Proactive by Design

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

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VIA EMAIL

July 1, 2016
File No. 31.0056687.30

Mr. Tim Dieffenbach
NYSDEC Region 9
270 Michigan Avenue
Buffalo, New York 14203

Re: Interim Remedial Measures Soil and Groundwater Characterization Sampling Results
Northtown Inc. (BCP Site # 915292)
Amherst, New York

Dear Mr. Dieffenbach:

On behalf of Northtown Property Owner LLC, GZA GeoEnvironmental of New York (GZA) provides this letter report of the Northtown Inc. Brownfield Cleanup Program Site (BCP Site # 915292) in Amherst, New York. In accordance with the amended Interim Remedial Measure (IRM) Work Plan which was approved by the New York State Department of Environmental Conservation (NYSDEC) on April 1, 2016, GZA collected soil and groundwater samples to supplement the site characterization.

Per the amended IRM Work Plan, GZA performed the following work:

- On May 17, 2016: collected three groundwater samples from each of the three existing groundwater monitoring wells (MW-1, MW-2, and MW-3) located on and near the BCP Site (Figure 1). The groundwater samples were collected using a peristaltic pump and low flow methods. Samples were analyzed for Target Analyte List (TAL) metals via EPA method 6010 and pesticides via EPA Method 8151. Table 1 provides a summary of samples collected and Table 2 provides a summary of groundwater analytical results. Equipment calibration certificates and field sampling forms are provided in Attachment A.

- On May 19, 2016: collected four samples of shallow subsurface soil from the three Areas of Interest (AOIs; one from AOI-1, one from AOI-2, and two from AOI-3, Figure 1). Using a direct-push drilling rig, one soil sample was collected from each of the four borings as a vertical composite sample of native/undisturbed soil. The composite samples were collected with the upper composite depth directly beneath the pavement and surface fill layer and the bottom of the composite depth being a depth of approximately six feet below ground surface. The four subsurface soil samples were analyzed for TAL metals via EPA method 6010 and pesticides via

EPA Method 8151. Table 1 provides a summary of samples collected and Table 3 provides a summary of soil analytical results. Attachment B includes the soil probe logs.

Groundwater Results:

As indicated on Table 2, pesticides were not detected in the groundwater samples at concentrations greater than the analytical method detection limits. Ten metals were detected in one or more of the groundwater samples at concentrations above method detection limits. Two of the 10 detected metals, magnesium and sodium, were detected at concentrations above their respective Class GA groundwater standards. Magnesium and sodium are non-toxic naturally occurring minerals which, among other of their many uses, are used as a dietary supplements.

Soil Results:

As indicated on Table 3, pesticides were not detected in the soil samples at concentrations greater than analytical method detection limits. Several metals were detected in one or more of the soil samples at concentrations above method detection limits. None of the detected metals were present at a concentration above its respective Soil Cleanup Objective for commercial site use.

Attachment C includes the data packages received from the analytical laboratory.

Please call Jim Richert at 716-844-7048 if you have any questions or require additional information.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

Jim Richert

James J. Richert, P.G.
Senior Project Manager

Bart A. Klettke

Bart A. Klettke, P.E.
Principal

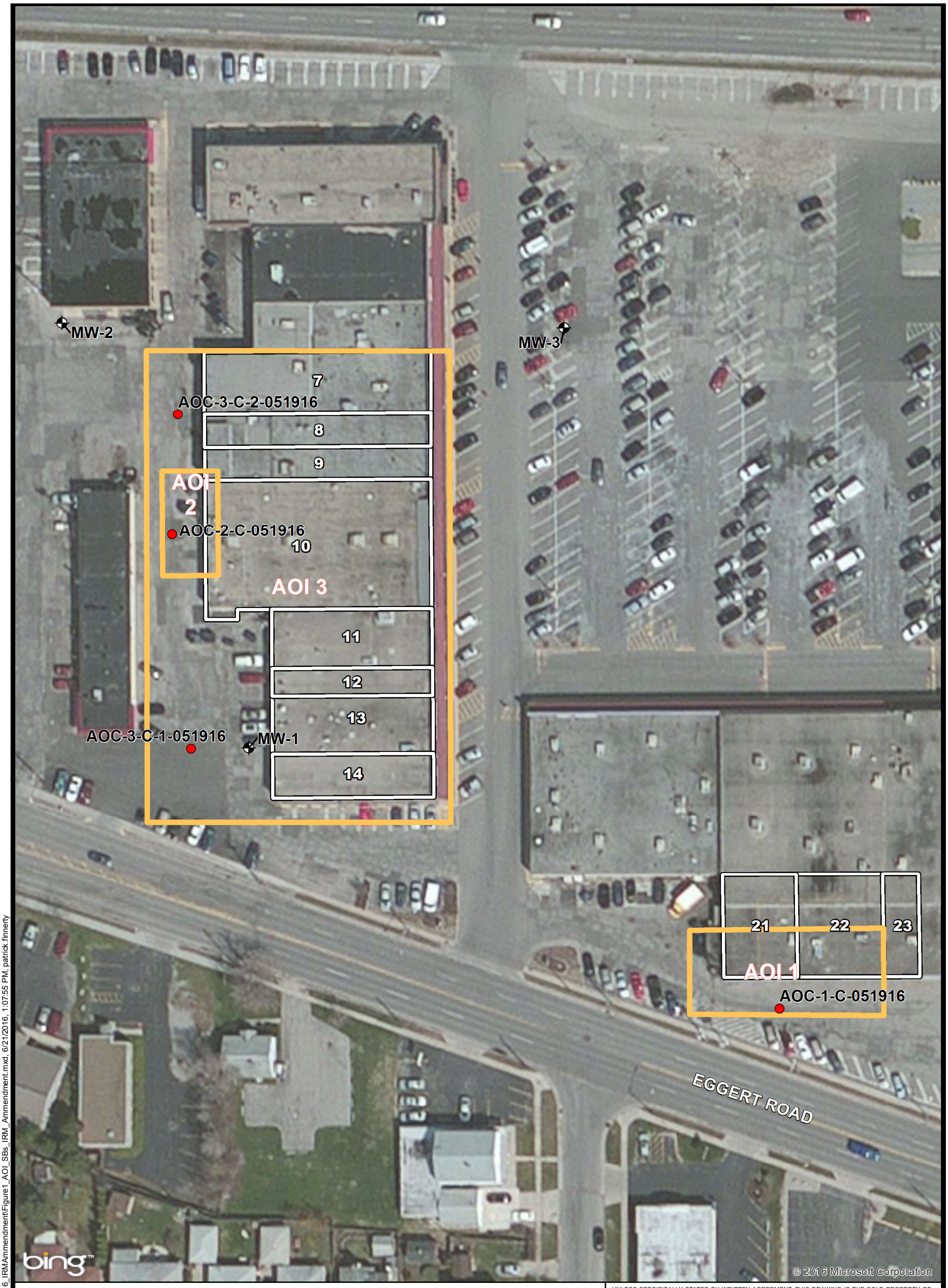
CC: Bart Butzig (NYSDEC)
Brad Wenskoski (NYSDOH)
Andrew Manning (Northtown Property Owner LLC)
Tim Alexander (Northtown Property Owner LLC)
Jonathan Pearlson (Goulston & Storrs)
Todd Bown (GZA)

Attachments:

Figures:	Figure 1	IRM Amendments Soil/Groundwater Sample Locations for TAL Metals and Pesticides Sample Locations
Tables:	Table 1	Summary of Samples Collected
	Table 2	Summary of Analytical Results – Groundwater
	Table 3	Summary of Analytical Results – Subsurface Soils

Attachment A	Equipment Calibration Certificates and Field Sampling Forms
Attachment B	Soil Probe Logs
Attachment C	Analytical Data Reports

FIGURES



Legend:

- Shallow Soil Boring and Composite Subsurface Soil Sample Location
- Monitoring Well and Groundwater Sample Location
- Building Layout
- Approximate BCP Site Boundary - Includes AOI 1, AOI 2, and AOI 3

Source: Erie County GIS Mapping Website
Notes: All features should be considered approximate

0 60 120
SCALE IN FEET

N W E S

NORTHTOWN INC. BCP SITE
3045 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

IRM AMENDMENT SOIL/GROUNDWATER SAMPLE LOCATIONS

PREPARED BY:	PREPARED FOR:		
GeoEnvironmental of NY Engineers and Scientists www.gza.com	NORTHTOWN PROPERTY OWNER, LLC		
PROJ MGR: JJR	REVIEWED BY: JJR	CHECKED BY: BK	FIGURE 1
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 60 ft	
DATE: JUNE 2016	PROJECT NO. 31.0056687.30	REVISION NO.	

TABLES

Table 1
Summary of Samples Collected
Interim Remedial Measures Soil and Groundwater Characterization Sampling Results
Northtown Inc. - BCP Site No. C915292
Amherst, New York

Location	Date Collected	Area of Interest (Soil)	Metals - TAL EPA Methods 7471B/6010C/3050B	Pesticides EPA Methods 8081B/3550C
SOIL SAMPLES				
AOC-1-C-051916	5/19/2016	AOI - 1	X	X
AOC-2-C-051916	5/19/2016	AOI - 2	X	X
C-Duplicate-051916	5/19/2016		X	X
AOC-3-C-1-051916	5/19/2016	AOI - 3	X	X
AOC-3-C-2-051916	5/19/2016		X	X
GROUNDWATER SAMPLES				
MW-1-051716	5/17/2016	NA	X	X
MW-2-051716	5/17/2016		X	X
MW-3-051716	5/17/2016		X	X
Duplicate-051716	5/17/2016		X	X

Notes:
1. Analytical testing completed by Paradigm Environmental Services, Inc., in Rochester, NY.
2. C-Duplicate-051916 is associated with sample AOC-2-C-051916.
3. Duplicate-051716 is associated with sample MW-3-051716.

Table 2
Summary of Analytical Results - Groundwater
Interim Remedial Measures Soil and Groundwater Characterization Sampling Results
Northtown Inc. - BCP Site No. C915292
Amherst, New York

Sample ID Sample Date	NYSDEC Class GA Groundwater Criteria	MW-1-051716 5/17/2016	MW-2-051716 5/17/2016	MW-3-051716 5/17/2016	Duplicate-051716 5/17/2016
TAL Metals - EPA Methods 7471B/6010C/3050B (mg/L) - Dissolved					
Arsenic	0.025	0.0139	0.0104	<0.0100	0.00542 J
Barium	1	0.216	<0.100	<0.100	<0.100
Calcium	NV	320	483	490	497
Copper	0.2	0.0649	<0.0250	<0.0250	0.166
Lead	0.025	<0.0100	<0.0100	<0.0100	0.0210
Magnesium	35	19.6	81.4	84.2	85.3
Manganese	0.3	<0.0150	0.192	0.0939	0.0958
Potassium	NV	20.2	11.4	5.61	5.78
Sodium	20	4,850	99.0 M	94.1	93.3
Zinc	2	0.249	<0.0600	<0.0600	0.610
Pesticides - EPA Methods 8081B/3550C (mg/L)					
No analytes were detected at concentrations above the laboratory's method detection limits.					

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Attachment C for list of all compounds included in analysis.
2. Groundwater analytical testing completed by Paradigm Environmental Services, Inc., in Rochester, NY.
3. mg/L = milligrams per liter (parts per million).
4. J = Result estimated between the quantitation limit and half the quantitation limit.
5. NV = No Value.
6. M = Matrix spike recoveries outside QC limits. Matrix bias indicated.
7. NYSDEC Class GA Groundwater Criteria are from Division of Water Technical and Operational Guidance Series [TOGS 1.1.1], June 1998 and April 2
8. Duplicate-051716 is associated with sample MW-3-051716.
9. Gray shading indicates a concentration detected above the NYSDEC Class GA Groundwater Criteria.

Table 3
Summary of Analytical Results - Subsurface Soils
Interim Remedial Measures Soil and Groundwater Characterization Sampling Results
Northtown Inc. - BCP Site No. C915292
Amherst, New York

Area of Concern	NYSDEC Part 375	AOI - 1	AOI - 2		AOI - 3	
Sample ID	Soil Criteria (mg/kg)	AOC-1-C-051916	AOC-2-C-051916	C-Duplicate-051916	AOC-3-C-1-051916	AOC-3-C-2-051916
Sample Date	Commercial	5/19/2016	5/19/2016	5/19/2016	5/19/2016	5/19/2016
TAL Metals - EPA Methods 7471B/6010C/3050B (mg/Kg)						
Mercury	2.8	0.00683 J	0.0220	0.0126	0.00672 J	0.0146
Aluminum	NV	10,700	17,300	14,400	14,000 D	29,900
Arsenic	16	3.14	3.64	3.68	2.63	3.85
Barium	400	72.3	144	86.9	89.5 DM	212
Beryllium	590	0.464	0.717	0.610	0.622 D	1.30
Calcium	NV	67,800	63,200	57,700	33,600 D	15,400
Chromium	400/1,500 (hexavalent/trivalent)	13.1	19.4	16.7	15.7 D	32.6
Cobalt	NV	8.03	9.39	8.71	7.81 D	14.6
Copper	270	17.2	19.4	17.0	16.5	19.9
Iron	NV	16,200	24,000	19,600	18,900 D	37,100
Lead	1,000	10.7	17.1	16.3	11.5 M	14.0
Magnesium	NV	18,800	17,400	16,200	17,400 D	13,400
Manganese	10,000	442	684	438	729 DM	373
Nickel	310	14.7	20.0	17.5	16.6 DM	34.8
Potassium	NV	3,130	4,240	3,000	2,890 DM	5,280
Sodium	NV	1,920	2,440	978	383 DM	2,600
Vanadium	NV	24.0	34.8	30.2	28.3 DM	52.1
Zinc	10,000	78.6	81.7	72.8	65.8	79.3
Pesticides - EPA Methods 8081B/3550C (mg/Kg)						
No analytes were detected at concentrations above the laboratory's method detection limits.						

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Attachment C for list of all compounds included in analysis.
2. Soil analytical testing completed by Paradigm Environmental Services, Inc., in Rochester, NY.
3. mg/kg = milligrams per kilogram (parts per million).
4. J = Result estimated between the quantitation limit and half the quantitation limit.
5. M = Matrix spike recoveries outside QC limits. Matrix bias indicated.
6. D = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
7. NV = No Value.
8. Soil cleanup objectives (SCOs) are from NYSDEC Part 375, Subpart 375-6: Commercial Use Soil Cleanup Objectives.
9. C-Duplicate-051916 is associated with sample AOC-2-C-051916.

ATTACHMENT A

Equipment Calibration Certificates and Field Sampling Forms

Eco-Rental Solutions

Calibration Certificate

rev 8/9/11

Work Order No.: SE-031465
Date of Service: 05/17/16

Unit Under Test: RAE MiniRAE 3000 PID Handheld VOC Meter

Asset No.: FA00334 Technician: Kevin Clauss Initials: KSC
Serial No: 592-907585

TEST	Specification	Result
Standard Calibration	Pass/Fail	Pass

TEST STANDARDS USED:

DESCRIPTION	LOT No./EXPIRATION DATE	QUANTITY
100 ppm Isobutylene in Air	Lot No. MAP-248-100-8 Exp. 12/14/19	1

TEST EQUIPMENT USED:

DESCRIPTION	ASSET NO.	SERIAL NO.	DATE OF LAST CAL	DATE CAL DUE

Test Equipment and standards are traceable to National standards.

11.7eV Lamp Installed

Eco-Rental Solutions

Calibration Certificate

rev 8/9/11

Work Order No.: SE-031420
Date of Service: 05/13/16

Unit Under Test: YSI Pro Plus Quatro, 4m pH/ORP/Cond/Temp/DO

Asset No.: FA00747 Technician: Brooke Tower Initials: BT
Serial No: 13E100043

TEST	Specification	Result
Standard Calibration	Pass/Fail	Pass

TEST STANDARDS USED:

DESCRIPTION	LOT No./EXPIRATION DATE	QUANTITY
Air Saturated Water		1
Sodium Sulfite/ Zero DO Standard	Lot No. C473638, No exp date	1
7.00 mS Conductivity Standard Solution	Lot No. 5GB1051 Exp. 2/17	1
pH 7.00 Standard Solution	Lot No. 5GI254 Exp. 9/17	1
pH 10.00 Standard Solution	Lot No. C584751 Exp. 12/17	1
pH 4.00 Standard Solution	Lot No. 5GH372, Exp. 8/17	1
ORP Standard Solution	Lot No.15G100275 exp. 07/19/17	1

TEST EQUIPMENT USED:

DESCRIPTION	ASSET NO.	SERIAL NO.	DATE OF LAST CAL	DATE CAL DUE

Test Equipment and standards are traceable to National standards.

Eco-Rental Solutions

Calibration Certificate

rev 8/9/11

Work Order No.: SE-031417
Date of Service: 05/13/16

Unit Under Test: Lamotte 2020WE Turbidity Meter

Asset No.: FA00413 Technician: Brooke Tower Initials: BT
Serial No: 2606-3812

TEST	Specification	Result
Standard Calibration	Pass/Fail	Pass

TEST STANDARDS USED:

DESCRIPTION	LOT No./EXPIRATION DATE	QUANTITY
Turbidity Free Water		1
10 NTU AMCO Turbidity Standard	Lot No. C576942 Exp. 10/31/16	1
1.0 NTU AMCO Turbidity Standard	Lot No.C582380 Exp. 10/31/16	1

TEST EQUIPMENT USED:

DESCRIPTION	ASSET NO.	SERIAL NO.	DATE OF LAST CAL	DATE CAL DUE

Test Equipment and standards are traceable to National standards.

File: 31.0056687.30

Historical Information

Boring Log Available (**yes**/no/attached):

Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-1**	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	May 2014	Protective Casing Elevation:	Top of Screen Depth: 44.7 feet (bgs)
Installed By:	Nature's Way	Monitoring Point Elevation:	Bottom of Screen Depth: 54.7 (bgs)
		Elevation Datum:	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Good	pH +/- 0.1	Sample ID: MW-1-051716
		Conductivity +/- 3%	Sample Time: 12:30
Interior Observations	Good	Temperature +/- 10%	# of Sample Containers: 2
		Turbidity +/- 10%	Duplicate Sample ID: NA
		ORP +/- 10mV	Sample Analysis: Metals TAL (6010)
Signs of Damage/Tampering:		DO +/- 10%	Pesticides

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: NA	Odors: None

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
5/17/2016	1148	7.68	0	11.18	30.97	13.6	2.95	Clear	0.39	-221.4	Depth of Water: 7.30' (TOR)
	1152	7.68	0.1	11.26	30.92	13.5	31.4	Clear	0.27	-244.7	Length of Water Column: 47.4'
	1157	7.68	0.1	11.24	30.47	13.4	33.7	Clear	0.24	-255.2	Depth of Well: 54.7
	1202	7.68	0.2	11.24	28.75	13.4	32.1	Clear	0.20	-263.8	Sheen Observed: Y **N**
	1207	7.68	0.3	11.16	27.33	13.4	37.2	Clear	0.18	-268.5	DNAPL Observed: Y **N**
	1212	7.68	0.4	10.91	25.23	13.5	37.1	Clear	0.15	-269.8	Did Well Go Dry: Y **N**
	1217	7.68	0.5	10.90	25.25	13.6	55.0	Clear	0.15	-265.9	Other:
	1222	7.68	0.5	10.90	25.21	13.6	57.1	Clear	0.15	-265.6	

File: 31.0056687.30

Historical Information

Boring Log Available (**yes**/no/attached):

Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-2**	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	May 2014	Protective Casing Elevation:	Top of Screen Depth: 48 feet (bgs)
Installed By:	Nature's Way	Monitoring Point Elevation:	Bottom of Screen Depth: 58 (bgs)
		Elevation Datum:	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Good.	pH +/- 0.1	Sample ID: MW-2-051716
		Conductivity +/- 3%	Sample Time: 1430
Interior Observations	Bentonite swelled around J-Plug; removed excess bentonine and cleaned J-Plug.	Temperature +/- 10%	# of Sample Containers:6
		Turbidity +/- 10%	Duplicate Sample ID: MS/MSD
		ORP +/- 10mV	Sample Analysis: Metals TAL (6010)
Signs of Damage/Tampering:		DO +/- 10%	Pesticides

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: NA	Odors: None

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
5/17/2016	1330	7.91	0	8.47	2.61	14.7	Overrange	Brown	0.39	-139.5	Depth of Water: 7.85' (TOR)
	1342	7.91	0.2	8.47	2.71	14.2	3238 AU	Brown	0.42	-69.1	Length of Water Column: 50.15'
	1347	7.91	0.4	8.45	2.71	14.2	2852 AU	Lt. Brwn	0.51	-78.1	Depth of Well: 58'
	1352	7.91	0.6	8.23	2.70	14.0	2931 AU	Lt. Brwn	0.42	-86.9	Sheen Observed: Y **N**
	1400	7.91	0.9	8.21	2.68	14.1	2963 AU	Lt. Brwn	0.47	-137.0	DNAPL Observed: Y **N**
	1405	7.91	1.2	8.17	2.67	14.2	2617 AU	Lt. Brwn	0.56	-146.8	Did Well Go Dry: Y **N**
	1410	7.91	1.5	8.17	2.67	14.2	2615 AU	Lt. Brwn	0.53	-150.0	Other:
	1415	7.91	1.9	8.17	2.66	14.2	2610 AU	Lt. Brwn	0.51	-150.7	

File: 31.0056687.30

Historical Information

Boring Log Available (**yes**/no/attached):

Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-3**	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	May 2014	Protective Casing Elevation:	Top of Screen Depth: 47.8 feet (bgs)
Installed By:	Nature's Way	Monitoring Point Elevation:	Bottom of Screen Depth: 57.8 (bgs)
		Elevation Datum:	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Good.	pH +/- 0.1	Sample ID: MW-3-051716
		Conductivity +/- 3%	Sample Time: 1545
Interior Observations	Road box flooded - purged prior to J-plug removal.	Temperature +/- 10%	# of Sample Containers: 4
		Turbidity +/- 10%	Duplicate Sample ID: Duplicate-051716
		ORP +/- 10mV	Sample Analysis: Metals TAL (6010)
Signs of Damage/Tampering:		DO +/- 10%	Pesticides

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: NA	Odors: None.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
5/17/2016	1505	6.59	0.0	8.38	3.07	13.6	50.4	Clear	1.56	65.0	Depth of Water: 6.55' (TOR)
	1515	6.59	1.0	8.43	3.06	13.5	23.0	Clear	0.22	-131.6	Length of Water Column: 51.25'
	1520	6.59	1.5	8.28	2.99	13.5	16.1	Clear	0.16	-169.5	Depth of Well: 57.8'
	1525	6.59	2.0	8.27	2.95	13.5	15.5	Clear	0.13	-178.2	Sheen Observed: Y **N**
	1530	6.59	2.5	8.25	2.90	13.5	13.4	Clear	0.11	-179.8	DNAPL Observed: Y **N**
	1535	6.59	3.0	8.25	2.91	13.5	13.2	Clear	0.11	-179.2	Did Well Go Dry: Y **N**
											Other:

ATTACHMENT B

Soil Probe Logs

CONTRACTOR	Zoladz Construction Co., Inc.	BORING LOCATION	AOC-1-C-051916
DRILLER	Eric Winter	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/19/2016 END DATE 5/19/16	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	GeoProbe 6610DT (Track Mounted)
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 6	100	Asphalt (~4-inches) and Sub-base (~4-inches).	Composite characterization sample taken 1 - 6 feet bgs. Analyzed for Metals (TAL) and Pesticides.	0.0
1				NATIVE: Brown Silty CLAY, trace Gravel, trace Silt, moist.		
2						
3						
4						
5						
6						
				End of soil probe at six feet bgs.		
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry 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

CONTRACTOR	Zoladz Construction Co., Inc.	BORING LOCATION	AOC-2-C-051916
DRILLER	Eric Winter	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/19/2016 END DATE 5/19/16	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	GeoProbe 6610DT (Track Mounted)
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 6	100	Asphalt (~4-inches) and Sub-base (~4-inches).	Composite characterization sample taken 1 - 6 feet bgs. Analyzed for Metals (TAL) and Pesticides. Duplicate sample taken at this location.	0.2
1						
				NATIVE: Brown Silty CLAY, trace Gravel, trace Silt, moist.		
2						
3						
4						
5						
6						
				End of soil probe at six feet bgs.		
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry 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

CONTRACTOR	Zoladz Construction Co., Inc.	BORING LOCATION	AOC-3-C-1-051916
DRILLER	Eric Winter	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/19/2016 END DATE 5/19/16	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	GeoProbe 6610DT (Track Mounted)
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 6	100	Asphalt (~4-inches) and Sub-base (~4-inches).	Composite character-ization sample taken 1 - 6 feet bgs. Analyzed for Metals (TAL) and Pesticides. MS/MSD samples taken at this location.	1.0
1						
				NATIVE: Brown Silty CLAY, trace Gravel, trace Silt, moist. Asphalt dust dragged through outside of soil core, effort made to remove for sampling.		
2						
3						
4						
5						
6						
				End of soil probe at six feet bgs.		
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry 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

CONTRACTOR	Zoladz Construction Co., Inc.	BORING LOCATION	AOC-3-C-2-051916
DRILLER	Eric Winter	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/19/2016 END DATE 5/19/16	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	GeoProbe 6610DT (Track Mounted)
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 6	100	Asphalt (~4-inches) and Sub-base (~4-inches).	Composite characterization sample taken 1 - 6 feet bgs. Analyzed for Metals (TAL) and Pesticides.	0.0
1				NATIVE: Brown Silty CLAY, trace Gravel, trace Silt, moist.		
2						
3						
4						
5						
6						
				End of soil probe at six feet bgs.		
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry 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

ATTACHMENT C

Analytical Data Reports

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-3-C-2-051916		
Lab Sample ID:	162083-01	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0146**	mg/Kg		5/25/2016 12:08

Method Reference(s): EPA 7471B
Preparation Date: 5/25/2016
Data File: Hg160525A

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-3-C-2-051916		
Lab Sample ID:	162083-01	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**29900**	mg/Kg		5/27/2016 09:54
Antimony	< 3.67	mg/Kg		5/27/2016 09:54
Arsenic	**3.85**	mg/Kg		5/27/2016 09:54
Barium	**212**	mg/Kg		5/27/2016 09:54
Beryllium	**1.30**	mg/Kg		5/26/2016 17:07
Cadmium	< 0.306	mg/Kg		5/27/2016 09:54
Calcium	**15400**	mg/Kg		5/27/2016 09:54
Chromium	**32.6**	mg/Kg		5/27/2016 09:54
Cobalt	**14.6**	mg/Kg		5/27/2016 09:54
Copper	**19.9**	mg/Kg		5/27/2016 09:54
Iron	**37100**	mg/Kg		5/26/2016 17:54
Lead	**14.0**	mg/Kg		5/27/2016 09:54
Magnesium	**13400**	mg/Kg		5/27/2016 09:54
Manganese	**373**	mg/Kg		5/27/2016 09:54
Nickel	**34.8**	mg/Kg		5/27/2016 09:54
Potassium	**5280**	mg/Kg		5/27/2016 09:54
Selenium	< 1.22	mg/Kg		5/26/2016 17:54
Silver	< 1.22	mg/Kg		5/26/2016 17:54
Sodium	**2600**	mg/Kg		5/27/2016 09:54
Thallium	< 1.53	mg/Kg		5/27/2016 09:54
Vanadium	**52.1**	mg/Kg		5/27/2016 09:54
Zinc	**79.3**	mg/Kg		5/27/2016 09:54

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 5/25/2016
Data File: 052716a

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-3-C-2-051916		
Lab Sample ID:	162083-01	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.62	ug/Kg		5/25/2016 16:57
4,4-DDE	< 3.62	ug/Kg		5/25/2016 16:57
4,4-DDT	< 3.62	ug/Kg		5/25/2016 16:57
Aldrin	< 3.62	ug/Kg		5/25/2016 16:57
alpha-BHC	< 3.62	ug/Kg		5/25/2016 16:57
beta-BHC	< 3.62	ug/Kg		5/25/2016 16:57
cis-Chlordane	< 3.62	ug/Kg		5/25/2016 16:57
delta-BHC	< 3.62	ug/Kg		5/25/2016 16:57
Dieldrin	< 3.62	ug/Kg		5/25/2016 16:57
Endosulfan I	< 3.62	ug/Kg		5/25/2016 16:57
Endosulfan II	< 3.62	ug/Kg		5/25/2016 16:57
Endosulfan Sulfate	< 3.62	ug/Kg		5/25/2016 16:57
Endrin	< 3.62	ug/Kg		5/25/2016 16:57
Endrin Aldehyde	< 3.62	ug/Kg		5/25/2016 16:57
Endrin Ketone	< 3.62	ug/Kg		5/25/2016 16:57
gamma-BHC (Lindane)	< 3.62	ug/Kg		5/25/2016 16:57
Heptachlor	< 3.62	ug/Kg		5/25/2016 16:57
Heptachlor Epoxide	< 3.62	ug/Kg		5/25/2016 16:57
Methoxychlor	< 3.62	ug/Kg		5/25/2016 16:57
Toxaphene	< 36.2	ug/Kg		5/25/2016 16:57
trans-Chlordane	< 3.62	ug/Kg		5/25/2016 16:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**51.3**	9.5 - 93.3		5/25/2016 16:57
Tetrachloro-m-xylene (1)	**37.1**	13.2 - 96.3		5/25/2016 16:57

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 5/25/2016

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-2-C-051916		
Lab Sample ID:	162083-02	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0220**	mg/Kg		5/25/2016 12:22

Method Reference(s): EPA 7471B
Preparation Date: 5/25/2016
Data File: Hg160525A

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 Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-2-C-051916		
Lab Sample ID:	162083-02	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**17300**	mg/Kg		5/27/2016 09:58
Antimony	< 3.47	mg/Kg		5/27/2016 09:58
Arsenic	**3.64**	mg/Kg		5/27/2016 09:58
Barium	**144**	mg/Kg		5/27/2016 09:58
Beryllium	**0.717**	mg/Kg		5/26/2016 17:11
Cadmium	< 0.289	mg/Kg		5/27/2016 09:58
Calcium	**63200**	mg/Kg		5/26/2016 12:23
Chromium	**19.4**	mg/Kg		5/27/2016 09:58
Cobalt	**9.39**	mg/Kg		5/27/2016 09:58
Copper	**19.4**	mg/Kg		5/27/2016 09:58
Iron	**24000**	mg/Kg		5/27/2016 09:58
Lead	**17.1**	mg/Kg		5/27/2016 09:58
Magnesium	**17400**	mg/Kg		5/27/2016 09:58
Manganese	**684**	mg/Kg		5/26/2016 17:58
Nickel	**20.0**	mg/Kg		5/27/2016 09:58
Potassium	**4240**	mg/Kg		5/27/2016 09:58
Selenium	< 1.16	mg/Kg		5/26/2016 17:58
Silver	< 1.16	mg/Kg		5/26/2016 17:58
Sodium	**2440**	mg/Kg		5/27/2016 09:58
Thallium	< 1.44	mg/Kg		5/27/2016 09:58
Vanadium	**34.8**	mg/Kg		5/27/2016 09:58
Zinc	**81.7**	mg/Kg		5/27/2016 09:58

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 5/25/2016
Data File: 052716a

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-2-C-051916		
Lab Sample ID:	162083-02	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.46	ug/Kg		5/25/2016 17:10
4,4-DDE	< 3.46	ug/Kg		5/25/2016 17:10
4,4-DDT	< 3.46	ug/Kg		5/25/2016 17:10
Aldrin	< 3.46	ug/Kg		5/25/2016 17:10
alpha-BHC	< 3.46	ug/Kg		5/25/2016 17:10
beta-BHC	< 3.46	ug/Kg		5/25/2016 17:10
cis-Chlordane	< 3.46	ug/Kg		5/25/2016 17:10
delta-BHC	< 3.46	ug/Kg		5/25/2016 17:10
Dieldrin	< 3.46	ug/Kg		5/25/2016 17:10
Endosulfan I	< 3.46	ug/Kg		5/25/2016 17:10
Endosulfan II	< 3.46	ug/Kg		5/25/2016 17:10
Endosulfan Sulfate	< 3.46	ug/Kg		5/25/2016 17:10
Endrin	< 3.46	ug/Kg		5/25/2016 17:10
Endrin Aldehyde	< 3.46	ug/Kg		5/25/2016 17:10
Endrin Ketone	< 3.46	ug/Kg		5/25/2016 17:10
gamma-BHC (Lindane)	< 3.46	ug/Kg		5/25/2016 17:10
Heptachlor	< 3.46	ug/Kg		5/25/2016 17:10
Heptachlor Epoxide	< 3.46	ug/Kg		5/25/2016 17:10
Methoxychlor	< 3.46	ug/Kg		5/25/2016 17:10
Toxaphene	< 34.6	ug/Kg		5/25/2016 17:10
trans-Chlordane	< 3.46	ug/Kg		5/25/2016 17:10

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**65.2**	9.5 - 93.3		5/25/2016 17:10
Tetrachloro-m-xylene (1)	**48.2**	13.2 - 96.3		5/25/2016 17:10

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 5/25/2016

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-3-C-1-051916		
Lab Sample ID:	162083-03	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.00672**	mg/Kg	J	5/25/2016 12:26

Method Reference(s): EPA 7471B
Preparation Date: 5/25/2016
Data File: Hg160525A

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-3-C-1-051916		
Lab Sample ID:	162083-03	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**14000**	mg/Kg	D	5/27/2016 10:02
Antimony	< 2.87	mg/Kg	M	5/27/2016 10:02
Arsenic	**2.63**	mg/Kg		5/27/2016 10:02
Barium	**89.5**	mg/Kg	DM	5/27/2016 10:02
Beryllium	**0.622**	mg/Kg	D	5/26/2016 17:16
Cadmium	< 0.239	mg/Kg	M	5/27/2016 10:02
Calcium	**33600**	mg/Kg	D	5/26/2016 18:02
Chromium	**15.7**	mg/Kg	D	5/27/2016 10:02
Cobalt	**7.81**	mg/Kg	D	5/27/2016 10:02
Copper	**16.5**	mg/Kg		5/27/2016 10:02
Iron	**18900**	mg/Kg	D	5/27/2016 10:02
Lead	**11.5**	mg/Kg	M	5/27/2016 10:02
Magnesium	**17400**	mg/Kg	D	5/27/2016 10:02
Manganese	**729**	mg/Kg	DM	5/26/2016 18:02
Nickel	**16.6**	mg/Kg	DM	5/27/2016 10:02
Potassium	**2890**	mg/Kg	DM	5/27/2016 10:02
Selenium	< 0.957	mg/Kg		5/26/2016 18:02
Silver	< 0.957	mg/Kg		5/26/2016 18:02
Sodium	**383**	mg/Kg	DM	5/27/2016 10:02
Thallium	< 1.20	mg/Kg	M	5/27/2016 10:02
Vanadium	**28.3**	mg/Kg	DM	5/27/2016 10:02
Zinc	**65.8**	mg/Kg		5/27/2016 10:02

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 5/25/2016
Data File: 052716a

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-3-C-1-051916		
Lab Sample ID:	162083-03	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.15	ug/Kg		5/25/2016 17:24
4,4-DDE	< 3.15	ug/Kg		5/25/2016 17:24
4,4-DDT	< 3.15	ug/Kg		5/25/2016 17:24
Aldrin	< 3.15	ug/Kg	M	5/25/2016 17:24
alpha-BHC	< 3.15	ug/Kg		5/25/2016 17:24
beta-BHC	< 3.15	ug/Kg		5/25/2016 17:24
cis-Chlordane	< 3.15	ug/Kg		5/25/2016 17:24
delta-BHC	< 3.15	ug/Kg		5/25/2016 17:24
Dieldrin	< 3.15	ug/Kg		5/25/2016 17:24
Endosulfan I	< 3.15	ug/Kg		5/25/2016 17:24
Endosulfan II	< 3.15	ug/Kg		5/25/2016 17:24
Endosulfan Sulfate	< 3.15	ug/Kg		5/25/2016 17:24
Endrin	< 3.15	ug/Kg		5/25/2016 17:24
Endrin Aldehyde	< 3.15	ug/Kg		5/25/2016 17:24
Endrin Ketone	< 3.15	ug/Kg		5/25/2016 17:24
gamma-BHC (Lindane)	< 3.15	ug/Kg		5/25/2016 17:24
Heptachlor	< 3.15	ug/Kg		5/25/2016 17:24
Heptachlor Epoxide	< 3.15	ug/Kg		5/25/2016 17:24
Methoxychlor	< 3.15	ug/Kg		5/25/2016 17:24
Toxaphene	< 31.5	ug/Kg		5/25/2016 17:24
trans-Chlordane	< 3.15	ug/Kg		5/25/2016 17:24

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**64.3**	9.5 - 93.3		5/25/2016 17:24
Tetrachloro-m-xylene (1)	**45.8**	13.2 - 96.3		5/25/2016 17:24

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 5/25/2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-1-C-051916		
Lab Sample ID:	162083-04	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.00683**	mg/Kg	J	5/25/2016 12:17

Method Reference(s): EPA 7471B
Preparation Date: 5/25/2016
Data File: Hg160525A

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-1-C-051916		
Lab Sample ID:	162083-04	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**10700**	mg/Kg		5/27/2016 10:15
Antimony	< 3.35	mg/Kg		5/27/2016 10:15
Arsenic	**3.14**	mg/Kg		5/27/2016 10:15
Barium	**72.3**	mg/Kg		5/27/2016 10:15
Beryllium	**0.464**	mg/Kg		5/26/2016 17:37
Cadmium	< 0.279	mg/Kg		5/27/2016 10:15
Calcium	**67800**	mg/Kg		5/26/2016 12:40
Chromium	**13.1**	mg/Kg		5/27/2016 10:15
Cobalt	**8.03**	mg/Kg		5/27/2016 10:15
Copper	**17.2**	mg/Kg		5/27/2016 10:15
Iron	**16200**	mg/Kg		5/27/2016 10:15
Lead	**10.7**	mg/Kg		5/27/2016 10:15
Magnesium	**18800**	mg/Kg		5/27/2016 10:15
Manganese	**442**	mg/Kg		5/27/2016 10:15
Nickel	**14.7**	mg/Kg		5/27/2016 10:15
Potassium	**3130**	mg/Kg		5/27/2016 10:15
Selenium	< 1.12	mg/Kg		5/26/2016 18:23
Silver	< 1.12	mg/Kg		5/26/2016 18:23
Sodium	**1920**	mg/Kg		5/27/2016 10:15
Thallium	< 1.40	mg/Kg		5/27/2016 10:15
Vanadium	**24.0**	mg/Kg		5/27/2016 10:15
Zinc	**78.6**	mg/Kg		5/27/2016 10:15

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 5/25/2016
Data File: 052716a

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	AOC-1-C-051916		
Lab Sample ID:	162083-04	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.21	ug/Kg		5/25/2016 18:03
4,4-DDE	< 3.21	ug/Kg		5/25/2016 18:03
4,4-DDT	< 3.21	ug/Kg		5/25/2016 18:03
Aldrin	< 3.21	ug/Kg		5/25/2016 18:03
alpha-BHC	< 3.21	ug/Kg		5/25/2016 18:03
beta-BHC	< 3.21	ug/Kg		5/25/2016 18:03
cis-Chlordane	< 3.21	ug/Kg		5/25/2016 18:03
delta-BHC	< 3.21	ug/Kg		5/25/2016 18:03
Dieldrin	< 3.21	ug/Kg		5/25/2016 18:03
Endosulfan I	< 3.21	ug/Kg		5/25/2016 18:03
Endosulfan II	< 3.21	ug/Kg		5/25/2016 18:03
Endosulfan Sulfate	< 3.21	ug/Kg		5/25/2016 18:03
Endrin	< 3.21	ug/Kg		5/25/2016 18:03
Endrin Aldehyde	< 3.21	ug/Kg		5/25/2016 18:03
Endrin Ketone	< 3.21	ug/Kg		5/25/2016 18:03
gamma-BHC (Lindane)	< 3.21	ug/Kg		5/25/2016 18:03
Heptachlor	< 3.21	ug/Kg		5/25/2016 18:03
Heptachlor Epoxide	< 3.21	ug/Kg		5/25/2016 18:03
Methoxychlor	< 3.21	ug/Kg		5/25/2016 18:03
Toxaphene	< 32.1	ug/Kg		5/25/2016 18:03
trans-Chlordane	< 3.21	ug/Kg		5/25/2016 18:03

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**91.2**	9.5 - 93.3		5/25/2016 18:03
Tetrachloro-m-xylene (1)	**29.2**	13.2 - 96.3		5/25/2016 18:03

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 5/25/2016

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	Soil-C-Duplicate-051916		
Lab Sample ID:	162083-05	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0126**	mg/Kg		5/25/2016 12:20

Method Reference(s): EPA 7471B
Preparation Date: 5/25/2016
Data File: Hg160525A

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 Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	Soil-C-Duplicate-051916		
Lab Sample ID:	162083-05	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**14400**	mg/Kg		5/27/2016 10:19
Antimony	< 3.30	mg/Kg		5/27/2016 10:19
Arsenic	**3.68**	mg/Kg		5/27/2016 10:19
Barium	**86.9**	mg/Kg		5/27/2016 10:19
Beryllium	**0.610**	mg/Kg		5/26/2016 17:41
Cadmium	< 0.275	mg/Kg		5/27/2016 10:19
Calcium	**57700**	mg/Kg		5/26/2016 12:45
Chromium	**16.7**	mg/Kg		5/27/2016 10:19
Cobalt	**8.71**	mg/Kg		5/27/2016 10:19
Copper	**17.0**	mg/Kg		5/27/2016 10:19
Iron	**19600**	mg/Kg		5/27/2016 10:19
Lead	**16.3**	mg/Kg		5/27/2016 10:19
Magnesium	**16200**	mg/Kg		5/27/2016 10:19
Manganese	**438**	mg/Kg		5/27/2016 10:19
Nickel	**17.5**	mg/Kg		5/27/2016 10:19
Potassium	**3000**	mg/Kg		5/27/2016 10:19
Selenium	< 1.10	mg/Kg		5/26/2016 18:28
Silver	< 1.10	mg/Kg		5/26/2016 18:28
Sodium	**978**	mg/Kg		5/27/2016 10:19
Thallium	< 1.37	mg/Kg		5/27/2016 10:19
Vanadium	**30.2**	mg/Kg		5/27/2016 10:19
Zinc	**72.8**	mg/Kg		5/27/2016 10:19

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 5/25/2016
Data File: 052716a

Report Prepared Friday, May 27, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162083

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	Soil-C-Duplicate-051916		
Lab Sample ID:	162083-05	**Date Sampled:**	5/19/2016
Matrix:	Soil	**Date Received:**	5/23/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.25	ug/Kg		5/25/2016 18:17
4,4-DDE	< 3.25	ug/Kg		5/25/2016 18:17
4,4-DDT	< 3.25	ug/Kg		5/25/2016 18:17
Aldrin	< 3.25	ug/Kg		5/25/2016 18:17
alpha-BHC	< 3.25	ug/Kg		5/25/2016 18:17
beta-BHC	< 3.25	ug/Kg		5/25/2016 18:17
cis-Chlordane	< 3.25	ug/Kg		5/25/2016 18:17
delta-BHC	< 3.25	ug/Kg		5/25/2016 18:17
Dieldrin	< 3.25	ug/Kg		5/25/2016 18:17
Endosulfan I	< 3.25	ug/Kg		5/25/2016 18:17
Endosulfan II	< 3.25	ug/Kg		5/25/2016 18:17
Endosulfan Sulfate	< 3.25	ug/Kg		5/25/2016 18:17
Endrin	< 3.25	ug/Kg		5/25/2016 18:17
Endrin Aldehyde	< 3.25	ug/Kg		5/25/2016 18:17
Endrin Ketone	< 3.25	ug/Kg		5/25/2016 18:17
gamma-BHC (Lindane)	< 3.25	ug/Kg		5/25/2016 18:17
Heptachlor	< 3.25	ug/Kg		5/25/2016 18:17
Heptachlor Epoxide	< 3.25	ug/Kg		5/25/2016 18:17
Methoxychlor	< 3.25	ug/Kg		5/25/2016 18:17
Toxaphene	< 32.5	ug/Kg		5/25/2016 18:17
trans-Chlordane	< 3.25	ug/Kg		5/25/2016 18:17

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**66.4**	9.5 - 93.3		5/25/2016 18:17
Tetrachloro-m-xylene (1)	**25.4**	13.2 - 96.3		5/25/2016 18:17

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 5/25/2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

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

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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.

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.

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

PARADIGM
ENVIRONMENTAL SERVICES, INC

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: GZA GeoEnvironmental	CLIENT: Same	LAB PROJECT ID: 162083
ADDRESS: 535 Washington St	ADDRESS:	
CITY: Buffalo STATE: NY ZIP: 14203	CITY: → STATE: ZIP:	Quotation #:
PHONE: 716-685-2300	PHONE:	Email: james.richert@gza.com
ATTN: J. Richert	ATTN:	

PROJECT REFERENCE: 31.0056687.30 Task 4 Subtask 1

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

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TAL Metals	Pesticides	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/19/16	1430	X		AOC-3-C-2-051916	SO	1 3	X	X	~~MS/MSD~~	01
	1450	X		AOC-2-C-051916	↓	1	X	X	per sample labels CP 5/24/16	02
	1510	X		AOC-3-C-1-051916	↓	3X	X	X	MS/MSD	03
	1530	X		AOC-1-C-051916	↓	1	X	X		04
	-	X		Soil-C-Duplicate-051916	↓	1	X	X		05

per visual CP 5/24/16

6°C iced by samples 5/20/16 1415hrs
No custody seals MM/Kail

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 ☐ please indicate package needed:	Other EDD ☐ please indicate EDD needed:

	Date/Time
Sampled By: T. Bohlen	5/19/16 / 1530
Relinquished By: Thomas Bohlen	5/19/16 17:20
Received By: John Hoff	5/19/16 17:20
Received @ Lab By: [signature]	5/23/16 17:18

Total Cost: ☐

P.I.F. ☐

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

See additional page for sample conditions.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Chain of Custody Supplement

Client: GZA Geo Environmental **Completed by:** Glenn Pezzulo

Lab Project ID: 162083 **Date:** 5/23/16

Sample Condition Requirements

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

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)			X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X Post HG		
Comments	6°C iced 5/20/16 14:15		
Sufficient Sample Quantity	X		
Comments			

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-1-051716		
Lab Sample ID:	162008-01	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.000200	mg/L		5/20/2016 14:12

Method Reference(s): EPA 7470A
Preparation Date: 5/19/2016
Data File: Hg160520A

Report Prepared Wednesday, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-1-051716		
Lab Sample ID:	162008-01	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	< 0.200	mg/L		5/23/2016 11:38
Antimony	< 0.0600	mg/L		5/23/2016 11:38
Arsenic	**0.0139**	mg/L		5/23/2016 11:38
Barium	**0.216**	mg/L		5/23/2016 11:38
Beryllium	< 0.00500	mg/L		5/23/2016 11:38
Cadmium	< 0.00500	mg/L		5/23/2016 11:38
Calcium	**320**	mg/L		5/23/2016 11:38
Chromium	< 0.0100	mg/L		5/23/2016 11:38
Cobalt	< 0.0500	mg/L		5/23/2016 11:38
Copper	**0.0649**	mg/L		5/23/2016 11:38
Iron	< 0.100	mg/L		5/23/2016 11:38
Lead	< 0.0100	mg/L		5/23/2016 11:38
Magnesium	**19.6**	mg/L		5/23/2016 11:38
Manganese	< 0.0150	mg/L		5/23/2016 11:38
Nickel	< 0.0400	mg/L		5/23/2016 11:38
Potassium	**20.2**	mg/L		5/23/2016 11:38
Selenium	< 0.0100	mg/L		5/23/2016 11:38
Silver	< 0.0100	mg/L		5/23/2016 11:38
Sodium	**4850**	mg/L		5/25/2016 10:00
Thallium	< 0.0250	mg/L		5/23/2016 11:38
Vanadium	< 0.0250	mg/L		5/23/2016 11:38
Zinc	**0.249**	mg/L		5/23/2016 11:38

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/19/2016
Data File: 052316a

Report Prepared Wednesday, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-1-051716		
Lab Sample ID:	162008-01	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		5/23/2016 14:48
4,4-DDE	< 0.100	ug/L		5/23/2016 14:48
4,4-DDT	< 0.100	ug/L		5/23/2016 14:48
Aldrin	< 0.100	ug/L		5/23/2016 14:48
alpha-BHC	< 0.100	ug/L		5/23/2016 14:48
beta-BHC	< 0.100	ug/L		5/23/2016 14:48
cis-Chlordane	< 0.100	ug/L		5/23/2016 14:48
delta-BHC	< 0.100	ug/L		5/23/2016 14:48
Dieldrin	< 0.100	ug/L		5/23/2016 14:48
Endosulfan I	< 0.100	ug/L		5/23/2016 14:48
Endosulfan II	< 0.100	ug/L		5/23/2016 14:48
Endosulfan Sulfate	< 0.100	ug/L		5/23/2016 14:48
Endrin	< 0.100	ug/L		5/23/2016 14:48
Endrin Aldehyde	< 0.100	ug/L		5/23/2016 14:48
Endrin Ketone	< 0.100	ug/L		5/23/2016 14:48
gamma-BHC (Lindane)	< 0.100	ug/L		5/23/2016 14:48
Heptachlor	< 0.100	ug/L		5/23/2016 14:48
Heptachlor Epoxide	< 0.100	ug/L		5/23/2016 14:48
Methoxychlor	< 0.100	ug/L		5/23/2016 14:48
Toxaphene	< 1.00	ug/L		5/23/2016 14:48
trans-Chlordane	< 0.100	ug/L		5/23/2016 14:48

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**63.7**	21.8 - 126		5/23/2016 14:48
Tetrachloro-m-xylene (1)	**60.8**	0 - 95.4		5/23/2016 14:48

Method Reference(s): EPA 8081B
EPA 3510C

Preparation Date: 5/23/2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-2-051716		
Lab Sample ID:	162008-02	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.000200	mg/L		5/20/2016 14:16

Method Reference(s): EPA 7470A
Preparation Date: 5/19/2016
Data File: Hg160520A

Report Prepared Wednesday, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-2-051716		
Lab Sample ID:	162008-02	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	< 0.200	mg/L		5/23/2016 11:42
Antimony	< 0.0600	mg/L		5/23/2016 11:42
Arsenic	**0.0104**	mg/L		5/23/2016 11:42
Barium	< 0.100	mg/L		5/23/2016 11:42
Beryllium	< 0.00500	mg/L		5/23/2016 11:42
Cadmium	< 0.00500	mg/L		5/23/2016 11:42
Calcium	**483**	mg/L		5/23/2016 11:42
Chromium	< 0.0100	mg/L		5/23/2016 11:42
Cobalt	< 0.0500	mg/L		5/23/2016 11:42
Copper	< 0.0250	mg/L		5/23/2016 11:42
Iron	< 0.100	mg/L		5/23/2016 11:42
Lead	< 0.0100	mg/L		5/23/2016 11:42
Magnesium	**81.4**	mg/L		5/23/2016 11:42
Manganese	**0.192**	mg/L		5/23/2016 11:42
Nickel	< 0.0400	mg/L		5/23/2016 11:42
Potassium	**11.4**	mg/L		5/23/2016 11:42
Selenium	< 0.0100	mg/L		5/23/2016 11:42
Silver	< 0.0100	mg/L		5/23/2016 11:42
Sodium	**99.0**	mg/L	M	5/23/2016 11:42
Thallium	< 0.0250	mg/L		5/23/2016 11:42
Vanadium	< 0.0250	mg/L		5/23/2016 11:42
Zinc	< 0.0600	mg/L		5/23/2016 11:42

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/19/2016
Data File: 052316a

Report Prepared Wednesday, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-2-051716		
Lab Sample ID:	162008-02	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		5/23/2016 15:01
4,4-DDE	< 0.100	ug/L		5/23/2016 15:01
4,4-DDT	< 0.100	ug/L		5/23/2016 15:01
Aldrin	< 0.100	ug/L		5/23/2016 15:01
alpha-BHC	< 0.100	ug/L		5/23/2016 15:01
beta-BHC	< 0.100	ug/L		5/23/2016 15:01
cis-Chlordane	< 0.100	ug/L		5/23/2016 15:01
delta-BHC	< 0.100	ug/L		5/23/2016 15:01
Dieldrin	< 0.100	ug/L		5/23/2016 15:01
Endosulfan I	< 0.100	ug/L		5/23/2016 15:01
Endosulfan II	< 0.100	ug/L		5/23/2016 15:01
Endosulfan Sulfate	< 0.100	ug/L		5/23/2016 15:01
Endrin	< 0.100	ug/L		5/23/2016 15:01
Endrin Aldehyde	< 0.100	ug/L		5/23/2016 15:01
Endrin Ketone	< 0.100	ug/L		5/23/2016 15:01
gamma-BHC (Lindane)	< 0.100	ug/L		5/23/2016 15:01
Heptachlor	< 0.100	ug/L		5/23/2016 15:01
Heptachlor Epoxide	< 0.100	ug/L		5/23/2016 15:01
Methoxychlor	< 0.100	ug/L		5/23/2016 15:01
Toxaphene	< 1.00	ug/L		5/23/2016 15:01
trans-Chlordane	< 0.100	ug/L		5/23/2016 15:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**10.6**	21.8 - 126	*	5/23/2016 15:01
Tetrachloro-m-xylene (1)	**86.5**	0 - 95.4		5/23/2016 15:01

Method Reference(s): EPA 8081B
EPA 3510C

Preparation Date: 5/23/2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-3-051716		
Lab Sample ID:	162008-03	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.000200	mg/L		5/20/2016 14:26

Method Reference(s): EPA 7470A
Preparation Date: 5/19/2016
Data File: Hg160520A

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, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-3-051716		
Lab Sample ID:	162008-03	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	< 0.200	mg/L		5/23/2016 11:55
Antimony	< 0.0600	mg/L		5/23/2016 11:55
Arsenic	< 0.0100	mg/L		5/23/2016 11:55
Barium	< 0.100	mg/L		5/23/2016 11:55
Beryllium	< 0.00500	mg/L		5/23/2016 11:55
Cadmium	< 0.00500	mg/L		5/23/2016 11:55
Calcium	**490**	mg/L		5/23/2016 11:55
Chromium	< 0.0100	mg/L		5/23/2016 11:55
Cobalt	< 0.0500	mg/L		5/23/2016 11:55
Copper	< 0.0250	mg/L		5/23/2016 11:55
Iron	< 0.100	mg/L		5/23/2016 11:55
Lead	< 0.0100	mg/L		5/23/2016 11:55
Magnesium	**84.2**	mg/L		5/23/2016 11:55
Manganese	**0.0939**	mg/L		5/23/2016 11:55
Nickel	< 0.0400	mg/L		5/23/2016 11:55
Potassium	**5.61**	mg/L		5/23/2016 11:55
Selenium	< 0.0100	mg/L		5/23/2016 11:55
Silver	< 0.0100	mg/L		5/23/2016 11:55
Sodium	**94.1**	mg/L		5/23/2016 11:55
Thallium	< 0.0250	mg/L		5/23/2016 11:55
Vanadium	< 0.0250	mg/L		5/23/2016 11:55
Zinc	< 0.0600	mg/L		5/23/2016 11:55

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/19/2016
Data File: 052316a

Report Prepared Wednesday, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	MW-3-051716		
Lab Sample ID:	162008-03	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		5/23/2016 15:42
4,4-DDE	< 0.100	ug/L		5/23/2016 15:42
4,4-DDT	< 0.100	ug/L		5/23/2016 15:42
Aldrin	< 0.100	ug/L		5/23/2016 15:42
alpha-BHC	< 0.100	ug/L		5/23/2016 15:42
beta-BHC	< 0.100	ug/L		5/23/2016 15:42
cis-Chlordane	< 0.100	ug/L		5/23/2016 15:42
delta-BHC	< 0.100	ug/L		5/23/2016 15:42
Dieldrin	< 0.100	ug/L		5/23/2016 15:42
Endosulfan I	< 0.100	ug/L		5/23/2016 15:42
Endosulfan II	< 0.100	ug/L		5/23/2016 15:42
Endosulfan Sulfate	< 0.100	ug/L		5/23/2016 15:42
Endrin	< 0.100	ug/L		5/23/2016 15:42
Endrin Aldehyde	< 0.100	ug/L		5/23/2016 15:42
Endrin Ketone	< 0.100	ug/L		5/23/2016 15:42
gamma-BHC (Lindane)	< 0.100	ug/L		5/23/2016 15:42
Heptachlor	< 0.100	ug/L		5/23/2016 15:42
Heptachlor Epoxide	< 0.100	ug/L		5/23/2016 15:42
Methoxychlor	< 0.100	ug/L		5/23/2016 15:42
Toxaphene	< 1.00	ug/L		5/23/2016 15:42
trans-Chlordane	< 0.100	ug/L		5/23/2016 15:42

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**71.6**	21.8 - 126		5/23/2016 15:42
Tetrachloro-m-xylene (1)	**72.3**	0 - 95.4		5/23/2016 15:42

Method Reference(s): EPA 8081B
EPA 3510C

Preparation Date: 5/23/2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	Duplicate-051716		
Lab Sample ID:	162008-04	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.000200	mg/L		5/20/2016 14:36

Method Reference(s): EPA 7470A
Preparation Date: 5/19/2016
Data File: Hg160520A

Report Prepared Wednesday, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	Duplicate-051716		
Lab Sample ID:	162008-04	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Dissolved TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	< 0.200	mg/L		5/23/2016 12:00
Antimony	< 0.0600	mg/L		5/23/2016 12:00
Arsenic	**0.00542**	mg/L	J	5/23/2016 12:00
Barium	< 0.100	mg/L		5/23/2016 12:00
Beryllium	< 0.00500	mg/L		5/23/2016 12:00
Cadmium	< 0.00500	mg/L		5/23/2016 12:00
Calcium	**497**	mg/L		5/23/2016 12:00
Chromium	< 0.0100	mg/L		5/23/2016 12:00
Cobalt	< 0.0500	mg/L		5/23/2016 12:00
Copper	**0.166**	mg/L		5/23/2016 12:00
Iron	< 0.100	mg/L		5/23/2016 12:00
Lead	**0.0210**	mg/L		5/23/2016 12:00
Magnesium	**85.3**	mg/L		5/23/2016 12:00
Manganese	**0.0958**	mg/L		5/23/2016 12:00
Nickel	< 0.0400	mg/L		5/23/2016 12:00
Potassium	**5.78**	mg/L		5/23/2016 12:00
Selenium	< 0.0100	mg/L		5/23/2016 12:00
Silver	< 0.0100	mg/L		5/23/2016 12:00
Sodium	**93.3**	mg/L		5/23/2016 12:00
Thallium	< 0.0250	mg/L		5/23/2016 12:00
Vanadium	< 0.0250	mg/L		5/23/2016 12:00
Zinc	**0.610**	mg/L		5/23/2016 12:00

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/19/2016
Data File: 052316a

Report Prepared Wednesday, May 25, 2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 162008

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

Project Reference: 31.0056687.30 Task 4 Sub Task 1

Sample Identifier:	Duplicate-051716		
Lab Sample ID:	162008-04	**Date Sampled:**	5/17/2016
Matrix:	Groundwater	**Date Received:**	5/18/2016

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		5/23/2016 15:55
4,4-DDE	< 0.100	ug/L		5/23/2016 15:55
4,4-DDT	< 0.100	ug/L		5/23/2016 15:55
Aldrin	< 0.100	ug/L		5/23/2016 15:55
alpha-BHC	< 0.100	ug/L		5/23/2016 15:55
beta-BHC	< 0.100	ug/L		5/23/2016 15:55
cis-Chlordane	< 0.100	ug/L		5/23/2016 15:55
delta-BHC	< 0.100	ug/L		5/23/2016 15:55
Dieldrin	< 0.100	ug/L		5/23/2016 15:55
Endosulfan I	< 0.100	ug/L		5/23/2016 15:55
Endosulfan II	< 0.100	ug/L		5/23/2016 15:55
Endosulfan Sulfate	< 0.100	ug/L		5/23/2016 15:55
Endrin	< 0.100	ug/L		5/23/2016 15:55
Endrin Aldehyde	< 0.100	ug/L		5/23/2016 15:55
Endrin Ketone	< 0.100	ug/L		5/23/2016 15:55
gamma-BHC (Lindane)	< 0.100	ug/L		5/23/2016 15:55
Heptachlor	< 0.100	ug/L		5/23/2016 15:55
Heptachlor Epoxide	< 0.100	ug/L		5/23/2016 15:55
Methoxychlor	< 0.100	ug/L		5/23/2016 15:55
Toxaphene	< 1.00	ug/L		5/23/2016 15:55
trans-Chlordane	< 0.100	ug/L		5/23/2016 15:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**71.2**	21.8 - 126		5/23/2016 15:55
Tetrachloro-m-xylene (1)	**75.5**	0 - 95.4		5/23/2016 15:55

Method Reference(s): EPA 8081B
EPA 3510C

Preparation Date: 5/23/2016

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

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

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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.

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.

PARADIGM
ENVIRONMENTAL SERVICES, INC

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

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: GZA GeoEnvironmental	CLIENT: Same	LAB PROJECT ID: 162008
ADDRESS: 535 Washington St.	ADDRESS:	
CITY: Buffalo STATE: NY ZIP: 14203 →	CITY: STATE: ZIP:	Quotation #:
PHONE: 716-685-2300	PHONE:	Email:
ATTN: J. Richert	ATTN:	james.richert@gza.com

PROJECT REFERENCE
31.0056687.30
Task 4 Subtask 1

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

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	Metals TAL	Pesticides	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/17/16	1230		X	MW-1-051716	WG	2	X	X	* FILTER Metals Samples *	01A
↓	1430		X	MW-2-051716 (MS/MSD)	↓	6	X	X	↓	02A
	1545		X	MW-3-051716		2	X	X		03A
	-		X	Duplicate-051716		2	X	X		04A
									A for Dissolved Metals. CP 5/18/16	
									4°C iced by samples 5/18/16 by 55 hrs custody seals intact mol/Nail	

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 please indicate package needed:	☐	Other EDD please indicate EDD needed:	☐

Thomas Bohlen 5/17/16
Sampled By — Date/Time

Thomas Bohlen 5/17/16 / 1648
Relinquished By — Date/Time

Jim Richert 5/17/16 1730
Received By — Date/Time

[signature] 5/17/16 1730
Received @ Lab By — Date/Time

[signature] 5/18/16 15:27

Total Cost:

P.I.F.

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

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: GZA Geo Environmental **Completed by:** Glenn Pezzulo

Lab Project ID: 162008 **Date:** 5/18/16

Sample Condition Requirements

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

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)			X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		X metals
Comments	4°C iced 5/18/16 14:55		
Sufficient Sample Quantity	X		
Comments			