nitrate 300.0	TOC 9060	ms/msd	For Sample Mw-1	REMARKS	PAI	SAI
13/5/19	16:40			MW-1									190854-01	001	
2	14:35			MW-2									-02	002	
3	13:10			MW-3									-03	003	
4	15:30			MW-15S									-04	004	
5	15:30			MW-15M									-05	005	
6	13:20			MW-9									-06	006	
7	14:35			MW-11									-07	007	
8	17:00			MW-13									-08	008	
9															
10															

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244 Not supplied by ASES - Jm. 3/6/19

Receipt Parameter NELAC Compliance

Container Type:	Y ☐ N ☐
Comments:	
Preservation:	Y ☐ N ☐
Comments:	
Holding Time:	Y ☐ N ☐
Comments:	
Temperature:	Y ☐ N ☐
Comments:	

Client

Sampled By	Date/Time
Relinquished By	Date/Time

Total Cost:

Received By

Received @ Lab By	Date/Time
-------------------	-----------

P.L.F.



190306074



Experience is the solution

314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

- (a) Neither **Adirondack Environmental Services, Inc.**, nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.**'s performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.
- (b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.
- (c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.
- (d) In no event shall **Adirondack Environmental Services, Inc.**, its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.
- (e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**
- (f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.
- (g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

March 11, 2019

Joni Deutscher
Paradigm Environmental Service
179 Lake Avenue
Rochester, NY 14608

RE: Project: 10478
Pace Project No.: 7081640

Dear Joni Deutscher:

Enclosed are the analytical results for sample(s) received by the laboratory on March 07, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Jane Daloia, Paradigm Environmental Services
Reporting, Paradigm Environmental Services



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 10478
Pace Project No.: 7081640

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435

Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-1		Lab ID: 7081640001	Collected: 03/05/19 16:40	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 10:50	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 10:50	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 10:50	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-2		Lab ID: 7081640002	Collected: 03/05/19 14:25	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 10:59	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 10:59	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 10:59	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-3		Lab ID: 7081640003	Collected: 03/05/19 13:10	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:08	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:08	74-85-1	
Methane, Dissolved	2.9	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:08	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-15S		Lab ID: 7081640004	Collected: 03/05/19 15:20	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:17	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:17	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:17	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-15M		Lab ID: 7081640005	Collected: 03/05/19 15:30	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:26	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:26	74-85-1	
Methane, Dissolved	2.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 11:26	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-9		Lab ID: 7081640006	Collected: 03/05/19 13:20	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:34	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:34	74-85-1	
Methane, Dissolved	121	ug/L	43.0	43	03/09/19 09:43	03/09/19 15:25	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-11		Lab ID: 7081640007	Collected: 03/05/19 14:25	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:43	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:43	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:43	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 10478
Pace Project No.: 7081640

Sample: MW-13		Lab ID: 7081640008	Collected: 03/05/19 17:00	Received: 03/07/19 10:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:52	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:52	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 09:43	03/09/19 14:52	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 10478
Pace Project No.: 7081640

QC Batch: 104765 Analysis Method: RSK-175
QC Batch Method: RSK-175 Analysis Description: RSK 175 HEADSPACE
Associated Lab Samples: 7081640001, 7081640002, 7081640003, 7081640004, 7081640005, 7081640006, 7081640007, 7081640008

METHOD BLANK: 484498 Matrix: Water
Associated Lab Samples: 7081640001, 7081640002, 7081640003, 7081640004, 7081640005, 7081640006, 7081640007, 7081640008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethane, Dissolved	ug/L	<1.0	1.0	03/09/19 10:29	
Ethene, Dissolved	ug/L	<1.0	1.0	03/09/19 10:29	
Methane, Dissolved	ug/L	<1.0	1.0	03/09/19 10:29	

LABORATORY CONTROL SAMPLE: 484499

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethane, Dissolved	ug/L	10.2	8.5	83	32-156	
Ethene, Dissolved	ug/L	10.3	9.3	90	30-167	
Methane, Dissolved	ug/L	10.2	4.2	42	22-166	

SAMPLE DUPLICATE: 484506

Parameter	Units	7081640004 Result	Dup Result	RPD	Qualifiers
Ethane, Dissolved	ug/L	<1.0	<1.0		
Ethene, Dissolved	ug/L	<1.0	<1.0		
Methane, Dissolved	ug/L	<1.0	<1.0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: 10478
Pace Project No.: 7081640

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 10478
Pace Project No.: 7081640

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7081640001	MW-1	RSK-175	104765	RSK-175	104775
7081640002	MW-2	RSK-175	104765	RSK-175	104775
7081640003	MW-3	RSK-175	104765	RSK-175	104775
7081640004	MW-15S	RSK-175	104765	RSK-175	104775
7081640005	MW-15M	RSK-175	104765	RSK-175	104775
7081640006	MW-9	RSK-175	104765	RSK-175	104775
7081640007	MW-11	RSK-175	104765	RSK-175	104775
7081640008	MW-13	RSK-175	104765	RSK-175	104775

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CHAIN OF CUSTODY

Pace: ELAP ID: 10478

REPORT TO: INVOICE TO:

COMPANY: Paradigm Environmental Same

ADDRESS: ADDRESS:

CITY: CITY: STATE: STATE: ZIP: ZIP:

PHONE: PHONE: FAX: FAX:

ATTN: Reporting Accounts Payable

COMMENTS: Please email results to reporting@paradigmenv.com

LAB PROJECT #: CLIENT PROJECT #:

TURNAROUND TIME (WORKING DAYS): 1 2 3 5

OTHER:

Date Due: 3/18/19 For 3/19

DATE	TIME	COMPOSITE	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R	C O N T A I N E R	REMARKS	PARADIGM LAB SAMPLE NUMBER
3/5/19	16:40			MW-1	Ground Water	C	X	190884 -01	001
	14:25			MW-2				-02	002
	13:10			MW-3				-03	003
	15:20			MW-15S				-04	004
	15:30			MW-15M				-05	005
	13:20			MW-9				-06	006
	14:05			MW-11				-07	007
	17:00			MW-13				-08	008

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAP/ELAP 210/241/242/243/244

Receipt Parameter: NELAP Compliance

Container Type: Y ☐ N ☐

Preservation: Y ☐ N ☐

Holding Time: Y ☐ N ☐

Temperature: Y ☐ N ☐

Comments:

Comments:

Comments:

Comments:

Client: Sampled By: 3/6/19 16:00

Relinquished By: 3/7/19 10:40

Received By: P.I.F.

Received @ Lab By: Date/Time

Total Cost:



Sample Condition Upon Receipt

Client Name:

Paradigm

Project

WO#: 7081640

PM: STS Due Date: 03/18/19

CLIENT: PAR

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

1Z E11 212 NT 9589 9163

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Temperature Blank Present: ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: Wet Blue None

Thermometer Used: TH091

Correction Factor:

0.0

☐ Samples on ice, cooling process has begun

Cooler Temperature (°C):

0.5

Cooler Temperature Corrected (°C):

0.5

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil ☒ N/A, water sample

Date and Initials of person examining contents:

OK 3/17/19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☒ NO

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

		COMMENTS:
Chain of Custody Present:	☒ Yes ☐ No	1.
Chain of Custody Filled Out:	☒ Yes ☐ No	2.
Chain of Custody Relinquished:	☒ Yes ☐ No	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No	7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☒ Yes ☐ No	8.
Correct Containers Used:	☒ Yes ☐ No	9.
-Pace Containers Used:	☒ Yes ☐ No	
Containers Intact:	☒ Yes ☐ No	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☐ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☒ Yes ☐ No	12.
-Includes date/time/ID/Analysis Matrix SL WT OIL		
All containers needing preservation have been checked	☒ Yes ☐ No ☐ N/A	13. ☐ HNO ₃ ☐ H ₂ SO ₄ ☐ NaOH ☐ HCl
pH paper Lot #		Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl, NaOH>9 Sulfide, NaOH>12 Cyanide)	☐ Yes ☐ No ☐ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis		Initial when completed: Lot # of added preservative: Date/Time preservative added
Samples checked for dechlorination:	☐ Yes ☐ No ☐ N/A	14.
KI starch test strips Lot #		
Residual chlorine strips Lot #		Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐ Yes ☒ No ☐ N/A	15.
Trip Blank Present:	☐ Yes ☒ No ☐ N/A	16.
Trip Blank Custody Seals Present	☐ Yes ☐ No ☐ N/A	
Pace Trip Blank Lot # (if applicable):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-5

Lab Sample ID: 190918-01

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 10:40
Manganese	< 0.0150	mg/L		3/12/2019 10:40

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-5

Lab Sample ID: 190918-01

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/11/2019 12:59
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/11/2019 12:59
1,1,2-Trichloroethane	< 2.00	ug/L		3/11/2019 12:59
1,1-Dichloroethane	< 2.00	ug/L		3/11/2019 12:59
1,1-Dichloroethene	< 2.00	ug/L		3/11/2019 12:59
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/11/2019 12:59
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/11/2019 12:59
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/11/2019 12:59
1,2-Dibromoethane	< 2.00	ug/L		3/11/2019 12:59
1,2-Dichlorobenzene	< 2.00	ug/L		3/11/2019 12:59
1,2-Dichloroethane	< 2.00	ug/L		3/11/2019 12:59
1,2-Dichloropropane	< 2.00	ug/L		3/11/2019 12:59
1,3-Dichlorobenzene	< 2.00	ug/L		3/11/2019 12:59
1,4-Dichlorobenzene	< 2.00	ug/L		3/11/2019 12:59
1,4-Dioxane	< 20.0	ug/L		3/11/2019 12:59
2-Butanone	< 10.0	ug/L		3/11/2019 12:59
2-Hexanone	< 5.00	ug/L		3/11/2019 12:59
4-Methyl-2-pentanone	< 5.00	ug/L		3/11/2019 12:59
Acetone	< 10.0	ug/L		3/11/2019 12:59
Benzene	< 1.00	ug/L		3/11/2019 12:59
Bromochloromethane	< 5.00	ug/L		3/11/2019 12:59
Bromodichloromethane	< 2.00	ug/L		3/11/2019 12:59
Bromoform	< 5.00	ug/L		3/11/2019 12:59
Bromomethane	< 2.00	ug/L		3/11/2019 12:59
Carbon disulfide	< 2.00	ug/L		3/11/2019 12:59
Carbon Tetrachloride	< 2.00	ug/L		3/11/2019 12:59
Chlorobenzene	< 2.00	ug/L		3/11/2019 12:59

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-5

Lab Sample ID: 190918-01

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/11/2019 12:59
Chloroform	< 2.00	ug/L	3/11/2019 12:59
Chloromethane	< 2.00	ug/L	3/11/2019 12:59
cis-1,2-Dichloroethene	< 2.00	ug/L	3/11/2019 12:59
cis-1,3-Dichloropropene	< 2.00	ug/L	3/11/2019 12:59
Cyclohexane	< 10.0	ug/L	3/11/2019 12:59
Dibromochloromethane	< 2.00	ug/L	3/11/2019 12:59
Dichlorodifluoromethane	< 2.00	ug/L	3/11/2019 12:59
Ethylbenzene	< 2.00	ug/L	3/11/2019 12:59
Freon 113	< 2.00	ug/L	3/11/2019 12:59
Isopropylbenzene	< 2.00	ug/L	3/11/2019 12:59
m,p-Xylene	< 2.00	ug/L	3/11/2019 12:59
Methyl acetate	< 2.00	ug/L	3/11/2019 12:59
Methyl tert-butyl Ether	< 2.00	ug/L	3/11/2019 12:59
Methylcyclohexane	< 2.00	ug/L	3/11/2019 12:59
Methylene chloride	< 5.00	ug/L	3/11/2019 12:59
o-Xylene	< 2.00	ug/L	3/11/2019 12:59
Styrene	< 5.00	ug/L	3/11/2019 12:59
Tetrachloroethene	< 2.00	ug/L	3/11/2019 12:59
Toluene	< 2.00	ug/L	3/11/2019 12:59
trans-1,2-Dichloroethene	< 2.00	ug/L	3/11/2019 12:59
trans-1,3-Dichloropropene	< 2.00	ug/L	3/11/2019 12:59
Trichloroethene	< 2.00	ug/L	3/11/2019 12:59
Trichlorofluoromethane	< 2.00	ug/L	3/11/2019 12:59
Vinyl chloride	< 2.00	ug/L	3/11/2019 12:59

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-5

Lab Sample ID: 190918-01

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	116	75.3 - 127		3/11/2019	12:59
4-Bromofluorobenzene	79.4	67.4 - 122		3/11/2019	12:59
Pentafluorobenzene	91.1	86.8 - 110		3/11/2019	12:59
Toluene-D8	89.1	85 - 112		3/11/2019	12:59

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59152.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-16S

Lab Sample ID: 190918-02

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 10:44
Manganese	0.188	mg/L		3/12/2019 10:44

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-16S

Lab Sample ID: 190918-02

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/11/2019 13:22
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/11/2019 13:22
1,1,2-Trichloroethane	< 2.00	ug/L		3/11/2019 13:22
1,1-Dichloroethane	< 2.00	ug/L		3/11/2019 13:22
1,1-Dichloroethene	< 2.00	ug/L		3/11/2019 13:22
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/11/2019 13:22
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/11/2019 13:22
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/11/2019 13:22
1,2-Dibromoethane	< 2.00	ug/L		3/11/2019 13:22
1,2-Dichlorobenzene	< 2.00	ug/L		3/11/2019 13:22
1,2-Dichloroethane	< 2.00	ug/L		3/11/2019 13:22
1,2-Dichloropropane	< 2.00	ug/L		3/11/2019 13:22
1,3-Dichlorobenzene	< 2.00	ug/L		3/11/2019 13:22
1,4-Dichlorobenzene	< 2.00	ug/L		3/11/2019 13:22
1,4-Dioxane	< 20.0	ug/L		3/11/2019 13:22
2-Butanone	< 10.0	ug/L		3/11/2019 13:22
2-Hexanone	< 5.00	ug/L		3/11/2019 13:22
4-Methyl-2-pentanone	< 5.00	ug/L		3/11/2019 13:22
Acetone	< 10.0	ug/L		3/11/2019 13:22
Benzene	< 1.00	ug/L		3/11/2019 13:22
Bromochloromethane	< 5.00	ug/L		3/11/2019 13:22
Bromodichloromethane	< 2.00	ug/L		3/11/2019 13:22
Bromoform	< 5.00	ug/L		3/11/2019 13:22
Bromomethane	< 2.00	ug/L		3/11/2019 13:22
Carbon disulfide	< 2.00	ug/L		3/11/2019 13:22
Carbon Tetrachloride	< 2.00	ug/L		3/11/2019 13:22
Chlorobenzene	< 2.00	ug/L		3/11/2019 13:22

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-16S

Lab Sample ID: 190918-02

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/11/2019 13:22
Chloroform	< 2.00	ug/L	3/11/2019 13:22
Chloromethane	< 2.00	ug/L	3/11/2019 13:22
cis-1,2-Dichloroethene	< 2.00	ug/L	3/11/2019 13:22
cis-1,3-Dichloropropene	< 2.00	ug/L	3/11/2019 13:22
Cyclohexane	< 10.0	ug/L	3/11/2019 13:22
Dibromochloromethane	< 2.00	ug/L	3/11/2019 13:22
Dichlorodifluoromethane	< 2.00	ug/L	3/11/2019 13:22
Ethylbenzene	< 2.00	ug/L	3/11/2019 13:22
Freon 113	< 2.00	ug/L	3/11/2019 13:22
Isopropylbenzene	< 2.00	ug/L	3/11/2019 13:22
m,p-Xylene	< 2.00	ug/L	3/11/2019 13:22
Methyl acetate	< 2.00	ug/L	3/11/2019 13:22
Methyl tert-butyl Ether	< 2.00	ug/L	3/11/2019 13:22
Methylcyclohexane	< 2.00	ug/L	3/11/2019 13:22
Methylene chloride	< 5.00	ug/L	3/11/2019 13:22
o-Xylene	< 2.00	ug/L	3/11/2019 13:22
Styrene	< 5.00	ug/L	3/11/2019 13:22
Tetrachloroethene	< 2.00	ug/L	3/11/2019 13:22
Toluene	< 2.00	ug/L	3/11/2019 13:22
trans-1,2-Dichloroethene	< 2.00	ug/L	3/11/2019 13:22
trans-1,3-Dichloropropene	< 2.00	ug/L	3/11/2019 13:22
Trichloroethene	< 2.00	ug/L	3/11/2019 13:22
Trichlorofluoromethane	< 2.00	ug/L	3/11/2019 13:22
Vinyl chloride	< 2.00	ug/L	3/11/2019 13:22

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-16S

Lab Sample ID: 190918-02

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	117	75.3 - 127		3/11/2019 13:22
4-Bromofluorobenzene	81.8	67.4 - 122		3/11/2019 13:22
Pentafluorobenzene	94.3	86.8 - 110		3/11/2019 13:22
Toluene-D8	88.1	85 - 112		3/11/2019 13:22

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59153.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-16M

Lab Sample ID: 190918-03

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 10:49
Manganese	0.245	mg/L		3/12/2019 10:49

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-16M

Lab Sample ID: 190918-03

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 17:06
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 17:06
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 17:06
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 17:06
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 17:06
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 17:06
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 17:06
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 17:06
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 17:06
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:06
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 17:06
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 17:06
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:06
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:06
1,4-Dioxane	< 20.0	ug/L		3/8/2019 17:06
2-Butanone	< 10.0	ug/L		3/8/2019 17:06
2-Hexanone	< 5.00	ug/L		3/8/2019 17:06
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 17:06
Acetone	< 10.0	ug/L		3/8/2019 17:06
Benzene	< 1.00	ug/L		3/8/2019 17:06
Bromochloromethane	< 5.00	ug/L		3/8/2019 17:06
Bromodichloromethane	< 2.00	ug/L		3/8/2019 17:06
Bromoform	< 5.00	ug/L		3/8/2019 17:06
Bromomethane	< 2.00	ug/L		3/8/2019 17:06
Carbon disulfide	< 2.00	ug/L		3/8/2019 17:06
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 17:06
Chlorobenzene	< 2.00	ug/L		3/8/2019 17:06

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-16M

Lab Sample ID: 190918-03

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 17:06
Chloroform	< 2.00	ug/L	3/8/2019 17:06
Chloromethane	< 2.00	ug/L	3/8/2019 17:06
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 17:06
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 17:06
Cyclohexane	< 10.0	ug/L	3/8/2019 17:06
Dibromochloromethane	< 2.00	ug/L	3/8/2019 17:06
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 17:06
Ethylbenzene	< 2.00	ug/L	3/8/2019 17:06
Freon 113	< 2.00	ug/L	3/8/2019 17:06
Isopropylbenzene	< 2.00	ug/L	3/8/2019 17:06
m,p-Xylene	< 2.00	ug/L	3/8/2019 17:06
Methyl acetate	< 2.00	ug/L	3/8/2019 17:06
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 17:06
Methylcyclohexane	< 2.00	ug/L	3/8/2019 17:06
Methylene chloride	< 5.00	ug/L	3/8/2019 17:06
o-Xylene	< 2.00	ug/L	3/8/2019 17:06
Styrene	< 5.00	ug/L	3/8/2019 17:06
Tetrachloroethene	< 2.00	ug/L	3/8/2019 17:06
Toluene	< 2.00	ug/L	3/8/2019 17:06
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 17:06
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 17:06
Trichloroethene	< 2.00	ug/L	3/8/2019 17:06
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 17:06
Vinyl chloride	< 2.00	ug/L	3/8/2019 17:06

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-16M

Lab Sample ID: 190918-03

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	116	75.3 - 127		3/8/2019 17:06
4-Bromofluorobenzene	81.3	67.4 - 122		3/8/2019 17:06
Pentafluorobenzene	87.8	86.8 - 110		3/8/2019 17:06
Toluene-D8	87.0	85 - 112		3/8/2019 17:06

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59128.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-17S

Lab Sample ID: 190918-04

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 10:53
Manganese	< 0.0150	mg/L		3/12/2019 10:53

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-17S

Lab Sample ID: 190918-04

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 17:29
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 17:29
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 17:29
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 17:29
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 17:29
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 17:29
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 17:29
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 17:29
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 17:29
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:29
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 17:29
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 17:29
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:29
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:29
1,4-Dioxane	< 20.0	ug/L		3/8/2019 17:29
2-Butanone	< 10.0	ug/L		3/8/2019 17:29
2-Hexanone	< 5.00	ug/L		3/8/2019 17:29
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 17:29
Acetone	< 10.0	ug/L		3/8/2019 17:29
Benzene	< 1.00	ug/L		3/8/2019 17:29
Bromochloromethane	< 5.00	ug/L		3/8/2019 17:29
Bromodichloromethane	< 2.00	ug/L		3/8/2019 17:29
Bromoform	< 5.00	ug/L		3/8/2019 17:29
Bromomethane	< 2.00	ug/L		3/8/2019 17:29
Carbon disulfide	< 2.00	ug/L		3/8/2019 17:29
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 17:29
Chlorobenzene	< 2.00	ug/L		3/8/2019 17:29

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-17S

Lab Sample ID: 190918-04

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 17:29
Chloroform	< 2.00	ug/L	3/8/2019 17:29
Chloromethane	< 2.00	ug/L	3/8/2019 17:29
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 17:29
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 17:29
Cyclohexane	< 10.0	ug/L	3/8/2019 17:29
Dibromochloromethane	< 2.00	ug/L	3/8/2019 17:29
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 17:29
Ethylbenzene	< 2.00	ug/L	3/8/2019 17:29
Freon 113	< 2.00	ug/L	3/8/2019 17:29
Isopropylbenzene	< 2.00	ug/L	3/8/2019 17:29
m,p-Xylene	< 2.00	ug/L	3/8/2019 17:29
Methyl acetate	< 2.00	ug/L	3/8/2019 17:29
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 17:29
Methylcyclohexane	< 2.00	ug/L	3/8/2019 17:29
Methylene chloride	< 5.00	ug/L	3/8/2019 17:29
o-Xylene	< 2.00	ug/L	3/8/2019 17:29
Styrene	< 5.00	ug/L	3/8/2019 17:29
Tetrachloroethene	31.4	ug/L	3/8/2019 17:29
Toluene	< 2.00	ug/L	3/8/2019 17:29
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 17:29
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 17:29
Trichloroethene	< 2.00	ug/L	3/8/2019 17:29
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 17:29
Vinyl chloride	< 2.00	ug/L	3/8/2019 17:29

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-17S

Lab Sample ID: 190918-04

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	117	75.3 - 127		3/8/2019 17:29
4-Bromofluorobenzene	79.3	67.4 - 122		3/8/2019 17:29
Pentafluorobenzene	91.2	86.8 - 110		3/8/2019 17:29
Toluene-D8	87.9	85 - 112		3/8/2019 17:29

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59129.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-17M

Lab Sample ID: 190918-05

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 10:57
Manganese	0.0221	mg/L		3/12/2019 10:57

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-17M

Lab Sample ID: 190918-05

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 17:52
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 17:52
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 17:52
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 17:52
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 17:52
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 17:52
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 17:52
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 17:52
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 17:52
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:52
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 17:52
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 17:52
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:52
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 17:52
1,4-Dioxane	< 20.0	ug/L		3/8/2019 17:52
2-Butanone	< 10.0	ug/L		3/8/2019 17:52
2-Hexanone	< 5.00	ug/L		3/8/2019 17:52
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 17:52
Acetone	< 10.0	ug/L		3/8/2019 17:52
Benzene	< 1.00	ug/L		3/8/2019 17:52
Bromochloromethane	< 5.00	ug/L		3/8/2019 17:52
Bromodichloromethane	< 2.00	ug/L		3/8/2019 17:52
Bromoform	< 5.00	ug/L		3/8/2019 17:52
Bromomethane	< 2.00	ug/L		3/8/2019 17:52
Carbon disulfide	< 2.00	ug/L		3/8/2019 17:52
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 17:52
Chlorobenzene	< 2.00	ug/L		3/8/2019 17:52

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-17M

Lab Sample ID: 190918-05

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 17:52
Chloroform	< 2.00	ug/L	3/8/2019 17:52
Chloromethane	< 2.00	ug/L	3/8/2019 17:52
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 17:52
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 17:52
Cyclohexane	< 10.0	ug/L	3/8/2019 17:52
Dibromochloromethane	< 2.00	ug/L	3/8/2019 17:52
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 17:52
Ethylbenzene	< 2.00	ug/L	3/8/2019 17:52
Freon 113	< 2.00	ug/L	3/8/2019 17:52
Isopropylbenzene	< 2.00	ug/L	3/8/2019 17:52
m,p-Xylene	< 2.00	ug/L	3/8/2019 17:52
Methyl acetate	< 2.00	ug/L	3/8/2019 17:52
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 17:52
Methylcyclohexane	< 2.00	ug/L	3/8/2019 17:52
Methylene chloride	< 5.00	ug/L	3/8/2019 17:52
o-Xylene	< 2.00	ug/L	3/8/2019 17:52
Styrene	< 5.00	ug/L	3/8/2019 17:52
Tetrachloroethene	< 2.00	ug/L	3/8/2019 17:52
Toluene	< 2.00	ug/L	3/8/2019 17:52
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 17:52
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 17:52
Trichloroethene	< 2.00	ug/L	3/8/2019 17:52
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 17:52
Vinyl chloride	< 2.00	ug/L	3/8/2019 17:52

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-17M

Lab Sample ID: 190918-05

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	118	75.3 - 127		3/8/2019 17:52
4-Bromofluorobenzene	78.5	67.4 - 122		3/8/2019 17:52
Pentafluorobenzene	89.5	86.8 - 110		3/8/2019 17:52
Toluene-D8	85.7	85 - 112		3/8/2019 17:52

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59130.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Field Duplicate 1

Lab Sample ID: 190918-06

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 11:02
Manganese	< 0.0150	mg/L		3/12/2019 11:02

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Field Duplicate 1

Lab Sample ID: 190918-06

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 18:15
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 18:15
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 18:15
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 18:15
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 18:15
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 18:15
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 18:15
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 18:15
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 18:15
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 18:15
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 18:15
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 18:15
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 18:15
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 18:15
1,4-Dioxane	< 20.0	ug/L		3/8/2019 18:15
2-Butanone	< 10.0	ug/L		3/8/2019 18:15
2-Hexanone	< 5.00	ug/L		3/8/2019 18:15
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 18:15
Acetone	< 10.0	ug/L		3/8/2019 18:15
Benzene	< 1.00	ug/L		3/8/2019 18:15
Bromochloromethane	< 5.00	ug/L		3/8/2019 18:15
Bromodichloromethane	< 2.00	ug/L		3/8/2019 18:15
Bromoform	< 5.00	ug/L		3/8/2019 18:15
Bromomethane	< 2.00	ug/L		3/8/2019 18:15
Carbon disulfide	< 2.00	ug/L		3/8/2019 18:15
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 18:15
Chlorobenzene	< 2.00	ug/L		3/8/2019 18:15

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier:	Field Duplicate 1				
Lab Sample ID:	190918-06			Date Sampled:	3/6/2019
Matrix:	Groundwater			Date Received:	3/7/2019
Chloroethane	< 2.00	ug/L		3/8/2019	18:15
Chloroform	< 2.00	ug/L		3/8/2019	18:15
Chloromethane	< 2.00	ug/L		3/8/2019	18:15
cis-1,2-Dichloroethene	< 2.00	ug/L		3/8/2019	18:15
cis-1,3-Dichloropropene	< 2.00	ug/L		3/8/2019	18:15
Cyclohexane	< 10.0	ug/L		3/8/2019	18:15
Dibromochloromethane	< 2.00	ug/L		3/8/2019	18:15
Dichlorodifluoromethane	< 2.00	ug/L		3/8/2019	18:15
Ethylbenzene	< 2.00	ug/L		3/8/2019	18:15
Freon 113	< 2.00	ug/L		3/8/2019	18:15
Isopropylbenzene	< 2.00	ug/L		3/8/2019	18:15
m,p-Xylene	< 2.00	ug/L		3/8/2019	18:15
Methyl acetate	< 2.00	ug/L		3/8/2019	18:15
Methyl tert-butyl Ether	< 2.00	ug/L		3/8/2019	18:15
Methylcyclohexane	< 2.00	ug/L		3/8/2019	18:15
Methylene chloride	< 5.00	ug/L		3/8/2019	18:15
o-Xylene	< 2.00	ug/L		3/8/2019	18:15
Styrene	< 5.00	ug/L		3/8/2019	18:15
Tetrachloroethene	1.15	ug/L	J	3/8/2019	18:15
Toluene	< 2.00	ug/L		3/8/2019	18:15
trans-1,2-Dichloroethene	< 2.00	ug/L		3/8/2019	18:15
trans-1,3-Dichloropropene	< 2.00	ug/L		3/8/2019	18:15
Trichloroethene	< 2.00	ug/L		3/8/2019	18:15
Trichlorofluoromethane	< 2.00	ug/L		3/8/2019	18:15
Vinyl chloride	< 2.00	ug/L		3/8/2019	18:15

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: Field Duplicate 1

Lab Sample ID: 190918-06

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	114	75.3 - 127		3/8/2019 18:15
4-Bromofluorobenzene	76.8	67.4 - 122		3/8/2019 18:15
Pentafluorobenzene	87.4	86.8 - 110		3/8/2019 18:15
Toluene-D8	88.0	85 - 112		3/8/2019 18:15

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59131.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Field Duplicate 2

Lab Sample ID: 190918-07

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 11:06
Manganese	0.0695	mg/L		3/12/2019 11:06

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Field Duplicate 2

Lab Sample ID: 190918-07

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 40.0	ug/L		3/11/2019 13:45
1,1,2,2-Tetrachloroethane	< 40.0	ug/L		3/11/2019 13:45
1,1,2-Trichloroethane	< 40.0	ug/L		3/11/2019 13:45
1,1-Dichloroethane	< 40.0	ug/L		3/11/2019 13:45
1,1-Dichloroethene	< 40.0	ug/L		3/11/2019 13:45
1,2,3-Trichlorobenzene	< 100	ug/L		3/11/2019 13:45
1,2,4-Trichlorobenzene	< 100	ug/L		3/11/2019 13:45
1,2-Dibromo-3-Chloropropane	< 200	ug/L		3/11/2019 13:45
1,2-Dibromoethane	< 40.0	ug/L		3/11/2019 13:45
1,2-Dichlorobenzene	< 40.0	ug/L		3/11/2019 13:45
1,2-Dichloroethane	< 40.0	ug/L		3/11/2019 13:45
1,2-Dichloropropane	< 40.0	ug/L		3/11/2019 13:45
1,3-Dichlorobenzene	< 40.0	ug/L		3/11/2019 13:45
1,4-Dichlorobenzene	< 40.0	ug/L		3/11/2019 13:45
1,4-Dioxane	< 400	ug/L		3/11/2019 13:45
2-Butanone	< 200	ug/L		3/11/2019 13:45
2-Hexanone	< 100	ug/L		3/11/2019 13:45
4-Methyl-2-pentanone	< 100	ug/L		3/11/2019 13:45
Acetone	< 200	ug/L		3/11/2019 13:45
Benzene	< 20.0	ug/L		3/11/2019 13:45
Bromochloromethane	< 100	ug/L		3/11/2019 13:45
Bromodichloromethane	< 40.0	ug/L		3/11/2019 13:45
Bromoform	< 100	ug/L		3/11/2019 13:45
Bromomethane	< 40.0	ug/L		3/11/2019 13:45
Carbon disulfide	< 40.0	ug/L		3/11/2019 13:45
Carbon Tetrachloride	< 40.0	ug/L		3/11/2019 13:45
Chlorobenzene	< 40.0	ug/L		3/11/2019 13:45

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier:	Field Duplicate 2				
Lab Sample ID:	190918-07			Date Sampled:	3/6/2019
Matrix:	Groundwater			Date Received:	3/7/2019
Chloroethane	< 40.0	ug/L		3/11/2019	13:45
Chloroform	< 40.0	ug/L		3/11/2019	13:45
Chloromethane	< 40.0	ug/L		3/11/2019	13:45
cis-1,2-Dichloroethene	< 40.0	ug/L		3/11/2019	13:45
cis-1,3-Dichloropropene	< 40.0	ug/L		3/11/2019	13:45
Cyclohexane	< 200	ug/L		3/11/2019	13:45
Dibromochloromethane	< 40.0	ug/L		3/11/2019	13:45
Dichlorodifluoromethane	< 40.0	ug/L		3/11/2019	13:45
Ethylbenzene	< 40.0	ug/L		3/11/2019	13:45
Freon 113	< 40.0	ug/L		3/11/2019	13:45
Isopropylbenzene	< 40.0	ug/L		3/11/2019	13:45
m,p-Xylene	< 40.0	ug/L		3/11/2019	13:45
Methyl acetate	< 40.0	ug/L		3/11/2019	13:45
Methyl tert-butyl Ether	< 40.0	ug/L		3/11/2019	13:45
Methylcyclohexane	< 40.0	ug/L		3/11/2019	13:45
Methylene chloride	< 100	ug/L		3/11/2019	13:45
o-Xylene	< 40.0	ug/L		3/11/2019	13:45
Styrene	< 100	ug/L		3/11/2019	13:45
Tetrachloroethene	1550	ug/L		3/11/2019	13:45
Toluene	< 40.0	ug/L		3/11/2019	13:45
trans-1,2-Dichloroethene	< 40.0	ug/L		3/11/2019	13:45
trans-1,3-Dichloropropene	< 40.0	ug/L		3/11/2019	13:45
Trichloroethene	< 40.0	ug/L		3/11/2019	13:45
Trichlorofluoromethane	< 40.0	ug/L		3/11/2019	13:45
Vinyl chloride	< 40.0	ug/L		3/11/2019	13:45

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: Field Duplicate 2

Lab Sample ID: 190918-07

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	116	75.3 - 127		3/11/2019	13:45
4-Bromofluorobenzene	77.9	67.4 - 122		3/11/2019	13:45
Pentafluorobenzene	91.4	86.8 - 110		3/11/2019	13:45
Toluene-D8	88.1	85 - 112		3/11/2019	13:45

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59154.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Trip Blank T886

Lab Sample ID: 190918-08

Date Sampled: 2/28/2019

Matrix: Water

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 14:02
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 14:02
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 14:02
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 14:02
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 14:02
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 14:02
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 14:02
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 14:02
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 14:02
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 14:02
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 14:02
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 14:02
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 14:02
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 14:02
1,4-Dioxane	< 20.0	ug/L		3/8/2019 14:02
2-Butanone	< 10.0	ug/L		3/8/2019 14:02
2-Hexanone	< 5.00	ug/L		3/8/2019 14:02
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 14:02
Acetone	< 10.0	ug/L		3/8/2019 14:02
Benzene	< 1.00	ug/L		3/8/2019 14:02
Bromochloromethane	< 5.00	ug/L		3/8/2019 14:02
Bromodichloromethane	< 2.00	ug/L		3/8/2019 14:02
Bromoform	< 5.00	ug/L		3/8/2019 14:02
Bromomethane	< 2.00	ug/L		3/8/2019 14:02
Carbon disulfide	< 2.00	ug/L		3/8/2019 14:02
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 14:02
Chlorobenzene	< 2.00	ug/L		3/8/2019 14:02

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: Trip Blank T886

Lab Sample ID: 190918-08

Date Sampled: 2/28/2019

Matrix: Water

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 14:02
Chloroform	< 2.00	ug/L	3/8/2019 14:02
Chloromethane	< 2.00	ug/L	3/8/2019 14:02
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 14:02
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 14:02
Cyclohexane	< 10.0	ug/L	3/8/2019 14:02
Dibromochloromethane	< 2.00	ug/L	3/8/2019 14:02
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 14:02
Ethylbenzene	< 2.00	ug/L	3/8/2019 14:02
Freon 113	< 2.00	ug/L	3/8/2019 14:02
Isopropylbenzene	< 2.00	ug/L	3/8/2019 14:02
m,p-Xylene	< 2.00	ug/L	3/8/2019 14:02
Methyl acetate	< 2.00	ug/L	3/8/2019 14:02
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 14:02
Methylcyclohexane	< 2.00	ug/L	3/8/2019 14:02
Methylene chloride	< 5.00	ug/L	3/8/2019 14:02
o-Xylene	< 2.00	ug/L	3/8/2019 14:02
Styrene	< 5.00	ug/L	3/8/2019 14:02
Tetrachloroethene	< 2.00	ug/L	3/8/2019 14:02
Toluene	< 2.00	ug/L	3/8/2019 14:02
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 14:02
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 14:02
Trichloroethene	< 2.00	ug/L	3/8/2019 14:02
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 14:02
Vinyl chloride	< 2.00	ug/L	3/8/2019 14:02

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Trip Blank T886

Lab Sample ID: 190918-08

Date Sampled: 2/28/2019

Matrix: Water

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	109	75.3 - 127		3/8/2019	14:02
4-Bromofluorobenzene	84.2	67.4 - 122		3/8/2019	14:02
Pentafluorobenzene	96.5	86.8 - 110		3/8/2019	14:02
Toluene-D8	88.9	85 - 112		3/8/2019	14:02

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59120.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 1

Lab Sample ID: 190918-09

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 11:19
Manganese	< 0.0150	mg/L		3/12/2019 11:19

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 1

Lab Sample ID: 190918-09

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 21:18
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 21:18
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 21:18
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 21:18
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 21:18
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 21:18
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 21:18
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 21:18
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 21:18
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 21:18
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 21:18
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 21:18
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 21:18
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 21:18
1,4-Dioxane	< 20.0	ug/L		3/8/2019 21:18
2-Butanone	< 10.0	ug/L		3/8/2019 21:18
2-Hexanone	< 5.00	ug/L		3/8/2019 21:18
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 21:18
Acetone	< 10.0	ug/L		3/8/2019 21:18
Benzene	< 1.00	ug/L		3/8/2019 21:18
Bromochloromethane	< 5.00	ug/L		3/8/2019 21:18
Bromodichloromethane	< 2.00	ug/L		3/8/2019 21:18
Bromoform	< 5.00	ug/L		3/8/2019 21:18
Bromomethane	< 2.00	ug/L		3/8/2019 21:18
Carbon disulfide	< 2.00	ug/L		3/8/2019 21:18
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 21:18
Chlorobenzene	< 2.00	ug/L		3/8/2019 21:18

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 1

Lab Sample ID: 190918-09

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 21:18
Chloroform	< 2.00	ug/L	3/8/2019 21:18
Chloromethane	< 2.00	ug/L	3/8/2019 21:18
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 21:18
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 21:18
Cyclohexane	< 10.0	ug/L	3/8/2019 21:18
Dibromochloromethane	< 2.00	ug/L	3/8/2019 21:18
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 21:18
Ethylbenzene	< 2.00	ug/L	3/8/2019 21:18
Freon 113	< 2.00	ug/L	3/8/2019 21:18
Isopropylbenzene	< 2.00	ug/L	3/8/2019 21:18
m,p-Xylene	< 2.00	ug/L	3/8/2019 21:18
Methyl acetate	< 2.00	ug/L	3/8/2019 21:18
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 21:18
Methylcyclohexane	< 2.00	ug/L	3/8/2019 21:18
Methylene chloride	< 5.00	ug/L	3/8/2019 21:18
o-Xylene	< 2.00	ug/L	3/8/2019 21:18
Styrene	< 5.00	ug/L	3/8/2019 21:18
Tetrachloroethene	< 2.00	ug/L	3/8/2019 21:18
Toluene	< 2.00	ug/L	3/8/2019 21:18
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 21:18
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 21:18
Trichloroethene	< 2.00	ug/L	3/8/2019 21:18
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 21:18
Vinyl chloride	< 2.00	ug/L	3/8/2019 21:18

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 1

Lab Sample ID: 190918-09

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	120	75.3 - 127		3/8/2019	21:18
4-Bromofluorobenzene	80.4	67.4 - 122		3/8/2019	21:18
Pentafluorobenzene	88.5	86.8 - 110		3/8/2019	21:18
Toluene-D8	88.5	85 - 112		3/8/2019	21:18

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59139.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 2

Lab Sample ID: 190918-10

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 11:23
Manganese	< 0.0150	mg/L		3/12/2019 11:23

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 2

Lab Sample ID: 190918-10

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 14:48
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 14:48
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 14:48
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 14:48
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 14:48
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 14:48
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 14:48
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 14:48
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 14:48
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 14:48
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 14:48
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 14:48
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 14:48
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 14:48
1,4-Dioxane	< 20.0	ug/L		3/8/2019 14:48
2-Butanone	< 10.0	ug/L		3/8/2019 14:48
2-Hexanone	< 5.00	ug/L		3/8/2019 14:48
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 14:48
Acetone	< 10.0	ug/L		3/8/2019 14:48
Benzene	< 1.00	ug/L		3/8/2019 14:48
Bromochloromethane	< 5.00	ug/L		3/8/2019 14:48
Bromodichloromethane	< 2.00	ug/L		3/8/2019 14:48
Bromoform	< 5.00	ug/L		3/8/2019 14:48
Bromomethane	< 2.00	ug/L		3/8/2019 14:48
Carbon disulfide	< 2.00	ug/L		3/8/2019 14:48
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 14:48
Chlorobenzene	< 2.00	ug/L		3/8/2019 14:48

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 2

Lab Sample ID: 190918-10

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 14:48
Chloroform	< 2.00	ug/L	3/8/2019 14:48
Chloromethane	< 2.00	ug/L	3/8/2019 14:48
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 14:48
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 14:48
Cyclohexane	< 10.0	ug/L	3/8/2019 14:48
Dibromochloromethane	< 2.00	ug/L	3/8/2019 14:48
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 14:48
Ethylbenzene	< 2.00	ug/L	3/8/2019 14:48
Freon 113	< 2.00	ug/L	3/8/2019 14:48
Isopropylbenzene	< 2.00	ug/L	3/8/2019 14:48
m,p-Xylene	< 2.00	ug/L	3/8/2019 14:48
Methyl acetate	< 2.00	ug/L	3/8/2019 14:48
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 14:48
Methylcyclohexane	< 2.00	ug/L	3/8/2019 14:48
Methylene chloride	< 5.00	ug/L	3/8/2019 14:48
o-Xylene	< 2.00	ug/L	3/8/2019 14:48
Styrene	< 5.00	ug/L	3/8/2019 14:48
Tetrachloroethene	< 2.00	ug/L	3/8/2019 14:48
Toluene	< 2.00	ug/L	3/8/2019 14:48
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 14:48
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 14:48
Trichloroethene	< 2.00	ug/L	3/8/2019 14:48
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 14:48
Vinyl chloride	< 2.00	ug/L	3/8/2019 14:48

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: Equipment Blank 2

Lab Sample ID: 190918-10

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	113	75.3 - 127		3/8/2019	14:48
4-Bromofluorobenzene	76.7	67.4 - 122		3/8/2019	14:48
Pentafluorobenzene	96.6	86.8 - 110		3/8/2019	14:48
Toluene-D8	88.2	85 - 112		3/8/2019	14:48

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59122.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-19

Lab Sample ID: 190918-11

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 11:28
Manganese	< 0.0150	mg/L		3/12/2019 11:28

Method Reference(s): EPA 6010C
EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-19

Lab Sample ID: 190918-11

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 100	ug/L		3/8/2019 21:41
1,1,2,2-Tetrachloroethane	< 100	ug/L	M	3/8/2019 21:41
1,1,2-Trichloroethane	< 100	ug/L	M	3/8/2019 21:41
1,1-Dichloroethane	< 100	ug/L		3/8/2019 21:41
1,1-Dichloroethene	< 100	ug/L		3/8/2019 21:41
1,2,3-Trichlorobenzene	< 250	ug/L		3/8/2019 21:41
1,2,4-Trichlorobenzene	< 250	ug/L		3/8/2019 21:41
1,2-Dibromo-3-Chloropropane	< 500	ug/L		3/8/2019 21:41
1,2-Dibromoethane	< 100	ug/L		3/8/2019 21:41
1,2-Dichlorobenzene	< 100	ug/L		3/8/2019 21:41
1,2-Dichloroethane	< 100	ug/L		3/8/2019 21:41
1,2-Dichloropropane	< 100	ug/L		3/8/2019 21:41
1,3-Dichlorobenzene	< 100	ug/L		3/8/2019 21:41
1,4-Dichlorobenzene	< 100	ug/L		3/8/2019 21:41
1,4-Dioxane	< 1000	ug/L		3/8/2019 21:41
2-Butanone	< 500	ug/L		3/8/2019 21:41
2-Hexanone	< 250	ug/L		3/8/2019 21:41
4-Methyl-2-pentanone	< 250	ug/L		3/8/2019 21:41
Acetone	< 500	ug/L		3/8/2019 21:41
Benzene	< 50.0	ug/L		3/8/2019 21:41
Bromochloromethane	< 250	ug/L		3/8/2019 21:41
Bromodichloromethane	< 100	ug/L		3/8/2019 21:41
Bromoform	< 250	ug/L	M	3/8/2019 21:41
Bromomethane	< 100	ug/L		3/8/2019 21:41
Carbon disulfide	< 100	ug/L		3/8/2019 21:41
Carbon Tetrachloride	< 100	ug/L		3/8/2019 21:41
Chlorobenzene	< 100	ug/L		3/8/2019 21:41

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier:	MW-19			
Lab Sample ID:	190918-11		Date Sampled:	3/6/2019
Matrix:	Groundwater		Date Received:	3/7/2019
Chloroethane	< 100	ug/L		3/8/2019 21:41
Chloroform	< 100	ug/L		3/8/2019 21:41
Chloromethane	< 100	ug/L		3/8/2019 21:41
cis-1,2-Dichloroethene	< 100	ug/L		3/8/2019 21:41
cis-1,3-Dichloropropene	< 100	ug/L		3/8/2019 21:41
Cyclohexane	< 500	ug/L		3/8/2019 21:41
Dibromochloromethane	< 100	ug/L	M	3/8/2019 21:41
Dichlorodifluoromethane	< 100	ug/L		3/8/2019 21:41
Ethylbenzene	< 100	ug/L		3/8/2019 21:41
Freon 113	< 100	ug/L		3/8/2019 21:41
Isopropylbenzene	< 100	ug/L		3/8/2019 21:41
m,p-Xylene	< 100	ug/L		3/8/2019 21:41
Methyl acetate	< 100	ug/L		3/8/2019 21:41
Methyl tert-butyl Ether	< 100	ug/L		3/8/2019 21:41
Methylcyclohexane	< 100	ug/L		3/8/2019 21:41
Methylene chloride	< 250	ug/L		3/8/2019 21:41
o-Xylene	< 100	ug/L		3/8/2019 21:41
Styrene	< 250	ug/L		3/8/2019 21:41
Tetrachloroethene	3700	ug/L		3/8/2019 21:41
Toluene	< 100	ug/L		3/8/2019 21:41
trans-1,2-Dichloroethene	< 100	ug/L		3/8/2019 21:41
trans-1,3-Dichloropropene	< 100	ug/L	M	3/8/2019 21:41
Trichloroethene	< 100	ug/L		3/8/2019 21:41
Trichlorofluoromethane	< 100	ug/L		3/8/2019 21:41
Vinyl chloride	< 100	ug/L		3/8/2019 21:41

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-19

Lab Sample ID: 190918-11

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	122	75.3 - 127		3/8/2019	21:41
4-Bromofluorobenzene	75.8	67.4 - 122		3/8/2019	21:41
Pentafluorobenzene	88.1	86.8 - 110		3/8/2019	21:41
Toluene-D8	85.3	85 - 112		3/8/2019	21:41

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59140.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-22

Lab Sample ID: 190918-12

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	< 0.100	mg/L		3/12/2019 11:49
Manganese	< 0.0150	mg/L		3/12/2019 11:49

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-22

Lab Sample ID: 190918-12

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 19:01
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 19:01
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 19:01
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 19:01
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 19:01
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 19:01
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 19:01
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 19:01
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 19:01
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 19:01
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 19:01
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 19:01
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 19:01
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 19:01
1,4-Dioxane	< 20.0	ug/L		3/8/2019 19:01
2-Butanone	< 10.0	ug/L		3/8/2019 19:01
2-Hexanone	< 5.00	ug/L		3/8/2019 19:01
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 19:01
Acetone	< 10.0	ug/L		3/8/2019 19:01
Benzene	< 1.00	ug/L		3/8/2019 19:01
Bromochloromethane	< 5.00	ug/L		3/8/2019 19:01
Bromodichloromethane	< 2.00	ug/L		3/8/2019 19:01
Bromoform	< 5.00	ug/L		3/8/2019 19:01
Bromomethane	< 2.00	ug/L		3/8/2019 19:01
Carbon disulfide	< 2.00	ug/L		3/8/2019 19:01
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 19:01
Chlorobenzene	< 2.00	ug/L		3/8/2019 19:01

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-22

Lab Sample ID: 190918-12

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 19:01
Chloroform	< 2.00	ug/L	3/8/2019 19:01
Chloromethane	< 2.00	ug/L	3/8/2019 19:01
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 19:01
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 19:01
Cyclohexane	< 10.0	ug/L	3/8/2019 19:01
Dibromochloromethane	< 2.00	ug/L	3/8/2019 19:01
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 19:01
Ethylbenzene	< 2.00	ug/L	3/8/2019 19:01
Freon 113	< 2.00	ug/L	3/8/2019 19:01
Isopropylbenzene	< 2.00	ug/L	3/8/2019 19:01
m,p-Xylene	< 2.00	ug/L	3/8/2019 19:01
Methyl acetate	< 2.00	ug/L	3/8/2019 19:01
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 19:01
Methylcyclohexane	< 2.00	ug/L	3/8/2019 19:01
Methylene chloride	< 5.00	ug/L	3/8/2019 19:01
o-Xylene	< 2.00	ug/L	3/8/2019 19:01
Styrene	< 5.00	ug/L	3/8/2019 19:01
Tetrachloroethene	165	ug/L	3/8/2019 19:01
Toluene	< 2.00	ug/L	3/8/2019 19:01
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 19:01
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 19:01
Trichloroethene	< 2.00	ug/L	3/8/2019 19:01
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 19:01
Vinyl chloride	< 2.00	ug/L	3/8/2019 19:01

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-22

Lab Sample ID: 190918-12

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	122	75.3 - 127		3/8/2019 19:01
4-Bromofluorobenzene	77.3	67.4 - 122		3/8/2019 19:01
Pentafluorobenzene	91.3	86.8 - 110		3/8/2019 19:01
Toluene-D8	87.3	85 - 112		3/8/2019 19:01

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59133.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-23

Lab Sample ID: 190918-13

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Iron	0.685	mg/L		3/12/2019 11:54
Manganese	0.125	mg/L		3/12/2019 11:54

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 3/11/2019

Data File: 190312A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: MW-23

Lab Sample ID: 190918-13

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 40.0	ug/L		3/11/2019 14:08
1,1,2,2-Tetrachloroethane	< 40.0	ug/L		3/11/2019 14:08
1,1,2-Trichloroethane	< 40.0	ug/L		3/11/2019 14:08
1,1-Dichloroethane	< 40.0	ug/L		3/11/2019 14:08
1,1-Dichloroethene	< 40.0	ug/L		3/11/2019 14:08
1,2,3-Trichlorobenzene	< 100	ug/L		3/11/2019 14:08
1,2,4-Trichlorobenzene	< 100	ug/L		3/11/2019 14:08
1,2-Dibromo-3-Chloropropane	< 200	ug/L		3/11/2019 14:08
1,2-Dibromoethane	< 40.0	ug/L		3/11/2019 14:08
1,2-Dichlorobenzene	< 40.0	ug/L		3/11/2019 14:08
1,2-Dichloroethane	< 40.0	ug/L		3/11/2019 14:08
1,2-Dichloropropane	< 40.0	ug/L		3/11/2019 14:08
1,3-Dichlorobenzene	< 40.0	ug/L		3/11/2019 14:08
1,4-Dichlorobenzene	< 40.0	ug/L		3/11/2019 14:08
1,4-Dioxane	< 400	ug/L		3/11/2019 14:08
2-Butanone	< 200	ug/L		3/11/2019 14:08
2-Hexanone	< 100	ug/L		3/11/2019 14:08
4-Methyl-2-pentanone	< 100	ug/L		3/11/2019 14:08
Acetone	< 200	ug/L		3/11/2019 14:08
Benzene	< 20.0	ug/L		3/11/2019 14:08
Bromochloromethane	< 100	ug/L		3/11/2019 14:08
Bromodichloromethane	< 40.0	ug/L		3/11/2019 14:08
Bromoform	< 100	ug/L		3/11/2019 14:08
Bromomethane	< 40.0	ug/L		3/11/2019 14:08
Carbon disulfide	< 40.0	ug/L		3/11/2019 14:08
Carbon Tetrachloride	< 40.0	ug/L		3/11/2019 14:08
Chlorobenzene	< 40.0	ug/L		3/11/2019 14:08

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier:	MW-23			
Lab Sample ID:	190918-13		Date Sampled:	3/6/2019
Matrix:	Groundwater		Date Received:	3/7/2019
Chloroethane	< 40.0	ug/L		3/11/2019 14:08
Chloroform	< 40.0	ug/L		3/11/2019 14:08
Chloromethane	< 40.0	ug/L		3/11/2019 14:08
cis-1,2-Dichloroethene	< 40.0	ug/L		3/11/2019 14:08
cis-1,3-Dichloropropene	< 40.0	ug/L		3/11/2019 14:08
Cyclohexane	< 200	ug/L		3/11/2019 14:08
Dibromochloromethane	< 40.0	ug/L		3/11/2019 14:08
Dichlorodifluoromethane	< 40.0	ug/L		3/11/2019 14:08
Ethylbenzene	< 40.0	ug/L		3/11/2019 14:08
Freon 113	< 40.0	ug/L		3/11/2019 14:08
Isopropylbenzene	< 40.0	ug/L		3/11/2019 14:08
m,p-Xylene	< 40.0	ug/L		3/11/2019 14:08
Methyl acetate	< 40.0	ug/L		3/11/2019 14:08
Methyl tert-butyl Ether	< 40.0	ug/L		3/11/2019 14:08
Methylcyclohexane	< 40.0	ug/L		3/11/2019 14:08
Methylene chloride	< 100	ug/L		3/11/2019 14:08
o-Xylene	< 40.0	ug/L		3/11/2019 14:08
Styrene	< 100	ug/L		3/11/2019 14:08
Tetrachloroethene	2390	ug/L	M,D	3/11/2019 14:08
Toluene	< 40.0	ug/L		3/11/2019 14:08
trans-1,2-Dichloroethene	< 40.0	ug/L		3/11/2019 14:08
trans-1,3-Dichloropropene	< 40.0	ug/L		3/11/2019 14:08
Trichloroethene	< 40.0	ug/L		3/11/2019 14:08
Trichlorofluoromethane	< 40.0	ug/L		3/11/2019 14:08
Vinyl chloride	< 40.0	ug/L		3/11/2019 14:08

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: GZA Geo Environmental of New York

Project Reference: Boices Lane

Sample Identifier: MW-23

Lab Sample ID: 190918-13

Date Sampled: 3/6/2019

Matrix: Groundwater

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	122	75.3 - 127		3/11/2019 14:08
4-Bromofluorobenzene	74.2	67.4 - 122		3/11/2019 14:08
Pentafluorobenzene	91.3	86.8 - 110		3/11/2019 14:08
Toluene-D8	85.8	85 - 112		3/11/2019 14:08

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59155.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Trip Blank T884

Lab Sample ID: 190918-14

Date Sampled: 2/27/2019

Matrix: Water

Date Received: 3/7/2019

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		3/8/2019 15:11
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/8/2019 15:11
1,1,2-Trichloroethane	< 2.00	ug/L		3/8/2019 15:11
1,1-Dichloroethane	< 2.00	ug/L		3/8/2019 15:11
1,1-Dichloroethene	< 2.00	ug/L		3/8/2019 15:11
1,2,3-Trichlorobenzene	< 5.00	ug/L		3/8/2019 15:11
1,2,4-Trichlorobenzene	< 5.00	ug/L		3/8/2019 15:11
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		3/8/2019 15:11
1,2-Dibromoethane	< 2.00	ug/L		3/8/2019 15:11
1,2-Dichlorobenzene	< 2.00	ug/L		3/8/2019 15:11
1,2-Dichloroethane	< 2.00	ug/L		3/8/2019 15:11
1,2-Dichloropropane	< 2.00	ug/L		3/8/2019 15:11
1,3-Dichlorobenzene	< 2.00	ug/L		3/8/2019 15:11
1,4-Dichlorobenzene	< 2.00	ug/L		3/8/2019 15:11
1,4-Dioxane	< 20.0	ug/L		3/8/2019 15:11
2-Butanone	< 10.0	ug/L		3/8/2019 15:11
2-Hexanone	< 5.00	ug/L		3/8/2019 15:11
4-Methyl-2-pentanone	< 5.00	ug/L		3/8/2019 15:11
Acetone	< 10.0	ug/L		3/8/2019 15:11
Benzene	< 1.00	ug/L		3/8/2019 15:11
Bromochloromethane	< 5.00	ug/L		3/8/2019 15:11
Bromodichloromethane	< 2.00	ug/L		3/8/2019 15:11
Bromoform	< 5.00	ug/L		3/8/2019 15:11
Bromomethane	< 2.00	ug/L		3/8/2019 15:11
Carbon disulfide	< 2.00	ug/L		3/8/2019 15:11
Carbon Tetrachloride	< 2.00	ug/L		3/8/2019 15:11
Chlorobenzene	< 2.00	ug/L		3/8/2019 15:11

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Trip Blank T884

Lab Sample ID: 190918-14

Date Sampled: 2/27/2019

Matrix: Water

Date Received: 3/7/2019

Chloroethane	< 2.00	ug/L	3/8/2019 15:11
Chloroform	< 2.00	ug/L	3/8/2019 15:11
Chloromethane	< 2.00	ug/L	3/8/2019 15:11
cis-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 15:11
cis-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 15:11
Cyclohexane	< 10.0	ug/L	3/8/2019 15:11
Dibromochloromethane	< 2.00	ug/L	3/8/2019 15:11
Dichlorodifluoromethane	< 2.00	ug/L	3/8/2019 15:11
Ethylbenzene	< 2.00	ug/L	3/8/2019 15:11
Freon 113	< 2.00	ug/L	3/8/2019 15:11
Isopropylbenzene	< 2.00	ug/L	3/8/2019 15:11
m,p-Xylene	< 2.00	ug/L	3/8/2019 15:11
Methyl acetate	< 2.00	ug/L	3/8/2019 15:11
Methyl tert-butyl Ether	< 2.00	ug/L	3/8/2019 15:11
Methylcyclohexane	< 2.00	ug/L	3/8/2019 15:11
Methylene chloride	< 5.00	ug/L	3/8/2019 15:11
o-Xylene	< 2.00	ug/L	3/8/2019 15:11
Styrene	< 5.00	ug/L	3/8/2019 15:11
Tetrachloroethene	< 2.00	ug/L	3/8/2019 15:11
Toluene	< 2.00	ug/L	3/8/2019 15:11
trans-1,2-Dichloroethene	< 2.00	ug/L	3/8/2019 15:11
trans-1,3-Dichloropropene	< 2.00	ug/L	3/8/2019 15:11
Trichloroethene	< 2.00	ug/L	3/8/2019 15:11
Trichlorofluoromethane	< 2.00	ug/L	3/8/2019 15:11
Vinyl chloride	< 2.00	ug/L	3/8/2019 15:11

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Lab Project ID: 190918

Client: **GZA Geo Environmental of New York**

Project Reference: Boices Lane

Sample Identifier: Trip Blank T884

Lab Sample ID: 190918-14

Date Sampled: 2/27/2019

Matrix: Water

Date Received: 3/7/2019

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	117	75.3 - 127		3/8/2019	15:11
4-Bromofluorobenzene	79.9	67.4 - 122		3/8/2019	15:11
Pentafluorobenzene	93.2	86.8 - 110		3/8/2019	15:11
Toluene-D8	86.5	85 - 112		3/8/2019	15:11

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x59123.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, March 21, 2019



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

"(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 26, 2018

GENERAL TERMS AND CONDITIONS

LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation.

LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure.

Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling.

Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility.

LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment.

LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure.

LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law.

This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 26, 2018

CHAIN OF CUSTODY**REPORT TO:****INVOICE TO:****PARADIGM**
ENVIRONMENTAL SERVICES, INC.CLIENT: **GZA GeoEnvironmental**CLIENT: **Same**

LAB PROJECT ID

ADDRESS: **6296 Fly Road**

ADDRESS:

190918CITY: **East Syr**STATE: **NY**ZIP: **13057**

CITY:

STATE:

ZIP:

Quotation #:

PHONE: **315-800-1809**

PHONE:

Email: **benjamin.haith@gza.com****PROJECT REFERENCE****Boices Lane**

ATTN:

Ben Haith

ATTN:

Matrix Codes:**AQ - Aqueous Liquid**
NA - Non-Aqueous Liquid**WA - Water**
WG - Groundwater**DW - Drinking Water**
WW - Wastewater**SO - Soil**
SL - Sludge**SD - Solid**
PT - Paint**WP - Wipe**
CK - Caulk**OL - Oil**
AR - Air**REQUESTED ANALYSIS**

DATE COLLECTED	TIME COLLECTED	C O M P O S I T I O N	SAMPLE IDENTIFIER	M C A O T D R E I S	N O N M T B E A I R N O F S	TCL VOCs 8260	TOC 9060	Alkalinity 310.1	Dis. Gas. RSK-175	Fe, Mn 6010	Sulfate, Nitrate 300.0	REMARKS	PARADIGM LAB SAMPLE NUMBER
		X	MM-1	WG	18	X	X	X	X	X	X	Run MS/MSD	
		X	MM-2	WG	9	X	X	X	X	X	X		
		X	MM-3	WG	9	X	X	X	X	X	X		
		X	MM-4	WG	9	X	X	X	X	X	X		
3/6	09:40	X	MM-5	WG	9	X	X	X	X	X	X	Run MS/MSD Run MS/MSD 3/6/19	01
		X	MM-6	WG	9	X	X	X	X	X	X		
		X	MM-15S	WG	9	X	X	X	X	X	X		
		X	MM-15M	WG	9	X	X	X	X	X	X		
3/6	07:35	X	MM-16S	WG	9	X	X	X	X	X	X	Sulfate, Nitrate, TOC	02
3/6	07:45	X	MM-16M	WG	9	X	X	X	X	X	X	Soil directly to sub lab.	03

Turnaround Time**Report Supplements**

Availability contingent upon lab approval; additional fees may apply.

Standard 5 day

None Required

None Required

10 day

Batch QC

Basic EDD

Rush 3 day

Category A

NYSDEC EDD

Rush 2 day

Category B

Rush 1 day

Other

Please indicate date needed:

Other

Other EDD

Sampled By

Dustin Fletcher

Date/Time

3/6 12:30

Total Cost:

Relinquished By

Dustin Fletcher

Date/Time

3/6 12:30

Received By

Ben Haith

Date/Time

3/6/19 16:00

P.L.F.

Received @ Lab By

Ben Haith

Date/Time

3/7/19 13:45

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

CHAIN OF CUSTODY

REPORT TO:

INVOICE TO:

PARADIGM
ENVIRONMENTAL SERVICES, INC.CLIENT: **GZA GeoEnvironmental**CLIENT: **Same**

LAB PROJECT ID

ADDRESS: **6296 Fly Road**

ADDRESS:

CITY: **East Syr**STATE: **NY**

CITY:

STATE:

ZIP:

Quotation #:

PHONE: **315-800-1809**

PHONE:

Email: **benjamin.haith@gza.com**

PROJECT REFERENCE

Boices Lane

ATTN: **Ben Haith**

ATTN:

Matrix Codes:

AQ - Aqueous Liquid
NQ - Non-Aqueous LiquidWA - Water
WG - GroundwaterDW - Drinking Water
WW - WastewaterSO - Soil
SL - SludgeSD - Solid
PT - PaintWP - Wipe
CK - CaulkOL - Oil
AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GARB	SAMPLE IDENTIFIER	MC AO TD RES IS	NO UNT BEA T O R S	TCL VOCs 8260	TOC 9060	Alkalinity 310.1	Dis. Gas. RSK-175	Fe, Mn 6010	Sulfate, Nitrate 300.0	REMARKS	PARADIGM LAB SAMPLE NUMBER
3/6	08:40	X	X	MM-17S	WG	9.4	X	X	X	X	X	X		07
3/6	08:45	X	X	MM-17M	WG	9.4	X	X	X	X	X	X		05
		X	X	MM-18S	WG		X	X	X	X	X	X		
		X	X	MM-18M	WG		X	X	X	X	X	X		
3/6	09:50	X	X	Field Duplicate 1	WG	9.4	X	X	X	X	X	X		06
3/6	11:30	X	X	Field Duplicate 2	WG	9.4	X	X	X	X	X	X		07
		X	X											
2/28/19		X	X	Trip Blank T886	WA	AQ	1	X						08
		X	X											
		X	X											

Turnaround Time

Report Supplements

Availability contingent upon lab approval; additional fees may apply.

Standard 5 day

None Required

None Required

10 day

☒

Batch QC

Basic EDD

Rush 3 day

☐

Category A

NVSDEC EDD

Rush 2 day

☐

Category B

Rush 1 day

☒

Other

☐

Other EDD

Other EDD

Please indicate date needed:

Please indicate date needed:

Please indicate date needed:

Sampled By

Date/Time

Total Cost:

Relinquished By

Date/Time

Received By

Date/Time

P.L.F.

Received @ Lab By

Date/Time

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.



CHAIN OF CUSTODY

3/5/5

3/4

REPORT TO:

INVOICE TO:

CLIENT: GZA GeoEnvironmental	CLIENT: Same	LAB PROJECT ID
ADDRESS: 6296 Fly Road	ADDRESS:	190918
CITY: East Syr STATE: NY ZIP: 13057	CITY: STATE: ZIP:	Quotation #:
PHONE: 315-800-1809	PHONE:	Email: benjamin.haith@gza.com

PROJECT REFERENCE

Boices Lane

ATTN: Ben Haith

ATTN:

Matrix Codes:

AQ - Aqueous Liquid
NQ - Non-Aqueous LiquidWA - Water
WG - GroundwaterDW - Drinking Water
WW - WastewaterSO - Soil
SL - SludgeSD - Solid
PT - PaintWP - Wipe
CK - CaulkOL - Oil
AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRADES	SAMPLE IDENTIFIER	MC AC TD RE IS X	NO UN MT BA EI RN OE FS	TCL VOCs 8260	TOC 9060	Alkalinity 310.1	Dis. Gas. RSK-175	Fe, Mn 6010	Sulfate, Nitrate 300.0	REMARKS	PARADIGM LAB SAMPLE NUMBER
			X	MMW-7	WG	9	X	X	X	X	X	X		
			X	MMW-8	WG	9	X	X	X	X	X	X		
			X	MMW-9	WG	9	X	X	X	X	X	X		
			X	MMW-10	WG	9	X	X	X	X	X	X		
			X	MMW-11	WG	9	X	X	X	X	X	X		
			X	MMW-12	WG	9	X	X	X	X	X	X		
			X	MMW-13	WG	9	X	X	X	X	X	X		
			X	MMW-14	WG	9	X	X	X	X	X	X		
3/6	11:45		X	Equipment Blank 1	WG	9	X	X	X	X	X	X		09
3/6	11:50		X	Equipment Blank 2	WG	9	X	X	X	X	X	X		10

Turnaround Time

Report Supplements

Availability contingent upon lab approval; additional fees may apply.

Standard 5 day

None Required

None Required

10 day

Batch QC

Basic EDD

Rush 3 day

Category A

NYSDEC EDD

Rush 2 day

Category B

Rush 1 day

Other

Other EDD

Other

Other

Other

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

Sampled By

Date/Time

Total Cost

Relinquished By

Date/Time

Received By

Date/Time

P.L.F.

Received @ Lab By

Date/Time



INVOICE TO:

PROJECT REFERENCE

Boices Lane

Matrix Codes:

AQ - Aqueous Liquid
NQ - Non-Aqueous Liquid

WA - Water
WG - Groundwater

DW - Drinking Water
WW - Wastewater

SO - Soil
SL - Sludge

SD - Solid
PT - Paint

WP - Wipe
CK - Caulk

OL - Oil
AR - Air

REQUESTED ANALYSIS[illegible]

Turnaround Time	Report Supplements	
Availability contingent upon lab approval; additional fees may apply.		
Standard 5 day	☐	None Required ☐
10 day	☒	Batch QC ☐
Rush 3 day	☐	Category A ☐
Rush 2 day	☐	Category B ☒
Rush 1 day	☒	
Other ☐	Other ☐	Other EDD ☐
Please indicate date needed: _____		
Please indicate package needed: _____		
Please indicate EDD needed: _____		

Sampled By	Date/Time
Dustin Fletcher	3/6 12:30

Total Cost:

Relinquished By	Dustin Fletcher	Date/Time	3/6 12:30
-----------------	-----------------	-----------	-----------

Received By	<i>M. J. J. J. J.</i>	Date/Time	<i>3 Nov 11 11:00</i>
-------------	-----------------------	-----------	-----------------------

P.I.F.

Received @ Lab By	Date/Time

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

S.F.S



Chain of Custody Supplement

Client: GZA Geo Environmental Completed by: Glean Pezzulo
 Lab Project ID: 190918 Date: 3/7/19

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	<i>NELAC compliance with the sample condition requirements upon receipt</i>		
	Yes	No	N/A
Container Type	☒	☐	☐
Comments			
Transferred to method-compliant container	☐	☐	☒
Headspace (<1 mL)	☒ VOA	☐	☒
Comments			
Preservation	☒ VOA Total Metals	☐	☒
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☒
Comments			
Holding Time	☒	☐	☐
Comments			
Temperature	☒	☐	☒ metals
Comments	<u>4°C cool 3/7/19 12:10</u>		
Sufficient Sample Quantity	☒	☐	☐
Comments			

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-5
Collection Date: 3/6/2019 9:40:00 AM
Lab Sample ID: 190306074-009
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	3.18	0.04		mg/L	2	3/7/2019 6:21:19 PM
Sulfate	85.2	2.00		mg/L	2	3/7/2019 6:21:19 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	280	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	2.4	1.0		mg/L	1	3/11/2019 4:31:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank X - Value exceeds Maximum Contaminant Level E - Value above quantitation range-Estimate	S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits N - Matrix Spike below accepted limits (+ above) T - Tentitively Identified Compound-Estimated Conc.
--------------------	---	--

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental**Client Sample ID:** MW-16S**Work Order:** 190306074**Collection Date:** 3/6/2019 7:35:00 AM**Reference:** Sample Analysis / Boices Lane**Lab Sample ID:** 190306074-010**PO#:****Matrix:** GROUNDWATER**SDG# :** MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	0.76	0.04		mg/L	2	3/7/2019 6:40:24 PM
Sulfate	6.63	2.00		mg/L	2	3/7/2019 6:40:24 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	52	4		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	1.5	1.0		mg/L	1	3/11/2019 4:48:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-16M
Collection Date: 3/6/2019 7:45:00 AM
Lab Sample ID: 190306074-011
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	ND	0.04		mg/L	2	3/7/2019 6:59:29 PM
Sulfate	20.6	2.00		mg/L	2	3/7/2019 6:59:29 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	200	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	1.1	1.0		mg/L	1	3/11/2019 5:04:00 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental**Client Sample ID:** MW-17S**Work Order:** 190306074**Collection Date:** 3/6/2019 8:40:00 AM**Reference:** Sample Analysis / Boices Lane**Lab Sample ID:** 190306074-012**PO#:****Matrix:** GROUNDWATER**SDG# :** MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	3.07	0.04		mg/L	2	3/7/2019 7:18:34 PM
Sulfate	102	2.00		mg/L	2	3/7/2019 7:18:34 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	190	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	1.8	1.0		mg/L	1	3/11/2019 5:20:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-17M
Collection Date: 3/6/2019 8:45:00 AM
Lab Sample ID: 190306074-013
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	0.07	0.04		mg/L	2	3/7/2019 8:35:36 PM
Sulfate	28.5	2.00		mg/L	2	3/7/2019 8:35:36 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	130	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	ND	1.0		mg/L	1	3/11/2019 5:37:00 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: Field Duplicate 1
Collection Date: 3/6/2019 9:50:00 AM
Lab Sample ID: 190306074-014
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	3.14	0.04		mg/L	2	3/7/2019 8:54:48 PM
Sulfate	82.7	2.00		mg/L	2	3/7/2019 8:54:48 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	290	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	3.2	1.0		mg/L	1	3/11/2019 5:53:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: Field Duplicate 2
Collection Date: 3/6/2019 11:30:00 AM
Lab Sample ID: 190306074-015
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	1.90	0.04		mg/L	2	3/7/2019 9:13:53 PM
Sulfate	45.6	2.00		mg/L	2	3/7/2019 9:13:53 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	160	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	3.9	1.0		mg/L	1	3/11/2019 6:11:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank X - Value exceeds Maximum Contaminant Level E - Value above quantitation range-Estimate	S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits N - Matrix Spike below accepted limits (+ above) T - Tentitively Identified Compound-Estimated Conc.
--------------------	---	--

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: Equipment Blank 1
Collection Date: 3/6/2019 11:45:00 AM
Lab Sample ID: 190306074-016
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	ND	0.04		mg/L	2	3/7/2019 9:32:58 PM
Sulfate	ND	2.00		mg/L	2	3/7/2019 9:32:58 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	3	1		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	ND	1.0		mg/L	1	3/11/2019 6:27:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
	J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: Equipment Blank 2
Collection Date: 3/6/2019 11:50:00 AM
Lab Sample ID: 190306074-017
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	ND	0.04		mg/L	2	3/7/2019 9:52:03 PM
Sulfate	ND	2.00		mg/L	2	3/7/2019 9:52:03 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	2	1		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	ND	1.0		mg/L	1	3/11/2019 6:42:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-19
Collection Date: 3/6/2019 10:20:00 AM
Lab Sample ID: 190306074-018
Matrix: GROUNDWATER

SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	2.20	0.04		mg/L	2	3/7/2019 10:11:09 PM
Sulfate	67.0	2.00		mg/L	2	3/7/2019 10:11:09 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	200	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	2.2	1.0		mg/L	1	3/11/2019 6:59:00 PM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental**Client Sample ID:** MW-22**Work Order:** 190306074**Collection Date:** 3/6/2019 9:25:00 AM**Reference:** Sample Analysis / Boices Lane**Lab Sample ID:** 190306074-019**PO#:****Matrix:** GROUNDWATER**SDG# :** MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	2.49	0.04		mg/L	2	3/7/2019 11:08:25 PM
Sulfate	108	2.00		mg/L	2	3/7/2019 11:08:25 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	230	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	2.5	1.0		mg/L	1	3/11/2019 8:43:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 20-Mar-19

CLIENT: Paradigm Environmental
Work Order: 190306074
Reference: Sample Analysis / Boices Lane
PO#:

Client Sample ID: MW-23
Collection Date: 3/6/2019 11:15:00 AM
Lab Sample ID: 190306074-020
Matrix: GROUNDWATER

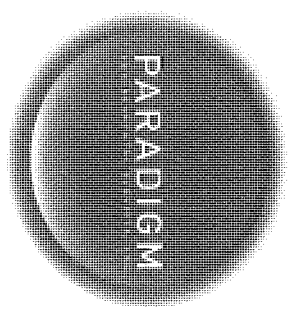
SDG# : MW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: CS
Nitrate, Nitrogen (As N)	1.91	0.04		mg/L	2	3/8/2019 12:45:31 AM
Sulfate	45.4	2.00		mg/L	2	3/8/2019 12:45:31 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011						Analyst: DAA
Alkalinity, Total (As CaCO3)	160	10		mg/L CaCO3	1	3/8/2019
TOTAL ORGANIC CARBON - SM 5310C-2011						Analyst: NK
Total Organic Carbon	3.8	1.0		mg/L	1	3/11/2019 9:00:00 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
Z - RPD outside accepted recovery limits
N - Matrix Spike below accepted limits (+ above)
T - Tentitively Identified Compound-Estimated Conc.

CHAIN OF CUSTODY



REPORT TO:		INVOICE TO:		LAB PROJECT ID	
CLIENT: <u>Paradigm Environmental</u>		CLIENT: _____		Quotation #: _____	
ADDRESS: <u>179 Lake Ave</u>		ADDRESS: _____		State: _____ ZIP: _____	
CITY: <u>Rochester</u>		CITY: _____		State: _____ ZIP: _____	
PHONE: <u>585-647-2530</u>		PHONE: _____		Email: <u>jdeloia@paradigmenv.com</u>	
ATTN: <u>Jane Deloia</u>		ATTN: _____		Email: _____	
PROJECT REFERENCE: <u>Boires Lane</u>		Matrix Codes: <u>WA - Water</u>		SD - Solid	
		<u>AQ - Aqueous Liquid</u>		PT - Paint	
		<u>NG - Non-Aqueous Liquid</u>		WP - Wipe	
				CK - Caulk	
				OL - Oil	
				AR - Air	

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GARBAGE	SAMPLE IDENTIFIER	MAINTAINED	CONTAMINANTS	REQUESTED ANALYSIS	REMARKS	PARADIGM LAB SAMPLE NUMBER
3/6/19	0940			MW-5	✓		504 mg/L		009
	0735			MW-16S			Alkalinity 310.1		010
	0745			MW-16M					011
	0840			MW-17S					012
	0845			MW-17M					013
	0950			Field Duplicate 1					014
	1130			Field Duplicate 2					015
	1145			Equipment Blank 1					016
	1150			Equipment Blank 2					017
	1030			MW-19					018

Turnaround Time		Report Supplements	
Availability contingent upon lab approval; additional fees may apply.			
Standard 5 day	☐	None Required	☐
10 day	☒	Batch QC	☐
Rush 3 day	☐	Category A	☐
Rush 2 day	☐	Category B	☒
Rush 1 day	☐		
Date Needed _____	Other ☐	Other EDD ☐	
please indicate date needed: _____			

Sampled By <u>M. M. P. Deloia</u>		Date/Time <u>3/7/19</u>	Total Cost: <u>140⁰⁰</u>
Relinquished By _____		Date/Time _____	
Received By <u>J. M. Deloia</u>		Date/Time <u>3/7/19 3:25 PM</u>	P.I.F. ☐
Received @ Lab By _____		Date/Time _____	

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

~~2~~

CHAIN OF CUSTODY

PARADIGM		REPORT TO:	INVOICE TO:				LAB PROJECT ID				
CLIENT:	Paradigm Environmental	CLIENT:									
ADDRESS:	179 Kete Ave	ADDRESS:									
CITY:	Redwater	CITY:									
STATE:	NS	STATE:									
PHONE:	585-647-2530	PHONE:									
ATTN:	Jane Deloia	ATTN:									
PROJECT REFERENCE		Matrix Codes:		Quotation #:		Email:					
Bojers Lane		AQ - Aqueous Liquid				i.deloria@paradigmenv.com					
		NQ - Non-Aqueous Liquid									
		WA - Water									
		WG - Groundwater									
		DW - Drinking Water									
		WW - Wastewater									
		SO - Soil									
		SL - Sludge									
		SD - Solid									
		PT - Paint									
		WP - Wipe									
		CK - Caulk									
		OL - Oil									
		AR - Air									

[illegible]

Turnaround Time	Report Supplements	
Availability contingent upon lab approval; additional fees may apply.		
Standard 5 day	☐	None Required ☐
10 day	☒	Batch QC ☐
Rush 3 day	☐	Category A ☐
Rush 2 day	☐	Category B ☒
Rush 1 day	☐	Other ☐
Date Needed _____	Other _____	Other EDD ☐
please indicate date needed: _____	please indicate package needed: _____	please indicate EDD needed: _____

Sampled By	Date/Time	Total Cost:
Mrs. Pottel	3/7/19	
Relinquished By	Date/Time	
Received By	Date/Time	P.I.F.
J. M.	3/7/19	3257m
Received @ Lab By	Date/Time	

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

See additional page for sample conditions.



Experience is the solution

314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

- (a) Neither **Adirondack Environmental Services, Inc.**, nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.**'s performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.
- (b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.
- (c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.
- (d) In no event shall **Adirondack Environmental Services, Inc.**, its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.
- (e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**
- (f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.
- (g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

March 11, 2019

Joni Deutscher
Paradigm Environmental Service
179 Lake Avenue
Rochester, NY 14608

RE: Project: 190918
Pace Project No.: 7081808

Dear Joni Deutscher:

Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Jane Daloia, Paradigm Environmental Services
Reporting, Paradigm Environmental Services



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 190918
Pace Project No.: 7081808

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435

Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-5		Lab ID: 7081808001	Collected: 03/06/19 09:40		Received: 03/08/19 09:50		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 15:55	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 15:55	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 15:55	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-16S		Lab ID: 7081808002	Collected: 03/06/19 07:35	Received: 03/08/19 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:06	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:06	74-85-1	
Methane, Dissolved	111	ug/L	43.0	43	03/09/19 10:46	03/10/19 14:18	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-16M		Lab ID: 7081808003		Collected: 03/06/19 07:45		Received: 03/08/19 09:50		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175							
Ethane, Dissolved		<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:17	74-84-0	
Ethene, Dissolved		<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:17	74-85-1	
Methane, Dissolved		114	ug/L	43.0	43	03/09/19 10:46	03/10/19 14:27	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-17S		Lab ID: 7081808004	Collected: 03/06/19 08:40	Received: 03/08/19 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:27	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:27	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:27	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-17M		Lab ID: 7081808005	Collected: 03/06/19 08:45		Received: 03/08/19 09:50		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:36	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:36	74-85-1	
Methane, Dissolved	5.7	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:36	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: FIELD DUPLICATE 1		Lab ID: 7081808006	Collected: 03/06/19 09:50	Received: 03/08/19 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:47	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:47	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:47	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: FIELD DUPLICATE 2		Lab ID: 7081808007	Collected: 03/06/19 11:30	Received: 03/08/19 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:59	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:59	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 16:59	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: EQUIPMENT BLANK 1		Lab ID: 7081808008	Collected: 03/06/19 11:45	Received: 03/08/19 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 17:09	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 17:09	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 17:09	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: EQUIPMENT BLANK 2		Lab ID: 7081808009	Collected: 03/06/19 11:50		Received: 03/08/19 09:50		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 17:18	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 17:18	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/09/19 17:18	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-19		Lab ID: 7081808010	Collected: 03/06/19 10:20		Received: 03/08/19 09:50		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 14:36	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 14:36	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 14:36	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-22		Lab ID: 7081808011	Collected: 03/06/19 09:25	Received: 03/08/19 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175						
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 15:02	74-84-0	
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 15:02	74-85-1	
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 15:02	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 190918
Pace Project No.: 7081808

Sample: MW-23		Lab ID: 7081808012		Collected: 03/06/19 11:15		Received: 03/08/19 09:50		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Dissolved Gases		Analytical Method: RSK-175 Preparation Method: RSK-175							
Ethane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 15:15	74-84-0		
Ethene, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 15:15	74-85-1		
Methane, Dissolved	<1.0	ug/L	1.0	1	03/09/19 10:46	03/10/19 15:15	74-82-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 190918
Pace Project No.: 7081808

QC Batch: 104766 Analysis Method: RSK-175
QC Batch Method: RSK-175 Analysis Description: RSK 175 HEADSPACE
Associated Lab Samples: 7081808001, 7081808002, 7081808003, 7081808004, 7081808005, 7081808006, 7081808007, 7081808008, 7081808009, 7081808010, 7081808011, 7081808012

METHOD BLANK: 484500 Matrix: Water
Associated Lab Samples: 7081808001, 7081808002, 7081808003, 7081808004, 7081808005, 7081808006, 7081808007, 7081808008, 7081808009, 7081808010, 7081808011, 7081808012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethane, Dissolved	ug/L	<1.0	1.0	03/09/19 15:36	
Ethene, Dissolved	ug/L	<1.0	1.0	03/09/19 15:36	
Methane, Dissolved	ug/L	<1.0	1.0	03/09/19 15:36	

LABORATORY CONTROL SAMPLE: 484501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethane, Dissolved	ug/L	10.2	7.0	69	32-156	
Ethene, Dissolved	ug/L	10.3	8.1	79	30-167	
Methane, Dissolved	ug/L	10.2	3.5	34	22-166	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 484502 484503

Parameter	Units	7081808010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Ethane, Dissolved	ug/L	<1.0	10.2	10.2	13.3	16.1	130	157	10-183	19	
Ethene, Dissolved	ug/L	<1.0	10.3	10.3	13.2	14.1	127	135	10-189	7	
Methane, Dissolved	ug/L	<1.0	10.2	10.2	6.4	7.0	61	66	10-184	8	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 484504 484505

Parameter	Units	7081808012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Ethane, Dissolved	ug/L	<1.0	10.2	10.2	13.5	14.2	132	139	10-183	5	
Ethene, Dissolved	ug/L	<1.0	10.3	10.3	12.2	13.4	118	129	10-189	9	
Methane, Dissolved	ug/L	<1.0	10.2	10.2	6.0	6.4	56	60	10-184	7	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: 190918
Pace Project No.: 7081808

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 190918
Pace Project No.: 7081808

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7081808001	MW-5	RSK-175	104766	RSK-175	104782
7081808002	MW-16S	RSK-175	104766	RSK-175	104782
7081808003	MW-16M	RSK-175	104766	RSK-175	104782
7081808004	MW-17S	RSK-175	104766	RSK-175	104782
7081808005	MW-17M	RSK-175	104766	RSK-175	104782
7081808006	FIELD DUPLICATE 1	RSK-175	104766	RSK-175	104782
7081808007	FIELD DUPLICATE 2	RSK-175	104766	RSK-175	104782
7081808008	EQUIPMENT BLANK 1	RSK-175	104766	RSK-175	104782
7081808009	EQUIPMENT BLANK 2	RSK-175	104766	RSK-175	104782
7081808010	MW-19	RSK-175	104766	RSK-175	104782
7081808011	MW-22	RSK-175	104766	RSK-175	104782
7081808012	MW-23	RSK-175	104766	RSK-175	104782

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

10F2

CHAIN OF CUSTODY

10478

PARADIGM
ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:	
CLIENT: <i>Paradigm Environmental</i>	CLIENT:	LAB PROJECT ID	
ADDRESS: <i>179 Lake Ave</i>	ADDRESS:		
CITY: <i>Rochester NY</i> STATE: <i>NY</i> ZIP: <i>14608</i>	CITY: STATE: ZIP:	Quotation #:	
PHONE: <i>585-647-2530</i>	PHONE:	Email: <i>jdolore@paradigmenv.com</i>	
ATTN: <i>Jane Dolore</i>	ATTN:		

PROJECT REFERENCE <i>Boices lane</i>	Matrix Codes:		WA - Water	DW - Drinking Water	SO - Soil	SD - Solid	WP - Wipe	OL - Oil
	AQ - Aqueous Liquid	NQ - Non-Aqueous Liquid	WG - Groundwater	WW - Wastewater	SL - Sludge	PT - Paint	CK - Caulk	AR - Air

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRA	SAMPLE IDENTIFIER	REQUESTED ANALYSIS										REMARKS	SAMPLE NUMBER
					C	N	U	N	T	A	B	E	I	N		
3/6/19	0940		X	MW-5											Report J Flgs. SOG closed.	
	0735		X	MW-16S											Asp Cat B Package Due 3/29/19	
	0745		X	MW-16M											SW-846 HTS.	
	0840		X	MW-17S												
	0845		X	MW-17M												
	0950		X	Field Duplicate 1												
	1130		X	Field Duplicate 2												
	1145		X	Equipment Blank 1												
	1150		X	Equipment Blank 2												
	1020		X	MW-19												

WO#: 7081808



RAW MS/USD

Turnaround Time	Report Supplements
Availability contingent upon lab approval; additional fees may apply. Standard 5 day ☐ None Required ☐ 10 day ☐ Batch QC ☐ Rush 3 day ☐ Category A ☐ Rush 2 day ☐ Category B ☒ Rush 1 day ☐ Other ☐ Date Needed <i>3/19/19</i> please indicate date needed:	None Required ☐ Basic EDD ☐ NYSDEC EDD ☒ Other EDD ☐ please indicate EDD needed:

Sampled By <i>SP2</i>	Date/Time <i>3/7/19 16:00</i>	Total Cost:
Relinquished By <i>Jane Dolore</i>	Date/Time <i>3/8/19 09:50</i>	
Received By	Date/Time	P.I.F.
Received @ Lab By	Date/Time	

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

2.F 2

CHAIN OF CUSTODY

10478

PARADIGM
ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:	
CLIENT:	Paradigm Environmental	CLIENT:	
ADDRESS:	179 Lake Ave	ADDRESS:	
CITY:	Rochester	CITY:	STATE: same
PHONE:	585-647-2530	PHONE:	
ATTN:	Jane Palom	ATTN:	

Matrix Codes:
 AQ - Aqueous Liquid
 NQ - Non-Aqueous Liquid
 WA - Water
 WG - Groundwater
 DW - Drinking Water
 WW - Wastewater
 SO - Soil
 SL - Sludge
 SD - Solid
 PT - Paint
 WP - Wipe
 CK - Caulk
 OL - Oil
 AR - Air

PROJECT REFERENCE		REQUESTED ANALYSIS										REMARKS	PARADIGM LAB SAMPLE NUMBER
DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRA B	CONTAINERS	MACTRES	MACTRES	MACTRES	MACTRES	MACTRES	MACTRES	MACTRES		
3/6/15	0925	X		190918	-13							* via R3K-175	
3/6/19	1115	X										Roma Als/mud	

WO# : 7081808
 PM: STS Due Date: 03/19/19
 CLIENT: PAR

Turnaround Time	Report Supplements
Availability contingent upon lab approval; additional fees may apply.	
Standard 5 day	☐ None Required ☐ Basic EDD ☒ NYSDEC EDD ☒ Other EDD
10 day	☐ None Required ☐ Basic EDD ☐ NYSDEC EDD ☐ Other EDD
Rush 3 day	☐ None Required ☐ Basic EDD ☐ NYSDEC EDD ☐ Other EDD
Rush 2 day	☐ None Required ☐ Basic EDD ☐ NYSDEC EDD ☐ Other EDD
Rush 1 day	☐ None Required ☐ Basic EDD ☐ NYSDEC EDD ☐ Other EDD
Date Needed 3/19/19	☐ None Required ☐ Basic EDD ☐ NYSDEC EDD ☐ Other EDD

Sampled By: *DP* Date/Time: 3/7/19 16:00
 Relinquished By: *DP* Date/Time: 3/8/19 9:50
 Received By: *DP* Date/Time:
 Received @ Lab By: *DP* Date/Time:
 Total Cost:
 P.I.F.:

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.



Sample Condition Upon Receipt

Client Name:

PAR

Project:

WO#: 7081808

PM: STS Due Date: 03/19/19

CLIENT: PAR

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 1Z E11 Q12 NT 9636 6585

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☒ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Thermometer Used: TH097 Correction Factor: 0.0

Cooler Temperature (°C): 3.5 Cooler Temperature Corrected (°C): 3.5 Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☒ N/A, water sample)

Date and Initials of person examining contents: #03/18/19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☒ NO

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

			COMMENTS:
Chain of Custody Present:	☒ Yes	☐ No	1.
Chain of Custody Filled Out:	☒ Yes	☐ No	2.
Chain of Custody Relinquished:	☒ Yes	☐ No	3.
Sampler Name & Signature on COC:	☐ Yes	☒ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes	☐ No	5.
Short Hold Time Analysis (<72hr):	☐ Yes	☒ No	6.
Rush Turn Around Time Requested:	☐ Yes	☐ No	7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☒ Yes	☐ No	8.
Correct Containers Used:	☒ Yes	☐ No	9.
-Pace Containers Used:	☒ Yes	☐ No	
Containers Intact:	☒ Yes	☐ No	10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No ☒ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☒ Yes	☐ No	12.
-Includes date/time/ID/Analysis Matrix SL WT OIL			
All containers needing preservation have been checked	☐ Yes	☐ No ☒ N/A	13. ☐ HNO ₃ ☐ H ₂ SO ₄ ☐ NaOH ☐ HCl
pH paper Lot #			Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl, NaOH>9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No ☒ N/A	Initial when completed: Lot # of added preservative: Date/Time preservative added
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis			
Samples checked for dechlorination:	☐ Yes	☐ No ☒ N/A	14. Positive for Res. Chlorine? Y N
KI starch test strips Lot #			
Residual chlorine strips Lot #			
Headspace in VOA Vials (>6mm):	☐ Yes	☒ No ☐ N/A	15.
Trip Blank Present:	☐ Yes	☒ No ☐ N/A	16.
Trip Blank Custody Seals Present	☐ Yes	☐ No ☒ N/A	
Pace Trip Blank Lot # (if applicable):			

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

APPENDIX C

EPA Class V Injection Well Inventory

 INVENTORY OF INJECTION WELLS UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (This information is collected under the authority of the Safe Drinking Water Act)					1. DATE PREPARED <i>(Year, Month, Day)</i>	2. FACILITY ID NUMBER <i>(To be completed by the permitting authority)</i>															
3. FACILITY INFORMATION					4. LEGAL CONTACT INFORMATION																
NAME, ADDRESS, PHONE NUMBER AND/OR EMAIL					NAME, ADDRESS, ORGANIZATION, PHONE NUMBER AND/OR EMAIL																
INDIAN COUNTRY Yes No					TYPE Owner Operator																
5. LOCATIONAL INFORMATION																					
Surface Location <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">1/4 of</td> <td style="width: 15%;">1/4 of</td> <td style="width: 20%;">Section</td> <td style="width: 20%;">Township</td> <td style="width: 30%;">Range</td> </tr> <tr> <td></td> <td>ft. from (N/S)</td> <td>Line of quarter section</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ft. from (E/W)</td> <td>Line of quarter section.</td> <td></td> <td></td> </tr> </table>					1/4 of	1/4 of	Section	Township	Range		ft. from (N/S)	Line of quarter section				ft. from (E/W)	Line of quarter section.			Latitude Longitude	
1/4 of	1/4 of	Section	Township	Range																	
	ft. from (N/S)	Line of quarter section																			
	ft. from (E/W)	Line of quarter section.																			
6. WELL INFORMATION:																					
A. CLASS AND TYPE	B. NUMBER OF WELLS		C. TOTAL NUMBER OF WELLS	D. WELL OPERATION STATUS					COMMENTS <i>(Optional)</i> :												
	COMM	NON-COMM		UC	AC	TA	PA	AN													
KEY: AC = Active PA = Permanently Abandoned and Approved by State UC = Under Construction AN = Permanently Abandoned and not Approved by State TA = Temporarily Abandoned																					
Name and Official Title <i>(Please type or print)</i>						Date Submitted															

INSTRUCTIONS FOR FORM 7520-16

Use this form to provide inventory information about injection wells regulated under the Underground Injection Control Program.

DATE PREPARED: Enter date in order of year, month, and day.

FACILITY OR EPA ID NUMBER: This will be completed by EPA or the permitting authority.

NAME, ADDRESS, PHONE AND/OR EMAIL OF FACILITY: Enter the name and street address, city/town, state, and ZIP code of the facility. Also provide an email address (if available) and/or a phone number.

INDIAN COUNTRY: Check yes if the well is located in Indian country. Indian country (as defined in 18 U.S.C. 1151) includes: all land within the limits of any Indian reservation under the jurisdiction of the U.S. government; all dependent Indian communities within the borders of the U.S.; and all Indian allotments, the Indian titles to which have not been extinguished.

NAME, ADDRESS, PHONE, ORGANIZATION, AND/OR EMAIL OF LEGAL CONTACT: Enter the name and street address, city/town, state, and ZIP code and the name of the organization to which the legal contact for any questions regarding the information provided belongs. Also provide an email address (if available) and/or a phone number.

LEGAL CONTACT TYPE: Check the appropriate box to indicate the type of legal contact (i.e., owner or operator). For wells operated by lease, the operator is the legal contact.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere. For an area permit, give the latitude and longitude of the approximate center of the area.

WELL CLASS AND TYPE: Enter the class (as defined in 40 CFR 144.6) and type of injection well. Use the most pertinent code selected from the list on the next page. When selecting type X, please explain in the comment space.

NUMBER OF WELLS: Enter the total number of **commercial** and **non-commercial** wells of each class/type, as applicable. A commercial facility is a single or multiple well facility that is specifically engaged in the business of injecting waste fluids generated by third party producers that is originated off-site and transported to the facility by truck for a fee or compensation.

TOTAL NUMBER OF WELLS: Enter the total number of injection wells of each specified class and type.

WELL OPERATION STATUS: Enter the number of wells under each operation status (use the key on the front of the form).

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average 0.4 hours per response. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

CLASS AND TYPE OF WELL

CLASS I: Wells that inject industrial and municipal waste, including hazardous waste, beneath the lowermost formation containing a USDW.

Type

- I Non-Hazardous Industrial Disposal Well.
- M Non-Hazardous Municipal Disposal Well.
- H Hazardous Waste Disposal Well injecting below the lowermost USDW.
- R Radioactive Waste Disposal Well.
- X Other Class I Wells (not included in Type "I," "M," "H," or "R").

CLASS II: Wells used to dispose of fluids which are brought to the surface in connection with oil or natural gas production; to inject fluids for enhanced recovery of oil or natural gas; or to store hydrocarbons.

Type

- A Annular Disposal Well.
- D Produced Fluid Disposal Well.
- H Hydrocarbon Storage Well (excluding natural gas).
- R Enhanced Recovery Well.
- X Other Class II Wells (not included in Type "A," "D," "H," or "R").

CLASS III: Wells that inject fluids for the extraction of minerals.

Type

- G In Situ Gasification Well.
- M Solution Mining Well.
- S Sulfur Mining Well by Frasch Process.
- T Geothermal Well.
- U Uranium Mining Well (excluding solution mining of conventional mines).
- X Other Class III Wells (not included in Type "G," "M," "S," "T," "U," or "X").

CLASS IV: Wells that inject hazardous waste into/above USDWs.

Type

- H Hazardous Facility Injection Well.
- R Remediation Well at RCRA or CERCLA site.

CLASS V: Wells not currently classified as Class I, II, III, IV, or VI.

Type

- A Industrial Well.
- B Beneficial Use Well.
- C Fluid Return Well.
- D Sewage Treatment Effluent Well.
- E Cesspool (non-domestic).
- F Septic System.
- G Experimental Technology Well.
- H Drainage Well.
- I Mine Backfill Well.
- J Waste Discharge Well.