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2018 PERIODIC REVIEW REPORT
BUFFALO LAKESIDE COMMERCE PARK (CertainTeed Site)
BUFFALO, NEW YORK
BROWNFIELD CLEANUP PROGRAM
Site Number C915185

April 23, 2018
File No. 21.0056854.00

PREPARED FOR:
Ship Certain, L.L.C.
15260 Ventura Boulevard
Suite 1120
Sherman Oaks, CA 91403

GZA GeoEnvironmental of New York
300 Pearl Street, Suite 700 | Buffalo, New York 14202
716-685-2300

32 Offices Nationwide
www.gza.com

Proactive by Design

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY
300 Pearl Street
Suite 700
Buffalo, NY 14202
T: 716-685-2300
F: 716-248-1472
www.gza.com

VIA EMAIL

April 23, 2018
File No. 21.0056854.00

Mr. David Szymanski
New York State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Avenue
Buffalo, New York 14203
email: david.szymanski@dec.ny.gov

Re: 2018 Periodic Review Report
Buffalo Lakeside Commerce Park (CertainTeed Site)
231 Ship Canal Parkway, Buffalo, New York
Brownfield Cleanup Program Site (Number C915185)

Dear Mr. Szymanski:

GZA GeoEnvironmental of New York (GZA) is pleased to submit this Periodic Review Report (PRR) on behalf of Ship Certain, L.L.C. Ship Certain, L.L.C. is the owner and operator of the Buffalo Lakeside Commerce Park Brownfield Cleanup Program (BCP) Site (No. 915185). GZA prepared this PRR in general conformance with the guidelines provided to Ship Certain in the 45-day reminder notice letter dated February 14, 2018.

If you have any questions or need additional information, please call Jim Richert at (716) 844-7048.

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: John Marciniak (CertainTeed)

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1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

The Buffalo Lakeside Commerce Park Site (CertainTeed Site or Site) is an active manufacturing facility located on a 25.1-acre parcel with an address of 231 Ship Canal Parkway. The Site is situated within the greater 113-acre Buffalo Lakeside Commerce Park of Buffalo, New York. **(Figure 1).** The Site is located on what was a railroad yard of the former Hanna Furnace iron manufacturing facility. Environmental Site investigations confirmed the presence of semi-volatile organic compounds (SVOCs) and metals in the soil/fill at concentrations greater than NYSDEC Part 375 Technical and Administrative Guidance Memorandum (TAGM) 4046 soil cleanup objectives. Also, groundwater was determined to have elevated pH. Considering Site contaminants of concern are not volatile, the focus of the Site remedy was to minimize the exposure risks of direct contact and/or inhalation with site contaminants in the soil/fill and the high pH groundwater. The Remedial Action Objectives (RAOs) for the Site included:

- Addressing soils with contaminants above the NYSDEC guidance values in the upper 1-foot;
- Prevention of ingestion or direct contact with groundwater and with soil containing contaminants exceeding the guidance values;
- Implementation and maintenance of engineering and institutional controls.

Institutional Controls Include:

- Property use may include restricted industrial use only;
- Groundwater may not be used without prior treatment and approval of the regulator.

The Engineering Control is:

- Cover System: hardscape and/or imported clean soil (minimum of 12 inches) underlain by a demarcation grid of high visibility yellow ribbon.

The Environmental Easement (EE) which includes greater specificity of the above ICs and ECs was signed by NYSDEC on September 22, 2005.

1.2 EFFECTIVENESS OF THE REMEDIAL PROGRAM

Based upon our PRR inspection conducted on March 29, 2018 and the screening and air monitoring observations performed in November 2016 as part of an on-Site pavement expansion project, the site cover system was confirmed to be in place and appeared to be complete, in good condition, and functioning as intended. Therefore, the Site remedy continues to be effective at meeting Site RAOs. The need for minor repairs of ruts and re-seeding of grass cover at some locations was identified.

1.3 COMPLIANCE

GZA identified the Site to be in compliance with the SMP. The Institutional Controls and Engineering Controls (IC/ECs) remain in place and there are no active remedial systems requiring monitoring or operation and maintenance.

1.4 RECOMMENDATIONS

GZA and CertainTeed recommend no changes to the SMP nor to the frequency of Site inspections and PRR submittals. Implementation of the SMP, including the Excavation Work Plan and maintenance of the Site cover system will continue as the Site continues operations as a manufacturing facility.

2.0 SITE OVERVIEW

2.1 SITE LOCATION AND FEATURES

The Site is in the southeast corner of the Buffalo Lakeside Commerce Park which is bounded by the Hamburg Turnpike (RT 5) to the west, the boundary between the Cities of Buffalo and Lackawanna to the south, railroad tracks to the east, and wetlands and Tifft Street to the north. The Site is flat and in area of the City that was formerly used for heavy industry but is currently sparsely developed by manufacturing and rail uses. **(Figure 1)**. In 2005 the Site (NYSDEC Site No. C915185) was remediated under the Brownfield Cleanup Program (BCP) for restricted industrial use.

2.2 INVESTIGATION AND REMEDIAL HISTORY

Based on information obtained from environmental Site investigations, SVOCs and metals were identified at concentrations above applicable regulatory guidance (TAGM-4046). Other than elevated pH, no contaminants of concern were identified in the on-Site groundwater.

The Remedial Action Objectives (RAOs) for the Site were:

- Address soils with contaminants above the TAGM-46 levels in the upper 1-foot;
- Prevent ingestion or direct contact with soil contaminants;
- Institute and maintain institutional and engineering controls to assure the Site is not used in a manner inconsistent with the future anticipated use (restricted industrial).

The selected site remedy included placement of a site cover system, made up of either clean soil at a minimum thickness of 1-foot or hardscapes including paved roads, parking lots, sidewalks, and/or building slab foundations.

The Site remedy was completed in 2005 and a Certificate of Completion (COC) was issued by NYSDEC.

3.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

GZA performed a Site Inspection during the reporting period (March 31, 2015 to March 31, 2018) on March 29, 2018. No record of inspections during 2016 or 2017 were provided. The completed Site Inspection Form is provided in **Appendix A**. A photo log is provided in **Appendix B** and a map showing the location and orientation of the Site photos is provided as **Figure 2**. Since the previous Site inspection and PRR in 2015, a pavement expansion project was completed by CertainTeed in November 2016. CertainTeed's pavement contractor hired

GZA to implement soil screening and air monitoring as required in the Site Management Plan. No evidence of significantly impacted soil/fill was encountered, and analytical samples collected confirmed that the disturbed soil/fill could remain on Site if covered appropriately. A copy of the soil/fill management report for the pavement expansion project is provided in **Appendix C**. The required cover system is being maintained per the SMP and was observed to be providing complete coverage of the Site. The Site remedy, therefore, continues to be effective at meeting the Site RAOs for protection of current and intended future site users.

4.0 INSTITUTIONAL CONTROL/ENGINEERING CONTROL (IC/EC) PLAN COMPLIANCE REPORT

4.1 IC/EC REQUIREMENTS AND COMPLIANCE

IC/ECs for the Site were determined by NYSDEC and specified in the EE issued by NYSDEC on September 22, 2005. Summary lists of the ICs and ECs are provided as follows:

Summary of Site Institutional Controls:

- Property use may include restricted industrial use only;
- Groundwater may not be used without prior treatment and approval of the regulator.

Summary of Site Engineering Control:

- Cover System: hardscape and imported clean soil (minimum of 12 inches) vegetated and underlain by a grid of high visibility yellow ribbon. Hardscapes may include paved roads, parking lots, sidewalks, and/or building slab foundations.

Besides the expansion of exterior paved surfaces, no significant changes to the Site cover system were reported or observed since submittal of the previous PRR on May 11, 2015. GZA provided on-Site Qualified Environmental Professional (QEP) services during the period of earth disturbance for pavement expansion and a report was prepared by GZA detailing the observation and monitoring conducted during that work period. The report **(Appendix C**) was provided to NYSDEC (David Szymanski) on December 2, 2016.

Based on observations made during GZA field observations and Site inspections Ship Certain is complying with provisions of the SMP relative to IC/ECs. Manufacturing activity continues at the Site and CertainTeed is aware that monitoring and observation by a QEP is required during earth moving activities. Although not a required EC, additional protection of the Site will be provided by a six-feet high PVC perimeter fence which is being installed this month and will restrict access to the Site.

4.2 IC/EC CERTIFICATION

The Site-specific IC/EC Certification Form, for reporting period of March 31, 2015 to March 31, 2018, was provided to Ship Certain as an attachment to the February 14, 2018 Reminder Notice letter sent by NYSDEC. This form has been completed by Ship Certain and Certified by GZA as QEP. The completed and certified IC/EC Certification Form for this reporting period is included in **Appendix D** of this PRR.

5.0 PRR CONCLUSIONS AND RECOMMENDATIONS

5.1 PRR CONCLUSIONS

The IC/ECs remain in place and are performing as intended. There are no active remedial systems requiring operation, monitoring, or maintenance. CertainTeed and their operations appear to be in general compliance with the SMP with a few relatively minor areas in need of improvement as follows:

- Due to an oversight, annual inspections of the Site cover system were not conducted during 2016 and 2017.
- The vegetative cover of the soil cover system is damaged (ruts and bare spots) at several locations due mostly to trucks cutting corners and snow plow blades scraping off the grass cover.

5.2 PRR RECOMMENDATIONS

GZA and CertainTeed recommend no changes to the SMP nor to the frequency of site inspections (annual) and PRR submittals (Triennial). Implementation of the SMP, including the Excavation Work Plan and maintenance of the Site cover system will continue as Site manufacturing operations continue.

To not miss future required site inspections, CertainTeed has contracted GZA to conduct annual inspections of the Site cover system for the next three years and to prepare the next PRR in 2021.

CertainTeed is in the process of having a six-feet high PVC fence installed around the entire site perimeter. The fence posts are being driven, not drilled. Once installed, this fence will help to reduce trespassing and damage to the vegetative grass cover.

During the spring and summer of 2018, CertainTeed will repair identified ruts and grass bare spots. The next site inspection is planned for early fall (September/October) of 2018 to demonstrate the above improvements.

FIGURES

NOTE:
BASE MAP ADAPTED FROM USA TOPO MAPS USING ArcGIS AUTOCAD PLUGIN

NO.	ISSUE/DESCRIPTION	BY	DATE

PREPARED BY:
GZA GeoEnvironmental of N.Y.
Engineers and Scientists
BUFFALO, NEW YORK 14202
(716) 685-2300

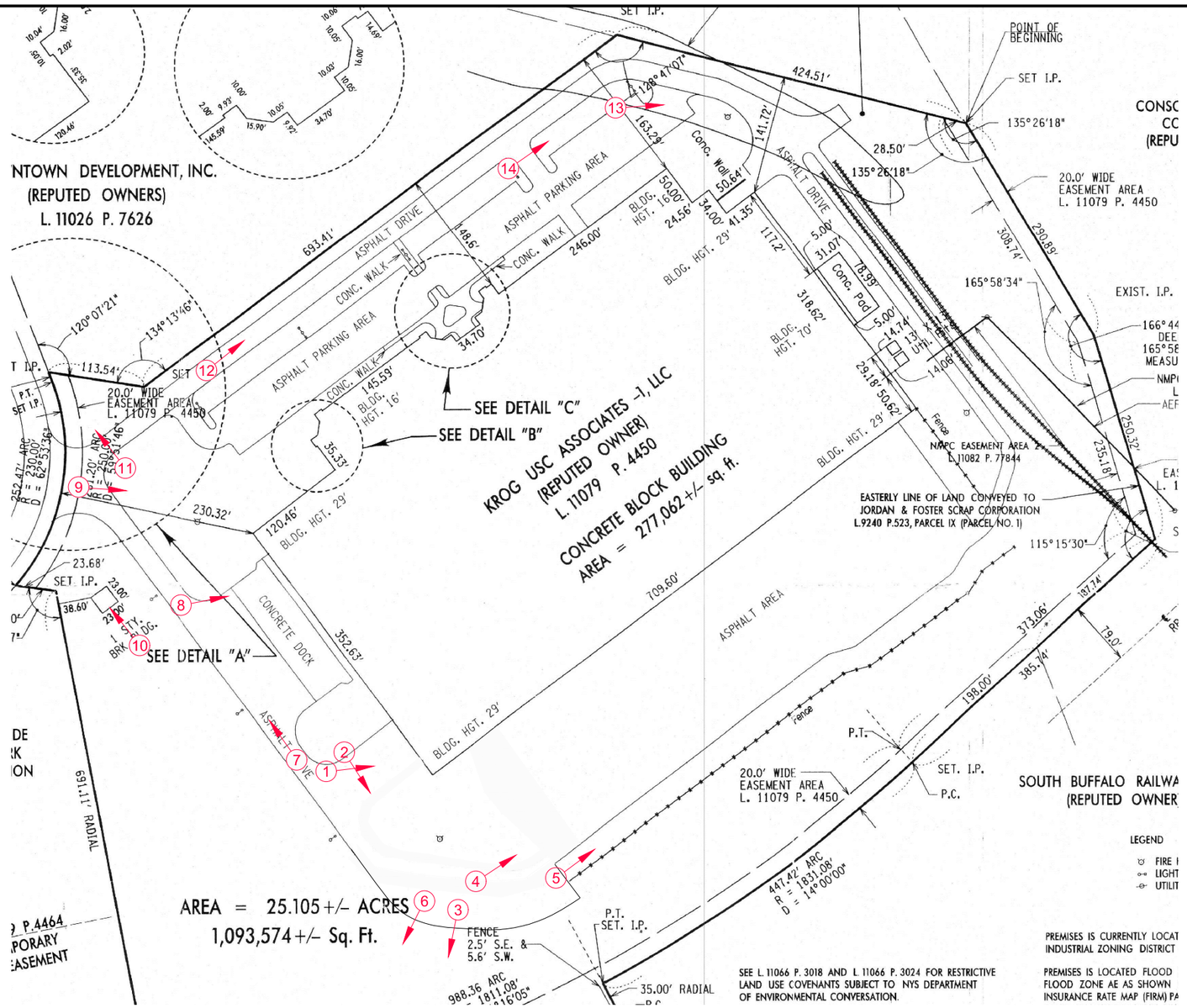
PREPARED FOR:
CERTAINTEED CORPORATION
BUFFALO, NEW YORK

BUFFALO LAKESIDE COMMERCE PARK
(CERTAINTEED SITE) 231 SHIP CANAL PARKWAY
BUFFALO, NEW YORK
2018 PERIODIC REVIEW

LOCUS PLAN

FIGURE 1

PROJ MGR: JR	REVIEWED BY: TB	CHECKED BY: BAK	DATE: APRIL 2018	PROJECT NO.: 21.0056854.00	REVISION NO.
DESIGNED BY:	DRAWN BY: MDK	SCALE: AS SHOWN			



NOTES:

1. BASE MAP FROM ALTA/ACSM LAND TITLE SURVEY URBAN CLASSIFICATION KROG USC ASSOCIATES-1, LLC. DRAWING NO. CPM-2, DATED FEB. 14, 2005. PREPARED BY PARSONS TRANSPORTATION GROUP, BUFFALO, NEW YORK.

2. LOCATION AND ORIENTATION OF PHOTOGRAPHS SHOULD BE CONSIDERED APPROXIMATE.

LEGEND:

3 — LOCATION, DESIGNATION AND DIRECTION OF PHOTOGRAPH

NO.	ISSUE/DESCRIPTION	BY	DATE

BUFFALO LAKESIDE COMMERCE PARK (CERTAINTEED SITE)
231 SHIP CANAL PARKWAY
BUFFALO, NEW YORK

2018 PERIODIC REVIEW REPORT
LOCATION AND ORIENTATION OF SITE PHOTOS

PREPARED BY:
GZA GeoEnvironmental of N.Y.
Engineers and Scientists
300 PEARL STREET, SUITE 700
BUFFALO, NEW YORK 14202
(716) 685-2300

PREPARED FOR:
CERTAINTEED CORPORATION
BUFFALO, NEW YORK

PROJ MGR: JR	REVIEWED BY: TB	CHECKED BY: BAK	FIGURE 2
DESIGNED BY:	DRAWN BY: MDK	SCALE: AS SHOWN	
DATE APRIL 2018	PROJECT NO. 21.0056854.00	REVISION NO.	

APPENDIX A

SITE INPECTION FORM

ENVIRONMENTAL INSPECTION FORM

Hanna Furnace - Former Railroad Yard Area (Subparcel 1)

Property Name: Buffalo Lakeside (C915185) commerce park - certainTeed site Inspection Date: March 29, 2018

Property Address: 231 ship Canal Parkway

City: Buffalo State: NY Zip Code: 14218

Property ID: (Tax Assessment Map)

Section: 132.20 Block: 1 Lot(s): 11

Total Acreage: 25

Weather (during inspection): Temperature: 48F Conditions: overcast + Fog

SIGNATURE:

The findings of this inspection were discussed with appropriate personnel, corrective actions were identified and implementation was mutually agreed upon:

Inspector: Jen Richert Date: 3-29-18

Next Scheduled Inspection Date: sept/oct 2018

SECURITY AND ACCESS

	Yes	No
1. Access controlled by perimeter fencing?		N/A
Are there sections of the fence material damaged or missing?		—
Are the fence or gate post foundations structurally sound?		—
2. "No Trespass" signs posted in appropriate languages?		N/A
Are the signs securely attached to the fencing or posts?		—
Are there sufficient signs; are the signs adequately spaced around the perimeter of the property?		—
3. Is there evidence of trespassing?		X
Is there evidence of illegal dumping?		X

COVER & VEGETATION

4. Final cover in acceptable condition?	X	
Is there evidence of sloughing, erosion, ponding or settlement?		X
Is there evidence of unintended traffic; rutting?	X	
Is there evidence of distressed vegetation/turf?	X	

	Yes	No	
5. Final cover sufficiently covers soil/fill material?	X	___	
Are there cracks visible in the soil or pavement?	X	___	minor
Is there evidence of erosion in the stormwater channels or swales?	___	X	
Is there damage to the synthetic erosion control fabric in the channels or swales?	___	N/A	

ACTIVITY ON SITE

6. Any activity on site that mechanically disturbed soil cover?	X	___

ADDITIONAL FACILITY INFORMATION

Development on or near the site? (Specify size and type: e.g., residential, 40 acres, well and septic)

NONE

COMMENTS

Item #

several areas of minor ruts and damaged grass cover caused by truck traffic and snow plows. see inspection photos

ATTACHMENTS

see PRR

1. Site Sketch
2. Photographs
3. ~~Laboratory Report (s)~~ 0

APPENDIX B

PHOTO LOG

Photographic Log

Client Name: CertainTeed Corporation	**Site Location:** 231 Ship Canal Parkway, Buffalo, NY	**Project No.** 21.0056854.00

Photo No.	**Date:**
1	3-29-18

Direction Photo Taken:

Southeast

Description:

Paved area in front of SW loading area.

Photo No.	**Date:**
2	3-29-18

Direction Photo Taken:

South

Description:

SW exterior storage yard.

Photographic Log

Client Name: CertainTeed Corporation	**Site Location:** 231 Ship Canal Parkway, Buffalo, NY	**Project No.** 21.0056854.00

Photo No.	**Date:**
3	3-29-18

Direction Photo Taken:

Southwest

Description:

Disturbed grass cover caused by contractor preparing to install site perimeter fence.

Photo No.	**Date:**
4	3-29-18

Direction Photo Taken:

East/northeast

Description:

Paved rear storage area.

Photographic Log

Client Name: CertainTeed Corporation	**Site Location:** 231 Ship Canal Parkway, Buffalo, NY	**Project No.** 21.0056854.00

Photo No.	**Date:**
5	3-29-18

Direction Photo Taken:

East/Northeast

Description:

Scarred grass cover at rear of storage area, caused by snow plow.

Photo No.	**Date:**
6	3-29-18

Direction Photo Taken:

Southwest

Description:

Wooden pallet debris stored on grass cover.

Photographic Log

Client Name: CertainTeed Corporation	**Site Location:** 231 Ship Canal Parkway, Buffalo, NY	**Project No.** 21.0056854.00

Photo No.	**Date:**
7	3-29-18

Direction Photo Taken:

Northwest

Description:

Paved truck drive area by loading docks.

Photo No.	**Date:**
8	3-29-18

Direction Photo Taken:

East

Description:

Tire ruts caused by trucks cutting the corner.

Photographic Log

Client Name: CertainTeed Corporation	**Site Location:** 231 Ship Canal Parkway, Buffalo, NY	**Project No.** 21.0056854.00

Photo No.	**Date:**
9	3-29-18

Direction Photo Taken:

Southeast

Description:

Western corner of the plant building.

Photo No.	**Date:**
10	3-29-18

Direction Photo Taken:

Down/north

Description:

Concrete pad placed to protect cover soil from high pressure water discharge from fire suppression building.

Photographic Log

Client Name: CertainTeed Corporation	**Site Location:** 231 Ship Canal Parkway, Buffalo, NY	**Project No.** 21.0056854.00

Photo No.	**Date:**
11	3-29-18

Direction Photo Taken:

North

Description:

Bolder used to prevent trucks from cutting the corner at main entrance to Site.

Photo No.	**Date:**
12	3-29-18

Direction Photo Taken:

Northeast

Description:

Main Site entrance road.

Photographic Log

Client Name: CertainTeed Corporation	**Site Location:** 231 Ship Canal Parkway, Buffalo, NY	**Project No.** 21.0056854.00

Photo No.	**Date:**
13	3-29-18

Direction Photo Taken:

East

Description:

Northeastern entrance to fenced area east of building. Note erosion of grass from tires.

Photo No.	**Date:**
14	3-29-18

Direction Photo Taken:

East

Description:

Damaged grass cover caused by rail workers driving through Site to access rail line.

APPENDIX C

Pre-Pavement Excavation Monitoring Report
(GZA: December 2, 2016)

Proactive by Design

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WATER
CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY
535 Washington Street
11th Floor
Buffalo, NY 14203
T: 716.685.2300
F: 716.685.3629
www.gza.com

VIA EMAIL

December 2, 2016
File No. 21.0056806.00

Mr. Gary Hall
Zoladz Construction Co., Inc.
13600 Railroad Street
P.O. Box 157
Alden, New York 14004
Email: garyh@zoladz.com

Re: Soil/Fill Management during Pre-Pave Excavations
CertainTeed Site
231 Ship Canal Parkway, Buffalo, NY 14218 (Site)

Dear Mr. Hall:

In accordance with our proposal dated October 17, 2016, GZA GeoEnvironmental of New York (GZA) completed the soil screening and sampling at the above-referenced Site for Zoladz Construction Co. (Client). Field screening, air monitoring, and sampling activities were conducted by GZA at the Site from November 9 to November 11, 2016.

BACKGROUND

The CertainTeed Site is located on a former brownfield at which contaminants in the soil were removed and disposed of off Site. Some contaminants remain at the Site in subsurface soil beneath a site-wide cover system. The cover system includes the site building slab foundation, paved parking, driveway, and walking surfaces, and a 1-foot thick layer of clean soil. The Site is subject to an Environmental Easement which, among other things, requires the Site owner to follow the requirements of a Site-Specific Soil/Fill Management Plan (S/FMP) whenever excavation activities are performed on Site.

CertainTeed hired Zoladz to increase the area of exterior pavement used for product storage. Two areas on either side of the access road to the southern storage yard were paved. The total area of new pavement is approximately one acre, Figure 1. Zoladz hired GZA to implement the applicable provisions of the Soil/Fill Management Plan.

SCOPE OF WORK

In support of Zoladz' planned paving operations for CertainTeed, GZA provided the following scope of services as required by the S/FMP:

1. **On-Site Soil Screening:** GZA provided on-site observation, screening, and documentation of surface and subsurface soils that were excavated and exposed beneath the existing 1-foot clean soil cover. Soils were described in the field log book and daily field forms and screened for volatile organic compounds (VOCs) using an organic vapor monitor (OVM) with photoionization detector (PID) 10.6 ev probe. Appendix A provides a log of pertinent

photographs taken during the work activities. Appendix B provides copies of the daily field forms completed throughout the field work days.

2. **On-Site Air Monitoring:** GZA provided on-site air monitoring per GZAs Site-Specific Health and Safety Plan (HASP) as required by the S/FMP. GZA monitored the breathing zone for VOCs using the OVM and particulates in the air were measured at the work site as well as downwind of the work site using a TSI Model AM510 dust monitor. Particulate measurements were recorded in the field log book and daily field forms.

3. **Soil Sampling:** As specified in the S/FMP, GZA collected one, 5-point, composite sample of the soil/fill that was excavated and relocated as part of the pre-pave activities.

4. **Report Preparation:** GZA then prepared this report, which summarizes the observations made and data collected during project. This report presents GZA's field observations, analytical results, and opinions and is subject to the limitations presented in Appendix C, and modification if subsequent information is developed by GZA or other party.

FIELD METHODS

Excavation Monitoring:
GZA observed Zoladz remove the 1-foot thick clean soil cover from the work site. The anticipated demarcation grid of yellow hazard tape was encountered at the interface between the clean cover soil and the underlying soil/fill material. The clean soil was stockpiled on site for later use as final cover. Once the clean cover soil was removed, a thin (<1 foot) of the underlying soil/fill was excavated to achieve the desired sub-grade elevations. GZA screened both the clean cover soil and the subsurface soil/fill during the excavation activities. Soil/fill was screened for VOCs by first placing the sample into a plastic Zip-Lock bag. A MiniRAE 3000 photoionization detector equipped with a 10.6 ev probe was used to measure the total VOCs in the screening sample. No elevated PID readings were detected in any of the excavated subsurface soil material.

Air Monitoring:
GZA monitored for total VOCs and dust particles during the excavation operations, as a requirement of the S/FMP. Dust measurements were monitored using a TSI Model AM510 dust monitor, no observable airborne dust was noted and no exceedances of the dust action level (150 ug/m3) were recorded by GZA. Dust mitigation was therefore not required during the excavation work.

Soil Sampling:
A total of 45 dump truck loads of subsurface soil/fill, 12 to 15 cubic yards (CY) each, were staged at a location adjacent to the work site. The total volume of this material was estimated to be 675 CY. GZA collected one composite soil sample from the subsurface material and one contingent duplicate sample. The samples were collected via methodologies identified in the S/FMP. The soil sample was composited from five locations from the stockpiled material. Each of the five composite aliquots was collected in a clean 8-oz glass jar and sealed with a screw top cap. The samples were slowly brought up to or near 70^{o}F, then screened with the PID for total volatile

organic compounds. No elevated PID readings were detected in any of the aliquots. A discrete VOC sample was collected at location 1 of 5 before compositing into one.

The five samples were transferred in equal portions to a pre-cleaned stainless mixing bowl and thoroughly homogenized using a clean stainless steel spoon. The composite sample was then transferred to appropriate precleaned jars provided by Alpha Analytical Labs, labeled and submitted to Alpha Analytical Labs for analysis. As required in the S/FMP, the sample was analyzed for the following parameters:

- Volatile Organic Compounds (Method 8260)
- Semi-volatile Organic Compounds (Method 8270)
- Polychlorinated biphenols (Method 8082)
- Pesticides (Method 8081)
- Target Analyte List (TAL) Metals (methods 6010,7471,7470)
- Cyanide (Method 9012)
- pH

A contingent duplicate sample was taken and submitted to the laboratory for holding in case additional analyses were necessary based on the results of the initial sample.

Sample results were compared to the Site-Specific Action Levels (SSALs) as provided in the S/FMP, see Table 1. Appendix D contains the complete sample data report as provided by the laboratory.

RESULTS AND CONCLUSIONS

- Soil/fill management operations were performed in accordance with the NYSDEC-approved S/FMP;
- Grossly contaminated soil/fill was not observed;
- Sample results were all below the SSALs, thus the soil/fill could remain on site beneath a 1-foot clean soil cover;
- The required Site-wide cover system remains and in compliance with the S/FMP;
- Continued monitoring of the newly seeded soil cover is recommended to assure complete vegetative cover in 2017.
- A copy of this report should be submitted to the NYSDEC and included with the next Periodic Review Report submittal.

Thank you for the opportunity to provide environmental support services to Zoladz. If you have any questions about this report, please call Jim Richert at (716) 844-7048.

Sincerely,

Peter J. Nyznyk

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

Bart Klettke, P.E.
Principal

Attachments:

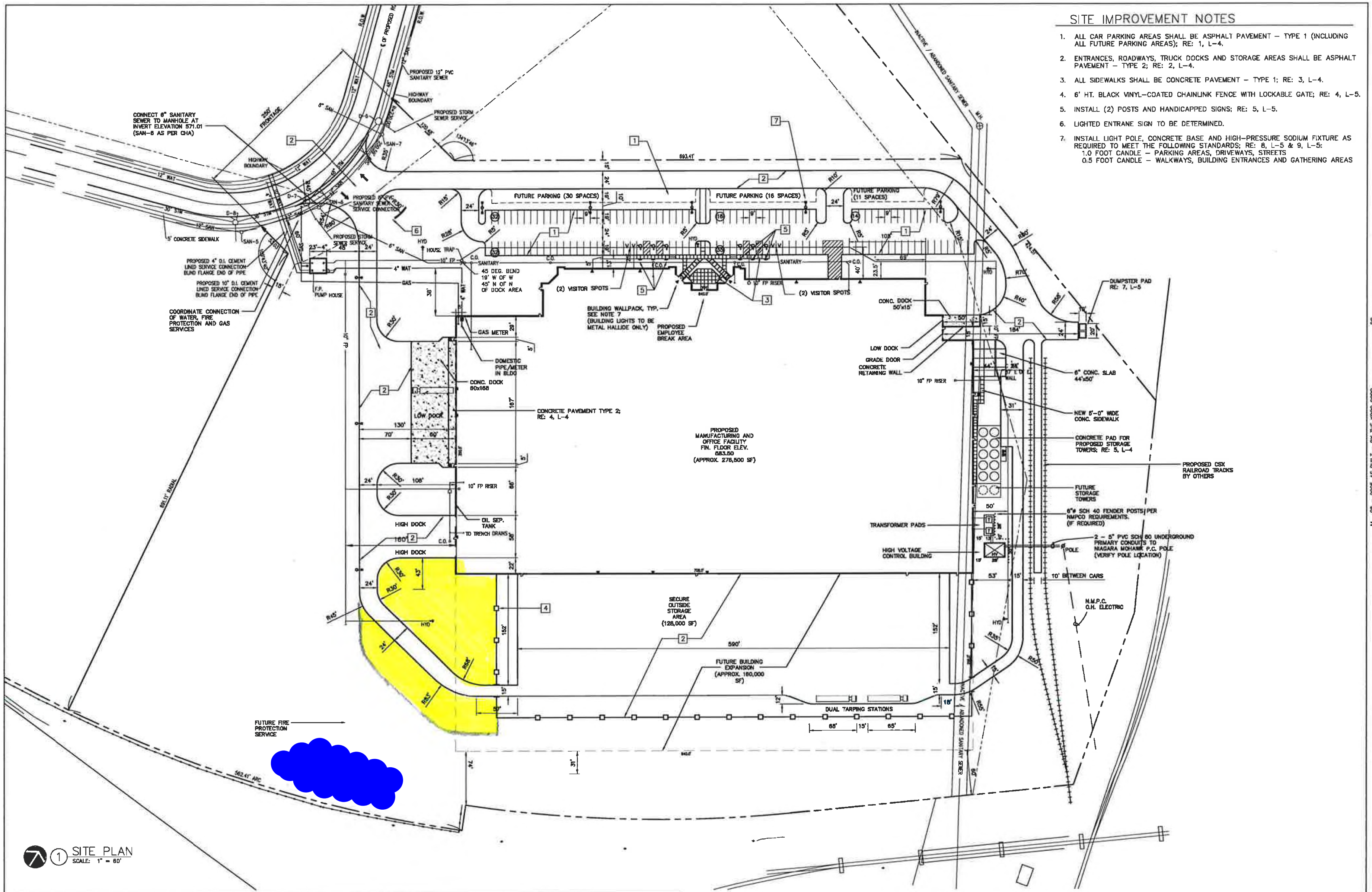
Table 1	Analytical Results Summary
Figure 1	Location of Work Site
Appendix A:	Photo Log
Appendix B:	Daily Field Forms
Appendix C:	Limitations
Appendix D:	Analytical Laboratory Report

TABLE 1
Analytical Results Summary - Soil/Fill Sample
CERTAINTEED SITE - 231 SHIP CANAL PARKWAY, BUFFALO, NY

Parameter	Site-Specific Action Level	SS-1
Volatile Organic Compounds (ug/kg)		
Total VOCs	10,000[(1)]	31.6
Semivolatile Organic Compounds (ug/kg)		
Total SVOCs	500,000[(1/2)]	2,294
Pesticides/PCBs (ug/kg)		
Total Pesticides	10,000[(2)]	ND
Total PCBs (surface-0-1')	1,000	127.6
Metals (mg/kg)		
Aluminum	–	11,000
Antimony	–	1.3 J
Arsenic	50	8.9
Barium	500	87
Beryllium	–	1.3
Cadmium	20	0.83
Calcium	–	61000
Chromium	200	30
Cobalt	–	7.3
Copper	–	35
Iron	–	42,000
Lead	1,000	65
Magnesium	–	9,400
Manganese	–	1,300
Mercury	1.0	0.09
Nickel	–	25
Potassium	–	690
Selenium	50	1.0 J
Silver	–	0.15 J
Sodium	–	280
Thallium	–	0.29
Vanadium	–	26
Zinc	–	210
Cyanide (mg/kg)	50	2.0
pH	9.0	8.5

Notes:
(1) Total concentration is the sum of concentrations of Target Compound List (TCL) compounds.

(2) In addition to the SSAL of 500,000 ug/kg for total concentrations of SVOCs, the SSAL for each individual SVOC is 50,000 ug/kg.
"–" = No Site Specific Action Level
ND = Non-detect
J = Analyte detected below quantitation limit



SITE IMPROVEMENT NOTES

1. ALL CAR PARKING AREAS SHALL BE ASPHALT PAVEMENT – TYPE 1 (INCLUDING ALL FUTURE PARKING AREAS); RE: 1, L-4.
2. ENTRANCES, ROADWAYS, TRUCK DOCKS AND STORAGE AREAS SHALL BE ASPHALT PAVEMENT – TYPE 2; RE: 2, L-4.
3. ALL SIDEWALKS SHALL BE CONCRETE PAVEMENT – TYPE 1; RE: 3, L-4.
4. 6' HT. BLACK VINYL-COATED CHAINLINK FENCE WITH LOCKABLE GATE; RE: 4, L-5.
5. INSTALL (2) POSTS AND HANDICAPPED SIGNS; RE: 5, L-5.
6. LIGHTED ENTRANE SIGN TO BE DETERMINED.
7. INSTALL LIGHT POLE, CONCRETE BASE AND HIGH-PRESSURE SODIUM FIXTURE AS REQUIRED TO MEET THE FOLLOWING STANDARDS; RE: 8, L-5 & 9, L-5:
   1.0 FOOT CANDLE – PARKING AREAS, DRIVEWAYS, STREETS
   0.5 FOOT CANDLE – WALKWAYS, BUILDING ENTRANCES AND GATHERING AREAS

SITE DATA REQUIREMENTS

ZONING DISTRICT	–	Urban Renewal							
SUPPLEMENTAL HEIGHT, LOT, YARD AND BULK REGULATIONS	–	Min. Lot 5 ac.	Width 350'	Depth 625'	Front	Side	Rear	Max. Bldg. Htg. 40'	Max. Lot Coverage % 75%
		STRUCTURE			60'	15'	15'		
		PARKING, LOADING & STACKING			NOTE 1	NOTE 2	NOTE 2		
PARKING REQUIREMENTS (SIX TENTHS (0.6) OF A PARKING SPACE PER EMPLOYEE FOR TWO CONSECUTIVE SHIFTS)	–	Space size – 9' x 19' – 171 sf. min.							
		Spaces required – 83							
		Spaces provided – 132							

SITE ACREAGE	–	25.0 ac.	1,089,000 sf.
BUILDING SIZE	–	9.78 ac.	426,000 sf.
PARKING/PAVEMENT	–	3.88 ac.	168,822 sf.
GREENSPACE	–	11.34 ac.	494,178 sf.

NOTES:
1. NO ON-SITE PARKING SHALL BE DEVELOPED WITHIN THE FRONT YARD
2. PARKING WILL BE ALLOWED IN SETBACKS IF PARKING IS TO BE LINKED OR SHARED AMONG USES IN THE URBAN RENEWAL AREA

K & associates
53 East Home Road
BOWMANSVILLE, NY 14026
716 684-5206

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CK & ASSOCIATES AND IS NOT TO BE USED IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CK & ASSOCIATES.

The Krog Corp.
4 Centre Drive Orchard Park, New York 14127
716-667-1234
Fax. 667-1256
Contractors Engineers Developers

11 08 – 2005 AS BUILT – BY THE KROG CORP. DS
10 09-08-04 REVISED NEW ROAD AS PER C.H.A., PUMP HOUSE, UTILITIES, INVERTS

NO.	DATE	REVISION DESCRIPTION	BY	APPRVD
9	08-10-04	REVISED SAN. INVERT AS PER CHA. / SERVICE ROAD S-E CORNER		
8	06-01-04	REVISED NEW EXT. DOOR, SILOS PAD, GAS M., RPZ, WATER M. MISC		
7	04-02-04	REVISED BUILDING PERMIT ISSUE		
6	03-25-04	REVISED HIGH VOLTAGE TRANSFORMER		
5	03-24-04	REVISED PAVING / UTILITIES		
4	03-15-04	REVISED HIGH VOLTAGE GEAR LOCATION		
3	01-12-04	REVISED BUILDING OUTLINE & MISC.		
2	12-12-03	REVISED PROPERTY LINES PER PARSONS SURVEY	CAR	PS
1	12-12-03	REVISED BUILDING FOOTPRINT PER KROG CORP	CAR	PS

CertainTeed
Proposed Manufacturing and Office Facility
Union Ship Canal – Buffalo, New York

SITE LAYOUT AND UTILITIES PLAN

DRAWN BY:	CAR
APPROVED BY:	CAR
DATE:	10-05-03
SCALE:	AS NOTED
PROJECT NO:	03-528
DRAWING NO:	L-1R

APPENDIX B

DAILY FIELD FORMS

APPENDIX A

PHOTO LOG

Exposed yellow demarcation tape.

Removal of clean cover soil.

Segregation of Clean cover soil for reuse.

Rolling subsurface soil/fill and placement of pre-pave stone layer

Placement of pre-pave stone layer.

Placement of clean soil cover onto new demarcation mesh.

Finished pavement, NE area.

Finished pavement, SW area.

Hydroseeded replaced clean soil cover.

APPENDIX B

DAILY FIELD FORMS

DAILY FIELD SUMMARY FORM

DATE: 11/9 2016 FILE No. 21.0056806.00 REPORT No. 16-__

PROJECT: CertainTeed Site, Buffalo, New York
Soil Screening during Paving Operations

GENERAL WEATHER CONDITIONS: Cloudy

Temp Range: 45 to 46 °F
Wind Speed: 12 mph
Wind Direction: N

Time GZA Arrived on Site: 0845

Site Conditions: Good

Contractors on Site: Zoladz

- GZA Personnel On-Site: Pete Nyznyk
- GZA's Equipment On-Site: Mini RAE 3000 TSI AM510 Dust Monitor

Name of NYSDEC Representative(s) on Site:
Time of arrival:
Time of departure:
Issues Discussed with NYSDEC:

SUMMARY OF WORK OBSERVED: (See attached field sketch) ★ See field note book

Zoladz begins removing sod & topsoil in proposed excavation area, south of paved area.

Clean cap spoils staged in location South of excavation area.

When excavating into soil below cap (D-marker) spoils staged separate from clean cap material

Zoladz begins to roll/stamp excavated area when reached at proposed depth ~12", Zoladz begins to excavation adjacent to building

No exceedences on dust monitoring → No elevated reading of soils w/ PID.

Photos taken: - Excavation - D-Marker
- Grading - Slag
- Soil - Rolling/Stamping

Time GZA left Site: 1700

Prepared by: Pete Nyznyk

Reviewed by: _____

DAILY FIELD SUMMARY FORM

DATE: 11/10 2016 FILE No. 21.0056806.00 REPORT No. 16-__

PROJECT: CertainTeed Site, Buffalo, New York
Soil Screening during Paving Operations

GENERAL WEATHER CONDITIONS: Partly Cloudy

Temp Range: 46 to 56 °F
Wind Speed: 0-10 mph possible gusts up to 40
Wind Direction: W-NW

Time GZA Arrived on Site: 0700

Site Conditions: cool

Contractors on Site: Zoladz

- GZA Personnel On-Site: Pete Nyznyk
- GZA's Equipment On-Site: Mini RAE3000, TSI AM510 - Dust monitor

Name of NYSDEC Representative(s) on Site: David Locey
Time of arrival: 1000
Time of departure: 1030
Issues Discussed with NYSDEC: General scope of work
- Soil material
- Soil staging
- boundries of excavation
- thickness of cap
- D-marker tape distance between each other

SUMMARY OF WORK OBSERVED: (See attached field sketch)

Zoladz continued to lay stone in southern excavation area and follow with roller/stamper.
Continuation of excavation area adjact to building. Most soil removed and staged in area South west of excavation.
Excavation depth ~12". When 'D-Marker' is encountered soil excavated below is stage separately from the cap material.
Screening of both cap soil (cap) and sub-base material no elevated detections were observed. For all screening of soils 0.0ppm on PID
1315-1700 No exceedences on dust monitor. 0700-1315 monitor broken Ecor Rental delivered operable unit
Photos taken:

Time GZA left Site: 1705

Prepared by: Pete Nyznyk

Reviewed by: _____

DAILY FIELD SUMMARY FORM

DATE: 11/11/2016 FILE No. 21.0056806.00 REPORT No. 16-__

PROJECT: CertainTeed Site, Buffalo, New York
Soil Screening during Paving Operations

GENERAL WEATHER CONDITIONS: Partly cloudy

Temp Range: 42 to 48°F
Wind Speed: 0-16 mph
Wind Direction: W - NW

Time GZA Arrived on Site: 0700

Site Conditions: Good

Contractors on Site: Zeladz

- GZA Personnel On-Site: Pete Nyznyk
- GZA's Equipment On-Site: Mini RAE3000, TSI AM510 Dust Monitor

Name of NYSDEC Representative(s) on Site:
Time of arrival:
Time of departure:
Issues Discussed with NYSDEC:

SUMMARY OF WORK OBSERVED: (See attached field sketch)

Zeladz completes excavation of southern area.
Zeladz dumps/grades stone in both areas.
Zeladz rolls/stamps stone in excavation area adjacent to be building
GZA screens and collects soil samples from the stock pile of the sub-base material

Photos taken:

Time GZA left Site: 0945

Prepared by: Pete Nyznyk

Reviewed by: _____

APPENDIX C

LIMITATIONS

GEOHYDROLOGICAL LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs.

6. Water level readings have been made in test holes (as described in the Report) and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX D

ANALYTICAL LABORATORY REPORT

ANALYTICAL REPORT

Lab Number:	L1636766
Client:	GZA GeoEnvironmental 535 Washington Street 11th Floor Buffalo, NY 14203
ATTN:	Peter Nyznyk
Phone:	(716) 844-7050
Project Name:	CERTAIN TEED
Project Number:	21.0056806
Report Date:	11/20/16

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1636766-01	SS-1-111116	SOIL	BUFFALO, NY	11/11/16 09:05	11/11/16
L1636766-02	C-DUP-111116	SOIL	BUFFALO, NY	11/11/16 00:00	11/11/16

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 11/20/16

ORGANICS

VOLATILES

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01
Client ID: SS-1-111116
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 11/16/16 18:32
Analyst: MV
Percent Solids: 86%

Date Collected: 11/11/16 09:05
Date Received: 11/11/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	2.1	J	ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.7	0.22	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	ND		ug/kg	1.2	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1

Project Name: CERTAIN TEED **Lab Number:** L1636766

Project Number: 21.0056806 **Report Date:** 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01 Date Collected: 11/11/16 09:05

Client ID: SS-1-111116 Date Received: 11/11/16

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.41	1
o-Xylene	ND		ug/kg	2.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.16	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	20		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	9.5	J	ug/kg	12	0.31	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.77	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.6	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/16/16 10:37
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG953179-5					
Methylene chloride	1.7	J	ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/16/16 10:37
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG953179-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/16/16 10:37
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG953179-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG953179-3 WG953179-4								
Methylene chloride	92		92		70-130	0		30
1,1-Dichloroethane	87		89		70-130	2		30
Chloroform	88		90		70-130	2		30
Carbon tetrachloride	81		83		70-130	2		30
1,2-Dichloropropane	87		89		70-130	2		30
Dibromochloromethane	92		93		70-130	1		30
2-Chloroethylvinyl ether	90		94		70-130	4		30
1,1,2-Trichloroethane	92		96		70-130	4		30
Tetrachloroethene	89		87		70-130	2		30
Chlorobenzene	93		91		70-130	2		30
Trichlorofluoromethane	76		77		70-139	1		30
1,2-Dichloroethane	89		91		70-130	2		30
1,1,1-Trichloroethane	82		84		70-130	2		30
Bromodichloromethane	87		89		70-130	2		30
trans-1,3-Dichloropropene	92		94		70-130	2		30
cis-1,3-Dichloropropene	87		90		70-130	3		30
1,1-Dichloropropene	82		84		70-130	2		30
Bromoform	96		99		70-130	3		30
1,1,2,2-Tetrachloroethane	93		99		70-130	6		30
Benzene	86		88		70-130	2		30
Toluene	91		90		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG953179-3 WG953179-4								
Ethylbenzene	91		92		70-130	1		30
Chloromethane	90		89		52-130	1		30
Bromomethane	83		84		57-147	1		30
Vinyl chloride	79		80		67-130	1		30
Chloroethane	86		88		50-151	2		30
1,1-Dichloroethene	81		81		65-135	0		30
trans-1,2-Dichloroethene	85		87		70-130	2		30
Trichloroethene	86		87		70-130	1		30
1,2-Dichlorobenzene	94		94		70-130	0		30
1,3-Dichlorobenzene	96		96		70-130	0		30
1,4-Dichlorobenzene	95		94		70-130	1		30
Methyl tert butyl ether	86		91		66-130	6		30
p/m-Xylene	93		94		70-130	1		30
o-Xylene	95		94		70-130	1		30
cis-1,2-Dichloroethene	88		90		70-130	2		30
Dibromomethane	87		90		70-130	3		30
Styrene	96		96		70-130	0		30
Dichlorodifluoromethane	74		76		30-146	3		30
Acetone	101		102		54-140	1		30
Carbon disulfide	76		78		59-130	3		30
2-Butanone	90		94		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG953179-3 WG953179-4								
Vinyl acetate	88		93		70-130	6		30
4-Methyl-2-pentanone	93		92		70-130	1		30
1,2,3-Trichloropropane	94		99		68-130	5		30
2-Hexanone	88		91		70-130	3		30
Bromochloromethane	90		93		70-130	3		30
2,2-Dichloropropane	84		87		70-130	4		30
1,2-Dibromoethane	90		94		70-130	4		30
1,3-Dichloropropane	92		92		69-130	0		30
1,1,1,2-Tetrachloroethane	91		92		70-130	1		30
Bromobenzene	94		94		70-130	0		30
n-Butylbenzene	90		91		70-130	1		30
sec-Butylbenzene	90		89		70-130	1		30
tert-Butylbenzene	91		90		70-130	1		30
o-Chlorotoluene	96		94		70-130	2		30
p-Chlorotoluene	95		95		70-130	0		30
1,2-Dibromo-3-chloropropane	98		100		68-130	2		30
Hexachlorobutadiene	83		84		67-130	1		30
Isopropylbenzene	92		93		70-130	1		30
p-Isopropyltoluene	91		92		70-130	1		30
Naphthalene	86		92		70-130	7		30
Acrylonitrile	90		98		70-130	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG953179-3 WG953179-4								
Isopropyl Ether	88		90		66-130	2		30
tert-Butyl Alcohol	80		92		70-130	14		30
n-Propylbenzene	92		92		70-130	0		30
1,2,3-Trichlorobenzene	91		95		70-130	4		30
1,2,4-Trichlorobenzene	92		95		70-130	3		30
1,3,5-Trimethylbenzene	95		95		70-130	0		30
1,2,4-Trimethylbenzene	95		95		70-130	0		30
Methyl Acetate	87		93		51-146	7		30
Ethyl Acetate	86		96		70-130	11		30
Acrolein	87		95		70-130	9		30
Cyclohexane	72		75		59-142	4		30
1,4-Dioxane	75		85		65-136	13		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	74		74		50-139	0		30
p-Diethylbenzene	92		93		70-130	1		30
p-Ethyltoluene	95		95		70-130	0		30
1,2,4,5-Tetramethylbenzene	93		92		70-130	1		30
Tetrahydrofuran	80		91		66-130	13		30
Ethyl ether	87		90		67-130	3		30
trans-1,4-Dichloro-2-butene	92		100		70-130	8		30
Methyl cyclohexane	72		74		70-130	3		30
Ethyl-Tert-Butyl-Ether	88		92		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG953179-3 WG953179-4								
Tertiary-Amyl Methyl Ether	87		90		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		102		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	98		100		70-130

SEMIVOLATILES

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01
Client ID: SS-1-111116
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/18/16 21:55
Analyst: ALS
Percent Solids: 86%

Date Collected: 11/11/16 09:05
Date Received: 11/11/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 11/14/16 02:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	26	J	ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	270		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	28	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	180		ug/kg	110	21.	1
Benzo(a)pyrene	220		ug/kg	150	46.	1
Benzo(b)fluoranthene	300		ug/kg	110	32.	1
Benzo(k)fluoranthene	100	J	ug/kg	110	30.	1

Project Name: CERTAIN TEED **Lab Number:** L1636766

Project Number: 21.0056806 **Report Date:** 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01 Date Collected: 11/11/16 09:05

Client ID: SS-1-111116 Date Received: 11/11/16

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	200		ug/kg	110	20.	1
Acenaphthylene	57	J	ug/kg	150	29.	1
Anthracene	58	J	ug/kg	110	37.	1
Benzo(ghi)perylene	180		ug/kg	150	22.	1
Fluorene	18	J	ug/kg	190	18.	1
Phenanthrene	150		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	42	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	180		ug/kg	150	26.	1
Pyrene	260		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	25	J	ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1
Caprolactam	ND		ug/kg	190	58.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: CERTAIN TEED **Lab Number:** L1636766

Project Number: 21.0056806 **Report Date:** 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01 Date Collected: 11/11/16 09:05

Client ID: SS-1-111116 Date Received: 11/11/16

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	53		18-120

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/18/16 13:06
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 11/14/16 02:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG951920-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/18/16 13:06
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 11/14/16 02:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG951920-1					
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/18/16 13:06
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 11/14/16 02:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG951920-1					
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	210	44.
Caprolactam	ND		ug/kg	160	49.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	60		10-136
4-Terphenyl-d14	71		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG951920-2 WG951920-3								
Acenaphthene	70		69		31-137	1		50
Benzidine	16		14		10-66	13		50
1,2,4-Trichlorobenzene	77		74		38-107	4		50
Hexachlorobenzene	72		71		40-140	1		50
Bis(2-chloroethyl)ether	76		75		40-140	1		50
2-Chloronaphthalene	74		73		40-140	1		50
1,2-Dichlorobenzene	73		72		40-140	1		50
1,3-Dichlorobenzene	73		72		40-140	1		50
1,4-Dichlorobenzene	71		70		28-104	1		50
3,3'-Dichlorobenzidine	48		41		40-140	16		50
2,4-Dinitrotoluene	76		79		40-132	4		50
2,6-Dinitrotoluene	77		78		40-140	1		50
Azobenzene	74		75		40-140	1		50
Fluoranthene	76		74		40-140	3		50
4-Chlorophenyl phenyl ether	75		73		40-140	3		50
4-Bromophenyl phenyl ether	74		73		40-140	1		50
Bis(2-chloroisopropyl)ether	79		77		40-140	3		50
Bis(2-chloroethoxy)methane	81		80		40-117	1		50
Hexachlorobutadiene	72		70		40-140	3		50
Hexachlorocyclopentadiene	81		86		40-140	6		50
Hexachloroethane	72		71		40-140	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG951920-2 WG951920-3								
Isophorone	76		76		40-140	0		50
Naphthalene	74		72		40-140	3		50
Nitrobenzene	80		82		40-140	2		50
NitrosoDiPhenylAmine(NDPA)/DPA	73		73		36-157	0		50
n-Nitrosodi-n-propylamine	79		78		32-121	1		50
Bis(2-Ethylhexyl)phthalate	80		78		40-140	3		50
Butyl benzyl phthalate	76		76		40-140	0		50
Di-n-butylphthalate	78		76		40-140	3		50
Di-n-octylphthalate	80		79		40-140	1		50
Diethyl phthalate	74		73		40-140	1		50
Dimethyl phthalate	76		75		40-140	1		50
Benzo(a)anthracene	75		74		40-140	1		50
Benzo(a)pyrene	77		74		40-140	4		50
Benzo(b)fluoranthene	80		70		40-140	13		50
Benzo(k)fluoranthene	75		80		40-140	6		50
Chrysene	77		72		40-140	7		50
Acenaphthylene	76		76		40-140	0		50
Anthracene	74		74		40-140	0		50
Benzo(ghi)perylene	80		77		40-140	4		50
Fluorene	72		72		40-140	0		50
Phenanthrene	75		72		40-140	4		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG951920-2 WG951920-3								
Dibenzo(a,h)anthracene	79		75		40-140	5		50
Indeno(1,2,3-cd)Pyrene	80		74		40-140	8		50
Pyrene	76		73		35-142	4		50
Biphenyl	83		84		54-104	1		50
Aniline	44		**36**	Q	40-140	20		50
4-Chloroaniline	49		42		40-140	15		50
1-Methylnaphthalene	78		74		26-130	5		50
2-Nitroaniline	80		82		47-134	2		50
3-Nitroaniline	56		50		26-129	11		50
4-Nitroaniline	79		80		41-125	1		50
Dibenzofuran	74		72		40-140	3		50
2-Methylnaphthalene	76		74		40-140	3		50
1,2,4,5-Tetrachlorobenzene	81		79		40-117	3		50
Pentachloronitrobenzene	93		96		42-153	3		50
Acetophenone	87		85		14-144	2		50
n-Nitrosodimethylamine	71		69		22-100	3		50
2,4,6-Trichlorophenol	75		77		30-130	3		50
P-Chloro-M-Cresol	79		78		26-103	1		50
2-Chlorophenol	79		79		25-102	0		50
2,4-Dichlorophenol	82		82		30-130	0		50
2,4-Dimethylphenol	79		77		30-130	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG951920-2 WG951920-3								
2-Nitrophenol	70		74		30-130	6		50
4-Nitrophenol	81		84		11-114	4		50
2,4-Dinitrophenol	41		42		4-130	2		50
4,6-Dinitro-o-cresol	66		67		10-130	2		50
Pentachlorophenol	62		67		17-109	8		50
Phenol	78		74		26-90	5		50
2-Methylphenol	82		80		30-130.	2		50
3-Methylphenol/4-Methylphenol	81		81		30-130	0		50
2,4,5-Trichlorophenol	80		82		30-130	2		50
Benzoic Acid	**5**	Q	**6**	Q	10-110	13		50
Benzyl Alcohol	79		80		40-140	1		50
Carbazole	76		74		54-128	3		50
Pyridine	59		60		10-93	2		50
Parathion, ethyl	94		92		40-140	2		50
Atrazine	98		100		40-140	2		50
Benzaldehyde	65		66		40-140	2		50
Caprolactam	87		90		15-130	3		50
2,3,4,6-Tetrachlorophenol	76		75		40-140	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG951920-2 WG951920-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	81		77		25-120
Phenol-d6	84		83		10-120
Nitrobenzene-d5	84		85		23-120
2-Fluorobiphenyl	78		76		30-120
2,4,6-Tribromophenol	76		78		10-136
4-Terphenyl-d14	75		72		18-120

PCBS

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01
Client ID: SS-1-111116
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 11/18/16 08:44
Analyst: JA
Percent Solids: 86%

Date Collected: 11/11/16 09:05
Date Received: 11/11/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 11/17/16 16:30
Cleanup Method: EPA 3665A
Cleanup Date: 11/17/16
Cleanup Method: EPA 3660B
Cleanup Date: 11/18/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	2.98	1	A
Aroclor 1221	ND		ug/kg	37.7	3.48	1	A
Aroclor 1232	ND		ug/kg	37.7	4.42	1	A
Aroclor 1242	ND		ug/kg	37.7	4.62	1	A
Aroclor 1248	ND		ug/kg	37.7	3.18	1	A
Aroclor 1254	31.3	J	ug/kg	37.7	3.10	1	B
Aroclor 1260	32.5	J	ug/kg	37.7	2.87	1	B
Aroclor 1262	ND		ug/kg	37.7	1.87	1	A
Aroclor 1268	ND		ug/kg	37.7	5.47	1	A
PCBs, Total	63.8	J	ug/kg	37.7	1.87	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 11/18/16 08:35
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 11/17/16 16:30
Cleanup Method: EPA 3665A
Cleanup Date: 11/17/16
Cleanup Method: EPA 3660B
Cleanup Date: 11/18/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG953433-1						
Aroclor 1016	ND		ug/kg	32.7	2.58	A
Aroclor 1221	ND		ug/kg	32.7	3.02	A
Aroclor 1232	ND		ug/kg	32.7	3.84	A
Aroclor 1242	ND		ug/kg	32.7	4.00	A
Aroclor 1248	ND		ug/kg	32.7	2.76	A
Aroclor 1254	ND		ug/kg	32.7	2.69	A
Aroclor 1260	ND		ug/kg	32.7	2.49	A
Aroclor 1262	ND		ug/kg	32.7	1.62	A
Aroclor 1268	ND		ug/kg	32.7	4.74	A
PCBs, Total	ND		ug/kg	32.7	1.62	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	111		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	59		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG953433-2 WG953433-3									
Aroclor 1016	91		59		40-140	43		50	A
Aroclor 1260	84		53		40-140	45		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	111		74		30-150	A
Decachlorobiphenyl	63		43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		60		30-150	B
Decachlorobiphenyl	54		34		30-150	B

PESTICIDES

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01
Client ID: SS-1-111116
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 11/17/16 15:30
Analyst: DM
Percent Solids: 86%

Date Collected: 11/11/16 09:05
Date Received: 11/11/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 11/14/16 16:00
Cleanup Method: EPA 3620B
Cleanup Date: 11/15/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.80	0.352	1	A
Lindane	ND		ug/kg	0.749	0.335	1	A
Alpha-BHC	ND		ug/kg	0.749	0.213	1	A
Beta-BHC	ND		ug/kg	1.80	0.681	1	A
Heptachlor	ND		ug/kg	0.898	0.403	1	A
Aldrin	ND		ug/kg	1.80	0.633	1	A
Heptachlor epoxide	ND		ug/kg	3.37	1.01	1	A
Endrin	ND		ug/kg	0.749	0.307	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.786	1	A
Endrin ketone	ND		ug/kg	1.80	0.463	1	A
Dieldrin	ND		ug/kg	1.12	0.561	1	A
4,4'-DDE	ND		ug/kg	1.80	0.415	1	A
4,4'-DDD	ND		ug/kg	1.80	0.641	1	A
4,4'-DDT	ND		ug/kg	3.37	1.44	1	A
Endosulfan I	ND		ug/kg	1.80	0.424	1	A
Endosulfan II	ND		ug/kg	1.80	0.600	1	A
Endosulfan sulfate	ND		ug/kg	0.749	0.356	1	A
Methoxychlor	ND		ug/kg	3.37	1.05	1	A
Toxaphene	ND		ug/kg	33.7	9.43	1	A
cis-Chlordane	ND		ug/kg	2.24	0.626	1	A
trans-Chlordane	ND		ug/kg	2.24	0.593	1	A
Chlordane	ND		ug/kg	14.6	5.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	69		30-150	B
2,4,5,6-Tetrachloro-m-xylene	113		30-150	A
Decachlorobiphenyl	85		30-150	A

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 11/14/16 16:46
Analyst: AM

Extraction Method: EPA 3546
Extraction Date: 11/13/16 21:03
Cleanup Method: EPA 3620B
Cleanup Date: 11/14/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG951909-1						
Delta-BHC	ND		ug/kg	1.56	0.306	A
Lindane	ND		ug/kg	0.651	0.291	A
Alpha-BHC	ND		ug/kg	0.651	0.185	A
Beta-BHC	ND		ug/kg	1.56	0.593	A
Heptachlor	ND		ug/kg	0.782	0.350	A
Aldrin	ND		ug/kg	1.56	0.550	A
Heptachlor epoxide	ND		ug/kg	2.93	0.879	A
Endrin	ND		ug/kg	0.651	0.267	A
Endrin aldehyde	ND		ug/kg	1.95	0.684	A
Endrin ketone	ND		ug/kg	1.56	0.403	A
Dieldrin	ND		ug/kg	0.977	0.488	A
4,4'-DDE	ND		ug/kg	1.56	0.362	A
4,4'-DDD	ND		ug/kg	1.56	0.558	A
4,4'-DDT	ND		ug/kg	2.93	1.26	A
Endosulfan I	ND		ug/kg	1.56	0.369	A
Endosulfan II	ND		ug/kg	1.56	0.522	A
Endosulfan sulfate	ND		ug/kg	0.651	0.310	A
Methoxychlor	ND		ug/kg	2.93	0.912	A
Toxaphene	ND		ug/kg	29.3	8.21	A
cis-Chlordane	ND		ug/kg	1.95	0.545	A
trans-Chlordane	ND		ug/kg	1.95	0.516	A
Chlordane	ND		ug/kg	12.7	5.18	A

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 11/14/16 16:46
Analyst: AM

Extraction Method: EPA 3546
Extraction Date: 11/13/16 21:03
Cleanup Method: EPA 3620B
Cleanup Date: 11/14/16

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG951909-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	96		30-150	B
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	90		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG951909-2 WG951909-3									
Delta-BHC	96		92		30-150	4		30	A
Lindane	100		97		30-150	3		30	A
Alpha-BHC	100		98		30-150	2		30	A
Beta-BHC	96		95		30-150	1		30	A
Heptachlor	95		95		30-150	0		30	A
Aldrin	105		100		30-150	5		30	A
Heptachlor epoxide	111		105		30-150	6		30	A
Endrin	116		110		30-150	5		30	A
Endrin aldehyde	89		87		30-150	2		30	A
Endrin ketone	106		99		30-150	7		30	A
Dieldrin	114		109		30-150	4		30	A
4,4'-DDE	116		110		30-150	5		30	A
4,4'-DDD	115		116		30-150	1		30	A
4,4'-DDT	115		109		30-150	5		30	A
Endosulfan I	113		109		30-150	4		30	A
Endosulfan II	123		117		30-150	5		30	A
Endosulfan sulfate	93		95		30-150	2		30	A
Methoxychlor	99		96		30-150	3		30	A
cis-Chlordane	102		99		30-150	3		30	A
trans-Chlordane	112		108		30-150	4		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG951909-2 WG951909-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		85		30-150	B
Decachlorobiphenyl	105		100		30-150	B
2,4,5,6-Tetrachloro-m-xylene	99		97		30-150	A
Decachlorobiphenyl	99		106		30-150	A

METALS

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01
Client ID: SS-1-111116
Sample Location: BUFFALO, NY
Matrix: Soil
Percent Solids: 86%

Date Collected: 11/11/16 09:05
Date Received: 11/11/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11000		mg/kg	110	17.	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Antimony, Total	1.3	J	mg/kg	1.8	0.15	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Arsenic, Total	8.9		mg/kg	0.57	0.08	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Barium, Total	87		mg/kg	3.4	0.24	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Beryllium, Total	1.3		mg/kg	0.34	0.10	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Cadmium, Total	0.83		mg/kg	0.23	0.03	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Calcium, Total	61000		mg/kg	570	69.	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Chromium, Total	30		mg/kg	2.3	0.53	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Cobalt, Total	7.3		mg/kg	0.57	0.06	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Copper, Total	35		mg/kg	2.3	0.22	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Iron, Total	42000		mg/kg	230	23.	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Lead, Total	65		mg/kg	0.68	0.17	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Magnesium, Total	9400		mg/kg	110	14.	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Manganese, Total	1300		mg/kg	2.3	0.50	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Mercury, Total	0.09		mg/kg	0.08	0.02	1	11/15/16 09:30	11/17/16 16:10	EPA 7471B	1,7471B	BV
Nickel, Total	25		mg/kg	1.1	0.30	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Potassium, Total	690		mg/kg	110	18.	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Selenium, Total	1.0	J	mg/kg	2.3	0.86	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Silver, Total	0.15	J	mg/kg	0.57	0.06	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Sodium, Total	280		mg/kg	170	13.	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Thallium, Total	0.29		mg/kg	0.23	0.06	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Vanadium, Total	26		mg/kg	1.1	0.43	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV
Zinc, Total	210		mg/kg	11	3.0	10	11/14/16 21:44	11/15/16 12:32	EPA 3050B	1,6020A	BV

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG952185-1										
Aluminum, Total	ND		mg/kg	100	15.	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Antimony, Total	0.20	J	mg/kg	1.6	0.14	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Arsenic, Total	ND		mg/kg	0.50	0.07	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Barium, Total	ND		mg/kg	3.0	0.21	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Beryllium, Total	ND		mg/kg	0.30	0.09	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Cadmium, Total	ND		mg/kg	0.20	0.03	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Calcium, Total	ND		mg/kg	500	61.	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Chromium, Total	ND		mg/kg	2.0	0.47	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Cobalt, Total	ND		mg/kg	0.50	0.05	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Copper, Total	ND		mg/kg	2.0	0.19	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Iron, Total	ND		mg/kg	200	21.	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Lead, Total	ND		mg/kg	0.60	0.15	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Magnesium, Total	ND		mg/kg	100	12.	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Manganese, Total	ND		mg/kg	2.0	0.44	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Nickel, Total	ND		mg/kg	1.0	0.27	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Potassium, Total	ND		mg/kg	100	16.	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Selenium, Total	ND		mg/kg	2.0	0.76	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Silver, Total	ND		mg/kg	0.50	0.05	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Sodium, Total	ND		mg/kg	150	12.	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Thallium, Total	ND		mg/kg	0.20	0.05	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Vanadium, Total	ND		mg/kg	1.0	0.38	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV
Zinc, Total	ND		mg/kg	10	2.6	10	11/14/16 21:44	11/15/16 11:56	1,6020A	BV

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG952288-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	11/15/16 09:30	11/16/16 11:14	1,7471B	BV

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG952185-2 SRM Lot Number: D091-540								
Aluminum, Total	70		-		52-148	-		20
Antimony, Total	146		-		1-200	-		20
Arsenic, Total	110		-		80-121	-		20
Barium, Total	100		-		84-117	-		20
Beryllium, Total	100		-		83-117	-		20
Cadmium, Total	103		-		83-117	-		20
Calcium, Total	104		-		81-118	-		20
Chromium, Total	98		-		80-119	-		20
Cobalt, Total	104		-		84-115	-		20
Copper, Total	104		-		82-118	-		20
Iron, Total	100		-		47-154	-		20
Lead, Total	110		-		82-118	-		20
Magnesium, Total	91		-		77-123	-		20
Manganese, Total	104		-		82-118	-		20
Nickel, Total	108		-		83-117	-		20
Potassium, Total	88		-		72-128	-		20
Selenium, Total	101		-		79-121	-		20
Silver, Total	112		-		76-124	-		20
Sodium, Total	97		-		73-126	-		20
Thallium, Total	99		-		80-121	-		20
Vanadium, Total	96		-		78-122	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG952185-2 SRM Lot Number: D091-540					
Zinc, Total	103	-	82-118	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG952288-2 SRM Lot Number: D091-540					
Mercury, Total	98	-	72-128	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG952185-3 QC Sample: L1634710-01 Client ID: MS Sample												
Aluminum, Total	10000	3430	11000	**29**	Q	-	-		75-125	-		20
Antimony, Total	0.65J	85.7	80	93		-	-		75-125	-		20
Arsenic, Total	7.8	20.6	28	98		-	-		75-125	-		20
Barium, Total	78.	343	400	94		-	-		75-125	-		20
Beryllium, Total	0.59J	8.57	8.5	99		-	-		75-125	-		20
Cadmium, Total	0.37J	8.74	8.8	101		-	-		75-125	-		20
Calcium, Total	48000	1710	29000	**0**	Q	-	-		75-125	-		20
Chromium, Total	19.	34.3	51	93		-	-		75-125	-		20
Cobalt, Total	10.	85.7	90	93		-	-		75-125	-		20
Copper, Total	29.	42.8	70	96		-	-		75-125	-		20
Iron, Total	26000	1710	27000	**58**	Q	-	-		75-125	-		20
Lead, Total	28.	87.4	110	94		-	-		75-125	-		20
Magnesium, Total	8600	1710	10000	82		-	-		75-125	-		20
Manganese, Total	750	85.7	860	**128**	Q	-	-		75-125	-		20
Nickel, Total	26.	85.7	110	98		-	-		75-125	-		20
Potassium, Total	950	1710	2600	96		-	-		75-125	-		20
Selenium, Total	ND	20.6	20	97		-	-		75-125	-		20
Silver, Total	0.33J	51.4	50	97		-	-		75-125	-		20
Sodium, Total	380	1710	2000	94		-	-		75-125	-		20
Thallium, Total	0.50	20.6	19	90		-	-		75-125	-		20
Vanadium, Total	18.	85.7	99	94		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG952185-3 QC Sample: L1634710-01 Client ID: MS Sample									
Zinc, Total	140	85.7	220	93	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG952288-3 QC Sample: L1636699-01 Client ID: MS Sample									
Mercury, Total	0.02J	0.141	0.17	120	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG952185-4 QC Sample: L1634710-01 Client ID: DUP Sample						
Aluminum, Total	10000	11000	mg/kg	10		20
Antimony, Total	0.65J	0.56J	mg/kg	NC		20
Arsenic, Total	7.8	7.1	mg/kg	9		20
Barium, Total	78.	79	mg/kg	1		20
Beryllium, Total	0.59J	0.59J	mg/kg	NC		20
Cadmium, Total	0.37J	0.38J	mg/kg	NC		20
Calcium, Total	48000	46000	mg/kg	4		20
Chromium, Total	19.	21	mg/kg	10		20
Cobalt, Total	10.	11	mg/kg	10		20
Copper, Total	29.	30	mg/kg	3		20
Iron, Total	26000	27000	mg/kg	4		20
Lead, Total	28.	28	mg/kg	0		20
Magnesium, Total	8600	12000	mg/kg	**33**	Q	20
Manganese, Total	750	720	mg/kg	4		20
Nickel, Total	26.	27	mg/kg	4		20
Potassium, Total	950	1000	mg/kg	5		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	0.33J	0.26J	mg/kg	NC		20
Sodium, Total	380	340	mg/kg	11		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG952185-4 QC Sample: L1634710-01 Client ID: DUP Sample					
Thallium, Total	0.50	0.24J	mg/kg	NC	20
Vanadium, Total	18.	19	mg/kg	5	20
Zinc, Total	140	150	mg/kg	7	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG952288-4 QC Sample: L1636699-01 Client ID: DUP Sample					
Mercury, Total	0.02J	0.02J	mg/kg	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

SAMPLE RESULTS

Lab ID: L1636766-01
Client ID: SS-1-111116
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 11/11/16 09:05
Date Received: 11/11/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	11/17/16 09:55	121,2540G	RI
Cyanide, Total	2.0		mg/kg	1.1	0.19	1	11/14/16 16:20	11/15/16 14:16	1,9010C/9012B	JO
pH (H)	8.5		SU	-	NA	1	-	11/12/16 06:30	1,9045D	MC

Project Name: CERTAIN TEED
Project Number: 21.0056806
Lab Number: L1636766
Report Date: 11/20/16

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG952109-1										
Cyanide, Total	0.16	J	mg/kg	0.91	0.15	1	11/14/16 16:20	11/15/16 13:53	1,9010C/9012B	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: CERTAIN TEED

Project Number: 21.0056806

Lab Number: L1636766

Report Date: 11/20/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG951699-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG952109-2 WG952109-3								
Cyanide, Total	120		120		80-120	1		35

Matrix Spike Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG952109-4 WG952109-5 QC Sample: L1636680-03 Client ID: MS Sample												
Cyanide, Total	ND	11	10	92		10	92		65-135	0		35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG951699-2 QC Sample: L1636795-05 Client ID: DUP Sample						
pH	6.5	6.6	SU	2		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG953210-1 QC Sample: L1637280-06 Client ID: DUP Sample						
Solids, Total	93.8	93.7	%	0		20

Project Name: CERTAIN TEED
Project Number: 21.0056806

Lab Number: L1636766
Report Date: 11/20/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1636766-01A	Vial Large Septa unpreserved (4o	A	N/A	3.5	Y	Absent	NYTCL-8260(14)
L1636766-01B	Glass 250ml/8oz unpreserved	A	N/A	3.5	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7),PH-9045(1),NYTCL-8081(14),NYTCL-8082(14)
L1636766-01C	Metals Only - Glass 60mL/2oz unp	A	N/A	3.5	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1636766-02A	Vial Large Septa unpreserved (4o	A	N/A	3.5	Y	Absent	HOLD-8260(14)
L1636766-02B	Glass 250ml/8oz unpreserved	A	N/A	3.5	Y	Absent	HOLD-WETCHEM(),HOLD-8081(14),HOLD-8270(14),HOLD-8082()
L1636766-02C	Glass 60mL/2oz unpreserved	A	N/A	3.5	Y	Absent	HOLD-METAL(180)

*Values in parentheses indicate holding time in days

Project Name:	CERTAIN TEED	**Lab Number:**	L1636766
Project Number:	21.0056806	**Report Date:**	11/20/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers

Project Name:	CERTAIN TEED	**Lab Number:**	L1636766
Project Number:	21.0056806	**Report Date:**	11/20/16

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CERTAIN TEED	**Lab Number:**	L1636766
Project Number:	21.0056806	**Report Date:**	11/20/16

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: ***EPA 3050B***

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 11/12/16

ALPHA Job #: L1636766

Client Information
Client: CZA
Address: 535 Washington St
Buffalo, NY 14203
Phone:
Fax:
Email:

Project Information
Project Name: Certain Teed
Project Location: Buffalo NY
Project # Zi.00056806
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date: 11-18-16
Rush (only if pre approved) ☒ NO # of Days: 7 JR

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCN, PH, 8081, 8082, 8270	TAL Metals	VOCs 8260	Sample Specific Comments	Total Bottle
36766-01	SS-1-111116	11/11/16	0905	Soil	PN	X	X	X		3
02	G-DUP-111116	11/11/16	—	Soil	PN	X	X	X	✗ Hold analysis pending field sampling results	3

Container Type: A A A
Preservative: A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	11-11-16/1215	AAL	11-11-16 1443
	11-11-16		11/12/16 0530

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

APPENDIX D

IC/EC CERTIFICATION FORM

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C915185**

Site Name Buffalo Lakeside Commerce Park

Site Address: 231 Ship Canal Parkway Zip Code: 14218
City/Town: Buffalo
County: Erie
Site Acreage: 25.0

Reporting Period: March 31, 2015 to March 31, 2018

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. C915185 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
132.20-1-11	Ship Certain LLC	Soil Management Plan Landuse Restriction Building Use Restriction Ground Water Use Restriction O&M Plan

1. Commercial/industrial site use only, commercial day care, child care or medical care prohibited.
2. Site cover to include pavement, structures, or minimum of 12 inches of clean soil with vegetative growth. Existing soil excavated from beneath cover is to be managed, characterized and disposed in accordance with the soil management plan.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
132.20-1-11	Cover System

1. Commercial/industrial site use only, commercial day care, child care or medical care prohibited.
2. Site cover to include pavement, structures, or minimum of 12 inches of clean soil with vegetative growth. Existing soil excavated from beneath cover is to be managed, characterized and disposed in accordance with the soil management plan.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C915185

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I MIKE JASKOLKA at 231 SHIP CANAL PARKWAY
print name print business address

am certifying as REMEDIAL PARTY (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

3/29/18
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

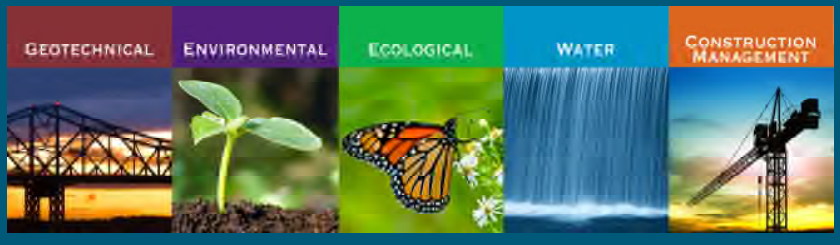
I, BART A. KLETTKE (print name) at 300 PEARL STREET, STE. 700, BUFFALO, NY 14202 (print business address)

am certifying as a Professional Engineer for the Remedial Party (Owner or Remedial Party)

Bart A. Klettke
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

4-17-18
Date



GZA GeoEnvironmental, Inc.